HALEY ALDRICH

www.haleyaldrich.com

PER- AND POLYFLUOROALKYL SUBSTANCES GROUNDWATER SAMPLING AND ANALYSIS RESULTS EWING TOWNSHIP INDUSTRIAL LAND FORMER DELPHI INTERIOR AND LIGHTING SYSTEMS DIVISION EWING, NEW JERSEY NJDEP SRP PI NO. 011336 ISRA CASE NO. E97070

by
Haley & Aldrich, Inc.
Cleveland, Ohio

for
RACER Trust
Detroit, Michigan

File No. 070613-872
February 2024

HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

9 February 2024
File No. 070613-872

New Jersey Department of Environmental Protection
Site Remediation Program
P.O. Box 420
Mail Code 401-05H
401 E. State Street
Trenton, New Jersey 08625-0420

Attention: Jill Monroe

Subject: Per- and Polyfluoroalkyl Substances
Groundwater Sampling and Analysis Results
Ewing Township Industrial Land
Former Delphi Interior and Lighting Systems Division
1445 Parkway Avenue
Ewing, New Jersey
NJDEP SRP PI No. 011336
ISRA Case No. E97070

Dear Jill Monroe:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, Haley & Aldrich, Inc. has prepared the following summary of the results of the Per- and Polyfluoroalkyl Substances (PFAS) groundwater and surface water sampling for the Ewing Township Industrial Land site (Site) located at 1445 Parkway Avenue in Ewing, New Jersey (**Figure 1**).

The PFAS sampling event was conducted to address New Jersey Department of Environmental Protection's (NJDEP's) request on 14 July 2021 for additional PFAS-compound evaluation in groundwater. The NJDEP identified that:

> *"Chromium plating operations took place at the facility. Chromium and hexavalent chromium are COCs in ground water at the site and indicative of releases associated with former plating operations."*

Due to the potential for PFAS use in chromium plating operations prior to the introduction of Maximum Achievable Control Technology standards in 1995 and cessation of chromium plating operations at the Site around the same time frame, the NJDEP identified that additional evaluation was needed regarding the potential presence of PFAS-compounds in groundwater and surface water at the Site.

Specifically, the goals of the sampling program were to:

- Determine the potential presence of PFAS constituents in groundwater or surface water at upgradient locations, locations in the vicinity of former plating production or waste management areas, and downgradient locations at the Site;
- If the PFAS constituents are detected, identify if the constituents are related to potential on- or off-Site releases; and
- Determine whether further investigation is warranted due to on-Site related releases.

Surface and groundwater samples were collected from 33 existing groundwater monitoring wells, two surface water locations, and three storm sewer/French drain manholes during the period of 12 to 17 October 2023. Groundwater samples were collected utilizing low-flow sampling techniques; surface water and storm sewer samples were collected utilizing grab sampling techniques from the air-water interface.

The results of the sampling activities are presented in the following report and generally indicated the following:

- PFAS constituents were detected in all on-Site groundwater, surface water and stormwater sampling locations.
- The majority of the detections were above New Jersey Groundwater Quality Standards (GWQS), with the only exception being MW-89, where PFAS constituents were detected below criteria.
- Perfluorooctanesulfonic acid (PFOS) dominated the detected constituents in many locations, with the highest locations 100 times the applicable GWQS.
- The highest PFAS concentrations, notably PFOS, were detected on the upgradient side of the Site in bedrock groundwater, at MW-92A (1,610 nanograms per liter), indicating an off-Site source(s) impacting the Ewing Site.
- PFAS fingerprints are consistent across the entire upgradient side of the Site.
- PFOS dominated detections in the upgradient center portion of the Site, typically centered around MW-92A in bedrock, appears to migrate into and across the Site in the bedrock.
- No distinct pattern is apparent in the plating areas or sludge drying beds, with PFOS concentrations in all process related areas lower than upgradient locations. Rather, consistent with the Site Conceptual Model, off-Site PFOS in bedrock groundwater migrates through the Site and ultimately appears to contribute to shallow overburden/weathered bedrock zones along Gold Run as bedrock groundwater discharges to this surface water feature.
- A general PFAS constituent mix, with less PFOS, is present in upgradient stormwater. A similar pattern is also present in upgradient shallow overburden/weathered bedrock zones on the north, western, and eastern sides of the Site and surface water from Gold Run. This indicates a connection between stormwater and the shallow overburden/weathered bedrock zones and Gold Run.

- This general PFAS pattern matches closely to what is observed in the former Naval Air Warfare Center (NAWC) data for storm sewer immediately south of the NAWC site.
- PFAS constituents were also detected in MW-15 and MW-34R on the east side of Gold Run, which is considered a hydraulic boundary. The PFAS detections exhibit a mix of PFAS constituents, with concentrations in the upgradient well, MW-15, slightly higher than in MW-34R, adjacent to the remediated drum burial area.
- Additional constituents were analyzed including metals (chromium and nickel), semi-volatiles organic compounds (1,4 dioxane), and volatile organic compounds. Exceedances of GWQS were observed in FDMH-4, with detections in FDMH-1, FDMH-2, and FDMH-4.

The PFAS results, with some of the highest PFOS detections on the upgradient property boundaries, indicated on-Site groundwater and surface water contamination from an off-Site source(s). The PFAS groundwater data presented herein clearly indicate the PFAS source is located upgradient of the Ewing Site and is not related to former manufacturing activities at the Site. This conclusion is further supported by the trichloroethylene data that also indicates an upgradient, off-Site source. Consequently, no further investigation is warranted for PFAS on the RACER Ewing Site and RACER plans to report the on-Site groundwater and surface water contamination from an off-Site source to the NJDEP Hotline. The PFAS findings in relation to other potential off-Site constituents such as trichloroethene and 1,1-dichloroethene will be discussed further in the upcoming Groundwater Remedial Action Report.

If you have any questions or require additional information, please contact us.

Sincerely yours,
HALEY & ALDRICH, INC.

Dimitri Quafisi
Technical Expert

Amy K. Murphy
Licensed Site Remediation Professional #586486

Daniel R. Putz
Program Manager

Enclosures

\\haleyaldrich.com\share\cle_common\Projects\70613\872 - 2023 PFAS Sampling\Summary Memo\2024-02-09 RACER Ewing PFAS Sampling Report F.docx

HALEY & ALDRICH, INC.
6500 ROCKSIDE ROAD
SUITE 200
CLEVELAND, OH 44131
216.739.0555

SIGNATURE PAGE FOR

PER- AND POLYFLUOROALKYL SUBSTANCES GROUNDWATER SAMPLING AND ANALYSIS RESULTS EWING TOWNSHIP INDUSTRIAL LAND FORMER DELPHI INTERIOR AND LIGHTING SYSTEMS DIVISION EWING, NEW JERSEY

PREPARED FOR
RACER TRUST
DETROIT, MICHIGAN

PREPARED BY:

Dimitri Quafisi
Technical Expert - Geologist
Haley & Aldrich, Inc.

REVIEWED AND APPROVED BY:

Amy K. Murphy
Licensed Site Remediation Professional #586486
Haley & Aldrich, Inc.

Daniel R. Putz
Program Manager
Haley & Aldrich, Inc.

Table of Contents

Page

List of Tables ii
List of Figures ii
List of Appendices iii

1. Introduction 1

1.1 SCREENING VALUES 1
1.2 REPORT ORGANIZATION 2

2. Sampling Activities 3

2.1 SAMPLING PROCEDURES 3
2.2 LABORATORY ANALYSIS 3
2.3 DATA USABILITY ASSESSMENT 4
2.3.1 Quality Assurance Project Plan 4
2.3.2 Data Quality Assessment 4
2.3.3 Data Usability Evaluation 4
2.4 NOTABLE ISSUES 4

3. Site Setting 5

3.1 HYDROGEOLOGIC SETTING 5
3.2 NEARBY SITES 6
3.2.1 NAWC 7

4. Sampling Results and Interpretation 9

4.1 ON-SITE GROUNDWATER RESULTS 9
4.2 PARKWAY AVENUE FRENCH DRAIN AND GOLD RUN STREAM RESULTS 10
4.3 COMPARISON TO NAWC RESULTS 11

5. Conclusions and Recommendations 12

References 13

List of Tables

Table No.	Title
1	PFAS Sampling Locations
2	PFAS Compounds List
3	New Jersey PFAS Groundwater Quality Standards
4	Groundwater Analytical Results – PFAS
5	Storm Sewer and Surface Water Analytical Results – PFAS
6	Storm Sewer and Surface Water Analytical Results – Other Compounds
7	NAWC Groundwater and Surface Water Analytical Results – PFAS

List of Figures

Figure No.	Title
1	Site Locus
2	PFAS Sampling Locations
3	Area-Wide Overburden Groundwater Elevation Contours – July 2008
4A	Groundwater Elevation Contours, Overburden and Weathered Bedrock Upgradient – September 2023
4B	Groundwater Elevation Contours, Bedrock Upgradient – September 2023
5	Potential NAWC Trenton PFAS Source Areas – Former Naval Air Warfare Ctr. Trenton, New Jersey
6	On-Site PFOS Concentration – Bedrock Wells
7	Off-Site to On-Site PFOS Concentration – Northern Area

List of Appendices

Appendix	Title
A	Field Sampling Documentation
B	Laboratory Analytical Results
C	Data Useability Reports

1. Introduction

As presented in the Per- and Polyfluoroalkyl Substances (PFAS) Groundwater Sampling and Analysis Sampling and Analysis Plan (SAP) dated 25 September 2023 for the Ewing Township Industrial Land site (Site) /Former Delphi Interior and Lighting Systems Division (former General Motors) located at 1445 Parkway Avenue, Ewing Township, New Jersey (**Figure 1**), the goal of this groundwater sampling event was to address New Jersey Department of Environmental Protection's (NJDEP's) request on 14 July 2021 for additional PFAS-compound evaluation in groundwater. The NJDEP identified that:

> *"Chromium plating operations took place at the facility. Chromium and hexavalent chromium are COCs in ground water at the site and indicative of releases associated with former plating operations."*

Due to the potential for PFAS use in chromium plating operations prior to introduction of Maximum Achievable Control Technology standards in 1995 and cessation of chromium plating operations at the Site around the same time frame, the NJDEP identified that additional evaluation was needed regarding the potential presence of PFAS-compounds at the Site.

Specifically, the goals of the sampling program were to:

- Determine the potential presence of PFAS constituents in groundwater or surface water at upgradient locations, locations in the vicinity of former plating production or waste management areas, and downgradient locations at the Site;
- If the PFAS constituents are detected, identify if the constituents are related to potential on- or off-Site releases; and
- Determine whether further investigation is warranted due to on-Site related releases.

1.1 SCREENING VALUES

The screening values are used as a means of identifying a potentially significant release to the environment and whether the field investigation adequately characterized these potential releases for each environmental medium. The following presents a summary of the screening values used during the field investigation.

- Groundwater:
  - New Jersey Groundwater Quality Standards (GWQS; 1 June 2020)
    - Perfluorononanoic acid (PFNA) – 13 nanograms per liter (ng/L)
    - Perfluorooctanesulfonic acid (PFOS) – 13 ng/L
    - Perfluorooctanoic acid (PFOA) – 14 ng/L
  - Interim Specific Groundwater Quality Standards (Effective 5 June 2023)
    - Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX)(HFPO-DA)

1.2 REPORT ORGANIZATION

The following describes the investigation and sampling activities completed in October 2023, along with an additional explanation of data screening methodology and key findings. Tables, figures, and appendices summarize the investigation results. Supporting information to the document includes:

- **Appendix A** presents field documentation for sampling activities;
- **Appendix B** presents laboratory analytical results;
- **Appendix C** presents the data quality assessment and validation reports for the laboratory analytical data;
- The tables present a summary of analytical data collected for surface water and groundwater; and
- The figures present a comparison of detected groundwater concentrations against the screening values, as well as upgradient PFAS results from the Naval Air Warfare Center (NAWC) data collected during the period of 2017 to 2018.

2. Sampling Activities

As identified in the PFAS SAP, the sampling included the collection of groundwater, surface water, and french drain manhole samples as illustrated on **Figure 2** and listed in **Table 1**. Field investigation activities were completed from 12 through 17 October 2023 and included the following:

- Collection of:
  - 33 groundwater samples;
  - two surface water samples; and
  - three French drain manhole samples
- Collection of additional analytes from French drain manhole samples including volatile organic compounds (VOCs), nickel, chromium, and 1,4-dioxane.

These select sampling points represent upgradient locations, locations in the vicinity of former plating production areas or waste management areas, and downgradient locations at the Site.

2.1 SAMPLING PROCEDURES

As specified in the SAP, samples were collected in accordance with Haley & Aldrich, Inc. (Haley & Aldrich) Standard Operating Procedure 3032 for the Collection of Environmental Samples for the Analysis of PFAS which is based on methods recommended by the United States Environmental Protection Agency (USEPA) and Interstate Technology and Regulatory Council, and in compliance with the project's Quality Assurance Project Plan (QAPP). Groundwater sample collection was conducted utilizing low-flow groundwater sampling procedures with a peristaltic pump to minimize the amount of equipment in contact with the sampled groundwater. Storm sewer water and surface water were collected via grab sampling techniques utilizing a dip cup from the air to water interface. Copies of the field documentation and sampling forms are provided in **Appendix A.**

Due to the presence of PFAS compounds generally available in consumer products, low analytical detection limits (i.e., parts per trillion range), and thus the potential for false positive detections in the project samples, the sampling program included the collection and analysis of Quality Assurance/Quality Control (QA/QC) samples. These QA/QC samples will include the following:

- one field blanks;
- five equipment decontamination blanks; one per day; and
- two field duplicate samples.

2.2 LABORATORY ANALYSIS

The water samples were submitted for analysis of PFAS compounds via USEPA Draft Method 537.1M (Method 537.1M) modified with isotope dilution to Eurofins Environment Burlington, Vermont (New Jersey laboratory certification # VT972). **Table 2** provides the list of the PFAS compounds analyzed, and the associated laboratory reporting limits for Method 537.1M. Method 537.1M provides analysis for all of the key constituents potentially associated with plating operations prior to the cessation of operations in 1998. For the purposes of this investigation, the three parameters (PFNA, PFOS, and PFOA) with New Jersey GWQS as well as the one parameter with an interim GWQS (perfluoro-2-

propoxypropanoic acid) are listed in **Table 3** were used for decision making for the Site. Data associated with the remaining parameters are intended for informational purposes regarding potential off-Site sources. The laboratory analytical results are presented in **Appendix B**.

2.3 DATA USABILITY ASSESSMENT

Groundwater, storm sewer water and surface water samples were collected and evaluated in accordance with NJDEP regulation and guidance documents. The data usability review is summarized below for data collected for this scope of work.

2.3.1 Quality Assurance Project Plan

In accordance with New Jersey Administrative Code (N.J.A.C.) 7:26E-1.6 (the Technical Requirements for Site Remediation) a QAPP that complies with N.J.A.C. 7:26E-2.2 and with the Quality Assurance Project Plan Technical Guidance (version 1.0, 2014) has been prepared and previously submitted as part of the PFAS SAP.

2.3.2 Data Quality Assessment

The Data Usability Review, conducted per NJDEP's Data Quality Assessment/Data Usability Evaluation Technical Guidance dated April 2014, has determined the data to be usable for its intended purposes. A usability review was completed for the data, as described in the procedures and guidelines presented in the Quality Assurance Project Plan Technical Guidance (version 1.0, 2014). The laboratory reports are provided as **Appendix B**.

2.3.3 Data Usability Evaluation

A usability review as described in the procedures and guidelines presented in the Quality Assurance Project Plan Technical Guidance (version 1.0, 2014) was performed on data generated for this sampling event, as required by the NJDEP. The review has determined the data to be usable for its intended purposes. A summary of the review is presented in **Appendix C**. The summary includes an examination of issues identified during the review. No data use limitations have been identified in the data usability review (**Appendix C**).

2.4 NOTABLE ISSUES

A few issues were encountered during field activities that precluded completion of the planned scope of work as follows:

- French drain manhole FDMH-3 was dry, preventing the collection of water or sediment samples.
- French drain manhole FDMH-5 was paved over with asphalt. To prevent damage to the roadway surface of Parkway Avenue, FDMH-5 was not opened or sampled.

3. Site Setting

3.1 HYDROGEOLOGIC SETTING

The hydrogeologic model in the area of the Site is extraordinarily complex, with a series of regional and local high-angle faulting and fracturing of varying strike angles, along with weathering overlain onto sedimentary bedrock with bedding plane joints dipping (north/northeast) in the opposite direction from regional groundwater flow (south/southeast). This creates a complex and irregular groundwater transport pathways through the area. Groundwater transport is typically in the overburden/weathered bedrock and bedrock in the secondary fracture and bedding plane porosity, rather than the bedrock matrix. The overburden/weathered bedrock is in direct communication with the bedrock through secondary pathways such as these fractures, faults and weathering. Groundwater recharges northwest of the Site, migrates downward and to the southeast, where it ultimately discharges to Gold Run. Gold Run is considered a hydraulic boundary for the area.

The general geology of the Site has been characterized as follows:

- Overburden - The overburden soils range in thickness from 0 to 20 feet, overlying weathered bedrock. The soils are generally: fill, 0 to 10 feet thick, and residual bedrock, clays, silts, sands and rock fragments, 0 to 10 feet thick. The soils are thinnest at the northwest corner of the Site, and thicken in the center of the Site, where extensive fill has been placed, then thinning as the topography drops towards Gold Run. The overburden soils typically are dry, with groundwater present in the underlying weathered bedrock.
- Weathered Bedrock - The weathered bedrock is highly fractured saprolite and regolith zones of bedrock, defined up to a depth of 30 feet below ground surface, where it transitions to competent bedrock. Groundwater is typically first encountered in the weathered bedrock zone in many areas of the Site and is in communication with groundwater in the bedrock.
- Bedrock - The underlying bedrock unit consists of alternating bands of light gray to reddish-brown, medium- to coarse-grained arkosic sandstone and reddish to purplish-brown siltstone and shale, with several thicker, more massive sandstone beds of the Raven Rock Member of Stockton Formation. The bedrock was formed during the late Triassic period. Bedding planes typically strike N70˚E to N85˚E, with a dip to the north/northwest ranging from 9 to 14 degrees, contrary to regional groundwater flow patterns. Numerous episodes of faulting and fracturing, with varying orientations, have been documented at the Site, the bedrock is highly fractured with high secondary porosity, creating numerous hydraulically interconnected vertical and horizontal fractures, along with bedding plane joints.

The hydrogeology of the Site is as follows:

- Overburden/Weathered Bedrock - The overburden/weathered bedrock unit is considered to constitute a single hydrogeologic unit and has an average hydraulic conductivity of $3x10^{-2}$ centimeters per second. Groundwater within the overburden/weathered bedrock aquifer generally flows from the west to east/southeast across the Site and discharges into Gold Run, as evidenced by the comparison of water levels to Gold Run surface water levels. Accordingly, Gold Run is considered a hydrogeologic boundary along the eastern portion of the Site for groundwater flowing through the overburdened/weathered bedrock.

- Bedrock - As noted above, the bedrock is highly fractured on varying orientations with high secondary porosity, creating numerous hydraulically interconnected vertical and horizontal fractures. In some areas of the Site, where multiple fractures intersect such as the area near MW-87 and MW-84AR, the intersecting fractures creates a groundwater setting similar to a macroscale porous media. Groundwater flow in the bedrock units is primarily through secondary porosity, such as bedding plane joints, fractures, and faults, rather than the primary porosity of the bedrock itself. Bedding plane joints, typical in New Jersey geology for conducting groundwater flow, are present, however due to their dip contrary to groundwater flow, their significance in relation to overall bedrock groundwater flow is overshadowed by significant structural geologic deformation, fracturing, and faulting.

Regionally the groundwater flow direction is typically from the northwest to the southeast across the area. However, at the Site scale, as mentioned above, there are innumerous interconnected fractures, bedding planes, and faults that create a complex flow pattern as groundwater follows the regional pattern. Along the western property boundary, roughly parallel to the railroad tracks, a high angle fault has been identified that creates a low flow boundary evident by hydraulic heads stacking (a large change in head [greater than 5 feet] when comparing the western elevations to those east of the fault area). Groundwater in this area, flows over the top of this western fault, due to the higher permeability in the overburden/weathered bedrock.

Additionally intersecting fractures cause bends in the groundwater contours deflecting flow toward the center of the Site and allowing for transport of off-Site groundwater and contamination from north of Parkway Avenue onto the Site. Within the vicinity of the former building slab area, the various fracture regimes intersect into a highly fractured, well connected, and transmissive area that allows groundwater to migrate deeper into the bedrock on its path to the southeast. Within the vicinity of Gold Run, the stream has been interpreted as gaining from bedrock flow, based on groundwater elevations compared to the stream levels and upward gradients in the area.

Vertical gradients across the Site vary spatially both in direction and magnitude. In areas proximal to groundwater flow boundaries, such as Gold Run and the western side of the fault along the western border of the Site, vertical groundwater gradients are upward. In the areas located some distance from the boundaries, vertical gradients are downward indicative of groundwater recharge.

As reported in the Groundwater Investigation Summary Report (Haley & Aldrich, May 2009), during the August 2008 groundwater sampling event, depths to groundwater were measured concurrently in NAWC monitoring wells and former Roller Bearing Company facility monitoring wells. An area-wide groundwater elevation contour plan was created to estimate the overall flow direction in the overburden/weathered bedrock for the area surrounding the Site, as shown on **Figure 3**. The area-wide groundwater elevation contours for overburden indicate groundwater flow is from the northwest to southeast, influenced by Gold Run and the Delaware River further to the south.

3.2 NEARBY SITES

The Site is bordered to the east and west by mixed commercial properties, former industrial sites, and residential neighborhoods, to the north by a shopping plaza and the former NAWC, and to the south by a residential development constructed on property formerly owned by RBC Bearings, Inc. (RBC facility) which operated as an industrial manufacturing facility. The Site is located approximately 1.5 miles north of the Delaware River. Gold Run, which roughly bisects the Site property and has its headwaters at the

NAWC, is a tributary to the Delaware River. The Site is situated between two known groundwater contamination sites: the former NAWC and the RBC facility. These are briefly described herein to provide a context to the groundwater investigation at the Site, along with information on area-wide groundwater conditions.

3.2.1 NAWC

The former NAWC (a former United States Department of Defense testing facility) is located less than 0.1-mile northwest of the Site with Parcels A, B and D. A former NAWC testing laboratory and administration facility (Parcel C) was located directly north of the former General Motors manufacturing building, immediately across Parkway Avenue on the east side of the railroad tracks. The eastern portion of the former NAWC (Parcel C) has been redeveloped into a multi-story apartment complex. **Figure 5** depicts these locations.

Portions of the western portion of the NAWC (Parcels A, B and D) are currently undergoing active remediation, including migration control of contaminated groundwater. In addition, the NAWC is a United States Geological Survey (USGS) research site for investigation, evaluation, and clean-up of chemical releases to fractured rock aquifers. According to the USGS website:

> *"The former Naval Air Warfare Center (NAWC) was a U.S. Navy jet engine testing facility for military aircraft from the mid-1950's until the late 1990's. As a result of the activities at the facility, trichloroethylene (TCE), jet fuel, and other chemicals have leaked into the subsurface. The NAWC covers 67 acres and has large jet-engine test buildings, associated service buildings, hangers, and scores of smaller support structures all interconnected with a vast network of aboveground and underground service lines…*
>
> *The NAWC Research Site, West Trenton, New Jersey, is located 4 miles north of Trenton, NJ. The fractured bedrock at the site has been contaminated with TCE a chlorinated solvent. The plume of TCE was caused by leakage of TCE from aboveground service lines and storage tanks. The TCE was used as a heat transfer agent during jet engine tests.* ***An estimated 100,000 gallons*** *[equivalent to 1.2 million pounds]* ***of TCE was lost through leakage and spills at the site. Dense non-aqueous phase liquids (DNAPL) have been identified at the site, and have flowed vertically downward and in the down-dip direction of the fractured sedimentary rocks.*** *[emphasis added] The aqueous phase plume of dissolved TCE has flowed along the strike and the up-dip directions of the sedimentary rocks. There is evidence of natural attenuation of TCE, probably and at least in part due to the presence of a jet-fuel oil spill that overlaps part of the plume."*

In 2000, the NAWC established a groundwater Classification Exception Area (CEA) along with the length of the north and south storm sewers that lie beneath Parkway Avenue up to the discharge point to Gold Run. The CEA identifies the areas where groundwater was identified to be impacted above GWQS for various VOCs and metals. The storm sewers identified in the CEA include culvert portions of the former Gold Run, where it originates as springs on and near the NAWC. The CEA has not been revised to include PFAS compounds above GWQS at the NAWC.

In 2018, the NAWC issued a report detailing their PFAS sampling efforts entitled "Draft Per- and Polyfluoroalkyl Substances Site Inspection for Multiple Sites Former Naval Air Warfare Center Trenton, Trenton, New Jersey" dated March 2022, which indicted:

> *"A Site Inspection (SI) for per- and polyfluoroalkyl substances (PFAS) was conducted in 2017 and 2018 at the former Naval Air Warfare Center (NAWC) Trenton…*

The PFAS SI was conducted to gather representative groundwater, surface water, and storm water PFAS data to aid in determining the path forward for four of eight potential PFAS source areas that were identified during an installation-specific Preliminary Assessment (PA) at the former NAWC Trenton. Potential PFAS source areas were selected based on known or suspected PFAS-related historical operations; and included areas used for storage of AFFF, fire-fighting training, facility wastewater treatment, and waste disposal. The four potential PFAS source areas investigated are:

- *Site 2, Fire-Fighting Training Area.*
- *Site 3, Former Sludge Disposal Area.*
- *Building 49, Former Fire Station.*
- *Area along Railroad Tracks East of Fire Station."*

And

"Perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and perfluorononanoic acid (PFNA) were detected in surface water samples collected upgradient and downstream in Gold Run…

Groundwater results in the eastern portion of the site, particularly in shallow overburden monitoring wells, suggest that potential former NAWC Trenton PFAS sources are located near the aboveground fuel tanks, former fire-fighting training area (Site 2), and sludge disposal beds (Site 3). PFAS detections along Jack Stephan Way suggest that a source contributor might exist upgradient of the sampling locations. However, the upgradient on-site spring at the headwaters of the OF-1 (West Ditch) system also has similar PFAS concentrations, suggesting that these locations may potentially share a common, upgradient on-site or off-site source(s)."

4. Sampling Results and Interpretation

Surface and groundwater samples were collected from 33 existing groundwater monitoring wells, two surface water locations, and three storm sewer/French drain manholes during the period of 12 to 17 October 2023. Groundwater samples were collected utilizing low-flow sampling techniques; surface water and storm sewer samples were collected utilizing grab sampling techniques from the air-water interface. The sampling results are summarized in **Tables 4**, **5**, and **6**, and presented on **Figure 6**.

4.1 ON-SITE GROUNDWATER RESULTS

As shown on **Table 4**, the results indicated that PFAS constituents were detected in all on-Site groundwater sampling locations, with the majority locations having one or more PFAS above GWQS. The only exception was MW-89, where PFAS constituents were detected, but below criteria. Some of the highest PFAS concentrations in groundwater, notably PFOS over 100 times the GWQS, were detected on the northern, upgradient side of the Site at the MW-92 cluster (**Table 4** and **Figure 6**):

- MW-92 overburden/weathered bedrock: 1420 ng/L,
- MW-92A intermediate bedrock: 1610 ng/L, and
- MW-92B bedrock: 1470 ng/L

Of the top 25 PFOS detections in groundwater, over half were on the upgradient northern or western upgradient sides of the Site. These locations exhibited elevated PFOS concentrations over 10 times the GWQS, including:

- MW-16C bedrock: 1,010 ng/L,
- MW-91A bedrock: 631 ng/L,
- MW-16A overburden/weathered bedrock: 400 ng/L
- MW-39A bedrock: 395 ng/L,
- MW-93A bedrock: 377 ng/L,
- MW-91 overburden/weathered bedrock: 325 ng/L,
- MW-17B bedrock on the western side of the Site: 174 ng/L,
- MW-90AR bedrock: 154 ng/L,
- MW-90R overburden/weathered bedrock: 150 ng/L,
- MW-17 A overburden/weathered bedrock: 116 ng/L,
- MW-93 overburden/weathered bedrock: 95.6/89.8 ng/L,

The MW-92 monitoring cluster was installed on the northern end of the former manufacturing building, away from the potential PFAS source areas such as the former plating pits and sludge drying beds. The highest PFOS concentrations detected in this cluster were in the upper bedrock. Furthermore, the other high detections of PFOS were similarly found in bedrock groundwater on the upgradient, northern side of the Site, with lower concentrations in overburden/weathered bedrock wells. This indicates that the PFOS-dominated detections on the upgradient sides of the Site in bedrock are not originating from an unknown source the Site, but rather demonstrate on-Site groundwater contamination from an off-Site

source. The highest PFOS concentrations, centered on the MW-92 cluster, are also coincident with the highest trichloroethene concentrations in the area.

There does not appear to be a concentrated high or increasing pattern PFAS associated with potential source areas, such as the plater pits, sludge drying beds or other waste management areas. Rather, the distribution pattern starting around MW-92A, appears to migrate into and across the Site in the overburden/weathered bedrock and bedrock as shown on **Figure 6**. This PFOS-dominated pattern follows Site groundwater flow patterns, consistent with the Site conceptual model discussed in Section 3.1, decreasing as it migrates into the Site.

The immediate downgradient locations from MW-92 cluster, such as MW-82, MW-83R, MW-84AR, and MW-84R show a clear pattern decreasing PFOS concentration away from the upgradient property boundaries. The highest PFOS concentrations in the former plating area were detected in the bedrock well, MW-84AR, beneath lower PFOS concentration overburden/weathered bedrock monitoring wells in the area, such as MW-84R and MW-83R, which further indicates that PFAS is not originating in this suspected source area. The decreasing PFOS concentration pattern continues towards the wells along Gold Run, such as MW-2, MW-3, MW-4, MW-6, and MW-7, where vertical groundwater heads transition to upward and discharge to Gold Run.

Some notable differences in the PFAS constituent mix are only observed in overburden/weathered bedrock monitoring wells on the perimeter of the Site, in monitoring wells such as MW-17A, MW-90R, MW-93, MW-39, MW-15, MW-34R, and MW-77. These wells have higher concentrations of PFAS constituents other than PFOS, and more closely match the patterns observed in the french drain and upgradient Gold Run locations, discussed below. This is likely the result of these surface water features in close communication with the shallow groundwater in the overburden/weathered bedrock.

PFAS constituents were also detected in MW-15 and MW-34R, on the east side of Gold Run. The Site conceptual model indicates that Gold Run is a discharge feature that would serve as a hydraulic boundary. As such, these wells would be hydraulically disconnected from the western portion of the Site. The MW-15 and MW-34R results indicates a general PFAS constituent mix, with PFOS and PFOA above GWQS. The remediated buried drum area was located adjacent to MW-34R; however, MW-15 is located away from and upgradient of this former waste management area. The PFAS concentrations are similar in both wells, with MW-15 exhibiting higher PFOS concentrations. This indicates that an off-Site source is likely impacting the groundwater across this area.

4.2 PARKWAY AVENUE FRENCH DRAIN AND GOLD RUN STREAM RESULTS

The Park Avenue french drain, influent and effluent Gold Run stream samples are summarized in **Table 5** and 6 and shown on **Figure 6**. As identified above, two of the french drain samples could not be collected due to either low water levels or blocked manholes. In general, the french drain locations had very little water to sample, likely related to the dry weather period prior and during the sampling event.

The french drain manholes that were sampled, are located in the railroad underpass of Parkway Avenue and exhibited lower PFOS concentrations than typically detected in groundwater, as summarized on **Table 5** and shown on **Figure 6**. Only PFOS was detected above GWQS, however PFHpA, PFHxS and PFHxA at similar concentrations. Similar to the french drain manholes, the upstream and downstream surface water samples from Gold Run indicated PFOS above GWQS, with a more general distribution of PFAS constituents, and elevated PFHpA, PFHxS and PFHxA concentrations. PFOA was also detected

above GWQS in the downstream sample, SW-4. The downstream concentrations of PFOS and PFOA in SW-4 were higher than the upstream sample, SW-1. This concentration rise is consistent with the overburden/weathered bedrock and bedrock groundwater discharges to Gold Run, as identified above.

In addition to PFAS compounds, samples collected from storm sewer manholes were analyzed for metals (chromium and nickel), semi-volatiles organic compounds (1,4-dioxane), and VOCs. The results of these analyses are presented in **Table 6**. Exceedances of GWQS for 1,4-dioxane and trichloroethene (TCE) were reported in samples analyzed from location FDMH-4. With detections of nickel (FDMH-1), cis-1,2-dichloroethene (FDMH-2 and FDMH-4), and TCE (FDMH-2) below GWQS.

4.3 COMPARISON TO NAWC RESULTS

The on-Site PFAS results have the highest PFOS detections on the upgradient property boundary, notably at the MW-92 cluster, away from the manufacturing areas. Furthermore, PFAS constituents are observed in the upgradient french drains and influent sample to Gold Run. These results clearly indicate a significant potential for on-Site groundwater contamination from an off-Site source. Consequently, the results were evaluated in relationship to the historical PFAS sampling results from the NAWC documented in the *Draft Per- and Polyfluoroalkyl Substances Site Inspection for Multiple Sites* dated March 2022. The evaluation of the historical NAWC data indicates that the NAWC has multiple areas with PFAS releases. Two dominant PFAS concentration patterns are observed in the PFAS constituent; these areas are on the western and eastern sides of the NAWC.

The western portion of the NAWC, which had the testing and operational areas, exhibits very low PFOS concentrations, as shown on **Figure 7**. In this area, a more general PFAS constituent mix pattern is observed, with lower PFOS concentrations with higher PFOA, PFHpA, PFHxA and PFHxS, as summarized in **Table 7** for the storm sewers manholes, MW-118.5N, MH-117N (noting that the T locations were coming from the eastern part of NAWC) and GR-OF, along Parkway Avenue. The constituent patterns for samples historically collected by NAWC correlate well with the samples recently collected from the french drain manhole and influent Gold Run surface water samples. As noted above, this also closely correlates to many of the shallow wells along Parkway Avenue and wells along the western portion of the RACER Ewing Site. This would suggest that the source of the PFAS in water in the french drain manholes and upstream sample of Gold Run is originating from the Parkway Avenue storm sewers immediately south of the NAWC.

The eastern portion of the NAWC, along the railroad, had PFAS source areas including the former fire training area, sludge disposal, and aqueous film forming foam (AFFF) sprayed gravel areas. The historical PFOS concentrations in the eastern portion of the NAWC are over an order of magnitude higher than detect on the upgradient side of the RACER Ewing Site at the MW-92 cluster, specifically at MW-11S (25,800 ng/L) and MW-27S (26,500 ng/L). The PFOS concentrations present at the NAWC are found in both shallow and bedrock groundwater, and even extend onto the neighboring Gardens at Birmingham apartments immediately east of the railroad, as demonstrated by bedrock monitoring well, MW-37BR (570 ng/L). The PFOS concentration map, **Figure 7**, clearly shows extremely high PFOS concentrations originating near the former tank farm on the east side of the NAWC, propagating south and southeast with regional and local groundwater flow patterns, and migrating onto the RACER Ewing Site.

5. Conclusions and Recommendations

Based on the evaluation presented herein, the PFAS concentrations identified at the Ewing Township Industrial Land Site demonstrate an upgradient, off-Site source. The following key observations are made:

- PFAS constituents were all on-Site groundwater, surface water and stormwater sampling locations.
- The majority of the detections were above GWQS in nearly, with the only exception MW-89, where PFAS constituents were detected, but below criteria.
- The highest concentrations of PFAS detected at the Site are along the upgradient boundaries of the Site.
- The PFOS-dominated concentrations in the upgradient monitoring well cluster, MW-92, on-Site are similar to those identified on the eastern side of NAWC.
- Concentrations on-Site are lower than those observed within the NAWC source areas by more than an order of magnitude.
- PFOS dominated detections in the upgradient center portion of the Site, centered around MW-92A in bedrock, appears to migrate into and across the Site in the bedrock.
- No distinct pattern is apparent in the plating areas or sludge drying beds, with PFOS concentrations in all process related areas lower than upgradient locations. Rather, consistent with the Site Conceptual Model (CSM), off-Site PFOS in bedrock groundwater migrates through the Site and ultimately appears to contribute to shallow overburden/weathered bedrock zones along Gold Run as bedrock groundwater discharges to this surface water feature.
- A general PFAS constituent mix, with less PFOS, is present in upgradient stormwater. A similar pattern is also present in upgradient shallow overburden/weathered bedrock zones on the north, western, and eastern sides of the Site and surface water from Gold Run. This indicates a connection between stormwater and the shallow overburden/weathered bedrock zones and Gold Run.
- This general PFAS pattern matches closely to what is observed in the NAWC data for storm sewer immediately south of the NAWC.
- PFAS constituents were even detected in MW-15 and MW-34R on the east side of Gold Run, which is considered a hydraulic boundary. The PFAS detections exhibit a mix of PFAS constituents, with concentrations in the upgradient well, MW-15, slightly higher than in MW-34R, adjacent to the remediated drum burial area.

The pathway presented by PFAS indicates a potential source on the NAWC, migrating down-gradient towards, onto, and throughout the RACER Ewing Site, ultimately discharging to Gold Run. Consequently, no further investigation is warranted for PFAS on the RACER Ewing Site.

References

1. Haley & Aldrich, Inc., Groundwater Investigation Summary Report, 20 May 2009.

2. Haley & Aldrich, Inc., Groundwater Remedial Investigation Report for Ewing Township Industrial Land, 6 May 2016.

3. Haley & Aldrich, Inc., Standard Operating Procedure 3032 for the Collection of Environmental Samples for the Analysis of PFAS, 2020, Revised January 2021.

4. Haley & Aldrich, Inc., Quality Assurance Project Plan, 9 August 2023.

5. Haley & Aldrich, Inc., Per- and Polyfluoroalkyl Substances Groundwater Sampling and Analysis Plan for the Ewing Township Industrial Land, 25 September 2023.

6. New Jersey Department of Environmental Protection, Site Remediation Program. Data Quality Assessment and Data Usability Evaluation Technical Guidance. Version 1.0. April 2014

7. New Jersey Department of Environmental Protection, Site Remediation Program. Quality Assurance Project Plan Technical Guidance. Version 1.0. April 2014.

8. Shoemaker, J. and Dan Tettenhorst. Method 537.1 Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). U.S. Environmental Protection Agency, Washington, DC, 2020. https://cfpub.epa.gov/si/si_public_record_report.cfm?lab=NERL&direntryid=343042

9. Tetra Tech, NAVFAC BRAC Program Management Office East, Draft Per- and Polyfluoroalkyl Substances Site Inspection for Multiple Sites Former Naval Air Warfare Center Trenton, Trenton, New Jersey, March 2022.

TABLES

TABLE 1
PFAS SAMPLING LOCATIONS
PFAS SAMPLING & ANALYSIS PLAN
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location	Unit	PFAS
MW-2	Overburden/Weathered Bedrock	1
MW-3	Overburden/Weathered Bedrock	1
MW-4	Overburden/Weathered Bedrock	1
MW-6	Overburden/Weathered Bedrock	1
MW-7	Overburden/Weathered Bedrock	1
MW-11	Overburden/Weathered Bedrock	1
MW-14AR	Bedrock	1
MW-15	Overburden/Weathered Bedrock	1
MW-16A	Overburden/Weathered Bedrock	1
MW-16C	Bedrock	1
MW-17A	Overburden/Weathered Bedrock	1
MW-17B	Bedrock	1
MW-34R	Overburden/Weathered Bedrock	1
MW-39	Overburden/Weathered Bedrock	1
MW-39A	Bedrock	1
MW-41R	Overburden/Weathered Bedrock	1
MW-77	Overburden/Weathered Bedrock	1
MW-82	Overburden/ Weathered Bedrock	1
MW-83R	Overburden/ Weathered Bedrock	1
MW-84R	Overburden/ Weathered Bedrock	1
MW-84AR	Bedrock	1
MW-88	Bedrock	1
MW-89	Overburden/Weathered Bedrock	1
MW-89A	Bedrock	1
MW-90R	Overburden/Weathered Bedrock	1
MW-90AR	Bedrock	1
MW-91	Overburden/Weathered Bedrock	1
MW-91A	Bedrock	1
MW-92	Overburden/Weathered Bedrock	1
MW-92A	Bedrock	1
MW-92B	Bedrock	1
MW-93	Overburden/Weathered Bedrock	1
MW-93A	Bedrock	1
SW-1	Surface Water Location	1
SW-4	Surface Water Location	1
FDMH-1	French Drain/Storm Sewer	1
FDMH-2	French Drain/Storm Sewer	1
FDMH-3*	French Drain/Storm Sewer	1
FDMH-4	French Drain/Storm Sewer	1
FDMH-5**	French Drain/Storm Sewer	1

Sampling Parameters:

PFAS 40

Manual Water Levels will be taken at each sampling event.

Note

* FDMH-3 was not sampled during this event due to lack of water.

**FDMH-5 was not sampled during this event due to access from pavement.

TABLE 2
PFAS COMPOUNDS LIST
PFAS SAMPLING AND ANALYSIS PLAN
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

PARAMETER	ACRONYM	CASRN	FORMULA	MDL	RL
PERFLUOROALKYL CARBOXYLATES (PFCAs)				ng/L (ppt)	ng/L (ppt)
Perfluorobutanoic acid	PFBA	375-22-4	C4HF7O2	2.000	0.5
Perfluoropentanoic acid	PFPeA	2706-90-3	C5HF9O2	0.500	2.0
Perfluorohexanoic acid	PFHxA	307-24-4	C6HF11O2	0.900	2.0
Perfluoroheptanoic acid	PFHpA	375-85-9	C7HF13O2	0.500	2.0
Perfluorooctanoic acid	PFOA	335-67-1	C8HF15O2	0.500	2.0
Perfluorononanoic acid	PFNA	375-95-1	C9HF17O2	0.500	2.0
Perfluorodecanoic acid	PFDA	335-76-2	C10HF19O2	0.500	2.0
Perfluorododecanoic acid (Tricosafluorododecanoic acid)	PFDoDA	307-55-1	C12HF23O2	0.500	2.0
Perfluorotridecanoic acid	PFTrDA	72629-94-8	C13HF25O2	0.500	2.0
Perfluortetradecanoic acid	PFTeDA	376-06-7	C14HF27O2	0.500	2.0
PERFLUOROALKYL SULFONIC ACIDS				ng/L (ppt)	ng/L (ppt)
Perfluorobutanesulfonic acid	PFBS	375-73-5	C4HF9O3S	0.500	2.0
Perfluoropentanesulfonic acid	PFPeS	2706-91-4	$C_5HF_{11}O_3S$	0.500	2.0
Perfluorohexanesulfonic acid	PFHxS	355-46-4	C6HF13O3S	0.500	2.0
Perfluoroheptanesulfonic acid	PFHpS	375-92-8	C7HF15O3S	0.500	2.0
Perfluorooctaanesulfonic acid	PFOS	1763-23-1	C8HF17O3S	1.000	2.0
Perfluornonanesulfonic acid	PFNS	68259-12-1	C9HF19O3S	0.500	2.0
Perfluorodecanesulfonic acid	PFDS	335-77-3	$C_{10}HF_{21}O_3S$	0.500	2.0
Perfluorododecanesulfonic acid (PFDoS)	PFDOS	79780-39-5	C12HF25O3S	0.500	2.0
Fluorotelometer Sulfonic Acid				ng/L (ppt)	ng/L (ppt)
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	4:2FTS	757124-72-4	C4F9CH2CH2SO3H	0.500	2.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	6:2FTS	27619-97-2	C8H5F13O3S	4.200	5.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	8:2FTS	39108-34-4	C8*C2D4F17NaO3S	1.000	3.0
Perfluorooctane sulfonamides				ng/L (ppt)	ng/L (ppt)
Perfluorooctanesulfonamide	PFSOA	754-91-6	C8H2F17NO2S	0.700	2.0
Perfluorooctane sulfonamidoacetic acids				ng/L (ppt)	ng/L (ppt)
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9	C8F17SO2N(CH3)CH2COOH	0.600	2.0
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6	C12H6F19NO4S	0.500	3.0
Per- and polyfluoroether carboxylic acids				ng/L (ppt)	ng/L (ppt)
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6	C6HF11O3	1.000	3.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ADONA	919005-14-4	C7H2F12O4	0.500	2.0
Ether sulfonic acids				ng/L (ppt)	ng/L (ppt)
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1	C8HF16ClSO4	0.500	2.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9	C10HClF20O4S	0.500	2.0

TABLE 3
NEW JERSEY PFAS GROUNDWATER QUALITY STANDARDS
PFAS SAMPLING AND ANALYSIS PLAN
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

PARAMETER	ACRONYM	CASRN	FORMULA	GWQS
PERFLUOROALKYL CARBOXYLATES (PFCAs)				ng/L (ppt)
Perfluorooctanoic acid	PFOA	335-67-1	C8HF15O2	14
Perfluorononanoic acid	PFNA	375-95-1	C9HF17O2	13
PERFLUOROALKYL SULFONATES (PFSAs)				ng/L (ppt)
Perfluorooctanesulfonic acid	PFOS	1763-23-1	C8F17O3S	13
INTERIM GROUNDWATER QUALITY STANDARDS				ng/L (ppt)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	Genx/HFPO-DA	13252-13-16 and 62037-80-3	C6H4F11NO3	20

Notes and Abbreviations:

ng/L = nanograms per liter

ppt = parts per trillion

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PFAS
RACER EWING INDUSTRIAL LAND
EWING, NEW JERSEY

Location	Post June 1, 2020	MW-2	MW-3	MW-4	MW-6	MW-7	MW-11	MW-14A	MW-15	MW-16A	MW-16C	MW-17A	MW-17B	MW-34R	MW-39	MW-39A	MW-41R	MW-41R	MW-77	MW-82	MW-83R	MW-84R	MW-84AR	MW-88
Sample Date	Groundwater	10/16/2023	10/16/2023	10/16/2023	10/17/2023	10/17/2023	10/17/2023	10/12/2023	10/16/2023	10/16/2023	10/16/2023	10/12/2023	10/12/2023	10/16/2023	10/13/2023	10/13/2023	10/12/2023	10/12/2023	10/17/2023	10/12/2023	10/12/2023	10/17/2023	10/17/2023	10/13/2023
Sample Type	Quality	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N
Sample Depth (bgs)	Standards	10 (ft)	9 (ft)	11.5 (ft)	10 (ft)	13 (ft)	25.5 (ft)	40 (ft)	7 (ft)	20 (ft)	120 (ft)	29 (ft)	96 (ft)	12 (ft)	17 (ft)	70 (ft)	29.5 (ft)	29.5 (ft)	20 (ft)	30 (ft)	29 (ft)	29 (ft)	75 (ft)	80.5 (ft)
Field Parameters																								
Temperature (Deg C)	-	**15.71**	**16.64**	**17.76**	**16.26**	**15.69**	**15.98**	**18.42**	**15.23**	**18.3**	**18.15**	**21.43**	**21.99**	**17.91**	**16.71**	**13.94**	**17.78**	-	**14.7**	**22.59**	**18.64**	**13.91**	**14.24**	**16.3**
Conductivity, Field (mS/cm)	-	**0.722**	**0.696**	**1.082**	**0.919**	**0.811**	**0.631**	**0.442**	**0.739**	**0.801**	**0.399**	**0.609**	**0.367**	**0.702**	**0.483**	**0.407**	**0.309**	-	**0.375**	**0.325**	**1.235**	**0.367**	**0.399**	**0.115**
Oxidation Reduction Potential (ORP), Field (mv)	-	**162.3**	**109.7**	**-60**	**-7.9**	**147.1**	**78.9**	**12.6**	**102**	**-35.3**	**4**	**-9.3**	**11.3**	**72.4**	**59.6**	**45.2**	**75.6**	-	**37.7**	**139.6**	**184.5**	**52.8**	**-22**	**-65.6**
Dissolved Oxygen, Field (mg/L)		**1.30**	**0.77**	**0.46**	**1.56**	**0.39**	**2.20**	**0.91**	**0.97**	**1.10**	**3.23**	**1.29**	**1.10**	**0.42**	**5.02**	**2.86**	**0.75**	-	**1.05**	**2.31**	**0.61**	**2.91**	**1.49**	**0.30**
Turbidity, Field (NTU)	-	**1.51**	**2.3**	**13.2**	**8.61**	**15**	**349**	**21.8**	**2.73**	**61.6**	**12.8**	**118**	**30.9**	**13.9**	**3.39**	**18.9**	**15.4**	-	**4.1**	**27.9**	**7.78**	**9.82**	**14.1**	**7.67**
pH, Field (pH units)	8.5	**7.26**	**6.24**	**6.43**	**6.44**	**6.3**	**6.65**	**7.23**	**4.02**	**6.29**	**6.68**	**7.37**	**7.51**	**5.07**	**6.32**	**9.22** [A]	**6.63**	-	**6.69**	**6**	**5.47**	**5.94**	**6.8**	**7.12**
PFAS (ng/L)																								
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	**0.64 J**	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	-	**4.17 J**	**8.56**	**7.35**	ND (4.36)	ND (4.28)	ND (4.25)	ND (4.12)	ND (4.3)	ND (4.36)	**64.3**	ND (4.28)	ND (4.4)	ND (4.11)	ND (4.03)	**10.3**	ND (4.18)	ND (4.28)	ND (4.01)	ND (4.35)	ND (4.17)	ND (3.97)	ND (3.95)	ND (4.29)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	-	**2.39**	**6.99**	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	-	ND (4.19)	ND (4.18)	ND (4.26)	ND (4.36)	ND (4.28)	ND (4.25)	ND (4.12)	ND (4.3)	ND (4.36)	ND (4.35)	ND (4.28)	ND (4.4)	ND (4.11)	ND (4.03)	ND (3.97)	ND (4.18)	ND (4.28)	ND (4.01)	ND (4.35)	ND (4.17)	ND (3.97)	ND (3.95)	ND (4.29)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	-	ND (4.19)	ND (4.18)	ND (4.26)	ND (4.36)	ND (4.28)	ND (4.25)	ND (4.12)	ND (4.3)	ND (4.36)	ND (4.35)	ND (4.28)	ND (4.4)	ND (4.11)	ND (4.03)	ND (3.97)	ND (4.18)	ND (4.28)	ND (4.01)	ND (4.35)	ND (4.17)	ND (3.97)	ND (3.95)	ND (4.29)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	20*	ND (3.35)	ND (3.35)	ND (3.41)	ND (3.49)	ND (3.43)	ND (3.4)	ND (3.29)	ND (3.44)	ND (3.49)	ND (3.48)	**1.37 J**	**1.19 J**	**1.26 J**	ND (3.22)	ND (3.17)	ND (3.35)	ND (3.42)	ND (3.2)	ND (3.48)	**0.92 J**	ND (3.17)	ND (3.16)	ND (3.43)
Perfluorobutanesulfonic acid (PFBS)	-	**3.07**	**3.67**	**11.7**	**1.72 J**	**3.39**	**3.32**	**1.02 J**	**9.69**	**5.51**	**7.34**	**2.77**	**2.07**	**8.33**	**1.17 J**	**9.07**	**0.94 J**	**0.93 J**	**4.53**	**3.62**	**3.23**	**2.77**	**11.2**	ND (1.71)
Perfluorobutanoic acid (PFBA)	-	**14.5**	**14.3**	**37.1**	**14.2**	**12.1**	**15.9**	**2.59 J**	**17.8**	**10.3**	**13.1**	**17.5**	**11.2**	**29.8**	**1.53 J**	**6.6**	ND (4.18)	ND (4.28)	**6.42**	**12.9**	**21.3**	**8.28**	**9.79**	ND (4.29)
Perfluorodecanesulfonic acid (PFDS)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	**0.42 J**	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	**0.37 J**	ND (1.59)	ND (1.58)	ND (1.71)
Perfluorodecanoic acid (PFDA)	-	**0.53 J**	**0.72 J**	**1.55 J**	**0.51 J**	**1.14 J**	**0.49 J**	**1.73**	**1.03 J**	**0.54 J**	**0.67 J**	**1.74**	**1.2 J**	**0.93 J**	ND (1.61)	**0.48 JI**	ND (1.67)	ND (1.71)	ND (1.6)	**0.73 J**	**0.76 JI**	**0.87 J**	ND (1.58)	ND (1.71)
Perfluorododecanoic acid (PFDoDA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
Perfluoroheptanesulfonic acid (PFHpS)	-	**7.05**	**6.6**	**7.22**	**3.12**	**4.8 I**	**2.66**	**0.44 J**	**1.48 J**	**2.42**	**13.3**	**0.94 J**	**0.59 J**	**1.31 J**	**0.74 J**	**6.3**	**0.57 J**	**0.5 J**	**0.49 J**	**8.66**	**8.15**	**6.85**	**27.5**	**0.54 J**
Perfluoroheptanoic acid (PFHpA)	-	**7.58**	**8.87**	**13.6**	**7.67**	**4.97**	**6.05**	**1.74**	**11**	**3.6**	**19.5**	**9.22**	**3.85**	**15.7**	**0.49 J**	**3.99**	**1.4 J**	**1.33 J**	**3.67**	**5.77**	**20.5**	**4.86**	**9.59**	**0.78 J**
Perfluorohexanesulfonic acid (PFHxS)	-	**14.1**	**14.4**	**32.9 I**	**8.9**	**15.1 I**	**7.8**	**2.4**	**45.7**	**14.4**	**33.9**	**6.09**	**2.34**	**26.6**	**4.05**	**28.4**	**2.43**	**2.57**	**2.26**	**14.7**	**15.4**	**15.1**	**64.3**	**1.65 J**
Perfluorohexanoic acid (PFHxA)	-	**11.3**	**11.3**	**39.5**	**8.3**	**5.9**	**8.46**	**2.79**	**22.6**	**6.45**	**55.2**	**18.7**	**6.52**	**26.4**	**0.64 J**	**10.4**	**1.65 J**	**1.68 J**	**8.32**	**10.8**	**81.1**	**9.67**	**21.2**	**1.35 J**
Perfluorononane sulfonic acid (PFNS)	-	**0.34 J**	ND (1.67)	**0.43 J**	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	**0.35 J**	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
Perfluorononanoic acid (PFNA)	13	**2.6**	**3.45**	**7.12**	**5.59**	**4.97**	**2.87**	**0.97 J**	**4.08**	**1.55 J**	**2.44**	**2.84**	**2.19**	**6.97**	**0.88 J**	**0.56 J**	ND (1.67)	ND (1.71)	**1.39 J**	**1.81**	**1.45 J**	**1.6**	**1.39 J**	ND (1.71)
Perfluorooctane sulfonamide (PFOSA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
Perfluorooctanesulfonic acid (PFOS)	13	**814 D** [A]	**757** [A]	**748** [A]	**694** [A]	**420** [A]	**207** [A]	**18.5** [A]	**77.3** [A]	**400** [A]	**1010 D** [A]	**116** [A]	**174** [A]	**60.3** [A]	**30.7** [A]	**395** [A]	**16.1** [A]	**15.1** [A]	**44.9** [A]	**598** [A]	**533** [A]	**556** [A]	**1130 D** [A]	**43.9** [A]
Perfluorooctanoic acid (PFOA)	14	**23** [A]	**23.4** [A]	**55.9** [A]	**20.1** [A]	**15.4** [A]	**13.2**	**7.96**	**17.5** [A]	**10.4**	**29.5** [A]	**16.6** [A]	**7.67**	**42.2** [A]	**5.14**	**16.6** [A]	**6.29**	**6.51**	**9.09**	**21.3** [A]	**16.2** [A]	**19** [A]	**39.5** [A]	**1.15 J**
Perfluoropentanesulfonic acid (PFPeS)	-	**3.1**	**3.4**	**11.6**	**1.82**	**3.31 I**	**2.25**	**0.52 J**	**9.45**	**3.57**	**9.79**	**0.85 J**	ND (1.76)	**5.03**	**0.67 J**	**12.9**	**0.63 J**	**0.62 J**	**0.59 J**	**4.18**	**4.03**	**2.59**	**15.8**	**0.47 J**
Perfluoropentanoic acid (PFPeA)	-	**9.71**	**12.6**	**35**	**12.7**	**8.52**	**8.5**	**2.51**	**29.8**	**7.86**	**61.4**	**16**	**4.18**	**31.5**	**0.59 J**	**3.63**	**1.65 J**	**1.89**	**9.33**	**9.07**	**81.2**	**6.44**	**7.87**	ND (1.71)
Perfluorotetradecanoic acid (PFTeDA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
Perfluorotridecanoic acid (PFTrDA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	ND (1.65)	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	ND (1.76)	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)
Perfluoroundecanoic acid (PFUnDA)	-	ND (1.68)	ND (1.67)	ND (1.7)	ND (1.74)	ND (1.71)	ND (1.7)	**1.15 J**	ND (1.72)	ND (1.74)	ND (1.74)	ND (1.71)	**0.63 J**	ND (1.64)	ND (1.61)	ND (1.59)	ND (1.67)	ND (1.71)	ND (1.6)	ND (1.74)	ND (1.67)	ND (1.59)	ND (1.58)	ND (1.71)

Notes:
1. ND: Result is not detected above the indicated reporting limit
   J: Estimated value
   D: Sample was diluted
2. Results in red exceed the following criteria:
   - Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
   FD - Field Duplicate
5. * Is an Interim Specific Ground Water Quality Criteria (Effective 6/5/23)

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PFAS
RACER EWING INDUSTRIAL LAND
EWING, NEW JERSEY

Location	Post June 1, 2020	MW-89	MW-89A	MW-90R	MW-90AR	MW-91	MW-91A	MW-92	MW-92A	MW-92B	MW-93	MW-93	MW-93A
Sample Date	Groundwater	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/13/2023	10/13/2023	10/13/2023	10/13/2023	10/13/2023	10/16/2023	10/16/2023	10/16/2023
Sample Type	Quality	N	N	N	N	N	N	N	N	N	N	FD	N
Sample Depth (bgs)	Standards	25 (ft)	96 (ft)	26 (ft)	95 (ft)	26 (ft)	66 (ft)	36 (ft)	70 (ft)	92 (ft)	30 (ft)	30 (ft)	65 (ft)
Field Parameters													
Temperature (Deg C)	-	**17.8**	**16.71**	**18.45**	**16.97**	**15.29**	**15.24**	**19.13**	**17.29**	**18.24**	**18.75**	-	**19.62**
Conductivity, Field (mS/cm)	-	**0.37**	**0.466**	**0.497**	**0.585**	**0.45**	**0.399**	**0.407**	**0.584**	**0.392**	**0.683**	-	**0.508**
Oxidation Reduction Potential (ORP), Field (mv)	-	**79.7**	**67.1**	**198.6**	**192.8**	**50.6**	**44.3**	**67.5**	**-195.6**	**-52**	**94.9**	-	**8**
Dissolved Oxygen, Field (mg/L)		**1.26**	**2.16**	**1.41**	**1.58**	**1.65**	**1.17**	**1.17**	**1.20**	**1.23**	**2.20**	-	**0.78**
Turbidity, Field (NTU)	-	**9.59**	**10.3**	**17.7**	**9.71**	**20.9**	**7.46**	**11.3**	**9.64**	**9.11**	**6.97**	-	**7.58**
pH, Field (pH units)	8.5	**7.23**	**7.63**	**7.3**	**6.56**	**6.43**	**7.82**	**6.94**	**11.02** [A]	**10.23** [A]	**6.41**	-	**8.47**
PFAS (ng/L)													
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	-	ND (4.24)	**11.8**	**7.35**	**1.42 J**	ND (3.98)	ND (3.98)	ND (4.36)	ND (4.39)	ND (4.36)	ND (4.37)	ND (4.29)	ND (4.37)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	-	ND (1.7)	ND (1.74)	**0.91 J**	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	-	ND (4.24)	ND (4.36)	ND (4.25)	ND (4.33)	ND (3.98)	ND (3.98)	ND (4.36)	ND (4.39)	ND (4.36)	ND (4.37)	ND (4.29)	ND (4.37)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	-	ND (4.24)	ND (4.36)	ND (4.25)	ND (4.33)	ND (3.98)	ND (3.98)	ND (4.36)	ND (4.39)	ND (4.36)	ND (4.37)	ND (4.29)	ND (4.37)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	20*	ND (3.39)	ND (3.49)	ND (3.4)	ND (3.46)	**1.57 J**	ND (3.19)	ND (3.49)	ND (3.51)	ND (3.49)	**1.07 J**	**1.07 J**	ND (3.5)
Perfluorobutanesulfonic acid (PFBS)	-	**2.93**	**1.82**	**17.9**	**0.59 J**	**3.5**	**15**	**9.35**	**8.79**	**8.88**	**3.39**	**3.39**	**2.31**
Perfluorobutanoic acid (PFBA)	-	**1.64 J**	**5.24**	**57.5**	**5.4**	**17.9**	**10.8**	**5.28**	**9.62**	**6.3**	**33.3**	**32.3**	**16.8**
Perfluorodecanesulfonic acid (PFDS)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
Perfluorodecanoic acid (PFDA)	-	ND (1.7)	ND (1.74)	**0.76 J**	**0.7 J**	**1.48 J**	**0.45 J**	**0.42 J**	**0.76 J**	**0.42 J**	**7.92**	**7.11**	**0.77 J**
Perfluorododecanoic acid (PFDoDA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
Perfluoroheptanesulfonic acid (PFHpS)	-	ND (1.7)	ND (1.74)	**2.74**	**2.34**	**4.19**	**9.1**	**17.1**	**16.9**	**16.5**	**1.5 J**	**1.35 J**	**5.5**
Perfluoroheptanoic acid (PFHpA)	-	**1.7**	**5.43**	**25.3**	**1.47 J**	**13.9**	**4.22**	**6.1**	**5.76**	**5.38**	**21.9**	**19.8**	**2.18**
Perfluorohexanesulfonic acid (PFHxS)	-	**2.26**	**1.56 J**	**85.2**	**8.57**	**16**	**50.3**	**40.7**	**37.6**	**41.2**	**17.6**	**16.9**	**13.3**
Perfluorohexanoic acid (PFHxA)	-	**2.18**	**19.7**	**54.3**	**3.16**	**30.2**	**12**	**15.9**	**16**	**16.2**	**51.3**	**51.8**	**6.9**
Perfluorononane sulfonic acid (PFNS)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	**0.54 JI**	**0.78 J**	**0.46 J**	ND (1.75)	ND (1.72)	ND (1.75)
Perfluorononanoic acid (PFNA)	13	**0.58 J**	**0.72 J**	**3.04**	**1.63 J**	**5.9**	**1.28 J**	**1.19 J**	**1.41 J**	**1.34 J**	**6.01**	**6.01**	**1.87**
Perfluorooctane sulfonamide (PFOSA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
Perfluorooctanesulfonic acid (PFOS)	13	**8.32**	**15** [A]	**150** [A]	**154** [A]	**325** [A]	**631** [A]	**1420 D** [A]	**1610 D** [A]	**1470 D** [A]	**95.6** [A]	**89.8** [A]	**377** [A]
Perfluorooctanoic acid (PFOA)	14	**5.6**	**4.46**	**16.3** [A]	**11.3**	**45.1** [A]	**25.3** [A]	**36.2** [A]	**38.6** [A]	**38.6** [A]	**45.8** [A]	**43.7** [A]	**18.9** [A]
Perfluoropentanesulfonic acid (PFPeS)	-	ND (1.7)	ND (1.74)	**16.9**	**0.88 J**	**2.98**	**21.2**	**12.7**	**11**	**12.1**	**3.33**	**3.19**	**3.55**
Perfluoropentanoic acid (PFPeA)	-	**1.88**	**24.5**	**84.1**	**2.49**	**28.8**	**5.34**	**4.09**	**5.05**	**4.41**	**50.7**	**46.3**	**6.75**
Perfluorotetradecanoic acid (PFTeDA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
Perfluorotridecanoic acid (PFTrDA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	ND (1.75)	ND (1.72)	ND (1.75)
Perfluoroundecanoic acid (PFUnDA)	-	ND (1.7)	ND (1.74)	ND (1.7)	ND (1.73)	ND (1.59)	ND (1.59)	ND (1.74)	ND (1.76)	ND (1.74)	**0.9 J**	**0.94 J**	ND (1.75)

Notes:
1. ND: Result is not detected above the indicated reporting limit
   J: Estimated value
   D: Sample was diluted
2. Results in red exceed the following criteria:
   - Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
   FD - Field Duplicate
5. * Is an Interim Specific Ground Water Quality Criteria (Effective 6/5/23)

TABLE 5
STORM SEWER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
RACER EWING INDUSTRIAL LAND
EWING, NEW JERSEY

Location	New Jersey Surface Water Quality Standards	New Jersey Surface Water Quality Standards	Post June 1, 2020 Groundwater Quality Standards	FDMH-1	FDMH-2	FDMH-4	SW-1	SW-4
Sample Date				10/16/2023	10/16/2023	10/16/2023	10/17/2023	10/17/2023
Sample Type				N	N	N	N	N
Sample Depth (bgs)	ECO Chronic	Chronic		-	-	-	-	-
Sample Name	Freshwater	Freshwater		FDMH-1-101623-0915	FDMH-2-101623-0930	FDMH-4-101623-1015	SW1-101723-1210	SW4-101723-0940
Field Parameters								
Temperature (Deg C)	-	-	-	-	-	-	**15.14**	**13.18**
Dissolved Oxygen, Field (mg/L)	-	-	-	-	-	-	**8.11**	**2.68**
Conductivity, Field (mS/cm)	-	-	-	-	-	-	**0.409**	**0.497**
Oxidation Reduction Potential (ORP), Field (mv)	-	-	-	-	-	-	**13.9**	**91.7**
Turbidity, Field (NTU)	-	-	-	-	-	-	**5.13**	**11.4**
pH, Field (pH units)	-	-	8.5	-	-	-	**7.84**	**7.23**
PFAS (ng/L)								
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	-	-	-	ND (4.42)	ND (4.37)	**21.2**	**15.7**	**5.76**
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	-	-	-	ND (1.77)	ND (1.75)	**4.41**	**3.34**	**1.32 J**
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	-	-	-	ND (4.42)	ND (4.37)	ND (4.12)	ND (4.03)	ND (4.2)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	-	-	-	ND (4.42)	ND (4.37)	ND (4.12)	ND (4.03)	ND (4.2)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	-	-	20*	ND (3.53)	ND (3.5)	ND (3.29)	ND (3.23)	ND (3.36)
Perfluorobutanesulfonic acid (PFBS)	-	-	-	**4.15**	**6.41**	**14.8**	**16**	**11.8**
Perfluorobutanoic acid (PFBA)	-	-	-	**59.2**	**74.4**	**25.6**	**30.5**	**23.2**
Perfluorodecanesulfonic acid (PFDS)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluorodecanoic acid (PFDA)	-	-	-	**0.52 J**	**0.42 J**	ND (1.65)	**0.39 J**	**0.86 J**
Perfluorododecanoic acid (PFDoDA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluoroheptanesulfonic acid (PFHpS)	-	-	-	ND (1.77)	**0.82 J**	**1.73**	**2.2**	**3.27**
Perfluoroheptanoic acid (PFHpA)	-	-	-	**3.86**	**15.1**	**17.2**	**17.3**	**15.8**
Perfluorohexanesulfonic acid (PFHxS)	-	-	-	**4.03**	**24.4**	**45.1**	**57.6**	**49.2**
Perfluorohexanoic acid (PFHxA)	-	-	-	**6.09**	**25.8**	**38.6**	**44.4**	**33.9**
Perfluorononane sulfonic acid (PFNS)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluorononanoic acid (PFNA)	-	-	13	**2.2**	**2.23**	**1.52 J**	**1.79**	**2.88**
Perfluorooctane sulfonamide (PFOSA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluorooctanesulfonic acid (PFOS)	-	-	13	**21.3** [C]	**29.2** [C]	**70.2** [C]	**109** [C]	**204** [C]
Perfluorooctanoic acid (PFOA)	-	-	14	**9.73**	**12.1**	**9.14**	**10.4**	**16.3** [C]
Perfluoropentanesulfonic acid (PFPeS)	-	-	-	**0.69 J**	**5.02**	**9.36**	**12.2**	**10**
Perfluoropentanoic acid (PFPeA)	-	-	-	**6.75**	**35.8**	**62.6**	**64.7**	**40**
Perfluorotetradecanoic acid (PFTeDA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluorotridecanoic acid (PFTrDA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)
Perfluoroundecanoic acid (PFUnDA)	-	-	-	ND (1.77)	ND (1.75)	ND (1.65)	ND (1.61)	ND (1.68)

Notes:
1. ND: Result is not detected above the indicated reporting limit
   J: Estimated value
2. Results in red exceed the following criteria:
   [A] Post June 1, 2020 Surface Water Quality Standards (SWQS) Eco Chronic Freshwater
   [B] Post June 1, 2020 Surface Water Quality Standards (SWQS) Chronic Freshwater
   [C] Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
   FD - Field Duplicate
5. * Is an Interim Specific Ground Water Quality Criteria (Effective 6/5/23)

TABLE 6
STORM SEWER AND SURFACE WATER ANALYTICAL RESULTS - OTHER COMPOUNDS
RACER EWING INDUSTRIAL LAND
EWING, NEW JERSEY

Location	New Jersey Surface Water Quality Standards	New Jersey Surface Water Quality Standards	Post June 1, 2020 Groundwater Quality	FDMH-1	FDMH-2	FDMH-4	SW-1	SW-4
Sample Date				10/16/2023	10/16/2023	10/16/2023	10/17/2023	10/17/2023
Sample Type				N	N	N	N	N
Sample Depth (bgs)	ECO Chronic	Chronic	Standards	-	-	-	-	-
Sample Name	Freshwater	Freshwater		FDMH-1-101623-0915	FDMH-2-101623-0930	FDMH-4-101623-1015	SW1-101723-1210	SW4-101723-0940
Field Parameters								
Temperature (Deg C)	-	-	-	-	-	-	**15.14**	**13.18**
Dissolved Oxygen, Field (mg/L)	-	-	-	-	-	-	**8.11**	**2.68**
Conductivity, Field (mS/cm)	-	-	-	-	-	-	**0.409**	**0.497**
Oxidation Reduction Potential (ORP), Field (mv)	-	-	-	-	-	-	**13.9**	**91.7**
Turbidity, Field (NTU)	-	-	-	-	-	-	**5.13**	**11.4**
pH, Field (pH units)	-	-	8.5	-	-	-	**7.84**	**7.23**
Inorganic Compounds (ug/L)								
Chromium, Total	42	-	70	ND (4)	ND (4)	ND (4)	-	-
Nickel, Total	80.09	80.09	100	**2.1 J**	ND (4)	ND (4)	-	-
Semi-Volatile Organic Compounds (ug/L)								
1,4-Dioxane	-	-	0.4	ND (0.2)	ND (0.2)	**0.49** [C]	-	-
Volatile Organic Compounds (ug/L)								
1,1,1-Trichloroethane	76	-	30	ND (1)	ND (1)	ND (1)	-	-
1,1,2,2-Tetrachloroethane	380	-	1	ND (1)	ND (1)	ND (1)	-	-
1,1,2-Trichloroethane	500	-	3	ND (1)	ND (1)	ND (1)	-	-
1,1-Dichloroethane	-	-	50	ND (1)	ND (1)	ND (1)	-	-
1,1-Dichloroethene	65	-	1	ND (1)	ND (1)	ND (1)	-	-
1,2,4-Trichlorobenzene	30	-	9	ND (1)	ND (1)	ND (1)	-	-
1,2-Dibromo-3-chloropropane (DBCP)	-	-	0.02	ND (1)	ND (1)	ND (1)	-	-
1,2-Dibromoethane (Ethylene Dibromide)	-	-	0.03	ND (1)	ND (1)	ND (1)	-	-
1,2-Dichlorobenzene	14	-	600	ND (1)	ND (1)	ND (1)	-	-
1,2-Dichloroethane	910	-	2	ND (1)	ND (1)	ND (1)	-	-
1,2-Dichloropropane	360	-	1	ND (1)	ND (1)	ND (1)	-	-
1,3-Dichlorobenzene	38	-	600	ND (1)	ND (1)	ND (1)	-	-
1,4-Dichlorobenzene	9.4	-	75	ND (1)	ND (1)	ND (1)	-	-
2-Butanone (Methyl Ethyl Ketone)	-	-	300	ND (5)	ND (5)	ND (5)	-	-
2-Hexanone (Methyl Butyl Ketone)	-	-	40	ND (5)	ND (5)	ND (5)	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	-	-	-	ND (5)	ND (5)	ND (5)	-	-
Acetone	-	-	6000	ND (5)	ND (5)	ND (5)	-	-
Benzene	114	-	1	ND (1)	ND (1)	ND (1)	-	-
Bromodichloromethane	-	-	1	ND (1)	ND (1)	ND (1)	-	-
Bromoform	230	-	4	ND (1)	ND (1)	ND (1)	-	-
Bromomethane (Methyl Bromide)	16	-	10	ND (1)	ND (1)	ND (1)	-	-
Carbon disulfide	-	-	700	ND (1)	ND (1)	ND (1)	-	-
Carbon tetrachloride	240	-	1	ND (1)	ND (1)	ND (1)	-	-
Chlorobenzene	47	-	50	ND (1)	ND (1)	ND (1)	-	-
Chloroethane	-	-	-	ND (1)	ND (1)	ND (1)	-	-
Chloroform (Trichloromethane)	140	-	70	ND (1)	ND (1)	ND (1)	-	-
Chloromethane (Methyl Chloride)	-	-	-	ND (1)	ND (1)	ND (1)	-	-
cis-1,2-Dichloroethene	-	-	70	ND (1)	**0.38 J**	**0.83 J**	-	-
cis-1,3-Dichloropropene	-	-	1	ND (1)	ND (1)	ND (1)	-	-
Cyclohexane	-	-	-	ND (1)	ND (1)	ND (1)	-	-
Dibromochloromethane	-	-	1	ND (1)	ND (1)	ND (1)	-	-
Dichlorodifluoromethane (CFC-12)	-	-	1000	ND (1)	ND (1)	ND (1)	-	-
Ethylbenzene	14	-	700	ND (1)	ND (1)	ND (1)	-	-
Isopropylbenzene (Cumene)	-	-	700	ND (1)	ND (1)	ND (1)	-	-
Methyl acetate	-	-	7000	ND (5)	ND (5)	ND (5)	-	-
Methyl Tert Butyl Ether (MTBE)	51450	-	70	ND (1)	ND (1)	ND (1)	-	-
Methylcyclohexane	-	-	-	ND (1)	ND (1)	ND (1)	-	-
Methylene chloride (Dichloromethane)	940	-	3	ND (1)	ND (1)	ND (1)	-	-
Styrene	32	-	100	ND (1)	ND (1)	ND (1)	-	-
Tetrachloroethene	45	-	1	ND (1)	ND (1)	ND (1)	-	-
Toluene	253	-	600	ND (1)	ND (1)	ND (1)	-	-
trans-1,2-Dichloroethene	970	-	100	ND (1)	ND (1)	ND (1)	-	-
trans-1,3-Dichloropropene	-	-	1	ND (1)	ND (1)	ND (1)	-	-
Trichloroethene	47	-	1	ND (1)	**0.37 J**	**1.3** [C]	-	-
Trichlorofluoromethane (CFC-11)	-	-	2000	ND (1)	ND (1)	ND (1)	-	-
Trifluorotrichloroethane (Freon 113)	-	-	20000	ND (1)	ND (1)	ND (1)	-	-
Vinyl chloride	930	-	1	ND (1)	ND (1)	ND (1)	-	-
Xylene (Total)	27	-	1000	ND (2)	ND (2)	ND (2)	-	-

Notes:
1. ND: Result is not detected above the indicated reporting limit
   J: Estimated value
2. Results in red exceed the following criteria:
   [A] Post June 1, 2020 Surface Water Quality Standards (SWQS) Eco Chronic Freshwater
   [B] Post June 1, 2020 Surface Water Quality Standards (SWQS) Chronic Freshwater
   [C] Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
   FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	GR-OF 6/27/2017 N	MH-117N 6/27/2017 N	MH-117T 6/27/2017 N	MH-118.5N 6/27/2017 N	MH-118.5N 6/27/2017 FD	MH-118.5T 6/27/2017 N	MH-121.5N 6/27/2017 N	MH-121.5T 6/27/2017 N	MH-125.9N 6/27/2017 N	MH-125.9T 6/27/2017 N	West Ditch Out 6/27/2017 N	WEST DITCH IN 6/27/2017 N	MH-140 6/28/2017 N	MH-140 6/28/2017 FD	Interceptor 6/28/2017 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	5.79 U	5.08 U	5.08 U	5.12 U	5.53 U	4.56 U	5.08 U	5.08 U	5.04 U	5.21 U	5.68 U	5.34 U	5.43 U	5.3 U	5.43 UJ
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	5.79 U	5.08 U	5.08 U	5.12 U	5.53 U	4.56 U	5.08 U	5.08 U	5.04 U	5.21 U	5.68 U	5.34 U	5.43 U	5.3 U	5.43 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**50.4**	**113**	**64.6**	**128**	**116**	**37.2**	**44.3**	**36.2**	**38.1**	**59**	**42.1**	**39.8**	**37**	**30.6**	**29.8**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	**39.3**	**120**	**39.7**	**155**	**127**	**1.87 J**	**5.5 J**	5.08 U	5.04 U	5.21 U	5.68 U	5.34 U	5.43 U	5.3 U	5.43 U
PERFLUORODECANOIC ACID (PFDA)	-	**3.29 J**	**1.6 J**	**3.3 J**	**3.78 J**	**3.79 J**	4.56 UJ	5.08 UJ	5.08 UJ	**3.26 J**	5.21 UJ	5.68 U	5.34 U	5.43 U	5.3 U	5.43 U
PERFLUORODODECANOIC ACID (PFDoA)	-	5.79 U	5.08 U	5.08 UJ	5.12 U	5.53 U	4.56 U	5.08 U	5.08 U	5.04 U	5.21 U	5.68 U	5.17 U	5.43 U	5.3 U	5.43 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**89.7**	**158**	**108**	**213**	**190**	**59.7**	**133**	**44.6**	**46.2**	**58.5**	**55.8**	**52.7**	**41.8 J**	**26.1 J**	**24.2**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**240**	**1010**	**227**	**815**	**799**	**9.73**	**33.5**	**4.68 J**	**4.95 J**	**3.02 J**	**5.81 J**	**3.87 J**	**4.7 J**	**4.1 J**	**4.88 J**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**224**	**601**	**295**	**705**	**612**	**113**	**314**	**59.9**	**71.9**	**84.2**	**76**	**70.8**	**70.5 J**	**35.2 J**	**35.9**
PERFLUORONONANOIC ACID (PFNA)	13	**9.5**	**11.2**	**10.3**	**13**	**10.7**	**6.12 J**	**5.21 J**	**6.84 J**	**11.1**	**7.37 J**	**13.9**	**7.76 J**	**4.9 J**	**3.69 J**	**4.92 J**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**1640**	**2860**	**2230**	**5700 J**	**1600 J**	**16.8**	**28.3**	**7.55 J**	**13.6**	**2.55 J**	**15.1**	**9.8**	**4.73 J**	**6.62 J**	**5.89 J**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	5.79 UJ	5.08 U	5.08 UJ	5.12 U	5.53 UJ	4.56 U	5.08 U	5.08 U	5.04 U	5.21 U	5.68 U	5.17 UJ	5.43 U	5.3 UJ	5.43 UJ
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	5.79 U	5.08 UJ	5.08 UJ	5.12 UJ	5.53 U	4.56 UJ	5.08 UJ	5.08 UJ	5.04 UJ	5.21 UJ	5.68 U	5.17 UJ	5.43 U	5.3 UJ	5.43 UJ
PERFLUOROUNDECANOIC ACID (PFUnA)	-	**1.96 J**	5.08 U	**1.5 J**	5.12 U	5.53 U	4.56 U	5.08 U	5.08 U	**3.51 J**	5.21 U	**2.41 J**	5.34 UJ	5.43 U	5.3 UJ	5.43 UJ

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location	Post June 1, 2020	Roof Drain	Spring	MH-388.9	MH-318.9	11-MW-1	MW-02BR	MW-06BR	MW-11S	MW-11BR	MW-11BR	MW-12S	MW-12S	MW-12BR	MW-13S	MW-13S
Sample Date	Groundwater	6/28/2017	6/28/2017	6/28/2017	6/28/2017	7/10/2017	7/18/2017	7/17/2017	7/13/2017	7/20/2017	7/20/2017	7/19/2017	7/19/2017	7/18/2017	7/19/2017	7/19/2017
Sample Type	Quality Standards	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	5.43 U	6.41 U	5.34 U	5.25 U	5.43 U	5.17 U	5.17 U	5.21 U	5.34 U	5.3 U	5.63 U	5.39 U	5.17 U	5.34 U	5.21 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	5.43 U	6.41 U	5.34 U	5.25 U	5.43 U	5.17 U	5.17 U	5.21 U	5.34 U	5.3 U	5.63 U	5.39 U	5.17 U	5.34 U	5.21 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**35.8**	**39.6**	**55.2**	**63.4**	**151**	**341**	5.17 U	**2000**	**48.9**	**47.7**	**444**	**423**	**26.8**	**59.1**	**60.5**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	5.43 U	6.41 U	5.34 U	5.25 U	**146 J+**	**298**	5.17 U	**1960**	**54.2**	**62.9**	**539**	**501**	**45.6 J+**	**68.3**	**60.3**
PERFLUORODECANOIC ACID (PFDA)	-	5.43 U	6.41 U	5.34 U	**3.1 J**	**4.61 J**	**3.29 J**	5.17 U	**140**	**1.69 J**	**1.84 J**	**9.26**	**9.82**	5.17 U	**1.91 J**	**2.9 J**
PERFLUORODODECANOIC ACID (PFDoA)	-	5.43 U	6.41 U	5.08 U	5.25 U	5.43 U	5.17 U	5.17 U	5.21 U	5.34 U	5.3 U	5.63 U	5.39 U	5.17 U	5.34 U	5.21 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**64.6**	**62.9**	**52.2**	**54.2**	**201**	**446**	5.17 U	**1850**	**50.2**	**56.2**	**640**	**681**	**31.3**	**68**	**66.2**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**3.22 J**	**2.96 J**	**2.84 J**	**3.38 J**	**1360**	**1500**	5.17 U	**24400**	**460**	**531**	**2360**	**2210**	**285**	**660**	**690**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**86.4**	**87.5**	**84.6**	**84.8**	**687**	**852**	5.17 U	**6730**	**230**	**247**	**1550**	**1630**	**136**	**291**	**257**
PERFLUORONONANOIC ACID (PFNA)	13	**4.94 J**	**8.19 J**	**5.49 J**	**9.93**	**18.2**	**114**	5.17 U	**481**	**5.65 J**	**5.62 J**	**190**	**206**	**1.59 J**	**8.76**	**9**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**3.82 J**	**4.28 J**	**2.75 J**	**6.63 J**	**3400**	**1160**	5.17 U	**25800**	**1310**	**1530**	**2340**	**2710**	**812**	**1900**	**1210**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	5.43 UJ	6.41 UJ	5.08 UJ	5.25 UJ	5.43 U	5.17 U	5.17 U	5.21 U	5.34 U	5.3 U	5.63 UJ	5.39 UJ	5.17 U	5.34 U	5.21 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	5.43 UJ	6.41 UJ	5.08 U	5.25 UJ	5.43 U	5.17 U	5.17 U	5.21 U	5.34 U	5.3 U	5.63 U	5.39 U	5.17 U	5.34 U	5.21 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	5.43 UJ	6.41 UJ	5.34 U	5.25 UJ	5.43 U	5.17 U	5.17 U	**5.89 J**	5.34 U	5.3 U	5.63 U	5.39 U	5.17 U	5.34 U	5.21 U

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	MW-13S 7/19/2017 N	MW-14S 7/20/2017 N	MW-14S 7/20/2017 N	MW-14BR 7/13/2017 N	MW-27S 7/7/2017 N	MW-28S 7/19/2017 N	MW-28S 7/19/2017 N	MW-29S 7/7/2017 N	MW-30S 7/7/2017 N	MW-30S 7/7/2017 FD	MW-31S 7/11/2017 N	MW-31BR 7/11/2017 N	MW-32BR 7/14/2017 N	MW-34S 7/11/2017 N	MW-35S 7/14/2017 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	5.25 U	5.43 U	5.48 U	5.25 U	5.3 U	5.39 U	5.63 U	5.21 U	5.25 U	5.08 UJ	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	5.25 U	5.43 U	5.48 U	5.25 U	5.3 U	5.39 U	5.63 U	5.21 U	5.25 U	5.08 UJ	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**52.5**	**40.9**	**41.4**	**8.36 J**	**597**	**217**	**253**	**253**	**128**	**121**	**118**	**123**	**35**	**108**	**21.6**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	**57.2**	**51.4**	**46.4**	**5.54 J**	**1200**	**243**	**300**	**232**	**150**	**169**	**161**	**175 J+**	**47.5**	**33.1 J+**	**26.4**
PERFLUORODECANOIC ACID (PFDA)	-	**2.67 J**	5.43 U	5.48 U	5.25 U	**38.5**	**9.62**	**12.7**	**17.2**	**4.28 J**	**4.62 J**	**3.22 J**	**5.8 J**	5.25 U	5.3 U	5.21 U
PERFLUORODODECANOIC ACID (PFDoA)	-	5.25 U	5.43 U	5.48 U	5.25 U	5.3 UJ	5.39 U	5.63 UJ	5.21 UJ	5.25 UJ	5.08 UJ	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**62.6**	**49.5**	**40.6**	**17.5**	**444**	**311**	**390**	**341**	**193**	**199**	**186**	**248**	**58.4**	**11.9**	**34.7**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**627**	**489**	**447**	**34.8**	**11600**	**1670**	**1650**	**1730**	**1780**	**1970**	**1040**	**1300**	**330**	**247**	**170**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**239**	**211**	**184**	**69**	**2510**	**884**	**989**	**888**	**504**	**494**	**453**	**695**	**169**	**49.3**	**101**
PERFLUORONONANOIC ACID (PFNA)	13	**7.41 J**	**6.59 J**	**5.61 J**	5.25 U	**55.4**	**55.1**	**64.6**	**79.4**	**38.1**	**34.5**	**31.3**	**27**	**4.44 J**	5.3 U	5.21 U
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**1700**	**1220**	**1020**	**20.9**	**26500**	**1980**	**2110**	**5200**	**2200**	**2470**	**1470**	**1830**	**321**	**728**	**156**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	5.25 UJ	5.43 U	5.48 U	5.25 U	5.3 UJ	5.39 UJ	5.63 UJ	5.21 UJ	5.25 UJ	5.08 UJ	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	5.25 U	5.43 U	5.48 U	5.25 U	5.3 UJ	5.39 U	5.63 UJ	5.21 UJ	5.25 UJ	5.08 UJ	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	5.25 U	5.43 U	5.48 U	5.25 U	5.3 U	5.39 U	5.63 U	5.21 U	5.25 U	5.08 U	5.34 U	5.3 U	5.25 U	5.3 U	5.21 U

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	MW-37S 7/11/2017 N	MW-37BR 7/14/2017 N	MW-42S 7/13/2017 N	MW-48BR 7/11/2017 N	MW-50BR 7/17/2017 N	MW-51BR 7/13/2017 N	MW-51BR 7/13/2017 FD	MW-54BR 7/10/2017 N	MH-A97 7/20/2017 N	MH-A97 7/20/2017 FD	MH-C94 7/20/2017 N	MH-H93 7/20/2017 N	MH-L103 7/21/2017 N	MH-N104 7/21/2017 N	Upstream-Culvert 7/21/2017 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	5.34 U	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 U	5.39 U	5.48 U	5.9 U	5.68 U	5.25 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	5.34 U	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 U	5.39 U	5.48 U	5.9 U	5.68 U	5.25 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**146**	**120**	**49**	**55.3**	**15.5**	**128**	**135**	**95.9**	**113**	**97**	**148**	**1.36 J**	**3 J**	**7.9 J**	**98.6 J**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	**161**	**20.7**	**70.4**	**87.6 J+**	**42.9**	**228**	**245**	**16.7 J+**	**140**	**141**	**217**	5.48 U	5.9 U	5.68 U	**67.7**
PERFLUORODECANOIC ACID (PFDA)	-	5.34 U	5.25 U	**2.09 J**	5.17 U	5.17 U	5.3 U	**2.21 J**	5.34 U	5.17 U	**1.95 J**	**5.64 J**	5.48 U	5.9 U	5.68 U	**37.1**
PERFLUORODODECANOIC ACID (PFDoA)	-	5.34 U	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 U	5.39 U	5.48 UJ	5.9 U	5.68 U	**4.24 J**
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**189**	**9.49**	**68.7**	**74.4**	**25.6**	**124**	**134**	**8.14 J**	**174**	**183**	**283**	5.48 U	**1.94 J**	**5.2 J**	**92.3**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**1450**	**230**	**480**	**363**	**195**	**978**	**993**	**153**	**985**	**1070**	**1120**	**9.73**	**2.05 J**	**5.98 J**	**449**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**691**	**41.7**	**158**	**247**	**78.8**	**461**	**491**	**35.2**	**662**	**602**	**904**	**4.27 J**	**4.36 J**	**4.8 J**	**245**
PERFLUORONONANOIC ACID (PFNA)	13	**8.29 J**	5.25 U	**23.1**	**7.45 J**	**1 J**	**13.1**	**12**	5.34 U	**10.1**	**10.6**	**13.4**	5.48 U	5.9 U	**4.75 J**	**30.4**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**2180**	**570**	**951 J+**	**390**	**96.6**	**2350**	**2800**	**792**	**1840 J**	**1240 J**	**4140**	**9.74**	**4.9 J**	**14.8**	**937**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	5.34 UJ	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 UJ	5.39 UJ	5.48 UJ	5.9 U	5.68 U	5.25 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	5.34 U	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 U	5.39 U	5.48 UJ	5.9 U	5.68 U	5.25 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	5.34 U	5.25 U	5.3 U	5.17 U	5.17 U	5.3 U	5.3 U	5.34 U	5.17 U	5.12 U	5.39 U	5.48 U	5.9 U	5.68 U	**10.7**

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location	Post June 1, 2020	GR-OF	MH-117N	MH-117T	MH-118.5N	MH-118.5T	MH-121.5N	MH-121.5T	MH-140 BOTTOM	MH-140 N	WEST DITCH IN	WEST DITCH IN	NTERCEPTOR SUM	NTERCEPTOR SUM	ROOF DRAIN	SPRING
Sample Date	Groundwater	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017	9/18/2017
Sample Type	Quality Standards	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N	N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	5.48 U	5.79 U	5.39 U	5.73 U	5.39 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	5.48 U	5.79 U	5.39 U	5.73 U	5.39 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**12.1**	**78.4**	**60.1**	**123**	**13.2**	**26.3**	**9.1 J**	**37.7**	**42.1**	**40**	**40.1**	**25**	**23**	**39.4**	**47.4**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	**14.3 J-**	**133**	**93.7 J-**	**164 J-**	5.53 U	**4.28 J**	5.73 U	**2.09 J**	5.63 U	**2.97 J**	5.48 U	5.79 U	**2.79 J**	**2.56 J**	5.39 U
PERFLUORODECANOIC ACID (PFDA)	-	5.34 U	**1.83 J**	**2.15 J**	**5.7 J**	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	**1.71 J**	5.79 U	5.39 U	5.73 U	5.39 U
PERFLUORODODECANOIC ACID (PFDoA)	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	5.48 U	5.79 U	5.39 U	5.73 U	5.39 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**27.1**	**193**	**136**	**223**	**60.8**	**156**	**19.2**	**70.1**	**73.1**	**68**	**65**	**19**	**16.1**	**60.7**	**94.1**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**87.3 J**	**768**	**550**	**1170**	**14.3**	**21.5**	**2.9 J**	**5.05 J**	**7.08 J**	**3.17 J**	**5.6 J**	**6.49 J**	**5.46 J**	**4.34 J**	**4.19 J**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**72.9**	**590**	**444**	**770**	**125**	**341**	**31.4**	**100**	**99.5**	**104**	**94.1**	**27**	**24**	**96.4**	**128**
PERFLUORONONANOIC ACID (PFNA)	13	5.34 U	**7.22 J**	**4.31 J**	**16.2**	**2.13 J**	**3.65 J**	**1.84 J**	**7.81 J**	**9.49**	**10.7**	**8.62 J**	**3.05 J**	**1.84 J**	**6.54 J**	**12.2**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**184 J**	**1740**	**1430**	**4240**	**13.2**	**13.6**	**5.71 J**	**3.16 J**	**6.9 J**	**9.8**	**10.7**	**6.39 J**	**5.06 J**	**2.16 J**	**5.74 J**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	5.48 U	5.79 U	5.39 U	5.73 U	5.39 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	5.43 U	5.48 U	5.79 U	5.39 U	5.73 U	5.39 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	5.34 U	5.39 U	5.63 U	5.95 U	5.53 U	5.53 U	5.73 U	5.63 U	5.63 U	**1.76 J**	**2.25 J**	5.79 U	5.39 U	5.73 U	5.39 U

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	MW-08BR01 6/14/2018 N	MW-15BR-01 6/14/2018 N	MW-20BR01 6/14/2018 N	MW-22BR01 6/14/2018 N	MW-29BR01 6/14/2018 N	MW-45BR01 6/21/2018 N	MW-48BR01 6/14/2018 N	MW-56BR-01 6/14/2018 N	MW-91BR01 6/14/2018 N	MW-91BR01 6/14/2018 FD	MW-BRP201 6/14/2018 N	INFLUENT 6/14/2018 N	INFLUENT 6/14/2018 FD	MIDPOINT-08 6/14/2018 N	MIDPOINT-09 6/14/2018 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**13.8**	**5.24 J**	9.16 U	**10.9**	8.62 U	8.45 U	**53.9**	8.59 U	**4.63 J**	**6.01 J**	**3.25 J**	**10.2**	**11.4**	8.65 U	8.63 U
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	**3.1 J**	**89.3**	8.59 U	8.74 U	8.29 U	8.85 U	**13.1**	**11.8**	8.65 U	8.63 U
PERFLUORODECANOIC ACID (PFDA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PERFLUORODODECANOIC ACID (PFDoA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**21.9**	**6.99 J**	9.16 U	**14.4**	**4.78 J**	**10.2**	**77.9**	8.59 U	**7.29 J**	**7.6 J**	**3.61 J**	**18.8**	**17.6**	8.65 U	8.63 U
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**12**	**6.35 J**	9.16 U	**5.74 J**	**4.41 J**	**12.3**	**410**	8.59 U	8.74 U	8.29 U	8.85 U	**60**	**58.4**	8.65 U	**6.59 J**
PERFLUOROHEXANOIC ACID (PFHxA)	-	**49.2**	8.98 U	9.16 U	**29**	**17.1**	**24.7**	**255**	8.59 U	8.74 UJ	**13.2 J**	**8.82 J**	**47.9**	**51.1**	8.65 U	**9.78**
PERFLUORONONANOIC ACID (PFNA)	13	**4.28 J**	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	**9.83**	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**11.1**	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	**469**	8.59 U	8.74 U	8.29 U	8.85 U	**65.6**	**63.3**	8.65 U	8.63 U
PERFLUOROTETRADECANOIC ACID (PFTA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	8.98 U	8.98 U	9.16 U	8.5 U	8.62 U	8.45 U	8.87 U	8.59 U	8.74 U	8.29 U	8.85 U	8.84 U	8.47 U	8.65 U	8.63 U

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	EFFLUENT 6/14/2018 N	GR-OF 6/15/2018 N	MH-117N 6/15/2018 N	MH-117T 6/15/2018 N	MH-118.5N 6/15/2018 N	MH-118.5T 6/15/2018 N	MH-121.5N 6/15/2018 N	MH-121.5T 6/15/2018 N	MH-125.9N 6/15/2018 N	MH-125.9T 6/15/2018 N	MH-140 6/15/2018 N	MH-140 6/15/2018 FD	MH-318.9 6/15/2018 N	MH-388.9 6/15/2018 N	WEST_DITCH_IN 6/15/2018 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)																
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	8.77 U	**49.4**	**105**	**51.8**	**97.1**	**36.7**	**30.9**	**37.9**	**71.3**	**47.8**	**70.2**	**68.4**	**46.6**	**49.4**	**60.2**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	8.77 U	**45.7**	**156**	**43.5**	**153**	**3.16 J**	**5.83 J**	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PERFLUORODECANOIC ACID (PFDA)	-	8.77 U	8.83 U	**3.53 J**	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PERFLUORODODECANOIC ACID (PFDoA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PERFLUOROHEPTANOIC ACID (PFHpA)	-	8.77 U	**71.8**	**118**	**82.8**	**129**	**54.1**	**84.7**	**43.4**	**86.7**	**51.4**	**88.4**	**85.4**	**58.5**	**65.3**	**86.4**
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	8.77 U	**204**	**802**	**220**	**750**	**11**	**25.8**	**4.59 J**	**5.39 J**	**6.52 J**	**3.66 J**	**4.16 J**	**6.71 J**	**5.17 J**	**4.48 J**
PERFLUOROHEXANOIC ACID (PFHxA)	-	8.77 U	**200**	**432**	**206**	**460**	**104**	**189**	**75.1**	**117**	**96.3**	**130**	**134**	**101**	**96.1**	**135**
PERFLUORONONANOIC ACID (PFNA)	13	8.77 U	**5.88 J**	**12.4**	**6.92 J**	**7.32 J**	**8.23 J**	**4.38 J**	**4.5 J**	**11.6**	**7.23 J**	**8.05 J**	**9.77**	**4.6 J**	**7.48 J**	**8.84**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	8.77 U	**533**	**1950**	**461**	**1810**	**16.2**	**33.1**	**5.46 J**	**7.93 J**	**4.04 J**	**4.44 J**	**6.18 J**	**3.67 J**	**6.12 J**	**4.64 J**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U
PERFLUOROUNDECANOIC ACID (PFUnA)	-	8.77 U	8.83 U	8.39 U	8.39 U	8.25 U	8.39 U	8.47 U	8.55 U	8.53 U	8.6 U	8.18 U	8.47 U	8.3 U	8.47 U	8.29 U

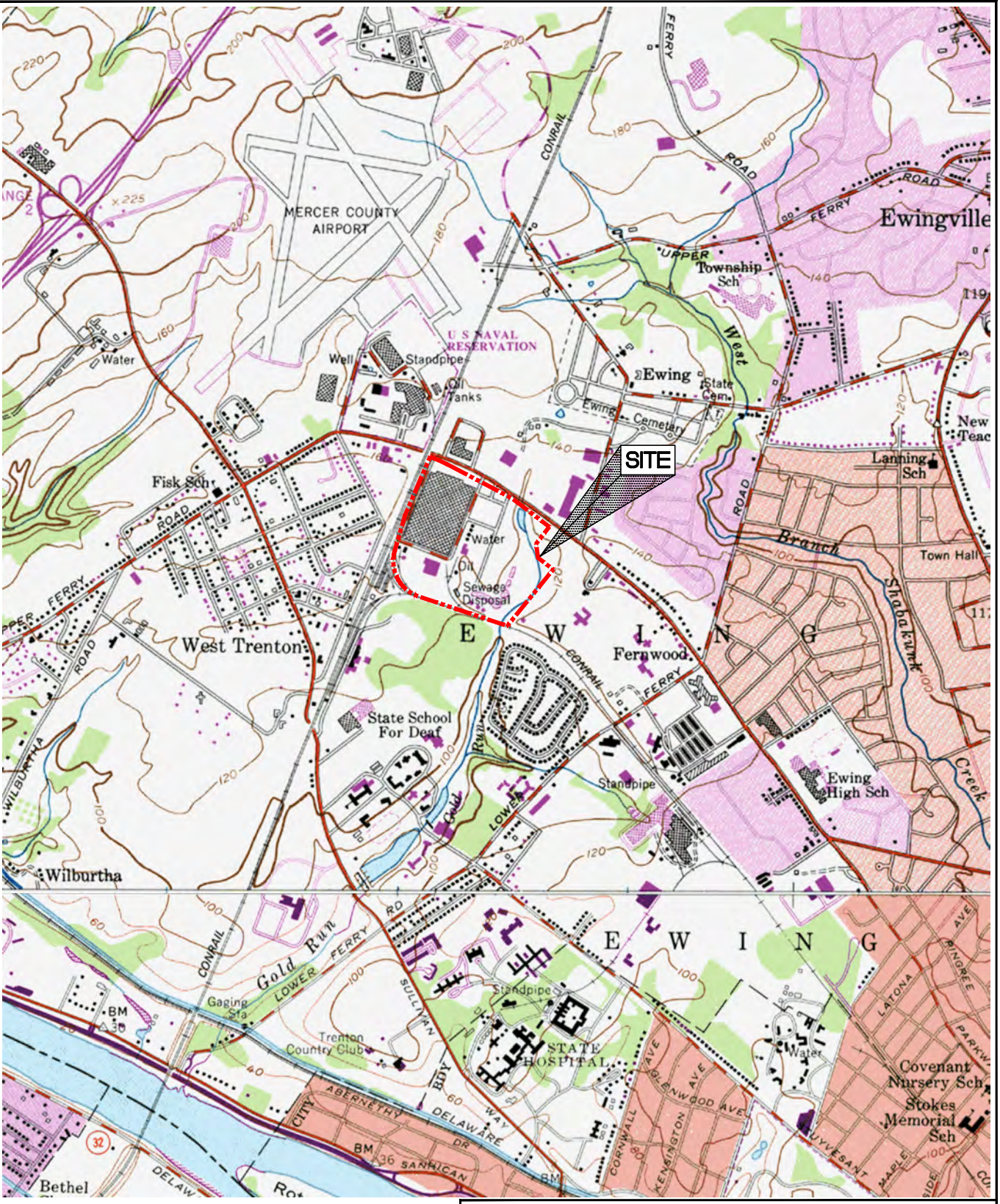
Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

TABLE 7
NAWC GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - PFAS
NAVAL AIR WARFARE CENTER
EWING, NEW JERSEY

Location Sample Date Sample Type	Post June 1, 2020 Groundwater Quality Standards	SPRING-GR 6/15/2018 N	SPRING-GR 6/15/2018 FD	GOLD RUN SPRING 1/9/2017 N	MH-117N 1/9/2017 N	MH-117N 1/9/2017 FD	MH-117T 1/9/2017 N	GR-OF 1/9/2017 N	GR-02 1/9/2017 N	GR-03 1/9/2017 N	GR-04 1/9/2017 N
POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L)											
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NEtFOSAA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID (NMeFOSAA	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
PENTADECAFLUOROOCTANOIC ACID (PFOA)	14	**98.9**	**87.9**	**4.3**	**110**	**110**	**72**	**36**	**22**	**14**	**13**
PERFLUOROBUTANESULFONIC ACID (PFBS)	-	8.8 U	**2.98 J**	-	-	-	-	-	-	-	-
PERFLUORODECANOIC ACID (PFDA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
PERFLUORODODECANOIC ACID (PFDoA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
PERFLUOROHEPTANOIC ACID (PFHpA)	-	**113**	**104**	-	-	-	-	-	-	-	-
PERFLUOROHEXANESULFONIC ACID (PFHxS)	-	**6.1 J**	**3.57 J**	-	-	-	-	-	-	-	-
PERFLUOROHEXANOIC ACID (PFHxA)	-	**165**	**164**	-	-	-	-	-	-	-	-
PERFLUORONONANOIC ACID (PFNA)	13	**12.5**	**11.7**	**4.8**	**9.4**	**8.9**	**8.6**	**3.7**	**2.9**	**1.9 J**	**1.8 J**
PERFLUOROOCTANE SULFONIC ACID (PFOS)	13	**6.05 J**	**6.96 J**	**12**	**2100**	**1900**	**1400**	**610**	**420**	**120**	**89**
PERFLUOROTETRADECANOIC ACID (PFTA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
PERFLUOROTRIDECANOIC ACID (PFTrDA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-
PERFLUOROUNDECANOIC ACID (PFUnA)	-	8.8 U	8.55 U	-	-	-	-	-	-	-	-

Notes:
1. U: Result is not detected above the indicated reporting limit
J: Estimated value
+: High bias
-: Low bias
2. Results in red exceed the following criteria:
- Post June 1, 2020 Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.
4. Sample Types: N - Normal Sample
FD - Field Duplicate

FIGURES



SOURCE:
PENNINGTON QUADRANGLE, NEW JERSEY - PENNSYLVANIA, USGS 7.5 MINUTE SERIES (TOPOGRAPHIC), DATED 1954, PHOTOREVISED 1981 AND TRENTON WEST QUADRANGLE, NEW JERSEY - PENNSYLVANIA, USGS 7.5 MINUTE SERIES (TOPOGRAPHIC), DATED 1955, PHOTOREVISED 1981.

N

0 500 1000
SCALE IN FEET

HALEY ALDRICH

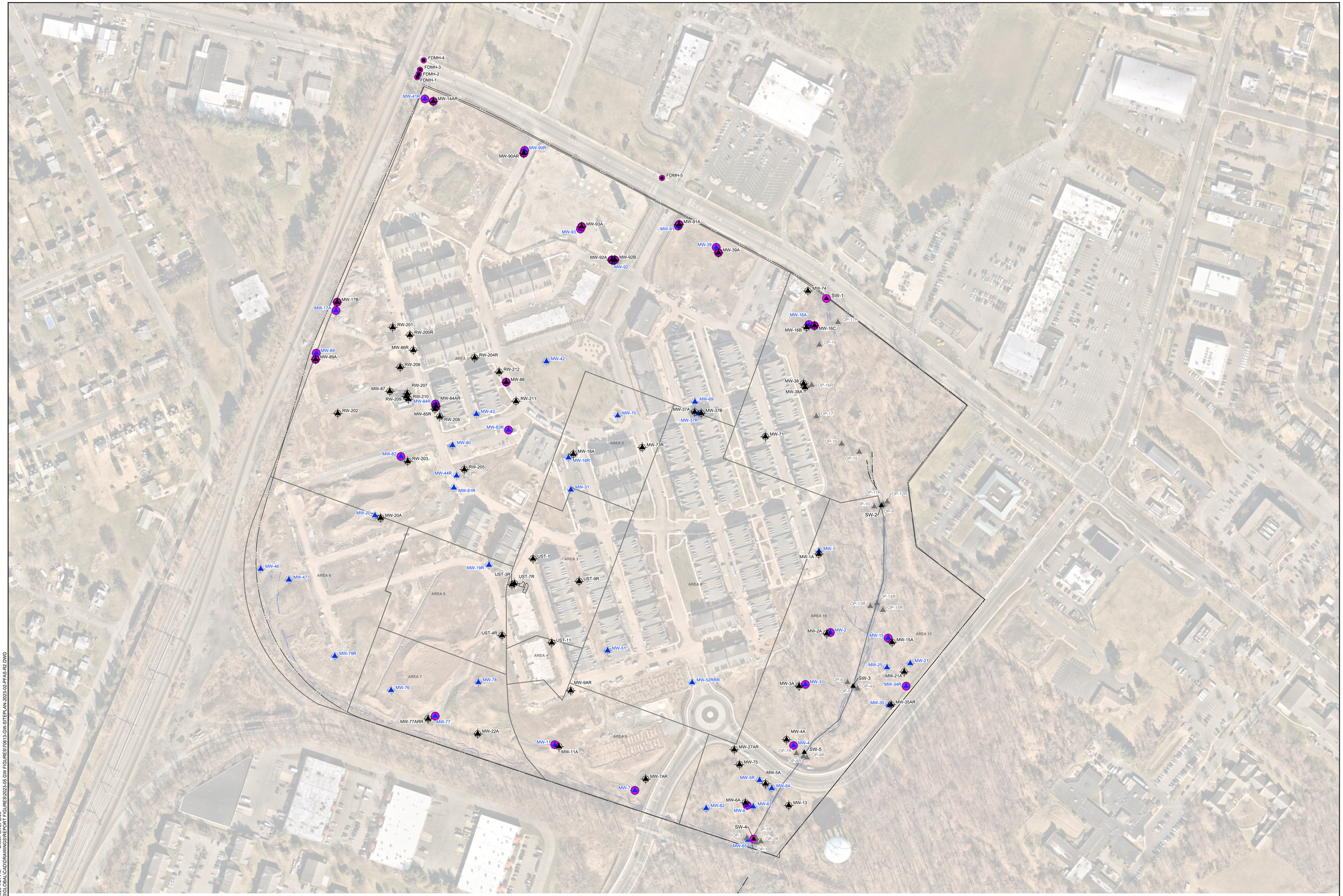
PRECISION ROLLED PRODUCTS, INC.
306 COLUMBIA TURNPIKE
EAST HANOVER, NEW JERSEY

SITE LOCUS

SCALE: AS SHOWN
MAY 2016

FIGURE 1

POSTOLOWSKI, KEVIN Printed: 5/2/2016 1:32 PM Layout: FIG 1
\\CLE\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2016 RIR\70613-125-001A-LOCUS FIG 1.DWG



LEGEND

- PROPERTY LINE
- WATER BODY
- MONITORING WELL LOCATION ASSOCIATED WITH OVERBURDEN (OBSERVATION WELLS GRAYED OUT TO NOT OVERSHADOW SAMPLING LOCATIONS)
- MONITORING WELL LOCATION ASSOCIATED WITH BEDROCK
- SURFACE WATER LOCATION
- FRENCH DRAIN/STORM SEWER MANHOLE LOCATION
- LOCATION TO BE SAMPLED FOR PFAS

NOTES

1. MONITORING WELL LOCATIONS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO APRIL 15, 2013. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252.
2. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.
3. VERTICAL DATUM : NAVD 1988; HORIZONTAL DATUM - N.J.S.P.C.S. NAD 1983.

N

0 100 200 300 400
SCALE IN FEET

HALEY ALDRICH

EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

PFAS SAMPLING LOCATIONS

SCALE: AS SHOWN
SEPTEMBER 2023

FIGURE 2

Saved by: SFISCHER
\\HALEYALDRICH1.COM\SHARE\CLE_COMMON\PROJECTS\70813\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-05 GW FIGURES\70813-GW-SITEPLAN-2023-02-PFAS-R2.DWG
Printed: 9/25/2023 4:54 PM
Sheet: SITEPLAN

G:\70613\115\FIGURES\2008-1016-HAI-GROUNDWATER CONTOURS AREA WIDE-F.MXD



NOTES:

1. CONTOURS CREATED USING A COMPUTERIZED SPATIAL ANALYST SPLINE TENSION TECHNIQUE.
2. GROUNDWATER ELEVATION CONTOURS ARE APPROXIMATE.
3. CONTOURS CREATED USING GROUNDWATER LEVELS MEASURED ON 31 JULY 2008.

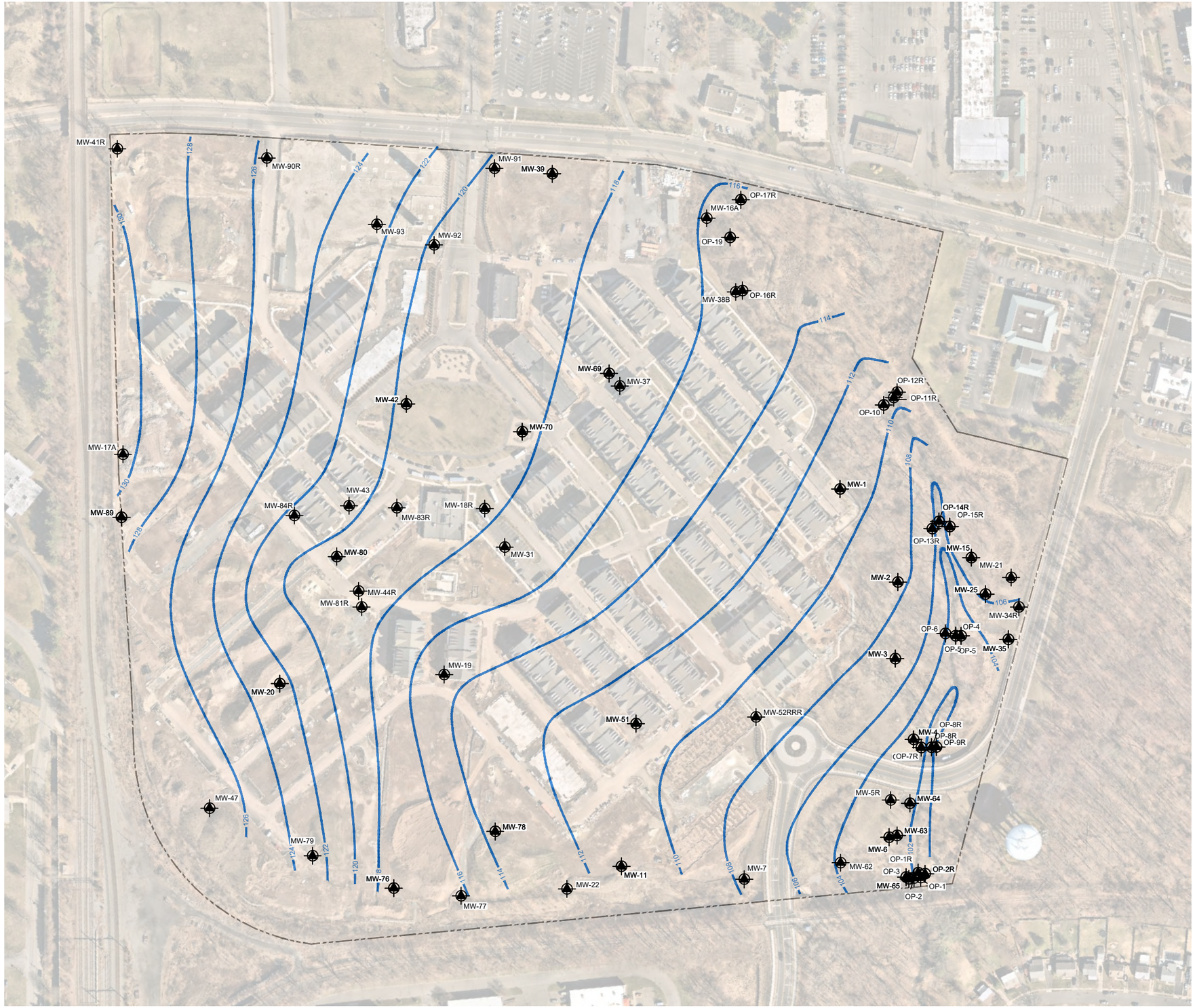
HALEY ALDRICH

GROUNDWATER INVESTIGATION SUMMARY REPORT
GENERAL MOTORS CORPORATION
TRENTON, NEW JERSEY
ISRA CASE NO. E97070

AREA-WIDE OVERBURDEN GROUNDWATER ELEVATION CONTOURS - JULY 2008

SCALE: AS SHOWN
MAY 2009

FIGURE 3



LEGEND:

PROPERTY LINE

MONITORING WELL LOCATION ASSOCIATED WITH OVERBURDEN

110 GROUNDWATER OVERBURDEN CONTOUR

NOTES:

1. MONITORING WELL LOCATIONS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO APRIL 15, 2013. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252. WETLANDS DELINEATED BY AMY S.GREENE ENVIRONMENTAL CONSULTANTS, INC., FLEMINGTON, N.J., JUNE, 2005. WETLAND BOUNDARIES SHOWN BASED ON A WETLAND SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005, REVISED TO JANUARY 20, 2006.
2. AERIAL TOPOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY CO. INC., MT. OLIVE, N.J. DATE OF FLIGHT : MARCH 27, 2010
3. VERTICAL DATUM: NAVD 1988; HORIZONTAL DATUM: - N.J.S.P.C.S. NAD 1983.3. UNITS SHOWN IN UG/L.
4. ONLY CHEMICALS EXCEEDING CRITERIA ARE SHOWN IN DATABOXES. DATABOXES ARE RESTRICTED TO THE MOST RECENT FOUR SAMPLING EVENTS SINCE 2010.
5. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.

0 240 480

SCALE IN FEET

HALEY ALDRICH

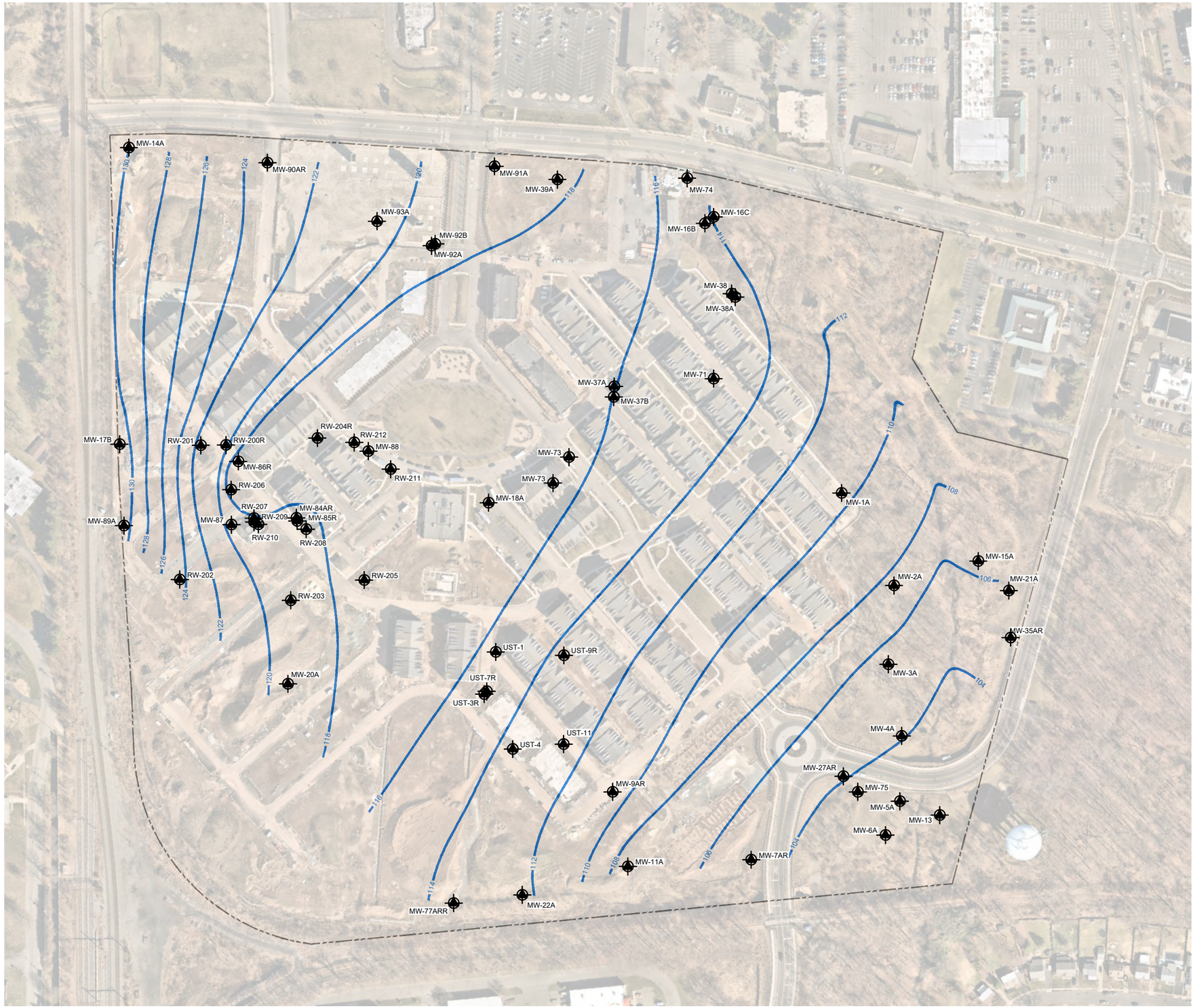
EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

GROUNDWATER ELEVATION CONTOURS, OVERBURDEN AND WEATHERED BEDROCK UPGRADIENT - SEPTEMBER 2023

SCALE: AS SHOWN
JANUARY 2024

FIGURE 4A

Saved by: KPOSTOLOWSKI Printed: 1/18/2024 6:40 PM Sheet: OVB-FIG 4A
\\HALEYALDRICH.COM\SHARE\CLE_COMMON\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-11 GW FIGURES\70613_0007_GW_CONTOURS 2023-SEP.DWG



LEGEND:

- PROPERTY LINE
- MONITORING WELL LOCATION ASSOCIATED WITH BEDROCK
- 110 GROUNDWATER OVERBURDEN CONTOUR

NOTES:

1. MONITORING WELL LOCATIONS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO APRIL 15, 2013. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252. WETLANDS DELINEATED BY AMY S.GREENE ENVIRONMENTAL CONSULTANTS, INC., FLEMINGTON, N.J., JUNE, 2005. WETLAND BOUNDARIES SHOWN BASED ON A WETLAND SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005, REVISED TO JANUARY 20, 2006.
2. AERIAL TOPOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY CO. INC., MT. OLIVE, N.J. DATE OF FLIGHT : MARCH 27, 2010
3. VERTICAL DATUM: NAVD 1988; HORIZONTAL DATUM: - N.J.S.P.C.S. NAD 1983.3. UNITS SHOWN IN UG/L.
4. ONLY CHEMICALS EXCEEDING CRITERIA ARE SHOWN IN DATABOXES. DATABOXES ARE RESTRICTED TO THE MOST RECENT FOUR SAMPLING EVENTS SINCE 2010.
5. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.

0 240 480
SCALE IN FEET

HALEY ALDRICH

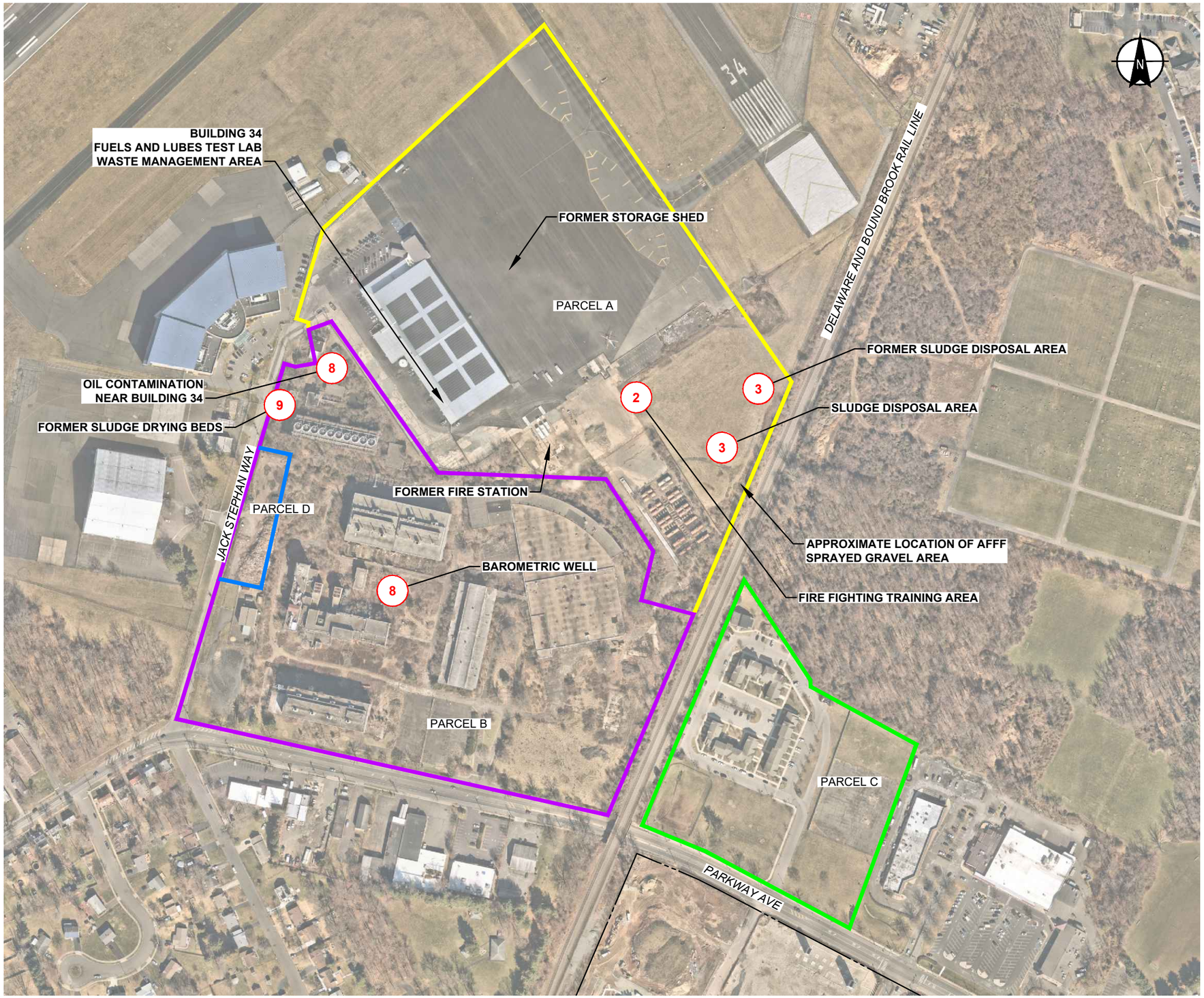
EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

GROUNDWATER ELEVATION CONTOURS, BEDROCK UPGRADIENT - SEPTEMBER 2023

SCALE: AS SHOWN
JANUARY 2024

FIGURE 4B

Saved by: KPOSTOLOWSKI Printed: 1/18/2024 6:41 PM Sheet: BED-FIG 4B
\\HALEYALDRICH.COM\SHARE\CLE_COMMON\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-11 GW FIGURES\70613_0007_GW_CONTOURS 2023-SEP.DWG



LEGEND

- PROPERTY LINE
- (1) POTENTIAL PFAS SOURCE AREAS
- PARCEL A: COUNTY OF MERCER
- PARCEL B: N & H MERCER REALTY/NASSIMI REALTY
- PARCEL C: COMMUNITY INVESTMENT STRATEGIES, INC. (GARDENS AT BIRMINGHAM) AND 1400 PARKWAY LLC
- PARCEL D: TOWNSHIP OF EWING

NOTES

1. PARCEL BOUNDARIES AND PFAS LOCATION ID'S FROM DRAFT PER- AND POLYFLUOROALKYL SUBSTANCES SITE INSPECTION FOR MULTIPLE SITES FORMER NAVAL AIR WARFARE CENTER TRENTON, NEW JERSEY DATED MARCH 2022.
2. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.

HALEY ALDRICH

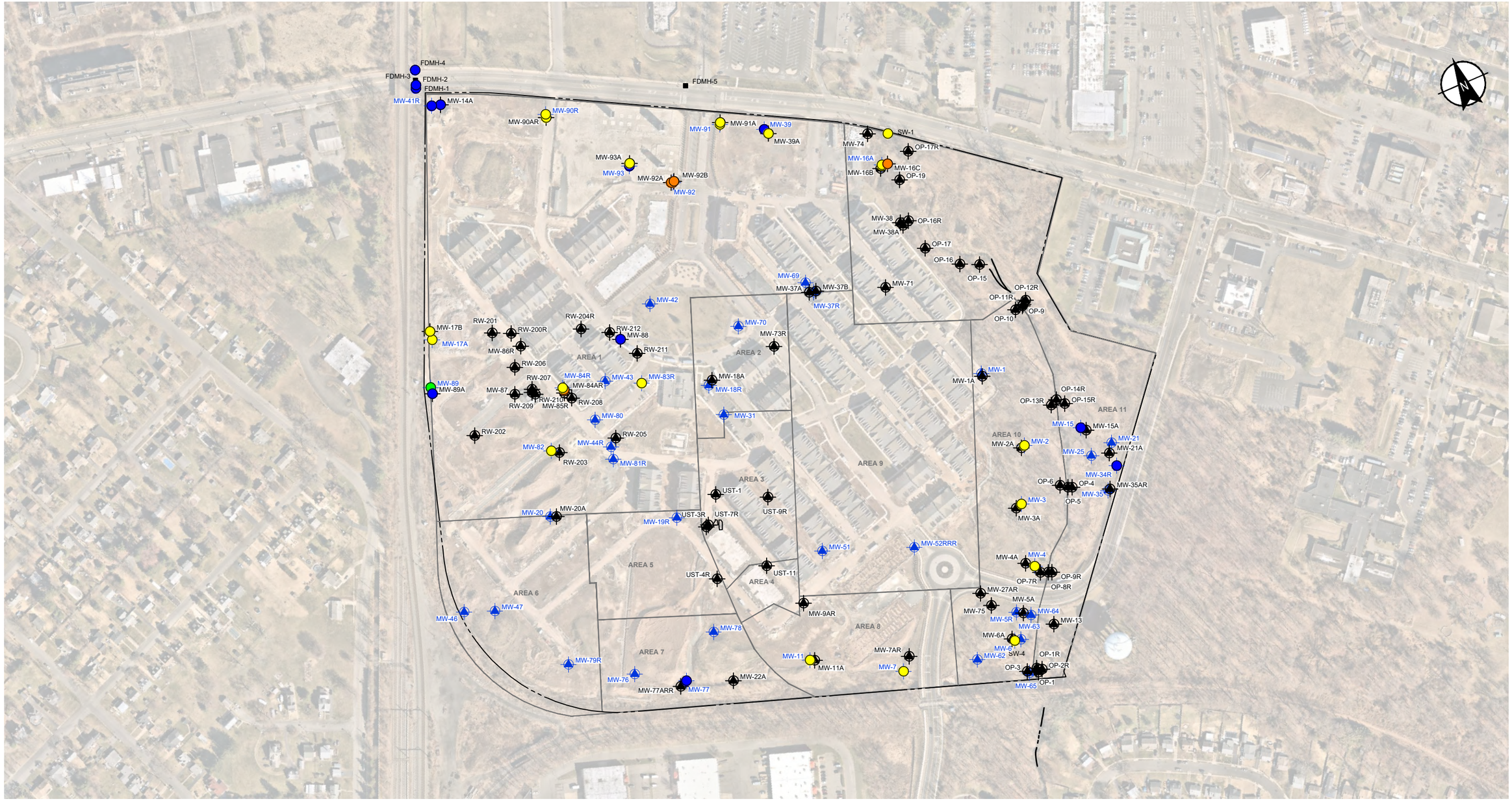
EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

POTENTIAL NAWC TRENTON PFAS SOURCE AREAS
FORMER NAVAL AIR WARFARE CTR.
TRENTON, NEW JERSEY

SCALE: AS SHOWN
JANUARY 2024

FIGURE 5

Saved by: KPOSTOLOWSKI Printed: 1/18/2024 7:03 PM Sheet: NAWC-FIG 5
\\HALEYALDRICH.COM\SHAREICLE_COM\MON\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-11 GW FIGURES\70613_0006_NAWC_PFAS SOURCE AREAS.DWG



LEGEND

- PROPERTY LINE
- WATER BODY
- EWING MONITORING WELL LOCATION ASSOCIATED WITH OVERBURDEN (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- EWING MONITORING WELL LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- STORMWATER LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- MANHOLE LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)

GW PFOS CONCENTRATION LEGEND

- ND - 10 ng/L
- 10 ng/L - 100 ng/L
- 100 ng/L - 1000 ng/L
- 1000 ng/L - 10000 ng/L
- > 10000 ng/L

0 300 600 900 1200
SCALE IN FEET

NOTES

1. MONITORING WELL LOCATIONS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO APRIL 15, 2013. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252.
2. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.
3. VERTICAL DATUM : NAVD 1988; HORIZONTAL DATUM - N.J.S.P.C.S. NAD 1983.
4. PFAS DATA COMES FROM MOST RECENT SAMPLING EVENT AT EACH LOCATION

HALEY ALDRICH

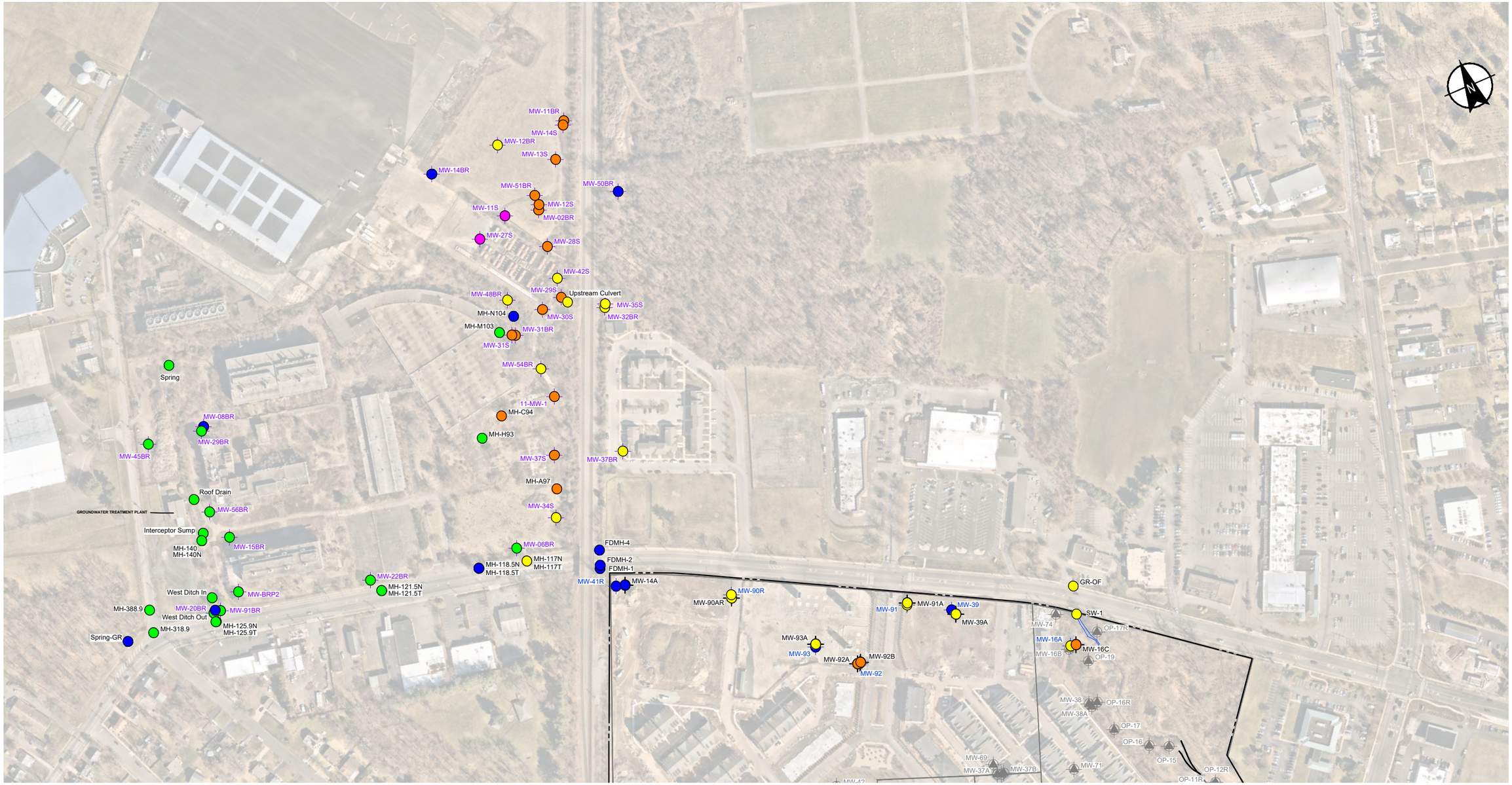
EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

ON-SITE PFOS CONCENTRATION - BEDROCK WELLS

SCALE: AS SHOWN
JANUARY 2024

FIGURE 6

Saved by: KPOSTOLOWSKI Printed: 1/19/2024 10:16 AM Sheet: DOT FIG 6
\\HALEYALDRICH.COM\SHARE\CLE_COMMON\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-11 GW FIGURES\70613_0008_DOT MAP_EWING_NAWC.DWG



LEGEND

- PROPERTY LINE
- WATER BODY
- EWING MONITORING WELL LOCATION ASSOCIATED WITH OVERBURDEN (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- EWING MONITORING WELL LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- NAVAL AIR WARFARE CENTER (NAWC) MONITORING WELL
- STORMWATER LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)
- MANHOLE LOCATION ASSOCIATED WITH BEDROCK (LOCATIONS NOT SAMPLED FOR PFAS GRAYED OUT)

GW PFOS CONCENTRATION LEGEND

- ND - 10 ng/L
- 10 ng/L - 100 ng/L
- 100 ng/L - 1000 ng/L
- 1000 ng/L - 10000 ng/L
- > 10000 ng/L

NOTES

1. MONITORING WELL LOCATIONS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO APRIL 15, 2013. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252.
2. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2023.
3. VERTICAL DATUM : NAVD 1988; HORIZONTAL DATUM - N.J.S.P.C.S. NAD 1983.
4. PFAS DATA COMES FROM MOST RECENT SAMPLING EVENT AT EACH LOCATION.
5. NAWC PFAS DATA FROM DRAFT PER- AND POLYFLUOROALKYL SUBSTANCES SITE INSPECTION FOR MULTIPLE SITES FORMER NAVAL AIR WARFARE CENTER TRENTON, NEW JERSEY DATED MARCH 2022.

0 300 600
SCALE IN FEET

HALEY ALDRICH

EWING TOWNSHIP INDUSTRIAL LAND
ISA CASE NO. E97070
EWING TOWNSHIP, NEW JERSEY

OFF-SITE TO ON-SITE PFOS CONCENTRATION - NORTHERN AREA

SCALE: AS SHOWN
JANUARY 2024

FIGURE 7

Saved by: KPOSTOLOWSKI Printed: 1/19/2024 10:20 AM Sheet: DOT FIG 7
\\HALEYALDRICH.COM\SHARE\CLE_COMMON\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\REPORT FIGURES\2023-11 GW FIGURES\70613_0008_DOT MAP_EWING_NAWC.DWG

APPENDIX A
Field Sampling Documentation

EST Associates, Inc.

Client:	**Haley & Aldrich**	**EST Technician:**	**Z. Moir**
Site:	**Racer Ewing**	**Weather:**	**Partly Sunny 70's**
Date:	**10/17/2023**		

I.D.	pH (pH units)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)	Salinity (ppt)	Time
SW-4	7.23	13.18	497	2.68	91.7	11.4	0.24	940
SW-1	7.84	15.14	409	8.11	13.9	5.13	0.20	1210

Sample ID's:

SW4-101723-0940

SW1-101723-1210

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** Z. Moir

Site: Racer Ewing **Weather:** Sunny 50's

Date: 10/16/2023

Monitoring Well #: MW-2 **Well Depth:** 13.98 ft **Screened/Open Interval:** 6-12 ft

Well Permit #: N/A **Well Diameter:** 4 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 10.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 7.01 ft below TOC

Beneath Inner Cap: 0.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
920	X		7.62	NA	15.59	NA	748	NA	4.11	NA	126.5	NA	3.36	NA	130	7.43
925	X		7.48	-0.14	15.51	-0.08	739	-9	2.61	-1.50	141.4	14.9	2.48	-0.88	130	7.49
930	X		7.40	-0.08	15.57	0.06	734	-5	1.87	-0.74	148.1	6.7	2.12	-0.36	130	7.53
935	X		7.34	-0.06	15.64	0.07	729	-5	1.54	-0.33	153.6	5.5	1.89	-0.23	130	7.59
940	X		7.30	-0.04	15.68	0.04	725	-4	1.42	-0.12	157.4	3.8	1.63	-0.26	130	7.61
945	X		7.27	-0.03	15.69	0.01	723	-2	1.36	-0.06	160.5	3.1	1.56	-0.07	130	7.65
950	X		7.26	-0.01	15.71	0.02	722	-1	1.30	-0.06	162.3	1.8	1.51	-0.05	130	7.69

Purge Start: 9:17
Purge End: 9:50
Sample Time: 9:51

Sample notes: MW2-101623-0951-10

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** Z. Moir

Site: Racer Ewing **Weather:** Sunny 50's

Date: 10/16/2023

Monitoring Well #: MW-3 **Well Depth:** 12.75 ft **Screened/Open Interval:** 4-11 ft

Well Permit #: 27-8330-0 **Well Diameter:** 4 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 9.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 7.04 ft below TOC

Beneath Inner Cap: 0.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1020	X		6.80	NA	16.29	NA	741	NA	1.71	NA	131.0	NA	4.02	NA	150	7.18
1025	X		6.61	-0.19	16.40	0.11	735	-6	1.16	-0.55	123.6	-7.4	3.25	-0.77	150	7.19
1030	X		6.44	-0.17	16.49	0.09	727	-8	0.95	-0.21	118.5	-5.1	2.70	-0.55	150	7.19
1035	X		6.31	-0.13	16.57	0.08	711	-16	0.84	-0.11	114.2	-4.3	2.46	-0.24	150	7.20
1040	X		6.27	-0.04	16.61	0.04	699	-12	0.80	-0.04	111.4	-2.8	2.38	-0.08	150	7.20
1045	X		6.24	-0.03	16.64	0.03	696	-3	0.77	-0.03	109.7	-1.7	2.30	-0.08	150	7.20

Purge Start: 10:13
Purge End: 10:45
Sample Time: 10:46

Sample notes: MW3-101623-1046-9

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	Z. Moir
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-4	**Well Depth:**	13.80 ft	**Screened/Open Interval:**	5-12 ft
Well Permit #:	27-8331-0	**Well Diameter:**	4 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	11.5 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	9.50 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1125	X		6.34	NA	18.03	NA	1038	NA	0.94	NA	-13.6	NA	36.5	NA	150	9.65
1130	X		6.38	0.04	17.97	-0.06	1050	12	0.65	-0.29	-21.8	-8.2	26.2	-10.3	150	9.77
1135	X		6.41	0.03	17.92	-0.05	1063	13	0.51	-0.14	-31.4	-9.6	18.9	-7.3	150	9.91
1140	X		6.42	0.01	17.89	-0.03	1072	9	0.47	-0.04	-42.9	-11.5	15.7	-3.2	150	10.05
1145	X		6.42	0.00	17.83	-0.06	1077	5	0.45	-0.02	-52.6	-9.7	14.1	-1.6	150	10.17
1150	X		6.43	0.01	17.79	-0.04	1080	3	0.45	0.00	-57.1	-4.5	13.4	-0.7	150	10.29
1155	X		6.43	0.00	17.76	-0.03	1082	2	0.46	0.01	-60.0	-2.9	13.2	-0.2	150	10.39

Purge Start:	**11:17**
Purge End:	**11:55**
Sample Time:	**11:56**

Sample notes: MW4-101623-1156-11.5

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/17/2023		

Monitoring Well #:	MW-6	**Well Depth:**	14.08 ft	**Screened/Open Interval:**	5-12 ft
Well Permit #:	N/A	**Well Diameter:**	4 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	10.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	8.61 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
840	X		6.31	NA	16.17	NA	896	NA	1.78	NA	-14.7	NA	16.4	NA	200	9.12
845	X		6.34	0.03	16.13	-0.04	901	5	1.72	-0.06	-12.7	2.0	13.2	-3.2	200	9.17
850	X		6.37	0.03	16.18	0.05	905	4	1.67	-0.05	-10.2	2.5	10.7	-2.5	200	9.25
855	X		6.40	0.03	16.23	0.05	908	3	1.65	-0.02	-9.6	0.6	9.63	-1.07	200	9.31
900	X		6.42	0.02	16.19	-0.04	912	4	1.63	-0.02	-9.1	0.5	9.12	-0.51	200	9.36
905	X		6.44	0.02	16.27	0.08	915	3	1.60	-0.03	-8.7	0.4	8.74	-0.38	200	9.42
910	X		6.45	0.01	16.23	-0.04	917	2	1.58	-0.02	-8.2	0.5	8.68	-0.06	200	9.47
915	X		6.44	-0.01	16.26	0.03	919	2	1.56	-0.02	-7.9	0.3	8.61	-0.07	200	9.53

Purge Start:	**8:35**	**Sample notes:**	MW6-101723-0917-10
Purge End:	**9:15**		
Sample Time:	**9:17**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** C. Bachmann

Site: Racer Ewing **Weather:** Sunny 50's

Date: 10/17/2023

Monitoring Well #: MW-7 **Well Depth:** 16.75 ft **Screened/Open Interval:** 5.5-15.5 ft

Well Permit #: N/A **Well Diameter:** 4 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 13.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 11.94 ft below TOC

Beneath Inner Cap: 0.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1010	X		6.19	NA	15.52	NA	771	NA	0.89	NA	182.6	NA	32.4	NA	200	12.17
1015	X		6.22	0.03	15.61	0.09	778	7	0.72	-0.17	167.4	-15.2	29.3	-3.1	200	12.21
1020	X		6.24	0.02	15.57	-0.04	785	7	0.63	-0.09	161.3	-6.1	24.9	-4.4	200	12.26
1025	X		6.27	0.03	15.64	0.07	791	6	0.54	-0.09	154.8	-6.5	20.6	-4.3	200	12.32
1030	X		6.28	0.01	15.59	-0.05	796	5	0.48	-0.06	152.6	-2.2	18.4	-2.2	200	12.38
1035	X		6.29	0.01	15.68	0.09	804	8	0.45	-0.03	150.5	-2.1	17.6	-0.8	200	12.41
1040	X		6.30	0.01	15.62	-0.06	806	2	0.43	-0.02	149.3	-1.2	16.3	-1.3	200	12.45
1045	X		6.31	0.01	15.71	0.09	808	2	0.41	-0.02	148.7	-0.6	15.8	-0.5	200	12.51
1050	X		6.30	-0.01	15.69	-0.02	811	3	0.39	-0.02	147.1	-1.6	15.0	-0.8	200	12.56

Purge Start: 10:05
Purge End: 10:50
Sample Time: 10:52

Sample notes: MW7-101723-1052-13

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/17/2023		

Monitoring Well #:	MW-11	**Well Depth:**	28.29 ft	**Screened/Open Interval:**	6.5-17.5 ft
Well Permit #:	N/A	**Well Diameter:**	4 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	25.5 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	23.78 ft below TOC
Beneath Inner Cap:	0.2	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1130	X		6.48	NA	15.87	NA	656	NA	2.61	NA	57.6	NA	487	NA	200	24.12
1135	X		6.51	0.03	15.91	0.04	652	-4	2.54	-0.07	61.3	3.7	451	-36	200	24.28
1140	X		6.54	0.03	15.89	-0.02	649	-3	2.47	-0.07	64.8	3.5	428	-23	200	24.37
1145	X		6.57	0.03	15.96	0.07	645	-4	2.43	-0.04	67.9	3.1	412	-16	200	24.46
1150	X		6.61	0.04	15.92	-0.04	641	-4	2.38	-0.05	71.3	3.4	391	-21	200	24.55
1155	X		6.63	0.02	15.98	0.06	637	-4	2.31	-0.07	74.5	3.2	374	-17	200	24.63
1200	X		6.65	0.02	15.95	-0.03	635	-2	2.25	-0.06	77.8	3.3	362	-12	200	24.72
1205	X		6.64	-0.01	16.03	0.08	633	-2	2.22	-0.03	78.2	0.4	357	-5	200	24.81
1210	X		6.65	0.01	15.98	-0.05	631	-2	2.20	-0.02	78.9	0.7	349	-8	200	24.95

Purge Start:	**11:25**	**Sample notes:** MW11-101723-1212-25.5
Purge End:	**12:10**	Field Blanks collected at 1231 & 1240 : 1000-101723-0002 / 1000-101723-0004
Sample Time:	**12:12**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	clear, 70's
Date:	10/12/2023		

Monitoring Well #:	MW-14AR	**Well Depth:**	44.68 ft	**Screened/Open Interval:**	NA ft
Well Permit #:	N/A	**Well Diameter:**	6 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	40.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	3.94 ft below TOC
Beneath Inner Cap:	0.2	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
11:55	X		7.43	NA	18.23	NA	474	NA	1.68	NA	24.7	NA	40.6	NA	200	3.98
12:00	X		7.39	-0.04	18.17	-0.06	469	-5	1.43	-0.25	21.3	-3.4	35.2	-5.4	200	4.00
12:05	X		7.34	-0.05	18.11	-0.06	462	-7	1.21	-0.22	19.6	-1.7	30.7	-4.5	200	4.00
12:10	X		7.31	-0.03	18.19	0.08	457	-5	1.14	-0.07	15.8	-3.8	27.1	-3.6	200	3.99
12:15	X		7.27	-0.04	18.25	0.06	451	-6	1.06	-0.08	14.2	-1.6	25.3	-1.8	200	3.99
12:20	X		7.25	-0.02	18.31	0.06	447	-4	0.97	-0.09	13.7	-0.5	23.2	-2.1	200	3.99
12:25	X		7.24	-0.01	18.34	0.03	445	-2	0.94	-0.03	13.1	-0.6	22.4	-0.8	200	4.00
12:30	X		7.23	-0.01	18.42	0.08	442	-3	0.91	-0.03	12.6	-0.5	21.8	-0.6	200	4.00

Purge Start:	**11:50**
Purge End:	**12:30**
Sample Time:	**12:31**

Sample notes:
MW-14AR-101223-1231-40

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	Z. Moir
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-15	**Well Depth:**	12.92 ft	**Screened/Open Interval:**	2-12 ft
Well Permit #:	N/A	**Well Diameter:**	4 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	7.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	2.63 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1255	X		4.41	NA	15.57	NA	744	NA	1.52	NA	70.3	NA	6.81	NA	140	2.67
1300	X		4.28	-0.13	15.49	-0.08	743	-1	1.33	-0.19	81.0	10.7	4.72	-2.09	140	2.67
1305	X		4.21	-0.07	15.42	-0.07	743	0	1.19	-0.14	86.2	5.2	3.85	-0.87	140	2.67
1310	X		4.14	-0.07	15.37	-0.05	742	-1	1.10	-0.09	91.3	5.1	3.24	-0.61	140	2.68
1315	X		4.09	-0.05	15.31	-0.06	741	-1	1.03	-0.07	96.4	5.1	2.96	-0.28	140	2.68
1320	X		4.05	-0.04	15.26	-0.05	740	-1	0.99	-0.04	100.6	4.2	2.77	-0.19	140	2.68
1325	X		4.02	-0.03	15.23	-0.03	739	-1	0.97	-0.02	102.0	1.4	2.73	-0.04	140	2.68

Purge Start:	**12:50**	**Sample notes:** MW15-101623-1325-7
Purge End:	**13:25**	
Sample Time:	**13:26**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-16A	**Well Depth:**	32.07 ft	**Screened/Open Interval:**	N/A ft
Well Permit #:	N/A	**Well Diameter:**	6 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	20.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	11.24 ft below TOC
Beneath Inner Cap:	0.2	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
850	X		6.94	NA	17.96	NA	788	NA	1.49	NA	-99.1	NA	116	NA	200	11.30
855	X		6.81	-0.13	18.07	0.11	793	5	1.35	-0.14	-78.5	20.6	98.3	-17.7	200	11.36
900	X		6.44	-0.37	18.44	0.37	799	6	1.25	-0.10	-61.4	17.1	90.7	-7.6	200	11.41
905	X		6.40	-0.04	18.38	-0.06	802	3	1.22	-0.03	-51.6	9.8	81.1	-9.6	200	11.47
910	X		6.39	-0.01	18.32	-0.06	803	1	1.16	-0.06	-48.3	3.3	75.9	-5.2	200	11.52
915	X		6.32	-0.07	18.27	-0.05	806	3	1.12	-0.04	-42.4	5.9	67.2	-8.7	200	11.57
920	X		6.31	-0.01	18.36	0.09	804	-2	1.12	0.00	-39.0	3.4	64.8	-2.4	200	11.61
925	X		6.29	-0.02	18.30	-0.06	801	-3	1.10	-0.02	-35.3	3.7	61.6	-3.2	200	11.66

Purge Start:	**8:42**	**Sample notes:** MW16A-101623-0926-20
Purge End:	**9:25**	
Sample Time:	**9:26**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-16C	**Well Depth:**	127.79 ft	**Screened/Open Interval:**	115-125 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	120.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	10.10 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
955	X		6.70	NA	17.72	NA	394	NA	3.67	NA	26.8	NA	25.9	NA	250	10.18
1000	X		6.69	-0.01	17.81	0.09	397	3	3.81	0.14	19.5	-7.3	22.2	-3.7	250	10.28
1005	X		6.69	0.00	17.88	0.07	397	0	3.71	-0.10	11.7	-7.8	18.8	-3.4	250	10.27
1010	X		6.68	-0.01	17.93	0.05	398	1	3.42	-0.29	7.4	-4.3	17.1	-1.7	250	10.30
1015	X		6.67	-0.01	17.99	0.06	399	1	3.40	-0.02	5.1	-2.3	14.0	-3.1	250	10.34
1020	X		6.68	0.01	18.07	0.08	399	0	3.37	-0.03	4.4	-0.7	13.6	-0.4	250	10.39
1025	X		6.68	0.00	18.15	0.08	399	0	3.23	-0.14	4.0	-0.4	12.8	-0.8	250	10.45

Purge Start:	**9:48**	**Sample notes:** MW16C-101623-1026-120
Purge End:	**10:25**	Field Blank collected at 1105: 1000-101623-0002
Sample Time:	**10:26**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-17A	**Well Depth:**	38.69 ft	**Screened/Open Interval:**	10-35 ft
Well Permit #:	N/A	**Well Diameter:**	6 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	29.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	8.34 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1135	X		7.35	NA	20.63	NA	599	NA	1.38	NA	-8.1	NA	84.9	NA	250	8.55
1140	X		7.37	0.02	20.99	0.36	607	8	1.38	0.00	-5.7	2.4	79.1	-5.8	250	8.58
1145	X		7.38	0.01	21.29	0.30	610	3	1.37	-0.01	-3.9	1.8	88.8	9.7	250	8.60
1150	X		7.38	0.00	21.70	0.41	612	2	1.36	-0.01	-2.4	1.5	111	22	250	8.62
1155	X		7.37	-0.01	21.45	-0.25	611	-1	1.31	-0.05	-4.9	-2.5	129	18	250	8.64
1200	X		7.37	0.00	21.20	-0.25	610	-1	1.28	-0.03	-7.6	-2.7	122	-7	250	8.66
1205	X		7.37	0.00	21.43	0.23	609	-1	1.29	0.01	-9.3	-1.7	118	-4	250	8.69

Purge Start:	**11:26**	**Sample notes:** MW17A-101223-1206-29
Purge End:	**12:05**	Turbidity fluctuated during purge
Sample Time:	**12:06**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-17B	**Well Depth:**	104.13 ft	**Screened/Open Interval:**	91-101 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	96.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	4.73 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1230	X		7.52	NA	21.32	NA	359	NA	1.14	NA	-4.8	NA	64.8	NA	220	4.75
1235	X		7.53	0.01	21.18	-0.14	357	-2	1.10	-0.04	-1.1	3.7	60.1	-4.7	220	4.75
1240	X		7.54	0.01	19.92	-1.26	355	-2	1.01	-0.09	2.7	3.8	56.7	-3.4	220	4.73
1245	X		7.53	-0.01	20.71	0.79	355	0	1.00	-0.01	5.5	2.8	44.9	-11.8	220	4.72
1250	X		7.52	-0.01	21.24	0.53	359	4	1.03	0.03	7.1	1.6	39.2	-5.7	220	4.75
1255	X		7.51	-0.01	21.75	0.51	361	2	1.05	0.02	9.6	2.5	34.4	-4.8	220	4.77
1300	X		7.51	0.00	21.86	0.11	370	9	1.08	0.03	10.7	1.1	31.8	-2.6	220	4.78
1305	X		7.51	0.00	21.99	0.13	367	-3	1.10	0.02	11.3	0.6	30.9	-0.9	220	4.79

Purge Start:	**12:24**	**Sample notes:** MW17B-101223-1306-96
Purge End:	**13:05**	Sheen visible in purge bucket
Sample Time:	**13:06**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	Z. Moir
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-34R	**Well Depth:**	15.91 ft	**Screened/Open Interval:**	N/A ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	12.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	7.42 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1350	X		4.64	NA	17.44	NA	813	NA	0.67	NA	98.8	NA	69.5	NA	200	7.53
1355	X		4.78	0.14	17.53	0.09	785	-28	0.62	-0.05	87.2	-11.6	44.3	-25.2	200	7.53
1400	X		4.90	0.12	17.65	0.12	759	-26	0.58	-0.04	83.6	-3.6	31.2	-13.1	200	7.54
1405	X		4.97	0.07	17.72	0.07	738	-21	0.52	-0.06	80.6	-3.0	19.6	-11.6	200	7.54
1410	X		5.01	0.04	17.80	0.08	720	-18	0.47	-0.05	77.9	-2.7	17.1	-2.5	200	7.55
1415	X		5.04	0.03	17.83	0.03	712	-8	0.45	-0.02	75.7	-2.2	16.5	-0.6	200	7.55
1420	X		5.06	0.02	17.88	0.05	706	-6	0.44	-0.01	73.8	-1.9	15.8	-0.7	200	7.55
1425		X	5.07	0.01	17.91	0.03	702	-4	0.42	-0.02	72.4	-1.4	13.9	-1.9	200	7.56

Purge Start:	**13:42**	**Sample notes:**	MW34R-101623-1421-12
Purge End:	**14:20**	MS/MSD collected	
Sample Time:	**14:21**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-39	**Well Depth:**	20.98 ft	**Screened/Open Interval:**	8.5-18.5 ft
Well Permit #:	N/A	**Well Diameter:**	4 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	17.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	13.55 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
850	X		6.40	NA	16.27	NA	546	NA	3.92	NA	62.2	NA	8.71	NA	150	13.91
855	X		6.29	-0.11	16.51	0.24	519	-27	4.28	0.36	61.1	-1.1	6.02	-2.69	150	14.02
900	X		6.24	-0.05	16.67	0.16	506	-13	4.56	0.28	60.5	-0.6	4.86	-1.16	150	14.12
905	X		6.27	0.03	16.74	0.07	496	-10	4.70	0.14	60.2	-0.3	4.12	-0.74	150	14.22
910	X		6.28	0.01	16.66	-0.08	492	-4	4.79	0.09	59.9	-0.3	3.62	-0.50	150	14.30
915	X		6.31	0.03	16.63	-0.03	487	-5	4.88	0.09	59.7	-0.2	3.47	-0.15	150	14.39
920	X		6.32	0.01	16.71	0.08	483	-4	5.02	0.14	59.6	-0.1	3.39	-0.08	150	14.47

Purge Start:	**8:43**	**Sample notes:** MW39-101323-0921-17
Purge End:	**9:20**	
Sample Time:	**9:21**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-39A	**Well Depth:**	75.85 ft	**Screened/Open Interval:**	67.5-72.5 ft
Well Permit #:	N/A	**Well Diameter:**	6 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	70.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	14.48 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
750	X		8.99	NA	13.76	NA	419	NA	2.42	NA	36.5	NA	81.6	NA	200	14.82
755	X		9.03	0.04	13.86	0.10	416	-3	2.35	-0.07	39.9	3.4	68.3	-13.3	200	14.89
800	X		9.05	0.02	13.99	0.13	414	-2	2.49	0.14	42.5	2.6	49.2	-19.1	200	14.94
805	X		9.13	0.08	14.03	0.04	413	-1	2.61	0.12	42.4	-0.1	34.8	-14.4	200	14.97
810	X		9.16	0.03	14.09	0.06	411	-2	2.68	0.07	43.2	0.8	27.3	-7.5	200	15.00
815	X		9.18	0.02	14.07	-0.02	411	0	2.77	0.09	43.5	0.3	20.4	-6.9	200	15.02
820	X		9.21	0.03	14.02	-0.05	410	-1	2.82	0.05	44.6	1.1	19.6	-0.8	200	15.04
825	X		9.22	0.01	13.94	-0.08	407	-3	2.86	0.04	45.2	0.6	18.9	-0.7	200	15.05

Purge Start:	**7:45**	**Sample notes:**	MW39A-101323-0826-70
Purge End:	**8:25**		
Sample Time:	**8:26**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-41AR	**Well Depth:**	44.68 ft	**Screened/Open Interval:**	N/A ft
Well Permit #:	N/A	**Well Diameter:**	6 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	40.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	3.94 ft below TOC
Beneath Inner Cap:	0.2	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1155	X		7.43	NA	18.23	NA	474	NA	1.68	NA	24.7	NA	40.6	NA	200	3.98
1200	X		7.39	-0.04	18.17	-0.06	469	-5	1.43	-0.25	21.3	-3.4	35.2	-5.4	200	4.00
1205	X		7.34	-0.05	18.11	-0.06	462	-7	1.21	-0.22	19.6	-1.7	30.7	-4.5	200	4.00
1210	X		7.31	-0.03	18.19	0.08	457	-5	1.14	-0.07	15.8	-3.8	27.1	-3.6	200	3.99
1215	X		7.27	-0.04	18.25	0.06	451	-6	1.06	-0.08	14.2	-1.6	25.3	-1.8	200	3.99
1220	X		7.25	-0.02	18.31	0.06	447	-4	0.97	-0.09	13.7	-0.5	23.2	-2.1	200	3.99
1225	X		7.24	-0.01	18.34	0.03	445	-2	0.94	-0.03	13.1	-0.6	22.4	-0.8	200	4.00
1230	X		7.23	-0.01	18.42	0.08	442	-3	0.91	-0.03	12.6	-0.5	21.8	-0.6	200	4.00

Purge Start:	**11:50**	**Sample notes:**	MW41AR-101223-1231-40
Purge End:	**12:30**		
Sample Time:	**12:31**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** C. Bachmann

Site: Racer Ewing **Weather:** Sunny 60's

Date: 10/12/2023

Monitoring Well #: MW-41R **Well Depth:** 34.34 ft **Screened/Open Interval:** N/A ft

Well Permit #: N/A **Well Diameter:** 2 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 29.5 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 4.18 ft below TOC

Beneath Inner Cap: 0.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1100	X		6.78	NA	17.56	NA	331	NA	1.42	NA	71.4	NA	45.7	NA	200	5.14
1105	X		6.75	-0.03	17.47	-0.09	328	-3	1.21	-0.21	71.9	0.5	38.2	-7.5	200	5.26
1110	X		6.73	-0.02	17.41	-0.06	325	-3	1.07	-0.14	72.5	0.6	30.6	-7.6	200	5.38
1115	X		6.70	-0.03	17.49	0.08	322	-3	0.94	-0.13	73.0	0.5	24.7	-5.9	200	5.49
1120	X		6.67	-0.03	17.54	0.05	319	-3	0.83	-0.11	73.7	0.7	19.3	-5.4	200	5.61
1125	X		6.64	-0.03	17.63	0.09	317	-2	0.81	-0.02	74.4	0.7	17.1	-2.2	200	5.73
1130	X		6.63	-0.01	17.69	0.06	315	-2	0.79	-0.02	74.8	0.4	16.7	-0.4	200	5.85
1135	X		6.62	-0.01	17.74	0.05	312	-3	0.77	-0.02	75.1	0.3	15.9	-0.8	200	5.97
1140		X	6.63	0.01	17.78	0.04	309	-3	0.75	-0.02	75.6	0.5	15.4	-0.5	200	6.08

Purge Start: 10:55
Purge End: 11:35
Sample Time: 11:37

Sample notes: MW41R-101223-1137-29.5
DUP collected : 1000-101223-0003

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/17/2023		

Monitoring Well #:	MW-77	**Well Depth:**	22.30 ft	**Screened/Open Interval:**	8-18 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	20.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	17.26 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1100	X		6.73	NA	14.29	NA	391	NA	2.75	NA	31.4	NA	15.2	NA	200	17.37
1105	X		6.71	-0.02	14.23	-0.06	383	-8	2.21	-0.54	32.1	0.7	6.13	-9.07	200	17.37
1110	X		6.70	-0.01	14.44	0.21	381	-2	1.79	-0.42	33.3	1.2	5.27	-0.86	200	17.37
1115	X		6.70	0.00	14.52	0.08	380	-1	1.43	-0.36	34.6	1.3	4.51	-0.76	200	17.37
1120	X		6.69	-0.01	14.49	-0.03	376	-4	1.12	-0.31	35.8	1.2	4.34	-0.17	200	17.37
1125	X		6.69	0.00	14.56	0.07	375	-1	1.09	-0.03	36.7	0.9	4.19	-0.15	200	17.37
1130	X		6.69	0.00	14.70	0.14	375	0	1.05	-0.04	37.7	1.0	4.10	-0.09	200	17.37

Purge Start:	**10:54**	**Sample notes:** MW77-101723-1131-20
Purge End:	**11:30**	
Sample Time:	**11:31**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-82R	**Well Depth:**	34.93 ft	**Screened/Open Interval:**	24-34 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	30.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	16.66 ft below TOC
Beneath Inner Cap:	13.3	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1335	X		6.32	NA	20.38	NA	326	NA	2.33	NA	115.1	NA	96.1	NA	225	16.78
1340	X		6.17	-0.15	21.14	0.76	326	0	2.27	-0.06	115.2	0.1	72.6	-23.5	225	16.78
1345	X		6.16	-0.01	21.61	0.47	325	-1	2.29	0.02	114.4	-0.8	50.8	-21.8	225	16.78
1350	X		6.08	-0.08	21.99	0.38	325	0	2.28	-0.01	119.1	4.7	46.6	-4.2	225	16.78
1355	X		6.05	-0.03	22.60	0.61	324	-1	2.26	-0.02	126.7	7.6	38.9	-7.7	225	16.78
1400	X		6.00	-0.05	22.98	0.38	324	0	2.27	0.01	132.9	6.2	30.8	-8.1	225	16.78
1405	X		6.02	0.02	22.77	-0.21	325	1	2.29	0.02	137.7	4.8	28.3	-2.5	225	16.78
1410	X		6.00	-0.02	22.59	-0.18	325	0	2.31	0.02	139.6	1.9	27.9	-0.4	225	16.78

Purge Start:	**13:28**	**Sample notes:** MW82R-101223-1411-30
Purge End:	**14:10**	
Sample Time:	**14:11**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-83R	**Well Depth:**	34.14 ft	**Screened/Open Interval:**	24-34 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	29.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	15.47 ft below TOC
Beneath Inner Cap:	3.2	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1305	X		5.66	NA	18.27	NA	1193	NA	1.06	NA	171.3	NA	17.6	NA	200	15.52
1310	X		5.63	-0.03	18.16	-0.11	1198	5	0.89	-0.17	173.5	2.2	15.1	-2.5	200	15.54
1315	X		5.60	-0.03	18.25	0.09	1204	6	0.83	-0.06	176.2	2.7	13.4	-1.7	200	15.55
1320	X		5.57	-0.03	18.31	0.06	1210	6	0.76	-0.07	178.7	2.5	11.7	-1.7	200	15.57
1325	X		5.54	-0.03	18.37	0.06	1216	6	0.72	-0.04	179.8	1.1	9.63	-2.07	200	15.58
1330	X		5.51	-0.03	18.42	0.05	1223	7	0.68	-0.04	181.3	1.5	8.42	-1.21	200	15.60
1335	X		5.48	-0.03	18.51	0.09	1228	5	0.65	-0.03	183.4	2.1	7.89	-0.53	200	15.61
1340	X		5.47	-0.01	18.57	0.06	1231	3	0.63	-0.02	184.0	0.6	7.81	-0.08	200	15.63
1345	X		5.47	0.00	18.64	0.07	1235	4	0.61	-0.02	184.5	0.5	7.78	-0.03	200	15.65

Purge Start:	**13:00**	**Sample notes:**	MW83R-101223-1346-29
Purge End:	**13:45**		
Sample Time:	**13:46**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** M. Spata

Site: Racer Ewing **Weather:** Sunny 50's

Date: 10/17/2023

Monitoring Well #: MW-84R **Well Depth:** 33.36 ft **Screened/Open Interval:** 24-34 ft

Well Permit #: N/A **Well Diameter:** 2 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 29.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 12.58 ft below TOC

Beneath Inner Cap: 1.1 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
835	X		6.29	NA	13.65	NA	387	NA	5.75	NA	68.5	NA	22.9	NA	150	13.64
840	X		6.03	-0.26	13.84	0.19	391	4	3.89	-1.86	62.8	-5.7	17.6	-5.3	150	13.79
845	X		5.81	-0.22	13.71	-0.13	391	0	3.36	-0.53	59.8	-3.0	13.8	-3.8	150	13.80
850	X		5.87	0.06	13.66	-0.05	388	-3	3.11	-0.25	57.5	-2.3	11.4	-2.4	150	13.80
855	X		5.93	0.06	13.77	0.11	375	-13	3.02	-0.09	54.9	-2.6	10.6	-0.8	150	13.80
900	X		5.93	0.00	13.87	0.10	369	-6	2.95	-0.07	53.8	-1.1	10.2	-0.4	150	13.80
905	X		5.94	0.01	13.91	0.04	367	-2	2.91	-0.04	52.8	-1.0	9.82	-0.38	150	13.80

Purge Start: 8:30
Purge End: 9:05
Sample Time: 9:06

Sample notes: MW84R-101723-0906-29

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/17/2023		

Monitoring Well #:	MW-84AR	**Well Depth:**	80.71 ft	**Screened/Open Interval:**	73-83 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	75.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	15.55 ft below TOC
Beneath Inner Cap:	13.1	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
935	X		6.79	NA	14.16	NA	436	NA	2.43	NA	-4.8	NA	72.4	NA	150	15.89
940	X		6.82	0.03	14.15	-0.01	429	-7	2.21	-0.22	-9.9	-5.1	41.0	-31.4	150	16.19
945	X		6.81	-0.01	14.25	0.10	419	-10	1.98	-0.23	-12.9	-3.0	28.3	-12.7	150	16.31
950	X		6.82	0.01	14.29	0.04	412	-7	1.77	-0.21	-15.6	-2.7	22.6	-5.7	150	16.44
955	X		6.83	0.01	14.38	0.09	409	-3	1.71	-0.06	-17.7	-2.1	17.2	-5.4	150	16.55
1000	X		6.81	-0.02	14.32	-0.06	404	-5	1.56	-0.15	-19.4	-1.7	15.0	-2.2	150	16.67
1005	X		6.80	-0.01	14.19	-0.13	401	-3	1.51	-0.05	-20.2	-0.8	14.7	-0.3	150	16.79
1010	X		6.80	0.00	14.24	0.05	399	-2	1.49	-0.02	-22.0	-1.8	14.1	-0.6	150	16.90

Purge Start:	**9:27**	**Sample notes:** MW84AR-101723-1011-75
Purge End:	**10:10**	Purge water has a strong odor
Sample Time:	**10:11**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-88	**Well Depth:**	84.35 ft	**Screened/Open Interval:**	76.5-86.5 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	80.5 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	15.40 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
755	X		7.60	NA	15.99	NA	118	NA	0.54	NA	-36.6	NA	16.4	NA	200	15.60
800	X		7.27	-0.33	16.05	0.06	116	-2	0.43	-0.11	-43.5	-6.9	15.1	-1.3	200	15.60
805	X		7.21	-0.06	15.94	-0.11	116	0	0.37	-0.06	-49.9	-6.4	14.0	-1.1	200	15.60
810	X		7.16	-0.05	15.87	-0.07	115	-1	0.32	-0.05	-57.1	-7.2	11.9	-2.1	200	15.60
815	X		7.11	-0.05	15.73	-0.14	115	0	0.23	-0.09	-62.0	-4.9	10.5	-1.4	200	15.60
820	X		7.11	0.00	15.98	0.25	115	0	0.29	0.06	-63.7	-1.7	8.35	-2.15	200	15.60
825	X		7.12	0.01	16.19	0.21	115	0	0.31	0.02	-64.0	-0.3	8.04	-0.31	200	15.60
830	X		7.12	0.00	16.30	0.11	115	0	0.30	-0.01	-65.6	-1.6	7.67	-0.37	200	15.60

Purge Start:	**7:49**	**Sample notes:** MW88-101323-0831-80.5
Purge End:	**8:30**	
Sample Time:	**8:31**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** D. Kossakowski

Site: Racer Ewing **Weather:** Sunny 60's

Date: 10/12/2023

Monitoring Well #: MW-89 **Well Depth:** 38.19 ft **Screened/Open Interval:** 20-30 ft

Well Permit #: N/A **Well Diameter:** 2 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 25.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 8.61 ft below TOC

Beneath Inner Cap: 0.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1020	X		7.59	NA	16.96	NA	399	NA	1.75	NA	73.1	NA	28.2	NA	200	8.70
1025	X		7.42	-0.17	17.14	0.18	392	-7	1.68	-0.07	70.0	-3.1	19.9	-8.3	200	8.79
1030	X		7.35	-0.07	17.34	0.20	383	-9	1.48	-0.20	70.4	0.4	15.7	-4.2	200	8.79
1035	X		7.30	-0.05	17.64	0.30	378	-5	1.39	-0.09	73.3	2.9	13.0	-2.7	200	8.79
1040	X		7.26	-0.04	17.90	0.26	373	-5	1.33	-0.06	76.4	3.1	12.1	-0.9	200	8.79
1045	X		7.24	-0.02	17.84	-0.06	370	-3	1.27	-0.06	78.9	2.5	10.6	-1.5	200	8.79
1050	X		7.24	0.00	17.92	0.08	371	1	1.24	-0.03	79.0	0.1	10.2	-0.4	200	8.79
1055	X		7.23	-0.01	17.80	-0.12	370	-1	1.26	0.02	79.7	0.7	9.6	-0.6	200	8.79

Purge Start: 10:13
Purge End: 10:55
Sample Time: 10:56

Sample notes: MW89-101223-1056-25

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-89A	**Well Depth:**	100.65 ft	**Screened/Open Interval:**	91-100 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	96.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	4.74 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
910	X		7.42	NA	16.45	NA	465	NA	2.22	NA	81.3	NA	21.2	NA	300	7.42
915	X		7.47	0.05	16.48	0.03	465	0	2.18	-0.04	79.9	-1.4	15.4	-5.8	300	8.03
920	X		7.55	0.08	16.51	0.03	465	0	2.12	-0.06	75.6	-4.3	14.9	-0.5	300	8.59
925	X		7.60	0.05	16.65	0.14	465	0	2.18	0.06	73.3	-2.3	12.1	-2.8	300	8.97
930	X		7.61	0.01	16.75	0.10	465	0	2.11	-0.07	73.3	0.0	11.6	-0.5	300	9.56
935	X		7.61	0.00	16.84	0.09	466	1	2.08	-0.03	73.4	0.1	11.0	-0.6	300	9.98
940	X		7.63	0.02	16.75	-0.09	466	0	2.12	0.04	68.0	-5.4	10.7	-0.3	300	10.49
945	X		7.63	0.00	16.71	-0.04	466	0	2.16	0.04	67.1	-0.9	10.3	-0.4	300	10.92

Purge Start:	**9:04**	**Sample notes:**	MW89A-101223-0946-96
Purge End:	**9:45**	Poor Recharge	
Sample Time:	**9:46**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-90AR	**Well Depth:**	100.42 ft	**Screened/Open Interval:**	N/A ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	95.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	8.24 ft below TOC
Beneath Inner Cap:	0.3	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
845	X		6.79	NA	16.77	NA	557	NA	2.24	NA	197.8	NA	36.7	NA	200	8.29
850	X		6.74	-0.05	16.63	-0.14	561	4	2.07	-0.17	197.1	-0.7	32.4	-4.3	200	8.29
855	X		6.71	-0.03	16.75	0.12	566	5	1.94	-0.13	196.4	-0.7	27.3	-5.1	200	8.29
900	X		6.68	-0.03	16.81	0.06	569	3	1.86	-0.08	195.9	-0.5	21.4	-5.9	200	8.29
905	X		6.65	-0.03	16.84	0.03	573	4	1.78	-0.08	195.2	-0.7	16.7	-4.7	200	8.29
910	X		6.63	-0.02	16.87	0.03	575	2	1.72	-0.06	194.8	-0.4	13.4	-3.3	200	8.29
915	X		6.60	-0.03	16.92	0.05	578	3	1.67	-0.05	194.1	-0.7	9.86	-3.54	200	8.29
920	X		6.59	-0.01	16.95	0.03	580	2	1.64	-0.03	193.7	-0.4	9.82	-0.04	200	8.29
925	X		6.58	-0.01	16.93	-0.02	583	3	1.61	-0.03	193.2	-0.5	9.79	-0.03	200	8.29
930		X	6.56	-0.02	16.97	0.04	585	2	1.58	-0.03	192.8	-0.4	9.71	-0.08	200	8.29

Purge Start:	**8:40**	**Sample notes:** MW90AR-101223-0927-95
Purge End:	**9:25**	MS/MSD collected.
Sample Time:	**9:27**	Field Blank collected at 825 : 1000-101223-0002

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	C. Bachmann
Site:	Racer Ewing	**Weather:**	Sunny 60's
Date:	10/12/2023		

Monitoring Well #:	MW-90R	**Well Depth:**	30.76 ft	**Screened/Open Interval:**	N/A ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	26.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	6.27 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
955	X		7.13	NA	18.34	NA	458	NA	1.82	NA	204.0	NA	56.3	NA	200	6.34
1000	X		7.15	0.02	18.27	-0.07	464	6	1.73	-0.09	203.5	-0.5	51.7	-4.6	200	6.34
1005	X		7.18	0.03	18.19	-0.08	471	7	1.64	-0.09	202.8	-0.7	44.8	-6.9	200	6.34
1010	X		7.20	0.02	18.25	0.06	476	5	1.58	-0.06	201.9	-0.9	37.6	-7.2	200	6.34
1015	X		7.22	0.02	18.29	0.04	483	7	1.51	-0.07	201.3	-0.6	25.3	-12.3	200	6.34
1020	X		7.25	0.03	18.34	0.05	489	6	1.47	-0.04	200.6	-0.7	21.7	-3.6	200	6.34
1025	X		7.28	0.03	18.38	0.04	491	2	1.45	-0.02	199.7	-0.9	18.8	-2.9	200	6.34
1030	X		7.29	0.01	18.41	0.03	494	3	1.43	-0.02	199.1	-0.6	18.2	-0.6	200	6.34
1035	X		7.30	0.01	18.45	0.04	497	3	1.41	-0.02	198.6	-0.5	17.7	-0.5	200	6.34

Purge Start:	**9:50**	**Sample notes:**	MW90R-101223-1036-26
Purge End:	**10:35**		
Sample Time:	**10:36**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-91	**Well Depth:**	31.36 ft	**Screened/Open Interval:**	21-31 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	26.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	14.26 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
945	X		6.44	NA	15.00	NA	465	NA	3.15	NA	54.1	NA	87.7	NA	300	15.07
950	X		6.44	0.00	15.09	0.09	459	-6	2.61	-0.54	53.4	-0.7	64.1	-23.6	300	15.07
955	X		6.44	0.00	15.14	0.05	456	-3	2.03	-0.58	53.0	-0.4	52.3	-11.8	300	15.07
1000	X		6.43	-0.01	15.06	-0.08	453	-3	1.81	-0.22	52.0	-1.0	44.0	-8.3	300	15.07
1005	X		6.42	-0.01	15.23	0.17	451	-2	1.77	-0.04	51.8	-0.2	30.6	-13.4	300	15.07
1010	X		6.43	0.01	15.24	0.01	451	0	1.73	-0.04	51.2	-0.6	23.0	-7.6	300	15.07
1015	X		6.43	0.00	15.25	0.01	452	1	1.70	-0.03	50.8	-0.4	22.4	-0.6	300	15.07
1020	X		6.43	0.00	15.29	0.04	450	-2	1.65	-0.05	50.6	-0.2	20.9	-1.5	300	15.07

Purge Start:	**9:39**	**Sample notes:** MW91-101323-1021-26
Purge End:	**10:20**	
Sample Time:	**10:21**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	M. Spata
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-91A	**Well Depth:**	75.11 ft	**Screened/Open Interval:**	61-71 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	66.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	14.56 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1045	X		7.65	NA	15.08	NA	408	NA	1.48	NA	43.5	NA	21.2	NA	300	15.11
1050	X		7.70	0.05	15.05	-0.03	408	0	1.25	-0.23	42.9	-0.6	15.1	-6.1	300	15.11
1055	X		7.74	0.04	15.11	0.06	406	-2	1.13	-0.12	43.4	0.5	11.2	-3.9	300	15.11
1100	X		7.78	0.04	15.15	0.04	404	-2	1.19	0.06	44.5	1.1	9.86	-1.34	300	15.11
1105	X		7.80	0.02	15.17	0.02	403	-1	1.25	0.06	45.2	0.7	8.23	-1.63	300	15.11
1110	X		7.81	0.01	15.20	0.03	401	-2	1.21	-0.04	44.7	-0.5	8.01	-0.22	300	15.11
1115	X		7.82	0.01	15.24	0.04	399	-2	1.17	-0.04	44.3	-0.4	7.46	-0.55	300	15.11

Purge Start:	**10:37**	**Sample notes:** MW91A-101323-1116-66
Purge End:	**11:15**	Field Blank: 1000-101323-0002 at 1130
Sample Time:	**11:16**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client: Haley & Aldrich **EST Technician:** D. Kossakowski

Site: Racer Ewing **Weather:** Sunny 50's

Date: 10/13/2023

Monitoring Well #: MW-92A **Well Depth:** 75.61 ft **Screened/Open Interval:** 65-75 ft

Well Permit #: N/A **Well Diameter:** 2 inches

PID Readings (ppm)

Background: 0.0 **Pump Intake Depth:** 70.0 ft below TOC

Beneath Outer Cap: 0.0 **Depth to Water Before Pump Installation:** 16.34 ft below TOC

Beneath Inner Cap: 78.0 **Purge Method** Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
935	X		10.75	NA	16.90	NA	569	NA	1.21	NA	-253.4	NA	20.2	NA	150	18.91
940	X		10.90	0.15	17.35	0.45	578	9	1.14	-0.07	-230.8	22.6	18.1	-2.1	150	19.72
945	X		10.98	0.08	17.37	0.02	583	5	1.14	0.00	-205.1	25.7	15.7	-2.4	150	20.34
950	X		10.99	0.01	17.47	0.10	583	0	1.15	0.01	-201.0	4.1	12.2	-3.5	150	20.93
955	X		11.00	0.01	17.56	0.09	584	1	1.17	0.02	-197.3	3.7	10.6	-1.6	150	21.65
1000	X		11.05	0.05	17.11	-0.45	584	0	1.21	0.04	-196.7	0.6	10.1	-0.5	150	21.89
1005	X		11.02	-0.03	17.29	0.18	584	0	1.20	-0.01	-195.6	1.1	9.64	-0.46	150	22.07

Purge Start: 9:26
Purge End: 10:05
Sample Time: 10:06

Sample notes: MW92A-101323-1006-70
Poor recharge

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters: PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-92	**Well Depth:**	45.23 ft	**Screened/Open Interval:**	31-41 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	36.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	16.83 ft below TOC
Beneath Inner Cap:	0.0	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units) Reading	pH Change	Temperature (°C) Reading	Temperature Change	Specific Conductivity (uS/cm) Reading	Specific Conductivity Change	Dissolved Oxygen (mg/L) Reading	Dissolved Oxygen Change	Redox Potential (mV) Reading	Redox Potential Change	Turbidity (NTU) Reading	Turbidity Change	Pumping Rate (ml/min)	Depth to Water (ft below TOC)
1020	X		9.02	NA	18.77	NA	442	NA	1.15	NA	-6.2	NA	28.5	NA	150	17.11
1025	X		8.05	-0.97	19.02	0.25	425	-17	1.80	0.65	36.7	42.9	25.3	-3.2	150	17.15
1030	X		7.56	-0.49	19.42	0.40	416	-9	1.52	-0.28	49.9	13.2	23.0	-2.3	150	17.19
1035	X		7.26	-0.30	19.85	0.43	411	-5	1.34	-0.18	55.8	5.9	19.4	-3.6	150	17.24
1040	X		7.11	-0.15	19.38	-0.47	409	-2	1.27	-0.07	58.0	2.2	15.8	-3.6	150	17.30
1045	X		7.00	-0.11	19.07	-0.31	406	-3	1.20	-0.07	63.7	5.7	12.5	-3.3	150	17.35
1050	X		6.97	-0.03	19.30	0.23	406	0	1.19	-0.01	66.1	2.4	11.9	-0.6	150	17.41
1055	X		6.94	-0.03	19.13	-0.17	407	1	1.17	-0.02	67.5	1.4	11.3	-0.6	150	17.49

Purge Start:	**10:14**	**Sample notes:** MW92-101323-1056-36
Purge End:	**10:55**	
Sample Time:	**10:56**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/13/2023		

Monitoring Well #:	MW-92B	**Well Depth:**	95.91 ft	**Screened/Open Interval:**	90-100 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	92.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	16.75 ft below TOC
Beneath Inner Cap:	33.8	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1120	X		9.85	NA	17.60	NA	373	NA	1.32	NA	-45.3	NA	22.7	NA	180	17.88
1125	X		9.89	0.04	17.93	0.33	370	-3	1.37	0.05	-39.2	6.1	21.1	-1.6	180	18.00
1130	X		9.91	0.02	18.42	0.49	369	-1	1.24	-0.13	-36.6	2.6	18.7	-2.4	180	18.23
1135	X		9.92	0.01	18.99	0.57	367	-2	1.20	-0.04	-34.8	1.8	14.6	-4.1	180	18.46
1140	X		10.06	0.14	18.81	-0.18	373	6	1.22	0.02	-42.0	-7.2	11.9	-2.7	180	18.70
1145	X		10.17	0.11	18.55	-0.26	388	15	1.20	-0.02	-50.1	-8.1	10.1	-1.8	180	18.91
1150	X		10.20	0.03	18.35	-0.20	391	3	1.18	-0.02	-50.9	-0.8	9.38	-0.72	180	19.09
1155	X		10.23	0.03	18.24	-0.11	392	1	1.23	0.05	-52.0	-1.1	9.11	-0.27	180	19.22

Purge Start:	**11:13**	**Sample notes:**	MW92B-101323-1156-92
Purge End:	**11:55**		
Sample Time:	**11:56**		

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-93	**Well Depth:**	33.40 ft	**Screened/Open Interval:**	30-40 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	30.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	13.21 ft below TOC
Beneath Inner Cap:	0.3	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1130	X		6.48	NA	19.45	NA	673	NA	2.28	NA	93.2	NA	18.7	NA	200	13.26
1135	X		6.45	-0.03	19.52	0.07	675	2	2.28	0.00	91.9	-1.3	16.2	-2.5	200	13.26
1140	X		6.44	-0.01	19.49	-0.03	677	2	2.25	-0.03	92.4	0.5	14.7	-1.5	200	13.27
1145	X		6.42	-0.02	19.46	-0.03	678	1	2.23	-0.02	93.1	0.7	12.9	-1.8	200	13.28
1150	X		6.40	-0.02	19.00	-0.46	679	1	2.23	0.00	94.1	1.0	9.10	-3.80	200	13.28
1155	X		6.41	0.01	18.52	-0.48	682	3	2.20	-0.03	94.9	0.8	7.64	-1.46	200	13.29
1200	X		6.41	0.00	18.58	0.06	682	0	2.21	0.01	95.1	0.2	7.22	-0.42	200	13.29
1205	X		6.41	0.00	18.75	0.17	683	1	2.20	-0.01	94.9	-0.2	6.97	-0.25	200	13.29

Purge Start:	**11:21**	**Sample notes:** MW93-101623-1206-30
Purge End:	**12:05**	DUP Collected : 1000-101623-0003
Sample Time:	**12:06**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

LOW FLOW SAMPLING
FIELD DATA SHEETS

Client:	Haley & Aldrich	**EST Technician:**	D. Kossakowski
Site:	Racer Ewing	**Weather:**	Sunny 50's
Date:	10/16/2023		

Monitoring Well #:	MW-93A	**Well Depth:**	72.80 ft	**Screened/Open Interval:**	60-70 ft
Well Permit #:	N/A	**Well Diameter:**	2 inches		

PID Readings (ppm)

Background:	0.0	**Pump Intake Depth:**	65.0 ft below TOC
Beneath Outer Cap:	0.0	**Depth to Water Before Pump Installation:**	13.45 ft below TOC
Beneath Inner Cap:	2.3	**Purge Method**	Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1235	X		6.61	NA	17.99	NA	586	NA	1.68	NA	95.5	NA	19.1	NA	100	14.65
1240	X		7.71	1.10	17.94	-0.05	519	-67	1.10	-0.58	81.1	-14.4	16.5	-2.6	100	15.73
1245	X		7.56	-0.15	18.75	0.81	511	-8	1.10	0.00	65.8	-15.3	13.3	-3.2	100	16.28
1250	X		7.98	0.42	19.97	1.22	511	0	0.93	-0.17	37.7	-28.1	10.8	-2.5	100	16.84
1255	X		8.22	0.24	19.99	0.02	509	-2	0.89	-0.04	24.5	-13.2	8.66	-2.14	100	17.17
1300	X		8.39	0.17	19.98	-0.01	507	-2	0.81	-0.08	12.4	-12.1	8.17	-0.49	100	17.62
1305	X		8.43	0.04	19.71	-0.27	510	3	0.79	-0.02	8.2	-4.2	7.79	-0.38	100	18.19
1310	X		8.47	0.04	19.62	-0.09	508	-2	0.78	-0.01	8.0	-0.2	7.58	-0.21	100	18.59

Purge Start:	**12:26**	**Sample notes:** MW93A-101623-1311-65
Purge End:	**13:10**	Ambient Field Blank collected at 1430: 1000-101623-0004
Sample Time:	**13:11**	

***INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity**

Parameters:	PFAS

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich
Field Personnel:	C. Bachmann		
Date:	10/12/2023	**Start Time:**	6:30
Stop:	7:00		

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 01	MPP 01
pH	YSI 556 / MPM 01	MPP 01
Spec. Cond	YSI 556 / MPM 01	MPP 01
ORP	YSI 556 / MPM 01	MPP 01
Turbidity	HACH 2100Q / Turb 08	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	12.56	**20.0 NTU**	19.4		**Temp °C**	11.83
Baro Pres.	760.9	**100 NTU**	99.5		**246mV ± 10mV**	248.0
O2 Satur %	100	**800 NTU**	805			
Zero mg/L	0.18	**10.0 NTU**	10.10	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	11.98	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	12.13	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	11.97	2GB359 Feb-25
Buffer 10	10.15	**Temp °C**	11.84	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich
Field Personnel:	C. Bachmann		
Date:	10/17/2023	**Start Time:**	6:30
Stop:	7:00		

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 01	MPP 01
pH	YSI 556 / MPM 01	MPP 01
Spec. Cond	YSI 556 / MPM 01	MPP 01
ORP	YSI 556 / MPM 01	MPP 01
Turbidity	HACH 2100Q / Turb 08	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	11.92	**20.0 NTU**	20.1		**Temp °C**	12.11
Baro Pres.	759.5	**100 NTU**	99.1		**246mV ± 10mV**	248.0
O2 Satur %	100	**800 NTU**	807			
Zero mg/L	0.18	**10.0 NTU**	9.28	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	12.15	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	11.78	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	11.67	2GB359 Feb-25
Buffer 10	10.15	**Temp °C**	11.84	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich		
Field Personnel:	Z. Moir				
Date:	10/16/2023	**Start Time:**	6:12	**Stop:**	6:46

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 04	MPP 04
pH	YSI 556 / MPM 04	MPP 04
Spec. Cond	YSI 556 / MPM 04	MPP 04
ORP	YSI 556 / MPM 04	MPP 04
Turbidity	HACH 2100Q / Turb 07	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	10.26	**20.0 NTU**	19.4		**Temp °C**	11.72
Baro Pres.	753.0	**100 NTU**	98.2		**246mV ±**	
O2 Satur %	100	**800 NTU**	792		**10mV**	249.0
Zero mg/L	0.16	**10.0 NTU**	9.84	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	10.11	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	10.57	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	10.49	2GB359 Feb-25
Buffer 10	10.08	**Temp °C**	10.90	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich		
Field Personnel:	M. Spata				
Date:	10/13/2023	**Start Time:**	5:30	**Stop:**	5:54

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 05	MPP 05
pH	YSI 556 / MPM 05	MPP 05
Spec. Cond	YSI 556 / MPM 05	MPP 05
ORP	YSI 556 / MPM 05	MPP 05
Turbidity	HACH 2100Q / Turb 05	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	11.90	**20.0 NTU**	20.0		**Temp °C**	10.46
Baro Pres.	760.7	**100 NTU**	98.6		**246mV ± 10mV**	250.0
O2 Satur %	100	**800 NTU**	801			
Zero mg/L	0.09	**10.0 NTU**	9.93	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	12.80	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	12.74	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	10.96	2GB359 Feb-25
Buffer 10	10.14	**Temp °C**	13.01	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich		
Field Personnel:	M. Spata				
Date:	10/17/2023	**Start Time:**	6:30	**Stop:**	6:54

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 05	MPP 05
pH	YSI 556 / MPM 05	MPP 05
Spec. Cond	YSI 556 / MPM 05	MPP 05
ORP	YSI 556 / MPM 05	MPP 05
Turbidity	HACH 2100Q / Turb 05	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	10.54	**20.0 NTU**	20.2		**Temp °C**	11.01
Baro Pres.	758.0	**100 NTU**	100		**246mV ± 10mV**	249.0
O2 Satur %	100	**800 NTU**	802			
Zero mg/L	0.09	**10.0 NTU**	9.82	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	11.23	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	11.98	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	12.08	2GB359 Feb-25
Buffer 10	10.14	**Temp °C**	12.65	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site: Racer - Ewing **Client:** Haley & Aldrich

Field Personnel: D. Kossakowski

Date: 10/12/2023 **Start Time:** 6:48 **Stop:** 7:10

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 06	MPP 06
pH	YSI 556 / MPM 06	MPP 06
Spec. Cond	YSI 556 / MPM 06	MPP 06
ORP	YSI 556 / MPM 06	MPP 06
Turbidity	HACH 2100Q / Turb 10	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	13.23	**20.0 NTU**	20.5		**Temp °C**	12.49
Baro Pres.	760.0	**100 NTU**	101		**246mV ± 10mV**	248.5
O2 Satur %	100	**800 NTU**	798			
Zero mg/L	0.17	**10.0 NTU**	9.64	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	12.37	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	13.92	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	13.80	2GB359 Feb-25
Buffer 10	10.15	**Temp °C**	13.68	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site: Racer - Ewing **Client:** Haley & Aldrich

Field Personnel: D. Kossakowski

Date: 10/13/2023 **Start Time:** 5:49 **Stop:** 6:10

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 06	MPP 06
pH	YSI 556 / MPM 06	MPP 06
Spec. Cond	YSI 556 / MPM 06	MPP 06
ORP	YSI 556 / MPM 06	MPP 06
Turbidity	HACH 2100Q / Turb 10	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	10.77	**20.0 NTU**	19.1		**Temp °C**	11.74
Baro Pres.	761.5	**100 NTU**	98.1		**246mV ±**	
O2 Satur %	100	**800 NTU**	802		**10mV**	249.5
Zero mg/L	0.18	**10.0 NTU**	10.0	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	12.73	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	11.28	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	10.15	2GB359 Feb-25
Buffer 10	10.16	**Temp °C**	10.48	2GG018 Jul-24

NJDEP Cert #: 03035

EST Associates, Inc.

Field Instrument and Calibration Data Sheet

Site:	Racer - Ewing	**Client:**	Haley & Aldrich
Field Personnel:	D. Kossakowski		
Date:	10/16/2023	**Start Time:**	6:52
		Stop:	7:18

	Meter (model/EST ID)	Probe (EST ID)
DO	YSI 556 / MPM 06	MPP 06
pH	YSI 556 / MPM 06	MPP 06
Spec. Cond	YSI 556 / MPM 06	MPP 06
ORP	YSI 556 / MPM 06	MPP 06
Turbidity	HACH 2100Q / Turb 10	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity			ORP	
Temp °C	11.11	**20.0 NTU**	21.3		**Temp °C**	13.37
Baro Pres.	752.6	**100 NTU**	102		**246mV ± 10mV**	248.5
O2 Satur %	100	**800 NTU**	803			
Zero mg/L	0.17	**10.0 NTU**	9.50	**(check)**		

Specific Conductance

Standard 1000 ± 10 uS/cm		**Lot # and Exp Date**
Reading	1000	3GA934 Jan-24
Temp °C	12.96	

pH Calibration

				Lot # and Exp Date
Buffer 4	4.00	**Temp °C**	11.21	2GH670 Aug-24
Buffer 7	7.05	**Temp °C**	10.60	2GB359 Feb-25
Buffer 10	10.16	**Temp °C**	11.88	2GG018 Jul-24

NJDEP Cert #: 03035

APPENDIX B
Laboratory Analytical Results

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 10/26/2023 2:28 PM

JOB DESCRIPTION

Racer, Ewing/Trenton

JOB NUMBER

460-290219-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/26/2023 2:28 PM

Authorized for release by
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 5

- Report Narrative 5
- Sample Summary 6
- Detection Summary 7
- Method Summary 11
- Client Sample Results 12
- Isotope Dilution Summary 26
- QC Sample Results 28
- Definitions 37
- QC Association 38
- Chronicle 39
- Certification Summary 41

Organic Sample Data 42

- LCMS 42
  - Method PFC IDA 42
    - Method PFC IDA QC Summary 43
    - Method PFC IDA Sample Data 64
    - Standards Data 594
      - Method PFC IDA ICAL Data 594
      - Method PFC IDA CCAL Data 711
    - Raw QC Data 802
      - Method PFC IDA Blank Data 802
      - Method PFC IDA LCS/LCSD Data 872
      - Method PFC IDA MS/MSD Data 999
    - Method PFC IDA Run Logs 1003

Table of Contents

Method PFC IDA Prep Data 1007

Shipping and Receiving Documents 1014

Client Chain of Custody 1015

Sample Receipt Checklist 1021

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing/Trenton

Report Number: 460-290219-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/12/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.5 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Samples MW90AR-101223-0927-95 (460-290219-1), MW90R-101223-1030-26 (460-290219-2), MW41R-101223-1137-29.5 (460-290219-3), MW14A-101223-1231-40 (460-290219-4), MW83R-101223-1346-29 (460-290219-5), 1000-101223-0003 (460-290219-6), MW89A-101223-0946-96 (460-290219-7), MW89-101223-1056-25 (460-290219-8), MW17A-101223-1206-29 (460-290219-9), MW17B-101223-1306-96 (460-290219-10), MW82-101223-1411-30 (460-290219-11) and 1000-101223-0002 (460-290219-12) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC-IDA - 537 (modified). The samples were prepared on 10/19/2023 and analyzed on 10/21/2023.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196590.

The “I” qualifier associated with sample MW83R-101223-1346-29 (460-290219-5) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the PFAS analysis.

All other quality control parameters were within the acceptance limits.

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290219-1	MW90AR-101223-0927-95	Water	10/12/23 09:27	10/12/23 18:20
460-290219-2	MW90R-101223-1030-26	Water	10/12/23 10:30	10/12/23 18:20
460-290219-3	MW41R-101223-1137-29.5	Water	10/12/23 11:37	10/12/23 18:20
460-290219-4	MW14A-101223-1231-40	Water	10/12/23 12:31	10/12/23 18:20
460-290219-5	MW83R-101223-1346-29	Water	10/12/23 13:46	10/12/23 18:20
460-290219-6	1000-101223-0003	Water	10/12/23 08:00	10/12/23 18:20
460-290219-7	MW89A-101223-0946-96	Water	10/12/23 09:46	10/12/23 18:20
460-290219-8	MW89-101223-1056-25	Water	10/12/23 10:56	10/12/23 18:20
460-290219-9	MW17A-101223-1206-29	Water	10/12/23 12:06	10/12/23 18:20
460-290219-10	MW17B-101223-1306-96	Water	10/12/23 13:06	10/12/23 18:20
460-290219-11	MW82-101223-1411-30	Water	10/12/23 14:11	10/12/23 18:20
460-290219-12	1000-101223-0002	Water	10/12/23 08:25	10/12/23 18:20

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Client Sample ID: MW90AR-101223-0927-95 — Lab Sample ID: 460-290219-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	5.40		4.33	1.04	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	2.49		1.73	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	3.16		1.73	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	1.47	J	1.73	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	11.3		1.73	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.63	J	1.73	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.70	J	1.73	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	0.59	J	1.73	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.88	J	1.73	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	8.57		1.73	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	2.34		1.73	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	154		1.73	0.74	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	1.42	J	4.33	1.13	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW90R-101223-1030-26 — Lab Sample ID: 460-290219-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	57.5		4.25	1.02	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	84.1		1.70	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	54.3		1.70	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	25.3		1.70	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	16.3		1.70	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	3.04		1.70	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.76	J	1.70	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	17.9		1.70	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	16.9		1.70	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	85.2		1.70	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	2.74		1.70	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	150		1.70	0.72	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	7.35		4.25	1.11	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	0.91	J	1.70	0.65	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW41R-101223-1137-29.5 — Lab Sample ID: 460-290219-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid	1.65	J	1.67	0.57	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	1.65	J	1.67	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	1.40	J	1.67	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	6.29		1.67	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	0.94	J	1.67	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.63	J	1.67	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.43		1.67	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.57	J	1.67	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	16.1		1.67	0.71	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW14A-101223-1231-40 — Lab Sample ID: 460-290219-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	2.59	J	4.12	0.99	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	2.51		1.65	0.56	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	2.79		1.65	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	1.74		1.65	0.44	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW14A-101223-1231-40 (Continued) — Lab Sample ID: 460-290219-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid	7.96		1.65	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	0.97	J	1.65	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.73		1.65	0.38	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid	1.15	J	1.65	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	1.02	J	1.65	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.52	J	1.65	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.40		1.65	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.44	J	1.65	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	18.5		1.65	0.70	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW83R-101223-1346-29 — Lab Sample ID: 460-290219-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	21.3		4.17	1.00	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	81.2		1.67	0.57	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	81.1		1.67	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	20.5		1.67	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	16.2		1.67	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.45	J	1.67	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.76	J I	1.67	0.38	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.23		1.67	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	4.03		1.67	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	15.4		1.67	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	8.15		1.67	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	533		1.67	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorodecanesulfonic acid	0.37	J	1.67	0.33	ng/L	1		537 (modified)	Total/NA
HFPODA	0.92	J	3.34	0.92	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 1000-101223-0003 — Lab Sample ID: 460-290219-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid	1.89		1.71	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	1.68	J	1.71	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	1.33	J	1.71	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	6.51		1.71	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	0.93	J	1.71	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.62	J	1.71	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.57		1.71	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.50	J	1.71	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	15.1		1.71	0.73	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW89A-101223-0946-96 — Lab Sample ID: 460-290219-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	5.24		4.36	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	24.5		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	19.7		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	5.43		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	4.46		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	0.72	J	1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	1.82		1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	1.56	J	1.74	0.48	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW89A-101223-0946-96 (Continued) — Lab Sample ID: 460-290219-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid	15.0		1.74	0.74	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	11.8		4.36	1.13	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW89-101223-1056-25 — Lab Sample ID: 460-290219-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	1.64	J	4.24	1.02	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	1.88		1.70	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	2.18		1.70	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	1.70		1.70	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	5.60		1.70	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	0.58	J	1.70	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	2.93		1.70	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.26		1.70	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	8.32		1.70	0.72	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW17A-101223-1206-29 — Lab Sample ID: 460-290219-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	17.5		4.28	1.03	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	16.0		1.71	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	18.7		1.71	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	9.22		1.71	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	16.6		1.71	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.84		1.71	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.74		1.71	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	2.77		1.71	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.85	J	1.71	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	6.09		1.71	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.94	J	1.71	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	116		1.71	0.73	ng/L	1		537 (modified)	Total/NA
HFPODA	1.37	J	3.42	0.94	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW17B-101223-1306-96 — Lab Sample ID: 460-290219-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	11.2		4.40	1.06	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	4.18		1.76	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	6.52		1.76	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	3.85		1.76	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	7.67		1.76	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.19		1.76	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.20	J	1.76	0.40	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid	0.63	J	1.76	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	2.07		1.76	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.34		1.76	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.59	J	1.76	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	174		1.76	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorodecanesulfonic acid	0.42	J	1.76	0.35	ng/L	1		537 (modified)	Total/NA
HFPODA	1.19	J	3.52	0.97	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Client Sample ID: MW82-101223-1411-30 — Lab Sample ID: 460-290219-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	12.9		4.35	1.04	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	9.07		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	10.8		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	5.77		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	21.3		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.81		1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.73	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.62		1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	4.18		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	14.7		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	8.66		1.74	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	598		1.74	0.74	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 1000-101223-0002 — Lab Sample ID: 460-290219-12

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Job ID: 460-290219-1
Project/Site: Racer, Ewing/Trenton

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET BUR
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: MW90AR-101223-0927-95
Lab Sample ID: 460-290219-1

Date Collected: 10/12/23 09:27
Matrix: Water

Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**5.40**		4.33	1.04	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluoropentanoic acid	**2.49**		1.73	0.59	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorohexanoic acid	**3.16**		1.73	0.56	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluoroheptanoic acid	**1.47**	**J**	1.73	0.47	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorooctanoic acid	**11.3**		1.73	0.66	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorononanoic acid	**1.63**	**J**	1.73	0.42	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorodecanoic acid	**0.70**	**J**	1.73	0.40	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluoroundecanoic acid	1.73	U	1.73	0.48	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorododecanoic acid	1.73	U	1.73	0.42	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorotridecanoic acid	1.73	U	1.73	0.42	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorotetradecanoic acid	1.73	U	1.73	0.55	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorobutanesulfonic acid	**0.59**	**J**	1.73	0.54	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluoropentanesulfonic acid	**0.88**	**J**	1.73	0.43	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorohexanesulfonic acid	**8.57**		1.73	0.48	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluoroheptanesulfonic acid	**2.34**		1.73	0.35	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorooctanesulfonic acid	**154**		1.73	0.74	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorononanesulfonic acid	1.73	U	1.73	0.35	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorodecanesulfonic acid	1.73	U	1.73	0.35	ng/L		10/19/23 13:52	10/21/23 06:25	1
4:2 Fluorotelomer sulfonic acid	1.73	U	1.73	0.47	ng/L		10/19/23 13:52	10/21/23 06:25	1
6:2 Fluorotelomer sulfonic acid	**1.42**	**J**	4.33	1.13	ng/L		10/19/23 13:52	10/21/23 06:25	1
8:2 Fluorotelomer sulfonic acid	1.73	U	1.73	0.67	ng/L		10/19/23 13:52	10/21/23 06:25	1
Perfluorooctanesulfonamide	1.73	U	1.73	0.80	ng/L		10/19/23 13:52	10/21/23 06:25	1
NMeFOSAA	4.33	U	4.33	1.64	ng/L		10/19/23 13:52	10/21/23 06:25	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.33	U	4.33	1.39	ng/L		10/19/23 13:52	10/21/23 06:25	1
HFPODA	3.46	U	3.46	0.95	ng/L		10/19/23 13:52	10/21/23 06:25	1
DONA	1.73	U	1.73	0.36	ng/L		10/19/23 13:52	10/21/23 06:25	1
9Cl-PF3ONS	1.73	U	1.73	0.28	ng/L		10/19/23 13:52	10/21/23 06:25	1
11Cl-PF3OUdS	1.73	U	1.73	0.75	ng/L		10/19/23 13:52	10/21/23 06:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C5 PFPeA	*89*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C4 PFHpA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C2 PFTeDA	*79*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C3 PFBS	*83*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C8 FOSA	*69*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
d3-NMeFOSAA	*85*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
d5-NEtFOSAA	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
M2-4:2 FTS	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
M2-6:2 FTS	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
M2-8:2 FTS	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C3 HFPO-DA	*97*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
18O2 PFHxS	*83*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C2 PFHxA	*89*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C4 PFOS	*85*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C2 PFDoA	*87*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C5 PFNA	*91*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C2 PFDA	*87*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*
13C4 PFOA	*104*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:25*	*1*

Client Sample ID: MW90AR-101223-0927-95
Lab Sample ID: 460-290219-1
Date Collected: 10/12/23 09:27
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	84		50 - 150	10/19/23 13:52	10/21/23 06:25	1

Client Sample ID: MW90R-101223-1030-26
Lab Sample ID: 460-290219-2
Date Collected: 10/12/23 10:30
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**57.5**		4.25	1.02	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluoropentanoic acid	**84.1**		1.70	0.58	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorohexanoic acid	**54.3**		1.70	0.55	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluoroheptanoic acid	**25.3**		1.70	0.46	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorooctanoic acid	**16.3**		1.70	0.65	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorononanoic acid	**3.04**		1.70	0.42	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorodecanoic acid	**0.76**	**J**	1.70	0.39	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluoroundecanoic acid	1.70	U	1.70	0.47	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorododecanoic acid	1.70	U	1.70	0.42	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorotridecanoic acid	1.70	U	1.70	0.41	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorotetradecanoic acid	1.70	U	1.70	0.54	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorobutanesulfonic acid	**17.9**		1.70	0.53	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluoropentanesulfonic acid	**16.9**		1.70	0.43	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorohexanesulfonic acid	**85.2**		1.70	0.47	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluoroheptanesulfonic acid	**2.74**		1.70	0.35	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorooctanesulfonic acid	**150**		1.70	0.72	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorononanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorodecanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/19/23 13:52	10/21/23 06:49	1
4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46	ng/L		10/19/23 13:52	10/21/23 06:49	1
6:2 Fluorotelomer sulfonic acid	**7.35**		4.25	1.11	ng/L		10/19/23 13:52	10/21/23 06:49	1
8:2 Fluorotelomer sulfonic acid	**0.91**	**J**	1.70	0.65	ng/L		10/19/23 13:52	10/21/23 06:49	1
Perfluorooctanesulfonamide	1.70	U	1.70	0.78	ng/L		10/19/23 13:52	10/21/23 06:49	1
NMeFOSAA	4.25	U	4.25	1.62	ng/L		10/19/23 13:52	10/21/23 06:49	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.25	U	4.25	1.36	ng/L		10/19/23 13:52	10/21/23 06:49	1
HFPODA	3.40	U	3.40	0.94	ng/L		10/19/23 13:52	10/21/23 06:49	1
DONA	1.70	U	1.70	0.36	ng/L		10/19/23 13:52	10/21/23 06:49	1
9Cl-PF3ONS	1.70	U	1.70	0.27	ng/L		10/19/23 13:52	10/21/23 06:49	1
11Cl-PF3OUdS	1.70	U	1.70	0.74	ng/L		10/19/23 13:52	10/21/23 06:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	96		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C5 PFPeA	94		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C4 PFHpA	98		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C2 PFTeDA	84		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C3 PFBS	90		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C8 FOSA	84		50 - 150	10/19/23 13:52	10/21/23 06:49	1
d3-NMeFOSAA	88		50 - 150	10/19/23 13:52	10/21/23 06:49	1
d5-NEtFOSAA	92		50 - 150	10/19/23 13:52	10/21/23 06:49	1
M2-4:2 FTS	89		50 - 150	10/19/23 13:52	10/21/23 06:49	1
M2-6:2 FTS	90		50 - 150	10/19/23 13:52	10/21/23 06:49	1
M2-8:2 FTS	84		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C3 HFPO-DA	96		50 - 150	10/19/23 13:52	10/21/23 06:49	1

Client Sample ID: MW90R-101223-1030-26
Lab Sample ID: 460-290219-2

Date Collected: 10/12/23 10:30
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	94		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C2 PFHxA	101		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C4 PFOS	92		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C2 PFDoA	93		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C5 PFNA	99		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C2 PFDA	90		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C4 PFOA	104		50 - 150	10/19/23 13:52	10/21/23 06:49	1
13C2 PFUnA	91		50 - 150	10/19/23 13:52	10/21/23 06:49	1

Client Sample ID: MW41R-101223-1137-29.5
Lab Sample ID: 460-290219-3

Date Collected: 10/12/23 11:37
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.18	U	4.18	1.00	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluoropentanoic acid	**1.65**	**J**	1.67	0.57	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorohexanoic acid	**1.65**	**J**	1.67	0.54	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluoroheptanoic acid	**1.40**	**J**	1.67	0.45	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorooctanoic acid	**6.29**		1.67	0.64	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorononanoic acid	1.67	U	1.67	0.41	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorodecanoic acid	1.67	U	1.67	0.38	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluoroundecanoic acid	1.67	U	1.67	0.46	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorododecanoic acid	1.67	U	1.67	0.41	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorotridecanoic acid	1.67	U	1.67	0.40	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorotetradecanoic acid	1.67	U	1.67	0.54	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorobutanesulfonic acid	**0.94**	**J**	1.67	0.52	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluoropentanesulfonic acid	**0.63**	**J**	1.67	0.42	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorohexanesulfonic acid	**2.43**		1.67	0.46	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluoroheptanesulfonic acid	**0.57**	**J**	1.67	0.34	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorooctanesulfonic acid	**16.1**		1.67	0.71	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorononanesulfonic acid	1.67	U	1.67	0.33	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorodecanesulfonic acid	1.67	U	1.67	0.33	ng/L		10/19/23 13:52	10/21/23 06:57	1
4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45	ng/L		10/19/23 13:52	10/21/23 06:57	1
6:2 Fluorotelomer sulfonic acid	4.18	U	4.18	1.09	ng/L		10/19/23 13:52	10/21/23 06:57	1
8:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.64	ng/L		10/19/23 13:52	10/21/23 06:57	1
Perfluorooctanesulfonamide	1.67	U	1.67	0.77	ng/L		10/19/23 13:52	10/21/23 06:57	1
NMeFOSAA	4.18	U	4.18	1.59	ng/L		10/19/23 13:52	10/21/23 06:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.18	U	4.18	1.34	ng/L		10/19/23 13:52	10/21/23 06:57	1
HFPODA	3.35	U	3.35	0.92	ng/L		10/19/23 13:52	10/21/23 06:57	1
DONA	1.67	U	1.67	0.35	ng/L		10/19/23 13:52	10/21/23 06:57	1
9Cl-PF3ONS	1.67	U	1.67	0.27	ng/L		10/19/23 13:52	10/21/23 06:57	1
11Cl-PF3OUdS	1.67	U	1.67	0.73	ng/L		10/19/23 13:52	10/21/23 06:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98		50 - 150	10/19/23 13:52	10/21/23 06:57	1
13C5 PFPeA	100		50 - 150	10/19/23 13:52	10/21/23 06:57	1
13C4 PFHpA	97		50 - 150	10/19/23 13:52	10/21/23 06:57	1
13C2 PFTeDA	77		50 - 150	10/19/23 13:52	10/21/23 06:57	1
13C3 PFBS	87		50 - 150	10/19/23 13:52	10/21/23 06:57	1

Client Sample ID: MW41R-101223-1137-29.5
Lab Sample ID: 460-290219-3

Date Collected: 10/12/23 11:37
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*83*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
d3-NMeFOSAA	*79*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
d5-NEtFOSAA	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
M2-4:2 FTS	*84*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
M2-6:2 FTS	*88*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
M2-8:2 FTS	*74*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C3 HFPO-DA	*92*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
18O2 PFHxS	*92*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C2 PFHxA	*102*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C4 PFOS	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C2 PFDoA	*83*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C5 PFNA	*93*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C2 PFDA	*95*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C4 PFOA	*106*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*
13C2 PFUnA	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 06:57*	*1*

Client Sample ID: MW14A-101223-1231-40
Lab Sample ID: 460-290219-4

Date Collected: 10/12/23 12:31
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**2.59**	**J**	4.12	0.99	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluoropentanoic acid	**2.51**		1.65	0.56	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorohexanoic acid	**2.79**		1.65	0.54	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluoroheptanoic acid	**1.74**		1.65	0.44	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorooctanoic acid	**7.96**		1.65	0.63	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorononanoic acid	**0.97**	**J**	1.65	0.40	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorodecanoic acid	**1.73**		1.65	0.38	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluoroundecanoic acid	**1.15**	**J**	1.65	0.45	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorododecanoic acid	1.65	U	1.65	0.40	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorotridecanoic acid	1.65	U	1.65	0.40	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorotetradecanoic acid	1.65	U	1.65	0.53	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorobutanesulfonic acid	**1.02**	**J**	1.65	0.51	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluoropentanesulfonic acid	**0.52**	**J**	1.65	0.41	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorohexanesulfonic acid	**2.40**		1.65	0.45	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluoroheptanesulfonic acid	**0.44**	**J**	1.65	0.34	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorooctanesulfonic acid	**18.5**		1.65	0.70	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorononanesulfonic acid	1.65	U	1.65	0.33	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorodecanesulfonic acid	1.65	U	1.65	0.33	ng/L		10/19/23 13:52	10/21/23 07:06	1
4:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.44	ng/L		10/19/23 13:52	10/21/23 07:06	1
6:2 Fluorotelomer sulfonic acid	4.12	U	4.12	1.07	ng/L		10/19/23 13:52	10/21/23 07:06	1
8:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.63	ng/L		10/19/23 13:52	10/21/23 07:06	1
Perfluorooctanesulfonamide	1.65	U	1.65	0.76	ng/L		10/19/23 13:52	10/21/23 07:06	1
NMeFOSAA	4.12	U	4.12	1.56	ng/L		10/19/23 13:52	10/21/23 07:06	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.12	U	4.12	1.32	ng/L		10/19/23 13:52	10/21/23 07:06	1
HFPODA	3.29	U	3.29	0.91	ng/L		10/19/23 13:52	10/21/23 07:06	1
DONA	1.65	U	1.65	0.35	ng/L		10/19/23 13:52	10/21/23 07:06	1
9Cl-PF3ONS	1.65	U	1.65	0.26	ng/L		10/19/23 13:52	10/21/23 07:06	1

Client Sample ID: MW14A-101223-1231-40 — Lab Sample ID: 460-290219-4

Date Collected: 10/12/23 12:31 **Matrix: Water**
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	1.65	U	1.65	0.72	ng/L		10/19/23 13:52	10/21/23 07:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C5 PFPeA	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C4 PFHpA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C3 PFBS	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C8 FOSA	*80*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
d3-NMeFOSAA	*84*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
M2-4:2 FTS	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
M2-6:2 FTS	*87*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
M2-8:2 FTS	*78*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C3 HFPO-DA	*98*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
18O2 PFHxS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C2 PFHxA	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C4 PFOS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C2 PFDoA	*91*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C5 PFNA	*101*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C2 PFDA	*96*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C4 PFOA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*
13C2 PFUnA	*95*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:06*	*1*

Client Sample ID: MW83R-101223-1346-29 — Lab Sample ID: 460-290219-5

Date Collected: 10/12/23 13:46 **Matrix: Water**
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**21.3**		4.17	1.00	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluoropentanoic acid	**81.2**		1.67	0.57	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorohexanoic acid	**81.1**		1.67	0.54	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluoroheptanoic acid	**20.5**		1.67	0.45	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorooctanoic acid	**16.2**		1.67	0.63	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorononanoic acid	**1.45**	**J**	1.67	0.41	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorodecanoic acid	**0.76**	**J I**	1.67	0.38	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluoroundecanoic acid	1.67	U	1.67	0.46	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorododecanoic acid	1.67	U	1.67	0.41	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorotridecanoic acid	1.67	U	1.67	0.40	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorotetradecanoic acid	1.67	U	1.67	0.53	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorobutanesulfonic acid	**3.23**		1.67	0.52	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluoropentanesulfonic acid	**4.03**		1.67	0.42	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorohexanesulfonic acid	**15.4**		1.67	0.46	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluoroheptanesulfonic acid	**8.15**		1.67	0.34	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorooctanesulfonic acid	**533**		1.67	0.71	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorononanesulfonic acid	1.67	U	1.67	0.33	ng/L		10/19/23 13:52	10/21/23 07:14	1
Perfluorodecanesulfonic acid	**0.37**	**J**	1.67	0.33	ng/L		10/19/23 13:52	10/21/23 07:14	1
4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45	ng/L		10/19/23 13:52	10/21/23 07:14	1
6:2 Fluorotelomer sulfonic acid	4.17	U	4.17	1.08	ng/L		10/19/23 13:52	10/21/23 07:14	1
8:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.64	ng/L		10/19/23 13:52	10/21/23 07:14	1

Client Sample ID: MW83R-101223-1346-29
Lab Sample ID: 460-290219-5

Date Collected: 10/12/23 13:46
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide	1.67	U	1.67	0.77	ng/L		10/19/23 13:52	10/21/23 07:14	1
NMeFOSAA	4.17	U	4.17	1.59	ng/L		10/19/23 13:52	10/21/23 07:14	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.17	U	4.17	1.34	ng/L		10/19/23 13:52	10/21/23 07:14	1
HFPODA	**0.92**	**J**	3.34	0.92	ng/L		10/19/23 13:52	10/21/23 07:14	1
DONA	1.67	U	1.67	0.35	ng/L		10/19/23 13:52	10/21/23 07:14	1
9Cl-PF3ONS	1.67	U	1.67	0.27	ng/L		10/19/23 13:52	10/21/23 07:14	1
11Cl-PF3OUdS	1.67	U	1.67	0.73	ng/L		10/19/23 13:52	10/21/23 07:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C5 PFPeA	*93*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C4 PFHpA	*102*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C2 PFTeDA	*89*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C3 PFBS	*88*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C8 FOSA	*78*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
M2-4:2 FTS	*89*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
M2-6:2 FTS	*94*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
M2-8:2 FTS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C3 HFPO-DA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
18O2 PFHxS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C2 PFHxA	*95*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C4 PFOS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C2 PFDoA	*99*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C5 PFNA	*92*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C2 PFDA	*95*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C4 PFOA	*96*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*
13C2 PFUnA	*97*		*50 - 150*	*10/19/23 13:52*	*10/21/23 07:14*	*1*

Client Sample ID: 1000-101223-0003
Lab Sample ID: 460-290219-6

Date Collected: 10/12/23 08:00
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.28	U	4.28	1.03	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluoropentanoic acid	**1.89**		1.71	0.58	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorohexanoic acid	**1.68**	**J**	1.71	0.56	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluoroheptanoic acid	**1.33**	**J**	1.71	0.46	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorooctanoic acid	**6.51**		1.71	0.65	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorononanoic acid	1.71	U	1.71	0.42	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorodecanoic acid	1.71	U	1.71	0.39	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluoroundecanoic acid	1.71	U	1.71	0.47	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorododecanoic acid	1.71	U	1.71	0.42	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorotridecanoic acid	1.71	U	1.71	0.41	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorotetradecanoic acid	1.71	U	1.71	0.55	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorobutanesulfonic acid	**0.93**	**J**	1.71	0.53	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluoropentanesulfonic acid	**0.62**	**J**	1.71	0.43	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorohexanesulfonic acid	**2.57**		1.71	0.47	ng/L		10/19/23 13:45	10/21/23 00:50	1

Client Sample ID: 1000-101223-0003
Lab Sample ID: 460-290219-6
Date Collected: 10/12/23 08:00
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid	**0.50**	**J**	1.71	0.35	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorooctanesulfonic acid	**15.1**		1.71	0.73	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorononanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorodecanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/19/23 13:45	10/21/23 00:50	1
4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46	ng/L		10/19/23 13:45	10/21/23 00:50	1
6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11	ng/L		10/19/23 13:45	10/21/23 00:50	1
8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66	ng/L		10/19/23 13:45	10/21/23 00:50	1
Perfluorooctanesulfonamide	1.71	U	1.71	0.79	ng/L		10/19/23 13:45	10/21/23 00:50	1
NMeFOSAA	4.28	U	4.28	1.63	ng/L		10/19/23 13:45	10/21/23 00:50	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37	ng/L		10/19/23 13:45	10/21/23 00:50	1
HFPODA	3.42	U	3.42	0.94	ng/L		10/19/23 13:45	10/21/23 00:50	1
DONA	1.71	U	1.71	0.36	ng/L		10/19/23 13:45	10/21/23 00:50	1
9Cl-PF3ONS	1.71	U	1.71	0.27	ng/L		10/19/23 13:45	10/21/23 00:50	1
11Cl-PF3OUdS	1.71	U	1.71	0.74	ng/L		10/19/23 13:45	10/21/23 00:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C5 PFPeA	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C4 PFHpA	*96*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C2 PFTeDA	*73*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C3 PFBS	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C8 FOSA	*75*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
d3-NMeFOSAA	*78*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
d5-NEtFOSAA	*78*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
M2-4:2 FTS	*74*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
M2-6:2 FTS	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
M2-8:2 FTS	*71*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C3 HFPO-DA	*85*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
18O2 PFHxS	*83*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C2 PFHxA	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C4 PFOS	*85*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C2 PFDoA	*84*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C5 PFNA	*95*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C2 PFDA	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C4 PFOA	*102*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*
13C2 PFUnA	*82*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:50*	*1*

Client Sample ID: MW89A-101223-0946-96
Lab Sample ID: 460-290219-7
Date Collected: 10/12/23 09:46
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**5.24**		4.36	1.05	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluoropentanoic acid	**24.5**		1.74	0.59	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorohexanoic acid	**19.7**		1.74	0.57	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluoroheptanoic acid	**5.43**		1.74	0.47	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorooctanoic acid	**4.46**		1.74	0.66	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorononanoic acid	**0.72**	**J**	1.74	0.43	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorodecanoic acid	1.74	U	1.74	0.40	ng/L		10/19/23 13:45	10/21/23 00:58	1

Client Sample ID: MW89A-101223-0946-96

Date Collected: 10/12/23 09:46
Date Received: 10/12/23 18:20

Lab Sample ID: 460-290219-7

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorobutanesulfonic acid	**1.82**		1.74	0.54	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluoropentanesulfonic acid	1.74	U	1.74	0.44	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorohexanesulfonic acid	**1.56**	**J**	1.74	0.48	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluoroheptanesulfonic acid	1.74	U	1.74	0.36	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorooctanesulfonic acid	**15.0**		1.74	0.74	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorononanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/19/23 13:45	10/21/23 00:58	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/19/23 13:45	10/21/23 00:58	1
6:2 Fluorotelomer sulfonic acid	**11.8**		4.36	1.13	ng/L		10/19/23 13:45	10/21/23 00:58	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/19/23 13:45	10/21/23 00:58	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/19/23 13:45	10/21/23 00:58	1
NMeFOSAA	4.36	U	4.36	1.66	ng/L		10/19/23 13:45	10/21/23 00:58	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40	ng/L		10/19/23 13:45	10/21/23 00:58	1
HFPODA	3.49	U	3.49	0.96	ng/L		10/19/23 13:45	10/21/23 00:58	1
DONA	1.74	U	1.74	0.37	ng/L		10/19/23 13:45	10/21/23 00:58	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/19/23 13:45	10/21/23 00:58	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/19/23 13:45	10/21/23 00:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*99*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C5 PFPeA	*95*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C4 PFHpA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C3 PFBS	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C8 FOSA	*85*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
d3-NMeFOSAA	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
M2-4:2 FTS	*82*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
M2-6:2 FTS	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
M2-8:2 FTS	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C3 HFPO-DA	*96*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
18O2 PFHxS	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C2 PFHxA	*97*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C4 PFOS	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C2 PFDoA	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C5 PFNA	*97*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C4 PFOA	*105*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*
13C2 PFUnA	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:58*	*1*

Client Sample ID: MW89-101223-1056-25

Date Collected: 10/12/23 10:56
Date Received: 10/12/23 18:20

Lab Sample ID: 460-290219-8

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**1.64**	**J**	4.24	1.02	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluoropentanoic acid	**1.88**		1.70	0.58	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorohexanoic acid	**2.18**		1.70	0.55	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluoroheptanoic acid	**1.70**		1.70	0.46	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorooctanoic acid	**5.60**		1.70	0.64	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorononanoic acid	**0.58**	**J**	1.70	0.42	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorodecanoic acid	1.70	U	1.70	0.39	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluoroundecanoic acid	1.70	U	1.70	0.47	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorododecanoic acid	1.70	U	1.70	0.42	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorotridecanoic acid	1.70	U	1.70	0.41	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorotetradecanoic acid	1.70	U	1.70	0.54	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorobutanesulfonic acid	**2.93**		1.70	0.53	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluoropentanesulfonic acid	1.70	U	1.70	0.42	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorohexanesulfonic acid	**2.26**		1.70	0.47	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluoroheptanesulfonic acid	1.70	U	1.70	0.35	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorooctanesulfonic acid	**8.32**		1.70	0.72	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorononanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorodecanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/19/23 13:45	10/21/23 01:06	1
4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46	ng/L		10/19/23 13:45	10/21/23 01:06	1
6:2 Fluorotelomer sulfonic acid	4.24	U	4.24	1.10	ng/L		10/19/23 13:45	10/21/23 01:06	1
8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.65	ng/L		10/19/23 13:45	10/21/23 01:06	1
Perfluorooctanesulfonamide	1.70	U	1.70	0.78	ng/L		10/19/23 13:45	10/21/23 01:06	1
NMeFOSAA	4.24	U	4.24	1.61	ng/L		10/19/23 13:45	10/21/23 01:06	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.24	U	4.24	1.36	ng/L		10/19/23 13:45	10/21/23 01:06	1
HFPODA	3.39	U	3.39	0.93	ng/L		10/19/23 13:45	10/21/23 01:06	1
DONA	1.70	U	1.70	0.36	ng/L		10/19/23 13:45	10/21/23 01:06	1
9Cl-PF3ONS	1.70	U	1.70	0.27	ng/L		10/19/23 13:45	10/21/23 01:06	1
11Cl-PF3OUdS	1.70	U	1.70	0.74	ng/L		10/19/23 13:45	10/21/23 01:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C5 PFPeA	*93*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C4 PFHpA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C2 PFTeDA	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C8 FOSA	*83*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
d5-NEtFOSAA	*83*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
M2-4:2 FTS	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
M2-6:2 FTS	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
M2-8:2 FTS	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C3 HFPO-DA	*96*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
18O2 PFHxS	*92*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C4 PFOS	*90*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C2 PFDoA	*86*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C5 PFNA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C2 PFDA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*
13C4 PFOA	*108*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:06*	*1*

Client Sample ID: MW89-101223-1056-25
Lab Sample ID: 460-290219-8
Date Collected: 10/12/23 10:56
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	90		50 - 150	10/19/23 13:45	10/21/23 01:06	1

Client Sample ID: MW17A-101223-1206-29
Lab Sample ID: 460-290219-9
Date Collected: 10/12/23 12:06
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**17.5**		4.28	1.03	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluoropentanoic acid	**16.0**		1.71	0.58	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorohexanoic acid	**18.7**		1.71	0.56	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluoroheptanoic acid	**9.22**		1.71	0.46	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorooctanoic acid	**16.6**		1.71	0.65	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorononanoic acid	**2.84**		1.71	0.42	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorodecanoic acid	**1.74**		1.71	0.39	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluoroundecanoic acid	1.71	U	1.71	0.47	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorododecanoic acid	1.71	U	1.71	0.42	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorotridecanoic acid	1.71	U	1.71	0.41	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorotetradecanoic acid	1.71	U	1.71	0.55	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorobutanesulfonic acid	**2.77**		1.71	0.53	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluoropentanesulfonic acid	**0.85**	**J**	1.71	0.43	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorohexanesulfonic acid	**6.09**		1.71	0.47	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluoroheptanesulfonic acid	**0.94**	**J**	1.71	0.35	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorooctanesulfonic acid	**116**		1.71	0.73	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorononanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorodecanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/19/23 13:45	10/21/23 01:14	1
4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46	ng/L		10/19/23 13:45	10/21/23 01:14	1
6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11	ng/L		10/19/23 13:45	10/21/23 01:14	1
8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66	ng/L		10/19/23 13:45	10/21/23 01:14	1
Perfluorooctanesulfonamide	1.71	U	1.71	0.79	ng/L		10/19/23 13:45	10/21/23 01:14	1
NMeFOSAA	4.28	U	4.28	1.63	ng/L		10/19/23 13:45	10/21/23 01:14	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37	ng/L		10/19/23 13:45	10/21/23 01:14	1
HFPODA	**1.37**	**J**	3.42	0.94	ng/L		10/19/23 13:45	10/21/23 01:14	1
DONA	1.71	U	1.71	0.36	ng/L		10/19/23 13:45	10/21/23 01:14	1
9Cl-PF3ONS	1.71	U	1.71	0.27	ng/L		10/19/23 13:45	10/21/23 01:14	1
11Cl-PF3OUdS	1.71	U	1.71	0.74	ng/L		10/19/23 13:45	10/21/23 01:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	70		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C5 PFPeA	80		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C4 PFHpA	91		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C2 PFTeDA	90		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C3 PFBS	83		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C8 FOSA	82		50 - 150	10/19/23 13:45	10/21/23 01:14	1
d3-NMeFOSAA	93		50 - 150	10/19/23 13:45	10/21/23 01:14	1
d5-NEtFOSAA	93		50 - 150	10/19/23 13:45	10/21/23 01:14	1
M2-4:2 FTS	109		50 - 150	10/19/23 13:45	10/21/23 01:14	1
M2-6:2 FTS	100		50 - 150	10/19/23 13:45	10/21/23 01:14	1
M2-8:2 FTS	92		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C3 HFPO-DA	88		50 - 150	10/19/23 13:45	10/21/23 01:14	1

Client Sample ID: MW17A-101223-1206-29

Lab Sample ID: 460-290219-9

Date Collected: 10/12/23 12:06
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C2 PFHxA	87		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C4 PFOS	93		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C2 PFDoA	98		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C5 PFNA	95		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C2 PFDA	96		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C4 PFOA	99		50 - 150	10/19/23 13:45	10/21/23 01:14	1
13C2 PFUnA	97		50 - 150	10/19/23 13:45	10/21/23 01:14	1

Client Sample ID: MW17B-101223-1306-96

Lab Sample ID: 460-290219-10

Date Collected: 10/12/23 13:06
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**11.2**		4.40	1.06	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluoropentanoic acid	**4.18**		1.76	0.60	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorohexanoic acid	**6.52**		1.76	0.57	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluoroheptanoic acid	**3.85**		1.76	0.47	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorooctanoic acid	**7.67**		1.76	0.67	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorononanoic acid	**2.19**		1.76	0.43	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorodecanoic acid	**1.20**	**J**	1.76	0.40	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluoroundecanoic acid	**0.63**	**J**	1.76	0.48	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorododecanoic acid	1.76	U	1.76	0.43	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorotridecanoic acid	1.76	U	1.76	0.42	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorotetradecanoic acid	1.76	U	1.76	0.56	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorobutanesulfonic acid	**2.07**		1.76	0.55	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluoropentanesulfonic acid	1.76	U	1.76	0.44	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorohexanesulfonic acid	**2.34**		1.76	0.48	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluoroheptanesulfonic acid	**0.59**	**J**	1.76	0.36	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorooctanesulfonic acid	**174**		1.76	0.75	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorononanesulfonic acid	1.76	U	1.76	0.35	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorodecanesulfonic acid	**0.42**	**J**	1.76	0.35	ng/L		10/19/23 13:45	10/21/23 01:22	1
4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.47	ng/L		10/19/23 13:45	10/21/23 01:22	1
6:2 Fluorotelomer sulfonic acid	4.40	U	4.40	1.14	ng/L		10/19/23 13:45	10/21/23 01:22	1
8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68	ng/L		10/19/23 13:45	10/21/23 01:22	1
Perfluorooctanesulfonamide	1.76	U	1.76	0.81	ng/L		10/19/23 13:45	10/21/23 01:22	1
NMeFOSAA	4.40	U	4.40	1.67	ng/L		10/19/23 13:45	10/21/23 01:22	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.40	U	4.40	1.41	ng/L		10/19/23 13:45	10/21/23 01:22	1
HFPODA	**1.19**	**J**	3.52	0.97	ng/L		10/19/23 13:45	10/21/23 01:22	1
DONA	1.76	U	1.76	0.37	ng/L		10/19/23 13:45	10/21/23 01:22	1
9Cl-PF3ONS	1.76	U	1.76	0.28	ng/L		10/19/23 13:45	10/21/23 01:22	1
11Cl-PF3OUdS	1.76	U	1.76	0.77	ng/L		10/19/23 13:45	10/21/23 01:22	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98		50 - 150	10/19/23 13:45	10/21/23 01:22	1
13C5 PFPeA	97		50 - 150	10/19/23 13:45	10/21/23 01:22	1
13C4 PFHpA	101		50 - 150	10/19/23 13:45	10/21/23 01:22	1
13C2 PFTeDA	95		50 - 150	10/19/23 13:45	10/21/23 01:22	1
13C3 PFBS	94		50 - 150	10/19/23 13:45	10/21/23 01:22	1

Client Sample ID: MW17B-101223-1306-96
Lab Sample ID: 460-290219-10
Date Collected: 10/12/23 13:06
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
d3-NMeFOSAA	*95*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
d5-NEtFOSAA	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
M2-4:2 FTS	*103*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
M2-6:2 FTS	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
M2-8:2 FTS	*92*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C3 HFPO-DA	*99*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
18O2 PFHxS	*95*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C4 PFOS	*93*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C2 PFDoA	*104*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C5 PFNA	*106*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C2 PFDA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C4 PFOA	*107*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*
13C2 PFUnA	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:22*	*1*

Client Sample ID: MW82-101223-1411-30
Lab Sample ID: 460-290219-11
Date Collected: 10/12/23 14:11
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**12.9**		4.35	1.04	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluoropentanoic acid	**9.07**		1.74	0.59	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorohexanoic acid	**10.8**		1.74	0.57	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluoroheptanoic acid	**5.77**		1.74	0.47	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorooctanoic acid	**21.3**		1.74	0.66	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorononanoic acid	**1.81**		1.74	0.43	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorodecanoic acid	**0.73**	**J**	1.74	0.40	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorobutanesulfonic acid	**3.62**		1.74	0.54	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluoropentanesulfonic acid	**4.18**		1.74	0.44	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorohexanesulfonic acid	**14.7**		1.74	0.48	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluoroheptanesulfonic acid	**8.66**		1.74	0.36	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorooctanesulfonic acid	**598**		1.74	0.74	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorononanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/19/23 13:45	10/21/23 01:30	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/19/23 13:45	10/21/23 01:30	1
6:2 Fluorotelomer sulfonic acid	4.35	U	4.35	1.13	ng/L		10/19/23 13:45	10/21/23 01:30	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/19/23 13:45	10/21/23 01:30	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/19/23 13:45	10/21/23 01:30	1
NMeFOSAA	4.35	U	4.35	1.65	ng/L		10/19/23 13:45	10/21/23 01:30	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.35	U	4.35	1.39	ng/L		10/19/23 13:45	10/21/23 01:30	1
HFPODA	3.48	U	3.48	0.96	ng/L		10/19/23 13:45	10/21/23 01:30	1
DONA	1.74	U	1.74	0.37	ng/L		10/19/23 13:45	10/21/23 01:30	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/19/23 13:45	10/21/23 01:30	1

Client Sample ID: MW82-101223-1411-30
Lab Sample ID: 460-290219-11

Date Collected: 10/12/23 14:11
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/19/23 13:45	10/21/23 01:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*63*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C5 PFPeA	*80*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C4 PFHpA	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C2 PFTeDA	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C3 PFBS	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C8 FOSA	*75*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
d3-NMeFOSAA	*94*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
M2-4:2 FTS	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
M2-6:2 FTS	*104*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
M2-8:2 FTS	*94*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C3 HFPO-DA	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
18O2 PFHxS	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C2 PFHxA	*85*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C4 PFOS	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C2 PFDoA	*96*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C5 PFNA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C4 PFOA	*100*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*
13C2 PFUnA	*102*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:30*	*1*

Client Sample ID: 1000-101223-0002
Lab Sample ID: 460-290219-12

Date Collected: 10/12/23 08:25
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.19	U	4.19	1.01	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluoropentanoic acid	1.68	U	1.68	0.57	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorohexanoic acid	1.68	U	1.68	0.55	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluoroheptanoic acid	1.68	U	1.68	0.45	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorooctanoic acid	1.68	U	1.68	0.64	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorononanoic acid	1.68	U	1.68	0.41	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorodecanoic acid	1.68	U	1.68	0.39	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluoroundecanoic acid	1.68	U	1.68	0.46	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorododecanoic acid	1.68	U	1.68	0.41	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorotridecanoic acid	1.68	U	1.68	0.40	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorotetradecanoic acid	1.68	U	1.68	0.54	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorobutanesulfonic acid	1.68	U	1.68	0.52	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluoropentanesulfonic acid	1.68	U	1.68	0.42	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorohexanesulfonic acid	1.68	U	1.68	0.46	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluoroheptanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorooctanesulfonic acid	1.68	U	1.68	0.71	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorononanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/19/23 13:45	10/21/23 01:39	1
Perfluorodecanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/19/23 13:45	10/21/23 01:39	1
4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45	ng/L		10/19/23 13:45	10/21/23 01:39	1
6:2 Fluorotelomer sulfonic acid	4.19	U	4.19	1.09	ng/L		10/19/23 13:45	10/21/23 01:39	1
8:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.65	ng/L		10/19/23 13:45	10/21/23 01:39	1

Client Sample ID: 1000-101223-0002
Lab Sample ID: 460-290219-12
Date Collected: 10/12/23 08:25
Matrix: Water
Date Received: 10/12/23 18:20

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide	1.68	U	1.68	0.77	ng/L		10/19/23 13:45	10/21/23 01:39	1
NMeFOSAA	4.19	U	4.19	1.59	ng/L		10/19/23 13:45	10/21/23 01:39	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.19	U	4.19	1.34	ng/L		10/19/23 13:45	10/21/23 01:39	1
HFPODA	3.35	U	3.35	0.92	ng/L		10/19/23 13:45	10/21/23 01:39	1
DONA	1.68	U	1.68	0.35	ng/L		10/19/23 13:45	10/21/23 01:39	1
9Cl-PF3ONS	1.68	U	1.68	0.27	ng/L		10/19/23 13:45	10/21/23 01:39	1
11Cl-PF3OUdS	1.68	U	1.68	0.73	ng/L		10/19/23 13:45	10/21/23 01:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*109*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C5 PFPeA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C4 PFHpA	*107*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C2 PFTeDA	*87*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C3 PFBS	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C8 FOSA	*78*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
M2-4:2 FTS	*82*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
M2-6:2 FTS	*93*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
M2-8:2 FTS	*85*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C3 HFPO-DA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
18O2 PFHxS	*92*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C2 PFHxA	*104*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C4 PFOS	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C2 PFDoA	*94*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C5 PFNA	*104*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C2 PFDA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C4 PFOA	*103*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*
13C2 PFUnA	*99*		*50 - 150*	*10/19/23 13:45*	*10/21/23 01:39*	*1*

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	C4PFHA	PFTDA	C3PFBS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290219-1	MW90AR-101223-0927-95	81	89	100	79	83	69	85	86
460-290219-1 MS	MW90AR-101223-0927-95	86	95	103	82	87	76	87	92
460-290219-1 MSD	MW90AR-101223-0927-95	74	83	87	82	80	73	87	89
460-290219-2	MW90R-101223-1030-26	96	94	98	84	90	84	88	92
460-290219-3	MW41R-101223-1137-29.5	98	100	97	77	87	83	79	81
460-290219-4	MW14A-101223-1231-40	98	90	100	81	86	80	84	88
460-290219-5	MW83R-101223-1346-29	86	93	102	89	88	78	90	91
460-290219-6	1000-101223-0003	90	88	96	73	80	75	78	78
460-290219-7	MW89A-101223-0946-96	99	95	101	81	89	85	87	88
460-290219-8	MW89-101223-1056-25	101	93	101	80	90	83	90	83
460-290219-9	MW17A-101223-1206-29	70	80	91	90	83	82	93	93
460-290219-10	MW17B-101223-1306-96	98	97	101	95	94	88	95	100
460-290219-11	MW82-101223-1411-30	63	80	89	87	87	75	94	97
460-290219-12	1000-101223-0002	109	101	107	87	91	78	92	91
LCS 200-196590/2-A	Lab Control Sample	103	98	103	83	87	79	94	88
LCS 200-196591/2-A	Lab Control Sample	102	96	104	79	85	76	84	86
LCSD 200-196590/3-A	Lab Control Sample Dup	102	94	98	86	88	80	89	89
MB 200-196590/1-A	Method Blank	101	94	104	88	91	83	89	91
MB 200-196591/1-A	Method Blank	105	100	105	81	87	75	86	81

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	PFHxS	PFHxA	PFOS	PFDoA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290219-1	MW90AR-101223-0927-95	86	86	81	97	83	89	85	87
460-290219-1 MS	MW90AR-101223-0927-95	94	96	86	103	88	96	89	93
460-290219-1 MSD	MW90AR-101223-0927-95	82	85	80	85	84	90	83	87
460-290219-2	MW90R-101223-1030-26	89	90	84	96	94	101	92	93
460-290219-3	MW41R-101223-1137-29.5	84	88	74	92	92	102	86	83
460-290219-4	MW14A-101223-1231-40	81	87	78	98	90	90	90	91
460-290219-5	MW83R-101223-1346-29	89	94	90	100	90	95	90	99
460-290219-6	1000-101223-0003	74	80	71	85	83	90	85	84
460-290219-7	MW89A-101223-0946-96	82	88	80	96	88	97	91	89
460-290219-8	MW89-101223-1056-25	87	88	80	96	92	98	90	86
460-290219-9	MW17A-101223-1206-29	109	100	92	88	85	87	93	98
460-290219-10	MW17B-101223-1306-96	103	100	92	99	95	98	93	104
460-290219-11	MW82-101223-1411-30	100	104	94	89	87	85	87	96
460-290219-12	1000-101223-0002	82	93	85	101	92	104	91	94
LCS 200-196590/2-A	Lab Control Sample	84	86	81	89	91	107	92	91
LCS 200-196591/2-A	Lab Control Sample	82	83	73	93	86	97	85	87
LCSD 200-196590/3-A	Lab Control Sample Dup	87	88	80	96	88	98	92	91
MB 200-196590/1-A	Method Blank	89	91	83	98	93	98	94	89
MB 200-196591/1-A	Method Blank	82	86	79	101	89	98	90	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFNA	PFDA	PFOA	PFUnA				
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)				
460-290219-1	MW90AR-101223-0927-95	91	87	104	84				
460-290219-1 MS	MW90AR-101223-0927-95	94	102	101	96				
460-290219-1 MSD	MW90AR-101223-0927-95	85	90	93	89				
460-290219-2	MW90R-101223-1030-26	99	90	104	91				
460-290219-3	MW41R-101223-1137-29.5	93	95	106	86				

Isotope Dilution Summary

Client: Haley & Aldrich, Inc. Job ID: 460-290219-1
Project/Site: Racer, Ewing/Trenton

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFNA (50-150)	PFDA (50-150)	PFOA (50-150)	PFUnA (50-150)				
460-290219-4	MW14A-101223-1231-40	101	96	100	95				
460-290219-5	MW83R-101223-1346-29	92	95	96	97				
460-290219-6	1000-101223-0003	95	90	102	82				
460-290219-7	MW89A-101223-0946-96	97	100	105	91				
460-290219-8	MW89-101223-1056-25	101	101	108	90				
460-290219-9	MW17A-101223-1206-29	95	96	99	97				
460-290219-10	MW17B-101223-1306-96	106	98	107	100				
460-290219-11	MW82-101223-1411-30	98	100	100	102				
460-290219-12	1000-101223-0002	104	101	103	99				
LCS 200-196590/2-A	Lab Control Sample	98	99	103	96				
LCS 200-196591/2-A	Lab Control Sample	94	96	102	90				
LCSD 200-196590/3-A	Lab Control Sample Dup	97	95	104	93				
MB 200-196590/1-A	Method Blank	102	103	108	101				
MB 200-196591/1-A	Method Blank	101	100	105	92				

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
PFHxS = 18O2 PFHxS
PFHxA = 13C2 PFHxA
PFOS = 13C4 PFOS
PFDoA = 13C2 PFDoA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFOA = 13C4 PFOA
PFUnA = 13C2 PFUnA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-196590/1-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/19/23 13:45	10/21/23 00:25	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/19/23 13:45	10/21/23 00:25	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/19/23 13:45	10/21/23 00:25	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/19/23 13:45	10/21/23 00:25	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/19/23 13:45	10/21/23 00:25	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/19/23 13:45	10/21/23 00:25	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/19/23 13:45	10/21/23 00:25	1
HFPODA	4.00	U	4.00	1.10	ng/L		10/19/23 13:45	10/21/23 00:25	1
DONA	2.00	U	2.00	0.42	ng/L		10/19/23 13:45	10/21/23 00:25	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/19/23 13:45	10/21/23 00:25	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/19/23 13:45	10/21/23 00:25	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C5 PFPeA	*94*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C4 PFHpA	*104*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C3 PFBS	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C8 FOSA	*83*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
M2-4:2 FTS	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
M2-8:2 FTS	*83*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C3 HFPO-DA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
18O2 PFHxS	*93*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C4 PFOS	*94*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C2 PFDoA	*89*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C5 PFNA	*102*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*
13C2 PFDA	*103*		*50 - 150*	*10/19/23 13:45*	*10/21/23 00:25*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196590/1-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196590

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	108		50 - 150	10/19/23 13:45	10/21/23 00:25	1
13C2 PFUnA	101		50 - 150	10/19/23 13:45	10/21/23 00:25	1

Lab Sample ID: LCS 200-196590/2-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196590

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	80.0	81.84		ng/L		102	70 - 130
Perfluoropentanoic acid	80.0	84.33		ng/L		105	70 - 130
Perfluorohexanoic acid	80.0	74.90		ng/L		94	70 - 130
Perfluoroheptanoic acid	80.0	79.10		ng/L		99	70 - 130
Perfluorooctanoic acid	80.0	75.96		ng/L		95	70 - 130
Perfluorononanoic acid	80.0	81.93		ng/L		102	70 - 130
Perfluorodecanoic acid	80.0	80.79		ng/L		101	70 - 130
Perfluoroundecanoic acid	80.0	83.42		ng/L		104	70 - 130
Perfluorododecanoic acid	80.0	82.05		ng/L		103	70 - 130
Perfluorotridecanoic acid	80.0	79.10		ng/L		99	70 - 130
Perfluorotetradecanoic acid	80.0	77.12		ng/L		96	70 - 130
Perfluorobutanesulfonic acid	71.0	77.87		ng/L		110	70 - 130
Perfluoropentanesulfonic acid	75.3	81.48		ng/L		108	70 - 130
Perfluorohexanesulfonic acid	73.1	73.06		ng/L		100	70 - 130
Perfluoroheptanesulfonic acid	76.2	77.87		ng/L		102	70 - 130
Perfluorooctanesulfonic acid	74.2	72.73		ng/L		98	70 - 130
Perfluorononanesulfonic acid	77.0	68.96		ng/L		90	70 - 130
Perfluorodecanesulfonic acid	77.2	73.14		ng/L		95	70 - 130
4:2 Fluorotelomer sulfonic acid	75.0	82.84		ng/L		111	70 - 130
6:2 Fluorotelomer sulfonic acid	76.1	84.77		ng/L		111	60 - 140
8:2 Fluorotelomer sulfonic acid	76.8	87.47		ng/L		114	70 - 130
Perfluorooctanesulfonamide	80.0	88.09		ng/L		110	70 - 130
NMeFOSAA	80.0	77.55		ng/L		97	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	82.36		ng/L		103	70 - 130
HFPODA	80.0	86.11		ng/L		108	60 - 140
DONA	75.6	85.15		ng/L		113	70 - 130
9Cl-PF3ONS	74.6	84.36		ng/L		113	70 - 130
11Cl-PF3OUdS	75.4	76.76		ng/L		102	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	103		50 - 150
13C5 PFPeA	98		50 - 150
13C4 PFHpA	103		50 - 150
13C2 PFTeDA	83		50 - 150
13C3 PFBS	87		50 - 150
13C8 FOSA	79		50 - 150
d3-NMeFOSAA	94		50 - 150
d5-NEtFOSAA	88		50 - 150
M2-4:2 FTS	84		50 - 150
M2-6:2 FTS	86		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196590/2-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196590

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-8:2 FTS	81		50 - 150
13C3 HFPO-DA	89		50 - 150
18O2 PFHxS	91		50 - 150
13C2 PFHxA	107		50 - 150
13C4 PFOS	92		50 - 150
13C2 PFDoA	91		50 - 150
13C5 PFNA	98		50 - 150
13C2 PFDA	99		50 - 150
13C4 PFOA	103		50 - 150
13C2 PFUnA	96		50 - 150

Lab Sample ID: LCSD 200-196590/3-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196590

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			80.0	84.10		ng/L		105	70 - 130	3	30
Perfluoropentanoic acid			80.0	84.94		ng/L		106	70 - 130	1	30
Perfluorohexanoic acid			80.0	80.77		ng/L		101	70 - 130	8	30
Perfluoroheptanoic acid			80.0	82.00		ng/L		103	70 - 130	4	30
Perfluorooctanoic acid			80.0	76.22		ng/L		95	70 - 130	0	30
Perfluorononanoic acid			80.0	81.35		ng/L		102	70 - 130	1	30
Perfluorodecanoic acid			80.0	78.33		ng/L		98	70 - 130	3	30
Perfluoroundecanoic acid			80.0	87.83		ng/L		110	70 - 130	5	30
Perfluorododecanoic acid			80.0	77.14		ng/L		96	70 - 130	6	30
Perfluorotridecanoic acid			80.0	86.36		ng/L		108	70 - 130	9	30
Perfluorotetradecanoic acid			80.0	75.33		ng/L		94	70 - 130	2	30
Perfluorobutanesulfonic acid			71.0	76.06		ng/L		107	70 - 130	2	30
Perfluoropentanesulfonic acid			75.3	83.06		ng/L		110	70 - 130	2	30
Perfluorohexanesulfonic acid			73.1	73.68		ng/L		101	70 - 130	1	30
Perfluoroheptanesulfonic acid			76.2	78.43		ng/L		103	70 - 130	1	30
Perfluorooctanesulfonic acid			74.2	74.19		ng/L		100	70 - 130	2	30
Perfluorononanesulfonic acid			77.0	70.85		ng/L		92	70 - 130	3	30
Perfluorodecanesulfonic acid			77.2	68.97		ng/L		89	70 - 130	6	30
4:2 Fluorotelomer sulfonic acid			75.0	84.33		ng/L		112	70 - 130	2	30
6:2 Fluorotelomer sulfonic acid			76.1	84.62		ng/L		111	60 - 140	0	30
8:2 Fluorotelomer sulfonic acid			76.8	89.10		ng/L		116	70 - 130	2	30
Perfluorooctanesulfonamide			80.0	92.01		ng/L		115	70 - 130	4	30
NMeFOSAA			80.0	85.34		ng/L		107	70 - 130	10	30
N-ethylperfluorooctanesulfonamidoacetic acid			80.0	82.85		ng/L		104	70 - 130	1	30
HFPODA			80.0	86.08		ng/L		108	60 - 140	0	30
DONA			75.6	85.01		ng/L		112	70 - 130	0	30
9Cl-PF3ONS			74.6	85.20		ng/L		114	70 - 130	1	30
11Cl-PF3OUdS			75.4	79.50		ng/L		105	60 - 140	4	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	102		50 - 150
13C5 PFPeA	94		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196590/3-A
Matrix: Water
Analysis Batch: 196633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196590

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	98		50 - 150
13C2 PFTeDA	86		50 - 150
13C3 PFBS	88		50 - 150
13C8 FOSA	80		50 - 150
d3-NMeFOSAA	89		50 - 150
d5-NEtFOSAA	89		50 - 150
M2-4:2 FTS	87		50 - 150
M2-6:2 FTS	88		50 - 150
M2-8:2 FTS	80		50 - 150
13C3 HFPO-DA	96		50 - 150
18O2 PFHxS	88		50 - 150
13C2 PFHxA	98		50 - 150
13C4 PFOS	92		50 - 150
13C2 PFDoA	91		50 - 150
13C5 PFNA	97		50 - 150
13C2 PFDA	95		50 - 150
13C4 PFOA	104		50 - 150
13C2 PFUnA	93		50 - 150

Lab Sample ID: MB 200-196591/1-A
Matrix: Water
Analysis Batch: 196634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/19/23 13:52	10/21/23 03:57	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/19/23 13:52	10/21/23 03:57	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/19/23 13:52	10/21/23 03:57	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/19/23 13:52	10/21/23 03:57	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/19/23 13:52	10/21/23 03:57	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/19/23 13:52	10/21/23 03:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/19/23 13:52	10/21/23 03:57	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196591/1-A
Matrix: Water
Analysis Batch: 196634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPODA	4.00	U	4.00	1.10	ng/L		10/19/23 13:52	10/21/23 03:57	1
DONA	2.00	U	2.00	0.42	ng/L		10/19/23 13:52	10/21/23 03:57	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/19/23 13:52	10/21/23 03:57	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/19/23 13:52	10/21/23 03:57	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*105*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C5 PFPeA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C4 PFHpA	*105*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C3 PFBS	*87*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C8 FOSA	*75*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
d3-NMeFOSAA	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
d5-NEtFOSAA	*81*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
M2-4:2 FTS	*82*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
M2-6:2 FTS	*86*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
M2-8:2 FTS	*79*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C3 HFPO-DA	*101*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
18O2 PFHxS	*89*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C4 PFOS	*90*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C2 PFDoA	*94*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C5 PFNA	*101*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C4 PFOA	*105*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*
13C2 PFUnA	*92*		*50 - 150*	*10/19/23 13:52*	*10/21/23 03:57*	*1*

Lab Sample ID: LCS 200-196591/2-A
Matrix: Water
Analysis Batch: 196634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	40.0	38.64		ng/L		97	70 - 130
Perfluoropentanoic acid	40.0	38.19		ng/L		95	70 - 130
Perfluorohexanoic acid	40.0	36.33		ng/L		91	70 - 130
Perfluoroheptanoic acid	40.0	36.38		ng/L		91	70 - 130
Perfluorooctanoic acid	40.0	40.04		ng/L		100	70 - 130
Perfluorononanoic acid	40.0	40.17		ng/L		100	70 - 130
Perfluorodecanoic acid	40.0	37.43		ng/L		94	70 - 130
Perfluoroundecanoic acid	40.0	42.37		ng/L		106	70 - 130
Perfluorododecanoic acid	40.0	36.79		ng/L		92	70 - 130
Perfluorotridecanoic acid	40.0	37.85		ng/L		95	70 - 130
Perfluorotetradecanoic acid	40.0	34.44		ng/L		86	70 - 130
Perfluorobutanesulfonic acid	35.5	35.59		ng/L		100	70 - 130
Perfluoropentanesulfonic acid	37.6	37.91		ng/L		101	70 - 130
Perfluorohexanesulfonic acid	36.6	35.19		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid	38.1	37.35		ng/L		98	70 - 130
Perfluorooctanesulfonic acid	37.1	35.53		ng/L		96	70 - 130
Perfluorononanesulfonic acid	38.5	33.40		ng/L		87	70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196591/2-A
Matrix: Water
Analysis Batch: 196634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanesulfonic acid	38.6	33.12		ng/L		86	70 - 130
4:2 Fluorotelomer sulfonic acid	37.5	38.44		ng/L		103	70 - 130
6:2 Fluorotelomer sulfonic acid	38.0	39.32		ng/L		103	60 - 140
8:2 Fluorotelomer sulfonic acid	38.4	44.49		ng/L		116	70 - 130
Perfluorooctanesulfonamide	40.0	41.13		ng/L		103	70 - 130
NMeFOSAA	40.0	40.18		ng/L		100	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.11		ng/L		93	70 - 130
HFPODA	40.0	41.18		ng/L		103	60 - 140
DONA	37.8	41.11		ng/L		109	70 - 130
9Cl-PF3ONS	37.3	40.52		ng/L		109	70 - 130
11Cl-PF3OUdS	37.7	36.66		ng/L		97	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*102*		*50 - 150*
13C5 PFPeA	*96*		*50 - 150*
13C4 PFHpA	*104*		*50 - 150*
13C2 PFTeDA	*79*		*50 - 150*
13C3 PFBS	*85*		*50 - 150*
13C8 FOSA	*76*		*50 - 150*
d3-NMeFOSAA	*84*		*50 - 150*
d5-NEtFOSAA	*86*		*50 - 150*
M2-4:2 FTS	*82*		*50 - 150*
M2-6:2 FTS	*83*		*50 - 150*
M2-8:2 FTS	*73*		*50 - 150*
13C3 HFPO-DA	*93*		*50 - 150*
18O2 PFHxS	*86*		*50 - 150*
13C2 PFHxA	*97*		*50 - 150*
13C4 PFOS	*85*		*50 - 150*
13C2 PFDoA	*87*		*50 - 150*
13C5 PFNA	*94*		*50 - 150*
13C2 PFDA	*96*		*50 - 150*
13C4 PFOA	*102*		*50 - 150*
13C2 PFUnA	*90*		*50 - 150*

Lab Sample ID: 460-290219-1 MS
Matrix: Water
Analysis Batch: 196634

Client Sample ID: MW90AR-101223-0927-95
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	5.40		34.3	37.54		ng/L		94	60 - 140
Perfluoropentanoic acid	2.49		34.3	35.21		ng/L		95	60 - 140
Perfluorohexanoic acid	3.16		34.3	34.10		ng/L		90	60 - 140
Perfluoroheptanoic acid	1.47	J	34.3	32.14		ng/L		89	60 - 140
Perfluorooctanoic acid	11.3		34.3	42.84		ng/L		92	60 - 140
Perfluorononanoic acid	1.63	J	34.3	36.50		ng/L		102	60 - 140
Perfluorodecanoic acid	0.70	J	34.3	32.35		ng/L		92	60 - 140
Perfluoroundecanoic acid	1.73	U	34.3	30.31		ng/L		88	60 - 140
Perfluorododecanoic acid	1.73	U	34.3	29.11		ng/L		85	60 - 140

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 460-290219-1 MS
Matrix: Water
Analysis Batch: 196634

Client Sample ID: MW90AR-101223-0927-95
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotridecanoic acid	1.73	U	34.3	28.05		ng/L		82	60 - 140
Perfluorotetradecanoic acid	1.73	U	34.3	29.77		ng/L		87	60 - 140
Perfluorobutanesulfonic acid	0.59	J	30.4	28.88		ng/L		93	60 - 140
Perfluoropentanesulfonic acid	0.88	J	32.3	32.47		ng/L		98	60 - 140
Perfluorohexanesulfonic acid	8.57		31.3	37.23		ng/L		91	60 - 140
Perfluoroheptanesulfonic acid	2.34		32.7	34.11		ng/L		97	60 - 140
Perfluorooctanesulfonic acid	154		31.8	180.0	4	ng/L		82	60 - 140
Perfluorononanesulfonic acid	1.73	U	33.0	28.41		ng/L		86	60 - 140
Perfluorodecanesulfonic acid	1.73	U	33.1	25.45		ng/L		77	60 - 140
4:2 Fluorotelomer sulfonic acid	1.73	U	32.1	32.47		ng/L		101	60 - 140
6:2 Fluorotelomer sulfonic acid	1.42	J	32.6	33.71		ng/L		99	50 - 150
8:2 Fluorotelomer sulfonic acid	1.73	U	32.9	35.48		ng/L		108	60 - 140
Perfluorooctanesulfonamide	1.73	U	34.3	33.89		ng/L		99	60 - 140
NMeFOSAA	4.33	U	34.3	32.08		ng/L		94	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid	4.33	U	34.3	30.12		ng/L		88	60 - 140
HFPODA	3.46	U	34.3	33.66		ng/L		98	50 - 150
DONA	1.73	U	32.4	31.99		ng/L		99	60 - 140
9Cl-PF3ONS	1.73	U	32.0	34.57		ng/L		108	60 - 140
11Cl-PF3OUdS	1.73	U	32.3	28.81		ng/L		89	50 - 150

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*86*		*50 - 150*
13C5 PFPeA	*95*		*50 - 150*
13C4 PFHpA	*103*		*50 - 150*
13C2 PFTeDA	*82*		*50 - 150*
13C3 PFBS	*87*		*50 - 150*
13C8 FOSA	*76*		*50 - 150*
d3-NMeFOSAA	*87*		*50 - 150*
d5-NEtFOSAA	*92*		*50 - 150*
M2-4:2 FTS	*94*		*50 - 150*
M2-6:2 FTS	*96*		*50 - 150*
M2-8:2 FTS	*86*		*50 - 150*
13C3 HFPO-DA	*103*		*50 - 150*
18O2 PFHxS	*88*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C4 PFOS	*89*		*50 - 150*
13C2 PFDoA	*93*		*50 - 150*
13C5 PFNA	*94*		*50 - 150*
13C2 PFDA	*102*		*50 - 150*
13C4 PFOA	*101*		*50 - 150*
13C2 PFUnA	*96*		*50 - 150*

Lab Sample ID: 460-290219-1 MSD
Matrix: Water
Analysis Batch: 196634

Client Sample ID: MW90AR-101223-0927-95
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid	5.40		34.3	36.67		ng/L		91	60 - 140	2	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 460-290219-1 MSD
Matrix: Water
Analysis Batch: 196634

Client Sample ID: MW90AR-101223-0927-95
Prep Type: Total/NA
Prep Batch: 196591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoropentanoic acid	2.49		34.3	36.59		ng/L		99	60 - 140	4	30
Perfluorohexanoic acid	3.16		34.3	34.72		ng/L		92	60 - 140	2	30
Perfluoroheptanoic acid	1.47	J	34.3	36.66		ng/L		103	60 - 140	13	30
Perfluorooctanoic acid	11.3		34.3	43.72		ng/L		94	60 - 140	2	30
Perfluorononanoic acid	1.63	J	34.3	35.33		ng/L		98	60 - 140	3	30
Perfluorodecanoic acid	0.70	J	34.3	35.50		ng/L		101	60 - 140	9	30
Perfluoroundecanoic acid	1.73	U	34.3	31.06		ng/L		91	60 - 140	2	30
Perfluorododecanoic acid	1.73	U	34.3	32.06		ng/L		93	60 - 140	10	30
Perfluorotridecanoic acid	1.73	U	34.3	30.31		ng/L		88	60 - 140	8	30
Perfluorotetradecanoic acid	1.73	U	34.3	30.85		ng/L		90	60 - 140	4	30
Perfluorobutanesulfonic acid	0.59	J	30.4	29.63		ng/L		95	60 - 140	3	30
Perfluoropentanesulfonic acid	0.88	J	32.3	32.78		ng/L		99	60 - 140	1	30
Perfluorohexanesulfonic acid	8.57		31.4	37.05		ng/L		91	60 - 140	0	30
Perfluoroheptanesulfonic acid	2.34		32.7	33.79		ng/L		96	60 - 140	1	30
Perfluorooctanesulfonic acid	154		31.8	186.9	4	ng/L		103	60 - 140	4	30
Perfluorononanesulfonic acid	1.73	U	33.0	30.27		ng/L		92	60 - 140	6	30
Perfluorodecanesulfonic acid	1.73	U	33.1	29.64		ng/L		90	60 - 140	15	30
4:2 Fluorotelomer sulfonic acid	1.73	U	32.2	32.60		ng/L		101	60 - 140	0	30
6:2 Fluorotelomer sulfonic acid	1.42	J	32.6	34.03		ng/L		100	50 - 150	1	30
8:2 Fluorotelomer sulfonic acid	1.73	U	32.9	36.77		ng/L		112	60 - 140	4	30
Perfluorooctanesulfonamide	1.73	U	34.3	35.50		ng/L		103	60 - 140	5	30
NMeFOSAA	4.33	U	34.3	33.25		ng/L		97	60 - 140	4	30
N-ethylperfluorooctanesulfonamidoacetic acid	4.33	U	34.3	31.21		ng/L		91	60 - 140	4	30
HFPODA	3.46	U	34.3	36.50		ng/L		106	50 - 150	8	30
DONA	1.73	U	32.4	31.83		ng/L		98	60 - 140	1	30
9Cl-PF3ONS	1.73	U	32.0	35.59		ng/L		111	60 - 140	3	30
11Cl-PF3OUdS	1.73	U	32.4	31.99		ng/L		99	50 - 150	10	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*74*		*50 - 150*
13C5 PFPeA	*83*		*50 - 150*
13C4 PFHpA	*87*		*50 - 150*
13C2 PFTeDA	*82*		*50 - 150*
13C3 PFBS	*80*		*50 - 150*
13C8 FOSA	*73*		*50 - 150*
d3-NMeFOSAA	*87*		*50 - 150*
d5-NEtFOSAA	*89*		*50 - 150*
M2-4:2 FTS	*82*		*50 - 150*
M2-6:2 FTS	*85*		*50 - 150*
M2-8:2 FTS	*80*		*50 - 150*
13C3 HFPO-DA	*85*		*50 - 150*
18O2 PFHxS	*84*		*50 - 150*
13C2 PFHxA	*90*		*50 - 150*
13C4 PFOS	*83*		*50 - 150*
13C2 PFDoA	*87*		*50 - 150*
13C5 PFNA	*85*		*50 - 150*
13C2 PFDA	*90*		*50 - 150*
13C4 PFOA	*93*		*50 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 460-290219-1 MSD
Matrix: Water
Analysis Batch: 196634

Client Sample ID: MW90AR-101223-0927-95
Prep Type: Total/NA
Prep Batch: 196591

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 PFUnA	89		50 - 150

Definitions/Glossary

Client: Haley & Aldrich, Inc. Job ID: 460-290219-1
Project/Site: Racer, Ewing/Trenton

Qualifiers

LCMS

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 196590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290219-6	1000-101223-0003	Total/NA	Water	3535	
460-290219-7	MW89A-101223-0946-96	Total/NA	Water	3535	
460-290219-8	MW89-101223-1056-25	Total/NA	Water	3535	
460-290219-9	MW17A-101223-1206-29	Total/NA	Water	3535	
460-290219-10	MW17B-101223-1306-96	Total/NA	Water	3535	
460-290219-11	MW82-101223-1411-30	Total/NA	Water	3535	
460-290219-12	1000-101223-0002	Total/NA	Water	3535	
MB 200-196590/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196590/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196590/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 196591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290219-1	MW90AR-101223-0927-95	Total/NA	Water	3535	
460-290219-2	MW90R-101223-1030-26	Total/NA	Water	3535	
460-290219-3	MW41R-101223-1137-29.5	Total/NA	Water	3535	
460-290219-4	MW14A-101223-1231-40	Total/NA	Water	3535	
460-290219-5	MW83R-101223-1346-29	Total/NA	Water	3535	
MB 200-196591/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196591/2-A	Lab Control Sample	Total/NA	Water	3535	
460-290219-1 MS	MW90AR-101223-0927-95	Total/NA	Water	3535	
460-290219-1 MSD	MW90AR-101223-0927-95	Total/NA	Water	3535	

Analysis Batch: 196633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290219-6	1000-101223-0003	Total/NA	Water	537 (modified)	196590
460-290219-7	MW89A-101223-0946-96	Total/NA	Water	537 (modified)	196590
460-290219-8	MW89-101223-1056-25	Total/NA	Water	537 (modified)	196590
460-290219-9	MW17A-101223-1206-29	Total/NA	Water	537 (modified)	196590
460-290219-10	MW17B-101223-1306-96	Total/NA	Water	537 (modified)	196590
460-290219-11	MW82-101223-1411-30	Total/NA	Water	537 (modified)	196590
460-290219-12	1000-101223-0002	Total/NA	Water	537 (modified)	196590
MB 200-196590/1-A	Method Blank	Total/NA	Water	537 (modified)	196590
LCS 200-196590/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196590
LCSD 200-196590/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196590

Analysis Batch: 196634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290219-1	MW90AR-101223-0927-95	Total/NA	Water	537 (modified)	196591
460-290219-2	MW90R-101223-1030-26	Total/NA	Water	537 (modified)	196591
460-290219-3	MW41R-101223-1137-29.5	Total/NA	Water	537 (modified)	196591
460-290219-4	MW14A-101223-1231-40	Total/NA	Water	537 (modified)	196591
460-290219-5	MW83R-101223-1346-29	Total/NA	Water	537 (modified)	196591
MB 200-196591/1-A	Method Blank	Total/NA	Water	537 (modified)	196591
LCS 200-196591/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196591
460-290219-1 MS	MW90AR-101223-0927-95	Total/NA	Water	537 (modified)	196591
460-290219-1 MSD	MW90AR-101223-0927-95	Total/NA	Water	537 (modified)	196591

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Client Sample ID: MW90AR-101223-0927-95
Lab Sample ID: 460-290219-1
Date Collected: 10/12/23 09:27
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196591	KFW	EET BUR	10/19/23 13:52
Total/NA	Analysis	537 (modified)		1	196634	BWC	EET BUR	10/21/23 06:25

Client Sample ID: MW90R-101223-1030-26
Lab Sample ID: 460-290219-2
Date Collected: 10/12/23 10:30
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196591	KFW	EET BUR	10/19/23 13:52
Total/NA	Analysis	537 (modified)		1	196634	BWC	EET BUR	10/21/23 06:49

Client Sample ID: MW41R-101223-1137-29.5
Lab Sample ID: 460-290219-3
Date Collected: 10/12/23 11:37
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196591	KFW	EET BUR	10/19/23 13:52
Total/NA	Analysis	537 (modified)		1	196634	BWC	EET BUR	10/21/23 06:57

Client Sample ID: MW14A-101223-1231-40
Lab Sample ID: 460-290219-4
Date Collected: 10/12/23 12:31
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196591	KFW	EET BUR	10/19/23 13:52
Total/NA	Analysis	537 (modified)		1	196634	BWC	EET BUR	10/21/23 07:06

Client Sample ID: MW83R-101223-1346-29
Lab Sample ID: 460-290219-5
Date Collected: 10/12/23 13:46
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196591	KFW	EET BUR	10/19/23 13:52
Total/NA	Analysis	537 (modified)		1	196634	BWC	EET BUR	10/21/23 07:14

Client Sample ID: 1000-101223-0003
Lab Sample ID: 460-290219-6
Date Collected: 10/12/23 08:00
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 00:50

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290219-1

Client Sample ID: MW89A-101223-0946-96
Lab Sample ID: 460-290219-7
Date Collected: 10/12/23 09:46
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 00:58

Client Sample ID: MW89-101223-1056-25
Lab Sample ID: 460-290219-8
Date Collected: 10/12/23 10:56
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 01:06

Client Sample ID: MW17A-101223-1206-29
Lab Sample ID: 460-290219-9
Date Collected: 10/12/23 12:06
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 01:14

Client Sample ID: MW17B-101223-1306-96
Lab Sample ID: 460-290219-10
Date Collected: 10/12/23 13:06
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 01:22

Client Sample ID: MW82-101223-1411-30
Lab Sample ID: 460-290219-11
Date Collected: 10/12/23 14:11
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 01:30

Client Sample ID: 1000-101223-0002
Lab Sample ID: 460-290219-12
Date Collected: 10/12/23 08:25
Matrix: Water
Date Received: 10/12/23 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196590	KFW	EET BUR	10/19/23 13:45
Total/NA	Analysis	537 (modified)		1	196633	BWC	EET BUR	10/21/23 01:39

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc. Job ID: 460-290219-1
Project/Site: Racer, Ewing/Trenton

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-23
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-24
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399140830	08-31-24

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
MW90AR-101223-0927-95	460-290219-1	81	89	83	86	89	97	100	83
MW90R-101223-1030-26	460-290219-2	96	94	90	89	101	96	98	94
MW41R-101223-1137-29.5	460-290219-3	98	100	87	84	102	92	97	92
MW14A-101223-1231-40	460-290219-4	98	90	86	81	90	98	100	90
MW83R-101223-1346-29	460-290219-5	86	93	88	89	95	100	102	90
	MB 200-196591/1-A	105	100	87	82	98	101	105	89
	LCS 200-196591/2-A	102	96	85	82	97	93	104	86
MW90AR-101223-0927-95 MS	460-290219-1 MS	86	95	87	94	96	103	103	88
MW90AR-101223-0927-95 MSD	460-290219-1 MSD	74	83	80	82	90	85	87	84

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	M282FTS #	PFDA #	PFOSA #	d3NMFOS #
MW90AR-101223-0927-95	460-290219-1	86	104	85	91	81	87	69	85
MW90R-101223-1030-26	460-290219-2	90	104	92	99	84	90	84	88
MW41R-101223-1137-29.5	460-290219-3	88	106	86	93	74	95	83	79
MW14A-101223-1231-40	460-290219-4	87	100	90	101	78	96	80	84
MW83R-101223-1346-29	460-290219-5	94	96	90	92	90	95	78	90
	MB 200-196591/1-A	86	105	90	101	79	100	75	86
	LCS 200-196591/2-A	83	102	85	94	73	96	76	84
MW90AR-101223-0927-95 MS	460-290219-1 MS	96	101	89	94	86	102	76	87
MW90AR-101223-0927-95 MSD	460-290219-1 MSD	85	93	83	85	80	90	73	87

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
M282FTS = M2-8:2 FTS	50-150
PFDA = 13C2 PFDA	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
MW90AR-101223-0927-95	460-290219-1	84	86	87	79
MW90R-101223-1030-26	460-290219-2	91	92	93	84
MW41R-101223-1137-29.5	460-290219-3	86	81	83	77
MW14A-101223-1231-40	460-290219-4	95	88	91	81
MW83R-101223-1346-29	460-290219-5	97	91	99	89
	MB 200-196591/1-A	92	81	94	81
	LCS 200-196591/2-A	90	86	87	79
MW90AR-101223-0927-95 MS	460-290219-1 MS	96	92	93	82
MW90AR-101223-0927-95 MSD	460-290219-1 MSD	89	89	87	82

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
1000-101223-0003	460-290219-6	90	88	80	74	90	85	96	83
MW89A-101223-0946-96	460-290219-7	99	95	89	82	97	96	101	88
MW89-101223-1056-25	460-290219-8	101	93	90	87	98	96	101	92
MW17A-101223-1206-29	460-290219-9	70	80	83	109	87	88	91	85
MW17B-101223-1306-96	460-290219-10	98	97	94	103	98	99	101	95
MW82-101223-1411-30	460-290219-11	63	80	87	100	85	89	89	87
1000-101223-0002	460-290219-12	109	101	91	82	104	101	107	92
	MB 200-196590/1-A	101	94	91	89	98	98	104	93
	LCS 200-196590/2-A	103	98	87	84	107	89	103	91
	LCSD 200-196590/3-A	102	94	88	87	98	96	98	88

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #
1000-101223-0003	460-290219-6	80	102	85	95	90	71	75	78
MW89A-101223-0946-96	460-290219-7	88	105	91	97	100	80	85	87
MW89-101223-1056-25	460-290219-8	88	108	90	101	101	80	83	90
MW17A-101223-1206-29	460-290219-9	100	99	93	95	96	92	82	93
MW17B-101223-1306-96	460-290219-10	100	107	93	106	98	92	88	95
MW82-101223-1411-30	460-290219-11	104	100	87	98	100	94	75	94
1000-101223-0002	460-290219-12	93	103	91	104	101	85	78	92
	MB 200-196590/1-A	91	108	94	102	103	83	83	89
	LCS 200-196590/2-A	86	103	92	98	99	81	79	94
	LCSD 200-196590/3-A	88	104	92	97	95	80	80	89

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
1000-101223-0003	460-290219-6	82	78	84	73
MW89A-101223-0946-96	460-290219-7	91	88	89	81
MW89-101223-1056-25	460-290219-8	90	83	86	80
MW17A-101223-1206-29	460-290219-9	97	93	98	90
MW17B-101223-1306-96	460-290219-10	100	100	104	95
MW82-101223-1411-30	460-290219-11	102	97	96	87
1000-101223-0002	460-290219-12	99	91	94	87
	MB 200-196590/1-A	101	91	89	88
	LCS 200-196590/2-A	96	88	91	83
	LCSD 200-196590/3-A	93	89	91	86

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020C03.d

Lab ID: LCS 200-196590/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	81.84	102	70-130	
Perfluoropentanoic acid	80.0	84.33	105	70-130	
Perfluorohexanoic acid	80.0	74.90	94	70-130	
Perfluoroheptanoic acid	80.0	79.10	99	70-130	
Perfluorooctanoic acid	80.0	75.96	95	70-130	
Perfluorononanoic acid	80.0	81.93	102	70-130	
Perfluorodecanoic acid	80.0	80.79	101	70-130	
Perfluoroundecanoic acid	80.0	83.42	104	70-130	
Perfluorododecanoic acid	80.0	82.05	103	70-130	
Perfluorotridecanoic acid	80.0	79.10	99	70-130	
Perfluorotetradecanoic acid	80.0	77.12	96	70-130	
Perfluorobutanesulfonic acid	71.0	77.87	110	70-130	
Perfluoropentanesulfonic acid	75.3	81.48	108	70-130	
Perfluorohexanesulfonic acid	73.1	73.06	100	70-130	
Perfluoroheptanesulfonic acid	76.2	77.87	102	70-130	
Perfluorooctanesulfonic acid	74.2	72.73	98	70-130	
Perfluorononanesulfonic acid	77.0	68.96	90	70-130	
Perfluorodecanesulfonic acid	77.2	73.14	95	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	82.84	111	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	84.77	111	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	87.47	114	70-130	
Perfluorooctanesulfonamide	80.0	88.09	110	70-130	
NMeFOSAA	80.0	77.55	97	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	82.36	103	70-130	
HFPODA	80.0	86.11	108	60-140	
DONA	75.6	85.15	113	70-130	
9Cl-PF3ONS	74.6	84.36	113	70-130	
11Cl-PF3OUdS	75.4	76.76	102	60-140	
13C4 PFBA	50.0	51.33	103	50-150	
13C5 PFPeA	50.0	49.05	98	50-150	
13C4 PFHpA	50.0	51.63	103	50-150	
13C2 PFTeDA	50.0	41.75	83	50-150	
13C3 PFBS	46.5	40.26	87	50-150	
13C8 FOSA	50.0	39.56	79	50-150	
d3-NMeFOSAA	50.0	46.95	94	50-150	
d5-NEtFOSAA	50.0	43.87	88	50-150	
M2-4:2 FTS	46.7	39.11	84	50-150	
M2-6:2 FTS	47.5	40.87	86	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020C03.d

Lab ID: LCS 200-196590/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	38.91	81	50-150	
13C3 HFPO-DA	50.0	44.55	89	50-150	
18O2 PFHxS	47.3	42.96	91	50-150	
13C2 PFHxA	50.0	53.52	107	50-150	
13C4 PFOS	47.8	43.90	92	50-150	
13C2 PFDoA	50.0	45.69	91	50-150	
13C5 PFNA	50.0	48.77	98	50-150	
13C2 PFDA	50.0	49.55	99	50-150	
13C4 PFOA	50.0	51.48	103	50-150	
13C2 PFUnA	50.0	48.06	96	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D03.d

Lab ID: LCS 200-196591/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.64	97	70-130	
Perfluoropentanoic acid	40.0	38.19	95	70-130	
Perfluorohexanoic acid	40.0	36.33	91	70-130	
Perfluoroheptanoic acid	40.0	36.38	91	70-130	
Perfluorooctanoic acid	40.0	40.04	100	70-130	
Perfluorononanoic acid	40.0	40.17	100	70-130	
Perfluorodecanoic acid	40.0	37.43	94	70-130	
Perfluoroundecanoic acid	40.0	42.37	106	70-130	
Perfluorododecanoic acid	40.0	36.79	92	70-130	
Perfluorotridecanoic acid	40.0	37.85	95	70-130	
Perfluorotetradecanoic acid	40.0	34.44	86	70-130	
Perfluorobutanesulfonic acid	35.5	35.59	100	70-130	
Perfluoropentanesulfonic acid	37.6	37.91	101	70-130	
Perfluorohexanesulfonic acid	36.6	35.19	96	70-130	
Perfluoroheptanesulfonic acid	38.1	37.35	98	70-130	
Perfluorooctanesulfonic acid	37.1	35.53	96	70-130	
Perfluorononanesulfonic acid	38.5	33.40	87	70-130	
Perfluorodecanesulfonic acid	38.6	33.12	86	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	38.44	103	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	39.32	103	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	44.49	116	70-130	
Perfluorooctanesulfonamide	40.0	41.13	103	70-130	
NMeFOSAA	40.0	40.18	100	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.11	93	70-130	
HFPODA	40.0	41.18	103	60-140	
DONA	37.8	41.11	109	70-130	
9Cl-PF3ONS	37.3	40.52	109	70-130	
11Cl-PF3OUdS	37.7	36.66	97	60-140	
13C4 PFBA	50.0	51.24	102	50-150	
13C5 PFPeA	50.0	48.11	96	50-150	
13C4 PFHpA	50.0	51.84	104	50-150	
13C2 PFTeDA	50.0	39.42	79	50-150	
13C3 PFBS	46.5	39.35	85	50-150	
13C8 FOSA	50.0	37.84	76	50-150	
d3-NMeFOSAA	50.0	41.88	84	50-150	
d5-NEtFOSAA	50.0	42.97	86	50-150	
M2-4:2 FTS	46.7	38.46	82	50-150	
M2-6:2 FTS	47.5	39.42	83	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D03.d

Lab ID: LCS 200-196591/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	34.99	73	50-150	
13C3 HFPO-DA	50.0	46.61	93	50-150	
18O2 PFHxS	47.3	40.80	86	50-150	
13C2 PFHxA	50.0	48.48	97	50-150	
13C4 PFOS	47.8	40.85	85	50-150	
13C2 PFDoA	50.0	43.51	87	50-150	
13C5 PFNA	50.0	47.16	94	50-150	
13C2 PFDA	50.0	47.87	96	50-150	
13C4 PFOA	50.0	51.08	102	50-150	
13C2 PFUnA	50.0	45.17	90	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020C04.d

Lab ID: LCSD 200-196590/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	84.10	105	3	30	70-130	
Perfluoropentanoic acid	80.0	84.94	106	1	30	70-130	
Perfluorohexanoic acid	80.0	80.77	101	8	30	70-130	
Perfluoroheptanoic acid	80.0	82.00	103	4	30	70-130	
Perfluorooctanoic acid	80.0	76.22	95	0	30	70-130	
Perfluorononanoic acid	80.0	81.35	102	1	30	70-130	
Perfluorodecanoic acid	80.0	78.33	98	3	30	70-130	
Perfluoroundecanoic acid	80.0	87.83	110	5	30	70-130	
Perfluorododecanoic acid	80.0	77.14	96	6	30	70-130	
Perfluorotridecanoic acid	80.0	86.36	108	9	30	70-130	
Perfluorotetradecanoic acid	80.0	75.33	94	2	30	70-130	
Perfluorobutanesulfonic acid	71.0	76.06	107	2	30	70-130	
Perfluoropentanesulfonic acid	75.3	83.06	110	2	30	70-130	
Perfluorohexanesulfonic acid	73.1	73.68	101	1	30	70-130	
Perfluoroheptanesulfonic acid	76.2	78.43	103	1	30	70-130	
Perfluorooctanesulfonic acid	74.2	74.19	100	2	30	70-130	
Perfluorononanesulfonic acid	77.0	70.85	92	3	30	70-130	
Perfluorodecanesulfonic acid	77.2	68.97	89	6	30	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	84.33	112	2	30	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	84.62	111	0	30	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	89.10	116	2	30	70-130	
Perfluorooctanesulfonamide	80.0	92.01	115	4	30	70-130	
NMeFOSAA	80.0	85.34	107	10	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	82.85	104	1	30	70-130	
HFPODA	80.0	86.08	108	0	30	60-140	
DONA	75.6	85.01	112	0	30	70-130	
9Cl-PF3ONS	74.6	85.20	114	1	30	70-130	
11Cl-PF3OUdS	75.4	79.50	105	4	30	60-140	
13C4 PFBA	50.0	51.22	102			50-150	
13C5 PFPeA	50.0	47.12	94			50-150	
13C4 PFHpA	50.0	48.98	98			50-150	
13C2 PFTeDA	50.0	43.14	86			50-150	
13C3 PFBS	46.5	40.85	88			50-150	
13C8 FOSA	50.0	40.10	80			50-150	
d3-NMeFOSAA	50.0	44.30	89			50-150	
d5-NEtFOSAA	50.0	44.31	89			50-150	
M2-4:2 FTS	46.7	40.83	87			50-150	
M2-6:2 FTS	47.5	41.71	88			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020C04.d

Lab ID: LCSD 200-196590/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	38.43	80			50-150	
13C3 HFPO-DA	50.0	47.98	96			50-150	
18O2 PFHxS	47.3	41.63	88			50-150	
13C2 PFHxA	50.0	48.82	98			50-150	
13C4 PFOS	47.8	43.77	92			50-150	
13C2 PFDoA	50.0	45.67	91			50-150	
13C5 PFNA	50.0	48.40	97			50-150	
13C2 PFDA	50.0	47.61	95			50-150	
13C4 PFOA	50.0	52.21	104			50-150	
13C2 PFUnA	50.0	46.31	93			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D21.d

Lab ID: 460-290219-1 MS Client ID: MW90AR-101223-0927-95 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	34.3	5.40	37.54	94	60-140	
Perfluoropentanoic acid	34.3	2.49	35.21	95	60-140	
Perfluorohexanoic acid	34.3	3.16	34.10	90	60-140	
Perfluoroheptanoic acid	34.3	1.47 J	32.14	89	60-140	
Perfluorooctanoic acid	34.3	11.3	42.84	92	60-140	
Perfluorononanoic acid	34.3	1.63 J	36.50	102	60-140	
Perfluorodecanoic acid	34.3	0.70 J	32.35	92	60-140	
Perfluoroundecanoic acid	34.3	1.73 U	30.31	88	60-140	
Perfluorododecanoic acid	34.3	1.73 U	29.11	85	60-140	
Perfluorotridecanoic acid	34.3	1.73 U	28.05	82	60-140	
Perfluorotetradecanoic acid	34.3	1.73 U	29.77	87	60-140	
Perfluorobutanesulfonic acid	30.4	0.59 J	28.88	93	60-140	
Perfluoropentanesulfonic acid	32.3	0.88 J	32.47	98	60-140	
Perfluorohexanesulfonic acid	31.3	8.57	37.23	91	60-140	
Perfluoroheptanesulfonic acid	32.7	2.34	34.11	97	60-140	
Perfluorooctanesulfonic acid	31.8	154	180.0	82	60-140	4
Perfluorononanesulfonic acid	33.0	1.73 U	28.41	86	60-140	
Perfluorodecanesulfonic acid	33.1	1.73 U	25.45	77	60-140	
4:2 Fluorotelomer sulfonic acid	32.1	1.73 U	32.47	101	60-140	
6:2 Fluorotelomer sulfonic acid	32.6	1.42 J	33.71	99	50-150	
8:2 Fluorotelomer sulfonic acid	32.9	1.73 U	35.48	108	60-140	
Perfluorooctanesulfonamide	34.3	1.73 U	33.89	99	60-140	
NMeFOSAA	34.3	4.33 U	32.08	94	60-140	
N-ethylperfluorooctanesulfonamidoacetic acid	34.3	4.33 U	30.12	88	60-140	
HFPODA	34.3	3.46 U	33.66	98	50-150	
DONA	32.4	1.73 U	31.99	99	60-140	
9Cl-PF3ONS	32.0	1.73 U	34.57	108	60-140	
11Cl-PF3OUdS	32.3	1.73 U	28.81	89	50-150	
13C4 PFBA	42.9	35.2	36.89	86	50-150	
13C5 PFPeA	42.9	38.5	40.60	95	50-150	
13C4 PFHpA	42.9	43.3	44.27	103	50-150	
13C2 PFTeDA	42.9	34.2	35.10	82	50-150	
13C3 PFBS	39.9	33.4	34.59	87	50-150	
13C8 FOSA	42.9	29.9	32.39	76	50-150	
d3-NMeFOSAA	42.9	36.7	37.46	87	50-150	
d5-NEtFOSAA	42.9	37.1	39.50	92	50-150	
M2-4:2 FTS	40.0	34.6	37.76	94	50-150	
M2-6:2 FTS	40.7	35.3	38.89	96	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D21.d

Lab ID: 460-290219-1 MS Client ID: MW90AR-101223-0927-95 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
M2-8:2 FTS	41.1	33.4	35.46	86	50-150	
13C3 HFPO-DA	42.9	41.9	44.14	103	50-150	
18O2 PFHxS	40.6	34.1	35.85	88	50-150	
13C2 PFHxA	42.9	38.6	41.32	96	50-150	
13C4 PFOS	41.0	35.1	36.45	89	50-150	
13C2 PFDoA	42.9	37.7	39.66	93	50-150	
13C5 PFNA	42.9	39.3	40.47	94	50-150	
13C2 PFDA	42.9	37.7	43.53	102	50-150	
13C4 PFOA	42.9	44.8	43.15	101	50-150	
13C2 PFUnA	42.9	36.3	41.01	96	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D22.d

Lab ID: 460-290219-1 MSD Client ID: MW90AR-101223-0927-95 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	34.3	36.67	91	2	30	60-140	
Perfluoropentanoic acid	34.3	36.59	99	4	30	60-140	
Perfluorohexanoic acid	34.3	34.72	92	2	30	60-140	
Perfluoroheptanoic acid	34.3	36.66	103	13	30	60-140	
Perfluorooctanoic acid	34.3	43.72	94	2	30	60-140	
Perfluorononanoic acid	34.3	35.33	98	3	30	60-140	
Perfluorodecanoic acid	34.3	35.50	101	9	30	60-140	
Perfluoroundecanoic acid	34.3	31.06	91	2	30	60-140	
Perfluorododecanoic acid	34.3	32.06	93	10	30	60-140	
Perfluorotridecanoic acid	34.3	30.31	88	8	30	60-140	
Perfluorotetradecanoic acid	34.3	30.85	90	4	30	60-140	
Perfluorobutanesulfonic acid	30.4	29.63	95	3	30	60-140	
Perfluoropentanesulfonic acid	32.3	32.78	99	1	30	60-140	
Perfluorohexanesulfonic acid	31.4	37.05	91	0	30	60-140	
Perfluoroheptanesulfonic acid	32.7	33.79	96	1	30	60-140	
Perfluorooctanesulfonic acid	31.8	186.9	103	4	30	60-140	4
Perfluorononanesulfonic acid	33.0	30.27	92	6	30	60-140	
Perfluorodecanesulfonic acid	33.1	29.64	90	15	30	60-140	
4:2 Fluorotelomer sulfonic acid	32.2	32.60	101	0	30	60-140	
6:2 Fluorotelomer sulfonic acid	32.6	34.03	100	1	30	50-150	
8:2 Fluorotelomer sulfonic acid	32.9	36.77	112	4	30	60-140	
Perfluorooctanesulfonamide	34.3	35.50	103	5	30	60-140	
NMeFOSAA	34.3	33.25	97	4	30	60-140	
N-ethylperfluorooctanesulfonamidoacetic acid	34.3	31.21	91	4	30	60-140	
HFPODA	34.3	36.50	106	8	30	50-150	
DONA	32.4	31.83	98	1	30	60-140	
9Cl-PF3ONS	32.0	35.59	111	3	30	60-140	
11Cl-PF3OUdS	32.4	31.99	99	10	30	50-150	
13C4 PFBA	42.9	31.82	74			50-150	
13C5 PFPeA	42.9	35.42	83			50-150	
13C4 PFHpA	42.9	37.33	87			50-150	
13C2 PFTeDA	42.9	35.12	82			50-150	
13C3 PFBS	39.9	32.06	80			50-150	
13C8 FOSA	42.9	31.37	73			50-150	
d3-NMeFOSAA	42.9	37.51	87			50-150	
d5-NEtFOSAA	42.9	38.25	89			50-150	
M2-4:2 FTS	40.1	32.94	82			50-150	
M2-6:2 FTS	40.8	34.69	85			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231020D22.d

Lab ID: 460-290219-1 MSD Client ID: MW90AR-101223-0927-95 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	41.1	32.78	80			50-150	
13C3 HFPO-DA	42.9	36.47	85			50-150	
18O2 PFHxS	40.6	34.01	84			50-150	
13C2 PFHxA	42.9	38.57	90			50-150	
13C4 PFOS	41.0	34.06	83			50-150	
13C2 PFDoA	42.9	37.18	87			50-150	
13C5 PFNA	42.9	36.39	85			50-150	
13C2 PFDA	42.9	38.67	90			50-150	
13C4 PFOA	42.9	40.00	93			50-150	
13C2 PFUnA	42.9	38.37	89			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab File ID: PA231020C02.d Lab Sample ID: MB 200-196590/1-A

Matrix: Water Date Extracted: 10/19/2023 13:45

Instrument ID: LC812 Date Analyzed: 10/21/2023 00:25

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196590/2-A	PA231020C03.d	10/21/2023 00:33
	LCSD 200-196590/3-A	PA231020C04.d	10/21/2023 00:41
1000-101223-0003	460-290219-6	PA231020C05.d	10/21/2023 00:50
MW89A-101223-0946-96	460-290219-7	PA231020C06.d	10/21/2023 00:58
MW89-101223-1056-25	460-290219-8	PA231020C07.d	10/21/2023 01:06
MW17A-101223-1206-29	460-290219-9	PA231020C08.d	10/21/2023 01:14
MW17B-101223-1306-96	460-290219-10	PA231020C09.d	10/21/2023 01:22
MW82-101223-1411-30	460-290219-11	PA231020C10.d	10/21/2023 01:30
1000-101223-0002	460-290219-12	PA231020C11.d	10/21/2023 01:39

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab File ID: PA231020D02.d Lab Sample ID: MB 200-196591/1-A

Matrix: Water Date Extracted: 10/19/2023 13:52

Instrument ID: LC812 Date Analyzed: 10/21/2023 03:57

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196591/2-A	PA231020D03.d	10/21/2023 04:06
MW90AR-101223-0927-95	460-290219-1	PA231020D20.d	10/21/2023 06:25
MW90AR-101223-0927-95 MS	460-290219-1 MS	PA231020D21.d	10/21/2023 06:33
MW90AR-101223-0927-95 MSD	460-290219-1 MSD	PA231020D22.d	10/21/2023 06:41
MW90R-101223-1030-26	460-290219-2	PA231020D23.d	10/21/2023 06:49
MW41R-101223-1137-29.5	460-290219-3	PA231020D24.d	10/21/2023 06:57
MW14A-101223-1231-40	460-290219-4	PA231020D25.d	10/21/2023 07:06
MW83R-101223-1346-29	460-290219-5	PA231020D26.d	10/21/2023 07:14

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Instrument I LC812 Calibration Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.6(mm) Calibration End Date: 07/26/2023 18:05

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		1938034	3.46				
UPPER LIMIT		2907051	3.66				
LOWER LIMIT		969017	3.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-193912/12		2117259	3.46				
ICV 200-193912/13		2099437	3.47				
CCB 200-196630/4		2155017	3.51				
CCVLIS 200-196630/5		2061570	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Sample No.: CCVLIS 200-196630/5 Date Analyzed: 10/20/2023 17:12

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231020A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2061570	3.52				
UPPER LIMIT		3092355	3.72				
LOWER LIMIT		1030785	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196633/1		2056102	3.51				
MB 200-196590/1-A		2115457	3.51				
LCS 200-196590/2-A		2080973	3.51				
LCSD 200-196590/3-A		2039871	3.52				
460-290219-6	1000-101223-0003	2240356	3.52				
460-290219-7	MW89A-101223-0946-96	2078994	3.52				
460-290219-8	MW89-101223-1056-25	2095728	3.51				
460-290219-9	MW17A-101223-1206-29	1978187	3.51				
460-290219-10	MW17B-101223-1306-96	1917601	3.52				
460-290219-11	MW82-101223-1411-30	1835659	3.52				
460-290219-12	1000-101223-0002	2017739	3.51				
CCV 200-196633/15		2231631	3.51				
CCV 200-196634/1		2145253	3.51				
MB 200-196591/1-A		2206137	3.51				
LCS 200-196591/2-A		2131992	3.51				
CCV 200-196634/14		1973840	3.51				
460-290219-1	MW90AR-101223-0927-95	2006626	3.52				
460-290219-1 MS	MW90AR-101223-0927-95 MS	1947913	3.52				
460-290219-1 MSD	MW90AR-101223-0927-95 MSD	2096000	3.52				
460-290219-2	MW90R-101223-1030-26	2091672	3.51				
460-290219-3	MW41R-101223-1137-29.5	2095133	3.51				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Sample No.: CCVLIS 200-196630/5 Date Analyzed: 10/20/2023 17:12

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231020A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2061570	3.52				
UPPER LIMIT		3092355	3.72				
LOWER LIMIT		1030785	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
460-290219-4	MW14A-101223-1231-40	2119078	3.51				
460-290219-5	MW83R-101223-1346-29	1874034	3.51				
CCV 200-196634/27		2022701	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 | Lab Sample ID: 460-290219-1

Matrix: Water | Lab File ID: PA231020D20.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 09:27

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 288.8(mL) | Date Analyzed: 10/21/2023 06:25

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.40		4.33	1.04
2706-90-3	Perfluoropentanoic acid	2.49		1.73	0.59
307-24-4	Perfluorohexanoic acid	3.16		1.73	0.56
375-85-9	Perfluoroheptanoic acid	1.47	J	1.73	0.47
335-67-1	Perfluorooctanoic acid	11.3		1.73	0.66
375-95-1	Perfluorononanoic acid	1.63	J	1.73	0.42
335-76-2	Perfluorodecanoic acid	0.70	J	1.73	0.40
2058-94-8	Perfluoroundecanoic acid	1.73	U	1.73	0.48
307-55-1	Perfluorododecanoic acid	1.73	U	1.73	0.42
72629-94-8	Perfluorotridecanoic acid	1.73	U	1.73	0.42
376-06-7	Perfluorotetradecanoic acid	1.73	U	1.73	0.55
375-73-5	Perfluorobutanesulfonic acid	0.59	J	1.73	0.54
2706-91-4	Perfluoropentanesulfonic acid	0.88	J	1.73	0.43
355-46-4	Perfluorohexanesulfonic acid	8.57		1.73	0.48
375-92-8	Perfluoroheptanesulfonic acid	2.34		1.73	0.35
1763-23-1	Perfluorooctanesulfonic acid	154		1.73	0.74
68259-12-1	Perfluorononanesulfonic acid	1.73	U	1.73	0.35
335-77-3	Perfluorodecanesulfonic acid	1.73	U	1.73	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.73	U	1.73	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	1.42	J	4.33	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.73	U	1.73	0.67
754-91-6	Perfluorooctanesulfonamide	1.73	U	1.73	0.80
2355-31-9	NMeFOSAA	4.33	U	4.33	1.64
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.33	U	4.33	1.39
13252-13-6	HFPODA	3.46	U	3.46	0.95
919005-14-4	DONA	1.73	U	1.73	0.36
756426-58-1	9Cl-PF3ONS	1.73	U	1.73	0.28
763051-92-9	11Cl-PF3OUdS	1.73	U	1.73	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 Lab Sample ID: 460-290219-1

Matrix: Water Lab File ID: PA231020D20.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:27

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 288.8(mL) Date Analyzed: 10/21/2023 06:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	81		50-150
STL01893	13C5 PFPeA	89		50-150
STL01892	13C4 PFHpA	100		50-150
STL02116	13C2 PFTeDA	79		50-150
STL02337	13C3 PFBS	83		50-150
STL01056	13C8 FOSA	69		50-150
STL02118	d3-NMeFOSAA	85		50-150
STL02117	d5-NEtFOSAA	86		50-150
STL02395	M2-4:2 FTS	86		50-150
STL02279	M2-6:2 FTS	86		50-150
STL02280	M2-8:2 FTS	81		50-150
STL02255	13C3 HFPO-DA	97		50-150
STL00994	18O2 PFHxS	83		50-150
STL00993	13C2 PFHxA	89		50-150
STL00991	13C4 PFOS	85		50-150
STL00998	13C2 PFDoA	87		50-150
STL00995	13C5 PFNA	91		50-150
STL00996	13C2 PFDA	87		50-150
STL00990	13C4 PFOA	104		50-150
STL00997	13C2 PFUnA	84		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d
Lims ID: 460-290219-A-1-A
Client ID: MW90AR-101223-0927-95
Sample Type: Client
Inject. Date: 21-Oct-2023 06:25:10 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-1-A
Misc. Info.: 200-0057494-020 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 16:31:46
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1620522	1.02		81.4	1243	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	230890	0.1561			7.6	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.692	1372224	1.11		88.9	339	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	85158	0.0719			0.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.696	1611851	0.9642		82.9	14187	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.453	2.467	-0.014	1.000	26515	0.0171	Target=2.06		0.2	M
298.90 > 99.00	2.467	2.467	0.0	1.006	23419		1.13(1.03-3.09)		2.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	180	0.000321			0.6	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.783	193038	1.00		85.5	9.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.798	0.0	0.794	1401453	1.12		89.2	2369	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.798	0.0	1.000	112420	0.0911	Target=14.12		0.9	M
313.00 > 119.00	2.798	2.798	0.0	1.000	8702		12.92(7.06-21.17)		2.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.798	2.798	0.0	0.883	32924	0.0253	Target=2.72		0.6	M
349.00 > 99.00	2.810	2.798	0.012	0.887	22003		1.50(1.36-4.09)		4.7	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.885	2.908	-0.023	0.992	583	0.002470			9.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.825	294730	1.21		96.9	1762	
D 11 18O2 PFHxS										
403.00 > 84.00	3.168	3.157	0.011	0.899	1179741	0.9846		83.3	5279	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.168	3.157	0.011	1.000	273312	0.2475	Target=3.32		17.5	M
399.00 > 99.00	3.156	3.157	-0.001	0.996	109240		2.50(1.66-4.98)		48.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.169	-0.001	1.000	65851	0.0425	Target=4.17		1.2	M
363.00 > 169.00	3.168	3.169	-0.001	1.000	15089		4.36(2.09-6.26)		13.4	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.168	3.169	-0.001	0.899	1726253	1.25		100	2773	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.505	3.506	-0.001	0.917	63189	0.0677	Target=4.83		5.0	M
449.00 > 99.00	3.496	3.506	-0.010	0.915	18340		3.45(2.41-7.24)		8.7	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.505	3.506	-0.001	0.995	254105	1.02		85.9	29.4	M
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.505	3.506	-0.001	1.000	24055	0.0411			27.4	
D 14 13C4 PFOA										
417.00 > 372.00	3.514	3.515	-0.001	0.997	2021749	1.29		104	4695	
* 62 13C2 PFOA										
415.00 > 370.00	3.523	3.515	0.008		2006626	1.25			3924	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.515	-0.001	1.000	563776	0.3273	Target=2.88		8.6	M
413.00 > 169.00	3.514	3.515	-0.001	1.000	184012		3.06(1.44-4.32)		167	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.822	3.823	-0.001	1.000	3348574	4.45	Target=4.24		442	M
499.00 > 99.00	3.822	3.823	-0.001	1.000	1078406		3.11(2.12-6.37)		1120	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.823	-0.001	1.085	771637	1.01		84.8	166	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.845	3.846	-0.001	1.000	71258	0.0471	Target=8.34		3.6	M
463.00 > 169.00	3.845	3.846	-0.001	1.000	8965		7.95(4.17-12.51)		26.9	
D 19 13C5 PFNA										M
468.00 > 423.00	3.845	3.846	-0.001	1.092	1930873	1.14		90.9	2397	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.141	4.130	0.011	1.003	31492	0.0203	Target=11.44		2.6	M
513.00 > 169.00	4.141	4.130	0.011	1.003	1978		15.92(5.72-17.16)		6.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.130	-0.001	1.172	1940296	1.09		87.2	5134	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.141	4.142	-0.001	1.176	270002	0.9644		80.5	161	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.141	4.142	-0.001	1.000	7726	0.0156			42.4	M
D 21 13C8 FOSA										
506.00 > 78.00	4.234	4.235	-0.001	1.202	1309698	0.8622		69.0	4015	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.212	4.235	-0.023	0.995	1821	0.001822			5.7	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.269	4.271	-0.002	1.212	450840	1.06		84.8	1381	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.282	4.271	0.011	1.003	659	0.002014			2.0	
D 30 13C2 PFUnA										
565.00 > 520.00	4.389	4.380	0.009	1.246	1759819	1.05		83.8	5758	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.378	4.391	-0.013	0.997	8255	0.005689	Target=12.20		1.1	M
563.00 > 169.00	4.378	4.391	-0.013	0.997	736		11.22(6.10-18.31)		5.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.401	4.391	0.010	1.249	438538	1.07		85.6	1081	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.318	4.403	-0.085	0.981	4909	0.0140			11.8	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.500	4.475	0.025	1.178	998	0.000282			2.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.613	4.604	0.009	1.310	1857434	1.09		87.0	8938	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.635	4.626	0.009	1.119	515	0.001736			8.7	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.982	4.983	-0.001	1.414	1680466	0.9882		79.1	9835	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.982	4.983	-0.001	1.000	187	0.001244	Target=0.87		4.6	M
713.00 > 219.00	4.982	4.983	-0.001	1.000	270		0.69(0.43-1.30)		7.2	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.292	5.293	-0.001	1.502	1848375	0.9433		75.5	4878	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.292	5.293	-0.001	1.000	2265	0.001532	Target=7.89		0.3	M
813.00 > 169.00	5.303	5.293	0.010	1.002	406		5.58(3.94-11.83)		8.5	M

QC Flag Legend

Processing Flags

Review Flags

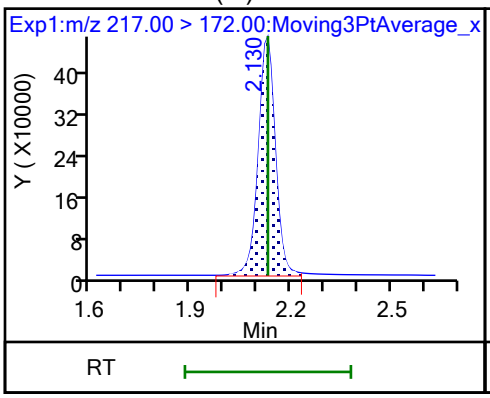
M - Manually Integrated

Report Date: 25-Oct-2023 09:08:37 Chrom Revision: 2.3 18-Oct-2023 21:16:54

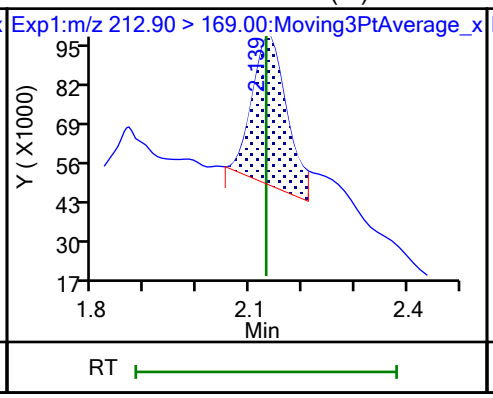
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d
Injection Date: 21-Oct-2023 06:25:10 Instrument ID: LC812
Lims ID: 460-290219-A-1-A Lab Sample ID: 200-290219-1
Client ID: MW90AR-101223-0927-95
Operator ID: LC812user ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

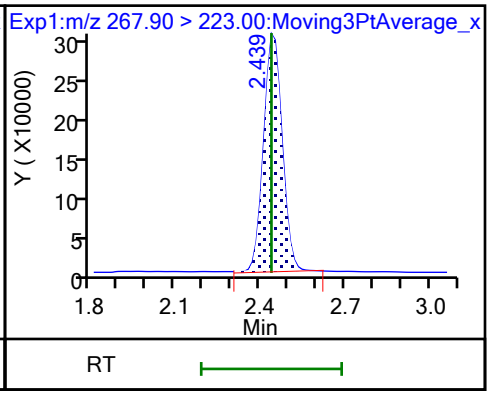
D 1 13C4 PFBA (M)



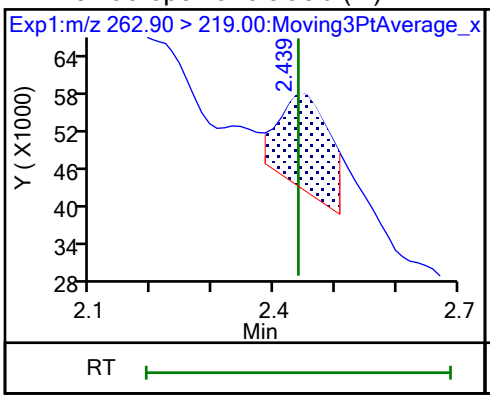
2 Perfluorobutanoic acid (M)



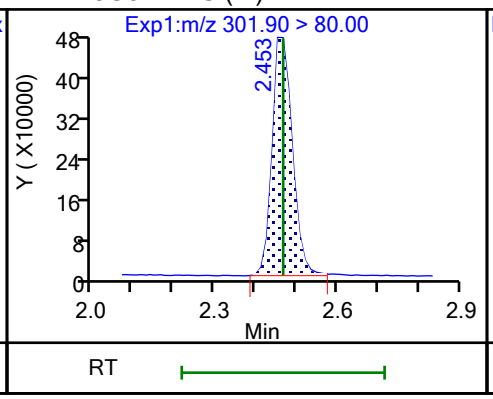
D 3 13C5 PFPeA



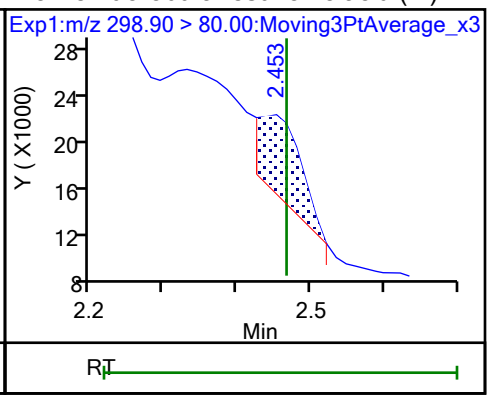
4 Perfluoropentanoic acid (M)



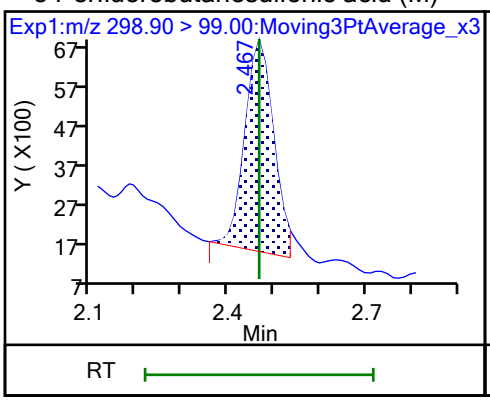
D 47 13C3 PFBS (M)



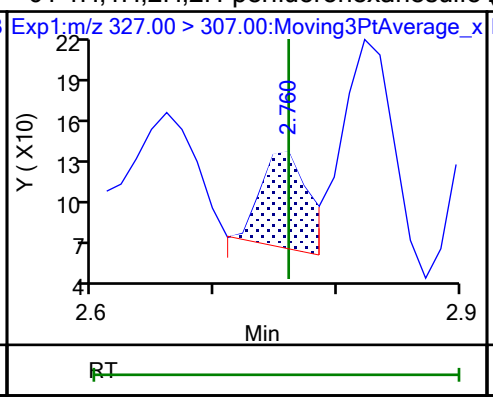
5 Perfluorobutanesulfonic acid (M)



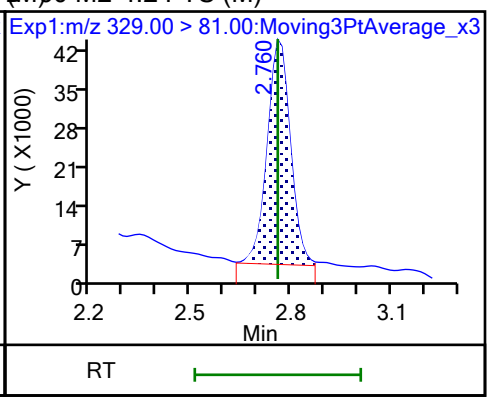
5 Perfluorobutanesulfonic acid (M)



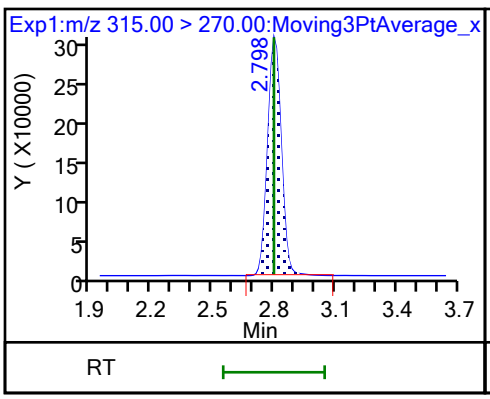
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



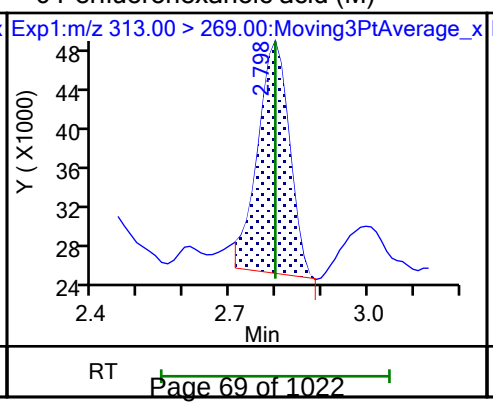
60 M2-4:2 FTS (M)



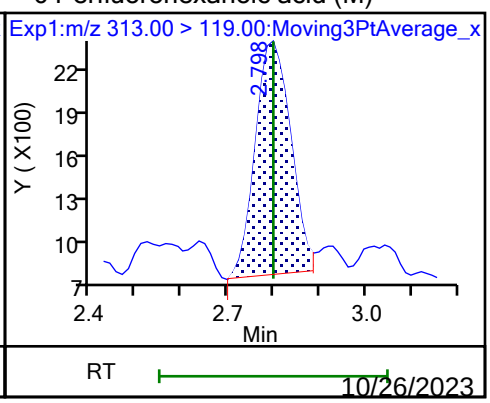
D 7 13C2 PFHxA



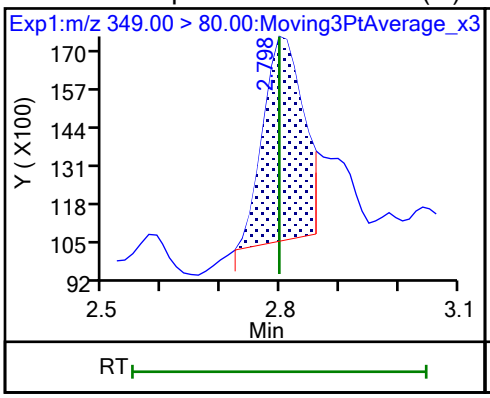
6 Perfluorohexanoic acid (M)



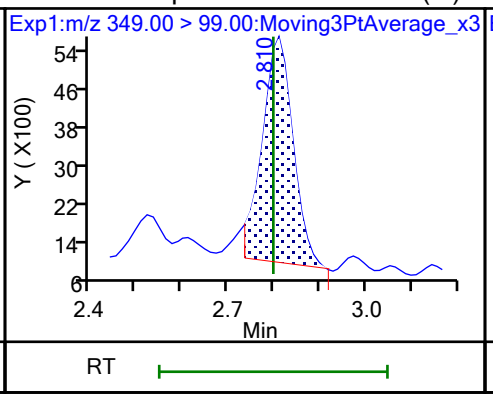
6 Perfluorohexanoic acid (M)



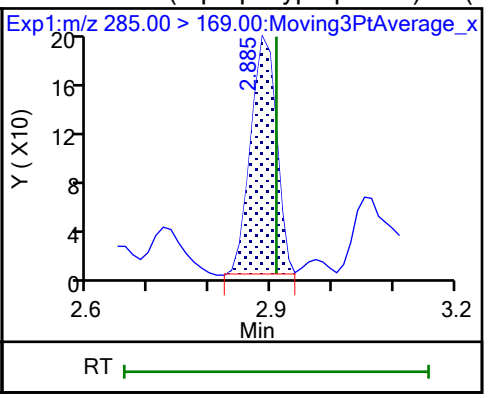
70 Perfluoropentanesulfonic acid (M)



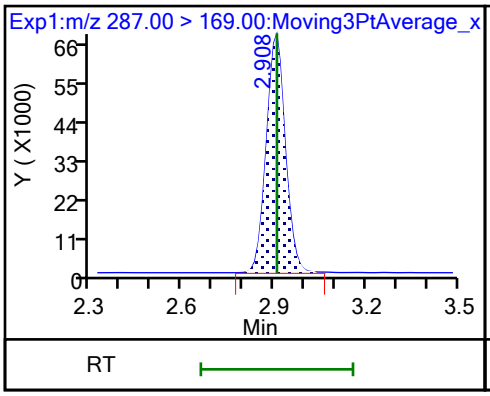
70 Perfluoropentanesulfonic acid (M)



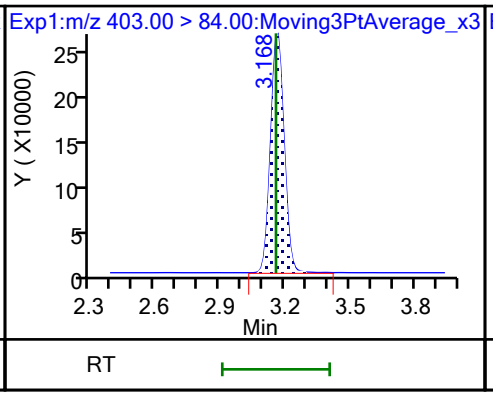
67 Perfluoro(2-propoxypropanoic) ac (M)



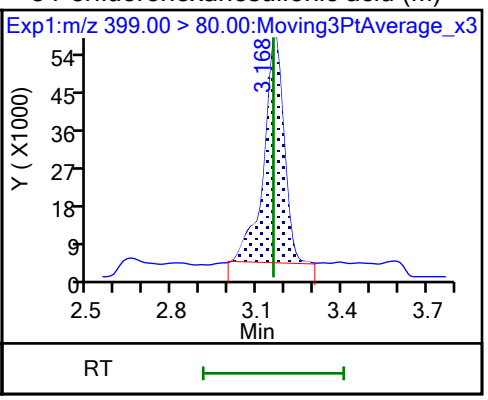
D 64 13C3 HFPO-DA



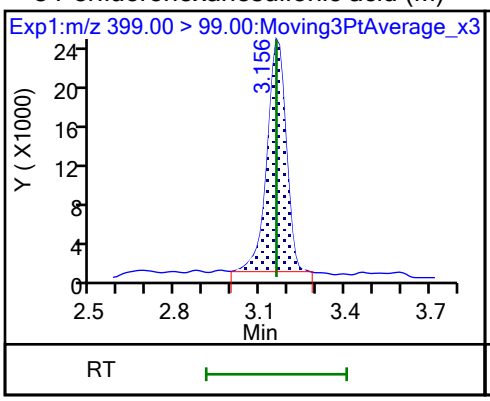
D 11 18O2 PFHxS



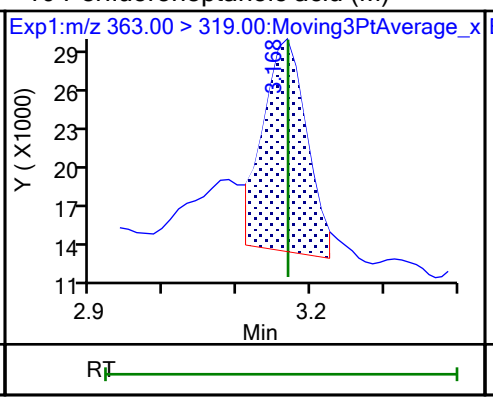
8 Perfluorohexanesulfonic acid (M)



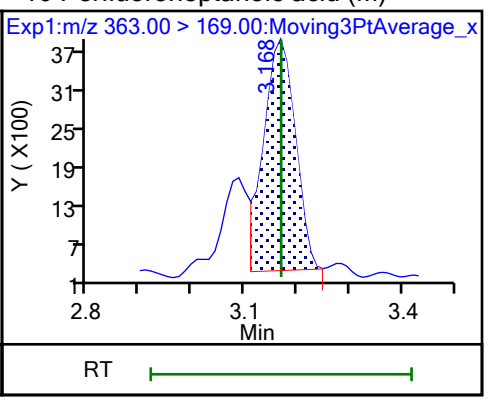
8 Perfluorohexanesulfonic acid (M)



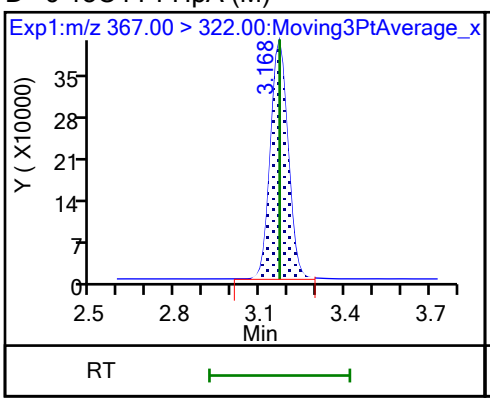
10 Perfluoroheptanoic acid (M)



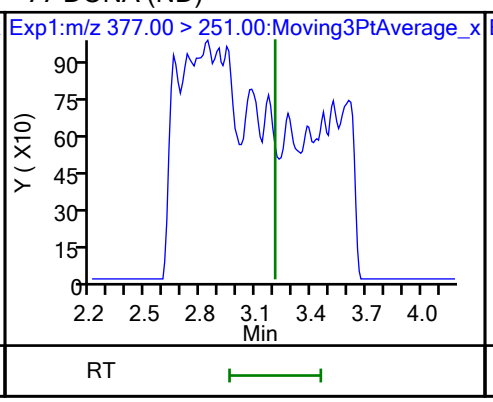
10 Perfluoroheptanoic acid (M)



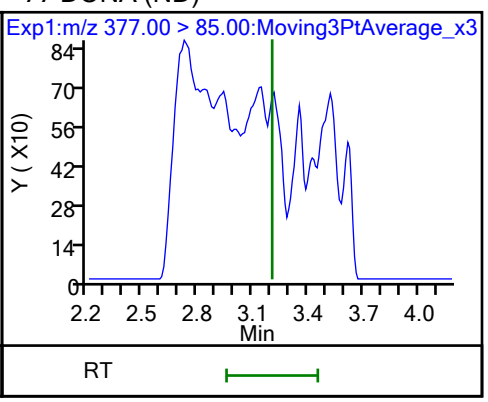
D 9 13C4 PFHpA (M)



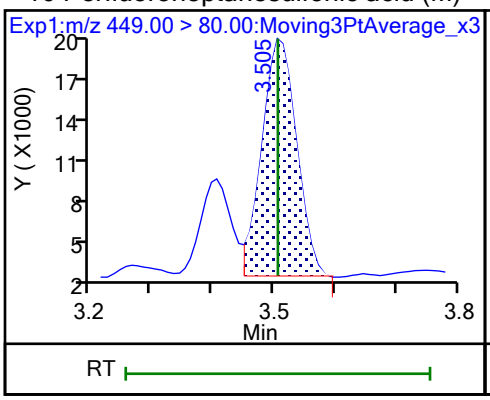
77 DONA (ND)



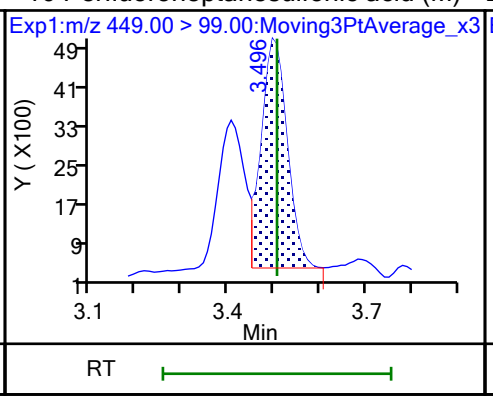
77 DONA (ND)



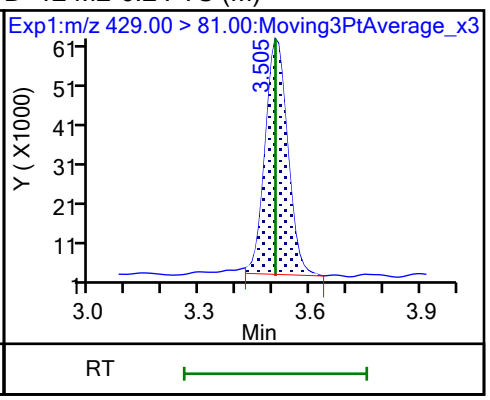
16 Perfluoroheptanesulfonic acid (M)



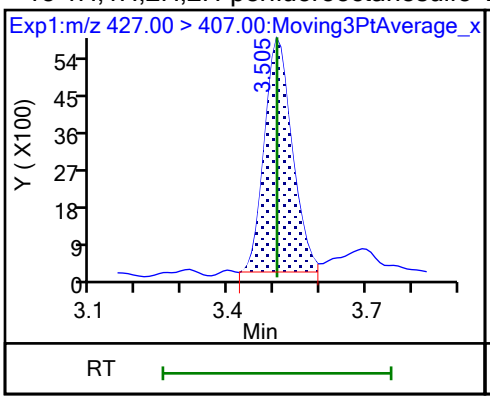
16 Perfluoroheptanesulfonic acid (M)



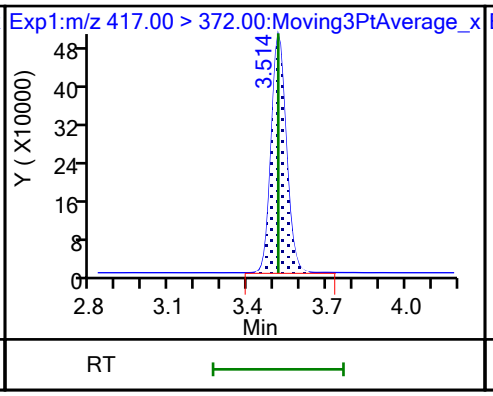
D 12 M2-6:2 FTS (M)



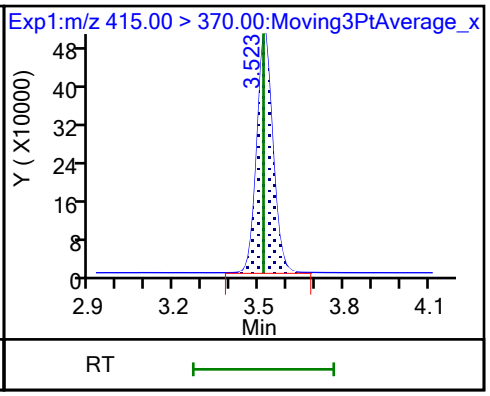
13 1H,1H,2H,2H-perfluorooctanesulfo



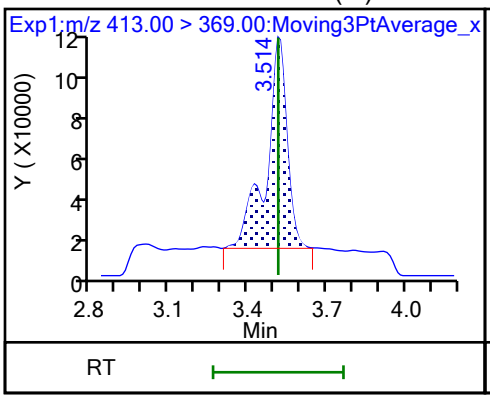
D 14 13C4 PFOA



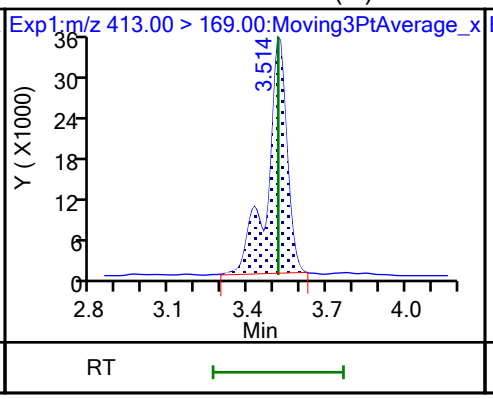
* 62 13C2 PFOA



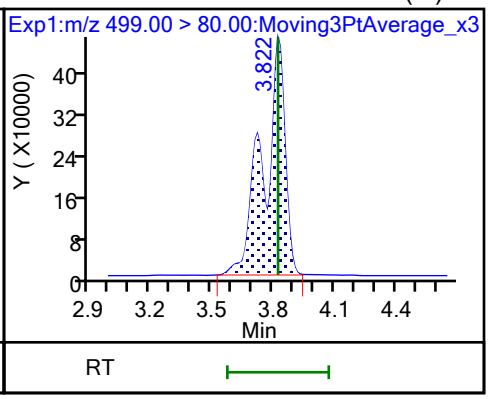
15 Perfluorooctanoic acid (M)



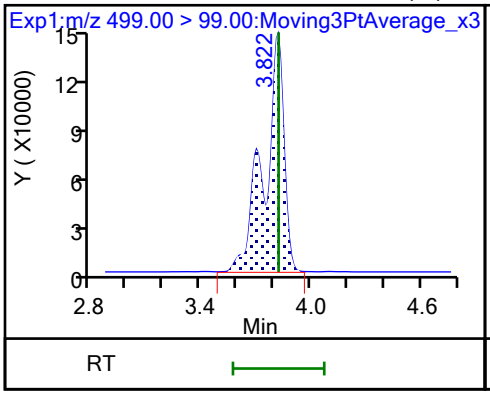
15 Perfluorooctanoic acid (M)



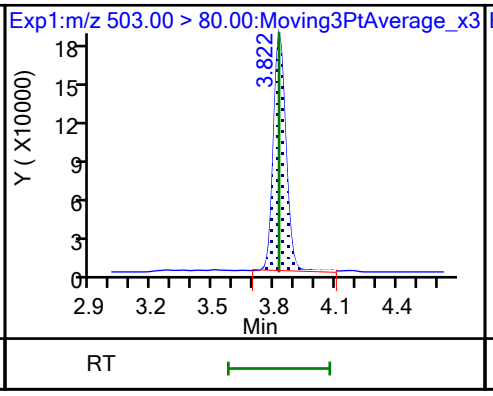
17 Perfluorooctanesulfonic acid (M)



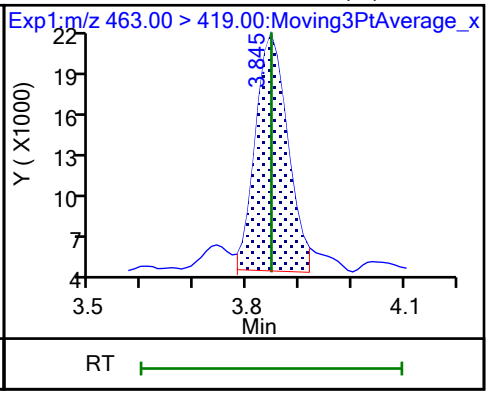
17 Perfluorooctanesulfonic acid (M)



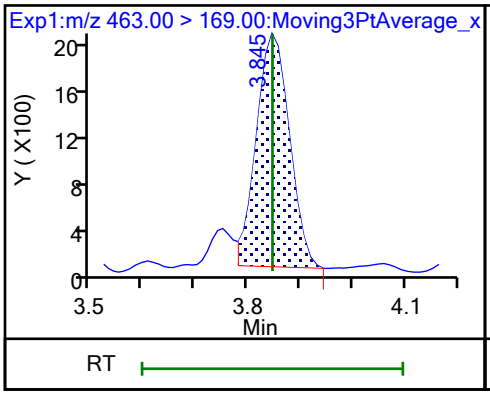
D 18 13C4 PFOS



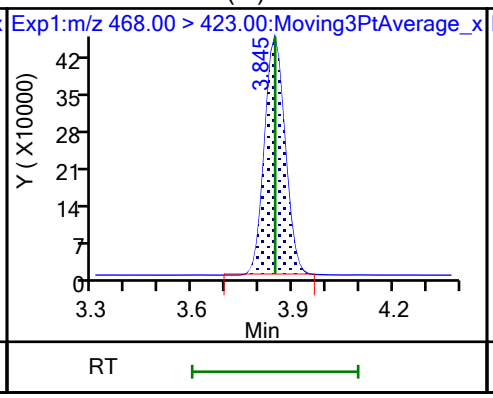
20 Perfluorononanoic acid (M)



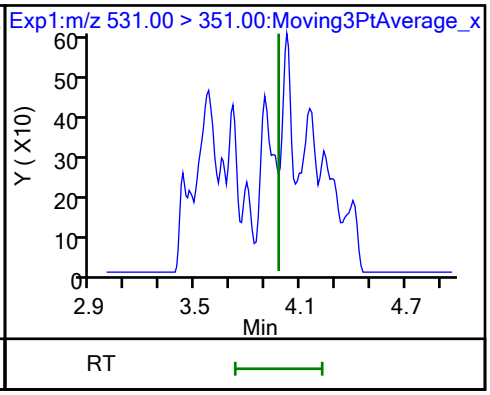
20 Perfluorononanoic acid



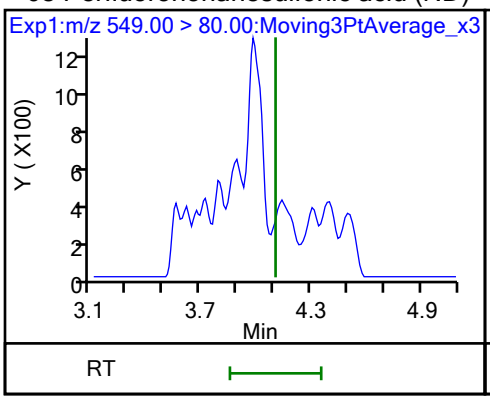
D 19 13C5 PFNA (M)



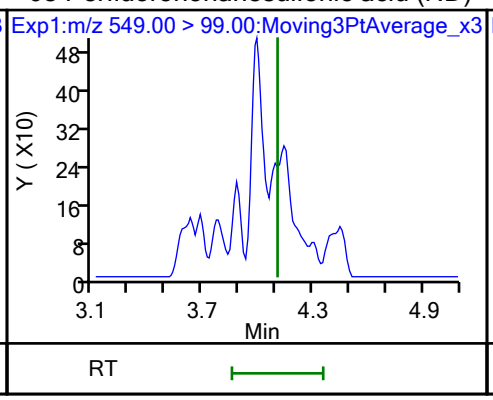
69 9-Chlorohexadecafluoro-3-oxanona (ND)



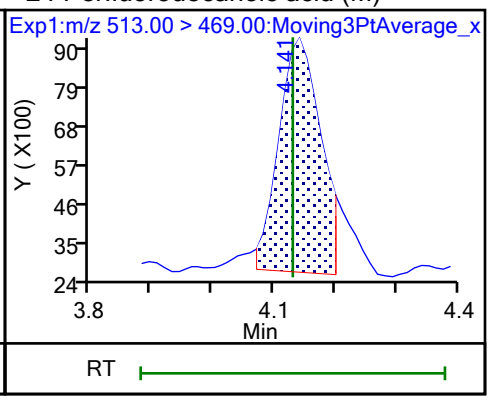
68 Perfluorononanesulfonic acid (ND)



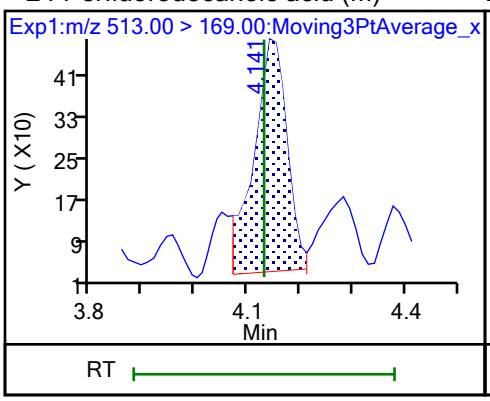
68 Perfluorononanesulfonic acid (ND)



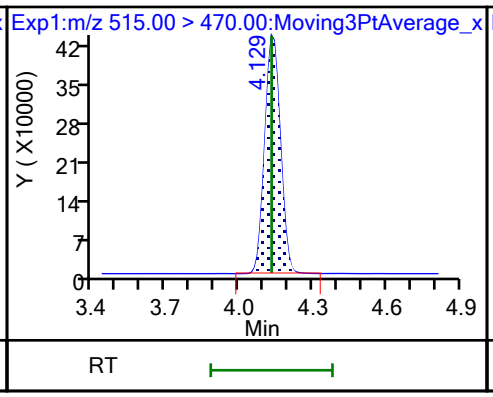
24 Perfluorodecanoic acid (M)



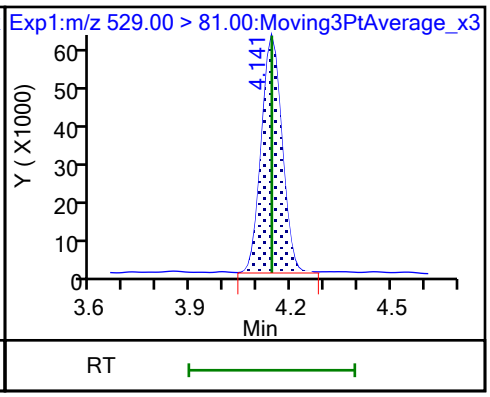
24 Perfluorodecanoic acid (M)



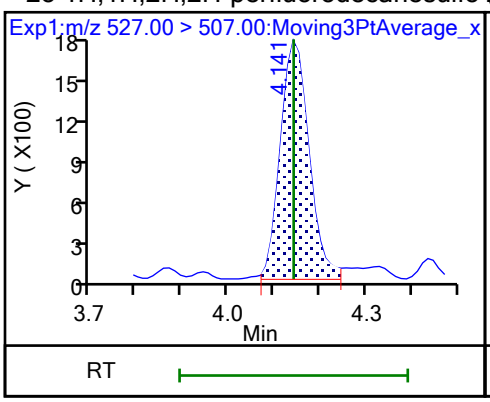
D 23 13C2 PFDA



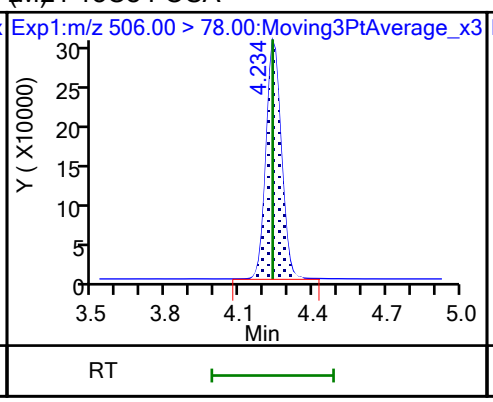
D 26 M2-8:2 FTS



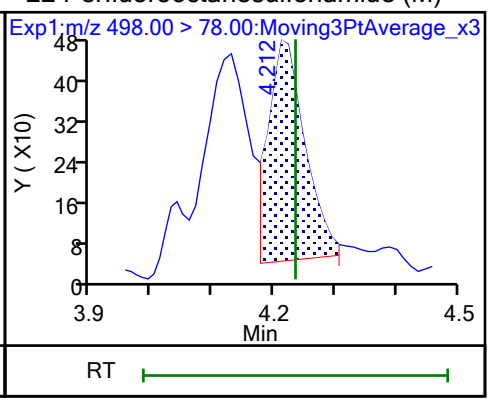
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



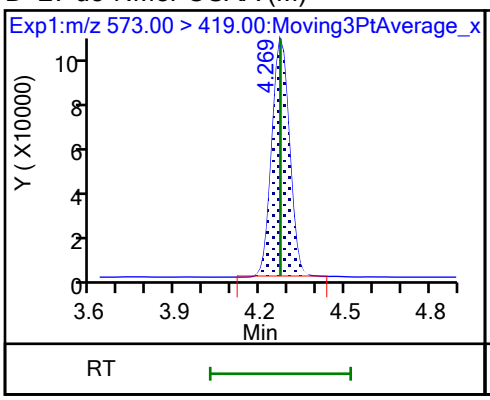
D 21 13C8 FOSA



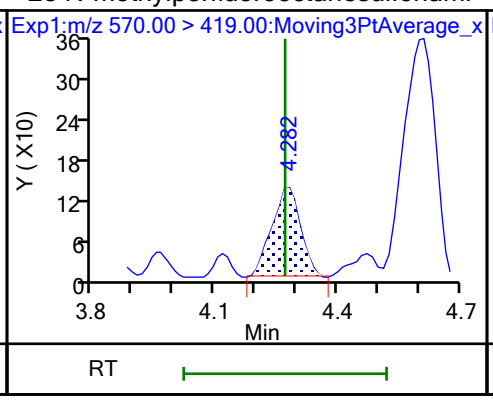
22 Perfluorooctanesulfonamide (M)



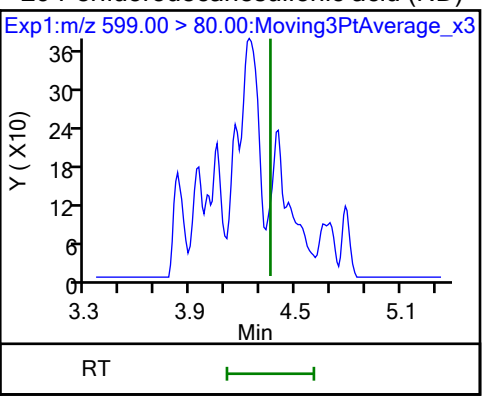
D 27 d3-NMeFOSAA (M)



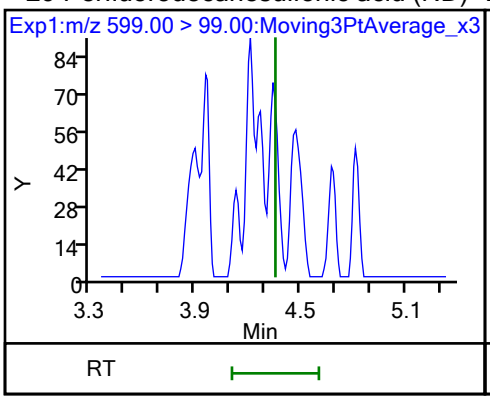
28 N-methylperfluorooctanesulfonami



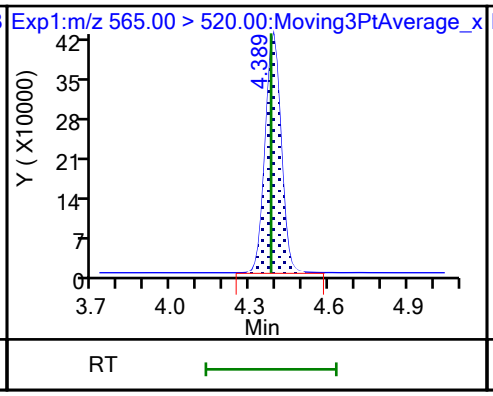
29 Perfluorodecanesulfonic acid (ND)



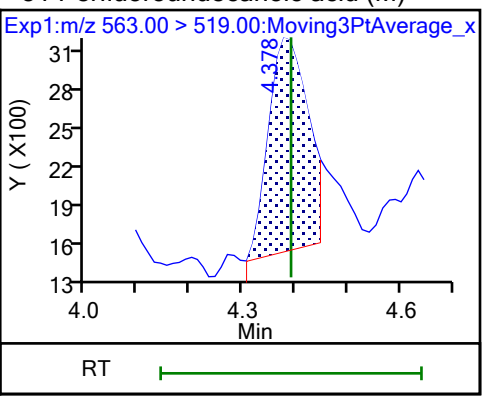
29 Perfluorodecanesulfonic acid (ND)



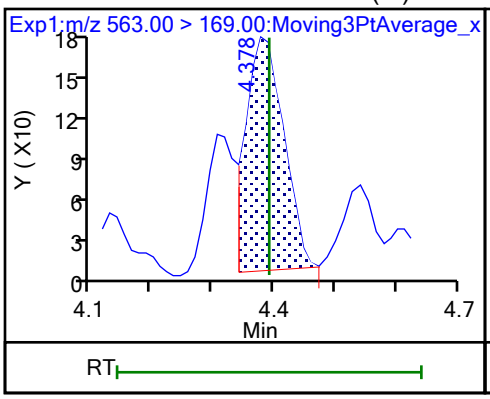
D 30 13C2 PFUnA



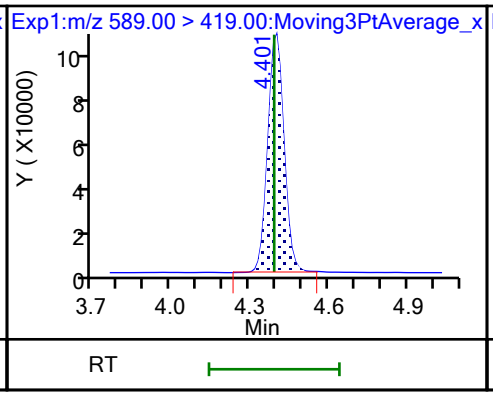
31 Perfluoroundecanoic acid (M)



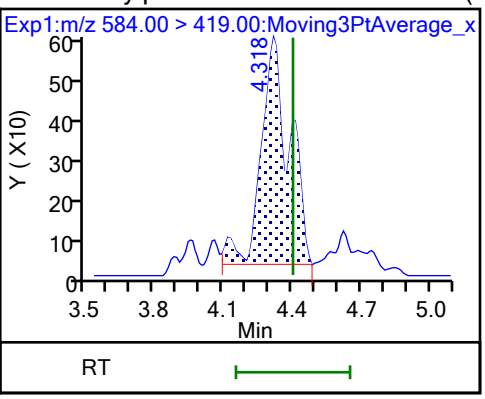
31 Perfluoroundecanoic acid (M)



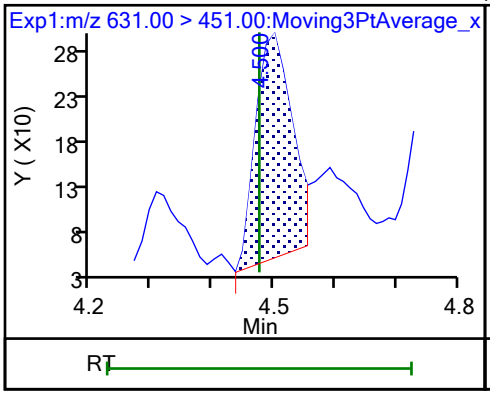
D 32 d5-NEtFOSAA



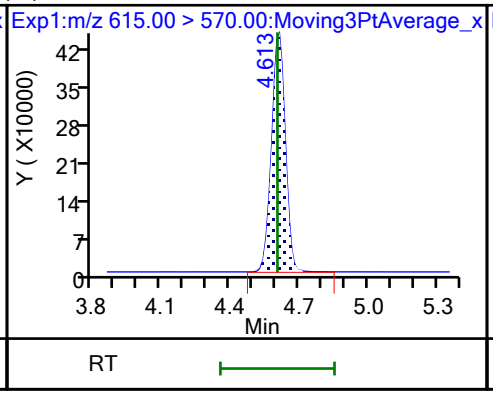
33 N-ethylperfluorooctanesulfonamid (M)



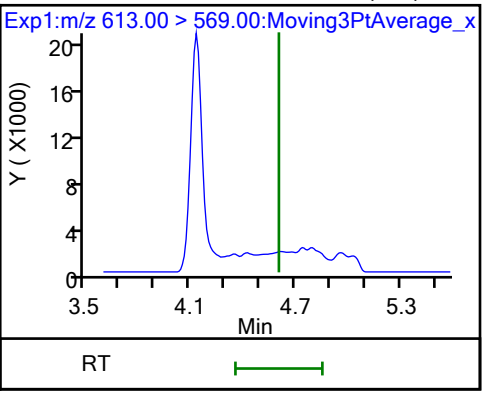
66 11-Chloroeicosafluoro-3-oxaundec (M)



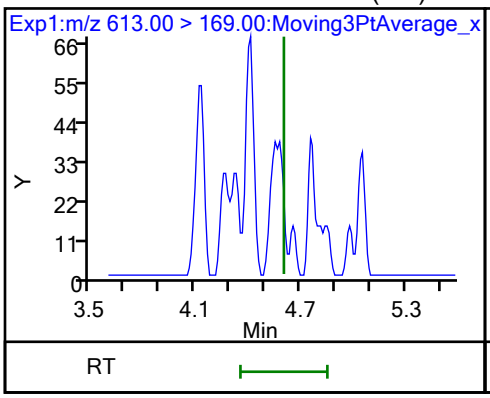
D 36 13C2 PFDoA



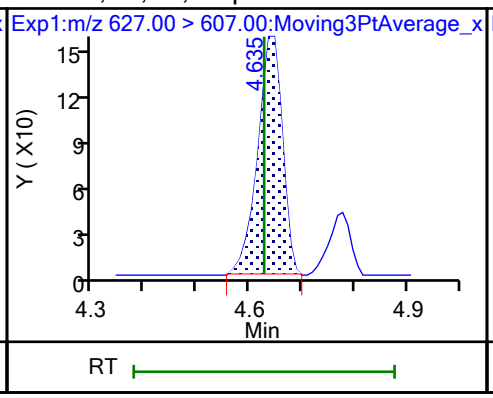
37 Perfluorododecanoic acid (ND)



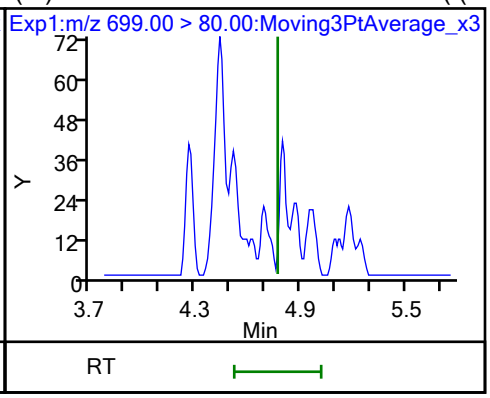
37 Perfluorododecanoic acid (ND)



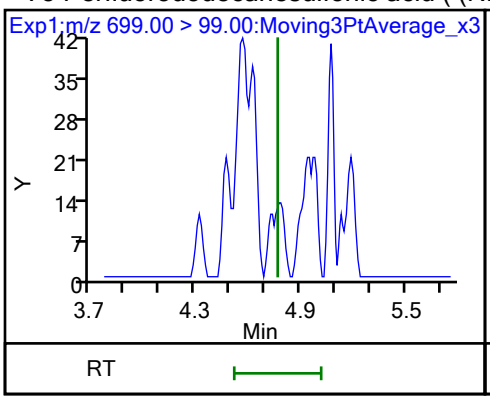
74 1H,1H,2H,2H-perfluorododecanesul (M)



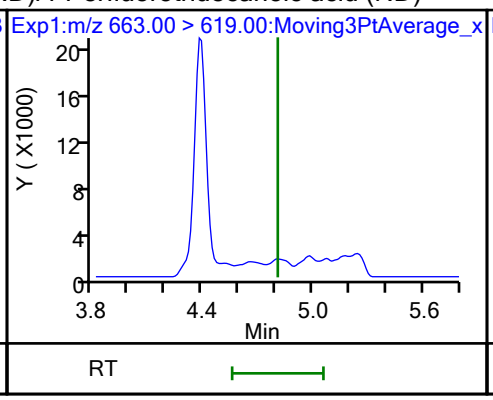
75 Perfluorododecanesulfonic acid ((ND)



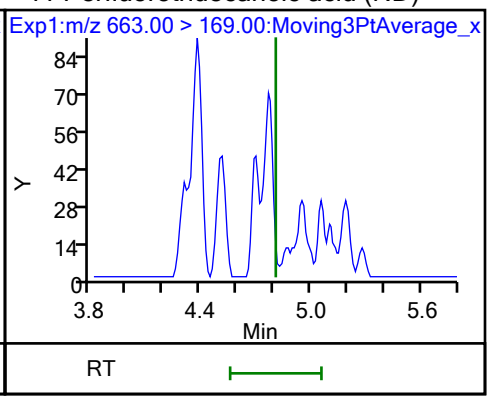
75 Perfluorododecanesulfonic acid ((ND)



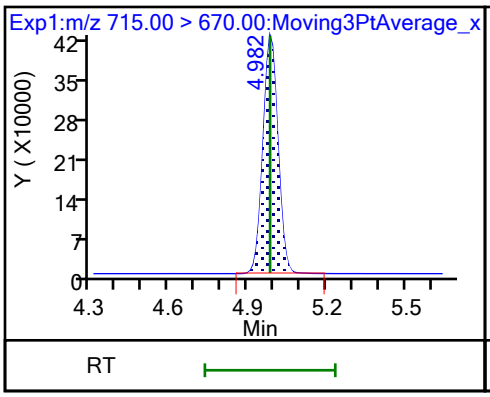
41 Perfluorotridecanoic acid (ND)



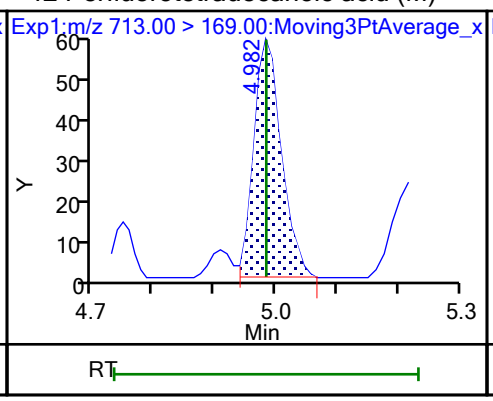
41 Perfluorotridecanoic acid (ND)



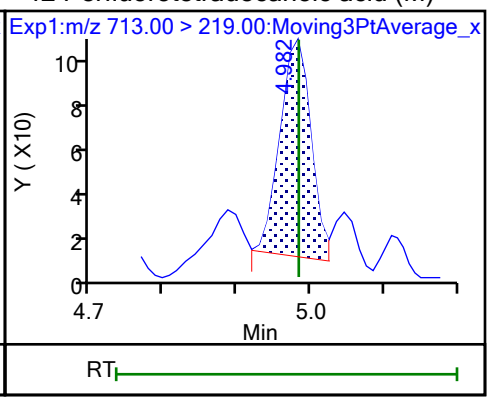
D 43 13C2 PFTeDA



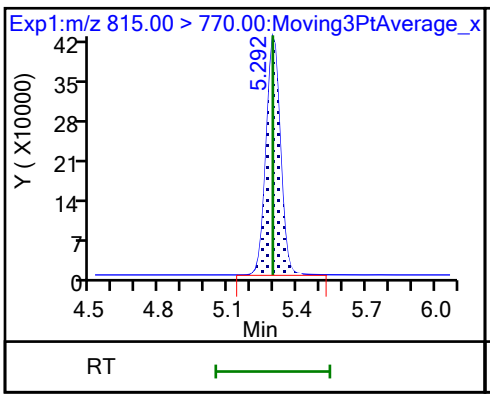
42 Perfluorotetradecanoic acid (M)



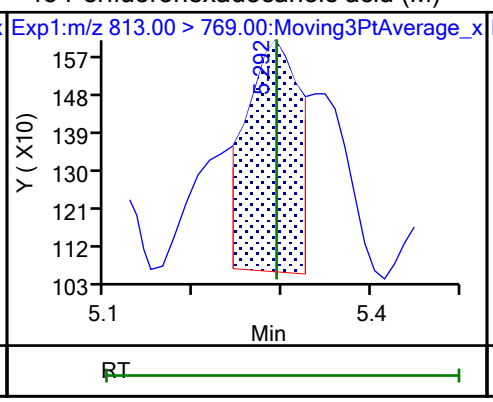
42 Perfluorotetradecanoic acid (M)



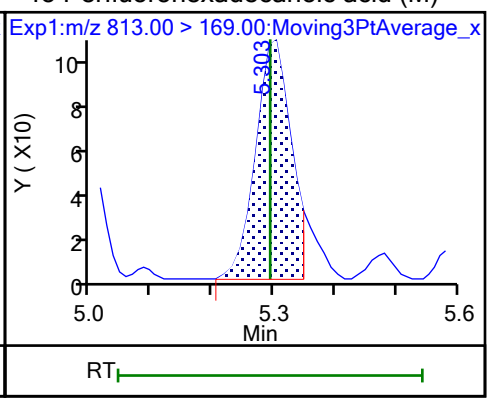
D 44 13C2 PFHxDA



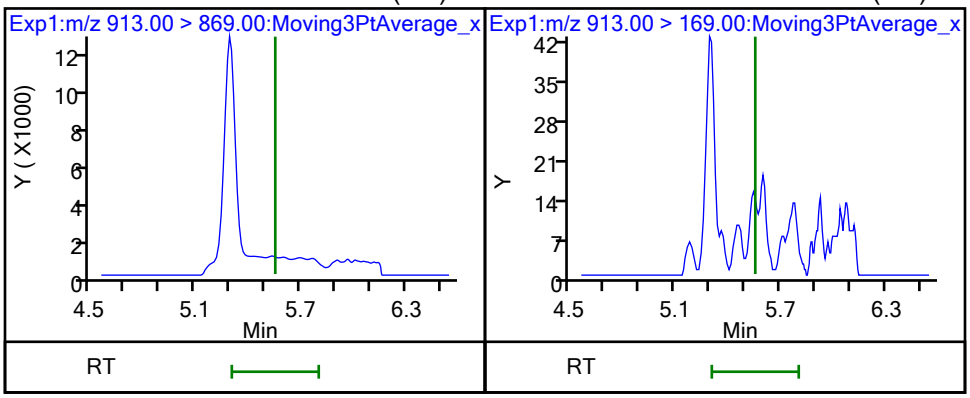
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Eurofins Burlington

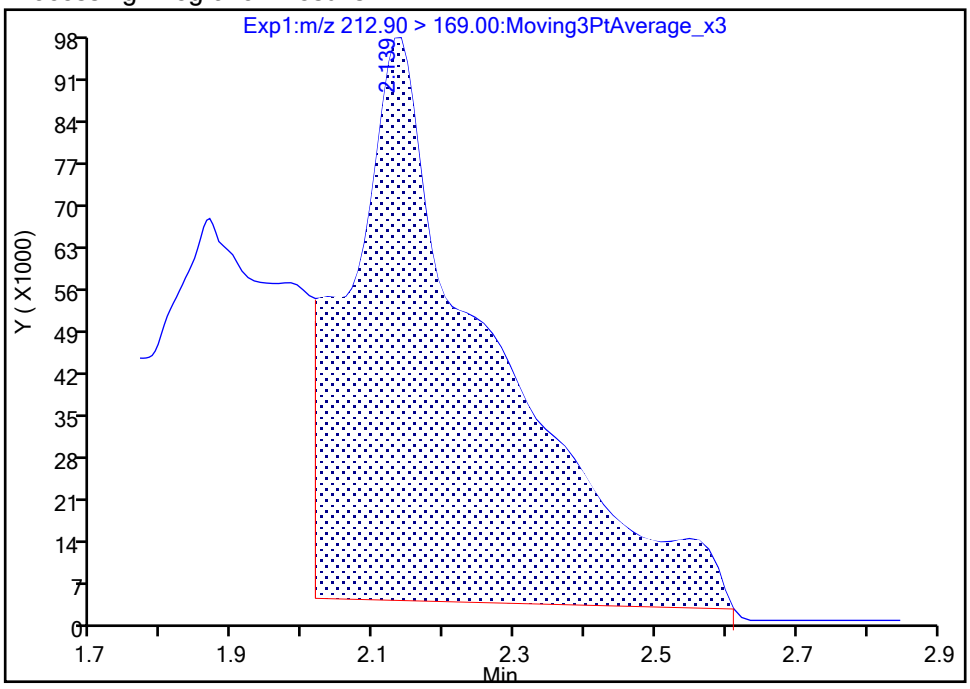
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

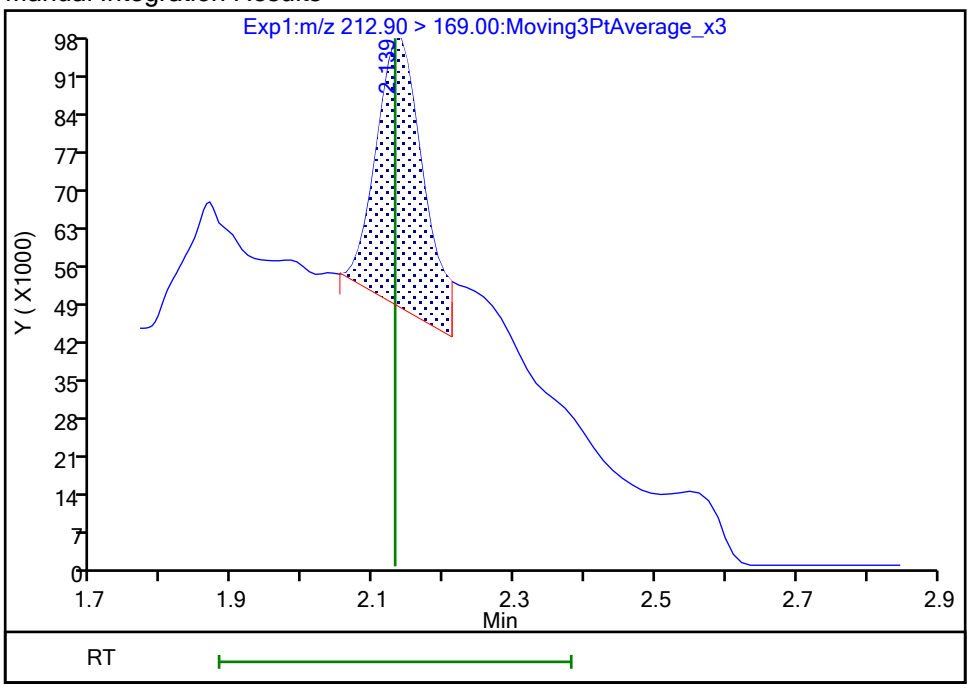
Processing Integration Results

RT: 2.14
Area: 1332362
Amount: 1.095645
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 230890
Amount: 0.156070
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

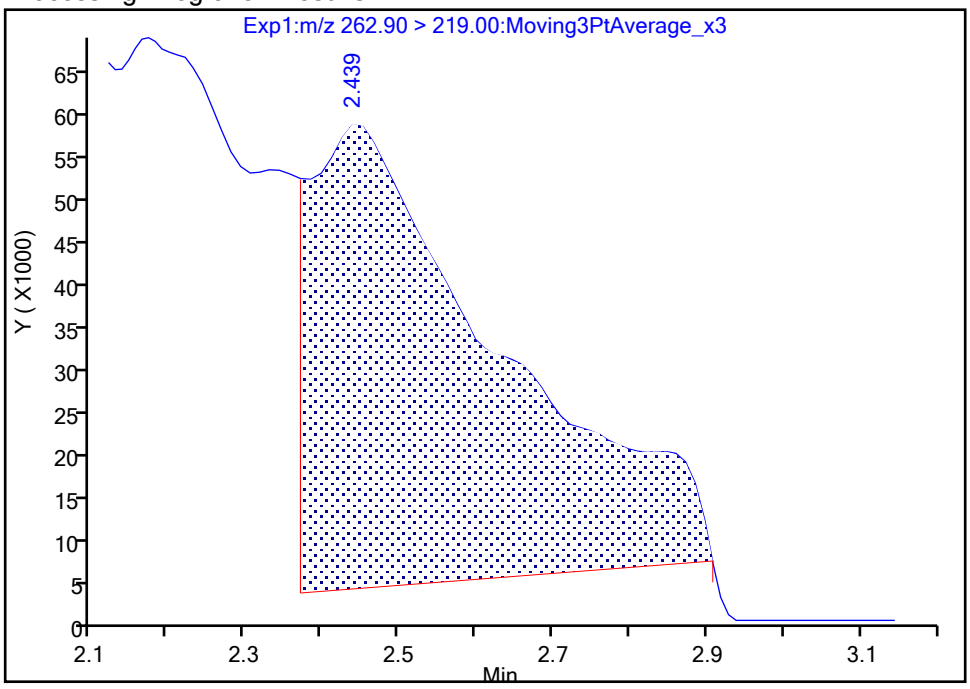
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

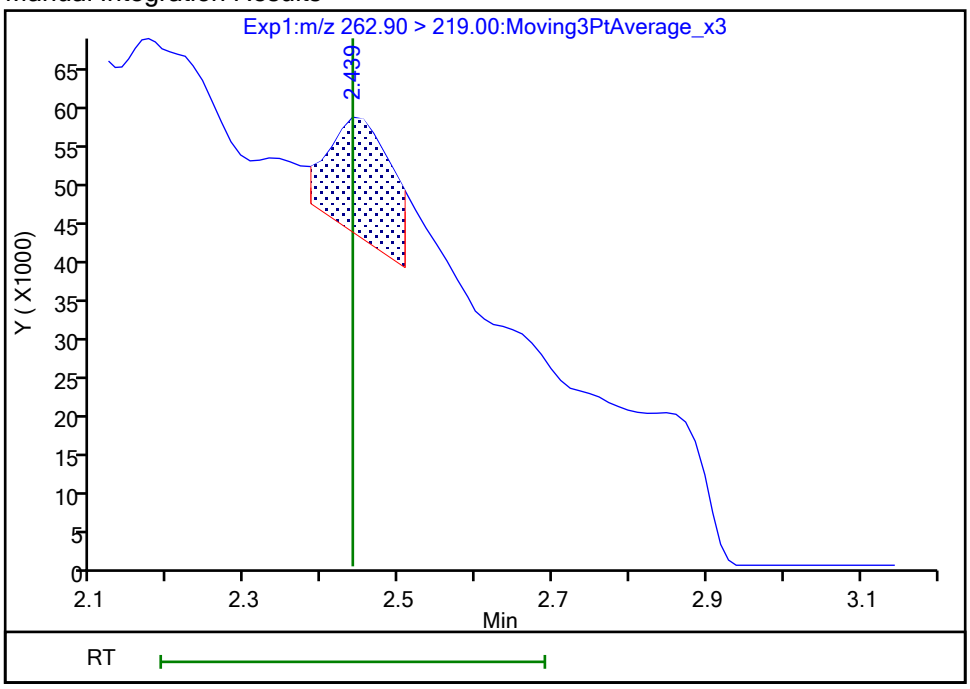
Processing Integration Results

RT: 2.44
Area: 929489
Amount: 0.784612
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 85158
Amount: 0.071885
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

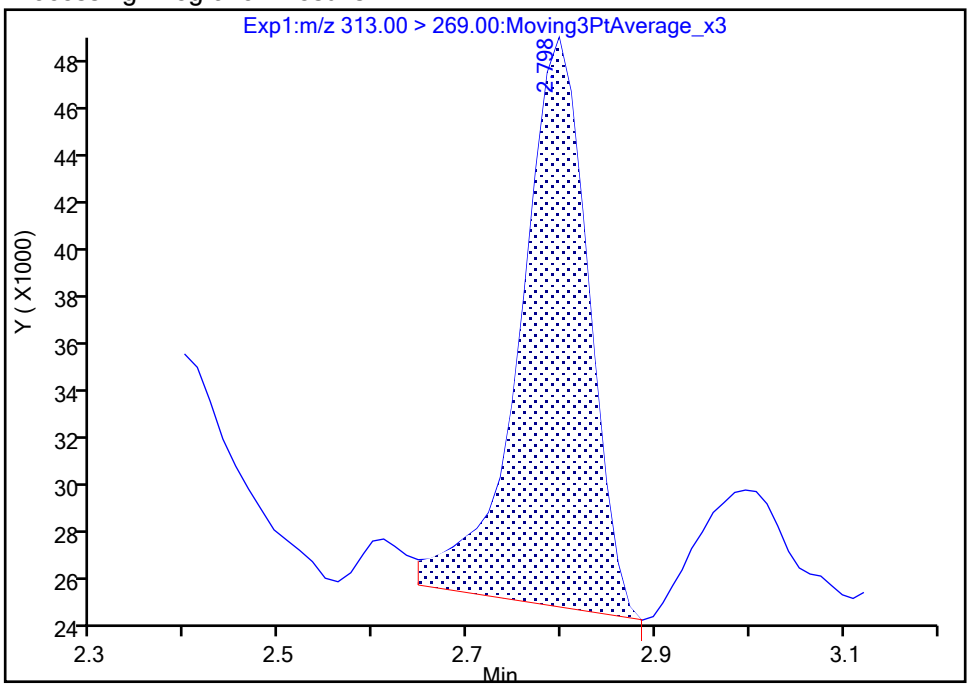
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

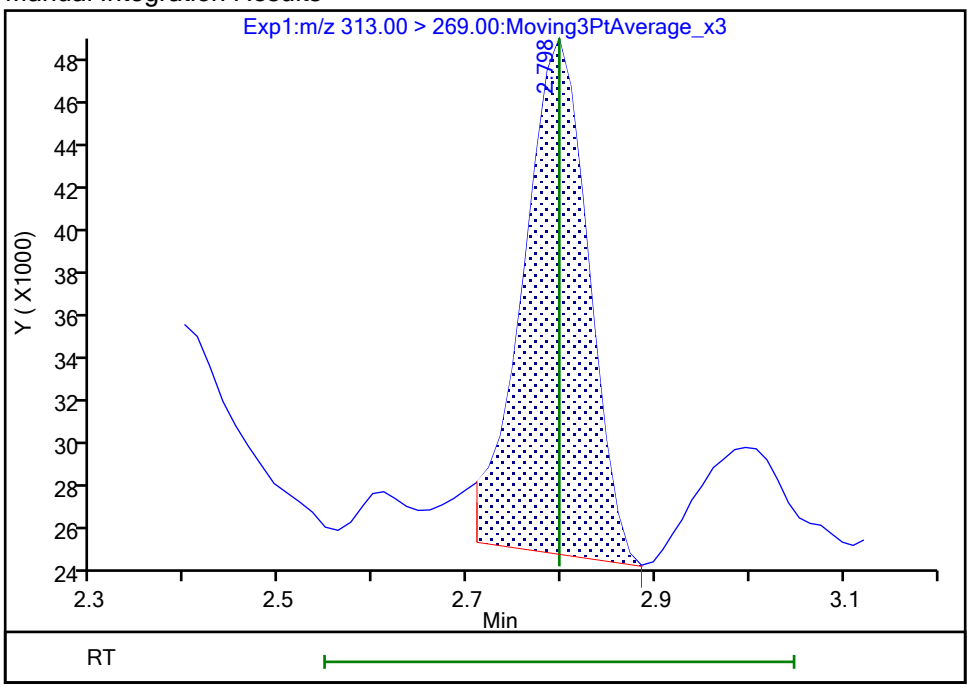
Processing Integration Results

RT: 2.80
Area: 118590
Amount: 0.096118
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 112420
Amount: 0.091118
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

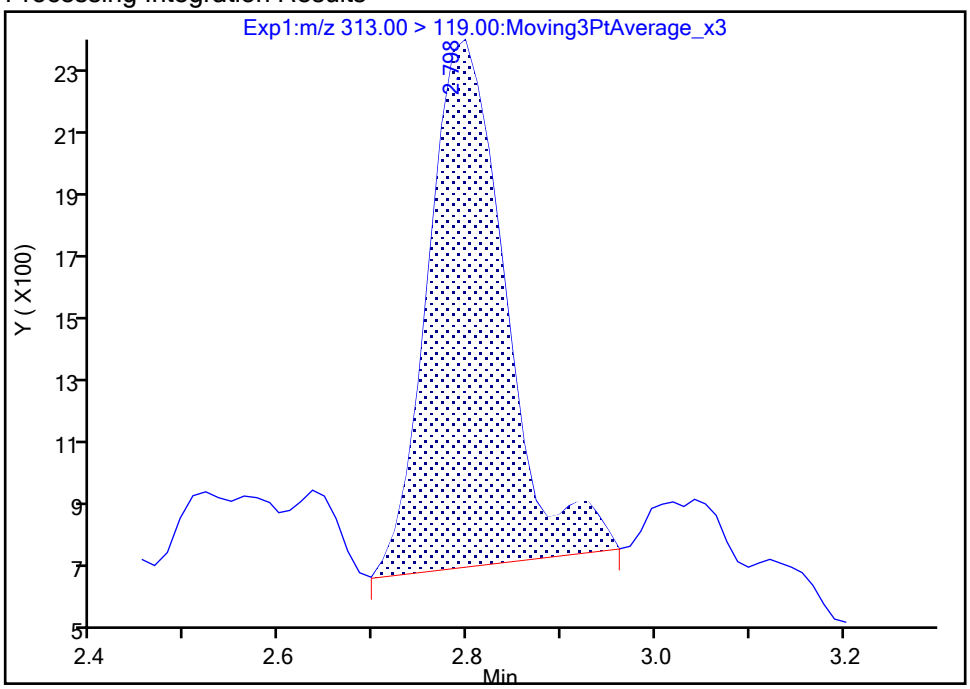
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

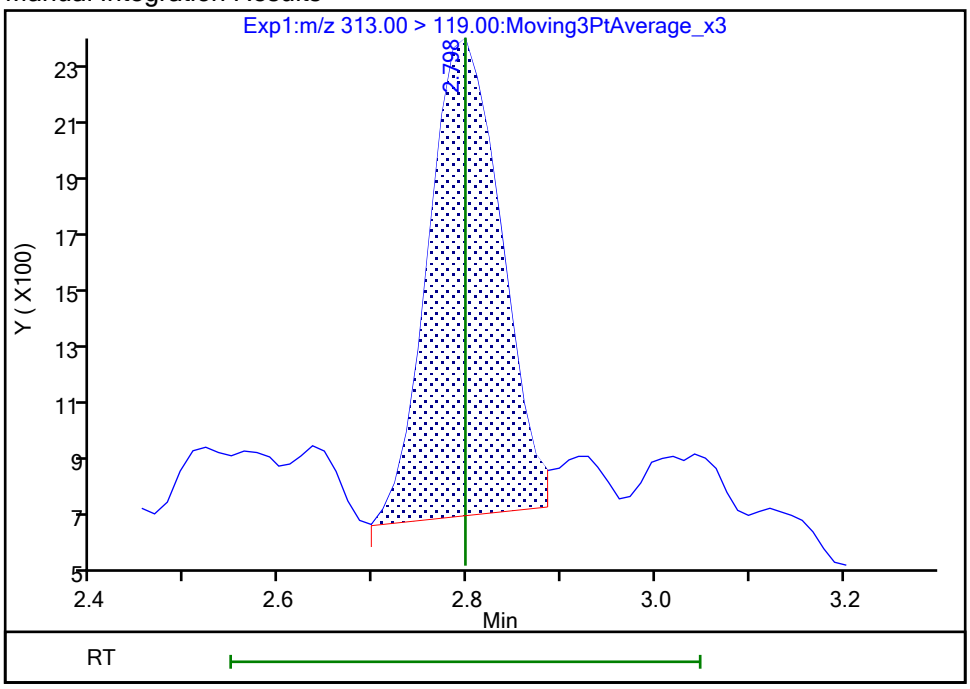
Processing Integration Results

RT: 2.80
Area: 9222
Amount: 0.096118
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 8702
Amount: 0.091118
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

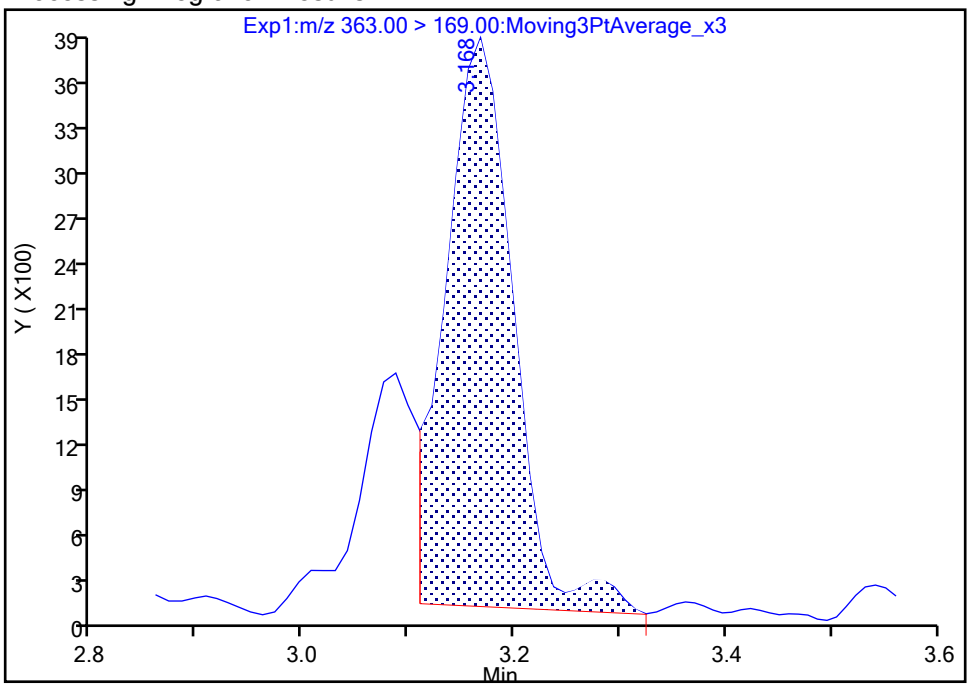
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

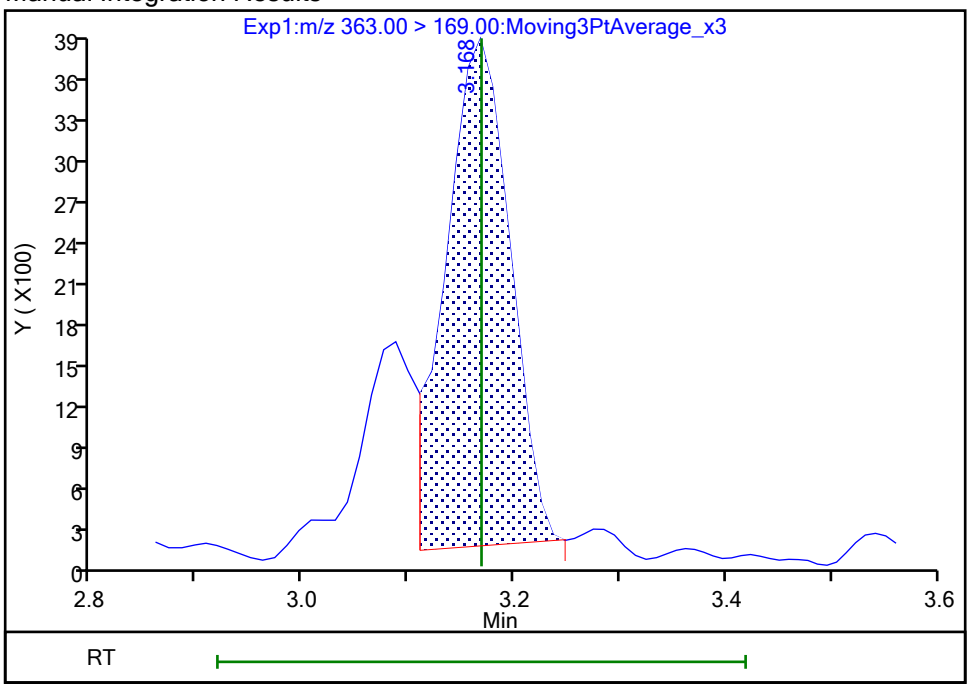
Processing Integration Results

RT: 3.17
Area: 16163
Amount: 0.171721
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 15089
Amount: 0.042541
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

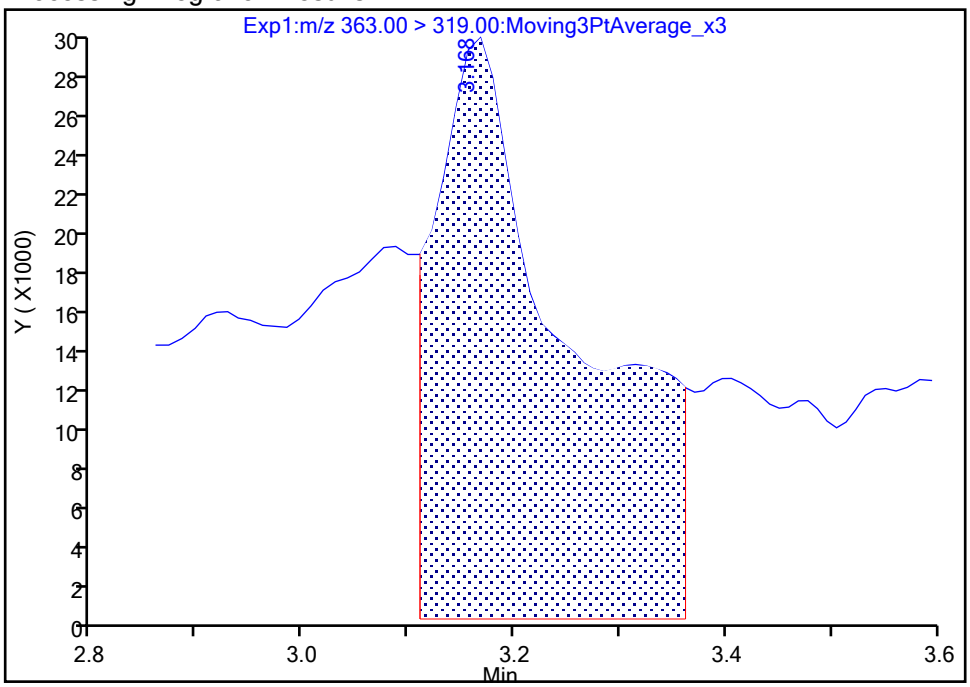
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

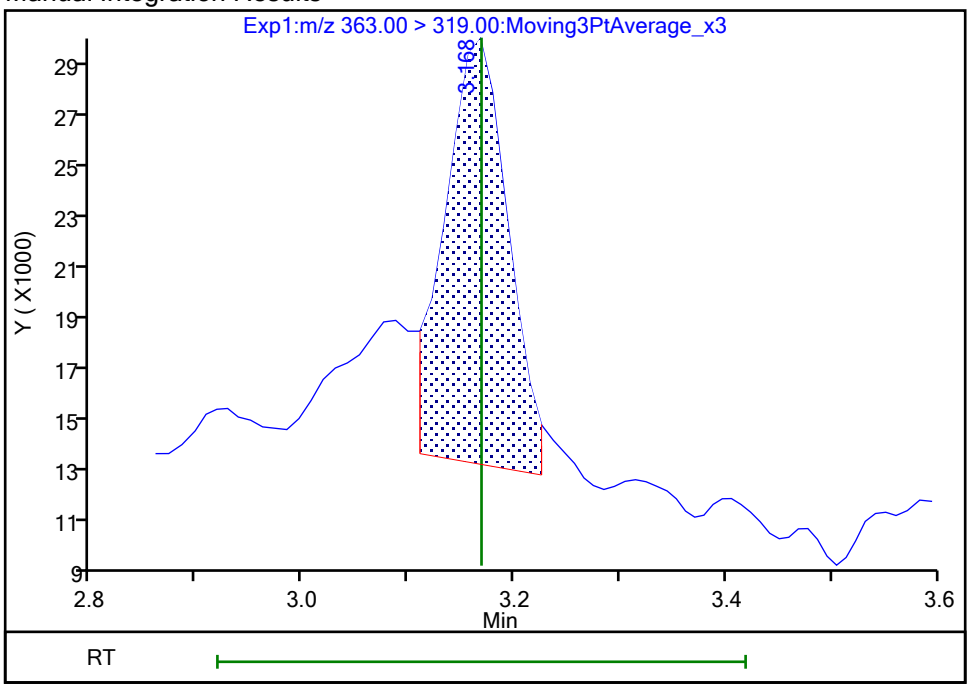
Processing Integration Results

RT: 3.17
Area: 265814
Amount: 0.171721
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 65851
Amount: 0.042541
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

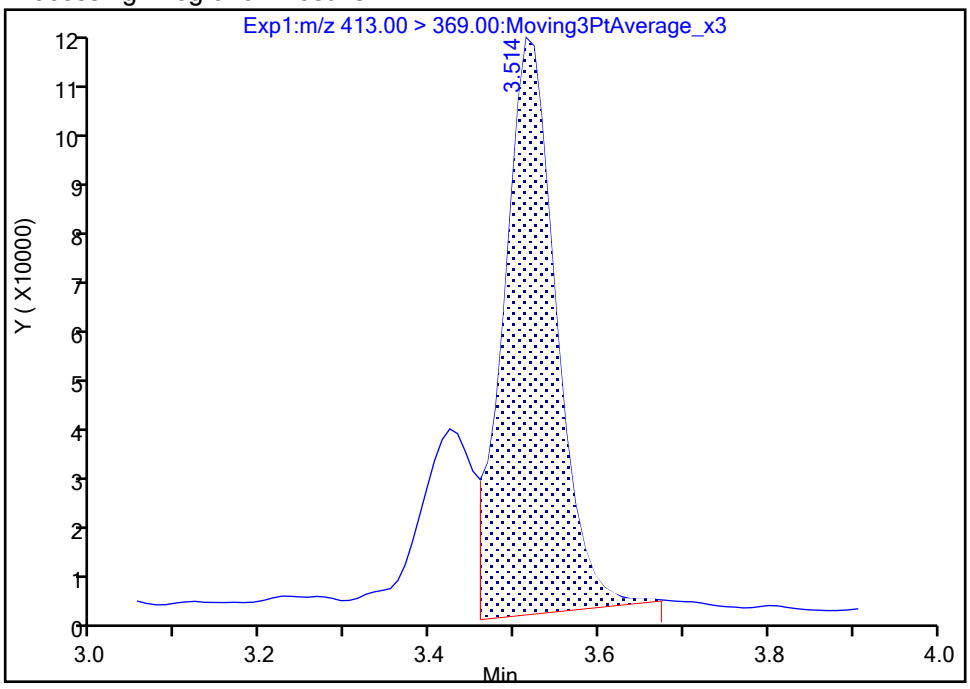
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

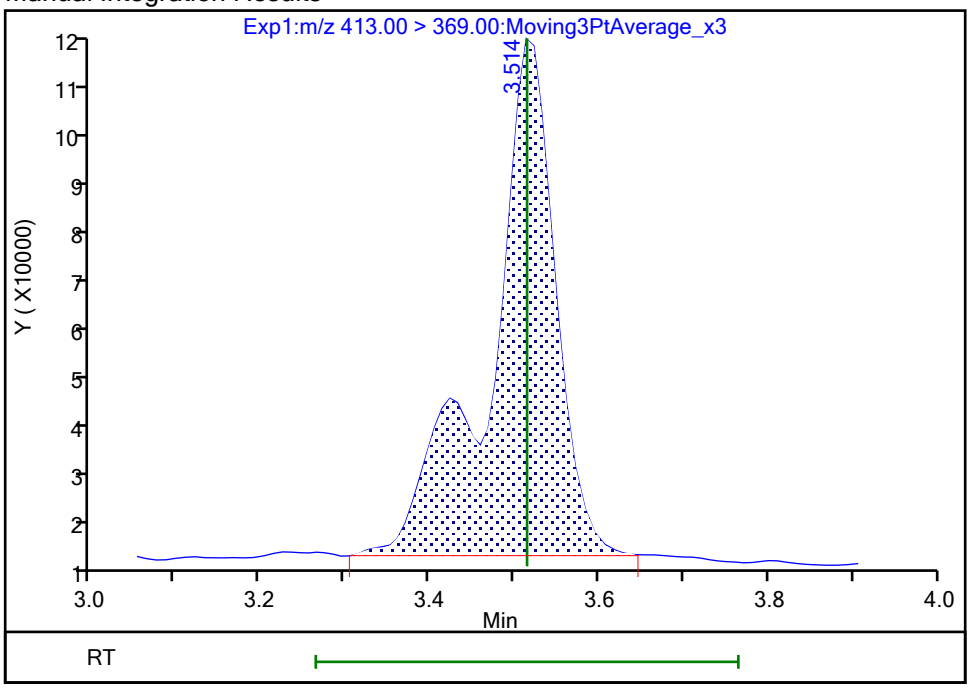
Processing Integration Results

RT: 3.51
Area: 457485
Amount: 0.265554
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 563776
Amount: 0.327252
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:29:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

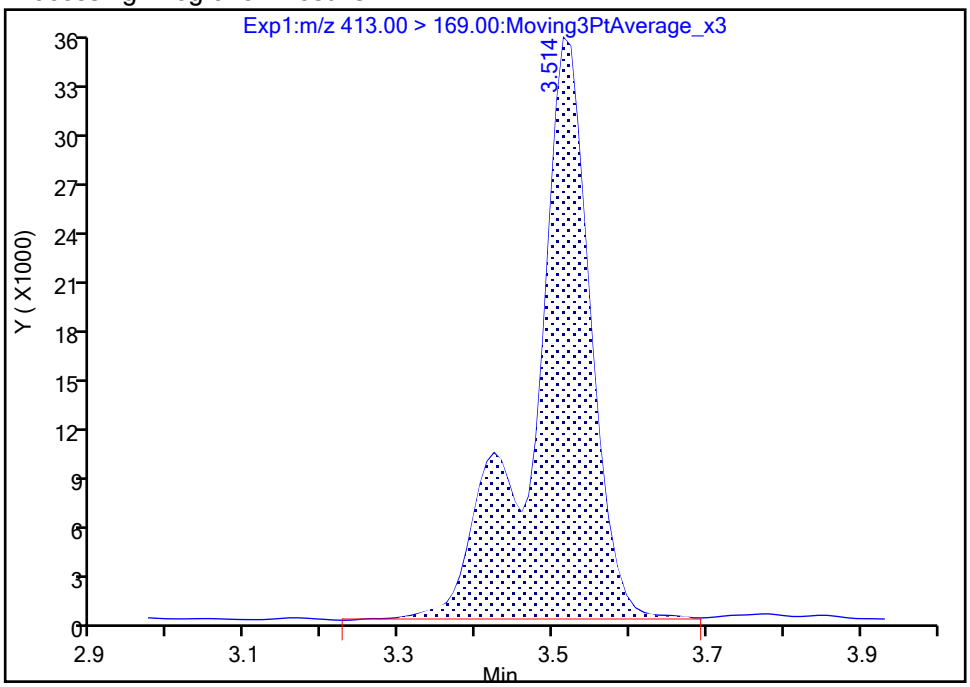
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

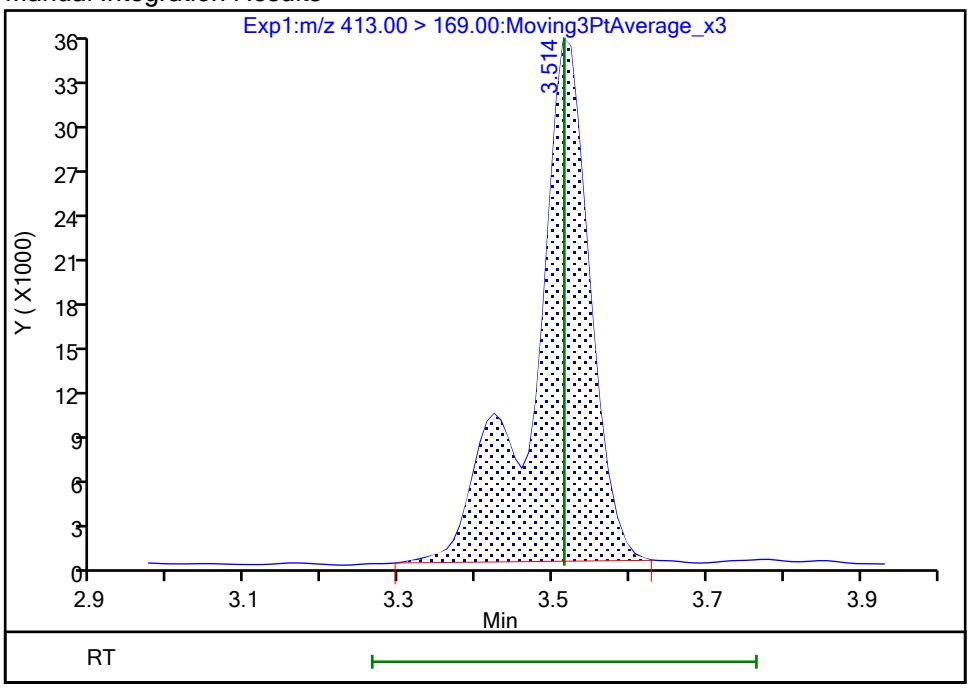
Processing Integration Results

RT: 3.51
Area: 188287
Amount: 0.265554
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 184012
Amount: 0.327252
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:29:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

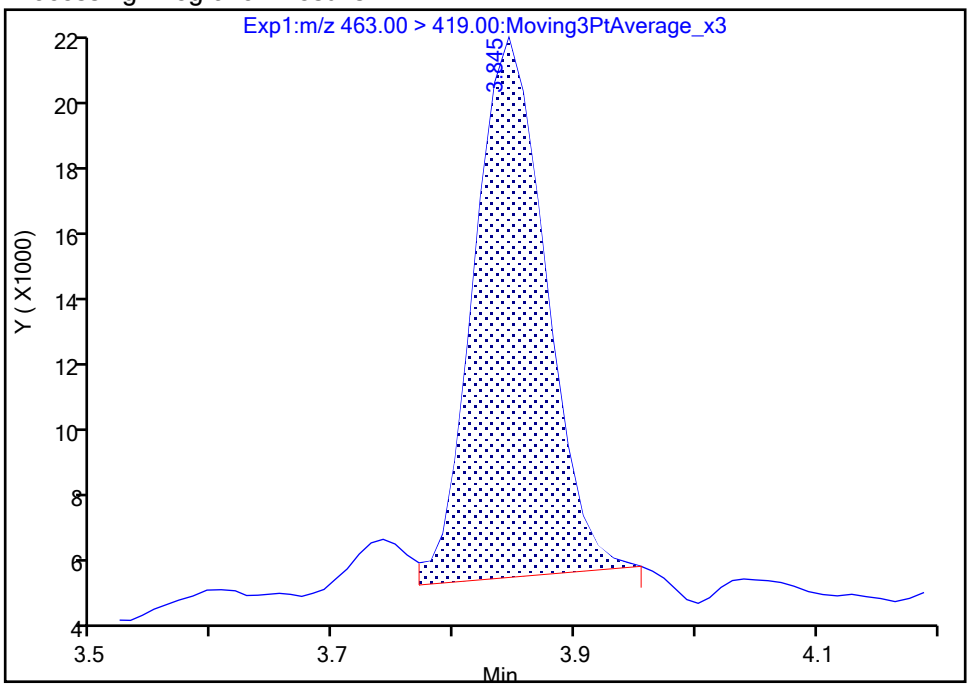
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

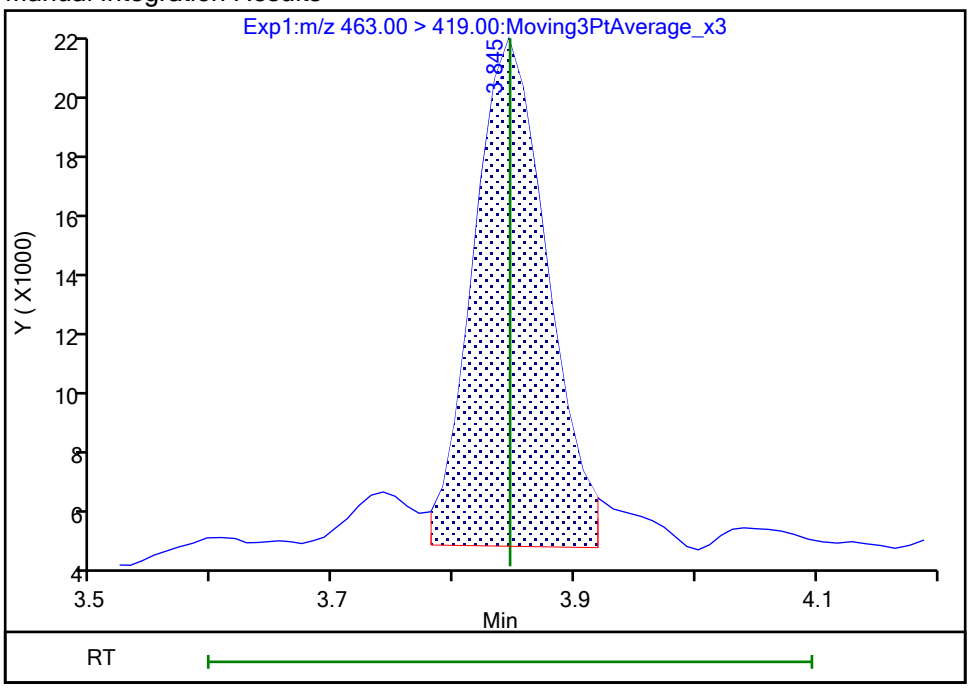
Processing Integration Results

RT: 3.85
Area: 66734
Amount: 0.044081
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 71258
Amount: 0.047070
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:29:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

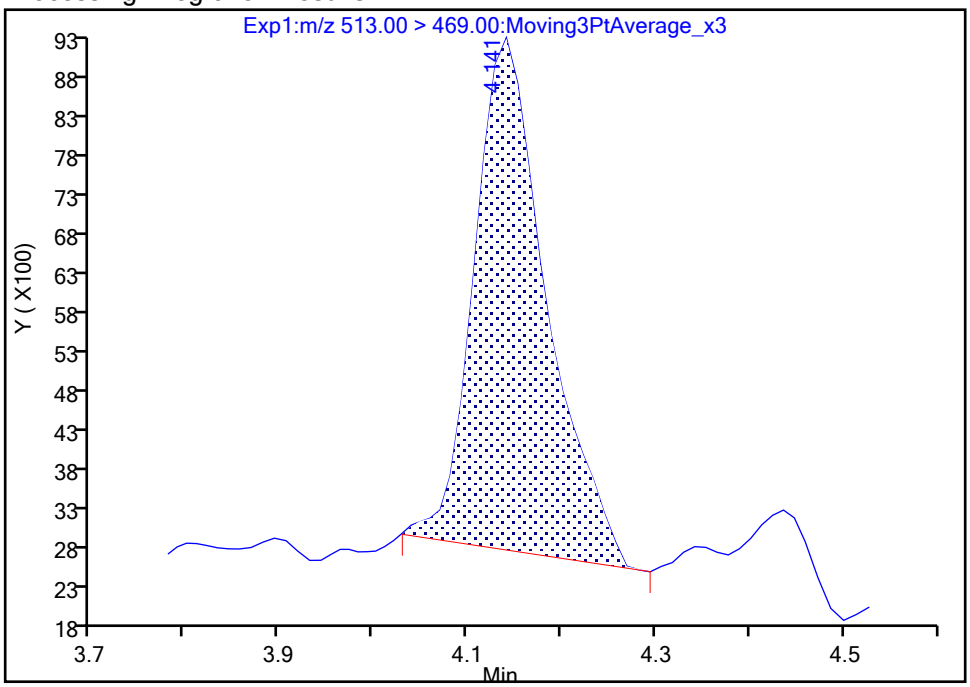
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

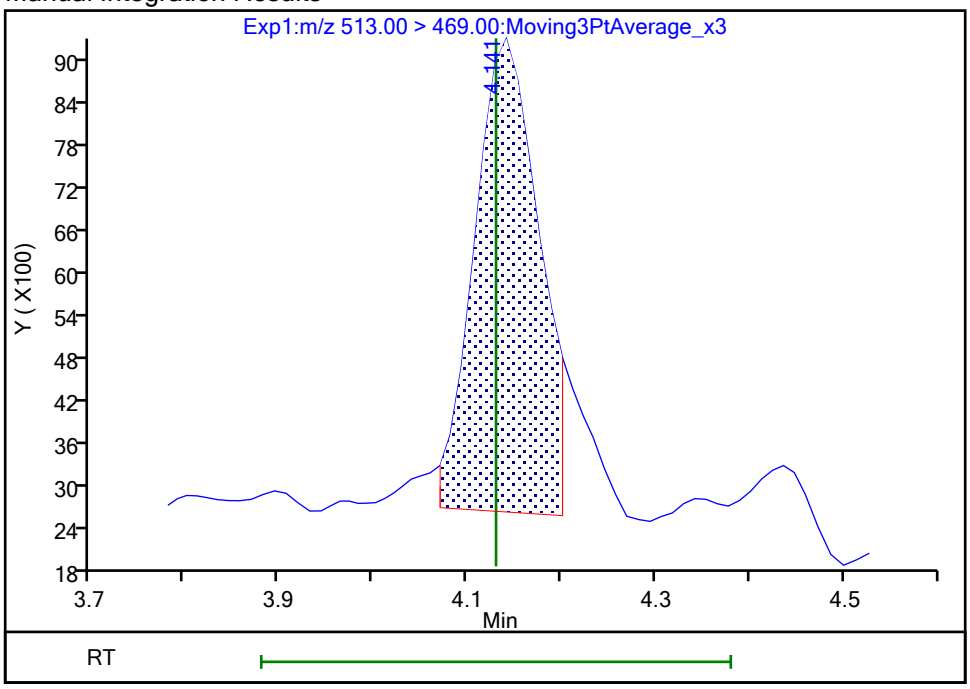
Processing Integration Results

RT: 4.14
Area: 35010
Amount: 0.022569
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 31492
Amount: 0.020301
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 09:01:40 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

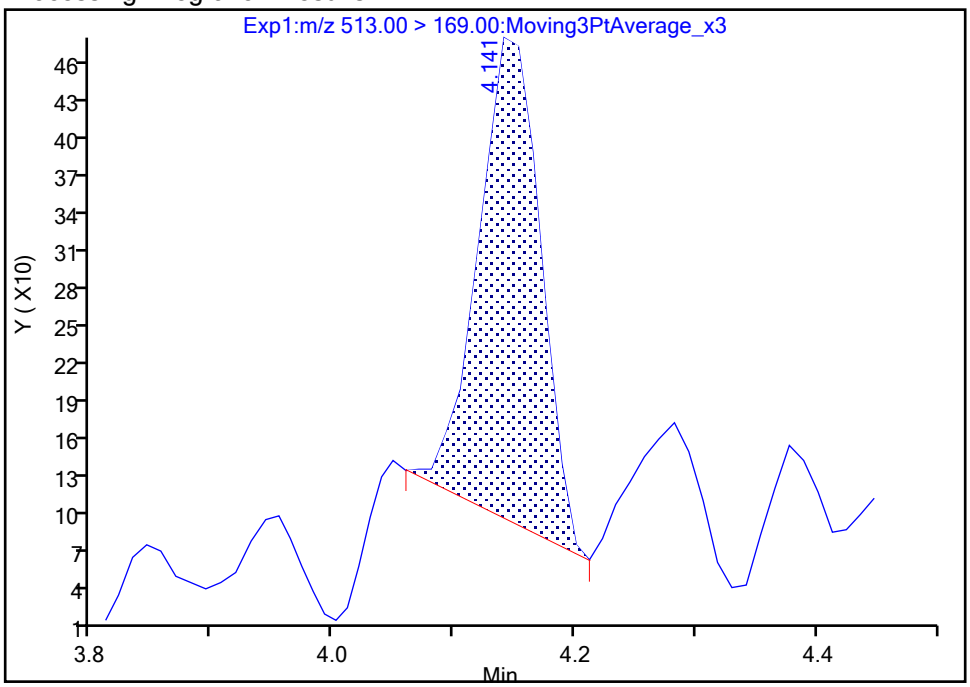
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

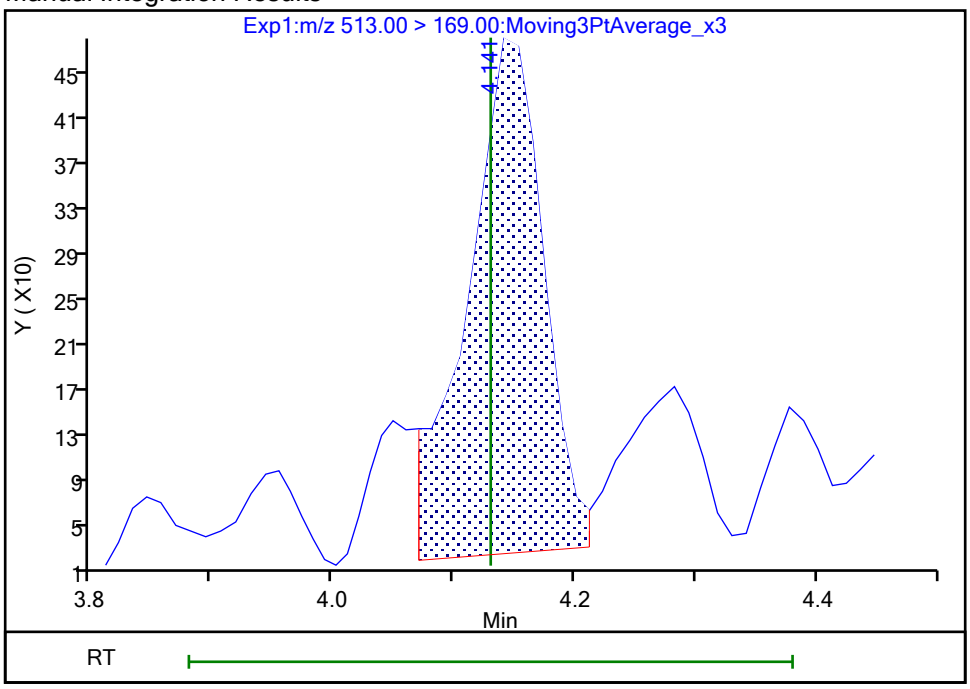
Processing Integration Results

RT: 4.14
Area: 1382
Amount: 0.022569
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1978
Amount: 0.020301
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 09:01:44 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

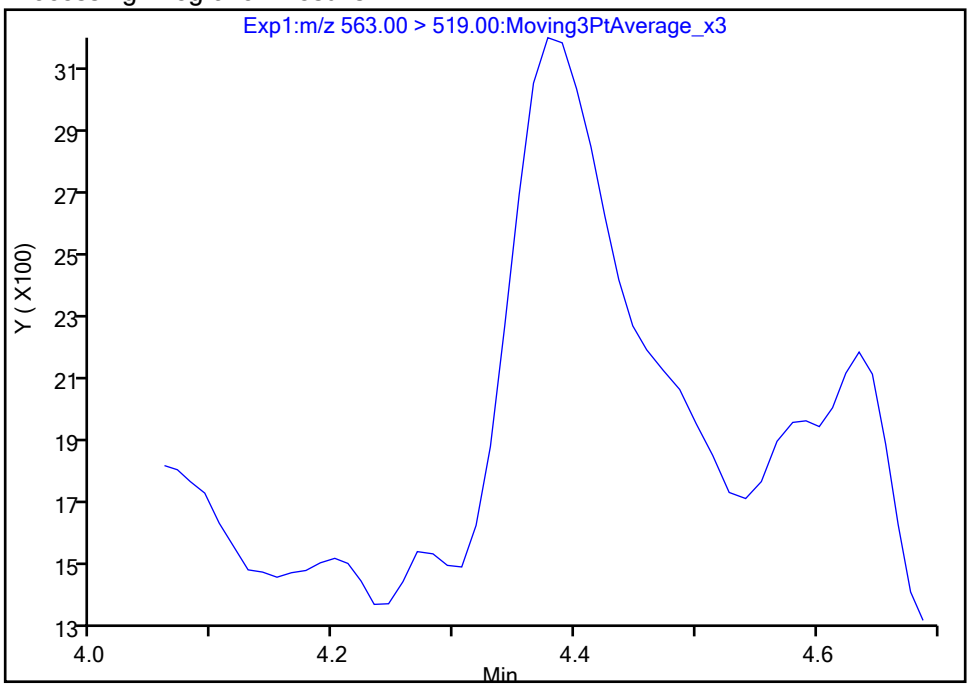
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

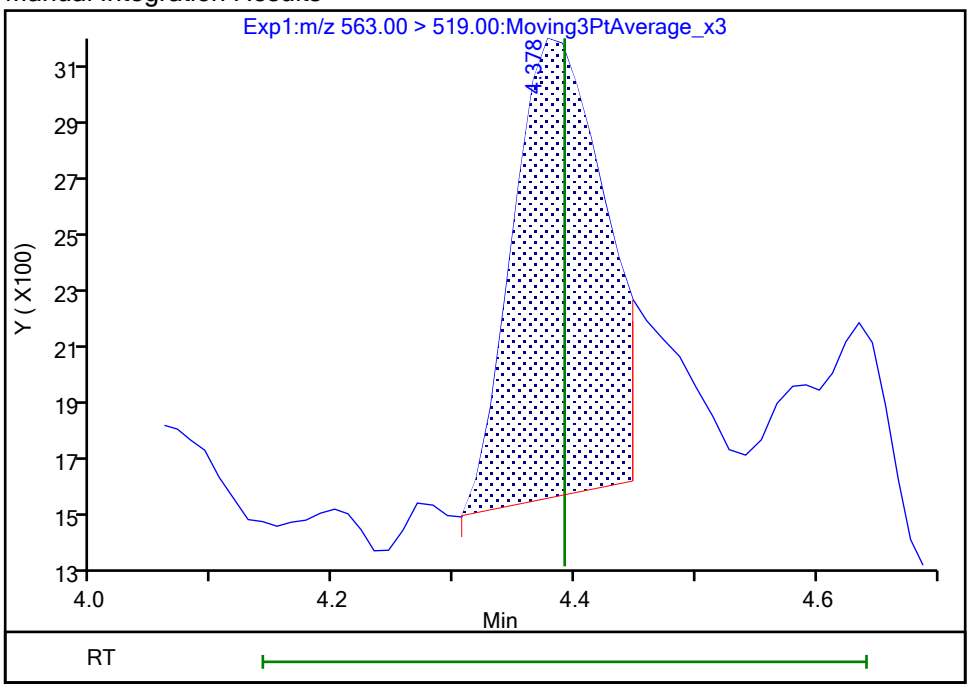
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 8255
Amount: 0.005689
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:30:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

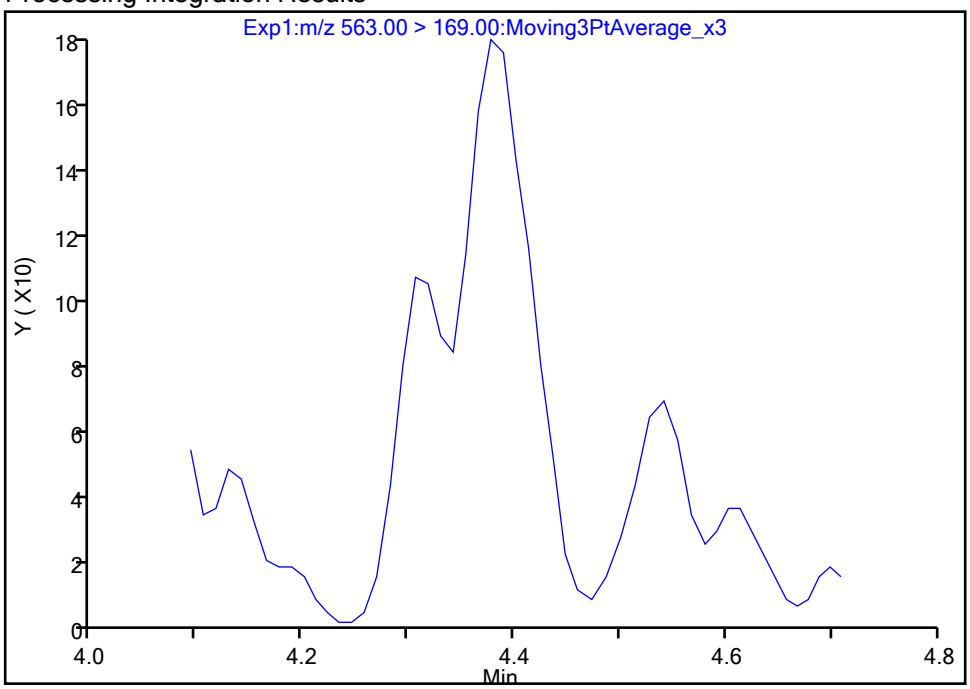
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

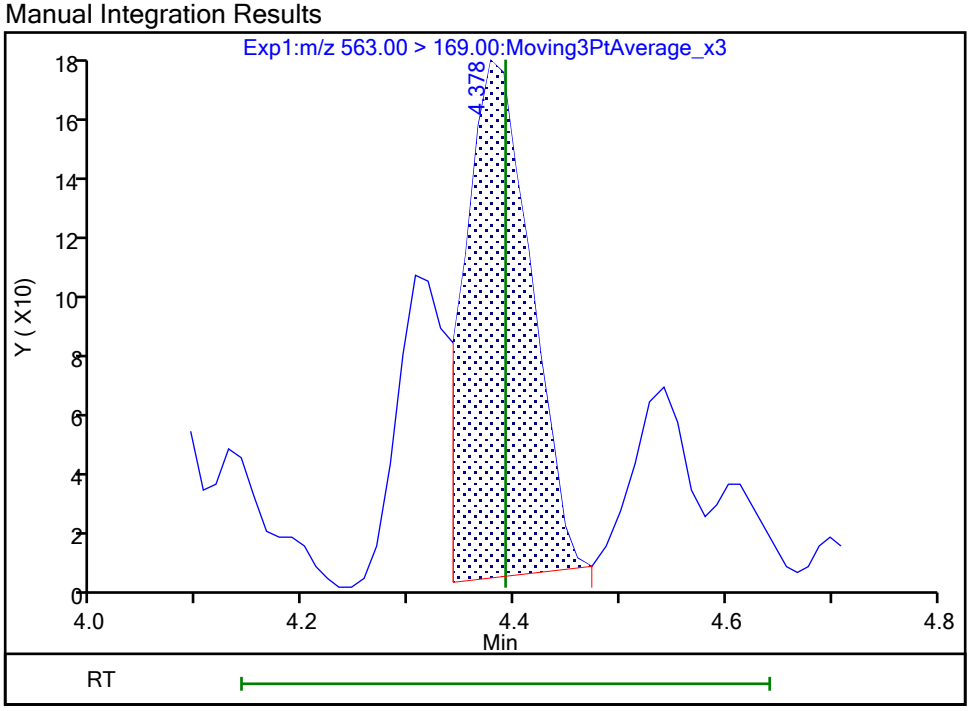
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 736
Amount: 0.005689
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:30:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

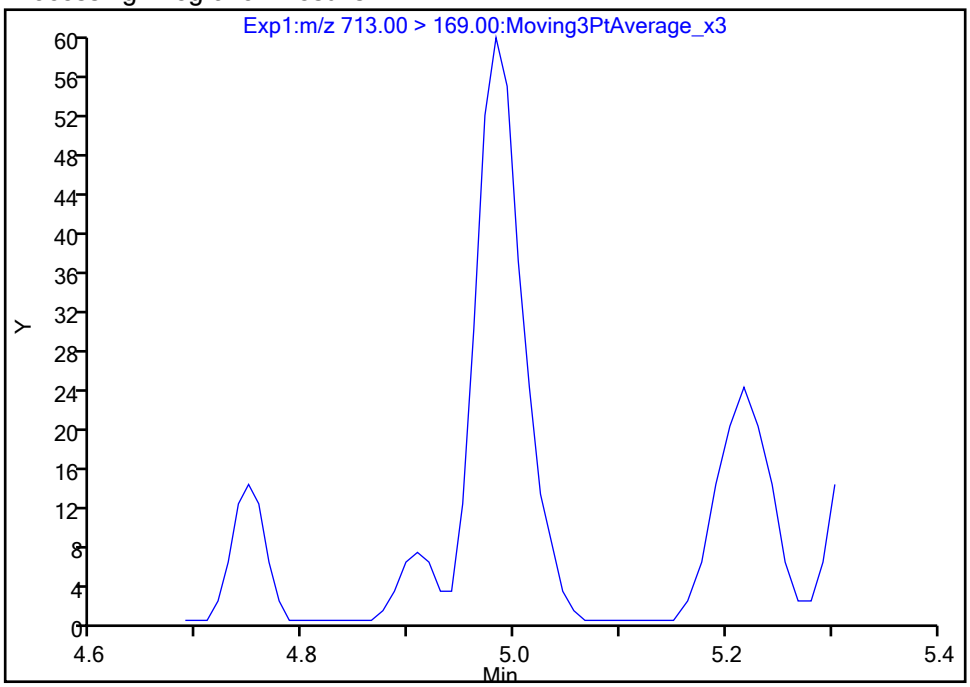
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

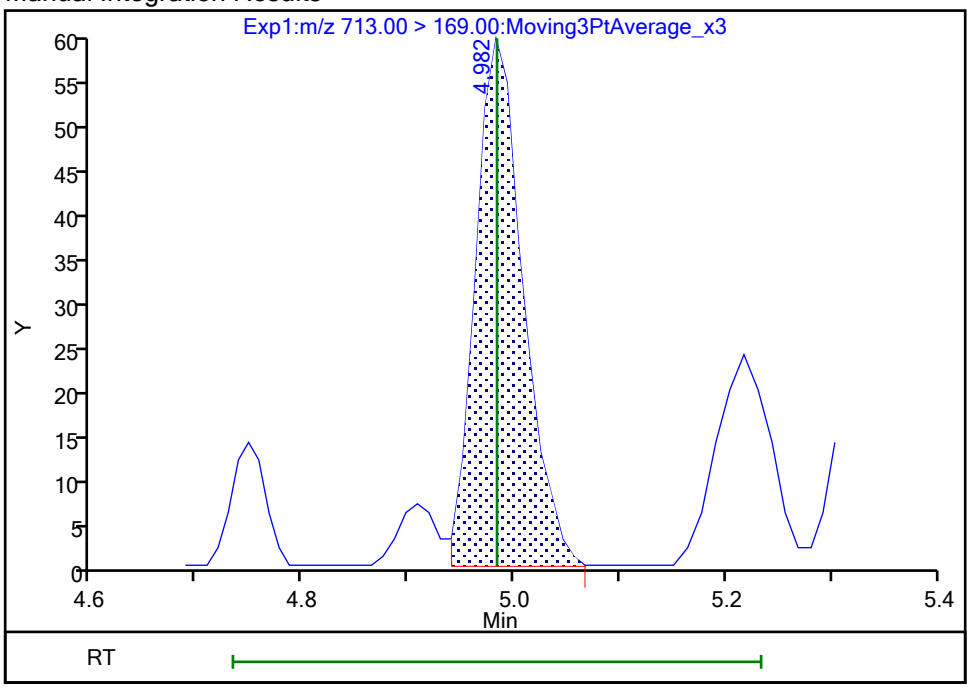
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 187
Amount: 0.001244
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:31:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

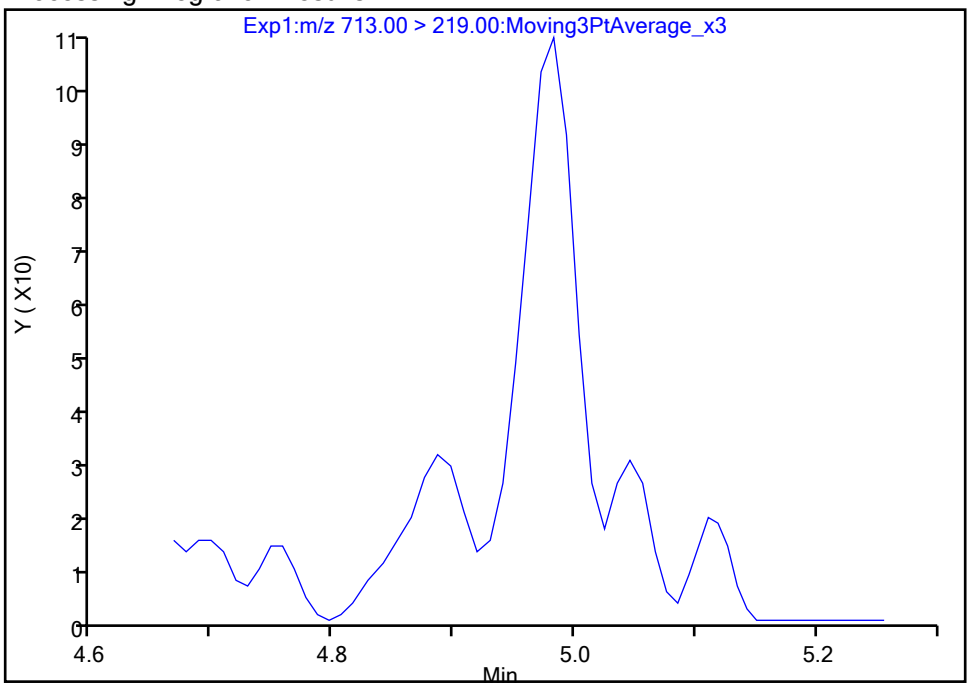
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

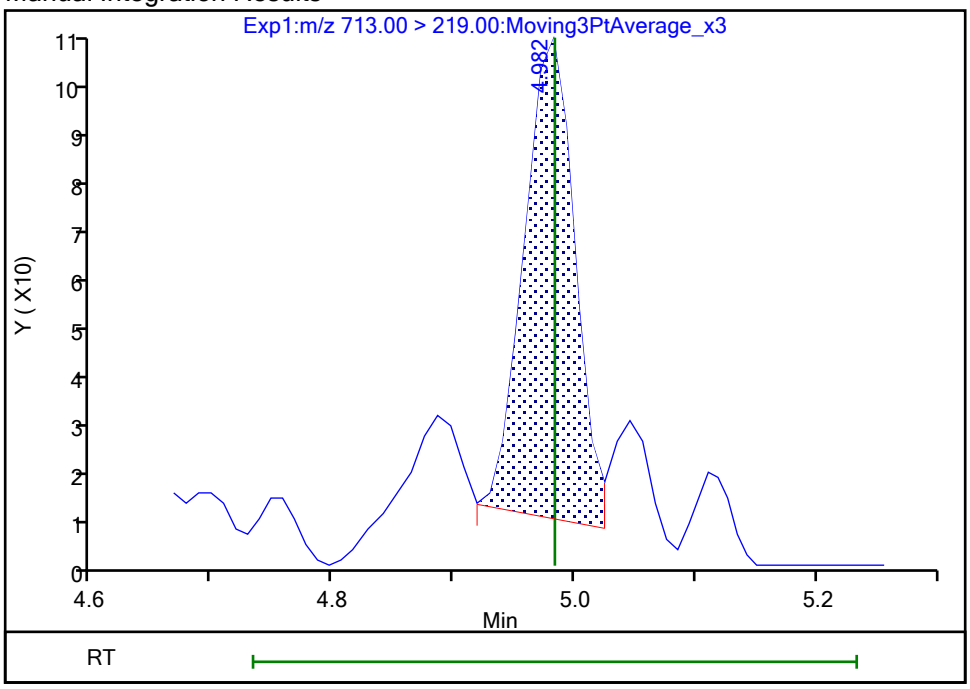
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 270
Amount: 0.001244
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:31:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

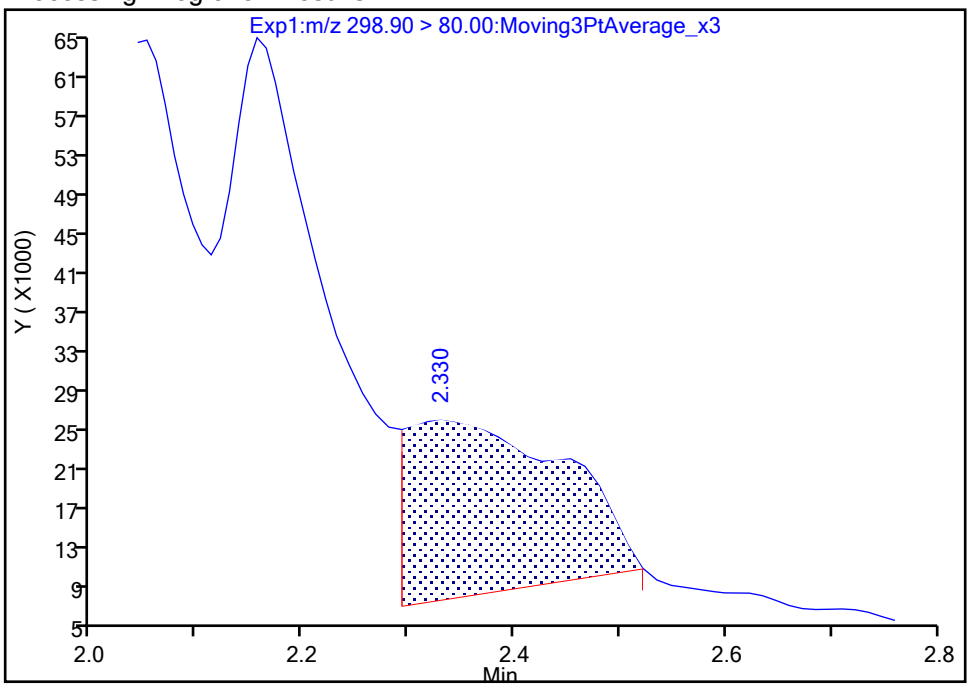
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

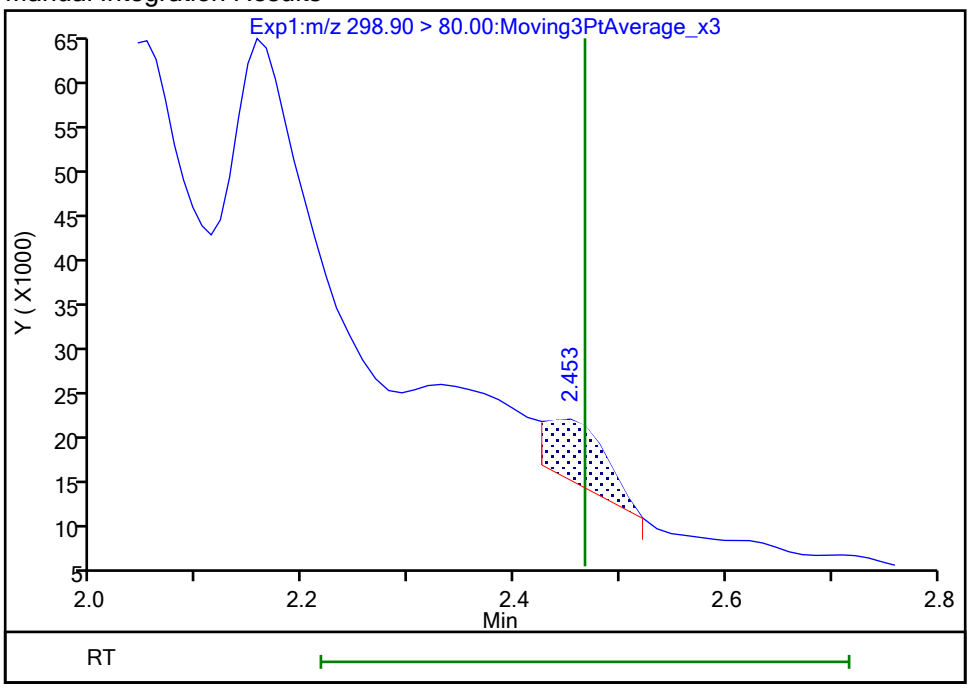
Processing Integration Results

RT: 2.33
Area: 179494
Amount: 0.115905
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 26515
Amount: 0.017122
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

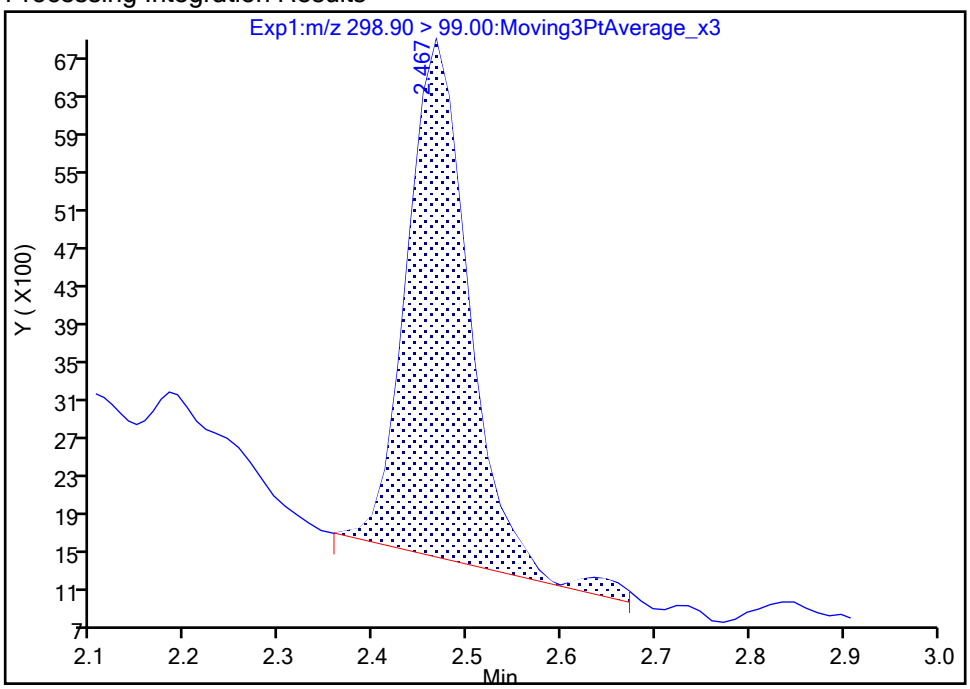
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

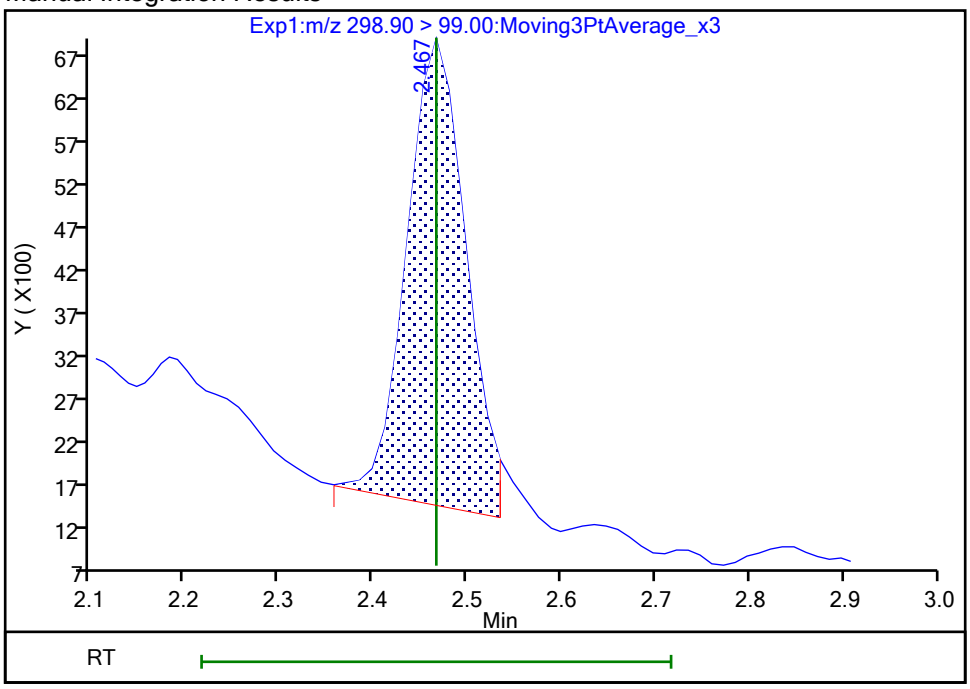
Processing Integration Results

RT: 2.47
Area: 25063
Amount: 0.115905
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 23419
Amount: 0.017122
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

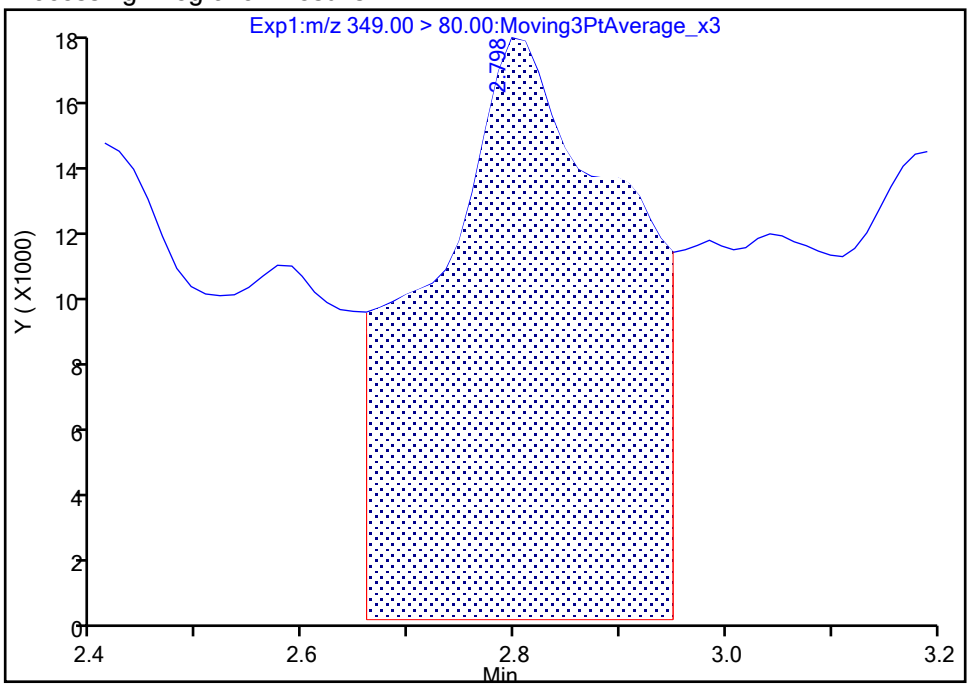
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

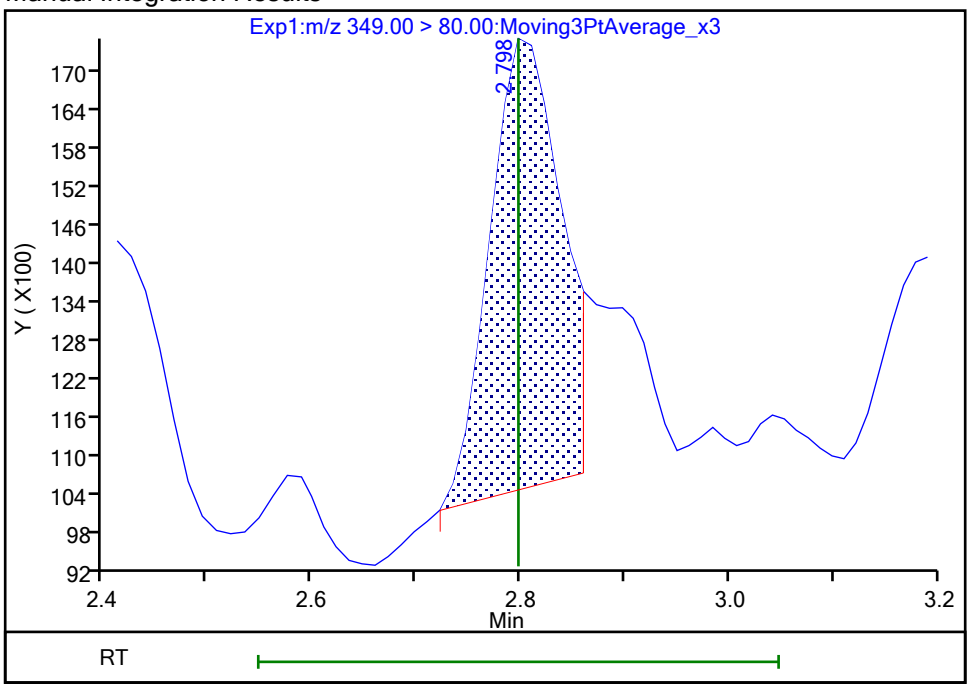
Processing Integration Results

RT: 2.80
Area: 223365
Amount: 0.171443
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 32924
Amount: 0.025271
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

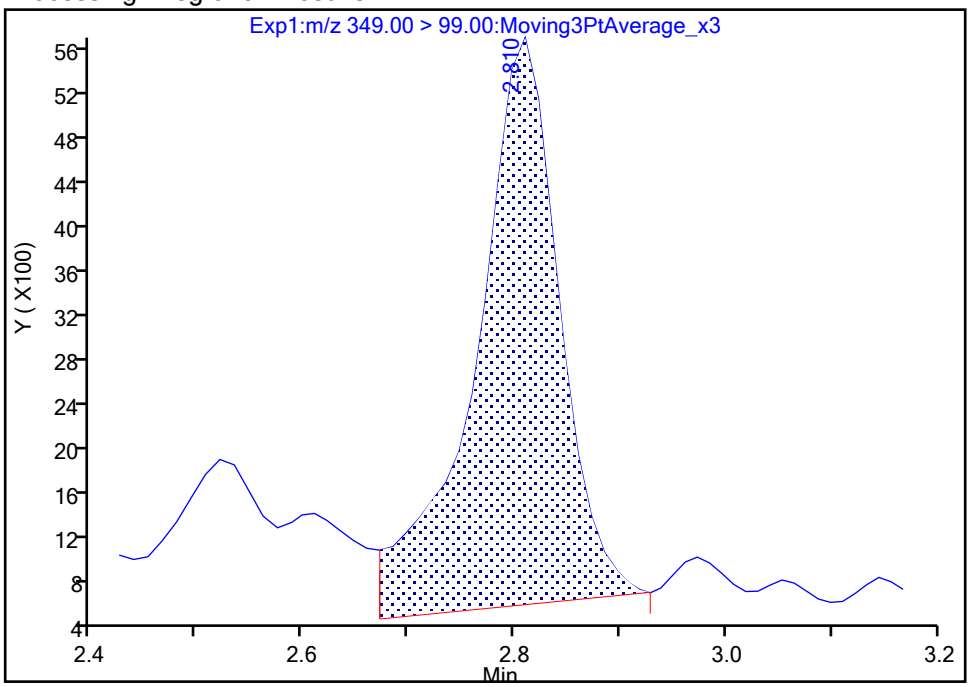
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

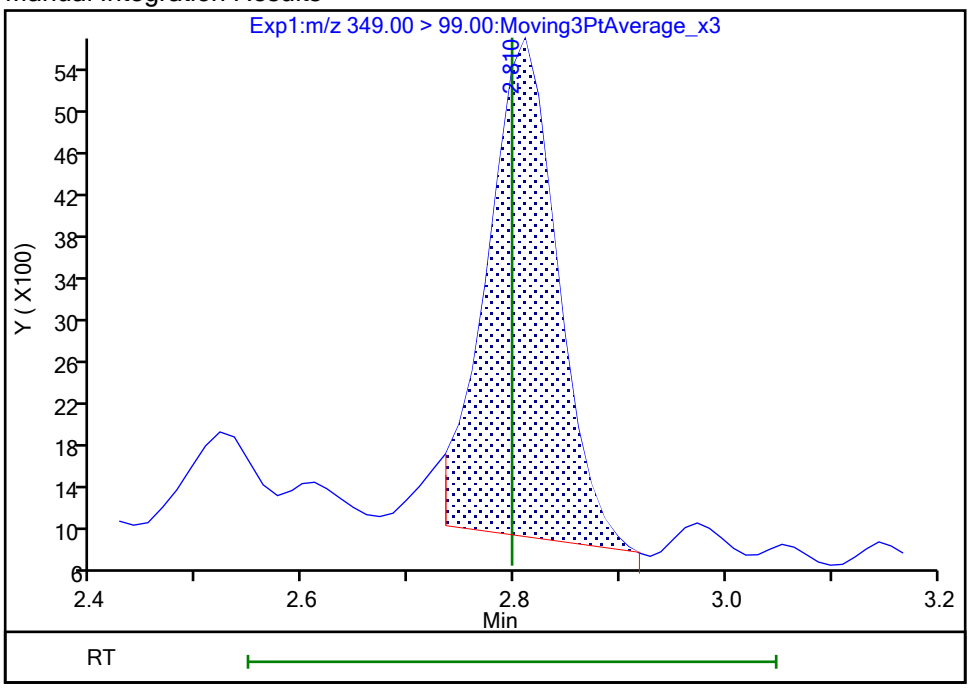
Processing Integration Results

RT: 2.81
Area: 27982
Amount: 0.171443
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 22003
Amount: 0.025271
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

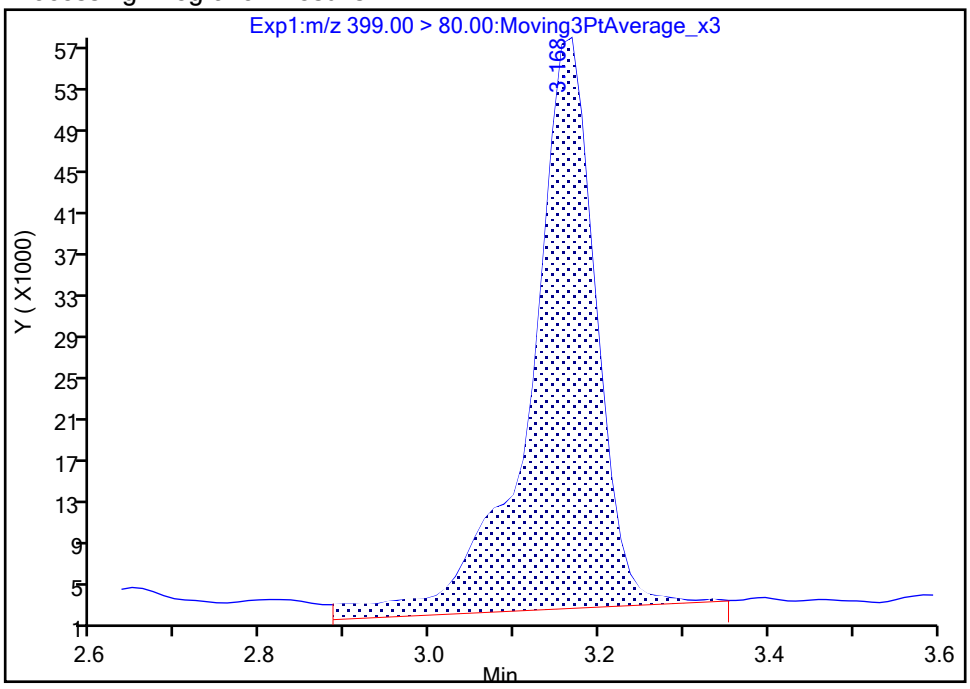
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

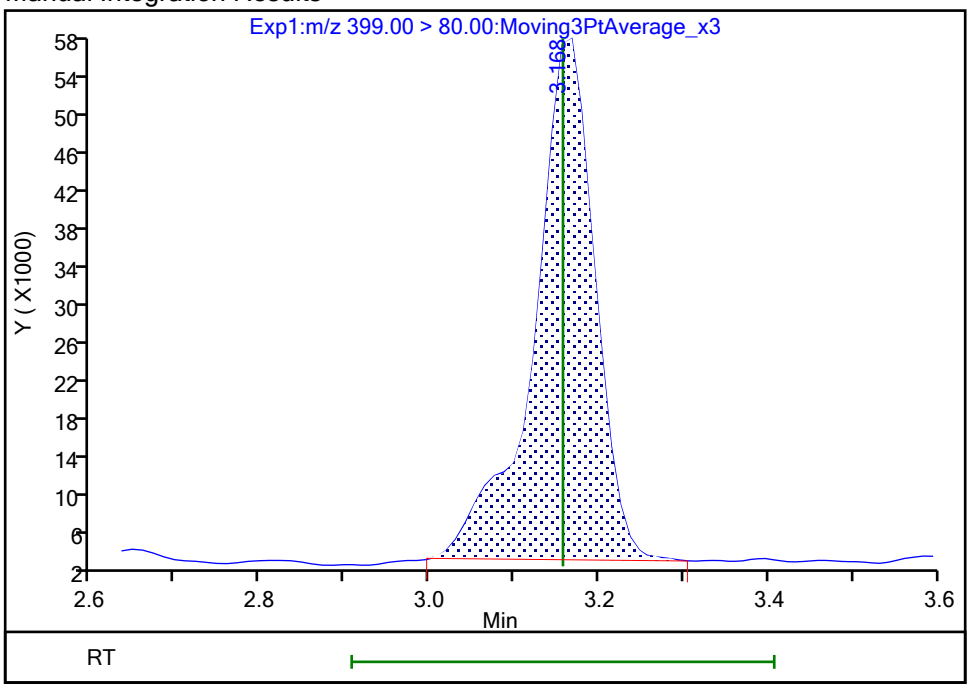
Processing Integration Results

RT: 3.17
Area: 301479
Amount: 0.272980
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 273312
Amount: 0.247476
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

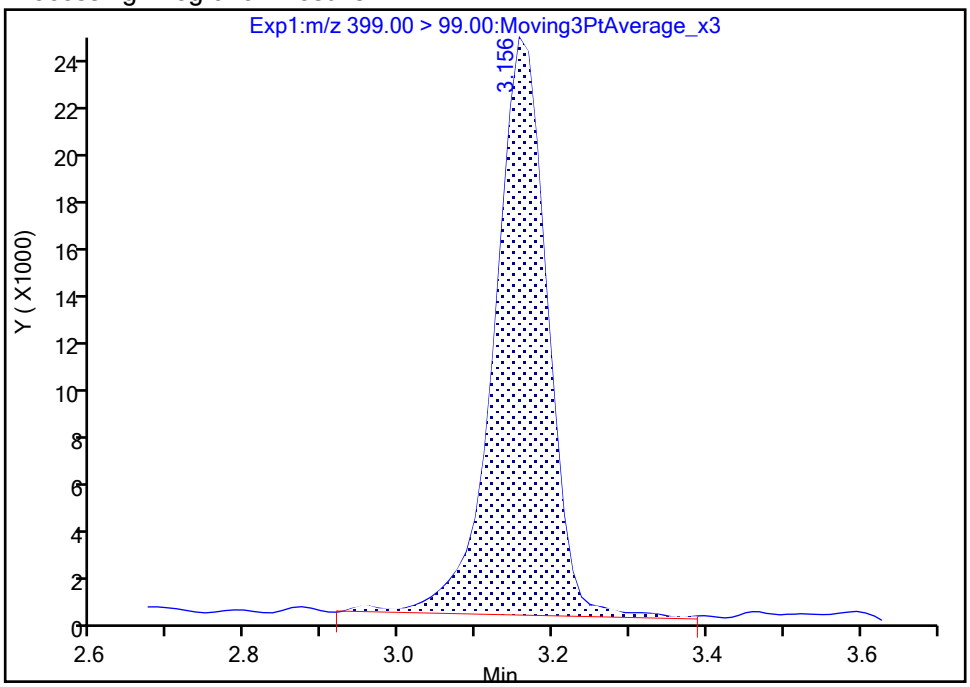
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

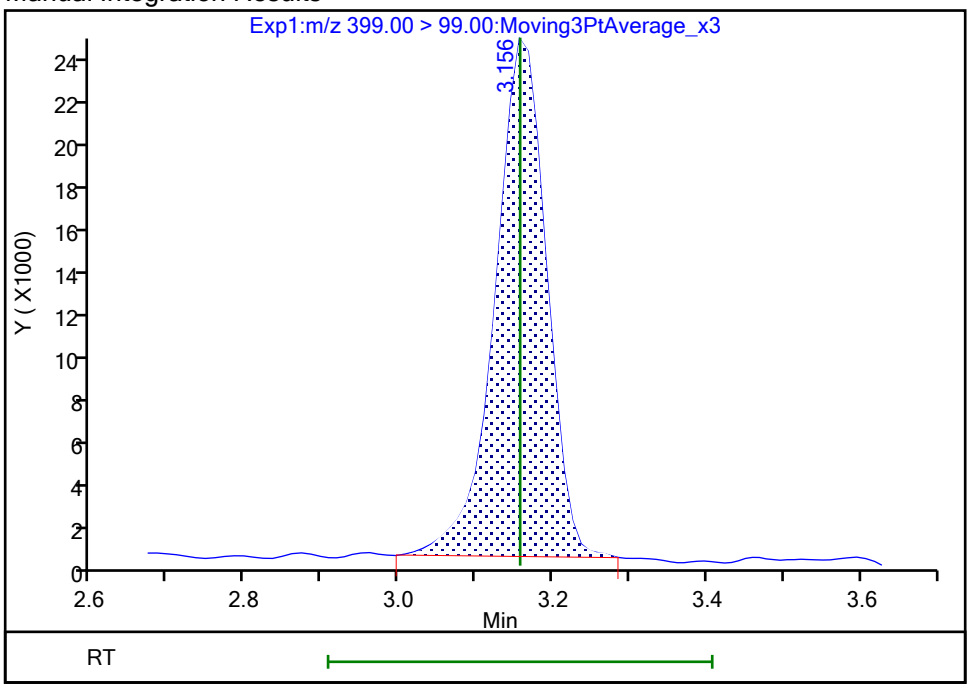
Processing Integration Results

RT: 3.16
Area: 113664
Amount: 0.272980
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 109240
Amount: 0.247476
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

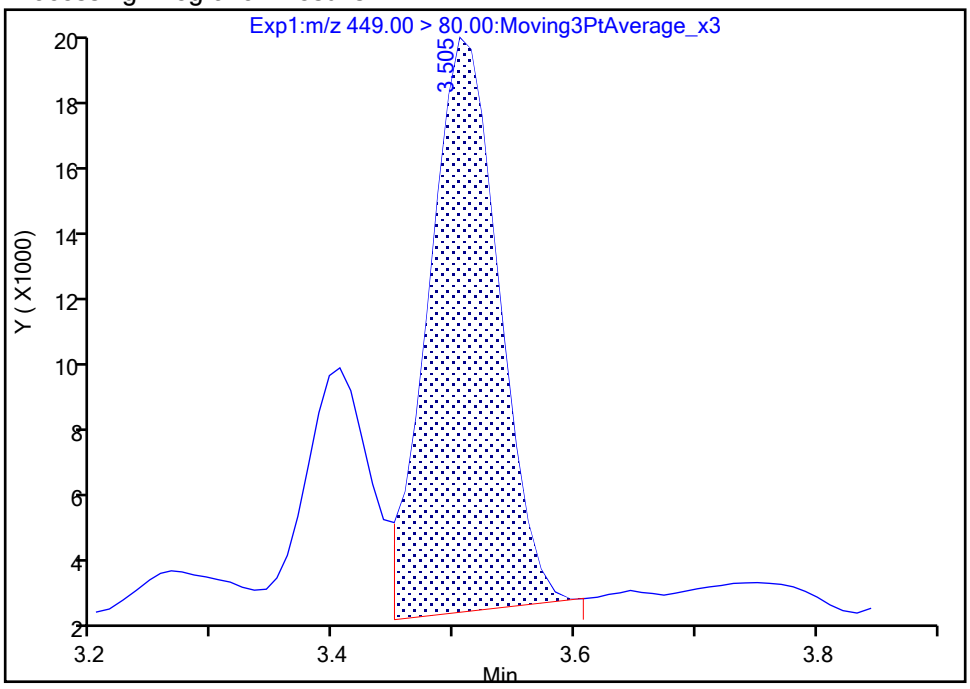
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

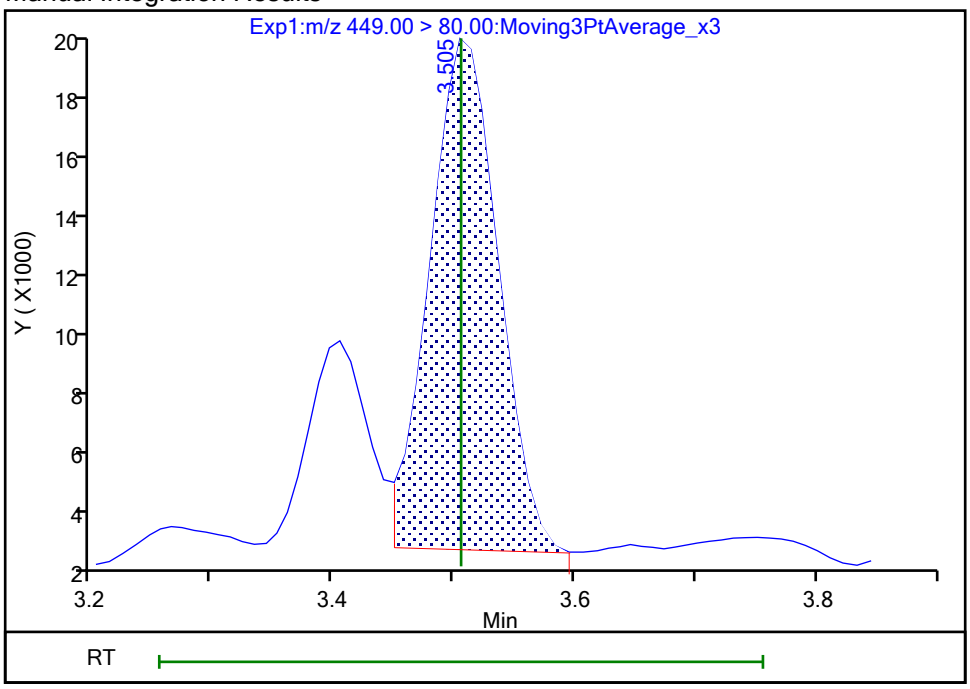
Processing Integration Results

RT: 3.50
Area: 66725
Amount: 0.071501
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 63189
Amount: 0.067712
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

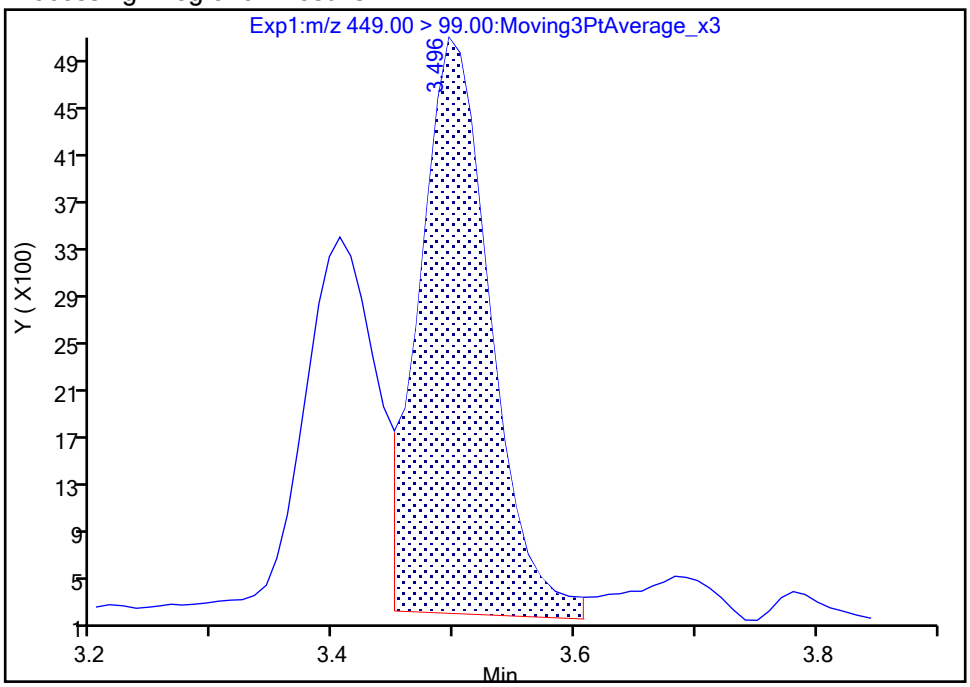
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

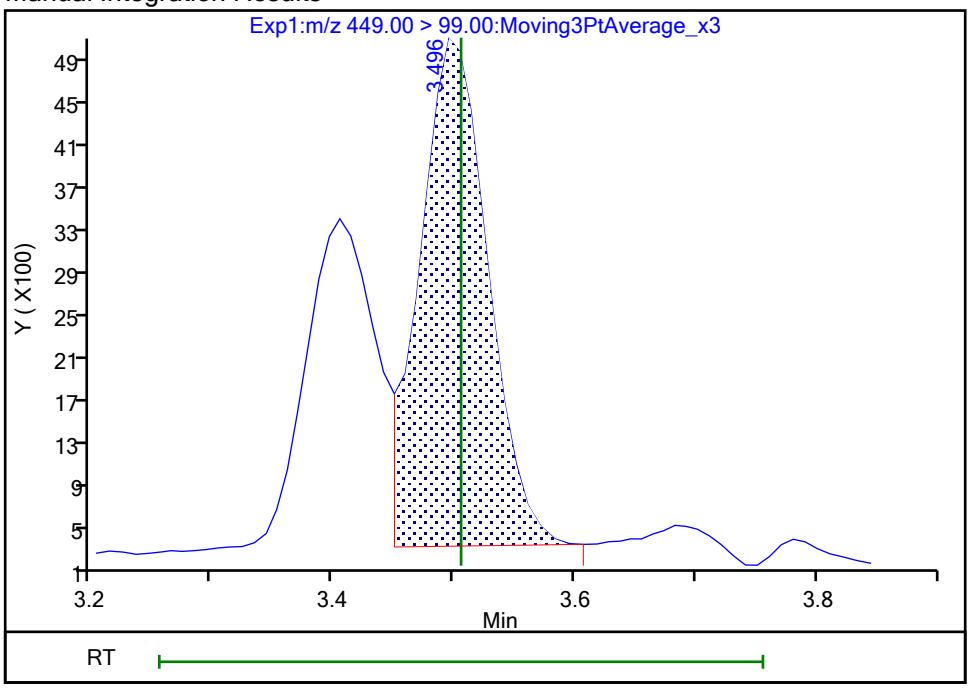
Processing Integration Results

RT: 3.50
Area: 19705
Amount: 0.071501
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 18340
Amount: 0.067712
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

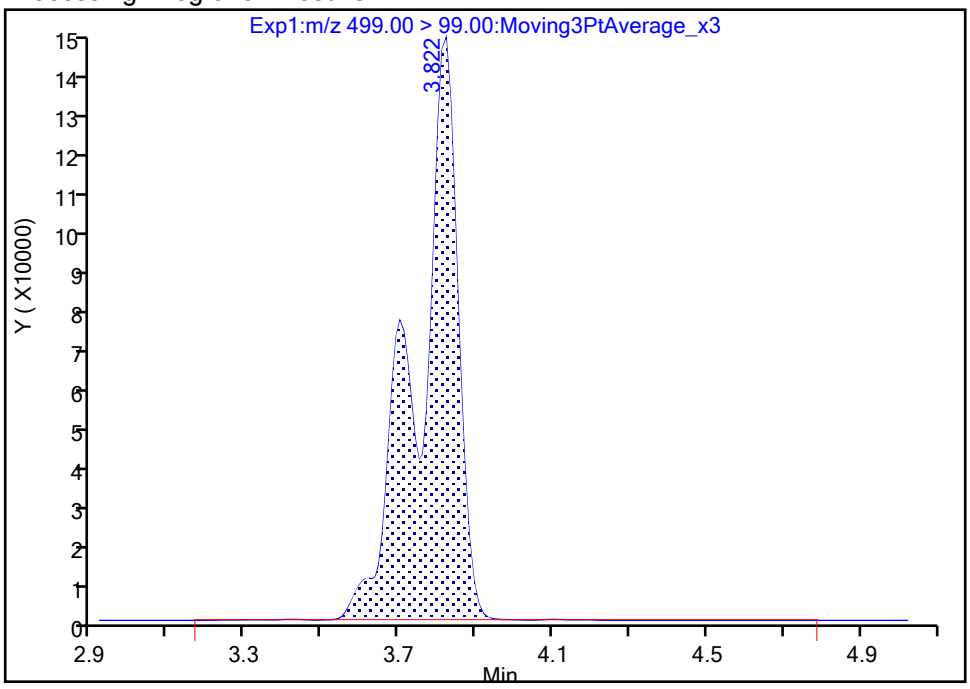
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

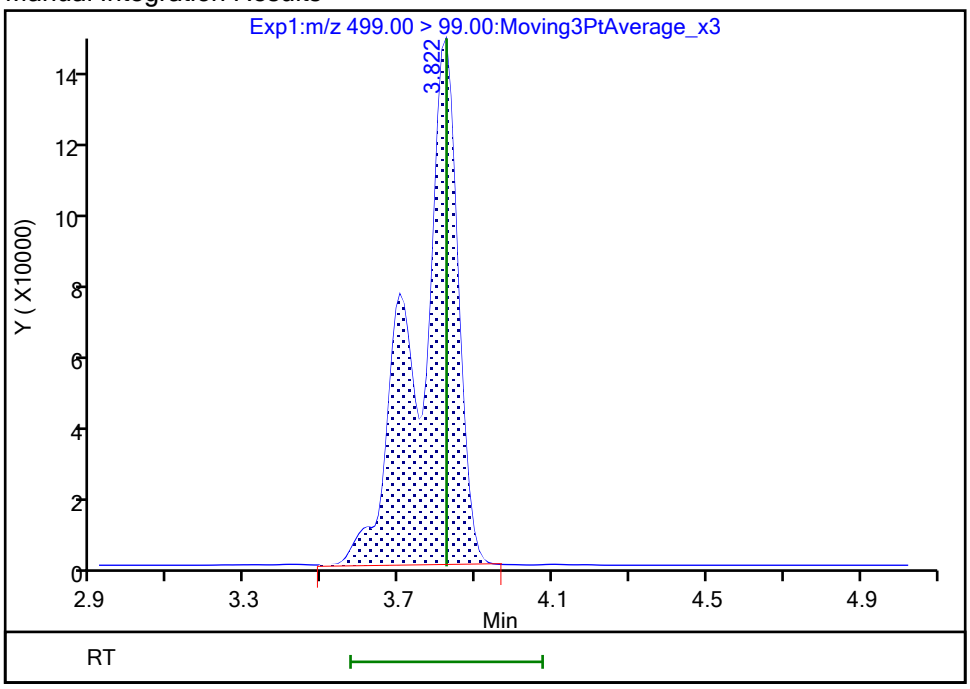
Processing Integration Results

RT: 3.82
Area: 1084872
Amount: 4.505955
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1078406
Amount: 4.445900
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:29:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

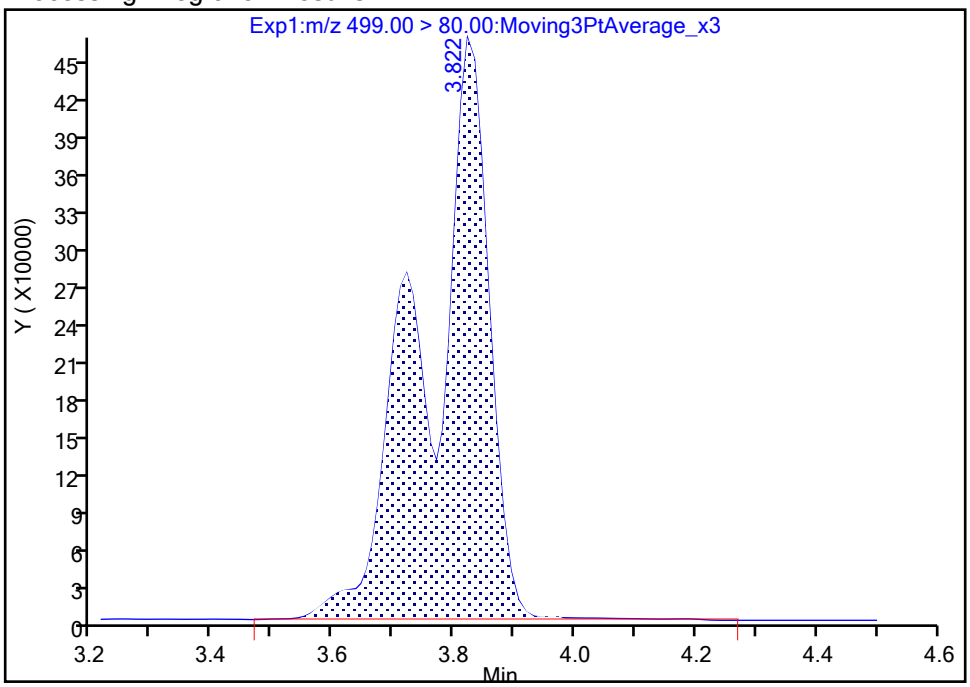
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

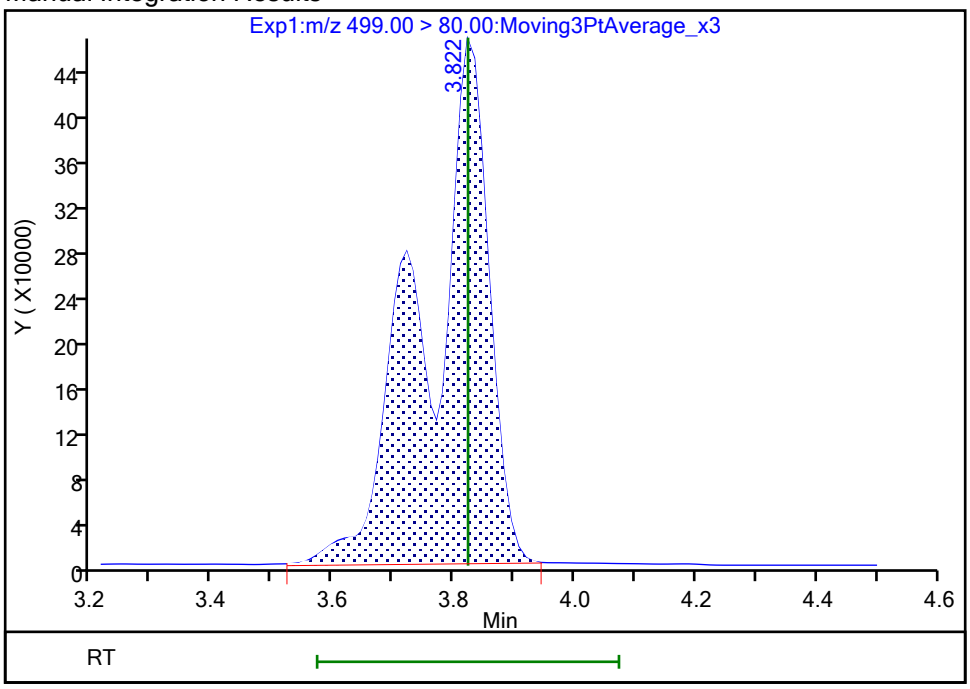
Processing Integration Results

RT: 3.82
Area: 3393806
Amount: 4.505955
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3348574
Amount: 4.445900
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:29:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

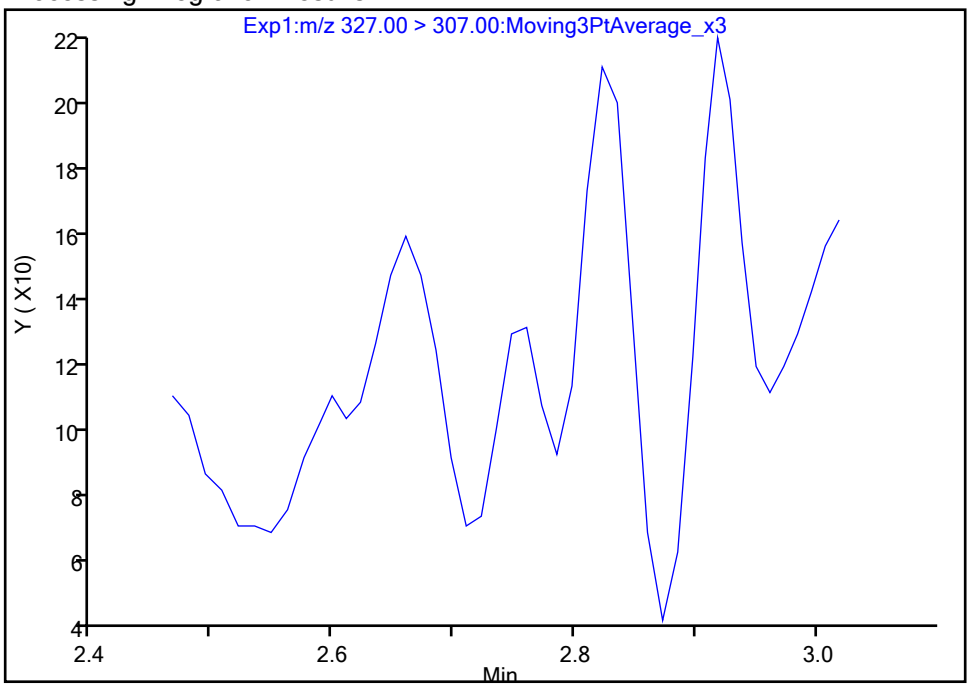
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

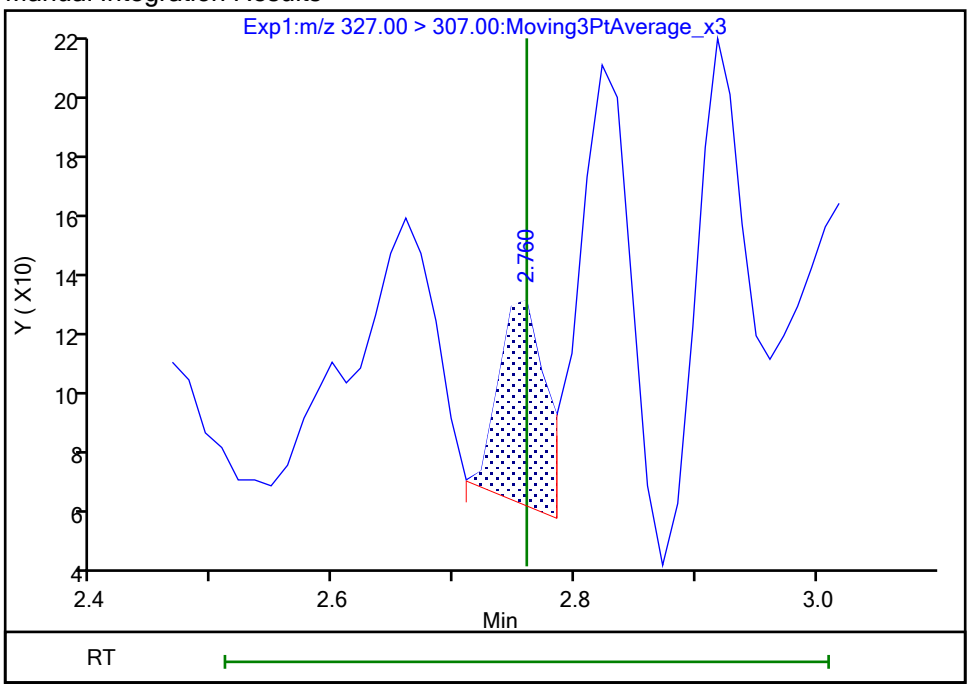
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 180
Amount: 0.000321
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:27:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

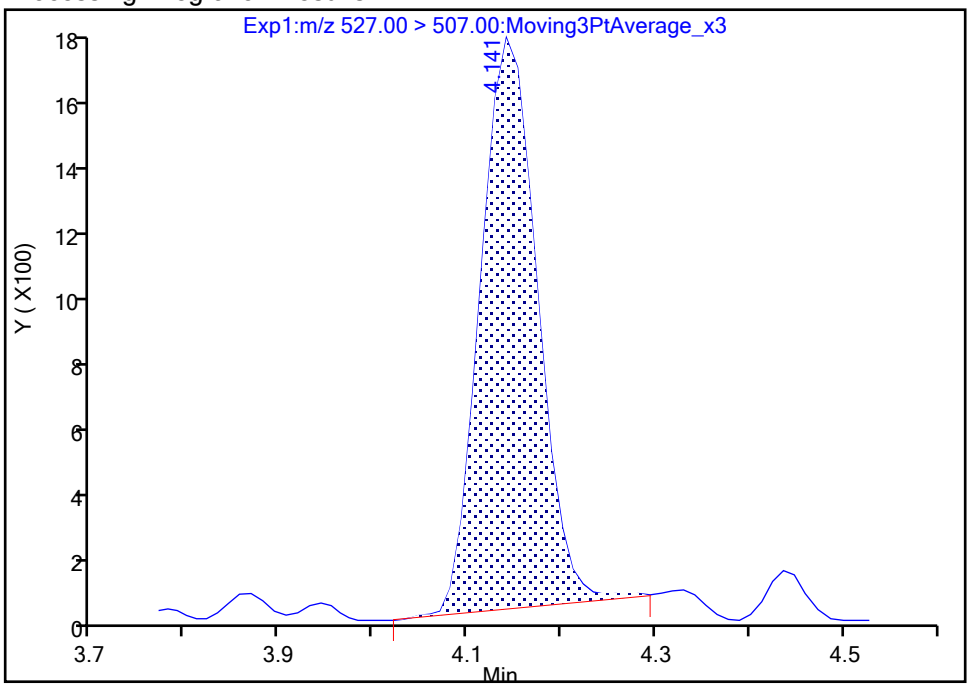
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

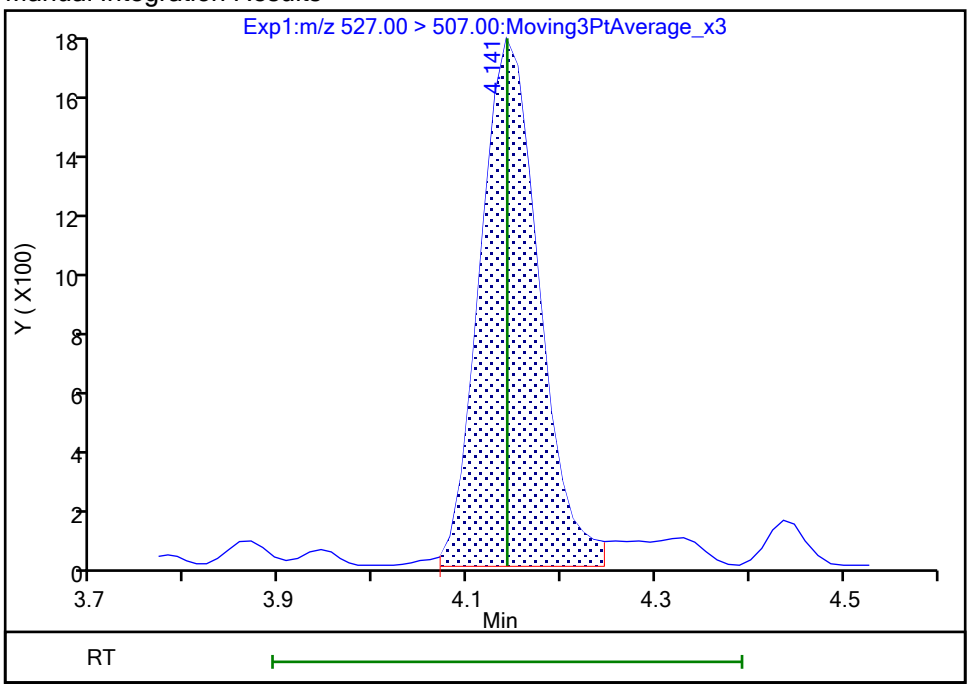
Processing Integration Results

RT: 4.14
Area: 7359
Amount: 0.014826
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 7726
Amount: 0.015565
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:30:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

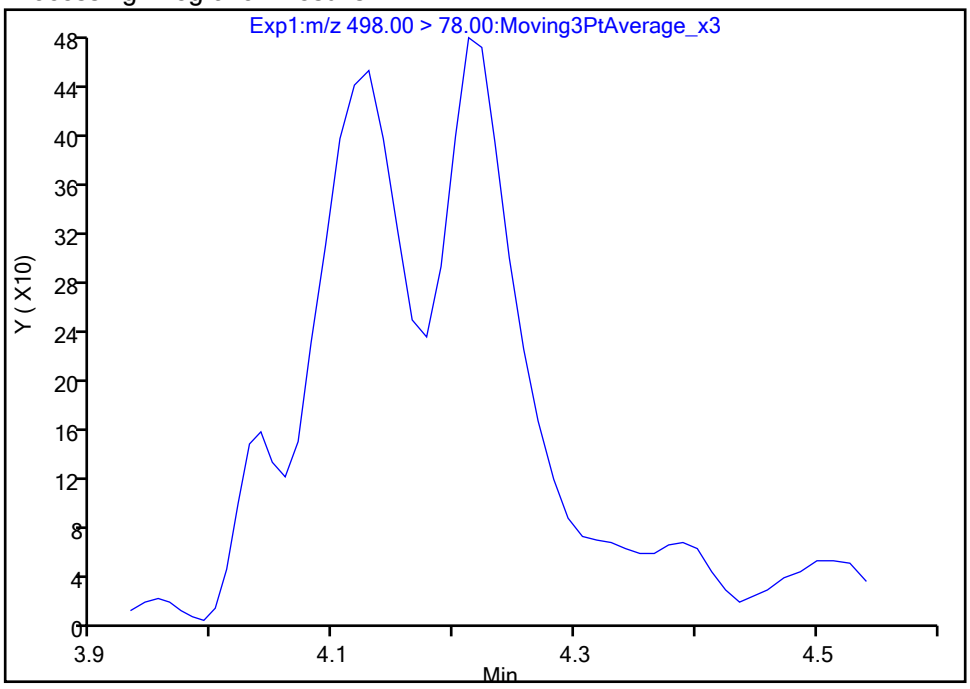
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

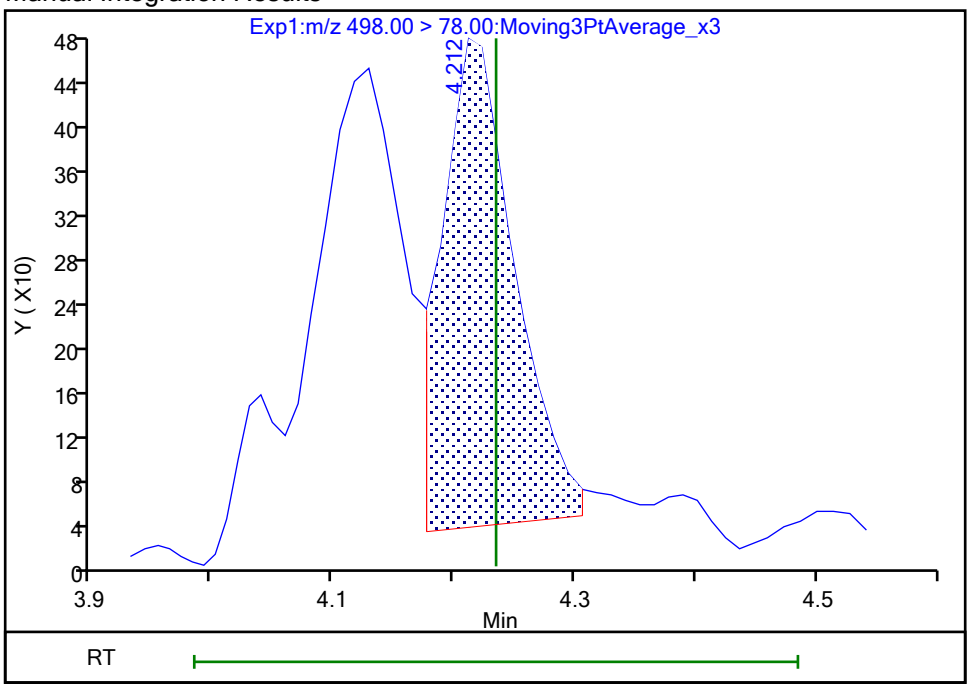
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 1821
Amount: 0.001822
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:30:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

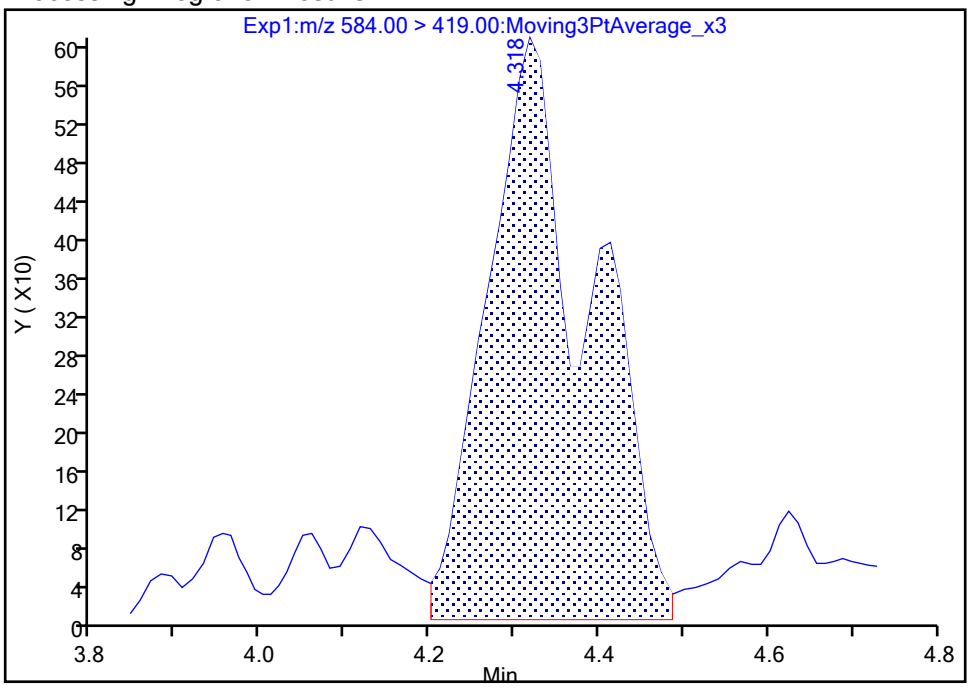
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

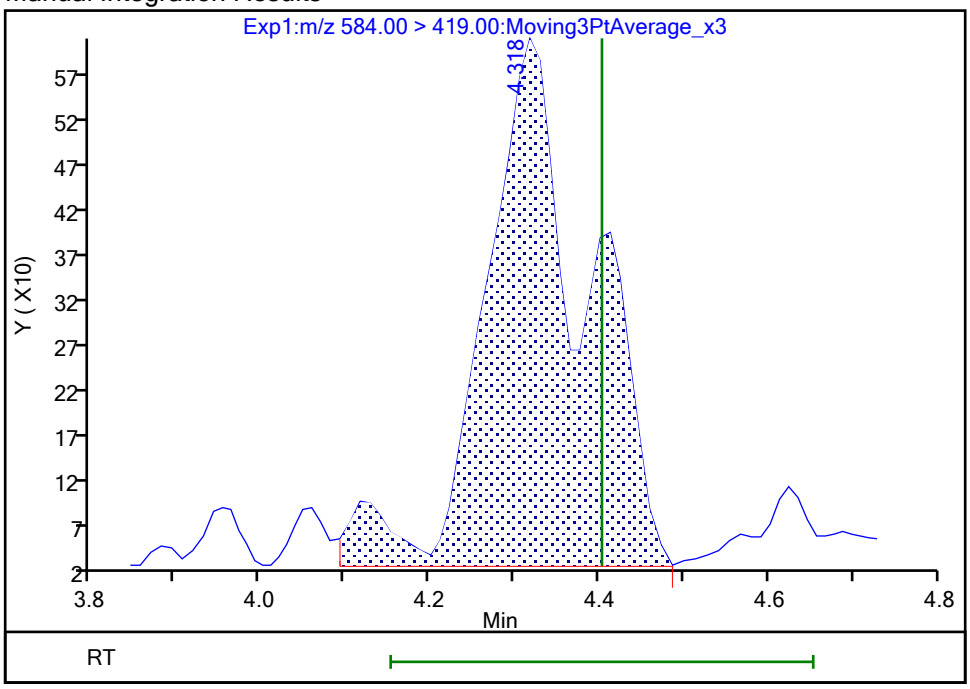
Processing Integration Results

RT: 4.32
Area: 5111
Amount: 0.014565
Amount Units: ng/ml



Manual Integration Results

RT: 4.32
Area: 4909
Amount: 0.013990
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:30:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

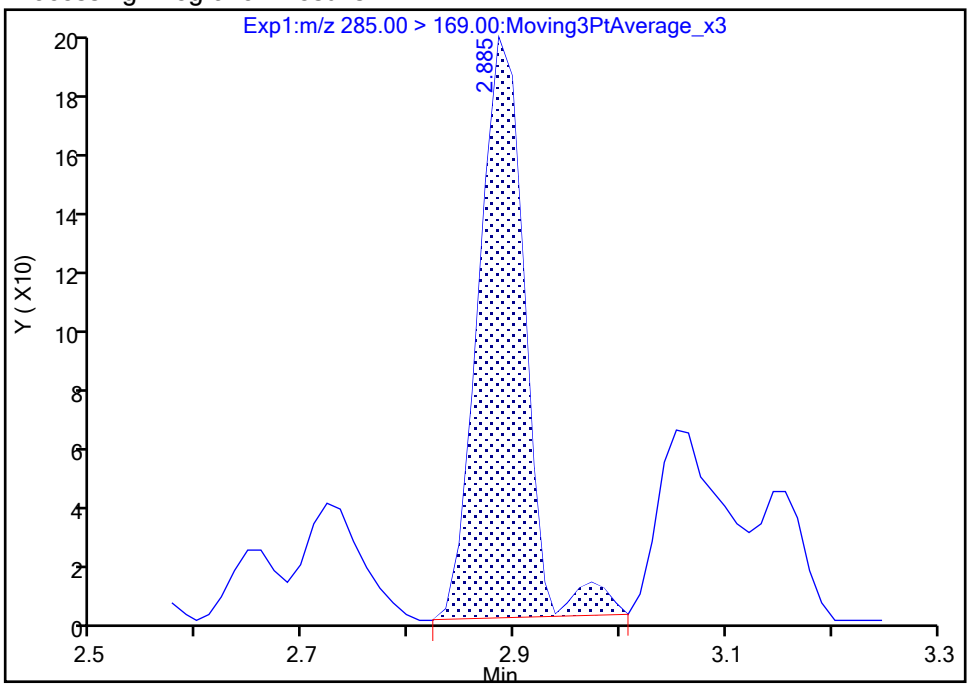
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

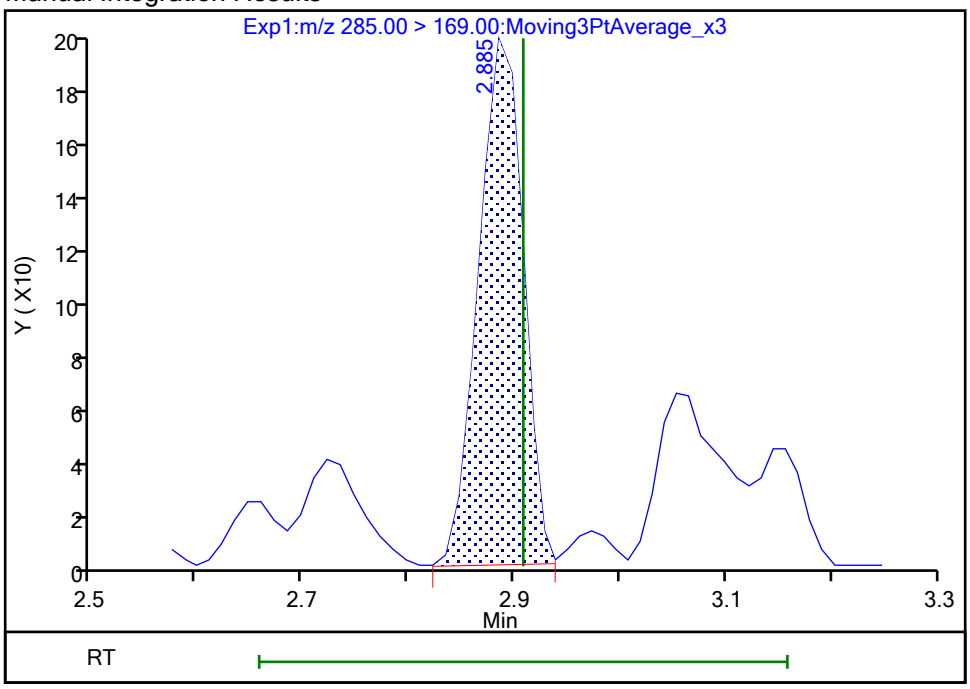
Processing Integration Results

RT: 2.89
Area: 609
Amount: 0.002580
Amount Units: ng/ml



Manual Integration Results

RT: 2.89
Area: 583
Amount: 0.002470
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:28:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

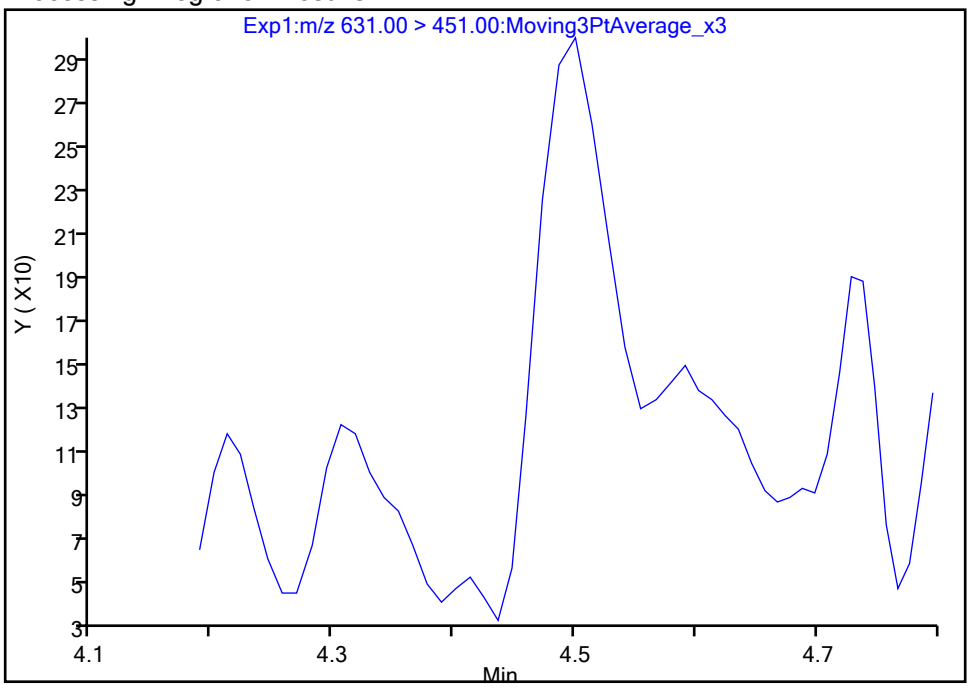
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

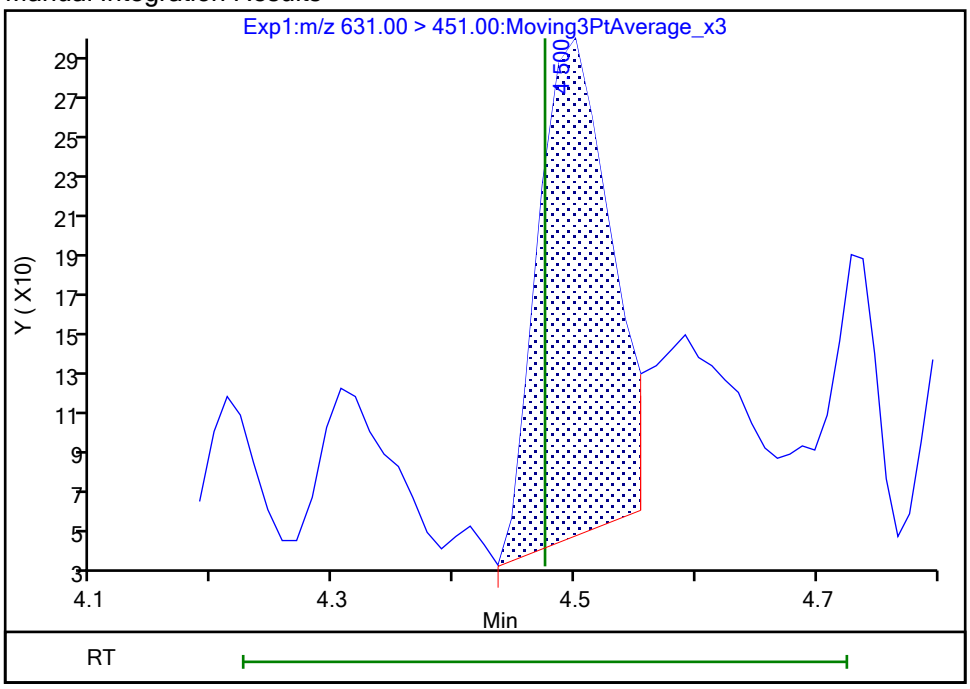
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.50
Area: 998
Amount: 0.000282
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:31:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

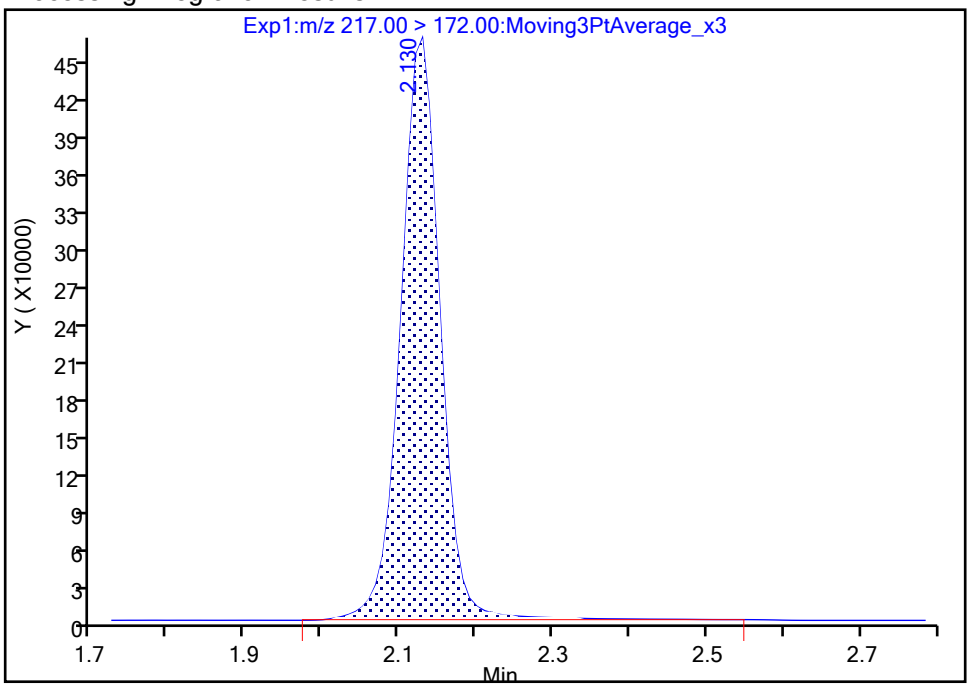
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

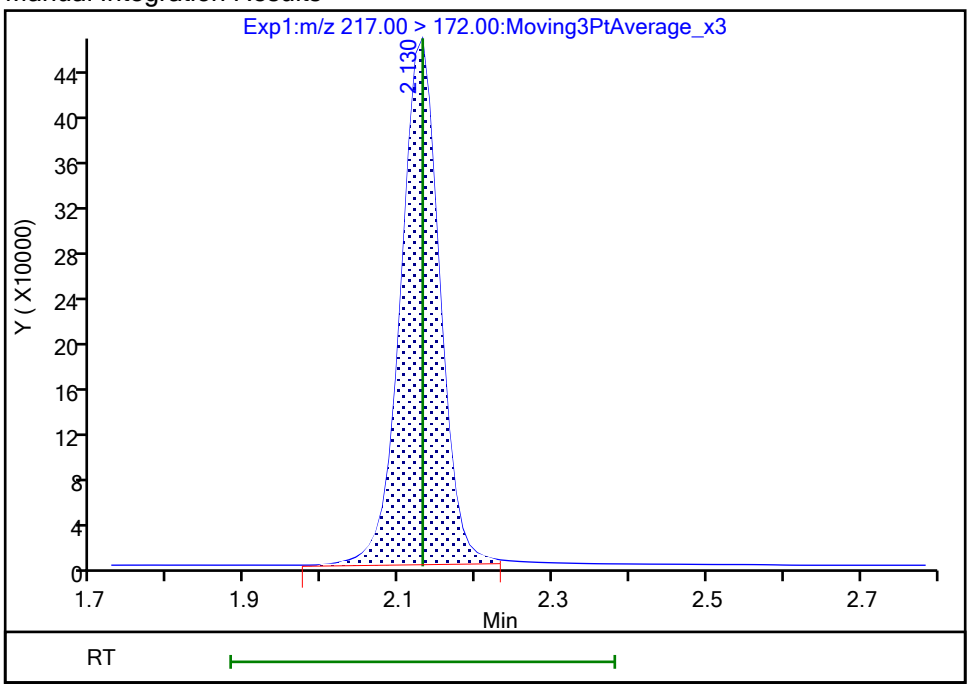
Processing Integration Results

RT: 2.13
Area: 1640618
Amount: 1.030588
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1620522
Amount: 1.017964
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

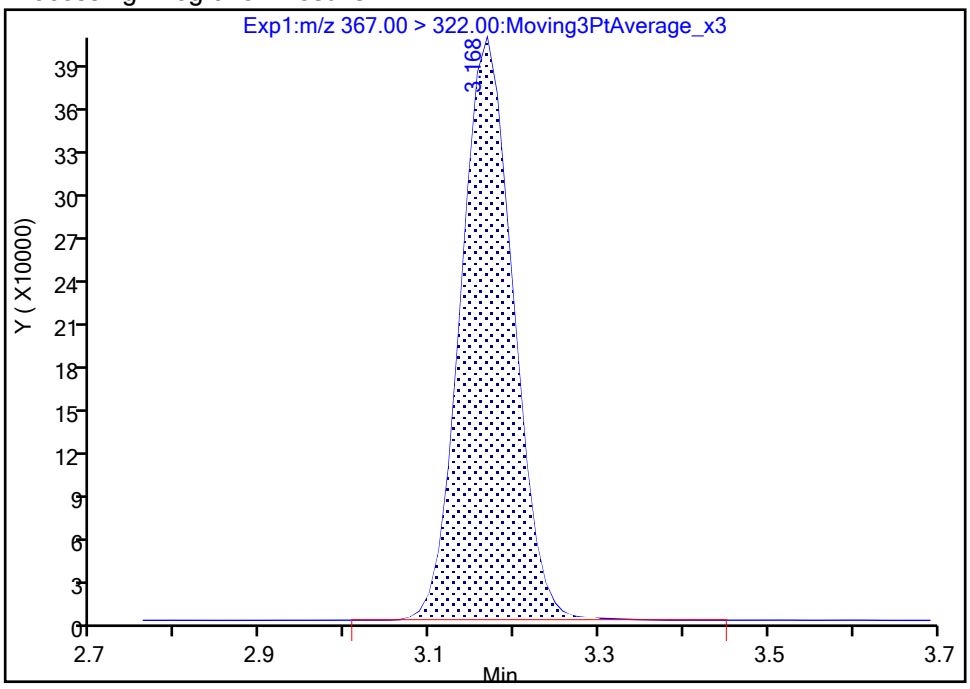
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 9 13C4 PFHpA, CAS: STL01892

Signal: 1

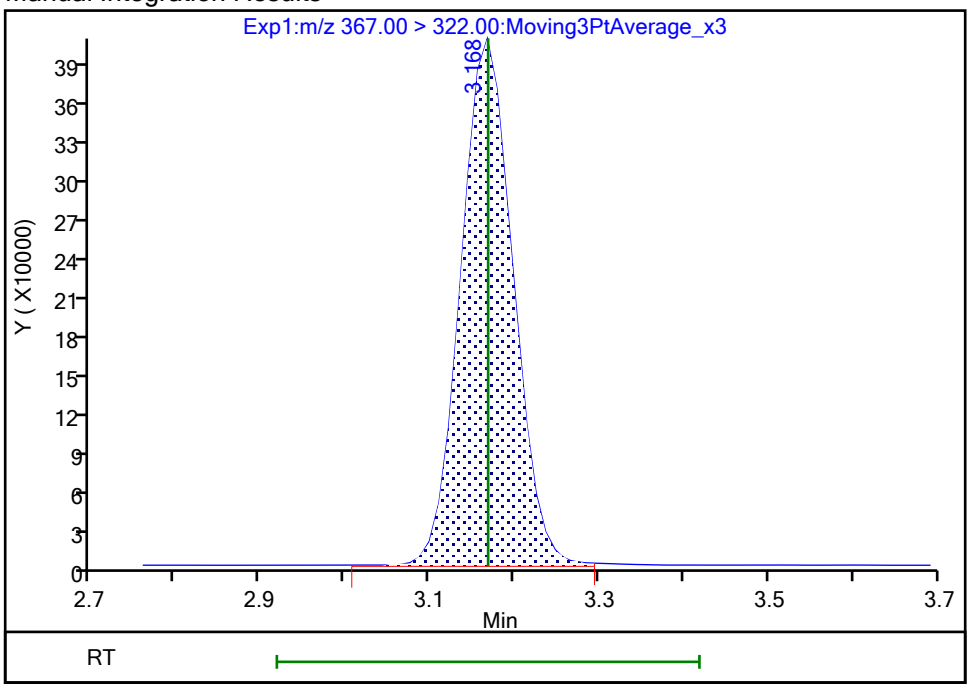
Processing Integration Results

RT: 3.17
Area: 1729610
Amount: 1.254349
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1726253
Amount: 1.251915
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

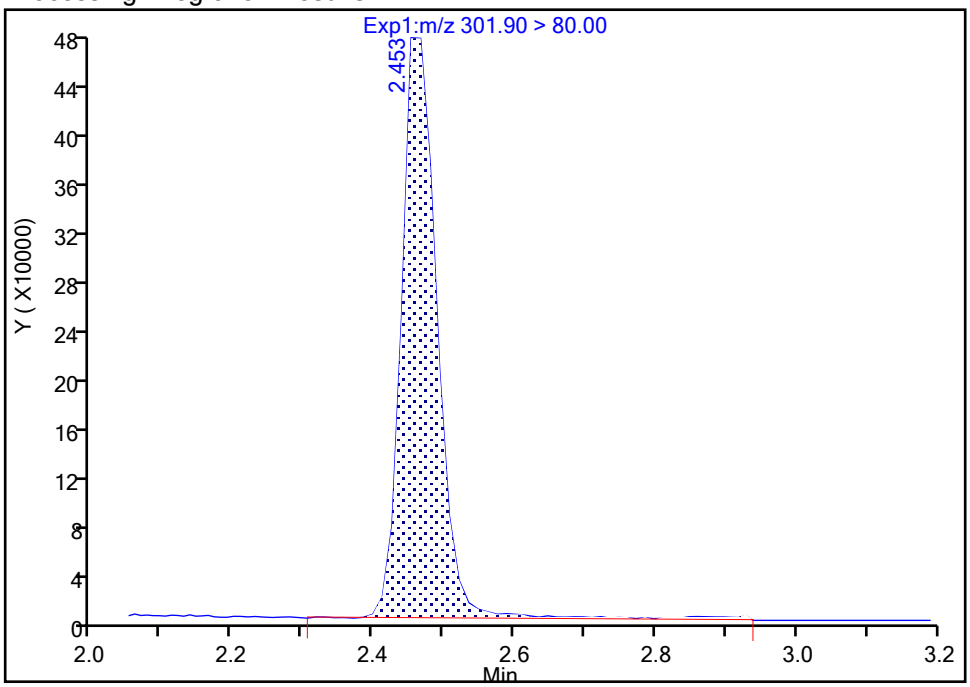
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

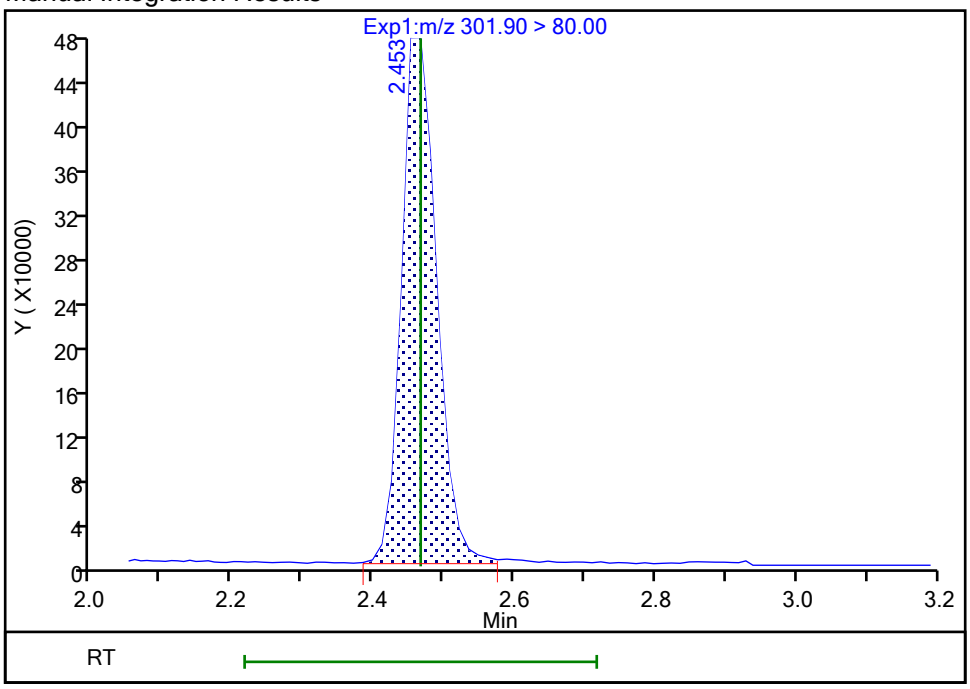
Processing Integration Results

RT: 2.45
Area: 1678549
Amount: 1.004114
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1611851
Amount: 0.964215
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

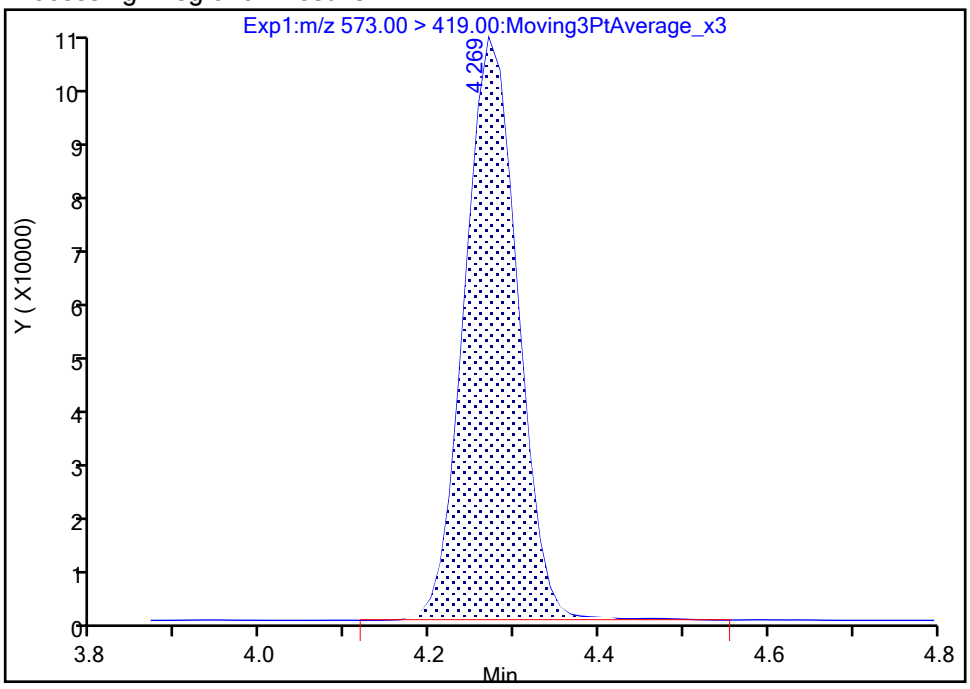
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

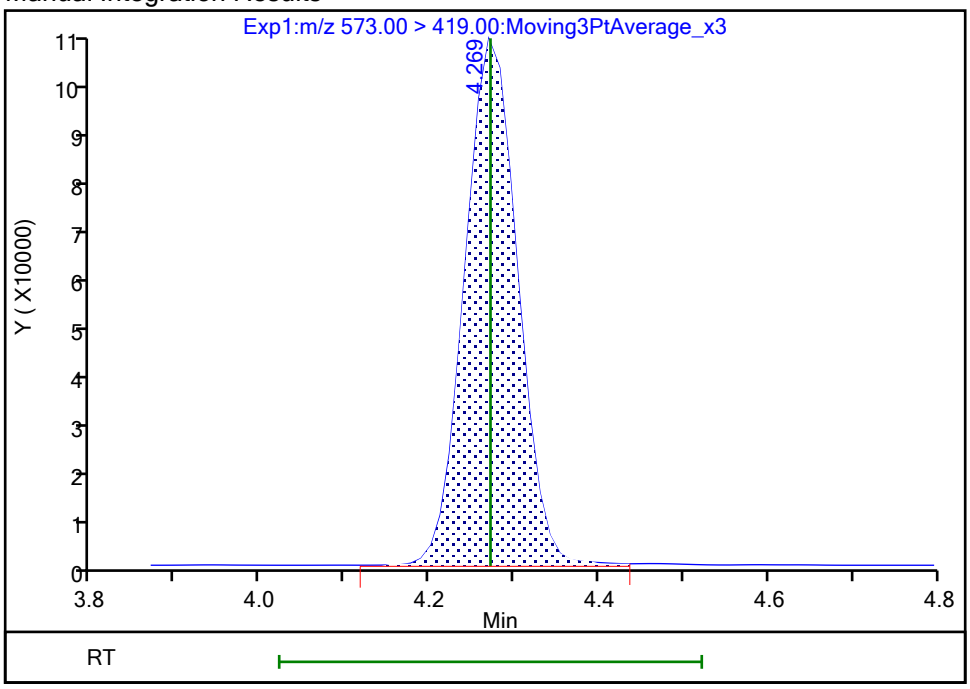
Processing Integration Results

RT: 4.27
Area: 451948
Amount: 1.062340
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 450840
Amount: 1.059735
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

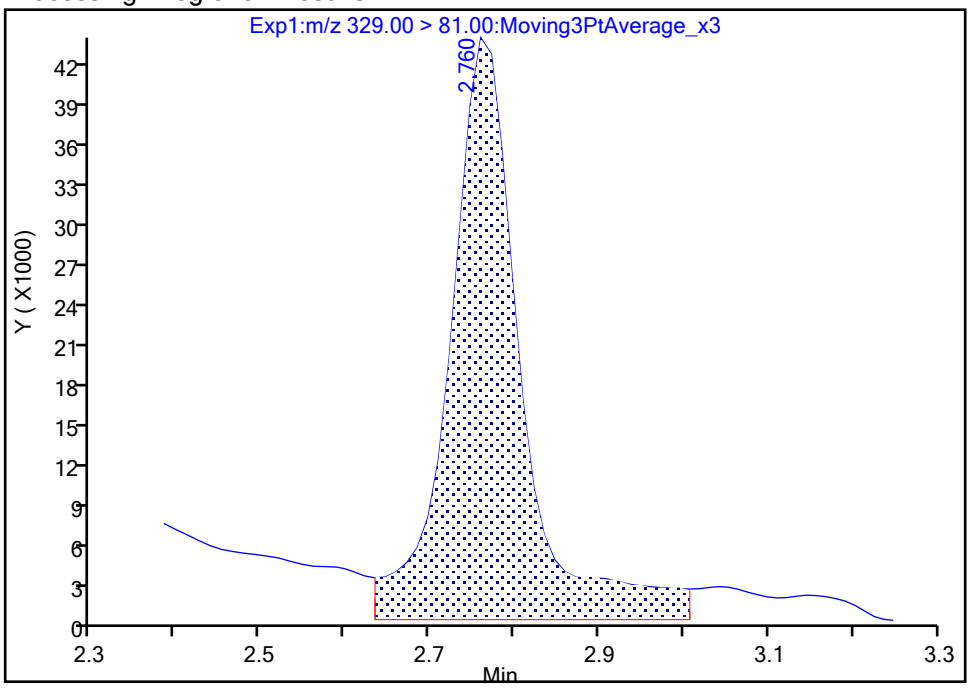
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

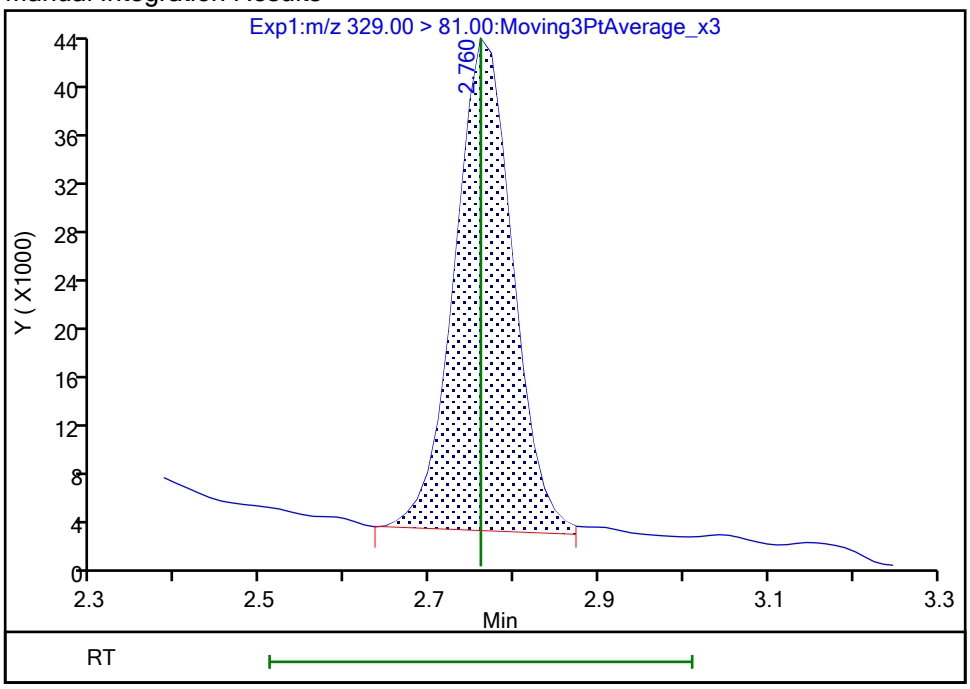
Processing Integration Results

RT: 2.76
Area: 256318
Amount: 1.325852
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 193038
Amount: 0.998525
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

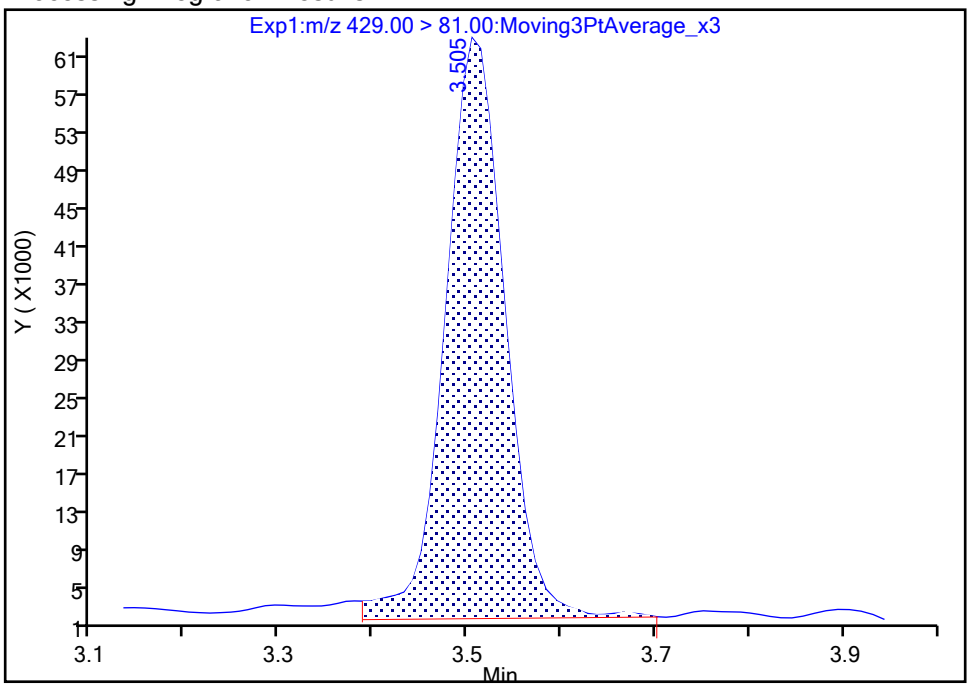
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

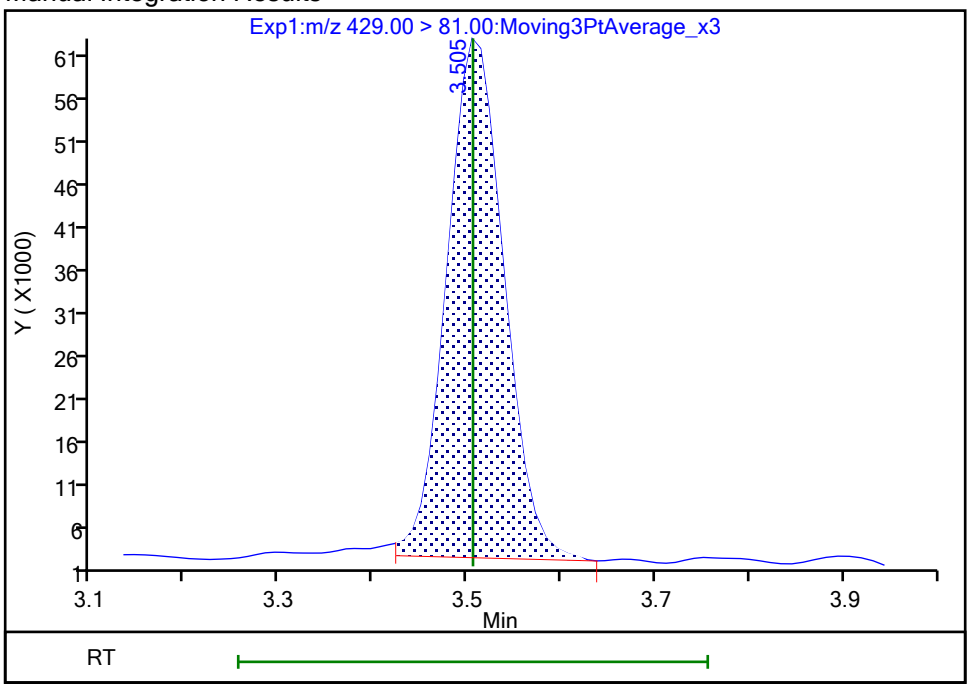
Processing Integration Results

RT: 3.50
Area: 269731
Amount: 1.083290
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 254105
Amount: 1.020533
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

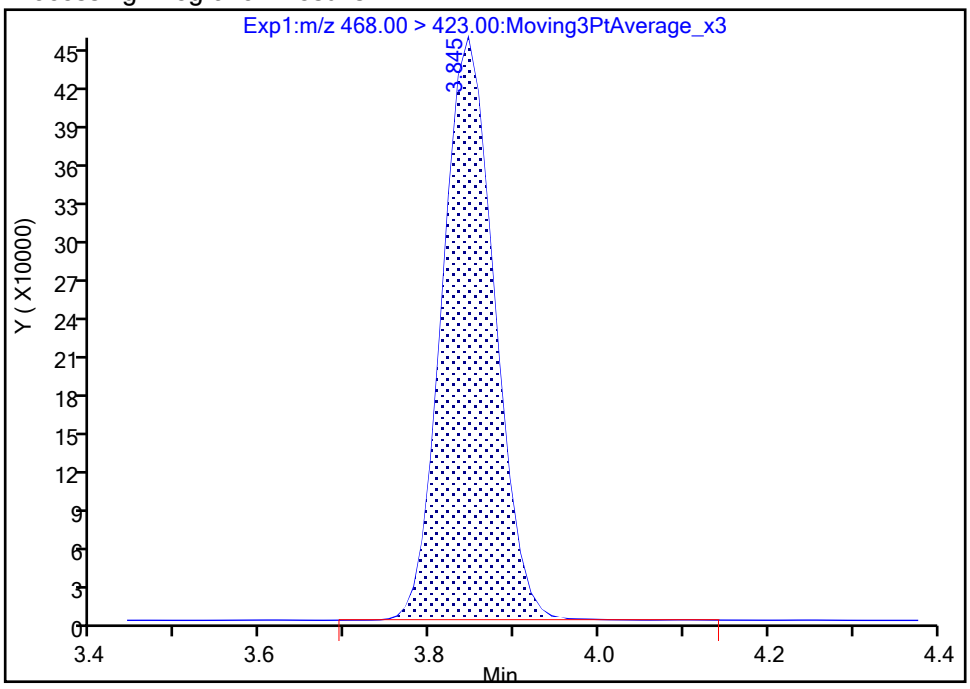
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D20.d				
Injection Date:	21-Oct-2023 06:25:10	Instrument ID:	LC812		
Lims ID:	460-290219-A-1-A	Lab Sample ID:	200-290219-1		
Client ID:	MW90AR-101223-0927-95				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 19 13C5 PFNA, CAS: STL00995

Signal: 1

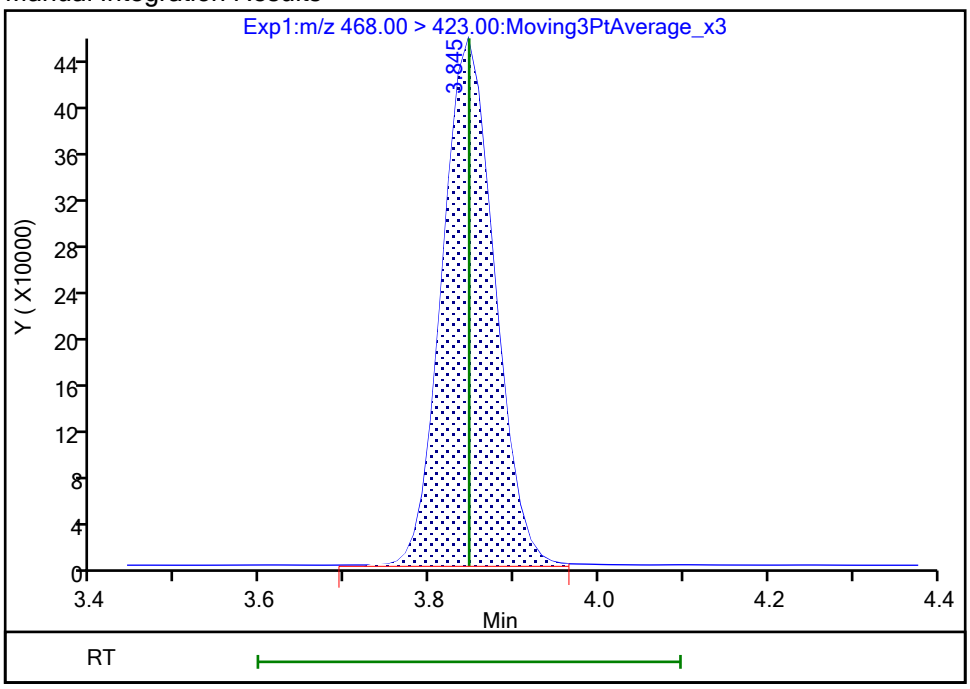
Processing Integration Results

RT: 3.85
Area: 1934027
Amount: 1.137697
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 1930873
Amount: 1.135841
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:26:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90R-101223-1030-26 | Lab Sample ID: 460-290219-2

Matrix: Water | Lab File ID: PA231020D23.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 10:30

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 293.9(mL) | Date Analyzed: 10/21/2023 06:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	57.5		4.25	1.02
2706-90-3	Perfluoropentanoic acid	84.1		1.70	0.58
307-24-4	Perfluorohexanoic acid	54.3		1.70	0.55
375-85-9	Perfluoroheptanoic acid	25.3		1.70	0.46
335-67-1	Perfluorooctanoic acid	16.3		1.70	0.65
375-95-1	Perfluorononanoic acid	3.04		1.70	0.42
335-76-2	Perfluorodecanoic acid	0.76	J	1.70	0.39
2058-94-8	Perfluoroundecanoic acid	1.70	U	1.70	0.47
307-55-1	Perfluorododecanoic acid	1.70	U	1.70	0.42
72629-94-8	Perfluorotridecanoic acid	1.70	U	1.70	0.41
376-06-7	Perfluorotetradecanoic acid	1.70	U	1.70	0.54
375-73-5	Perfluorobutanesulfonic acid	17.9		1.70	0.53
2706-91-4	Perfluoropentanesulfonic acid	16.9		1.70	0.43
355-46-4	Perfluorohexanesulfonic acid	85.2		1.70	0.47
375-92-8	Perfluoroheptanesulfonic acid	2.74		1.70	0.35
1763-23-1	Perfluorooctanesulfonic acid	150		1.70	0.72
68259-12-1	Perfluorononanesulfonic acid	1.70	U	1.70	0.34
335-77-3	Perfluorodecanesulfonic acid	1.70	U	1.70	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	7.35		4.25	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	0.91	J	1.70	0.65
754-91-6	Perfluorooctanesulfonamide	1.70	U	1.70	0.78
2355-31-9	NMeFOSAA	4.25	U	4.25	1.62
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.25	U	4.25	1.36
13252-13-6	HFPODA	3.40	U	3.40	0.94
919005-14-4	DONA	1.70	U	1.70	0.36
756426-58-1	9Cl-PF3ONS	1.70	U	1.70	0.27
763051-92-9	11Cl-PF3OUdS	1.70	U	1.70	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90R-101223-1030-26 Lab Sample ID: 460-290219-2

Matrix: Water Lab File ID: PA231020D23.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 10:30

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 293.9(mL) Date Analyzed: 10/21/2023 06:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	96		50-150
STL01893	13C5 PFPeA	94		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	84		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	88		50-150
STL02117	d5-NEtFOSAA	92		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	90		50-150
STL02280	M2-8:2 FTS	84		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	94		50-150
STL00993	13C2 PFHxA	101		50-150
STL00991	13C4 PFOS	92		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	90		50-150
STL00990	13C4 PFOA	104		50-150
STL00997	13C2 PFUnA	91		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d
Lims ID: 460-290219-A-2-A
Client ID: MW90R-101223-1030-26
Sample Type: Client
Inject. Date: 21-Oct-2023 06:49:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-2-A
Misc. Info.: 200-0057494-023 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 16:40:54
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	2000429	1.21		96.4	1372	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.004	2503549	1.69			193	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.440	2.439	0.001	0.695	1513794	1.18		94.0	1152	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.440	2.439	0.001	1.000	3230203	2.47			40.9	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.698	1818576	1.04		89.8	35384	M
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.006	918986	0.5260	Target=2.06		70.0	
298.90 > 99.00	2.467	2.467	0.0	1.006	488779		1.88(1.03-3.09)		86.4	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.748	2.760	-0.012	0.995	894	0.001471			4.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	209008	1.04		88.8	33.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.798	0.0	0.797	1652907	1.26		101	7063	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.798	0.0	1.000	2320905	1.59	Target=14.12		108	M
313.00 > 119.00	2.798	2.798	0.0	1.000	153025		15.17(7.06-21.17)		127	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.798	2.798	0.0	0.887	759964	0.4965	Target=2.72		105	M
349.00 > 99.00	2.798	2.798	0.0	0.887	275003		2.76(1.36-4.09)		89.9	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	1792	0.007362			9.3	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	303919	1.20		95.9	1653	
D 11 18O2 PFHxS										
403.00 > 84.00	3.155	3.157	-0.002	0.898	1386007	1.11		93.8	8596	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.155	3.157	-0.002	1.000	3247158	2.50	Target=3.32		1041	M
399.00 > 99.00	3.155	3.157	-0.002	1.000	909432		3.57(1.66-4.98)		614	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.169	-0.003	1.000	1168991	0.7430	Target=4.17		94.6	M
363.00 > 169.00	3.166	3.169	-0.003	1.000	272753		4.29(2.09-6.26)		377	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.169	-0.003	0.901	1754689	1.22		97.7	4867	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.506	-0.003	0.917	84968	0.0804	Target=4.83		21.3	M
449.00 > 99.00	3.503	3.506	-0.003	0.917	20633		4.12(2.41-7.24)		27.6	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.506	-0.003	0.997	278760	1.07		90.4	222	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.506	-0.003	1.000	138650	0.2161			198	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.515	-0.003	1.000	2116260	1.30		104	7428	
* 62 13C2 PFOA										M
415.00 > 370.00	3.512	3.515	-0.003		2091672	1.25			6728	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.515	-0.003	1.000	863201	0.4787	Target=2.88		29.4	M
413.00 > 169.00	3.521	3.515	0.006	1.003	320503		2.69(1.44-4.32)		474	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.823	-0.003	1.000	3768543	4.42	Target=4.24		1692	M
499.00 > 99.00	3.820	3.823	-0.003	1.000	923841		4.08(2.12-6.37)		1385	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.823	-0.003	1.088	873635	1.10		92.1	1482	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.844	3.846	-0.002	1.000	153080	0.0894	Target=8.34		17.9	M
463.00 > 169.00	3.844	3.846	-0.002	1.000	17268		8.86(4.17-12.51)		57.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.846	-0.002	1.094	2182983	1.23		98.6	6004	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.982	3.975	0.007	1.042	1203	0.000461			3.9	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.091	4.106	-0.015	1.071	1309	0.002018	Target=2.17		1.7	M
549.00 > 99.00	4.091	4.106	-0.015	1.071	1131		1.16(1.08-3.25)		3.4	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.127	4.130	-0.003	1.000	36918	0.0222	Target=11.44		10.2	M
513.00 > 169.00	4.127	4.130	-0.003	1.000	4013		9.20(5.72-17.16)		16.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.127	4.130	-0.003	1.175	2078878	1.12		89.6	10346	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.142	-0.004	1.178	291861	1.00		83.5	548	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.142	-0.004	1.000	14347	0.0267			82.2	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.235	-0.003	1.205	1669657	1.05		84.4	7110	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.235	-0.003	1.000	11361	0.008917			13.6	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.271	-0.003	1.215	487436	1.10		87.9	1339	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.293	4.271	0.022	1.006	645	0.001823			2.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.380	0.008	1.249	1996345	1.14		91.2	10559	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.391	-0.003	1.000	10630	0.006458	Target=12.20		2.3	M
563.00 > 169.00	4.388	4.391	-0.003	1.000	713		14.91(6.10-18.31)		5.9	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.391	0.009	1.253	488867	1.14		91.6	866	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.412	4.403	0.009	1.003	1887	0.004824			5.4	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.475	-0.006	1.170	3729	0.000932			5.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.604	-0.004	1.310	2070010	1.16		93.0	8738	
D 43 13C2 PFTeDA										M
715.00 > 670.00	4.980	4.983	-0.003	1.418	1871791	1.06		84.5	3933	M
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.991	4.983	0.008	1.002	243	0.001451	Target=0.87		5.6	RM
713.00 > 219.00	4.980	4.983	-0.003	1.000	181		1.34(0.43-1.30)		4.6	M

QC Flag Legend

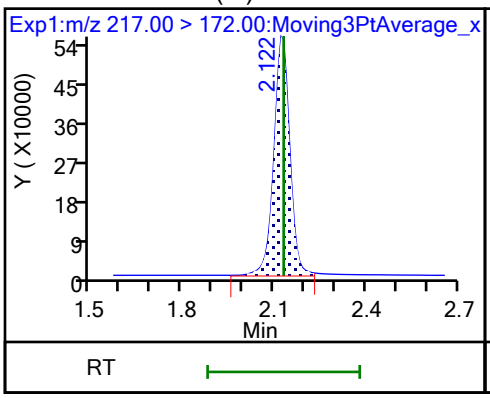
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 25-Oct-2023 09:08:48 Chrom Revision: 2.3 18-Oct-2023 21:16:54

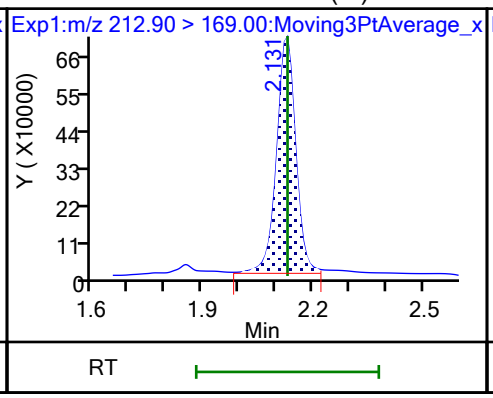
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d
Injection Date: 21-Oct-2023 06:49:42 Instrument ID: LC812
Lims ID: 460-290219-A-2-A Lab Sample ID: 200-290219-2
Client ID: MW90R-101223-1030-26
Operator ID: LC812user ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

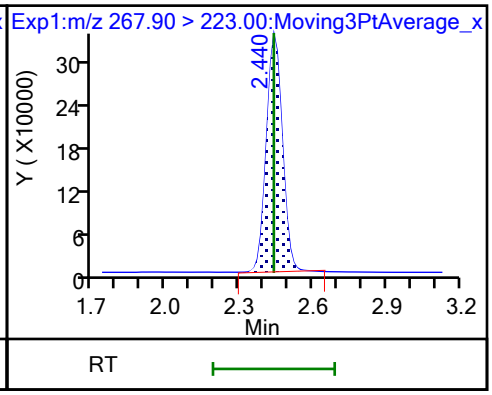
D 1 13C4 PFBA (M)



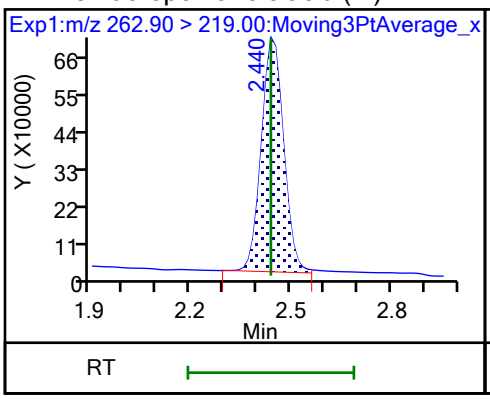
2 Perfluorobutanoic acid (M)



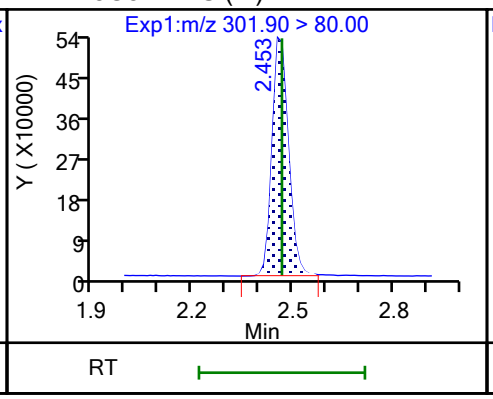
D 3 13C5 PFPeA



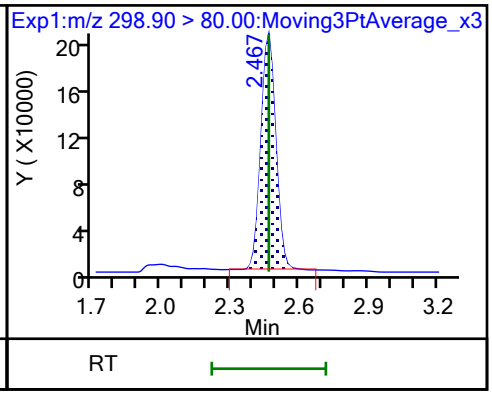
4 Perfluoropentanoic acid (M)



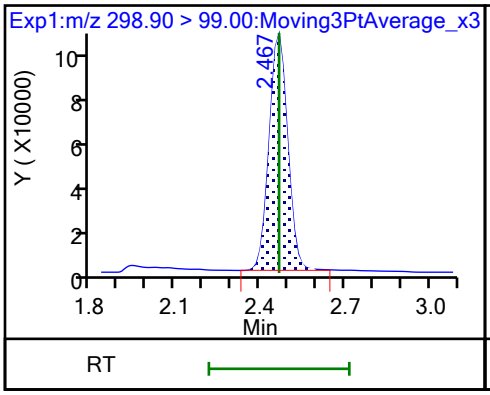
D 47 13C3 PFBS (M)



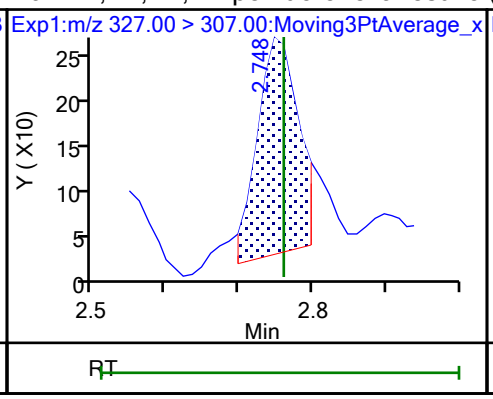
5 Perfluorobutanesulfonic acid



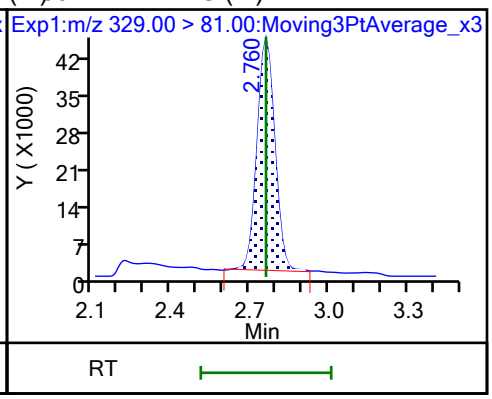
5 Perfluorobutanesulfonic acid



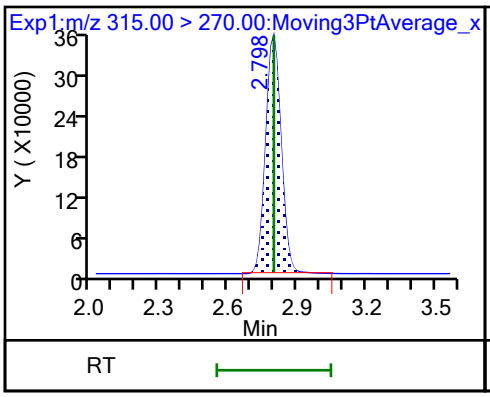
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



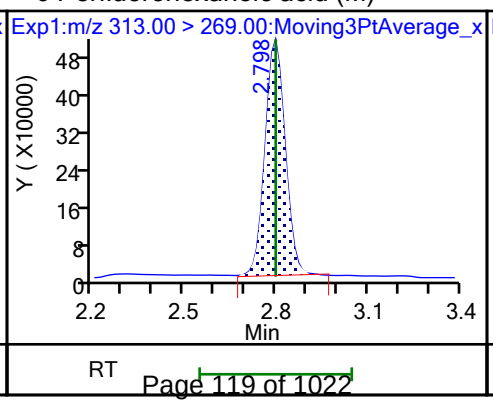
60 M2-4:2 FTS (M)



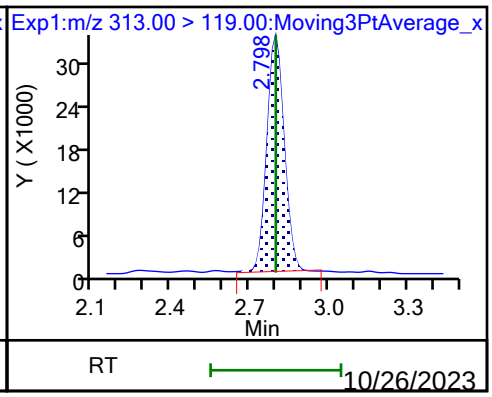
D 7 13C2 PFHxA



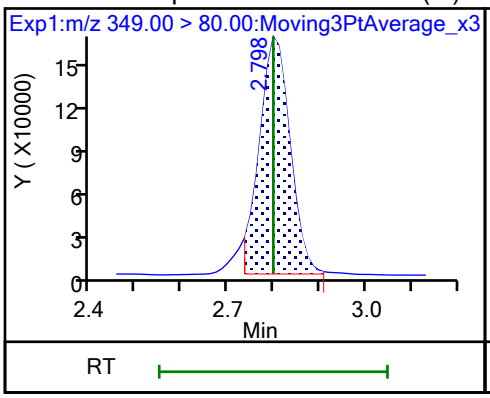
6 Perfluorohexanoic acid (M)



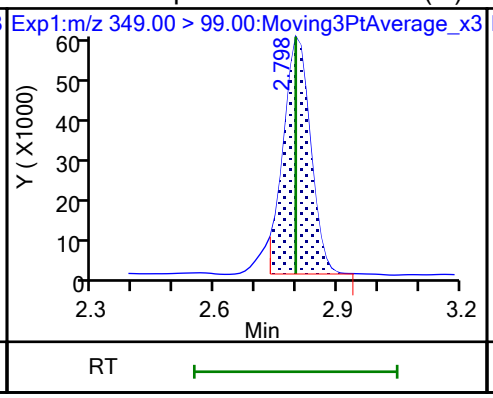
6 Perfluorohexanoic acid



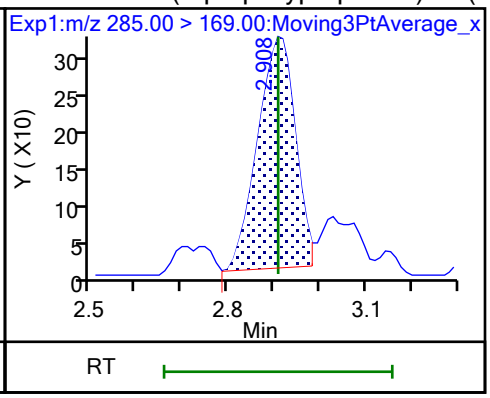
70 Perfluoropentanesulfonic acid (M)



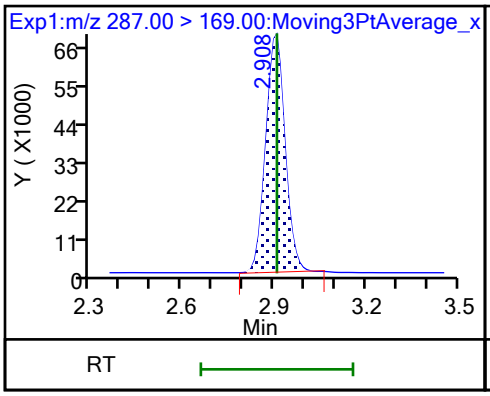
70 Perfluoropentanesulfonic acid (M)



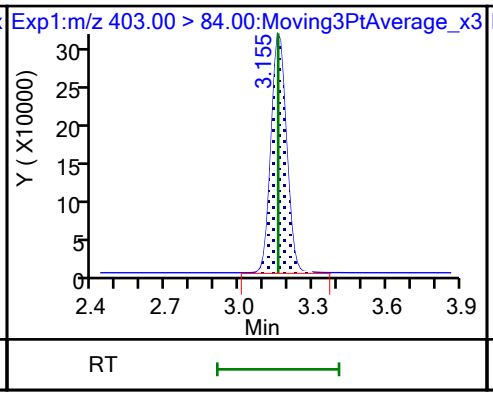
67 Perfluoro(2-propoxypropanoic) ac (M)



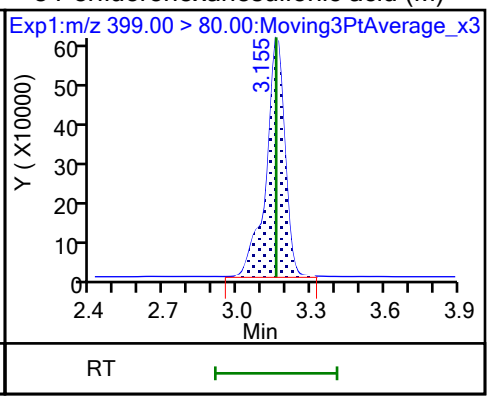
D 64 13C3 HFPO-DA



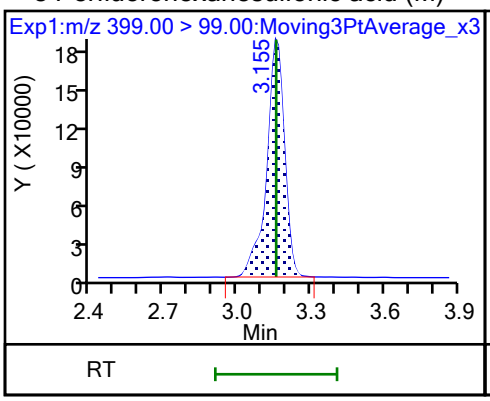
D 11 18O2 PFHxS



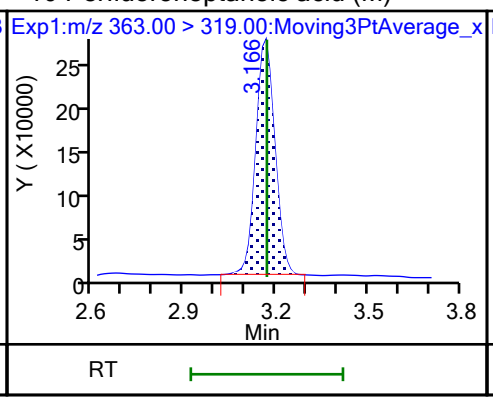
8 Perfluorohexanesulfonic acid (M)



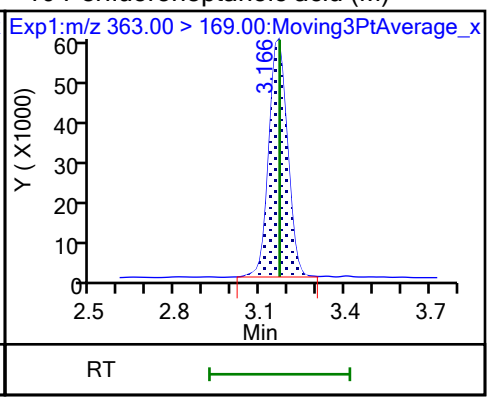
8 Perfluorohexanesulfonic acid (M)



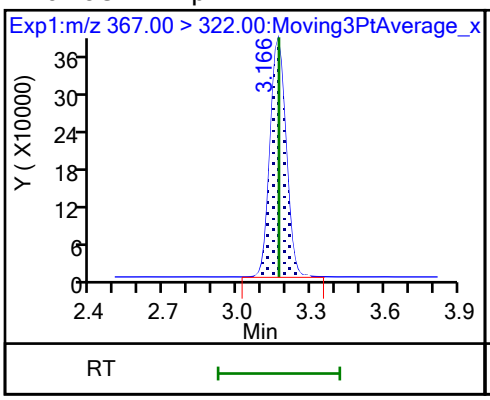
10 Perfluoroheptanoic acid (M)



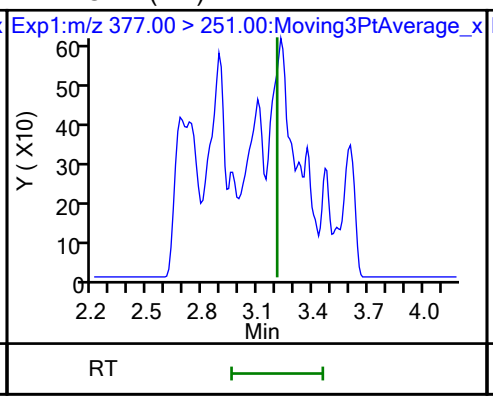
10 Perfluoroheptanoic acid (M)



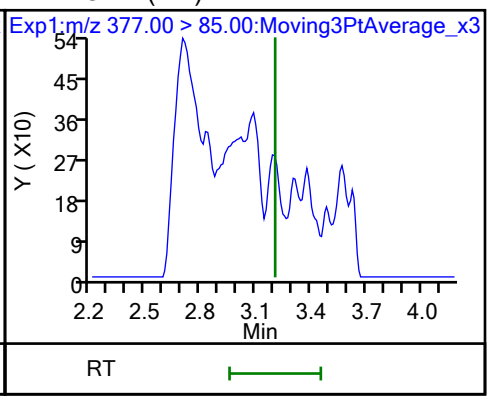
D 9 13C4 PFHpA



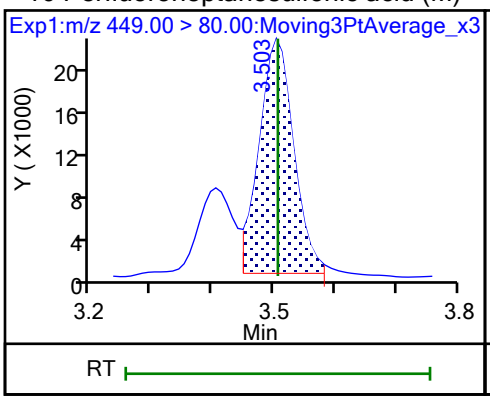
77 DONA (ND)



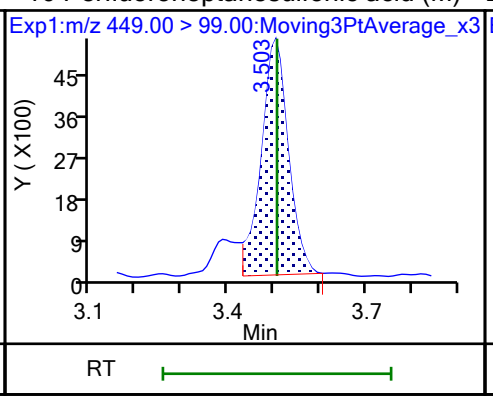
77 DONA (ND)



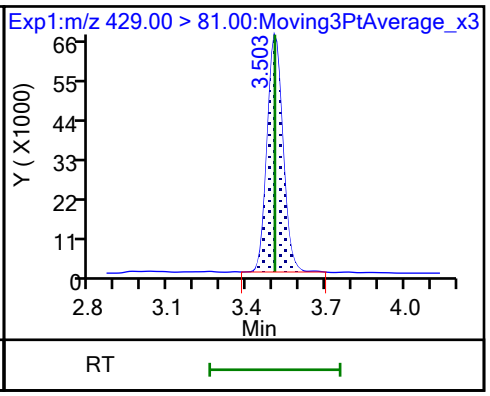
16 Perfluoroheptanesulfonic acid (M)



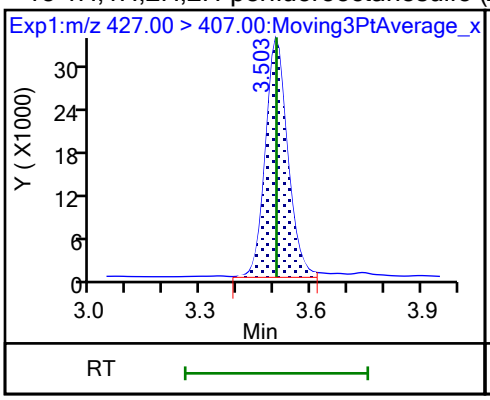
16 Perfluoroheptanesulfonic acid (M)



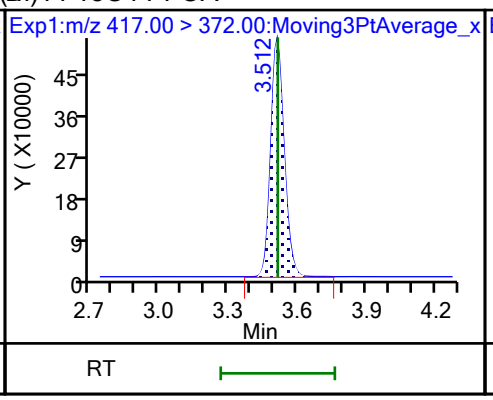
D 12 M2-6:2 FTS



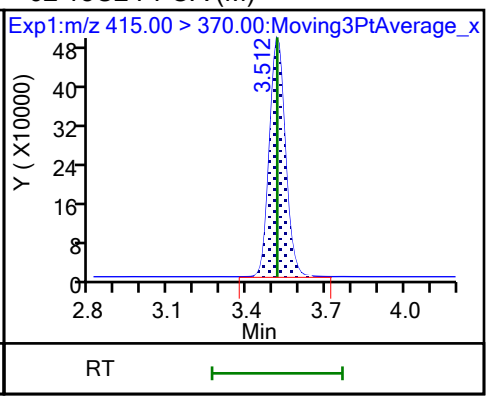
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



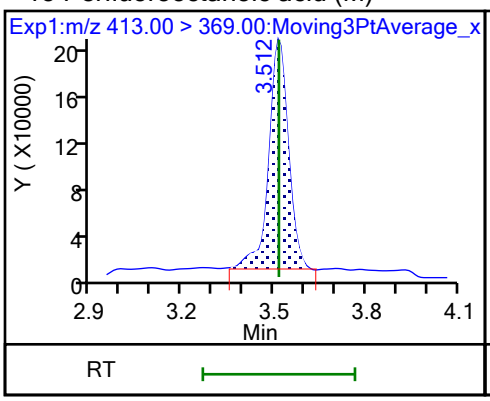
D 14 13C4 PFOA



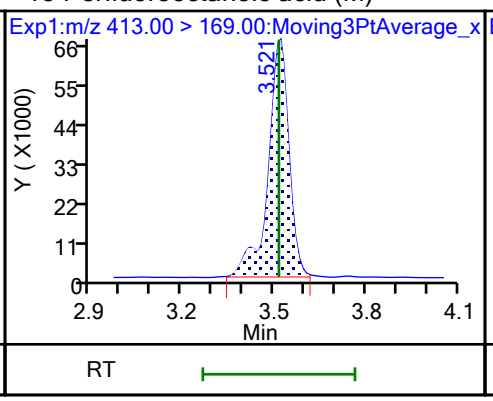
* 62 13C2 PFOA (M)



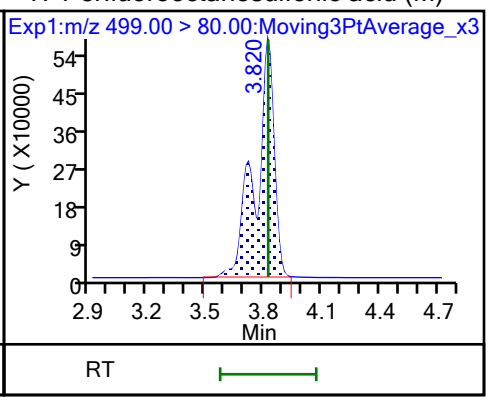
15 Perfluorooctanoic acid (M)



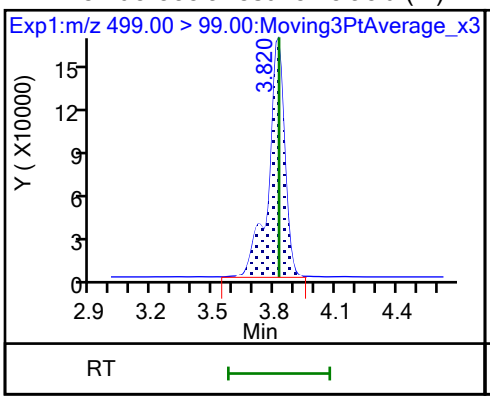
15 Perfluorooctanoic acid (M)



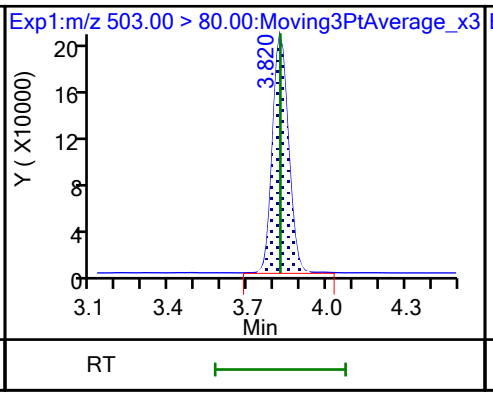
17 Perfluorooctanesulfonic acid (M)



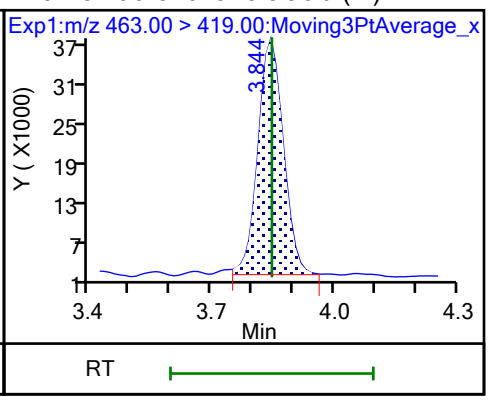
17 Perfluorooctanesulfonic acid (M)



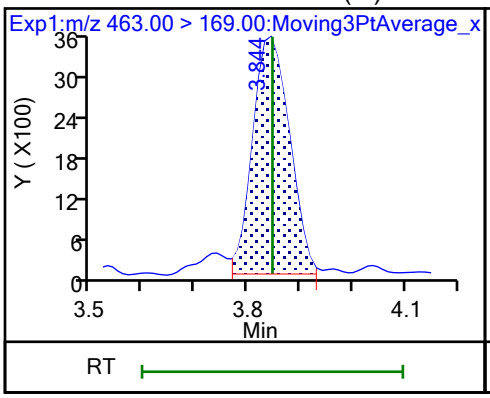
D 18 13C4 PFOS



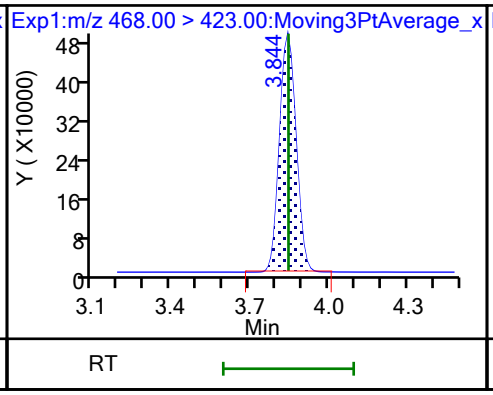
20 Perfluorononanoic acid (M)



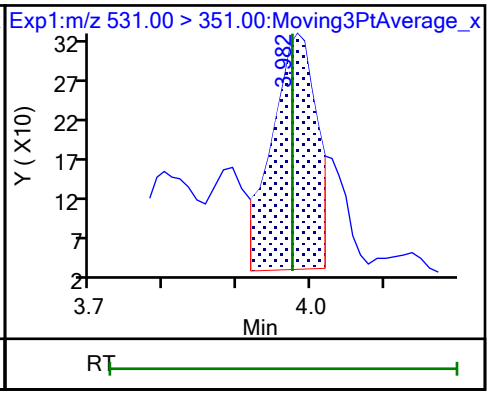
20 Perfluorononanoic acid (M)



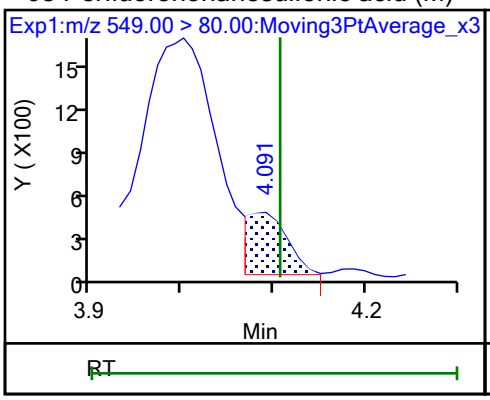
D 19 13C5 PFNA



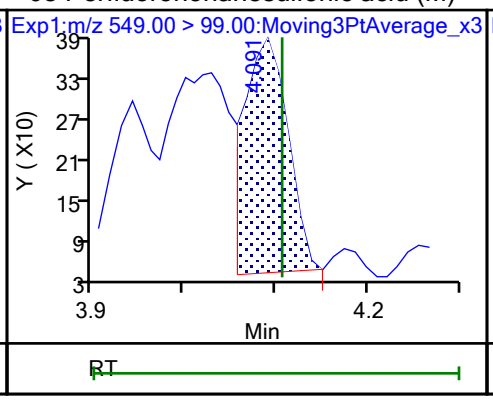
69 9-Chlorohexadecafluoro-3-oxanona (M)



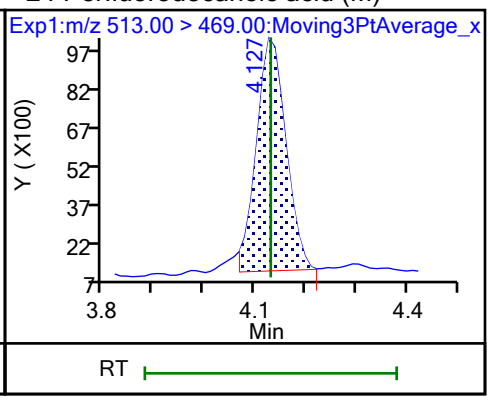
68 Perfluorononanesulfonic acid (M)



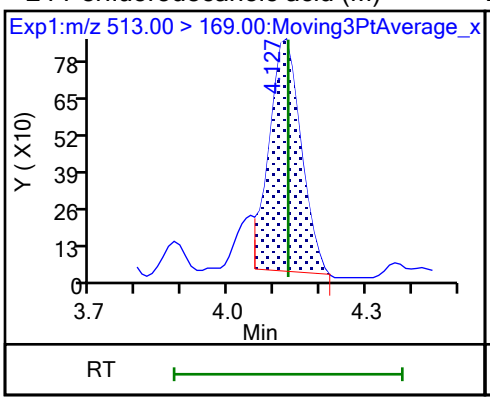
68 Perfluorononanesulfonic acid (M)



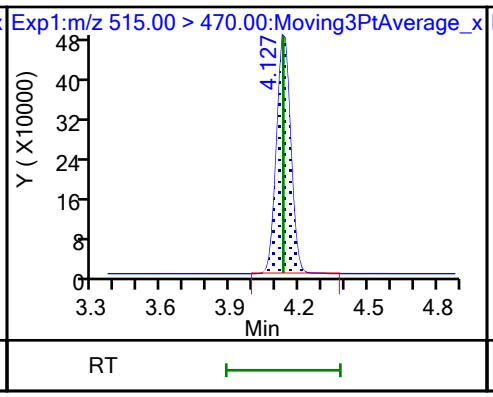
24 Perfluorodecanoic acid (M)



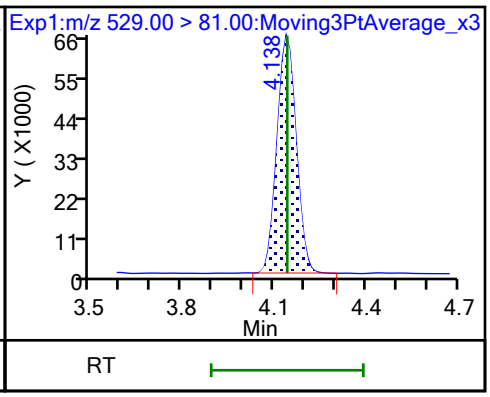
24 Perfluorodecanoic acid (M)



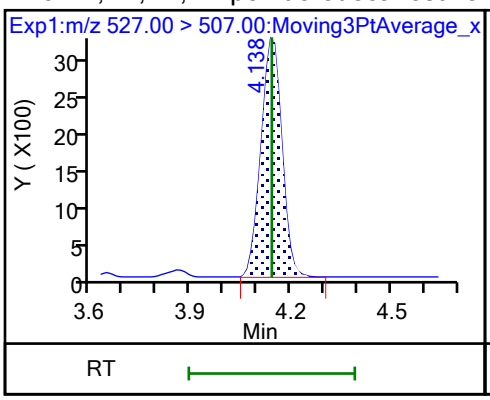
D 23 13C2 PFDA



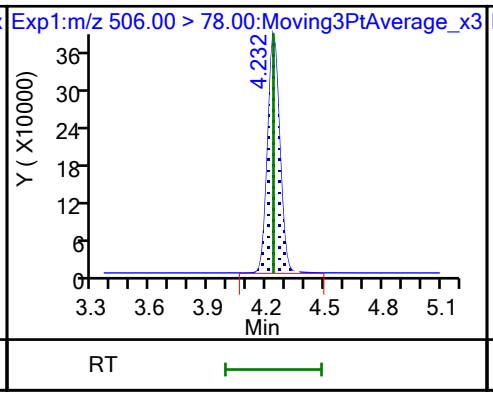
D 26 M2-8:2 FTS



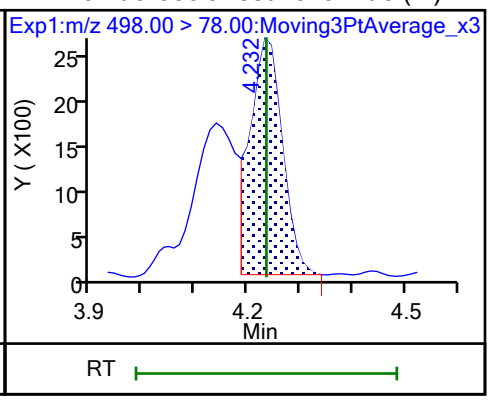
25 1H,1H,2H,2H-perfluorodecanesulfo



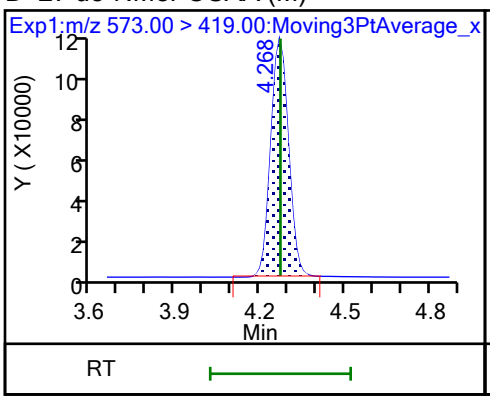
D 21 13C8 FOSA



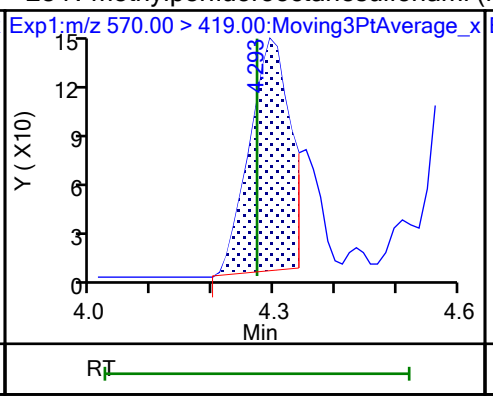
22 Perfluorooctanesulfonamide (M)



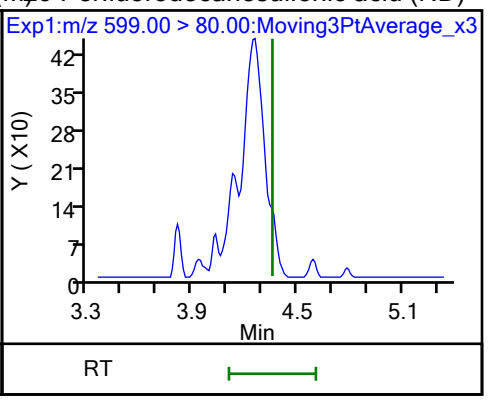
D 27 d3-NMeFOSAA (M)



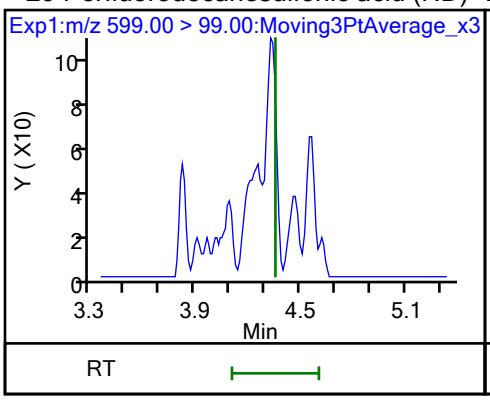
28 N-methylperfluorooctanesulfonami (M)



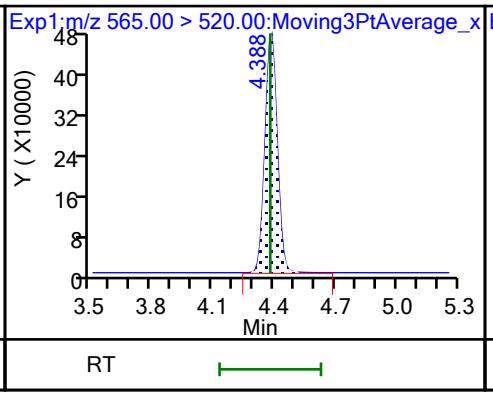
29 Perfluorodecanesulfonic acid (ND)



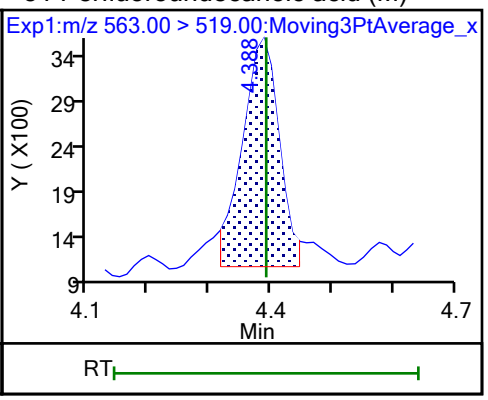
29 Perfluorodecanesulfonic acid (ND)



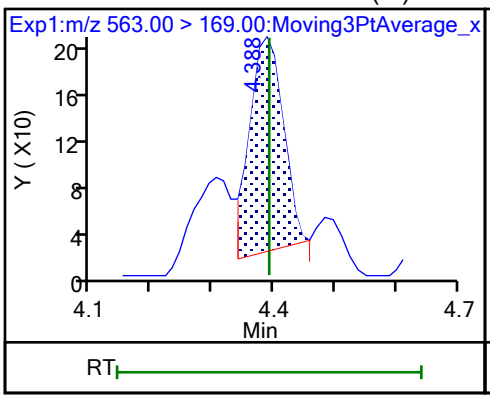
D 30 13C2 PFUnA



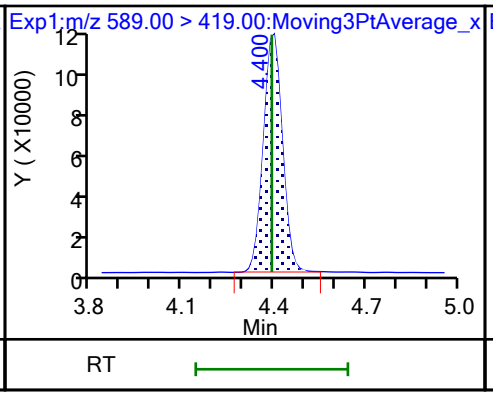
31 Perfluoroundecanoic acid (M)



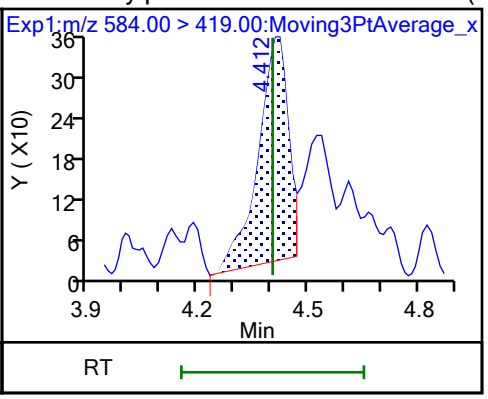
31 Perfluoroundecanoic acid (M)



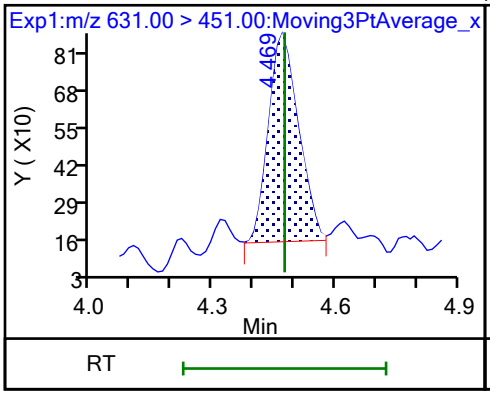
D 32 d5-NEtFOSAA



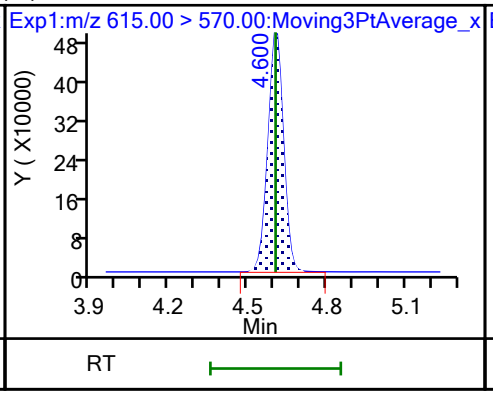
33 N-ethylperfluorooctanesulfonamid (M)



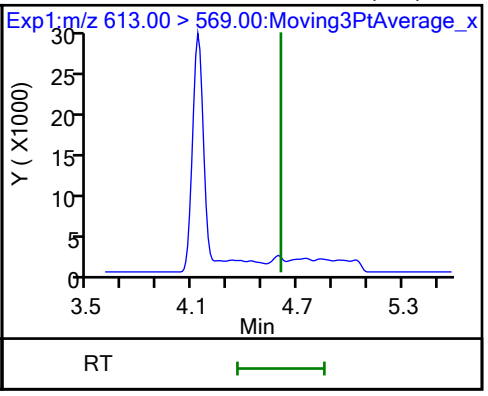
66 11-Chloroeicosafluoro-3-oxaundec (M)



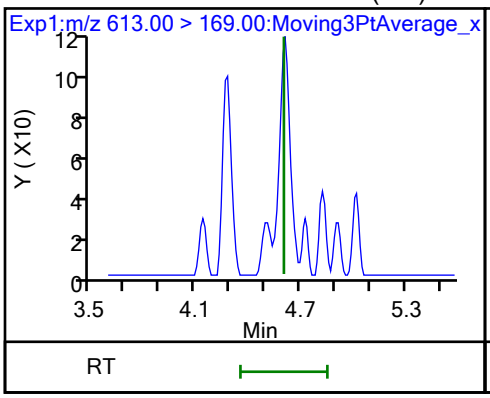
D 36 13C2 PFDoA



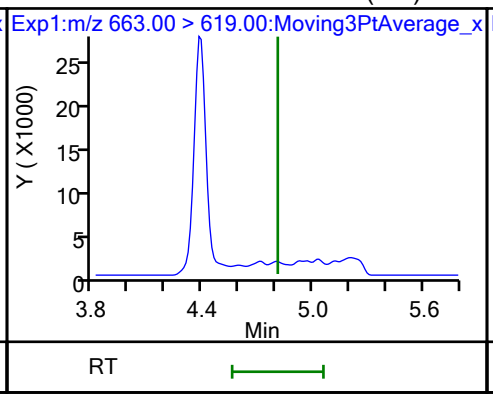
37 Perfluorododecanoic acid (ND)



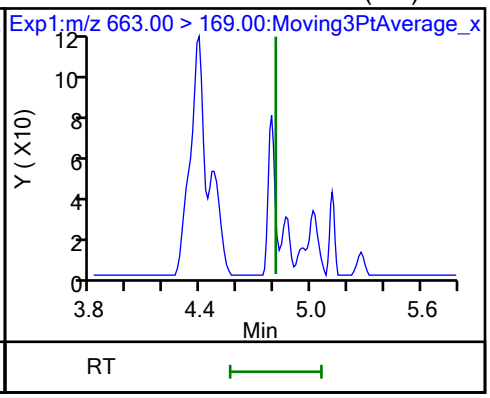
37 Perfluorododecanoic acid (ND)



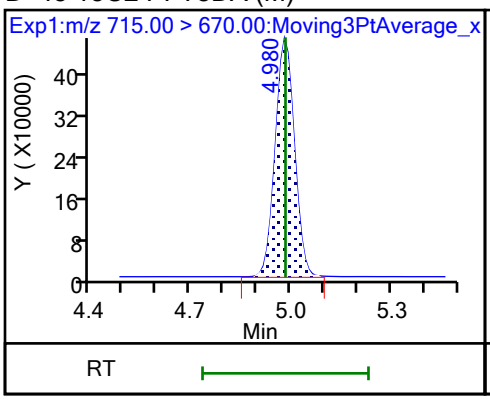
41 Perfluorotridecanoic acid (ND)



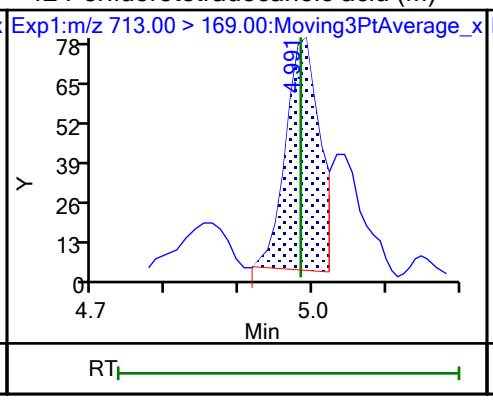
41 Perfluorotridecanoic acid (ND)



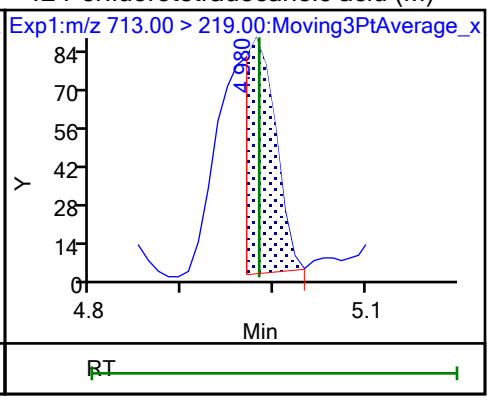
D 43 13C2 PFTeDA (M)



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

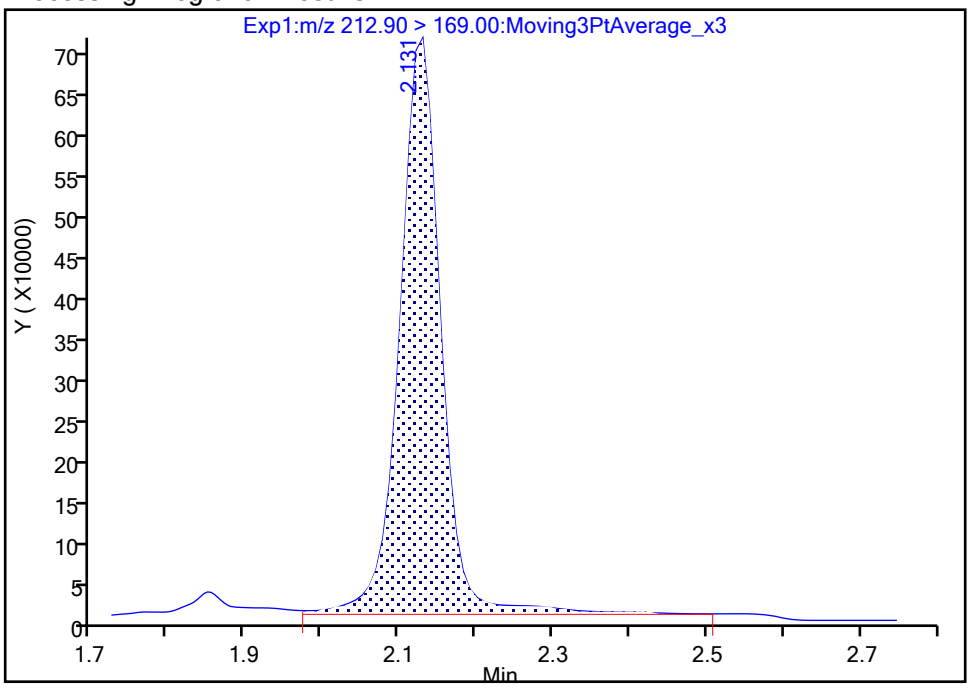
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

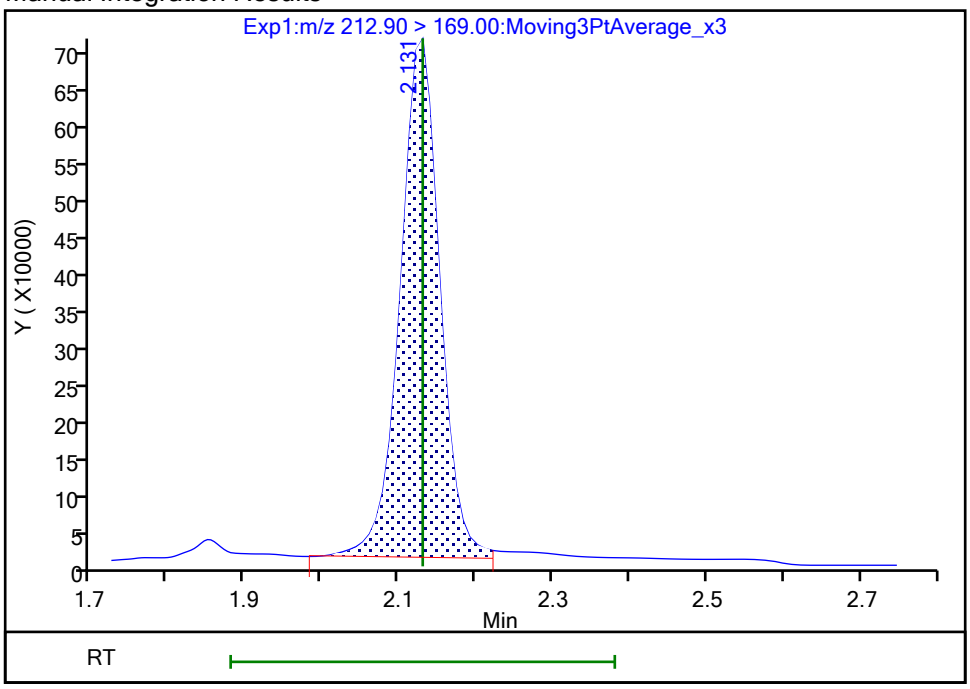
Processing Integration Results

RT: 2.13
Area: 2635388
Amount: 1.780220
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2503549
Amount: 1.689116
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

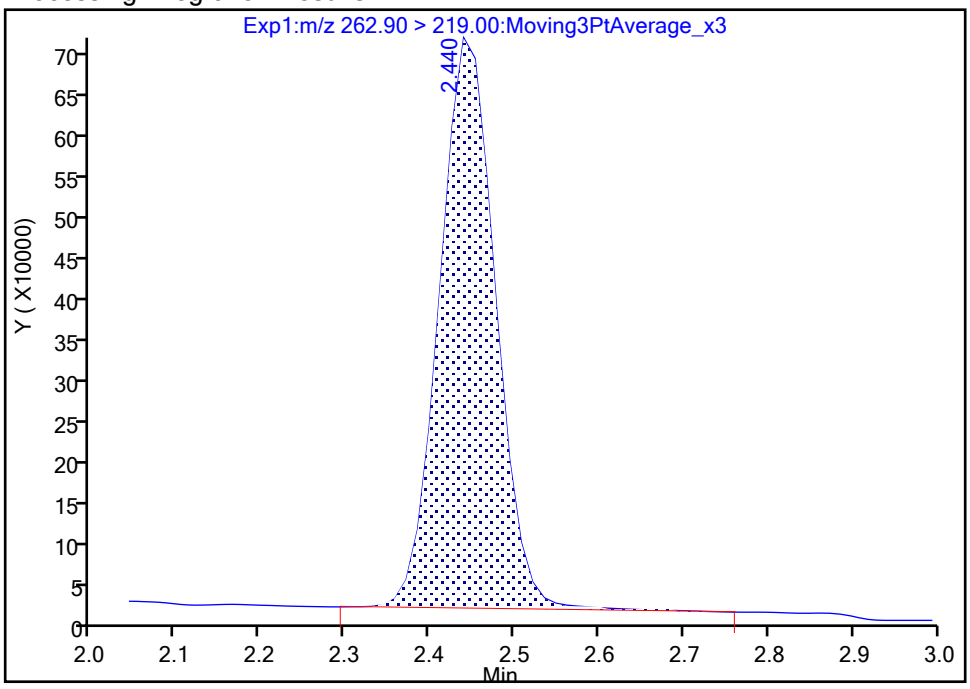
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

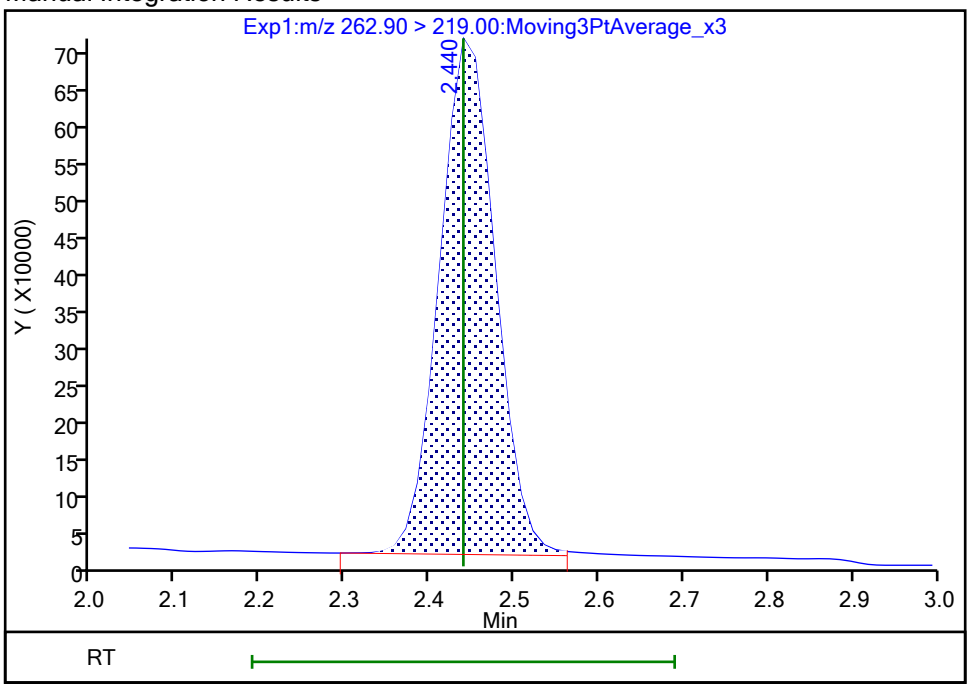
Processing Integration Results

RT: 2.44
Area: 3254108
Amount: 2.490008
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 3230203
Amount: 2.471717
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

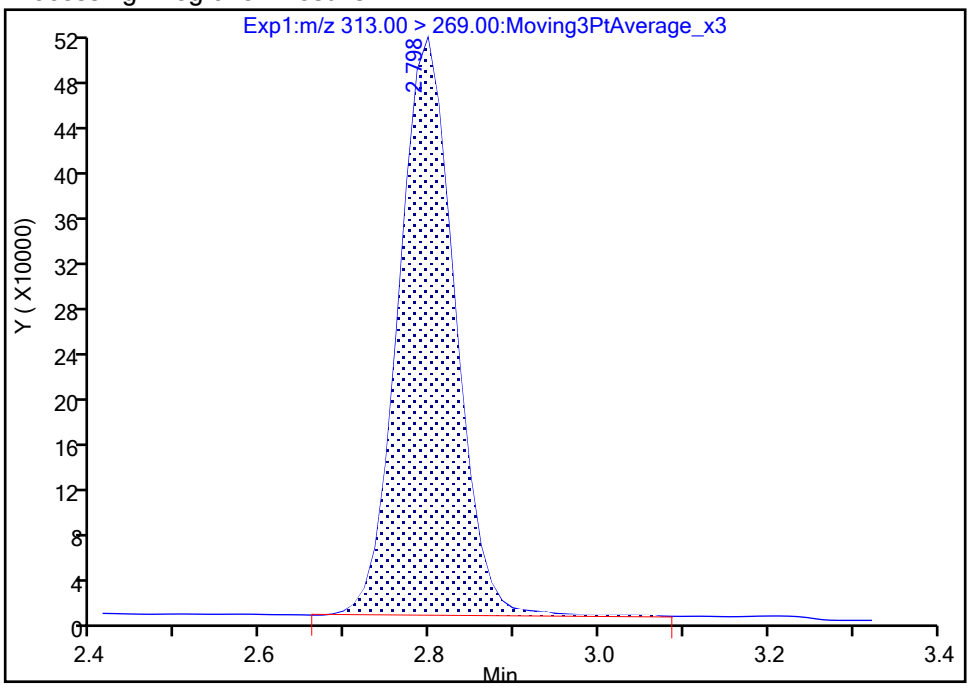
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

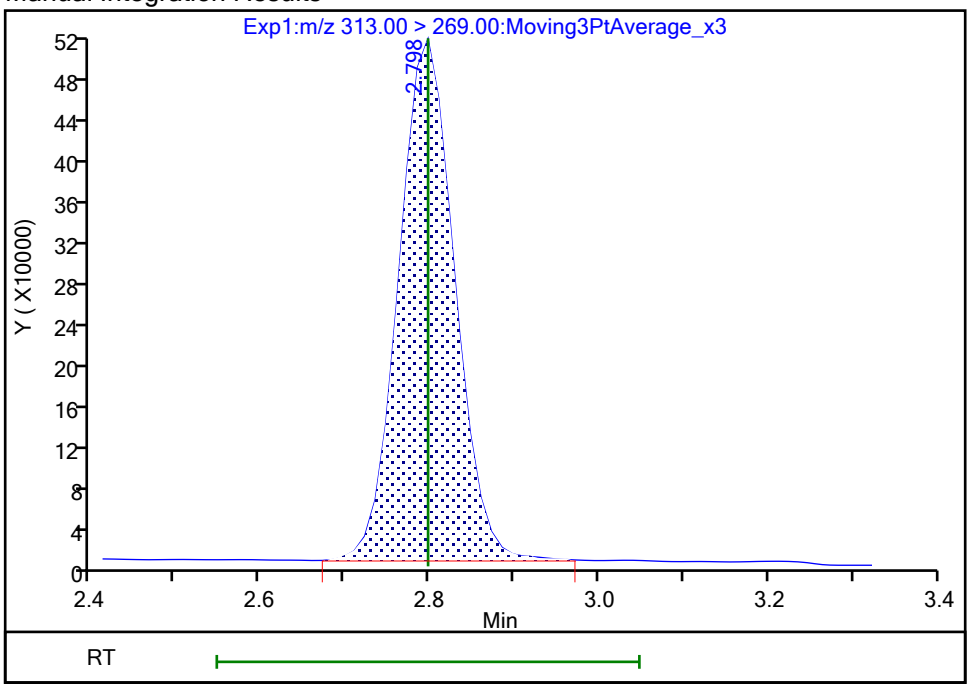
Processing Integration Results

RT: 2.80
Area: 2339289
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 2320905
Amount: 1.594947
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

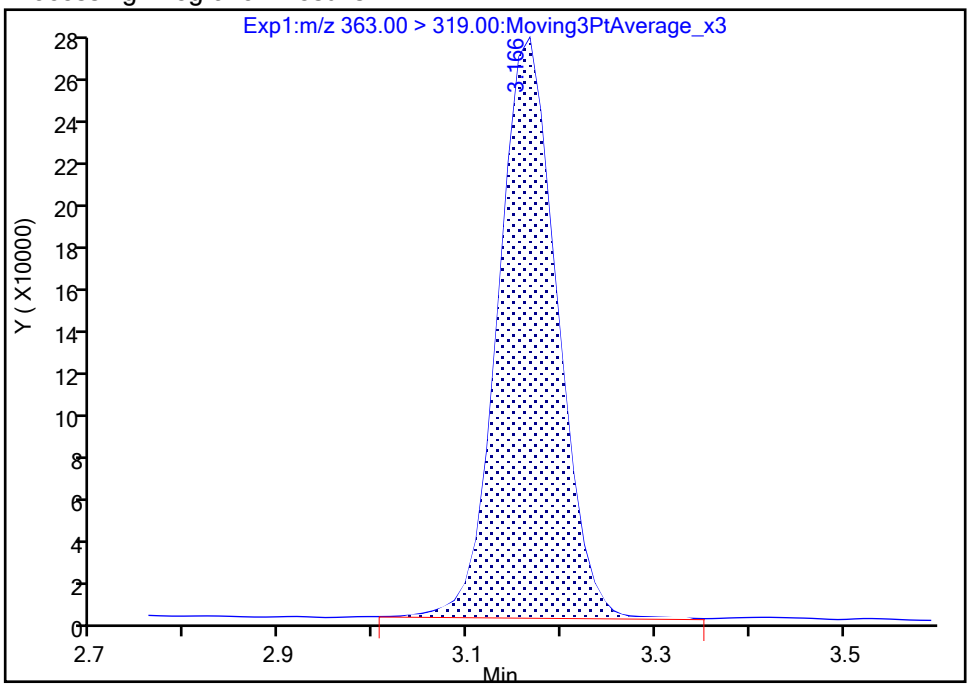
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

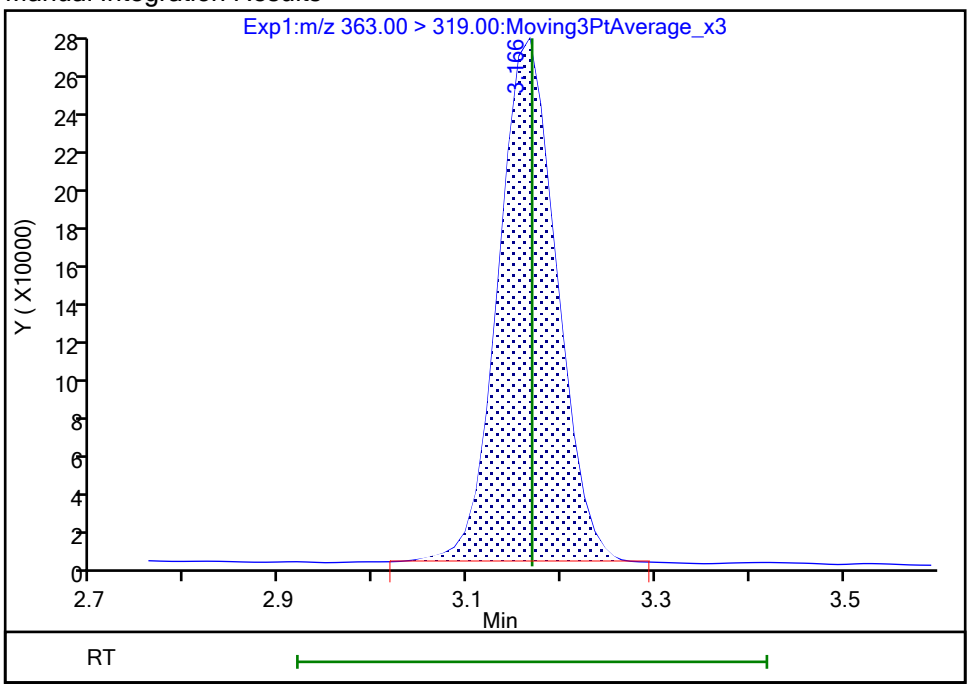
Processing Integration Results

RT: 3.17
Area: 1179735
Amount: 0.749779
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1168991
Amount: 0.742950
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

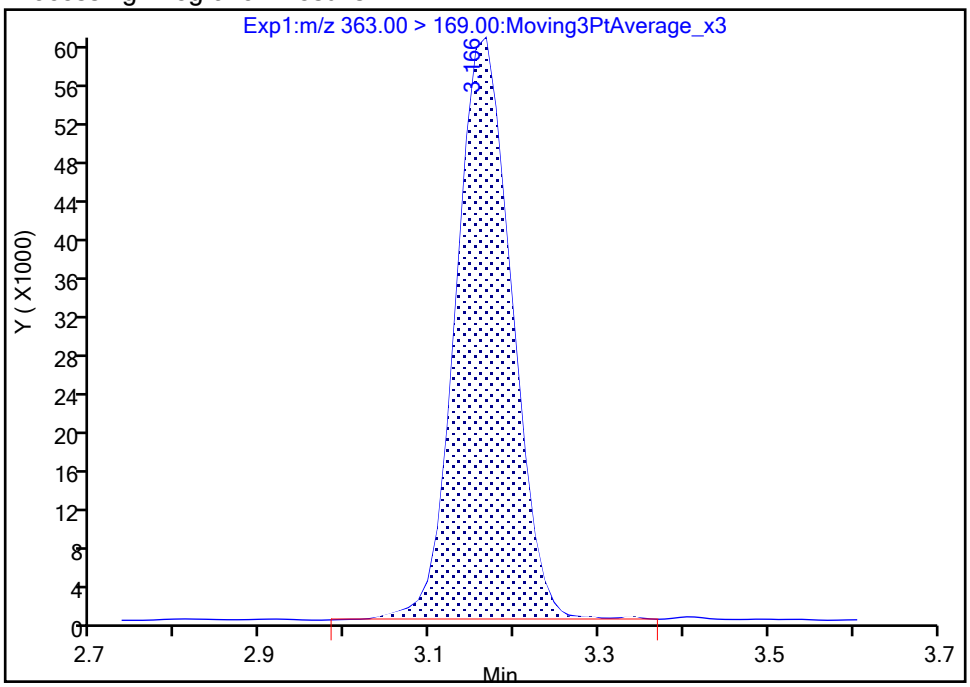
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

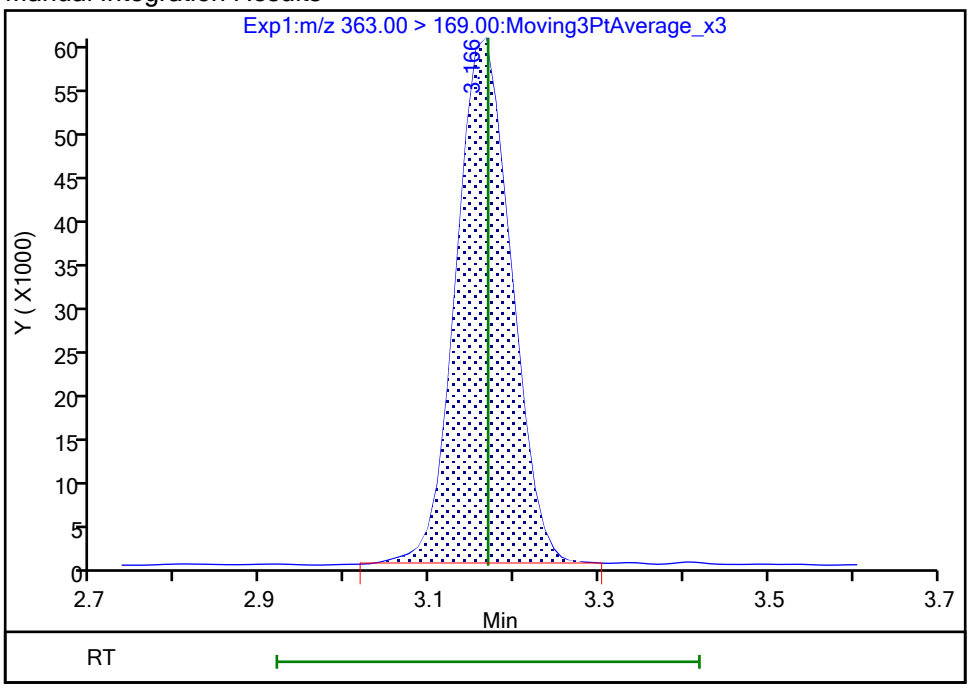
Processing Integration Results

RT: 3.17
Area: 274963
Amount: 0.749779
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 272753
Amount: 0.742950
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

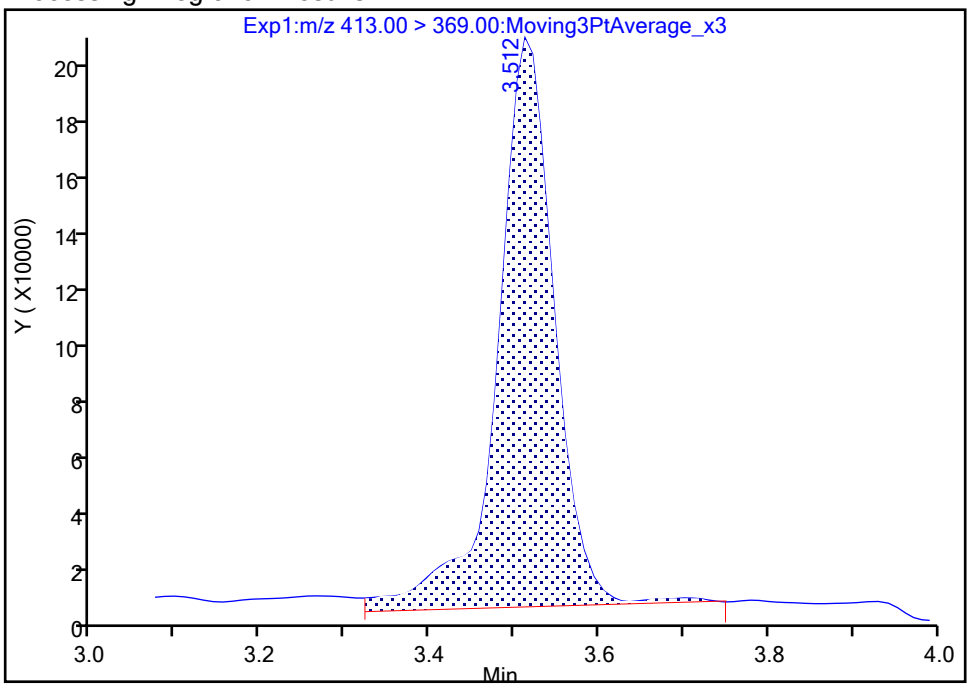
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

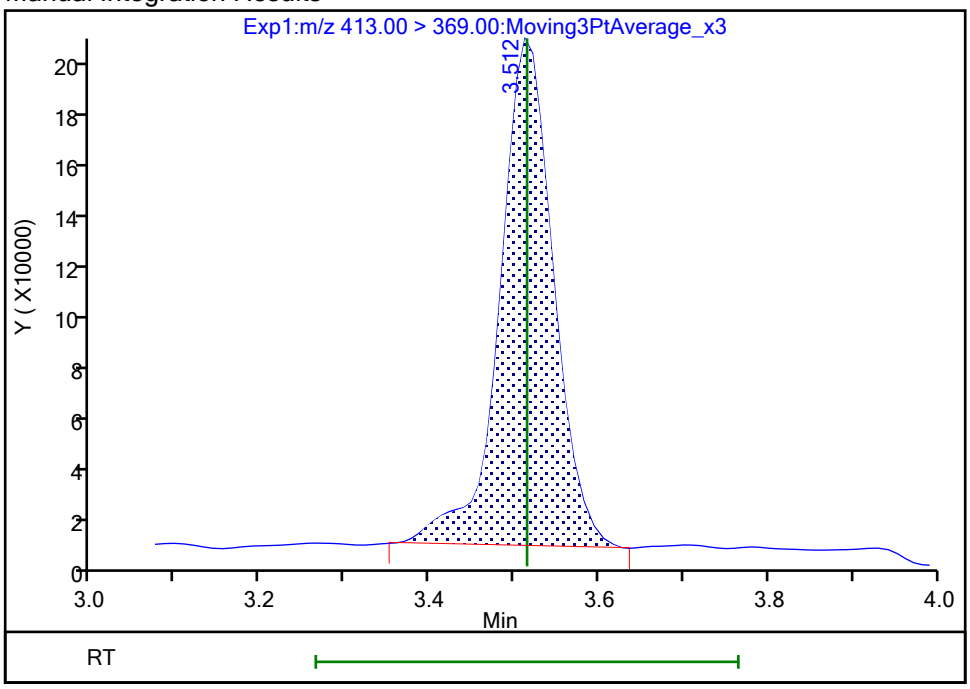
Processing Integration Results

RT: 3.51
Area: 931620
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 863201
Amount: 0.478681
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

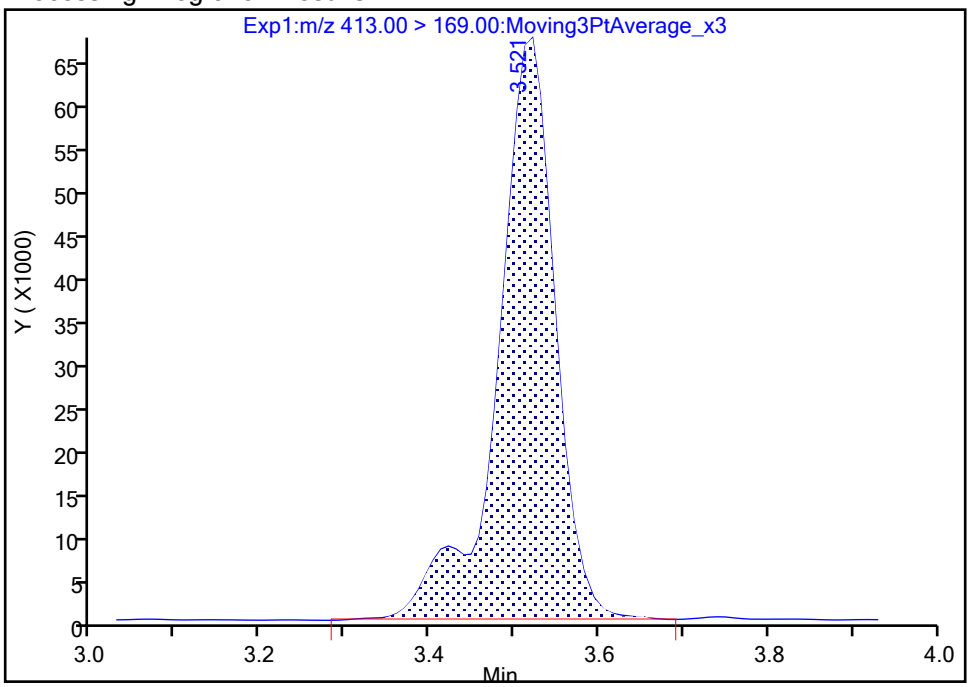
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

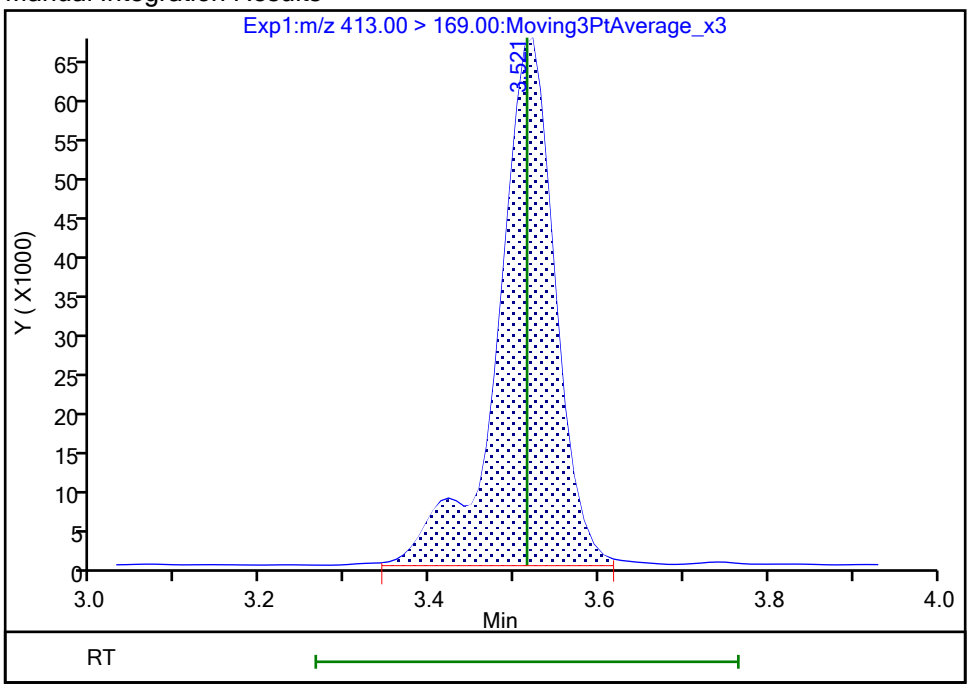
Processing Integration Results

RT: 3.52
Area: 322172
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 320503
Amount: 0.478681
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

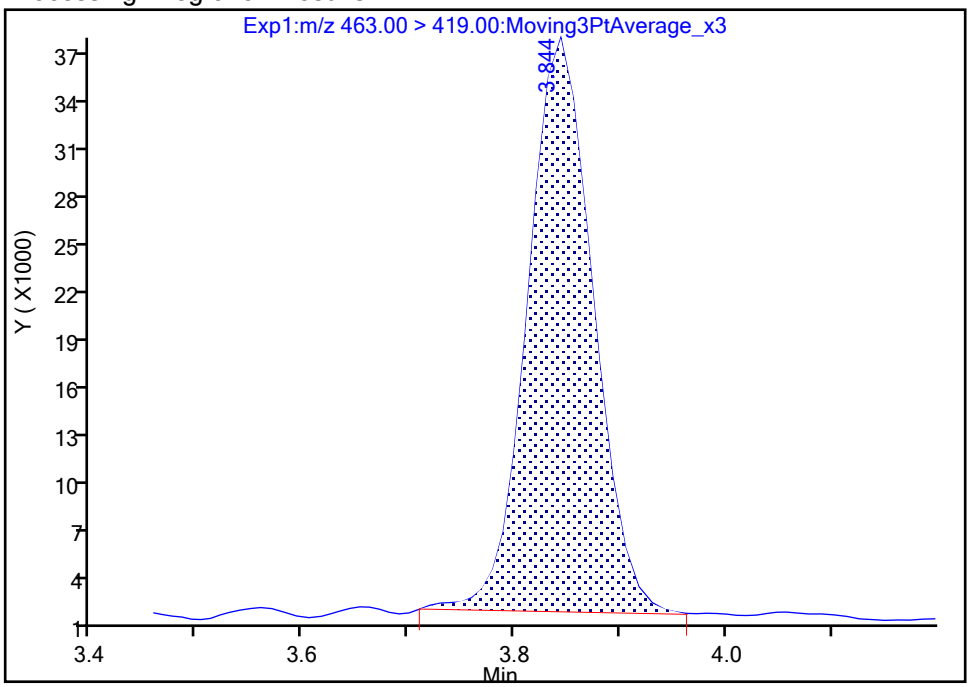
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

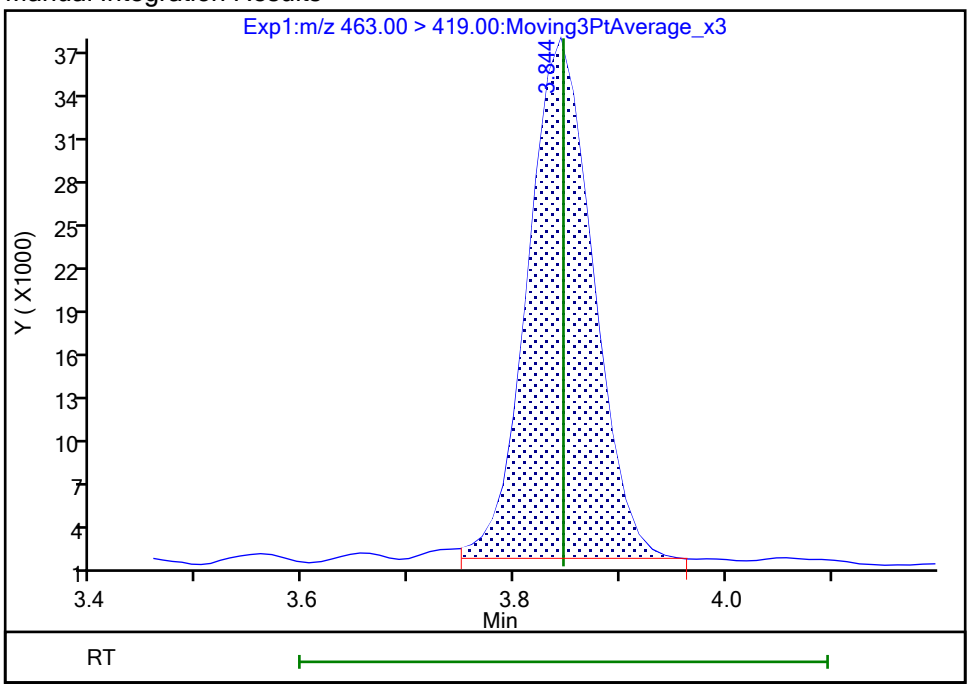
Processing Integration Results

RT: 3.84
Area: 152343
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 153080
Amount: 0.089440
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:46:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

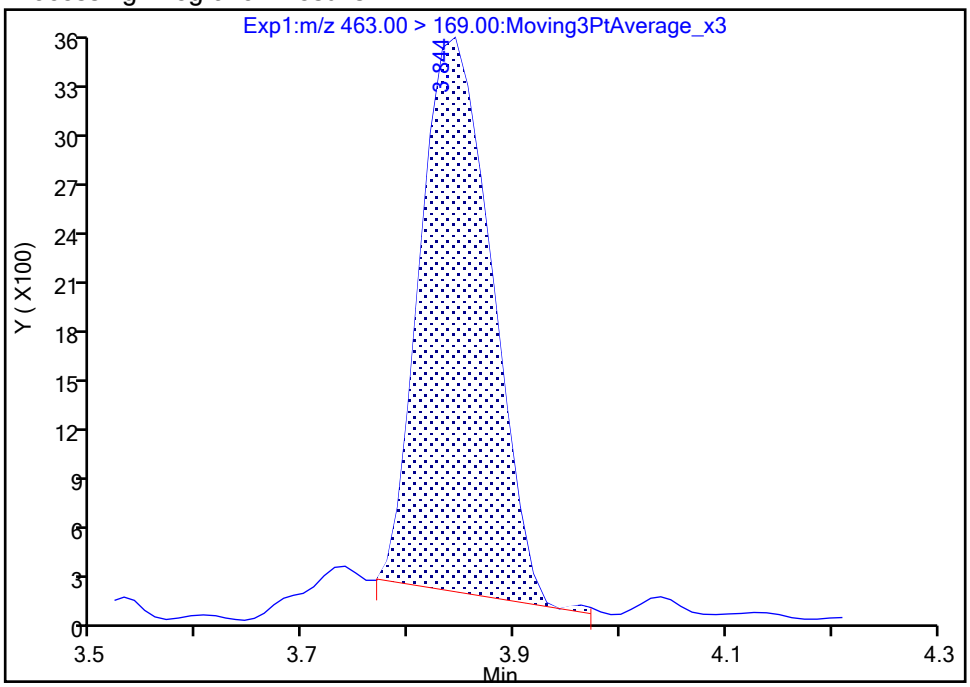
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

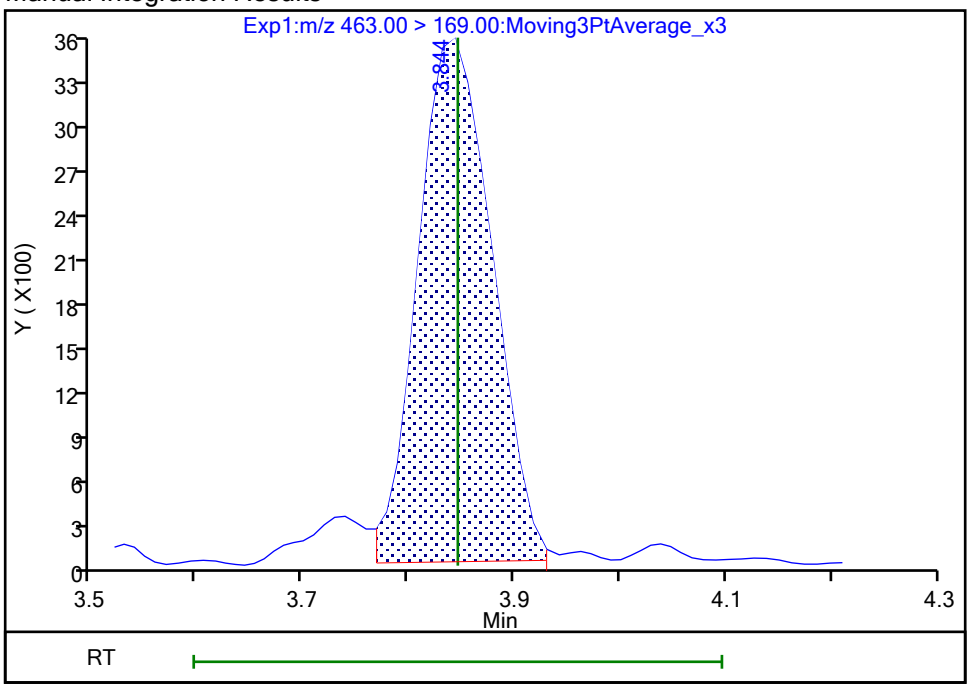
Processing Integration Results

RT: 3.84
Area: 16020
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 17268
Amount: 0.089440
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:46:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

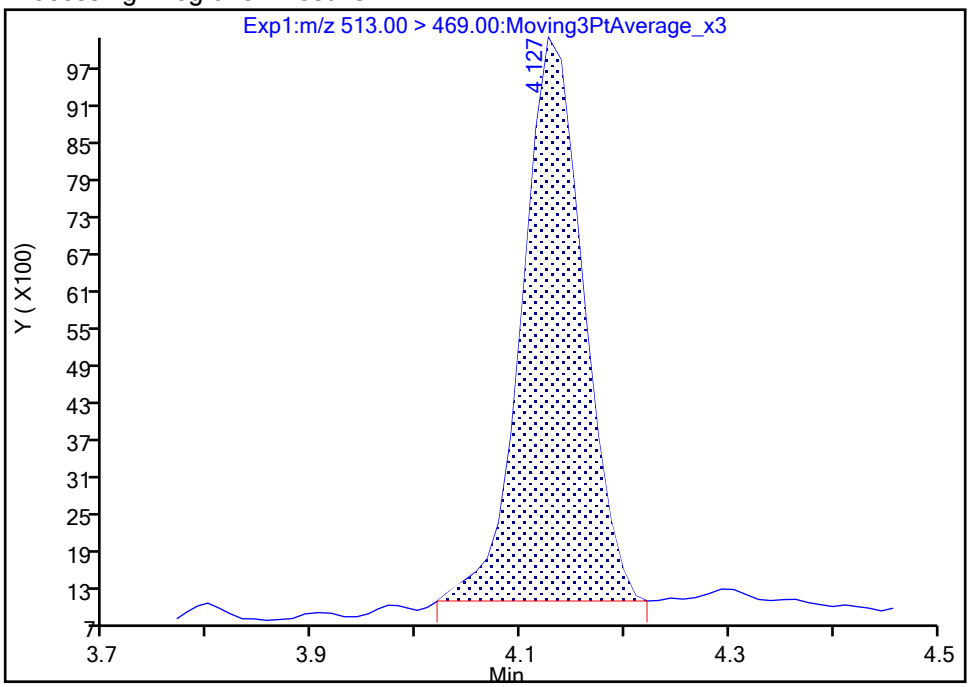
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

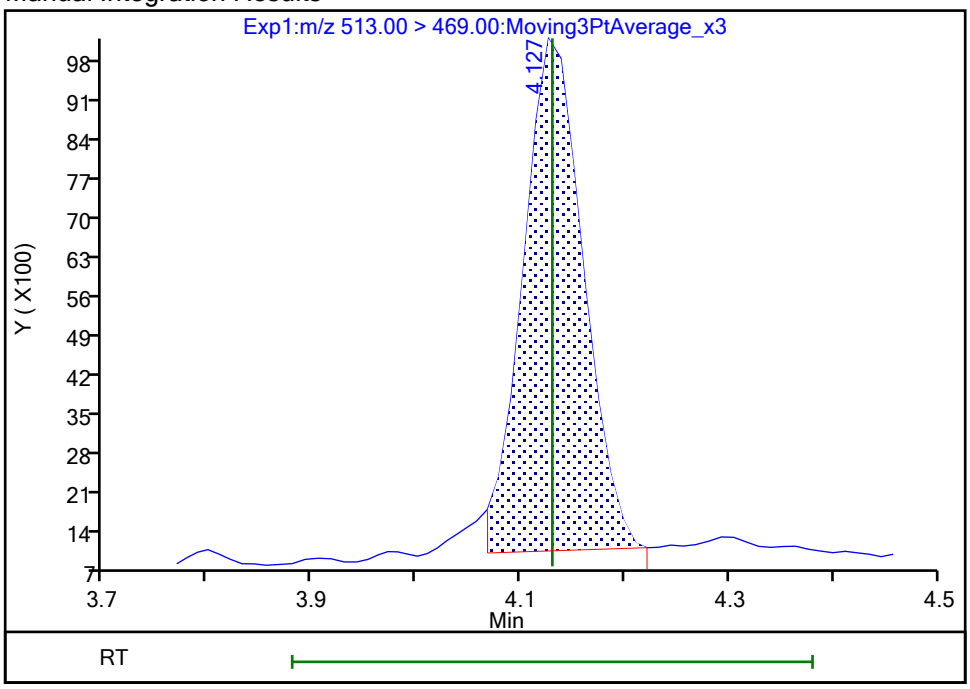
Processing Integration Results

RT: 4.13
Area: 37395
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 36918
Amount: 0.022213
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

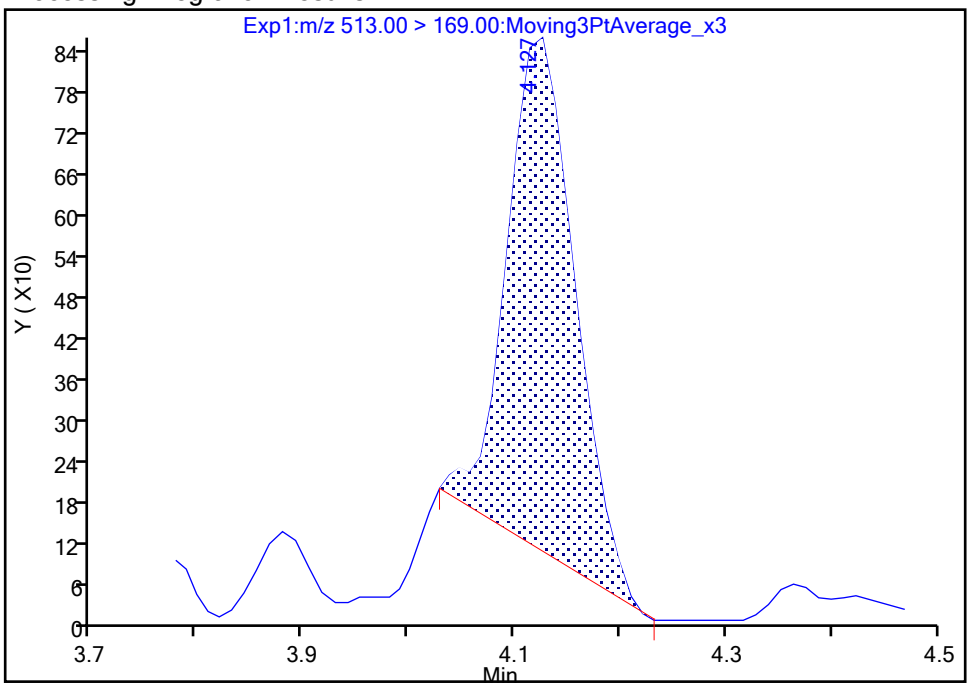
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

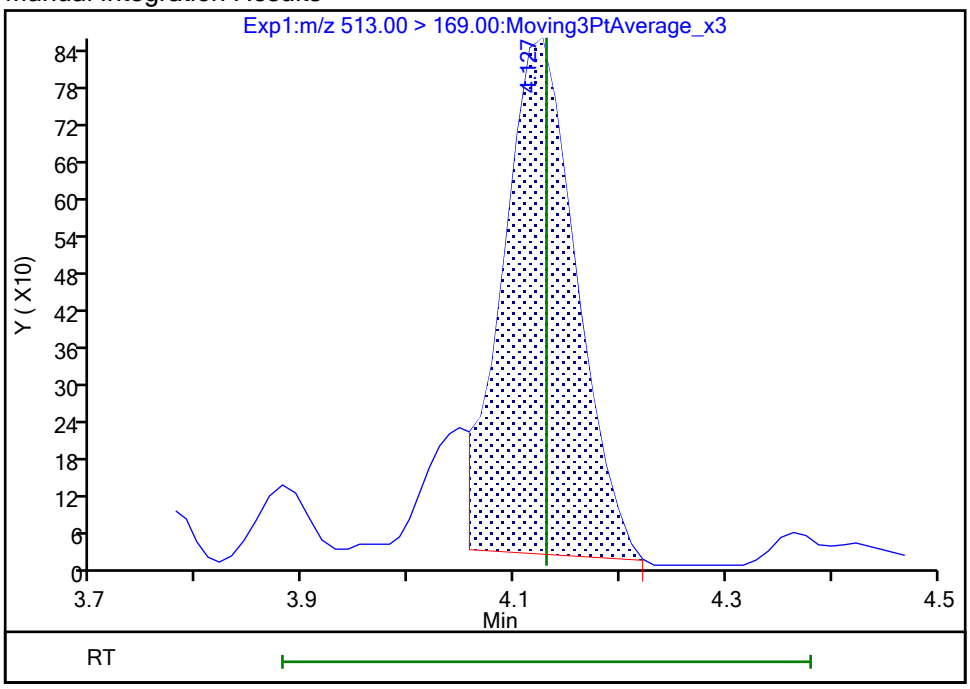
Processing Integration Results

RT: 4.13
Area: 3389
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 4013
Amount: 0.022213
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

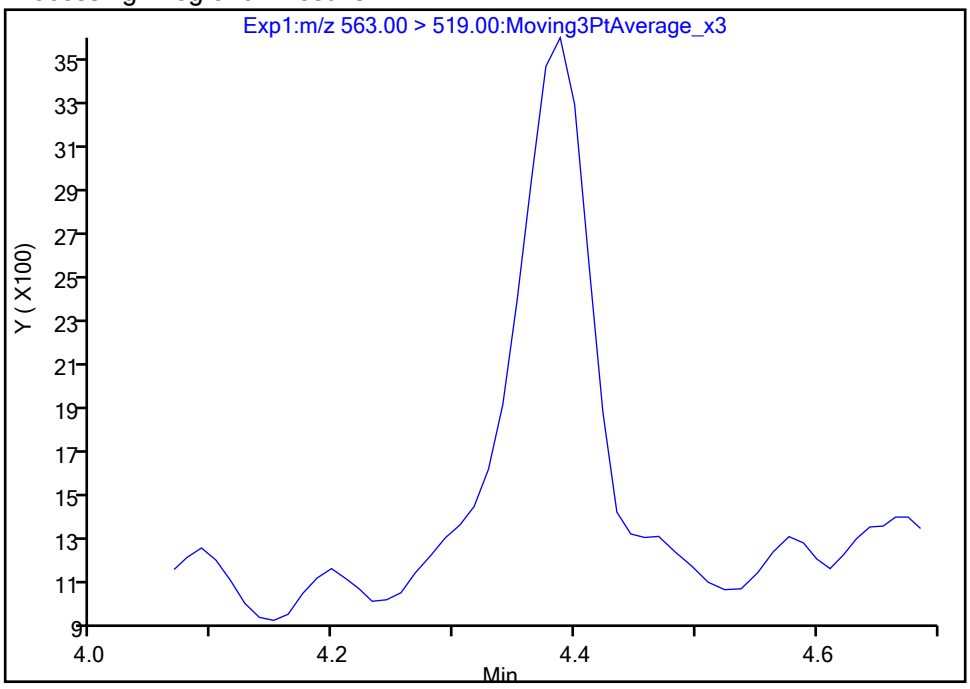
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

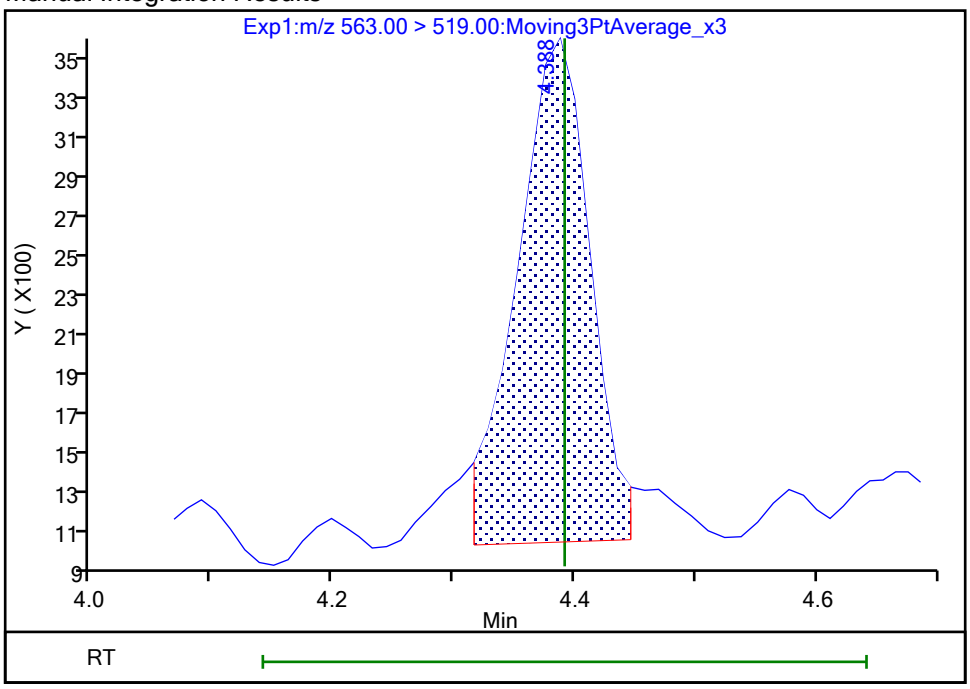
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 10630
Amount: 0.006458
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

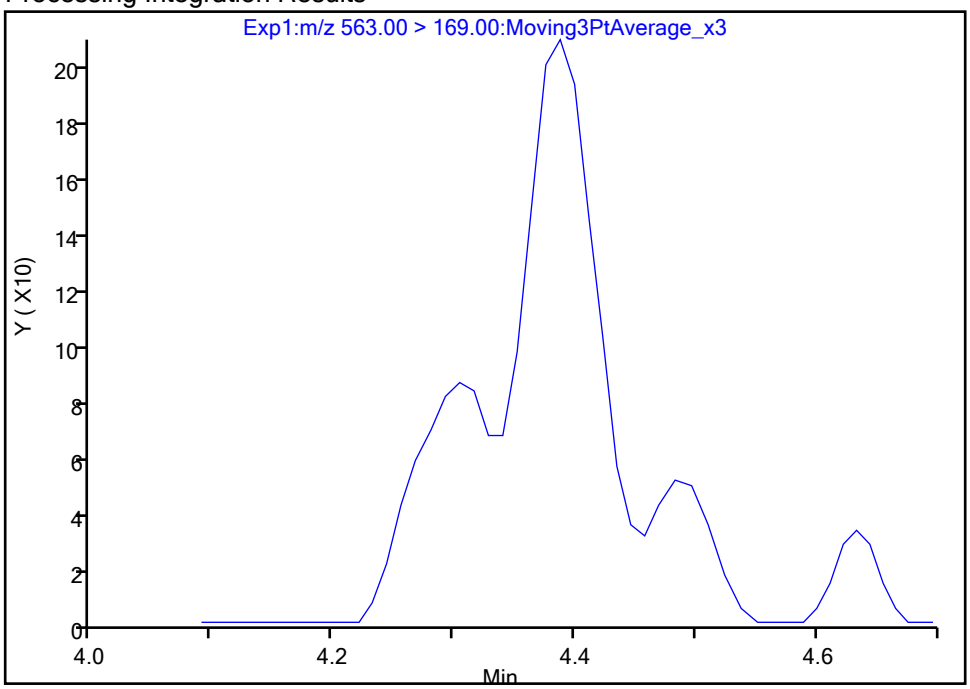
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

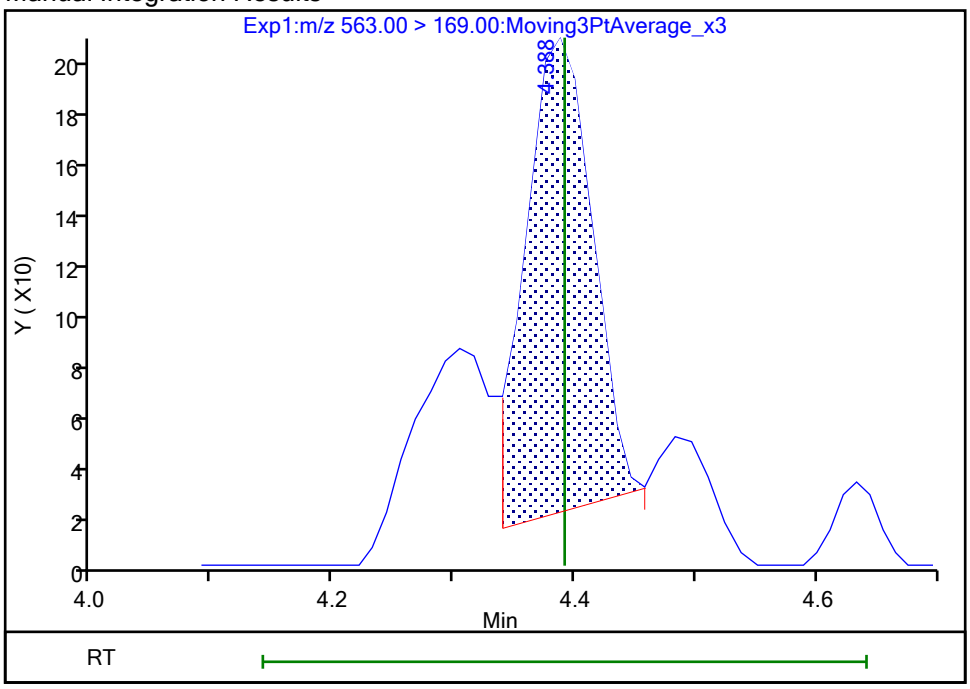
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 713
Amount: 0.006458
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

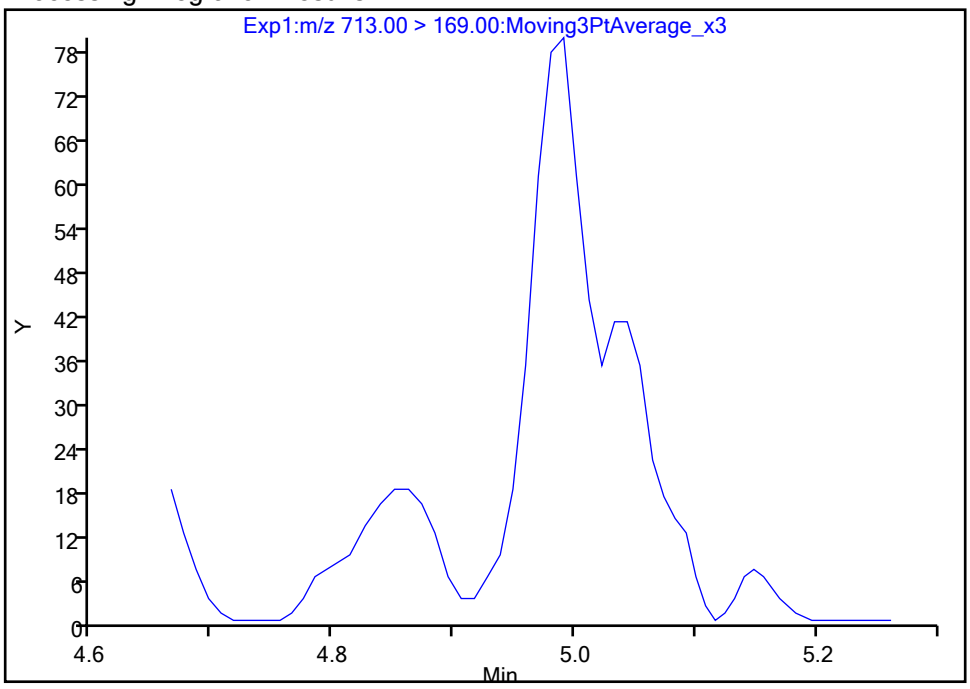
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

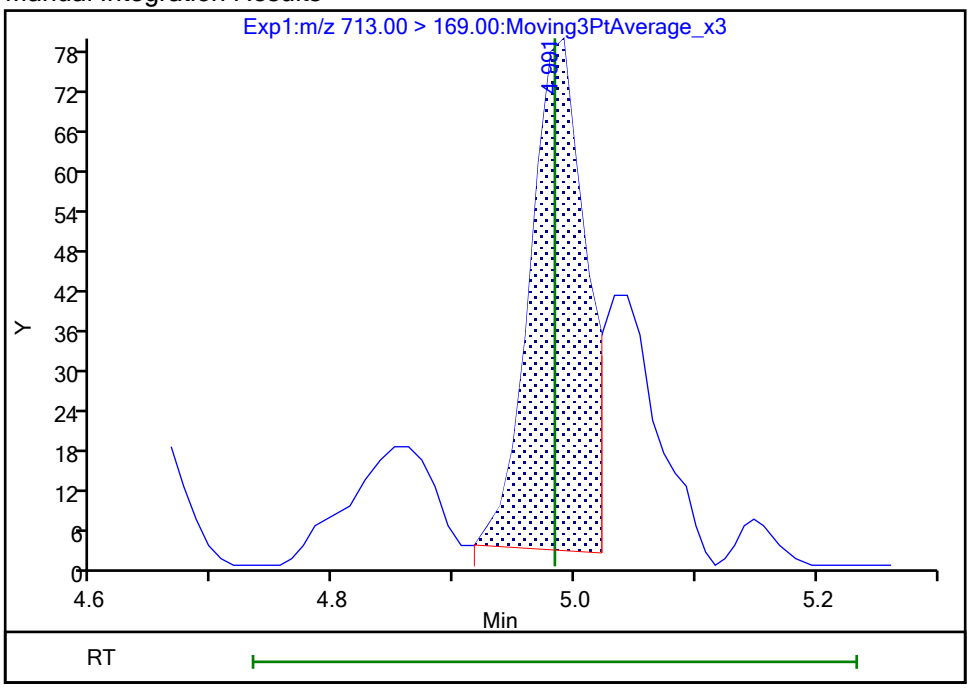
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 243
Amount: 0.001451
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

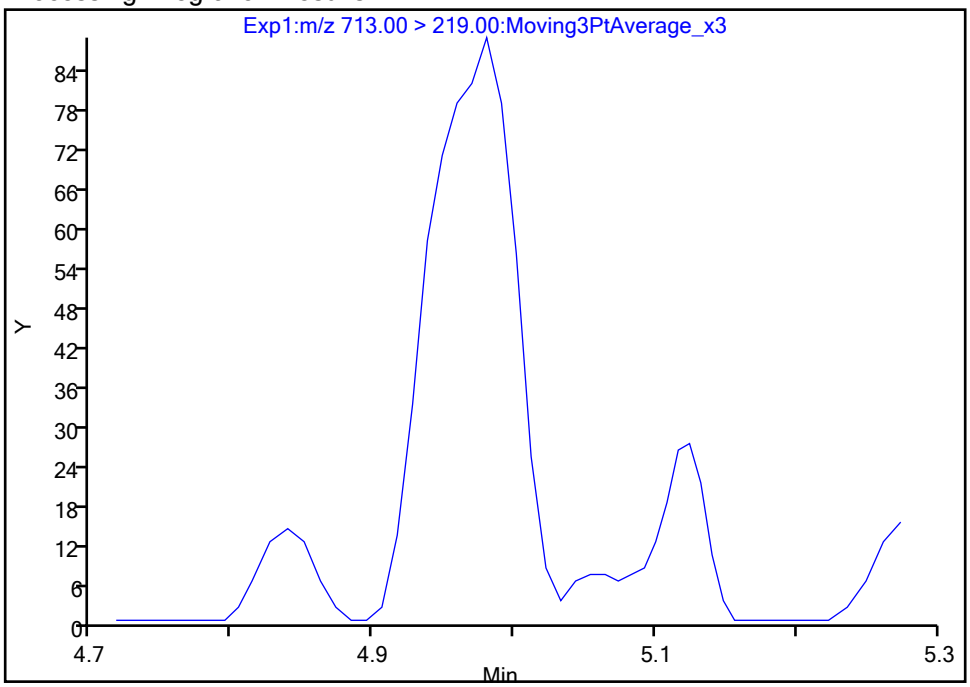
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

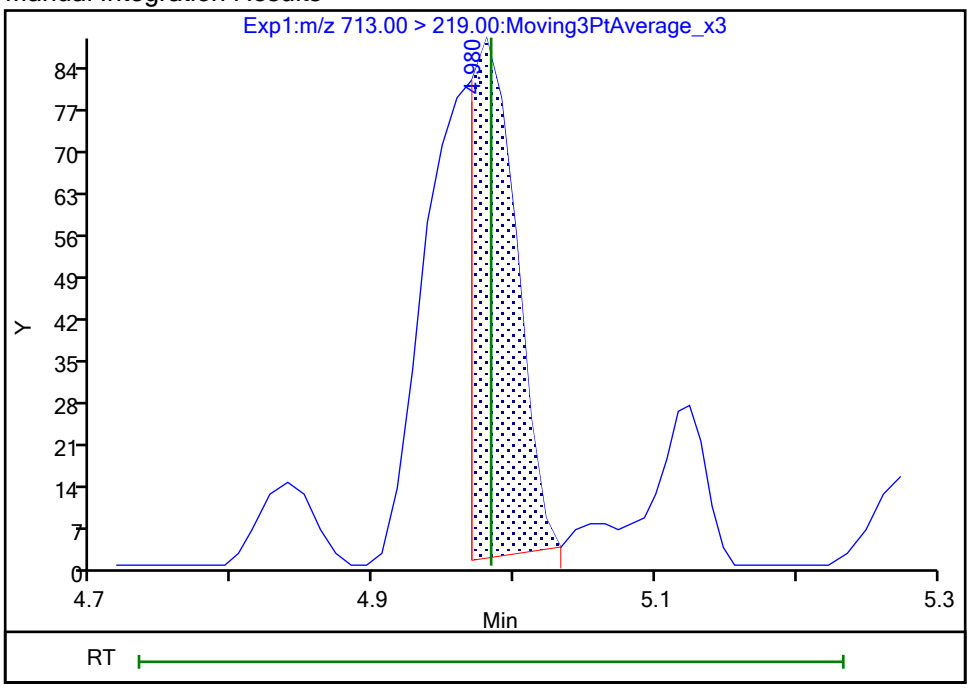
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 181
Amount: 0.001451
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

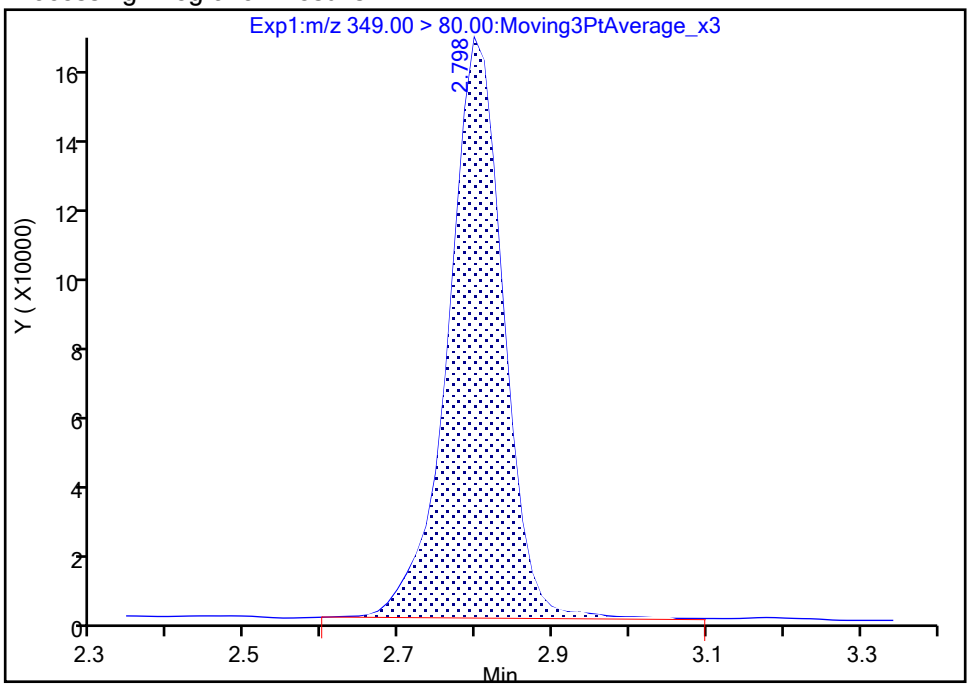
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

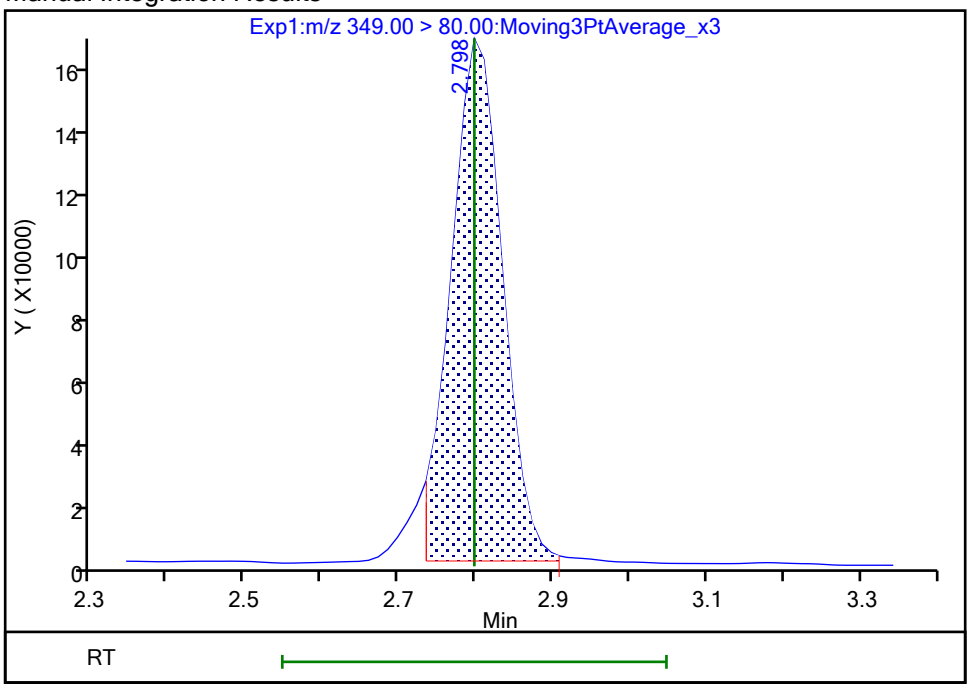
Processing Integration Results

RT: 2.80
Area: 819090
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 759964
Amount: 0.496500
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

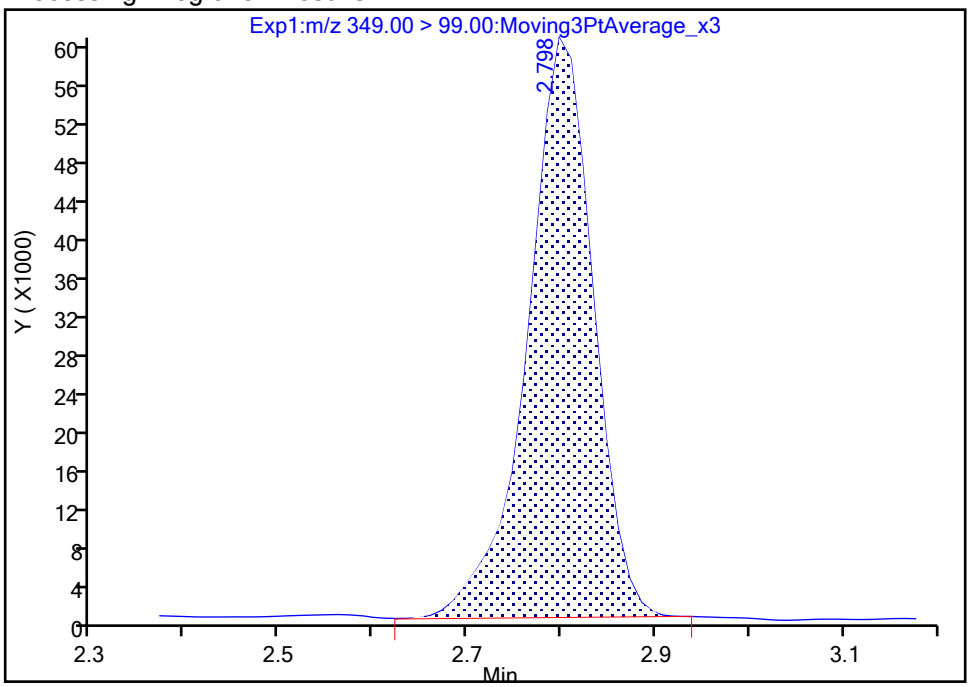
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

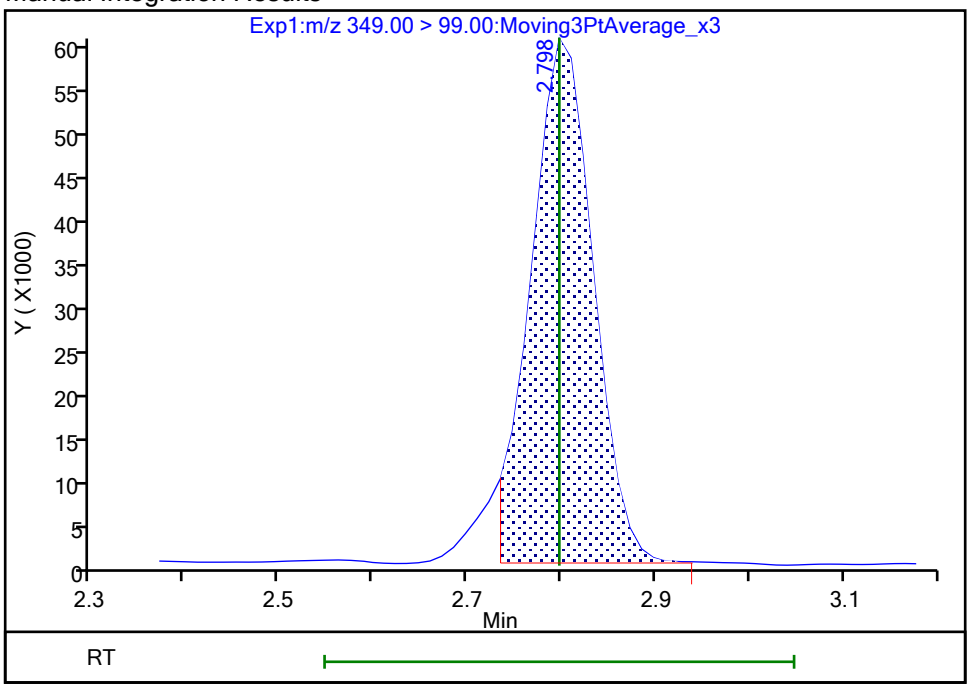
Processing Integration Results

RT: 2.80
Area: 292478
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 275003
Amount: 0.496500
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

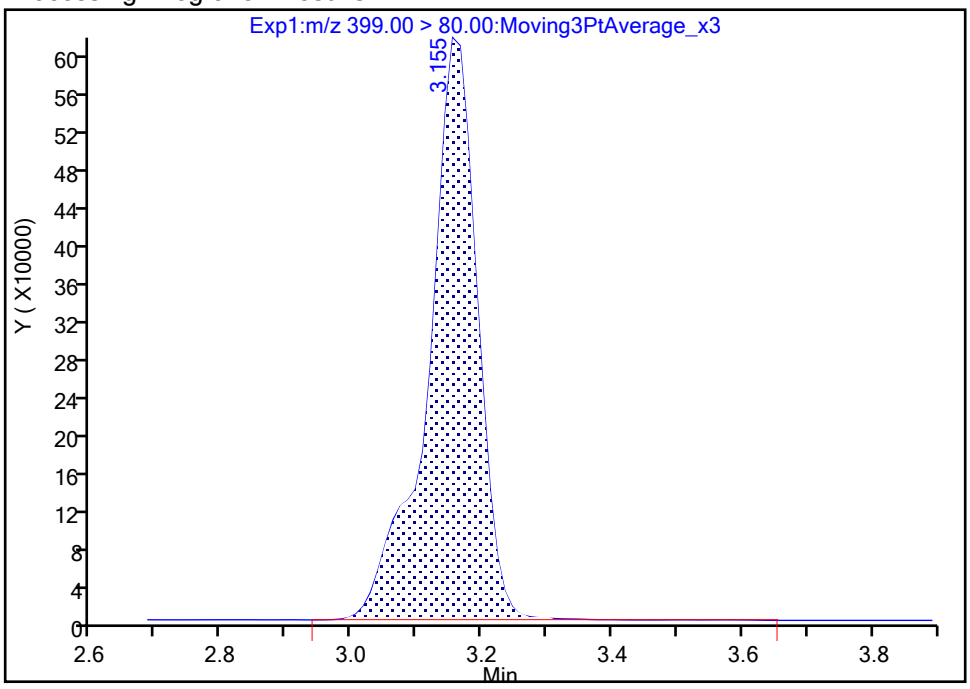
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

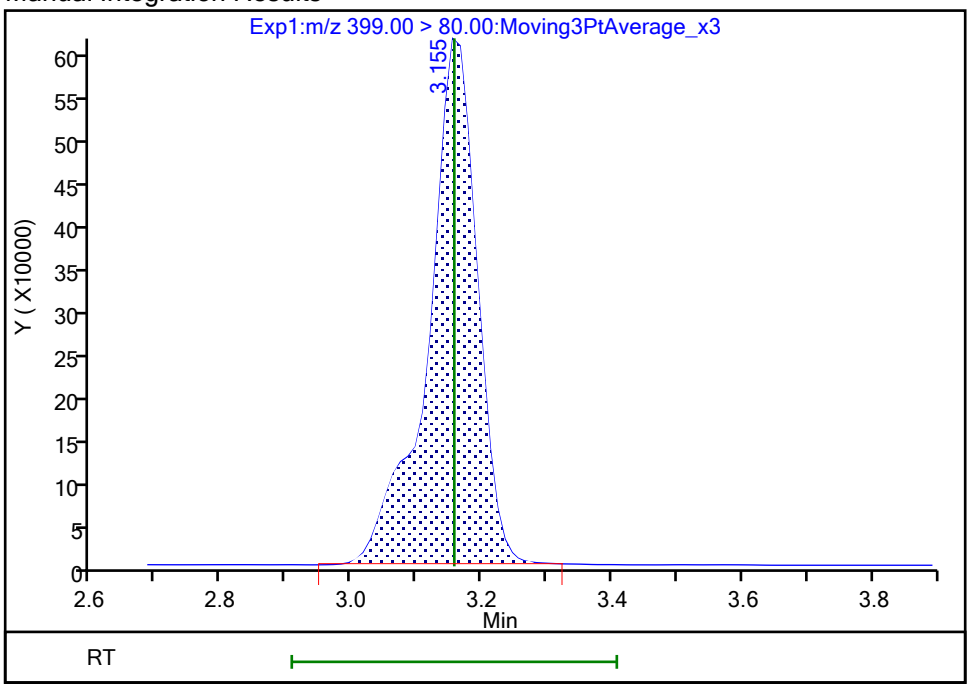
Processing Integration Results

RT: 3.15
Area: 3273604
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 3247158
Amount: 2.502642
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

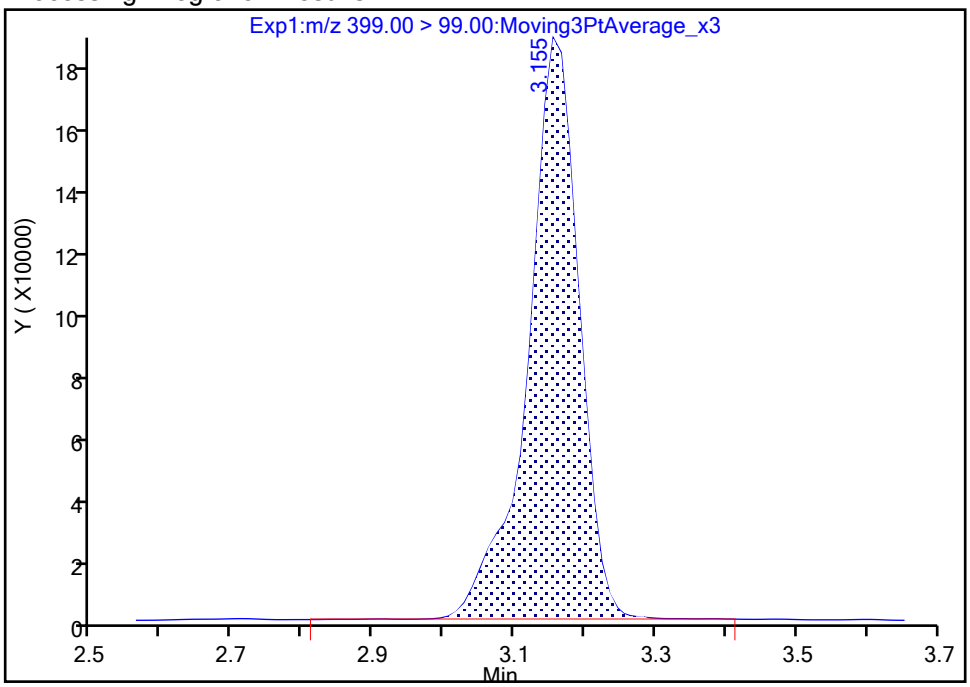
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

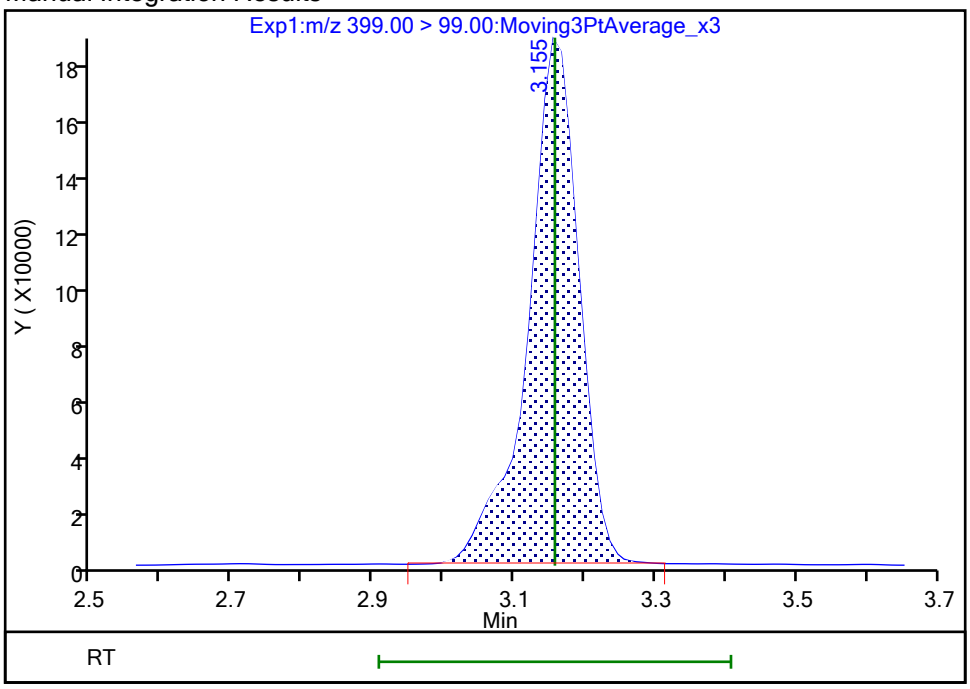
Processing Integration Results

RT: 3.15
Area: 913724
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 909432
Amount: 2.502642
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

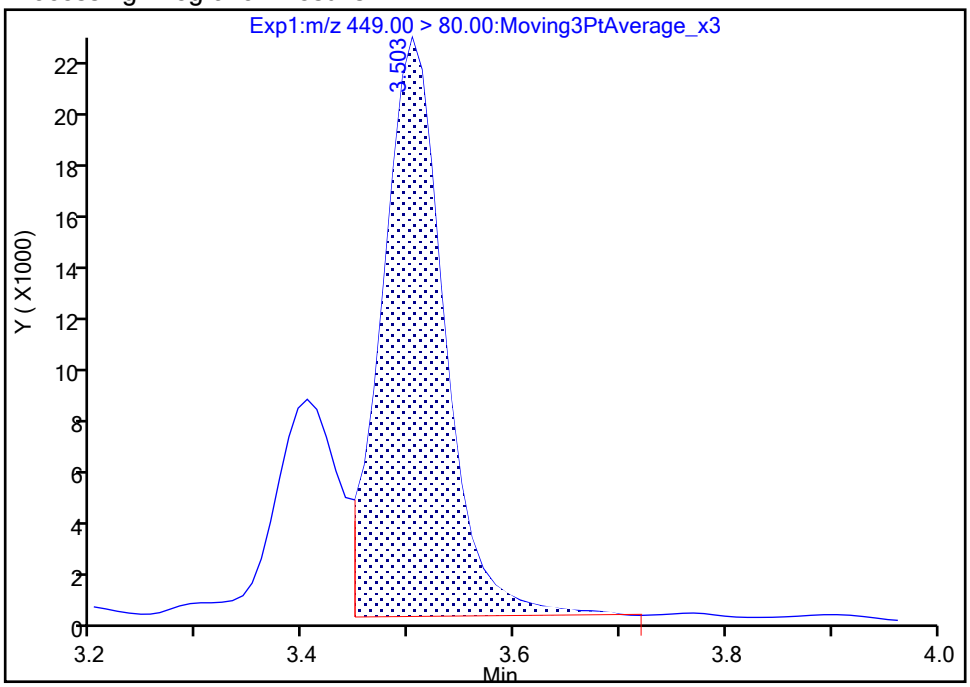
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

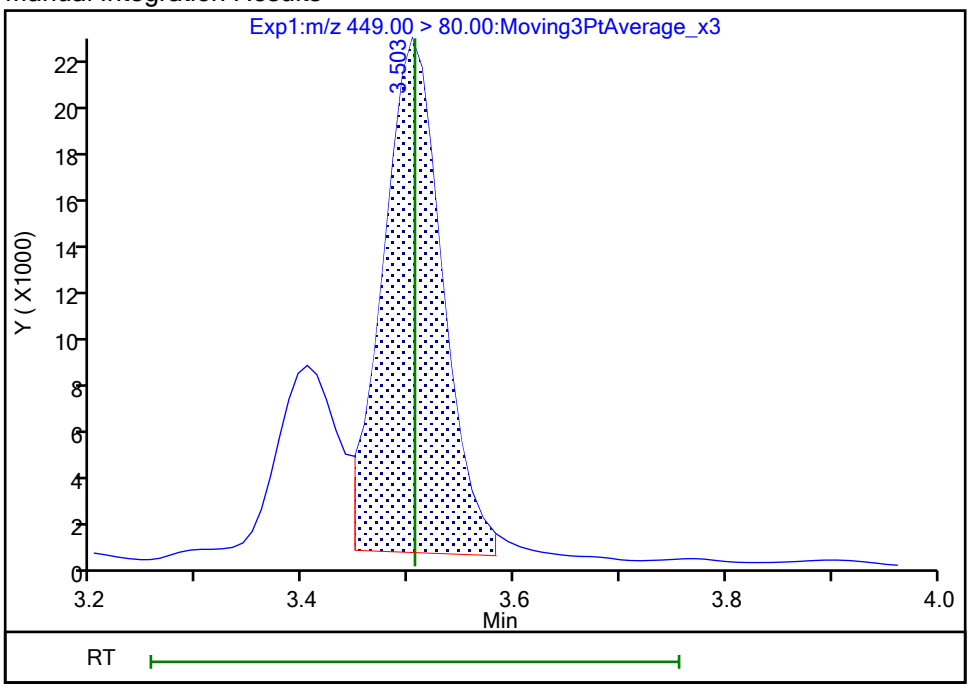
Processing Integration Results

RT: 3.50
Area: 90738
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 84968
Amount: 0.080419
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

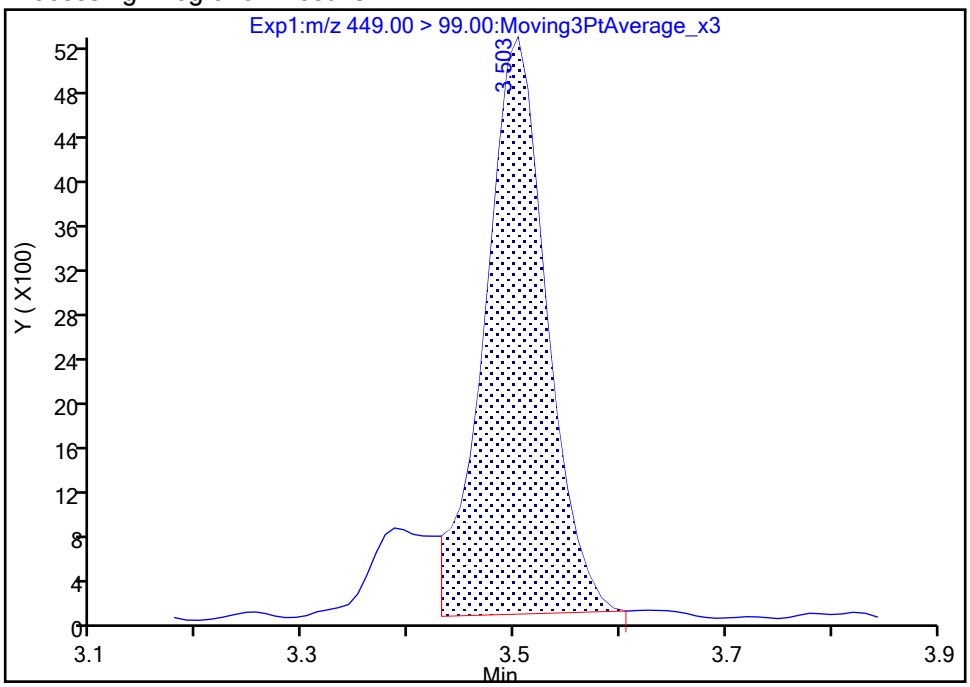
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

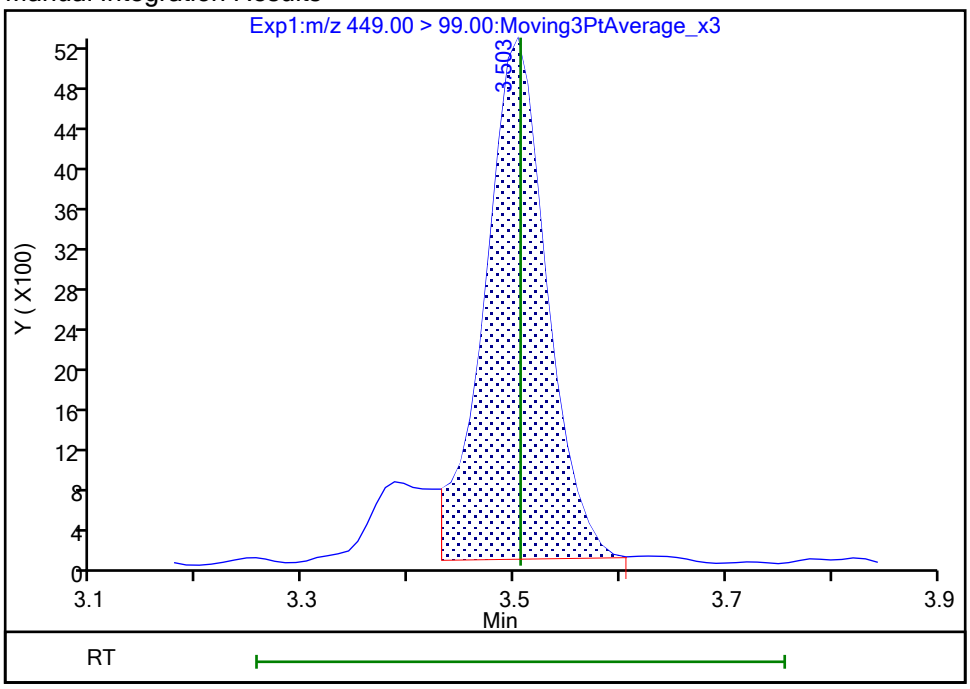
Processing Integration Results

RT: 3.50
Area: 20680
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 20633
Amount: 0.080419
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

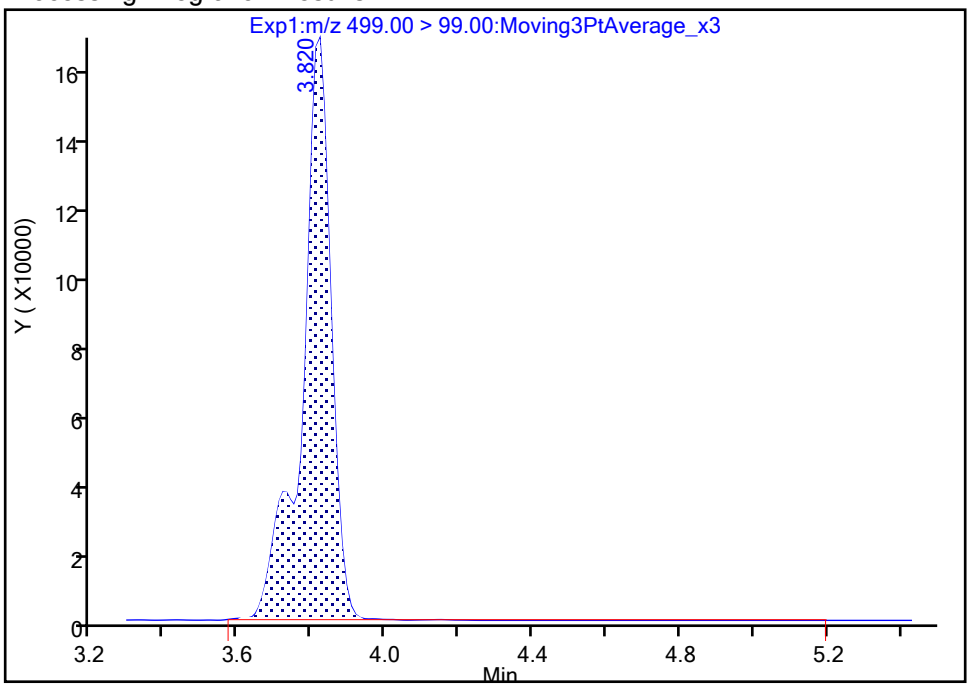
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

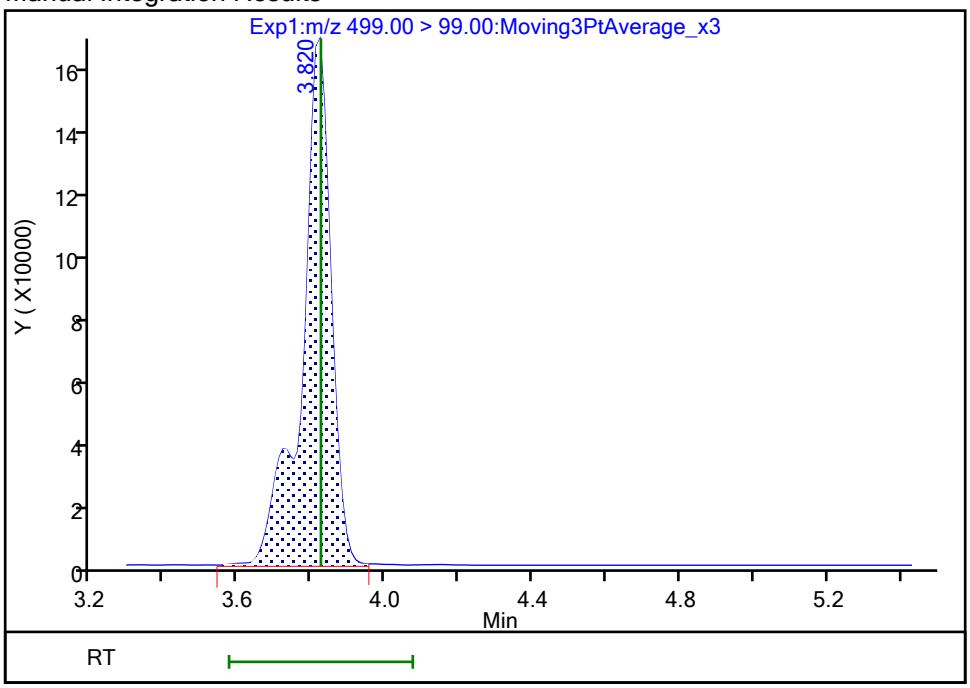
Processing Integration Results

RT: 3.82
Area: 928025
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 923841
Amount: 4.419329
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:46:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

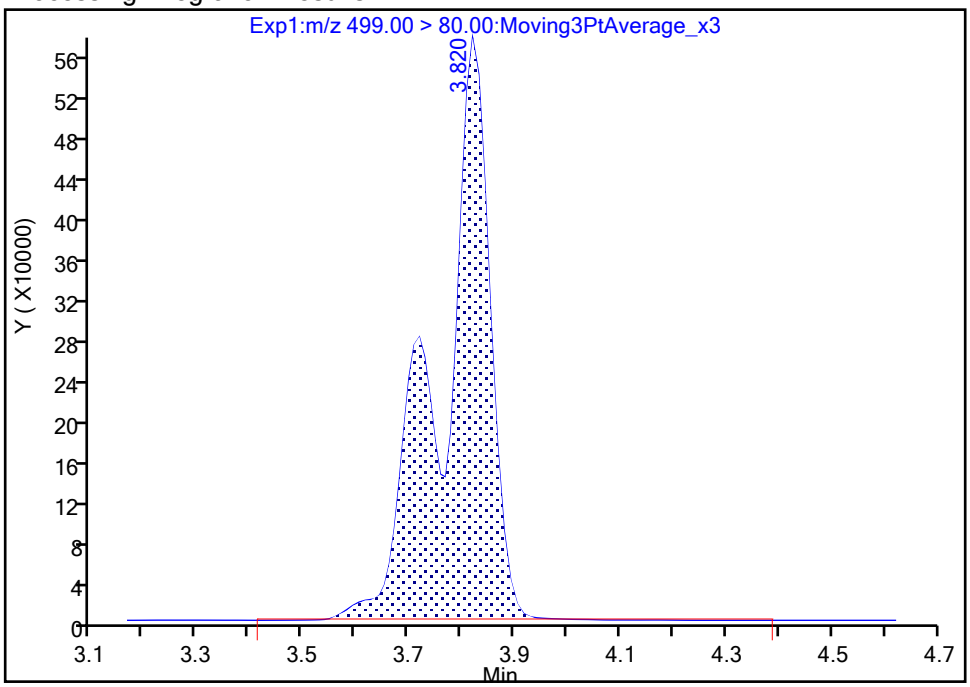
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

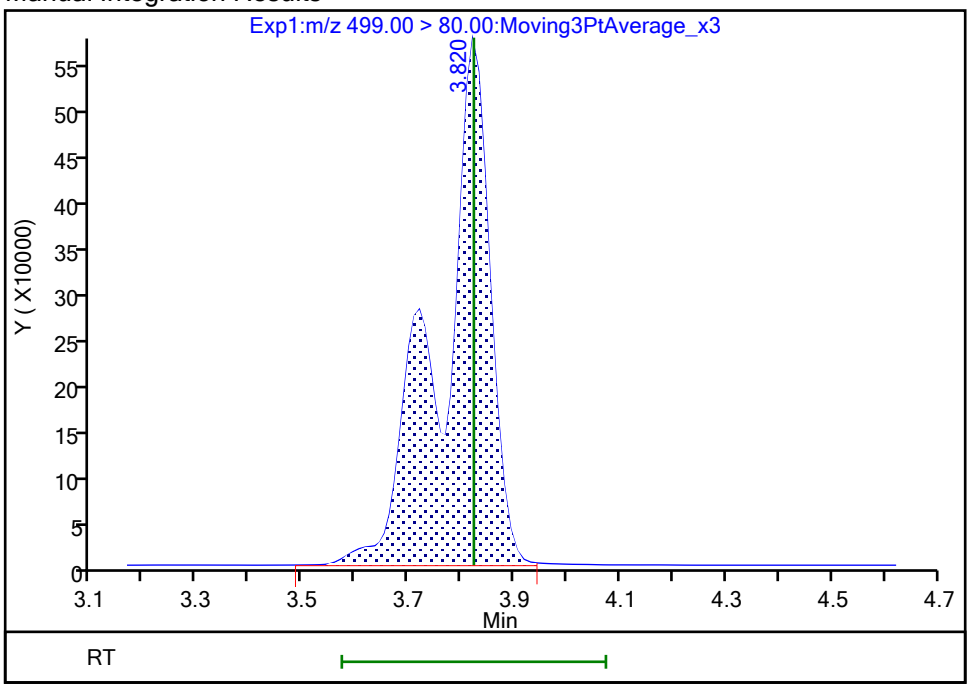
Processing Integration Results

RT: 3.82
Area: 3793230
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3768543
Amount: 4.419329
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:46:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

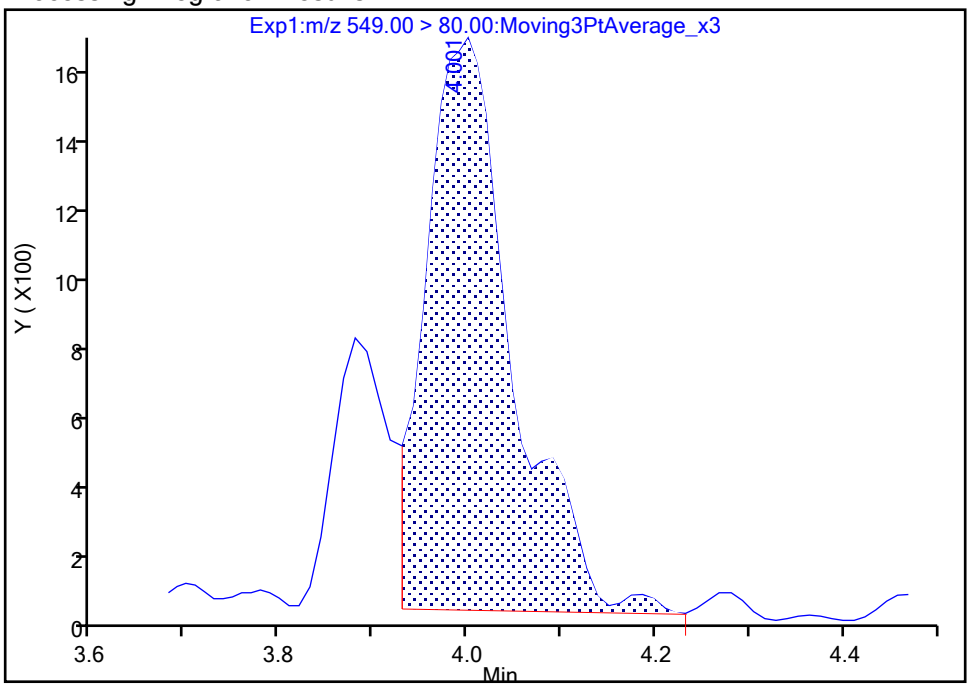
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

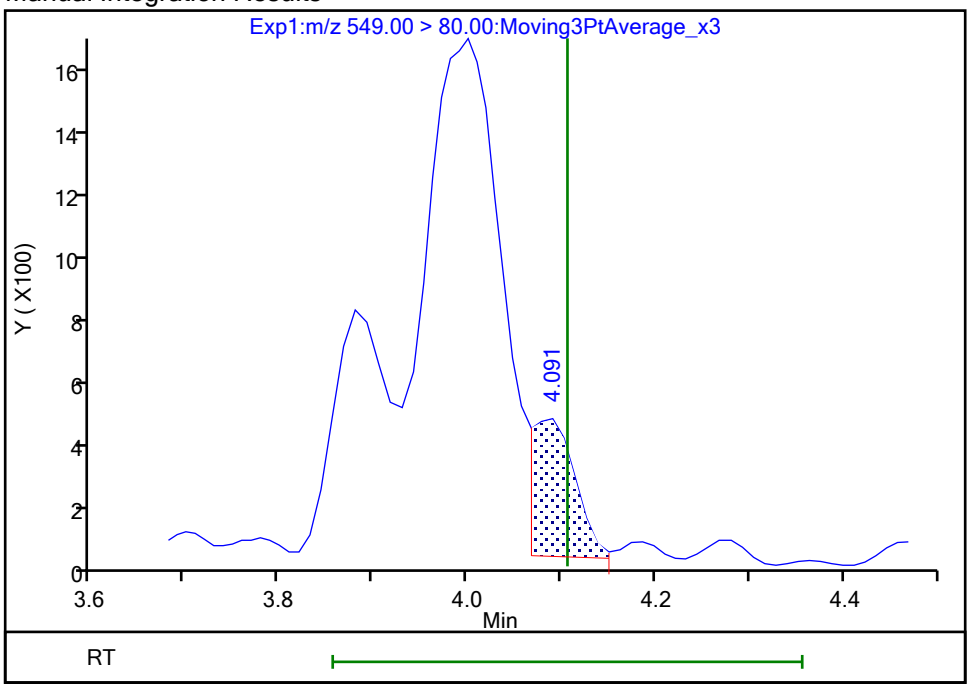
Processing Integration Results

RT: 4.00
Area: 10366
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 1309
Amount: 0.002018
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

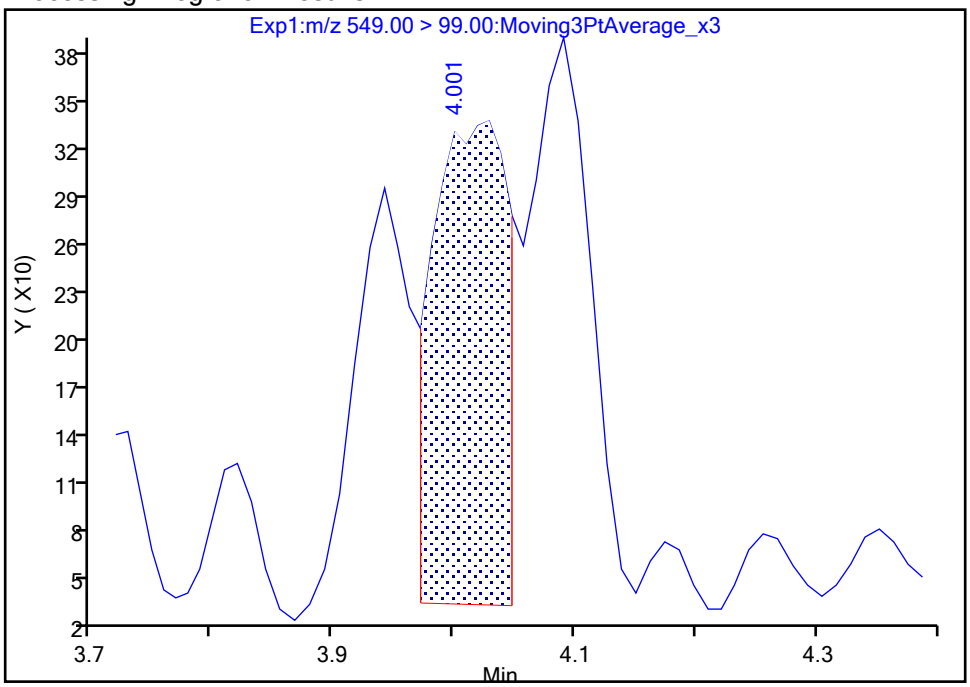
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

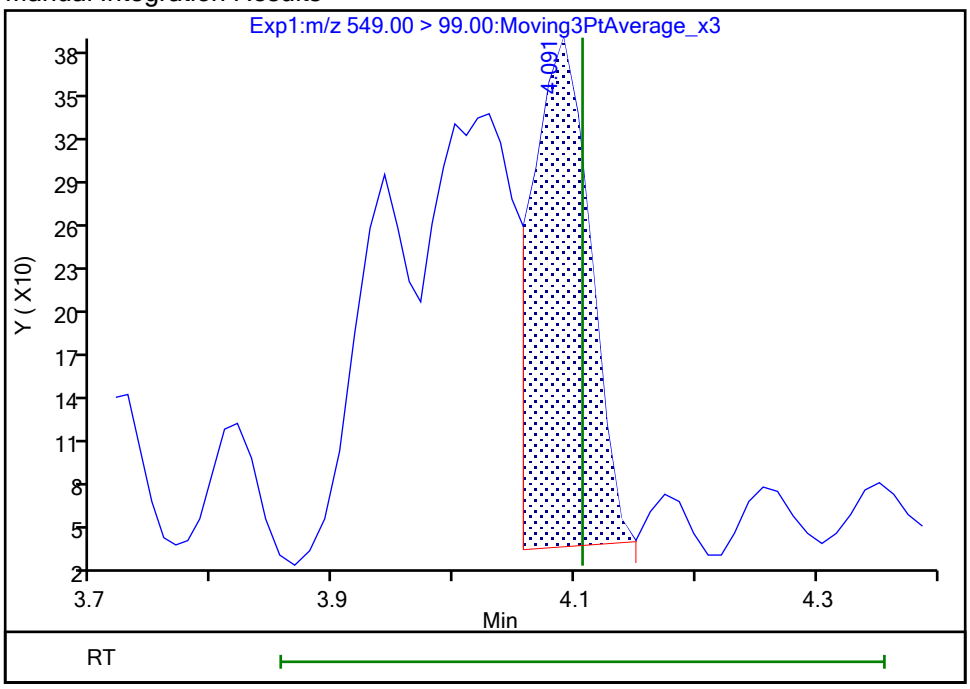
Processing Integration Results

RT: 4.00
Area: 1228
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 1131
Amount: 0.002018
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

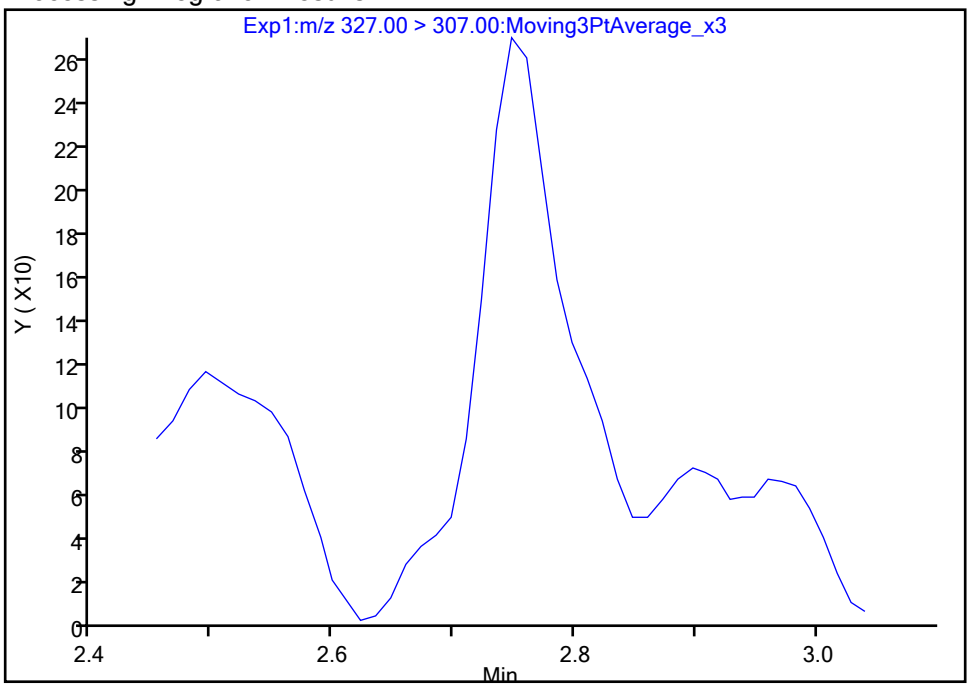
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

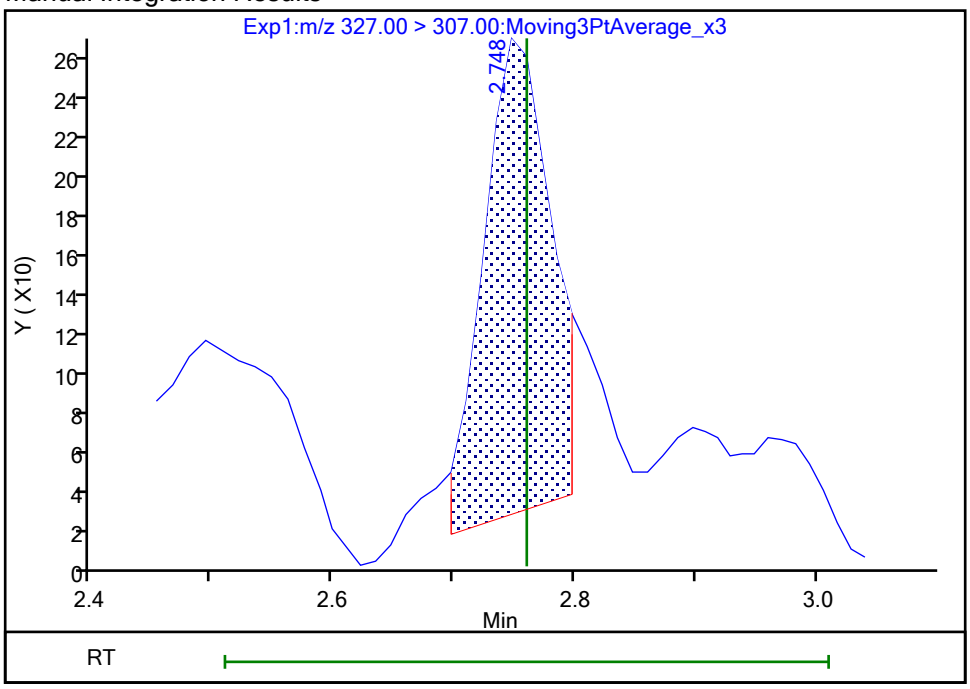
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 894
Amount: 0.001471
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

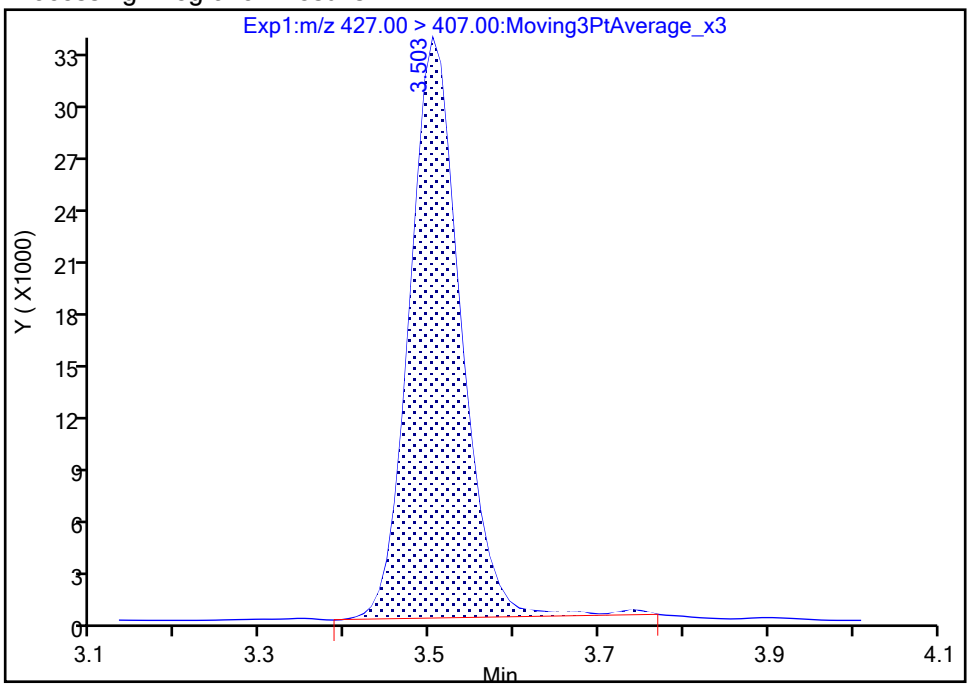
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

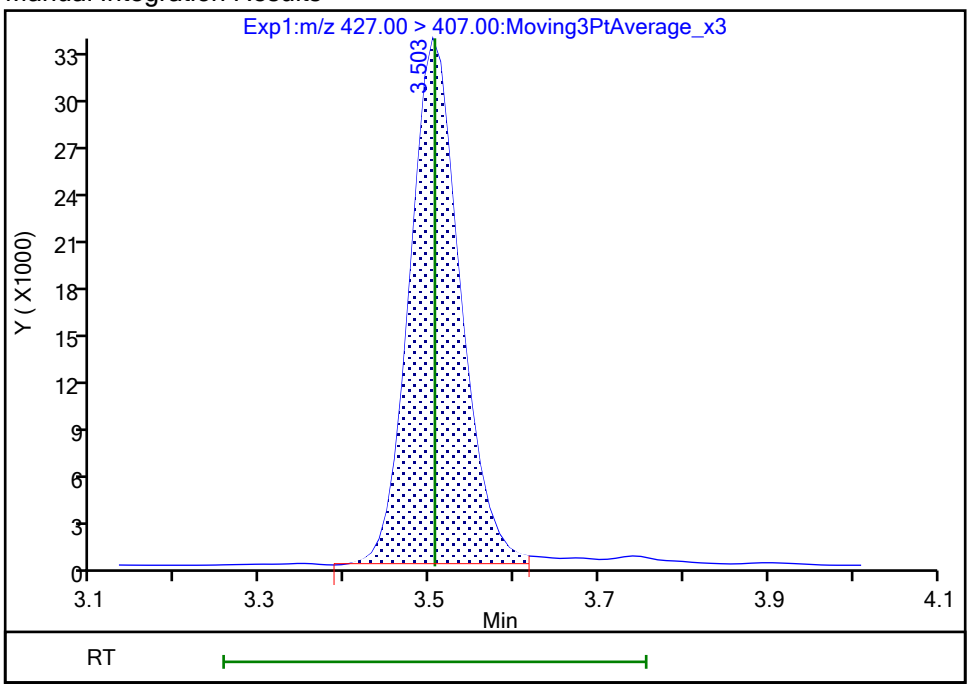
Processing Integration Results

RT: 3.50
Area: 139332
Amount: 0.217160
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 138650
Amount: 0.216097
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:45:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

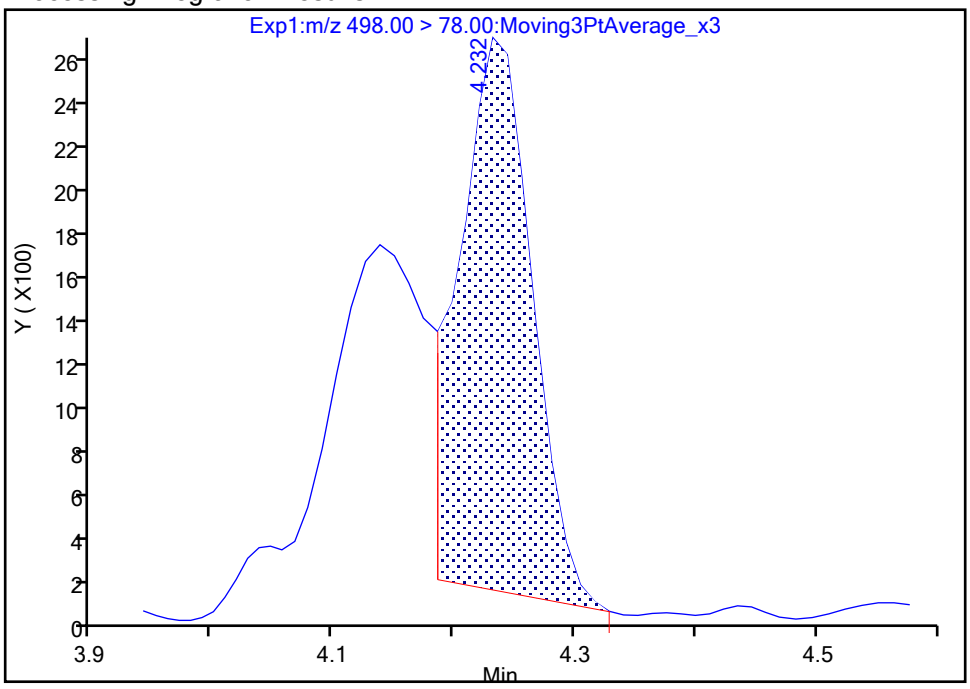
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

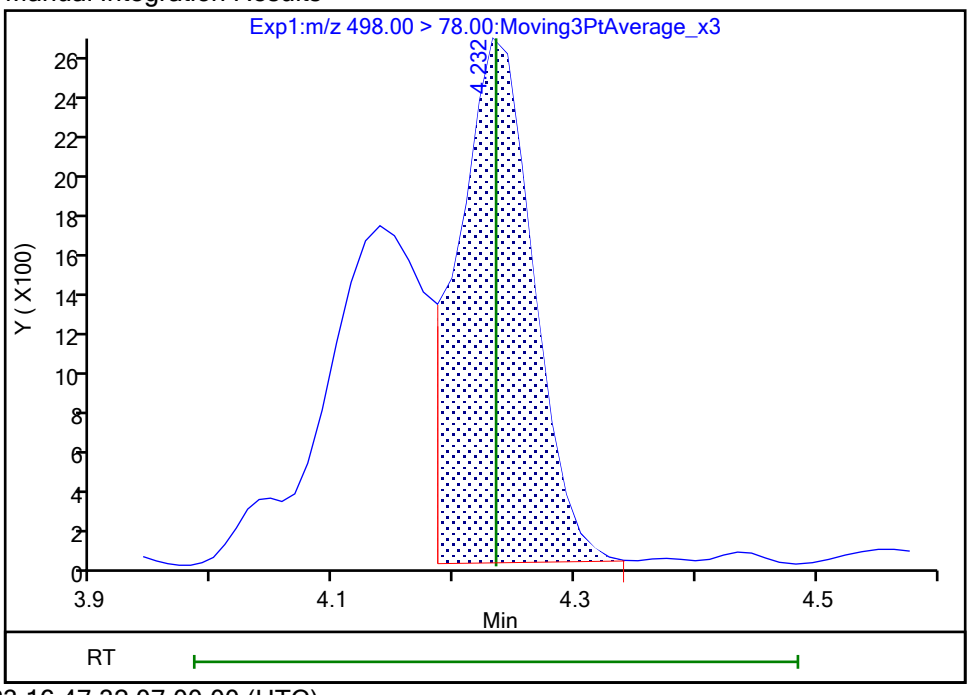
Processing Integration Results

RT: 4.23
Area: 10529
Amount: 0.008264
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 11361
Amount: 0.008917
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

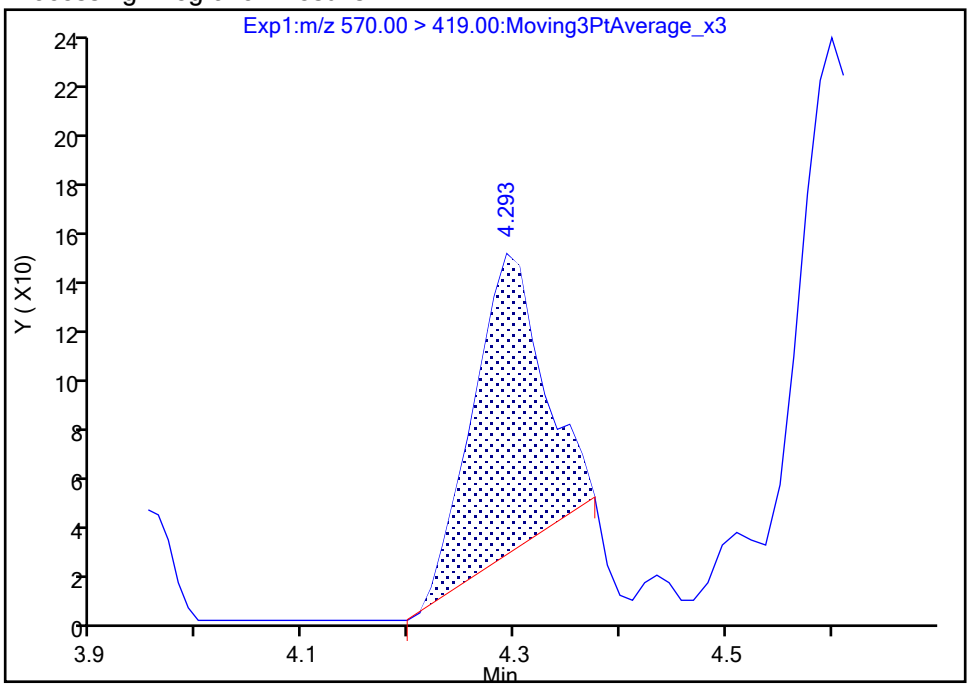
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

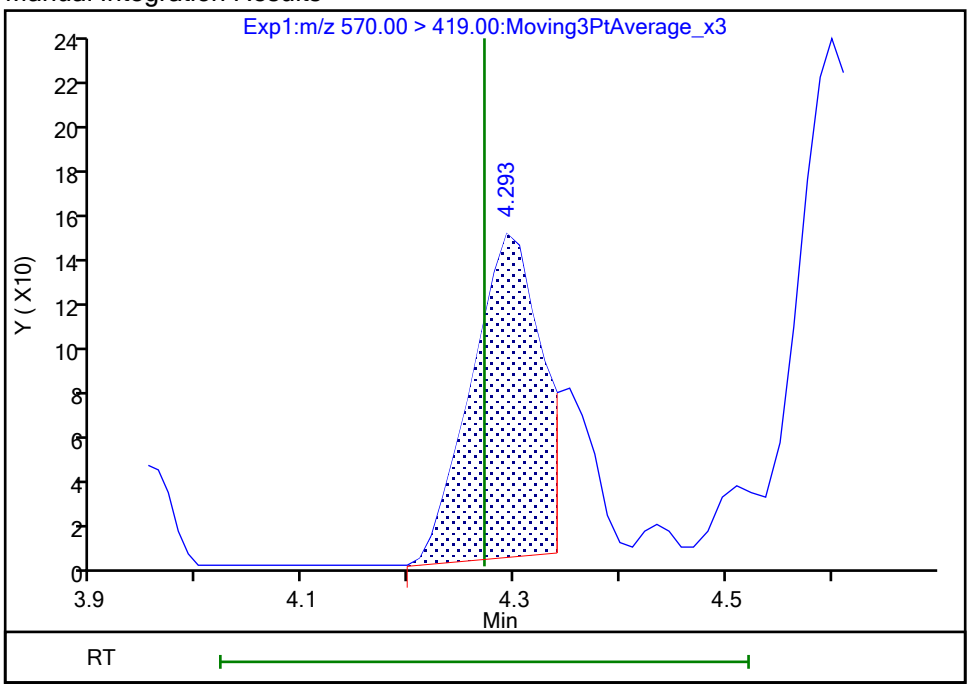
Processing Integration Results

RT: 4.29
Area: 552
Amount: 0.001560
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 645
Amount: 0.001823
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

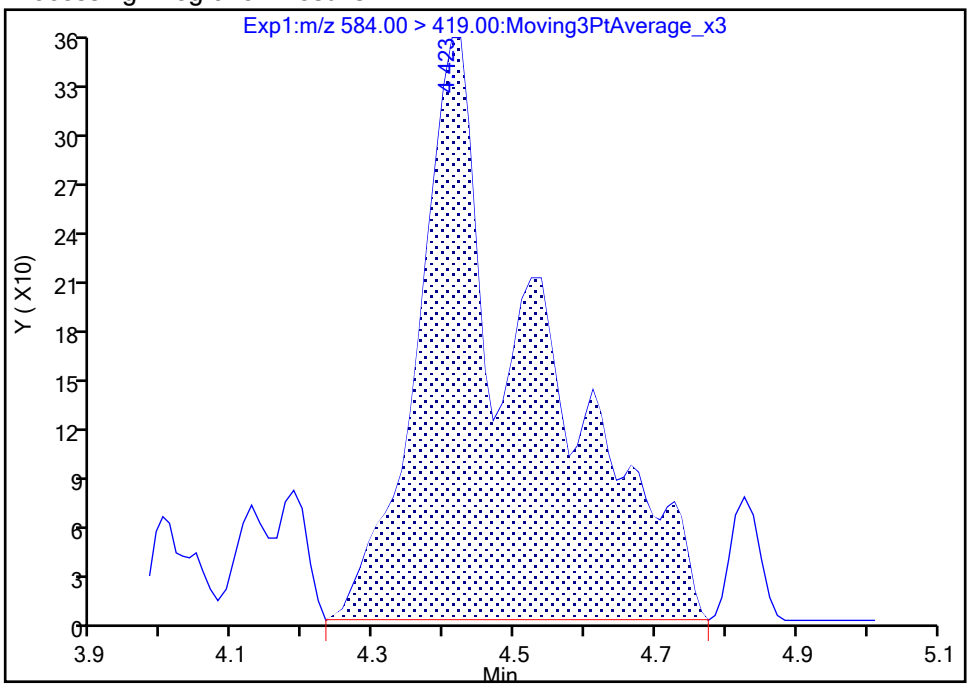
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

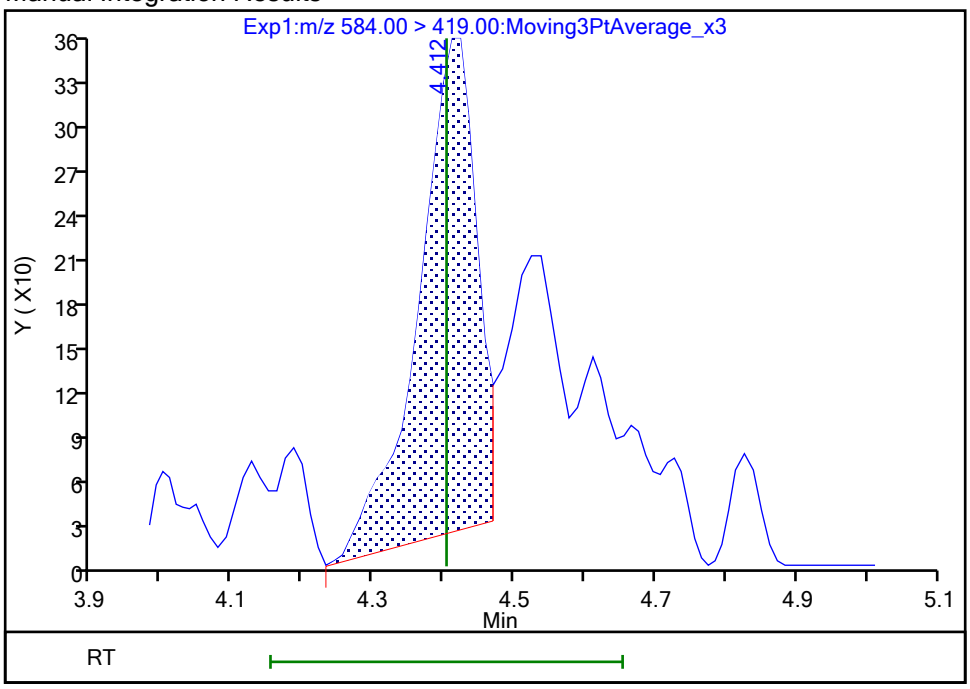
Processing Integration Results

RT: 4.42
Area: 4101
Amount: 0.010484
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1887
Amount: 0.004824
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:47:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

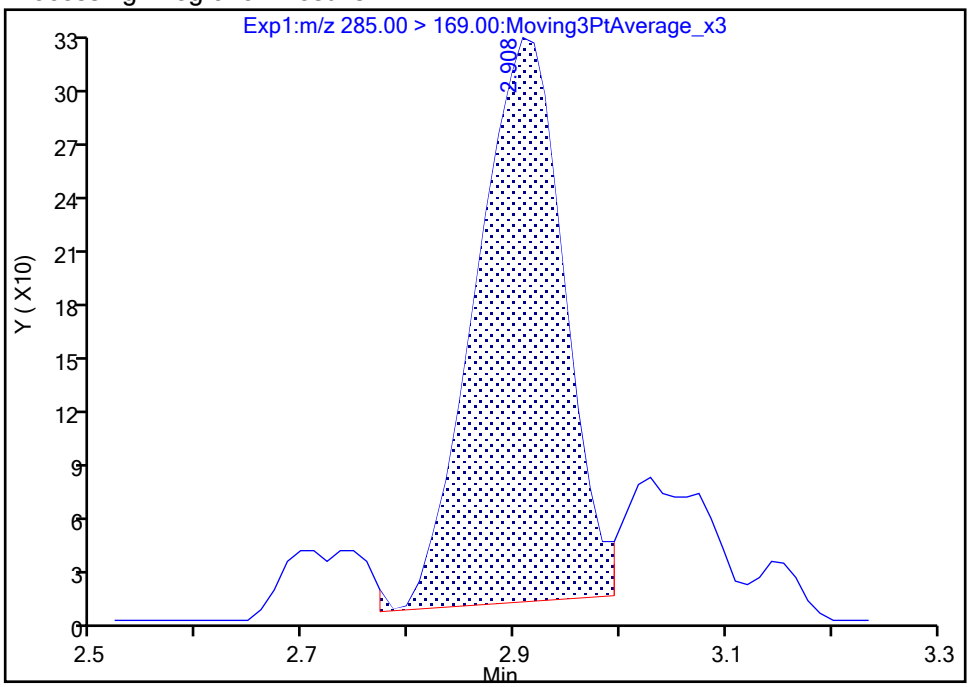
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

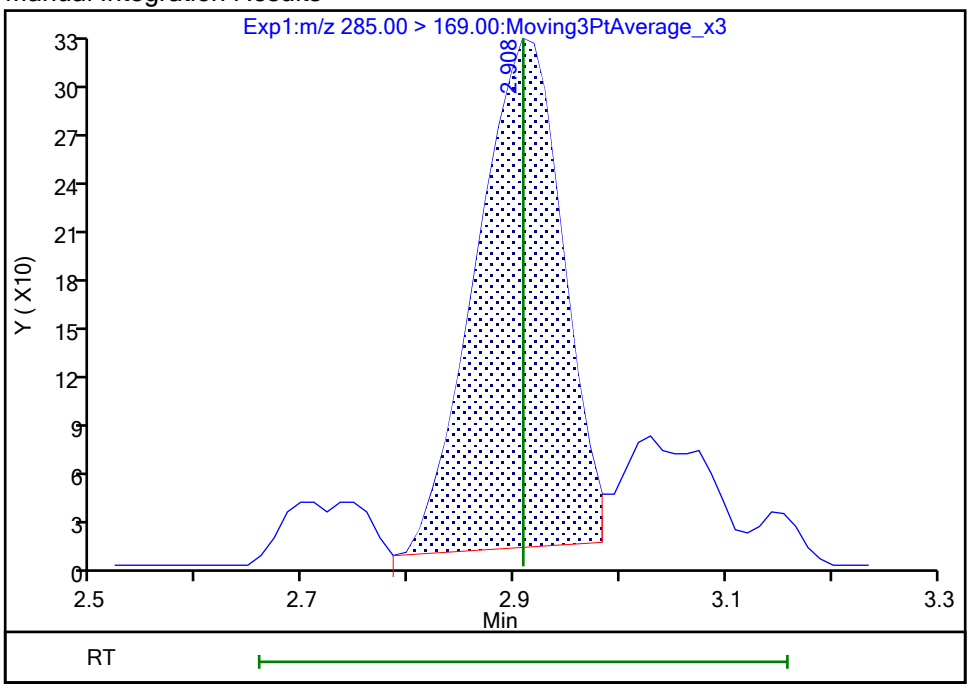
Processing Integration Results

RT: 2.91
Area: 1823
Amount: 0.007489
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 1792
Amount: 0.007362
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

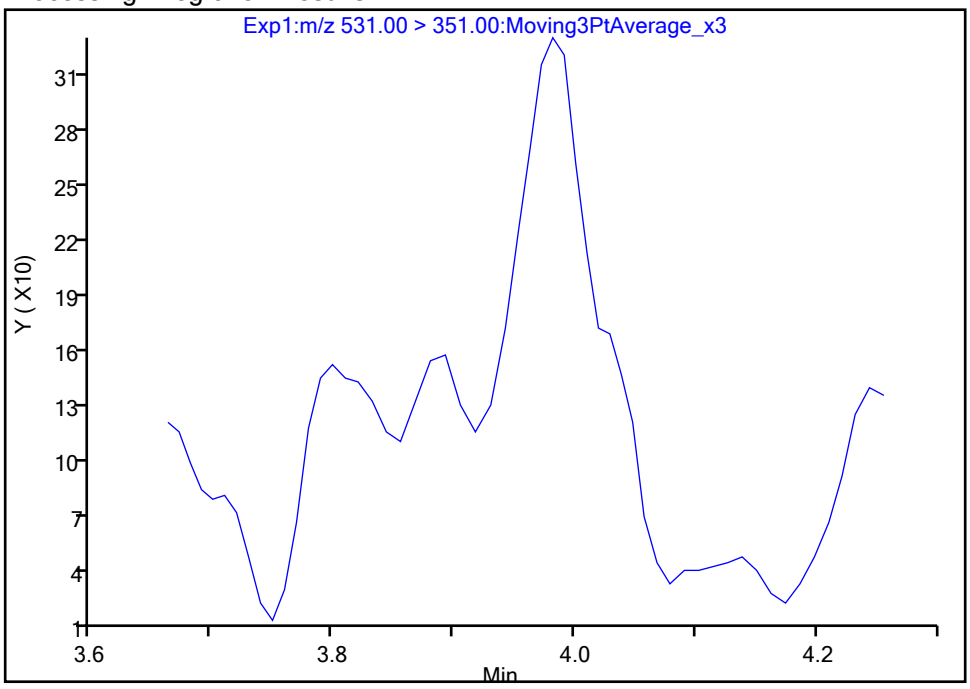
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

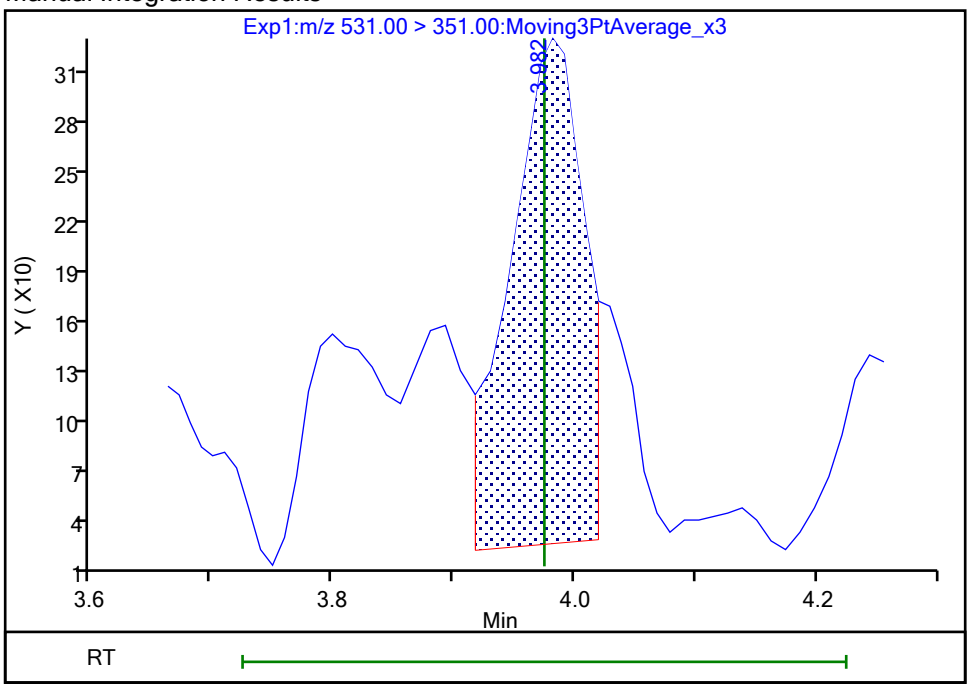
Not Detected
Expected RT: 3.97

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 1203
Amount: 0.000461
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:46:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

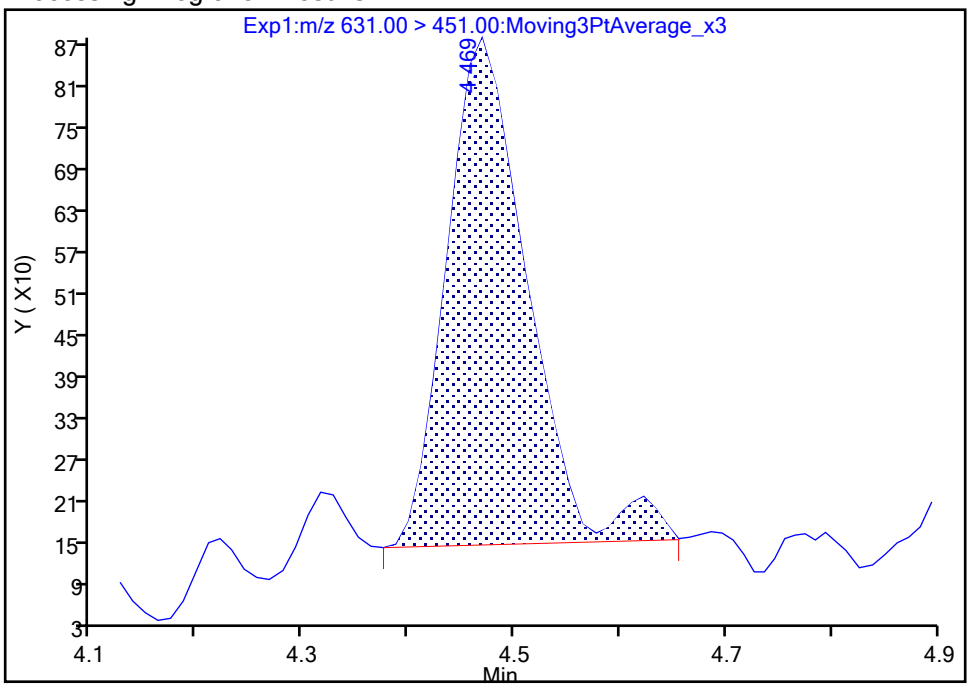
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

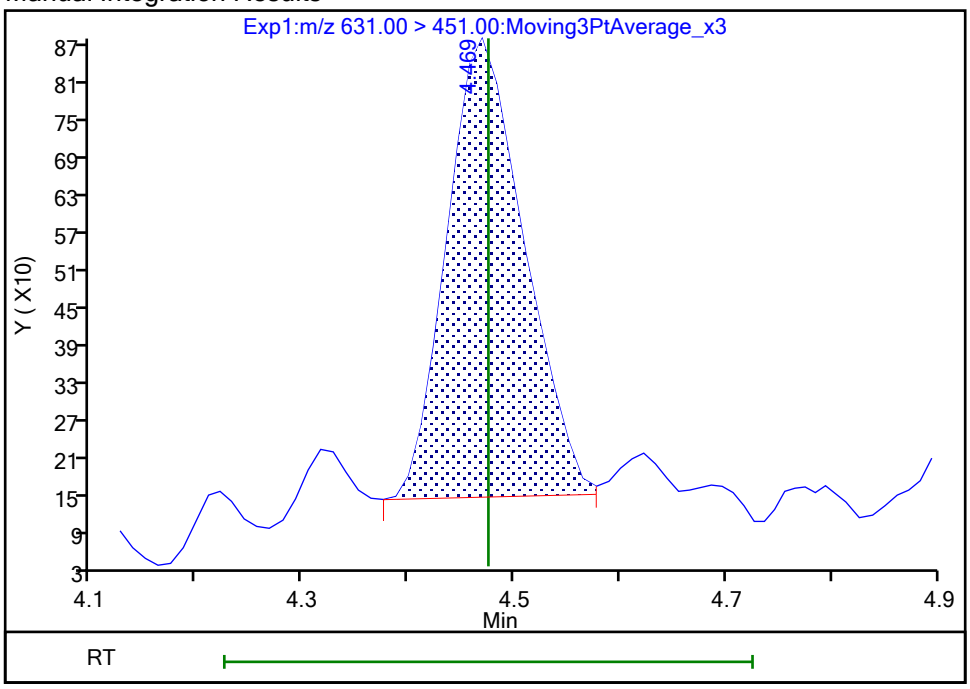
Processing Integration Results

RT: 4.47
Area: 3891
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 3729
Amount: 0.000932
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

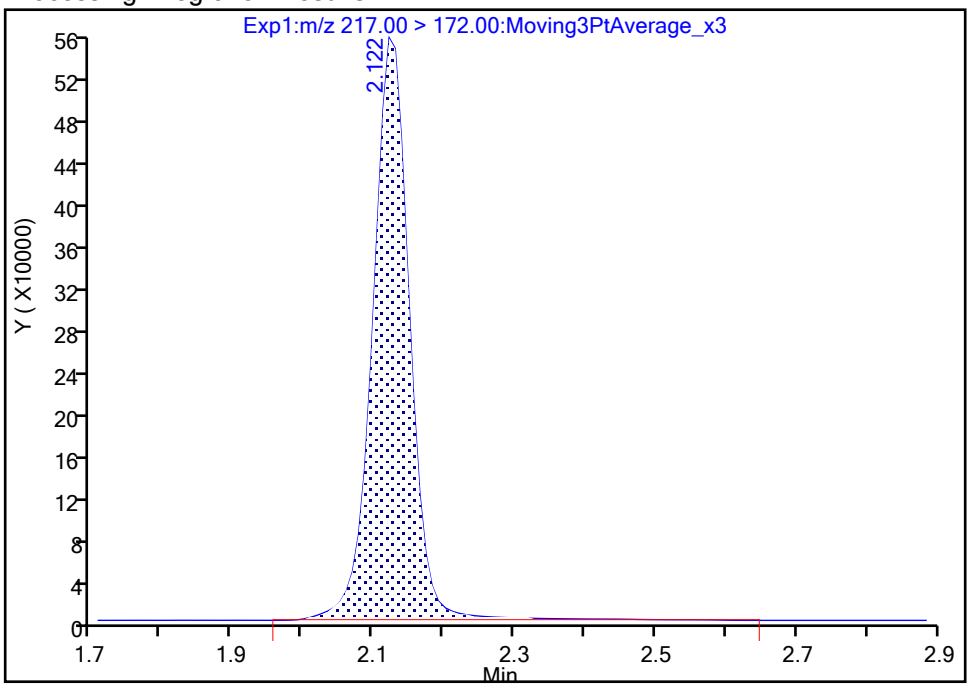
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

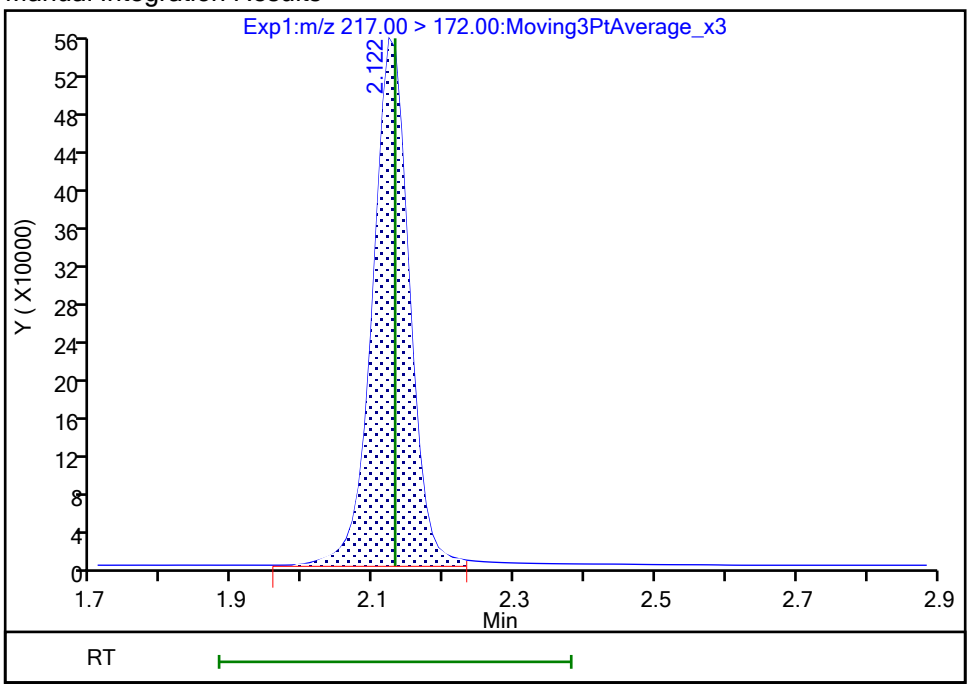
Processing Integration Results

RT: 2.12
Area: 2034331
Amount: 1.225727
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2000429
Amount: 1.205517
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:40:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

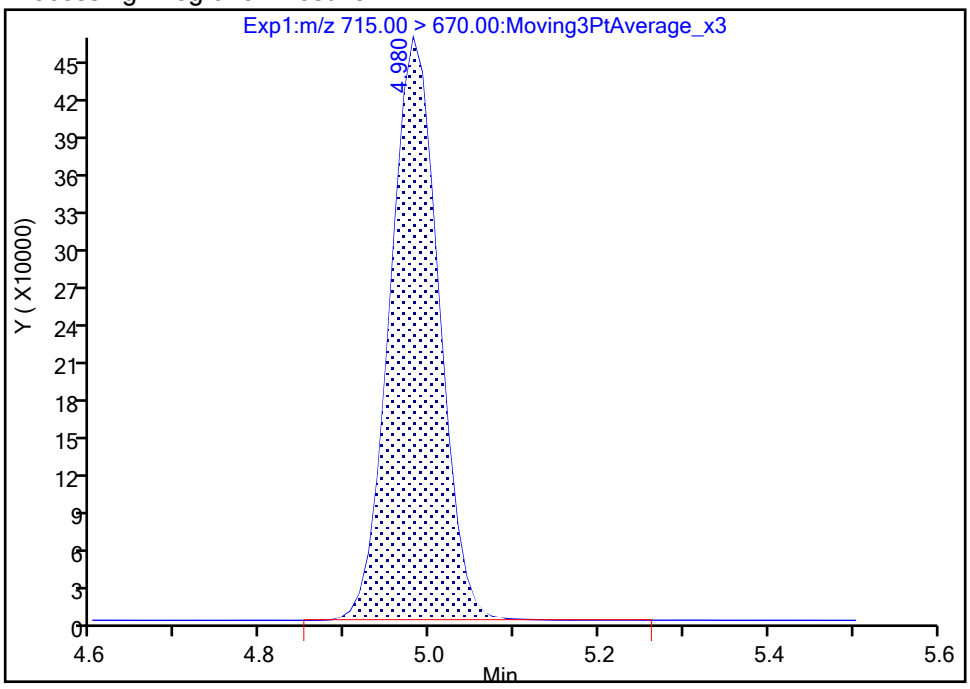
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 43 13C2 PFTeDA, CAS: STL02116

Signal: 1

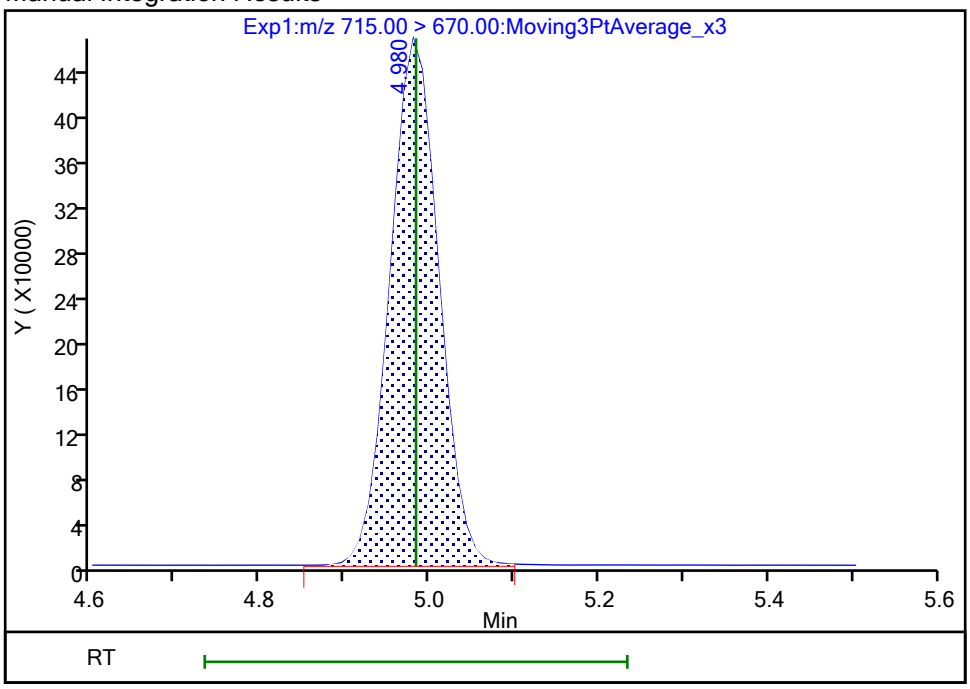
Processing Integration Results

RT: 4.98
Area: 1873763
Amount: 1.056883
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 1871791
Amount: 1.055961
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:43:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

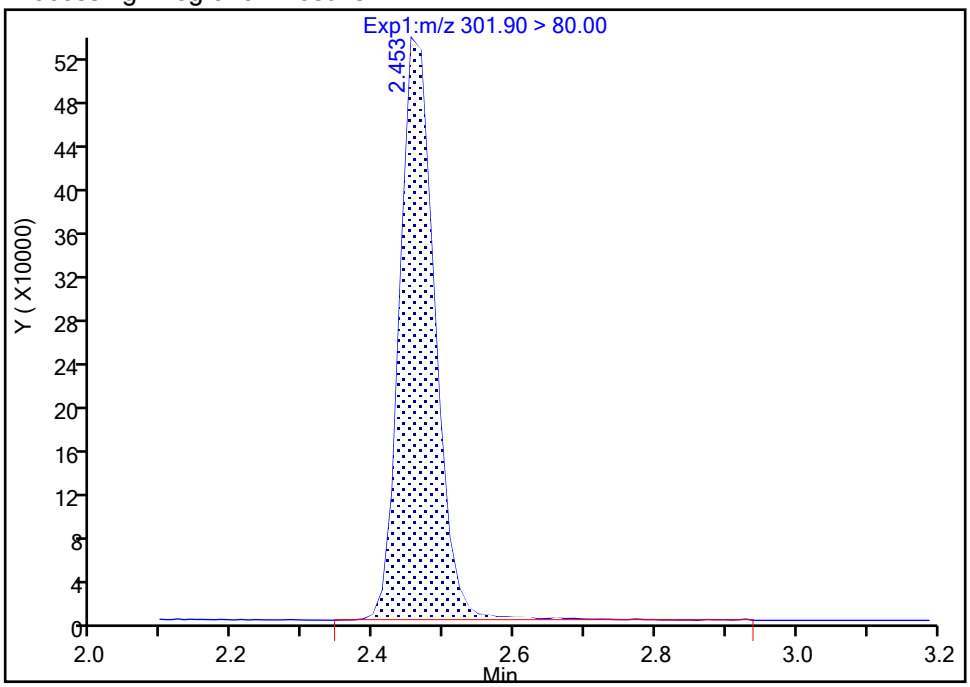
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

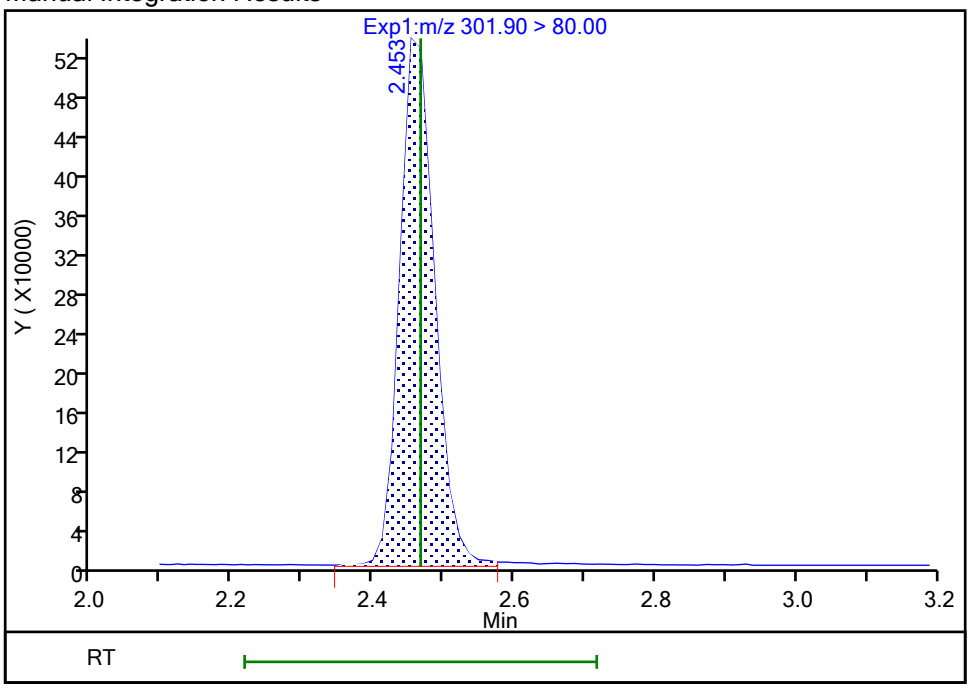
Processing Integration Results

RT: 2.45
Area: 1842663
Amount: 1.057279
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1818576
Amount: 1.043646
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:40:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

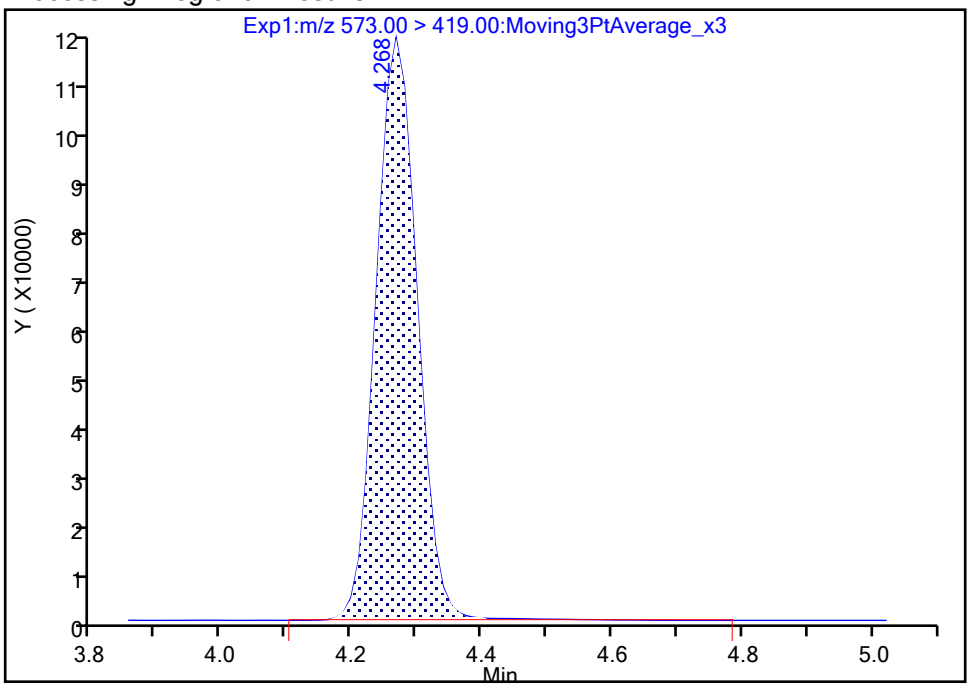
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

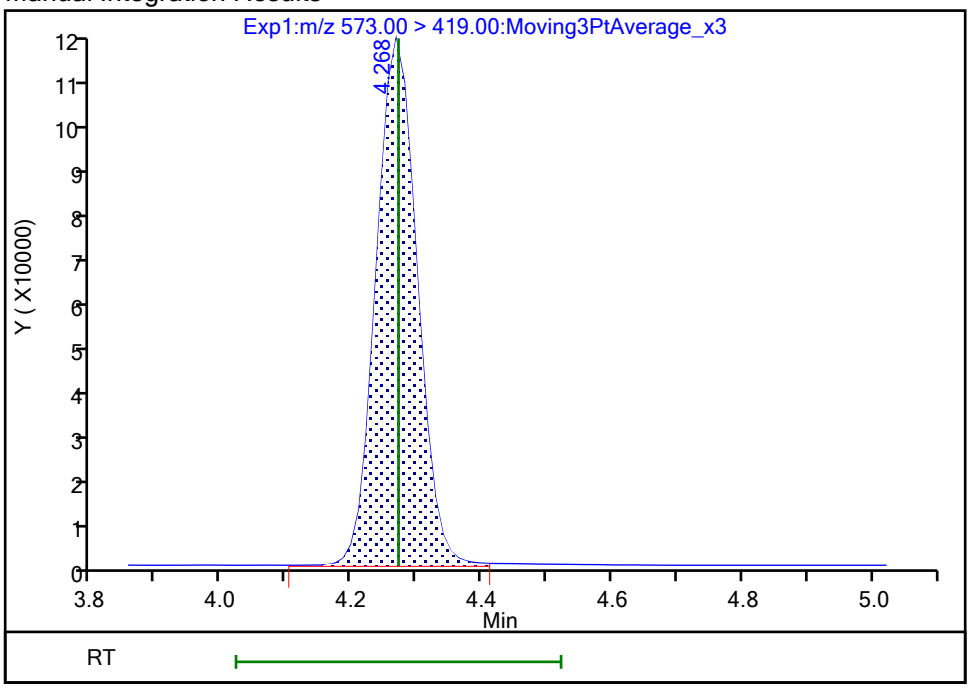
Processing Integration Results

RT: 4.27
Area: 490301
Amount: 1.105433
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 487436
Amount: 1.099172
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:43:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

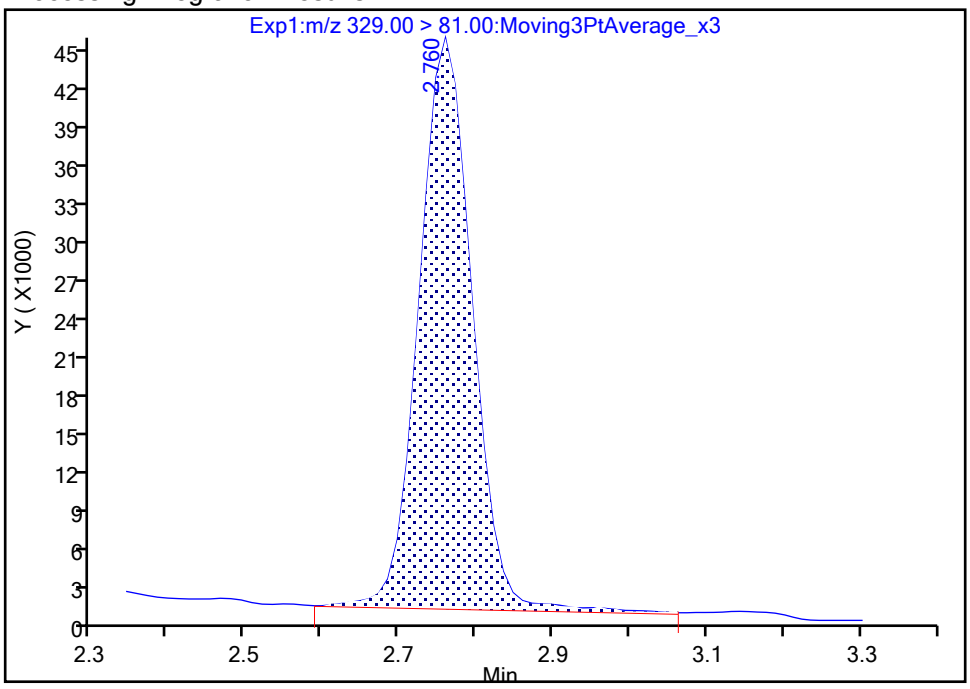
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

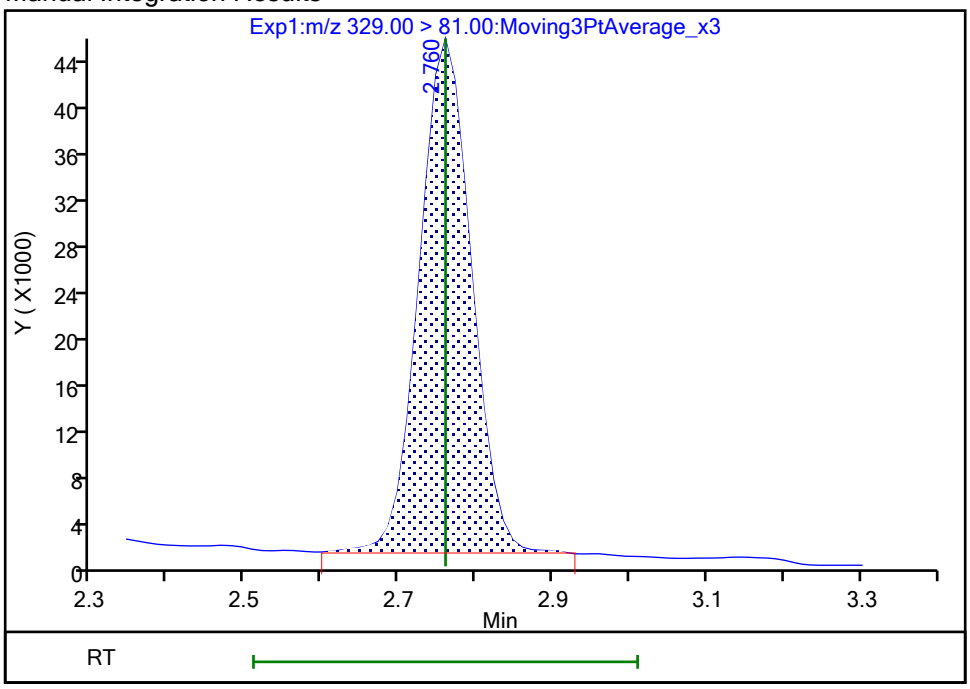
Processing Integration Results

RT: 2.76
Area: 215474
Amount: 1.069069
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 209008
Amount: 1.037174
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:43:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

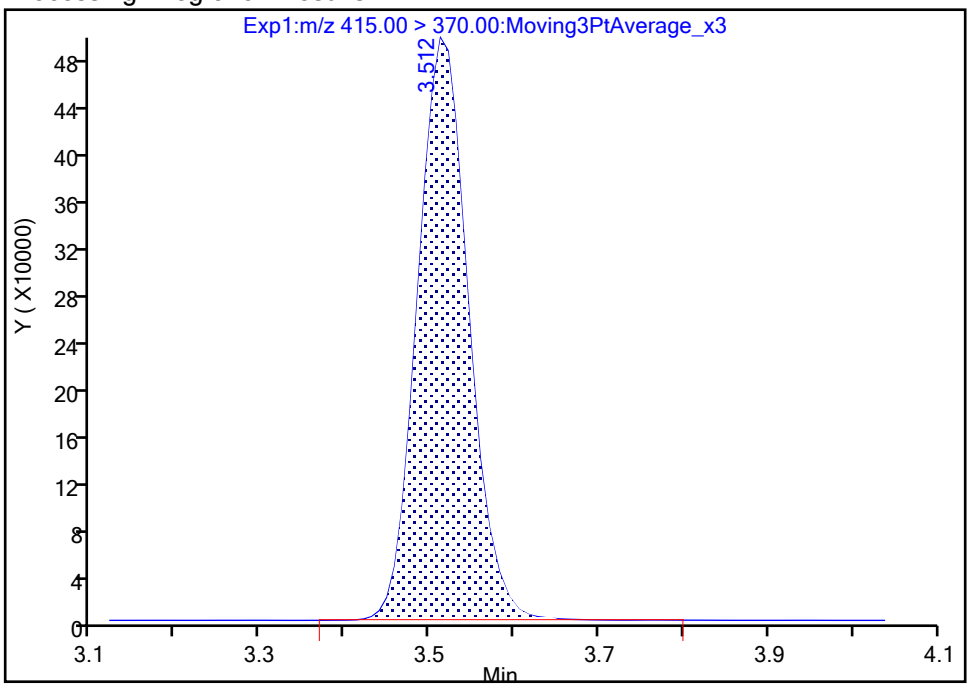
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D23.d				
Injection Date:	21-Oct-2023 06:49:42	Instrument ID:	LC812		
Lims ID:	460-290219-A-2-A	Lab Sample ID:	200-290219-2		
Client ID:	MW90R-101223-1030-26				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

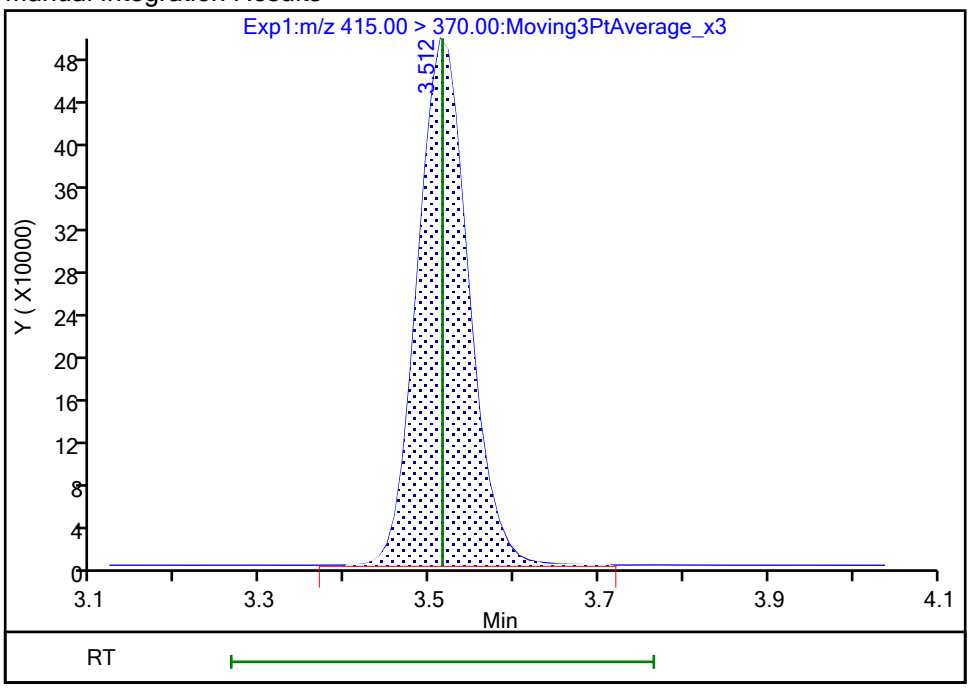
Processing Integration Results

RT: 3.51
Area: 2092048
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2091672
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:44:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW41R-101223-1137-29.5 Lab Sample ID: 460-290219-3

Matrix: Water Lab File ID: PA231020D24.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 11:37

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 298.8(mL) Date Analyzed: 10/21/2023 06:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.18	U	4.18	1.00
2706-90-3	Perfluoropentanoic acid	1.65	J	1.67	0.57
307-24-4	Perfluorohexanoic acid	1.65	J	1.67	0.54
375-85-9	Perfluoroheptanoic acid	1.40	J	1.67	0.45
335-67-1	Perfluorooctanoic acid	6.29		1.67	0.64
375-95-1	Perfluorononanoic acid	1.67	U	1.67	0.41
335-76-2	Perfluorodecanoic acid	1.67	U	1.67	0.38
2058-94-8	Perfluoroundecanoic acid	1.67	U	1.67	0.46
307-55-1	Perfluorododecanoic acid	1.67	U	1.67	0.41
72629-94-8	Perfluorotridecanoic acid	1.67	U	1.67	0.40
376-06-7	Perfluorotetradecanoic acid	1.67	U	1.67	0.54
375-73-5	Perfluorobutanesulfonic acid	0.94	J	1.67	0.52
2706-91-4	Perfluoropentanesulfonic acid	0.63	J	1.67	0.42
355-46-4	Perfluorohexanesulfonic acid	2.43		1.67	0.46
375-92-8	Perfluoroheptanesulfonic acid	0.57	J	1.67	0.34
1763-23-1	Perfluorooctanesulfonic acid	16.1		1.67	0.71
68259-12-1	Perfluorononanesulfonic acid	1.67	U	1.67	0.33
335-77-3	Perfluorodecanesulfonic acid	1.67	U	1.67	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.18	U	4.18	1.09
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.64
754-91-6	Perfluorooctanesulfonamide	1.67	U	1.67	0.77
2355-31-9	NMeFOSAA	4.18	U	4.18	1.59
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.18	U	4.18	1.34
13252-13-6	HFPODA	3.35	U	3.35	0.92
919005-14-4	DONA	1.67	U	1.67	0.35
756426-58-1	9Cl-PF3ONS	1.67	U	1.67	0.27
763051-92-9	11Cl-PF3OUdS	1.67	U	1.67	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW41R-101223-1137-29.5 Lab Sample ID: 460-290219-3

Matrix: Water Lab File ID: PA231020D24.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 11:37

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 298.8(mL) Date Analyzed: 10/21/2023 06:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	100		50-150
STL01892	13C4 PFHpA	97		50-150
STL02116	13C2 PFTeDA	77		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	79		50-150
STL02117	d5-NEtFOSAA	81		50-150
STL02395	M2-4:2 FTS	84		50-150
STL02279	M2-6:2 FTS	88		50-150
STL02280	M2-8:2 FTS	74		50-150
STL02255	13C3 HFPO-DA	92		50-150
STL00994	18O2 PFHxS	92		50-150
STL00993	13C2 PFHxA	102		50-150
STL00991	13C4 PFOS	86		50-150
STL00998	13C2 PFDoA	83		50-150
STL00995	13C5 PFNA	93		50-150
STL00996	13C2 PFDA	95		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	86		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d
Lims ID: 460-290219-A-3-A
Client ID: MW41R-101223-1137-29.5
Sample Type: Client
Inject. Date: 21-Oct-2023 06:57:53 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-3-A
Misc. Info.: 200-0057494-024 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 16:52:51
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	2046050	1.23		98.5	1377	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.004	93043	0.0220			8.5	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.440	2.439	0.001	0.695	1606889	1.25		99.7	1655	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.440	2.439	0.001	1.000	68196	0.0492			1.4	
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1767229	1.01		87.1	48323	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.006	47693	0.0281	Target=2.06		9.8	M
298.90 > 99.00	2.467	2.467	0.0	1.006	21727		2.20(1.03-3.09)		6.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.005	773	0.001338			4.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	198572	0.9838		84.3	68.8	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1675729	1.28		102	5035	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	72936	0.0494	Target=14.12		8.3	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	5350		13.63(7.06-21.17)		5.6	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.887	28358	0.0190	Target=2.72		11.3	M
349.00 > 99.00	2.797	2.798	-0.001	0.887	10259		2.76(1.36-4.09)		8.2	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.004	676	0.002904			5.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.898	2.908	-0.010	0.825	290675	1.14		91.5	3665	
D 11 18O2 PFHxS										
403.00 > 84.00	3.154	3.157	-0.003	0.898	1354289	1.08		91.5	3390	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.004	92034	0.0726	Target=3.32		60.1	M
399.00 > 99.00	3.154	3.157	-0.003	1.000	25750		3.57(1.66-4.98)		21.6	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	65515	0.0419	Target=4.17		8.2	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	13919		4.71(2.09-6.26)		21.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1743329	1.21		96.9	5492	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.917	16917	0.0171	Target=4.83		8.5	M
449.00 > 99.00	3.493	3.506	-0.013	0.915	2684		6.30(2.41-7.24)		4.9	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.997	271485	1.04		87.9	379	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.506	0.005	1.003	2755	0.004409			3.7	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	1.000	2157770	1.32		106	5716	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.515	-0.004		2095133	1.25			5576	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.515	-0.004	1.000	345796	0.1881	Target=2.88		12.1	M
413.00 > 169.00	3.511	3.515	-0.004	1.000	127064		2.72(1.44-4.32)		144	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.719	3.823	-0.104	0.974	384404	0.4807	Target=4.24		386	M
499.00 > 99.00	3.819	3.823	-0.004	1.000	94490		4.07(2.12-6.37)		137	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.088	819294	1.03		86.3	1759	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.846	-0.004	1.000	11878	0.007343	Target=8.34		1.6	M
463.00 > 169.00	3.831	3.846	-0.015	0.997	2293		5.18(4.17-12.51)		7.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2063287	1.16		93.0	6995	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.972	3.975	-0.003	1.040	1971	0.000805			5.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.125	4.130	-0.005	1.175	2212465	1.19		95.2	6499	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.137	4.142	-0.005	1.178	260373	0.8908		74.4	711	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.125	4.142	-0.017	0.997	2352	0.004914			20.3	M
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.235	-0.005	1.205	1635680	1.03		82.5	8957	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.235	0.007	1.003	17365	0.0139			103	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.271	-0.005	1.215	438970	0.9882		79.1	1153	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.271	-0.005	1.000	5480	0.0172			20.6	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.363	4.356	0.007	1.142	565	0.001207	Target=2.37		7.5	RM
599.00 > 99.00	4.363	4.356	0.007	1.142	633		0.89(1.19-3.56)		6.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	1894431	1.08		86.4	7556	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.391	-0.004	1.000	9308	0.005959	Target=12.20		2.1	
563.00 > 169.00	4.375	4.391	-0.016	0.997	1213		7.67(6.10-18.31)		14.9	M
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.387	4.391	-0.004	1.249	432766	1.01		80.9	939	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.403	-0.004	1.003	4309	0.0124			27.8	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.482	4.475	0.007	1.174	2693	0.000718			4.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.604	-0.005	1.310	1845316	1.03		82.8	7313	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.604	0.006	1.002	4741	0.003155	Target=8.47		0.4	
613.00 > 169.00	4.610	4.604	0.006	1.002	1057		4.49(4.23-12.70)		7.3	M
41 Perfluorotridecanoic acid										RM
663.00 > 619.00	4.793	4.807	-0.014	1.042	3139	0.001988	Target=6.41		0.2	R
663.00 > 169.00	4.793	4.807	-0.014	1.042	235		13.36(3.21-9.62)		2.3	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	1699085	0.9569		76.6	4555	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.969	4.983	-0.014	0.998	455	0.002994	Target=0.87		9.3	M
713.00 > 219.00	4.990	4.983	0.007	1.002	373		1.22(0.43-1.30)		7.5	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

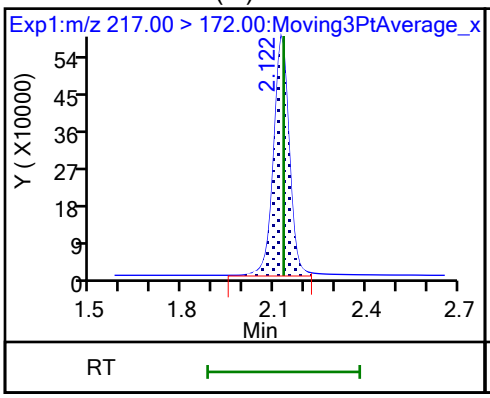
M - Manually Integrated

Report Date: 25-Oct-2023 09:08:52 Chrom Revision: 2.3 18-Oct-2023 21:16:54

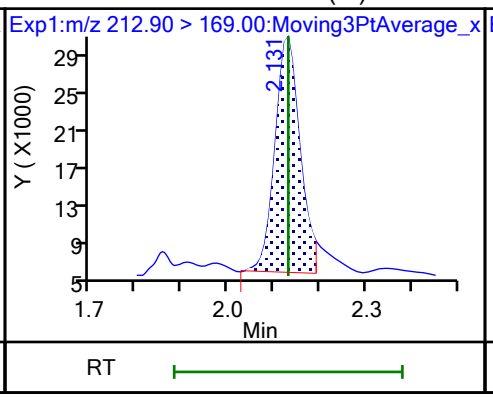
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d
Injection Date: 21-Oct-2023 06:57:53 Instrument ID: LC812
Lims ID: 460-290219-A-3-A Lab Sample ID: 200-290219-3
Client ID: MW41R-101223-1137-29.5
Operator ID: LC812user ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

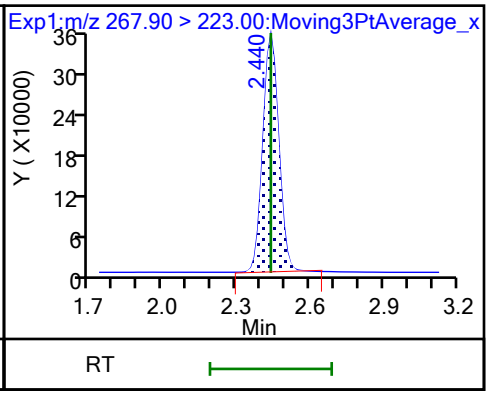
D 1 13C4 PFBA (M)



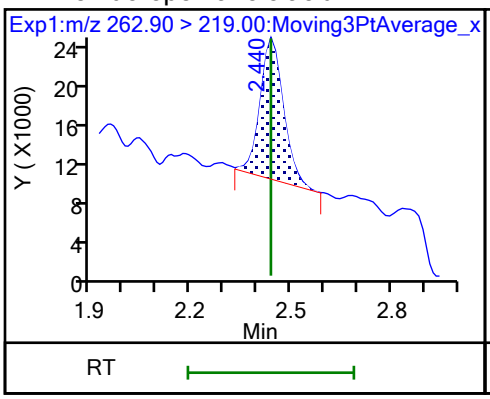
2 Perfluorobutanoic acid (M)



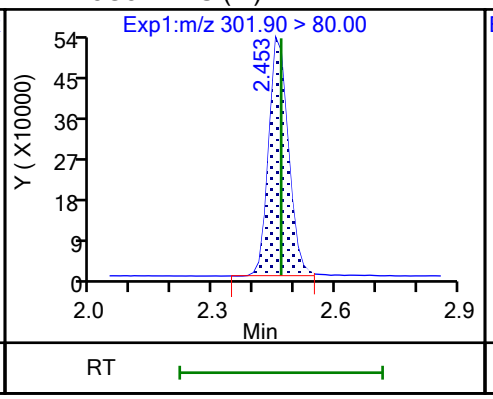
D 3 13C5 PFPeA



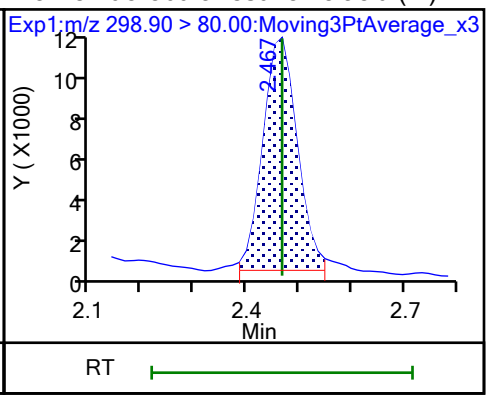
4 Perfluoropentanoic acid



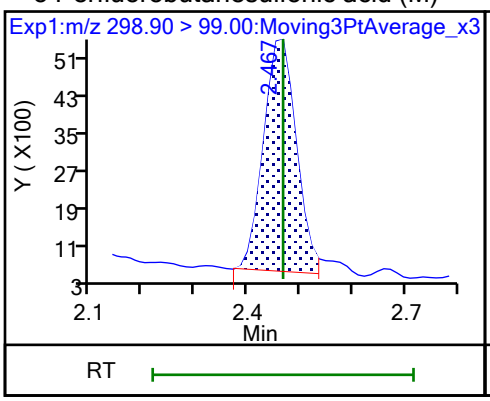
D 47 13C3 PFBS (M)



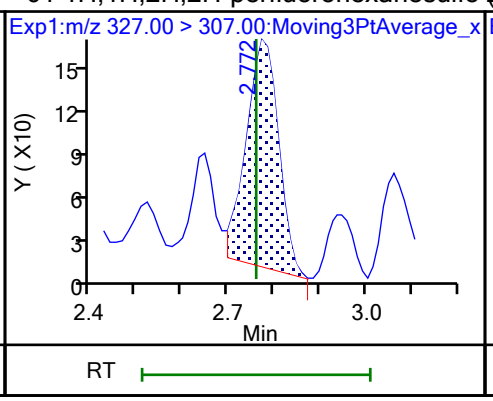
5 Perfluorobutanesulfonic acid (M)



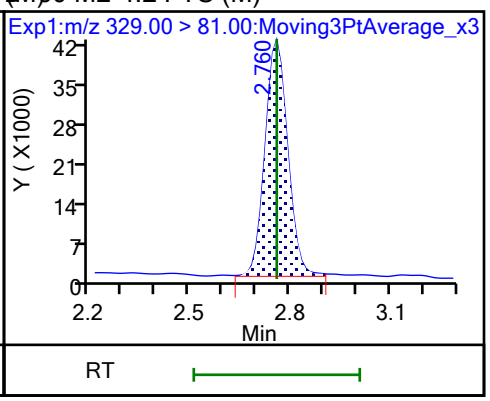
5 Perfluorobutanesulfonic acid (M)



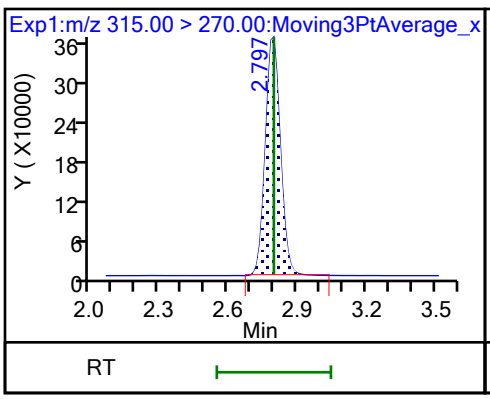
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



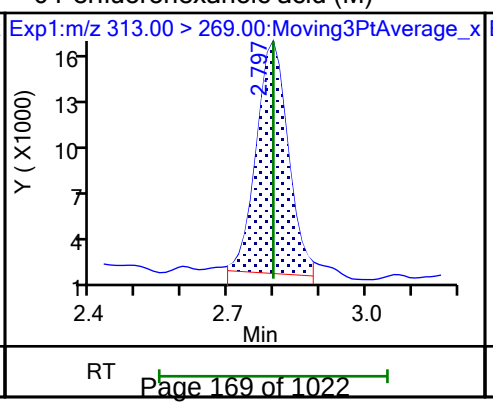
60 M2-4:2 FTS (M)



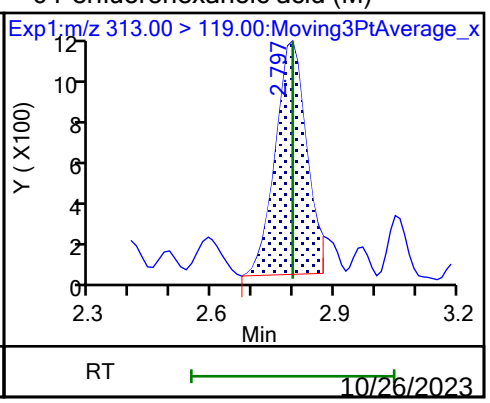
D 7 13C2 PFHxA



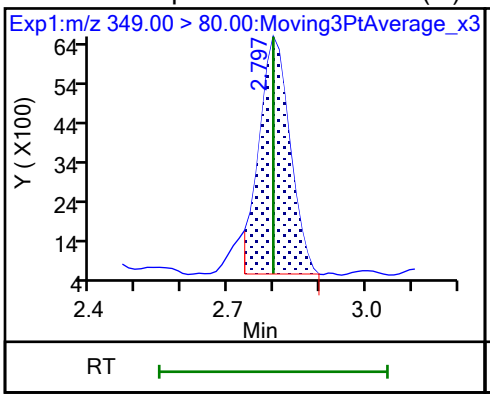
6 Perfluorohexanoic acid (M)



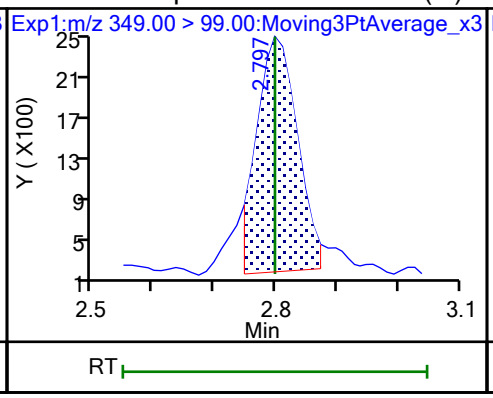
6 Perfluorohexanoic acid (M)



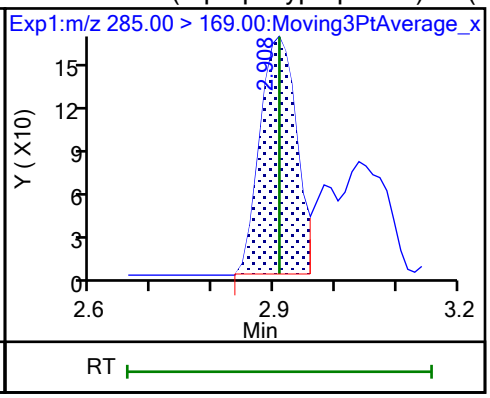
70 Perfluoropentanesulfonic acid (M)



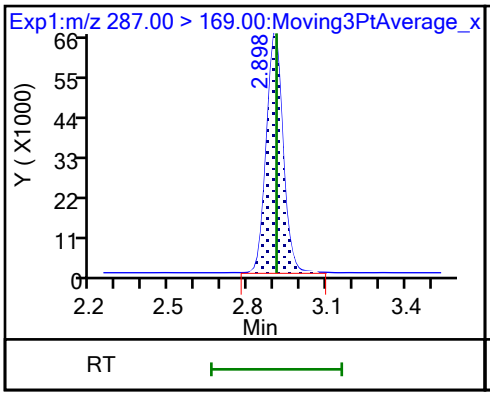
70 Perfluoropentanesulfonic acid (M)



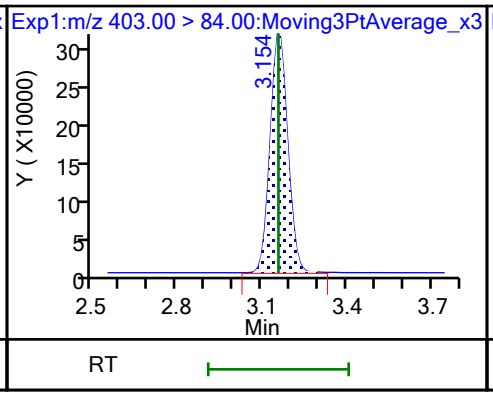
67 Perfluoro(2-propoxypropanoic) ac (M)



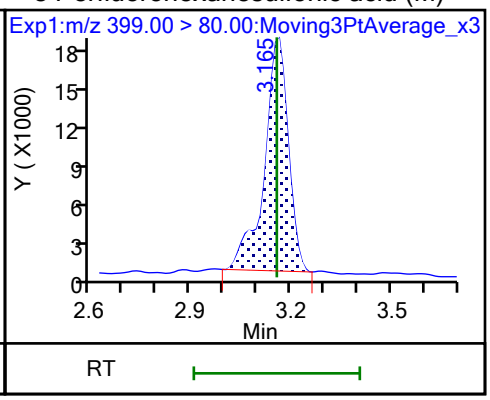
D 64 13C3 HFPO-DA



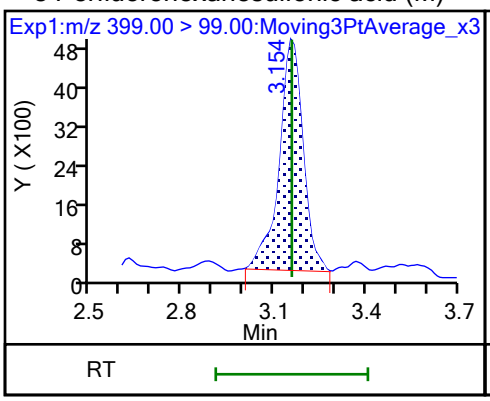
D 11 18O2 PFHxS



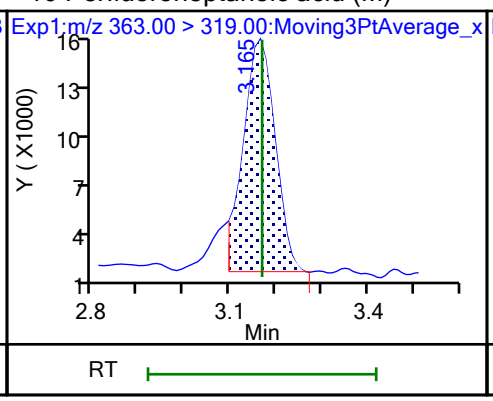
8 Perfluorohexanesulfonic acid (M)



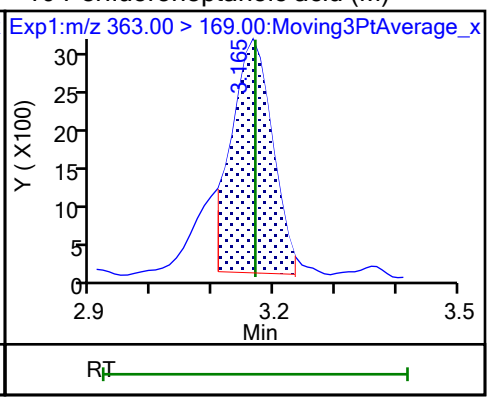
8 Perfluorohexanesulfonic acid (M)



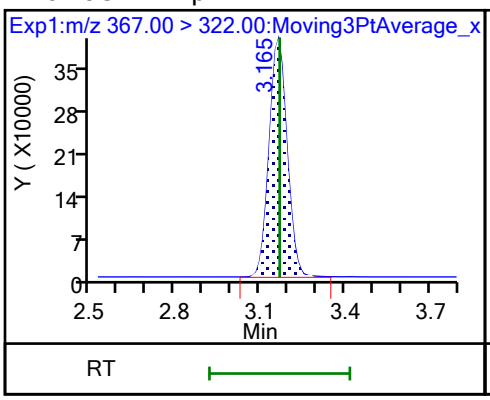
10 Perfluoroheptanoic acid (M)



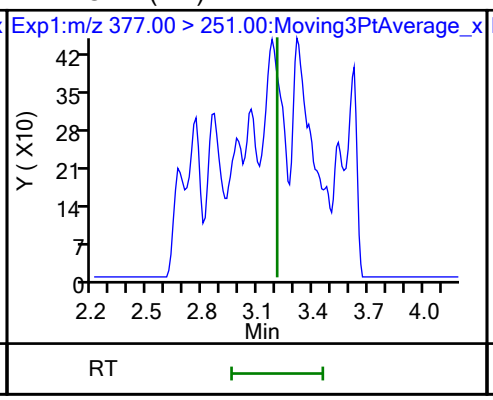
10 Perfluoroheptanoic acid (M)



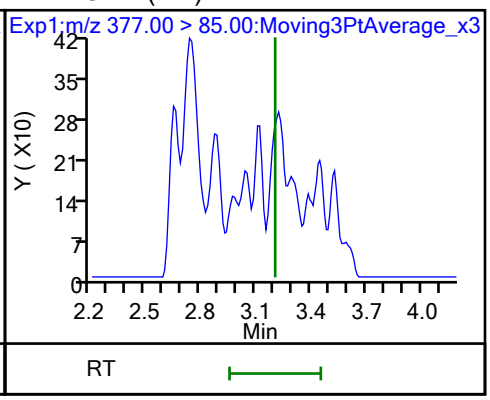
D 9 13C4 PFHpA



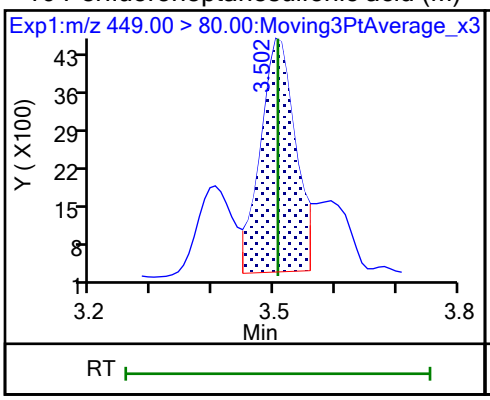
77 DONA (ND)



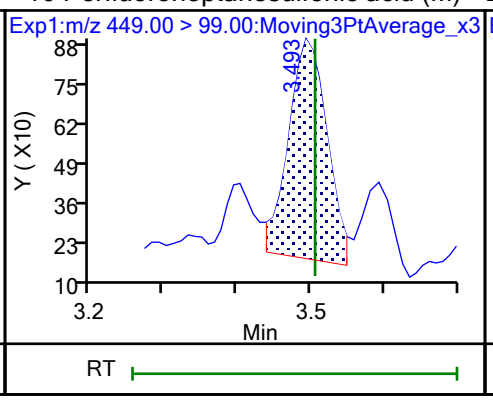
77 DONA (ND)



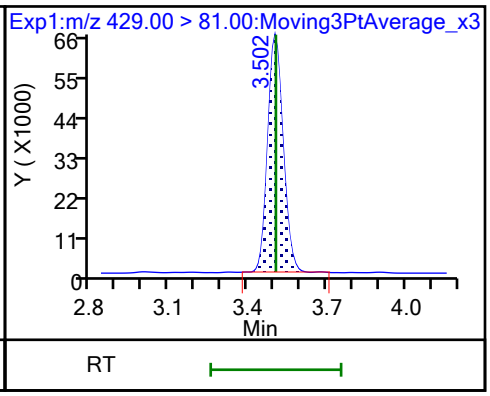
16 Perfluoroheptanesulfonic acid (M)



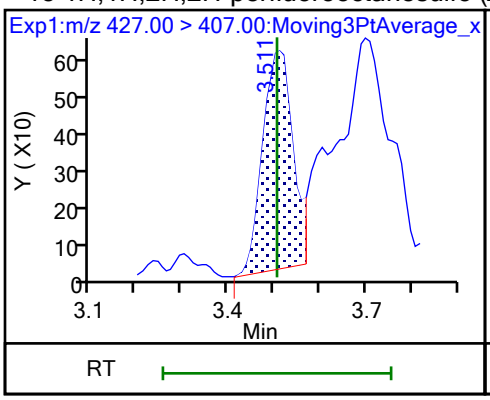
16 Perfluoroheptanesulfonic acid (M)



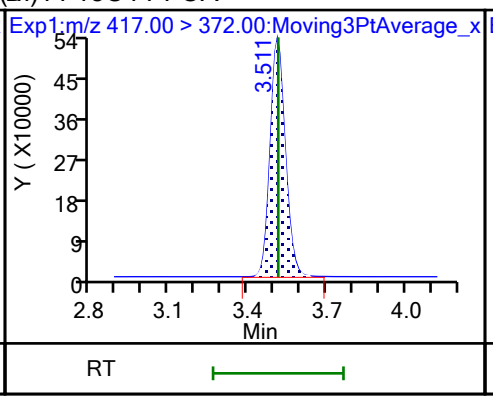
D 12 M2-6:2 FTS



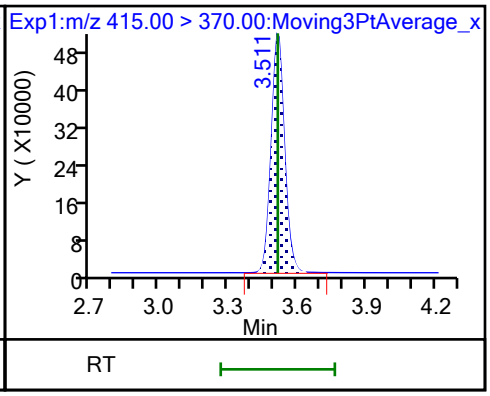
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



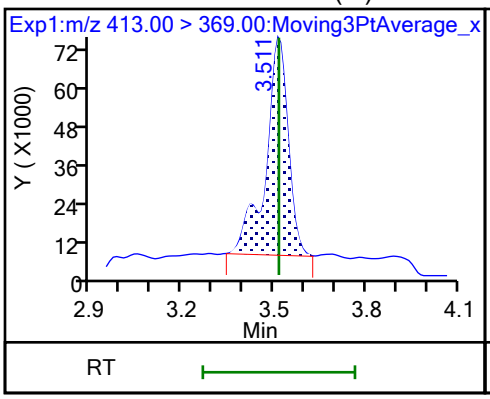
D 14 13C4 PFOA



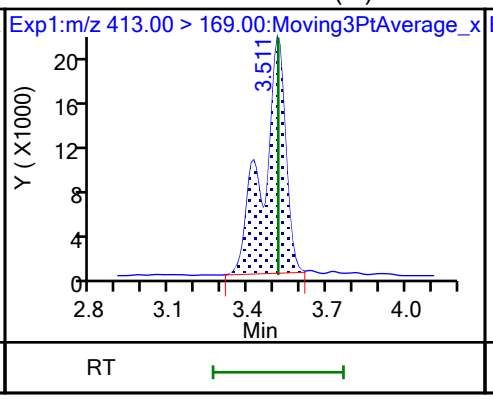
* 62 13C2 PFOA



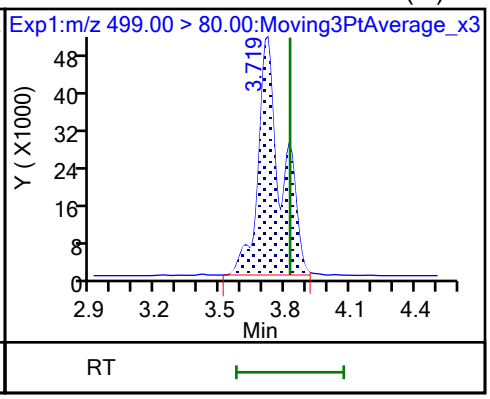
15 Perfluorooctanoic acid (M)



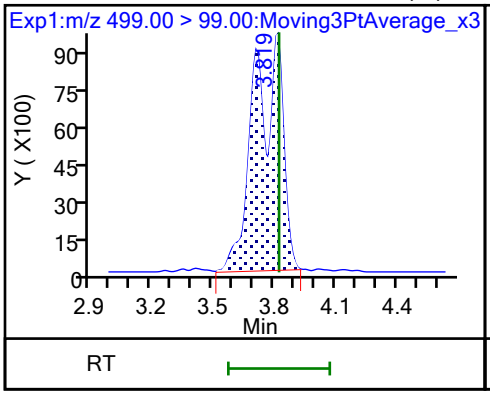
15 Perfluorooctanoic acid (M)



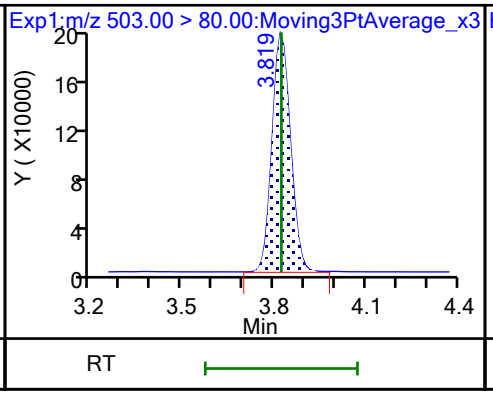
17 Perfluorooctanesulfonic acid (M)



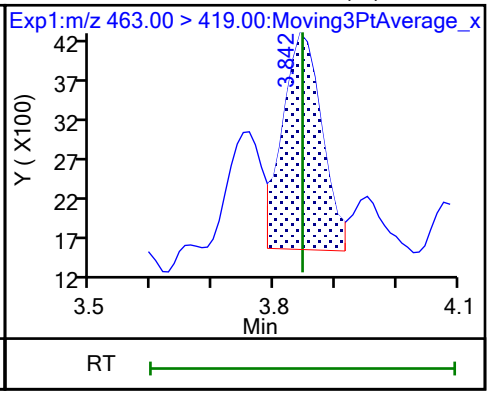
17 Perfluorooctanesulfonic acid (M)



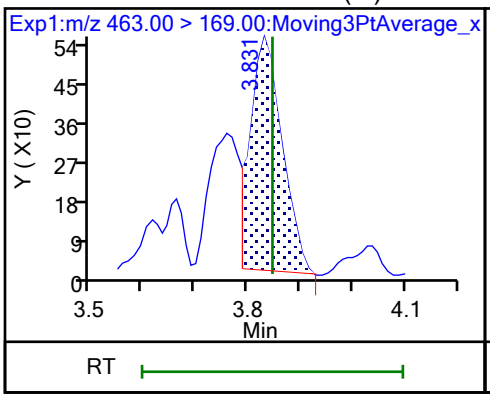
D 18 13C4 PFOS



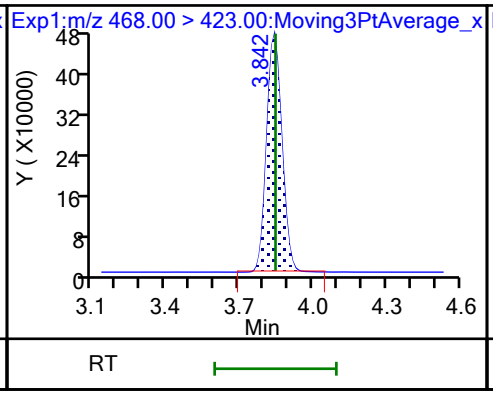
20 Perfluorononanoic acid (M)



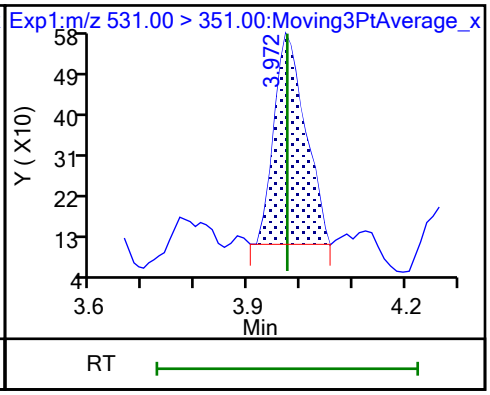
20 Perfluorononanoic acid (M)



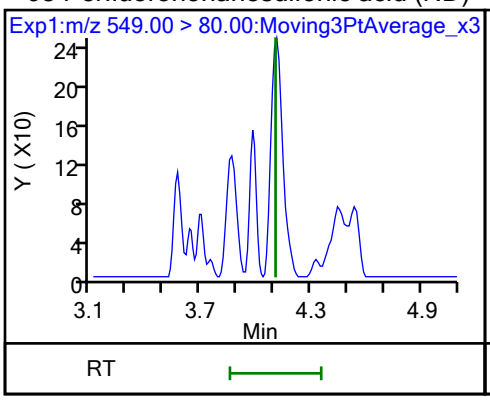
D 19 13C5 PFNA



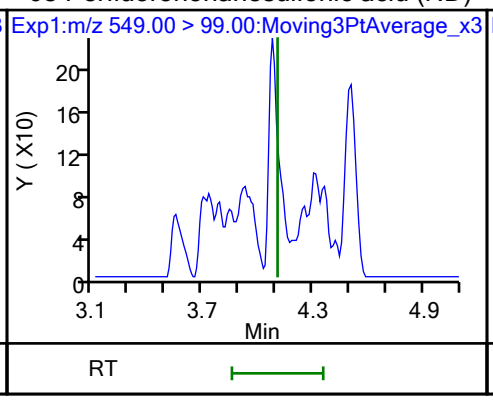
69 9-Chlorohexadecafluoro-3-oxanona (M)



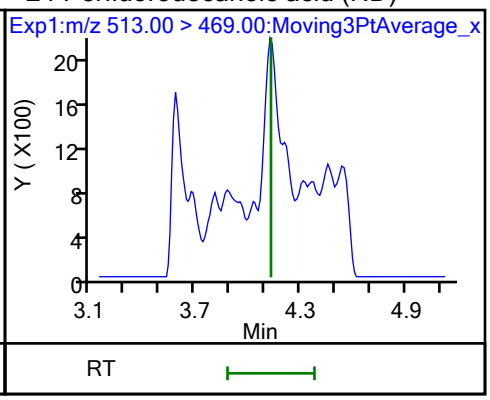
68 Perfluorononanesulfonic acid (ND)



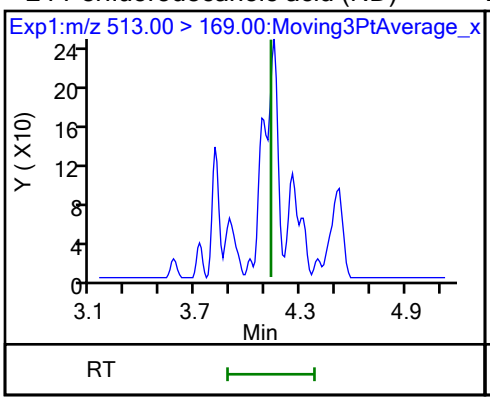
68 Perfluorononanesulfonic acid (ND)



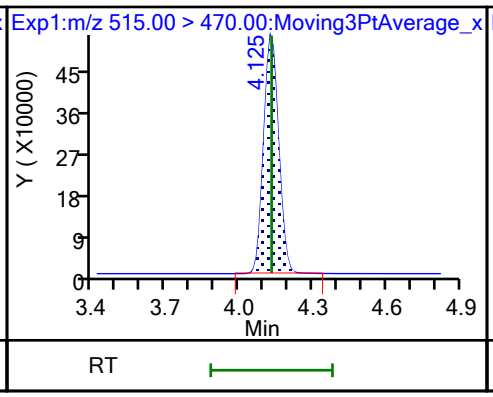
24 Perfluorodecanoic acid (ND)



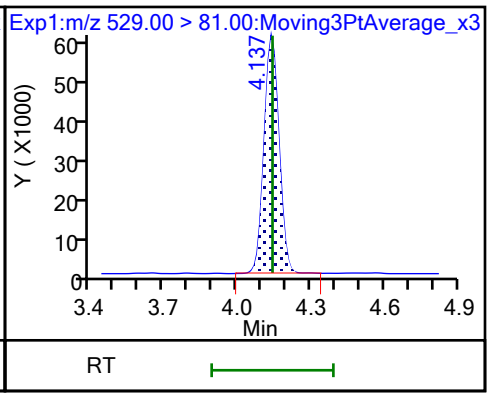
24 Perfluorodecanoic acid (ND)



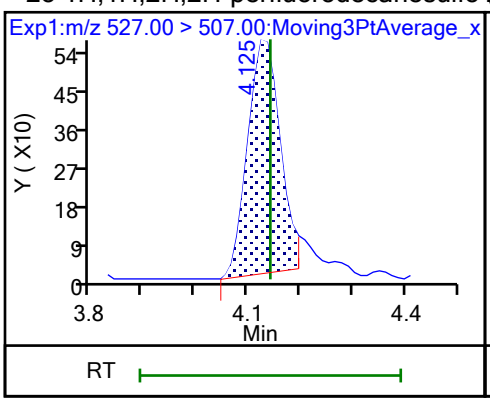
D 23 13C2 PFDA



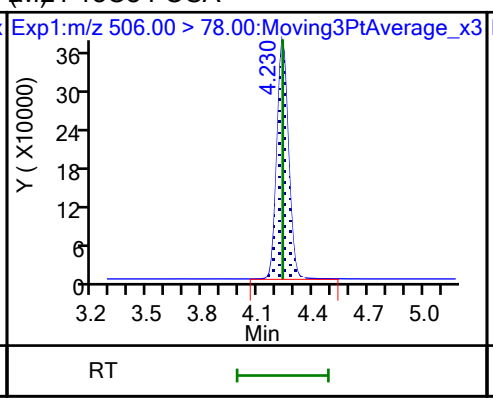
D 26 M2-8:2 FTS



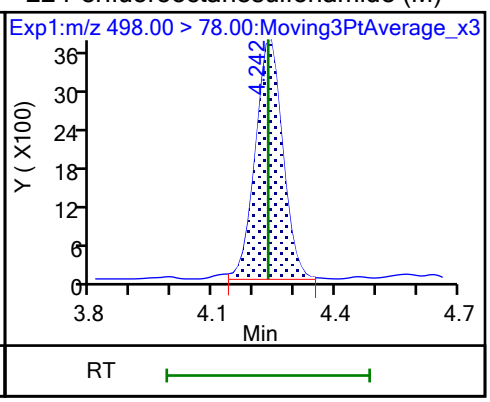
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



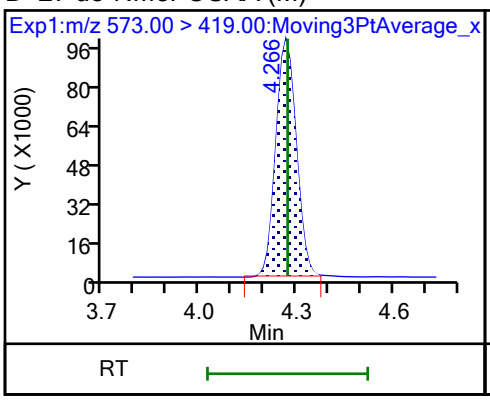
D 21 13C8 FOSA



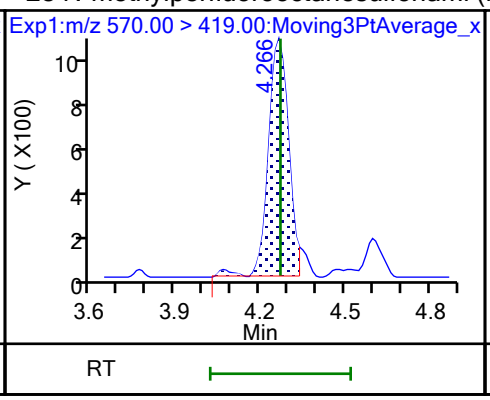
22 Perfluorooctanesulfonamide (M)



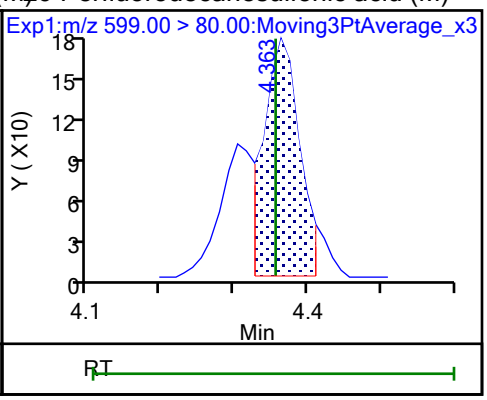
D 27 d3-NMeFOSAA (M)



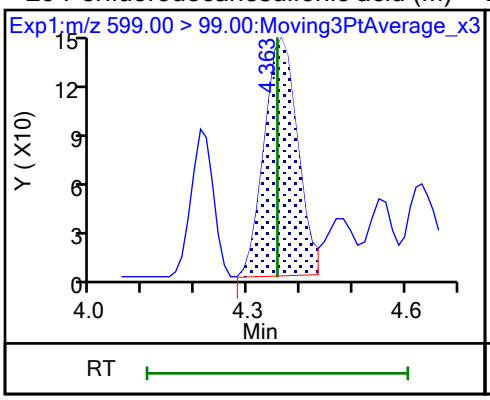
28 N-methylperfluorooctanesulfonami (M)



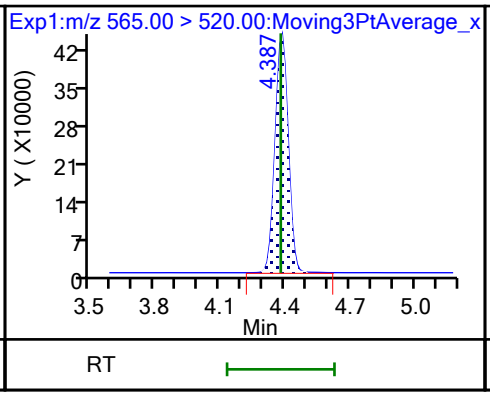
29 Perfluorodecanesulfonic acid (M)



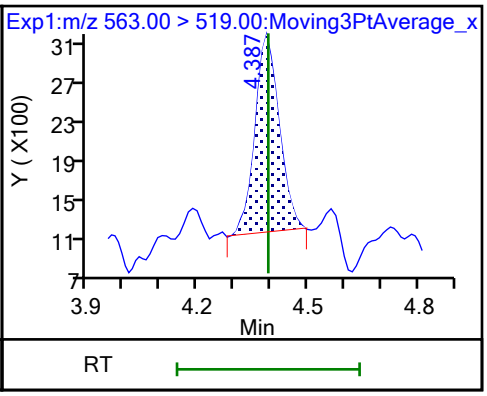
29 Perfluorodecanesulfonic acid (M)



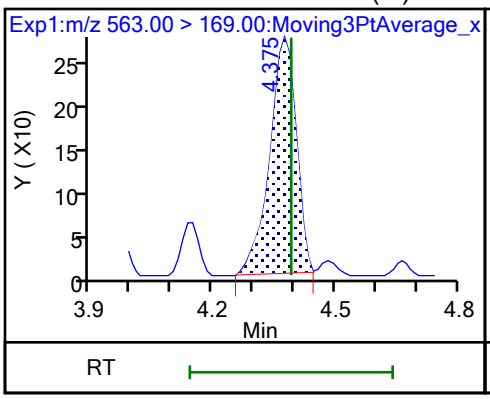
D 30 13C2 PFUnA



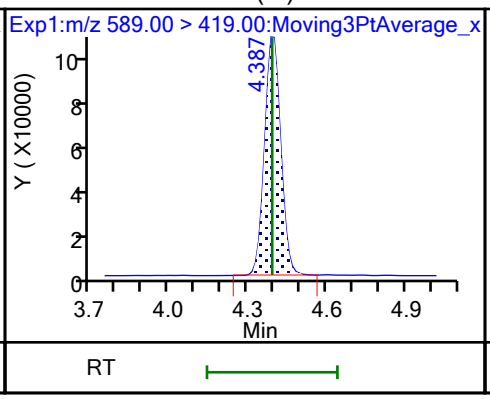
31 Perfluoroundecanoic acid



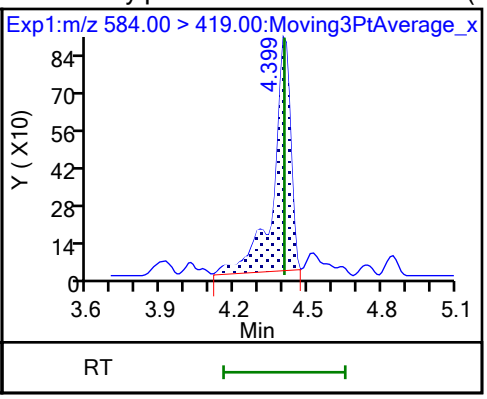
31 Perfluoroundecanoic acid (M)



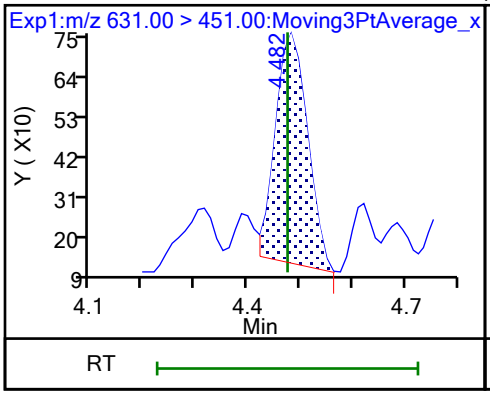
D 32 d5-NEtFOSAA (M)



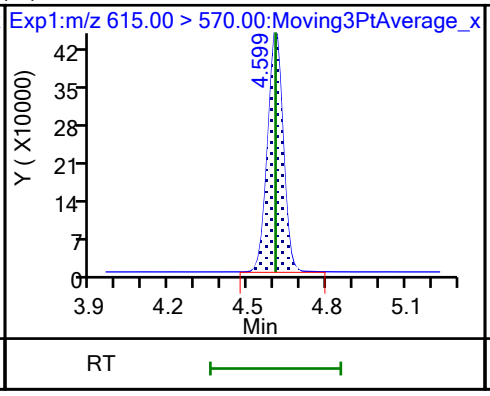
33 N-ethylperfluorooctanesulfonamid (M)



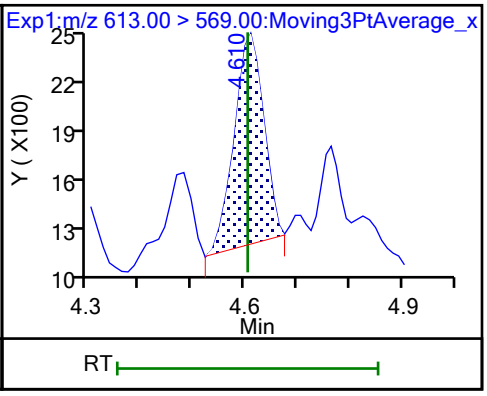
66 11-Chloroeicosafluoro-3-oxaundec (M)



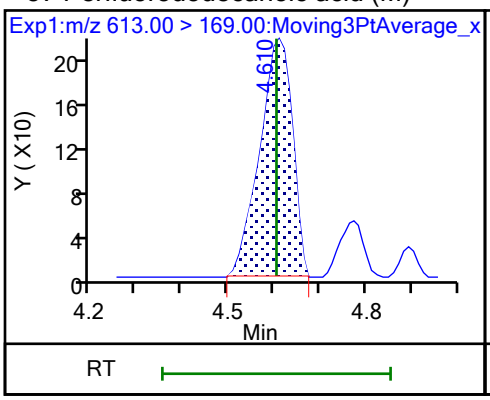
D 36 13C2 PFDoA



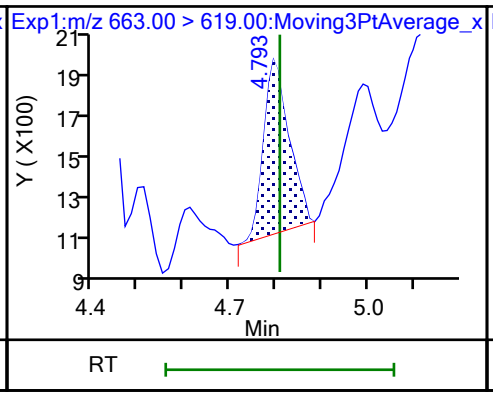
37 Perfluorododecanoic acid



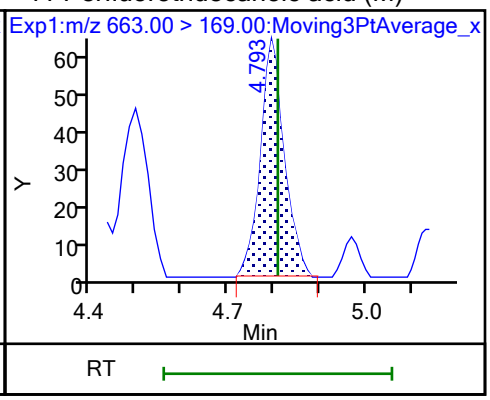
37 Perfluorododecanoic acid (M)



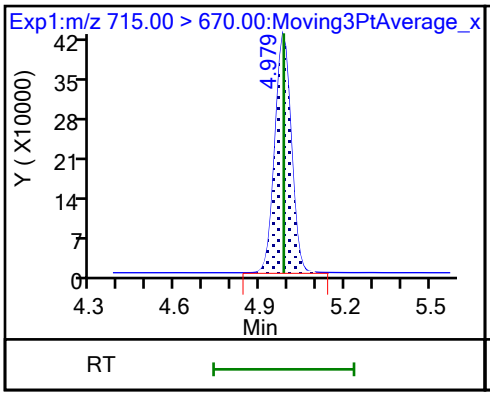
41 Perfluorotridecanoic acid



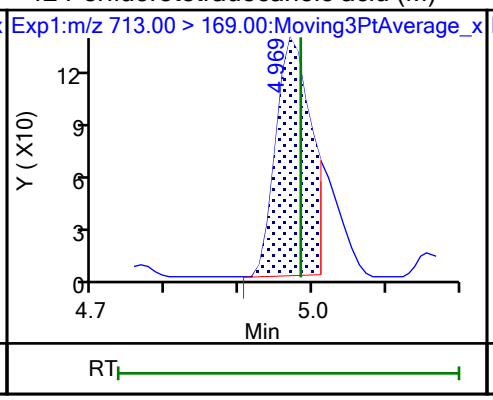
41 Perfluorotridecanoic acid (M)



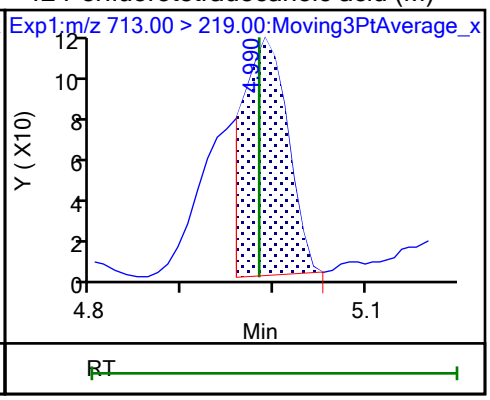
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

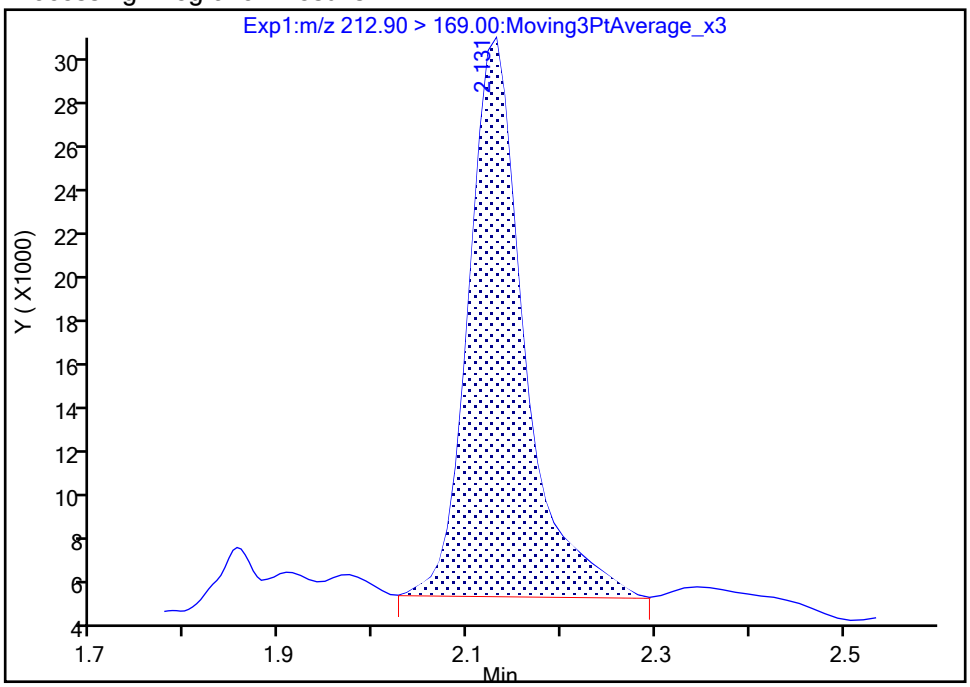
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

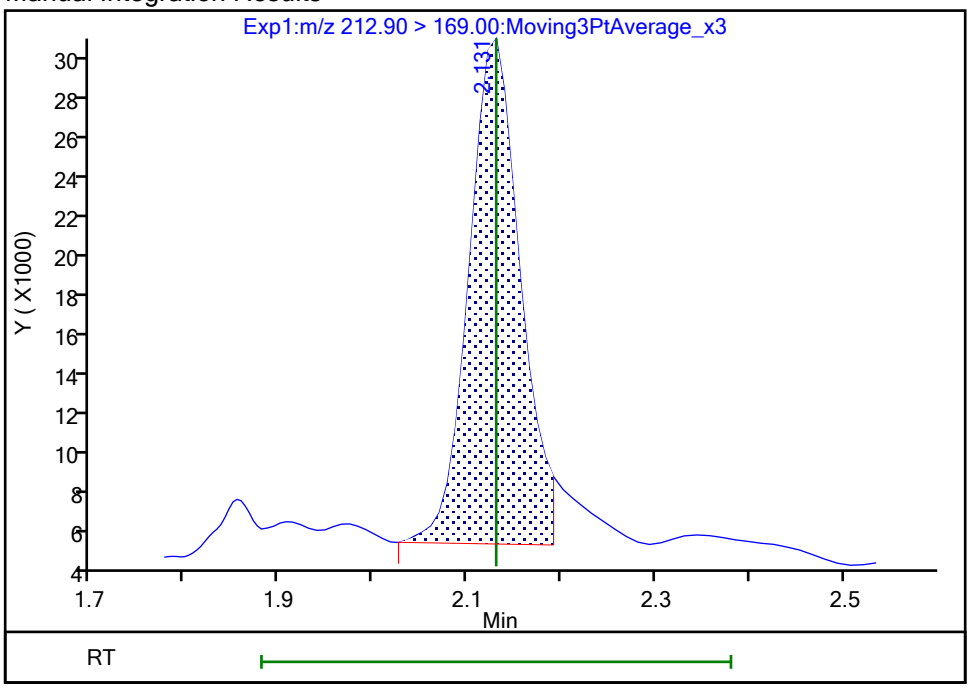
Processing Integration Results

RT: 2.13
Area: 100758
Amount: 0.027190
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 93043
Amount: 0.021977
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

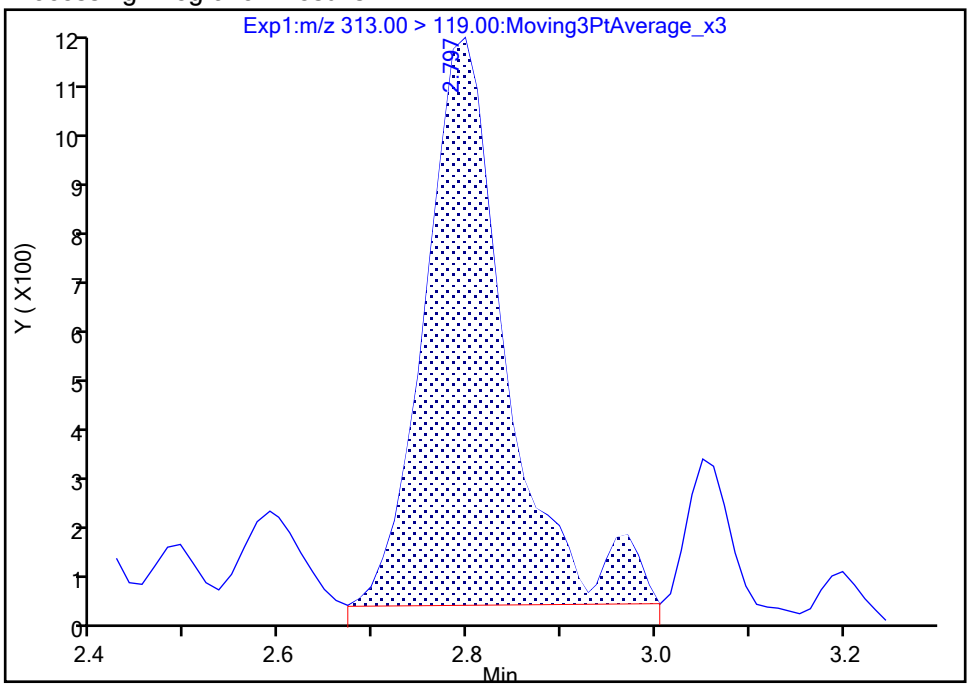
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

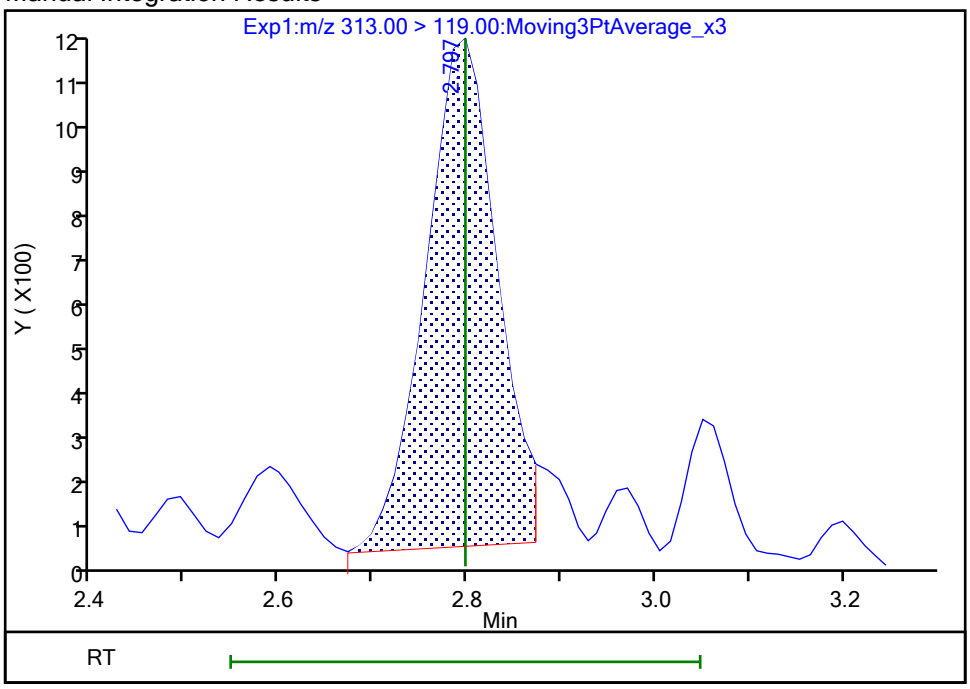
Processing Integration Results

RT: 2.80
Area: 6159
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 5350
Amount: 0.049440
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

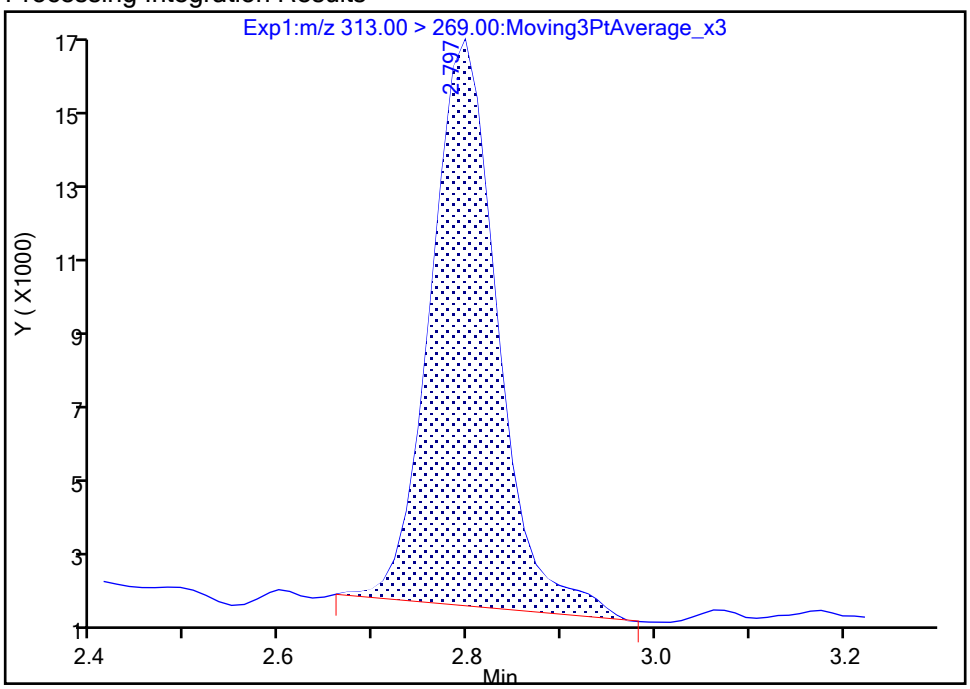
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

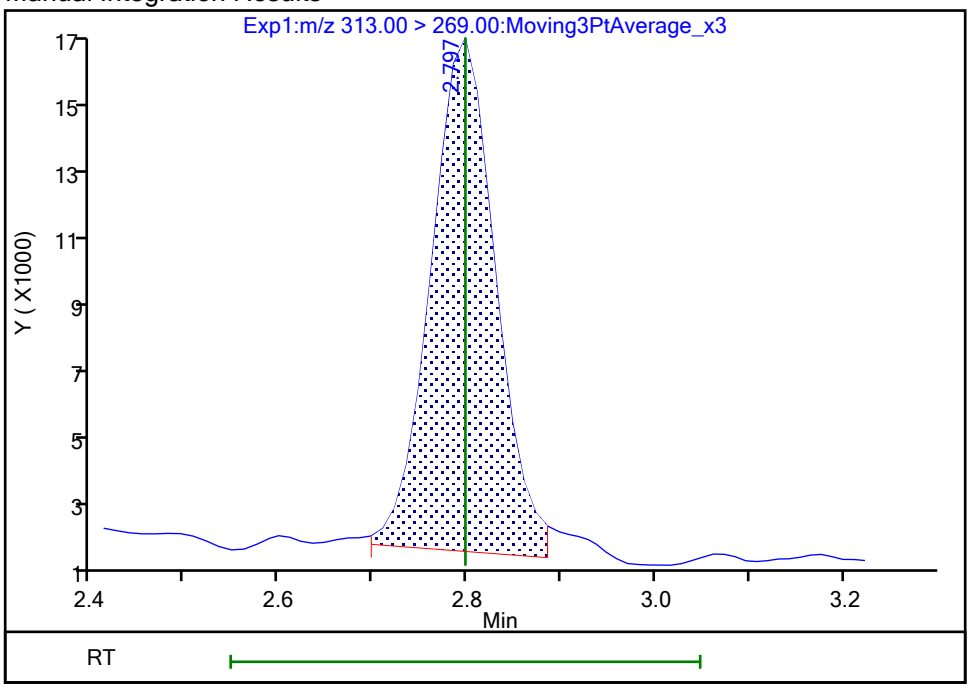
Processing Integration Results

RT: 2.80
Area: 75377
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 72936
Amount: 0.049440
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

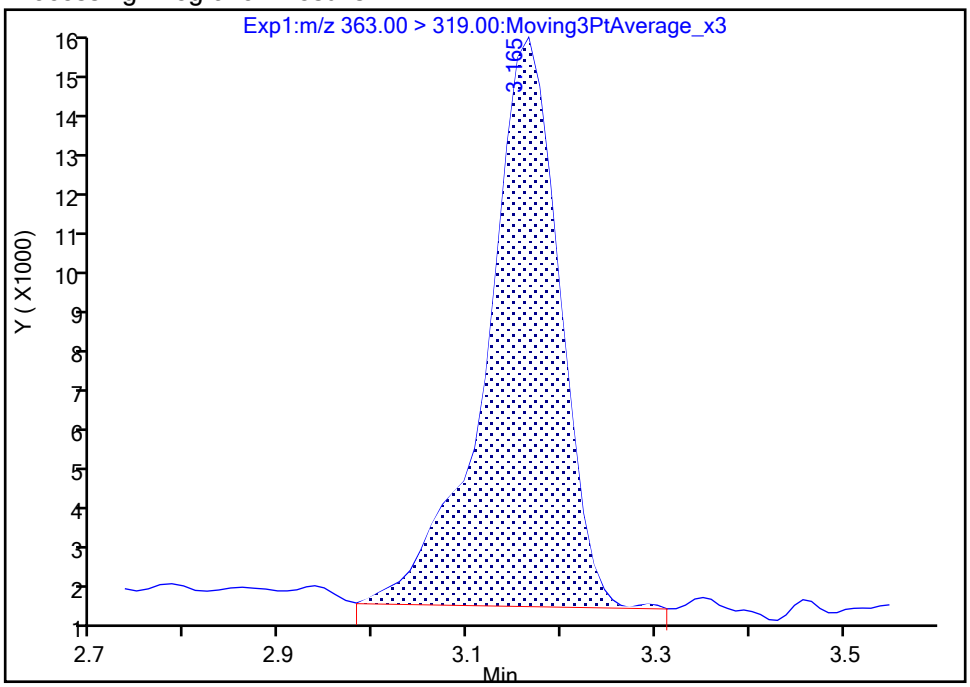
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

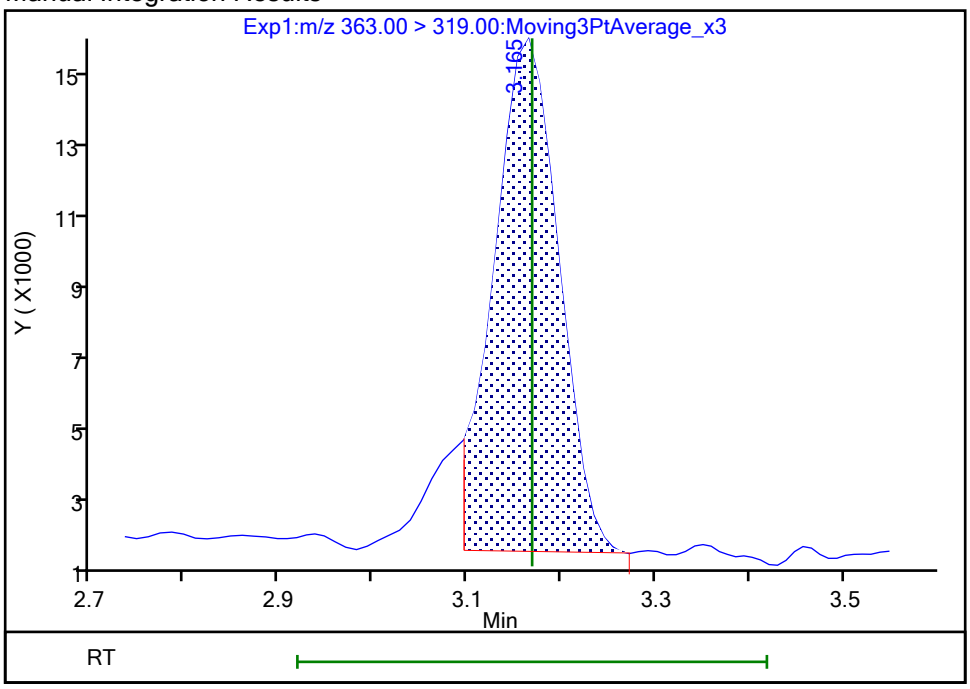
Processing Integration Results

RT: 3.16
Area: 74143
Amount: 0.047429
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 65515
Amount: 0.041909
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

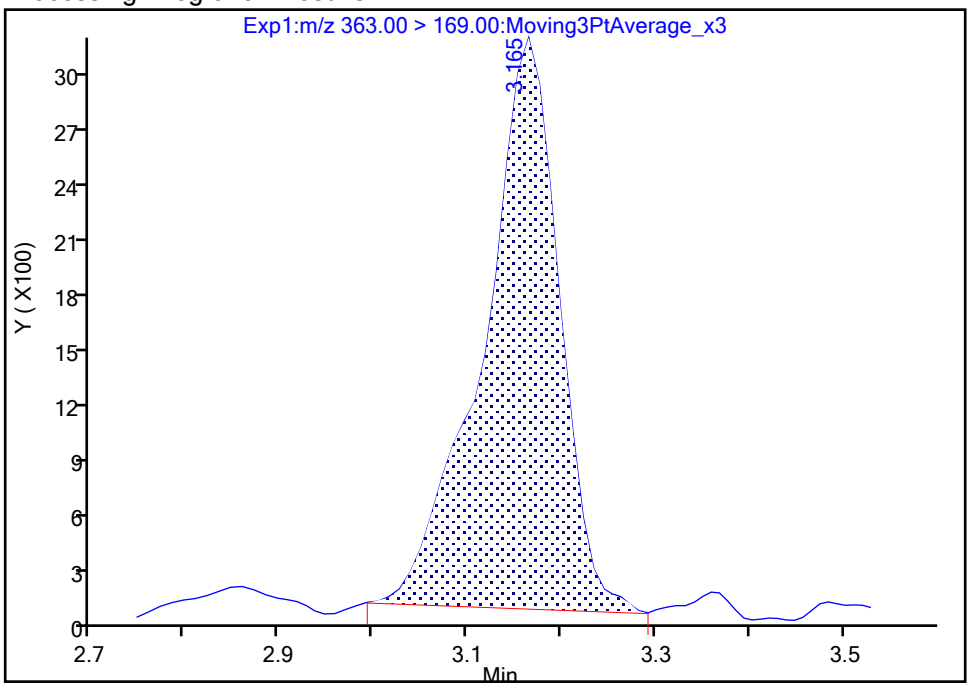
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

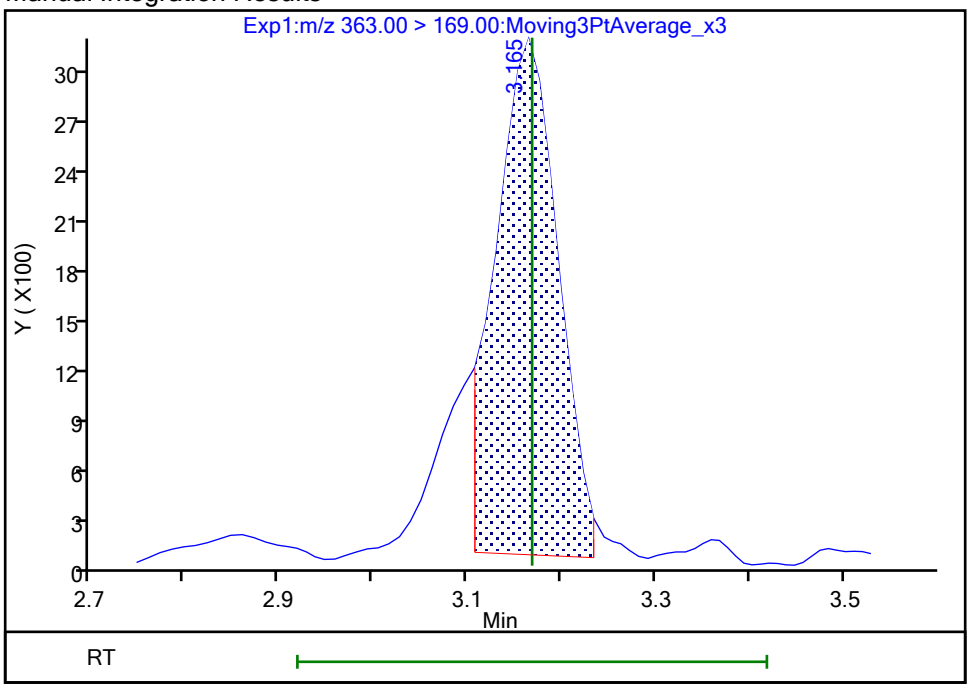
Processing Integration Results

RT: 3.16
Area: 17049
Amount: 0.047429
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 13919
Amount: 0.041909
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

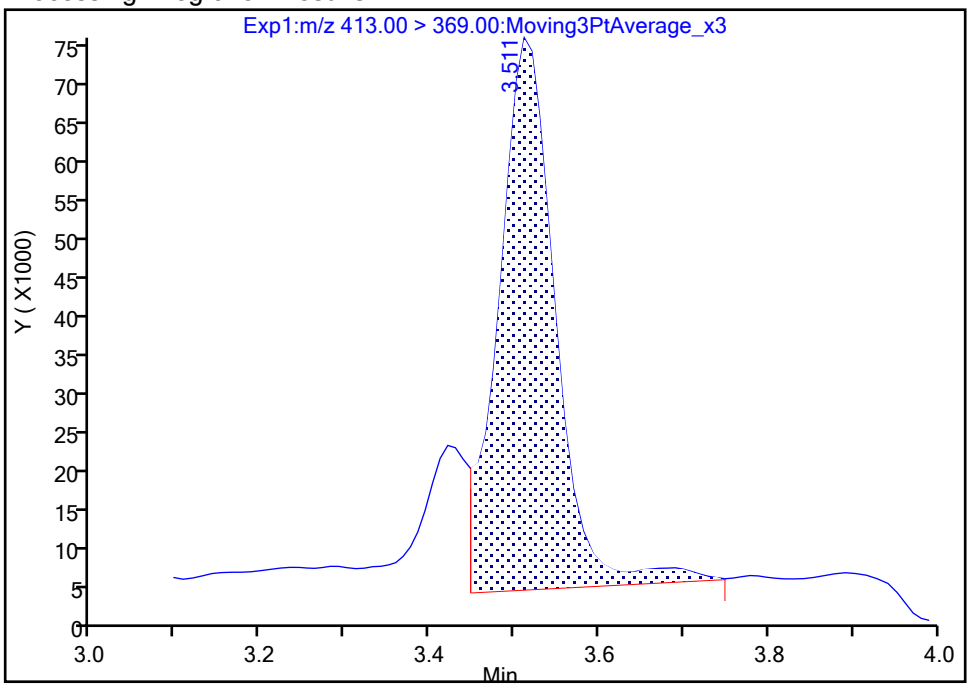
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

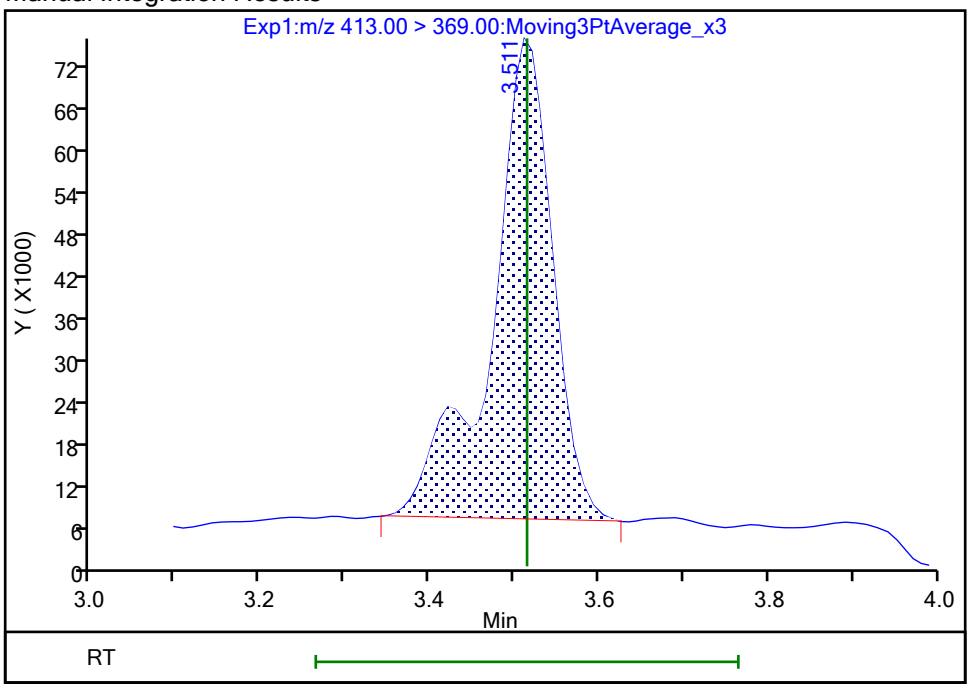
Processing Integration Results

RT: 3.51
Area: 331668
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 345796
Amount: 0.188069
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

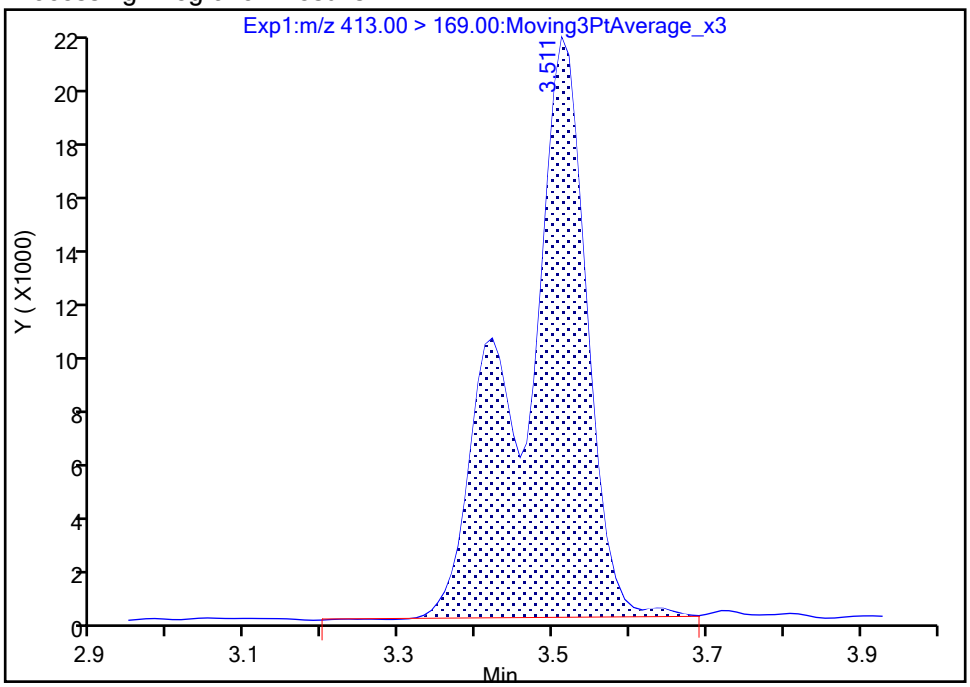
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

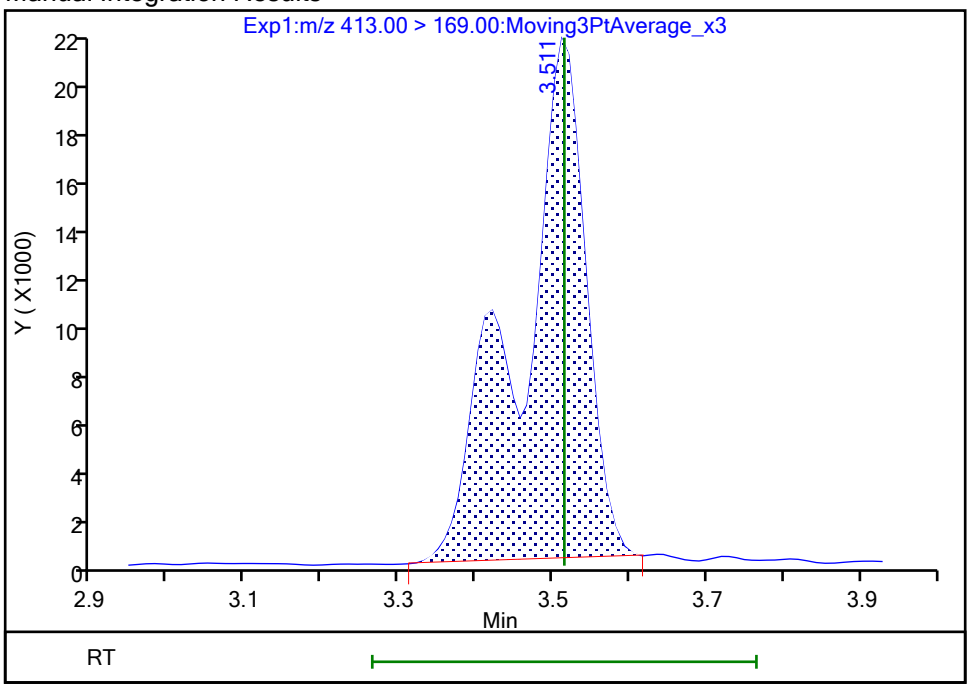
Processing Integration Results

RT: 3.51
Area: 130257
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 127064
Amount: 0.188069
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

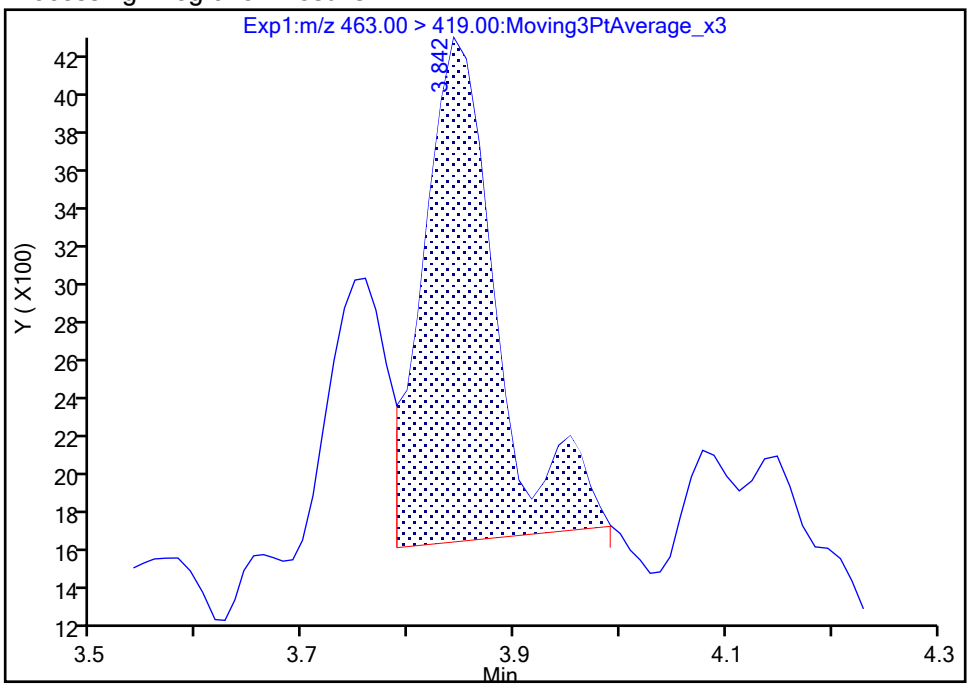
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

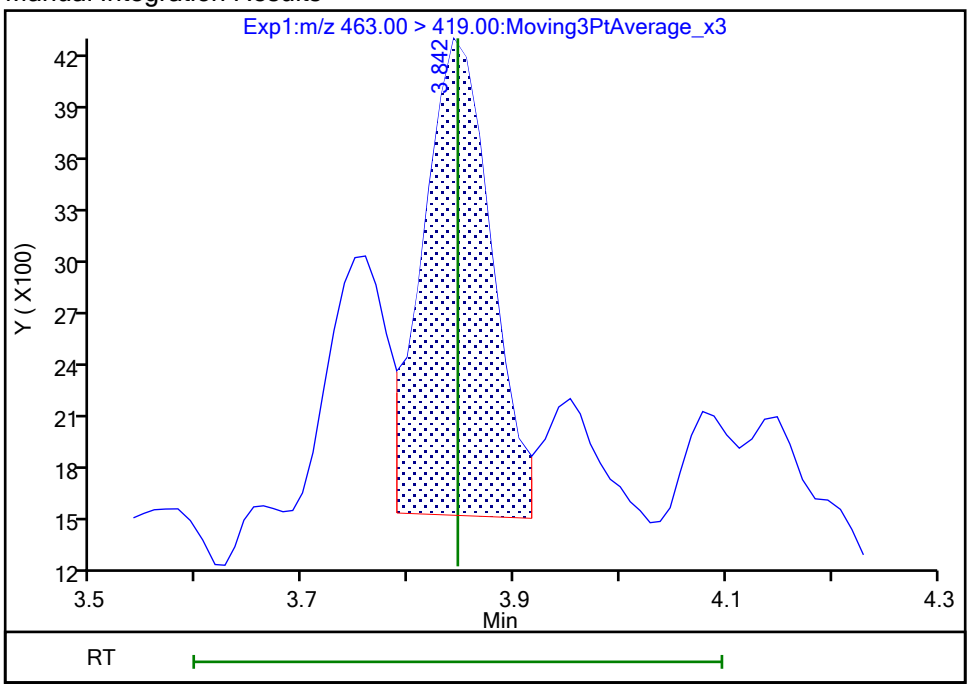
Processing Integration Results

RT: 3.84
Area: 12168
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 11878
Amount: 0.007343
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

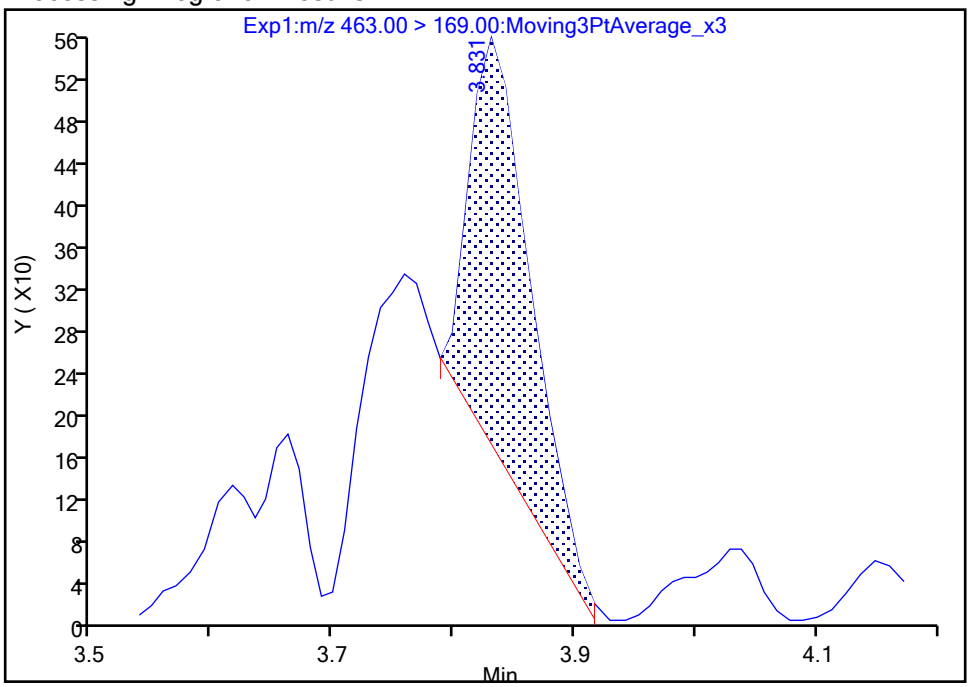
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

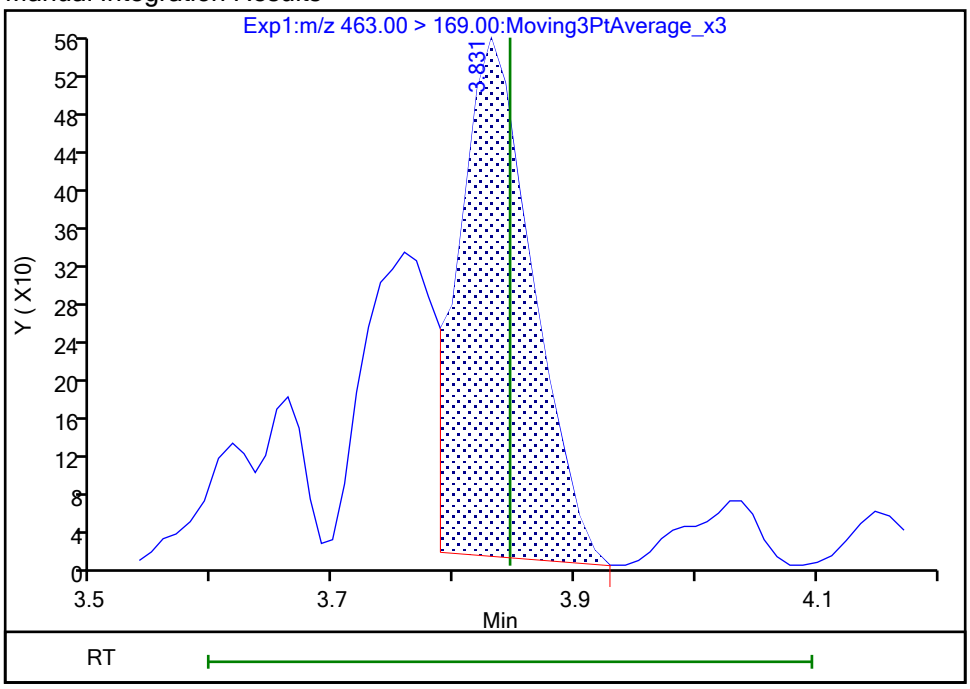
Processing Integration Results

RT: 3.83
Area: 1388
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 2293
Amount: 0.007343
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

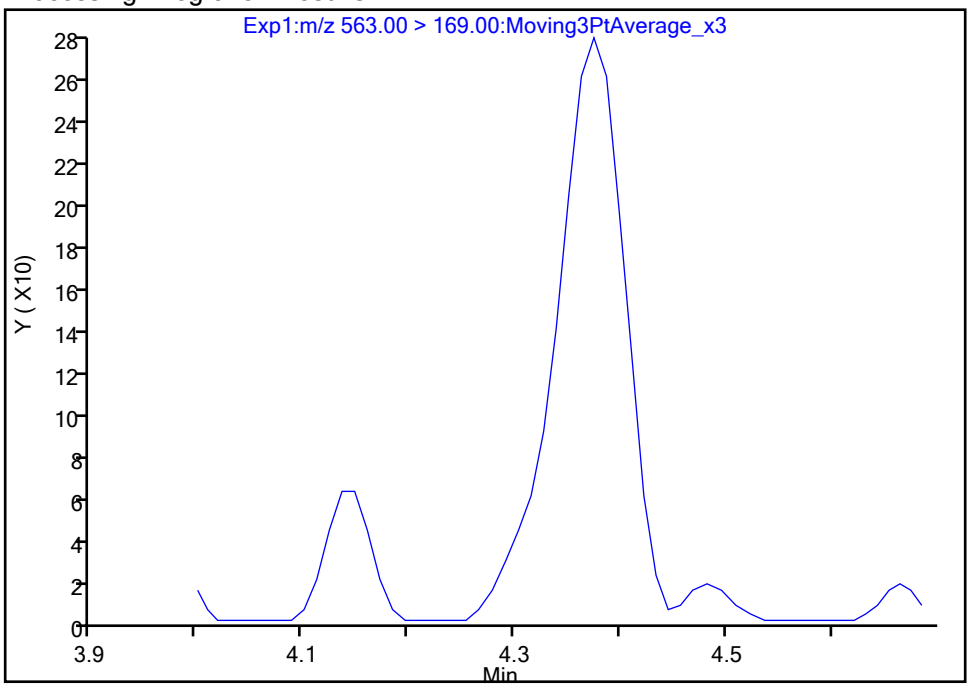
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

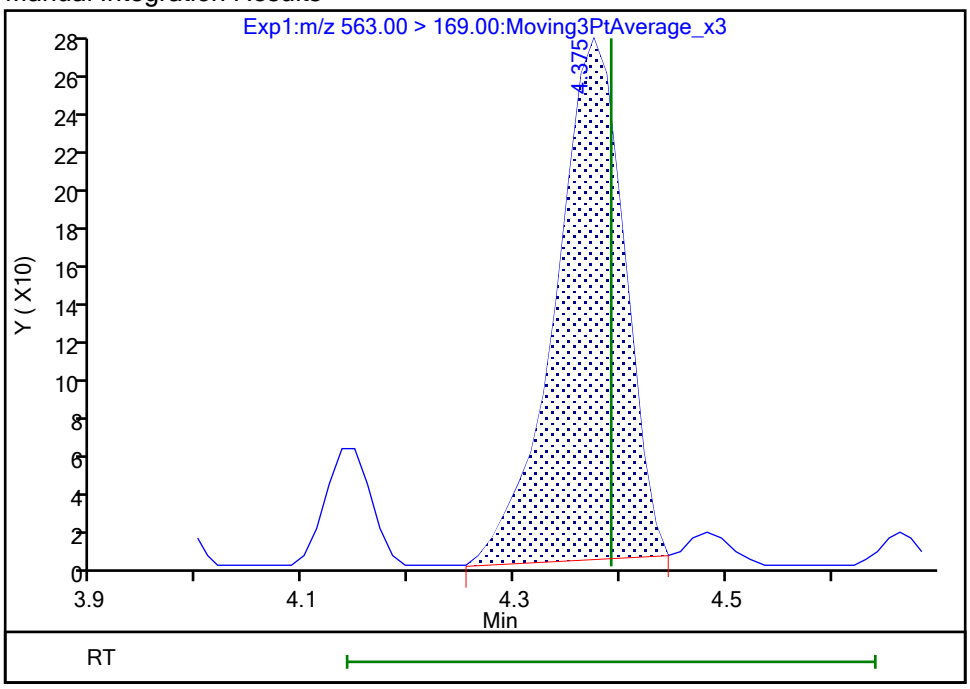
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 1213
Amount: 0.005959
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

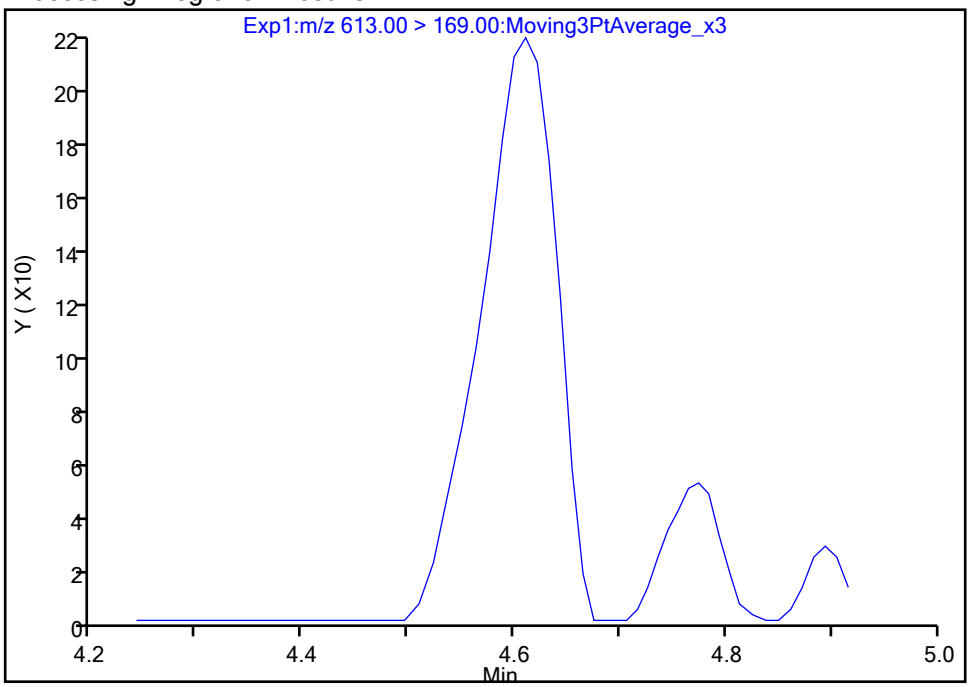
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

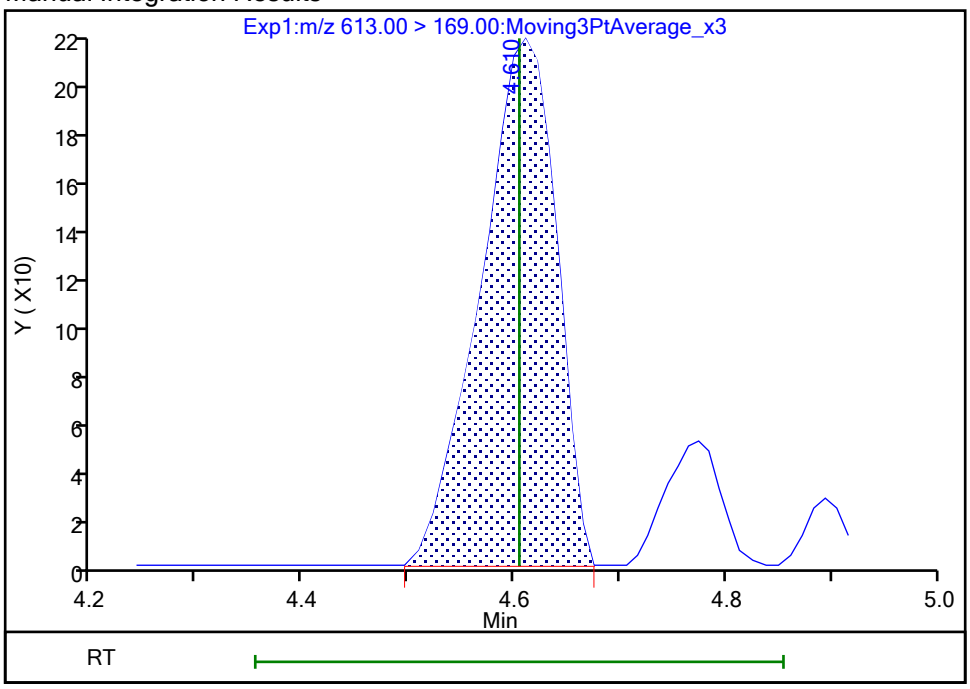
Not Detected
Expected RT: 4.60

Processing Integration Results



RT: 4.61
Area: 1057
Amount: 0.003155
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 23-Oct-2023 16:52:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

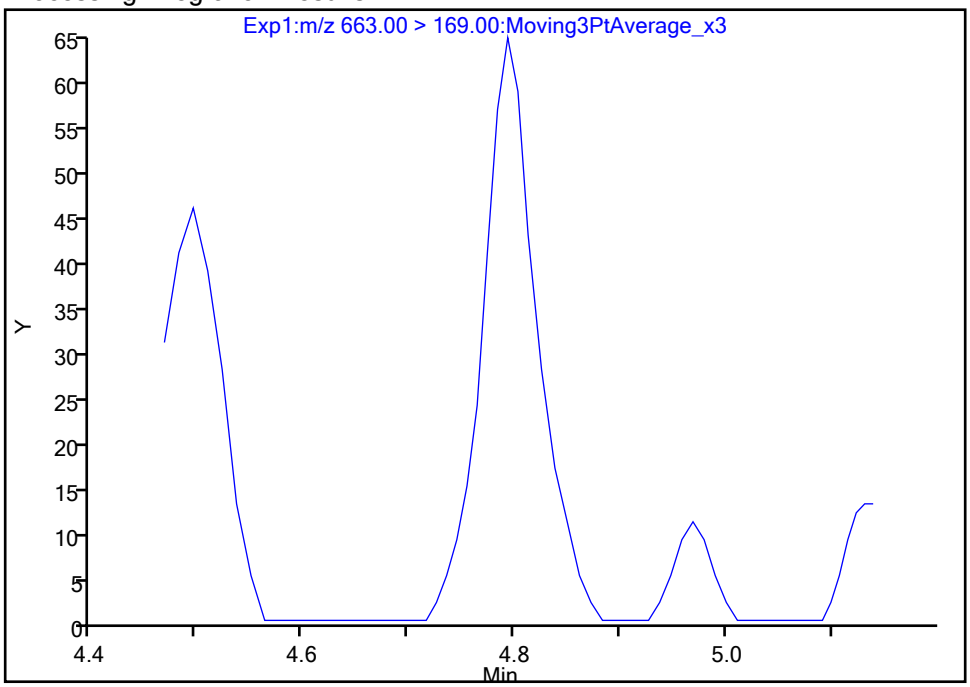
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

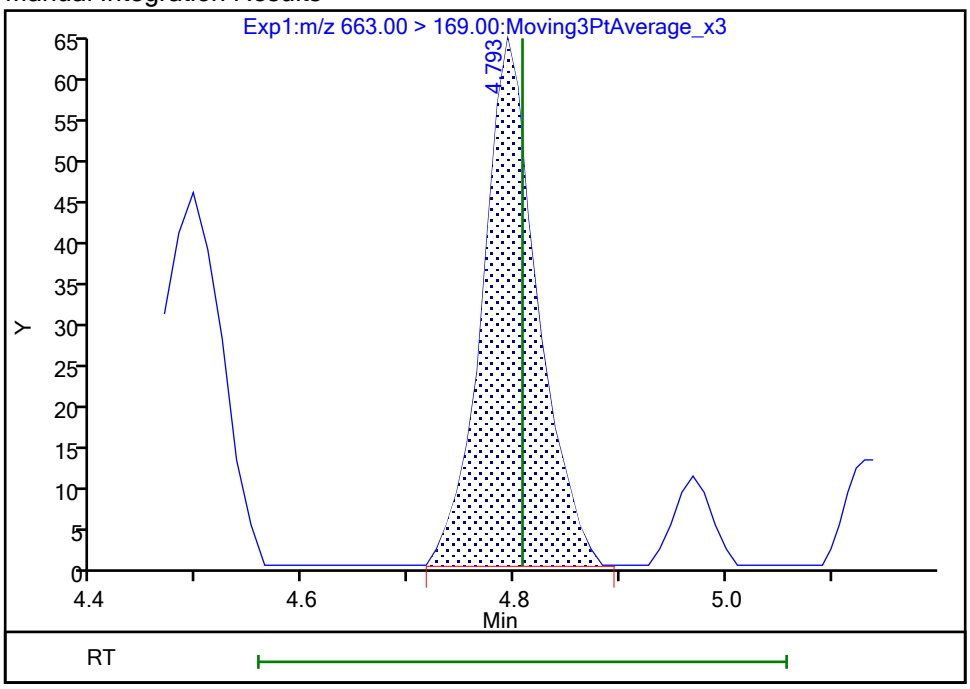
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.79
Area: 235
Amount: 0.001988
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

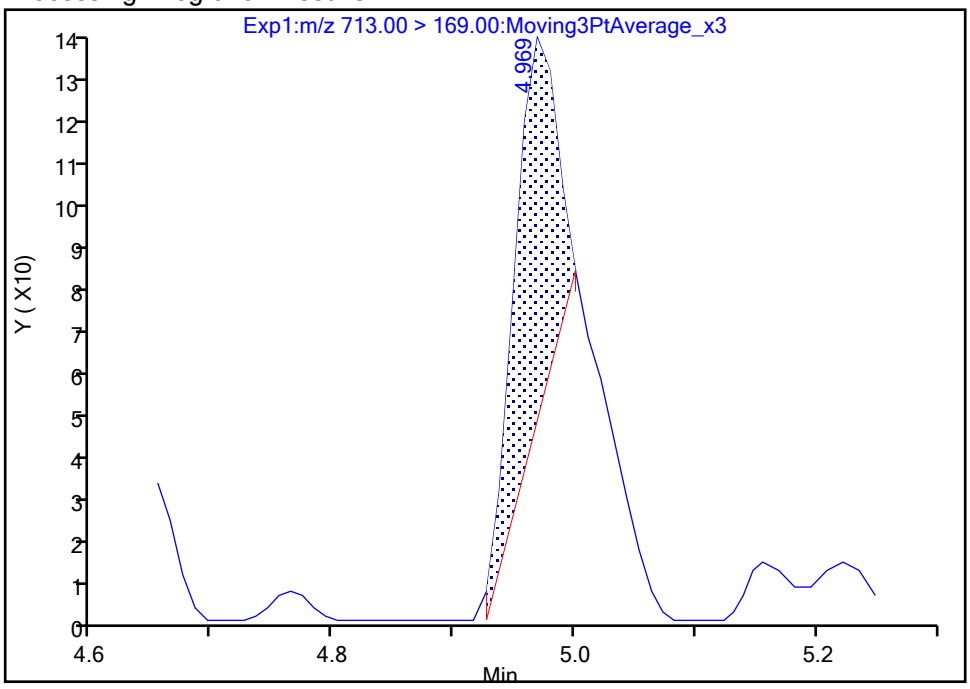
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

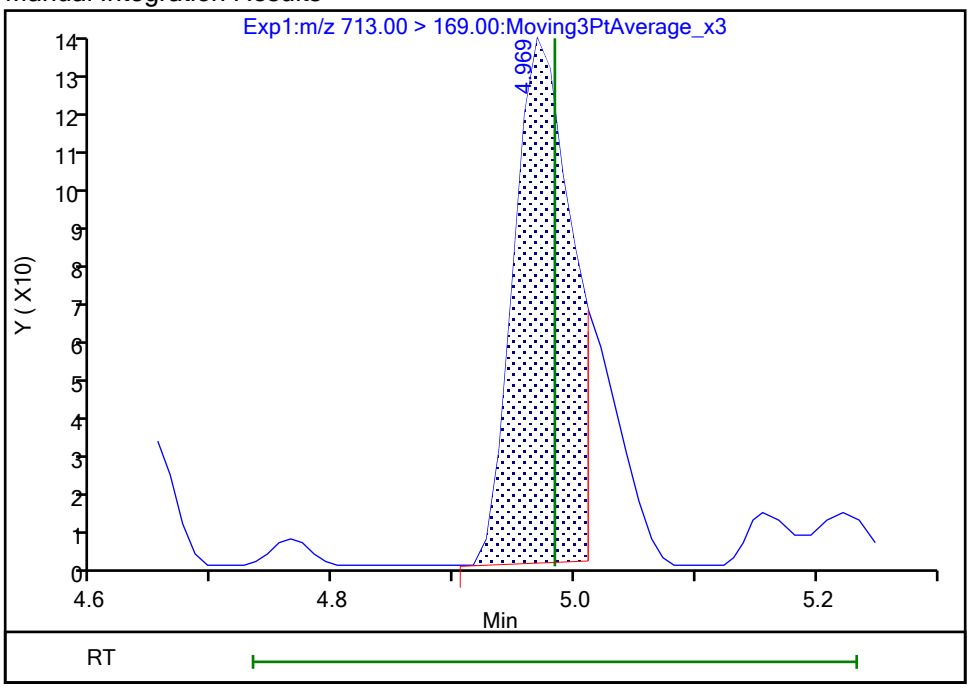
Processing Integration Results

RT: 4.97
Area: 222
Amount: 0.001461
Amount Units: ng/ml



Manual Integration Results

RT: 4.97
Area: 455
Amount: 0.002994
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 09:05:06 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

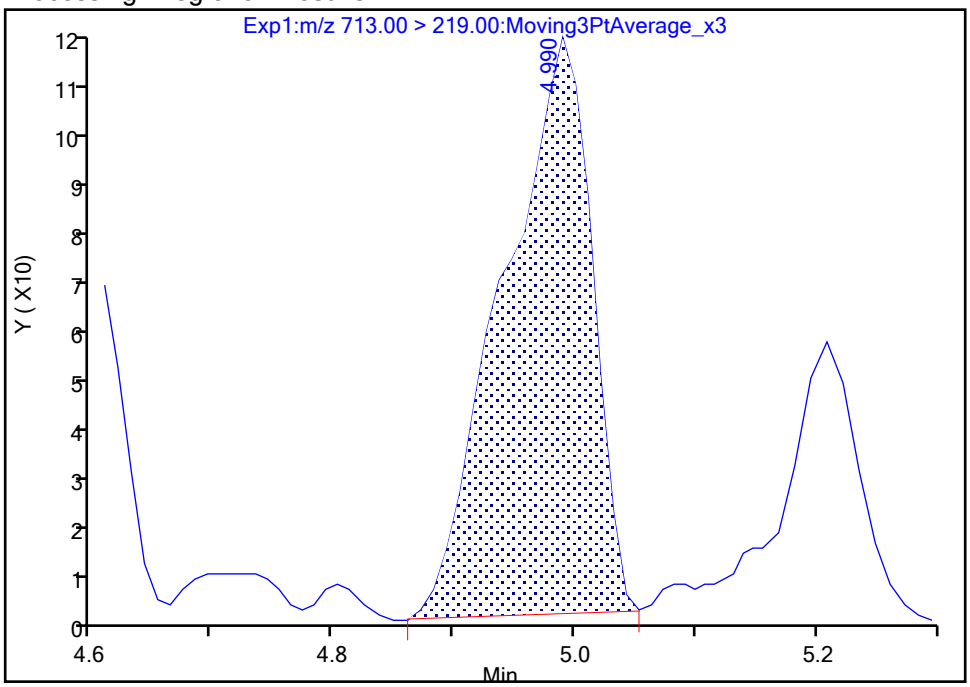
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

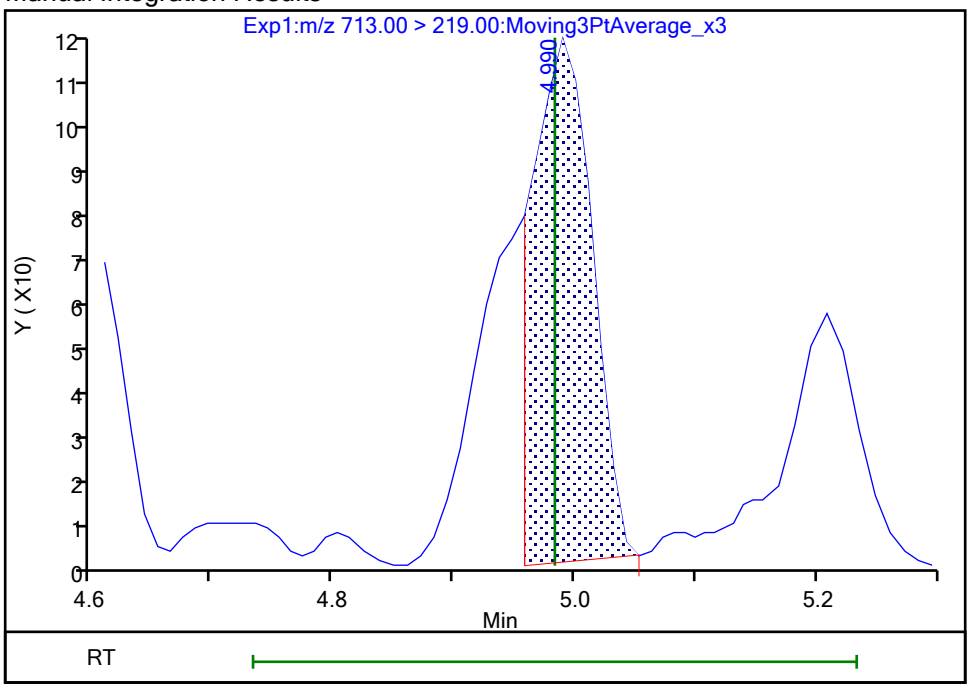
Processing Integration Results

RT: 4.99
Area: 570
Amount: 0.001461
Amount Units: ng/ml



Manual Integration Results

RT: 4.99
Area: 373
Amount: 0.002994
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 09:05:11 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

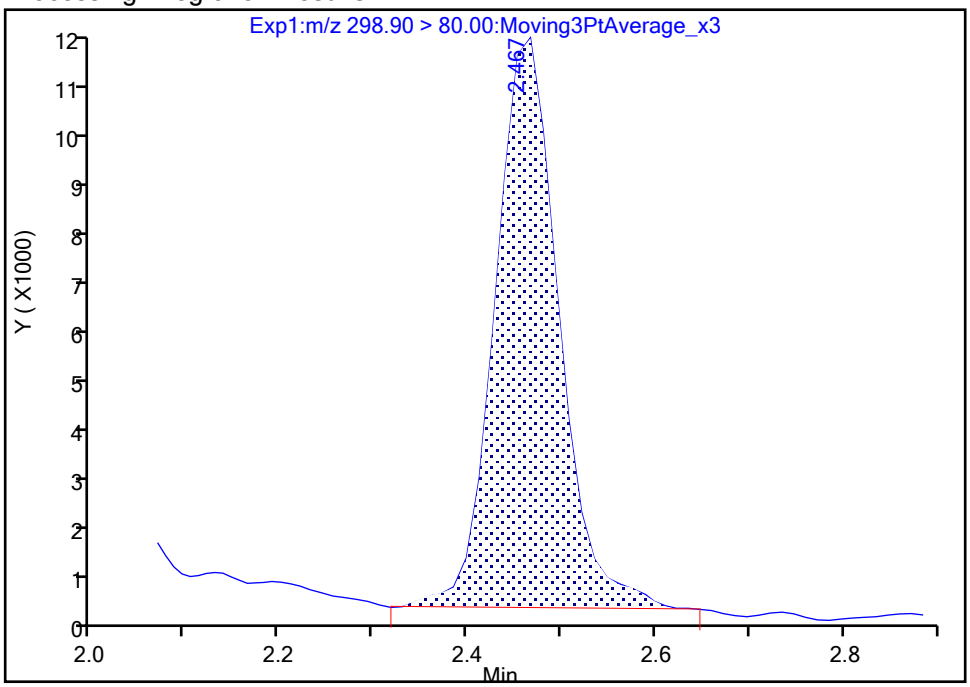
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

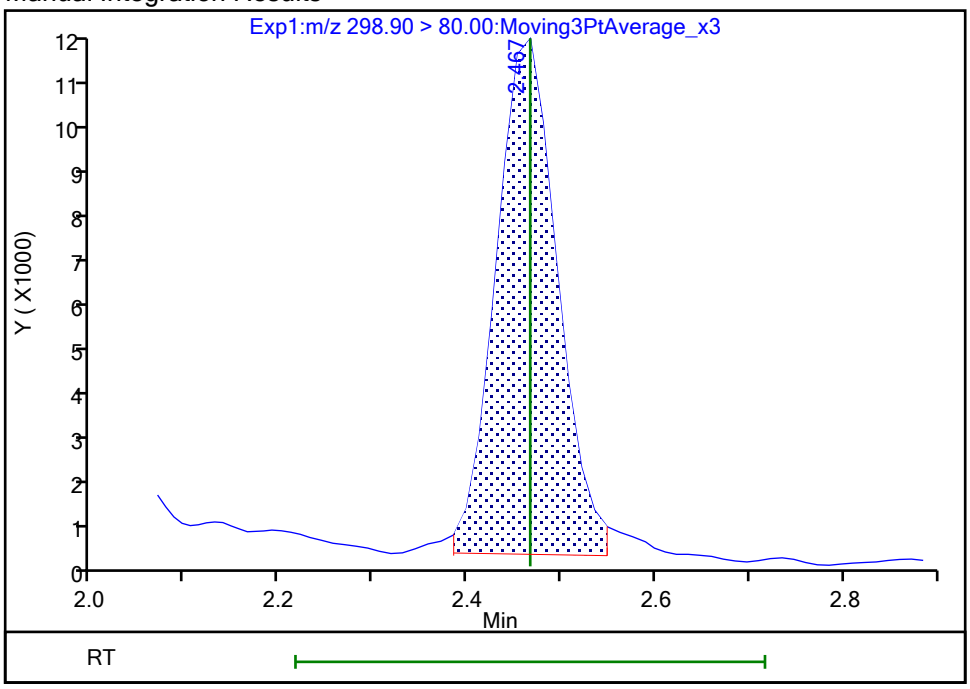
Processing Integration Results

RT: 2.47
Area: 49579
Amount: 0.029200
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 47693
Amount: 0.028089
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

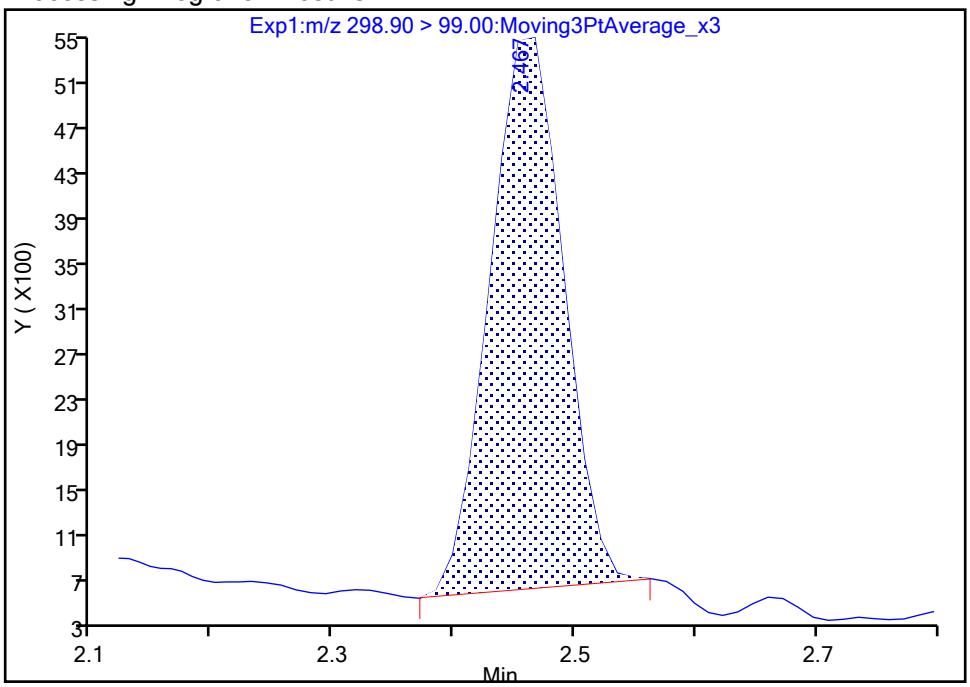
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

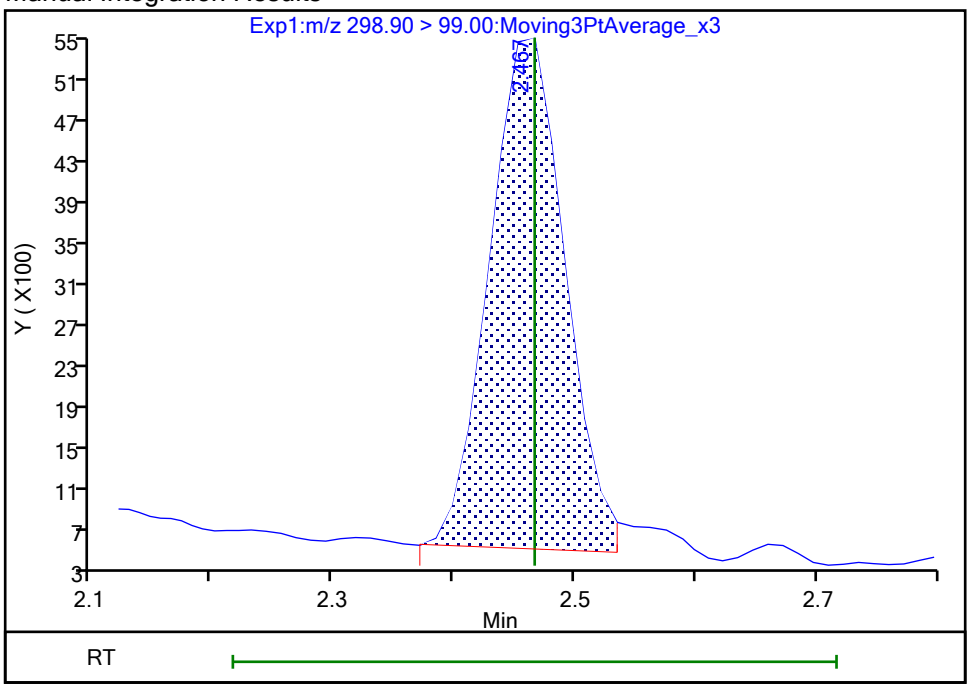
Processing Integration Results

RT: 2.47
Area: 20676
Amount: 0.029200
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 21727
Amount: 0.028089
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 09:05:45 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

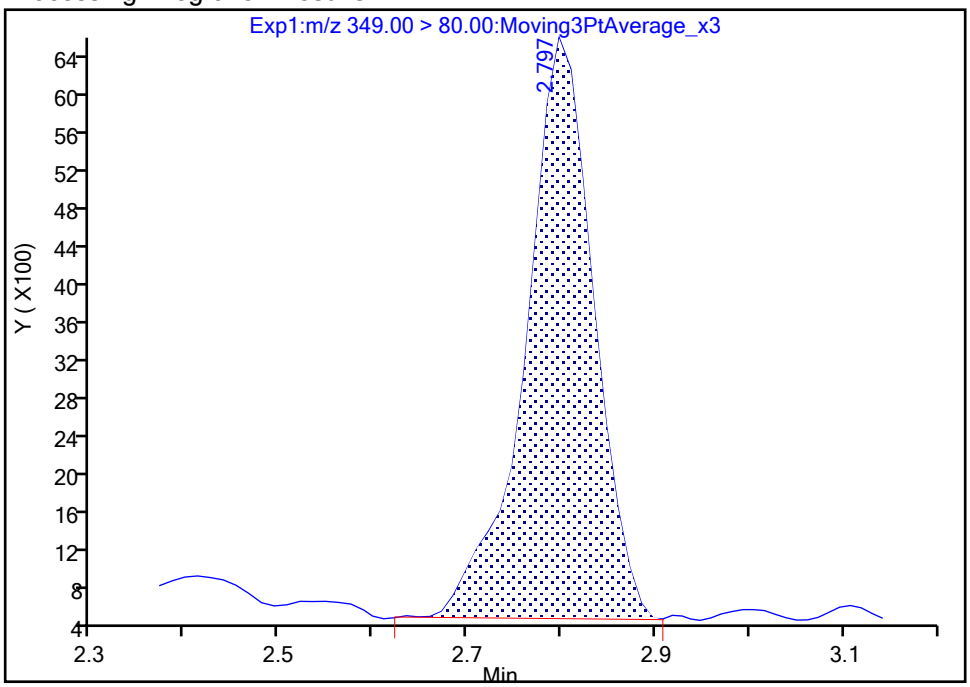
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

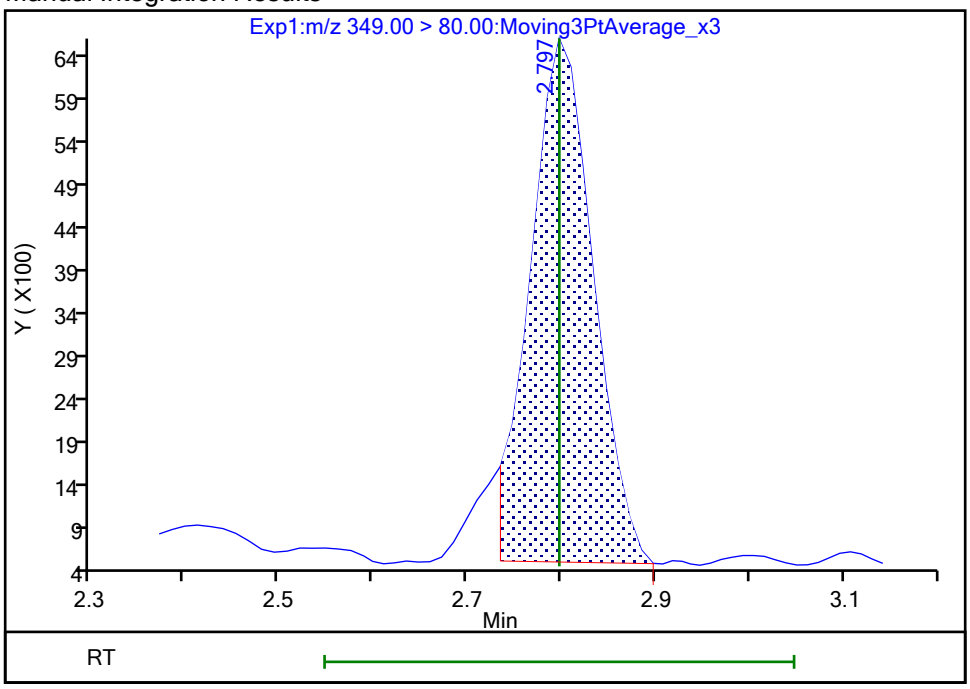
Processing Integration Results

RT: 2.80
Area: 30749
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 28358
Amount: 0.018961
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

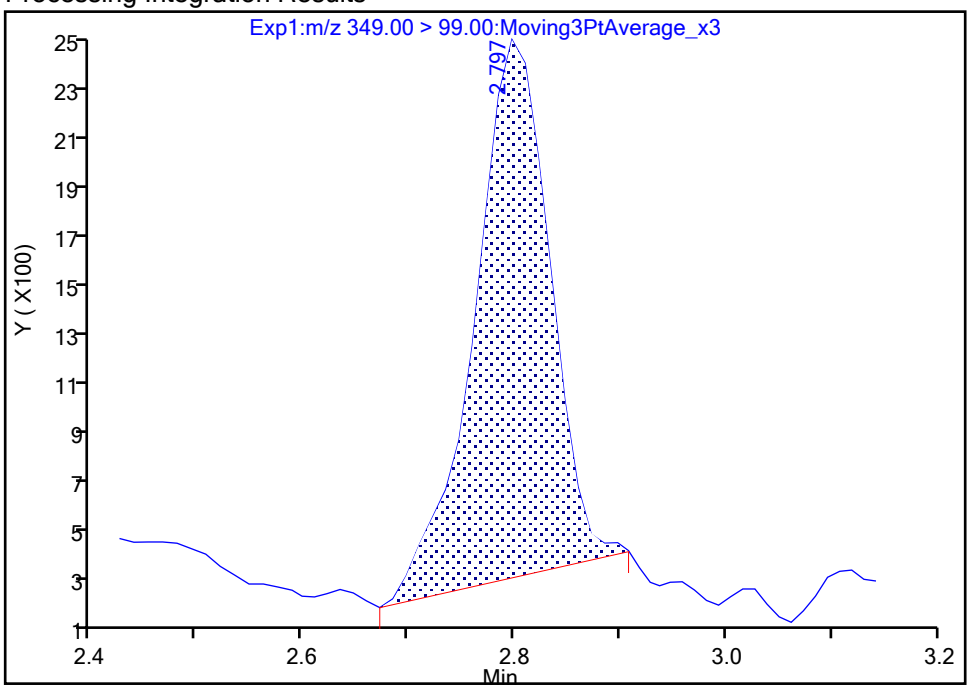
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

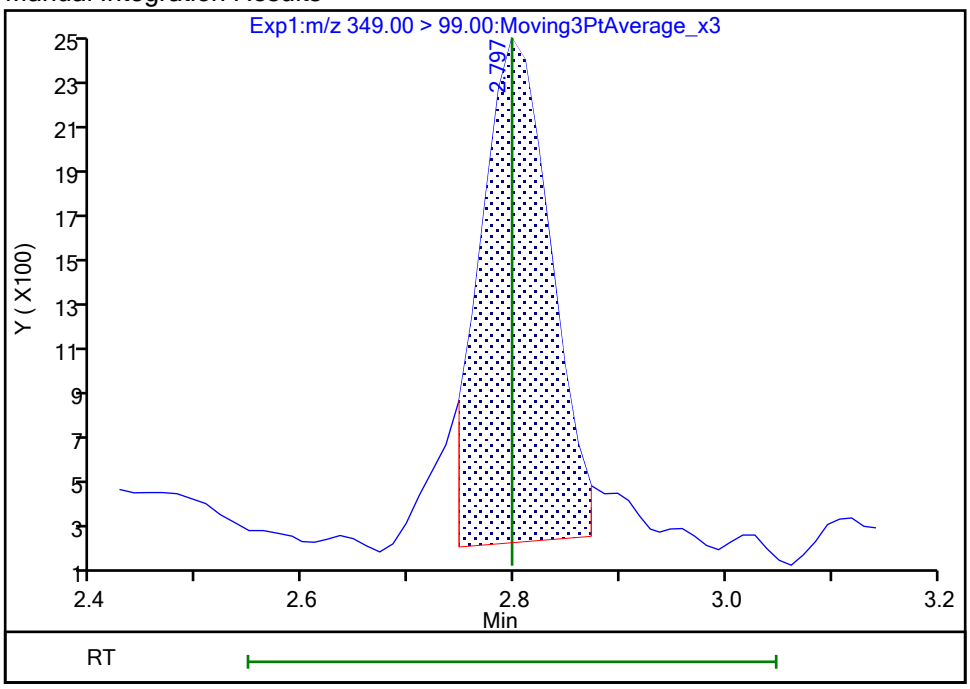
Processing Integration Results

RT: 2.80
Area: 10729
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 10259
Amount: 0.018961
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

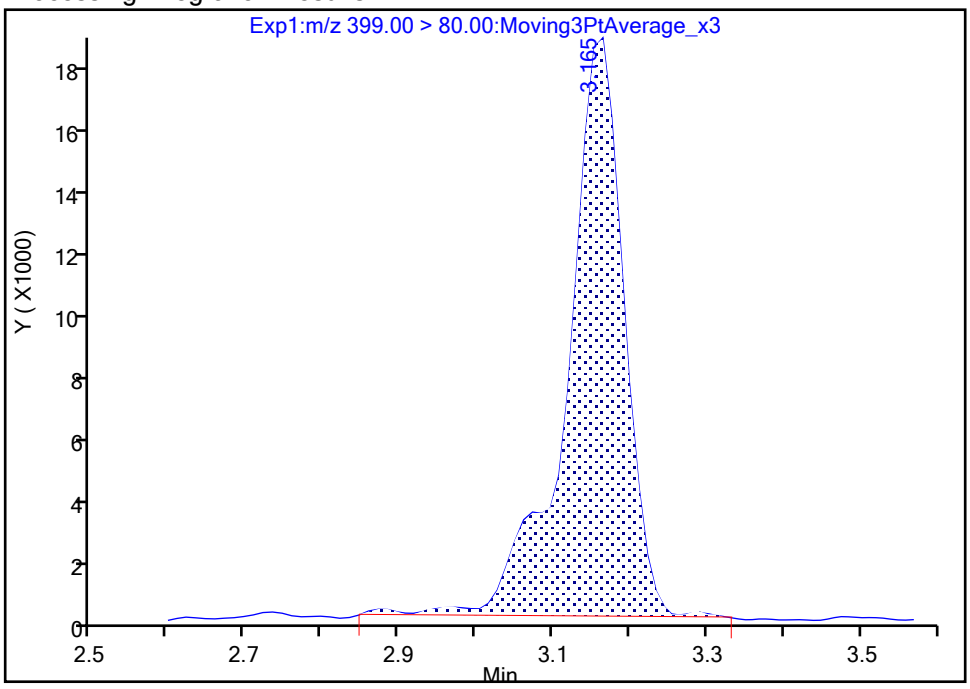
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

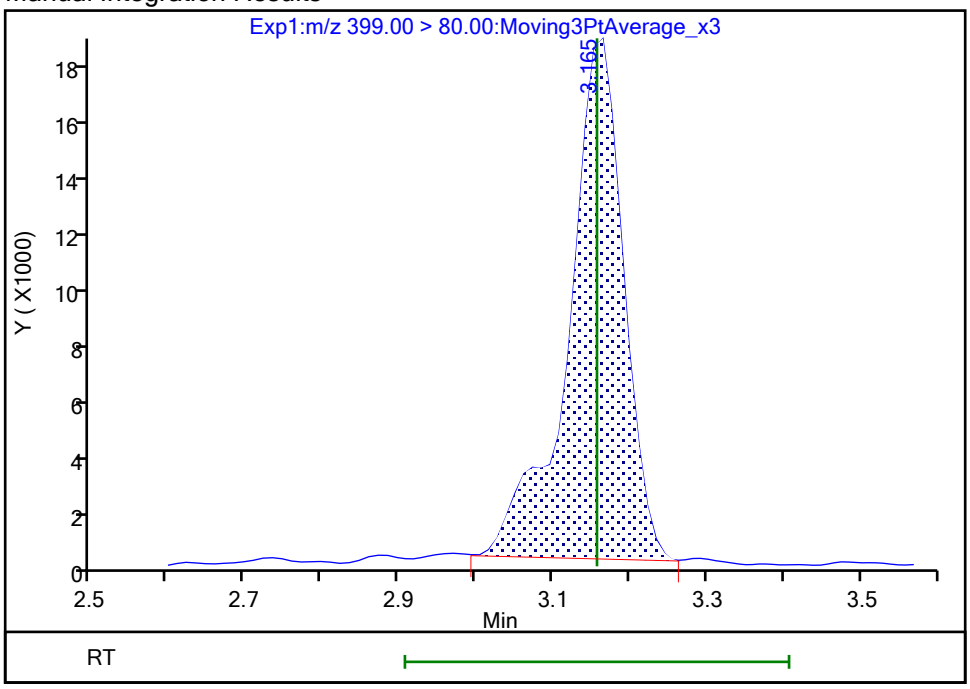
Processing Integration Results

RT: 3.16
Area: 96414
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 92034
Amount: 0.072593
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

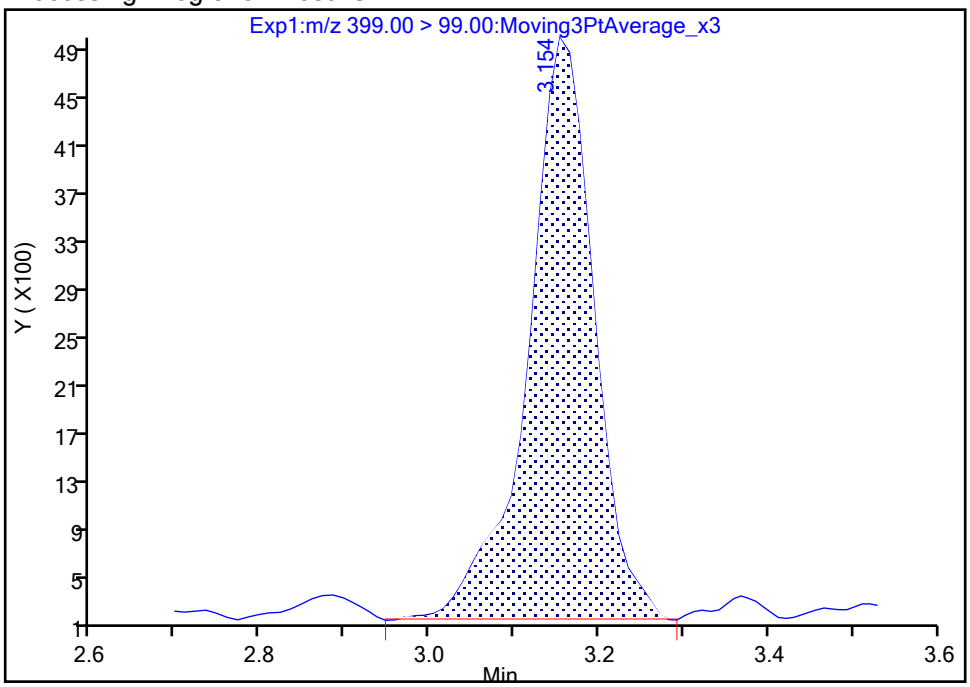
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

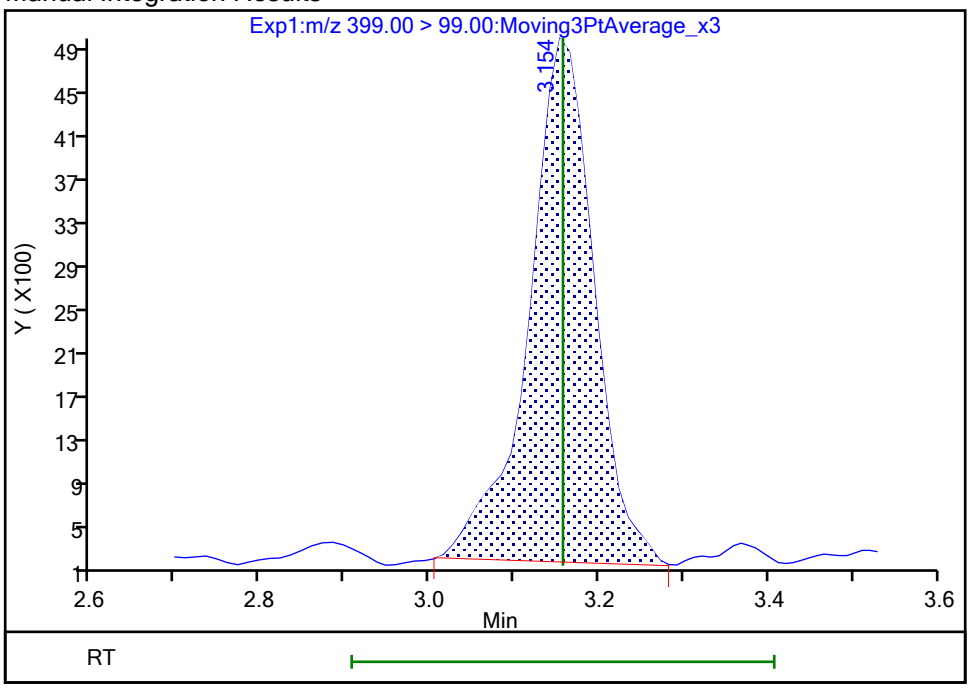
Processing Integration Results

RT: 3.15
Area: 26358
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 25750
Amount: 0.072593
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

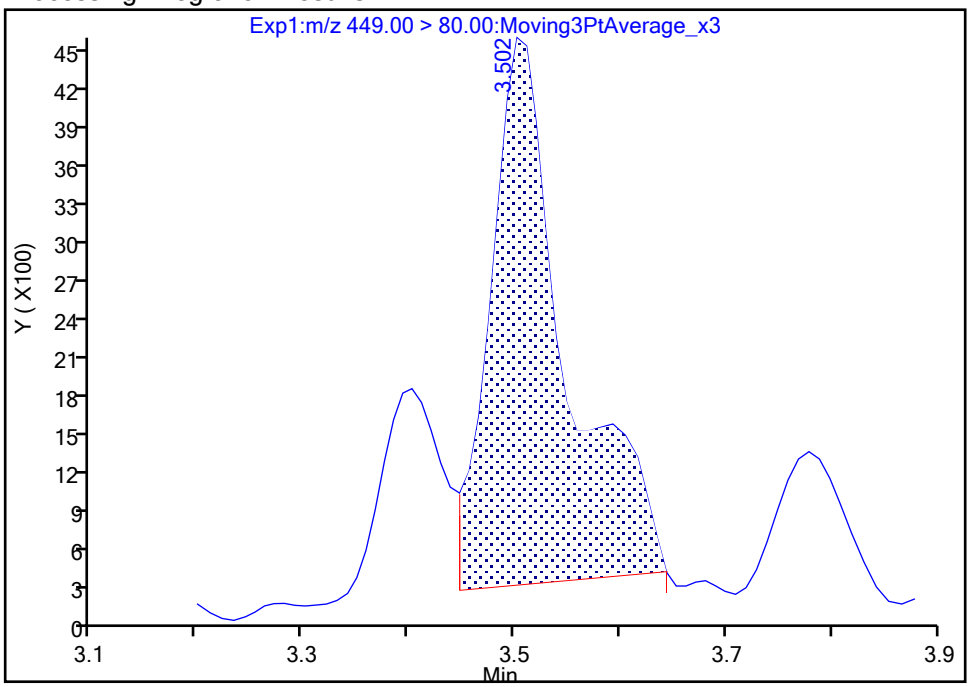
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

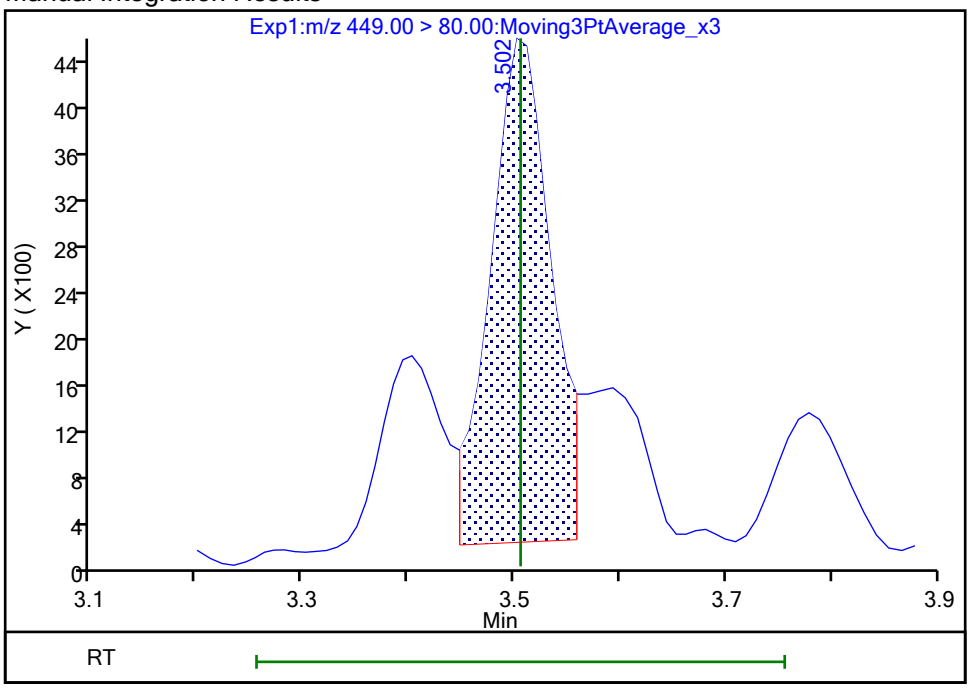
Processing Integration Results

RT: 3.50
Area: 21066
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 16917
Amount: 0.017073
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

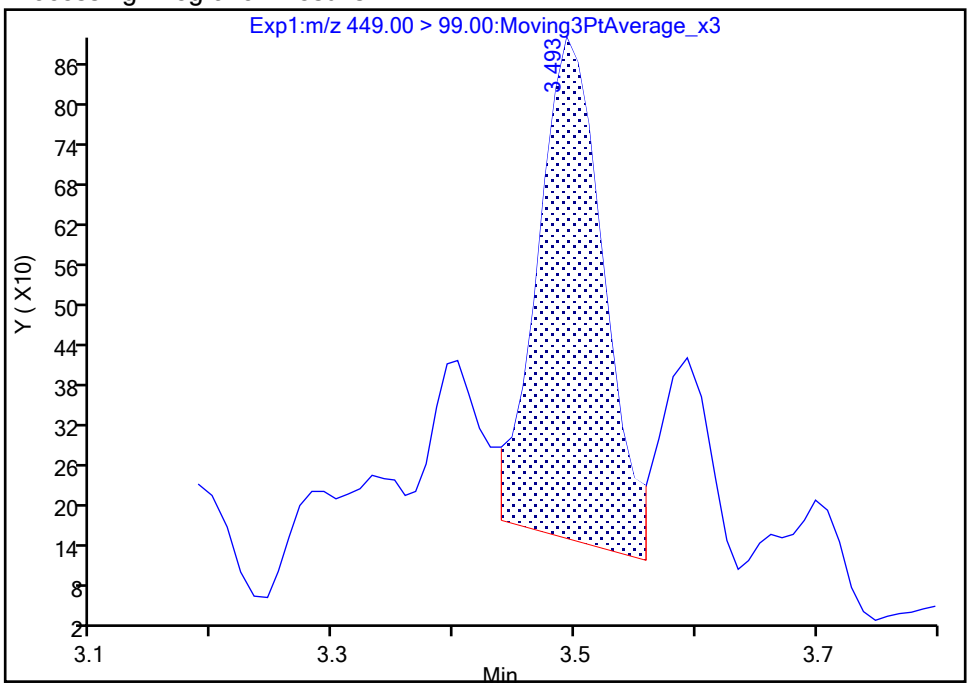
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

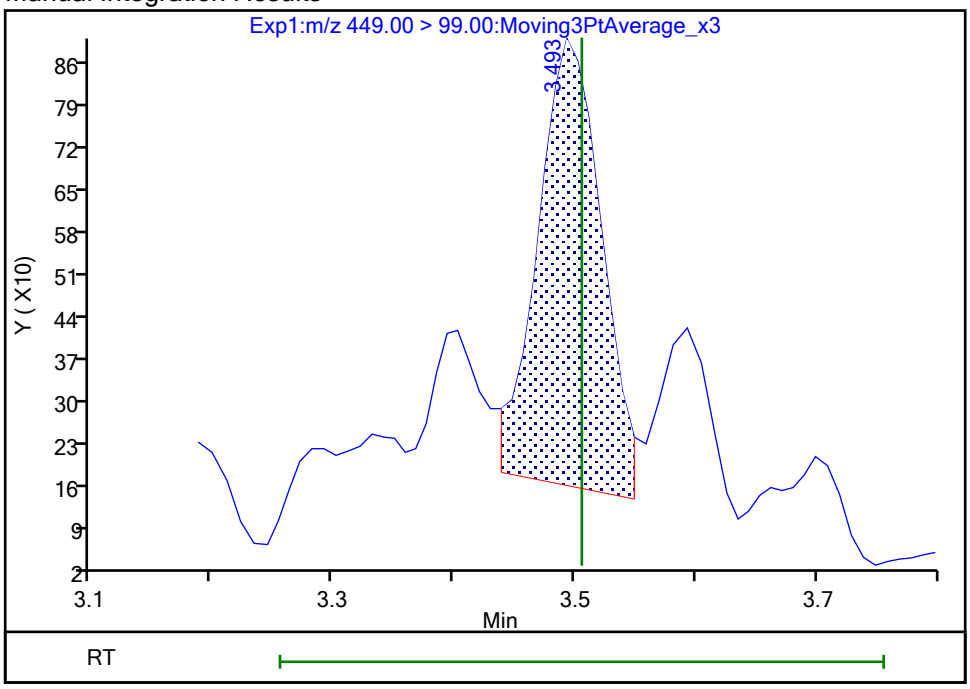
Processing Integration Results

RT: 3.49
Area: 2833
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 2684
Amount: 0.017073
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

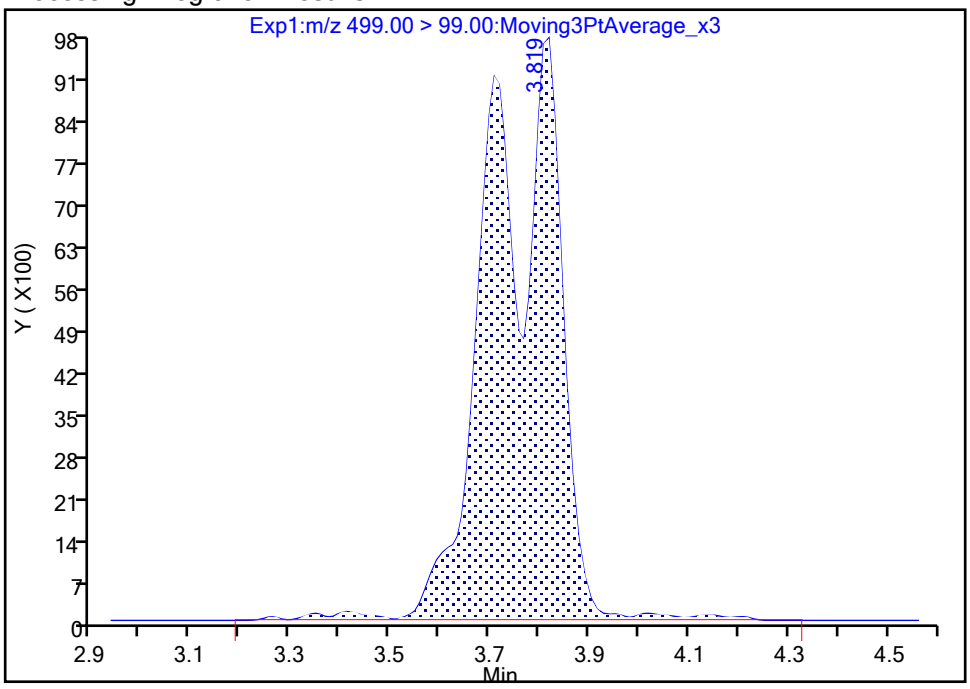
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

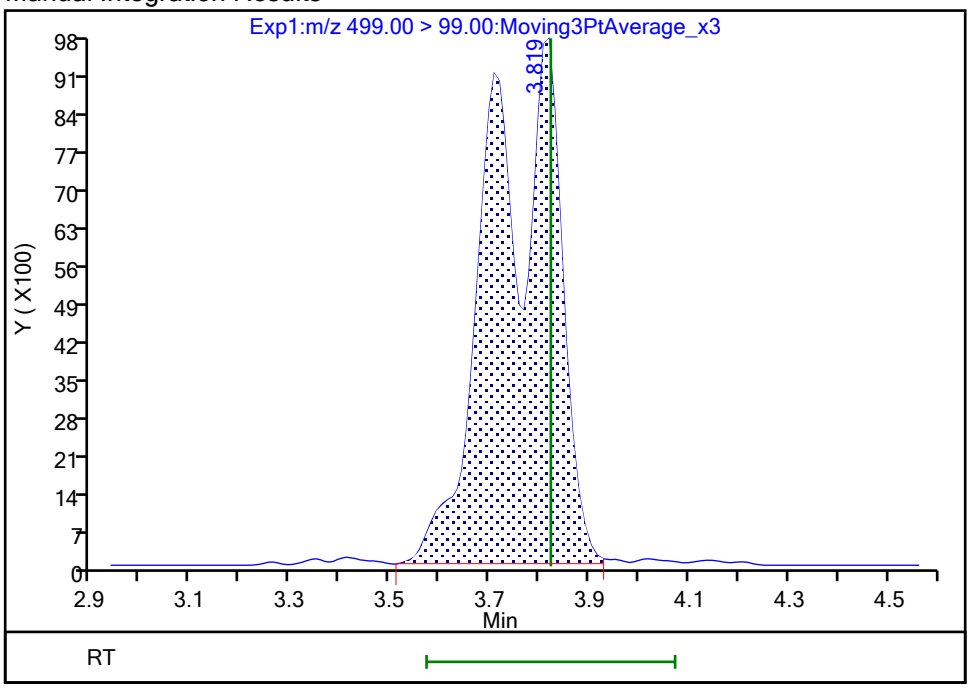
Processing Integration Results

RT: 3.82
Area: 97939
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 94490
Amount: 0.480685
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

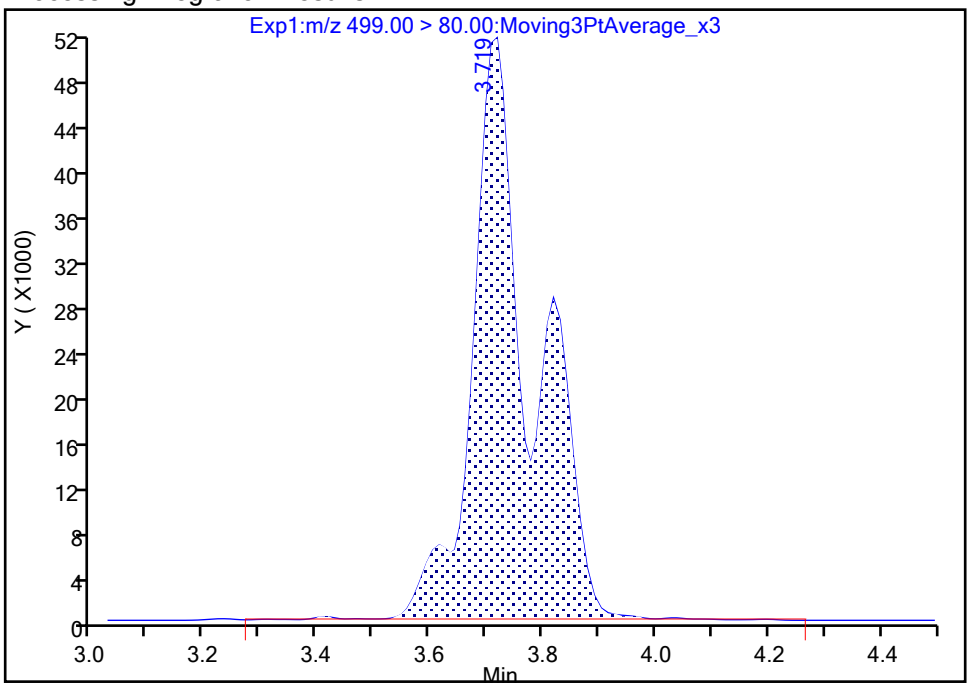
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

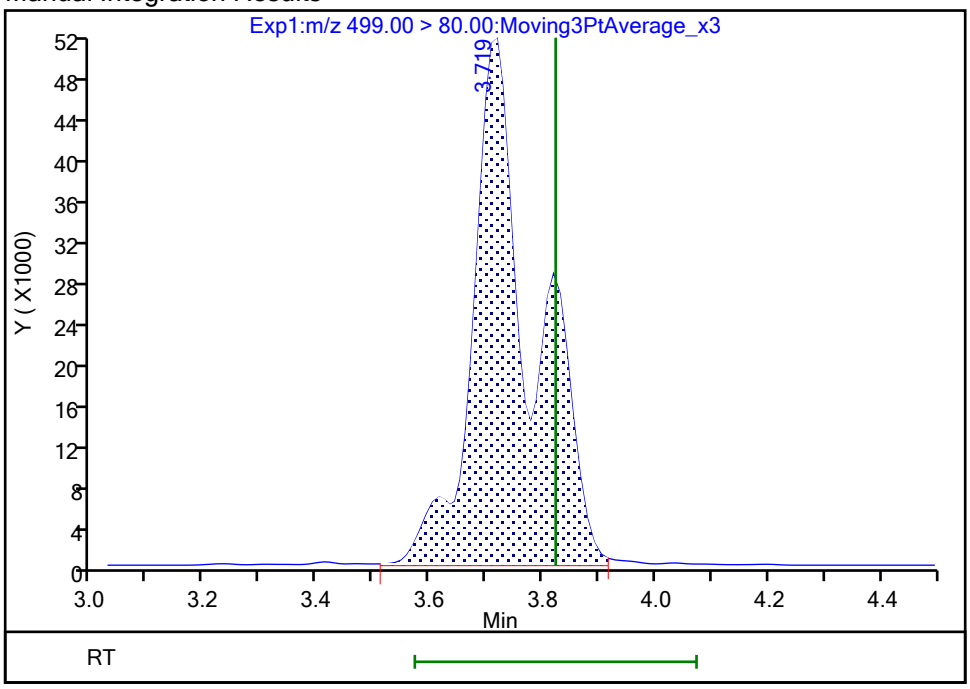
Processing Integration Results

RT: 3.72
Area: 389579
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.72
Area: 384404
Amount: 0.480685
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

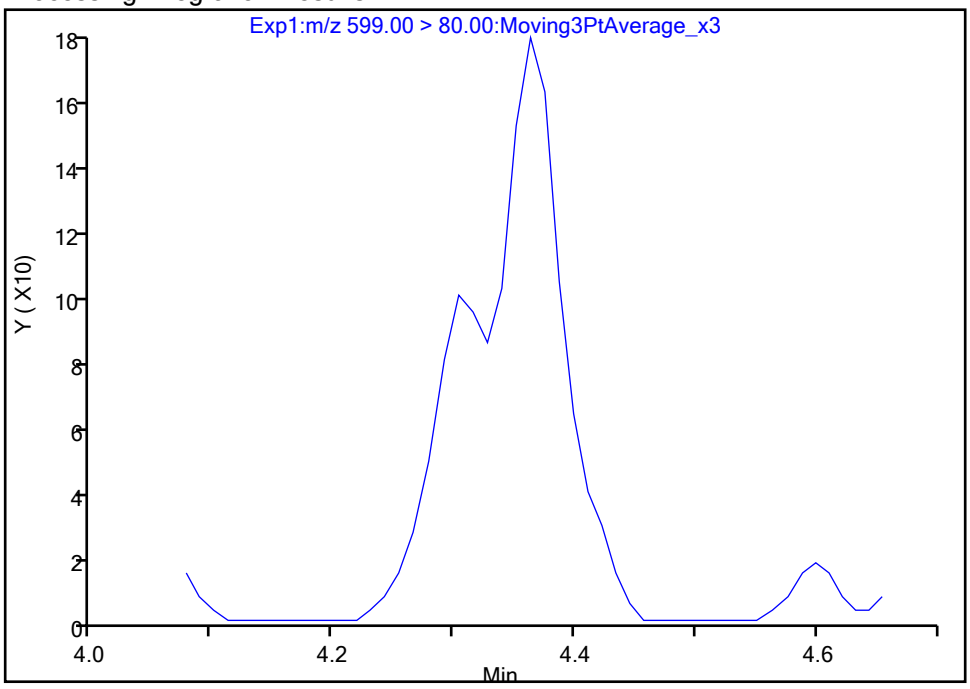
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

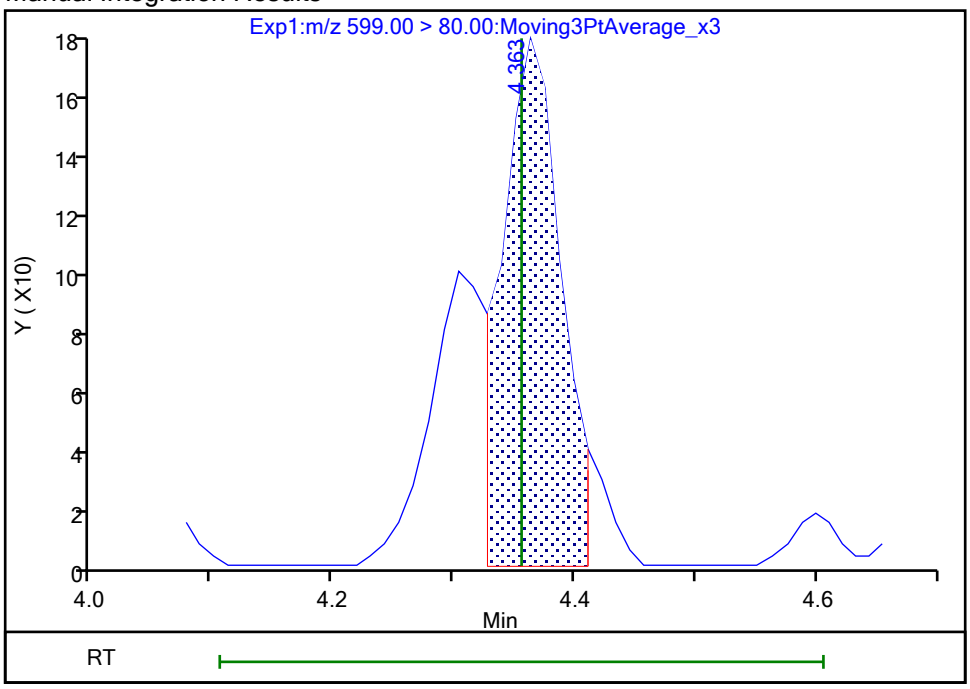
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 565
Amount: 0.001207
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

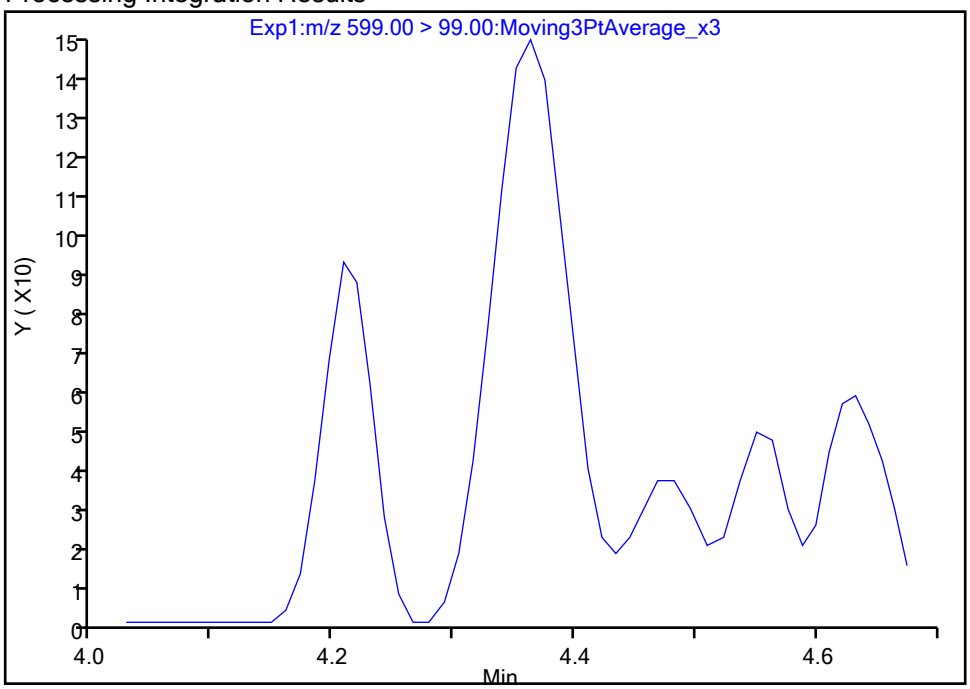
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

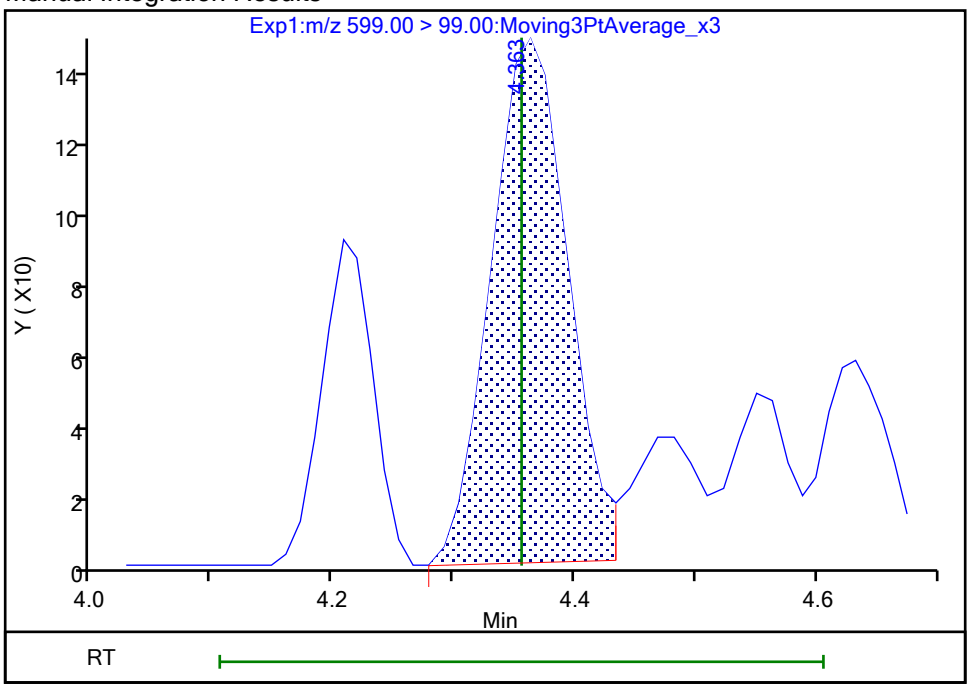
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 633
Amount: 0.001207
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

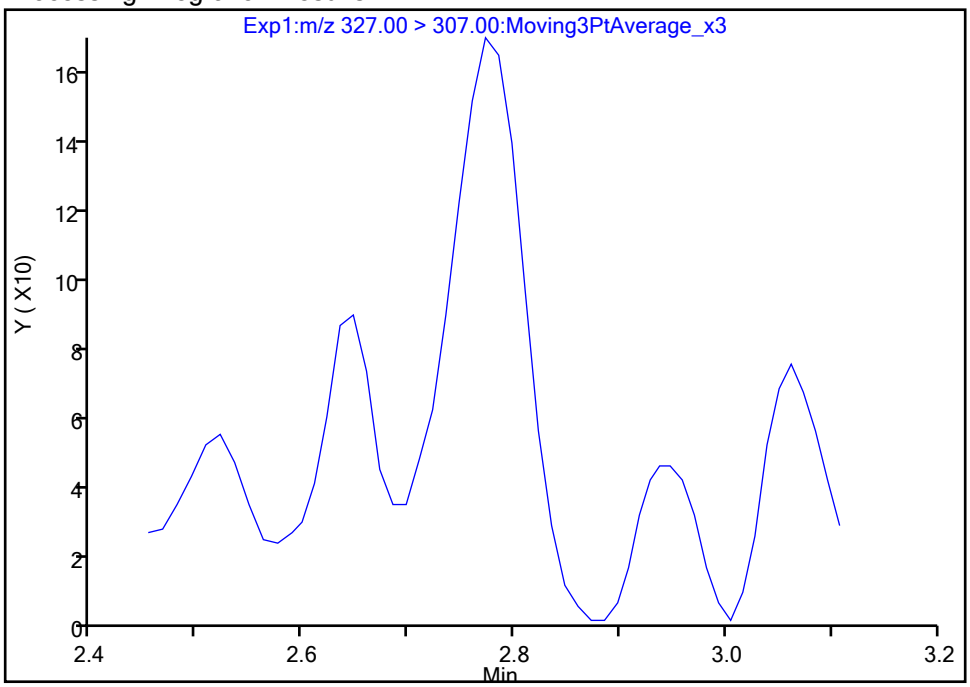
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

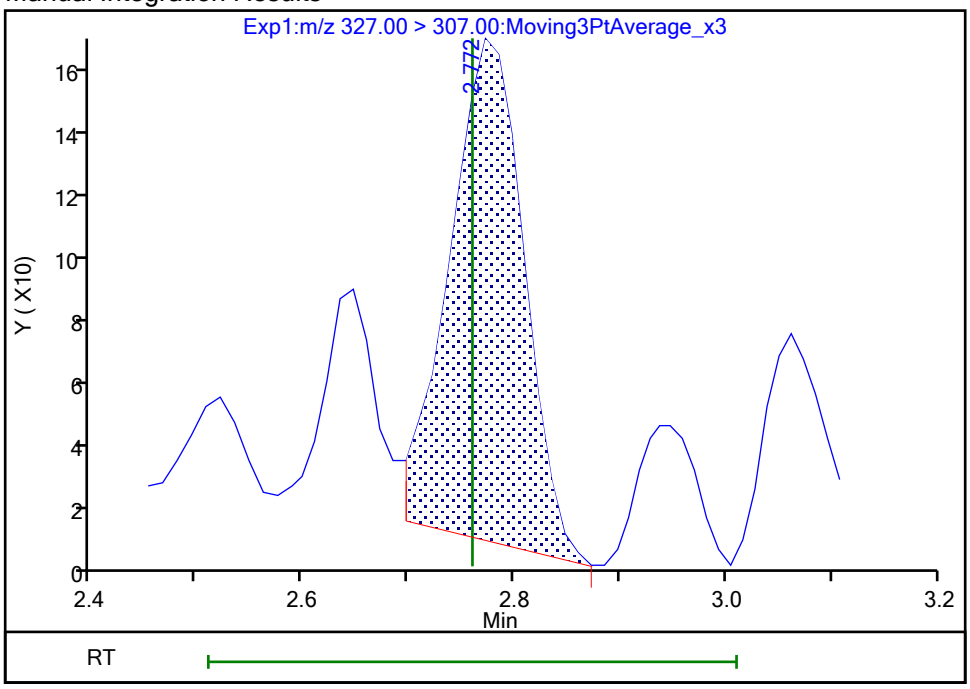
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 773
Amount: 0.001338
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:49:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

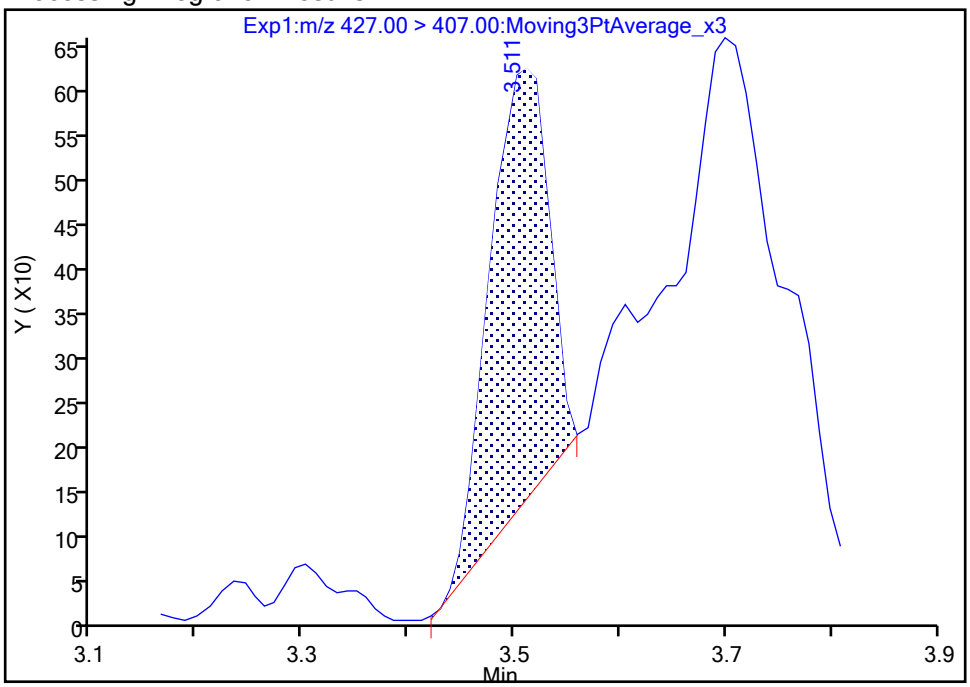
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

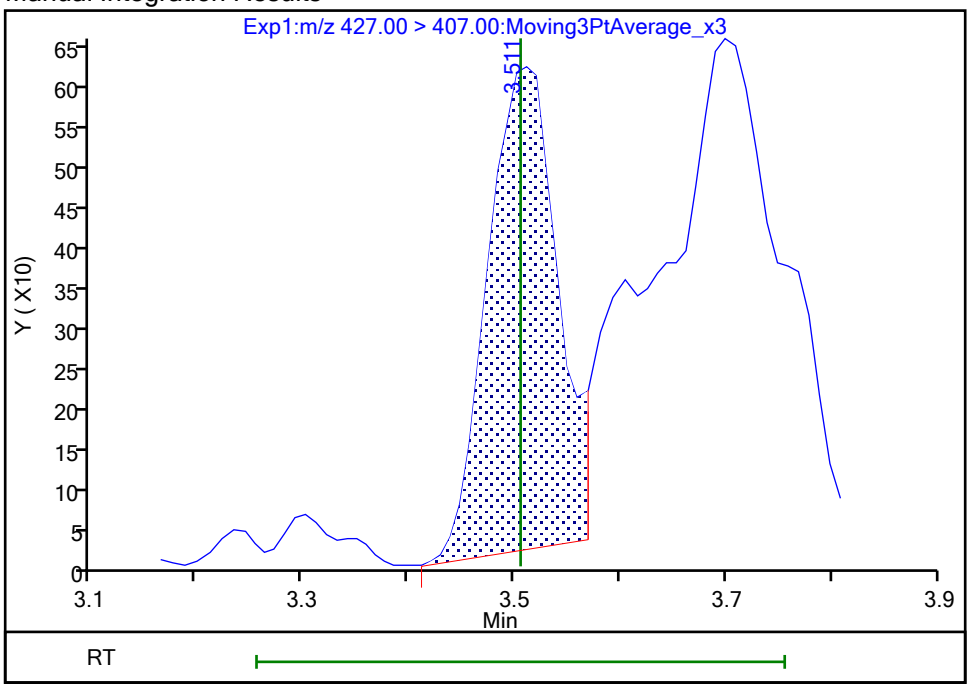
Processing Integration Results

RT: 3.51
Area: 1905
Amount: 0.003049
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2755
Amount: 0.004409
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

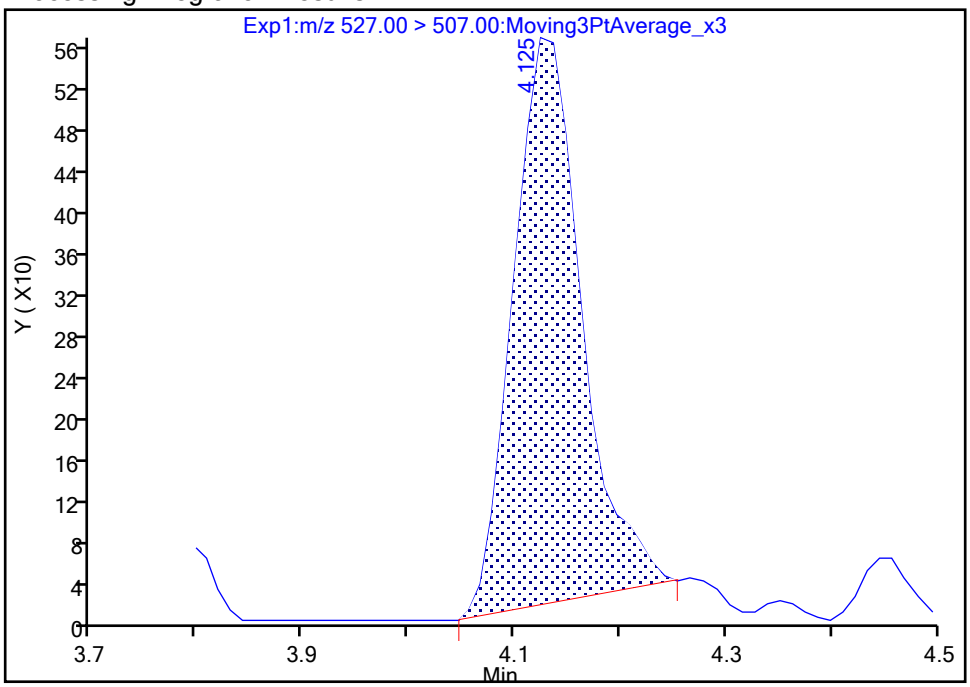
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

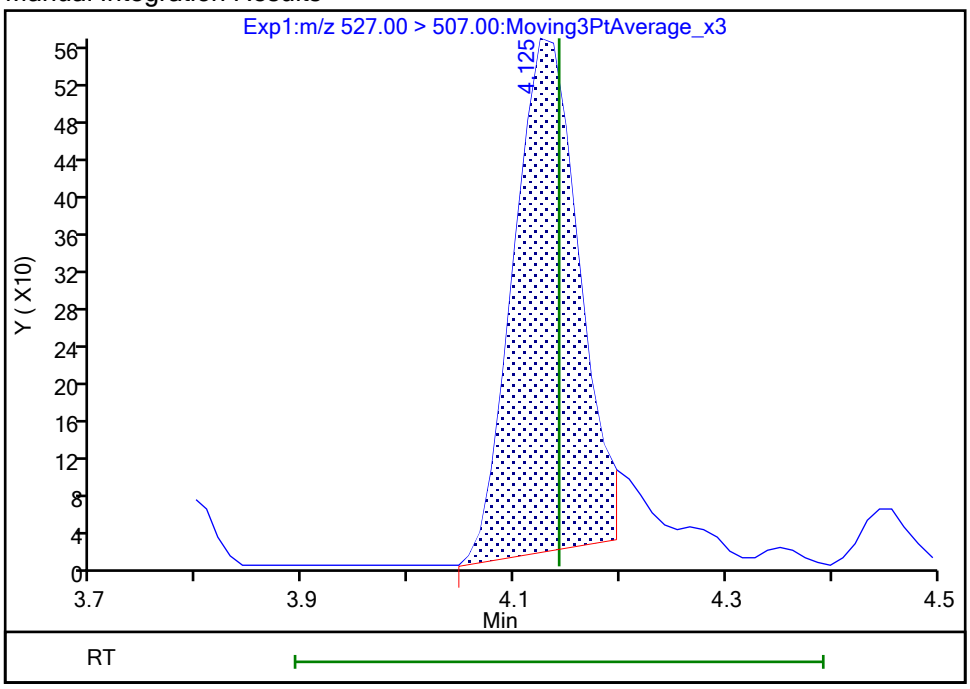
Processing Integration Results

RT: 4.12
Area: 2468
Amount: 0.005156
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 2352
Amount: 0.004914
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

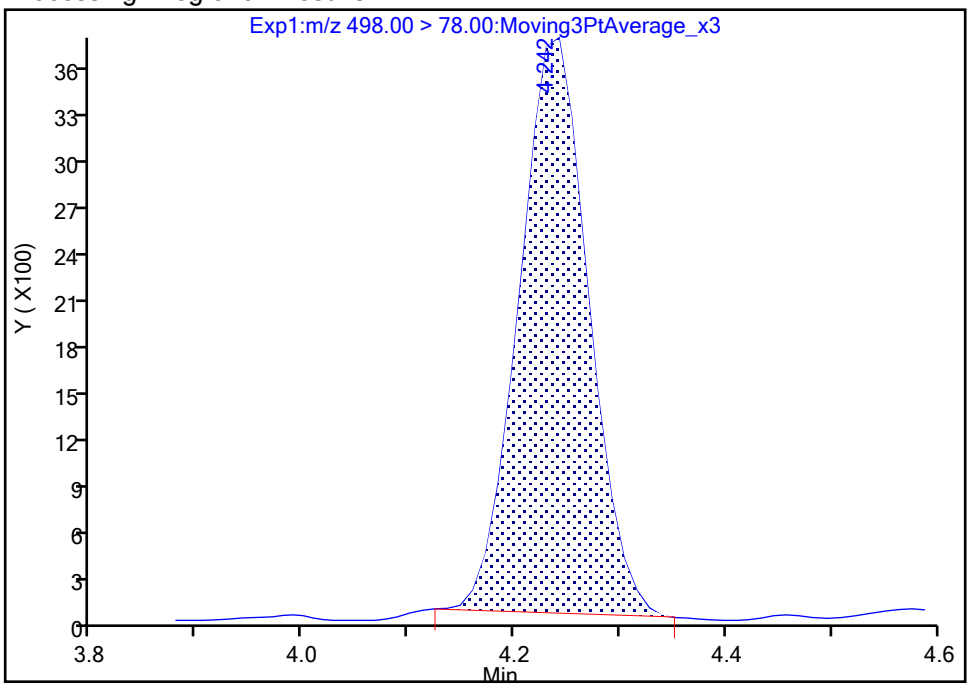
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

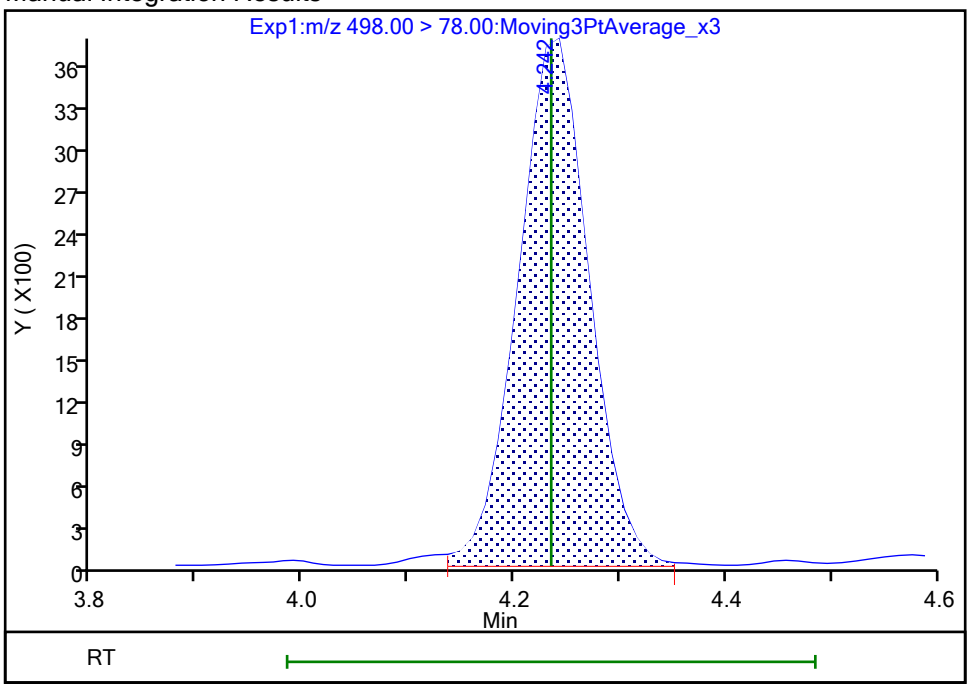
Processing Integration Results

RT: 4.24
Area: 16794
Amount: 0.013455
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 17365
Amount: 0.013912
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

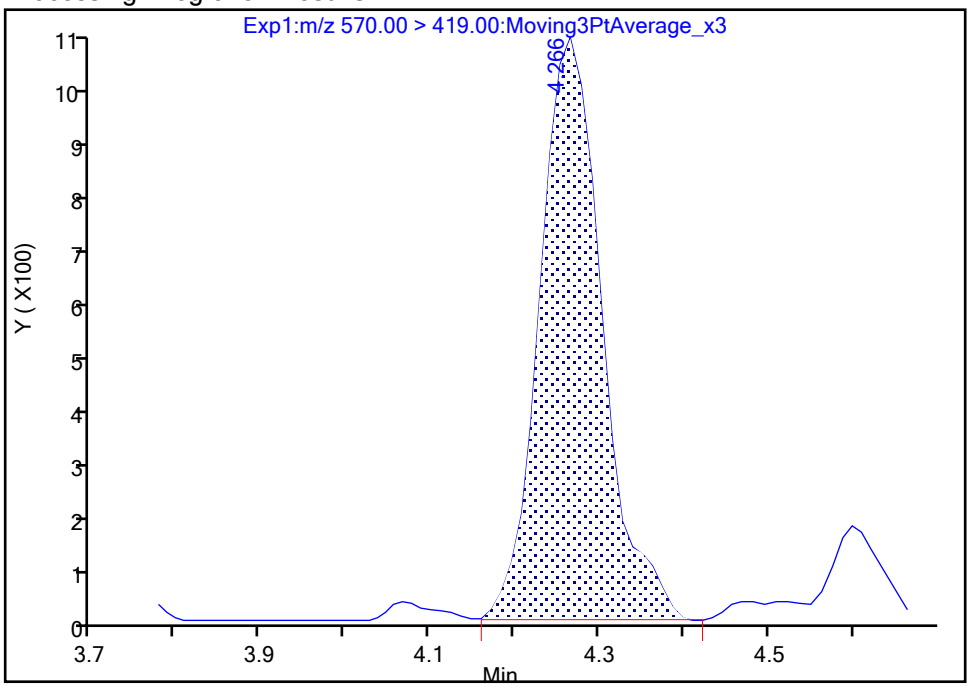
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

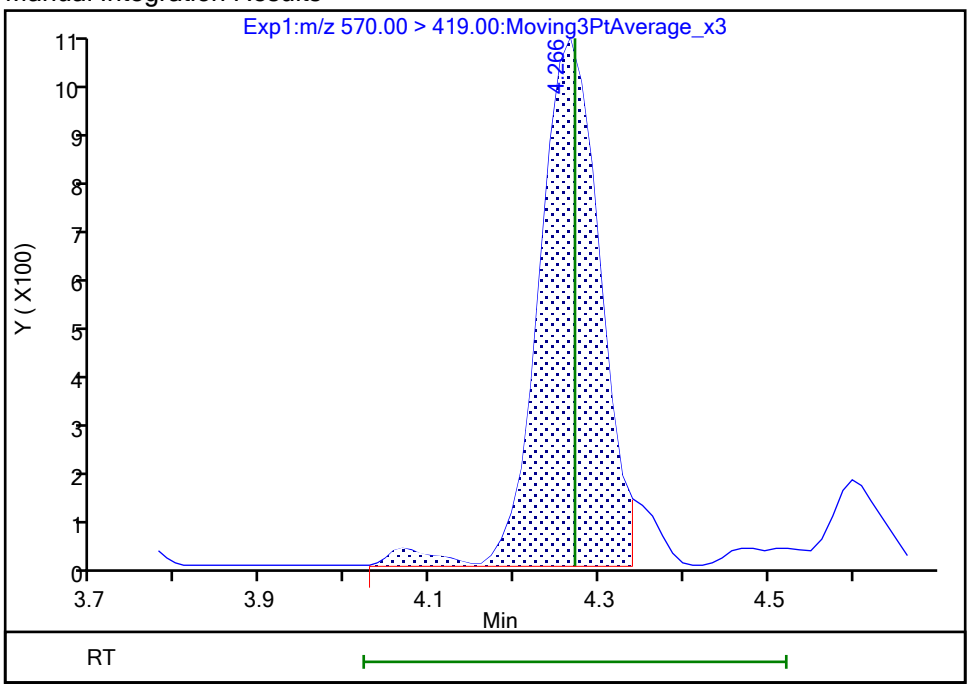
Processing Integration Results

RT: 4.27
Area: 5597
Amount: 0.017564
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 5480
Amount: 0.017197
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

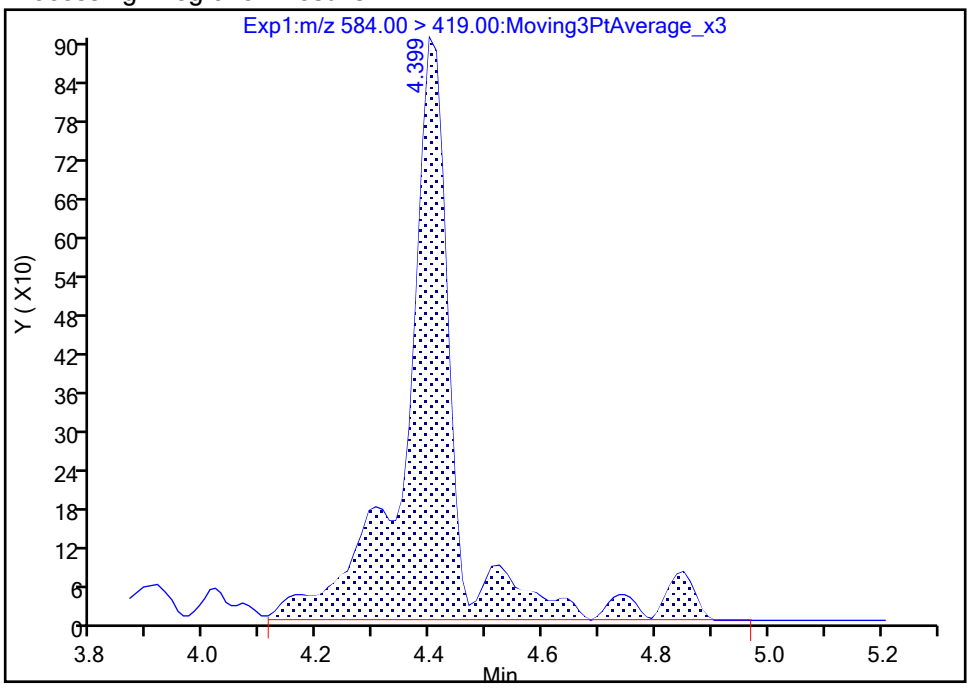
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

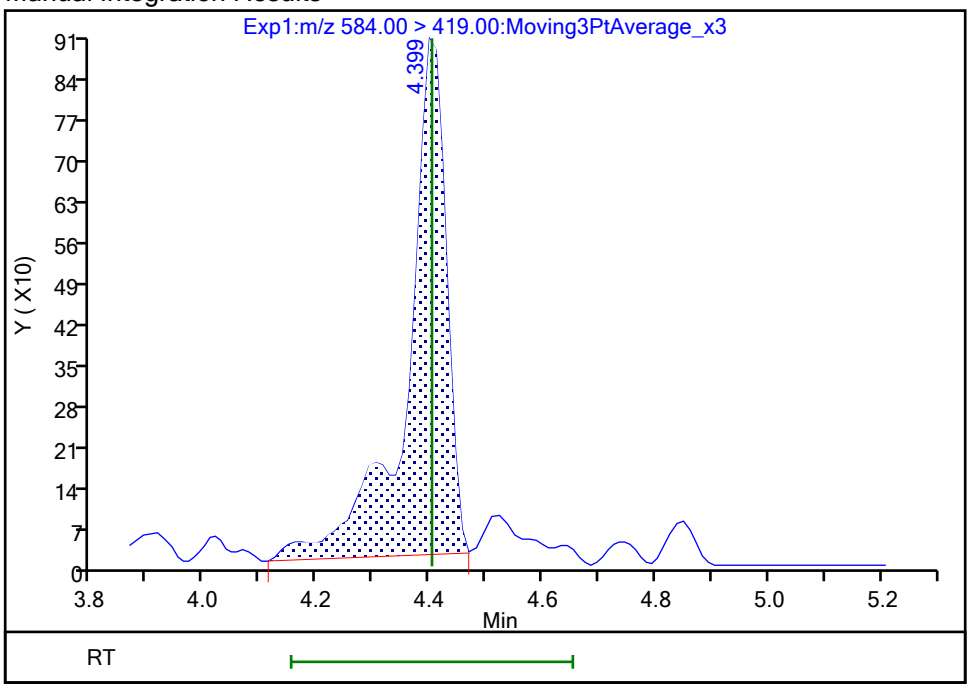
Processing Integration Results

RT: 4.40
Area: 5584
Amount: 0.016126
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 4309
Amount: 0.012444
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

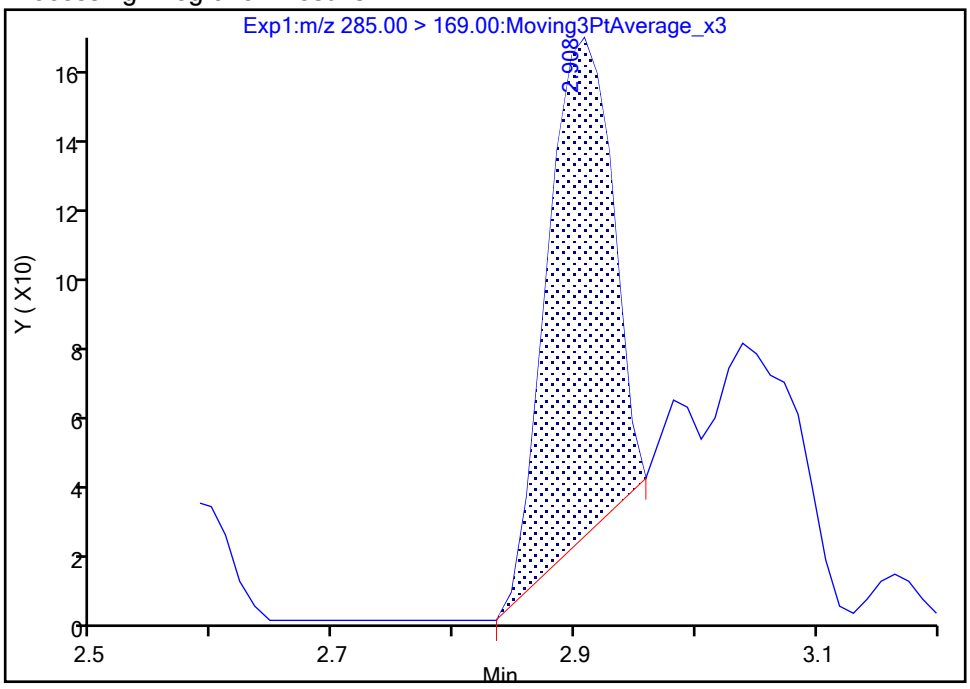
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

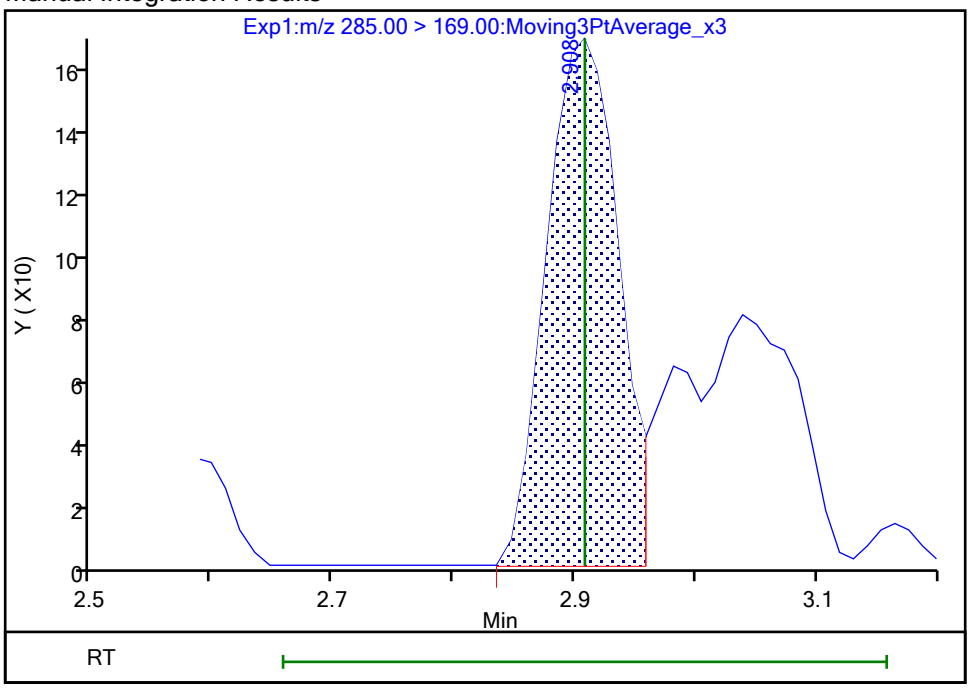
Processing Integration Results

RT: 2.91
Area: 527
Amount: 0.002264
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 676
Amount: 0.002904
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:50:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

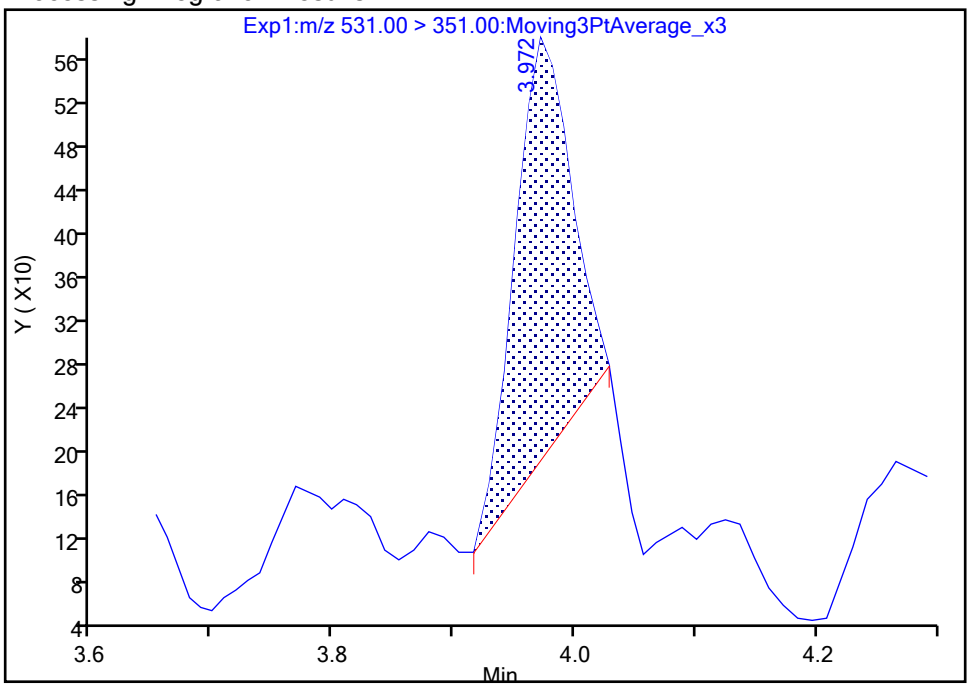
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

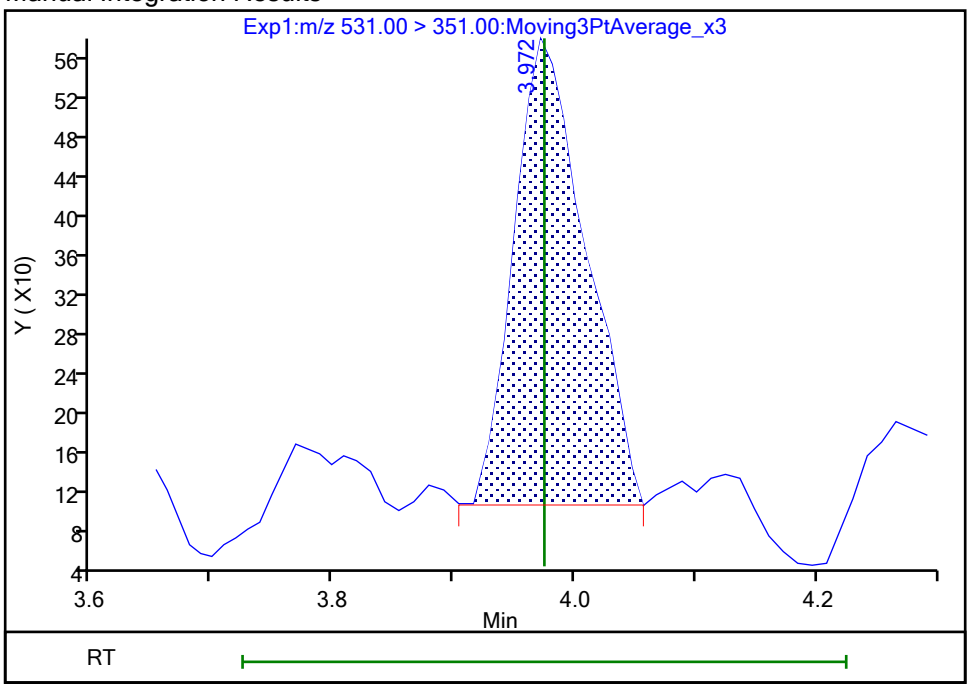
Processing Integration Results

RT: 3.97
Area: 1252
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.97
Area: 1971
Amount: 0.000805
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:51:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

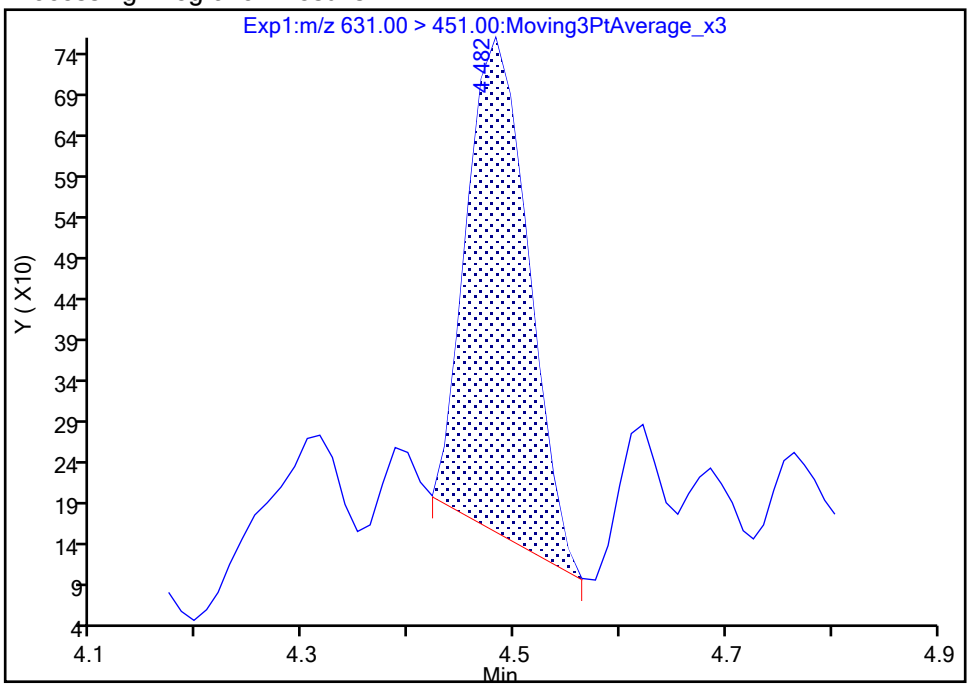
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

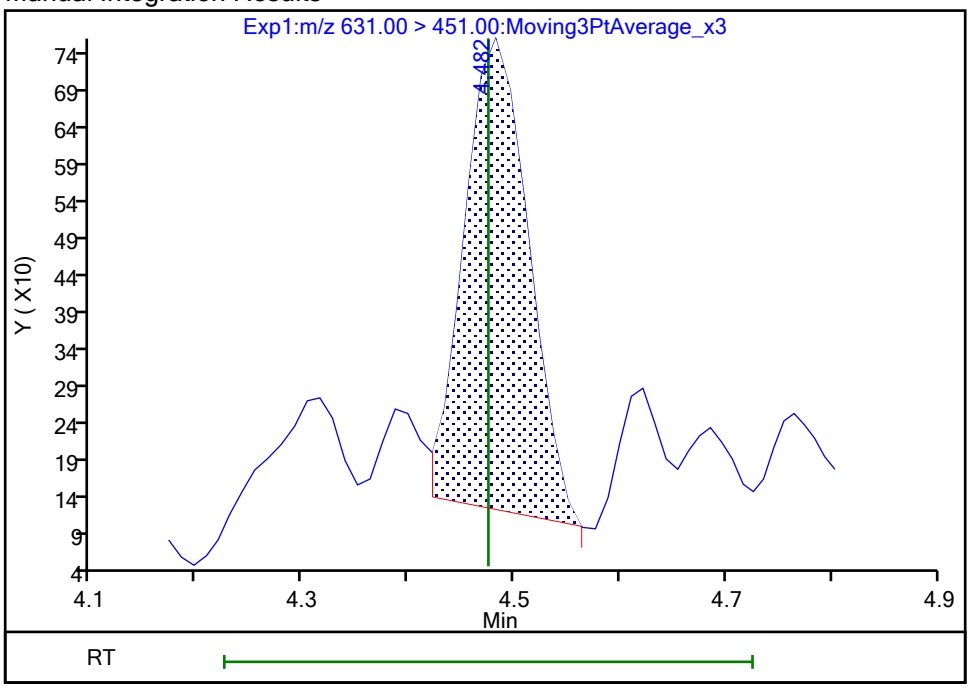
Processing Integration Results

RT: 4.48
Area: 2443
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 2693
Amount: 0.000718
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:52:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

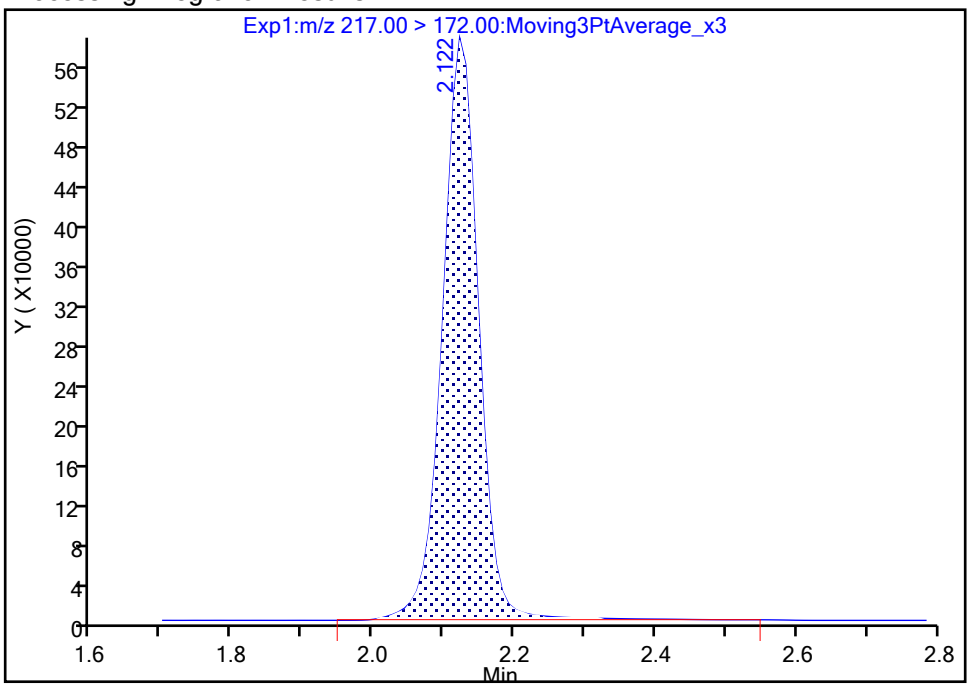
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

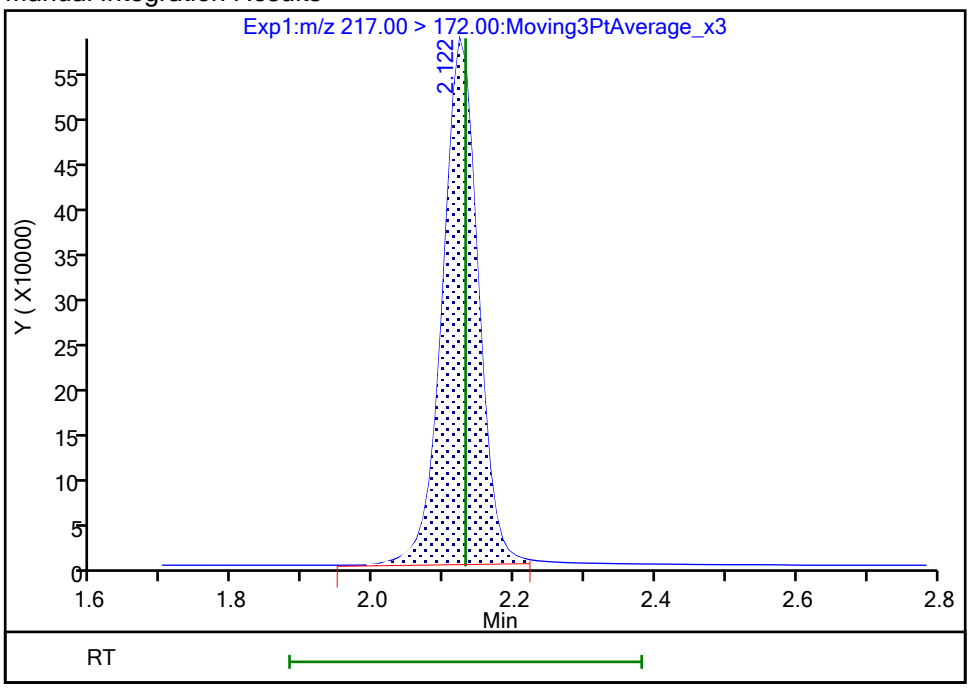
Processing Integration Results

RT: 2.12
Area: 2072015
Amount: 1.246595
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2046050
Amount: 1.230973
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

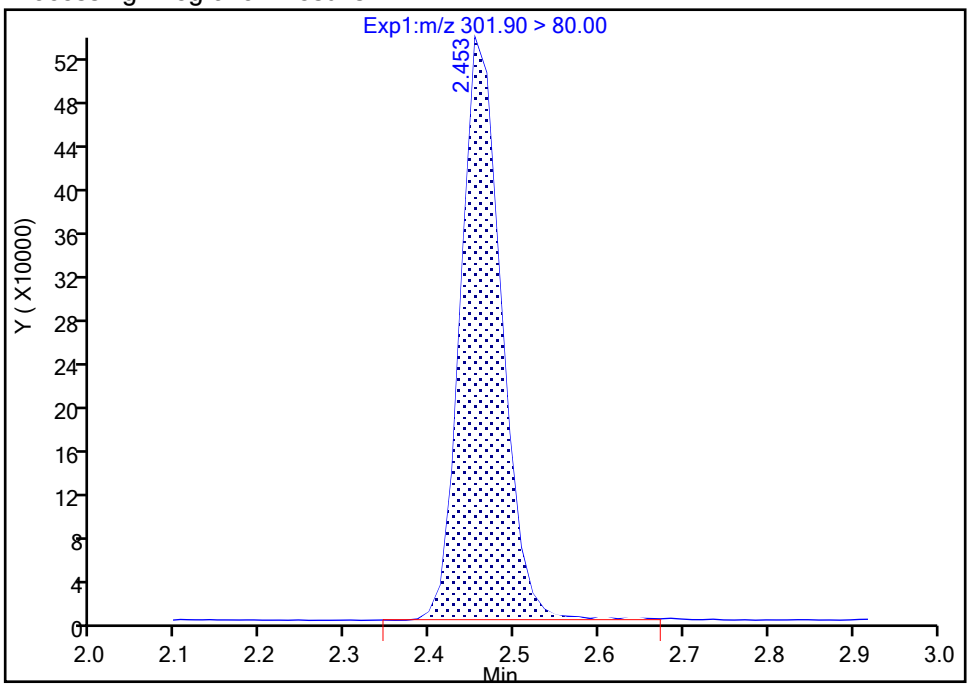
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

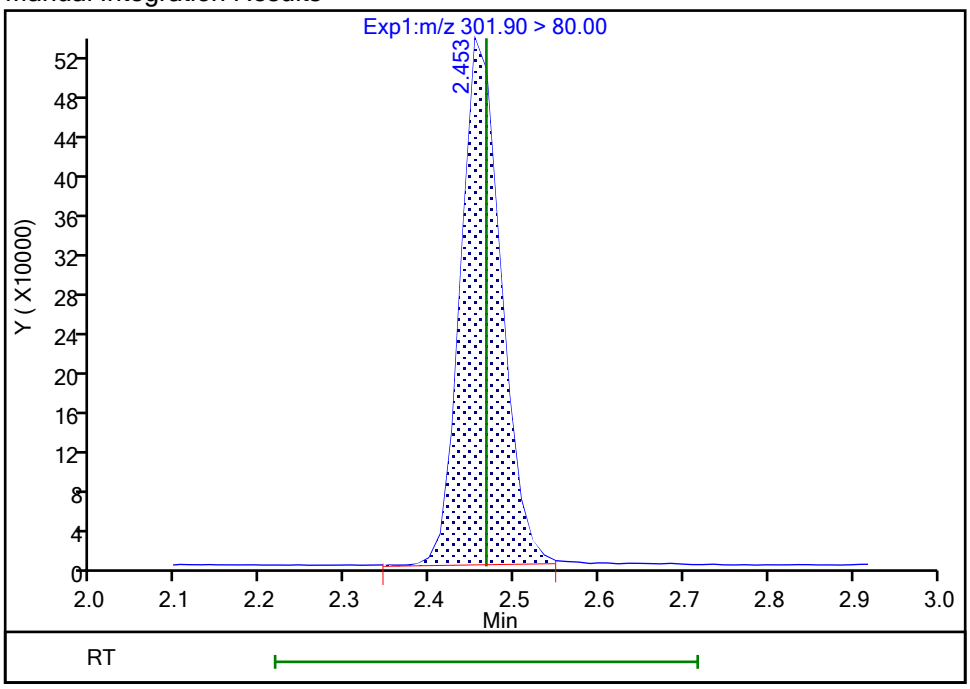
Processing Integration Results

RT: 2.45
Area: 1776476
Amount: 1.017802
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1767229
Amount: 1.012504
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

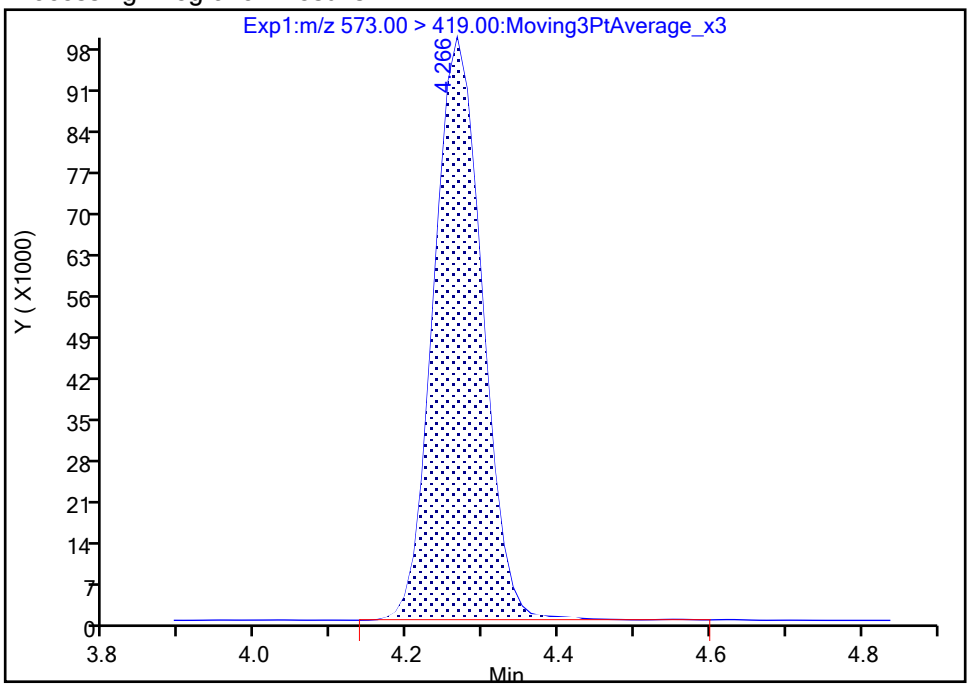
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

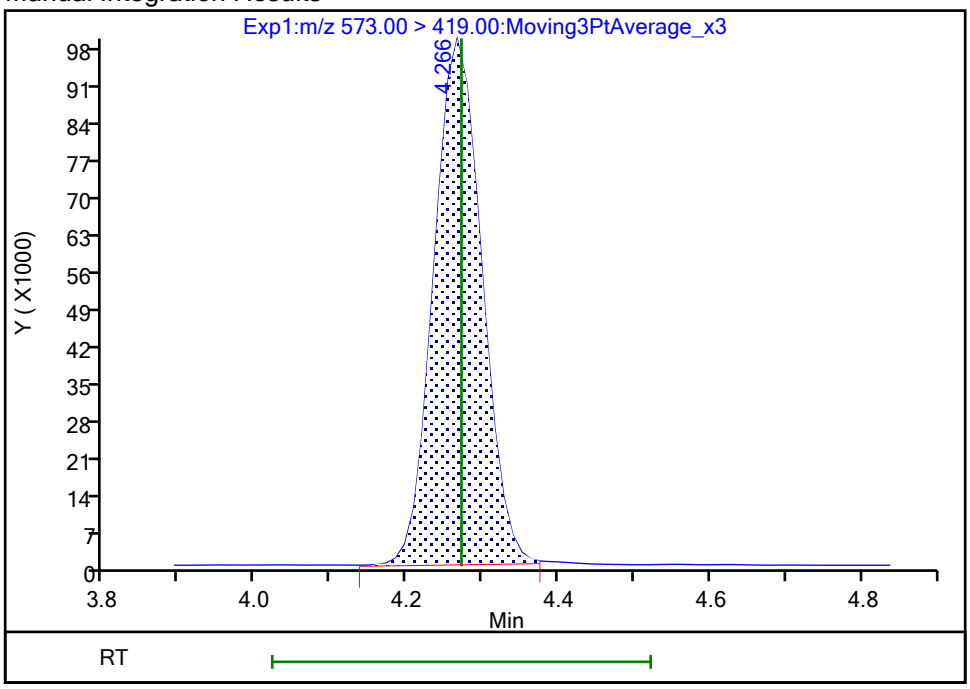
Processing Integration Results

RT: 4.27
Area: 441505
Amount: 0.993952
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 438970
Amount: 0.988245
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

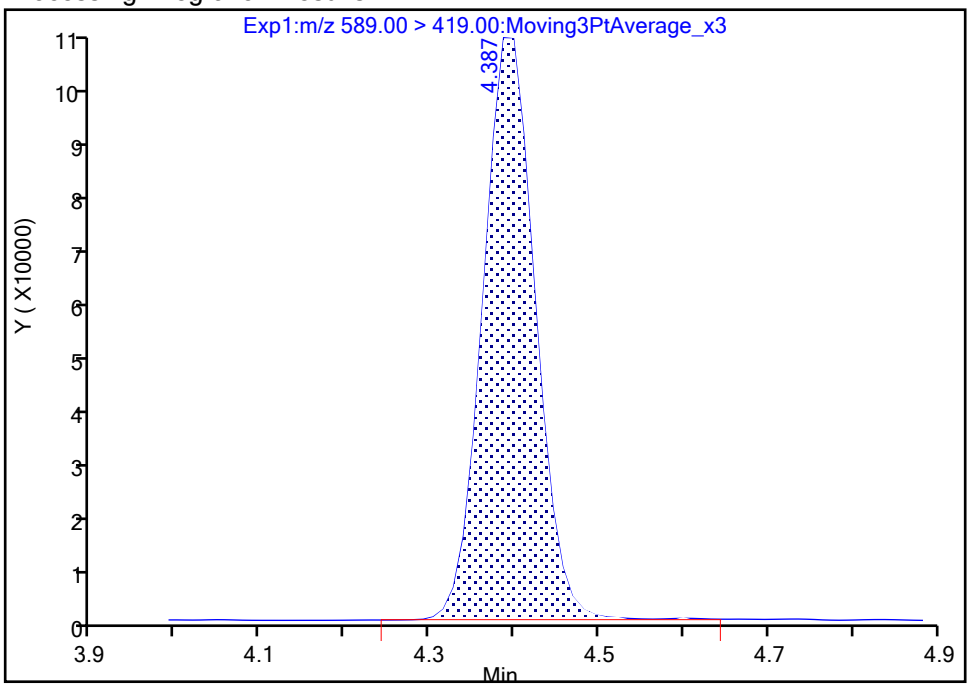
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

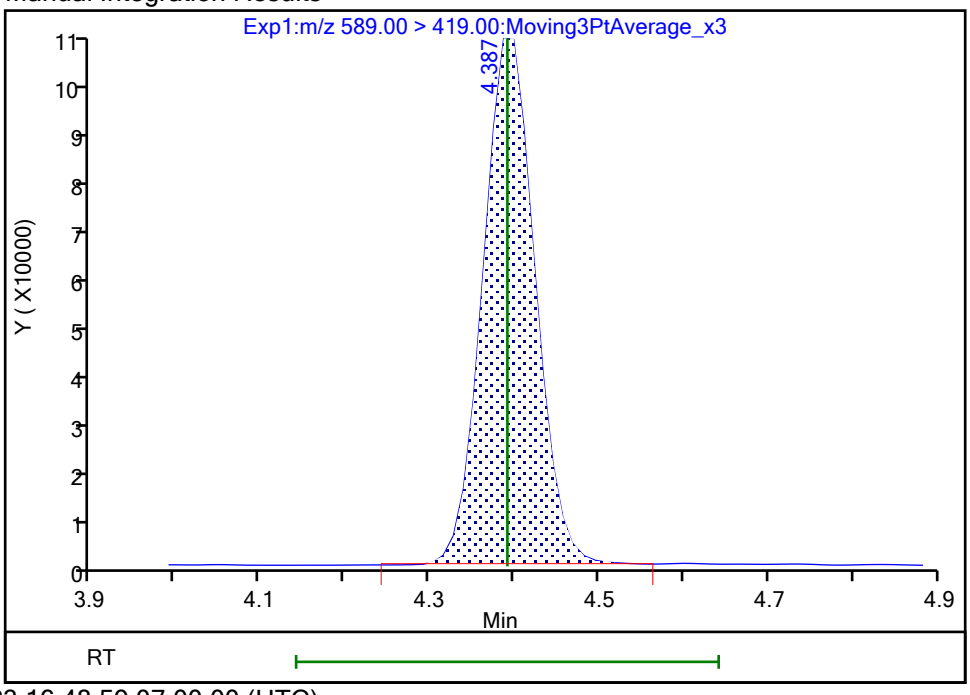
Processing Integration Results

RT: 4.39
Area: 433214
Amount: 1.012890
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 432766
Amount: 1.011843
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

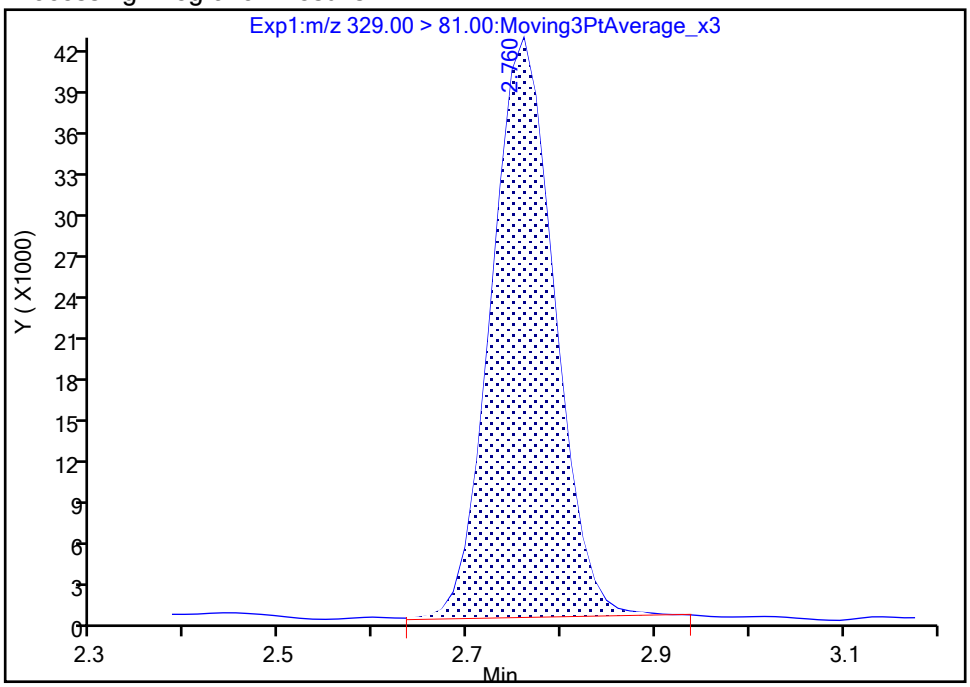
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D24.d				
Injection Date:	21-Oct-2023 06:57:53	Instrument ID:	LC812		
Lims ID:	460-290219-A-3-A	Lab Sample ID:	200-290219-3		
Client ID:	MW41R-101223-1137-29.5				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

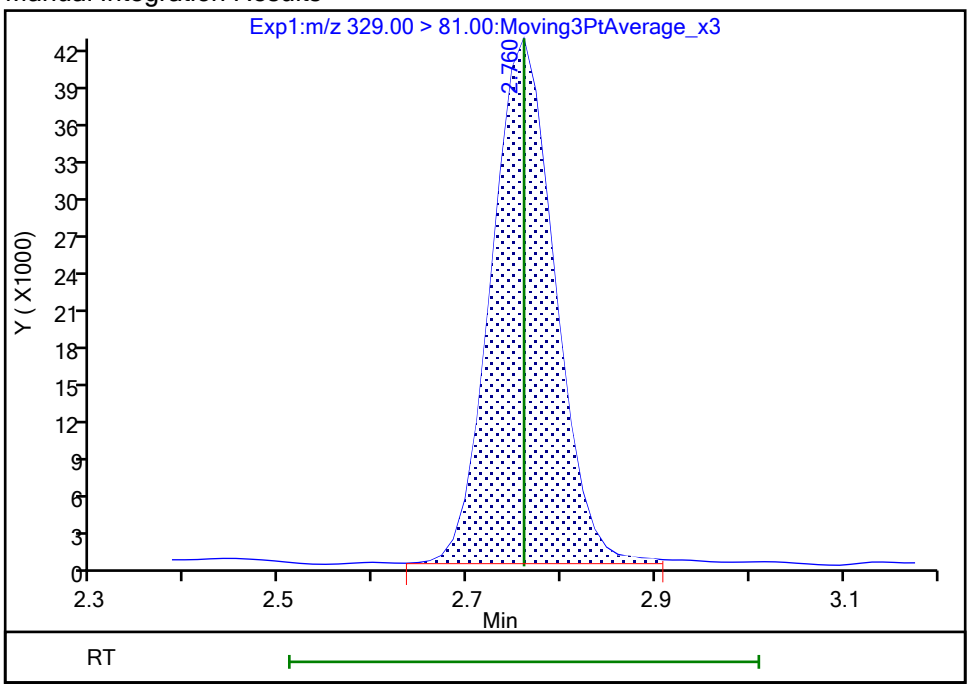
Processing Integration Results

RT: 2.76
Area: 197320
Amount: 0.977557
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 198572
Amount: 0.983759
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:48:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW14A-101223-1231-40 | Lab Sample ID: 460-290219-4

Matrix: Water | Lab File ID: PA231020D25.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 12:31

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 303.6(mL) | Date Analyzed: 10/21/2023 07:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	2.59	J	4.12	0.99
2706-90-3	Perfluoropentanoic acid	2.51		1.65	0.56
307-24-4	Perfluorohexanoic acid	2.79		1.65	0.54
375-85-9	Perfluoroheptanoic acid	1.74		1.65	0.44
335-67-1	Perfluorooctanoic acid	7.96		1.65	0.63
375-95-1	Perfluorononanoic acid	0.97	J	1.65	0.40
335-76-2	Perfluorodecanoic acid	1.73		1.65	0.38
2058-94-8	Perfluoroundecanoic acid	1.15	J	1.65	0.45
307-55-1	Perfluorododecanoic acid	1.65	U	1.65	0.40
72629-94-8	Perfluorotridecanoic acid	1.65	U	1.65	0.40
376-06-7	Perfluorotetradecanoic acid	1.65	U	1.65	0.53
375-73-5	Perfluorobutanesulfonic acid	1.02	J	1.65	0.51
2706-91-4	Perfluoropentanesulfonic acid	0.52	J	1.65	0.41
355-46-4	Perfluorohexanesulfonic acid	2.40		1.65	0.45
375-92-8	Perfluoroheptanesulfonic acid	0.44	J	1.65	0.34
1763-23-1	Perfluorooctanesulfonic acid	18.5		1.65	0.70
68259-12-1	Perfluorononanesulfonic acid	1.65	U	1.65	0.33
335-77-3	Perfluorodecanesulfonic acid	1.65	U	1.65	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.12	U	4.12	1.07
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.63
754-91-6	Perfluorooctanesulfonamide	1.65	U	1.65	0.76
2355-31-9	NMeFOSAA	4.12	U	4.12	1.56
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.12	U	4.12	1.32
13252-13-6	HFPODA	3.29	U	3.29	0.91
919005-14-4	DONA	1.65	U	1.65	0.35
756426-58-1	9Cl-PF3ONS	1.65	U	1.65	0.26
763051-92-9	11Cl-PF3OUdS	1.65	U	1.65	0.72

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW14A-101223-1231-40 Lab Sample ID: 460-290219-4

Matrix: Water Lab File ID: PA231020D25.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 12:31

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 303.6(mL) Date Analyzed: 10/21/2023 07:06

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	90		50-150
STL01892	13C4 PFHpA	100		50-150
STL02116	13C2 PFTeDA	81		50-150
STL02337	13C3 PFBS	86		50-150
STL01056	13C8 FOSA	80		50-150
STL02118	d3-NMeFOSAA	84		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	81		50-150
STL02279	M2-6:2 FTS	87		50-150
STL02280	M2-8:2 FTS	78		50-150
STL02255	13C3 HFPO-DA	98		50-150
STL00994	18O2 PFHxS	90		50-150
STL00993	13C2 PFHxA	90		50-150
STL00991	13C4 PFOS	90		50-150
STL00998	13C2 PFDoA	91		50-150
STL00995	13C5 PFNA	101		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	95		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d
Lims ID: 460-290219-A-4-A
Client ID: MW14A-101223-1231-40
Sample Type: Client
Inject. Date: 21-Oct-2023 07:06:06 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-4-A
Misc. Info.: 200-0057494-025 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 16:57:21
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	2053068	1.22		97.7	1546	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.130	-0.008	1.000	177511	0.0786			15.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1462783	1.12		89.7	1567	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	96227	0.0762			1.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1774774	1.01		86.5	39772	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	53045	0.0311	Target=2.06		5.3	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	26146		2.03(1.03-3.09)		6.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.759	2.760	-0.001	1.000	575	0.001024			4.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.786	193020	0.9454		81.0	49.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.785	2.798	-0.013	0.793	1500859	1.13		90.5	3701	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.004	111741	0.0846	Target=14.12		8.4	M
313.00 > 119.00	2.797	2.798	-0.001	1.004	7808		14.31(7.06-21.17)		7.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.887	23602	0.0159	Target=2.72		6.8	M
349.00 > 99.00	2.797	2.798	-0.001	0.887	9320		2.53(1.36-4.09)		5.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.908	-0.011	0.825	314652	1.22		98.0	2867	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.157	-0.004	0.898	1340915	1.06		89.6	5232	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.157	-0.004	1.000	91374	0.0728	Target=3.32		50.2	M
399.00 > 99.00	3.153	3.157	-0.004	1.000	27800		3.29(1.66-4.98)		26.0	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.153	3.169	-0.016	0.996	86074	0.0528	Target=4.17		8.2	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	22823		3.77(2.09-6.26)		26.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1818202	1.25		99.9	8518	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.917	14041	0.0134	Target=4.83		6.0	M
449.00 > 99.00	3.502	3.506	-0.004	0.917	4154		3.38(2.41-7.24)		7.5	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.997	270402	1.03		86.6	277	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.502	3.506	-0.004	1.000	3251	0.005224			4.8	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	1.000	2064038	1.25		100	7008	
* 62 13C2 PFOA										M
415.00 > 370.00	3.511	3.515	-0.004		2119078	1.25			5750	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.515	-0.004	1.000	425067	0.2417	Target=2.88		14.4	M
413.00 > 169.00	3.511	3.515	-0.004	1.000	169959		2.50(1.44-4.32)		236	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.719	3.823	-0.104	0.974	474408	0.5623	Target=4.24		438	M
499.00 > 99.00	3.808	3.823	-0.015	0.997	112195		4.23(2.12-6.37)		207	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.088	864398	1.08		90.0	1377	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.846	-0.004	1.000	52345	0.0294	Target=8.34		7.0	M
463.00 > 169.00	3.842	3.846	-0.004	1.000	8509		6.15(4.17-12.51)		29.5	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2272704	1.27		101	6217	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.975	0.006	1.042	174	0.00006740			0.9	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.124	4.130	-0.006	1.000	94313	0.0525	Target=11.44		28.0	M
513.00 > 169.00	4.124	4.130	-0.006	1.000	9553		9.87(5.72-17.16)		53.7	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.130	-0.006	1.175	2248156	1.20		95.7	13922	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.178	277855	0.9398		78.5	680	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.142	-0.006	1.000	1493	0.002923			13.1	M
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.235	-0.005	1.205	1609701	1.00		80.3	3624	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.235	0.007	1.003	644	0.000524			4.1	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.271	-0.006	1.215	470915	1.05		83.9	2769	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.271	-0.006	1.000	552	0.001615			2.4	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	2100479	1.18		94.7	8460	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.375	4.391	-0.016	0.997	60353	0.0348	Target=12.20		14.0	
563.00 > 169.00	4.375	4.391	-0.016	0.997	4497		13.42(6.10-18.31)		49.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.387	4.391	-0.004	1.249	475955	1.10		88.0	1005	
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.475	-0.007	1.170	1376	0.000348			1.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.604	-0.005	1.310	2053423	1.14		91.1	4460	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.604	0.006	1.002	6612	0.003954	Target=8.47		0.4	M
613.00 > 169.00	4.599	4.604	-0.005	1.000	771		8.58(4.23-12.70)		6.6	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	1810737	1.01		80.7	5627	

QC Flag Legend

Processing Flags

Review Flags

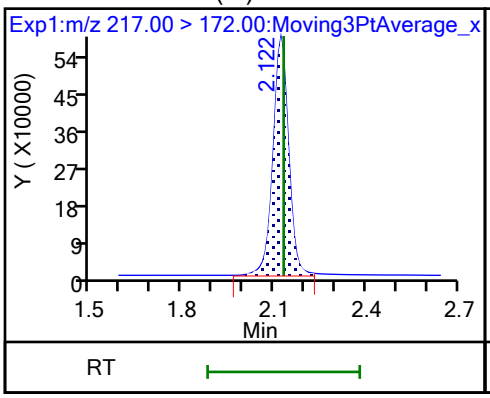
M - Manually Integrated

Report Date: 25-Oct-2023 09:08:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

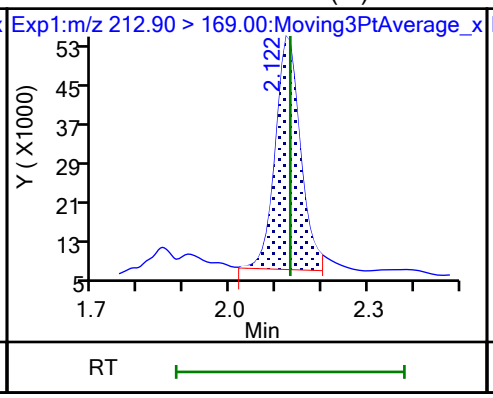
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d
Injection Date: 21-Oct-2023 07:06:06 Instrument ID: LC812
Lims ID: 460-290219-A-4-A Lab Sample ID: 200-290219-4
Client ID: MW14A-101223-1231-40
Operator ID: LC812user ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

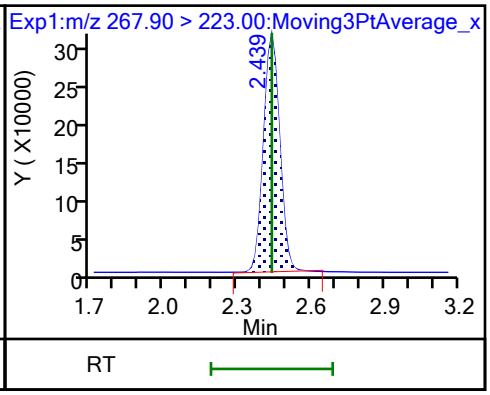
D 1 13C4 PFBA (M)



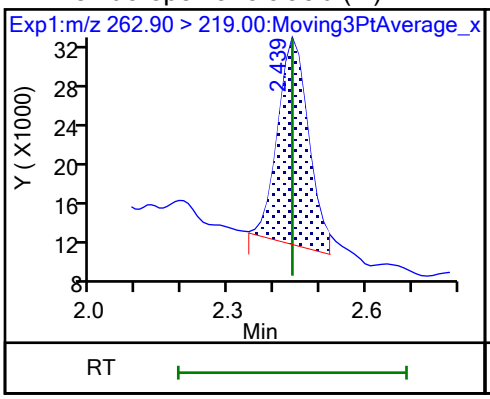
2 Perfluorobutanoic acid (M)



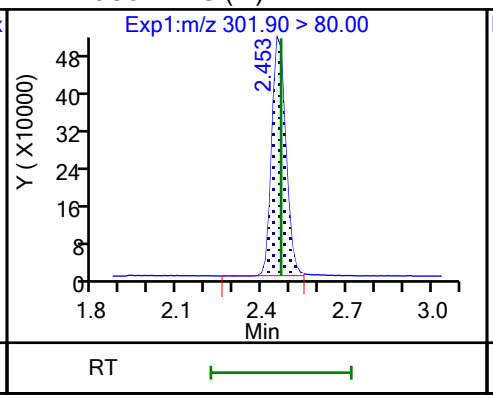
D 3 13C5 PFPeA



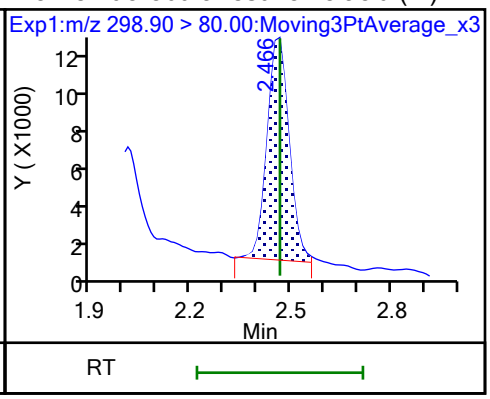
4 Perfluoropentanoic acid (M)



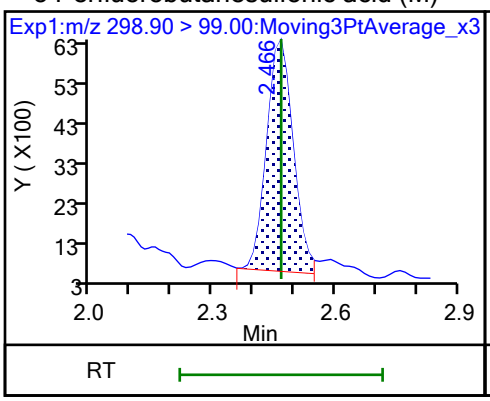
D 47 13C3 PFBS (M)



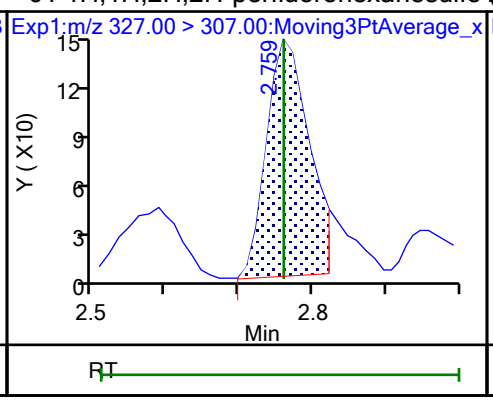
5 Perfluorobutanesulfonic acid (M)



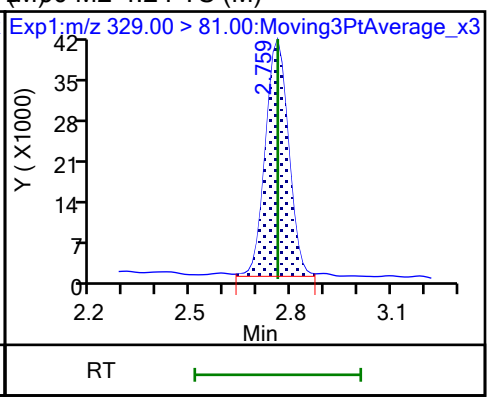
5 Perfluorobutanesulfonic acid (M)



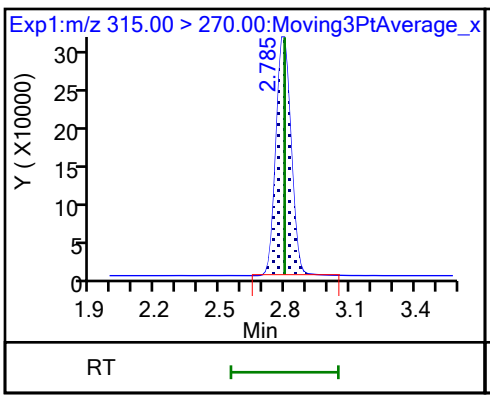
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



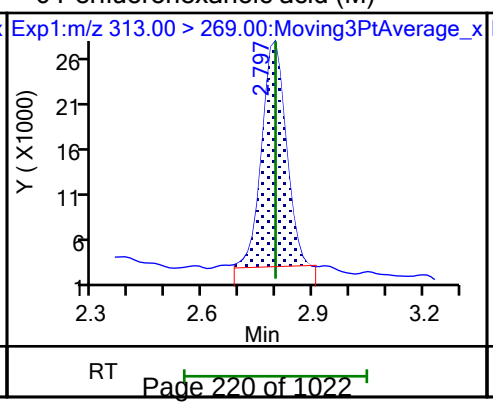
60 M2-4:2 FTS (M)



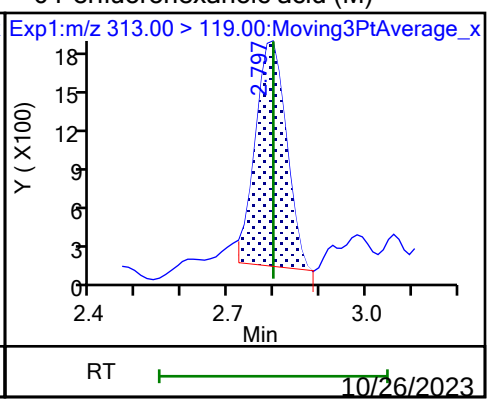
D 7 13C2 PFHxA



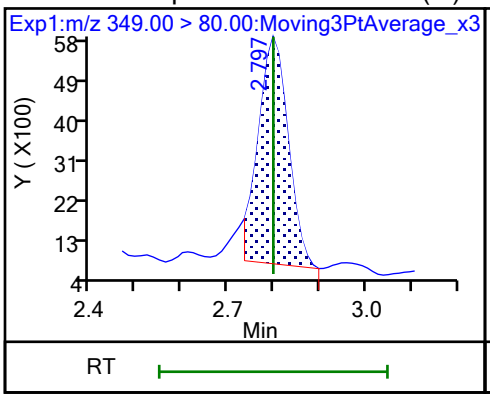
6 Perfluorohexanoic acid (M)



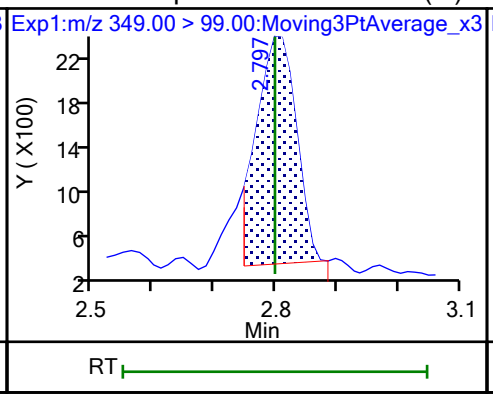
6 Perfluorohexanoic acid (M)



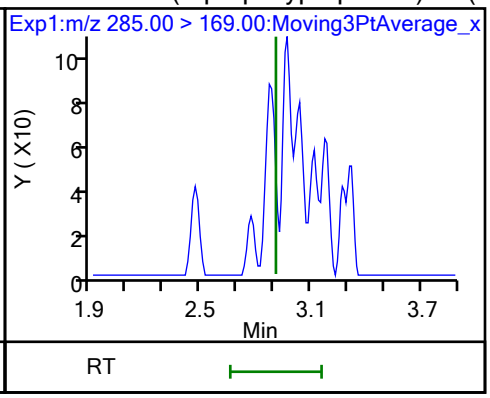
70 Perfluoropentanesulfonic acid (M)



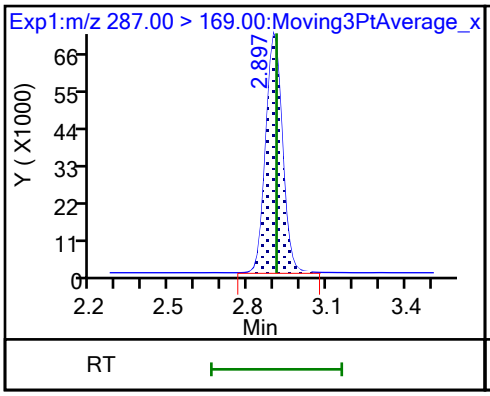
70 Perfluoropentanesulfonic acid (M)



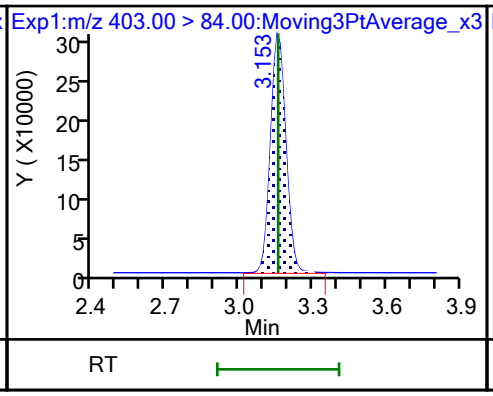
67 Perfluoro(2-propoxypropanoic) ac (ND)



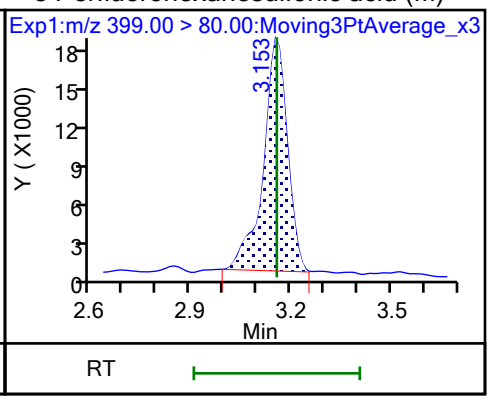
D 64 13C3 HFPO-DA



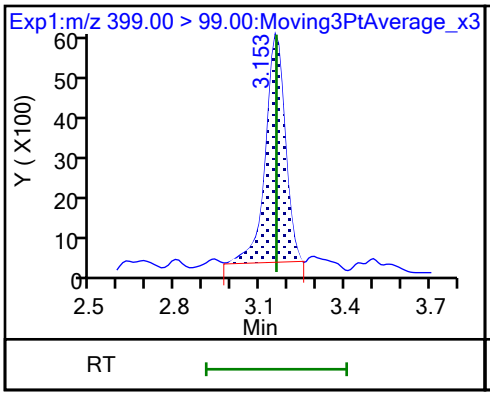
D 11 18O2 PFHxS



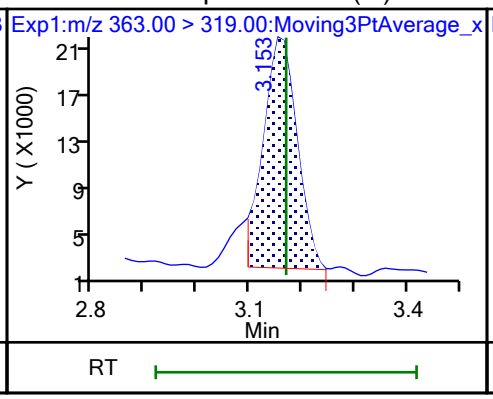
8 Perfluorohexanesulfonic acid (M)



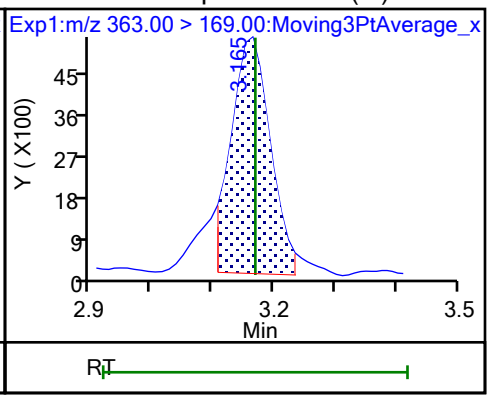
8 Perfluorohexanesulfonic acid



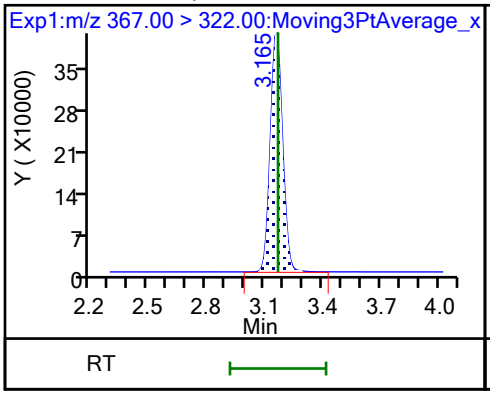
10 Perfluoroheptanoic acid (M)



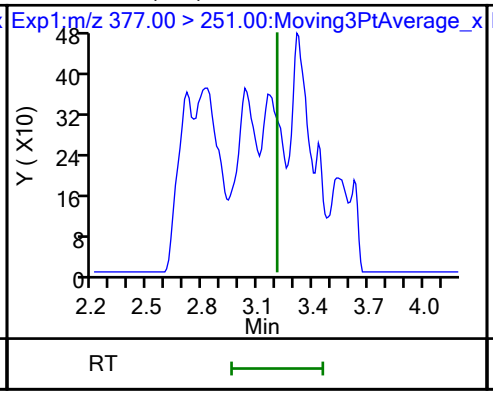
10 Perfluoroheptanoic acid (M)



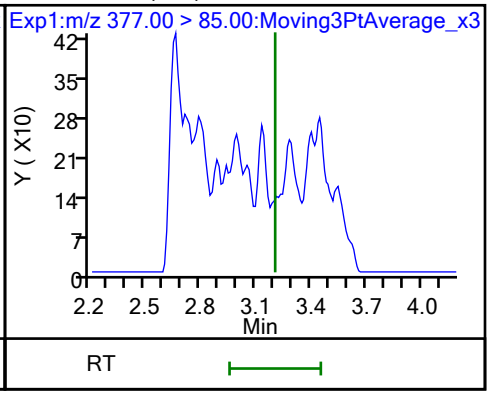
D 9 13C4 PFHpA



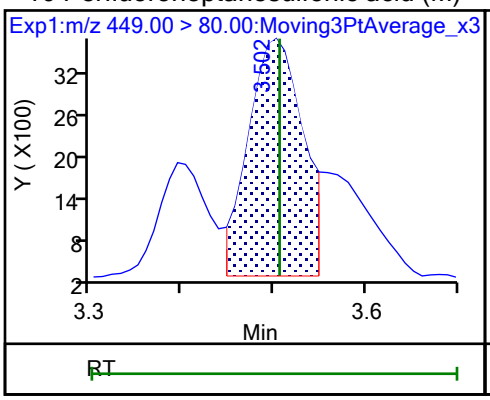
77 DONA (ND)



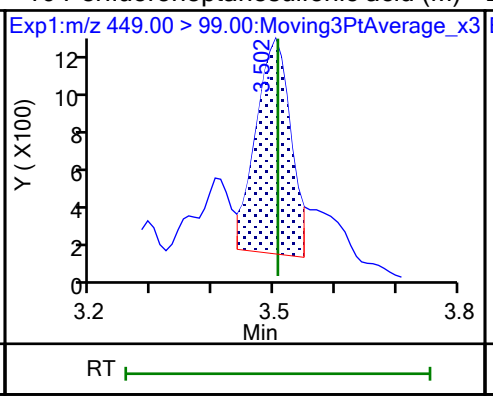
77 DONA (ND)



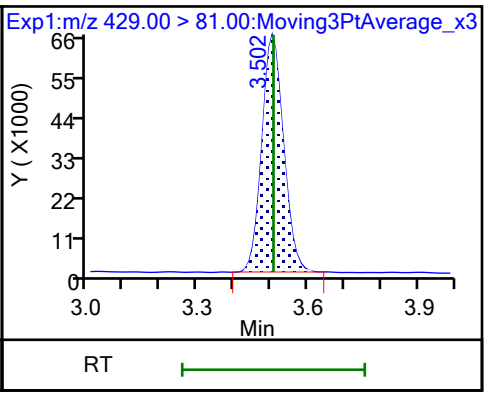
16 Perfluoroheptanesulfonic acid (M)



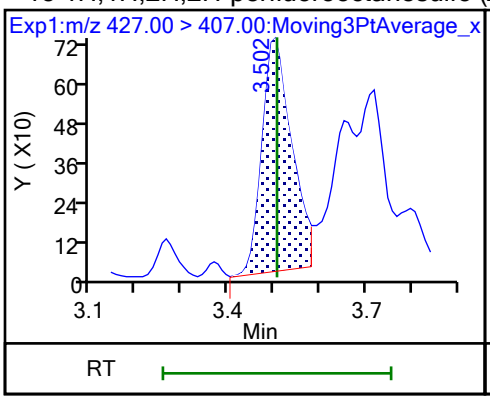
16 Perfluoroheptanesulfonic acid (M)



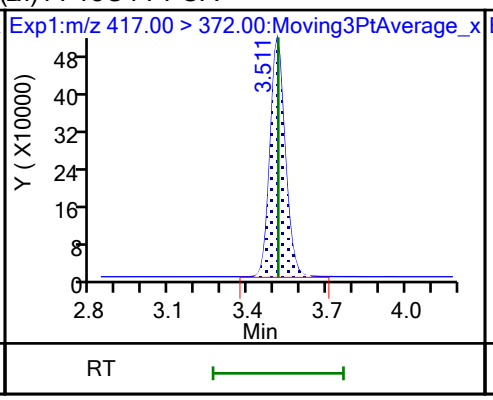
D 12 M2-6:2 FTS



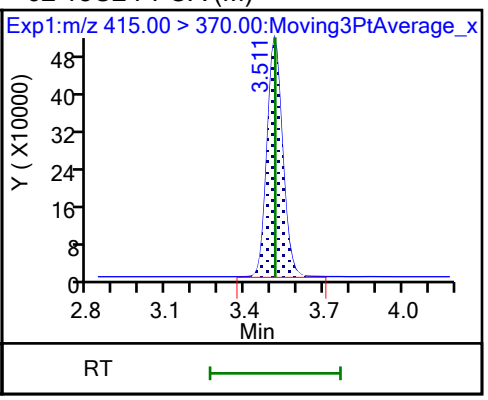
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



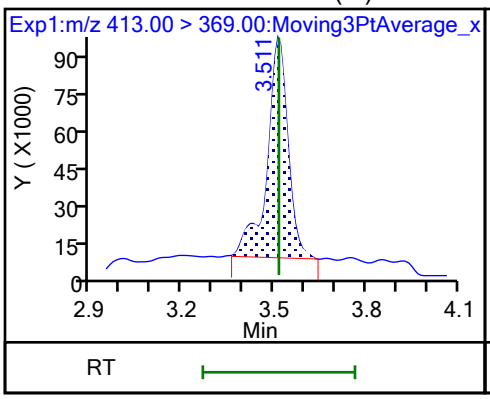
D 14 13C4 PFOA



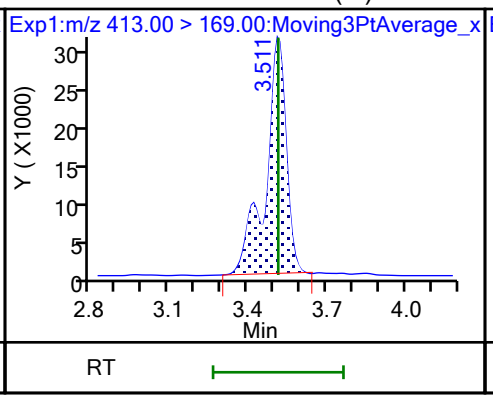
* 62 13C2 PFOA (M)



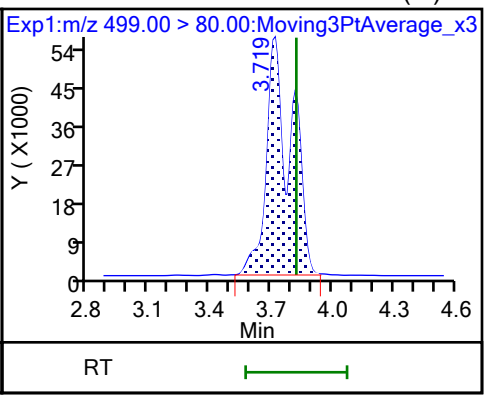
15 Perfluorooctanoic acid (M)



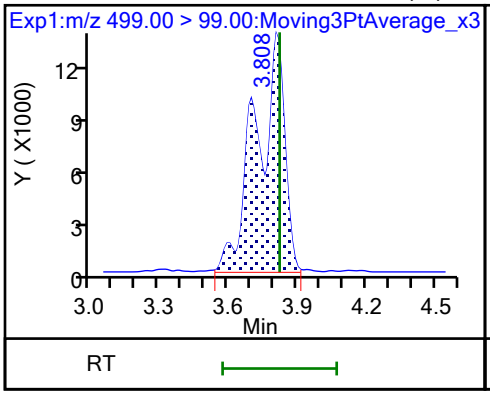
15 Perfluorooctanoic acid (M)



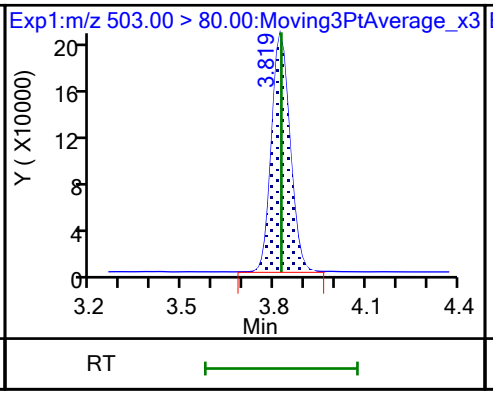
17 Perfluorooctanesulfonic acid (M)



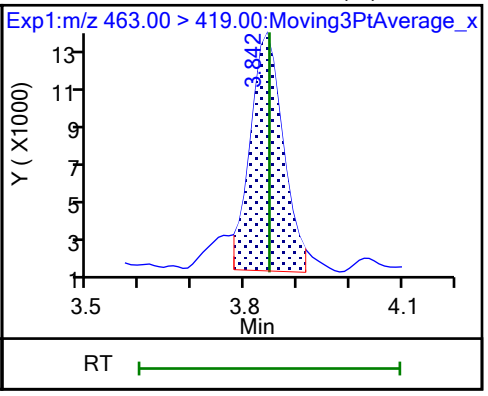
17 Perfluorooctanesulfonic acid (M)



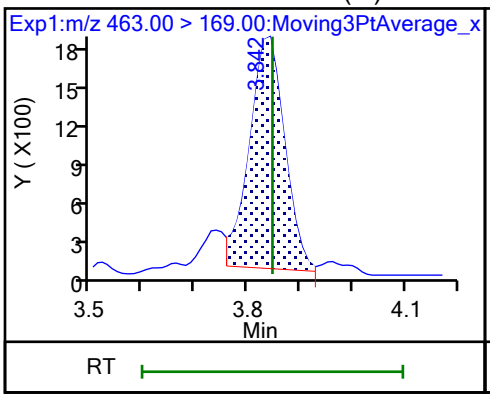
D 18 13C4 PFOS



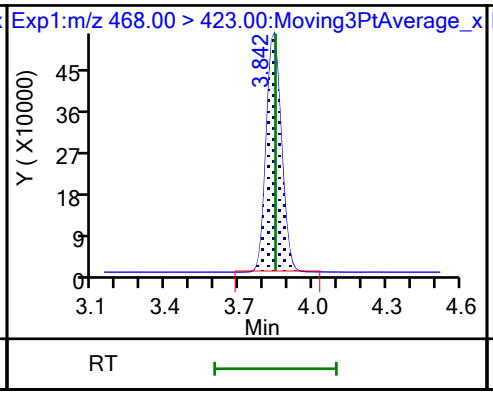
20 Perfluorononanoic acid (M)



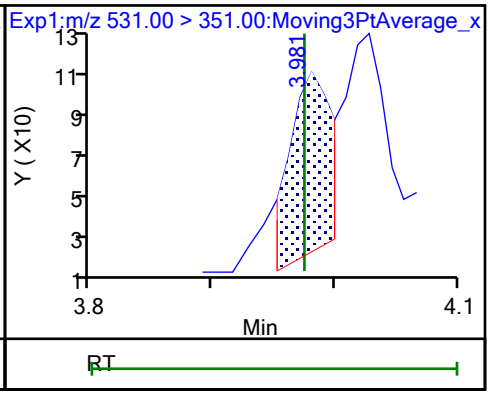
20 Perfluorononanoic acid (M)



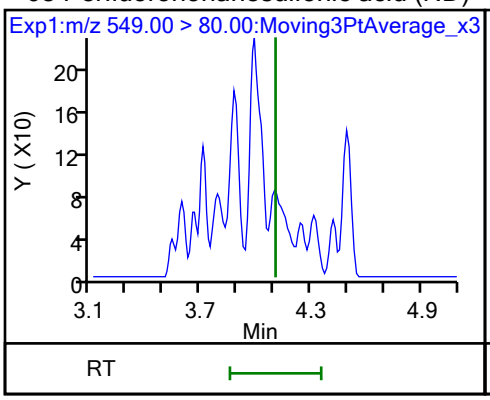
D 19 13C5 PFNA



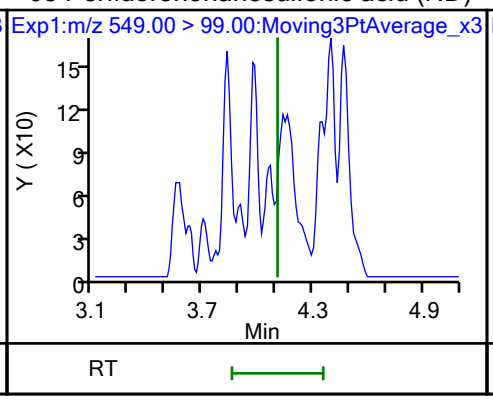
69 9-Chlorohexadecafluoro-3-oxanona (M)



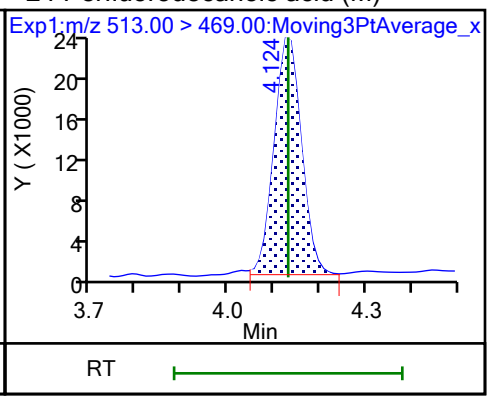
68 Perfluorononanesulfonic acid (ND)



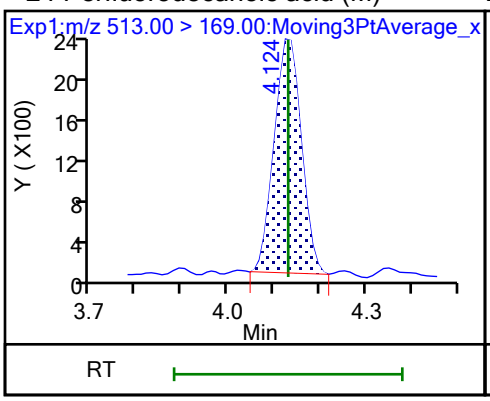
68 Perfluorononanesulfonic acid (ND)



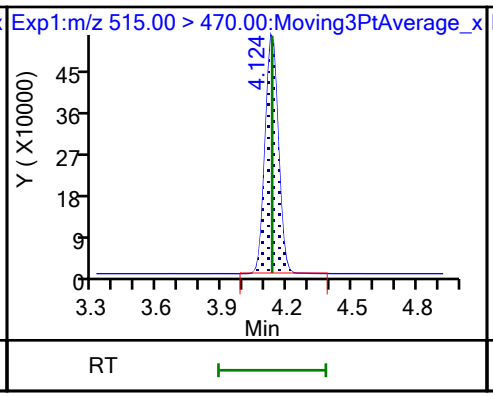
24 Perfluorodecanoic acid (M)



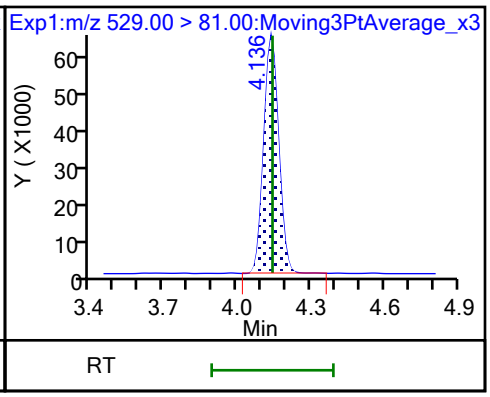
24 Perfluorodecanoic acid (M)



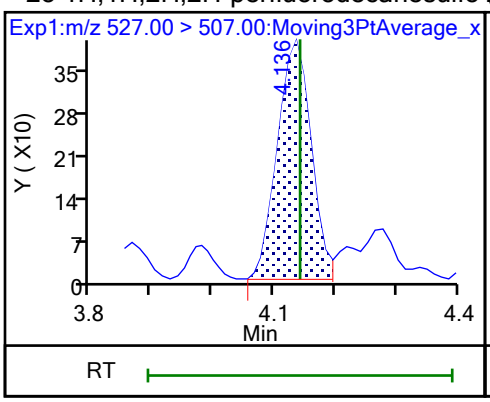
D 23 13C2 PFDA



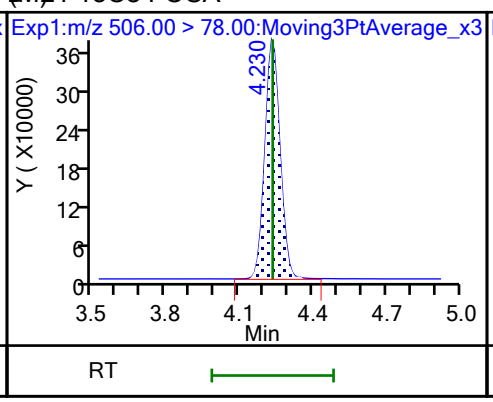
D 26 M2-8:2 FTS



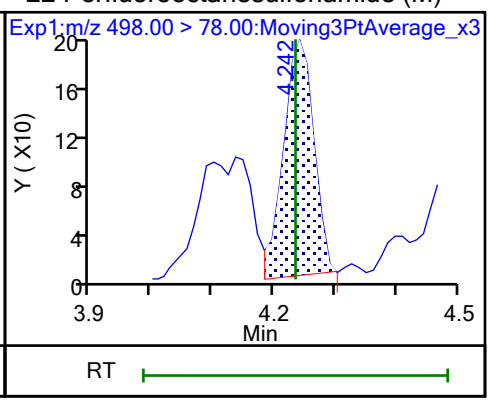
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



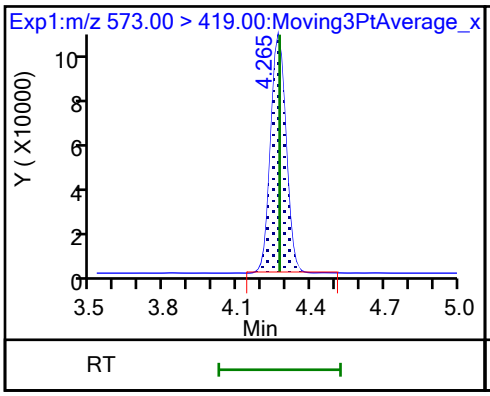
D 21 13C8 FOSA



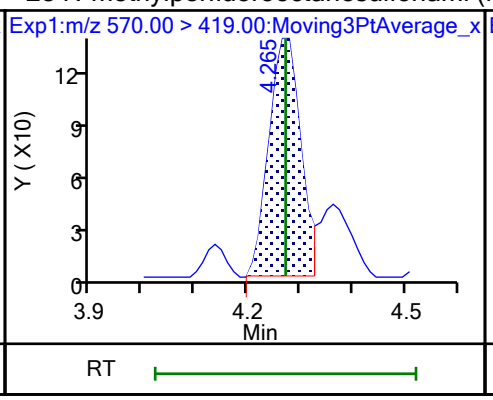
22 Perfluorooctanesulfonamide (M)



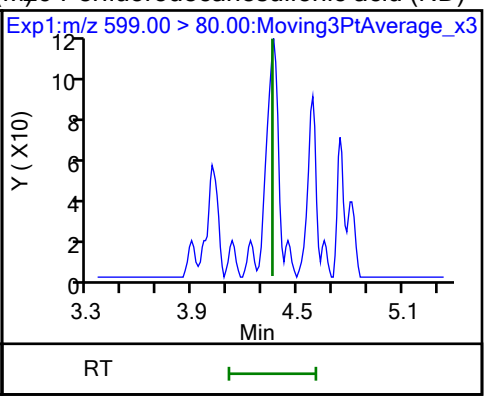
D 27 d3-NMeFOSAA



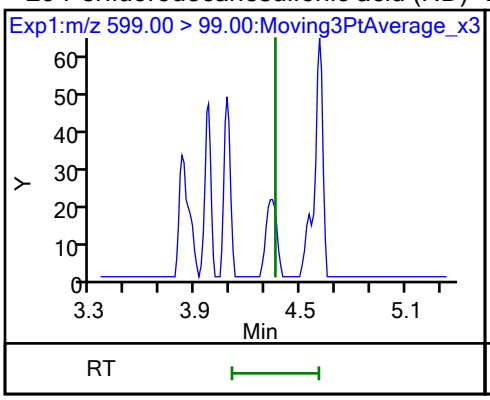
28 N-methylperfluorooctanesulfonami (M)



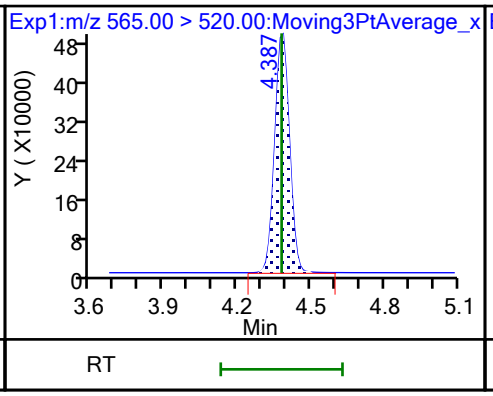
29 Perfluorodecanesulfonic acid (ND)



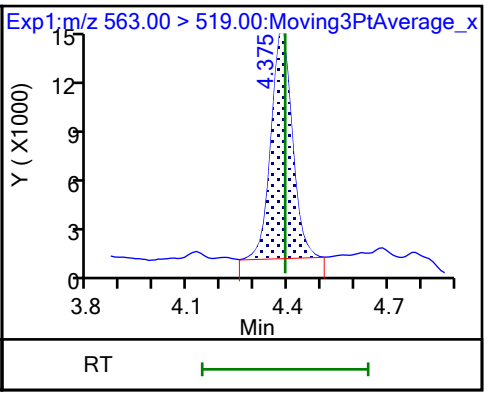
29 Perfluorodecanesulfonic acid (ND)



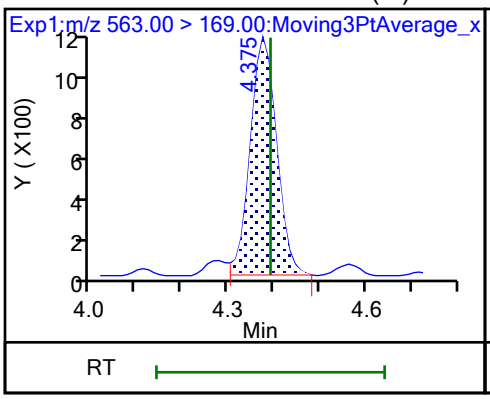
D 30 13C2 PFUnA



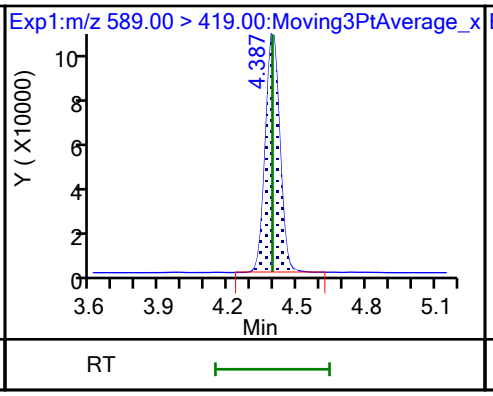
31 Perfluoroundecanoic acid



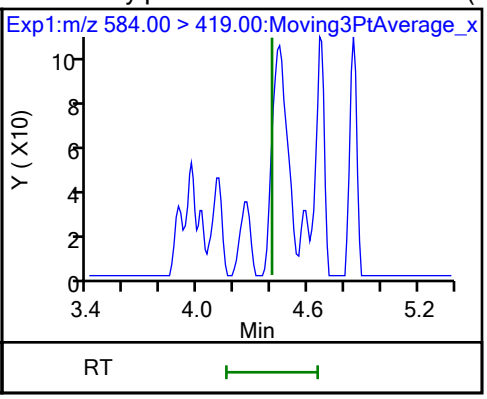
31 Perfluoroundecanoic acid (M)



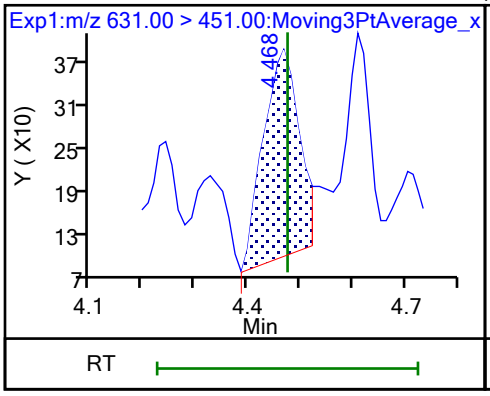
D 32 d5-NEtFOSAA



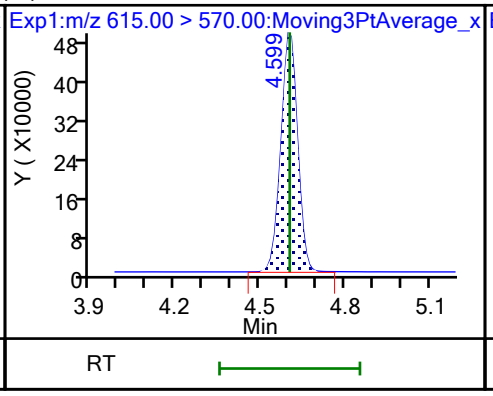
33 N-ethylperfluorooctanesulfonamid (ND)



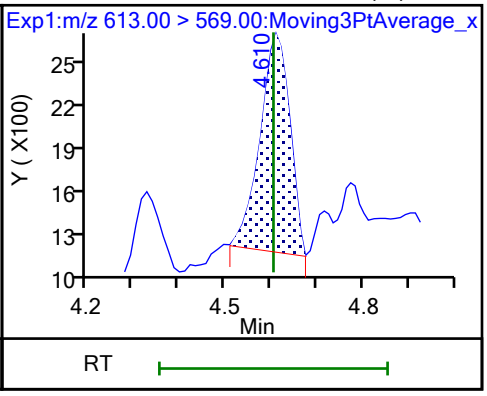
66 11-Chloroeicosafluoro-3-oxaundec (M)



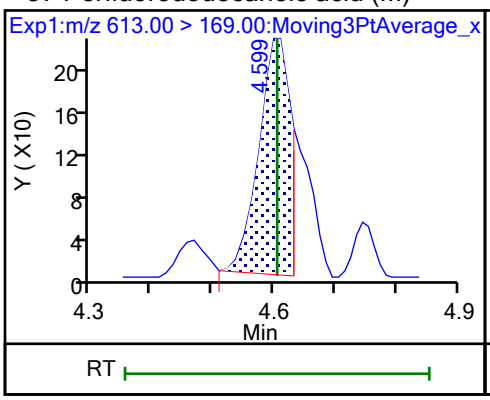
D 36 13C2 PFDoA



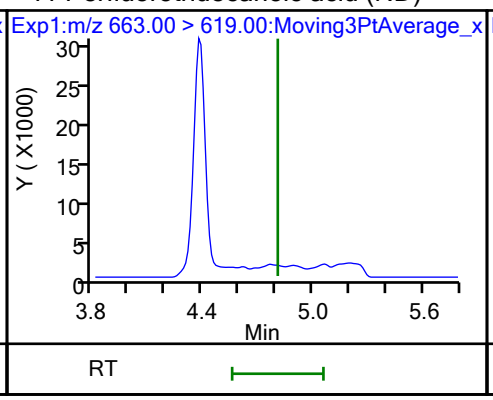
37 Perfluorododecanoic acid (M)



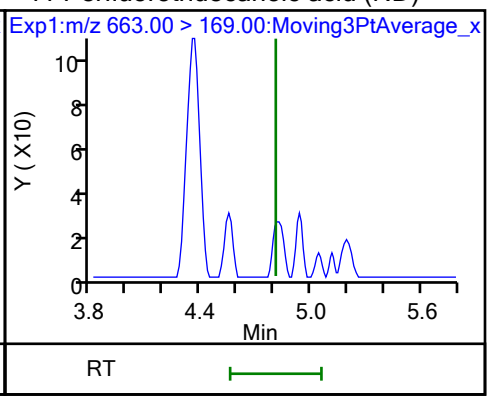
37 Perfluorododecanoic acid (M)



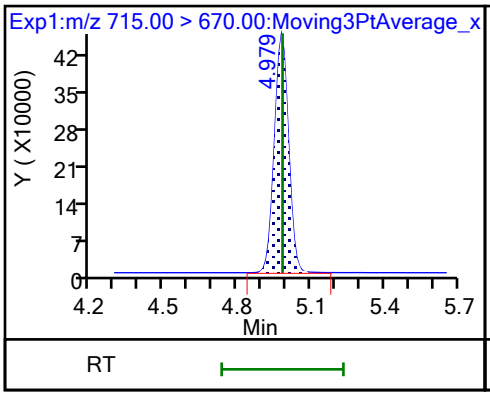
41 Perfluorotridecanoic acid (ND)



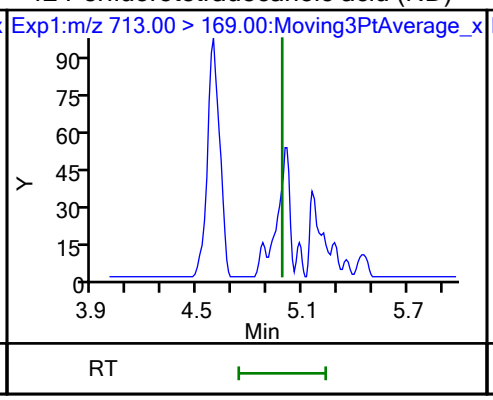
41 Perfluorotridecanoic acid (ND)



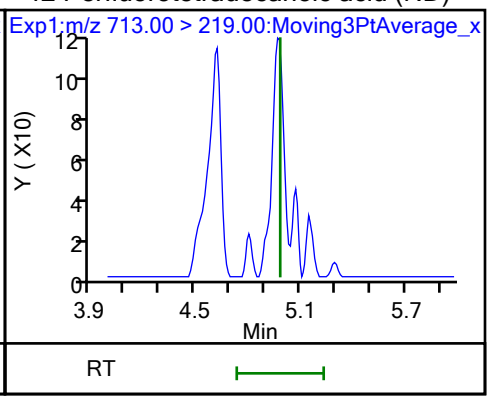
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

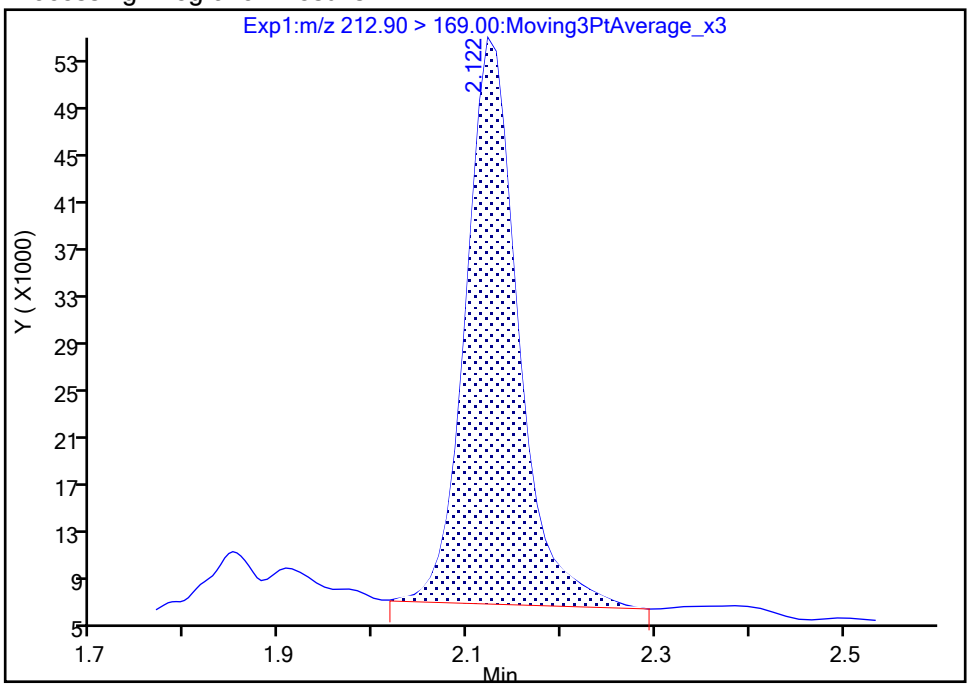
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

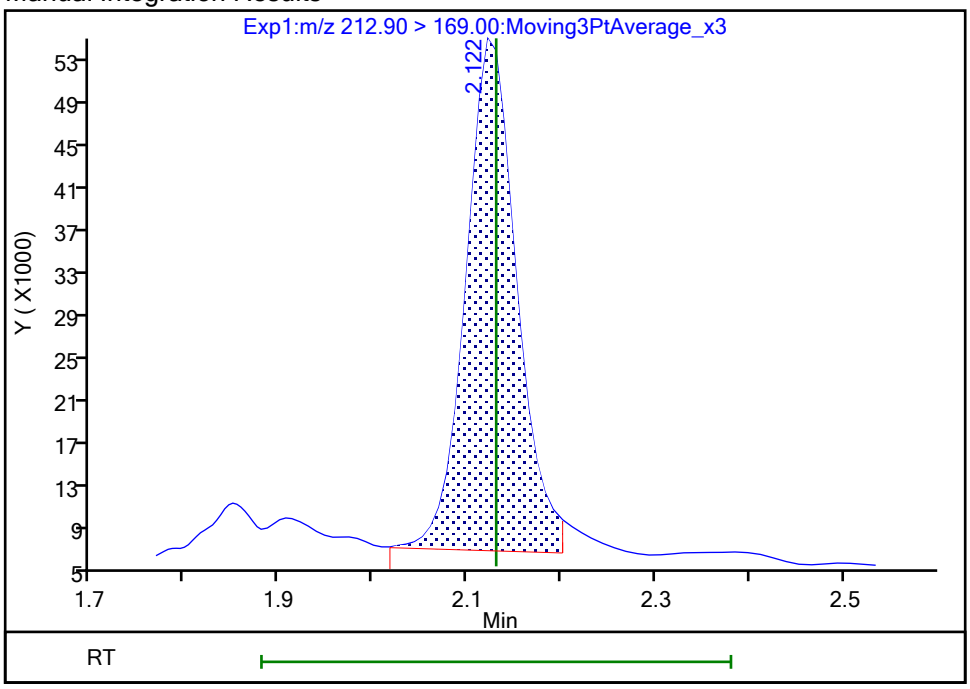
Processing Integration Results

RT: 2.12
Area: 183347
Amount: 0.082564
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 177511
Amount: 0.078635
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

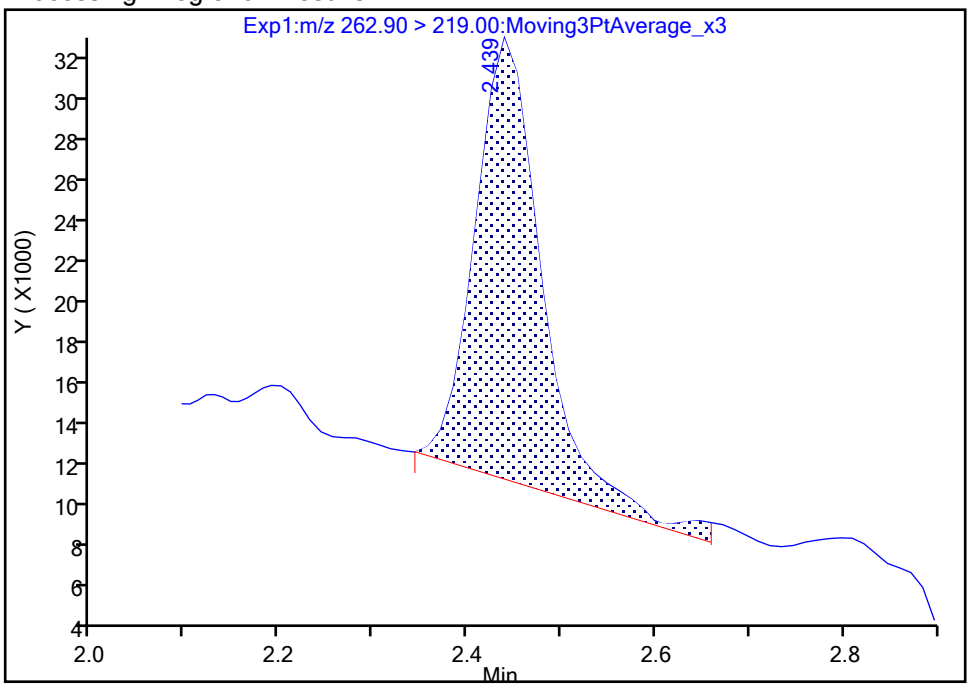
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

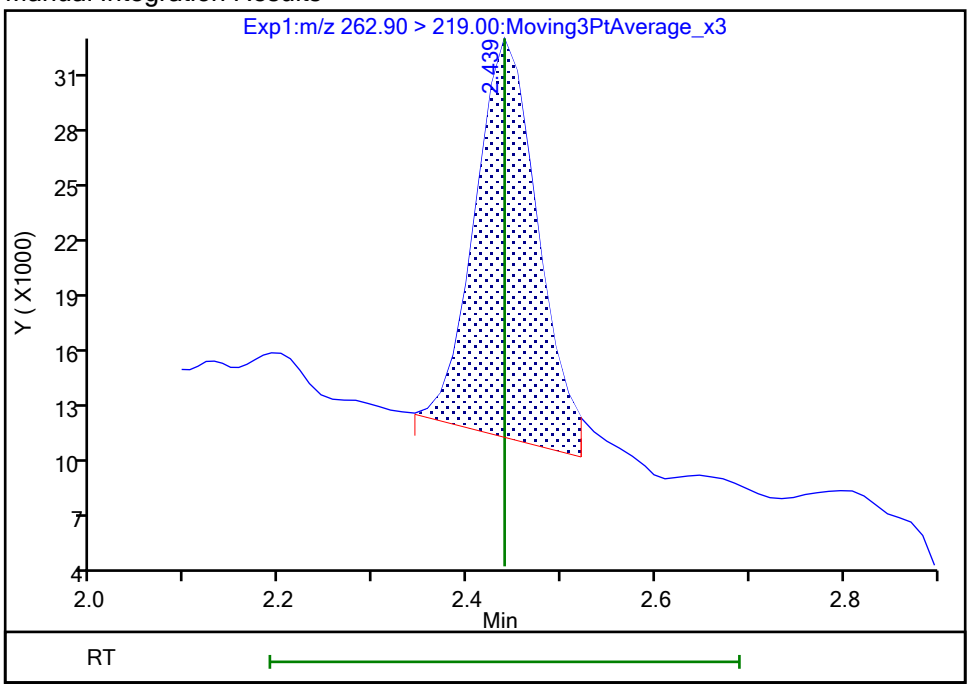
Processing Integration Results

RT: 2.44
Area: 103545
Amount: 0.081995
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 96227
Amount: 0.076200
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

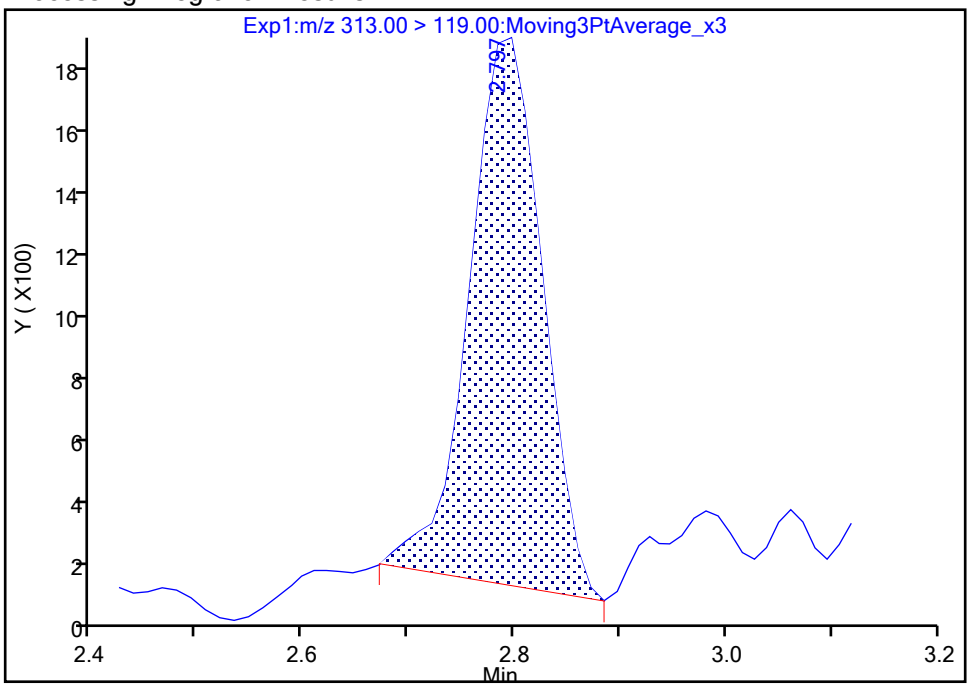
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

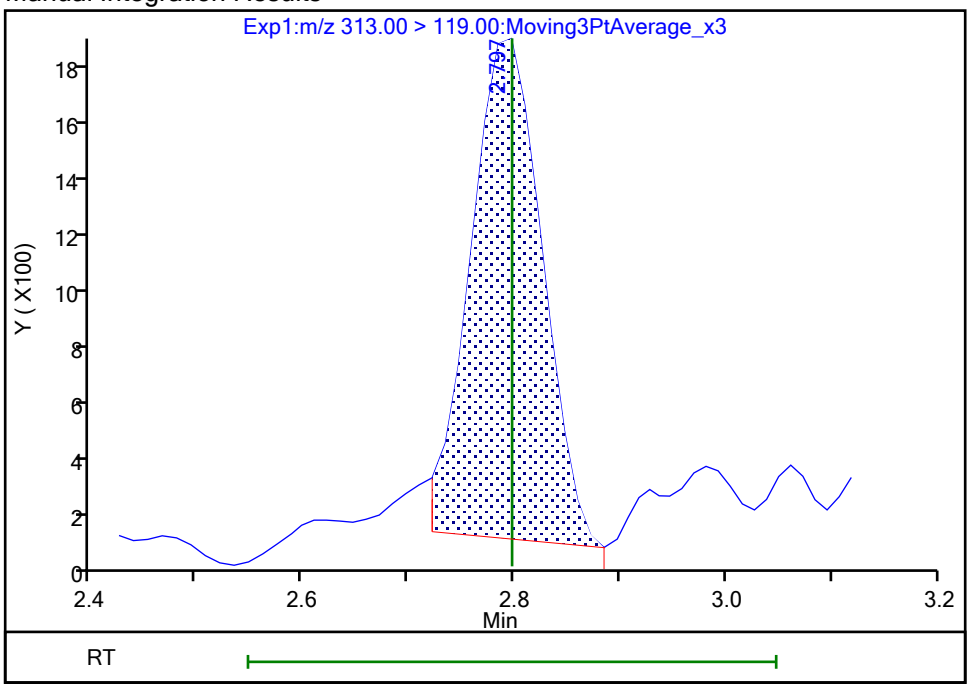
Processing Integration Results

RT: 2.80
Area: 7925
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 7808
Amount: 0.084569
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

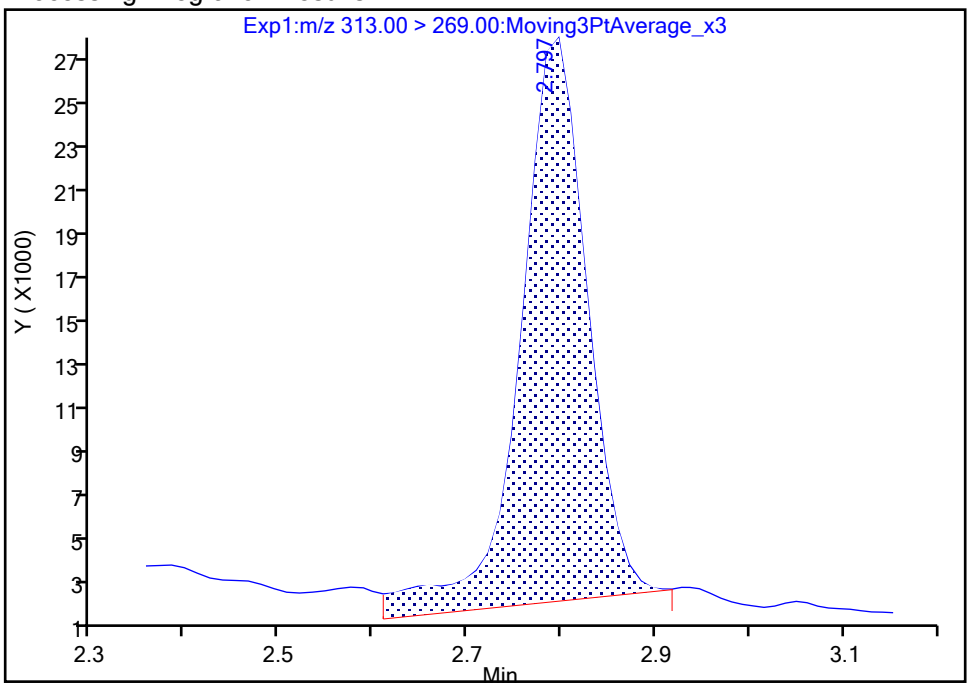
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

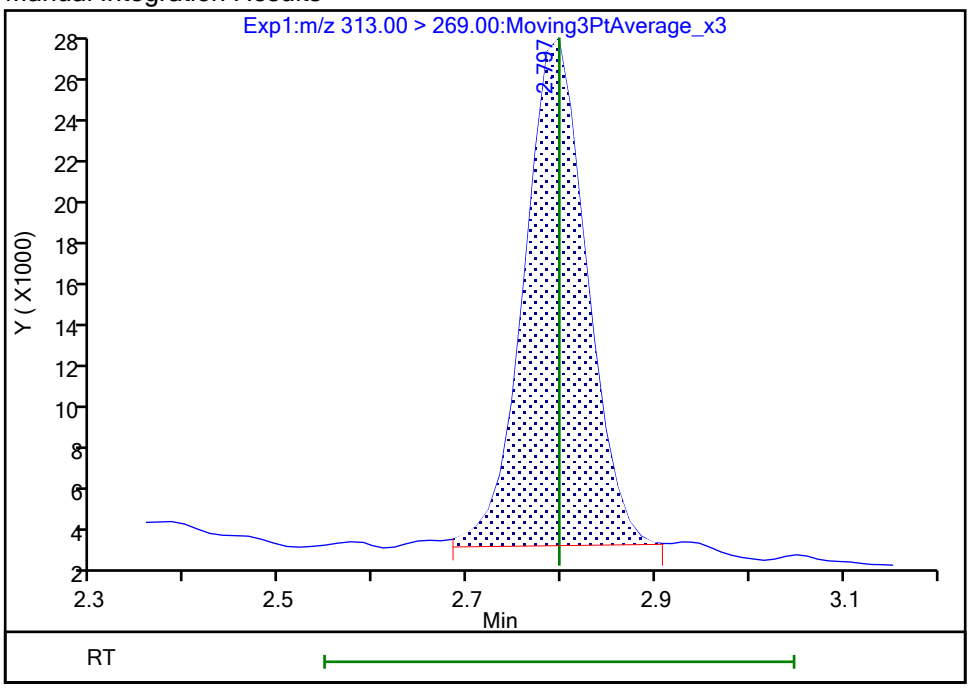
Processing Integration Results

RT: 2.80
Area: 123674
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 111741
Amount: 0.084569
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

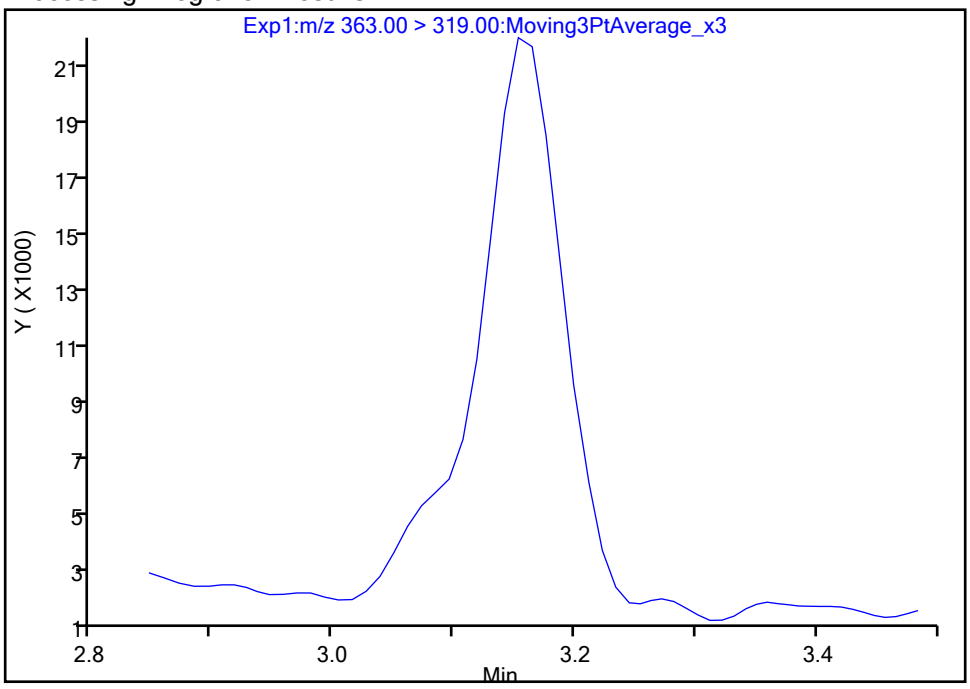
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

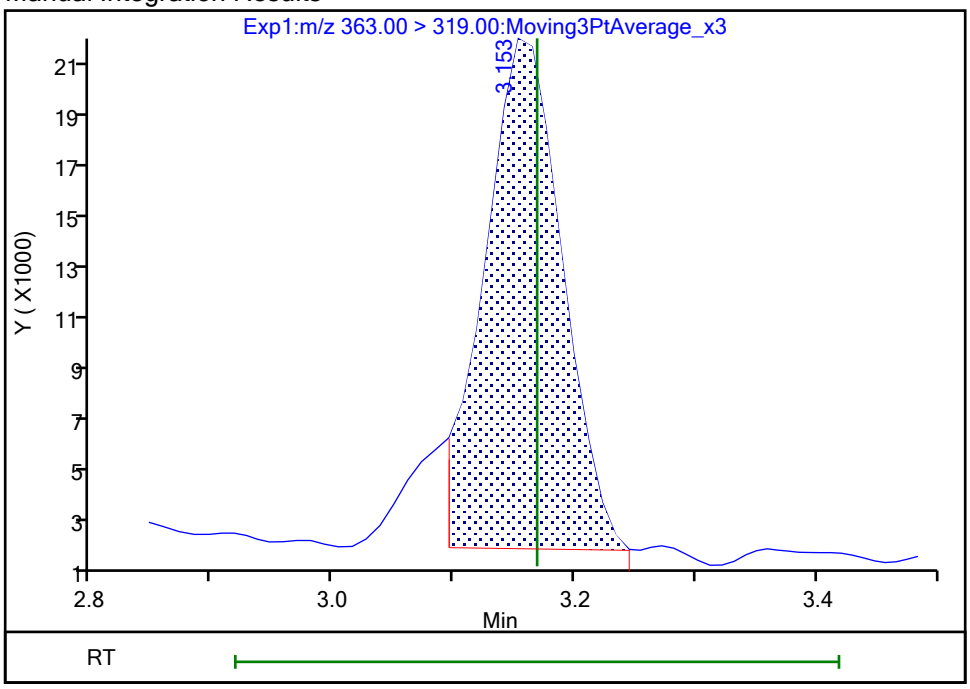
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 86074
Amount: 0.052793
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

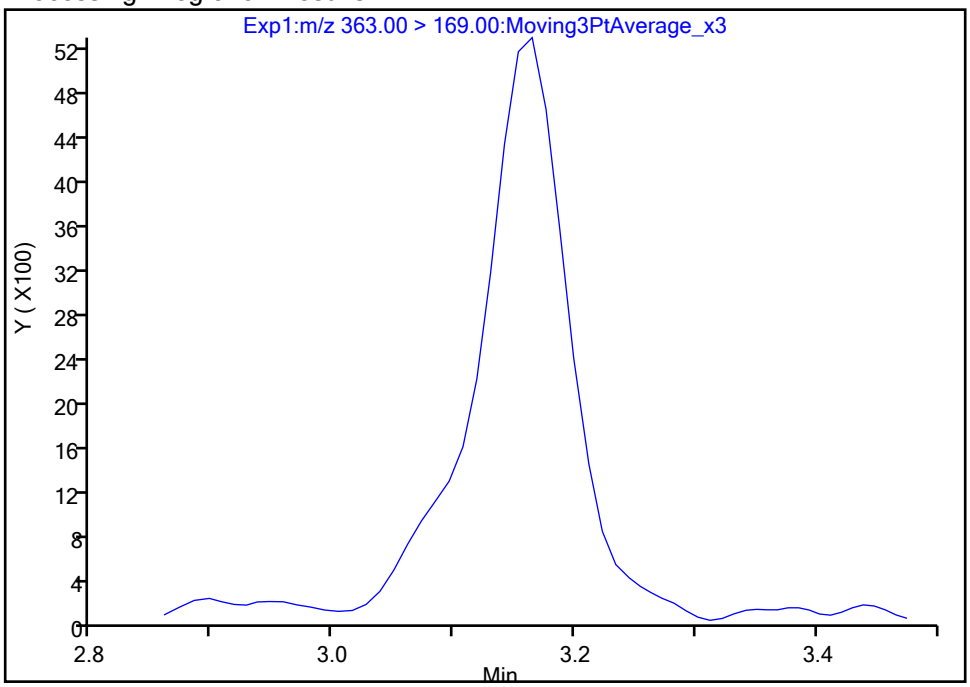
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

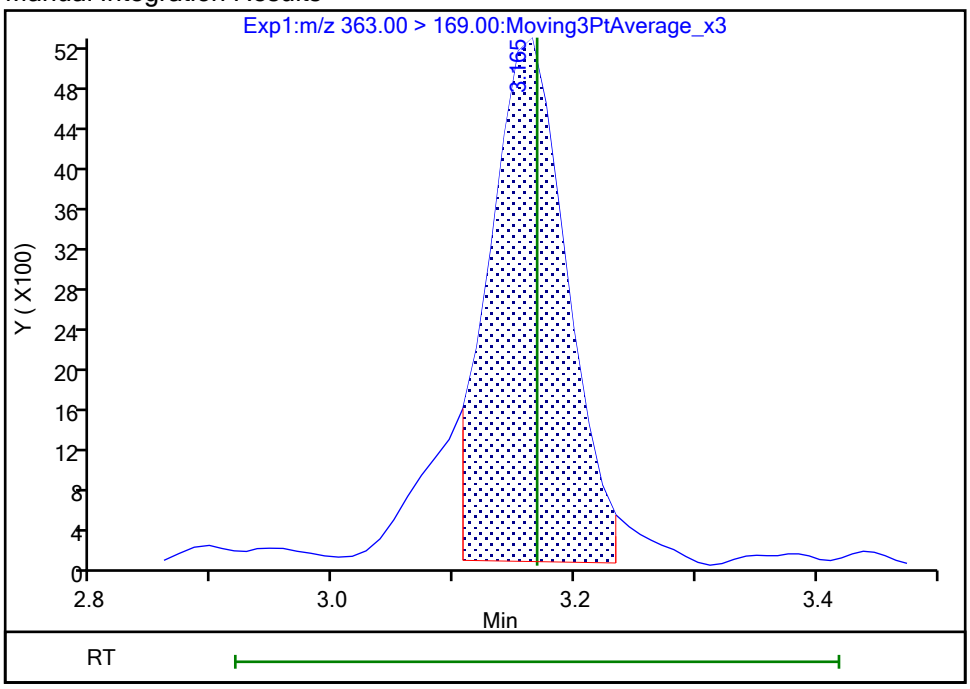
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 22823
Amount: 0.052793
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

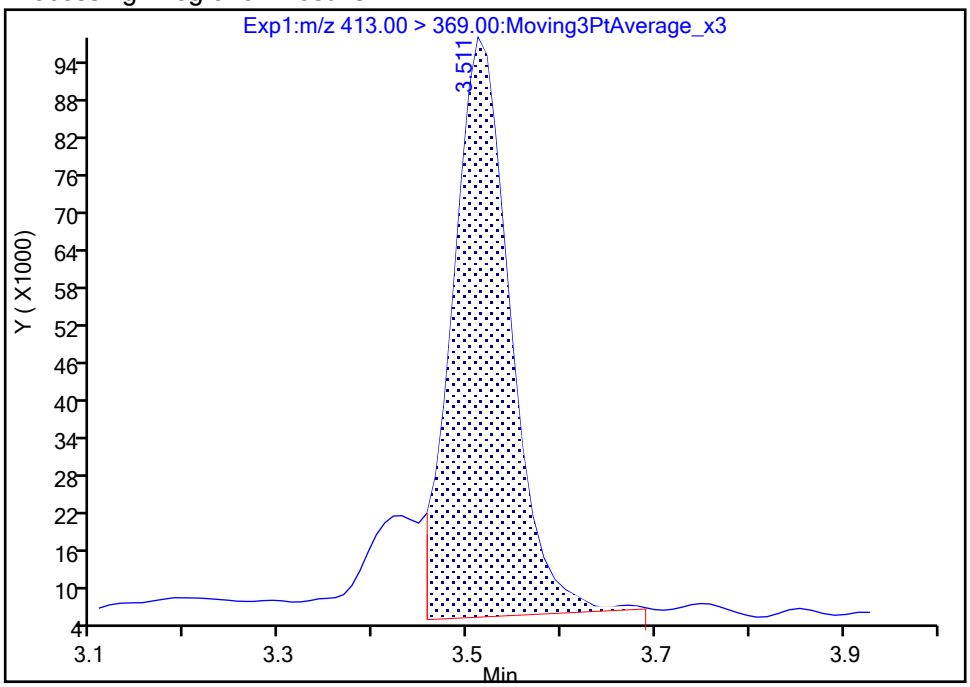
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

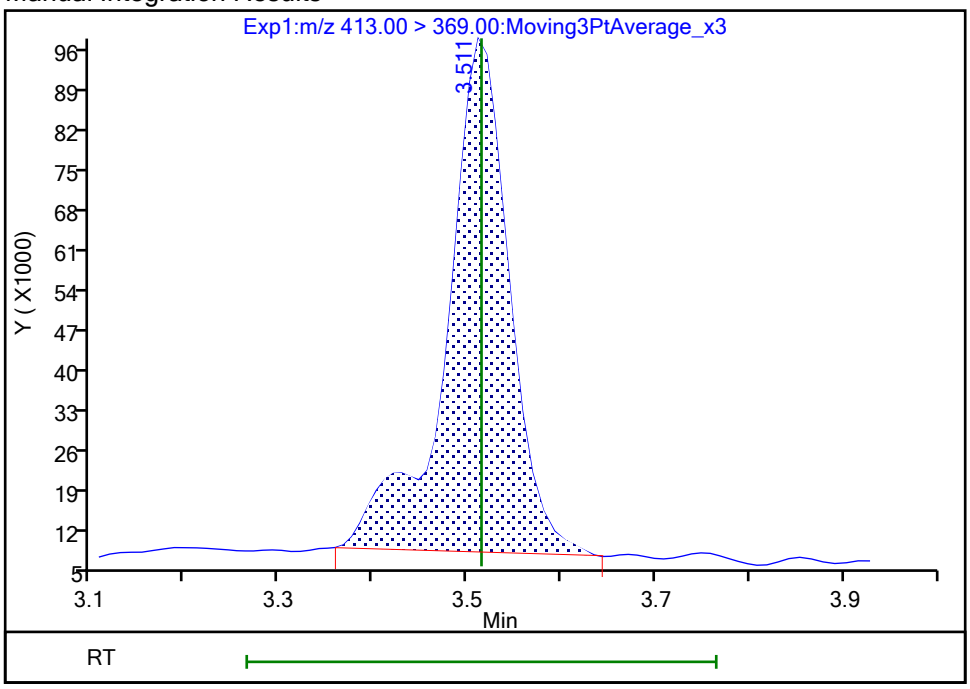
Processing Integration Results

RT: 3.51
Area: 394137
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 425067
Amount: 0.241681
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

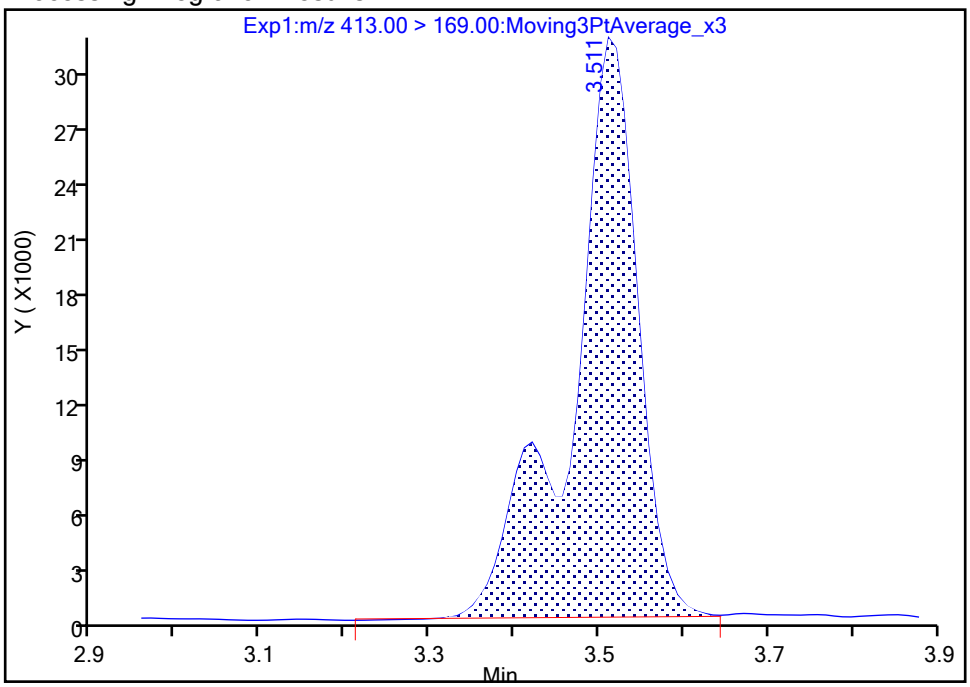
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

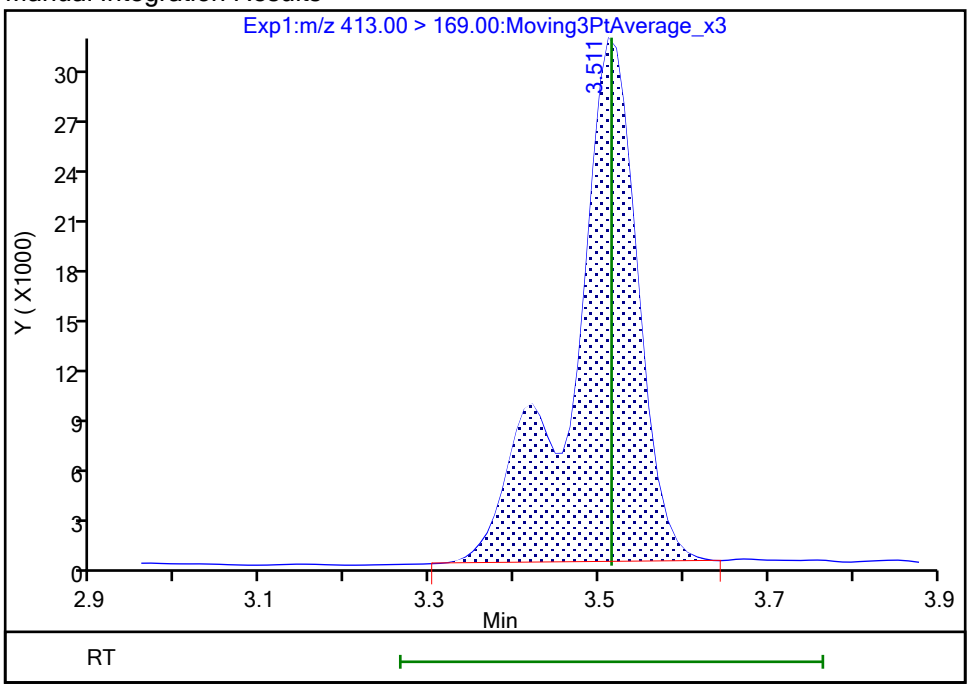
Processing Integration Results

RT: 3.51
Area: 170373
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 169959
Amount: 0.241681
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

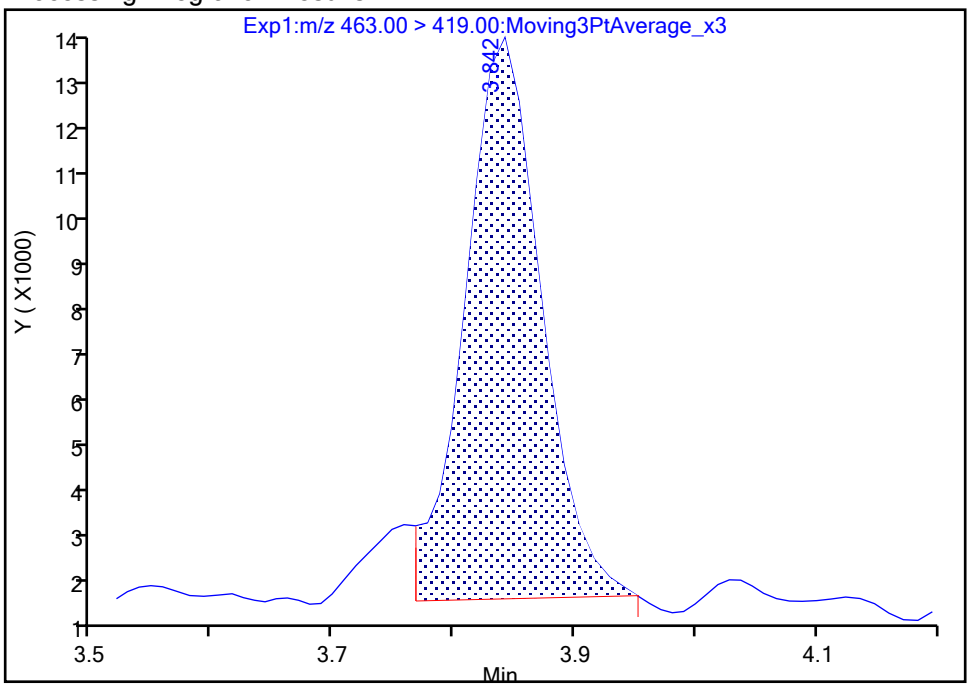
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

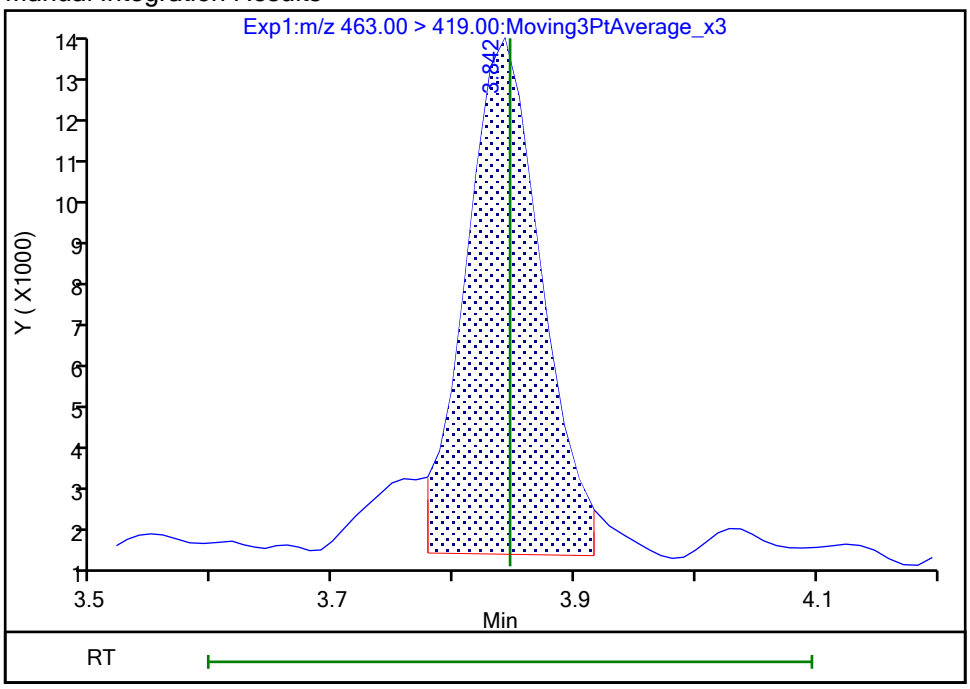
Processing Integration Results

RT: 3.84
Area: 52485
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 52345
Amount: 0.029376
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

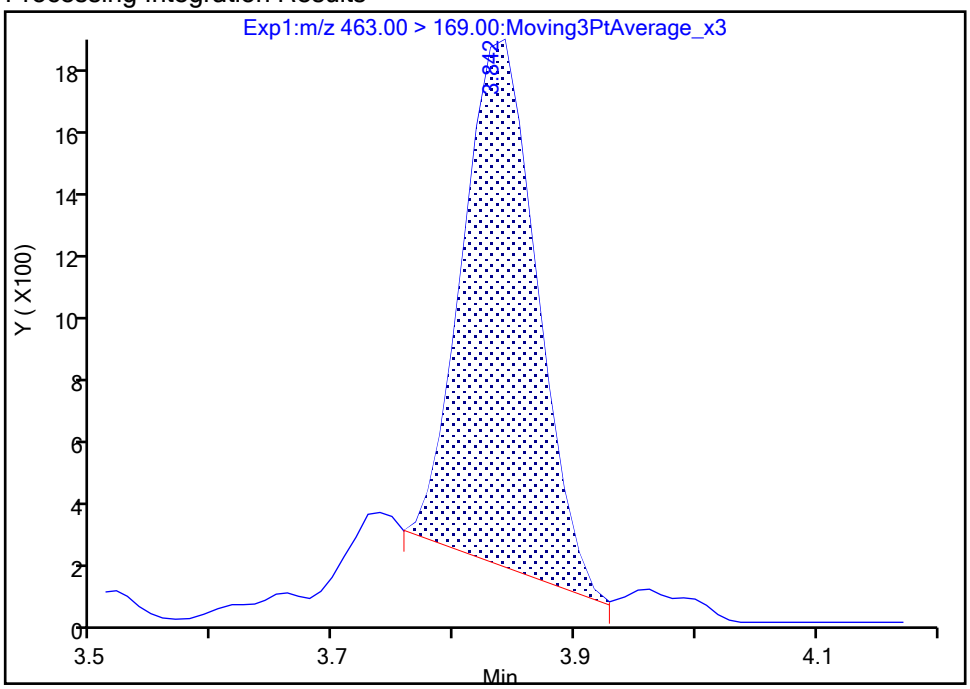
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

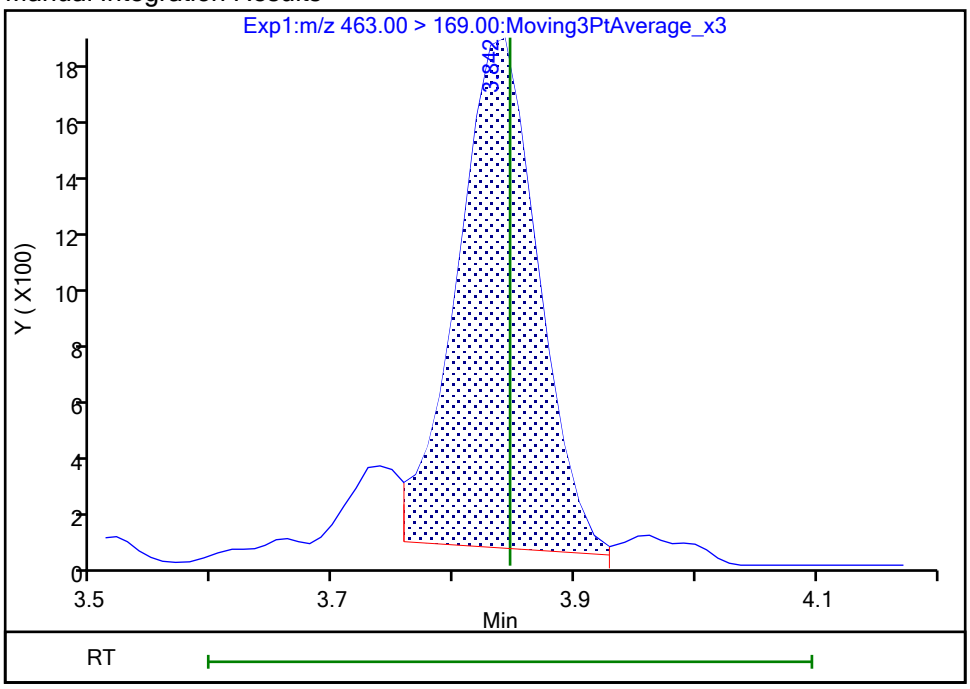
Processing Integration Results

RT: 3.84
Area: 7299
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 8509
Amount: 0.029376
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

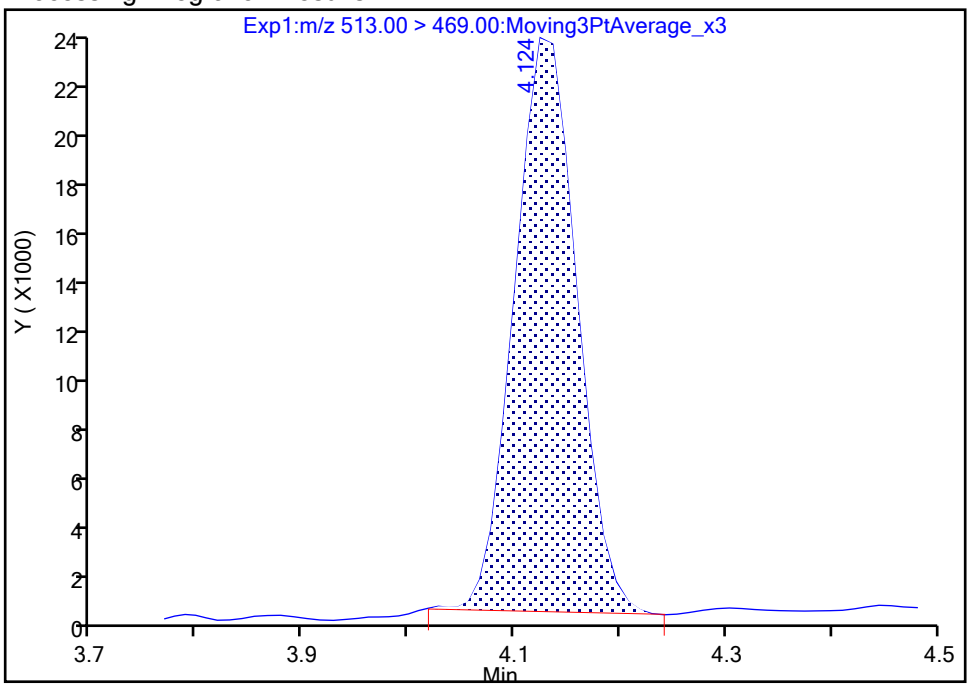
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

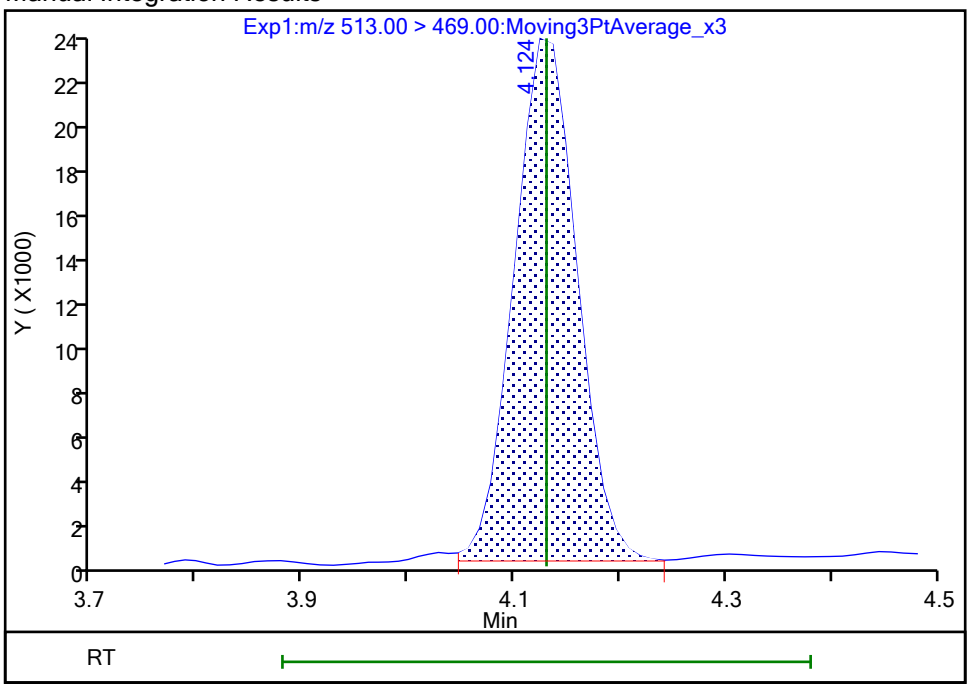
Processing Integration Results

RT: 4.12
Area: 92760
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 94313
Amount: 0.052473
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

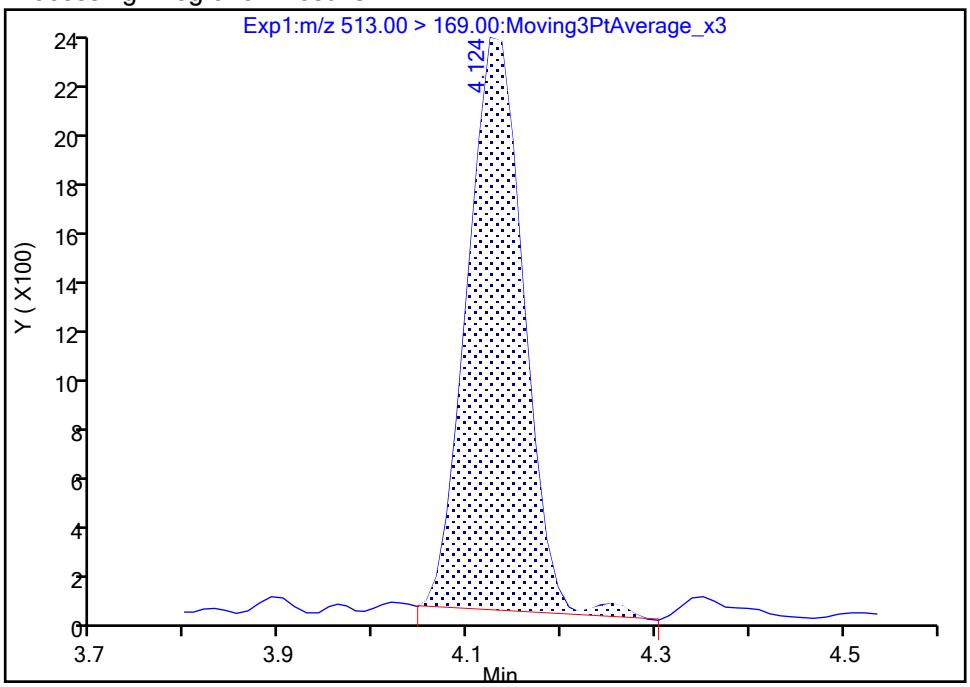
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

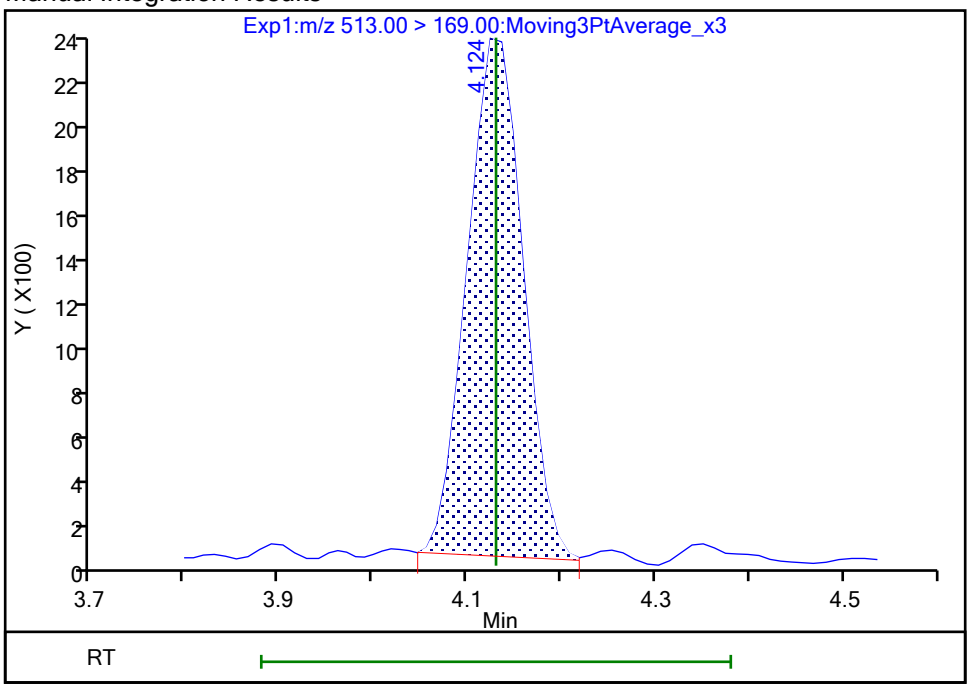
Processing Integration Results

RT: 4.12
Area: 9714
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 9553
Amount: 0.052473
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

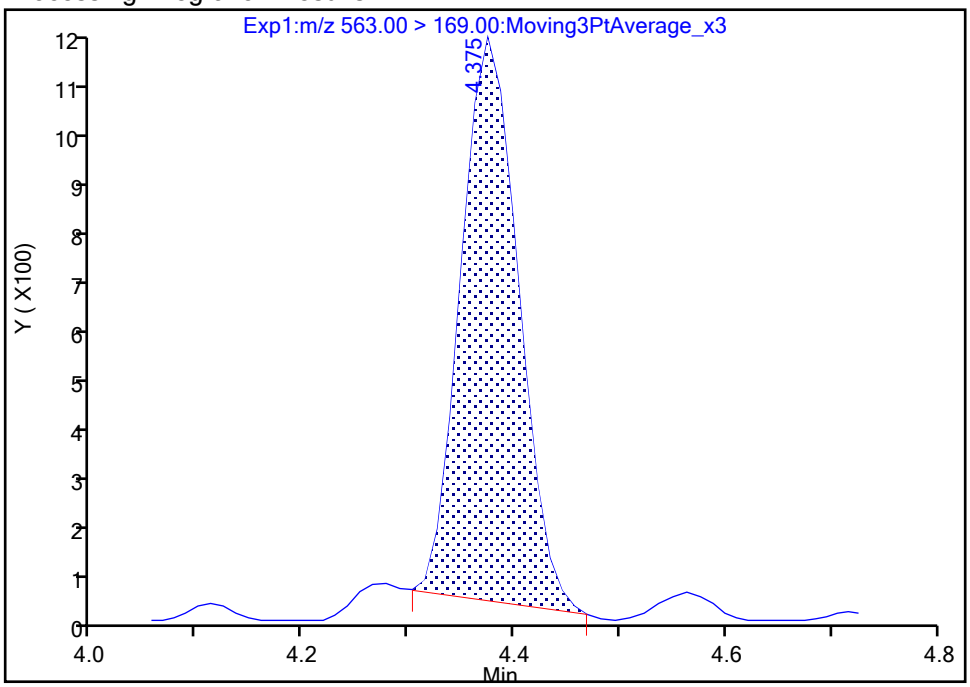
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

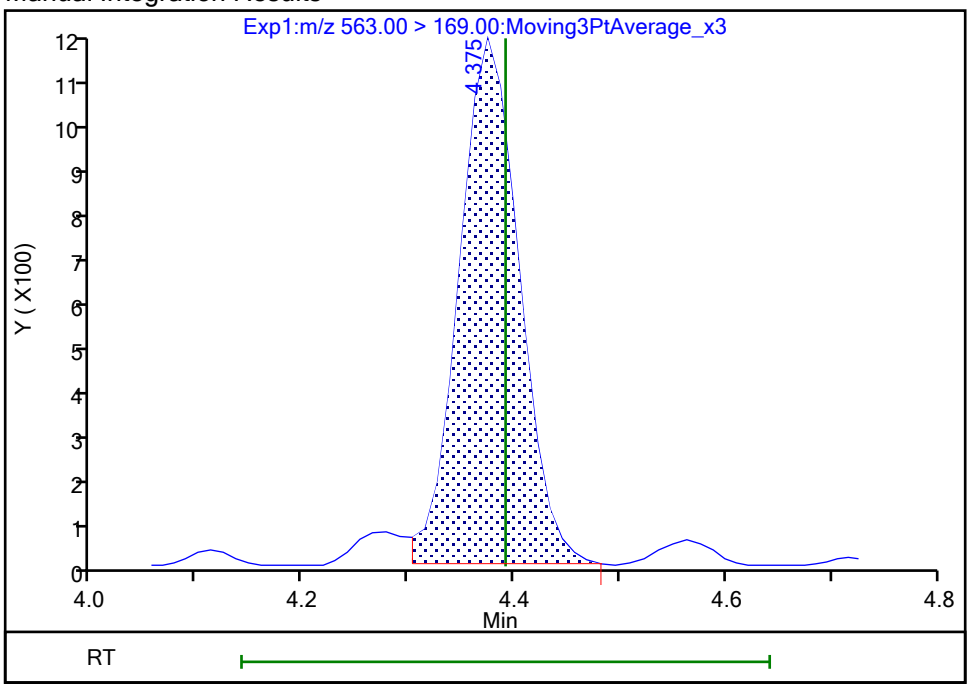
Processing Integration Results

RT: 4.37
Area: 4157
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 4497
Amount: 0.034848
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

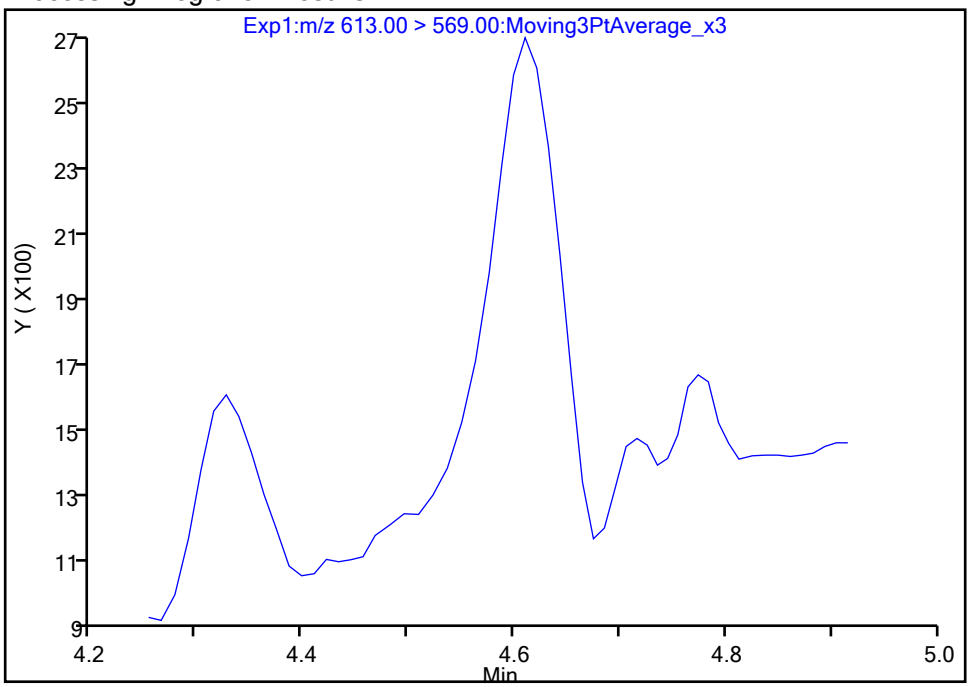
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

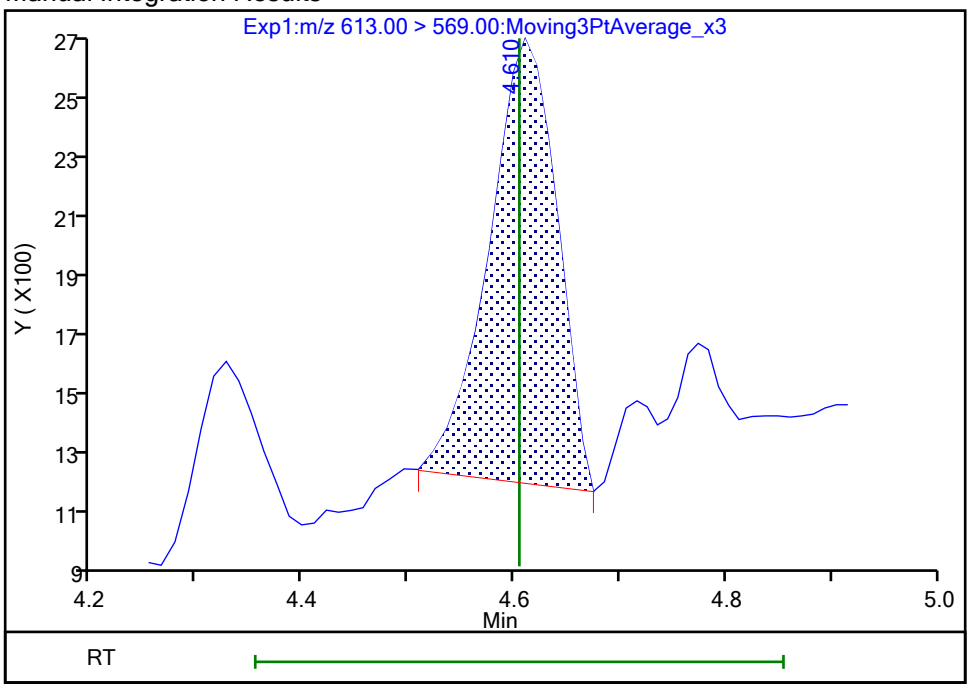
Not Detected
Expected RT: 4.60

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 6612
Amount: 0.003954
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

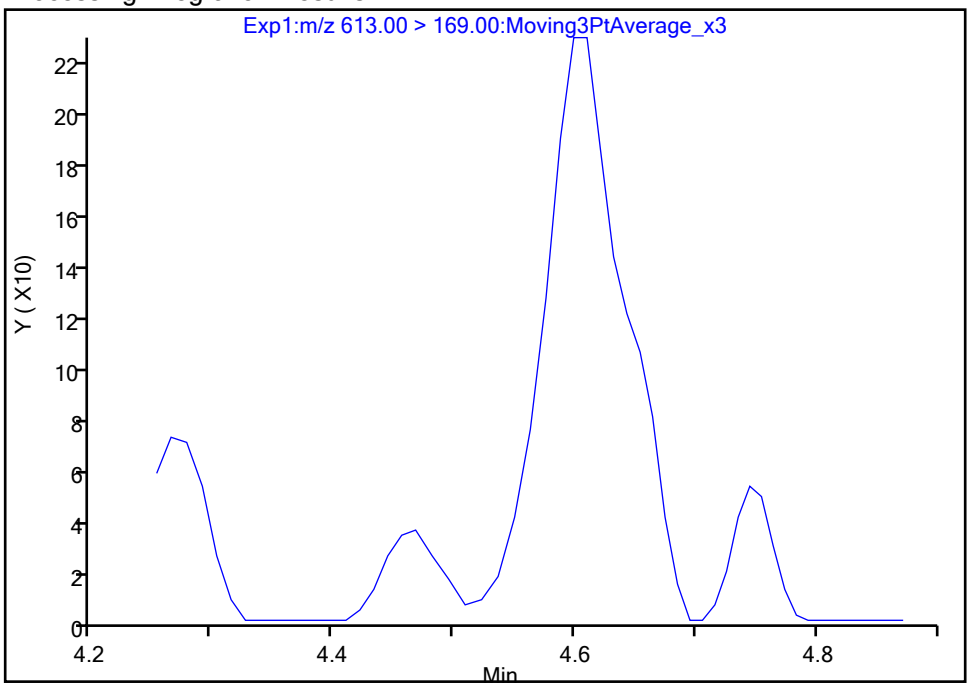
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

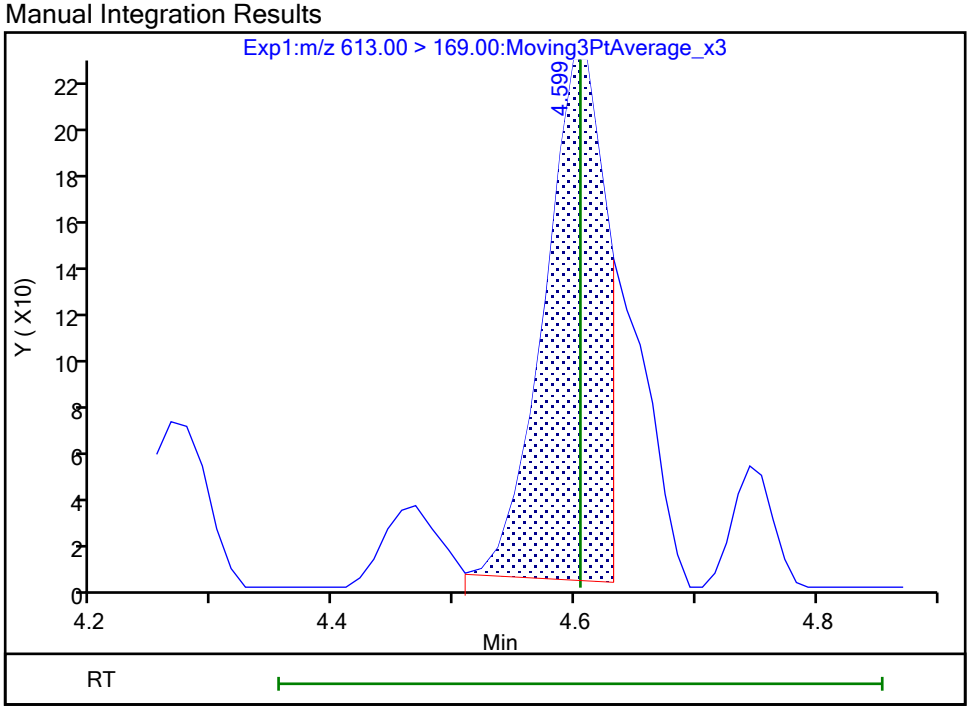
Not Detected
Expected RT: 4.60

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 771
Amount: 0.003954
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

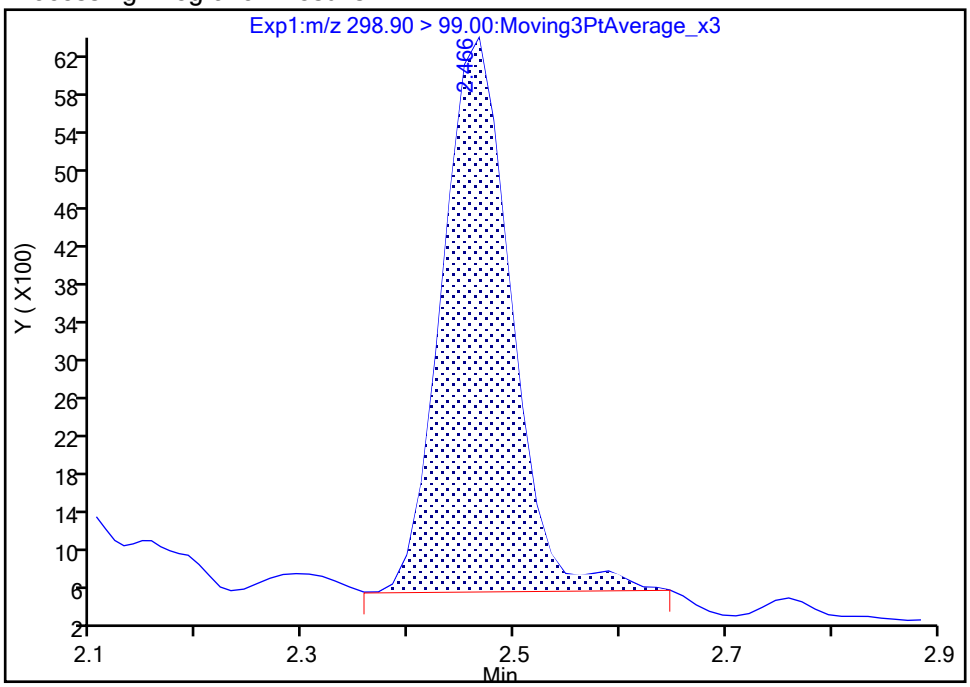
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

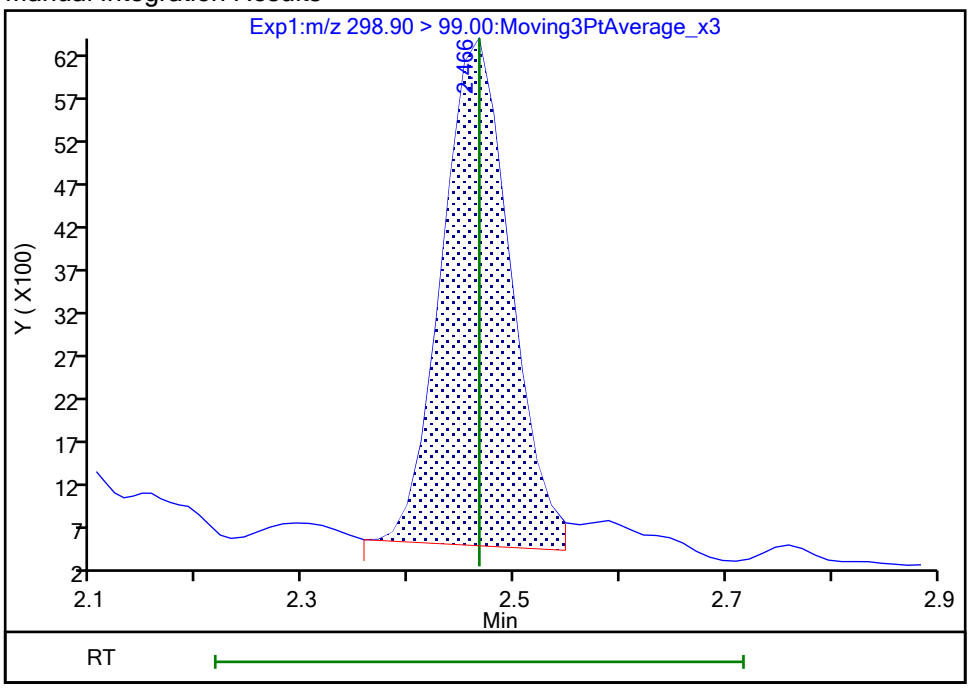
Processing Integration Results

RT: 2.47
Area: 26092
Amount: 0.031510
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 26146
Amount: 0.031108
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

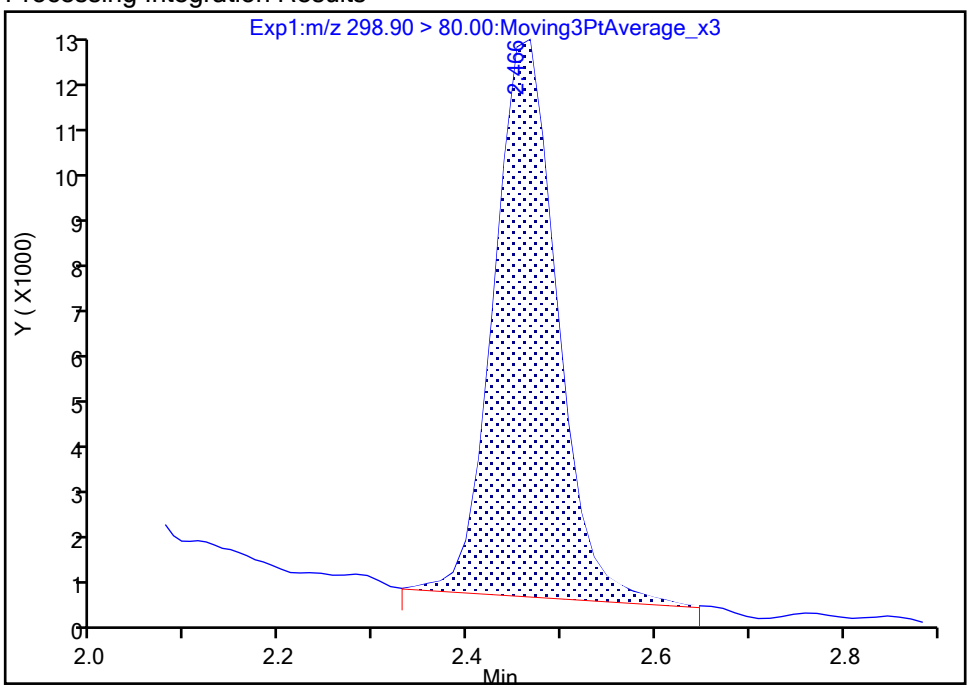
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

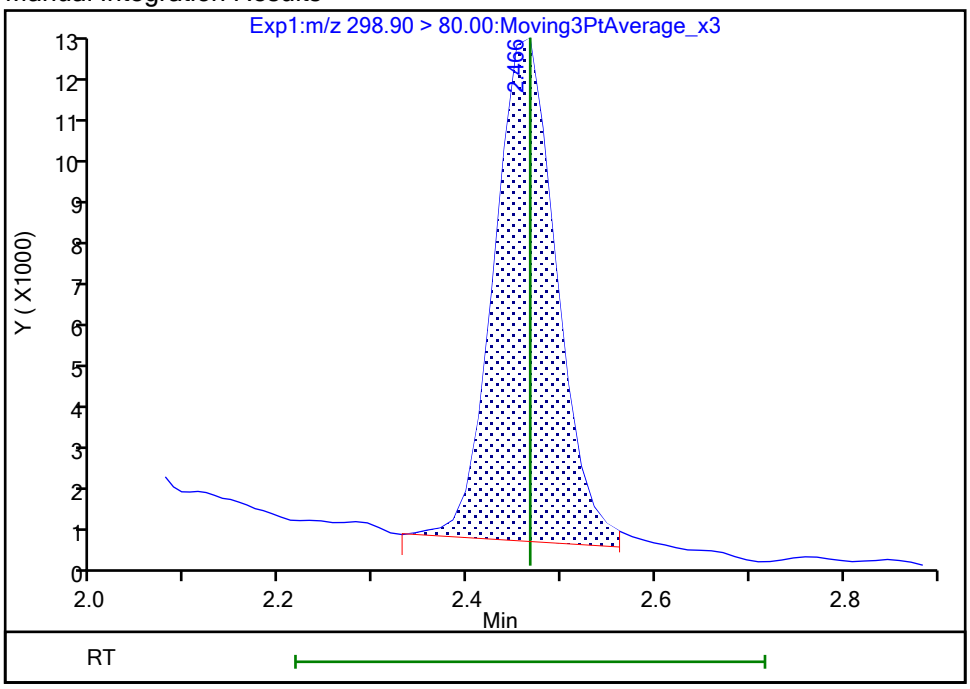
Processing Integration Results

RT: 2.47
Area: 53730
Amount: 0.031510
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 53045
Amount: 0.031108
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

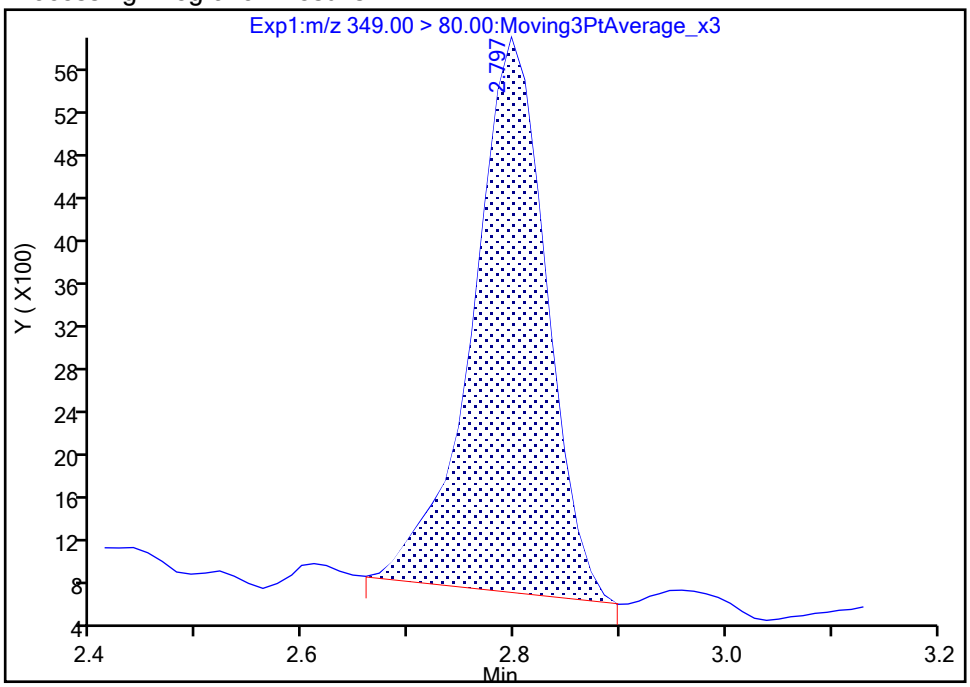
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

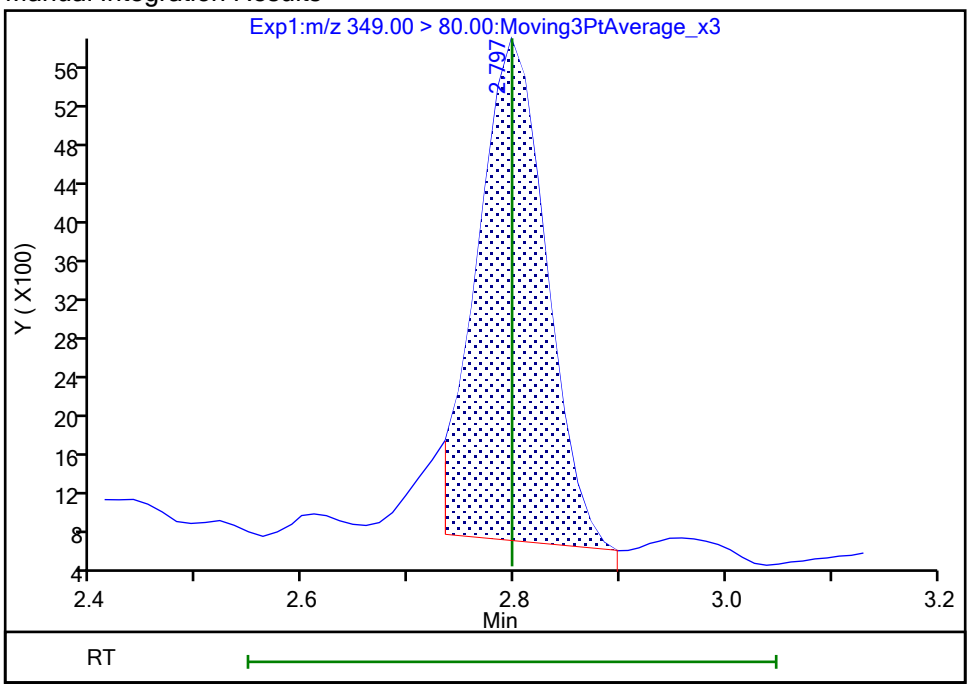
Processing Integration Results

RT: 2.80
Area: 25377
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 23602
Amount: 0.015938
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

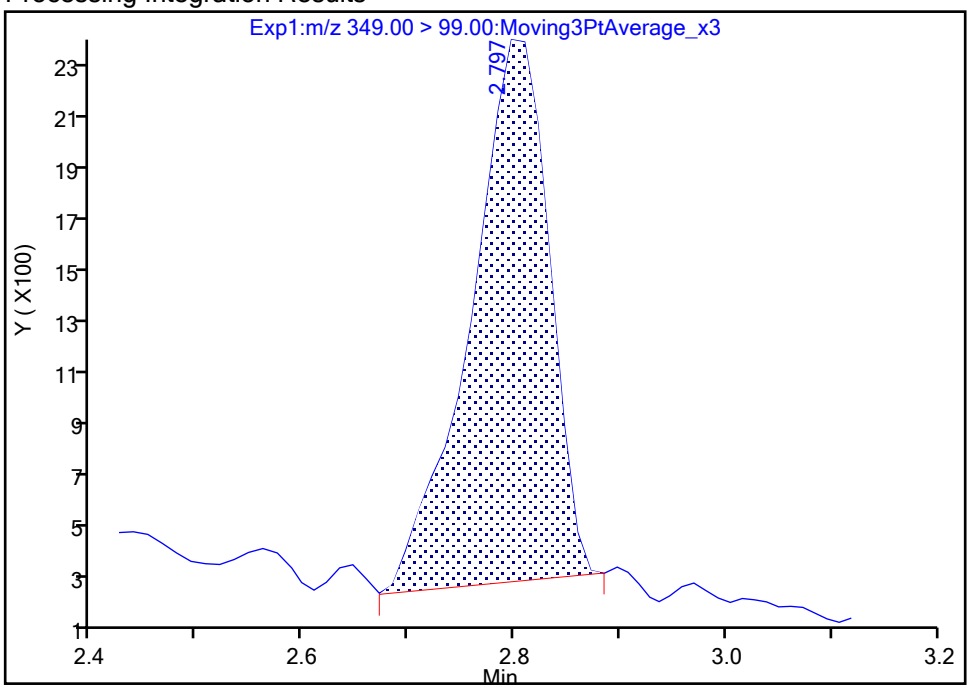
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

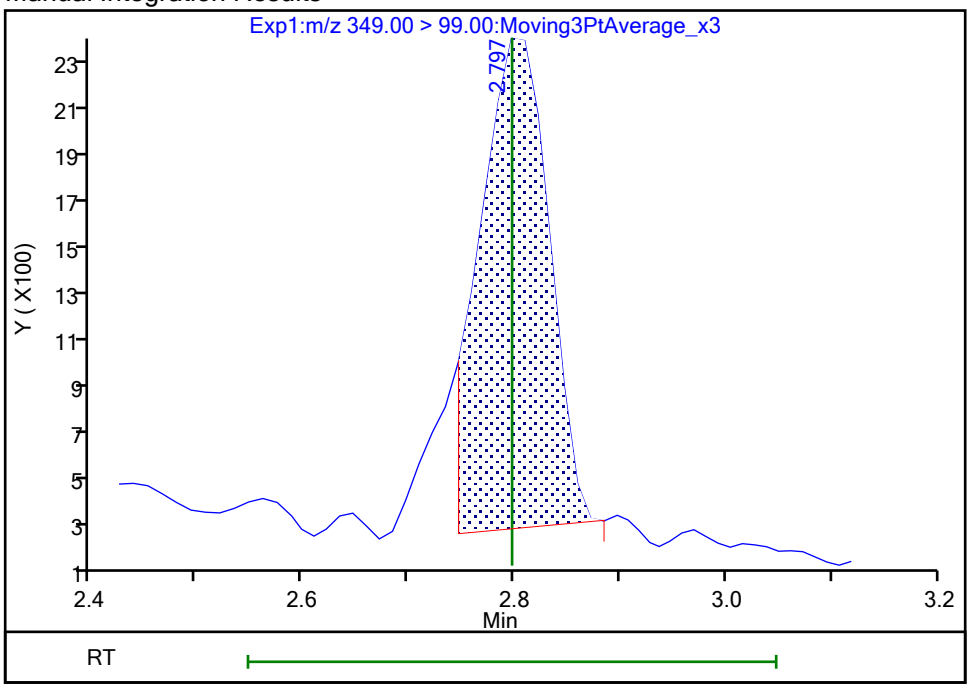
Processing Integration Results

RT: 2.80
Area: 10680
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 9320
Amount: 0.015938
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

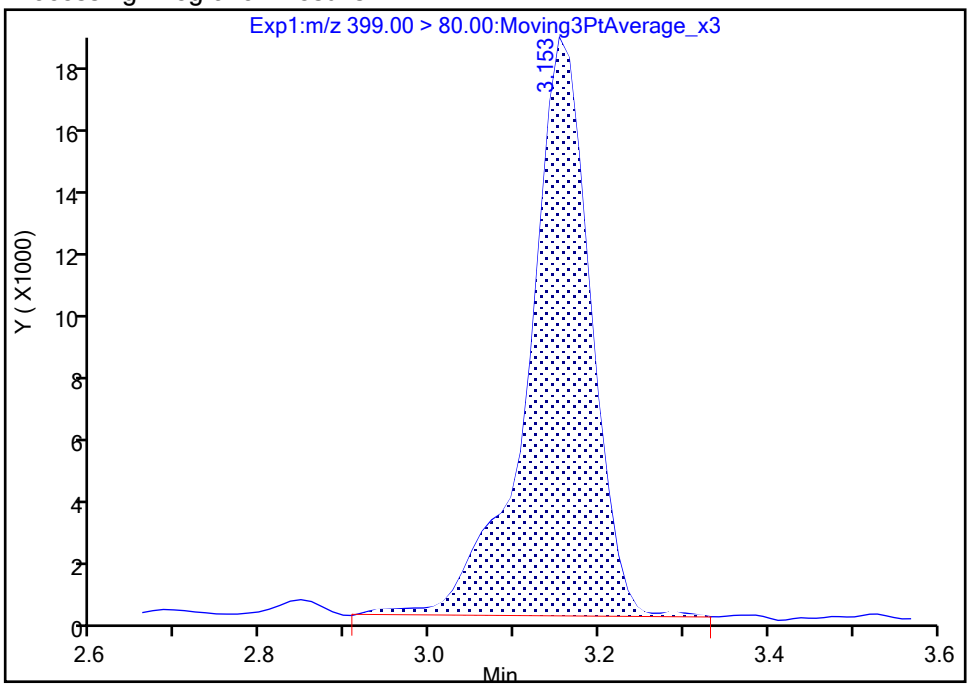
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

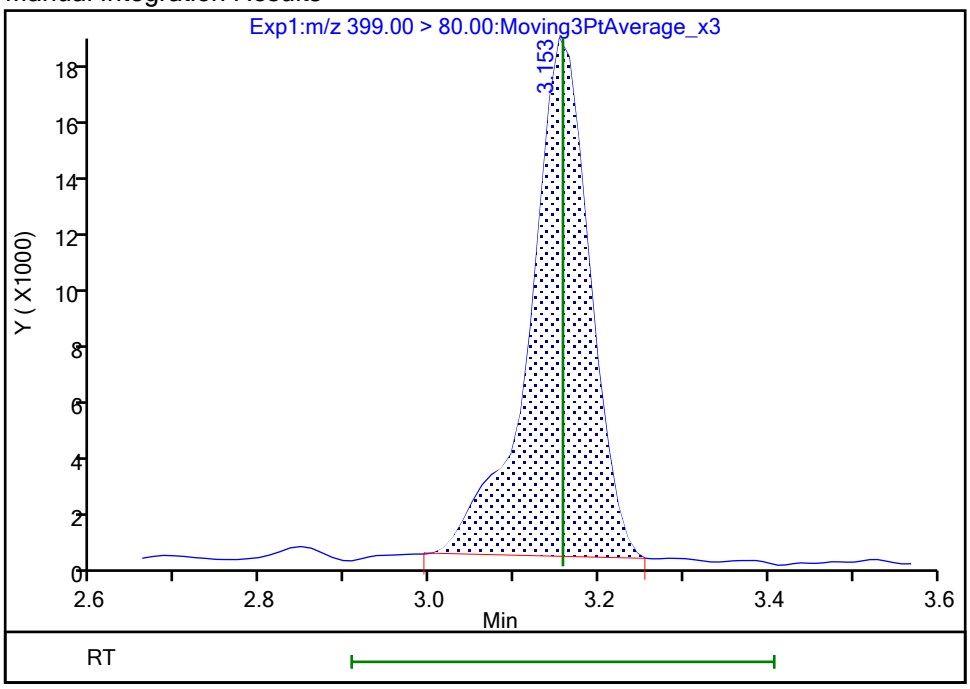
Processing Integration Results

RT: 3.15
Area: 95656
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 91374
Amount: 0.072792
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:54:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

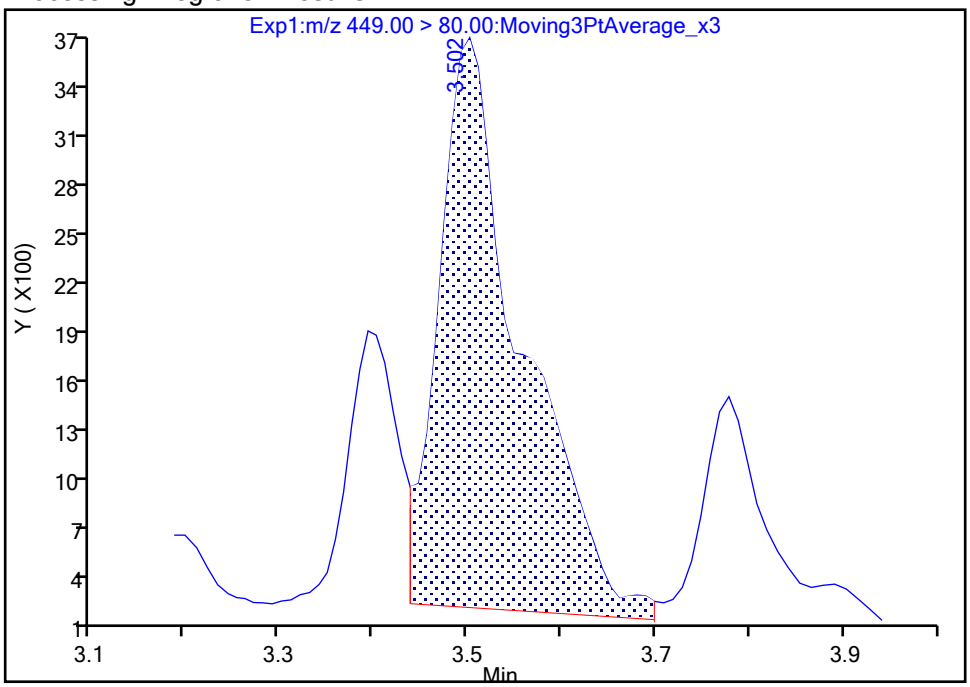
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

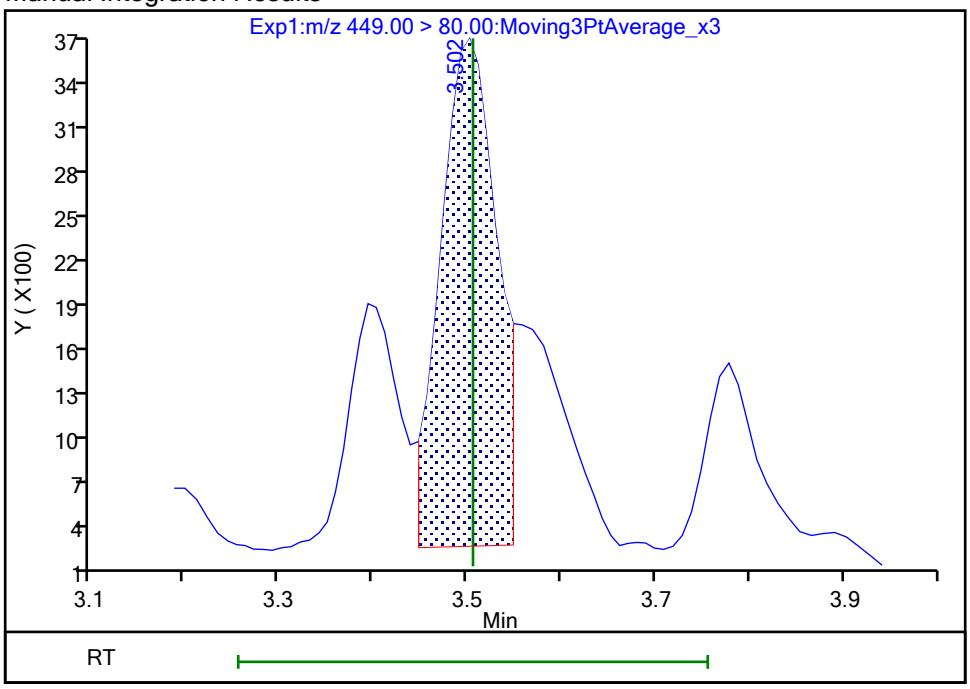
Processing Integration Results

RT: 3.50
Area: 21295
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 14041
Amount: 0.013431
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

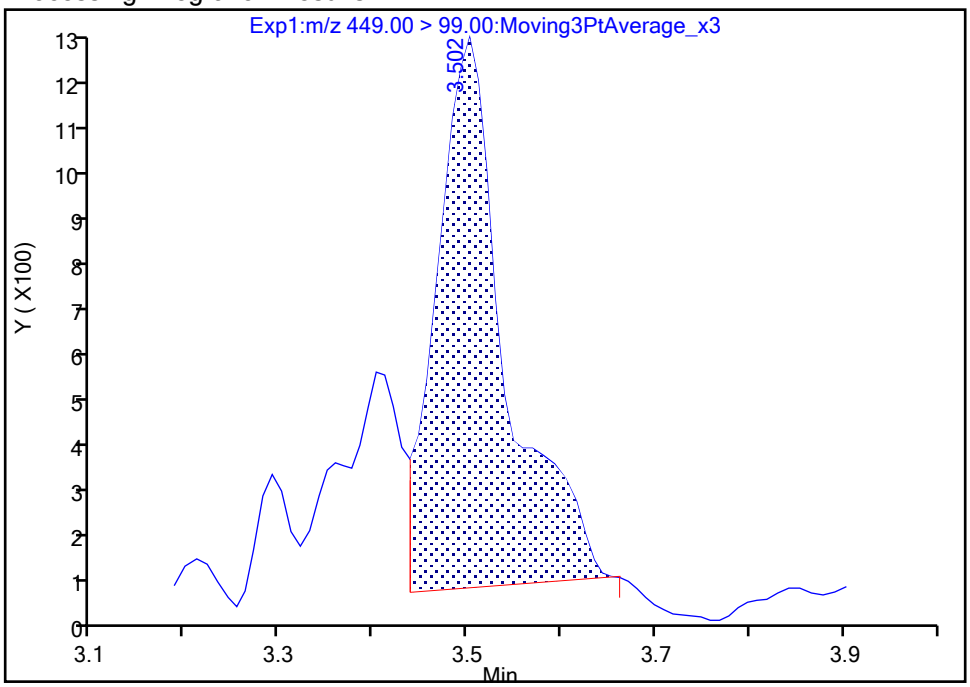
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

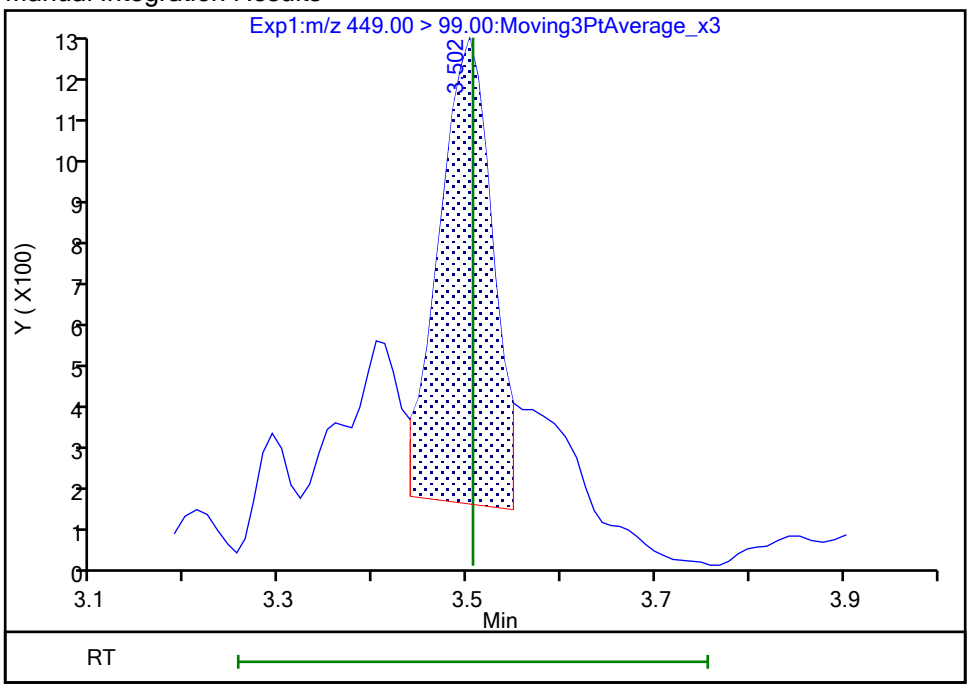
Processing Integration Results

RT: 3.50
Area: 5754
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 4154
Amount: 0.013431
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

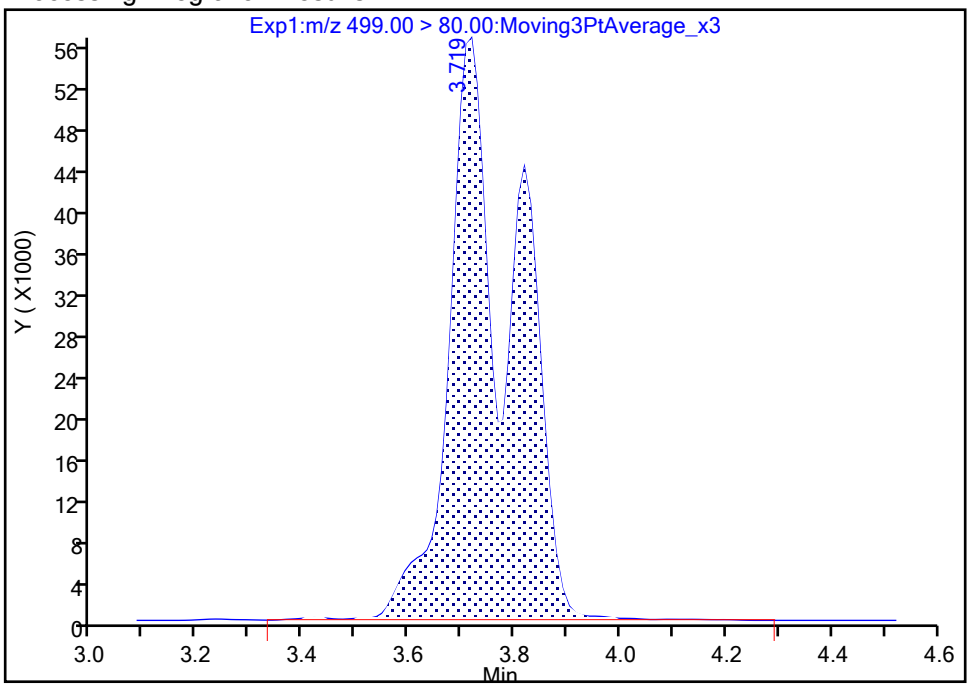
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

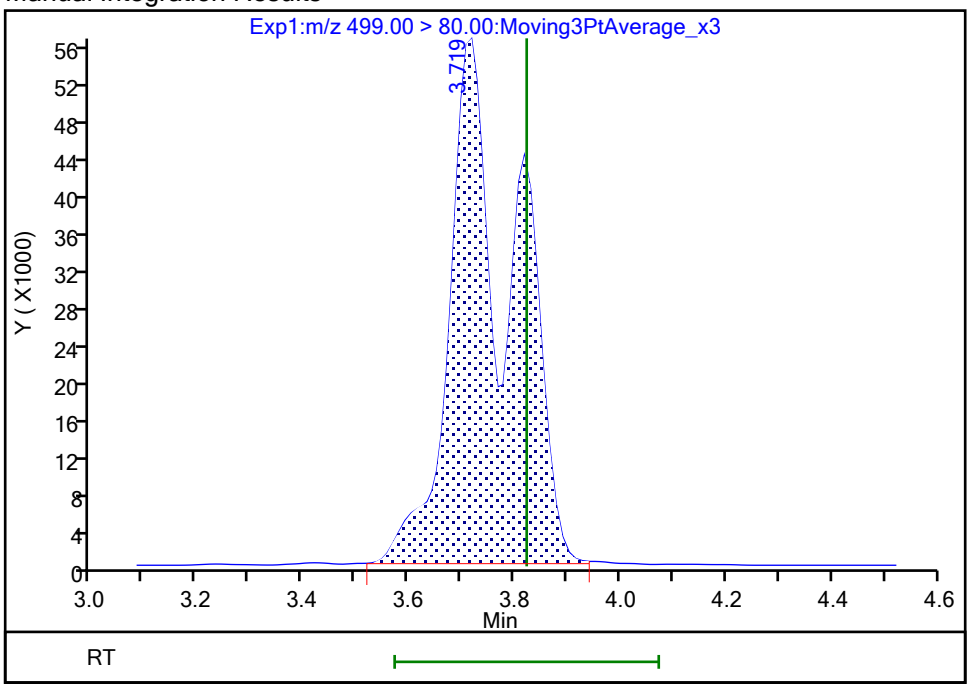
Processing Integration Results

RT: 3.72
Area: 479570
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.72
Area: 474408
Amount: 0.562278
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

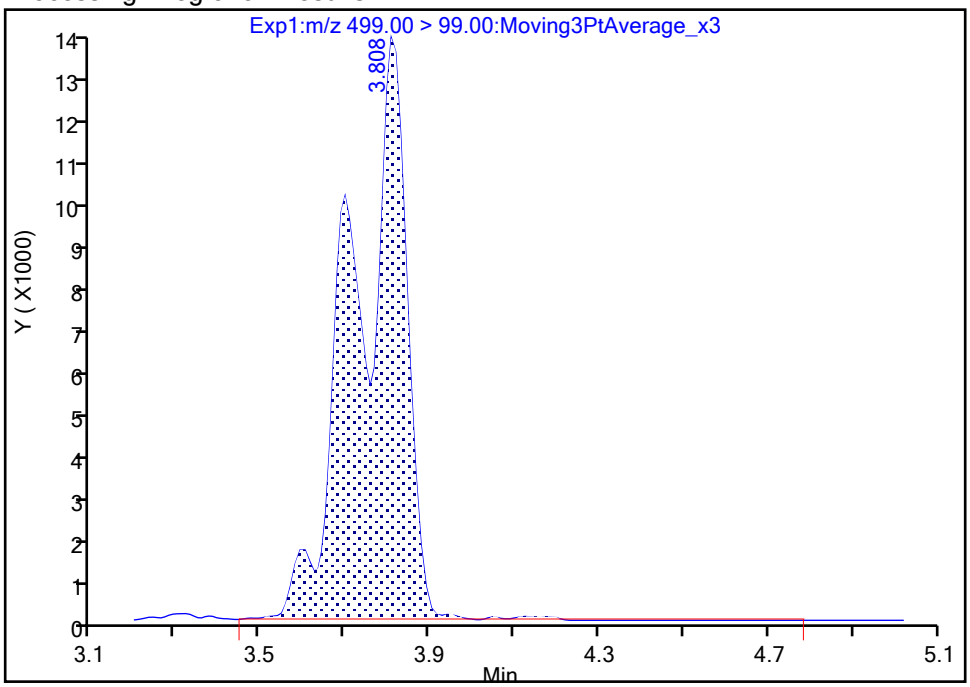
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

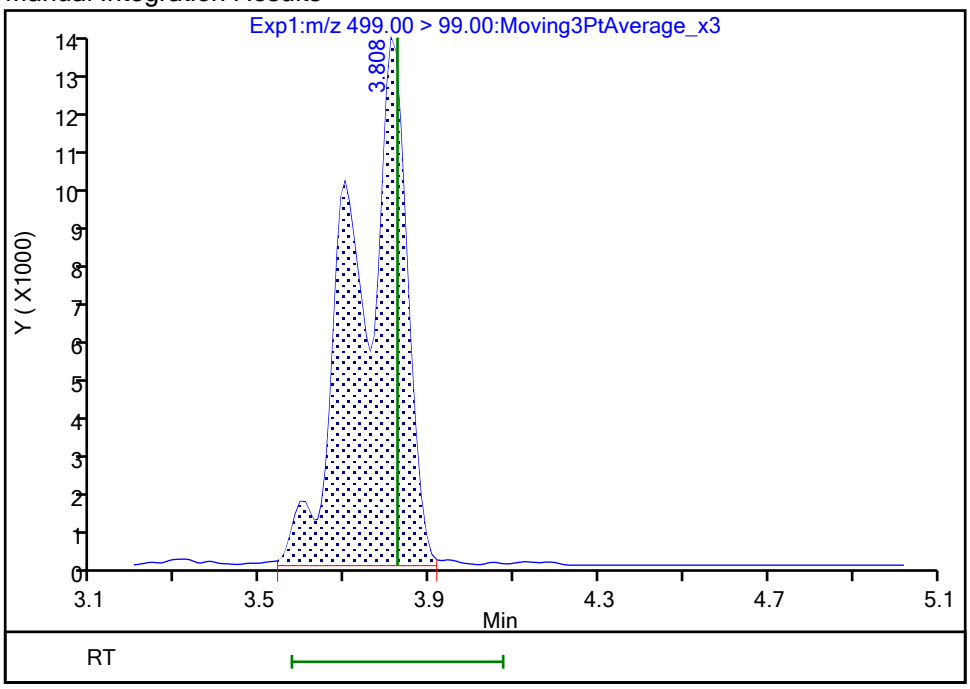
Processing Integration Results

RT: 3.81
Area: 114072
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 112195
Amount: 0.562278
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

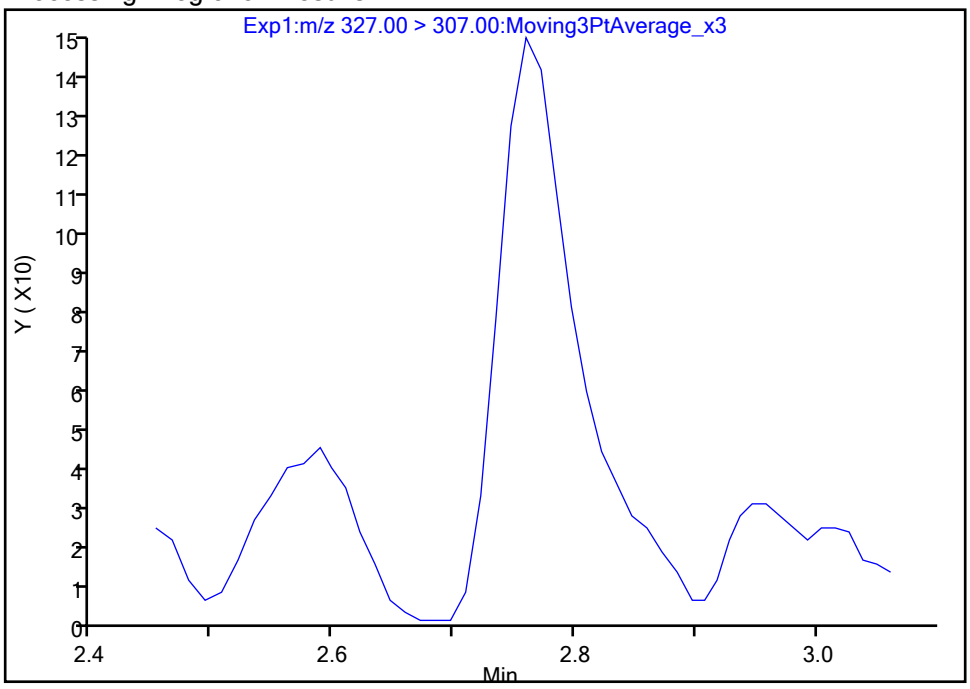
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

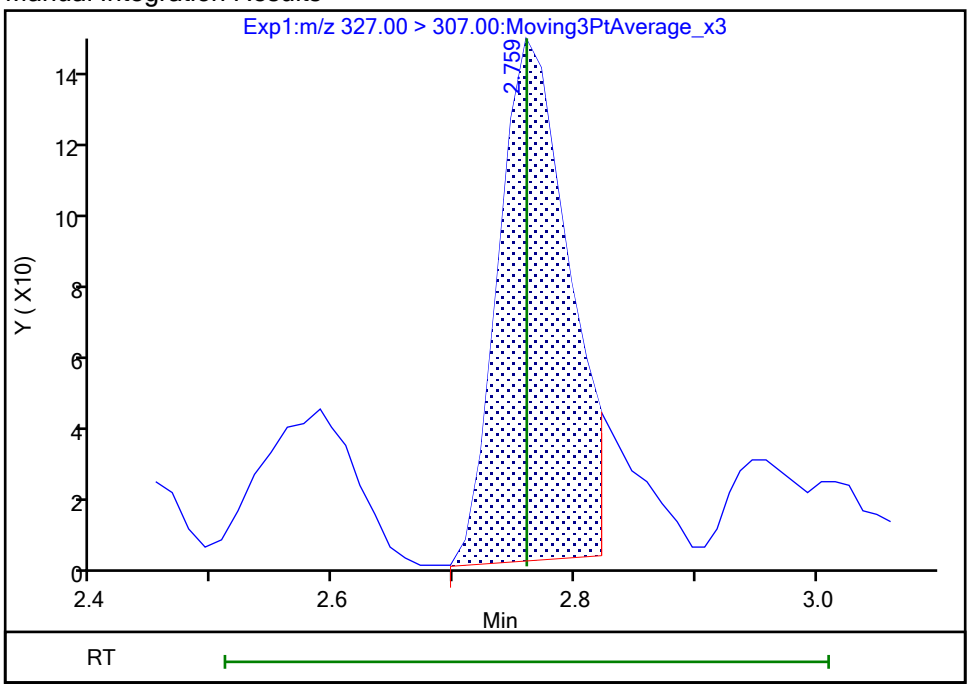
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 575
Amount: 0.001024
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

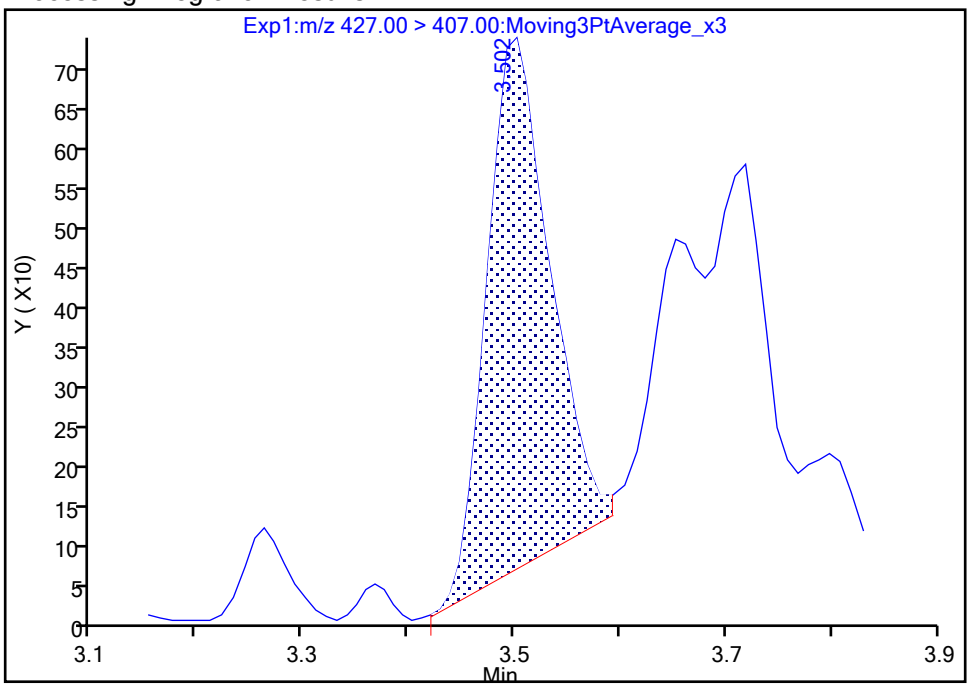
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

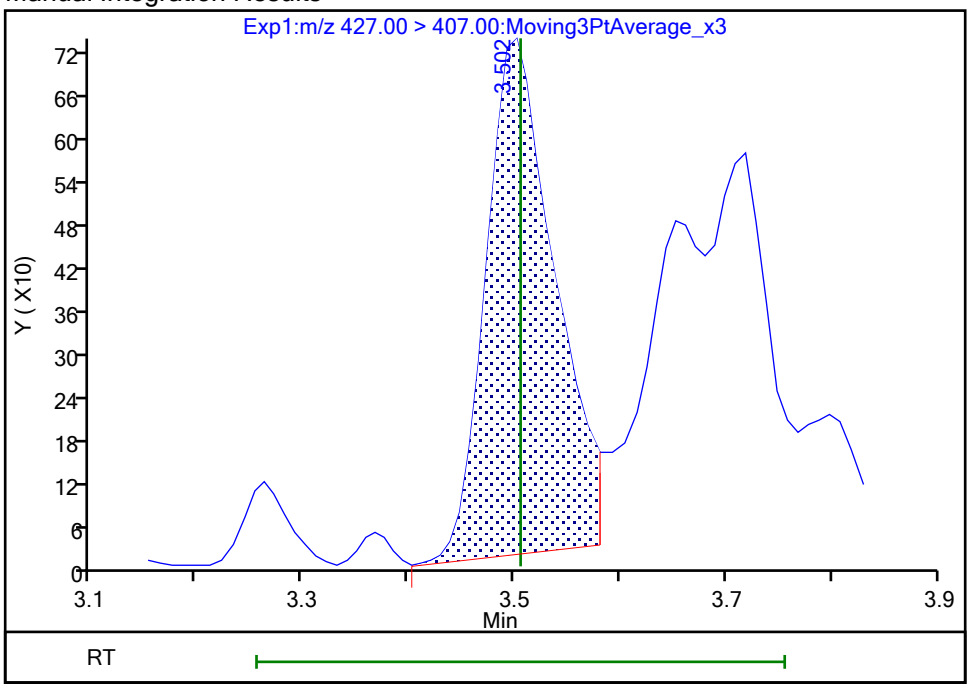
Processing Integration Results

RT: 3.50
Area: 2813
Amount: 0.004520
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 3251
Amount: 0.005224
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:55:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

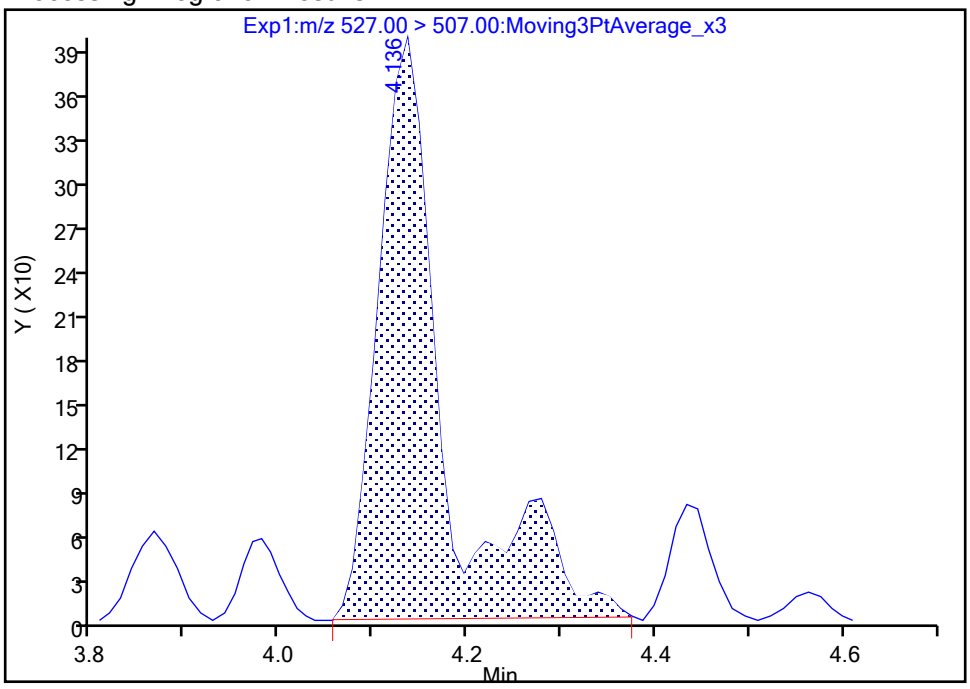
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

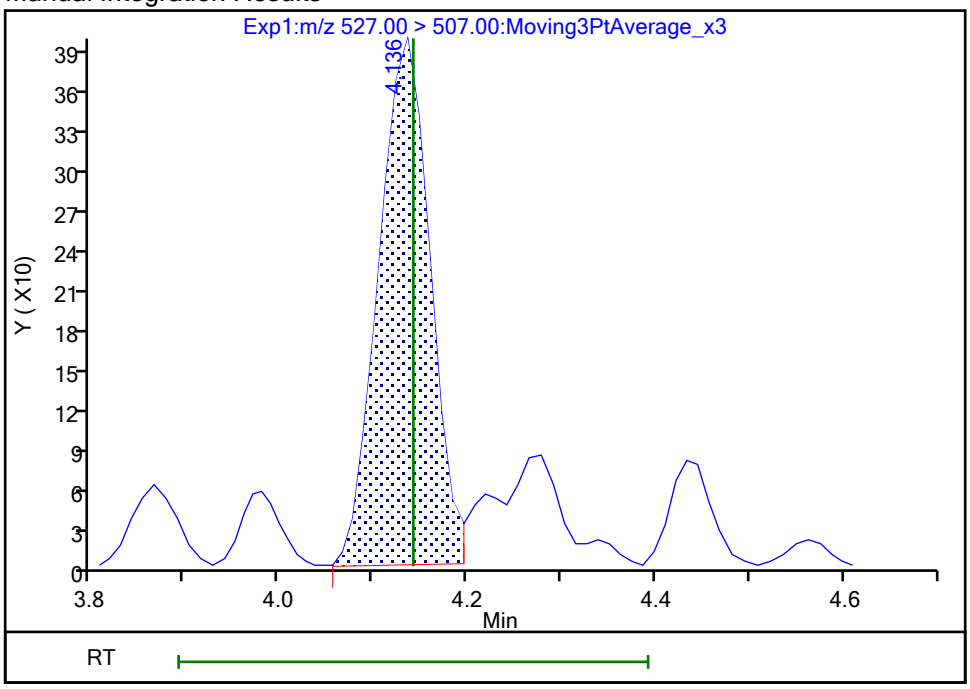
Processing Integration Results

RT: 4.14
Area: 1899
Amount: 0.003718
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1493
Amount: 0.002923
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

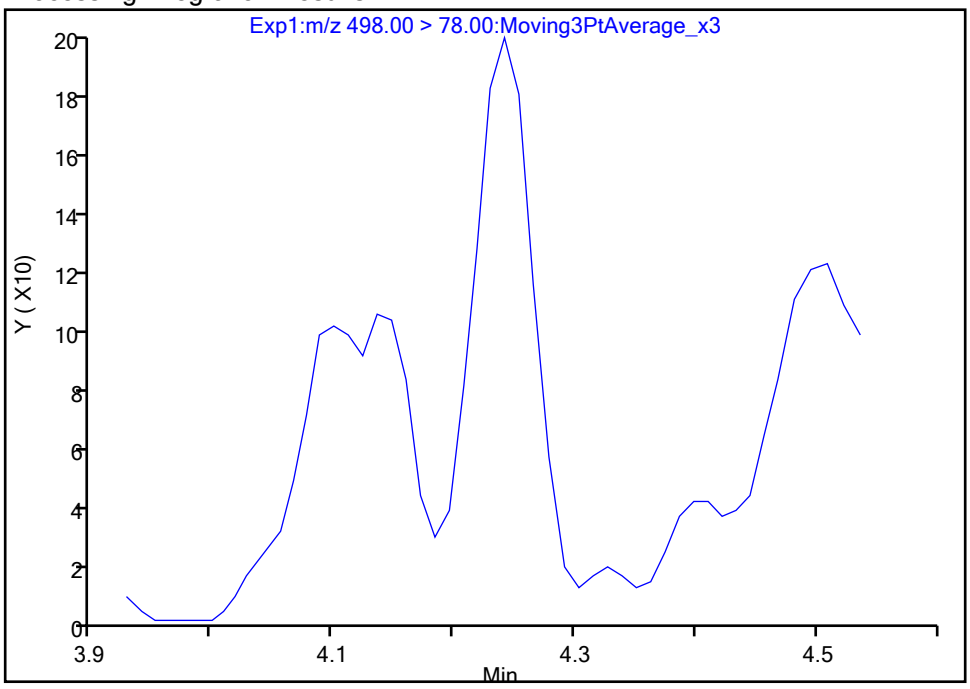
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

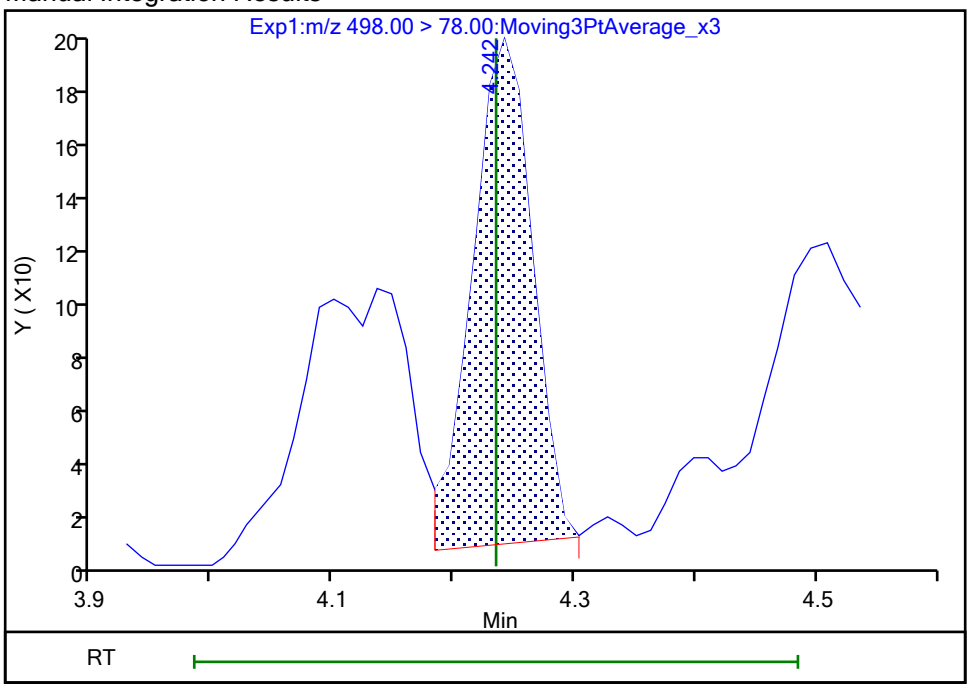
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 644
Amount: 0.000524
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

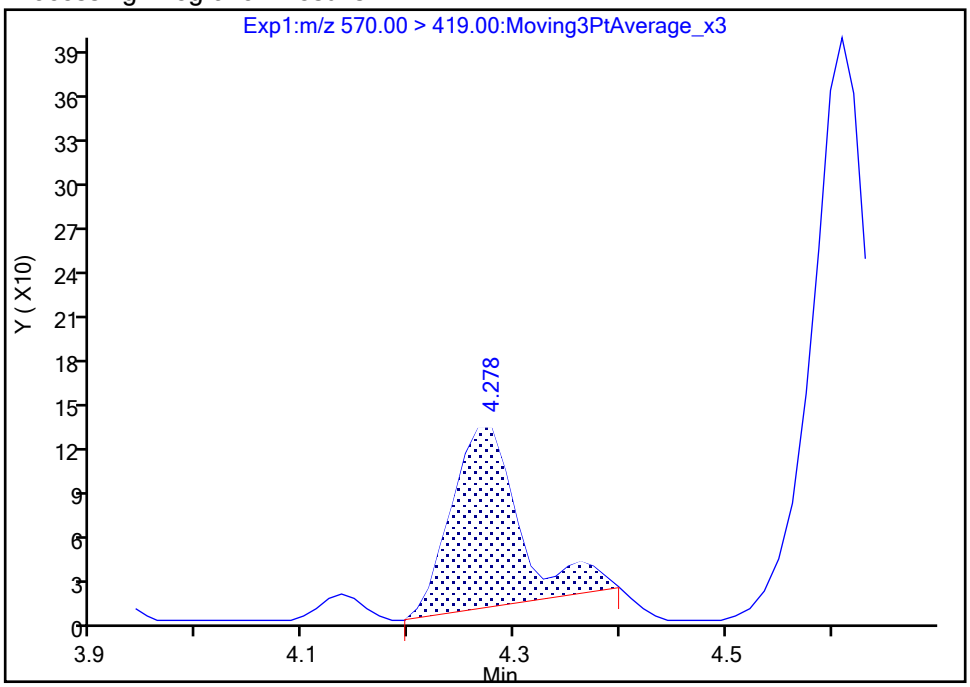
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

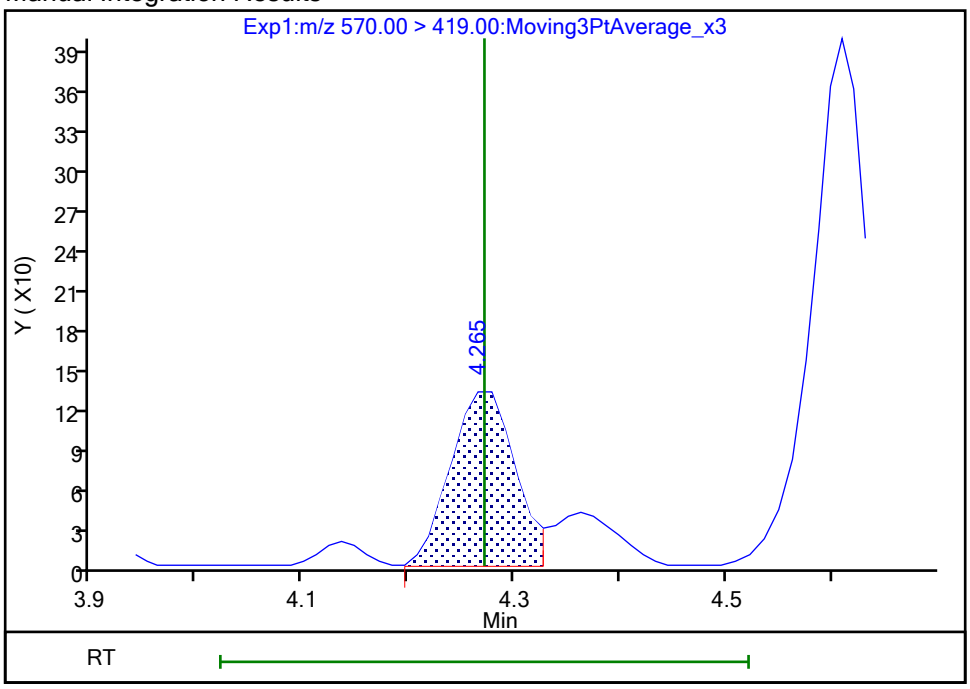
Processing Integration Results

RT: 4.28
Area: 555
Amount: 0.001624
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 552
Amount: 0.001615
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

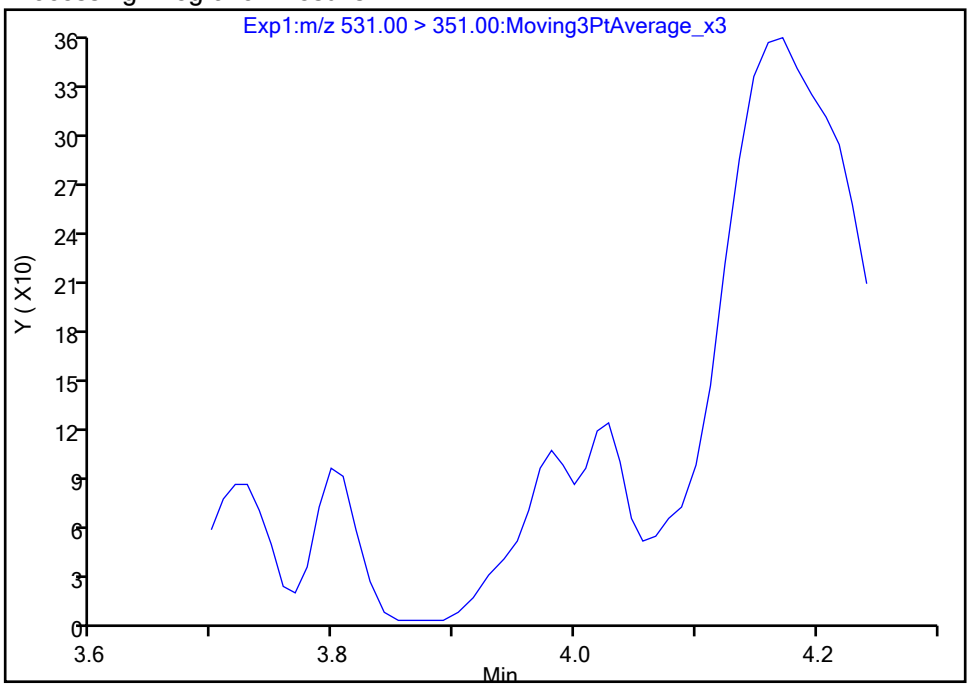
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

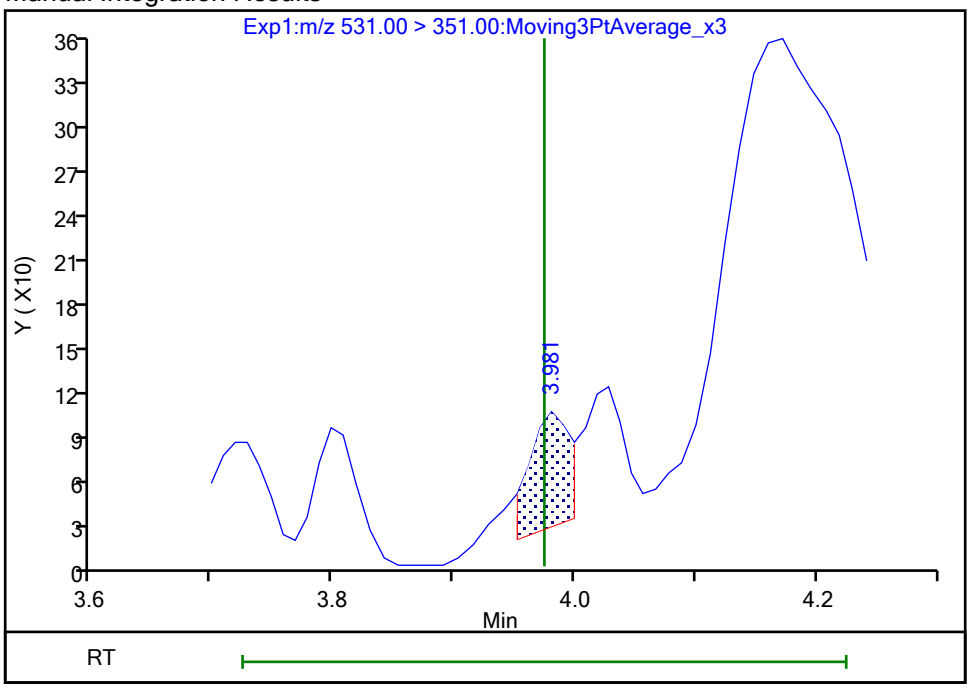
Not Detected
Expected RT: 3.97

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 174
Amount: 0.000067
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:56:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

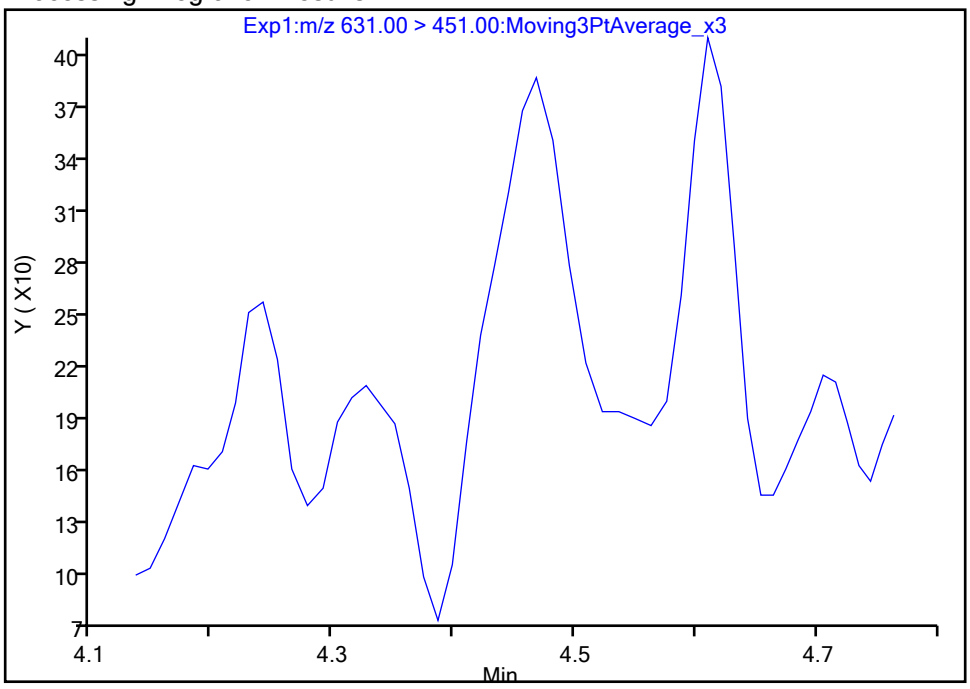
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

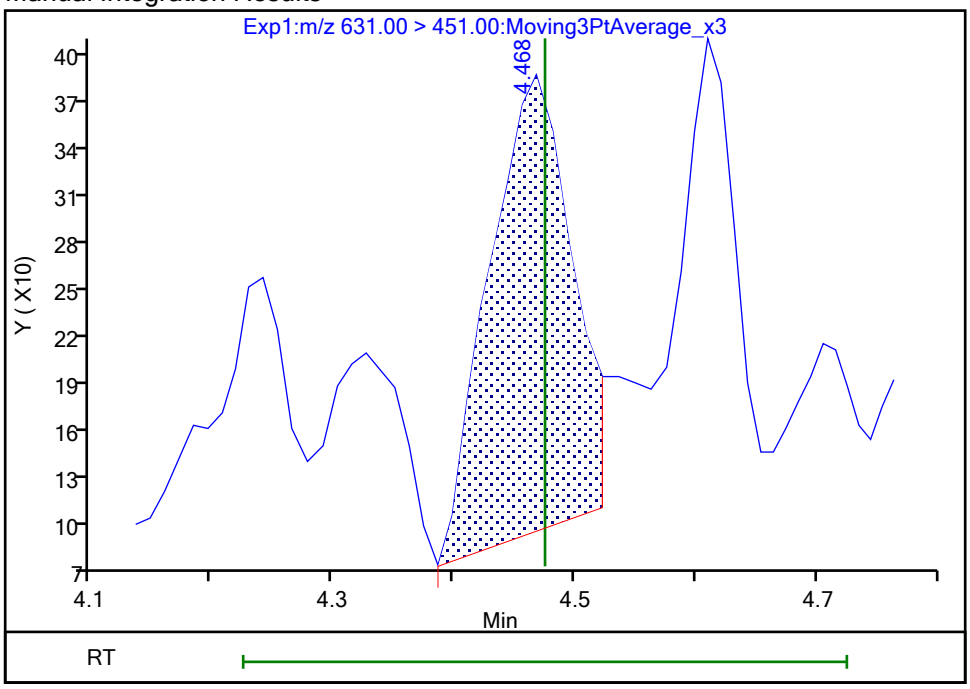
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.47
Area: 1376
Amount: 0.000348
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

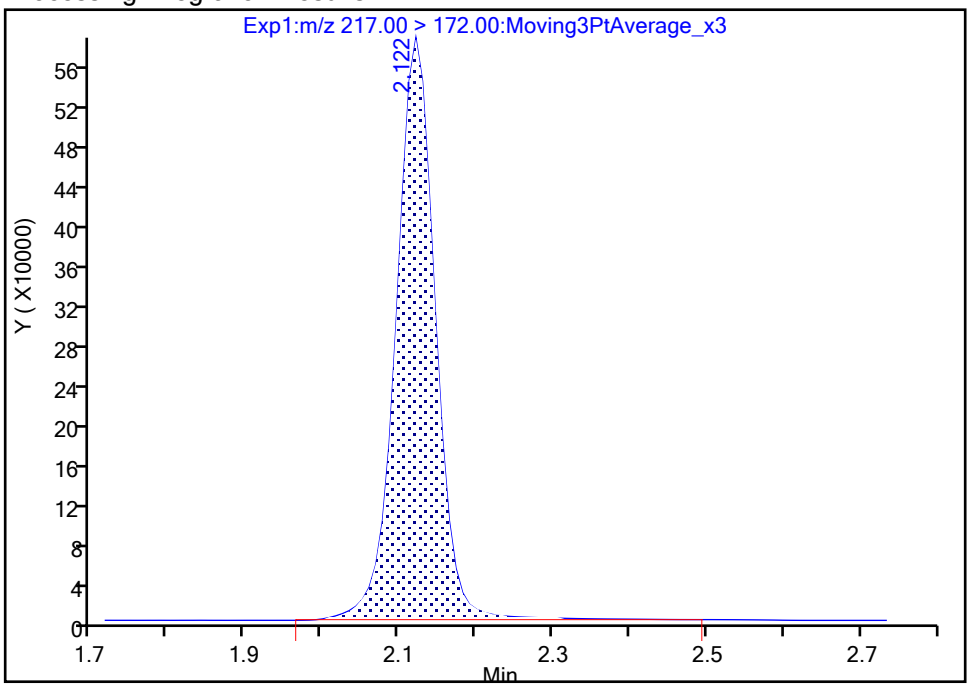
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

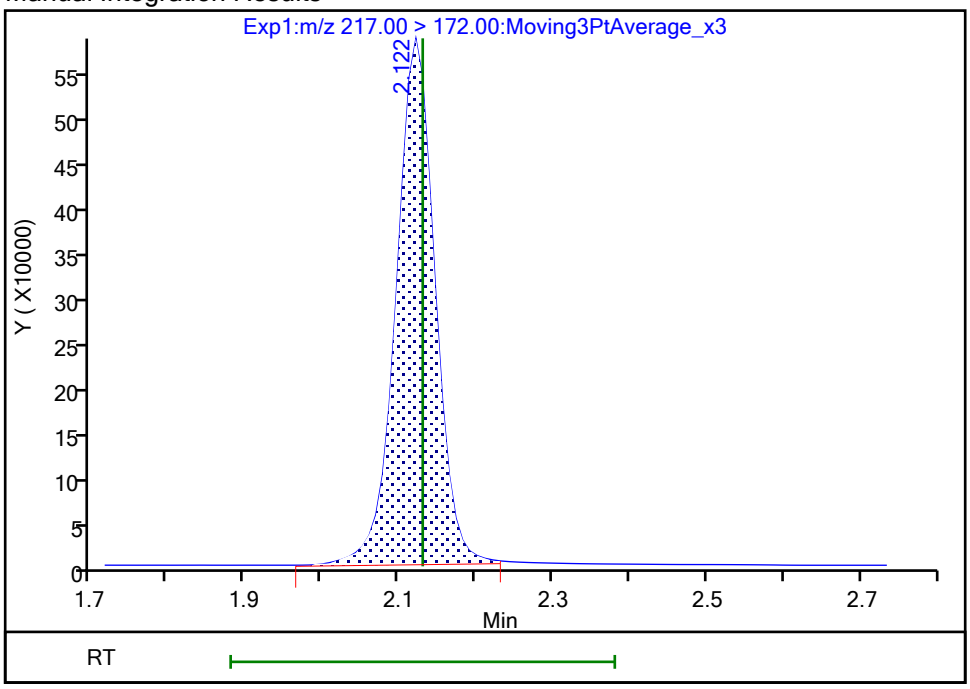
Processing Integration Results

RT: 2.12
Area: 2072147
Amount: 1.232007
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2053068
Amount: 1.221238
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

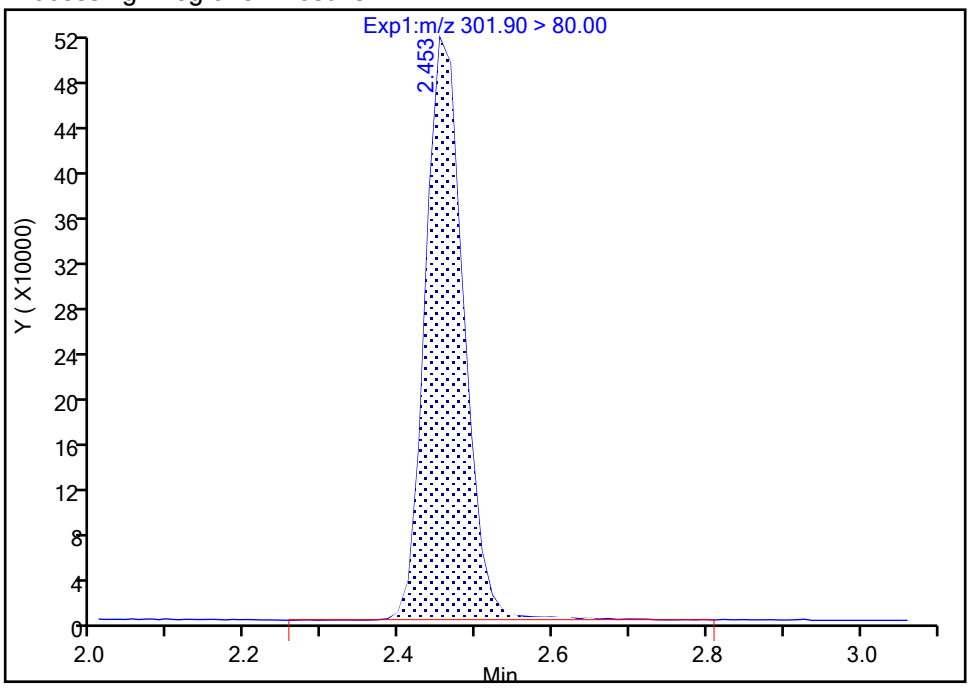
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

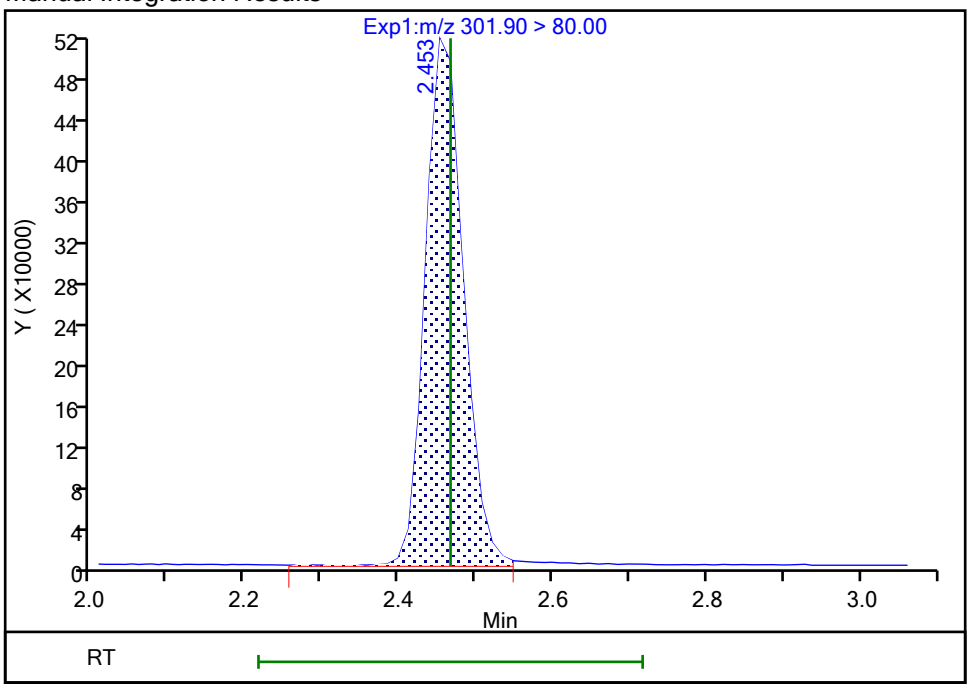
Processing Integration Results

RT: 2.45
Area: 1795474
Amount: 1.016584
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1774774
Amount: 1.005337
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

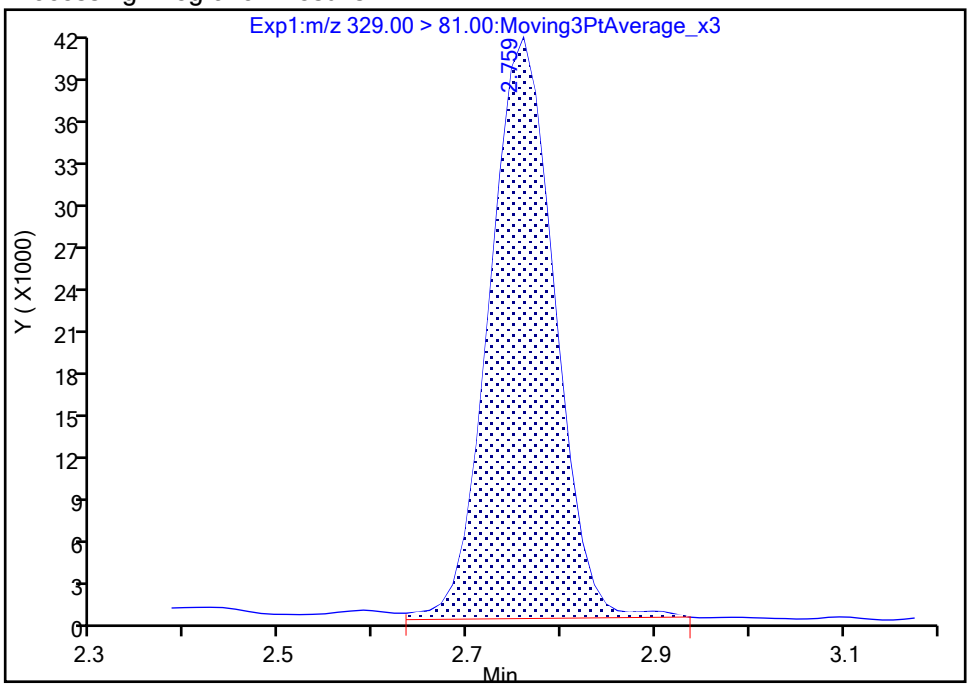
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

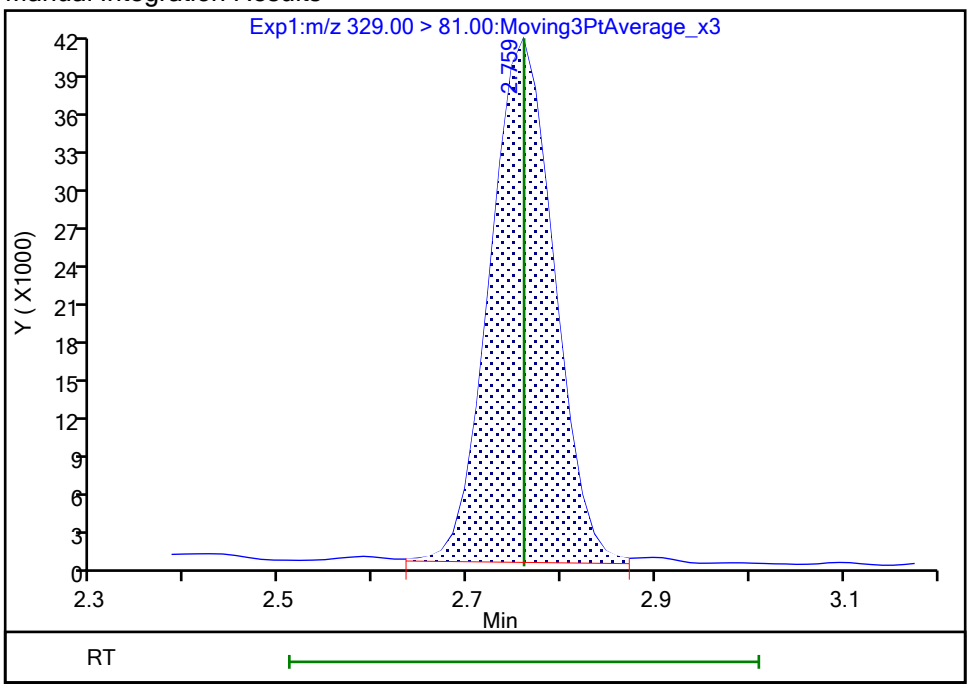
Processing Integration Results

RT: 2.76
Area: 197047
Amount: 0.964719
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 193020
Amount: 0.945448
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

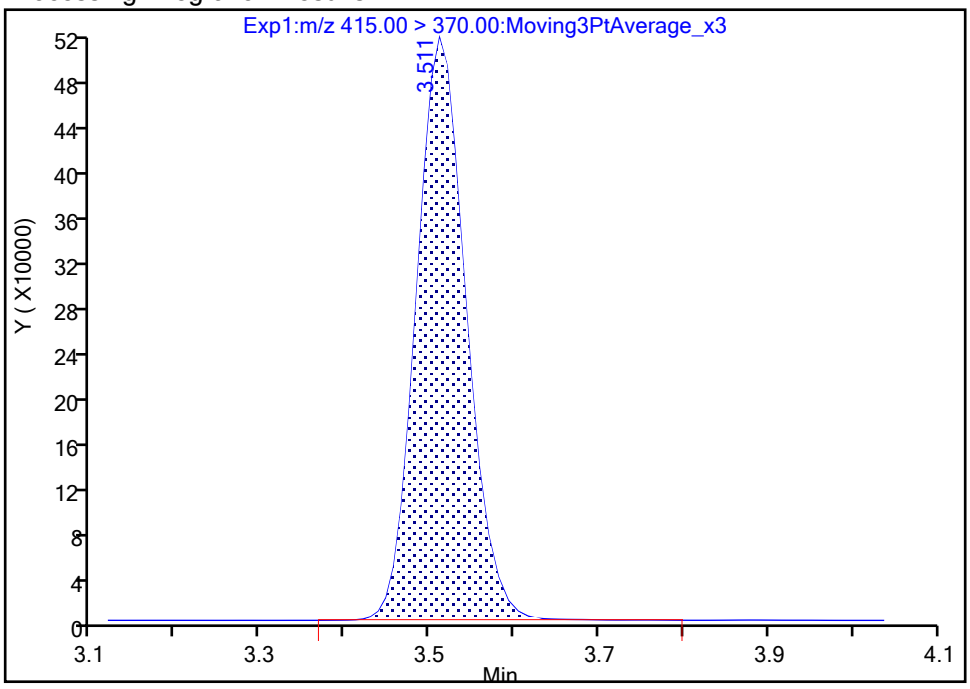
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D25.d				
Injection Date:	21-Oct-2023 07:06:06	Instrument ID:	LC812		
Lims ID:	460-290219-A-4-A	Lab Sample ID:	200-290219-4		
Client ID:	MW14A-101223-1231-40				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

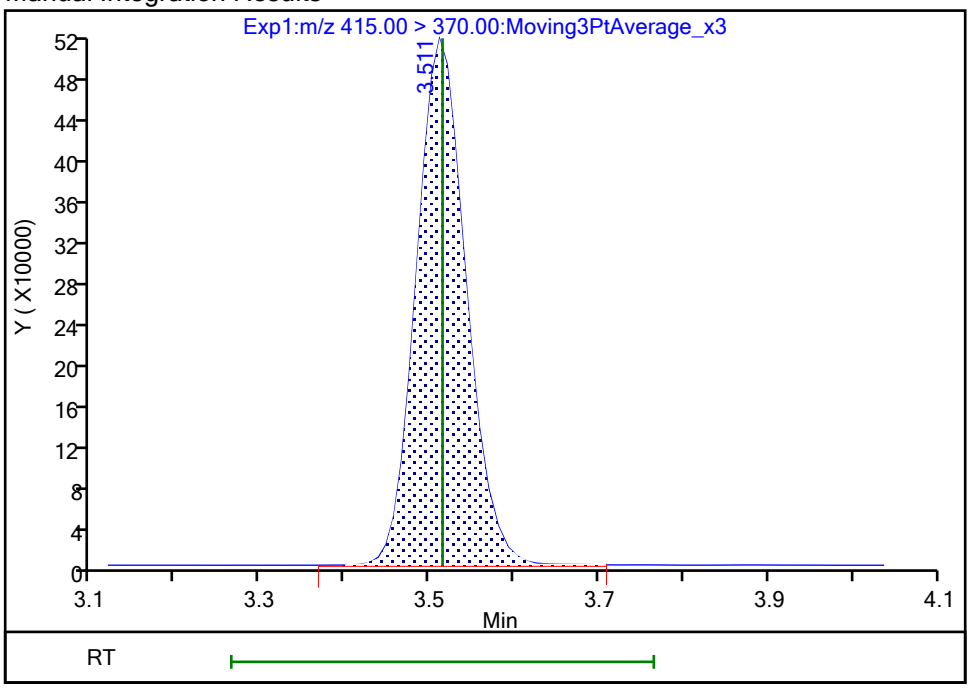
Processing Integration Results

RT: 3.51
Area: 2120075
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2119078
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:53:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW83R-101223-1346-29 Lab Sample ID: 460-290219-5

Matrix: Water Lab File ID: PA231020D26.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 13:46

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 299.6(mL) Date Analyzed: 10/21/2023 07:14

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	21.3		4.17	1.00
2706-90-3	Perfluoropentanoic acid	81.2		1.67	0.57
307-24-4	Perfluorohexanoic acid	81.1		1.67	0.54
375-85-9	Perfluoroheptanoic acid	20.5		1.67	0.45
335-67-1	Perfluorooctanoic acid	16.2		1.67	0.63
375-95-1	Perfluorononanoic acid	1.45	J	1.67	0.41
335-76-2	Perfluorodecanoic acid	0.76	J I	1.67	0.38
2058-94-8	Perfluoroundecanoic acid	1.67	U	1.67	0.46
307-55-1	Perfluorododecanoic acid	1.67	U	1.67	0.41
72629-94-8	Perfluorotridecanoic acid	1.67	U	1.67	0.40
376-06-7	Perfluorotetradecanoic acid	1.67	U	1.67	0.53
375-73-5	Perfluorobutanesulfonic acid	3.23		1.67	0.52
2706-91-4	Perfluoropentanesulfonic acid	4.03		1.67	0.42
355-46-4	Perfluorohexanesulfonic acid	15.4		1.67	0.46
375-92-8	Perfluoroheptanesulfonic acid	8.15		1.67	0.34
1763-23-1	Perfluorooctanesulfonic acid	533		1.67	0.71
68259-12-1	Perfluorononanesulfonic acid	1.67	U	1.67	0.33
335-77-3	Perfluorodecanesulfonic acid	0.37	J	1.67	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.17	U	4.17	1.08
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.64
754-91-6	Perfluorooctanesulfonamide	1.67	U	1.67	0.77
2355-31-9	NMeFOSAA	4.17	U	4.17	1.59
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.17	U	4.17	1.34
13252-13-6	HFPODA	0.92	J	3.34	0.92
919005-14-4	DONA	1.67	U	1.67	0.35
756426-58-1	9Cl-PF3ONS	1.67	U	1.67	0.27
763051-92-9	11Cl-PF3OUdS	1.67	U	1.67	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW83R-101223-1346-29 Lab Sample ID: 460-290219-5

Matrix: Water Lab File ID: PA231020D26.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 13:46

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 299.6(mL) Date Analyzed: 10/21/2023 07:14

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	86		50-150
STL01893	13C5 PFPeA	93		50-150
STL01892	13C4 PFHpA	102		50-150
STL02116	13C2 PFTeDA	89		50-150
STL02337	13C3 PFBS	88		50-150
STL01056	13C8 FOSA	78		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	91		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	94		50-150
STL02280	M2-8:2 FTS	90		50-150
STL02255	13C3 HFPO-DA	100		50-150
STL00994	18O2 PFHxS	90		50-150
STL00993	13C2 PFHxA	95		50-150
STL00991	13C4 PFOS	90		50-150
STL00998	13C2 PFDoA	99		50-150
STL00995	13C5 PFNA	92		50-150
STL00996	13C2 PFDA	95		50-150
STL00990	13C4 PFOA	96		50-150
STL00997	13C2 PFUnA	97		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d
Lims ID: 460-290219-A-5-A
Client ID: MW83R-101223-1346-29
Sample Type: Client
Inject. Date: 21-Oct-2023 07:14:16 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-5-A
Misc. Info.: 200-0057494-026 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 16:43:39
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.130	-0.009	0.604	1589699	1.07		85.5	1372	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	781496	0.6387			33.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1340105	1.16		92.9	335	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	2813124	2.43			11.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.702	1600616	1.03		88.2	16862	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	148727	0.0967	Target=2.06		2.4	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	76268		1.95(1.03-3.09)		5.2	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.005	425	0.000776			0.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.786	188388	1.04		89.4	6.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1400925	1.19		95.5	2751	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	2995363	2.43	Target=14.12		26.8	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	199994		14.98(7.06-21.17)		50.0	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.887	159650	0.1208	Target=2.72		5.8	M
349.00 > 99.00	2.797	2.798	-0.001	0.887	80924		1.97(1.36-4.09)		13.2	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.004	6268	0.0275			47.9	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.897	2.908	-0.011	0.825	284481	1.25		100	987	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.157	-0.004	0.898	1196885	1.07		90.4	4272	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.157	-0.004	1.000	516369	0.4609	Target=3.32		47.2	M
399.00 > 99.00	3.153	3.157	-0.004	1.000	207777		2.49(1.66-4.98)		76.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	902767	0.6131	Target=4.17		17.4	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	211595		4.27(2.09-6.26)		117	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1642124	1.28		102	5327	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.917	225949	0.2443	Target=4.83		17.3	M
449.00 > 99.00	3.493	3.506	-0.013	0.915	61407		3.68(2.41-7.24)		13.7	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.997	260513	1.12		94.3	46.1	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.506	0.005	1.003	2451	0.004088			3.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	1.000	1743075	1.19		95.6	5070	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.515	-0.004		1874034	1.25			4499	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.003	720901	0.4854	Target=2.88		12.5	M
413.00 > 169.00	3.511	3.515	-0.004	1.000	245342		2.94(1.44-4.32)		196	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.823	-0.005	1.000	11910273	16.0	Target=4.24		1358	M
499.00 > 99.00	3.818	3.823	-0.005	1.000	3563497		3.34(2.12-6.37)		2020	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.823	-0.005	1.088	764767	1.08		90.0	237	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.846	-0.004	1.000	61960	0.0435	Target=8.34		3.1	M
463.00 > 169.00	3.842	3.846	-0.004	1.000	6632		9.34(4.17-12.51)		8.3	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	1816624	1.14		91.5	2722	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.980	3.975	0.005	1.042	560	0.000245			1.0	M
24 Perfluorodecanoic acid										RM
513.00 > 469.00	4.124	4.130	-0.006	1.000	36209	0.0229	Target=11.44		4.0	RM
513.00 > 169.00	4.124	4.130	-0.006	1.000	1704		21.25(5.72-17.16)		5.5	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.130	-0.006	1.175	1981500	1.19		95.4	7310	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.136	4.142	-0.006	1.178	281953	1.08		90.1	171	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.142	0.006	1.003	724	0.001397			7.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.235	-0.005	1.205	1381748	0.9740		77.9	4958	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.271	-0.005	1.215	448673	1.13		90.3	981	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.160	4.271	-0.111	0.975	375	0.001151			1.5	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.351	4.356	-0.005	1.139	4827	0.0110	Target=2.37		5.8	M
599.00 > 99.00	4.351	4.356	-0.005	1.139	2090		2.31(1.19-3.56)		11.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	1907783	1.22		97.3	16126	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.391	-0.004	1.000	13050	0.008296	Target=12.20		2.4	M
563.00 > 169.00	4.375	4.391	-0.016	0.997	1525		8.56(6.10-18.31)		5.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.391	0.007	1.253	435886	1.14		91.2	820	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	806	0.002311			2.2	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.313	1972024	1.24		98.9	6535	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	1773376	1.12		89.3	5527	

QC Flag Legend

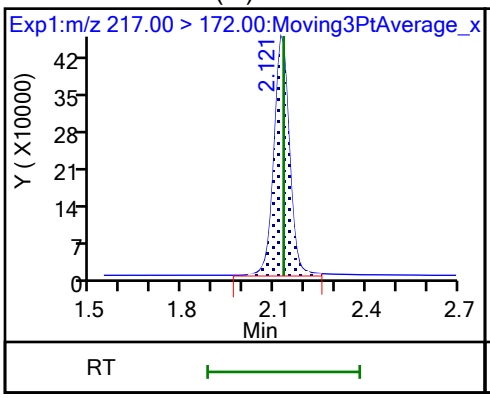
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 25-Oct-2023 09:08:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54

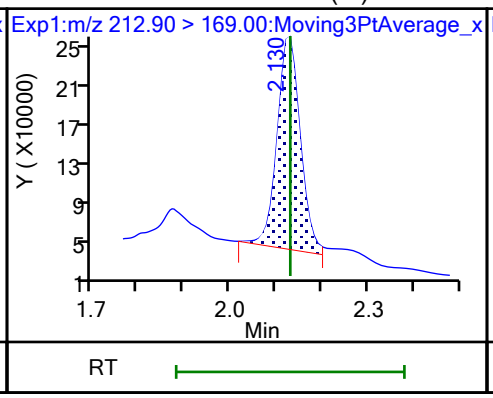
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d
Injection Date: 21-Oct-2023 07:14:16 Instrument ID: LC812
Lims ID: 460-290219-A-5-A Lab Sample ID: 200-290219-5
Client ID: MW83R-101223-1346-29
Operator ID: LC812user ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

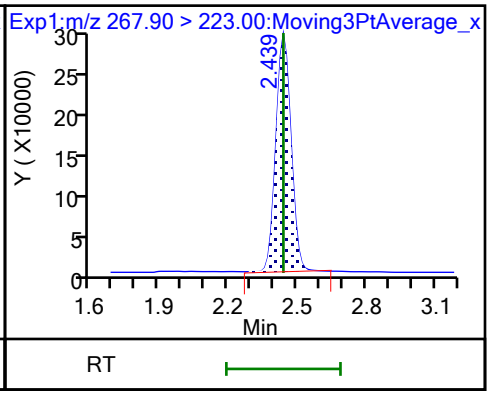
D 1 13C4 PFBA (M)



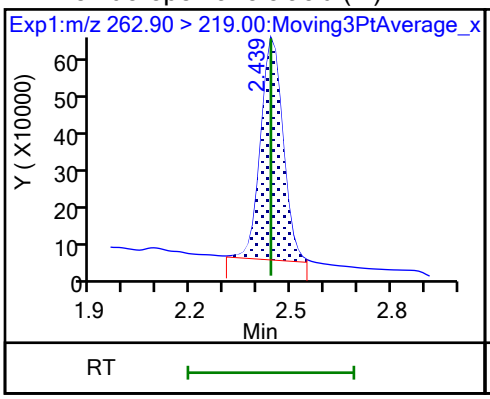
2 Perfluorobutanoic acid (M)



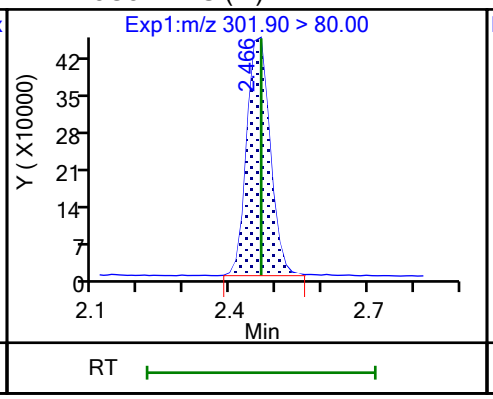
D 3 13C5 PFPeA



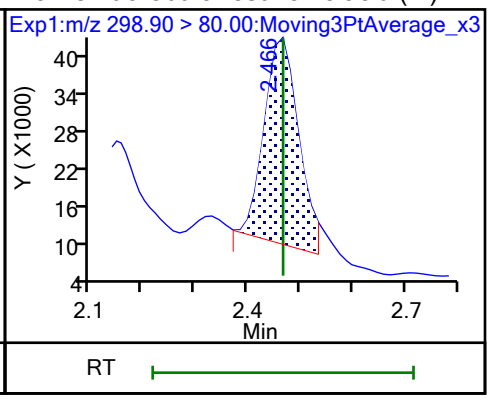
4 Perfluoropentanoic acid (M)



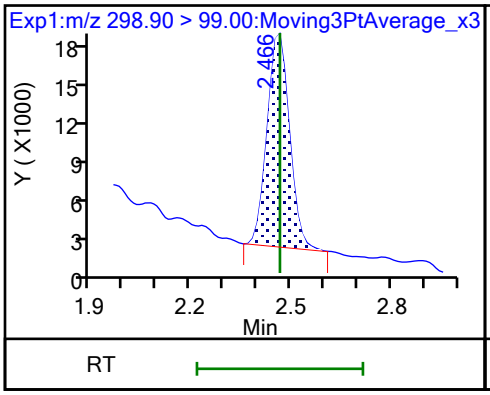
D 47 13C3 PFBS (M)



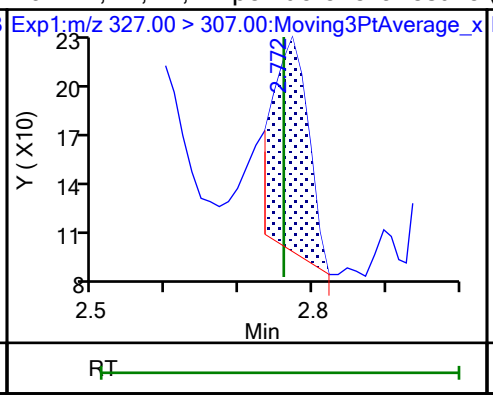
5 Perfluorobutanesulfonic acid (M)



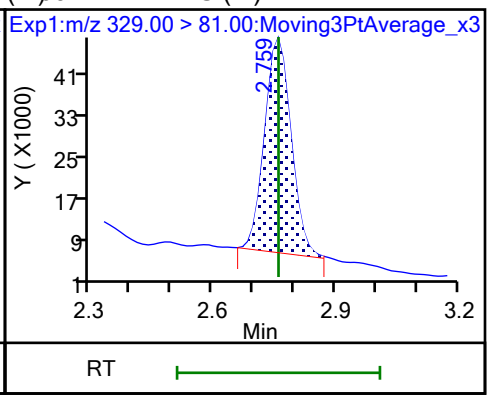
5 Perfluorobutanesulfonic acid



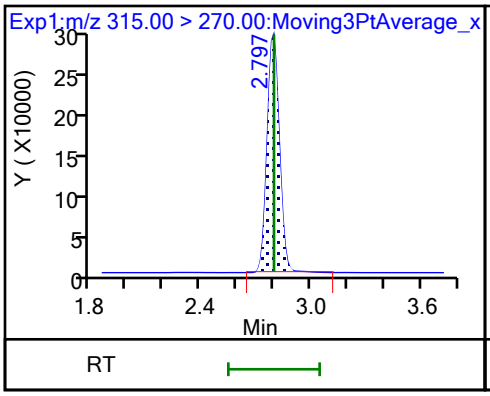
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



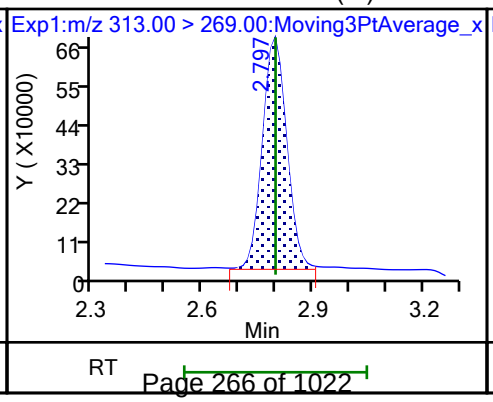
60 M2-4:2 FTS (M)



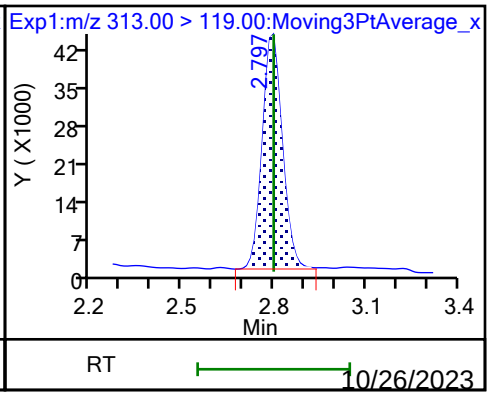
D 7 13C2 PFHxA



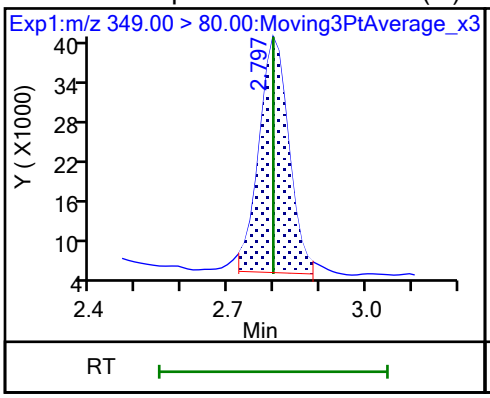
6 Perfluorohexanoic acid (M)



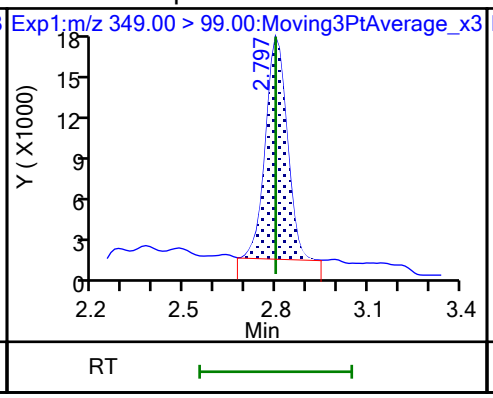
6 Perfluorohexanoic acid



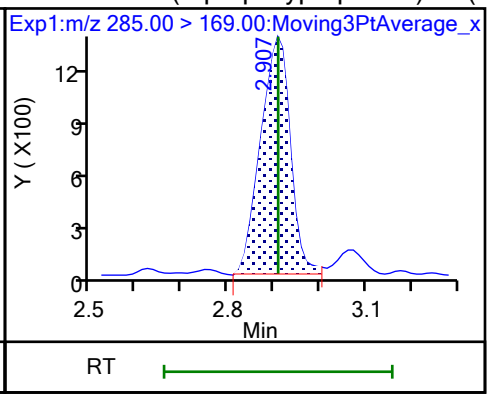
70 Perfluoropentanesulfonic acid (M)



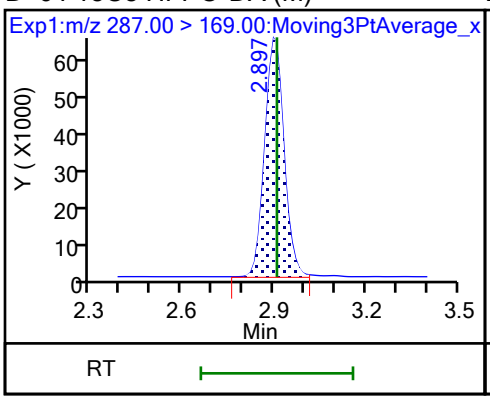
70 Perfluoropentanesulfonic acid



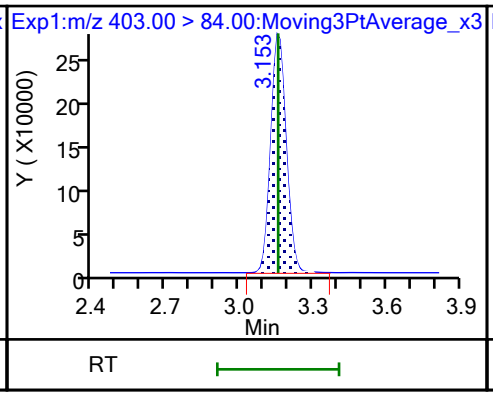
67 Perfluoro(2-propoxypropanoic) ac (M)



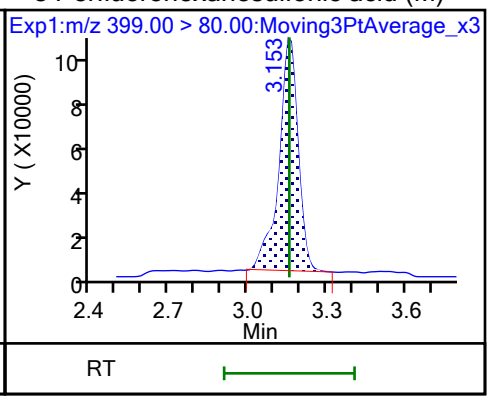
D 64 13C3 HFPO-DA (M)



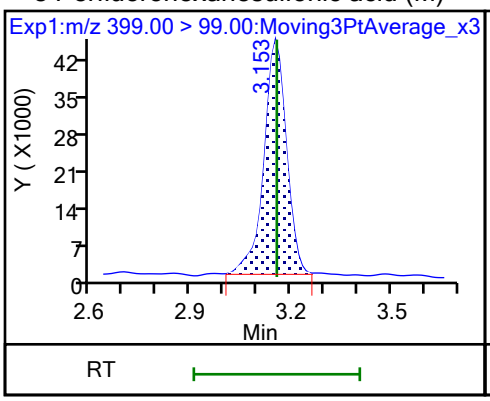
D 11 18O2 PFHxS



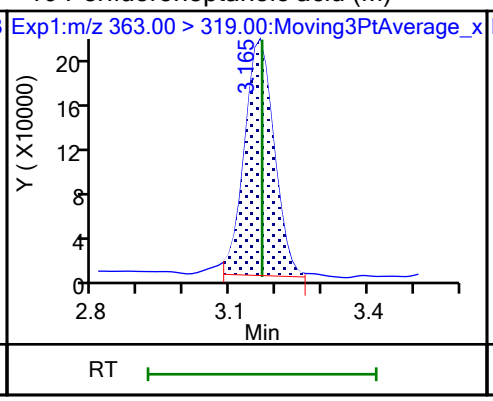
8 Perfluorohexanesulfonic acid (M)



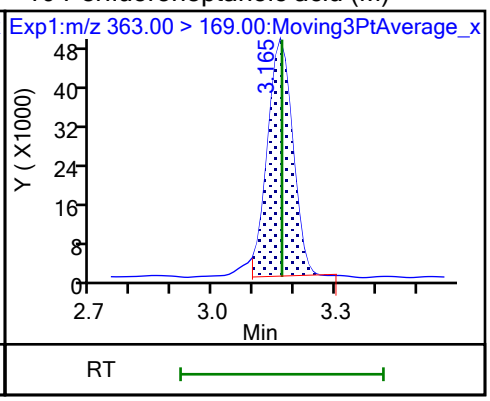
8 Perfluorohexanesulfonic acid (M)



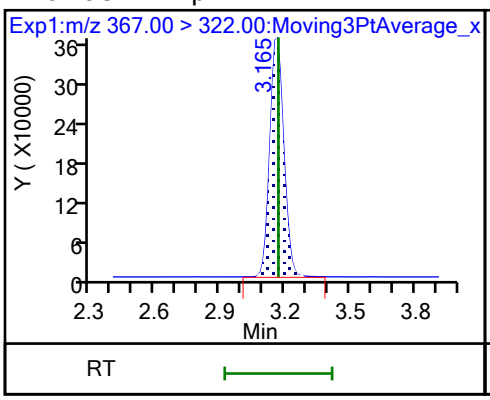
10 Perfluoroheptanoic acid (M)



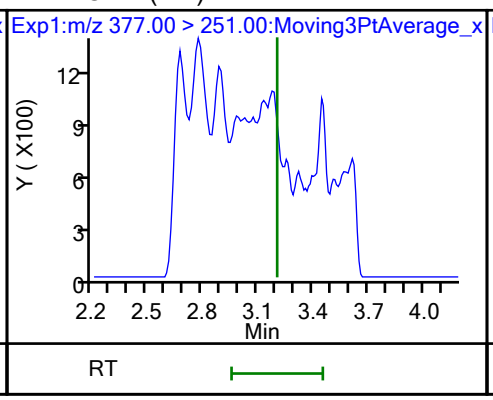
10 Perfluoroheptanoic acid (M)



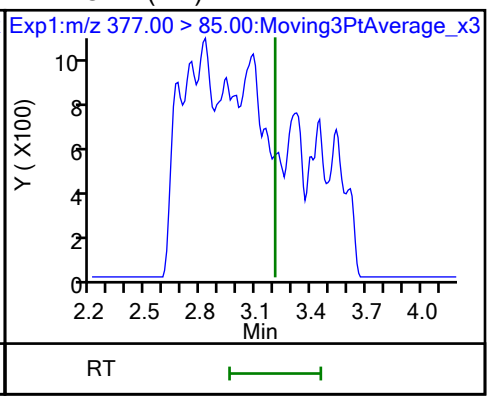
D 9 13C4 PFHpA



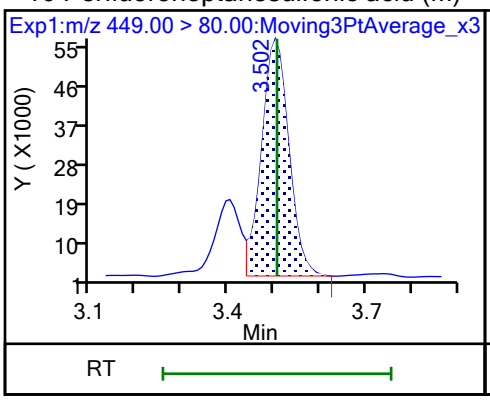
77 DONA (ND)



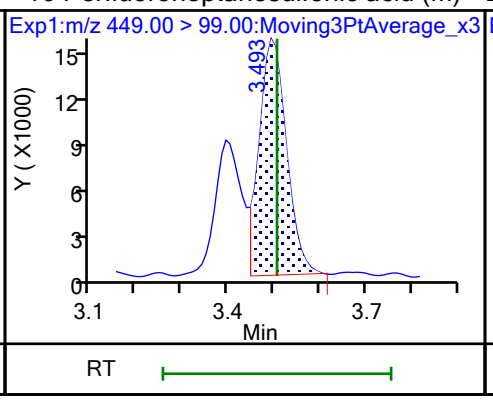
77 DONA (ND)



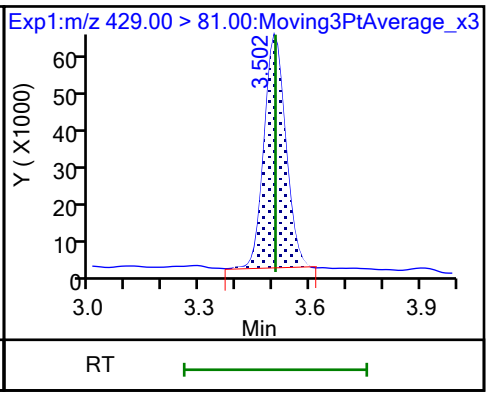
16 Perfluoroheptanesulfonic acid (M)



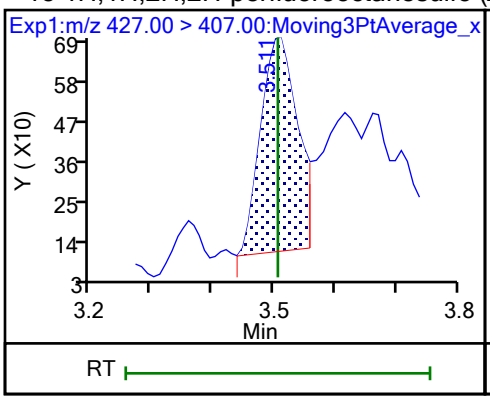
16 Perfluoroheptanesulfonic acid (M)



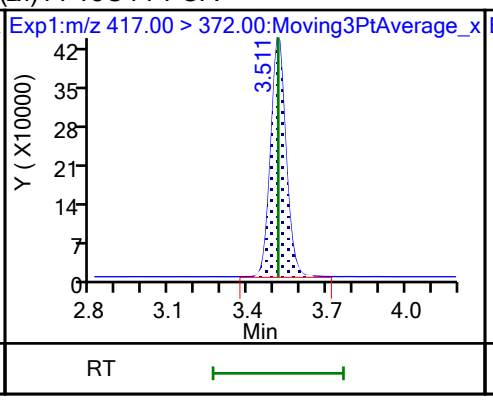
D 12 M2-6:2 FTS



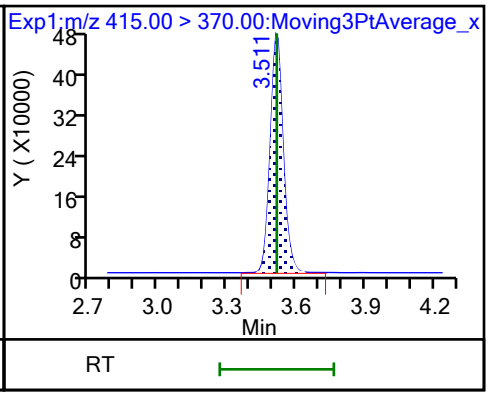
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



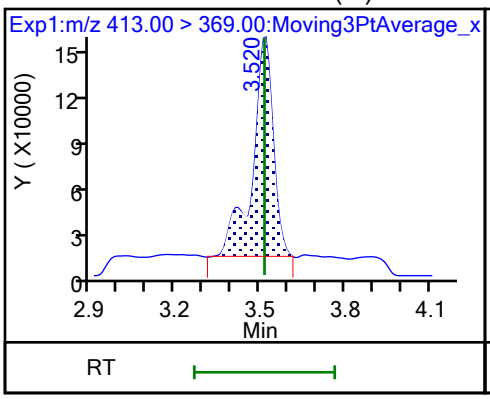
D 14 13C4 PFOA



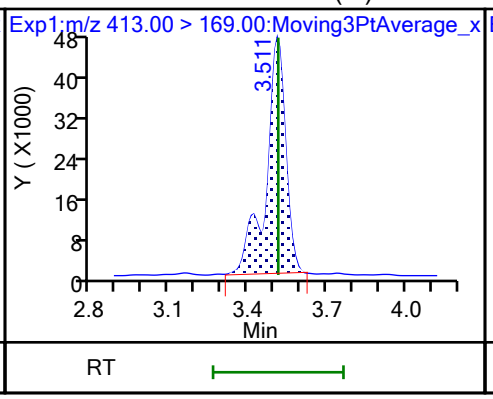
* 62 13C2 PFOA



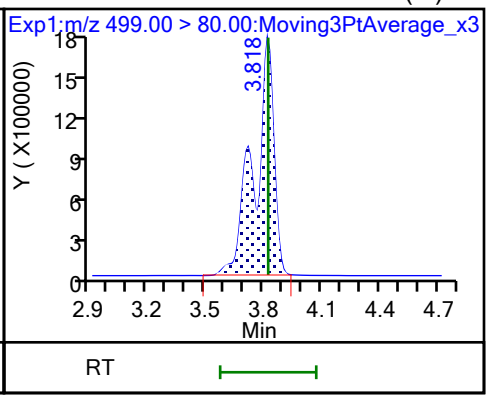
15 Perfluorooctanoic acid (M)



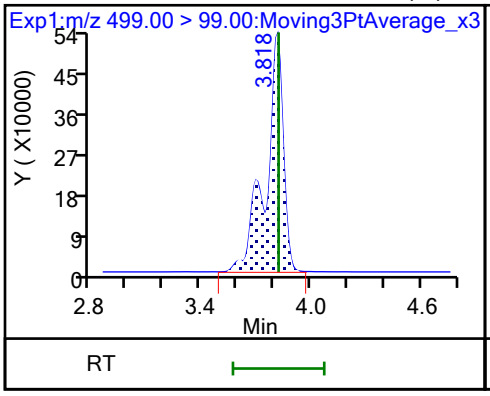
15 Perfluorooctanoic acid (M)



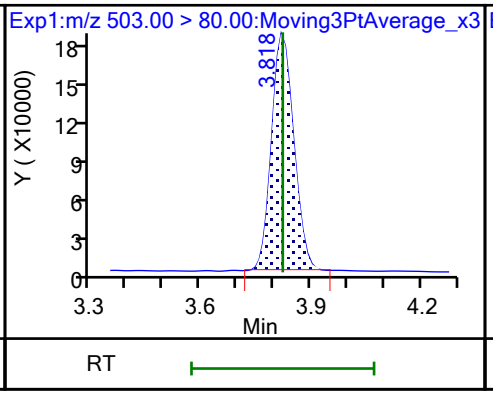
17 Perfluorooctanesulfonic acid (M)



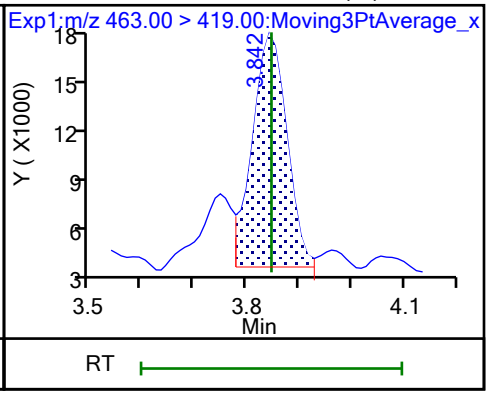
17 Perfluorooctanesulfonic acid (M)



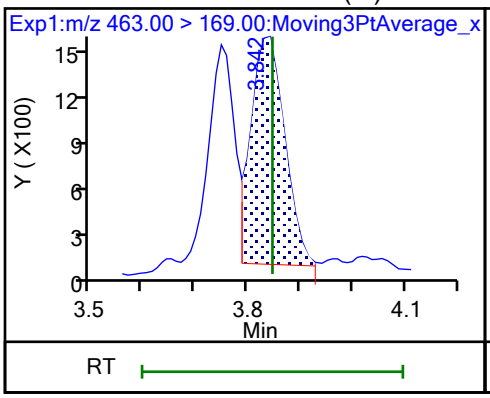
D 18 13C4 PFOS



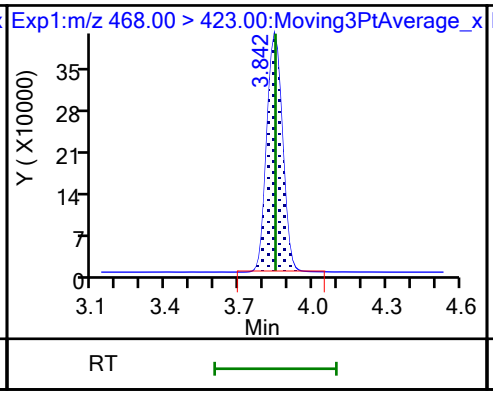
20 Perfluorononanoic acid (M)



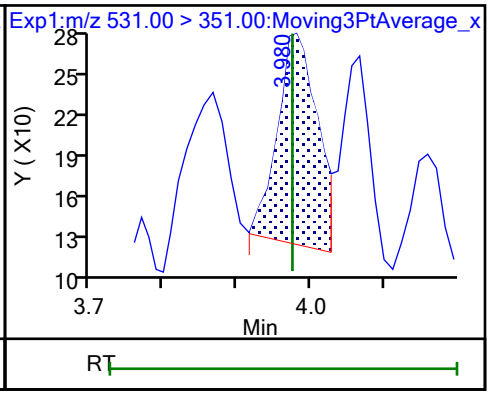
20 Perfluorononanoic acid (M)



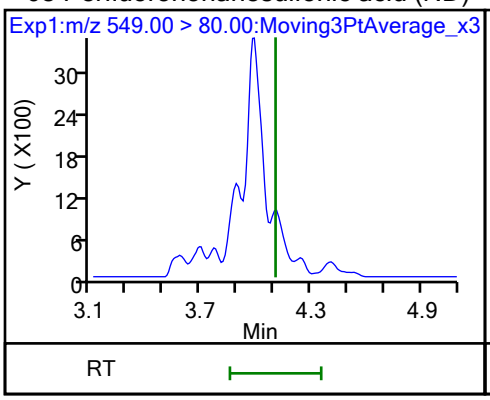
D 19 13C5 PFNA



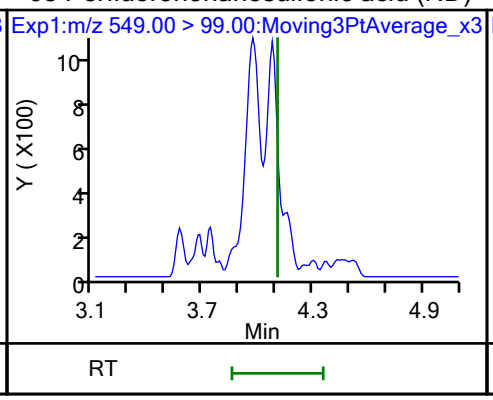
69 9-Chlorohexadecafluoro-3-oxanona (M)



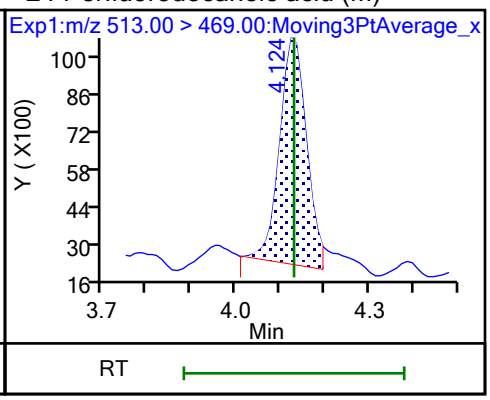
68 Perfluorononanesulfonic acid (ND)



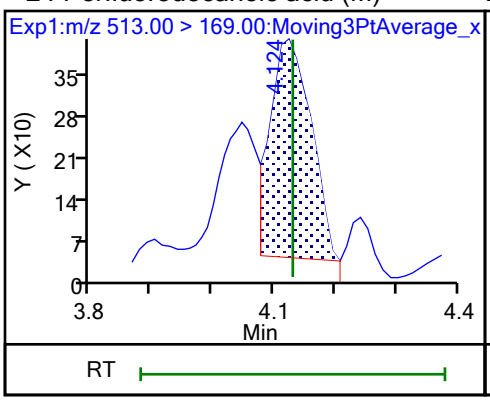
68 Perfluorononanesulfonic acid (ND)



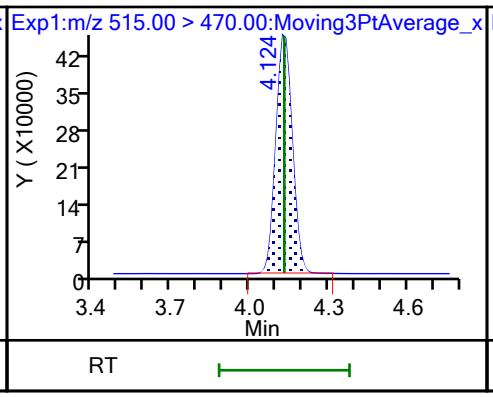
24 Perfluorodecanoic acid (M)



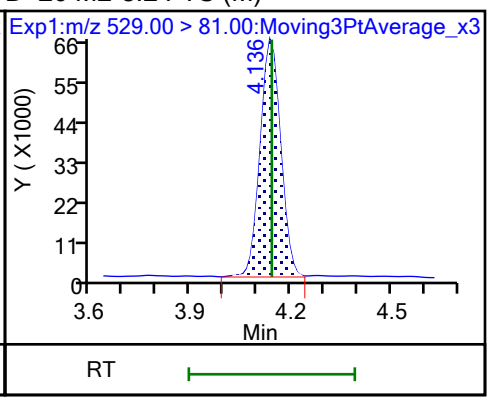
24 Perfluorodecanoic acid (M)



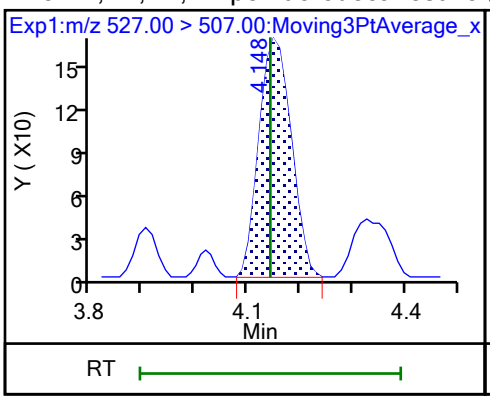
D 23 13C2 PFDA



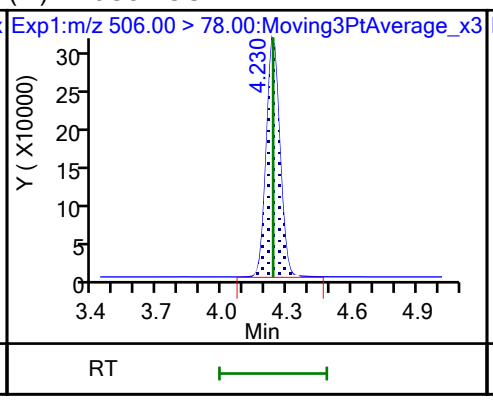
D 26 M2-8:2 FTS (M)



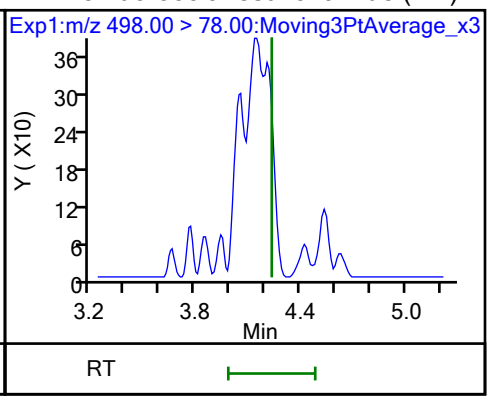
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



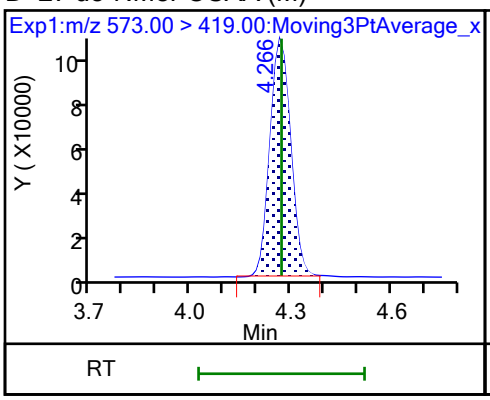
D 21 13C8 FOSA



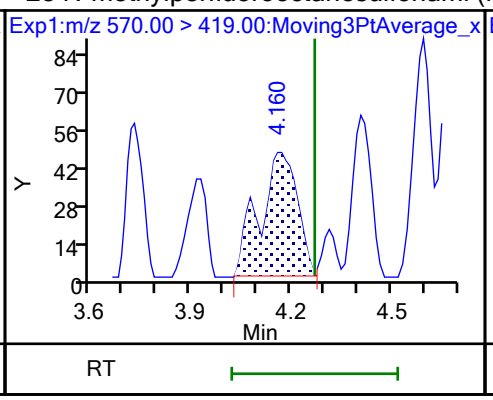
22 Perfluorooctanesulfonamide (ND)



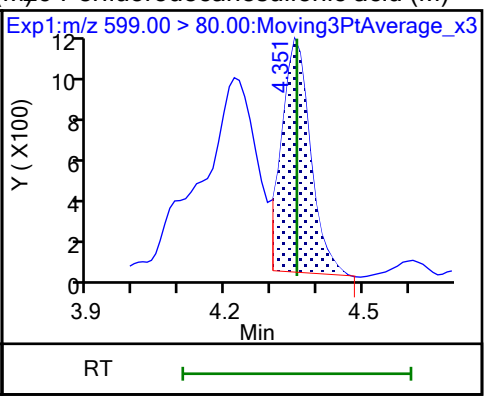
D 27 d3-NMeFOSAA (M)



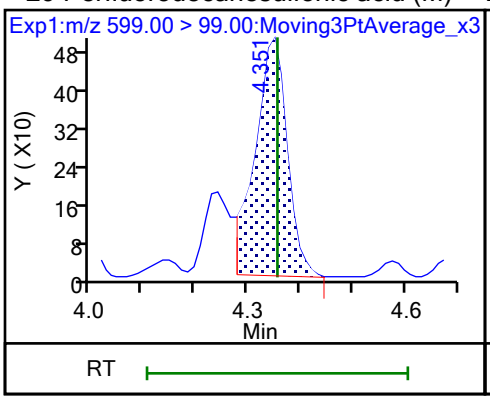
28 N-methylperfluorooctanesulfonami (M)



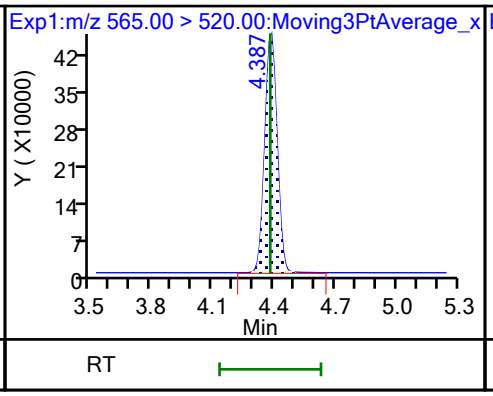
29 Perfluorodecanesulfonic acid (M)



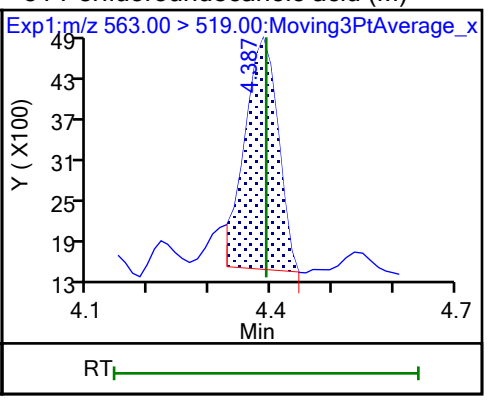
29 Perfluorodecanesulfonic acid (M)



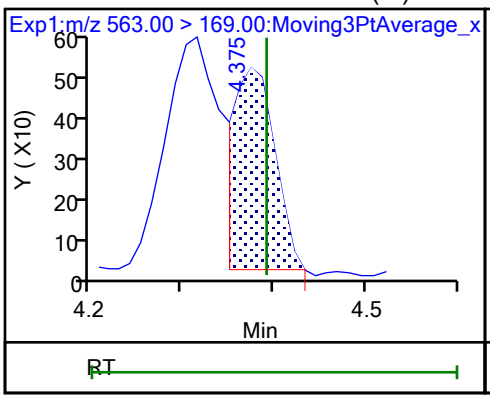
D 30 13C2 PFUnA



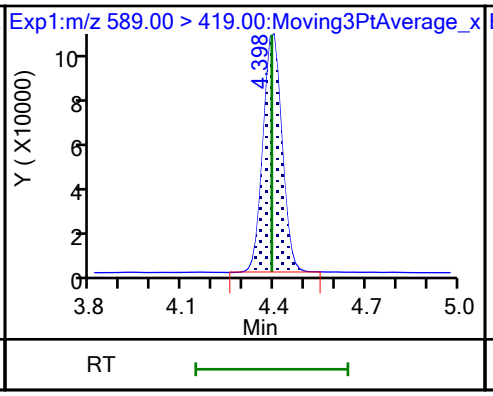
31 Perfluoroundecanoic acid (M)



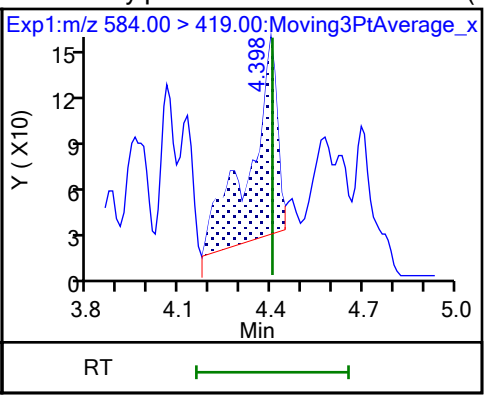
31 Perfluoroundecanoic acid (M)



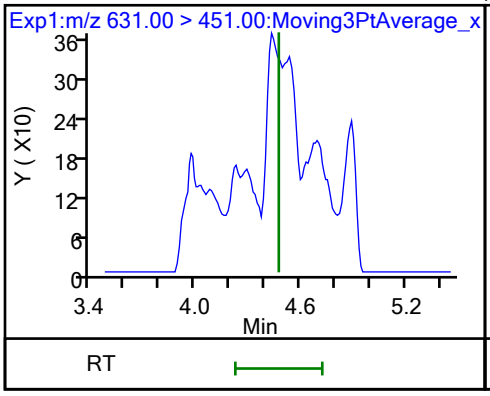
D 32 d5-NEtFOSAA



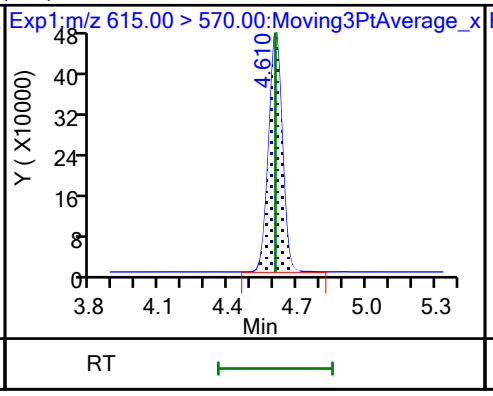
33 N-ethylperfluorooctanesulfonamid (M)



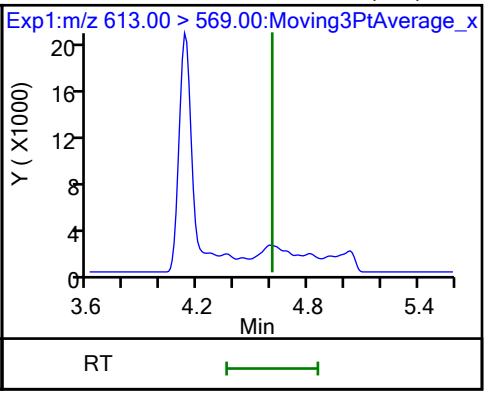
66 11-Chloroeicosafluoro-3-oxaundec (ND)



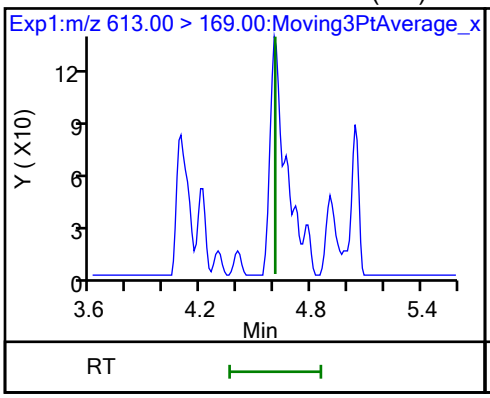
D 36 13C2 PFDoA



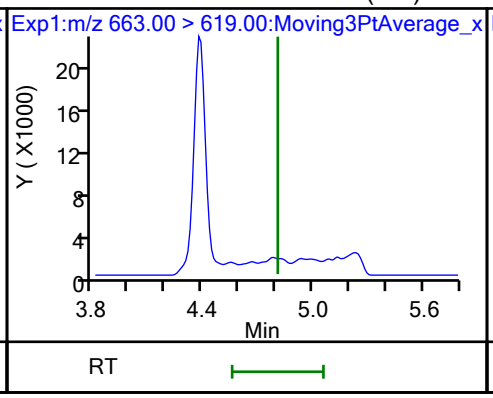
37 Perfluorododecanoic acid (ND)



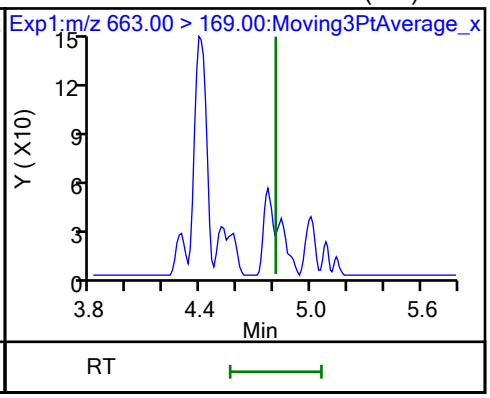
37 Perfluorododecanoic acid (ND)



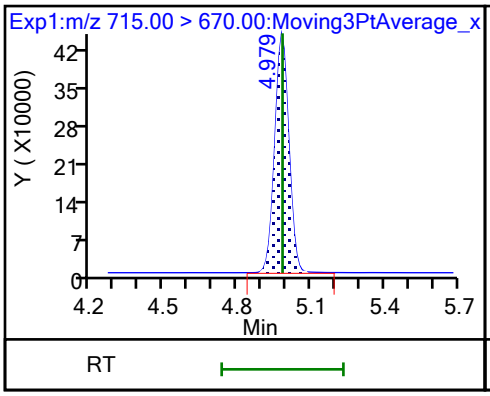
41 Perfluorotridecanoic acid (ND)



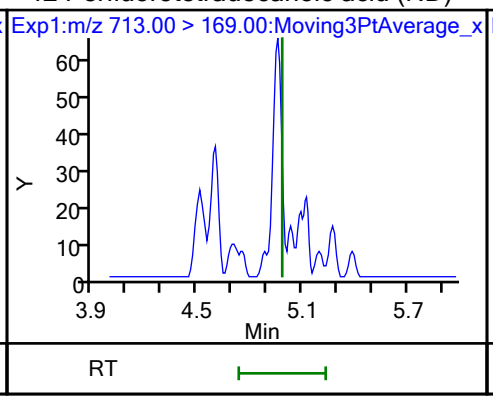
41 Perfluorotridecanoic acid (ND)



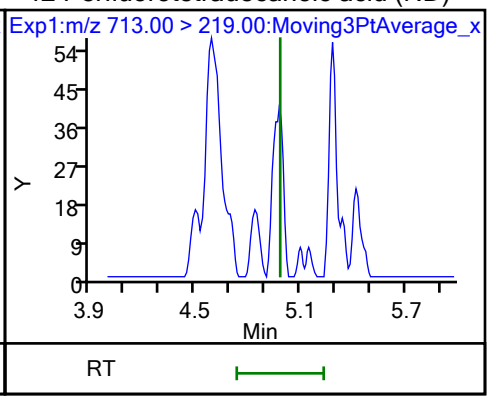
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

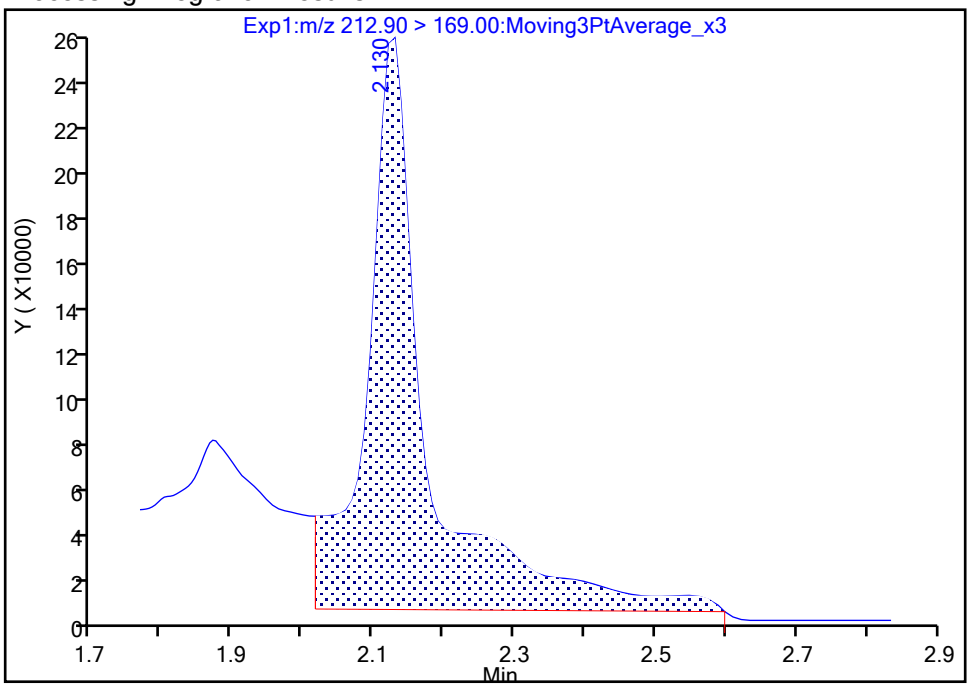
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

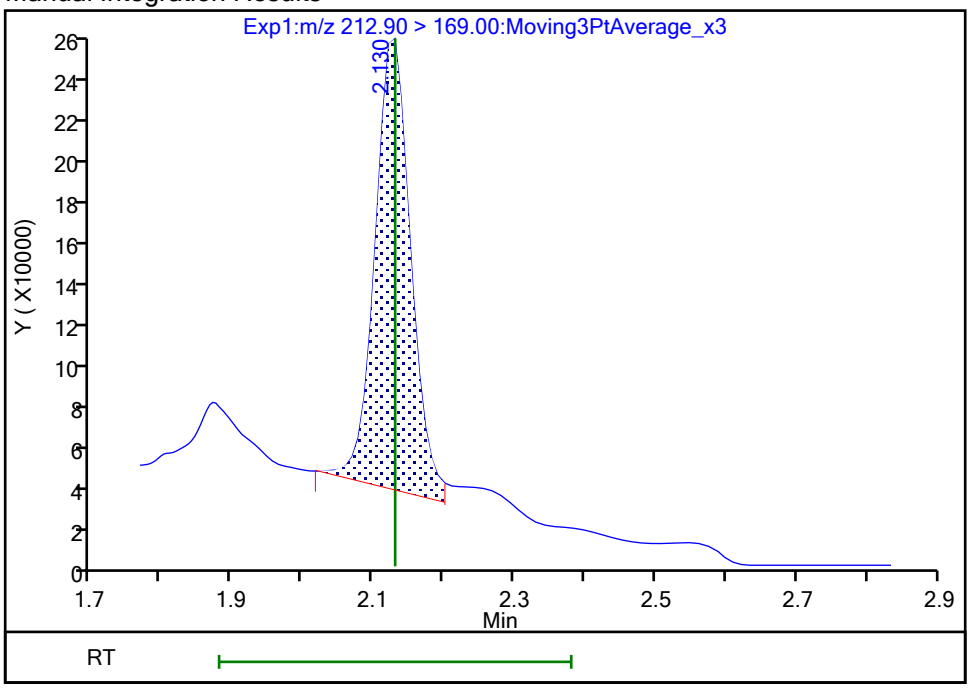
Processing Integration Results

RT: 2.13
Area: 1543864
Amount: 1.301595
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 781496
Amount: 0.638672
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

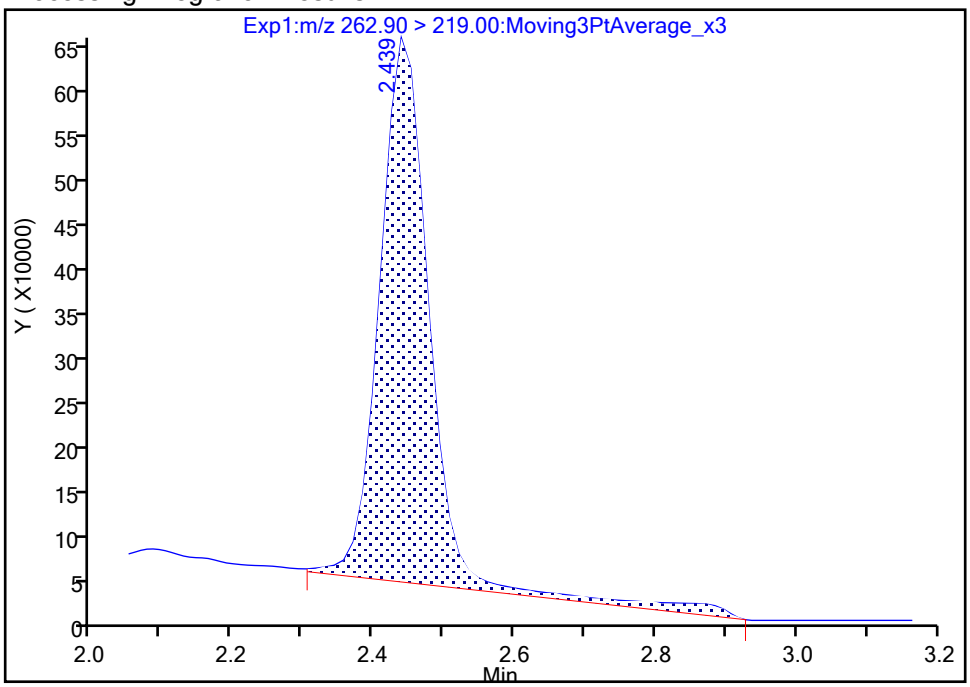
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

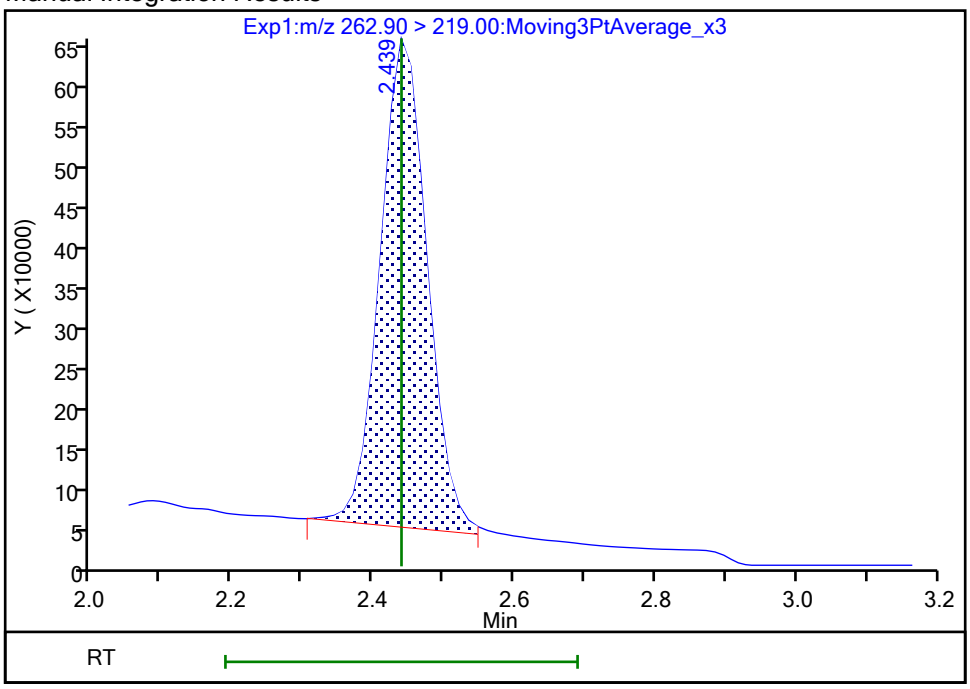
Processing Integration Results

RT: 2.44
Area: 3071265
Amount: 2.654692
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 2813124
Amount: 2.431564
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

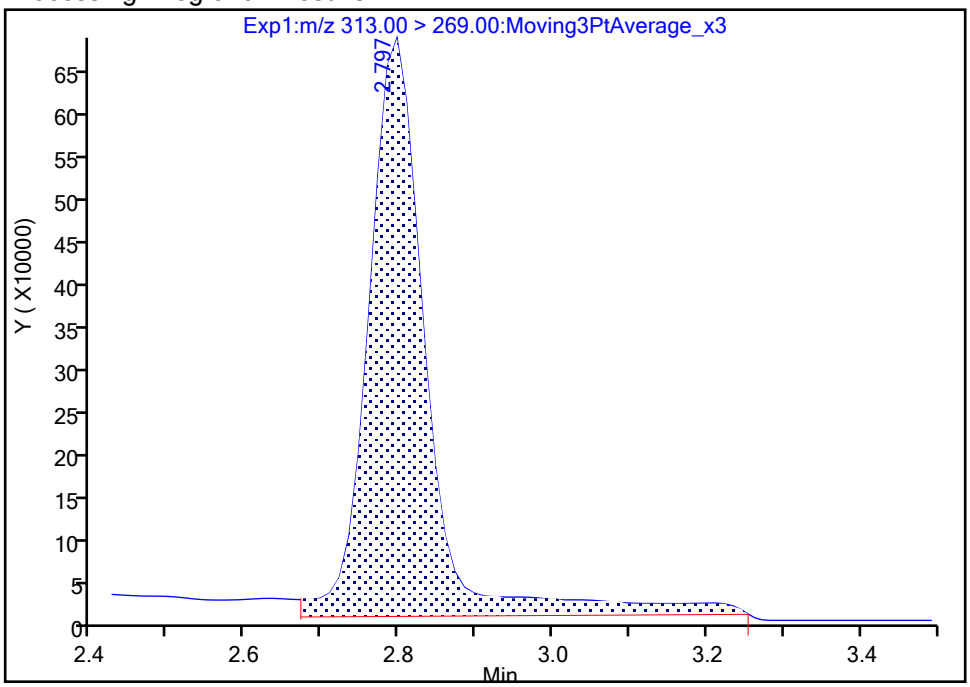
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

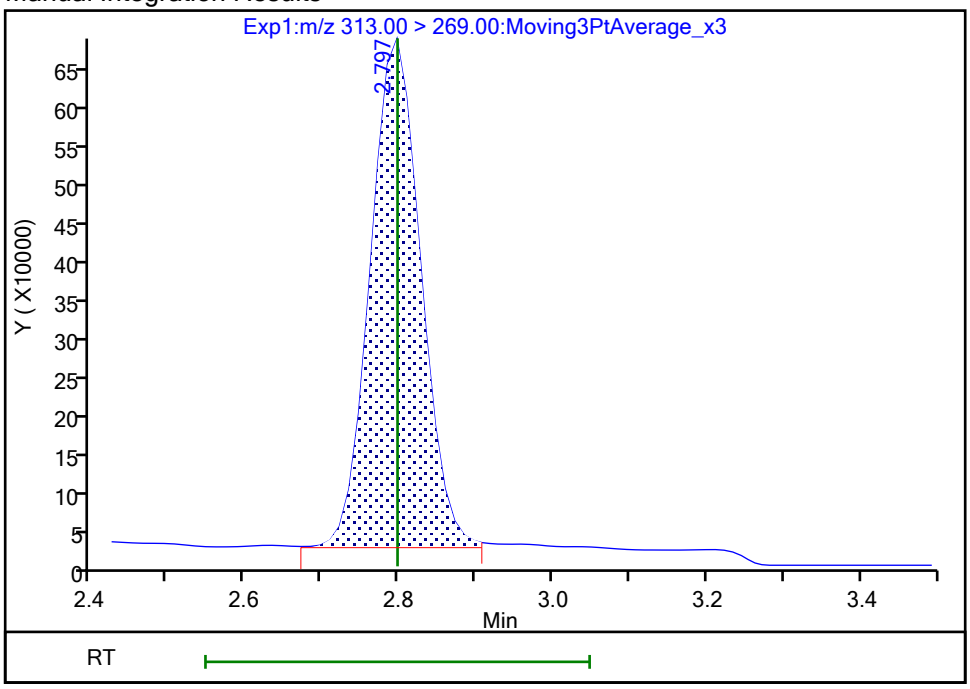
Processing Integration Results

RT: 2.80
Area: 3613204
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 2995363
Amount: 2.428690
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

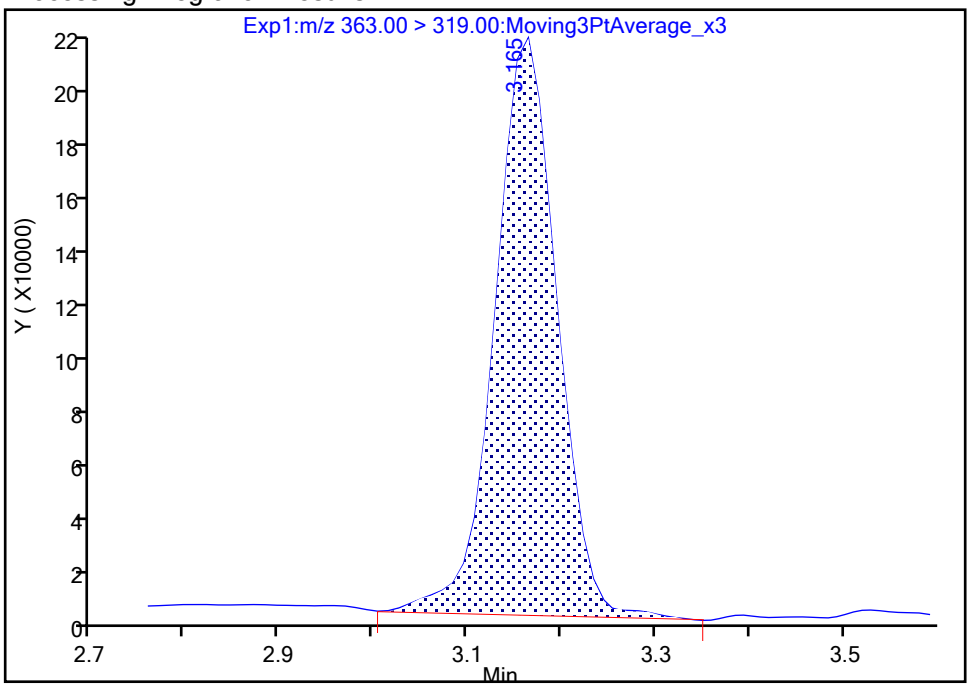
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

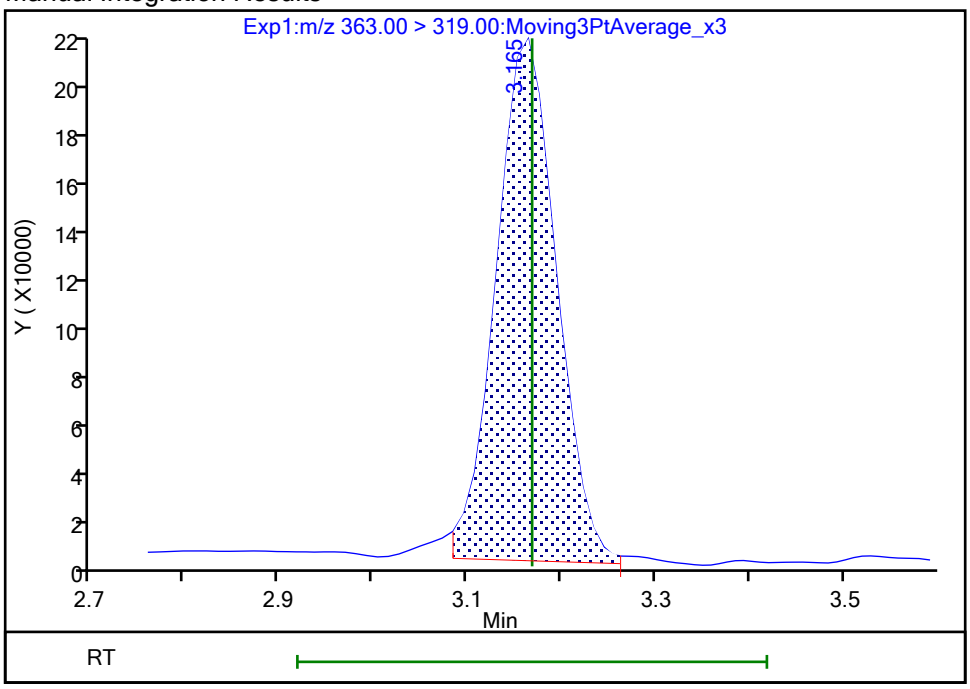
Processing Integration Results

RT: 3.16
Area: 930702
Amount: 0.632053
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 902767
Amount: 0.613082
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

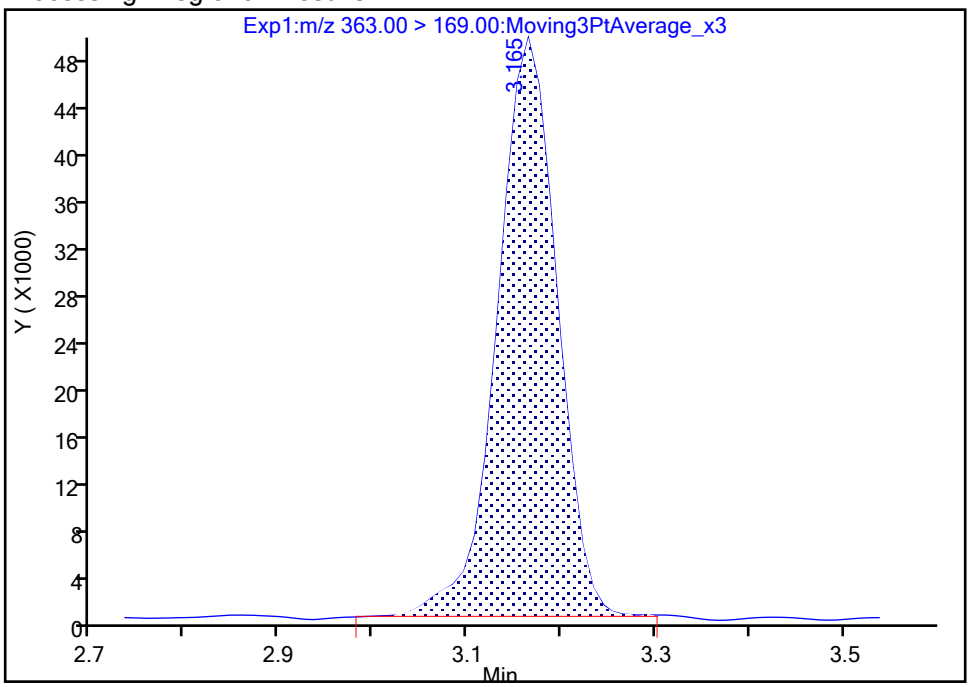
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

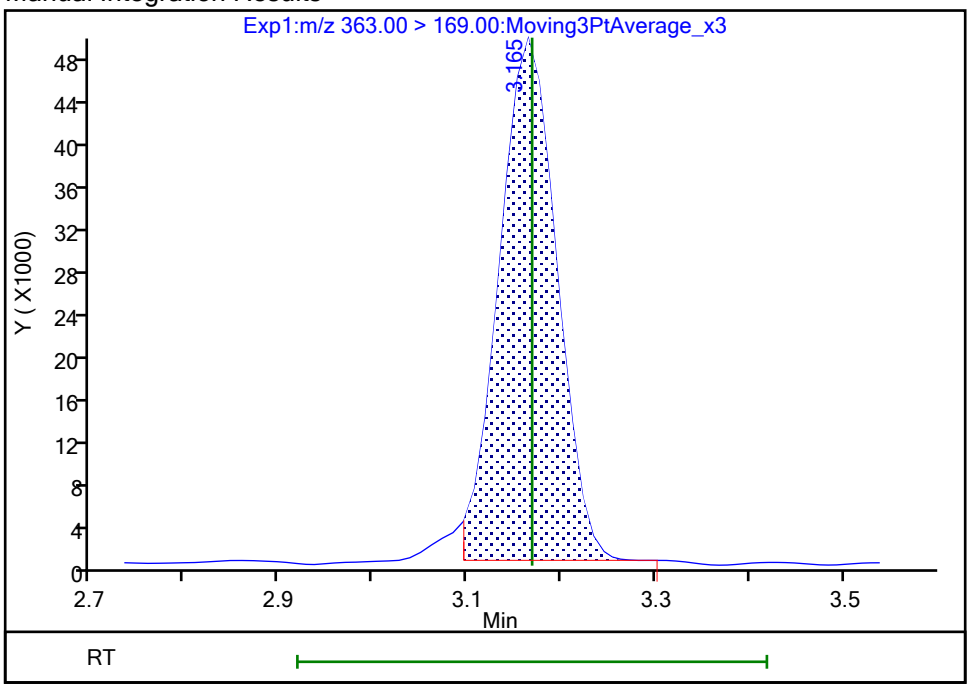
Processing Integration Results

RT: 3.16
Area: 218528
Amount: 0.632053
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 211595
Amount: 0.613082
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

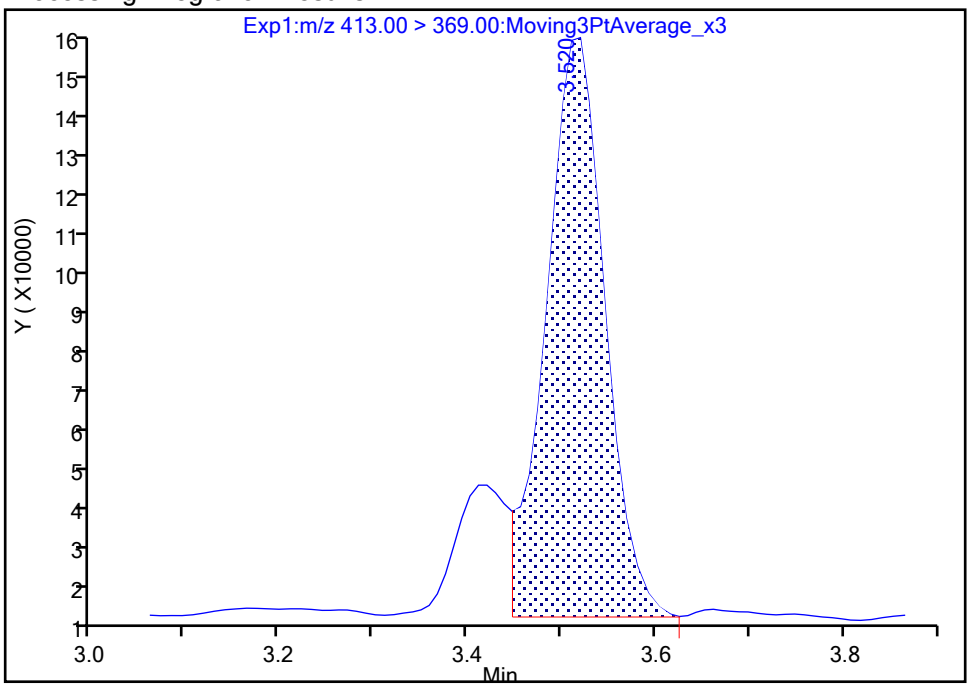
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

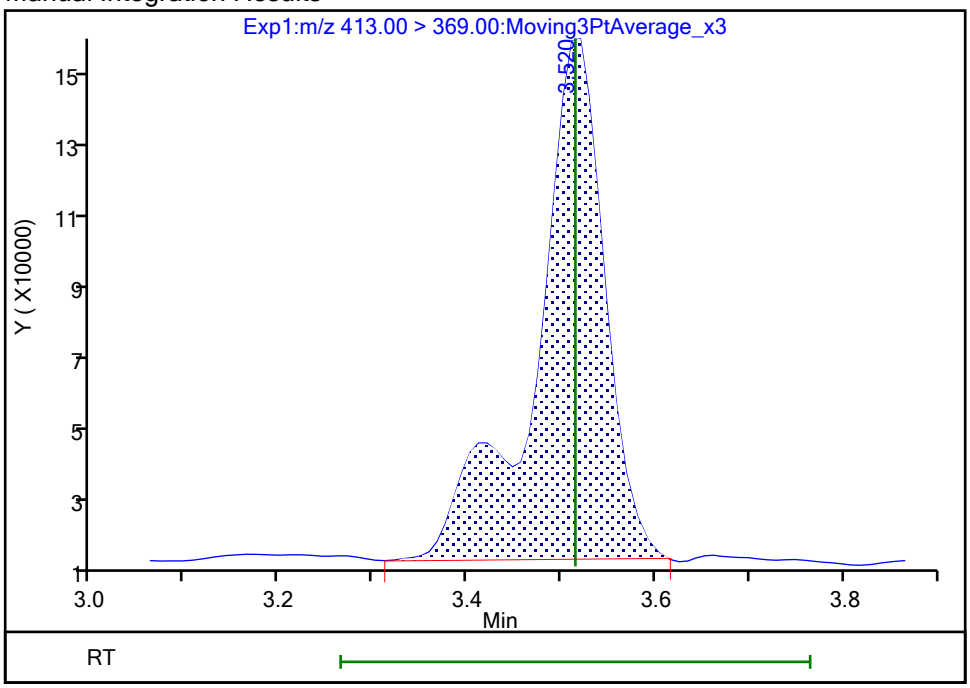
Processing Integration Results

RT: 3.52
Area: 606695
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 720901
Amount: 0.485359
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

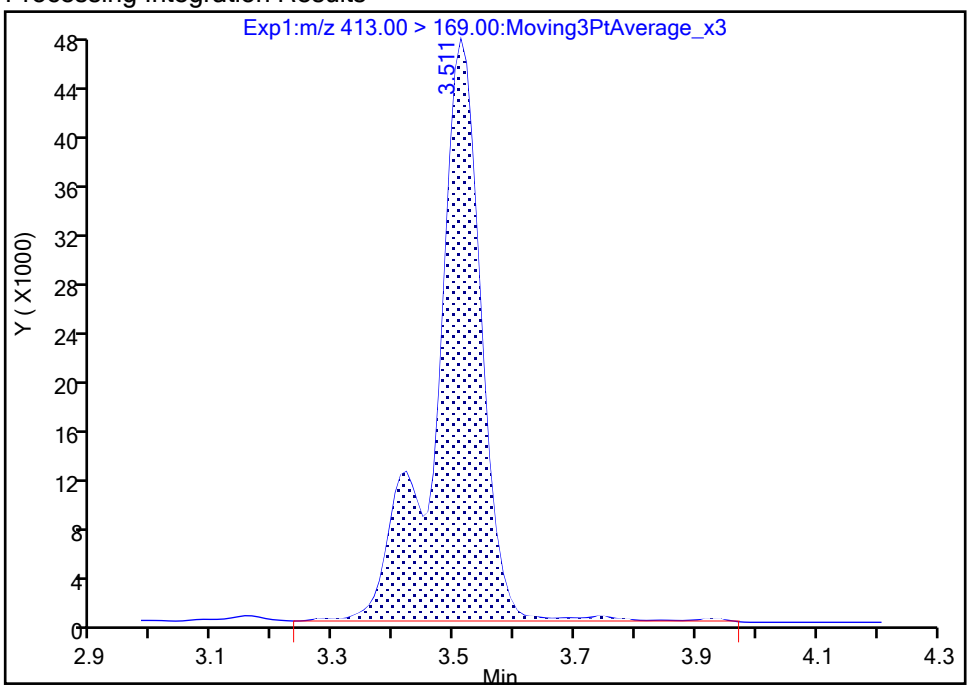
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

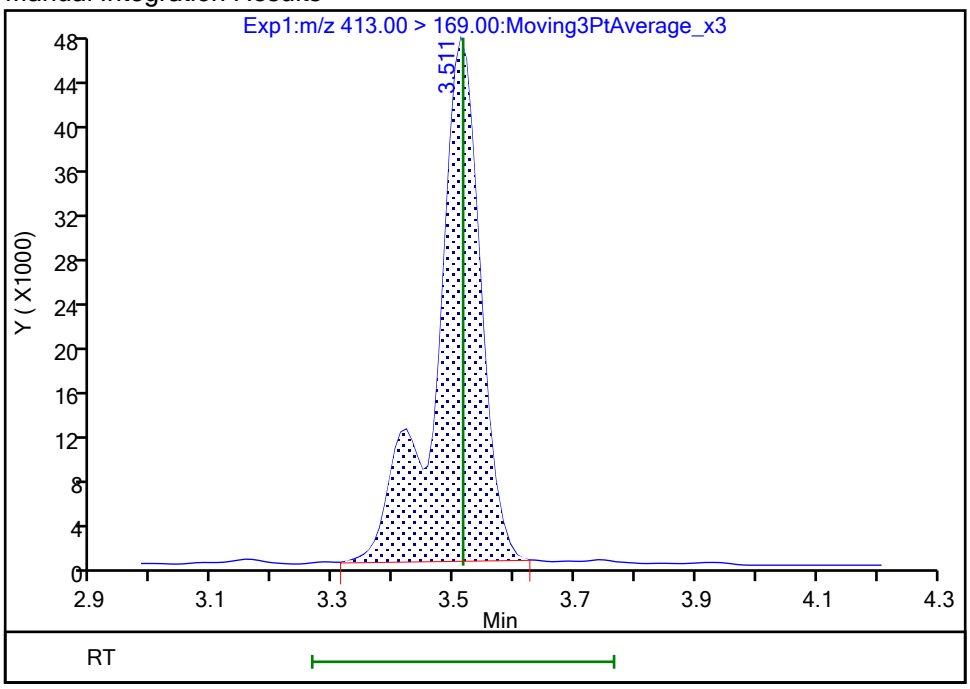
Processing Integration Results

RT: 3.51
Area: 255689
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 245342
Amount: 0.485359
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

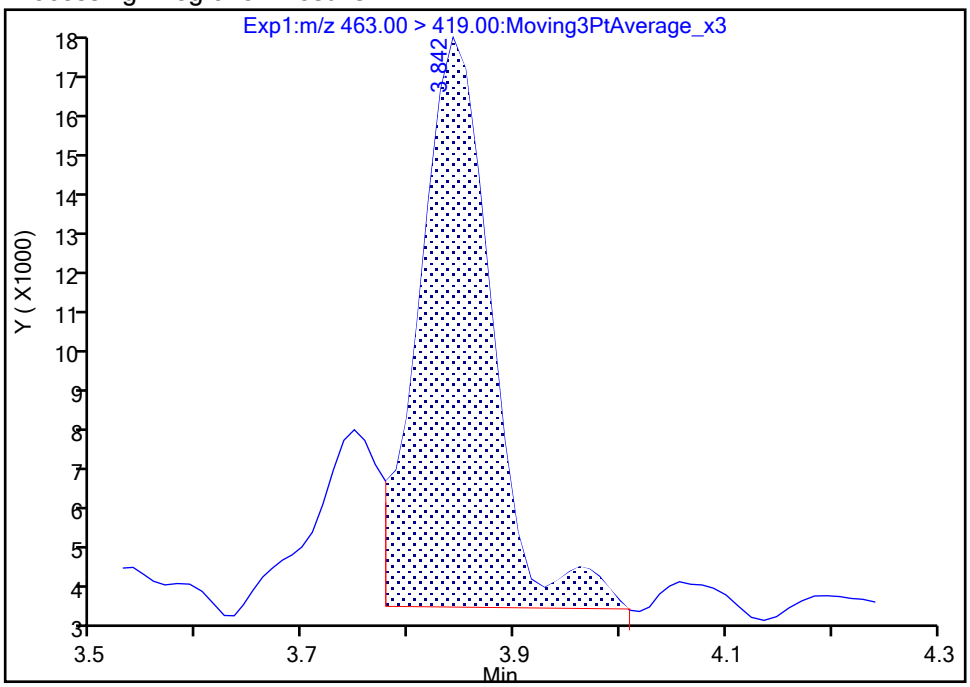
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

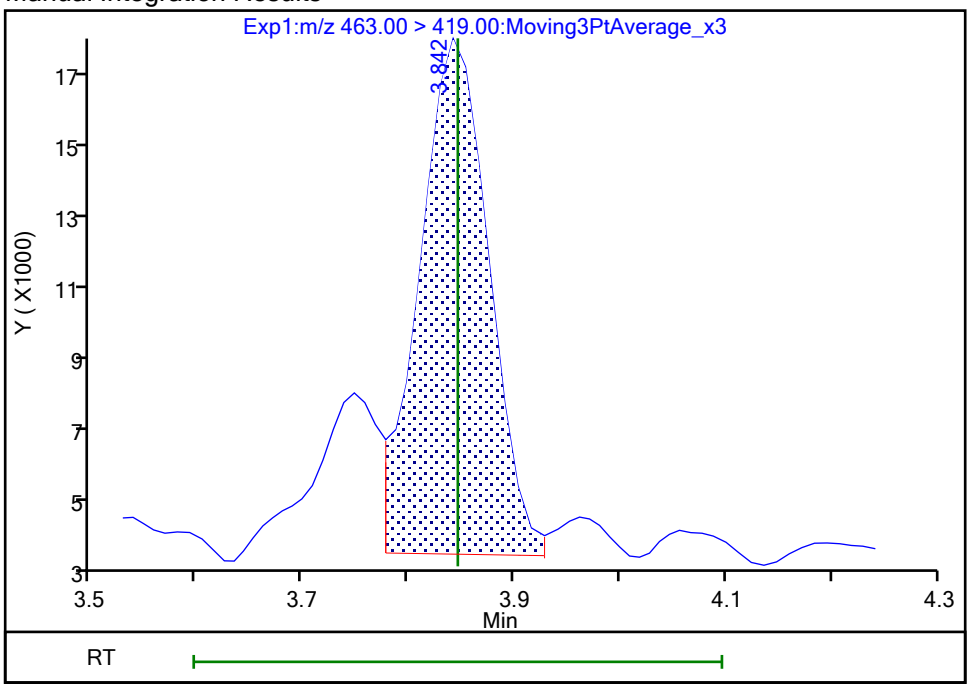
Processing Integration Results

RT: 3.84
Area: 65205
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 61960
Amount: 0.043502
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

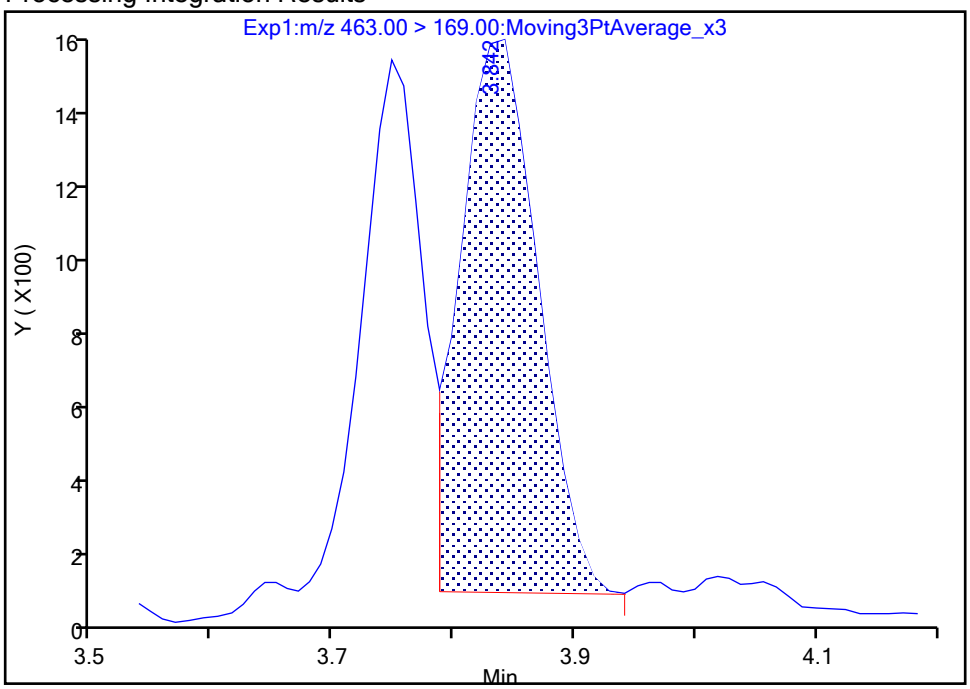
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

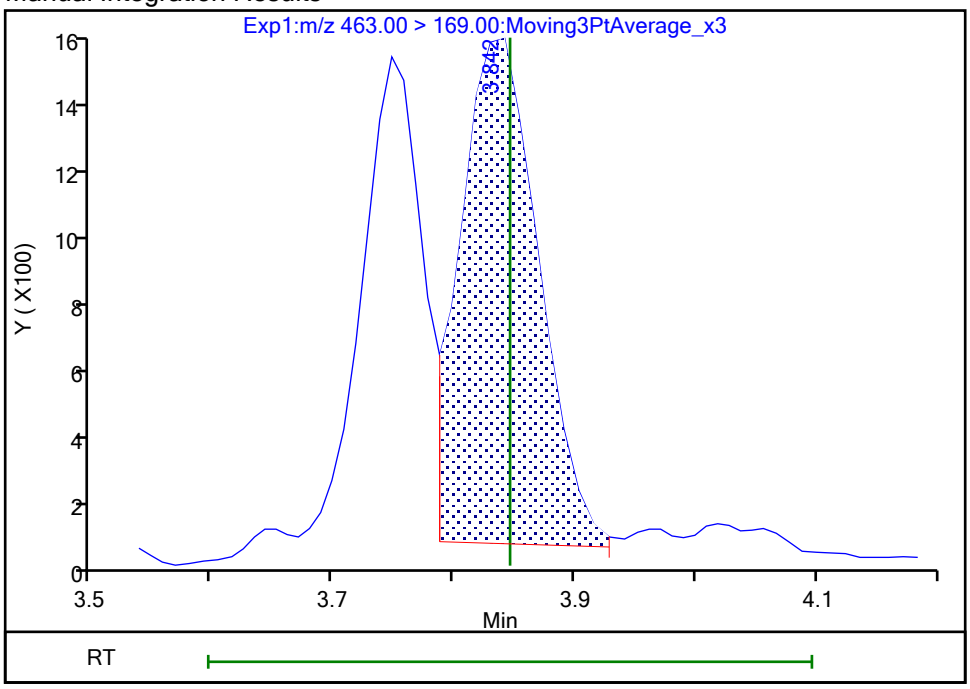
Processing Integration Results

RT: 3.84
Area: 6515
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 6632
Amount: 0.043502
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

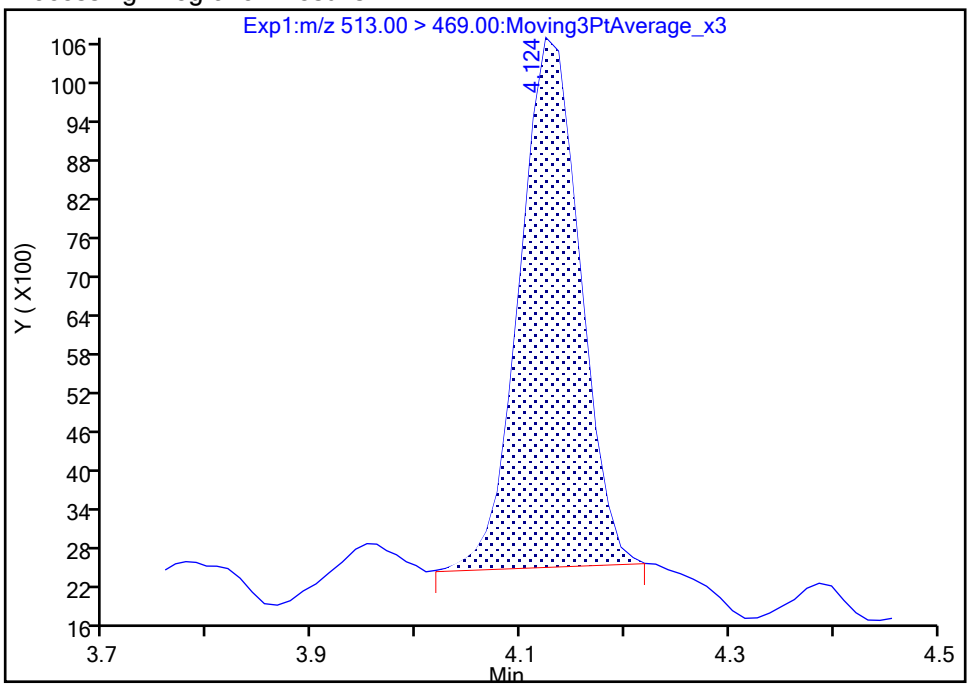
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

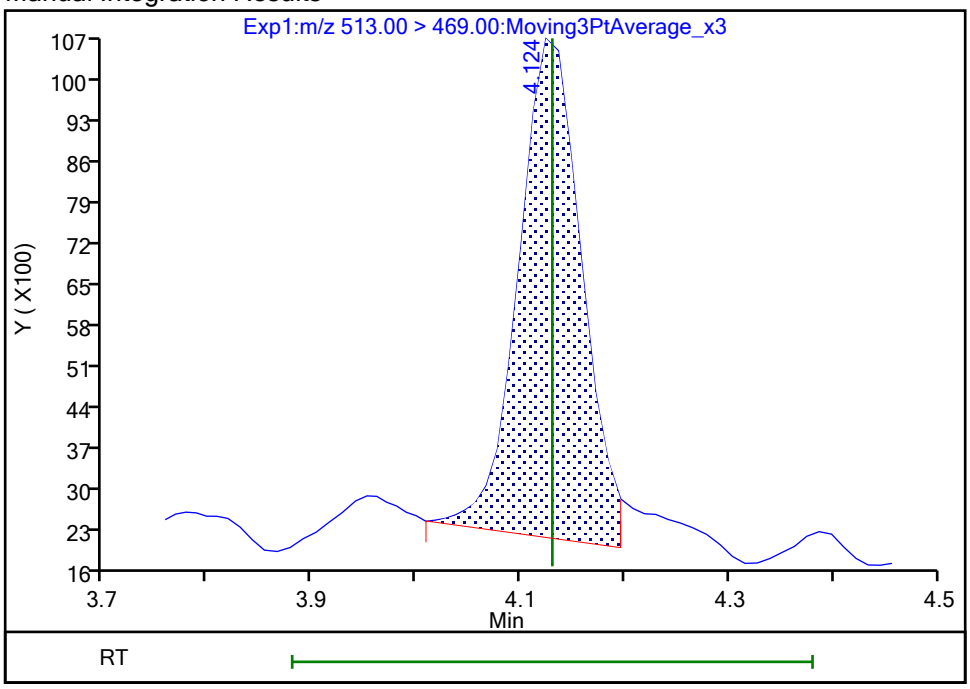
Processing Integration Results

RT: 4.12
Area: 33129
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 36209
Amount: 0.022857
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

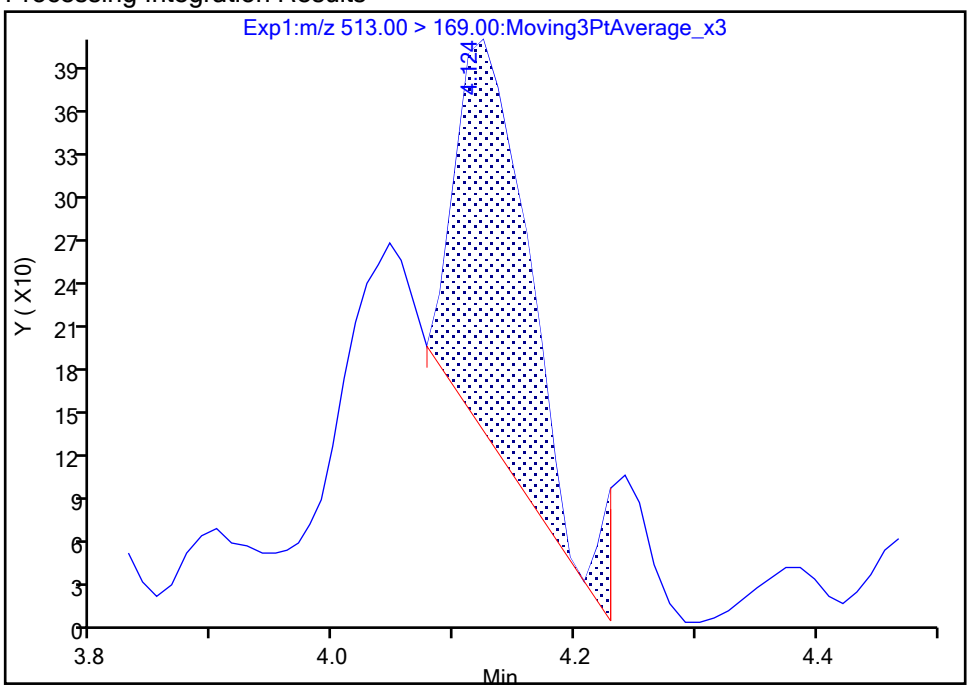
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

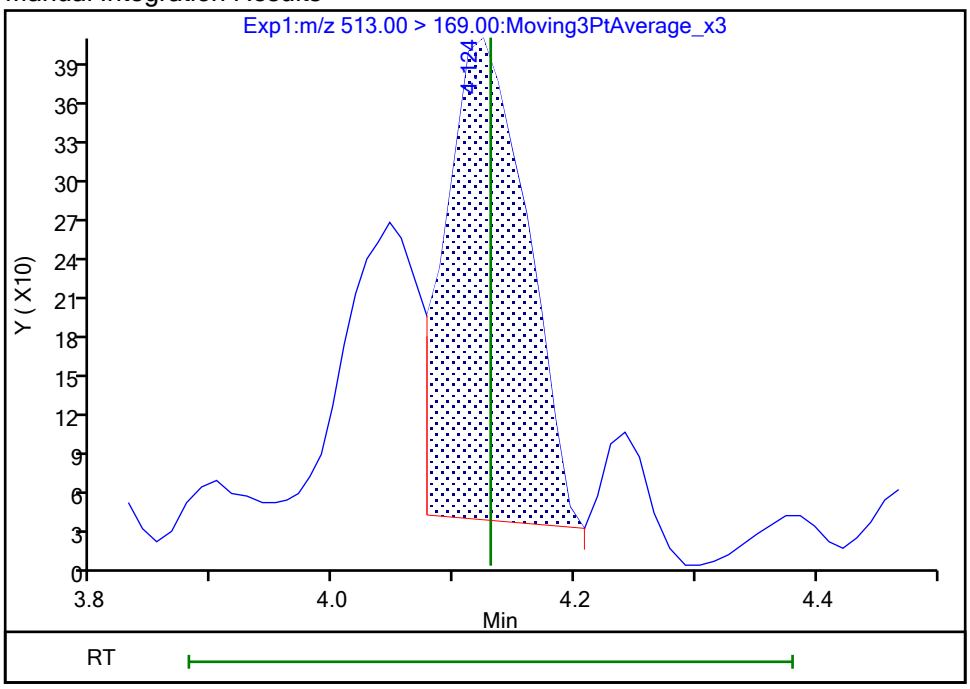
Processing Integration Results

RT: 4.12
Area: 1170
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 1704
Amount: 0.022857
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

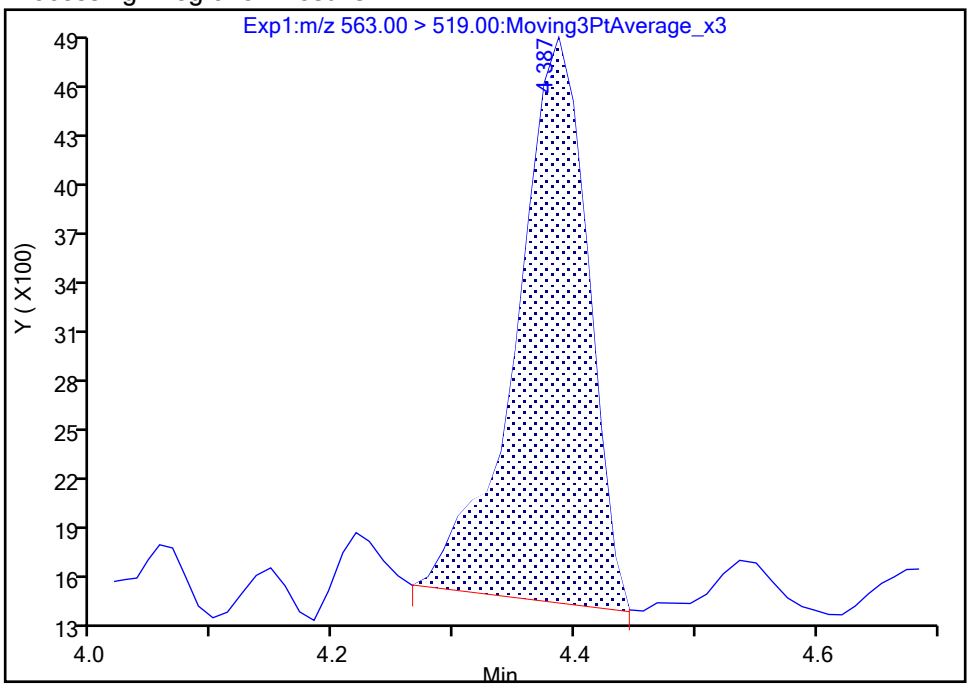
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

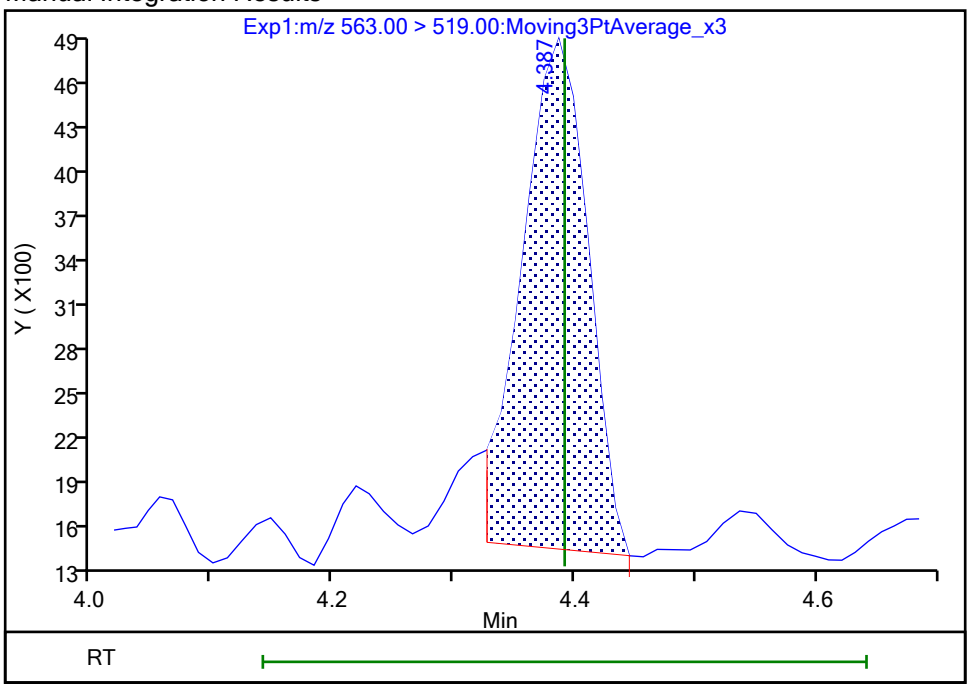
Processing Integration Results

RT: 4.39
Area: 14215
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 13050
Amount: 0.008296
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

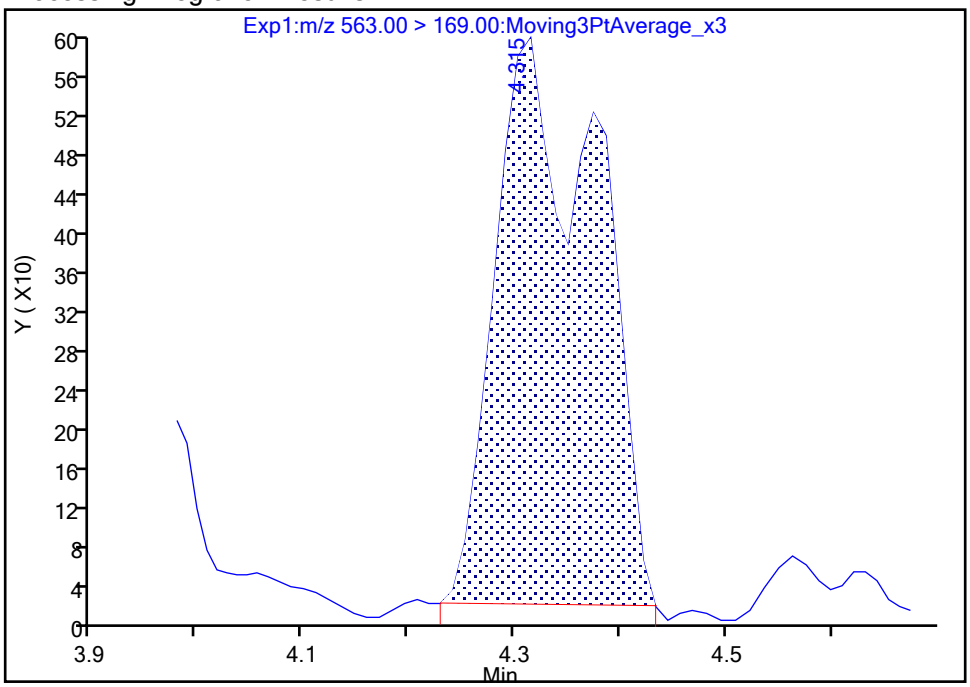
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

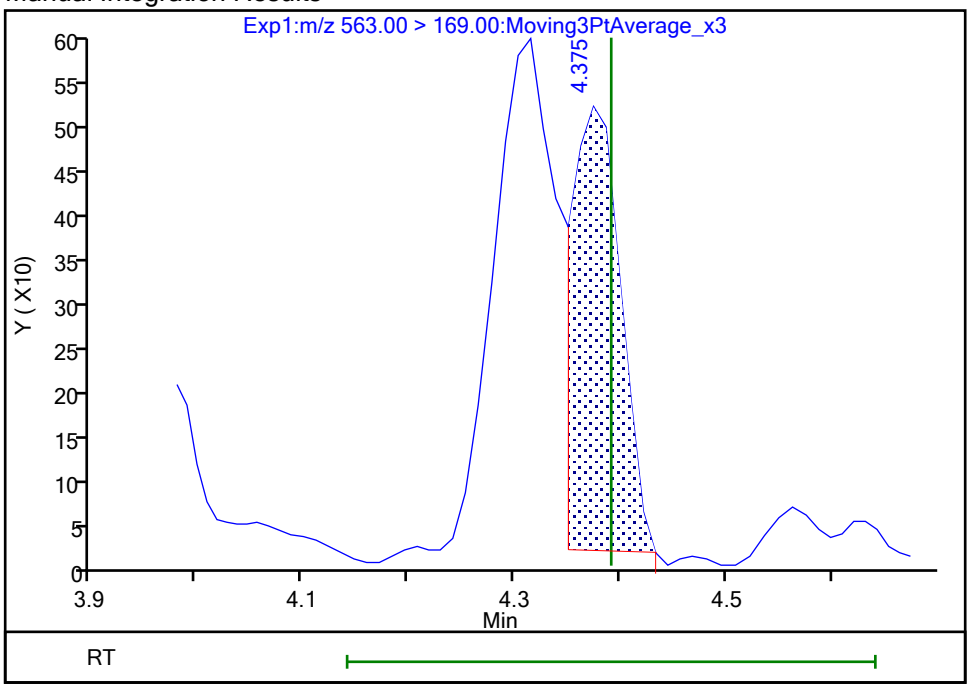
Processing Integration Results

RT: 4.32
Area: 3833
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 1525
Amount: 0.008296
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

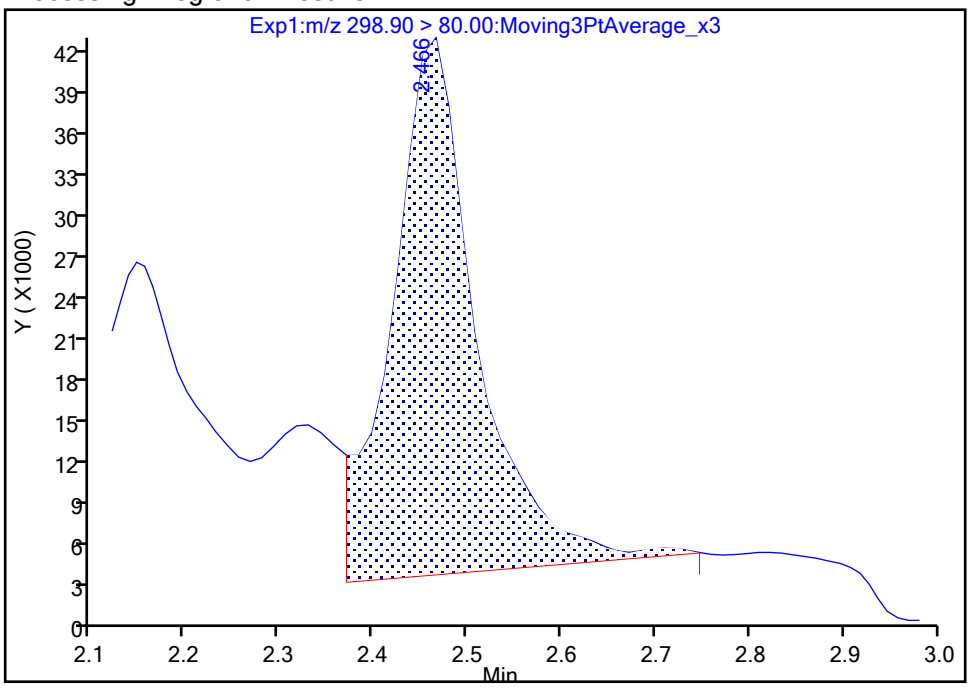
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

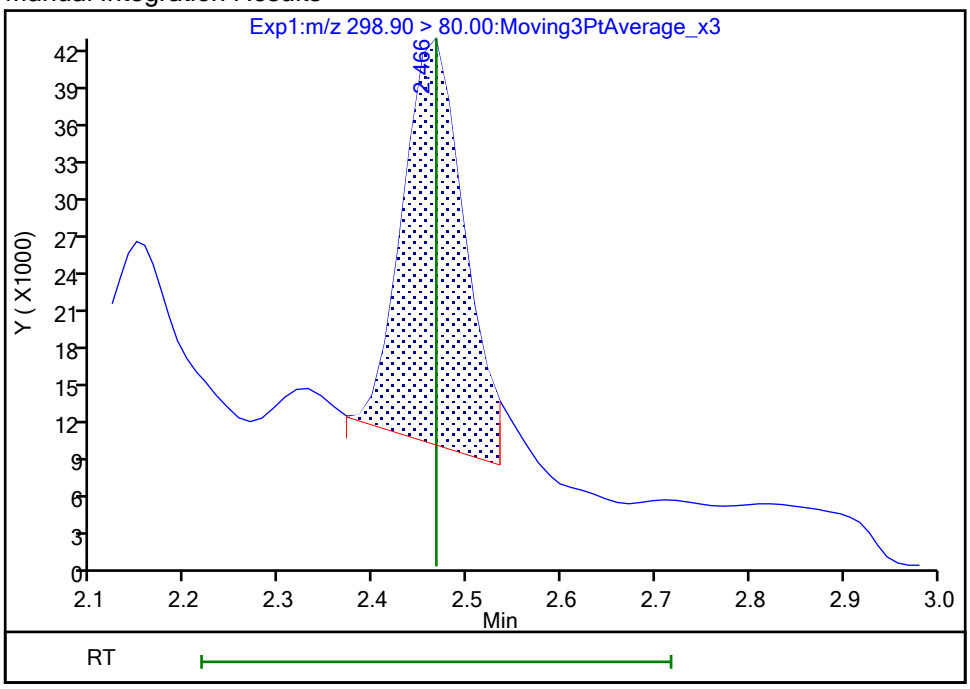
Processing Integration Results

RT: 2.47
Area: 245699
Amount: 0.159769
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 148727
Amount: 0.096712
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

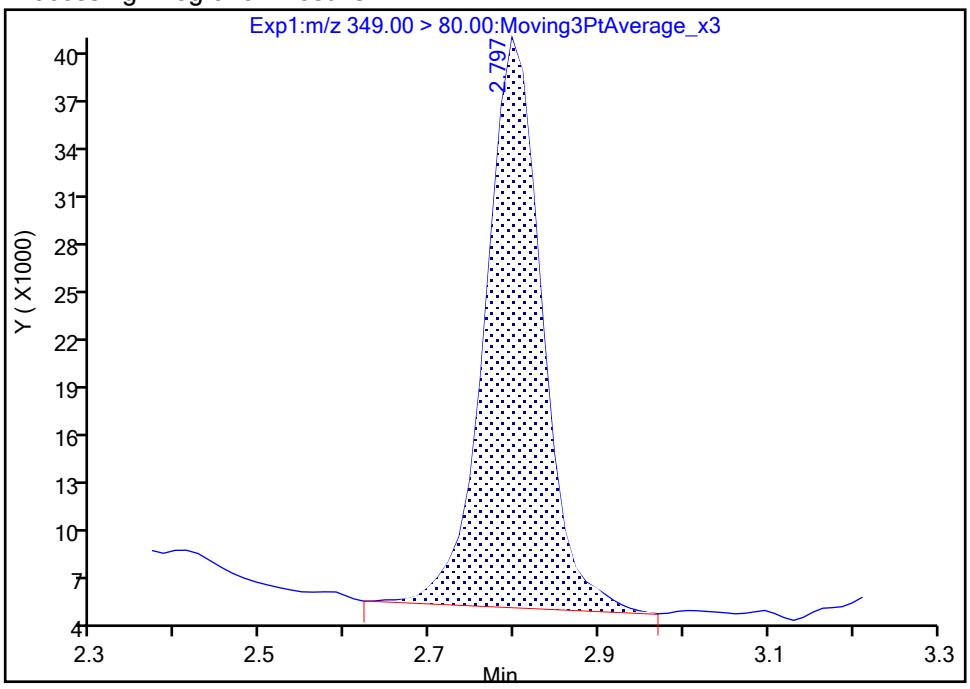
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

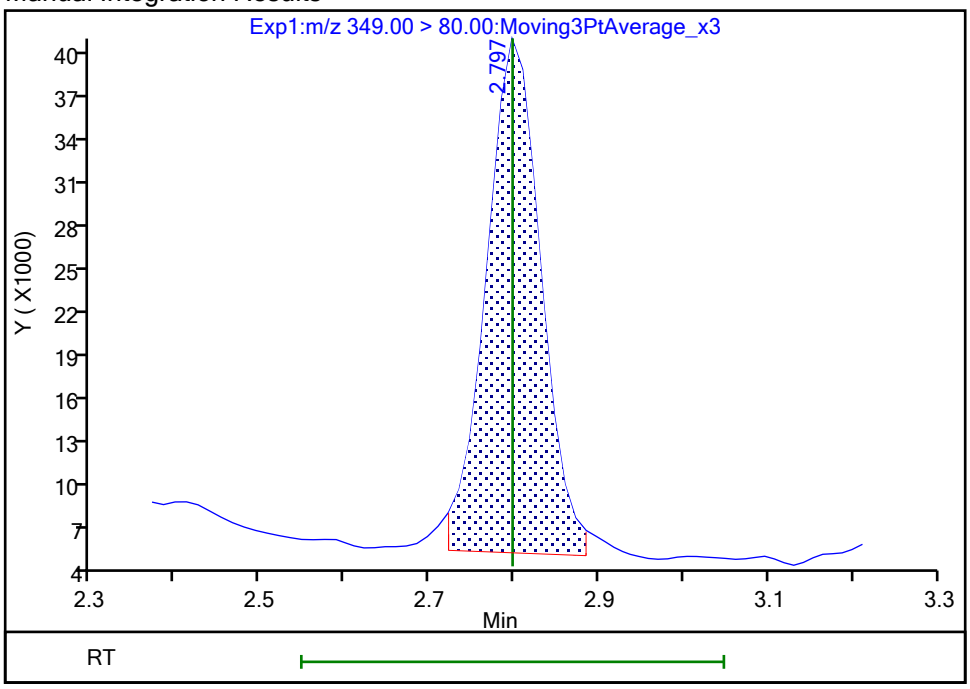
Processing Integration Results

RT: 2.80
Area: 166724
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 159650
Amount: 0.120784
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

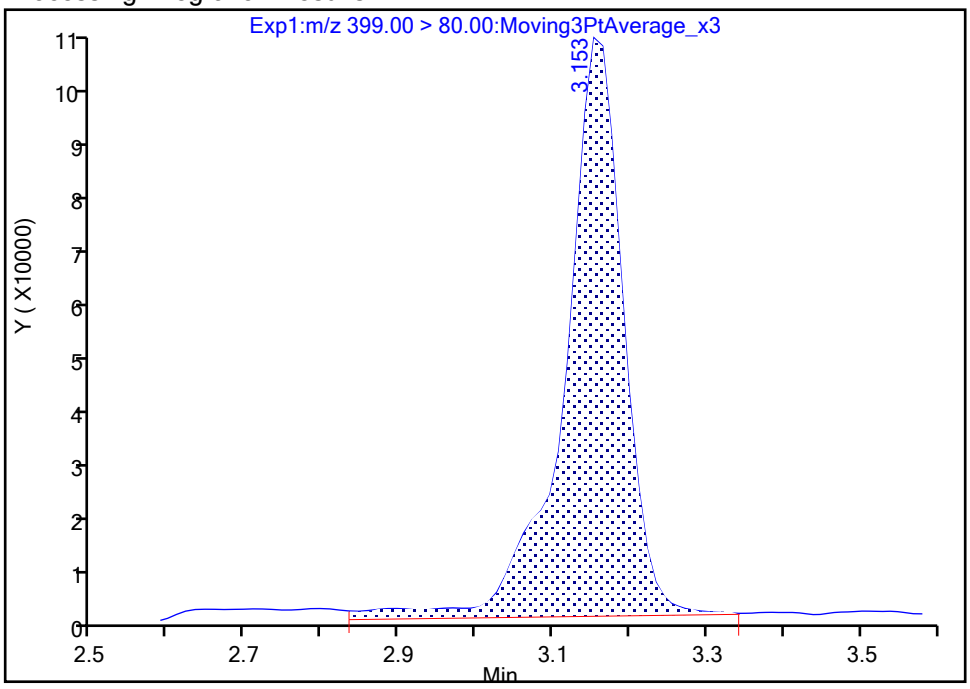
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

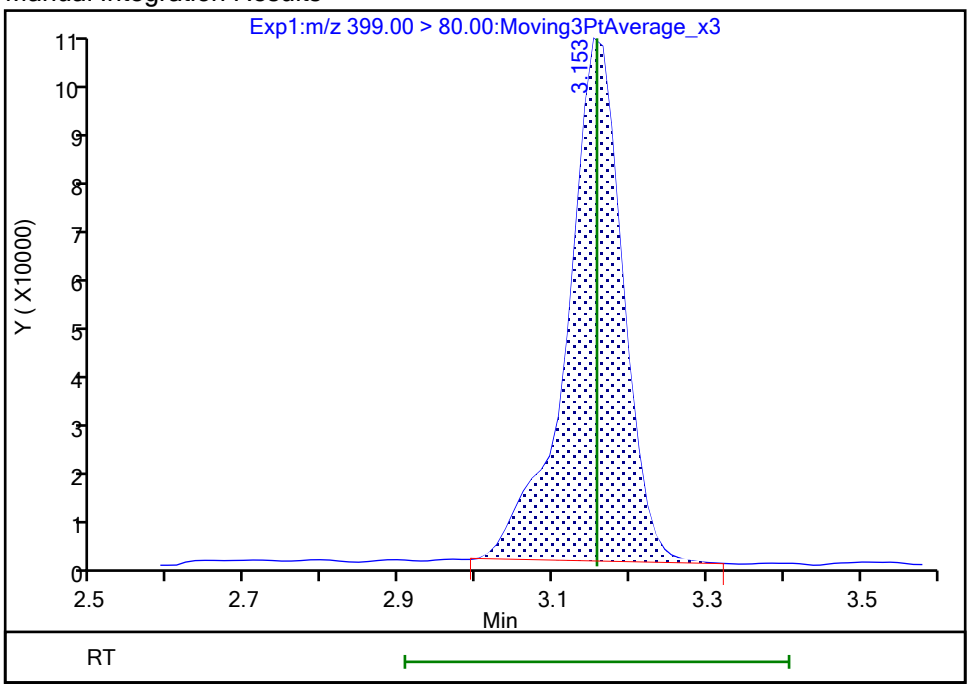
Processing Integration Results

RT: 3.15
Area: 552790
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 516369
Amount: 0.460859
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

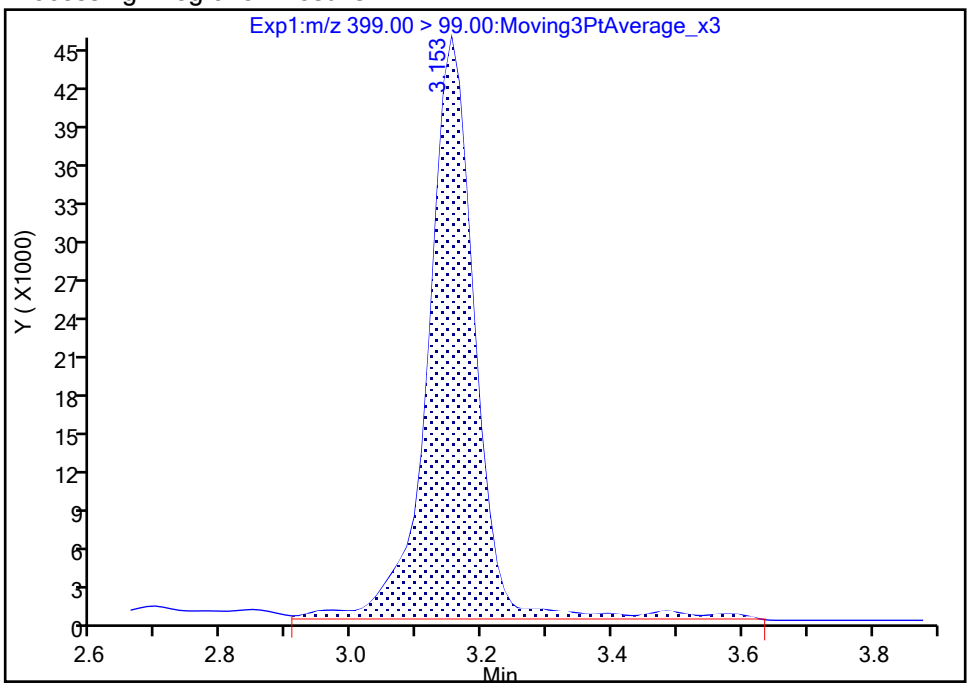
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

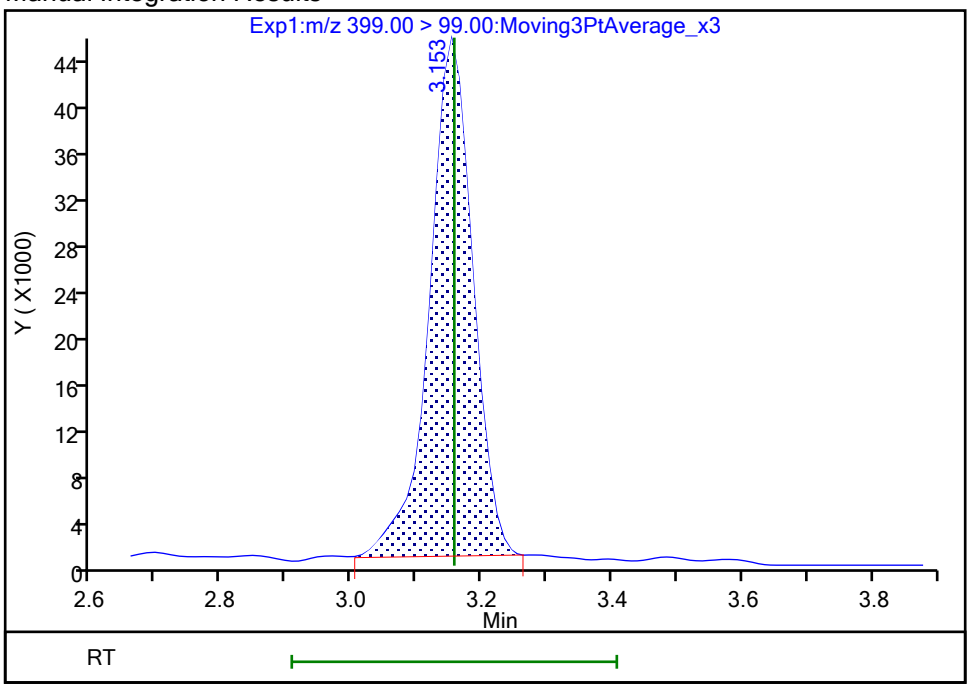
Processing Integration Results

RT: 3.15
Area: 234773
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 207777
Amount: 0.460859
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

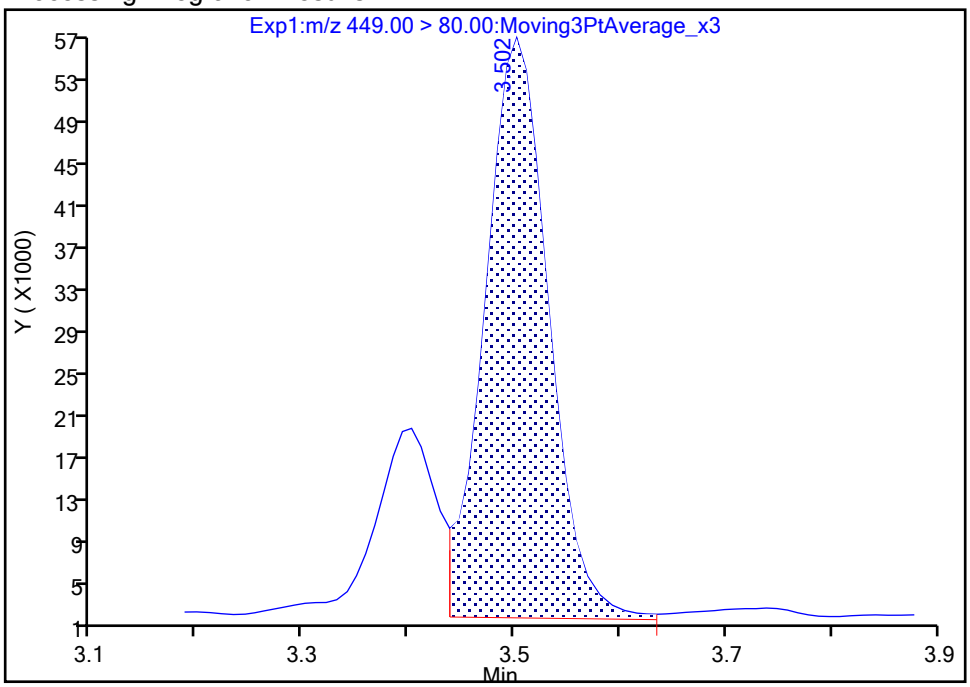
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

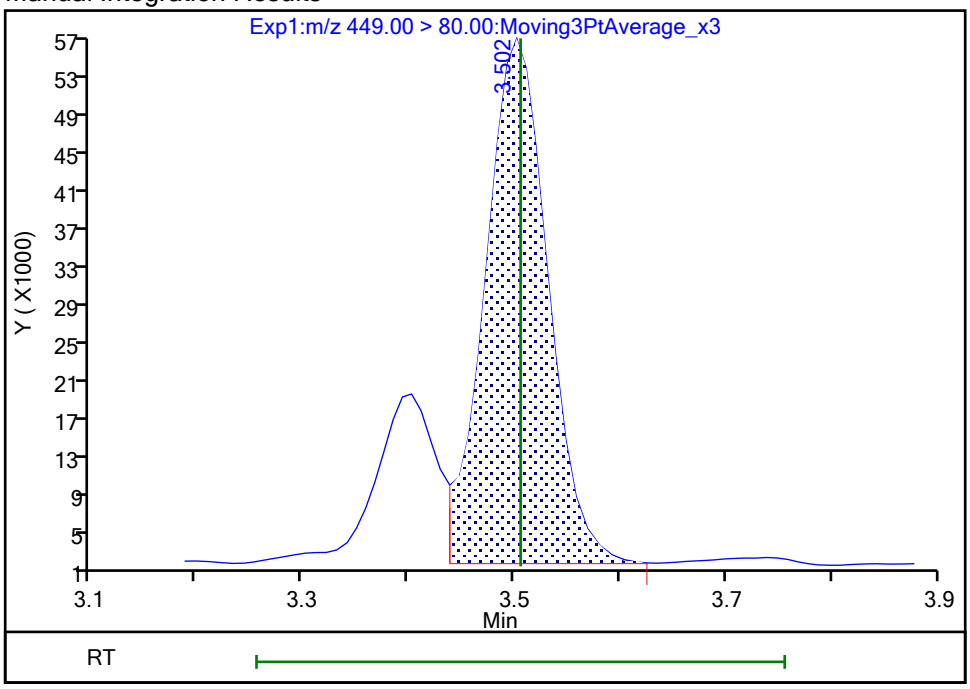
Processing Integration Results

RT: 3.50
Area: 231565
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 225949
Amount: 0.244296
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

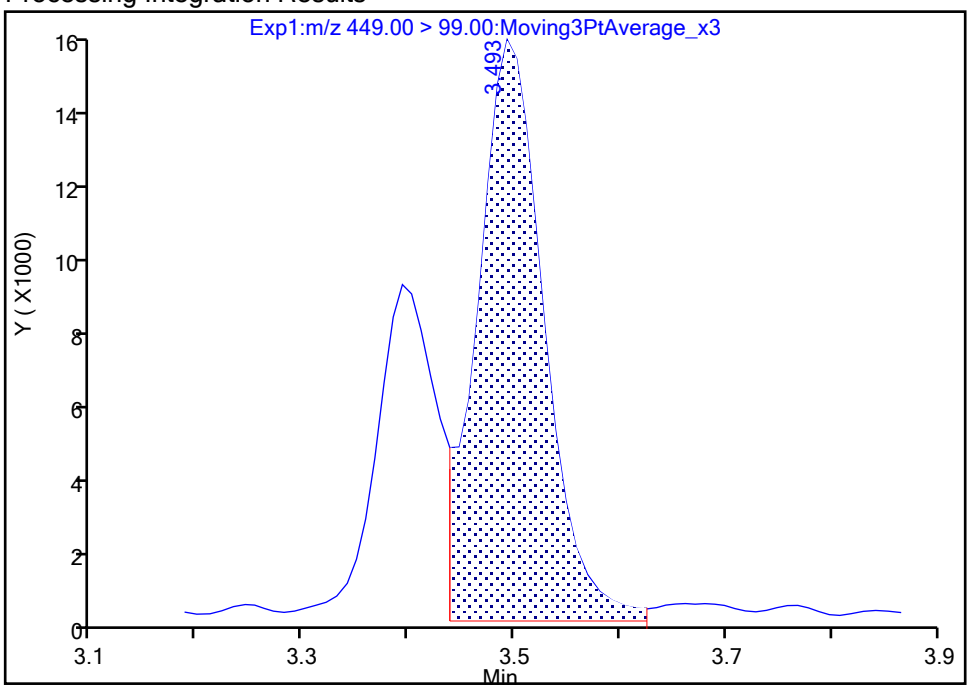
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

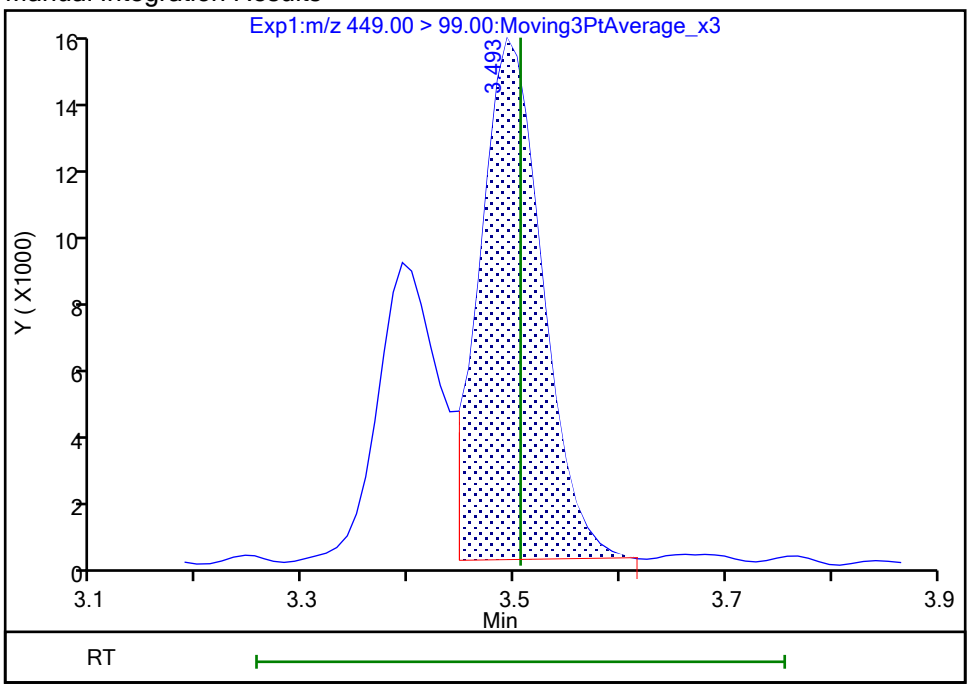
Processing Integration Results

RT: 3.49
Area: 67561
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 61407
Amount: 0.244296
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

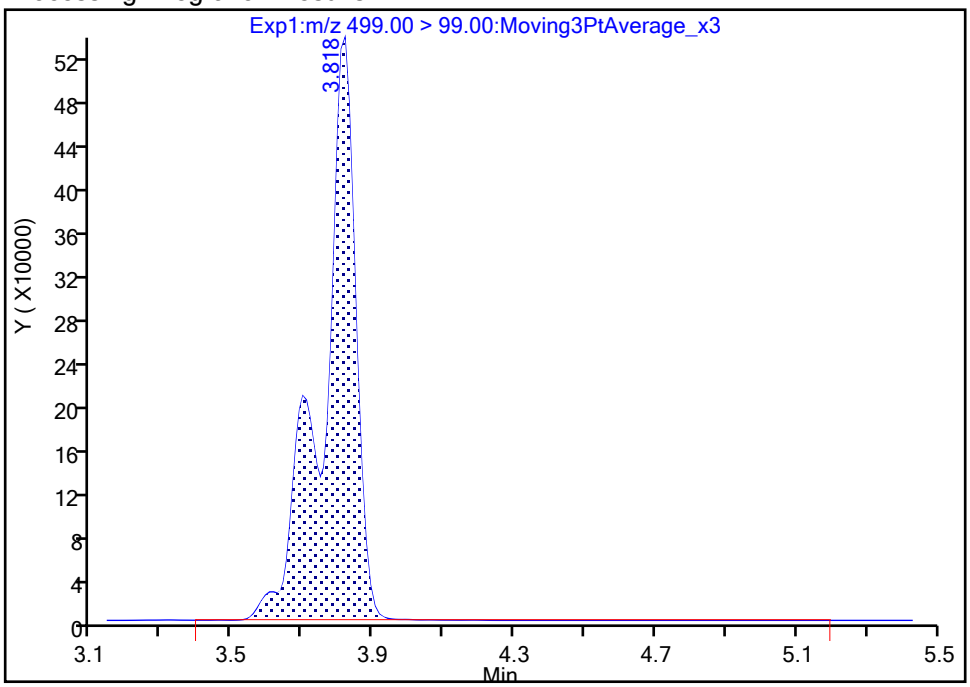
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

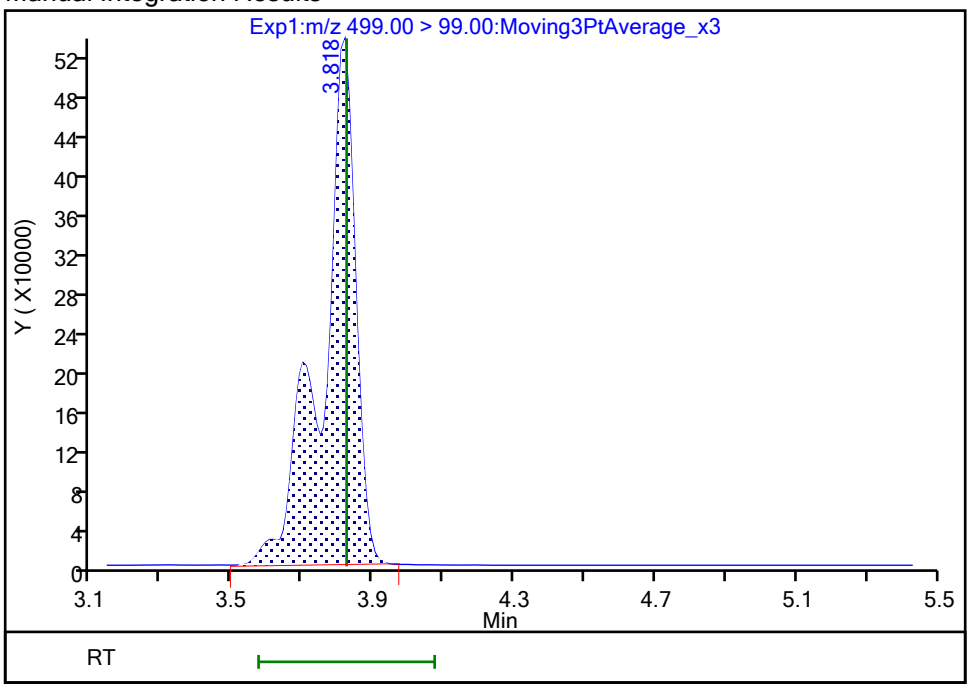
Processing Integration Results

RT: 3.82
Area: 3577759
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3563497
Amount: 15.955317
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

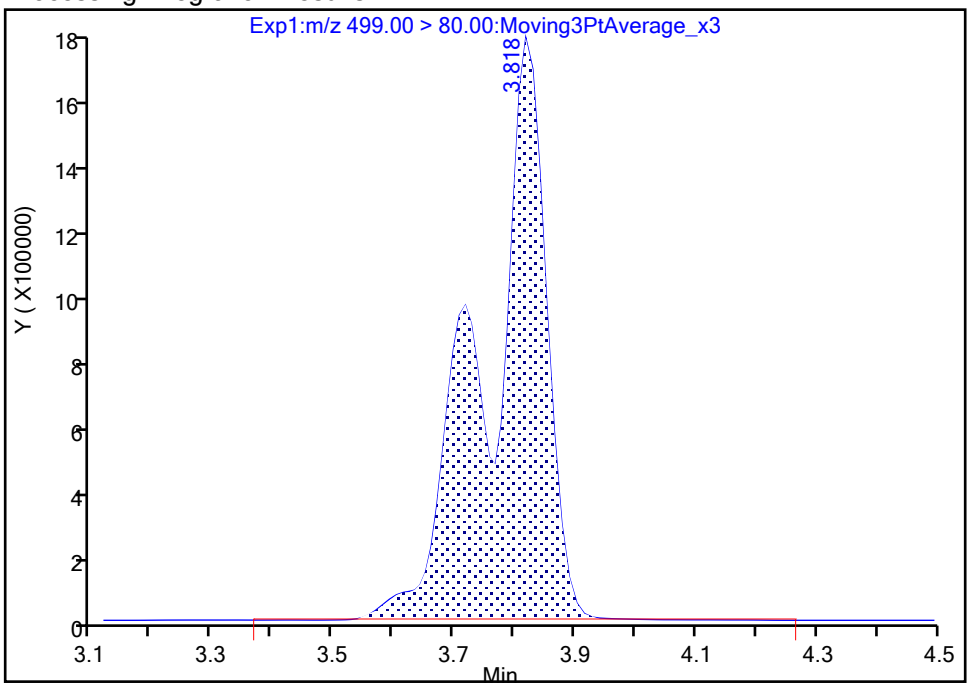
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

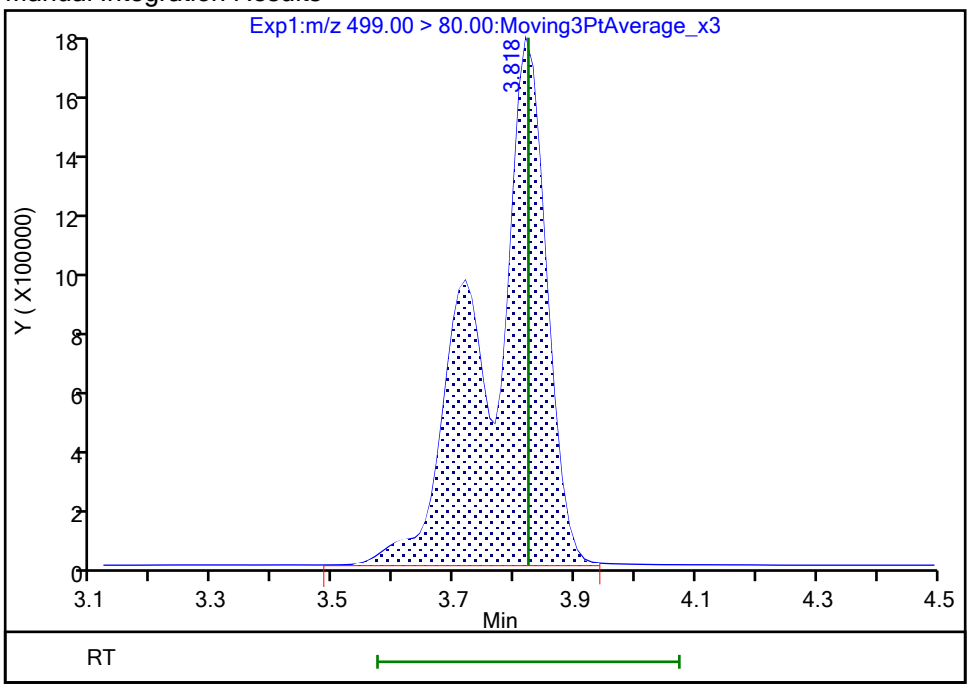
Processing Integration Results

RT: 3.82
Area: 11980893
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 11910273
Amount: 15.955317
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

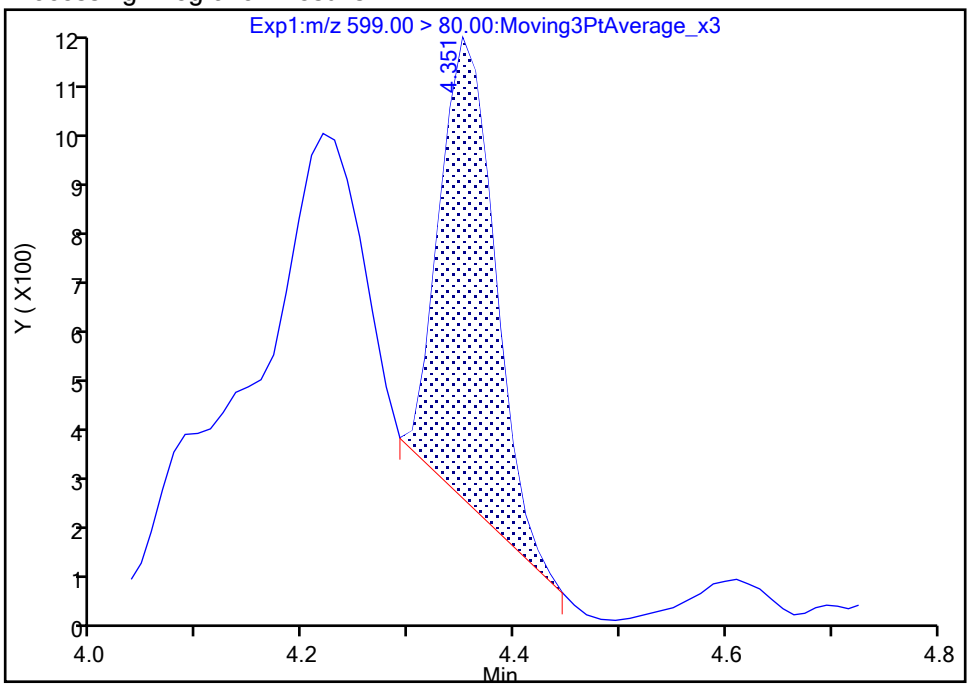
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

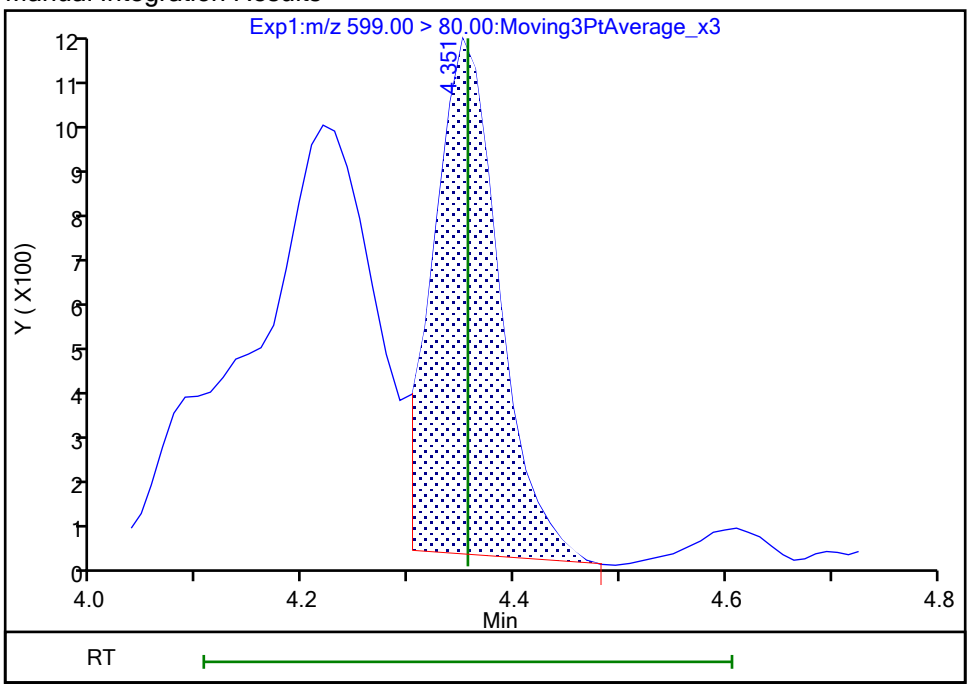
Processing Integration Results

RT: 4.35
Area: 3326
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 4827
Amount: 0.011044
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

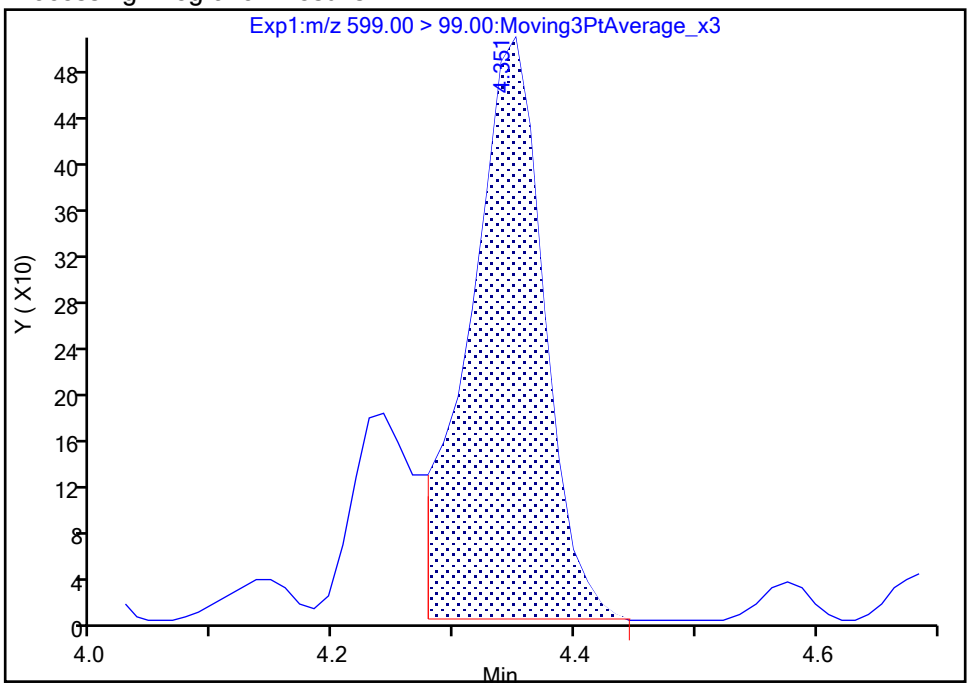
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

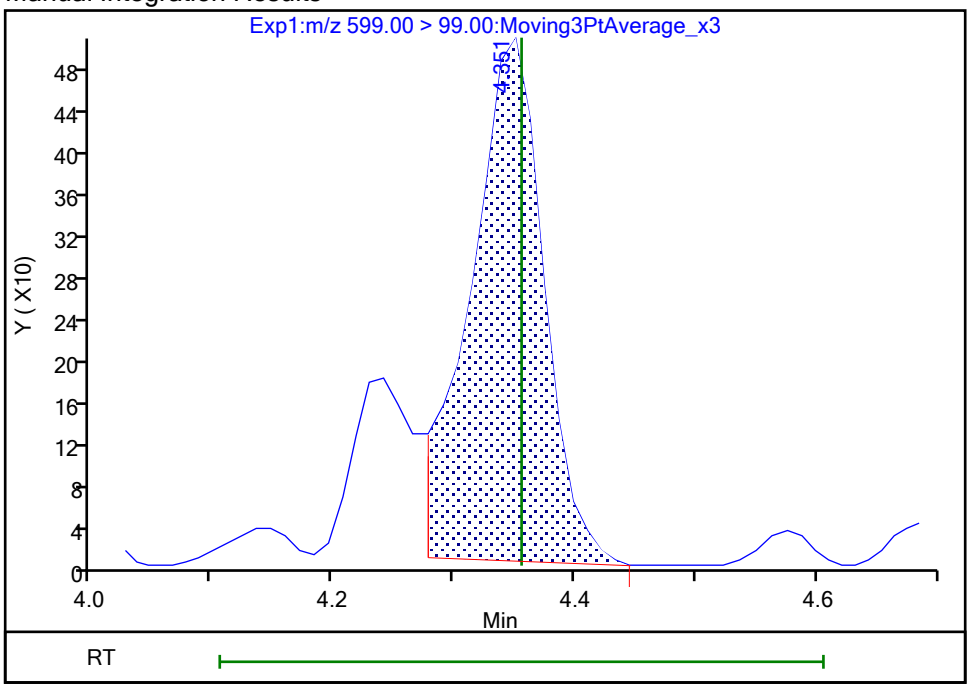
Processing Integration Results

RT: 4.35
Area: 2125
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 2090
Amount: 0.011044
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

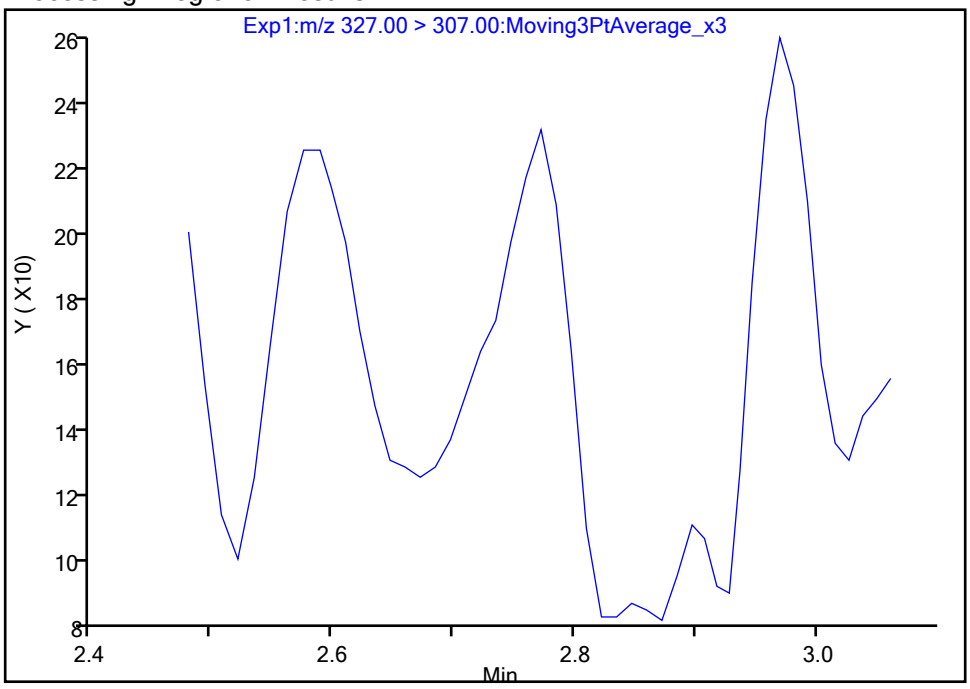
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

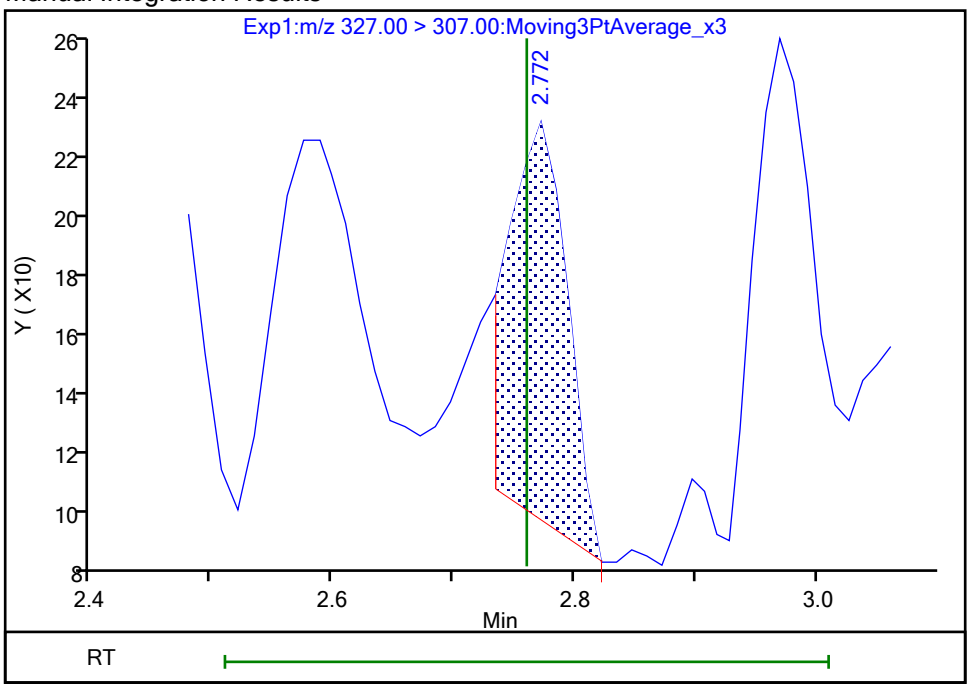
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 425
Amount: 0.000776
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

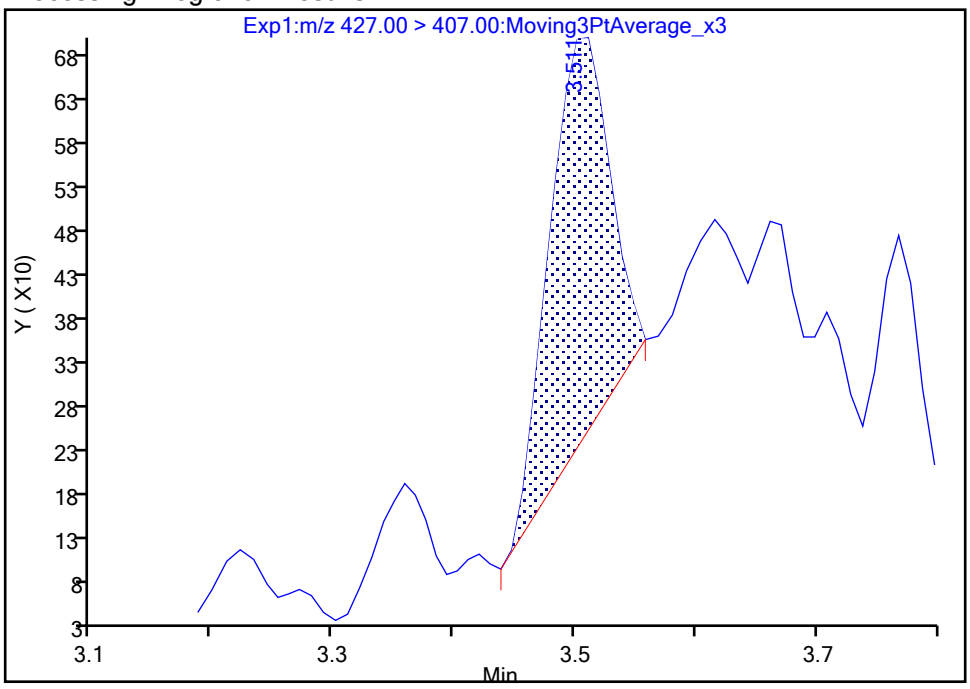
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

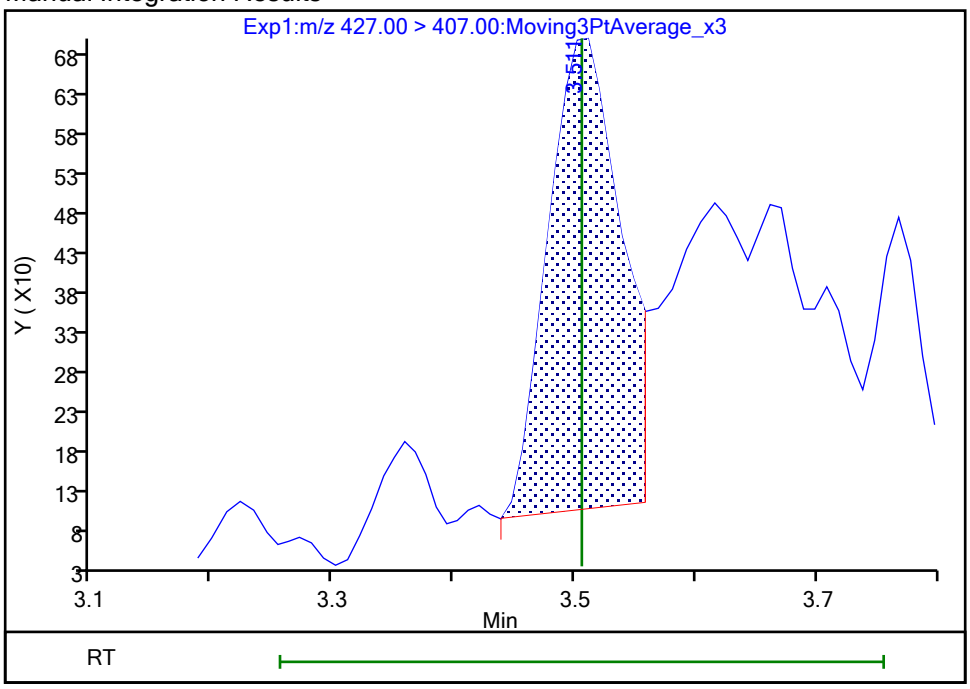
Processing Integration Results

RT: 3.51
Area: 1593
Amount: 0.002657
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2451
Amount: 0.004088
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:59:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

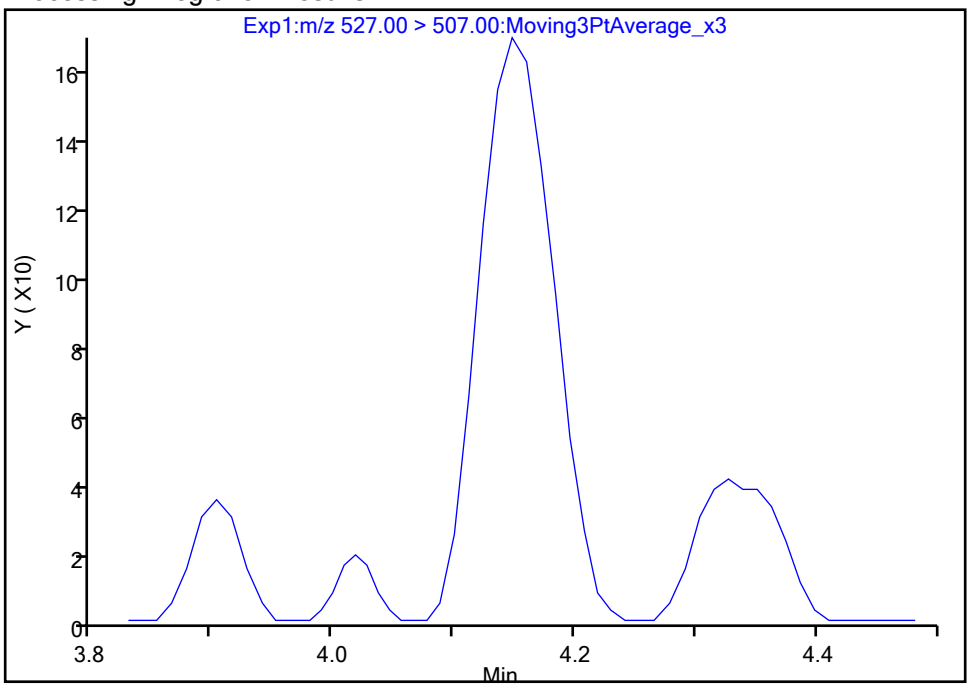
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

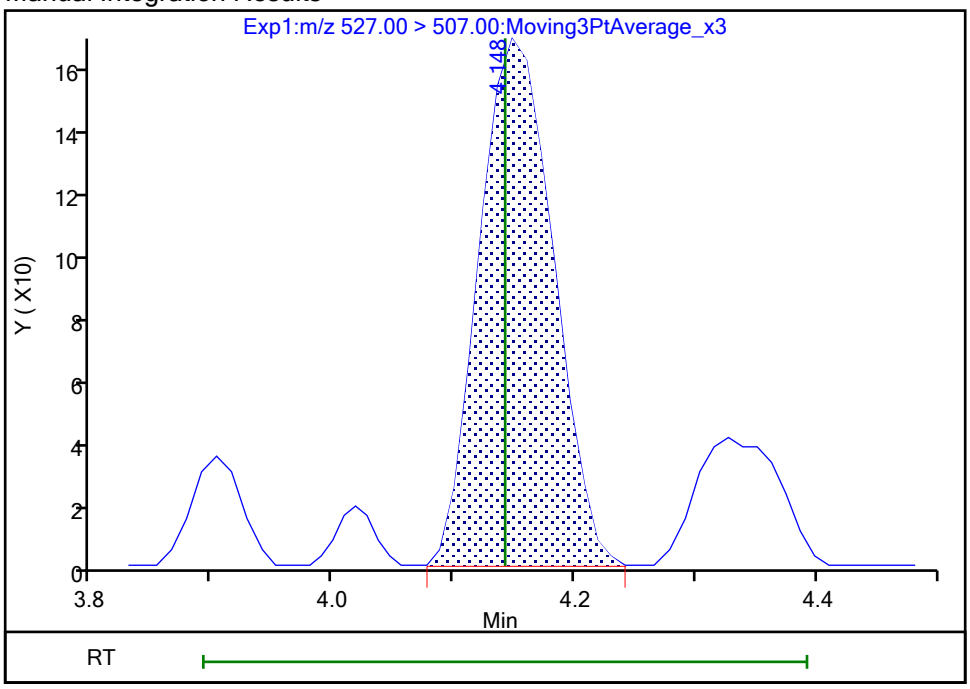
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 724
Amount: 0.001397
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

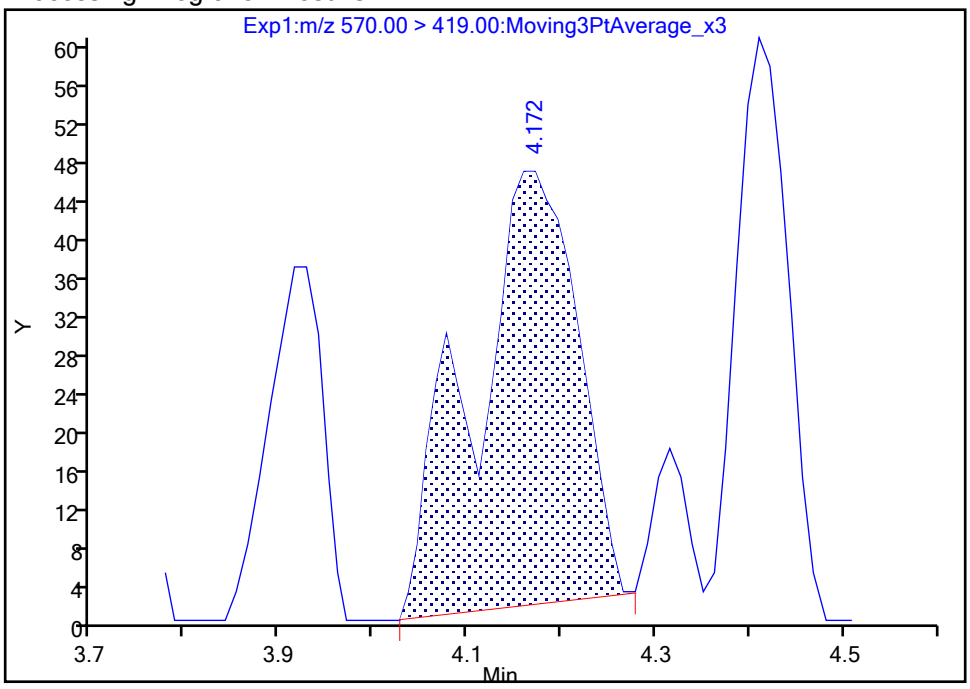
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

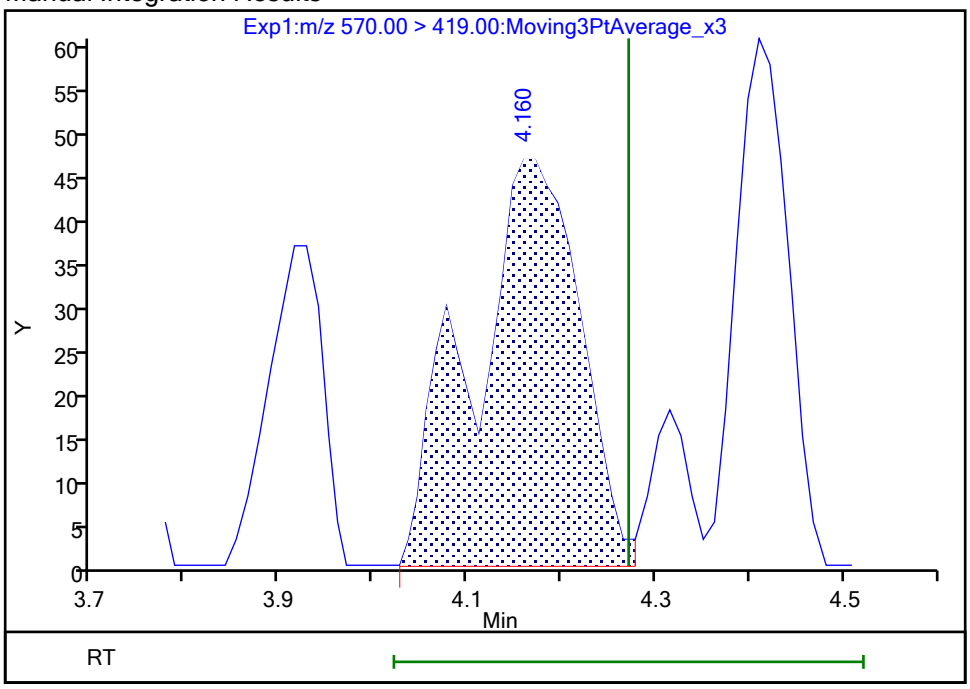
Processing Integration Results

RT: 4.17
Area: 352
Amount: 0.001081
Amount Units: ng/ml



Manual Integration Results

RT: 4.16
Area: 375
Amount: 0.001151
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

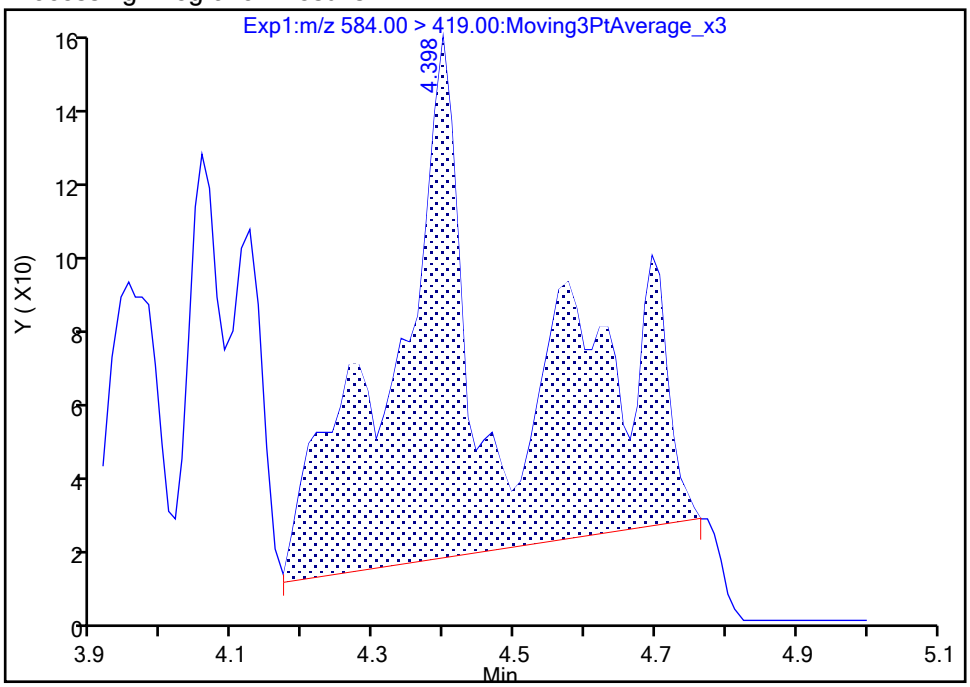
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

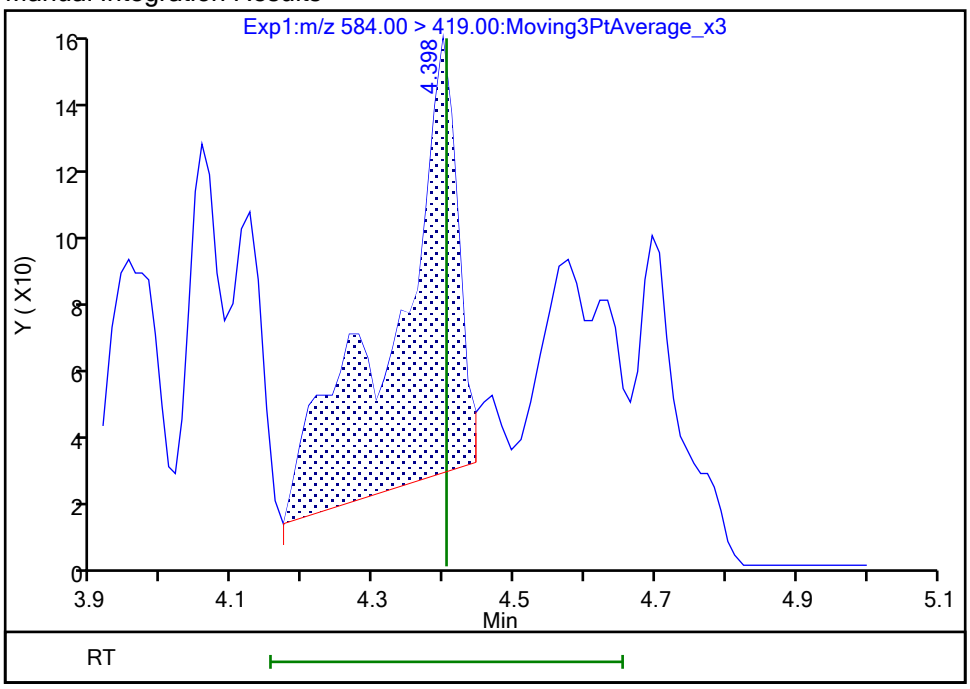
Processing Integration Results

RT: 4.40
Area: 1661
Amount: 0.004762
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 806
Amount: 0.002311
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:01:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

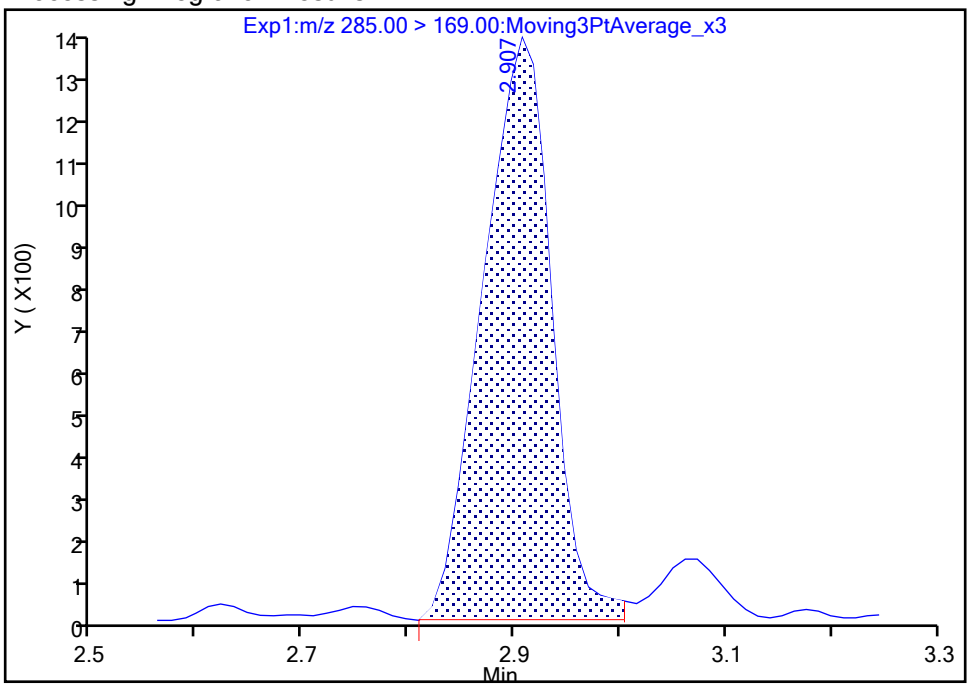
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

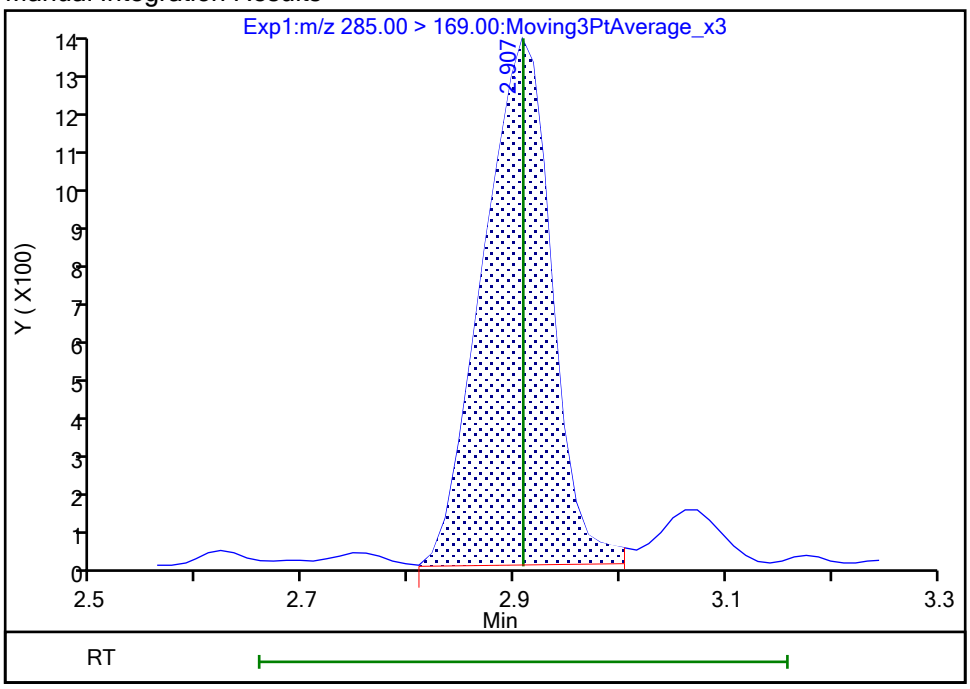
Processing Integration Results

RT: 2.91
Area: 6273
Amount: 0.027531
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 6268
Amount: 0.027509
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

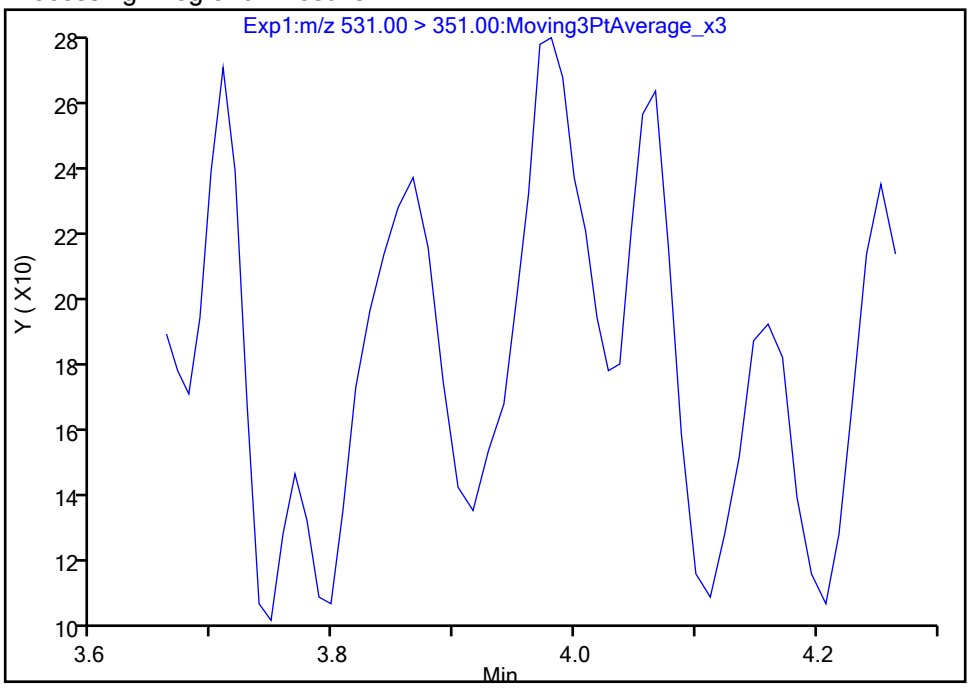
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

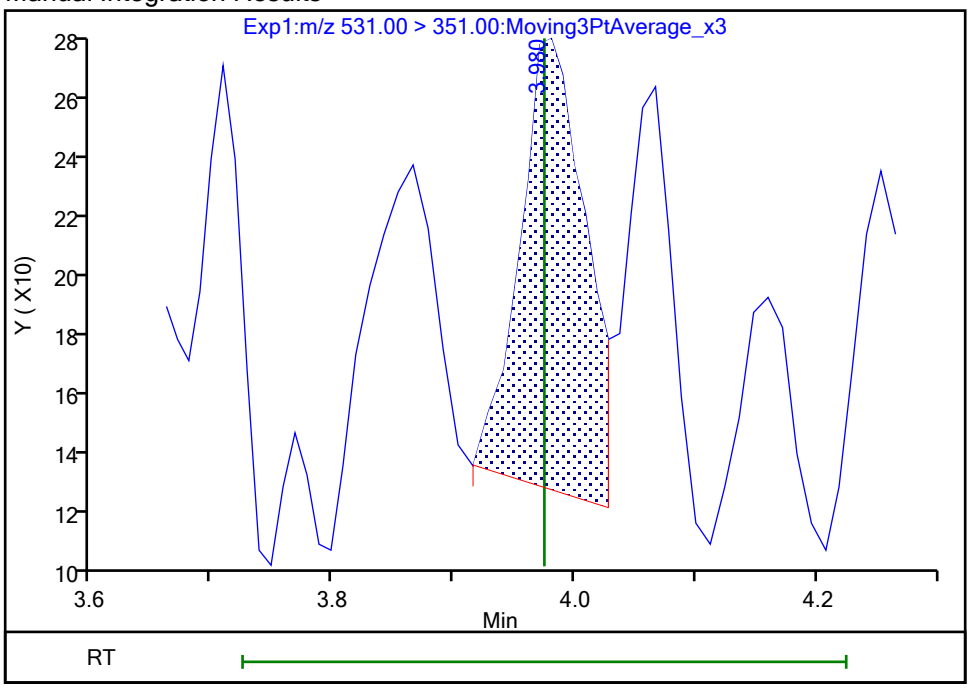
Not Detected
Expected RT: 3.97

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 560
Amount: 0.000245
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 17:00:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

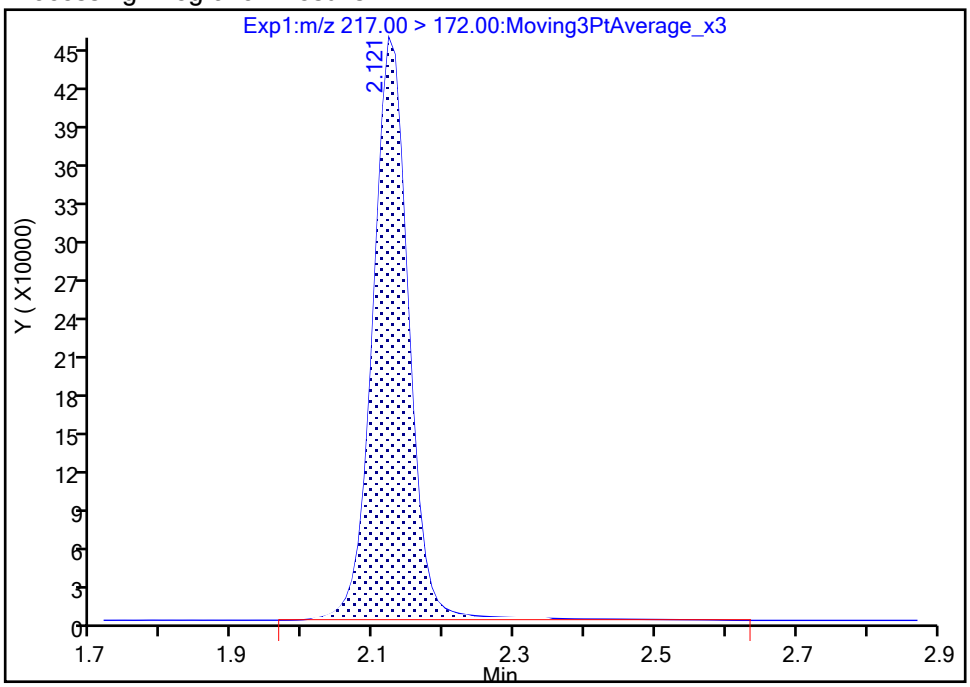
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

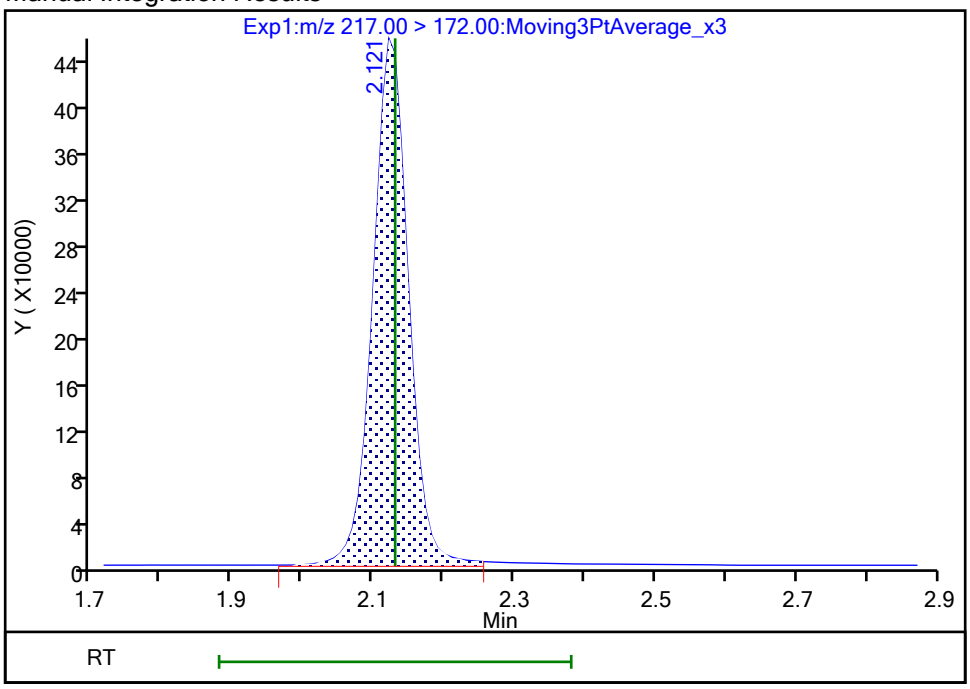
Processing Integration Results

RT: 2.12
Area: 1613638
Amount: 1.085357
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1589699
Amount: 1.069255
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

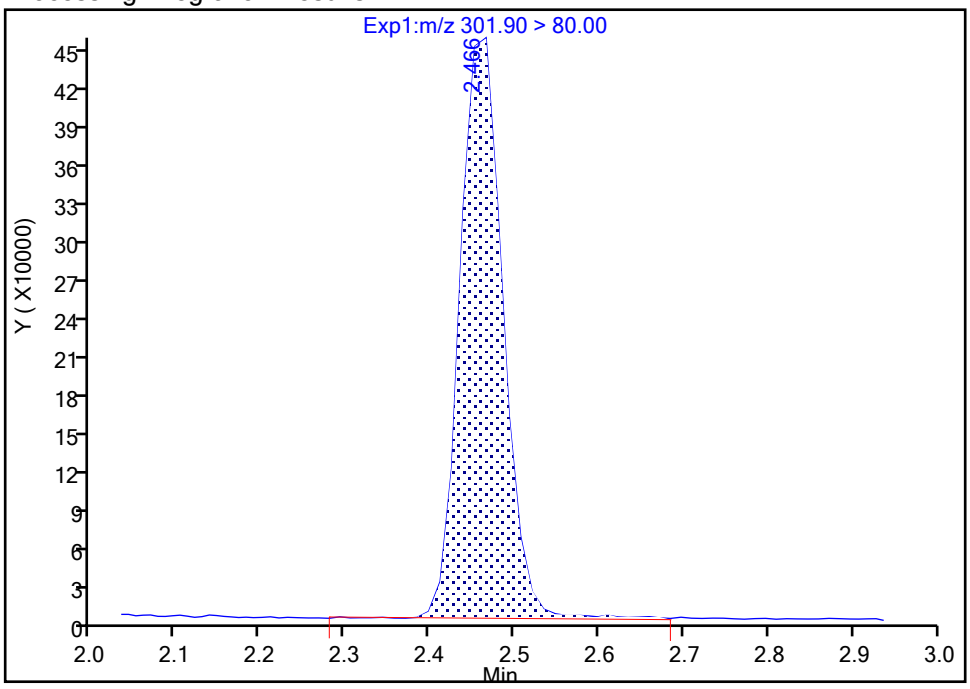
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

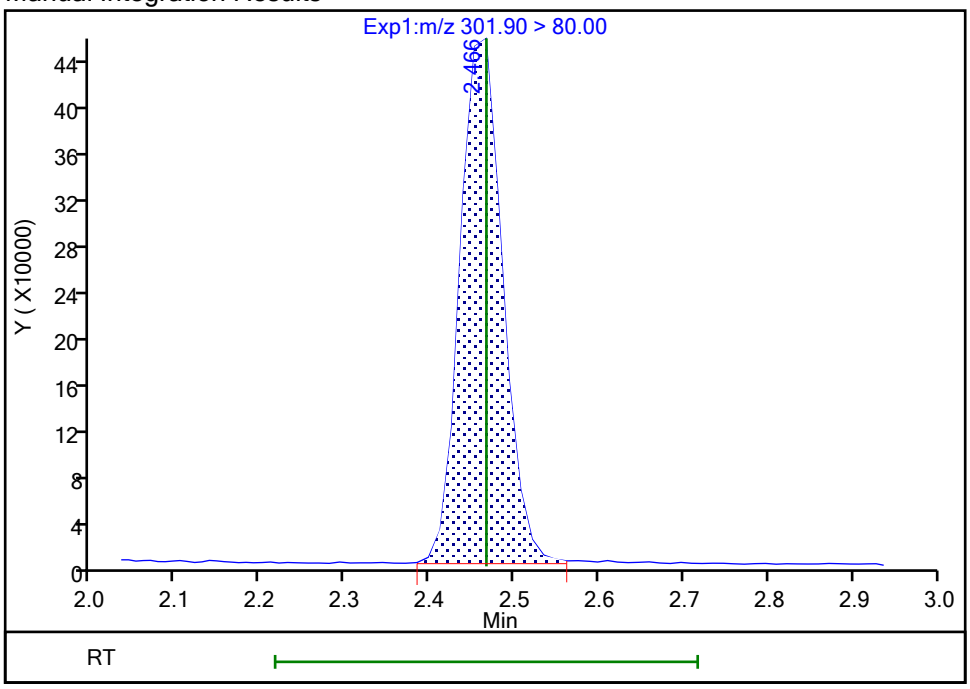
Processing Integration Results

RT: 2.47
Area: 1613980
Amount: 1.033799
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1600616
Amount: 1.025239
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

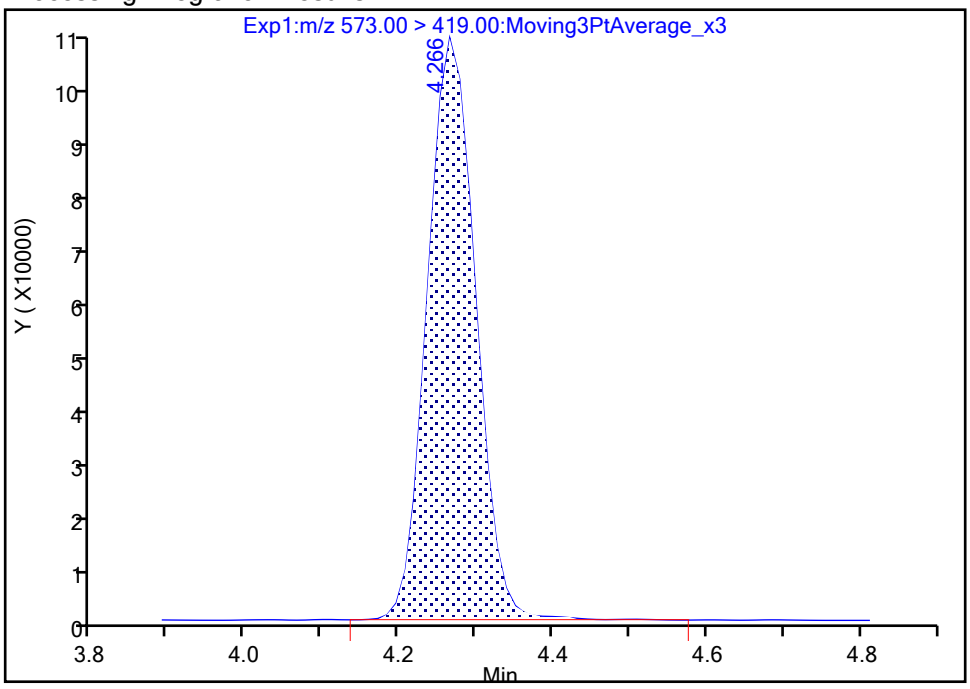
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

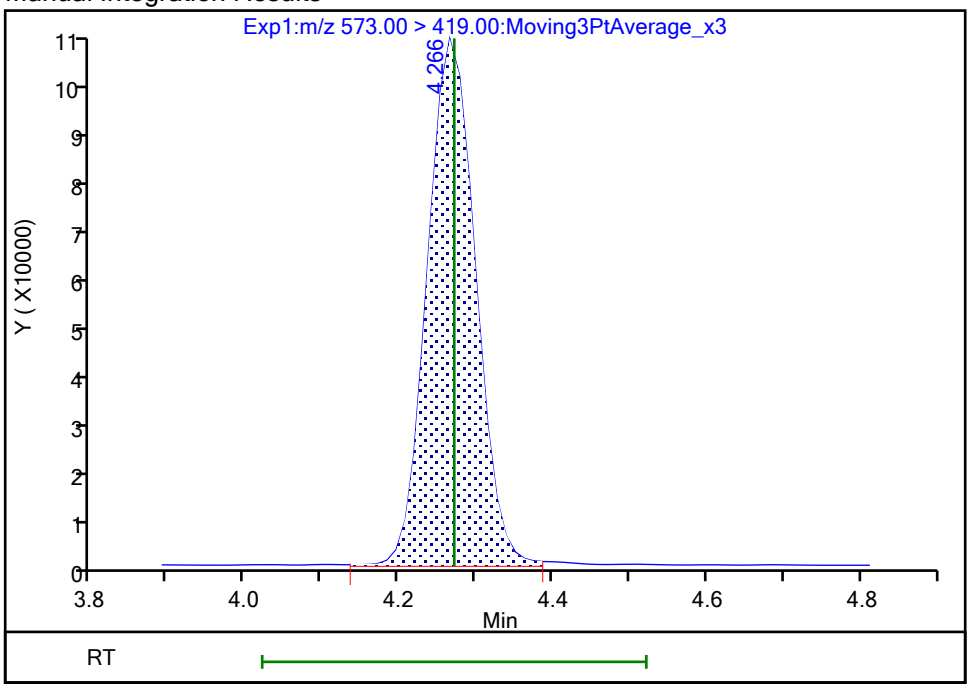
Processing Integration Results

RT: 4.27
Area: 451064
Amount: 1.135278
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 448673
Amount: 1.129260
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

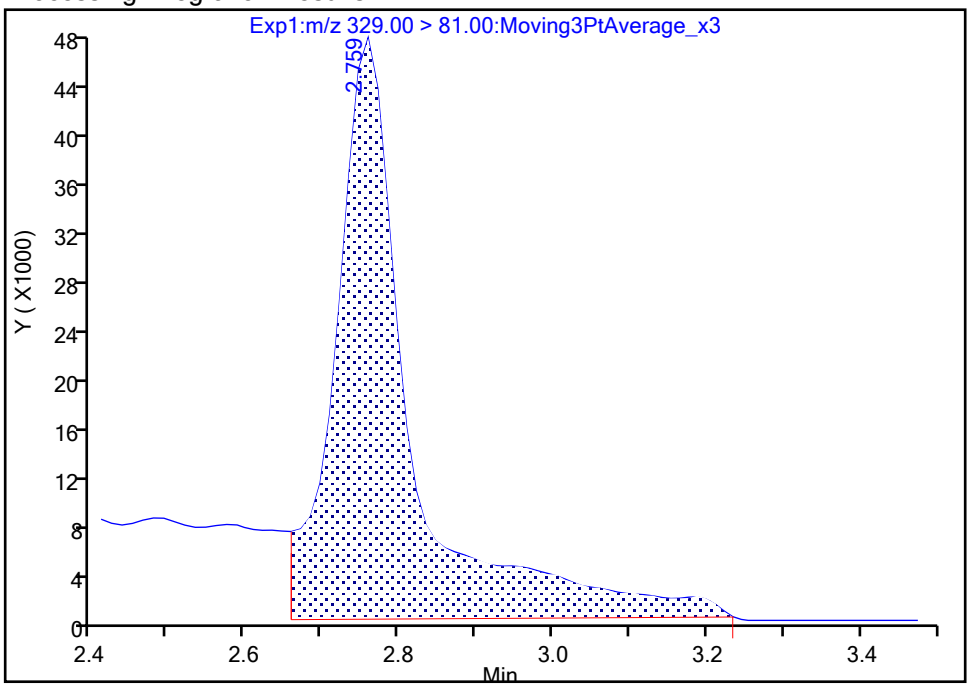
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

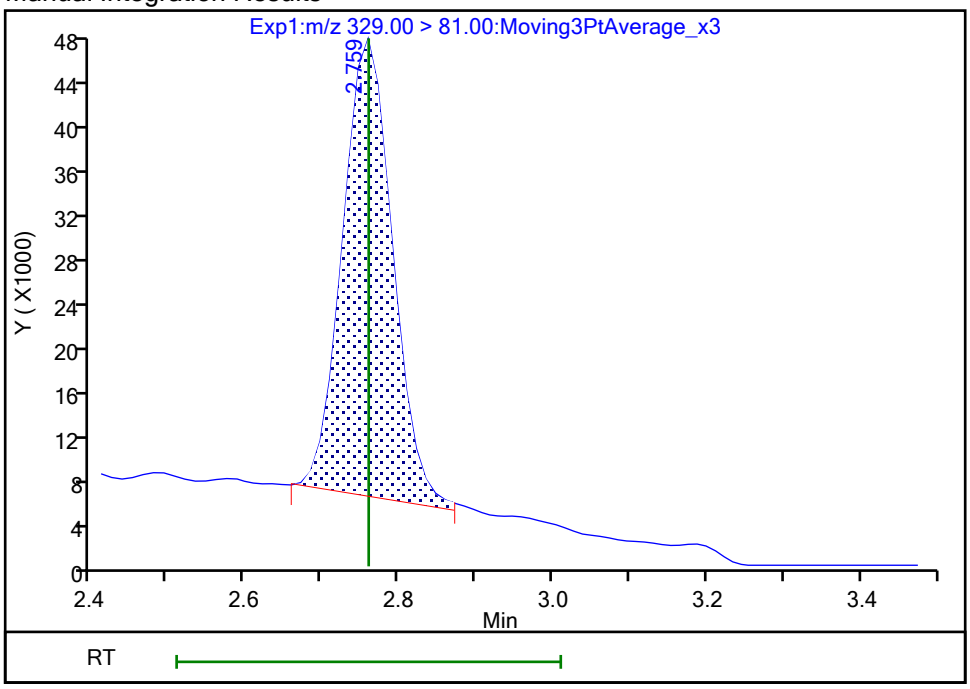
Processing Integration Results

RT: 2.76
Area: 325864
Amount: 1.804851
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 188388
Amount: 1.043418
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

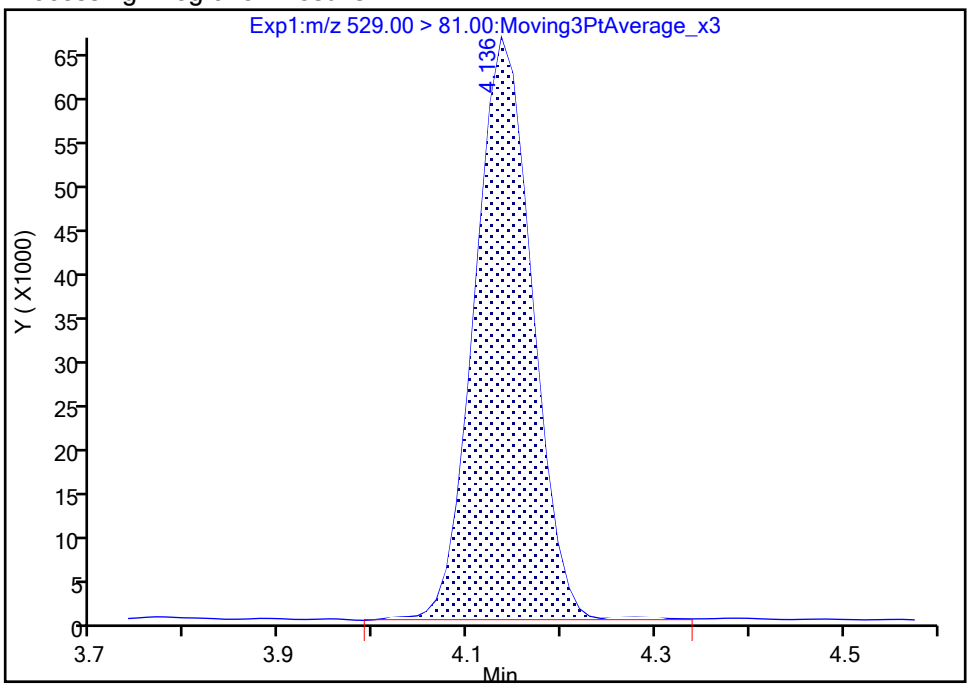
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

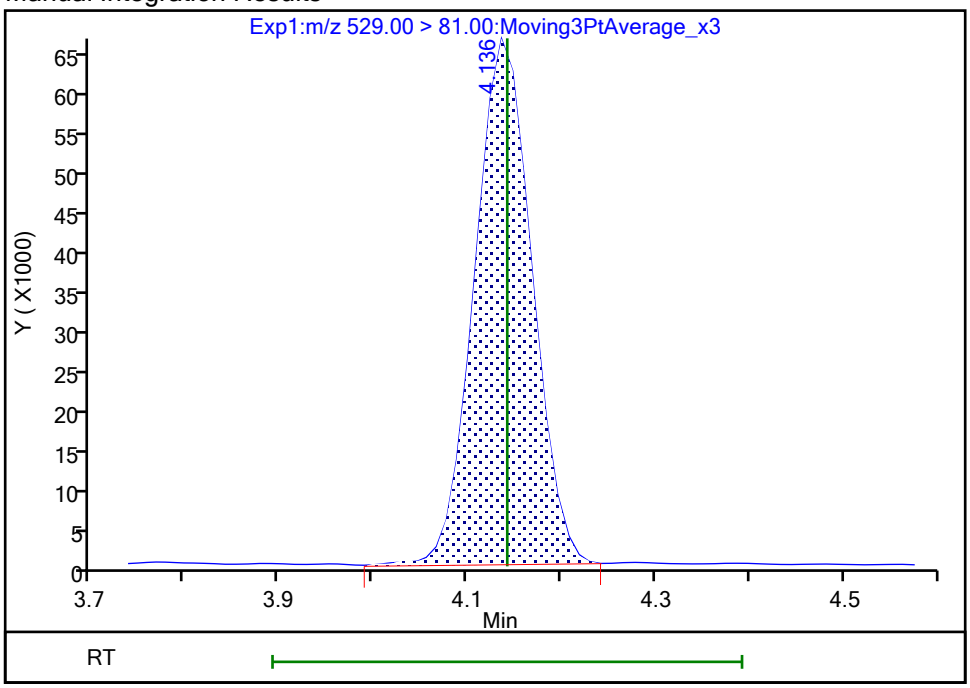
Processing Integration Results

RT: 4.14
Area: 282648
Amount: 1.081036
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 281953
Amount: 1.078377
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:58:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

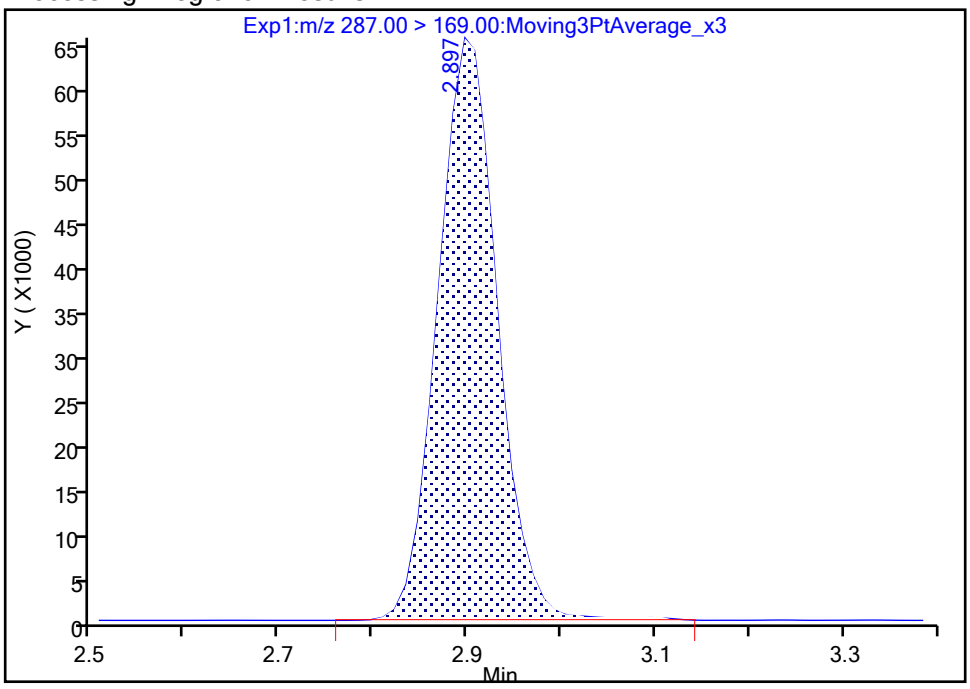
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D26.d				
Injection Date:	21-Oct-2023 07:14:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-5-A	Lab Sample ID:	200-290219-5		
Client ID:	MW83R-101223-1346-29				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

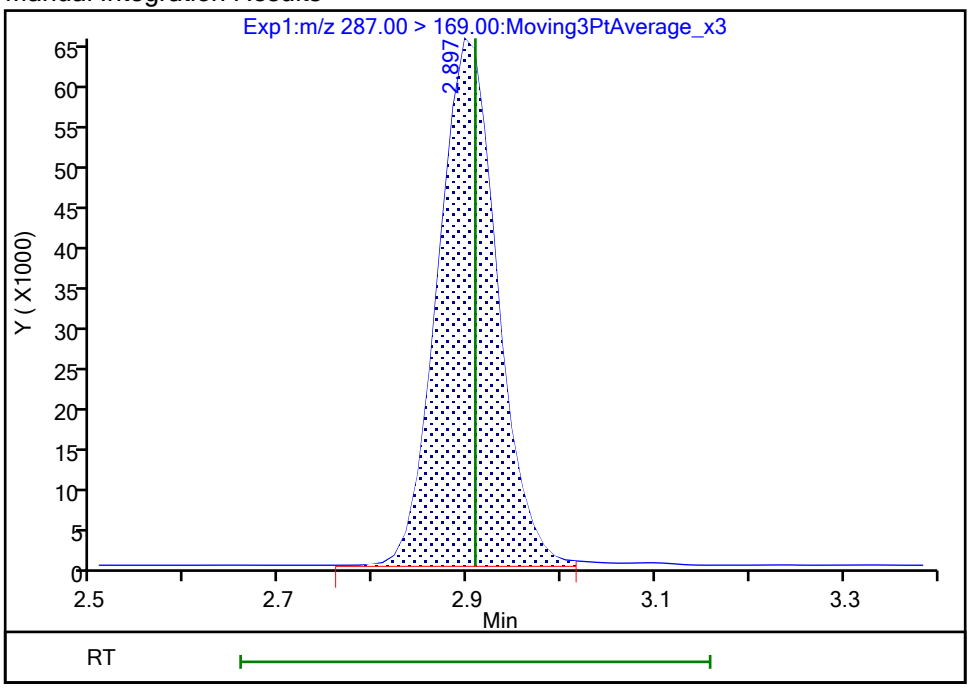
Processing Integration Results

RT: 2.90
Area: 286406
Amount: 1.260545
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 284481
Amount: 1.252072
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 16:57:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: 1000-101223-0003 Lab Sample ID: 460-290219-6

Matrix: Water Lab File ID: PA231020C05.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 08:00

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 292(mL) Date Analyzed: 10/21/2023 00:50

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.28	U	4.28	1.03
2706-90-3	Perfluoropentanoic acid	1.89		1.71	0.58
307-24-4	Perfluorohexanoic acid	1.68	J	1.71	0.56
375-85-9	Perfluoroheptanoic acid	1.33	J	1.71	0.46
335-67-1	Perfluorooctanoic acid	6.51		1.71	0.65
375-95-1	Perfluorononanoic acid	1.71	U	1.71	0.42
335-76-2	Perfluorodecanoic acid	1.71	U	1.71	0.39
2058-94-8	Perfluoroundecanoic acid	1.71	U	1.71	0.47
307-55-1	Perfluorododecanoic acid	1.71	U	1.71	0.42
72629-94-8	Perfluorotridecanoic acid	1.71	U	1.71	0.41
376-06-7	Perfluorotetradecanoic acid	1.71	U	1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	0.93	J	1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	0.62	J	1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	2.57		1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	0.50	J	1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	15.1		1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	1.71	U	1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	1.71	U	1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66
754-91-6	Perfluorooctanesulfonamide	1.71	U	1.71	0.79
2355-31-9	NMeFOSAA	4.28	U	4.28	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37
13252-13-6	HFPODA	3.42	U	3.42	0.94
919005-14-4	DONA	1.71	U	1.71	0.36
756426-58-1	9Cl-PF3ONS	1.71	U	1.71	0.27
763051-92-9	11Cl-PF3OUdS	1.71	U	1.71	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: 1000-101223-0003 Lab Sample ID: 460-290219-6

Matrix: Water Lab File ID: PA231020C05.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 08:00

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 292(mL) Date Analyzed: 10/21/2023 00:50

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	90		50-150
STL01893	13C5 PFPeA	88		50-150
STL01892	13C4 PFHpA	96		50-150
STL02116	13C2 PFTeDA	73		50-150
STL02337	13C3 PFBS	80		50-150
STL01056	13C8 FOSA	75		50-150
STL02118	d3-NMeFOSAA	78		50-150
STL02117	d5-NEtFOSAA	78		50-150
STL02395	M2-4:2 FTS	74		50-150
STL02279	M2-6:2 FTS	80		50-150
STL02280	M2-8:2 FTS	71		50-150
STL02255	13C3 HFPO-DA	85		50-150
STL00994	18O2 PFHxS	83		50-150
STL00993	13C2 PFHxA	90		50-150
STL00991	13C4 PFOS	85		50-150
STL00998	13C2 PFDoA	84		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	90		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	82		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d
Lims ID: 460-290219-A-6-A
Client ID: 1000-101223-0003
Sample Type: Client
Inject. Date: 21-Oct-2023 00:50:07 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-6-A
Misc. Info.: 200-0057493-005 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:29:28
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1995927	1.12		89.8	1525	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	87708	0.0199			8.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1512662	1.10		87.7	2207	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	72224	0.0553			1.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1745592	0.9353		80.5	54292	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	45405	0.0271	Target=2.06		10.6	M
298.90 > 99.00	2.467	2.467	0.0	1.000	23145		1.96(1.03-3.09)		7.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.005	638	0.001173			5.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	187022	0.8665		74.2	68.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.795	1580010	1.13		90.1	8362	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	68069	0.0489	Target=14.12		9.4	M
313.00 > 119.00	2.785	2.798	-0.013	0.996	5238		13.00(7.06-21.17)		5.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.884	26183	0.0181	Target=2.72		11.0	M
349.00 > 99.00	2.797	2.798	-0.001	0.884	10153		2.58(1.36-4.09)		8.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	289826	1.07		85.4	2262	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.899	1308818	0.9784		82.7	3289	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	92056	0.0751	Target=3.32		60.3	M
399.00 > 99.00	3.165	3.157	0.008	1.000	24044		3.83(1.66-4.98)		20.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	64357	0.0387	Target=4.17		9.3	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	16486		3.90(2.09-6.26)		26.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.899	1854661	1.20		96.4	7091	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.914	15084	0.0145	Target=4.83		6.3	
449.00 > 99.00	3.502	3.506	-0.004	0.914	3763		4.01(2.41-7.24)		7.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.506	0.005	0.997	265185	0.9539		80.3	352	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.515	0.005	1.000	2224010	1.28		102	5149	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.515	0.005		2240356	1.25			8487	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.515	-0.004	0.997	360145	0.1900	Target=2.88		12.5	M
413.00 > 169.00	3.520	3.515	0.005	1.000	133408		2.70(1.44-4.32)		149	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.719	3.823	-0.104	0.971	371422	0.4415	Target=4.24		374	M
499.00 > 99.00	3.709	3.823	-0.114	0.968	93906		3.96(2.12-6.37)		138	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.823	0.007	1.088	861839	1.01		84.9	1932	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.846	-0.004	1.000	11568	0.006581	Target=8.34		1.8	M
463.00 > 169.00	3.830	3.846	-0.016	0.997	1508		7.67(4.17-12.51)		5.3	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.091	2242081	1.18		94.5	6763	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.990	3.975	0.015	1.042	1951	0.000758			8.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.175	2235337	1.12		90.0	8265	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.175	267579	0.8561		71.5	747	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.112	4.142	-0.030	0.994	201	0.000409			3.0	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.205	1594765	0.9404		75.2	4906	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.235	0.007	1.000	2929	0.002407			16.6	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.266	4.271	-0.005	1.212	461667	0.9720		77.8	5252	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.271	-0.005	1.000	1420	0.004237			5.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.246	1926221	1.03		82.1	6473	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.391	0.008	1.249	443356	0.9694		77.6	1193	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.403	-0.004	1.000	2780	0.007836			11.6	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.475	0.007	1.170	2426	0.000615			3.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.310	2009730	1.05		84.3	10002	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.414	1725695	0.9089		72.7	5490	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.969	4.983	-0.014	0.998	570	0.003693	Target=0.87		11.5	M
713.00 > 219.00	4.979	4.983	-0.004	1.000	629		0.91(0.43-1.30)		10.5	M

QC Flag Legend

Processing Flags

Review Flags

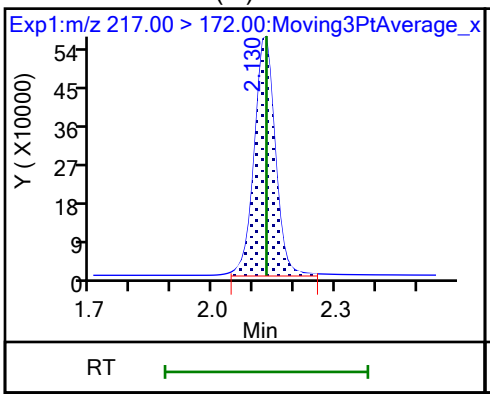
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:53 Chrom Revision: 2.3 18-Oct-2023 21:16:54

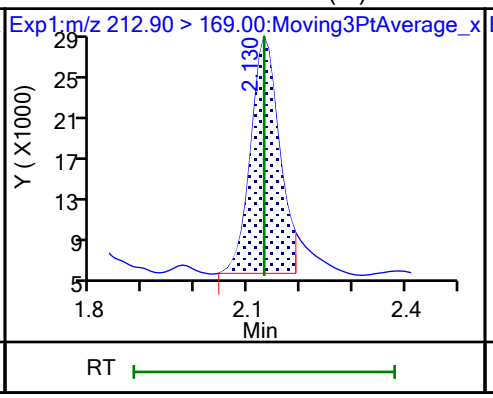
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d
Injection Date: 21-Oct-2023 00:50:07 Instrument ID: LC812
Lims ID: 460-290219-A-6-A Lab Sample ID: 200-290219-6
Client ID: 1000-101223-0003
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

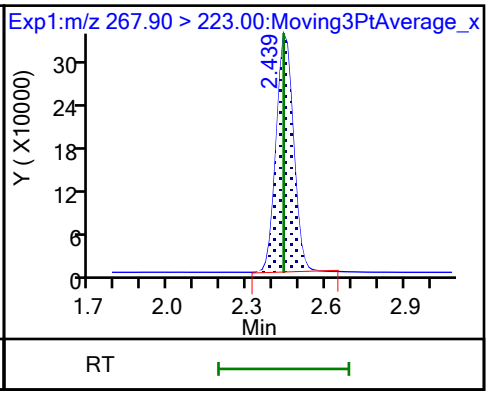
D 1 13C4 PFBA (M)



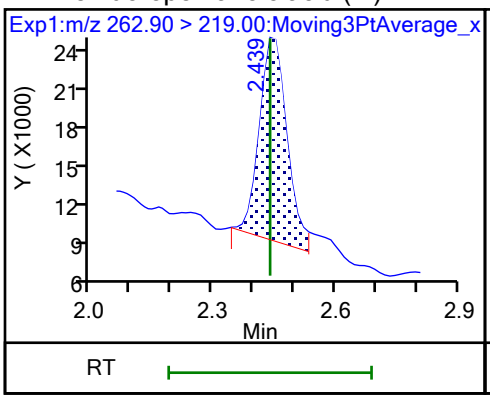
2 Perfluorobutanoic acid (M)



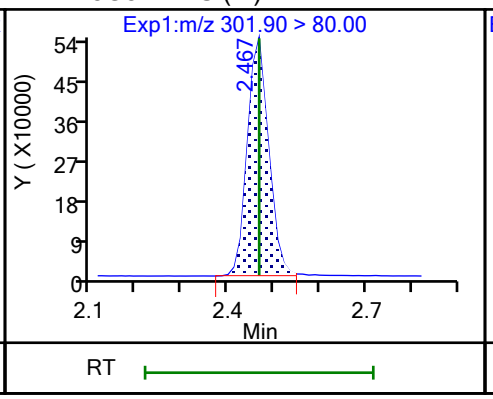
D 3 13C5 PFPeA



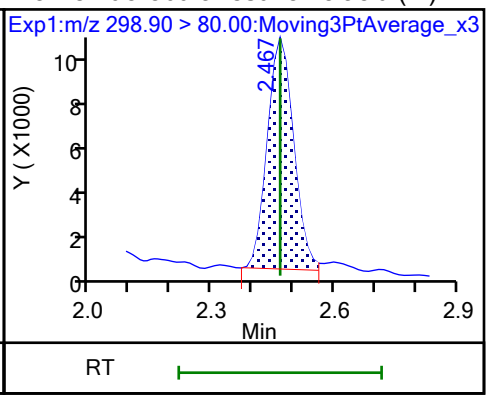
4 Perfluoropentanoic acid (M)



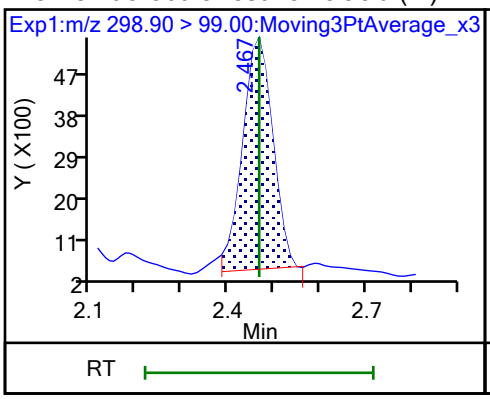
D 47 13C3 PFBS (M)



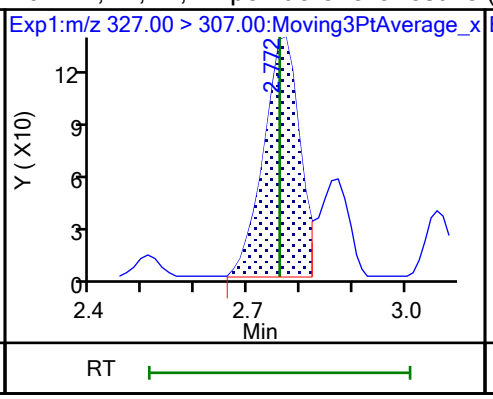
5 Perfluorobutanesulfonic acid (M)



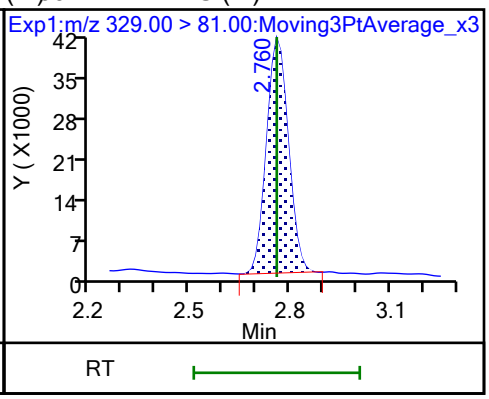
5 Perfluorobutanesulfonic acid (M)



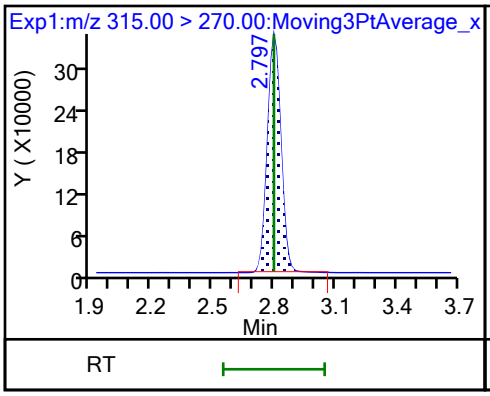
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



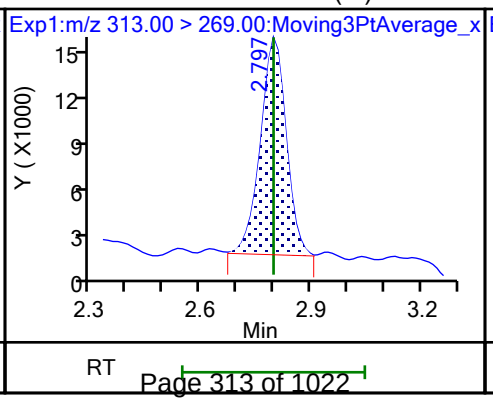
60 M2-4:2 FTS (M)



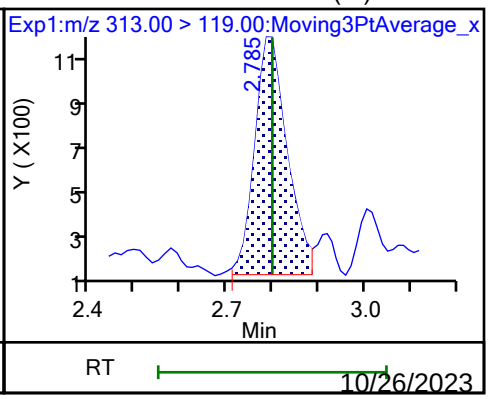
D 7 13C2 PFHxA



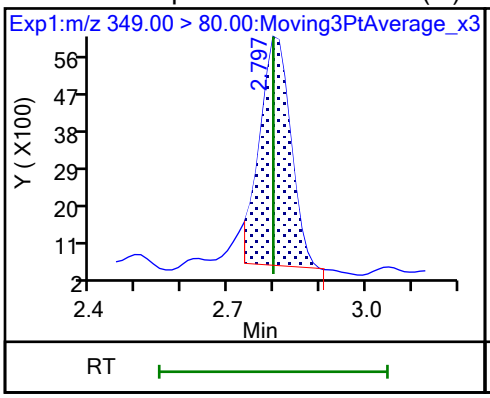
6 Perfluorohexanoic acid (M)



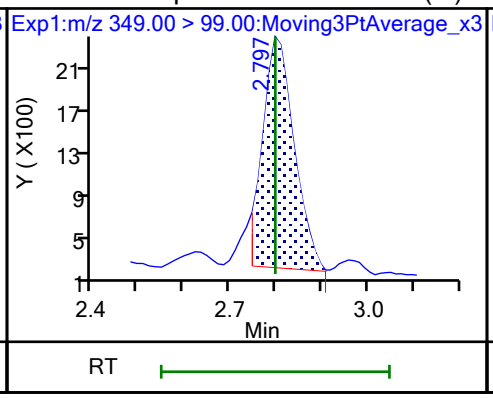
6 Perfluorohexanoic acid (M)



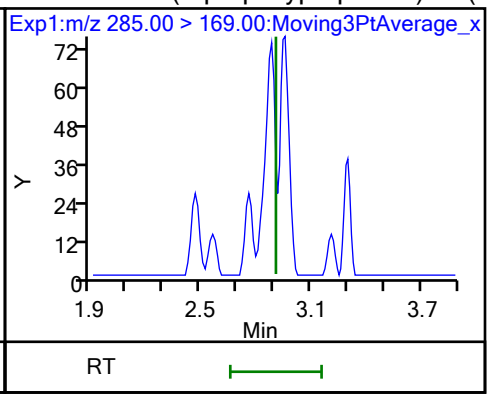
70 Perfluoropentanesulfonic acid (M)



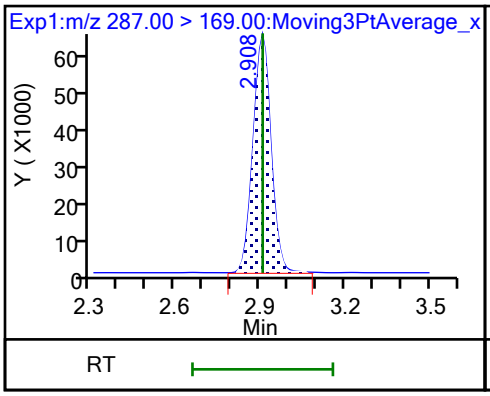
70 Perfluoropentanesulfonic acid (M)



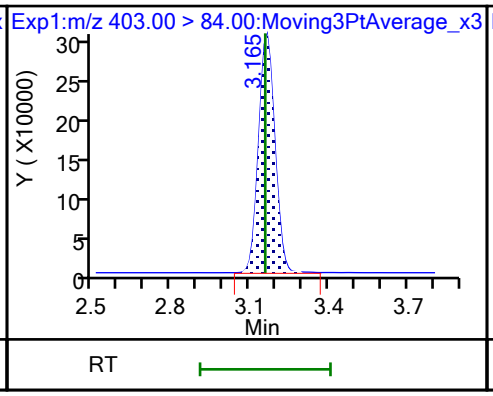
67 Perfluoro(2-propoxypropanoic) ac (ND)



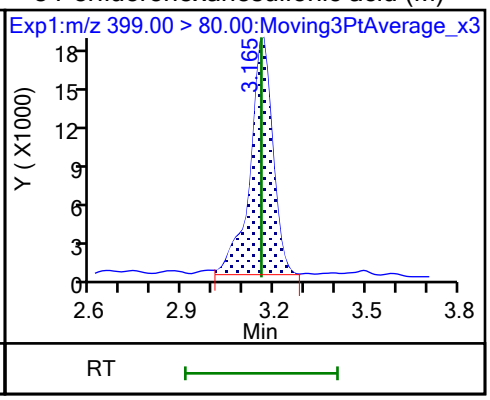
D 64 13C3 HFPO-DA



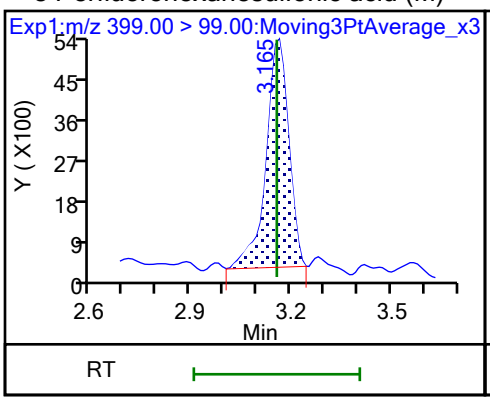
D 11 18O2 PFHxS



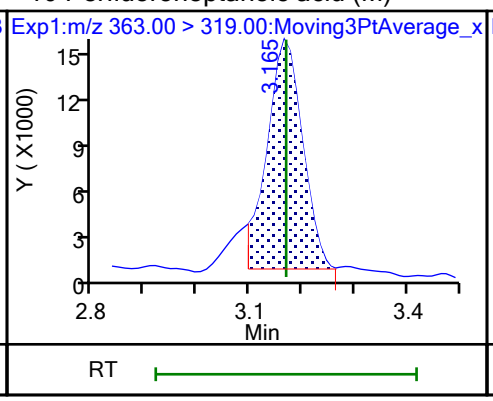
8 Perfluorohexanesulfonic acid (M)



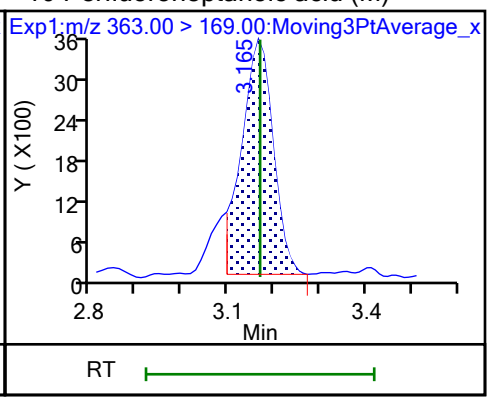
8 Perfluorohexanesulfonic acid (M)



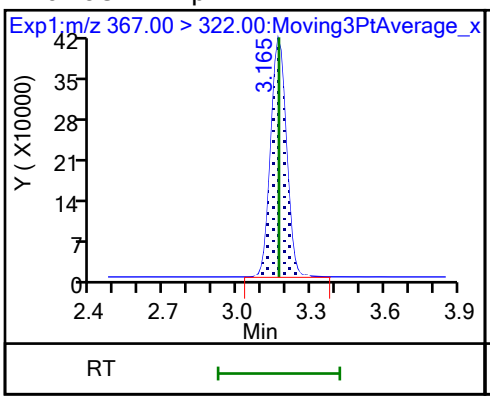
10 Perfluoroheptanoic acid (M)



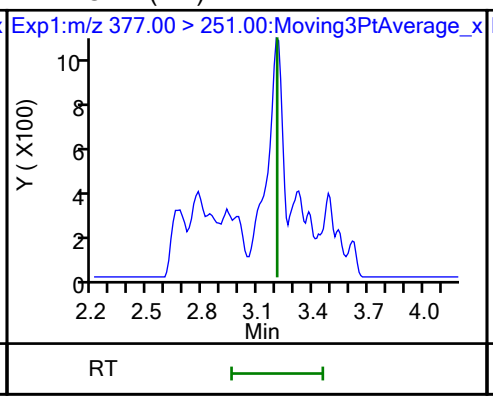
10 Perfluoroheptanoic acid (M)



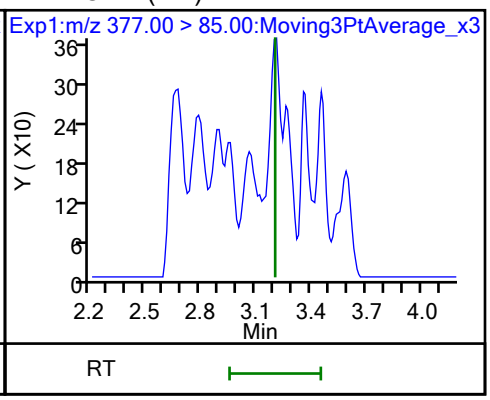
D 9 13C4 PFHpA



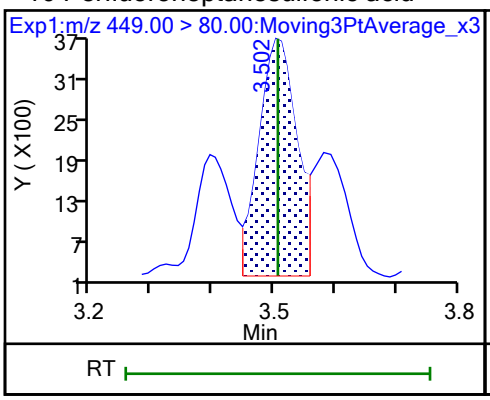
77 DONA (ND)



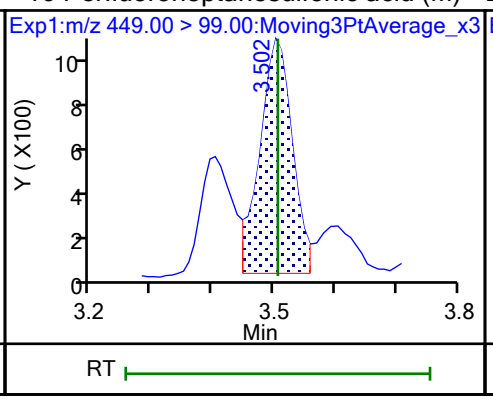
77 DONA (ND)



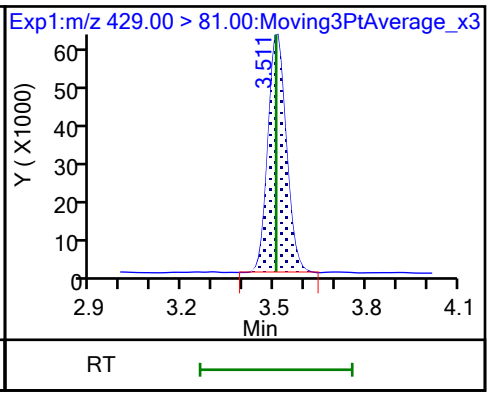
16 Perfluoroheptanesulfonic acid



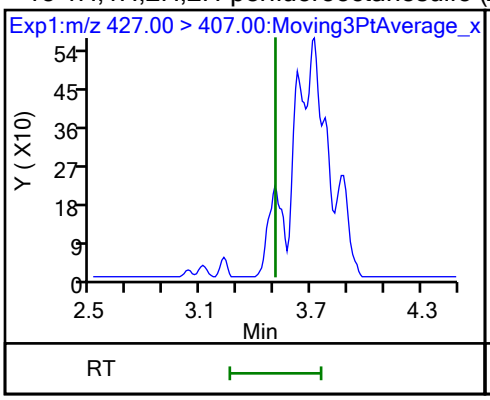
16 Perfluoroheptanesulfonic acid (M)



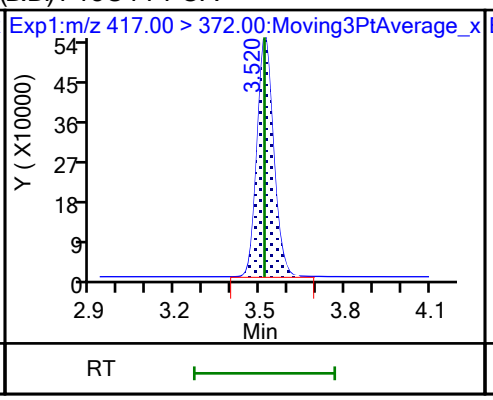
D 12 M2-6:2 FTS



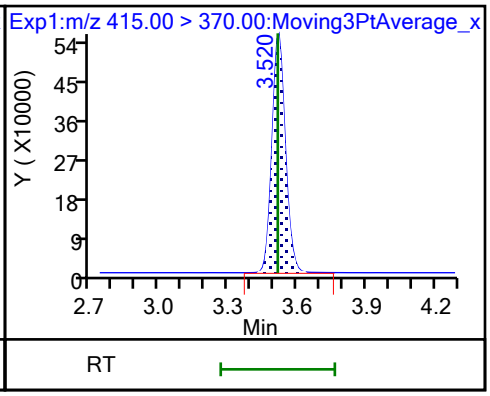
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



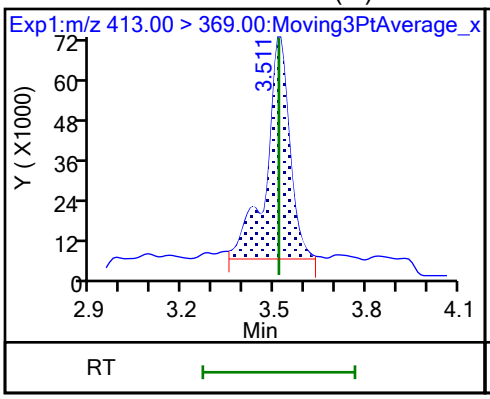
D 14 13C4 PFOA



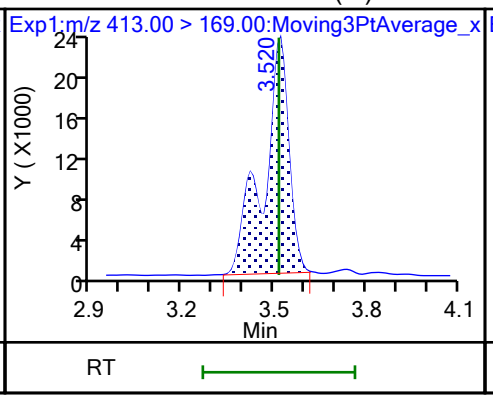
* 62 13C2 PFOA



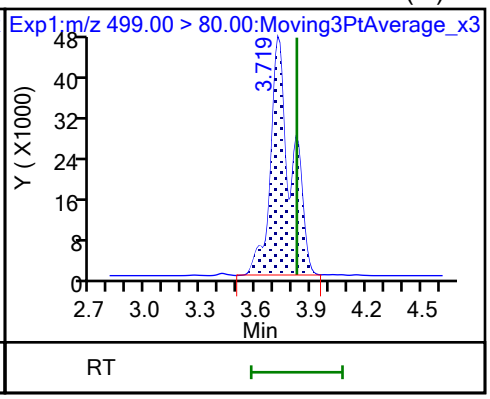
15 Perfluorooctanoic acid (M)



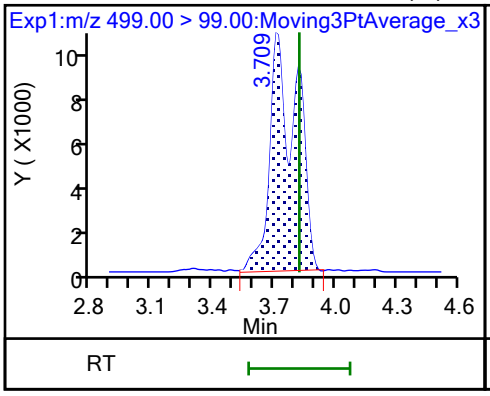
15 Perfluorooctanoic acid (M)



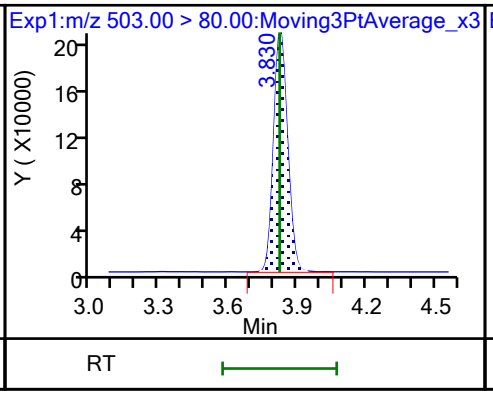
17 Perfluorooctanesulfonic acid (M)



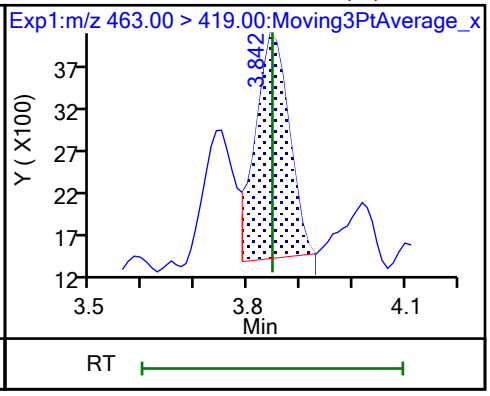
17 Perfluorooctanesulfonic acid (M)



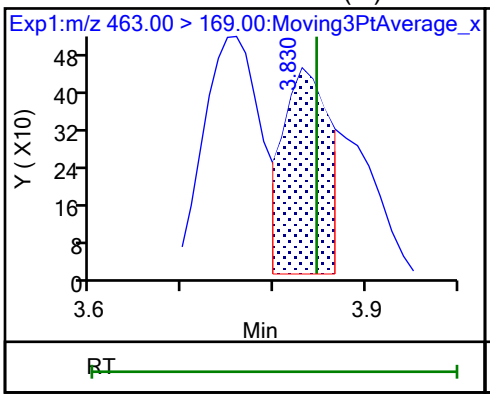
D 18 13C4 PFOS



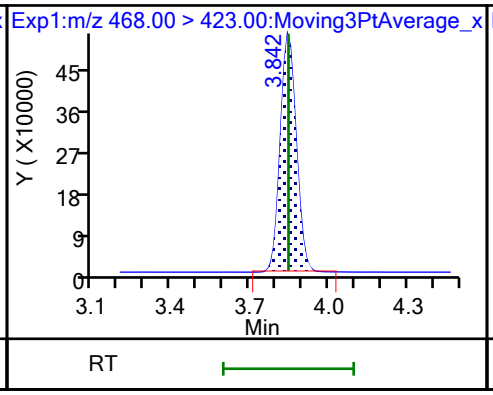
20 Perfluorononanoic acid (M)



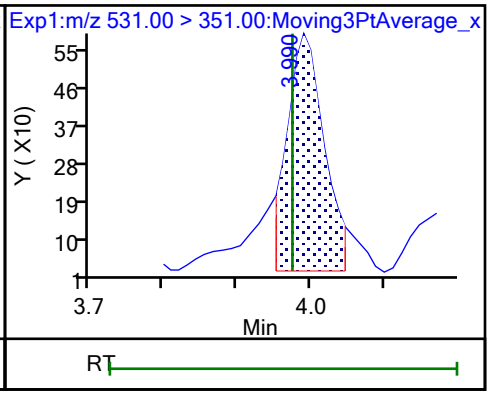
20 Perfluorononanoic acid (M)



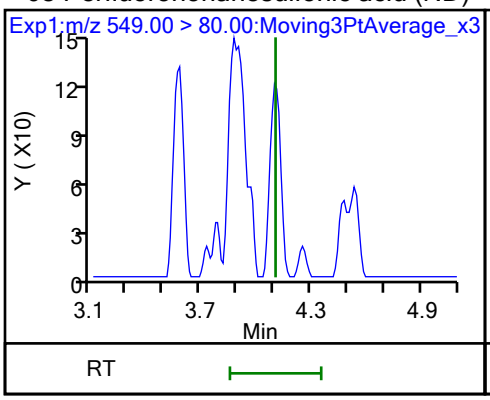
D 19 13C5 PFNA



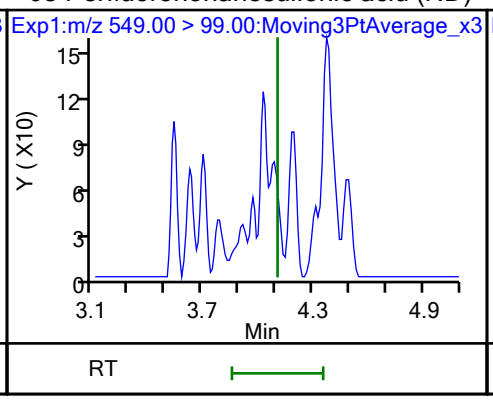
69 9-Chlorohexadecafluoro-3-oxanona (M)



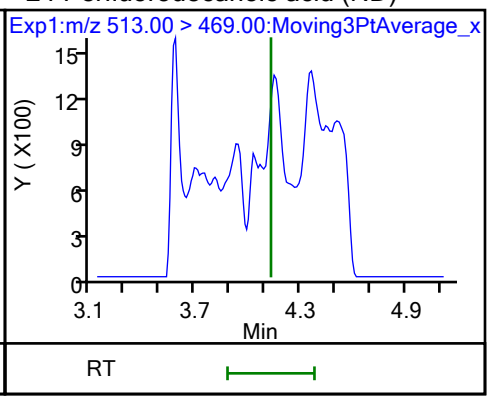
68 Perfluorononanesulfonic acid (ND)



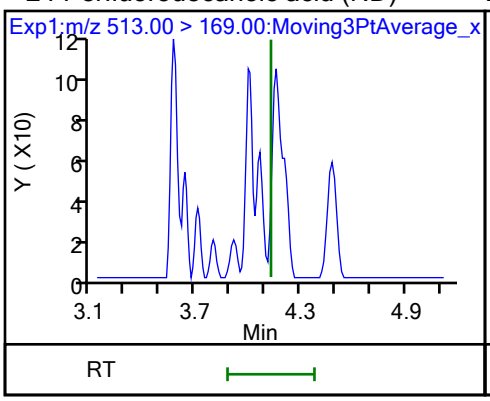
68 Perfluorononanesulfonic acid (ND)



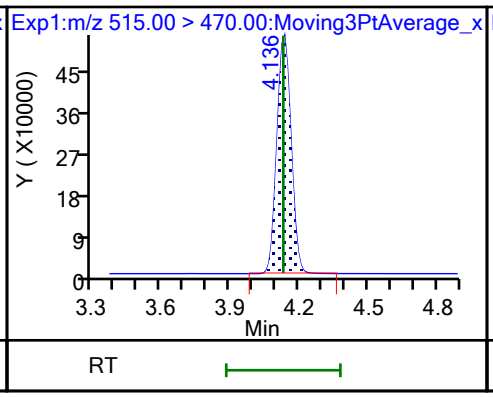
24 Perfluorodecanoic acid (ND)



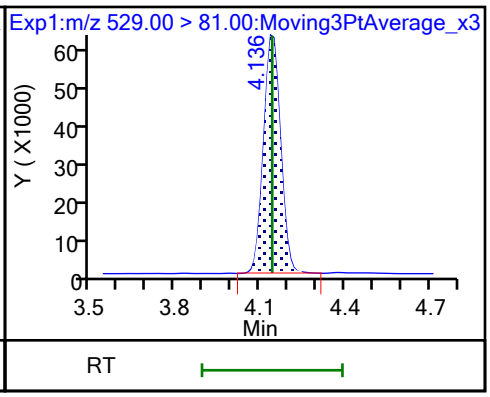
24 Perfluorodecanoic acid (ND)



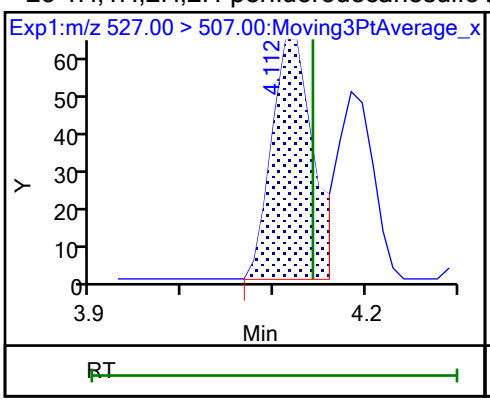
D 23 13C2 PFDA



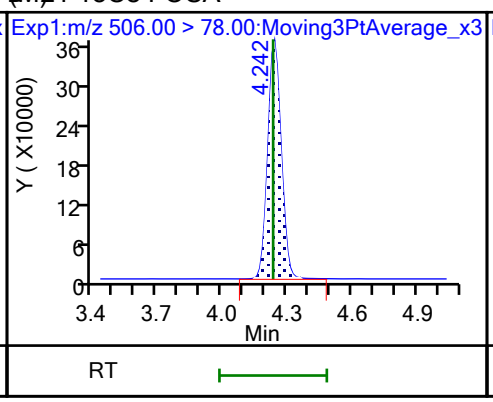
D 26 M2-8:2 FTS



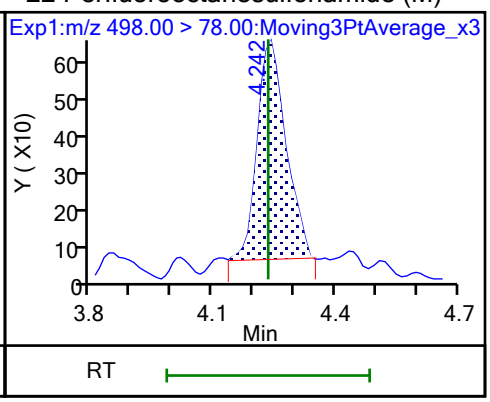
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



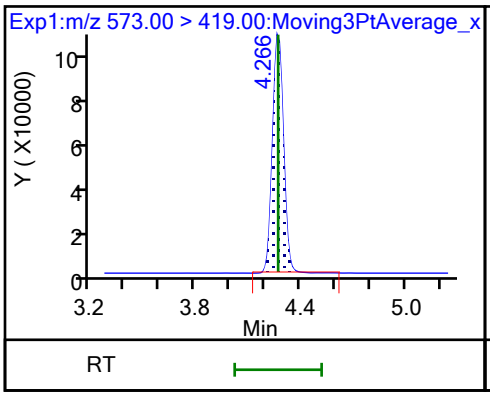
D 21 13C8 FOSA



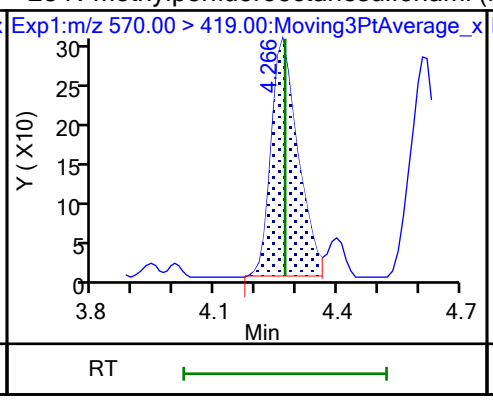
22 Perfluorooctanesulfonamide (M)



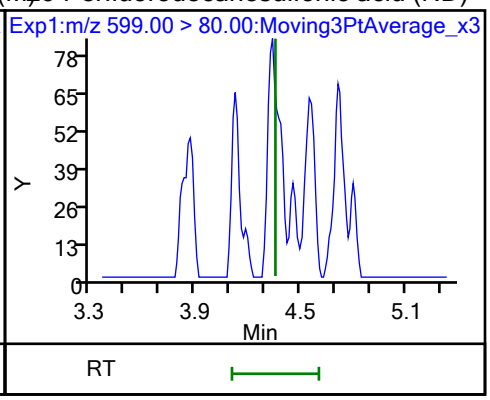
D 27 d3-NMeFOSAA



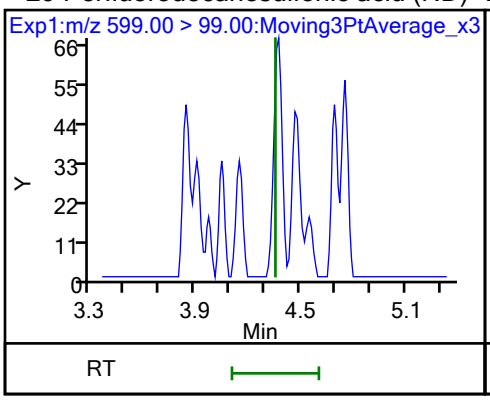
28 N-methylperfluorooctanesulfonami (M)



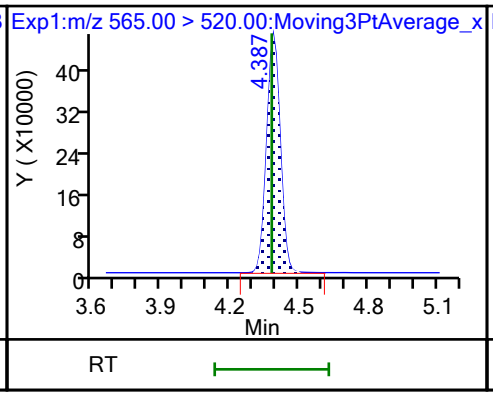
29 Perfluorodecanesulfonic acid (ND)



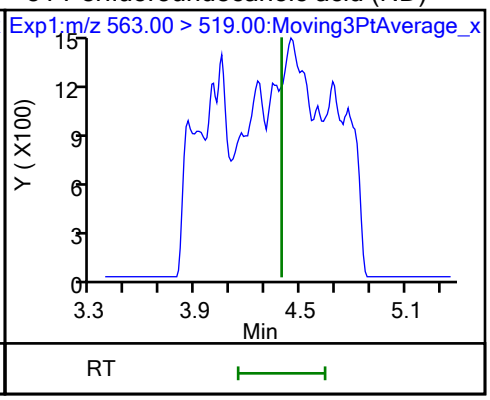
29 Perfluorodecanesulfonic acid (ND)



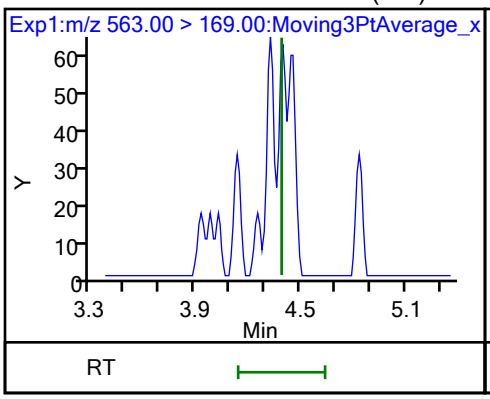
D 30 13C2 PFUnA



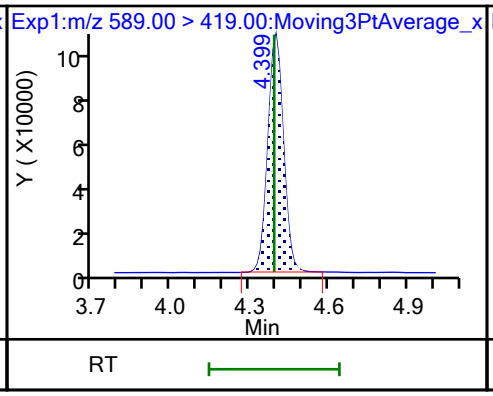
31 Perfluoroundecanoic acid (ND)



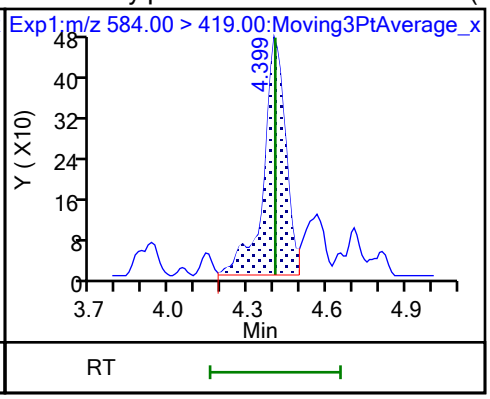
31 Perfluoroundecanoic acid (ND)



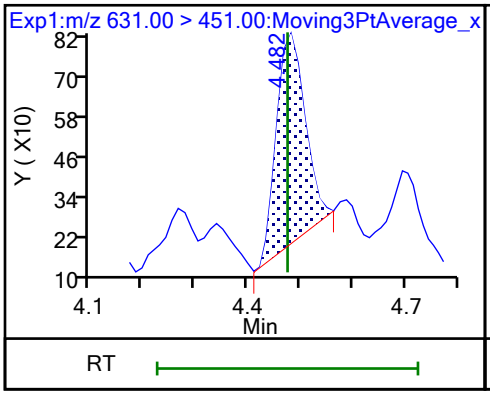
D 32 d5-NEtFOSAA



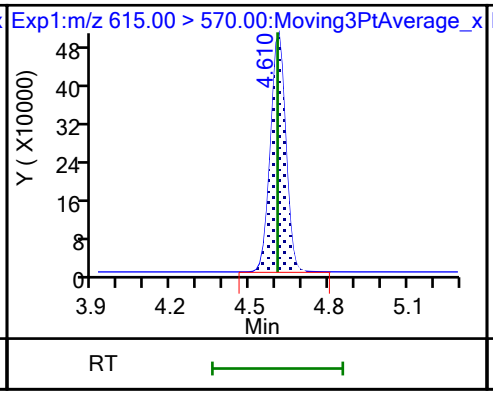
33 N-ethylperfluorooctanesulfonamid (M)



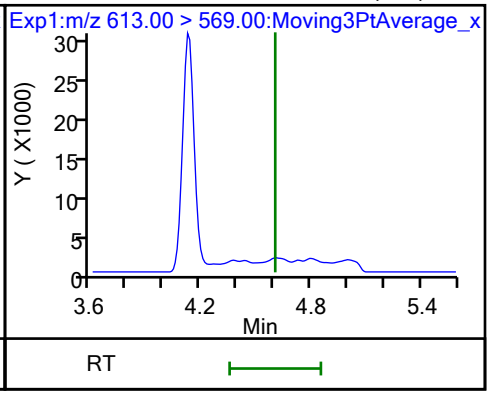
66 11-Chloroeicosafluoro-3-oxaundec



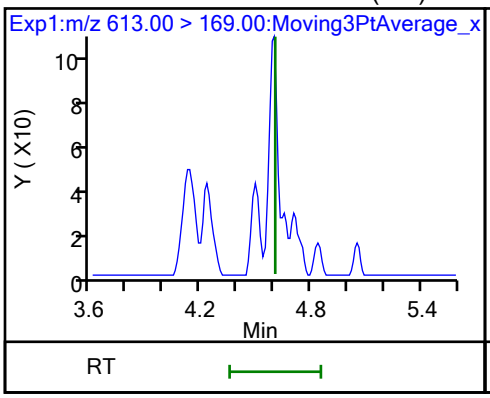
D 36 13C2 PFDoA



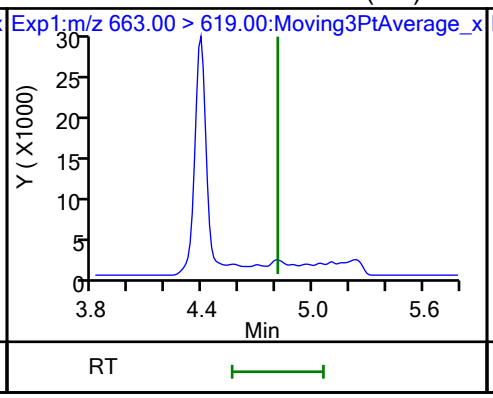
37 Perfluorododecanoic acid (ND)



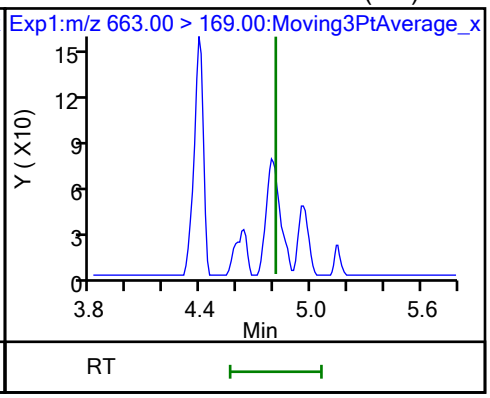
37 Perfluorododecanoic acid (ND)



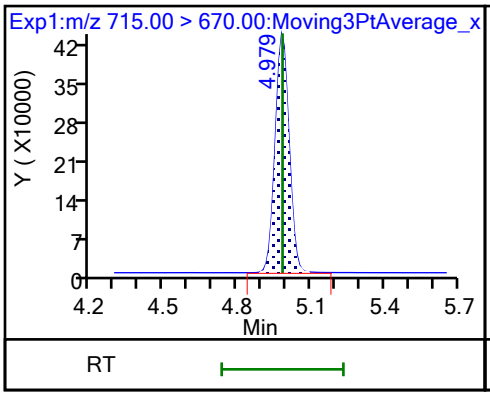
41 Perfluorotridecanoic acid (ND)



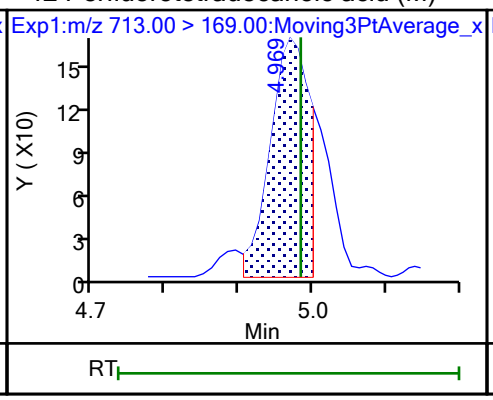
41 Perfluorotridecanoic acid (ND)



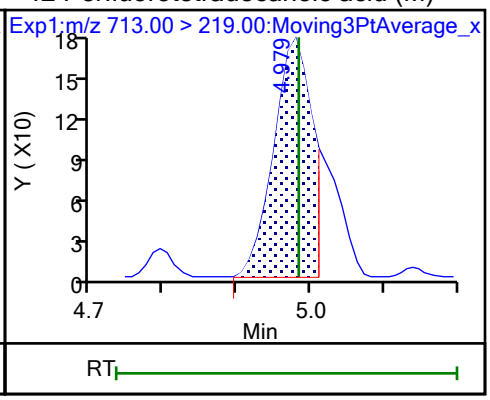
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

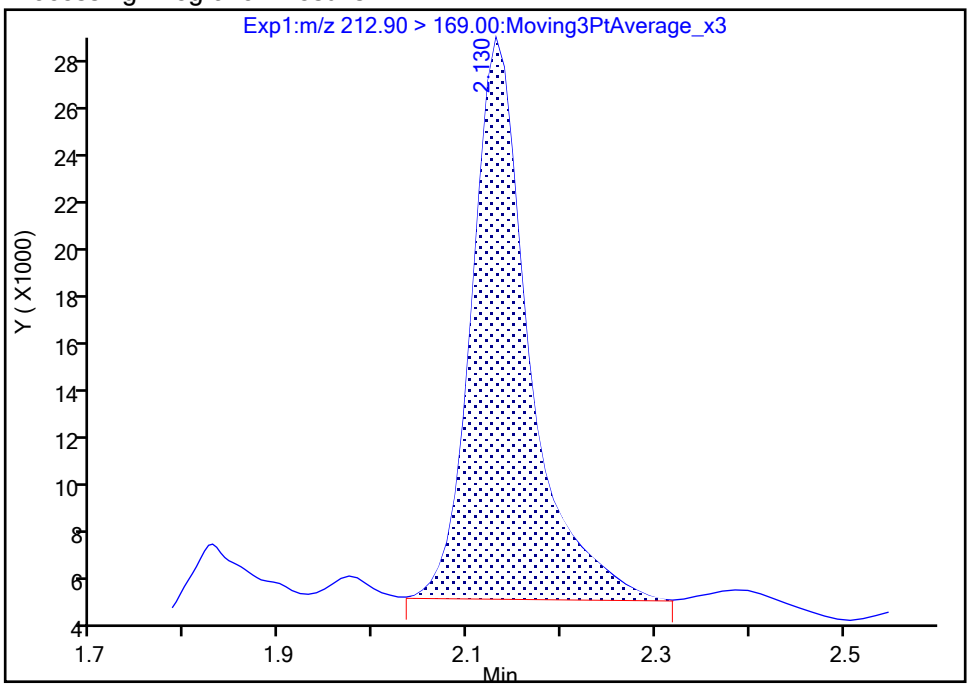
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

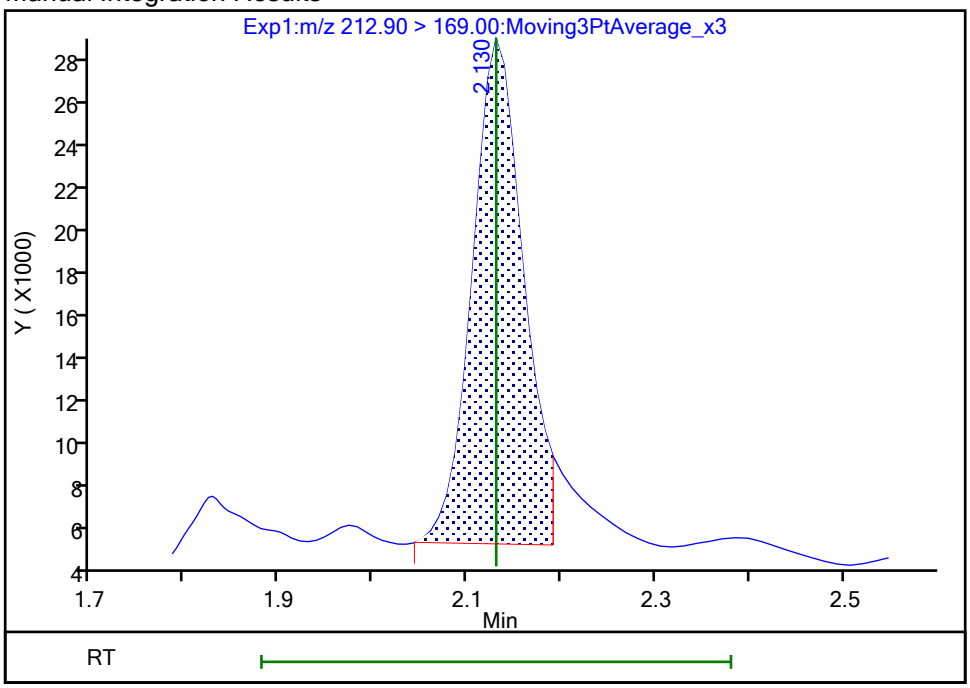
Processing Integration Results

RT: 2.13
Area: 98043
Amount: 0.027019
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 87708
Amount: 0.019861
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:25:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

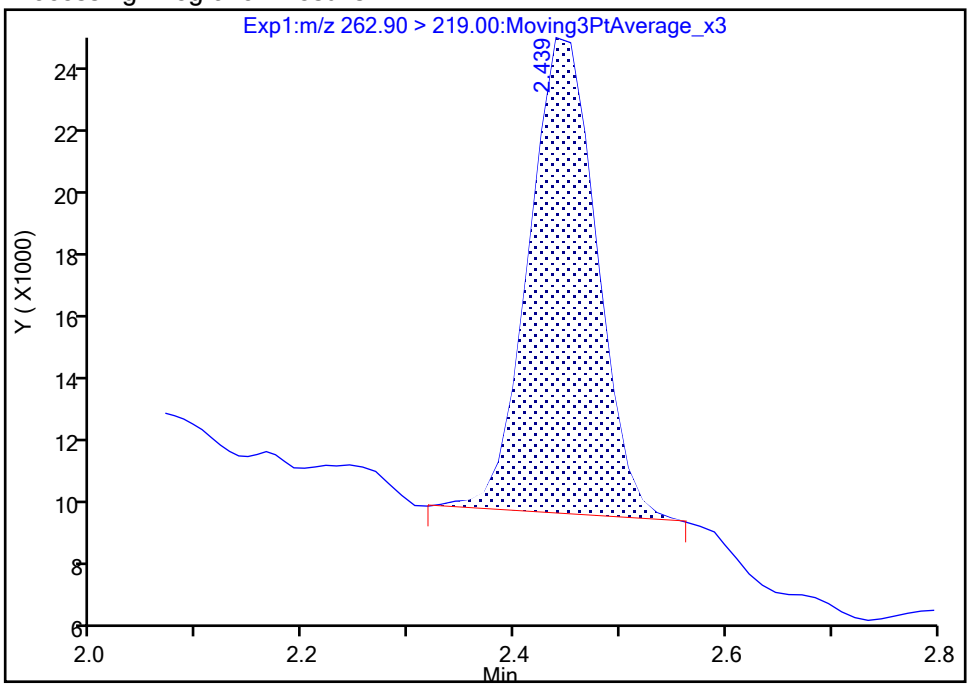
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

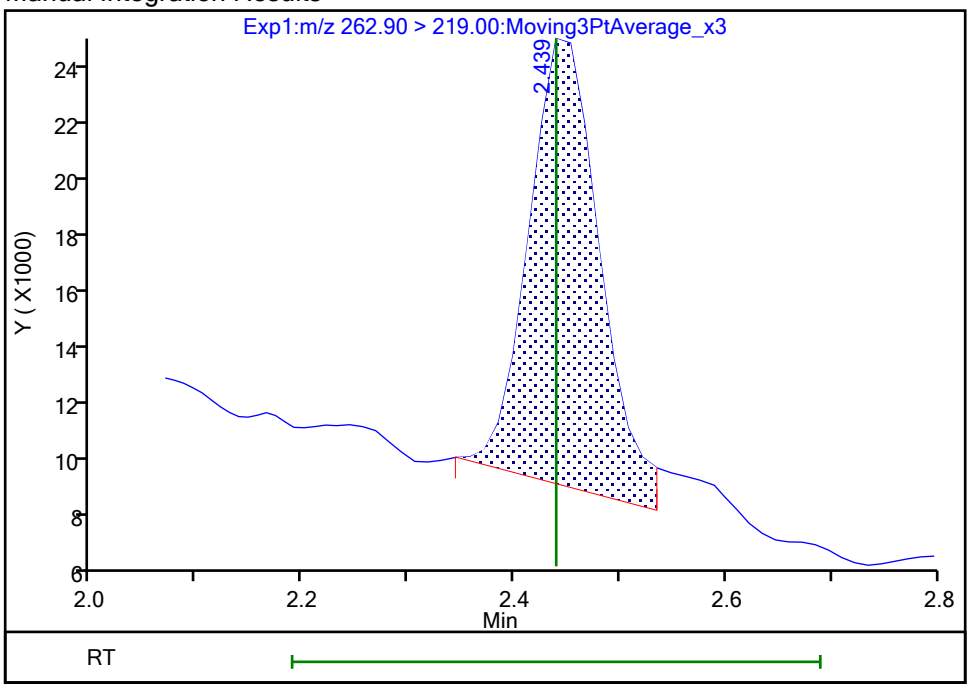
Processing Integration Results

RT: 2.44
Area: 66737
Amount: 0.051105
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 72224
Amount: 0.055306
Amount Units: ng/ml



Reviewer: SJ4N, 24-Oct-2023 23:17:22 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

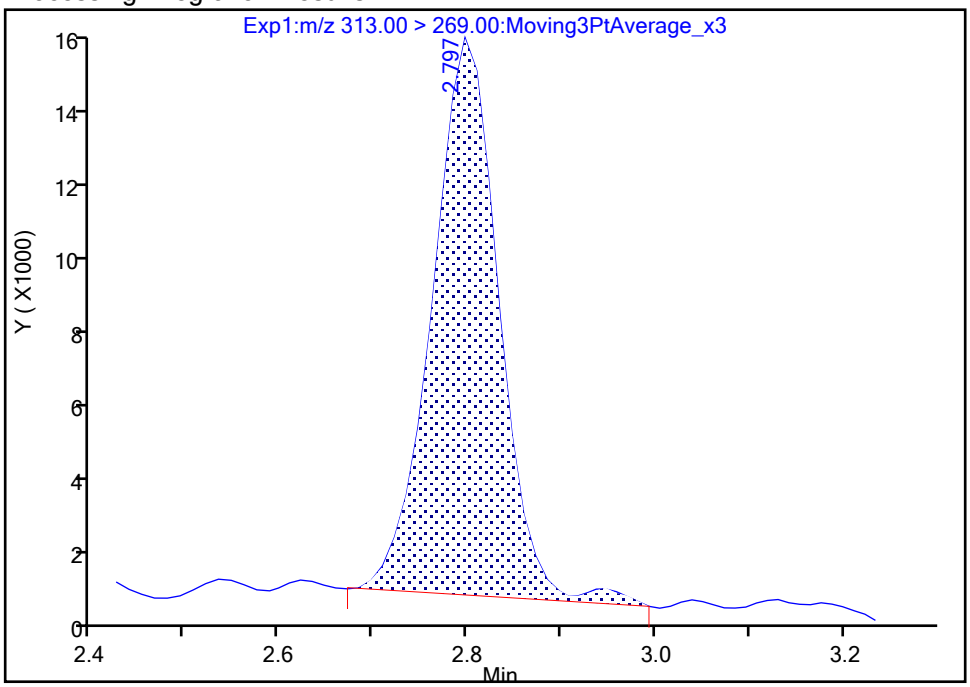
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

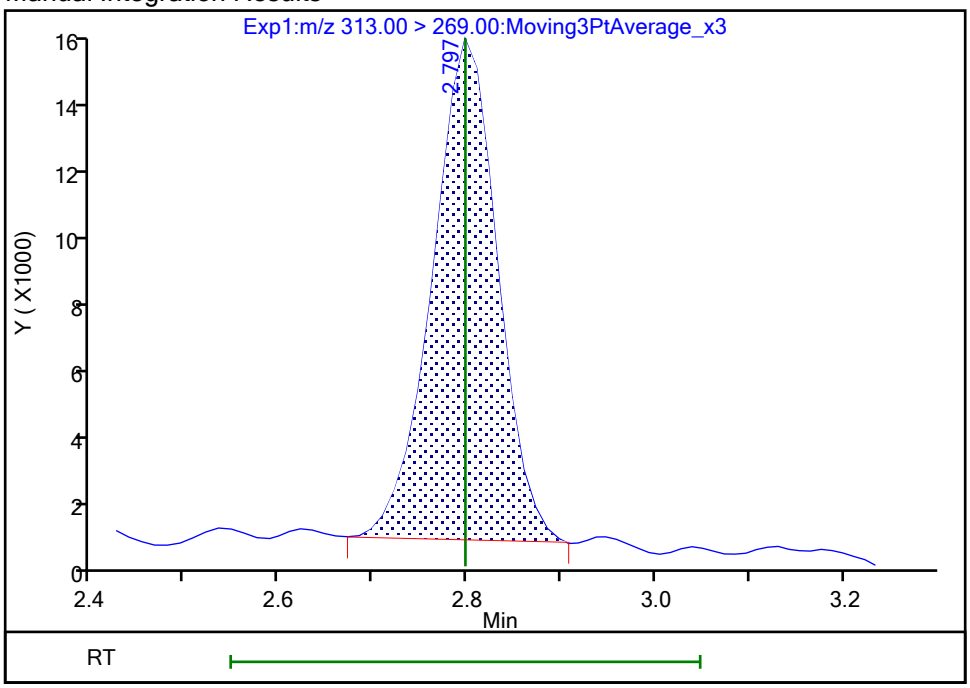
Processing Integration Results

RT: 2.80
Area: 70210
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 68069
Amount: 0.048936
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

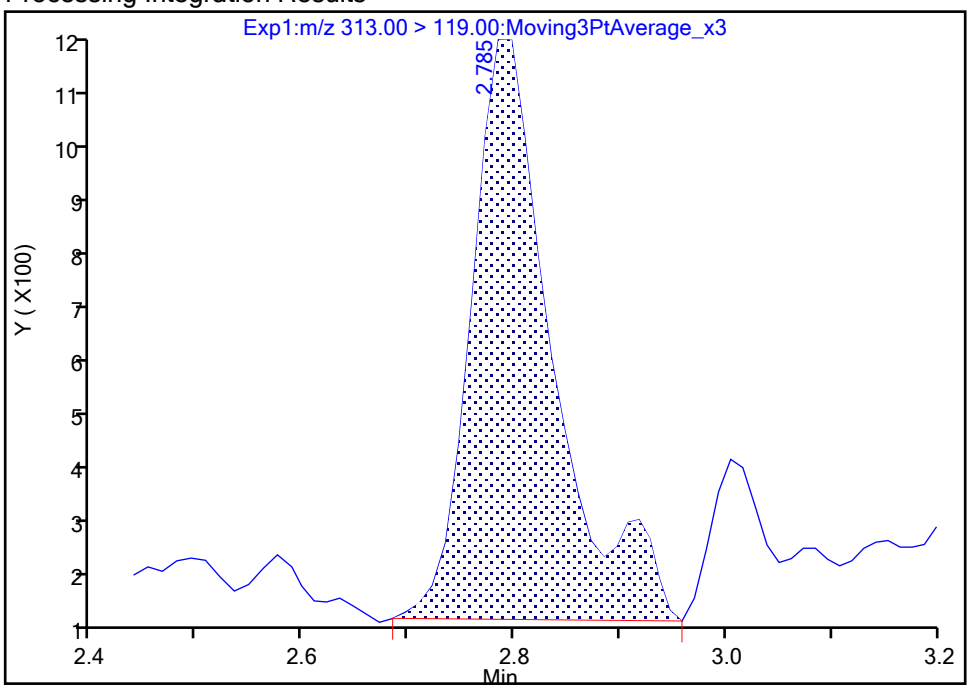
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

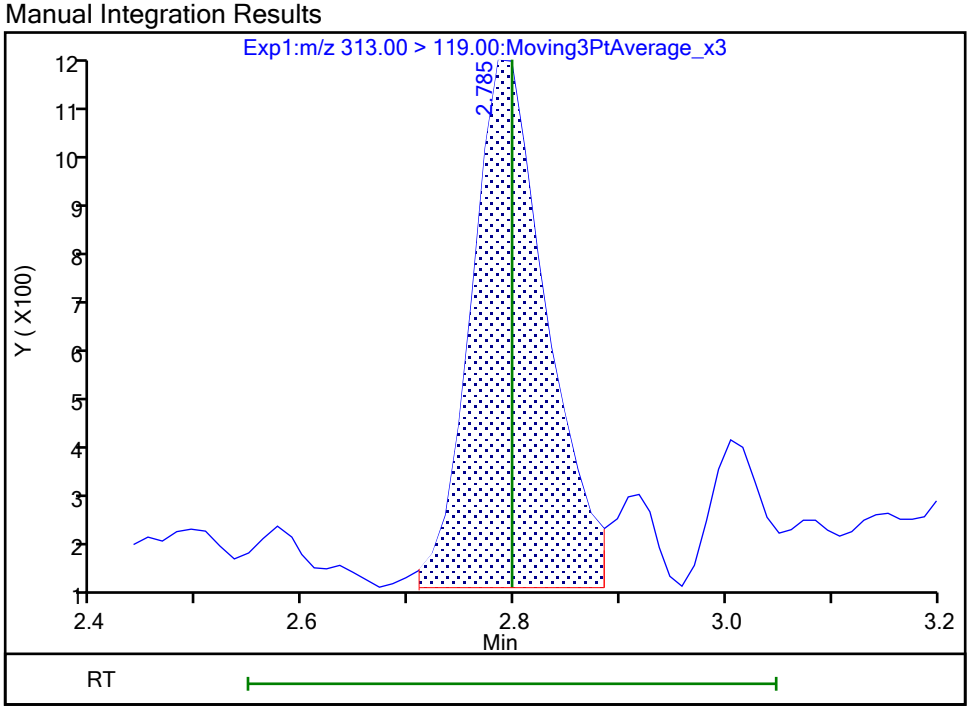
Processing Integration Results

RT: 2.78
Area: 5712
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.78
Area: 5238
Amount: 0.048936
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

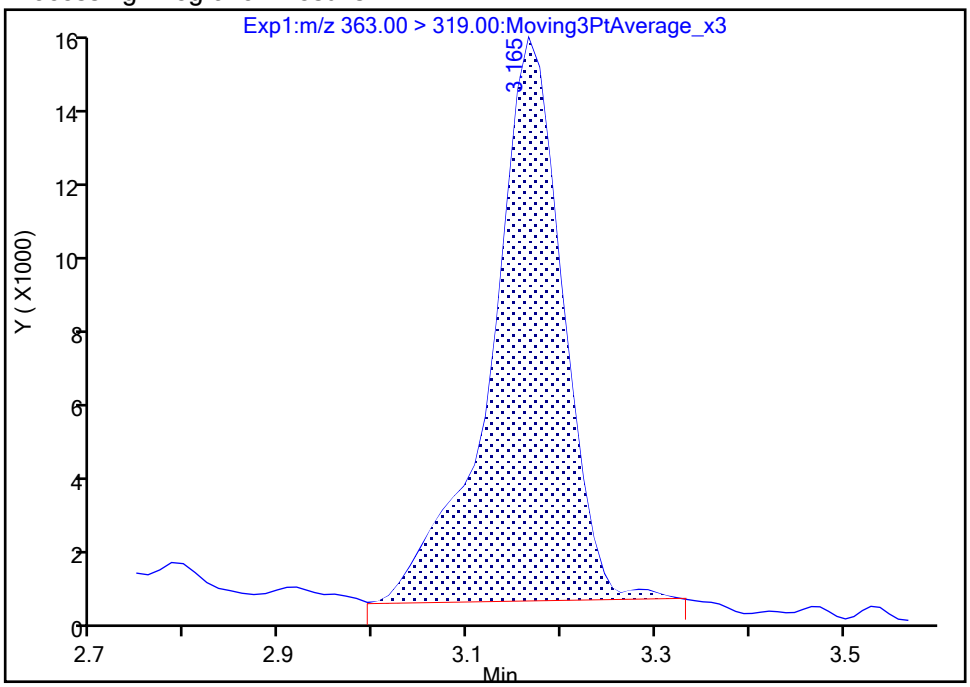
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

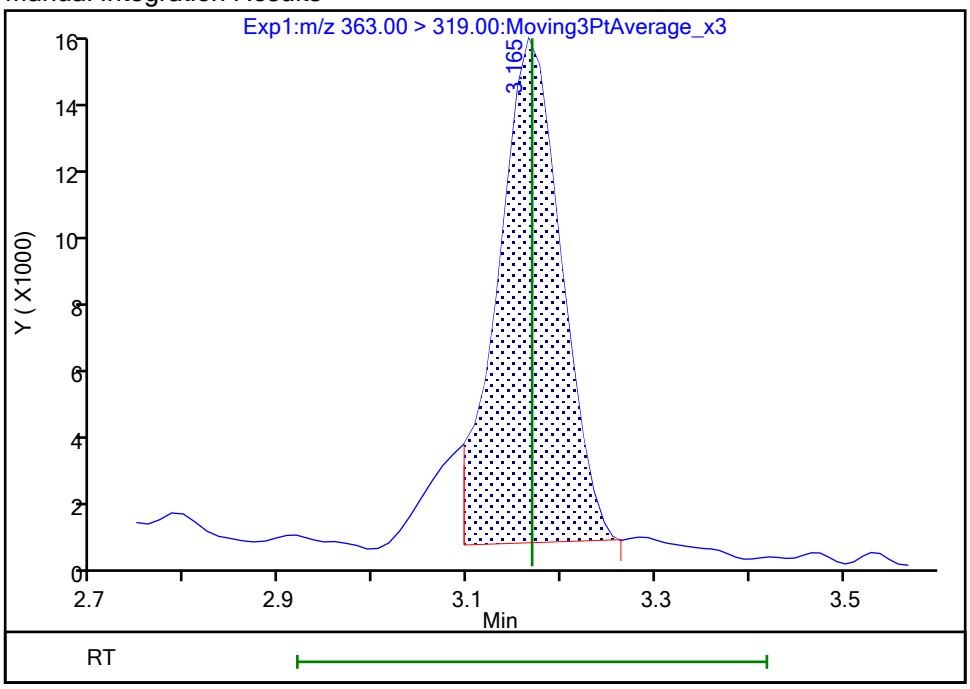
Processing Integration Results

RT: 3.16
Area: 73727
Amount: 0.044331
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 64357
Amount: 0.038697
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

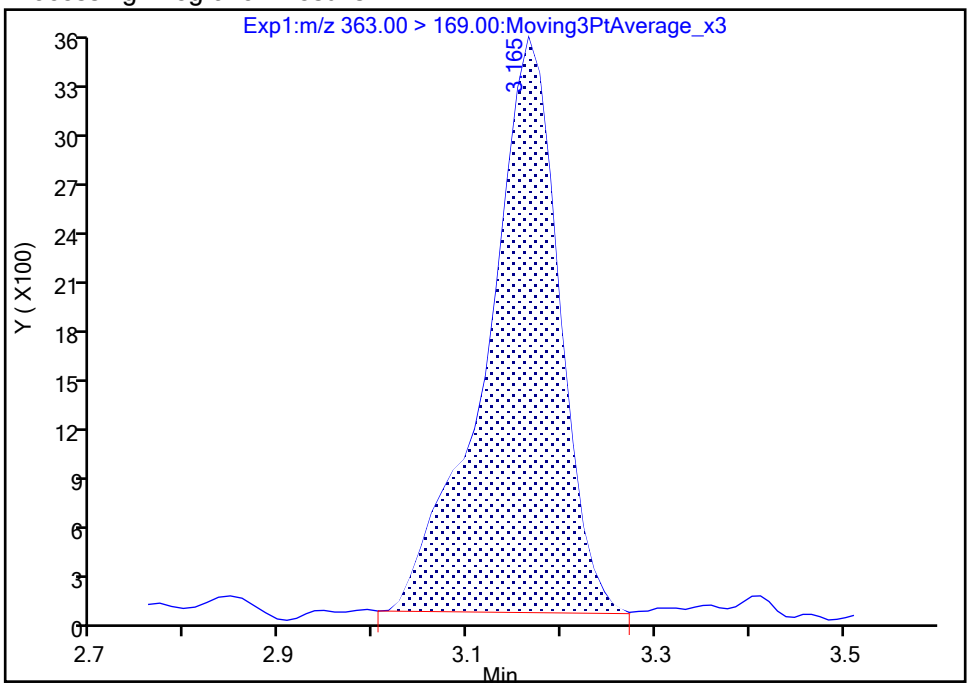
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

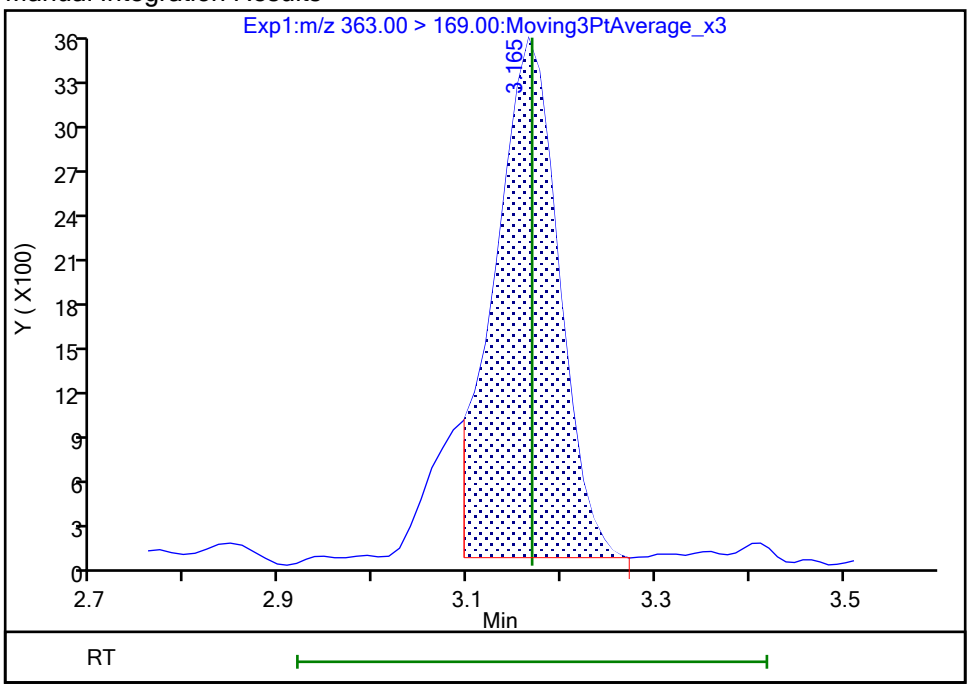
Processing Integration Results

RT: 3.16
Area: 18759
Amount: 0.044331
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 16486
Amount: 0.038697
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

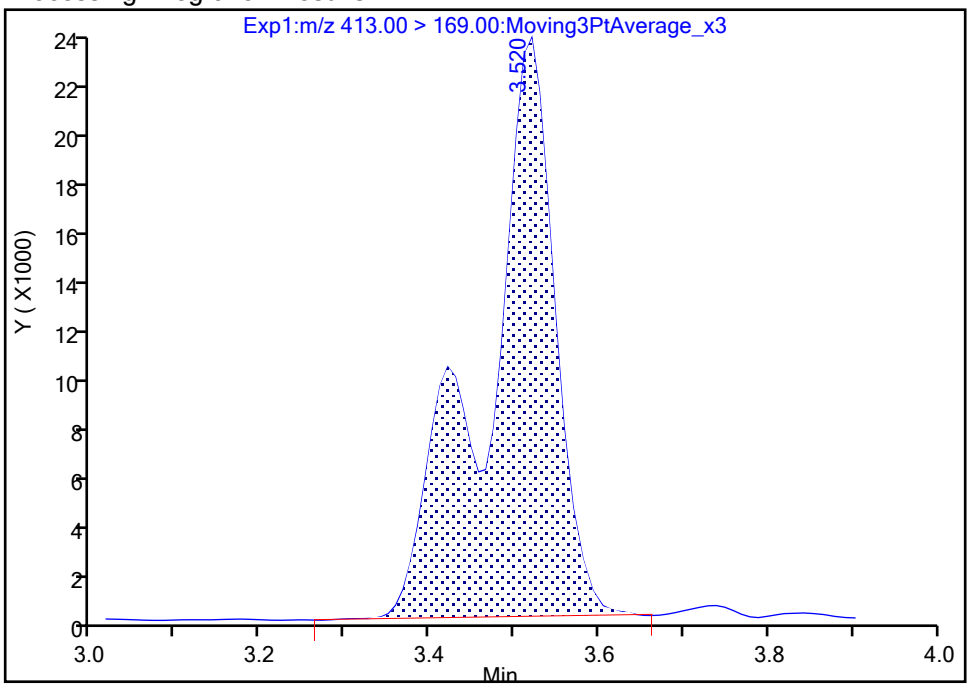
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

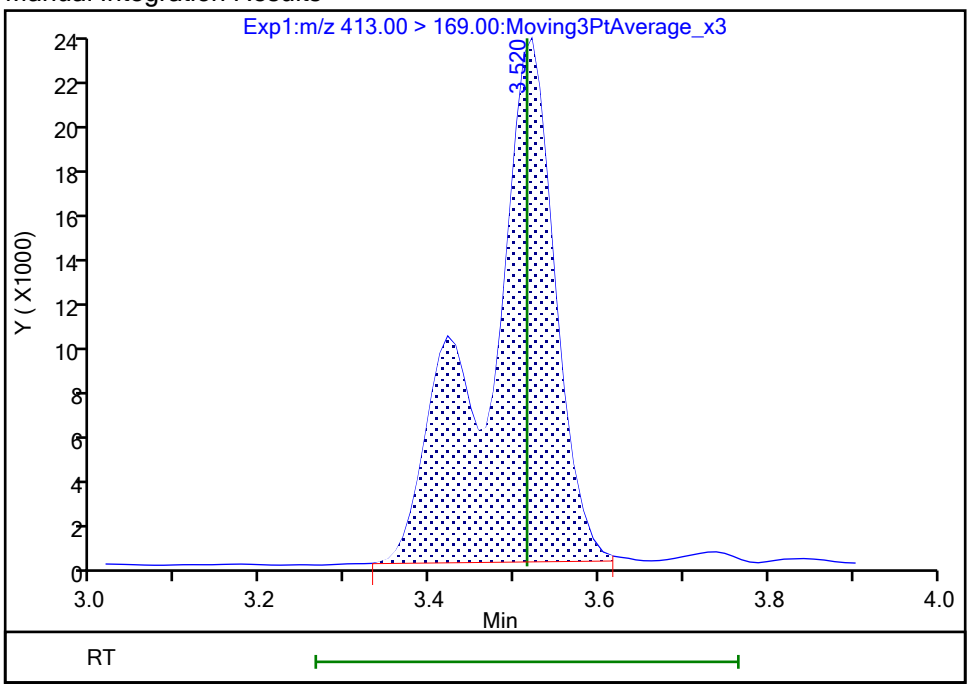
Processing Integration Results

RT: 3.52
Area: 133789
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 133408
Amount: 0.190040
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:27:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

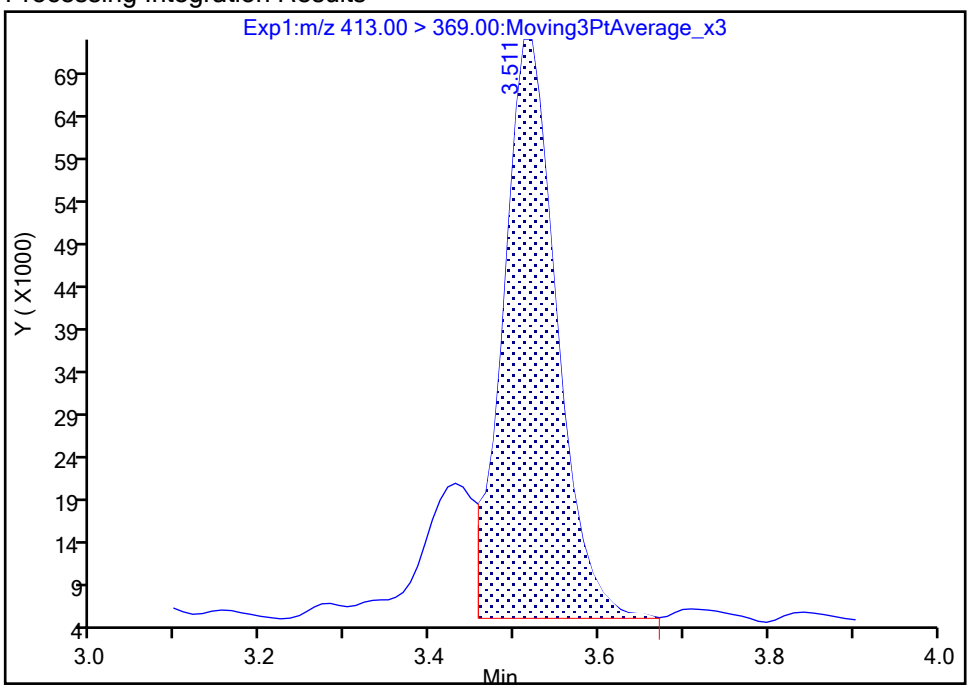
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

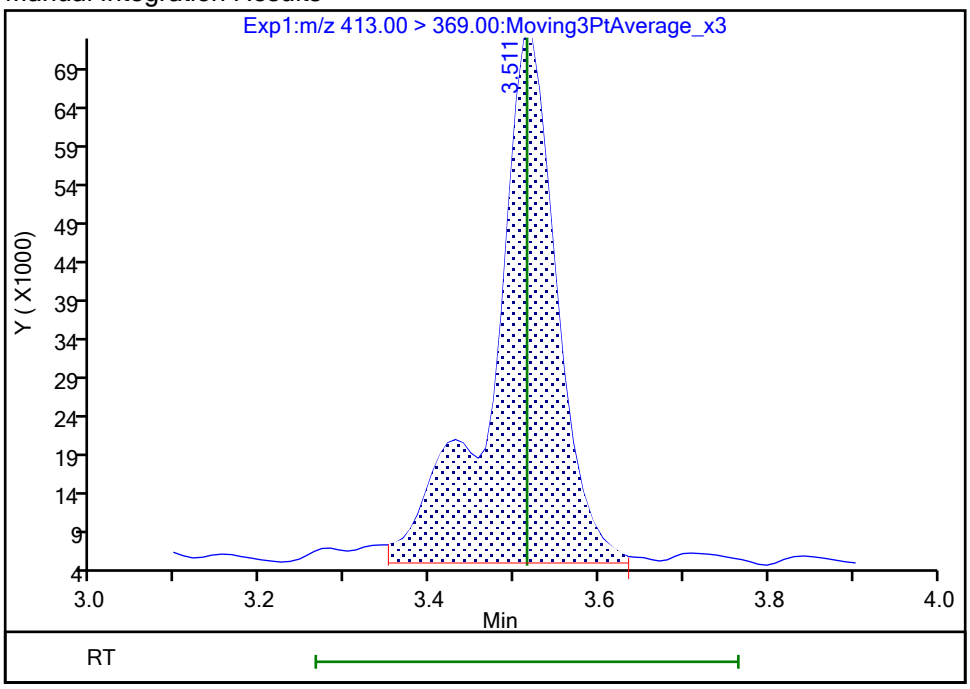
Processing Integration Results

RT: 3.51
Area: 293427
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 360145
Amount: 0.190040
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:14:58 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

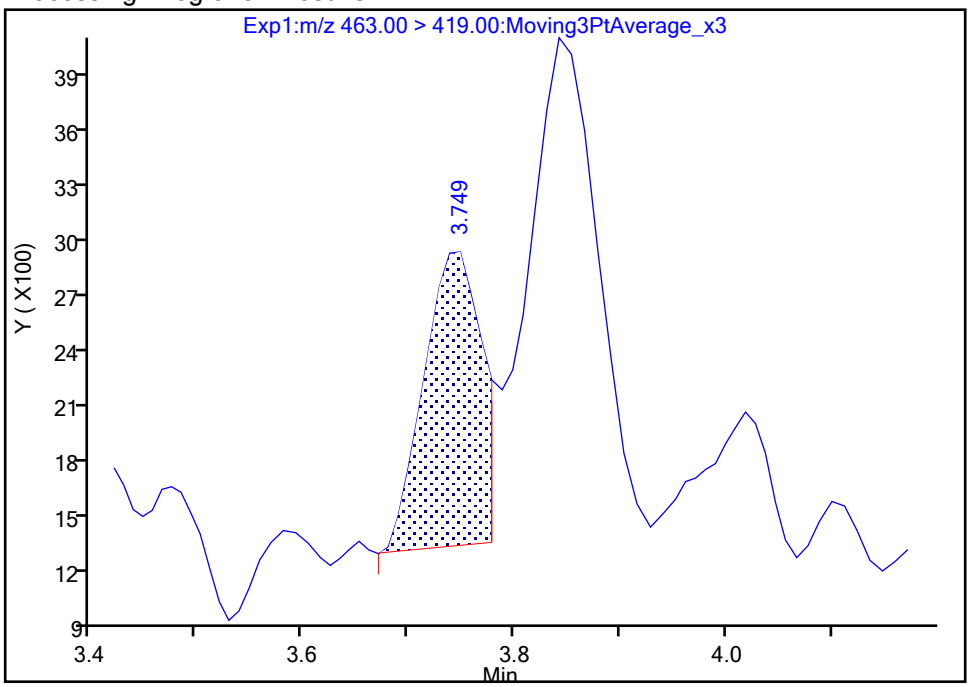
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

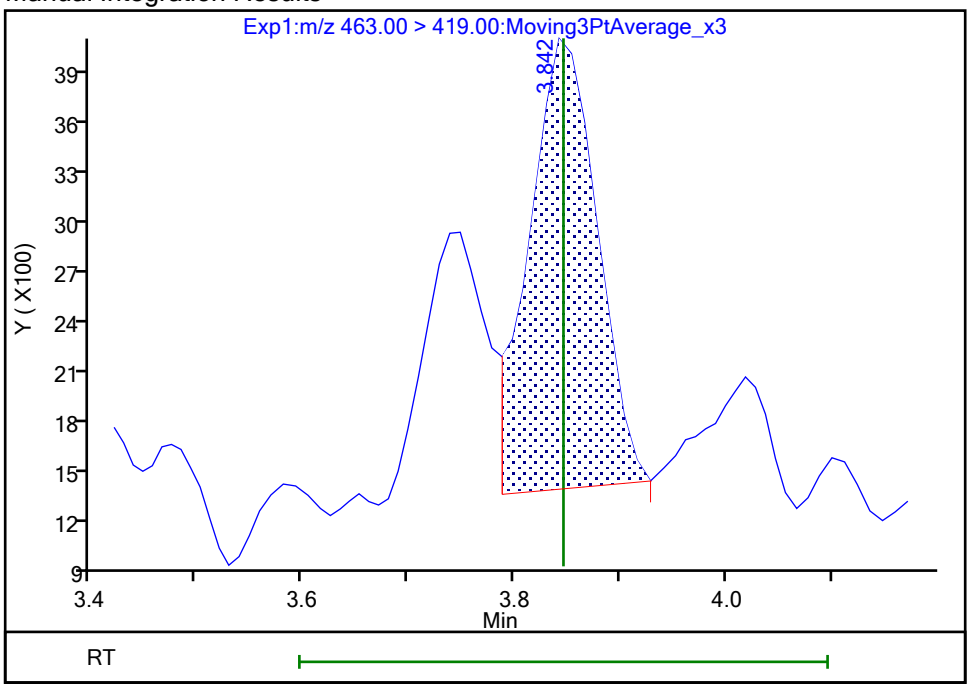
Processing Integration Results

RT: 3.75
Area: 5725
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 11568
Amount: 0.006581
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

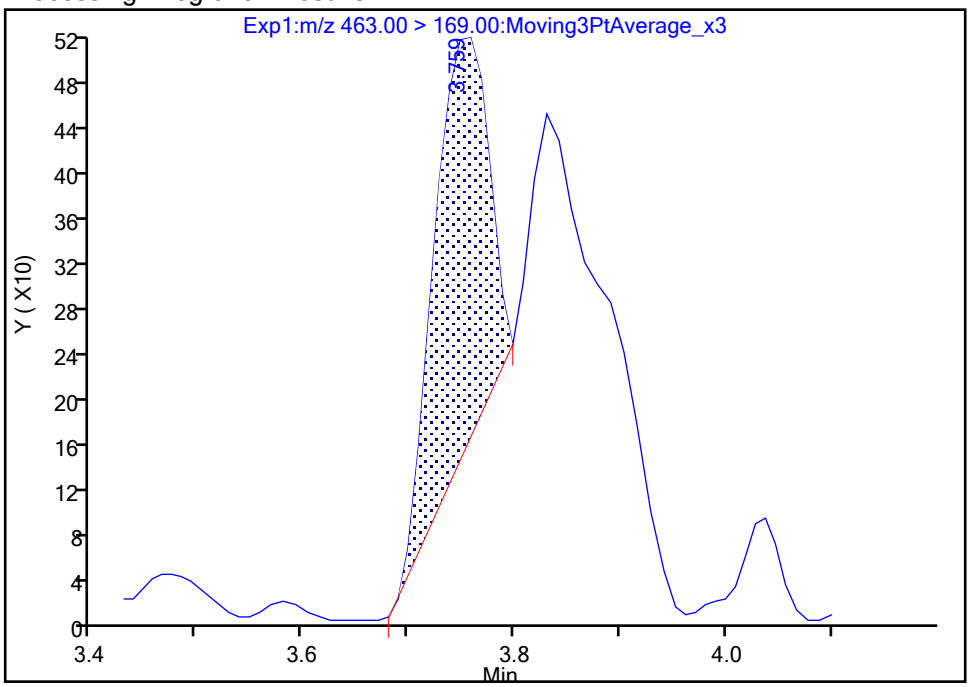
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

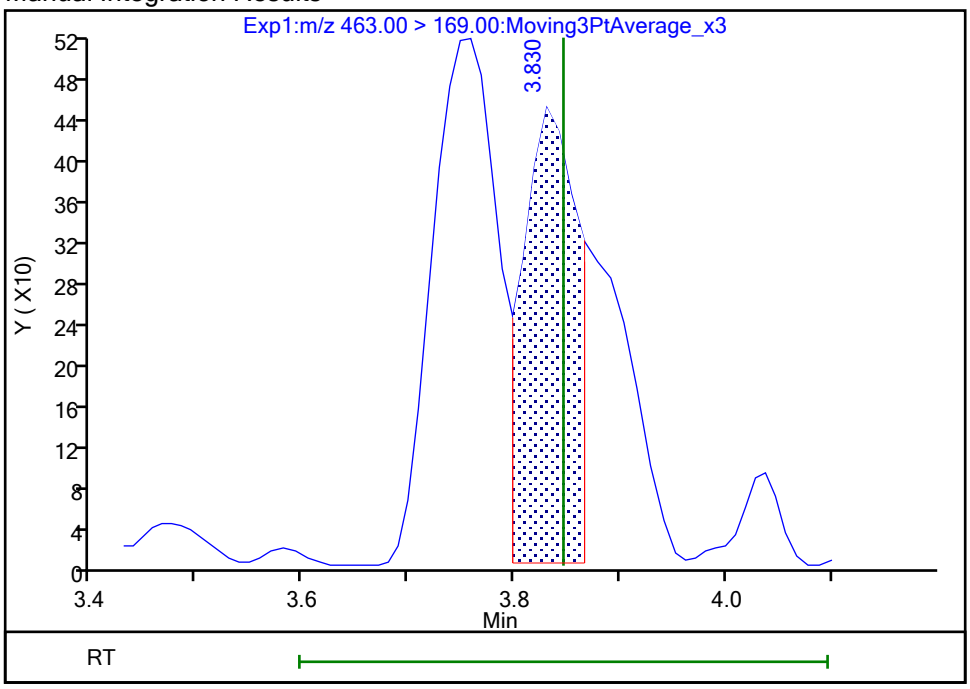
Processing Integration Results

RT: 3.76
Area: 1334
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 1508
Amount: 0.006581
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

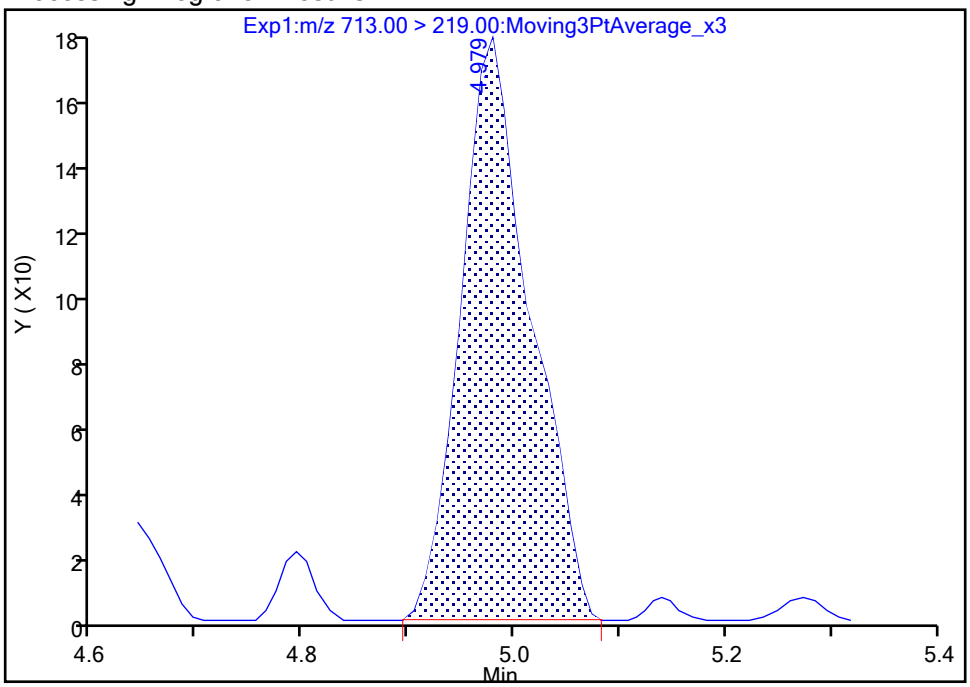
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

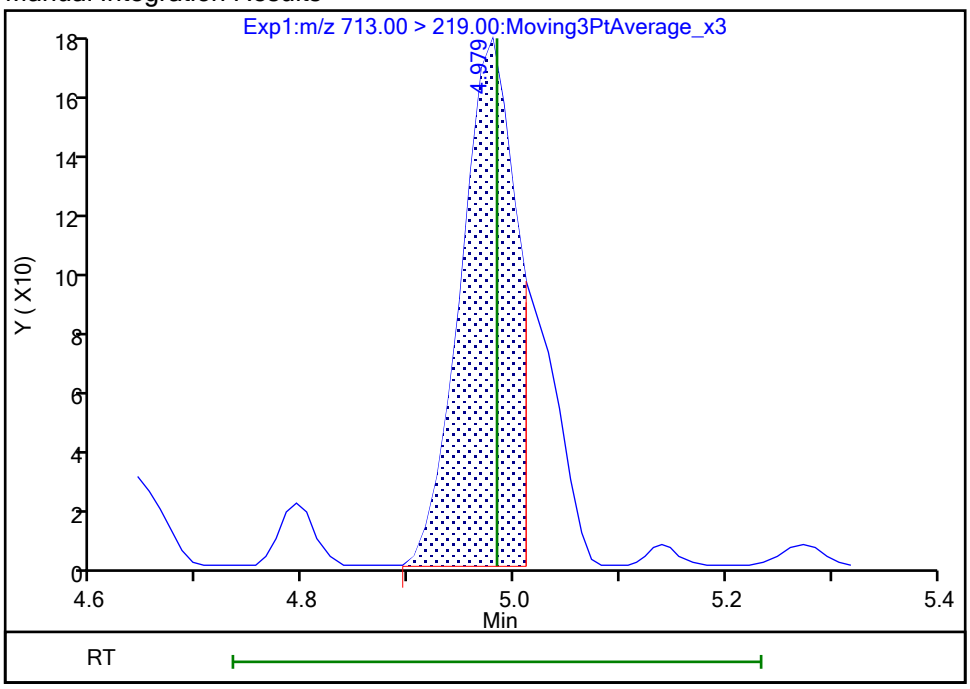
Processing Integration Results

RT: 4.98
Area: 817
Amount: 0.001496
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 629
Amount: 0.003693
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:29:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

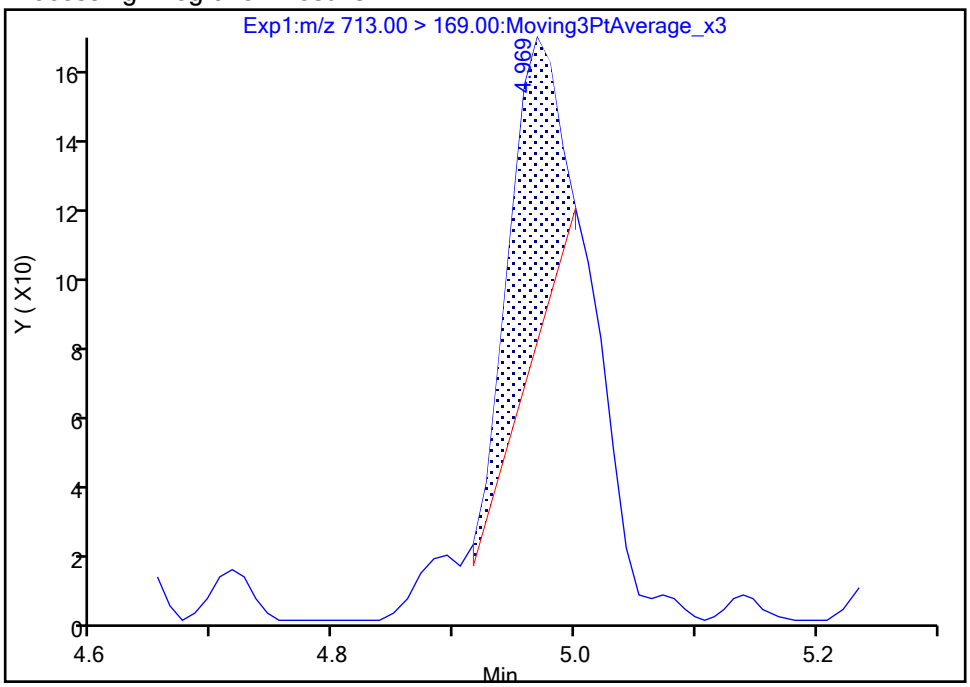
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

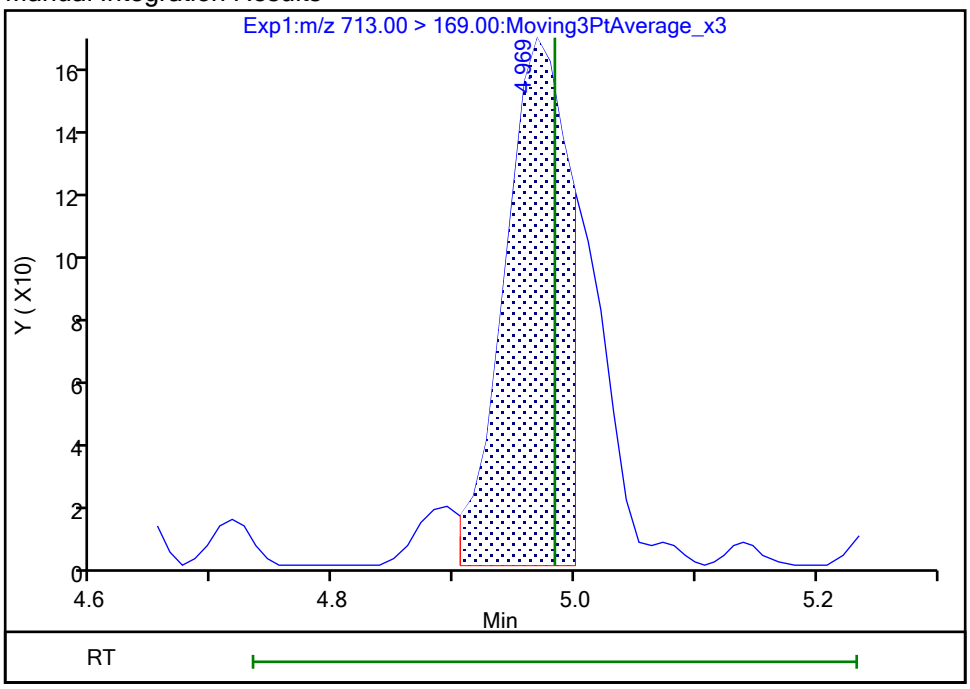
Processing Integration Results

RT: 4.97
Area: 231
Amount: 0.001496
Amount Units: ng/ml



Manual Integration Results

RT: 4.97
Area: 570
Amount: 0.003693
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:17:52 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

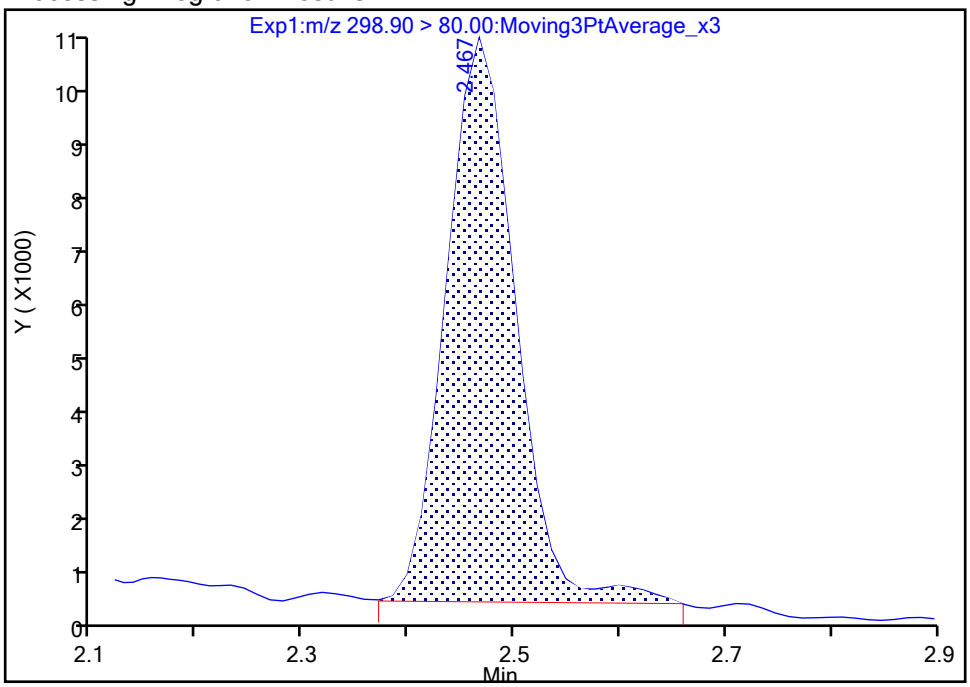
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

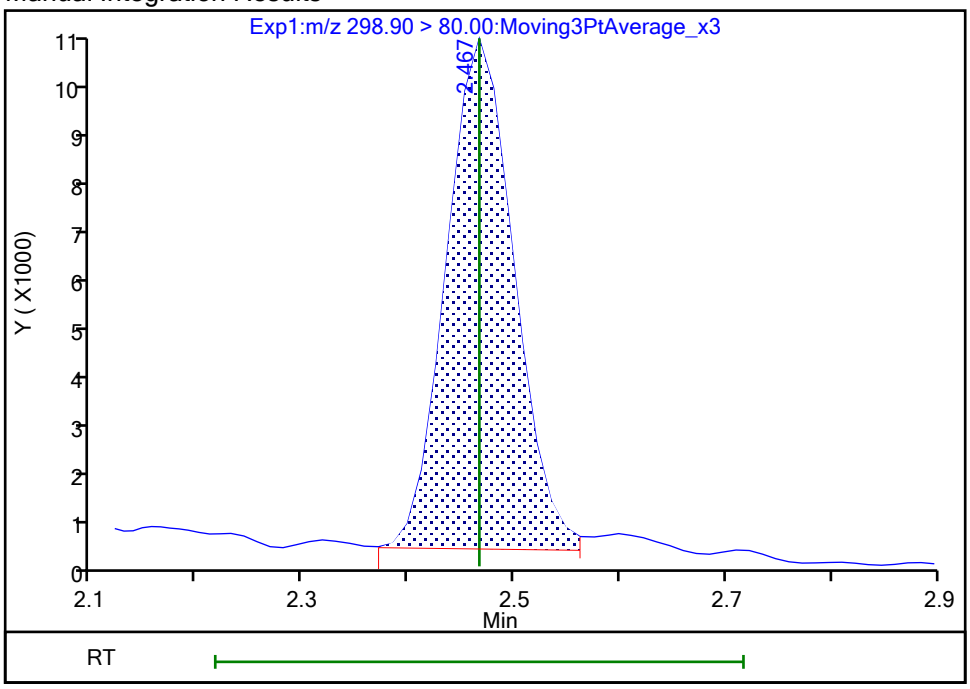
Processing Integration Results

RT: 2.47
Area: 46498
Amount: 0.027725
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 45405
Amount: 0.027073
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:25:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

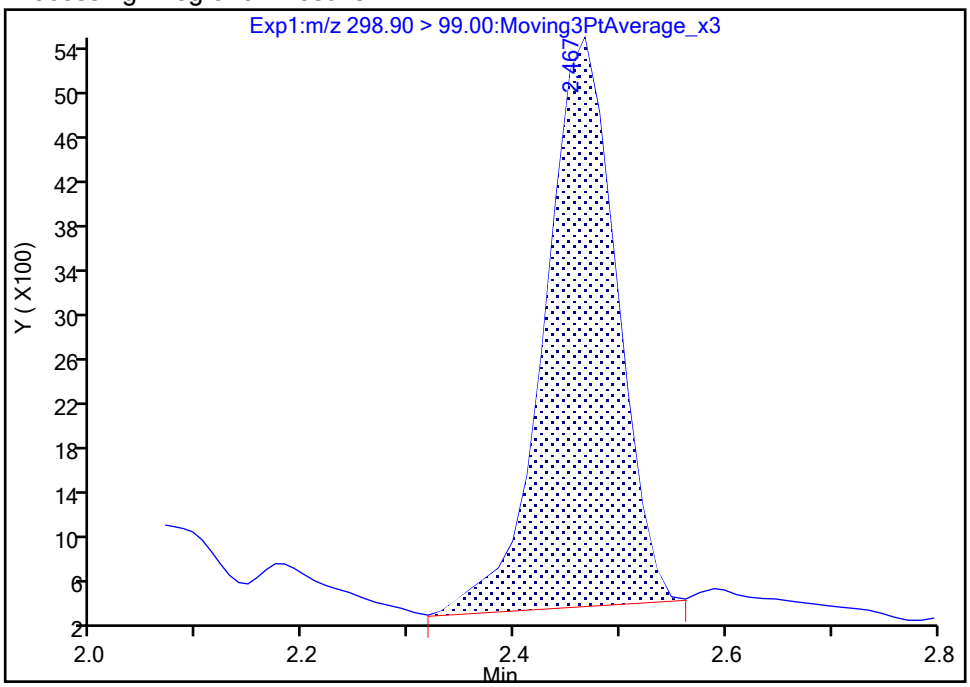
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

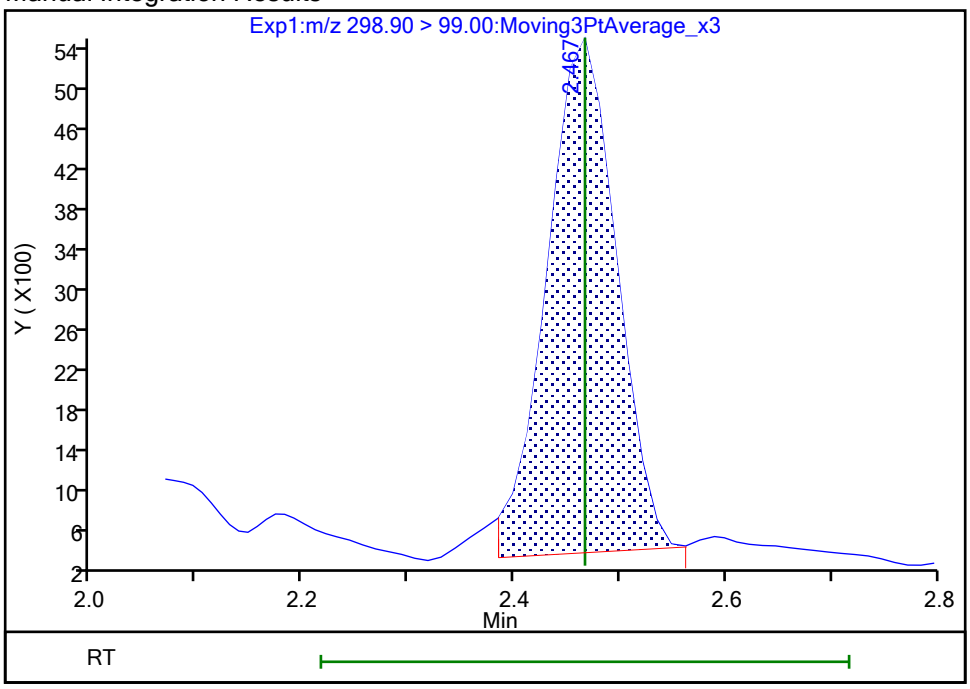
Processing Integration Results

RT: 2.47
Area: 23805
Amount: 0.027725
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 23145
Amount: 0.027073
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:25:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

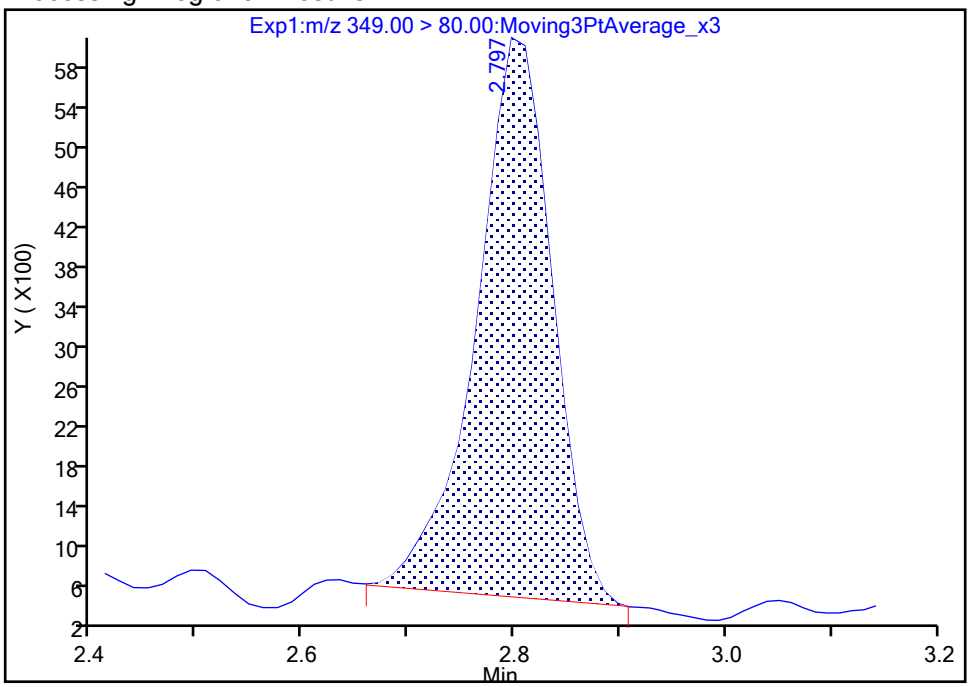
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

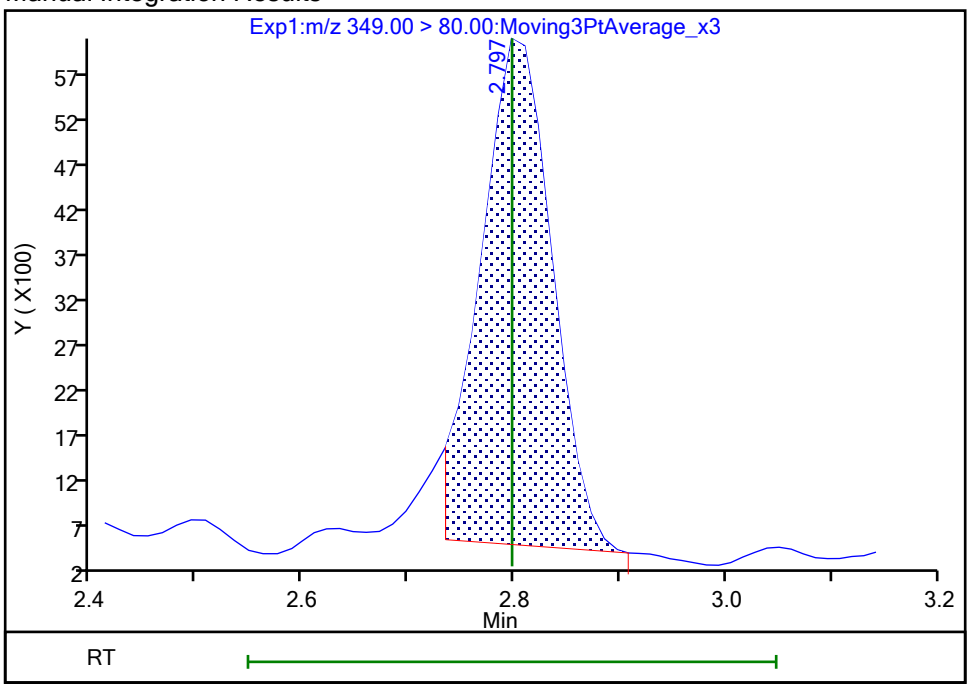
Processing Integration Results

RT: 2.80
Area: 27792
Amount: 0.019228
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 26183
Amount: 0.018115
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:17:30 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

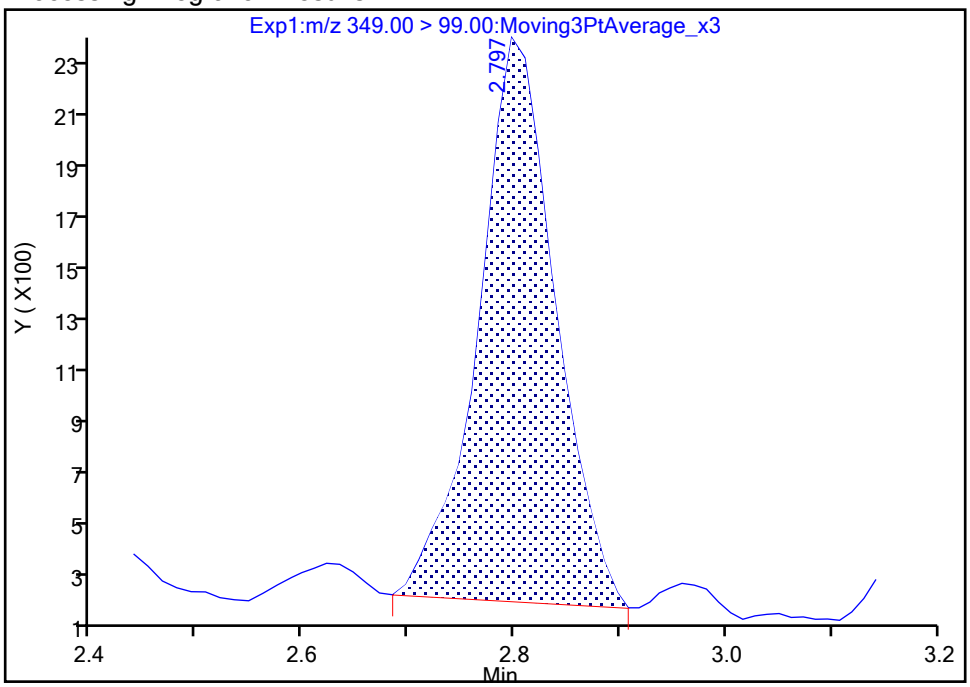
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

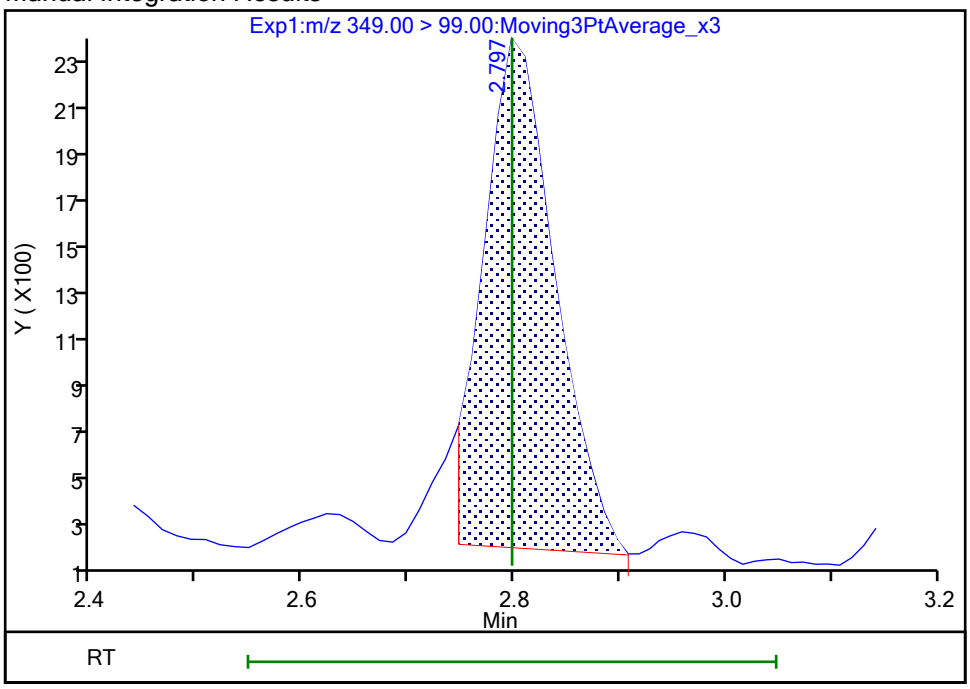
Processing Integration Results

RT: 2.80
Area: 10964
Amount: 0.019228
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 10153
Amount: 0.018115
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:17:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

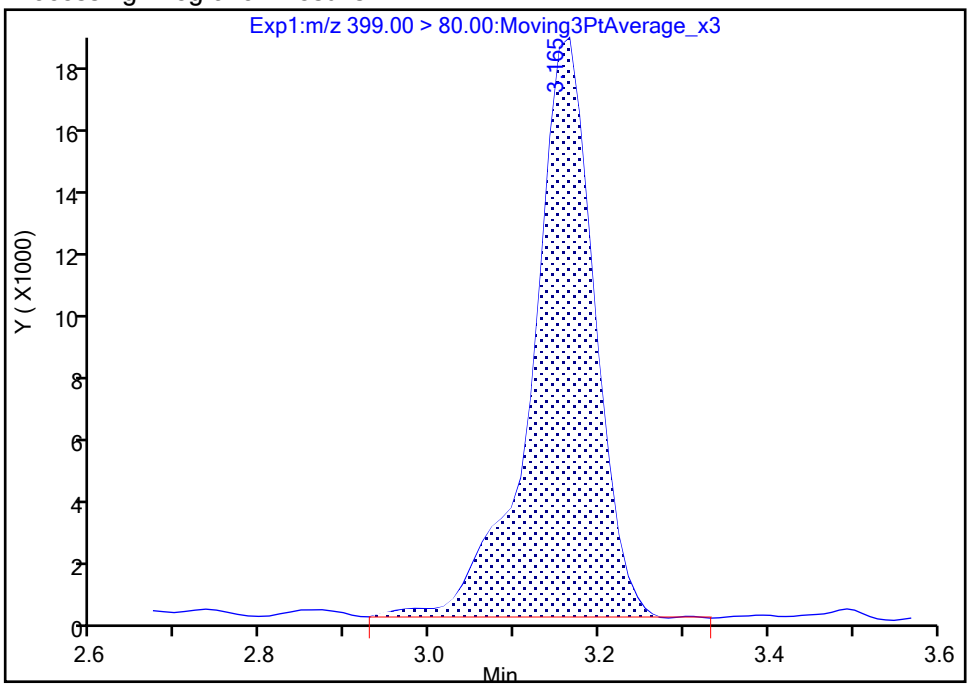
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

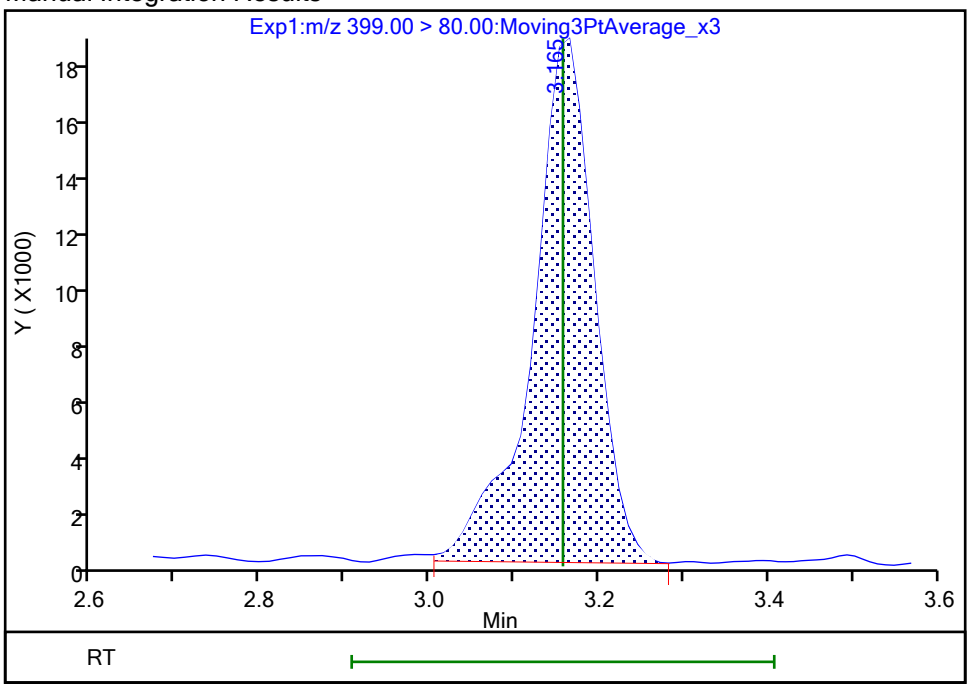
Processing Integration Results

RT: 3.16
Area: 93008
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 92056
Amount: 0.075133
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

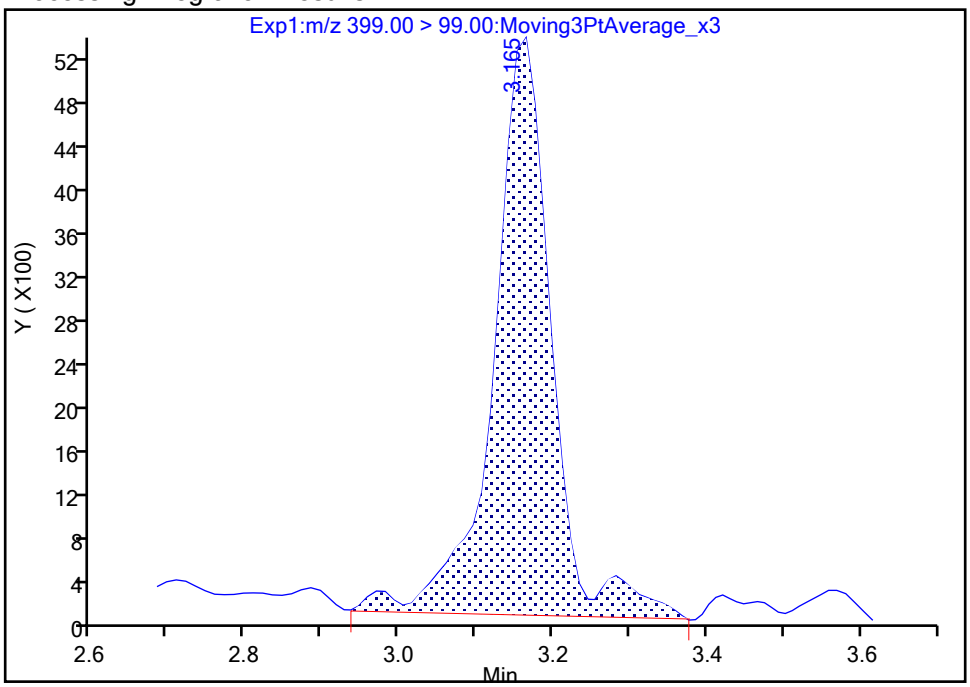
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

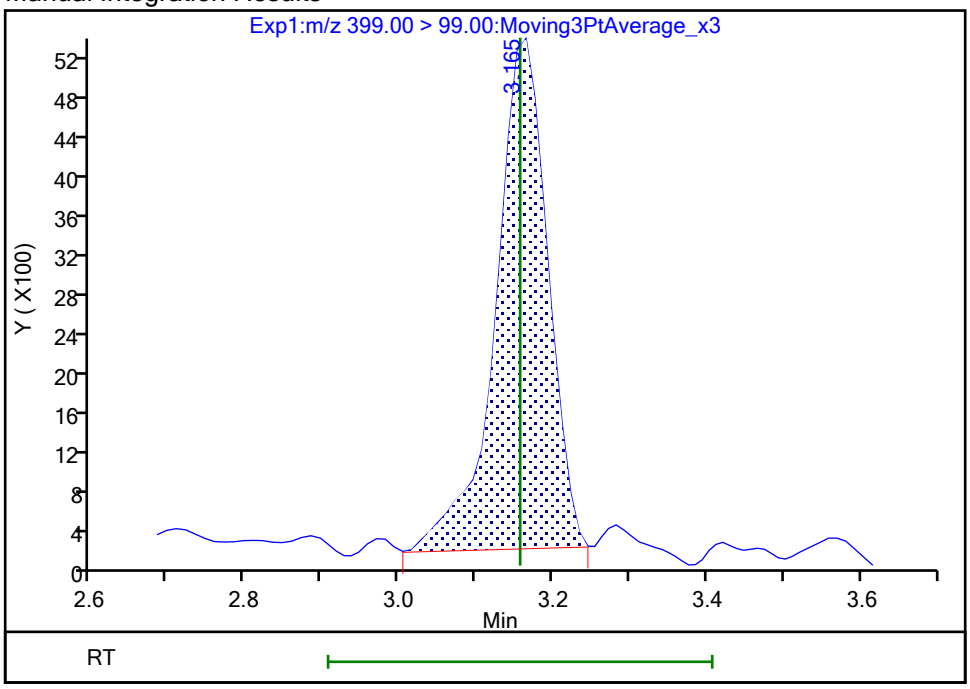
Processing Integration Results

RT: 3.16
Area: 27699
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 24044
Amount: 0.075133
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

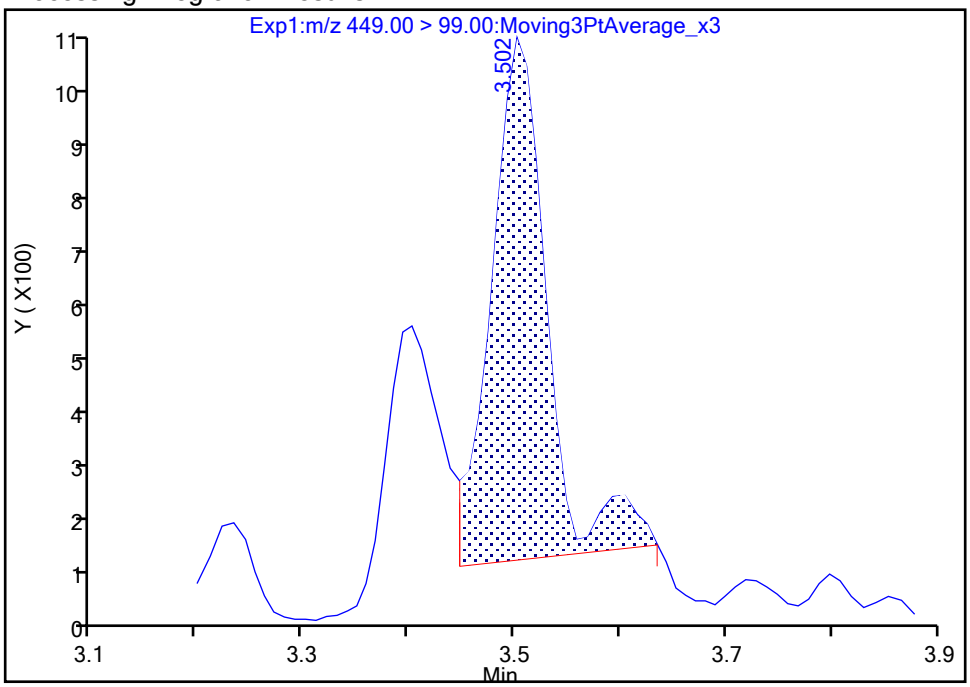
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

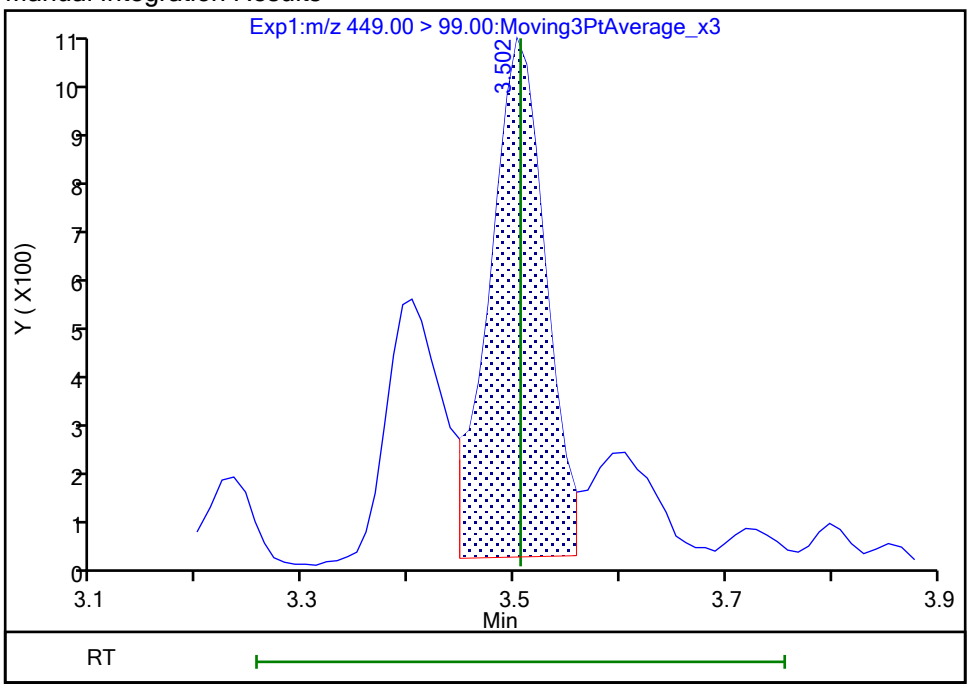
Processing Integration Results

RT: 3.50
Area: 3426
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 3763
Amount: 0.014472
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:27:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

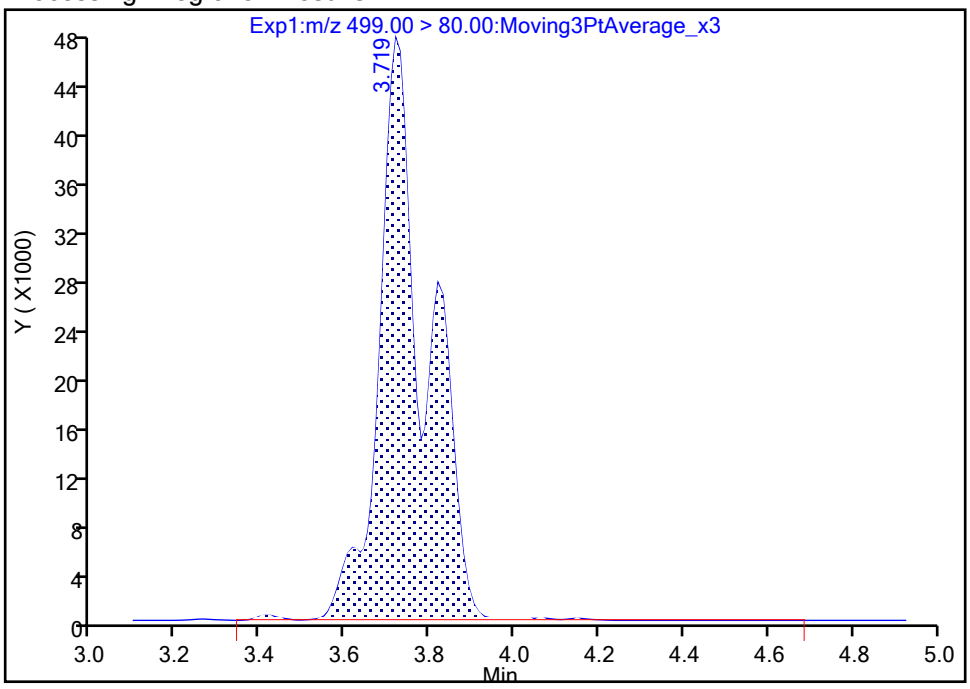
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

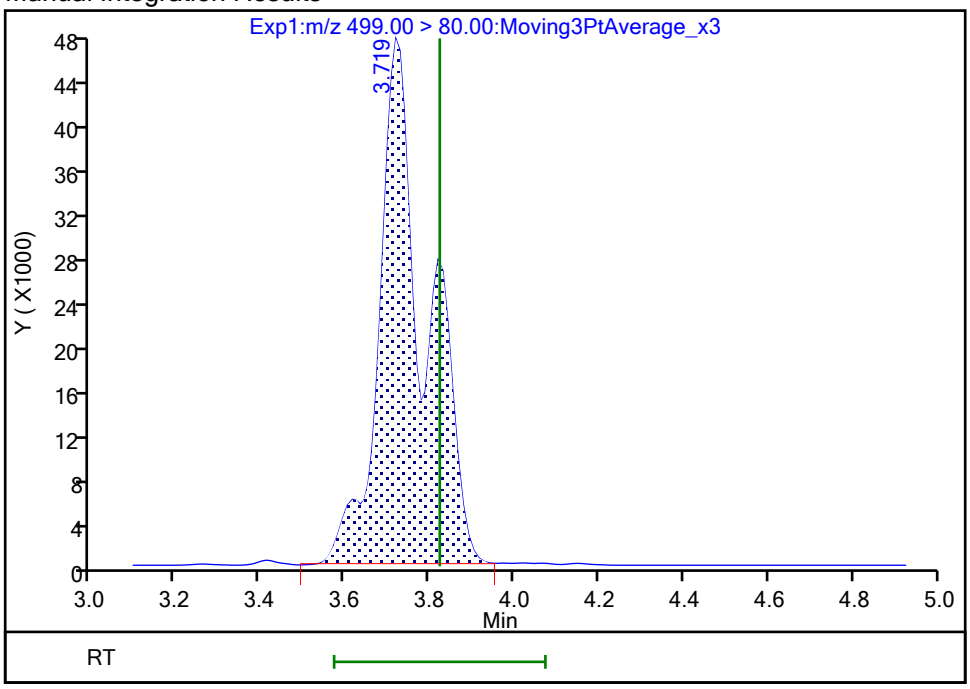
Processing Integration Results

RT: 3.72
Area: 376343
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.72
Area: 371422
Amount: 0.441524
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:27:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

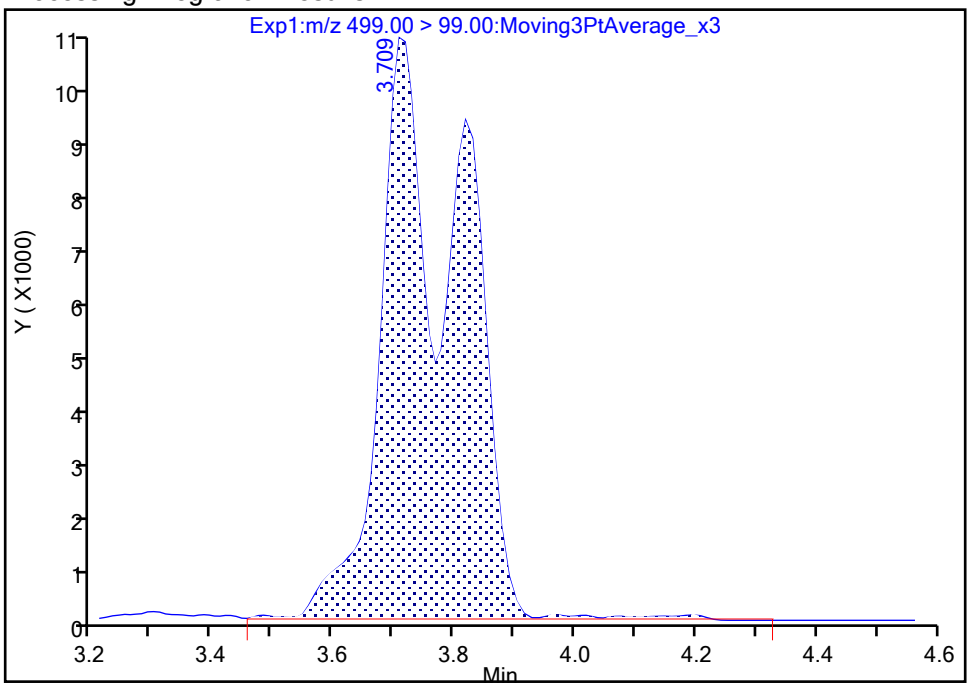
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

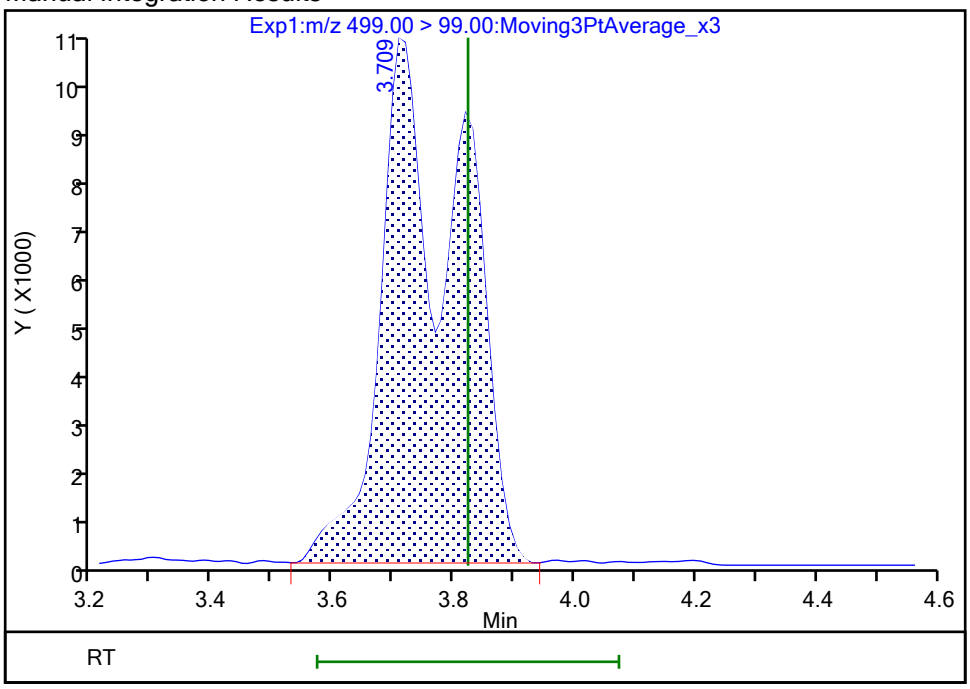
Processing Integration Results

RT: 3.71
Area: 96432
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.71
Area: 93906
Amount: 0.441524
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

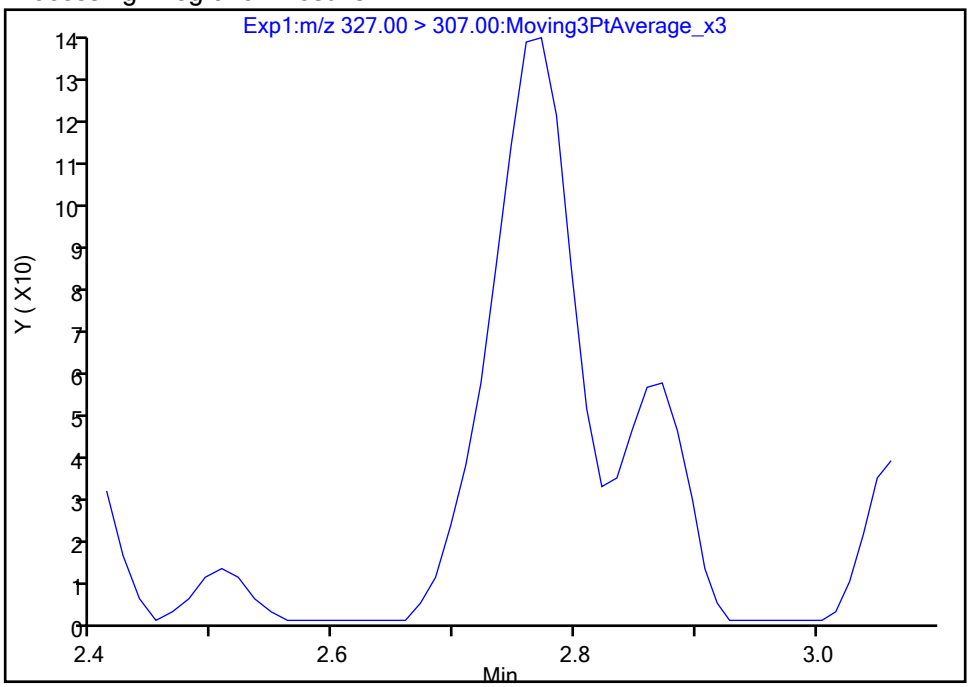
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

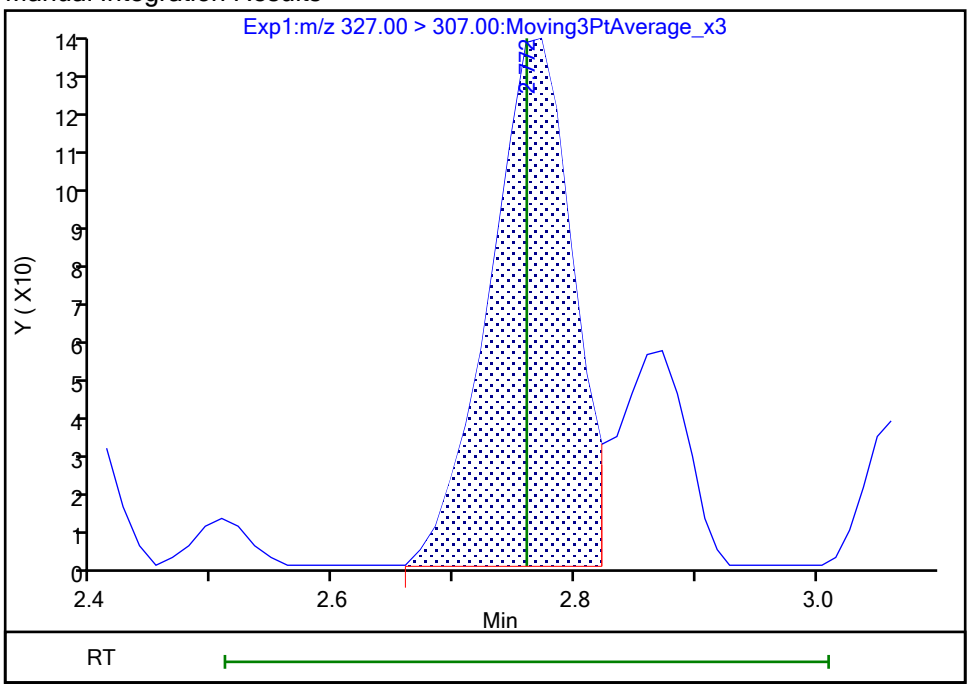
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 638
Amount: 0.001173
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:26:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

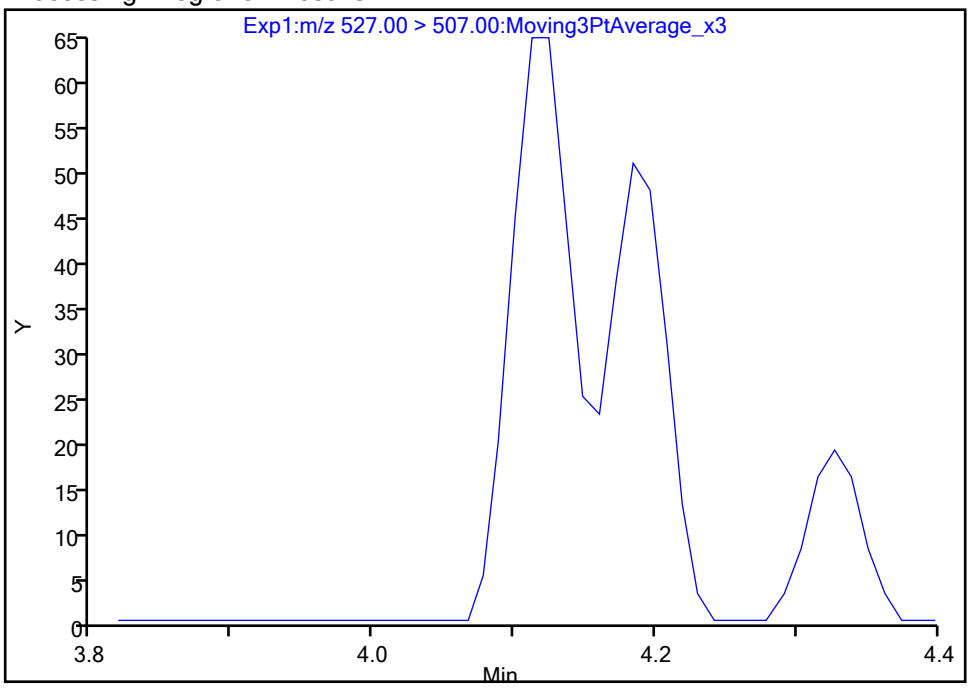
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

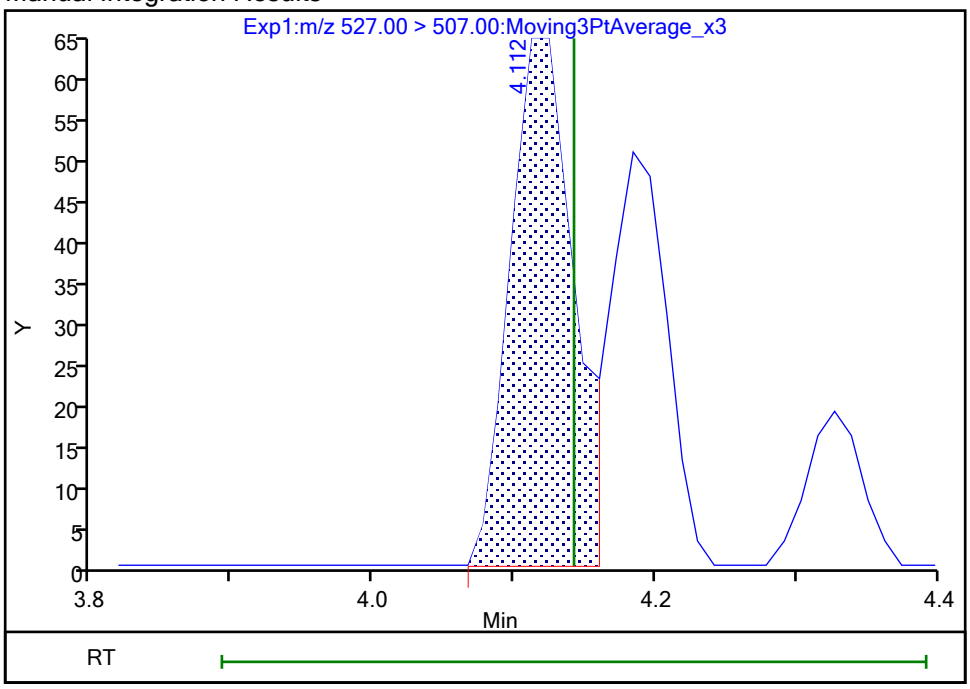
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.11
Area: 201
Amount: 0.000409
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

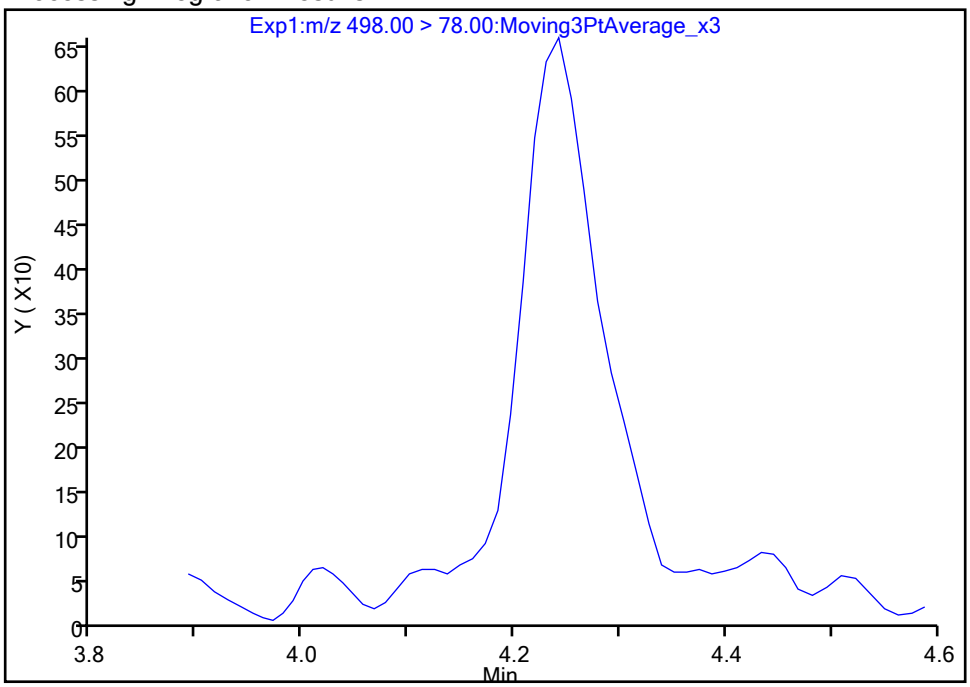
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

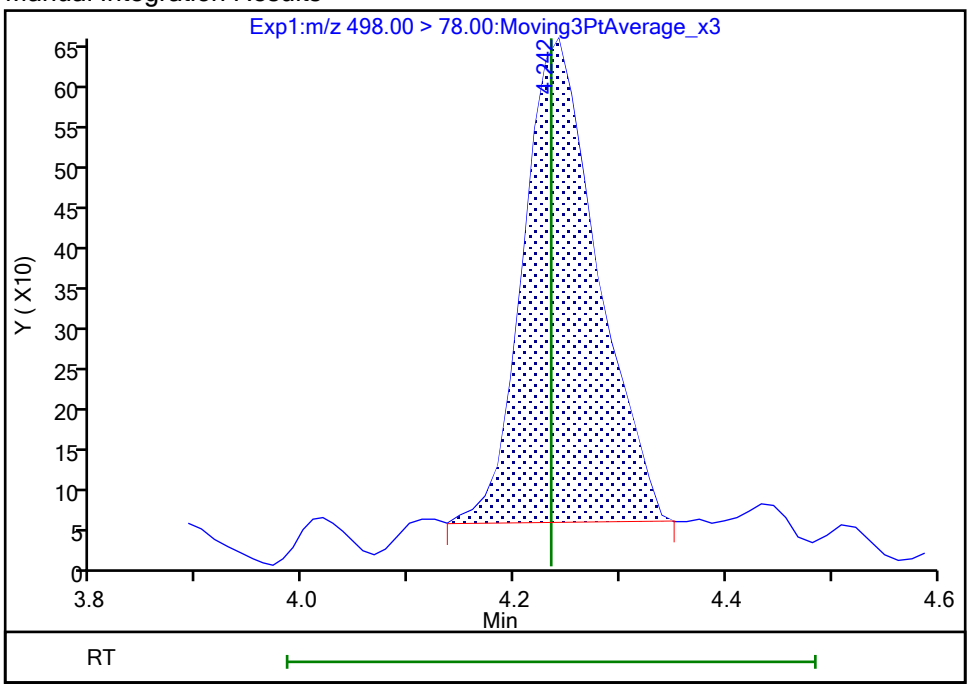
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 2929
Amount: 0.002407
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

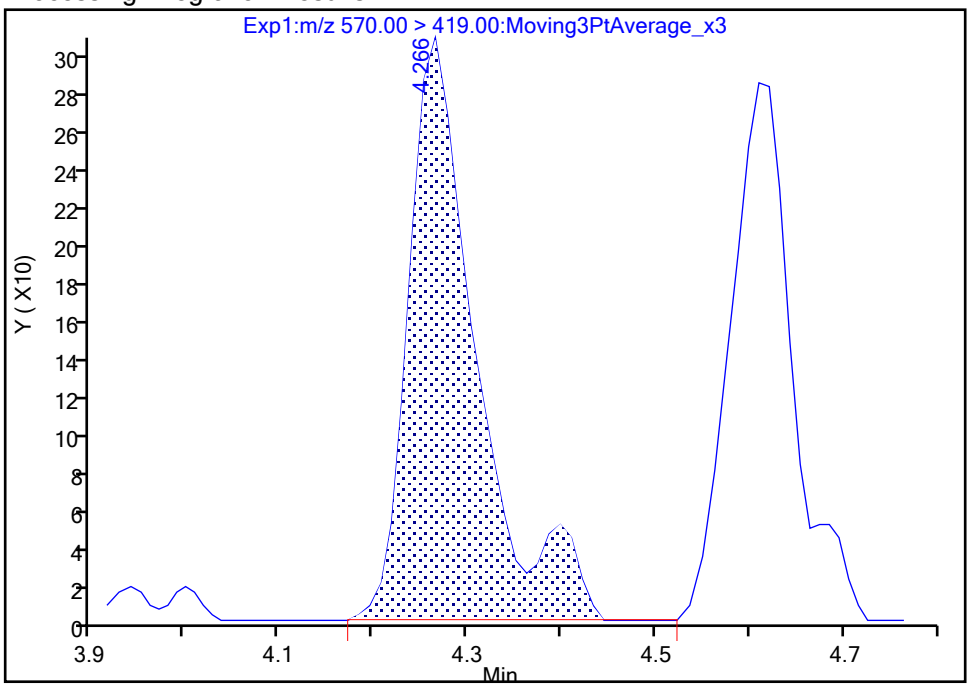
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

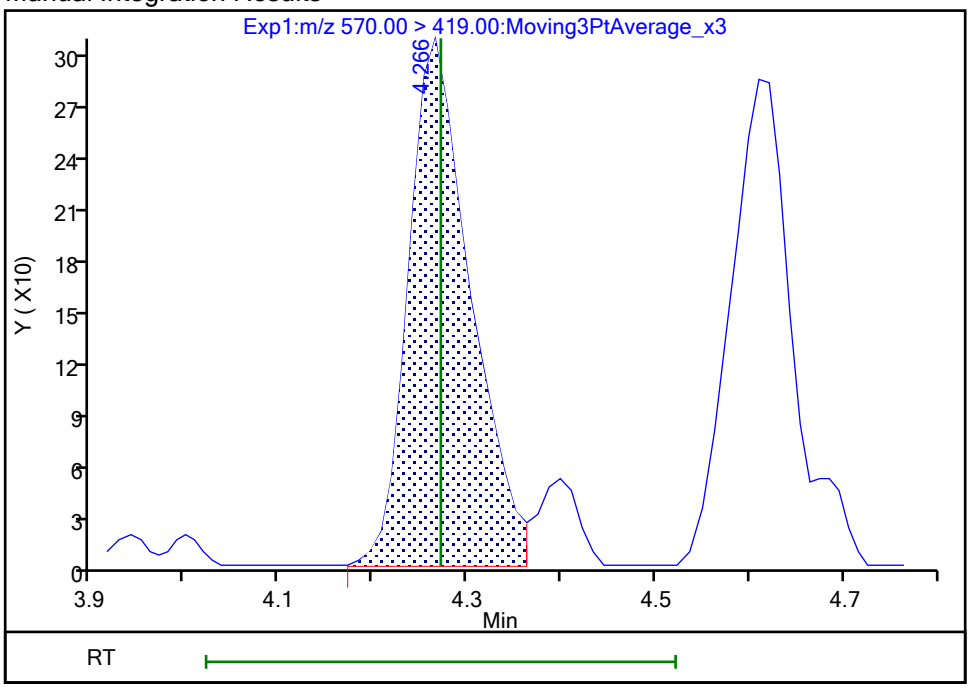
Processing Integration Results

RT: 4.27
Area: 1571
Amount: 0.004688
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 1420
Amount: 0.004237
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

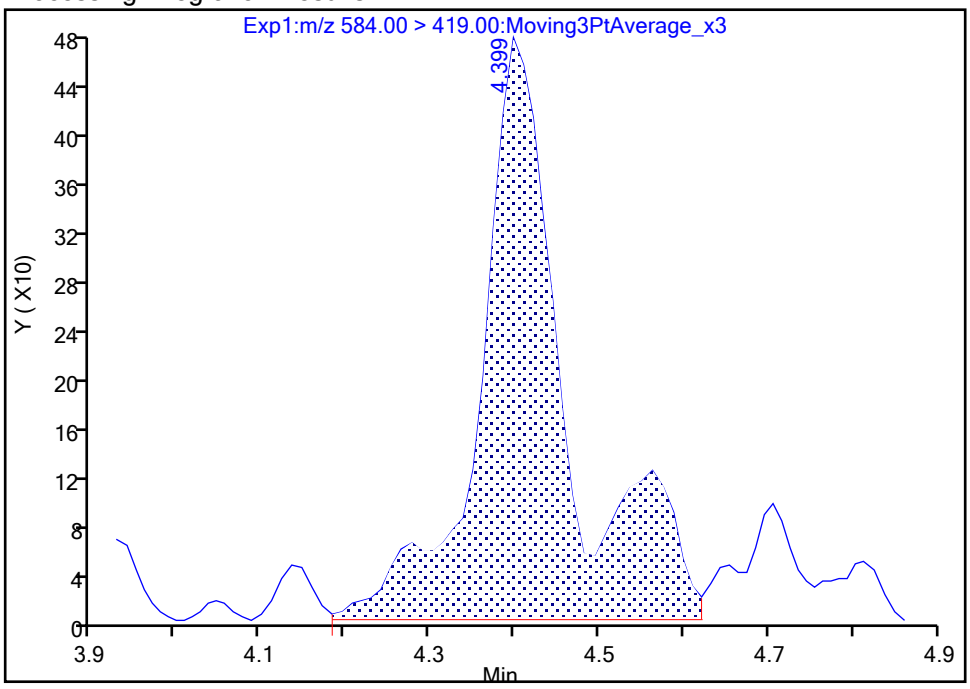
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

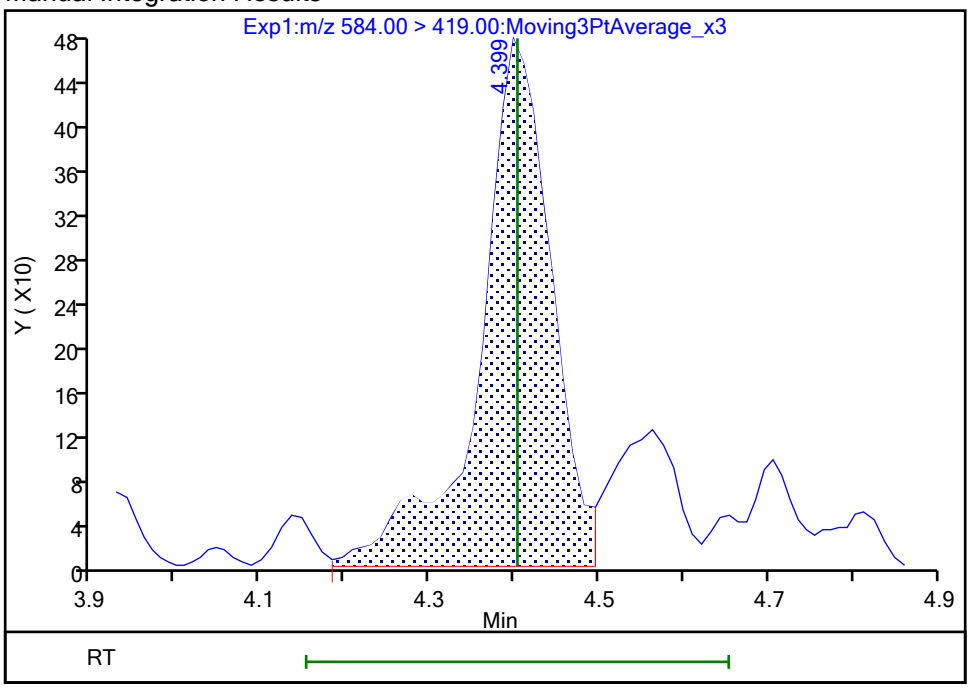
Processing Integration Results

RT: 4.40
Area: 3409
Amount: 0.009609
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 2780
Amount: 0.007836
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:29:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

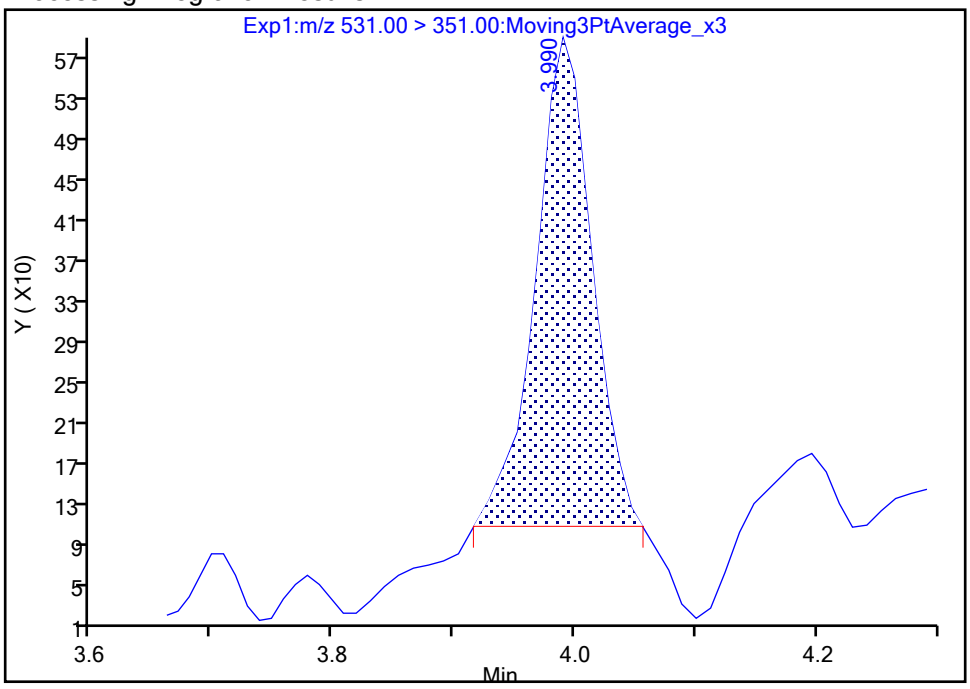
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

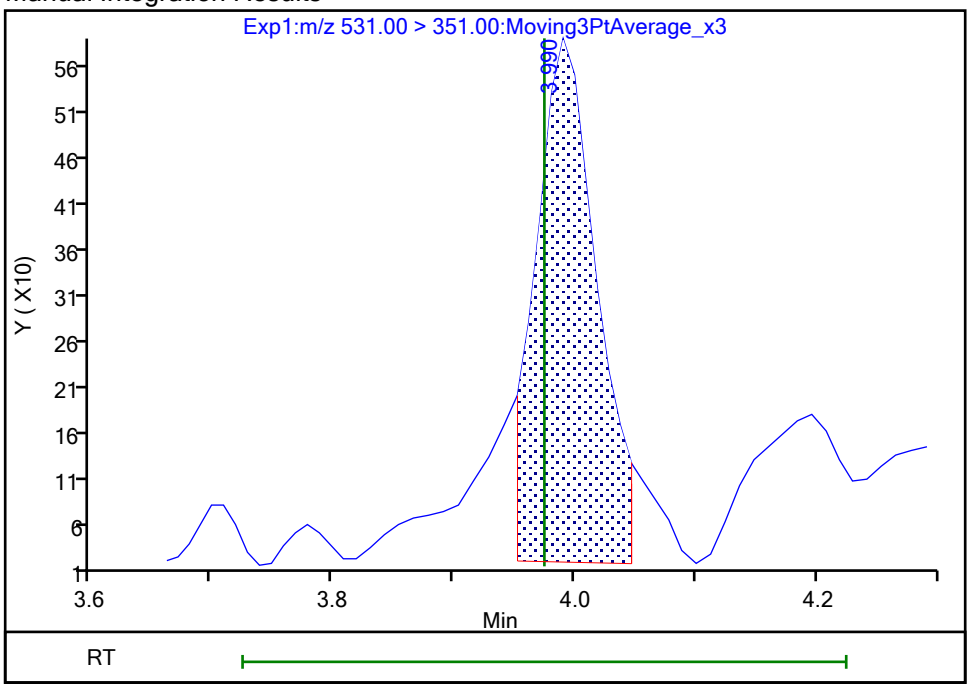
Processing Integration Results

RT: 3.99
Area: 1553
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.99
Area: 1951
Amount: 0.000758
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:28:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

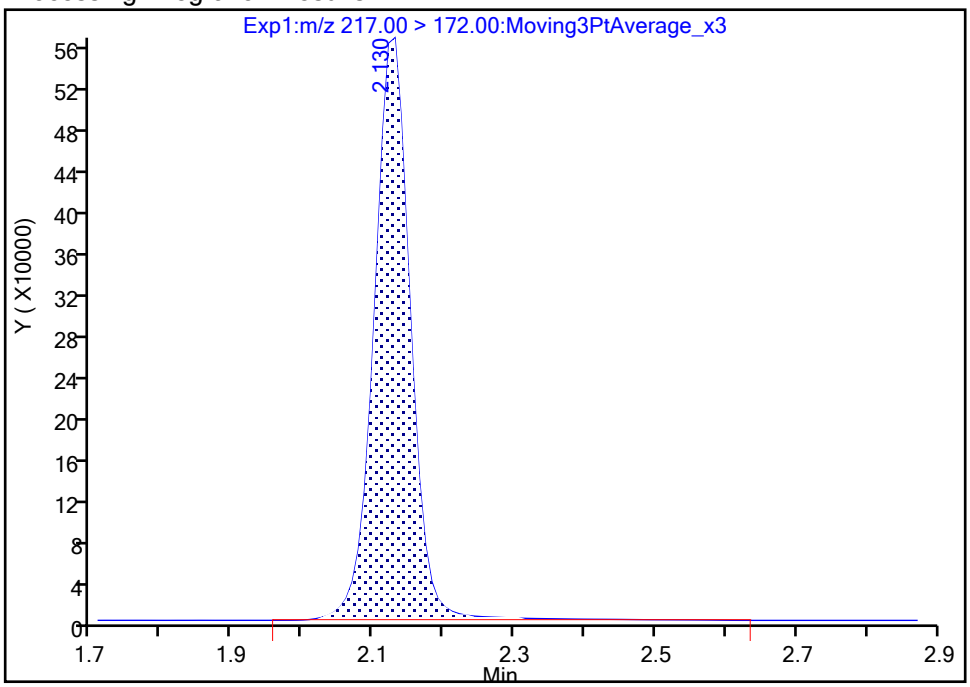
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

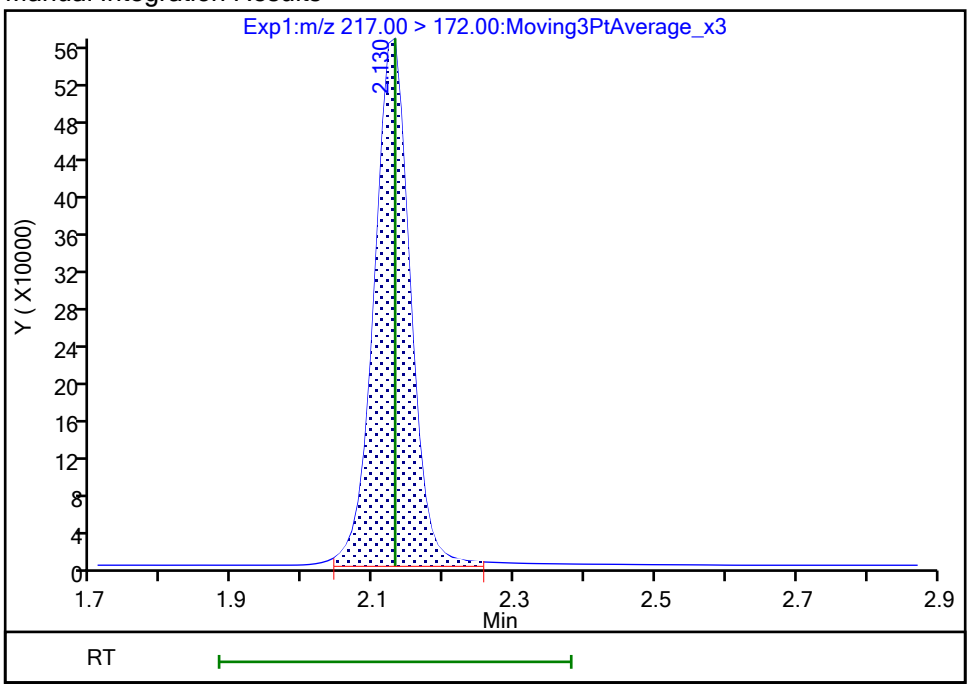
Processing Integration Results

RT: 2.13
Area: 2028166
Amount: 1.141118
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1995927
Amount: 1.122979
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:24:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

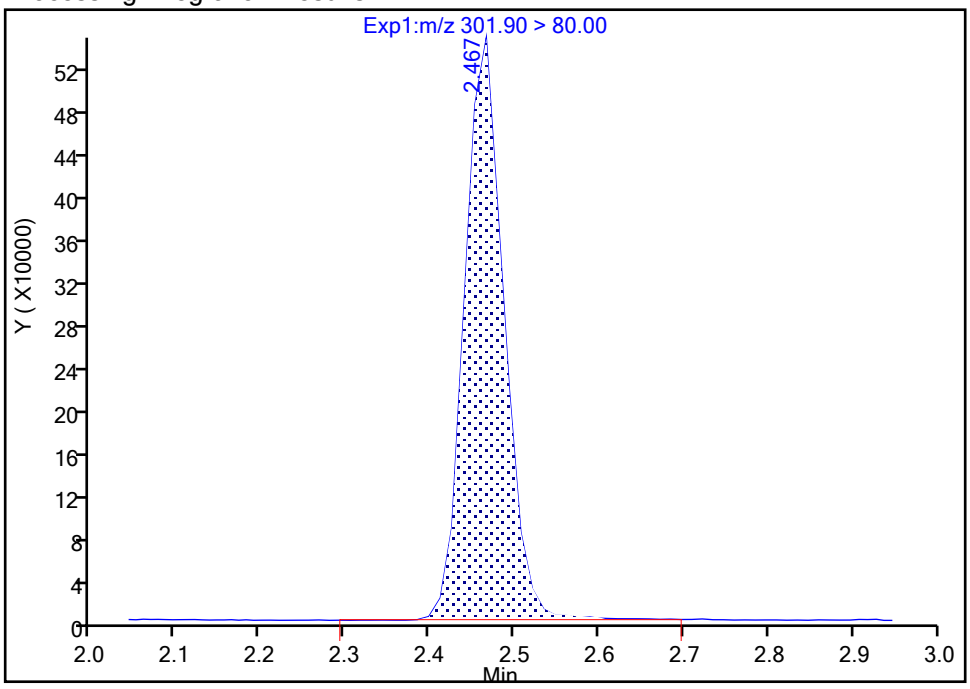
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

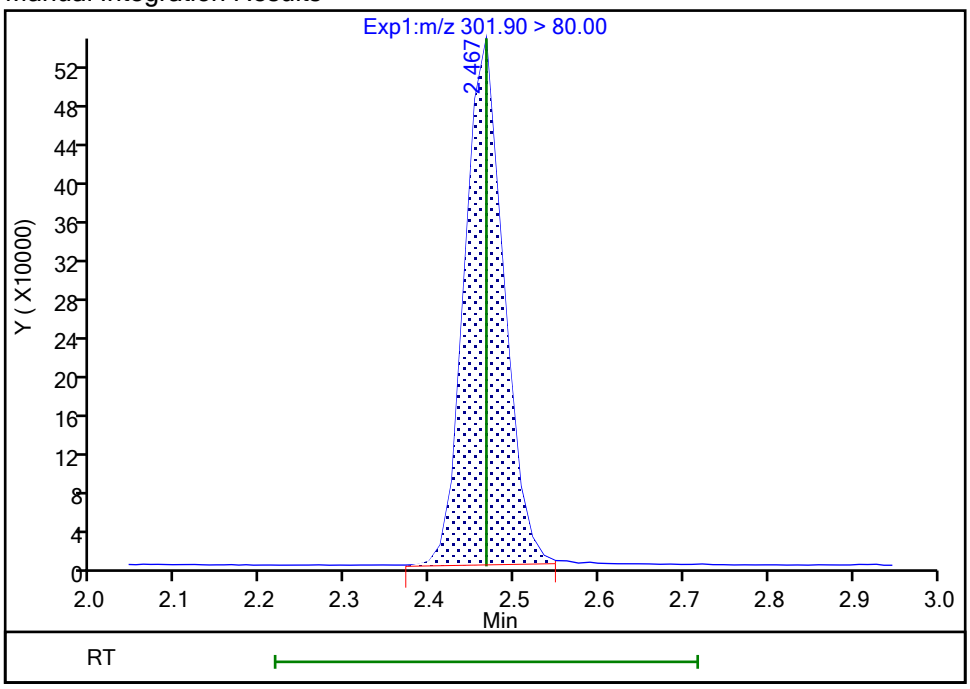
Processing Integration Results

RT: 2.47
Area: 1758562
Amount: 0.942228
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1745592
Amount: 0.935279
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:24:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

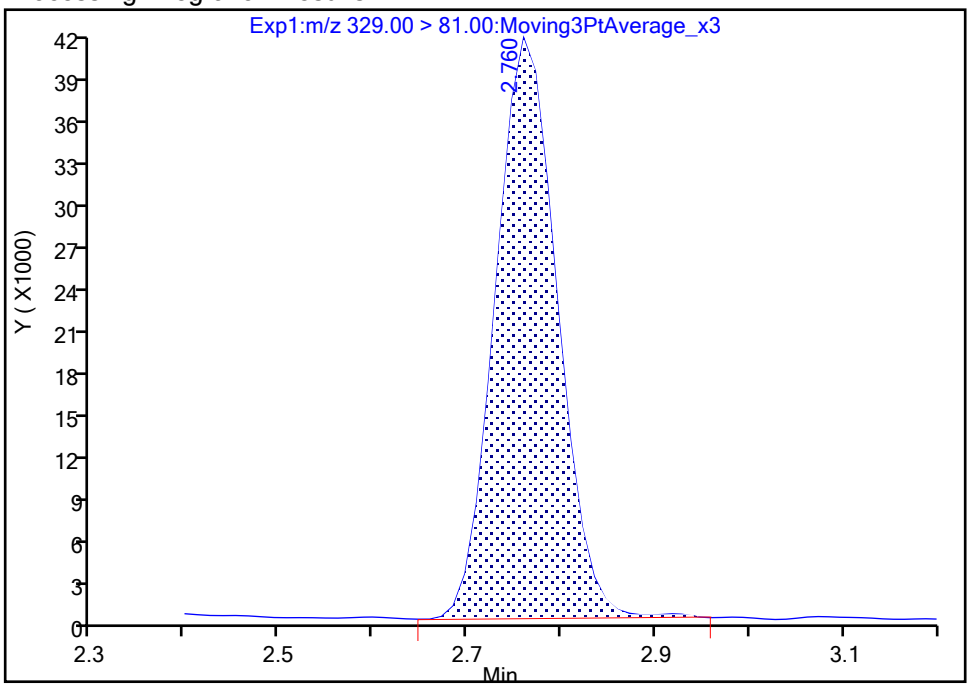
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C05.d				
Injection Date:	21-Oct-2023 00:50:07	Instrument ID:	LC812		
Lims ID:	460-290219-A-6-A	Lab Sample ID:	200-290219-6		
Client ID:	1000-101223-0003				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

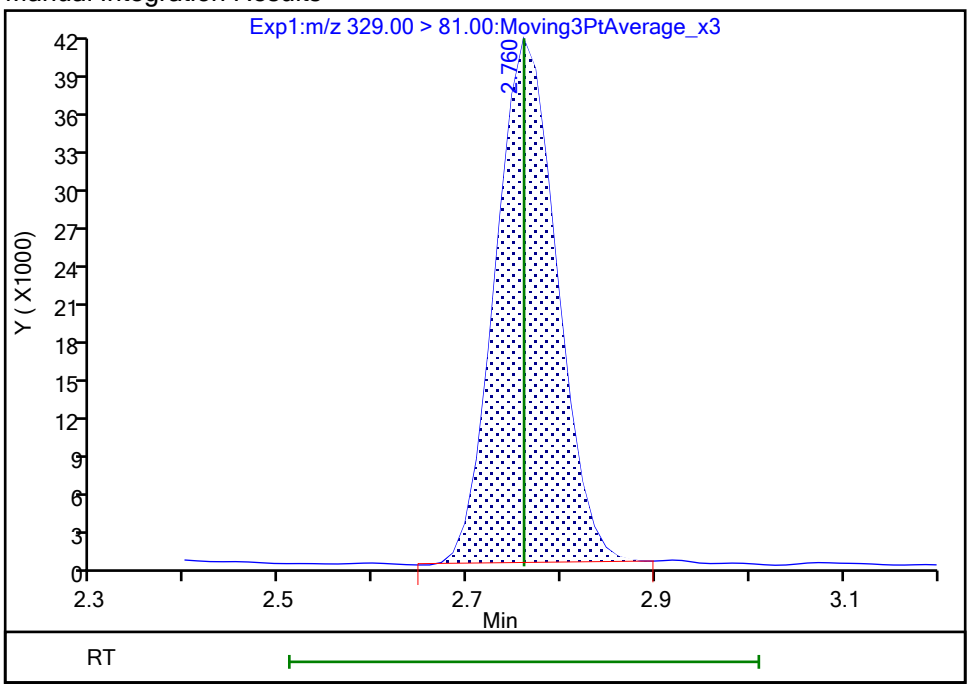
Processing Integration Results

RT: 2.76
Area: 190067
Amount: 0.880587
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 187022
Amount: 0.866479
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:24:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW89A-101223-0946-96 Lab Sample ID: 460-290219-7

Matrix: Water Lab File ID: PA231020C06.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:46

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 286.6(mL) Date Analyzed: 10/21/2023 00:58

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.24		4.36	1.05
2706-90-3	Perfluoropentanoic acid	24.5		1.74	0.59
307-24-4	Perfluorohexanoic acid	19.7		1.74	0.57
375-85-9	Perfluoroheptanoic acid	5.43		1.74	0.47
335-67-1	Perfluorooctanoic acid	4.46		1.74	0.66
375-95-1	Perfluorononanoic acid	0.72	J	1.74	0.43
335-76-2	Perfluorodecanoic acid	1.74	U	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	1.82		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	1.74	U	1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	1.56	J	1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	1.74	U	1.74	0.36
1763-23-1	Perfluorooctanesulfonic acid	15.0		1.74	0.74
68259-12-1	Perfluorononanesulfonic acid	1.74	U	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	11.8		4.36	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.36	U	4.36	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40
13252-13-6	HFPODA	3.49	U	3.49	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW89A-101223-0946-96 Lab Sample ID: 460-290219-7

Matrix: Water Lab File ID: PA231020C06.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:46

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 286.6(mL) Date Analyzed: 10/21/2023 00:58

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	99		50-150
STL01893	13C5 PFPeA	95		50-150
STL01892	13C4 PFHpA	101		50-150
STL02116	13C2 PFTeDA	81		50-150
STL02337	13C3 PFBS	89		50-150
STL01056	13C8 FOSA	85		50-150
STL02118	d3-NMeFOSAA	87		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	82		50-150
STL02279	M2-6:2 FTS	88		50-150
STL02280	M2-8:2 FTS	80		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	88		50-150
STL00993	13C2 PFHxA	97		50-150
STL00991	13C4 PFOS	91		50-150
STL00998	13C2 PFDoA	89		50-150
STL00995	13C5 PFNA	97		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	91		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d
Lims ID: 460-290219-A-7-A
Client ID: MW89A-101223-0946-96
Sample Type: Client
Inject. Date: 21-Oct-2023 00:58:16 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-7-A
Misc. Info.: 200-0057493-006 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:43:41
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	2049175	1.24		99.4	1495	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	283026	0.1500			24.6	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1524141	1.19		95.3	1334	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	925489	0.7034			12.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1785523	1.03		88.7	59396	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	89392	0.0521	Target=2.06		4.6	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	42967		2.08(1.03-3.09)		8.0	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	2007	0.003614			9.1	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	190909	0.9531		81.6	39.8	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.795	1580041	1.21		97.1	6109	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	785530	0.5647	Target=14.12		62.0	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	56362		13.94(7.06-21.17)		49.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.798	0.012	0.888	10016	0.006984	Target=2.72		3.3	M
349.00 > 99.00	2.797	2.798	-0.001	0.884	3304		3.03(1.36-4.09)		2.2	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	2508	0.0103			21.0	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	302794	1.20		96.1	1795	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.899	1298552	1.05		88.5	8860	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	54460	0.0448	Target=3.32		37.6	M
399.00 > 99.00	3.165	3.157	0.008	1.000	16112		3.38(1.66-4.98)		10.7	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	252123	0.1558	Target=4.17		26.1	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	61138		4.12(2.09-6.26)		95.1	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.899	1805131	1.26		101	5827	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.506	0.005	0.997	269783	1.05		88.1	268	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.506	0.005	1.000	210814	0.3395			252	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	0.997	2123990	1.31		105	6491	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.515	0.005		2078994	1.25			7549	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.003	231603	0.1280	Target=2.88		8.7	M
413.00 > 169.00	3.520	3.515	0.005	1.003	84054		2.76(1.44-4.32)		158	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.823	0.007	1.003	360189	0.4293	Target=4.24		345	M
499.00 > 99.00	3.819	3.823	-0.004	1.000	90202		3.99(2.12-6.37)		172	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.085	859587	1.09		91.2	2079	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.846	0.008	1.003	34714	0.0208	Target=8.34		4.6	M
463.00 > 169.00	3.854	3.846	0.008	1.003	3640		9.54(4.17-12.51)		13.7	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.091	2131118	1.21		96.8	6296	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.130	0.006	1.000	11098	0.006031	Target=11.44		3.2	M
513.00 > 169.00	4.136	4.130	0.006	1.000	1898		5.85(5.72-17.16)		11.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.175	2301743	1.25		99.8	7102	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.175	278178	0.9590		80.1	699	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.142	0.006	1.003	1731	0.003385			16.9	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.205	1665891	1.06		84.7	3079	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.235	0.019	1.003	2739	0.002155			9.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.271	-0.006	1.212	476938	1.08		86.6	2338	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.254	4.271	-0.017	0.997	762	0.002201			1.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.246	1990973	1.14		91.5	13294	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.387	4.391	-0.004	1.000	7828	0.004769	Target=12.20		1.8	R
563.00 > 169.00	4.387	4.391	-0.004	1.000	1296		6.04(6.10-18.31)		8.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.391	0.007	1.249	465853	1.10		87.8	1139	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	1988	0.005333			10.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.310	1977807	1.12		89.4	5669	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.414	1781676	1.01		80.9	5188	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.983	-0.004	1.000	195	0.001224	Target=0.87		5.5	M
713.00 > 219.00	4.979	4.983	-0.004	1.000	312		0.63(0.43-1.30)		7.0	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

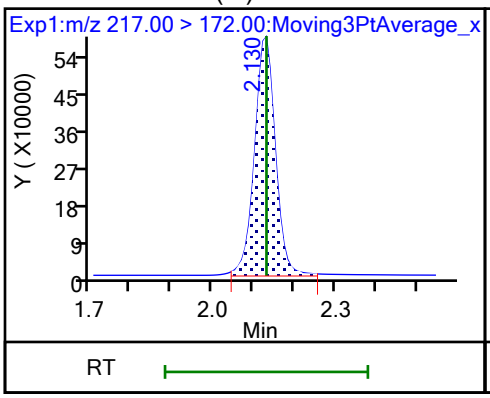
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

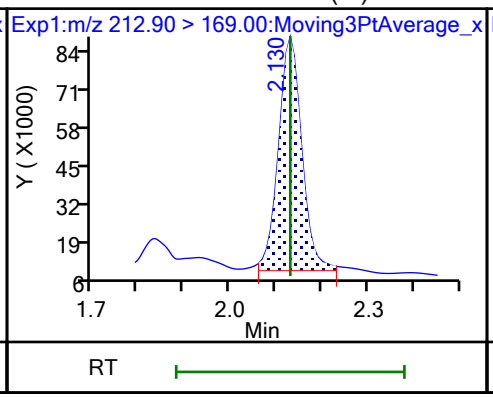
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d
Injection Date: 21-Oct-2023 00:58:16 Instrument ID: LC812
Lims ID: 460-290219-A-7-A Lab Sample ID: 200-290219-7
Client ID: MW89A-101223-0946-96
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

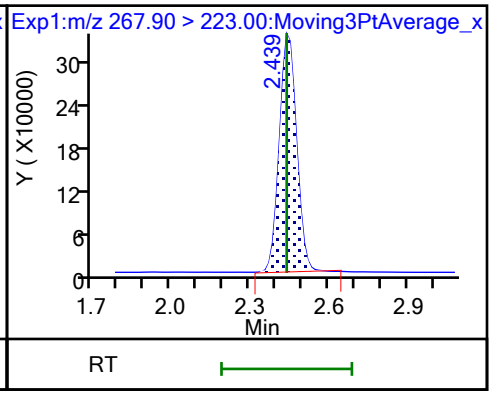
D 1 13C4 PFBA (M)



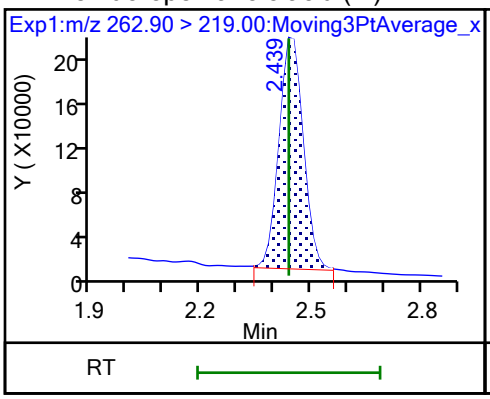
2 Perfluorobutanoic acid (M)



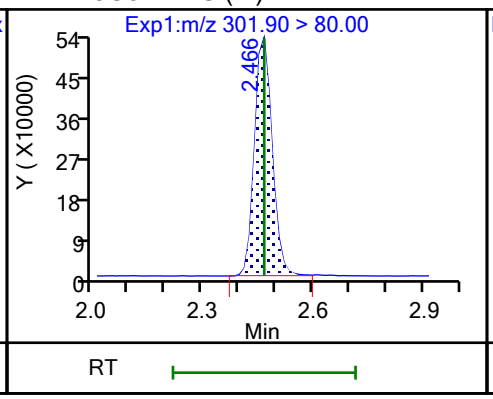
D 3 13C5 PFPeA



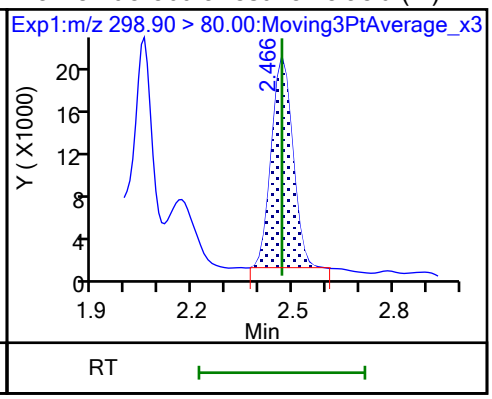
4 Perfluoropentanoic acid (M)



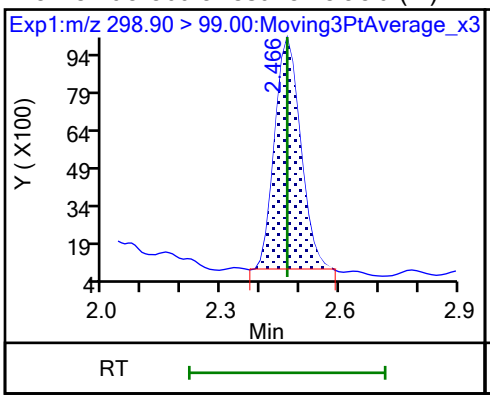
D 47 13C3 PFBS (M)



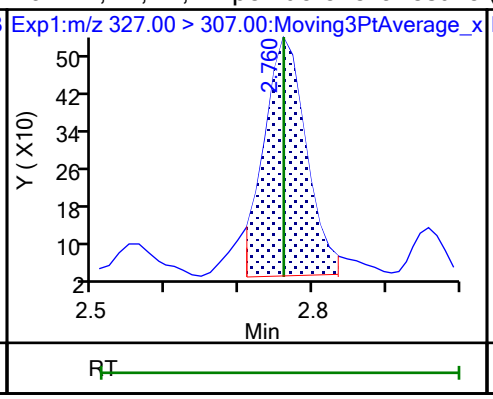
5 Perfluorobutanesulfonic acid (M)



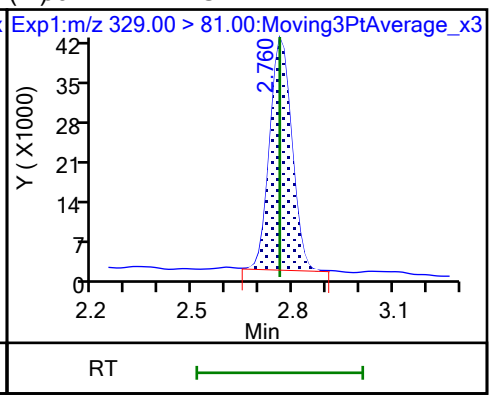
5 Perfluorobutanesulfonic acid (M)



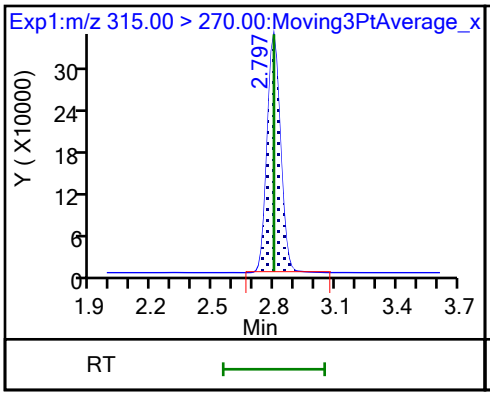
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



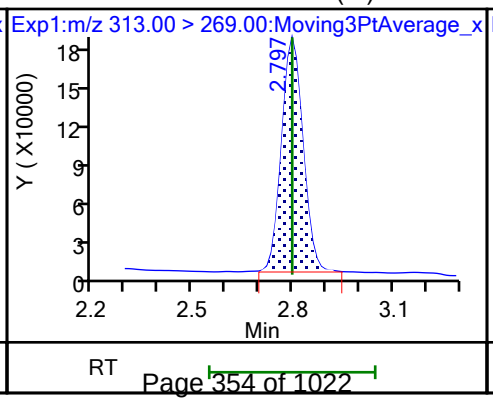
60 M2-4:2 FTS



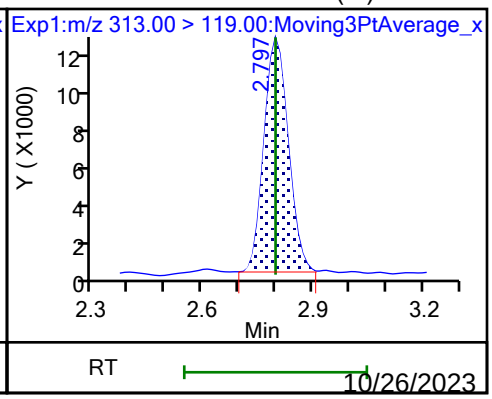
D 7 13C2 PFHxA



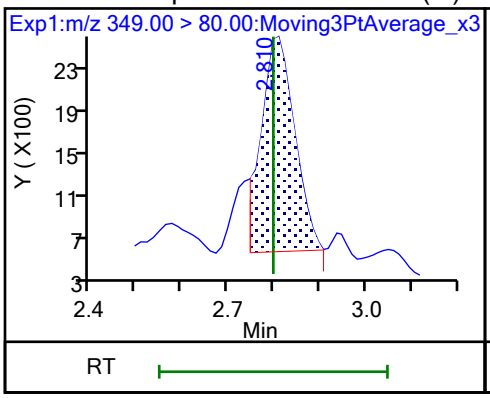
6 Perfluorohexanoic acid (M)



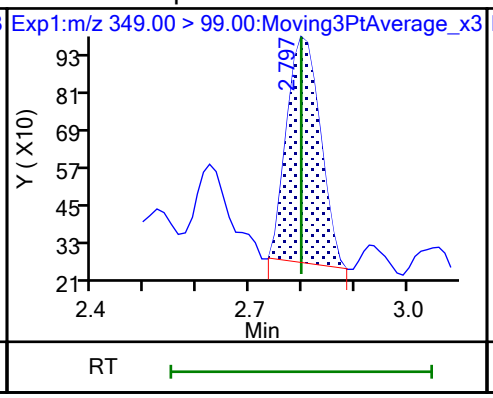
6 Perfluorohexanoic acid (M)



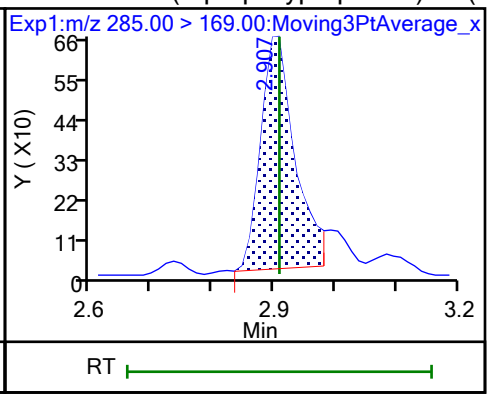
70 Perfluoropentanesulfonic acid (M)



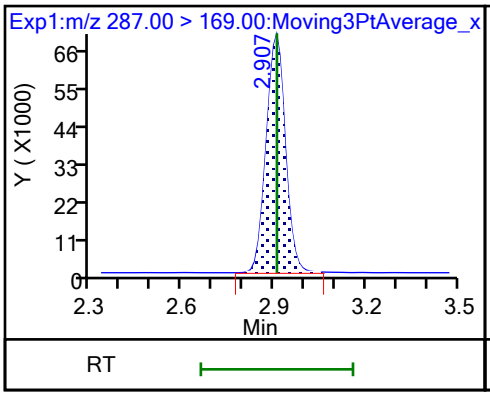
70 Perfluoropentanesulfonic acid



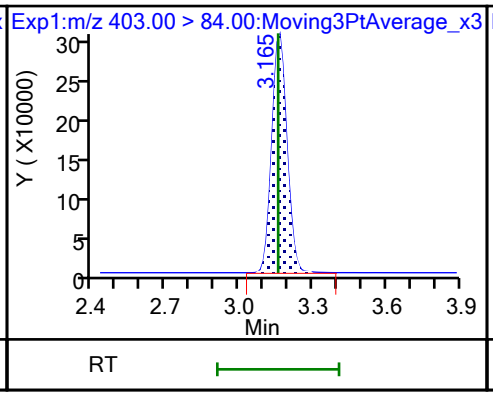
67 Perfluoro(2-propoxypropanoic) ac (M)



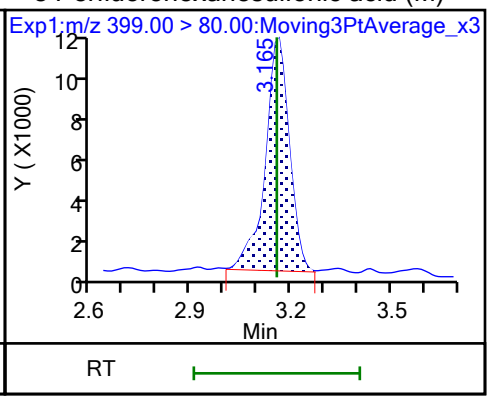
D 64 13C3 HFPO-DA



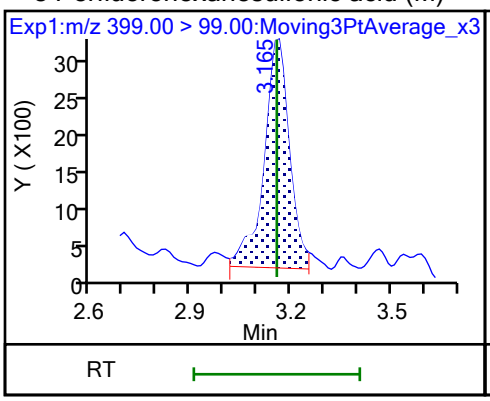
D 11 18O2 PFHxS



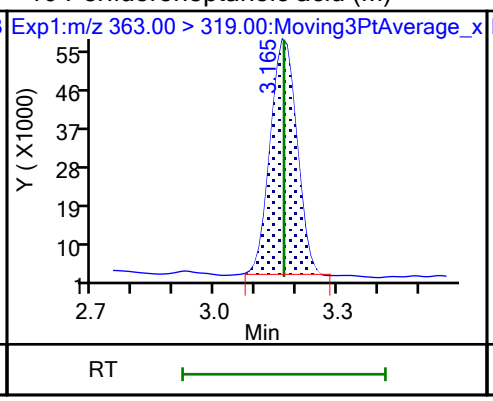
8 Perfluorohexanesulfonic acid (M)



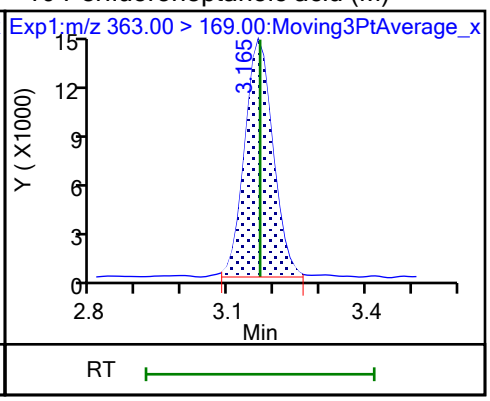
8 Perfluorohexanesulfonic acid (M)



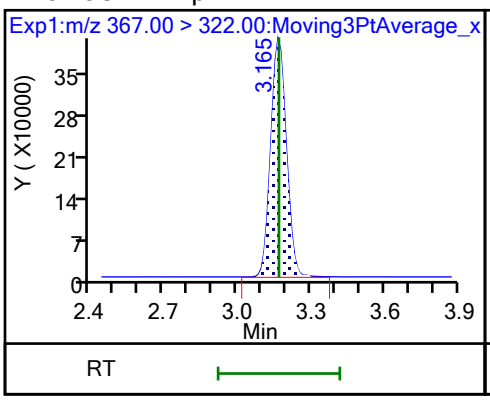
10 Perfluoroheptanoic acid (M)



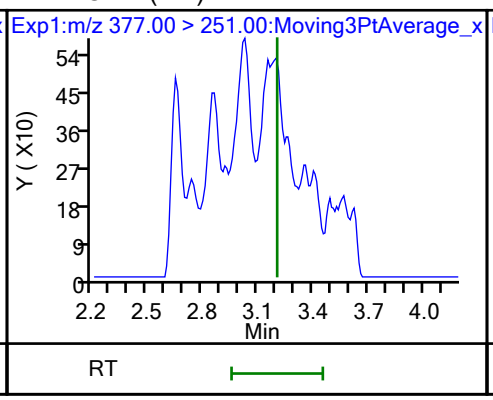
10 Perfluoroheptanoic acid (M)



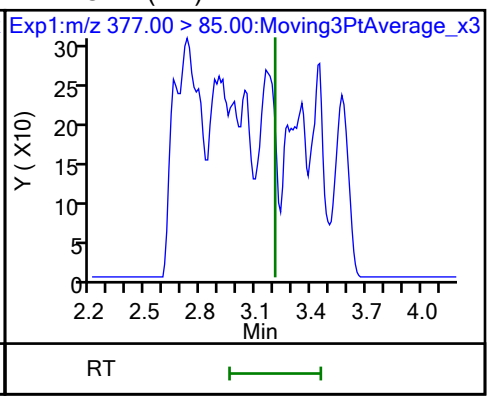
D 9 13C4 PFHpA



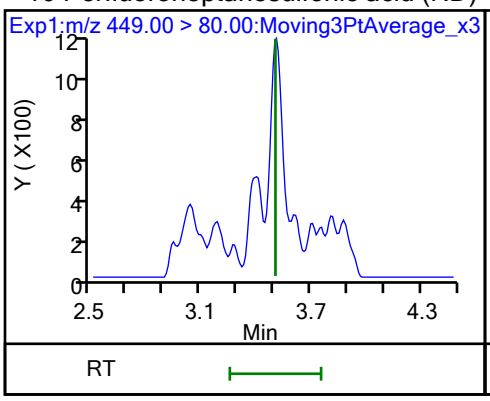
77 DONA (ND)



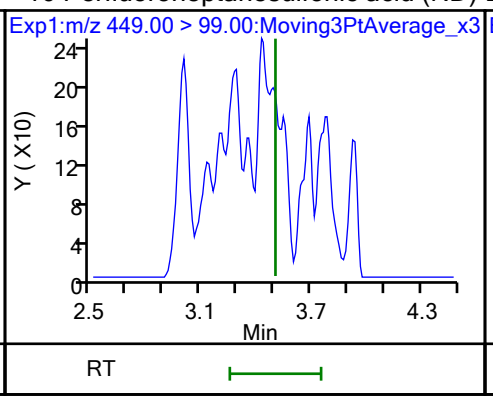
77 DONA (ND)

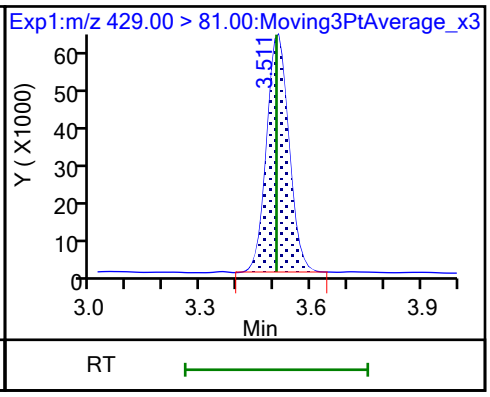


16 Perfluoroheptanesulfonic acid (ND)

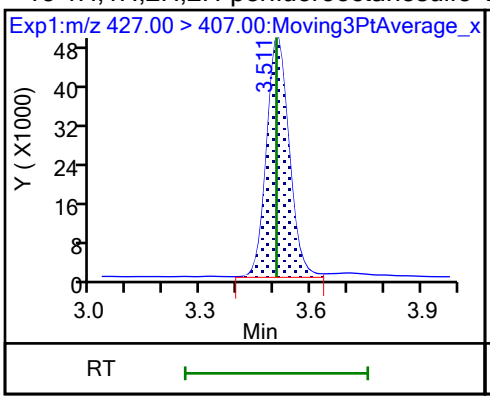


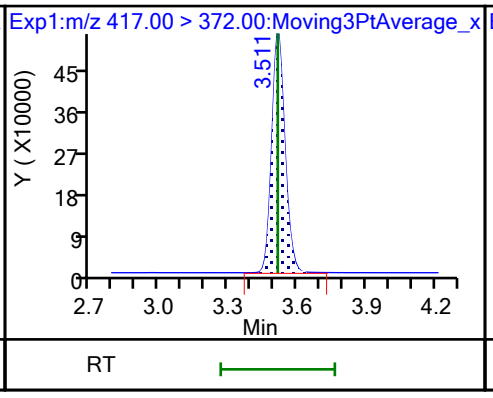
16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS

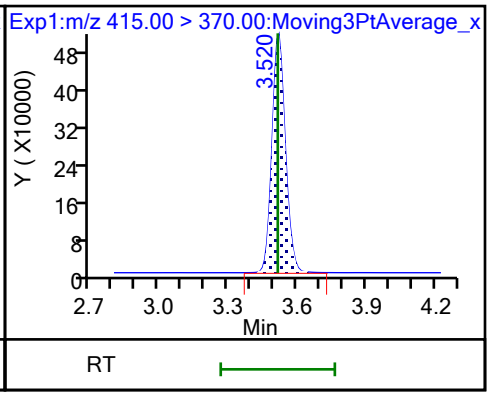




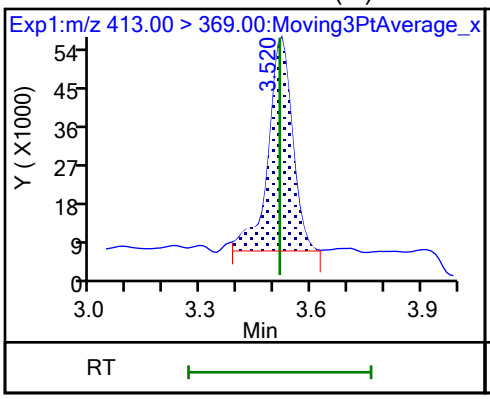
13 1H,1H,2H,2H-perfluorooctanesulfo D 14 13C4 PFOA * 62 13C2 PFOA



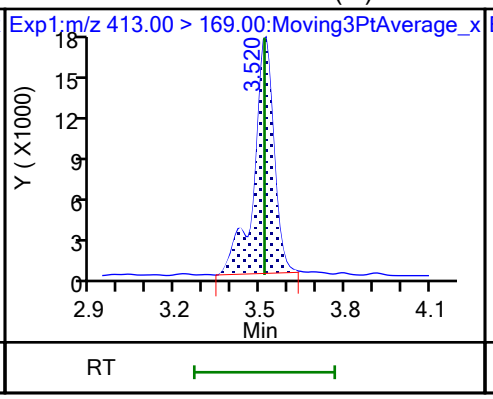




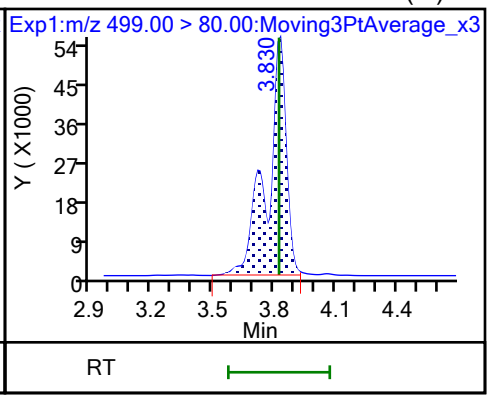
15 Perfluorooctanoic acid (M)



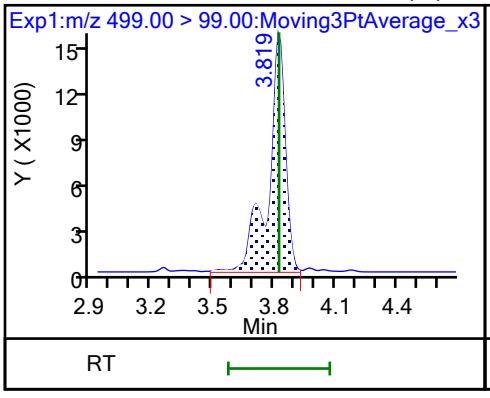
15 Perfluorooctanoic acid (M)

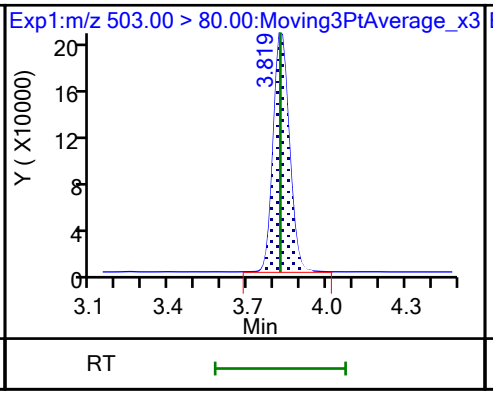


17 Perfluorooctanesulfonic acid (M)

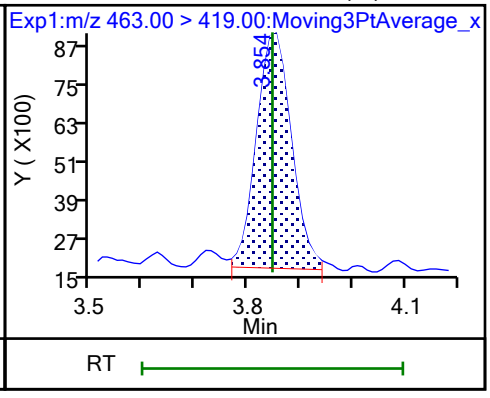


17 Perfluorooctanesulfonic acid (M) D 18 13C4 PFOS

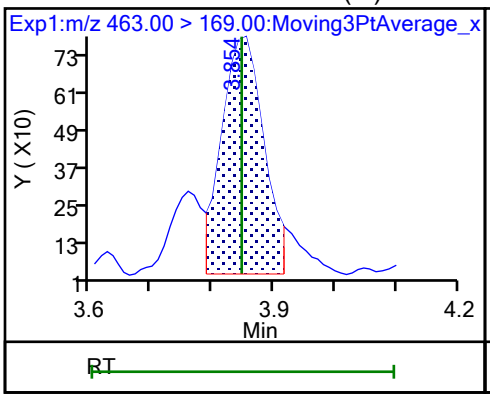




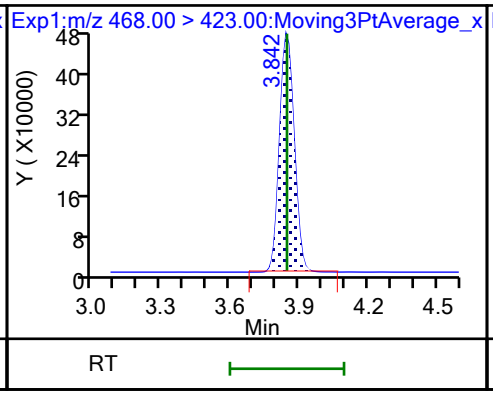
20 Perfluorononanoic acid (M)



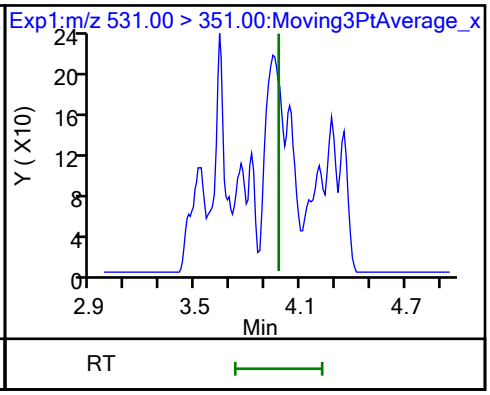
20 Perfluorononanoic acid (M)



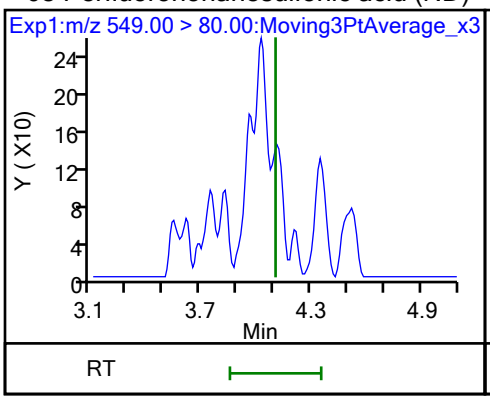
D 19 13C5 PFNA



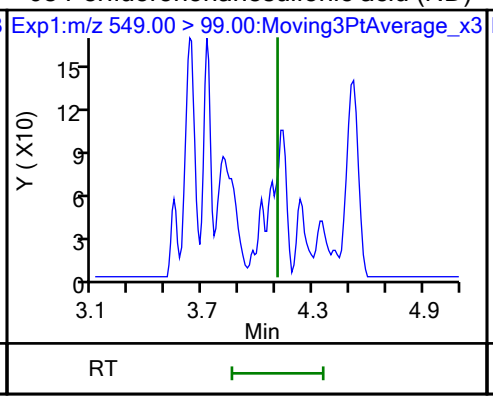
69 9-Chlorohexadecafluoro-3-oxanona (ND)



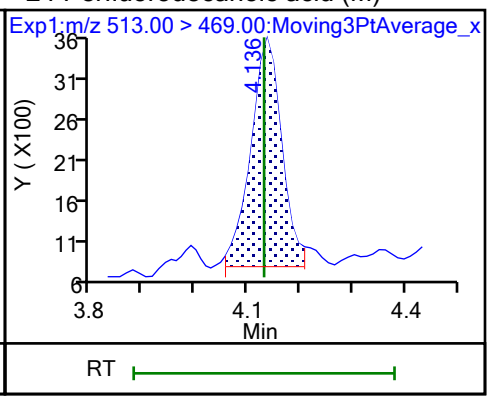
68 Perfluorononanesulfonic acid (ND)



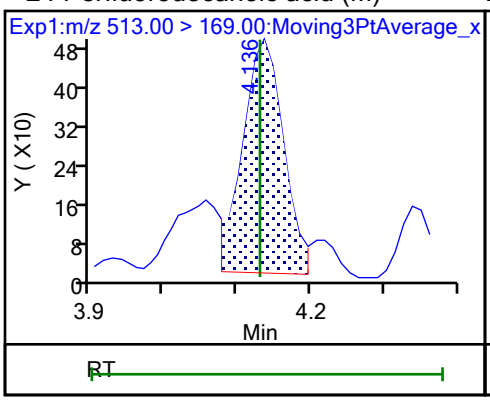
68 Perfluorononanesulfonic acid (ND)



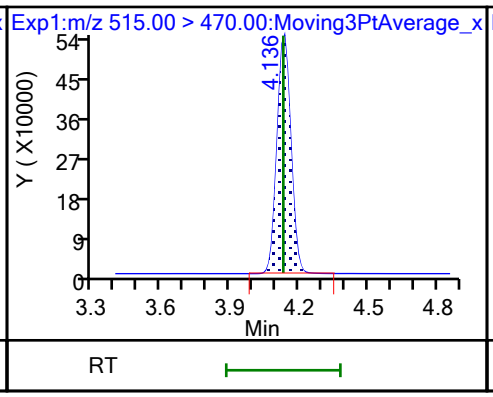
24 Perfluorodecanoic acid (M)



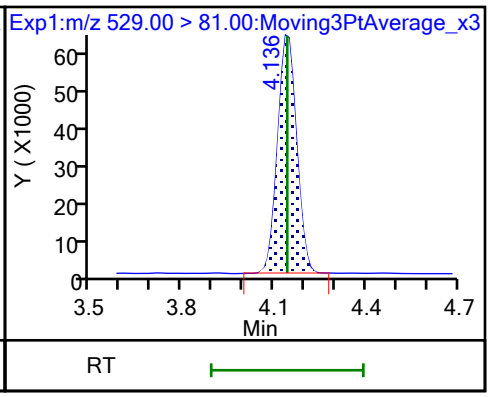
24 Perfluorodecanoic acid (M)



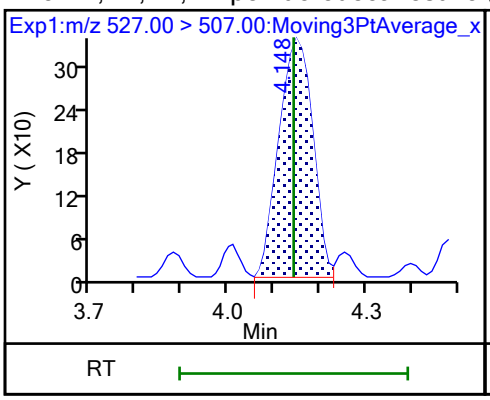
D 23 13C2 PFDA



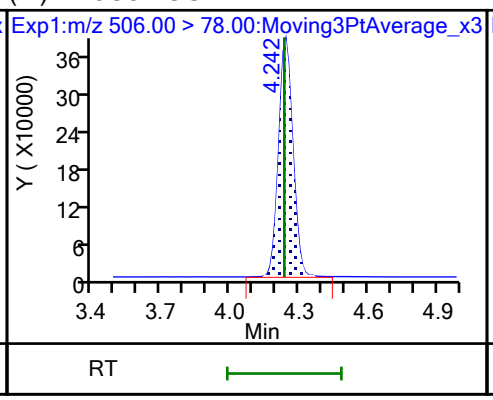
D 26 M2-8:2 FTS



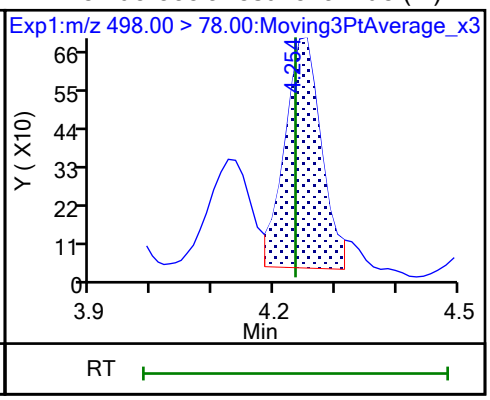
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



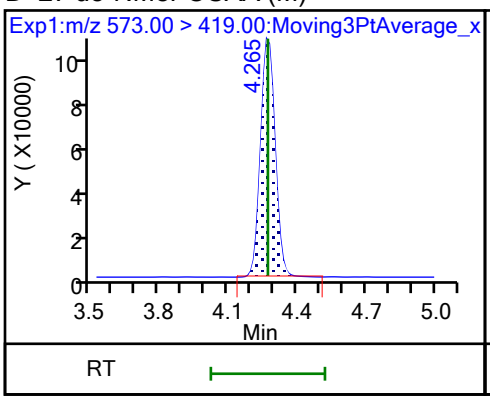
D 21 13C8 FOSA



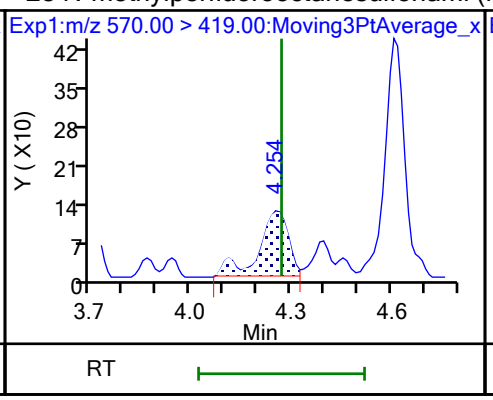
22 Perfluorooctanesulfonamide (M)



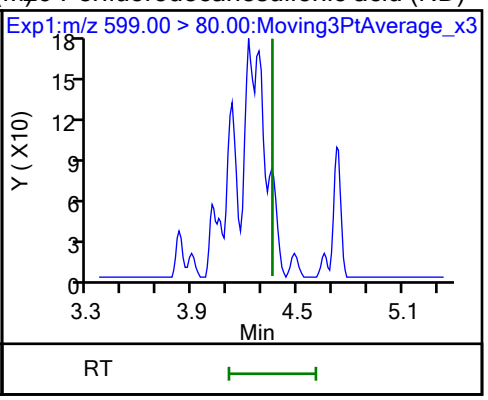
D 27 d3-NMeFOSAA (M)



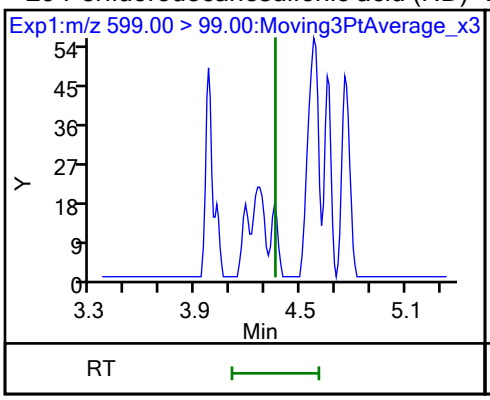
28 N-methylperfluorooctanesulfonami (M)



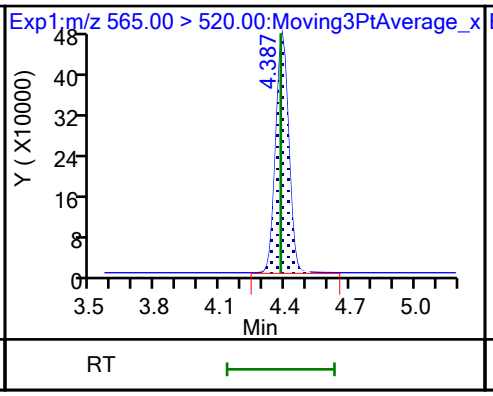
29 Perfluorodecanesulfonic acid (ND)



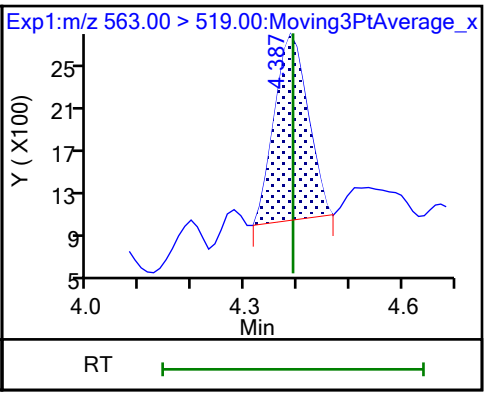
29 Perfluorodecanesulfonic acid (ND)



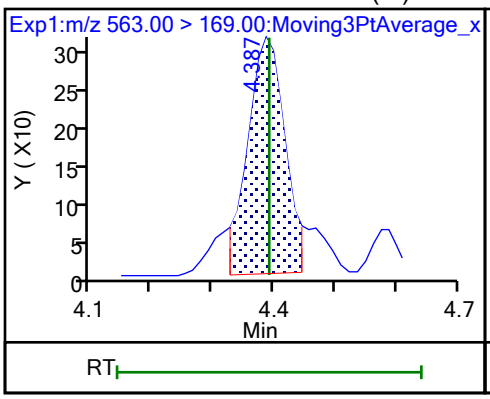
D 30 13C2 PFUnA



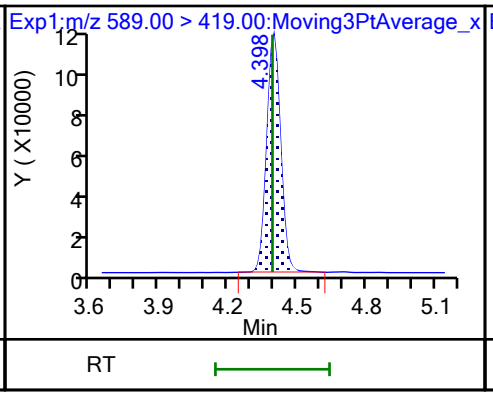
31 Perfluoroundecanoic acid



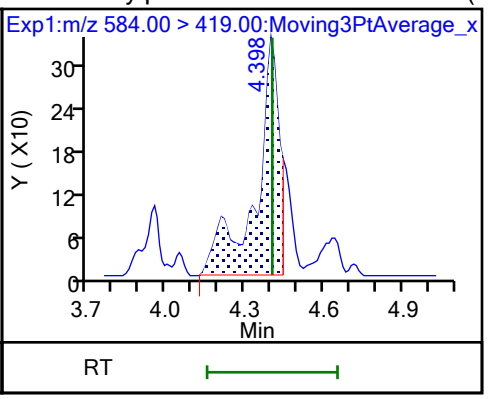
31 Perfluoroundecanoic acid (M)



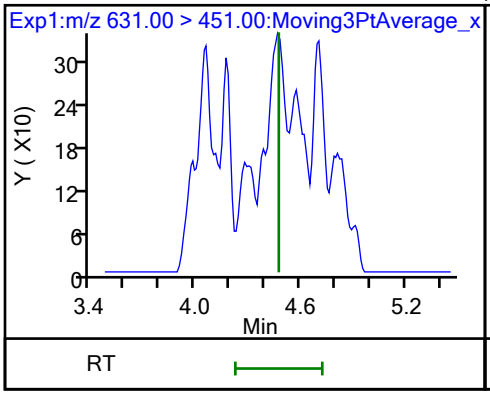
D 32 d5-NEtFOSAA



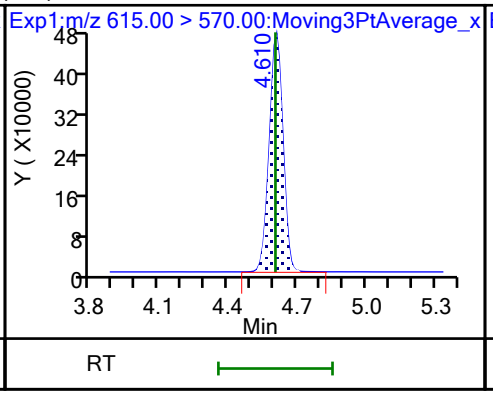
33 N-ethylperfluorooctanesulfonamid (M)



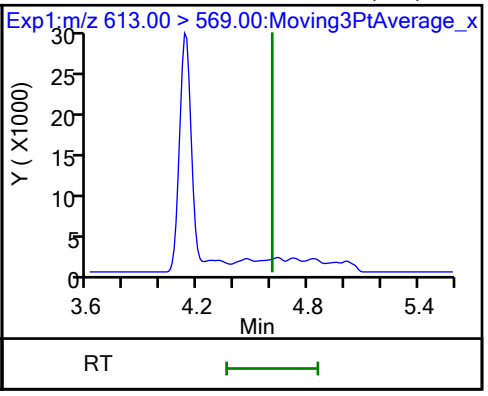
66 11-Chloroeicosafluoro-3-oxaundec (ND)



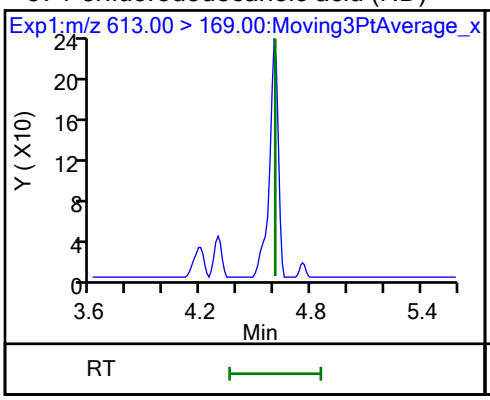
D 36 13C2 PFDoA



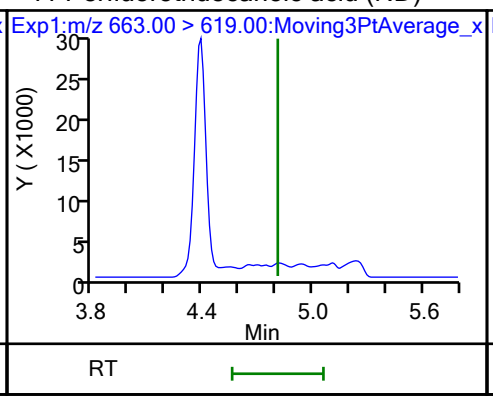
37 Perfluorododecanoic acid (ND)



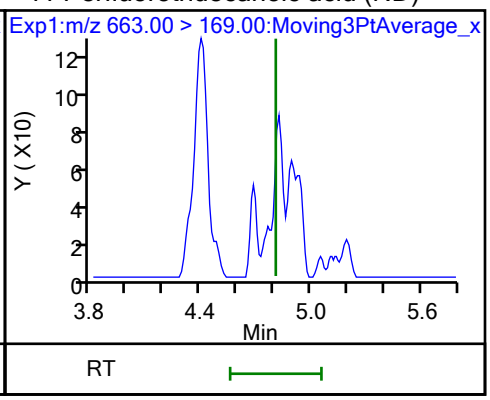
37 Perfluorododecanoic acid (ND)



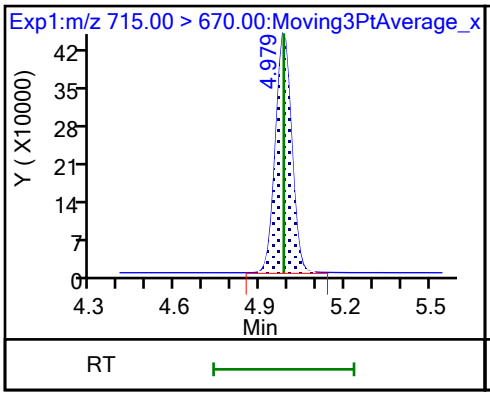
41 Perfluorotridecanoic acid (ND)



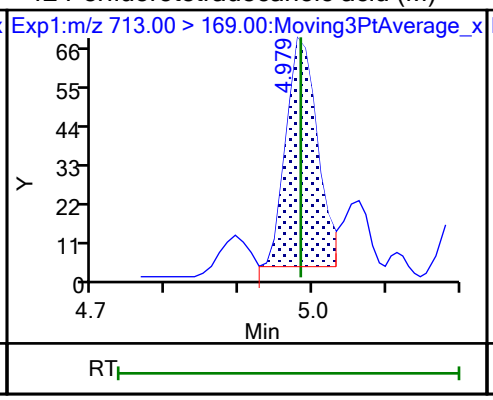
41 Perfluorotridecanoic acid (ND)



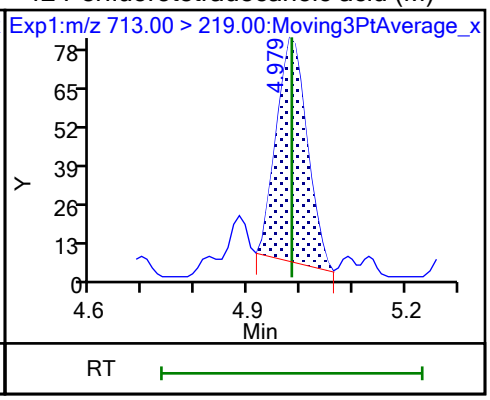
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

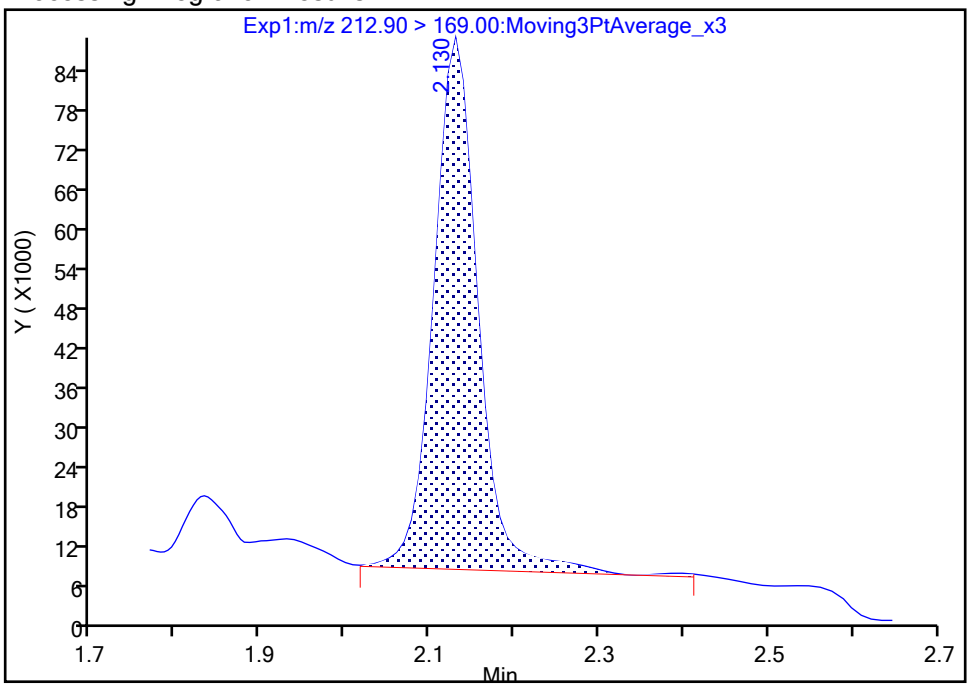
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

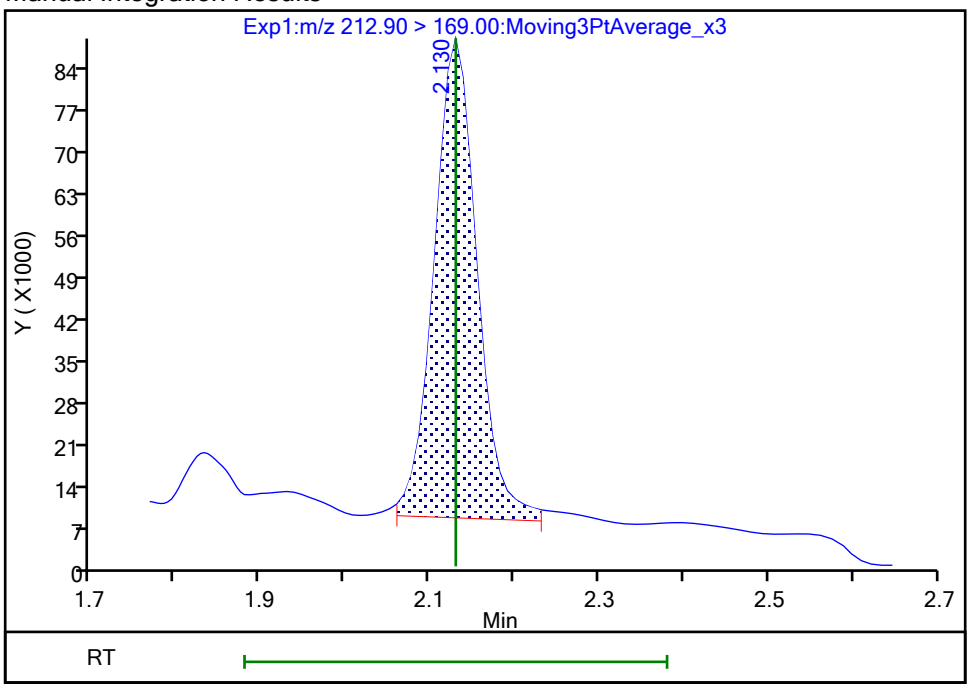
Processing Integration Results

RT: 2.13
Area: 292708
Amount: 0.156572
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 283026
Amount: 0.150040
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

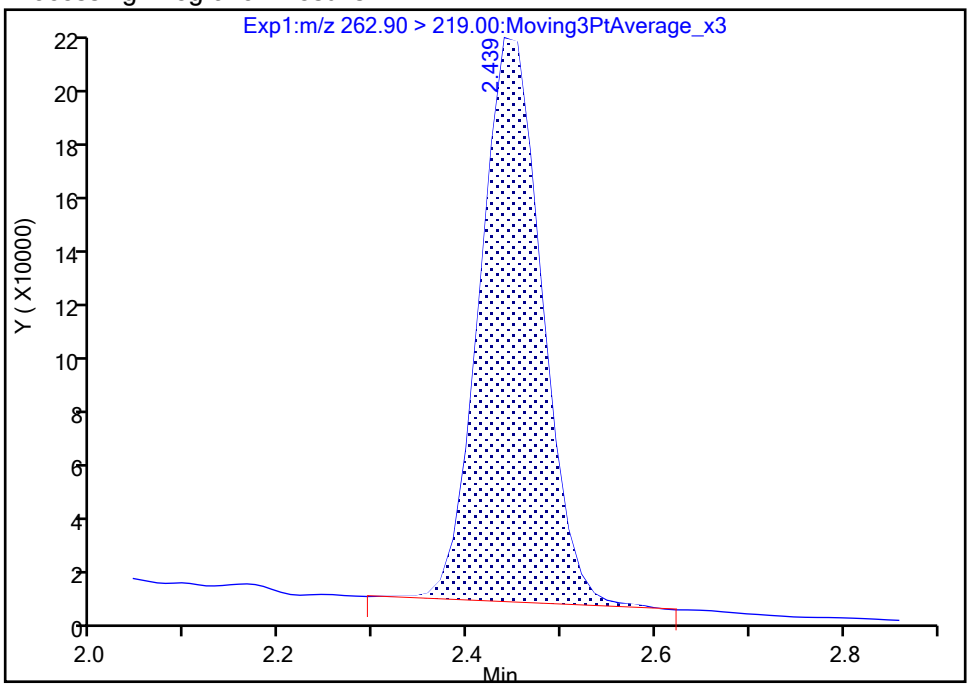
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

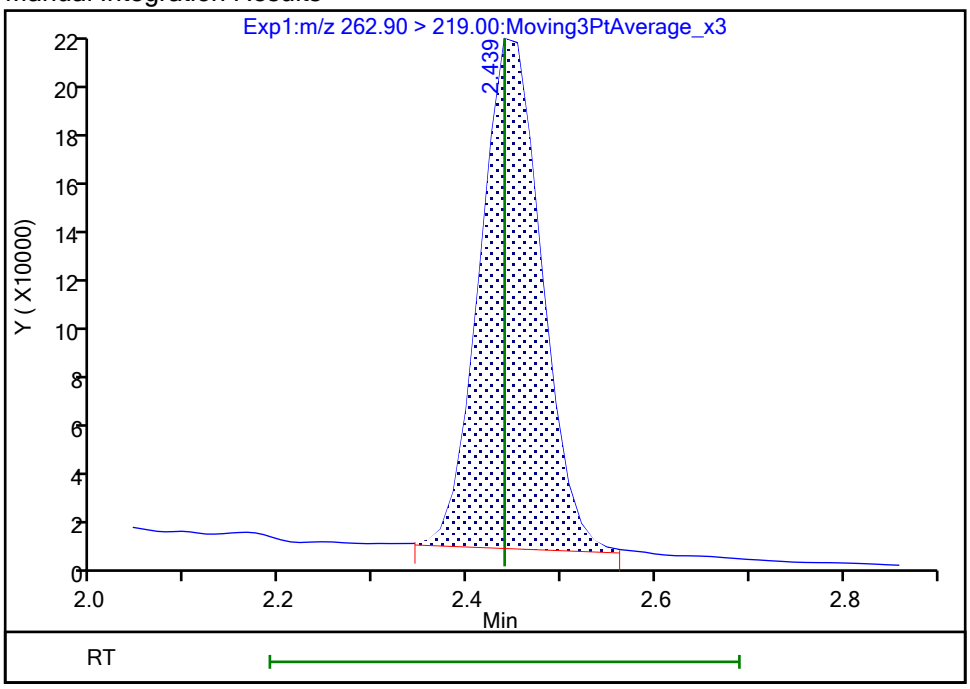
Processing Integration Results

RT: 2.44
Area: 929431
Amount: 0.706363
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 925489
Amount: 0.703367
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

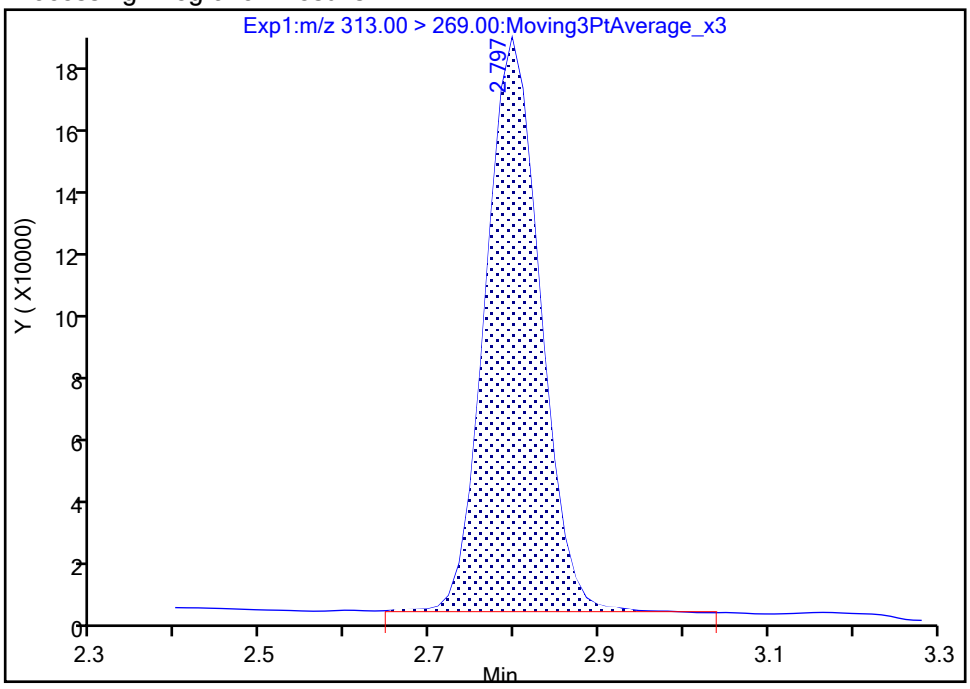
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

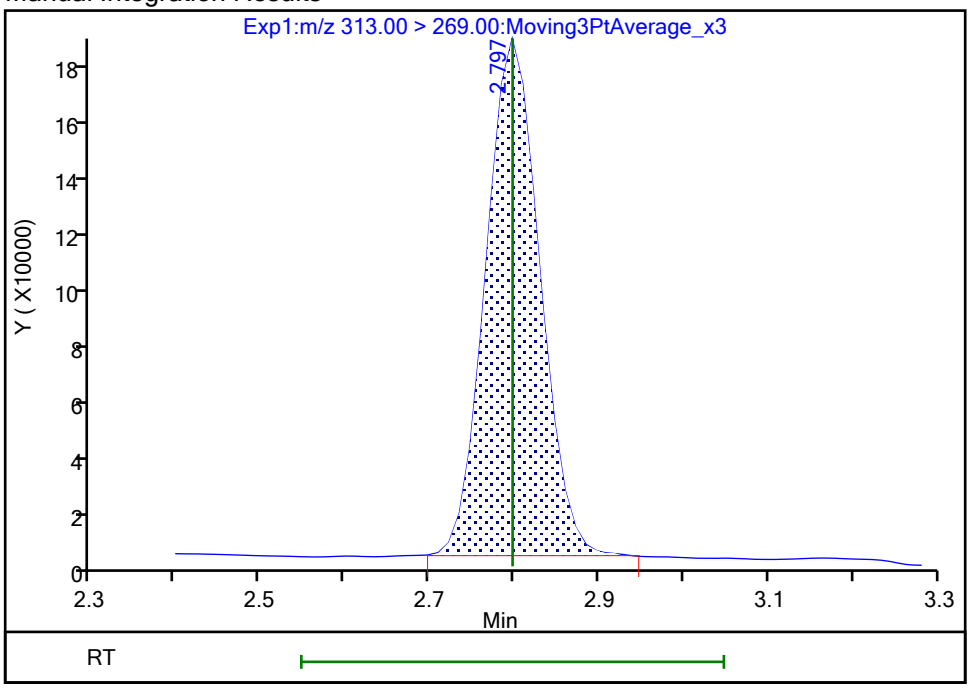
Processing Integration Results

RT: 2.80
Area: 796132
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 785530
Amount: 0.564718
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

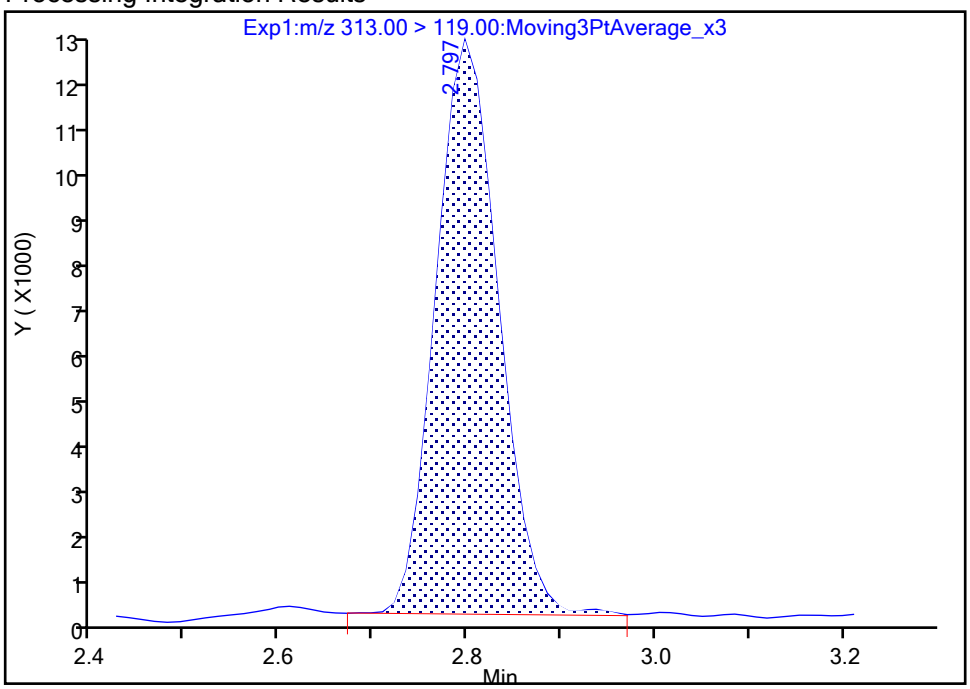
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

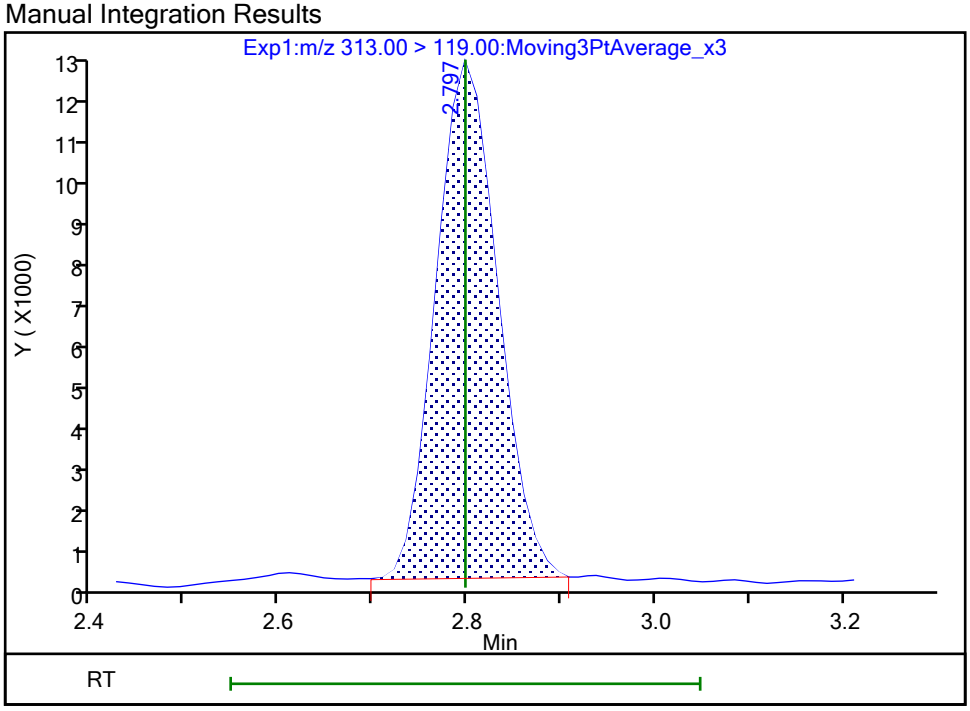
Processing Integration Results

RT: 2.80
Area: 57154
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 56362
Amount: 0.564718
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

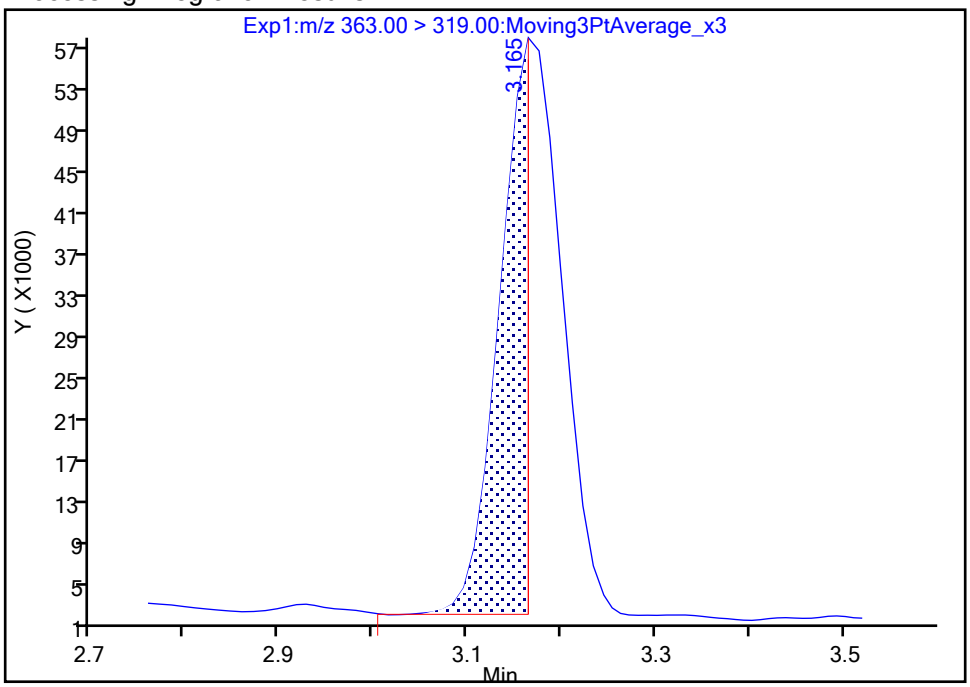
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

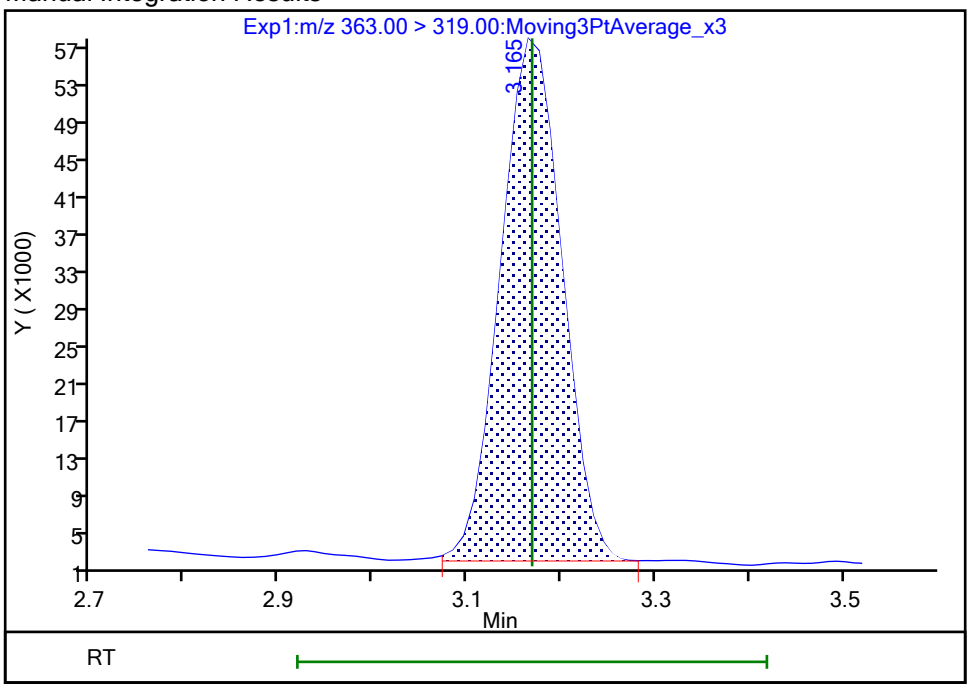
Processing Integration Results

RT: 3.16
Area: 114464
Amount: 0.070715
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 252123
Amount: 0.155759
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:40:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

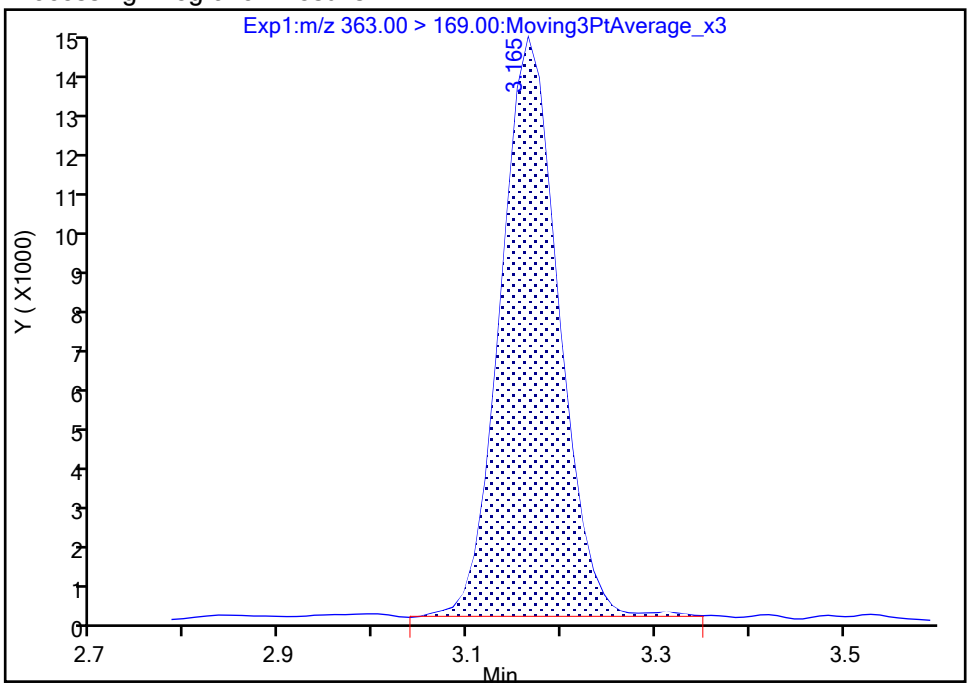
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

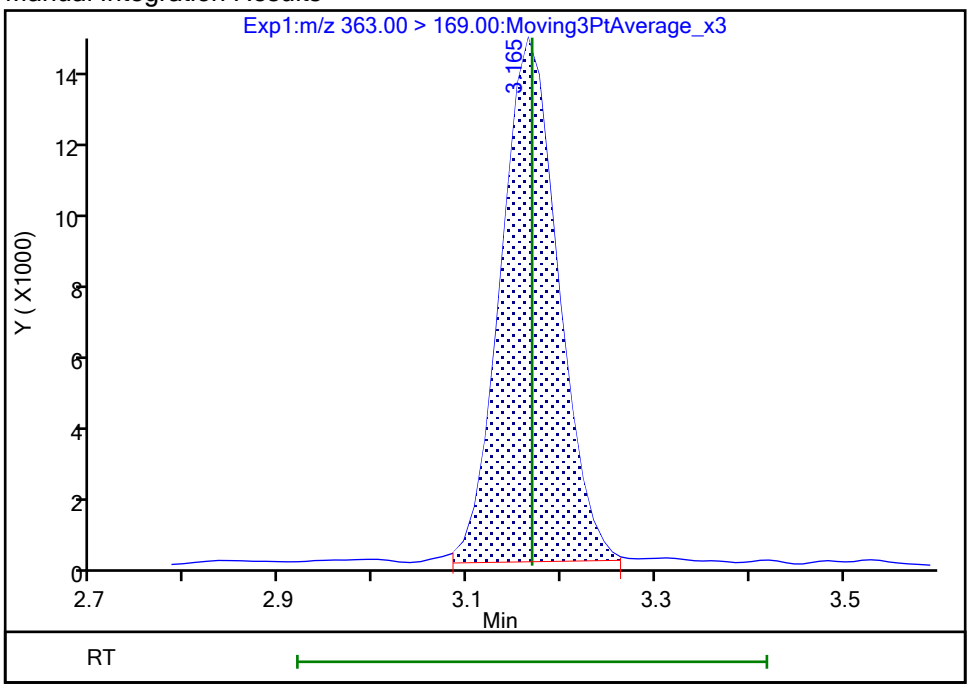
Processing Integration Results

RT: 3.16
Area: 61751
Amount: 0.070715
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 61138
Amount: 0.155759
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:40:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

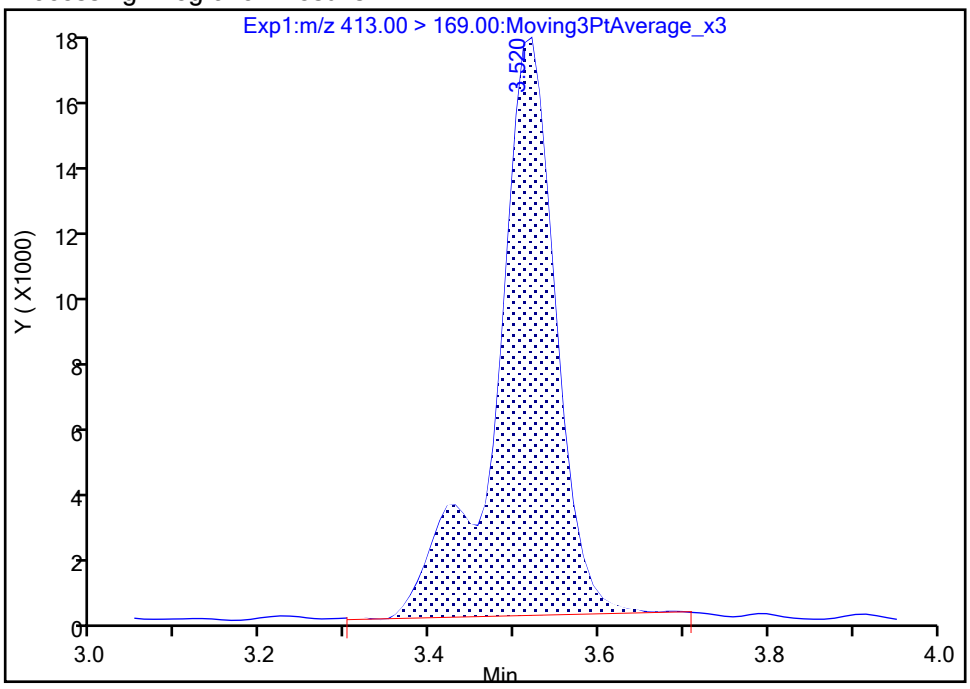
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

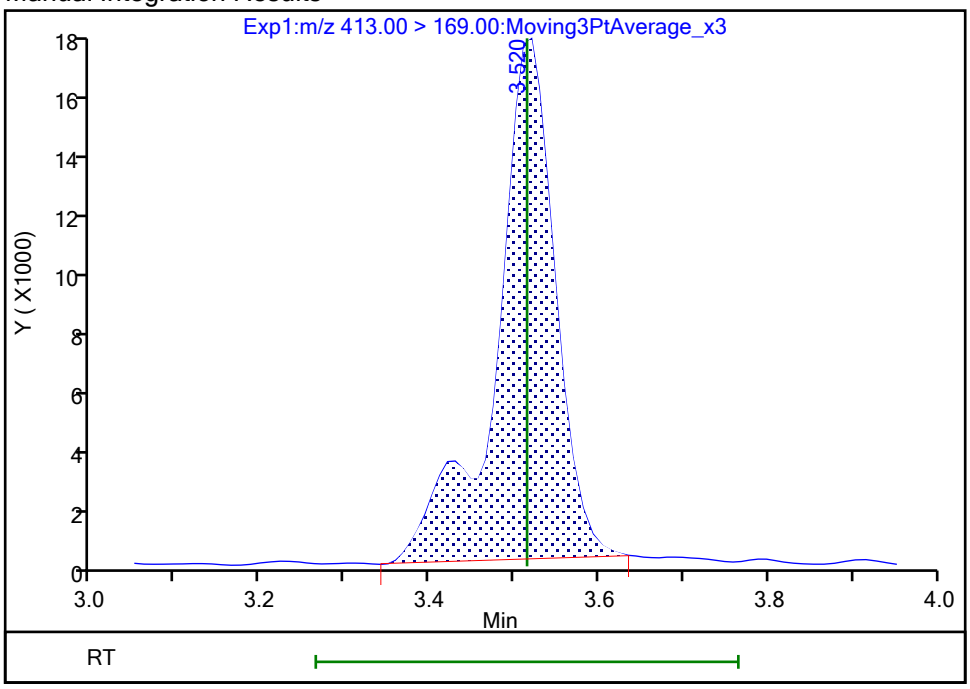
Processing Integration Results

RT: 3.52
Area: 85541
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 84054
Amount: 0.127966
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:40:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

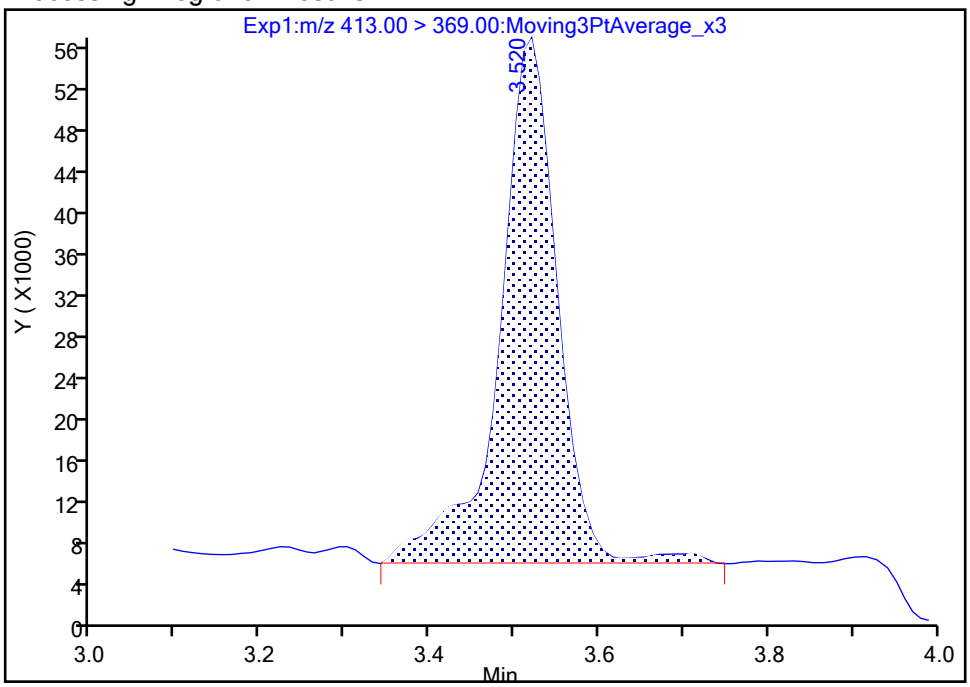
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

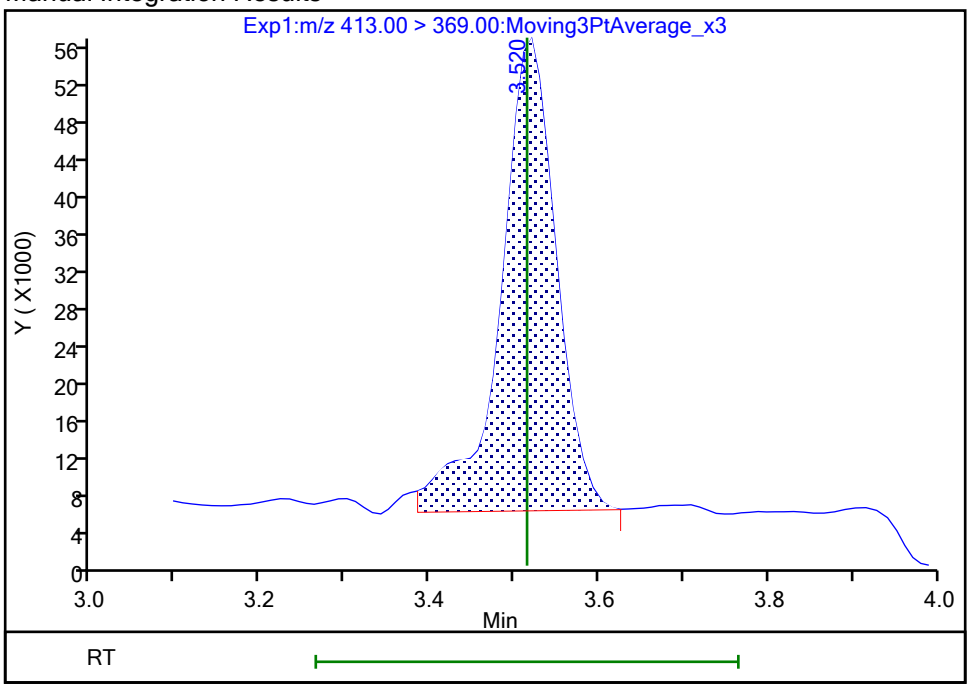
Processing Integration Results

RT: 3.52
Area: 244451
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 231603
Amount: 0.127966
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:40:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

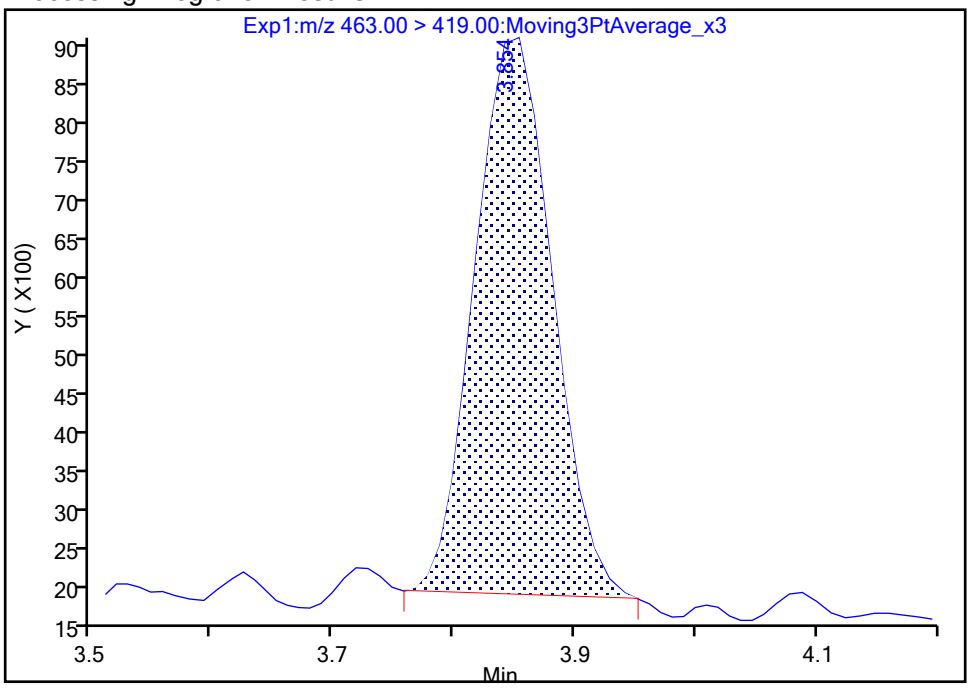
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

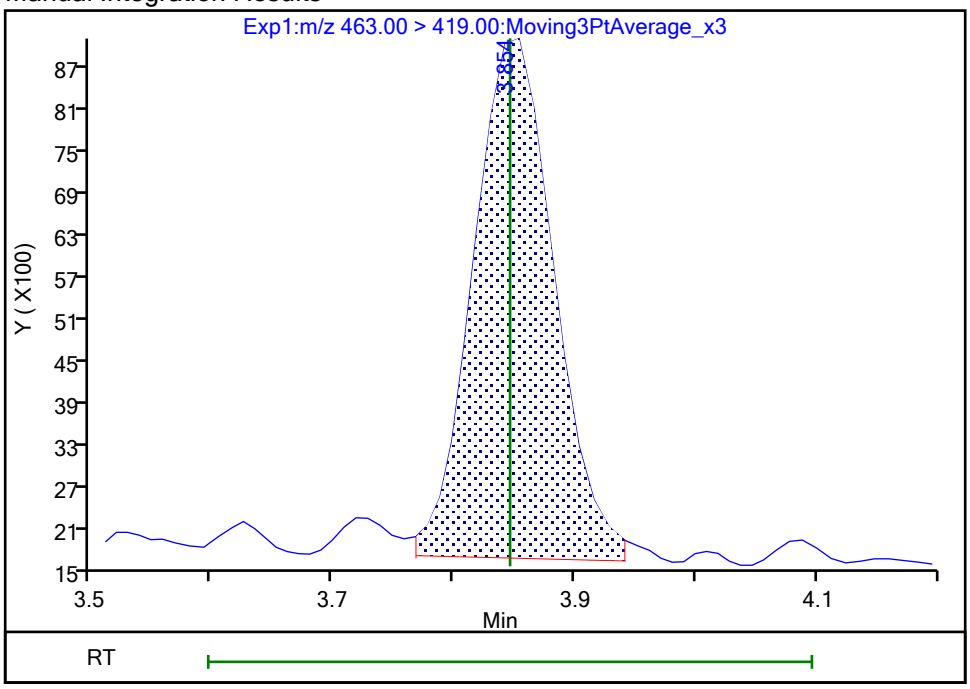
Processing Integration Results

RT: 3.85
Area: 32321
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 34714
Amount: 0.020776
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

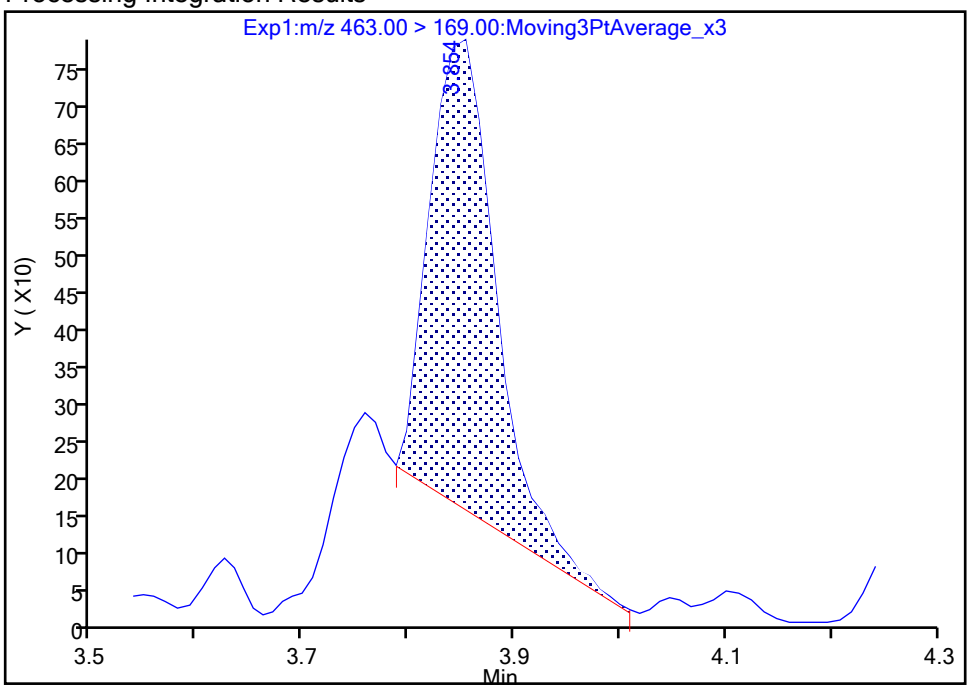
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

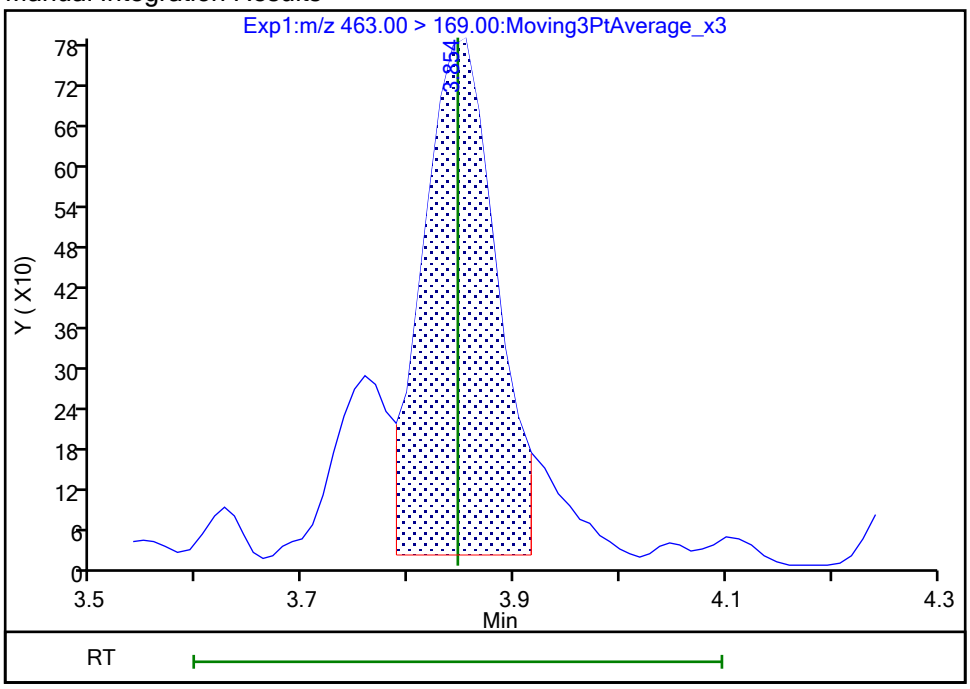
Processing Integration Results

RT: 3.85
Area: 2728
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 3640
Amount: 0.020776
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

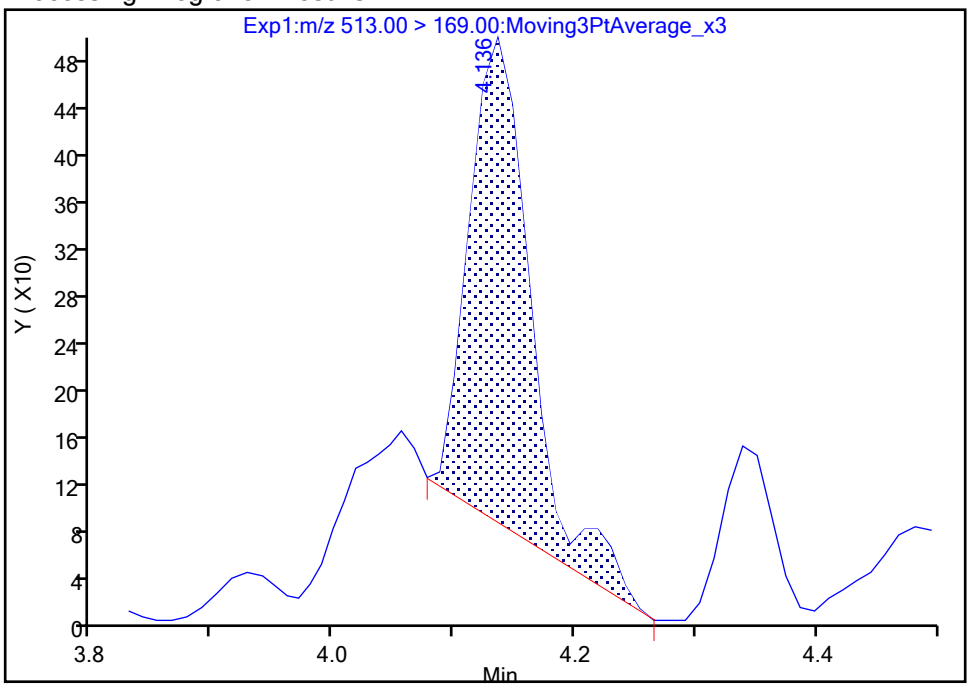
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

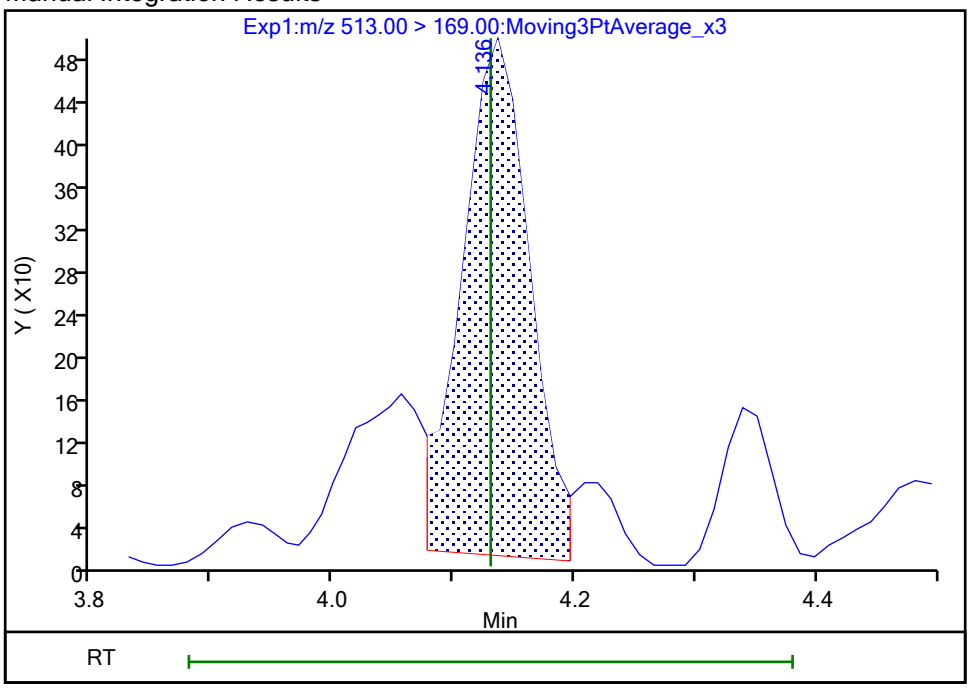
Processing Integration Results

RT: 4.14
Area: 1474
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1898
Amount: 0.006031
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

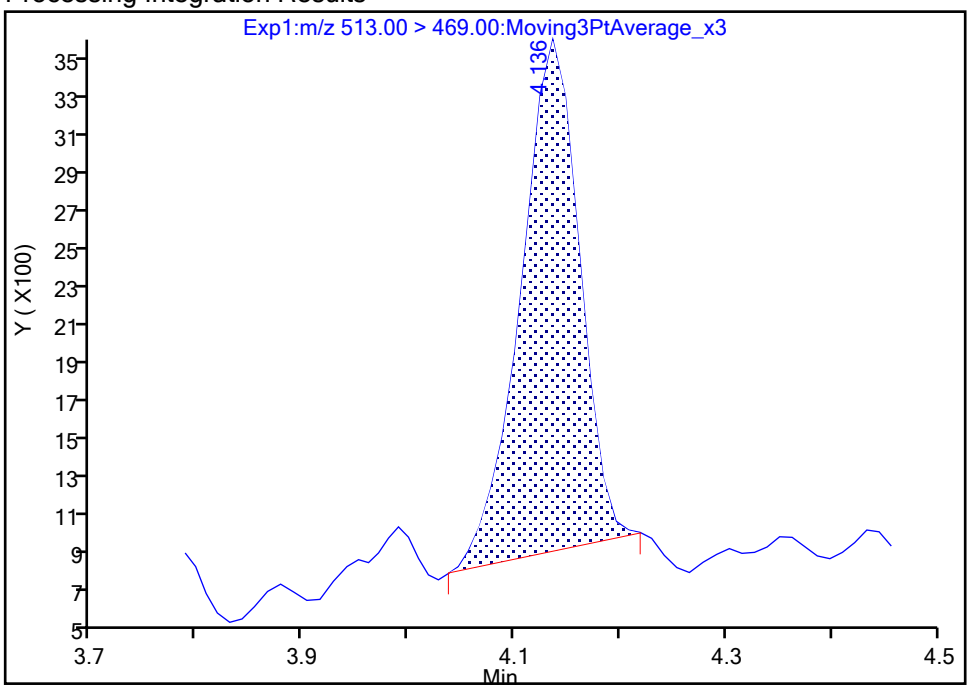
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

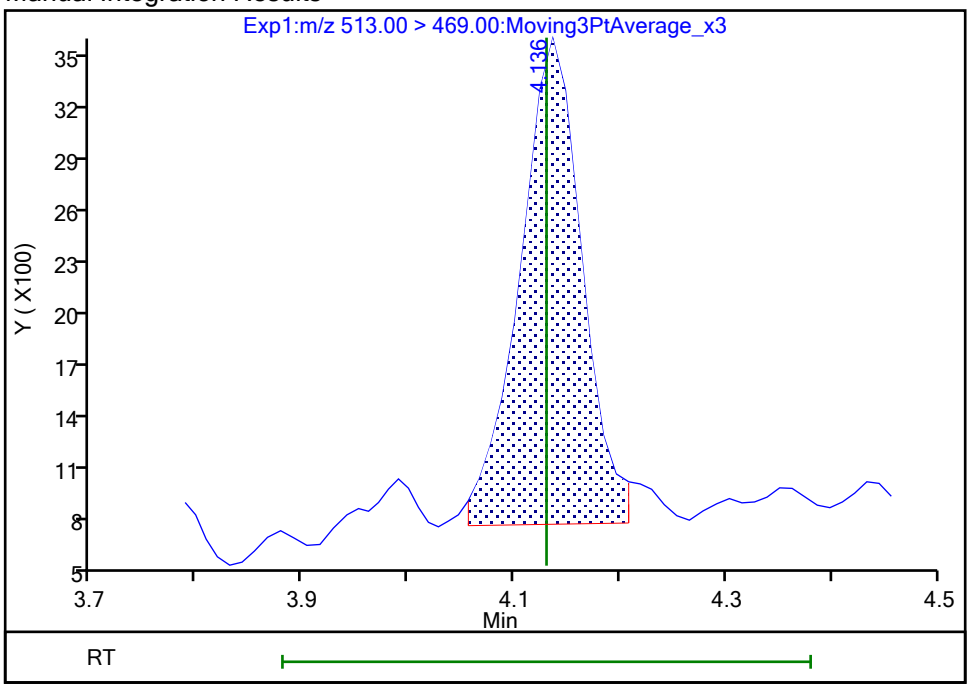
Processing Integration Results

RT: 4.14
Area: 10013
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 11098
Amount: 0.006031
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

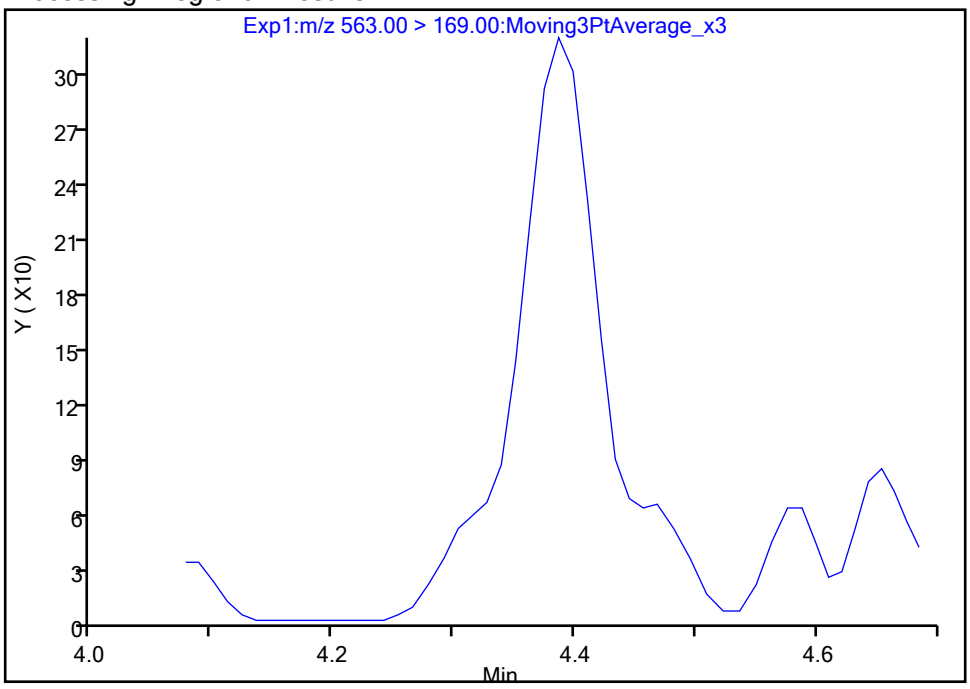
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

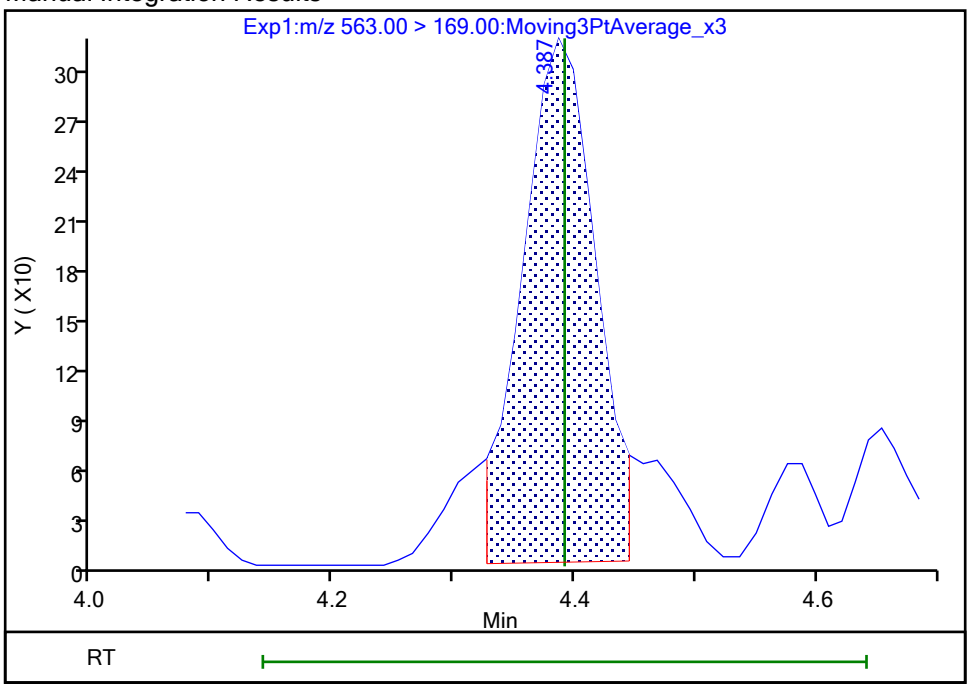
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 1296
Amount: 0.004769
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:43:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

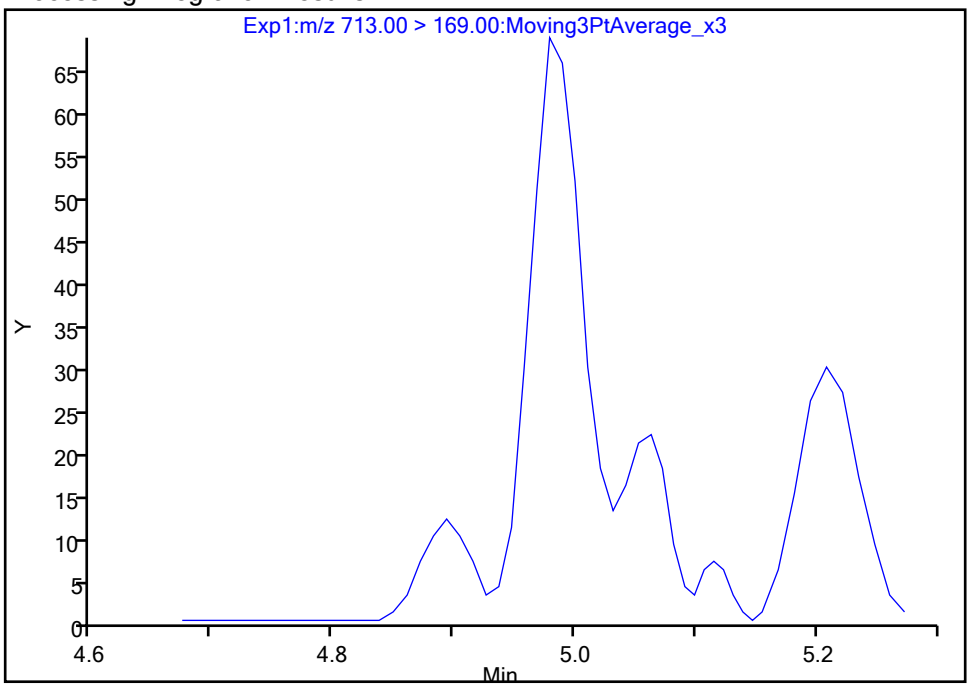
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

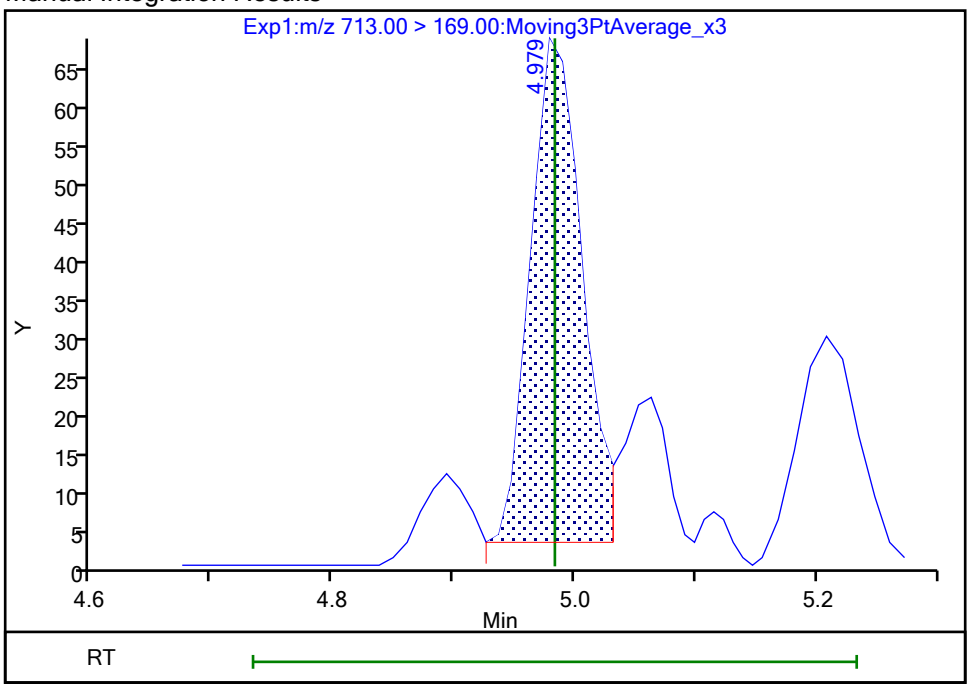
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 195
Amount: 0.001224
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:43:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

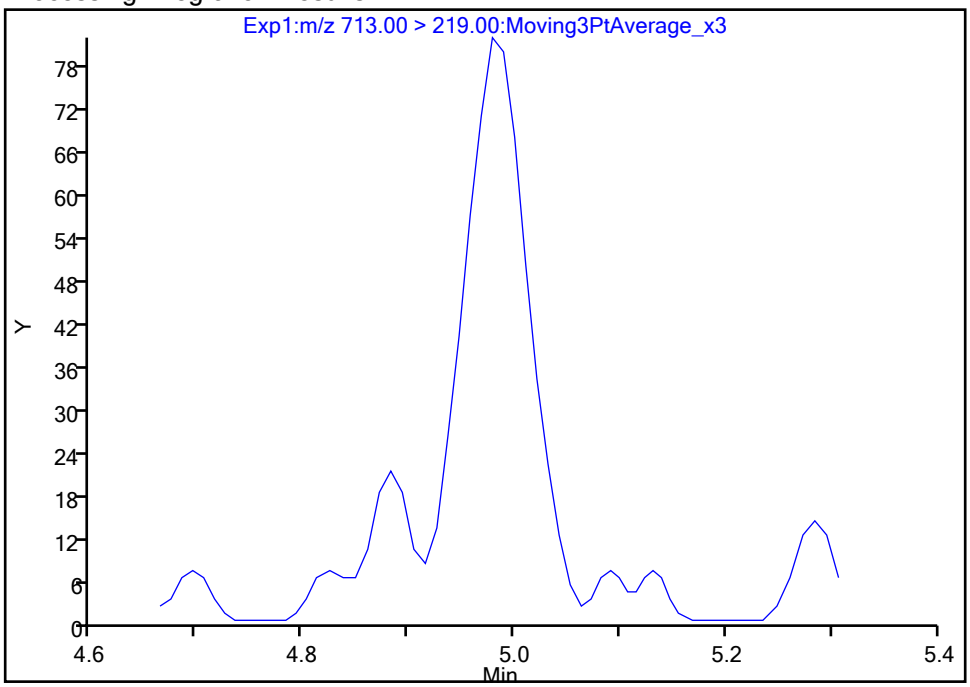
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

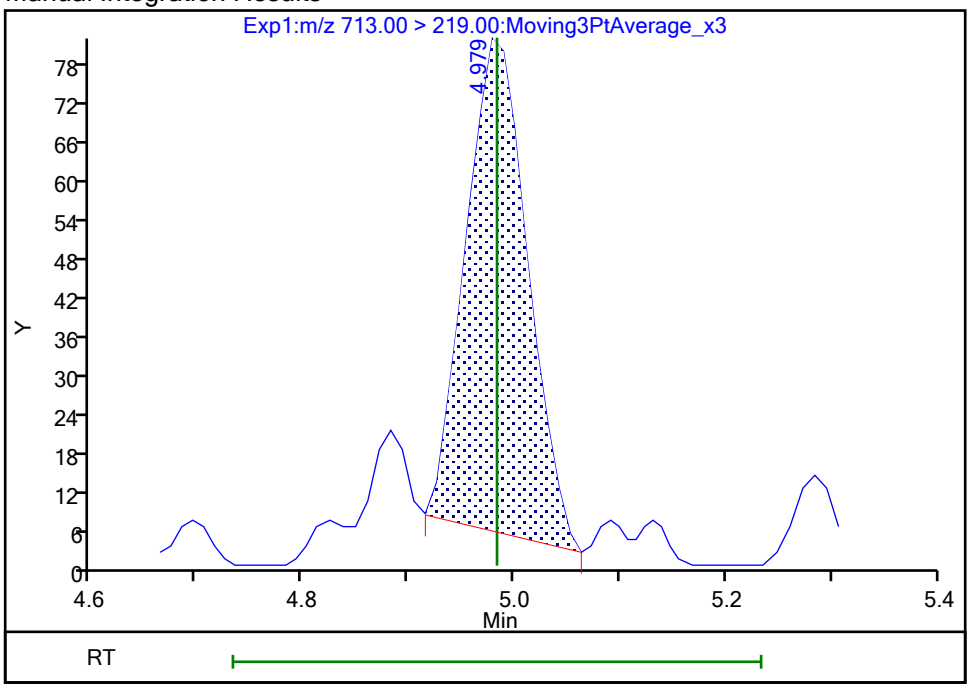
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 312
Amount: 0.001224
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:43:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

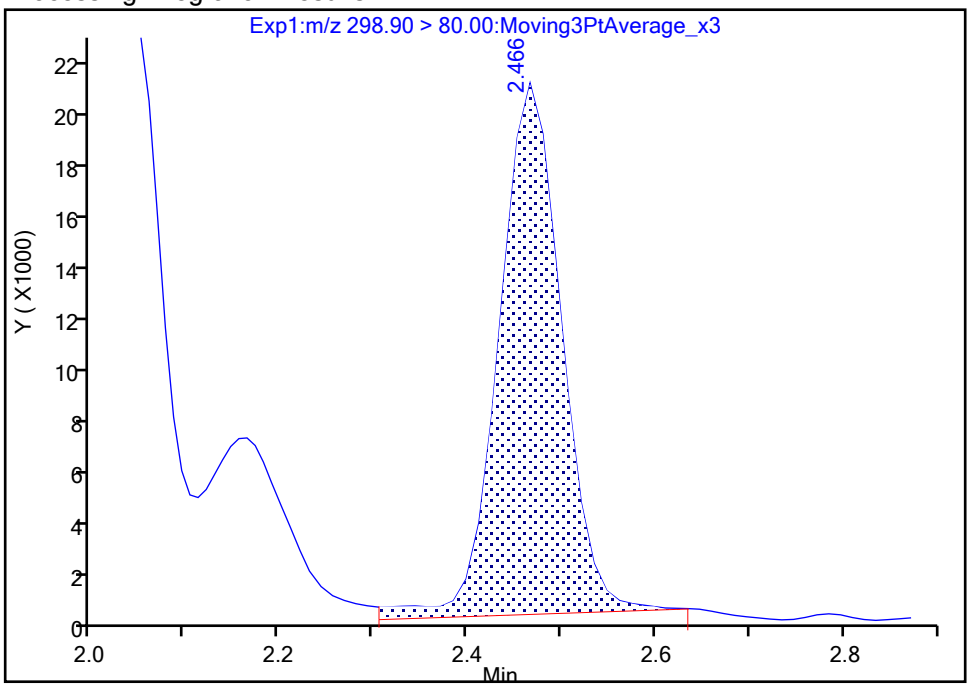
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

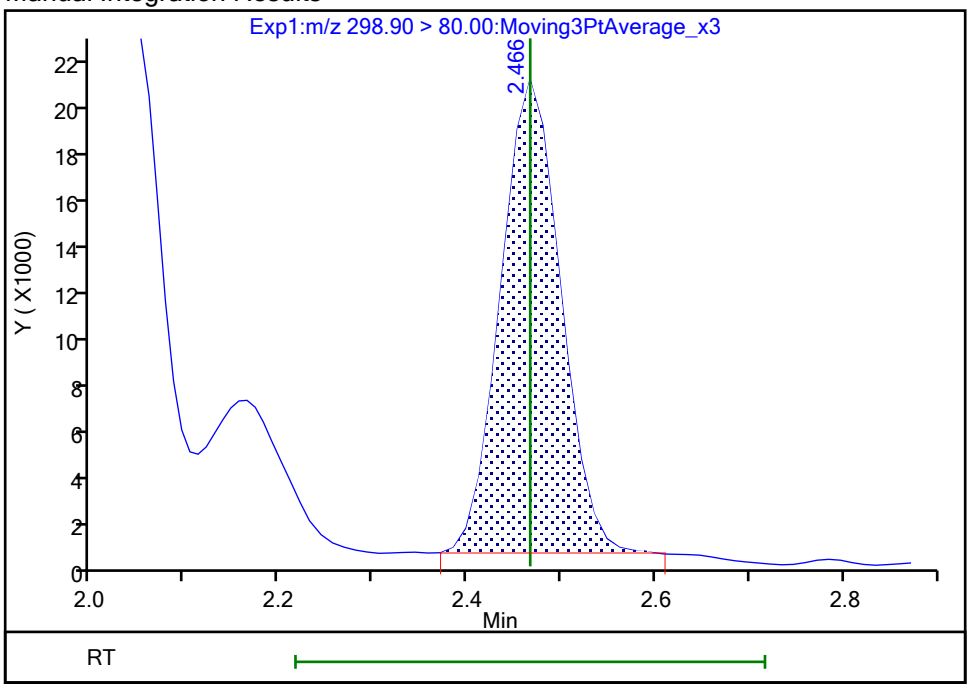
Processing Integration Results

RT: 2.47
Area: 94526
Amount: 0.055101
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 89392
Amount: 0.052109
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

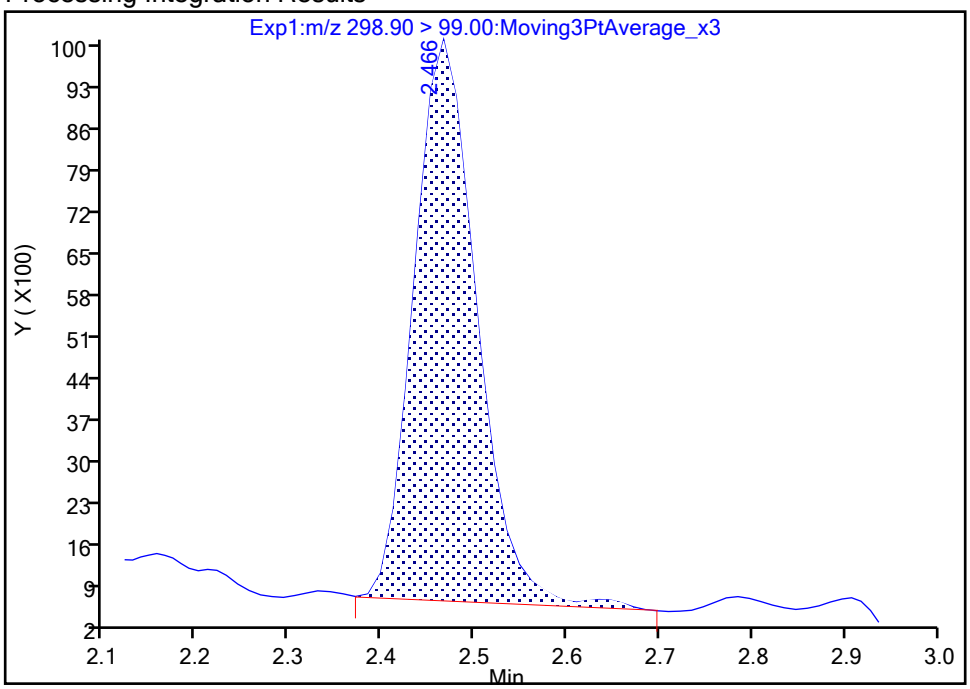
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

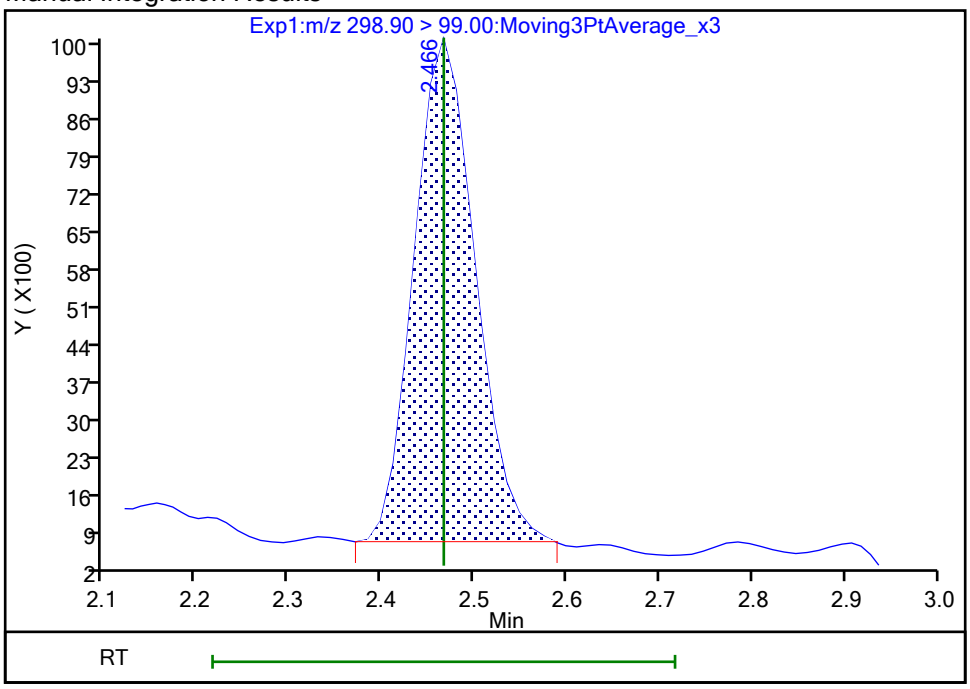
Processing Integration Results

RT: 2.47
Area: 44484
Amount: 0.055101
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 42967
Amount: 0.052109
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

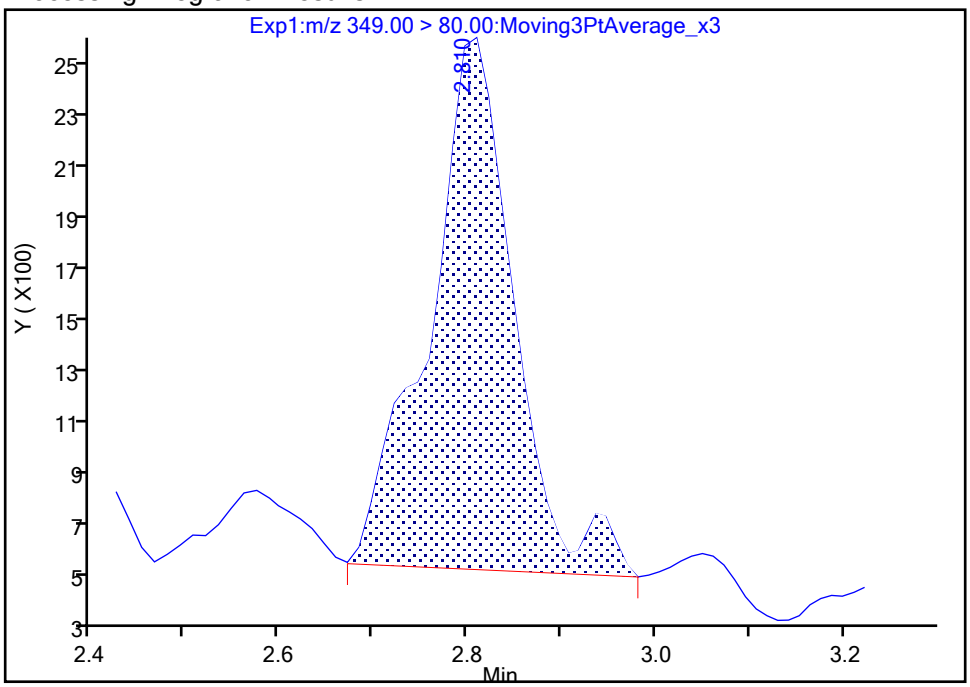
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

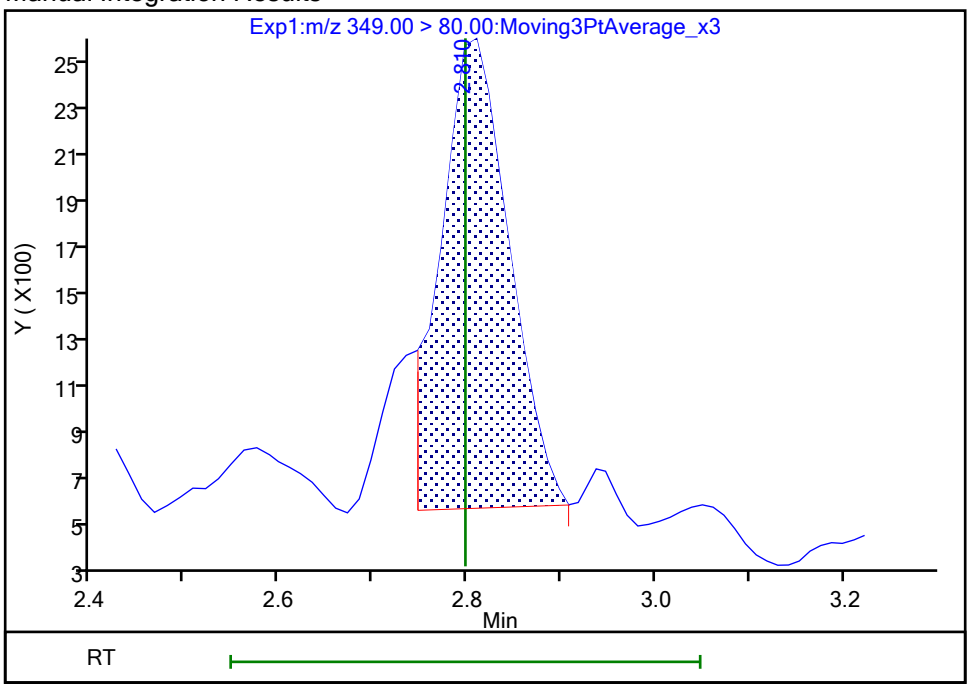
Processing Integration Results

RT: 2.81
Area: 12864
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 10016
Amount: 0.006984
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

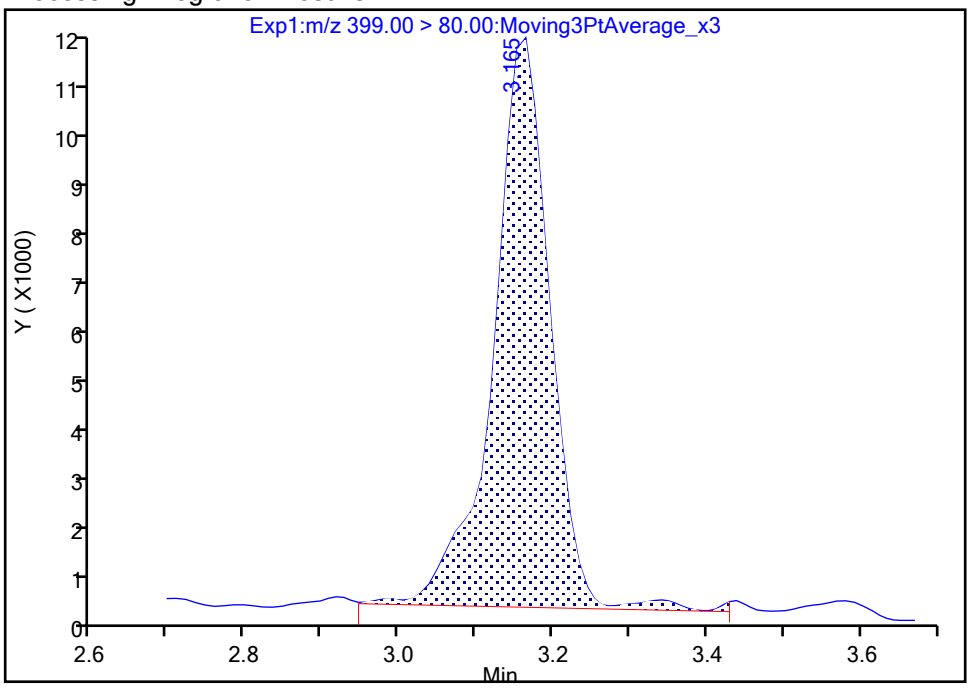
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

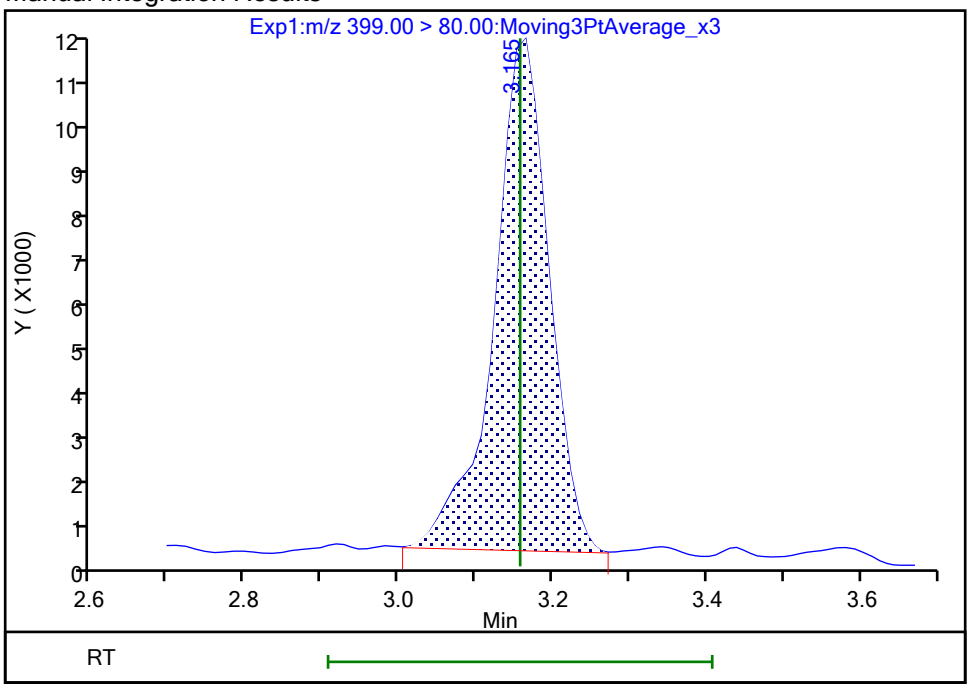
Processing Integration Results

RT: 3.16
Area: 56419
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 54460
Amount: 0.044800
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

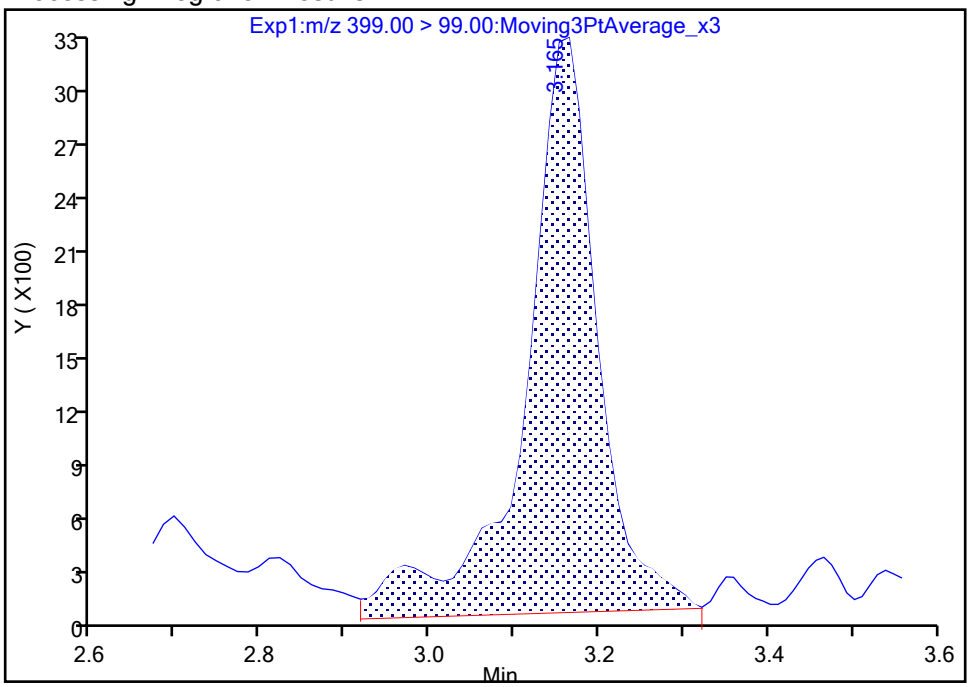
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

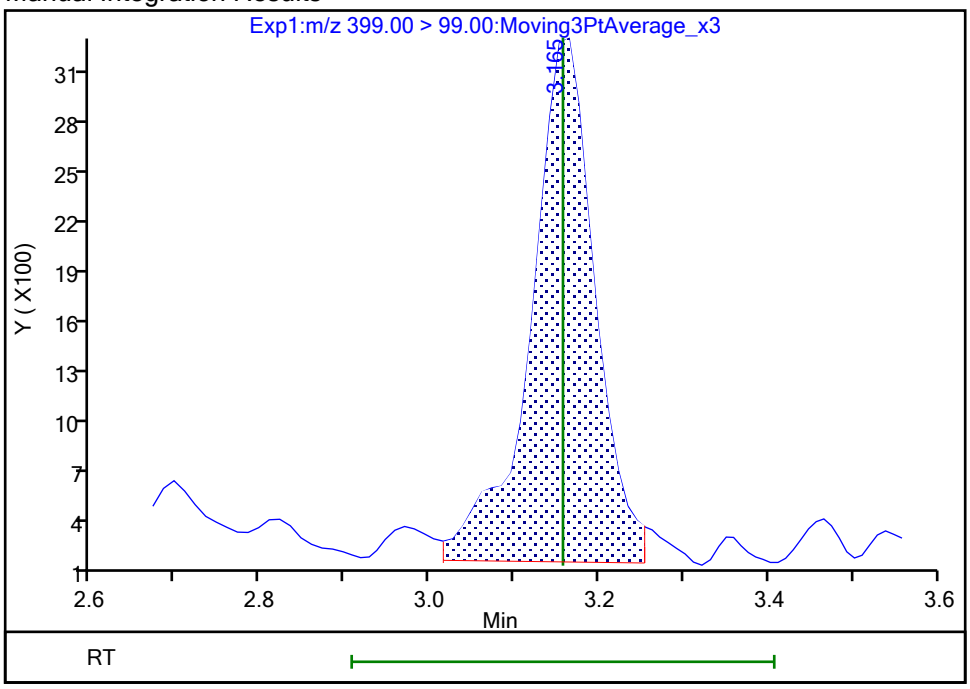
Processing Integration Results

RT: 3.16
Area: 18619
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 16112
Amount: 0.044800
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:40:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

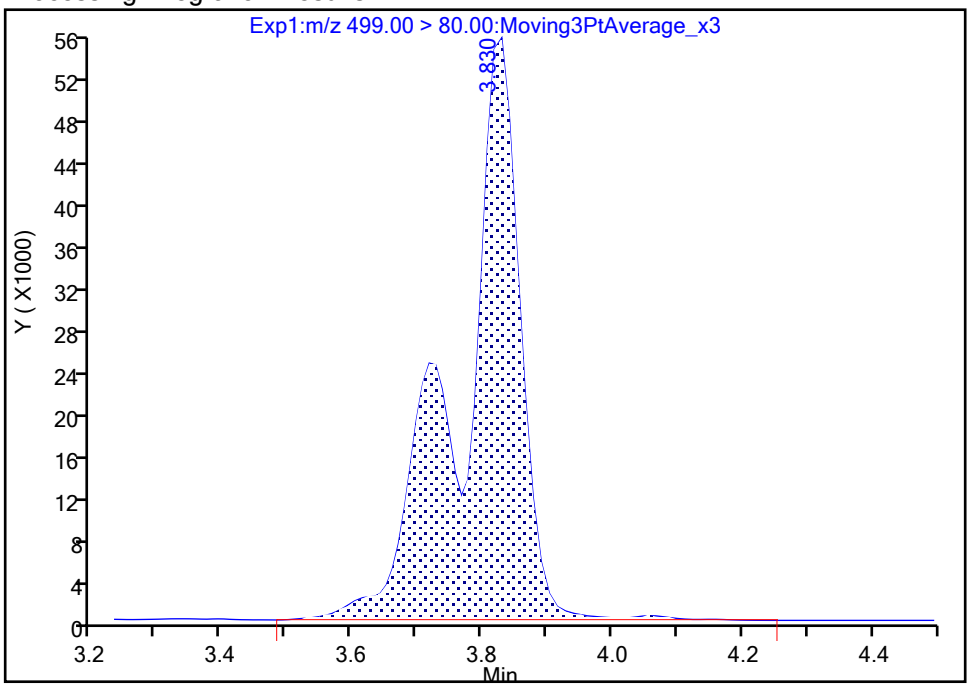
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

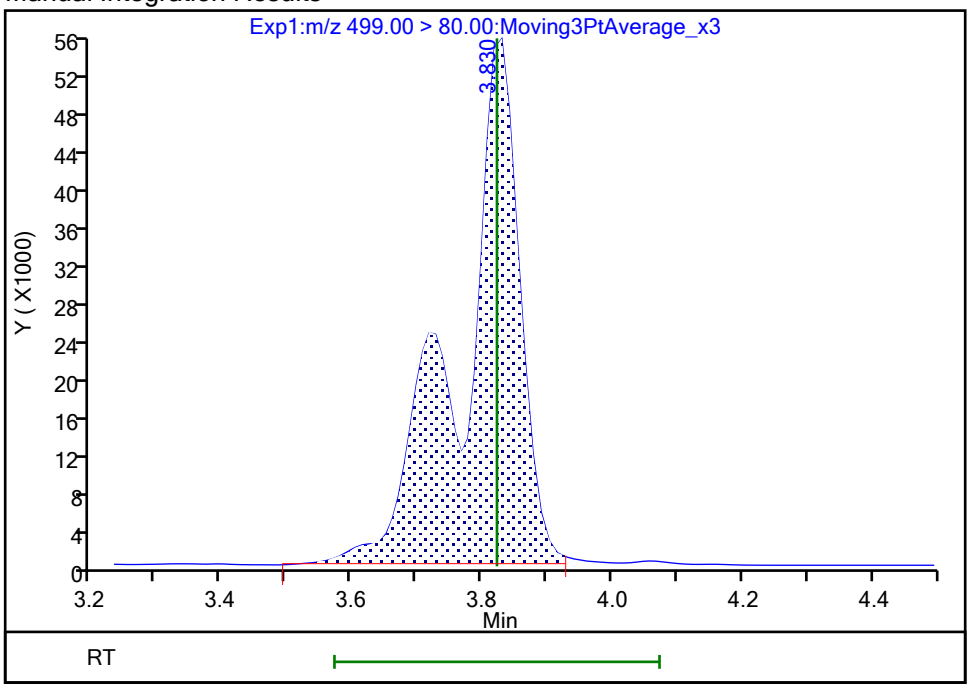
Processing Integration Results

RT: 3.83
Area: 365515
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 360189
Amount: 0.429293
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:41:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

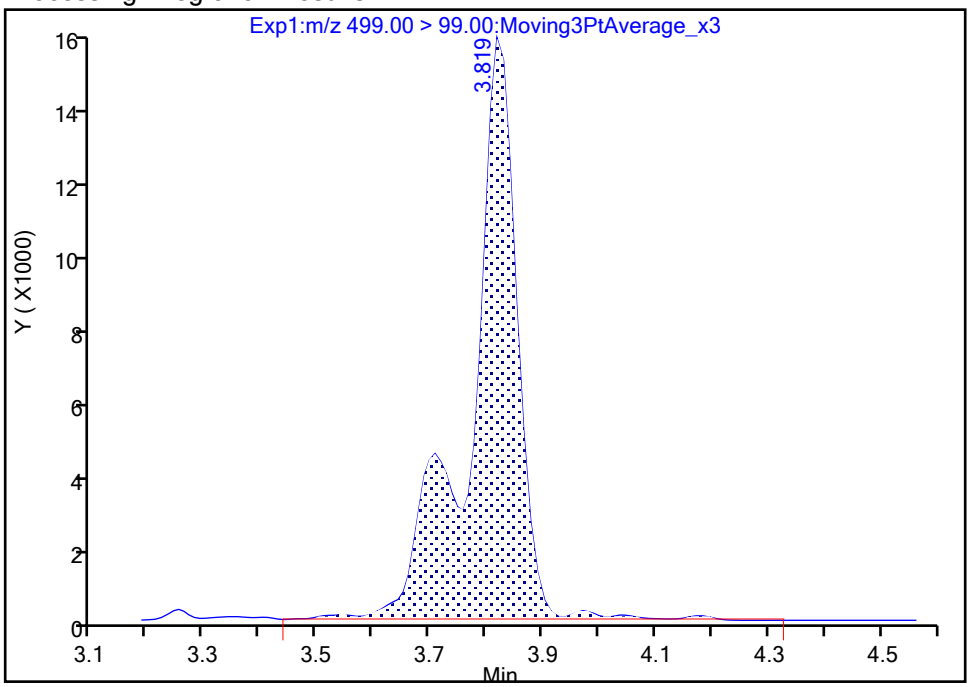
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

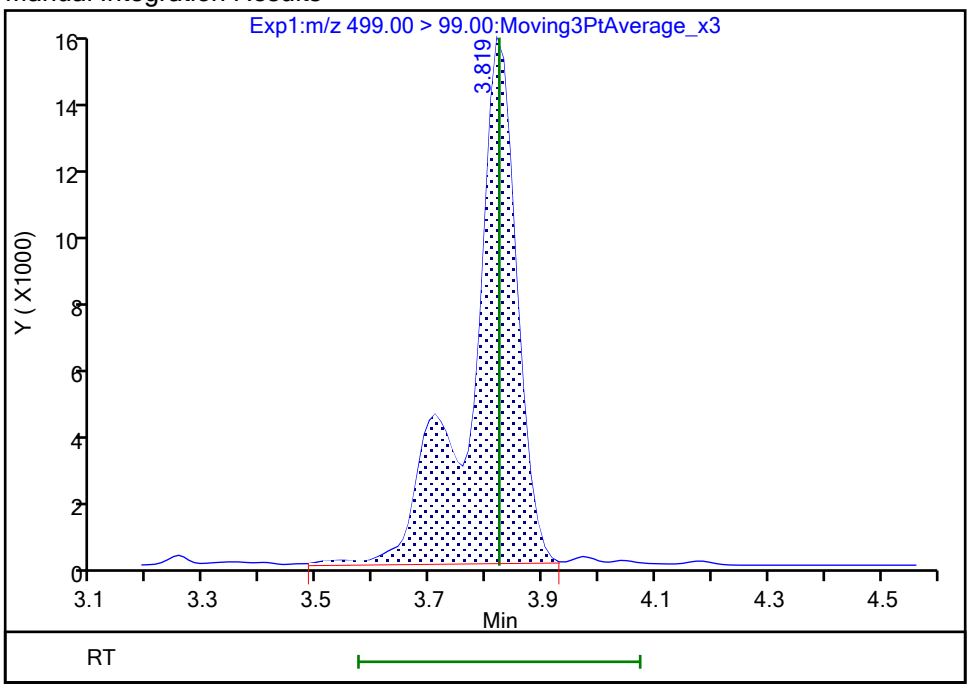
Processing Integration Results

RT: 3.82
Area: 92817
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 90202
Amount: 0.429293
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:41:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

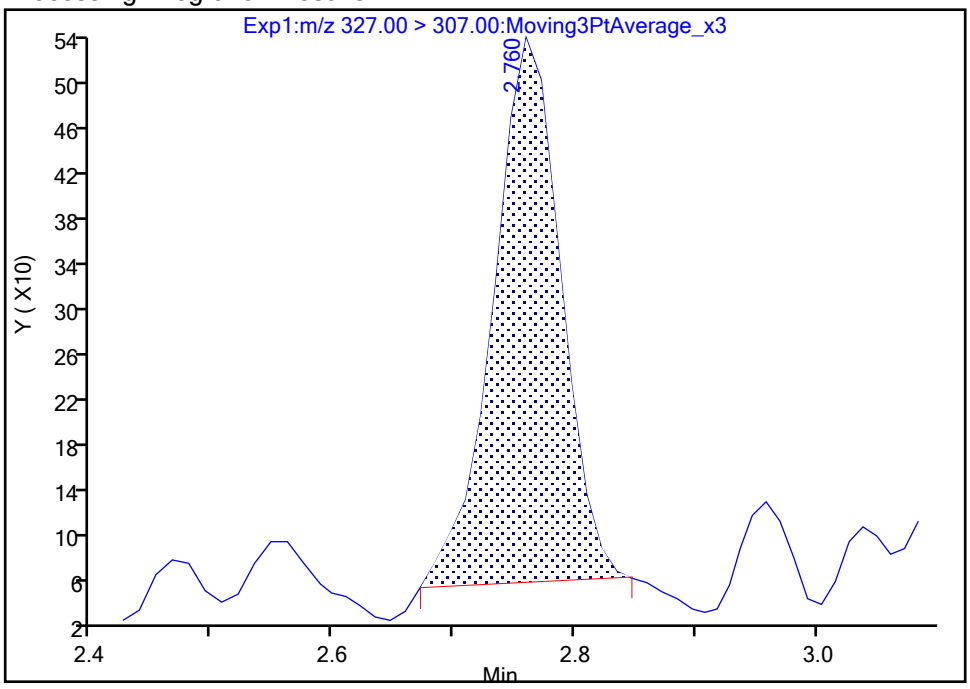
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

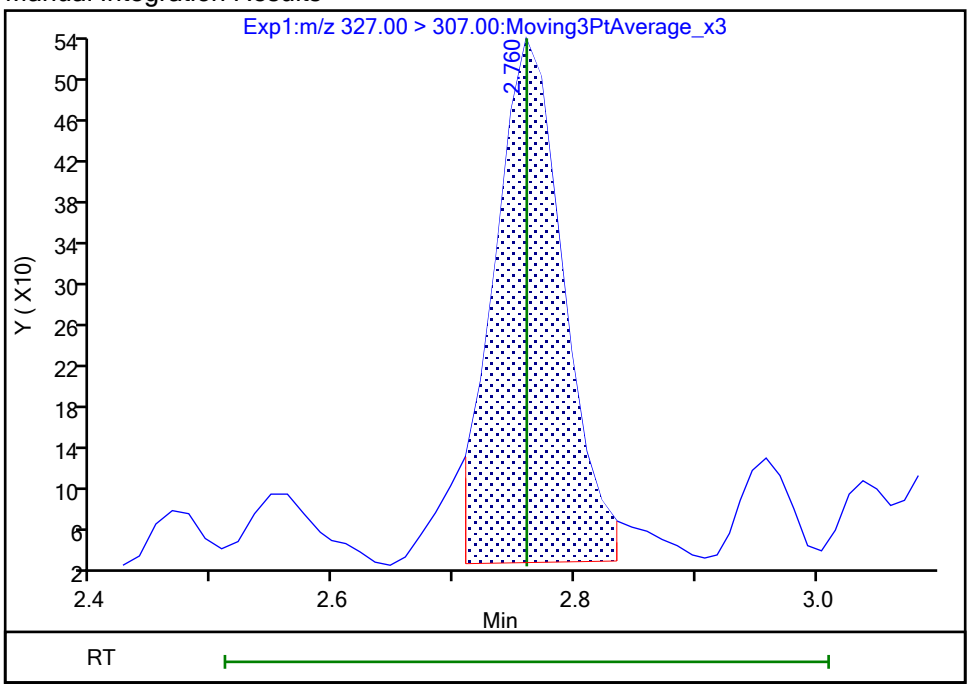
Processing Integration Results

RT: 2.76
Area: 1860
Amount: 0.003350
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 2007
Amount: 0.003614
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

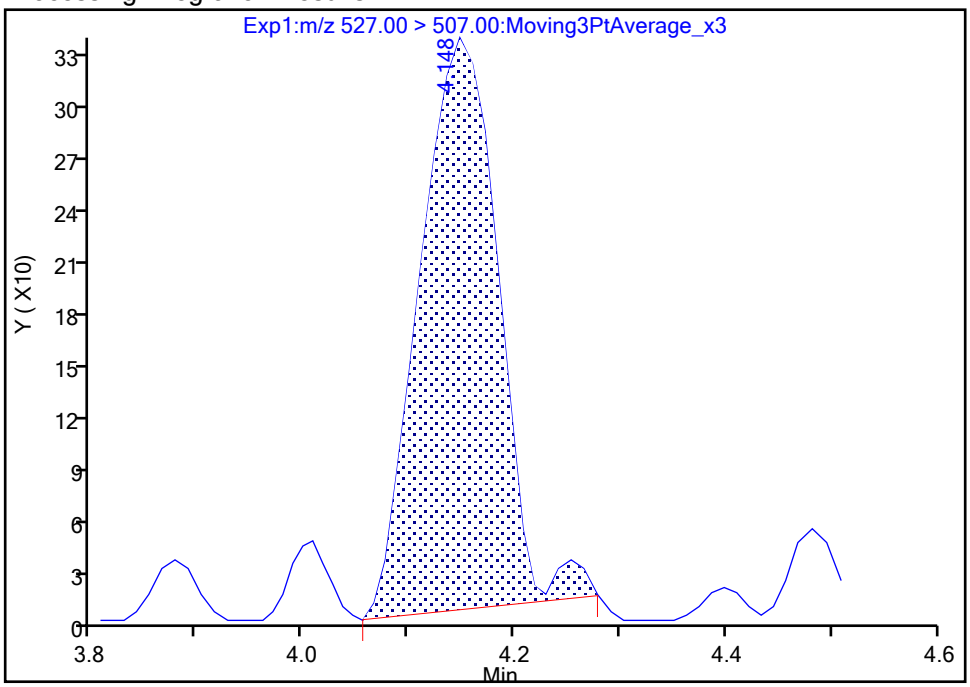
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

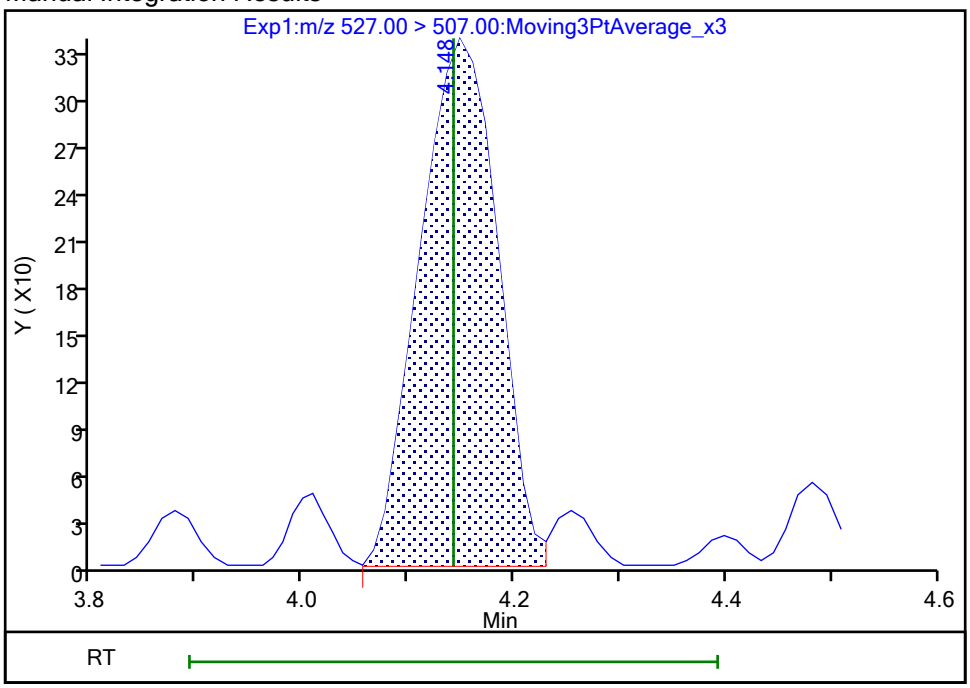
Processing Integration Results

RT: 4.15
Area: 1711
Amount: 0.003346
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 1731
Amount: 0.003385
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

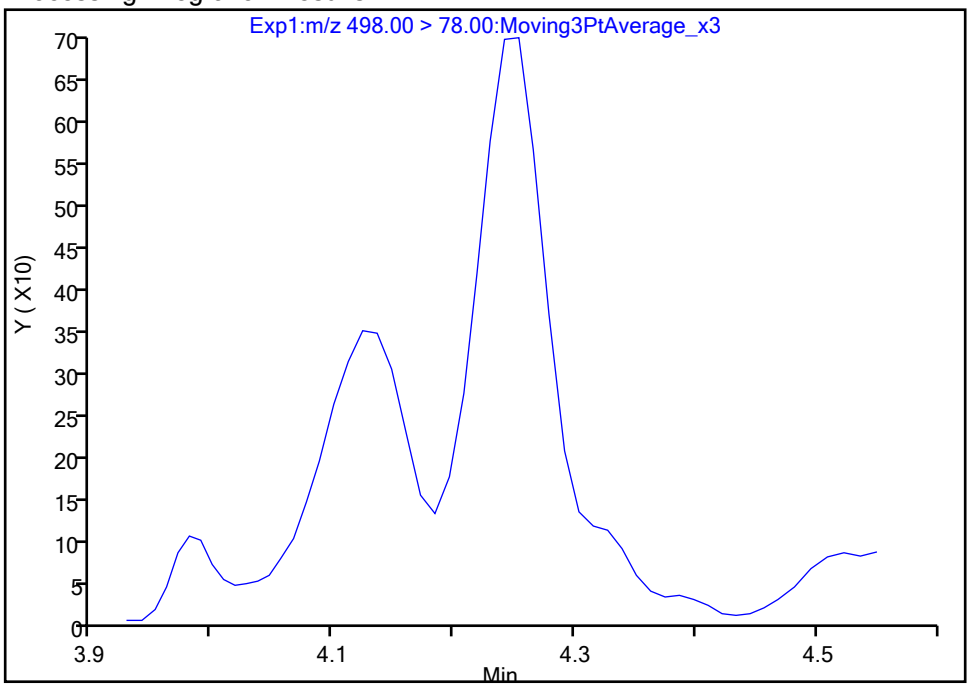
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

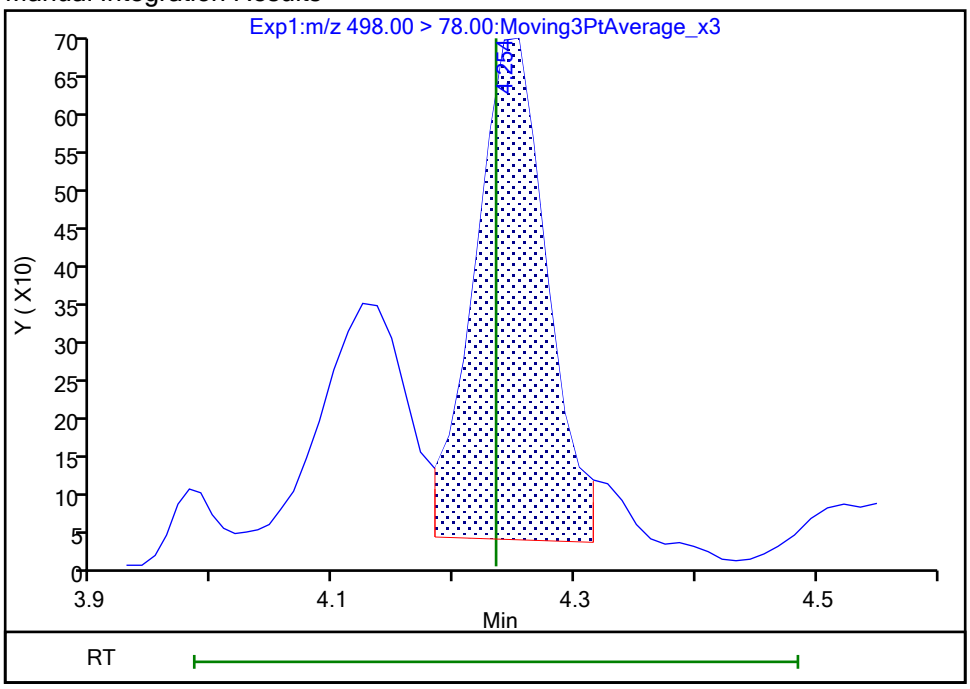
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 2739
Amount: 0.002155
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

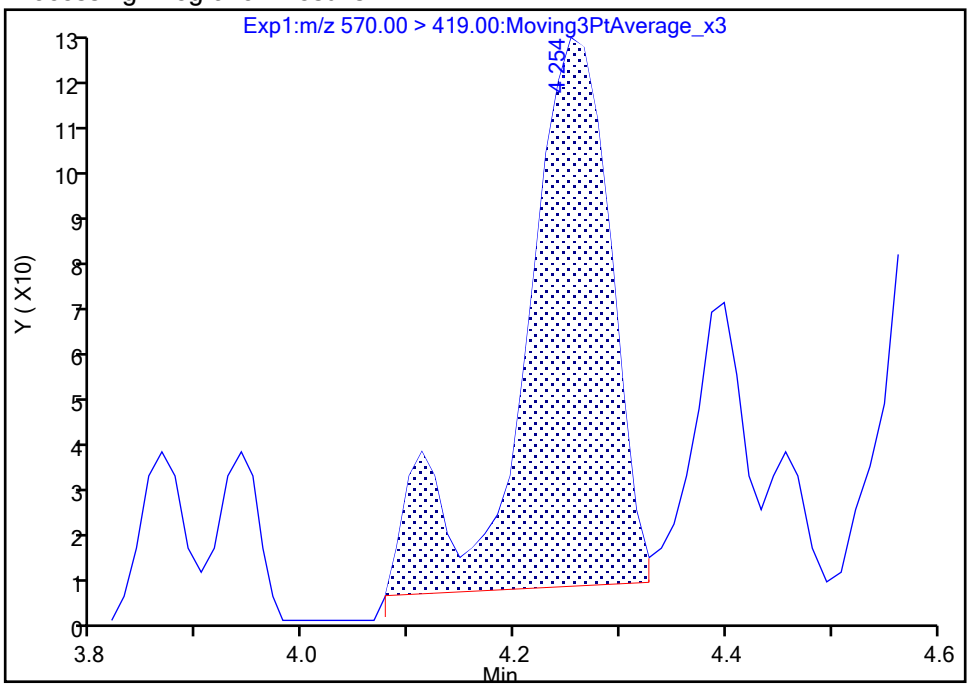
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

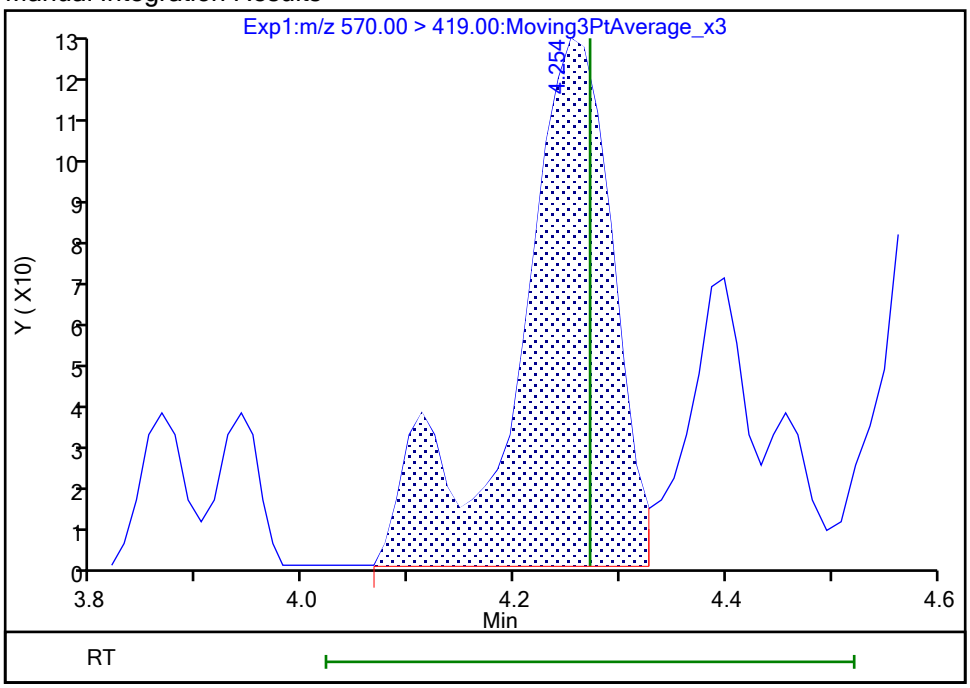
Processing Integration Results

RT: 4.25
Area: 663
Amount: 0.001915
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 762
Amount: 0.002201
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:42:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

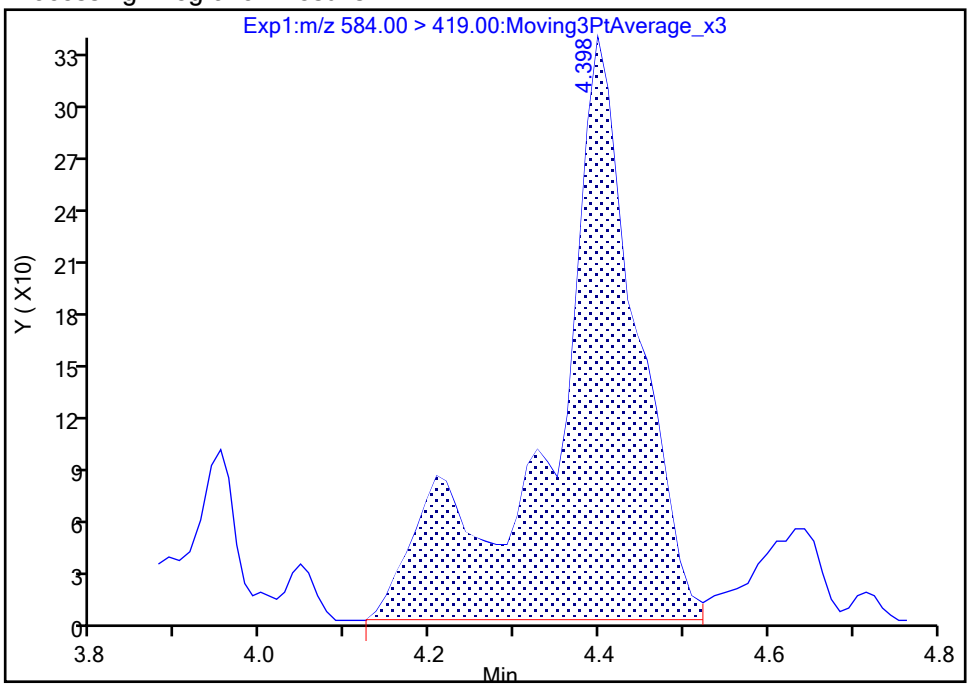
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

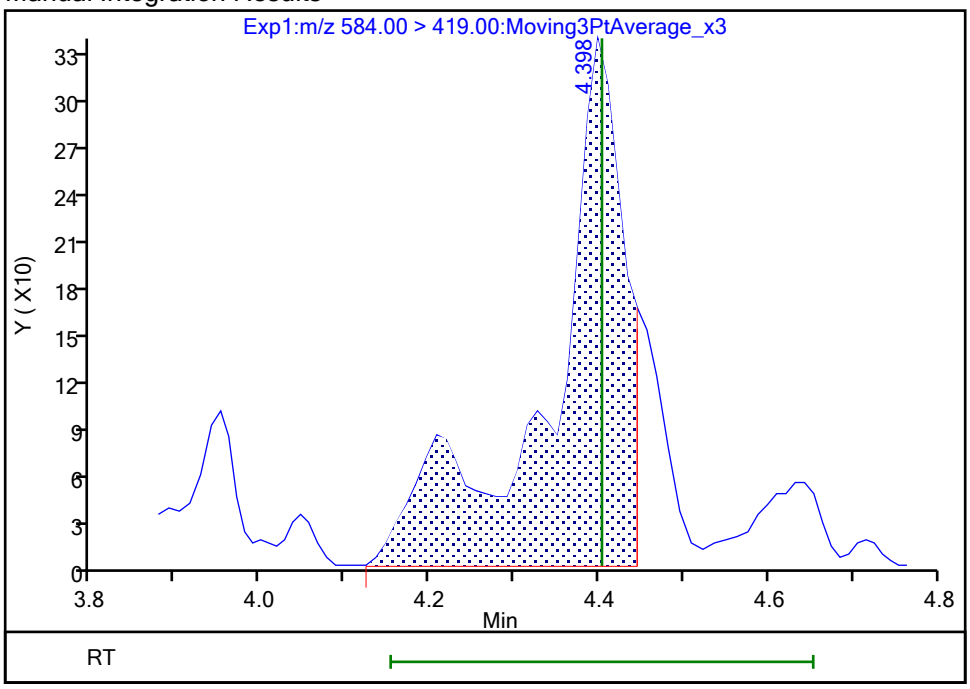
Processing Integration Results

RT: 4.40
Area: 2341
Amount: 0.006280
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 1988
Amount: 0.005333
Amount Units: ng/ml



Reviewer: SJ4N, 24-Oct-2023 23:18:55 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

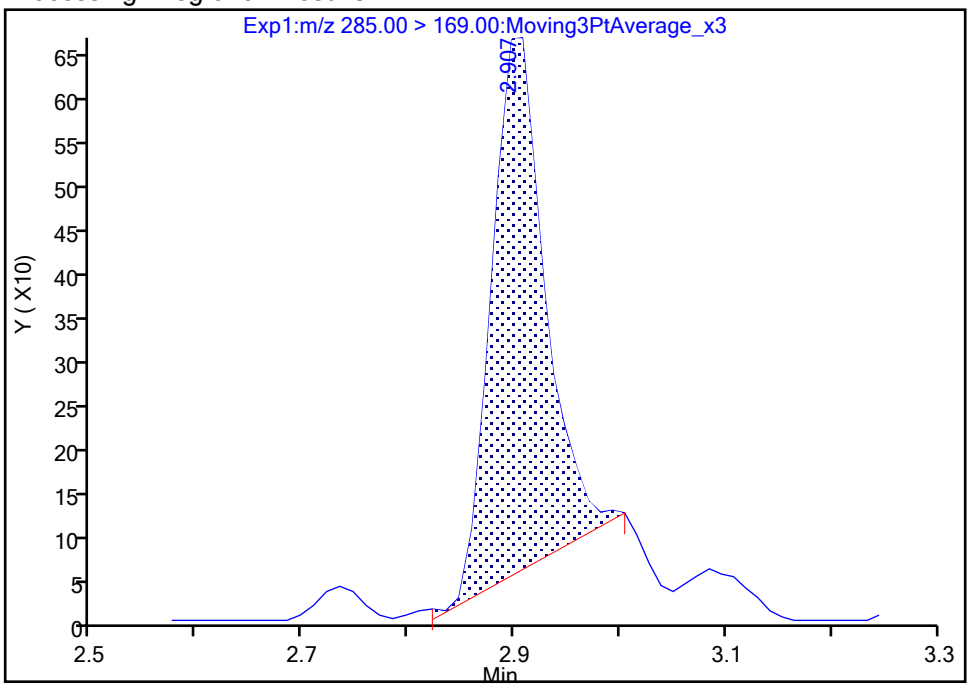
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

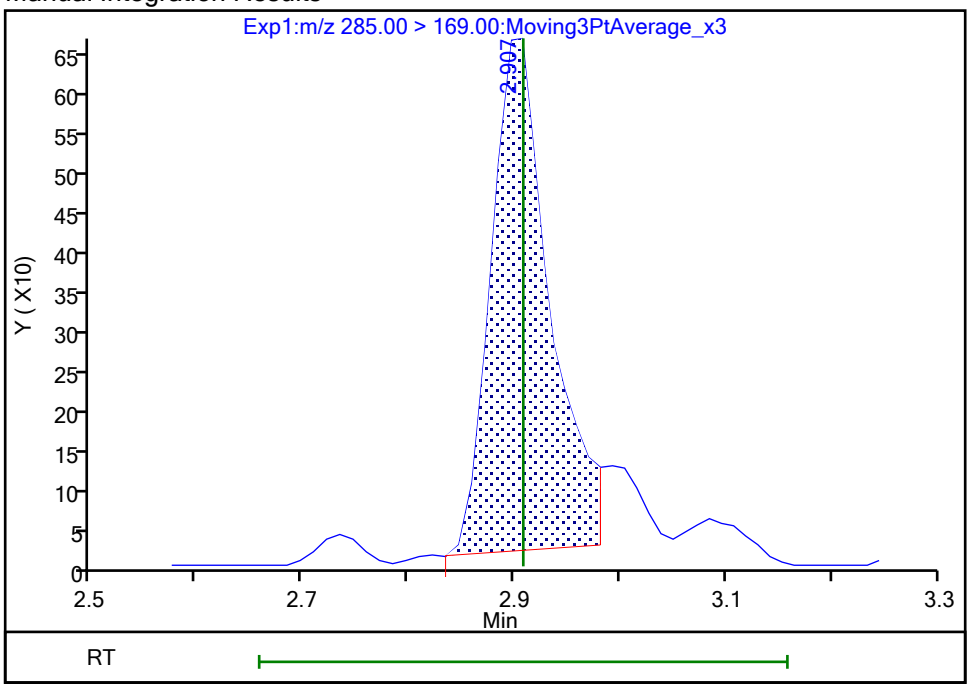
Processing Integration Results

RT: 2.91
Area: 2165
Amount: 0.008927
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 2508
Amount: 0.010341
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:39:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

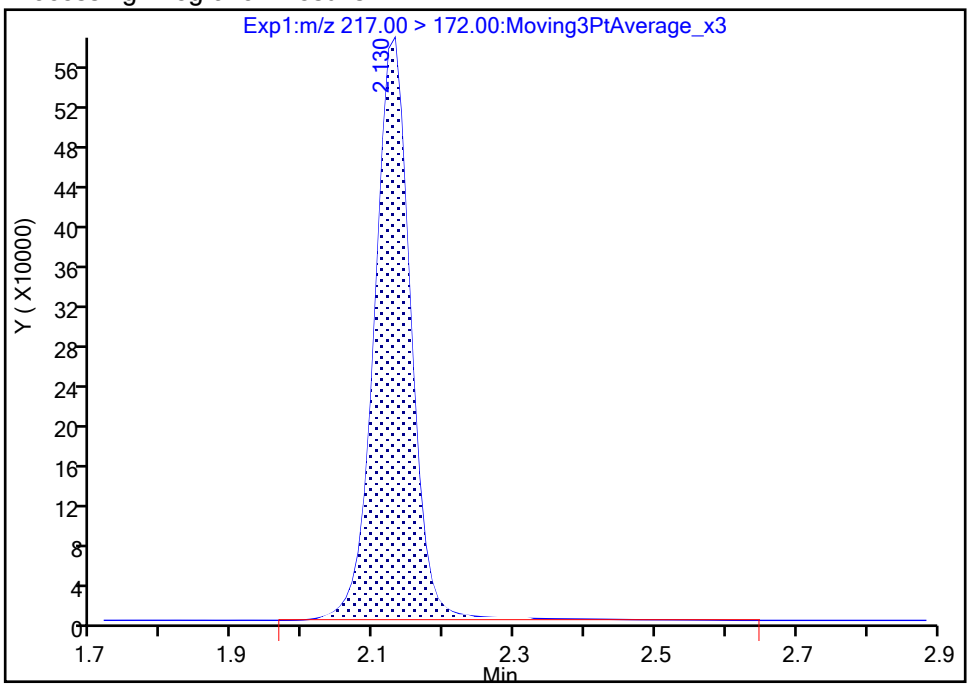
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

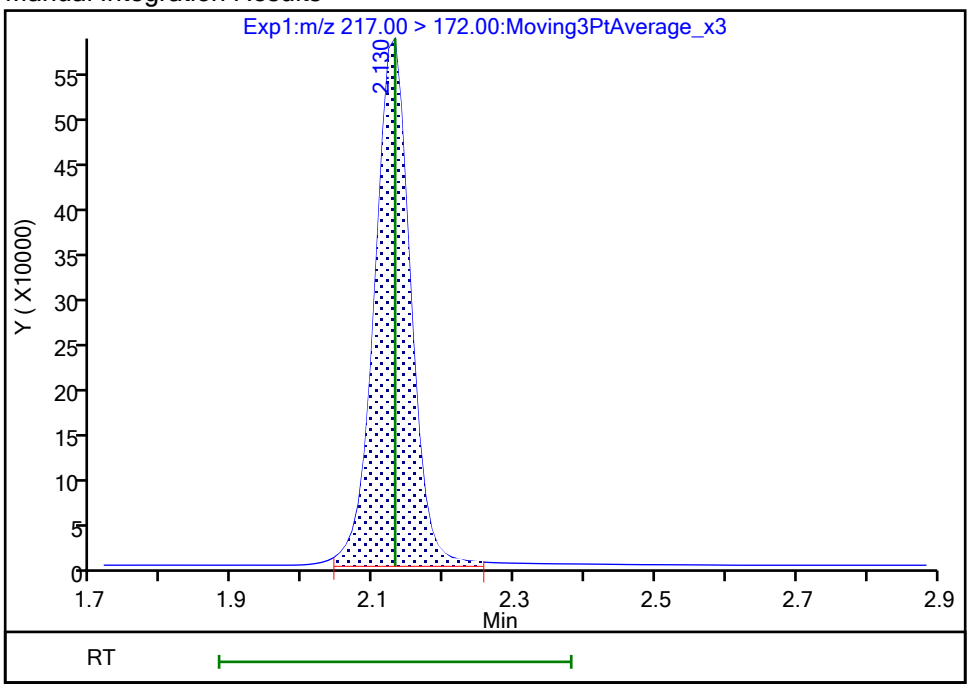
Processing Integration Results

RT: 2.13
Area: 2082524
Amount: 1.262643
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2049175
Amount: 1.242424
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

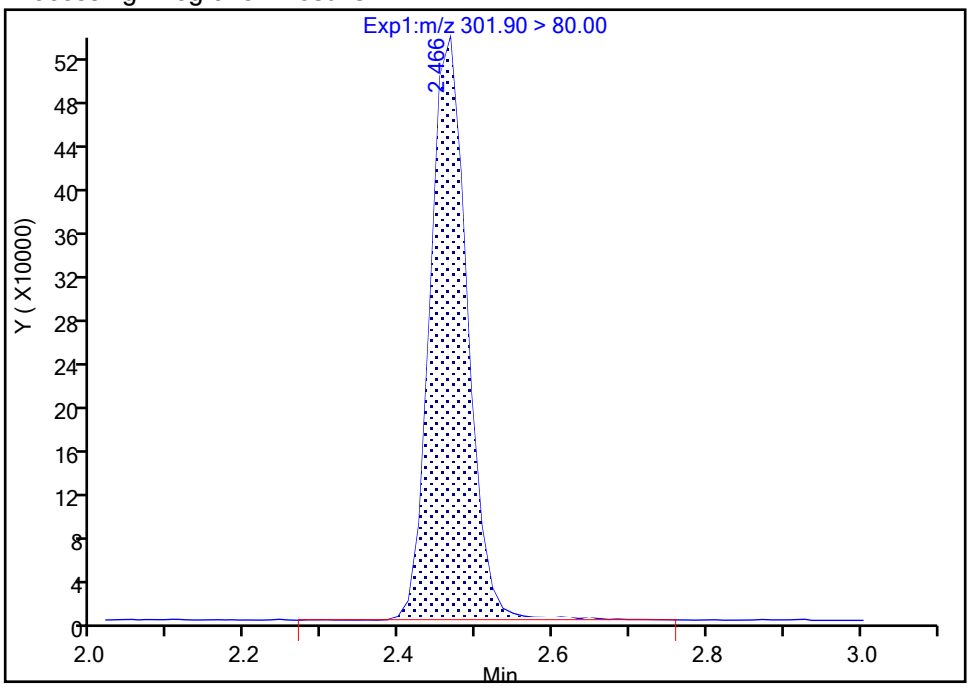
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

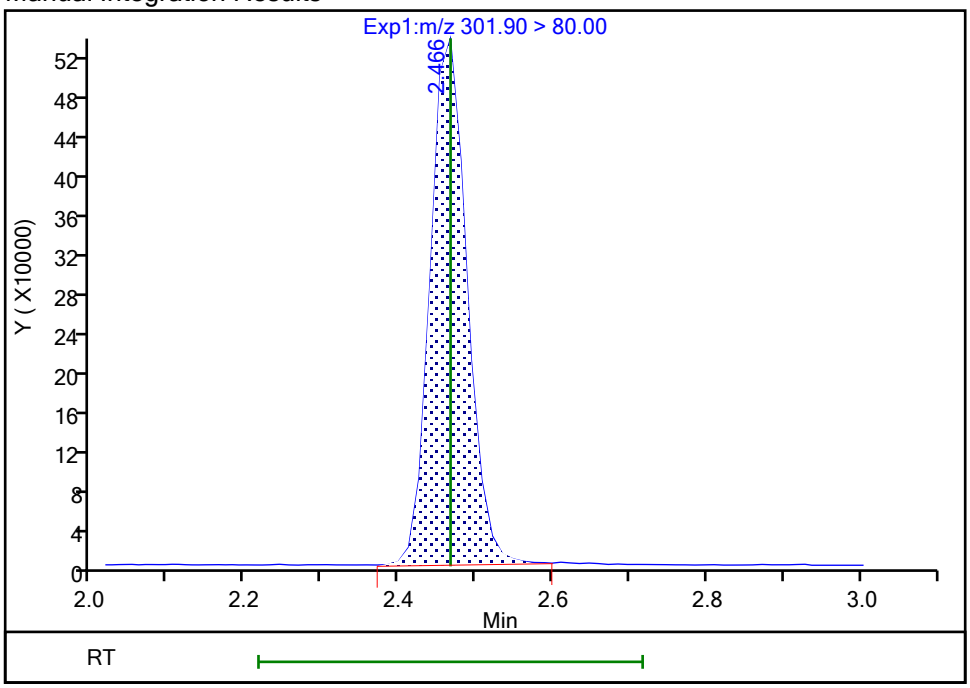
Processing Integration Results

RT: 2.47
Area: 1796562
Amount: 1.037300
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1785523
Amount: 1.030927
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

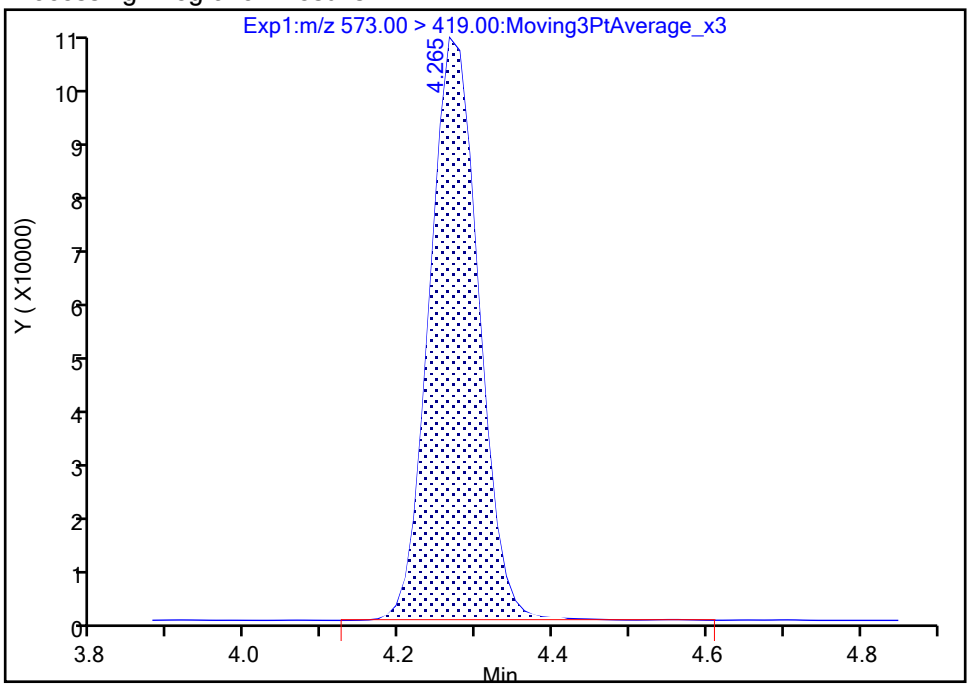
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C06.d				
Injection Date:	21-Oct-2023 00:58:16	Instrument ID:	LC812		
Lims ID:	460-290219-A-7-A	Lab Sample ID:	200-290219-7		
Client ID:	MW89A-101223-0946-96				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

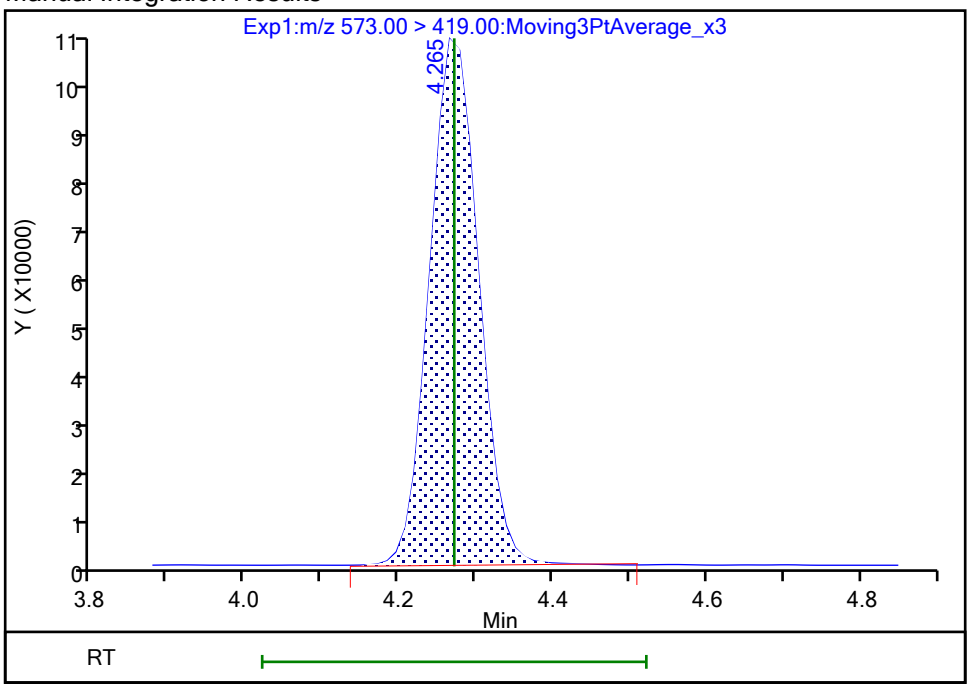
Processing Integration Results

RT: 4.27
Area: 477980
Amount: 1.084421
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 476938
Amount: 1.082057
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:38:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW89-101223-1056-25 | Lab Sample ID: 460-290219-8

Matrix: Water | Lab File ID: PA231020C07.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 10:56

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 294.8(mL) | Date Analyzed: 10/21/2023 01:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	1.64	J	4.24	1.02
2706-90-3	Perfluoropentanoic acid	1.88		1.70	0.58
307-24-4	Perfluorohexanoic acid	2.18		1.70	0.55
375-85-9	Perfluoroheptanoic acid	1.70		1.70	0.46
335-67-1	Perfluorooctanoic acid	5.60		1.70	0.64
375-95-1	Perfluorononanoic acid	0.58	J	1.70	0.42
335-76-2	Perfluorodecanoic acid	1.70	U	1.70	0.39
2058-94-8	Perfluoroundecanoic acid	1.70	U	1.70	0.47
307-55-1	Perfluorododecanoic acid	1.70	U	1.70	0.42
72629-94-8	Perfluorotridecanoic acid	1.70	U	1.70	0.41
376-06-7	Perfluorotetradecanoic acid	1.70	U	1.70	0.54
375-73-5	Perfluorobutanesulfonic acid	2.93		1.70	0.53
2706-91-4	Perfluoropentanesulfonic acid	1.70	U	1.70	0.42
355-46-4	Perfluorohexanesulfonic acid	2.26		1.70	0.47
375-92-8	Perfluoroheptanesulfonic acid	1.70	U	1.70	0.35
1763-23-1	Perfluorooctanesulfonic acid	8.32		1.70	0.72
68259-12-1	Perfluorononanesulfonic acid	1.70	U	1.70	0.34
335-77-3	Perfluorodecanesulfonic acid	1.70	U	1.70	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.24	U	4.24	1.10
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.65
754-91-6	Perfluorooctanesulfonamide	1.70	U	1.70	0.78
2355-31-9	NMeFOSAA	4.24	U	4.24	1.61
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.24	U	4.24	1.36
13252-13-6	HFPODA	3.39	U	3.39	0.93
919005-14-4	DONA	1.70	U	1.70	0.36
756426-58-1	9Cl-PF3ONS	1.70	U	1.70	0.27
763051-92-9	11Cl-PF3OUdS	1.70	U	1.70	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW89-101223-1056-25 Lab Sample ID: 460-290219-8

Matrix: Water Lab File ID: PA231020C07.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 10:56

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 294.8(mL) Date Analyzed: 10/21/2023 01:06

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	101		50-150
STL01893	13C5 PFPeA	93		50-150
STL01892	13C4 PFHpA	101		50-150
STL02116	13C2 PFTeDA	80		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	83		50-150
STL02395	M2-4:2 FTS	87		50-150
STL02279	M2-6:2 FTS	88		50-150
STL02280	M2-8:2 FTS	80		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	92		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	90		50-150
STL00998	13C2 PFDoA	86		50-150
STL00995	13C5 PFNA	101		50-150
STL00996	13C2 PFDA	101		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	90		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d
Lims ID: 460-290219-A-8-A
Client ID: MW89-101223-1056-25
Sample Type: Client
Inject. Date: 21-Oct-2023 01:06:27 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-8-A
Misc. Info.: 200-0057493-007 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:48:00
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	2108055	1.27		101	1661	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.004	136259	0.0485			13.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.440	2.439	0.001	0.694	1505183	1.17		93.3	1973	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.440	2.439	0.001	1.000	71929	0.0554			1.8	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.698	1831100	1.05		90.2	54182	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.006	151750	0.0863	Target=2.06		42.3	M
298.90 > 99.00	2.467	2.467	0.0	1.006	79071		1.92(1.03-3.09)		34.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.773	2.760	0.013	1.005	598	0.001007			3.1	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.785	204233	1.01		86.6	91.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.798	0.0	0.796	1608844	1.23		98.0	9924	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.798	0.0	1.000	91094	0.0643	Target=14.12		12.4	M
313.00 > 119.00	2.798	2.798	0.0	1.000	5030		18.11(7.06-21.17)		6.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.798	2.798	0.0	0.886	14645	0.009700	Target=2.72		7.1	M
349.00 > 99.00	2.798	2.798	0.0	0.886	5370		2.73(1.36-4.09)		6.9	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	499	0.002041			3.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	305301	1.20		96.1	2942	
D 11 18O2 PFHxS										
403.00 > 84.00	3.156	3.157	-0.001	0.898	1367119	1.09		92.4	4426	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.156	3.157	-0.001	1.000	85350	0.0667	Target=3.32		72.3	M
399.00 > 99.00	3.156	3.157	-0.001	1.000	29352		2.91(1.66-4.98)		30.3	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.169	-0.001	1.000	81592	0.0501	Target=4.17		13.6	M
363.00 > 169.00	3.156	3.169	-0.013	0.996	19564		4.17(2.09-6.26)		36.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.168	3.169	-0.001	0.901	1815458	1.26		101	7857	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.505	3.506	-0.001	0.917	6791	0.006592	Target=4.83		6.4	
449.00 > 99.00	3.496	3.506	-0.010	0.915	1965		3.46(2.41-7.24)		6.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.505	3.506	-0.001	0.997	272656	1.05		88.3	406	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.505	3.506	-0.001	1.000	302	0.000481			0.8	M
D 14 13C4 PFOA										
417.00 > 372.00	3.514	3.515	-0.001	1.000	2193299	1.34		108	7806	
* 62 13C2 PFOA										
415.00 > 370.00	3.514	3.515	-0.001		2095728	1.25			7345	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.515	-0.001	1.000	308534	0.1651	Target=2.88		11.7	M
413.00 > 169.00	3.514	3.515	-0.001	1.000	121472		2.54(1.44-4.32)		208	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.721	3.823	-0.102	0.974	204007	0.2453	Target=4.24		222	M
499.00 > 99.00	3.822	3.823	-0.001	1.000	47831		4.27(2.12-6.37)		98.4	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.823	-0.001	1.088	851885	1.07		89.7	2639	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.834	3.846	-0.012	0.997	30225	0.0172	Target=8.34		4.5	M
463.00 > 169.00	3.845	3.846	-0.001	1.000	3715		8.14(4.17-12.51)		18.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.845	3.846	-0.001	1.094	2244023	1.26		101	4822	
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.130	-0.001	1.175	2349957	1.26		101	9979	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.141	4.142	-0.001	1.179	279550	0.9561		79.8	783	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.153	4.142	0.011	1.003	491	0.000955			8.4	M
D 21 13C8 FOSA										
506.00 > 78.00	4.234	4.235	-0.001	1.205	1636111	1.03		82.5	10289	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.258	4.235	0.023	1.006	1654	0.001325			11.3	M

Report Date: 25-Oct-2023 08:39:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.270	4.271	-0.001	1.215	501762	1.13		90.3	1339	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.270	4.271	-0.001	1.000	288	0.000791			0.9	
D 30 13C2 PFUnA										
565.00 > 520.00	4.378	4.380	-0.002	1.246	1983054	1.13		90.4	5583	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.390	4.391	-0.001	1.249	444907	1.04		83.2	1550	
D 36 13C2 PFDoA										
615.00 > 570.00	4.603	4.604	-0.001	1.310	1913723	1.07		85.8	6110	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.983	0.0	1.418	1780107	1.00		80.2	6467	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.993	4.983	0.010	1.002	229	0.001438	Target=0.87		4.4	RM
713.00 > 219.00	4.972	4.983	-0.011	0.998	83		2.76(0.43-1.30)		2.3	M

QC Flag Legend

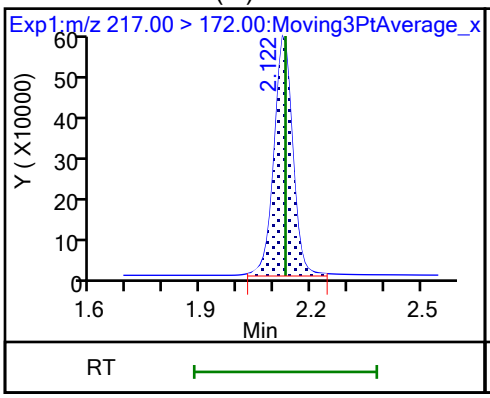
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54

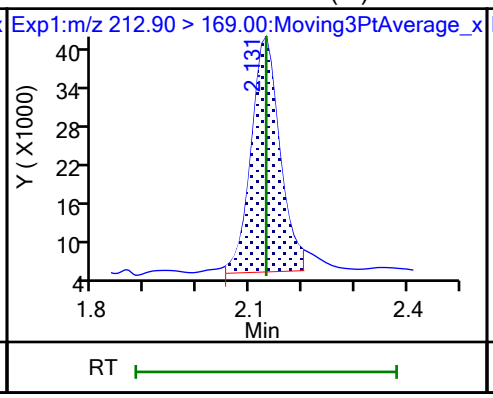
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d
Injection Date: 21-Oct-2023 01:06:27 Instrument ID: LC812
Lims ID: 460-290219-A-8-A Lab Sample ID: 200-290219-8
Client ID: MW89-101223-1056-25
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

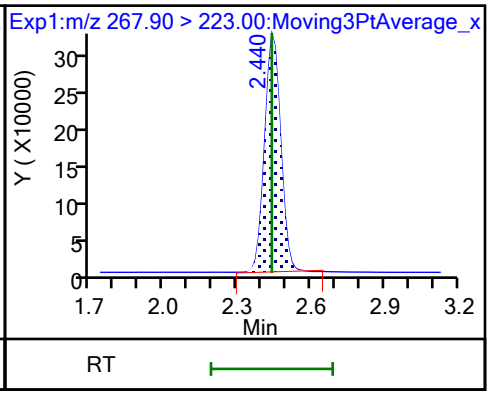
D 1 13C4 PFBA (M)



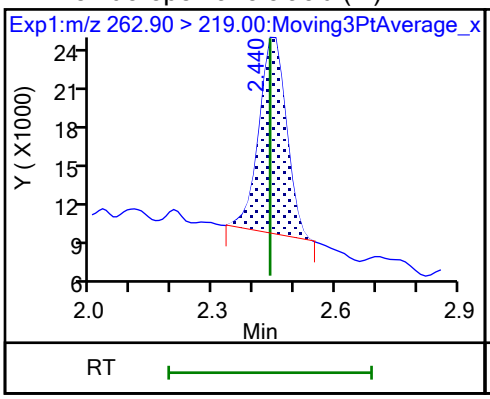
2 Perfluorobutanoic acid (M)



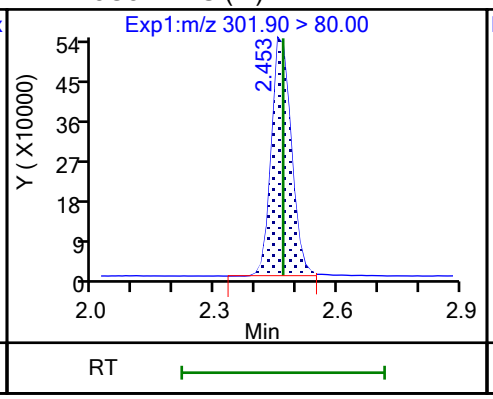
D 3 13C5 PFPeA



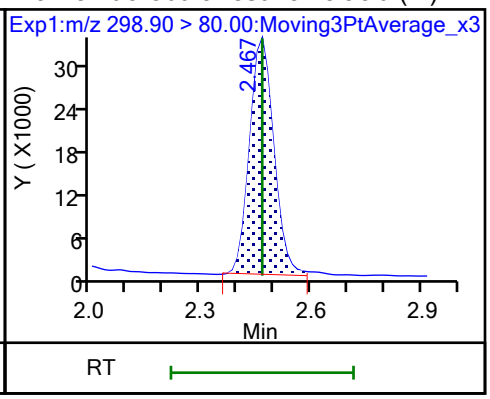
4 Perfluoropentanoic acid (M)



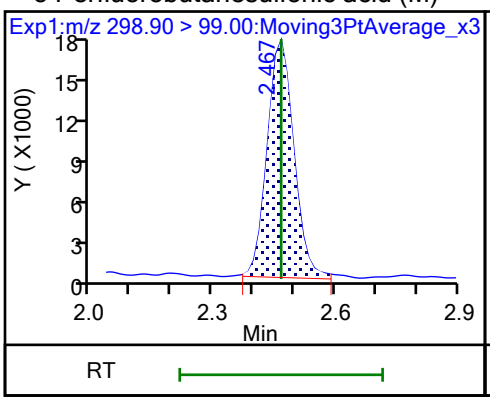
D 47 13C3 PFBS (M)



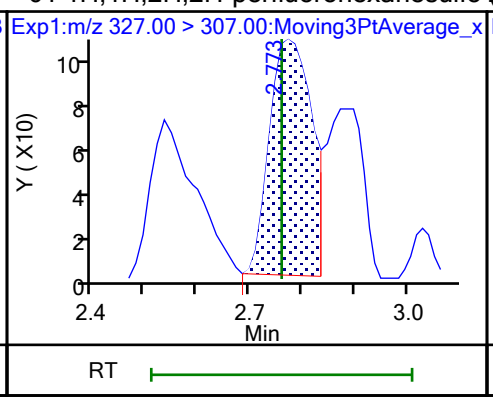
5 Perfluorobutanesulfonic acid (M)



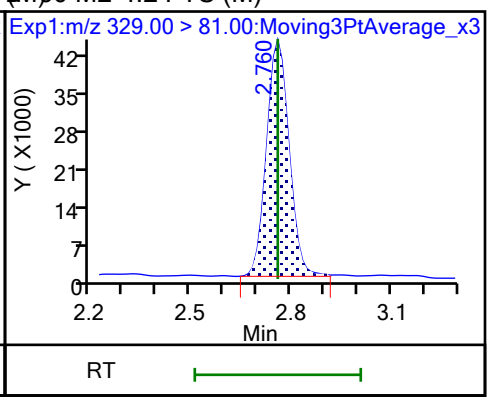
5 Perfluorobutanesulfonic acid (M)



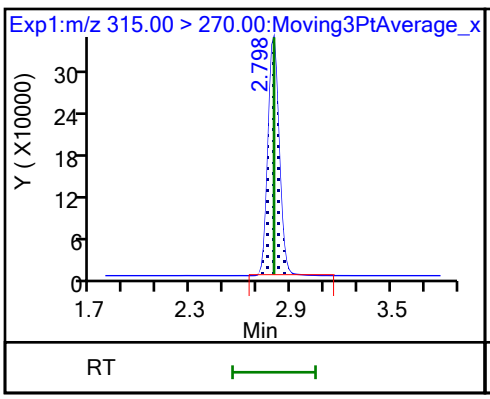
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



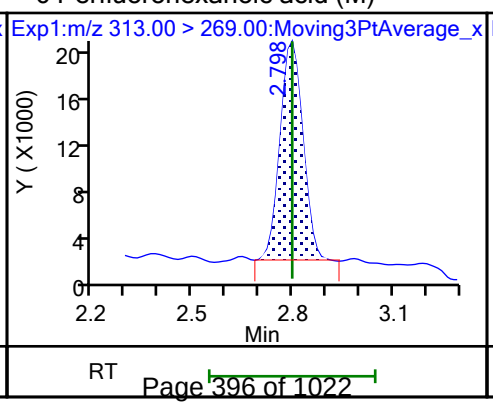
60 M2-4:2 FTS (M)



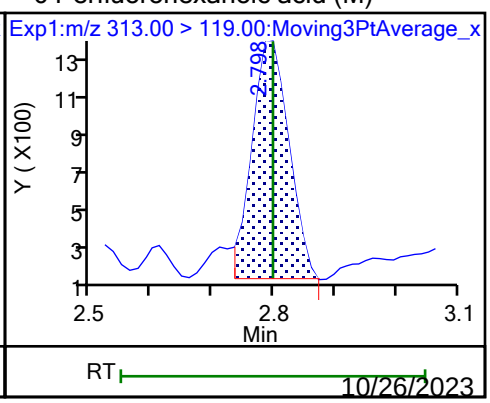
D 7 13C2 PFHxA



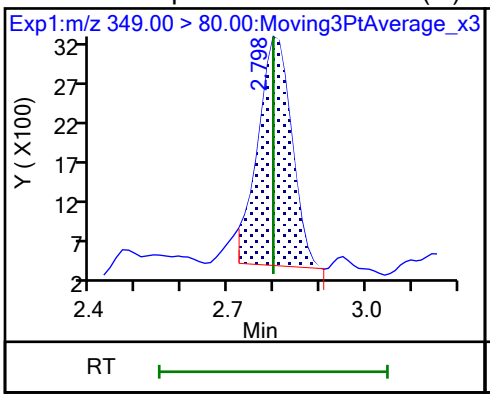
6 Perfluorohexanoic acid (M)



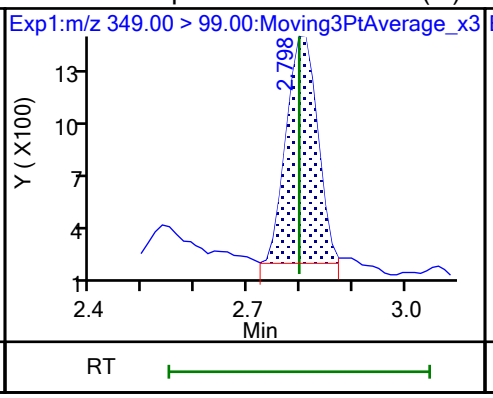
6 Perfluorohexanoic acid (M)



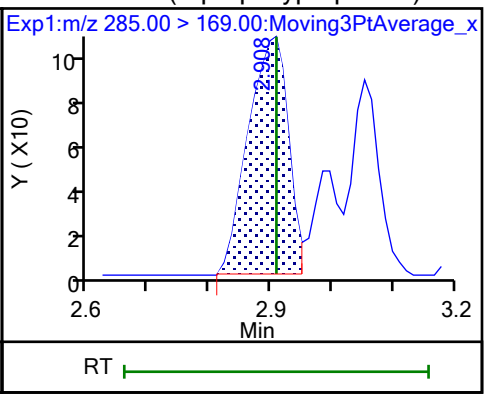
70 Perfluoropentanesulfonic acid (M)



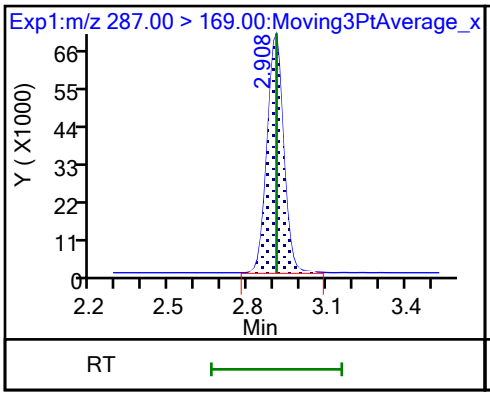
70 Perfluoropentanesulfonic acid (M)



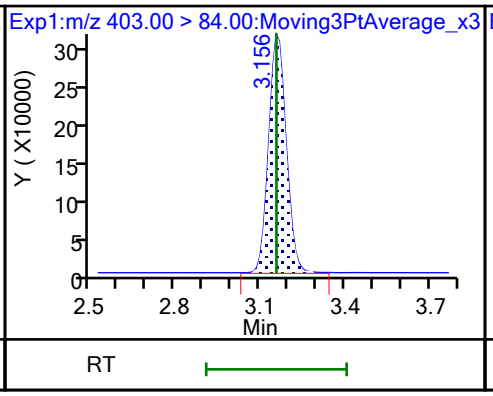
67 Perfluoro(2-propoxypropanoic) ac



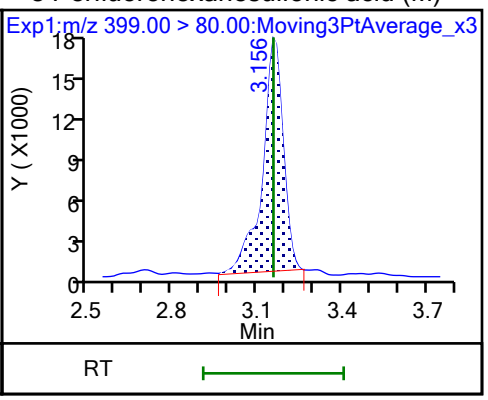
D 64 13C3 HFPO-DA



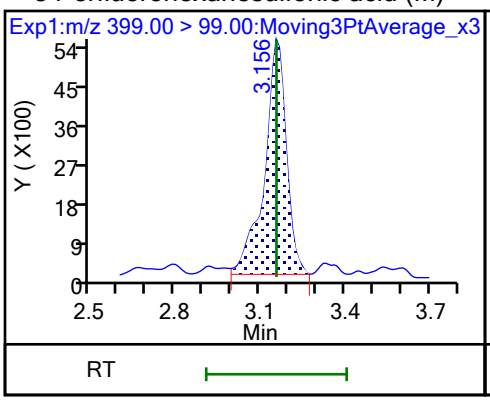
D 11 18O2 PFHxS



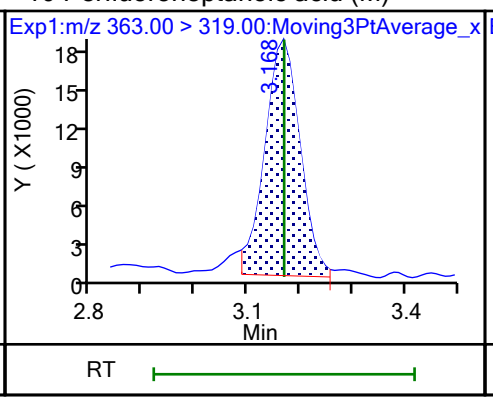
8 Perfluorohexanesulfonic acid (M)



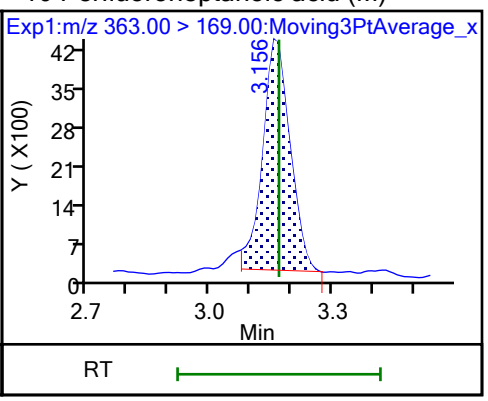
8 Perfluorohexanesulfonic acid (M)



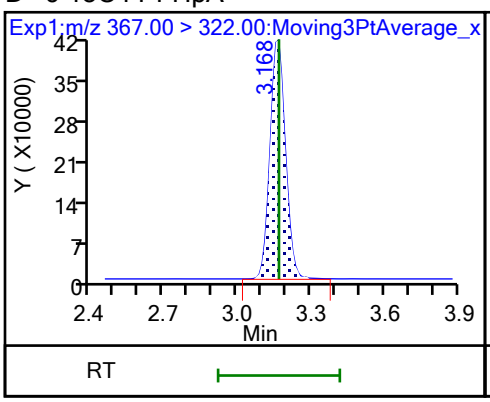
10 Perfluoroheptanoic acid (M)



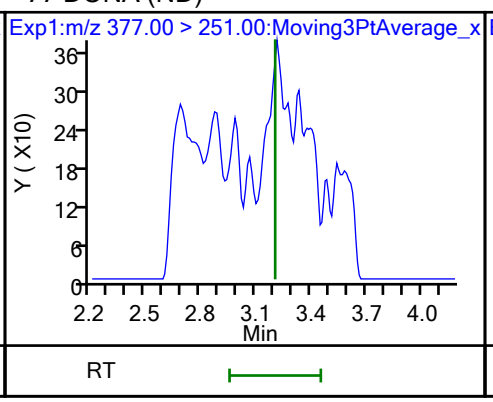
10 Perfluoroheptanoic acid (M)



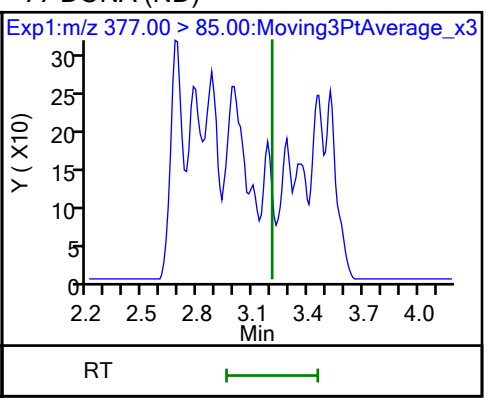
D 9 13C4 PFHpA



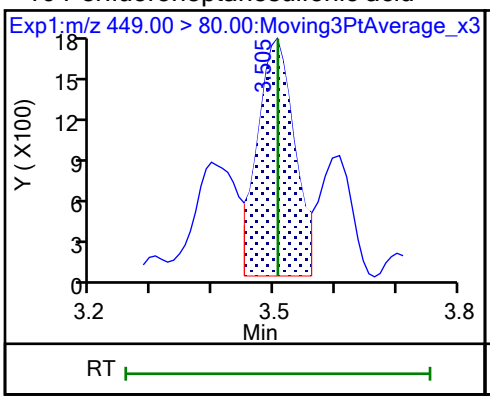
77 DONA (ND)



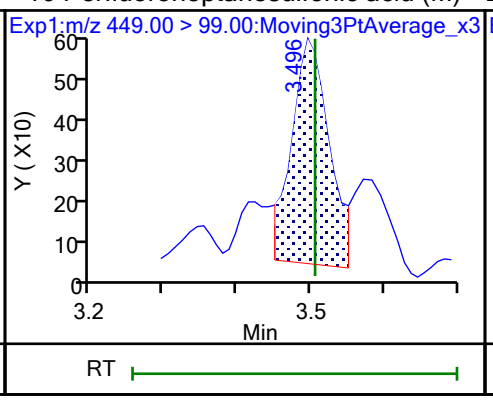
77 DONA (ND)



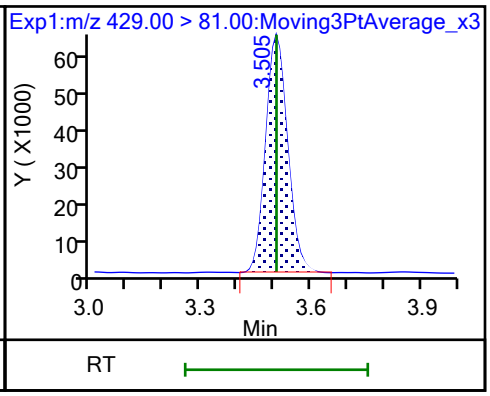
16 Perfluoroheptanesulfonic acid



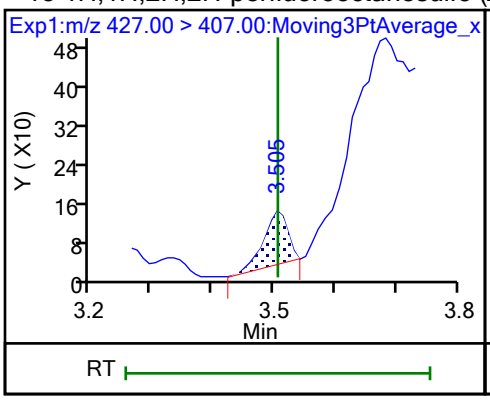
16 Perfluoroheptanesulfonic acid (M)



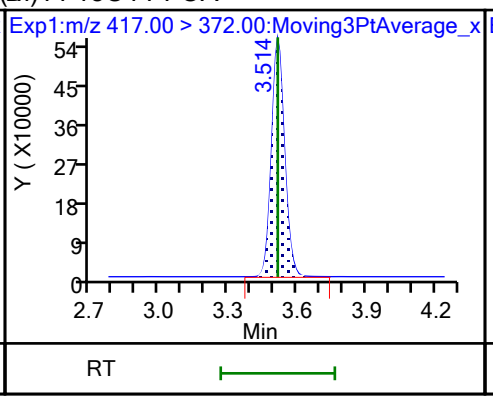
D 12 M2-6:2 FTS



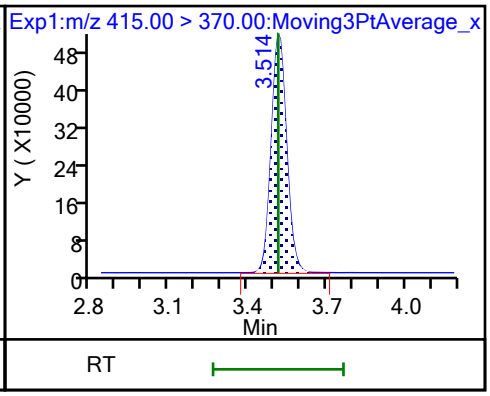
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



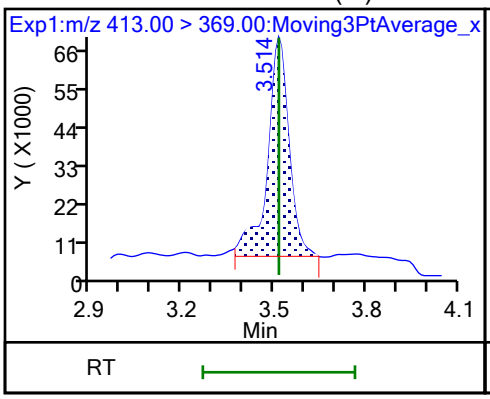
D 14 13C4 PFOA



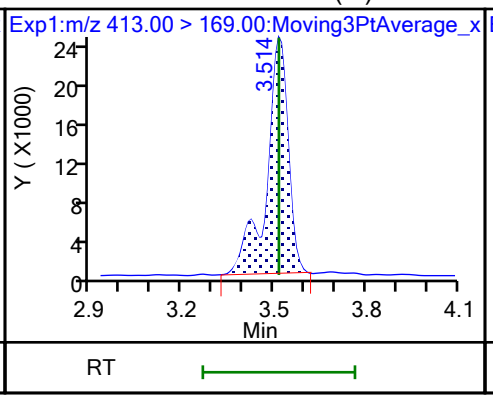
* 62 13C2 PFOA



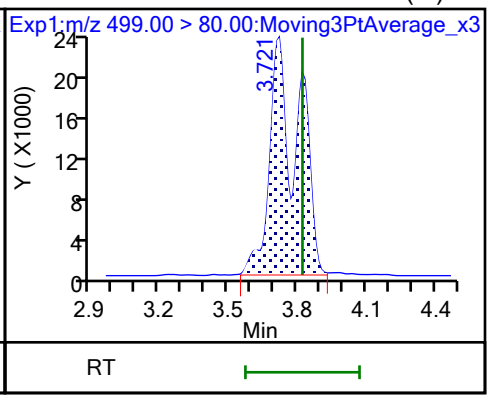
15 Perfluorooctanoic acid (M)



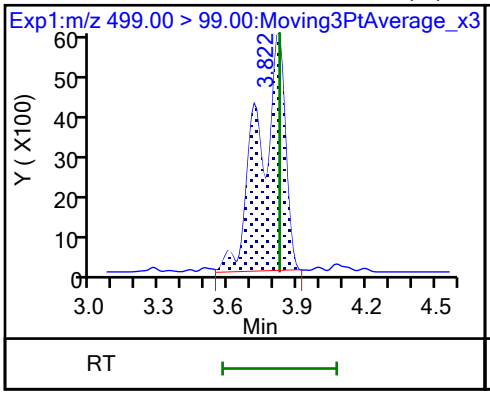
15 Perfluorooctanoic acid (M)



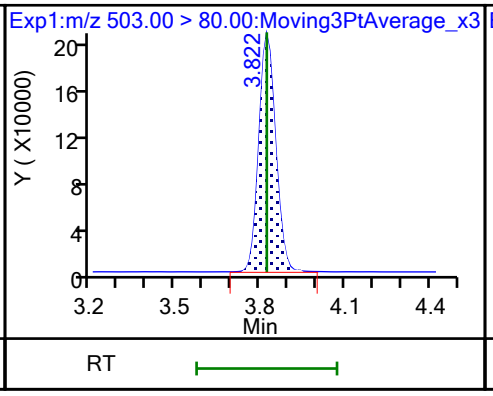
17 Perfluorooctanesulfonic acid (M)



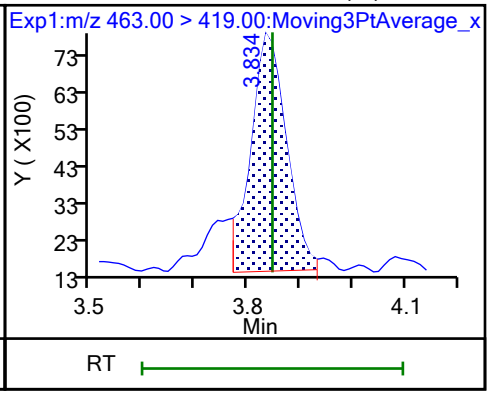
17 Perfluorooctanesulfonic acid (M)



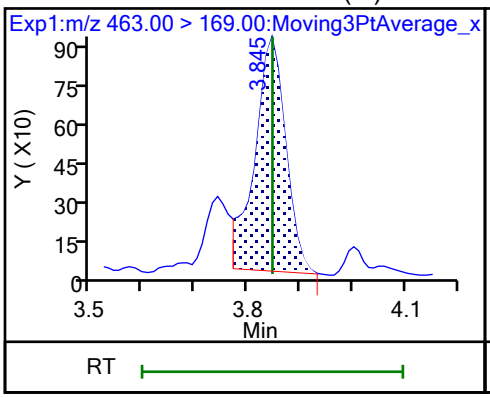
D 18 13C4 PFOS



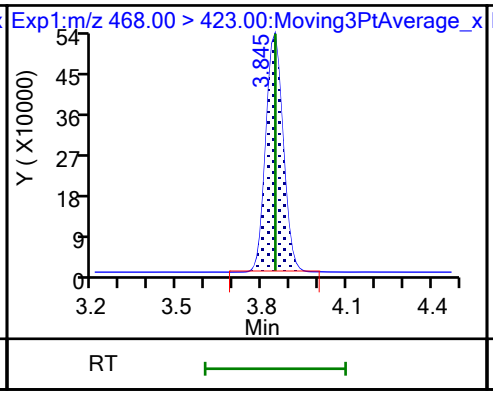
20 Perfluorononanoic acid (M)



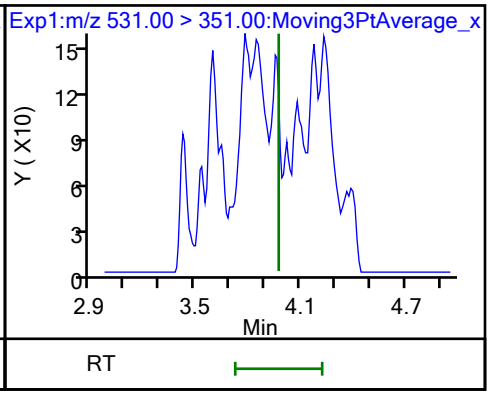
20 Perfluorononanoic acid (M)



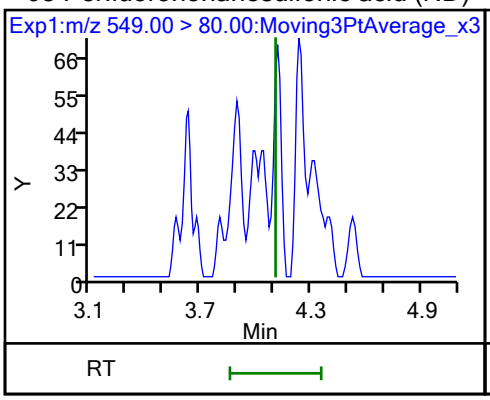
D 19 13C5 PFNA



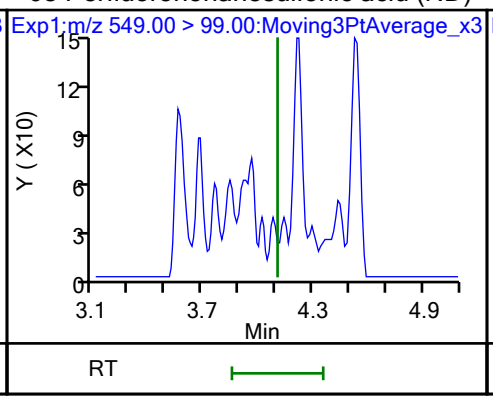
69 9-Chlorohexadecafluoro-3-oxanona (ND)



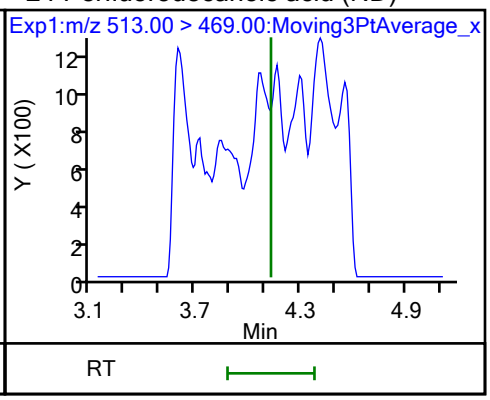
68 Perfluorononanesulfonic acid (ND)



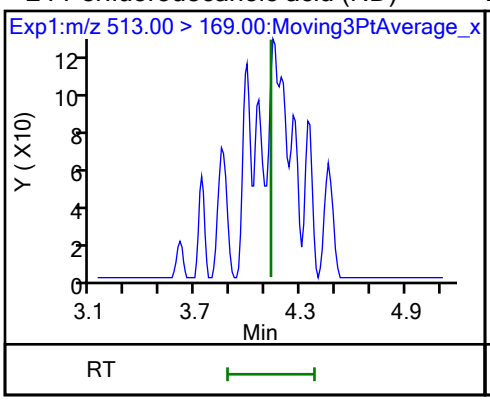
68 Perfluorononanesulfonic acid (ND)



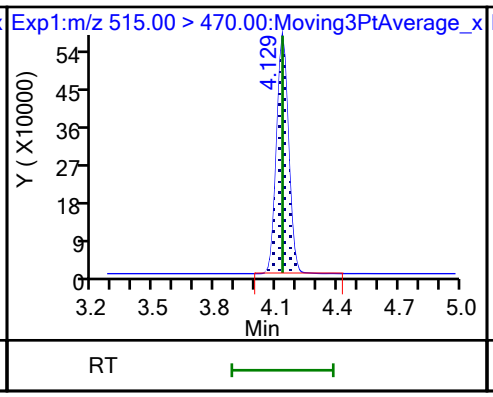
24 Perfluorodecanoic acid (ND)



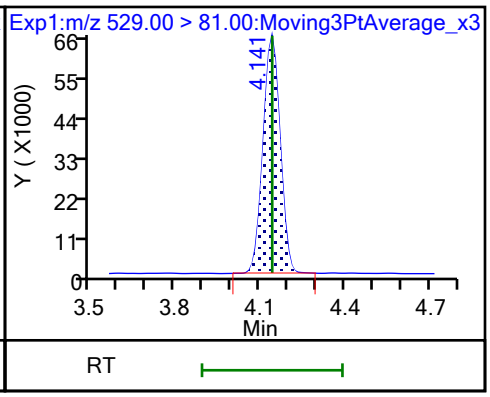
24 Perfluorodecanoic acid (ND)



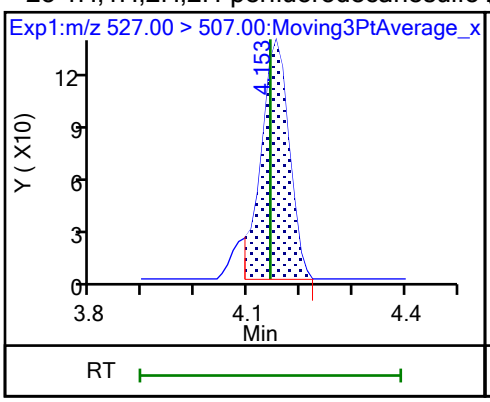
D 23 13C2 PFDA



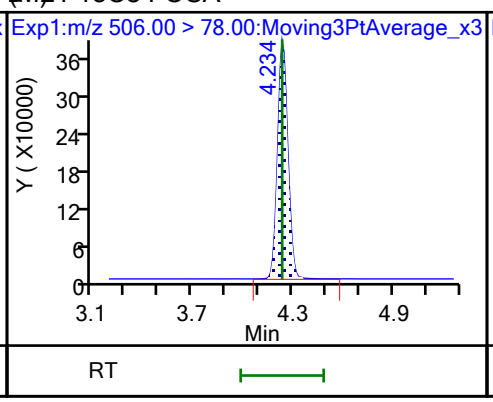
D 26 M2-8:2 FTS



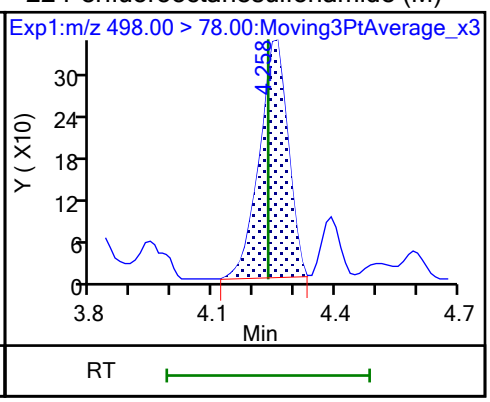
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



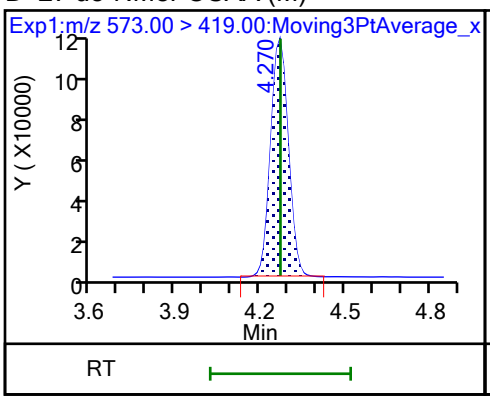
D 21 13C8 FOSA



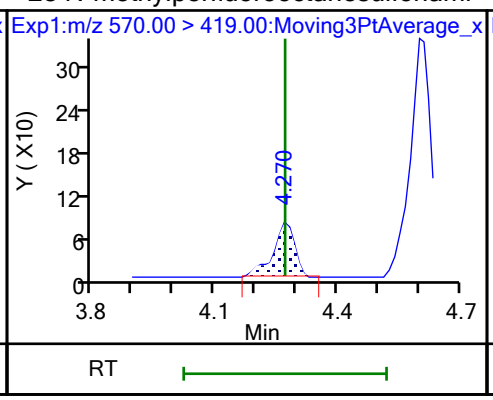
22 Perfluorooctanesulfonamide (M)



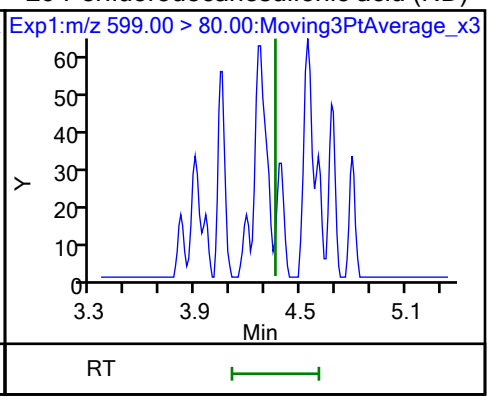
D 27 d3-NMeFOSAA (M)



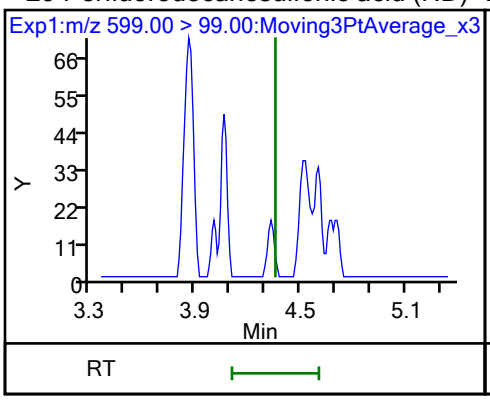
28 N-methylperfluorooctanesulfonami



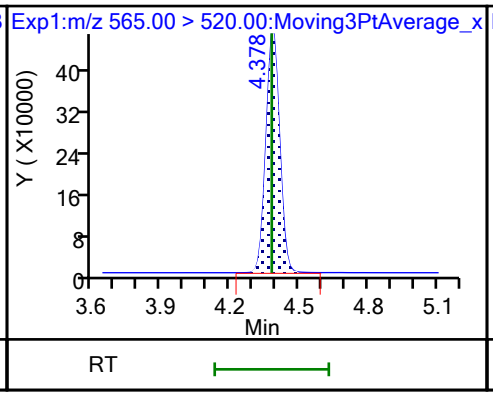
29 Perfluorodecanesulfonic acid (ND)



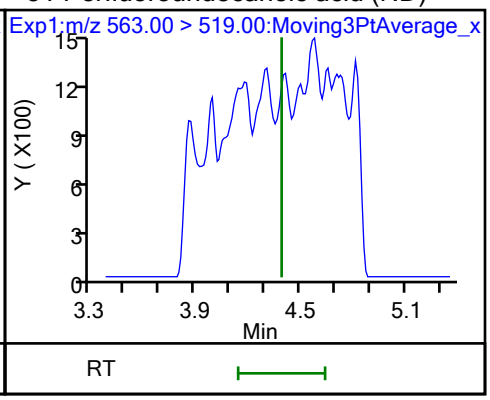
29 Perfluorodecanesulfonic acid (ND)



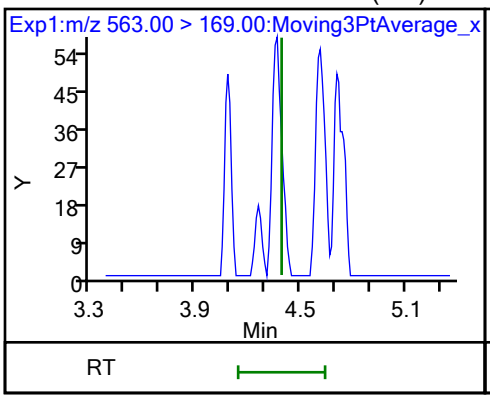
D 30 13C2 PFUnA



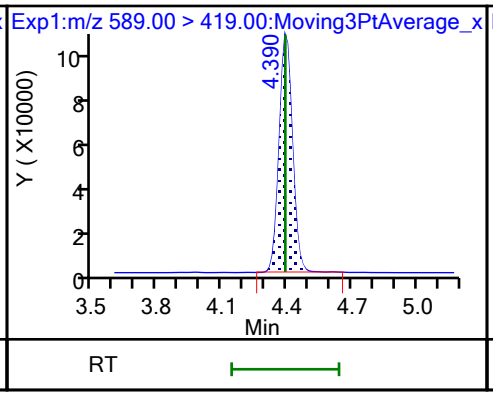
31 Perfluoroundecanoic acid (ND)



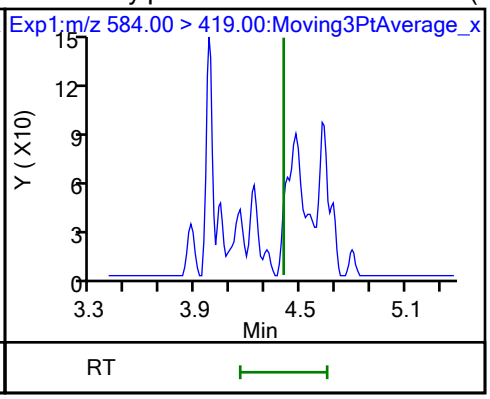
31 Perfluoroundecanoic acid (ND)



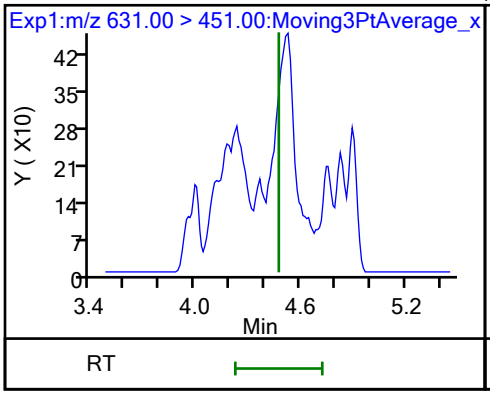
D 32 d5-NEtFOSAA



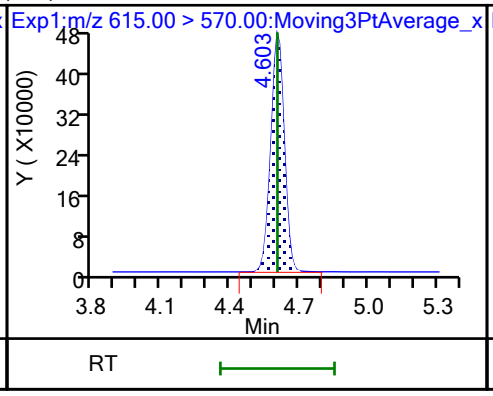
33 N-ethylperfluorooctanesulfonamid (ND)



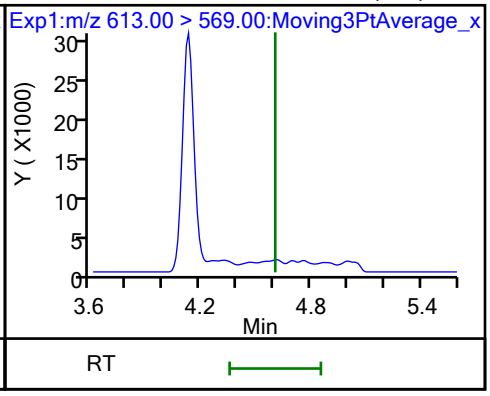
66 11-Chloroeicosafluoro-3-oxaundec (ND)



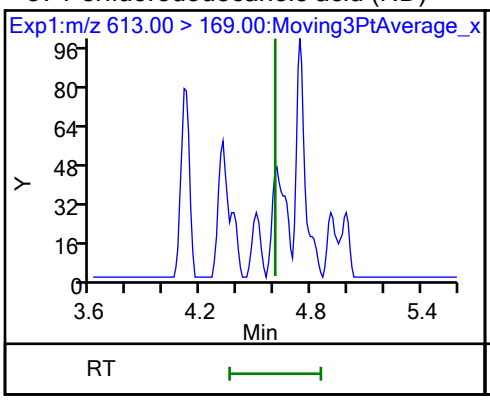
D 36 13C2 PFDoA



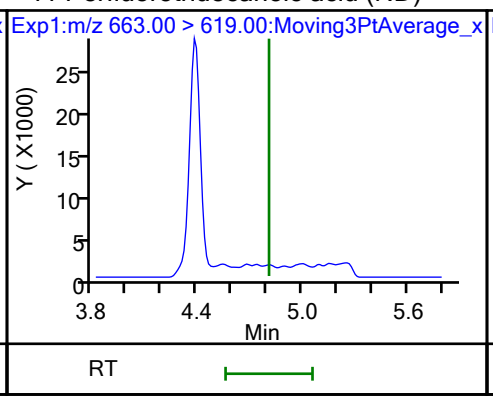
37 Perfluorododecanoic acid (ND)



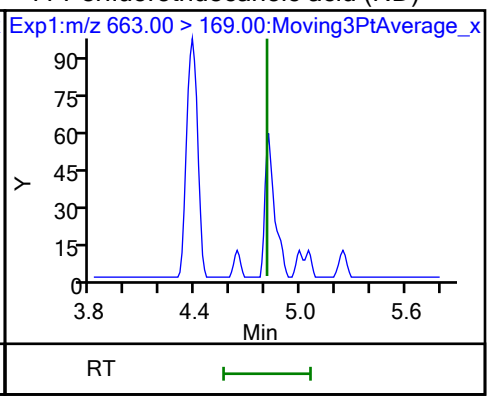
37 Perfluorododecanoic acid (ND)



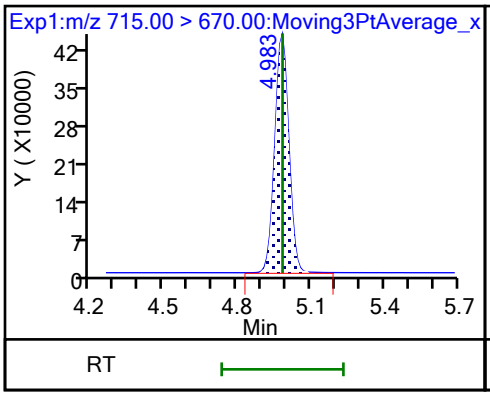
41 Perfluorotridecanoic acid (ND)



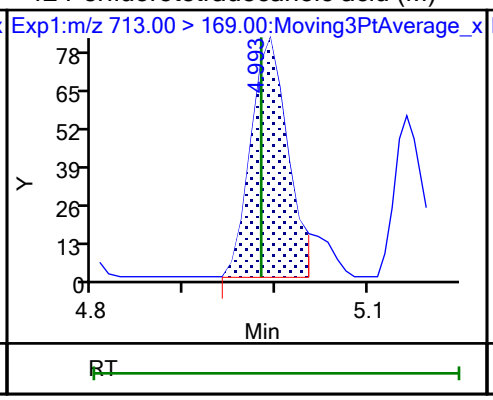
41 Perfluorotridecanoic acid (ND)



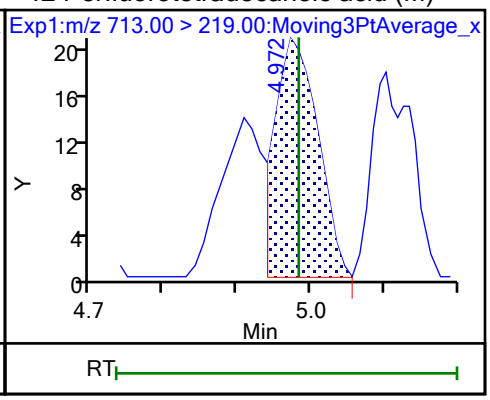
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

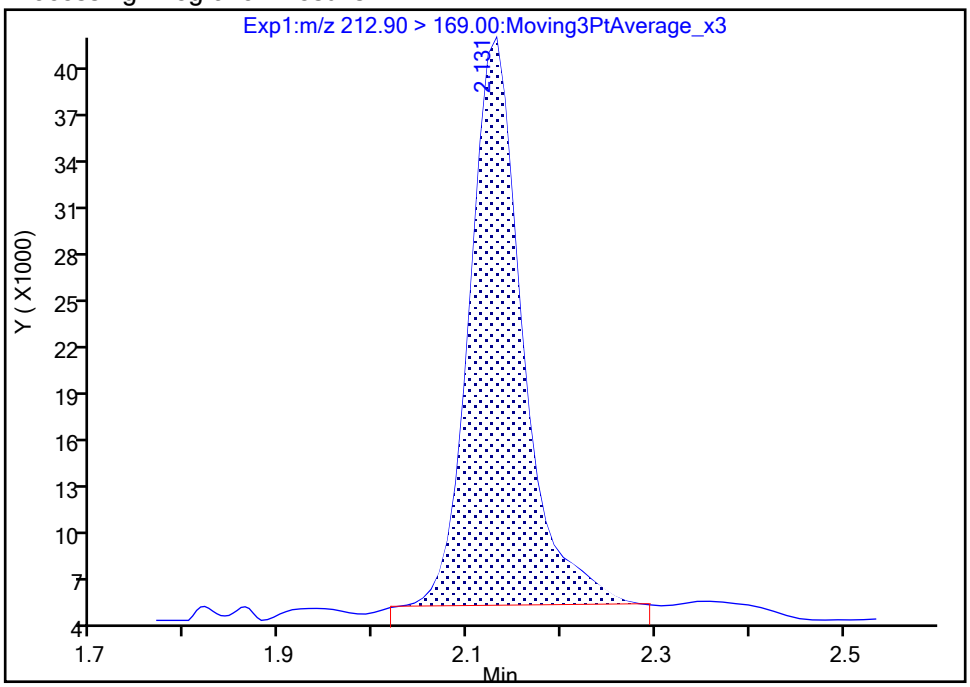
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

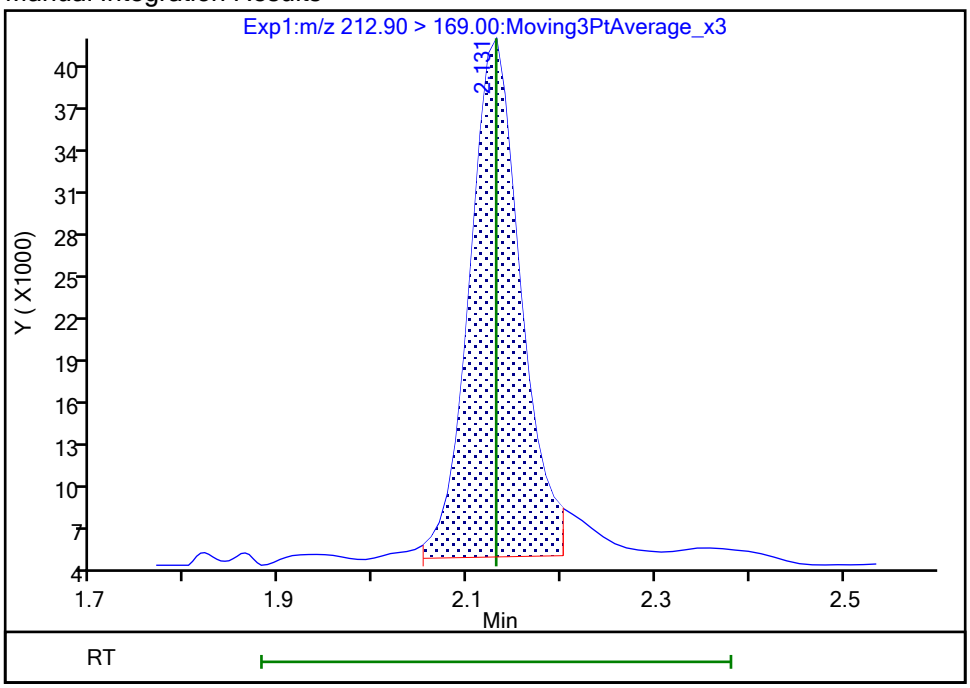
Processing Integration Results

RT: 2.13
Area: 140649
Amount: 0.051345
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 136259
Amount: 0.048467
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

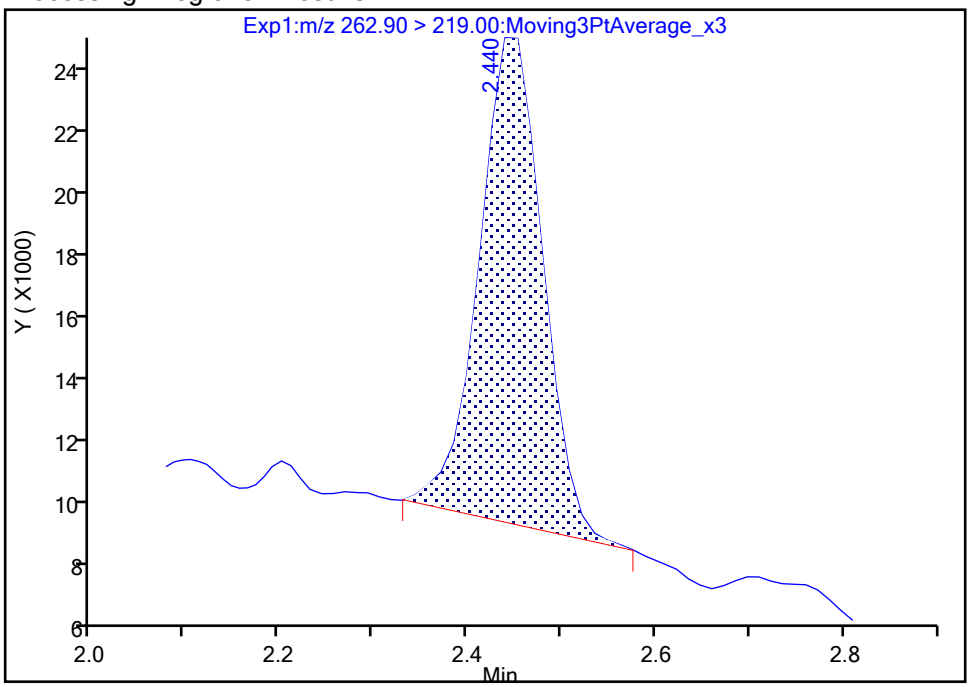
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

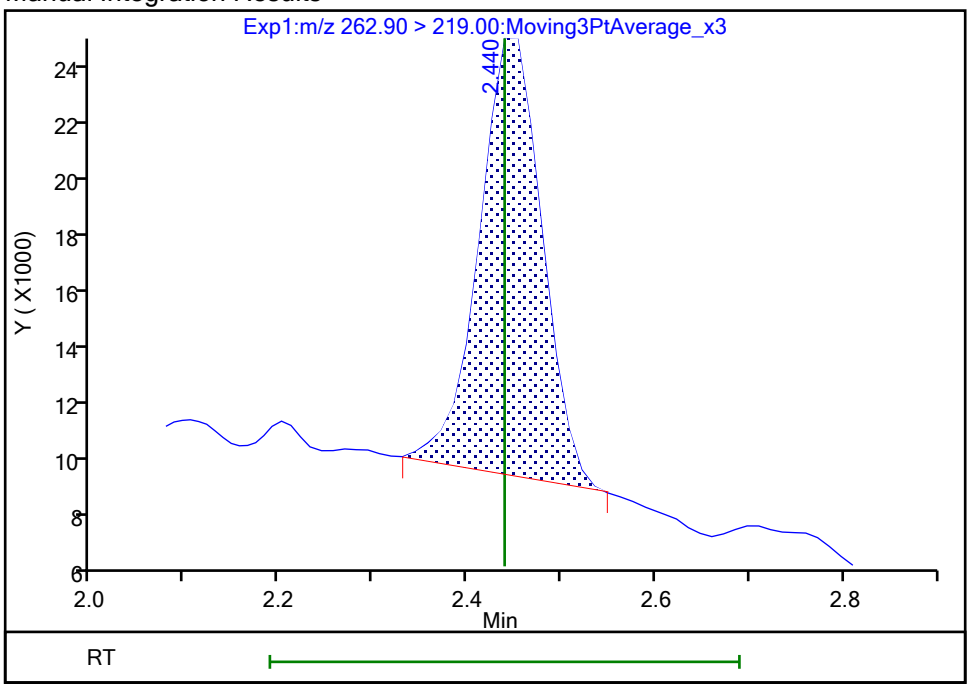
Processing Integration Results

RT: 2.44
Area: 72910
Amount: 0.056109
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 71929
Amount: 0.055354
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

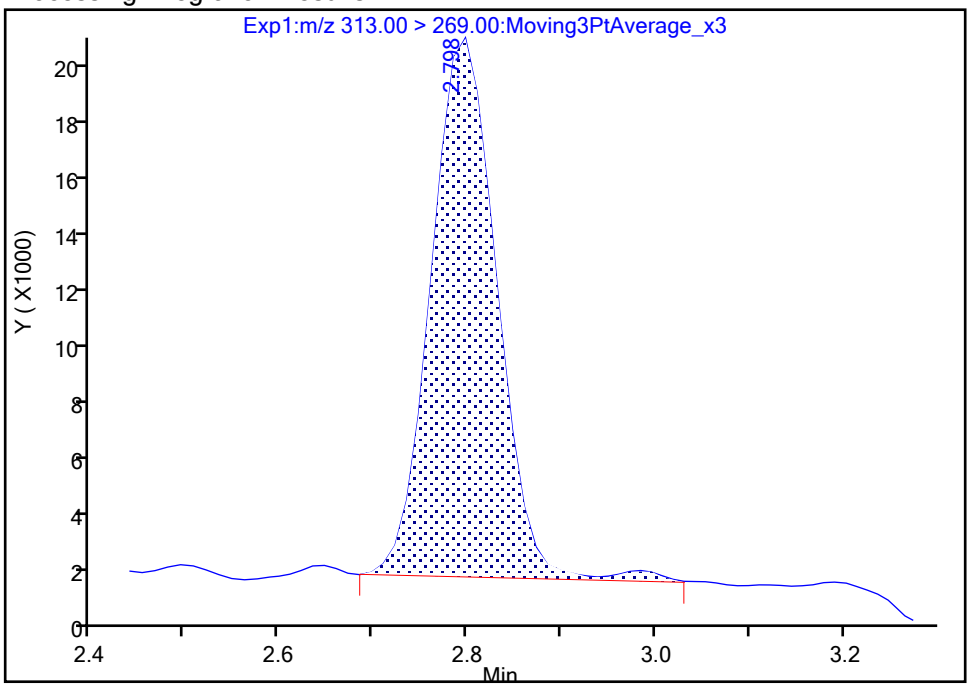
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

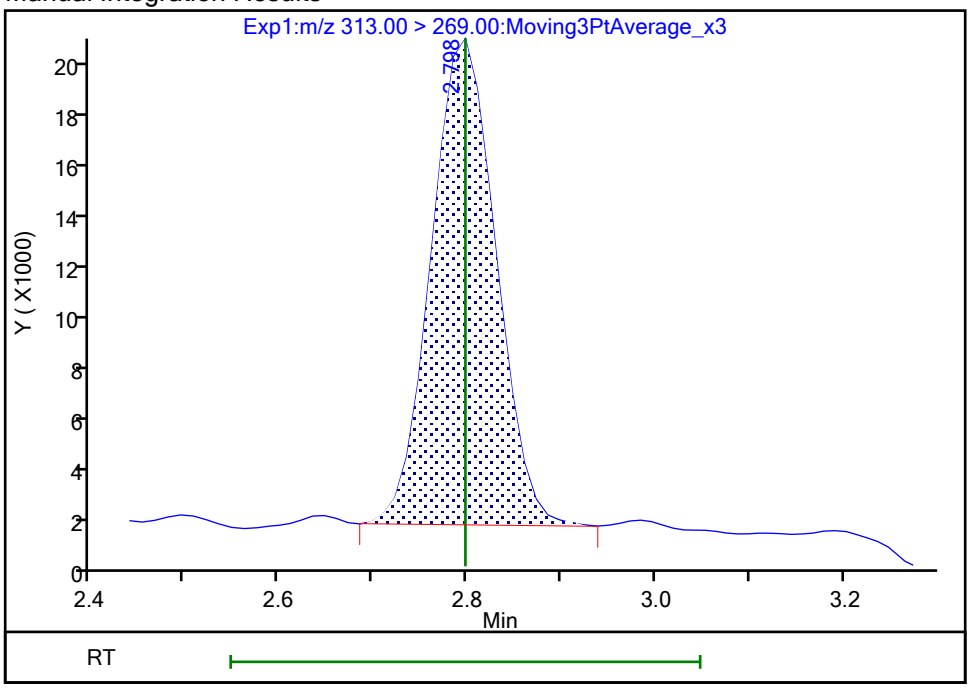
Processing Integration Results

RT: 2.80
Area: 92866
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 91094
Amount: 0.064315
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

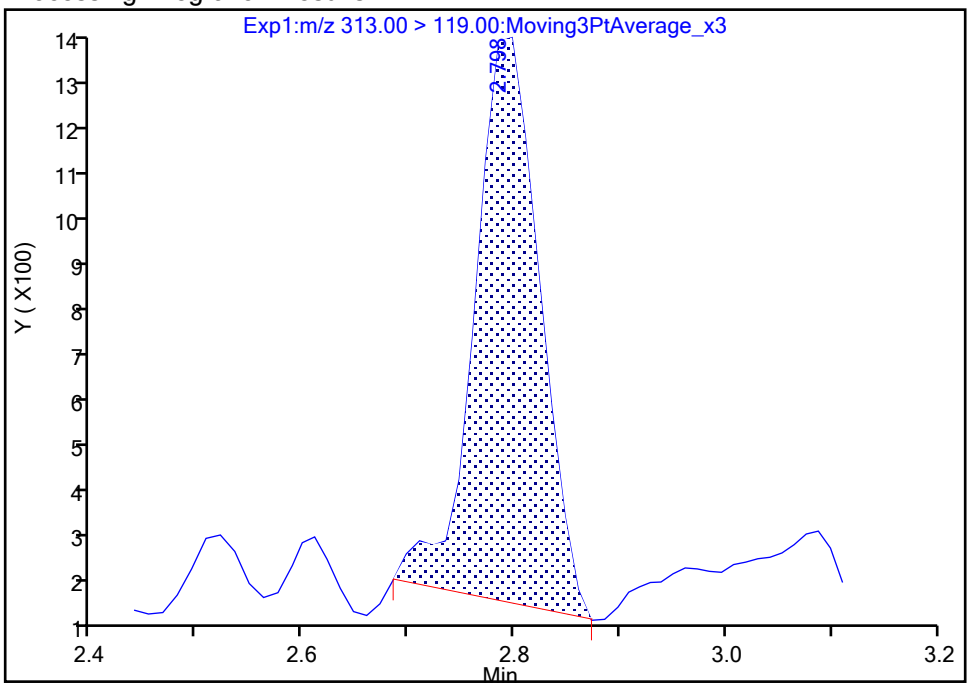
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

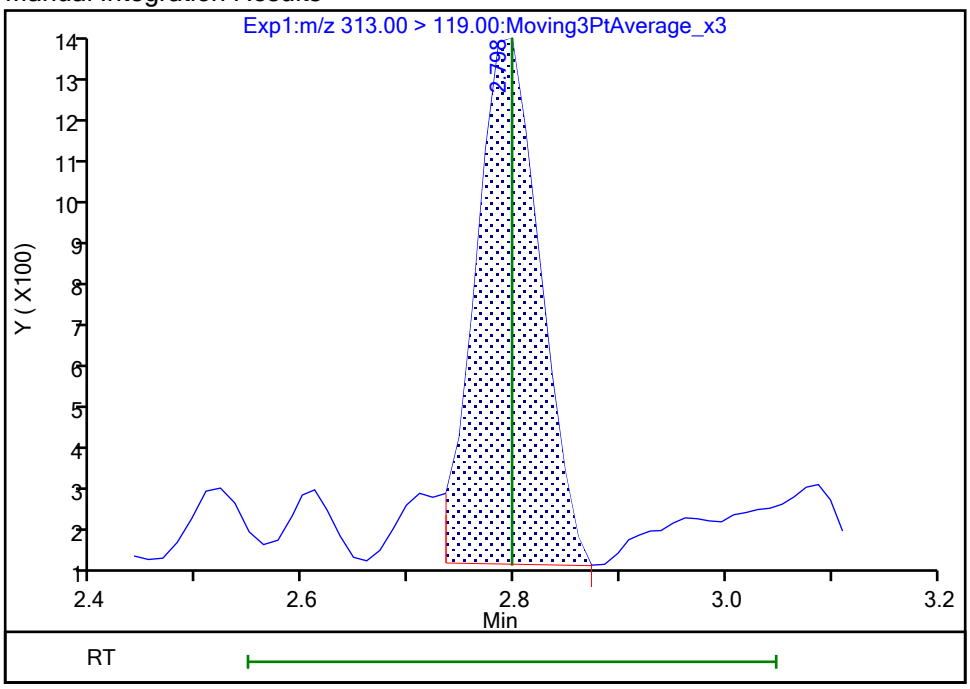
Processing Integration Results

RT: 2.80
Area: 5027
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 5030
Amount: 0.064315
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

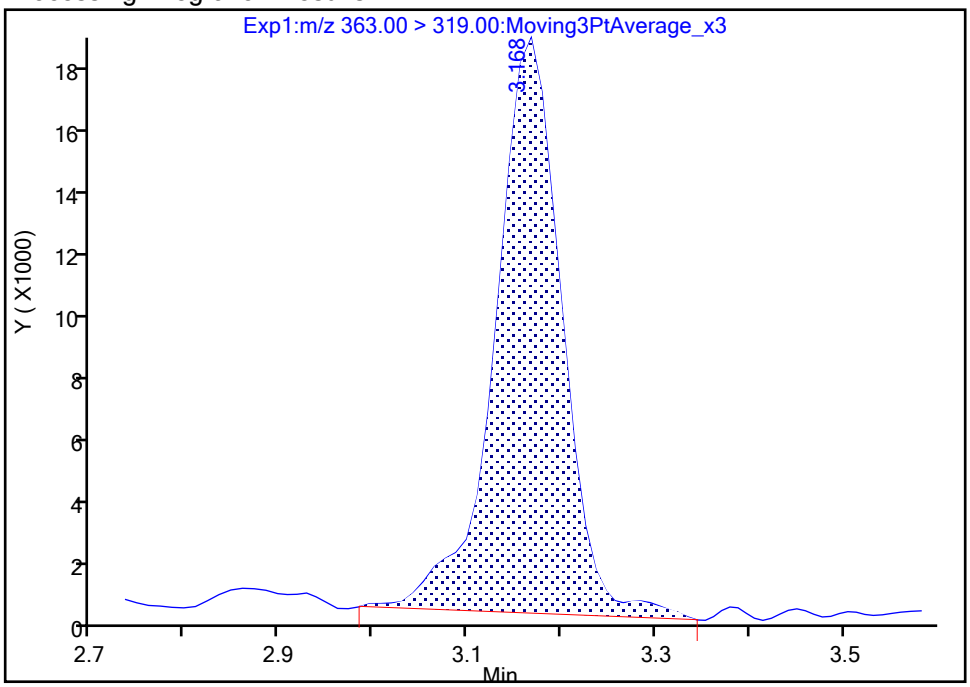
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

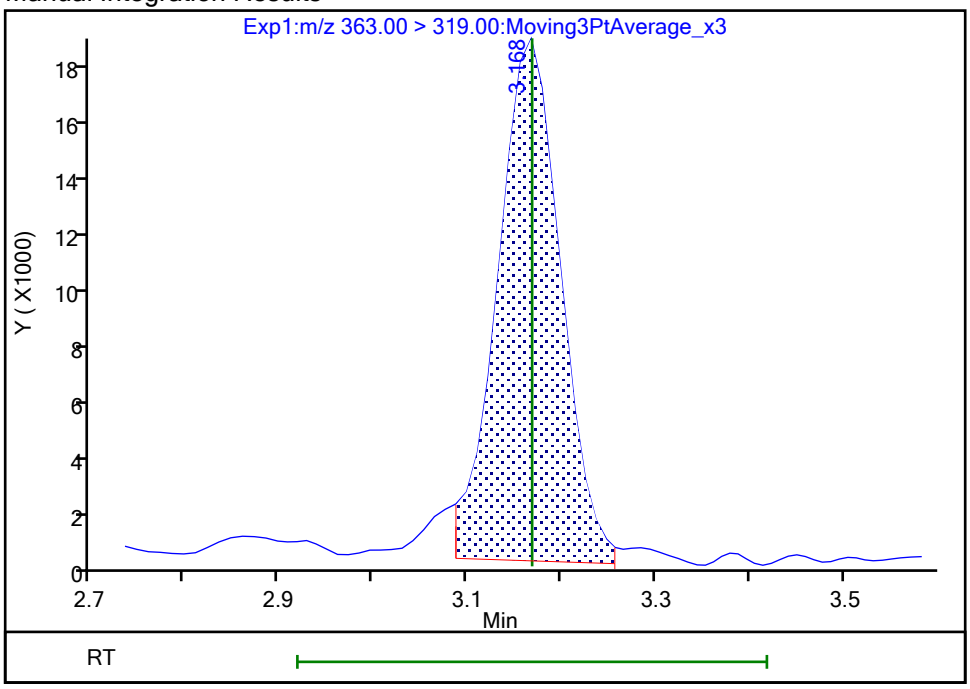
Processing Integration Results

RT: 3.17
Area: 86987
Amount: 0.053434
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 81592
Amount: 0.050120
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

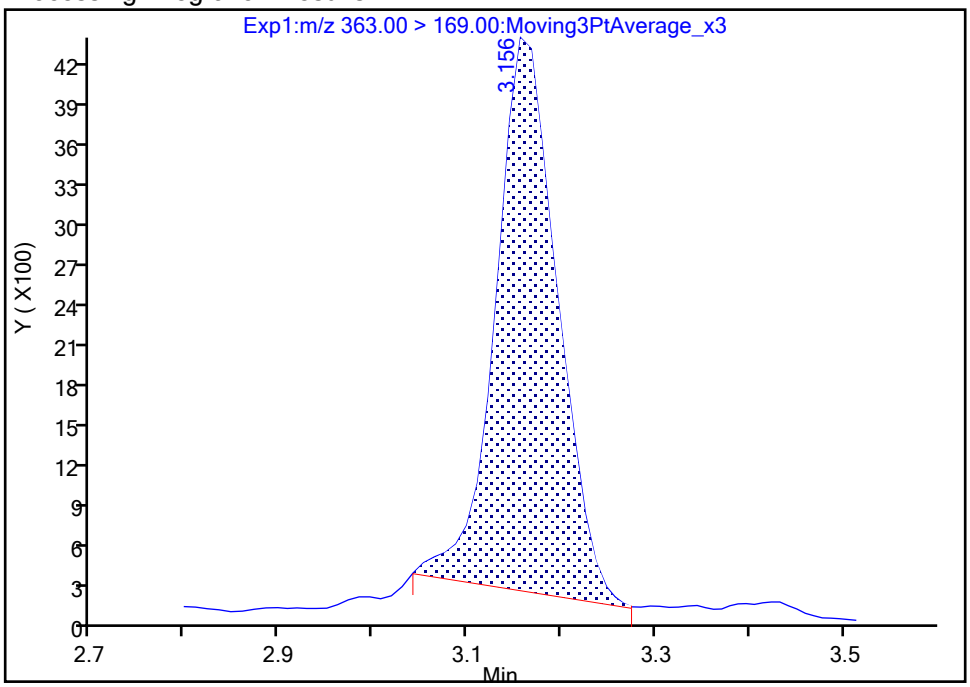
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

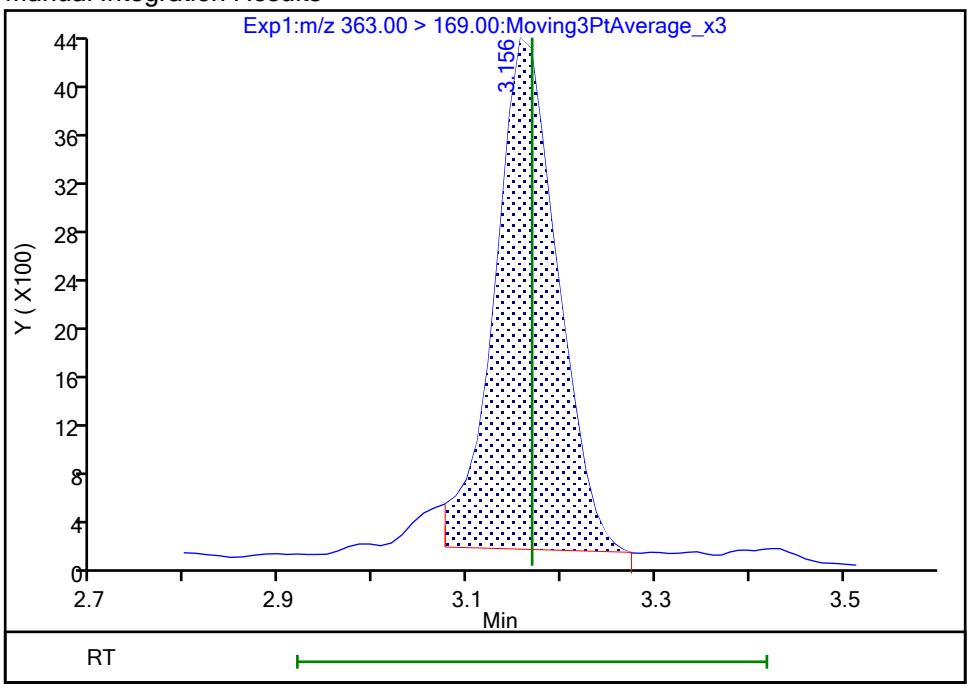
Processing Integration Results

RT: 3.16
Area: 18805
Amount: 0.053434
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 19564
Amount: 0.050120
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

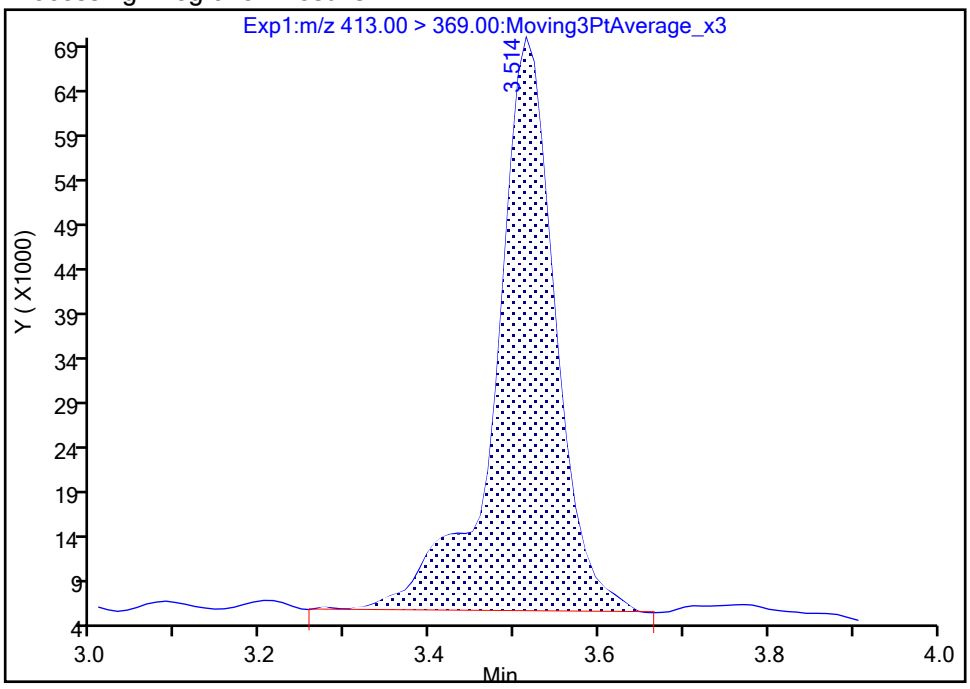
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

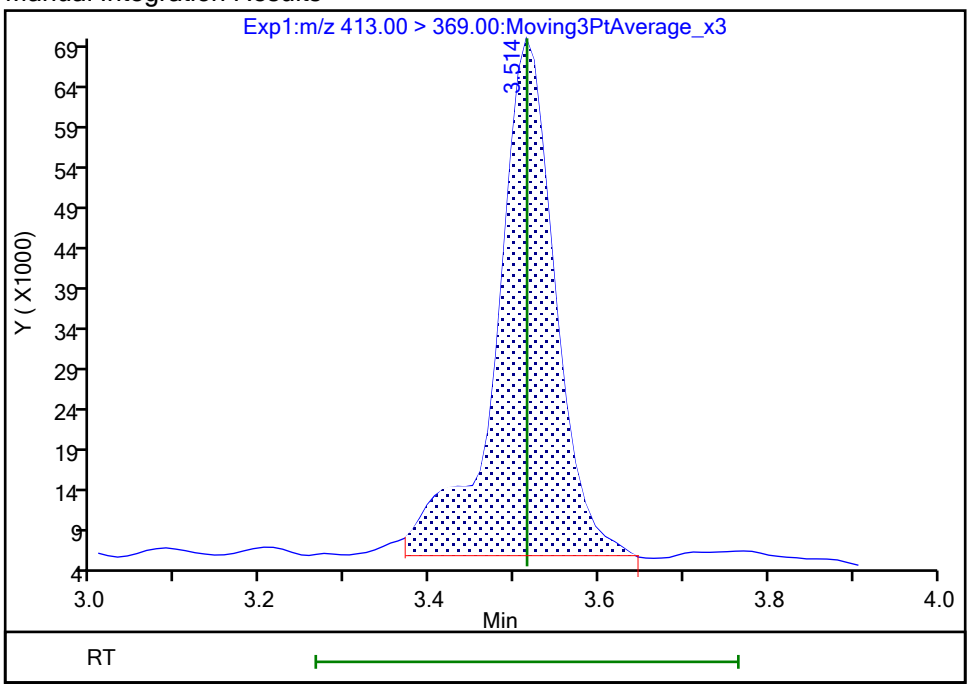
Processing Integration Results

RT: 3.51
Area: 315592
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 308534
Amount: 0.165085
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

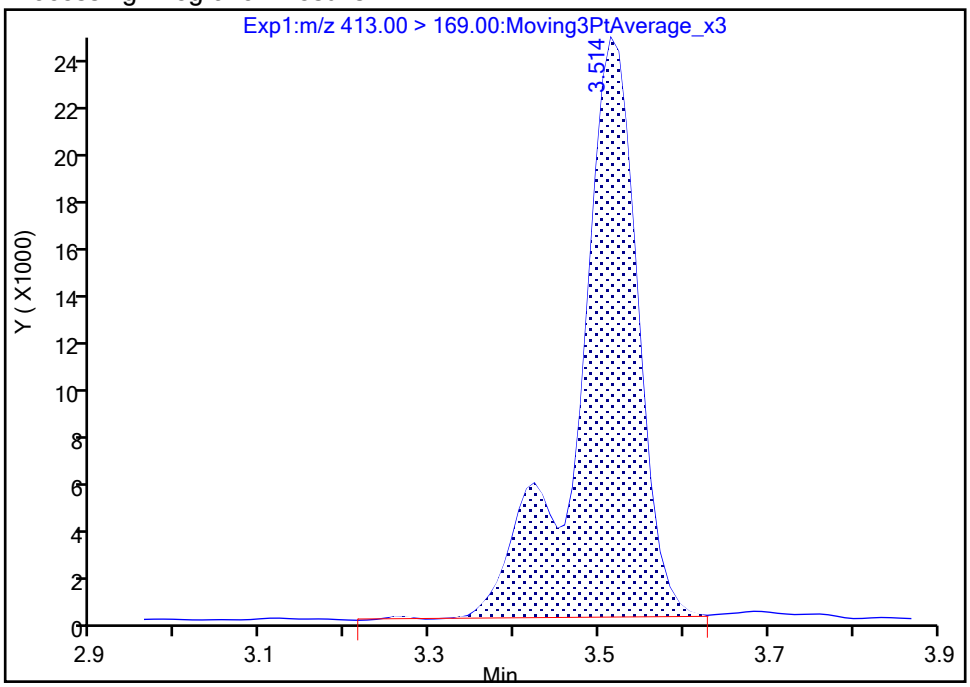
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

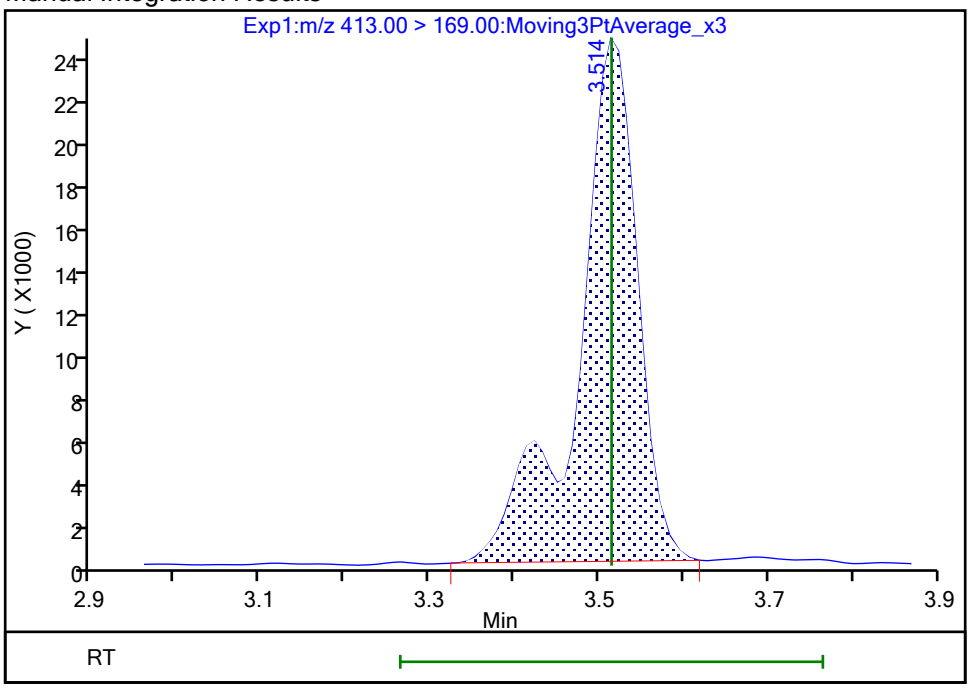
Processing Integration Results

RT: 3.51
Area: 122362
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 121472
Amount: 0.165085
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

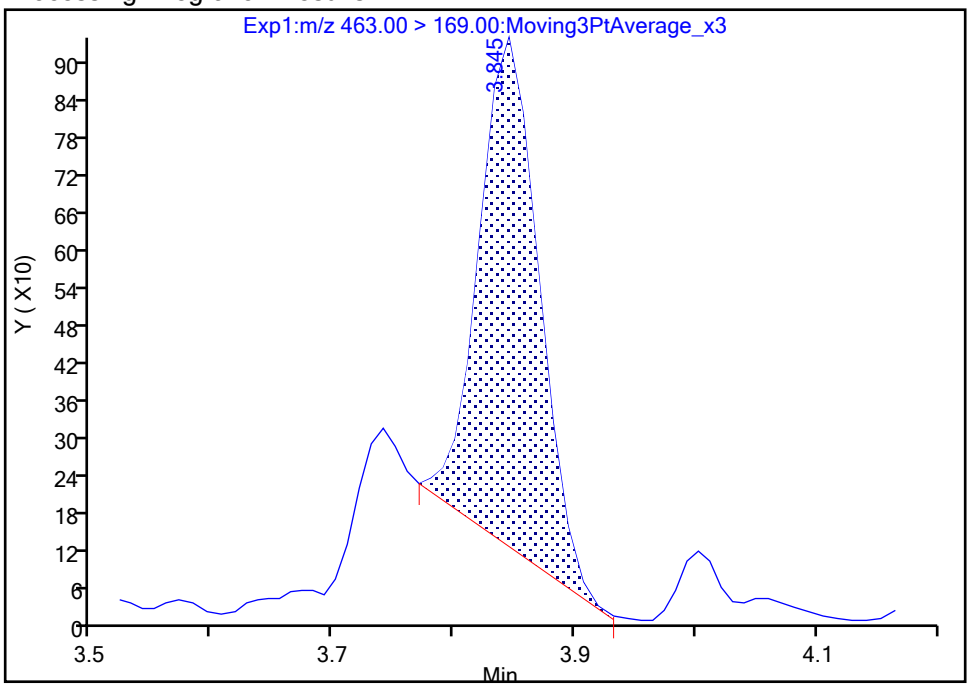
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

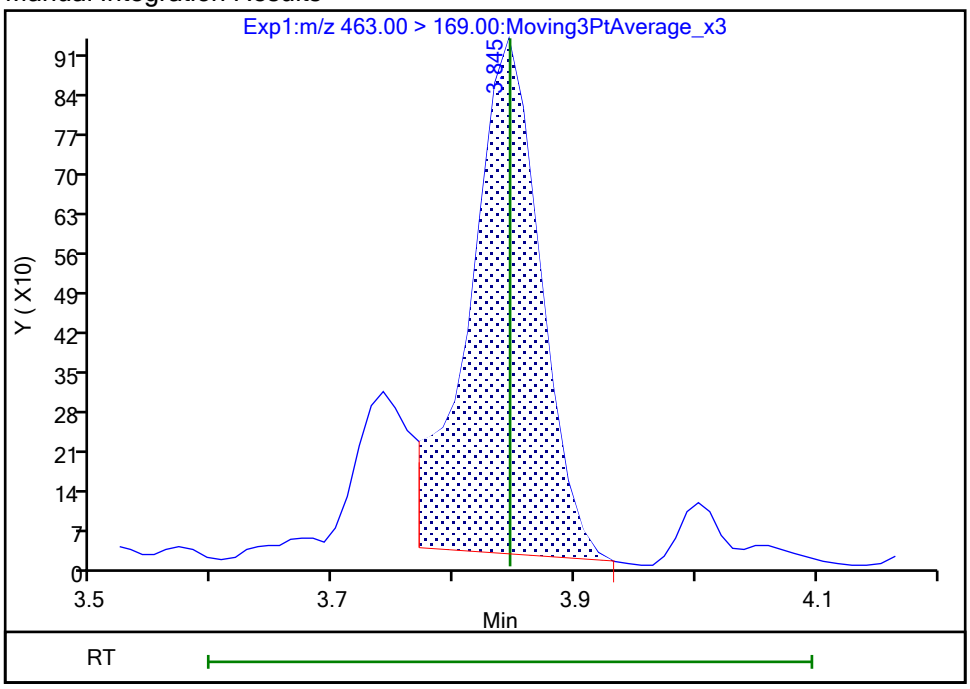
Processing Integration Results

RT: 3.85
Area: 2836
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 3715
Amount: 0.017179
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

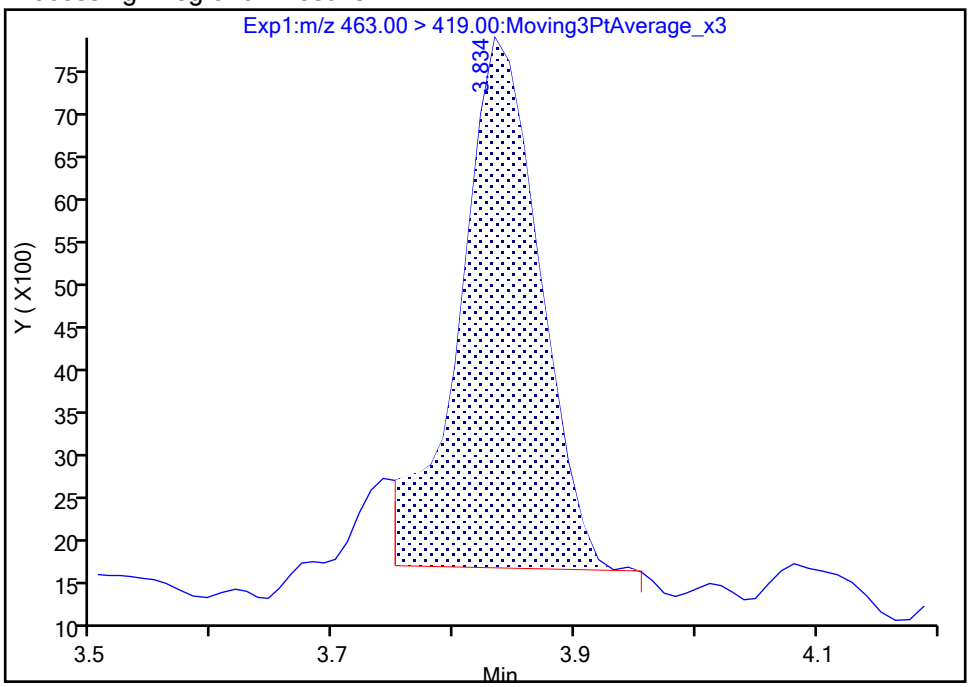
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

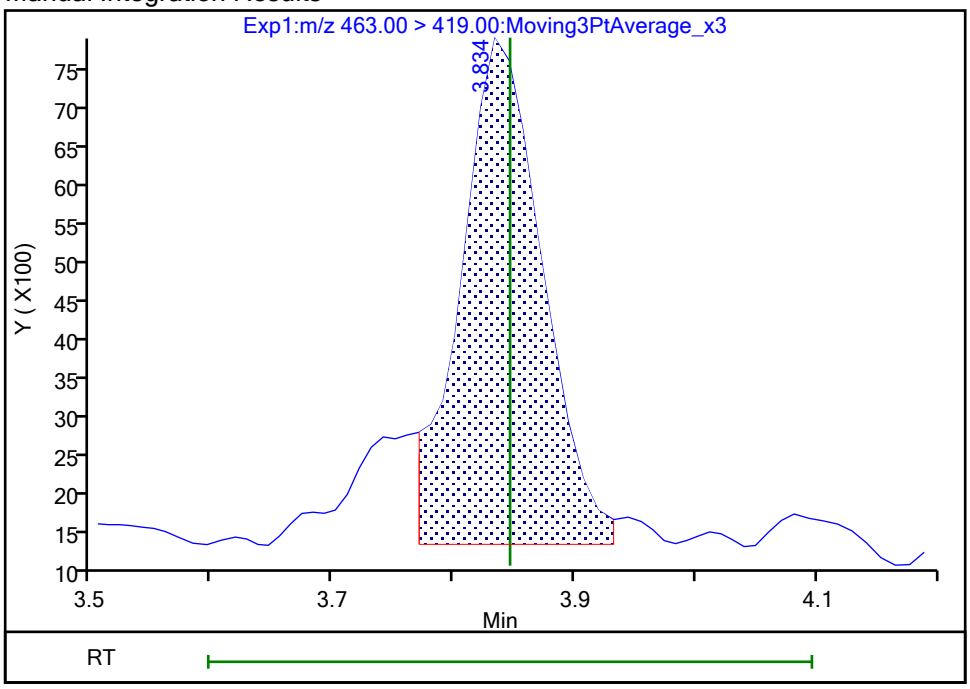
Processing Integration Results

RT: 3.83
Area: 28331
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 30225
Amount: 0.017179
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

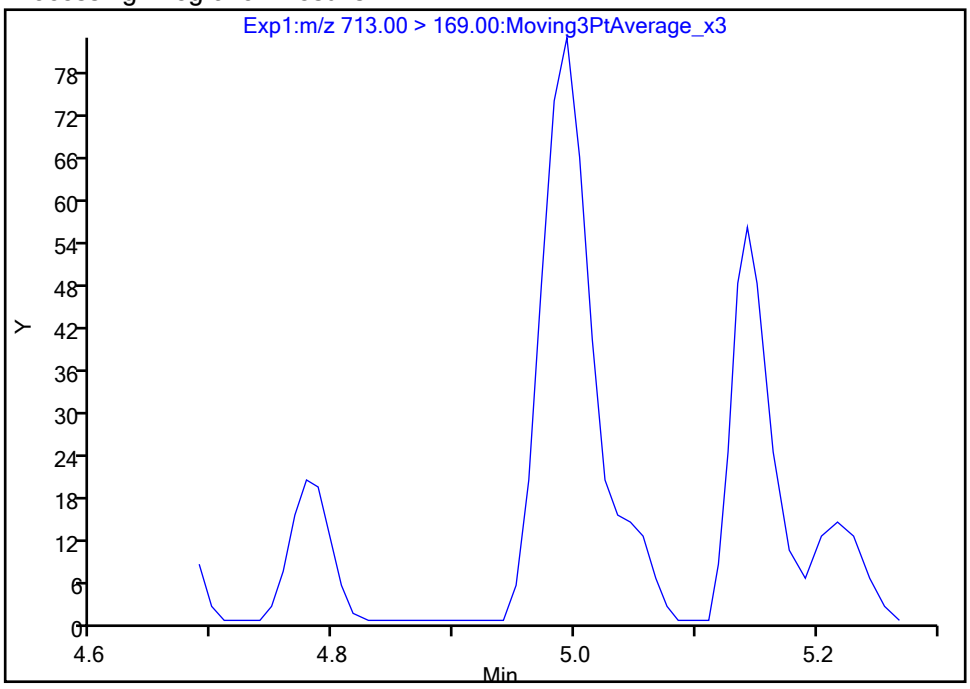
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

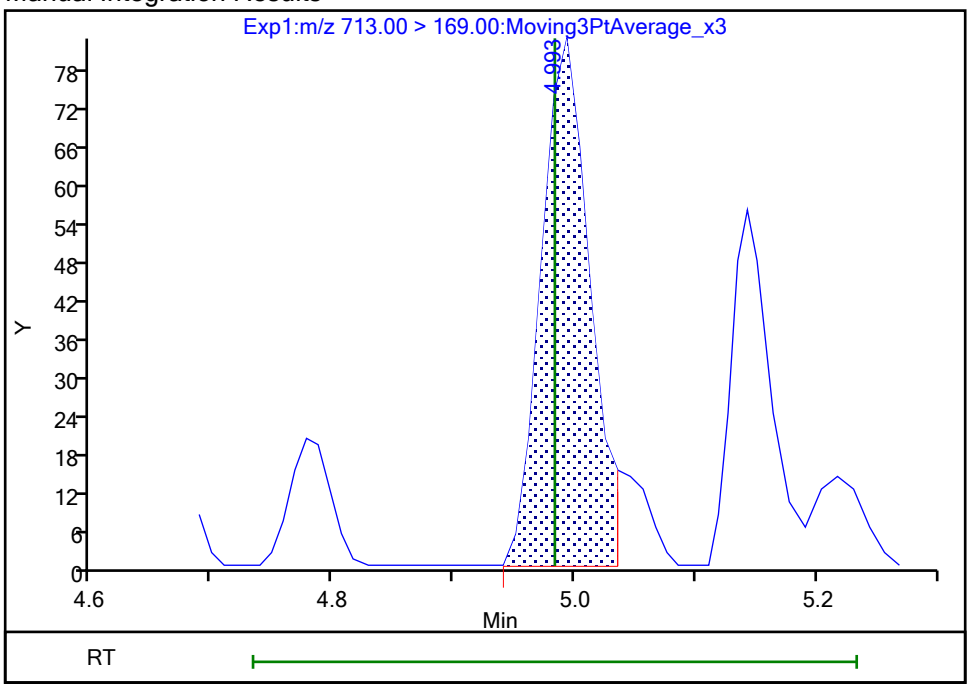
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 229
Amount: 0.001438
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

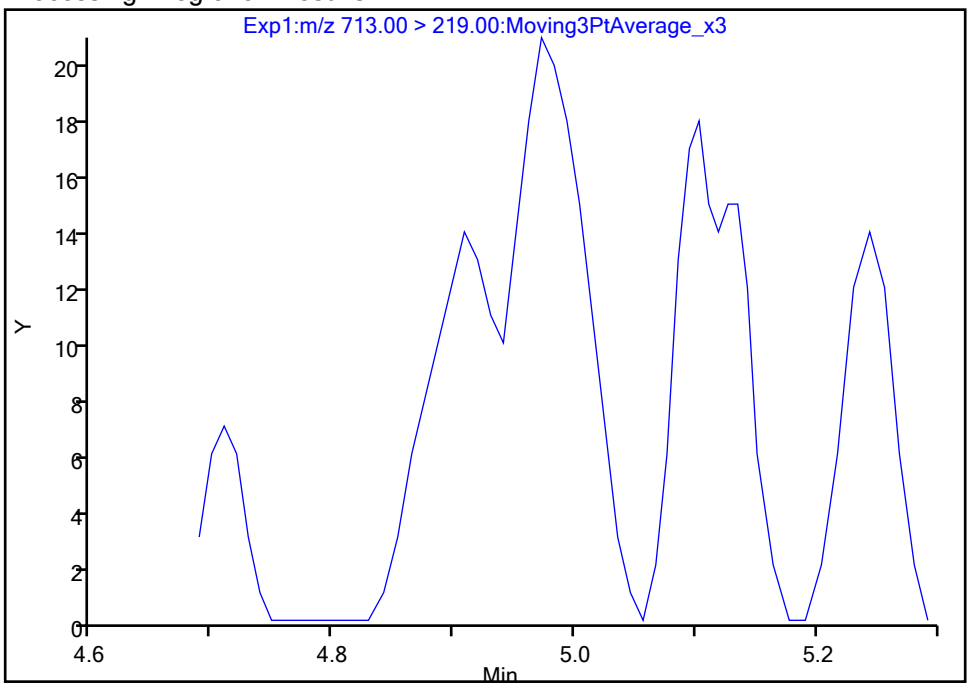
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

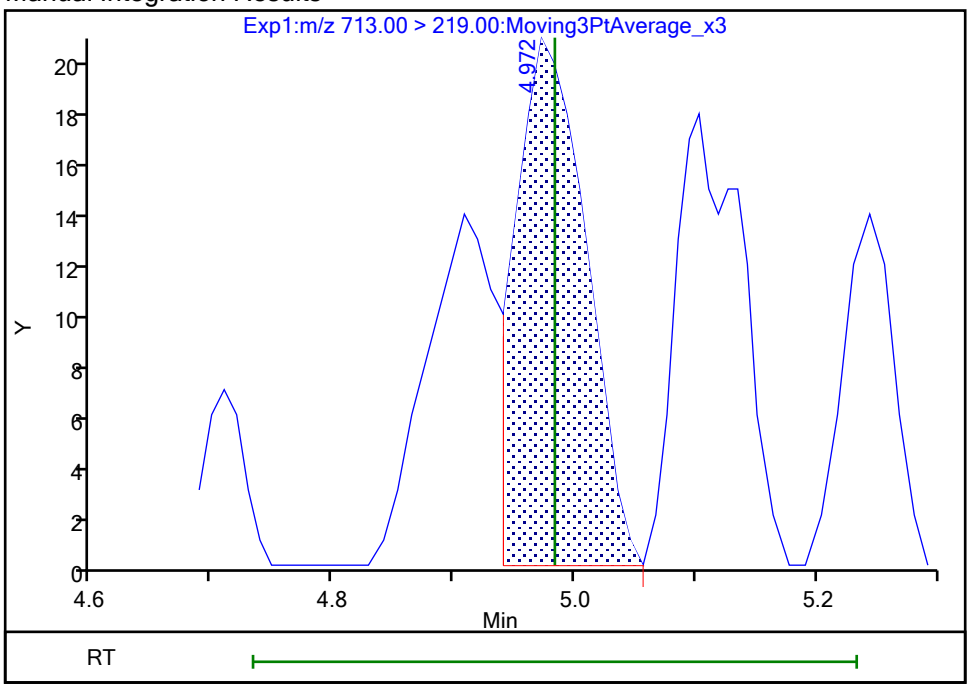
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 83
Amount: 0.001438
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

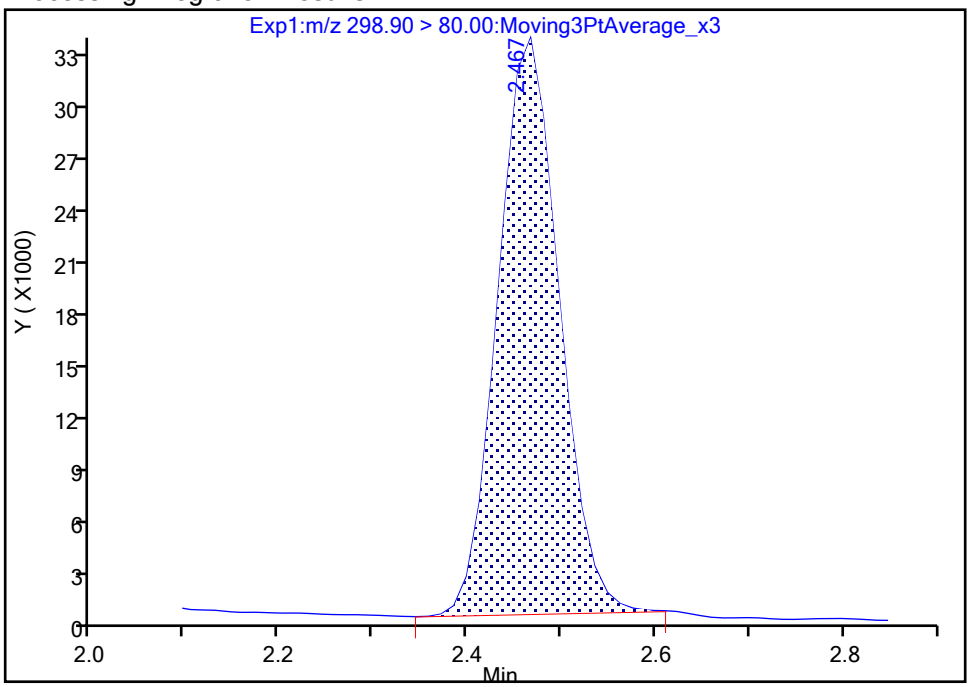
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

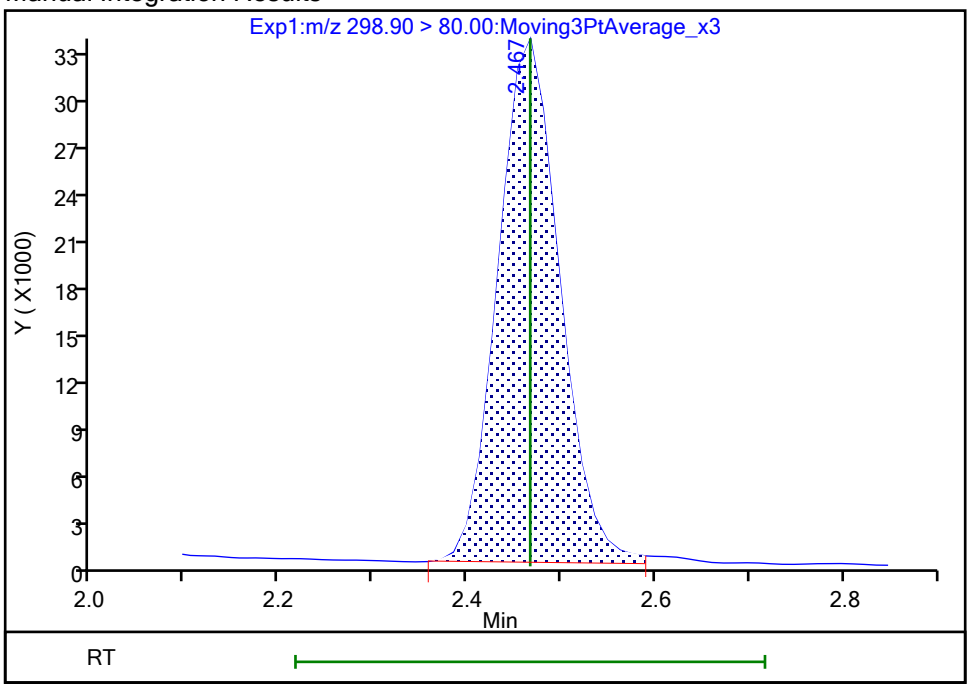
Processing Integration Results

RT: 2.47
Area: 149331
Amount: 0.084882
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 151750
Amount: 0.086257
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

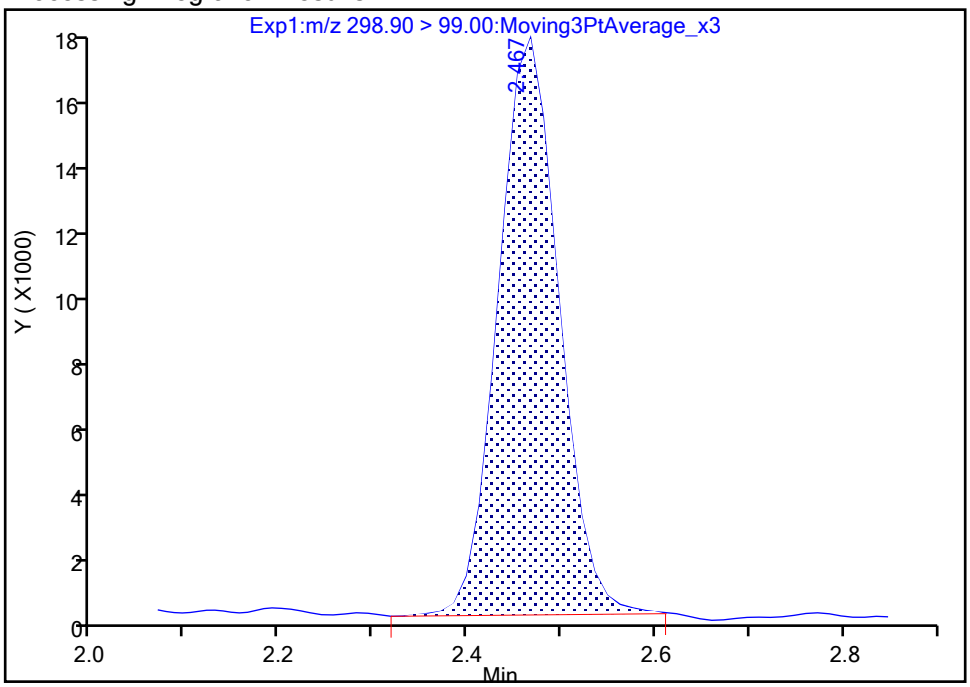
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

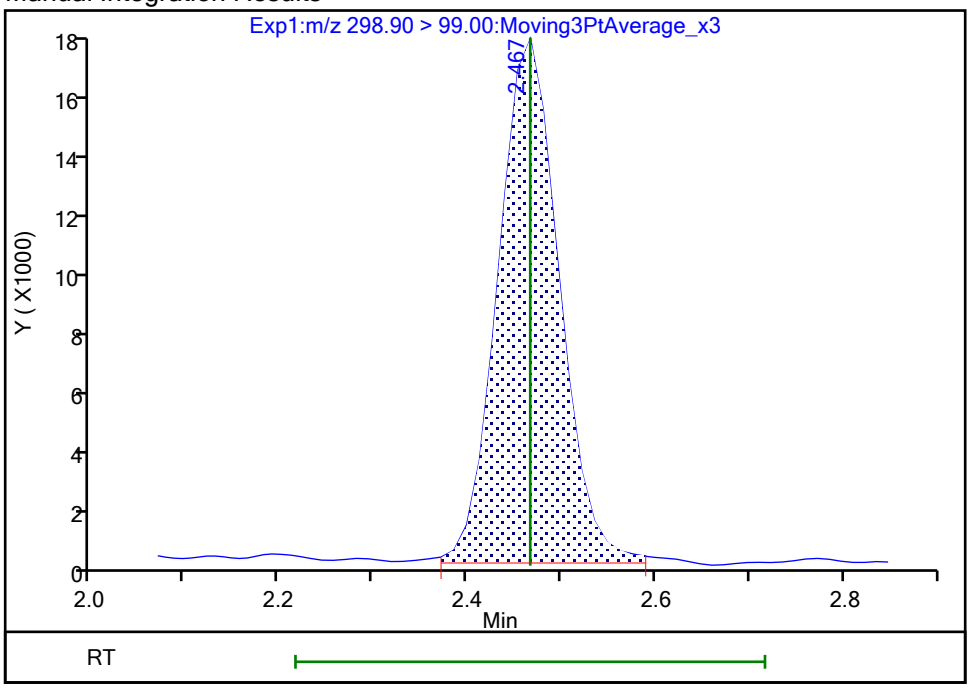
Processing Integration Results

RT: 2.47
Area: 77802
Amount: 0.084882
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 79071
Amount: 0.086257
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

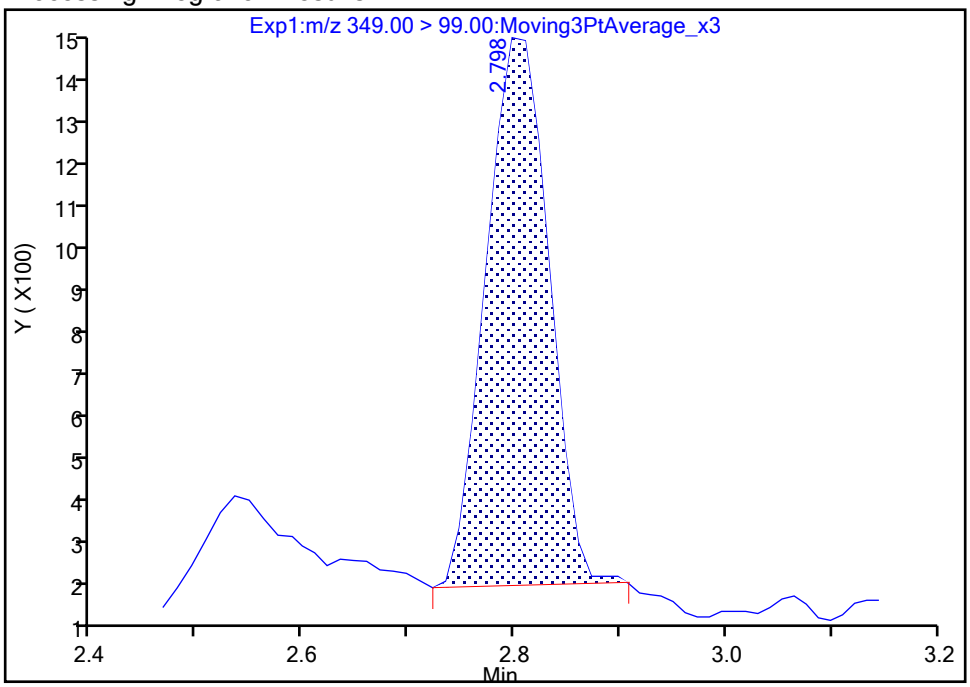
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

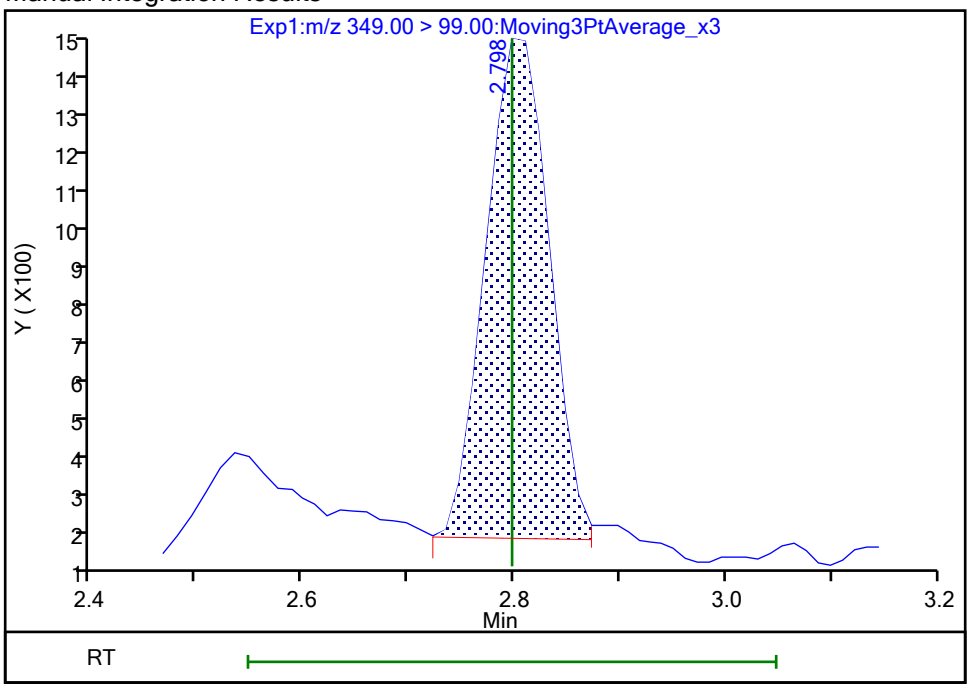
Processing Integration Results

RT: 2.80
Area: 5326
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 5370
Amount: 0.009700
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

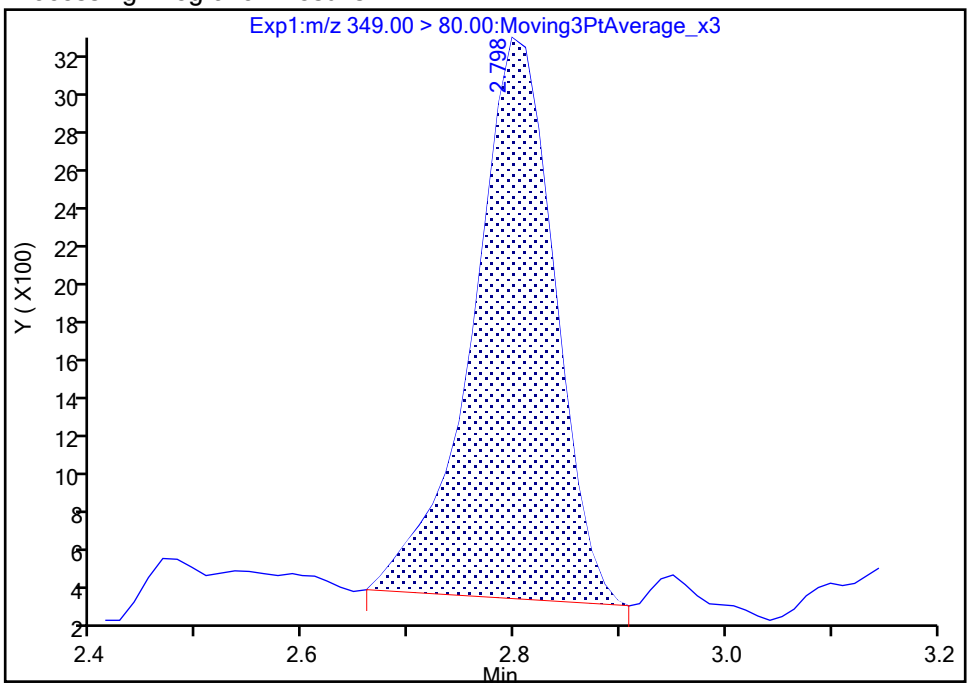
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

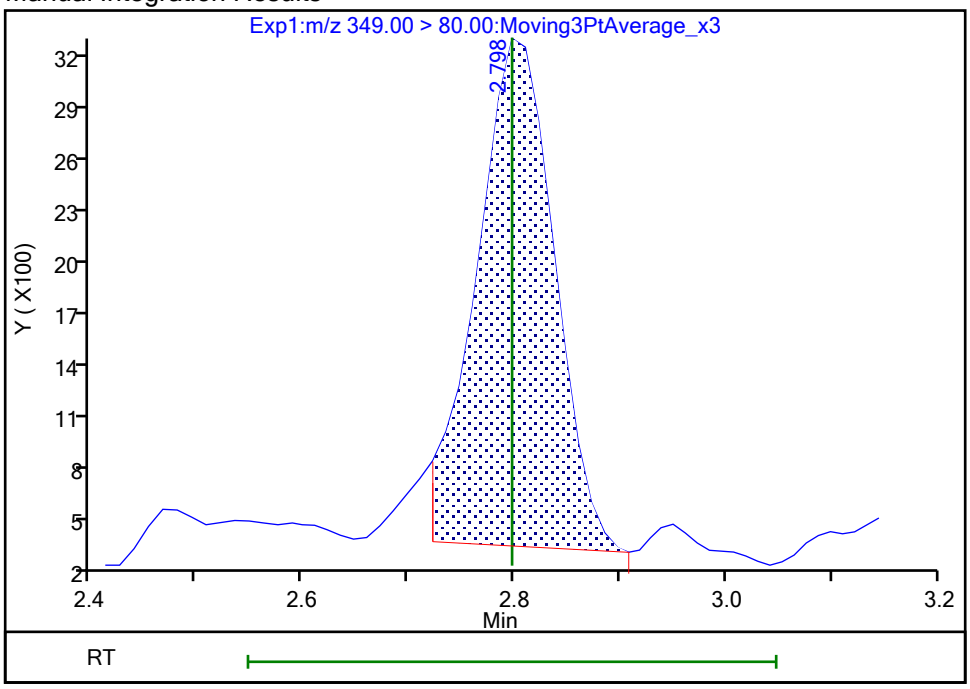
Processing Integration Results

RT: 2.80
Area: 15444
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 14645
Amount: 0.009700
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

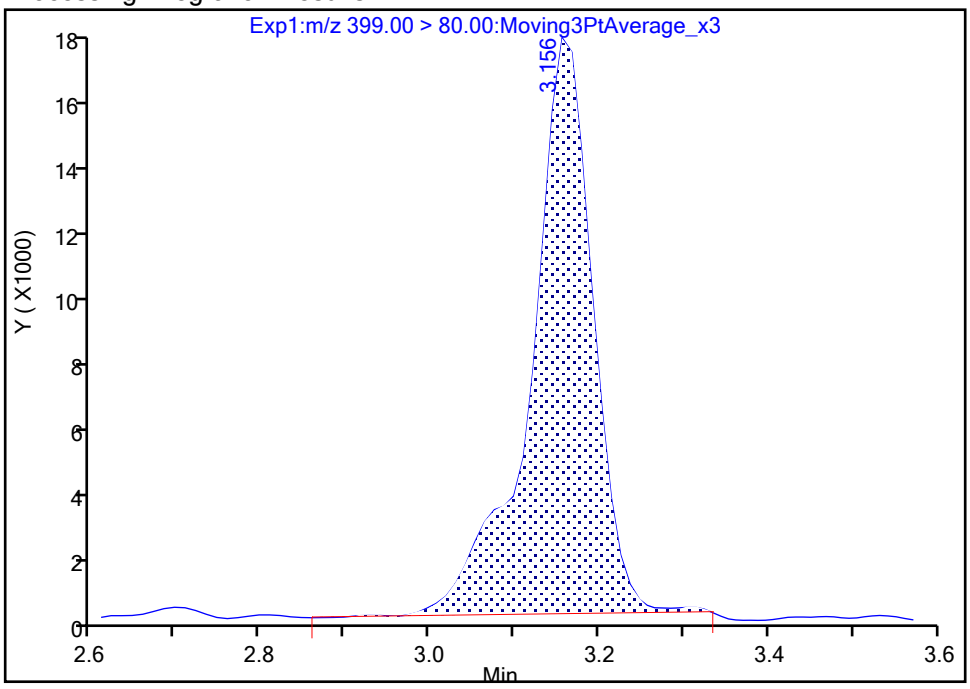
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

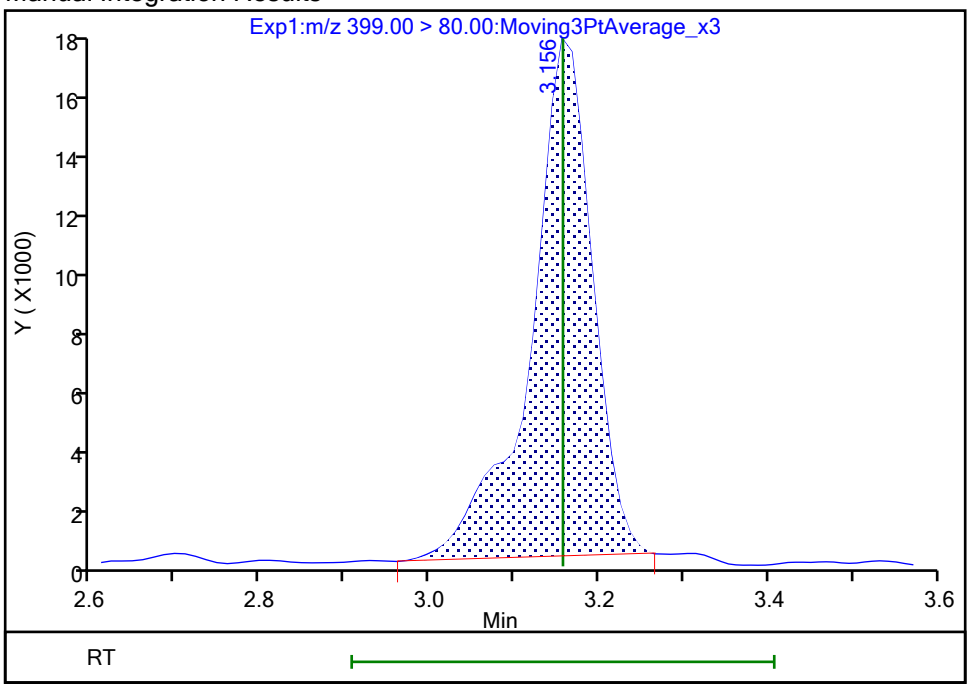
Processing Integration Results

RT: 3.16
Area: 87692
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 85350
Amount: 0.066690
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

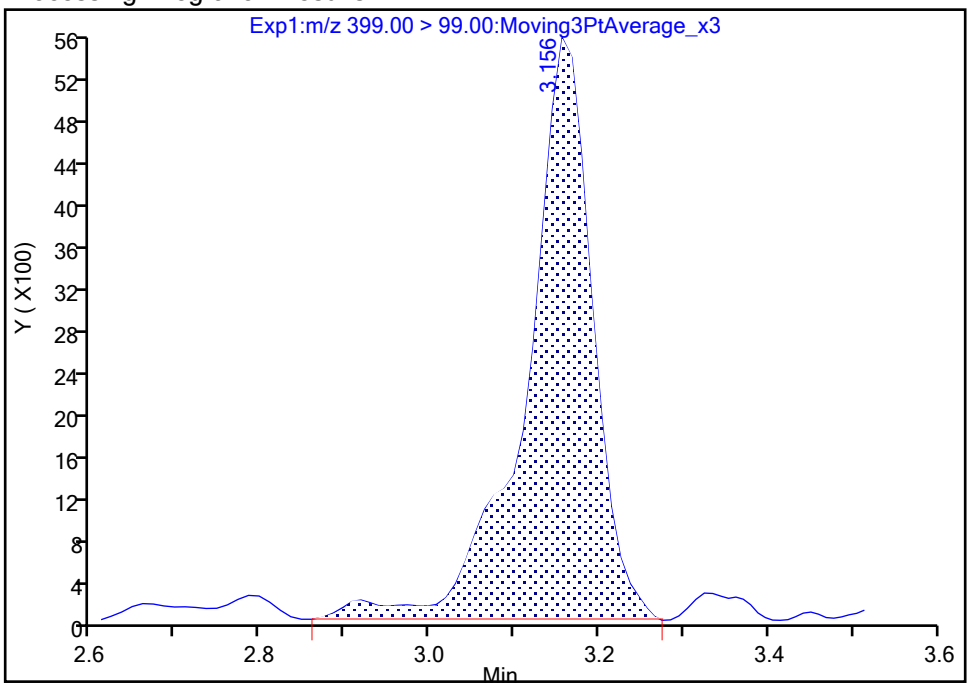
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

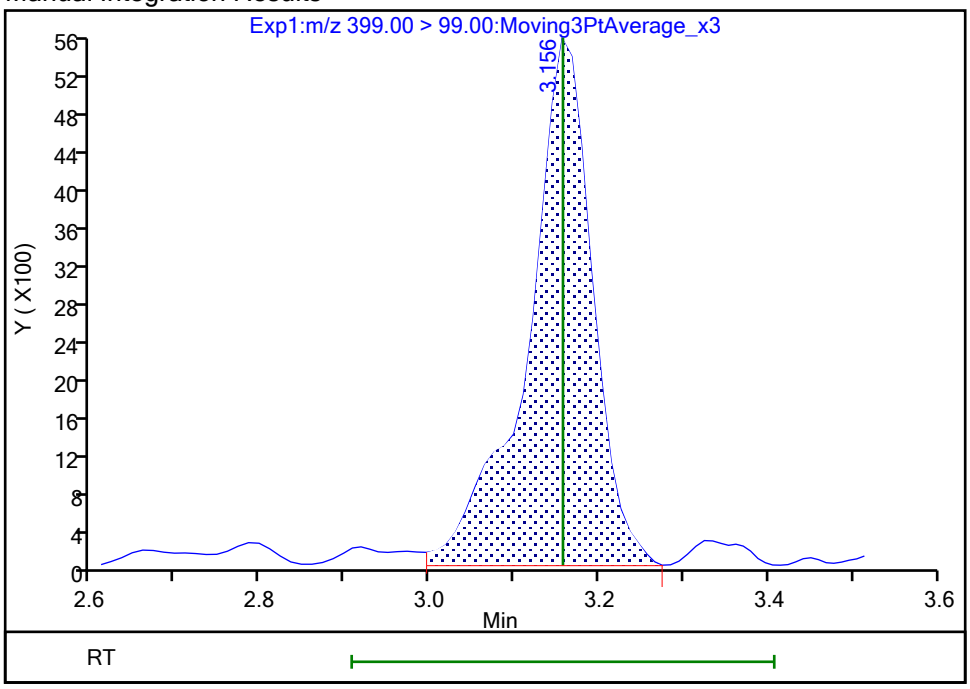
Processing Integration Results

RT: 3.16
Area: 30301
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 29352
Amount: 0.066690
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

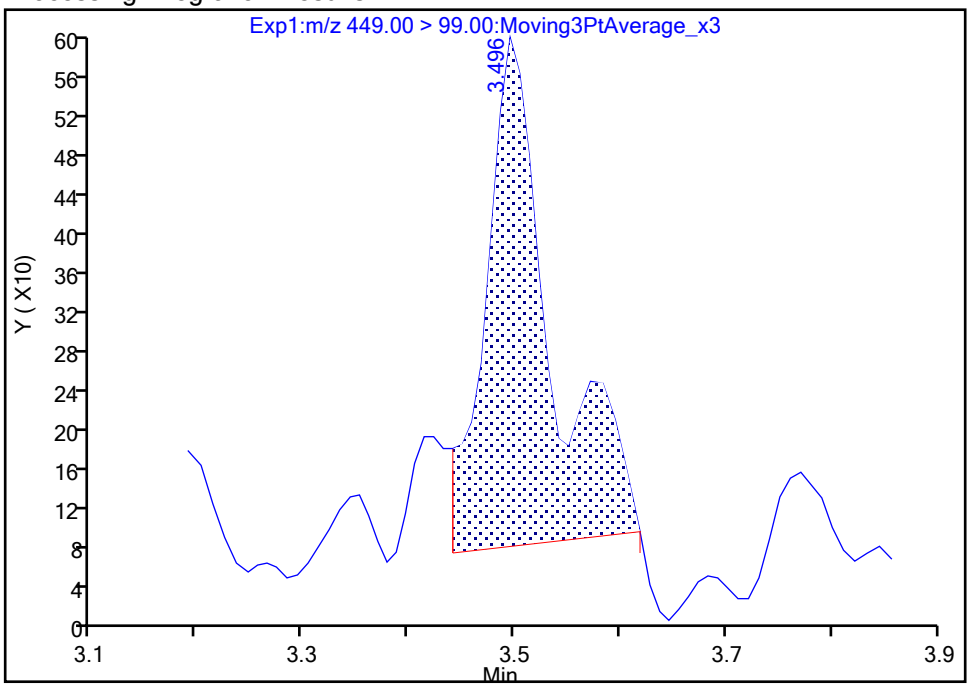
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

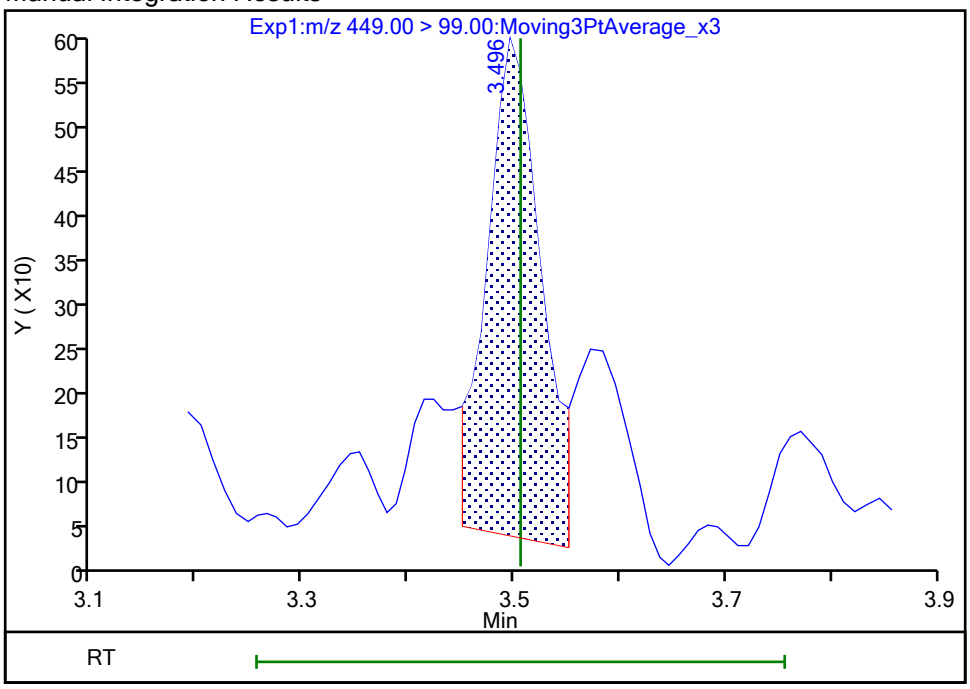
Processing Integration Results

RT: 3.50
Area: 2209
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 1965
Amount: 0.006592
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

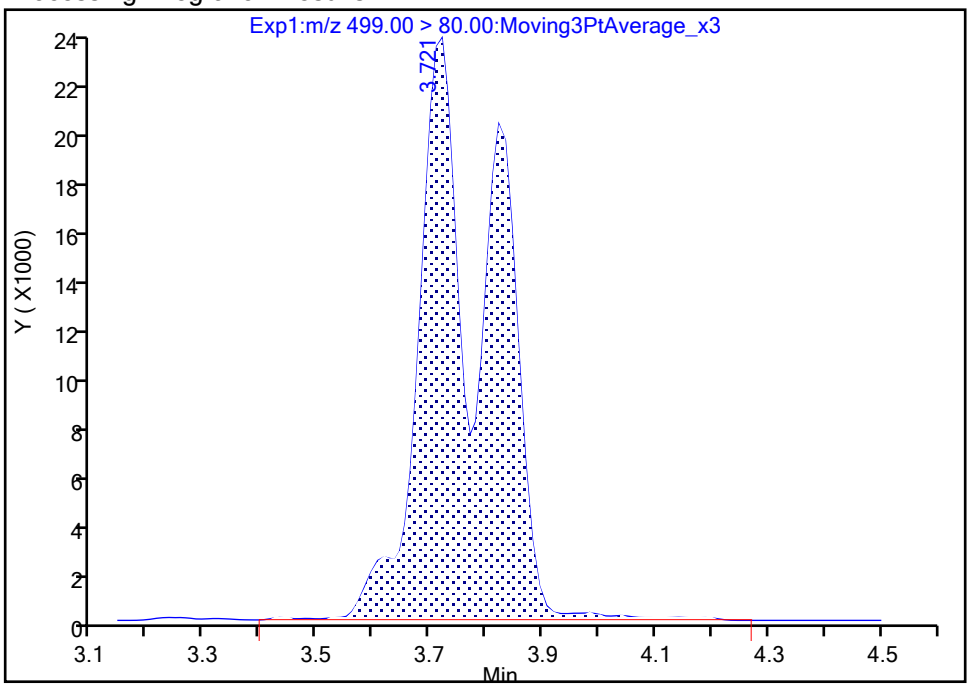
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

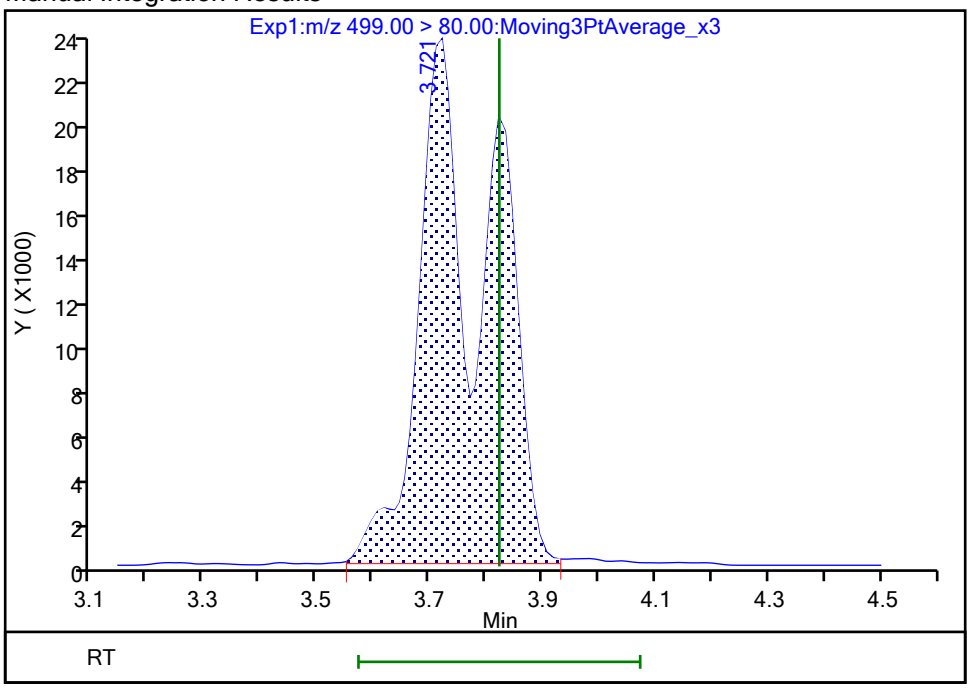
Processing Integration Results

RT: 3.72
Area: 208533
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.72
Area: 204007
Amount: 0.245345
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

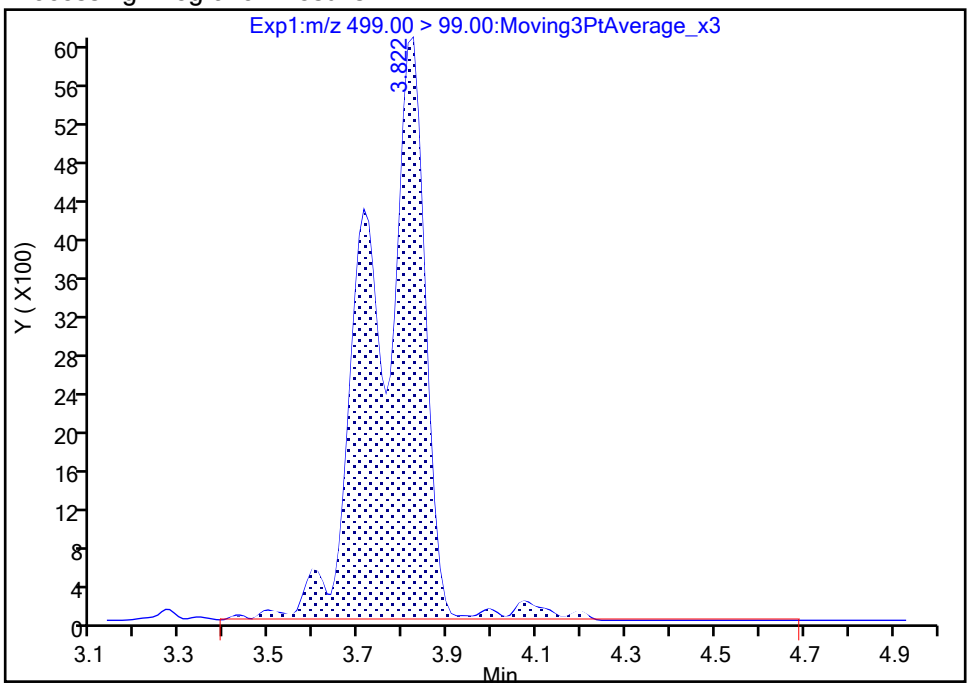
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

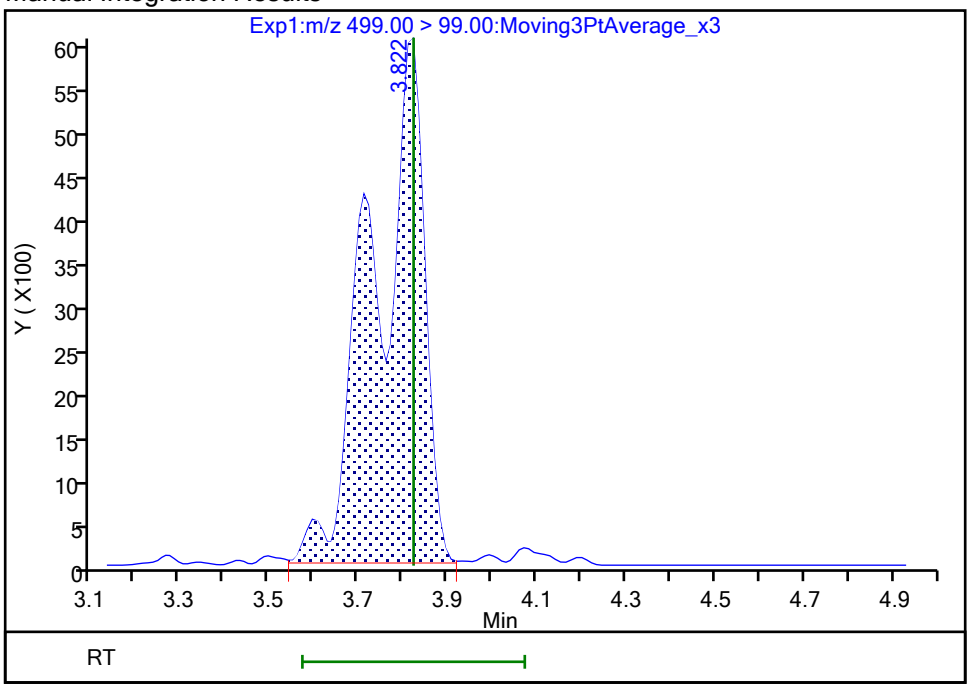
Processing Integration Results

RT: 3.82
Area: 50367
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 47831
Amount: 0.245345
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

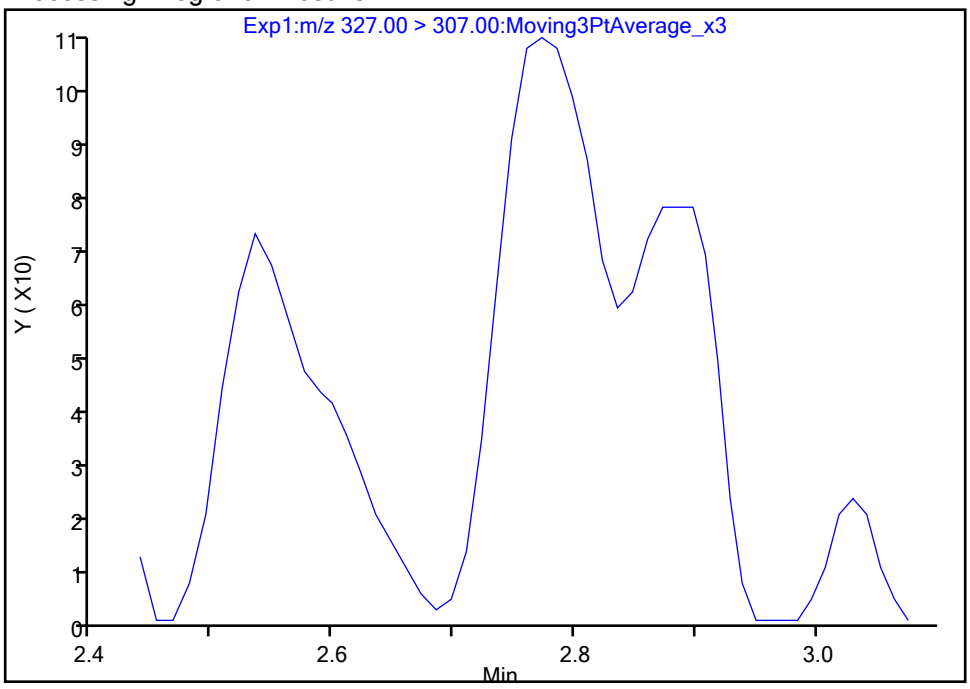
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

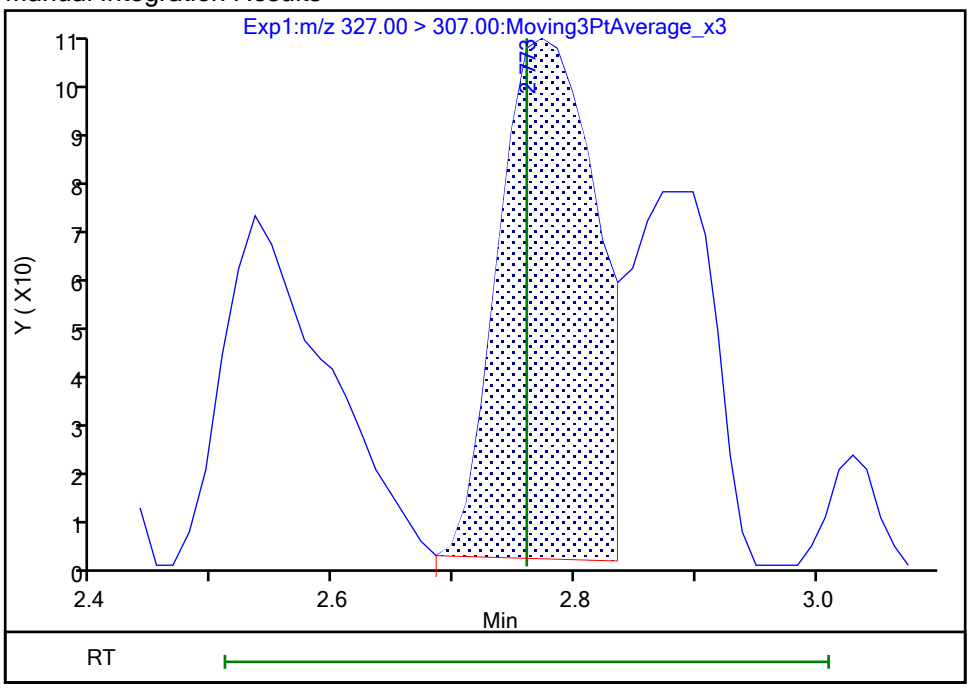
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 598
Amount: 0.001007
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:45:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

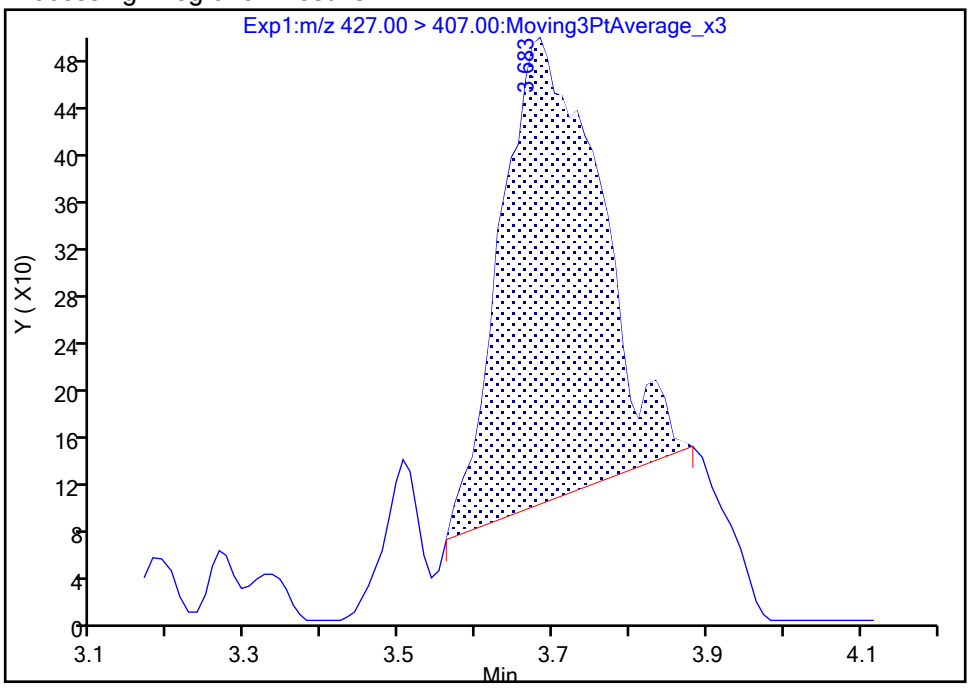
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

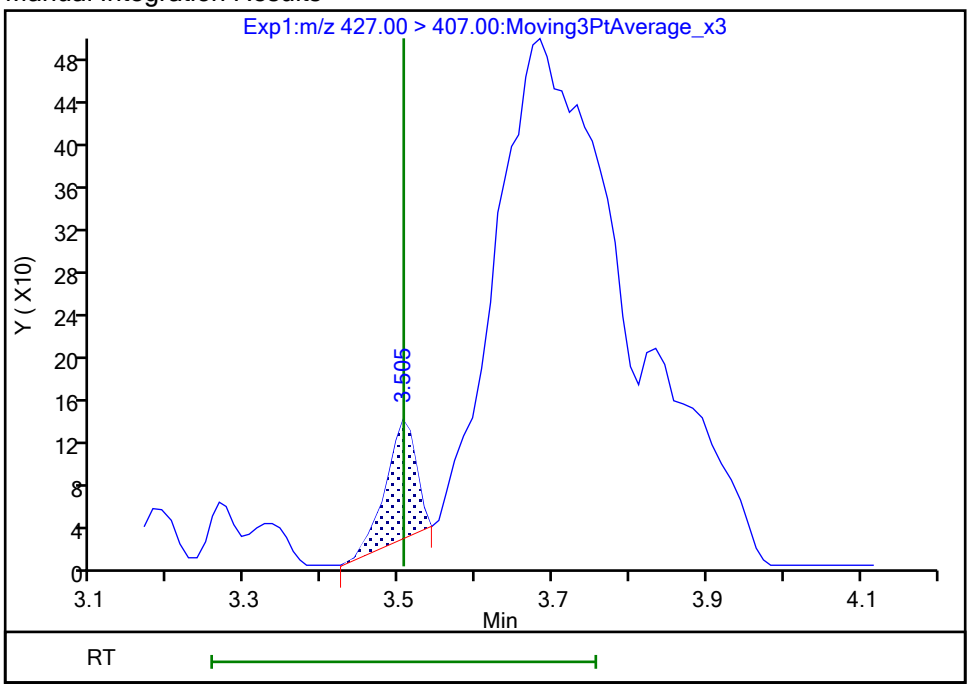
Processing Integration Results

RT: 3.68
Area: 3523
Amount: 0.005614
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 302
Amount: 0.000481
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:46:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

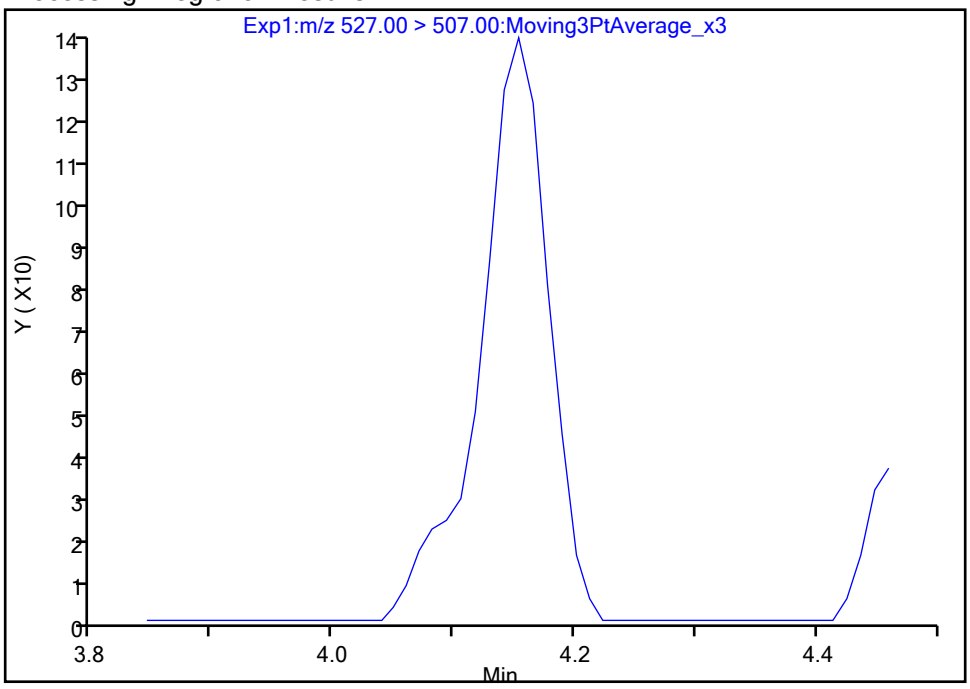
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

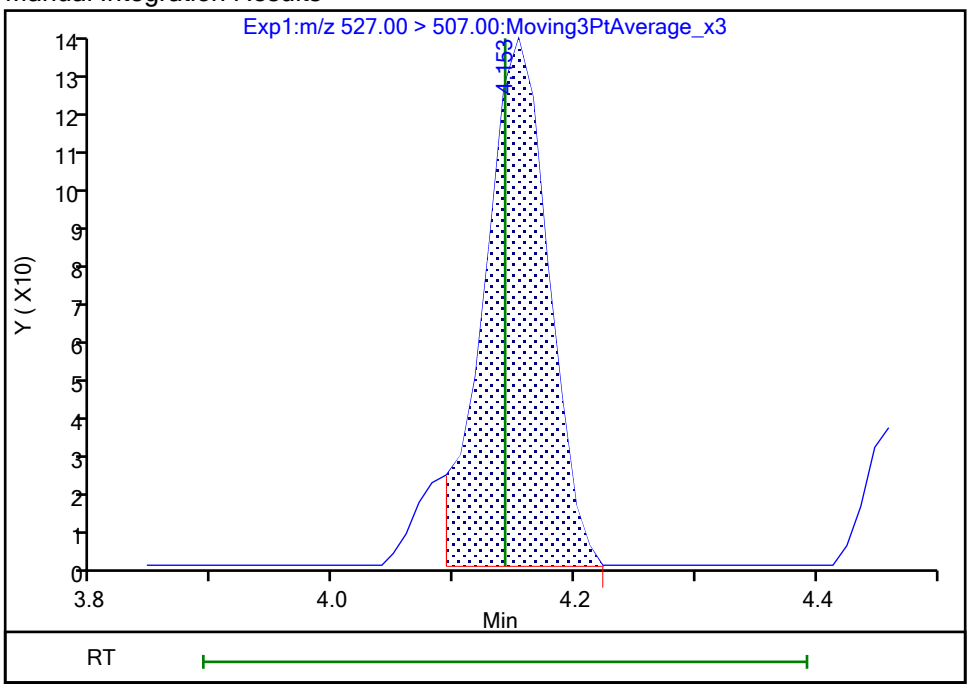
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 491
Amount: 0.000955
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

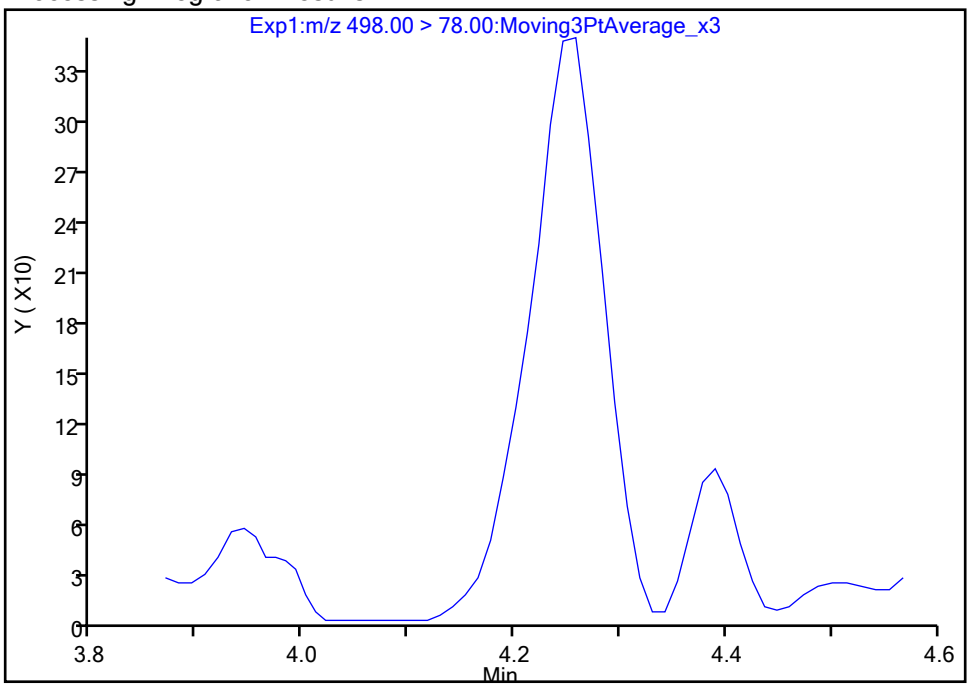
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

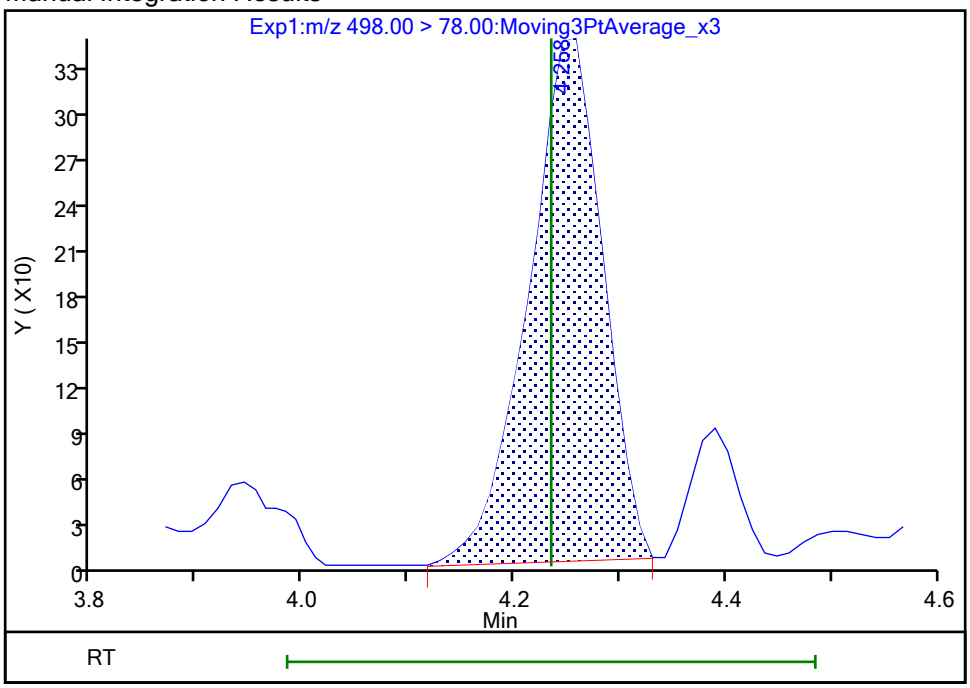
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.26
Area: 1654
Amount: 0.001325
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:47:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

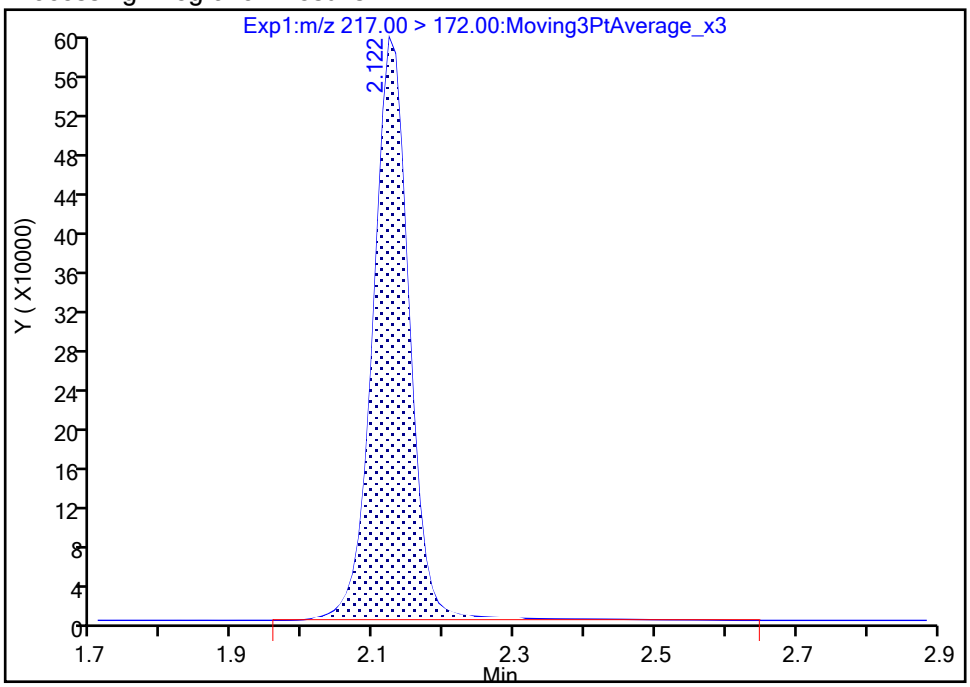
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

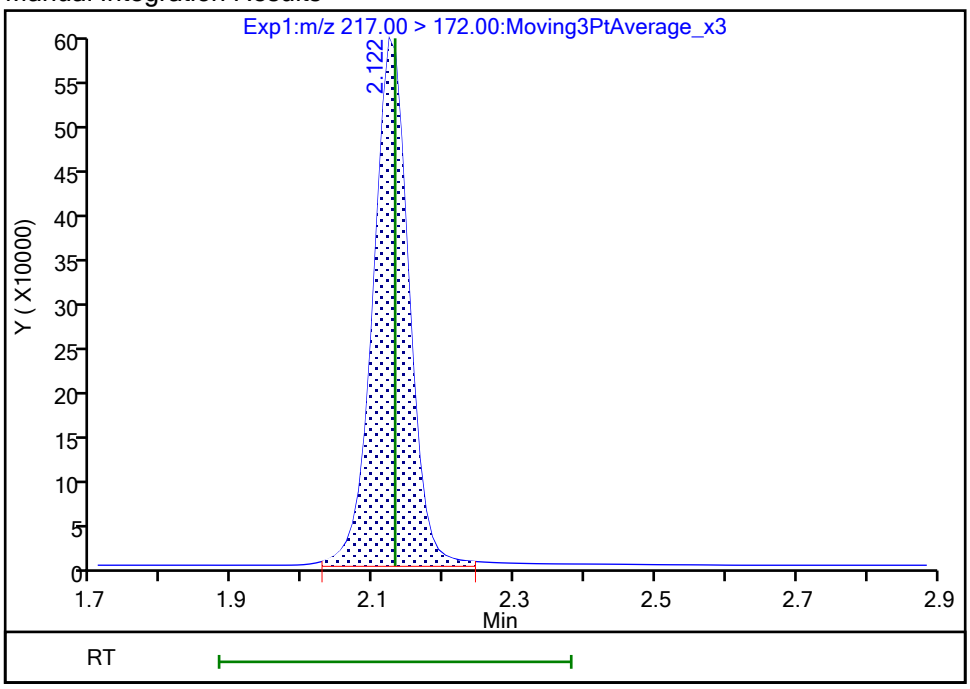
Processing Integration Results

RT: 2.12
Area: 2141012
Amount: 1.287740
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2108055
Amount: 1.267917
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:43:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

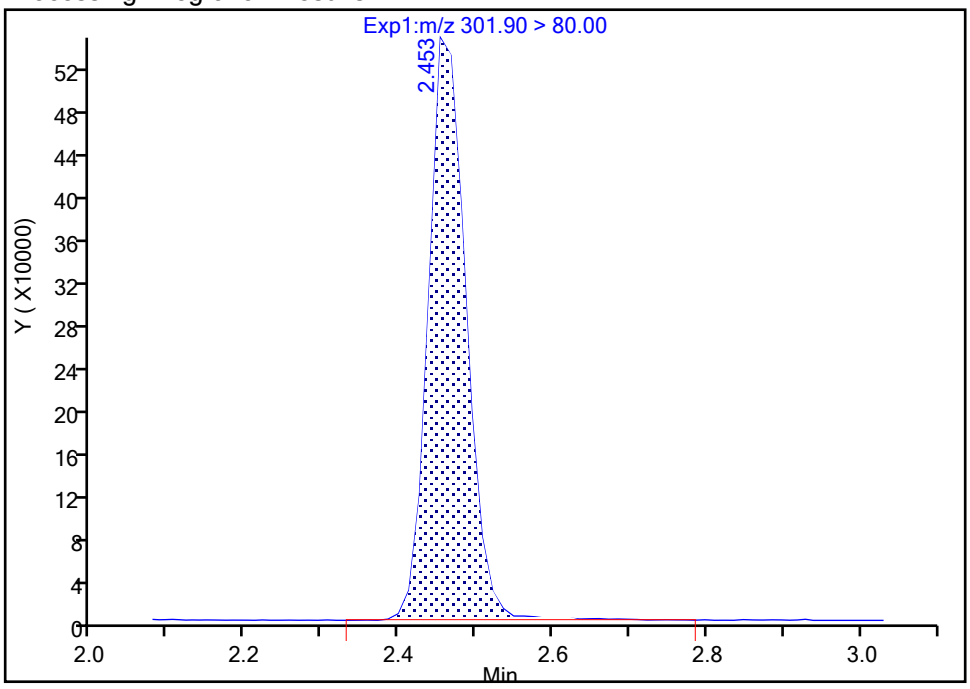
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

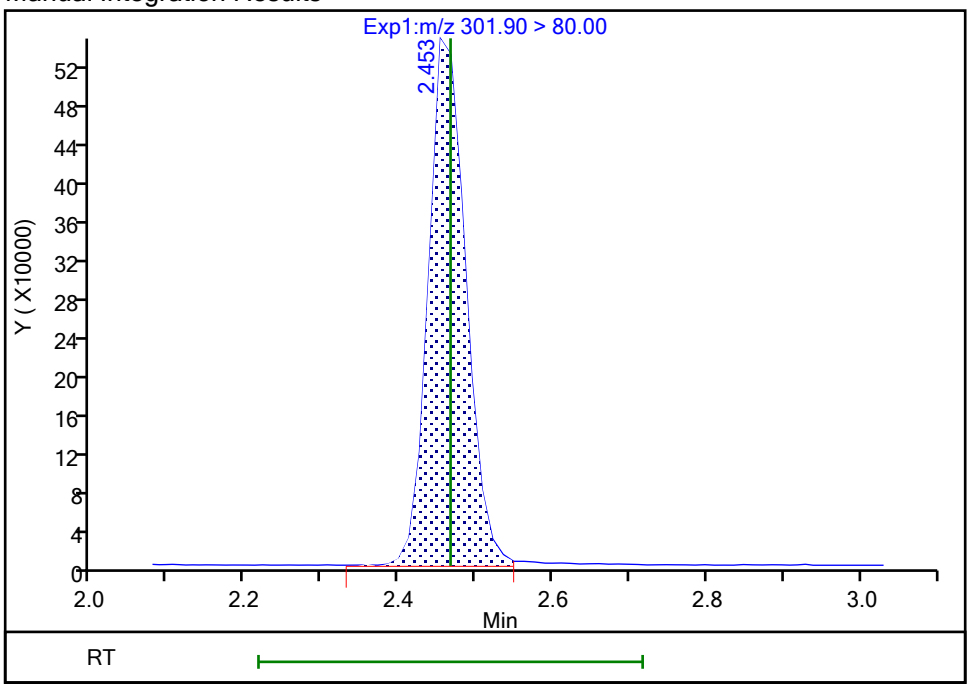
Processing Integration Results

RT: 2.45
Area: 1850978
Amount: 1.060186
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1831100
Amount: 1.048800
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

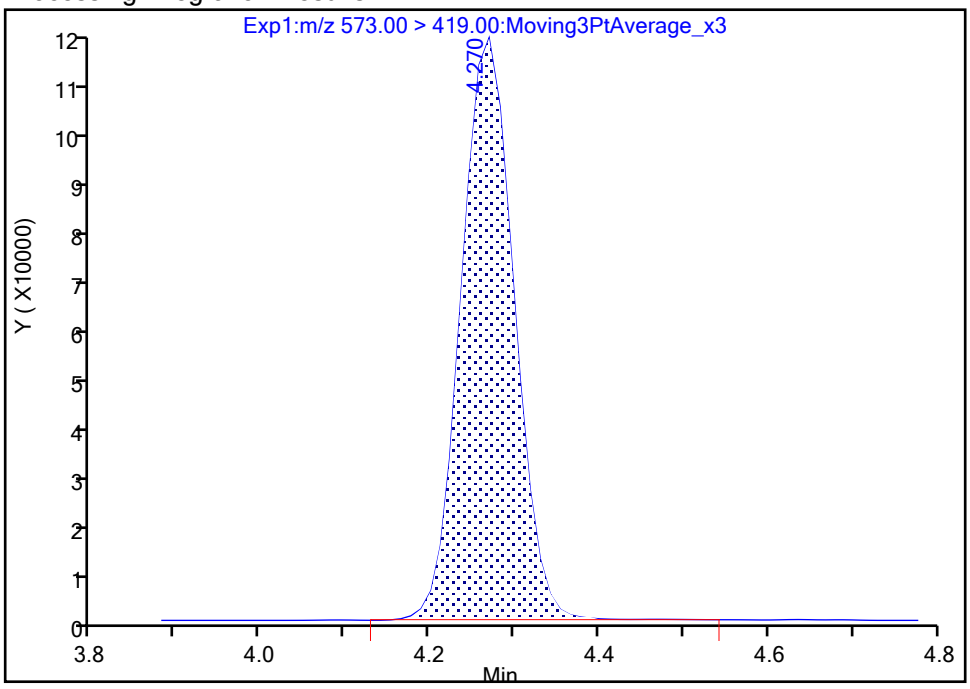
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

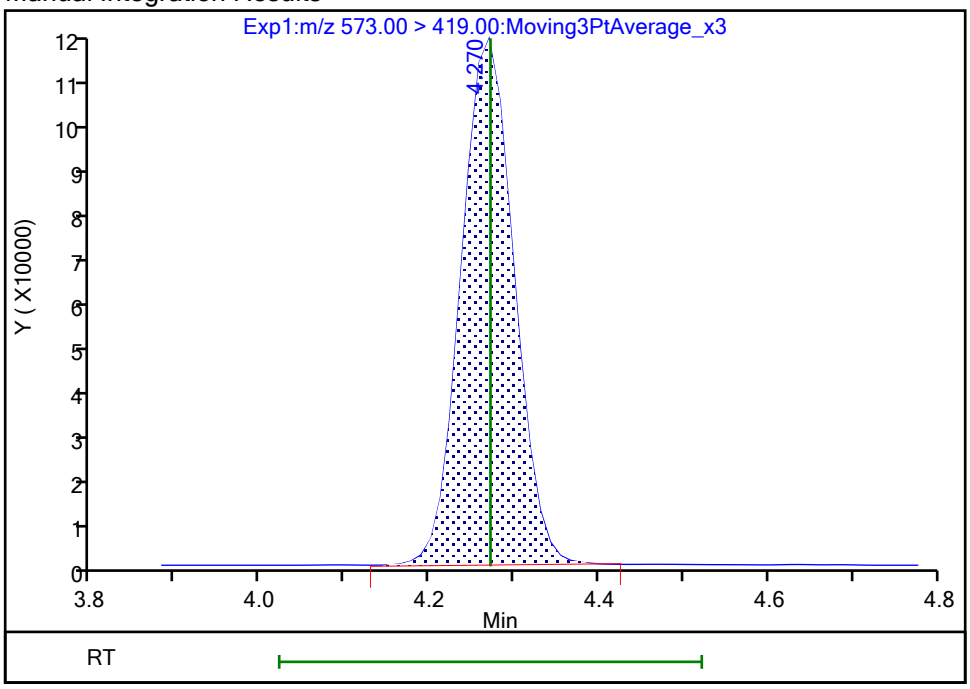
Processing Integration Results

RT: 4.27
Area: 503143
Amount: 1.132395
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 501762
Amount: 1.129287
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

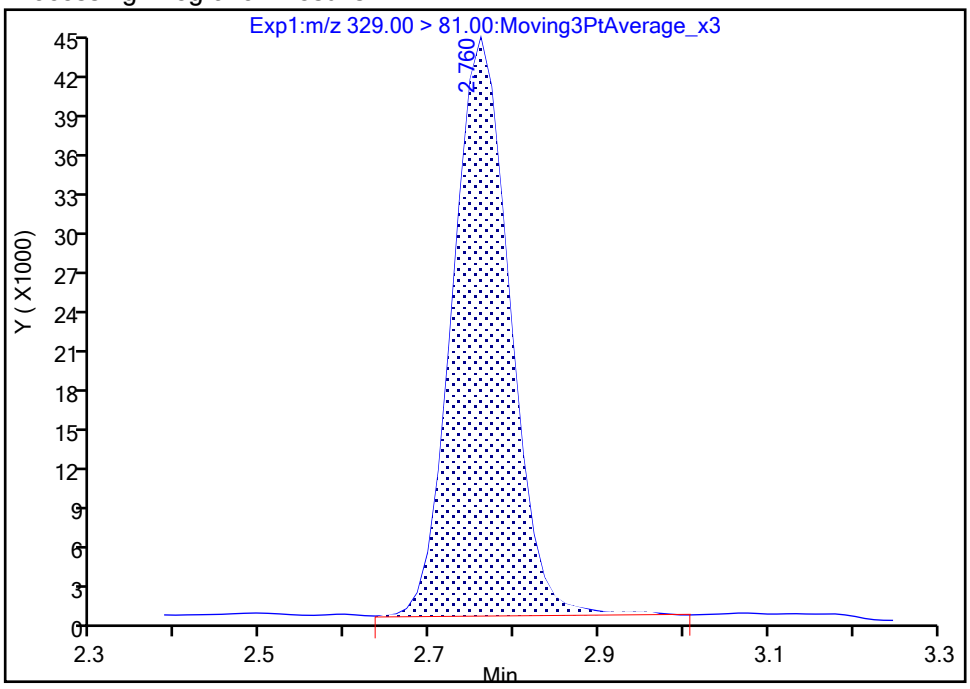
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C07.d				
Injection Date:	21-Oct-2023 01:06:27	Instrument ID:	LC812		
Lims ID:	460-290219-A-8-A	Lab Sample ID:	200-290219-8		
Client ID:	MW89-101223-1056-25				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

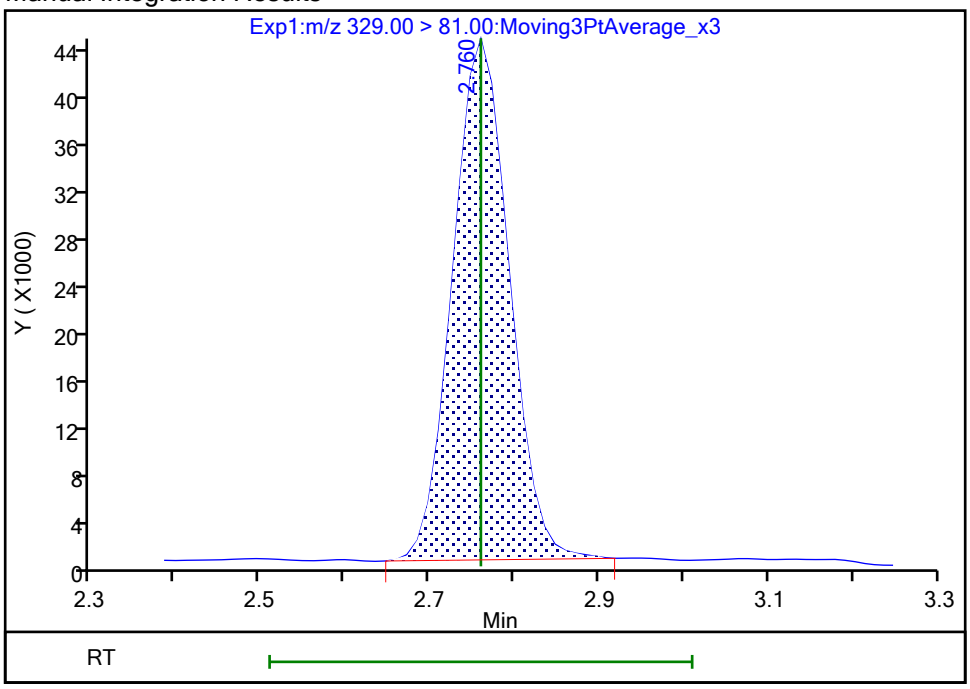
Processing Integration Results

RT: 2.76
Area: 206757
Amount: 1.024018
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 204233
Amount: 1.011517
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:44:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW17A-101223-1206-29 | Lab Sample ID: 460-290219-9

Matrix: Water | Lab File ID: PA231020C08.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 12:06

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 292.2(mL) | Date Analyzed: 10/21/2023 01:14

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	17.5		4.28	1.03
2706-90-3	Perfluoropentanoic acid	16.0		1.71	0.58
307-24-4	Perfluorohexanoic acid	18.7		1.71	0.56
375-85-9	Perfluoroheptanoic acid	9.22		1.71	0.46
335-67-1	Perfluorooctanoic acid	16.6		1.71	0.65
375-95-1	Perfluorononanoic acid	2.84		1.71	0.42
335-76-2	Perfluorodecanoic acid	1.74		1.71	0.39
2058-94-8	Perfluoroundecanoic acid	1.71	U	1.71	0.47
307-55-1	Perfluorododecanoic acid	1.71	U	1.71	0.42
72629-94-8	Perfluorotridecanoic acid	1.71	U	1.71	0.41
376-06-7	Perfluorotetradecanoic acid	1.71	U	1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	2.77		1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	0.85	J	1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	6.09		1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	0.94	J	1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	116		1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	1.71	U	1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	1.71	U	1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66
754-91-6	Perfluorooctanesulfonamide	1.71	U	1.71	0.79
2355-31-9	NMeFOSAA	4.28	U	4.28	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37
13252-13-6	HFPODA	1.37	J	3.42	0.94
919005-14-4	DONA	1.71	U	1.71	0.36
756426-58-1	9Cl-PF3ONS	1.71	U	1.71	0.27
763051-92-9	11Cl-PF3OUdS	1.71	U	1.71	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW17A-101223-1206-29 Lab Sample ID: 460-290219-9

Matrix: Water Lab File ID: PA231020C08.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 12:06

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 292.2(mL) Date Analyzed: 10/21/2023 01:14

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	70		50-150
STL01893	13C5 PFPeA	80		50-150
STL01892	13C4 PFHpA	91		50-150
STL02116	13C2 PFTeDA	90		50-150
STL02337	13C3 PFBS	83		50-150
STL01056	13C8 FOSA	82		50-150
STL02118	d3-NMeFOSAA	93		50-150
STL02117	d5-NEtFOSAA	93		50-150
STL02395	M2-4:2 FTS	109		50-150
STL02279	M2-6:2 FTS	100		50-150
STL02280	M2-8:2 FTS	92		50-150
STL02255	13C3 HFPO-DA	88		50-150
STL00994	18O2 PFHxS	85		50-150
STL00993	13C2 PFHxA	87		50-150
STL00991	13C4 PFOS	93		50-150
STL00998	13C2 PFDoA	98		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	99		50-150
STL00997	13C2 PFUnA	97		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d
Lims ID: 460-290219-A-9-A
Client ID: MW17A-101223-1206-29
Sample Type: Client
Inject. Date: 21-Oct-2023 01:14:36 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-9-A
Misc. Info.: 200-0057493-008 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:54:27
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	1377205	0.8776		70.2	1439	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.130	-0.008	1.000	550986	0.5122			35.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1223480	1.00		80.4	344	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	493074	0.4668			2.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.698	1586939	0.9630		82.8	24143	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.453	2.467	-0.014	1.000	123298	0.0809	Target=2.06		2.8	M
298.90 > 99.00	2.453	2.467	-0.014	1.000	57077		2.16(1.03-3.09)		3.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.722	2.760	-0.038	0.986	1634	0.002322			1.6	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	241949	1.27		109	4.7	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.785	2.798	-0.013	0.793	1351545	1.09		87.3	2959	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.004	650669	0.5468	Target=14.12		4.9	M
313.00 > 119.00	2.785	2.798	-0.013	1.000	47097		13.82(7.06-21.17)		14.0	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.887	32435	0.0248	Target=2.72		1.9	M
349.00 > 99.00	2.785	2.798	-0.013	0.883	13571		2.39(1.36-4.09)		2.0	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.908	-0.011	1.000	8424	0.0400			78.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.908	-0.011	0.825	262997	1.10		87.7	2225	
D 11 18O2 PFHxS										
403.00 > 84.00	3.154	3.157	-0.003	0.898	1183202	1.00		84.7	5556	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.154	3.157	-0.003	1.000	197189	0.1780	Target=3.32		21.6	M
399.00 > 99.00	3.154	3.157	-0.003	1.000	64624		3.05(1.66-4.98)		20.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.154	3.169	-0.015	1.000	375415	0.2695	Target=4.17		7.0	M
363.00 > 169.00	3.154	3.169	-0.015	1.000	88653		4.23(2.09-6.26)		71.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.154	3.169	-0.015	0.898	1553316	1.14		91.4	5005	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.494	3.506	-0.012	0.915	27889	0.0276	Target=4.83		4.1	M
449.00 > 99.00	3.494	3.506	-0.012	0.915	6861		4.06(2.41-7.24)		3.5	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.503	3.506	-0.003	0.997	290624	1.18		99.7	47.8	M
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.494	3.506	-0.012	0.997	748	0.001118			1.6	
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.515	-0.003	1.000	1913886	1.24		99.4	3713	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.515	-0.003		1978187	1.25			4156	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.515	-0.003	1.000	788847	0.4837	Target=2.88		13.5	M
413.00 > 169.00	3.512	3.515	-0.003	1.000	282788		2.79(1.44-4.32)		255	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.823	-0.003	1.000	2766208	3.39	Target=4.24		808	M
499.00 > 99.00	3.809	3.823	-0.014	0.997	743197		3.72(2.12-6.37)		660	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.823	-0.003	1.088	835141	1.11		93.1	296	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.832	3.846	-0.014	1.000	129355	0.0829	Target=8.34		5.8	M
463.00 > 169.00	3.832	3.846	-0.014	1.000	16315		7.93(4.17-12.51)		39.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.832	3.846	-0.014	1.091	1989794	1.19		95.0	3817	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.991	3.975	0.016	1.045	1246	0.000500			1.5	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.127	4.130	-0.003	1.000	86033	0.0509	Target=11.44		9.2	M
513.00 > 169.00	4.139	4.130	0.009	1.003	8425		10.21(5.72-17.16)		26.5	M
D 23 13C2 PFDA										
515.00 > 470.00	4.127	4.130	-0.003	1.175	2116151	1.21		96.5	7966	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.139	4.142	-0.003	1.179	303461	1.10		91.8	216	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.127	4.142	-0.015	0.997	529	0.000948			8.3	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.235	-0.003	1.205	1532803	1.02		81.9	5280	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.235	-0.003	1.000	14926	0.0128			10.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.271	-0.003	1.215	487237	1.16		92.9	1223	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.271	-0.003	1.000	2086	0.005898			5.9	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.352	4.356	-0.004	1.139	1177	0.002466	Target=2.37		1.9	M
599.00 > 99.00	4.341	4.356	-0.015	1.136	645		1.82(1.19-3.56)		6.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.376	4.380	-0.004	1.246	2000561	1.21		96.6	9510	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.376	4.391	-0.015	1.000	20789	0.0126	Target=12.20		3.7	M
563.00 > 169.00	4.376	4.391	-0.015	1.000	1558		13.34(6.10-18.31)		7.7	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.391	-0.003	1.250	471149	1.17		93.3	830	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.388	4.403	-0.015	1.000	4409	0.0117			8.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.602	4.604	-0.002	1.310	2057384	1.22		97.8	6296	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.971	4.983	-0.012	1.416	1893194	1.13		90.3	6585	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.971	4.983	-0.012	1.000	329	0.001943	Target=0.87		3.9	M
713.00 > 219.00	4.971	4.983	-0.012	1.000	326		1.01(0.43-1.30)		5.8	M

QC Flag Legend

Processing Flags

Review Flags

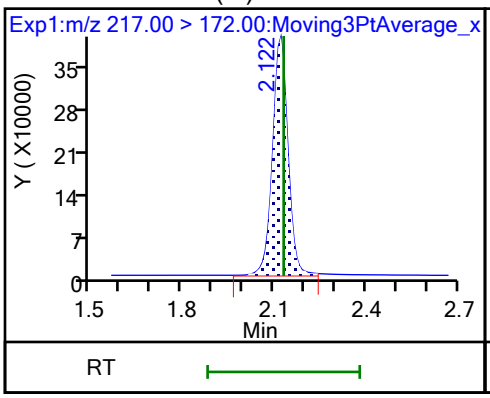
M - Manually Integrated

Report Date: 25-Oct-2023 08:40:00 Chrom Revision: 2.3 18-Oct-2023 21:16:54

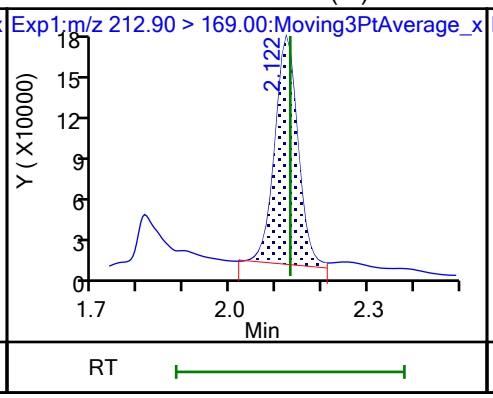
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d
Injection Date: 21-Oct-2023 01:14:36 Instrument ID: LC812
Lims ID: 460-290219-A-9-A Lab Sample ID: 200-290219-9
Client ID: MW17A-101223-1206-29
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

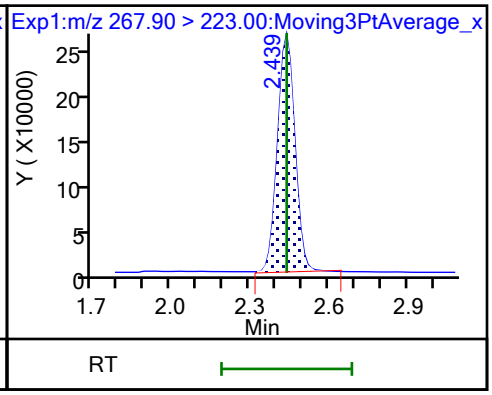
D 1 13C4 PFBA (M)



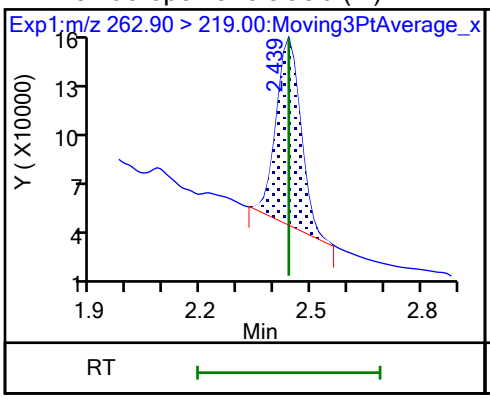
2 Perfluorobutanoic acid (M)



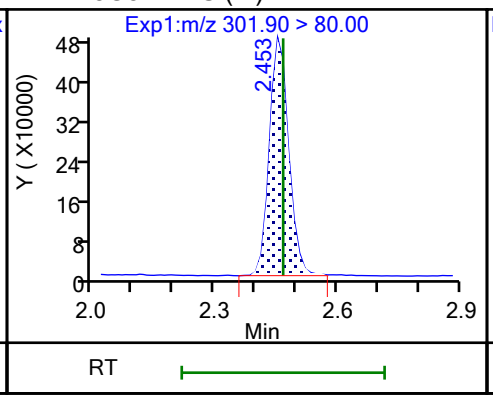
D 3 13C5 PFPeA



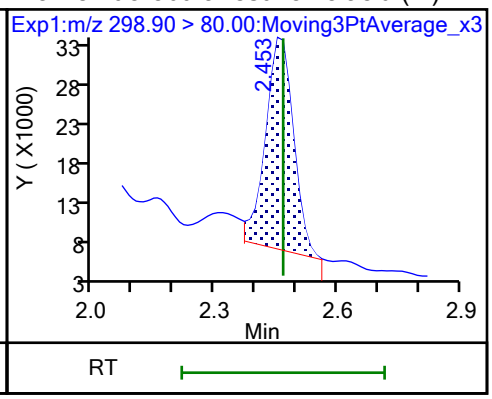
4 Perfluoropentanoic acid (M)



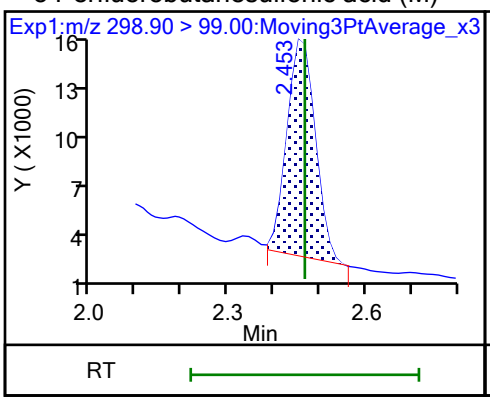
D 47 13C3 PFBS (M)



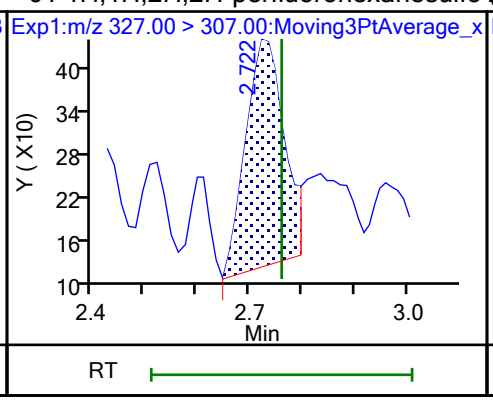
5 Perfluorobutanesulfonic acid (M)



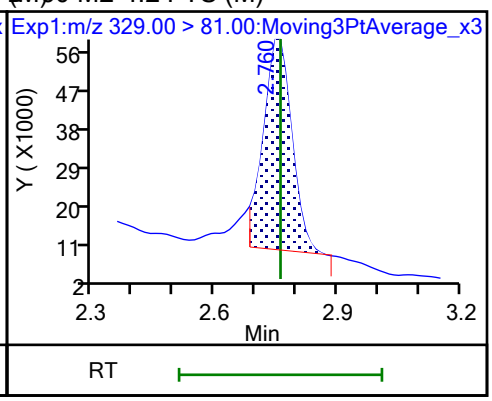
5 Perfluorobutanesulfonic acid (M)



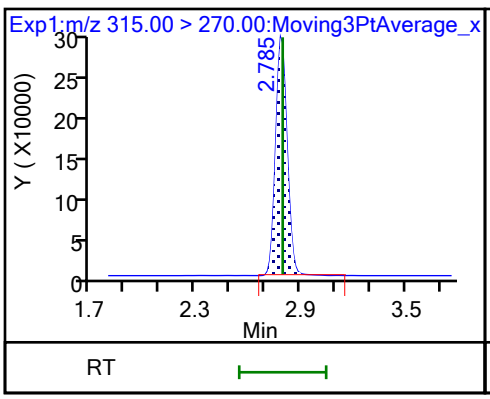
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



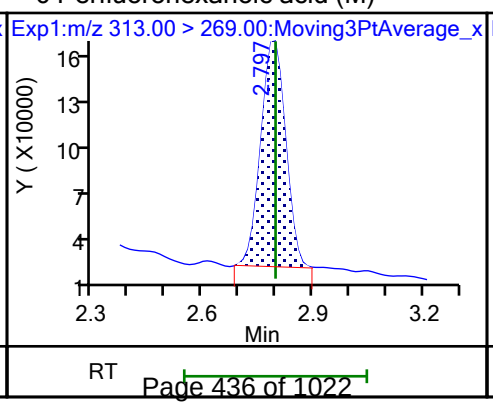
60 M2-4:2 FTS (M)



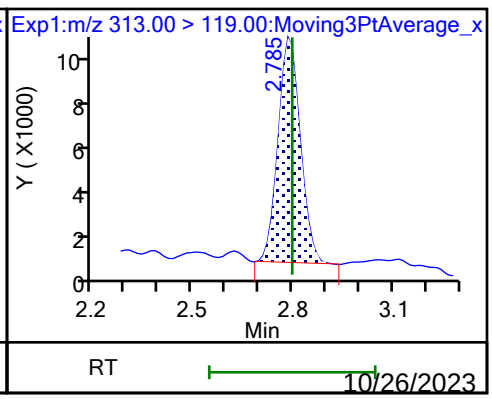
D 7 13C2 PFHxA



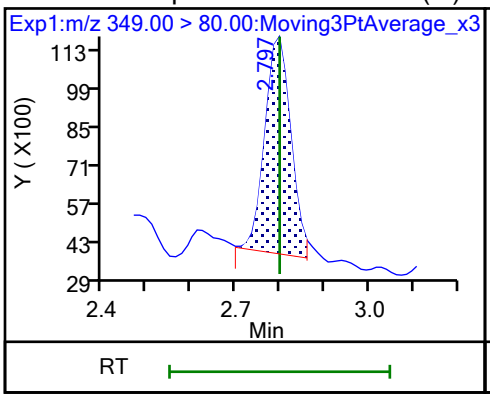
6 Perfluorohexanoic acid (M)



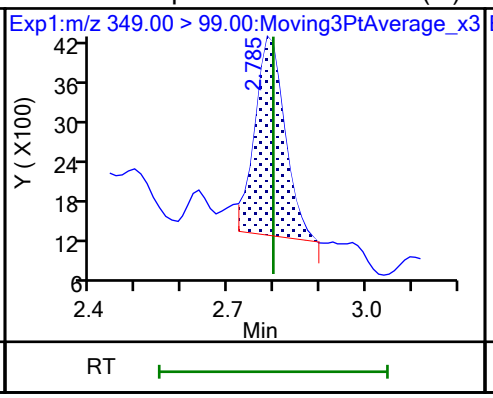
6 Perfluorohexanoic acid



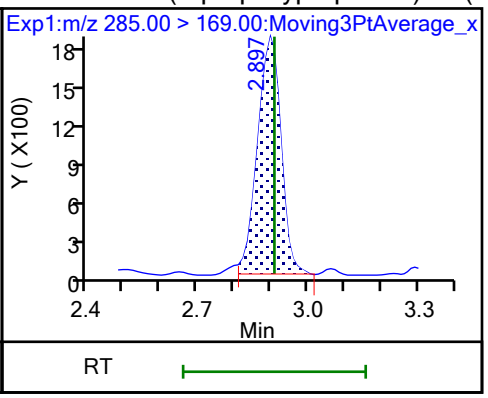
70 Perfluoropentanesulfonic acid (M)



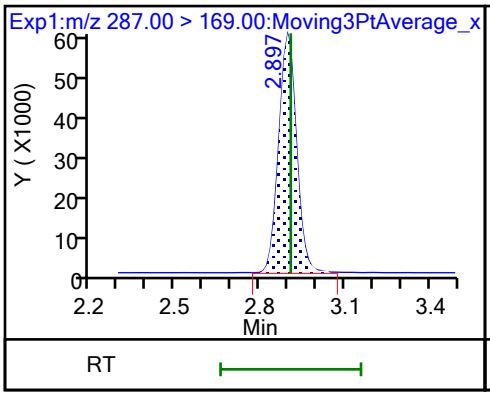
70 Perfluoropentanesulfonic acid (M)



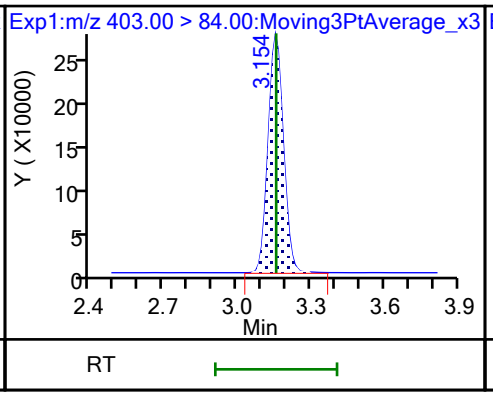
67 Perfluoro(2-propoxypropanoic) ac (M)



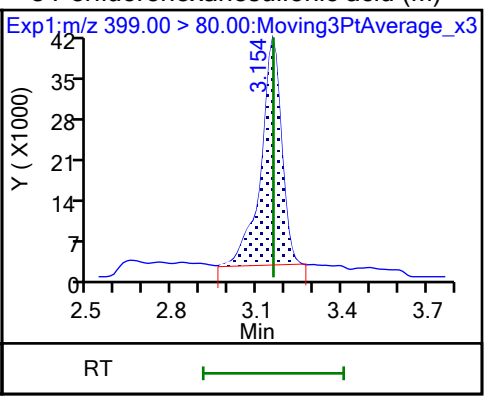
D 64 13C3 HFPO-DA



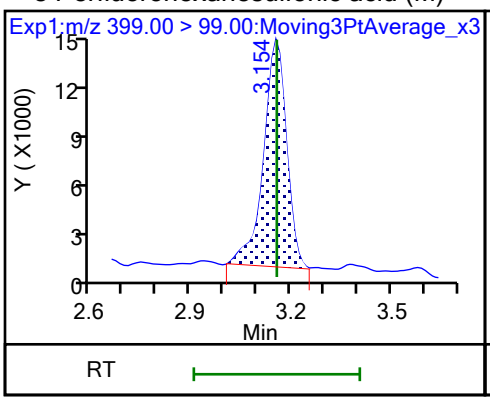
D 11 18O2 PFHxS



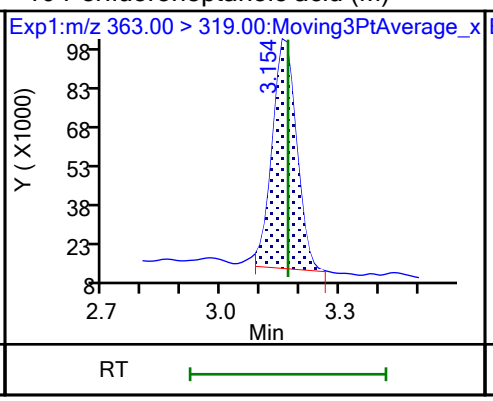
8 Perfluorohexanesulfonic acid (M)



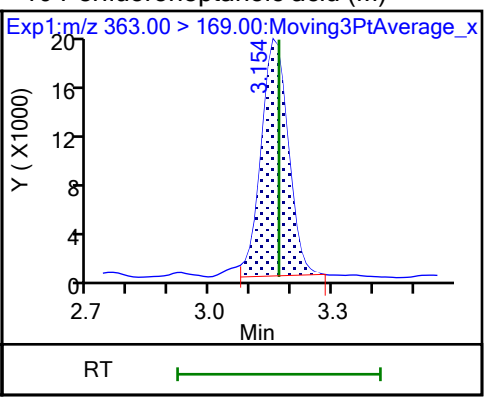
8 Perfluorohexanesulfonic acid (M)



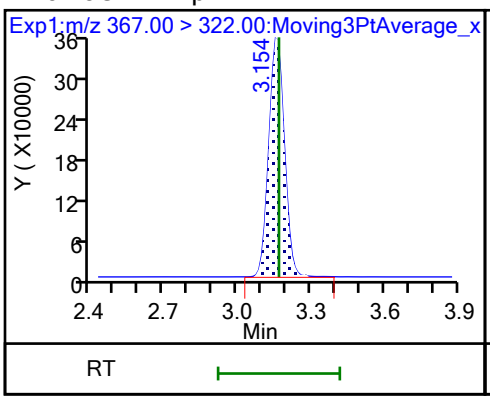
10 Perfluoroheptanoic acid (M)



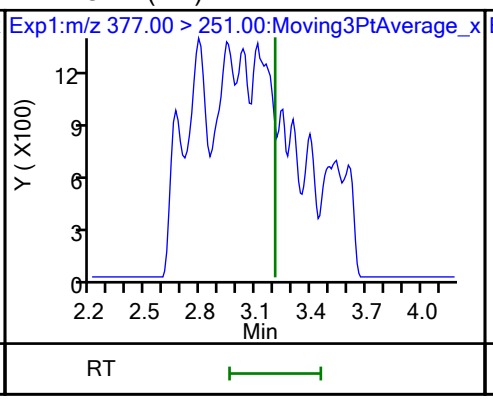
10 Perfluoroheptanoic acid (M)



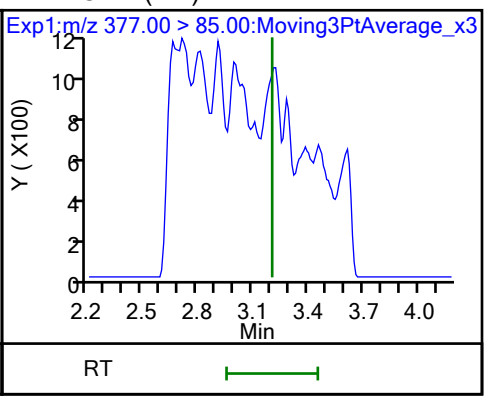
D 9 13C4 PFHpA



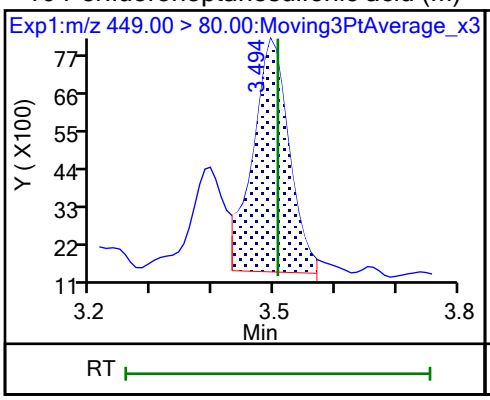
77 DONA (ND)



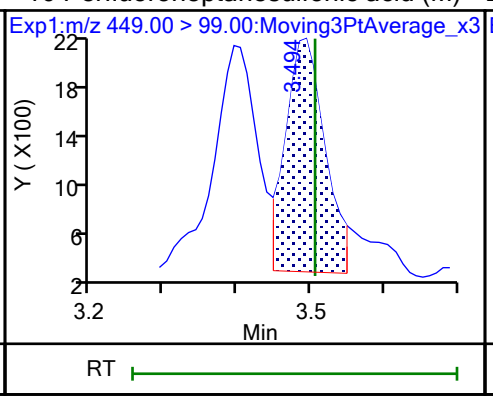
77 DONA (ND)



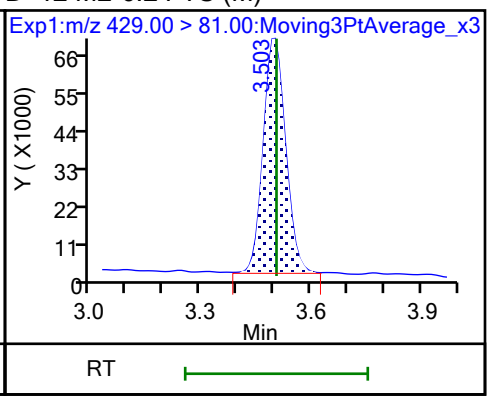
16 Perfluoroheptanesulfonic acid (M)



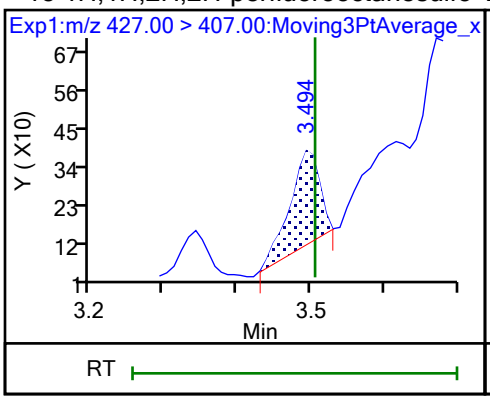
16 Perfluoroheptanesulfonic acid (M)



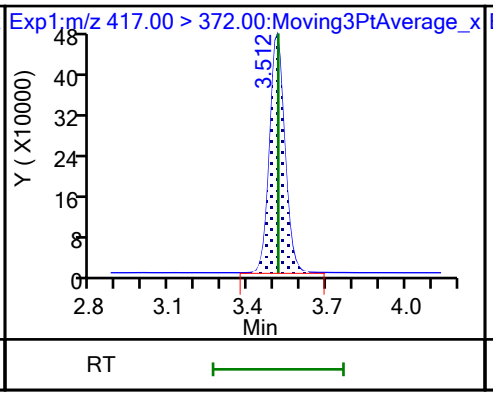
D 12 M2-6:2 FTS (M)



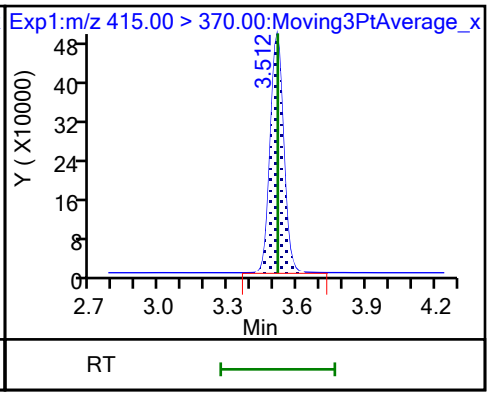
13 1H,1H,2H,2H-perfluorooctanesulfo



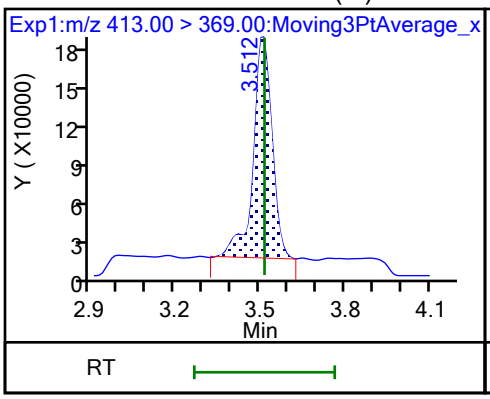
D 14 13C4 PFOA



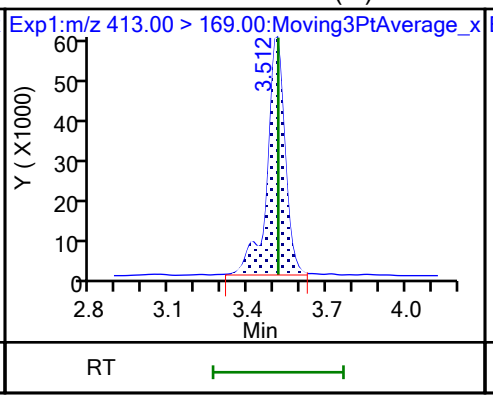
* 62 13C2 PFOA



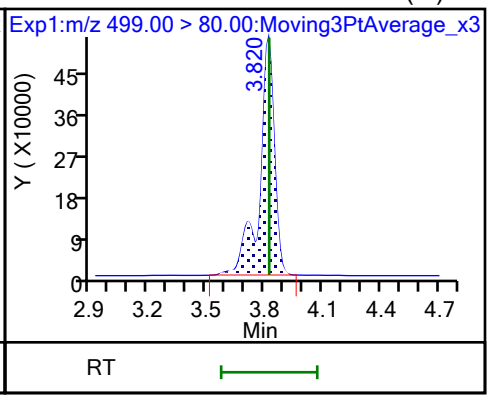
15 Perfluorooctanoic acid (M)



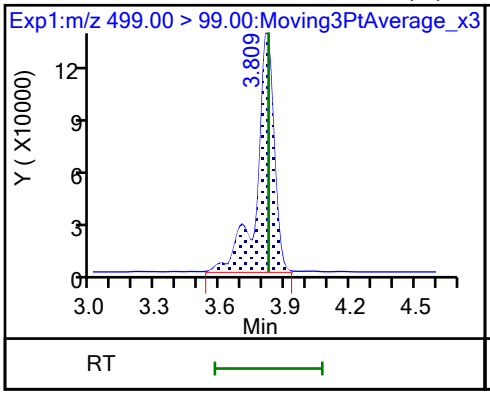
15 Perfluorooctanoic acid (M)



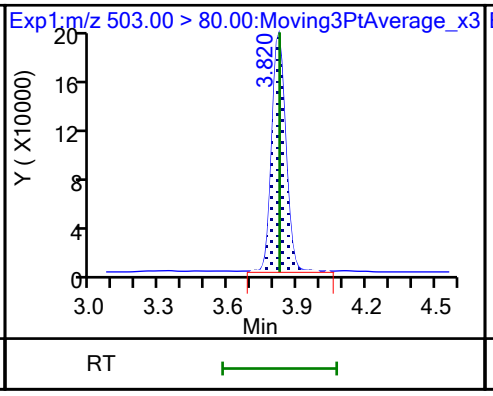
17 Perfluorooctanesulfonic acid (M)



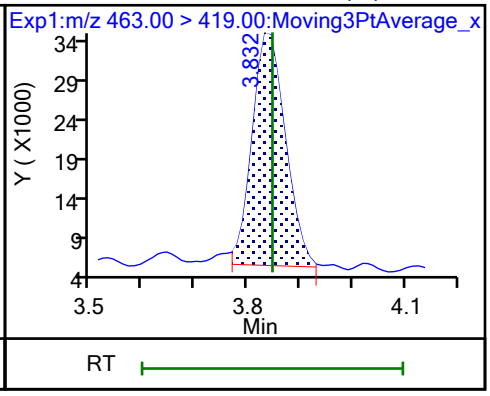
17 Perfluorooctanesulfonic acid (M)



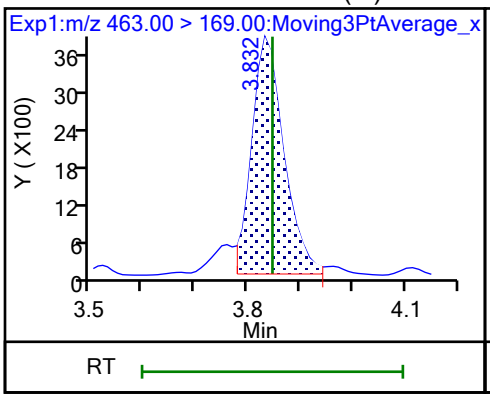
D 18 13C4 PFOS



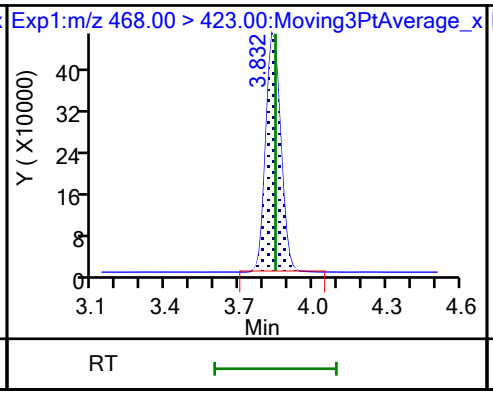
20 Perfluorononanoic acid (M)



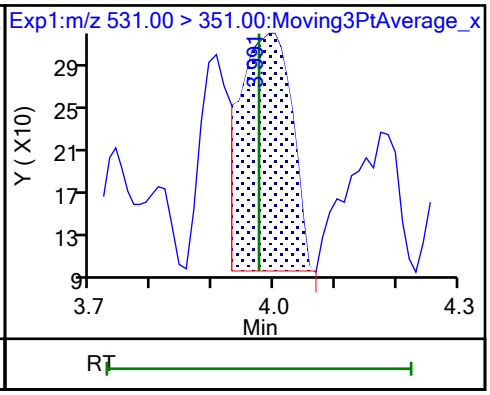
20 Perfluorononanoic acid (M)



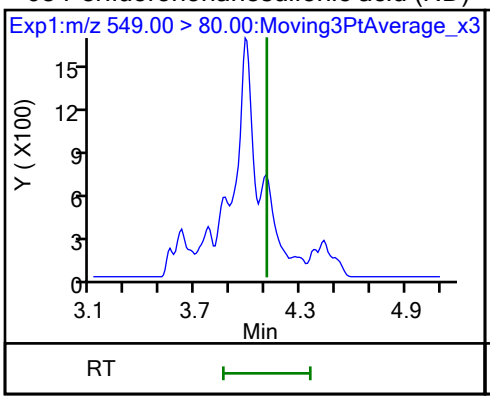
D 19 13C5 PFNA



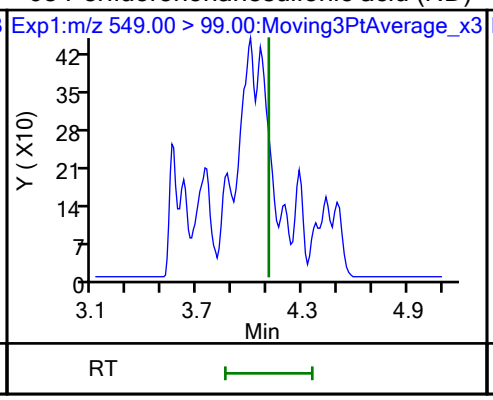
69 9-Chlorohexadecafluoro-3-oxanona (M)



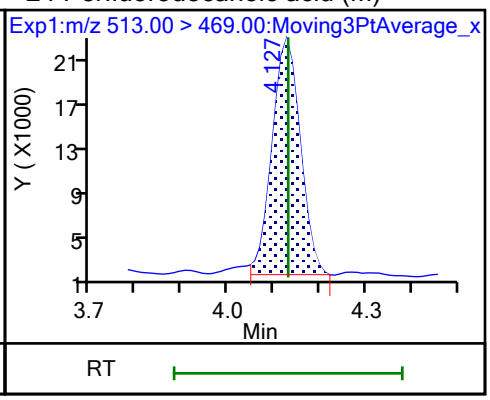
68 Perfluorononanesulfonic acid (ND)



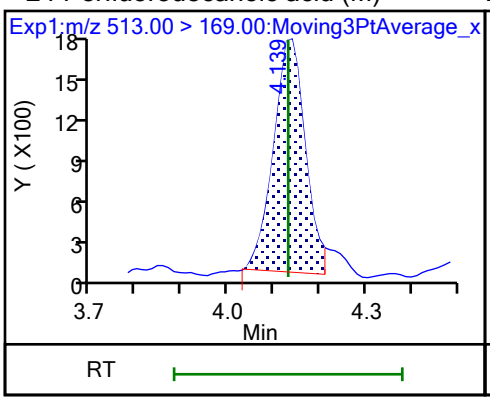
68 Perfluorononanesulfonic acid (ND)



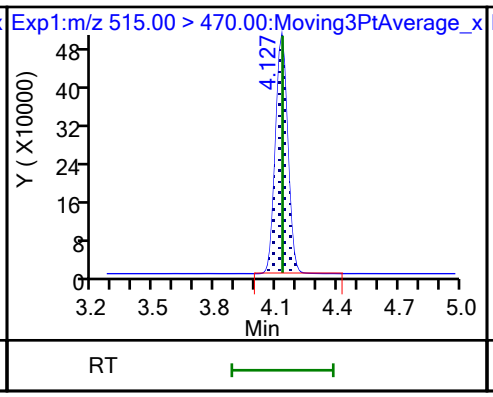
24 Perfluorodecanoic acid (M)



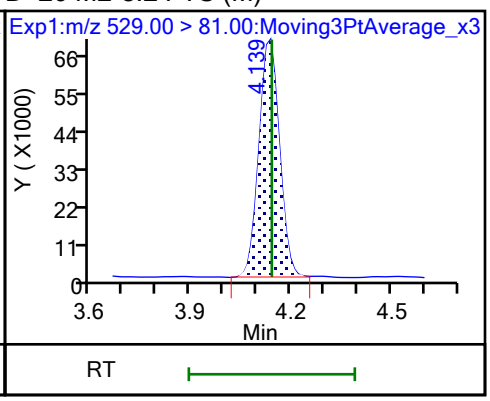
24 Perfluorodecanoic acid (M)



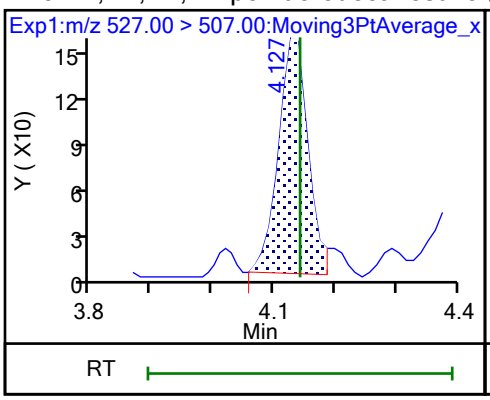
D 23 13C2 PFDA



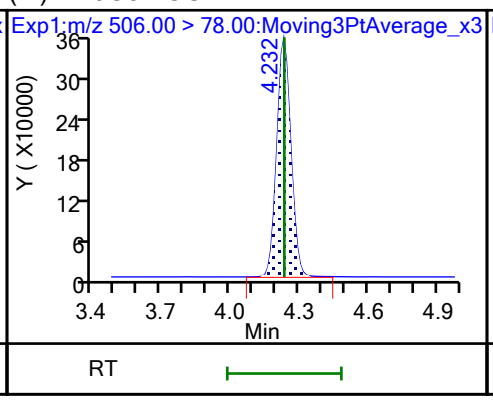
D 26 M2-8:2 FTS (M)



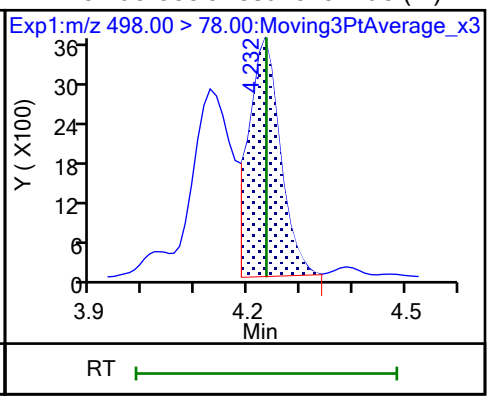
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



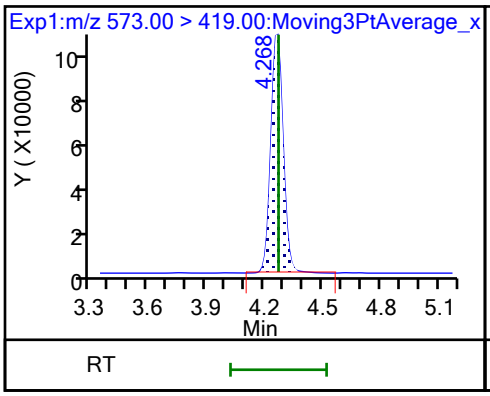
D 21 13C8 FOSA



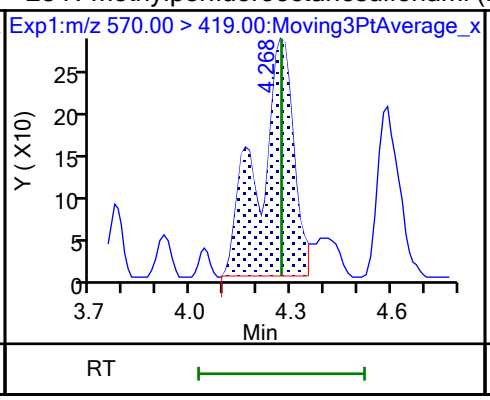
22 Perfluorooctanesulfonamide (M)



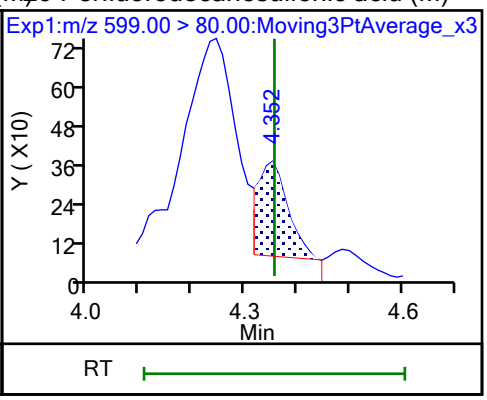
D 27 d3-NMeFOSAA



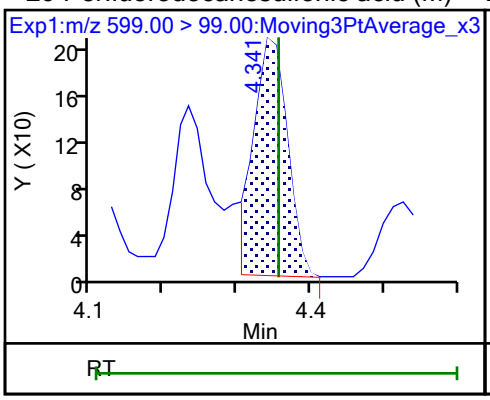
28 N-methylperfluorooctanesulfonami (M)



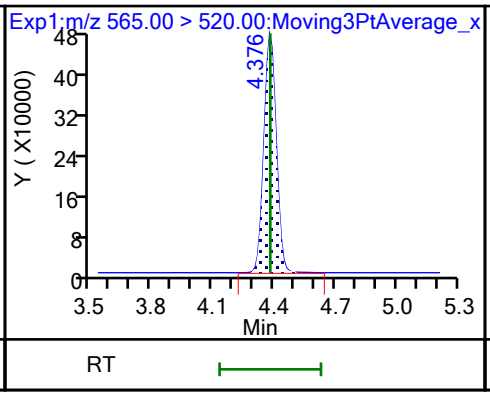
29 Perfluorodecanesulfonic acid (M)



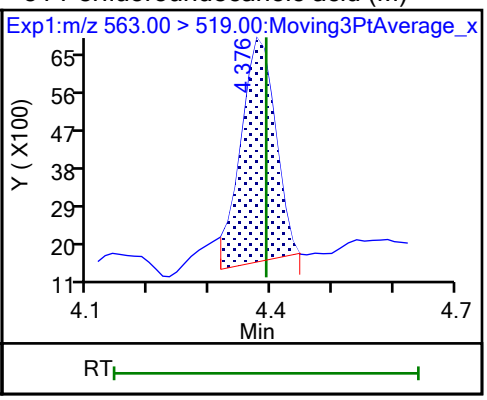
29 Perfluorodecanesulfonic acid (M)



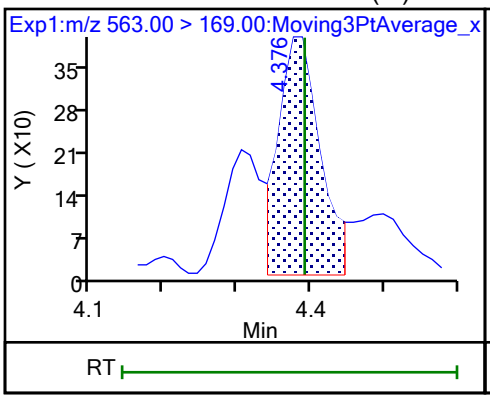
D 30 13C2 PFUnA



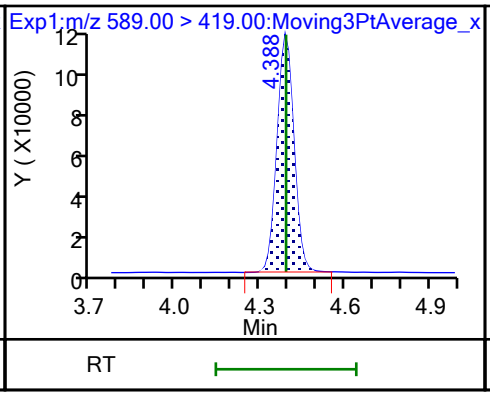
31 Perfluoroundecanoic acid (M)



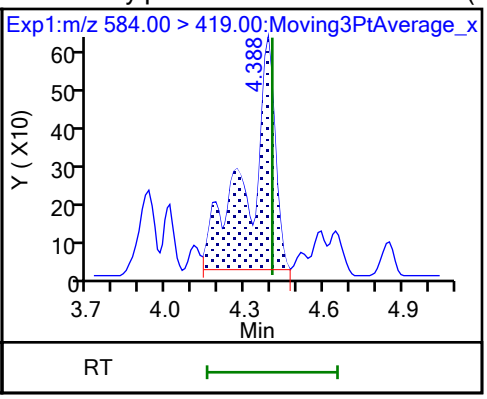
31 Perfluoroundecanoic acid (M)



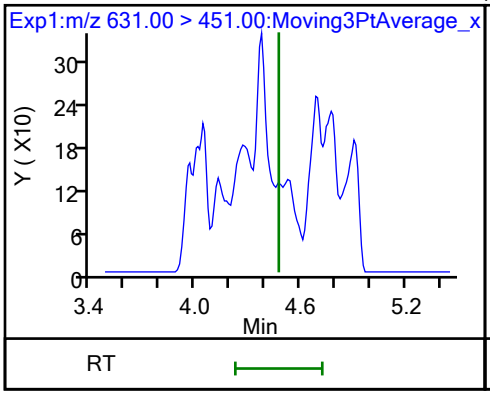
D 32 d5-NEtFOSAA



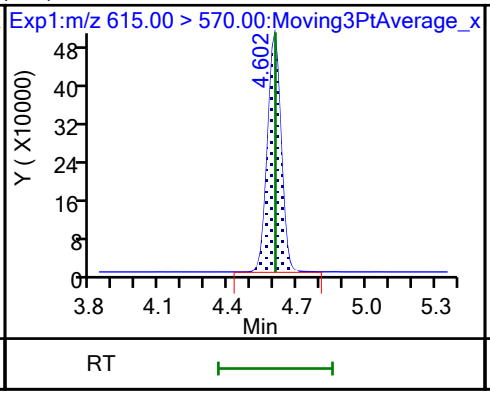
33 N-ethylperfluorooctanesulfonamid (M)



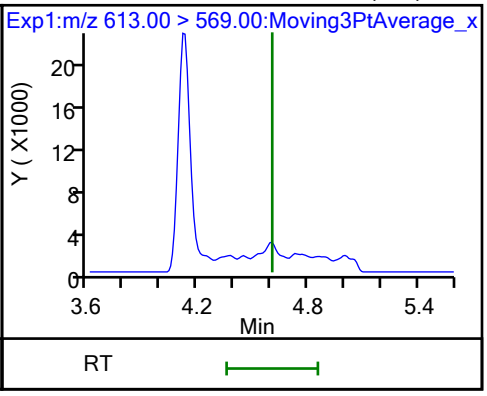
66 11-Chloroeicosafluoro-3-oxaundec (ND)



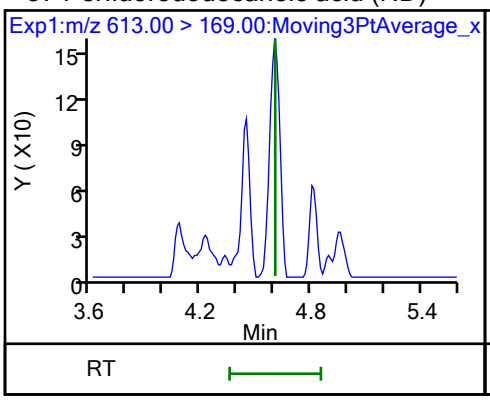
D 36 13C2 PFDoA



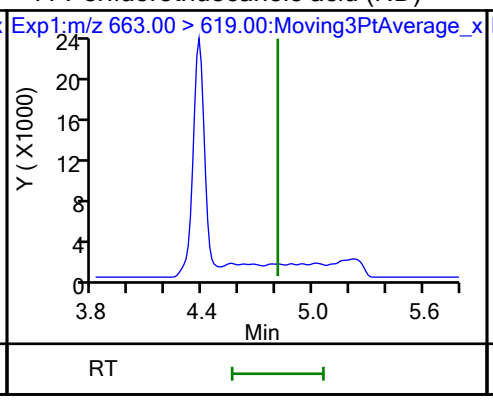
37 Perfluorododecanoic acid (ND)



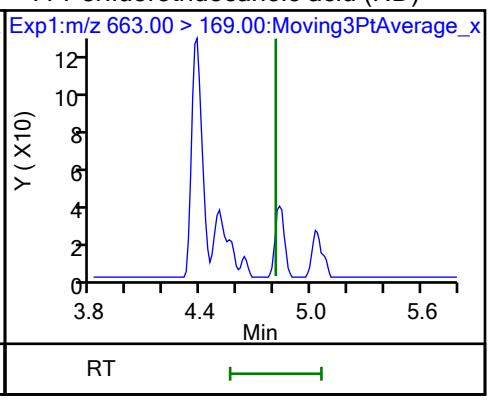
37 Perfluorododecanoic acid (ND)



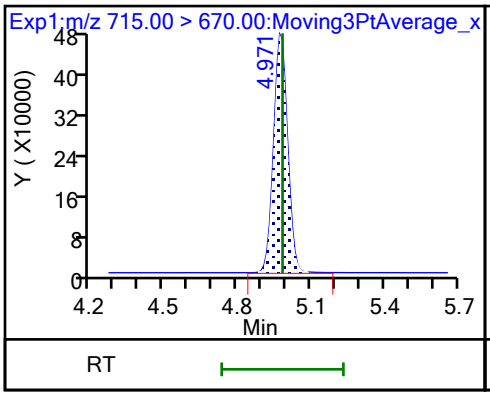
41 Perfluorotridecanoic acid (ND)



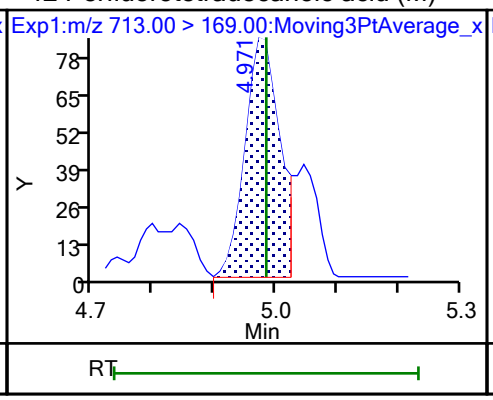
41 Perfluorotridecanoic acid (ND)



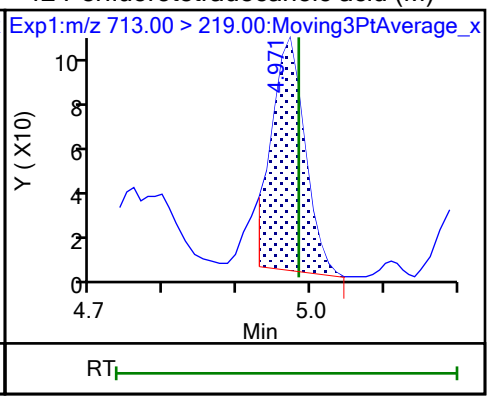
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

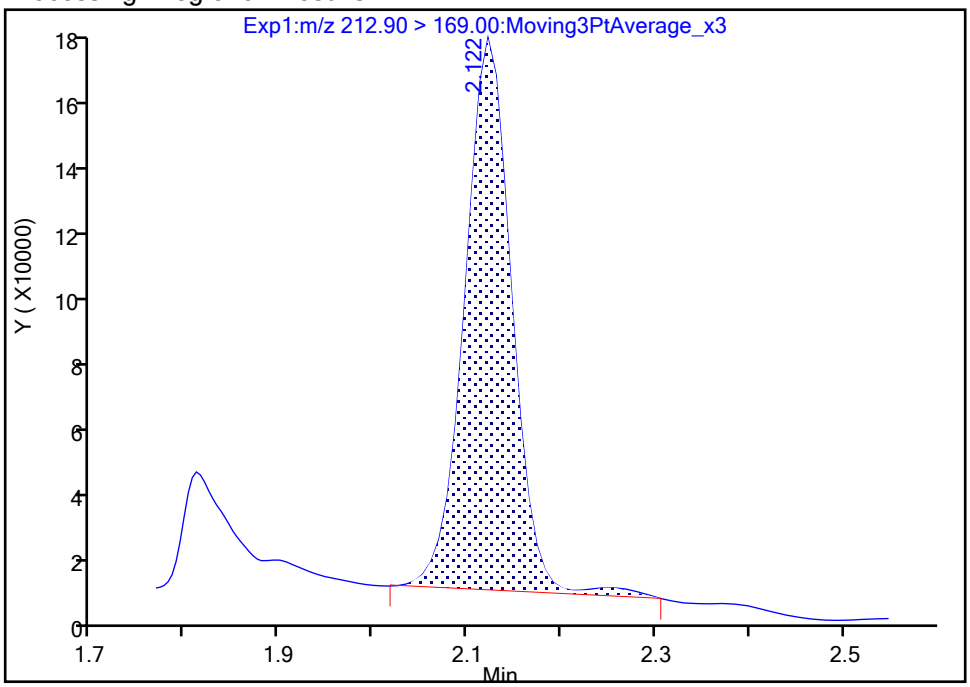
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

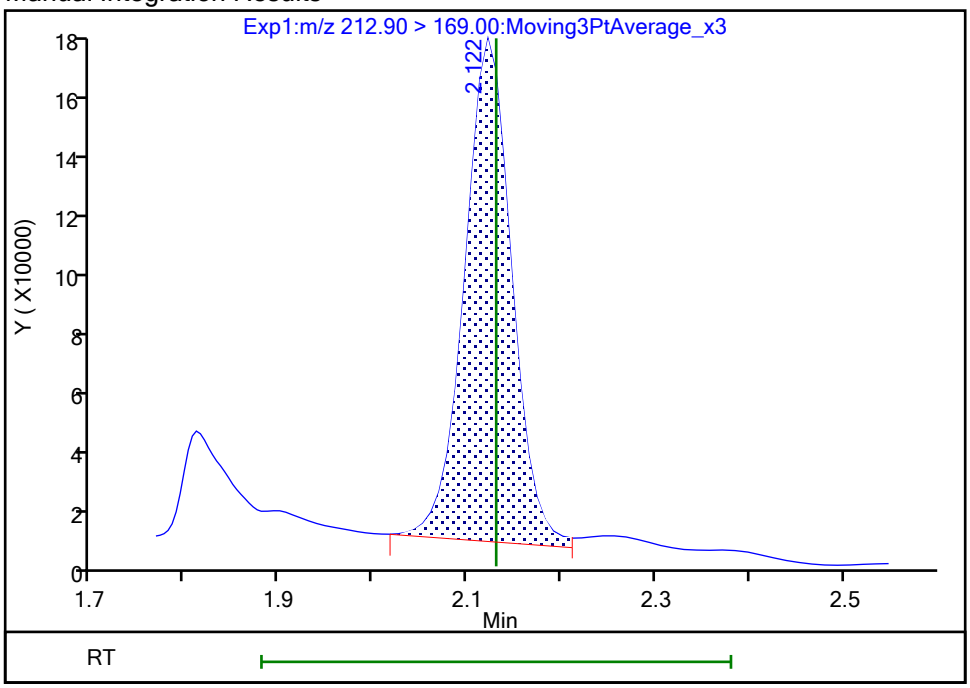
Processing Integration Results

RT: 2.12
Area: 550297
Amount: 0.511463
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 550986
Amount: 0.512154
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:27:14 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

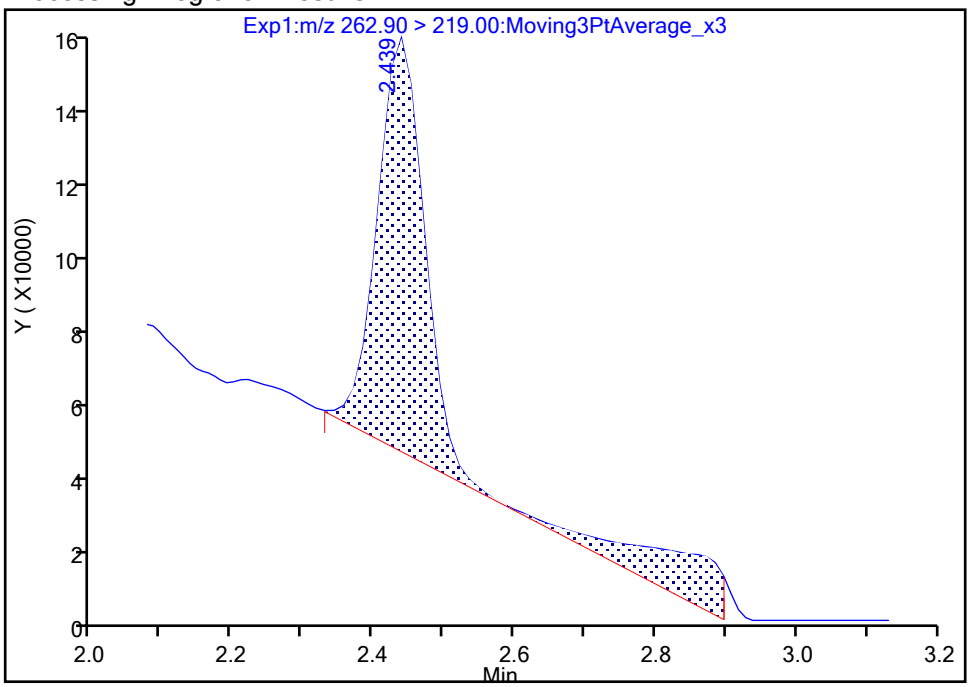
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

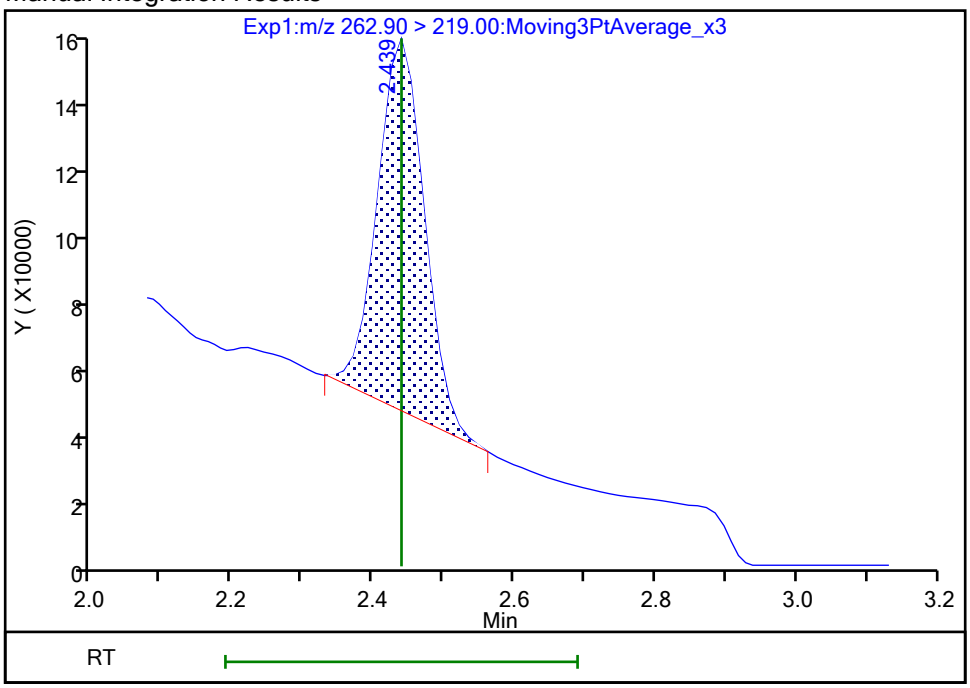
Processing Integration Results

RT: 2.44
Area: 611457
Amount: 0.578902
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 493074
Amount: 0.466822
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

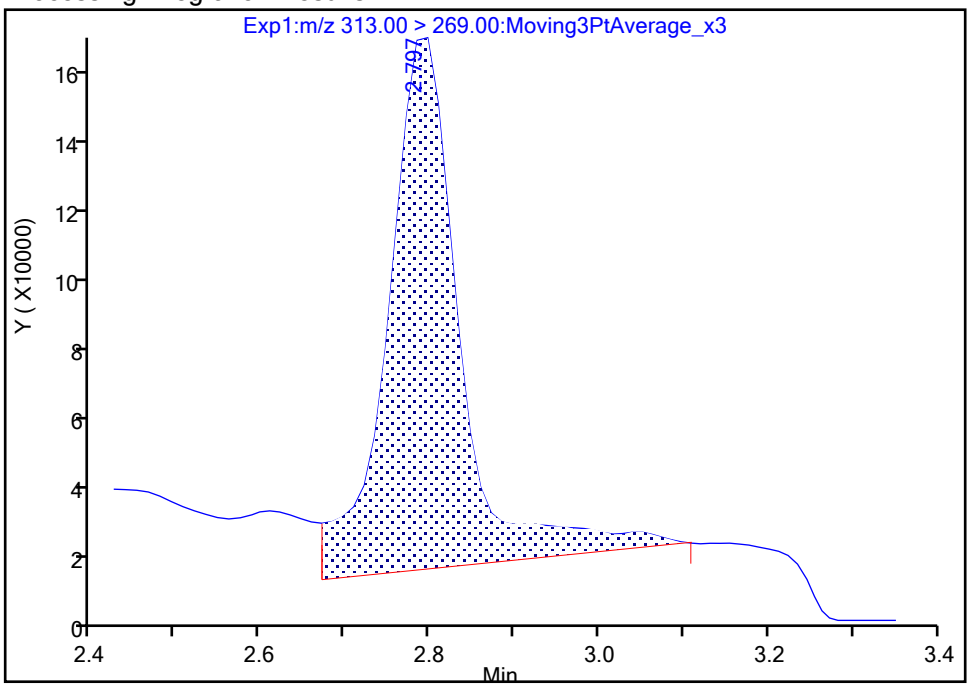
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

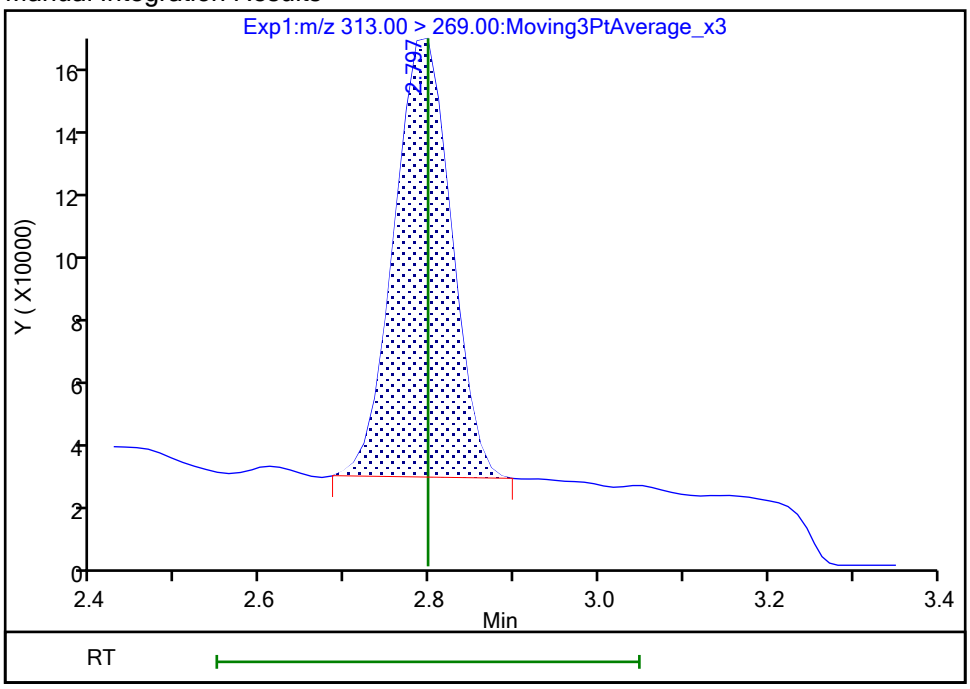
Processing Integration Results

RT: 2.80
Area: 909782
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 650669
Amount: 0.546849
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

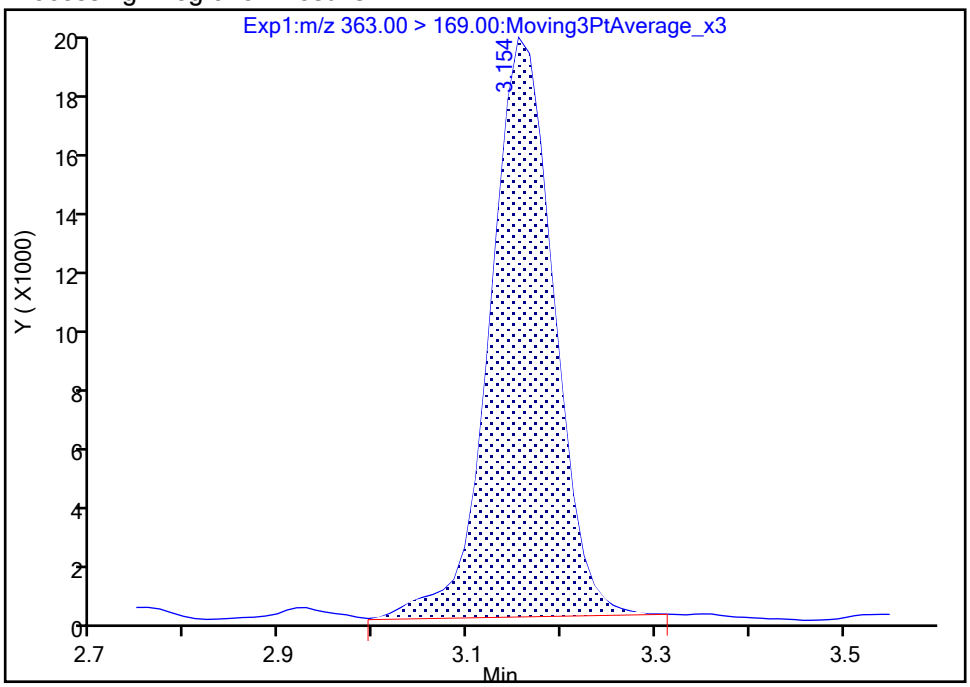
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

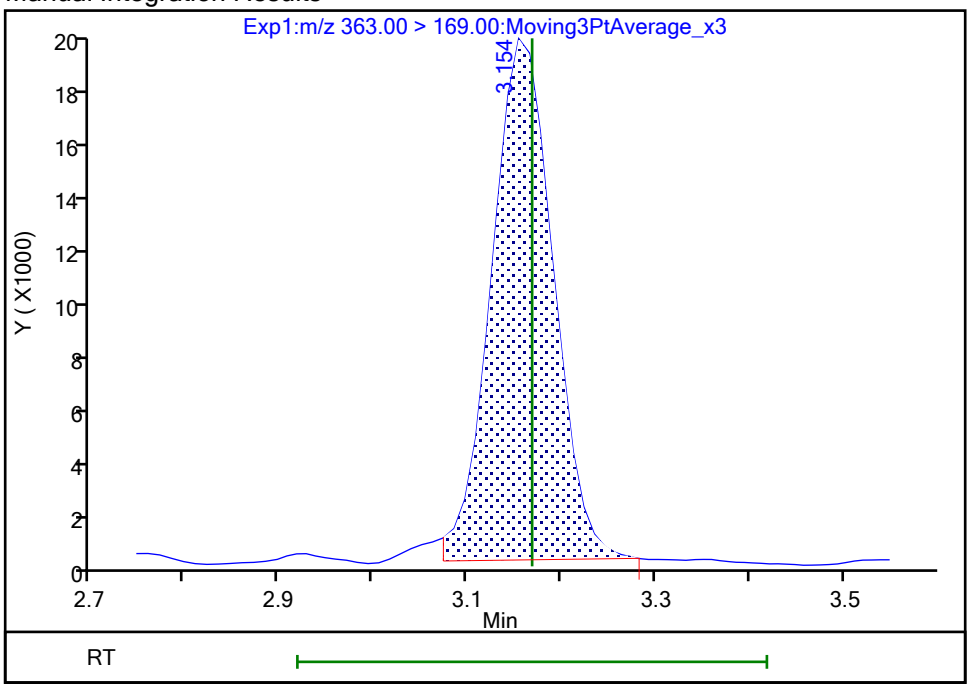
Processing Integration Results

RT: 3.15
Area: 91243
Amount: 0.317252
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 88653
Amount: 0.269526
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

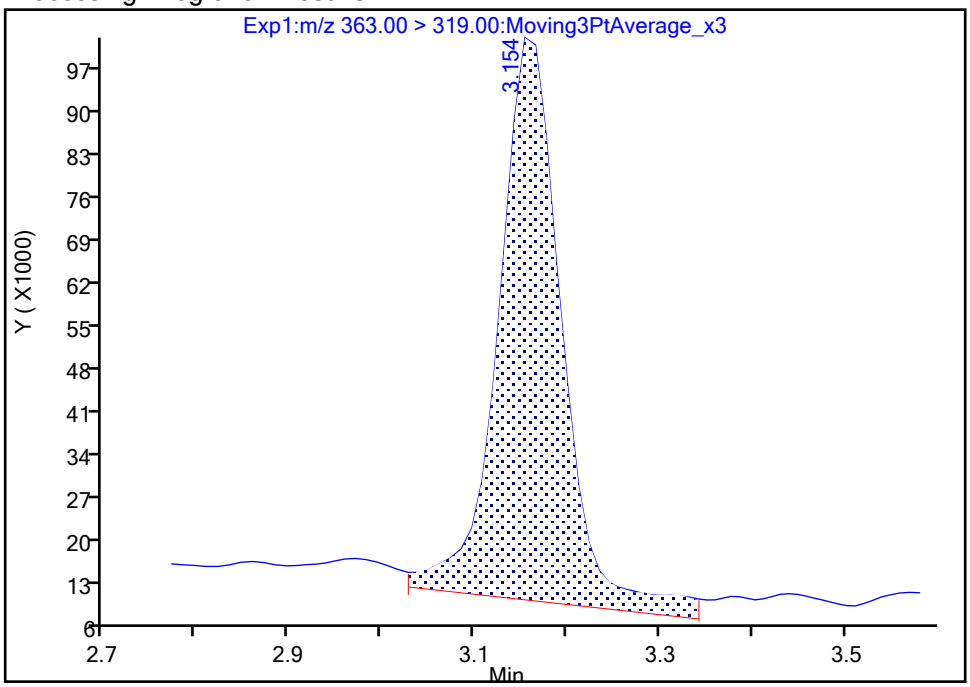
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

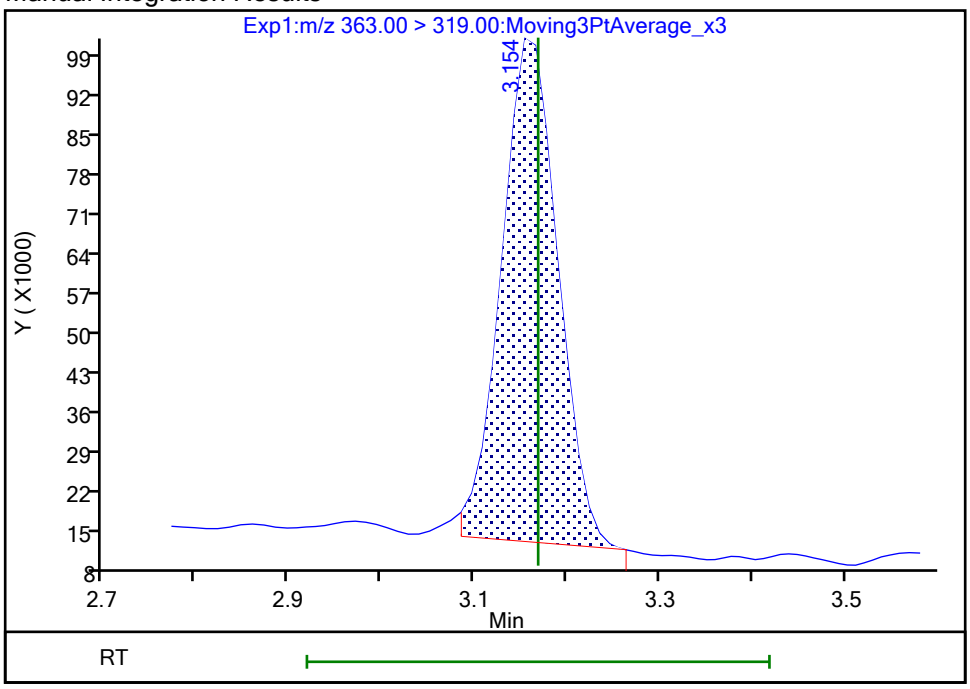
Processing Integration Results

RT: 3.15
Area: 441891
Amount: 0.317252
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 375415
Amount: 0.269526
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

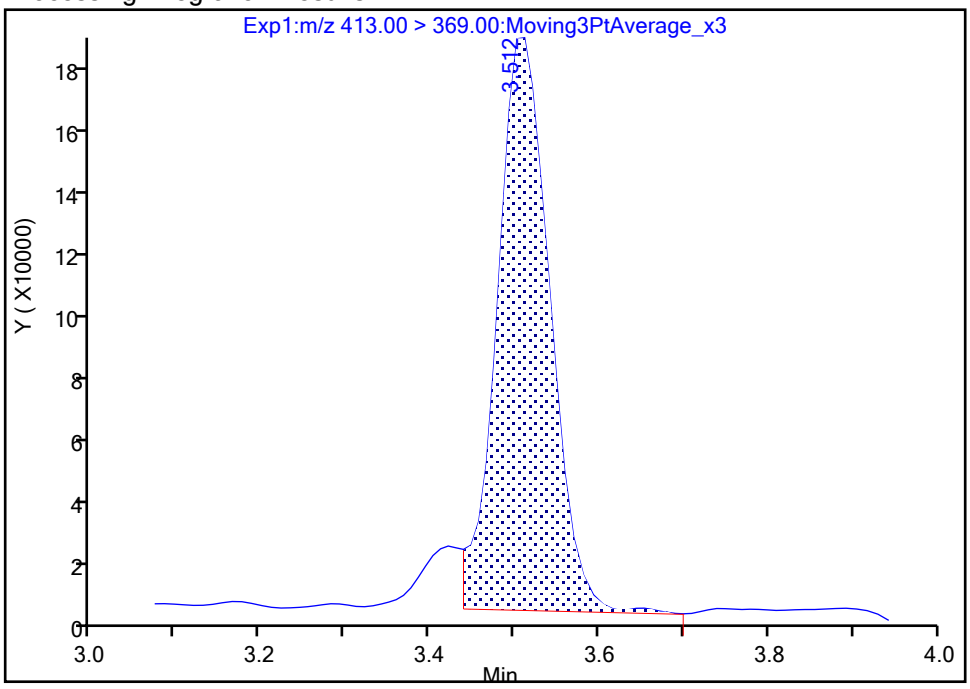
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

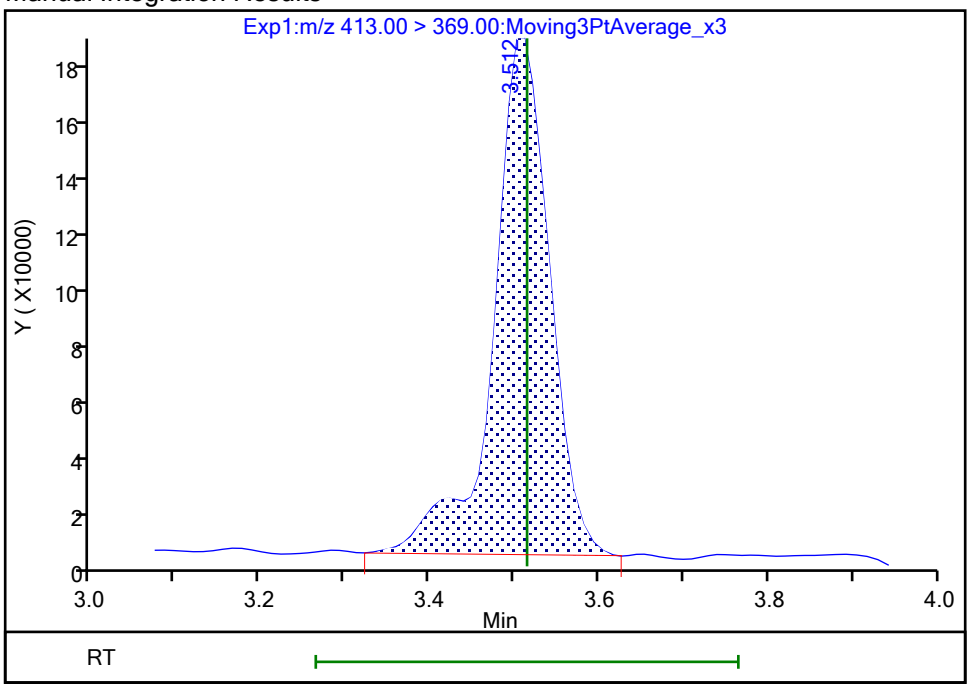
Processing Integration Results

RT: 3.51
Area: 736322
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 788847
Amount: 0.483705
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:51:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

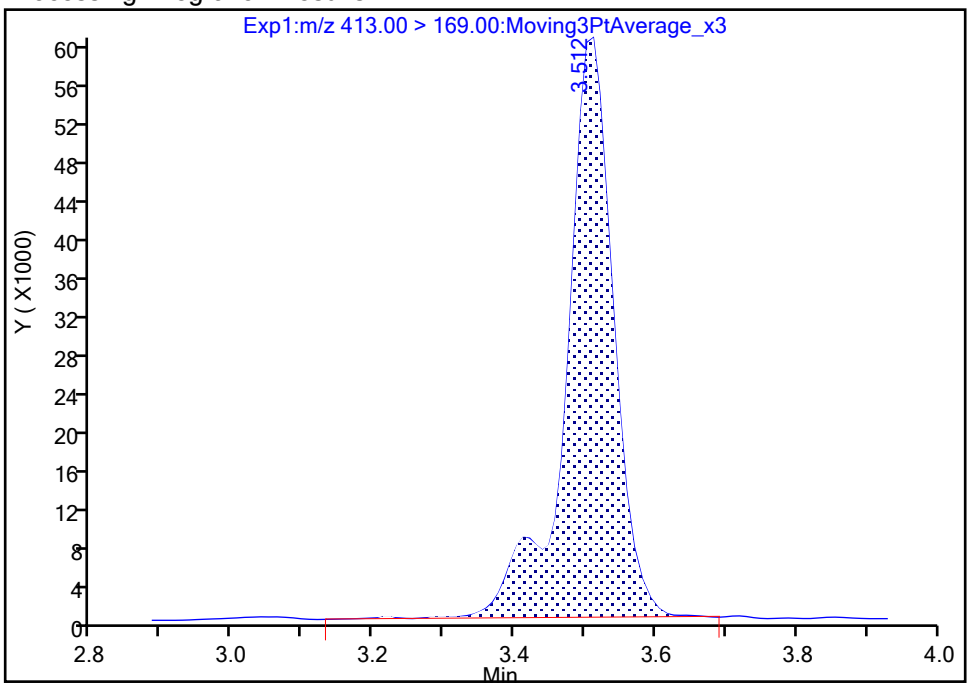
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

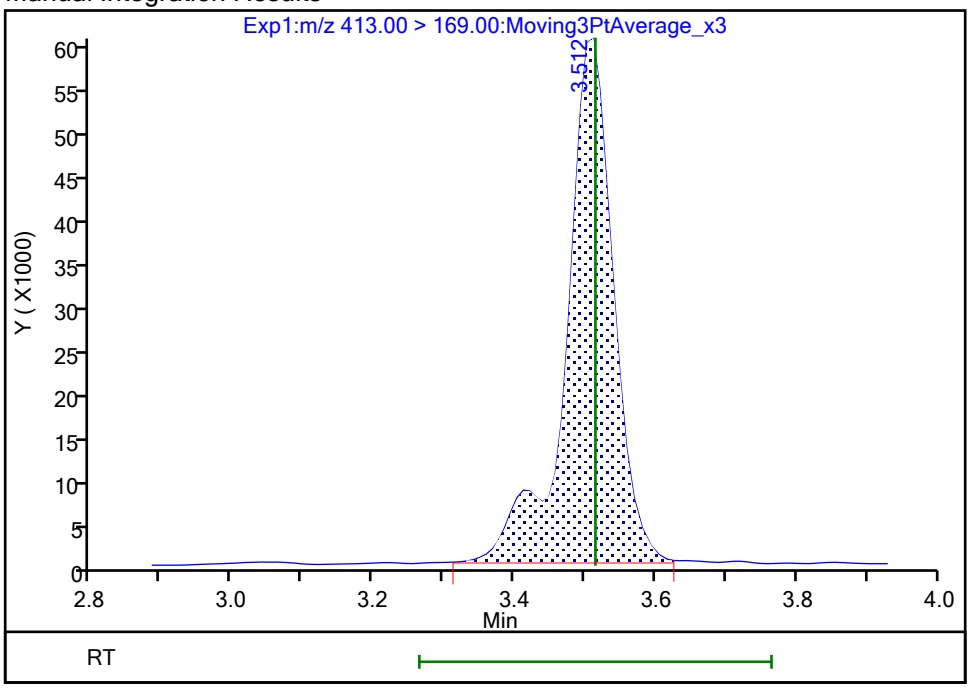
Processing Integration Results

RT: 3.51
Area: 284621
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 282788
Amount: 0.483705
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:51:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

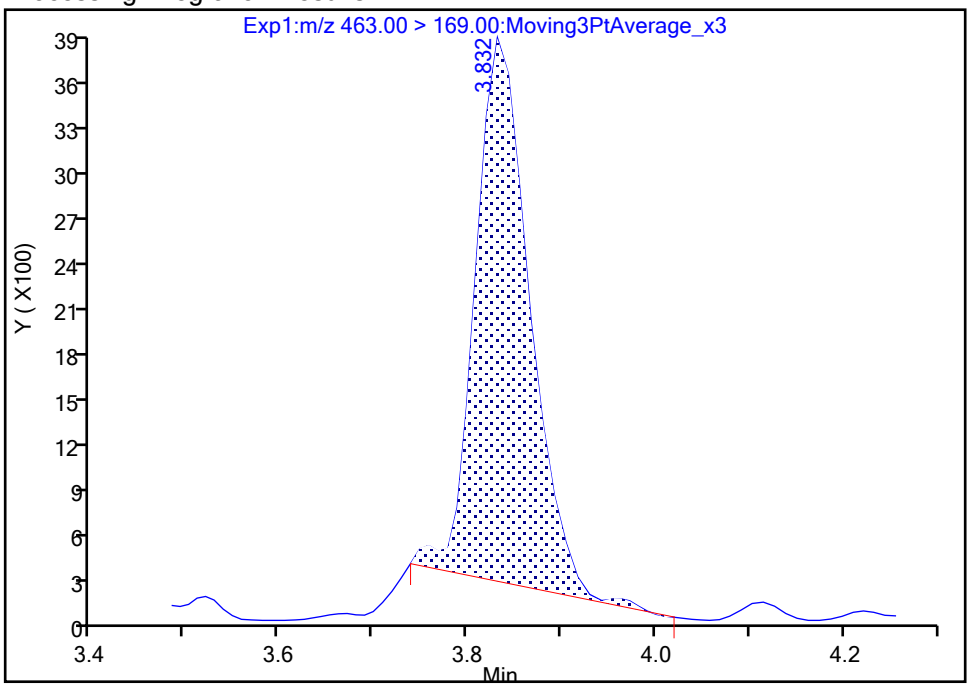
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

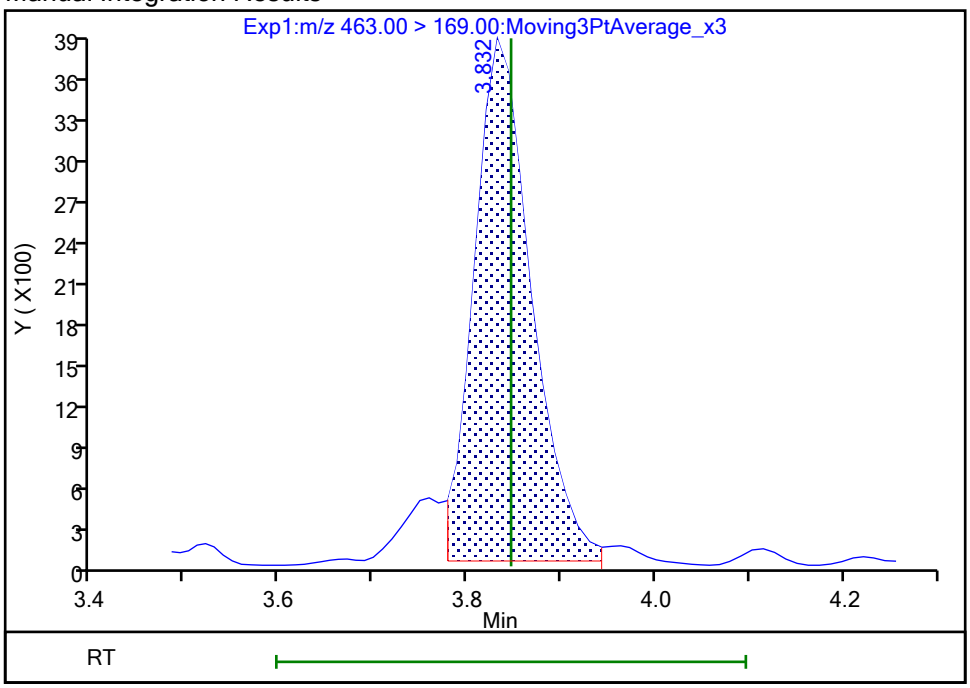
Processing Integration Results

RT: 3.83
Area: 14813
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 16315
Amount: 0.082916
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:52:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

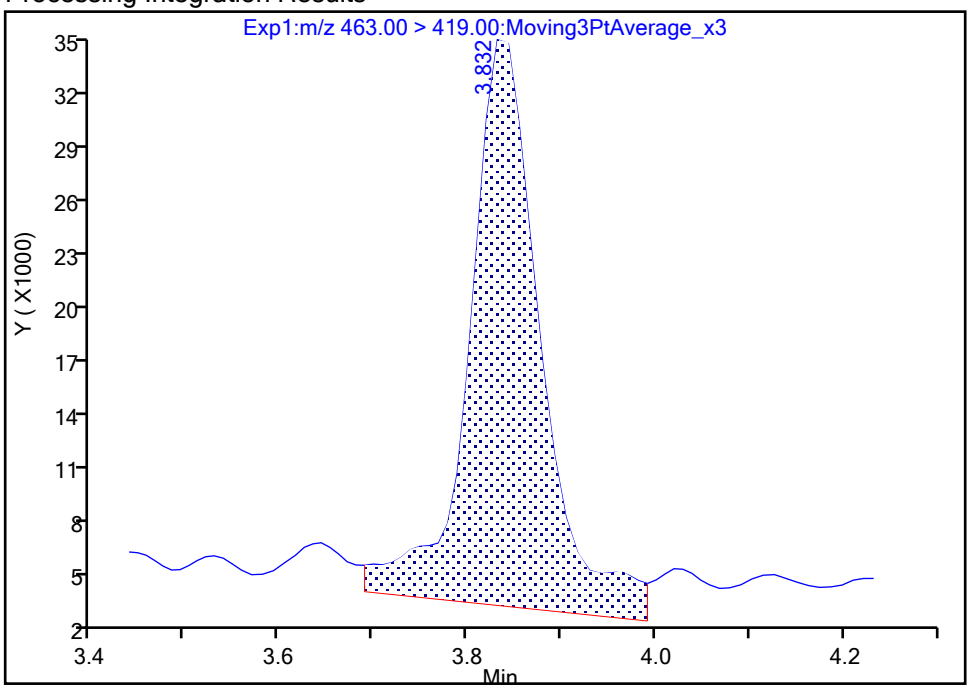
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

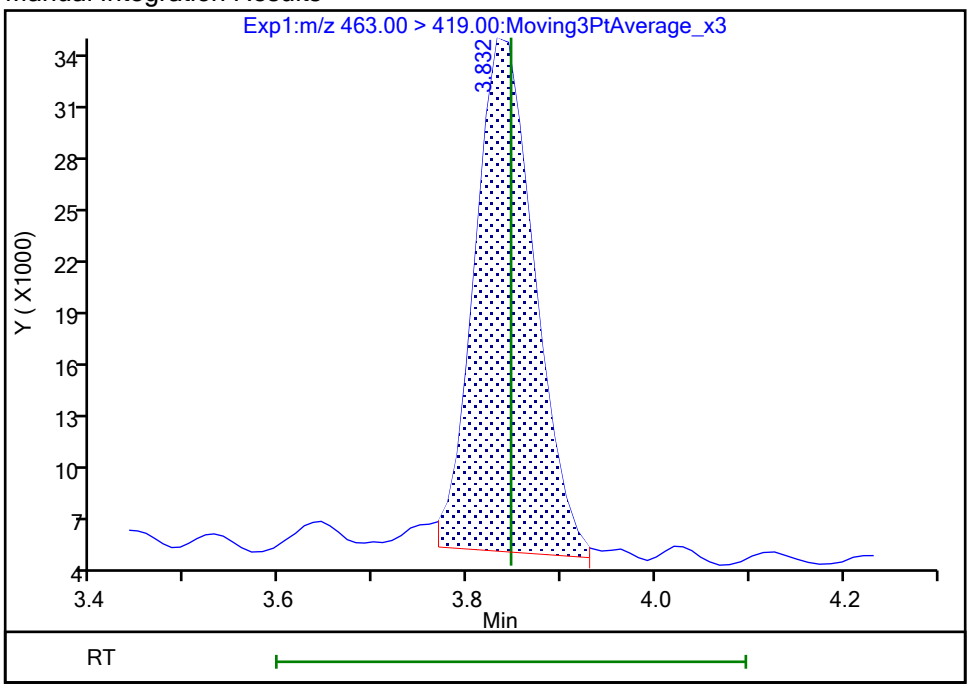
Processing Integration Results

RT: 3.83
Area: 166387
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 129355
Amount: 0.082916
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:52:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

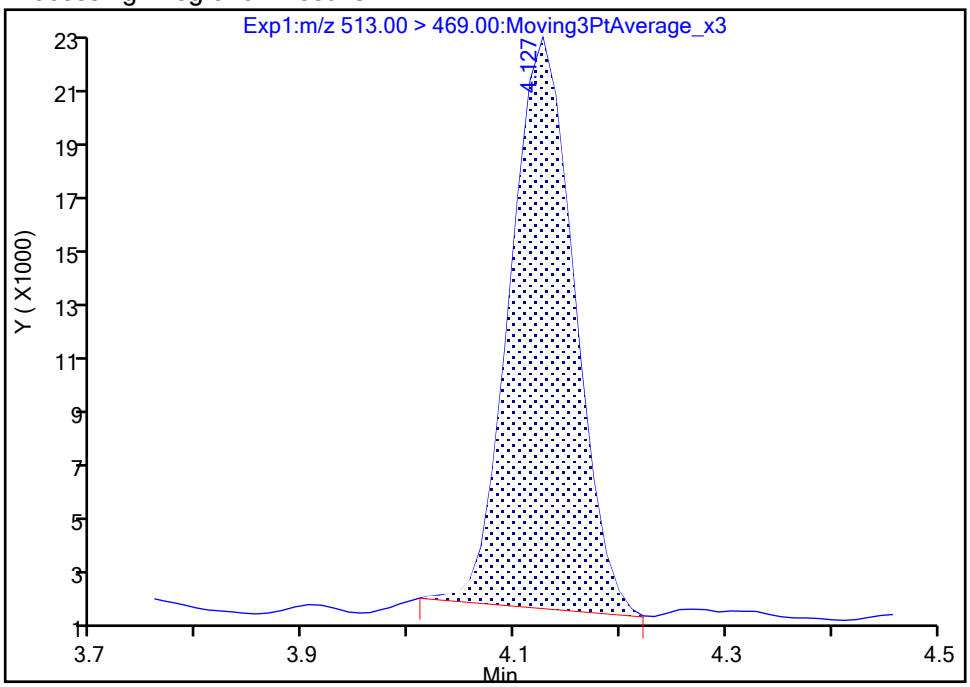
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

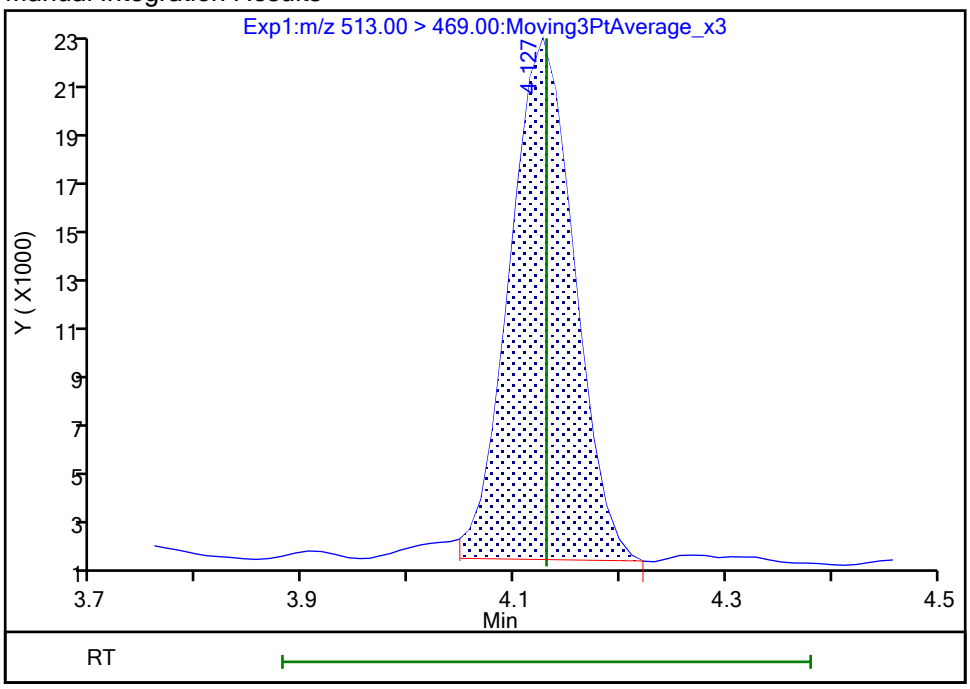
Processing Integration Results

RT: 4.13
Area: 84278
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 86033
Amount: 0.050852
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

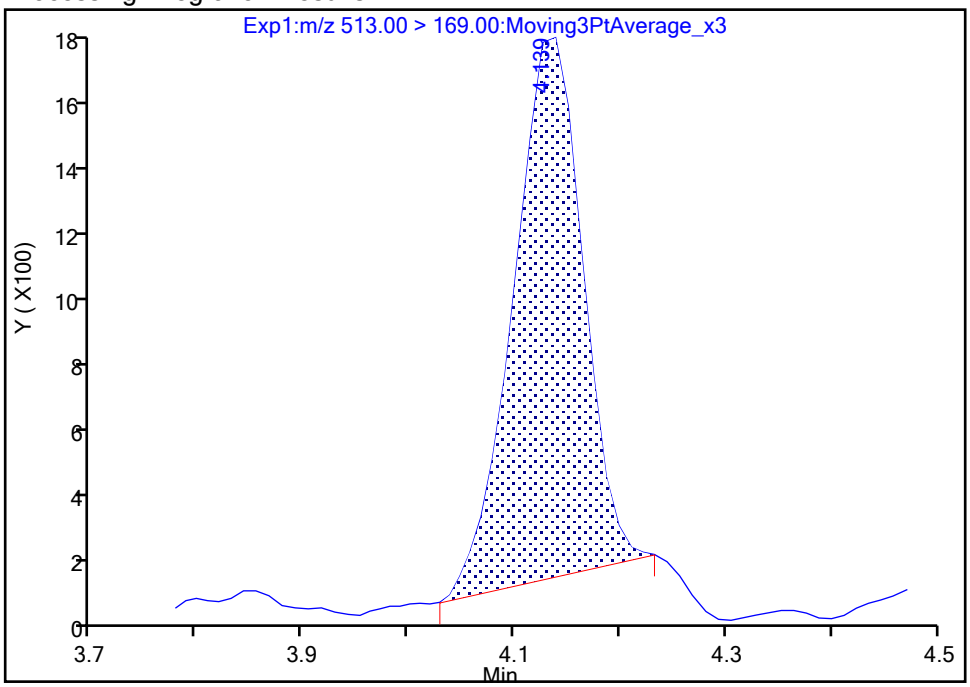
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

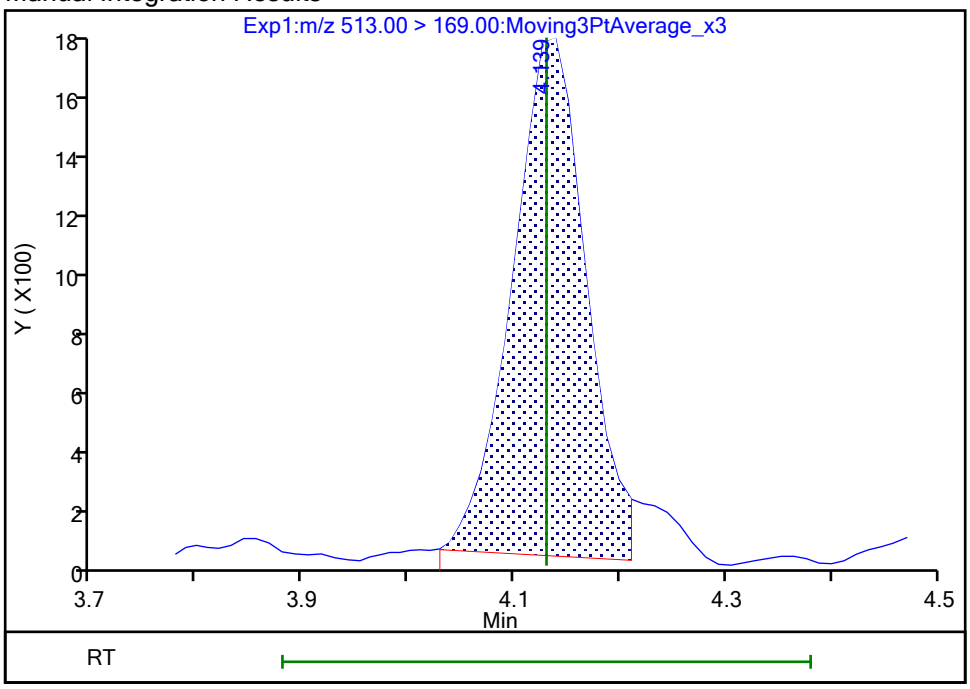
Processing Integration Results

RT: 4.14
Area: 7581
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 8425
Amount: 0.050852
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

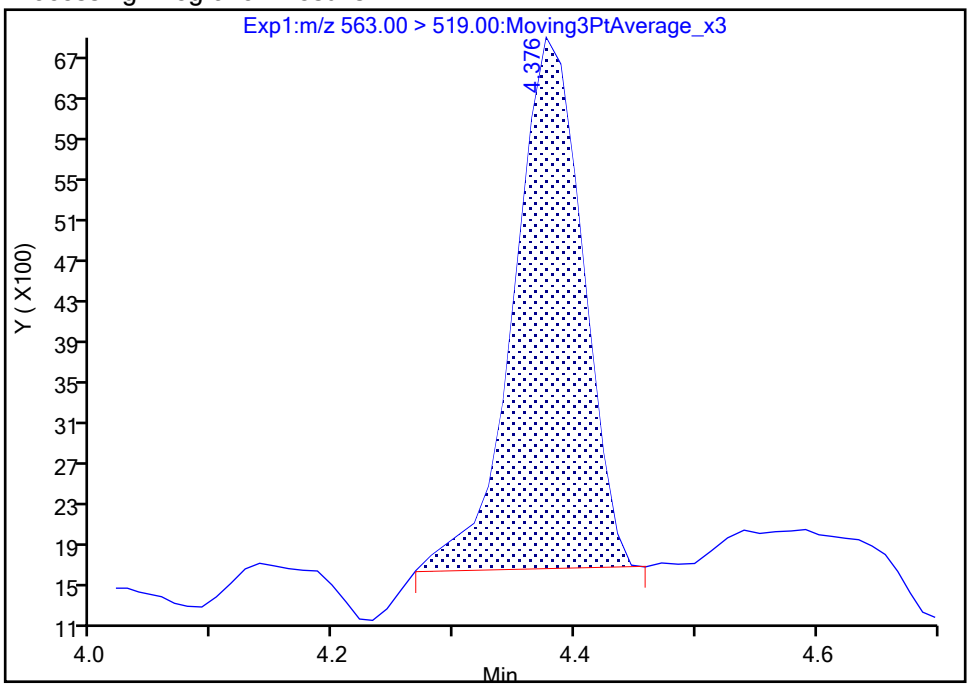
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

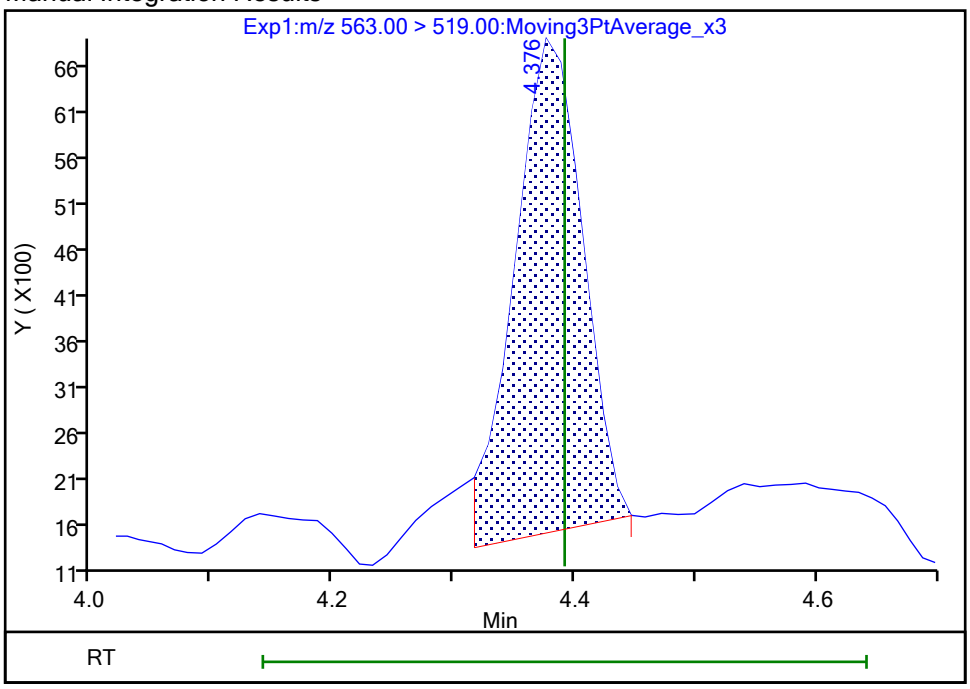
Processing Integration Results

RT: 4.38
Area: 20432
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.38
Area: 20789
Amount: 0.012603
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

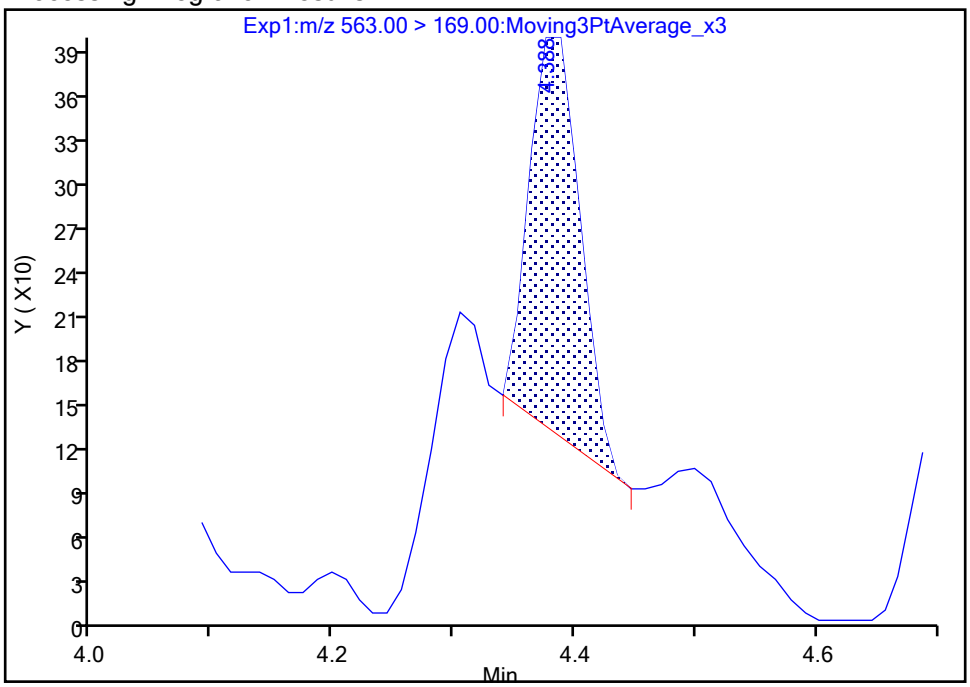
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

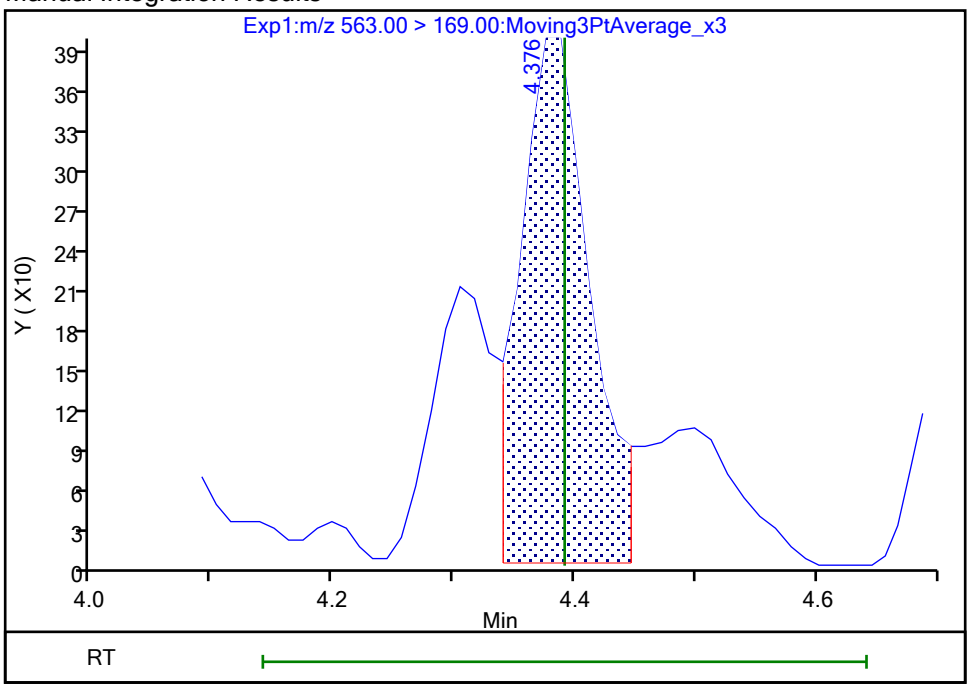
Processing Integration Results

RT: 4.39
Area: 791
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.38
Area: 1558
Amount: 0.012603
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:20:02 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

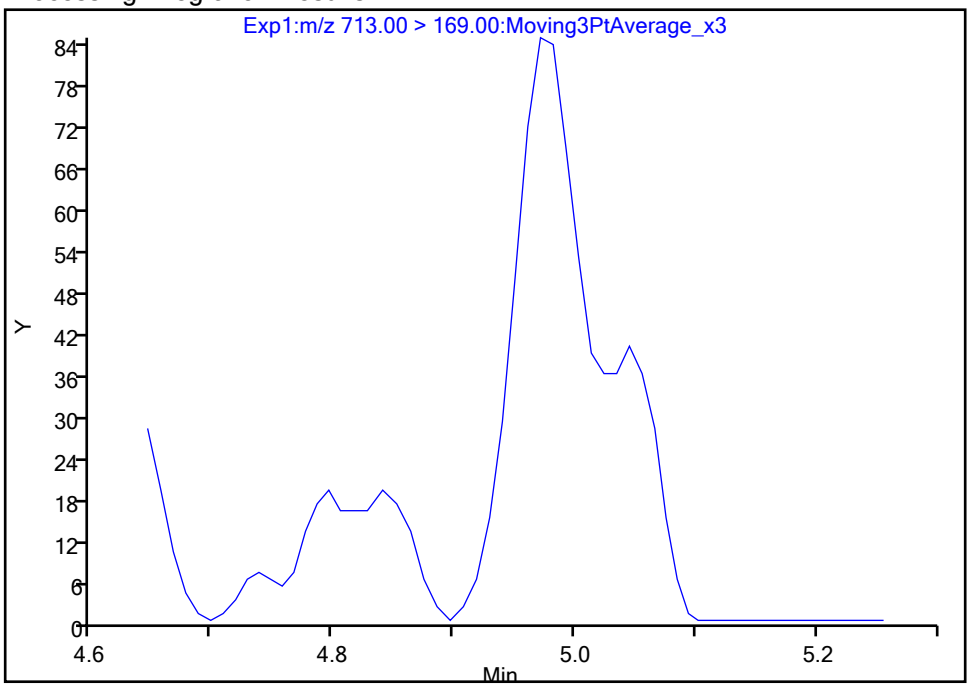
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

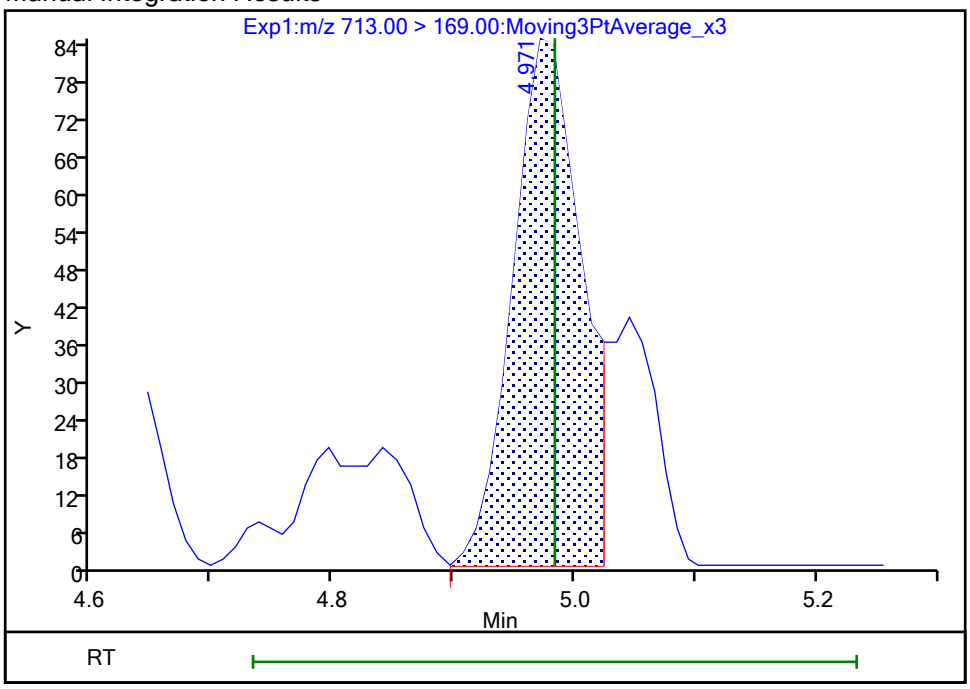
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 329
Amount: 0.001943
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

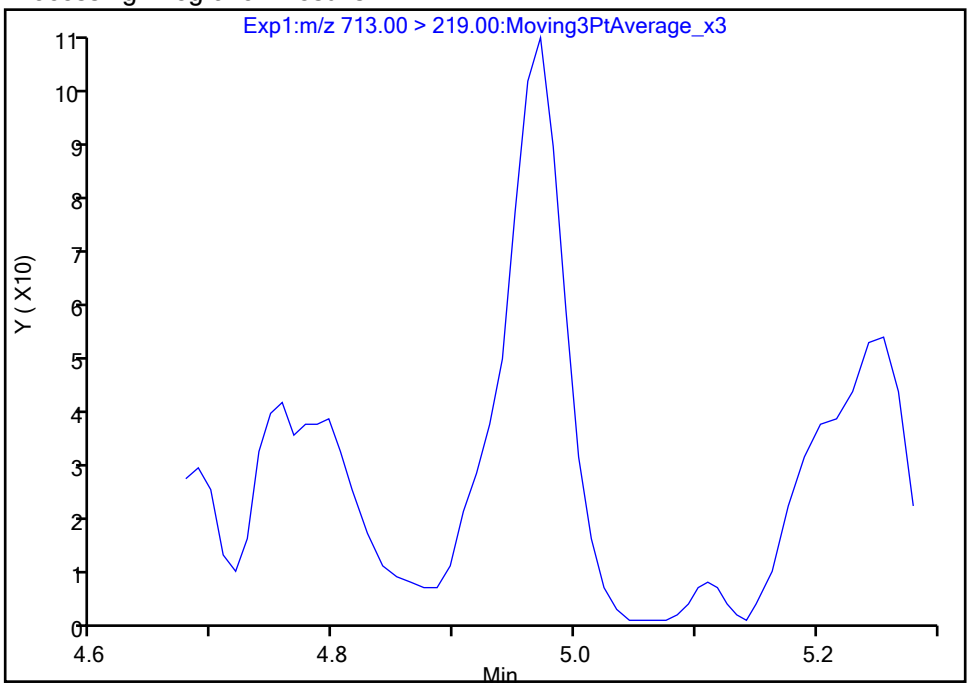
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

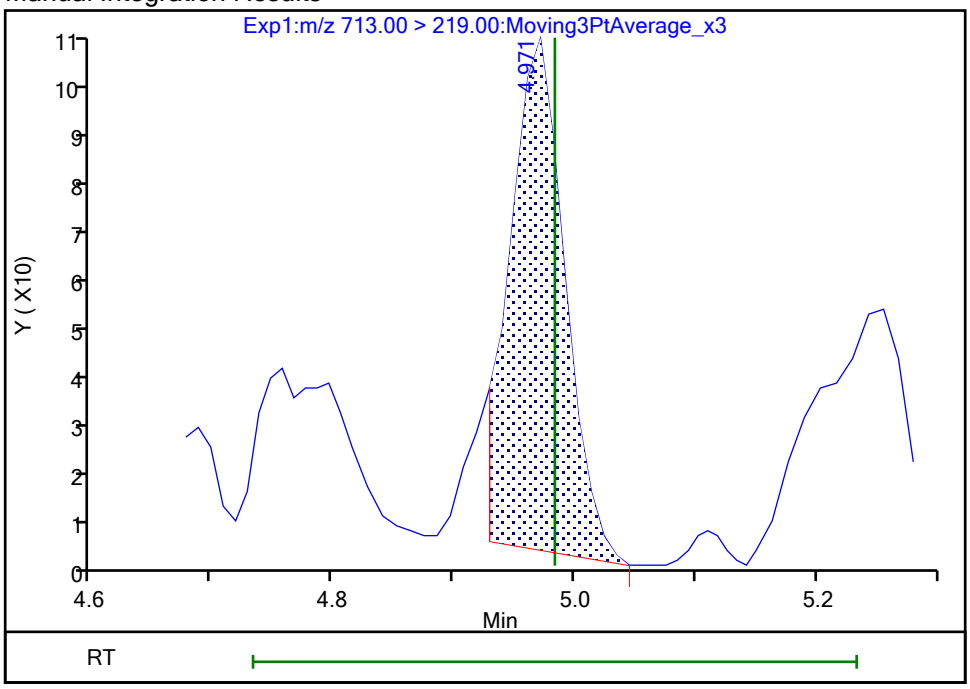
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 326
Amount: 0.001943
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

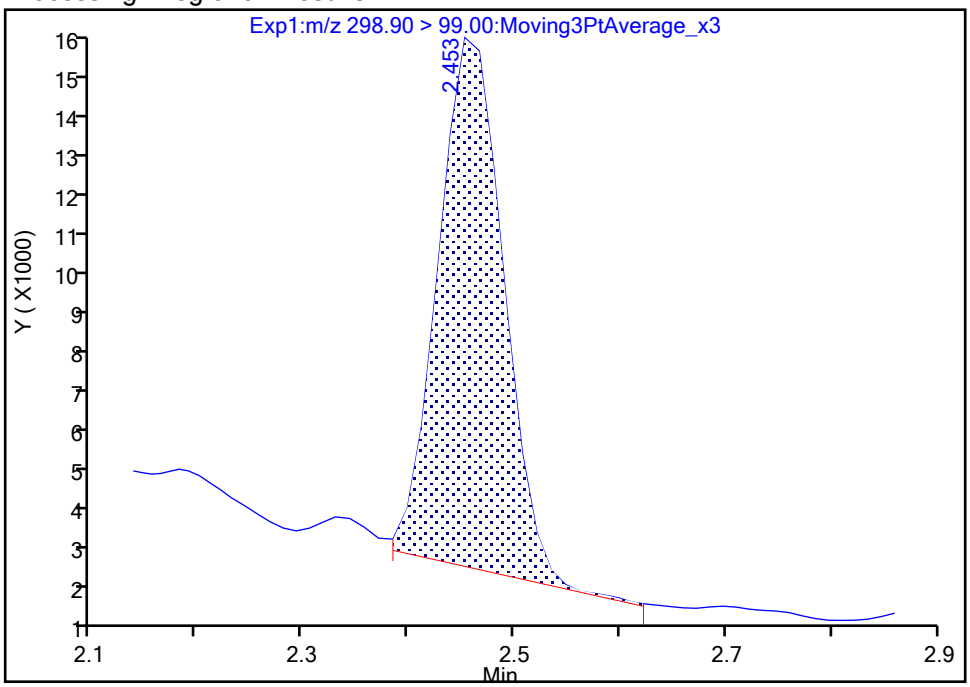
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

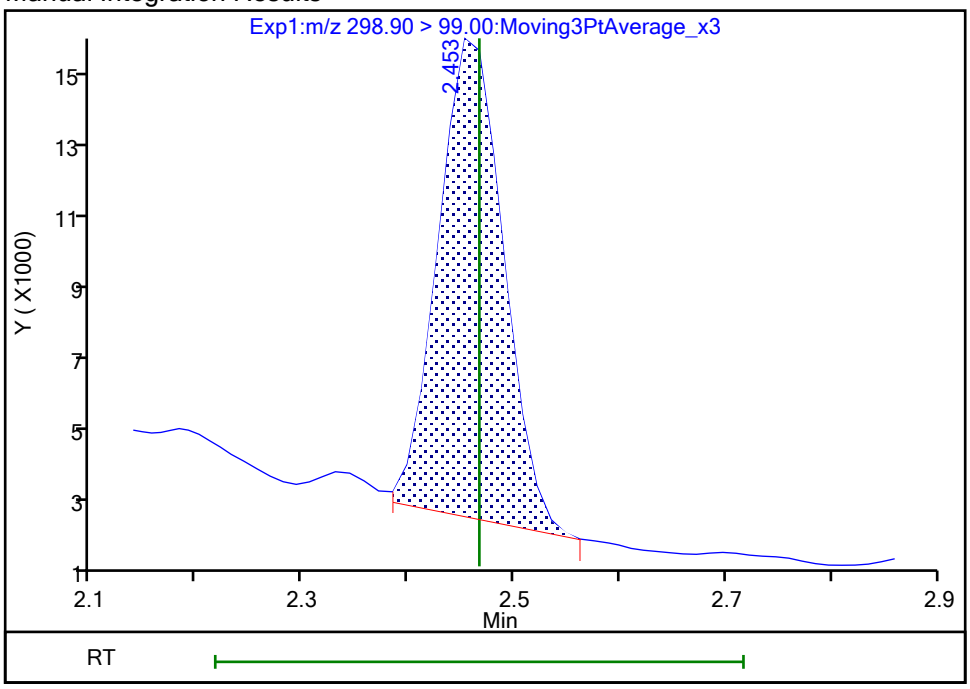
Processing Integration Results

RT: 2.45
Area: 57406
Amount: 0.099597
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 57077
Amount: 0.080867
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

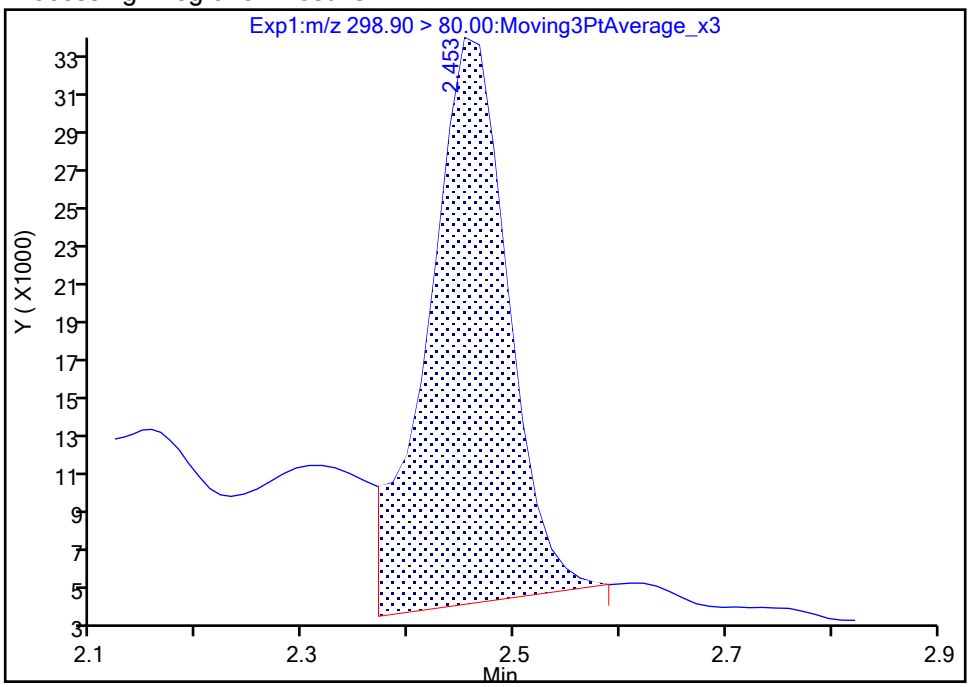
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

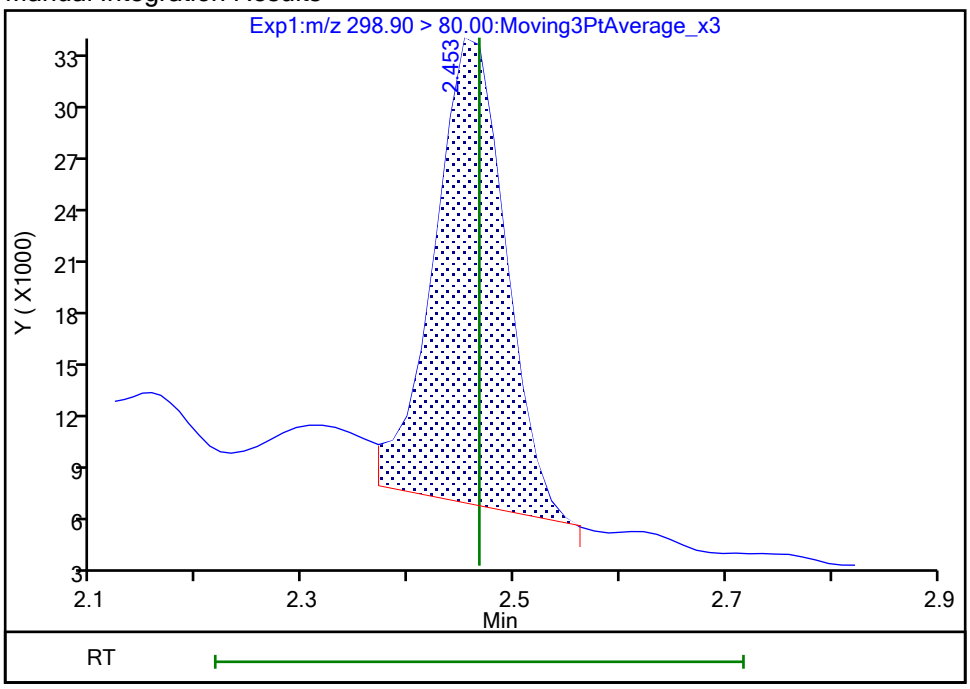
Processing Integration Results

RT: 2.45
Area: 151855
Amount: 0.099597
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 123298
Amount: 0.080867
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

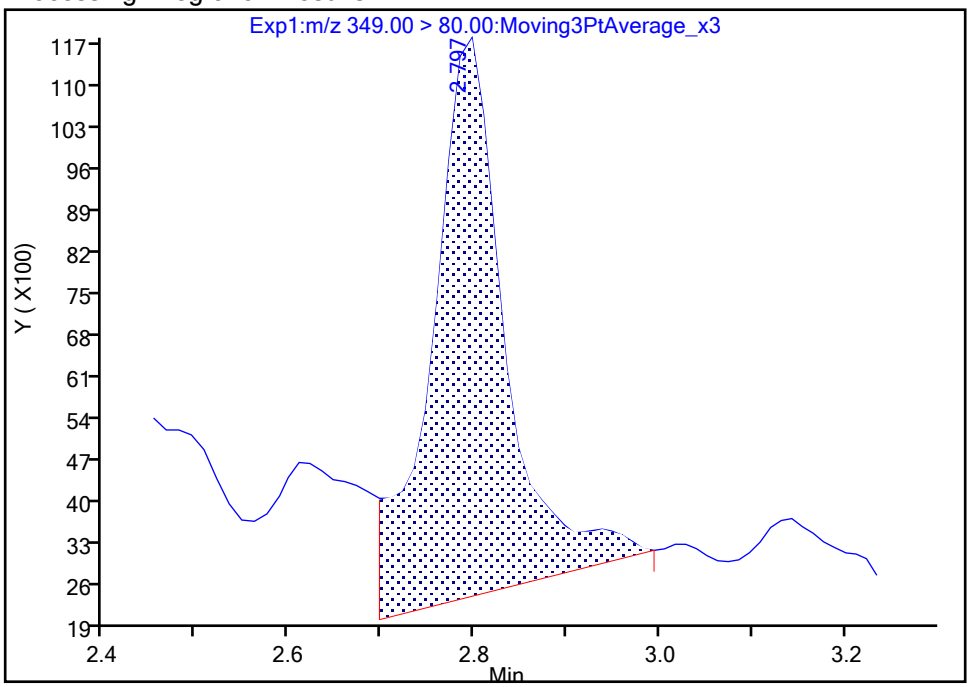
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

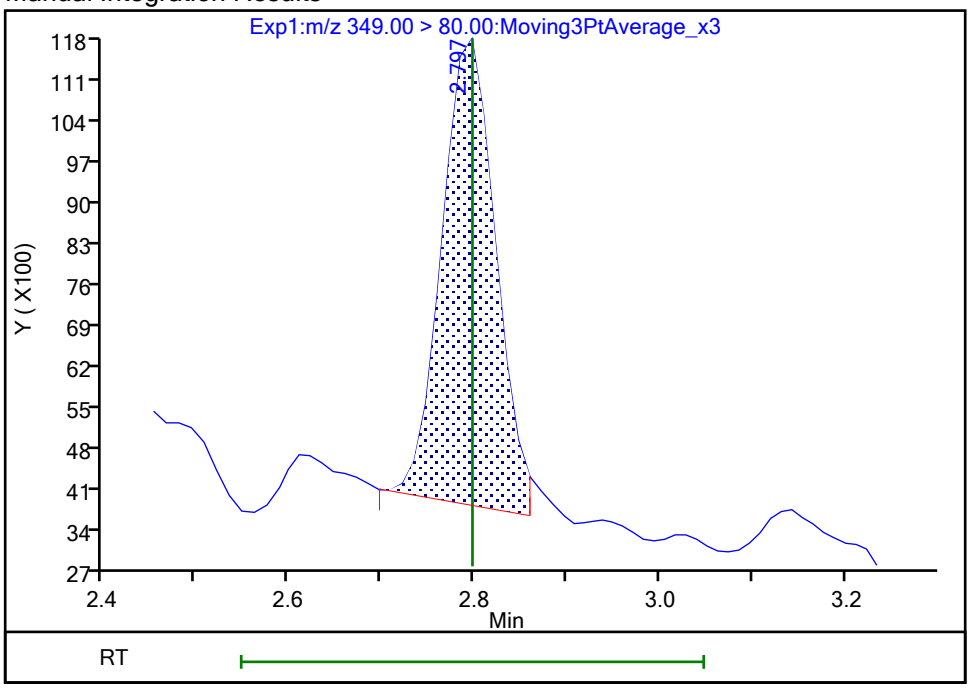
Processing Integration Results

RT: 2.80
Area: 52372
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 32435
Amount: 0.024823
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

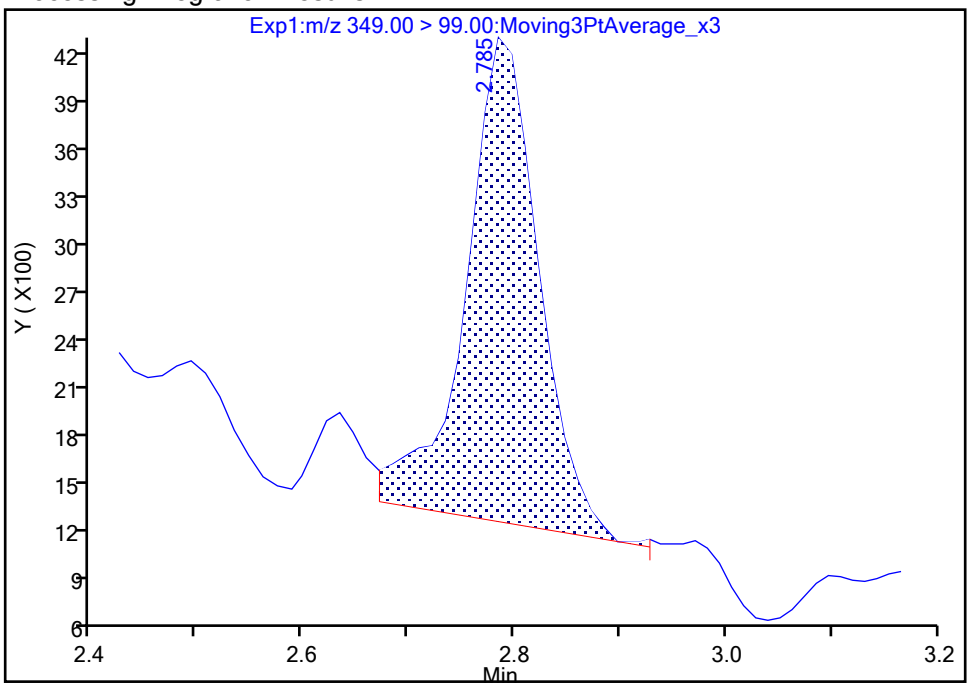
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

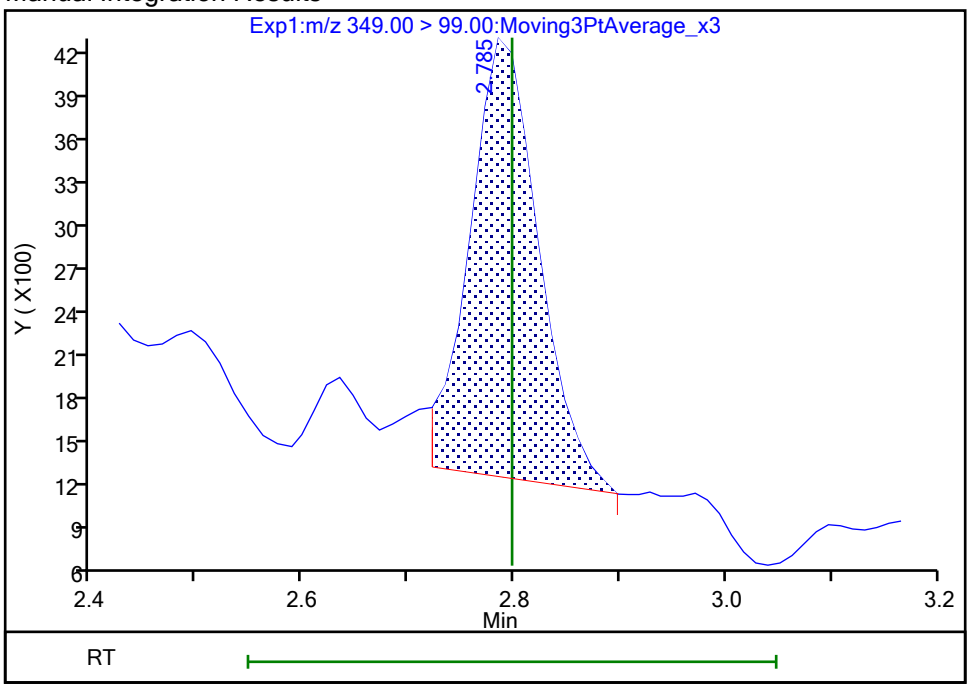
Processing Integration Results

RT: 2.78
Area: 14515
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.78
Area: 13571
Amount: 0.024823
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

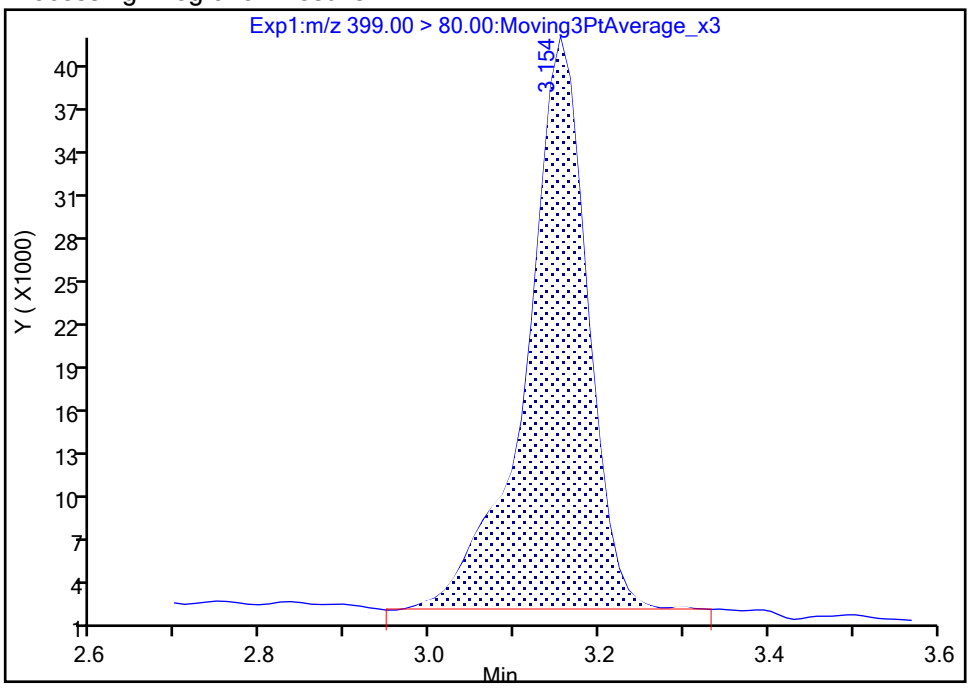
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

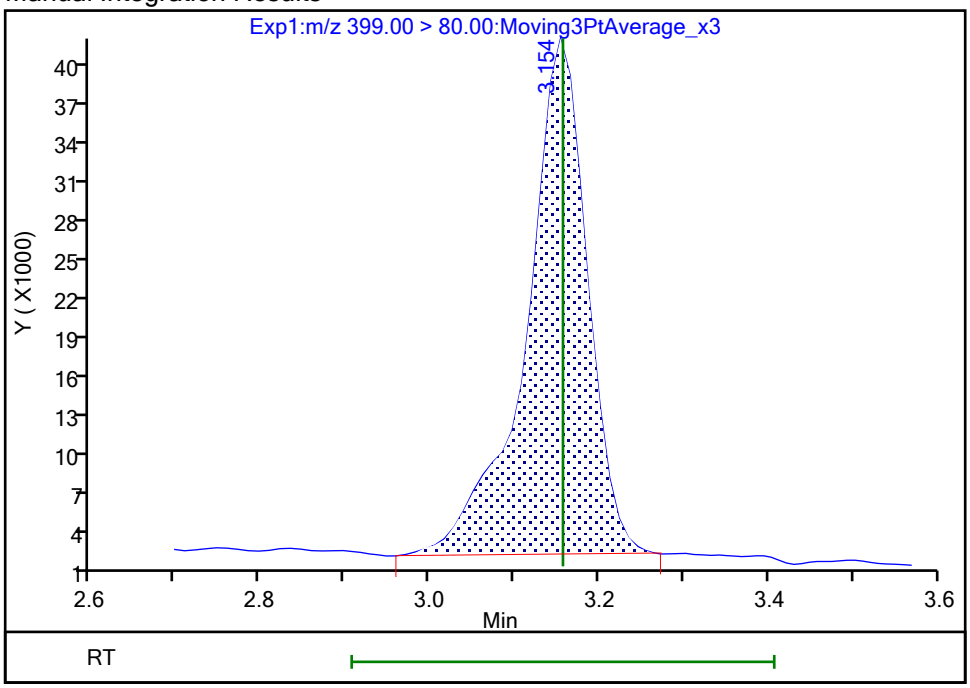
Processing Integration Results

RT: 3.15
Area: 198642
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 197189
Amount: 0.178026
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

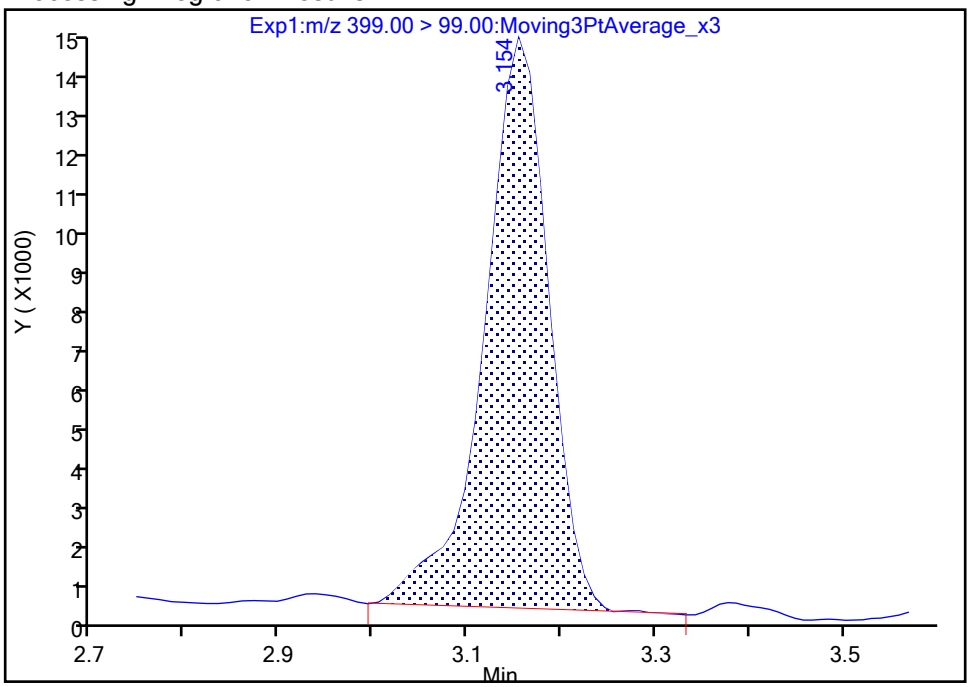
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

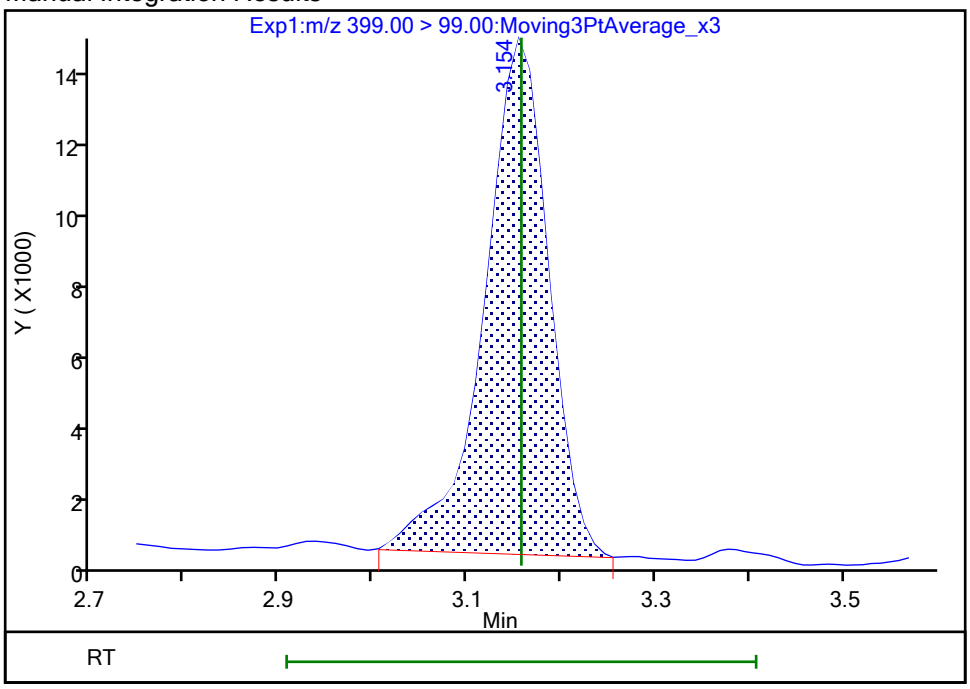
Processing Integration Results

RT: 3.15
Area: 65263
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 64624
Amount: 0.178026
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

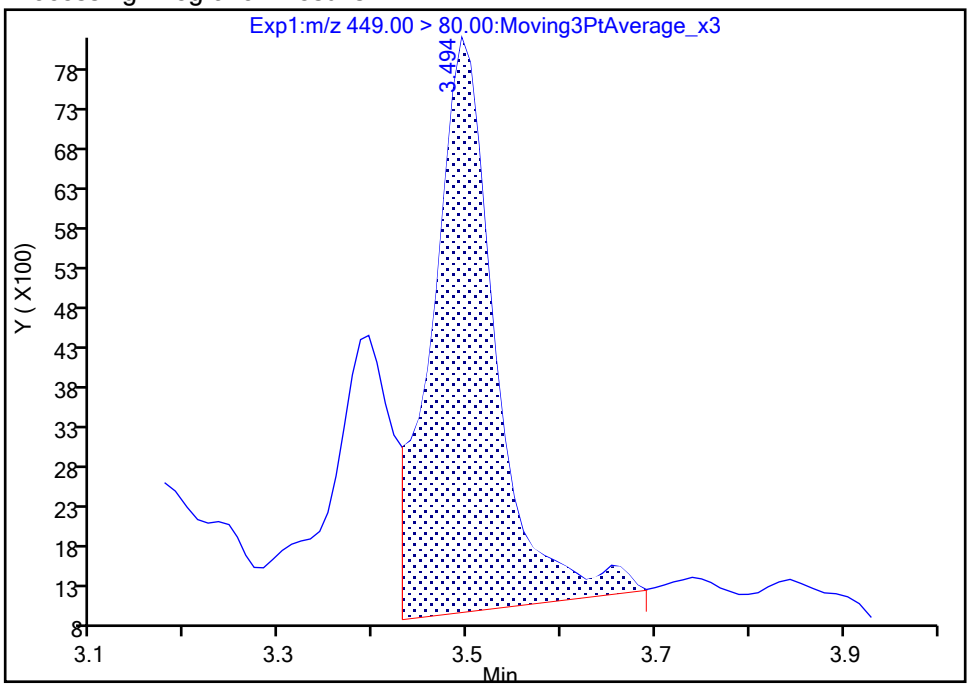
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

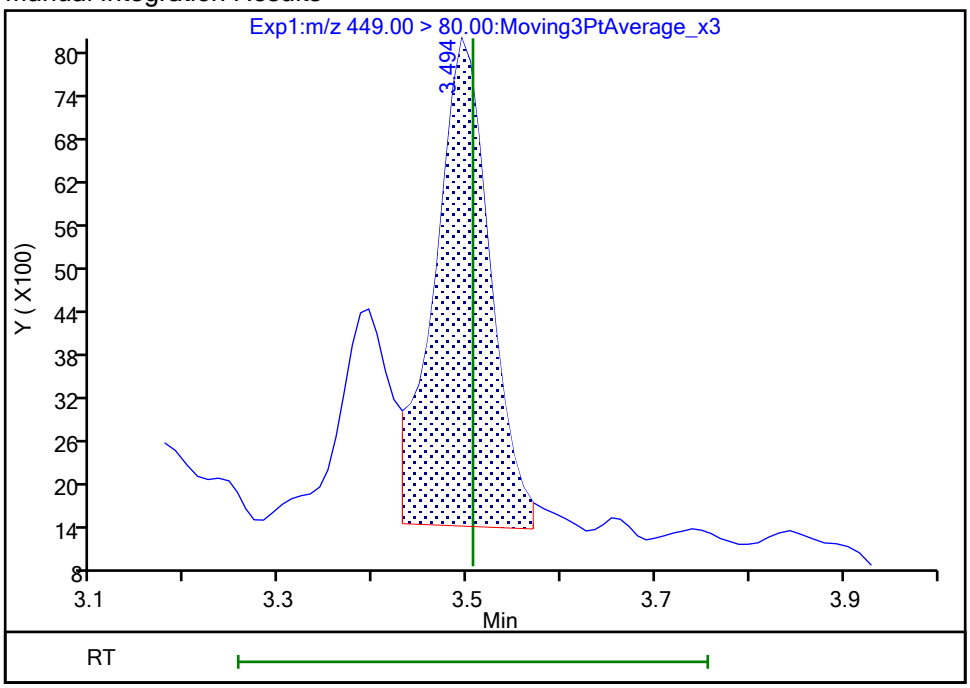
Processing Integration Results

RT: 3.49
Area: 34244
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 27889
Amount: 0.027613
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:51:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

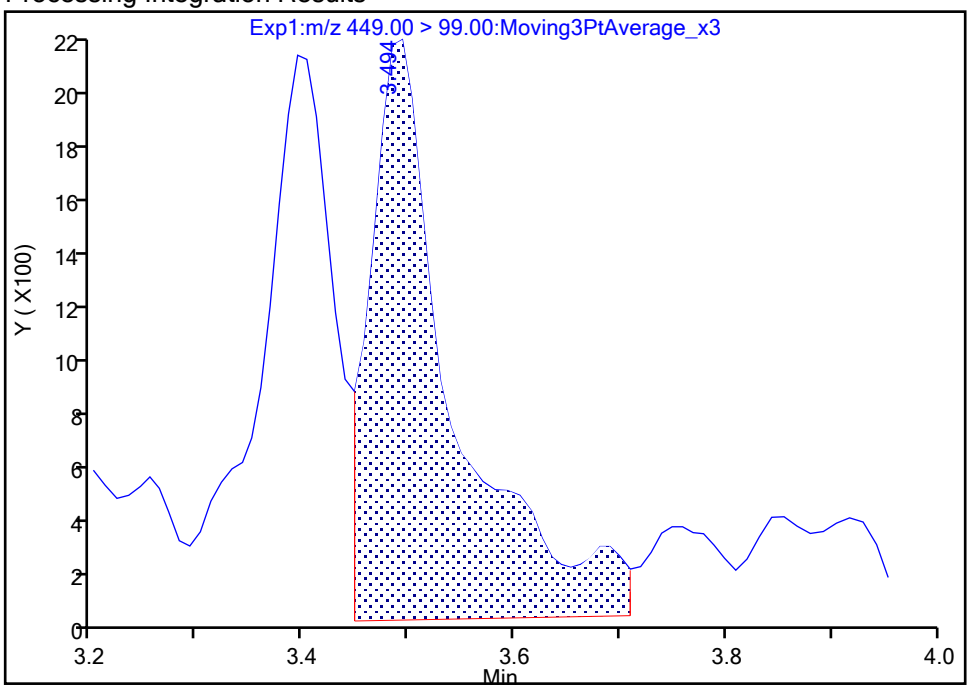
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

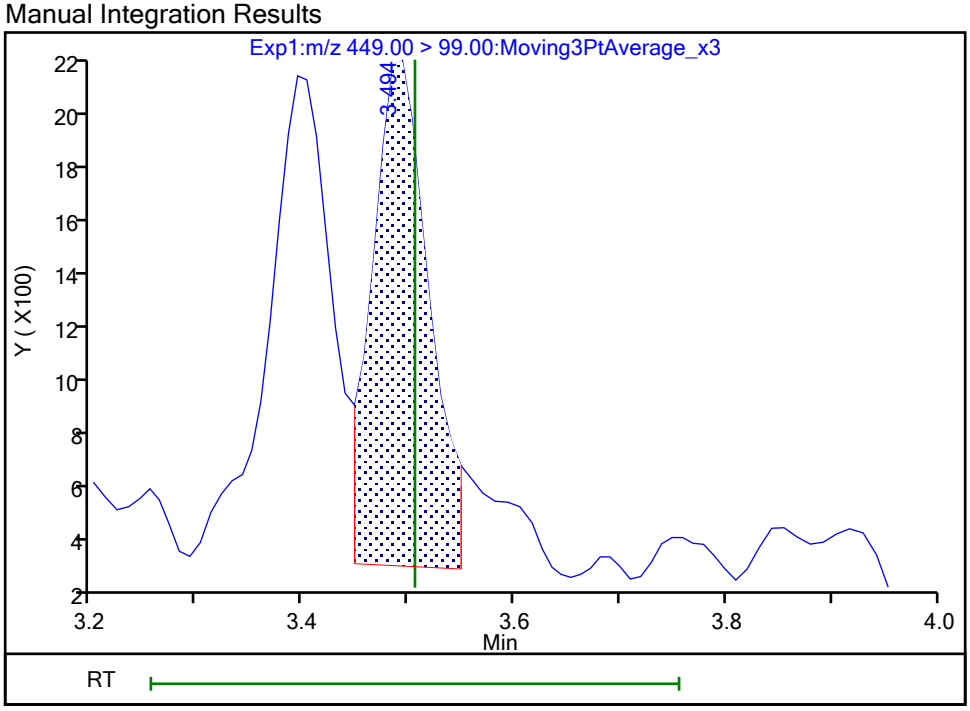
Processing Integration Results

RT: 3.49
Area: 11470
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 6861
Amount: 0.027613
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:51:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

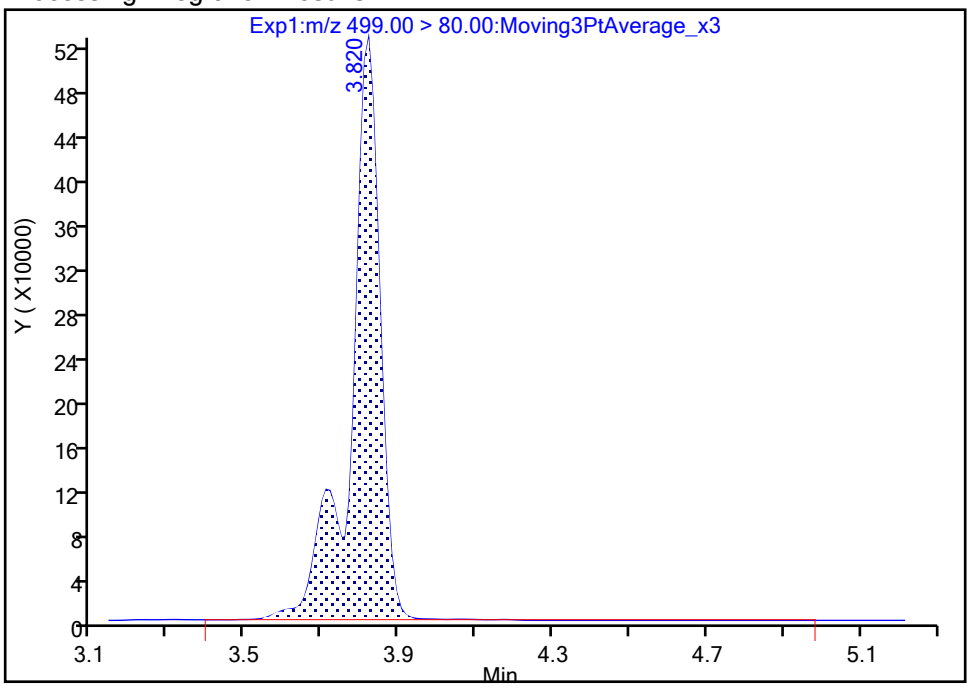
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

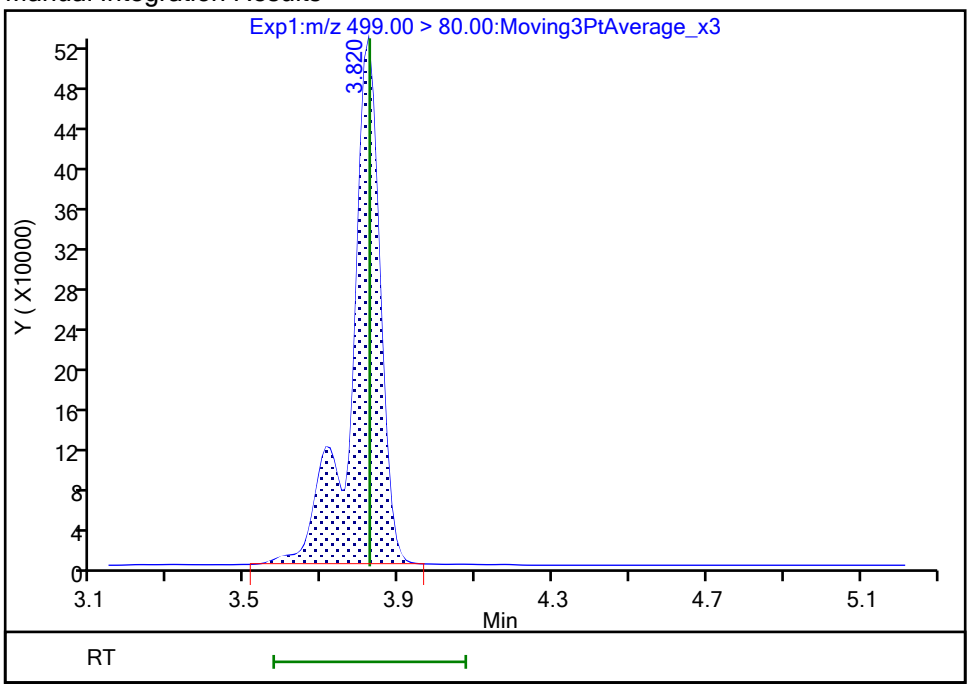
Processing Integration Results

RT: 3.82
Area: 2798333
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2766208
Amount: 3.393422
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:51:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

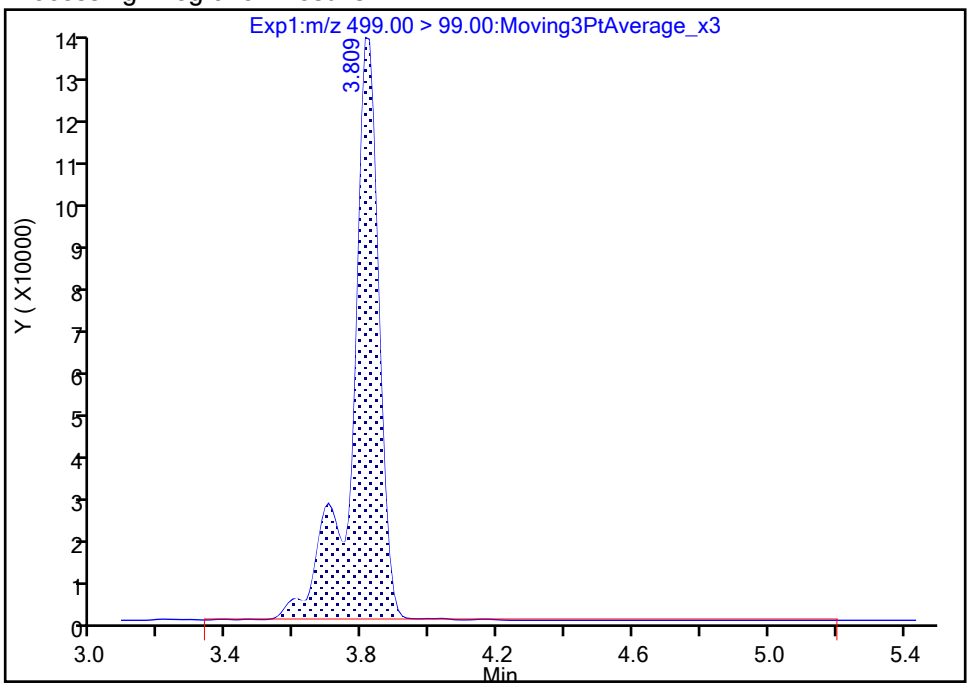
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

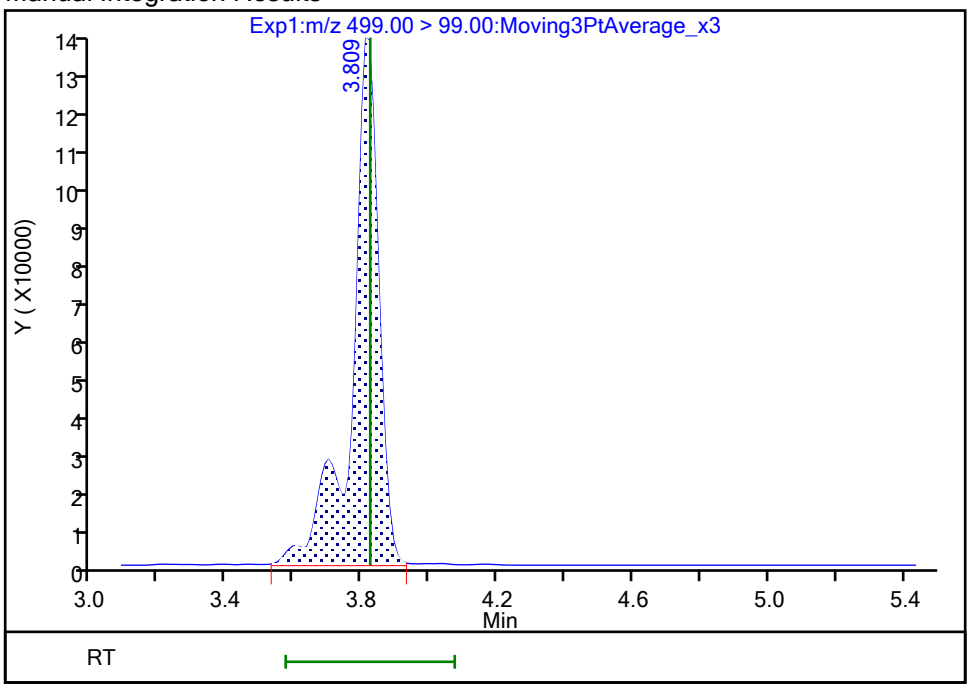
Processing Integration Results

RT: 3.81
Area: 752041
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 743197
Amount: 3.393422
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:52:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

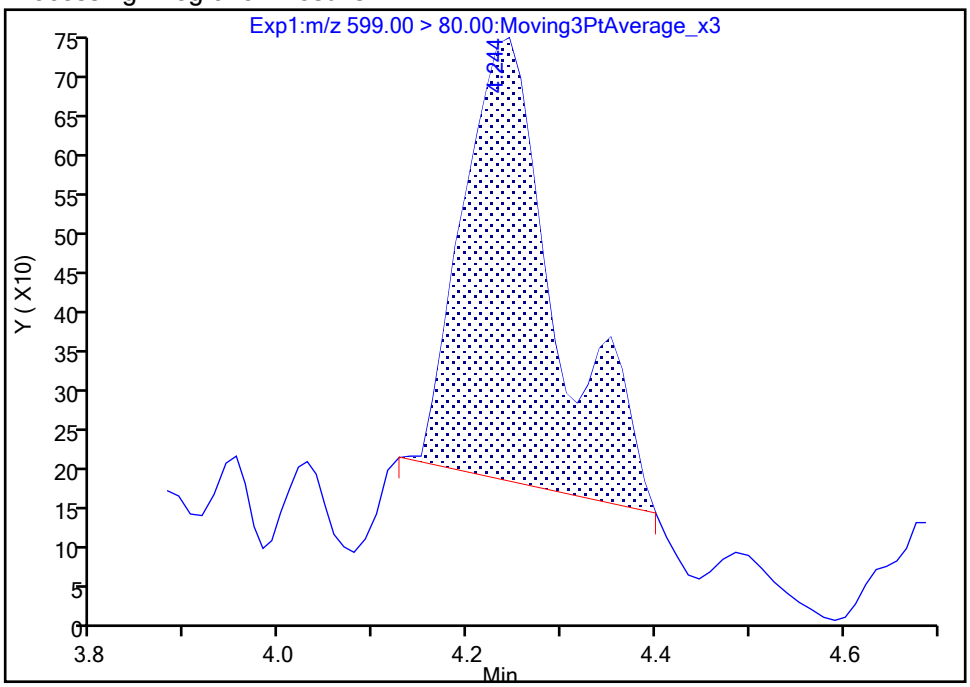
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

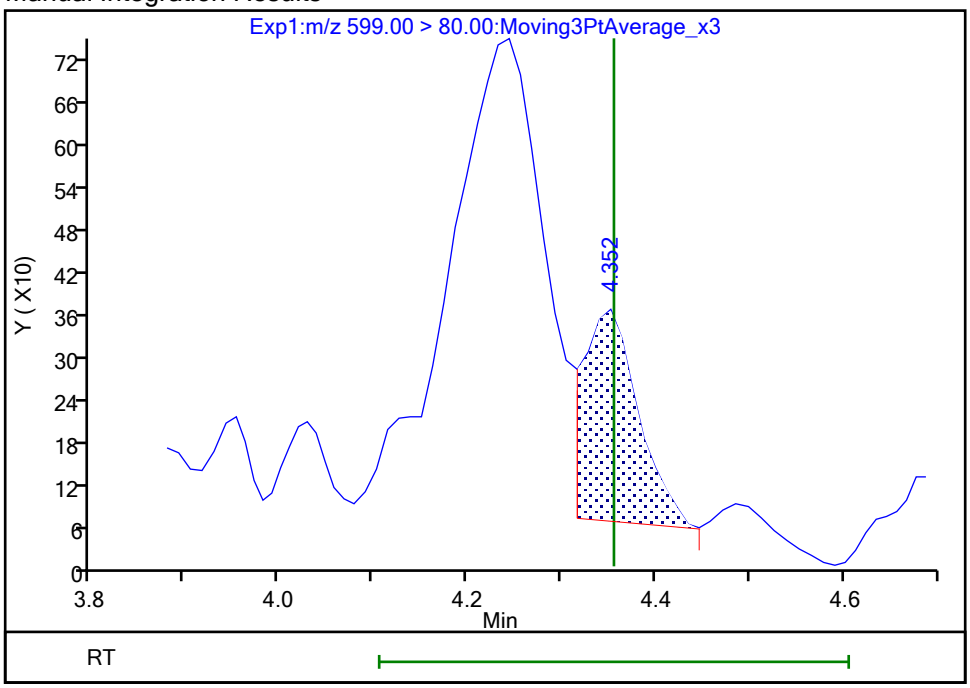
Processing Integration Results

RT: 4.24
Area: 3902
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 1177
Amount: 0.002466
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

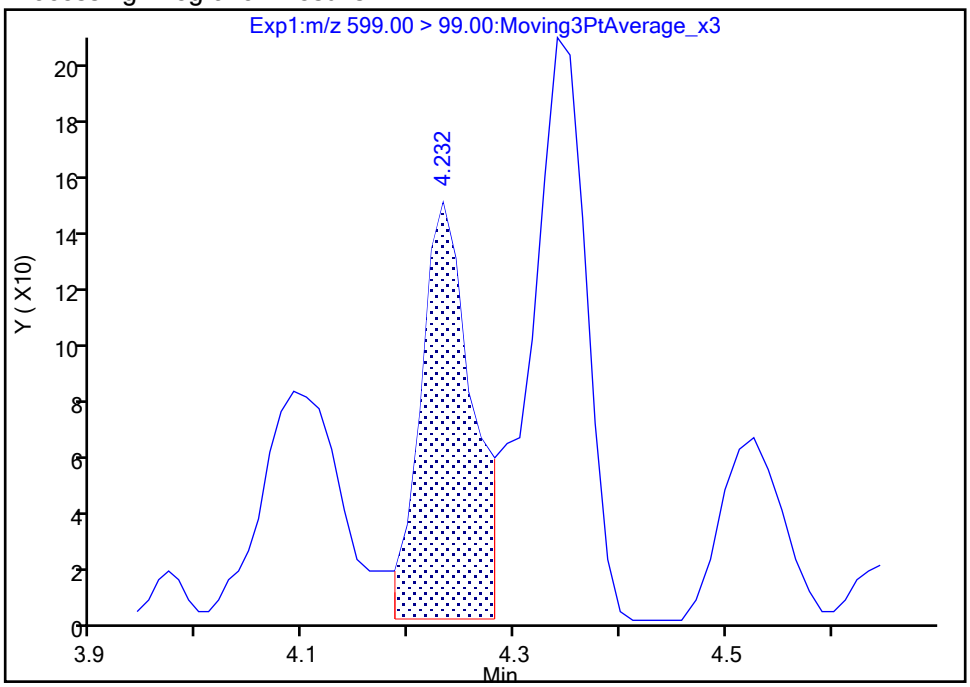
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

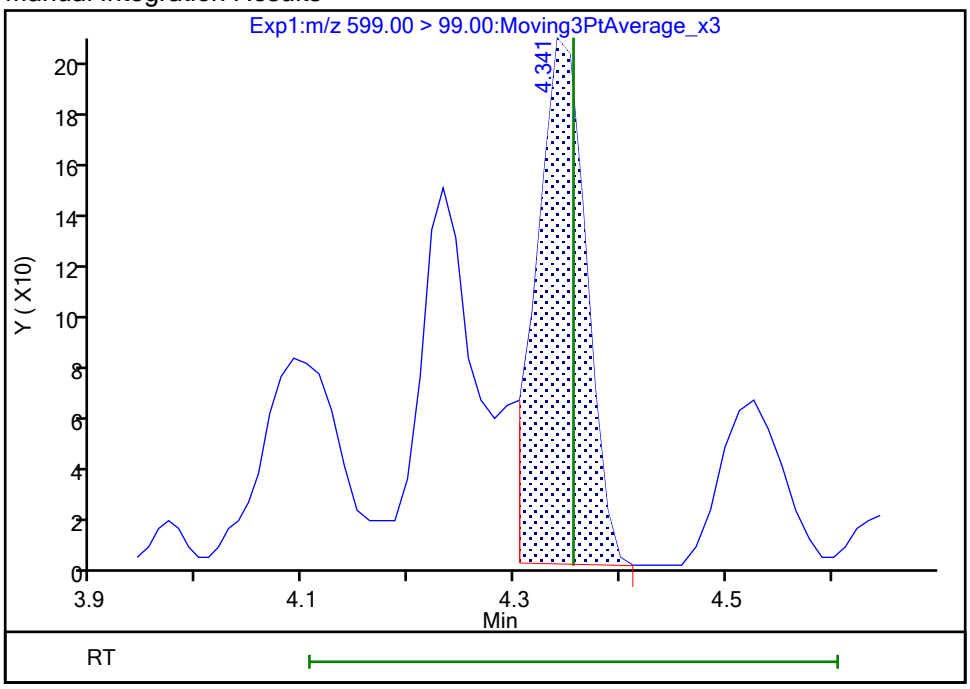
Processing Integration Results

RT: 4.23
Area: 474
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.34
Area: 645
Amount: 0.002466
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

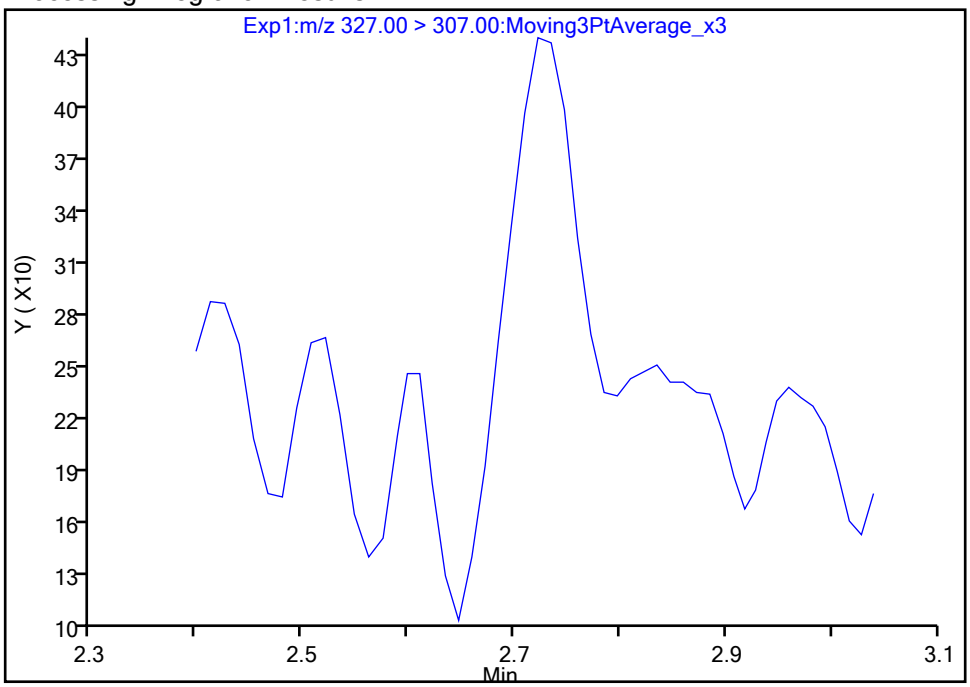
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

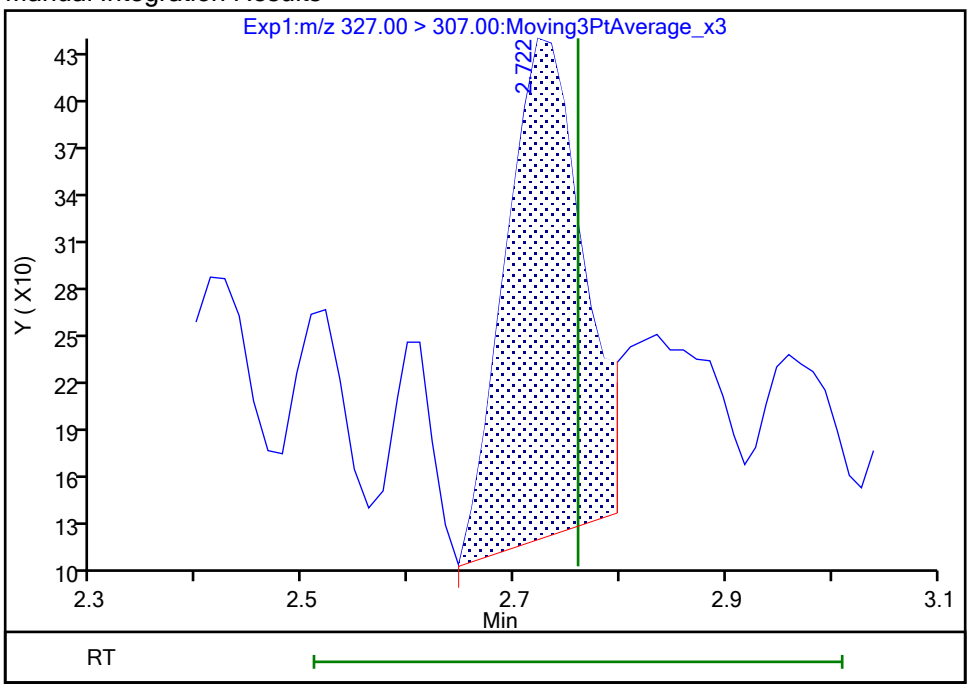
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.72
Area: 1634
Amount: 0.002322
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

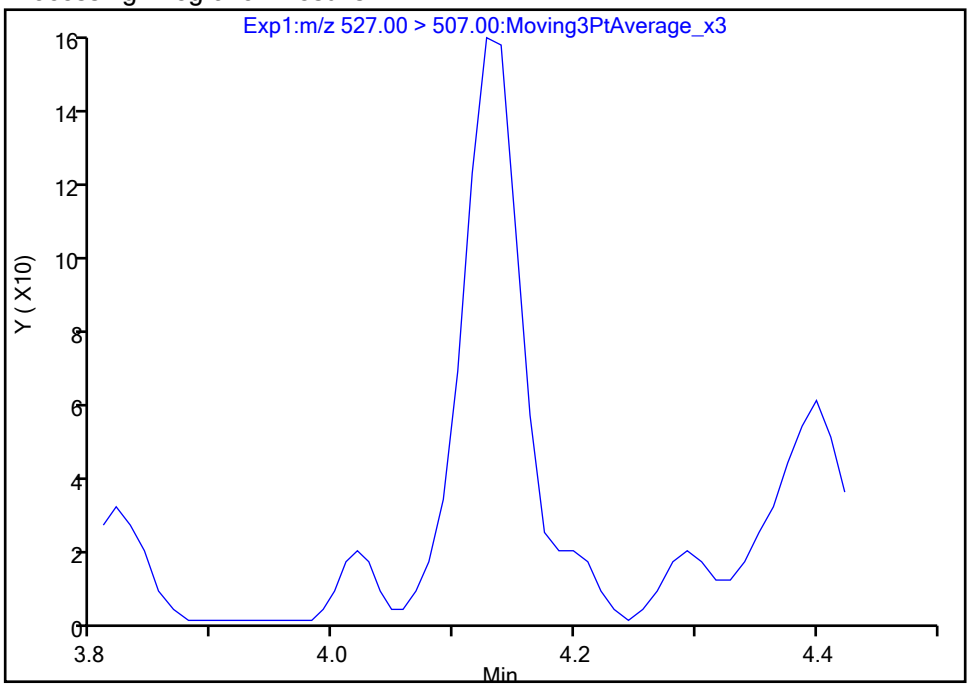
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

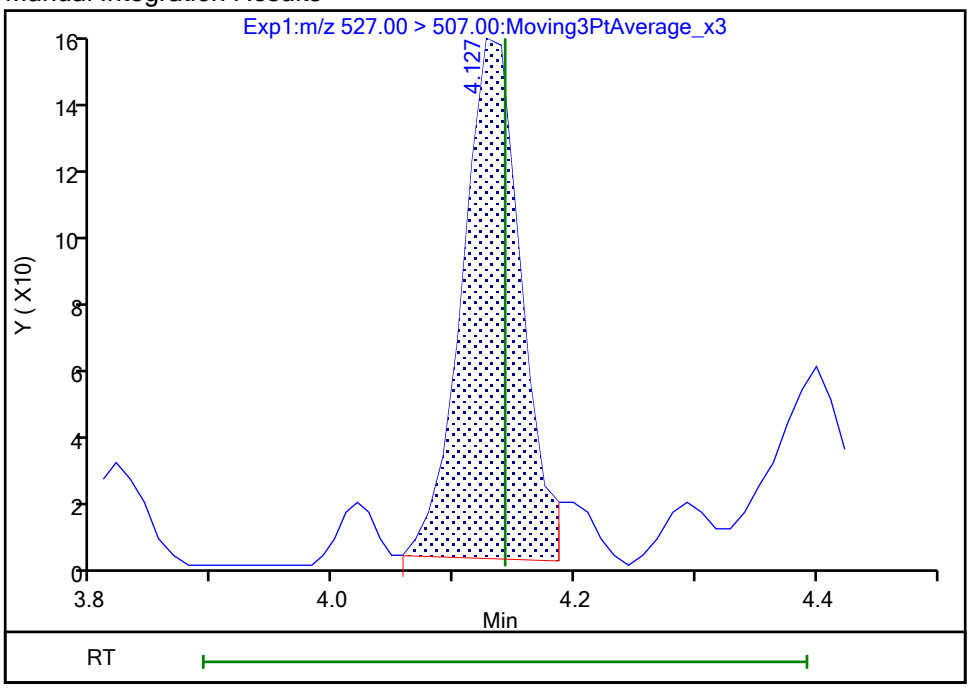
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.13
Area: 529
Amount: 0.000948
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

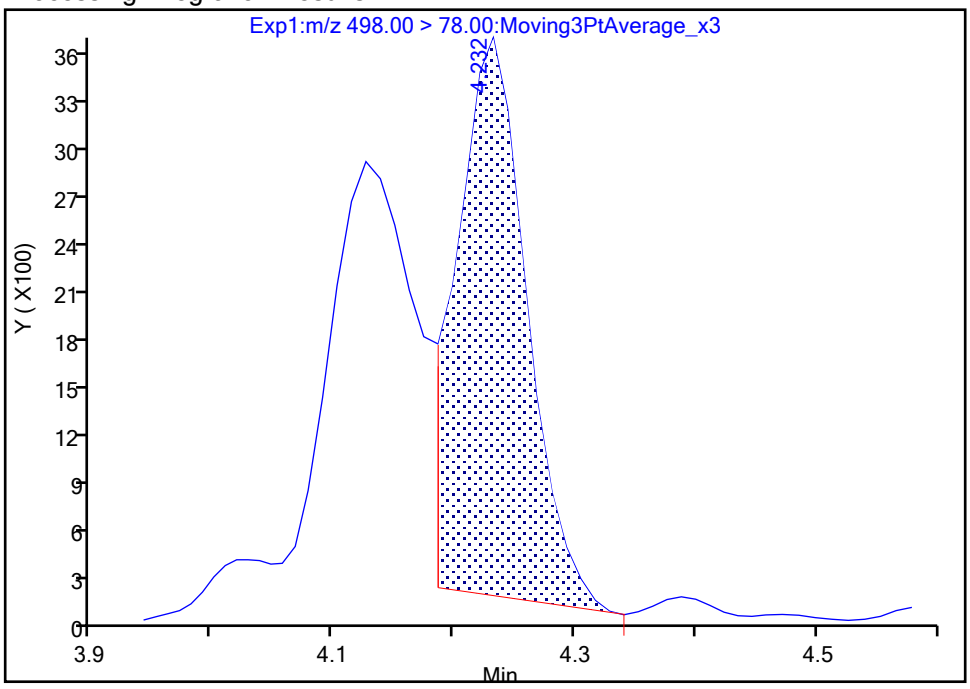
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

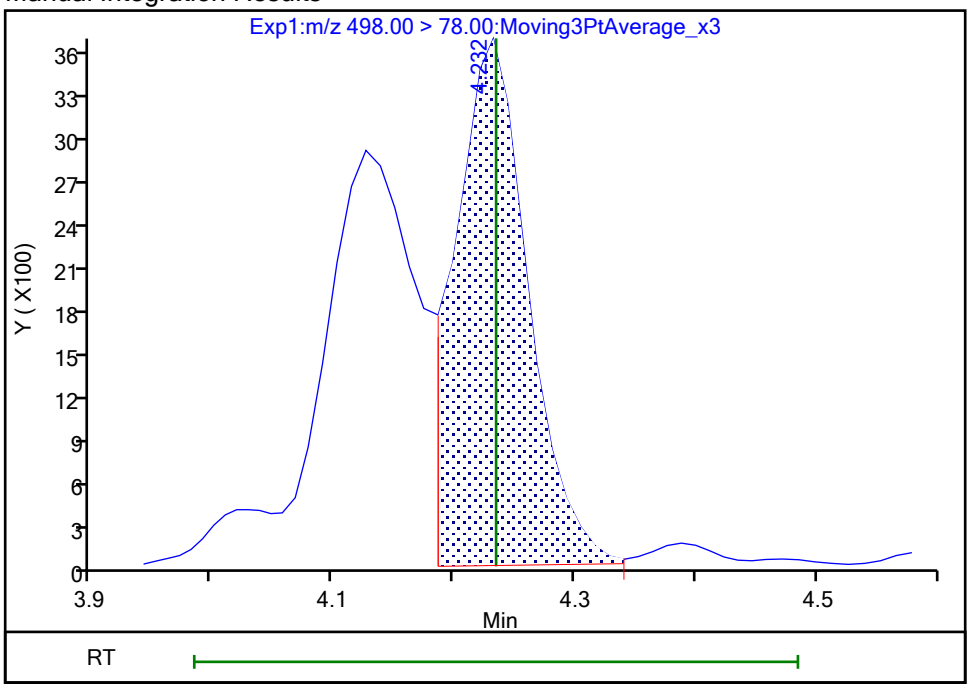
Processing Integration Results

RT: 4.23
Area: 13846
Amount: 0.011838
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 14926
Amount: 0.012761
Amount Units: ng/ml



Reviewer: SJ4N, 24-Oct-2023 23:19:58 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

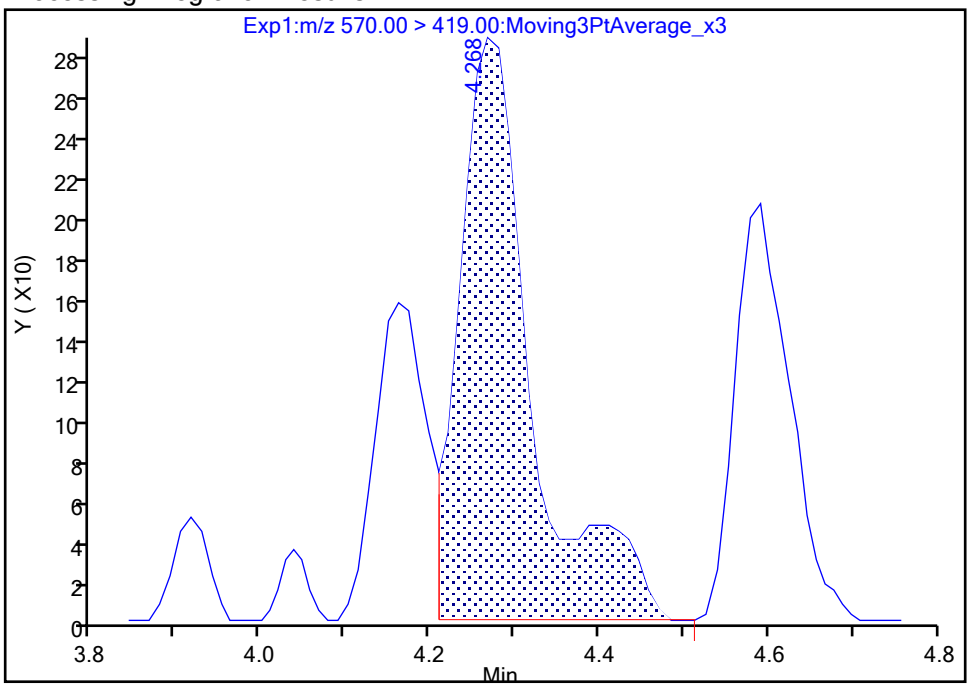
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

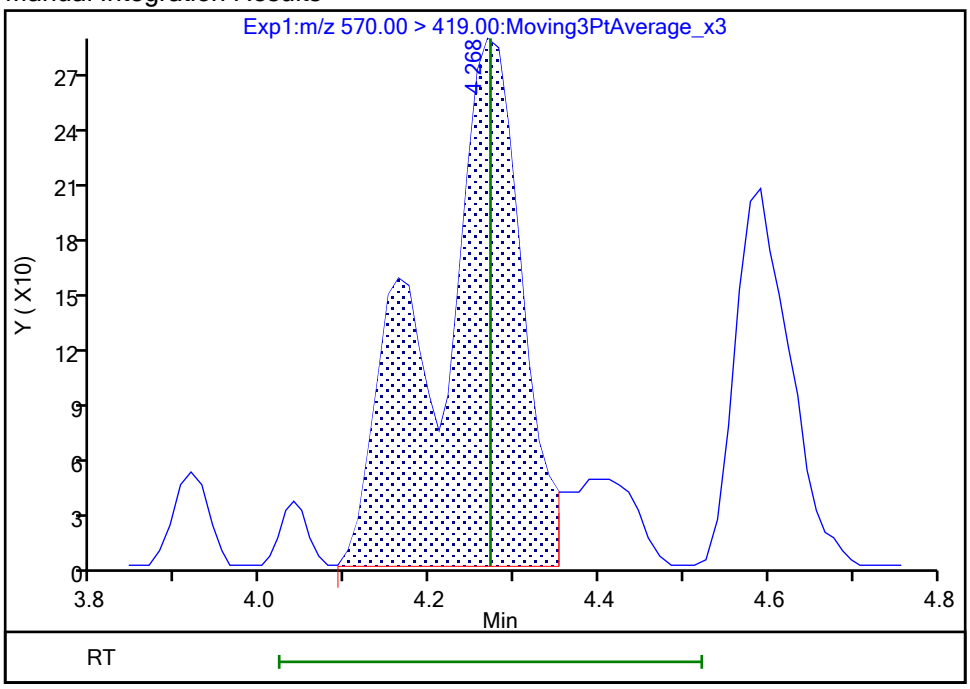
Processing Integration Results

RT: 4.27
Area: 1702
Amount: 0.004812
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 2086
Amount: 0.005898
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:53:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

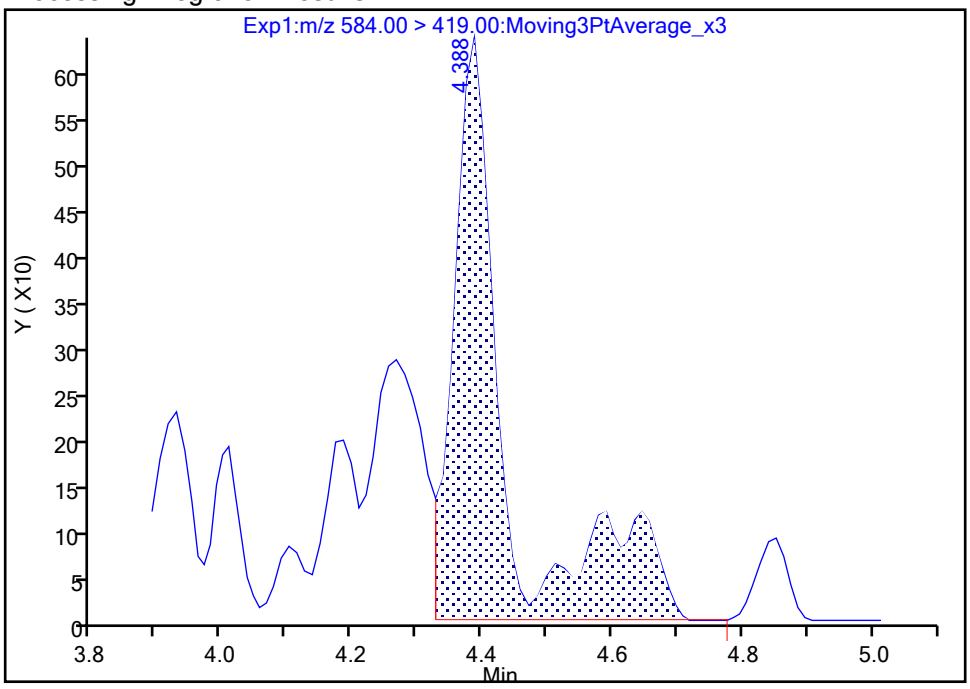
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

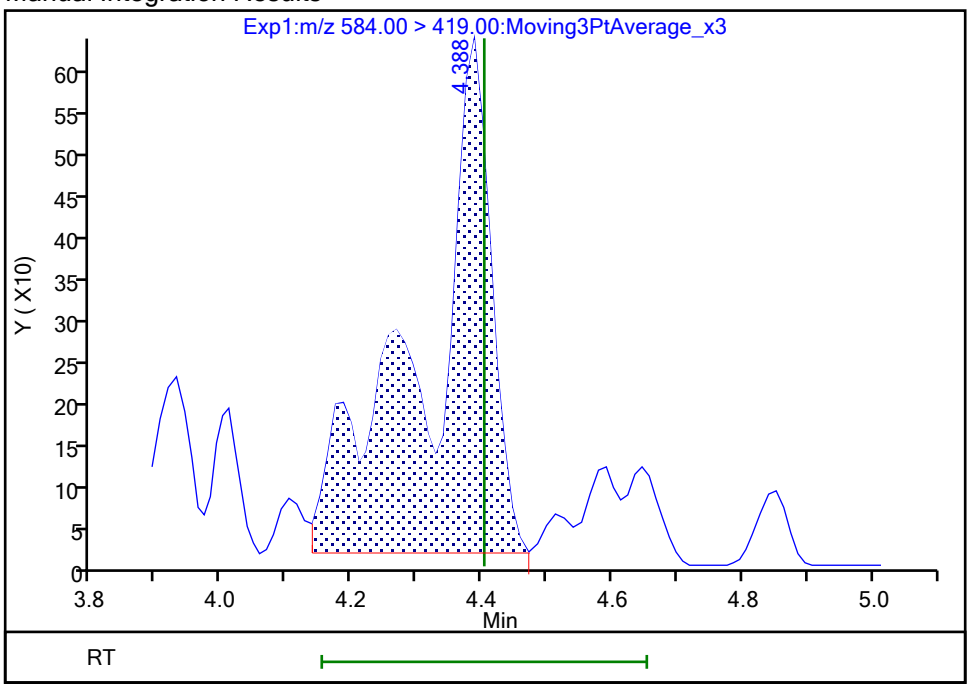
Processing Integration Results

RT: 4.39
Area: 3544
Amount: 0.009401
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 4409
Amount: 0.011695
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

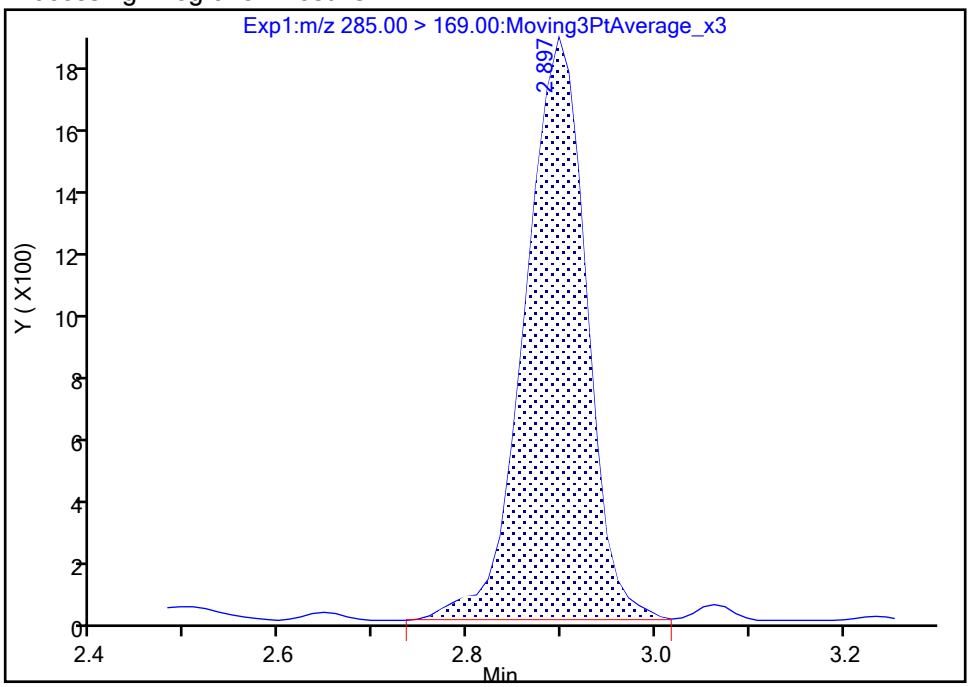
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

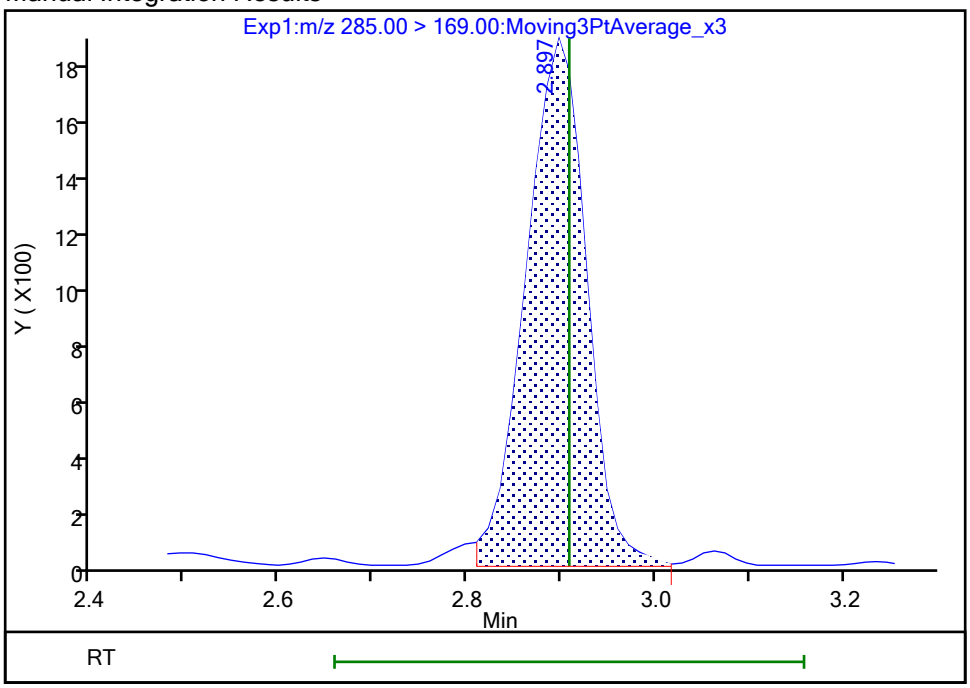
Processing Integration Results

RT: 2.90
Area: 8597
Amount: 0.040812
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 8424
Amount: 0.039991
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:50:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

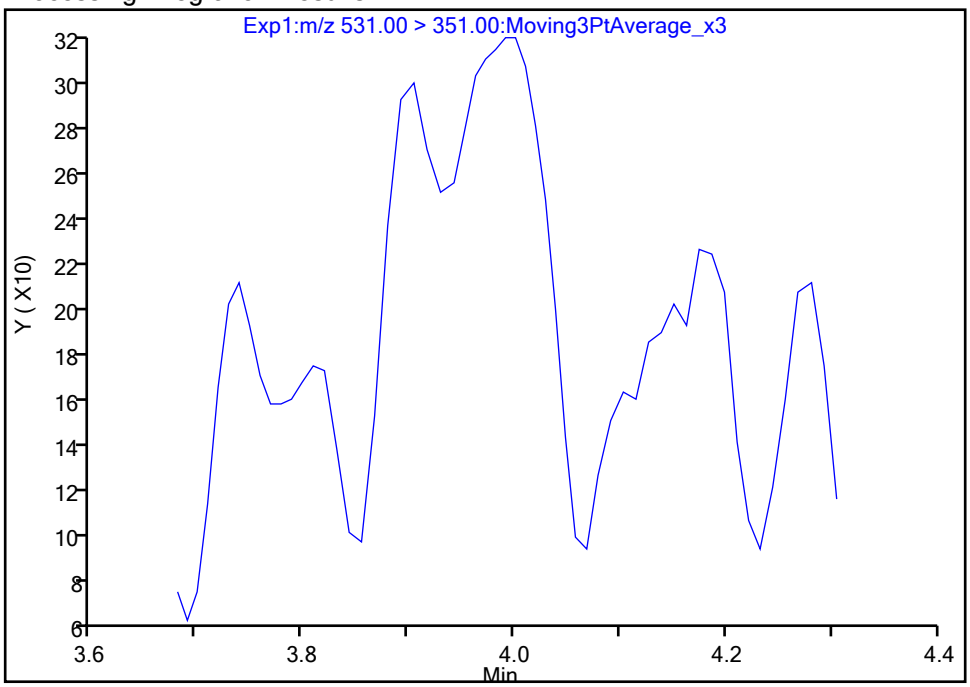
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

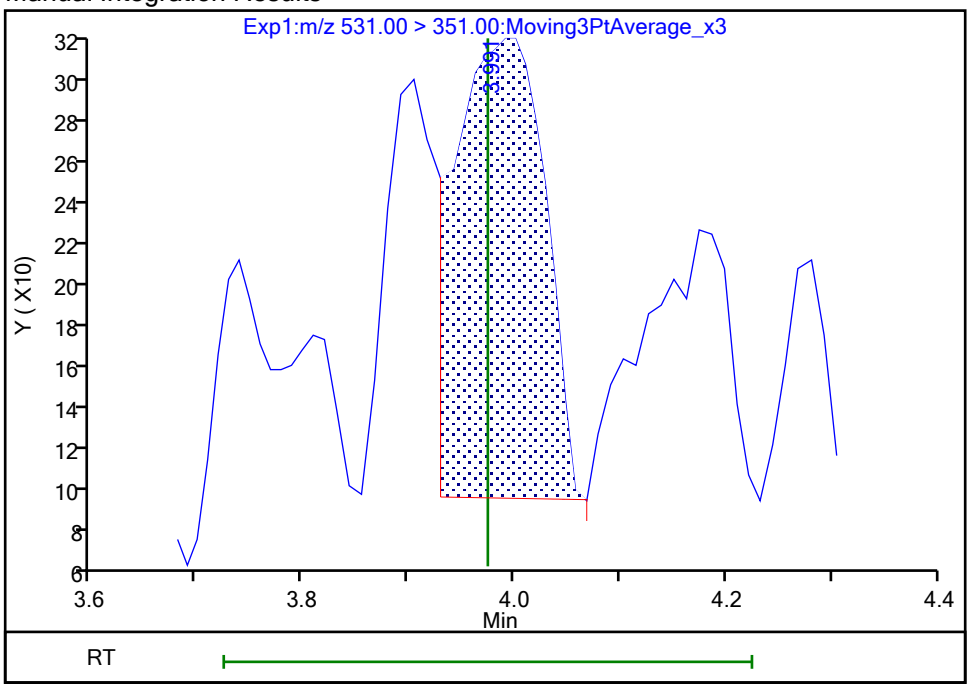
Not Detected
Expected RT: 3.97

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 1246
Amount: 0.000500
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:52:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

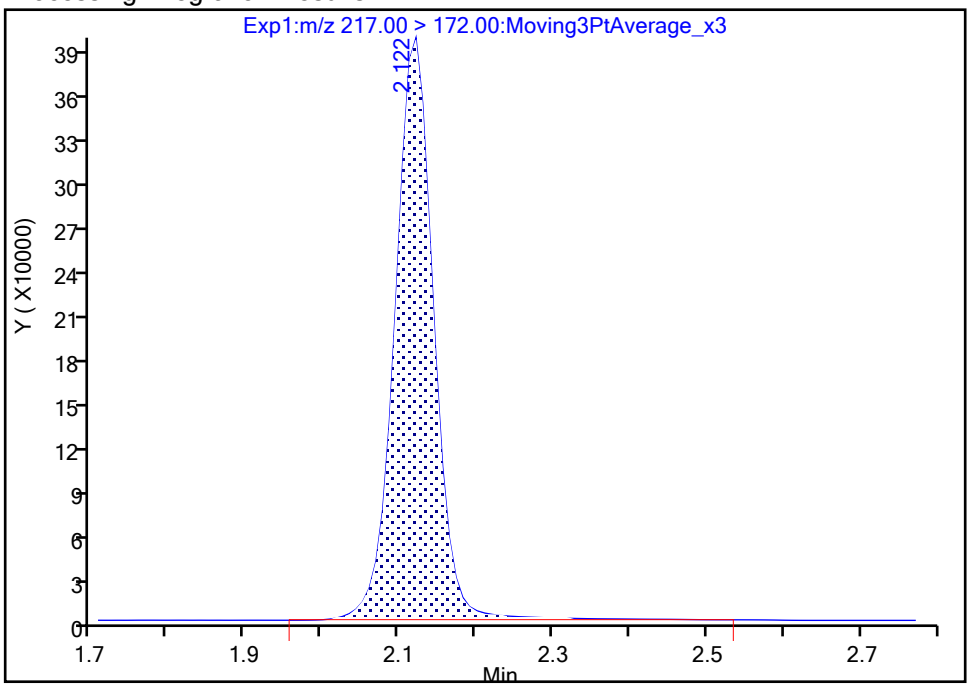
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

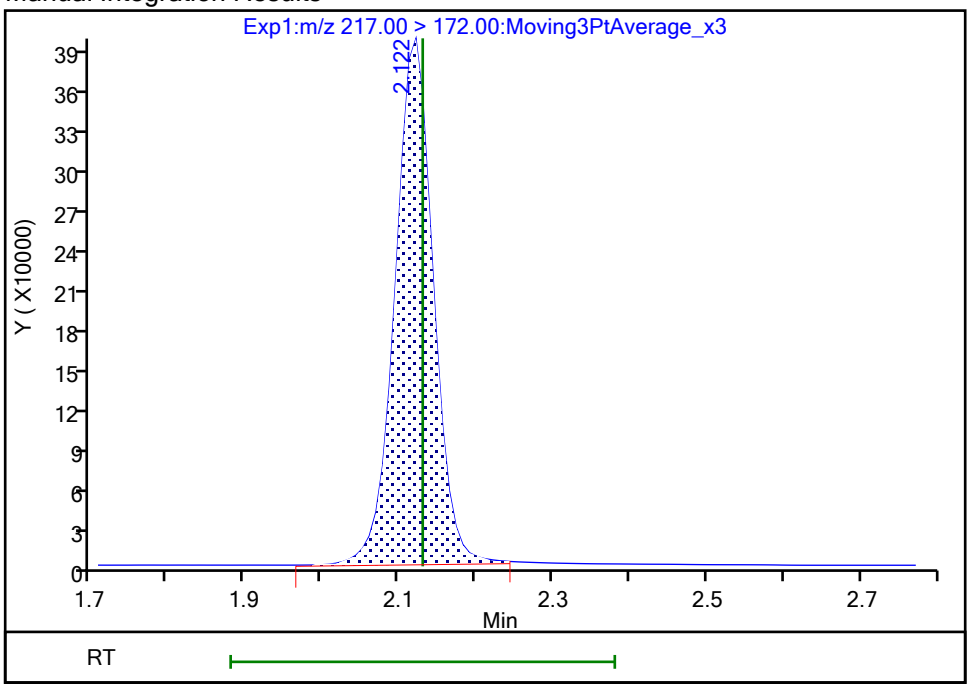
Processing Integration Results

RT: 2.12
Area: 1391311
Amount: 0.886545
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1377205
Amount: 0.877557
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:48:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

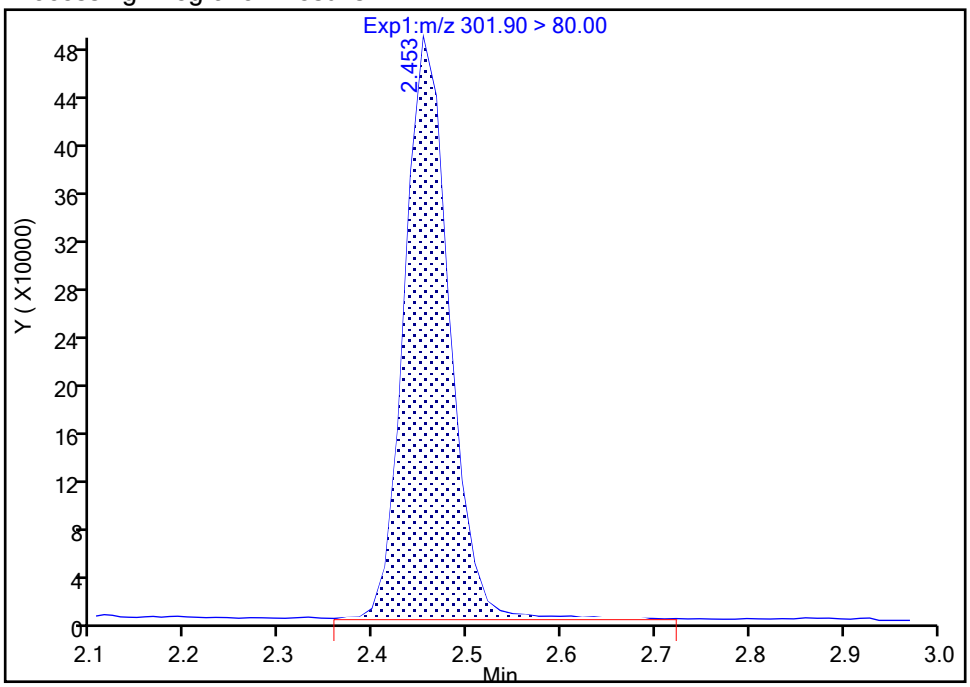
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

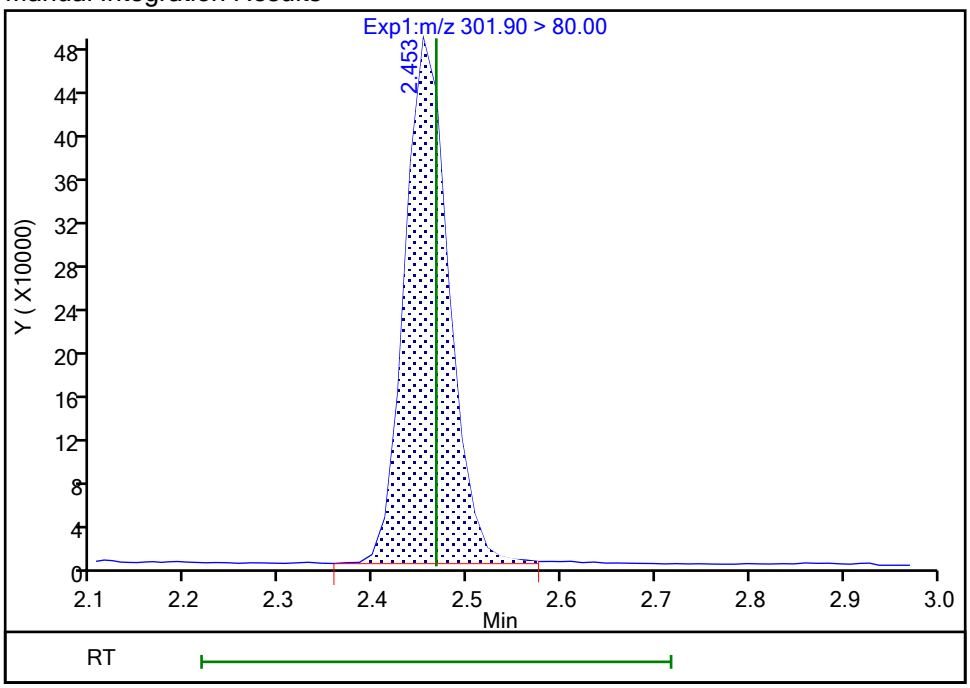
Processing Integration Results

RT: 2.45
Area: 1596478
Amount: 0.968749
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1586939
Amount: 0.962960
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:48:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

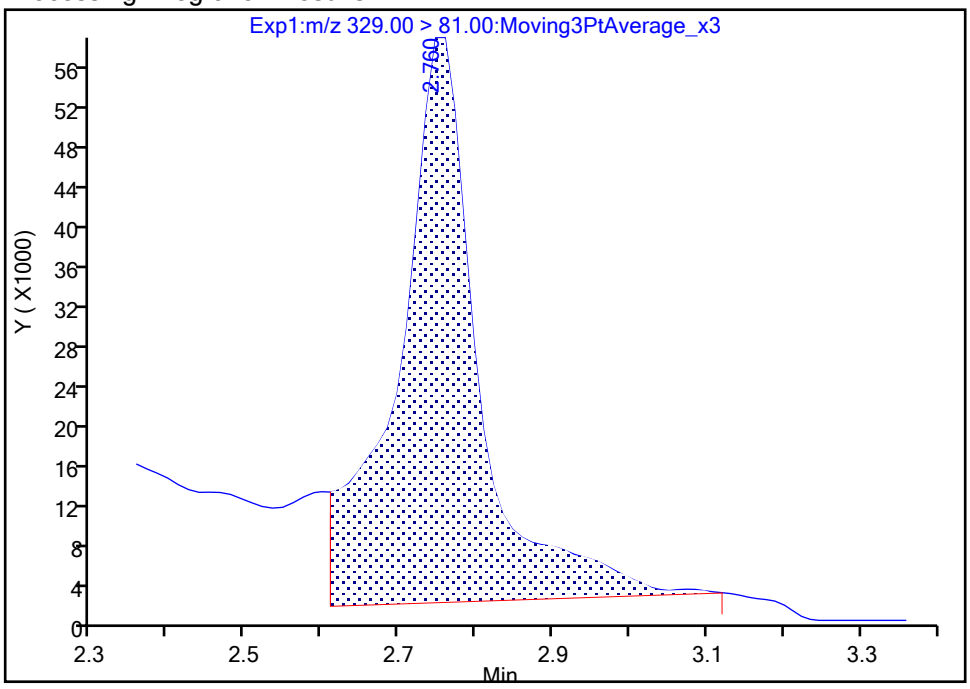
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

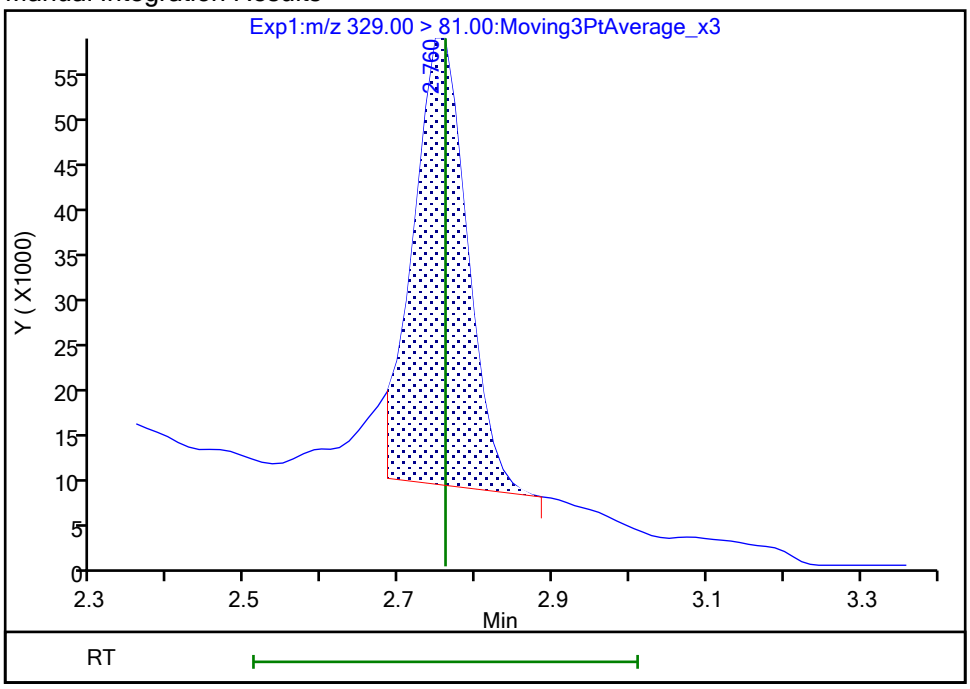
Processing Integration Results

RT: 2.76
Area: 418076
Amount: 2.193665
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 241949
Amount: 1.269518
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:48:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

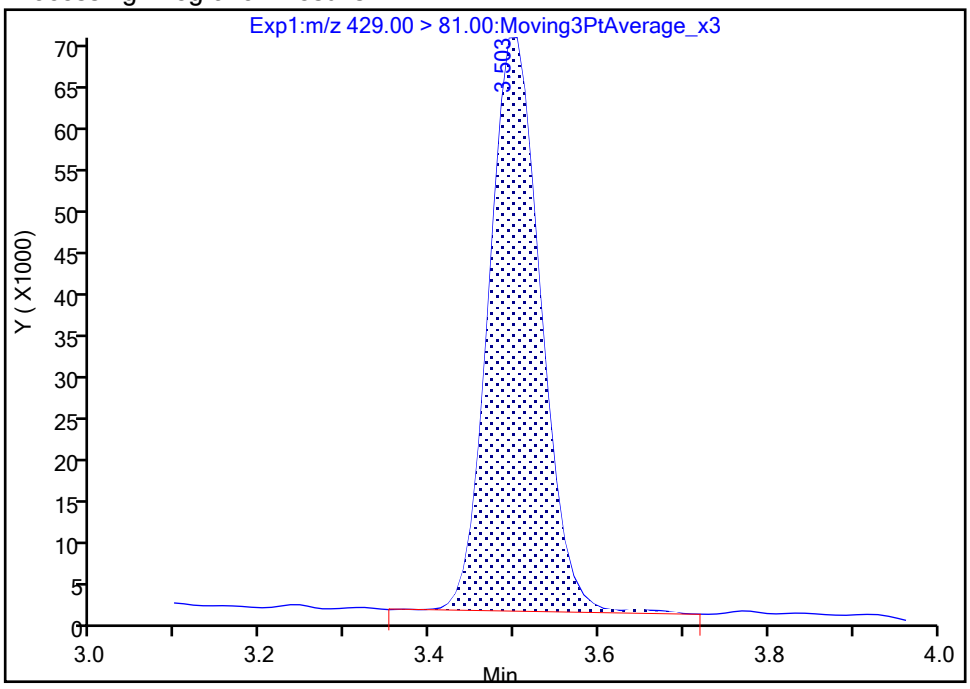
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

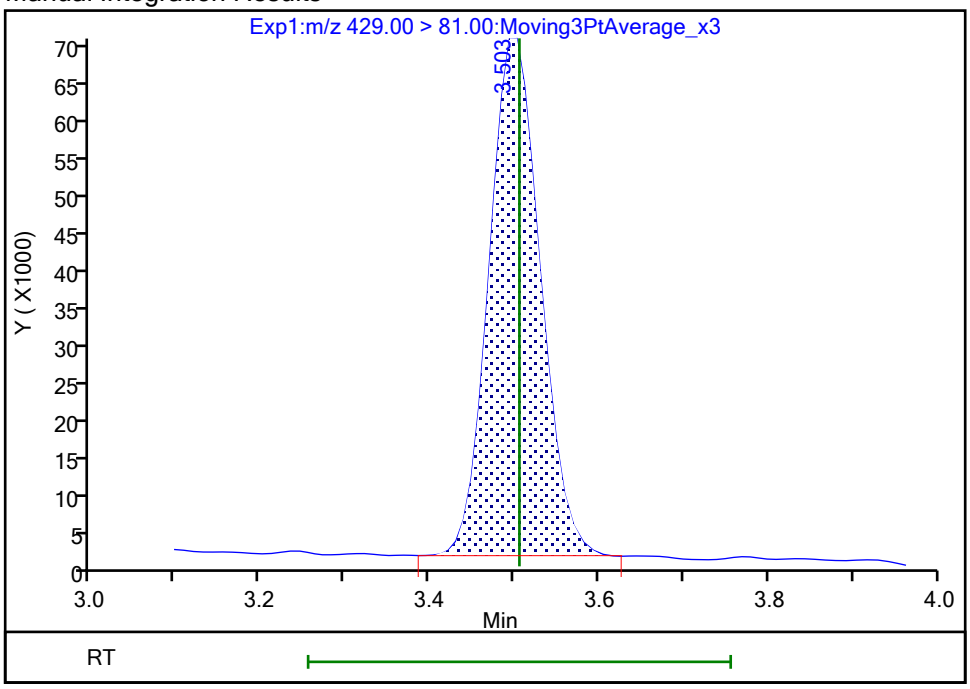
Processing Integration Results

RT: 3.50
Area: 294656
Amount: 1.200406
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 290624
Amount: 1.183980
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:48:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

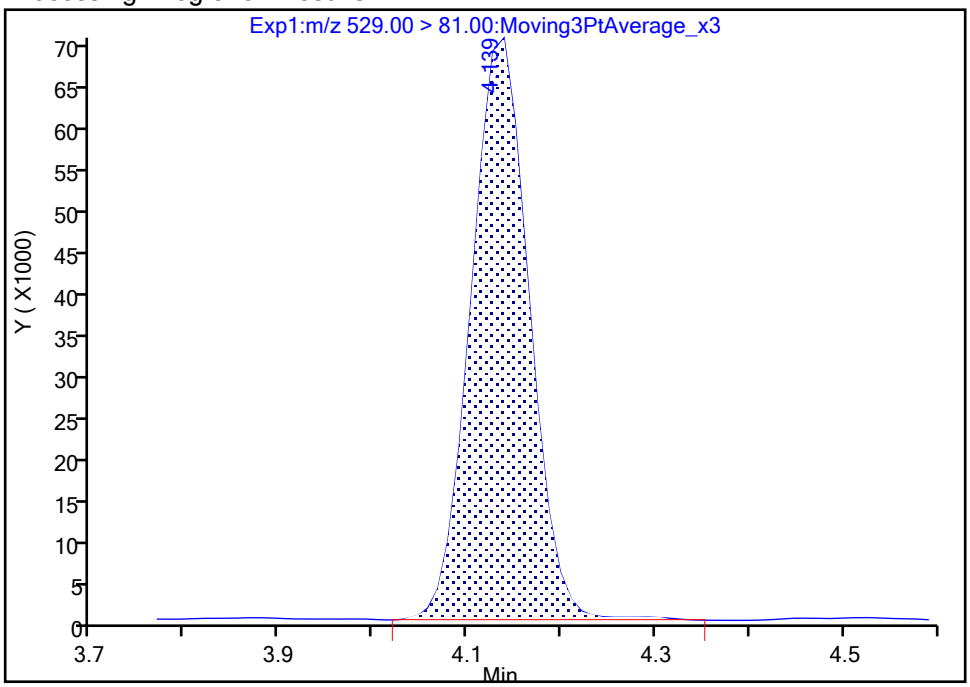
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C08.d				
Injection Date:	21-Oct-2023 01:14:36	Instrument ID:	LC812		
Lims ID:	460-290219-A-9-A	Lab Sample ID:	200-290219-9		
Client ID:	MW17A-101223-1206-29				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

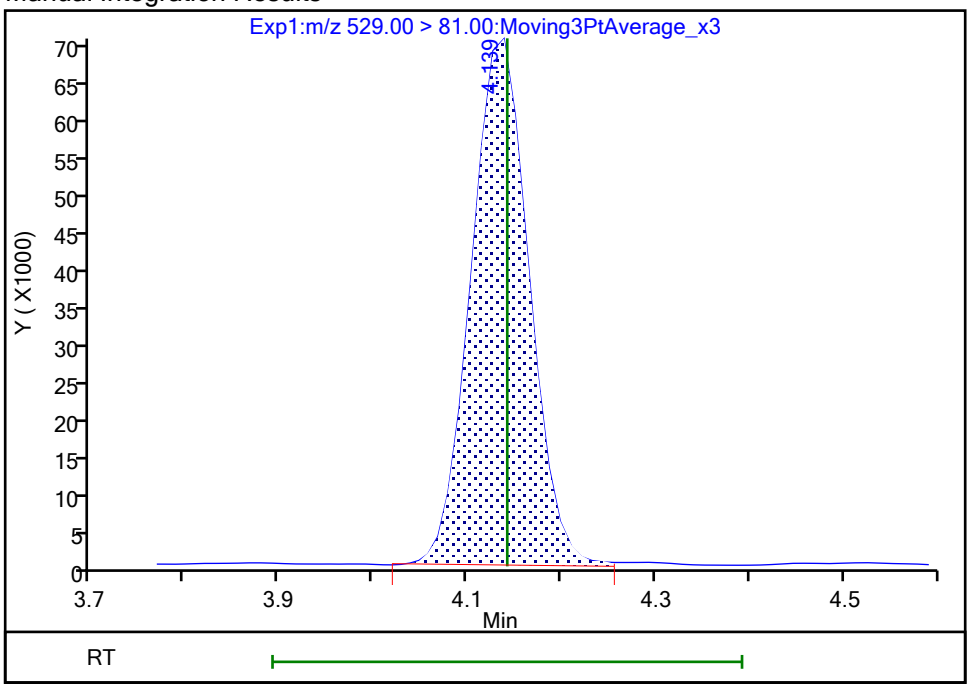
Processing Integration Results

RT: 4.14
Area: 304831
Amount: 1.104494
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 303461
Amount: 1.099530
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:49:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW17B-101223-1306-96 | Lab Sample ID: 460-290219-10

Matrix: Water | Lab File ID: PA231020C09.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 13:06

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 284.3(mL) | Date Analyzed: 10/21/2023 01:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	11.2		4.40	1.06
2706-90-3	Perfluoropentanoic acid	4.18		1.76	0.60
307-24-4	Perfluorohexanoic acid	6.52		1.76	0.57
375-85-9	Perfluoroheptanoic acid	3.85		1.76	0.47
335-67-1	Perfluorooctanoic acid	7.67		1.76	0.67
375-95-1	Perfluorononanoic acid	2.19		1.76	0.43
335-76-2	Perfluorodecanoic acid	1.20	J	1.76	0.40
2058-94-8	Perfluoroundecanoic acid	0.63	J	1.76	0.48
307-55-1	Perfluorododecanoic acid	1.76	U	1.76	0.43
72629-94-8	Perfluorotridecanoic acid	1.76	U	1.76	0.42
376-06-7	Perfluorotetradecanoic acid	1.76	U	1.76	0.56
375-73-5	Perfluorobutanesulfonic acid	2.07		1.76	0.55
2706-91-4	Perfluoropentanesulfonic acid	1.76	U	1.76	0.44
355-46-4	Perfluorohexanesulfonic acid	2.34		1.76	0.48
375-92-8	Perfluoroheptanesulfonic acid	0.59	J	1.76	0.36
1763-23-1	Perfluorooctanesulfonic acid	174		1.76	0.75
68259-12-1	Perfluorononanesulfonic acid	1.76	U	1.76	0.35
335-77-3	Perfluorodecanesulfonic acid	0.42	J	1.76	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.40	U	4.40	1.14
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68
754-91-6	Perfluorooctanesulfonamide	1.76	U	1.76	0.81
2355-31-9	NMeFOSAA	4.40	U	4.40	1.67
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.40	U	4.40	1.41
13252-13-6	HFPODA	1.19	J	3.52	0.97
919005-14-4	DONA	1.76	U	1.76	0.37
756426-58-1	9Cl-PF3ONS	1.76	U	1.76	0.28
763051-92-9	11Cl-PF3OUdS	1.76	U	1.76	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW17B-101223-1306-96 Lab Sample ID: 460-290219-10

Matrix: Water Lab File ID: PA231020C09.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 13:06

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 284.3(mL) Date Analyzed: 10/21/2023 01:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	97		50-150
STL01892	13C4 PFHpA	101		50-150
STL02116	13C2 PFTeDA	95		50-150
STL02337	13C3 PFBS	94		50-150
STL01056	13C8 FOSA	88		50-150
STL02118	d3-NMeFOSAA	95		50-150
STL02117	d5-NEtFOSAA	100		50-150
STL02395	M2-4:2 FTS	103		50-150
STL02279	M2-6:2 FTS	100		50-150
STL02280	M2-8:2 FTS	92		50-150
STL02255	13C3 HFPO-DA	99		50-150
STL00994	18O2 PFHxS	95		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	93		50-150
STL00998	13C2 PFDoA	104		50-150
STL00995	13C5 PFNA	106		50-150
STL00996	13C2 PFDA	98		50-150
STL00990	13C4 PFOA	107		50-150
STL00997	13C2 PFUnA	100		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d
Lims ID: 460-290219-A-10-A
Client ID: MW17B-101223-1306-96
Sample Type: Client
Inject. Date: 21-Oct-2023 01:22:45 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-10-A
Misc. Info.: 200-0057493-009 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 15:00:51
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1861842	1.22		97.9	1671	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.130	0.0	1.000	483694	0.3182			32.7	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1435689	1.22		97.3	636	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	147412	0.1189			1.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1751162	1.10		94.3	37903	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	98923	0.0588	Target=2.06		6.2	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	48003		2.06(1.03-3.09)		5.6	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	222280	1.20		103	15.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.795	1467159	1.22		97.7	3293	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	239486	0.1854	Target=14.12		4.4	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	16111		14.86(7.06-21.17)		9.7	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	7799	0.0339			96.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	287253	1.24		98.8	2363	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.899	1283729	1.12		94.8	7632	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	79879	0.0665	Target=3.32		20.6	M
399.00 > 99.00	3.165	3.157	0.008	1.000	27194		2.94(1.66-4.98)		13.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	163522	0.1094	Target=4.17		5.7	M
363.00 > 169.00	3.153	3.169	-0.016	0.996	36440		4.49(2.09-6.26)		48.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.899	1666721	1.26		101	4185	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.917	16582	0.0169	Target=4.83		5.5	M
449.00 > 99.00	3.502	3.506	-0.004	0.917	4589		3.61(2.41-7.24)		4.4	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.506	0.005	0.997	283491	1.19		100	118	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	0.997	1991706	1.33		107	4225	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.515	0.005		1917601	1.25			4595	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.003	370211	0.2181	Target=2.88		9.0	M
413.00 > 169.00	3.520	3.515	0.005	1.003	130074		2.85(1.44-4.32)		145	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.823	0.007	1.003	3919057	4.95	Target=4.24		1306	M
499.00 > 99.00	3.818	3.823	-0.005	1.000	981381		3.99(2.12-6.37)		1026	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.823	-0.005	1.085	811308	1.12		93.3	604	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.846	-0.004	1.000	104665	0.0623	Target=8.34		7.0	M
463.00 > 169.00	3.842	3.846	-0.004	1.000	13276		7.88(4.17-12.51)		48.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.091	2143652	1.32		106	4901	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.100	4.106	-0.006	1.074	5479	0.009094	Target=2.17		2.7	M
549.00 > 99.00	4.088	4.106	-0.018	1.071	4066		1.35(1.08-3.25)		6.2	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.130	0.006	1.000	56794	0.0341	Target=11.44		8.3	M
513.00 > 169.00	4.124	4.130	-0.006	0.997	5392		10.53(5.72-17.16)		22.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.175	2083105	1.22		98.0	6608	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.175	295252	1.10		92.2	269	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.142	0.006	1.003	160	0.000295			2.4	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.205	1591191	1.10		87.7	2628	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.271	-0.006	1.212	480369	1.18		94.5	2254	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.253	4.271	-0.018	0.997	337	0.000966			1.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.351	4.356	-0.005	1.139	5512	0.0119	Target=2.37		3.8	M
599.00 > 99.00	4.363	4.356	0.007	1.143	2739		2.01(1.19-3.56)		7.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.380	0.006	1.246	2013758	1.25		100	8659	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.386	4.391	-0.005	1.000	29974	0.0181	Target=12.20		5.2	M
563.00 > 169.00	4.386	4.391	-0.005	1.000	2758		10.87(6.10-18.31)		10.0	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.391	0.007	1.250	489156	1.25		100.0	839	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	821	0.002098			4.2	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.495	4.475	0.020	1.177	1121	0.000302			1.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.310	2113973	1.30		104	6888	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.604	0.006	1.000	11156	0.006481	Target=8.47		0.9	
613.00 > 169.00	4.610	4.604	0.006	1.000	1763		6.33(4.23-12.70)		18.4	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.414	1920664	1.18		94.6	4389	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.983	-0.004	1.000	259	0.001508	Target=0.87		3.9	M
713.00 > 219.00	4.968	4.983	-0.015	0.998	386		0.67(0.43-1.30)		6.7	M

QC Flag Legend

Processing Flags

Review Flags

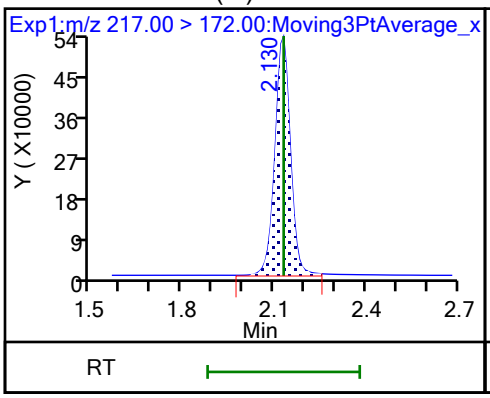
M - Manually Integrated

Report Date: 25-Oct-2023 08:40:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54

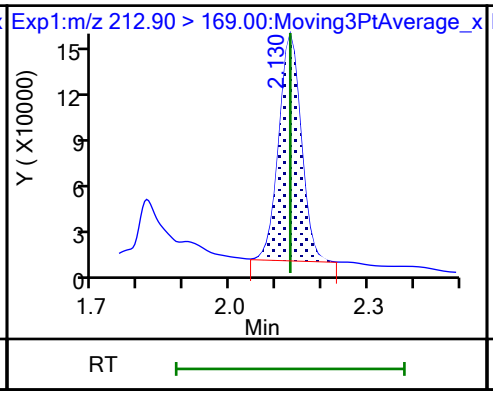
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d
Injection Date: 21-Oct-2023 01:22:45 Instrument ID: LC812
Lims ID: 460-290219-A-10-A Lab Sample ID: 200-290219-10
Client ID: MW17B-101223-1306-96
Operator ID: LC812user ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

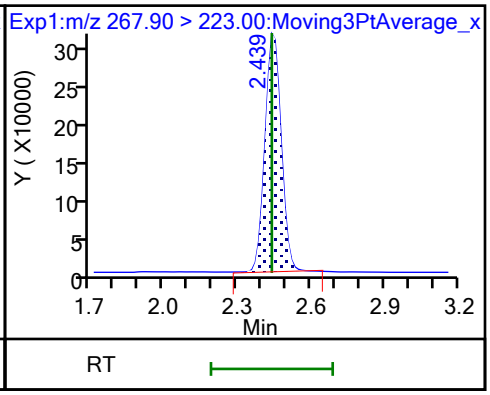
D 1 13C4 PFBA (M)



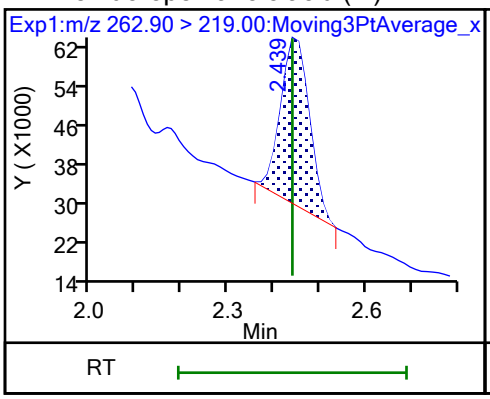
2 Perfluorobutanoic acid



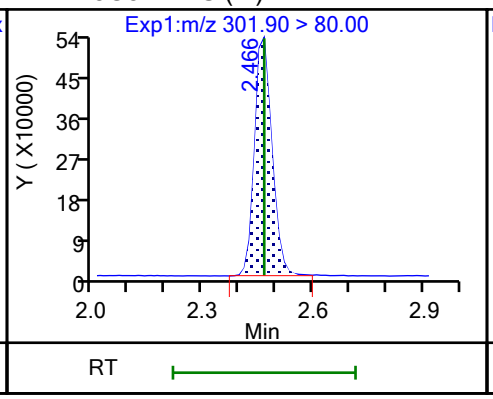
D 3 13C5 PFPeA



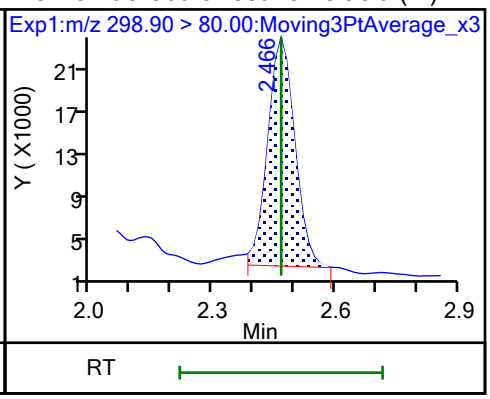
4 Perfluoropentanoic acid (M)



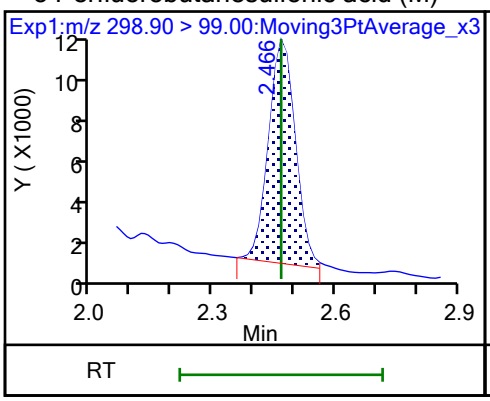
D 47 13C3 PFBS (M)



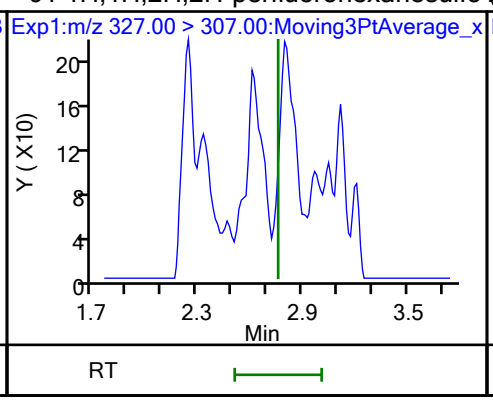
5 Perfluorobutanesulfonic acid (M)



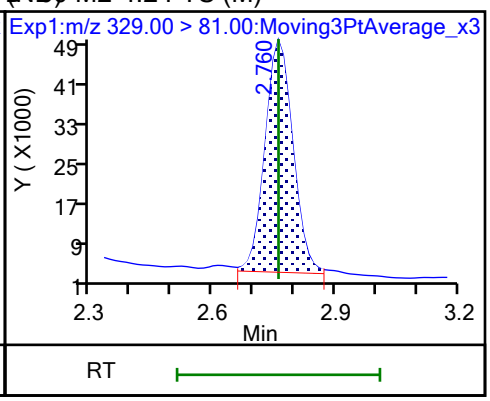
5 Perfluorobutanesulfonic acid (M)



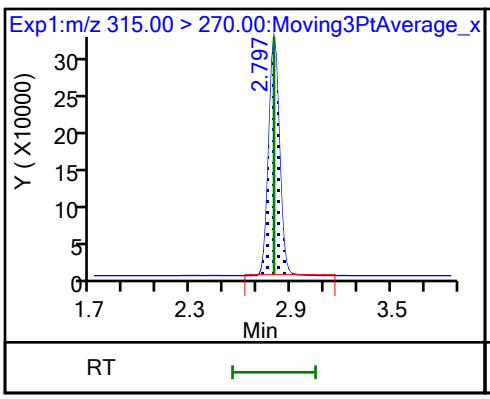
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



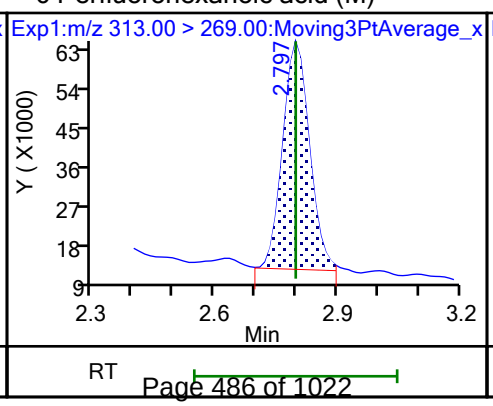
D 60 M2-4:2 FTS (M)



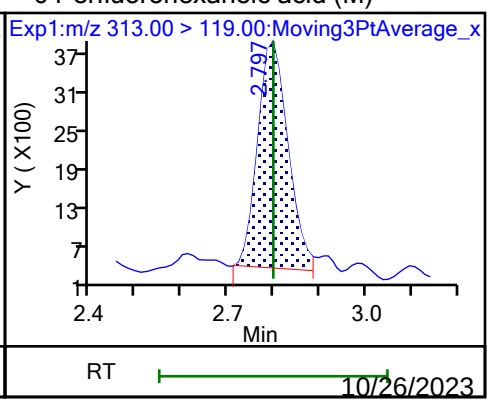
D 7 13C2 PFHxA



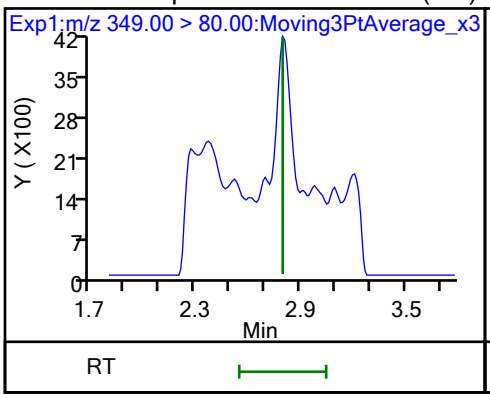
6 Perfluorohexanoic acid (M)



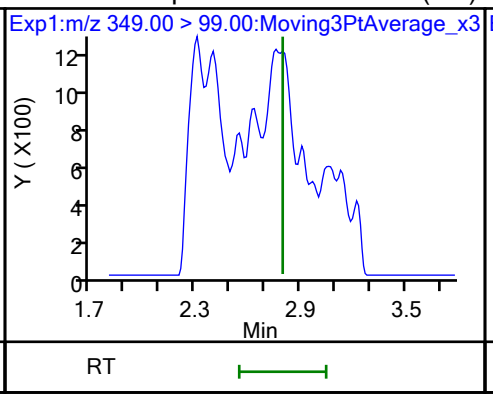
6 Perfluorohexanoic acid (M)



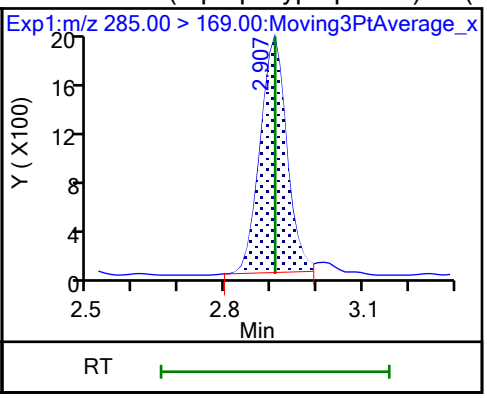
70 Perfluoropentanesulfonic acid (ND)



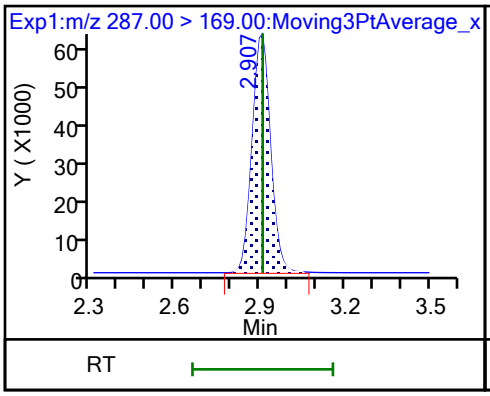
70 Perfluoropentanesulfonic acid (ND)



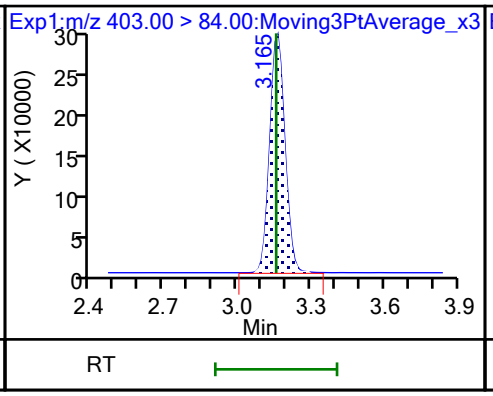
67 Perfluoro(2-propoxypropanoic) ac (M)



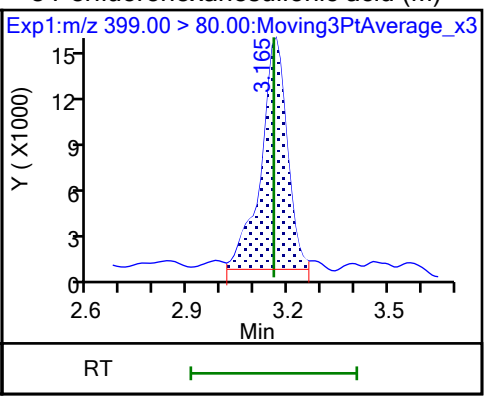
D 64 13C3 HFPO-DA



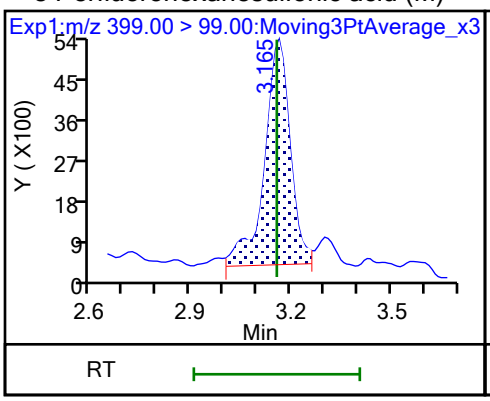
D 11 18O2 PFHxS



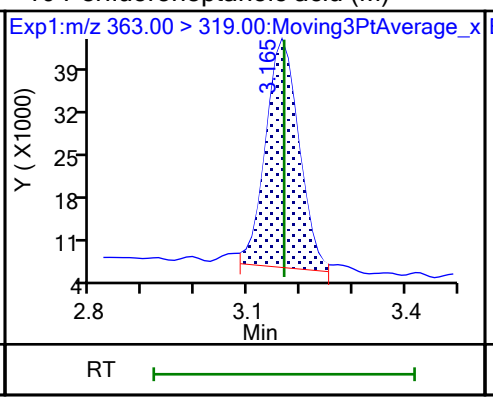
8 Perfluorohexanesulfonic acid (M)



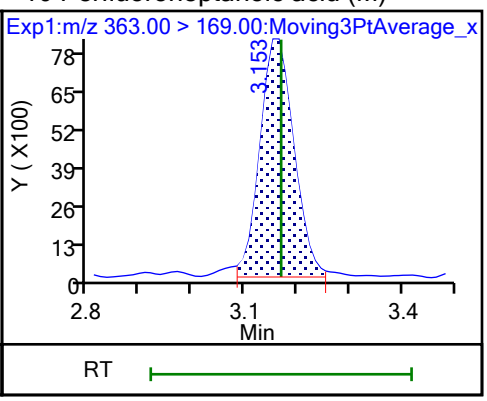
8 Perfluorohexanesulfonic acid (M)



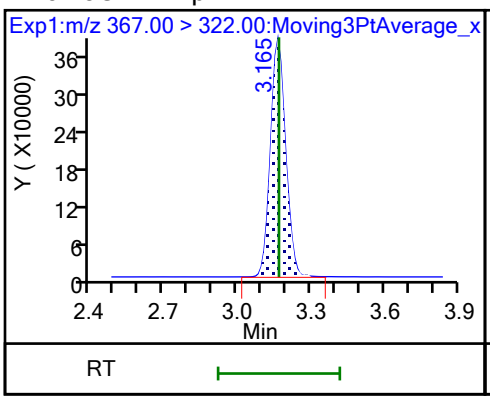
10 Perfluoroheptanoic acid (M)



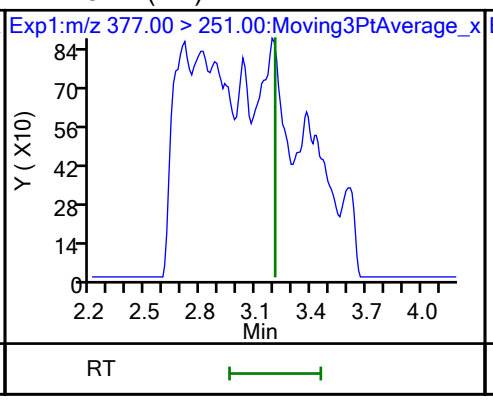
10 Perfluoroheptanoic acid (M)



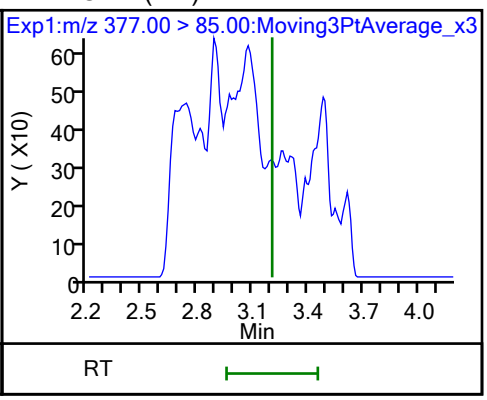
D 9 13C4 PFHpA



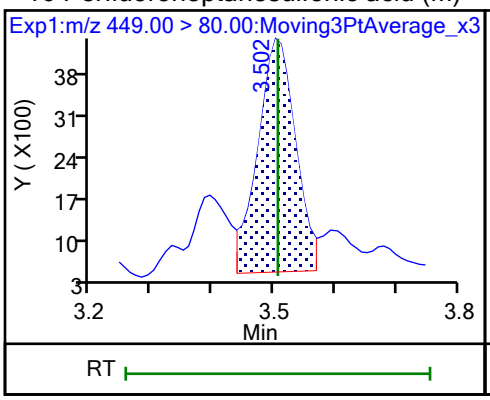
77 DONA (ND)



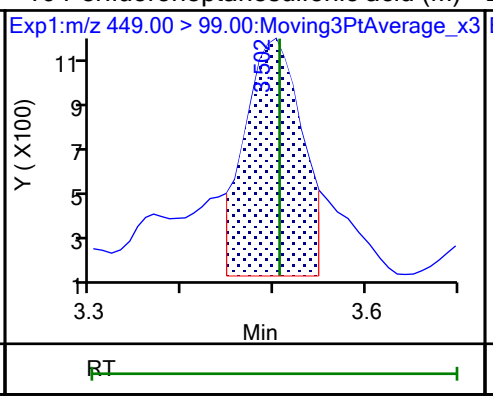
77 DONA (ND)



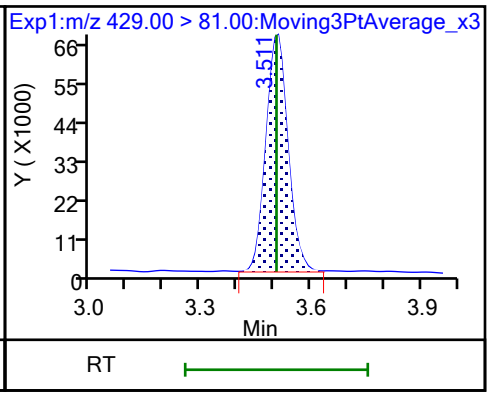
16 Perfluoroheptanesulfonic acid (M)



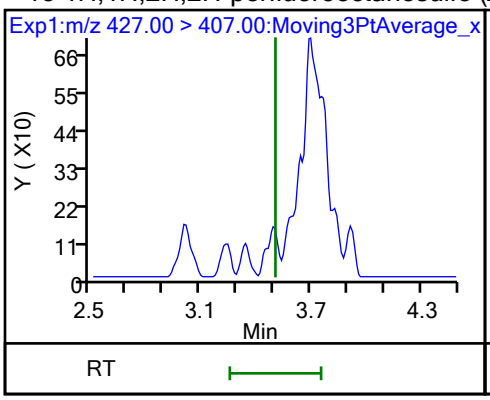
16 Perfluoroheptanesulfonic acid (M)



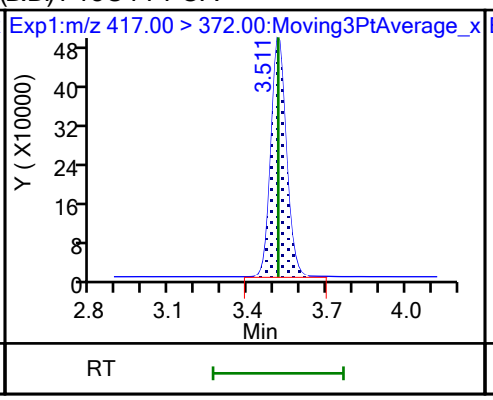
D 12 M2-6:2 FTS



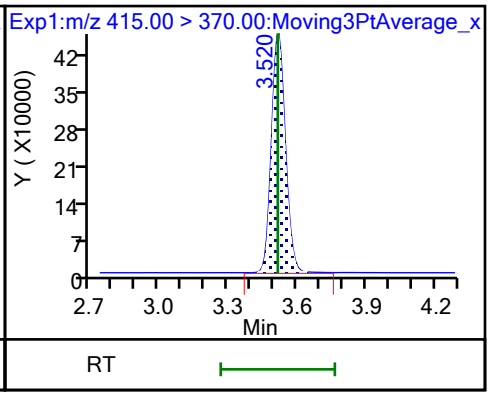
13 1H,1H,2H,2H-perfluorooctanesulfo (MD)



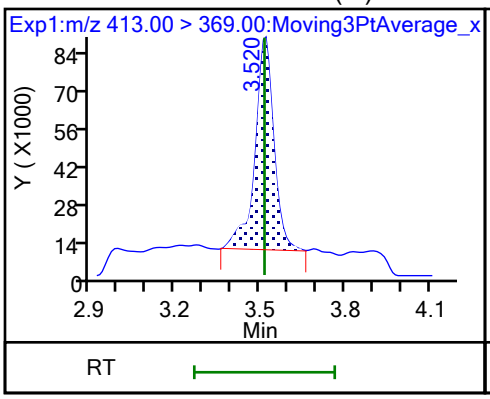
D 14 13C4 PFOA



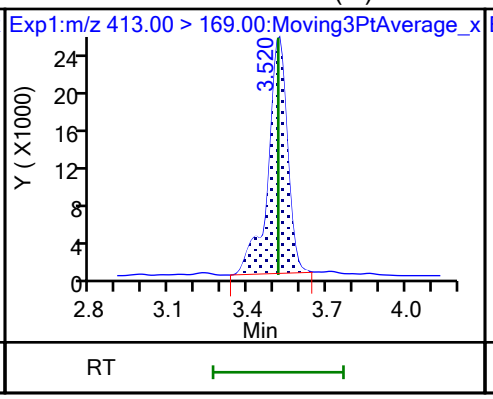
* 62 13C2 PFOA



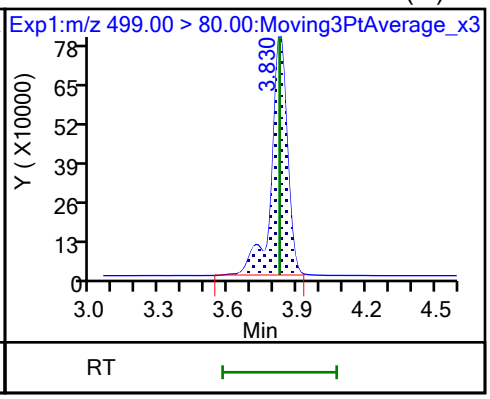
15 Perfluorooctanoic acid (M)



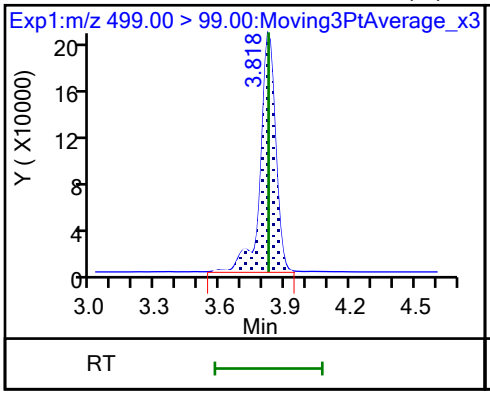
15 Perfluorooctanoic acid (M)



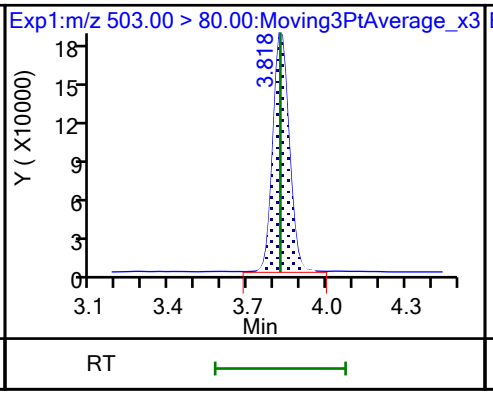
17 Perfluorooctanesulfonic acid (M)



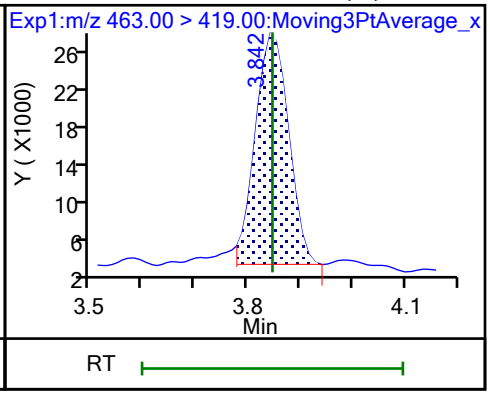
17 Perfluorooctanesulfonic acid (M)



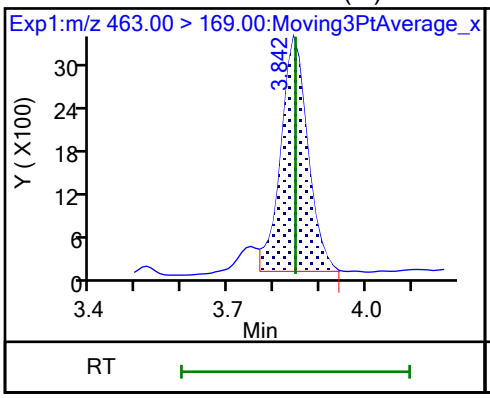
D 18 13C4 PFOS



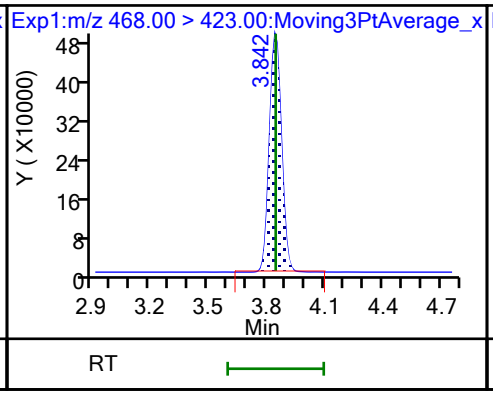
20 Perfluorononanoic acid (M)



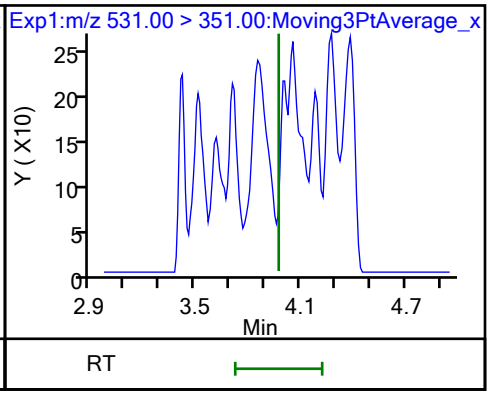
20 Perfluorononanoic acid (M)



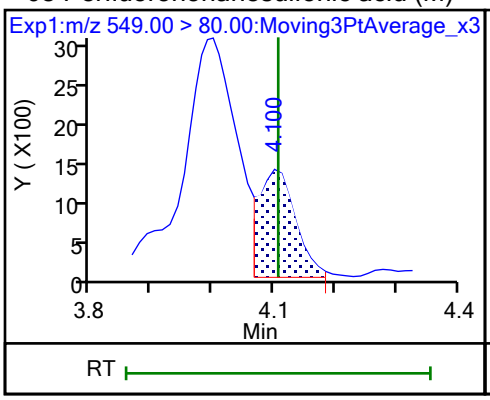
D 19 13C5 PFNA



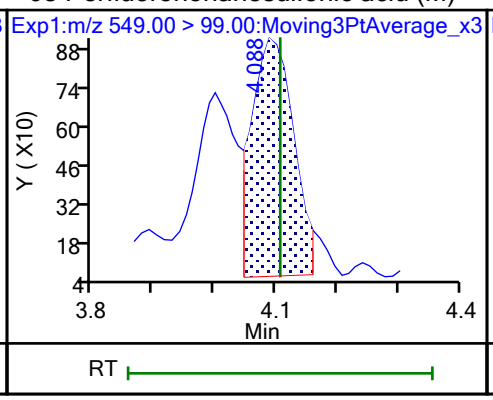
69 9-Chlorohexadecafluoro-3-oxanona (ND)



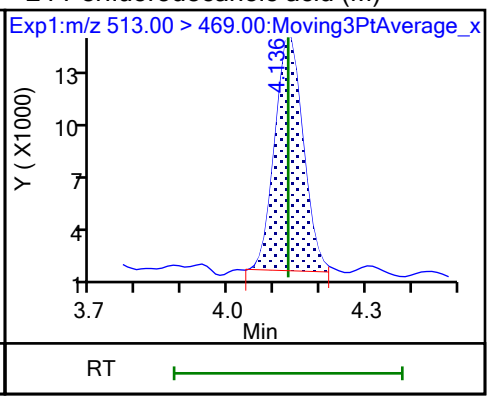
68 Perfluorononanesulfonic acid (M)



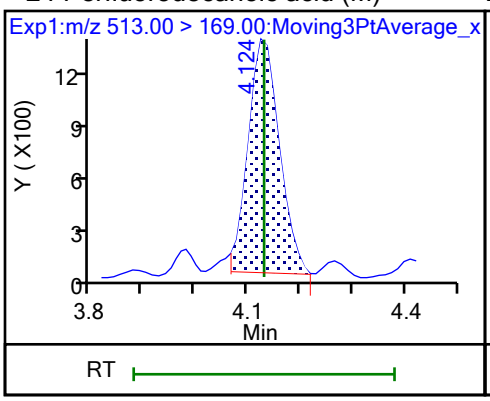
68 Perfluorononanesulfonic acid (M)



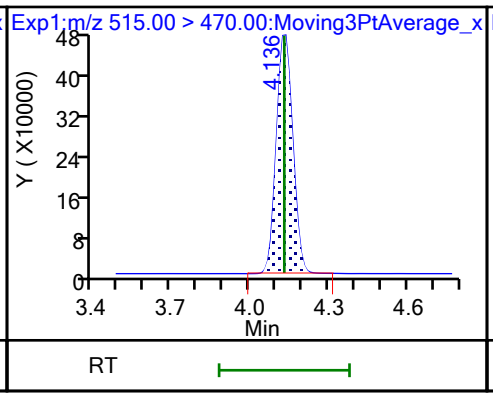
24 Perfluorodecanoic acid (M)



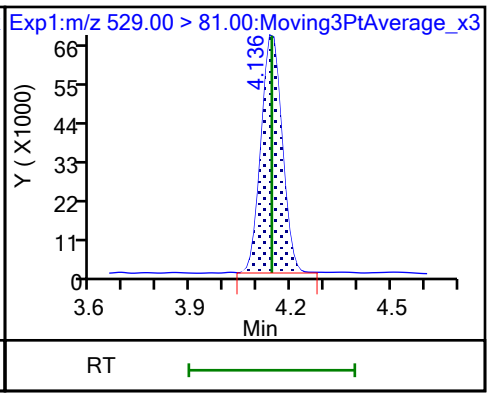
24 Perfluorodecanoic acid (M)



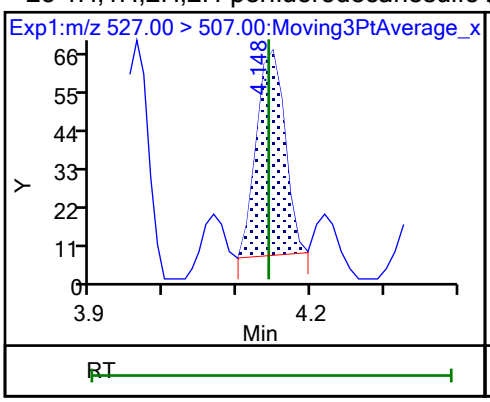
D 23 13C2 PFDA



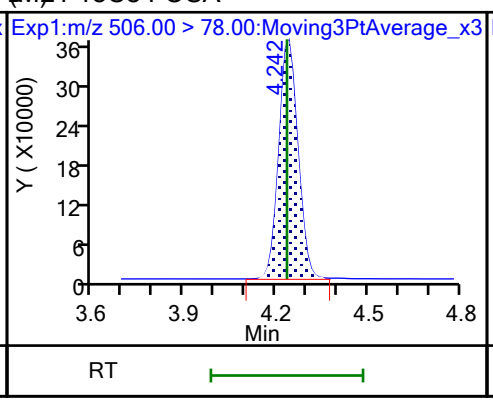
D 26 M2-8:2 FTS



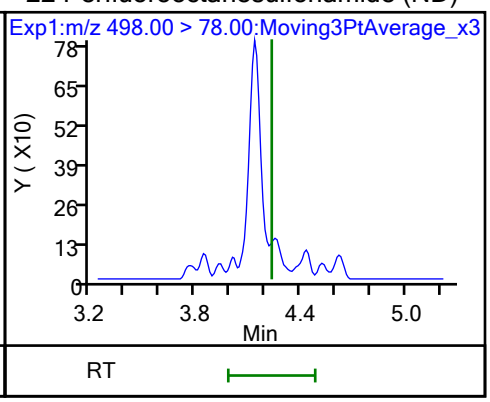
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



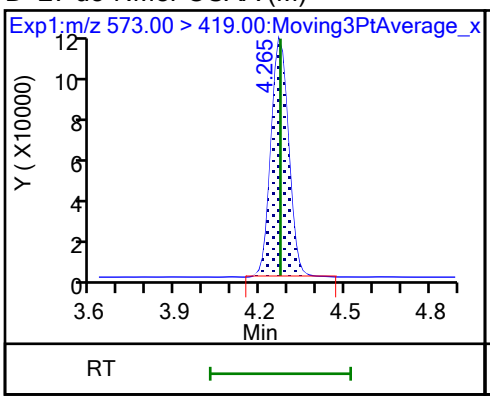
D 21 13C8 FOSA



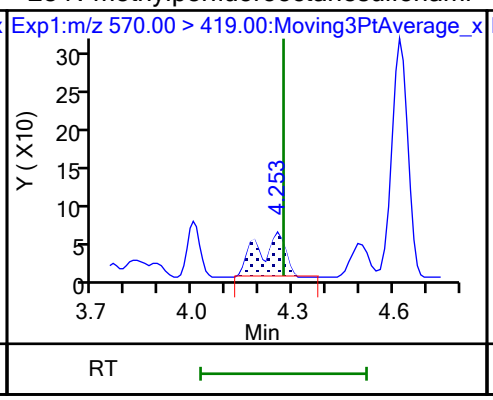
22 Perfluorooctanesulfonamide (ND)



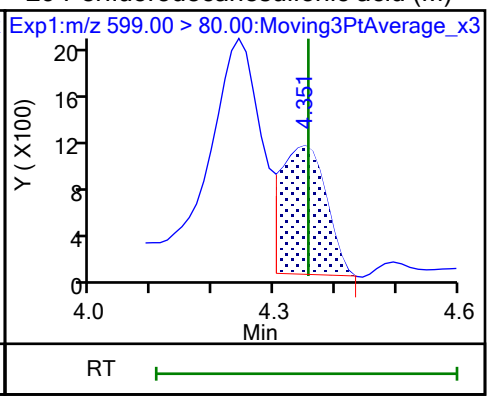
D 27 d3-NMeFOSAA (M)



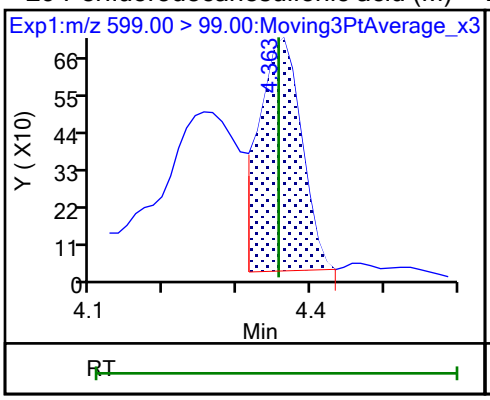
28 N-methylperfluorooctanesulfonami



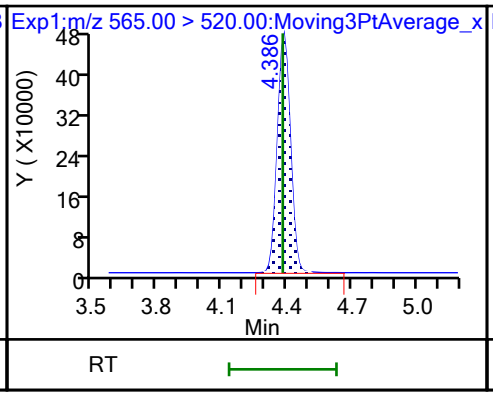
29 Perfluorodecanesulfonic acid (M)



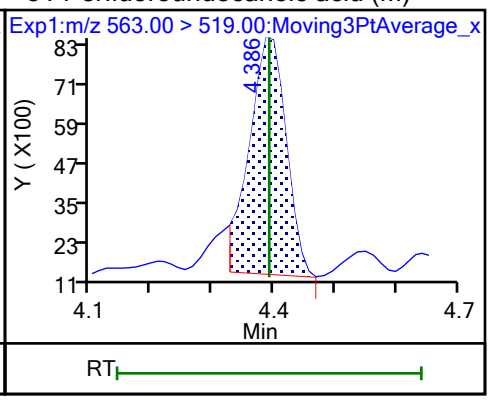
29 Perfluorodecanesulfonic acid (M)



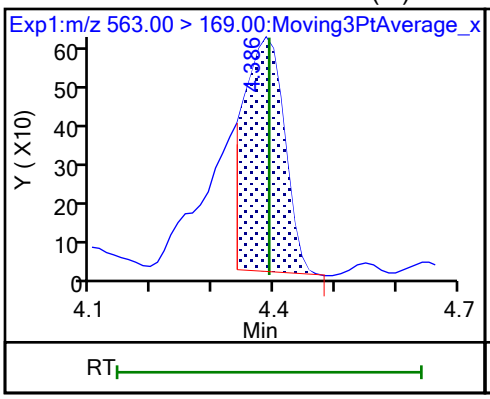
D 30 13C2 PFUnA



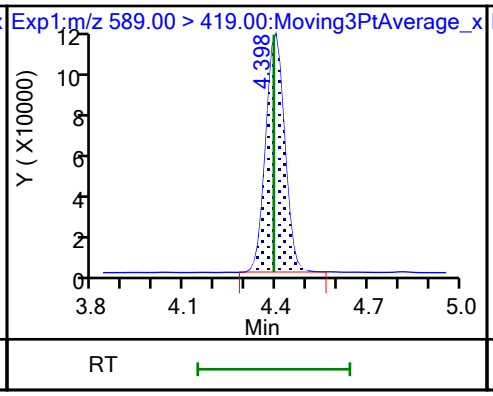
31 Perfluoroundecanoic acid (M)



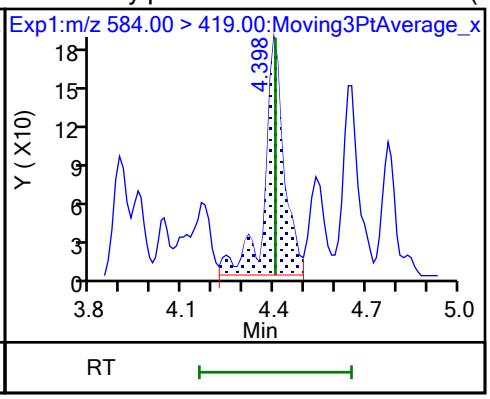
31 Perfluoroundecanoic acid (M)



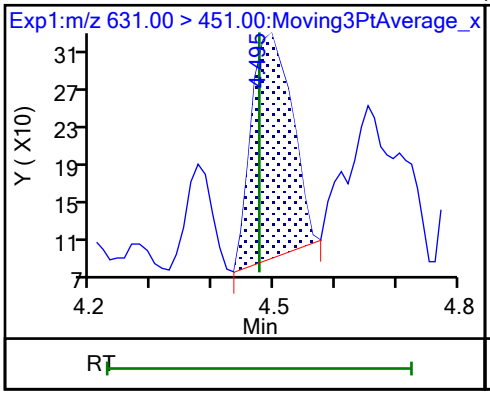
D 32 d5-NEtFOSAA



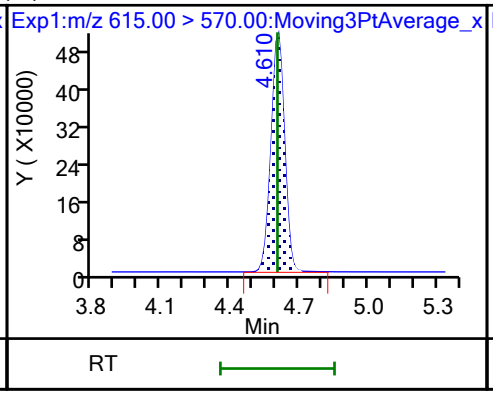
33 N-ethylperfluorooctanesulfonamid (M)



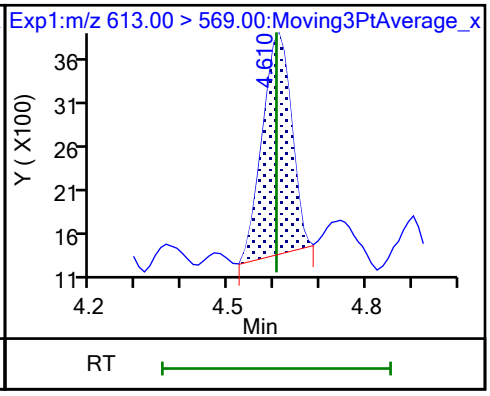
66 11-Chloroeicosafluoro-3-oxaundec (M)



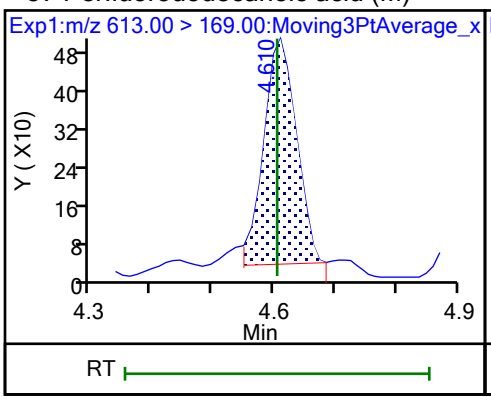
D 36 13C2 PFDoA



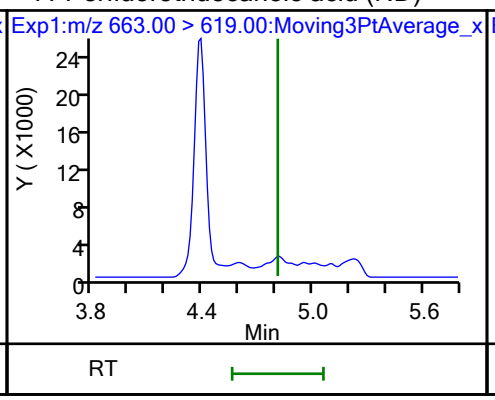
37 Perfluorododecanoic acid



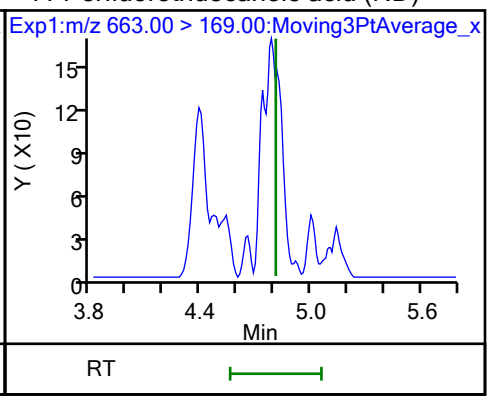
37 Perfluorododecanoic acid (M)



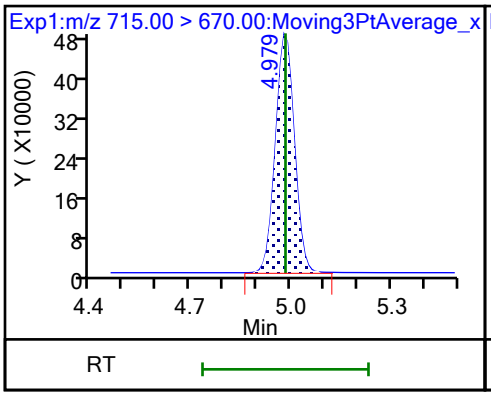
41 Perfluorotridecanoic acid (ND)



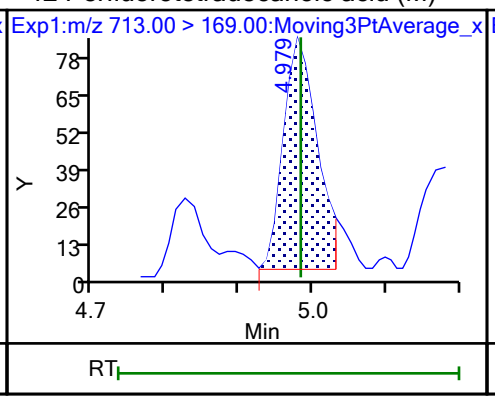
41 Perfluorotridecanoic acid (ND)



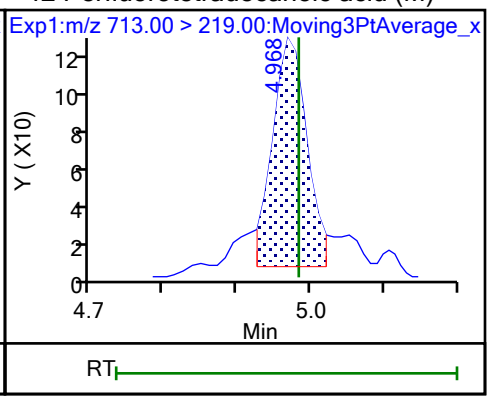
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

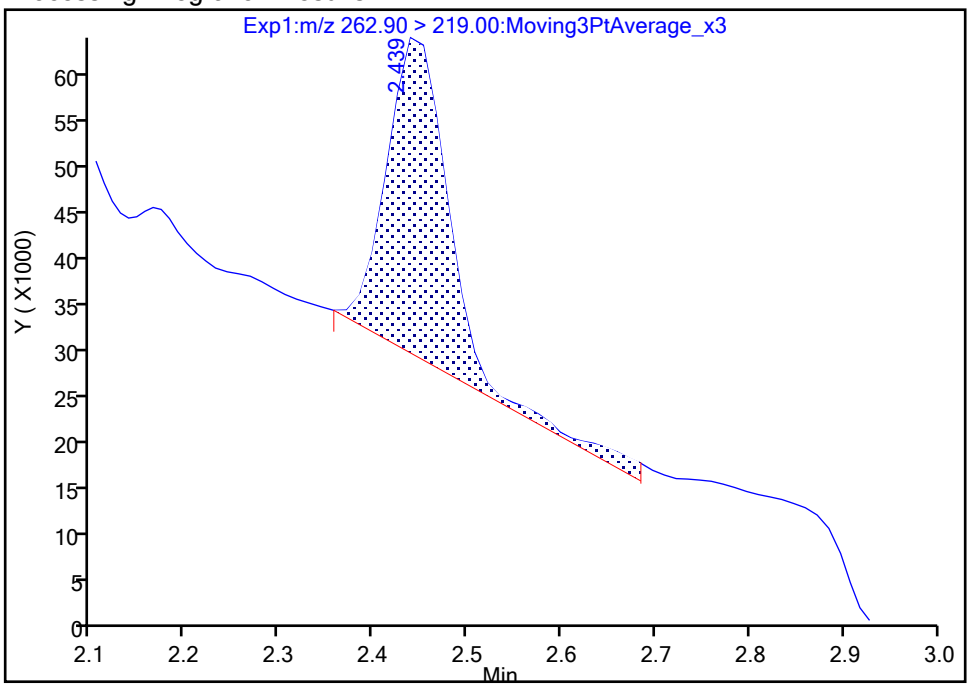
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

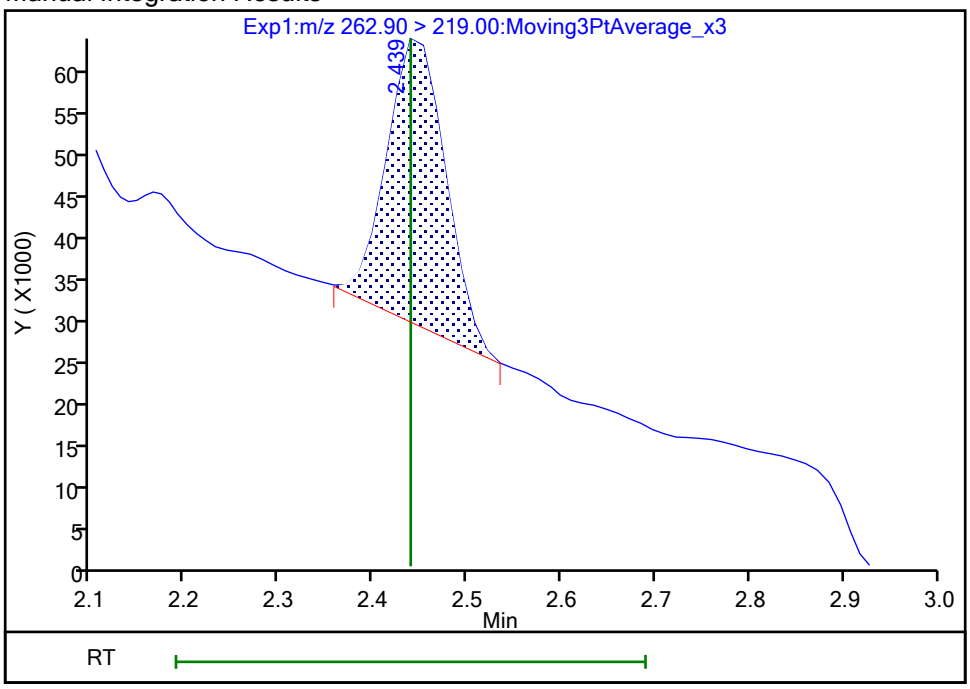
Processing Integration Results

RT: 2.44
Area: 159756
Amount: 0.128894
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 147412
Amount: 0.118935
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:56:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

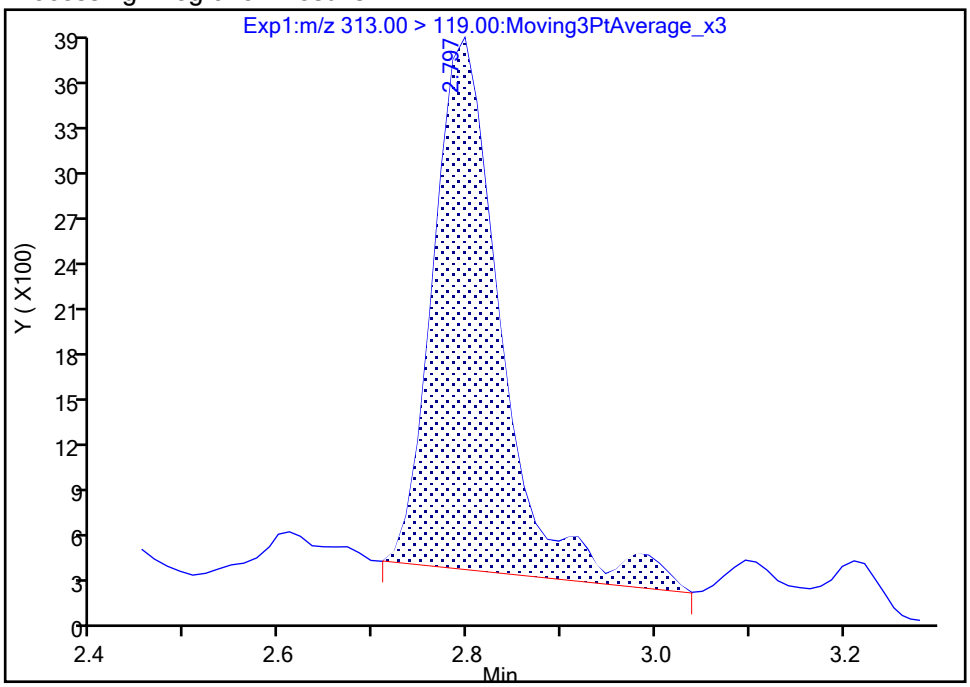
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

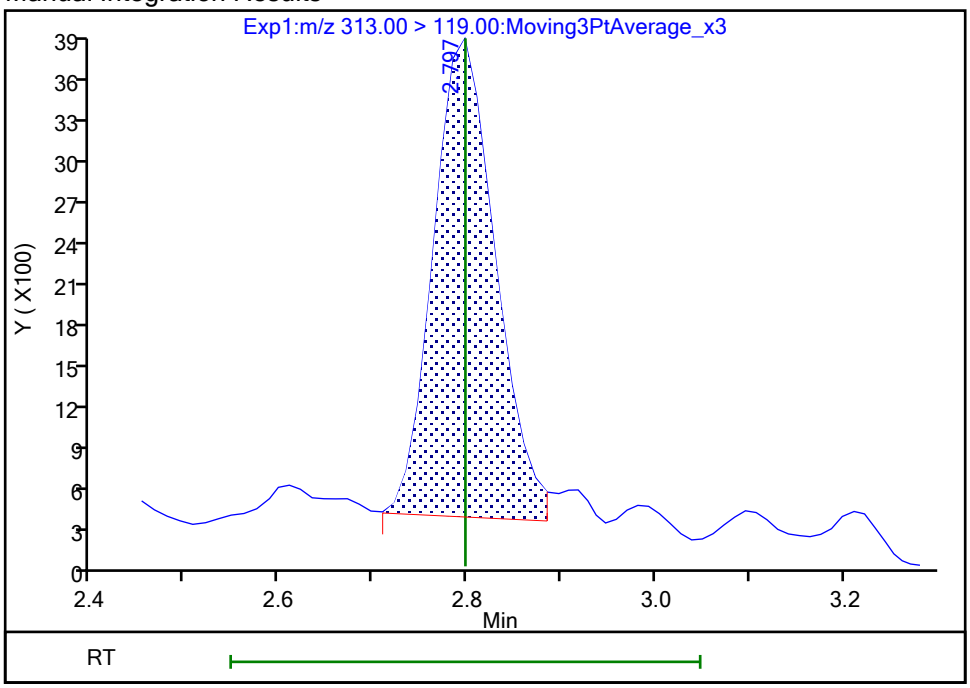
Processing Integration Results

RT: 2.80
Area: 17947
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 16111
Amount: 0.185413
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:56:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

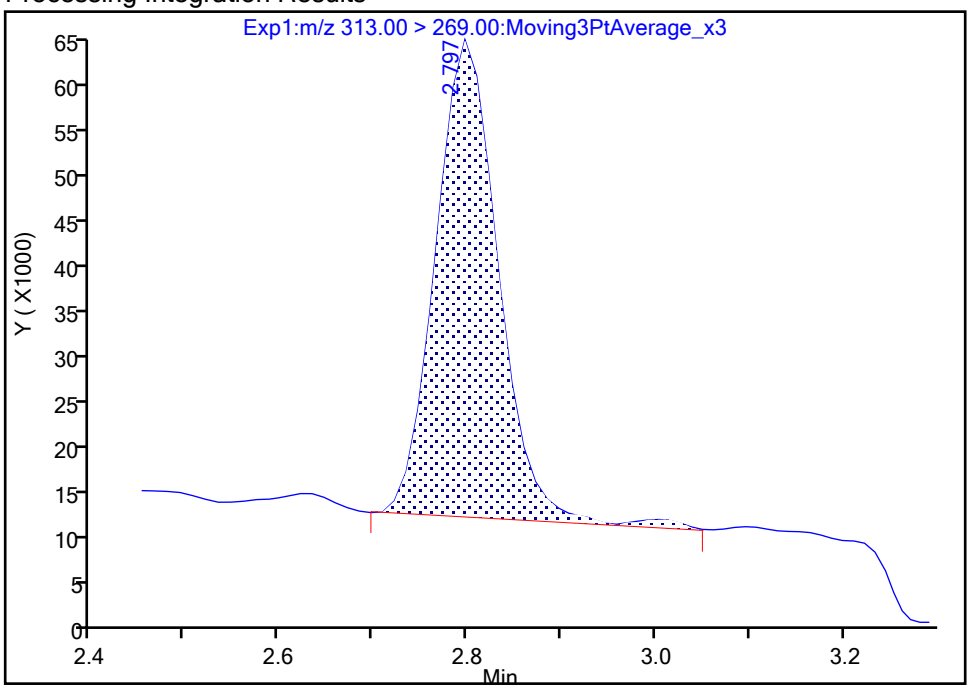
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

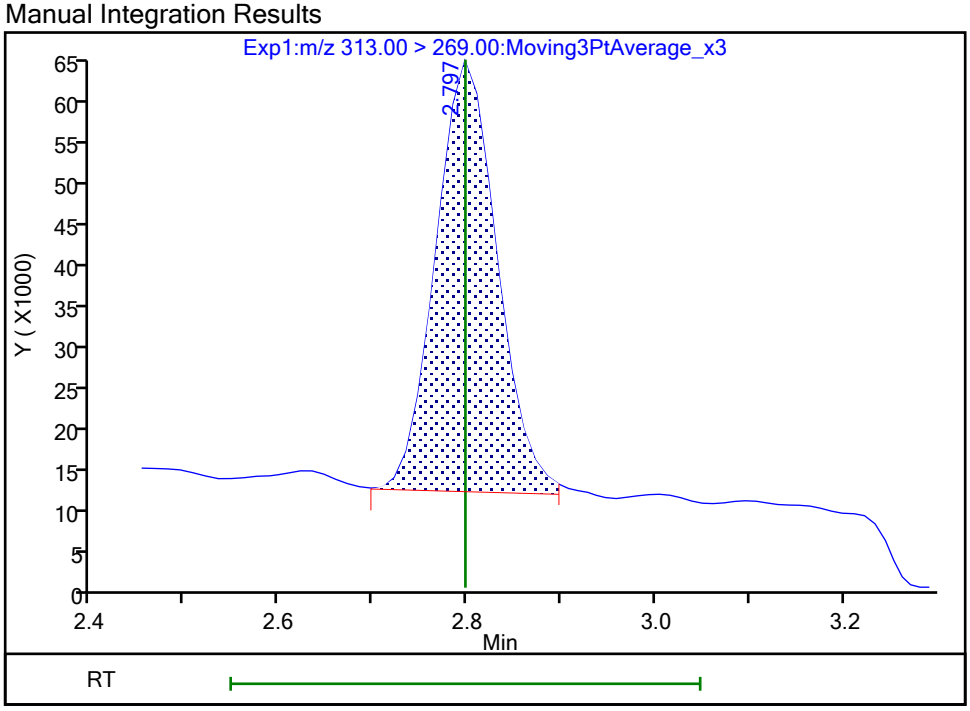
Processing Integration Results

RT: 2.80
Area: 245459
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 239486
Amount: 0.185413
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:56:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

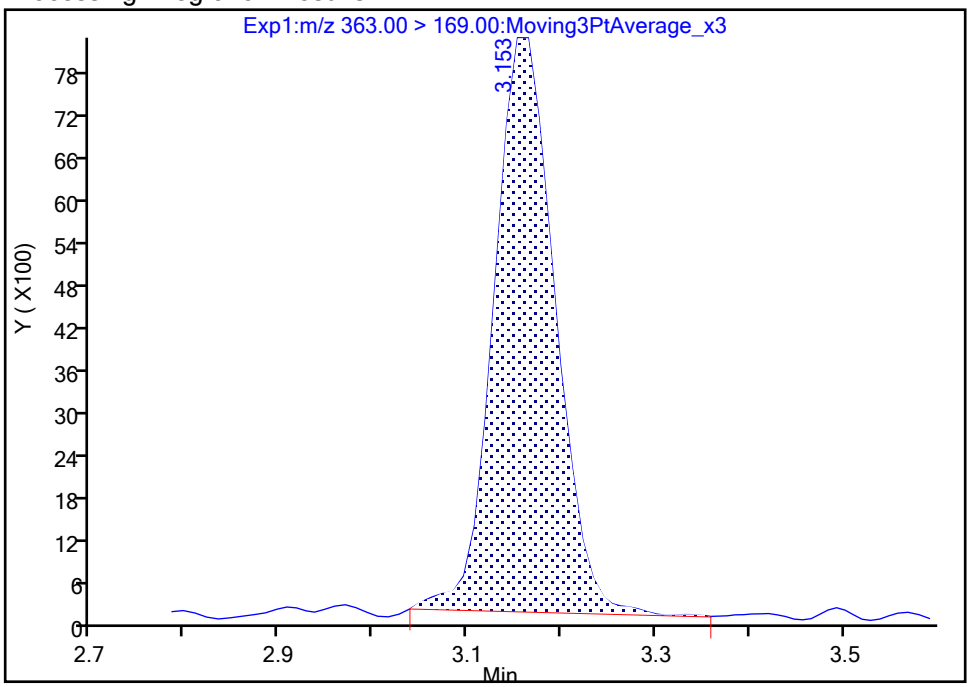
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

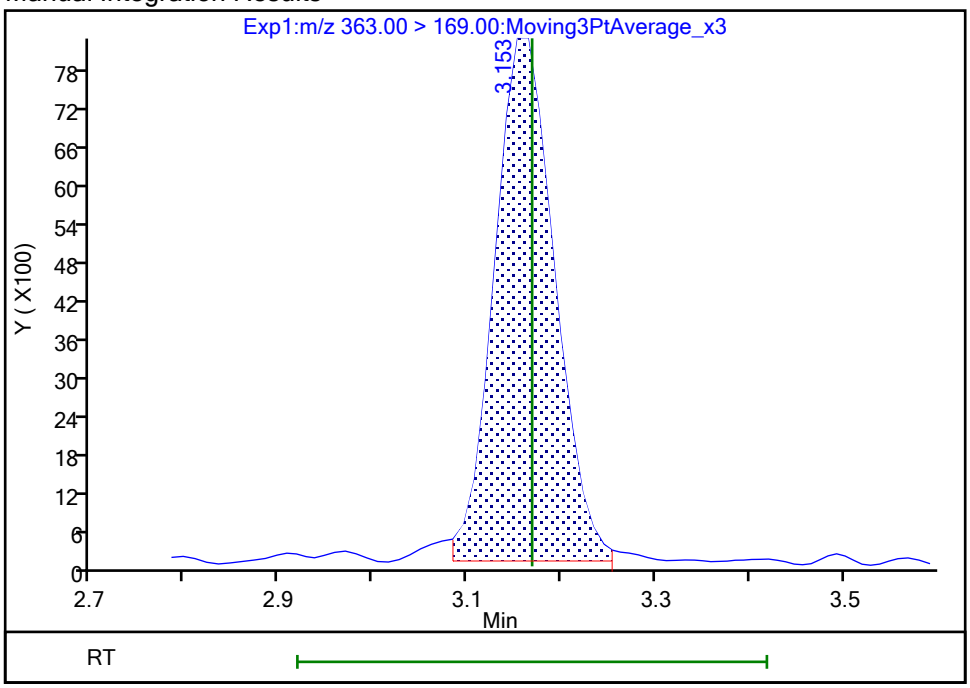
Processing Integration Results

RT: 3.15
Area: 36550
Amount: 0.106709
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 36440
Amount: 0.109411
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:57:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

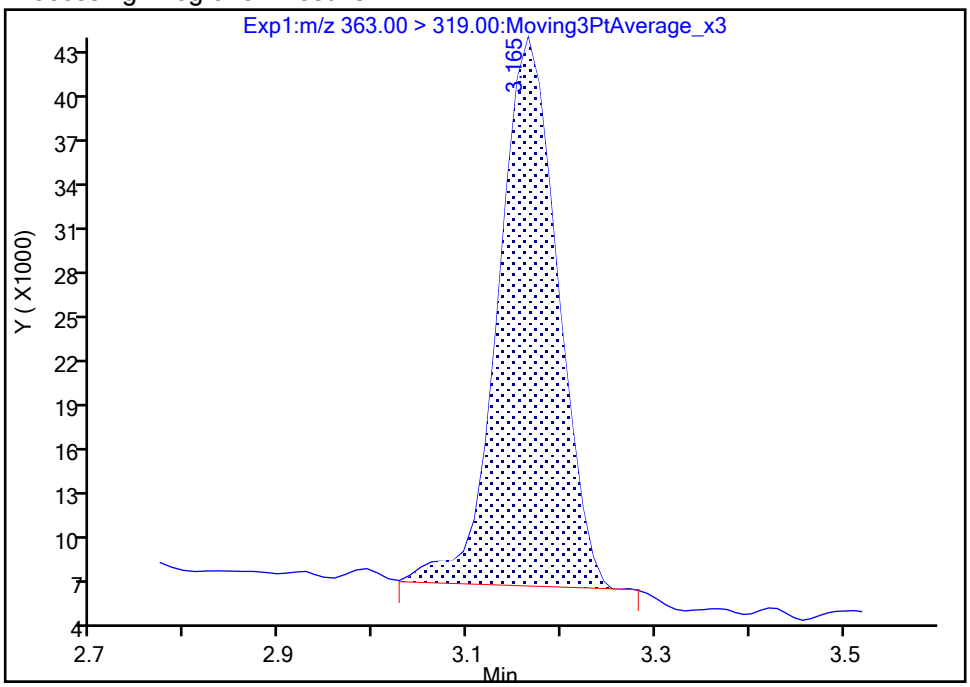
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

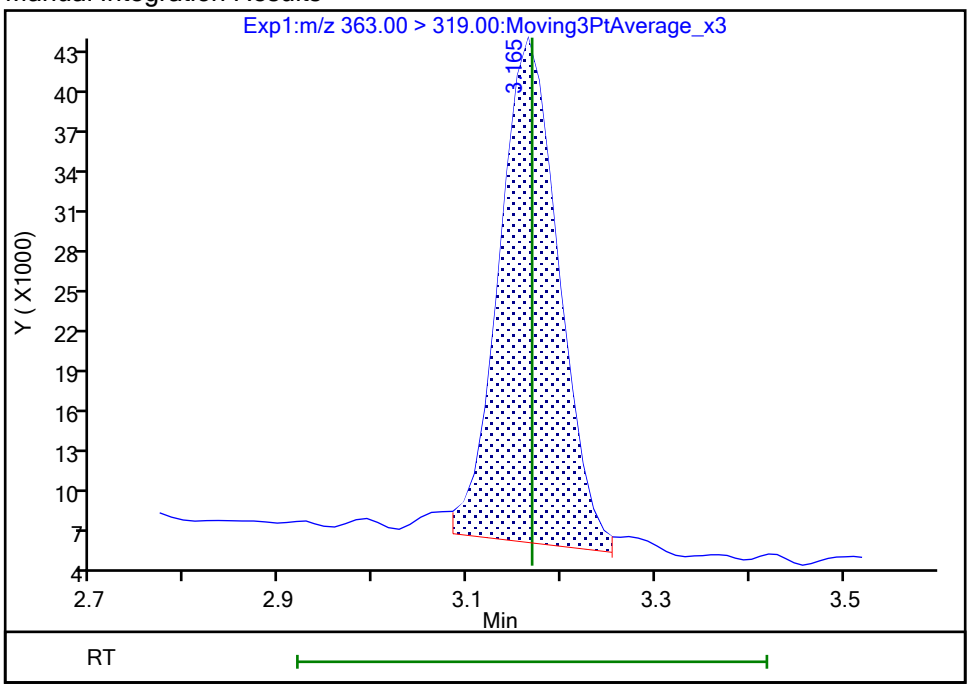
Processing Integration Results

RT: 3.16
Area: 159483
Amount: 0.106709
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 163522
Amount: 0.109411
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:21:52 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

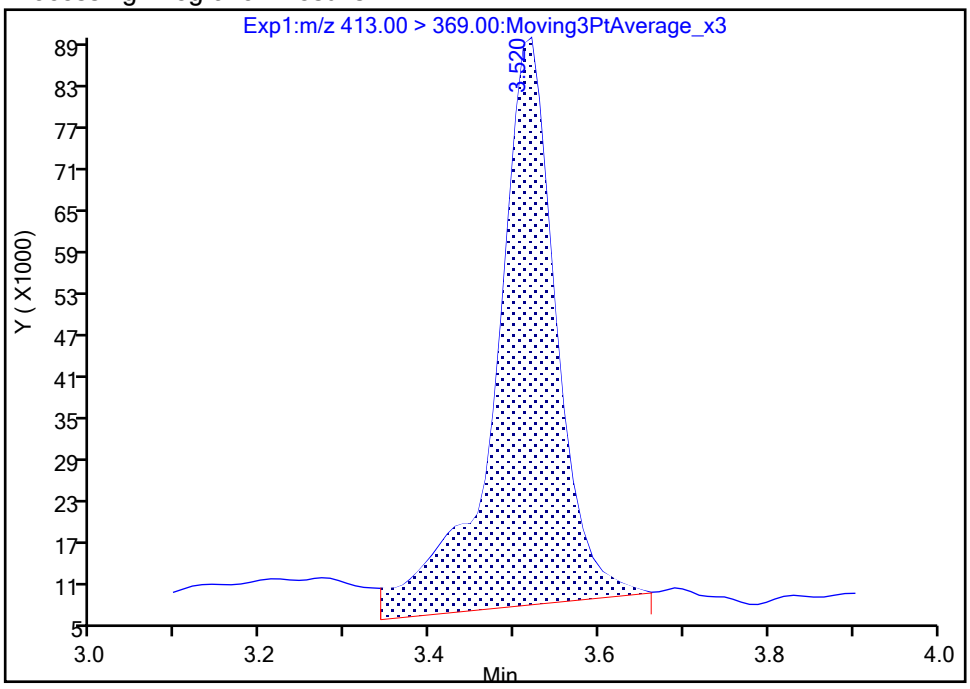
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

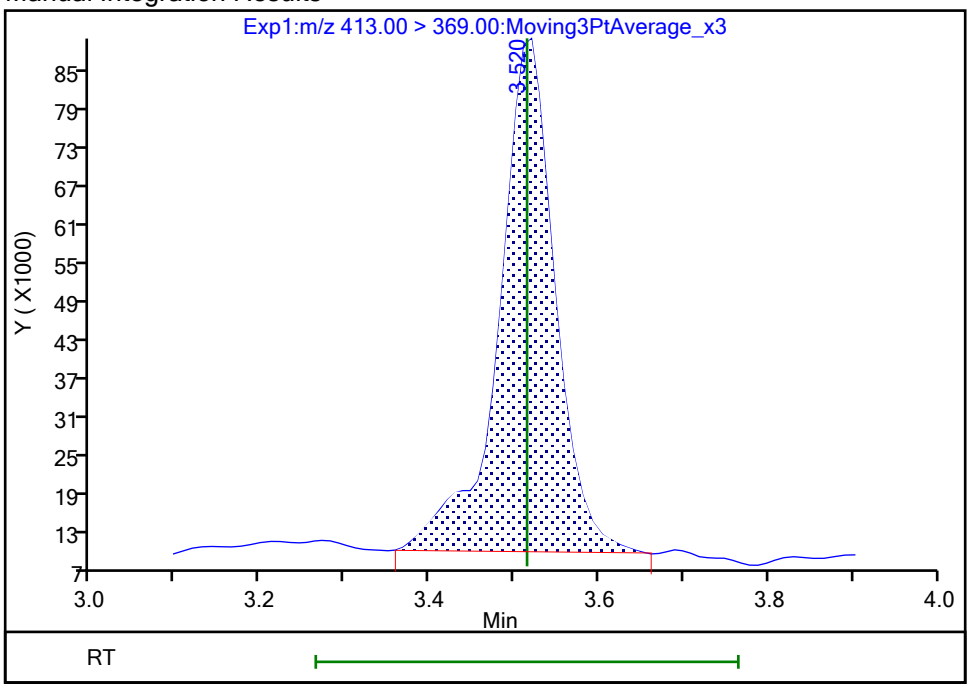
Processing Integration Results

RT: 3.52
Area: 415325
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 370211
Amount: 0.218136
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:57:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

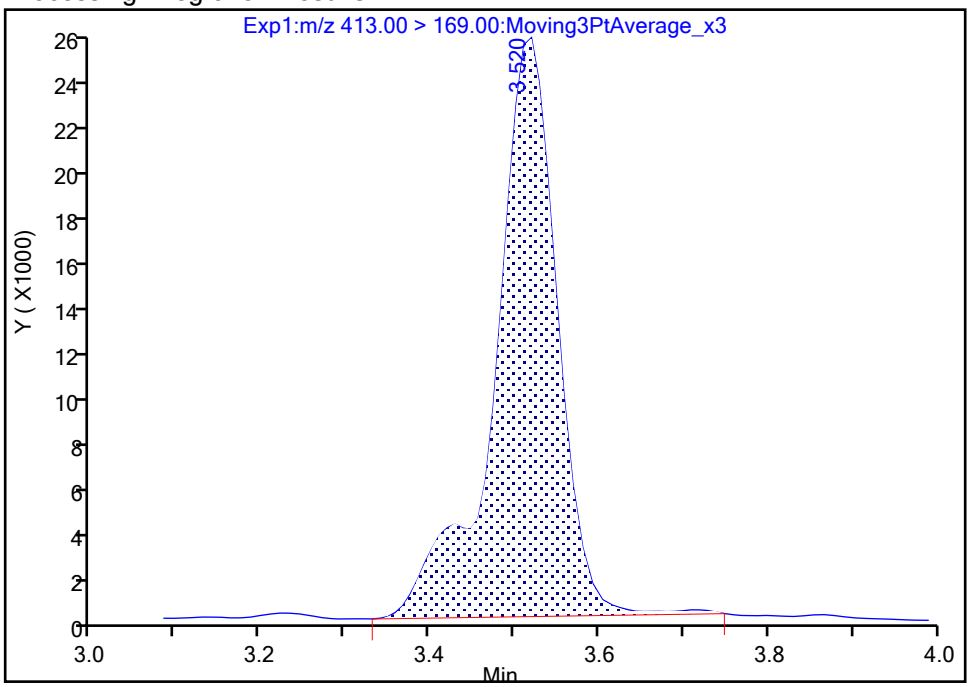
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

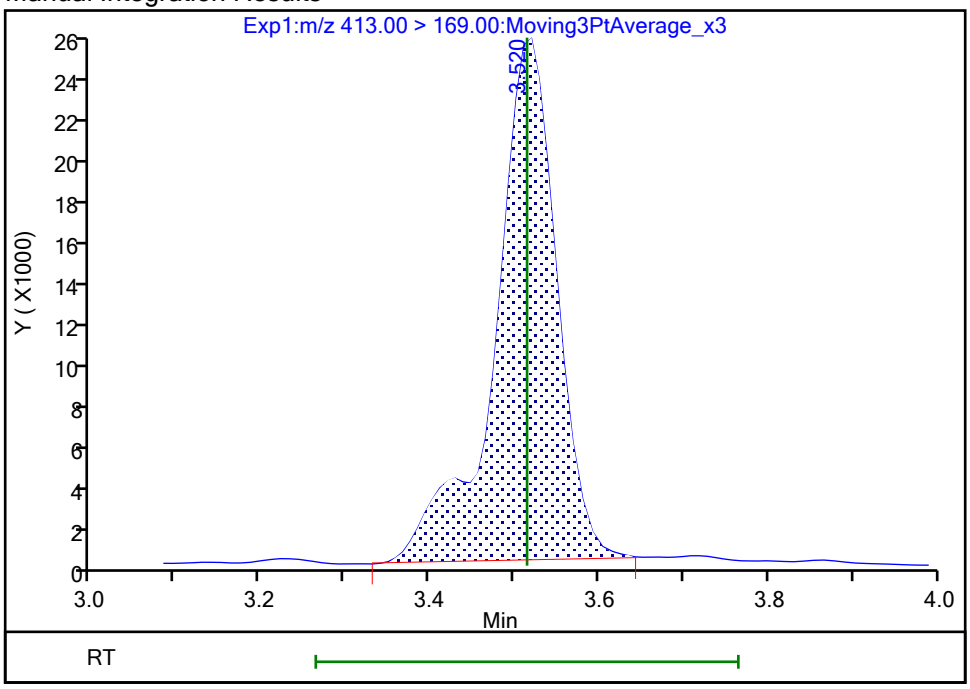
Processing Integration Results

RT: 3.52
Area: 132490
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 130074
Amount: 0.218136
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:58:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

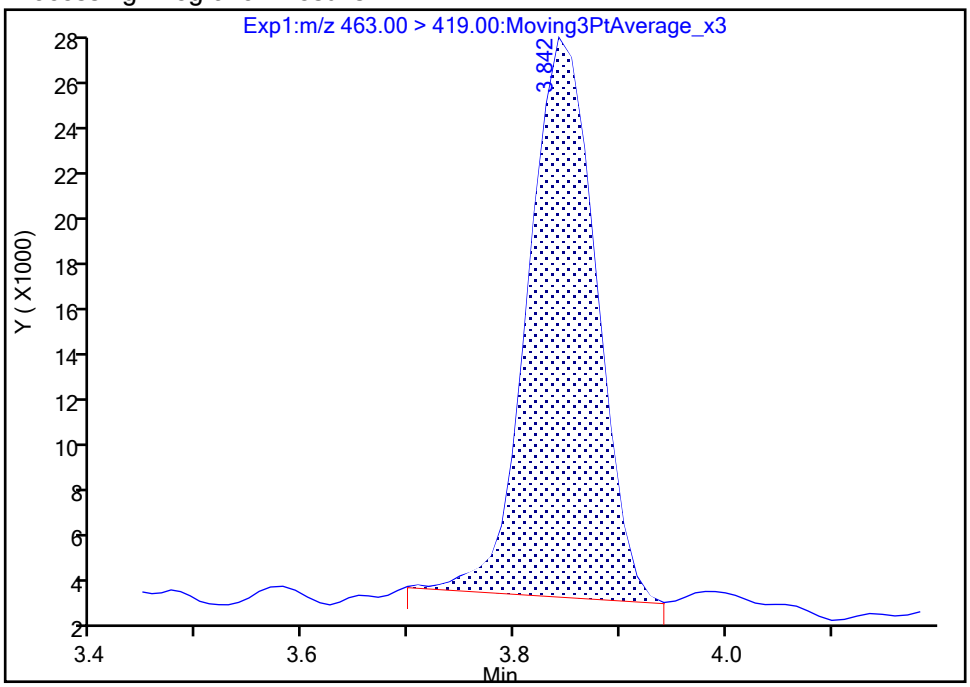
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

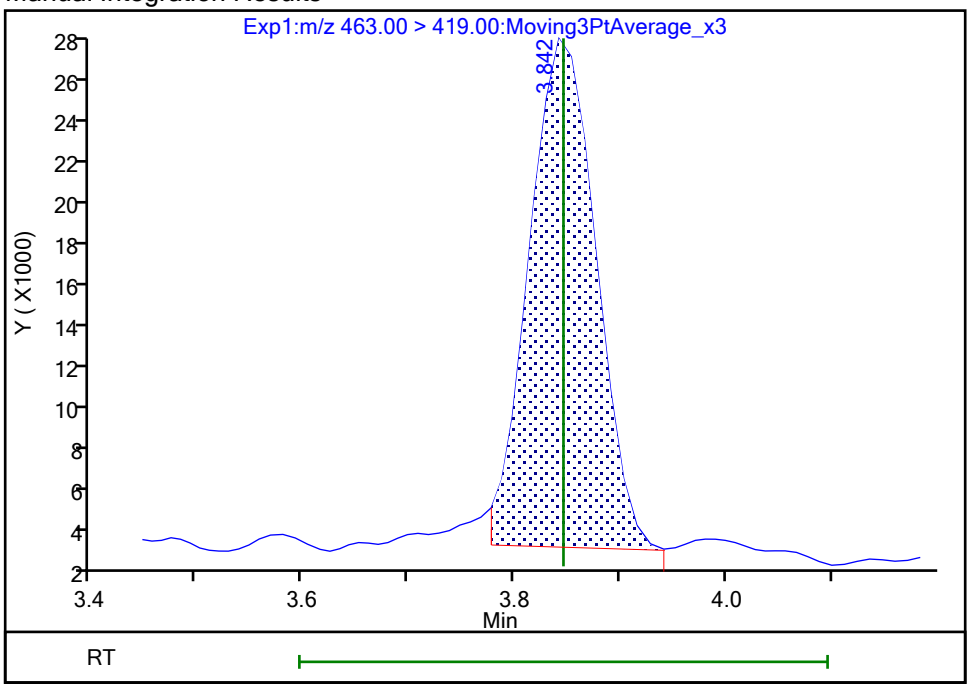
Processing Integration Results

RT: 3.84
Area: 105289
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 104665
Amount: 0.062274
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:58:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

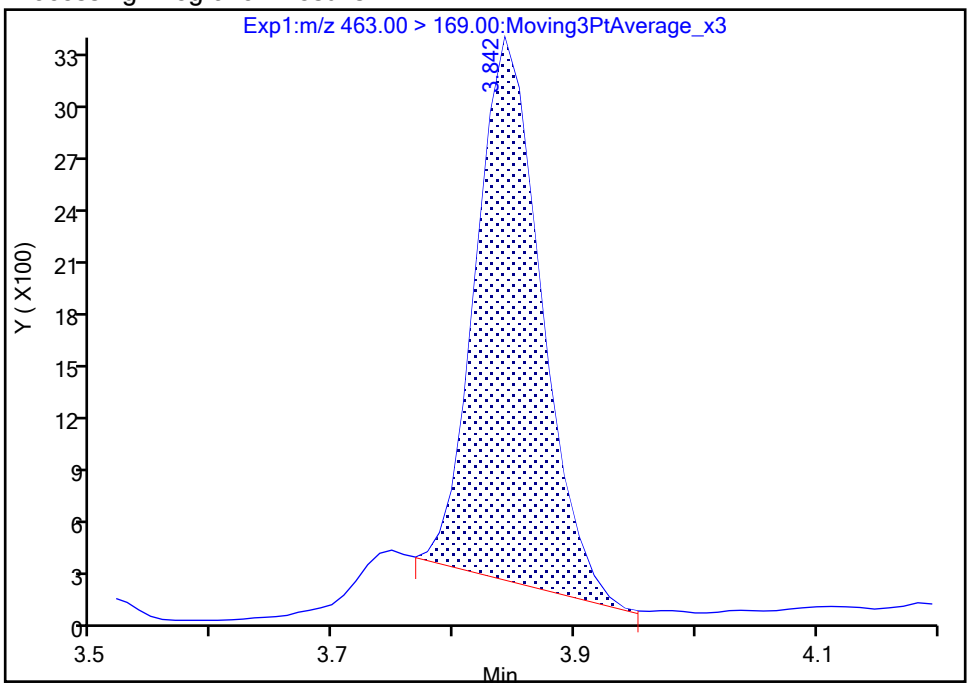
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

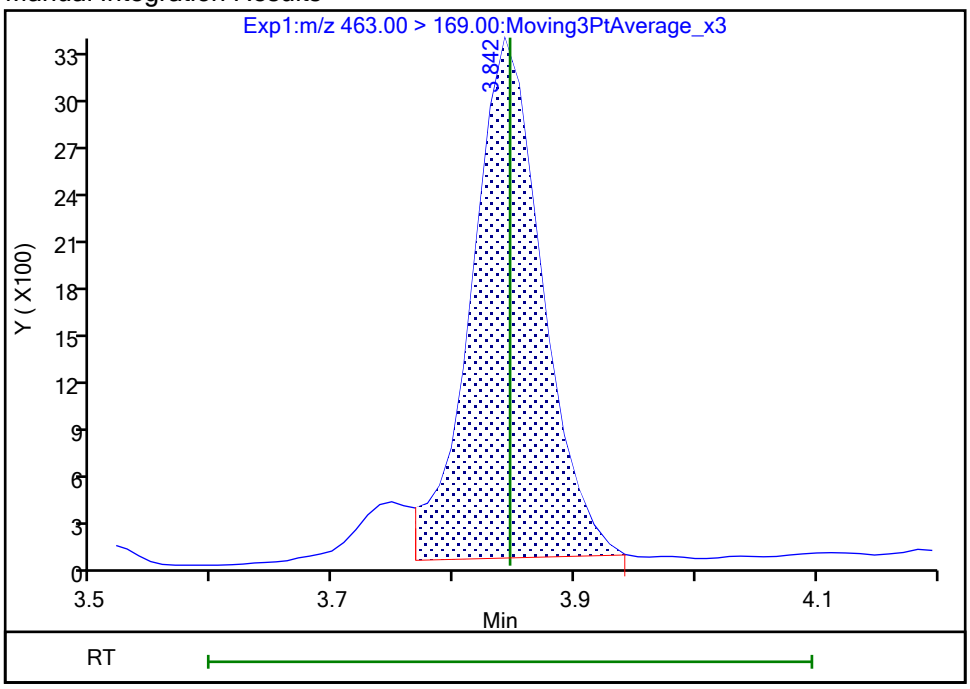
Processing Integration Results

RT: 3.84
Area: 11651
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 13276
Amount: 0.062274
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:58:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

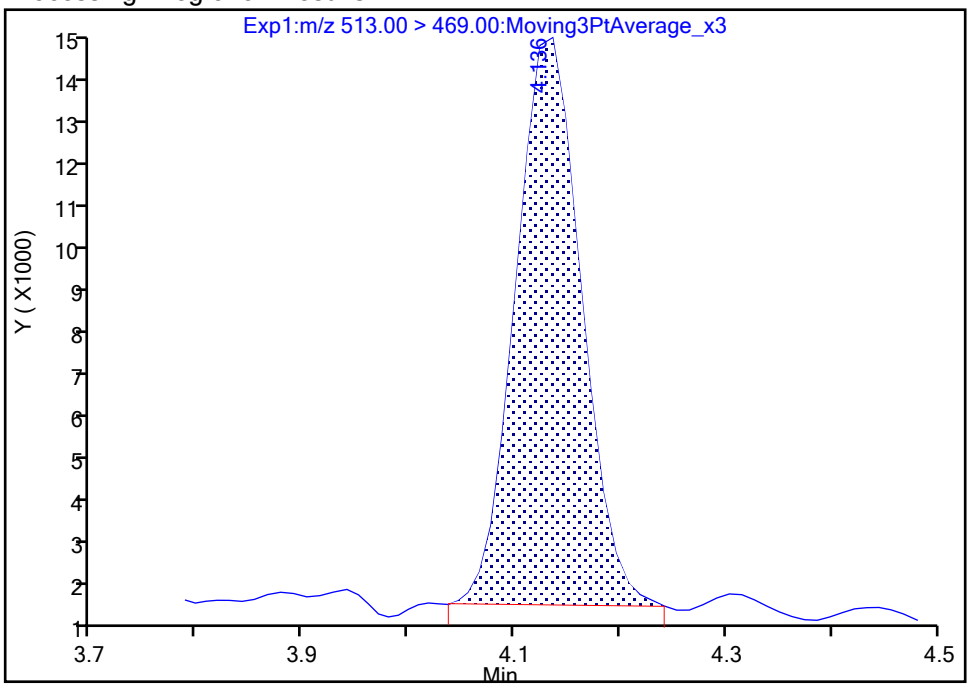
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

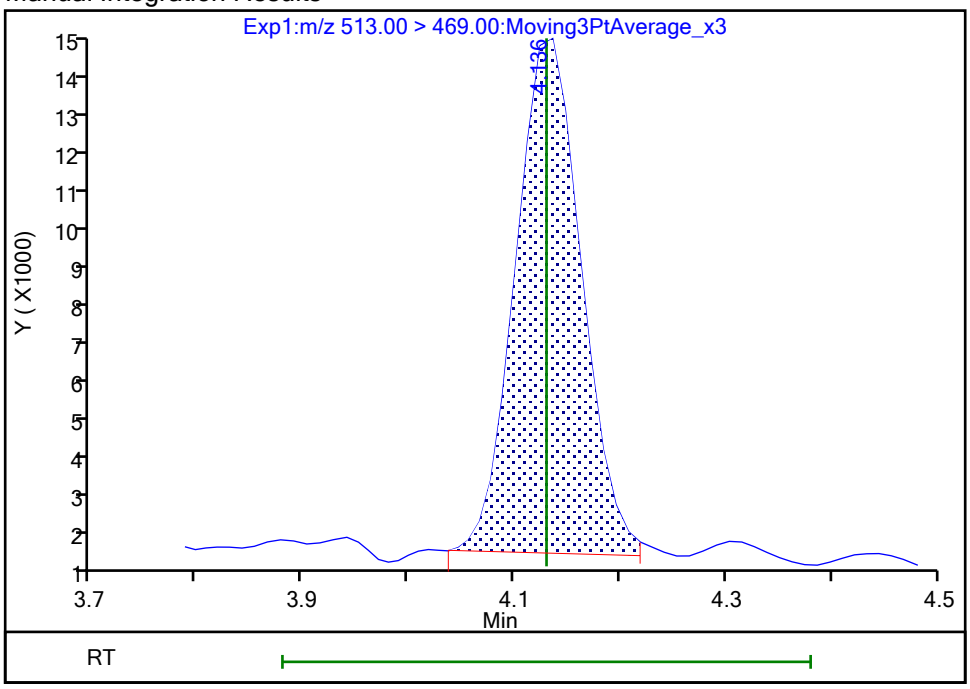
Processing Integration Results

RT: 4.14
Area: 56546
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 56794
Amount: 0.034102
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

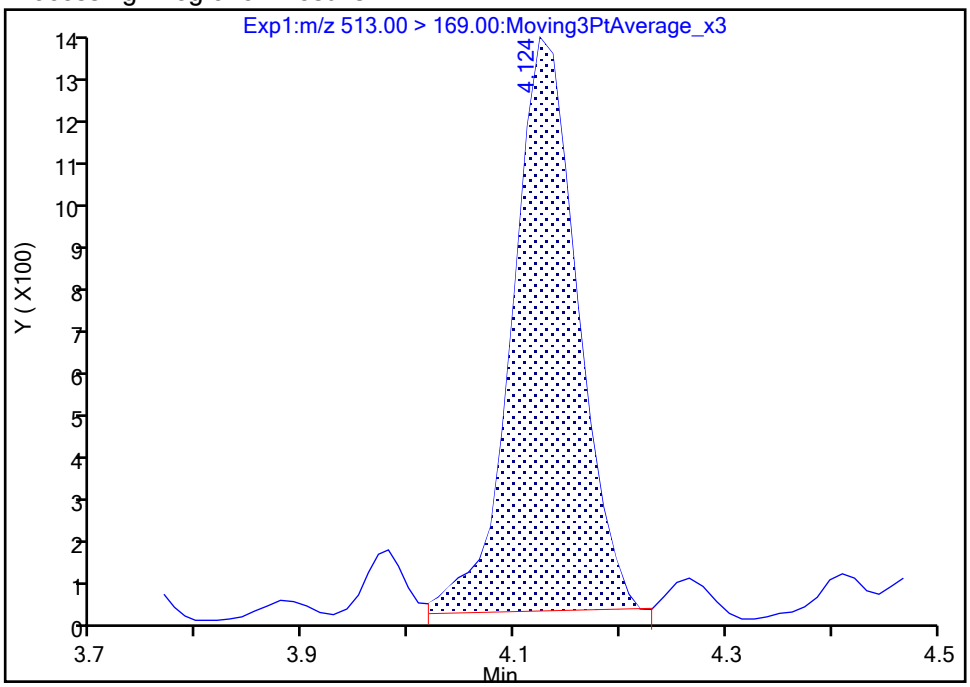
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

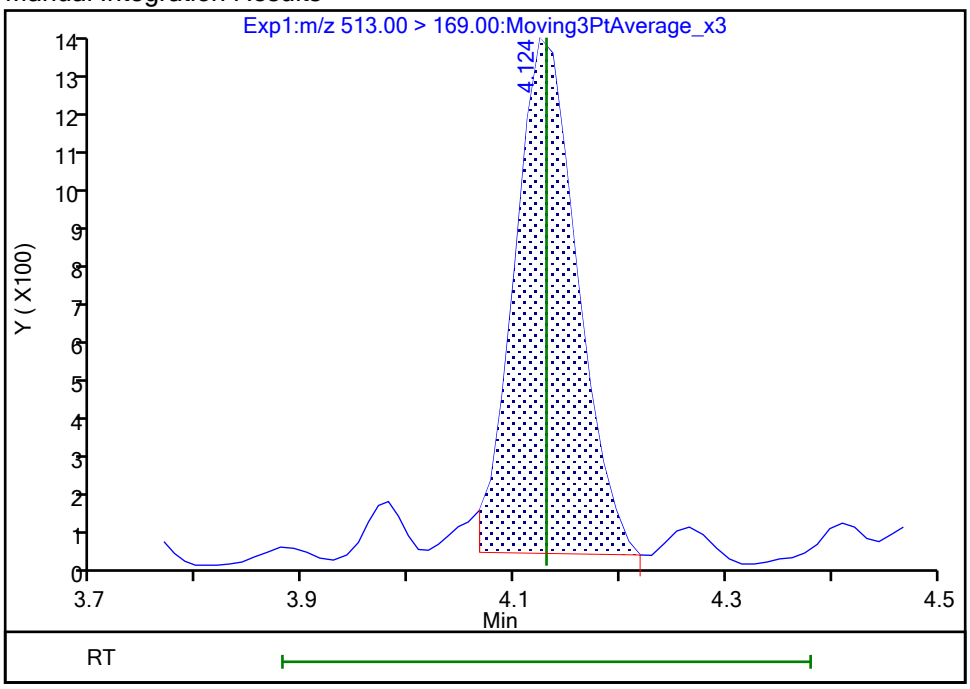
Processing Integration Results

RT: 4.12
Area: 5682
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 5392
Amount: 0.034102
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

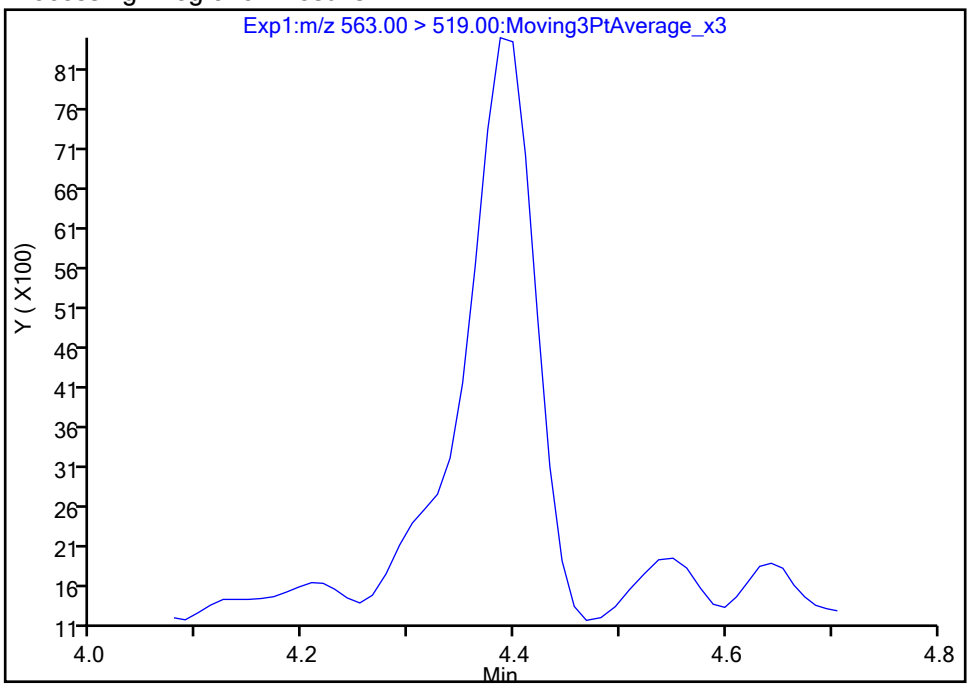
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

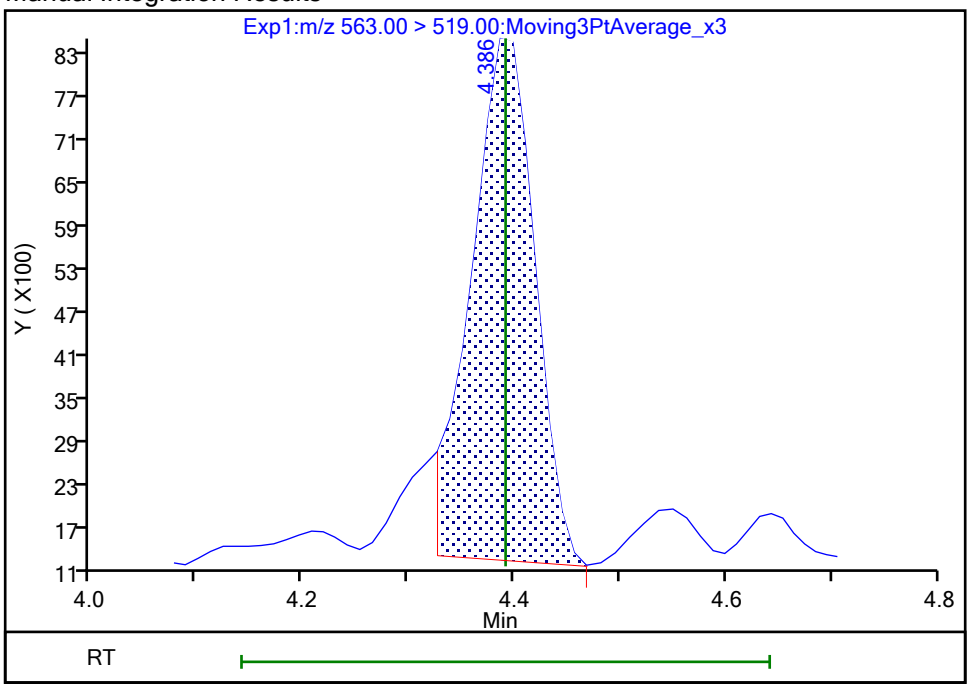
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 29974
Amount: 0.018053
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

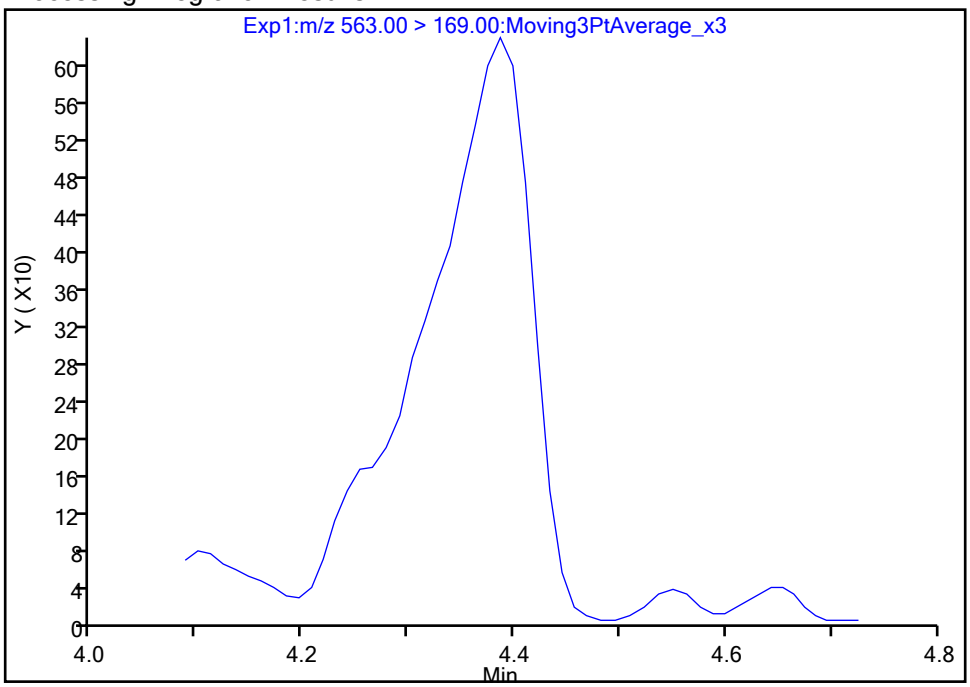
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

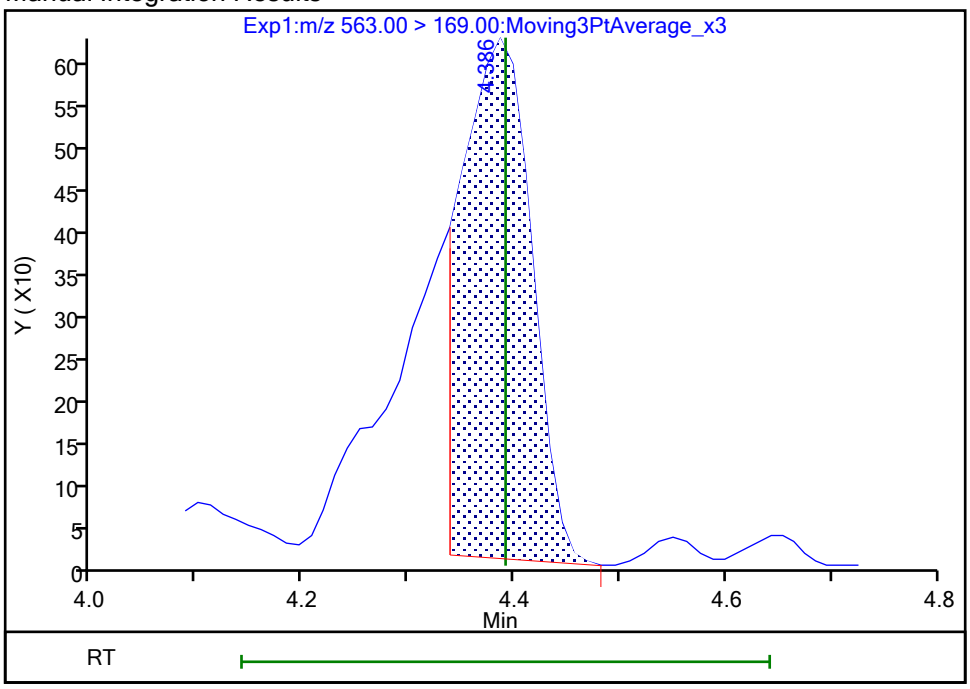
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 2758
Amount: 0.018053
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

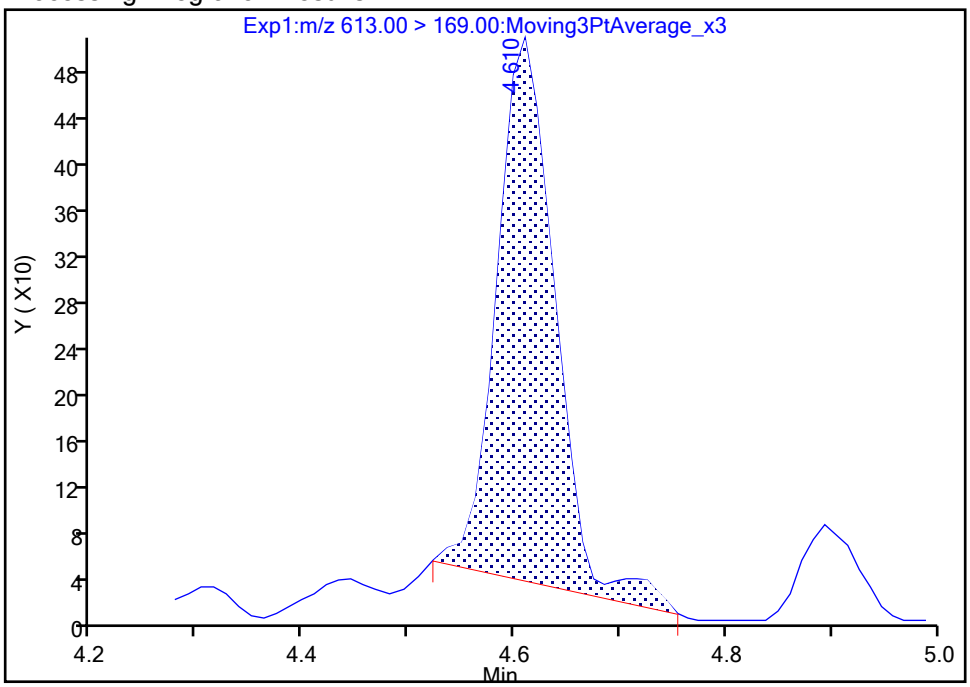
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

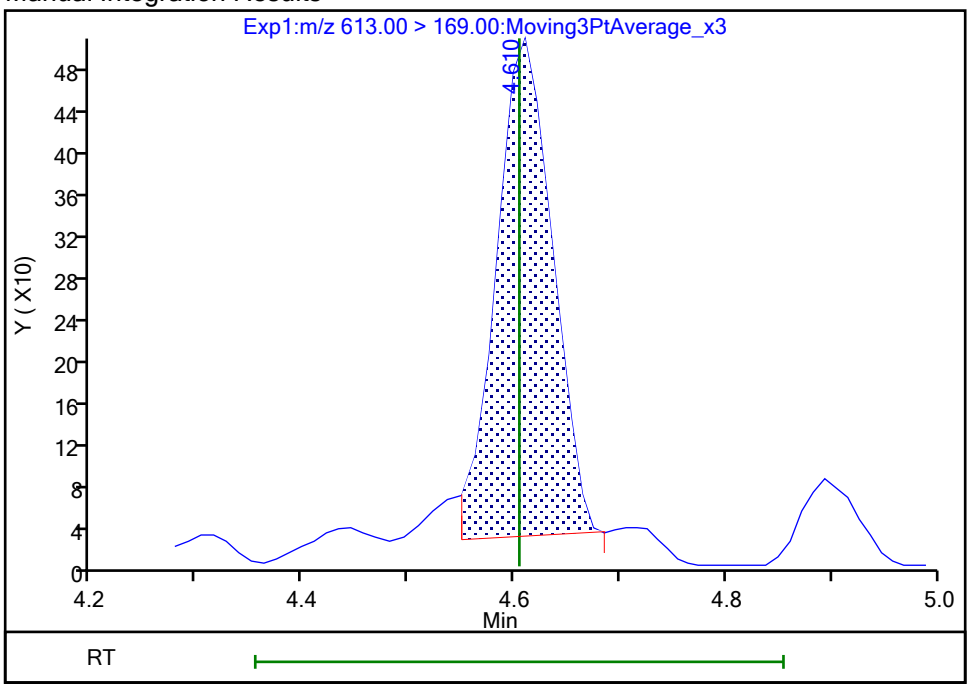
Processing Integration Results

RT: 4.61
Area: 1806
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 1763
Amount: 0.006481
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

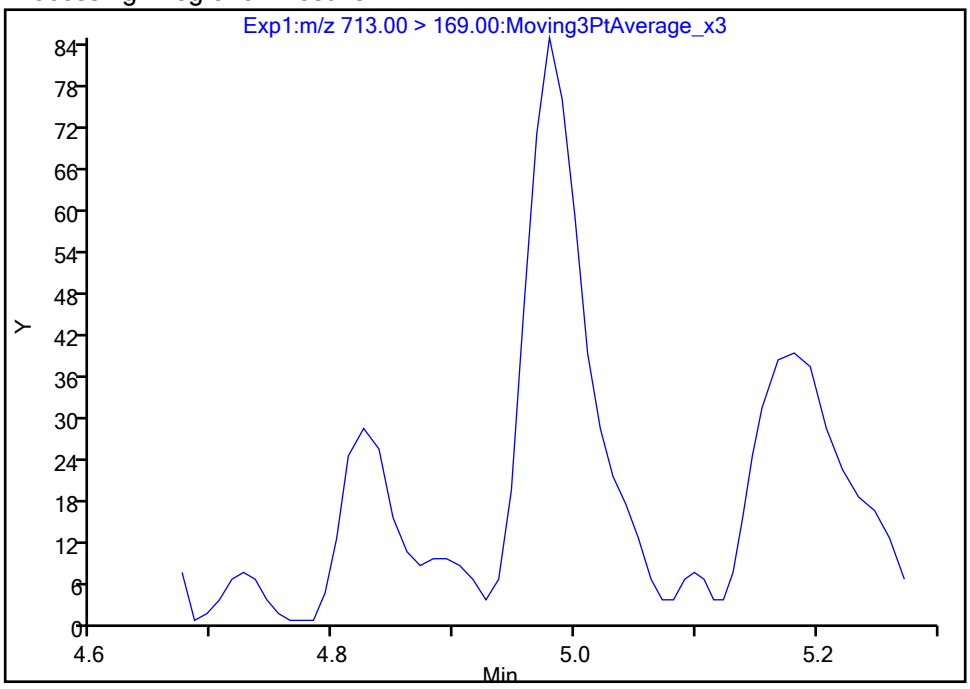
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

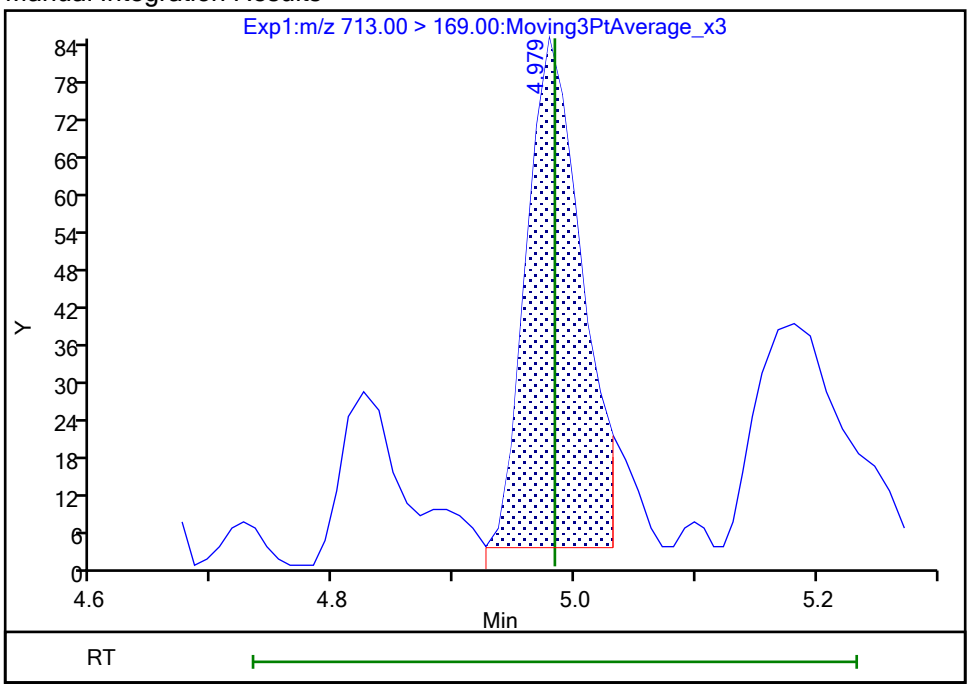
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 259
Amount: 0.001508
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

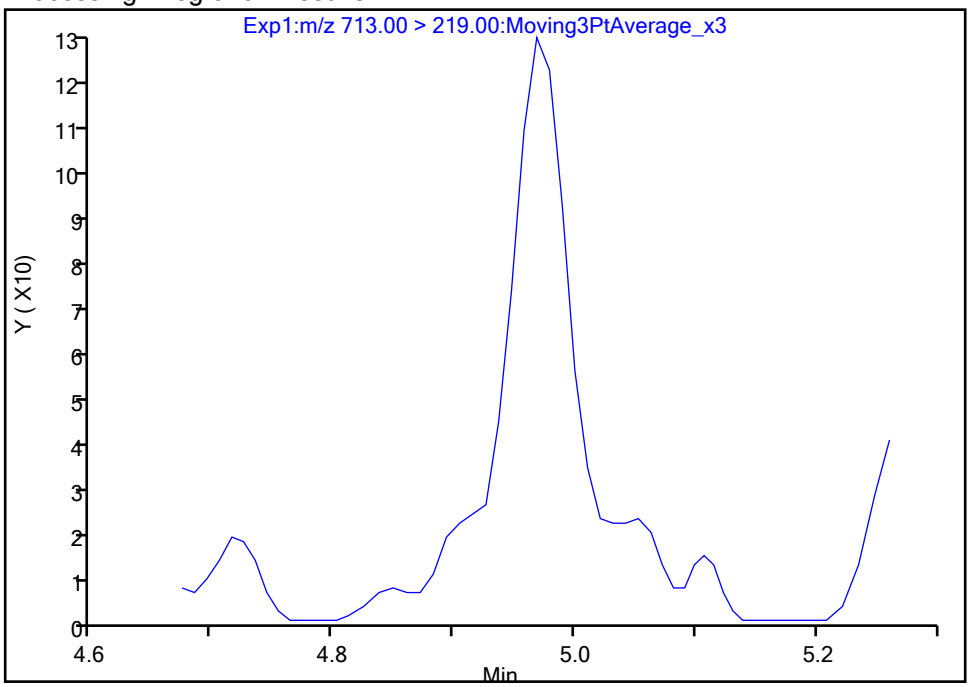
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

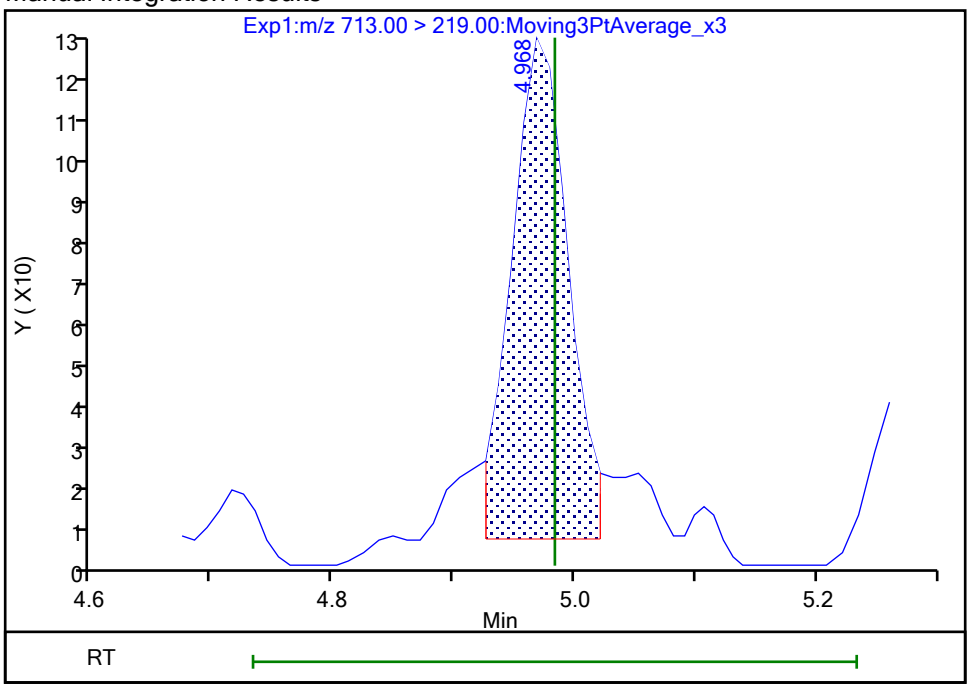
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 386
Amount: 0.001508
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

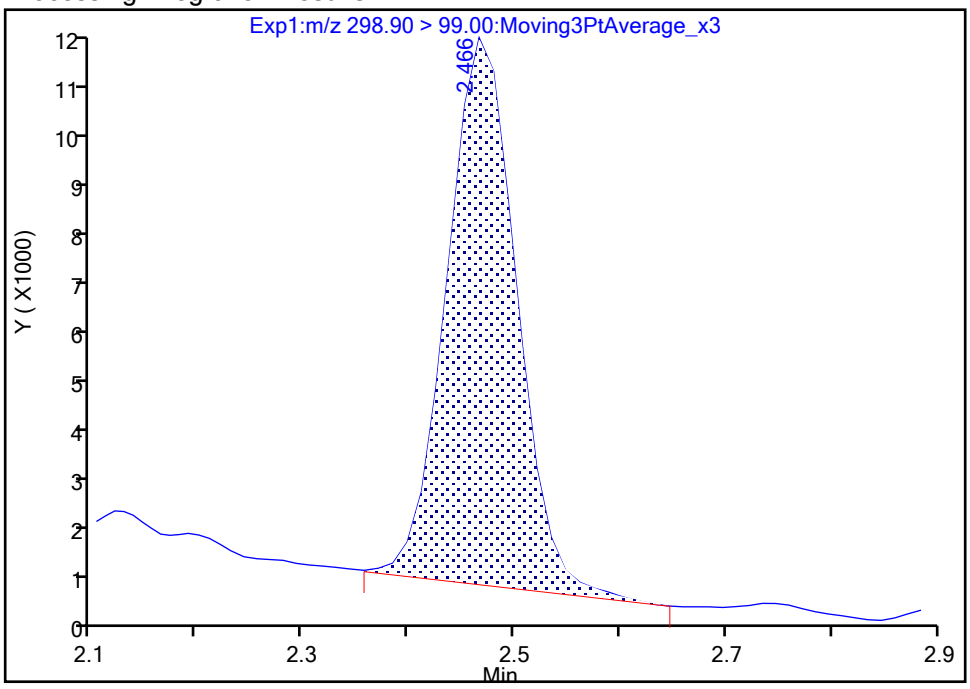
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

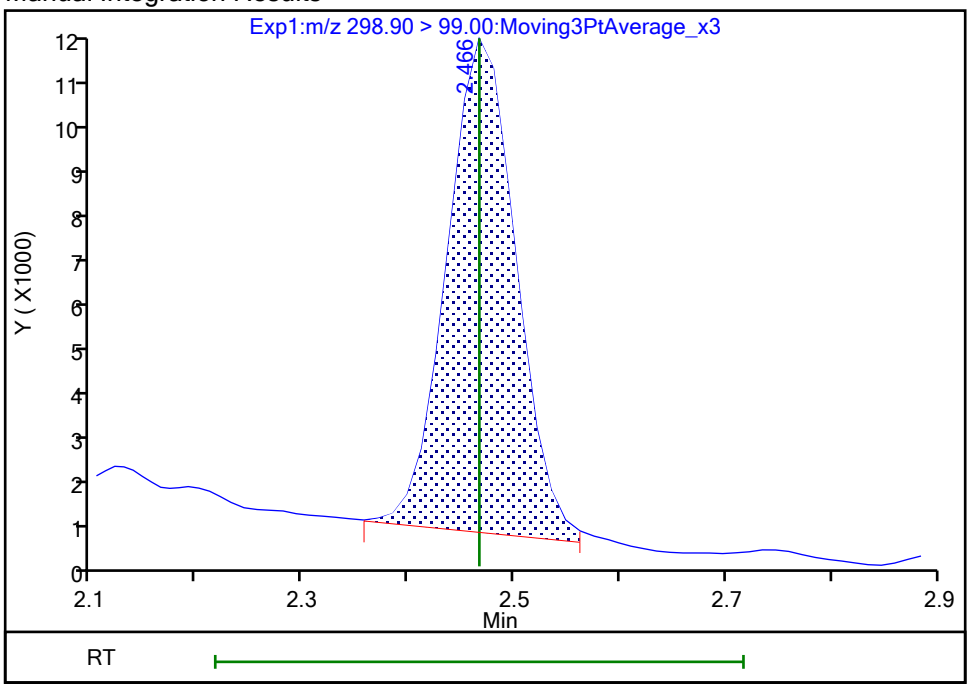
Processing Integration Results

RT: 2.47
Area: 48524
Amount: 0.061443
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 48003
Amount: 0.058796
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:56:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

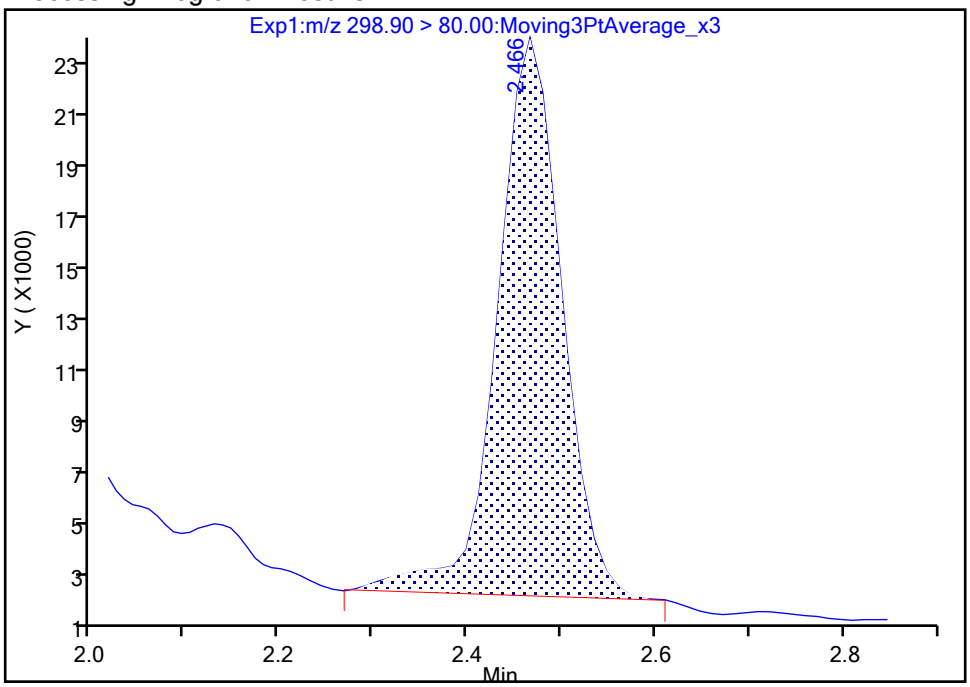
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

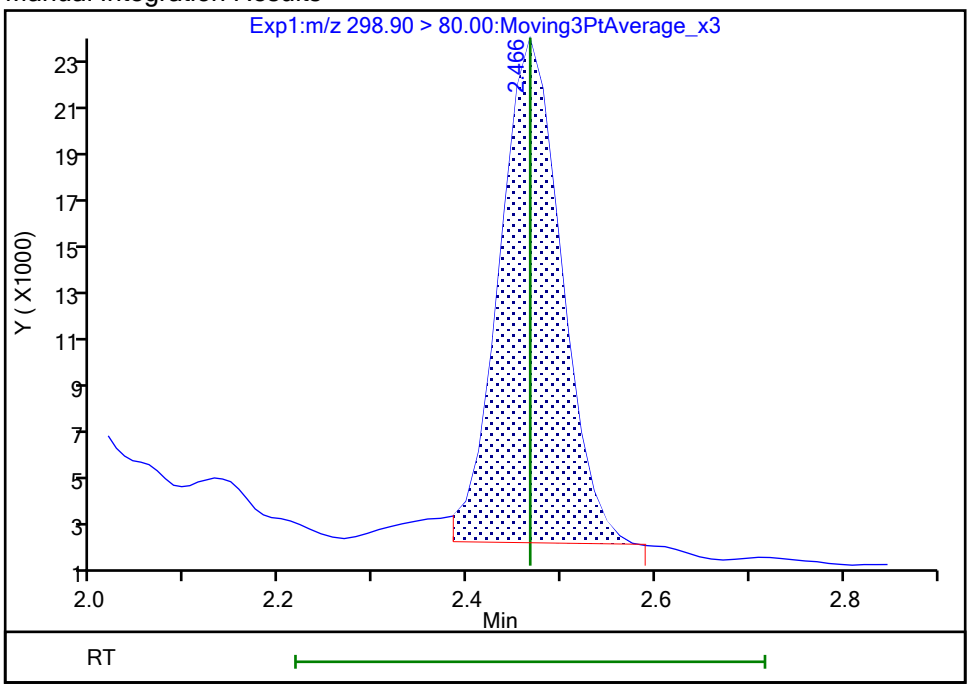
Processing Integration Results

RT: 2.47
Area: 103376
Amount: 0.061443
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 98923
Amount: 0.058796
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:56:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

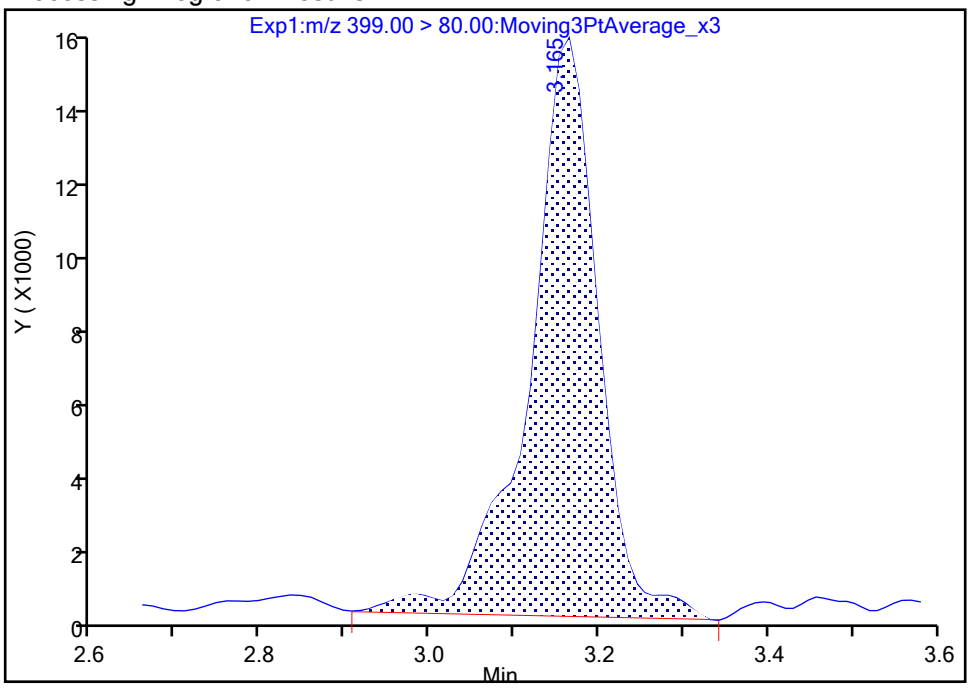
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

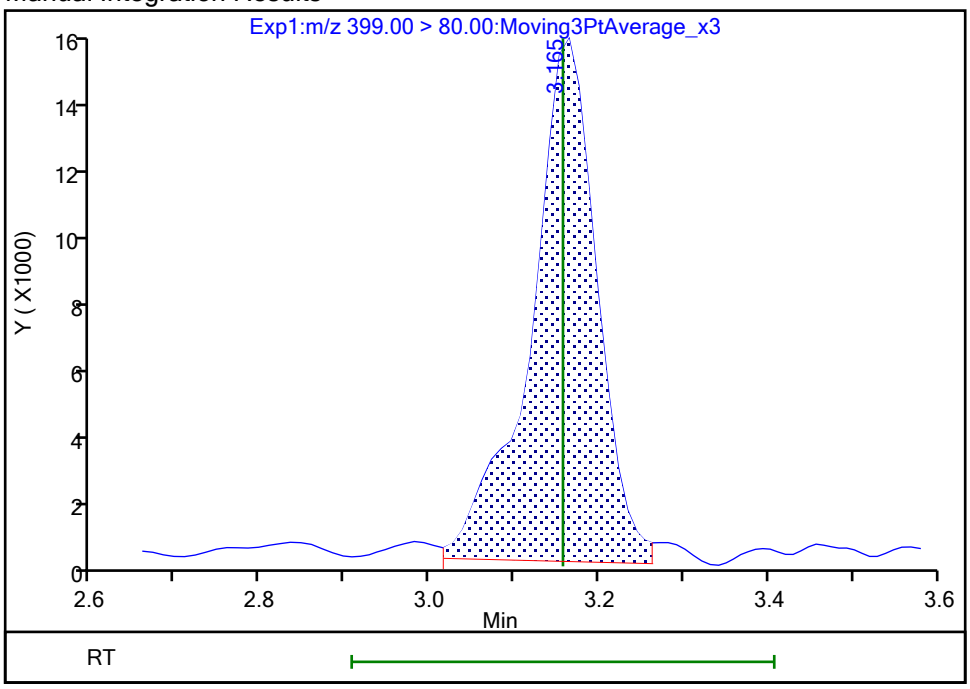
Processing Integration Results

RT: 3.16
Area: 83333
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 79879
Amount: 0.066469
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:57:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

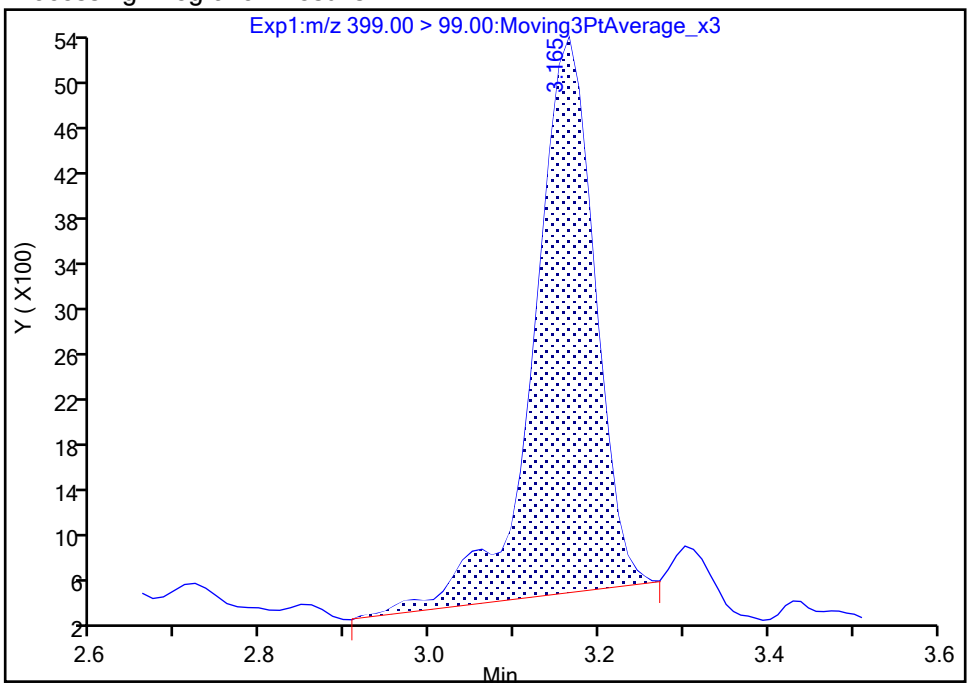
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

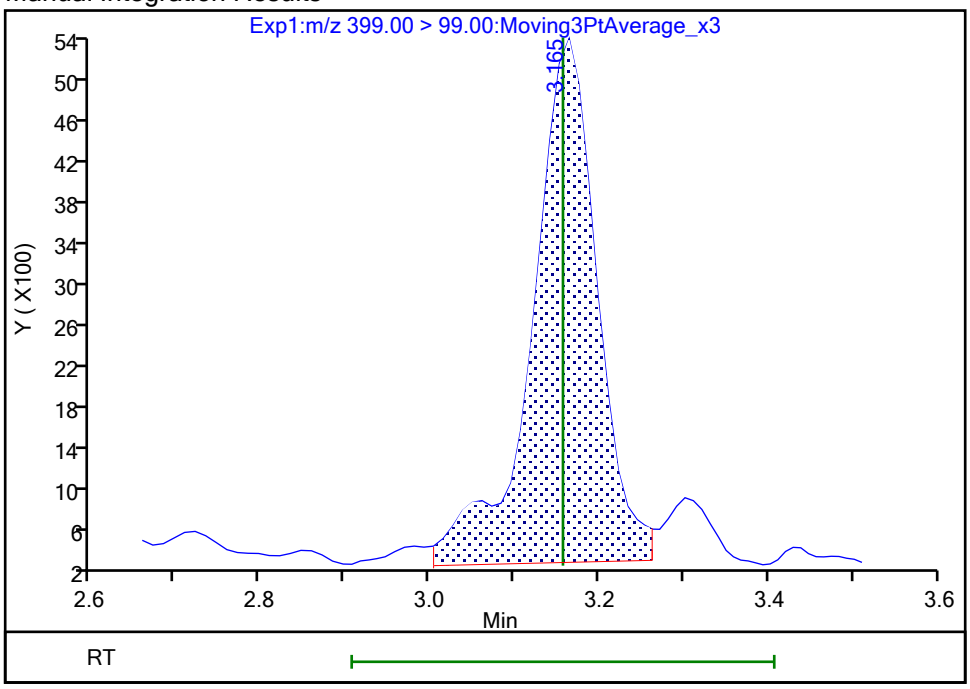
Processing Integration Results

RT: 3.16
Area: 24428
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 27194
Amount: 0.066469
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:22:04 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

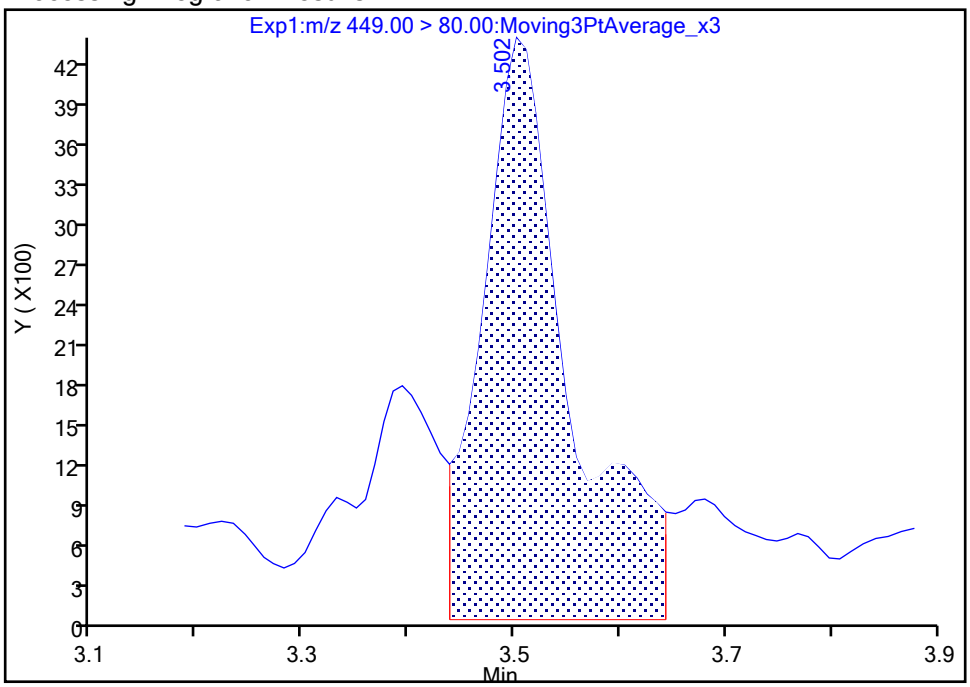
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

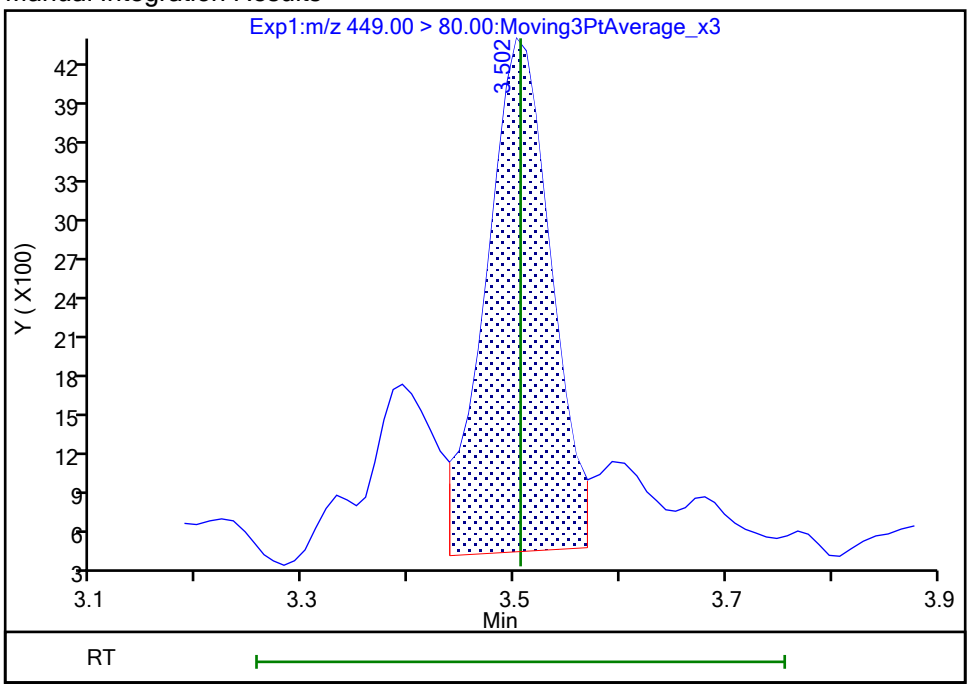
Processing Integration Results

RT: 3.50
Area: 25086
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 16582
Amount: 0.016900
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:57:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

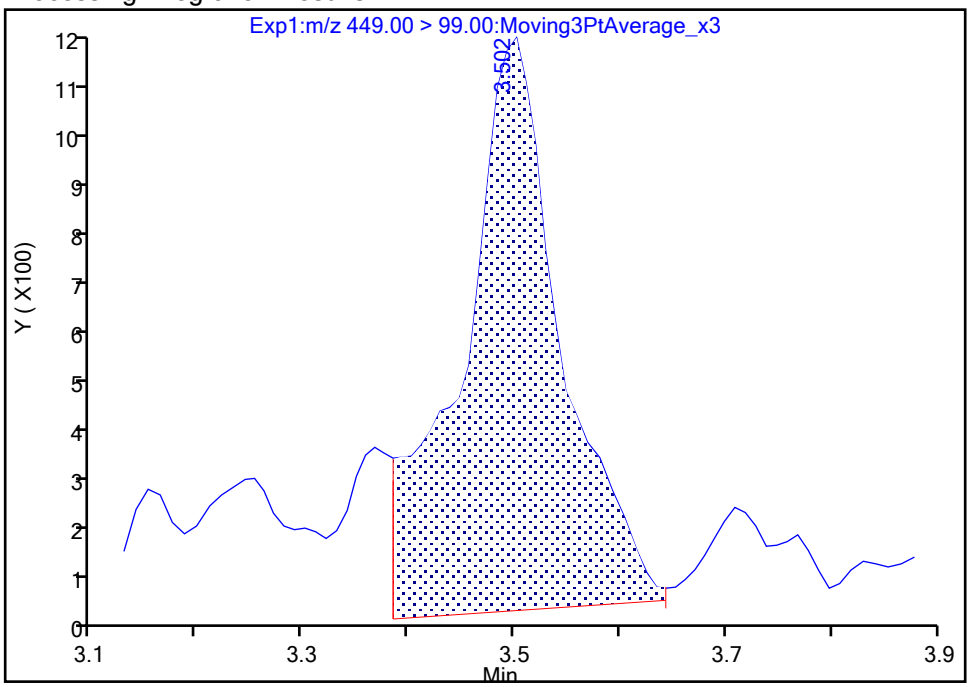
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

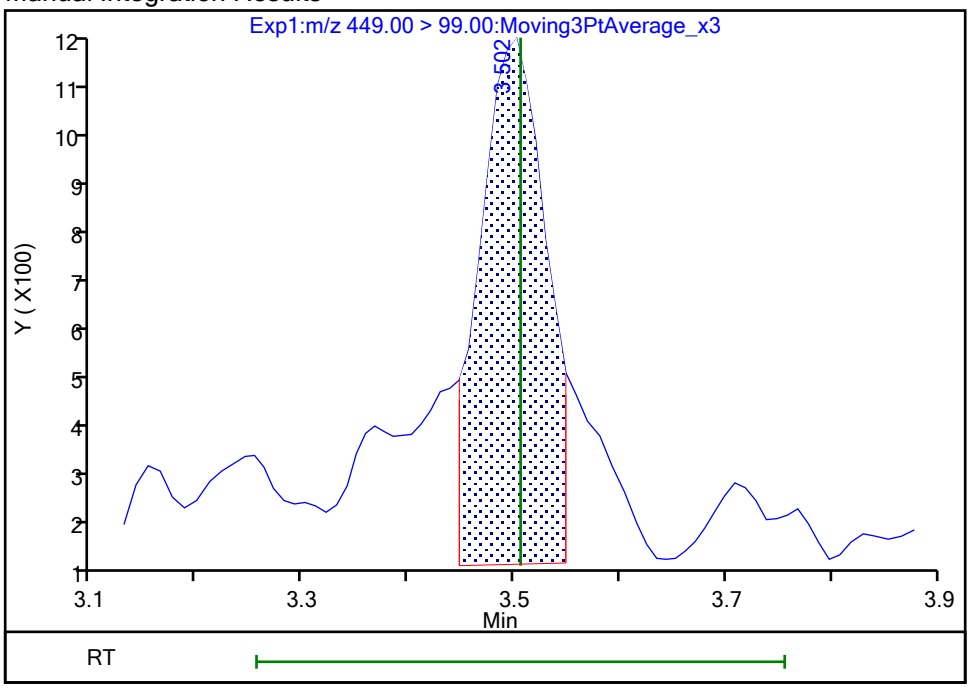
Processing Integration Results

RT: 3.50
Area: 7308
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 4589
Amount: 0.016900
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:22:20 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

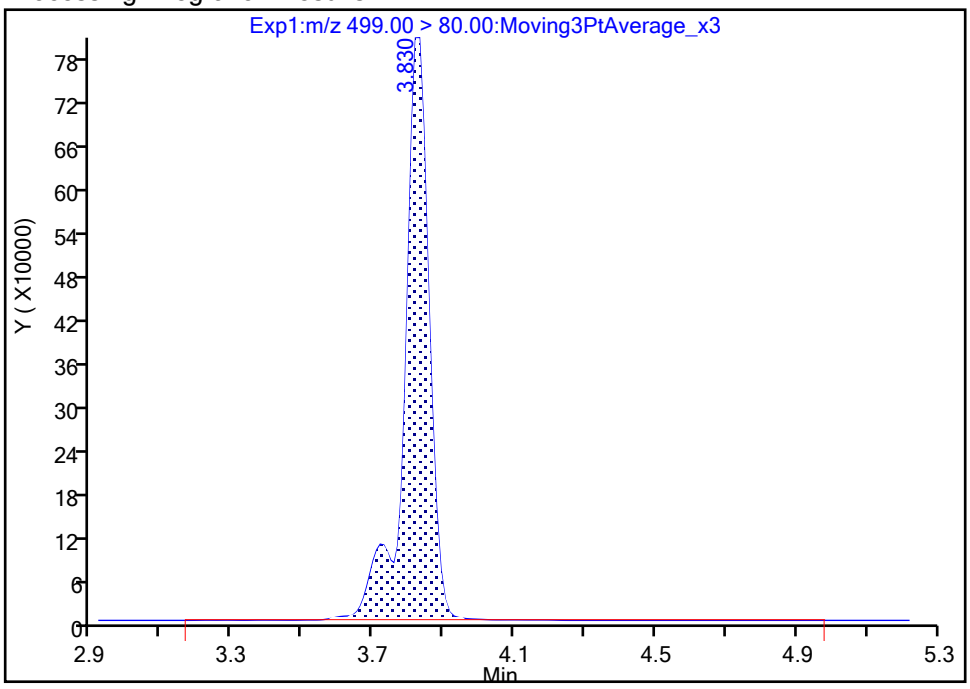
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

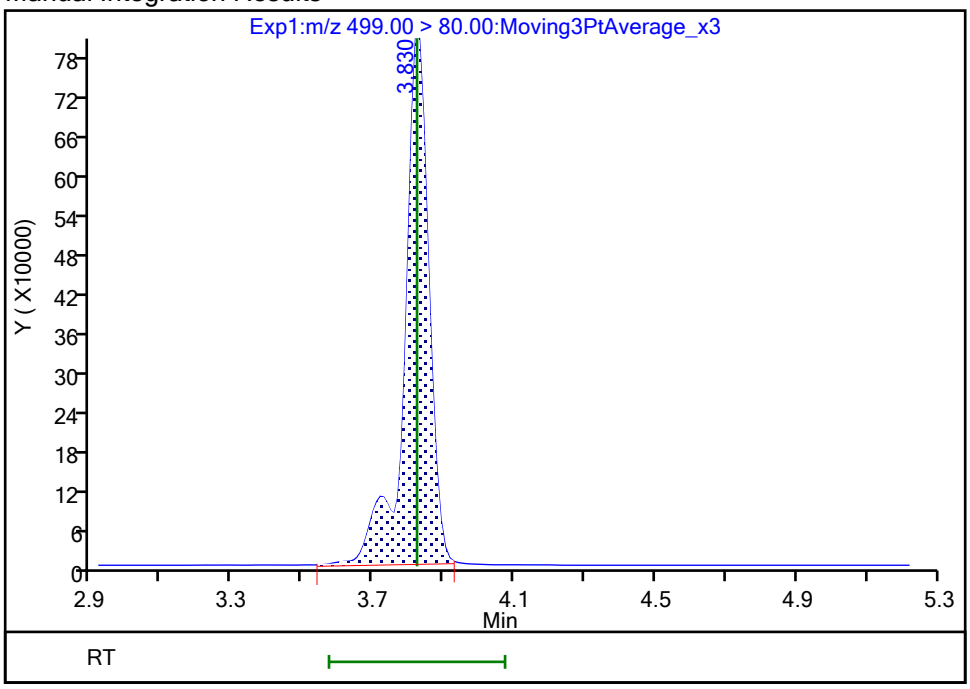
Processing Integration Results

RT: 3.83
Area: 3956766
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 3919057
Amount: 4.948900
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:58:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

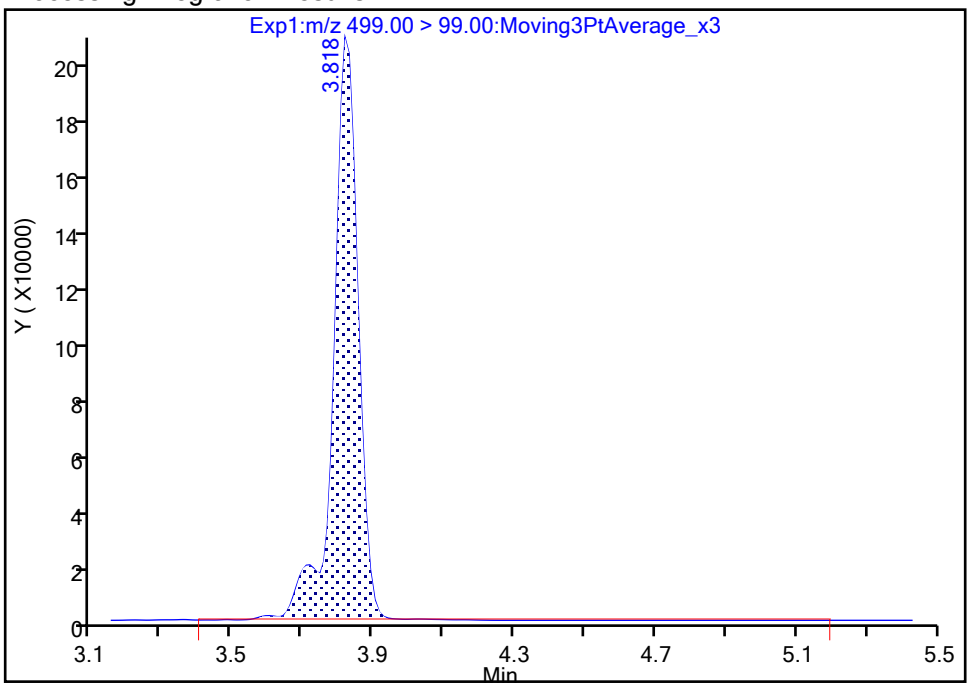
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

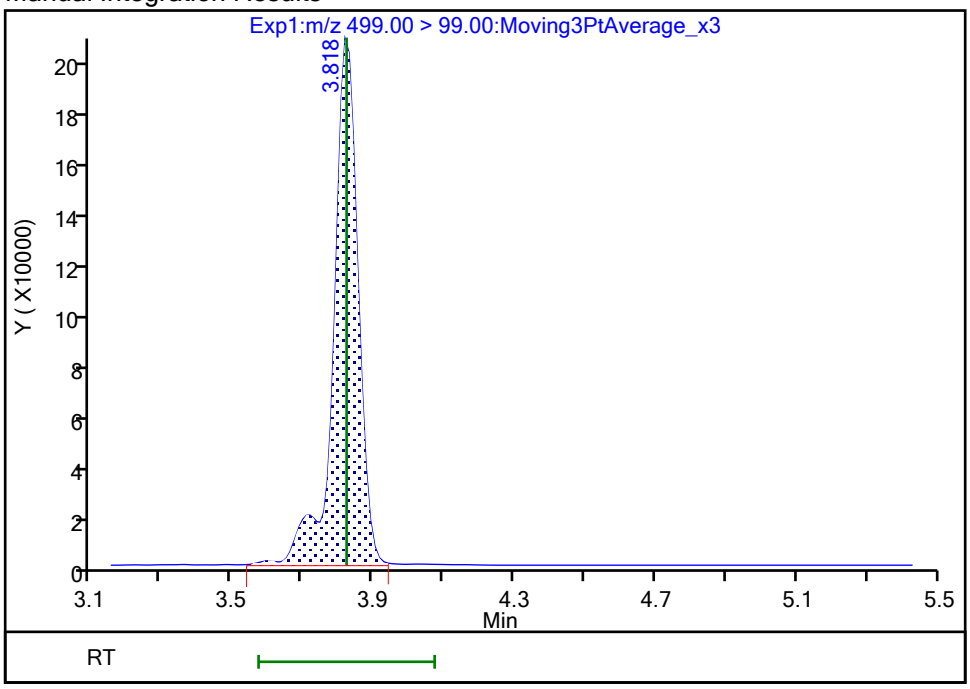
Processing Integration Results

RT: 3.82
Area: 990633
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 981381
Amount: 4.948900
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:58:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

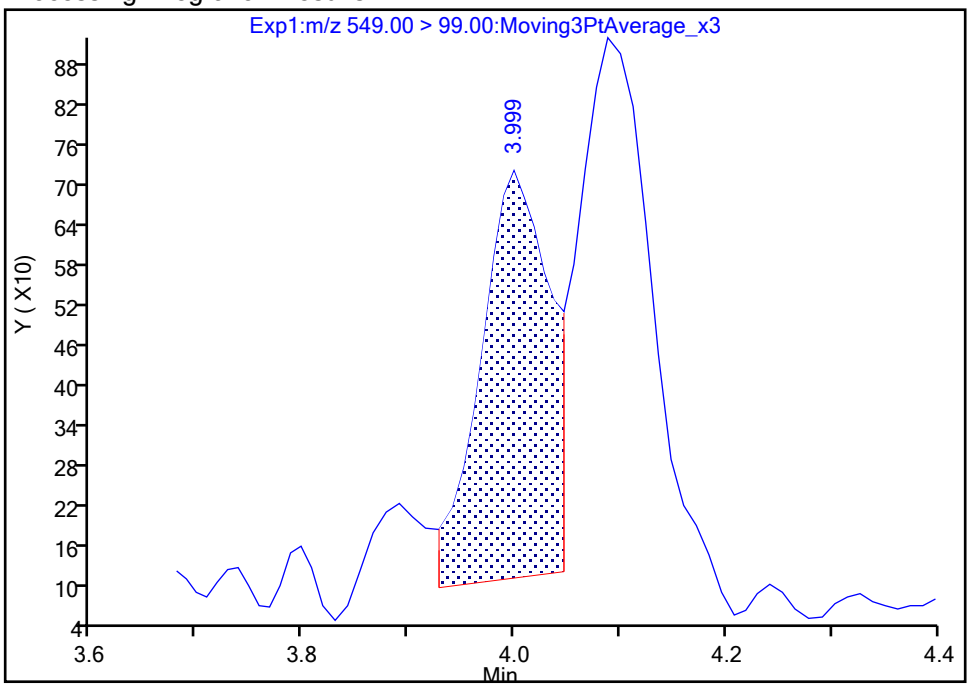
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

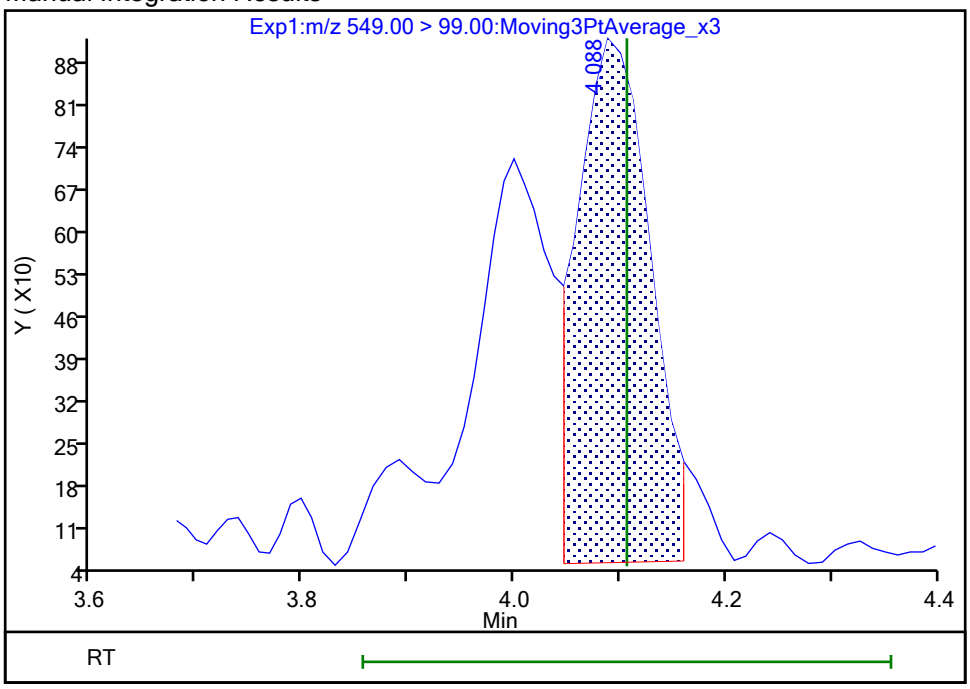
Processing Integration Results

RT: 4.00
Area: 2737
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 4066
Amount: 0.009094
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

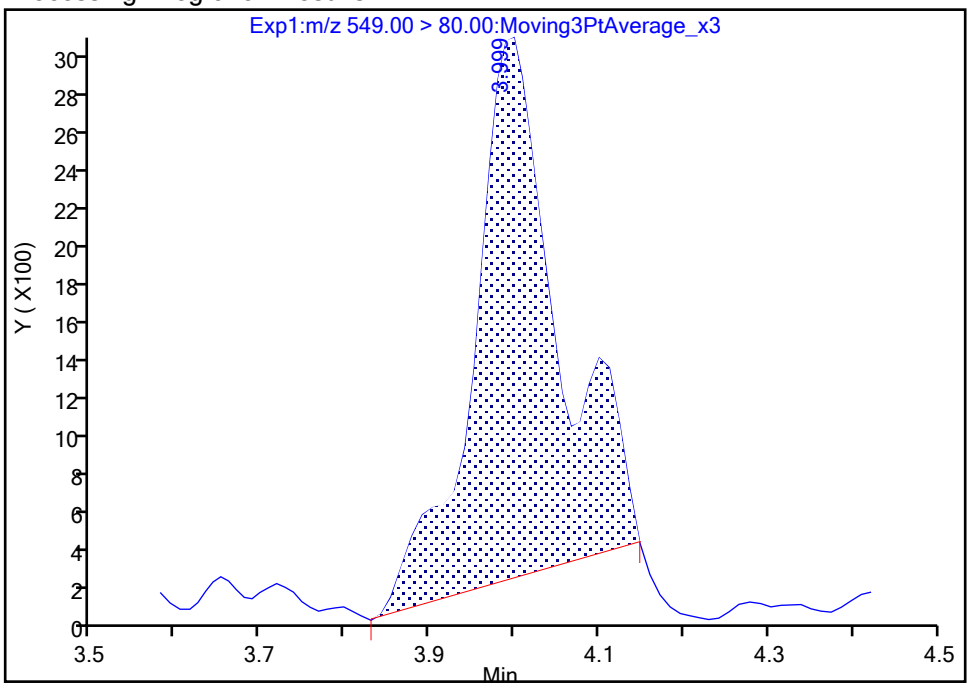
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

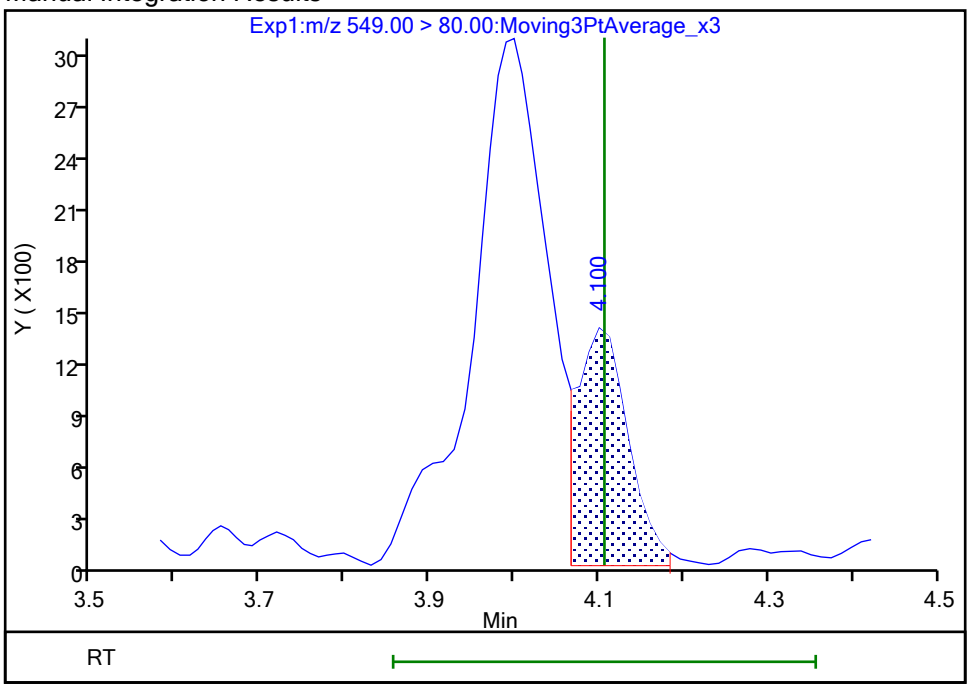
Processing Integration Results

RT: 4.00
Area: 19563
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 5479
Amount: 0.009094
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

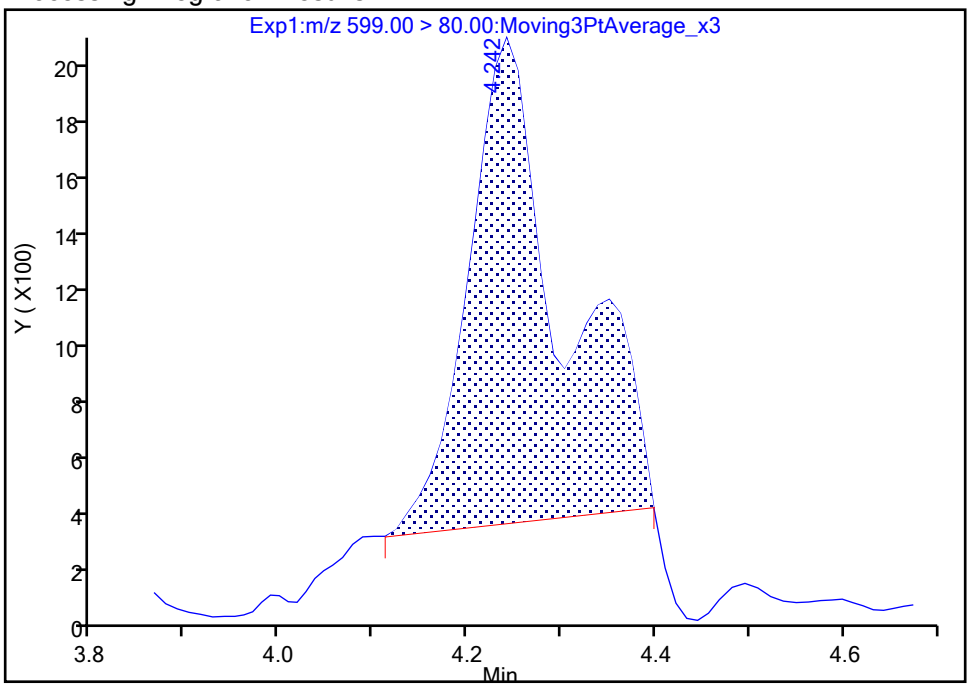
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

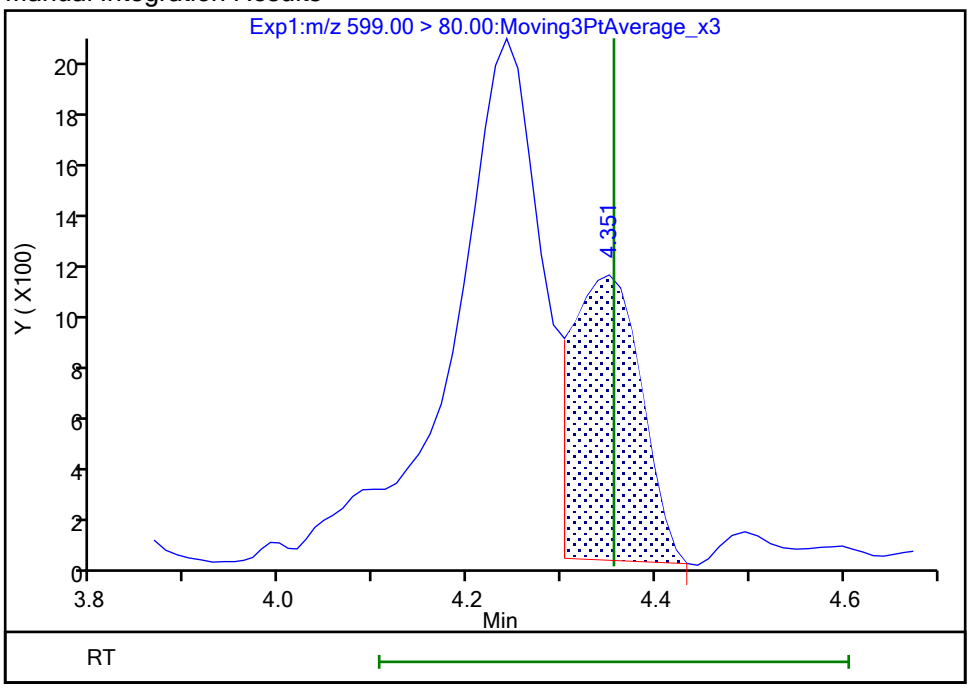
Processing Integration Results

RT: 4.24
Area: 11846
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 5512
Amount: 0.011888
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

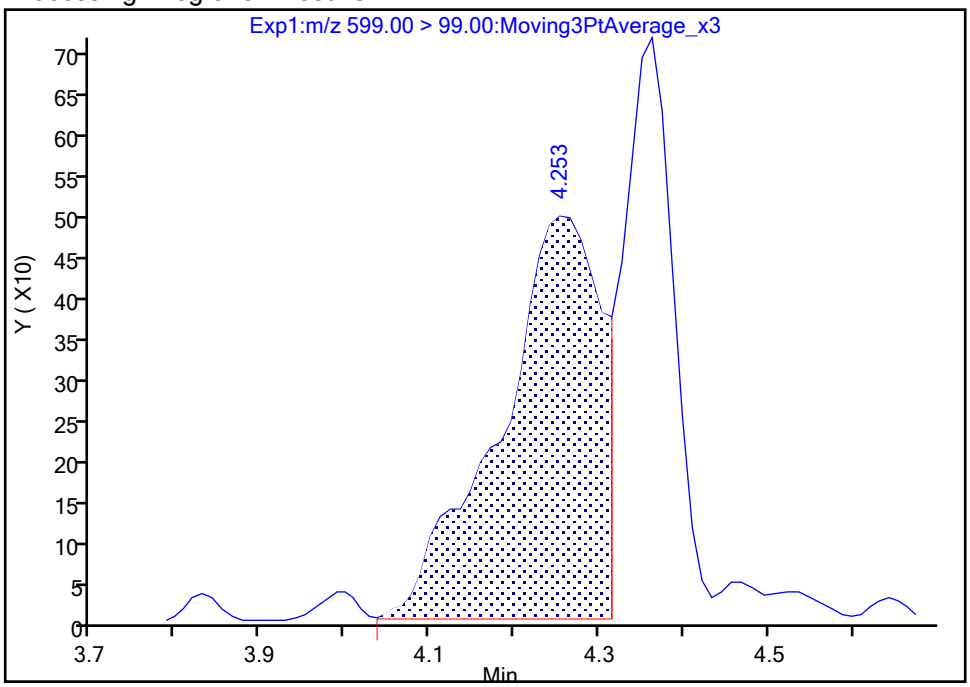
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

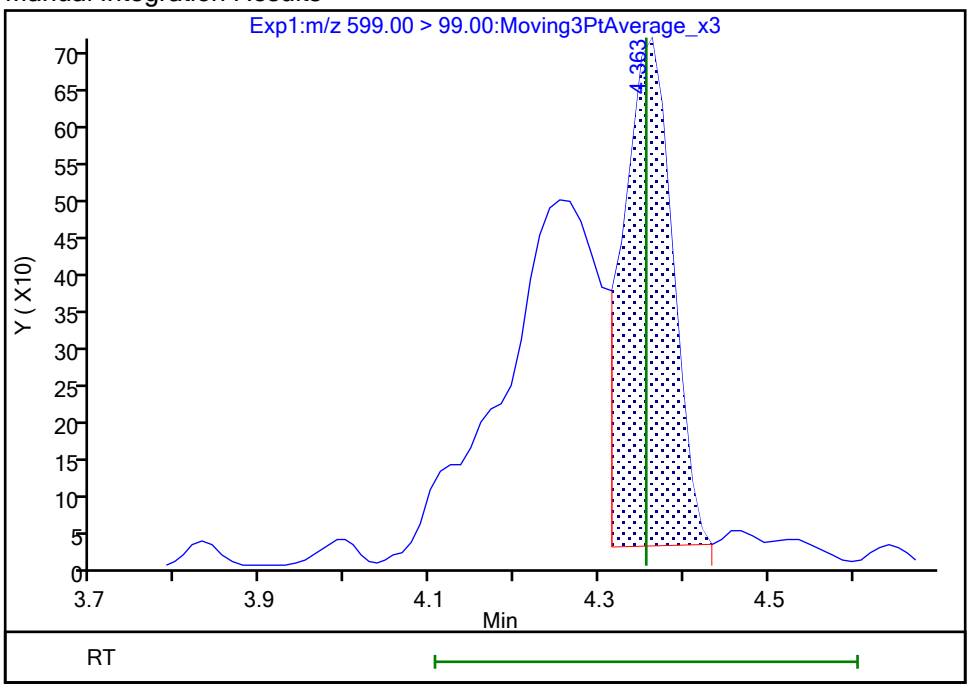
Processing Integration Results

RT: 4.25
Area: 4117
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 2739
Amount: 0.011888
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

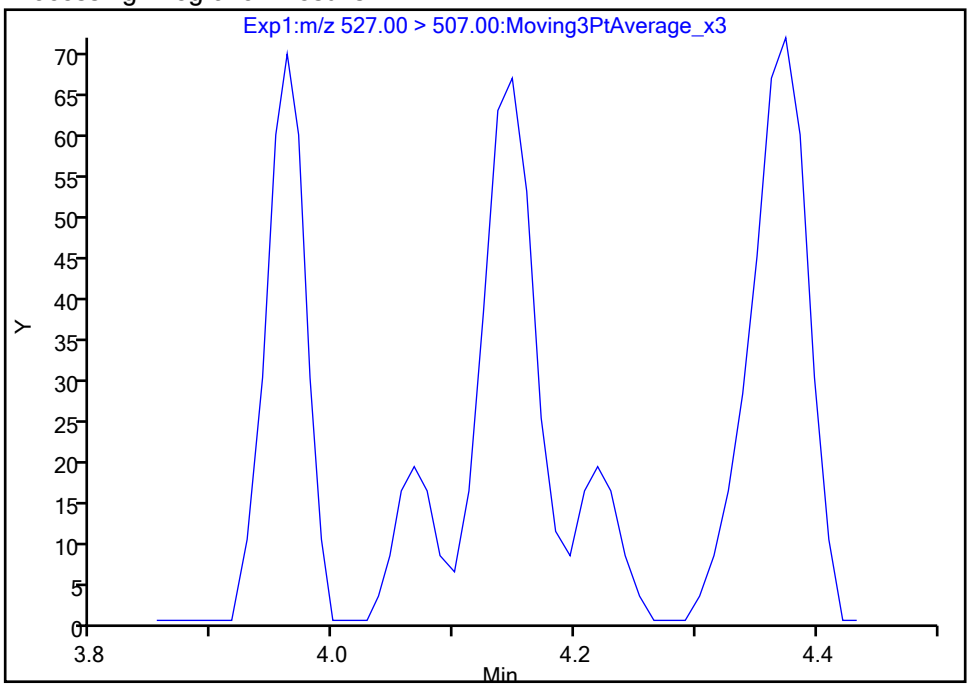
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

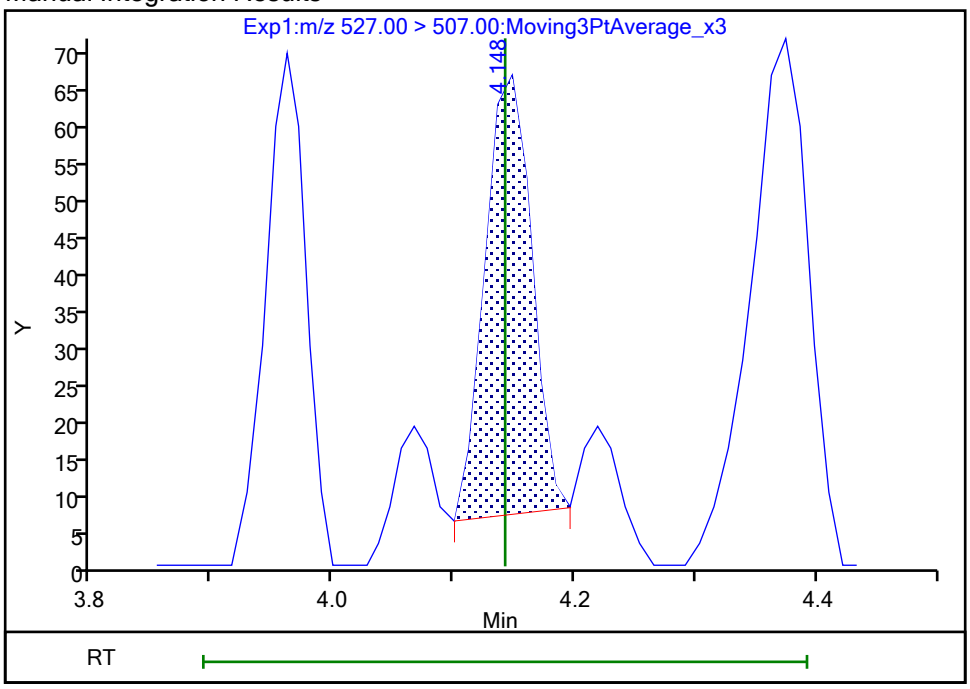
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 160
Amount: 0.000295
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:59:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

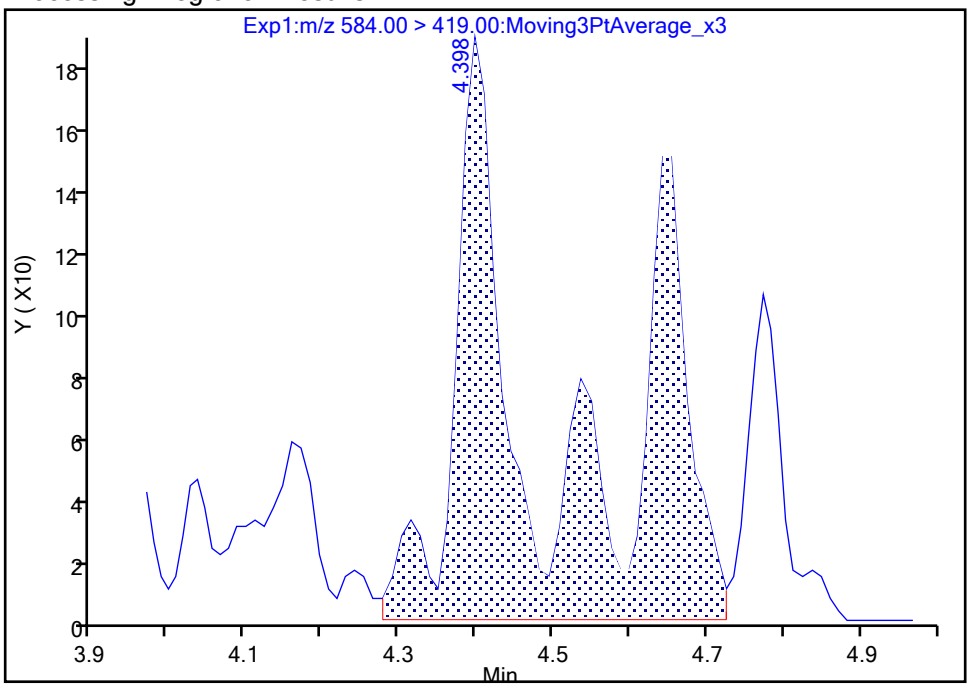
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

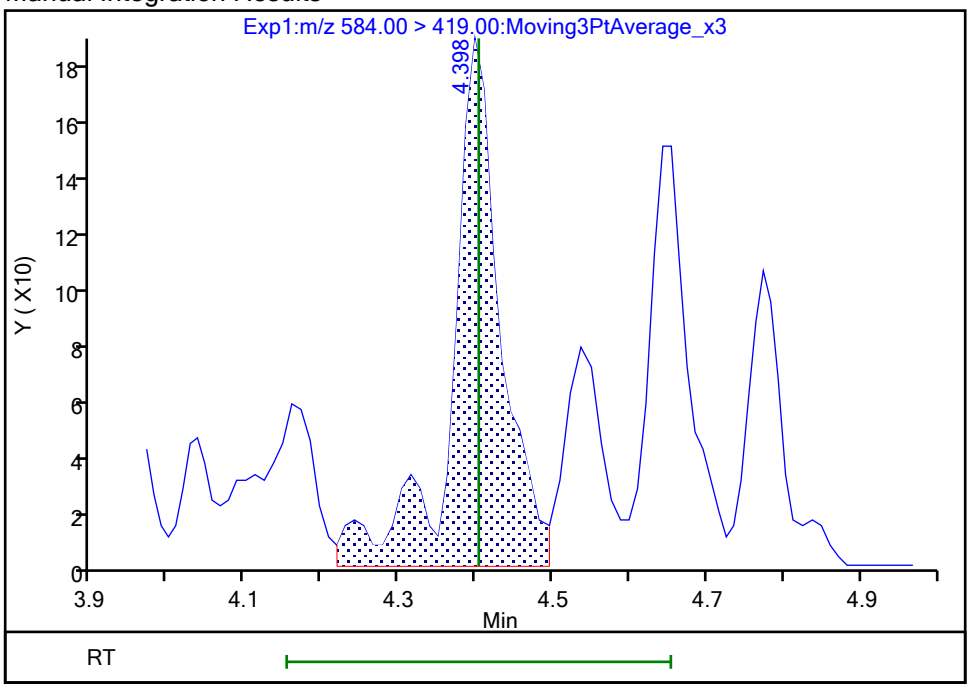
Processing Integration Results

RT: 4.40
Area: 1569
Amount: 0.004009
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 821
Amount: 0.002098
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

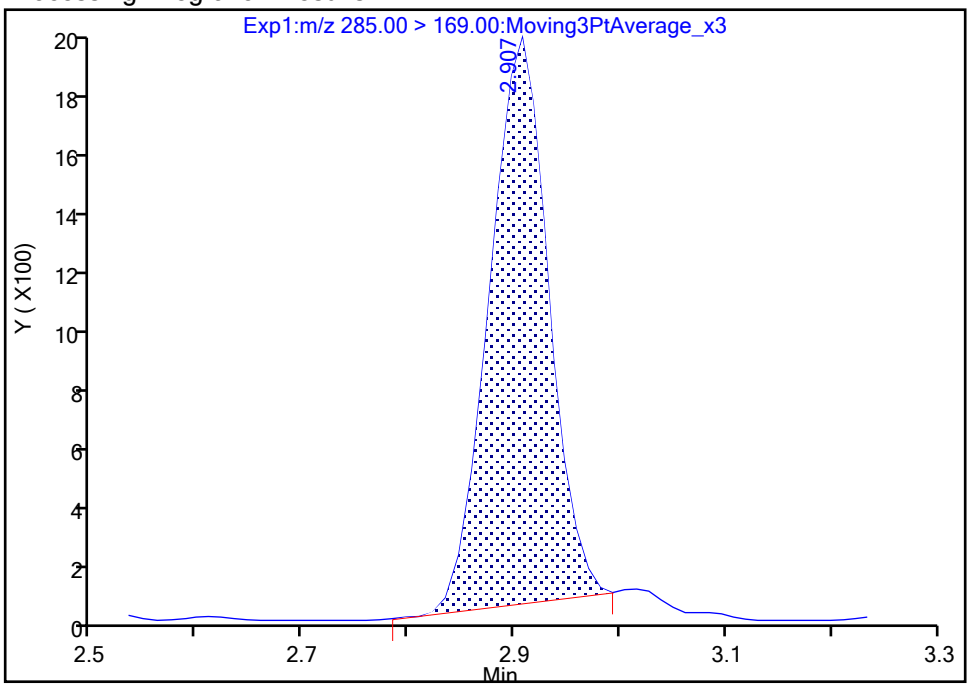
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

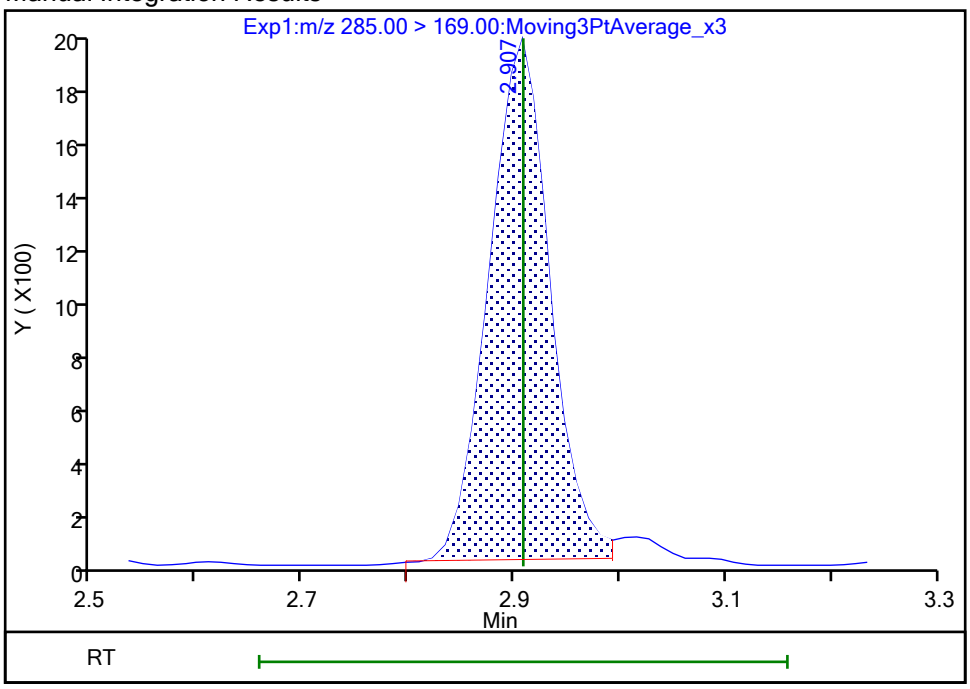
Processing Integration Results

RT: 2.91
Area: 7413
Amount: 0.032220
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 7799
Amount: 0.033898
Amount Units: ng/ml



Reviewer: SJ4N, 24-Oct-2023 23:22:00 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

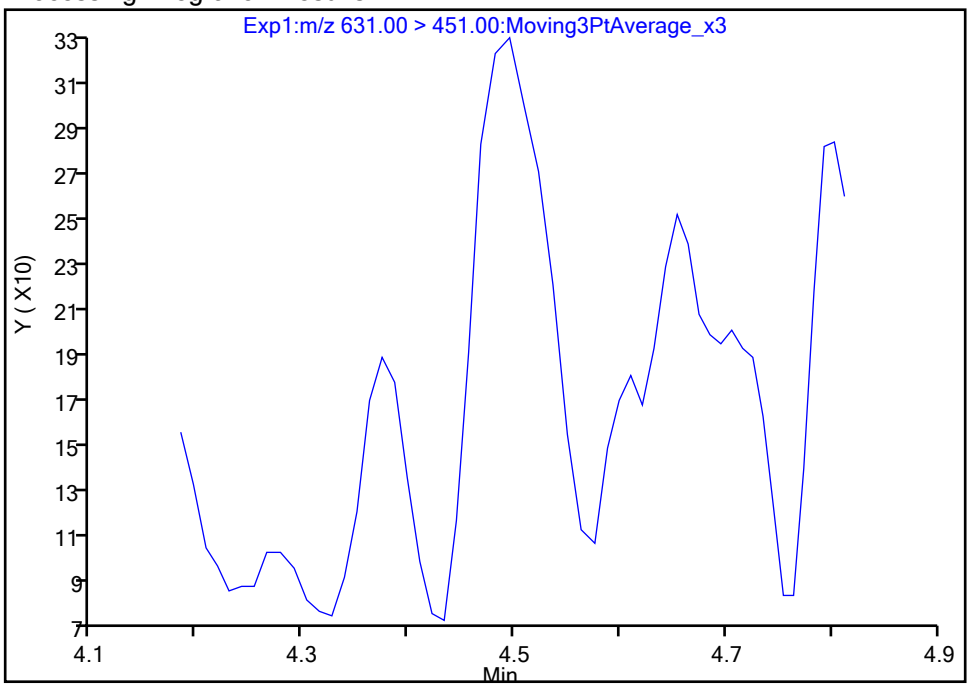
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

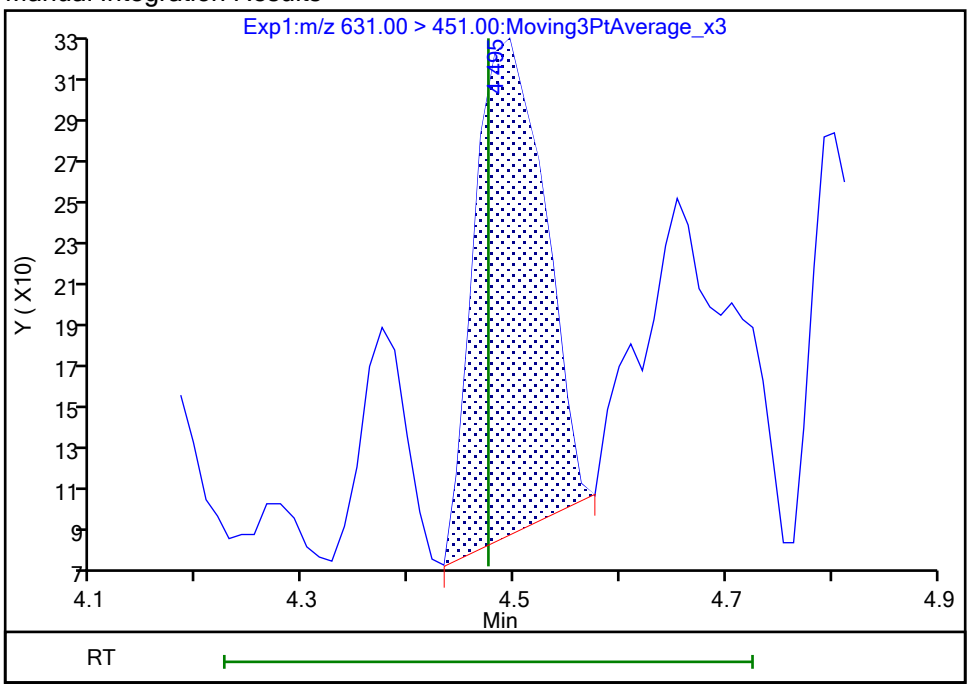
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.50
Area: 1121
Amount: 0.000302
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:00:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

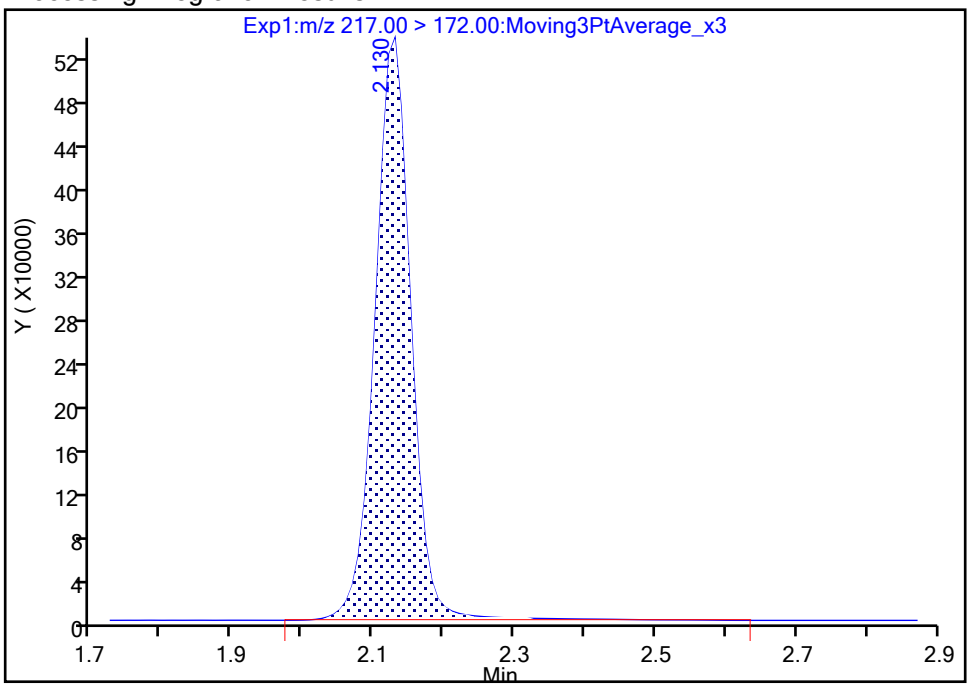
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

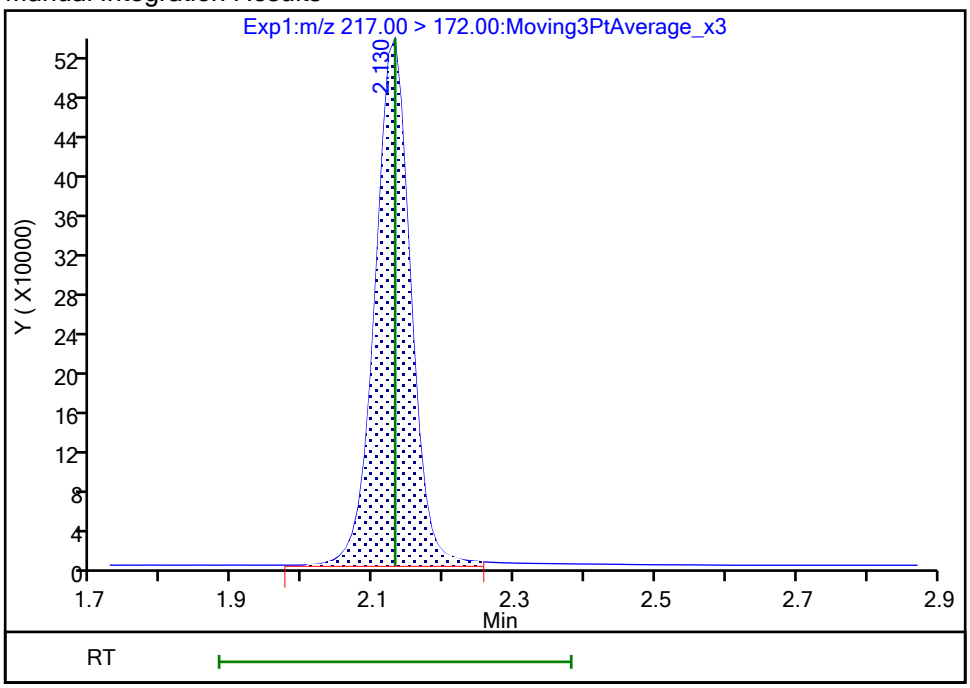
Processing Integration Results

RT: 2.13
Area: 1885610
Amount: 1.239474
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1861842
Amount: 1.223851
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

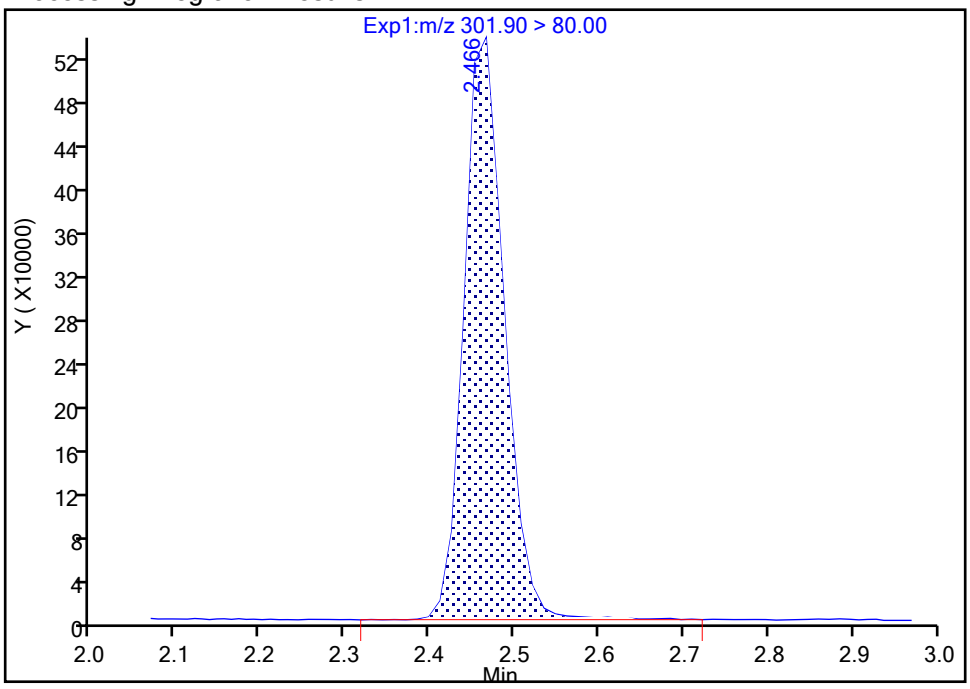
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

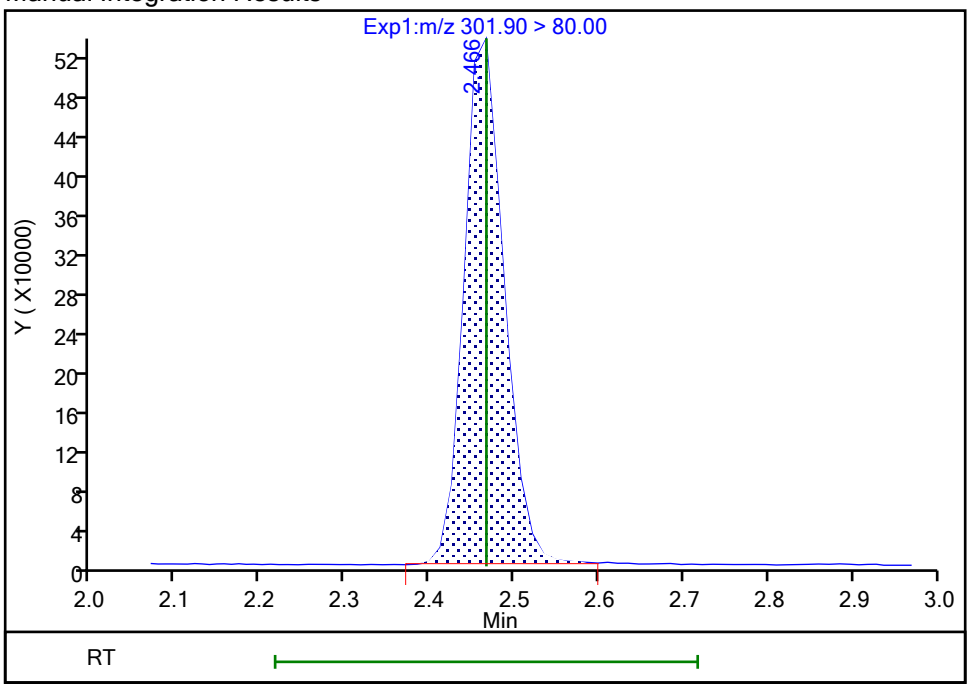
Processing Integration Results

RT: 2.47
Area: 1758928
Amount: 1.101046
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1751162
Amount: 1.096184
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

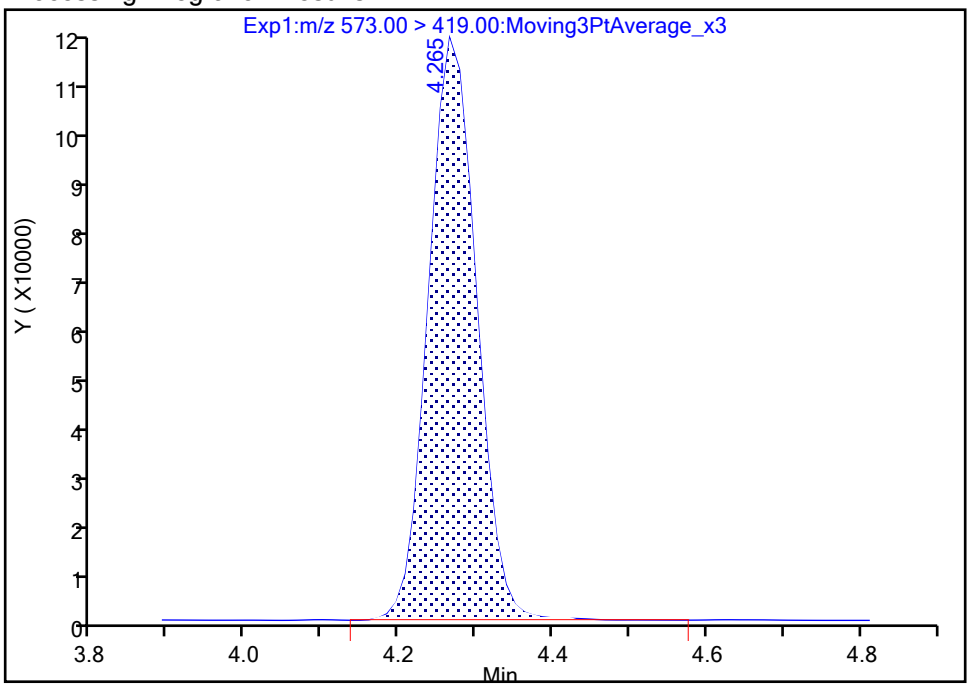
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

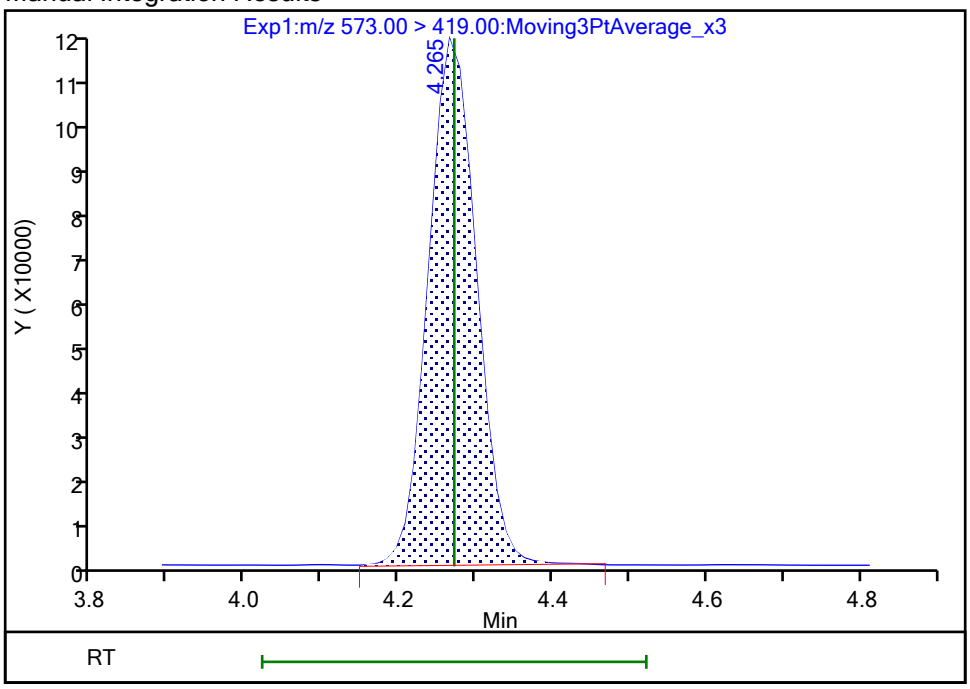
Processing Integration Results

RT: 4.27
Area: 481149
Amount: 1.183485
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 480369
Amount: 1.181567
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:55:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

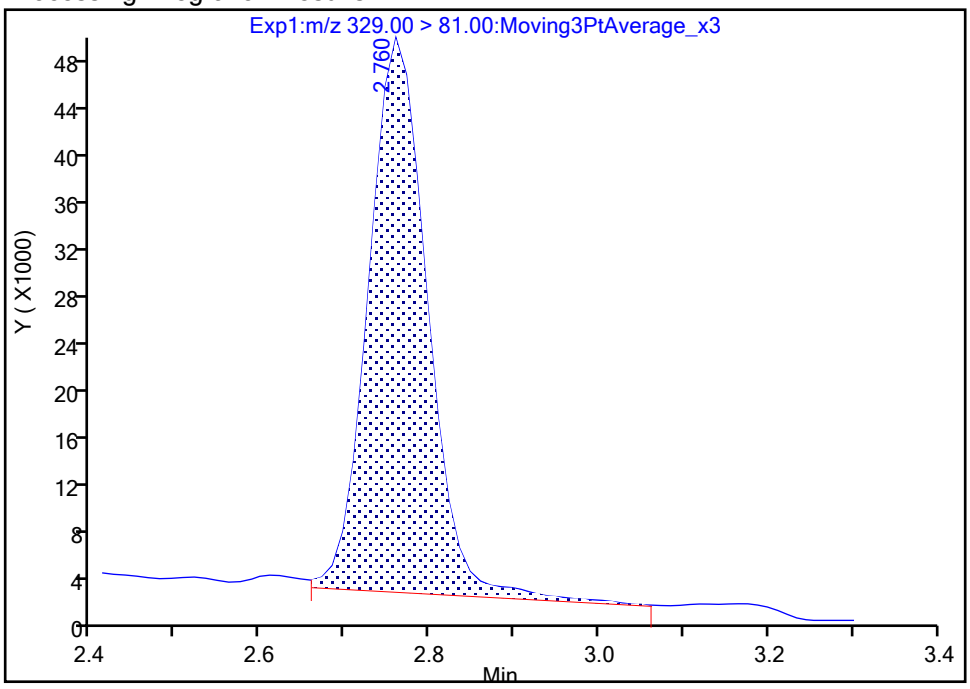
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C09.d				
Injection Date:	21-Oct-2023 01:22:45	Instrument ID:	LC812		
Lims ID:	460-290219-A-10-A	Lab Sample ID:	200-290219-10		
Client ID:	MW17B-101223-1306-96				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

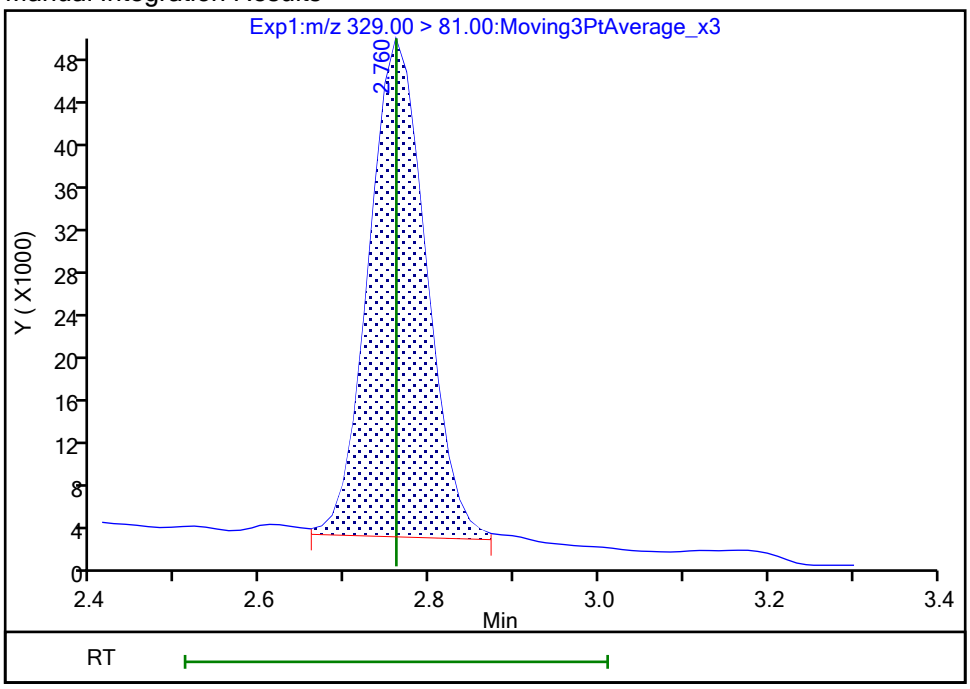
Processing Integration Results

RT: 2.76
Area: 228867
Amount: 1.238817
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 222280
Amount: 1.203163
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:54:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW82-101223-1411-30 | Lab Sample ID: 460-290219-11

Matrix: Water | Lab File ID: PA231020C10.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 14:11

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 287.1(mL) | Date Analyzed: 10/21/2023 01:30

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	12.9		4.35	1.04
2706-90-3	Perfluoropentanoic acid	9.07		1.74	0.59
307-24-4	Perfluorohexanoic acid	10.8		1.74	0.57
375-85-9	Perfluoroheptanoic acid	5.77		1.74	0.47
335-67-1	Perfluorooctanoic acid	21.3		1.74	0.66
375-95-1	Perfluorononanoic acid	1.81		1.74	0.43
335-76-2	Perfluorodecanoic acid	0.73	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	3.62		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	4.18		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	14.7		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	8.66		1.74	0.36
1763-23-1	Perfluorooctanesulfonic acid	598		1.74	0.74
68259-12-1	Perfluorononanesulfonic acid	1.74	U	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.35	U	4.35	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.35	U	4.35	1.65
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.35	U	4.35	1.39
13252-13-6	HFPODA	3.48	U	3.48	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW82-101223-1411-30 Lab Sample ID: 460-290219-11

Matrix: Water Lab File ID: PA231020C10.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 14:11

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 287.1(mL) Date Analyzed: 10/21/2023 01:30

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	63		50-150
STL01893	13C5 PFPeA	80		50-150
STL01892	13C4 PFHpA	89		50-150
STL02116	13C2 PFTeDA	87		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	75		50-150
STL02118	d3-NMeFOSAA	94		50-150
STL02117	d5-NEtFOSAA	97		50-150
STL02395	M2-4:2 FTS	100		50-150
STL02279	M2-6:2 FTS	104		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	89		50-150
STL00994	18O2 PFHxS	87		50-150
STL00993	13C2 PFHxA	85		50-150
STL00991	13C4 PFOS	87		50-150
STL00998	13C2 PFDoA	96		50-150
STL00995	13C5 PFNA	98		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	102		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d
Lims ID: 460-290219-A-11-A
Client ID: MW82-101223-1411-30
Sample Type: Client
Inject. Date: 21-Oct-2023 01:30:55 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-11-A
Misc. Info.: 200-0057493-010 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 15:08:36
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1153377	0.7920		63.4	1280	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	343821	0.3712			12.2	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1124096	0.99		79.6	175	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	252690	0.2604			0.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1542285	1.01		86.8	15400	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	154136	0.1040	Target=2.06		1.6	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	71446		2.16(1.03-3.09)		3.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.784	206951	1.17		100	3.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.795	1227717	1.07		85.4	1498	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	335929	0.3108	Target=14.12		1.5	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	21436		15.67(7.06-21.17)		4.0	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.884	149515	0.1200	Target=2.72		3.0	M
349.00 > 99.00	2.797	2.798	-0.001	0.884	64903		2.30(1.36-4.09)		6.9	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	5075	0.0256			32.0	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	247884	1.11		89.1	2606	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.157	0.007	0.899	1128082	1.03		87.0	4189	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.157	0.007	1.000	444723	0.4211	Target=3.32		26.9	M
399.00 > 99.00	3.153	3.157	-0.004	0.996	190881		2.33(1.66-4.98)		55.3	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.164	3.169	-0.005	1.000	208330	0.1657	Target=4.17		2.4	M
363.00 > 169.00	3.164	3.169	-0.005	1.000	58770		3.54(2.09-6.26)		29.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.169	-0.005	0.899	1401712	1.11		88.9	5415	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.915	218652	0.2485	Target=4.83		12.9	M
449.00 > 99.00	3.502	3.506	-0.004	0.915	60992		3.58(2.41-7.24)		13.5	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.995	280598	1.23		104	30.8	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.506	0.005	1.003	4055	0.006279			6.7	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	0.997	1779095	1.24		99.6	4422	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.515	0.005		1835659	1.25			3079	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.003	925683	0.6106	Target=2.88		10.7	M
413.00 > 169.00	3.520	3.515	0.005	1.003	294959		3.14(1.44-4.32)		215	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.826	3.823	0.003	1.000	12200486	17.2	Target=4.24		1164	M
499.00 > 99.00	3.816	3.823	-0.007	0.997	3703686		3.29(2.12-6.37)		1551	M
D 18 13C4 PFOS										
503.00 > 80.00	3.826	3.823	0.003	1.087	727523	1.04		87.4	145	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.850	3.846	0.004	1.003	77839	0.0519	Target=8.34		2.7	M
463.00 > 169.00	3.838	3.846	-0.008	1.000	9468		8.22(4.17-12.51)		16.6	M
D 19 13C5 PFNA										
468.00 > 423.00	3.838	3.846	-0.008	1.090	1914258	1.23		98.5	1757	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.135	4.130	0.005	1.000	34023	0.0210	Target=11.44		2.4	M
513.00 > 169.00	4.135	4.130	0.005	1.000	3360		10.13(5.72-17.16)		9.7	M
D 23 13C2 PFDA										
515.00 > 470.00	4.135	4.130	0.005	1.175	2027135	1.24		99.6	4711	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.135	4.142	-0.007	1.175	287057	1.12		93.6	126	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.147	4.142	0.005	1.003	99	0.000188			1.8	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.239	4.235	0.004	1.204	1305204	0.9393		75.1	2006	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.239	4.235	0.004	1.000	1239	0.001244			3.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.263	4.271	-0.008	1.211	456087	1.17		93.8	1087	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.263	4.271	-0.008	1.000	684	0.002066			2.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.384	4.380	0.004	1.245	1955818	1.27		102	8405	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.384	4.391	-0.007	1.000	16097	0.0100	Target=12.20		2.0	M
563.00 > 169.00	4.372	4.391	-0.019	0.997	1591		10.12(6.10-18.31)		7.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.396	4.391	0.005	1.249	453595	1.21		96.8	807	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.408	4.403	0.005	1.003	1739	0.004791			1.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.608	4.604	0.004	1.309	1870921	1.20		95.8	5318	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.977	4.983	-0.006	1.414	1698920	1.09		87.4	4903	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.977	4.983	-0.006	1.000	411	0.002704	Target=0.87		6.9	RM
713.00 > 219.00	4.998	4.983	0.015	1.004	184		2.23(0.43-1.30)		3.5	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

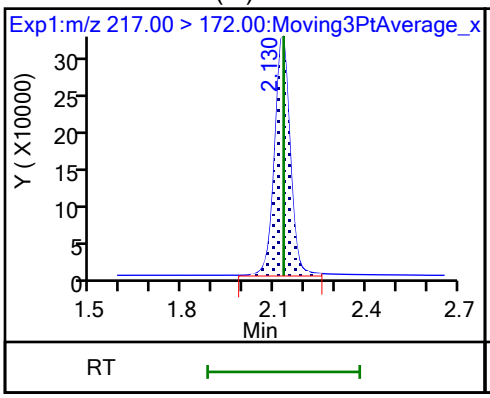
M - Manually Integrated

Report Date: 25-Oct-2023 08:40:06 Chrom Revision: 2.3 18-Oct-2023 21:16:54

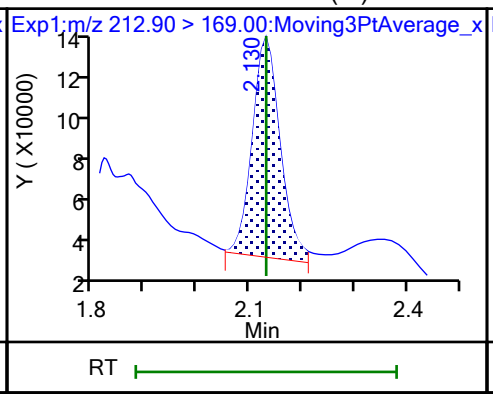
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d
Injection Date: 21-Oct-2023 01:30:55 Instrument ID: LC812
Lims ID: 460-290219-A-11-A Lab Sample ID: 200-290219-11
Client ID: MW82-101223-1411-30
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

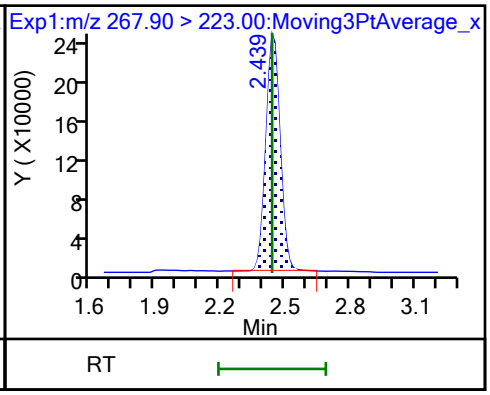
D 1 13C4 PFBA (M)



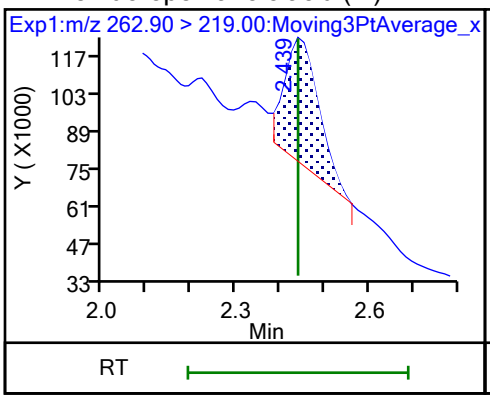
2 Perfluorobutanoic acid (M)



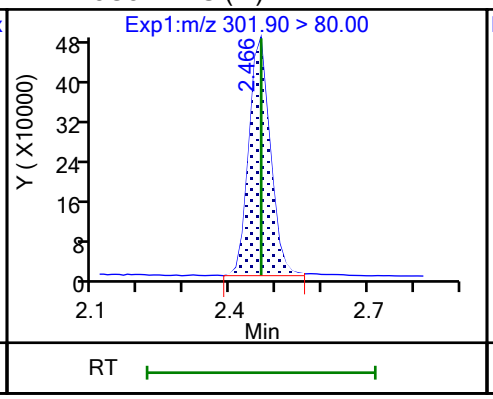
D 3 13C5 PFPeA



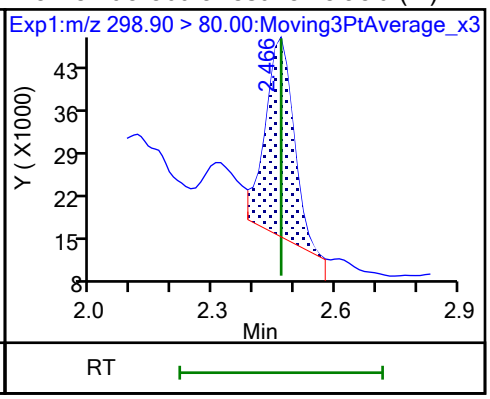
4 Perfluoropentanoic acid (M)



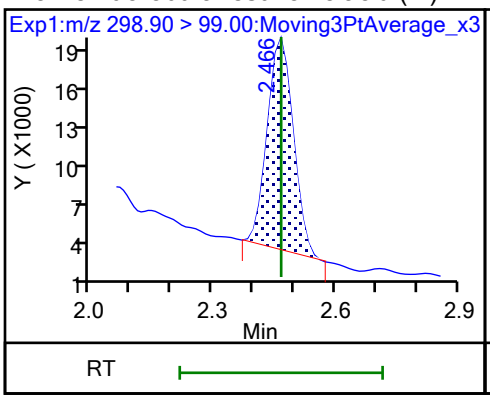
D 47 13C3 PFBS (M)



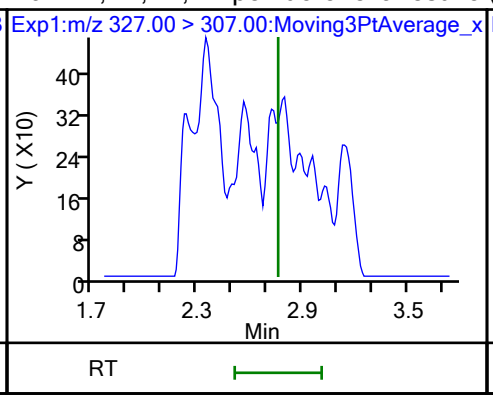
5 Perfluorobutanesulfonic acid (M)



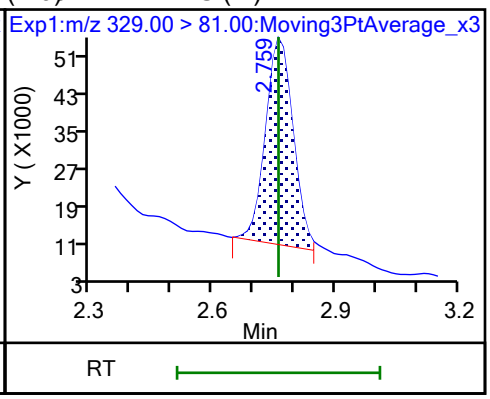
5 Perfluorobutanesulfonic acid (M)



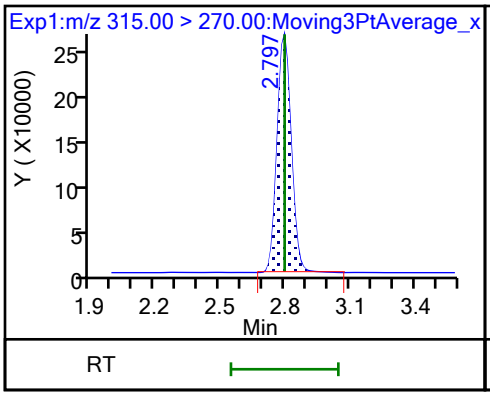
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



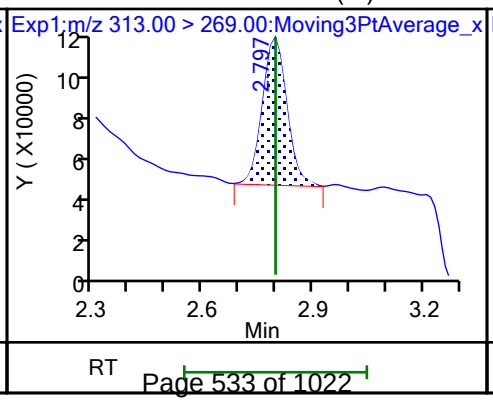
D 50 M2-4:2 FTS (M)



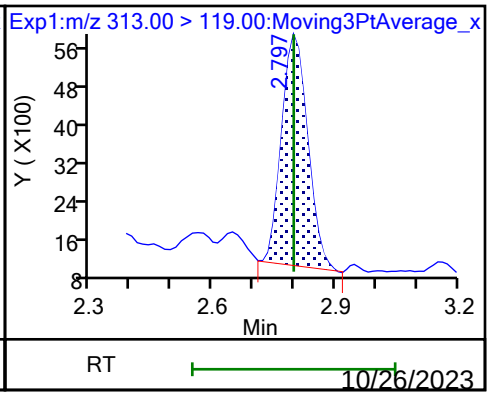
D 7 13C2 PFHxA



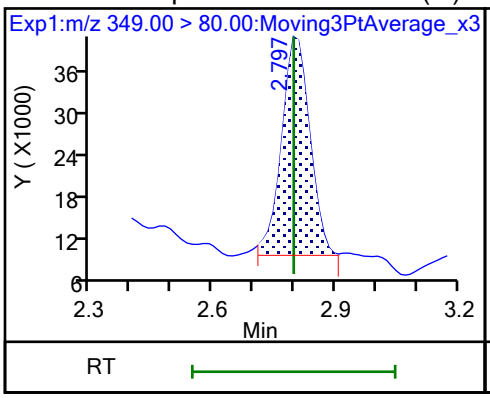
6 Perfluorohexanoic acid (M)



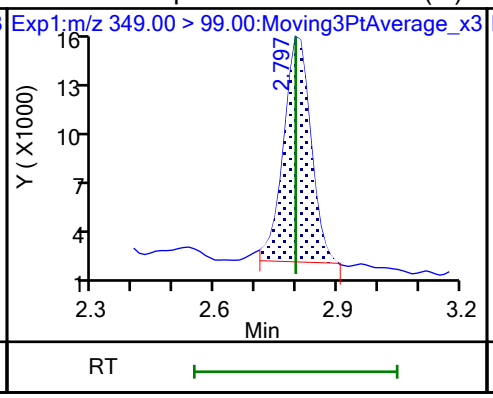
6 Perfluorohexanoic acid



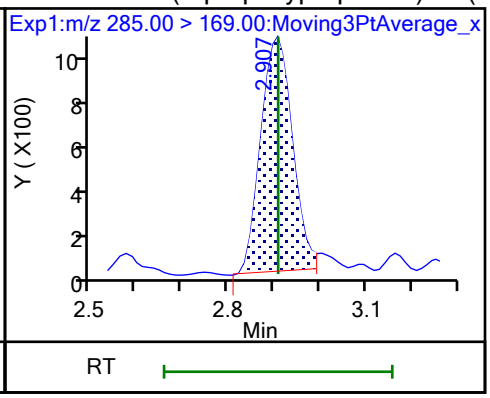
70 Perfluoropentanesulfonic acid (M)



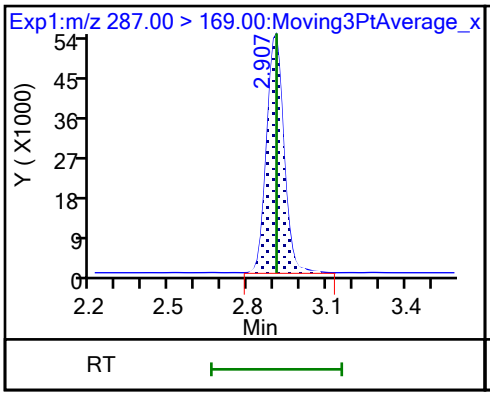
70 Perfluoropentanesulfonic acid (M)



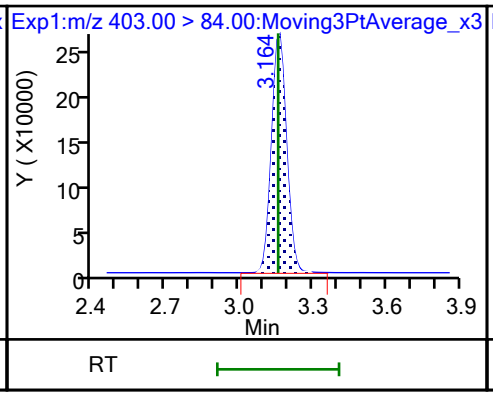
67 Perfluoro(2-propoxypropanoic) ac (M)



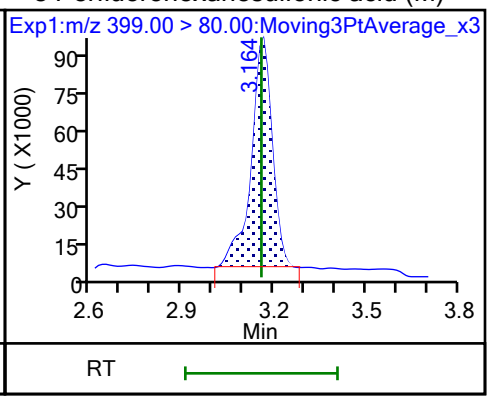
D 64 13C3 HFPO-DA



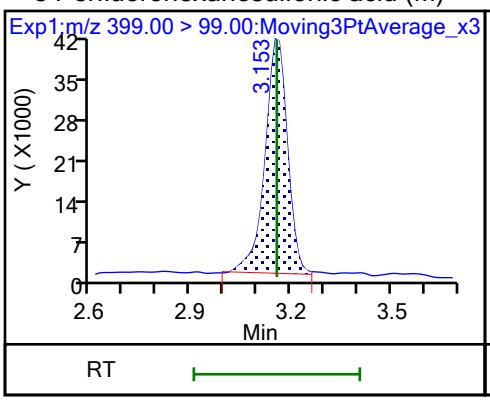
D 11 18O2 PFHxS



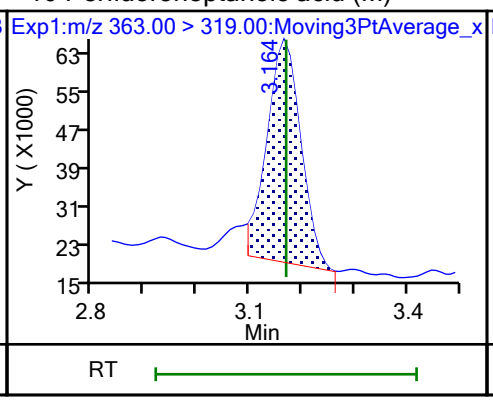
8 Perfluorohexanesulfonic acid (M)



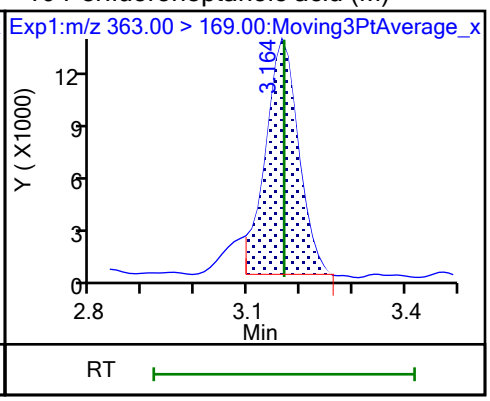
8 Perfluorohexanesulfonic acid (M)



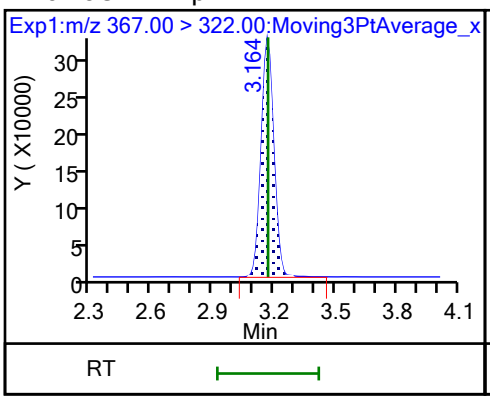
10 Perfluoroheptanoic acid (M)



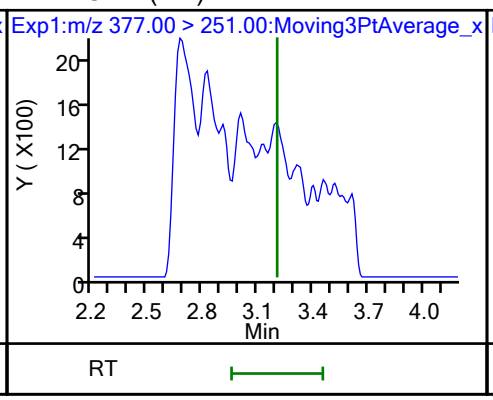
10 Perfluoroheptanoic acid (M)



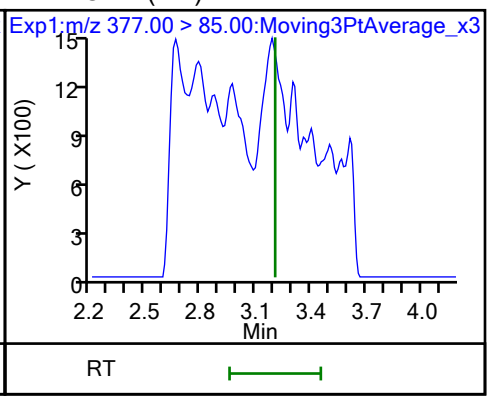
D 9 13C4 PFHpA



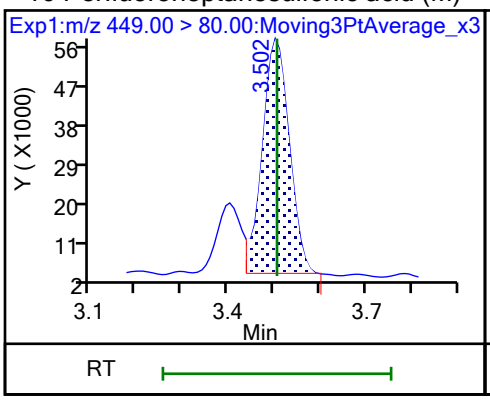
77 DONA (ND)



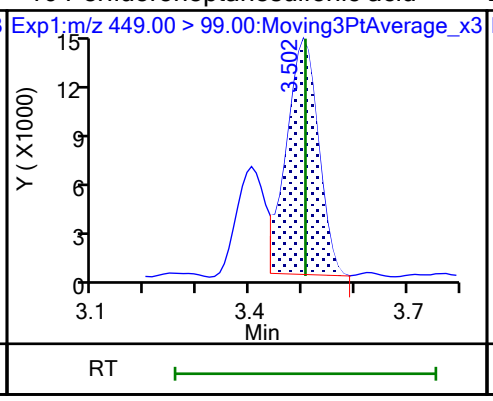
77 DONA (ND)



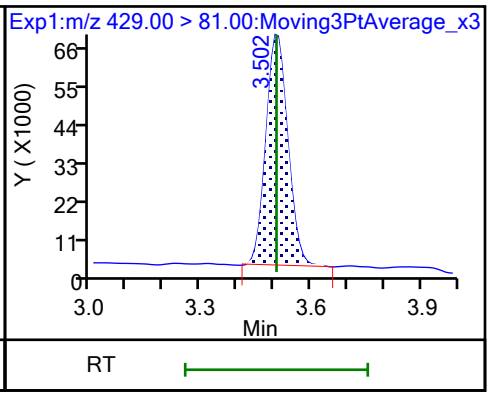
16 Perfluoroheptanesulfonic acid (M)



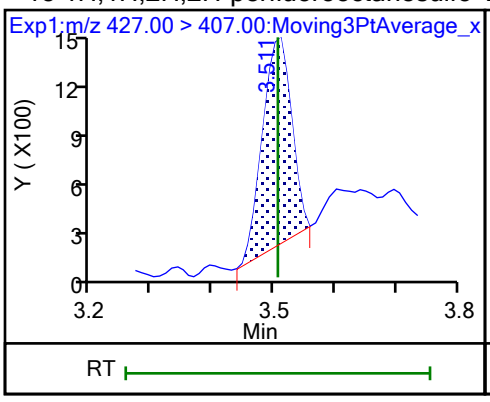
16 Perfluoroheptanesulfonic acid



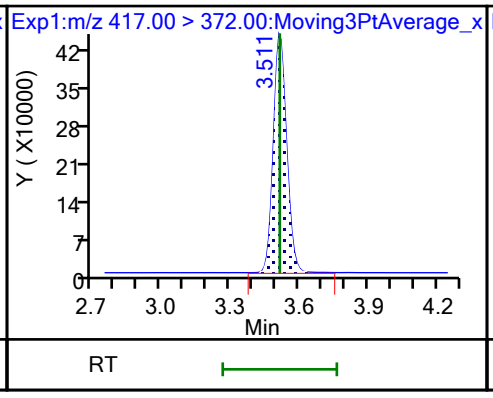
D 12 M2-6:2 FTS



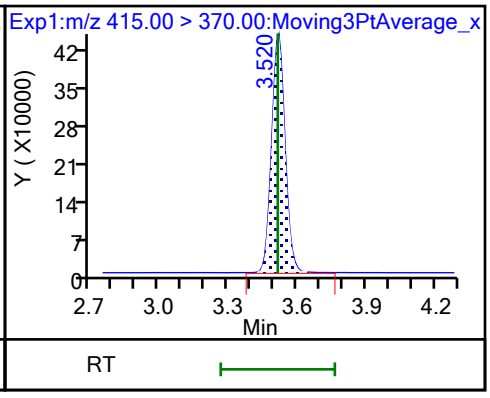
13 1H,1H,2H,2H-perfluorooctanesulfo



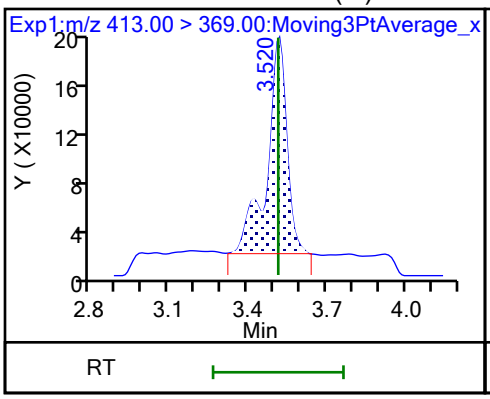
D 14 13C4 PFOA



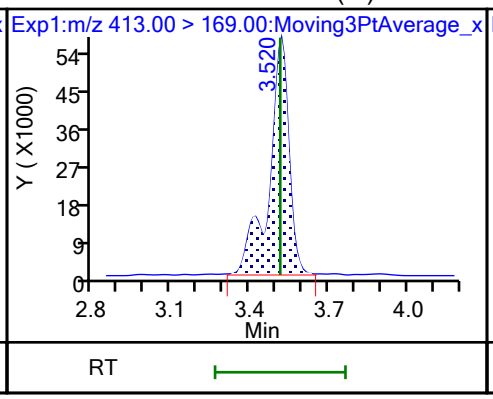
* 62 13C2 PFOA



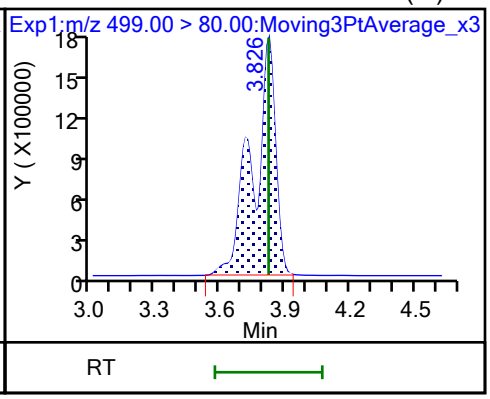
15 Perfluorooctanoic acid (M)



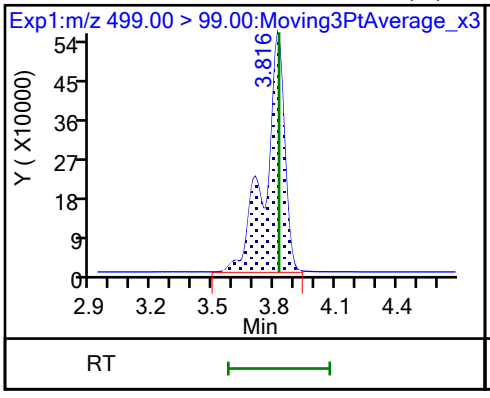
15 Perfluorooctanoic acid (M)



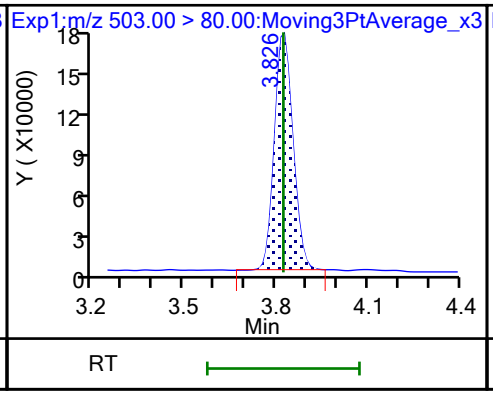
17 Perfluorooctanesulfonic acid (M)



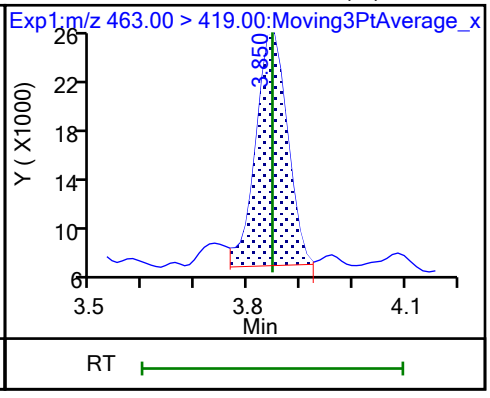
17 Perfluorooctanesulfonic acid (M)



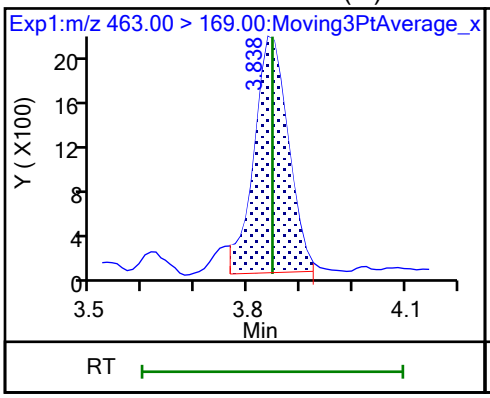
D 18 13C4 PFOS



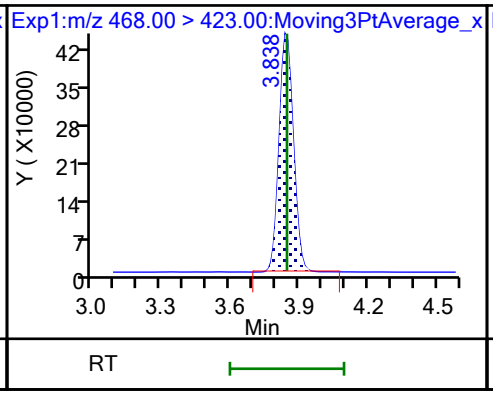
20 Perfluorononanoic acid (M)



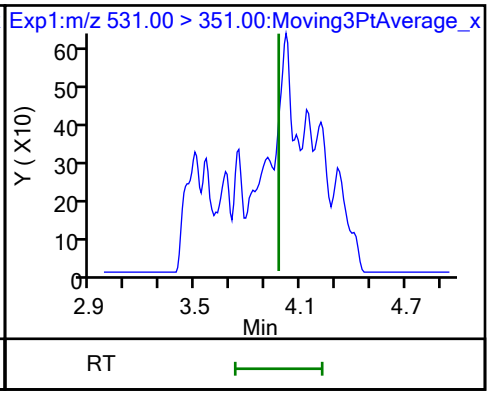
20 Perfluorononanoic acid (M)



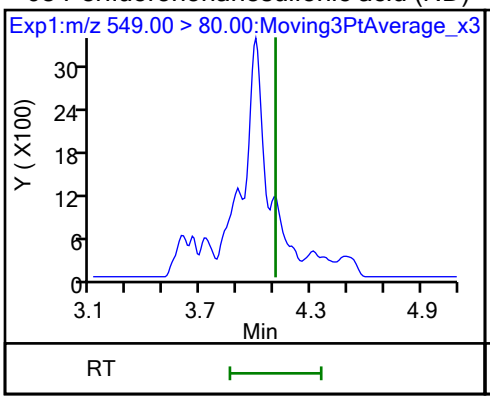
D 19 13C5 PFNA



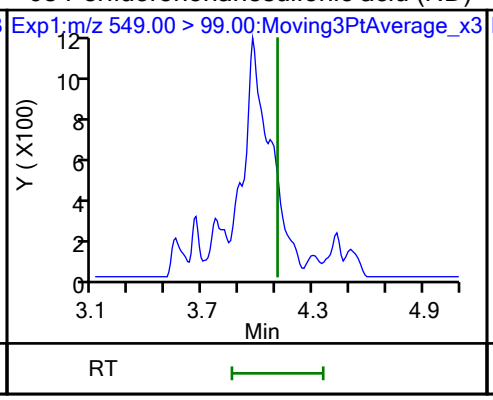
69 9-Chlorohexadecafluoro-3-oxanona (ND)



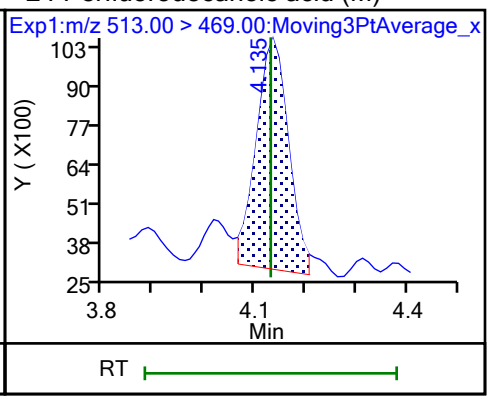
68 Perfluorononanesulfonic acid (ND)



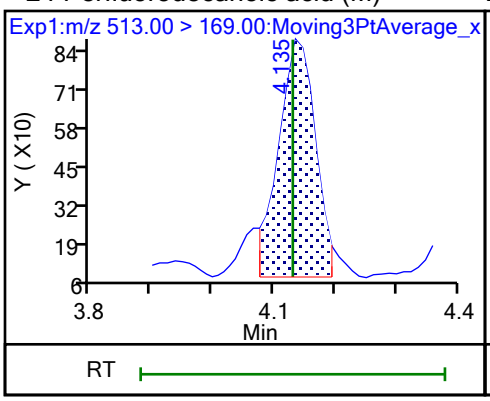
68 Perfluorononanesulfonic acid (ND)



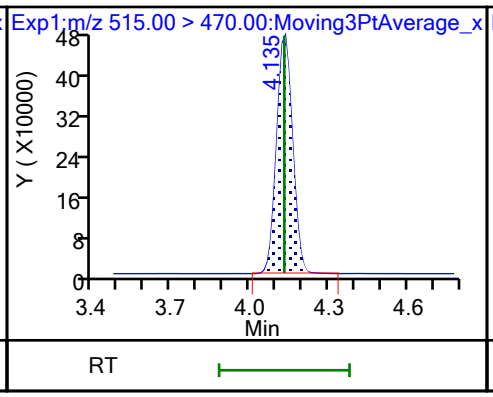
24 Perfluorodecanoic acid (M)



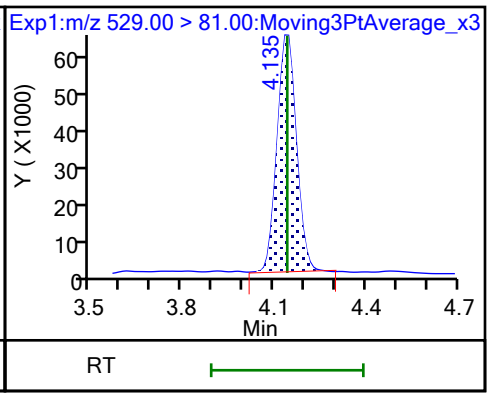
24 Perfluorodecanoic acid (M)



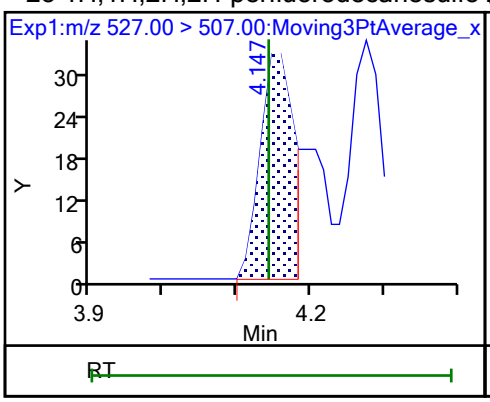
D 23 13C2 PFDA



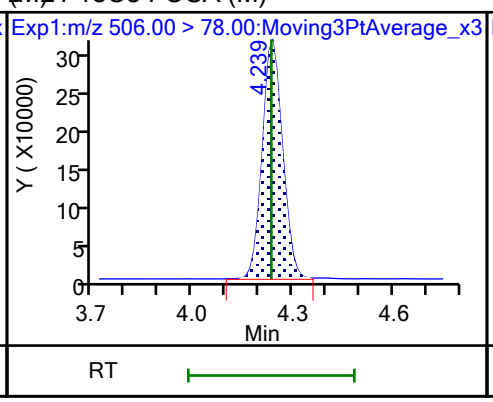
D 26 M2-8:2 FTS



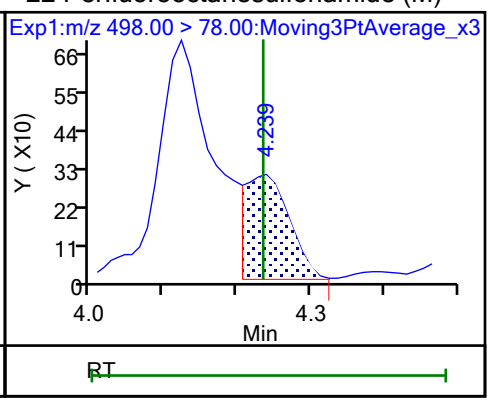
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



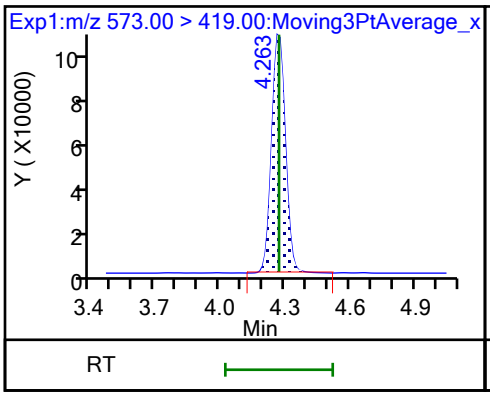
D 21 13C8 FOSA (M)



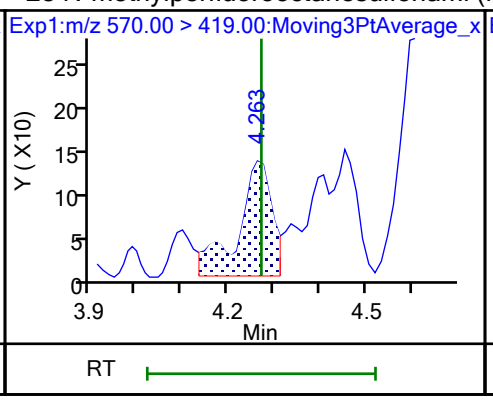
22 Perfluorooctanesulfonamide (M)



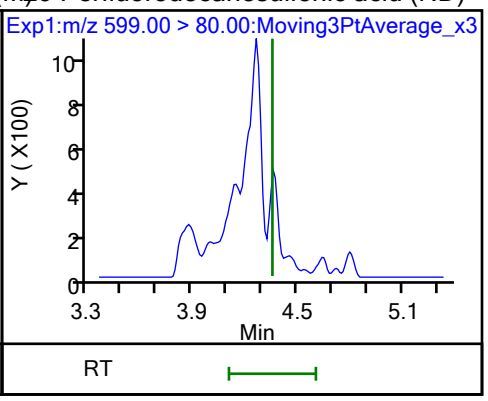
D 27 d3-NMeFOSAA



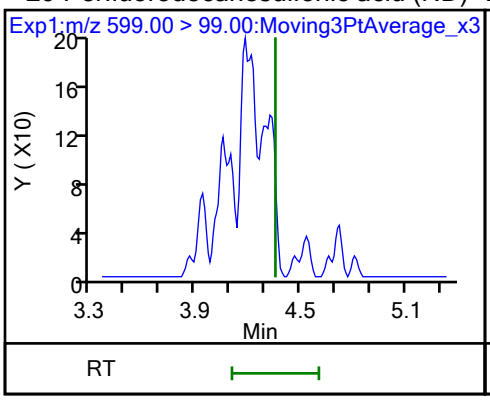
28 N-methylperfluorooctanesulfonami (M)



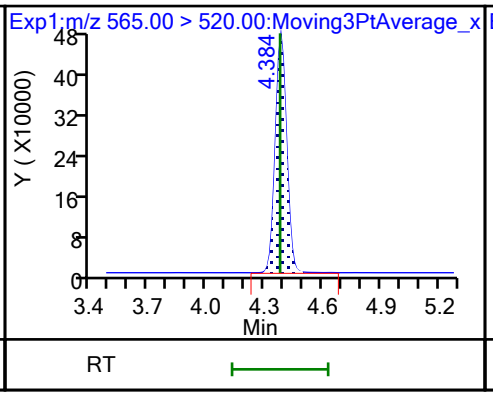
29 Perfluorodecanesulfonic acid (ND)



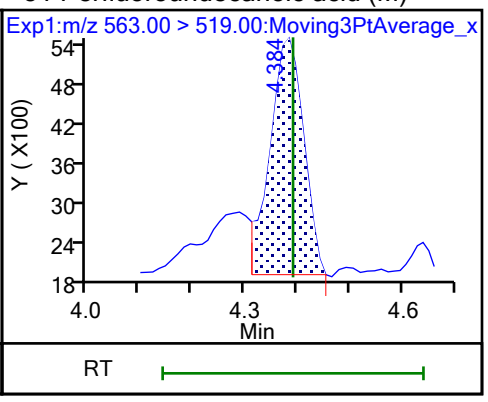
29 Perfluorodecanesulfonic acid (ND)



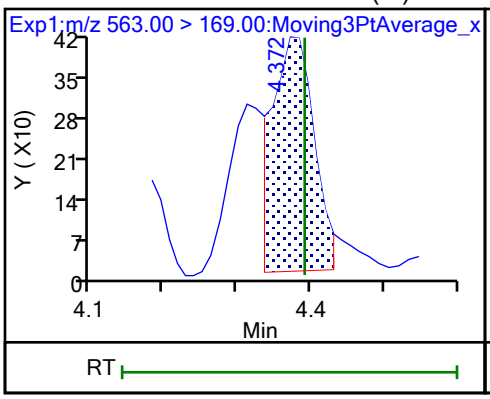
D 30 13C2 PFUnA



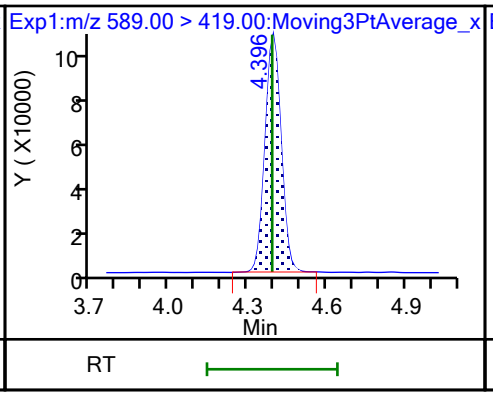
31 Perfluoroundecanoic acid (M)



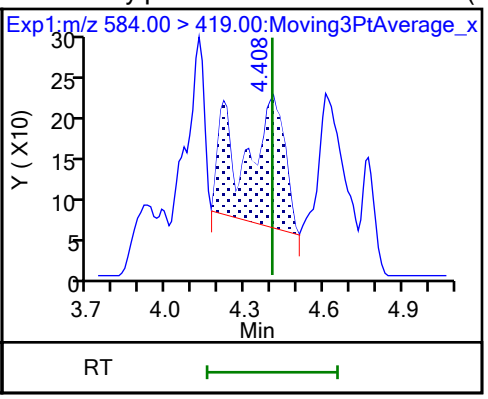
31 Perfluoroundecanoic acid (M)



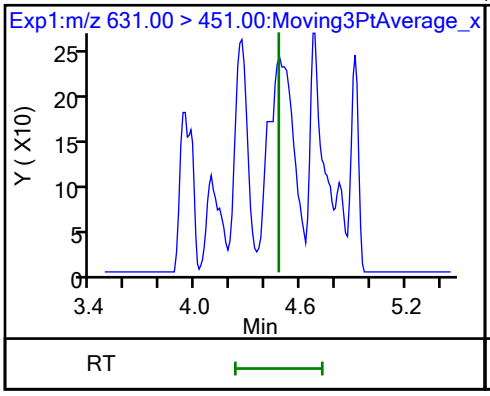
D 32 d5-NEtFOSAA



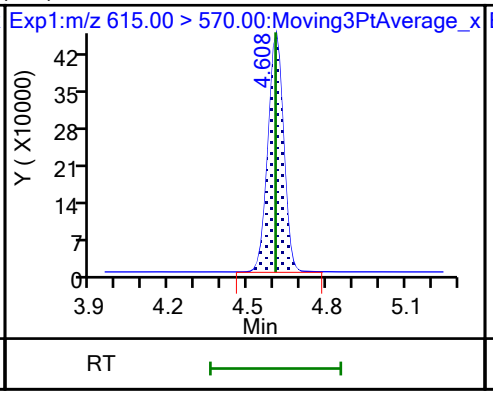
33 N-ethylperfluorooctanesulfonamid (M)



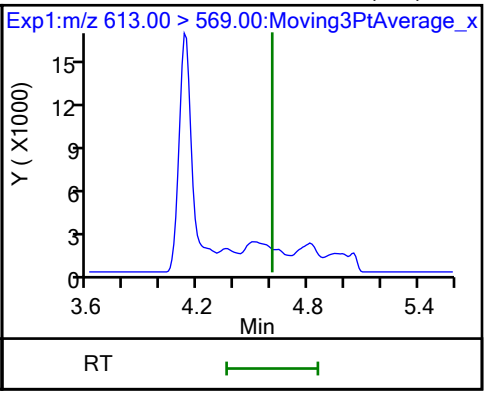
66 11-Chloroeicosafluoro-3-oxaundec (ND)



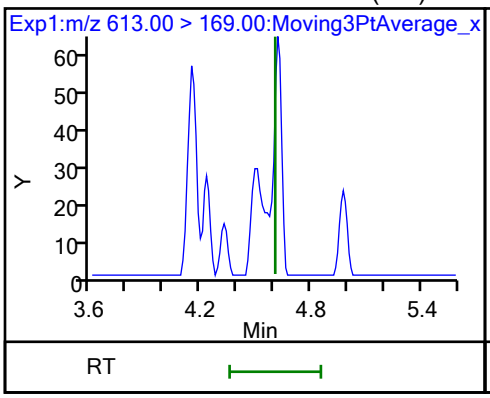
D 36 13C2 PFDoA



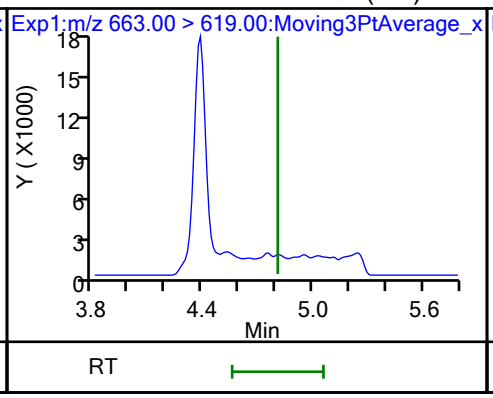
37 Perfluorododecanoic acid (ND)



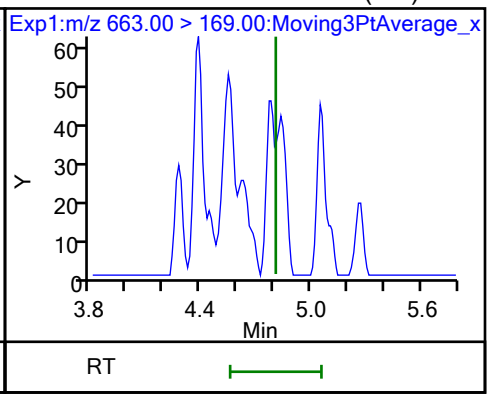
37 Perfluorododecanoic acid (ND)



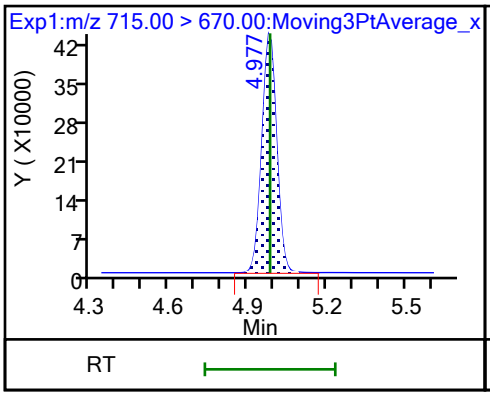
41 Perfluorotridecanoic acid (ND)



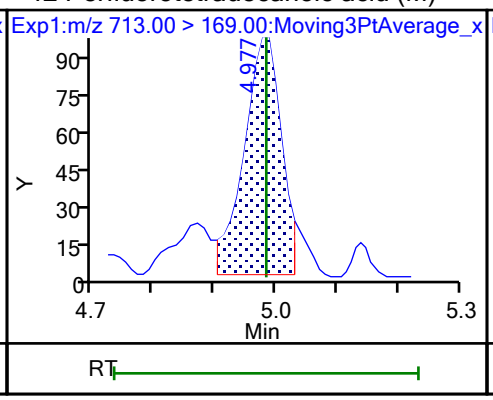
41 Perfluorotridecanoic acid (ND)



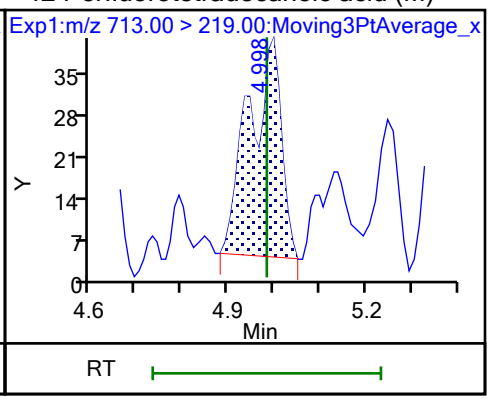
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

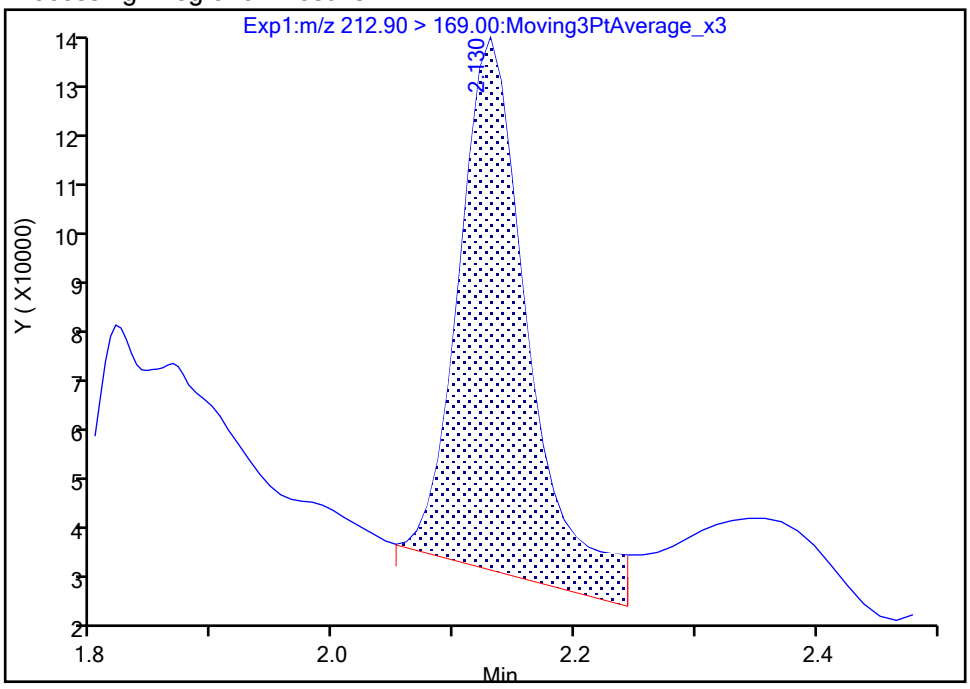
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

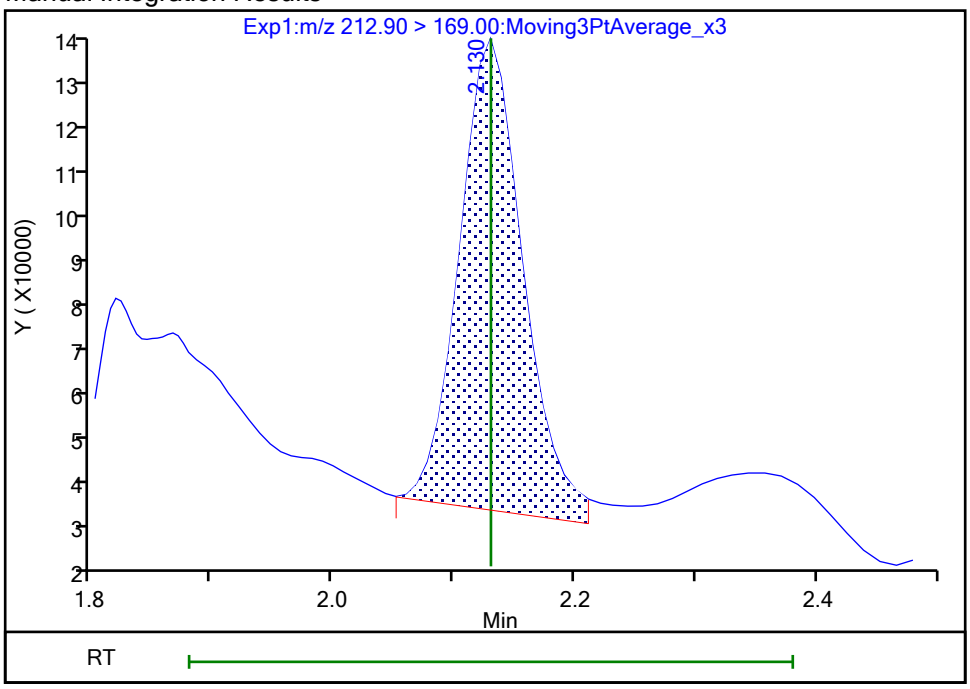
Processing Integration Results

RT: 2.13
Area: 379285
Amount: 0.413693
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 343821
Amount: 0.371189
Amount Units: ng/ml



Reviewer: SJ4N, 24-Oct-2023 23:22:54 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

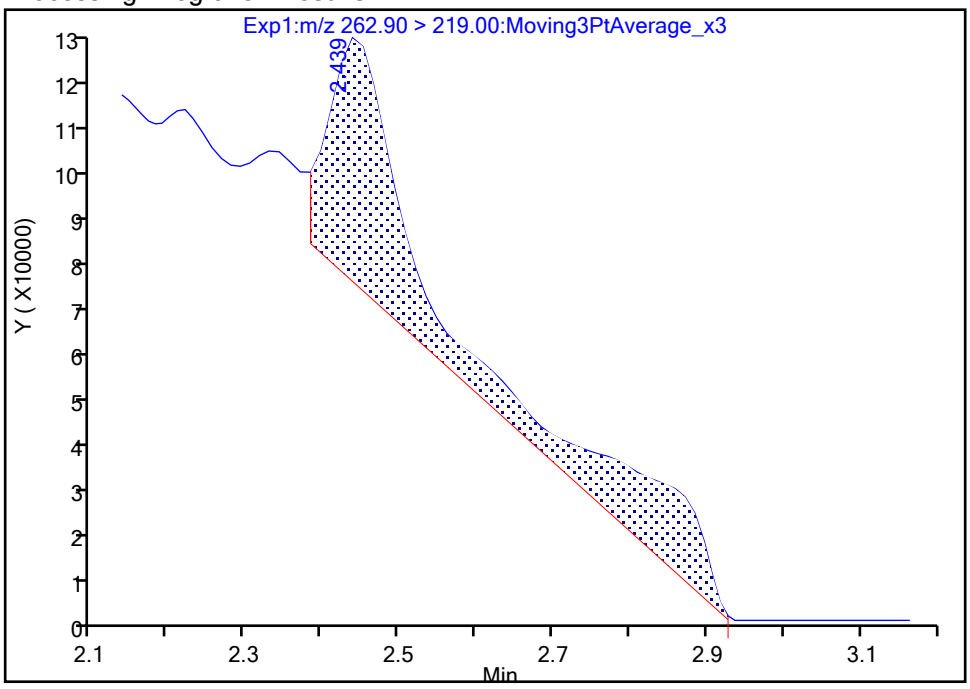
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

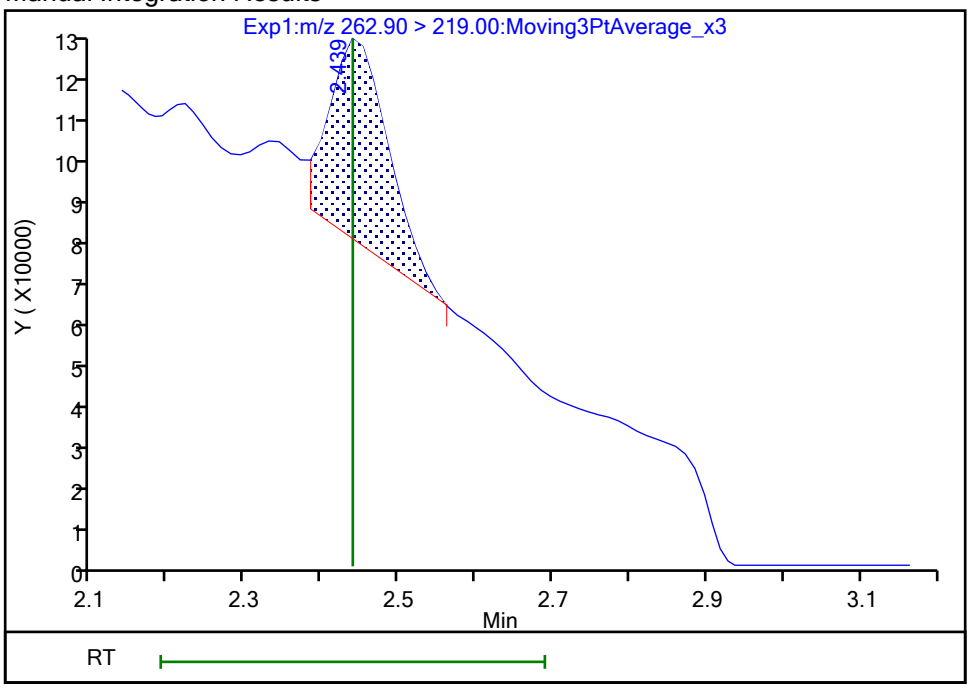
Processing Integration Results

RT: 2.44
Area: 523979
Amount: 0.539941
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 252690
Amount: 0.260388
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:03:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

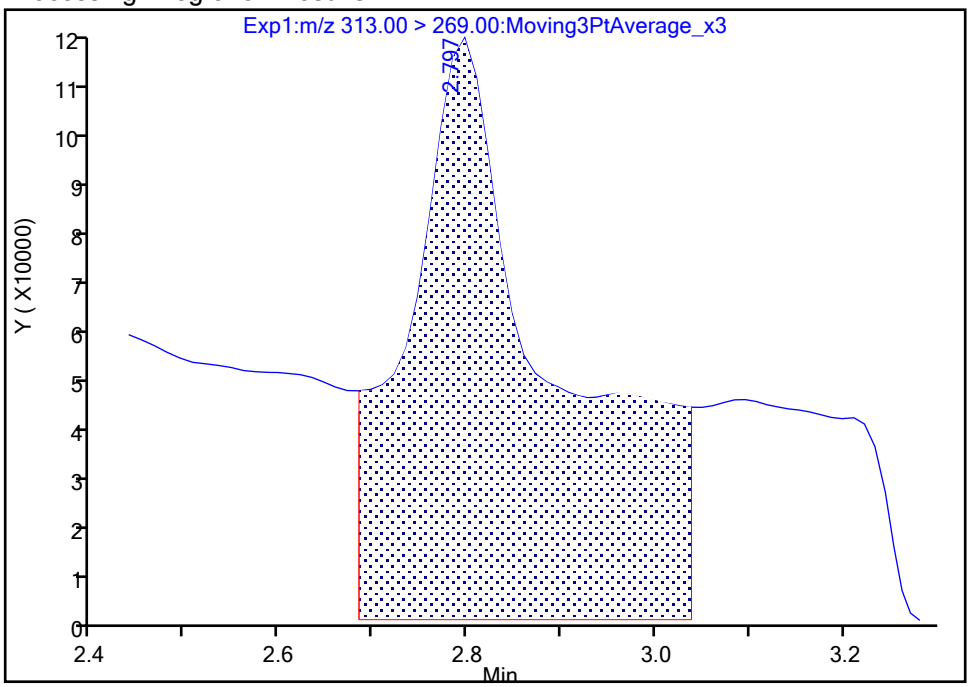
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

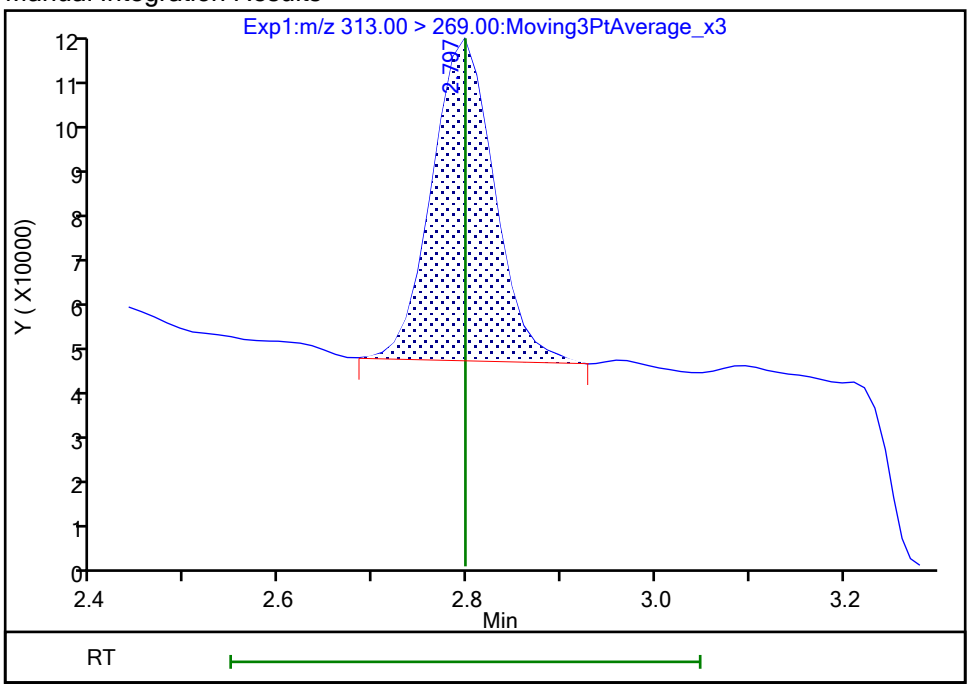
Processing Integration Results

RT: 2.80
Area: 1313498
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 335929
Amount: 0.310804
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:03:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

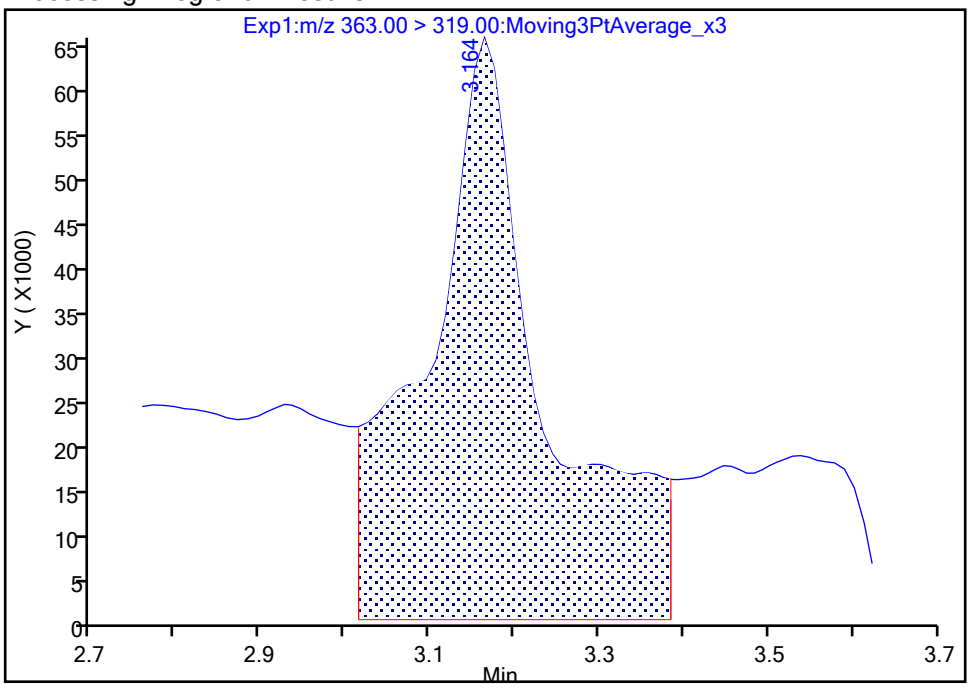
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

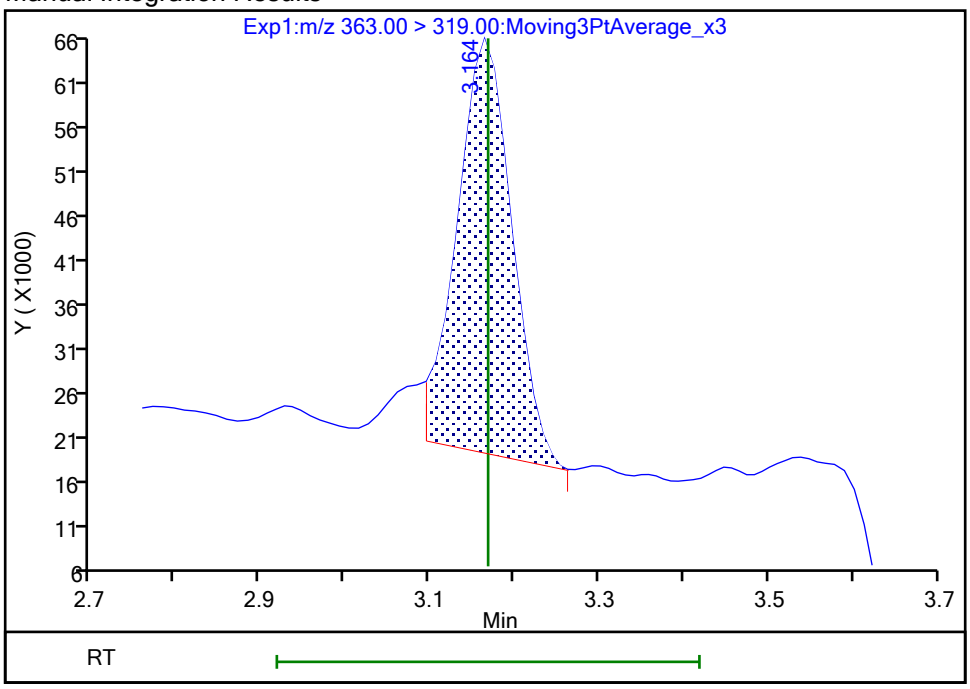
Processing Integration Results

RT: 3.16
Area: 639153
Amount: 0.508505
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 208330
Amount: 0.165746
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:05:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

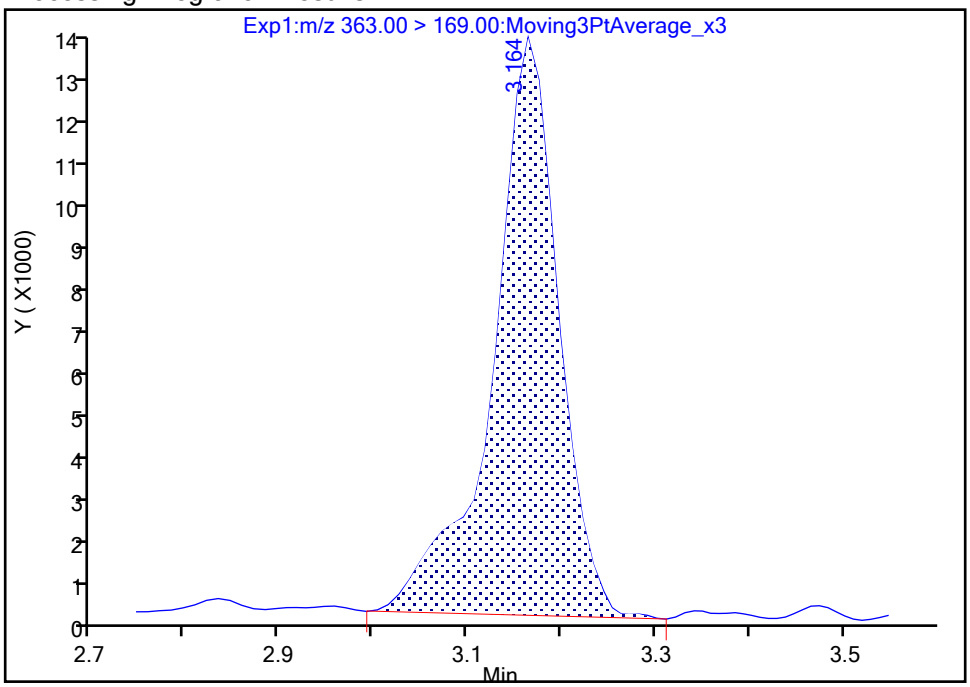
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

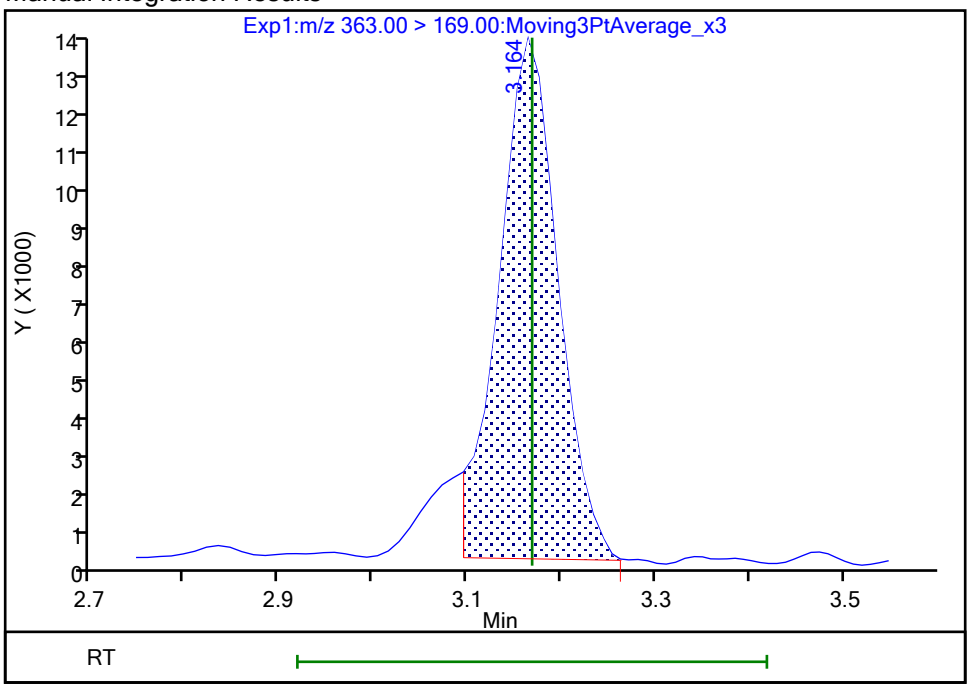
Processing Integration Results

RT: 3.16
Area: 66141
Amount: 0.508505
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 58770
Amount: 0.165746
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:05:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

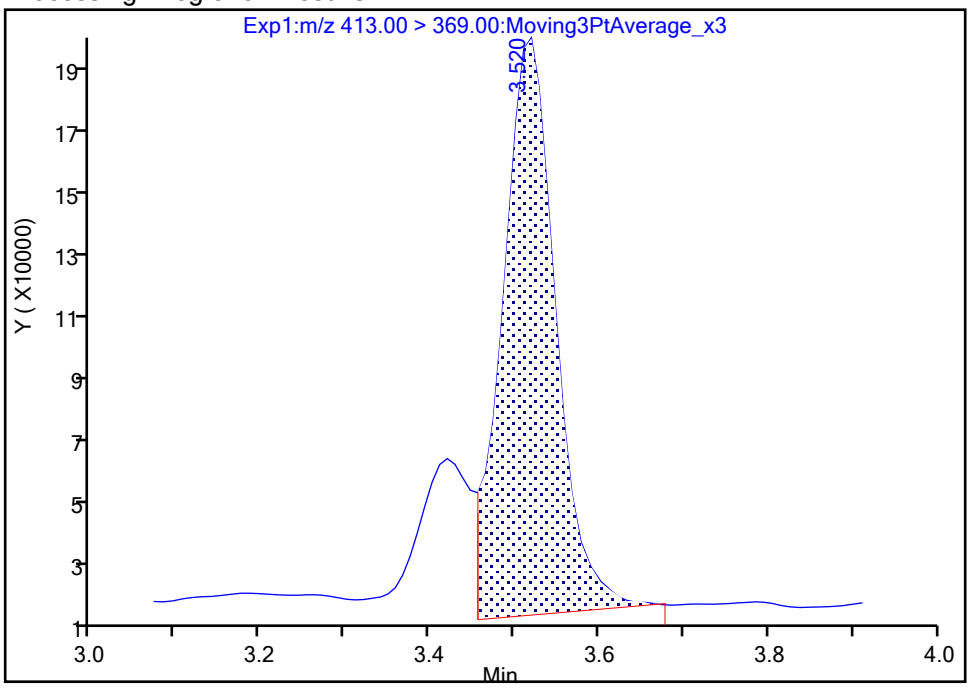
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

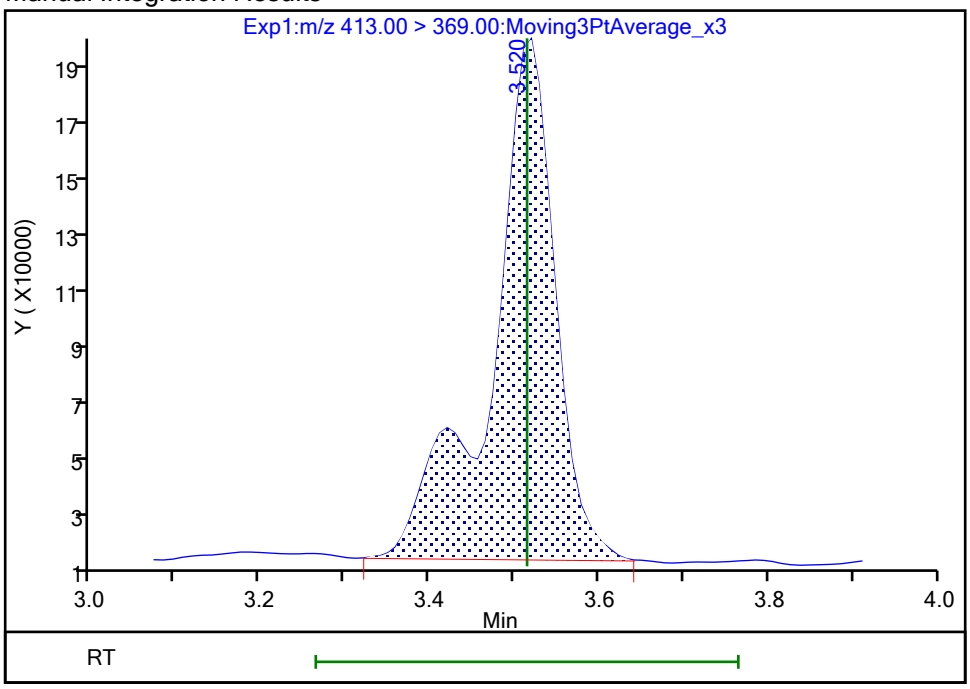
Processing Integration Results

RT: 3.52
Area: 792594
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 925683
Amount: 0.610614
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:05:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

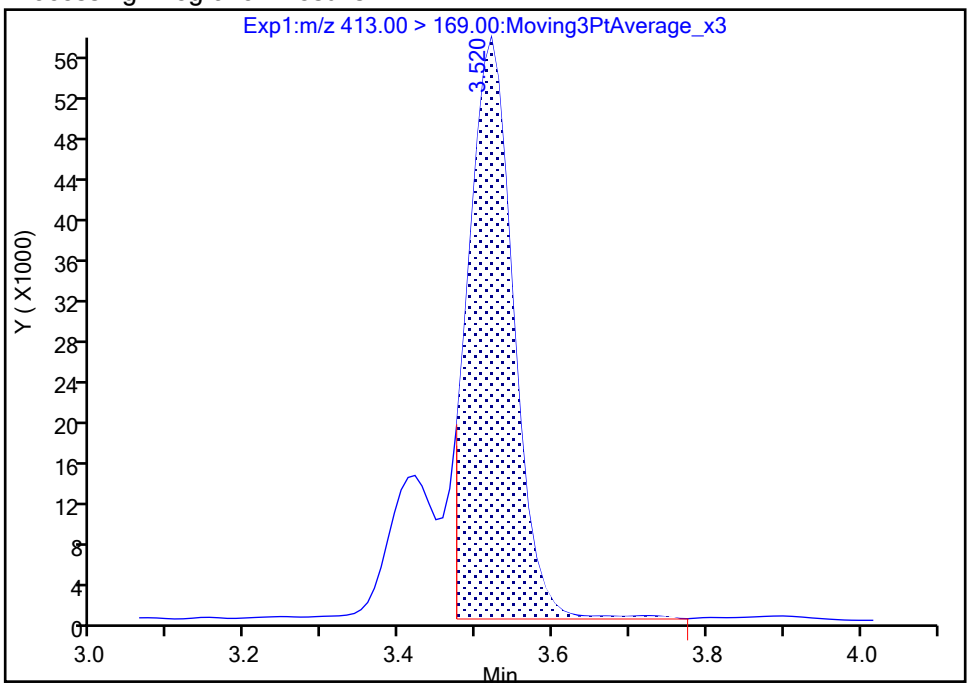
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

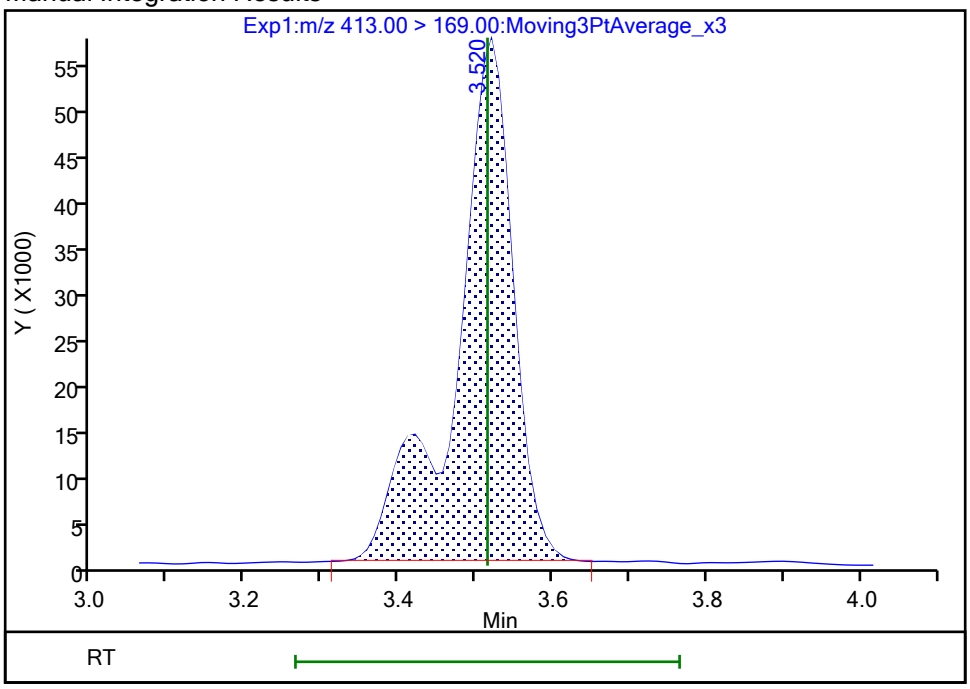
Processing Integration Results

RT: 3.52
Area: 227861
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 294959
Amount: 0.610614
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:05:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

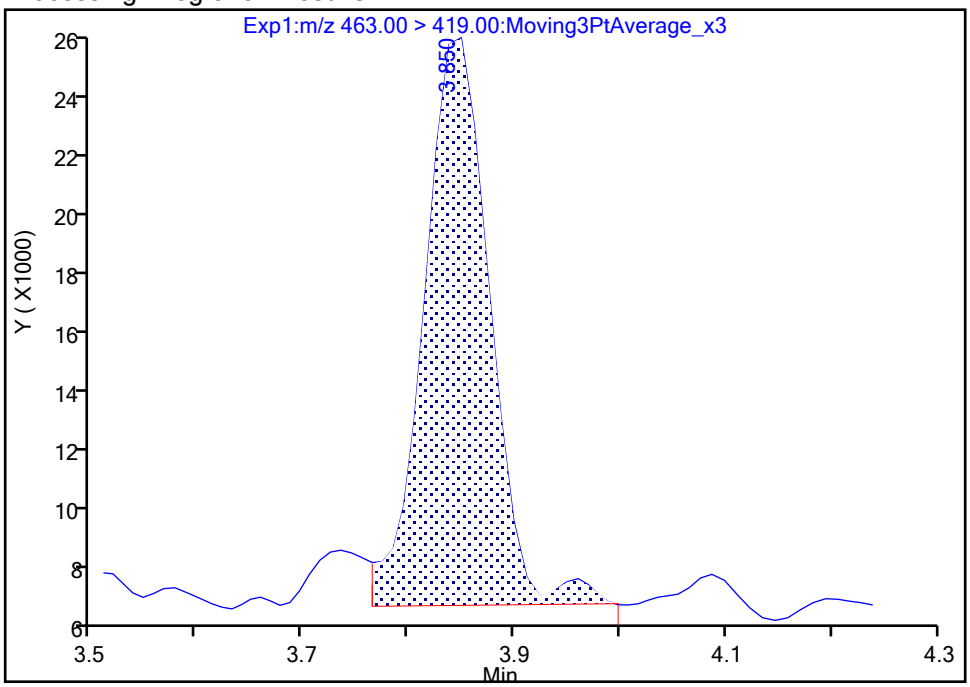
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

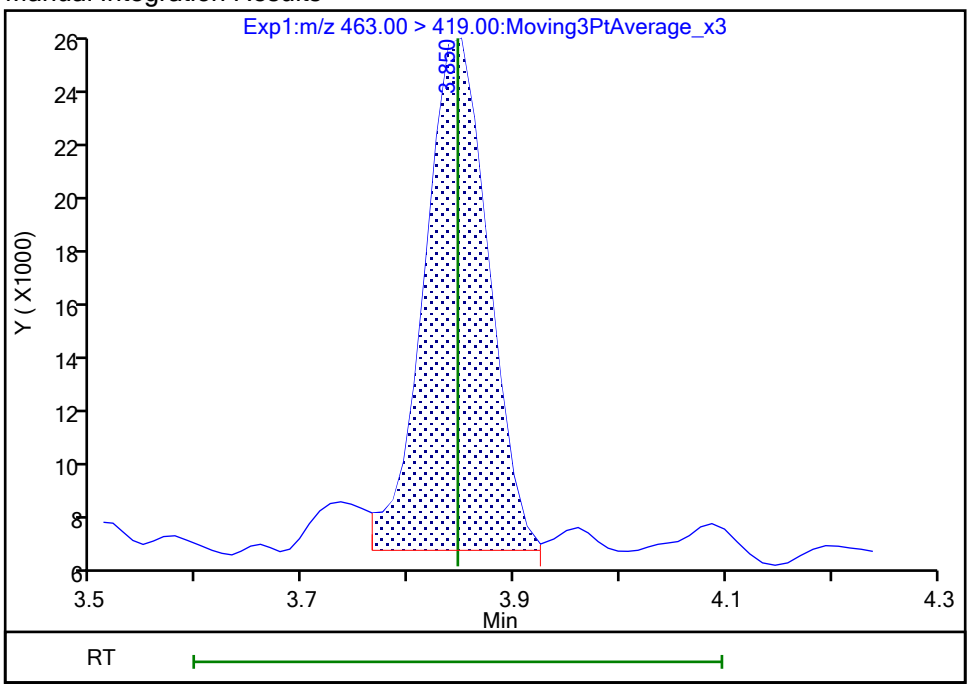
Processing Integration Results

RT: 3.85
Area: 79928
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 77839
Amount: 0.051863
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:06:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

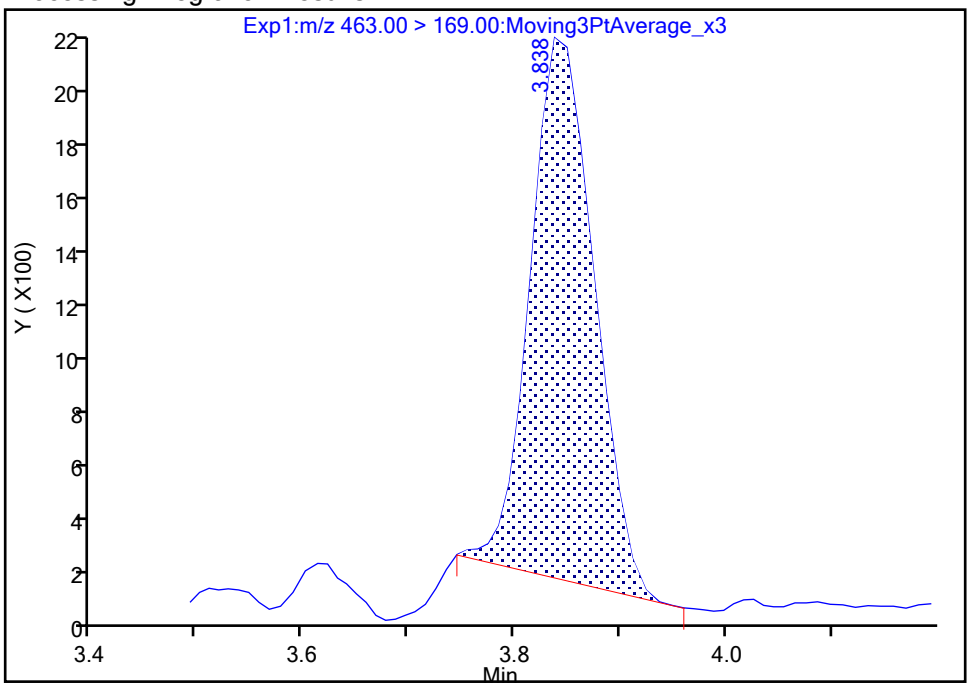
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

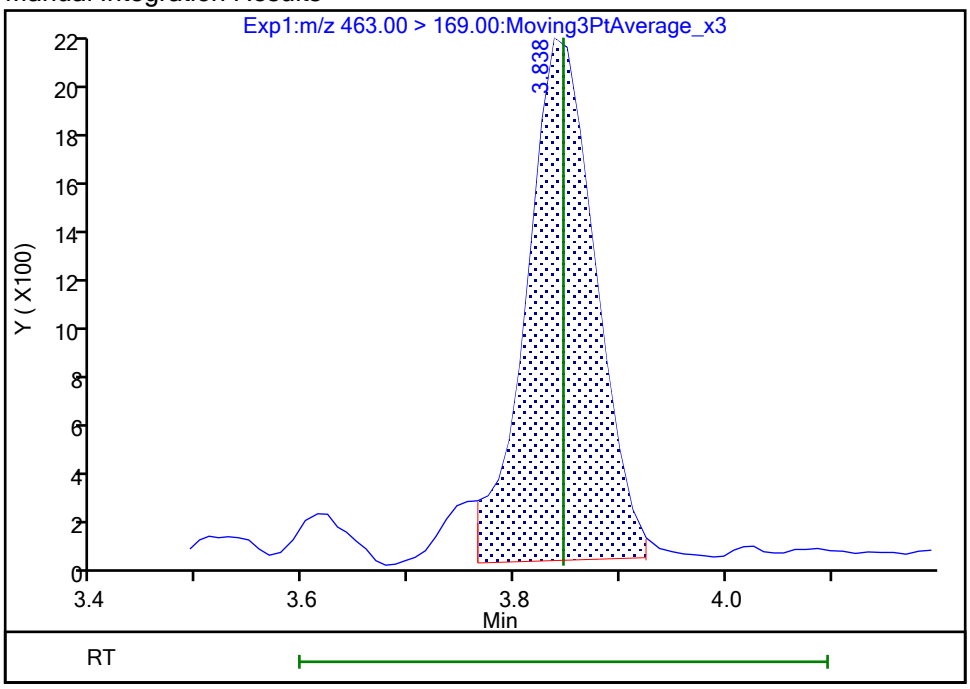
Processing Integration Results

RT: 3.84
Area: 8284
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 9468
Amount: 0.051863
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:06:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

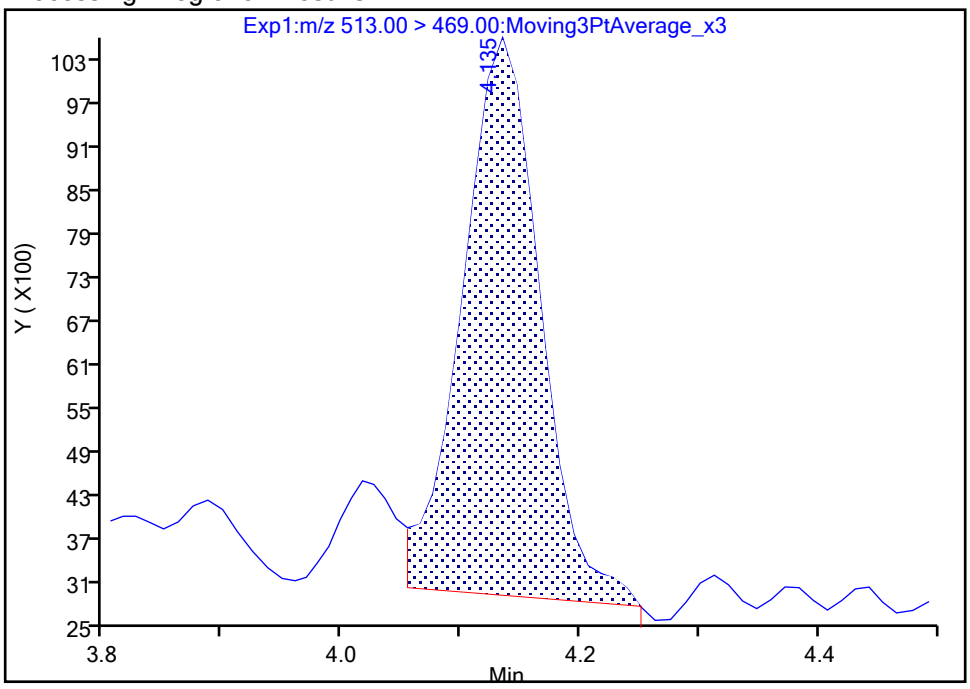
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

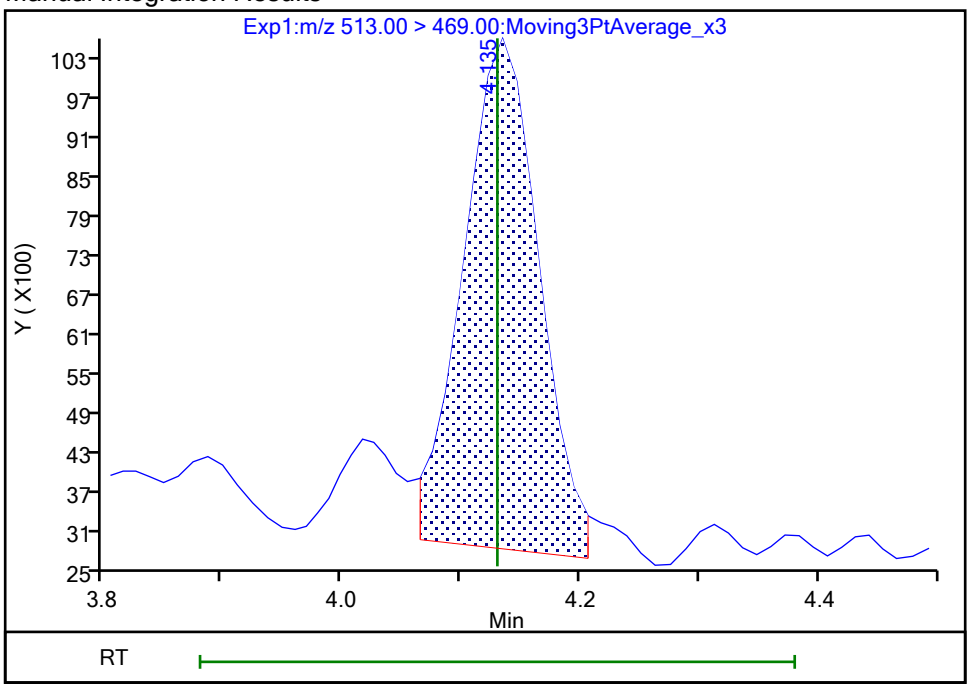
Processing Integration Results

RT: 4.13
Area: 34638
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 34023
Amount: 0.020993
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:06:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

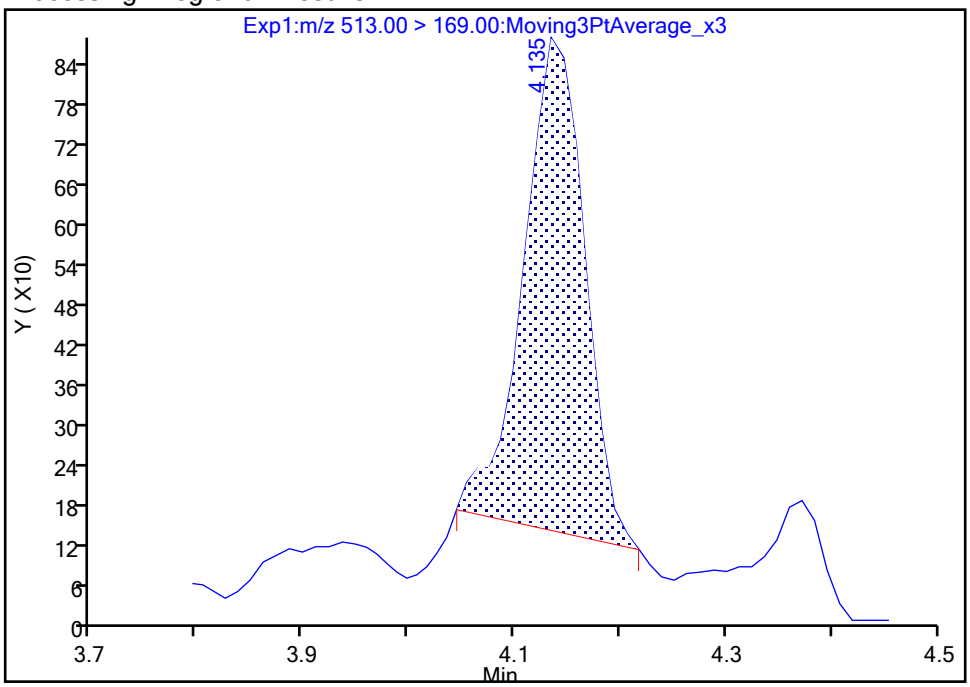
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

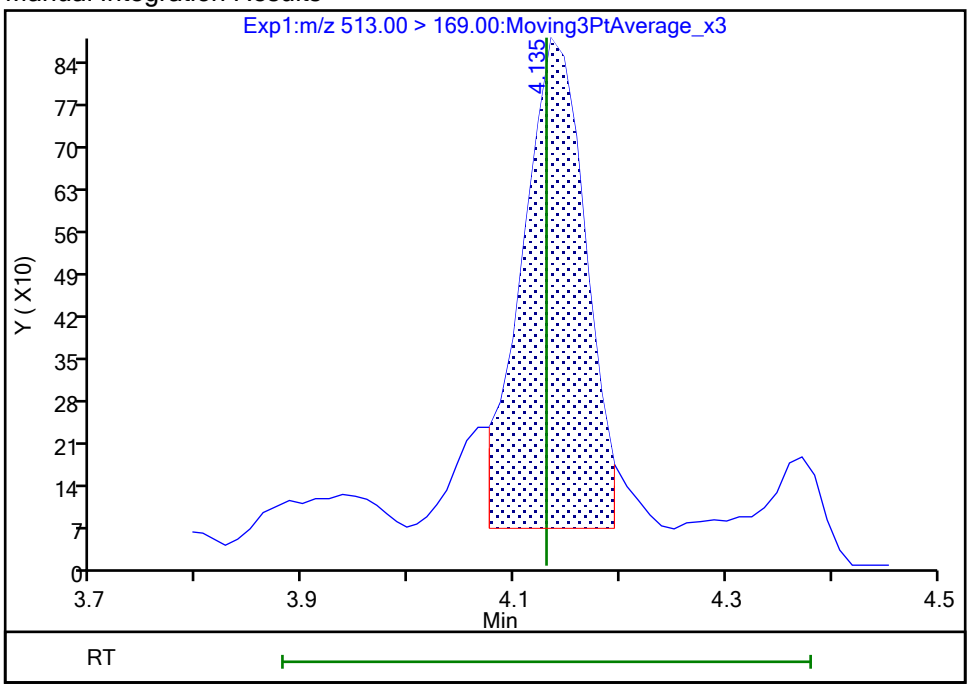
Processing Integration Results

RT: 4.13
Area: 2965
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 3360
Amount: 0.020993
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

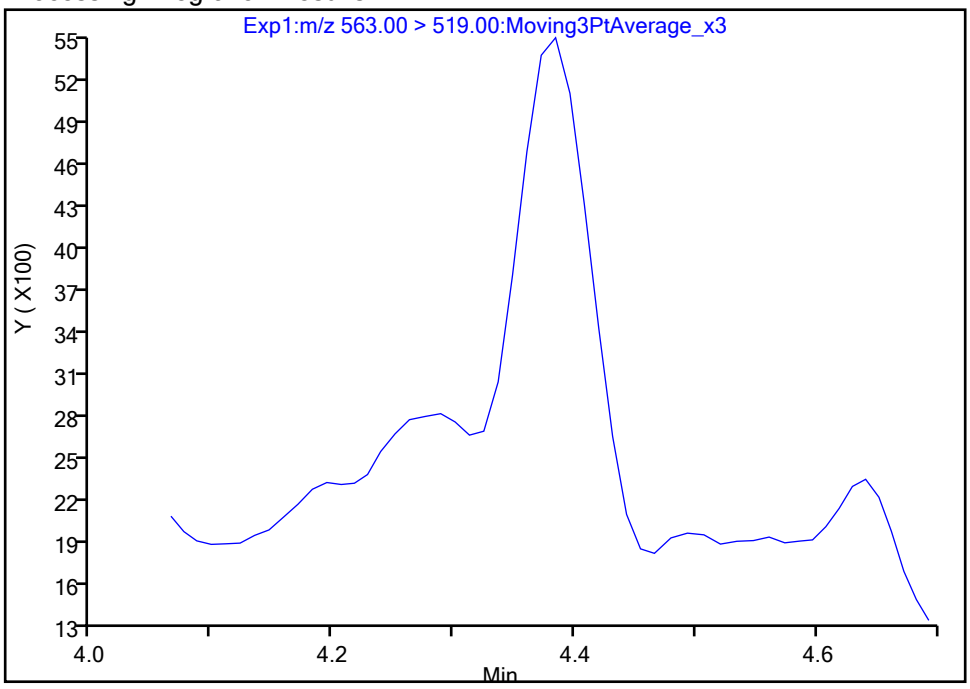
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

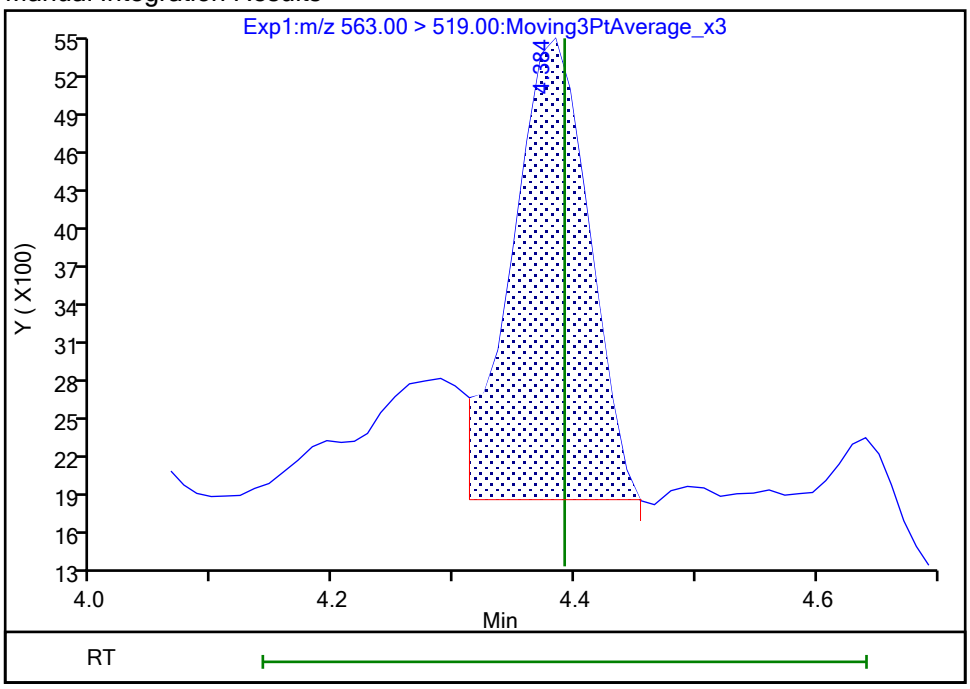
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 16097
Amount: 0.009982
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

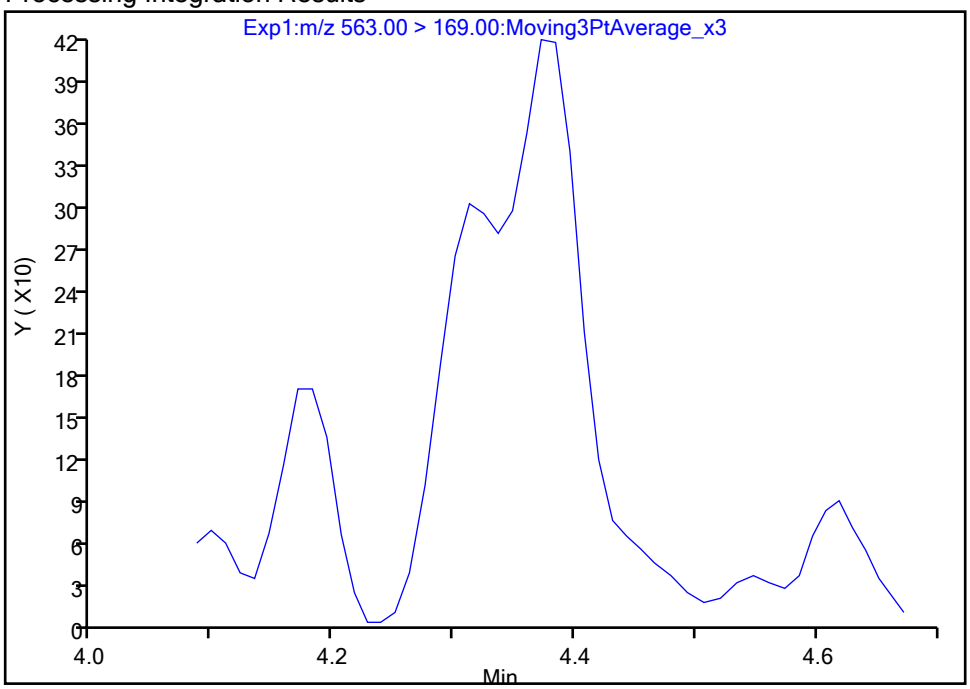
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

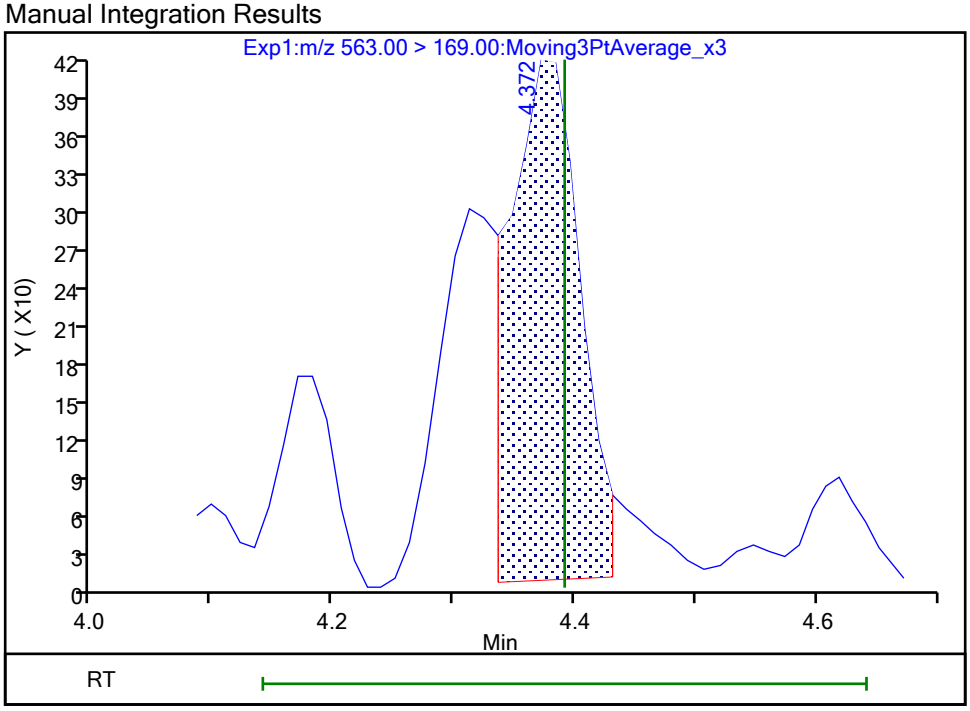
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.37
Area: 1591
Amount: 0.009982
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

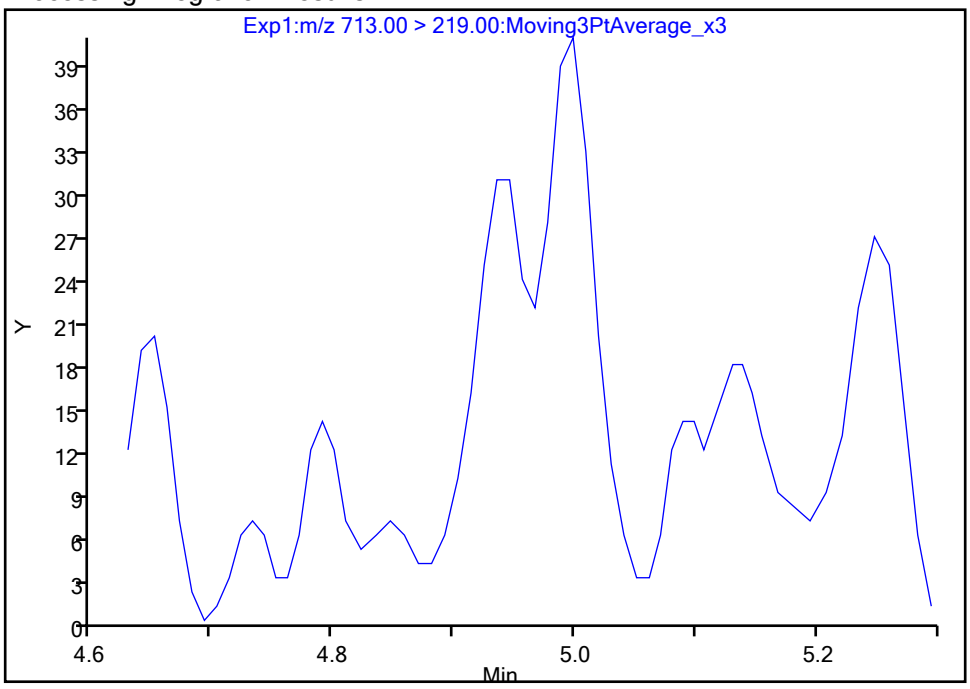
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

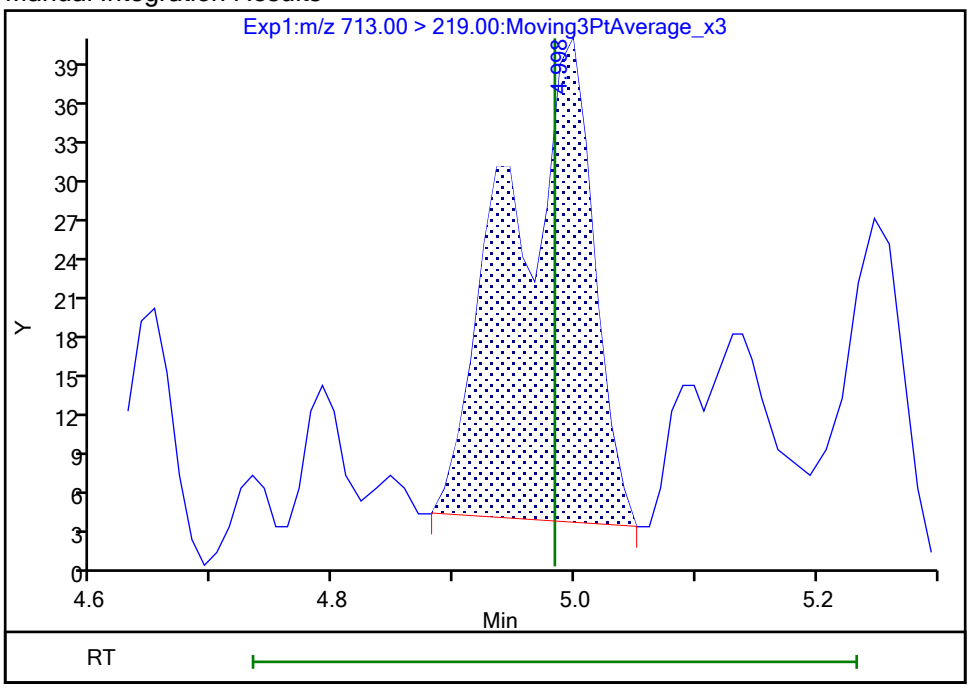
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 5.00
Area: 184
Amount: 0.002704
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:08:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

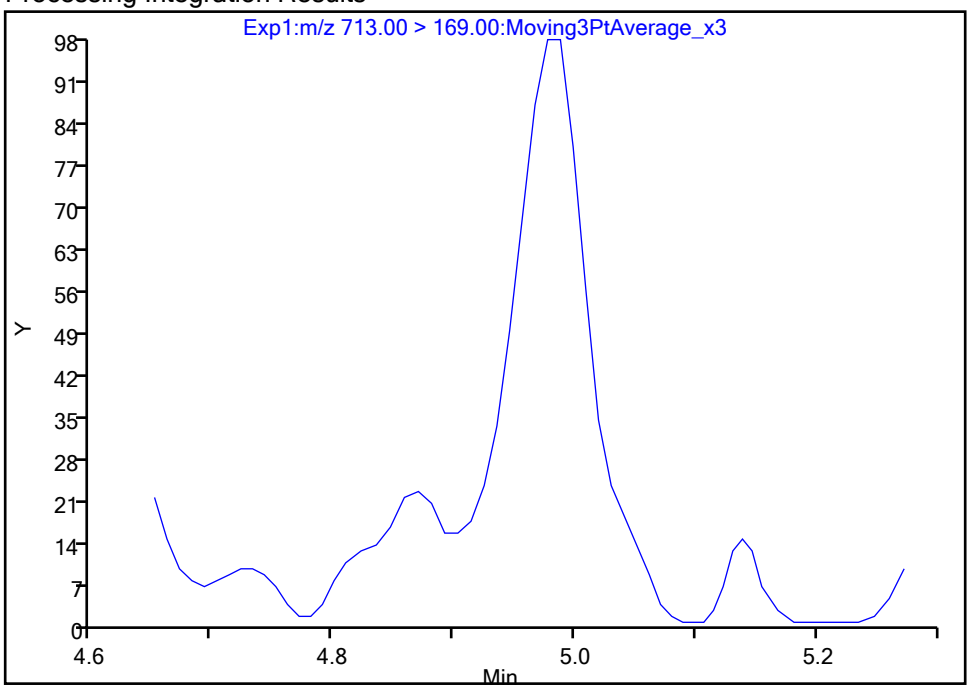
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

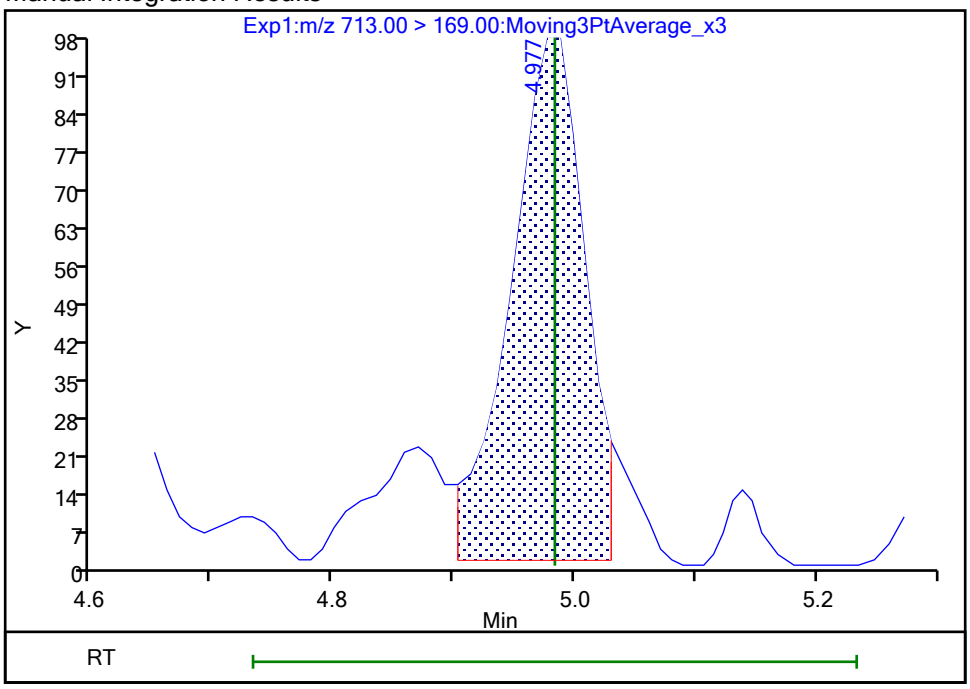
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 411
Amount: 0.002704
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:08:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

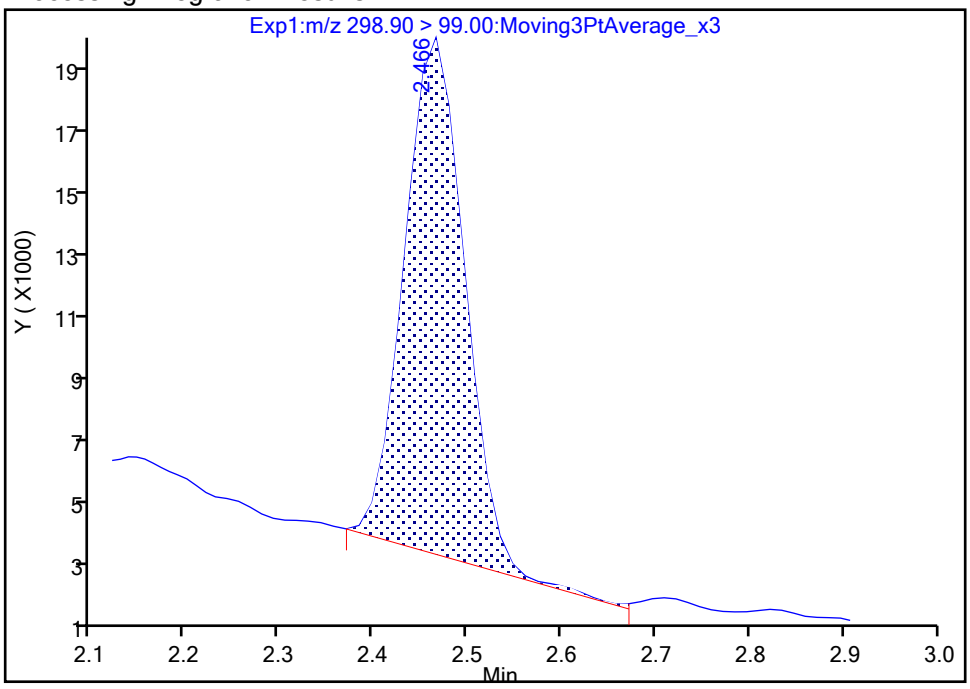
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

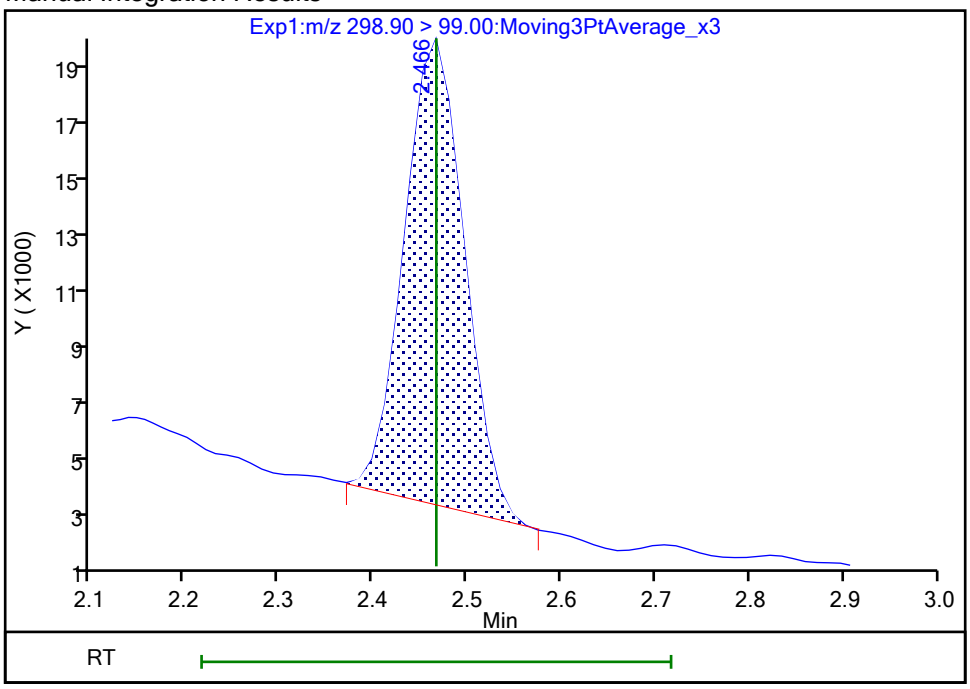
Processing Integration Results

RT: 2.47
Area: 72467
Amount: 0.166820
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 71446
Amount: 0.104020
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:03:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

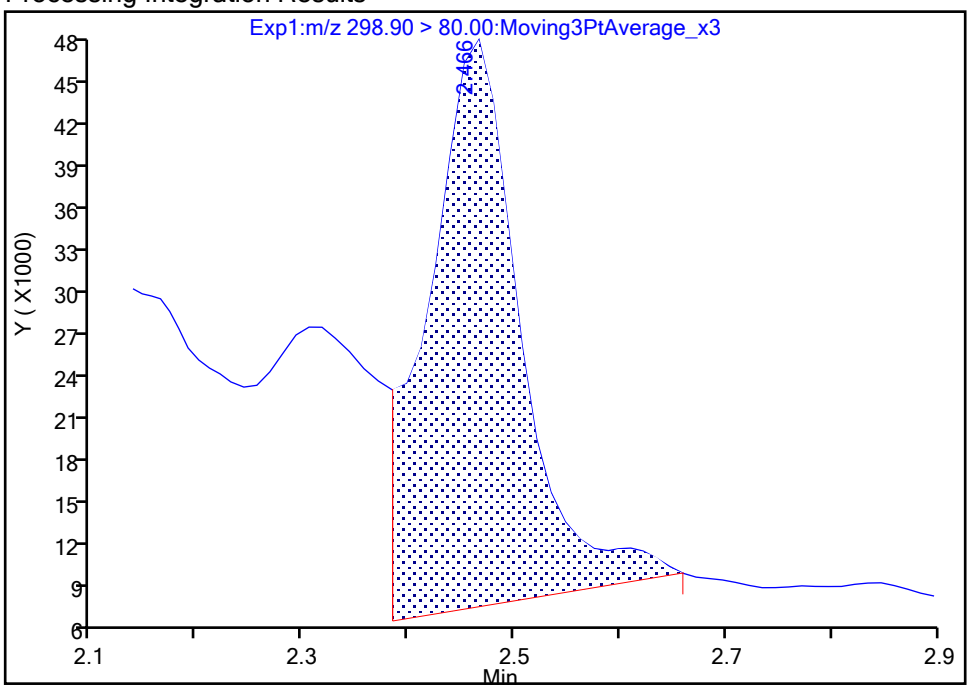
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

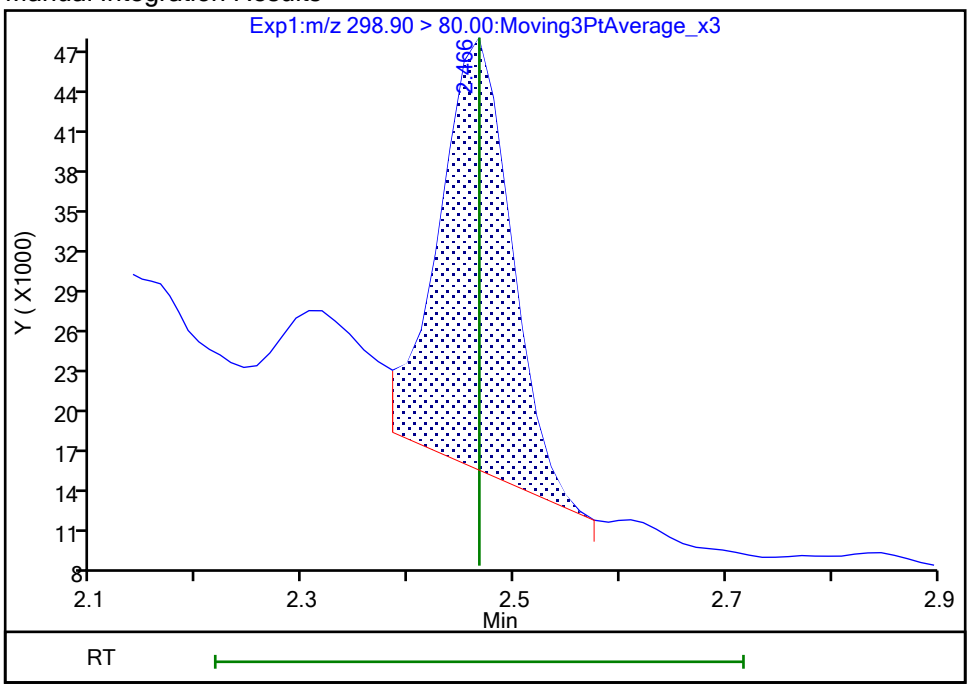
Processing Integration Results

RT: 2.47
Area: 247193
Amount: 0.166820
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 154136
Amount: 0.104020
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:03:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

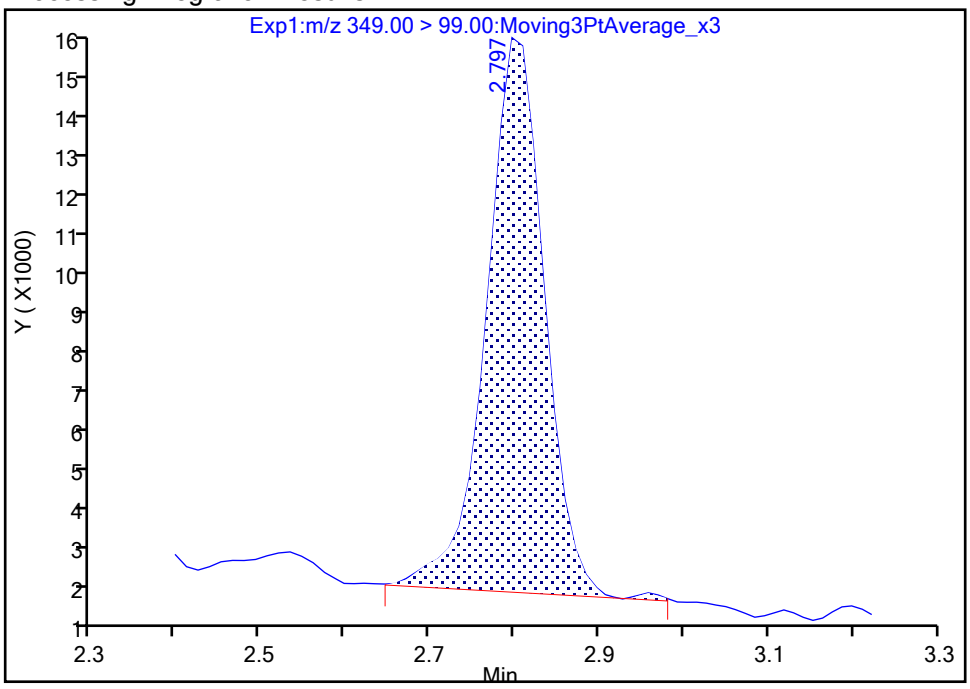
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

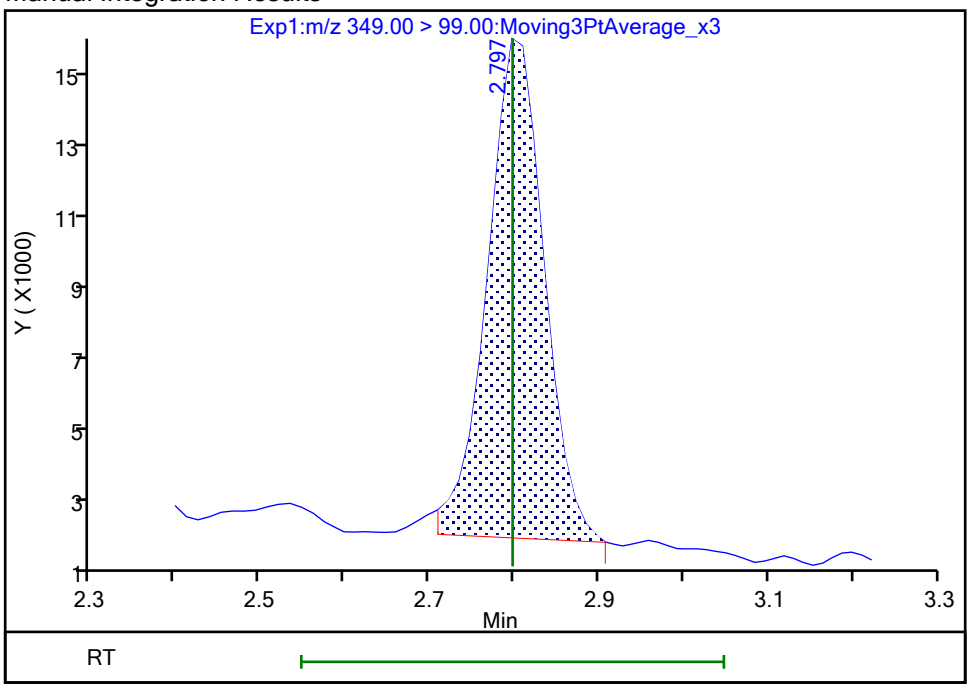
Processing Integration Results

RT: 2.80
Area: 67290
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 64903
Amount: 0.120015
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:04:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

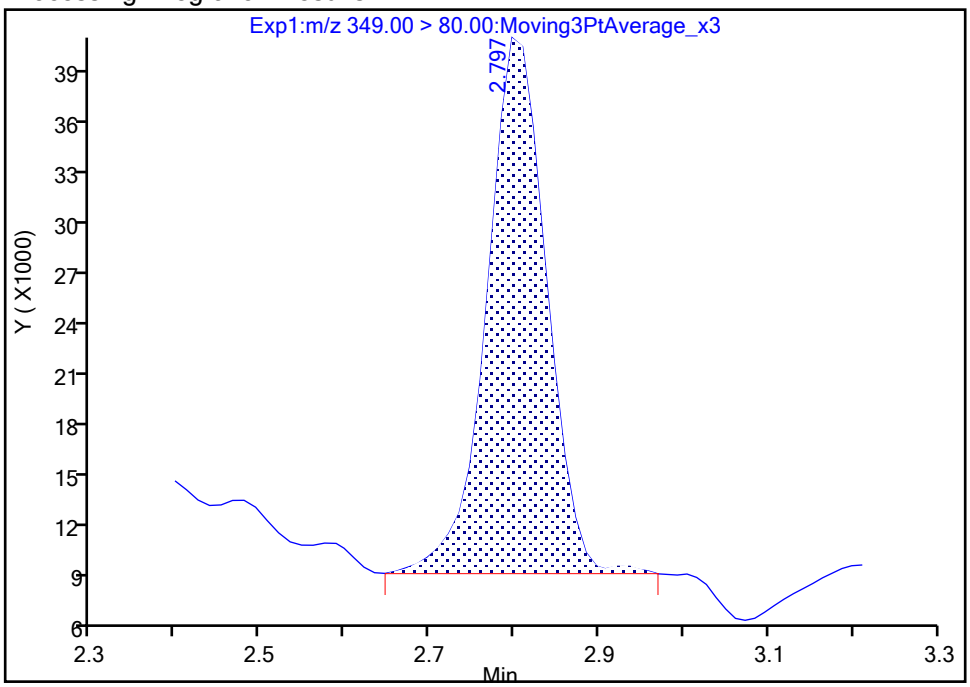
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

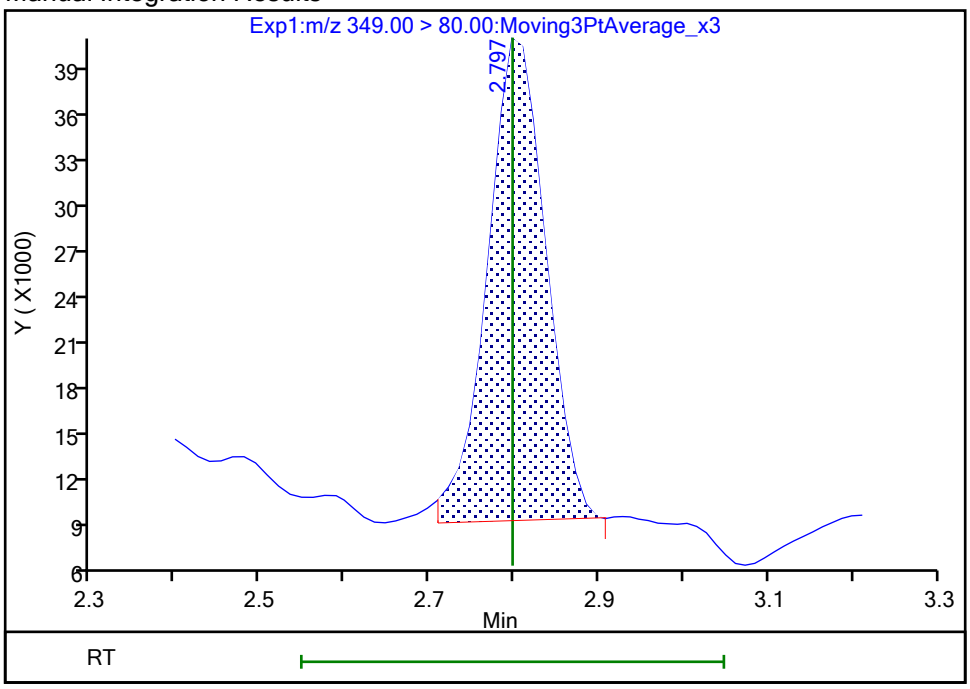
Processing Integration Results

RT: 2.80
Area: 154771
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 149515
Amount: 0.120015
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:04:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

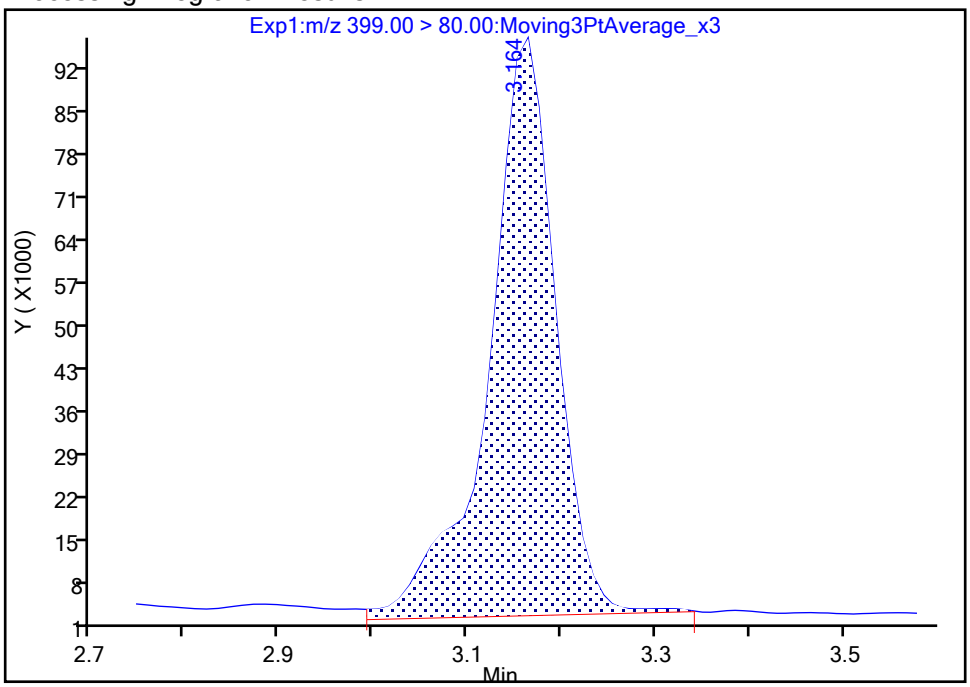
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

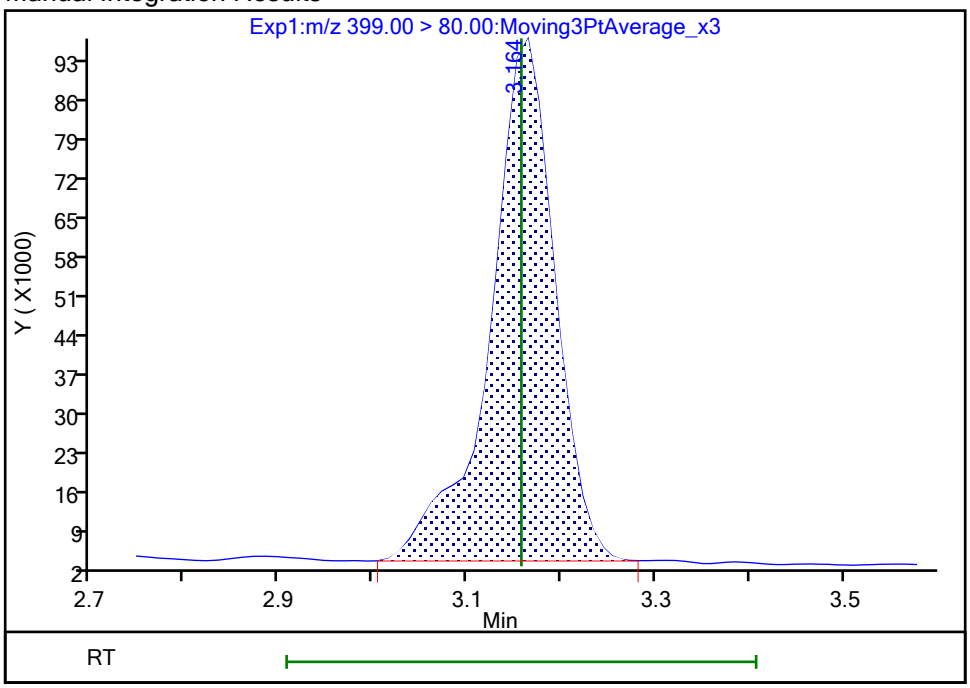
Processing Integration Results

RT: 3.16
Area: 467125
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 444723
Amount: 0.421124
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:04:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

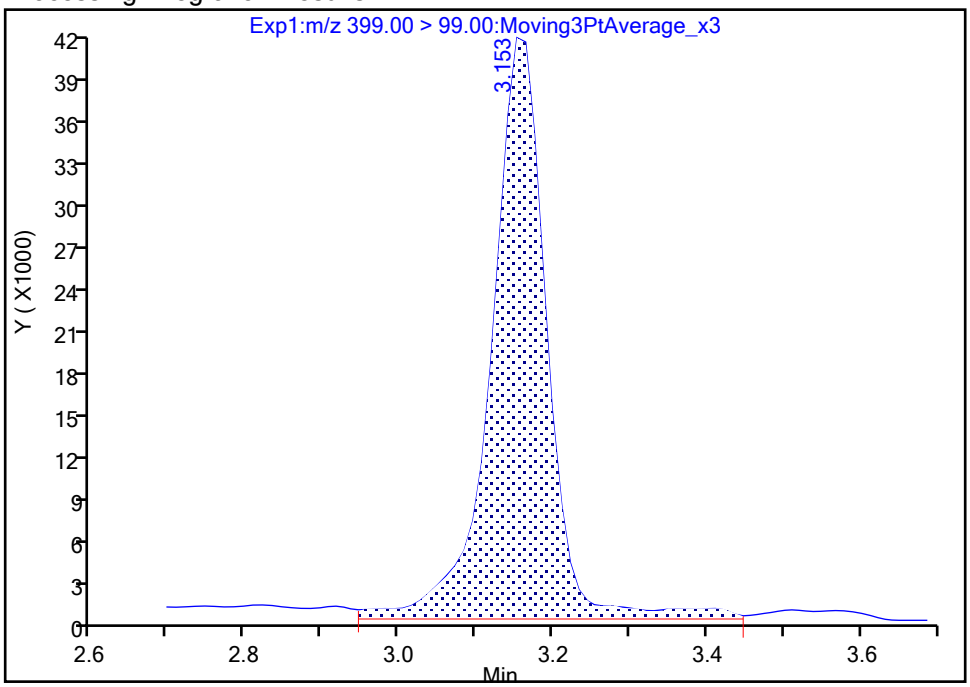
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

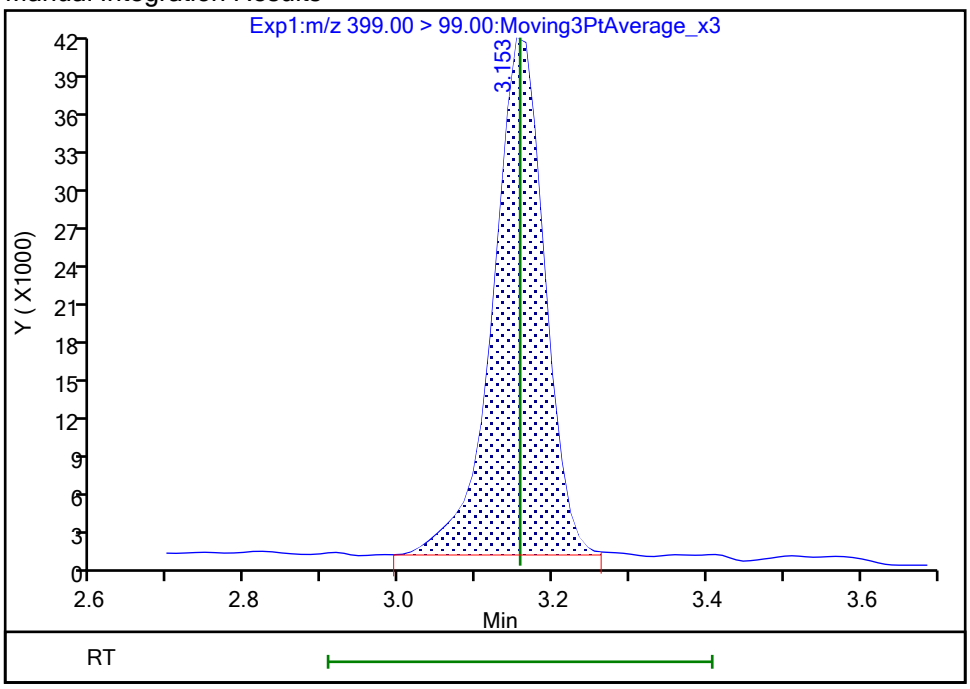
Processing Integration Results

RT: 3.15
Area: 214331
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 190881
Amount: 0.421124
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:04:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

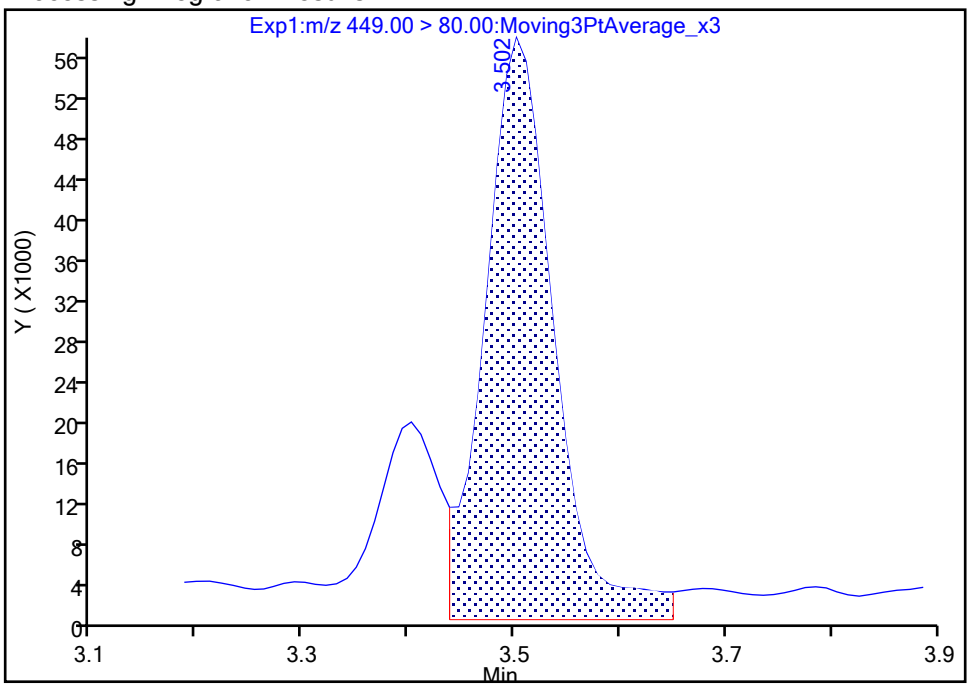
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

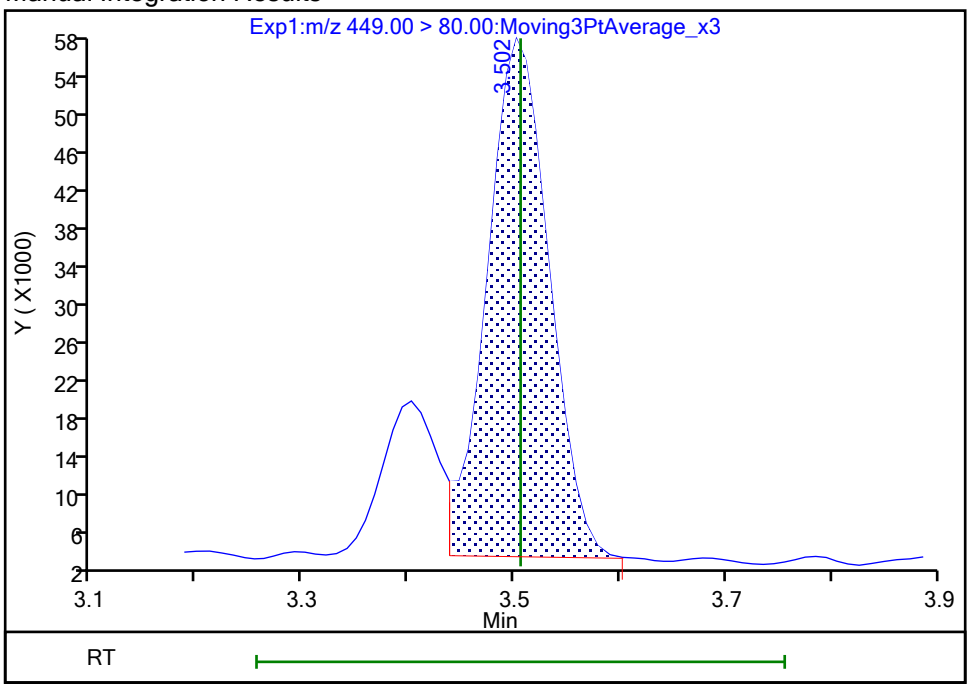
Processing Integration Results

RT: 3.50
Area: 259216
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 218652
Amount: 0.248509
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:05:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

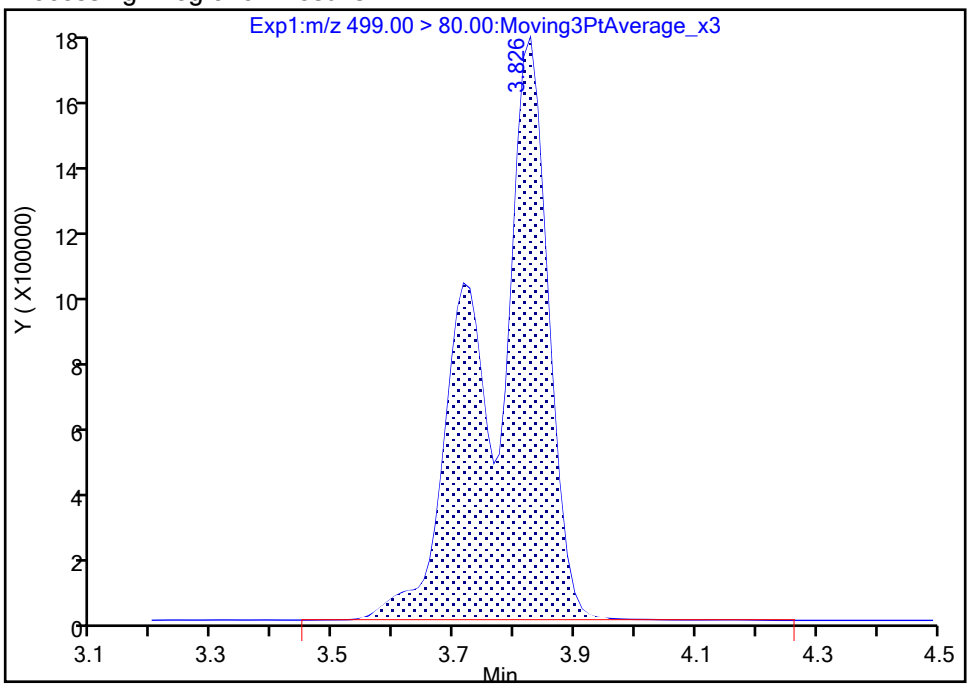
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

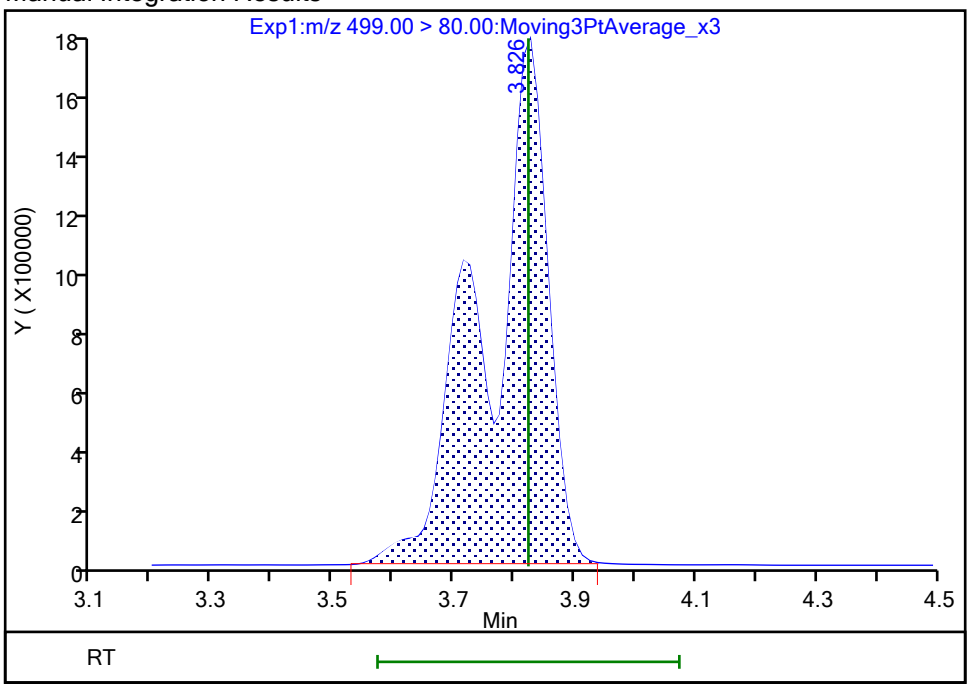
Processing Integration Results

RT: 3.83
Area: 12272621
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 12200486
Amount: 17.180795
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:06:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

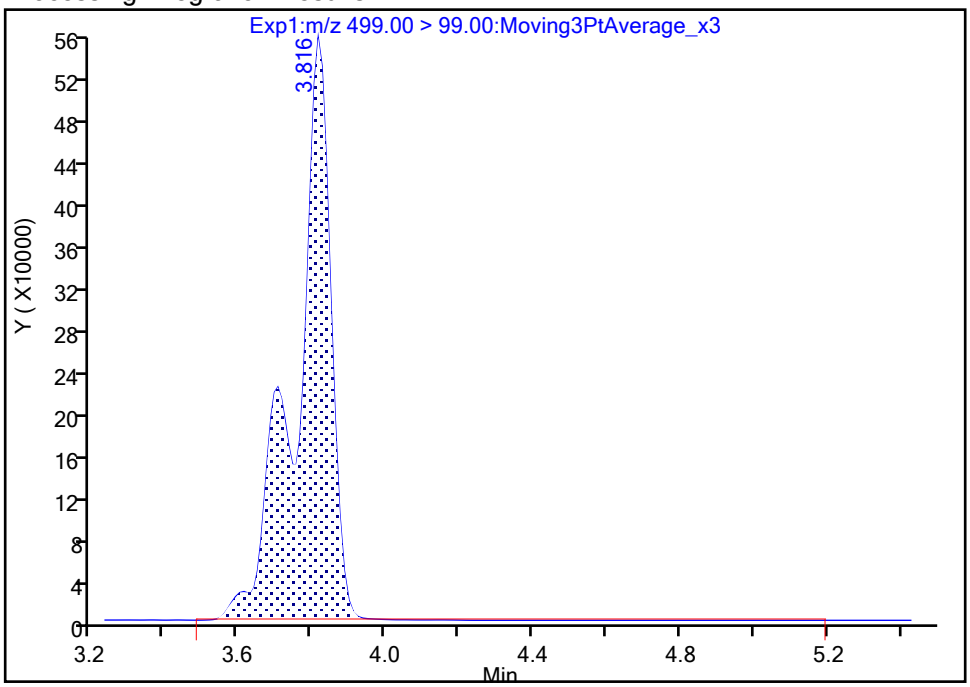
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

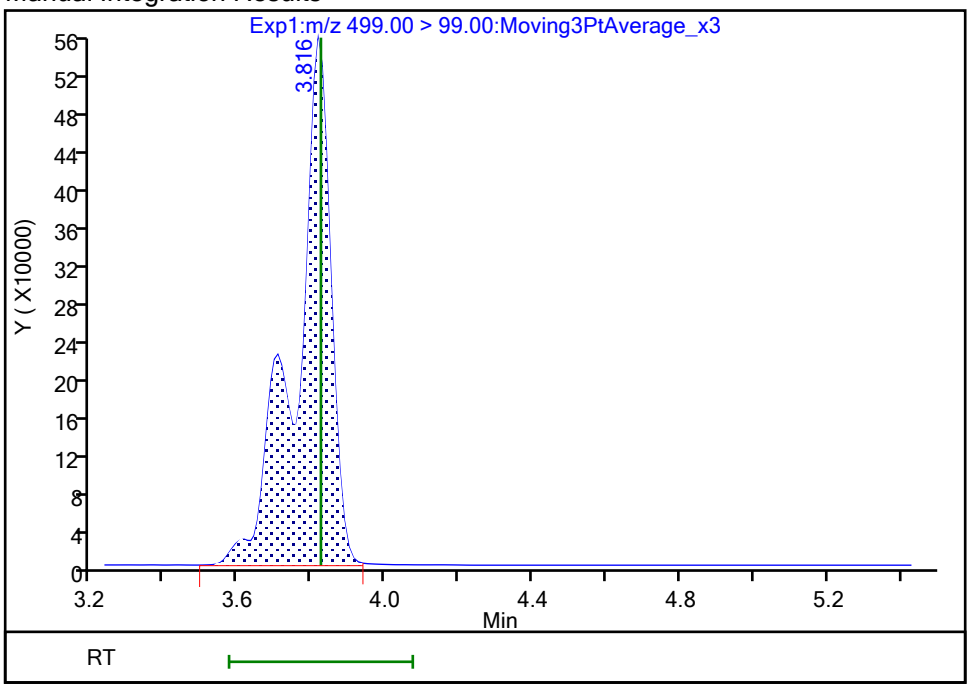
Processing Integration Results

RT: 3.82
Area: 3719304
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3703686
Amount: 17.180795
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:06:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

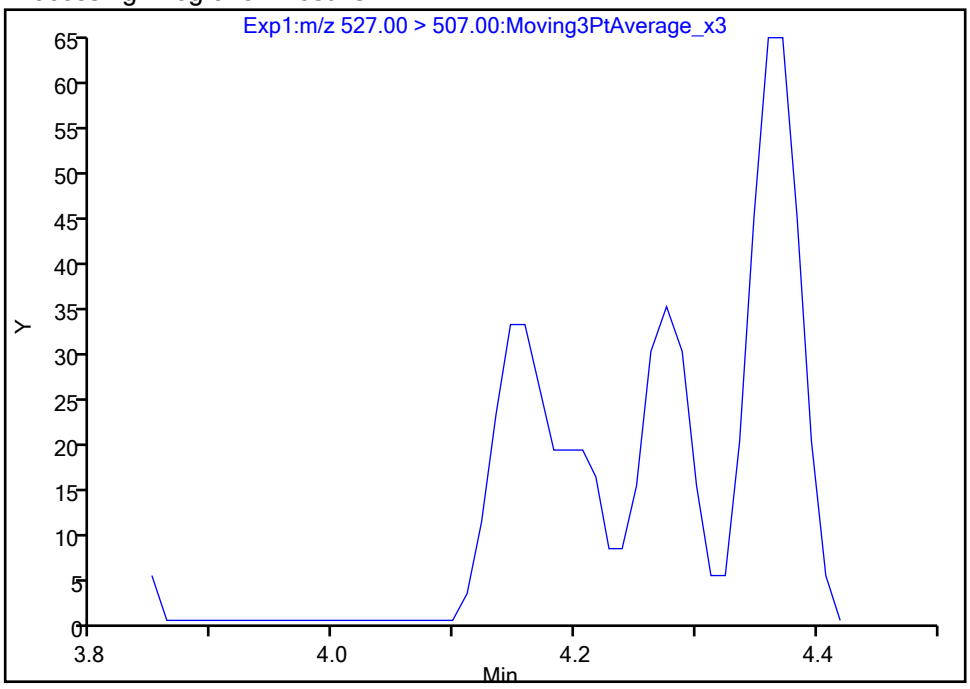
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

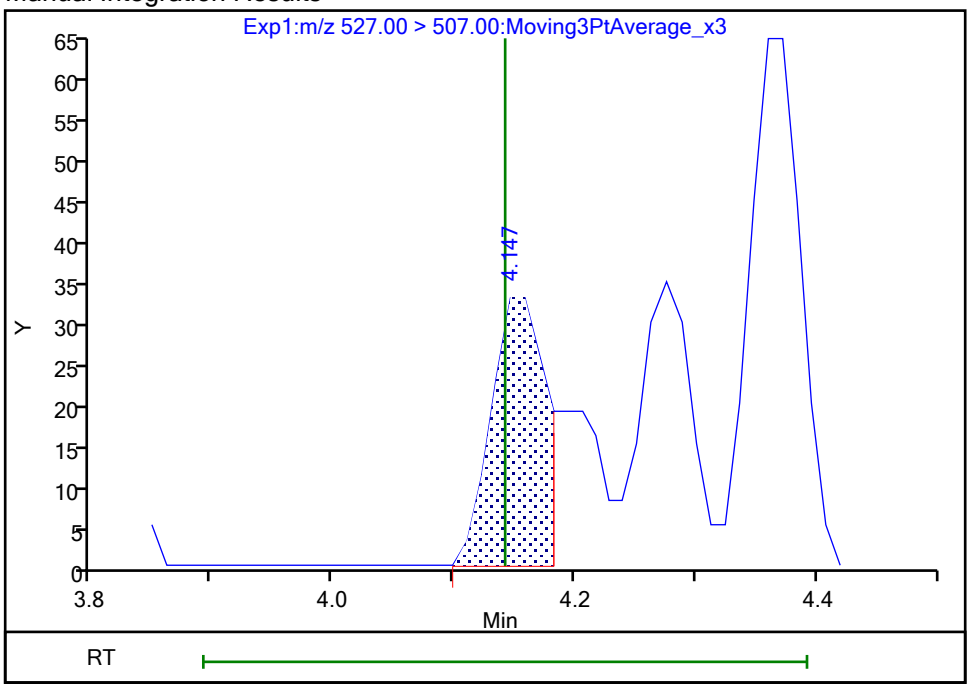
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 99
Amount: 0.000188
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

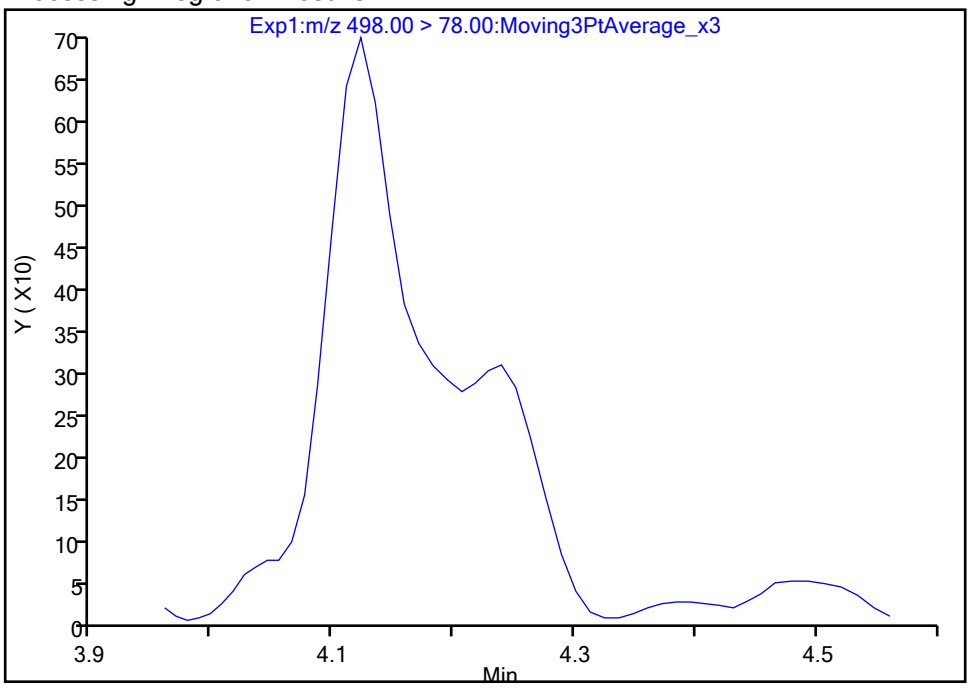
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

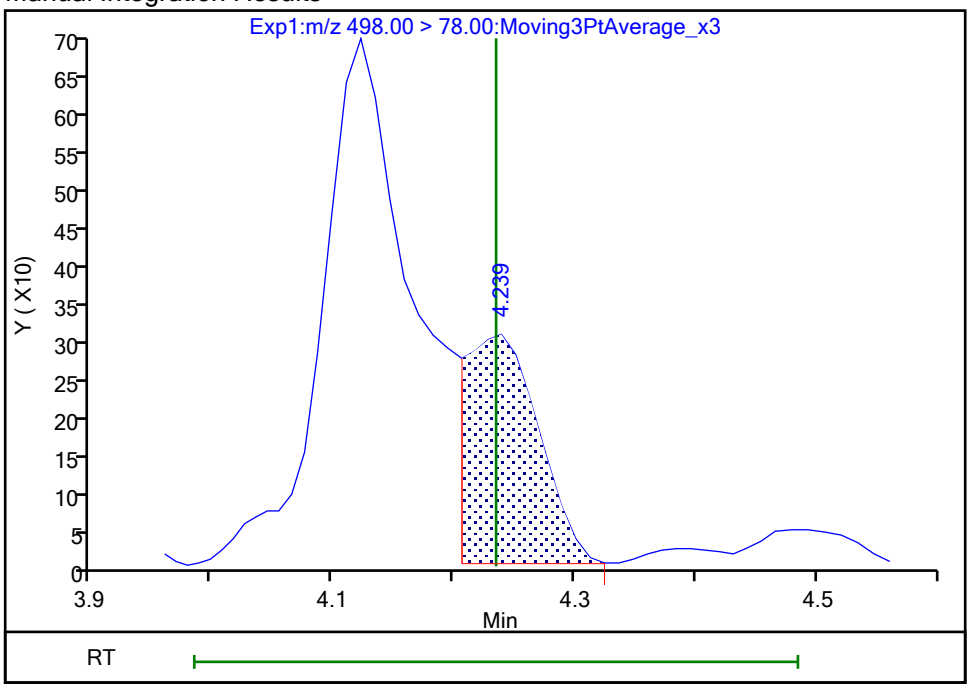
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1239
Amount: 0.001244
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

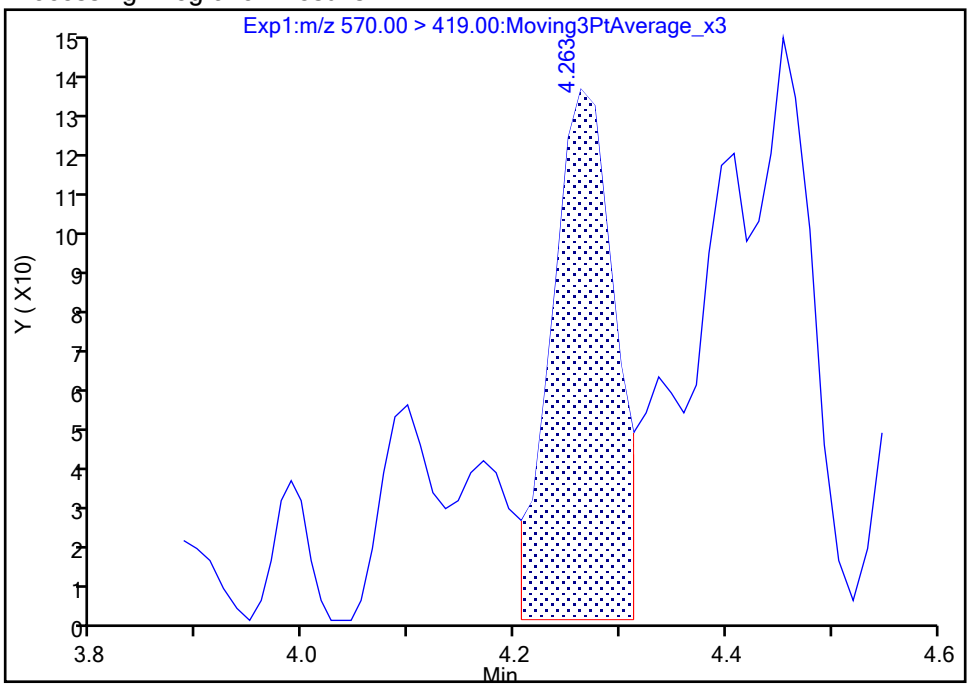
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

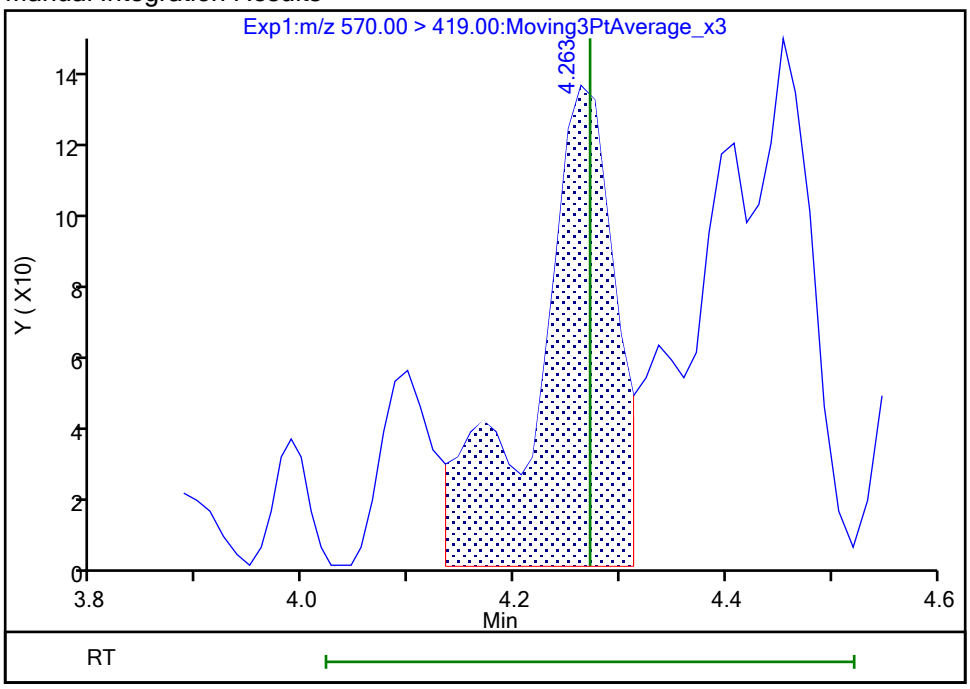
Processing Integration Results

RT: 4.26
Area: 542
Amount: 0.001637
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 684
Amount: 0.002066
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:07:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

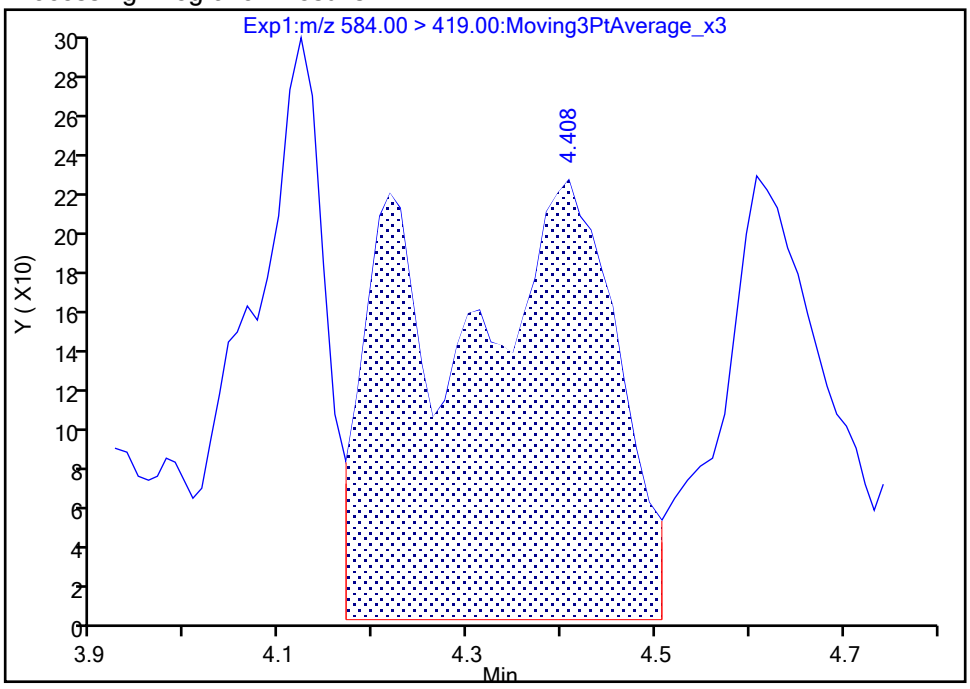
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

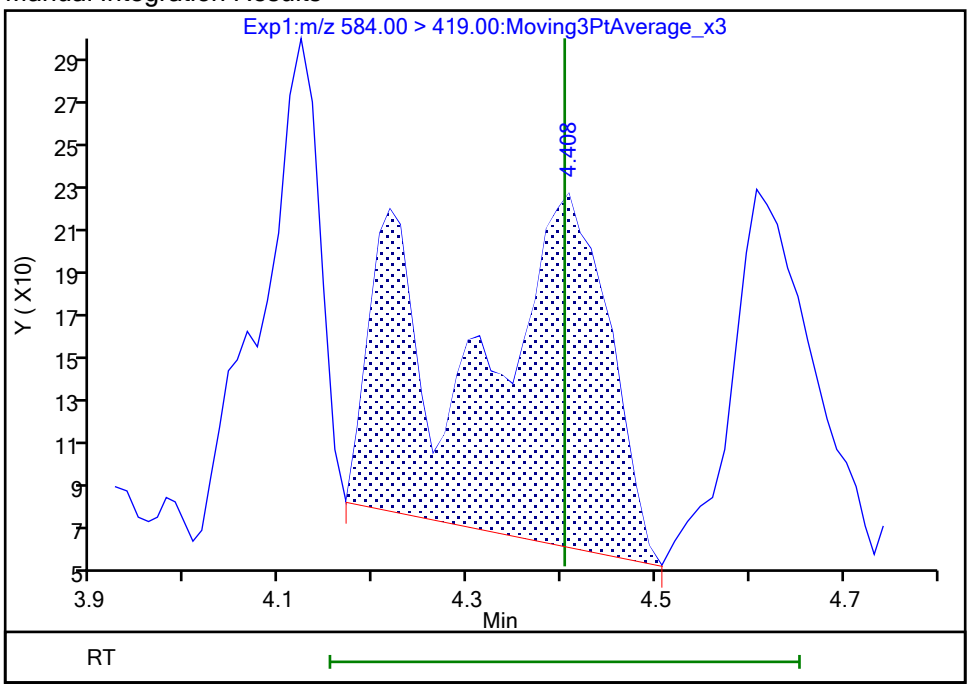
Processing Integration Results

RT: 4.41
Area: 3041
Amount: 0.008379
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1739
Amount: 0.004791
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:08:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

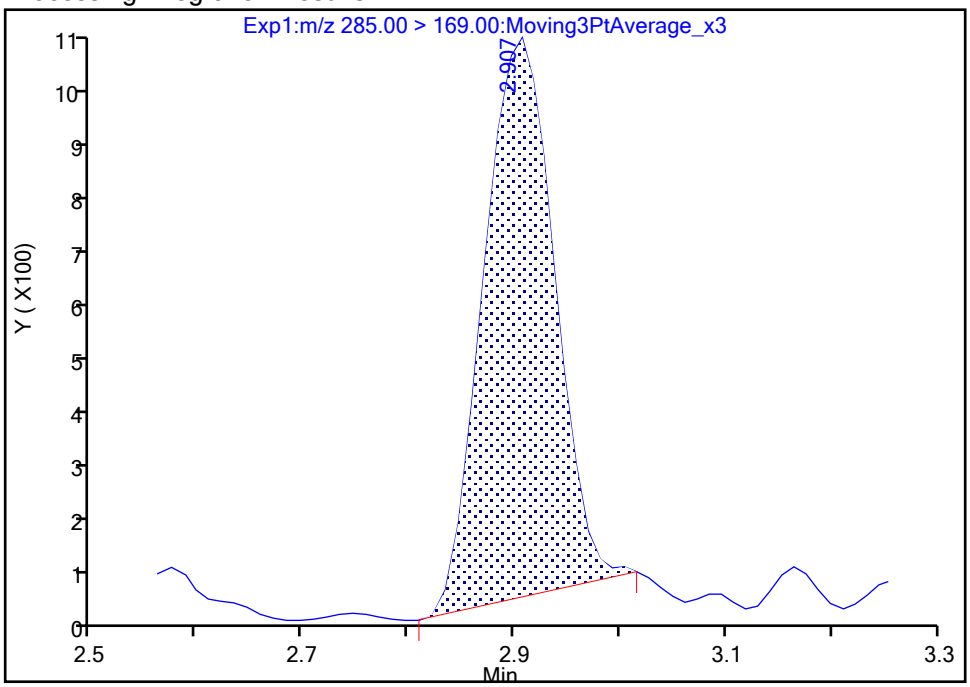
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

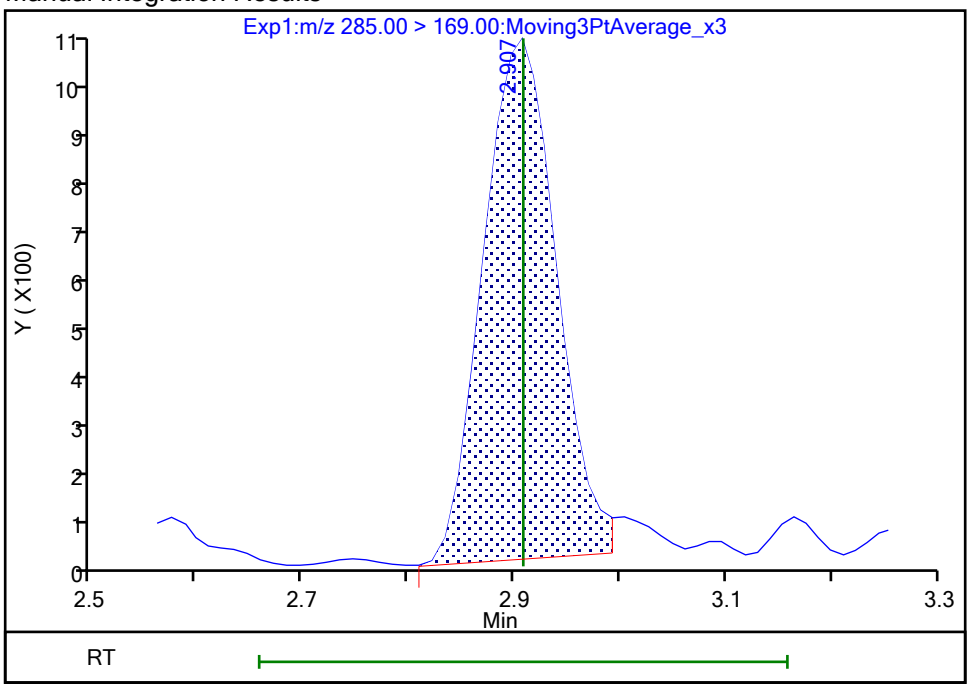
Processing Integration Results

RT: 2.91
Area: 4783
Amount: 0.024091
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 5075
Amount: 0.025561
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:04:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

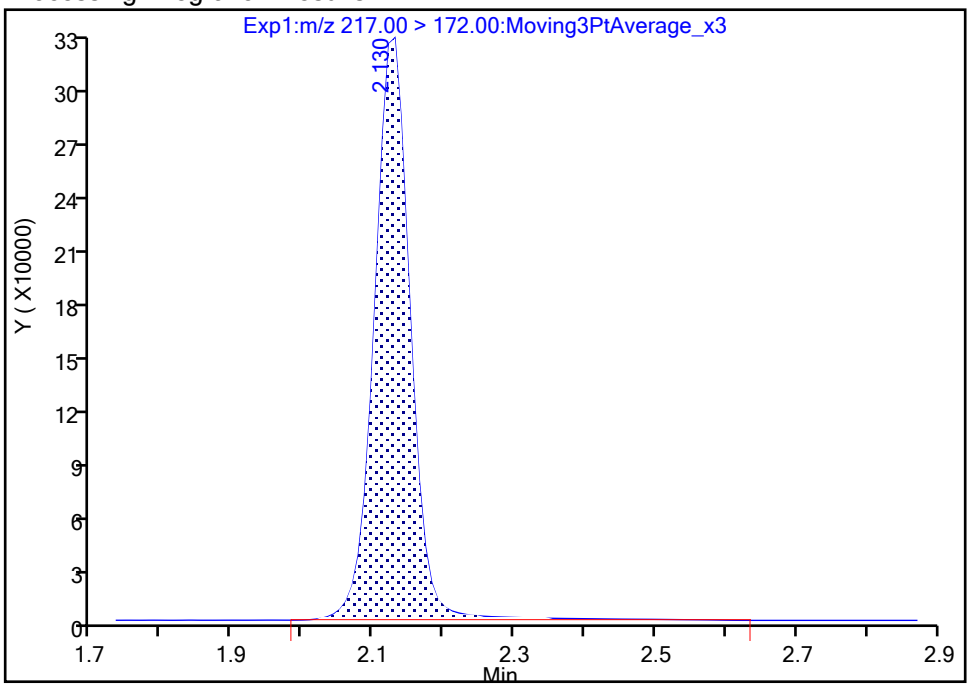
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

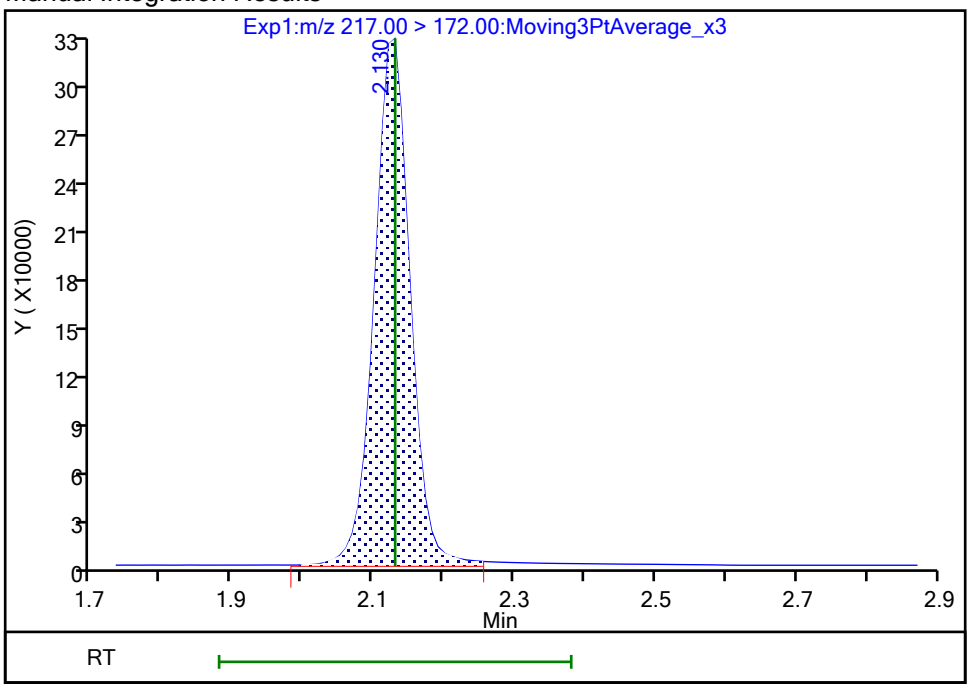
Processing Integration Results

RT: 2.13
Area: 1171782
Amount: 0.804635
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1153377
Amount: 0.791996
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:02:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

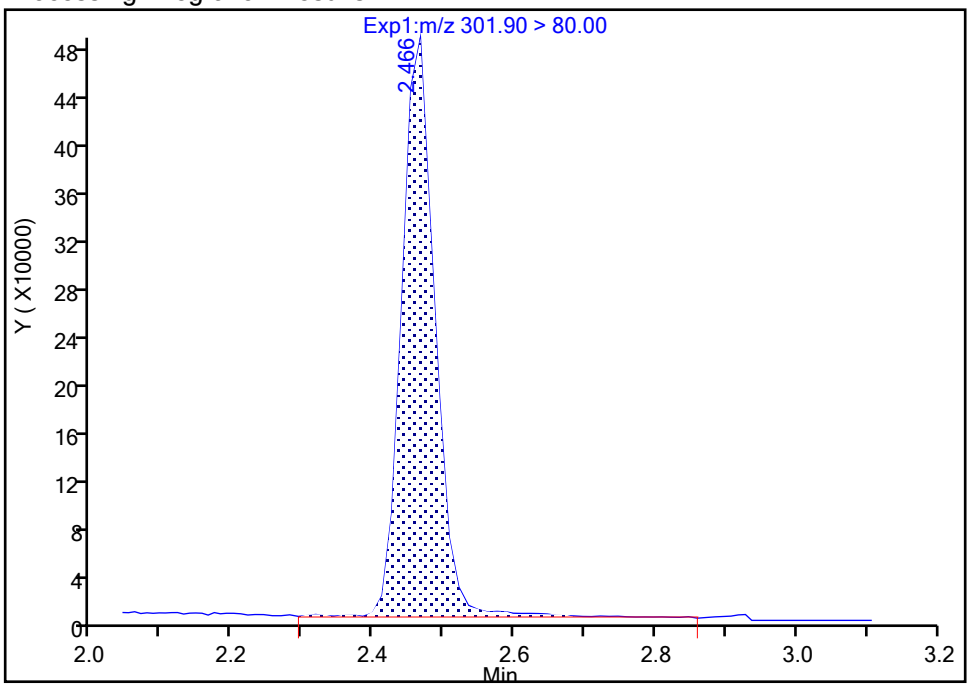
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

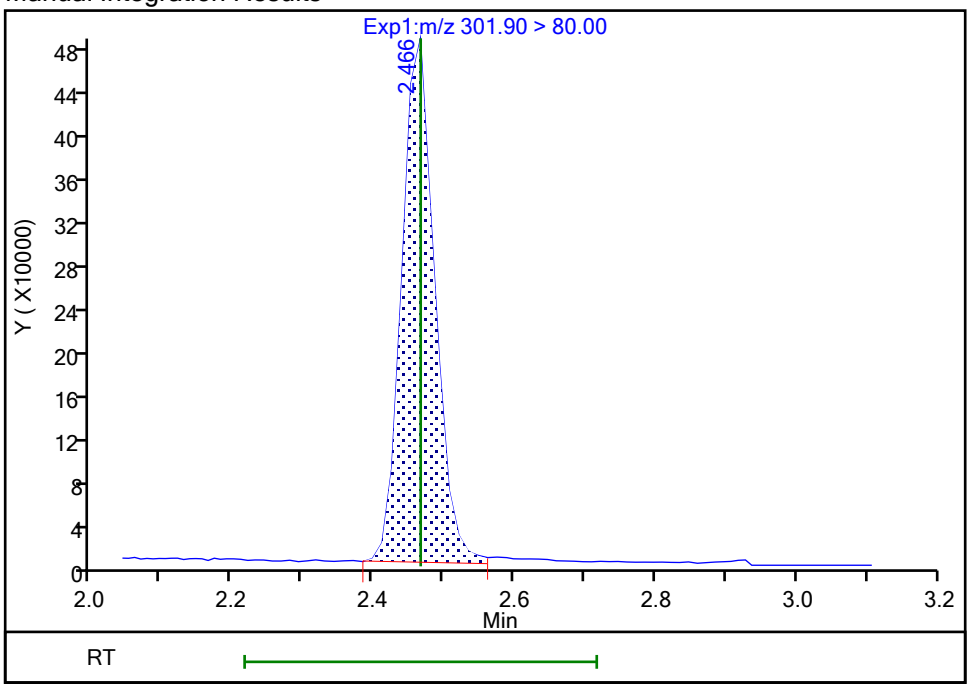
Processing Integration Results

RT: 2.47
Area: 1580073
Amount: 1.033239
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1542285
Amount: 1.008528
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:02:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

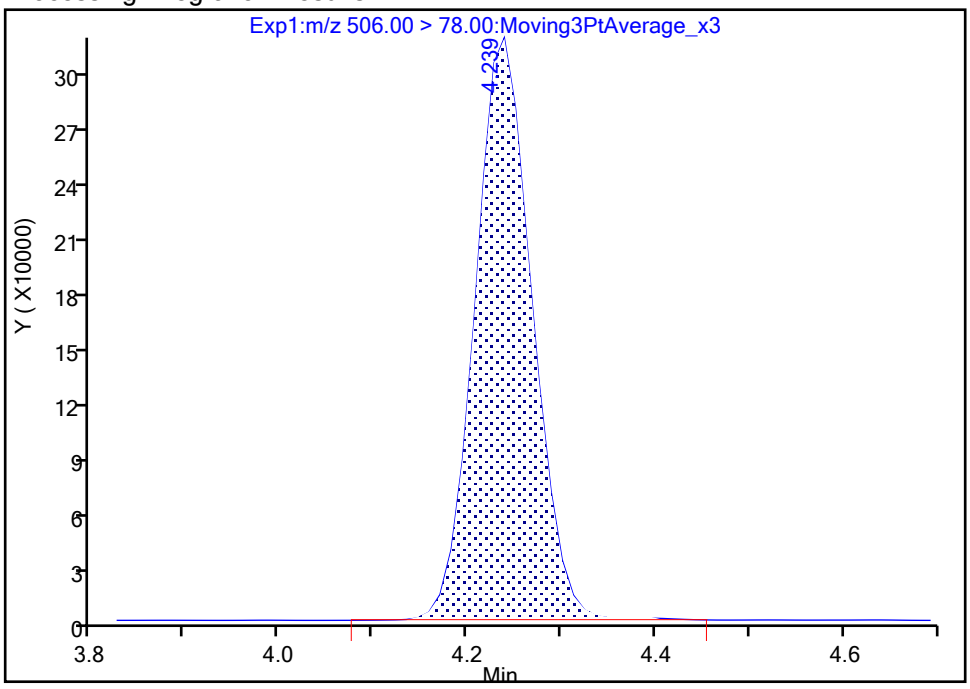
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

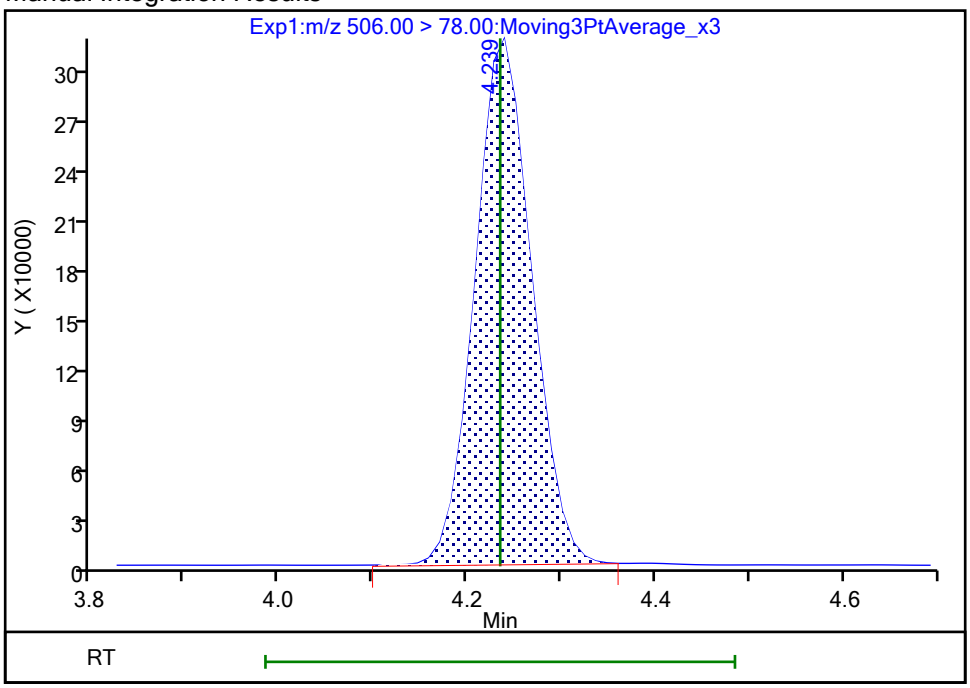
Processing Integration Results

RT: 4.24
Area: 1316531
Amount: 0.947464
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1305204
Amount: 0.939312
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:03:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

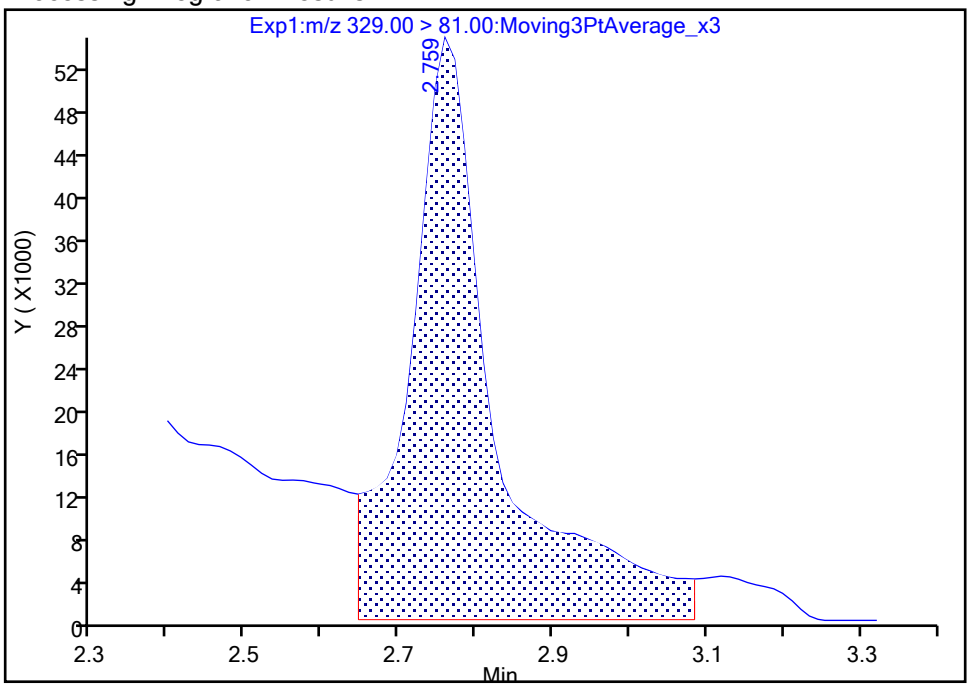
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C10.d				
Injection Date:	21-Oct-2023 01:30:55	Instrument ID:	LC812		
Lims ID:	460-290219-A-11-A	Lab Sample ID:	200-290219-11		
Client ID:	MW82-101223-1411-30				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

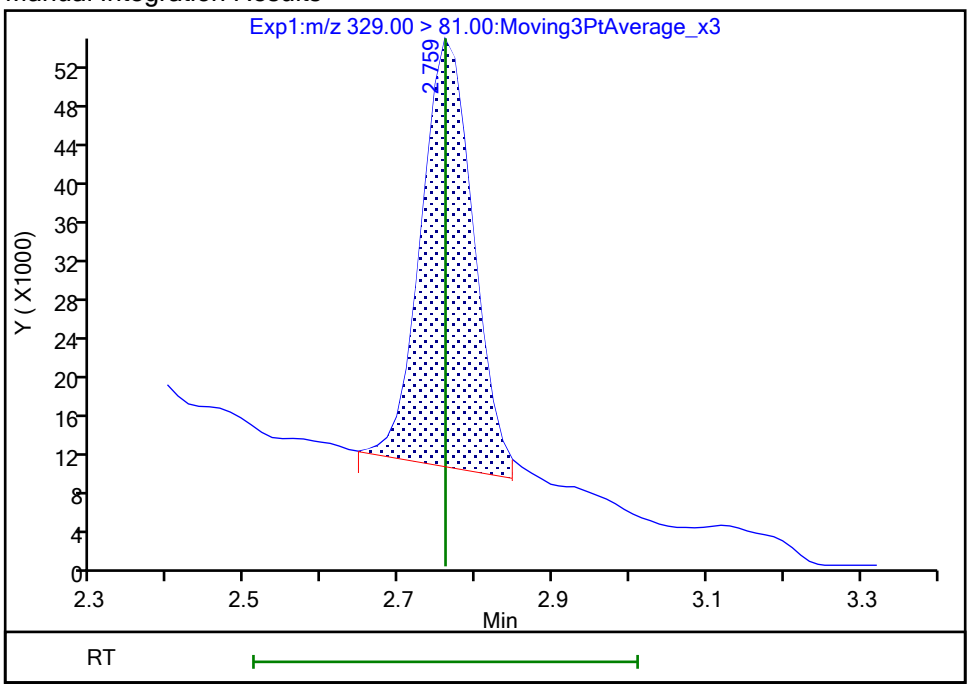
Processing Integration Results

RT: 2.76
Area: 427656
Amount: 2.418159
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 206951
Amount: 1.170194
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:02:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: 1000-101223-0002 | Lab Sample ID: 460-290219-12

Matrix: Water | Lab File ID: PA231020C11.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 08:25

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 298.1(mL) | Date Analyzed: 10/21/2023 01:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.19	U	4.19	1.01
2706-90-3	Perfluoropentanoic acid	1.68	U	1.68	0.57
307-24-4	Perfluorohexanoic acid	1.68	U	1.68	0.55
375-85-9	Perfluoroheptanoic acid	1.68	U	1.68	0.45
335-67-1	Perfluorooctanoic acid	1.68	U	1.68	0.64
375-95-1	Perfluorononanoic acid	1.68	U	1.68	0.41
335-76-2	Perfluorodecanoic acid	1.68	U	1.68	0.39
2058-94-8	Perfluoroundecanoic acid	1.68	U	1.68	0.46
307-55-1	Perfluorododecanoic acid	1.68	U	1.68	0.41
72629-94-8	Perfluorotridecanoic acid	1.68	U	1.68	0.40
376-06-7	Perfluorotetradecanoic acid	1.68	U	1.68	0.54
375-73-5	Perfluorobutanesulfonic acid	1.68	U	1.68	0.52
2706-91-4	Perfluoropentanesulfonic acid	1.68	U	1.68	0.42
355-46-4	Perfluorohexanesulfonic acid	1.68	U	1.68	0.46
375-92-8	Perfluoroheptanesulfonic acid	1.68	U	1.68	0.34
1763-23-1	Perfluorooctanesulfonic acid	1.68	U	1.68	0.71
68259-12-1	Perfluorononanesulfonic acid	1.68	U	1.68	0.34
335-77-3	Perfluorodecanesulfonic acid	1.68	U	1.68	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.19	U	4.19	1.09
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.65
754-91-6	Perfluorooctanesulfonamide	1.68	U	1.68	0.77
2355-31-9	NMeFOSAA	4.19	U	4.19	1.59
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.19	U	4.19	1.34
13252-13-6	HFPODA	3.35	U	3.35	0.92
919005-14-4	DONA	1.68	U	1.68	0.35
756426-58-1	9Cl-PF3ONS	1.68	U	1.68	0.27
763051-92-9	11Cl-PF3OUdS	1.68	U	1.68	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: 1000-101223-0002 Lab Sample ID: 460-290219-12

Matrix: Water Lab File ID: PA231020C11.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 08:25

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 298.1(mL) Date Analyzed: 10/21/2023 01:39

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	109		50-150
STL01893	13C5 PFPeA	101		50-150
STL01892	13C4 PFHpA	107		50-150
STL02116	13C2 PFTeDA	87		50-150
STL02337	13C3 PFBS	91		50-150
STL01056	13C8 FOSA	78		50-150
STL02118	d3-NMeFOSAA	92		50-150
STL02117	d5-NEtFOSAA	91		50-150
STL02395	M2-4:2 FTS	82		50-150
STL02279	M2-6:2 FTS	93		50-150
STL02280	M2-8:2 FTS	85		50-150
STL02255	13C3 HFPO-DA	101		50-150
STL00994	18O2 PFHxS	92		50-150
STL00993	13C2 PFHxA	104		50-150
STL00991	13C4 PFOS	91		50-150
STL00998	13C2 PFDoA	94		50-150
STL00995	13C5 PFNA	104		50-150
STL00996	13C2 PFDA	101		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	99		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d
Lims ID: 460-290219-A-12-A
Client ID: 1000-101223-0002
Sample Type: Client
Inject. Date: 21-Oct-2023 01:39:05 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290219-A-12-A
Misc. Info.: 200-0057493-011 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 15:12:45
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.130	-0.009	0.604	2176691	1.36		109	1337	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.008	23563	-0.0259			1.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1568080	1.26		101	1726	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.702	1779334	1.06		91.1	107285	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.759	2.760	-0.001	0.786	186891	0.9614		82.3	119	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1640592	1.30		104	5681	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	310099	1.27		101	1901	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.157	-0.004	0.898	1317740	1.09		92.5	3721	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1847245	1.33		107	5657	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.997	277585	1.11		93.4	653	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	1.000	2015017	1.28		103	6075	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.515	-0.004		2017739	1.25			4059	
15 Perfluorooctanoic acid										RM
413.00 > 369.00	3.529	3.515	0.014	1.005	27609	0.0161	Target=2.88		0.8	RM
413.00 > 169.00	3.520	3.515	0.005	1.003	4002		6.90(1.44-4.32)		5.9	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.823	-0.005	1.000	3888	0.004774	Target=4.24		7.6	M
499.00 > 99.00	3.830	3.823	0.007	1.003	1049		3.71(2.12-6.37)		4.7	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.823	-0.005	1.088	834439	1.09		91.2	6270	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2222654	1.30		104	7201	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.975	-0.004	1.040	899	0.000361			4.0	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.130	-0.006	1.175	2257185	1.26		101	13115	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.178	287120	1.02		85.2	1006	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.208	1482263	0.9705		77.6	4093	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.235	0.007	1.000	564	0.000499			5.3	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.271	-0.006	1.215	492760	1.15		92.2	1900	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.271	-0.006	1.000	197	0.000551			1.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	2095767	1.24		99.2	8279	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.391	0.007	1.253	466914	1.13		90.7	1141	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	596	0.001595			3.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.604	-0.005	1.310	2018272	1.18		94.0	8037	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	1857167	1.09		86.9	6995	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

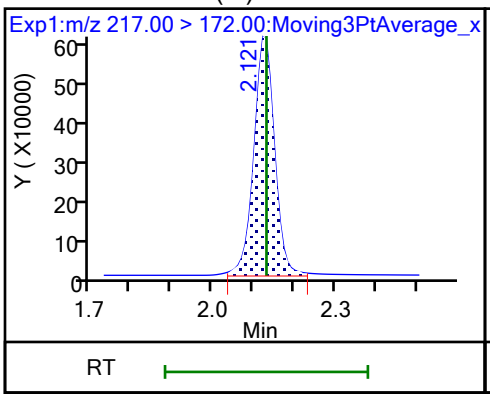
M - Manually Integrated

Report Date: 25-Oct-2023 08:40:08 Chrom Revision: 2.3 18-Oct-2023 21:16:54

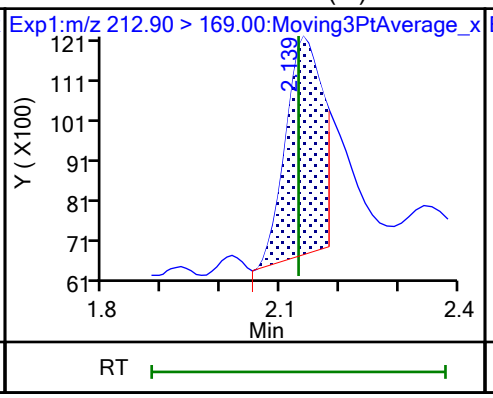
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d
Injection Date: 21-Oct-2023 01:39:05 Instrument ID: LC812
Lims ID: 460-290219-A-12-A Lab Sample ID: 200-290219-12
Client ID: 1000-101223-0002
Operator ID: LC812user ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

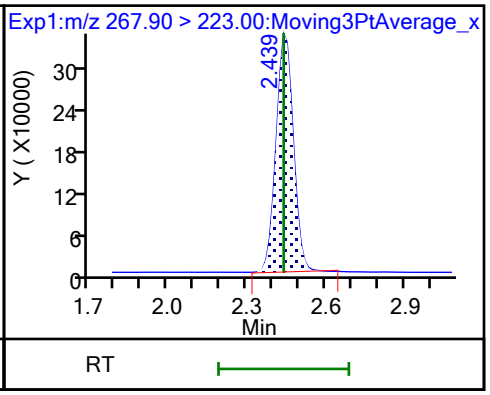
D 1 13C4 PFBA (M)



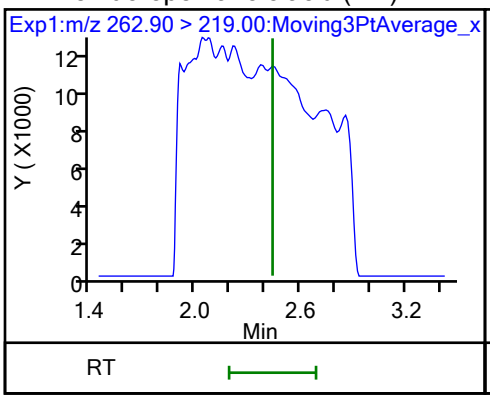
2 Perfluorobutanoic acid (M)



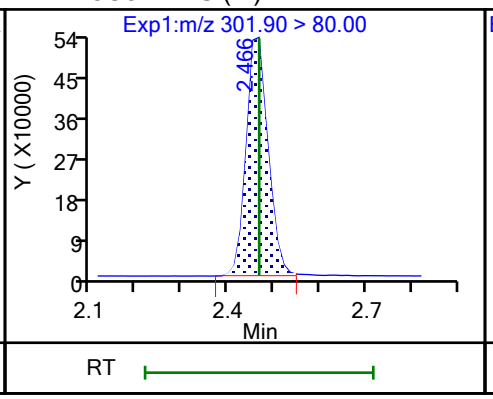
D 3 13C5 PFPeA



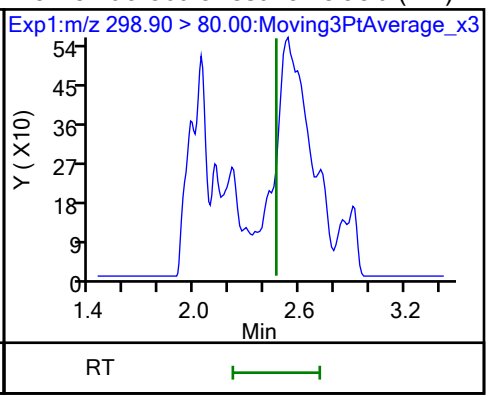
4 Perfluoropentanoic acid (ND)



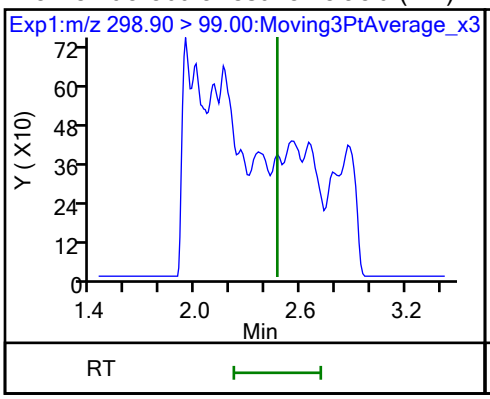
D 47 13C3 PFBS (M)



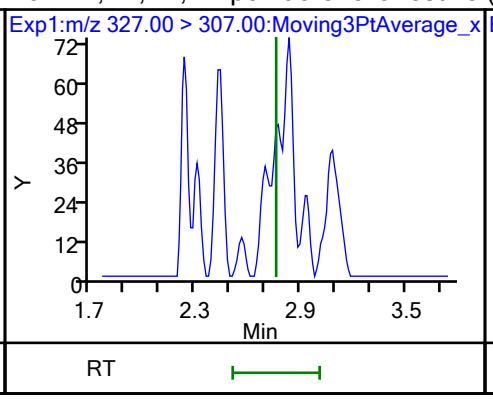
5 Perfluorobutanesulfonic acid (ND)



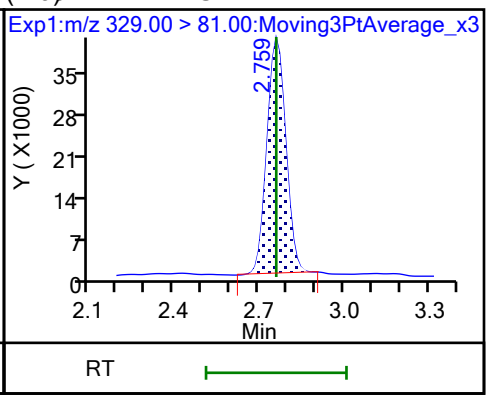
5 Perfluorobutanesulfonic acid (ND)



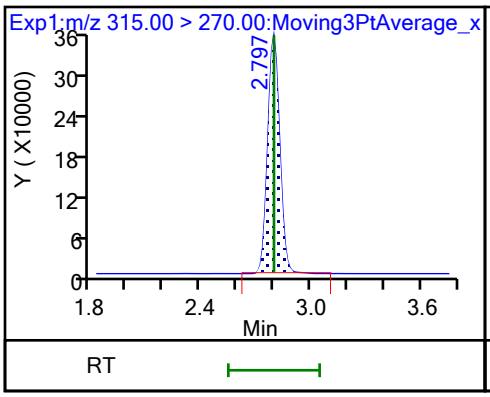
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



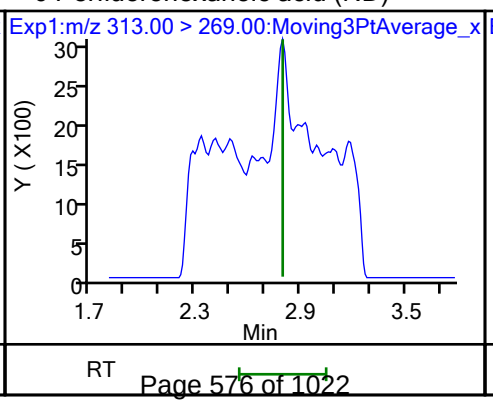
D 60 M2-4:2 FTS



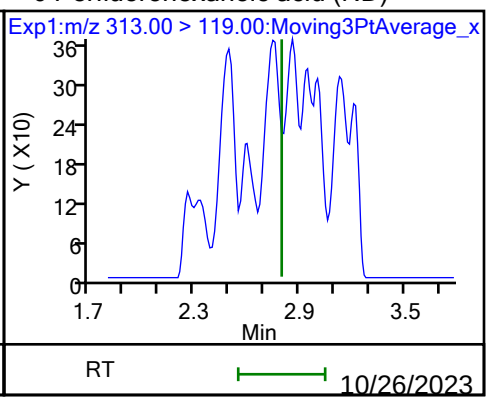
D 7 13C2 PFHxA



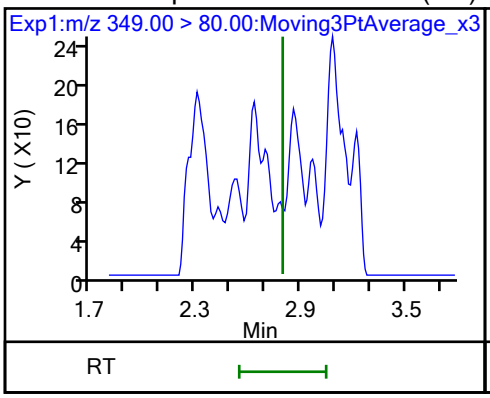
6 Perfluorohexanoic acid (ND)



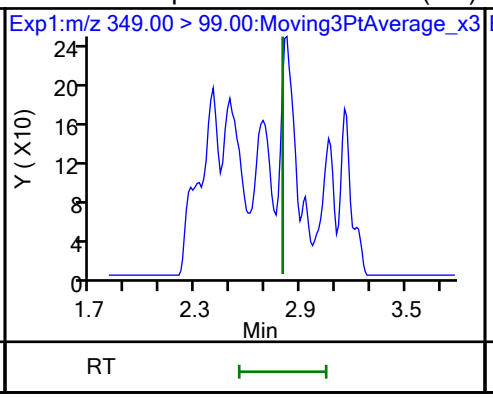
6 Perfluorohexanoic acid (ND)



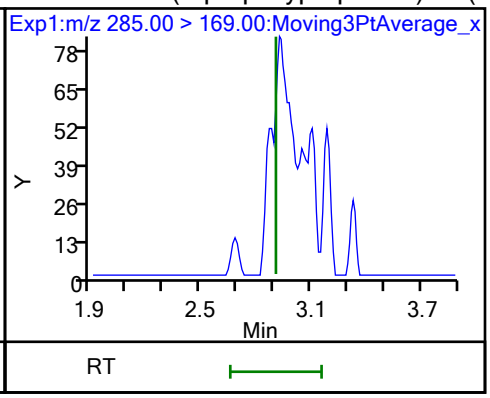
70 Perfluoropentanesulfonic acid (ND)



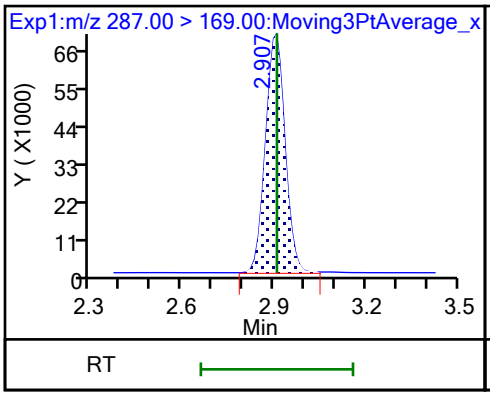
70 Perfluoropentanesulfonic acid (ND)



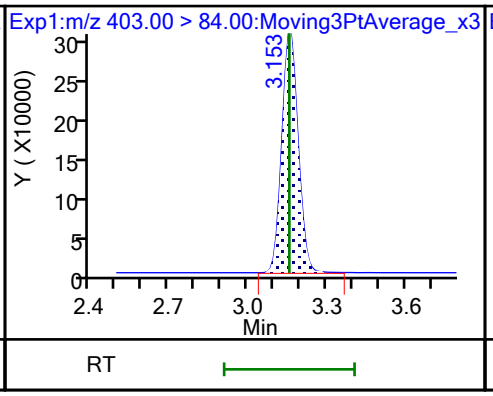
67 Perfluoro(2-propoxypropanoic) ac (ND)



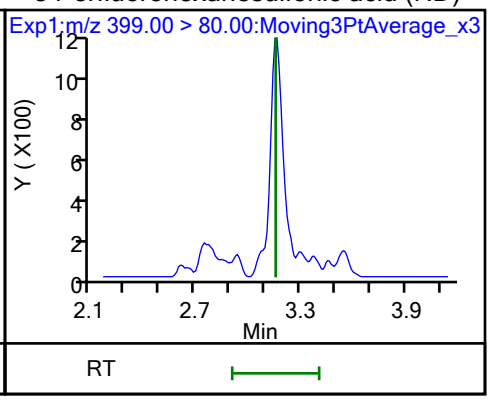
D 64 13C3 HFPO-DA



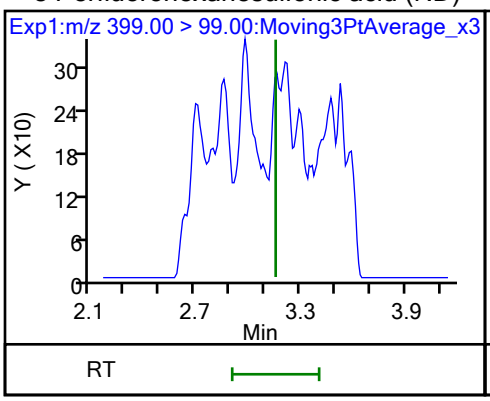
D 11 18O2 PFHxS



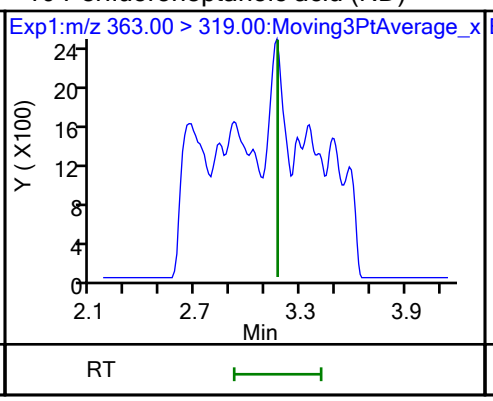
8 Perfluorohexanesulfonic acid (ND)



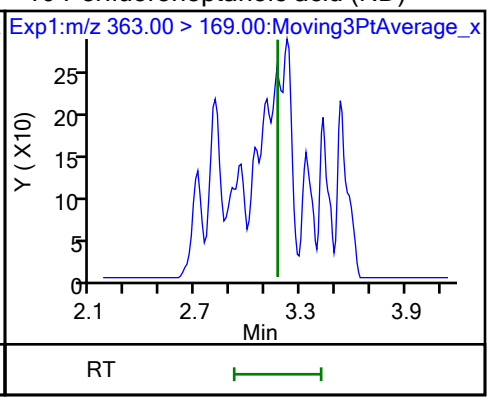
8 Perfluorohexanesulfonic acid (ND)



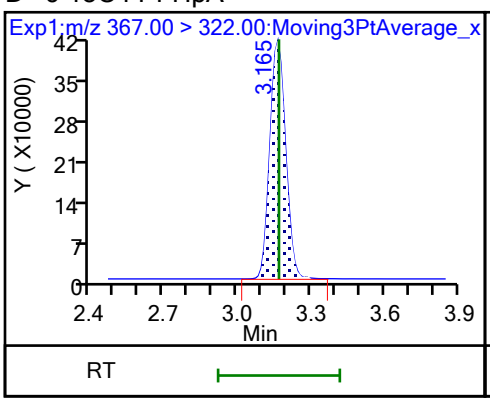
10 Perfluoroheptanoic acid (ND)



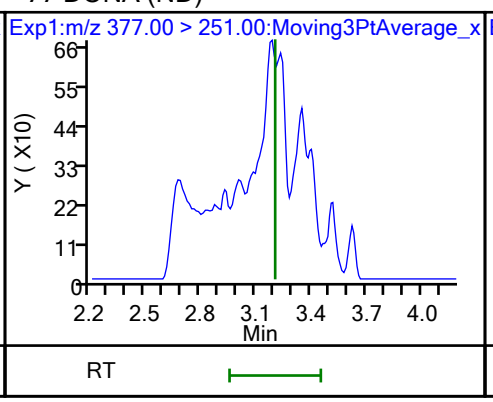
10 Perfluoroheptanoic acid (ND)



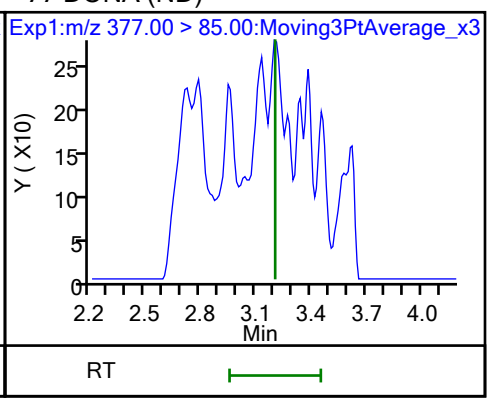
D 9 13C4 PFHpA



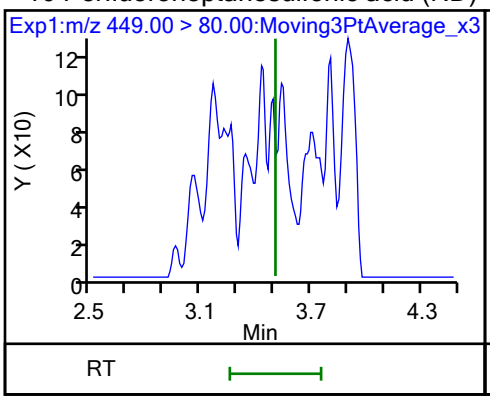
77 DONA (ND)



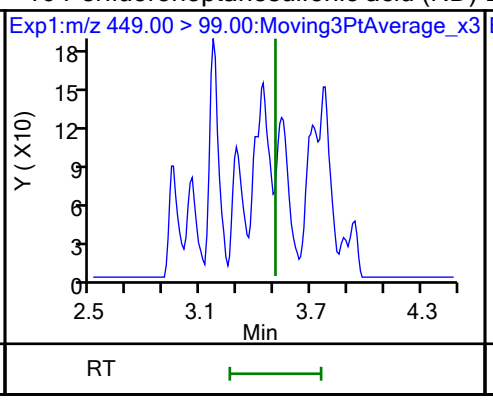
77 DONA (ND)

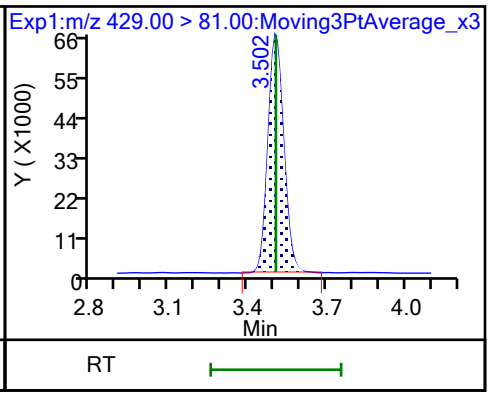


16 Perfluoroheptanesulfonic acid (ND)

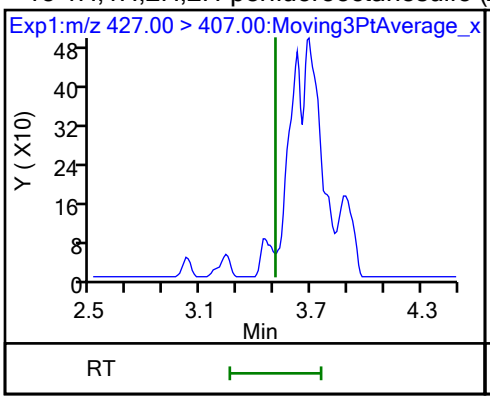


16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS

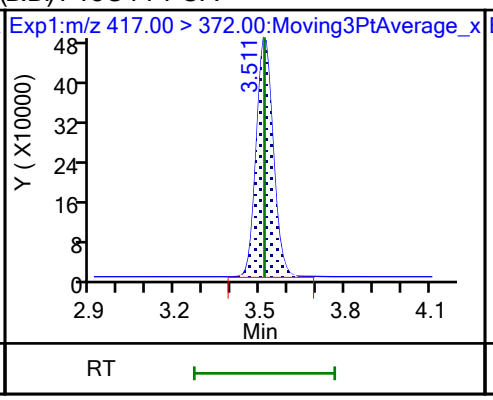




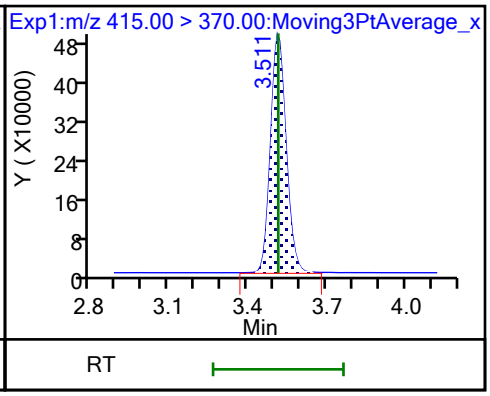
13 1H,1H,2H,2H-perfluorooctanesulfo (ND)



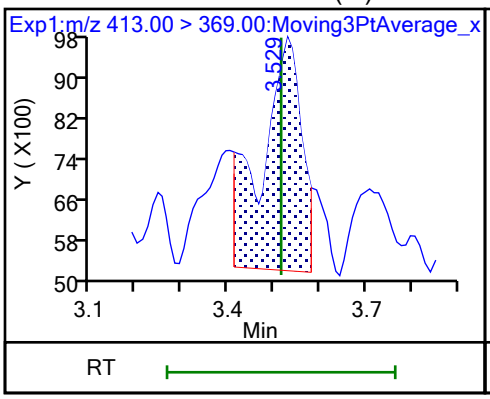
M4 13C4 PFOA



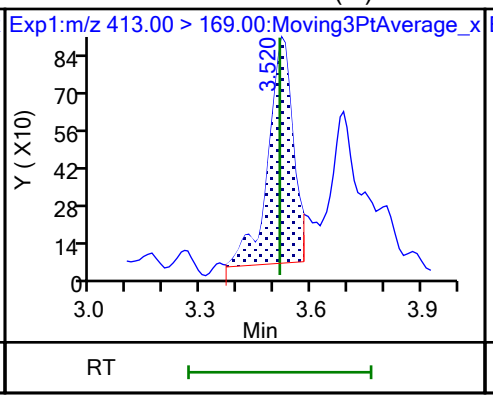
* 62 13C2 PFOA



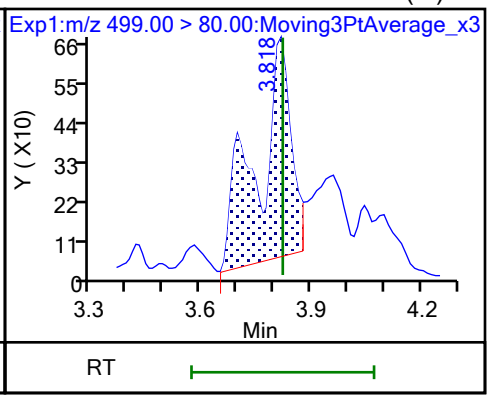
15 Perfluorooctanoic acid (M)



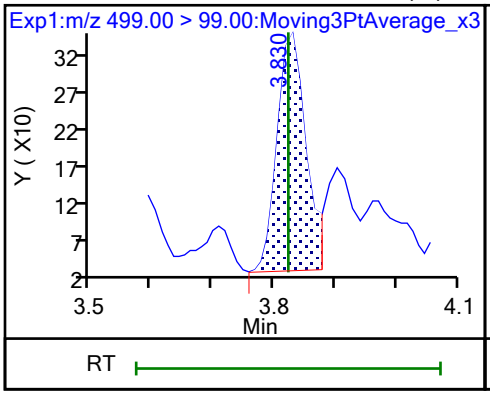
15 Perfluorooctanoic acid (M)



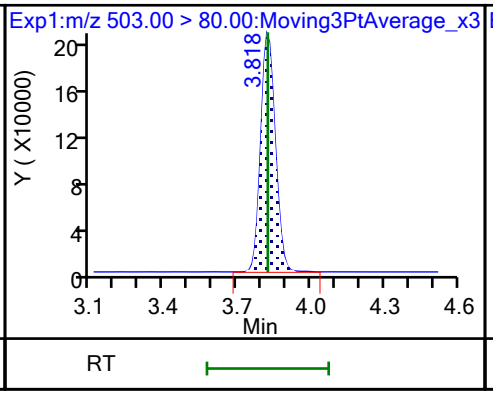
17 Perfluorooctanesulfonic acid (M)



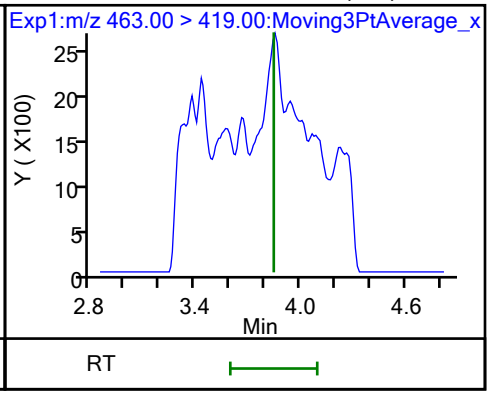
17 Perfluorooctanesulfonic acid (M)



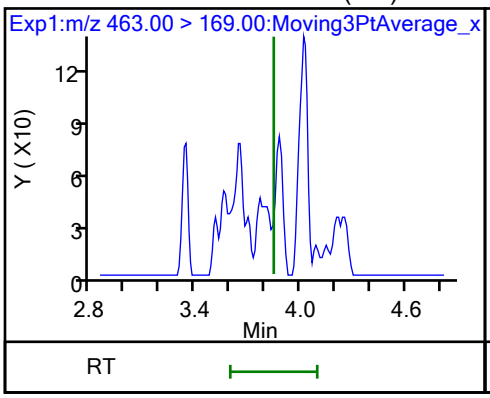
D 18 13C4 PFOS



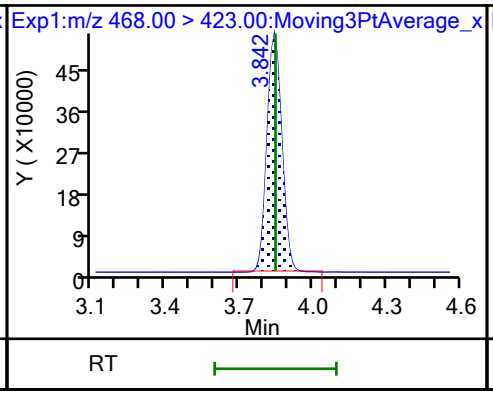
20 Perfluorononanoic acid (ND)



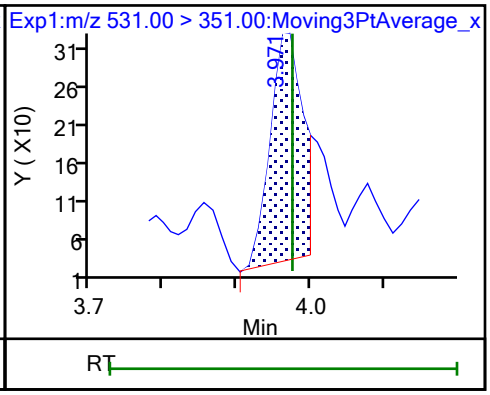
20 Perfluorononanoic acid (ND)



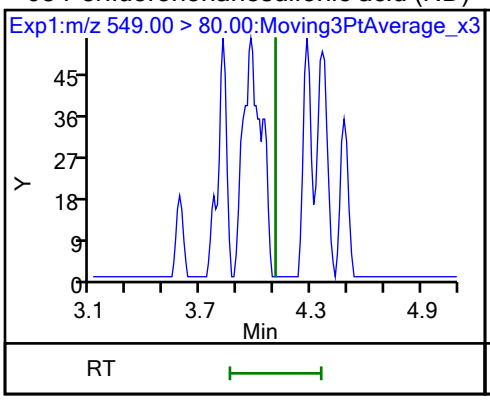
D 19 13C5 PFNA



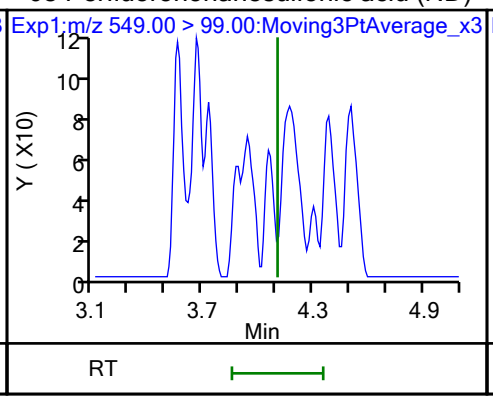
69 9-Chlorohexadecafluoro-3-oxanona (M)



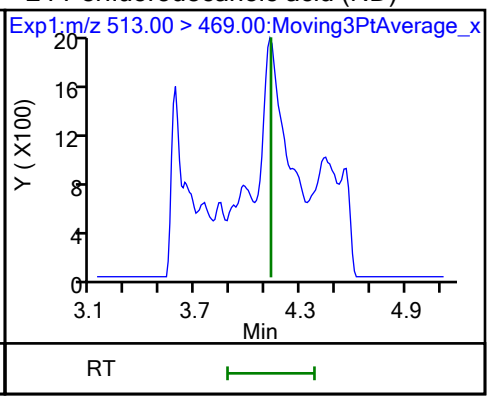
68 Perfluorononanesulfonic acid (ND)



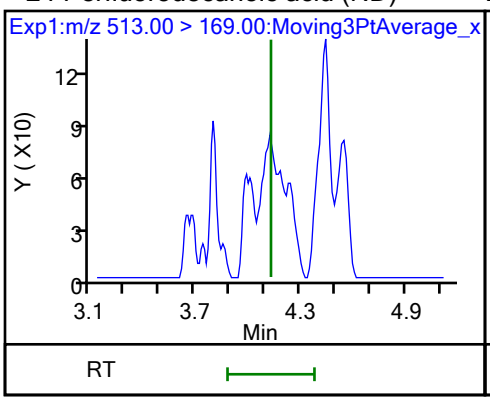
68 Perfluorononanesulfonic acid (ND)



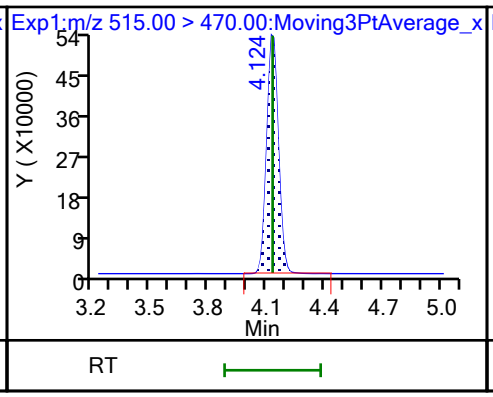
24 Perfluorodecanoic acid (ND)



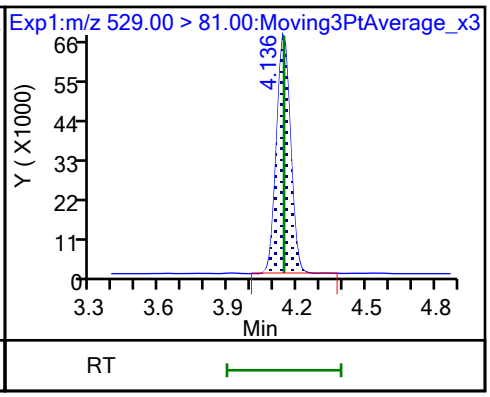
24 Perfluorodecanoic acid (ND)



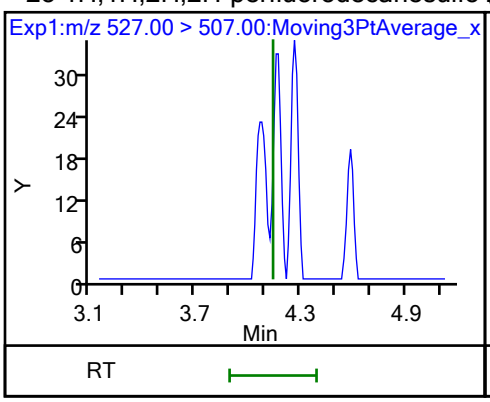
D 23 13C2 PFDA



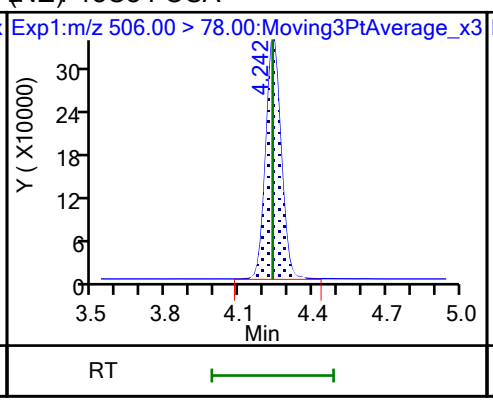
D 26 M2-8:2 FTS



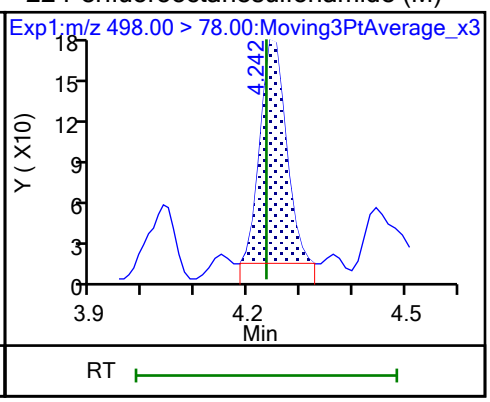
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



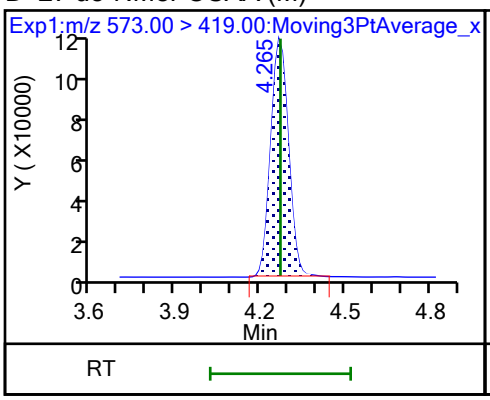
D 21 13C8 FOSA



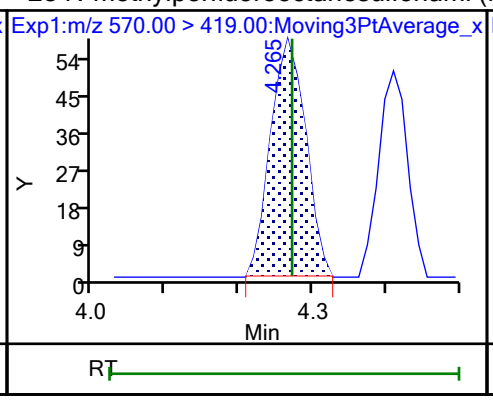
22 Perfluorooctanesulfonamide (M)



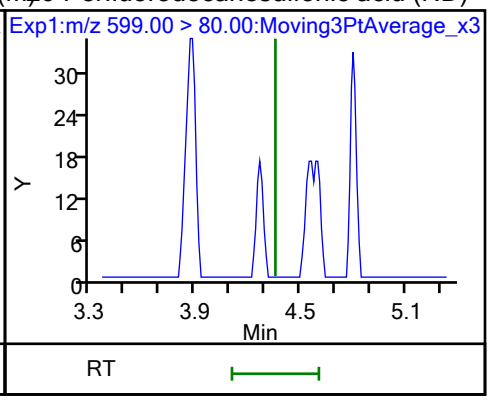
D 27 d3-NMeFOSAA (M)



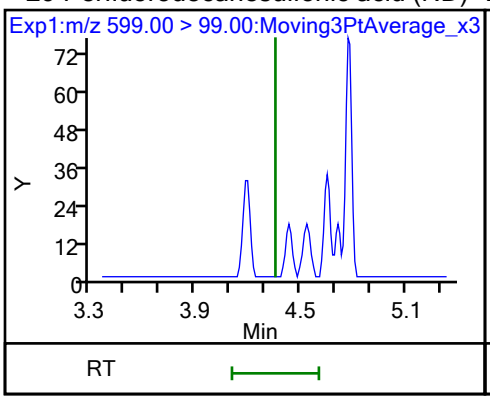
28 N-methylperfluorooctanesulfonami (M)



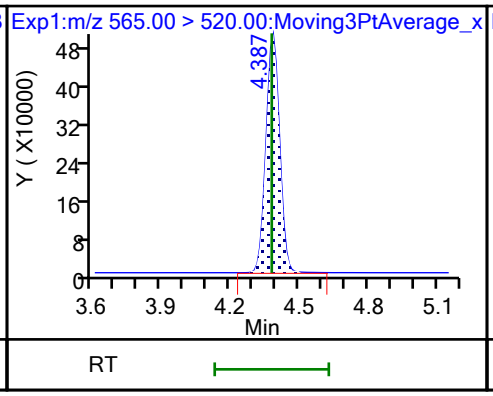
29 Perfluorodecanesulfonic acid (ND)



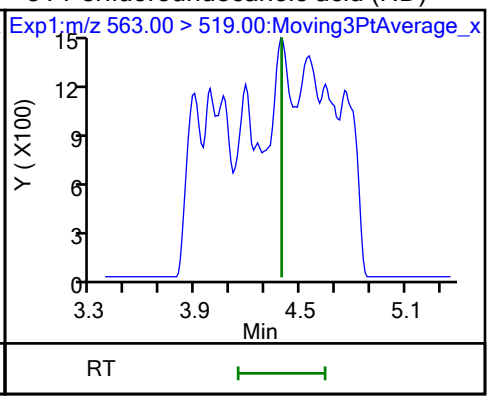
29 Perfluorodecanesulfonic acid (ND)



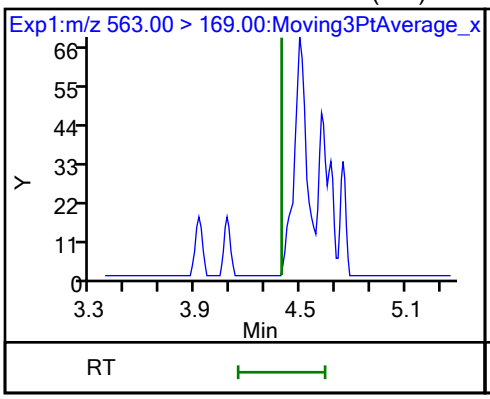
D 30 13C2 PFUnA



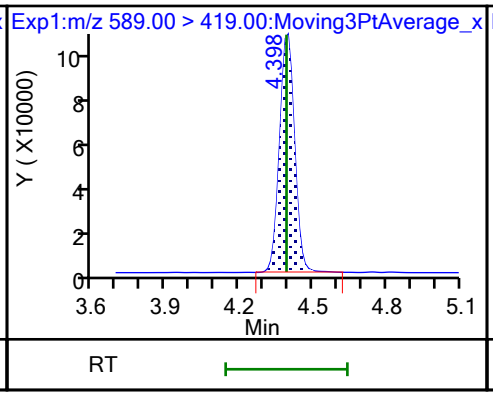
31 Perfluoroundecanoic acid (ND)



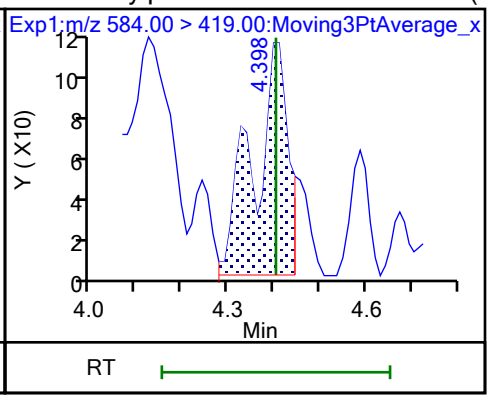
31 Perfluoroundecanoic acid (ND)



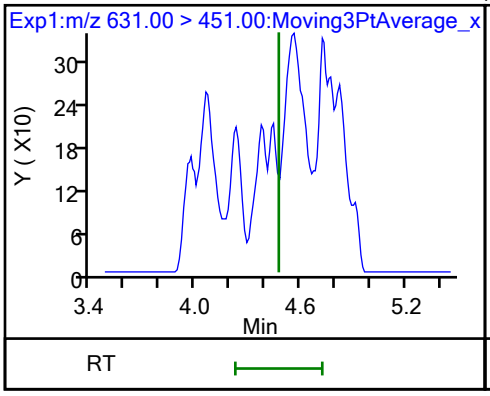
D 32 d5-NEtFOSAA



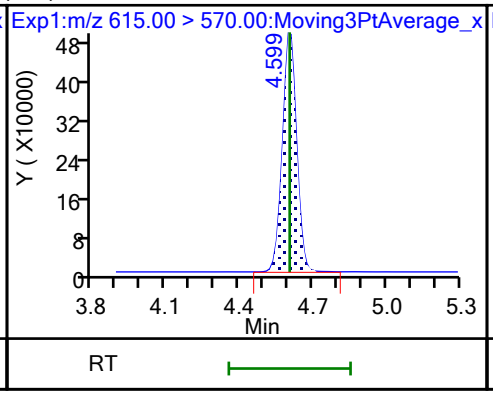
33 N-ethylperfluorooctanesulfonamid (M)



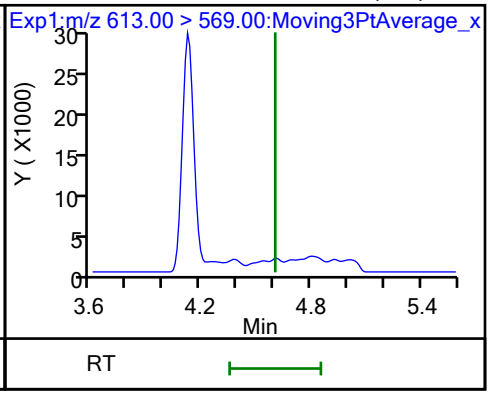
66 11-Chloroeicosafluoro-3-oxaundec (ND)



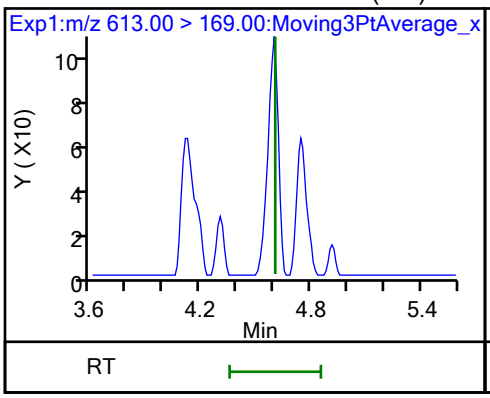
D 36 13C2 PFDoA



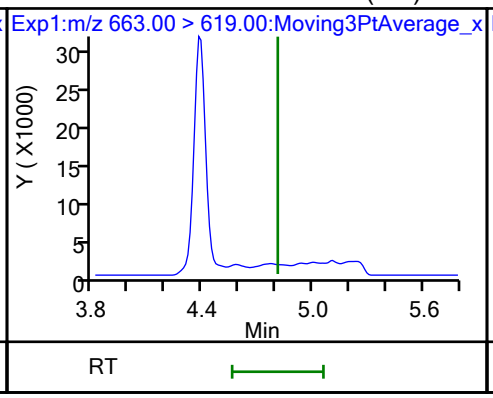
37 Perfluorododecanoic acid (ND)



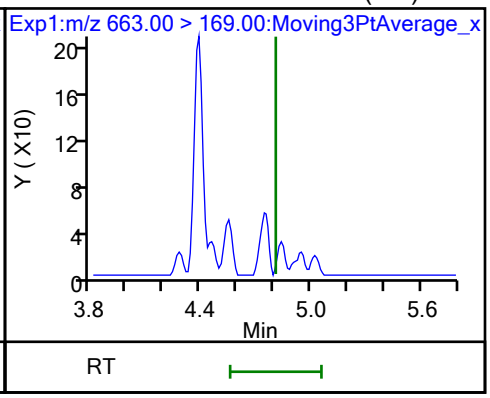
37 Perfluorododecanoic acid (ND)



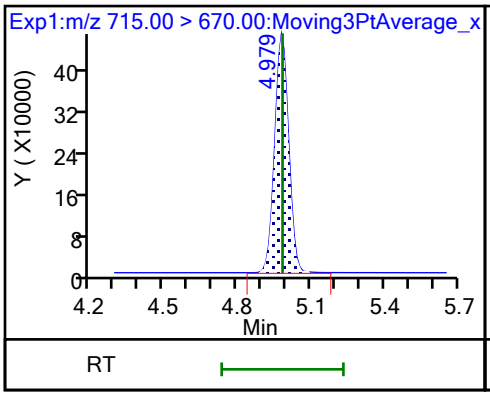
41 Perfluorotridecanoic acid (ND)



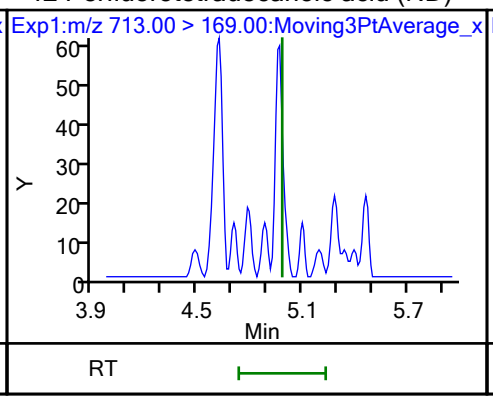
41 Perfluorotridecanoic acid (ND)



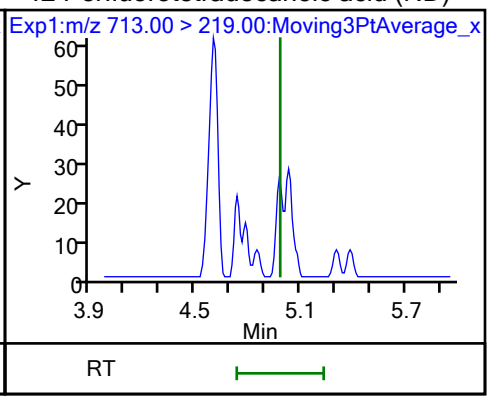
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

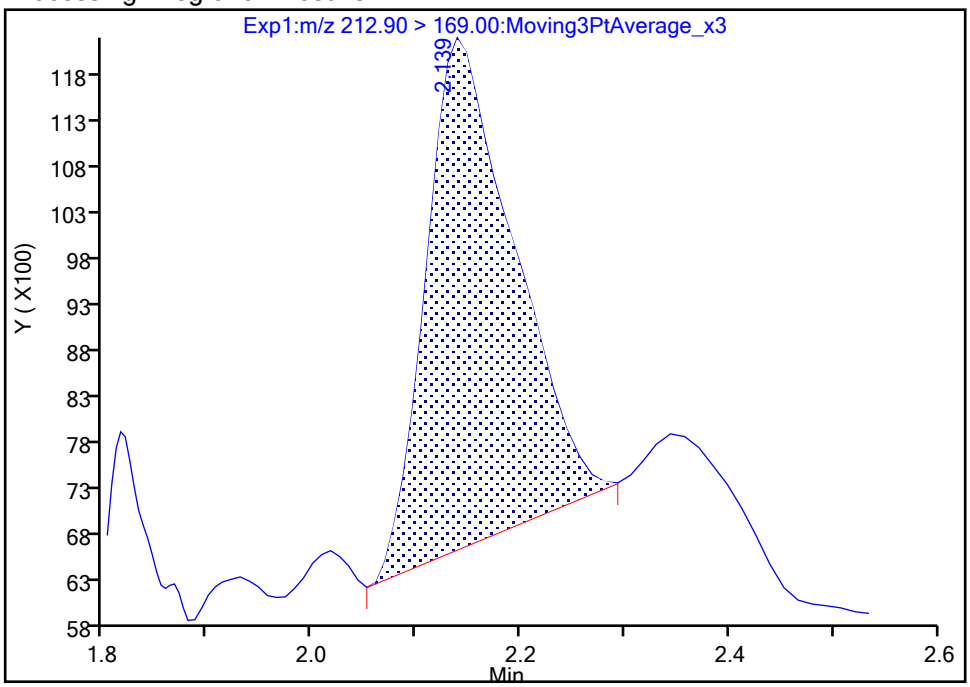
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

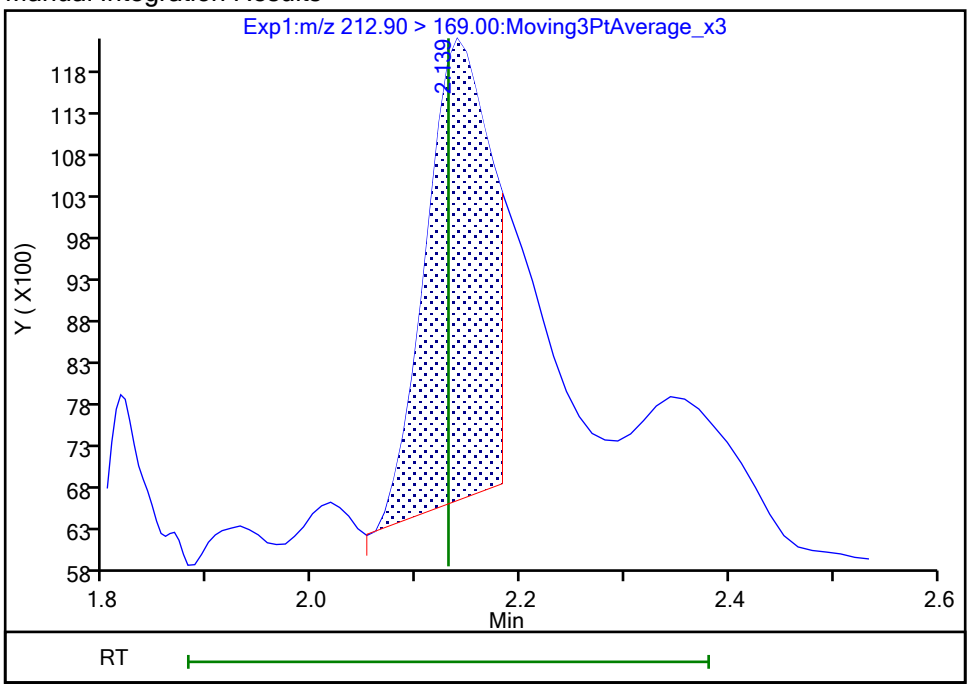
Processing Integration Results

RT: 2.14
Area: 32363
Amount: -0.020331
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 23563
Amount: -0.025920
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:09:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

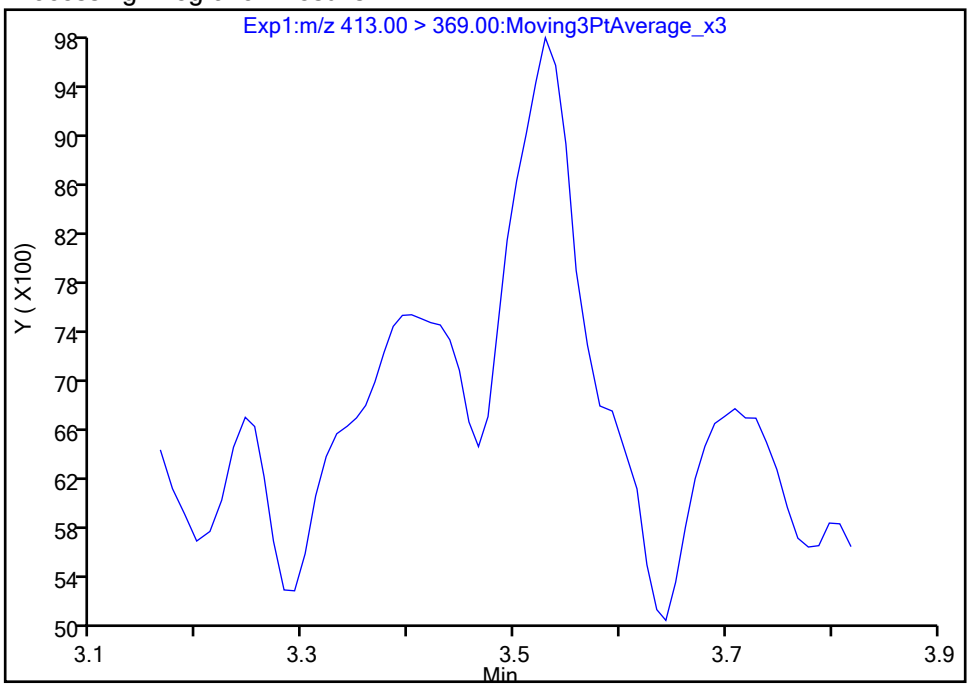
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

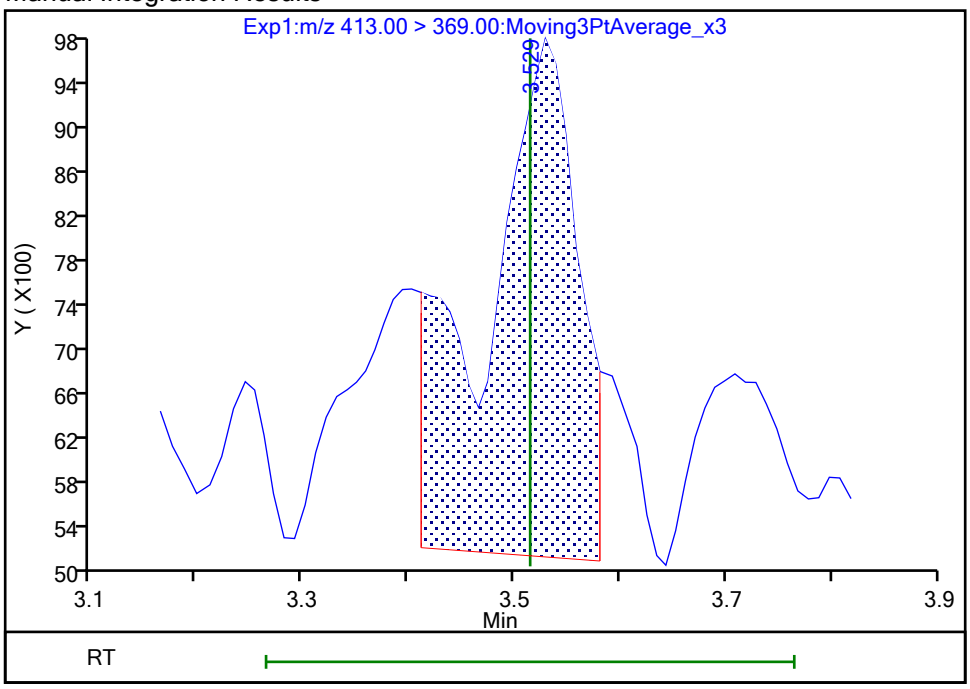
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.53
Area: 27609
Amount: 0.016080
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:11:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

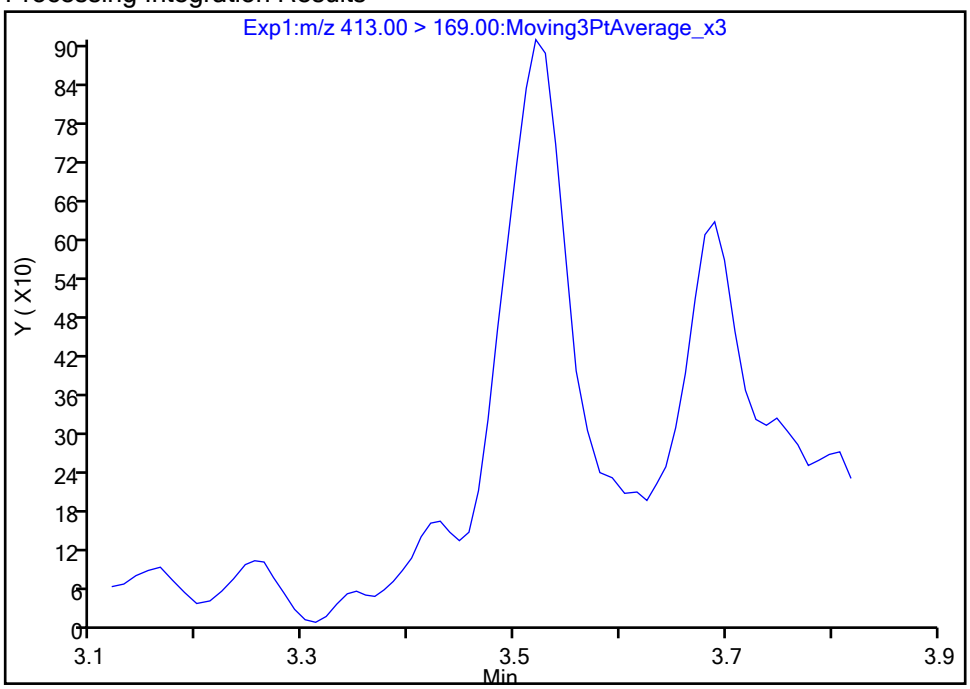
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

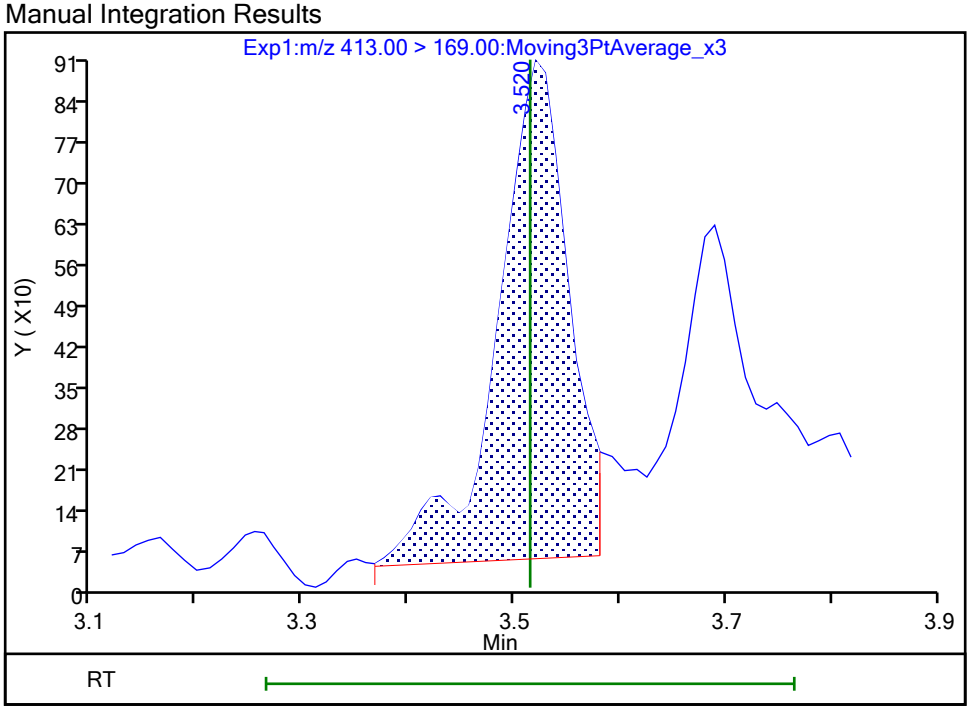
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.52
Area: 4002
Amount: 0.016080
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 08:32:10 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

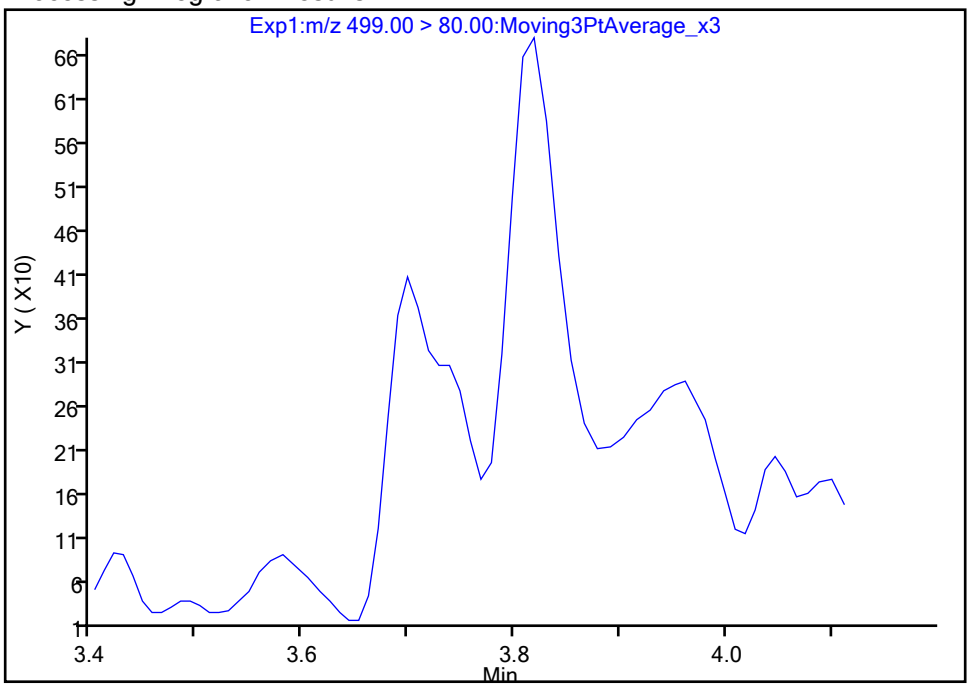
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

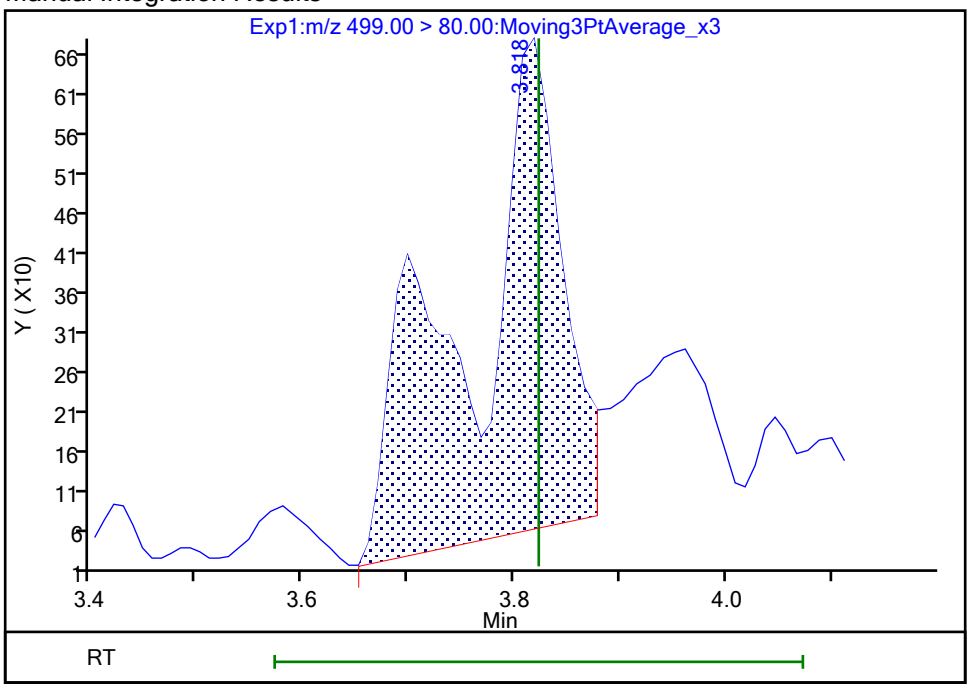
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.82
Area: 3888
Amount: 0.004774
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:11:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

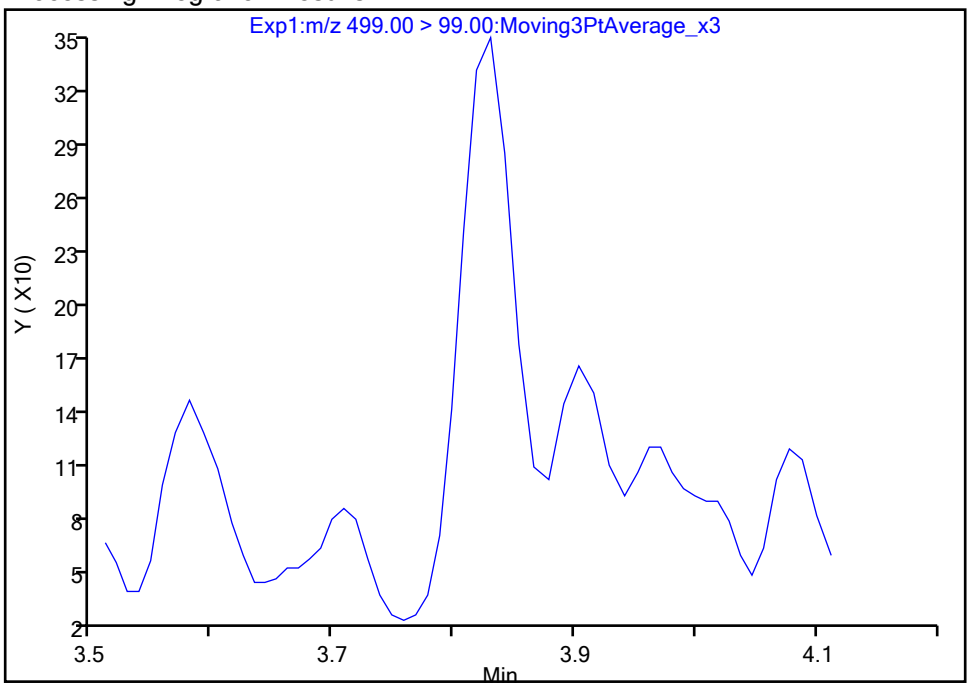
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

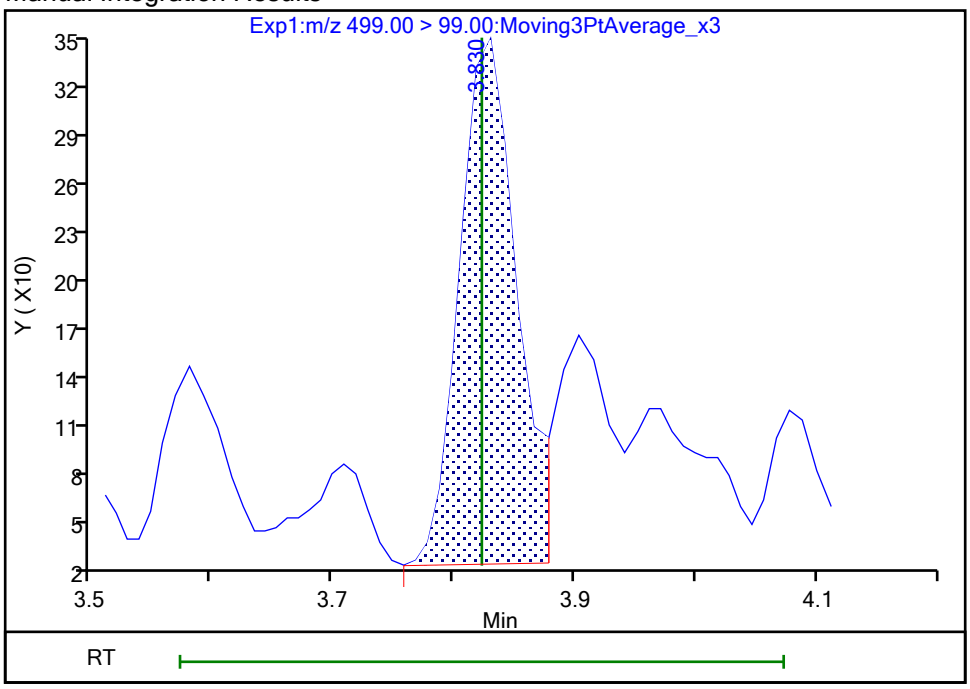
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.83
Area: 1049
Amount: 0.004774
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:11:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

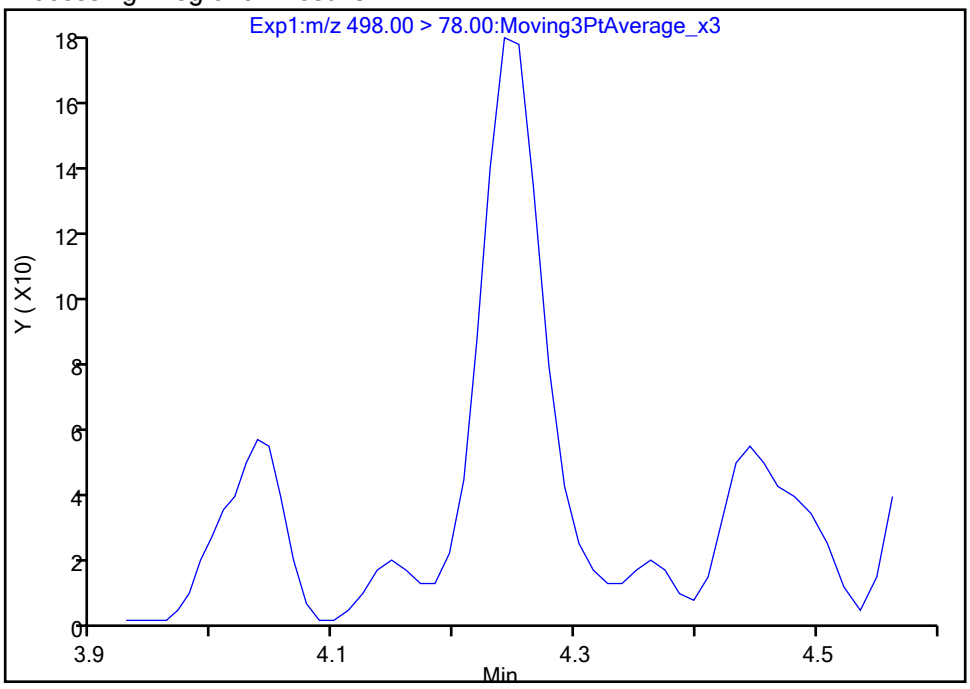
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

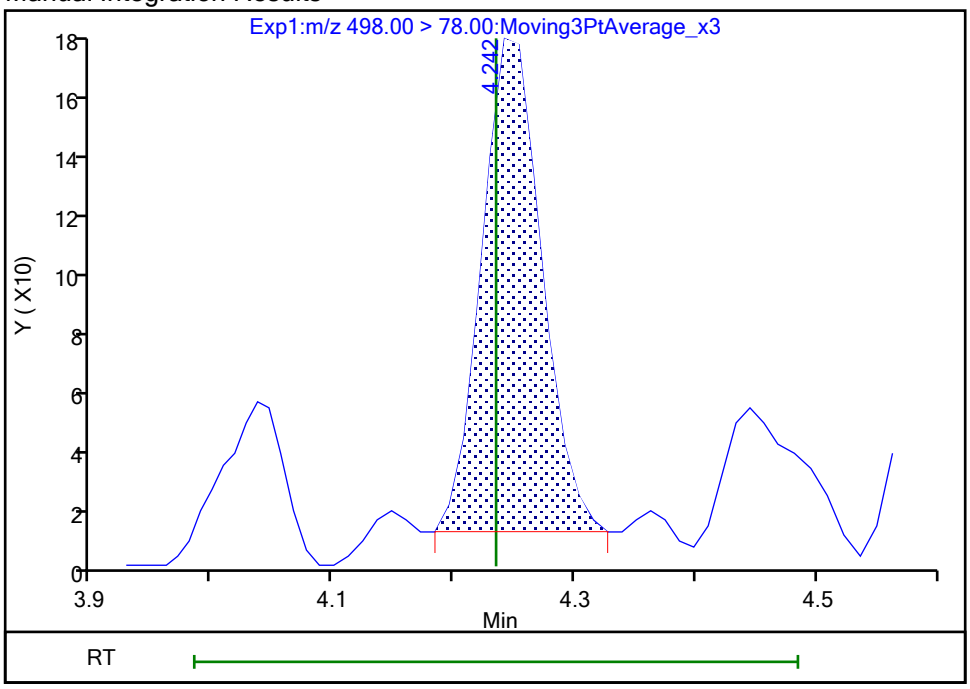
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 564
Amount: 0.000499
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:12:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

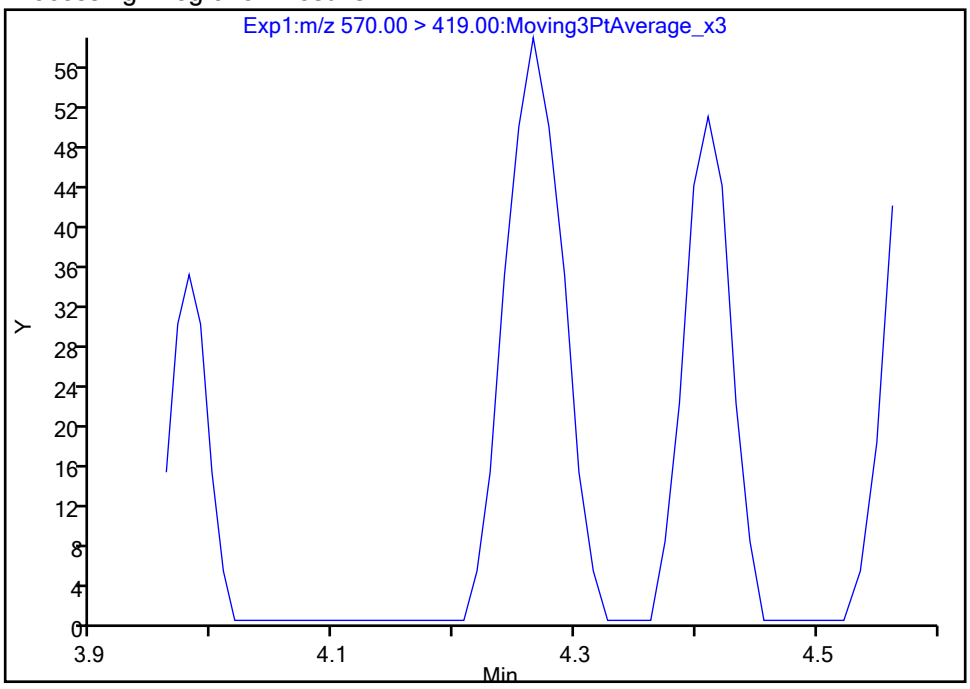
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

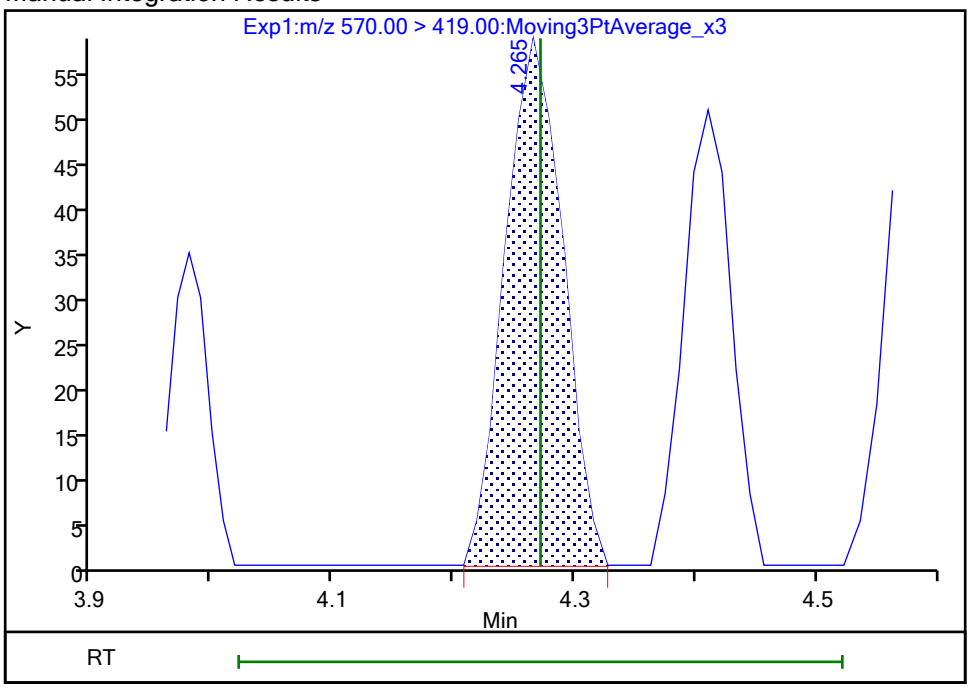
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.27
Area: 197
Amount: 0.000551
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:12:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

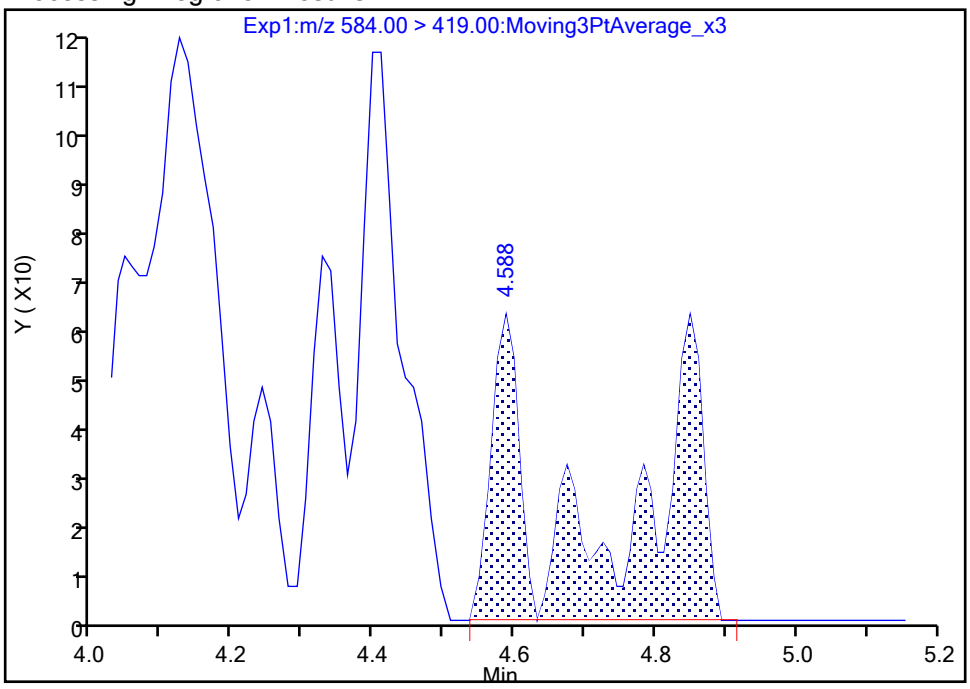
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

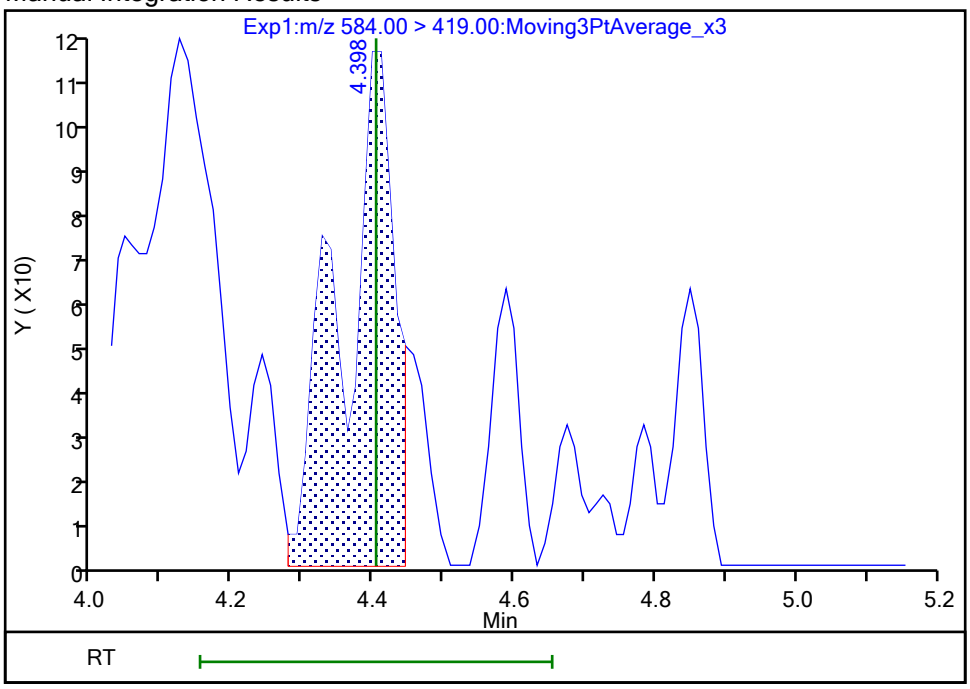
Processing Integration Results

RT: 4.59
Area: 527
Amount: 0.001411
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 596
Amount: 0.001595
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:12:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

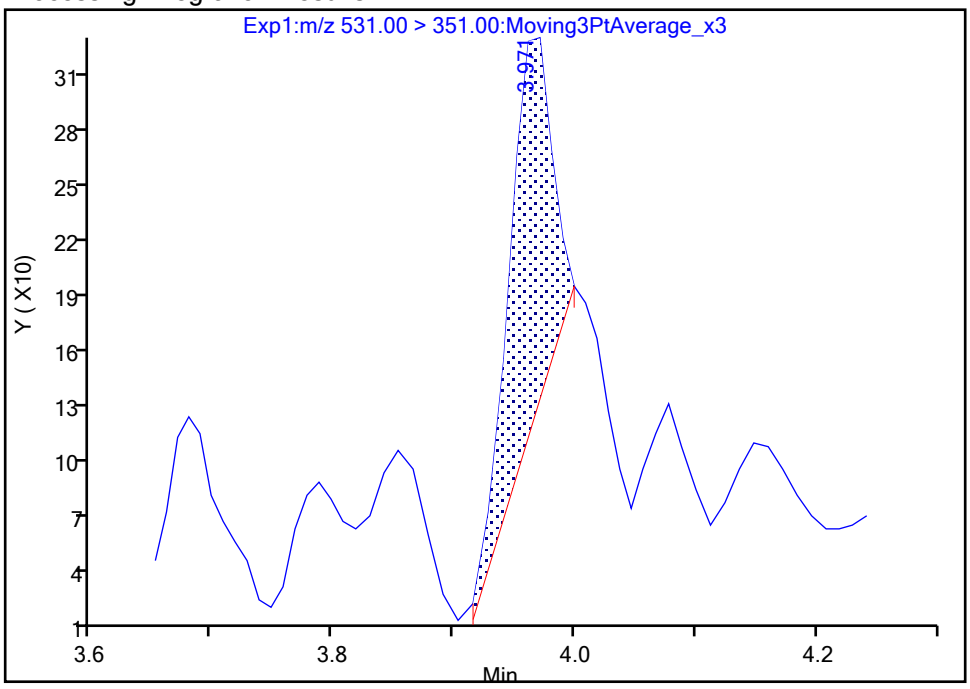
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

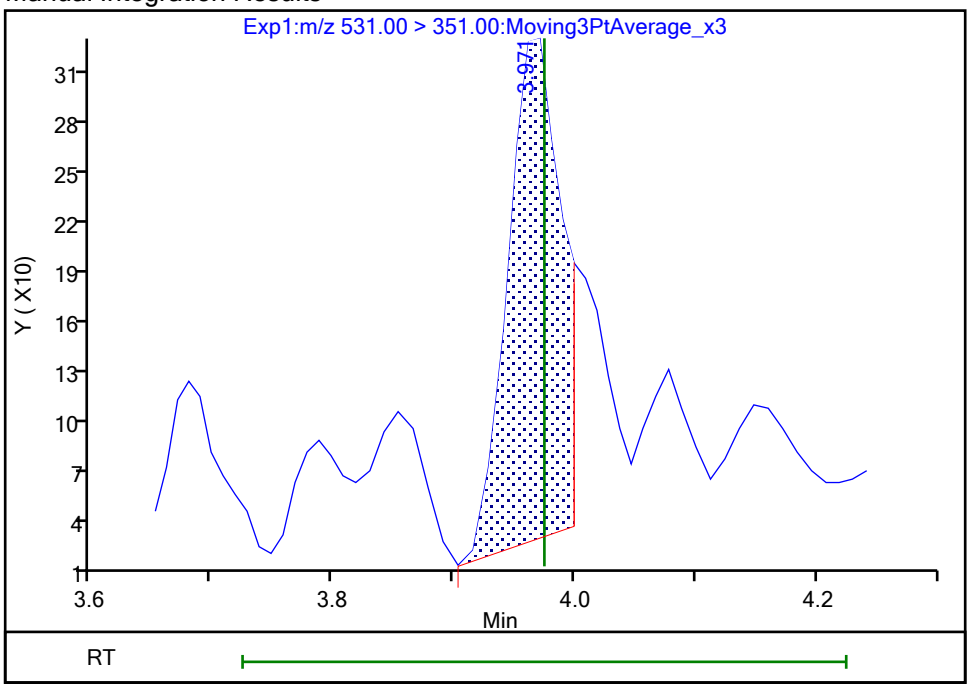
Processing Integration Results

RT: 3.97
Area: 512
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.97
Area: 899
Amount: 0.000361
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:12:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

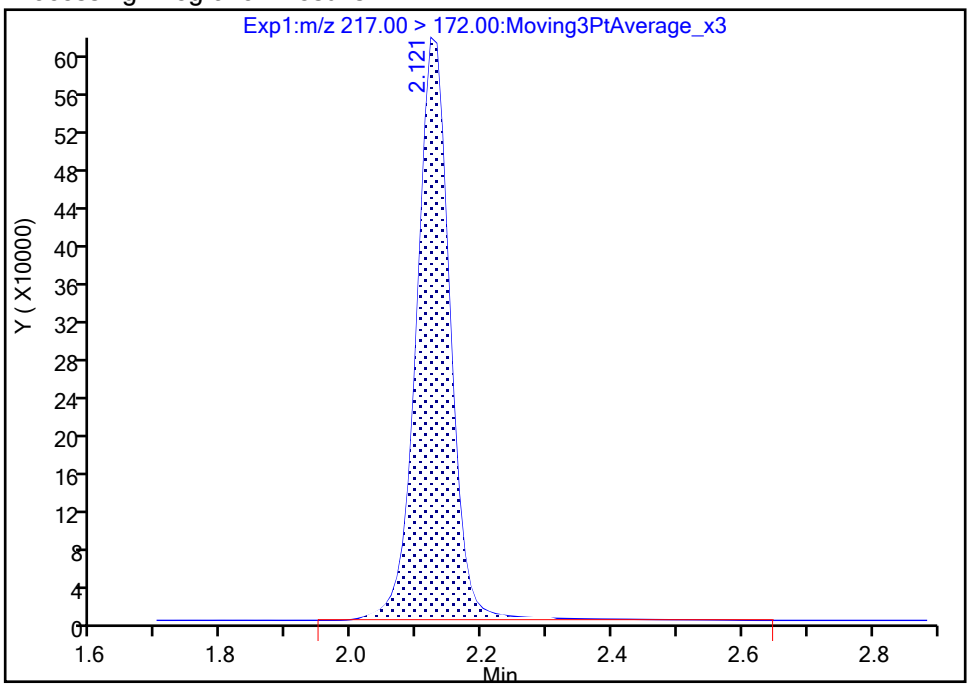
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

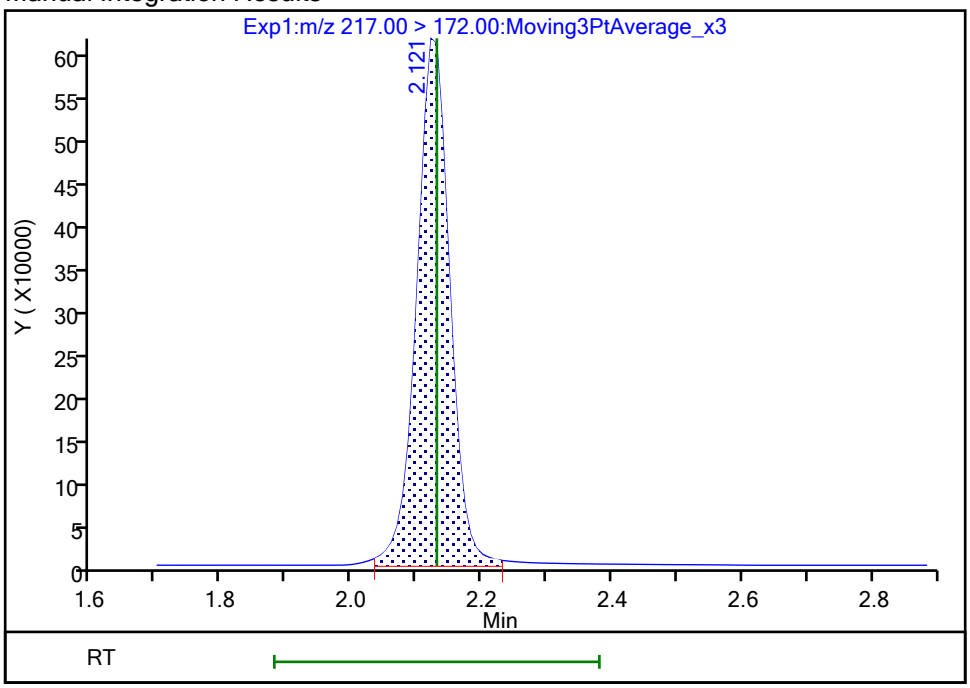
Processing Integration Results

RT: 2.12
Area: 2218572
Amount: 1.385966
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2176691
Amount: 1.359802
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:09:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

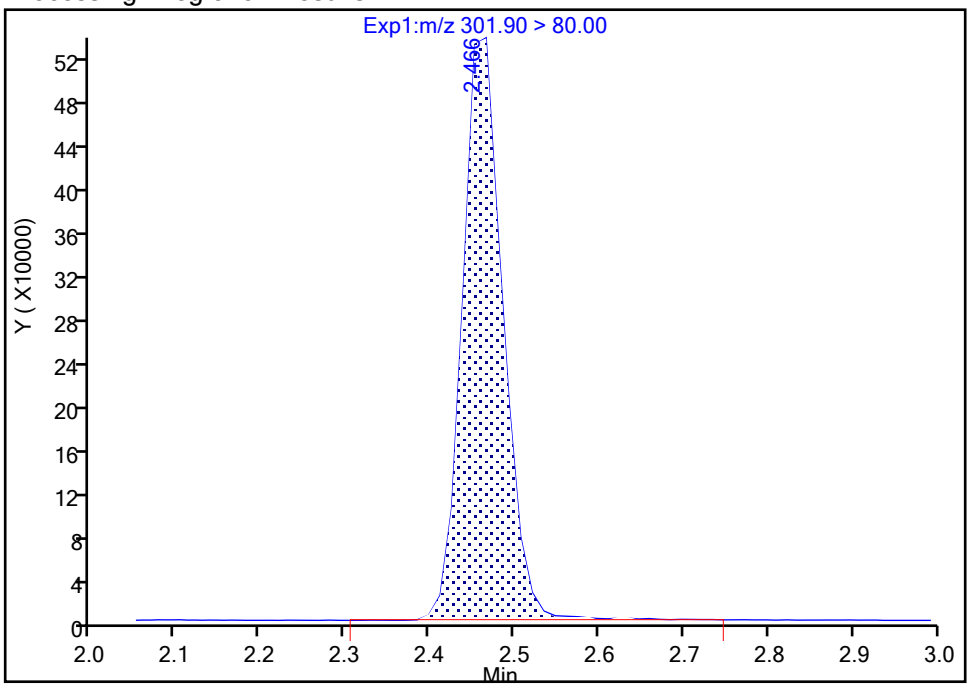
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

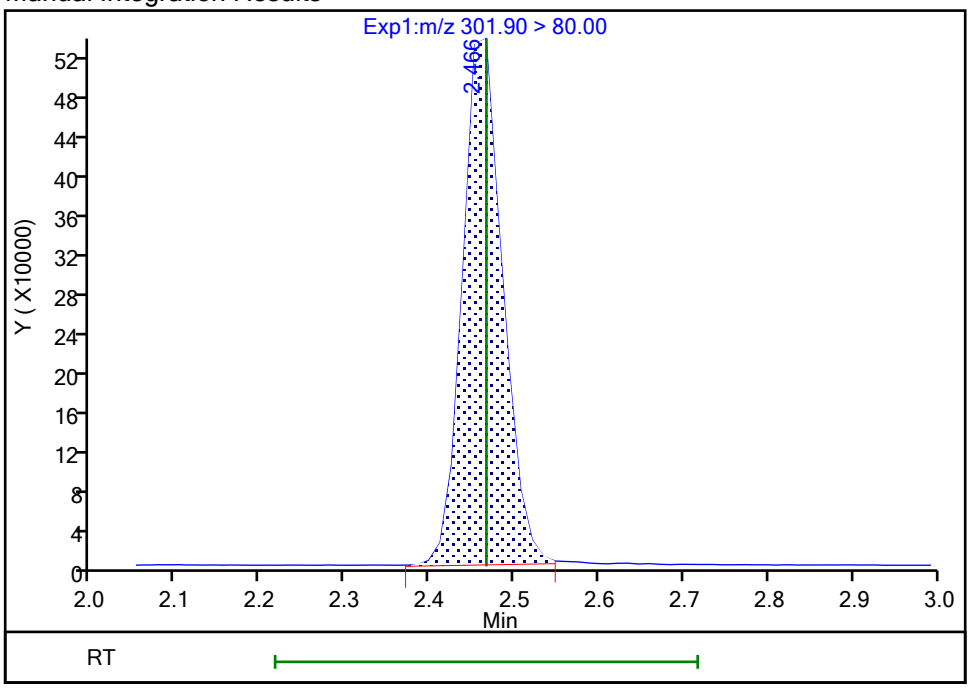
Processing Integration Results

RT: 2.47
Area: 1795897
Amount: 1.068395
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1779334
Amount: 1.058542
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:09:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

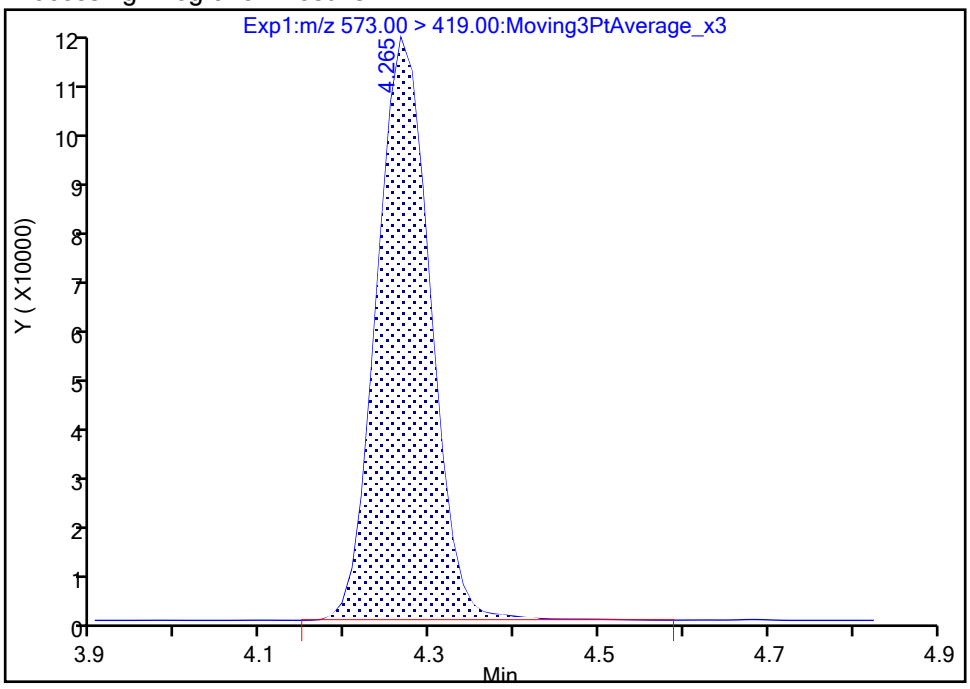
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C11.d				
Injection Date:	21-Oct-2023 01:39:05	Instrument ID:	LC812		
Lims ID:	460-290219-A-12-A	Lab Sample ID:	200-290219-12		
Client ID:	1000-101223-0002				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

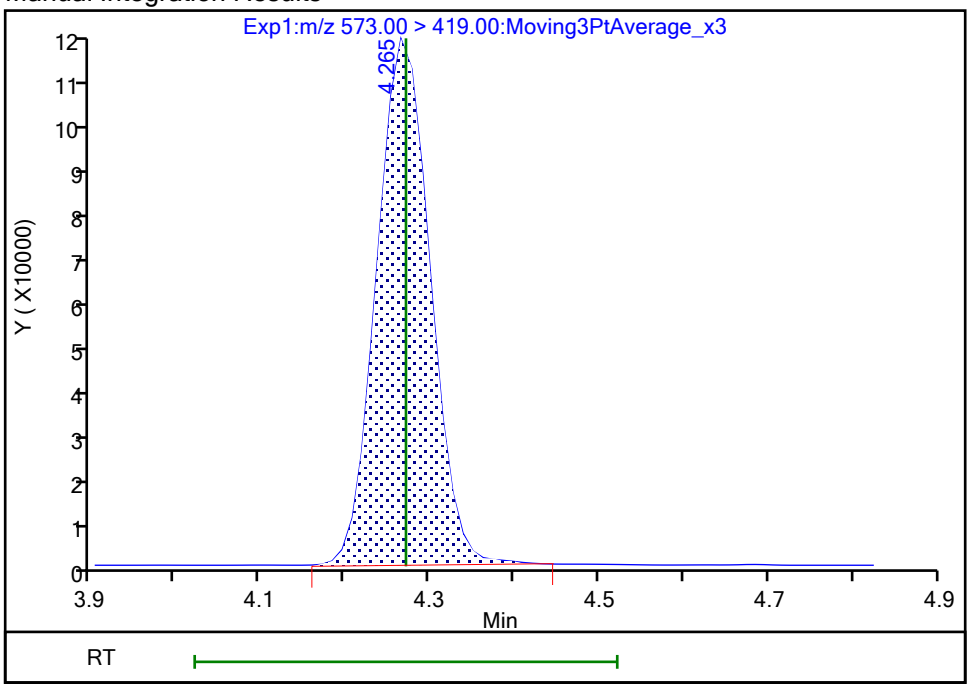
Processing Integration Results

RT: 4.27
Area: 495972
Amount: 1.159401
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 492760
Amount: 1.151892
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 15:09:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.6524 0.9526	1.2498 0.8290	1.0107	0.9321	0.9433	L2ID	0.0370	0.9043							0.9970		0.9900
Perfluoropentanoic acid	0.9814 1.1023	1.2167 0.9980	1.0808	1.1330	1.0416	AveID		1.0791				7.6		20.0			
Perfluorobutanesulfonic acid	1.1612 1.1003	1.1884 0.9103	1.1783	1.1604	1.1195	AveID		1.1169				8.6		20.0			
4:2 Fluorotelomer sulfonic acid	3.4184 3.3656	3.9768 3.1033	3.3451	3.2188	3.3429	AveID		3.3958				8.2		20.0			
Perfluorohexanoic acid	1.1882 1.0691	1.1566 1.0070	1.1410	1.0537	1.0877	AveID		1.1005				5.8		20.0			
Perfluoropentanesulfonic acid	1.4845 1.2935	1.4521 1.1291	1.2900	1.2829	1.2091	AveID		1.3059				9.6		20.0			
HFPODA	0.9814 0.9865	1.0329 1.0173	1.0323	0.9948	0.9631	AveID		1.0012				2.7		20.0			
Perfluorohexanesulfonic acid	1.2928 1.0776	1.1776 1.0324	1.0608	1.0404	1.0673	AveID		1.1070				8.6		20.0			
Perfluoroheptanoic acid	1.2326 1.1236	1.2826 0.9928	1.0542	1.0768	1.0835	AveID		1.1209				9.1		20.0			
DONA	6.2912 5.4323	5.8563 +++++	5.6532	5.8591	5.4332	AveID		5.7542				5.6		20.0			
Perfluoroheptanesulfonic acid	1.5386 1.5214	1.4429 1.3749	1.4126	1.3983	1.4277	AveID		1.4452				4.3		20.0			
6:2 Fluorotelomer sulfonic acid	3.0797 2.6772	2.9248 2.3586	2.8187	2.5735	2.6999	AveID		2.7332				8.6		20.0			
Perfluorooctanoic acid	1.2162 0.9982	1.1278 1.0173	1.0470	1.0322	1.0174	AveID		1.0651				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid	1.2942 1.1749	1.2075 1.1201	1.1227	1.1283	1.1172	AveID		1.1664				5.6		20.0			
Perfluorononanoic acid	1.0909 0.9315	1.0135 0.8900	0.9991	0.9692	0.9662	AveID		0.9800				6.5		20.0			
9Cl-PF3ONS	4.1020 3.5800	3.6236 2.9351	3.5909	3.5582	3.5944	AveID		3.5692				9.5		20.0			
Perfluorononanesulfonic acid	0.9328 0.9318	0.8683 0.8687	0.8784	0.8769	0.8548	AveID		0.8874				3.6		20.0			
Perfluorodecanoic acid	1.0281 0.9602	1.0154 0.8863	1.0541	1.0439	1.0074	AveID		0.9994				5.8		20.0			
8:2 Fluorotelomer sulfonic acid	2.4547 2.0072	2.6137 1.8970	2.2575	2.0908	2.0894	AveID		2.2015				11.6		20.0			
Perfluorooctanesulfonamide	1.0228 0.9436	0.9703 0.8970	0.9494	0.9521	0.9419	AveID		0.9539				4.0		20.0			
NMeFOSAA	0.9443 0.8812	0.9804 0.8681	0.9111	0.8934	0.8734	AveID		0.9074				4.6		20.0			
Perfluorodecanesulfonic acid	0.7041 0.7196	0.6658 0.6468	0.6593	0.6839	0.7012	AveID		0.6830				3.9		20.0			
Perfluoroundecanoic acid	1.0537 0.9843	1.1393 0.9061	1.0315	1.0530	1.0465	AveID		1.0306				6.9		20.0			
N-ethylperfluorooctanesulfonamidoacetic acid	1.2597 0.9339	1.0412 0.9751	0.9527	0.9331	0.9057	AveID		1.0002				12.2		20.0			
11Cl-PF3OUdS	6.1952 4.9604	5.5951 +++++	5.4392	5.5008	5.1507	AveID		5.4735				7.8		20.0			
Perfluorododecanoic acid	1.1479 1.0203	1.0537 0.8606	1.0533	0.9749	1.0139	AveID		1.0178				8.6		20.0			
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	1.4856 1.2641	1.3967 1.2755	1.3186	1.2286	1.2426	AveID		1.3160				7.1		20.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2394 0.2329	0.2672 0.2134	0.2319	0.2233	0.2121	AveID		0.2315				8.1		20.0			
Perfluorotridecanoic acid	1.2114 1.0324	1.0619 0.8831	1.1223	1.0731	1.1045	AveID		1.0698				9.4		20.0			
Perfluorotetradecanoic acid	0.1299 0.1049	0.1180 0.1087	0.1103	0.1048	0.1060	AveID		0.1118				8.2		20.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.1830 0.9749	1.1040 0.8219	0.9746	0.9651	0.9768	AveID		1.0000				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoro-n-octadecanoic acid (PFODA)	0.8629 0.7648	0.8634 0.6721	0.7865	0.8020	0.7147	AveI n		0.7809				9.1		20.0			
13C4 PFBA	1.0672 0.9509	0.9641 0.9862	0.9676	0.9942	1.0117	Ave		0.9917				3.9		50.0			
13C5 PFPeA	0.8654 0.7385	0.7296 0.7399	0.7610	0.7877	0.7652	Ave		0.7696				6.1		50.0			
13C3 PFBS	1.0756 1.0192	0.9876 1.1612	0.9549	1.0294	1.0615	Ave		1.0413				6.4		50.0			
M2-4:2 FTS	0.1343 0.1194	0.1086 0.1243	0.1164	0.1216	0.1185	Ave		0.1204				6.5		50.0			
13C2 PFHxA	0.8778 0.7694	0.7838 0.7387	0.7436	0.7956	0.7718	Ave		0.7830				5.9		50.0			
13C3 HFPO-DA	0.1643 0.1519	0.1501 0.1535	0.1409	0.1528	0.1474	Ave		0.1516				4.7		50.0			
18O2 PFHxS	0.7448 0.7507	0.6904 0.8129	0.7226	0.7607	0.7427	Ave		0.7464				5.0		50.0			
13C4 PFHpA	0.8886 0.8385	0.8151 0.8749	0.8445	0.8653	0.8858	Ave		0.8590				3.2		50.0			
M2-6:2 FTS	0.1544 0.1505	0.1511 0.1604	0.1460	0.1626	0.1607	Ave		0.1551				4.0		50.0			
13C4 PFOA	0.9601 0.9669	0.9919 0.9091	0.9657	0.9965	1.0218	Ave		0.9731				3.7		50.0			
13C4 PFOS	0.4674 0.4580	0.4521 0.5077	0.4662	0.4873	0.4807	Ave		0.4742				4.0		50.0			
13C5 PFNA	1.1059 1.0804	0.9837 1.0672	1.0142	1.1040	1.0572	Ave		1.0590				4.3		50.0			
13C2 PFDA	1.1803 1.1318	1.0494 1.1115	1.0411	1.0951	1.1528	Ave		1.1089				4.6		50.0			
M2-8:2 FTS	0.1812 0.1848	0.1605 0.1855	0.1573	0.1785	0.1730	Ave		0.1744				6.5		50.0			
13C8 FOSA	0.8923 0.9862	0.9301 0.9872	0.9041	0.9724	0.9514	Ave		0.9462				4.1		50.0			
d3-NMeFOSAA	0.2790 0.2660	0.2549 0.2833	0.2456	0.2672	0.2590	Ave		0.2650				5.0		50.0			
13C2 PFUnA	1.1562 1.0399	0.9889 1.0045	1.0013	1.0578	1.0784	Ave		1.0467				5.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
d5-NEtFOSAA	0.2684 0.2609	0.2442 0.2414	0.2482	0.2513	0.2718	Ave		0.2552				4.7		50.0			
13C2 PFDoA	1.0873 1.0291	1.0666 1.1188	1.0211	1.0940	1.0303	Ave		1.0639				3.6		50.0			
13C2 PFTeDA	1.0903 1.0729	1.0314 1.0760	1.0078	1.0703	1.0665	Ave		1.0593				2.7		50.0			
13C2 PFHxDA	1.3133 1.1726	1.1714 1.2858	1.1658	1.2481	1.1872	Ave		1.2206				5.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290219-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid		L2ID	148954 12675387	192635 29150051	774804	1439078	3820872	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanoic acid		AveID	71742 11390973	141937 26331175	651716	1385943	3191311	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorobutanesulfonic acid		AveID	93584 13919716	166434 33432260	790713	1645342	4220392	0.0444 8.87	0.0887 22.2	0.444	0.887	2.22
4:2 Fluorotelomer sulfonic acid		AveID	36330 5267048	64699 12889559	288946	569311	1486720	0.0469 9.37	0.0937 23.4	0.469	0.937	2.34
Perfluorohexanoic acid		AveID	88105 11510430	144941 26521589	672203	1301870	3361171	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanesulfonic acid		AveID	87889 12787110	150824 30796216	694967	1426185	3383549	0.0471 9.41	0.0941 23.5	0.471	0.941	2.35
HFPODA		AveID	13619 2096317	24788 5568235	115257	235976	568553	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorohexanesulfonic acid		AveID	74343 10346652	118807 27349473	555092	1123331	2901162	0.0457 9.14	0.0914 22.9	0.457	0.914	2.29
Perfluoroheptanoic acid		AveID	92528 13183148	167142 30971904	705383	1446925	3843212	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
DONA		AveID	234702 32898209	400019 +++++	1973200	4190396	9881253	0.0473 9.45	0.0945 +++++	0.473	0.945	2.36
Perfluoroheptanesulfonic acid		AveID	57887 9291673	99394 23718890	497245	1008539	2618603	0.0477 9.53	0.0953 23.8	0.477	0.953	2.38
6:2 Fluorotelomer sulfonic acid		AveID	38205 5360896	67191 12827492	310157	618135	1652144	0.0476 9.51	0.0951 23.8	0.476	0.951	2.38
Perfluorooctanoic acid		AveID	98642 13504480	178853 32974345	801060	1597361	4162515	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorooctanesulfonic acid		AveID	47415 6987392	80998 18816206	384806	792430	1995347	0.0464 9.28	0.0928 23.2	0.464	0.928	2.32
Perfluorononanoic acid		AveID	101909 14082035	159396 33868175	802848	1661649	4090183	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
9Cl-PF3ONS		AveID	151088	244371	1237458	2512476	6453976	0.0467	0.0933	0.467	0.933	2.33

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21405197	49573864				9.33	23.3			
Perfluorononanesulfonic acid		AveID	35424 5744699	60375 15127922	312103	638462	1582540	0.0481 9.62	0.0962 24.1	0.481	0.962	2.41
Perfluorodecanoic acid		AveID	102502 15207258	170377 35125264	869526	1775242	4650088	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
8:2 Fluorotelomer sulfonic acid		AveID	36060 4983035	64388 12048759	270156	556332	1389051	0.0480 9.60	0.0960 24.0	0.480	0.960	2.40
Perfluorooctanesulfonamide		AveID	77087 13020569	144294 31572610	680067	1437750	3587757	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
NMeFOSAA		AveID	22256 3280076	39956 8770277	177278	370720	905881	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorodecanesulfonic acid		AveID	26824 4450137	46440 11299421	234996	499466	1302171	0.0483 9.65	0.0965 24.1	0.483	0.965	2.41
Perfluoroundecanoic acid		AveID	102917 14323125	180134 32455800	818335	1729770	4518784	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	28562 3409503	40651 8392085	187350	364226	985607	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
11Cl-PF3OUdS		AveID	230633 29976782	381367 +++++	1894487	3925775	9347621	0.0472 9.43	0.0943 +++++	0.472	0.943	2.36
Perfluorododecanoic acid		AveID	105433 14693173	179683 34331936	852163	1656352	4182445	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)		AveID	21915 3151402	34552 8134970	158460	328276	829529	0.0482 9.64	0.0964 24.1	0.482	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	9148 1445002	18698 3739893	82920	163618	395113	0.0484 9.68	0.0968 24.2	0.484	0.968	2.42
Perfluorotridecanoic acid		AveID	111264 14866529	181083 35226779	907955	1823052	4556433	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorotetradecanoic acid		AveID	11967 1575221	19454 4171778	88102	174160	452708	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		AveID	131230 15997184	206767 37681202	900190	1870661	4643411	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	95729 12548221	161712 30813591	726427	1554372	3397685	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
13C4 PFBA	13PFOA	Ave	2253572 1663241	1926725 1758198	1916527	1929850	2025338	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C5 PFPeA	13PFOA	Ave	1827623 1291692	1458161 1319141	1507442	1529086	1531883	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 PFBS	13PFOA	Ave	2112456 1657995	1835537 1925353	1758991	1858340	1976378	1.16 1.16	1.16 1.16	1.16	1.16	1.16
M2-4:2 FTS	13PFOA	Ave	264843 194992	202715 207012	215257	220382	221658	1.17 1.17	1.17 1.17	1.17	1.17	1.17
13C2 PFHxA	13PFOA	Ave	1853797 1345799	1566461 1316912	1472867	1544435	1545081	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 HFPO-DA	13PFOA	Ave	346930 265620	299977 273677	279126	296521	295164	1.25 1.25	1.25 1.25	1.25	1.25	1.25
18O2 PFHxS	13PFOA	Ave	1487994 1242233	1305238 1370941	1353967	1396957	1406672	1.18 1.18	1.18 1.18	1.18	1.18	1.18
13C4 PFHpA	13PFOA	Ave	1876608 1466571	1628956 1559821	1672833	1679653	1773444	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-6:2 FTS	13PFOA	Ave	309808 250039	286854 271643	274798	299923	305639	1.19 1.19	1.19 1.19	1.19	1.19	1.19
13C4 PFOA	13PFOA	Ave	2027588 1691186	1982384 1620734	1912820	1934463	2045642	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C4 PFOS	13PFOA	Ave	943517 765818	863764 865311	882764	904398	919926	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C5 PFNA	13PFOA	Ave	2335475 1889768	1965971 1902682	2008931	2143126	2116548	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDA	13PFOA	Ave	2492424 1979736	2097344 1981566	2062234	2125756	2307904	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	13PFOA	Ave	366485 309678	307295 316911	298552	331913	331708	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C8 FOSA	13PFOA	Ave	1884229 1724931	1858847 1759972	1790735	1887535	1904586	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290219-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d3-NMeFOSAA	13PFOA	Ave	589245 465286	509447 505130	486461	518688	518571	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFUnA	13PFOA	Ave	2441700 1818926	1976379 1790927	1983358	2053330	2158999	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d5-NEtFOSAA	13PFOA	Ave	566846 456350	488020 430319	491633	487913	544137	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDoA	13PFOA	Ave	2296115 1800020	2131572 1994604	2022512	2123640	2062631	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	13PFOA	Ave	2302510 1876594	2061289 1918275	1996289	2077683	2135161	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFHxDA	13PFOA	Ave	2773326 2051028	2341179 2292454	2309121	2422773	2376838	1.25 1.25	1.25 1.25	1.25	1.25	1.25

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Jul-2023 17:16:50 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 1
Misc. Info.: 200-0056441-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:27:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.112	2.103	0.009	0.616	2253572	1.35		108	1147	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.120	2.112	0.008	1.004	148954	0.0505		101	7.7	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.704	1827623	1.41		112	783	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.411	2.411	0.0	1.000	71742	0.0455		90.9	3.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.708	2112456	1.20		103	64154	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	93584	0.0461	Target=2.07	104	18.4	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	42190		2.22(1.04-3.11)	104	8.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.693	2.694	-0.001	0.786	264843	1.30		111	103	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.693	2.694	-0.001	1.000	36330	0.0472		101	404	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.797	1853797	1.40		112	1419	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	88105	0.0540	Target=14.29	108	11.4	M
313.00 > 119.00	2.718	2.731	-0.013	0.995	5337		16.51(7.15-21.44)	108	3.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.896	87889	0.0535	Target=2.78	114	123	M
349.00 > 99.00	2.731	2.731	0.0	0.896	29458		2.98(1.39-4.17)	114	37.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.806	2.844	-0.038	0.819	346930	1.36		108	1501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.806	2.844	-0.038	1.000	13619	0.0490		98.0	101	
D 11 18O2 PFHxS										
403.00 > 84.00	3.046	3.092	-0.046	0.889	1487994	1.18		99.8	3478	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.046	3.092	-0.046	1.000	74343	0.0534	Target=3.23	117	116	M
399.00 > 99.00	3.046	3.092	-0.046	1.000	22455		3.31(1.62-4.84)	117	14.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.058	3.104	-0.046	1.000	92528	0.0550	Target=4.11	110	17.1	M
363.00 > 169.00	3.058	3.104	-0.046	1.000	21986		4.21(2.06-6.17)	110	17.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.058	3.104	-0.046	0.892	1876608	1.29		103	5156	
77 DONA										
377.00 > 251.00	3.092	3.138	-0.046	0.824	234702	0.0517	Target=3.28	109	257	
377.00 > 85.00	3.092	3.138	-0.046	0.824	72544		3.24(1.64-4.92)	109	83.1	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.408	3.446	-0.038	0.908	57887	0.0507	Target=4.71	106	138	
449.00 > 99.00	3.408	3.446	-0.038	0.908	11640		4.97(2.36-7.07)	106	22.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.417	3.446	-0.029	0.997	309808	1.18		99.6	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.417	3.446	-0.029	1.000	38205	0.0536		113	138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.426	3.464	-0.038	1.000	98642	0.0571	Target=2.90	114	6.8	M
413.00 > 169.00	3.426	3.464	-0.038	1.000	31899		3.09(1.45-4.35)	114	28.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.426	3.464	-0.038	1.000	2027588	1.23		98.7	5902	
* 62 13C2 PFOA										
415.00 > 370.00	3.426	3.464	-0.038		2111765	1.25			5485	
D 18 13C4 PFOS										
503.00 > 80.00	3.754	3.783	-0.029	1.096	943517	1.18		98.6	4119	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.754	3.783	-0.029	1.000	47415	0.0515	Target=4.11	111	65.8	M
499.00 > 99.00	3.754	3.783	-0.029	1.000	11529		4.11(2.05-6.16)	111	16.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.774	3.793	-0.019	1.101	2335475	1.31		104	6410	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.774	3.803	-0.029	1.000	101909	0.0557	Target=8.48	111	17.9	M
463.00 > 169.00	3.764	3.803	-0.039	0.997	10750		9.48(4.24-12.72)	111	35.9	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.922	3.947	-0.025	1.045	151088	0.0536		115	288	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.063	4.074	-0.011	1.082	35424	0.0506	Target=2.17	105	275	M
549.00 > 99.00	4.063	4.074	-0.011	1.082	15853		2.23(1.08-3.25)	105	31.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.084	4.108	-0.024	1.192	2492424	1.33		106	10504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.084	4.108	-0.024	1.000	102502	0.0514	Target=10.55	103	25.3	
513.00 > 169.00	4.084	4.108	-0.024	1.000	10265		9.99(5.27-15.82)	103	39.8	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.096	4.108	-0.012	1.196	366485	1.24		104	569	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.096	4.120	-0.024	1.000	36060	0.0535		112	260	M
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.224	1884229	1.18		94.3	3520	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	77087	0.0536		107	320	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.237	4.249	-0.012	1.237	589245	1.32		105	1006	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.260	-0.011	1.003	22256	0.0520		104	39.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.334	4.346	-0.012	1.155	26824	0.0497	Target=2.28	103	168	
599.00 > 99.00	4.334	4.346	-0.012	1.155	12867		2.08(1.14-3.42)	103	59.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.275	2441700	1.38		110	9527	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.000	102917	0.0511	Target=11.30	102	27.7	
563.00 > 169.00	4.370	4.382	-0.012	1.000	10486		9.81(5.65-16.96)	102	73.6	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.382	4.393	-0.011	1.279	566846	1.31		105	864	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.382	4.393	-0.011	1.000	28562	0.0630		126	124	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.189	230633	0.0534		113	329	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.344	2296115	1.28		102	6831	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	105433	0.0564	Target=8.15	113	10.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	13359		7.89(4.07-12.22)	113	79.9	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.130	21915	0.0544		113	524	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.780	4.779	0.001	1.273	9148	0.0501	Target=0.50	103	110	M
699.00 > 99.00	4.780	4.779	0.001	1.273	18434		0.50(0.25-0.75)	103	160	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	111264	0.0566	Target=6.61	113	12.0	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	15139		7.35(3.31-9.92)	113	149	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.459	2302510	1.29		103	7005	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.002	11967	0.0581	Target=0.96	116	150	
713.00 > 219.00	4.998	5.008	-0.010	1.000	11422		1.05(0.48-1.44)	116	211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	131230	0.0591	Target=7.69	118	14.7	
813.00 > 169.00	5.328	5.328	0.0	1.000	16433		7.99(3.85-11.54)	118	172	
D 44 13C2 PFHxDA										M
815.00 > 770.00	5.328	5.328	0.0	1.555	2773326	1.34		108	1764	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.620	5.611	0.009	1.055	95729	0.0553	Target=9.13	111	15.3	M
913.00 > 169.00	5.620	5.611	0.009	1.055	9904		9.67(4.56-13.69)	111	101	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

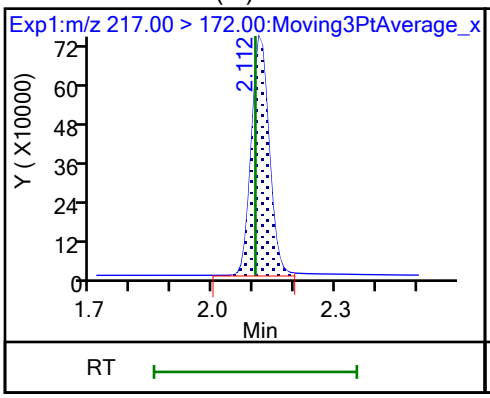
PFAS32NCIC1_00015 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:37 Chrom Revision: 2.3 19-Jul-2023 18:28:48

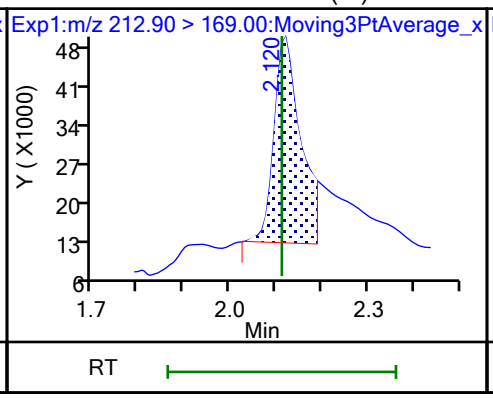
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Injection Date: 26-Jul-2023 17:16:50 Instrument ID: LC812
Lims ID: IC 1
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

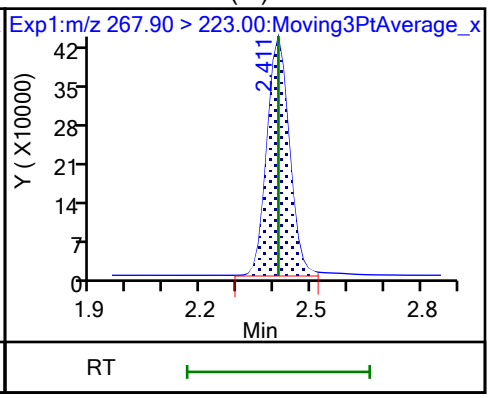
D 1 13C4 PFBA (M)



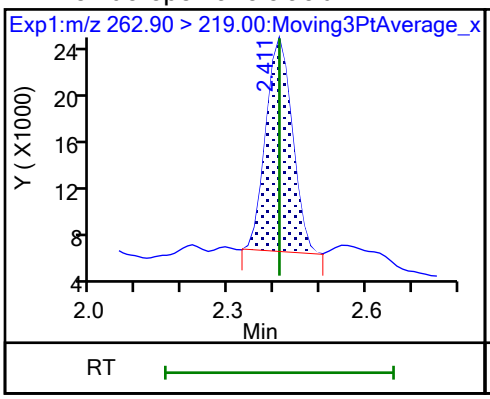
2 Perfluorobutanoic acid (M)



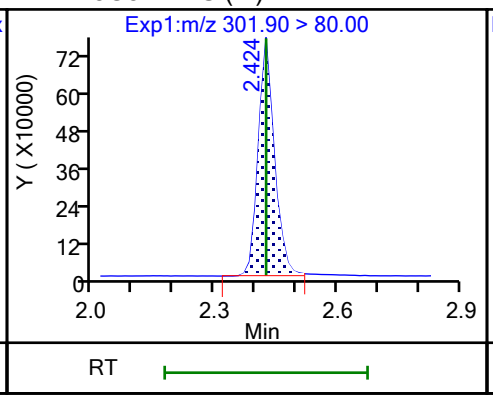
D 3 13C5 PFPeA (M)



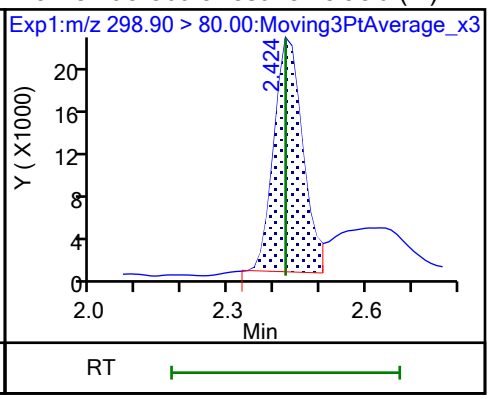
4 Perfluoropentanoic acid



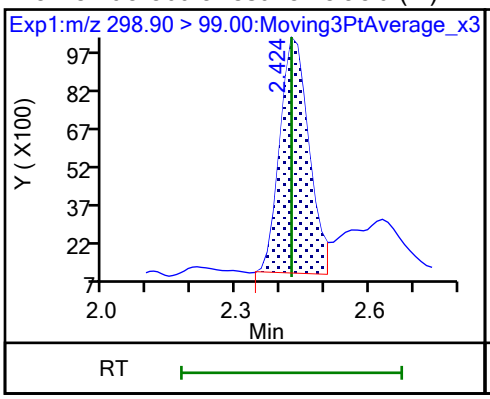
D 47 13C3 PFBS (M)



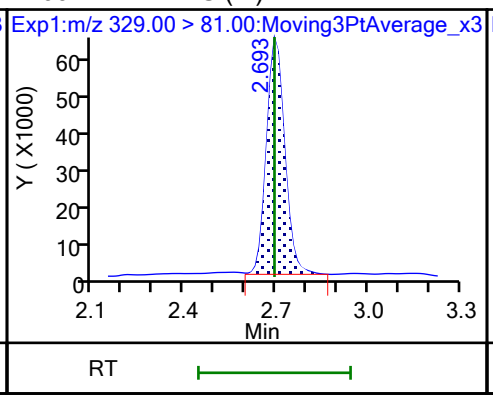
5 Perfluorobutanesulfonic acid (M)



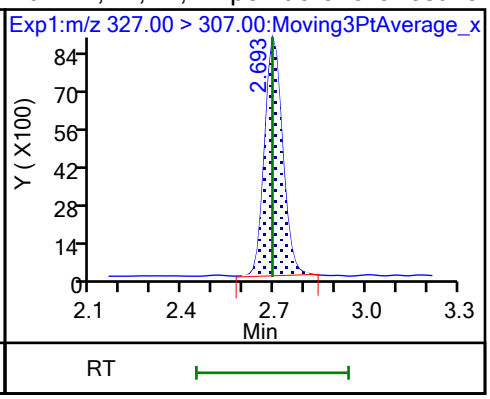
5 Perfluorobutanesulfonic acid (M)



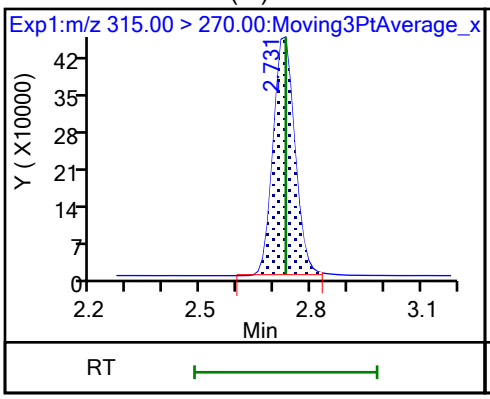
D 60 M2-4:2 FTS (M)



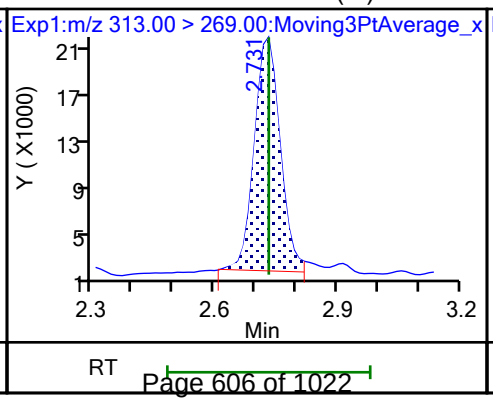
61 1H,1H,2H,2H-perfluorohexanesulfo



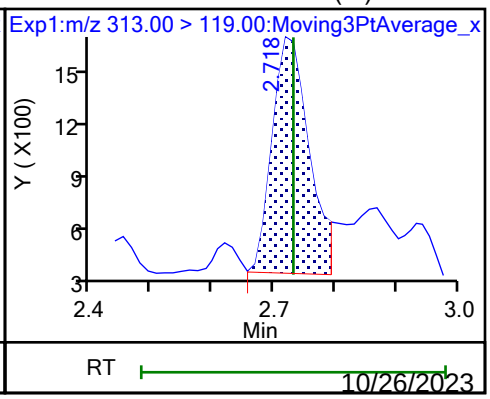
D 7 13C2 PFHxA (M)



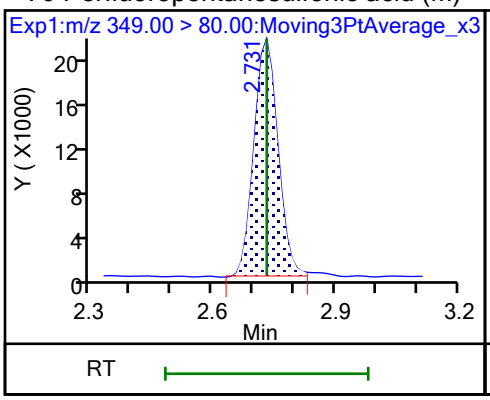
6 Perfluorohexanoic acid (M)



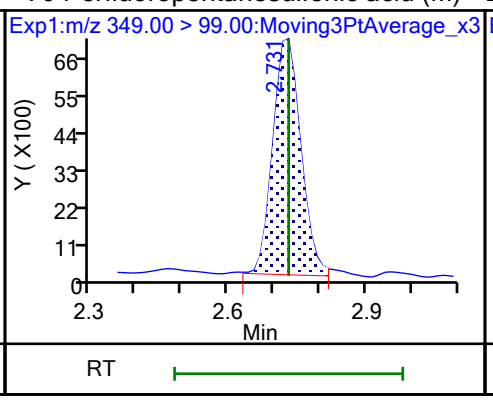
6 Perfluorohexanoic acid (M)



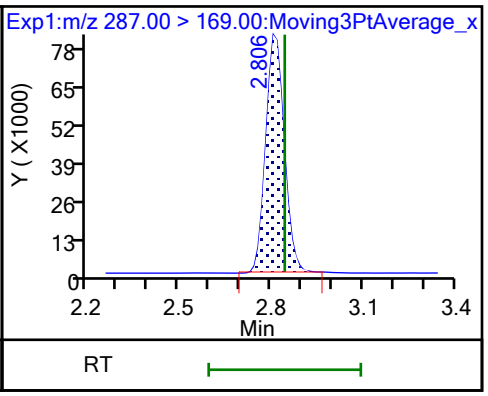
70 Perfluoropentanesulfonic acid (M)



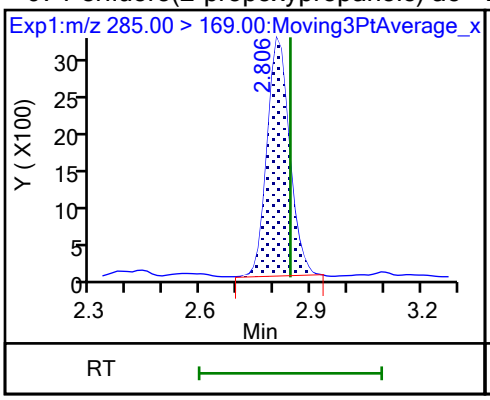
70 Perfluoropentanesulfonic acid (M)



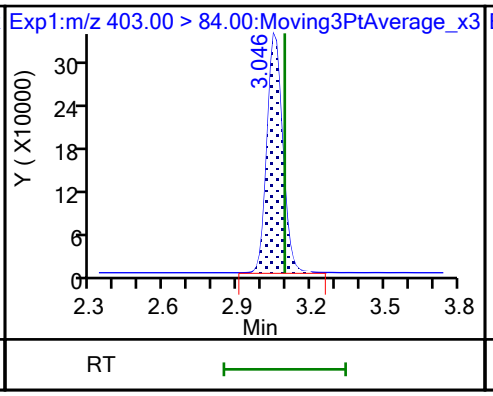
D 64 13C3 HFPO-DA



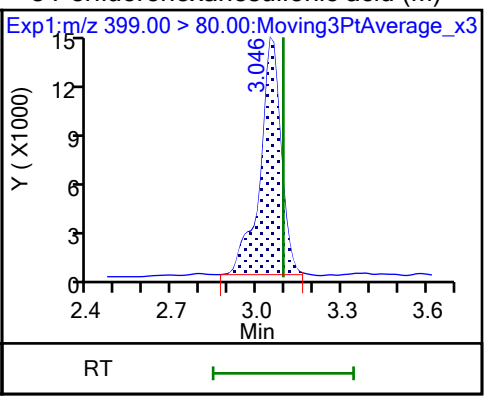
67 Perfluoro(2-propoxypropanoic) ac



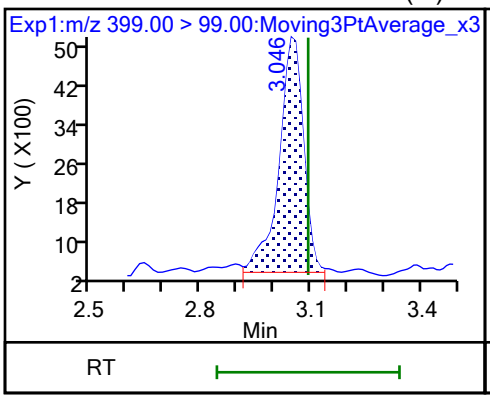
D 11 18O2 PFHxS



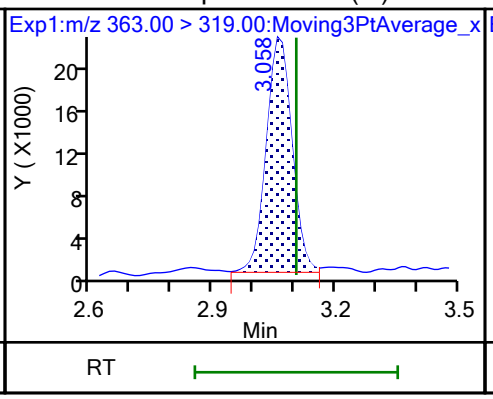
8 Perfluorohexanesulfonic acid (M)



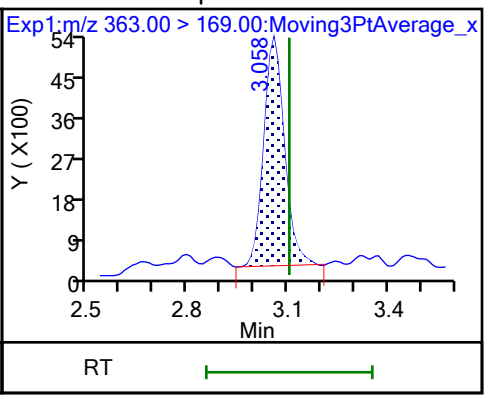
8 Perfluorohexanesulfonic acid (M)



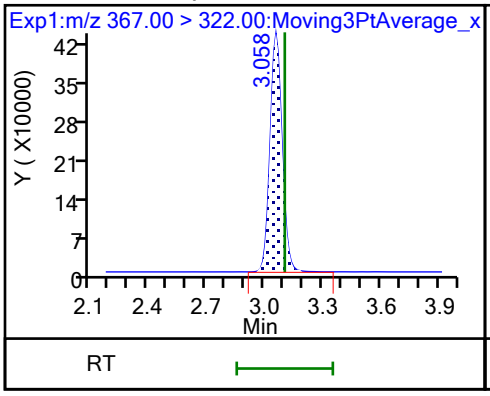
10 Perfluoroheptanoic acid (M)



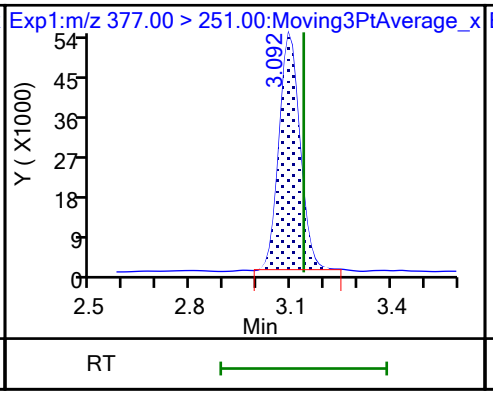
10 Perfluoroheptanoic acid



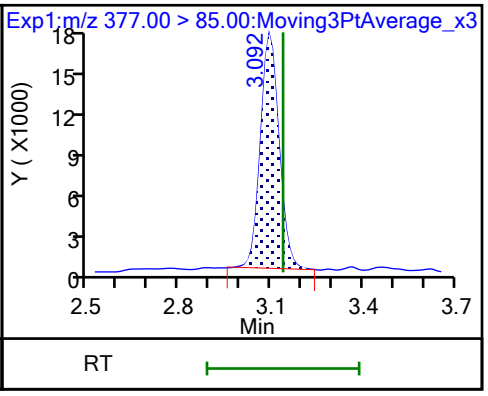
D 9 13C4 PFHpA



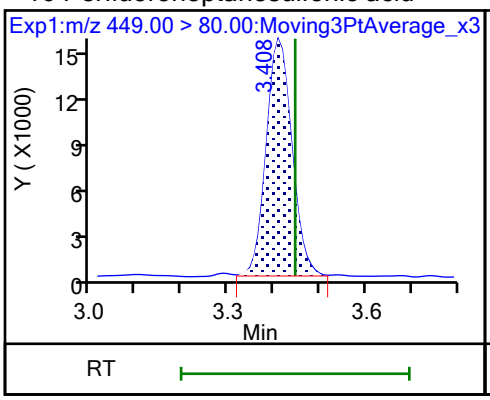
77 DONA



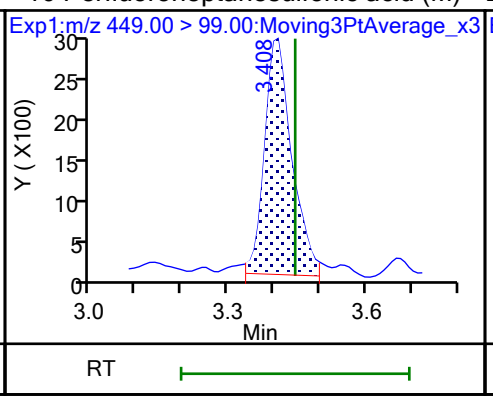
77 DONA



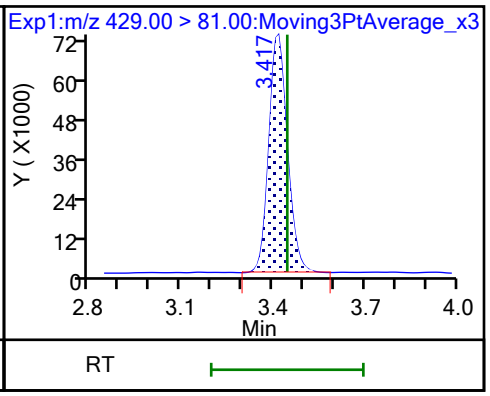
16 Perfluoroheptanesulfonic acid



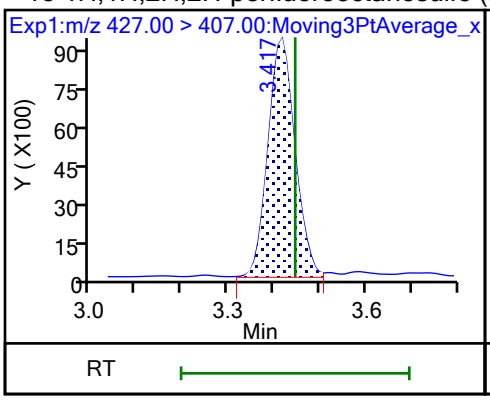
16 Perfluoroheptanesulfonic acid (M)



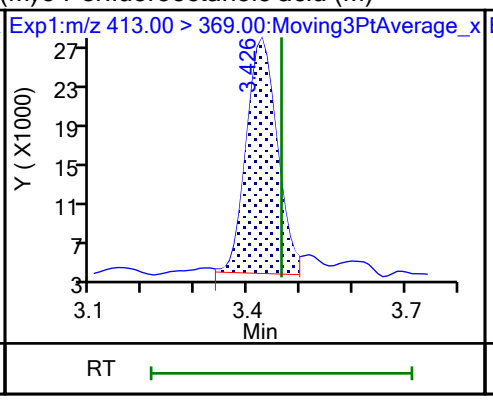
D 12 M2-6:2 FTS



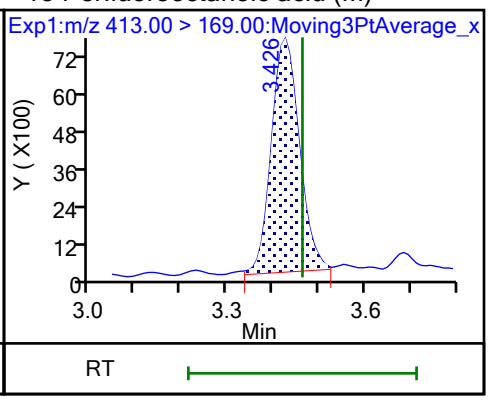
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



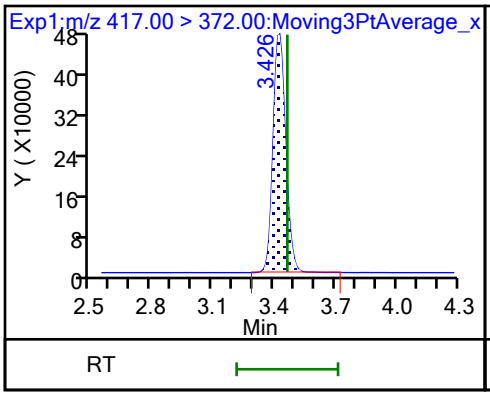
15 Perfluorooctanoic acid (M)



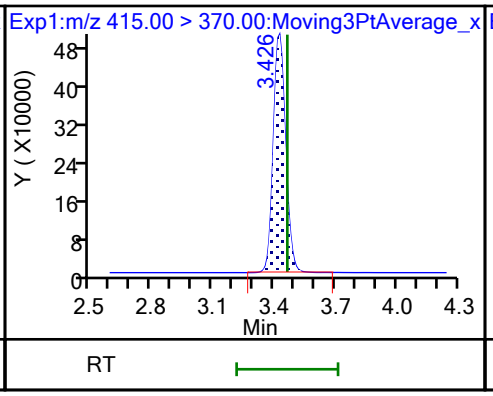
15 Perfluorooctanoic acid (M)



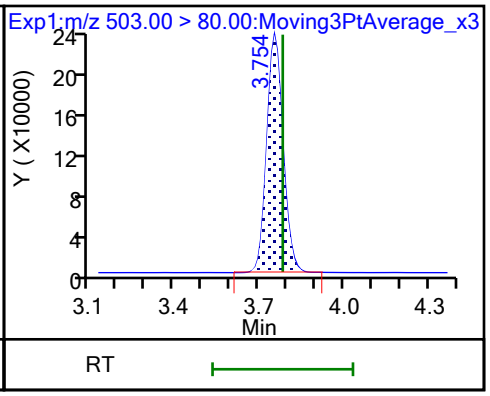
D 14 13C4 PFOA



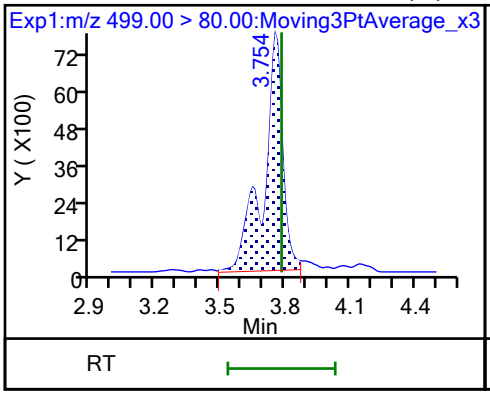
* 62 13C2 PFOA



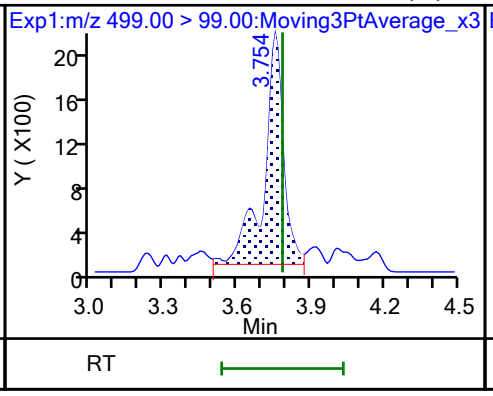
D 18 13C4 PFOS



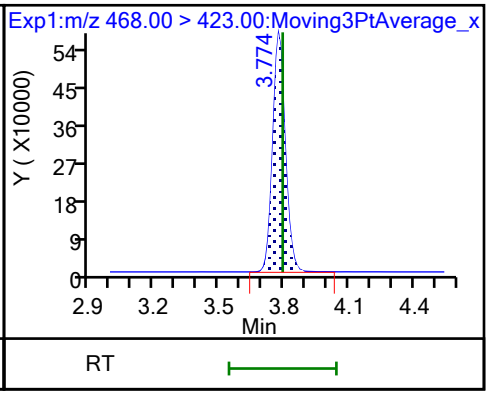
17 Perfluorooctanesulfonic acid (M)



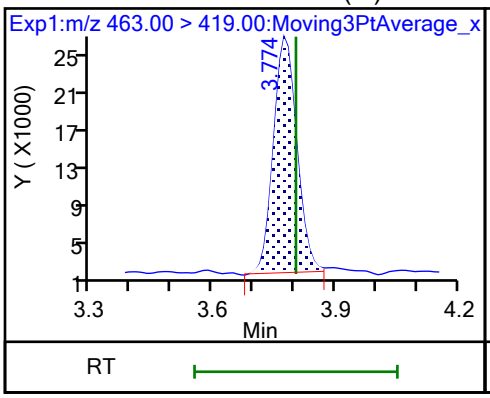
17 Perfluorooctanesulfonic acid (M)



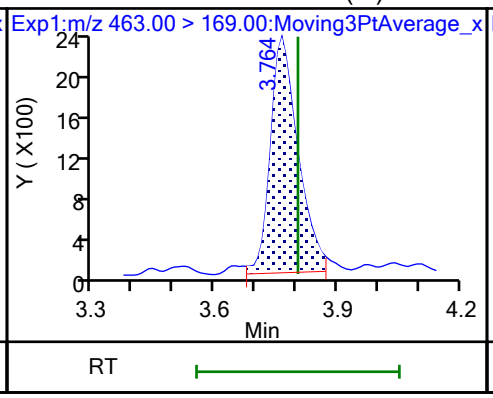
D 19 13C5 PFNA



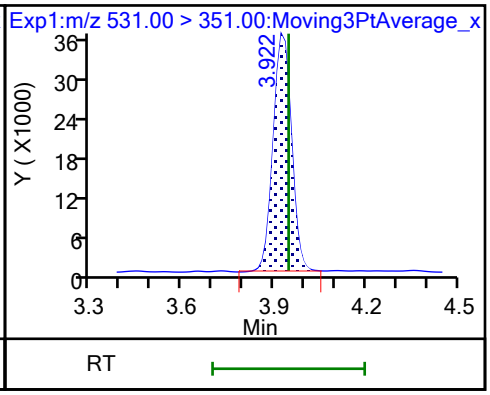
20 Perfluorononanoic acid (M)



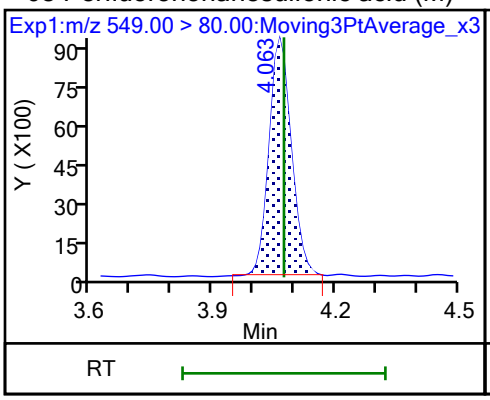
20 Perfluorononanoic acid (M)



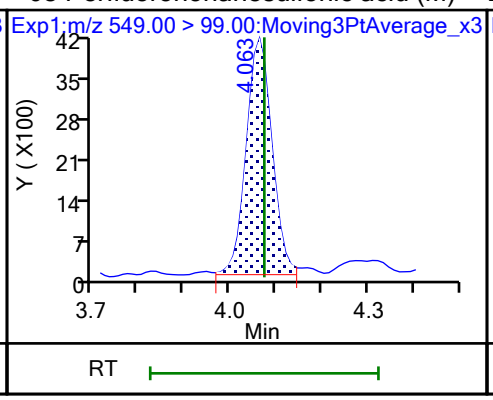
69 9-Chlorohexadecafluoro-3-oxanona



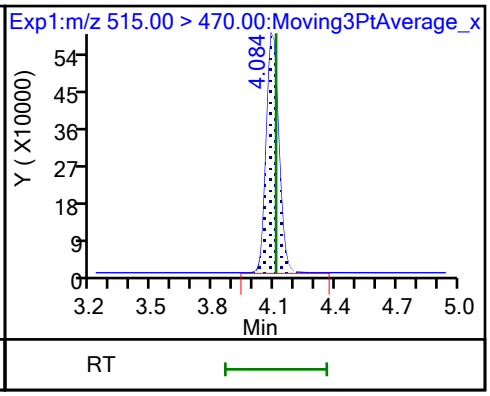
68 Perfluorononanesulfonic acid (M)



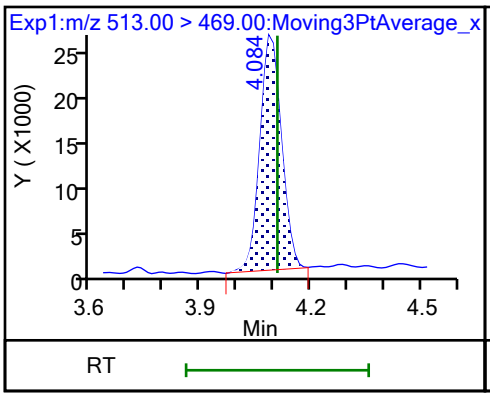
68 Perfluorononanesulfonic acid (M)



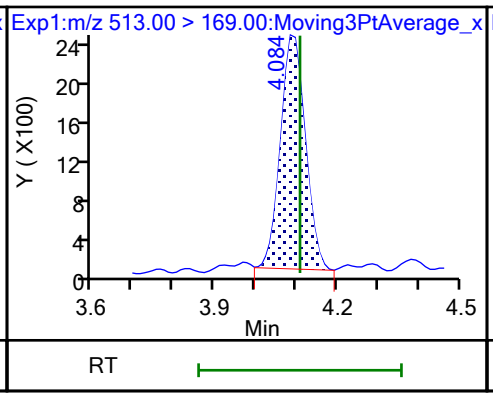
D 23 13C2 PFDA



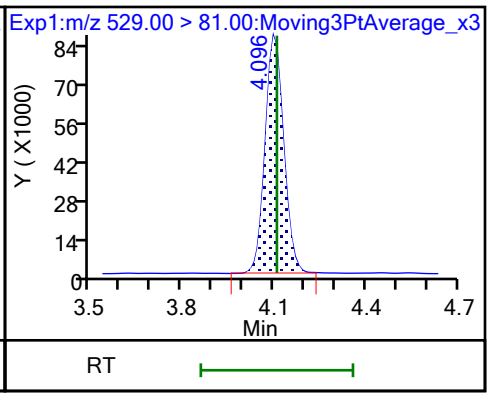
24 Perfluorodecanoic acid



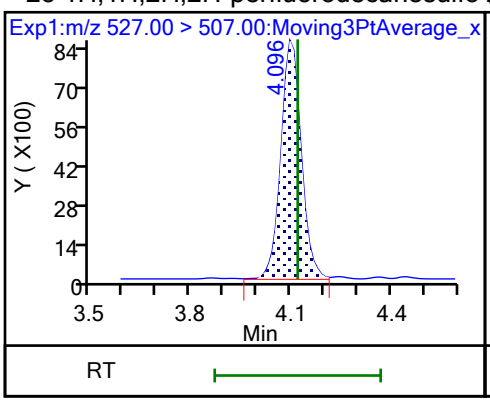
24 Perfluorodecanoic acid



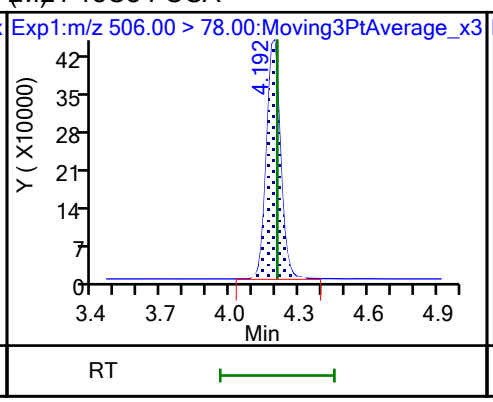
D 26 M2-8:2 FTS



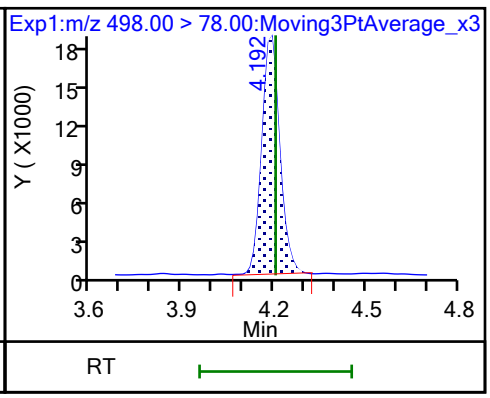
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



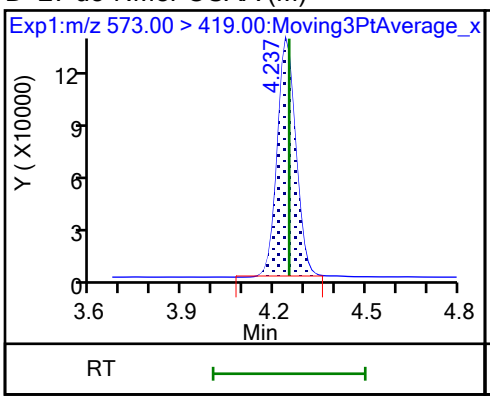
D 21 13C8 FOSA



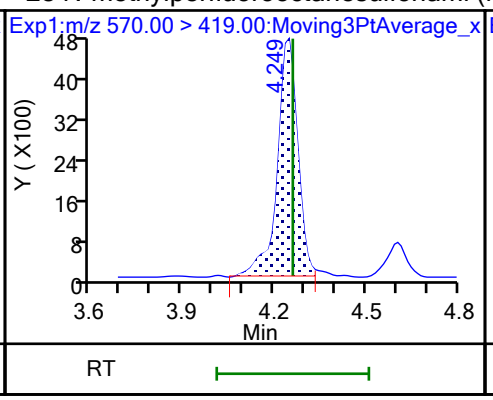
22 Perfluorooctanesulfonamide



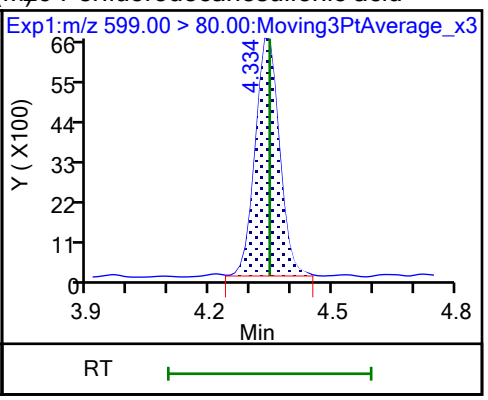
D 27 d3-NMeFOSAA (M)



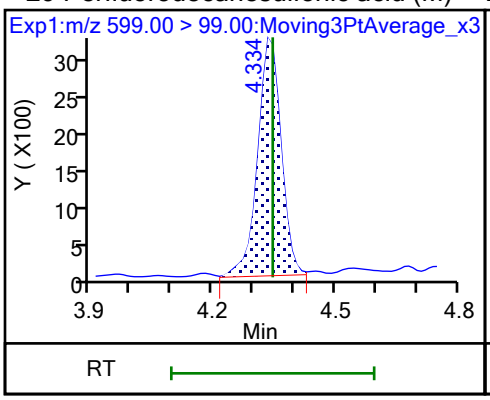
28 N-methylperfluorooctanesulfonami (M)



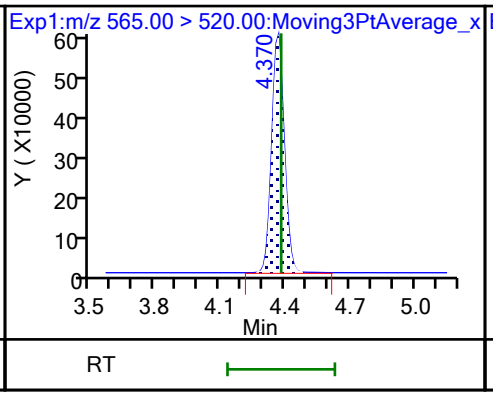
29 Perfluorodecanesulfonic acid



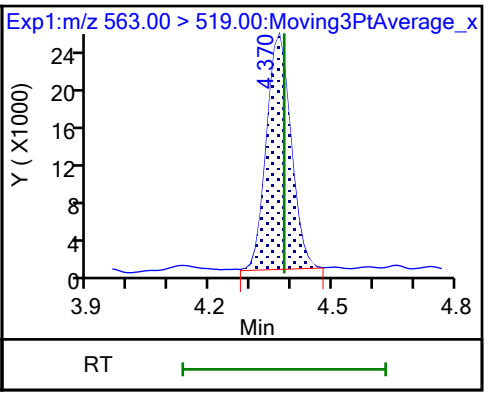
29 Perfluorodecanesulfonic acid (M)



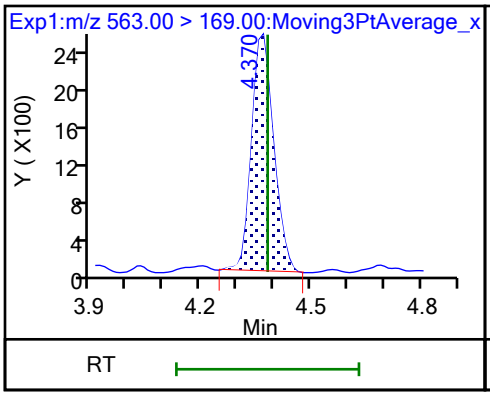
D 30 13C2 PFUnA



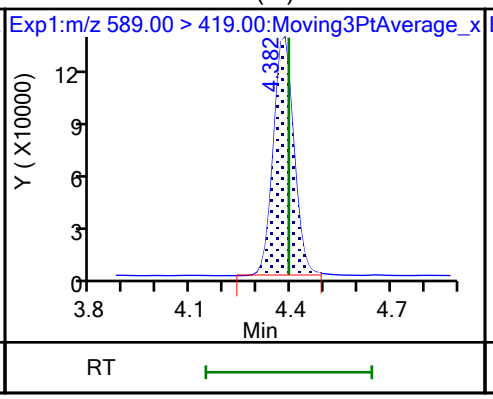
31 Perfluoroundecanoic acid



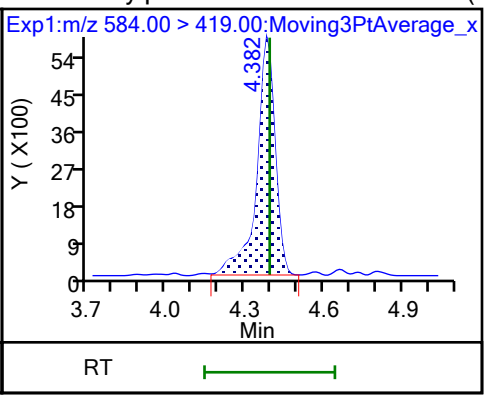
31 Perfluoroundecanoic acid



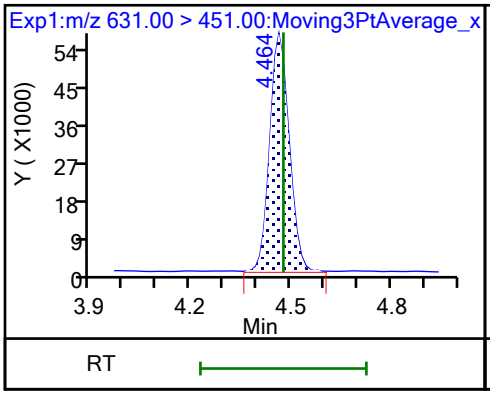
D 32 d5-NEtFOSAA (M)



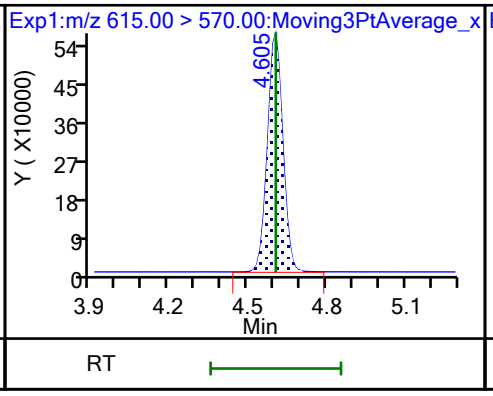
33 N-ethylperfluorooctanesulfonamid (M)



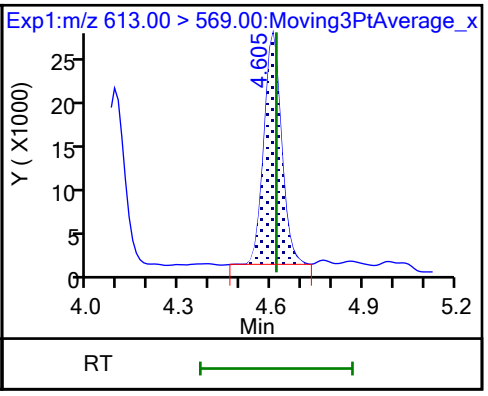
66 11-Chloroeicosafluoro-3-oxaundec



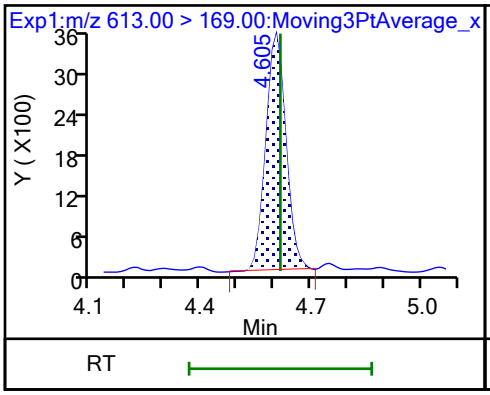
D 36 13C2 PFDoA



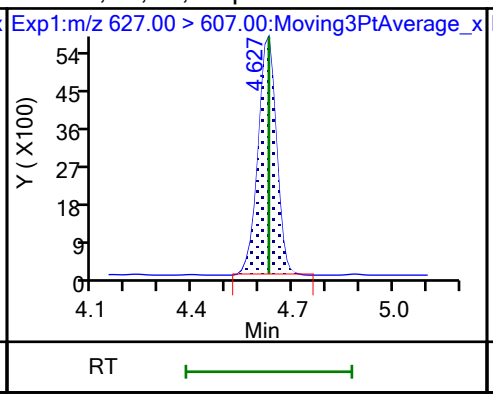
37 Perfluorododecanoic acid



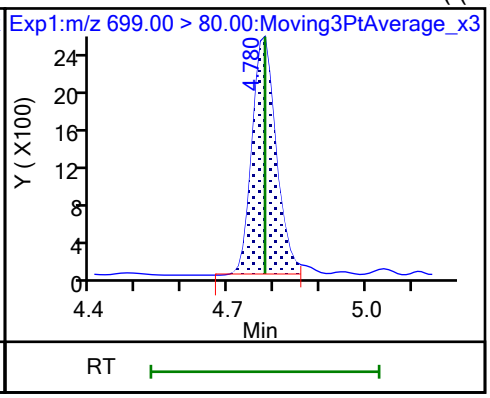
37 Perfluorododecanoic acid



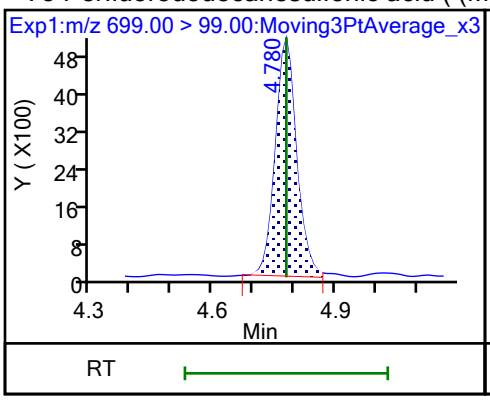
74 1H,1H,2H,2H-perfluorododecanesul



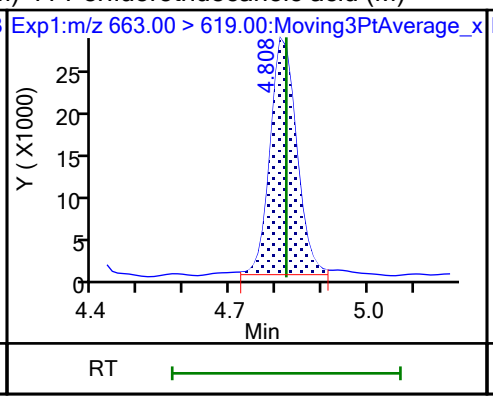
75 Perfluorododecanesulfonic acid ((M)



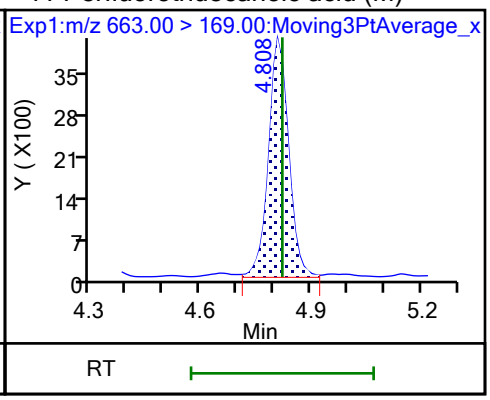
75 Perfluorododecanesulfonic acid ((M)



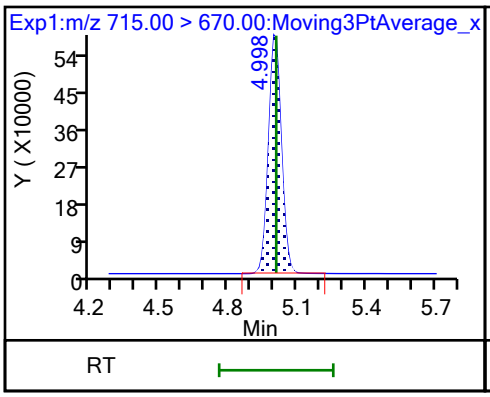
41 Perfluorotridecanoic acid (M)



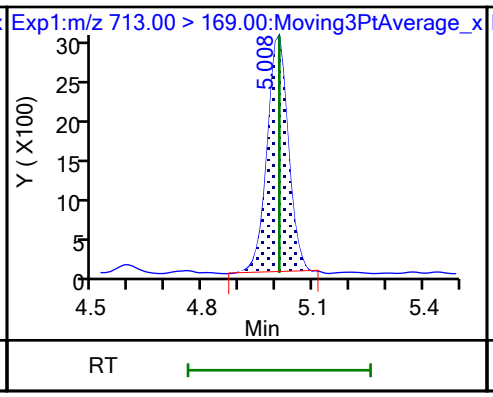
41 Perfluorotridecanoic acid (M)



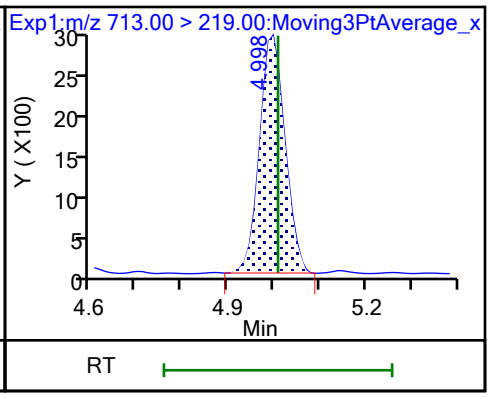
D 43 13C2 PFTeDA



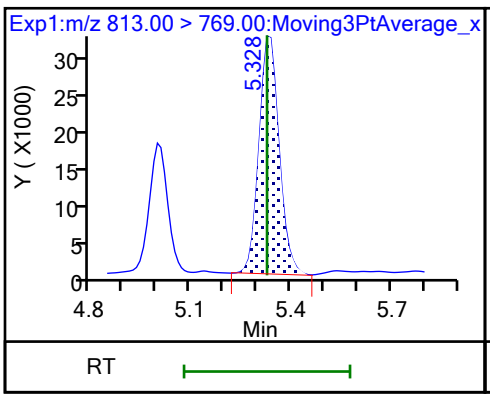
42 Perfluorotetradecanoic acid



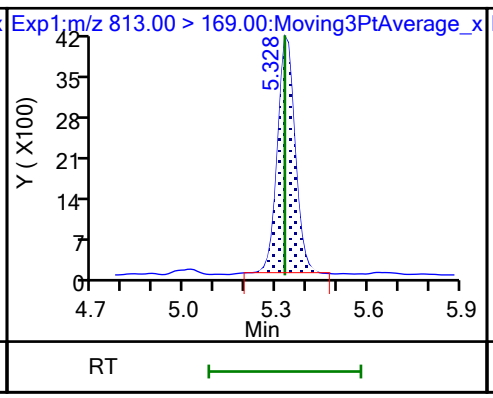
42 Perfluorotetradecanoic acid



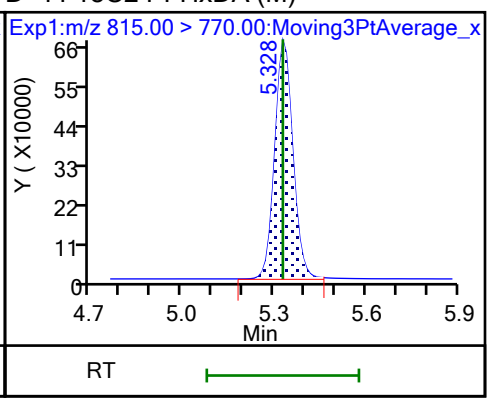
45 Perfluorohexadecanoic acid



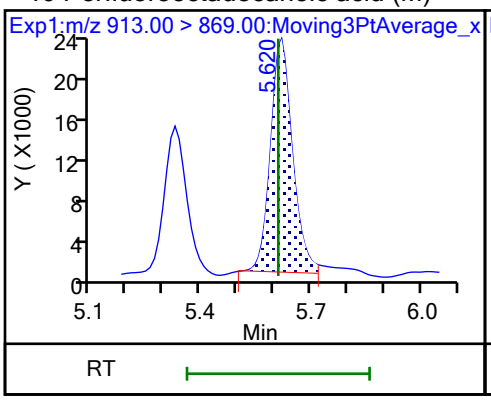
45 Perfluorohexadecanoic acid



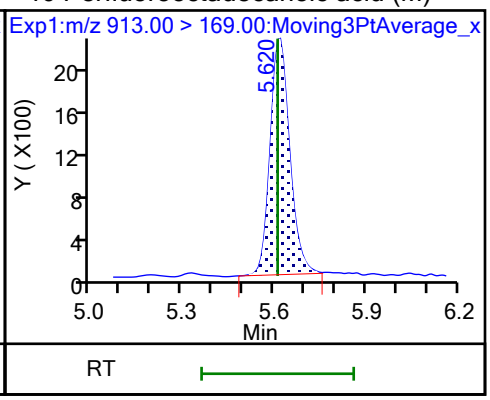
D 44 13C2 PFHxDA (M)



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Jul-2023 17:25:00 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 200-0056441-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:42 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:45:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	1926725	1.22		97.2	993	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	192635	0.0973		97.3	11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1458161	1.19		94.8	648	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	141937	0.1128		113	6.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.699	1835537	1.10		94.8	58282	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	166434	0.0944	Target=2.07	106	35.5	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	85051		1.96(1.04-3.11)	106	17.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	202715	1.05		90.2	72.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.718	2.694	0.024	1.000	64699	0.1097		117	613	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1566461	1.25		100	1391	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	144941	0.1051	Target=14.29	105	19.0	M
313.00 > 119.00	2.755	2.731	0.024	1.000	10821		13.39(7.15-21.44)	105	7.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.755	2.731	0.024	0.885	150824	0.1046	Target=2.78	111	211	M
349.00 > 99.00	2.755	2.731	0.024	0.885	53128		2.84(1.39-4.17)	111	51.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.826	299977	1.24		99.0	1628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.868	2.844	0.024	1.000	24788	0.1032		103	273	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1305238	1.09		92.5	2984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	118807	0.0972	Target=3.23	106	250	M
399.00 > 99.00	3.114	3.092	0.022	1.000	38530		3.08(1.62-4.84)	106	21.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.126	3.104	0.022	1.004	167142	0.1144	Target=4.11	114	33.0	M
363.00 > 169.00	3.126	3.104	0.022	1.004	38992		4.29(2.06-6.17)	114	33.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1628956	1.19		94.9	4384	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	400019	0.0962	Target=3.28	102	466	
377.00 > 85.00	3.160	3.138	0.022	0.835	118017		3.39(1.64-4.92)	102	143	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.461	3.446	0.015	0.915	99394	0.0951	Target=4.71	99.8	250	
449.00 > 99.00	3.461	3.446	0.015	0.915	23637		4.21(2.36-7.07)	99.8	50.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	286854	1.16		97.4	368	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.470	3.446	0.024	1.003	67191	0.1018		107	230	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.470	3.464	0.006	1.000	178853	0.1059	Target=2.90	106	14.0	M
413.00 > 169.00	3.479	3.464	0.015	1.003	59442		3.01(1.45-4.35)	106	72.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	1982384	1.27		102	5935	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		1998562	1.25			4141	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	863764	1.14		95.3	3395	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	80998	0.0961	Target=4.11	104	153	M
499.00 > 99.00	3.783	3.783	0.0	1.000	22759		3.56(2.05-6.16)	104	37.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1965971	1.16		92.9	4371	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.803	3.803	0.0	1.000	159396	0.1034	Target=8.48	103	30.7	
463.00 > 169.00	3.803	3.803	0.0	1.000	20785		7.67(4.24-12.72)	103	124	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.046	244371	0.0947		102	482	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.084	4.074	0.010	1.080	60375	0.0941	Target=2.17	97.8	490	
549.00 > 99.00	4.074	4.074	0.0	1.077	30462		1.98(1.08-3.25)	97.8	79.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2097344	1.18		94.6	8331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.108	4.108	0.0	1.000	170377	0.1016	Target=10.55	102	41.1	M
513.00 > 169.00	4.108	4.108	0.0	1.000	16328		10.43(5.27-15.82)	102	43.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	307295	1.10		92.0	634	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	64388	0.1140		119	478	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1858847	1.23		98.3	3368	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	144294	0.1017		102	567	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	509447	1.20		96.2	2611	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.260	0.001	1.003	39956	0.1080		108	67.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.346	0.0	1.149	46440	0.0941	Target=2.28	97.5	269	
599.00 > 99.00	4.346	4.346	0.0	1.149	23477		1.98(1.14-3.42)	97.5	80.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.263	1976379	1.18		94.5	7486	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.382	0.0	1.000	180134	0.1105	Target=11.30	111	48.4	
563.00 > 169.00	4.382	4.382	0.0	1.000	13744		13.11(5.65-16.96)	111	83.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	488020	1.20		95.7	1048	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	40651	0.1041		104	155	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	381367	0.0964		102	559	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	2131572	1.25		100	9591	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.616	-0.011	1.000	179683	0.1035	Target=8.15	104	19.1	M
613.00 > 169.00	4.605	4.616	-0.011	1.000	22765		7.89(4.07-12.22)	104	200	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.627	4.627	0.0	1.123	34552	0.1023		106	582	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	18698	0.1118	Target=0.50	115	275	
699.00 > 99.00	4.780	4.779	0.001	1.263	34305		0.55(0.25-0.75)	115	396	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	181083	0.0993	Target=6.61	99.3	22.2	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	27094		6.68(3.31-9.92)	99.3	218	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2061289	1.22		97.4	7140	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	19454	0.1055	Target=0.96	106	217	
713.00 > 219.00	4.998	5.008	-0.010	1.000	19131		1.02(0.48-1.44)	106	242	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	206767	0.1104	Target=7.69	110	24.0	
813.00 > 169.00	5.328	5.328	0.0	1.000	26550		7.79(3.85-11.54)	110	351	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.535	2341179	1.20		96.0	5506	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	161712	0.1106	Target=9.13	111	27.0	M
913.00 > 169.00	5.611	5.611	0.0	1.053	16958		9.54(4.56-13.69)	111	117	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

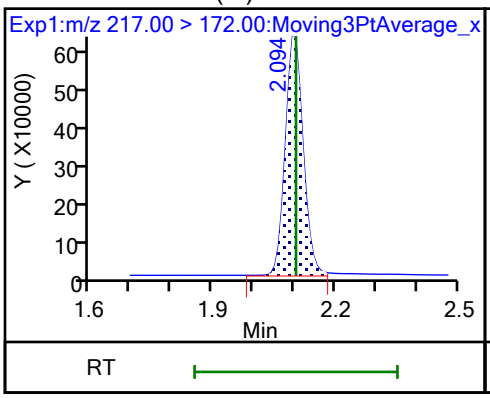
PFAS32NCIC2_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:44 Chrom Revision: 2.3 19-Jul-2023 18:28:48

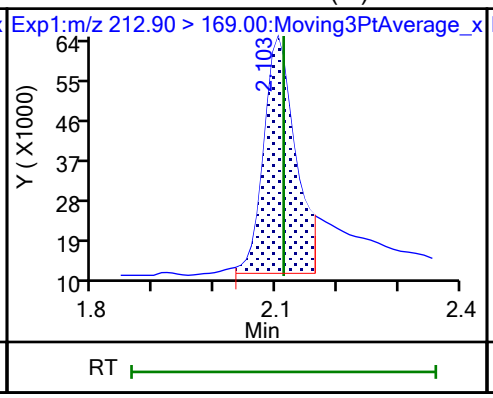
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Injection Date: 26-Jul-2023 17:25:00 Instrument ID: LC812
Lims ID: IC 2
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

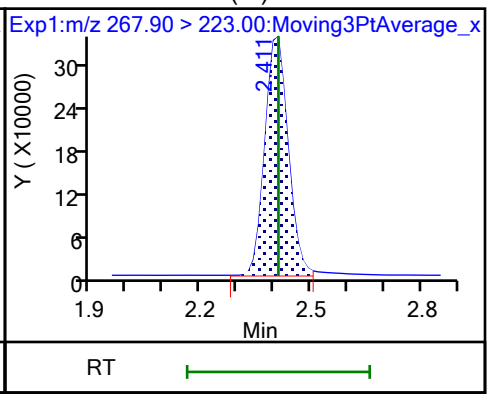
D 1 13C4 PFBA (M)



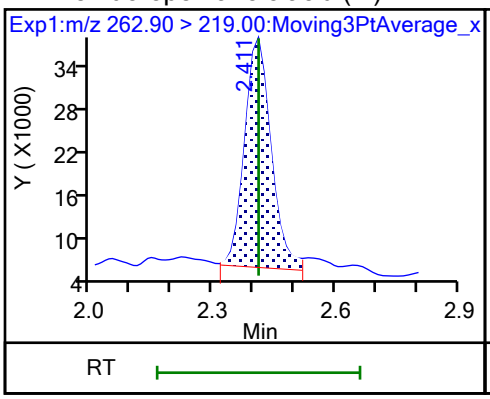
2 Perfluorobutanoic acid (M)



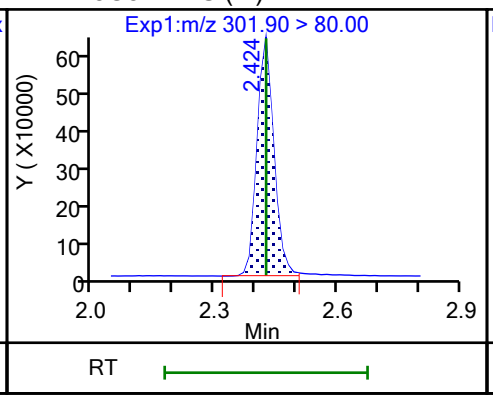
D 3 13C5 PFPeA (M)



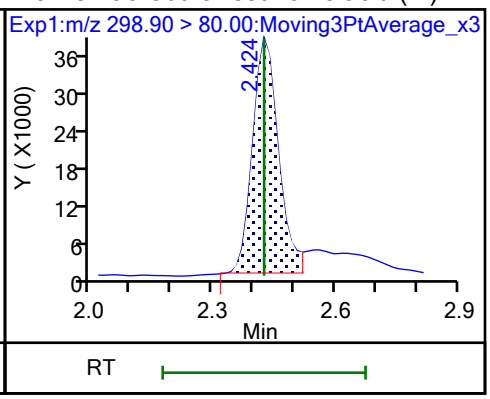
4 Perfluoropentanoic acid (M)



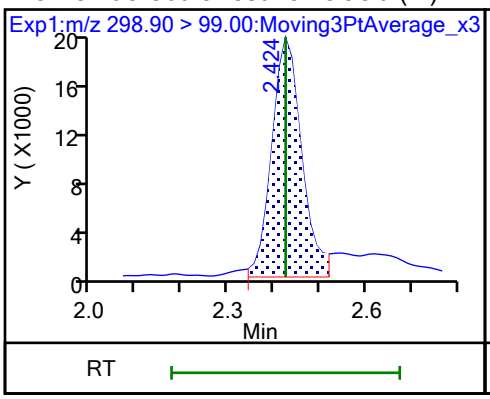
D 47 13C3 PFBS (M)



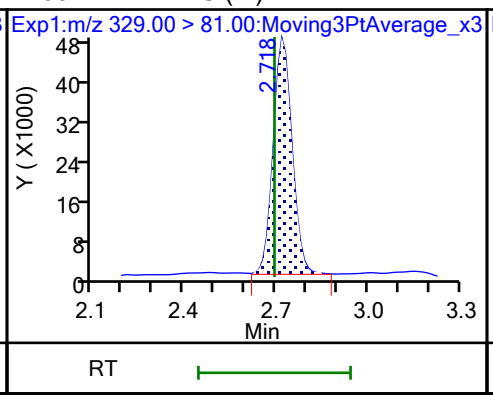
5 Perfluorobutanesulfonic acid (M)



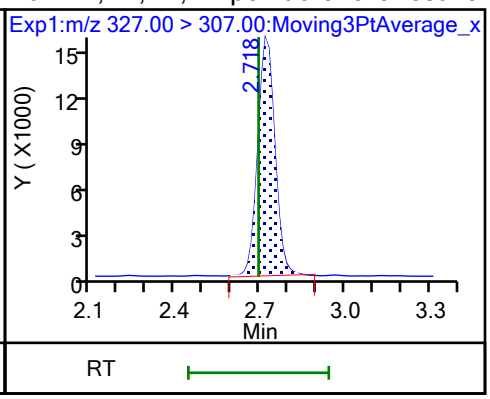
5 Perfluorobutanesulfonic acid (M)



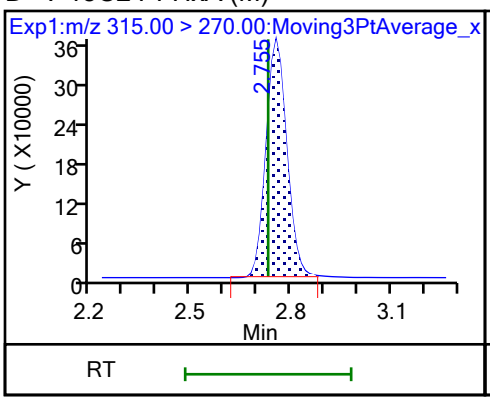
D 60 M2-4:2 FTS (M)



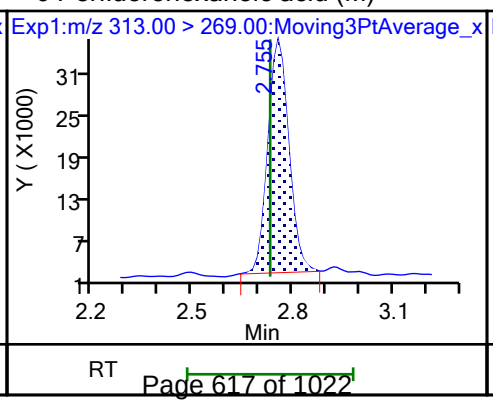
61 1H,1H,2H,2H-perfluorohexanesulfo



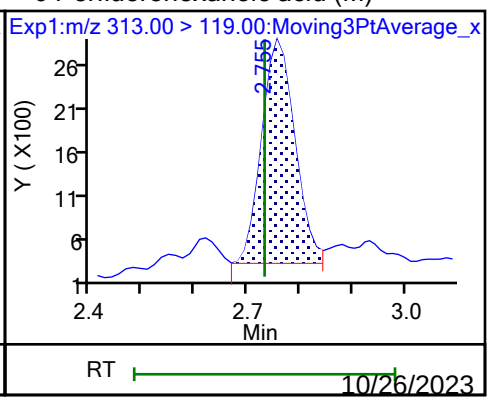
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

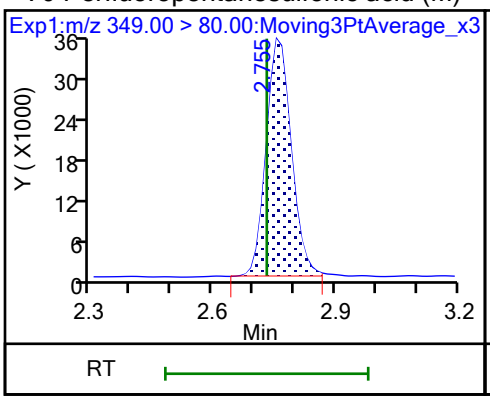


6 Perfluorohexanoic acid (M)

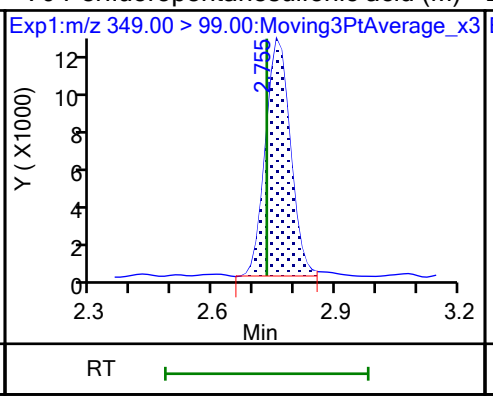


10/26/2023
2:28 PM

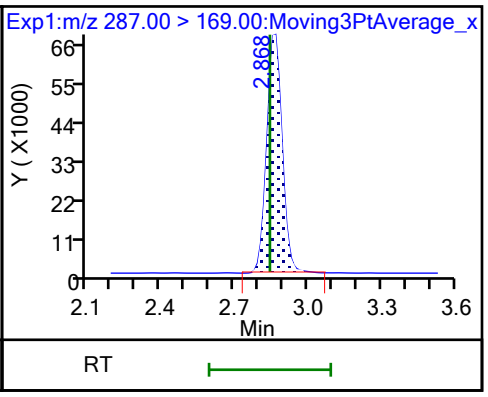
70 Perfluoropentanesulfonic acid (M)



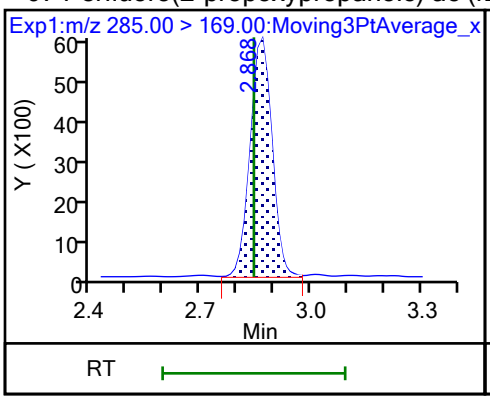
70 Perfluoropentanesulfonic acid (M)



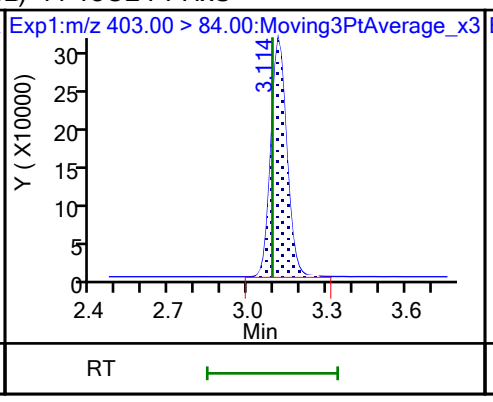
D 64 13C3 HFPO-DA



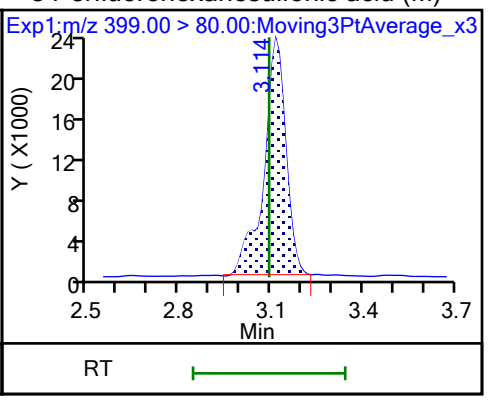
67 Perfluoro(2-propoxypropanoic) ac (M)



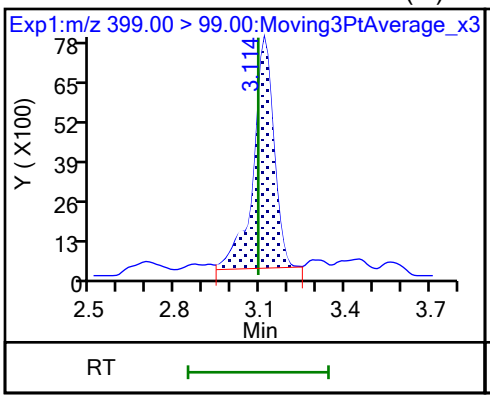
D 11 18O2 PFHxS



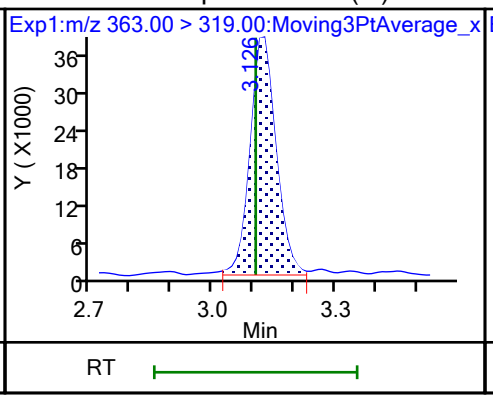
8 Perfluorohexanesulfonic acid (M)



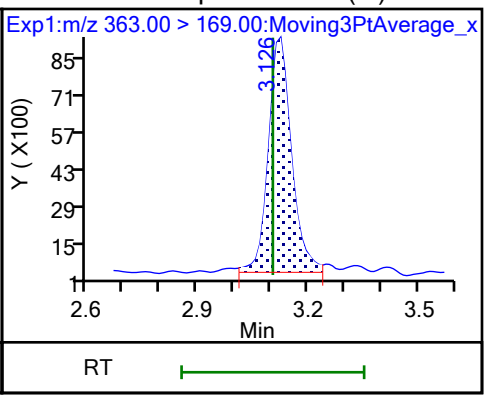
8 Perfluorohexanesulfonic acid (M)



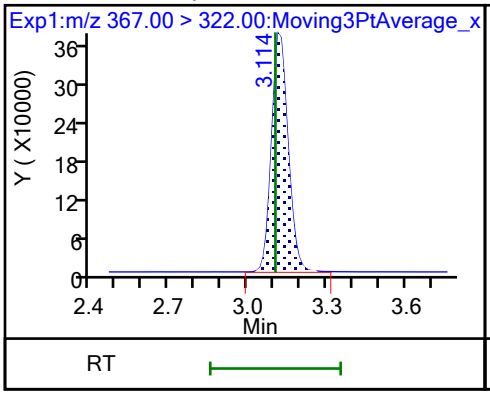
10 Perfluoroheptanoic acid (M)



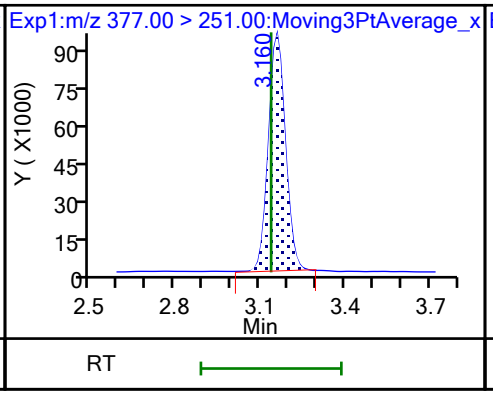
10 Perfluoroheptanoic acid (M)



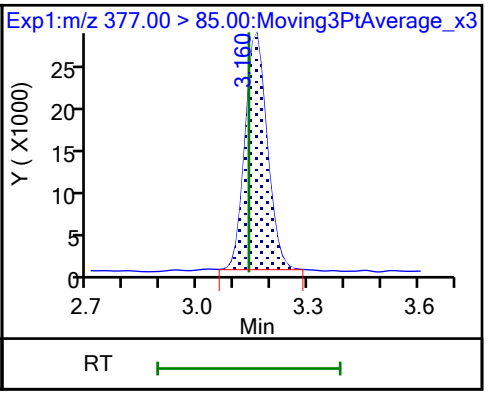
D 9 13C4 PFHpA



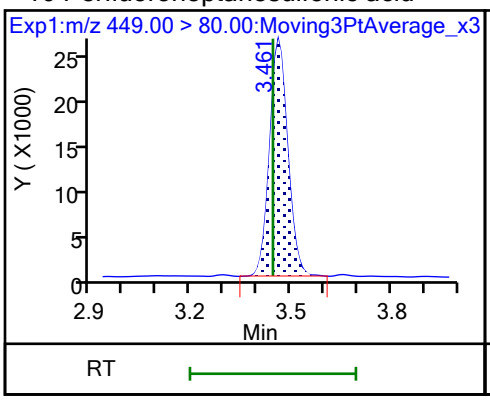
77 DONA



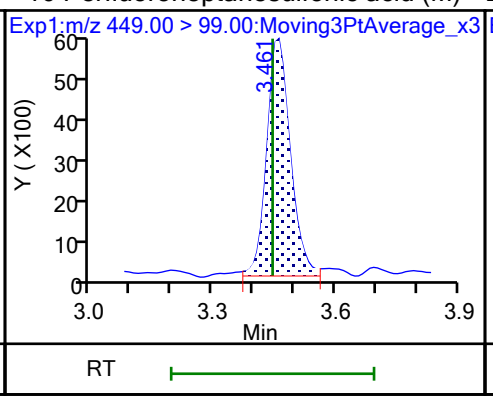
77 DONA



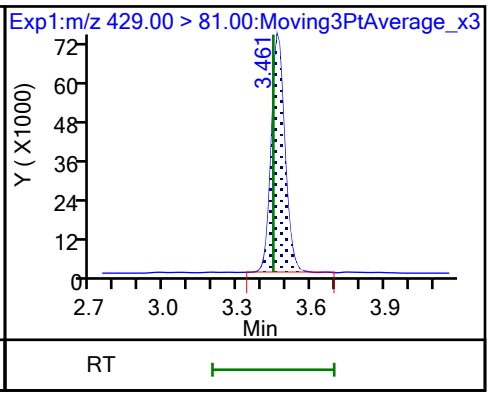
16 Perfluoroheptanesulfonic acid



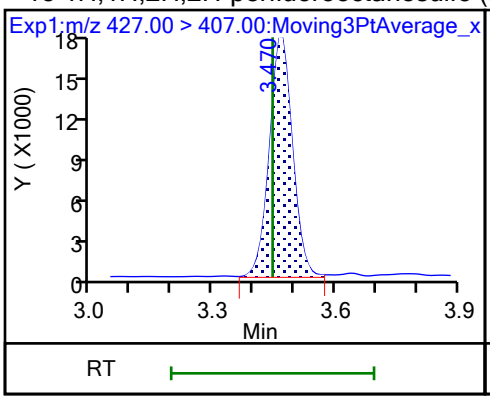
16 Perfluoroheptanesulfonic acid (M)



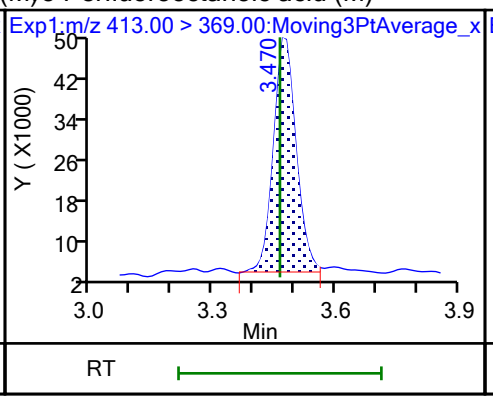
D 12 M2-6:2 FTS



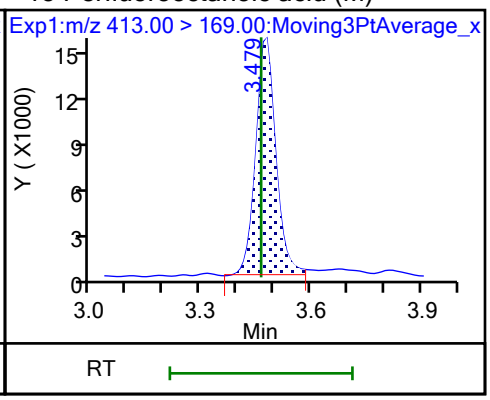
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



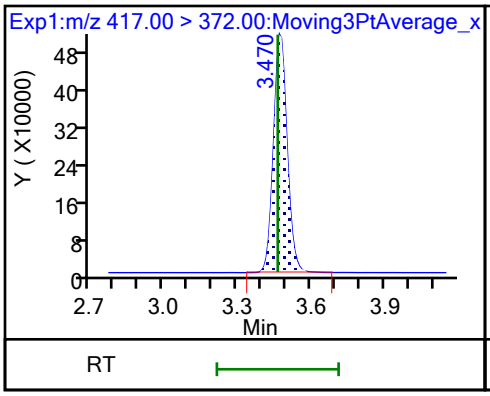
15 Perfluorooctanoic acid (M)



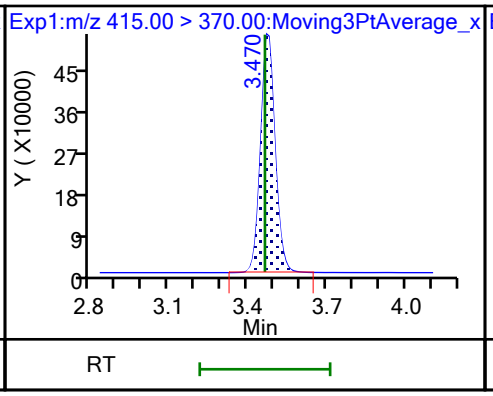
15 Perfluorooctanoic acid (M)



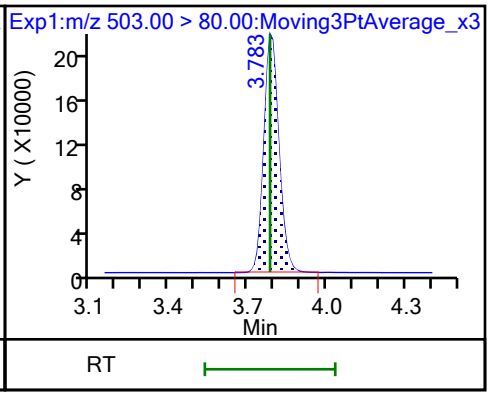
D 14 13C4 PFOA



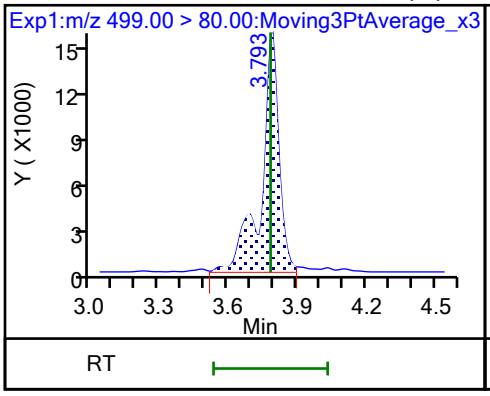
* 62 13C2 PFOA



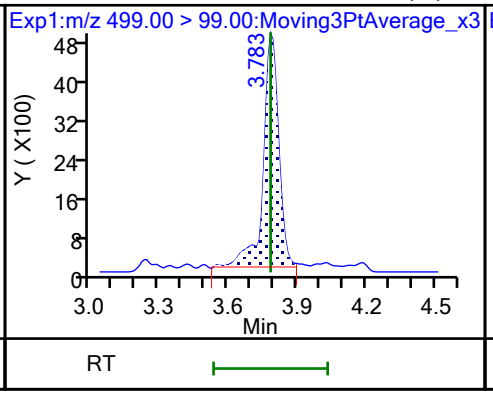
D 18 13C4 PFOS



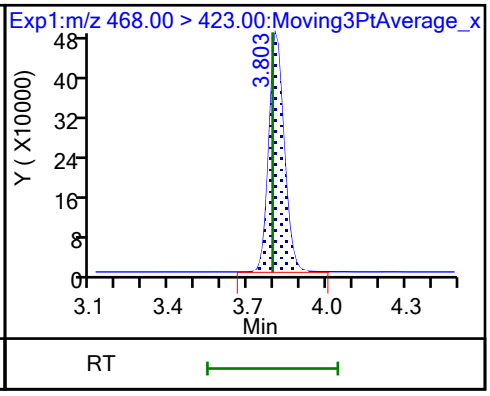
17 Perfluorooctanesulfonic acid (M)



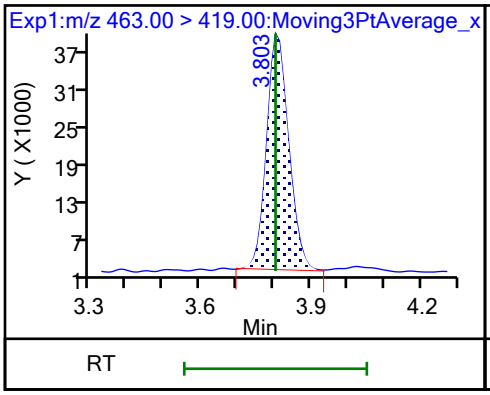
17 Perfluorooctanesulfonic acid (M)



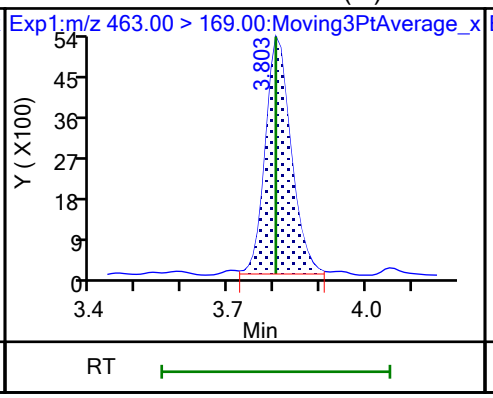
D 19 13C5 PFNA



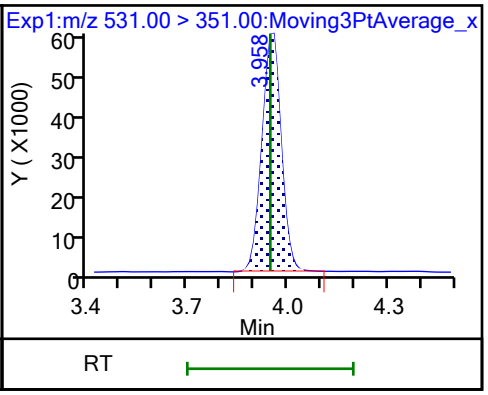
20 Perfluorononanoic acid



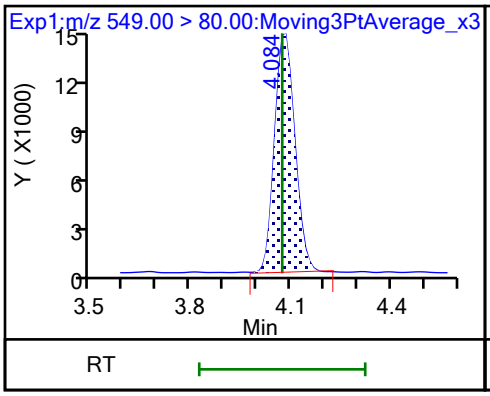
20 Perfluorononanoic acid (M)



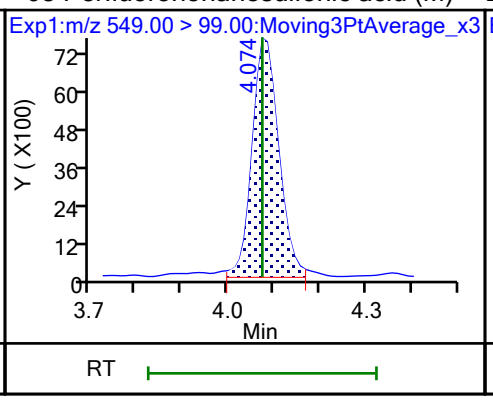
69 9-Chlorohexadecafluoro-3-oxanona



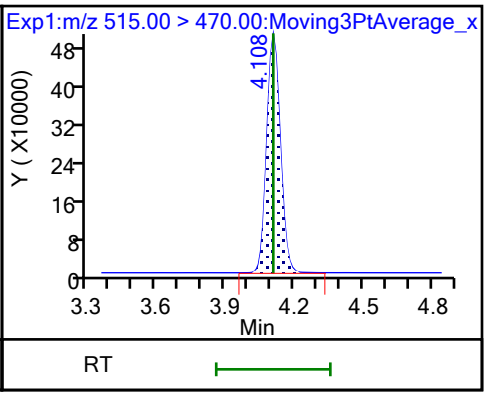
68 Perfluorononanesulfonic acid



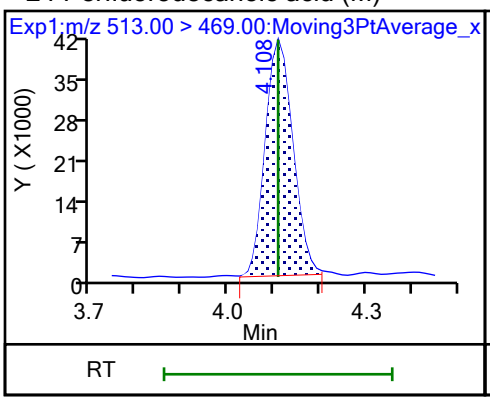
68 Perfluorononanesulfonic acid (M)



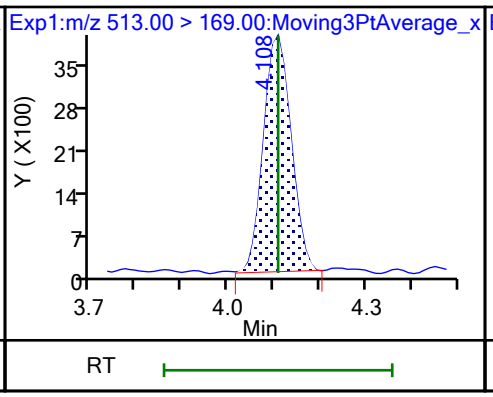
D 23 13C2 PFDA



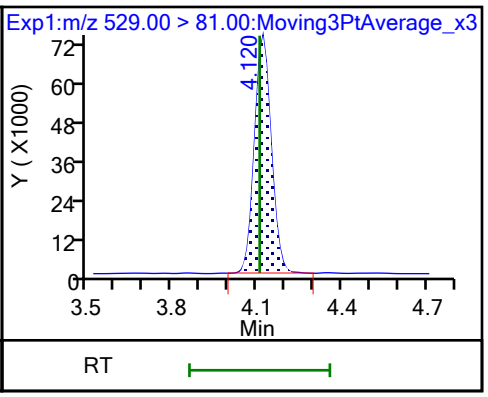
24 Perfluorodecanoic acid (M)



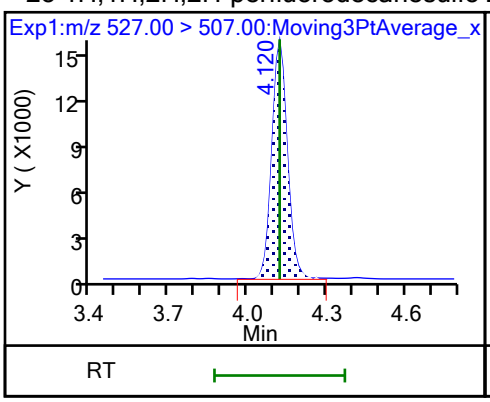
24 Perfluorodecanoic acid



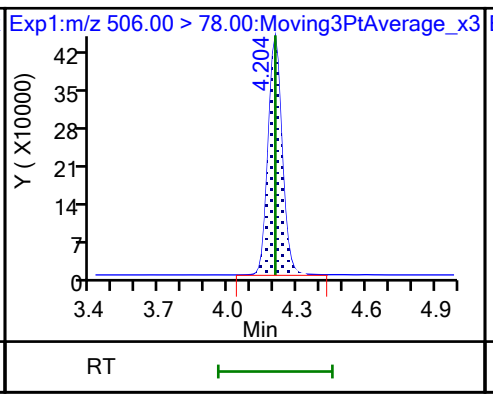
D 26 M2-8:2 FTS



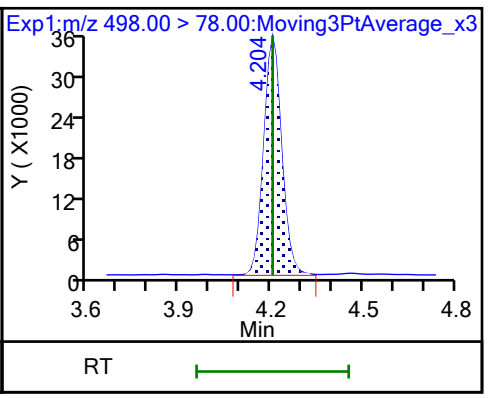
25 1H,1H,2H,2H-perfluorodecanesulfo



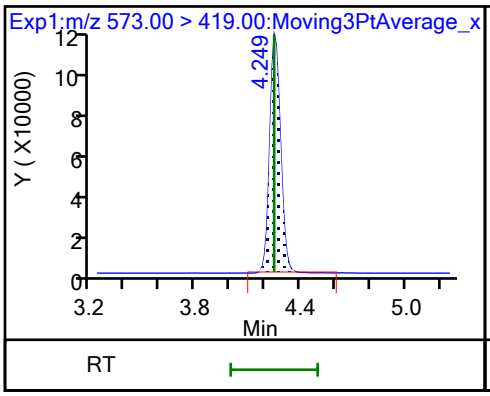
D 21 13C8 FOSA



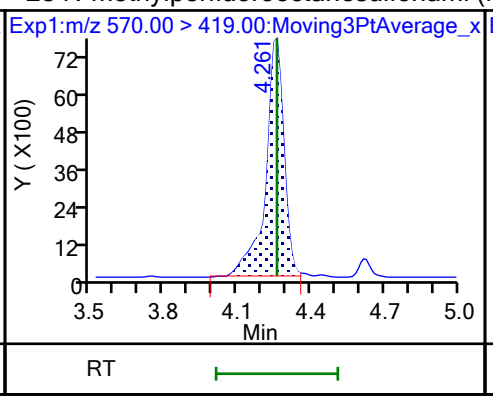
22 Perfluorooctanesulfonamide



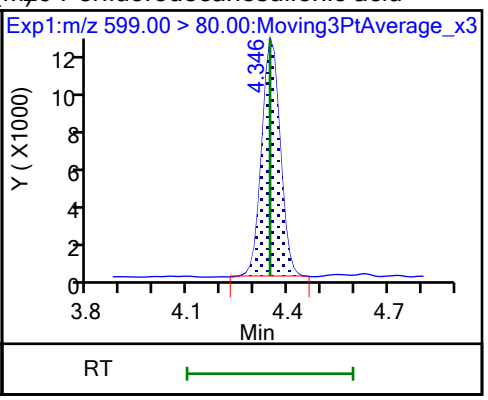
D 27 d3-NMeFOSAA



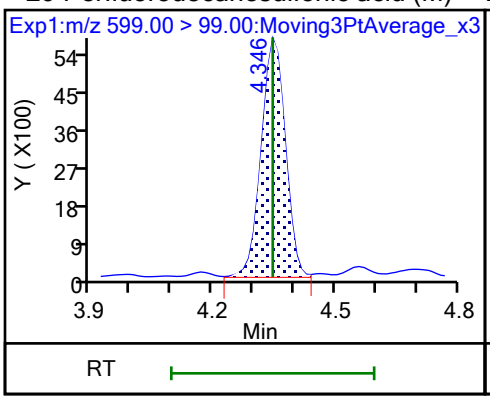
28 N-methylperfluorooctanesulfonami (M)



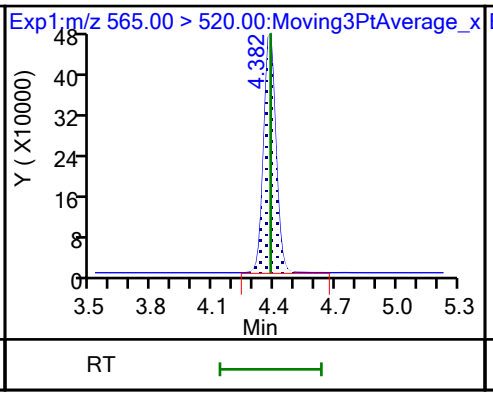
29 Perfluorodecanesulfonic acid



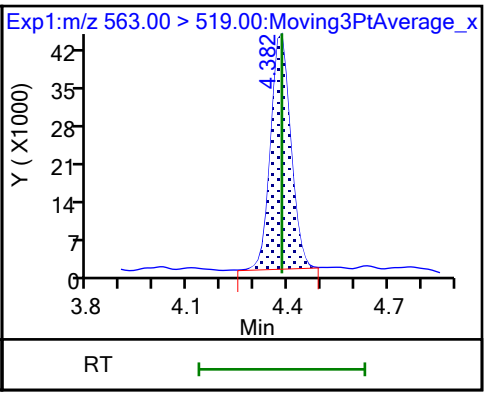
29 Perfluorodecanesulfonic acid (M)



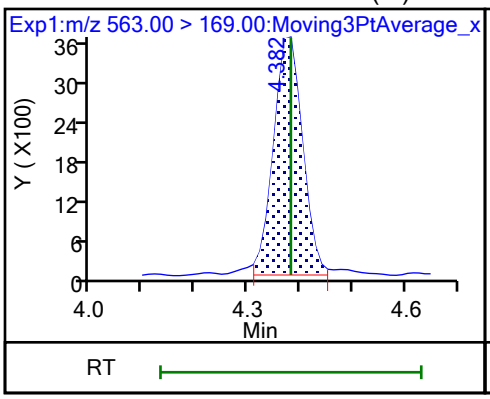
D 30 13C2 PFUnA



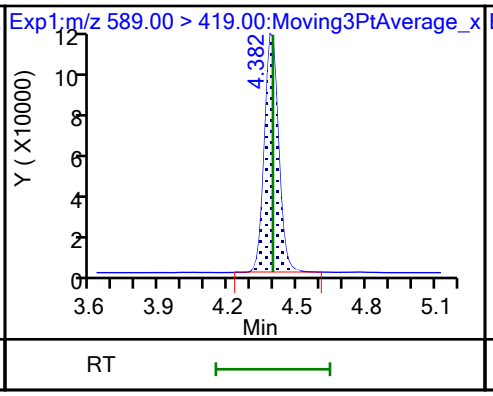
31 Perfluoroundecanoic acid



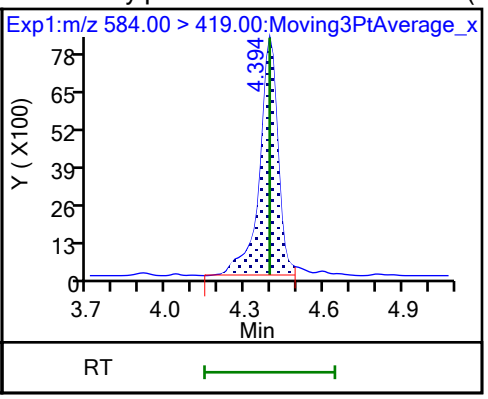
31 Perfluoroundecanoic acid (M)



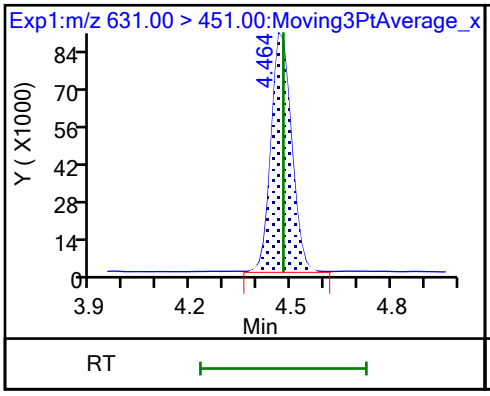
D 32 d5-NEtFOSAA



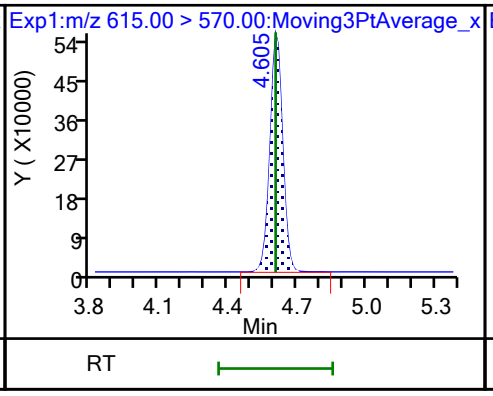
33 N-ethylperfluorooctanesulfonamid (M)



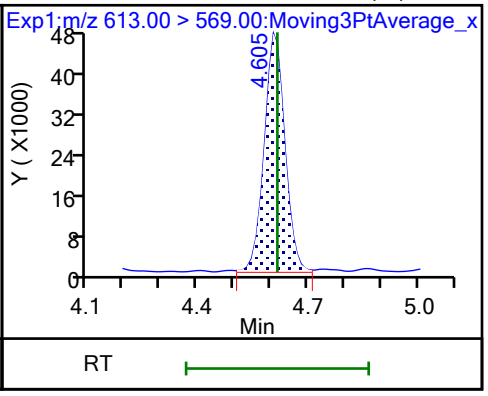
66 11-Chloroeicosafluoro-3-oxaundec



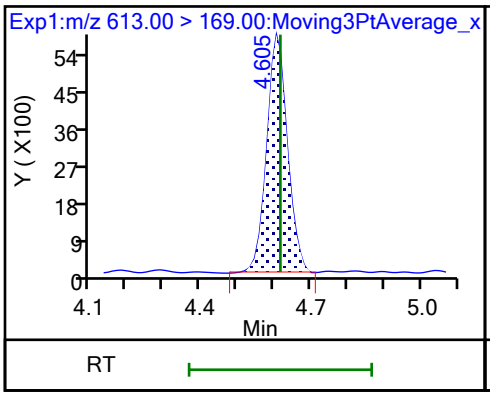
D 36 13C2 PFDoA



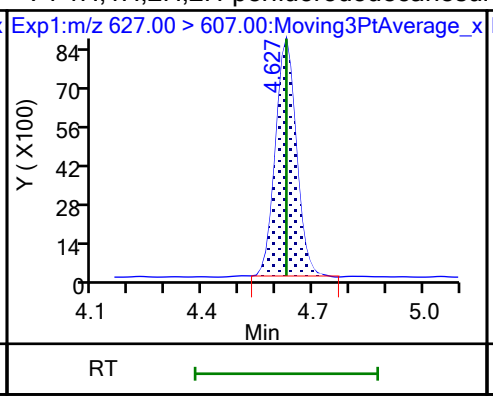
37 Perfluorododecanoic acid (M)



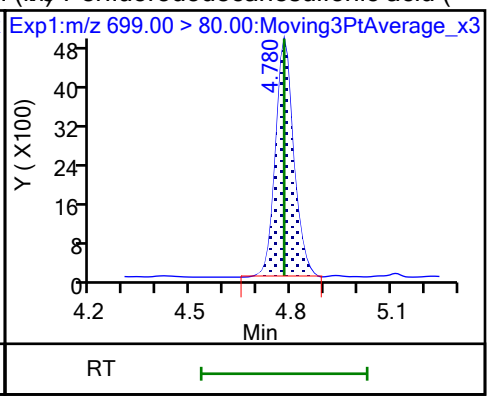
37 Perfluorododecanoic acid



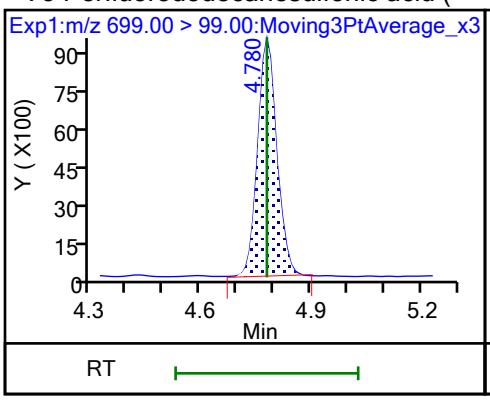
74 1H,1H,2H,2H-perfluorododecanesul (M)



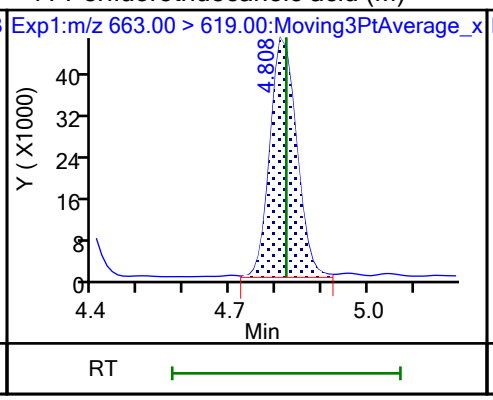
75 Perfluorododecanesulfonic acid (



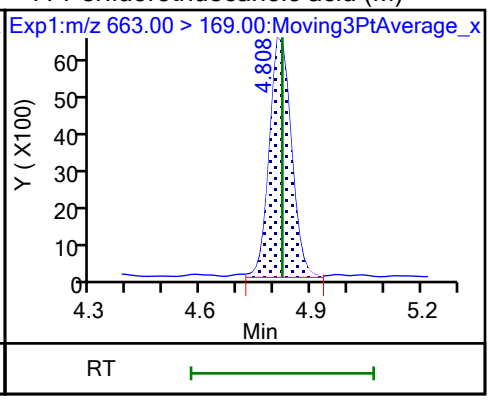
75 Perfluorododecanesulfonic acid (



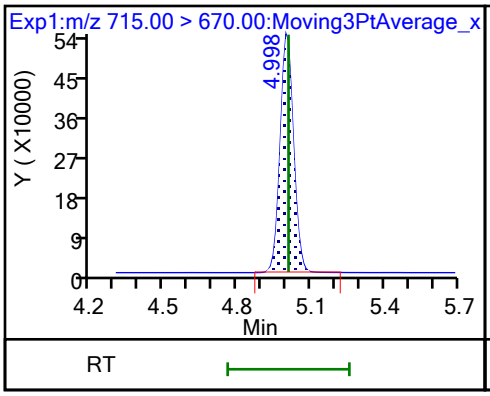
41 Perfluorotridecanoic acid (M)



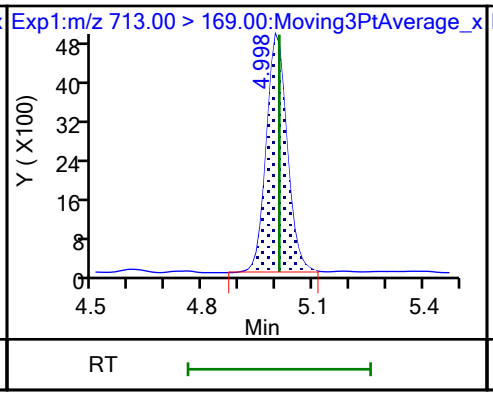
41 Perfluorotridecanoic acid (M)



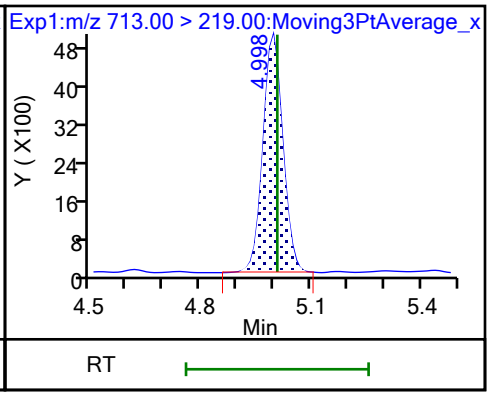
D 43 13C2 PFTeDA



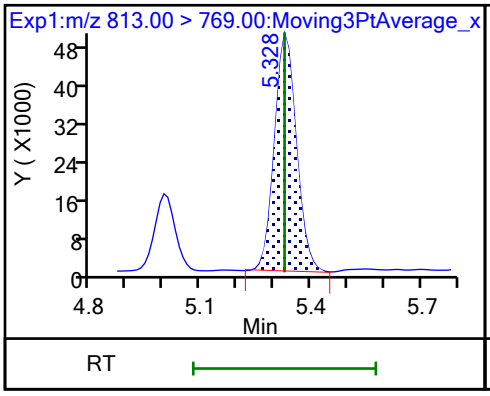
42 Perfluorotetradecanoic acid



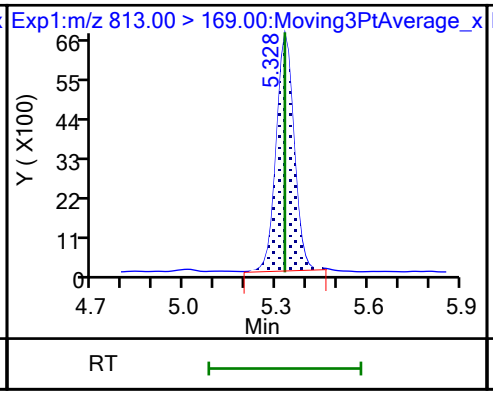
42 Perfluorotetradecanoic acid



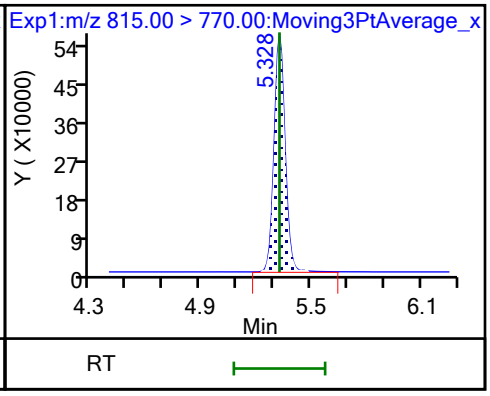
45 Perfluorohexadecanoic acid



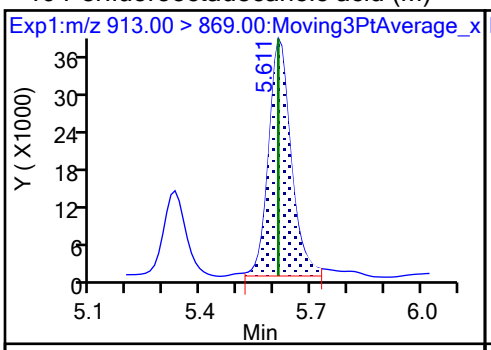
45 Perfluorohexadecanoic acid



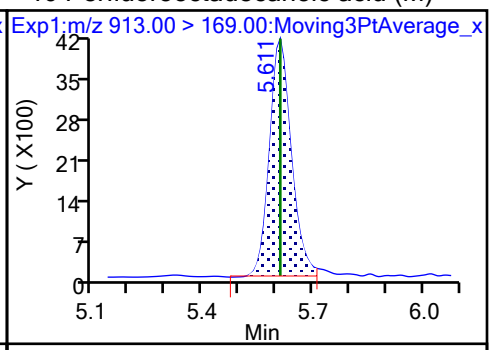
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Jul-2023 17:33:10 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 200-0056441-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:49 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:49:59
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.602	1916527	1.22		97.6	1037	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	774804	0.5180		104	49.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.693	1507442	1.24		98.9	854	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	651716	0.5008		100	28.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.697	1758991	1.07		91.7	56488	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	790713	0.4679	Target=2.07	105	143	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	376898		2.10(1.04-3.11)	105	75.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.781	215257	1.13		96.6	77.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	288946	0.4615		98.5	883	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.755	2.731	0.024	0.792	1472867	1.19		95.0	3850	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	672203	0.5184	Target=14.29	104	87.4	
313.00 > 119.00	2.755	2.731	0.024	1.000	43102		15.60(7.15-21.44)	104	30.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	694967	0.4648	Target=2.78	98.8	1051	
349.00 > 99.00	2.755	2.731	0.024	0.885	242262		2.87(1.39-4.17)	98.8	272	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.824	279126	1.16		93.0	2331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	0.996	115257	0.5155		103	712	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.895	1353967	1.14		96.8	3822	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	555092	0.4379	Target=3.23	95.8	787	M
399.00 > 99.00	3.114	3.092	0.022	1.000	169403		3.28(1.62-4.84)	95.8	113	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.126	3.104	0.022	1.004	705383	0.4702	Target=4.11	94.0	148	
363.00 > 169.00	3.114	3.104	0.010	1.000	172971		4.08(2.06-6.17)	94.0	135	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.895	1672833	1.23		98.3	4178	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	1973200	0.4642	Target=3.28	98.2	2579	
377.00 > 85.00	3.160	3.138	0.022	0.835	597494		3.30(1.64-4.92)	98.2	814	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.461	3.446	0.015	0.915	497245	0.4658	Target=4.71	97.7	1145	
449.00 > 99.00	3.461	3.446	0.015	0.915	101764		4.89(2.36-7.07)	97.7	193	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.995	274798	1.12		94.2	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	310157	0.4904		103	795	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.479	3.464	0.015	1.003	801060	0.4915	Target=2.90	98.3	61.0	
413.00 > 169.00	3.479	3.464	0.015	1.003	274444		2.92(1.45-4.35)	98.3	334	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	0.997	1912820	1.24		99.2	5100	
* 62 13C2 PFOA										
415.00 > 370.00	3.479	3.464	0.015		1980756	1.25			7103	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.087	882764	1.17		98.3	3627	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	384806	0.4466	Target=4.11	96.2	673	M
499.00 > 99.00	3.793	3.783	0.010	1.003	97181		3.96(2.05-6.16)	96.2	140	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.093	2008931	1.20		95.8	5719	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	802848	0.5097	Target=8.48	102	153	
463.00 > 169.00	3.803	3.803	0.0	1.000	92789		8.65(4.24-12.72)	102	535	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	1237458	0.4693		101	2329	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.080	312103	0.4761	Target=2.17	99.0	1622	
549.00 > 99.00	4.084	4.074	0.010	1.080	140337		2.22(1.08-3.25)	99.0	373	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.181	2062234	1.17		93.9	9314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	869526	0.5274	Target=10.55	105	223	
513.00 > 169.00	4.108	4.108	0.0	1.000	81818		10.63(5.27-15.82)	105	203	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.184	298552	1.08		90.2	633	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	270156	0.4922		103	2104	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.208	1790735	1.19		95.5	3553	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	680067	0.4977		99.5	1708	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.248	4.249	-0.001	1.221	486461	1.16		92.7	1692	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.248	4.260	-0.012	1.000	177278	0.5020		100	343	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	234996	0.4658	Target=2.28	96.5	994	
599.00 > 99.00	4.346	4.346	0.0	1.149	102960		2.28(1.14-3.42)	96.5	384	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.382	-0.001	1.259	1983358	1.20		95.7	15111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.382	-0.001	1.000	818335	0.5004	Target=11.30	100	237	
563.00 > 169.00	4.381	4.382	-0.001	1.000	76353		10.72(5.65-16.96)	100	564	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.381	4.393	-0.012	1.259	491633	1.22		97.3	1018	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.003	187350	0.4763		95.3	408	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	1894487	0.4685		99.4	2418	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.324	2022512	1.20		96.0	6242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	852163	0.5175	Target=8.15	103	86.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	100190		8.51(4.07-12.22)	103	964	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	158460	0.4830		100	1667	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	82920	0.4849	Target=0.50	100	1359	
699.00 > 99.00	4.779	4.779	0.0	1.263	159027		0.52(0.25-0.75)	100	1291	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	907955	0.5245	Target=6.61	105	105	
663.00 > 169.00	4.808	4.822	-0.014	1.044	136886		6.63(3.31-9.92)	105	771	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.994	5.008	-0.014	1.435	1996289	1.19		95.1	6980	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.994	5.008	-0.014	1.000	88102	0.4934	Target=0.96	98.7	1397	
713.00 > 219.00	4.994	5.008	-0.014	1.000	92762		0.95(0.48-1.44)	98.7	896	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.326	5.328	-0.002	1.000	900190	0.4873	Target=7.69	97.5	97.8	
813.00 > 169.00	5.326	5.328	-0.002	1.000	120909		7.45(3.85-11.54)	97.5	1116	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.326	5.328	-0.002	1.531	2309121	1.19		95.5	3874	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.609	5.611	-0.002	1.053	726427	0.5036	Target=9.13	101	95.3	M
913.00 > 169.00	5.600	5.611	-0.011	1.051	78986		9.20(4.56-13.69)	101	265	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

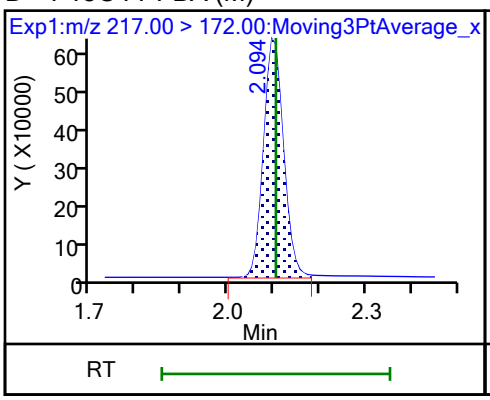
PFAS32NCIC3_00016 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:50 Chrom Revision: 2.3 19-Jul-2023 18:28:48

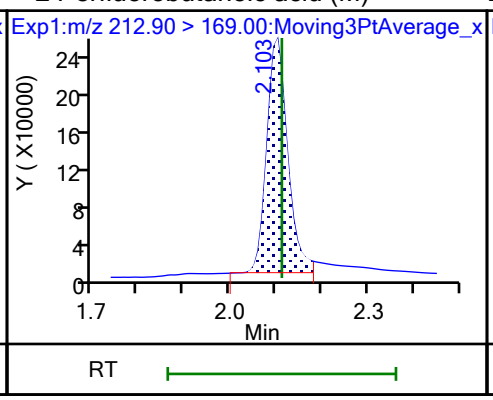
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Injection Date: 26-Jul-2023 17:33:10 Instrument ID: LC812
Lims ID: IC 3
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

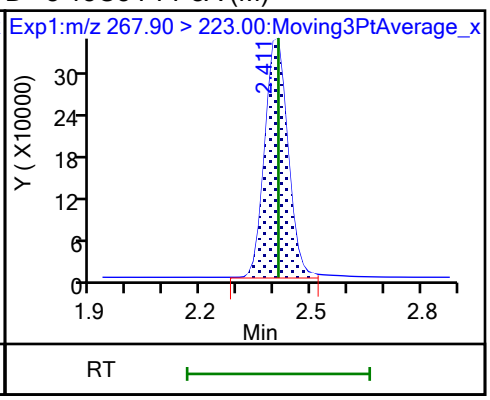
D 1 13C4 PFBA (M)



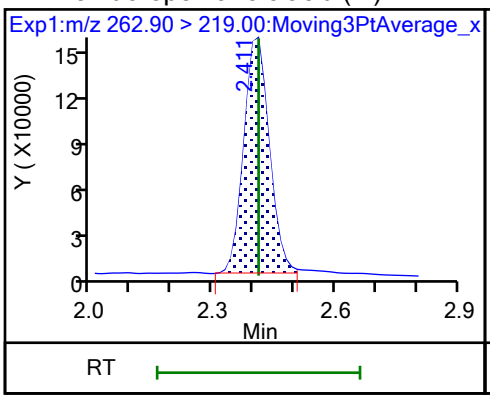
2 Perfluorobutanoic acid (M)



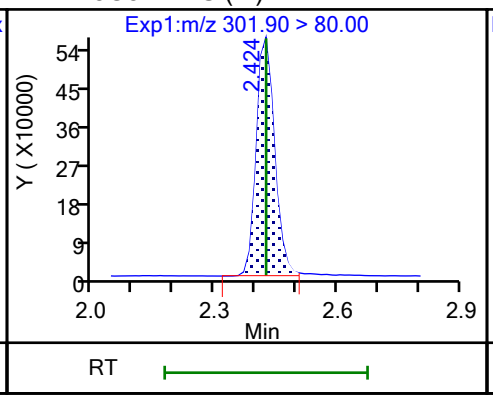
D 3 13C5 PFPeA (M)



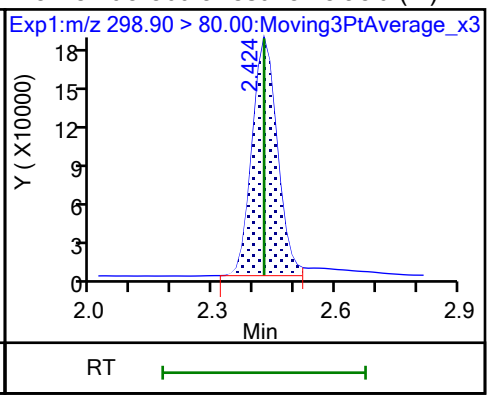
4 Perfluoropentanoic acid (M)



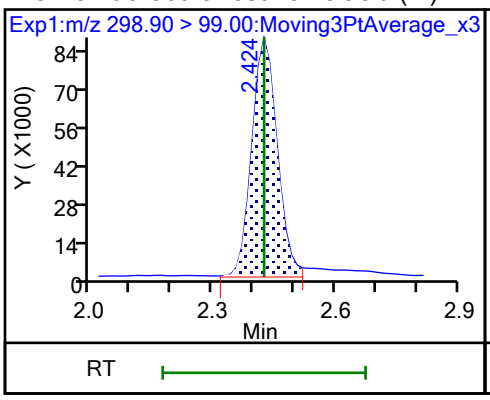
D 47 13C3 PFBS (M)



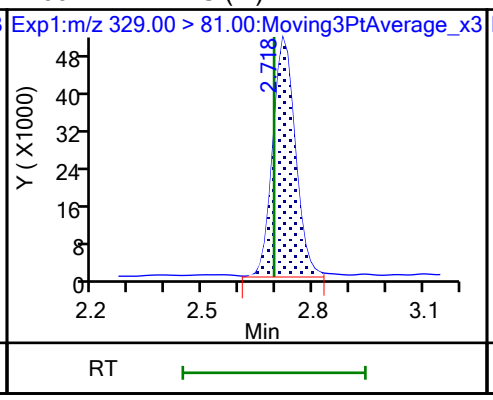
5 Perfluorobutanesulfonic acid (M)



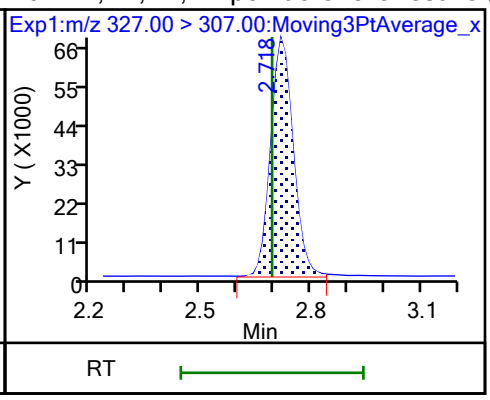
5 Perfluorobutanesulfonic acid (M)



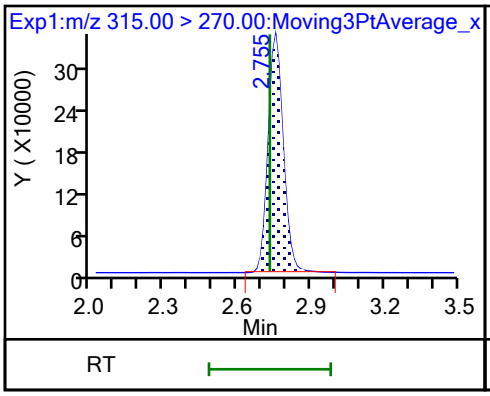
D 60 M2-4:2 FTS (M)



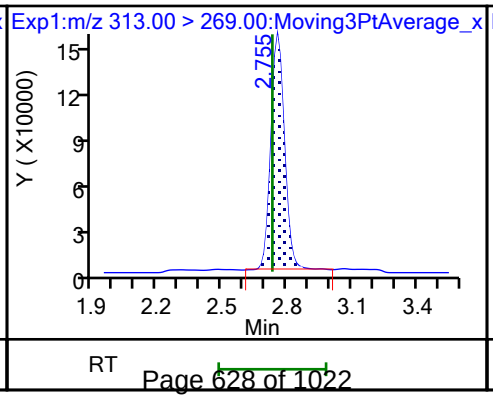
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



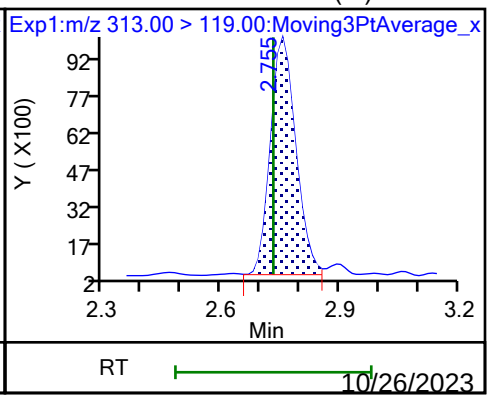
D 7 13C2 PFHxA



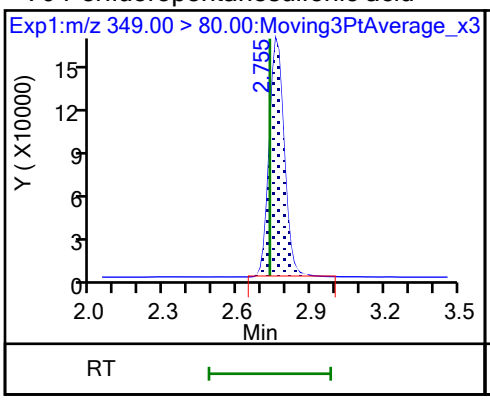
6 Perfluorohexanoic acid



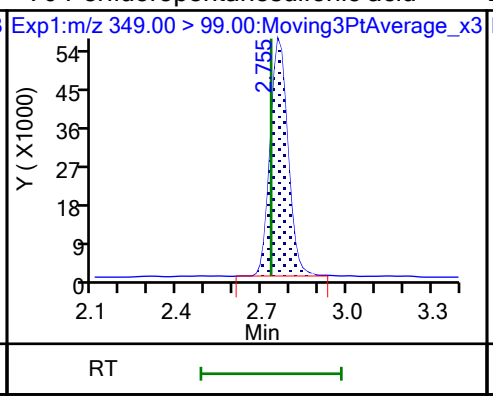
6 Perfluorohexanoic acid (M)



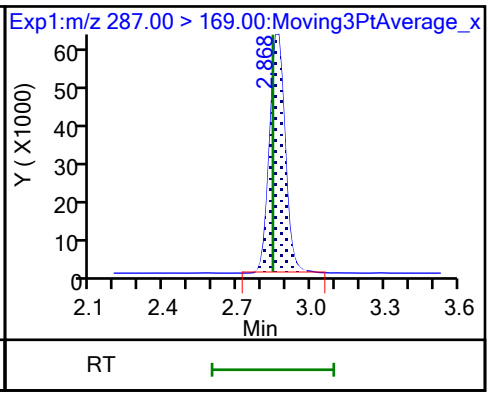
70 Perfluoropentanesulfonic acid



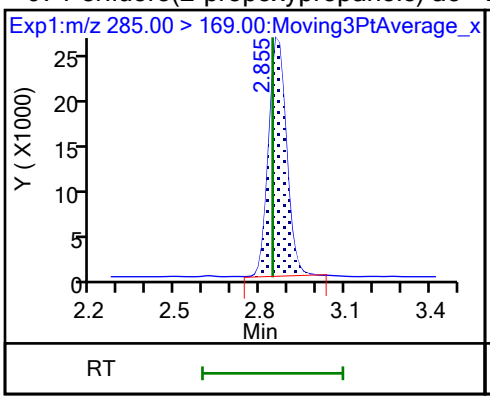
70 Perfluoropentanesulfonic acid



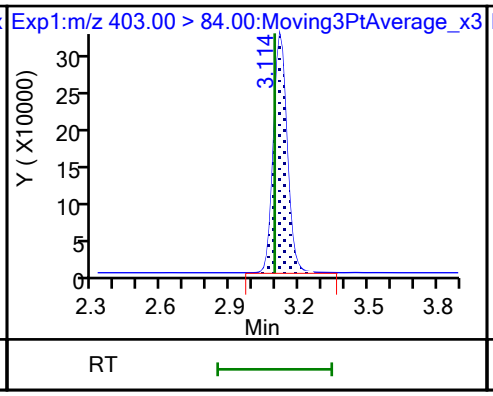
D 64 13C3 HFPO-DA



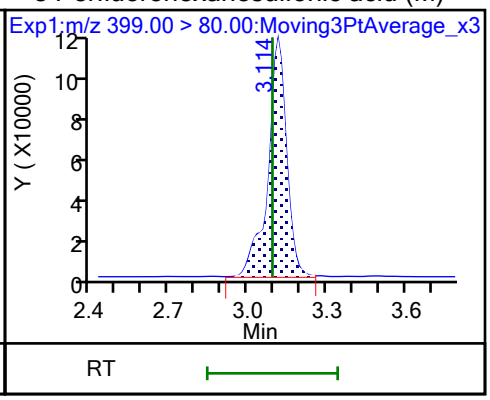
67 Perfluoro(2-propoxypropanoic) ac



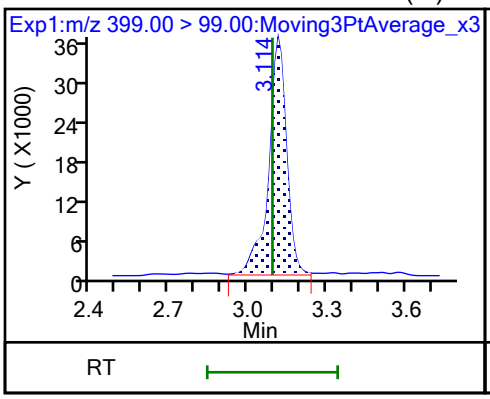
D 11 18O2 PFHxS



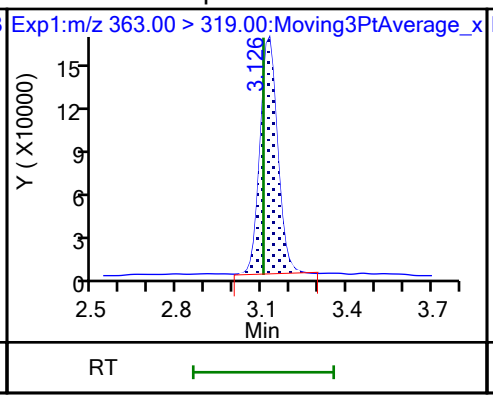
8 Perfluorohexanesulfonic acid (M)



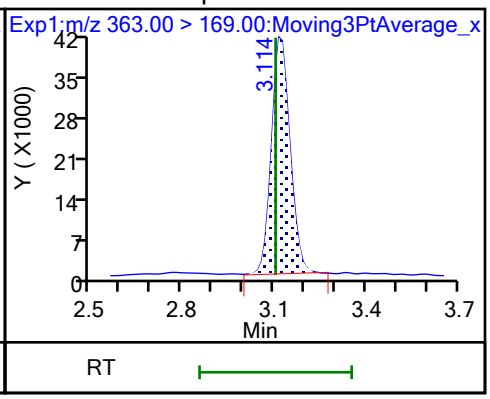
8 Perfluorohexanesulfonic acid (M)



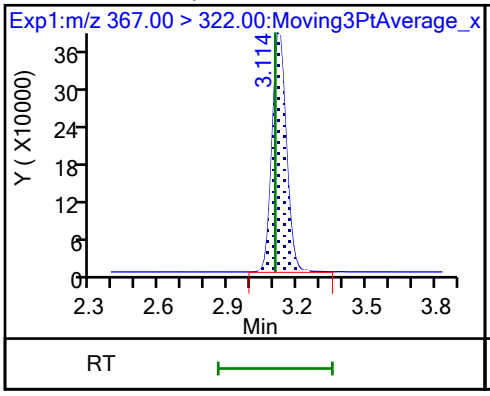
10 Perfluoroheptanoic acid



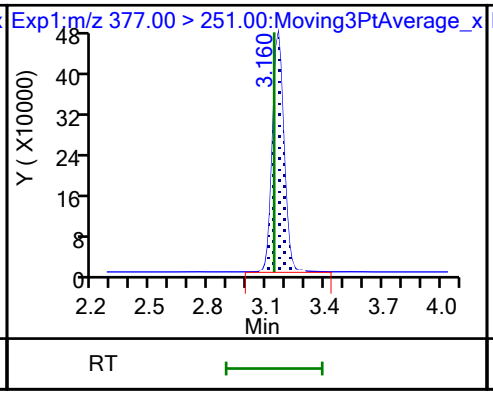
10 Perfluoroheptanoic acid



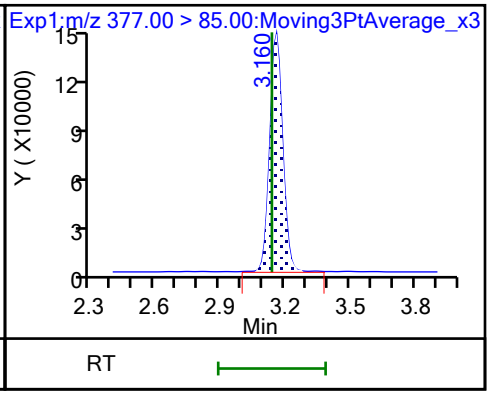
D 9 13C4 PFHpA



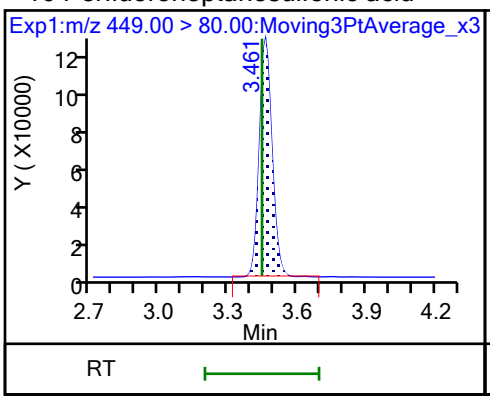
77 DONA



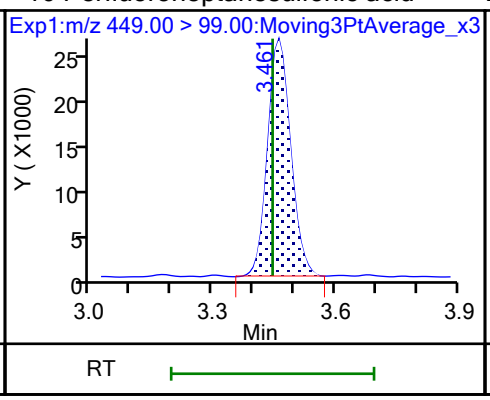
77 DONA



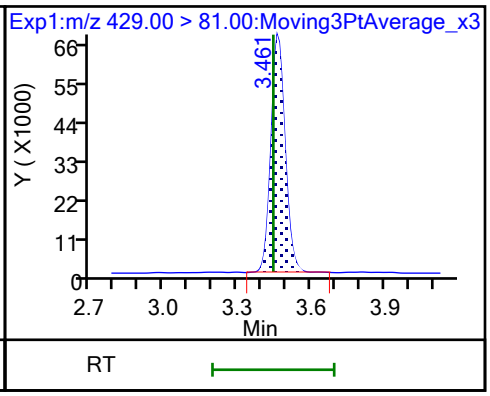
16 Perfluoroheptanesulfonic acid



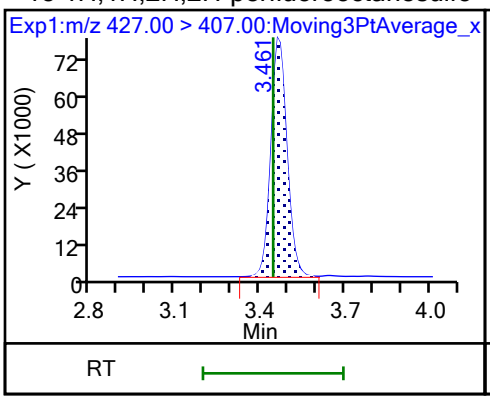
16 Perfluoroheptanesulfonic acid



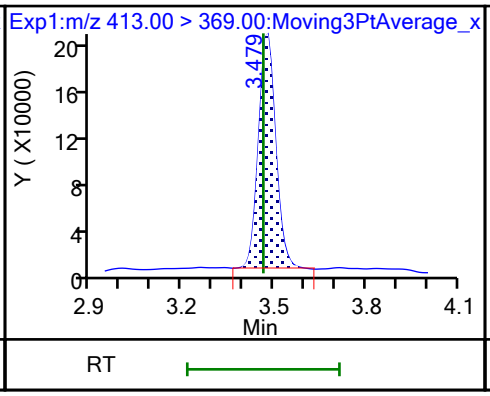
D 12 M2-6:2 FTS



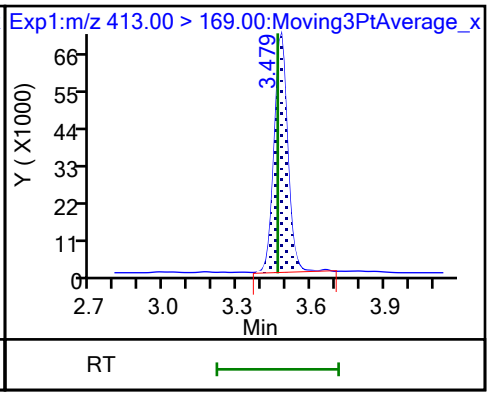
13 1H,1H,2H,2H-perfluorooctanesulfo



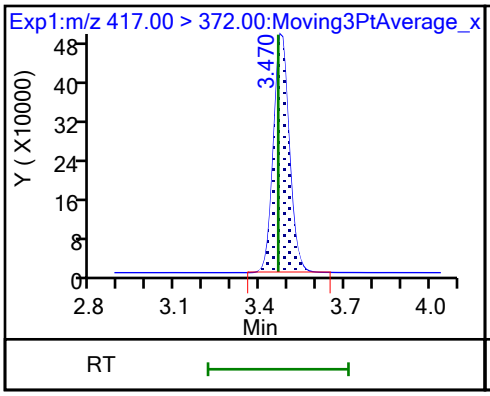
15 Perfluorooctanoic acid



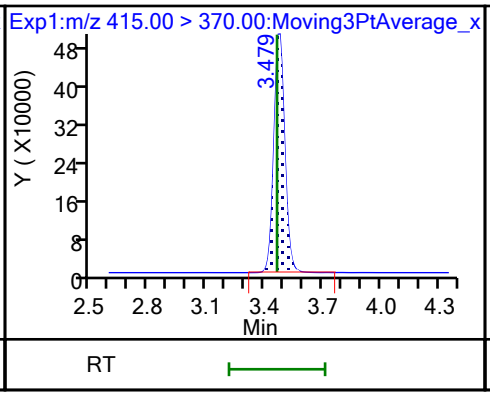
15 Perfluorooctanoic acid



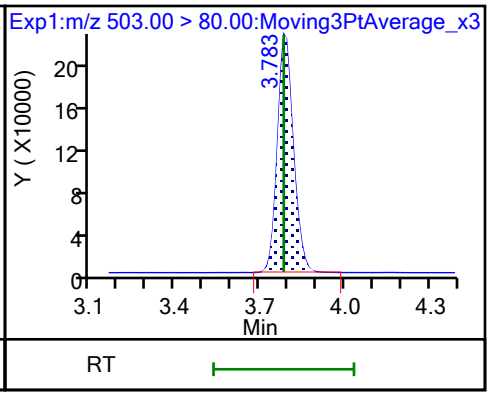
D 14 13C4 PFOA



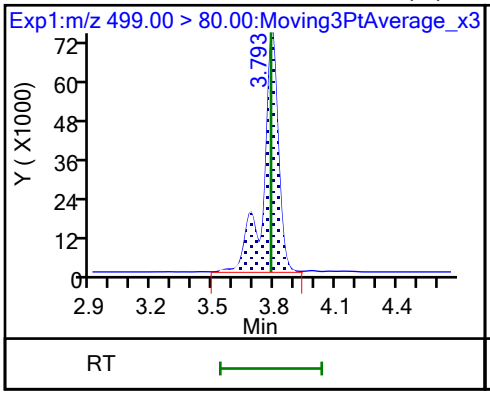
* 62 13C2 PFOA



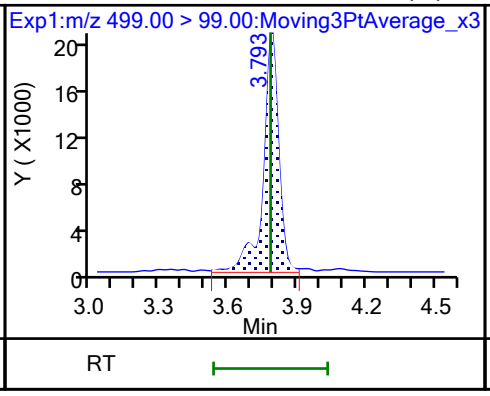
D 18 13C4 PFOS



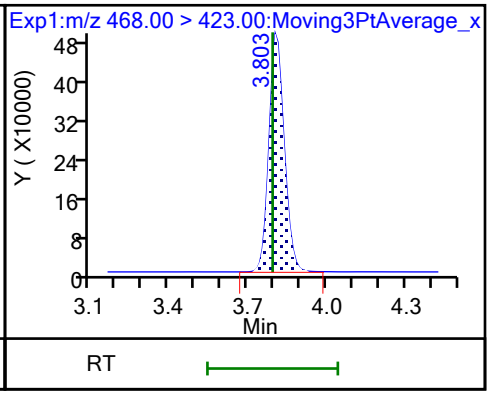
17 Perfluorooctanesulfonic acid (M)



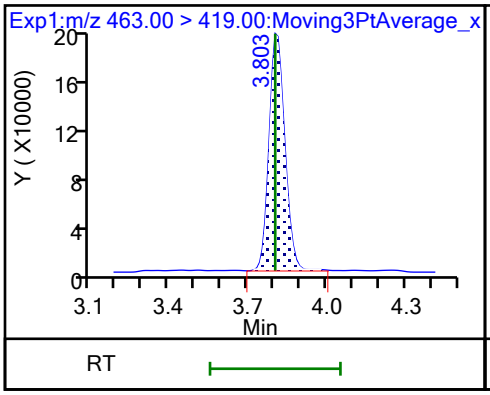
17 Perfluorooctanesulfonic acid (M)



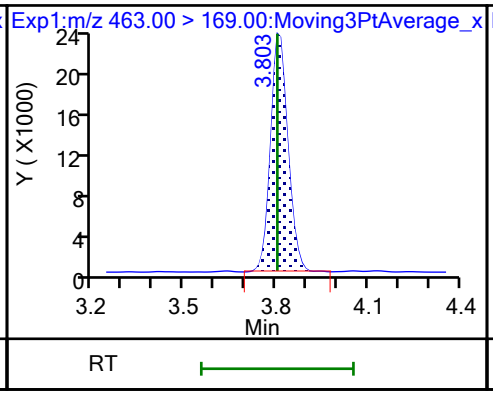
D 19 13C5 PFNA



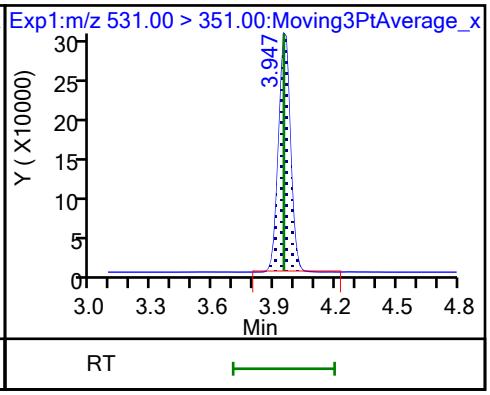
20 Perfluorononanoic acid



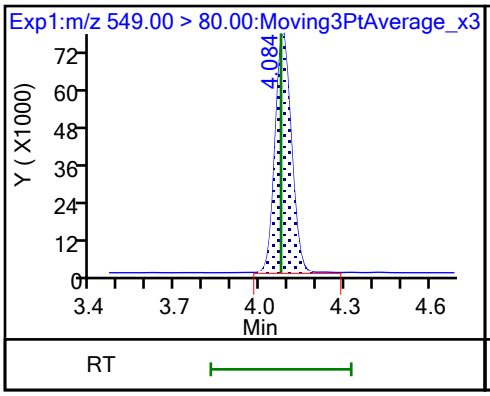
20 Perfluorononanoic acid



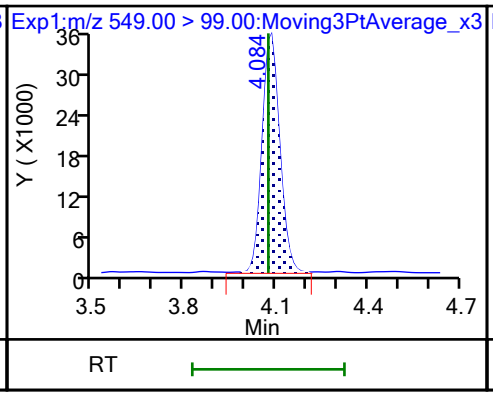
69 9-Chlorohexadecafluoro-3-oxanona



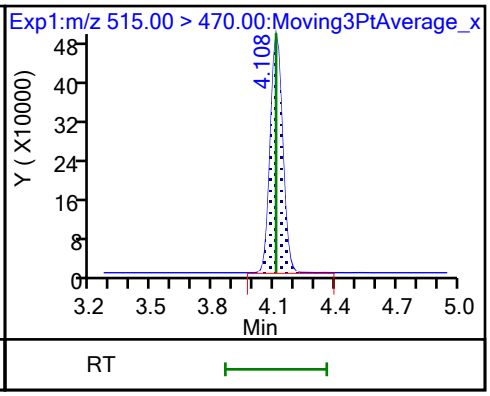
68 Perfluorononanesulfonic acid



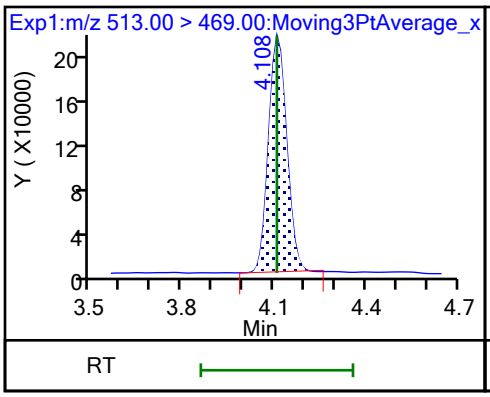
68 Perfluorononanesulfonic acid



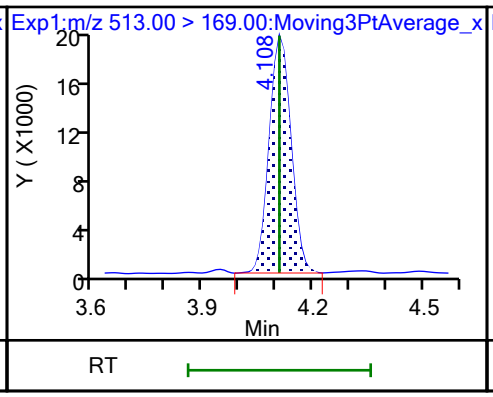
D 23 13C2 PFDA



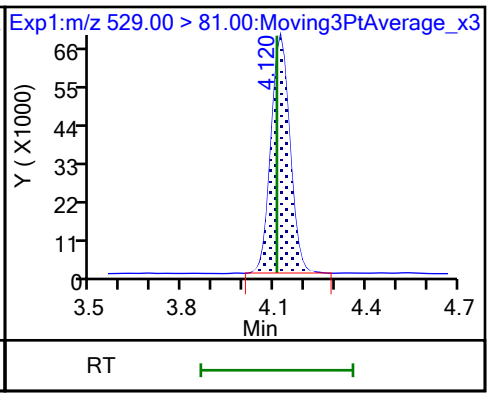
24 Perfluorodecanoic acid



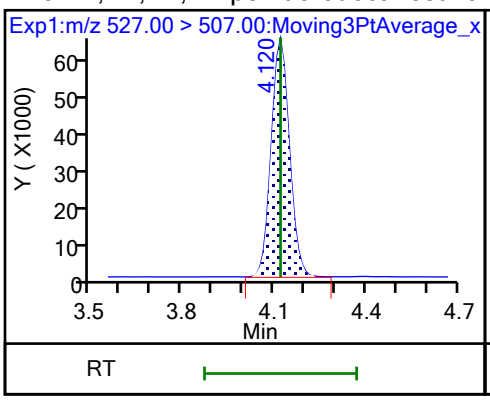
24 Perfluorodecanoic acid



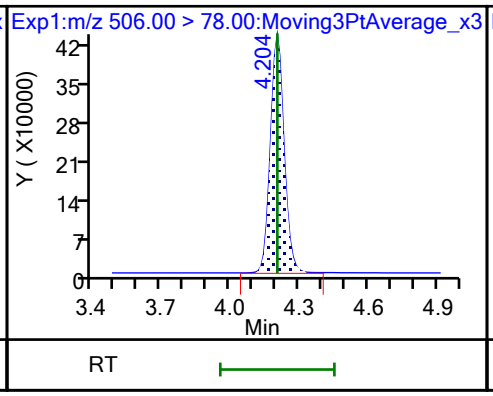
D 26 M2-8:2 FTS



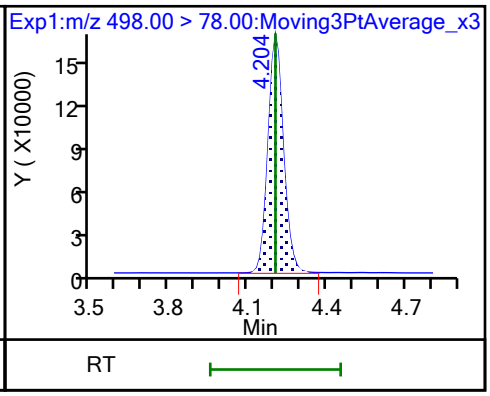
25 1H,1H,2H,2H-perfluorodecanesulfo



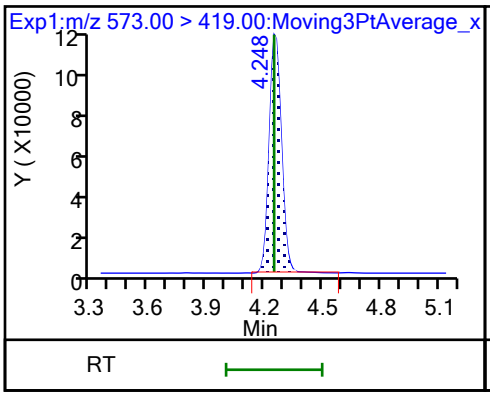
D 21 13C8 FOSA



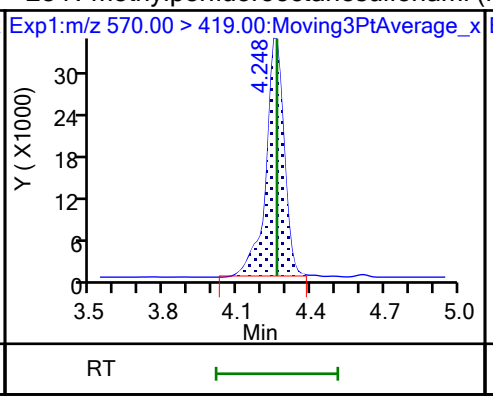
22 Perfluorooctanesulfonamide



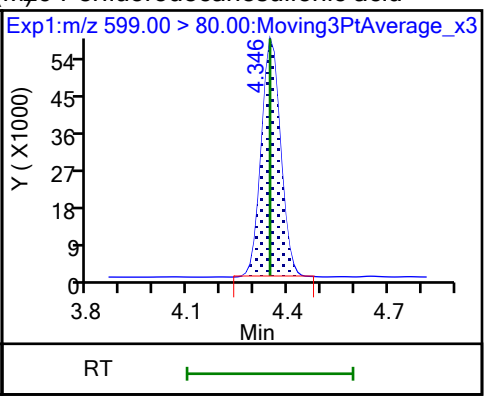
D 27 d3-NMeFOSAA



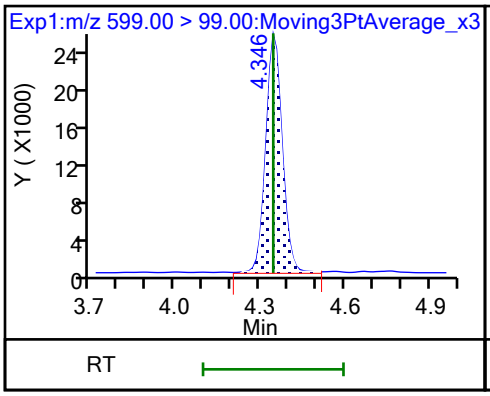
28 N-methylperfluorooctanesulfonami (M)



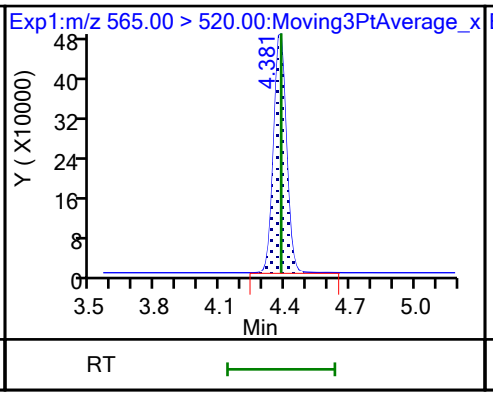
29 Perfluorodecanesulfonic acid



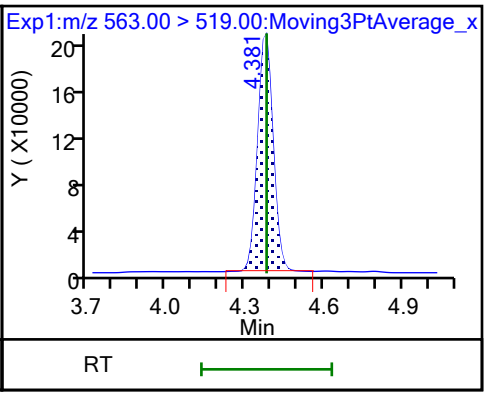
29 Perfluorodecanesulfonic acid



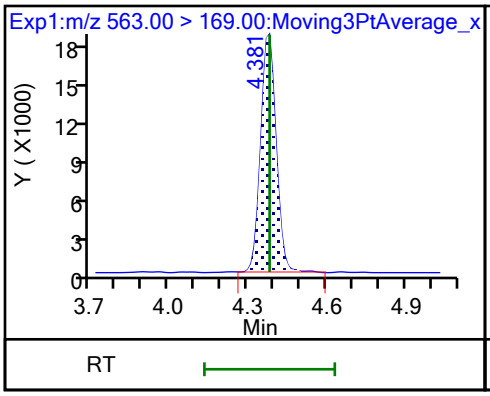
D 30 13C2 PFUnA



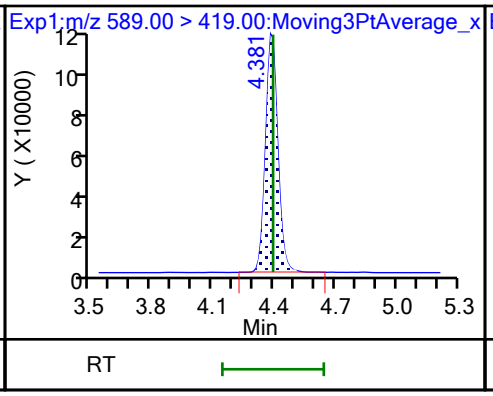
31 Perfluoroundecanoic acid



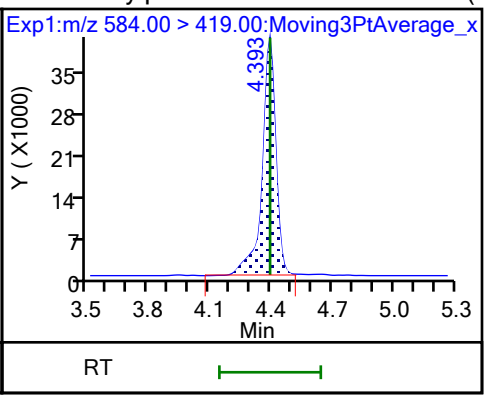
31 Perfluoroundecanoic acid



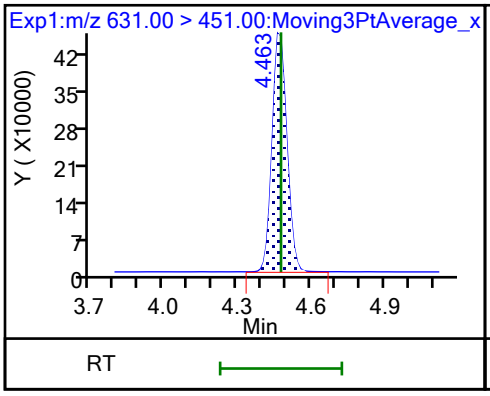
D 32 d5-NEtFOSAA



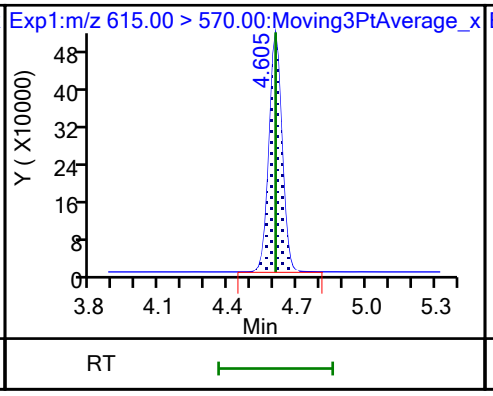
33 N-ethylperfluorooctanesulfonamid (M)



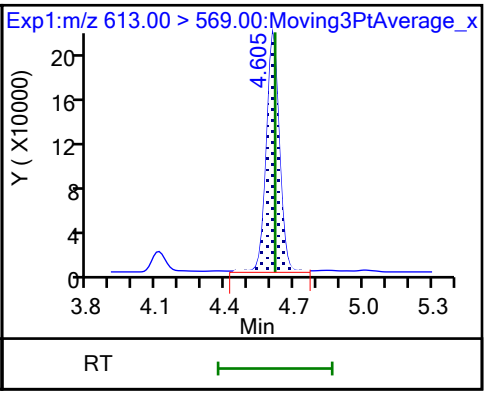
66 11-Chloroeicosafluoro-3-oxaundec



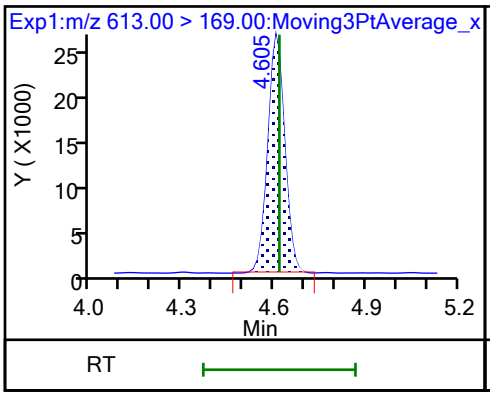
D 36 13C2 PFDoA



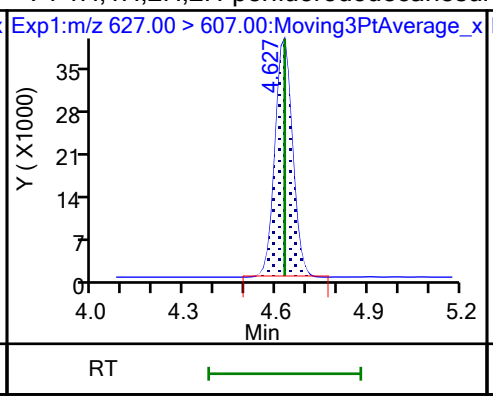
37 Perfluorododecanoic acid



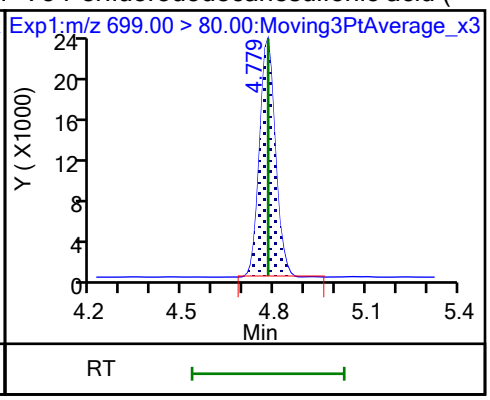
37 Perfluorododecanoic acid



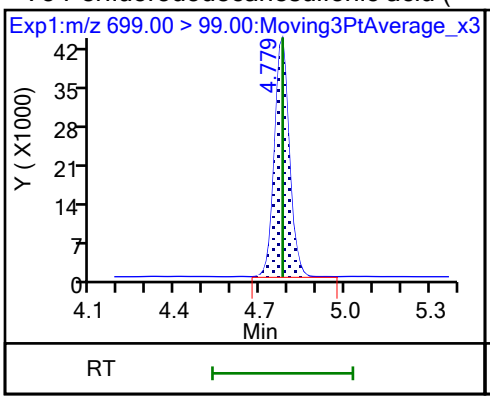
74 1H,1H,2H,2H-perfluorododecanesul



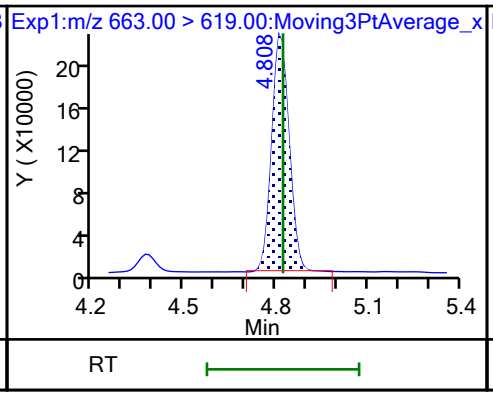
75 Perfluorododecanesulfonic acid (



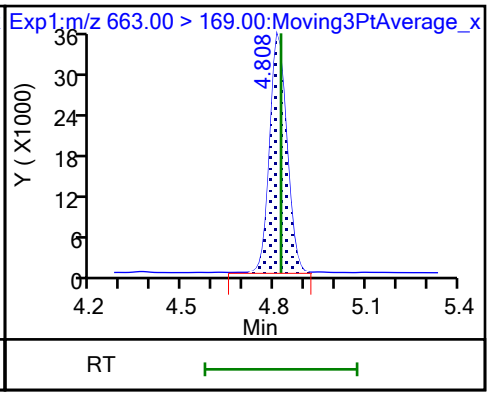
75 Perfluorododecanesulfonic acid (



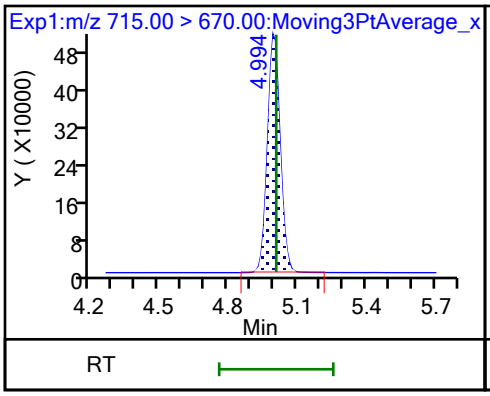
41 Perfluorotridecanoic acid



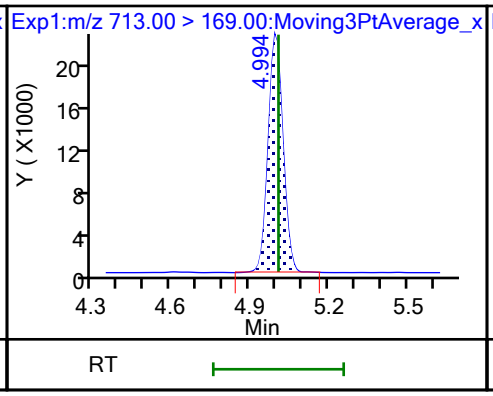
41 Perfluorotridecanoic acid



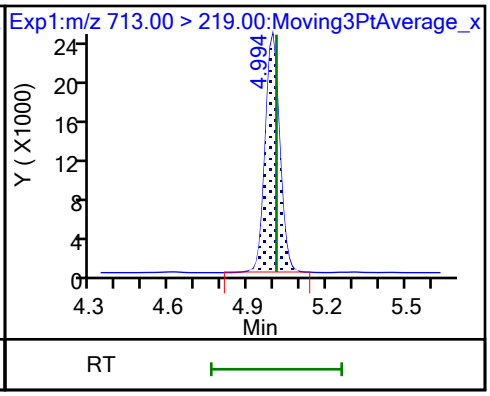
D 43 13C2 PFTeDA



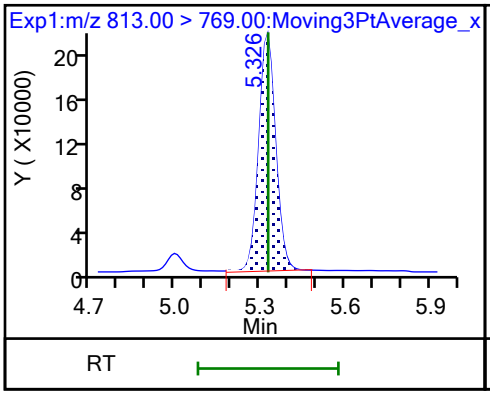
42 Perfluorotetradecanoic acid



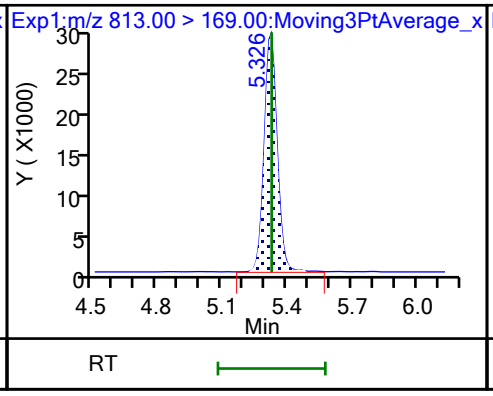
42 Perfluorotetradecanoic acid



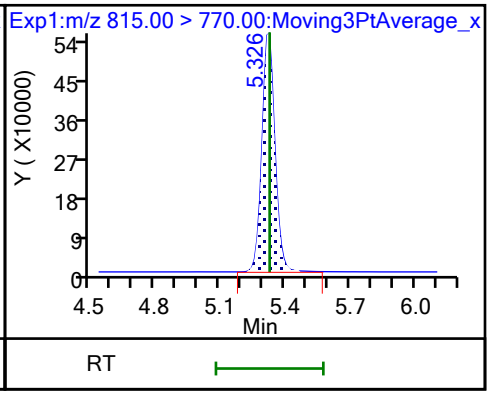
45 Perfluorohexadecanoic acid



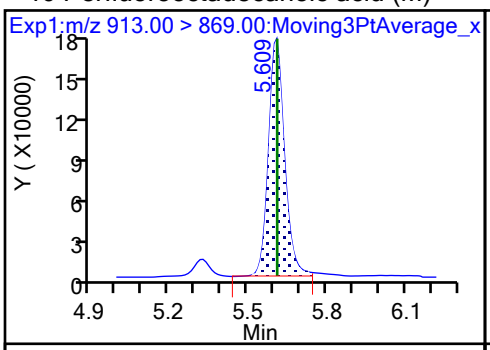
45 Perfluorohexadecanoic acid



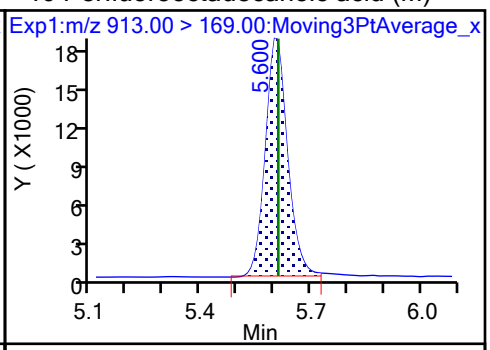
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Lims ID: ICISAV
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 26-Jul-2023 17:41:18 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICISAV
Misc. Info.: 200-0056441-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:28 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:44:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.607	1929850	1.25		100	852	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.112	2.112	0.0	1.004	1439078	0.9899		99.0	94.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.696	1529086	1.28		102	548	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1385943	1.05		105	60.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.425	2.425	0.0	0.700	1858340	1.15		98.8	53325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.425	2.425	0.0	1.000	1645342	0.9215	Target=2.07	104	208	M
298.90 > 99.00	2.425	2.425	0.0	1.000	798559		2.06(1.04-3.11)	104	141	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.694	2.694	0.0	0.778	220382	1.18		101	73.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.694	2.694	0.0	1.000	569311	0.8881		94.8	567	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.789	1544435	1.27		102	502	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	1301870	0.9575	Target=14.29	95.7	137	M
313.00 > 119.00	2.731	2.731	0.0	1.000	92229		14.12(7.15-21.44)	95.7	50.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.883	1426185	0.9245	Target=2.78	98.2	453	M
349.00 > 99.00	2.731	2.731	0.0	0.883	523421		2.72(1.39-4.17)	98.2	329	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.844	2.844	0.0	0.821	296521	1.26		101	448	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.844	2.844	0.0	1.000	235976	0.99		99.4	561	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.092	3.092	0.0	1.000	1123331	0.8590	Target=3.23	94.0	519	M
399.00 > 99.00	3.092	3.092	0.0	1.000	338365		3.32(1.62-4.84)	94.0	154	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.092	3.092	0.0	0.893	1396957	1.21		102	6682	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.104	3.104	0.0	1.000	1446925	0.9607	Target=4.11	96.1	215	M
363.00 > 169.00	3.104	3.104	0.0	1.000	346831		4.17(2.06-6.17)	96.1	225	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.104	3.104	0.0	0.896	1679653	1.26		101	737	M
77 DONA										
377.00 > 251.00	3.138	3.138	0.0	0.830	4190396	0.9622	Target=3.28	102	3717	
377.00 > 85.00	3.138	3.138	0.0	0.830	1260116		3.33(1.64-4.92)	102	1390	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.446	3.446	0.0	0.911	1008539	0.9221	Target=4.71	96.8	1714	
449.00 > 99.00	3.446	3.446	0.0	0.911	208912		4.83(2.36-7.07)	96.8	432	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.446	0.0	0.995	299923	1.25		105	422	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.446	3.446	0.0	1.000	618135	0.8954		94.2	1663	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.464	3.464	0.0	1.000	1597361	0.9691	Target=2.90	96.9	122	
413.00 > 169.00	3.464	3.464	0.0	1.000	554295		2.88(1.45-4.35)	96.9	502	M
D 14 13C4 PFOA										
417.00 > 372.00	3.464	3.464	0.0	1.000	1934463	1.28		102	3978	
* 62 13C2 PFOA										
415.00 > 370.00	3.464	3.464	0.0		1941206	1.25			4649	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.092	904398	1.23		103	2576	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	792430	0.8977	Target=4.11	96.7	1005	M
499.00 > 99.00	3.783	3.783	0.0	1.000	186696		4.24(2.05-6.16)	96.7	256	M
D 19 13C5 PFNA										
468.00 > 423.00	3.793	3.793	0.0	1.095	2143126	1.30		104	7977	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.003	1661649	0.9889	Target=8.48	98.9	305	
463.00 > 169.00	3.803	3.803	0.0	1.003	199241		8.34(4.24-12.72)	98.9	1189	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	2512476	0.9301		99.7	3906	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	638462	0.9507	Target=2.17	98.8	2935	
549.00 > 99.00	4.074	4.074	0.0	1.077	294408		2.17(1.08-3.25)	98.8	552	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.186	2125756	1.23		98.8	9272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	1775242	1.04	Target=10.55	104	474	
513.00 > 169.00	4.108	4.108	0.0	1.000	155159		11.44(5.27-15.82)	104	563	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.186	331913	1.23		102	577	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	556332	0.9117		95.0	3162	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.214	1887535	1.28		103	3920	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1437750	1.00		99.8	2735	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.227	518688	1.26		101	1367	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.260	0.0	1.003	370720	0.9846		98.5	480	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	499466	0.9663	Target=2.28	100	1659	
599.00 > 99.00	4.346	4.346	0.0	1.149	210609		2.37(1.14-3.42)	100	596	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	1729770	1.02	Target=11.30	102	492	
563.00 > 169.00	4.370	4.382	-0.012	0.997	141730		12.20(5.65-16.96)	102	888	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.265	2053330	1.26		101	9003	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.393	4.393	0.0	1.268	487913	1.23		98.5	834	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.000	364226	0.9329		93.3	589	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.477	0.0	1.183	3925775	0.9477		100	4259	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.330	2123640	1.29		103	8948	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.616	4.616	0.0	1.002	1656352	0.9579	Target=8.15	95.8	155	
613.00 > 169.00	4.616	4.616	0.0	1.002	195564		8.47(4.07-12.22)	95.8	1566	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.126	328276	0.9000		93.4	3601	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	163618	0.9340	Target=0.50	96.5	1669	
699.00 > 99.00	4.779	4.779	0.0	1.263	340004		0.48(0.25-0.75)	96.5	2126	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.822	4.822	0.0	1.047	1823052	1.00	Target=6.61	100	159	
663.00 > 169.00	4.822	4.822	0.0	1.047	284386		6.41(3.31-9.92)	100	1889	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.008	5.008	0.0	1.446	2077683	1.26		101	7096	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.000	174160	0.9371	Target=0.96	93.7	2069	
713.00 > 219.00	4.997	5.008	-0.011	0.998	200239		0.87(0.48-1.44)	93.7	2335	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.538	2422773	1.28		102	5274	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	1870661	0.9651	Target=7.69	96.5	189	
813.00 > 169.00	5.328	5.328	0.0	1.000	237159		7.89(3.85-11.54)	96.5	1188	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	1554372	1.03	Target=9.13	103	171	M
913.00 > 169.00	5.611	5.611	0.0	1.053	165585		9.39(4.56-13.69)	103	338	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

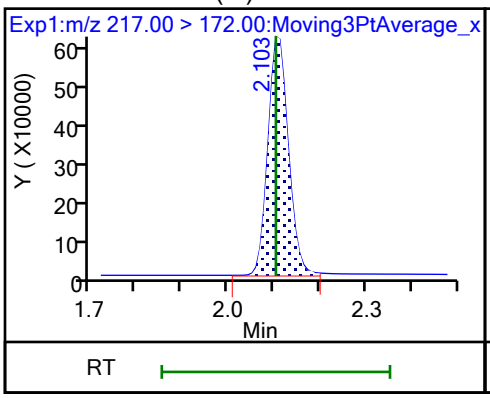
PFAS32NCIC4_00042 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48

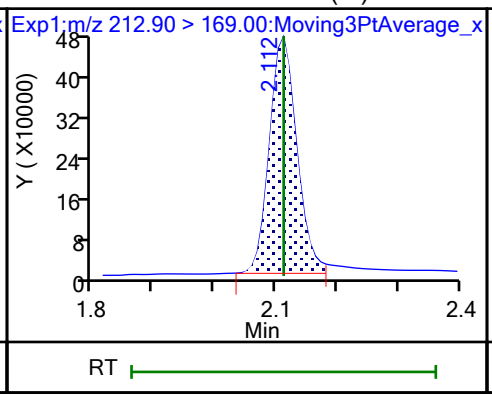
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Injection Date: 26-Jul-2023 17:41:18 Instrument ID: LC812
Lims ID: ICISAV
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

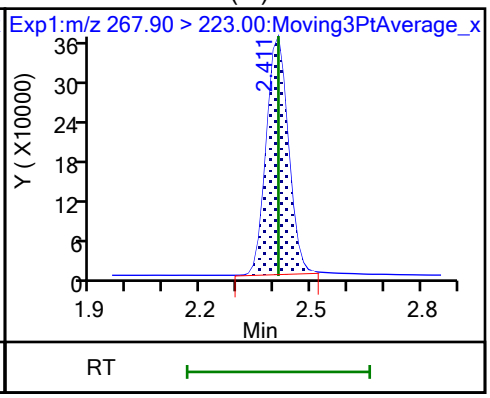
D 1 13C4 PFBA (M)



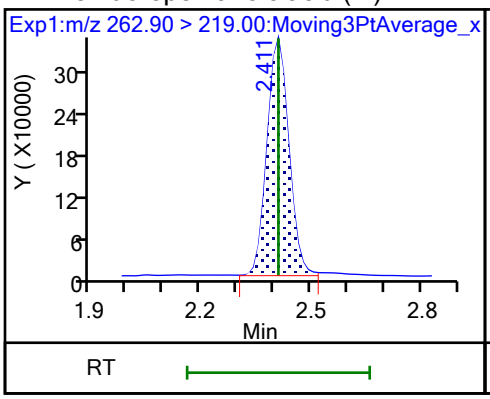
2 Perfluorobutanoic acid (M)



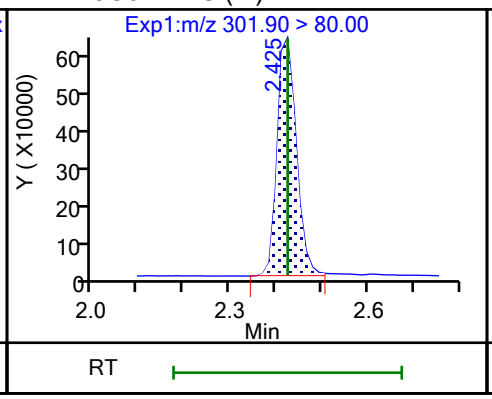
D 3 13C5 PFPeA (M)



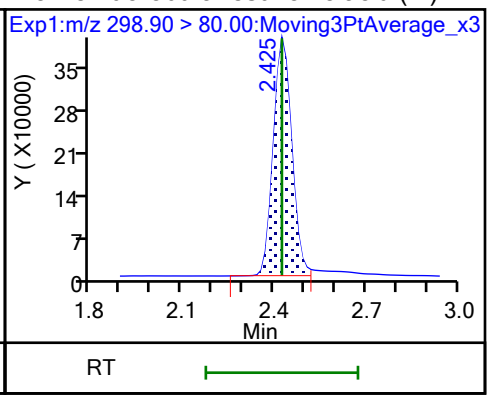
4 Perfluoropentanoic acid (M)



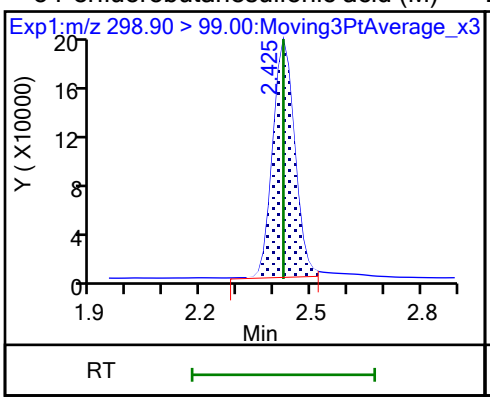
D 47 13C3 PFBS (M)



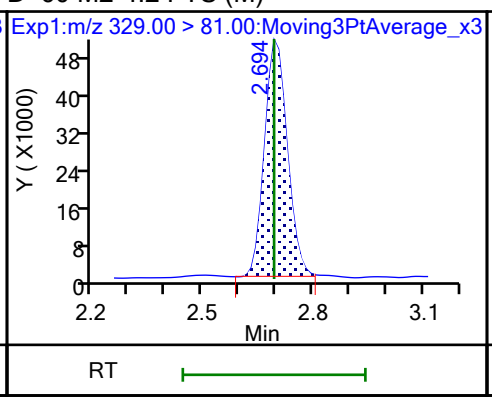
5 Perfluorobutanesulfonic acid (M)



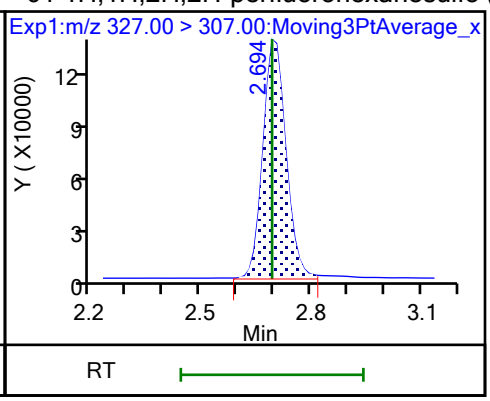
5 Perfluorobutanesulfonic acid (M)



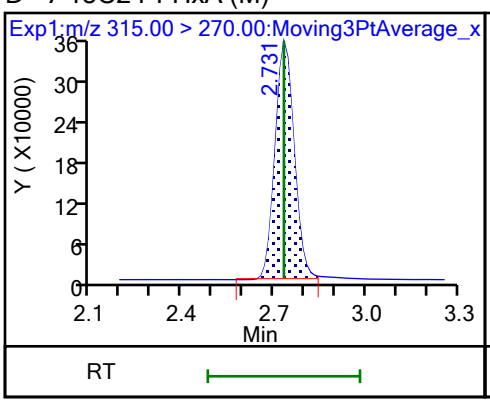
D 60 M2-4:2 FTS (M)



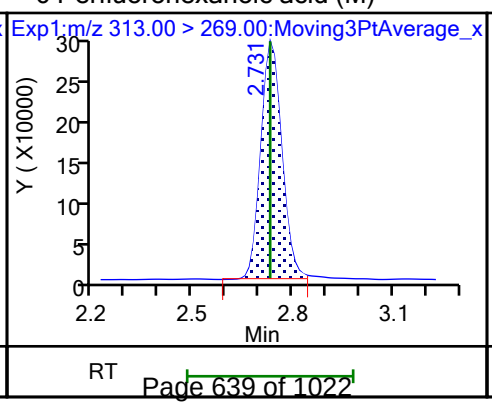
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



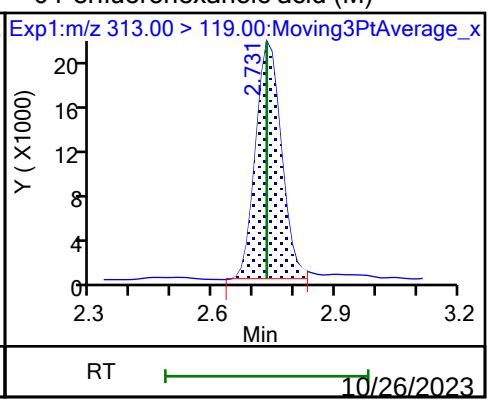
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

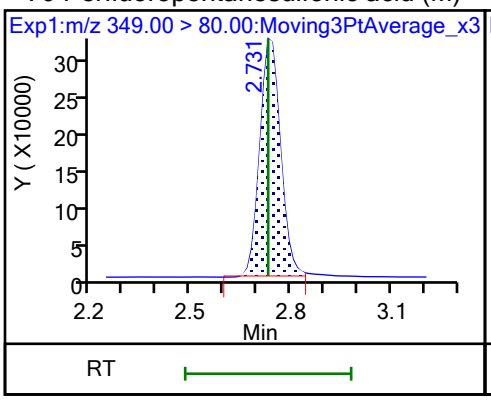


6 Perfluorohexanoic acid (M)

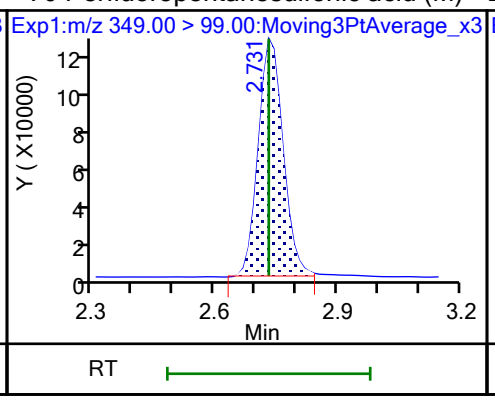


10/26/2023
2:28 PM

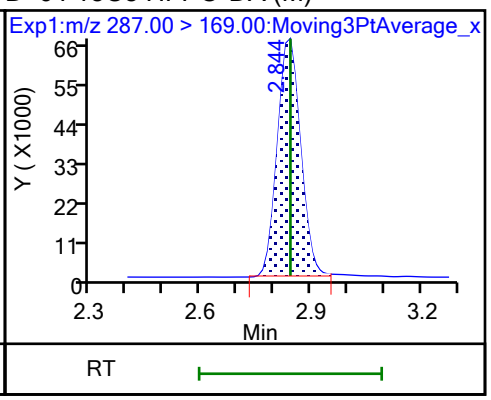
70 Perfluoropentanesulfonic acid (M)



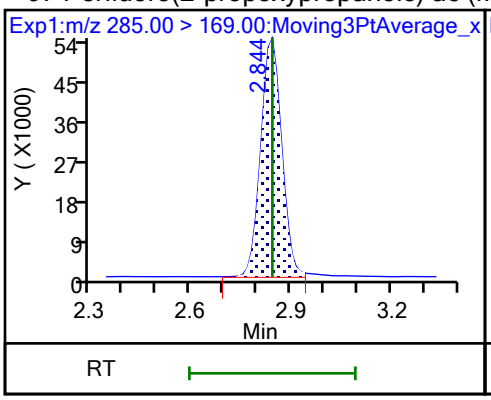
70 Perfluoropentanesulfonic acid (M)



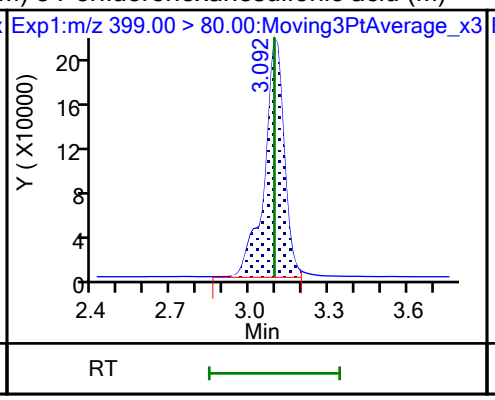
D 64 13C3 HFPO-DA (M)



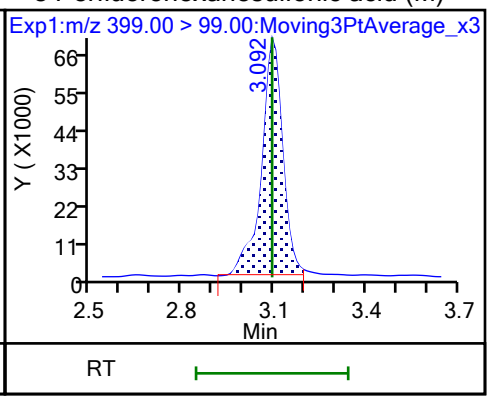
67 Perfluoro(2-propoxypropanoic) ac (M)



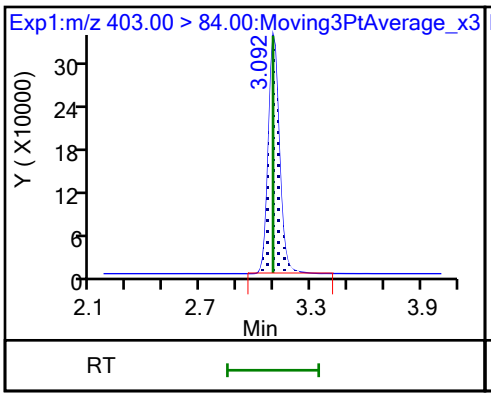
8 Perfluorohexanesulfonic acid (M)



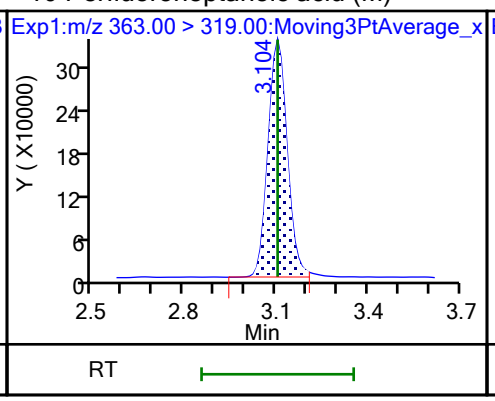
8 Perfluorohexanesulfonic acid (M)



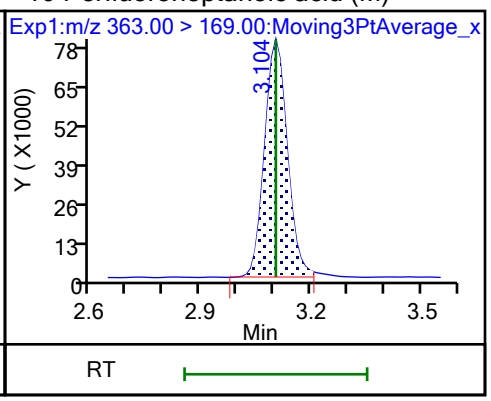
D 11 18O2 PFHxS



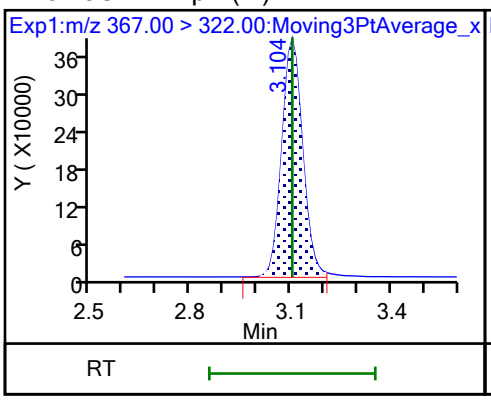
10 Perfluoroheptanoic acid (M)



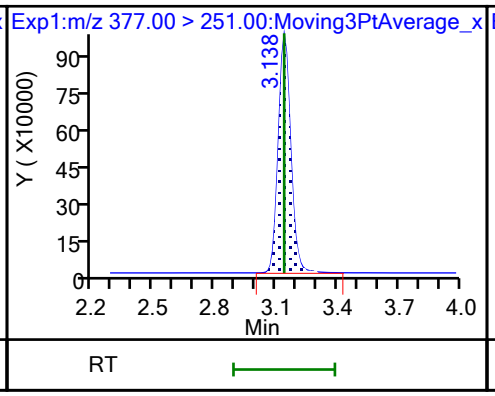
10 Perfluoroheptanoic acid (M)



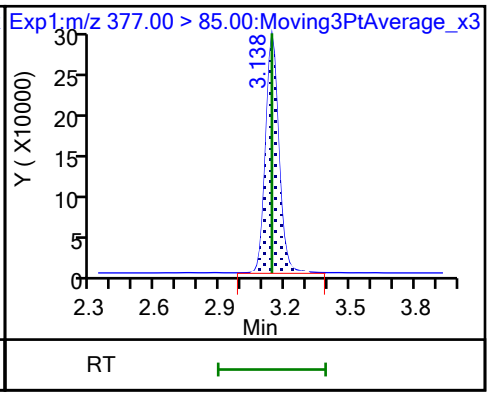
D 9 13C4 PFHpA (M)



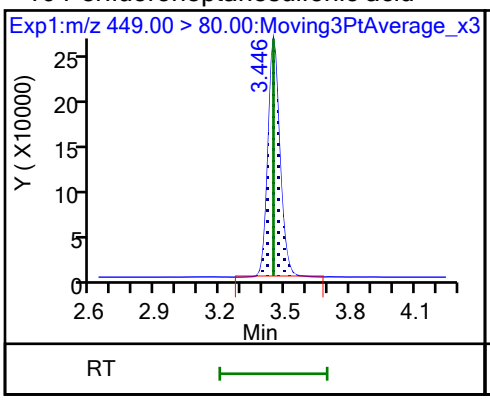
77 DONA



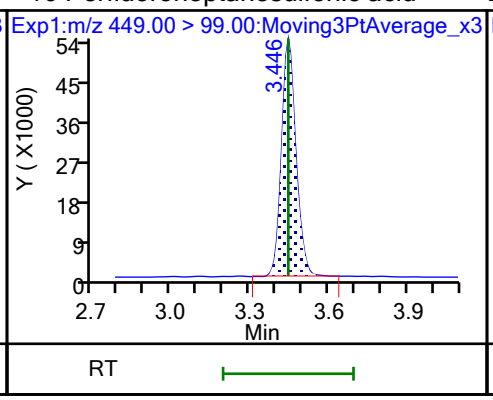
77 DONA



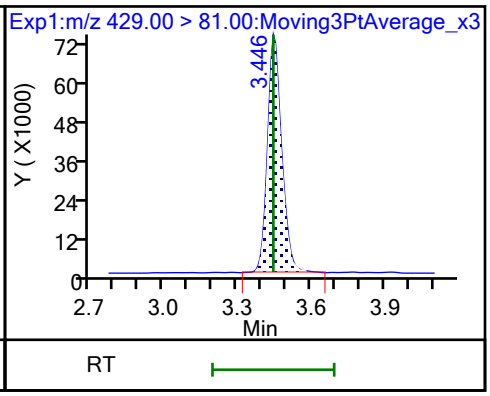
16 Perfluoroheptanesulfonic acid



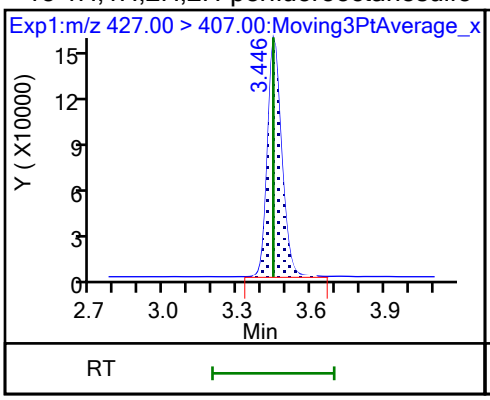
16 Perfluoroheptanesulfonic acid



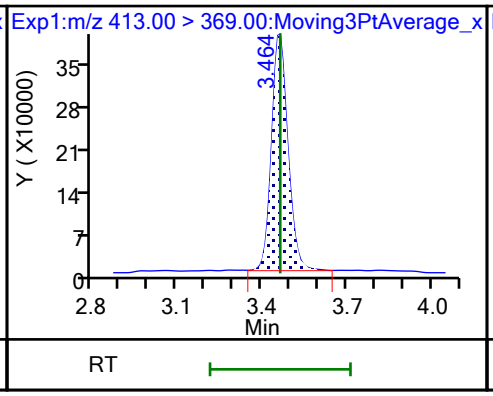
D 12 M2-6:2 FTS



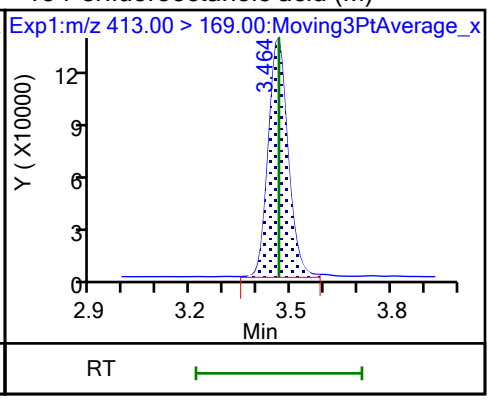
13 1H,1H,2H,2H-perfluorooctanesulfo



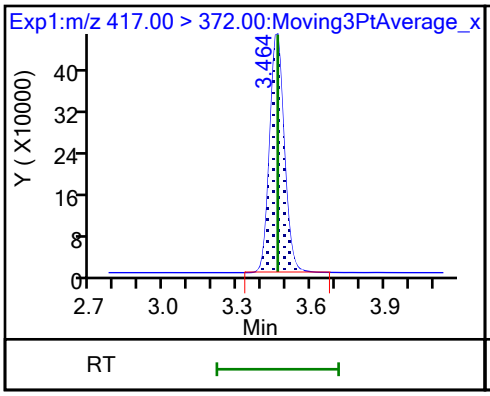
15 Perfluorooctanoic acid



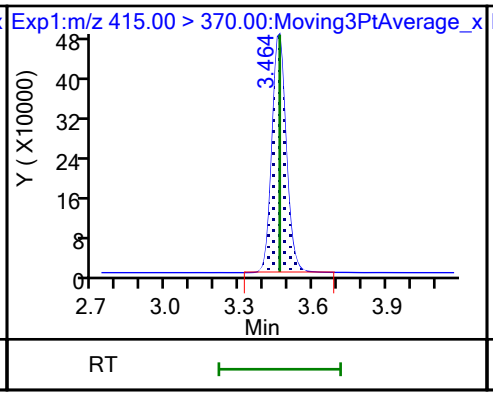
15 Perfluorooctanoic acid (M)



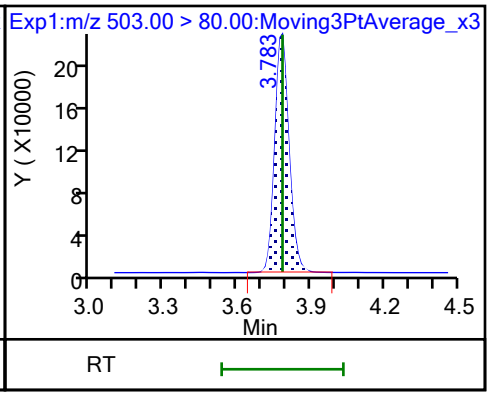
D 14 13C4 PFOA



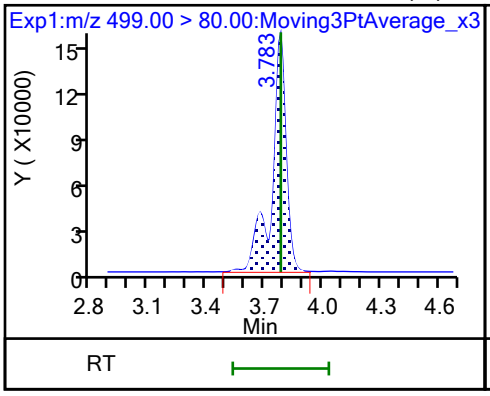
* 62 13C2 PFOA



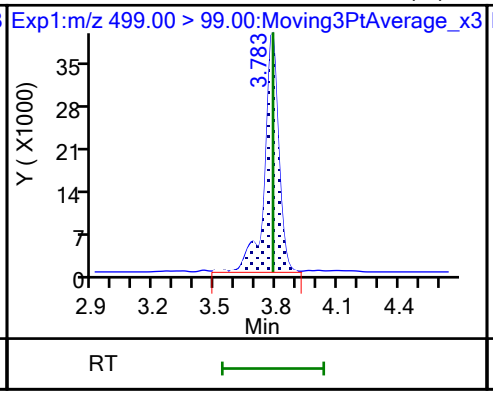
D 18 13C4 PFOS



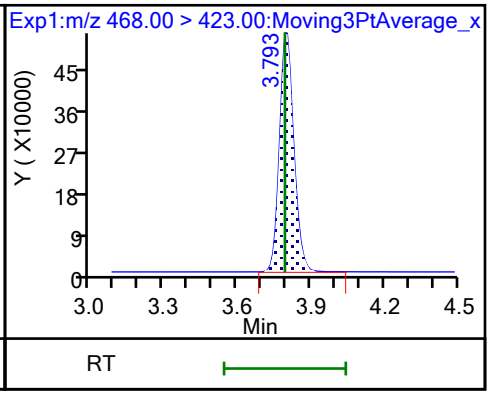
17 Perfluorooctanesulfonic acid (M)



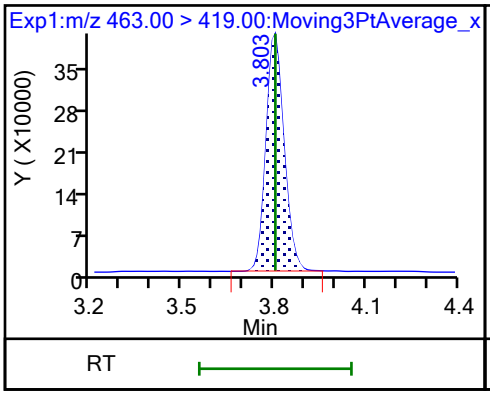
17 Perfluorooctanesulfonic acid (M)



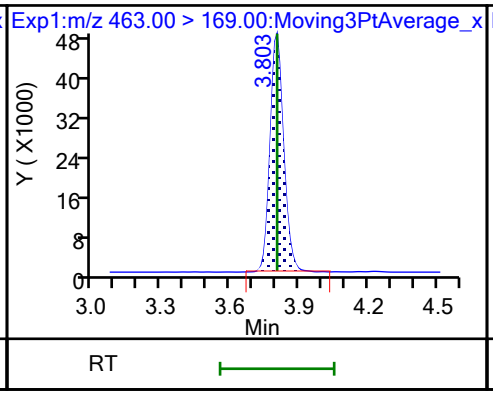
D 19 13C5 PFNA



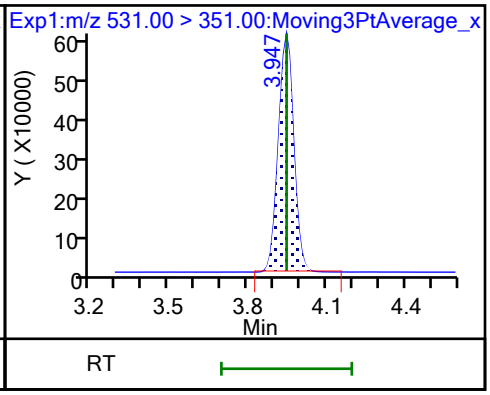
20 Perfluorononanoic acid



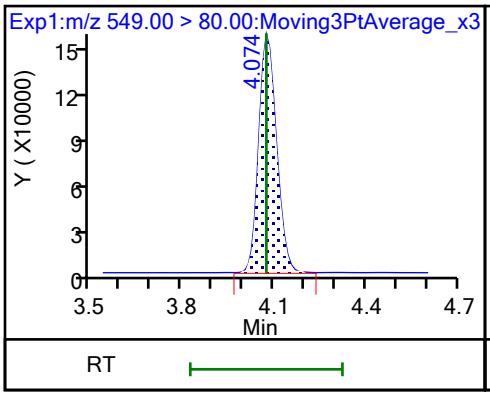
20 Perfluorononanoic acid



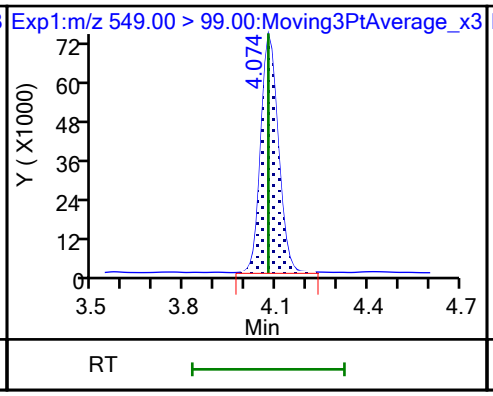
69 9-Chlorohexadecafluoro-3-oxanona



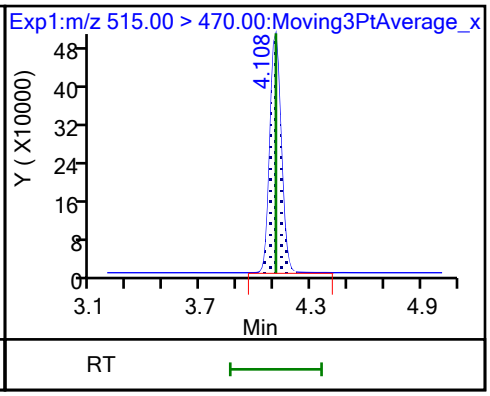
68 Perfluorononanesulfonic acid



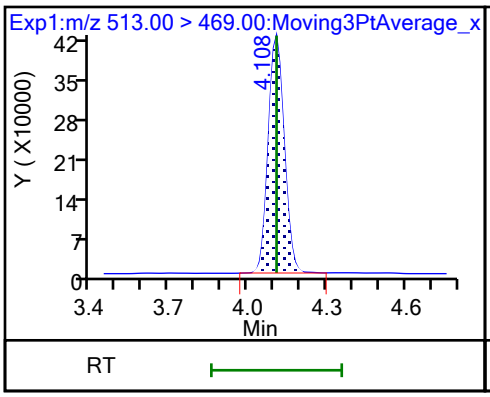
68 Perfluorononanesulfonic acid



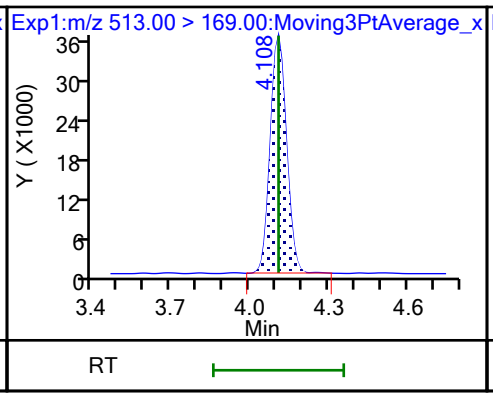
D 23 13C2 PFDA



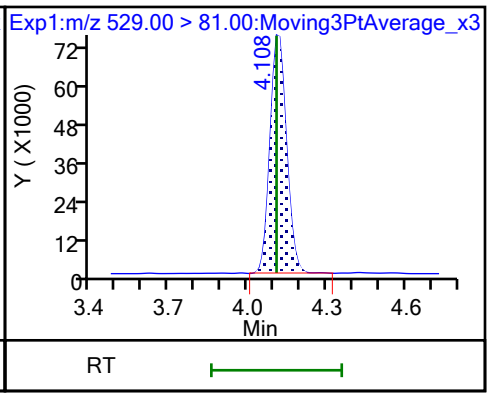
24 Perfluorodecanoic acid



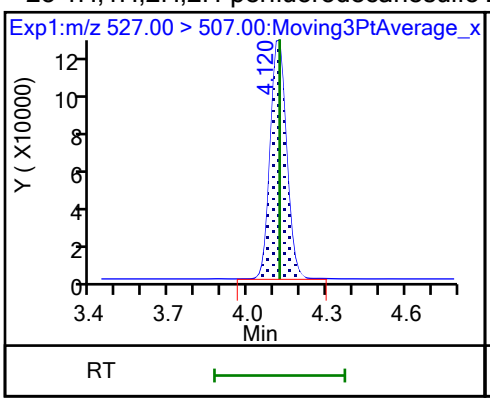
24 Perfluorodecanoic acid



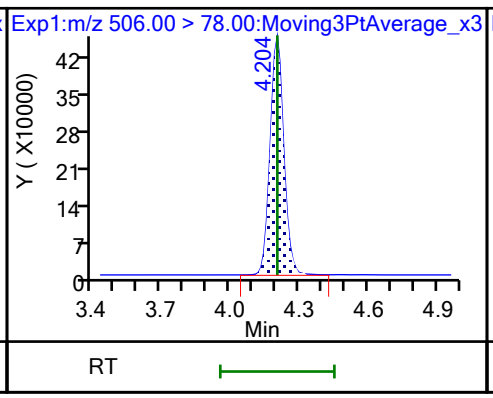
D 26 M2-8:2 FTS



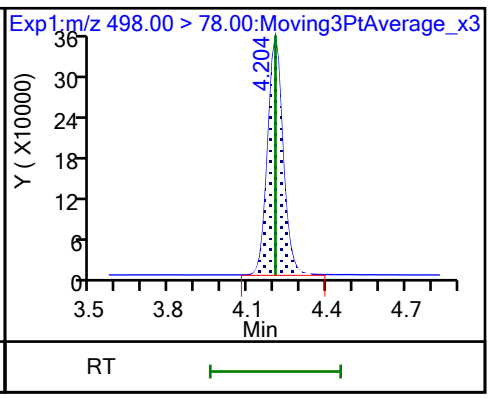
25 1H,1H,2H,2H-perfluorodecanesulfo



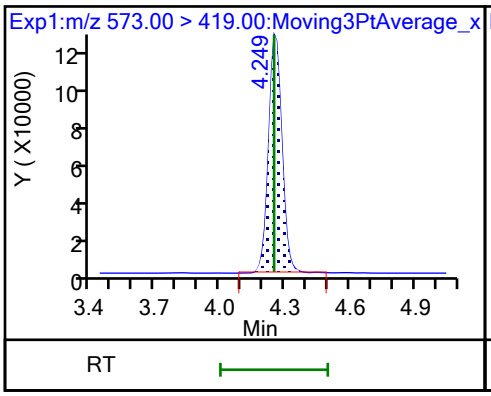
D 21 13C8 FOSA



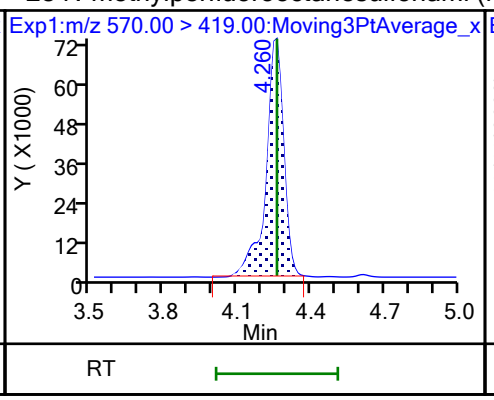
22 Perfluorooctanesulfonamide



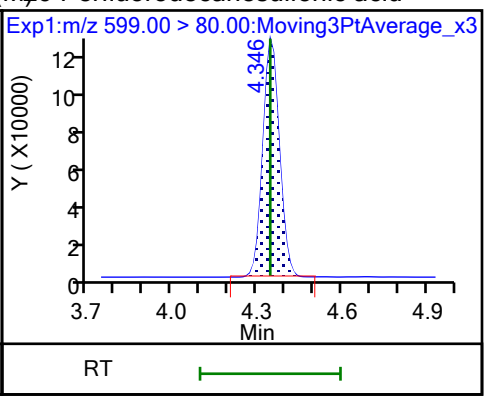
D 27 d3-NMeFOSAA



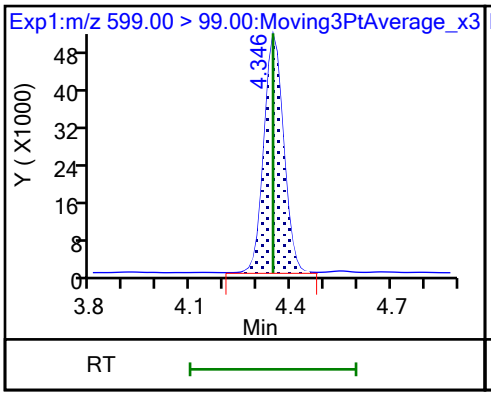
28 N-methylperfluorooctanesulfonami (M)



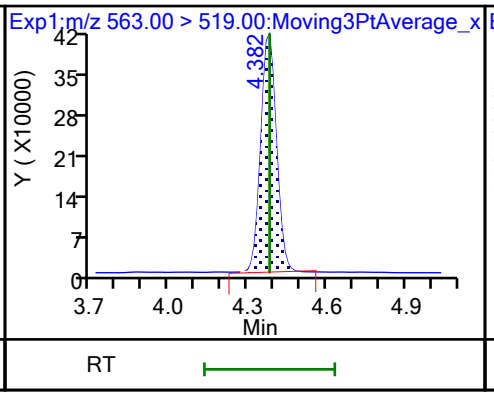
29 Perfluorodecanesulfonic acid



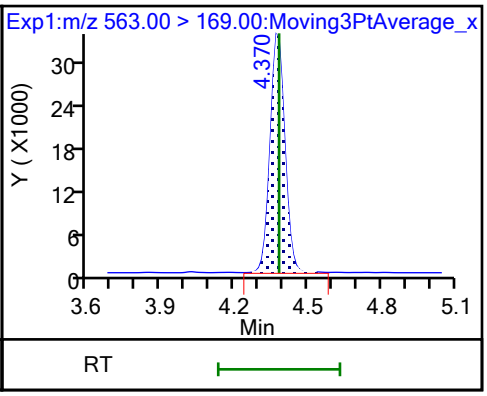
29 Perfluorodecanesulfonic acid



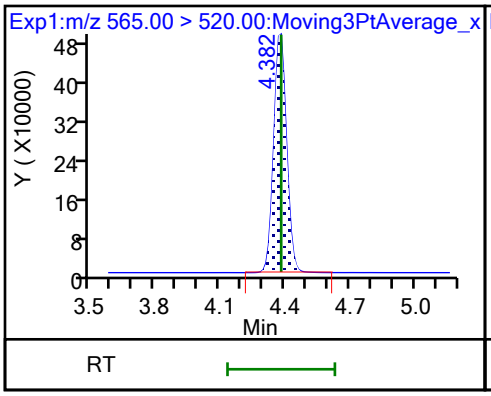
31 Perfluoroundecanoic acid



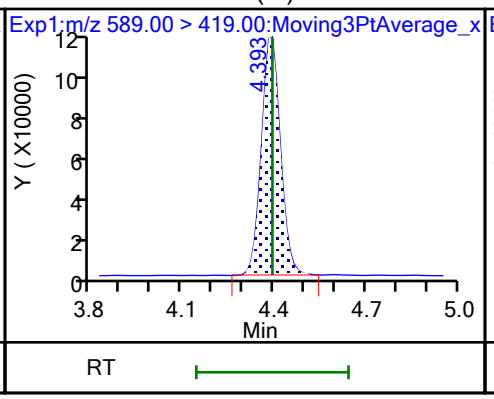
31 Perfluoroundecanoic acid



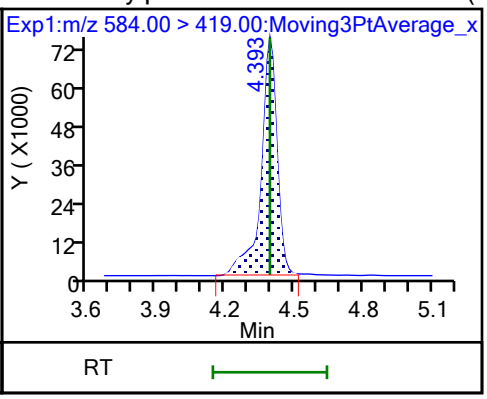
D 30 13C2 PFUnA



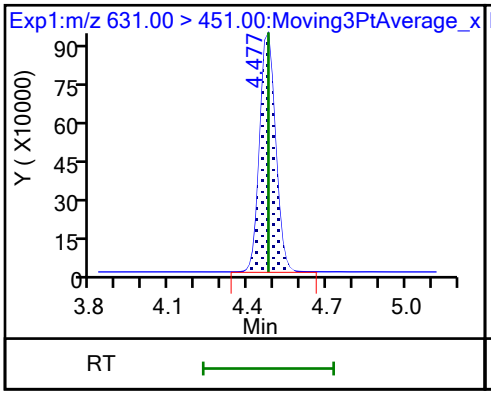
D 32 d5-NEtFOSAA (M)



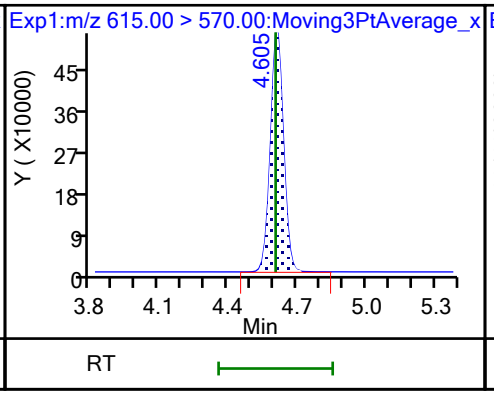
33 N-ethylperfluorooctanesulfonamid (M)



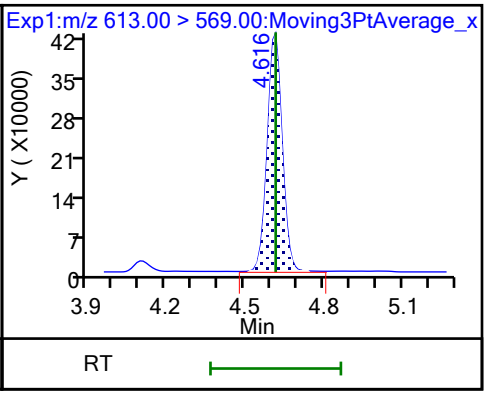
66 11-Chloroeicosafluoro-3-oxaundec



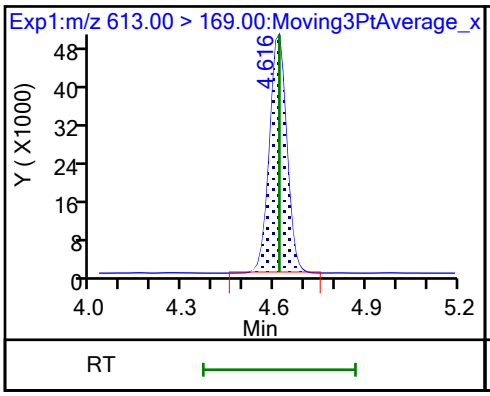
D 36 13C2 PFDoA



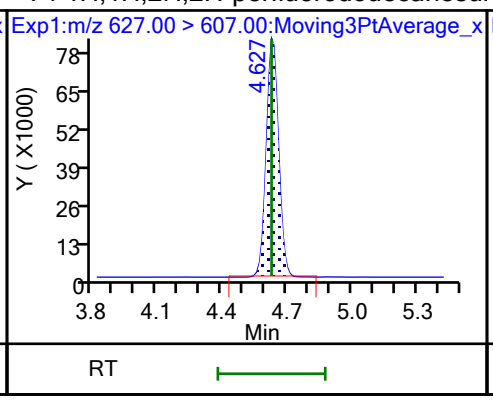
37 Perfluorododecanoic acid



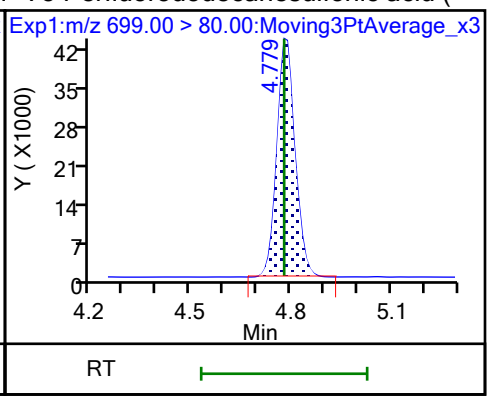
37 Perfluorododecanoic acid



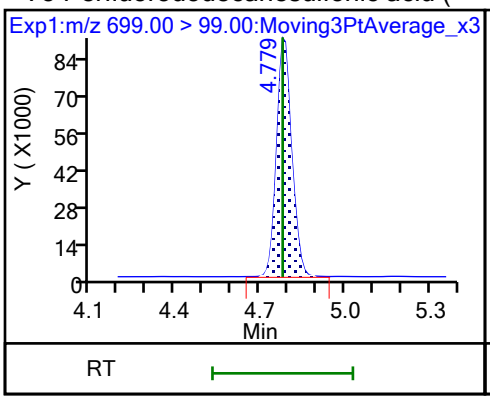
74 1H,1H,2H,2H-perfluorododecanesul



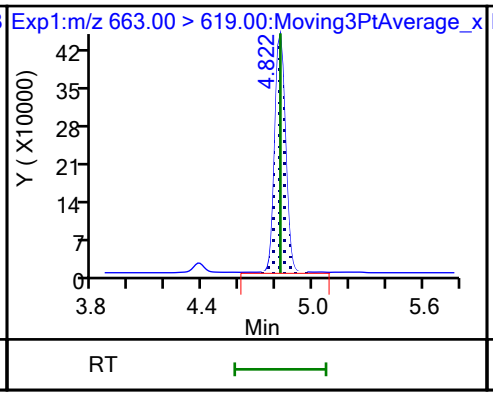
75 Perfluorododecanesulfonic acid (



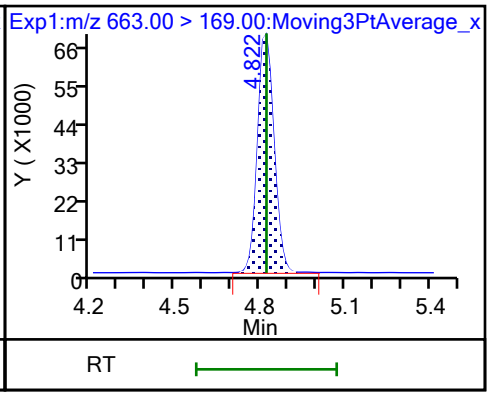
75 Perfluorododecanesulfonic acid (



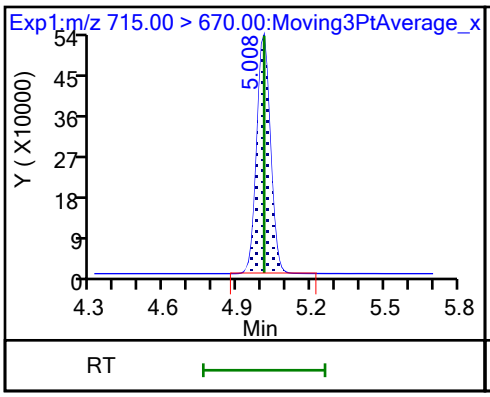
41 Perfluorotridecanoic acid



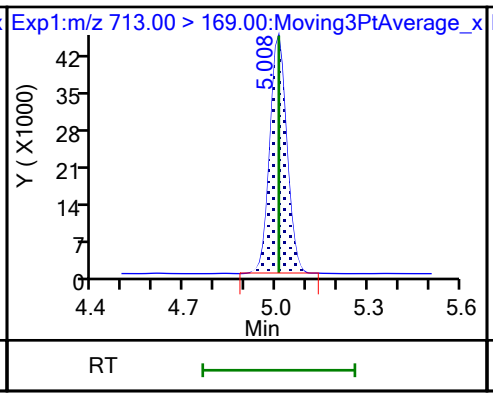
41 Perfluorotridecanoic acid



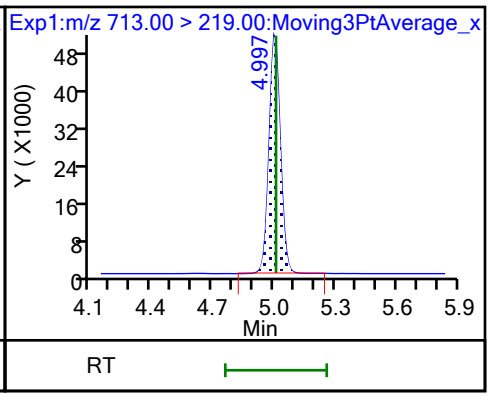
D 43 13C2 PFTeDA



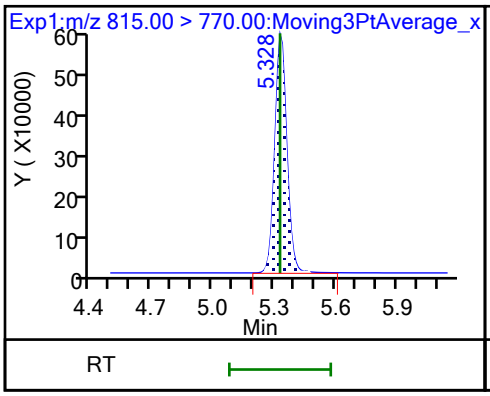
42 Perfluorotetradecanoic acid



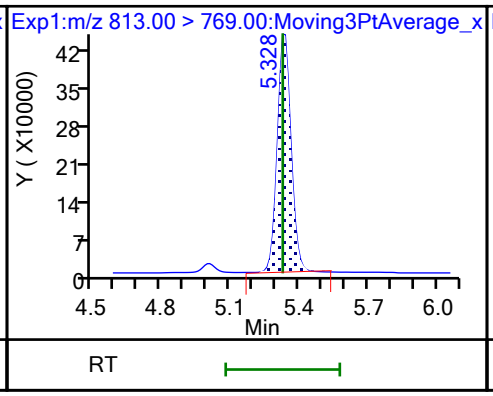
42 Perfluorotetradecanoic acid



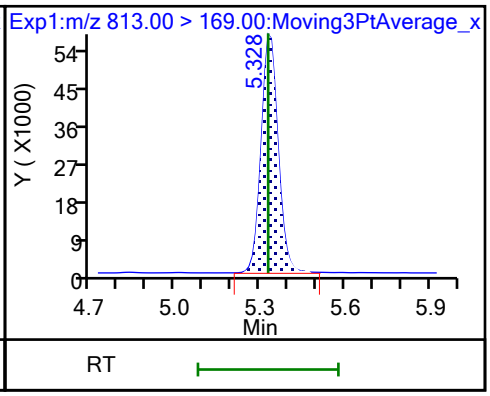
D 44 13C2 PFHxDA



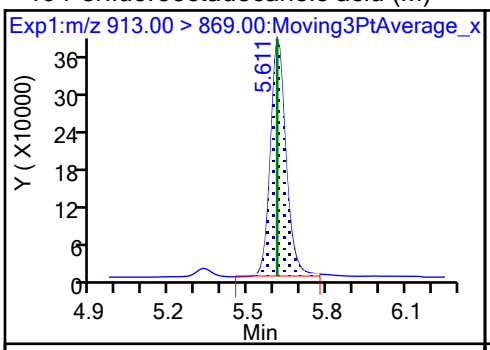
45 Perfluorohexadecanoic acid



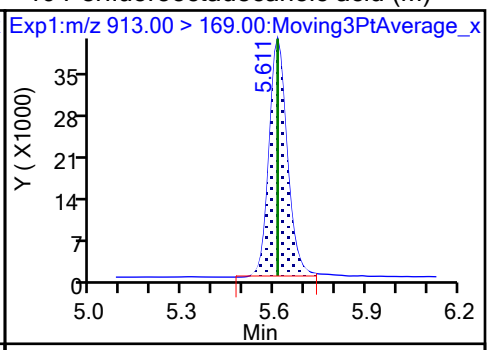
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Jul-2023 17:49:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 5
Misc. Info.: 200-0056441-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:56 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:04:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	2025338	1.28		102	885	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	3820872	2.57		103	264	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1531883	1.24		99.4	493	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	3191311	2.41		96.5	120	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1976378	1.19		102	60670	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	4220392	2.22	Target=2.07	100	362	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	1966405		2.15(1.04-3.11)	100	237	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.780	221658	1.15		98.4	76.5	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.719	2.694	0.025	1.005	1486720	2.31		98.4	503	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.790	1545081	1.23		98.6	491	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.756	2.731	0.025	1.005	3361171	2.47	Target=14.29	98.8	262	M
313.00 > 119.00	2.744	2.731	0.013	1.000	242572		13.86(7.15-21.44)	98.8	132	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	3383549	2.18	Target=2.78	92.6	480	M
349.00 > 99.00	2.756	2.731	0.025	0.885	1222931		2.77(1.39-4.17)	92.6	414	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.856	2.844	0.012	0.823	295164	1.22		97.3	301	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	568553	2.40		96.2	587	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.115	3.092	0.023	0.897	1406672	1.18		99.5	777	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.115	3.092	0.023	1.000	2901162	2.20	Target=3.23	96.4	1836	M
399.00 > 99.00	3.115	3.092	0.023	1.000	881531		3.29(1.62-4.84)	96.4	477	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	3843212	2.42	Target=4.11	96.7	693	
363.00 > 169.00	3.115	3.104	0.011	1.000	912116		4.21(2.06-6.17)	96.7	744	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.897	1773444	1.29		103	6393	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.832	9881253	2.23	Target=3.28	94.4	5501	
377.00 > 85.00	3.150	3.138	0.012	0.832	2882143		3.43(1.64-4.92)	94.4	2174	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.453	3.446	0.007	0.913	2618603	2.35	Target=4.71	98.8	7174	
449.00 > 99.00	3.453	3.446	0.007	0.913	550605		4.76(2.36-7.07)	98.8	949	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	305639	1.23		104	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	1652144	2.35		98.8	5134	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.471	3.464	0.007	1.000	4162515	2.39	Target=2.90	95.5	331	
413.00 > 169.00	3.471	3.464	0.007	1.000	1483061		2.81(1.45-4.35)	95.5	1671	
D 14 13C4 PFOA										
417.00 > 372.00	3.471	3.464	0.007	1.000	2045642	1.31		105	7037	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		2001977	1.25			5933	
D 18 13C4 PFOS										
503.00 > 80.00	3.784	3.783	0.001	1.090	919926	1.21		101	2583	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.784	3.783	0.001	1.000	1995347	2.22	Target=4.11	95.8	1944	M
499.00 > 99.00	3.784	3.783	0.001	1.000	459970		4.34(2.05-6.16)	95.8	606	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2116548	1.25		99.8	6446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	4090183	2.46	Target=8.48	98.6	745	
463.00 > 169.00	3.803	3.803	0.0	1.000	474097		8.63(4.24-12.72)	98.6	2866	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	6453976	2.35		101	11165	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	1582540	2.32	Target=2.17	96.3	4256	
549.00 > 99.00	4.074	4.074	0.0	1.077	738106		2.14(1.08-3.25)	96.3	2145	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2307904	1.30		104	5432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	4650088	2.52	Target=10.55	101	1254	
513.00 > 169.00	4.108	4.108	0.0	1.000	427287		10.88(5.27-15.82)	101	1132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	331708	1.19		99.2	445	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	1389051	2.28		94.9	12042	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1904586	1.26		101	11251	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	3587757	2.47		98.7	5778	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.249	4.249	0.0	1.224	518571	1.22		97.7	719	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	905881	2.41		96.3	1138	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	1302171	2.48	Target=2.28	103	3082	
599.00 > 99.00	4.346	4.346	0.0	1.149	526351		2.47(1.14-3.42)	103	2245	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2158999	1.29		103	6427	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.003	4518784	2.54	Target=11.30	102	1338	
563.00 > 169.00	4.370	4.382	-0.012	1.000	385480		11.72(5.65-16.96)	102	1987	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	544137	1.33		107	1362	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	985607	2.26		90.5	993	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	9347621	2.22		94.1	9361	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.605	0.001	1.327	2062631	1.21		96.8	7038	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.606	4.616	-0.010	1.000	4182445	2.49	Target=8.15	99.6	410	
613.00 > 169.00	4.606	4.616	-0.010	1.000	492816		8.49(4.07-12.22)	99.6	2697	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.628	4.627	0.001	1.123	829529	2.28		94.4	4461	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	395113	2.22	Target=0.50	91.6	5811	
699.00 > 99.00	4.770	4.779	-0.009	1.261	796739		0.50(0.25-0.75)	91.6	3768	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.044	4556433	2.58	Target=6.61	103	378	
663.00 > 169.00	4.809	4.822	-0.013	1.044	675409		6.75(3.31-9.92)	103	3752	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2135161	1.26		101	5547	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	452708	2.37	Target=0.96	94.8	4679	
713.00 > 219.00	4.987	5.008	-0.021	0.998	484354		0.93(0.48-1.44)	94.8	3347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.317	5.328	-0.011	1.000	4643411	2.44	Target=7.69	97.7	433	
813.00 > 169.00	5.317	5.328	-0.011	1.000	592603		7.84(3.85-11.54)	97.7	1734	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2376838	1.22		97.3	4400	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	3397685	2.29	Target=9.13	91.5	226	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	378101		8.99(4.56-13.69)	91.5	321	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

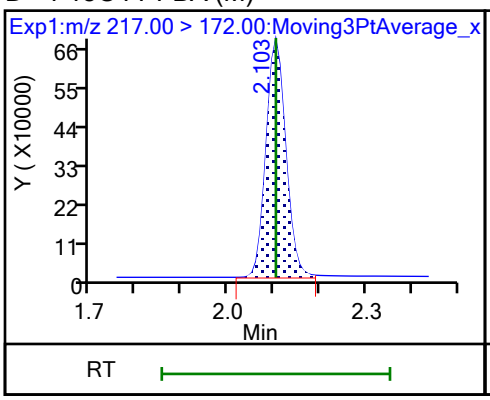
PFAS32NCIC5_00035 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:57 Chrom Revision: 2.3 19-Jul-2023 18:28:48

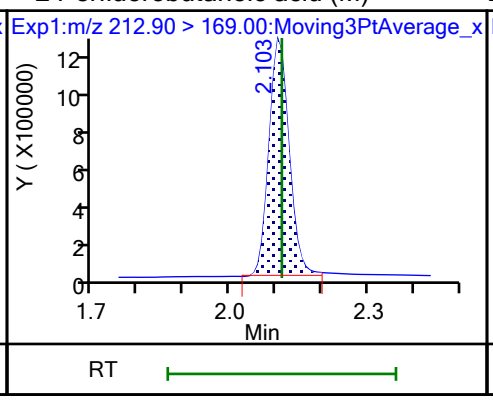
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Injection Date: 26-Jul-2023 17:49:28 Instrument ID: LC812
Lims ID: IC 5
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

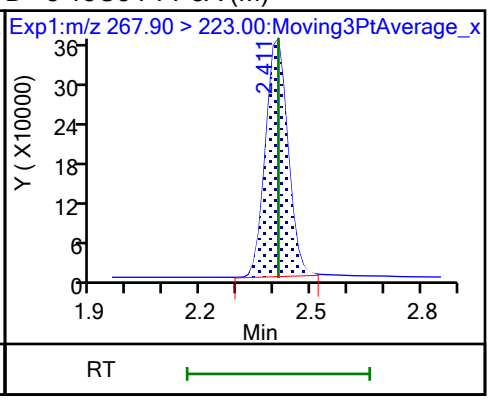
D 1 13C4 PFBA (M)



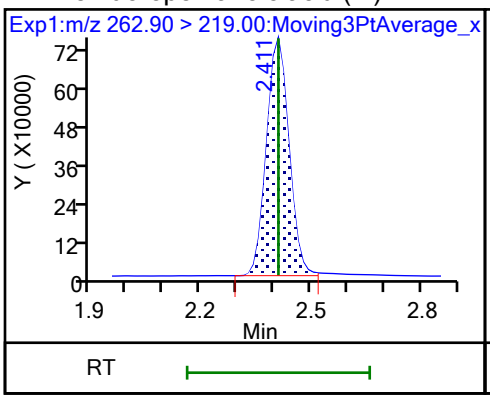
2 Perfluorobutanoic acid (M)



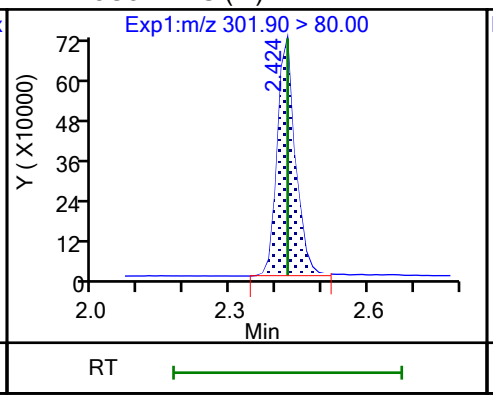
D 3 13C5 PFPeA (M)



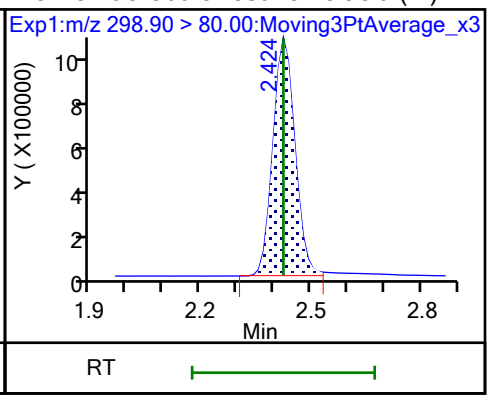
4 Perfluoropentanoic acid (M)



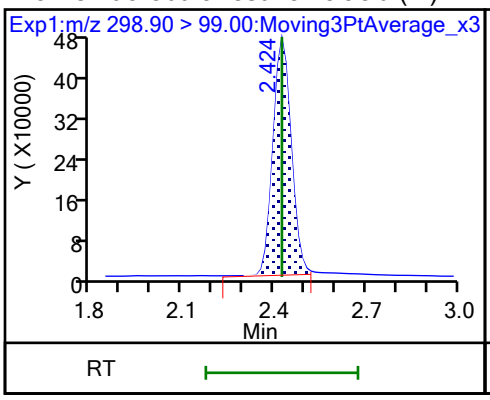
D 47 13C3 PFBS (M)



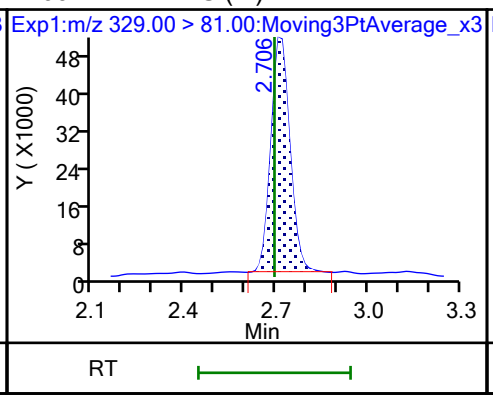
5 Perfluorobutanesulfonic acid (M)



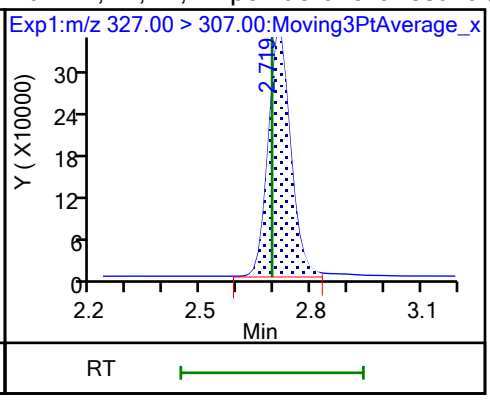
5 Perfluorobutanesulfonic acid (M)



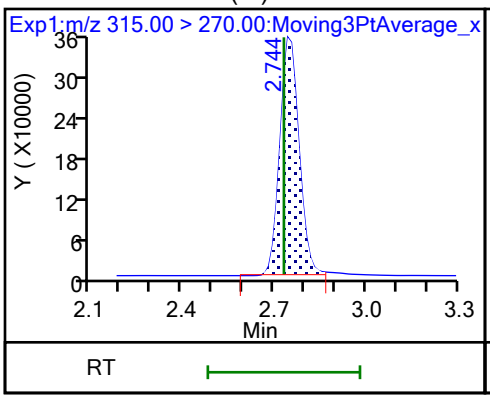
D 60 M2-4:2 FTS (M)



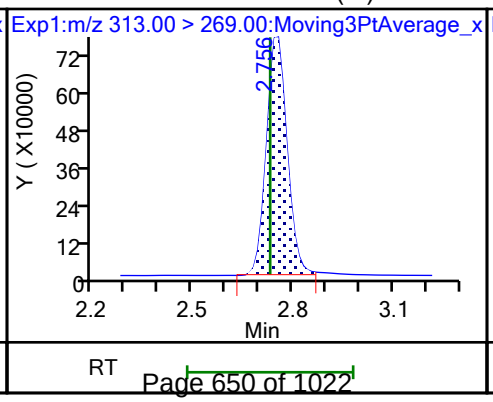
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



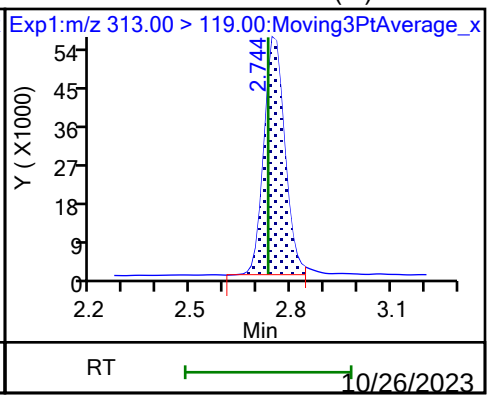
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

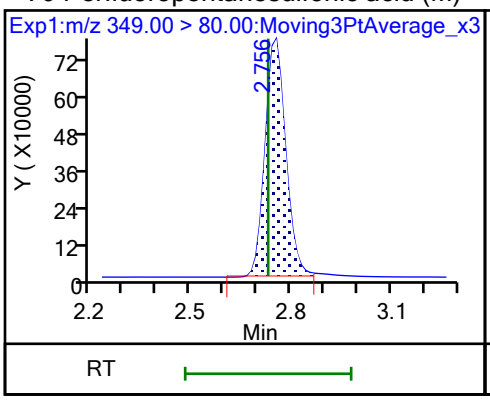


6 Perfluorohexanoic acid (M)

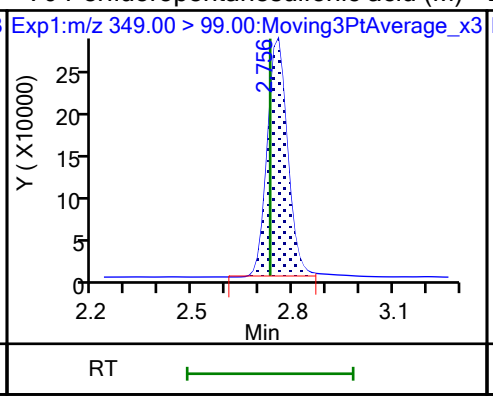


10/26/2023
2:28 PM

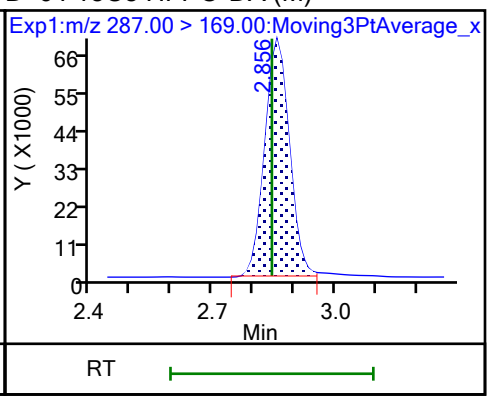
70 Perfluoropentanesulfonic acid (M)



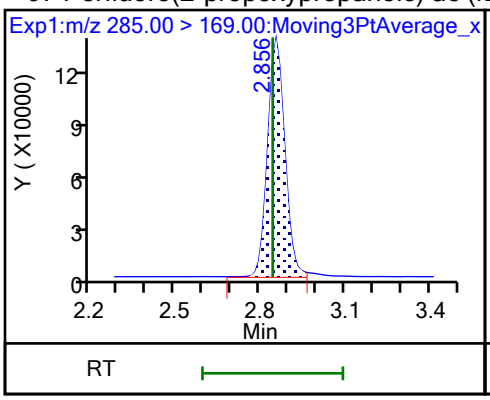
70 Perfluoropentanesulfonic acid (M)



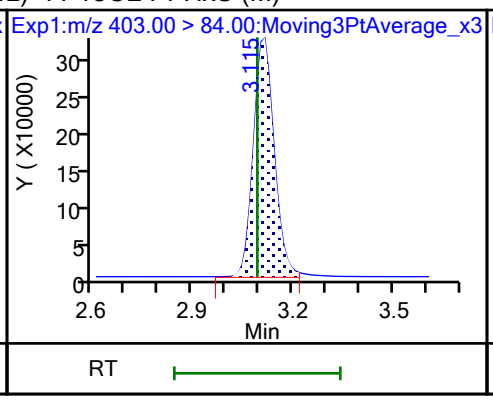
D 64 13C3 HFPO-DA (M)



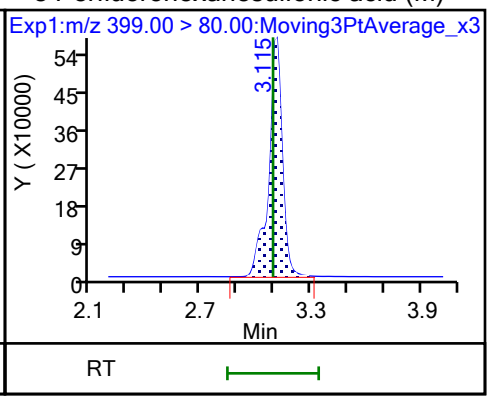
67 Perfluoro(2-propoxypropanoic) ac (M)



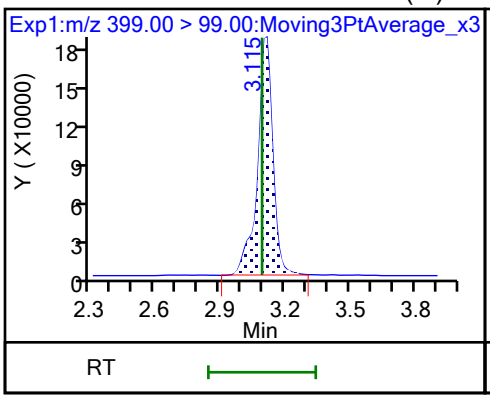
D 11 18O2 PFHxS (M)



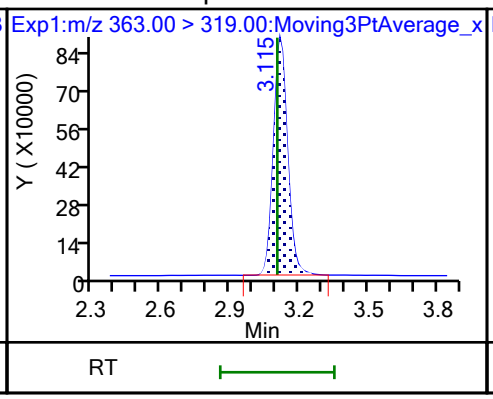
8 Perfluorohexanesulfonic acid (M)



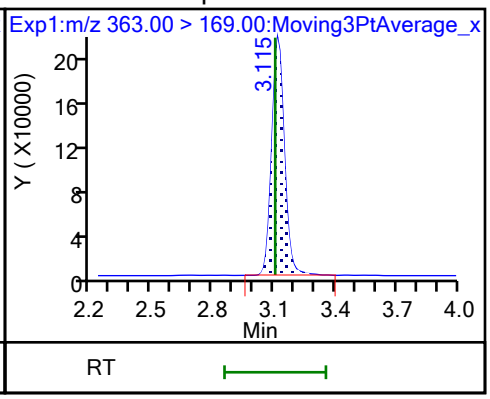
8 Perfluorohexanesulfonic acid (M)



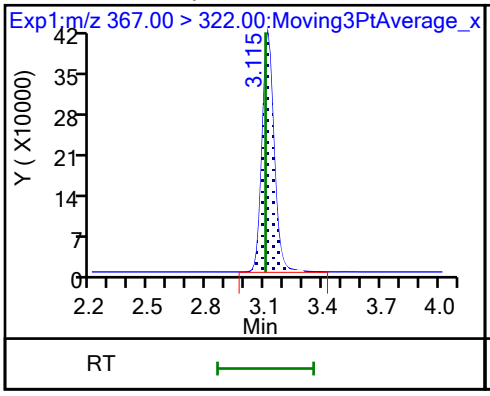
10 Perfluoroheptanoic acid



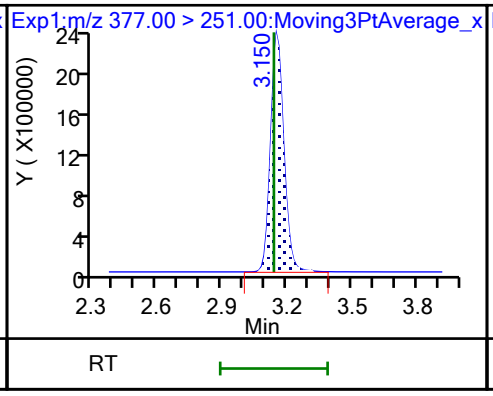
10 Perfluoroheptanoic acid



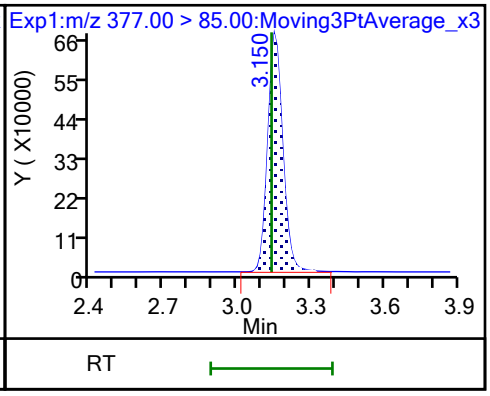
D 9 13C4 PFHpA



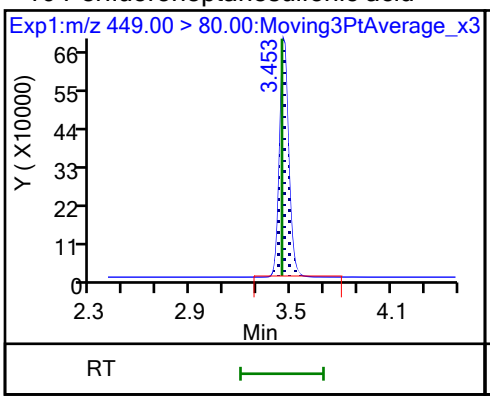
77 DONA



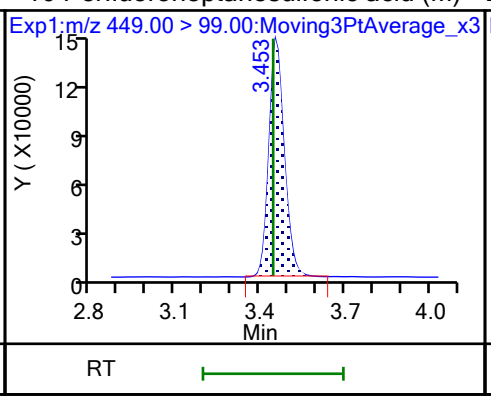
77 DONA



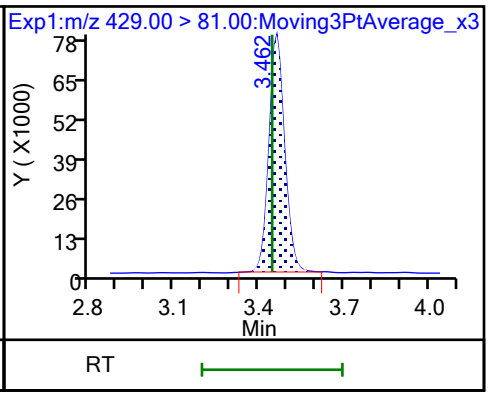
16 Perfluoroheptanesulfonic acid



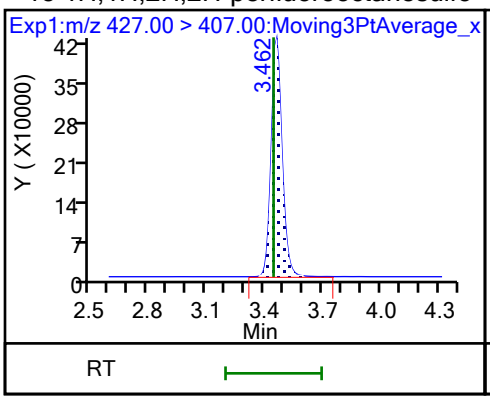
16 Perfluoroheptanesulfonic acid (M)



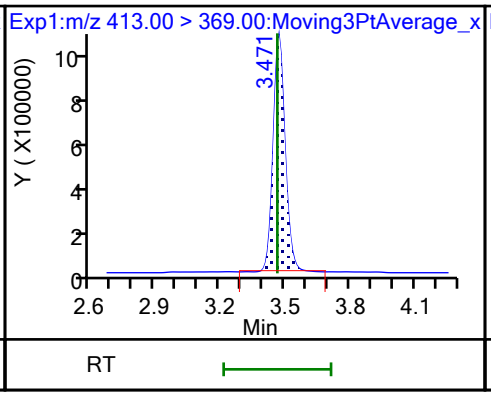
D 12 M2-6:2 FTS



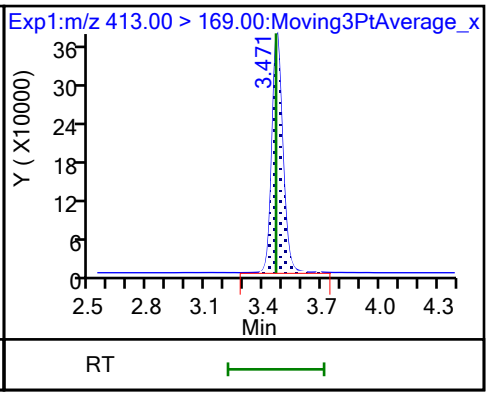
13 1H,1H,2H,2H-perfluorooctanesulfo



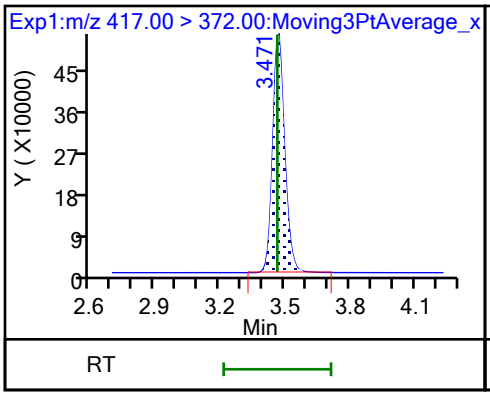
15 Perfluorooctanoic acid



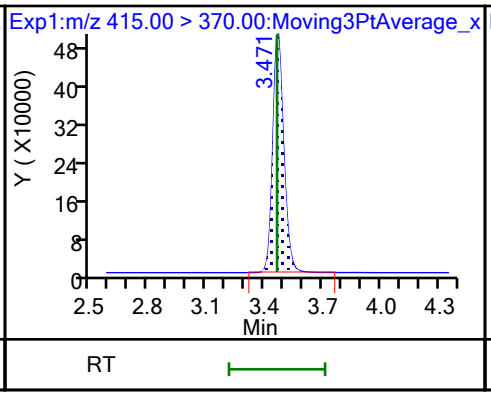
15 Perfluorooctanoic acid



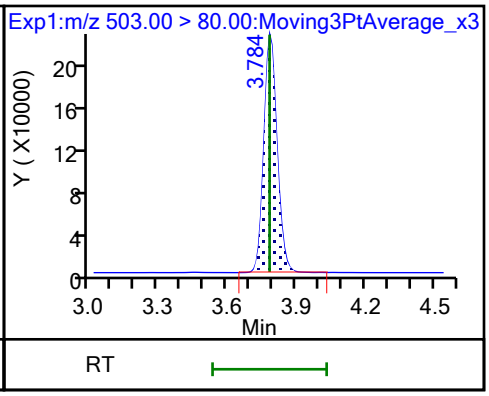
D 14 13C4 PFOA



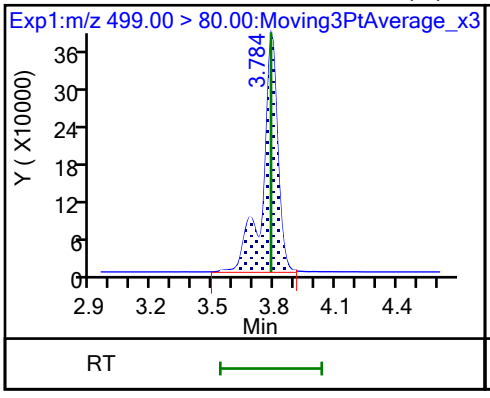
* 62 13C2 PFOA



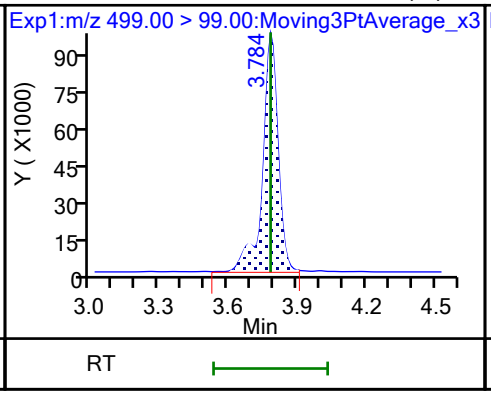
D 18 13C4 PFOS



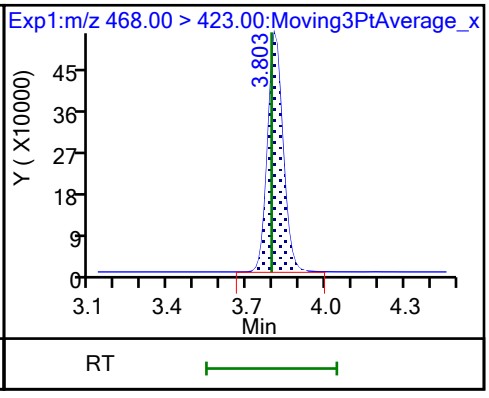
17 Perfluorooctanesulfonic acid (M)



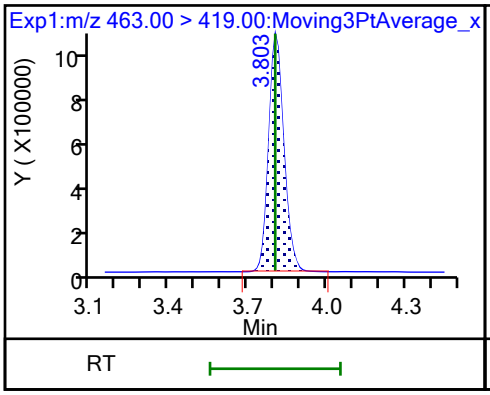
17 Perfluorooctanesulfonic acid (M)



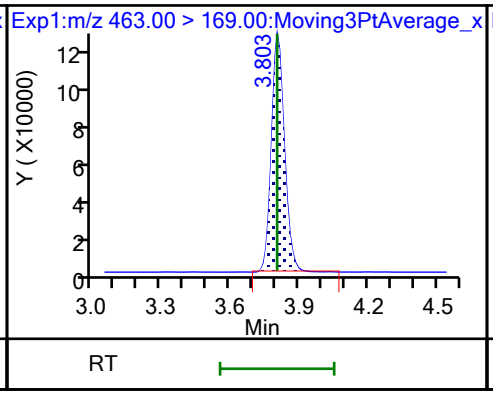
D 19 13C5 PFNA



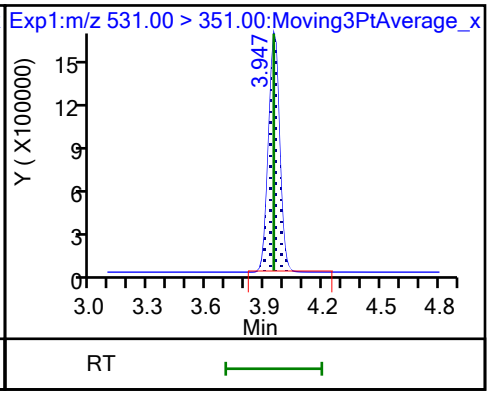
20 Perfluorononanoic acid



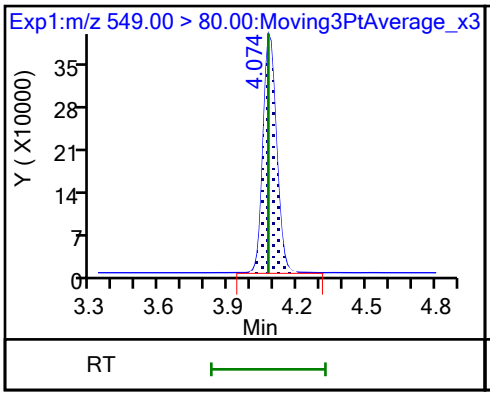
20 Perfluorononanoic acid



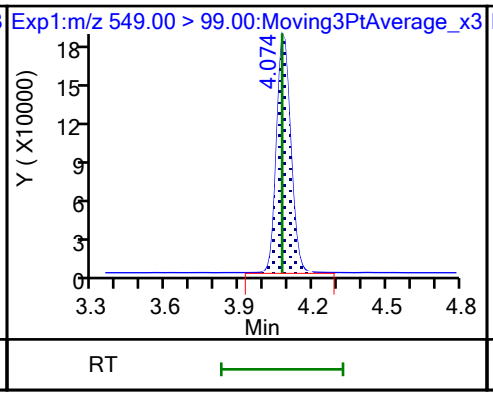
69 9-Chlorohexadecafluoro-3-oxanona



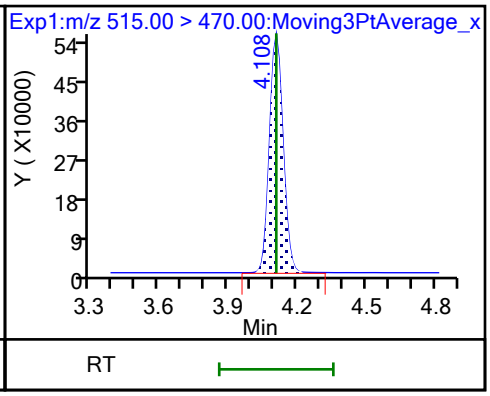
68 Perfluorononanesulfonic acid



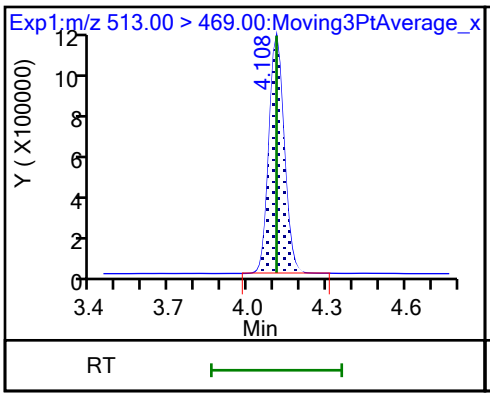
68 Perfluorononanesulfonic acid



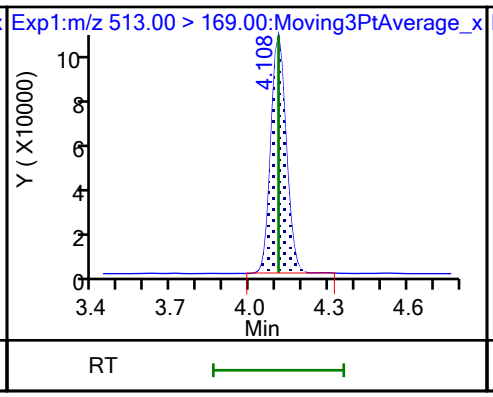
D 23 13C2 PFDA



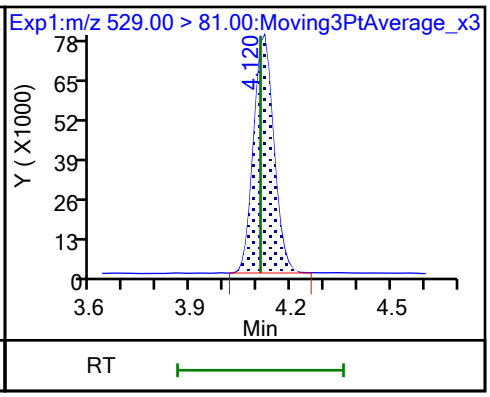
24 Perfluorodecanoic acid



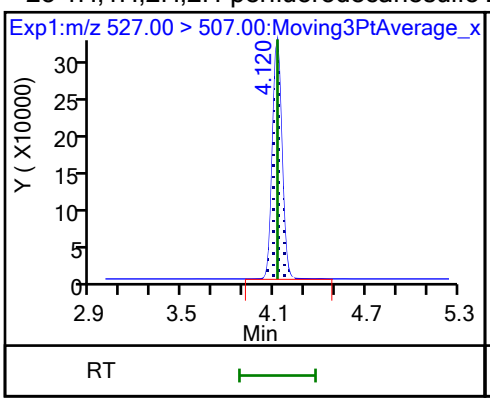
24 Perfluorodecanoic acid



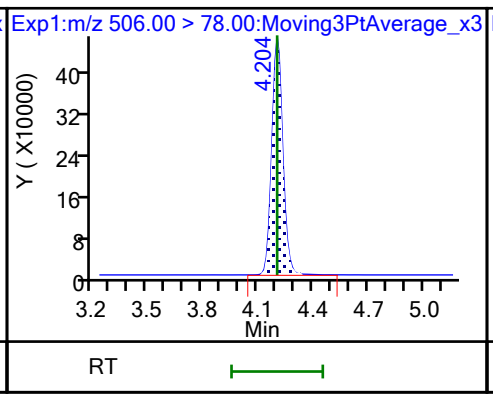
D 26 M2-8:2 FTS



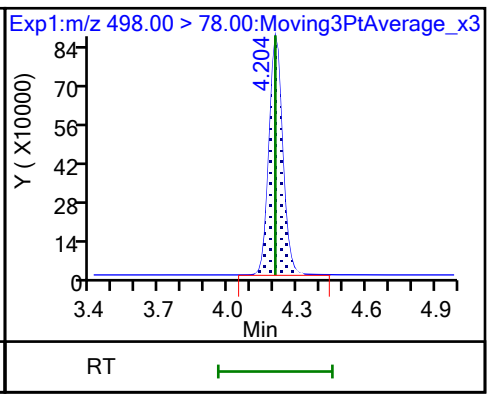
25 1H,1H,2H,2H-perfluorodecanesulfo



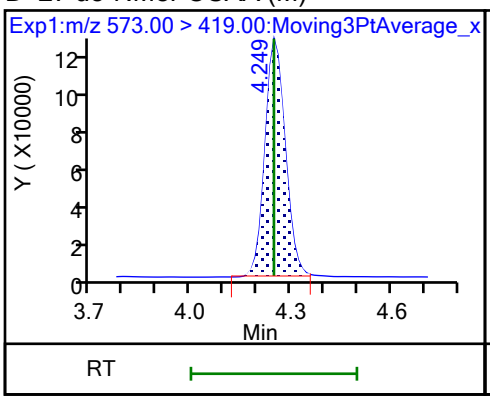
D 21 13C8 FOSA



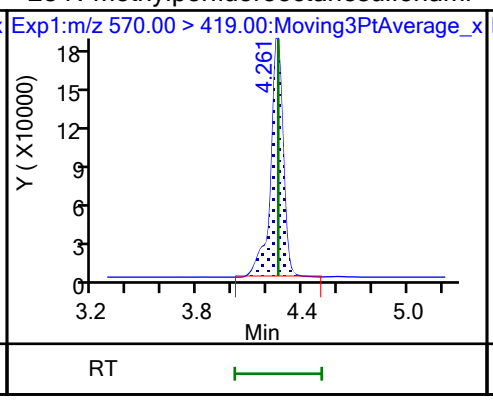
22 Perfluorooctanesulfonamide



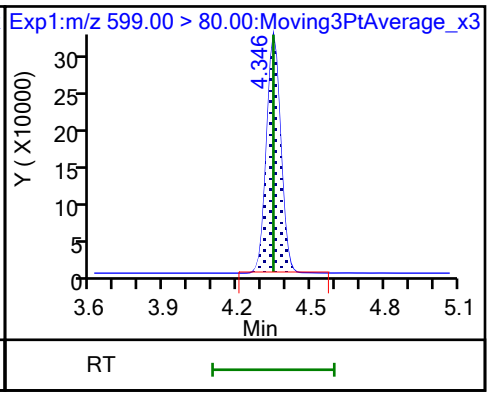
D 27 d3-NMeFOSAA (M)



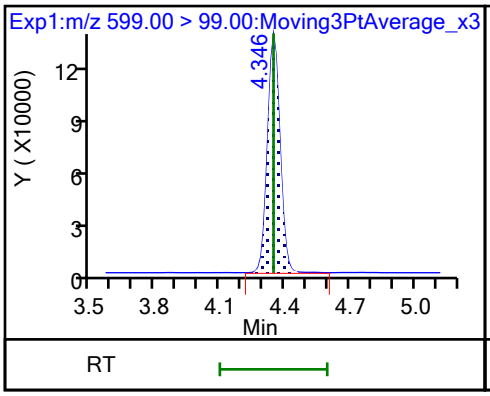
28 N-methylperfluorooctanesulfonami



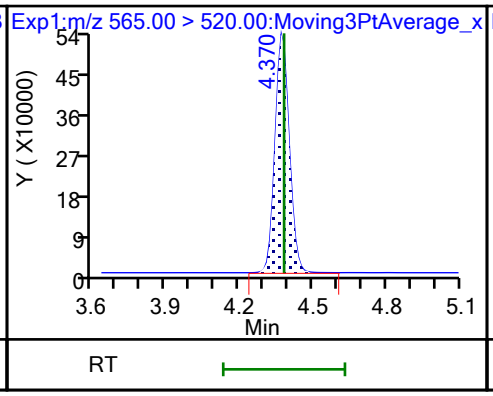
29 Perfluorodecanesulfonic acid



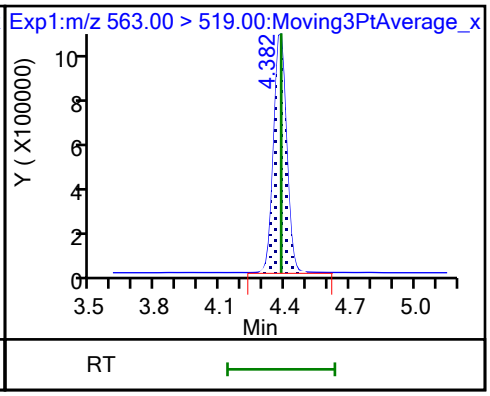
29 Perfluorodecanesulfonic acid



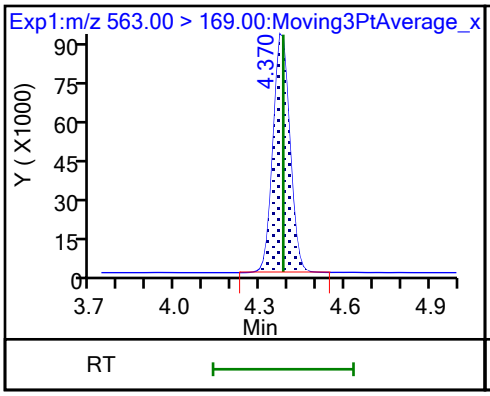
D 30 13C2 PFUnA



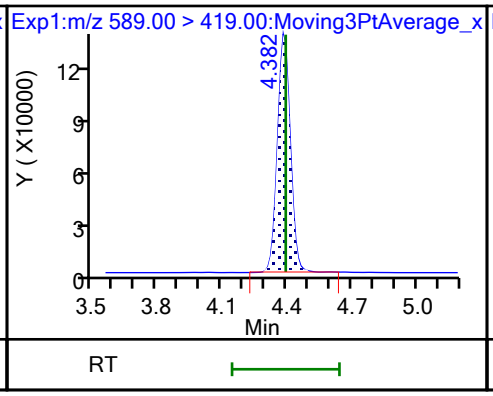
31 Perfluoroundecanoic acid



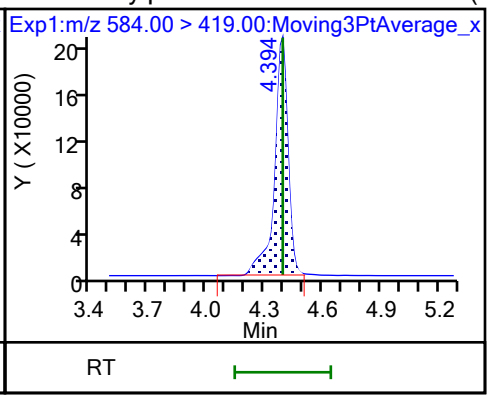
31 Perfluoroundecanoic acid



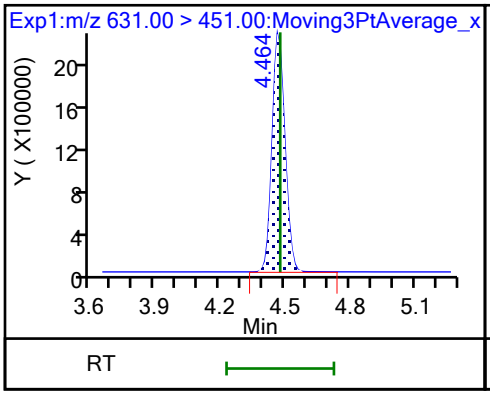
D 32 d5-NEtFOSAA



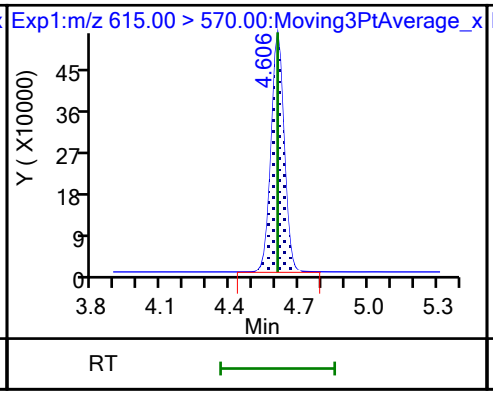
33 N-ethylperfluorooctanesulfonamid (M)



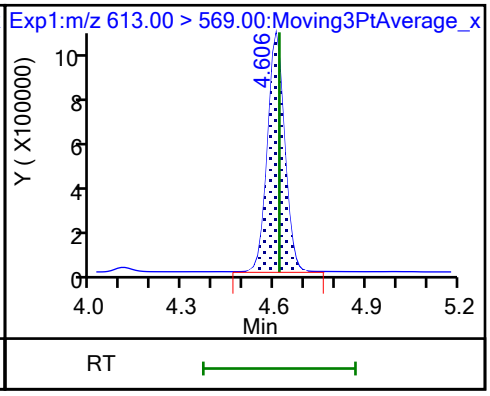
66 11-Chloroeicosafluoro-3-oxaundec



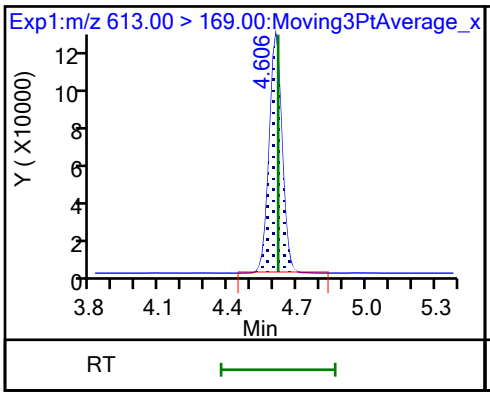
D 36 13C2 PFDoA



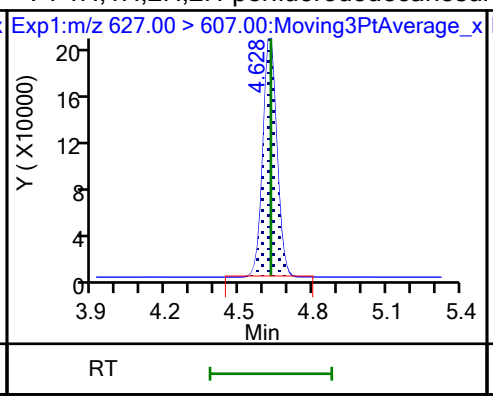
37 Perfluorododecanoic acid



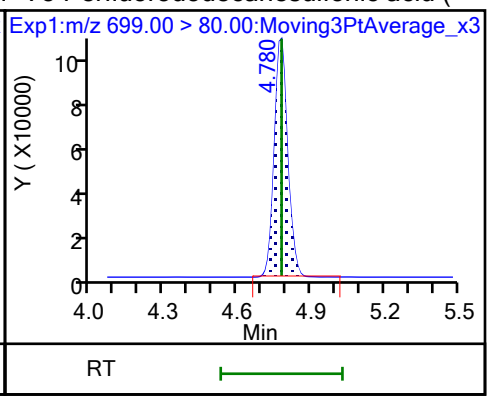
37 Perfluorododecanoic acid



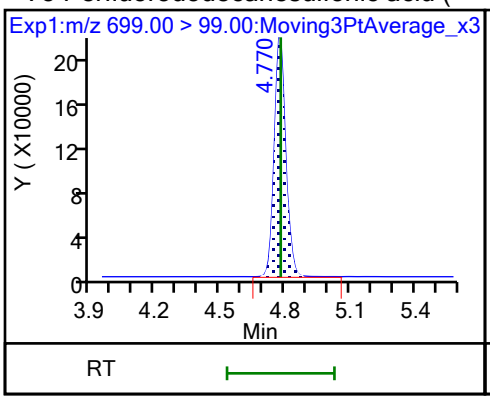
74 1H,1H,2H,2H-perfluorododecanesul



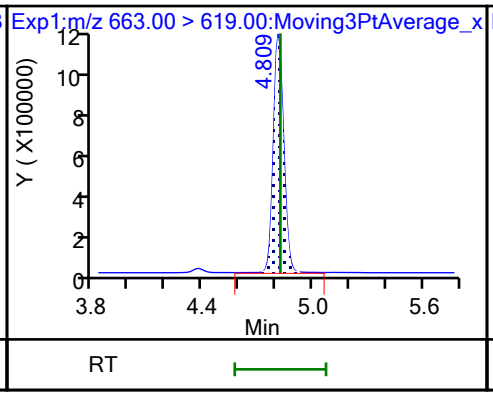
75 Perfluorododecanesulfonic acid (



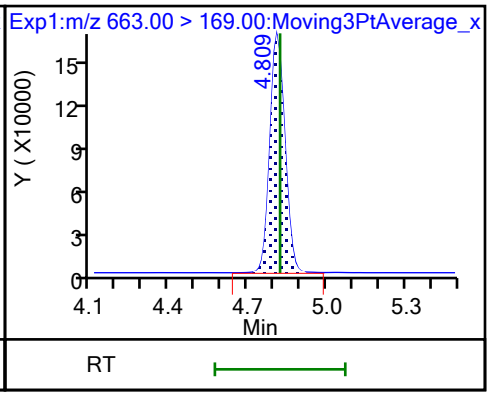
75 Perfluorododecanesulfonic acid (



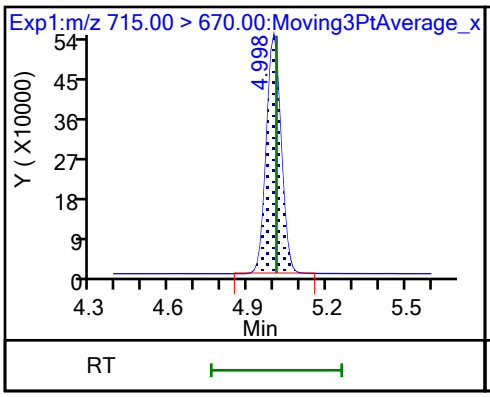
41 Perfluorotridecanoic acid



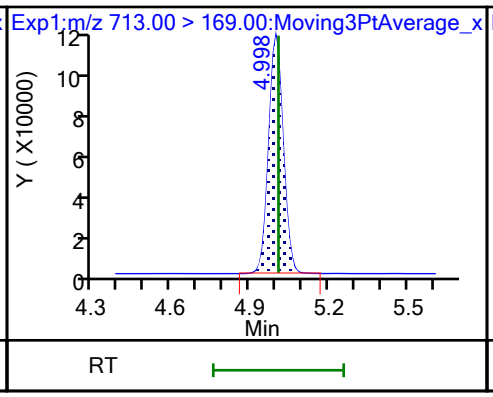
41 Perfluorotridecanoic acid



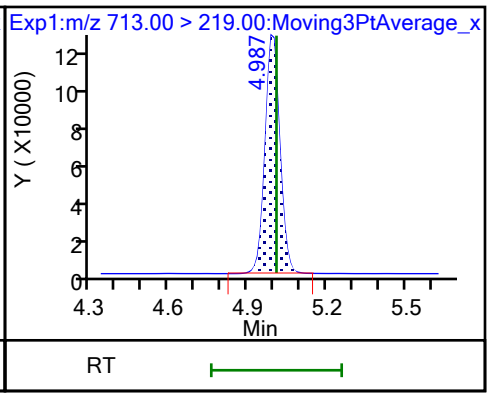
D 43 13C2 PFTeDA



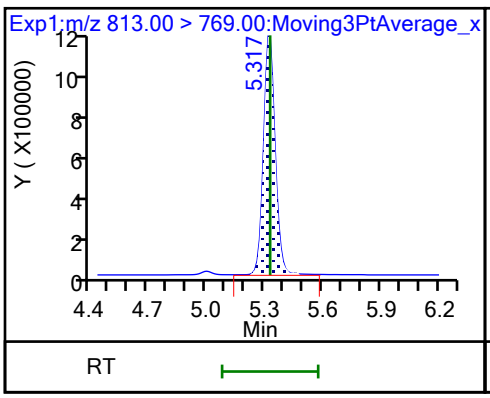
42 Perfluorotetradecanoic acid



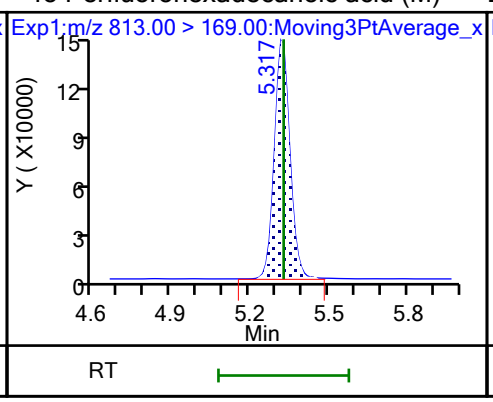
42 Perfluorotetradecanoic acid



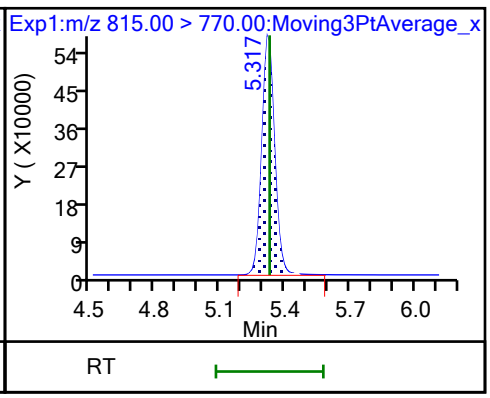
45 Perfluorohexadecanoic acid



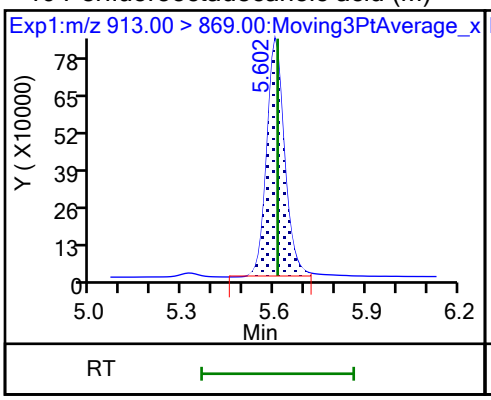
45 Perfluorohexadecanoic acid (M)



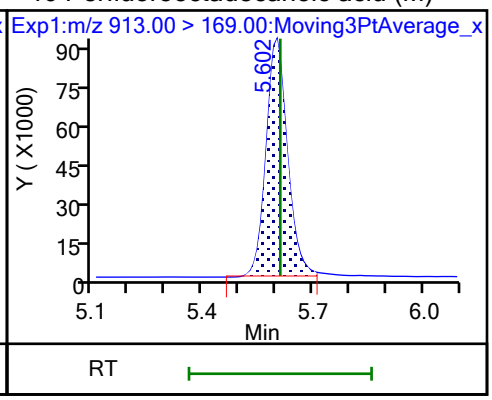
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Jul-2023 17:57:38 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 200-0056441-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:11:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	1663241	1.20		95.9	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	12675387	10.5		105	832	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1291692	1.20		96.0	717	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	11390973	10.2		102	344	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1657995	1.14		97.9	71060	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	13919716	8.74	Target=2.07	98.5	587	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	6698425		2.08(1.04-3.11)	98.5	540	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	194992	1.16		99.1	74.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	5267048	9.29		99.1	971	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.756	2.731	0.025	0.794	1345799	1.23		98.3	1043	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.756	2.731	0.025	1.000	11510430	9.72	Target=14.29	97.2	1512	
313.00 > 119.00	2.756	2.731	0.025	1.000	852173		13.51(7.15-21.44)	97.2	531	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.768	2.731	0.037	0.889	12787110	9.32	Target=2.78	99.1	25077	
349.00 > 99.00	2.756	2.731	0.025	0.885	4667101		2.74(1.39-4.17)	99.1	3572	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.869	2.844	0.025	0.826	265620	1.25		100	1509	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.869	2.844	0.025	1.000	2096317	9.85		98.5	8124	
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.897	1242233	1.19		101	4445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	10346652	8.90	Target=3.23	97.3	5752	
399.00 > 99.00	3.115	3.092	0.023	1.000	3264172		3.17(1.62-4.84)	97.3	1903	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.127	3.104	0.023	1.000	13183148	10.0	Target=4.11	100	2397	
363.00 > 169.00	3.127	3.104	0.023	1.000	3246220		4.06(2.06-6.17)	100	2137	
D 9 13C4 PFHpA										
367.00 > 322.00	3.127	3.104	0.023	0.901	1466571	1.22		97.6	3939	
77 DONA										
377.00 > 251.00	3.161	3.138	0.023	0.833	32898209	8.92	Target=3.28	94.4	23285	
377.00 > 85.00	3.161	3.138	0.023	0.833	10971378		3.00(1.64-4.92)	94.4	8094	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.462	3.446	0.016	0.913	9291673	10.0	Target=4.71	105	9326	
449.00 > 99.00	3.462	3.446	0.016	0.913	1923167		4.83(2.36-7.07)	105	2597	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	250039	1.15		97.0	319	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	5360896	9.32		98.0	3149	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.480	3.464	0.016	1.000	13504480	9.37	Target=2.90	93.7	1069	
413.00 > 169.00	3.480	3.464	0.016	1.000	4762707		2.84(1.45-4.35)	93.7	6332	
D 14 13C4 PFOA										
417.00 > 372.00	3.480	3.464	0.016	1.003	1691186	1.24		99.4	4091	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		1749133	1.25			3853	
D 18 13C4 PFOS										
503.00 > 80.00	3.793	3.783	0.010	1.093	765818	1.15		96.6	1062	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.000	6987392	9.35	Target=4.11	101	3645	M
499.00 > 99.00	3.783	3.783	0.0	0.997	1609293		4.34(2.05-6.16)	101	1686	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1889768	1.28		102	5845	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	14082035	9.50	Target=8.48	95.0	2121	
463.00 > 169.00	3.814	3.803	0.011	1.003	1663440		8.47(4.24-12.72)	95.0	6569	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.043	21405197	9.36		100	14512	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.077	5744699	10.1	Target=2.17	105	9927	
549.00 > 99.00	4.084	4.074	0.010	1.077	2540483		2.26(1.08-3.25)	105	4161	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	1979736	1.28		102	4717	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	15207258	9.61	Target=10.55	96.1	3130	
513.00 > 169.00	4.108	4.108	0.0	1.000	1435944		10.59(5.27-15.82)	96.1	3360	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	309678	1.27		106	551	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	4983035	8.75		91.2	118767	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1724931	1.30		104	4594	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	13020569	9.89		98.9	8748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	465286	1.25		100	354	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	3280076	9.71		97.1	1965	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.146	4450137	10.2	Target=2.28	105	9388	
599.00 > 99.00	4.346	4.346	0.0	1.146	1850008		2.41(1.14-3.42)	105	4976	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.262	1818926	1.24		99.3	12538	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	14323125	9.55	Target=11.30	95.5	3667	
563.00 > 169.00	4.382	4.382	0.0	1.000	1240618		11.55(5.65-16.96)	95.5	7177	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	456350	1.28		102	1074	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.394	4.393	0.001	1.003	3409503	9.34		93.4	39384	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.177	29976782	8.55		90.6	25762	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	1800020	1.21		96.7	6856	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	14693173	10.0	Target=8.15	100	1405	
613.00 > 169.00	4.605	4.616	-0.011	1.000	1710081		8.59(4.07-12.22)	100	10412	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	3151402	9.26		96.1	16125	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.260	1445002	9.74	Target=0.50	101	8185	
699.00 > 99.00	4.780	4.779	0.001	1.260	2914789		0.50(0.25-0.75)	101	8974	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	14866529	9.65	Target=6.61	96.5	1279	
663.00 > 169.00	4.808	4.822	-0.014	1.044	2252925		6.60(3.31-9.92)	96.5	4587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	1876594	1.27		101	6427	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.997	5.008	-0.011	1.000	1575221	9.38	Target=0.96	93.8	6626	
713.00 > 219.00	4.997	5.008	-0.011	1.000	1663605		0.95(0.48-1.44)	93.8	6338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.002	15997184	9.75	Target=7.69	97.5	1329	
813.00 > 169.00	5.317	5.328	-0.011	1.000	2021184		7.91(3.85-11.54)	97.5	3771	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2051028	1.20		96.1	4731	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	12548221	9.79	Target=9.13	97.9	379	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	1429786		8.78(4.56-13.69)	97.9	466	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

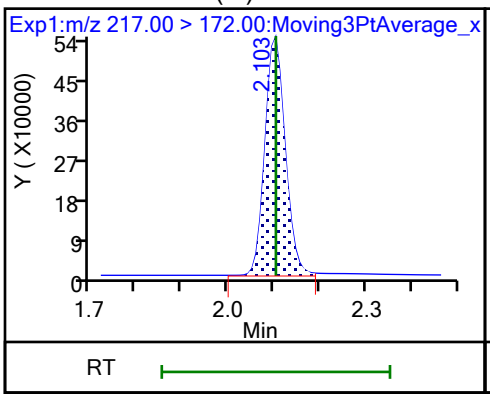
PFAS32NCIC6_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:03 Chrom Revision: 2.3 19-Jul-2023 18:28:48

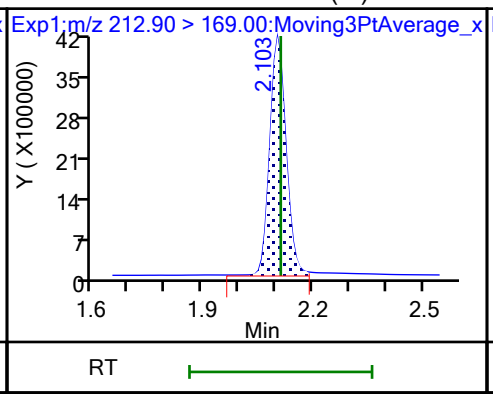
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Injection Date: 26-Jul-2023 17:57:38 Instrument ID: LC812
Lims ID: IC 6
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

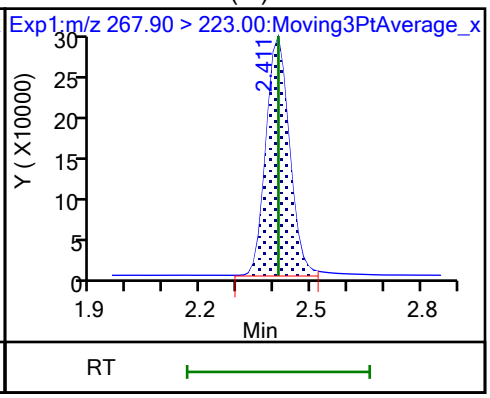
D 1 13C4 PFBA (M)



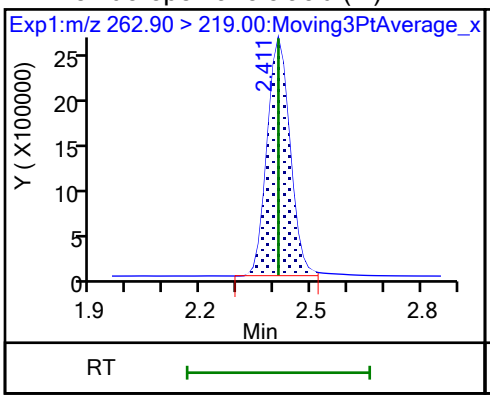
2 Perfluorobutanoic acid (M)



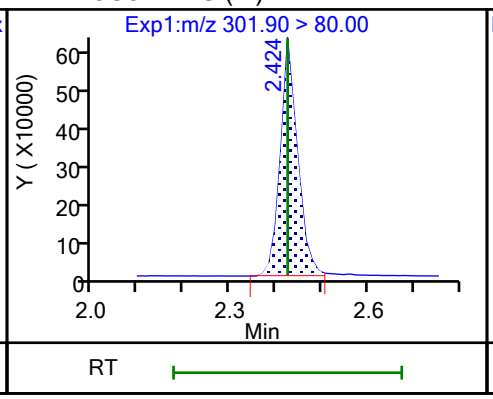
D 3 13C5 PFPeA (M)



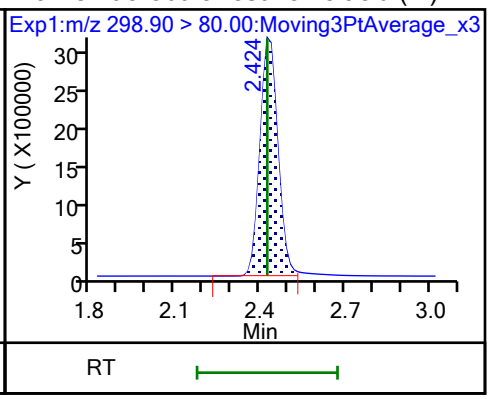
4 Perfluoropentanoic acid (M)



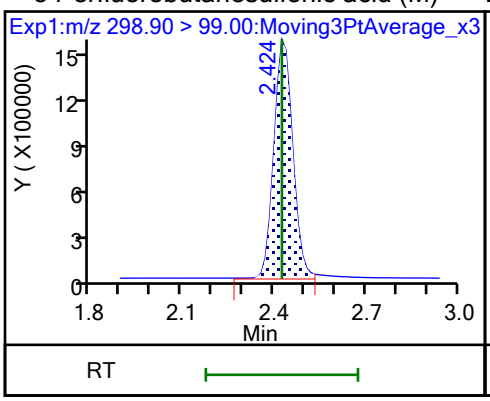
D 47 13C3 PFBS (M)



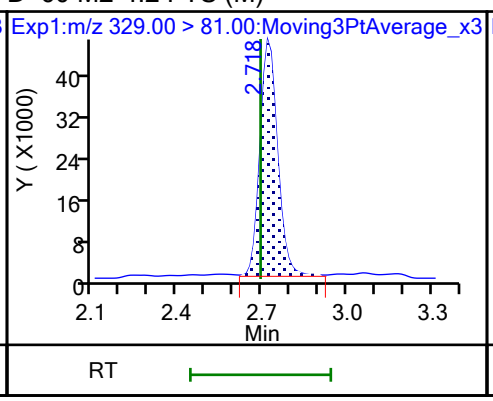
5 Perfluorobutanesulfonic acid (M)



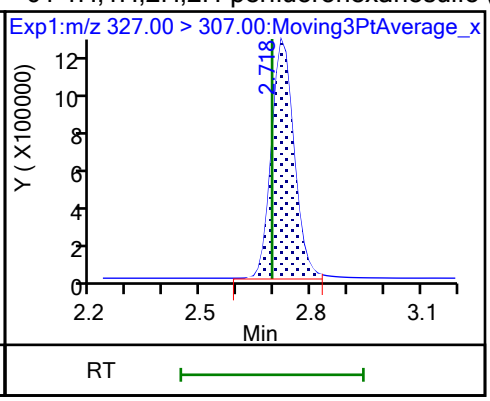
5 Perfluorobutanesulfonic acid (M)



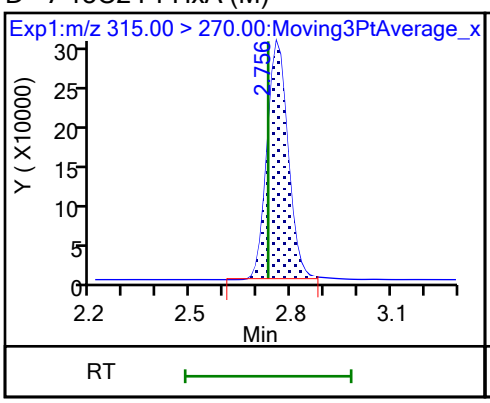
D 60 M2-4:2 FTS (M)



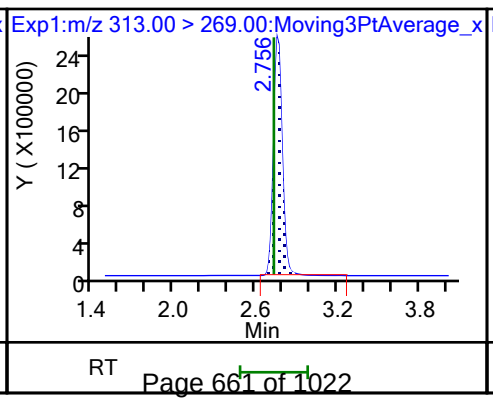
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



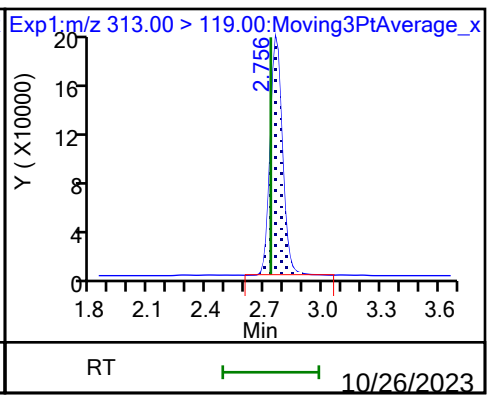
D 7 13C2 PFHxA (M)



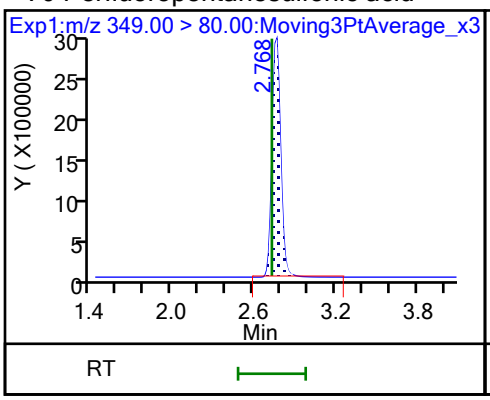
6 Perfluorohexanoic acid



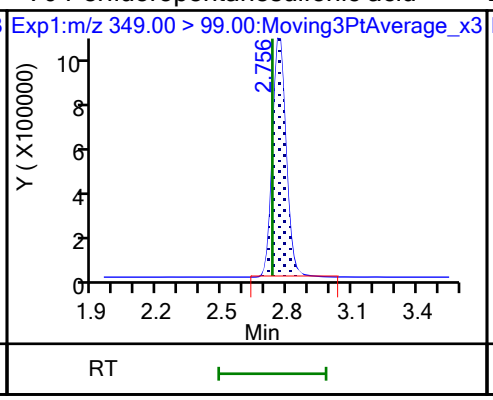
6 Perfluorohexanoic acid



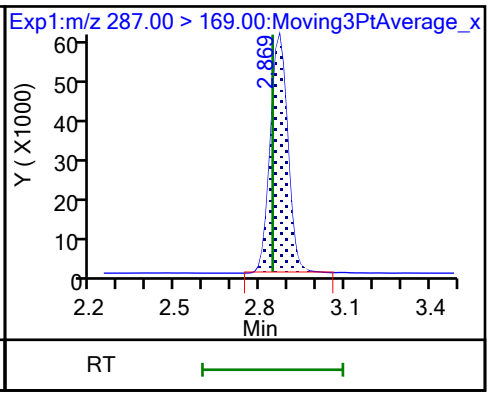
70 Perfluoropentanesulfonic acid



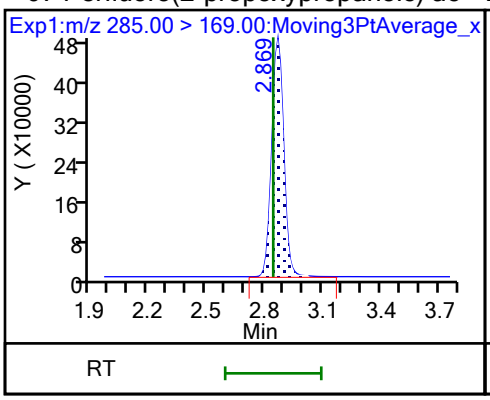
70 Perfluoropentanesulfonic acid



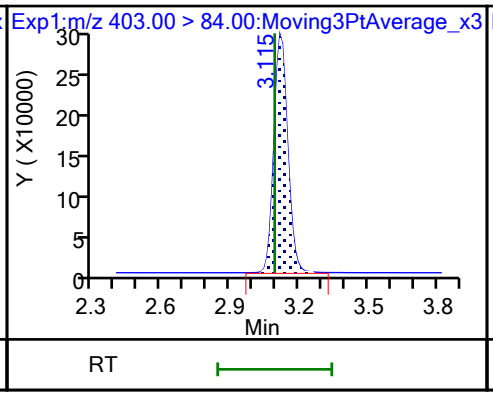
D 64 13C3 HFPO-DA



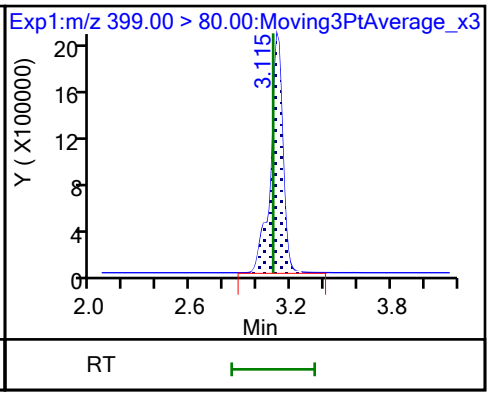
67 Perfluoro(2-propoxypropanoic) ac



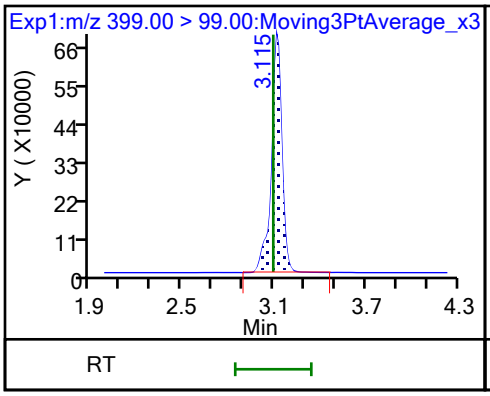
D 11 18O2 PFHxS



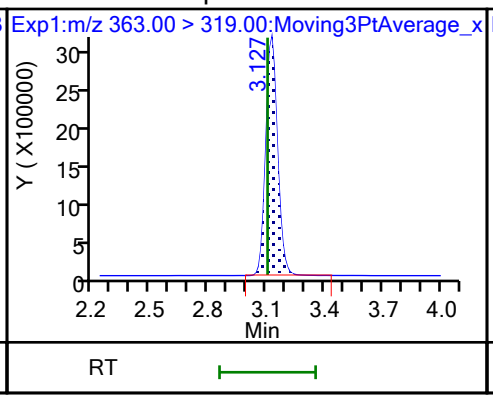
8 Perfluorohexanesulfonic acid



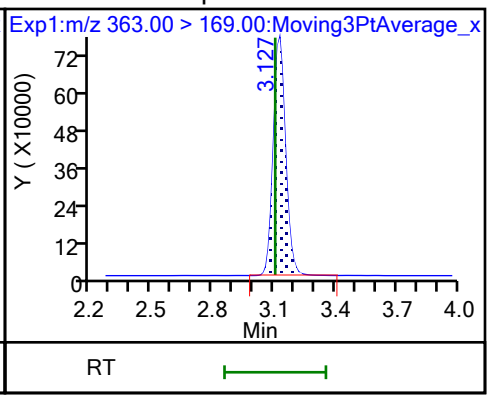
8 Perfluorohexanesulfonic acid



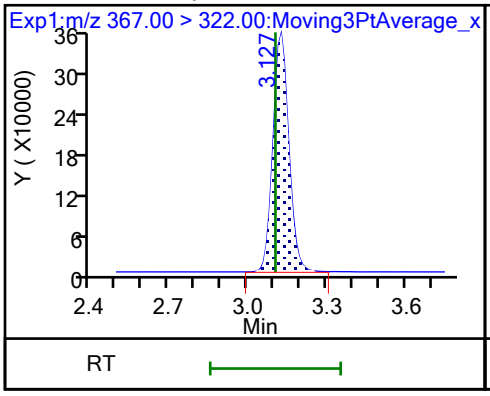
10 Perfluoroheptanoic acid



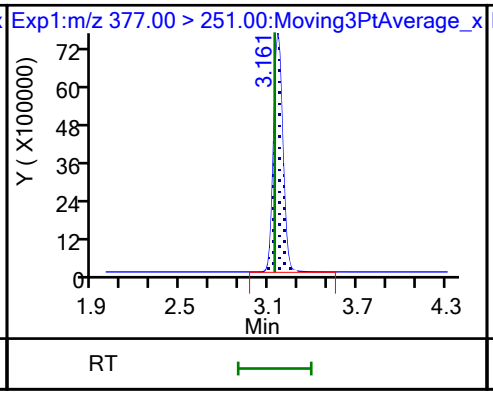
10 Perfluoroheptanoic acid



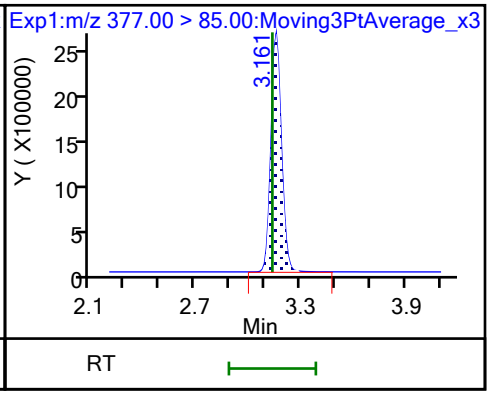
D 9 13C4 PFHpA



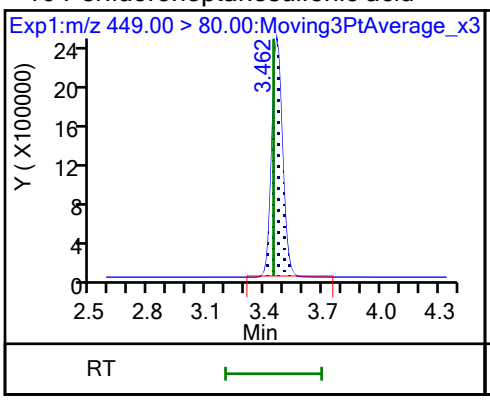
77 DONA



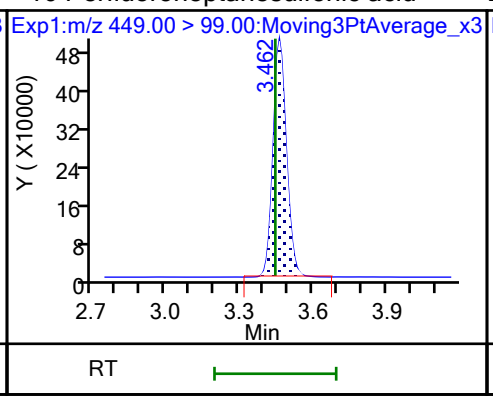
77 DONA



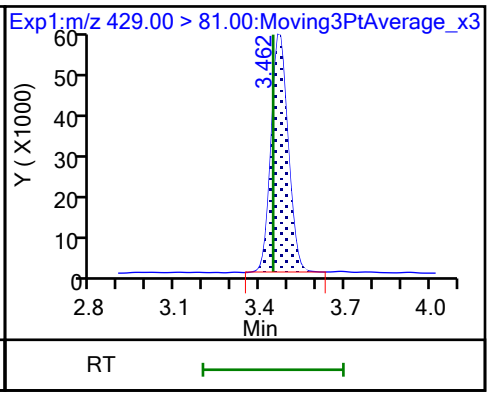
16 Perfluoroheptanesulfonic acid



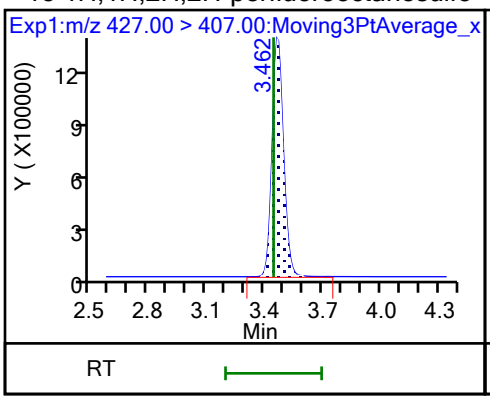
16 Perfluoroheptanesulfonic acid



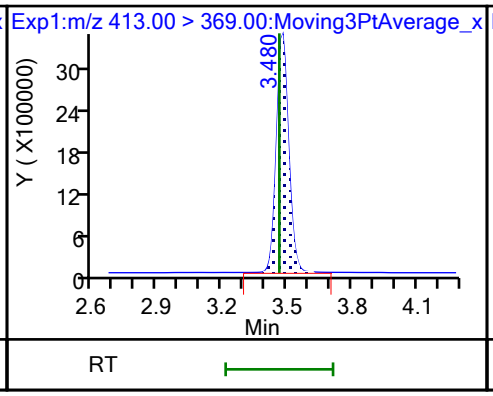
D 12 M2-6:2 FTS



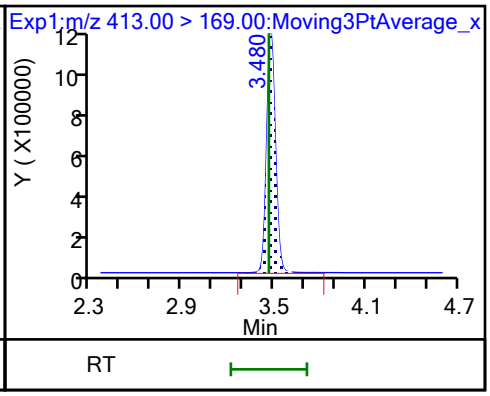
13 1H,1H,2H,2H-perfluorooctanesulfo



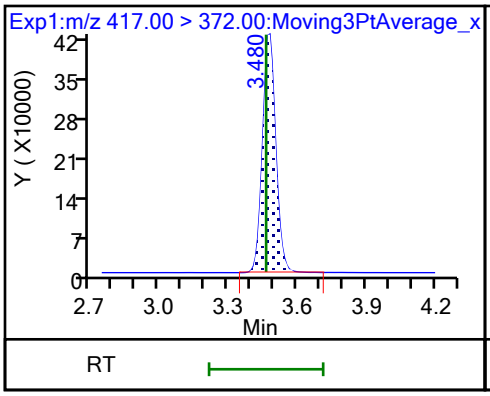
15 Perfluorooctanoic acid



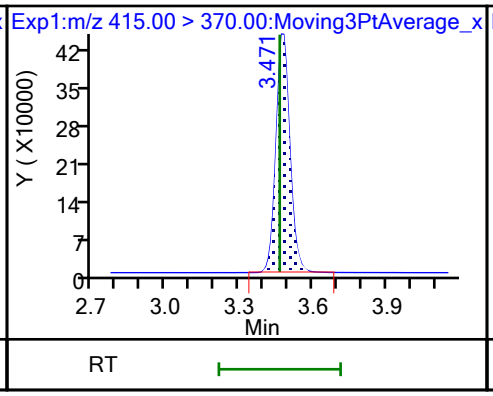
15 Perfluorooctanoic acid



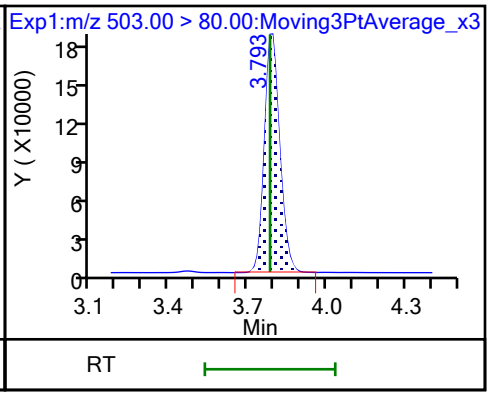
D 14 13C4 PFOA



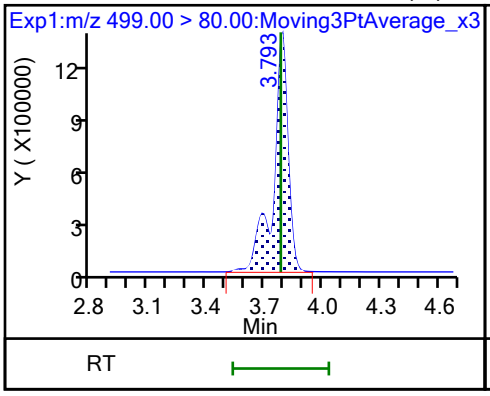
* 62 13C2 PFOA



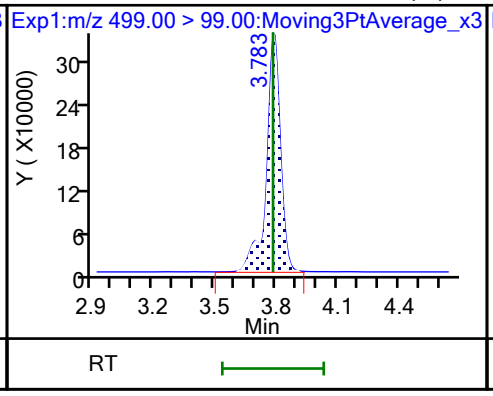
D 18 13C4 PFOS



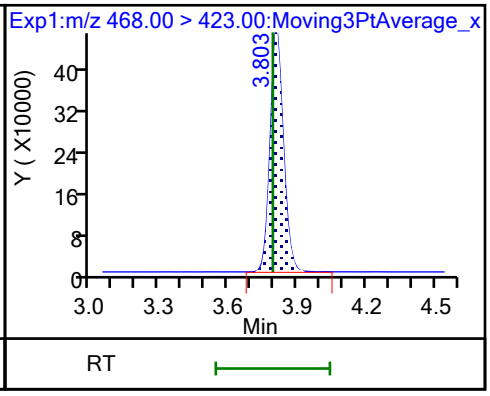
17 Perfluorooctanesulfonic acid (M)



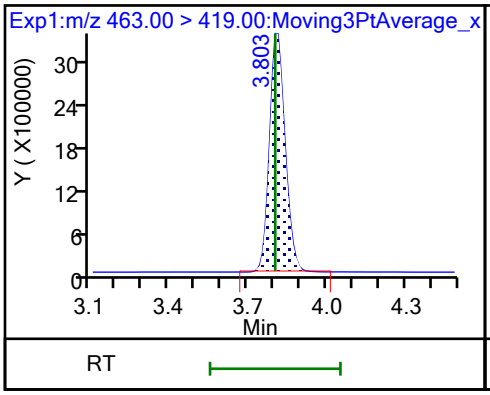
17 Perfluorooctanesulfonic acid (M)



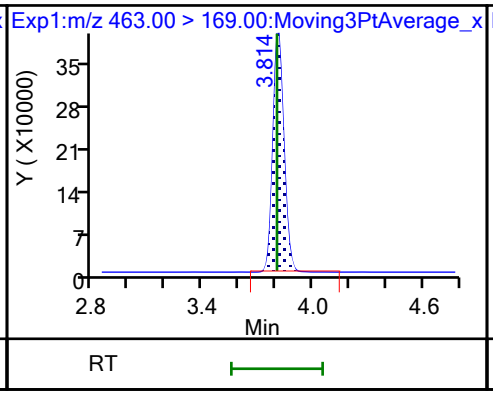
D 19 13C5 PFNA



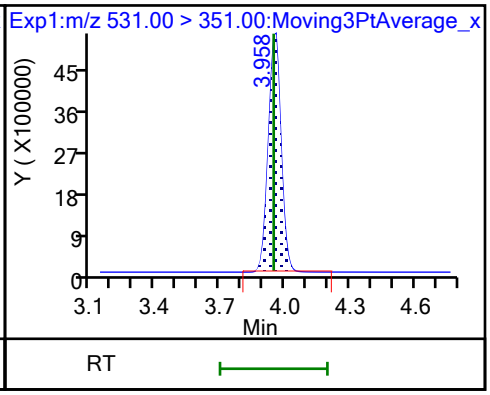
20 Perfluorononanoic acid



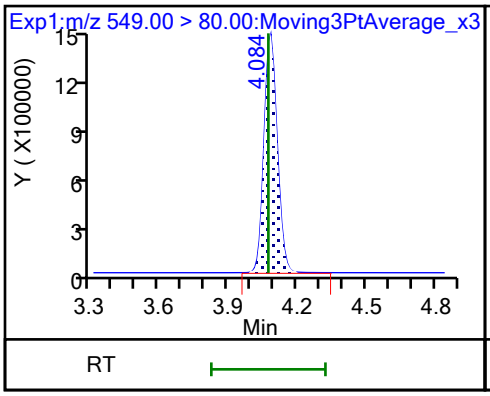
20 Perfluorononanoic acid



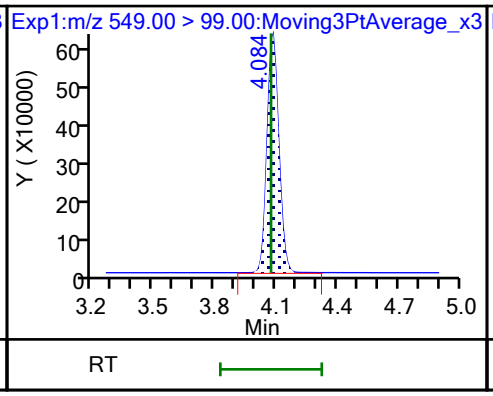
69 9-Chlorohexadecafluoro-3-oxanona



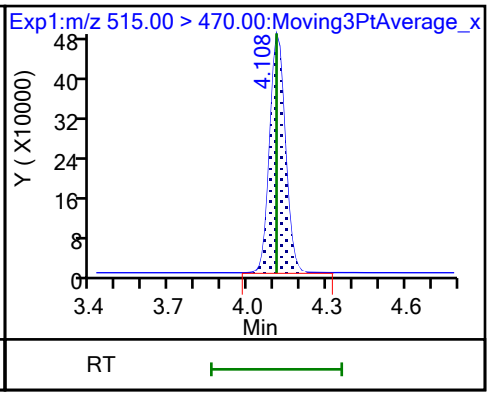
68 Perfluorononanesulfonic acid



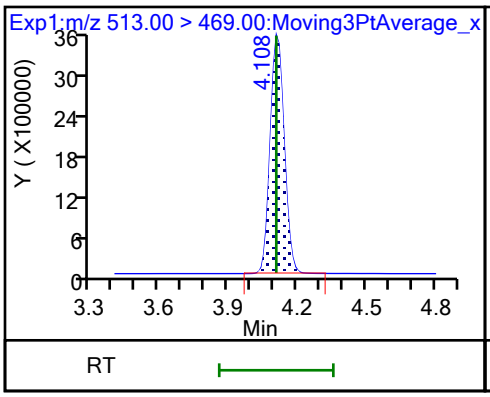
68 Perfluorononanesulfonic acid



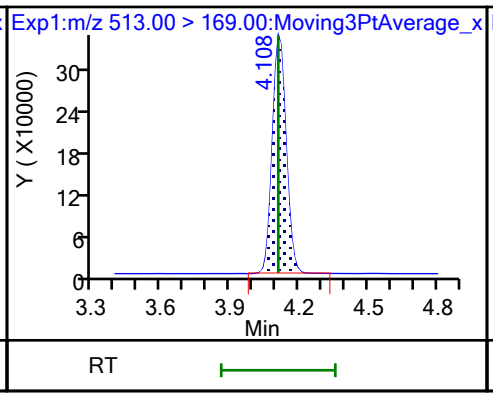
D 23 13C2 PFDA



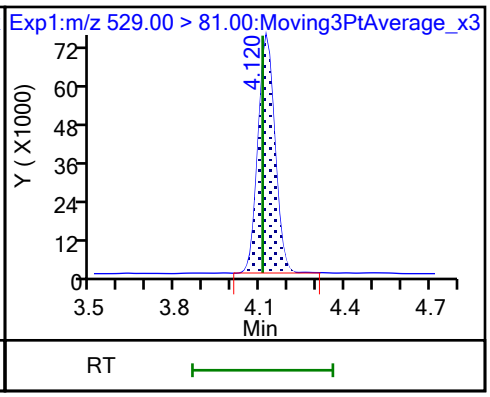
24 Perfluorodecanoic acid



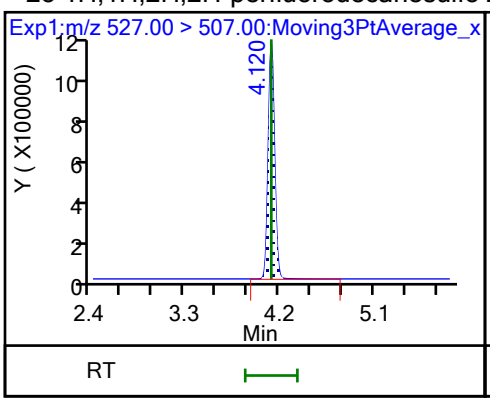
24 Perfluorodecanoic acid



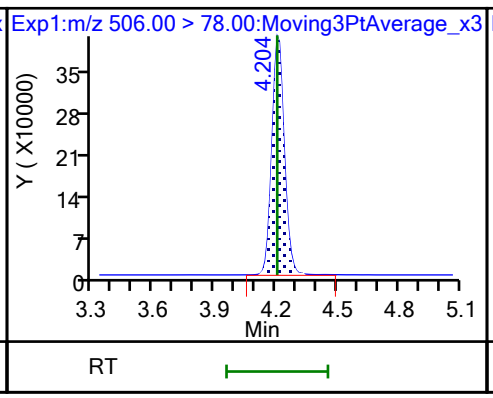
D 26 M2-8:2 FTS



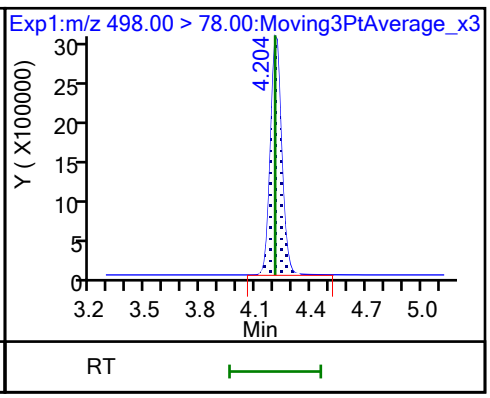
25 1H,1H,2H,2H-perfluorodecanesulfo



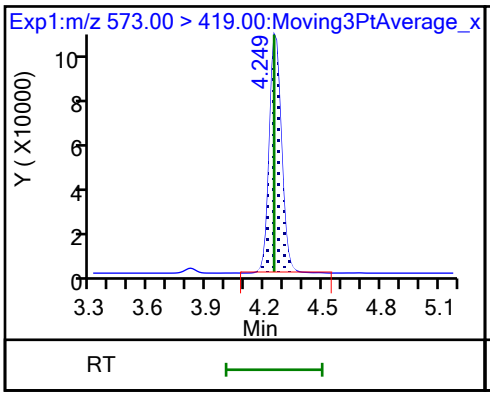
D 21 13C8 FOSA



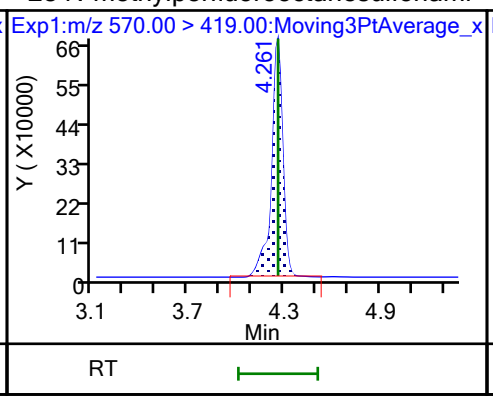
22 Perfluorooctanesulfonamide



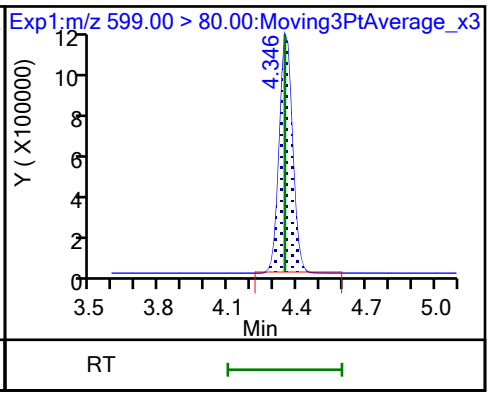
D 27 d3-NMeFOSAA



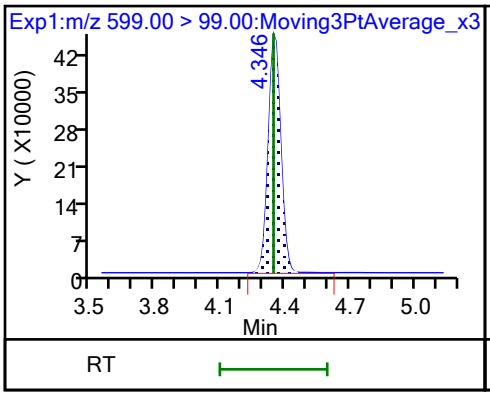
28 N-methylperfluorooctanesulfonami



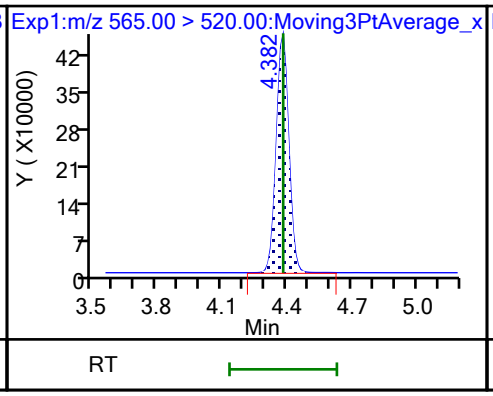
29 Perfluorodecanesulfonic acid



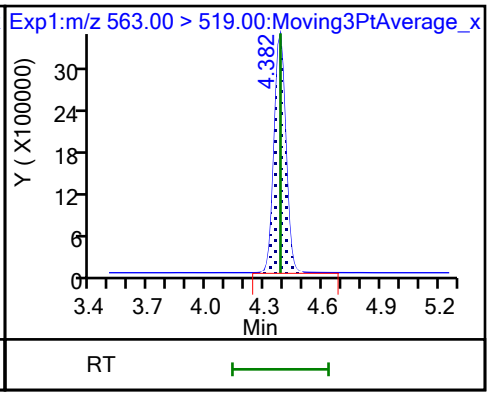
29 Perfluorodecanesulfonic acid



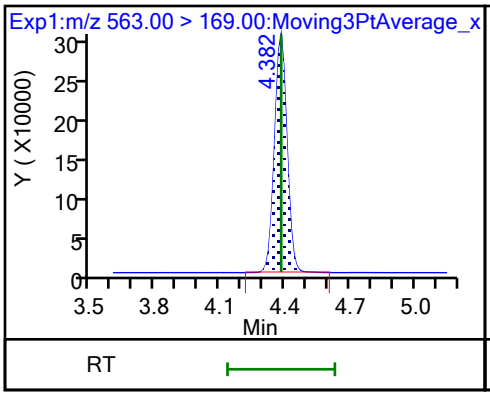
D 30 13C2 PFUnA



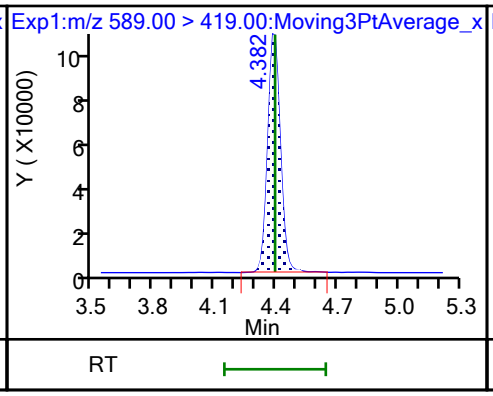
31 Perfluoroundecanoic acid



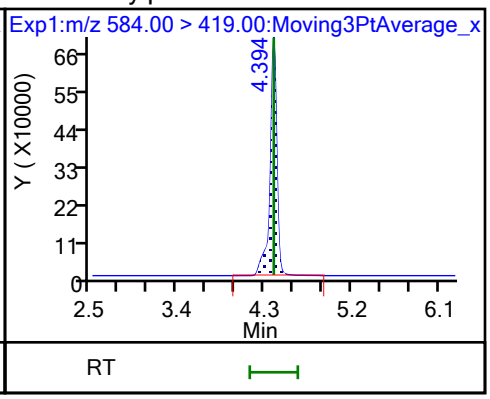
31 Perfluoroundecanoic acid



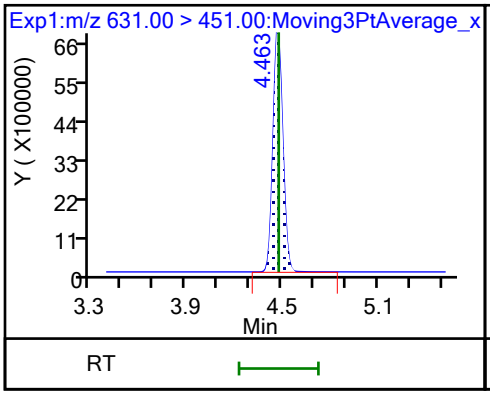
D 32 d5-NEtFOSAA



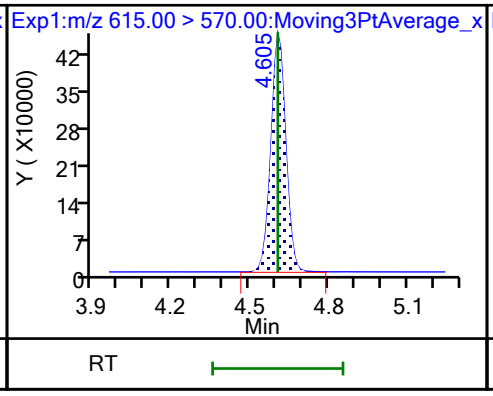
33 N-ethylperfluorooctanesulfonamid



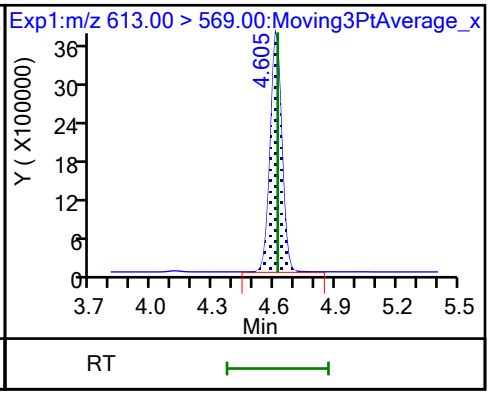
66 11-Chloroeicosafluoro-3-oxaundec



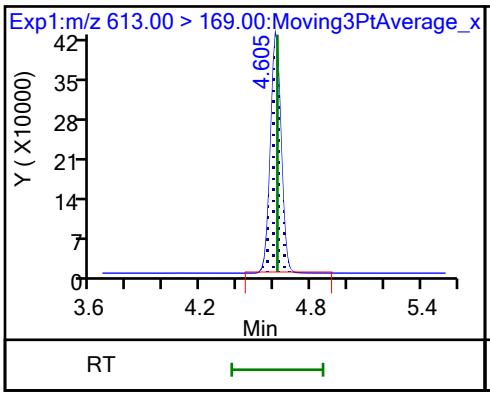
D 36 13C2 PFDoA



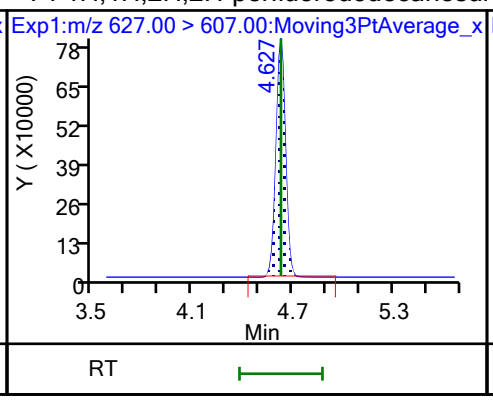
37 Perfluorododecanoic acid



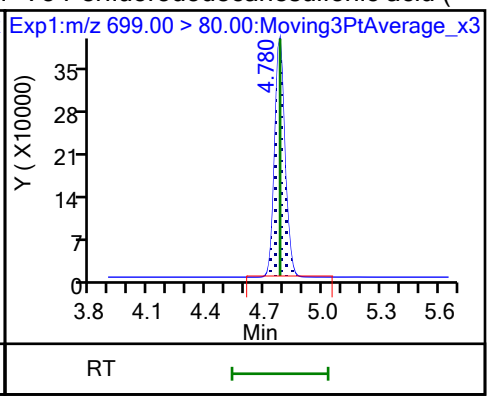
37 Perfluorododecanoic acid



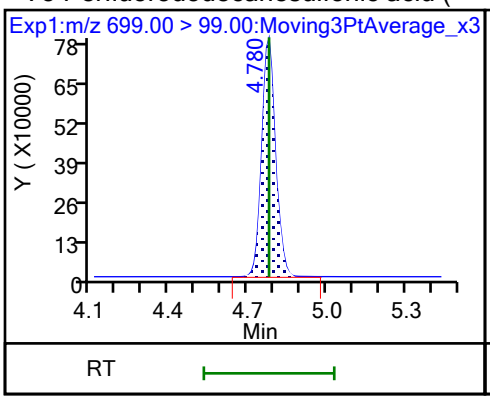
74 1H,1H,2H,2H-perfluorododecanesul



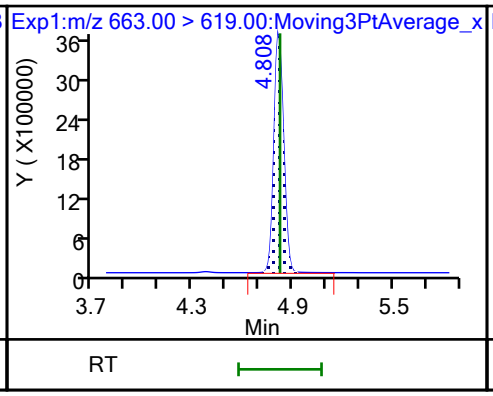
75 Perfluorododecanesulfonic acid (



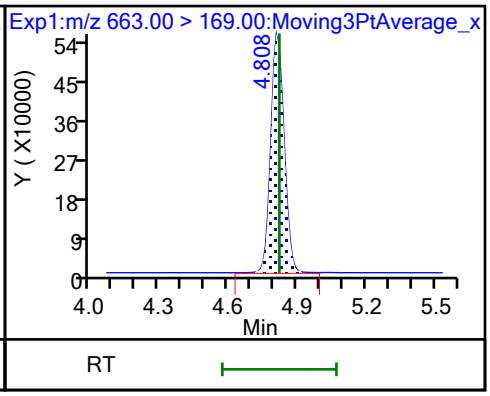
75 Perfluorododecanesulfonic acid (



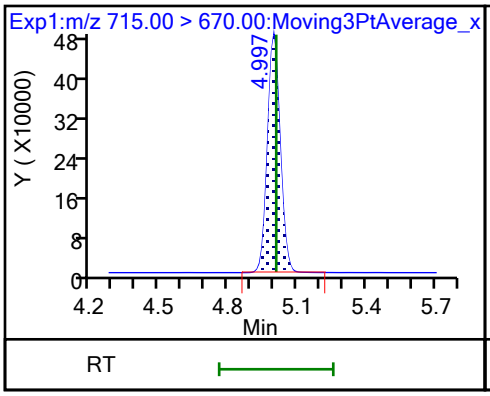
41 Perfluorotridecanoic acid



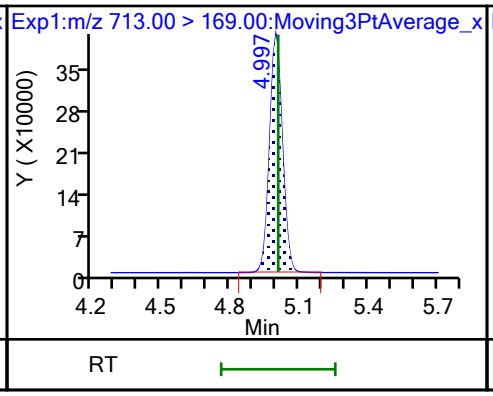
41 Perfluorotridecanoic acid



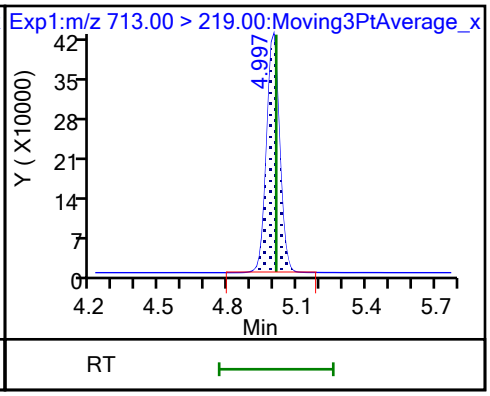
D 43 13C2 PFTeDA



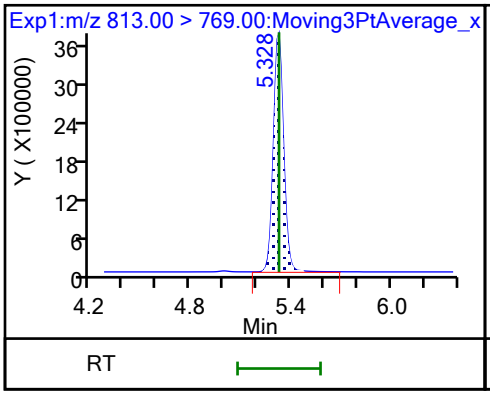
42 Perfluorotetradecanoic acid



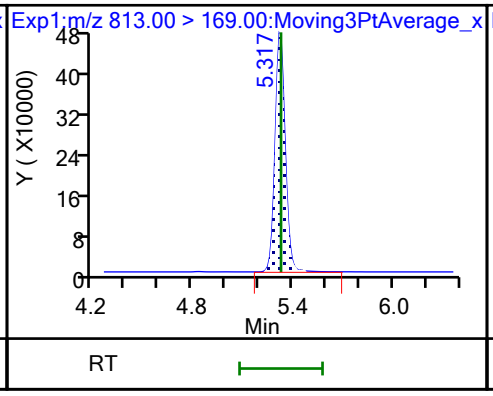
42 Perfluorotetradecanoic acid



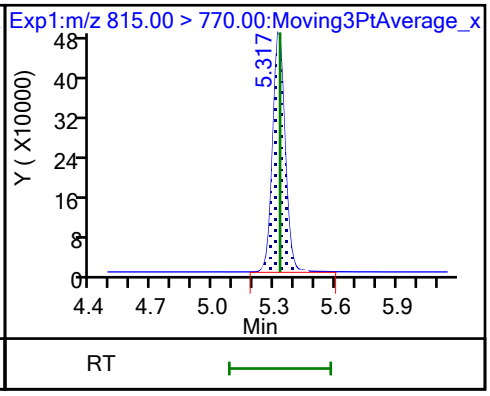
45 Perfluorohexadecanoic acid



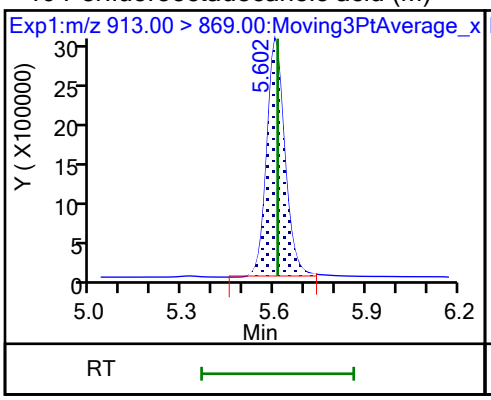
45 Perfluorohexadecanoic acid



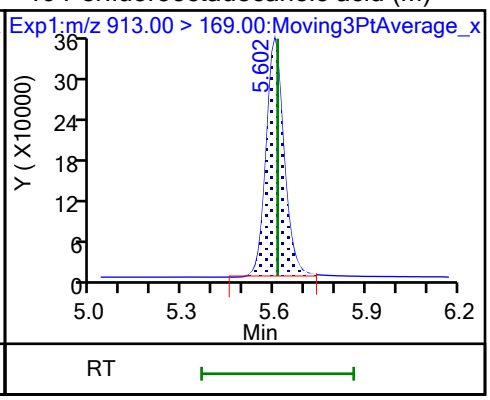
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Jul-2023 18:05:46 ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 200-0056441-011 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:07 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:17:02
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.606	1758198	1.24		99.4	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	29150051	22.9		91.5	1625	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.397	2.411	-0.014	0.694	1319141	1.20		96.1	720	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.397	2.411	-0.014	1.000	26331175	23.1		92.5	419	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.698	1925353	1.30		112	70151	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.411	2.425	-0.014	1.000	33432260	18.1	Target=2.07	81.5	580	M
298.90 > 99.00	2.411	2.425	-0.014	1.000	17197877		1.94(1.04-3.11)	81.5	556	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.784	207012	1.21		103	77.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.706	2.694	0.012	1.000	12889559	21.4		91.4	85591	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.794	1316912	1.18		94.3	776	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.744	2.731	0.013	1.000	26521589	22.9	Target=14.29	91.5	753	M
313.00 > 119.00	2.744	2.731	0.013	1.000	2031245		13.06(7.15-21.44)	91.5	678	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	30796216	20.3	Target=2.78	86.5	1048	M
349.00 > 99.00	2.756	2.731	0.025	0.885	12222657		2.52(1.39-4.17)	86.5	1012	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.856	2.844	0.012	0.827	273677	1.27		101	1285	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	5568235	25.4		102	6439	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.902	1370941	1.29		109	2166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	27349473	21.3	Target=3.23	93.3	7764	
399.00 > 99.00	3.115	3.092	0.023	1.000	8658987		3.16(1.62-4.84)	93.3	7018	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	30971904	22.1	Target=4.11	88.6	5231	
363.00 > 169.00	3.115	3.104	0.011	1.000	8208481		3.77(2.06-6.17)	88.6	4733	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.902	1559821	1.27		102	3648	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.837	68369017	16.4	Target=3.28	69.5	79642	
377.00 > 85.00	3.150	3.138	0.012	0.837	26772118		2.55(1.64-4.92)	69.5	10230	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.435	3.446	-0.011	0.913	23718890	22.7	Target=4.71	95.1	34545	
449.00 > 99.00	3.435	3.446	-0.011	0.913	5261248		4.51(2.36-7.07)	95.1	8032	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.444	3.446	-0.002	0.997	271643	1.23		103	338	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.444	3.446	-0.002	1.000	12827492	20.5		86.3	1734	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.453	3.464	-0.011	1.000	32974345	23.9	Target=2.90	95.5	2249	
413.00 > 169.00	3.453	3.464	-0.011	1.000	11969902		2.75(1.45-4.35)	95.5	9272	
D 14 13C4 PFOA										
417.00 > 372.00	3.453	3.464	-0.011	1.000	1620734	1.17		93.4	5069	
* 62 13C2 PFOA										
415.00 > 370.00	3.453	3.464	-0.011		1782839	1.25			3950	
D 18 13C4 PFOS										
503.00 > 80.00	3.764	3.783	-0.019	1.090	865311	1.28		107	633	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.764	3.783	-0.019	1.000	18816206	22.3	Target=4.11	96.0	9491	M
499.00 > 99.00	3.764	3.783	-0.019	1.000	4470828		4.21(2.05-6.16)	96.0	4135	M
D 19 13C5 PFNA										
468.00 > 423.00	3.794	3.793	0.001	1.098	1902682	1.26		101	3585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.784	3.803	-0.019	0.997	33868175	22.7	Target=8.48	90.8	4295	
463.00 > 169.00	3.794	3.803	-0.009	1.000	4166541		8.13(4.24-12.72)	90.8	5885	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.935	3.947	-0.012	1.045	49573864	19.2		82.2	122080	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.063	4.074	-0.011	1.080	15127922	23.5	Target=2.17	97.9	34897	
549.00 > 99.00	4.063	4.074	-0.011	1.080	7013195		2.16(1.08-3.25)	97.9	11531	
D 23 13C2 PFDA										
515.00 > 470.00	4.097	4.108	-0.011	1.186	1981566	1.25		100	6749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.097	4.108	-0.011	1.000	35125264	22.2	Target=10.55	88.7	8430	
513.00 > 169.00	4.097	4.108	-0.011	1.000	3557829		9.87(5.27-15.82)	88.7	7050	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.109	4.108	0.001	1.190	316911	1.27		106	810	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.109	4.120	-0.011	1.000	12048759	20.7		86.2	64543	
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.214	1759972	1.30		104	4229	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	31572610	23.5		94.0	87074	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.237	4.249	-0.012	1.227	505130	1.34		107	228	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.237	4.260	-0.023	1.000	8770277	23.9		95.7	2253	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.334	4.346	-0.012	1.152	11299421	22.8	Target=2.28	94.7	10546	
599.00 > 99.00	4.334	4.346	-0.012	1.152	4799204		2.35(1.14-3.42)	94.7	10362	
D 30 13C2 PFUnA										
565.00 > 520.00	4.358	4.382	-0.024	1.262	1790927	1.20		96.0	5216	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.003	32455800	22.0	Target=11.30	87.9	7502	
563.00 > 169.00	4.370	4.382	-0.012	1.003	3240672		10.02(5.65-16.96)	87.9	10679	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.370	4.393	-0.023	1.265	430319	1.18		94.6	987	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.003	8392085	24.4		97.5	27196	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.186	64636051	16.3		69.2	118442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.595	4.605	-0.010	1.330	1994604	1.31		105	5976	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.595	4.616	-0.021	1.000	34331936	21.1	Target=8.15	84.6	1991	
613.00 > 169.00	4.595	4.616	-0.021	1.000	4769328		7.20(4.07-12.22)	84.6	22673	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.627	-0.010	1.124	8134970	23.4		96.9	121535	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.267	3739893	22.3	Target=0.50	92.2	19469	
699.00 > 99.00	4.770	4.779	-0.009	1.267	7697869		0.49(0.25-0.75)	92.2	16871	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.047	35226779	20.6	Target=6.61	82.5	2165	
663.00 > 169.00	4.809	4.822	-0.013	1.047	5990766		5.88(3.31-9.92)	82.5	4583	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.447	1918275	1.27		102	5387	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	4171778	24.3	Target=0.96	97.2	14200	
713.00 > 219.00	4.987	5.008	-0.021	0.998	4312498		0.97(0.48-1.44)	97.2	10053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	37681202	20.5	Target=7.69	82.2	1953	
813.00 > 169.00	5.317	5.328	-0.011	1.000	5392503		6.99(3.85-11.54)	82.2	4998	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.540	2292454	1.32		105	5350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	30813591	21.5	Target=9.13	86.1	331	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	3700392		8.33(4.56-13.69)	86.1	382	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

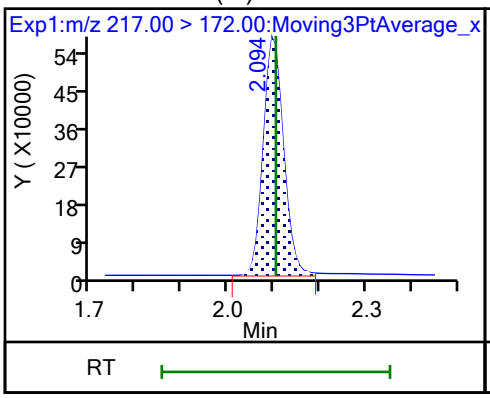
PFAS23NCIC7_00001 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:08 Chrom Revision: 2.3 19-Jul-2023 18:28:48

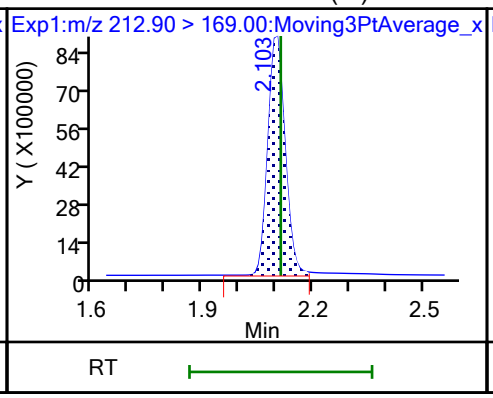
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Injection Date: 26-Jul-2023 18:05:46 Instrument ID: LC812
Lims ID: IC 7
Client ID:
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

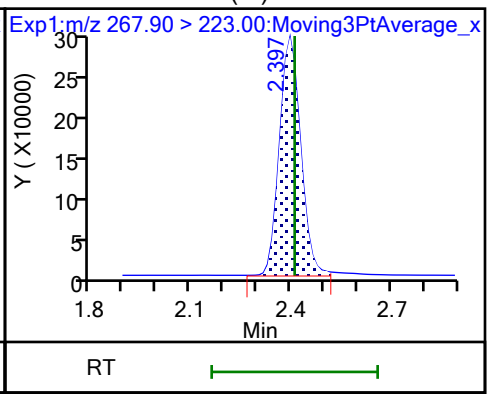
D 1 13C4 PFBA (M)



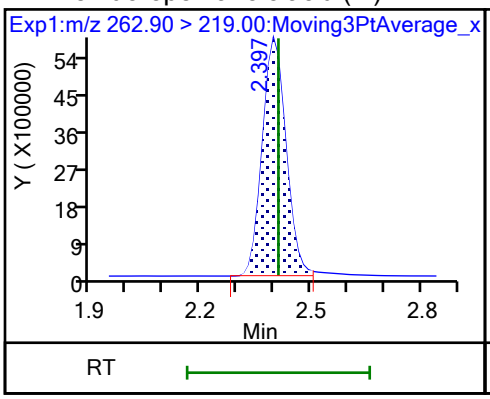
2 Perfluorobutanoic acid (M)



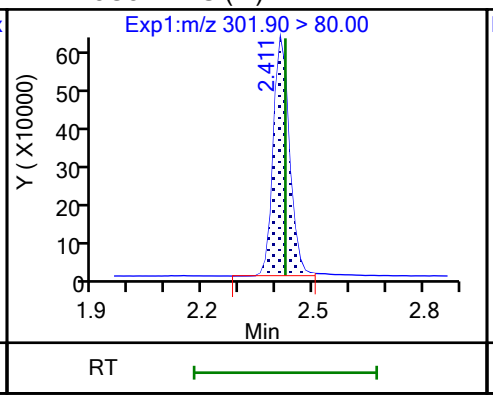
D 3 13C5 PFPeA (M)



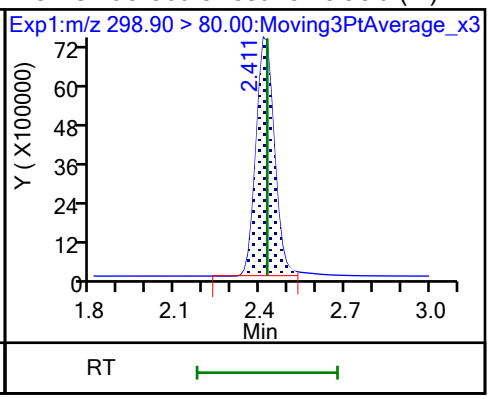
4 Perfluoropentanoic acid (M)



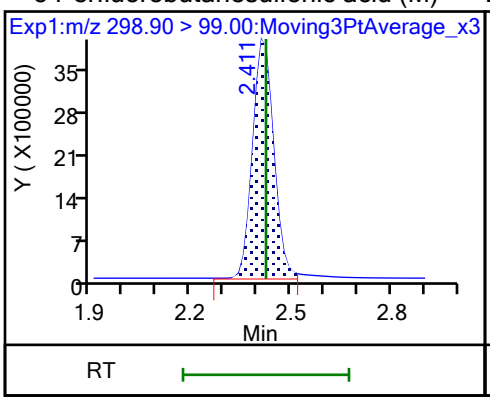
D 47 13C3 PFBS (M)



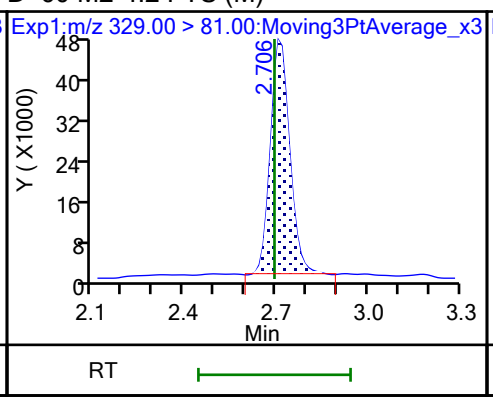
5 Perfluorobutanesulfonic acid (M)



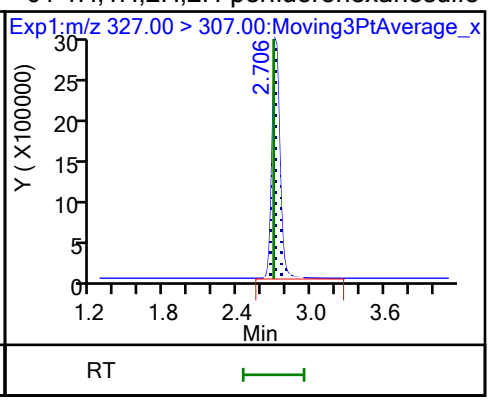
5 Perfluorobutanesulfonic acid (M)



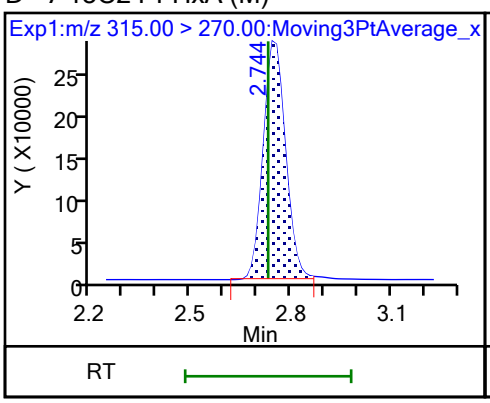
D 60 M2-4:2 FTS (M)



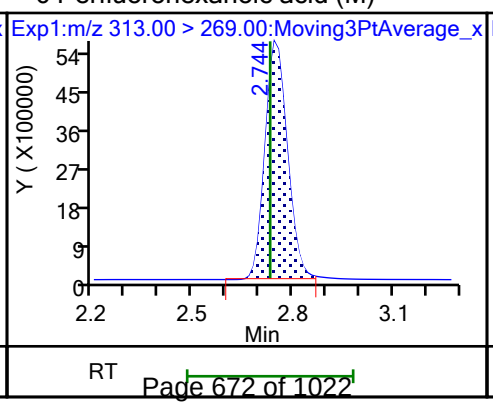
61 1H,1H,2H,2H-perfluorohexanesulfo



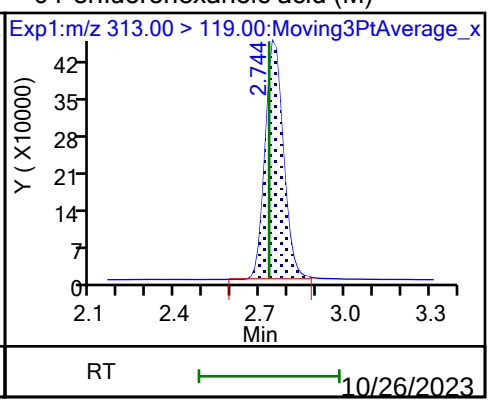
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

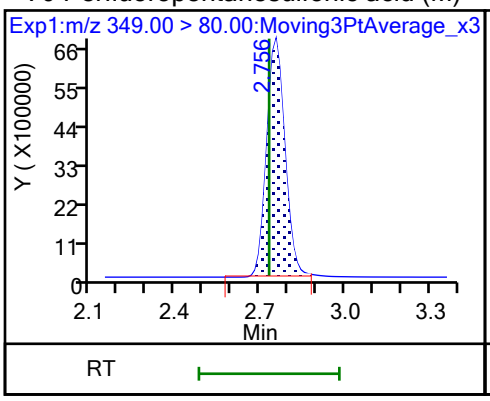


6 Perfluorohexanoic acid (M)

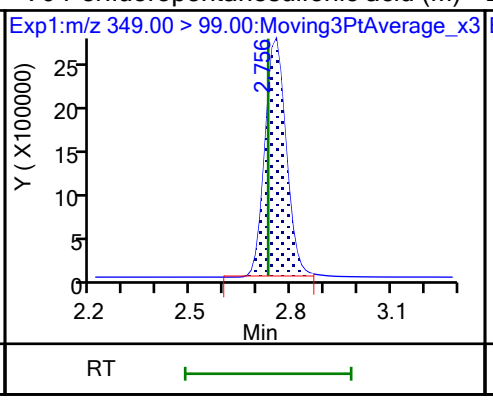


10/26/2023
2:28 PM

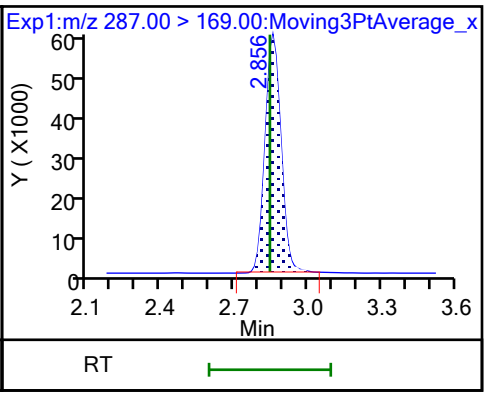
70 Perfluoropentanesulfonic acid (M)



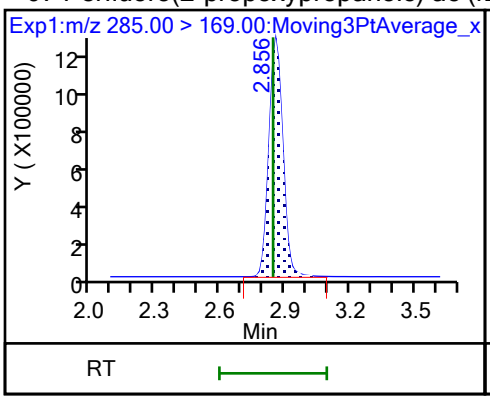
70 Perfluoropentanesulfonic acid (M)



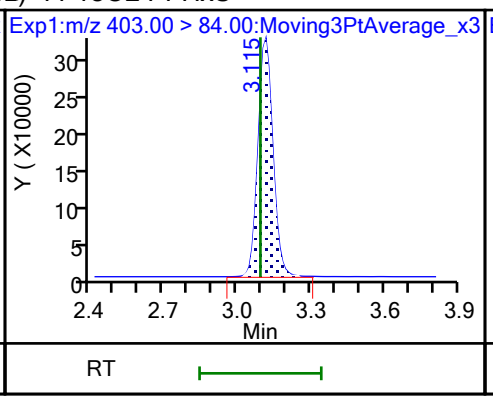
D 64 13C3 HFPO-DA



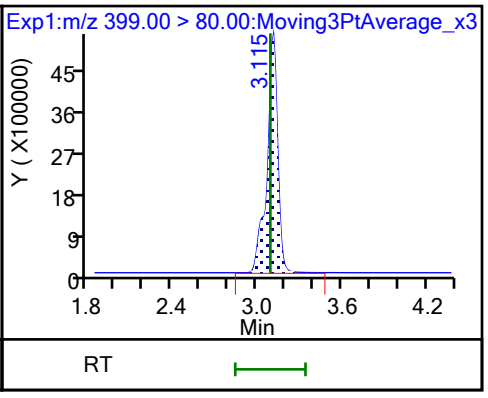
67 Perfluoro(2-propoxypropanoic) ac (M)



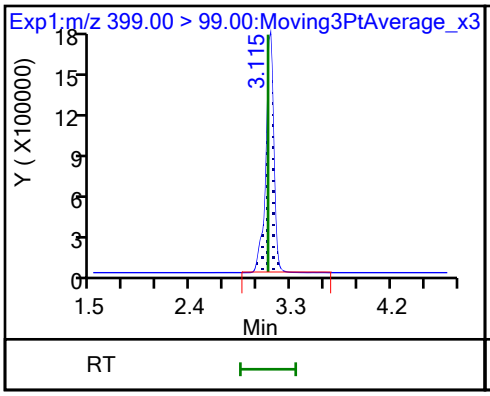
D 11 18O2 PFHxS



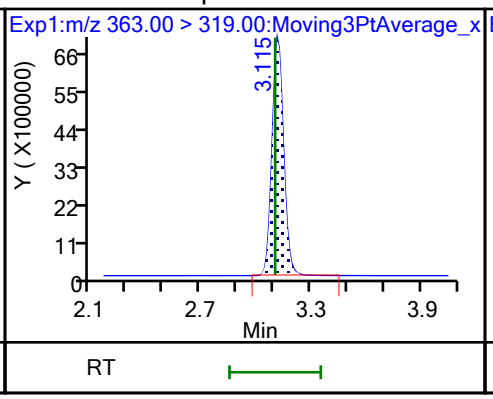
8 Perfluorohexanesulfonic acid



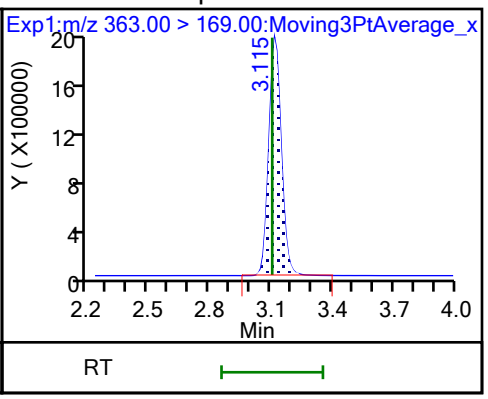
8 Perfluorohexanesulfonic acid



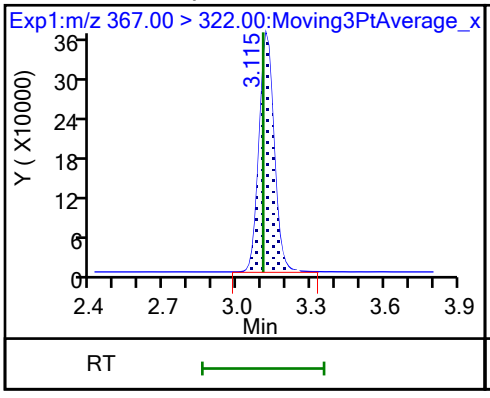
10 Perfluoroheptanoic acid



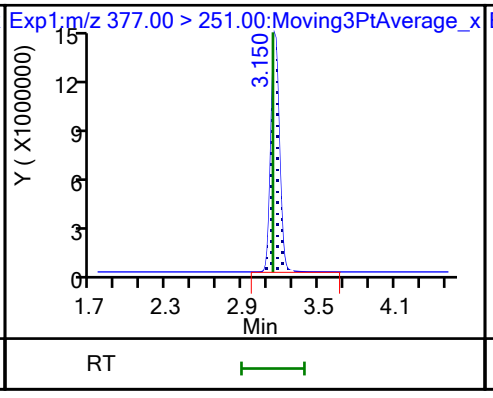
10 Perfluoroheptanoic acid



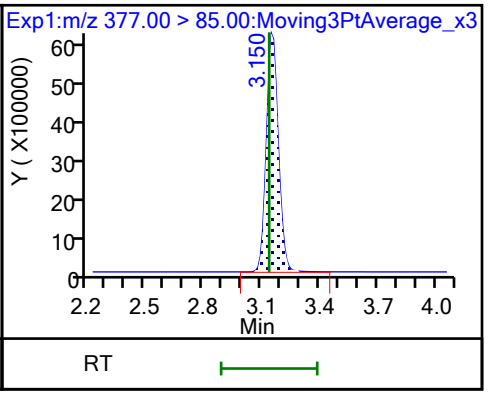
D 9 13C4 PFHpA



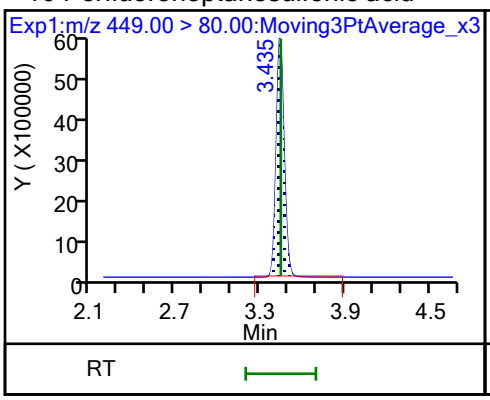
77 DONA



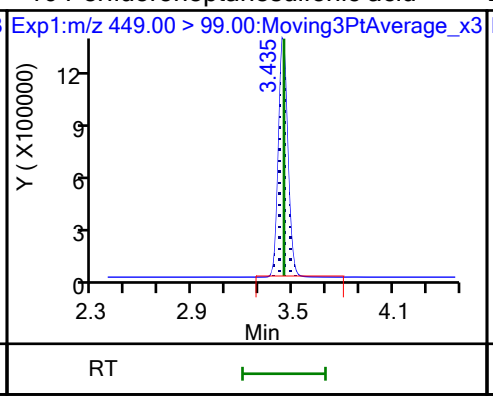
77 DONA



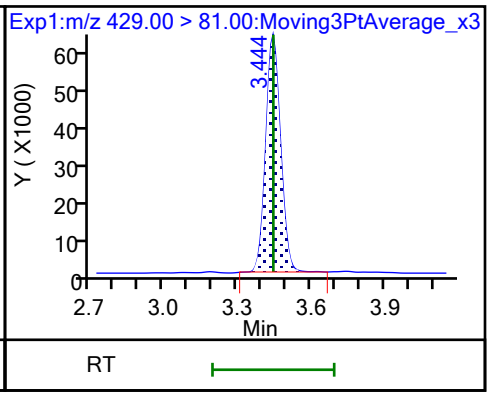
16 Perfluoroheptanesulfonic acid



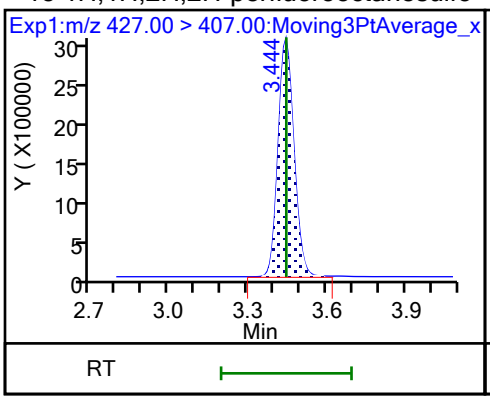
16 Perfluoroheptanesulfonic acid



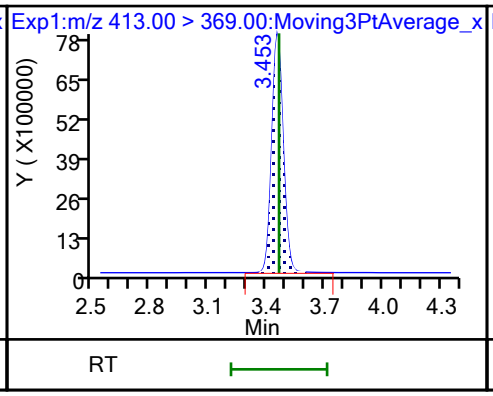
D 12 M2-6:2 FTS



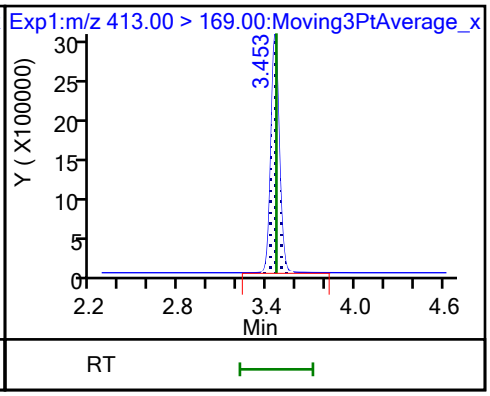
13 1H,1H,2H,2H-perfluorooctanesulfo



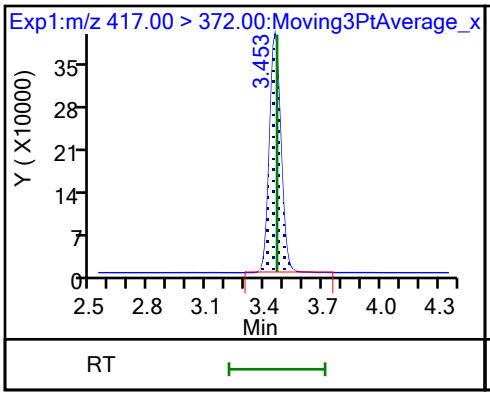
15 Perfluorooctanoic acid



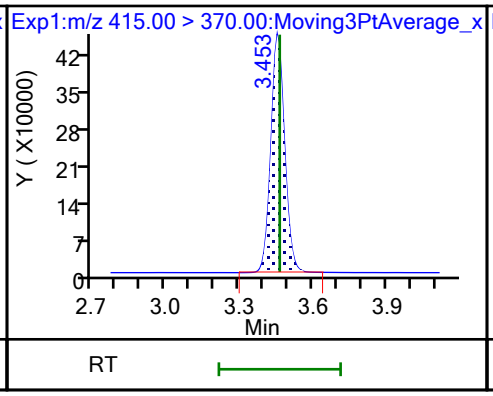
15 Perfluorooctanoic acid



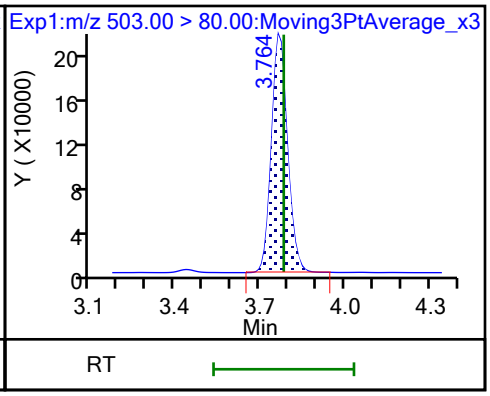
D 14 13C4 PFOA



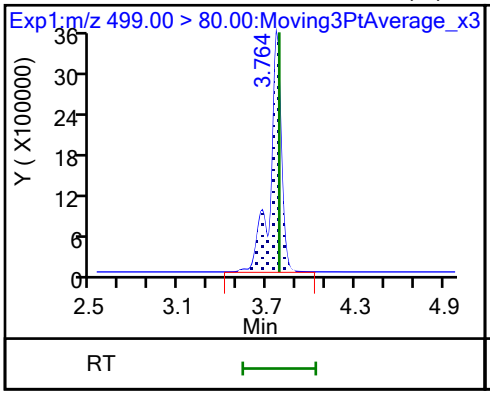
* 62 13C2 PFOA



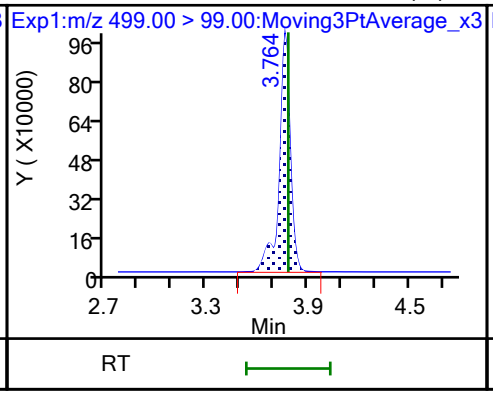
D 18 13C4 PFOS



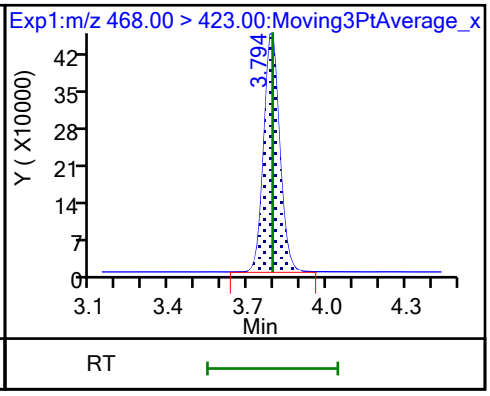
17 Perfluorooctanesulfonic acid (M)



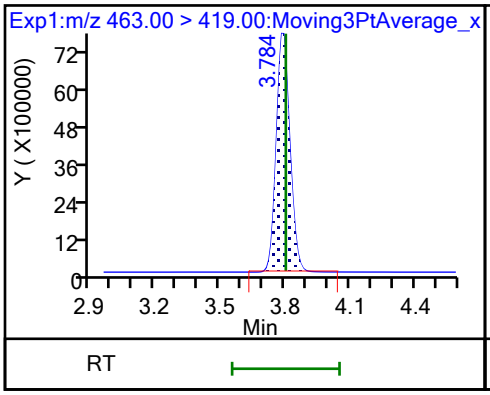
17 Perfluorooctanesulfonic acid (M)



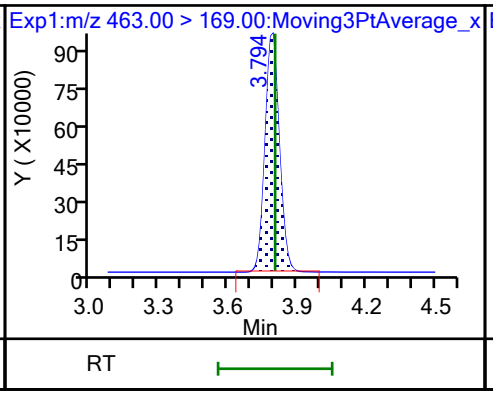
D 19 13C5 PFNA



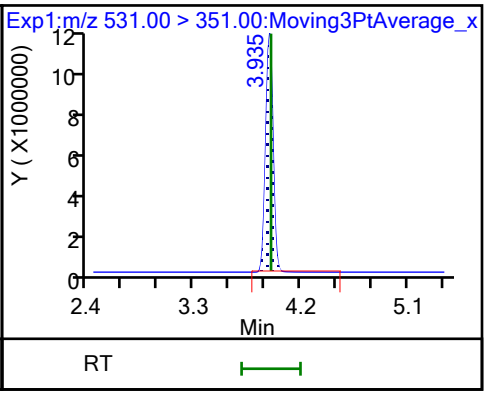
20 Perfluorononanoic acid



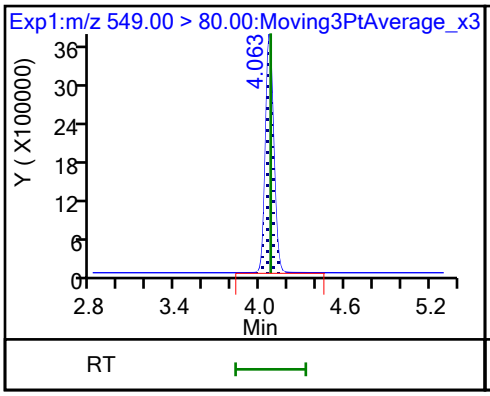
20 Perfluorononanoic acid



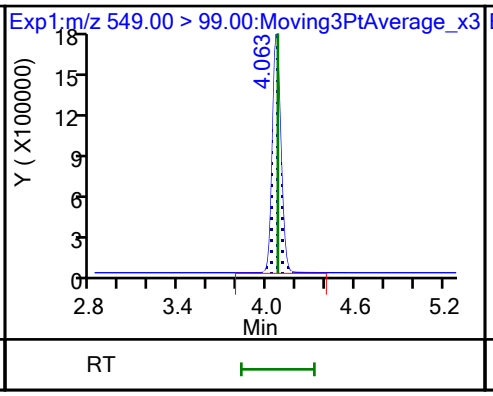
69 9-Chlorohexadecafluoro-3-oxanona



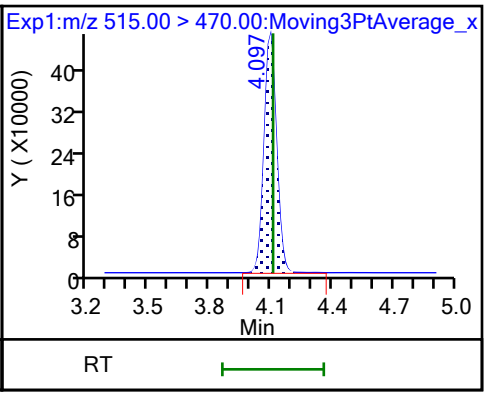
68 Perfluorononanesulfonic acid



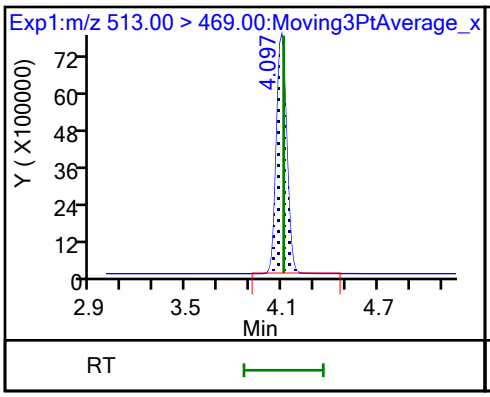
68 Perfluorononanesulfonic acid



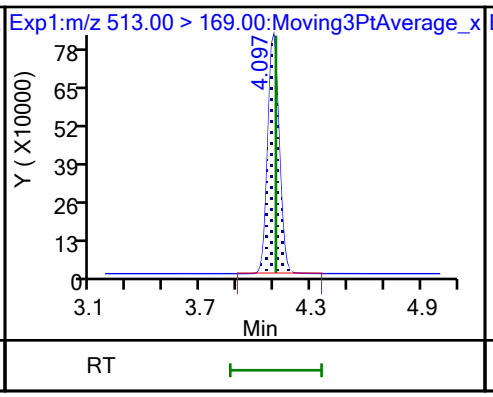
D 23 13C2 PFDA



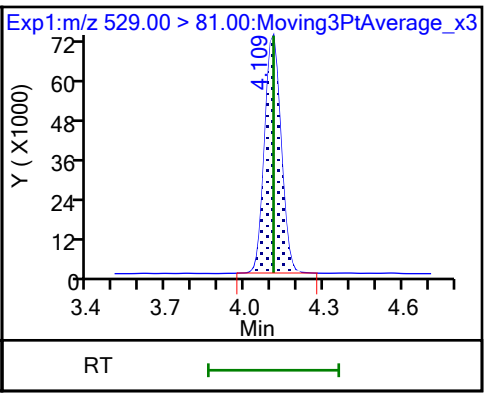
24 Perfluorodecanoic acid



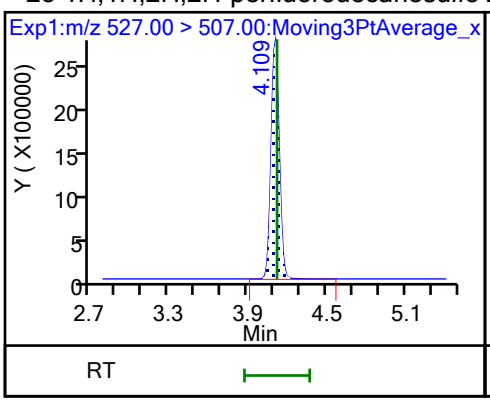
24 Perfluorodecanoic acid



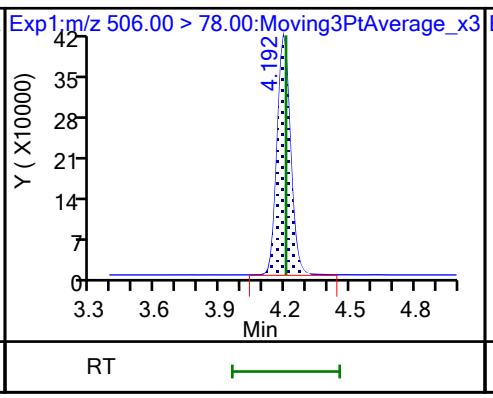
D 26 M2-8:2 FTS



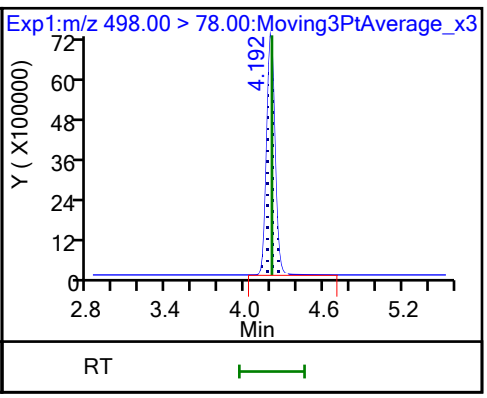
25 1H,1H,2H,2H-perfluorodecanesulfo



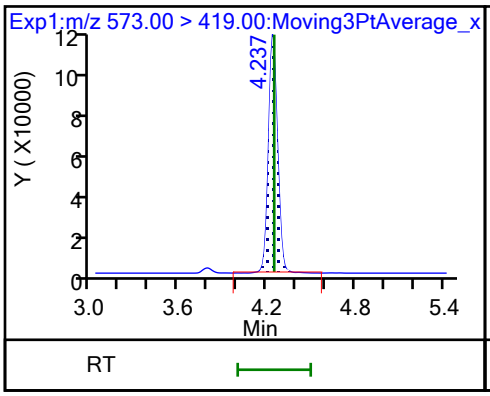
D 21 13C8 FOSA



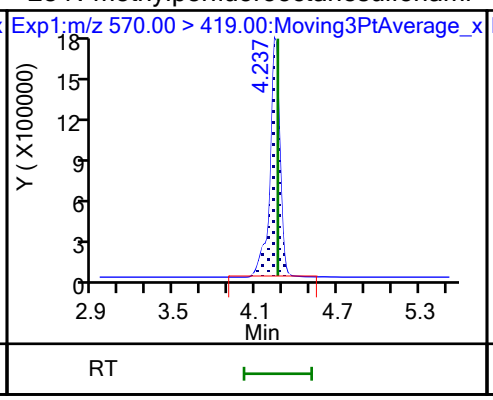
22 Perfluorooctanesulfonamide



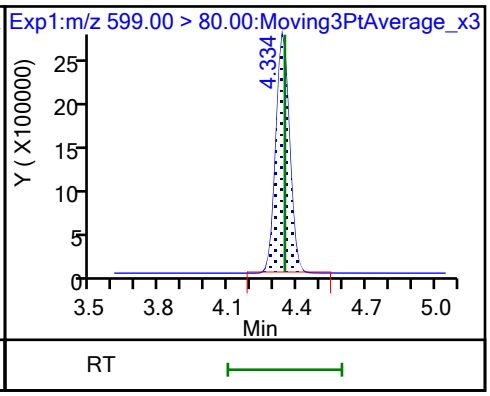
D 27 d3-NMeFOSAA



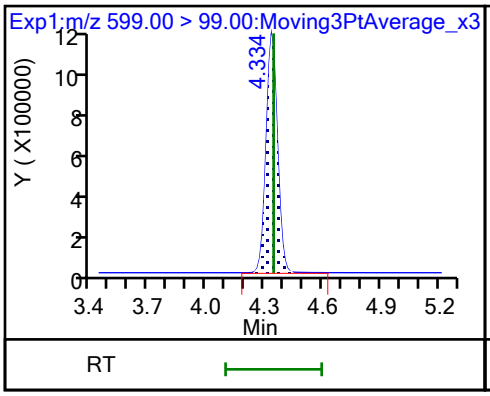
28 N-methylperfluorooctanesulfonami



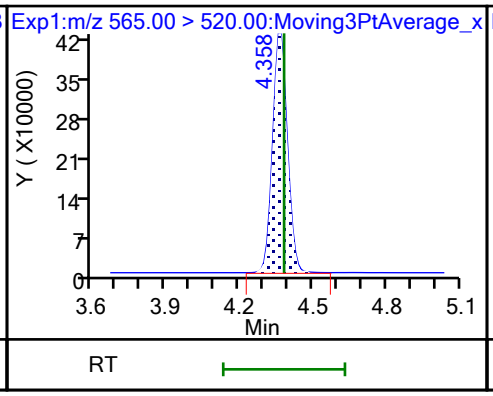
29 Perfluorodecanesulfonic acid



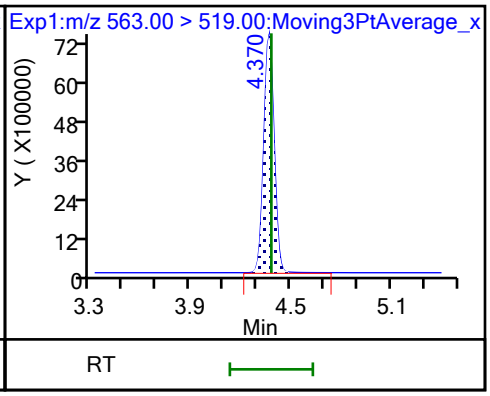
29 Perfluorodecanesulfonic acid



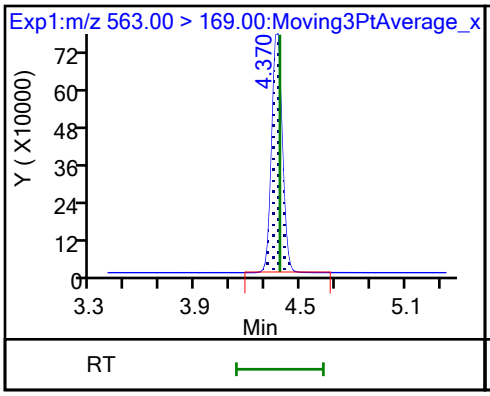
D 30 13C2 PFUnA



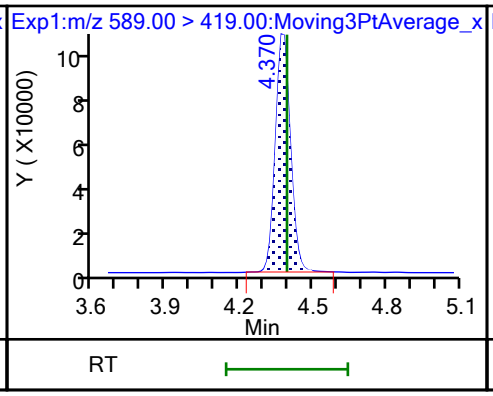
31 Perfluoroundecanoic acid



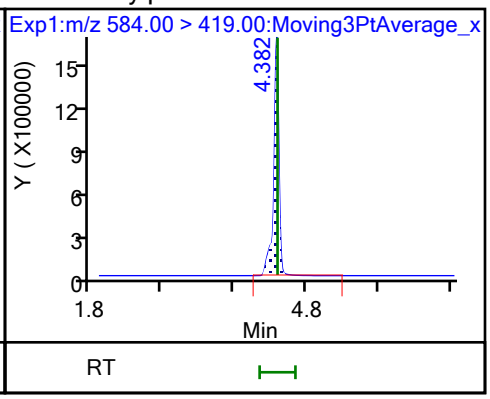
31 Perfluoroundecanoic acid



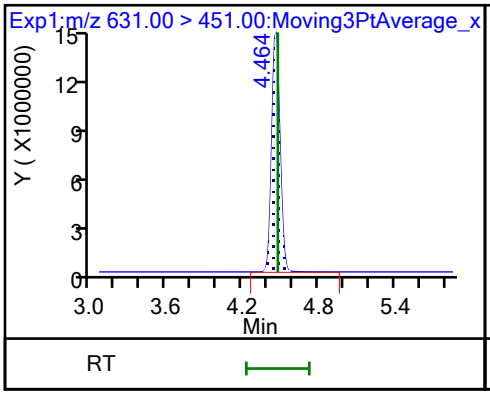
D 32 d5-NEtFOSAA



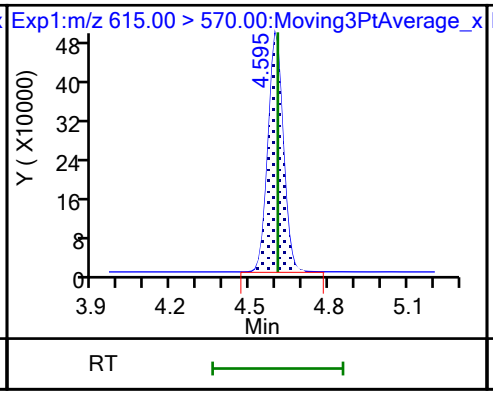
33 N-ethylperfluorooctanesulfonamid



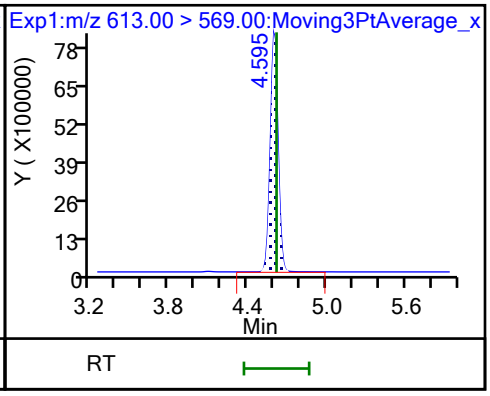
66 11-Chloroeicosafluoro-3-oxaundec



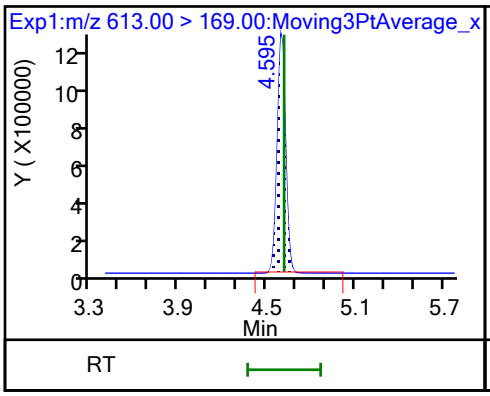
D 36 13C2 PFDoA



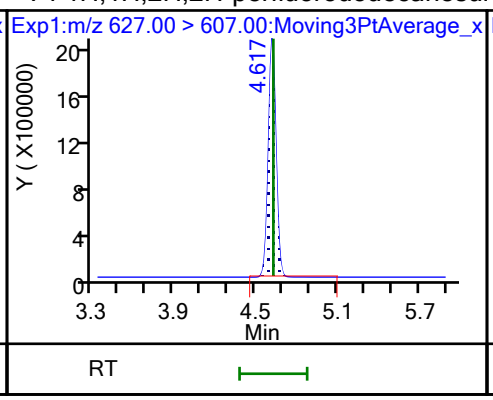
37 Perfluorododecanoic acid



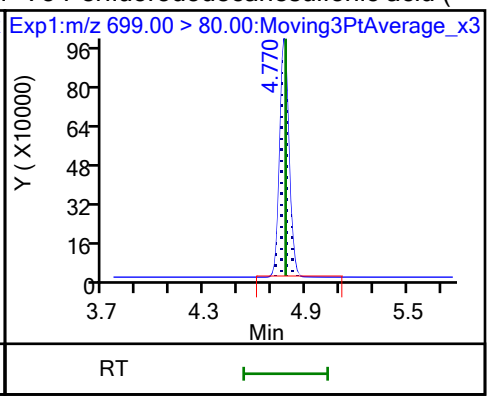
37 Perfluorododecanoic acid



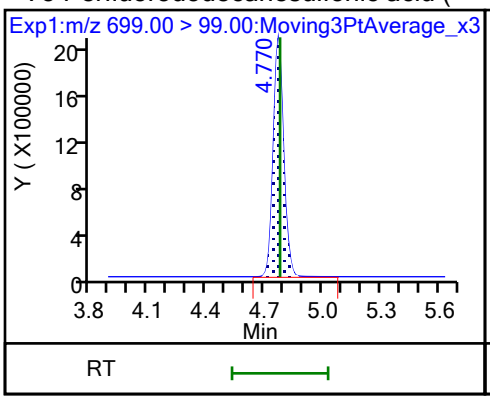
74 1H,1H,2H,2H-perfluorododecanesul



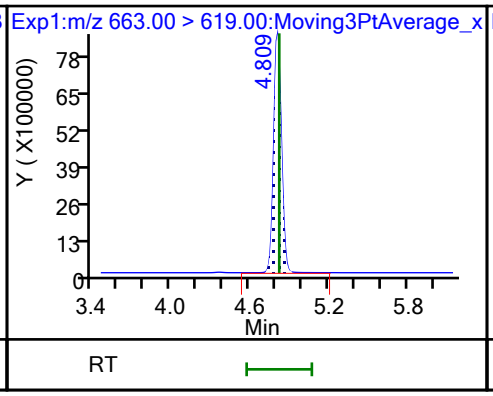
75 Perfluorododecanesulfonic acid (



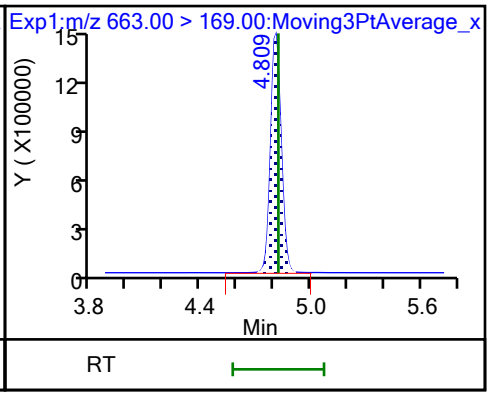
75 Perfluorododecanesulfonic acid (



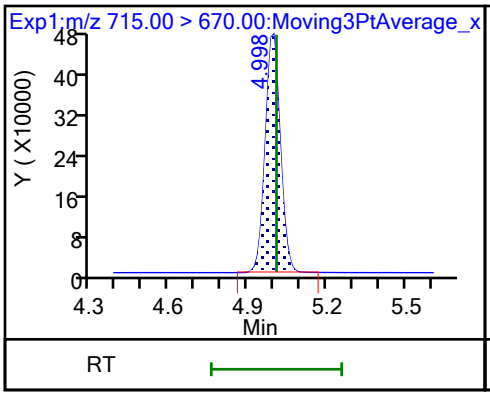
41 Perfluorotridecanoic acid



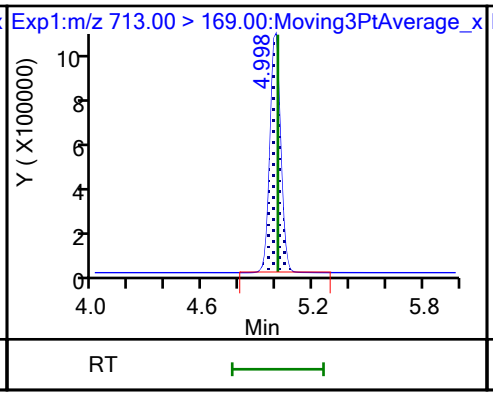
41 Perfluorotridecanoic acid



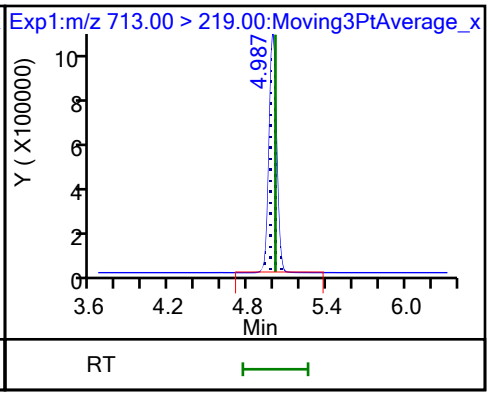
D 43 13C2 PFTeDA



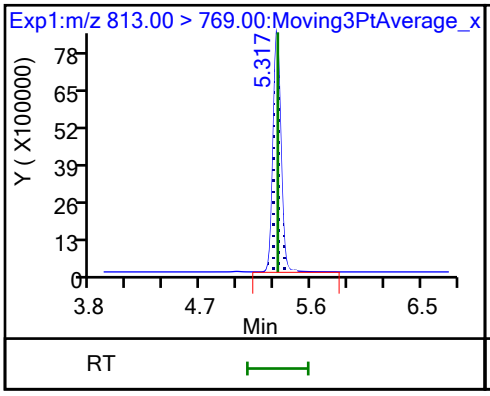
42 Perfluorotetradecanoic acid



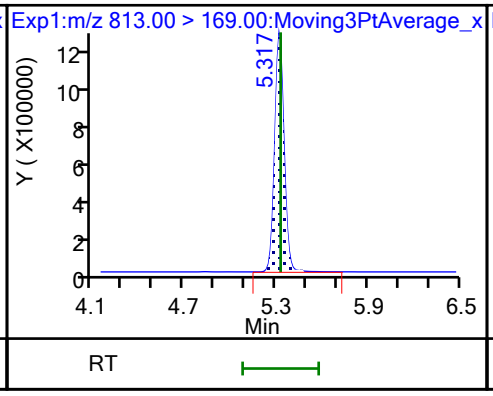
42 Perfluorotetradecanoic acid



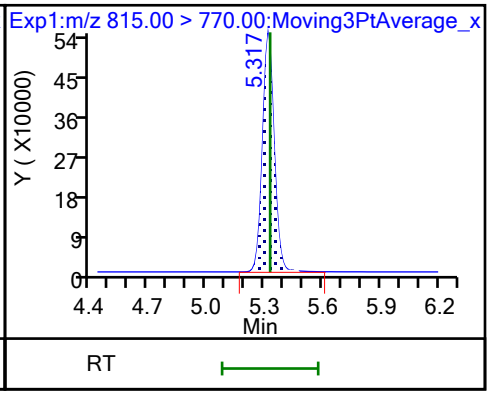
45 Perfluorohexadecanoic acid



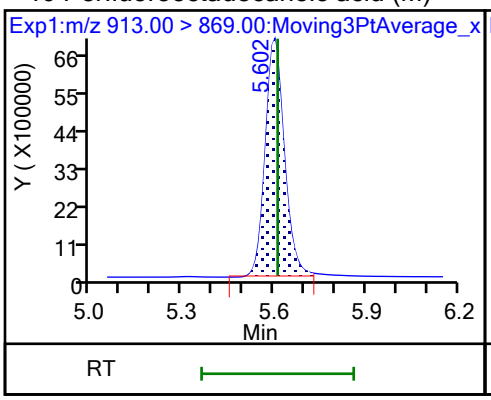
45 Perfluorohexadecanoic acid



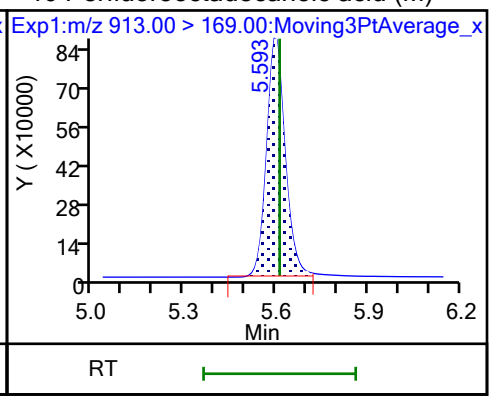
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Calibration / Perfluorobutanoic acid

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

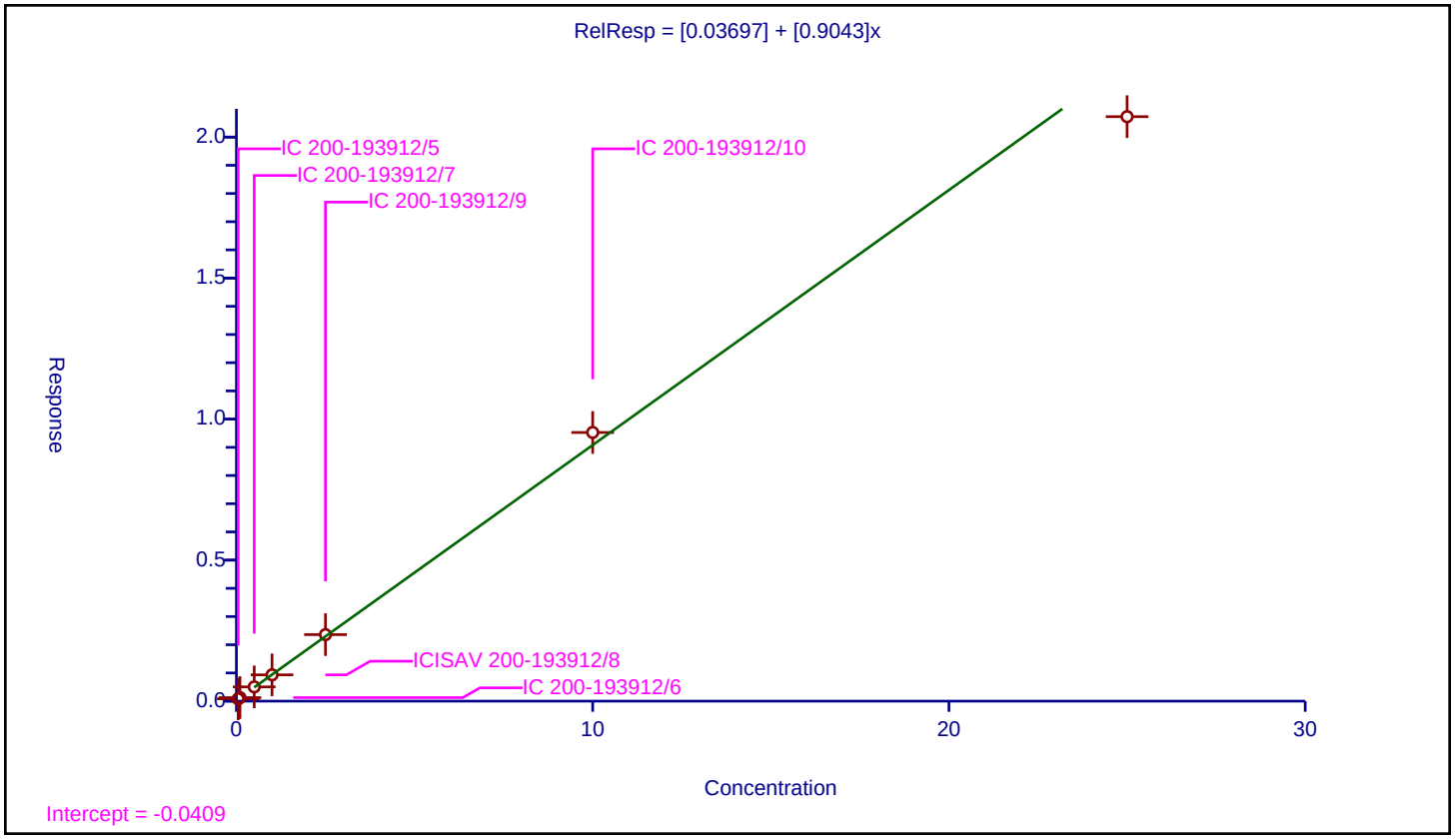
Curve Coefficients

Intercept:	0.03697
Slope:	0.9043

Error Coefficients

Standard Error:	14300000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.082621	1.25	2253572.0	1.652421	Y
2	IC 200-193912/6	0.1	0.124976	1.25	1926725.0	1.249757	Y
3	IC 200-193912/7	0.5	0.505344	1.25	1916527.0	1.010688	Y
4	ICISAV 200-193912/8	1.0	0.932118	1.25	1929850.0	0.932118	Y
5	IC 200-193912/9	2.5	2.358169	1.25	2025338.0	0.943268	Y
6	IC 200-193912/10	10.0	9.52612	1.25	1663241.0	0.952612	Y
7	IC 200-193912/11	25.0	20.72438	1.25	1758198.0	0.828975	Y



Calibration / Perfluoropentanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

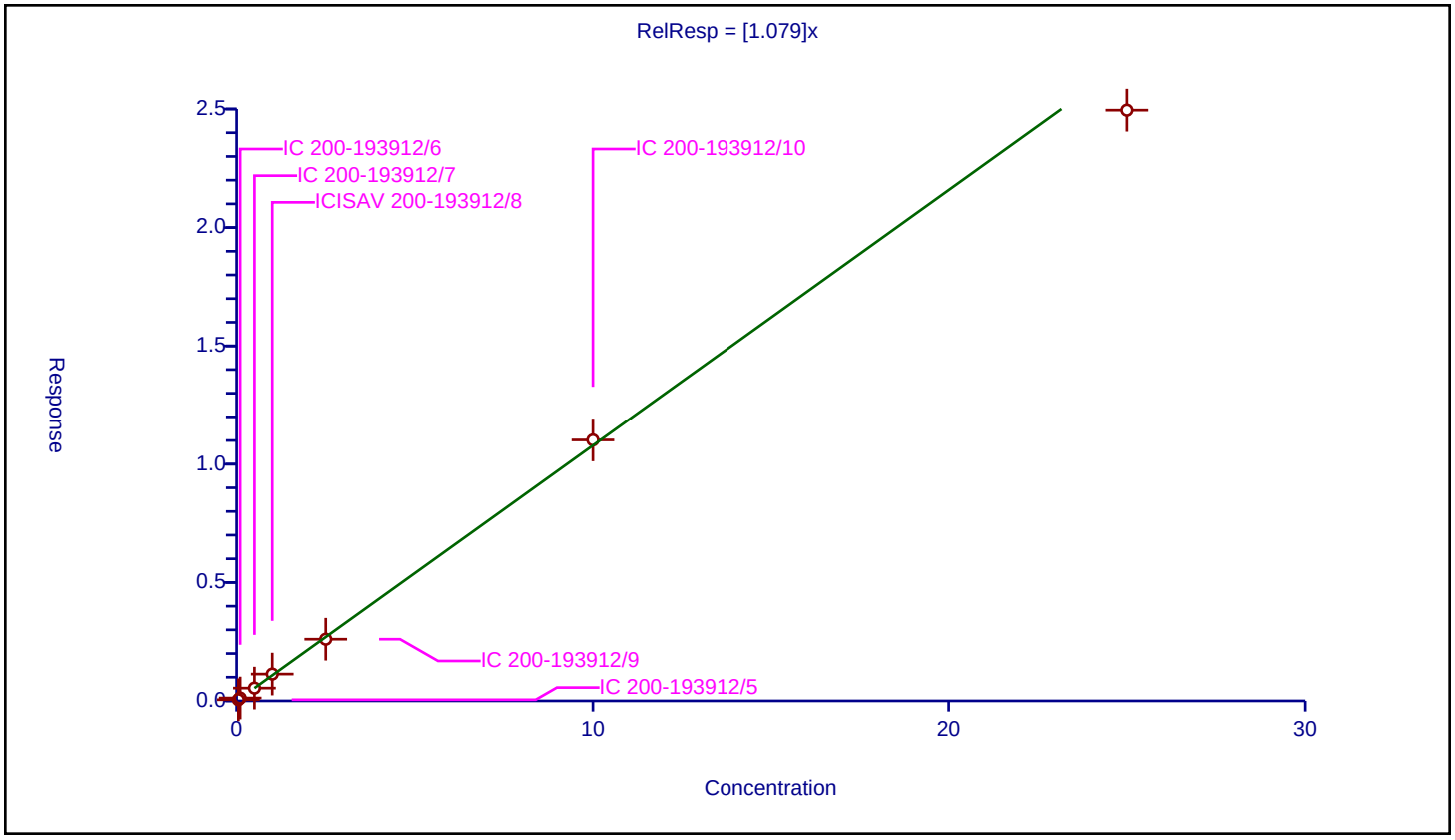
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.049068	1.25	1827623.0	0.981357	Y
2	IC 200-193912/6	0.1	0.121675	1.25	1458161.0	1.216747	Y
3	IC 200-193912/7	0.5	0.540415	1.25	1507442.0	1.080831	Y
4	ICISAV 200-193912/8	1.0	1.132983	1.25	1529086.0	1.132983	Y
5	IC 200-193912/9	2.5	2.604075	1.25	1531883.0	1.04163	Y
6	IC 200-193912/10	10.0	11.023306	1.25	1291692.0	1.102331	Y
7	IC 200-193912/11	25.0	24.951062	1.25	1319141.0	0.998042	Y



Calibration / Perfluorobutanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

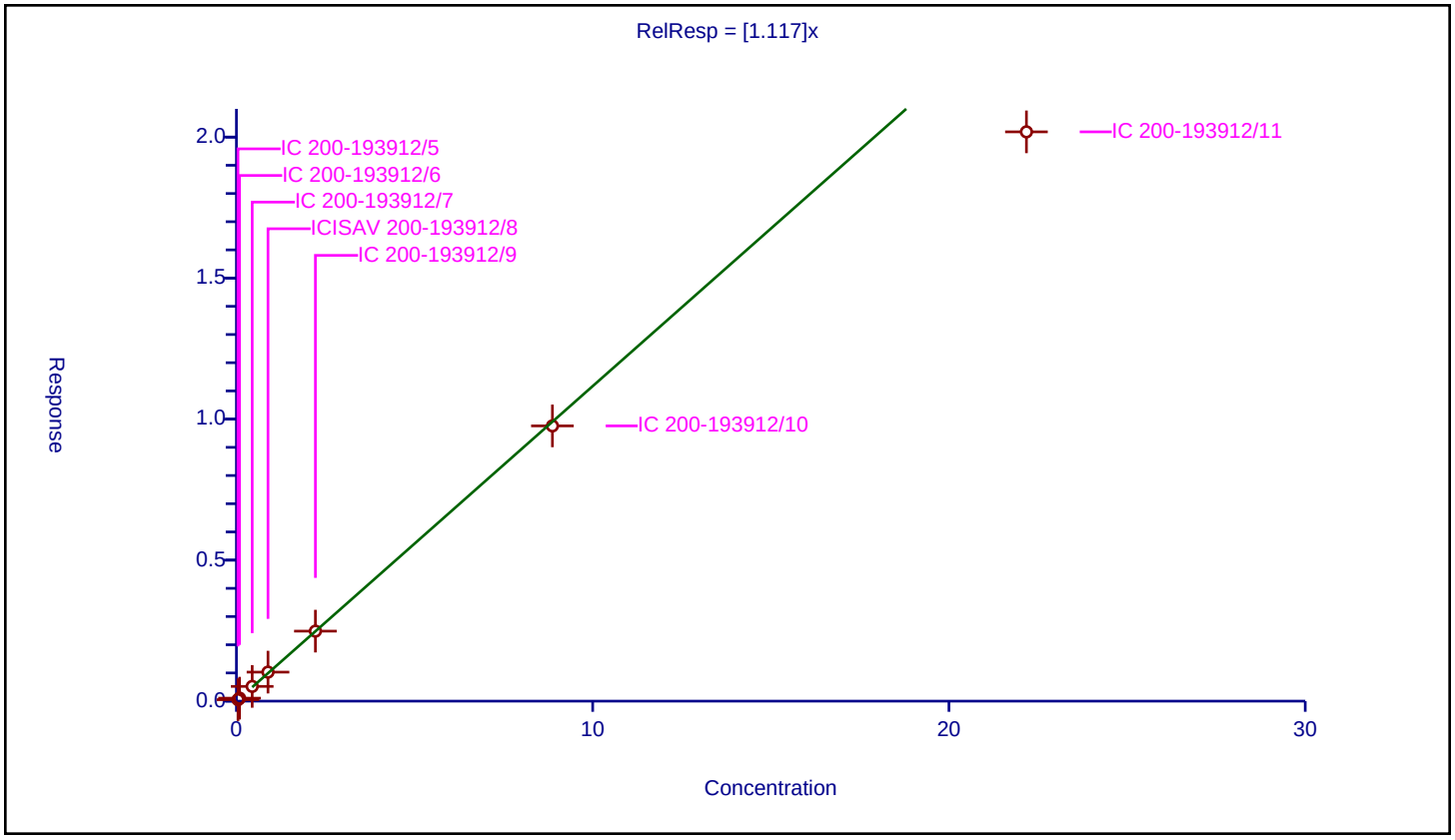
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	14900000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04435	0.0515	1.1625	2112456.0	1.161217	Y
2	IC 200-193912/6	0.0887	0.105408	1.1625	1835537.0	1.188361	Y
3	IC 200-193912/7	0.4435	0.522575	1.1625	1758991.0	1.178297	Y
4	ICISAV 200-193912/8	0.887	1.029257	1.1625	1858340.0	1.16038	Y
5	IC 200-193912/9	2.2175	2.482423	1.1625	1976378.0	1.119469	Y
6	IC 200-193912/10	8.87	9.759782	1.1625	1657995.0	1.100314	Y
7	IC 200-193912/11	22.175	20.18591	1.1625	1925353.0	0.9103	Y



Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

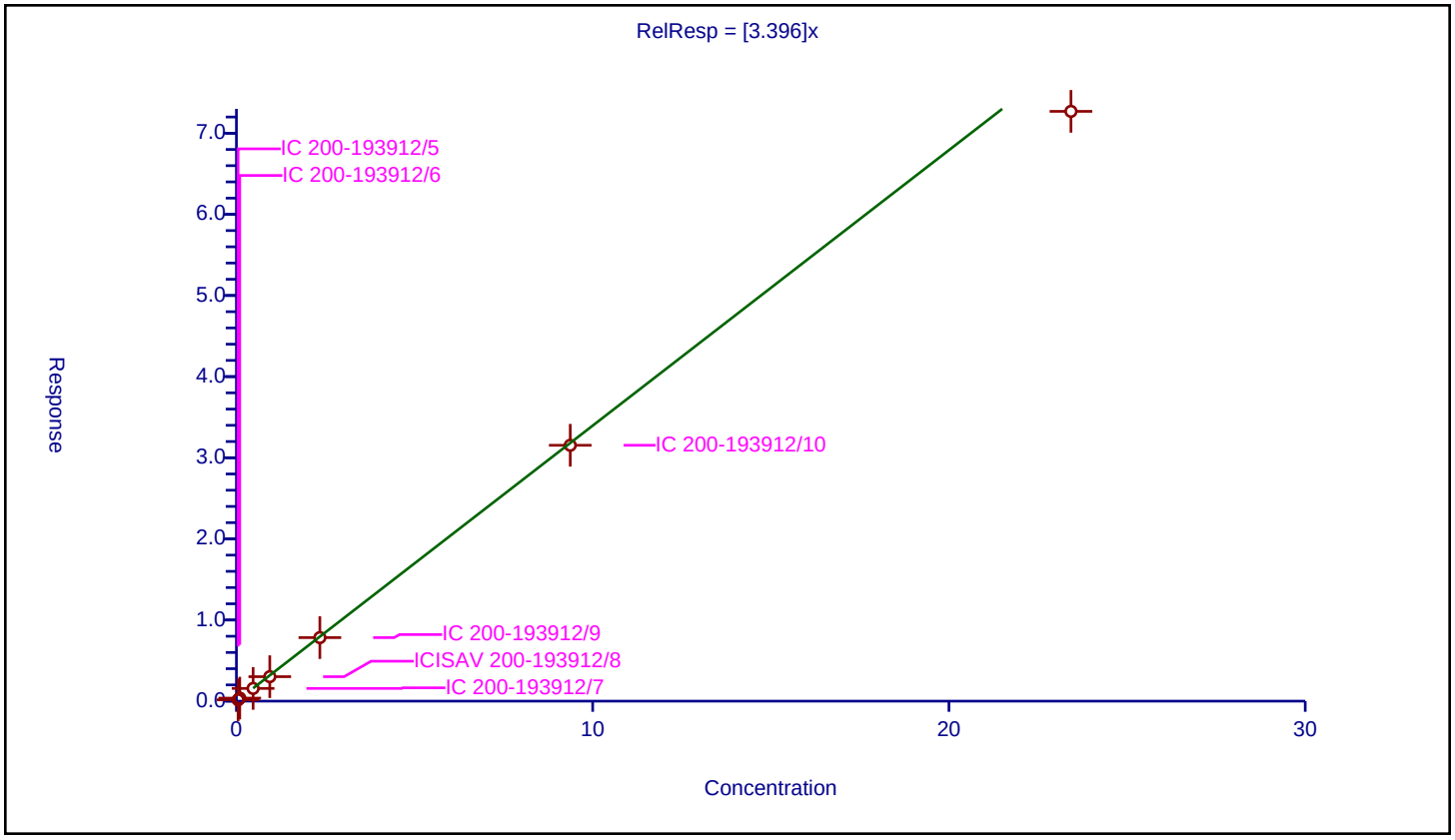
Curve Coefficients

Intercept:	0
Slope:	3.396

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04685	0.160153	1.1675	264843.0	3.41841	Y
2	IC 200-193912/6	0.0937	0.372622	1.1675	202715.0	3.976756	Y
3	IC 200-193912/7	0.4685	1.567171	1.1675	215257.0	3.345081	Y
4	ICISAV 200-193912/8	0.937	3.015993	1.1675	220382.0	3.218776	Y
5	IC 200-193912/9	2.3425	7.830737	1.1675	221658.0	3.342898	Y
6	IC 200-193912/10	9.37	31.536056	1.1675	194992.0	3.365641	Y
7	IC 200-193912/11	23.425	72.694144	1.1675	207012.0	3.103272	Y



Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

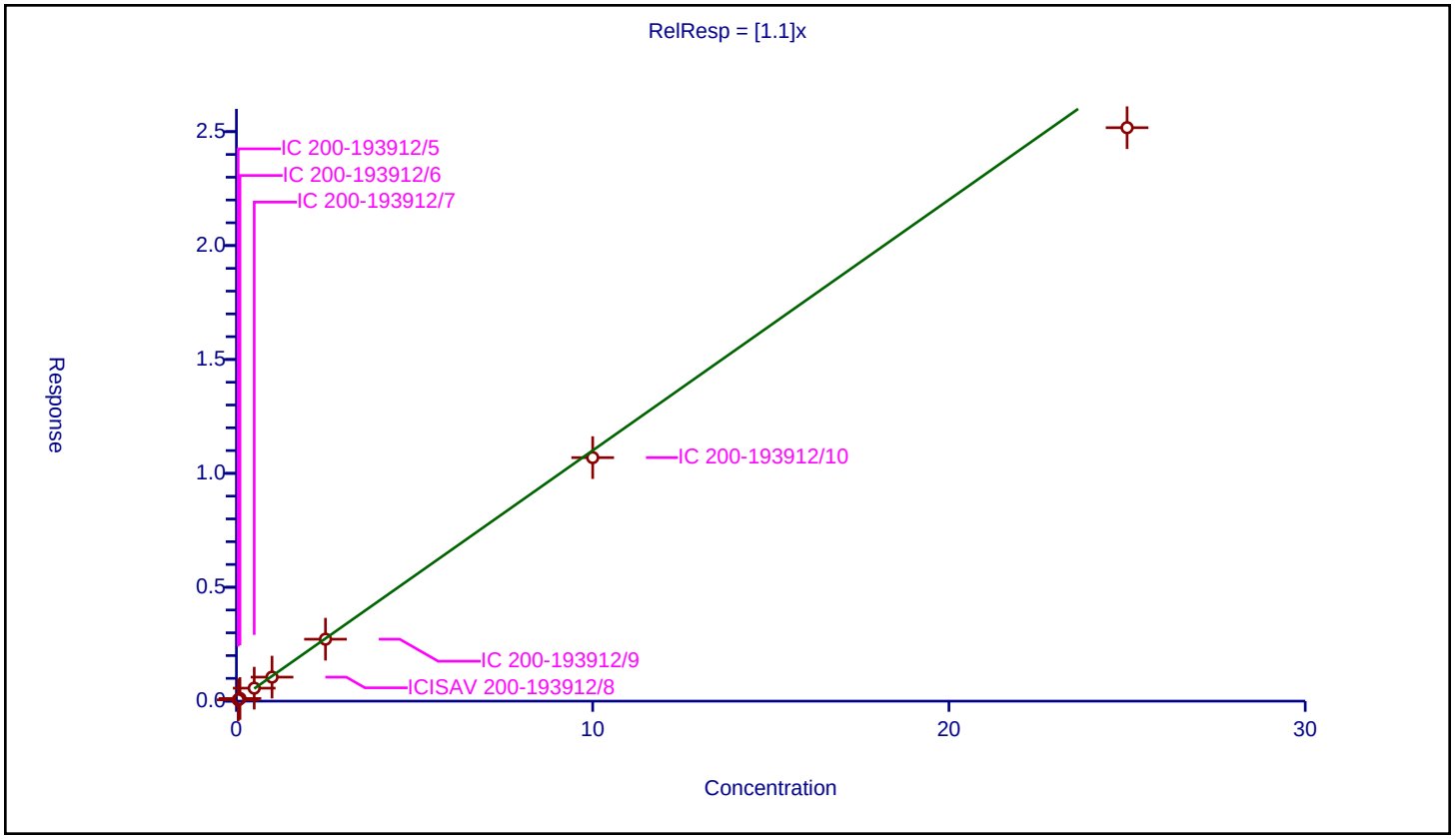
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059408	1.25	1853797.0	1.188169	Y
2	IC 200-193912/6	0.1	0.11566	1.25	1566461.0	1.156596	Y
3	IC 200-193912/7	0.5	0.570489	1.25	1472867.0	1.140977	Y
4	ICISAV 200-193912/8	1.0	1.053678	1.25	1544435.0	1.053678	Y
5	IC 200-193912/9	2.5	2.719251	1.25	1545081.0	1.087701	Y
6	IC 200-193912/10	10.0	10.691075	1.25	1345799.0	1.069107	Y
7	IC 200-193912/11	25.0	25.174033	1.25	1316912.0	1.006961	Y



Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

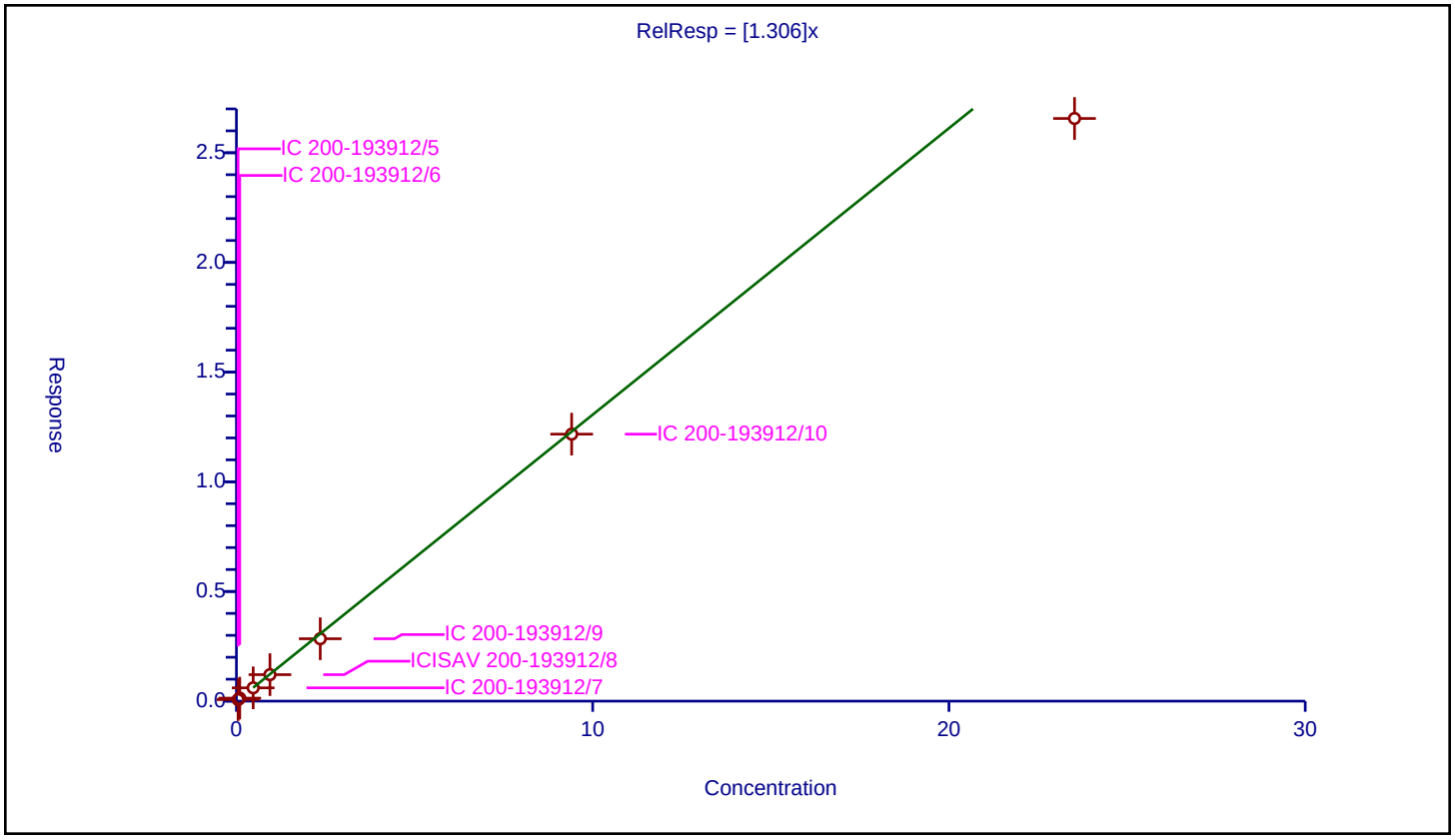
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04705	0.069845	1.1825	1487994.0	1.484482	Y
2	IC 200-193912/6	0.0941	0.136641	1.1825	1305238.0	1.452086	Y
3	IC 200-193912/7	0.4705	0.606956	1.1825	1353967.0	1.290024	Y
4	ICISAV 200-193912/8	0.941	1.207241	1.1825	1396957.0	1.282934	Y
5	IC 200-193912/9	2.3525	2.844335	1.1825	1406672.0	1.209069	Y
6	IC 200-193912/10	9.41	12.172239	1.1825	1242233.0	1.293543	Y
7	IC 200-193912/11	23.525	26.56316	1.1825	1370941.0	1.129146	Y



Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

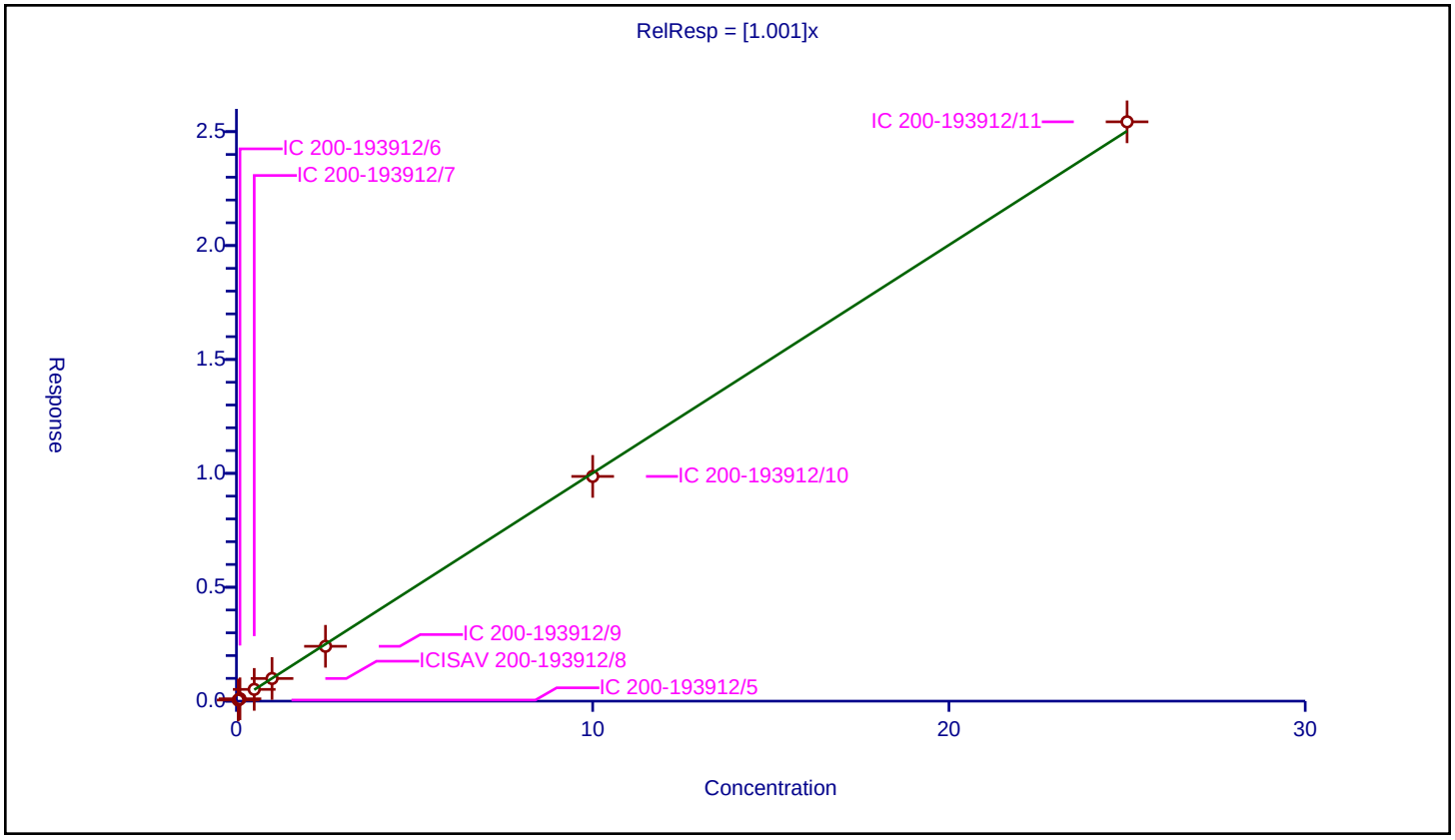
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.04907	1.25	346930.0	0.981394	Y
2	IC 200-193912/6	0.1	0.103291	1.25	299977.0	1.032913	Y
3	IC 200-193912/7	0.5	0.516151	1.25	279126.0	1.032303	Y
4	ICISAV 200-193912/8	1.0	0.994769	1.25	296521.0	0.994769	Y
5	IC 200-193912/9	2.5	2.407784	1.25	295164.0	0.963114	Y
6	IC 200-193912/10	10.0	9.865207	1.25	265620.0	0.986521	Y
7	IC 200-193912/11	25.0	25.432513	1.25	273677.0	1.017301	Y



10/26/2023
2:28 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

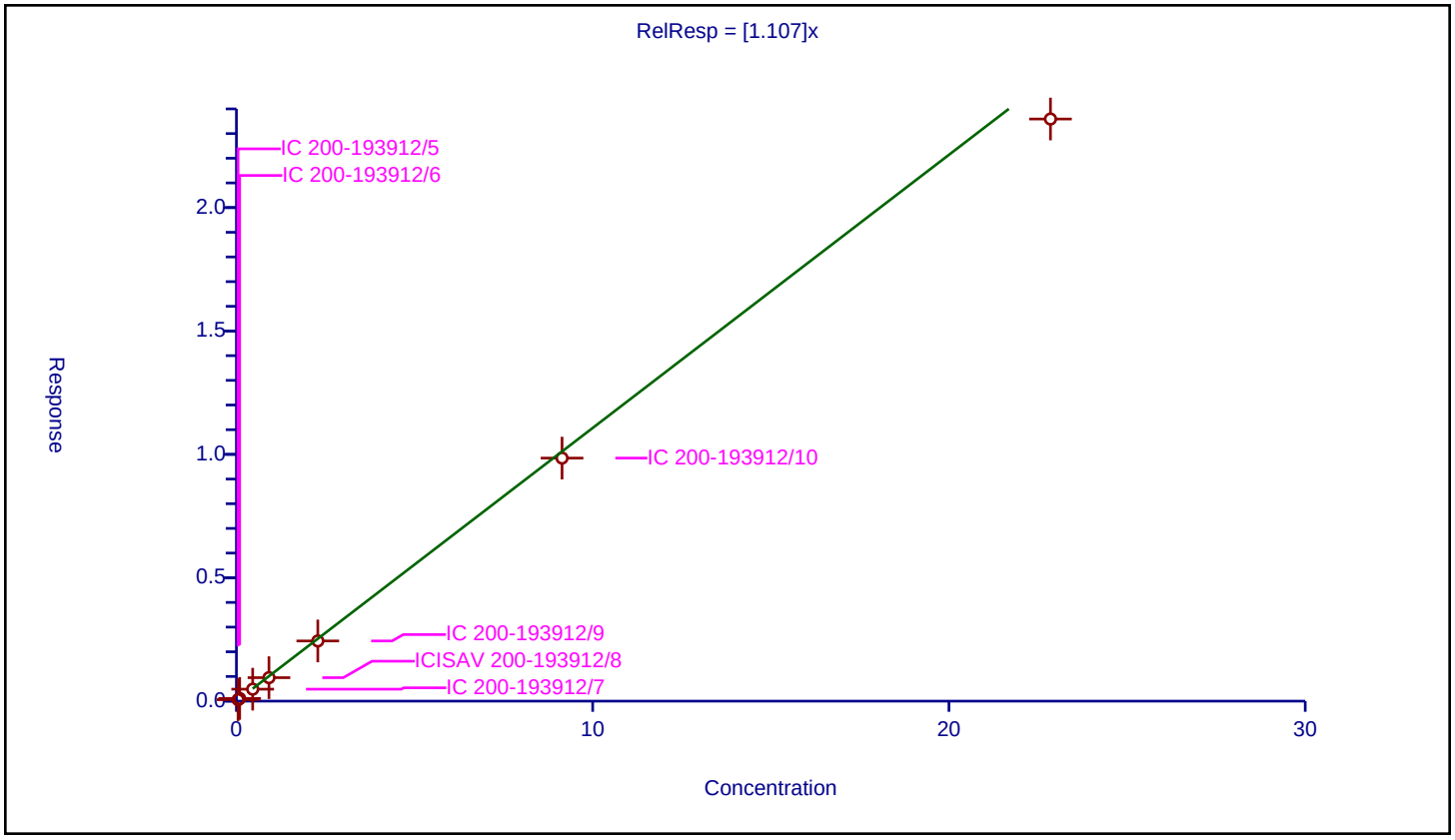
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0457	0.05908	1.1825	1487994.0	1.292778	Y
2	IC 200-193912/6	0.0914	0.107635	1.1825	1305238.0	1.177626	Y
3	IC 200-193912/7	0.457	0.484795	1.1825	1353967.0	1.06082	Y
4	ICISAV 200-193912/8	0.914	0.95088	1.1825	1396957.0	1.04035	Y
5	IC 200-193912/9	2.285	2.438823	1.1825	1406672.0	1.067319	Y
6	IC 200-193912/10	9.14	9.849131	1.1825	1242233.0	1.077585	Y
7	IC 200-193912/11	22.85	23.590185	1.1825	1370941.0	1.032393	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

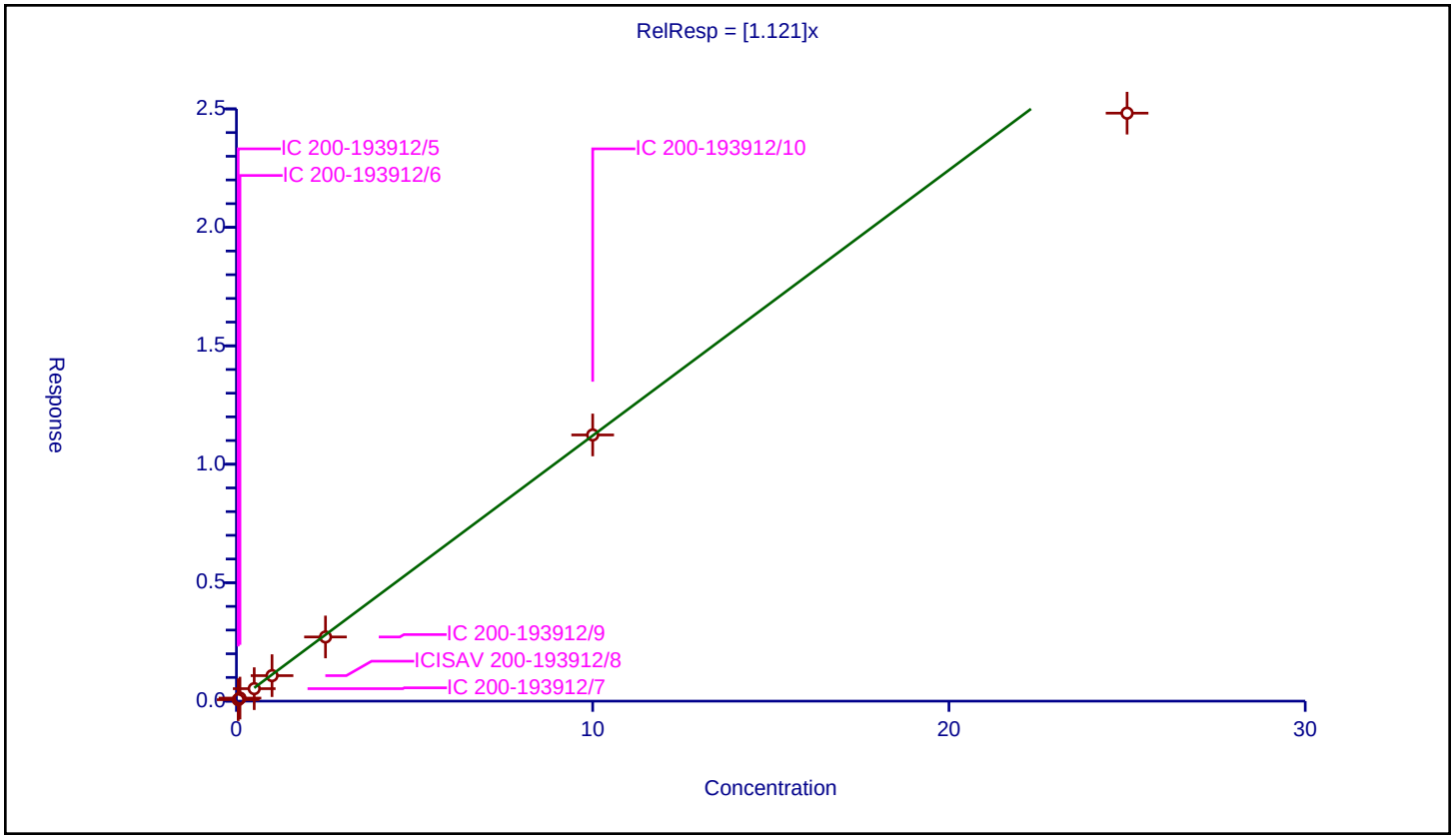
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.061632	1.25	1876608.0	1.23265	Y
2	IC 200-193912/6	0.1	0.128259	1.25	1628956.0	1.282585	Y
3	IC 200-193912/7	0.5	0.527087	1.25	1672833.0	1.054174	Y
4	ICISAV 200-193912/8	1.0	1.076804	1.25	1679653.0	1.076804	Y
5	IC 200-193912/9	2.5	2.708862	1.25	1773444.0	1.083545	Y
6	IC 200-193912/10	10.0	11.23637	1.25	1466571.0	1.123637	Y
7	IC 200-193912/11	25.0	24.820079	1.25	1559821.0	0.992803	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

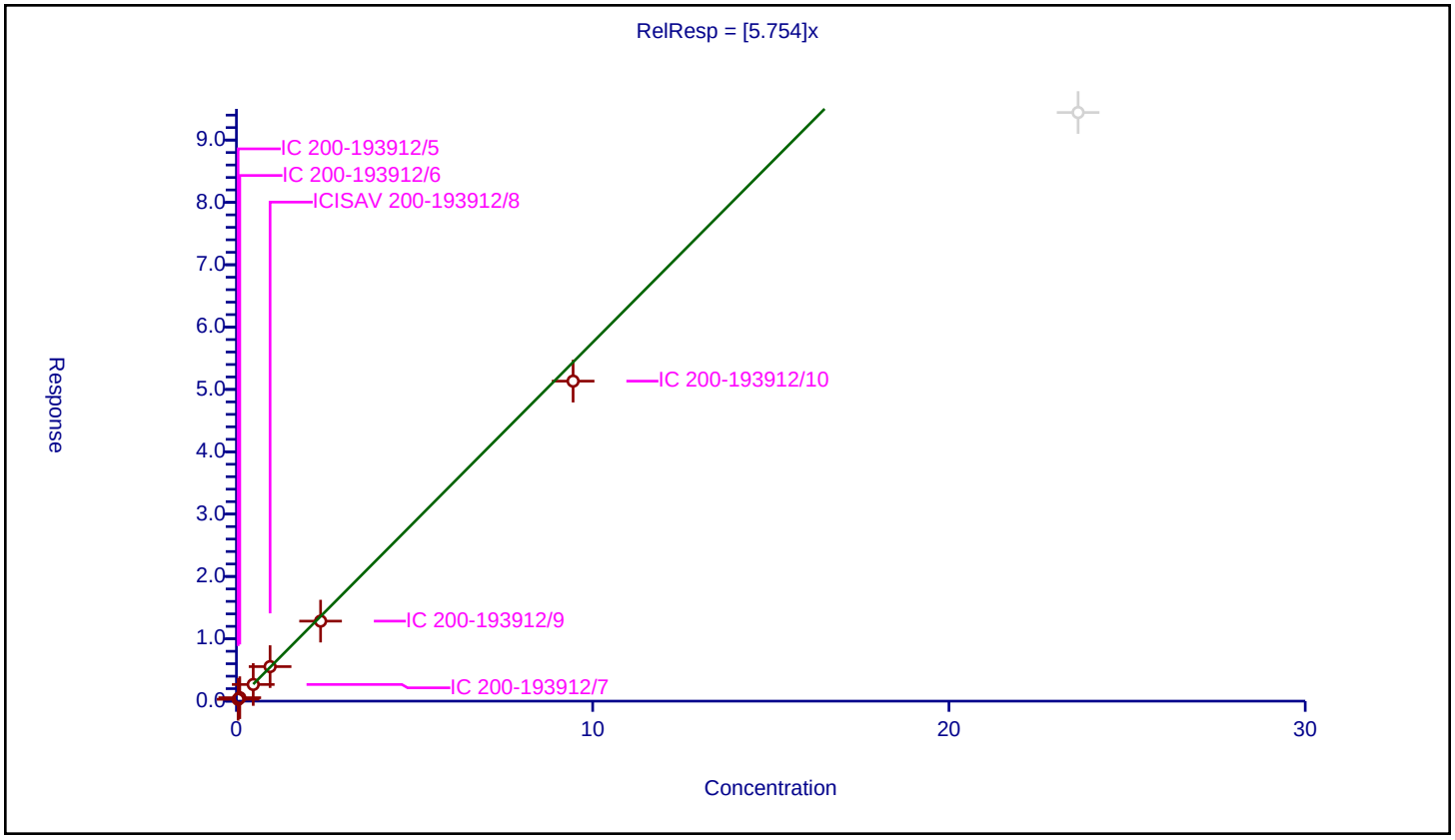
Curve Coefficients

Intercept:	0
Slope:	5.754

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04725	0.297259	1.195	943517.0	6.291195	Y
2	IC 200-193912/6	0.0945	0.553418	1.195	863764.0	5.856277	Y
3	IC 200-193912/7	0.4725	2.671126	1.195	882764.0	5.653177	Y
4	ICISAV 200-193912/8	0.945	5.536858	1.195	904398.0	5.859109	Y
5	IC 200-193912/9	2.3625	12.835921	1.195	919926.0	5.433194	Y
6	IC 200-193912/10	9.45	51.335121	1.195	765818.0	5.432288	Y
7	IC 200-193912/11	23.625	94.418048	1.195	865311.0	3.996531	N



Calibration / Perfluoroheptanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

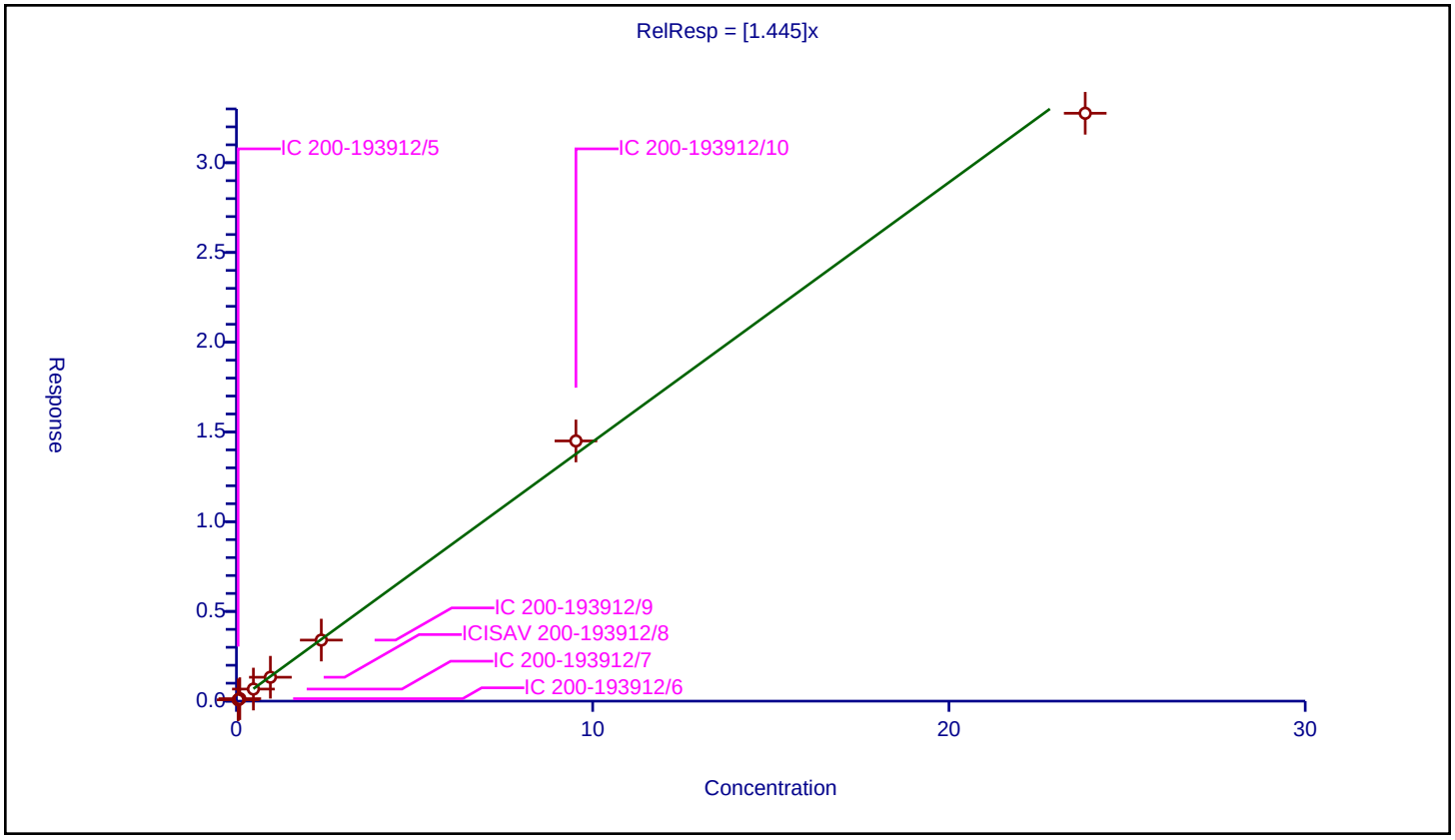
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04765	0.073316	1.195	943517.0	1.538638	Y
2	IC 200-193912/6	0.0953	0.13751	1.195	863764.0	1.442913	Y
3	IC 200-193912/7	0.4765	0.673122	1.195	882764.0	1.412638	Y
4	ICISAV 200-193912/8	0.953	1.332604	1.195	904398.0	1.398325	Y
5	IC 200-193912/9	2.3825	3.401611	1.195	919926.0	1.427749	Y
6	IC 200-193912/10	9.53	14.49894	1.195	765818.0	1.5214	Y
7	IC 200-193912/11	23.825	32.755938	1.195	865311.0	1.374856	Y



Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

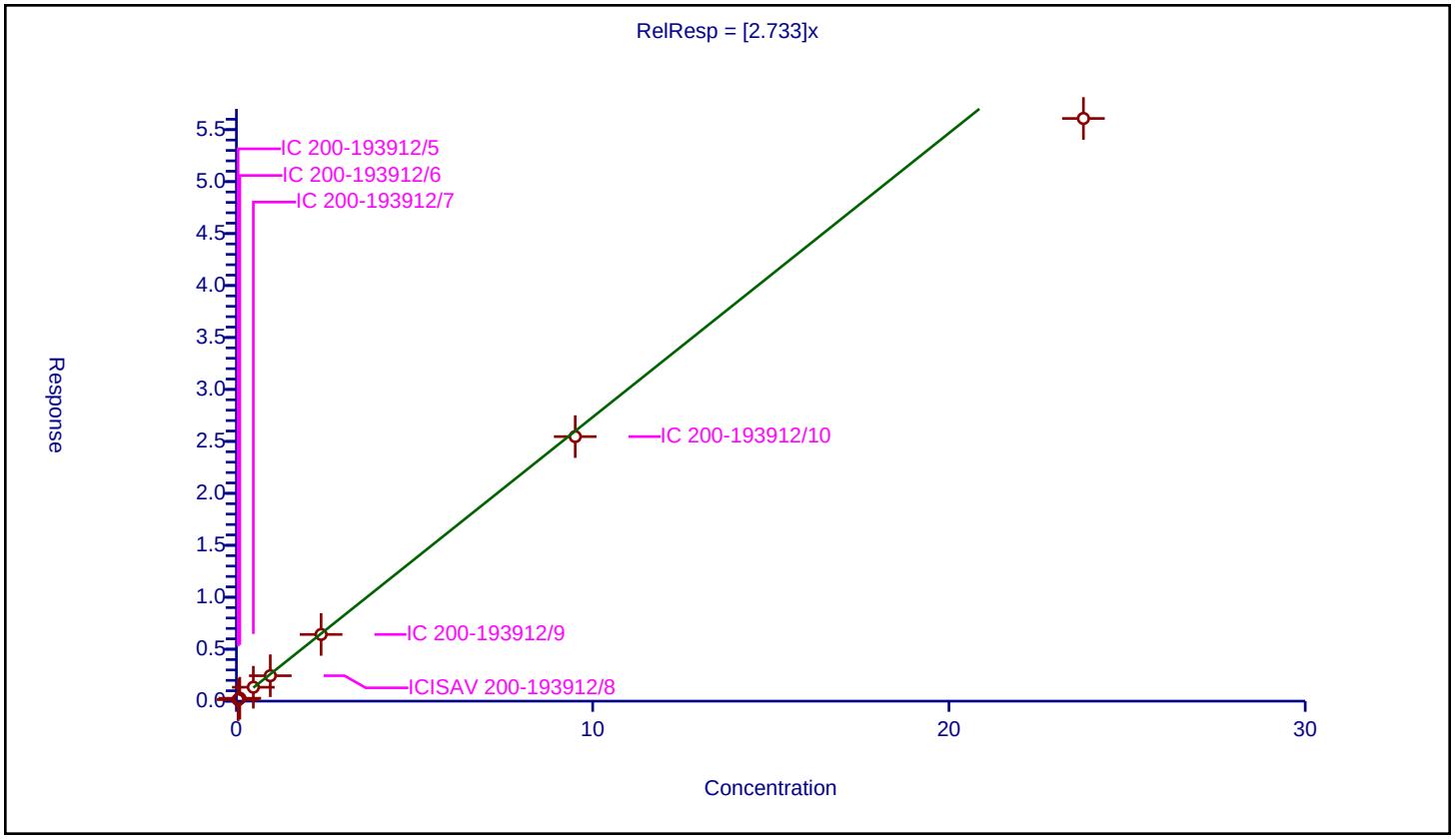
Curve Coefficients

Intercept:	0
Slope:	2.733

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04755	0.14644	1.1875	309808.0	3.079716	Y
2	IC 200-193912/6	0.0951	0.278153	1.1875	286854.0	2.924848	Y
3	IC 200-193912/7	0.4755	1.340299	1.1875	274798.0	2.818715	Y
4	ICISAV 200-193912/8	0.951	2.447413	1.1875	299923.0	2.573515	Y
5	IC 200-193912/9	2.3775	6.419079	1.1875	305639.0	2.699928	Y
6	IC 200-193912/10	9.51	25.460284	1.1875	250039.0	2.677212	Y
7	IC 200-193912/11	23.775	56.075977	1.1875	271643.0	2.358611	Y



Calibration / Perfluorooctanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

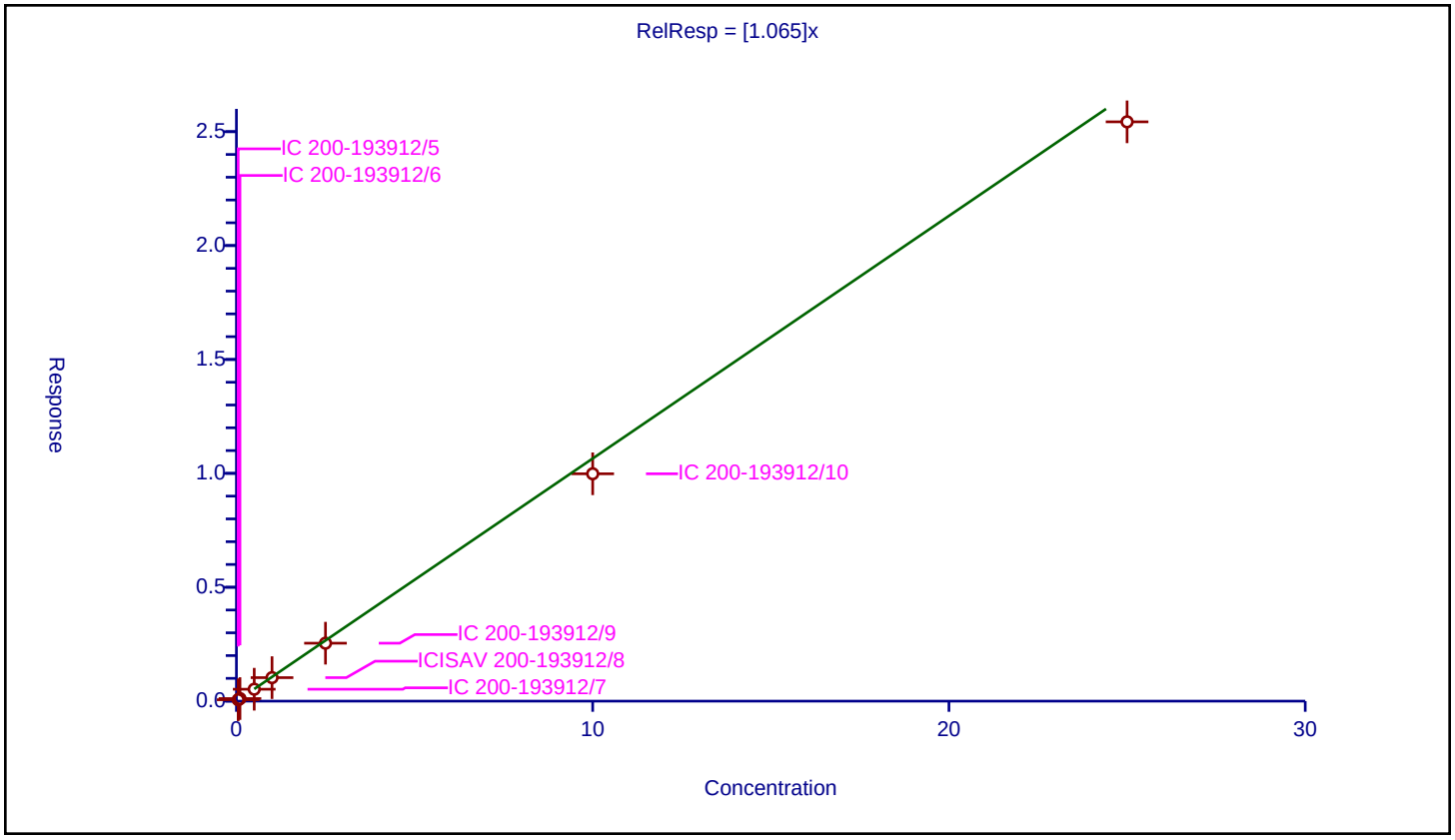
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	14700000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060812	1.25	2027588.0	1.216248	Y
2	IC 200-193912/6	0.1	0.112776	1.25	1982384.0	1.127765	Y
3	IC 200-193912/7	0.5	0.523481	1.25	1912820.0	1.046962	Y
4	ICISAV 200-193912/8	1.0	1.032173	1.25	1934463.0	1.032173	Y
5	IC 200-193912/9	2.5	2.543526	1.25	2045642.0	1.01741	Y
6	IC 200-193912/10	10.0	9.981516	1.25	1691186.0	0.998152	Y
7	IC 200-193912/11	25.0	25.431645	1.25	1620734.0	1.017266	Y



Calibration / Perfluorooctanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

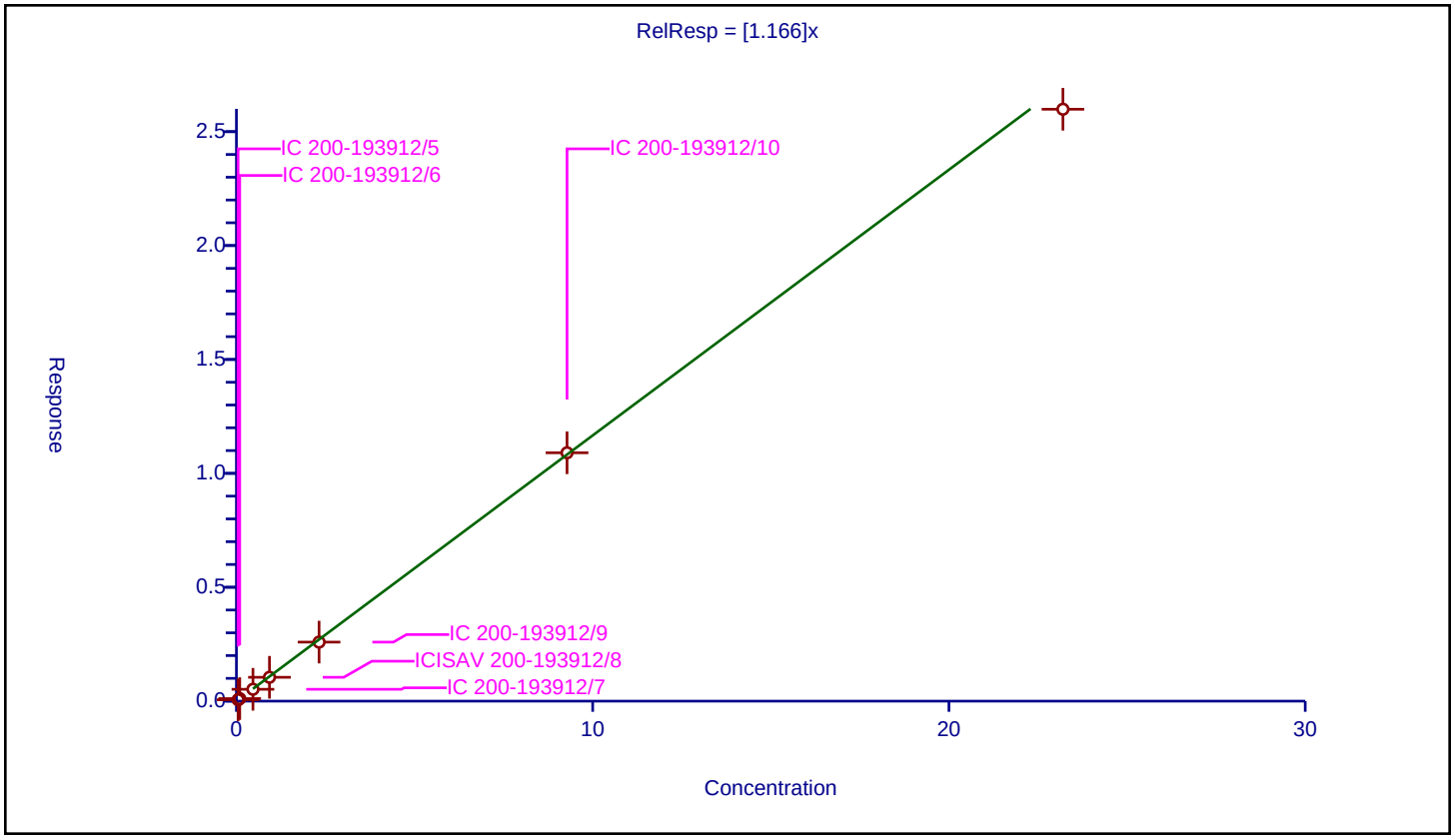
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	8240000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0464	0.060053	1.195	943517.0	1.294243	Y
2	IC 200-193912/6	0.0928	0.112059	1.195	863764.0	1.207533	Y
3	IC 200-193912/7	0.464	0.520913	1.195	882764.0	1.122657	Y
4	ICISAV 200-193912/8	0.928	1.047054	1.195	904398.0	1.128291	Y
5	IC 200-193912/9	2.32	2.591991	1.195	919926.0	1.117237	Y
6	IC 200-193912/10	9.28	10.903287	1.195	765818.0	1.174923	Y
7	IC 200-193912/11	23.2	25.9853	1.195	865311.0	1.120056	Y



Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

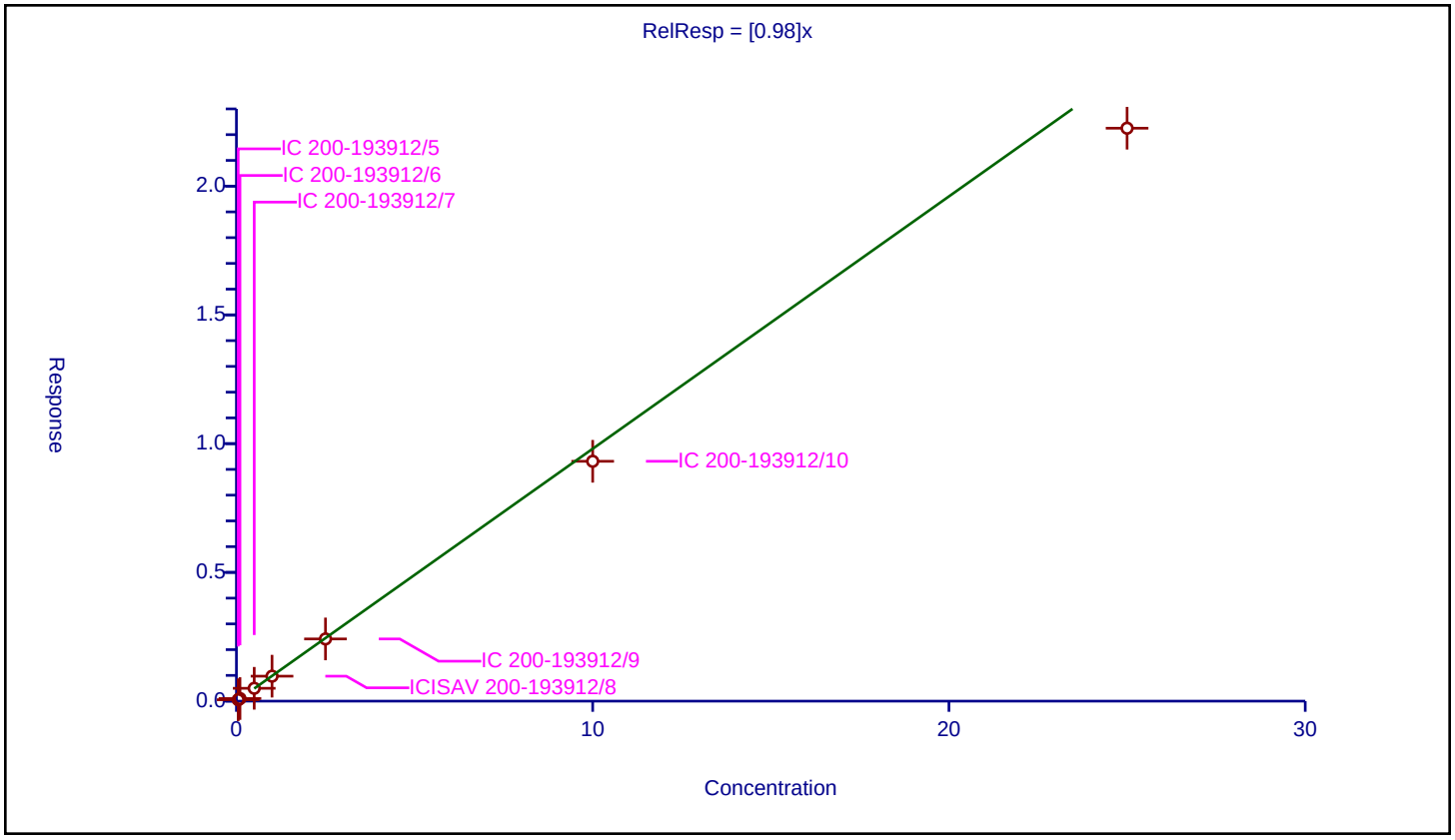
Curve Coefficients

Intercept:	0
Slope:	0.98

Error Coefficients

Standard Error:	15100000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.054544	1.25	2335475.0	1.090881	Y
2	IC 200-193912/6	0.1	0.101347	1.25	1965971.0	1.013469	Y
3	IC 200-193912/7	0.5	0.499549	1.25	2008931.0	0.999099	Y
4	ICISAV 200-193912/8	1.0	0.969174	1.25	2143126.0	0.969174	Y
5	IC 200-193912/9	2.5	2.415598	1.25	2116548.0	0.966239	Y
6	IC 200-193912/10	10.0	9.314659	1.25	1889768.0	0.931466	Y
7	IC 200-193912/11	25.0	22.250286	1.25	1902682.0	0.890011	Y



Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

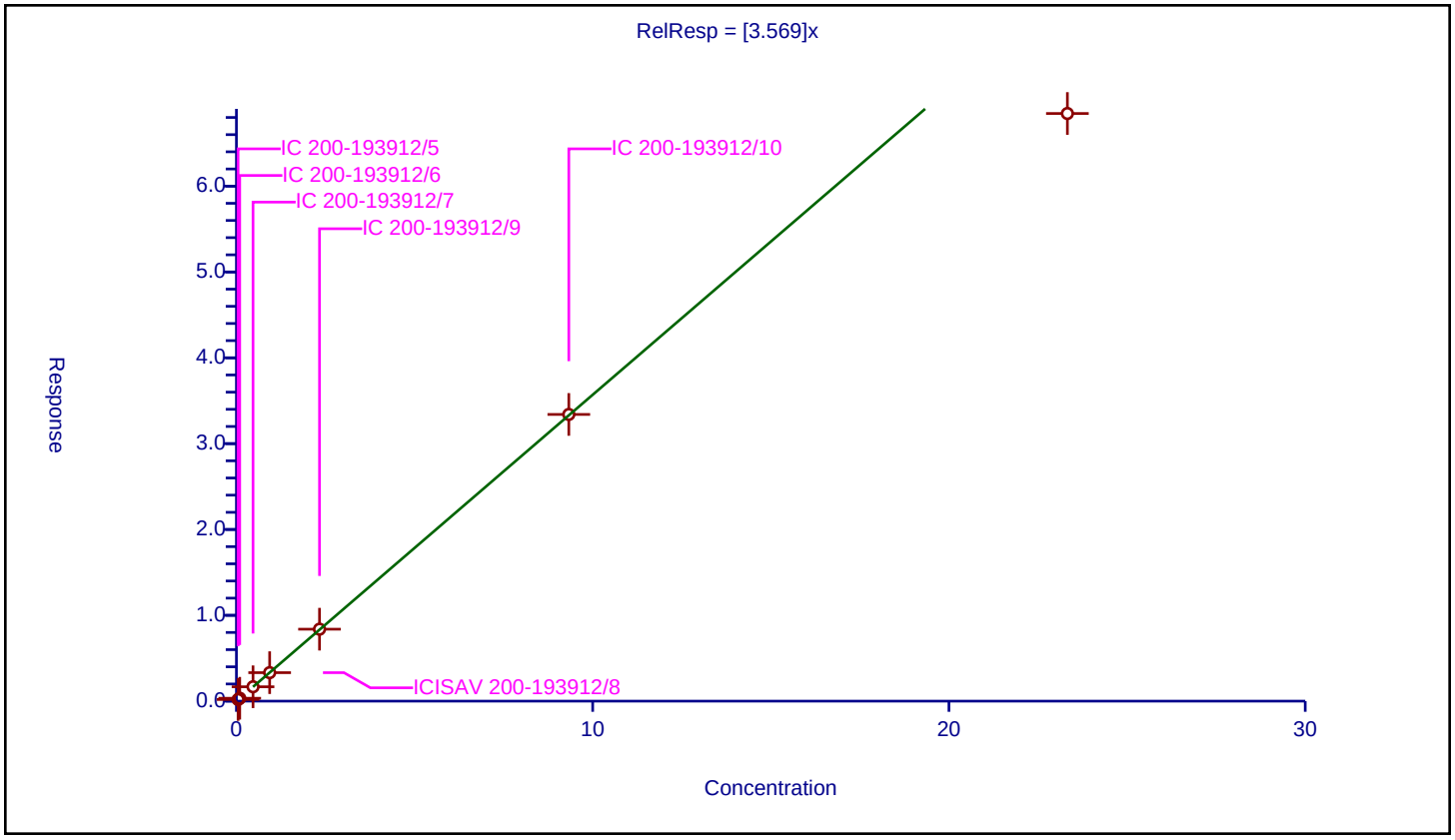
Curve Coefficients

Intercept:	0
Slope:	3.569

Error Coefficients

Standard Error:	22200000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04665	0.191359	1.195	943517.0	4.102008	Y
2	IC 200-193912/6	0.0933	0.338082	1.195	863764.0	3.623605	Y
3	IC 200-193912/7	0.4665	1.67515	1.195	882764.0	3.59089	Y
4	ICISAV 200-193912/8	0.933	3.319787	1.195	904398.0	3.558186	Y
5	IC 200-193912/9	2.3325	8.383828	1.195	919926.0	3.594353	Y
6	IC 200-193912/10	9.33	33.401161	1.195	765818.0	3.579974	Y
7	IC 200-193912/11	23.325	68.461822	1.195	865311.0	2.935126	Y



Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

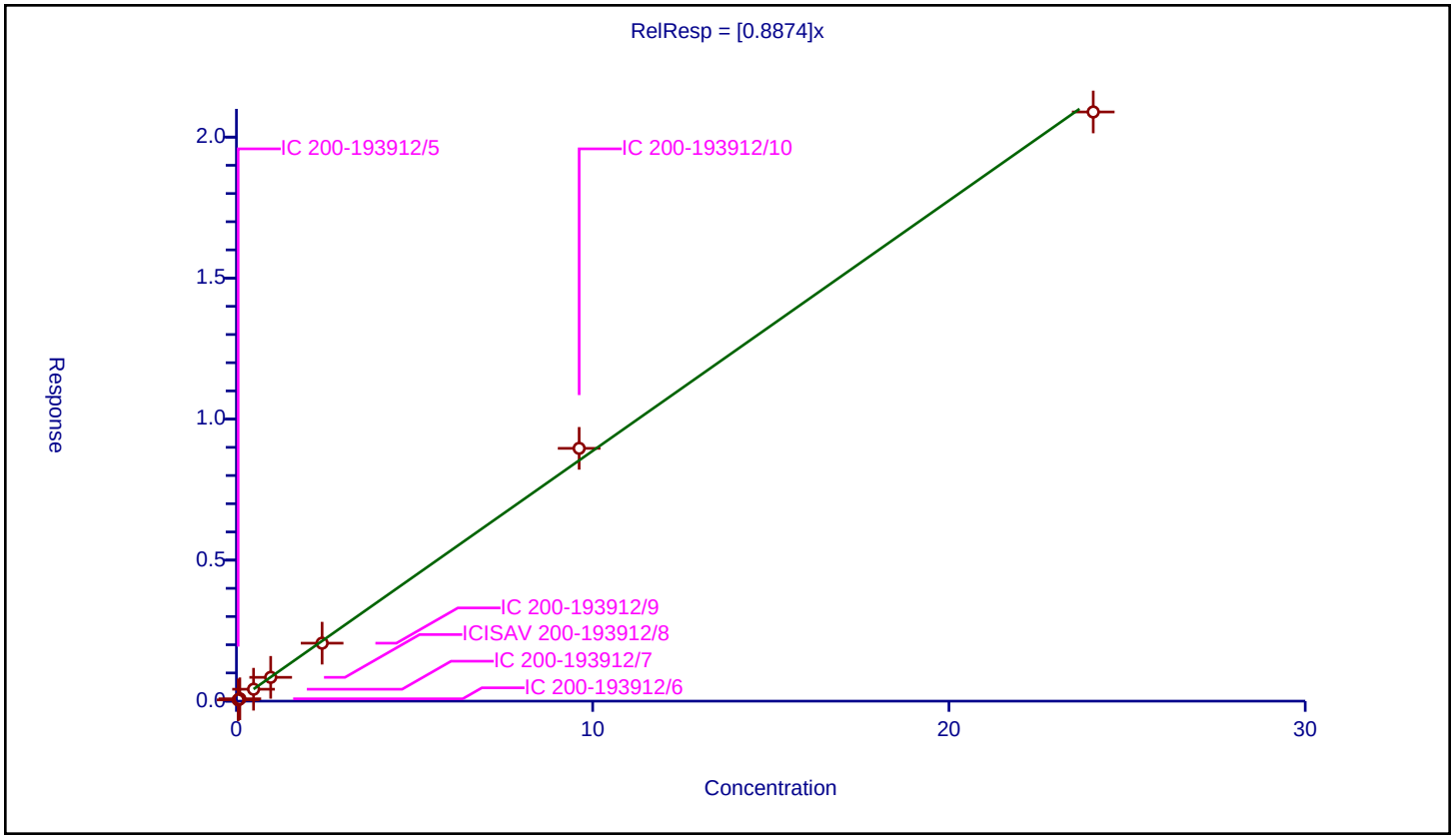
Curve Coefficients

Intercept:	0
Slope:	0.8874

Error Coefficients

Standard Error:	6640000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0481	0.044866	1.195	943517.0	0.932762	Y
2	IC 200-193912/6	0.0962	0.083528	1.195	863764.0	0.86827	Y
3	IC 200-193912/7	0.481	0.422495	1.195	882764.0	0.878367	Y
4	ICISAV 200-193912/8	0.962	0.843613	1.195	904398.0	0.876937	Y
5	IC 200-193912/9	2.405	2.055747	1.195	919926.0	0.854781	Y
6	IC 200-193912/10	9.62	8.96416	1.195	765818.0	0.931825	Y
7	IC 200-193912/11	24.05	20.891757	1.195	865311.0	0.86868	Y



Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

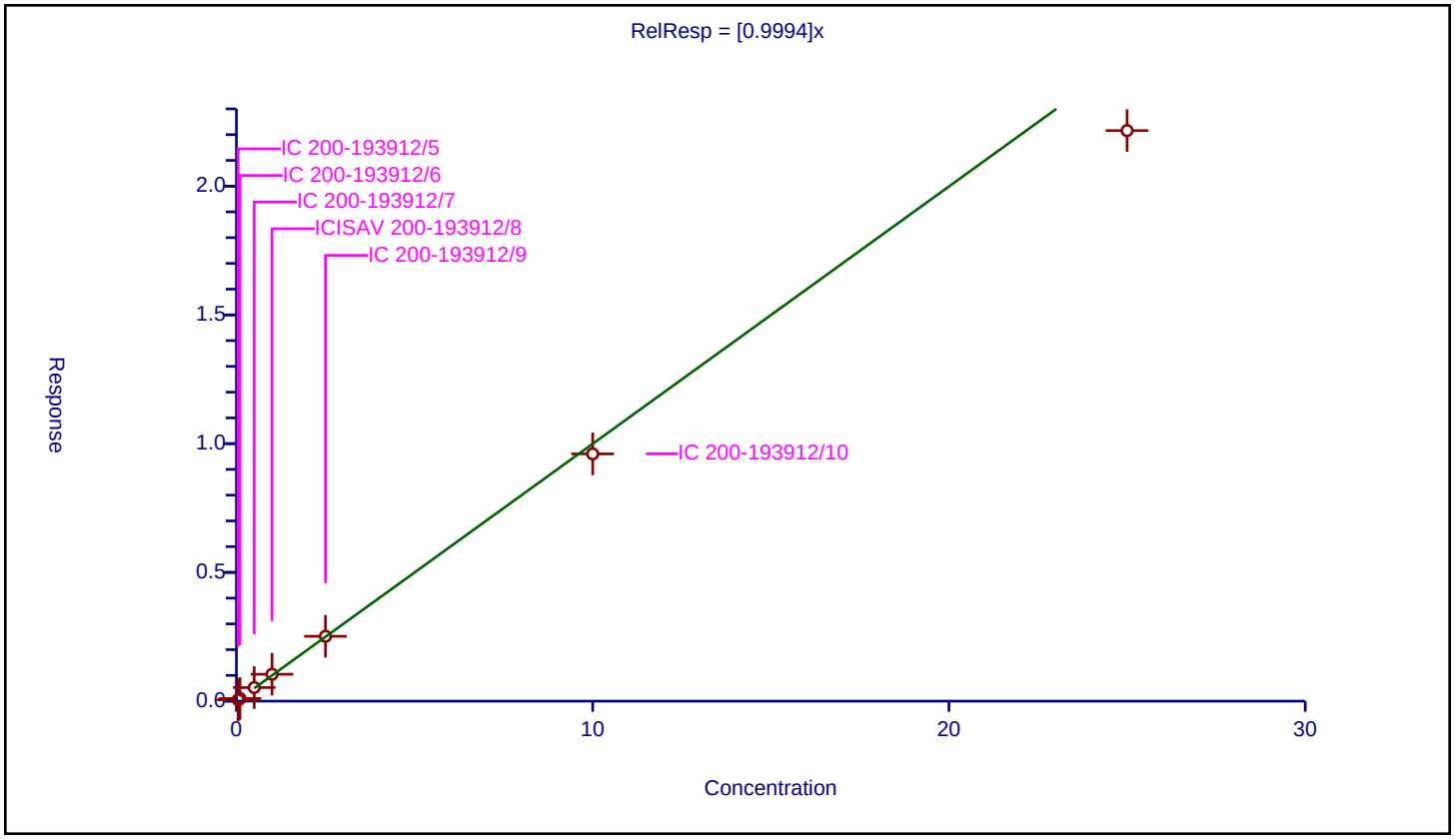
Curve Coefficients

Intercept:	0
Slope:	0.9994

Error Coefficients

Standard Error:	15800000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.051407	1.25	2492424.0	1.028136	Y
2	IC 200-193912/6	0.1	0.101543	1.25	2097344.0	1.015433	Y
3	IC 200-193912/7	0.5	0.527053	1.25	2062234.0	1.054107	Y
4	ICISAV 200-193912/8	1.0	1.043889	1.25	2125756.0	1.043889	Y
5	IC 200-193912/9	2.5	2.518567	1.25	2307904.0	1.007427	Y
6	IC 200-193912/10	10.0	9.601822	1.25	1979736.0	0.960182	Y
7	IC 200-193912/11	25.0	22.157516	1.25	1981566.0	0.886301	Y



Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

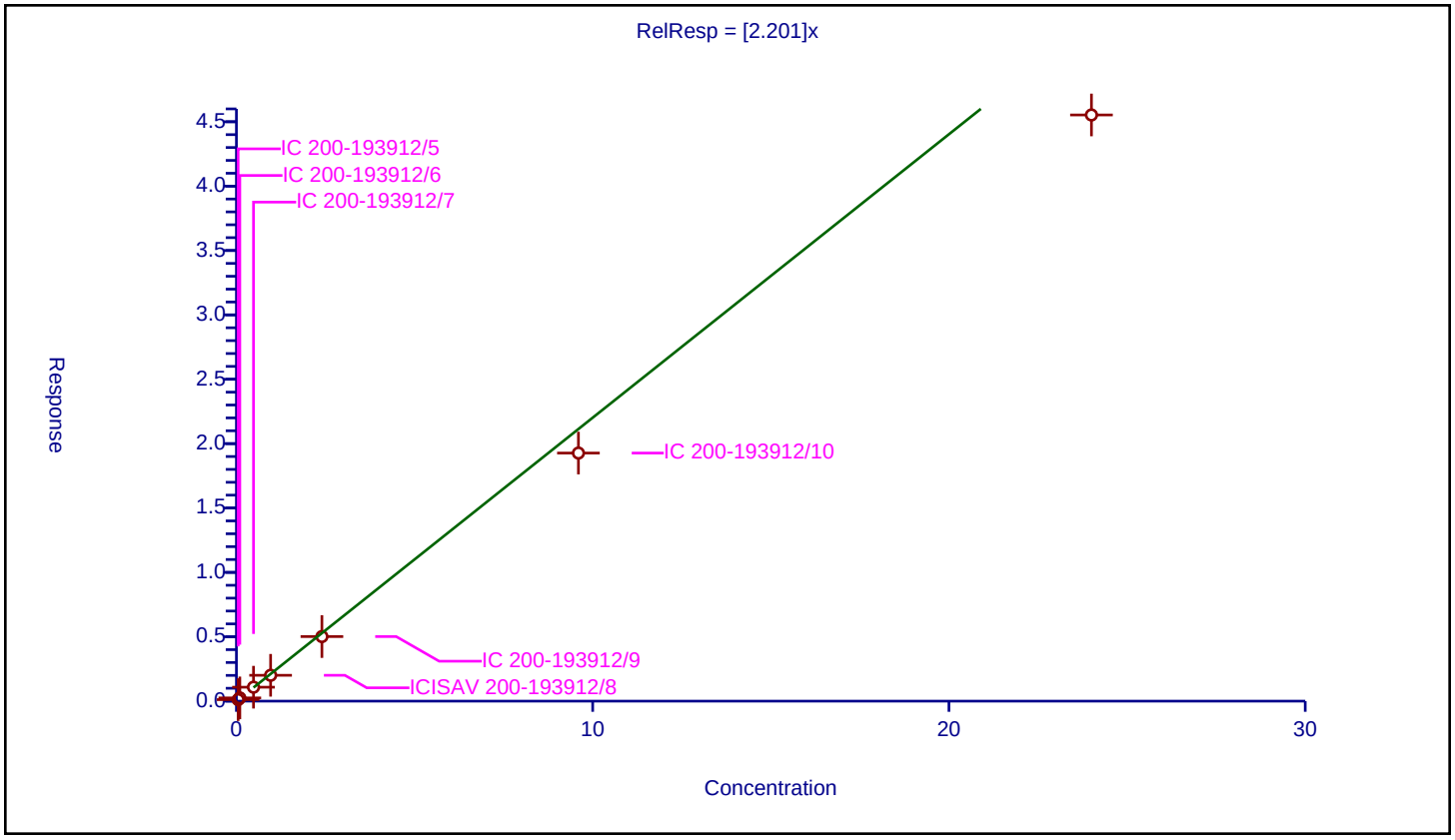
Curve Coefficients

Intercept:	0
Slope:	2.201

Error Coefficients

Standard Error:	5360000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.048	0.117827	1.1975	366485.0	2.45473	Y
2	IC 200-193912/6	0.096	0.250914	1.1975	307295.0	2.613688	Y
3	IC 200-193912/7	0.48	1.083603	1.1975	298552.0	2.257506	Y
4	ICISAV 200-193912/8	0.96	2.007175	1.1975	331913.0	2.090808	Y
5	IC 200-193912/9	2.4	5.014617	1.1975	331708.0	2.089424	Y
6	IC 200-193912/10	9.6	19.268997	1.1975	309678.0	2.007187	Y
7	IC 200-193912/11	24.0	45.528205	1.1975	316911.0	1.897009	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

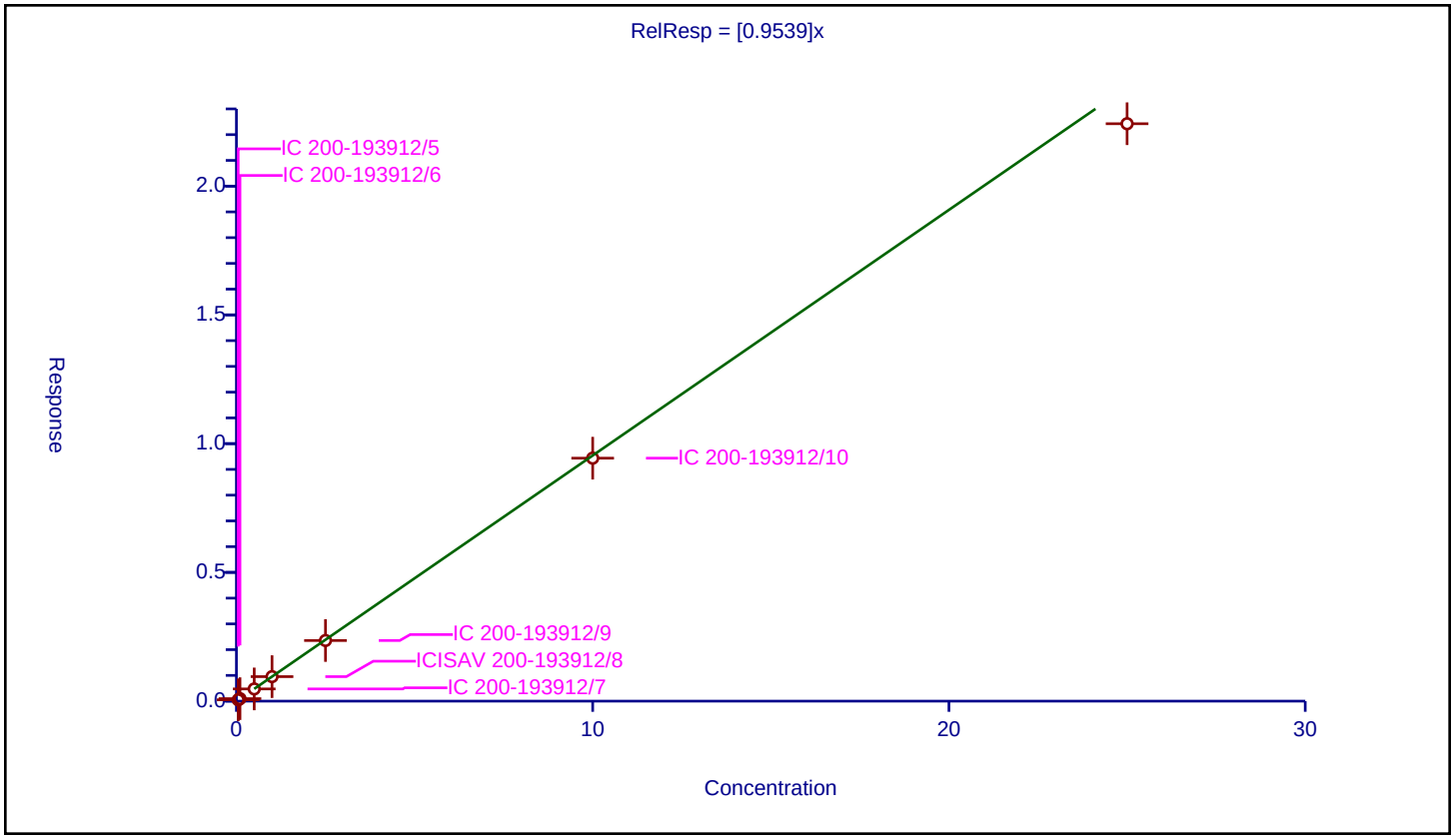
Curve Coefficients

Intercept:	0
Slope:	0.9539

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.05114	1.25	1884229.0	1.022792	Y
2	IC 200-193912/6	0.1	0.097032	1.25	1858847.0	0.970319	Y
3	IC 200-193912/7	0.5	0.474712	1.25	1790735.0	0.949424	Y
4	ICISAV 200-193912/8	1.0	0.952135	1.25	1887535.0	0.952135	Y
5	IC 200-193912/9	2.5	2.354683	1.25	1904586.0	0.941873	Y
6	IC 200-193912/10	10.0	9.435572	1.25	1724931.0	0.943557	Y
7	IC 200-193912/11	25.0	22.424085	1.25	1759972.0	0.896963	Y



Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

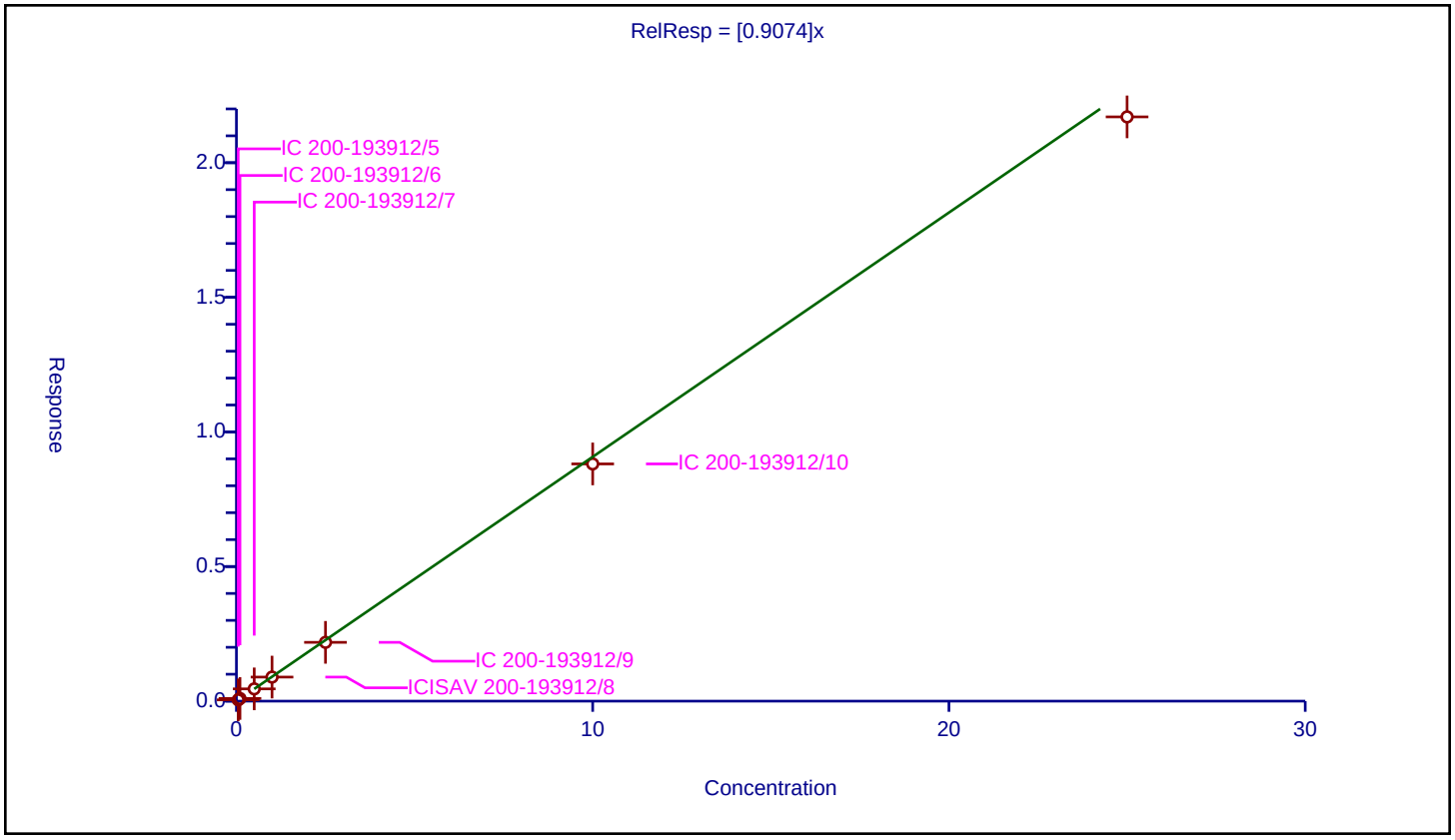
Curve Coefficients

Intercept:	0
Slope:	0.9074

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.047213	1.25	589245.0	0.944259	Y
2	IC 200-193912/6	0.1	0.098038	1.25	509447.0	0.980377	Y
3	IC 200-193912/7	0.5	0.45553	1.25	486461.0	0.91106	Y
4	ICISAV 200-193912/8	1.0	0.893408	1.25	518688.0	0.893408	Y
5	IC 200-193912/9	2.5	2.183599	1.25	518571.0	0.87344	Y
6	IC 200-193912/10	10.0	8.811989	1.25	465286.0	0.881199	Y
7	IC 200-193912/11	25.0	21.70302	1.25	505130.0	0.868121	Y



10/26/2023
2:28 PM

Calibration / Perfluorodecanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

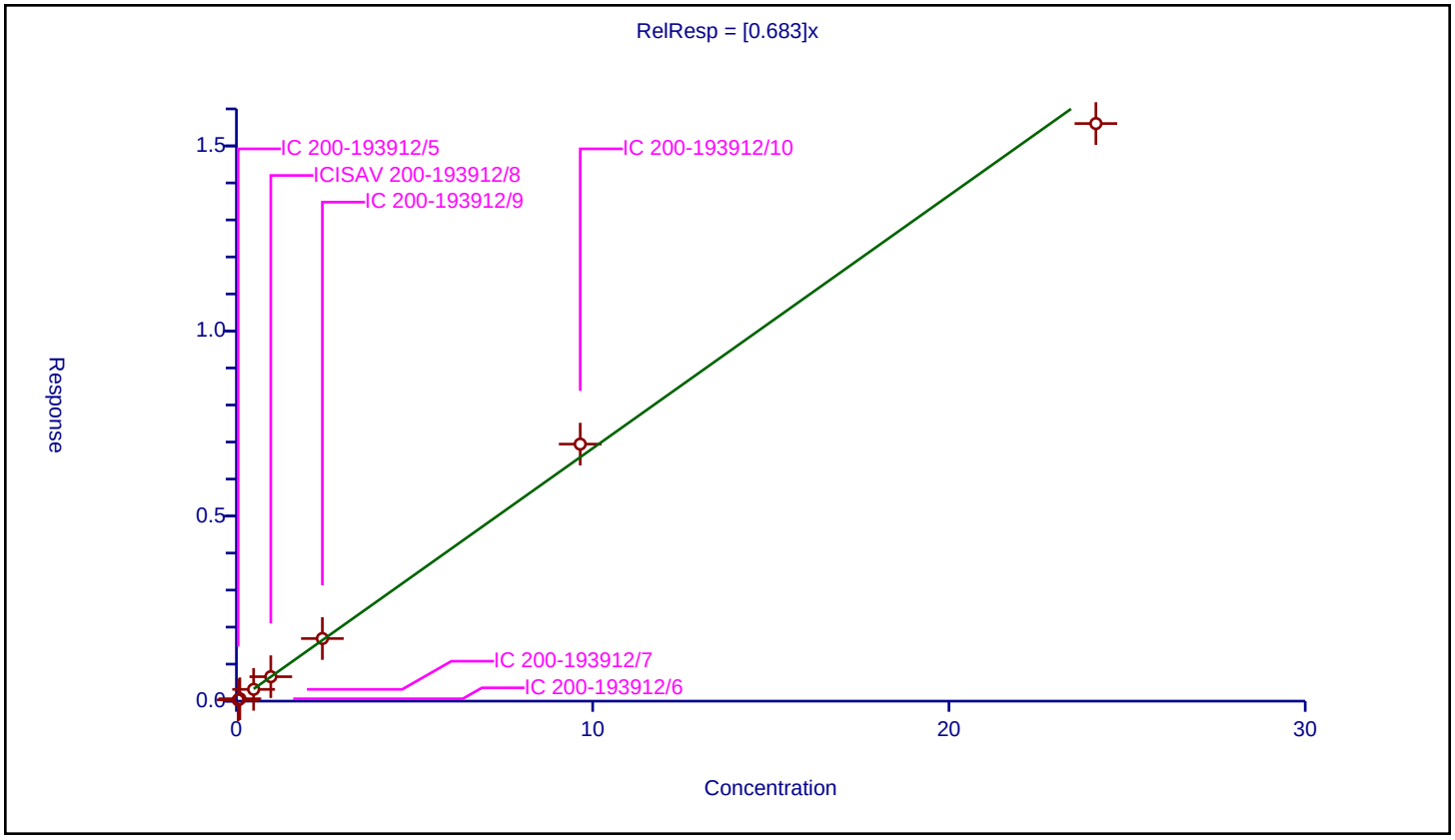
Curve Coefficients

Intercept:	0
Slope:	0.683

Error Coefficients

Standard Error:	4990000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04825	0.033974	1.195	943517.0	0.704116	Y
2	IC 200-193912/6	0.0965	0.064249	1.195	863764.0	0.665791	Y
3	IC 200-193912/7	0.4825	0.318115	1.195	882764.0	0.659305	Y
4	ICISAV 200-193912/8	0.965	0.659955	1.195	904398.0	0.683891	Y
5	IC 200-193912/9	2.4125	1.691543	1.195	919926.0	0.701158	Y
6	IC 200-193912/10	9.65	6.944096	1.195	765818.0	0.719595	Y
7	IC 200-193912/11	24.125	15.604572	1.195	865311.0	0.646822	Y



Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

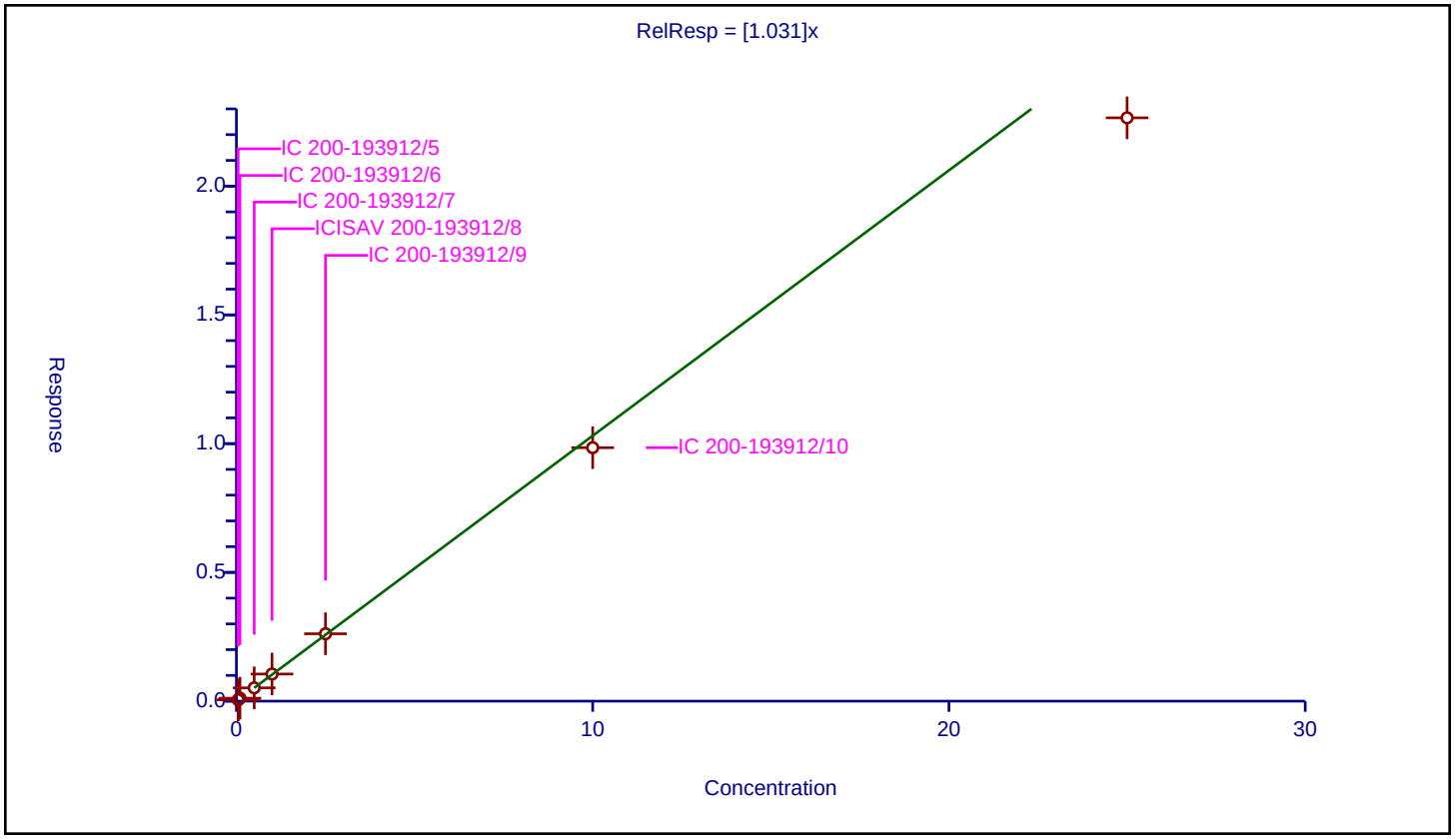
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	14600000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.052687	1.25	2441700.0	1.053743	Y
2	IC 200-193912/6	0.1	0.113929	1.25	1976379.0	1.139293	Y
3	IC 200-193912/7	0.5	0.515751	1.25	1983358.0	1.031502	Y
4	ICISAV 200-193912/8	1.0	1.053027	1.25	2053330.0	1.053027	Y
5	IC 200-193912/9	2.5	2.616249	1.25	2158999.0	1.0465	Y
6	IC 200-193912/10	10.0	9.84312	1.25	1818926.0	0.984312	Y
7	IC 200-193912/11	25.0	22.652933	1.25	1790927.0	0.906117	Y



10/26/2023
2:28 PM

Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

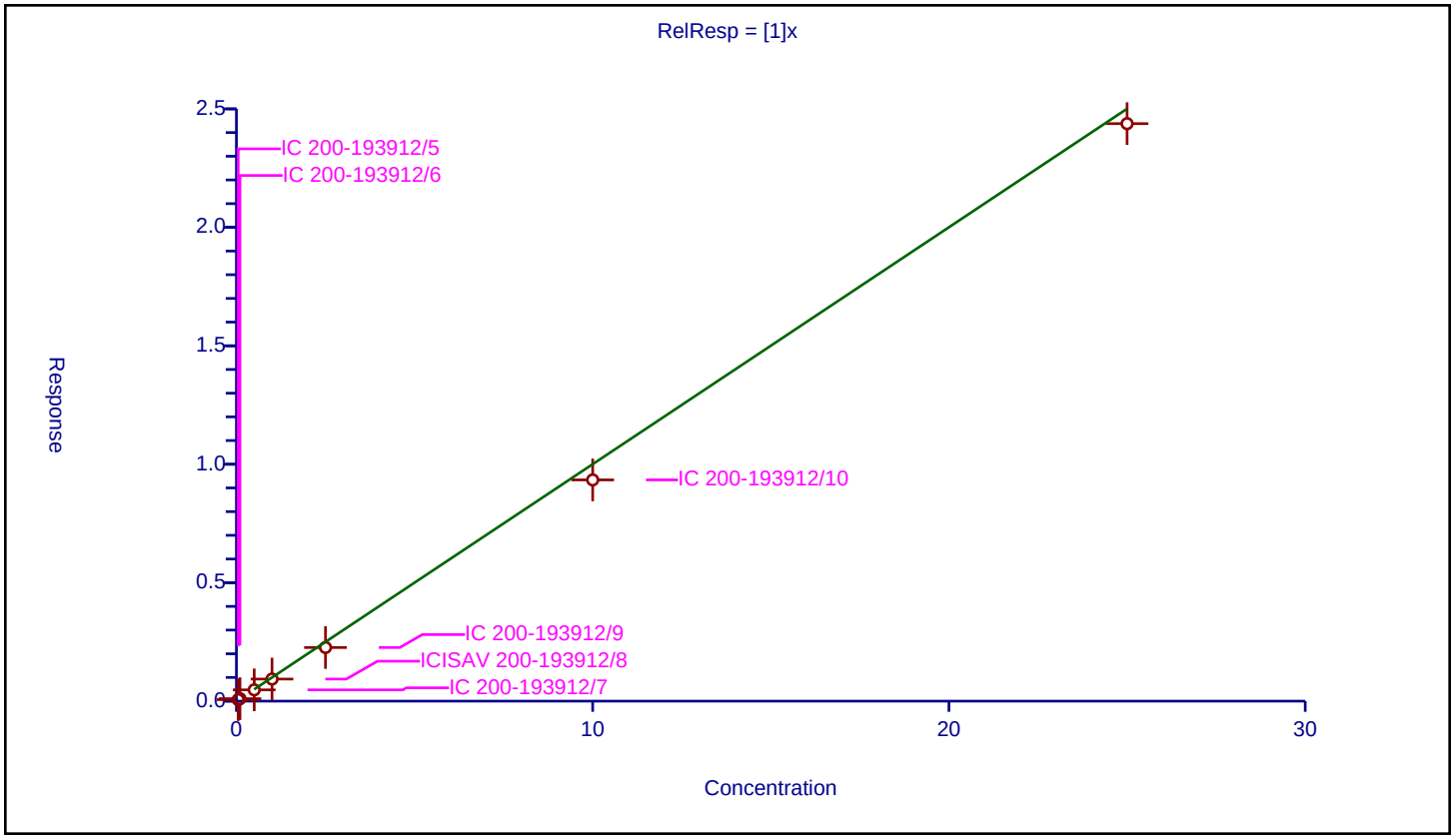
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.062984	1.25	566846.0	1.25969	Y
2	IC 200-193912/6	0.1	0.104122	1.25	488020.0	1.041223	Y
3	IC 200-193912/7	0.5	0.476346	1.25	491633.0	0.952692	Y
4	ICISAV 200-193912/8	1.0	0.933122	1.25	487913.0	0.933122	Y
5	IC 200-193912/9	2.5	2.264152	1.25	544137.0	0.905661	Y
6	IC 200-193912/10	10.0	9.339057	1.25	456350.0	0.933906	Y
7	IC 200-193912/11	25.0	24.377511	1.25	430319.0	0.9751	Y



Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

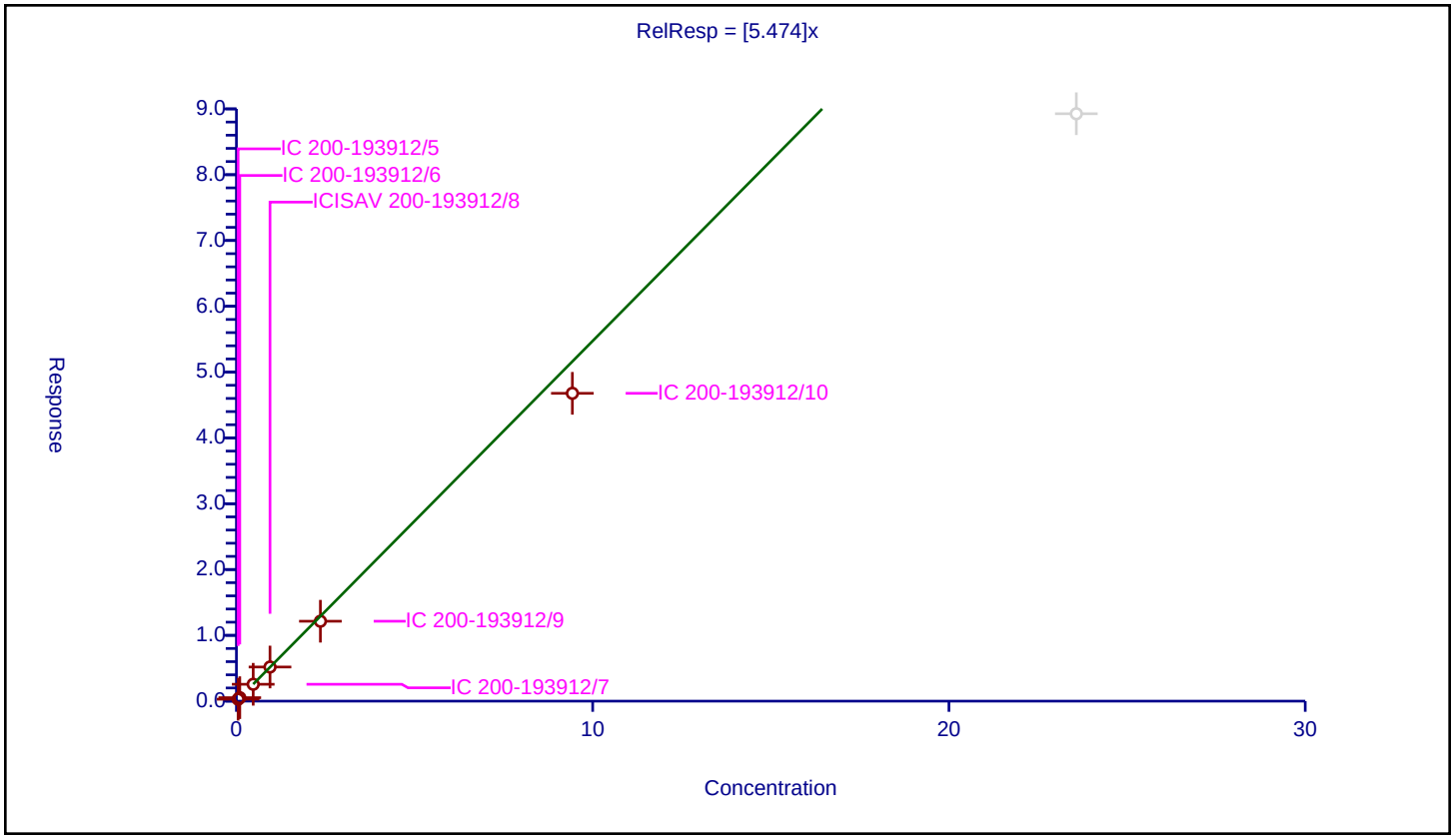
Curve Coefficients

Intercept:	0
Slope:	5.474

Error Coefficients

Standard Error:	14200000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04715	0.292105	1.195	943517.0	6.195237	Y
2	IC 200-193912/6	0.0943	0.527614	1.195	863764.0	5.595053	Y
3	IC 200-193912/7	0.4715	2.564572	1.195	882764.0	5.439177	Y
4	ICISAV 200-193912/8	0.943	5.187209	1.195	904398.0	5.500751	Y
5	IC 200-193912/9	2.3575	12.142724	1.195	919926.0	5.150678	Y
6	IC 200-193912/10	9.43	46.776459	1.195	765818.0	4.960388	Y
7	IC 200-193912/11	23.575	89.262798	1.195	865311.0	3.786333	N



Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

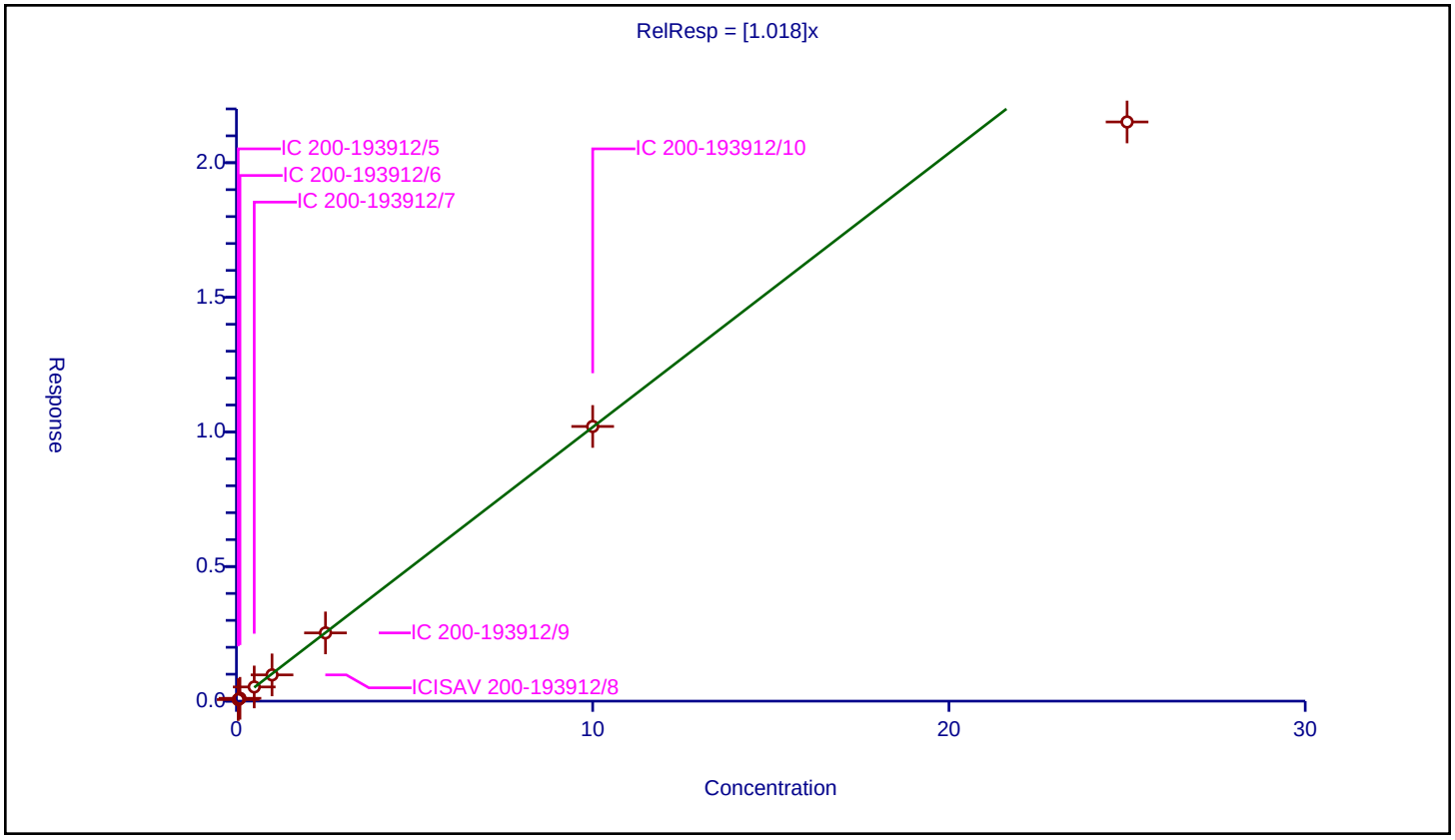
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	15400000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.057397	1.25	2296115.0	1.14795	Y
2	IC 200-193912/6	0.1	0.10537	1.25	2131572.0	1.0537	Y
3	IC 200-193912/7	0.5	0.526674	1.25	2022512.0	1.053347	Y
4	ICISAV 200-193912/8	1.0	0.974949	1.25	2123640.0	0.974949	Y
5	IC 200-193912/9	2.5	2.534654	1.25	2062631.0	1.013862	Y
6	IC 200-193912/10	10.0	10.203479	1.25	1800020.0	1.020348	Y
7	IC 200-193912/11	25.0	21.515509	1.25	1994604.0	0.86062	Y



10/26/2023
2:28 PM

Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

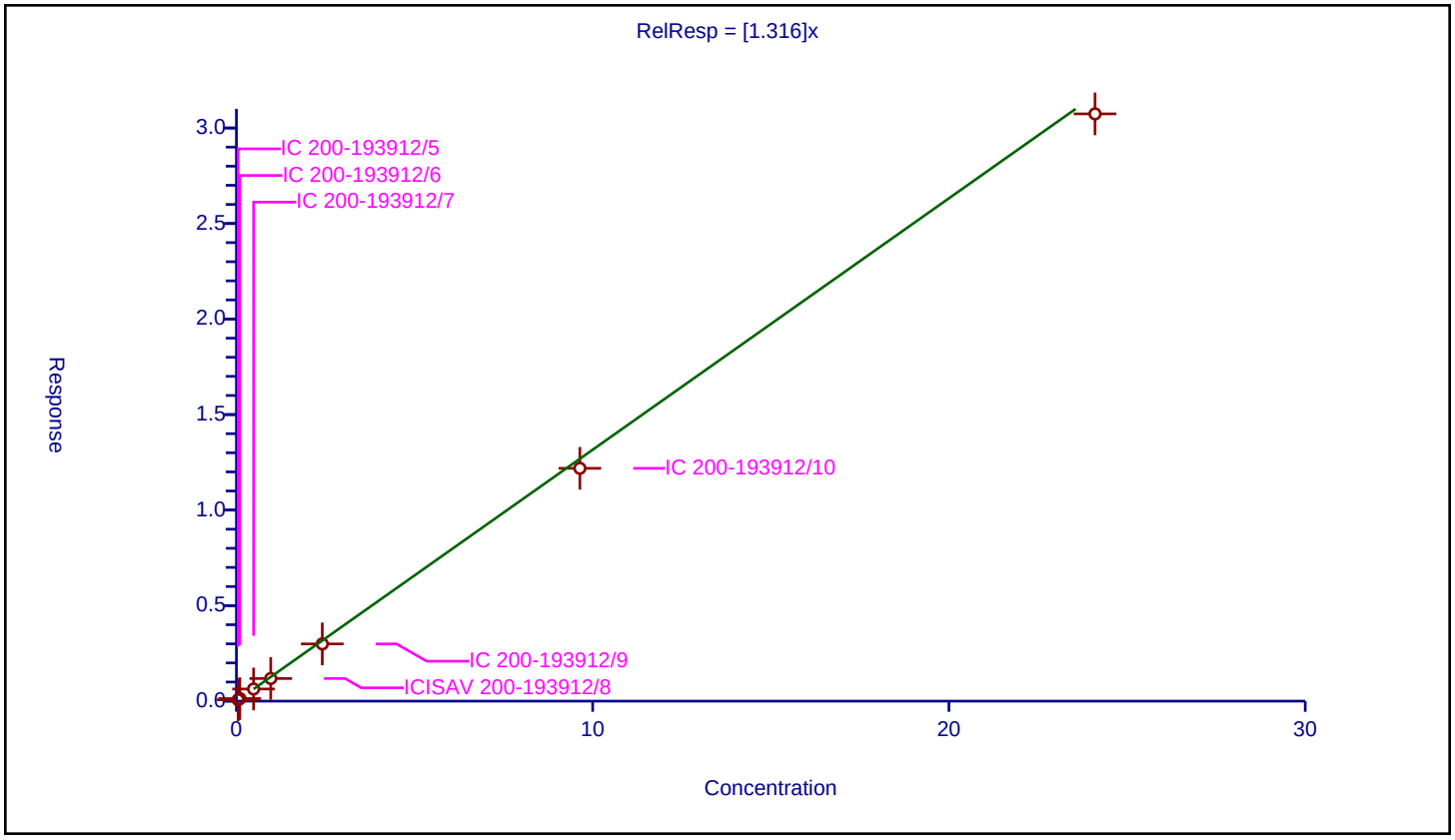
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	3580000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0482	0.071608	1.1975	366485.0	1.485641	Y
2	IC 200-193912/6	0.0964	0.134646	1.1975	307295.0	1.396742	Y
3	IC 200-193912/7	0.482	0.635587	1.1975	298552.0	1.318646	Y
4	ICISAV 200-193912/8	0.964	1.184378	1.1975	331913.0	1.228608	Y
5	IC 200-193912/9	2.41	2.994685	1.1975	331708.0	1.242608	Y
6	IC 200-193912/10	9.64	12.186219	1.1975	309678.0	1.264131	Y
7	IC 200-193912/11	24.1	30.739313	1.1975	316911.0	1.27549	Y



Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

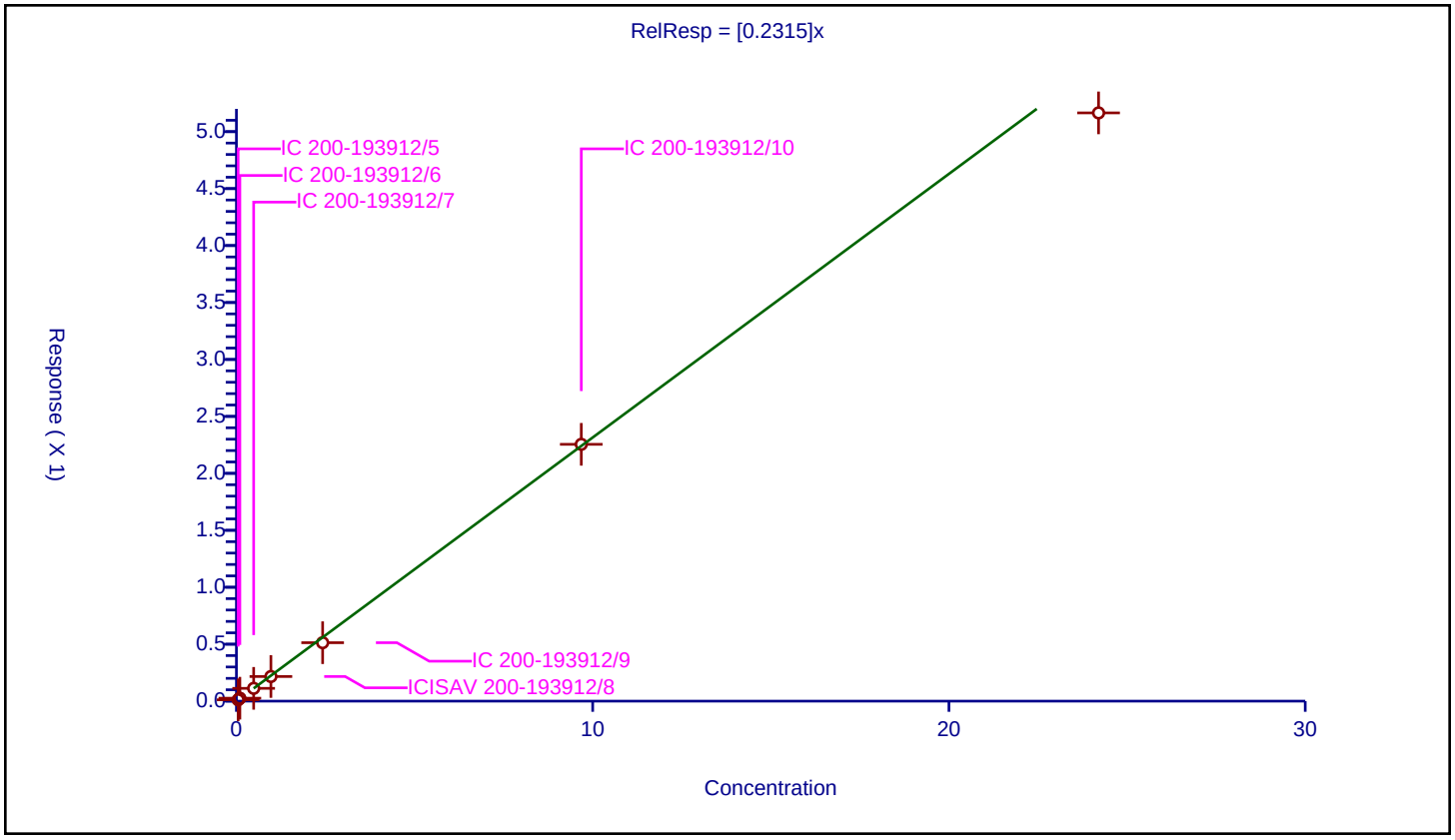
Curve Coefficients

Intercept:	0
Slope:	0.2315

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0484	0.011586	1.195	943517.0	0.239386	Y
2	IC 200-193912/6	0.0968	0.025868	1.195	863764.0	0.267235	Y
3	IC 200-193912/7	0.484	0.112249	1.195	882764.0	0.231919	Y
4	ICISAV 200-193912/8	0.968	0.216192	1.195	904398.0	0.223339	Y
5	IC 200-193912/9	2.42	0.513259	1.195	919926.0	0.21209	Y
6	IC 200-193912/10	9.68	2.254814	1.195	765818.0	0.232935	Y
7	IC 200-193912/11	24.2	5.164816	1.195	865311.0	0.213422	Y



Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

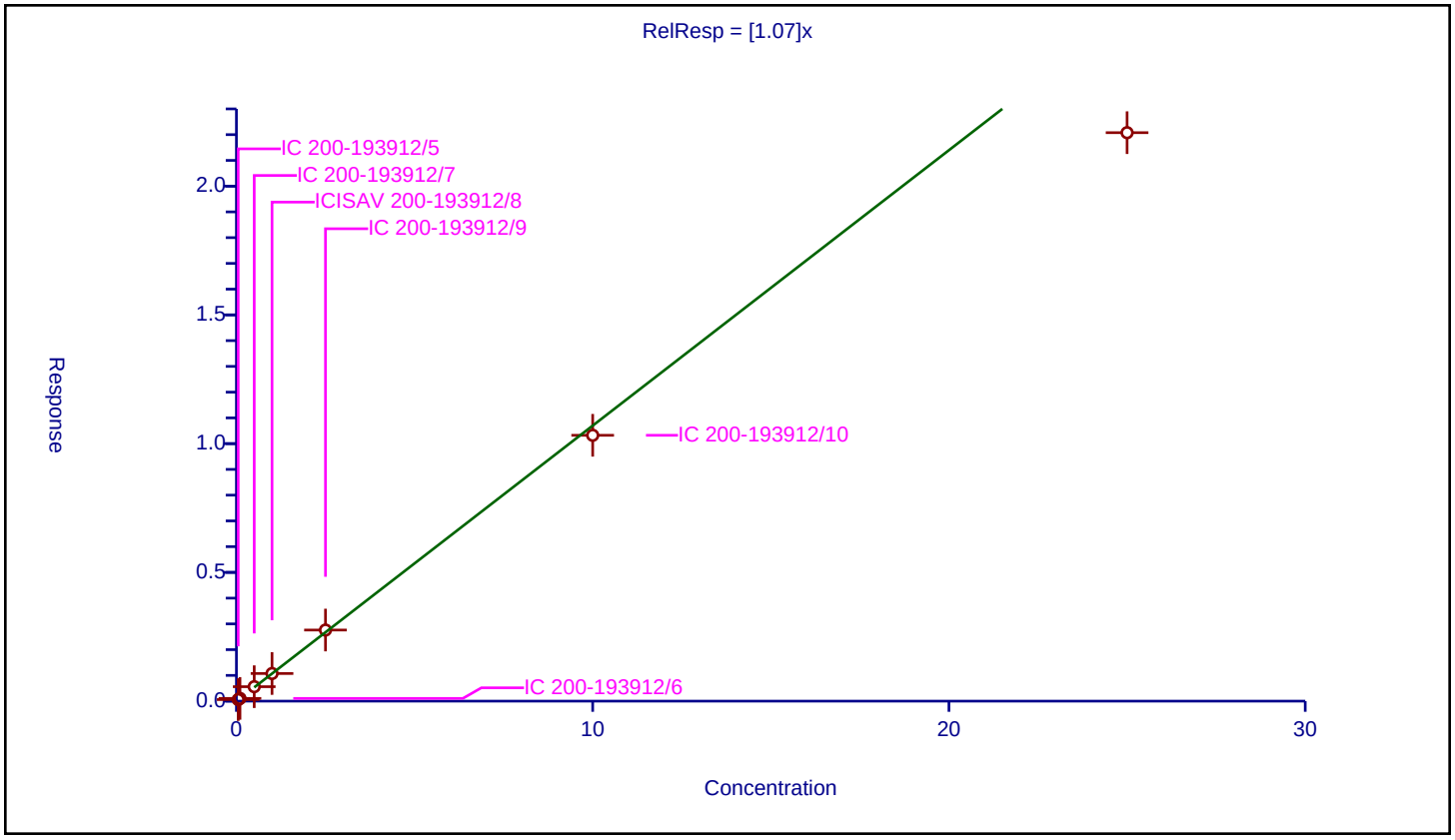
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	15700000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060572	1.25	2296115.0	1.211438	Y
2	IC 200-193912/6	0.1	0.106191	1.25	2131572.0	1.06191	Y
3	IC 200-193912/7	0.5	0.561156	1.25	2022512.0	1.122311	Y
4	ICISAV 200-193912/8	1.0	1.07307	1.25	2123640.0	1.07307	Y
5	IC 200-193912/9	2.5	2.761299	1.25	2062631.0	1.10452	Y
6	IC 200-193912/10	10.0	10.323864	1.25	1800020.0	1.032386	Y
7	IC 200-193912/11	25.0	22.076299	1.25	1994604.0	0.883052	Y



10/26/2023
2:28 PM

Calibration / Perfluorotetradecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

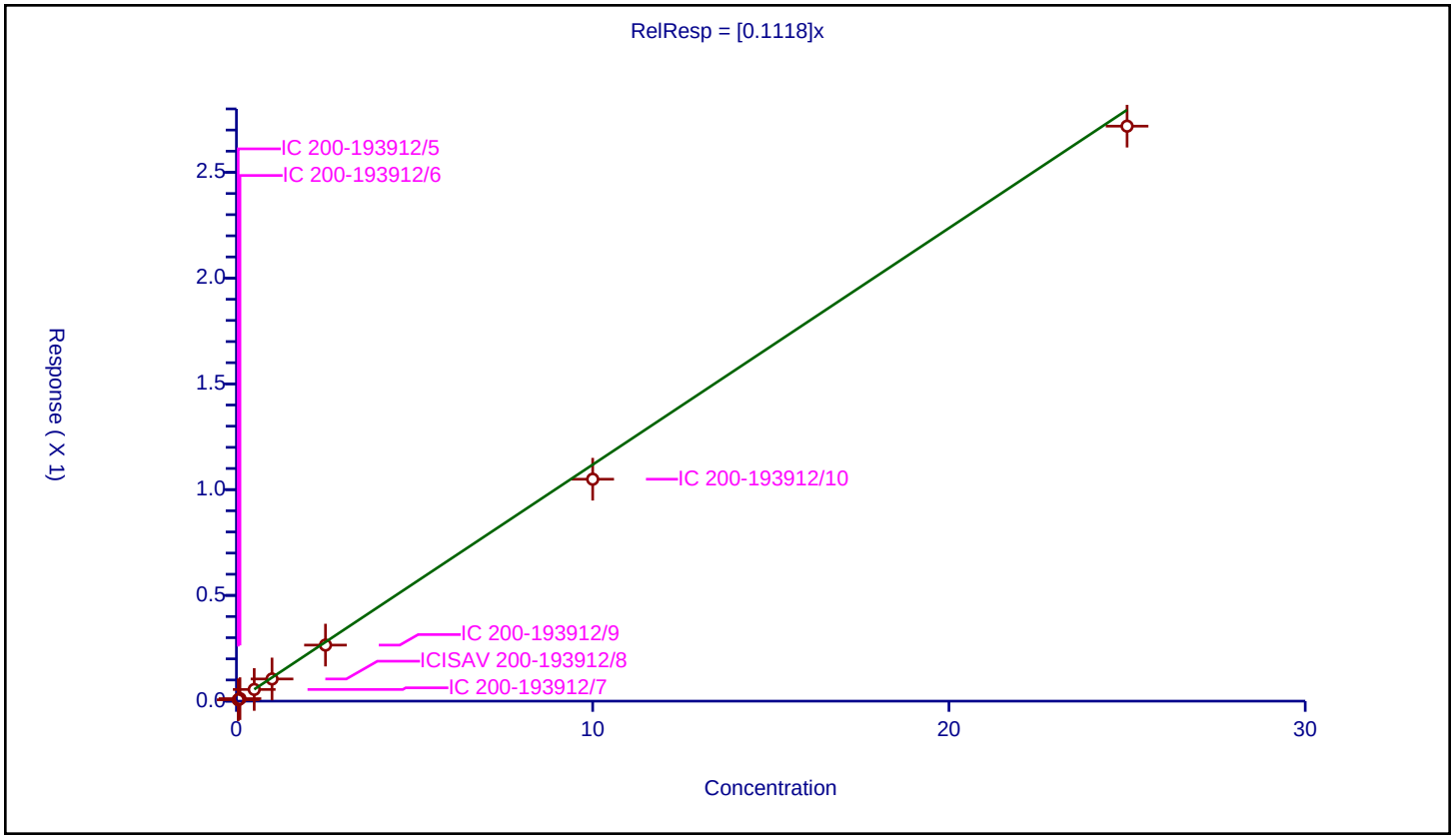
Curve Coefficients

Intercept:	0
Slope:	0.1118

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.006497	1.25	2302510.0	0.129934	Y
2	IC 200-193912/6	0.1	0.011797	1.25	2061289.0	0.117972	Y
3	IC 200-193912/7	0.5	0.055166	1.25	1996289.0	0.110332	Y
4	ICISAV 200-193912/8	1.0	0.10478	1.25	2077683.0	0.10478	Y
5	IC 200-193912/9	2.5	0.265032	1.25	2135161.0	0.106013	Y
6	IC 200-193912/10	10.0	1.049255	1.25	1876594.0	0.104926	Y
7	IC 200-193912/11	25.0	2.718444	1.25	1918275.0	0.108738	Y



Calibration / Perfluorohexadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

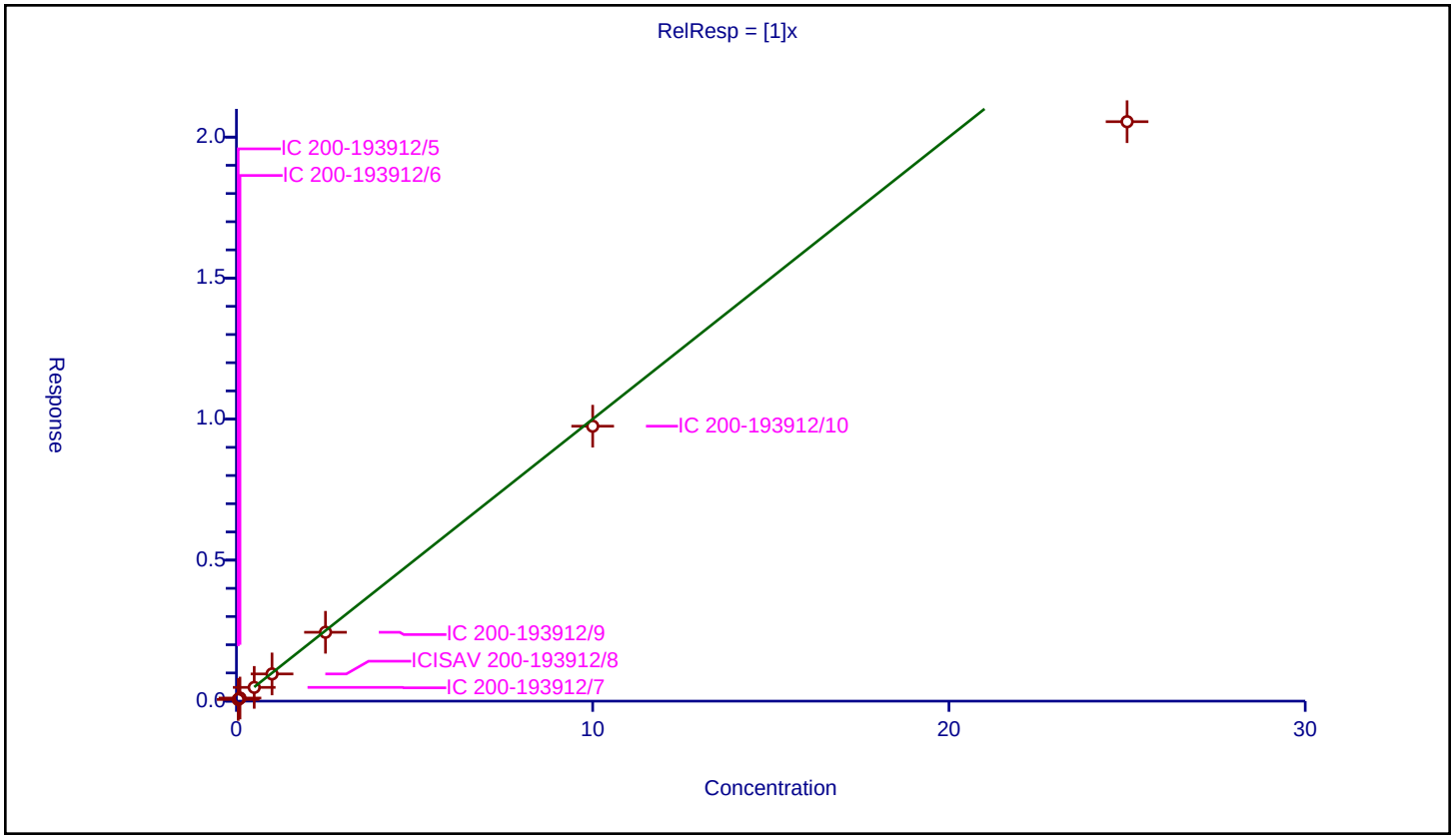
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	16800000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059148	1.25	2773326.0	1.182966	Y
2	IC 200-193912/6	0.1	0.110397	1.25	2341179.0	1.103968	Y
3	IC 200-193912/7	0.5	0.487301	1.25	2309121.0	0.974602	Y
4	ICISAV 200-193912/8	1.0	0.965145	1.25	2422773.0	0.965145	Y
5	IC 200-193912/9	2.5	2.442011	1.25	2376838.0	0.976804	Y
6	IC 200-193912/10	10.0	9.749491	1.25	2051028.0	0.974949	Y
7	IC 200-193912/11	25.0	20.546324	1.25	2292454.0	0.821853	Y



Calibration / Perfluorooctadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

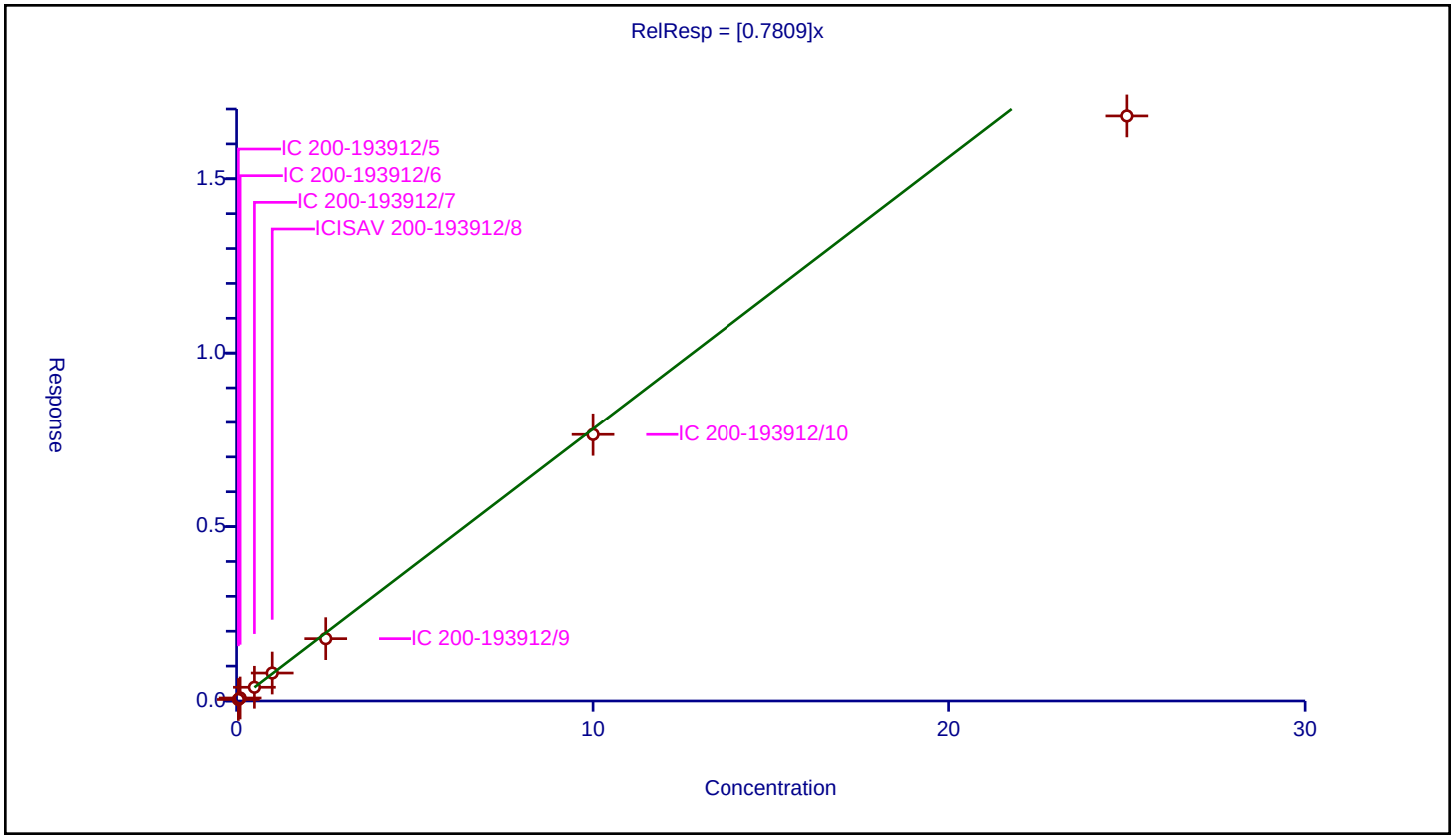
Curve Coefficients

Intercept:	0
Slope:	0.7809

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.043147	1.25	2773326.0	0.862944	Y
2	IC 200-193912/6	0.1	0.086341	1.25	2341179.0	0.863411	Y
3	IC 200-193912/7	0.5	0.393238	1.25	2309121.0	0.786476	Y
4	ICISAV 200-193912/8	1.0	0.801959	1.25	2422773.0	0.801959	Y
5	IC 200-193912/9	2.5	1.786872	1.25	2376838.0	0.714749	Y
6	IC 200-193912/10	10.0	7.647519	1.25	2051028.0	0.764752	Y
7	IC 200-193912/11	25.0	16.801641	1.25	2292454.0	0.672066	Y



10/26/2023
2:28 PM

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.091		1.17	1.00	16.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.233		1.15	1.01	14.2	30.0
Perfluorobutanesulfonic acid	AveID	1.117	1.273		1.14	1.00	14.0	30.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.749		1.10	1.00	10.4	30.0
Perfluorohexanoic acid	AveID	1.100	1.265		1.16	1.01	14.9	30.0
Perfluoropentanesulfonic acid	AveID	1.306	1.519		1.16	1.00	16.3	30.0
HFPODA	AveID	1.001	1.187		1.20	1.01	18.5	30.0
Perfluoroheptanoic acid	AveID	1.121	1.275		1.14	1.00	13.8	30.0
Perfluorohexanesulfonic acid	AveID	1.107	1.171		1.07	1.01	5.8	30.0
DONA	AveID	5.754	6.626		1.15	1.00	15.1	30.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.589		1.10	1.00	10.0	30.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.837		1.04	1.00	3.8	30.0
Perfluorooctanoic acid	AveID	1.065	1.147		1.08	1.00	7.6	30.0
Perfluorooctanesulfonic acid	AveID	1.166	1.129		0.977	1.01	-3.2	30.0
Perfluorononanoic acid	AveID	0.9800	1.173		1.20	1.00	19.7	30.0
9Cl-PF3ONS	AveID	3.569	3.916		1.10	1.00	9.7	30.0
Perfluorononanesulfonic acid	AveID	0.8874	0.9697		1.10	1.01	9.3	30.0
Perfluorodecanoic acid	AveID	0.999	1.132		1.13	1.00	13.3	30.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.648		1.22	1.01	20.3	30.0
Perfluorooctanesulfonamide	AveID	0.9539	1.010		1.06	1.00	5.9	30.0
NMeFOSAA	AveID	0.9074	1.065		1.17	1.00	17.3	30.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7209		1.07	1.01	5.6	30.0
Perfluoroundecanoic acid	AveID	1.031	1.105		1.07	1.00	7.2	30.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.079		1.08	1.00	7.9	30.0
11Cl-PF3OUdS	AveID	5.474	5.985		1.09	1.00	9.3	30.0
Perfluorododecanoic acid	AveID	1.018	1.033		1.02	1.00	1.5	30.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.421		1.04	0.964	7.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2219		0.928	0.968	-4.1	30.0
Perfluorotridecanoic acid	AveID	1.070	1.093		1.02	1.00	2.2	30.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1309		1.17	1.00	17.1	30.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9902		0.990	1.00	-1.0	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7992		1.02	1.00	2.3	30.0
13C4 PFBA	Ave	0.9917	0.9819		1.24	1.25	-1.0	50.0
13C3 PFBS	Ave	1.041	0.9897		1.11	1.16	-5.0	50.0
13C5 PFPeA	Ave	0.7696	0.7799		1.27	1.25	1.3	50.0
M2-4:2 FTS	Ave	0.1204	0.1244		1.21	1.17	3.3	50.0

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7614		1.22	1.25	-2.8	50.0
13C3 HFPO-DA	Ave	0.1516	0.1402		1.16	1.25	-7.5	50.0
13C4 PFHpA	Ave	0.8590	0.8570		1.25	1.25	-0.2	50.0
18O2 PFHxS	Ave	0.7464	0.7510		1.19	1.18	0.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1630		1.25	1.19	5.1	50.0
13C4 PFOA	Ave	0.9731	0.9893		1.27	1.25	1.7	50.0
13C4 PFOS	Ave	0.4742	0.4785		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.073		1.27	1.25	1.4	50.0
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	50.0
M2-8:2 FTS	Ave	0.1744	0.1644		1.13	1.20	-5.8	50.0
13C8 FOSA	Ave	0.9462	0.9298		1.23	1.25	-1.7	50.0
d3-NMeFOSAA	Ave	0.2650	0.2507		1.18	1.25	-5.4	50.0
13C2 PFUnA	Ave	1.047	1.065		1.27	1.25	1.7	50.0
d5-NEtFOSAA	Ave	0.2552	0.2498		1.22	1.25	-2.1	50.0
13C2 PFDoA	Ave	1.064	1.040		1.22	1.25	-2.3	50.0
13C2 PFTeDA	Ave	1.059	1.068		1.26	1.25	0.8	50.0
13C2 PFHxDA	Ave	1.221	1.213		1.24	1.25	-0.6	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Jul-2023 18:22:05 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0056441-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:46:57 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:36:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	2061390	1.24		99.0	1111	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	1799894	1.17			128	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1637273	1.27		101	855	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1630838	1.15			72.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.695	1932315	1.10		95.0	61660	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.006	2115731	1.14	Target=2.06		394	M
298.90 > 99.00	2.424	2.425	-0.001	1.006	951335		2.22(1.03-3.09)		205	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	243947	1.21		103	89.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	783361	1.10			1210	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1598439	1.22		97.2	1019	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	1633342	1.16	Target=14.12		201	M
313.00 > 119.00	2.755	2.731	0.024	1.000	119996		13.61(7.06-21.17)		87.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	1915826	1.16	Target=2.72		2515	
349.00 > 99.00	2.755	2.731	0.024	0.885	690197		2.78(1.36-4.09)		775	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.855	2.844	0.011	0.823	294290	1.16		92.5	1359	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	1.000	282227	1.20			1561	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1491459	1.19		101	3008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.114	3.092	0.022	1.000	1492005	1.07	Target=3.32		2002	
399.00 > 99.00	3.114	3.092	0.022	1.000	447913		3.33(1.66-4.98)		275	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.114	3.104	0.010	1.000	1835676	1.14	Target=4.17		375	
363.00 > 169.00	3.114	3.104	0.010	1.000	421780		4.35(2.09-6.26)		330	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1799170	1.25		99.8	4344	
77 DONA										
377.00 > 251.00	3.149	3.138	0.011	0.832	5325110	1.15	Target=3.33		4580	
377.00 > 85.00	3.149	3.138	0.011	0.832	1587786		3.35(1.66-4.99)		1564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.452	3.446	0.006	0.913	1277458	1.10	Target=4.83		2835	
449.00 > 99.00	3.452	3.446	0.006	0.913	271741		4.70(2.41-7.24)		608	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	325183	1.25		105	449	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	776988	1.04			1505	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.470	3.464	0.006	1.000	1905230	1.08	Target=2.88		155	
413.00 > 169.00	3.470	3.464	0.006	1.000	700454		2.72(1.44-4.32)		688	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	2077032	1.27		102	10779	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		2099437	1.25			5857	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	960411	1.21		101	3123	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	916205	0.9773	Target=4.24		1279	M
499.00 > 99.00	3.783	3.783	0.0	1.000	219275		4.18(2.12-6.37)		332	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2253485	1.27		101	8237	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	2114355	1.20	Target=8.34		396	
463.00 > 169.00	3.803	3.803	0.0	1.000	258068		8.19(4.17-12.51)		1687	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	3147105	1.10			4619	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	787129	1.10	Target=2.17		3635	
549.00 > 99.00	4.074	4.074	0.0	1.077	362945		2.17(1.08-3.25)		1106	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2306656	1.24		99.1	7364	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	2089059	1.13	Target=11.44		513	
513.00 > 169.00	4.108	4.108	0.0	1.000	187846		11.12(5.72-17.16)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.184	330559	1.13		94.2	534	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	738302	1.21			3324	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1951992	1.23		98.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1577862	1.06			1967	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	526368	1.18		94.6	1324	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.249	4.260	-0.011	1.000	448255	1.17			766	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	585144	1.07	Target=2.37		2036	
599.00 > 99.00	4.346	4.346	0.0	1.149	247580		2.36(1.19-3.56)		636	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2235945	1.27		102	10895	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.370	4.382	-0.012	1.000	1976512	1.07	Target=12.20		463	M
563.00 > 169.00	4.370	4.382	-0.012	1.000	173430		11.40(6.10-18.31)		356	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	524453	1.22		97.9	1054	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.000	452913	1.08			5512	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	4810172	1.09			5397	
D 36 13C2 PFDoA										
615.00 > 570.00	4.594	4.605	-0.011	1.324	2183255	1.22		97.7	5174	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.002	1804447	1.02	Target=8.47		152	
613.00 > 169.00	4.605	4.616	-0.011	1.002	231970		7.78(4.23-12.70)		1231	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.627	-0.011	1.124	378024	1.04			6028	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.261	172632	0.9280	Target=0.48		1502	
699.00 > 99.00	4.770	4.779	-0.009	1.261	341632		0.51(0.24-0.72)		2051	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.822	-0.023	1.044	1909411	1.02	Target=6.41		181	M
663.00 > 169.00	4.799	4.822	-0.023	1.044	273530		6.98(3.21-9.62)		474	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	2241989	1.26		101	6438	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.997	5.008	-0.011	1.000	234844	1.17	Target=0.87		1052	M
713.00 > 219.00	4.987	5.008	-0.021	0.998	248103		0.95(0.43-1.30)		673	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	2016874	0.99	Target=7.89		201	
813.00 > 169.00	5.317	5.328	-0.011	1.000	259711		7.77(3.94-11.83)		1503	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2546016	1.24		99.4	4909	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	1627913	1.02	Target=9.39		156	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	179766		9.06(4.69-14.08)		339	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

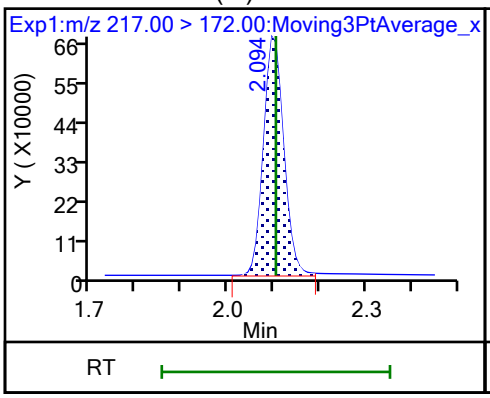
LCPFAS28NCICV_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:46:58 Chrom Revision: 2.3 19-Jul-2023 18:28:48

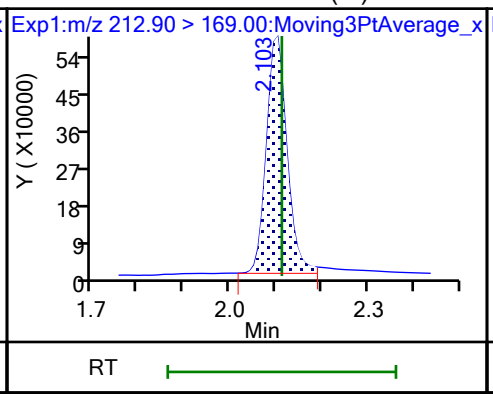
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Injection Date: 26-Jul-2023 18:22:05 Instrument ID: LC812
Lims ID: ICV
Client ID:
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

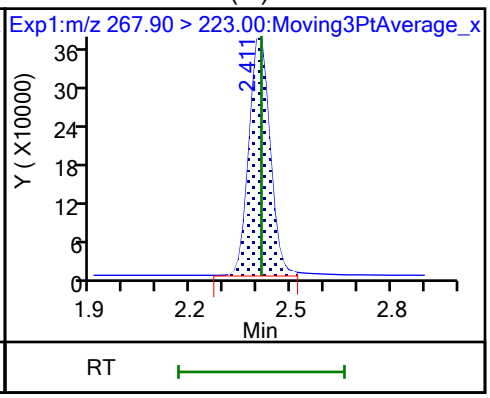
D 1 13C4 PFBA (M)



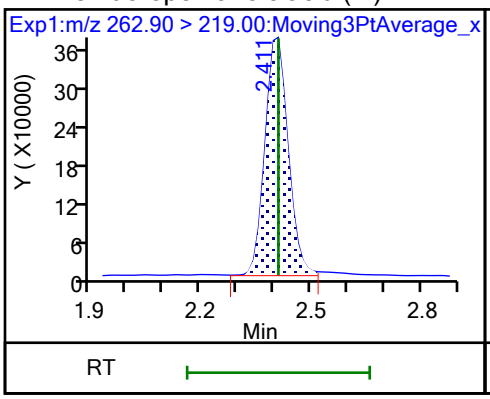
2 Perfluorobutanoic acid (M)



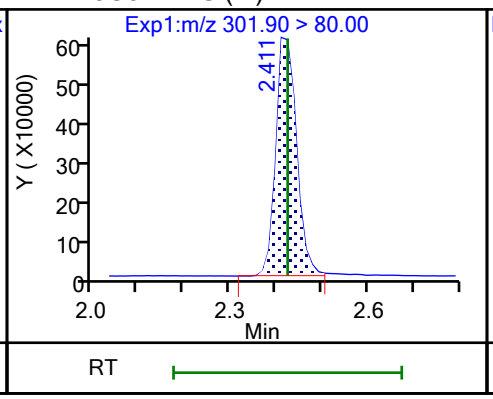
D 3 13C5 PFPeA (M)



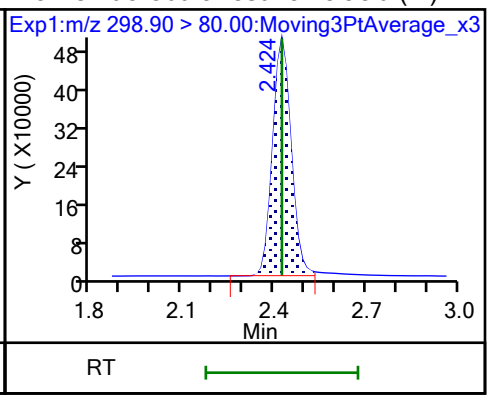
4 Perfluoropentanoic acid (M)



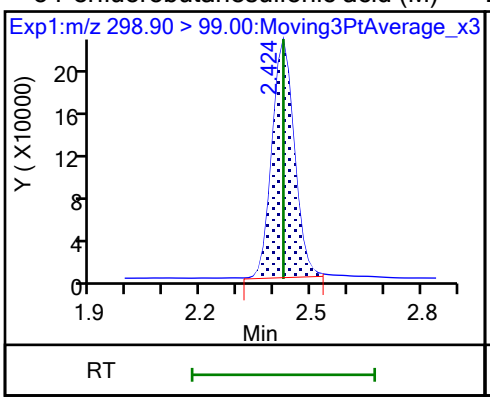
D 47 13C3 PFBS (M)



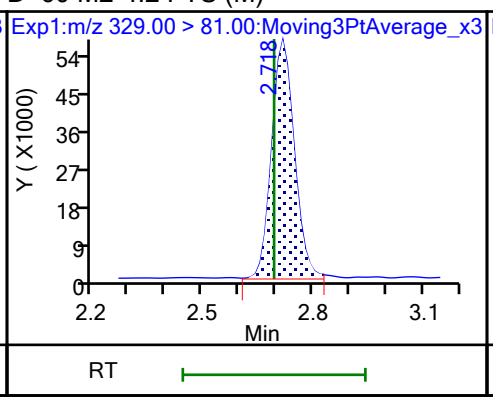
5 Perfluorobutanesulfonic acid (M)



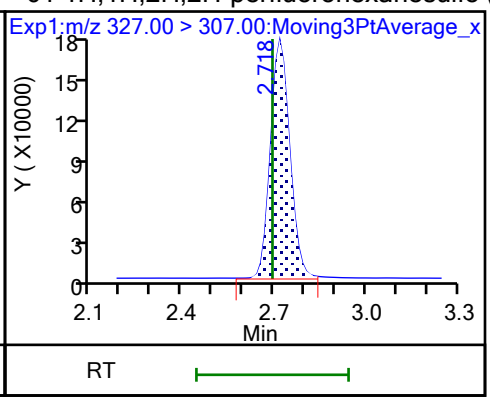
5 Perfluorobutanesulfonic acid (M)



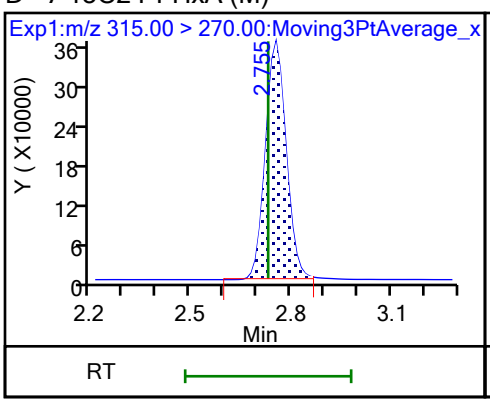
D 60 M2-4:2 FTS (M)



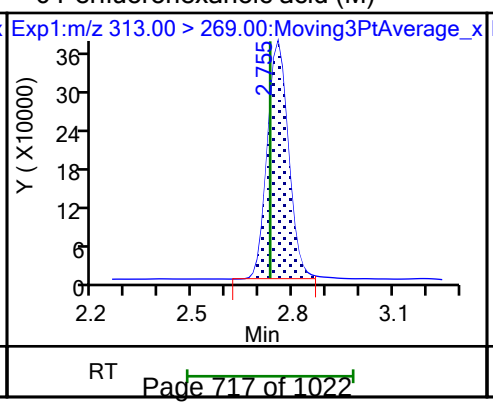
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



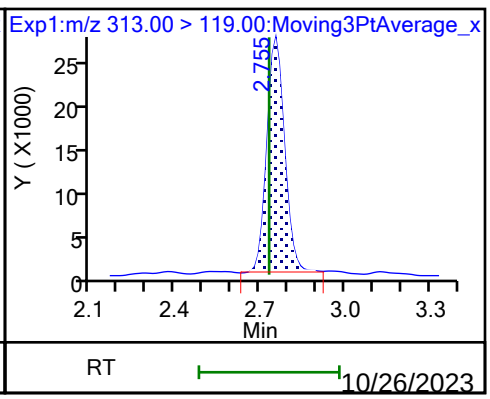
D 7 13C2 PFHxA (M)



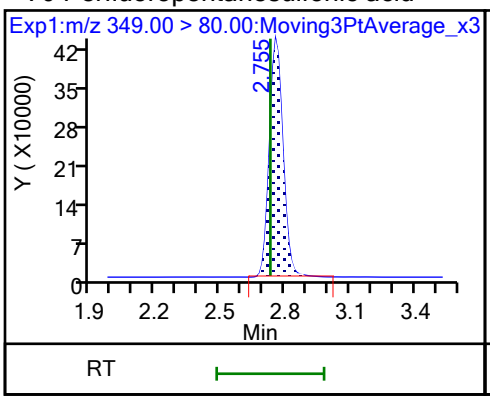
6 Perfluorohexanoic acid (M)



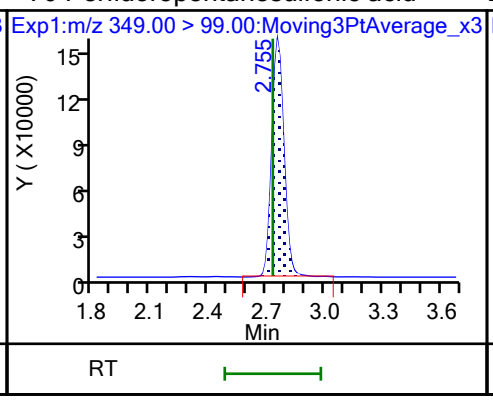
6 Perfluorohexanoic acid



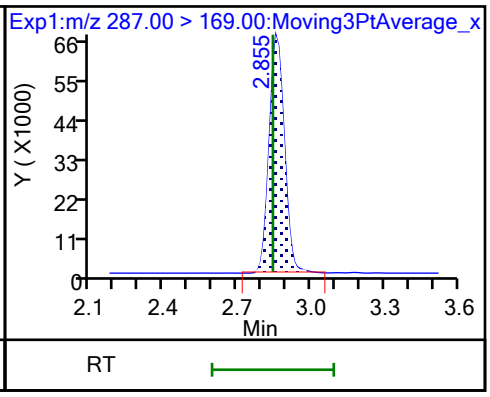
70 Perfluoropentanesulfonic acid



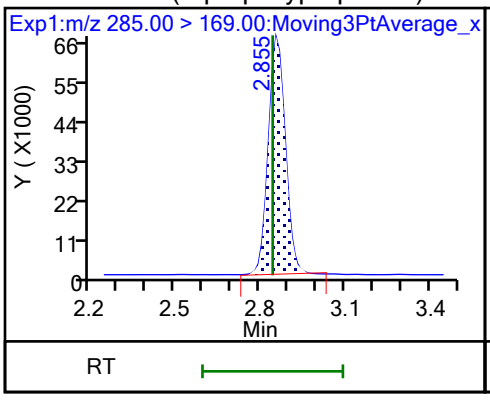
70 Perfluoropentanesulfonic acid



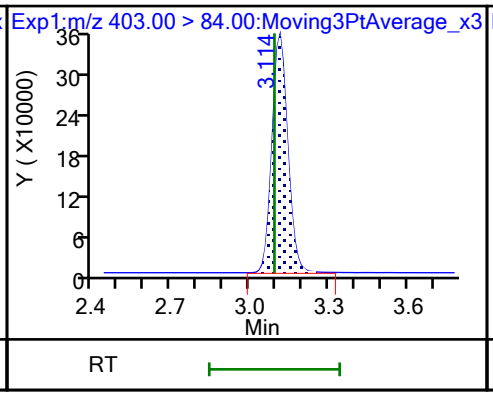
D 64 13C3 HFPO-DA



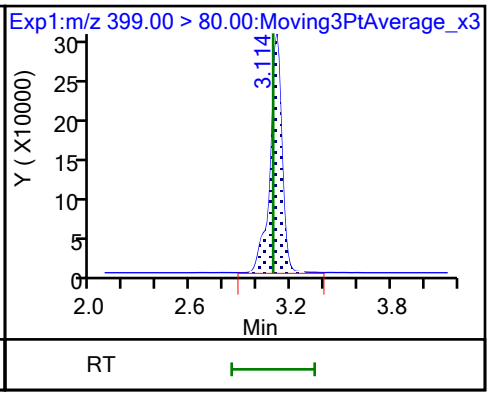
67 Perfluoro(2-propoxypropanoic) ac



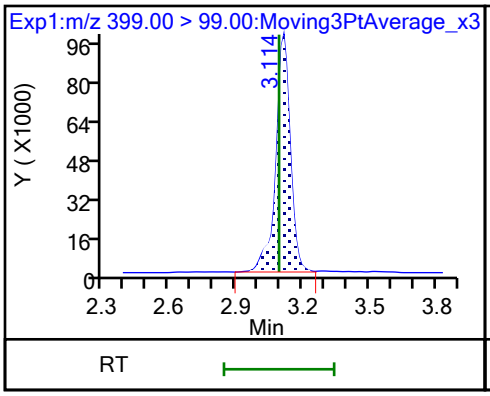
D 11 18O2 PFHxS



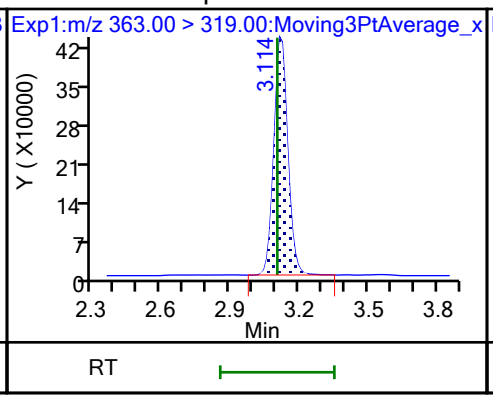
8 Perfluorohexanesulfonic acid



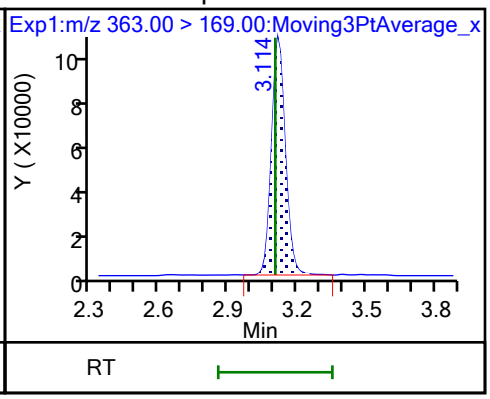
8 Perfluorohexanesulfonic acid



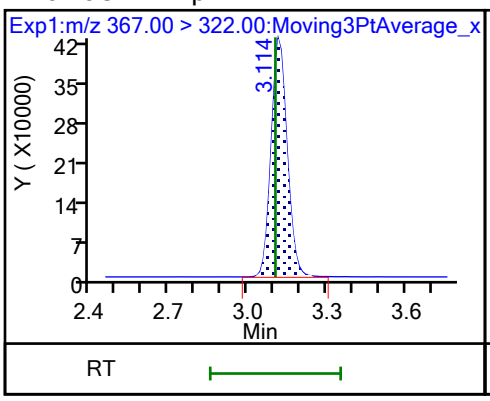
10 Perfluoroheptanoic acid



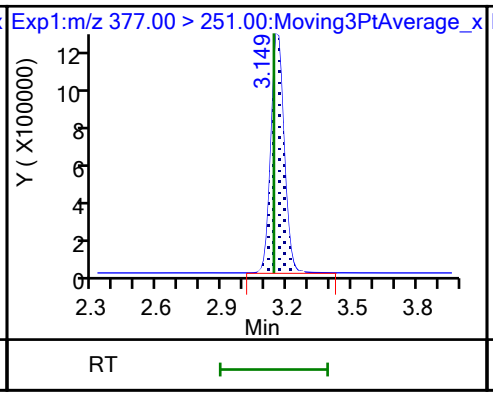
10 Perfluoroheptanoic acid



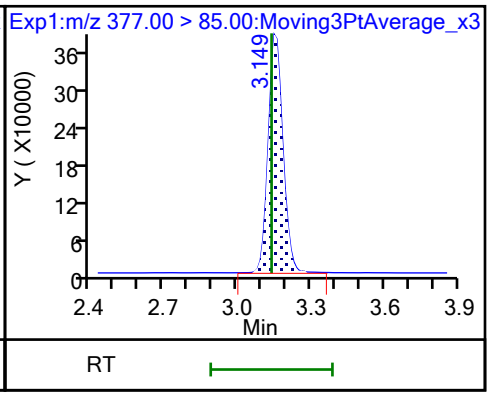
D 9 13C4 PFHpA



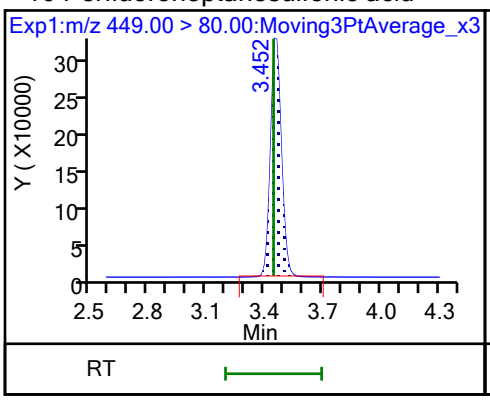
77 DONA



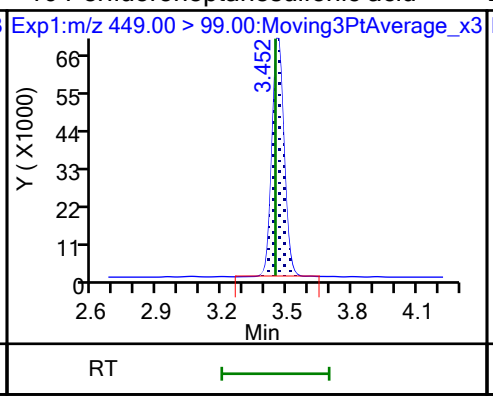
77 DONA



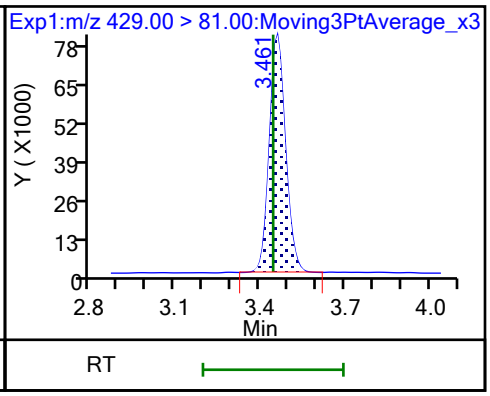
16 Perfluoroheptanesulfonic acid



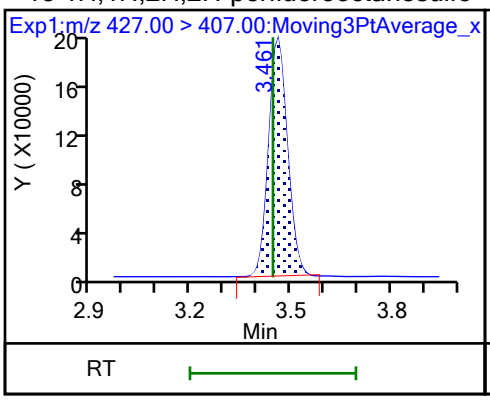
16 Perfluoroheptanesulfonic acid



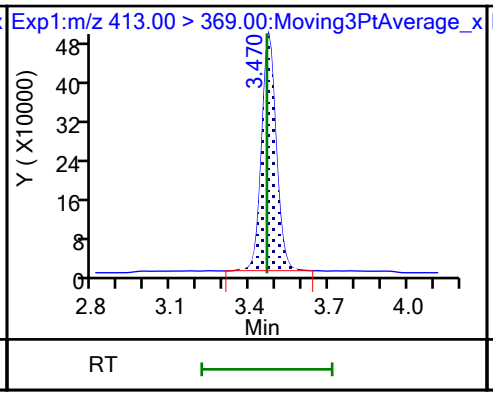
D 12 M2-6:2 FTS



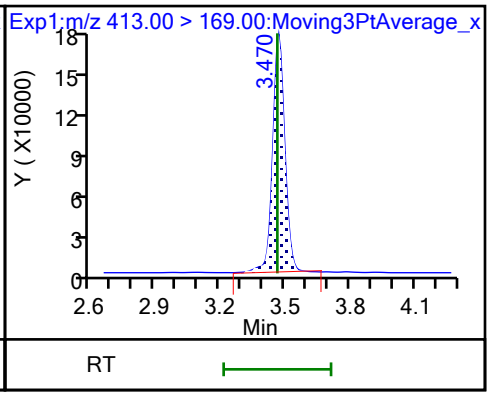
13 1H,1H,2H,2H-perfluorooctanesulfo



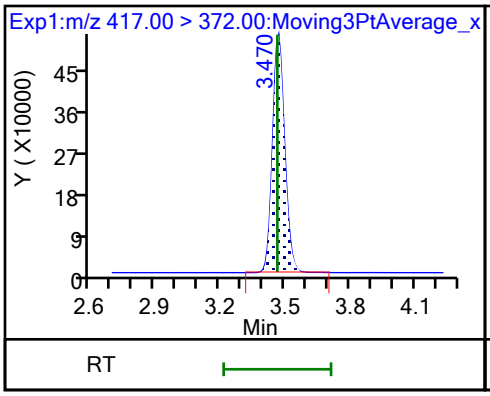
15 Perfluorooctanoic acid



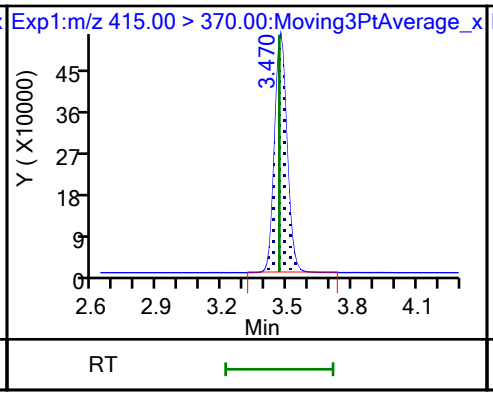
15 Perfluorooctanoic acid



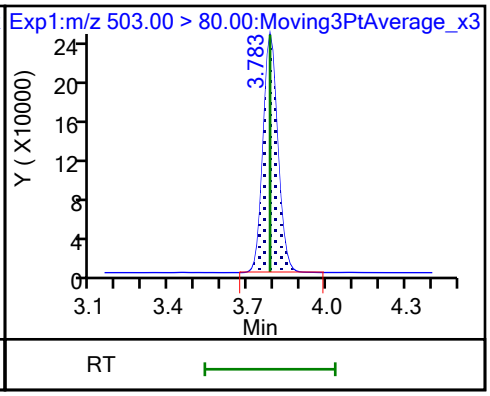
D 14 13C4 PFOA



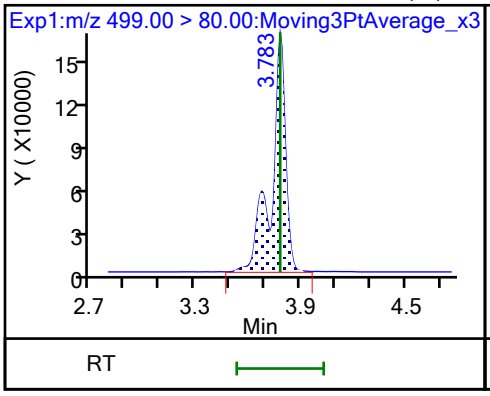
* 62 13C2 PFOA



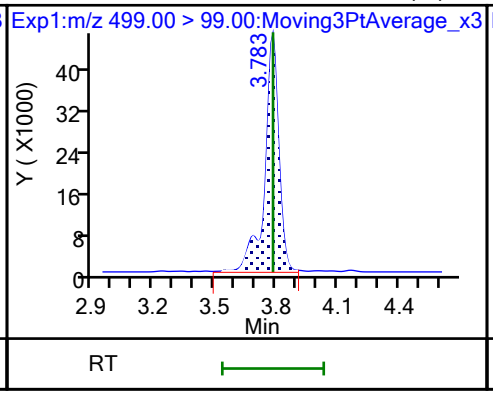
D 18 13C4 PFOS



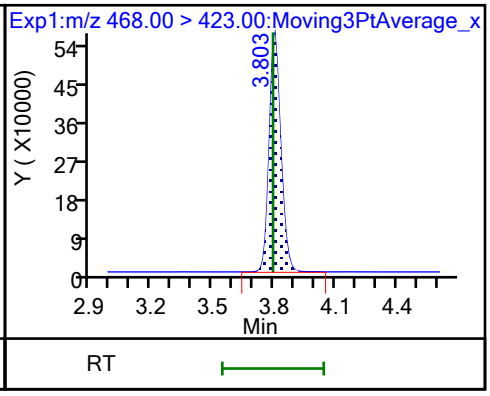
17 Perfluorooctanesulfonic acid (M)



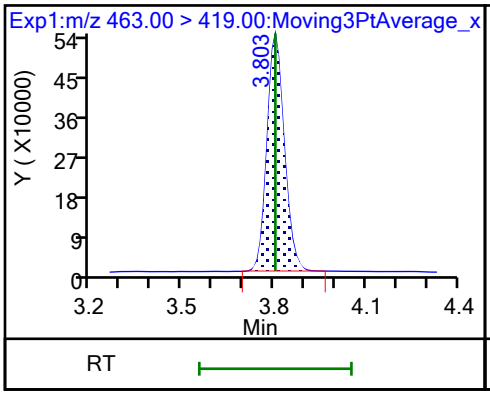
17 Perfluorooctanesulfonic acid (M)



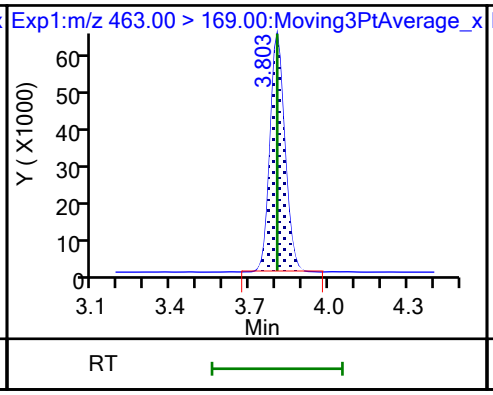
D 19 13C5 PFNA



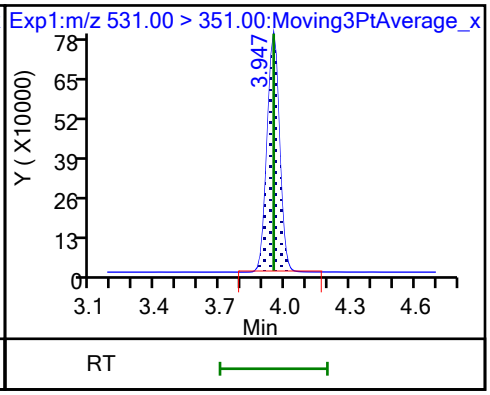
20 Perfluorononanoic acid



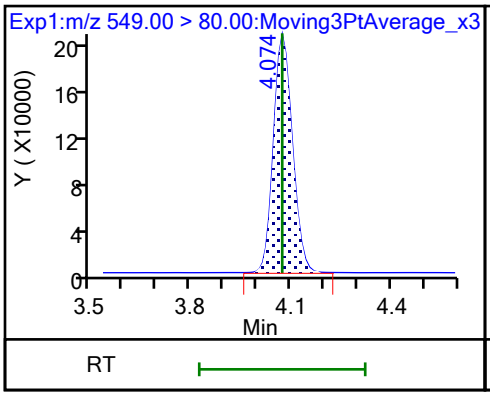
20 Perfluorononanoic acid



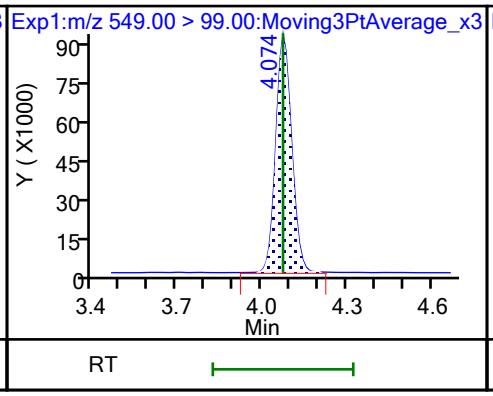
69 9-Chlorohexadecafluoro-3-oxanona



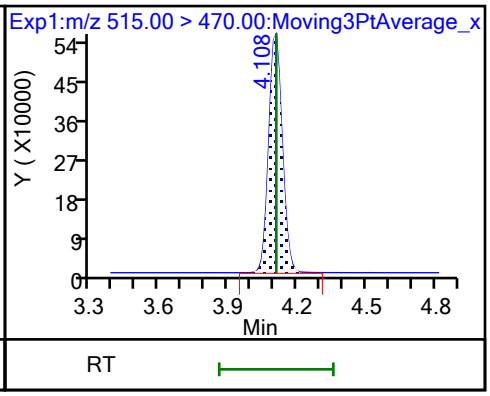
68 Perfluorononanesulfonic acid



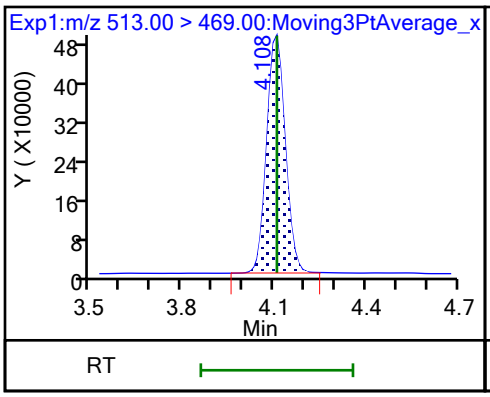
68 Perfluorononanesulfonic acid



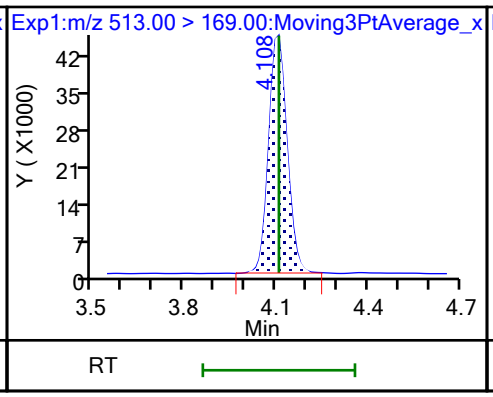
D 23 13C2 PFDA



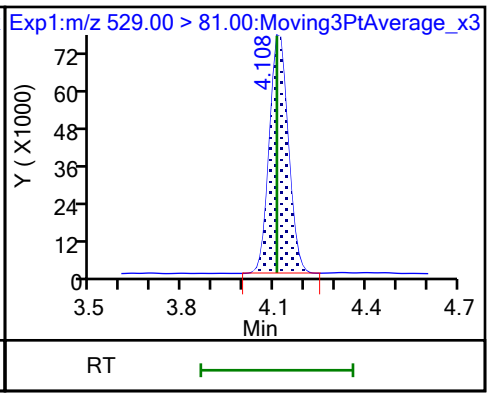
24 Perfluorodecanoic acid



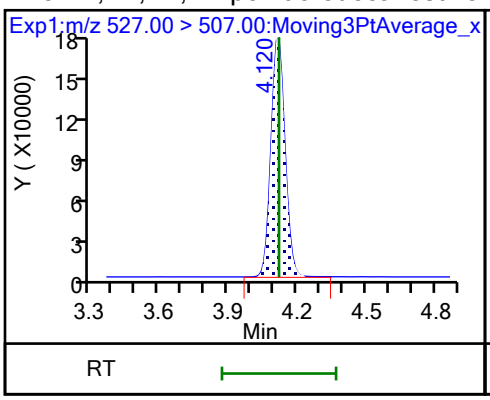
24 Perfluorodecanoic acid



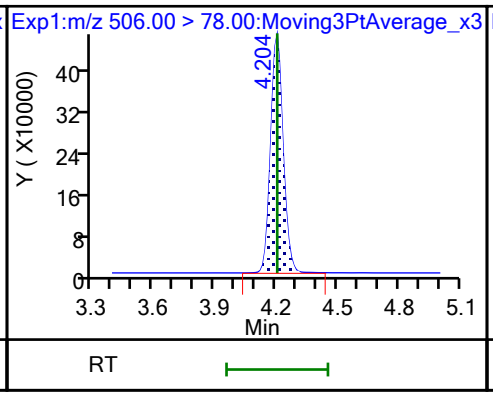
D 26 M2-8:2 FTS



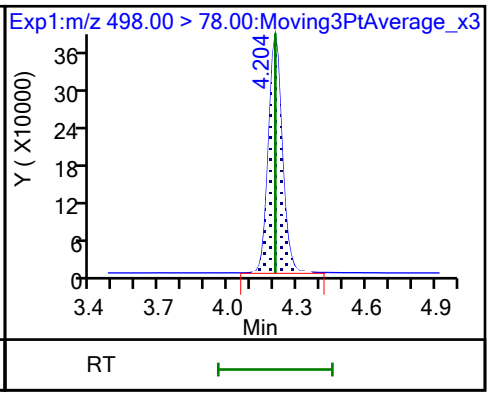
25 1H,1H,2H,2H-perfluorodecanesulfo



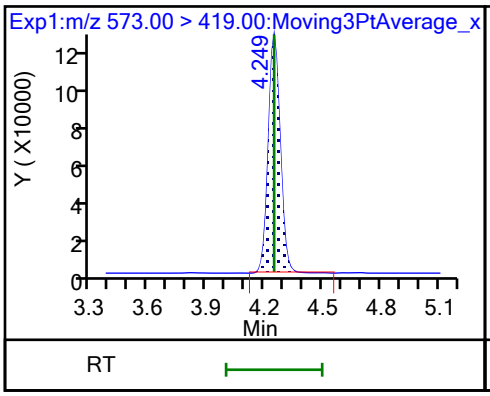
D 21 13C8 FOSA



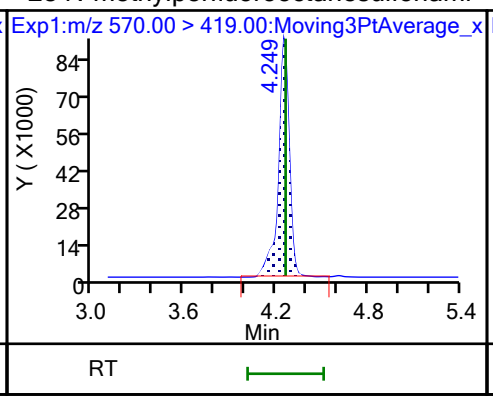
22 Perfluorooctanesulfonamide



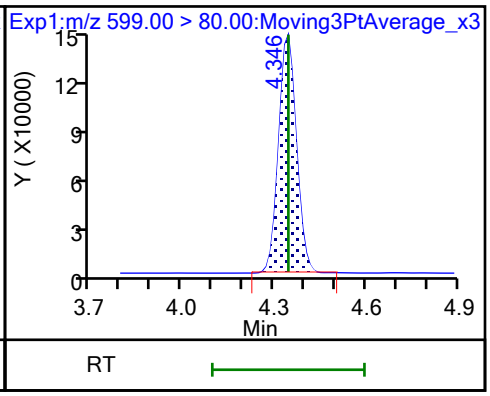
D 27 d3-NMeFOSAA



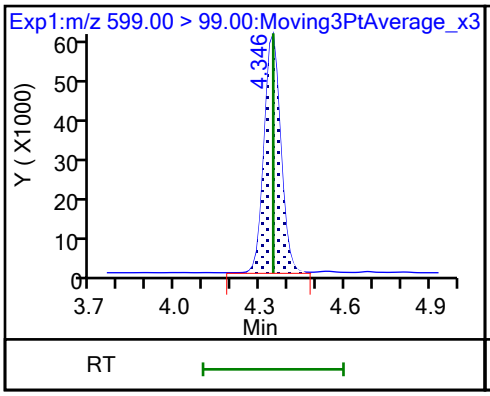
28 N-methylperfluorooctanesulfonami



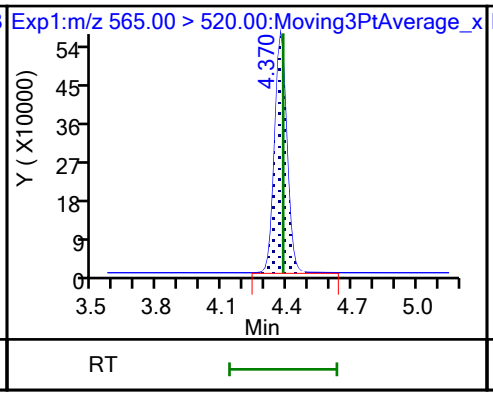
29 Perfluorodecanesulfonic acid



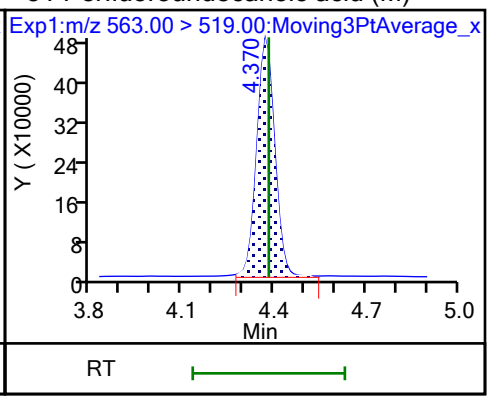
29 Perfluorodecanesulfonic acid



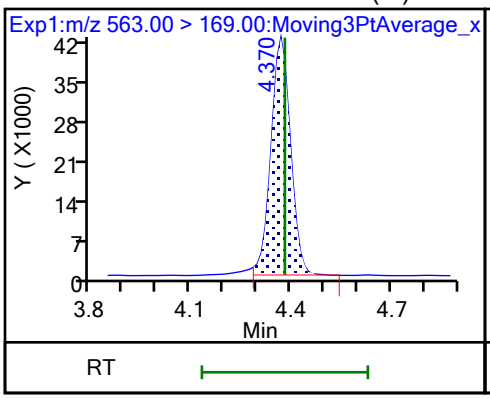
D 30 13C2 PFUnA



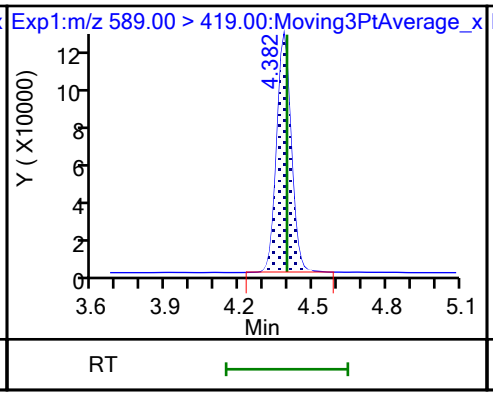
31 Perfluoroundecanoic acid (M)



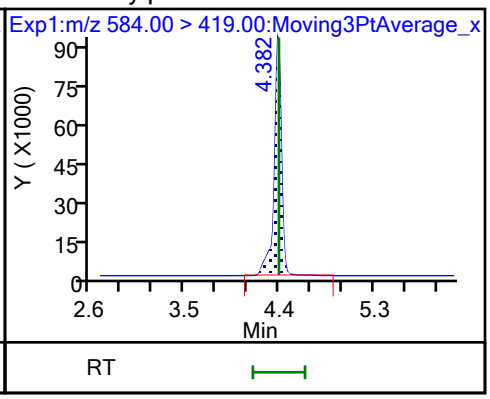
31 Perfluoroundecanoic acid (M)



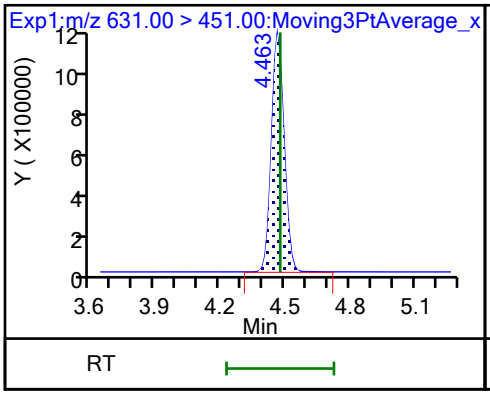
D 32 d5-NEtFOSAA



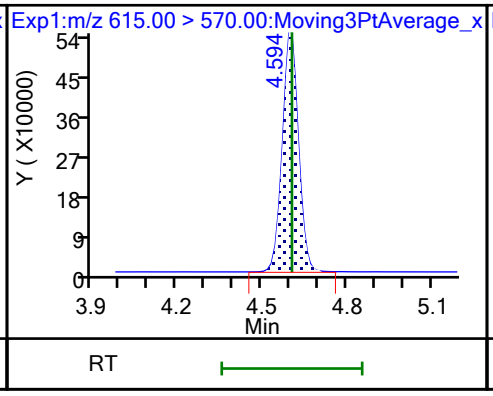
33 N-ethylperfluorooctanesulfonamid



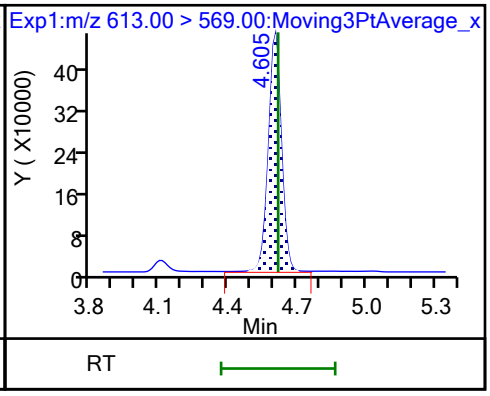
66 11-Chloroeicosafluoro-3-oxaundec



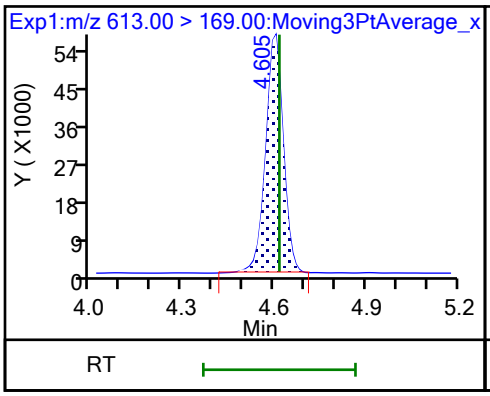
D 36 13C2 PFDoA



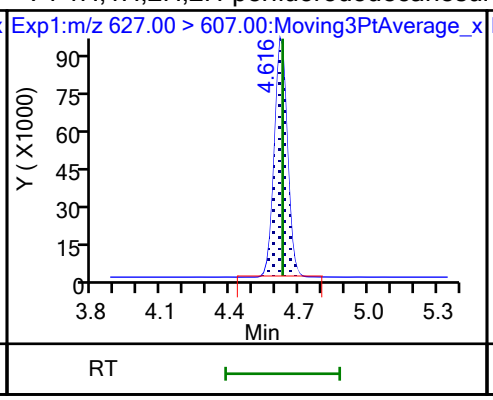
37 Perfluorododecanoic acid



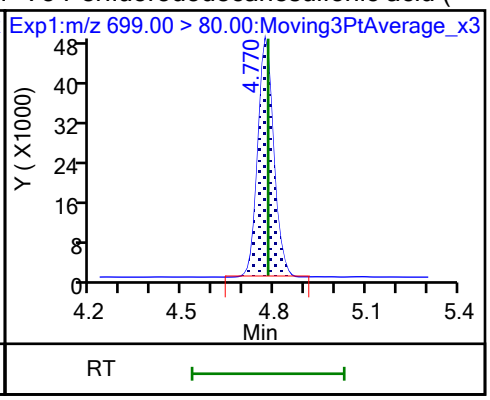
37 Perfluorododecanoic acid



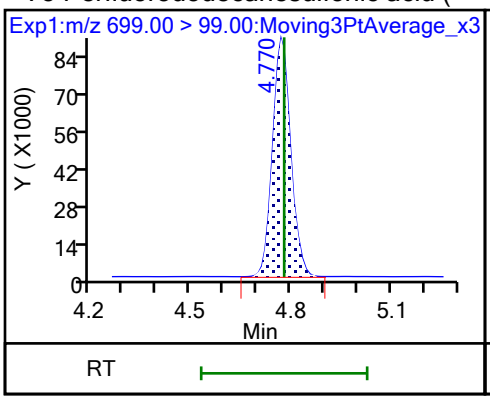
74 1H,1H,2H,2H-perfluorododecanesul



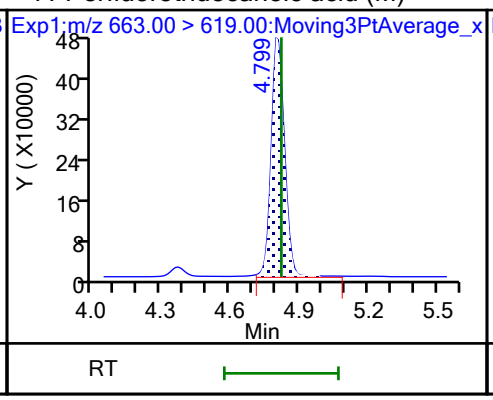
75 Perfluorododecanesulfonic acid (



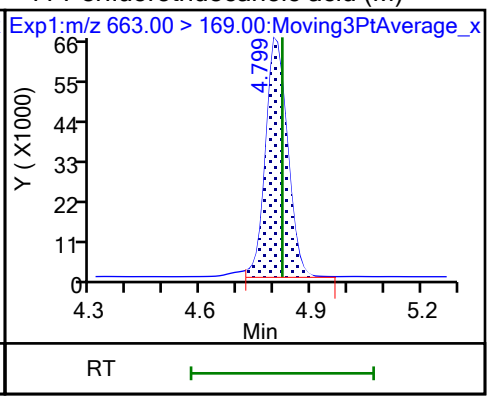
75 Perfluorododecanesulfonic acid (



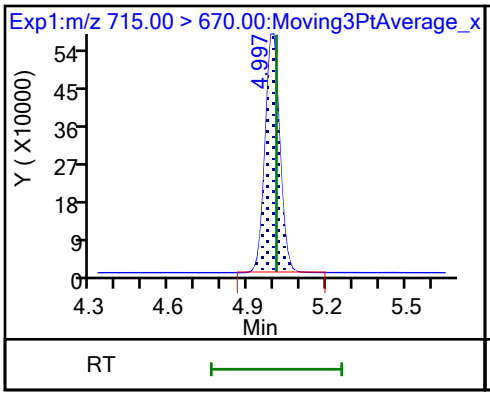
41 Perfluorotridecanoic acid (M)



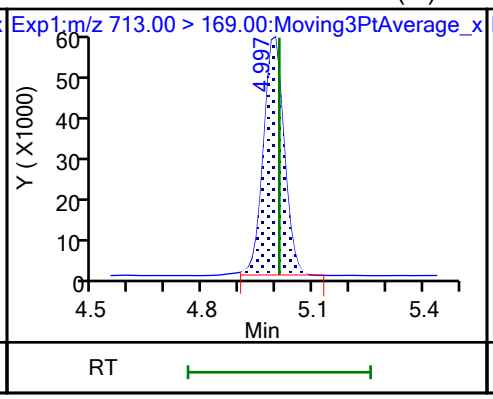
41 Perfluorotridecanoic acid (M)



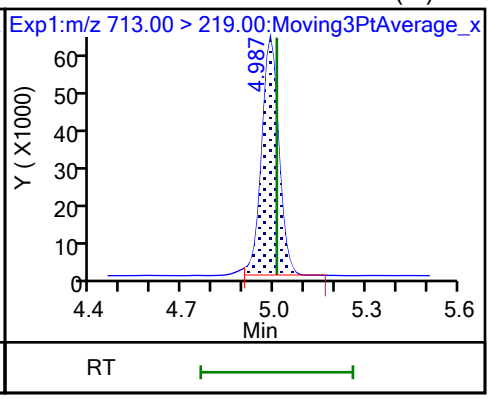
D 43 13C2 PFTeDA



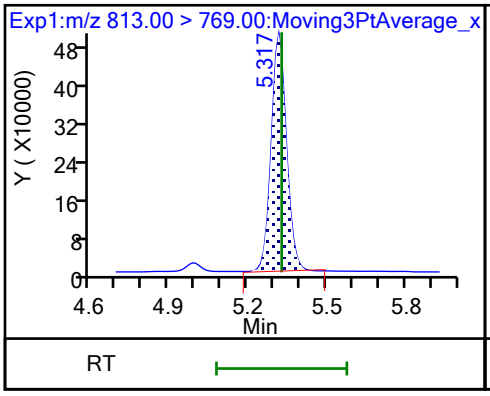
42 Perfluorotetradecanoic acid (M)



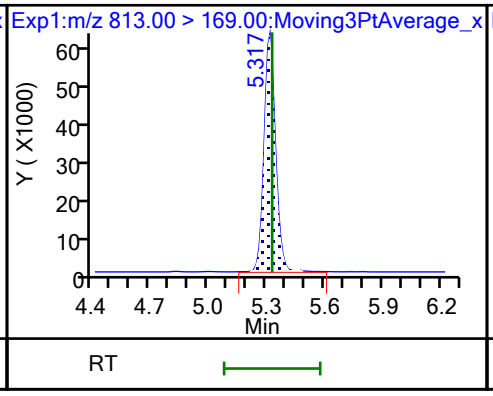
42 Perfluorotetradecanoic acid (M)



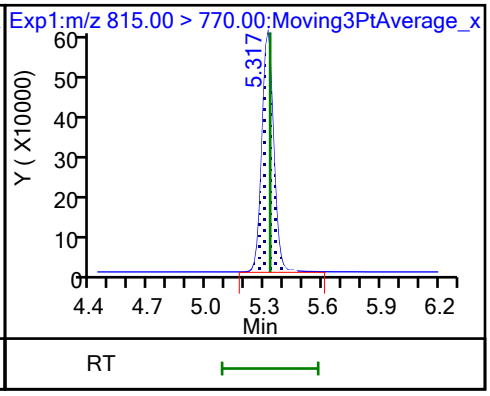
45 Perfluorohexadecanoic acid



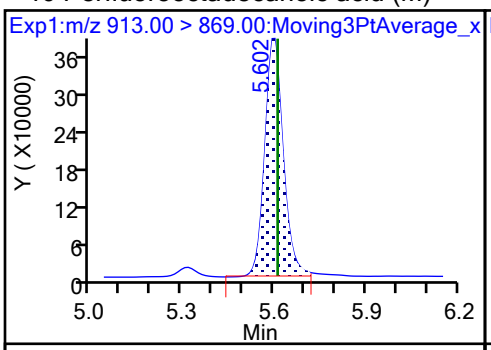
45 Perfluorohexadecanoic acid



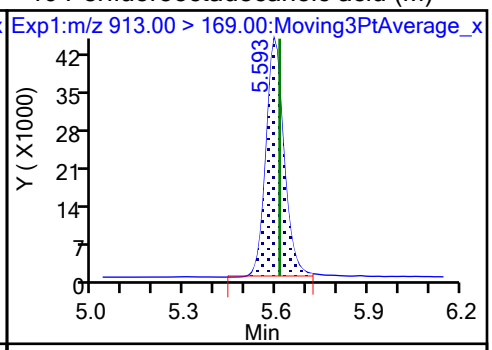
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCVLIS 200-196630/5 Calibration Date: 10/20/2023 17:12

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.176		0.122	0.125	-2.6	50.0
Perfluoropentanoic acid	AveID	1.079	1.133		0.0525	0.0500	4.9	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.219		0.0484	0.0444	9.1	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.642		0.0502	0.0469	7.2	50.0
Perfluorohexanoic acid	AveID	1.100	1.068		0.0485	0.0500	-3.0	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.289		0.0464	0.0471	-1.3	50.0
HFPODA	AveID	1.001	1.156		0.116	0.100	15.5	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.250		0.0516	0.0457	12.9	50.0
Perfluoroheptanoic acid	AveID	1.121	1.176		0.0525	0.0500	4.9	50.0
DONA	AveID	5.754	6.170		0.0507	0.0473	7.2	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.484		0.151	0.119	27.5	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.426		0.0470	0.0477	-1.3	50.0
Perfluorooctanoic acid	AveID	1.065	1.026		0.0481	0.0500	-3.7	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.155		0.0459	0.0464	-1.0	50.0
Perfluorononanoic acid	AveID	0.9800	0.9281		0.0474	0.0500	-5.3	50.0
9Cl-PF3ONS	AveID	3.569	4.324		0.0565	0.0467	21.1	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8854		0.0480	0.0481	-0.2	50.0
Perfluorodecanoic acid	AveID	0.999	1.092		0.0546	0.0500	9.3	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.616		0.0570	0.0480	18.8	50.0
Perfluorooctanesulfonamide	AveID	0.9539	1.042		0.0546	0.0500	9.2	50.0
NMeFOSAA	AveID	0.9074	1.058		0.146	0.125	16.6	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6329		0.0447	0.0483	-7.3	50.0
Perfluoroundecanoic acid	AveID	1.031	1.025		0.0497	0.0500	-0.6	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.169		0.146	0.125	16.8	50.0
11Cl-PF3OUdS	AveID	5.474	6.198		0.0534	0.0472	13.2	50.0
Perfluorododecanoic acid	AveID	1.018	1.062		0.0522	0.0500	4.3	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.588		0.0582	0.0482	20.7	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2486		0.0520	0.0484	7.4	50.0
Perfluorotridecanoic acid	AveID	1.070	1.069		0.0500	0.0500	-0.0	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1047		0.0468	0.0500	-6.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.223		0.0612	0.0500	22.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7896		0.0506	0.0500	1.1	50.0
13C4 PFBA	Ave	0.9917	1.009		1.27	1.25	1.7	
13C5 PFPeA	Ave	0.7696	0.7384		1.20	1.25	-4.1	
13C3 PFBS	Ave	1.041	0.9576		1.07	1.16	-8.0	
M2-4:2 FTS	Ave	0.1204	0.1058		1.03	1.17	-12.2	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCVLIS 200-196630/5 Calibration Date: 10/20/2023 17:12

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8302		1.33	1.25	6.0	
13C3 HFPO-DA	Ave	0.1516	0.1418		1.17	1.25	-6.4	
18O2 PFHxS	Ave	0.7464	0.7036		1.12	1.18	-5.7	
13C4 PFHpA	Ave	0.8590	0.8670		1.26	1.25	0.9	
M2-6:2 FTS	Ave	0.1551	0.1410		1.08	1.19	-9.1	
13C4 PFOA	Ave	0.9731	1.056		1.36	1.25	8.6	
13C4 PFOS	Ave	0.4742	0.4475		1.13	1.20	-5.6	
13C5 PFNA	Ave	1.059	1.133		1.34	1.25	7.0	
13C2 PFDA	Ave	1.109	1.051		1.19	1.25	-5.2	
M2-8:2 FTS	Ave	0.1744	0.1476		1.01	1.20	-15.4	
13C8 FOSA	Ave	0.9462	0.8820		1.17	1.25	-6.8	
d3-NMeFOSAA	Ave	0.2650	0.2355		1.11	1.25	-11.2	
13C2 PFUnA	Ave	1.047	1.018		1.22	1.25	-2.7	
d5-NEtFOSAA	Ave	0.2552	0.2433		1.19	1.25	-4.6	
13C2 PFDoA	Ave	1.064	1.104		1.30	1.25	3.8	
13C2 PFTeDA	Ave	1.059	0.9723		1.15	1.25	-8.2	
13C2 PFHxDA	Ave	1.221	1.072		1.10	1.25	-12.2	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57491.b\PA231020A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 20-Oct-2023 17:12:35 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057491-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57491.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 23-Oct-2023 10:59:20 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1629

First Level Reviewer: khanphomeea Date: 23-Oct-2023 10:59:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.606	2079168	1.27		102	1271	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	244593	0.1217		97.4	24.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.694	1522307	1.20		95.9	2242	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	68962	0.0525		105	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1835881	1.07		92.0	93925	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	85370	0.0484	Target=2.06	109	90.3	M
298.90 > 99.00	2.467	2.467	0.0	1.000	41117		2.08(1.03-3.09)		22.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	29764	0.0502		107	320	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.785	203658	1.03		87.8	165	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.798	0.0	0.796	1711525	1.33		106	8506	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.798	0.0	1.000	73107	0.0485	Target=14.12	97.0	17.3	M
313.00 > 119.00	2.798	2.798	0.0	1.000	7240		10.10(7.06-21.17)		8.9	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.798	2.798	0.0	0.886	70351	0.0464	Target=2.72	98.7	117	
349.00 > 99.00	2.798	2.798	0.0	0.886	23682		2.97(1.36-4.09)		48.1	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	27052	0.1155		116	153	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.827	292396	1.17		93.6	2297	
D 11 18O2 PFHxS										
403.00 > 84.00	3.157	3.157	0.0	0.898	1372149	1.11		94.3	6100	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.157	3.157	0.0	1.000	66286	0.0516	Target=3.32	113	215	M
399.00 > 99.00	3.169	3.157	0.012	1.004	18465		3.59(1.66-4.98)		17.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.169	3.169	0.0	1.000	84091	0.0525	Target=4.17	105	22.7	M
363.00 > 169.00	3.157	3.169	-0.012	0.996	20664		4.07(2.09-6.26)		37.9	
D 9 13C4 PFHpA										
367.00 > 322.00	3.169	3.169	0.0	0.902	1787356	1.26		101	5075	
77 DONA										
377.00 > 251.00	3.204	3.204	0.0	0.838	215161	0.0507	Target=3.33	107	322	
377.00 > 85.00	3.204	3.204	0.0	0.838	61242		3.51(1.66-4.99)		128	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.506	3.506	0.0	0.917	50143	0.0470	Target=4.83	98.7	181	M
449.00 > 99.00	3.506	3.506	0.0	0.917	11264		4.45(2.41-7.24)		53.4	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.506	3.506	0.0	0.997	276051	1.08		90.9	791	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.506	3.506	0.0	1.000	96089	0.1512		127	146	
D 14 13C4 PFOA										
417.00 > 372.00	3.515	3.515	0.0	1.000	2177958	1.36		109	5744	
* 62 13C2 PFOA										
415.00 > 370.00	3.515	3.515	0.0		2061570	1.25			9687	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.515	3.515	0.0	1.000	89342	0.0481	Target=2.88	96.3	4.3	M
413.00 > 169.00	3.515	3.515	0.0	1.000	28339		3.15(1.44-4.32)		67.1	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.823	3.823	0.0	1.000	39552	0.0459	Target=4.24	99.0	73.1	M
499.00 > 99.00	3.823	3.823	0.0	1.000	7892		5.01(2.12-6.37)		18.7	M
D 18 13C4 PFOS										
503.00 > 80.00	3.823	3.823	0.0	1.088	881955	1.13		94.4	3058	
20 Perfluorononanoic acid										
463.00 > 419.00	3.846	3.846	0.0	1.000	86740	0.0474	Target=8.34	94.7	14.8	
463.00 > 169.00	3.846	3.846	0.0	1.000	10419		8.33(4.17-12.51)		93.7	
D 19 13C5 PFNA										
468.00 > 423.00	3.846	3.846	0.0	1.094	2336448	1.34		107	8275	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.975	3.975	0.0	1.040	148869	0.0565		121	477	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.106	4.106	0.0	1.074	31430	0.0480	Target=2.17	99.8	269	
549.00 > 99.00	4.106	4.106	0.0	1.074	14497		2.17(1.08-3.25)		94.0	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.130	4.130	0.0	1.000	94686	0.0546	Target=11.44	109	33.4	
513.00 > 169.00	4.130	4.130	0.0	1.000	9480		9.99(5.72-17.16)		76.8	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.130	4.130	0.0	1.175	2167187	1.19		94.8	8798	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.142	4.142	0.0	1.179	291419	1.01		84.6	801	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.142	4.142	0.0	1.000	30557	0.0570		119	253	M
D 21 13C8 FOSA										
506.00 > 78.00	4.235	4.235	0.0	1.205	1818364	1.17		93.2	4488	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.235	4.235	0.0	1.000	75796	0.0546		109	558	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.271	4.271	0.0	1.215	485397	1.11		88.8	1279	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.271	4.271	0.0	1.000	51338	0.1457		117	239	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.356	4.356	0.0	1.139	22539	0.0447	Target=2.37	92.7	196	M
599.00 > 99.00	4.356	4.356	0.0	1.139	8119		2.78(1.19-3.56)		89.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.380	4.380	0.0	1.246	2099052	1.22		97.3	8252	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.391	4.391	0.0	1.003	86037	0.0497	Target=12.20	99.4	22.2	M
563.00 > 169.00	4.391	4.391	0.0	1.003	7618		11.29(6.10-18.31)		54.6	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.391	4.391	0.0	1.249	501626	1.19		95.4	1055	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.403	4.403	0.0	1.003	58615	0.1460		117	371	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.475	4.475	0.0	1.171	215682	0.0534		113	281	
D 36 13C2 PFDoA										
615.00 > 570.00	4.604	4.604	0.0	1.310	2276250	1.30		104	7132	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.604	4.604	0.0	1.000	96685	0.0522	Target=8.47	104	6.9	
613.00 > 169.00	4.604	4.604	0.0	1.000	10992		8.80(4.23-12.70)		111	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.626	4.626	0.0	1.117	18629	0.0582		121	244	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.769	4.769	0.0	1.247	8880	0.0520	Target=0.48	107	157	
699.00 > 99.00	4.769	4.769	0.0	1.247	16816		0.53(0.24-0.72)		219	M
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.807	4.807	0.0	1.044	97328	0.0500	Target=6.41	99.9	6.8	
663.00 > 169.00	4.798	4.807	-0.009	1.042	14336		6.79(3.21-9.62)		107	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.983	0.0	1.418	2004455	1.15		91.8	6983	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.983	4.983	0.0	1.000	8396	0.0468	Target=0.87	93.7	129	
713.00 > 219.00	4.973	4.983	-0.010	0.998	10843		0.77(0.43-1.30)		109	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.293	5.293	0.0	1.506	2210155	1.10		87.8	4459	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.293	5.293	0.0	1.000	108158	0.0612	Target=7.89	122	8.1	
813.00 > 169.00	5.293	5.293	0.0	1.000	12060		8.97(3.94-11.83)		272	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.555	5.555	0.0	1.049	69808	0.0506	Target=9.39	101	10.0	M
913.00 > 169.00	5.555	5.555	0.0	1.049	7007		9.96(4.69-14.08)		165	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

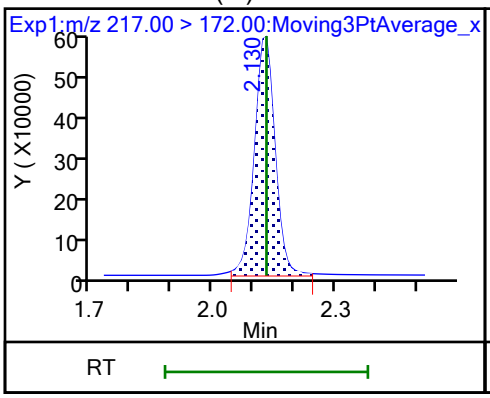
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 23-Oct-2023 10:59:20 Chrom Revision: 2.3 22-Sep-2023 11:33:50

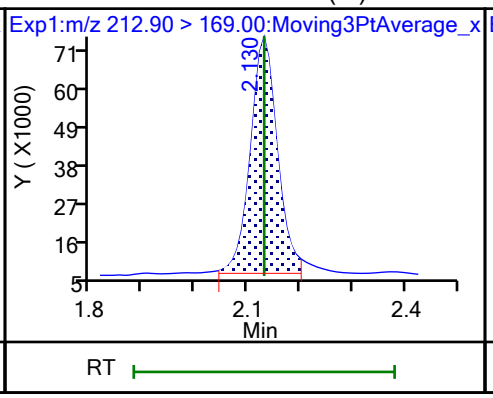
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57491.b\PA231020A05.d
Injection Date: 20-Oct-2023 17:12:35 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

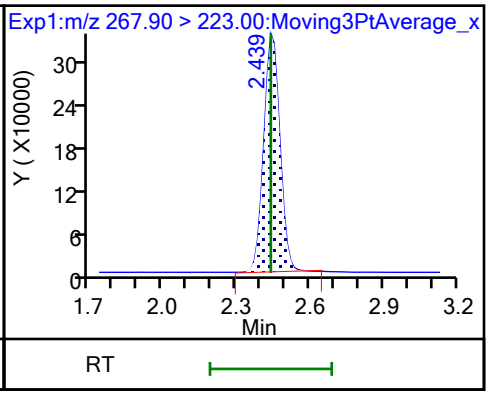
D 1 13C4 PFBA (M)



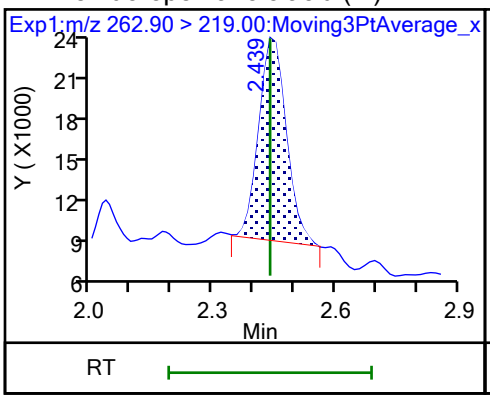
2 Perfluorobutanoic acid (M)



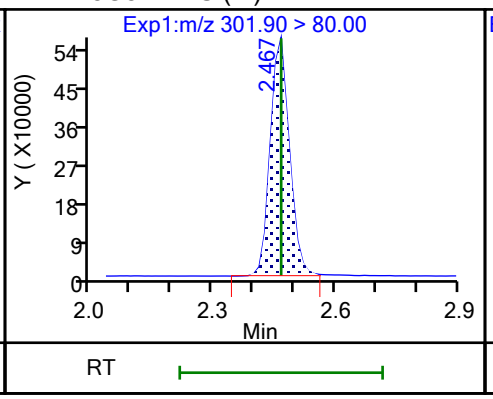
D 3 13C5 PFPeA



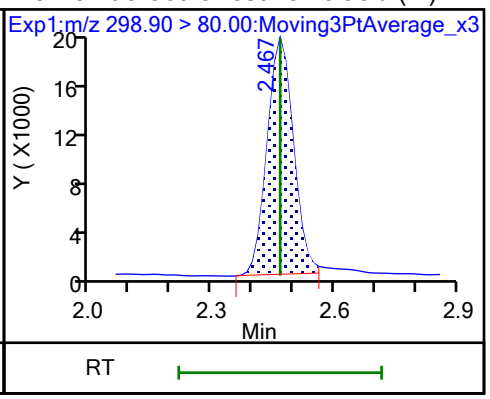
4 Perfluoropentanoic acid (M)



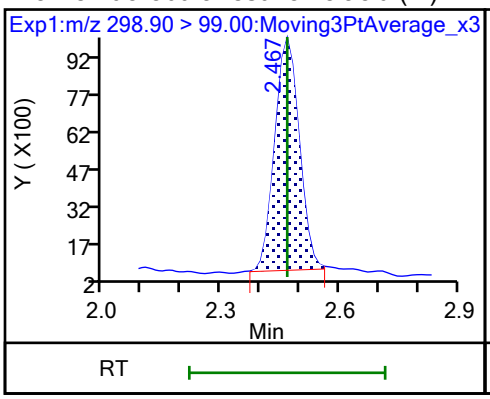
D 47 13C3 PFBS (M)



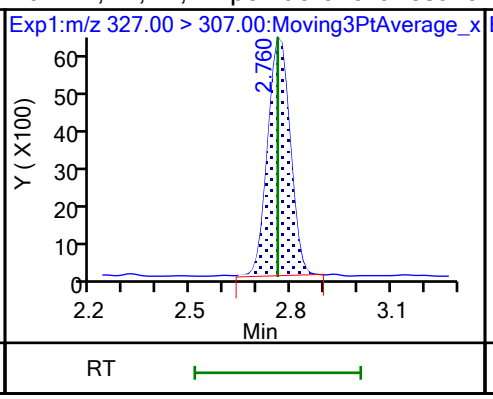
5 Perfluorobutanesulfonic acid (M)



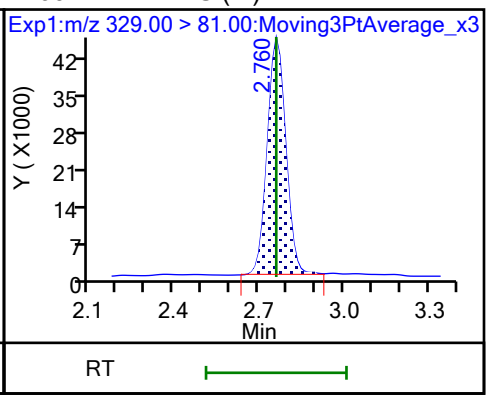
5 Perfluorobutanesulfonic acid (M)



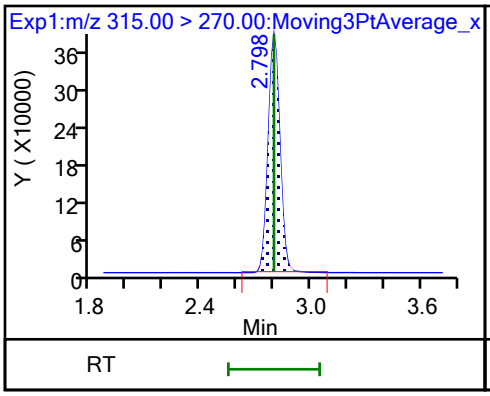
61 1H,1H,2H,2H-perfluorohexanesulfo



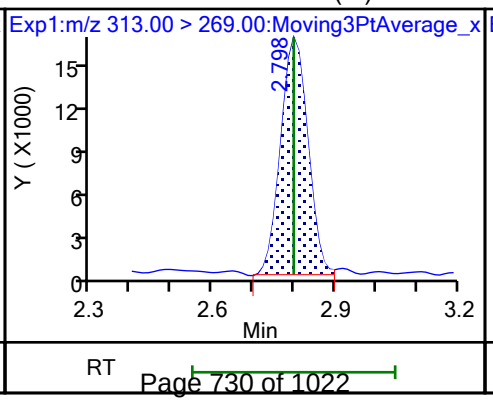
D 60 M2-4:2 FTS (M)



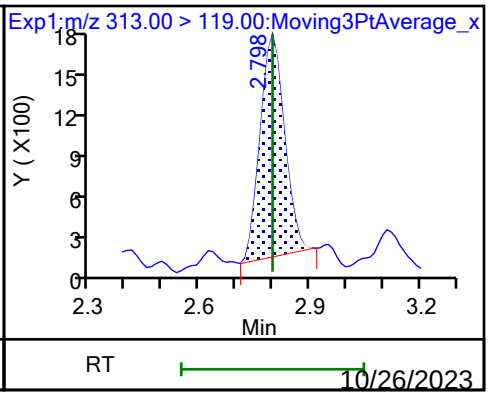
D 7 13C2 PFHxA



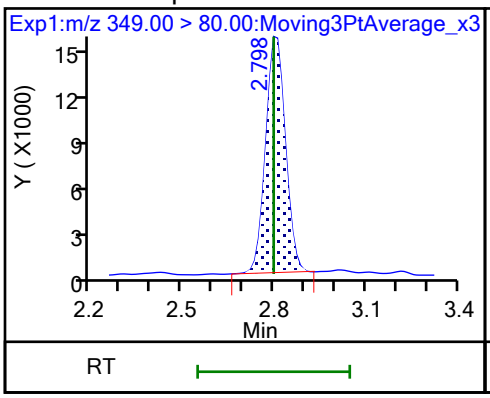
6 Perfluorohexanoic acid (M)



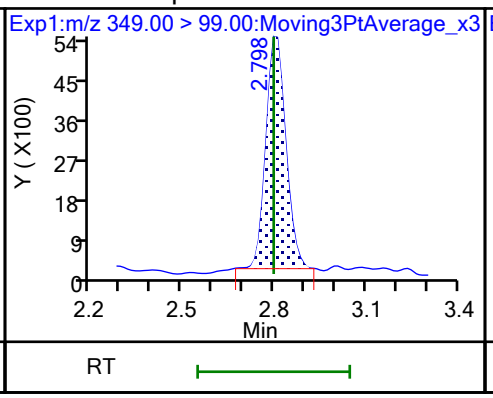
6 Perfluorohexanoic acid



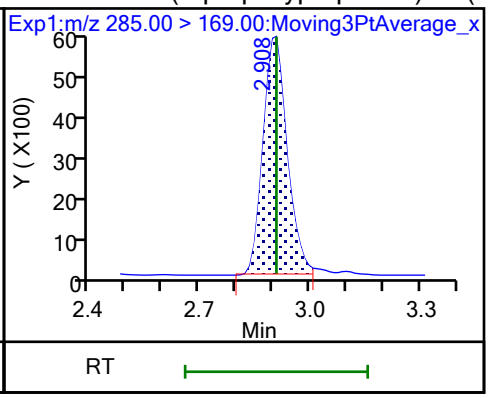
70 Perfluoropentanesulfonic acid



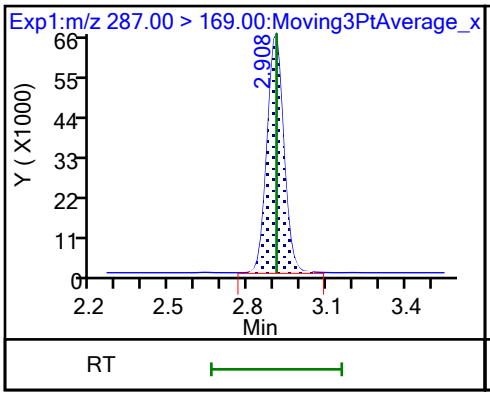
70 Perfluoropentanesulfonic acid



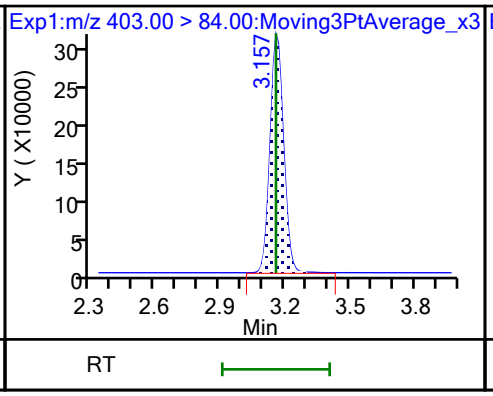
67 Perfluoro(2-propoxypropanoic) ac (M)



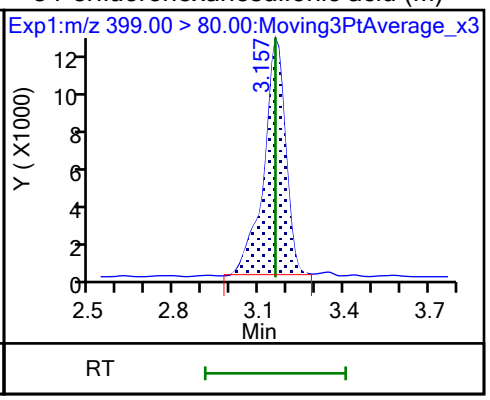
D 64 13C3 HFPO-DA



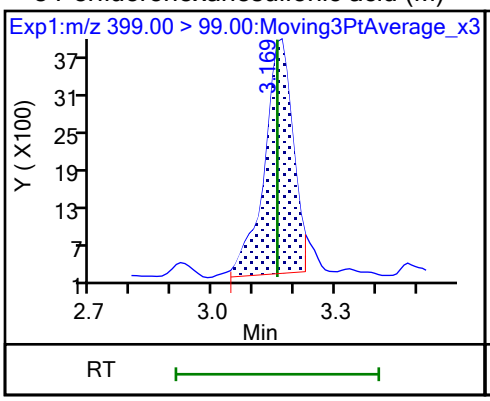
D 11 18O2 PFHxS



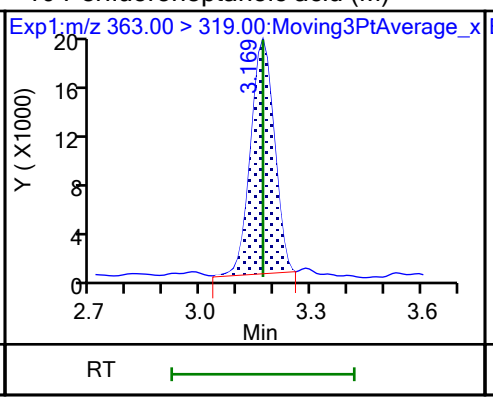
8 Perfluorohexanesulfonic acid (M)



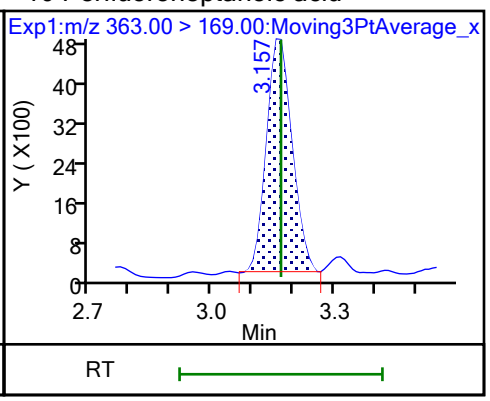
8 Perfluorohexanesulfonic acid (M)



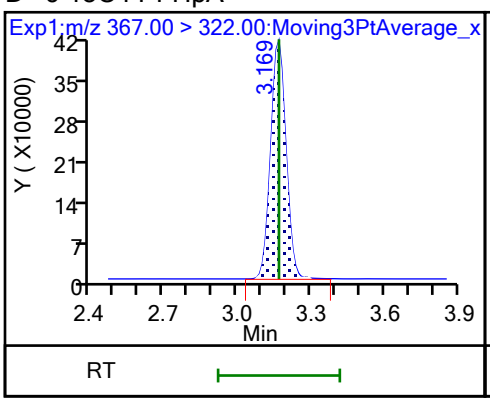
10 Perfluoroheptanoic acid (M)



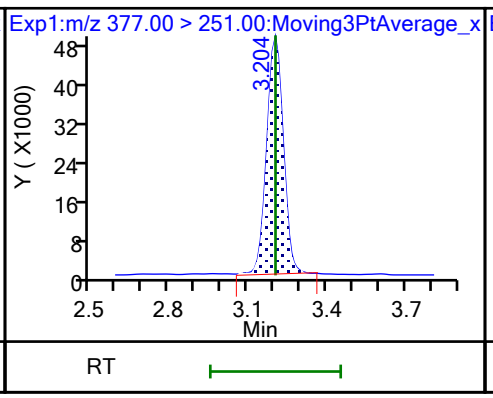
10 Perfluoroheptanoic acid



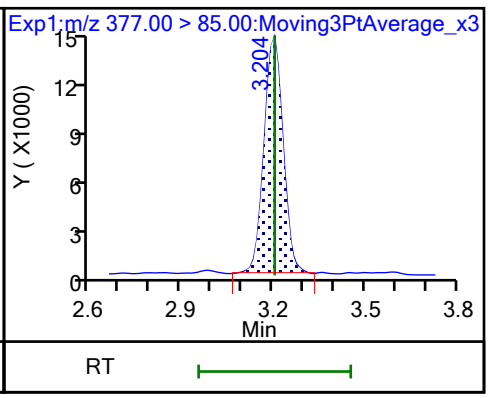
D 9 13C4 PFHpA



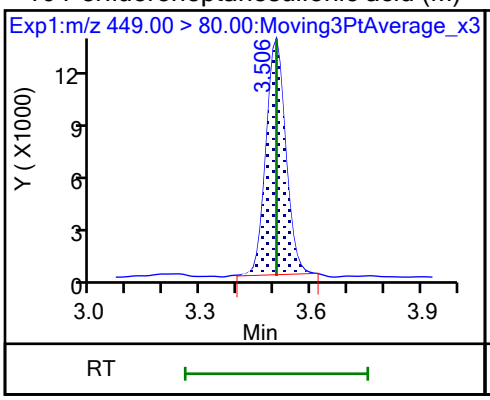
77 DONA



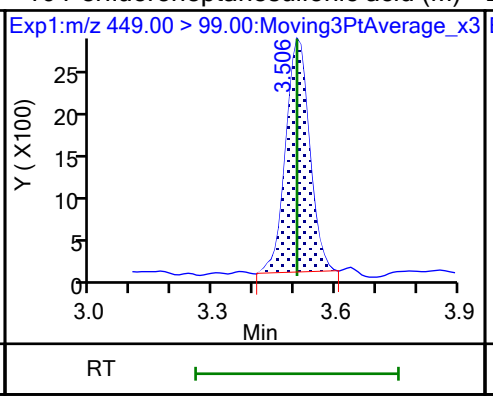
77 DONA



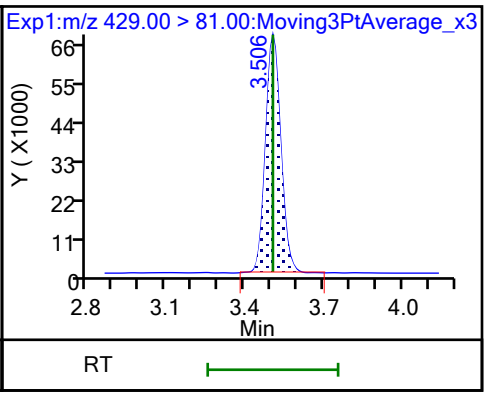
16 Perfluoroheptanesulfonic acid (M)



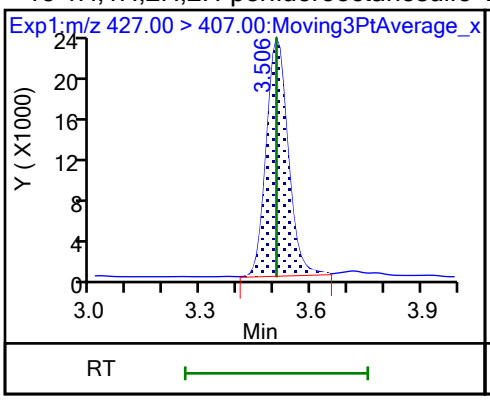
16 Perfluoroheptanesulfonic acid (M)



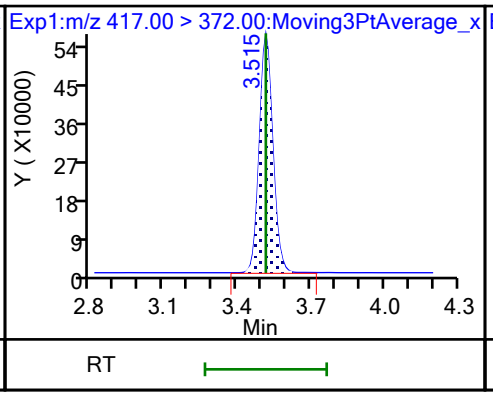
D 12 M2-6:2 FTS



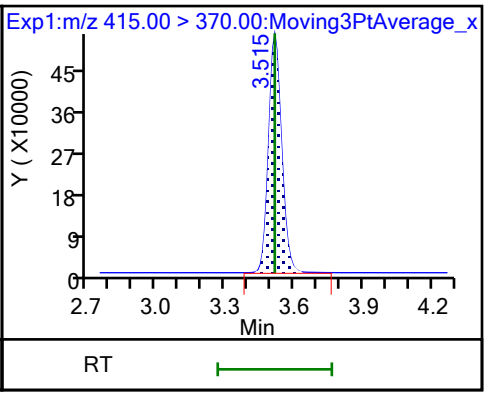
13 1H,1H,2H,2H-perfluorooctanesulfo



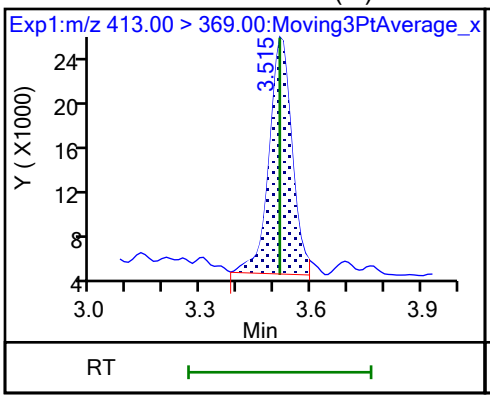
D 14 13C4 PFOA



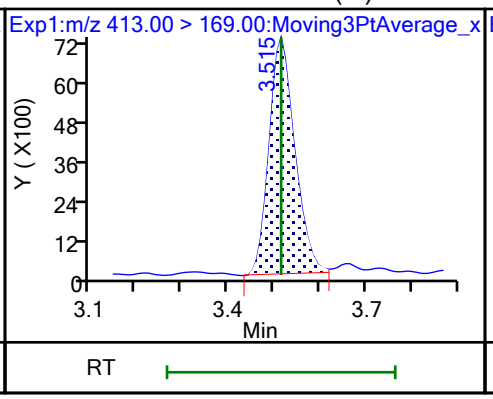
* 62 13C2 PFOA



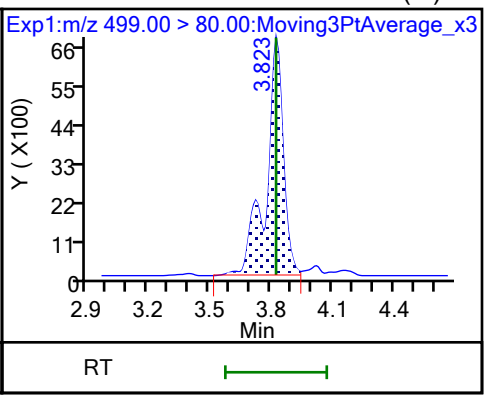
15 Perfluorooctanoic acid (M)



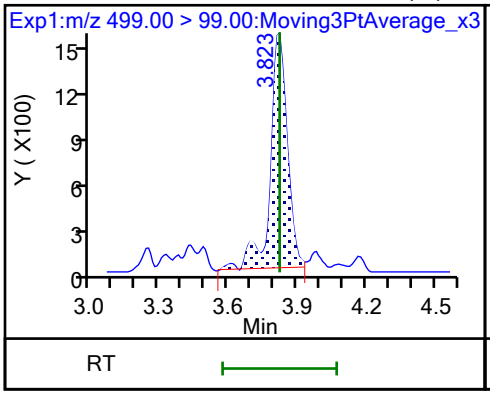
15 Perfluorooctanoic acid (M)



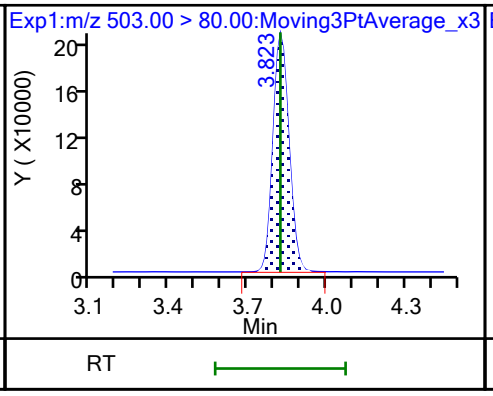
17 Perfluorooctanesulfonic acid (M)



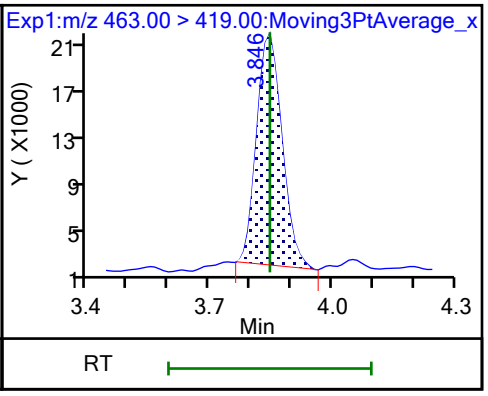
17 Perfluorooctanesulfonic acid (M)



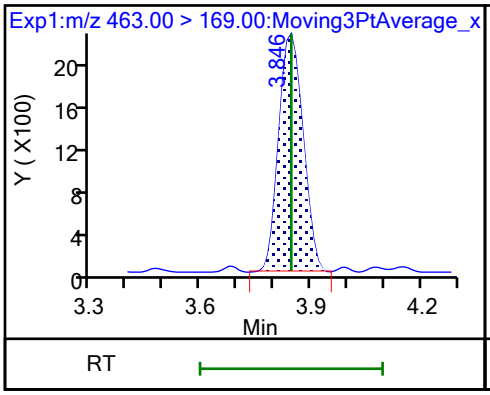
D 18 13C4 PFOS



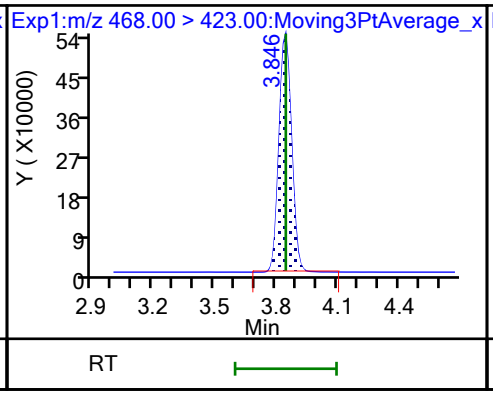
20 Perfluorononanoic acid



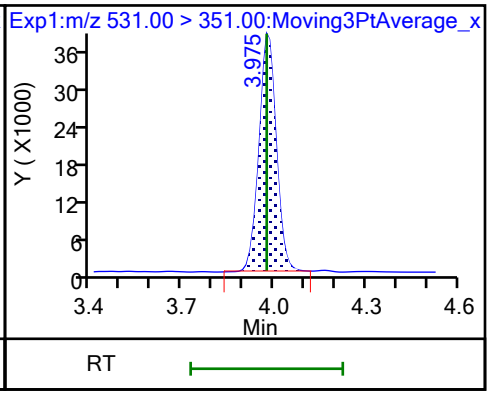
20 Perfluorononanoic acid



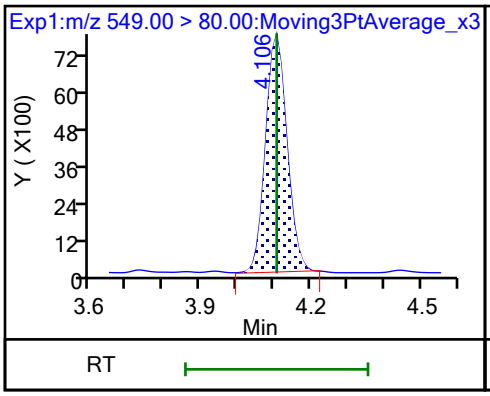
D 19 13C5 PFNA



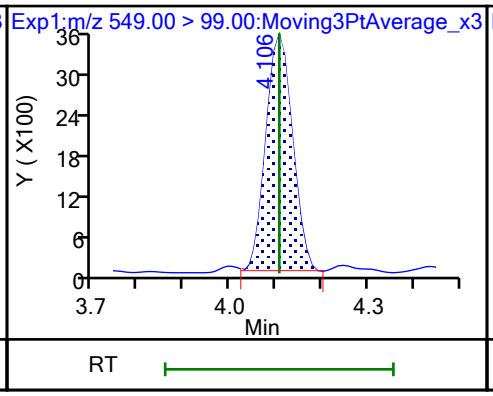
69 9-Chlorohexadecafluoro-3-oxanona



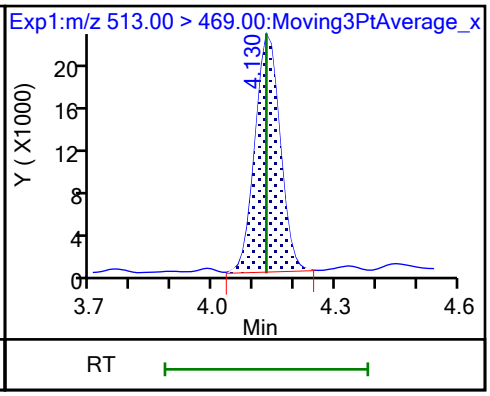
68 Perfluorononanesulfonic acid



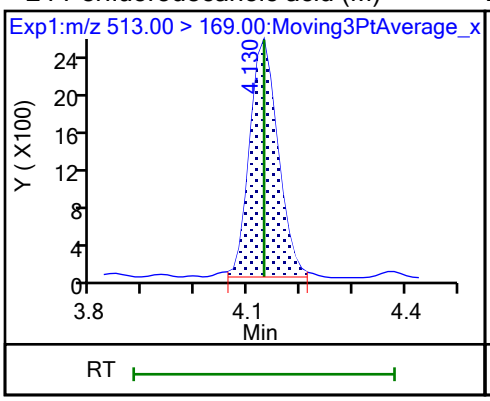
68 Perfluorononanesulfonic acid



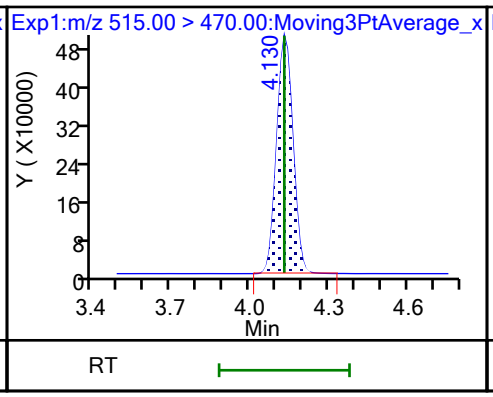
24 Perfluorodecanoic acid



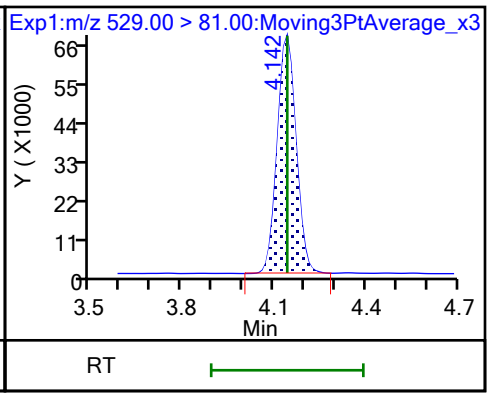
24 Perfluorodecanoic acid (M)



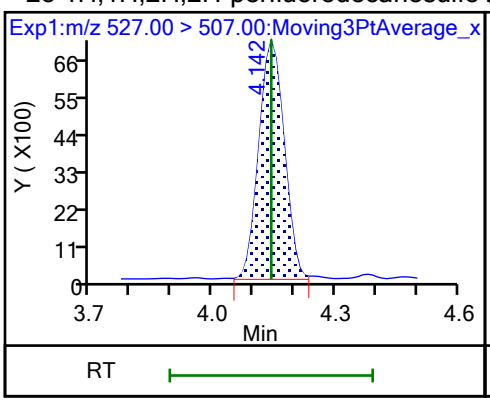
D 23 13C2 PFDA



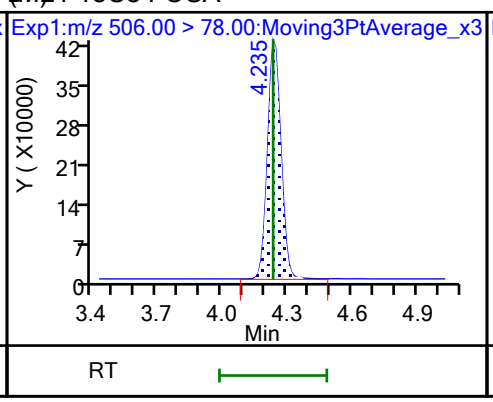
D 26 M2-8:2 FTS



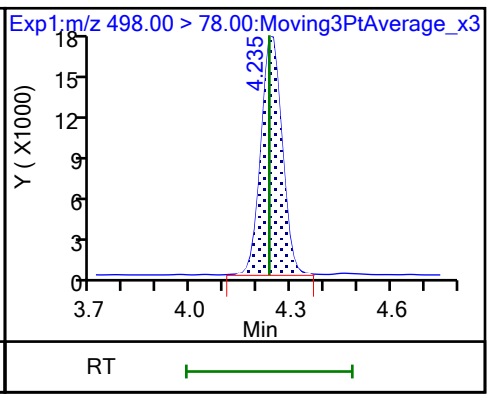
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



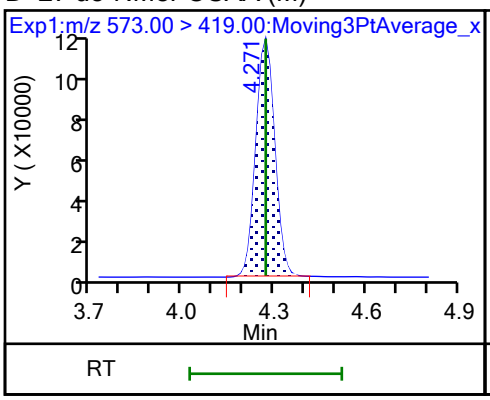
D 21 13C8 FOSA



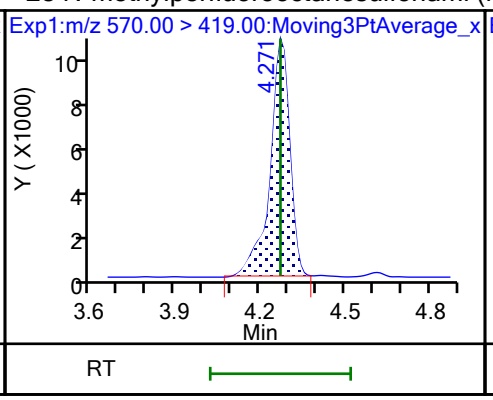
22 Perfluorooctanesulfonamide



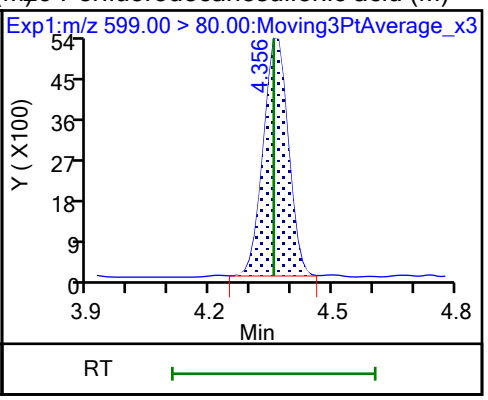
D 27 d3-NMeFOSAA (M)



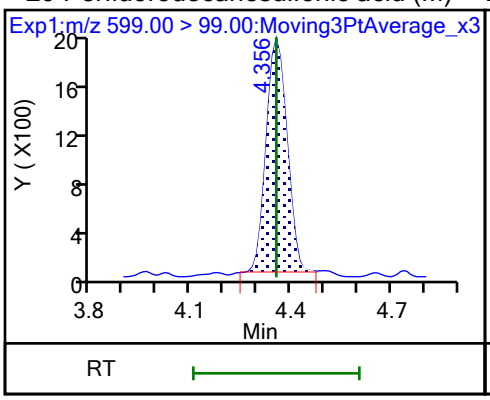
28 N-methylperfluorooctanesulfonami (M)



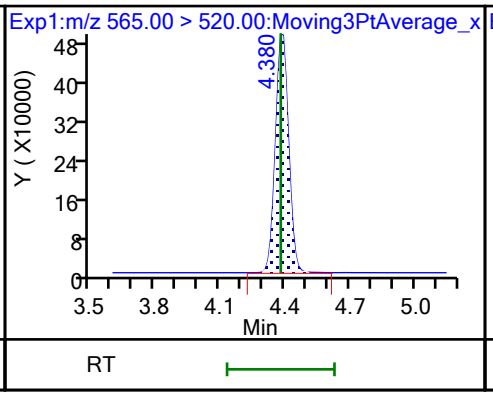
29 Perfluorodecanesulfonic acid (M)



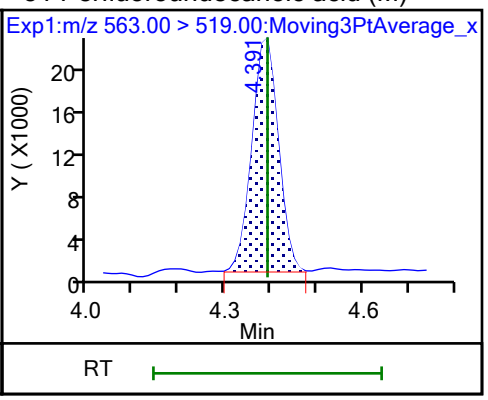
29 Perfluorodecanesulfonic acid (M)



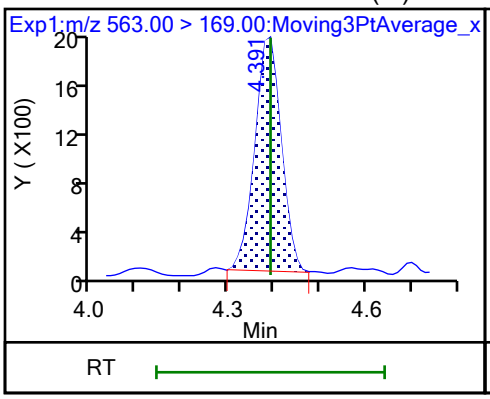
D 30 13C2 PFUnA



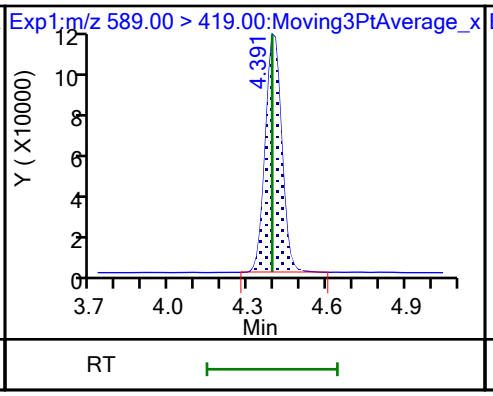
31 Perfluoroundecanoic acid (M)



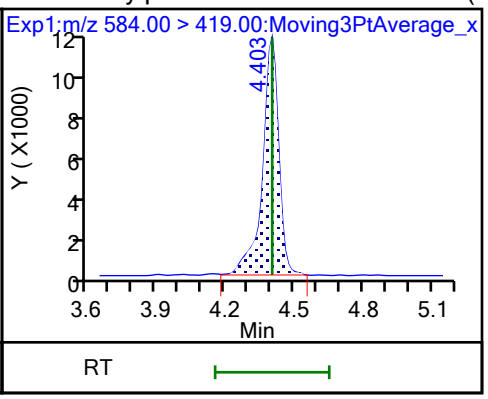
31 Perfluoroundecanoic acid (M)



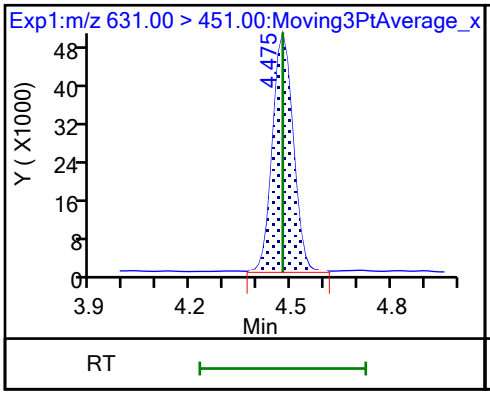
D 32 d5-NEtFOSAA



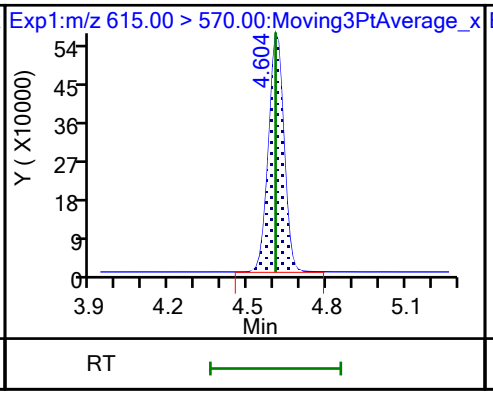
33 N-ethylperfluorooctanesulfonamid (M)



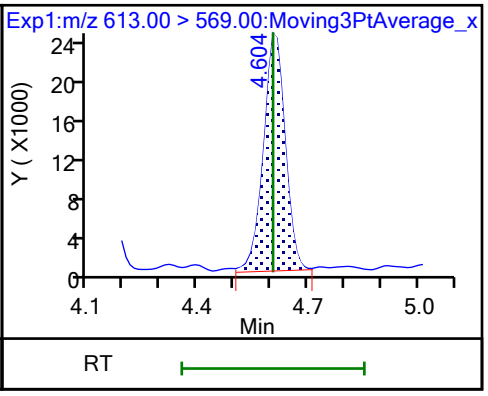
66 11-Chloroeicosafluoro-3-oxaundec



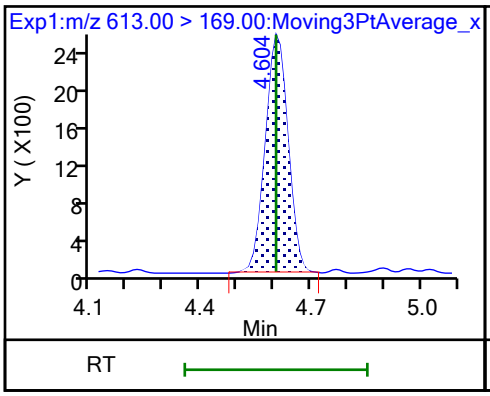
D 36 13C2 PFDoA



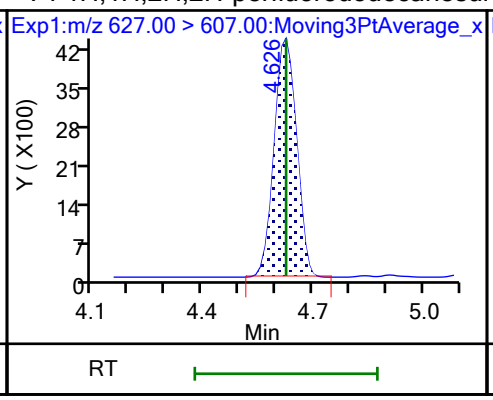
37 Perfluorododecanoic acid



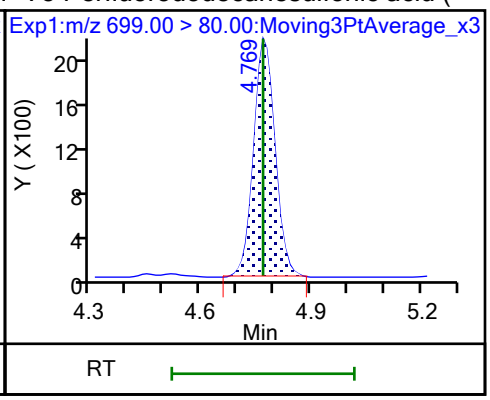
37 Perfluorododecanoic acid



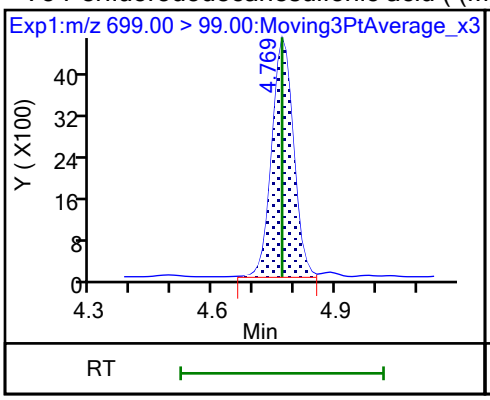
74 1H,1H,2H,2H-perfluorododecanesul



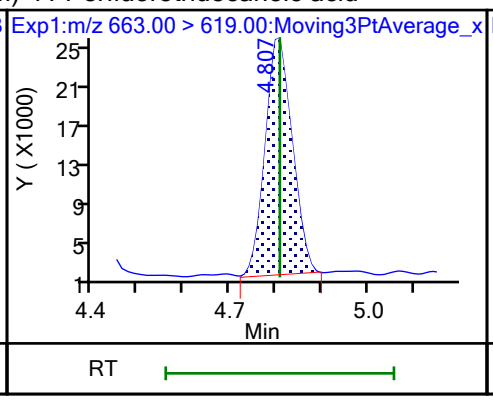
75 Perfluorododecanesulfonic acid (



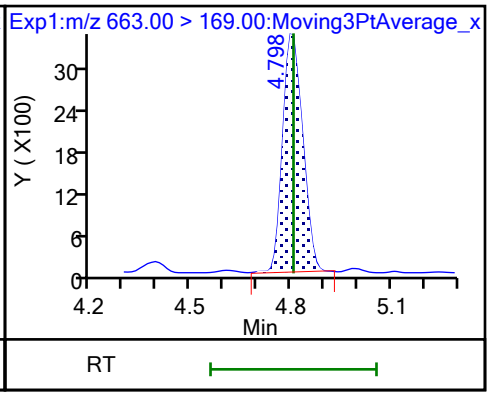
75 Perfluorododecanesulfonic acid ((M)



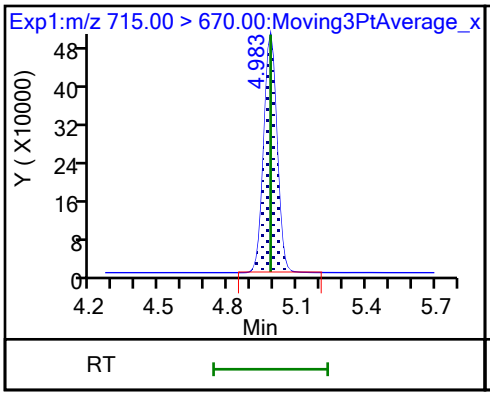
41 Perfluorotridecanoic acid



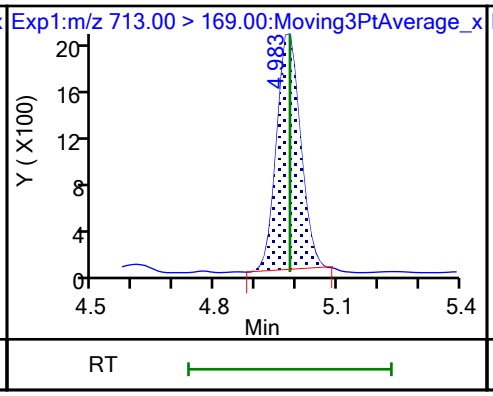
41 Perfluorotridecanoic acid



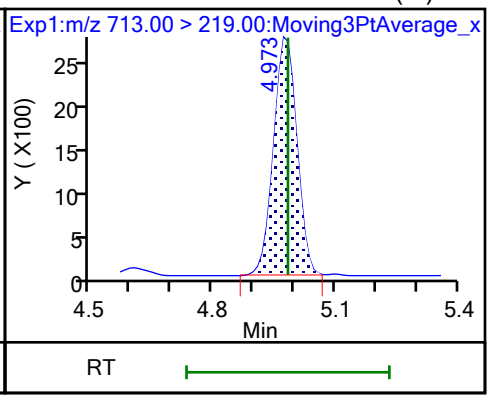
D 43 13C2 PFTeDA



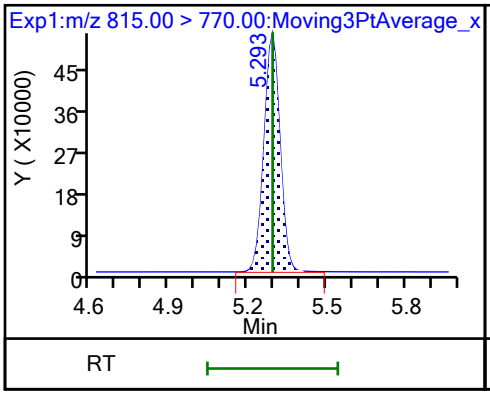
42 Perfluorotetradecanoic acid



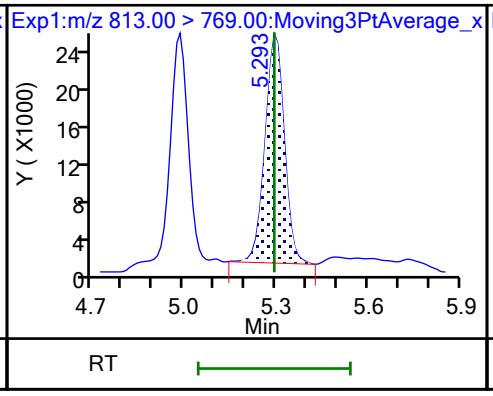
42 Perfluorotetradecanoic acid (M)



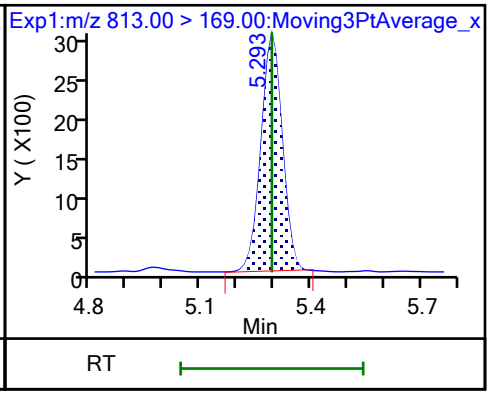
D 44 13C2 PFHxDA



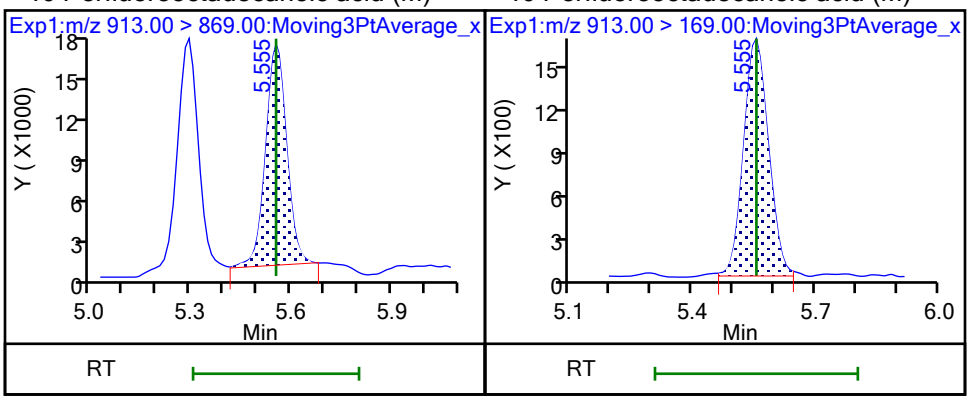
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196633/1 Calibration Date: 10/21/2023 00:17

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020C01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8947		2.43	2.50	-2.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.016		2.36	2.50	-5.8	
Perfluorobutanesulfonic acid	AveID	1.117	1.084		2.15	2.22	-3.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.402		2.35	2.34	0.2	
Perfluorohexanoic acid	AveID	1.100	1.096		2.49	2.50	-0.4	
Perfluoropentanesulfonic acid	AveID	1.306	1.321		2.38	2.35	1.2	
HFPODA	AveID	1.001	0.9592		2.40	2.50	-4.2	
Perfluoroheptanoic acid	AveID	1.121	1.108		2.47	2.50	-1.2	
Perfluorohexanesulfonic acid	AveID	1.107	1.037		2.14	2.29	-6.3	
DONA	AveID	5.754	5.778		2.37	2.36	0.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.737		2.38	2.38	0.2	
Perfluoroheptanesulfonic acid	AveID	1.445	1.378		2.27	2.38	-4.7	
Perfluorooctanoic acid	AveID	1.065	1.018		2.39	2.50	-4.4	
Perfluorooctanesulfonic acid	AveID	1.166	1.061		2.11	2.32	-9.0	
Perfluorononanoic acid	AveID	0.9800	0.9473		2.42	2.50	-3.3	
9Cl-PF3ONS	AveID	3.569	3.776		2.47	2.33	5.8	
Perfluorononanesulfonic acid	AveID	0.8874	0.8033		2.18	2.41	-9.5	
Perfluorodecanoic acid	AveID	0.999	0.8584		2.15	2.50	-14.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.330		2.54	2.40	5.8	
Perfluorooctanesulfonamide	AveID	0.9539	1.028		2.70	2.50	7.8	
NMeFOSAA	AveID	0.9074	0.8973		2.47	2.50	-1.1	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6204		2.19	2.41	-9.2	
Perfluoroundecanoic acid	AveID	1.031	1.060		2.57	2.50	2.9	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9799		2.45	2.50	-2.0	
11Cl-PF3OUdS	AveID	5.474	5.685		2.45	2.36	3.9	
Perfluorododecanoic acid	AveID	1.018	0.9572		2.35	2.50	-6.0	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.386		2.54	2.41	5.3	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2077		2.17	2.42	-10.3	
Perfluorotridecanoic acid	AveID	1.070	1.100		2.57	2.50	2.8	
Perfluorotetradecanoic acid	AveID	0.1118	0.1029		2.30	2.50	-8.0	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9899		2.48	2.50	-1.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7074		2.27	2.50	-9.4	
13C4 PFBA	Ave	0.9917	1.041		1.31	1.25	5.0	
13C5 PFPeA	Ave	0.7696	0.7623		1.24	1.25	-1.0	
13C3 PFBS	Ave	1.041	0.9735		1.09	1.16	-6.5	
M2-4:2 FTS	Ave	0.1204	0.1079		1.05	1.17	-10.4	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196633/1 Calibration Date: 10/21/2023 00:17

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020C01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7559		1.21	1.25	-3.5	
13C3 HFPO-DA	Ave	0.1516	0.1493		1.23	1.25	-1.5	
13C4 PFHpA	Ave	0.8590	0.8919		1.30	1.25	3.8	50.0
18O2 PFHxS	Ave	0.7464	0.7155		1.13	1.18	-4.1	50.0
M2-6:2 FTS	Ave	0.1551	0.1419		1.09	1.19	-8.5	
13C4 PFOA	Ave	0.9731	1.024		1.32	1.25	5.2	50.0
13C4 PFOS	Ave	0.4742	0.4550		1.15	1.20	-4.0	50.0
13C5 PFNA	Ave	1.059	1.100		1.30	1.25	3.9	50.0
13C2 PFDA	Ave	1.109	1.158		1.31	1.25	4.4	
M2-8:2 FTS	Ave	0.1744	0.1497		1.03	1.20	-14.1	
13C8 FOSA	Ave	0.9462	0.8426		1.11	1.25	-11.0	
d3-NMeFOSAA	Ave	0.2650	0.2489		1.17	1.25	-6.1	
13C2 PFUnA	Ave	1.047	0.9773		1.17	1.25	-6.6	
d5-NEtFOSAA	Ave	0.2552	0.2326		1.14	1.25	-8.8	
13C2 PFDoA	Ave	1.064	1.030		1.21	1.25	-3.2	
13C2 PFTeDA	Ave	1.059	1.033		1.22	1.25	-2.5	
13C2 PFHxDA	Ave	1.221	1.072		1.10	1.25	-12.2	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C01.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 21-Oct-2023 00:17:26 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057493-001 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 13:50:00
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.130	0.0	0.607	2140995	1.31		105	1518	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.0	1.000	3831002	2.43		97.3	395	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1567372	1.24		99.0	3636	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	3186112	2.35		94.2	93.9	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.703	1861530	1.09		93.5	114293	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	3848481	2.15	Target=2.06	97.0	1212	M
298.90 > 99.00	2.467	2.467	0.0	1.000	1910350		2.01(1.03-3.09)		644	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1414141	2.35		100	1355	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.786	207148	1.05		89.6	143	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1554239	1.21		96.5	4175	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	3408353	2.49	Target=14.12	99.6	796	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	224585		15.18(7.06-21.17)		314	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.884	3657870	2.38	Target=2.72	101	9047	M
349.00 > 99.00	2.810	2.798	0.012	0.888	1246967		2.93(1.36-4.09)		2663	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	588831	2.40		95.8	3346	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	306927	1.23		98.5	1283	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.901	1391732	1.13		95.9	5769	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	2789361	2.14	Target=3.32	93.7	4092	M
399.00 > 99.00	3.165	3.157	0.008	1.000	837181		3.33(1.66-4.98)		856	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.169	-0.004	1.000	4063151	2.47	Target=4.17	98.8	1007	
363.00 > 169.00	3.165	3.169	-0.004	1.000	940010		4.32(2.09-6.26)		1532	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1833868	1.30		104	12210	
77 DONA										
377.00 > 251.00	3.199	3.204	-0.005	0.838	10217254	2.37	Target=3.33	100	12086	
377.00 > 85.00	3.199	3.204	-0.005	0.838	2824031		3.62(1.66-4.99)		3864	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.506	-0.004	0.917	2457277	2.27	Target=4.83	95.3	4779	M
449.00 > 99.00	3.502	3.506	-0.004	0.917	484224		5.07(2.41-7.24)		1492	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.506	0.005	1.000	277251	1.09		91.5	709	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.506	-0.004	0.997	1519513	2.38		100	2136	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.515	0.005	1.003	2105679	1.32		105	12851	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.515	-0.004		2056102	1.25			5667	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.515	-0.004	0.997	4287213	2.39	Target=2.88	95.6	213	
413.00 > 169.00	3.520	3.515	0.005	1.000	1576182		2.72(1.44-4.32)		1670	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.823	-0.004	1.000	1842687	2.11	Target=4.24	91.0	2112	M
499.00 > 99.00	3.819	3.823	-0.004	1.000	417714		4.41(2.12-6.37)		997	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.088	894457	1.15		96.0	2598	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.846	-0.004	1.000	4285078	2.42	Target=8.34	96.7	697	
463.00 > 169.00	3.842	3.846	-0.004	1.000	489272		8.76(4.17-12.51)		2156	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2261644	1.30		104	11142	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.975	0.006	1.042	6592337	2.47		106	14876	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.106	-0.006	1.074	1446053	2.18	Target=2.17	90.5	7064	
549.00 > 99.00	4.100	4.106	-0.006	1.074	600594		2.41(1.08-3.25)		1639	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.130	0.006	1.000	4087576	2.15	Target=11.44	85.9	1249	
513.00 > 169.00	4.136	4.130	0.006	1.000	373453		10.95(5.72-17.16)		1986	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.178	2380839	1.31		104	10759	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.142	0.006	1.181	294931	1.03		85.9	783	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.142	0.006	1.000	1377155	2.54		106	4277	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.235	0.007	1.208	1732379	1.11		89.0	5104	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.235	0.007	1.000	3562812	2.70		108	5935	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.271	-0.006	1.215	511665	1.17		93.9	977	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.278	4.271	0.007	1.003	918231	2.47		98.9	1200	
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.356	0.007	1.142	1120287	2.19	Target=2.37	90.8	5216	
599.00 > 99.00	4.363	4.356	0.007	1.142	433709		2.58(1.19-3.56)		3166	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	2009374	1.17		93.4	5560	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.391	-0.004	1.000	4261703	2.57	Target=12.20	103	954	
563.00 > 169.00	4.387	4.391	-0.004	1.000	367218		11.61(6.10-18.31)		3537	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.391	0.007	1.253	478299	1.14		91.2	1369	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	937403	2.45		98.0	1746	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.475	-0.007	1.170	10032165	2.45		104	5701	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.313	2118088	1.21		96.8	9213	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.604	0.006	1.000	4054848	2.35	Target=8.47	94.0	272	M
613.00 > 169.00	4.610	4.604	0.006	1.000	485144		8.36(4.23-12.70)		3394	M
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.626	-0.005	1.114	822412	2.54		105	8777	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.769	0.005	1.250	376255	2.17	Target=0.48	89.7	8046	
699.00 > 99.00	4.774	4.769	0.005	1.250	808546		0.47(0.24-0.72)		4839	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.807	-0.004	1.042	4658449	2.57	Target=6.41	103	306	M
663.00 > 169.00	4.803	4.807	-0.004	1.042	698890		6.67(3.21-9.62)		3802	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	2124016	1.22		97.5	8436	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.983	-0.004	1.000	436921	2.30	Target=0.87	92.0	4642	
713.00 > 219.00	4.979	4.983	-0.004	1.000	471656		0.93(0.43-1.30)		3426	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.293	0.002	1.508	2204424	1.10		87.8	5435	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.293	0.002	1.000	4364348	2.47	Target=7.89	99.0	294	M
813.00 > 169.00	5.295	5.293	0.002	1.000	533378		8.18(3.94-11.83)		4233	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.557	5.555	0.002	1.049	3118988	2.26	Target=9.39	90.6	336	M
913.00 > 169.00	5.557	5.555	0.002	1.049	326048		9.57(4.69-14.08)		1116	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

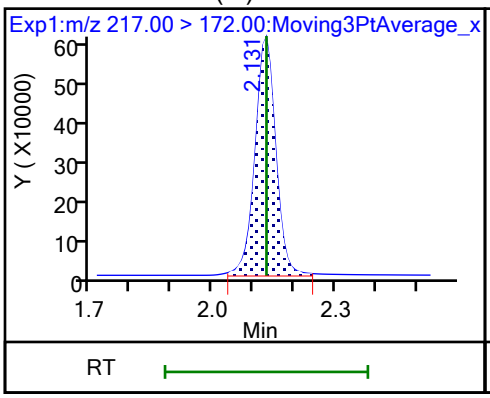
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 08:39:40 Chrom Revision: 2.3 18-Oct-2023 21:16:54

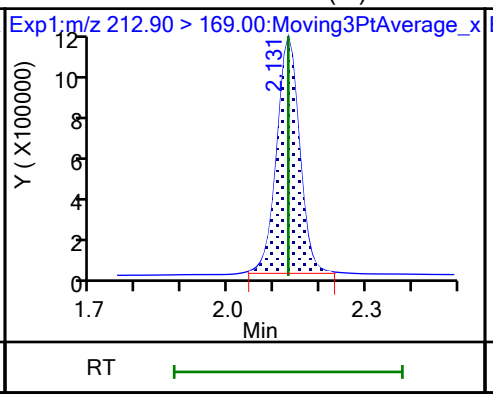
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C01.d
Injection Date: 21-Oct-2023 00:17:26 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

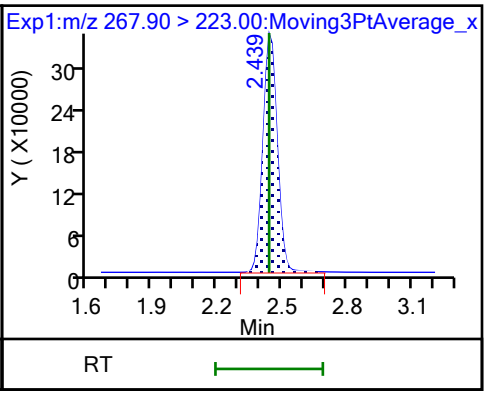
D 1 13C4 PFBA (M)



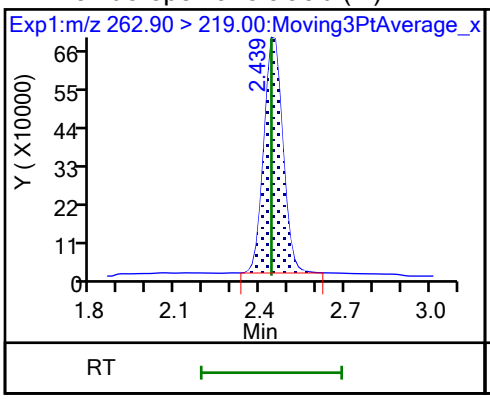
2 Perfluorobutanoic acid (M)



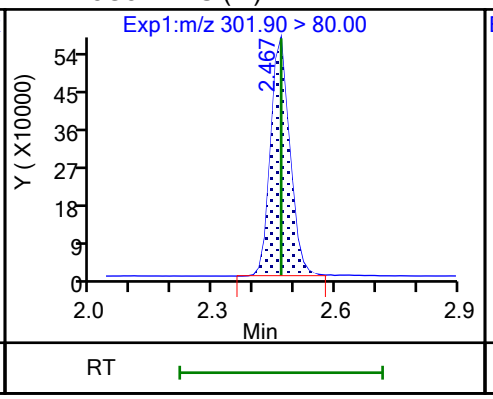
D 3 13C5 PFPeA



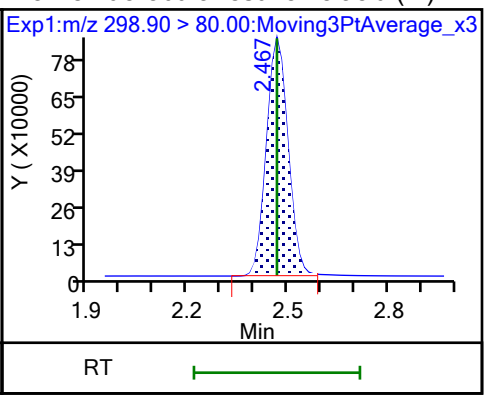
4 Perfluoropentanoic acid (M)



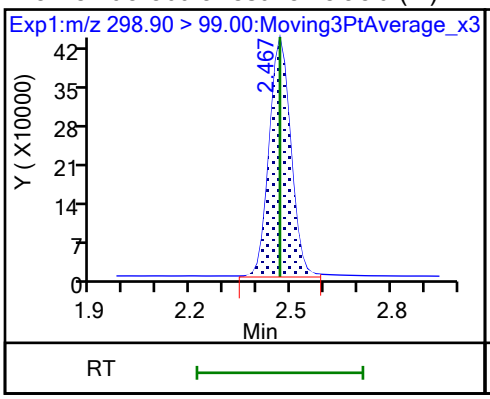
D 47 13C3 PFBS (M)



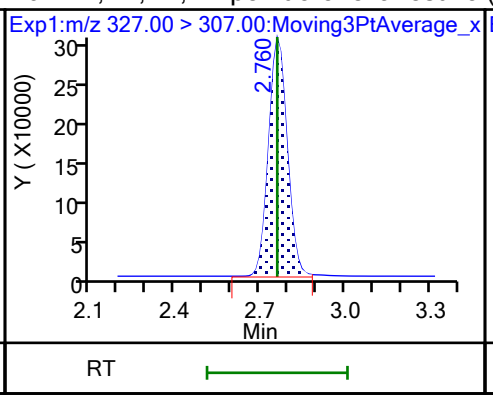
5 Perfluorobutanesulfonic acid (M)



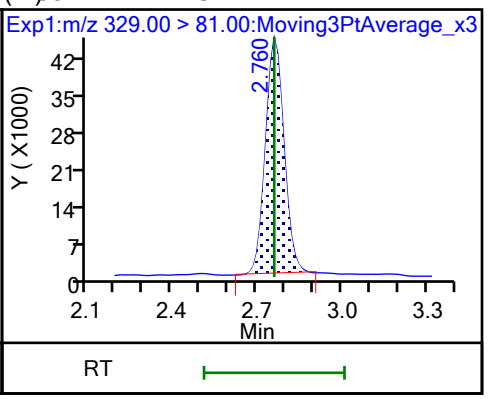
5 Perfluorobutanesulfonic acid (M)



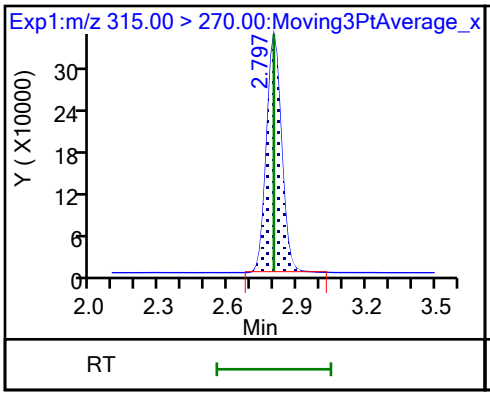
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



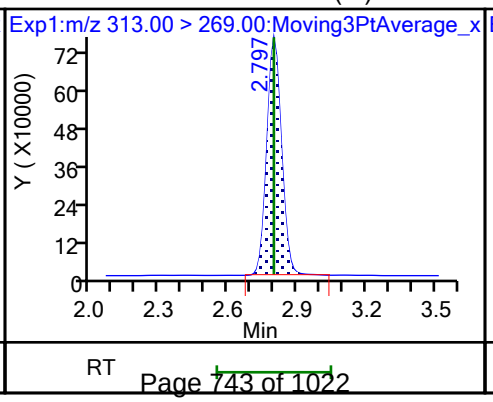
D 60 M2-4:2 FTS



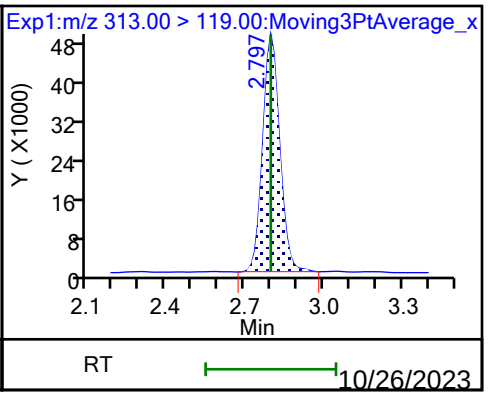
D 7 13C2 PFHxA



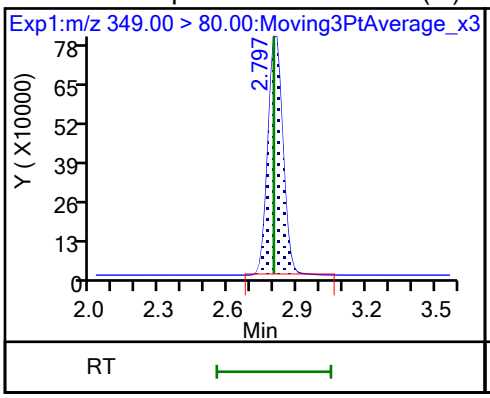
6 Perfluorohexanoic acid (M)



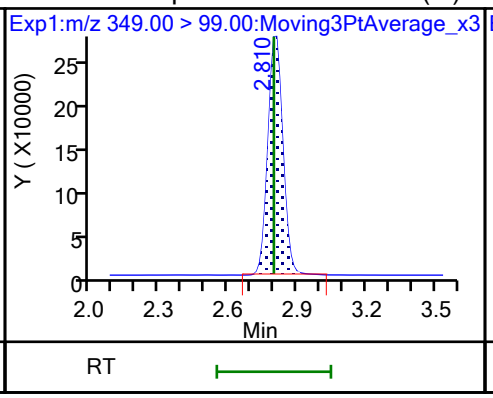
6 Perfluorohexanoic acid



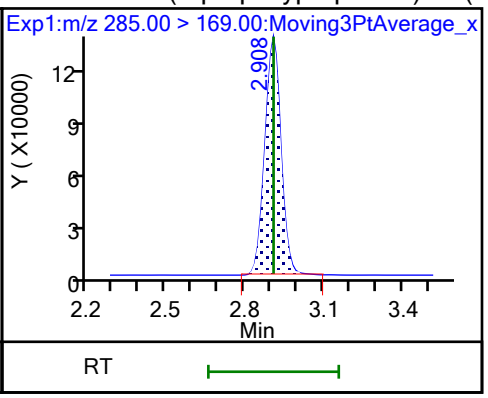
70 Perfluoropentanesulfonic acid (M)



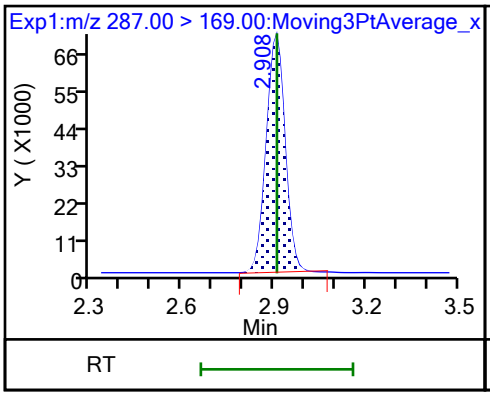
70 Perfluoropentanesulfonic acid (M)



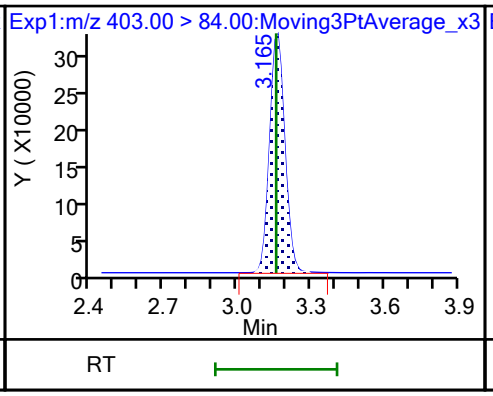
67 Perfluoro(2-propoxypropanoic) ac (M)



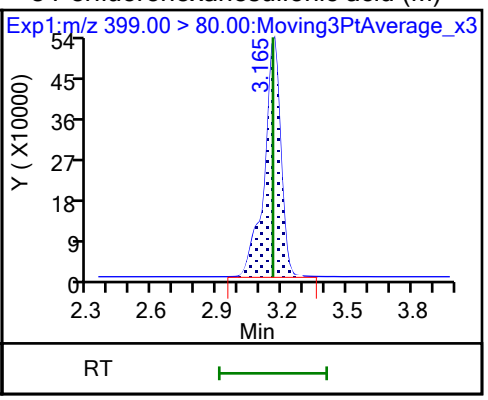
D 64 13C3 HFPO-DA



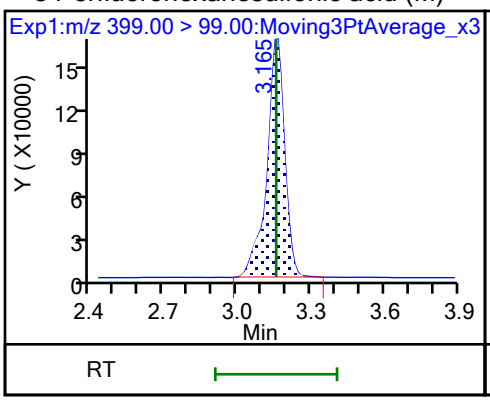
D 11 18O2 PFHxS



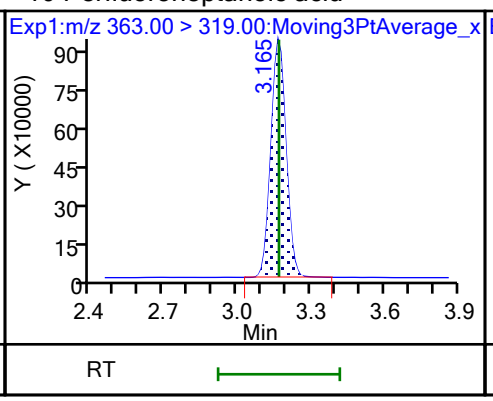
8 Perfluorohexanesulfonic acid (M)



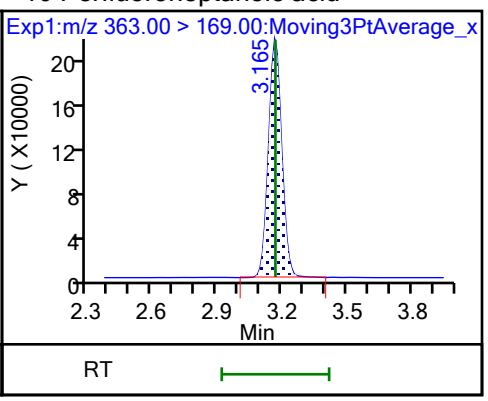
8 Perfluorohexanesulfonic acid (M)



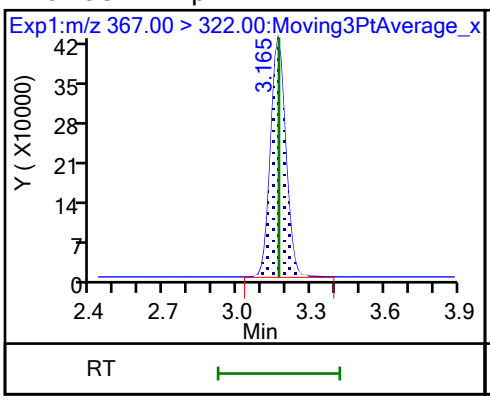
10 Perfluoroheptanoic acid



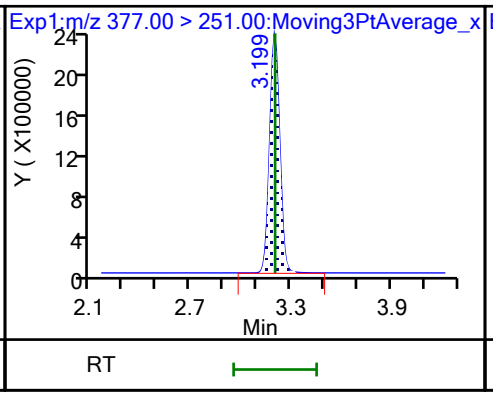
10 Perfluoroheptanoic acid



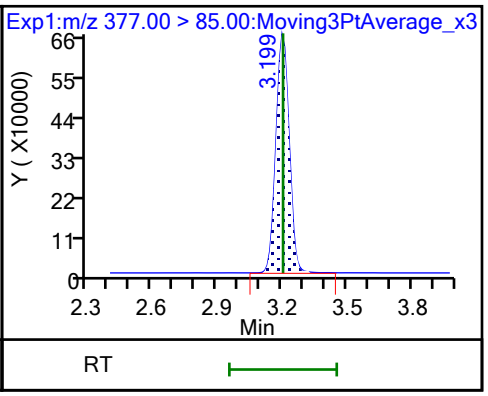
D 9 13C4 PFHpA



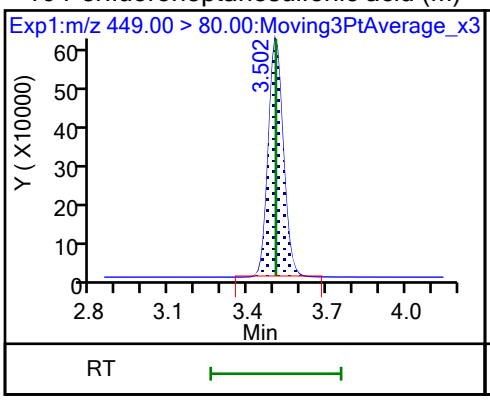
77 DONA



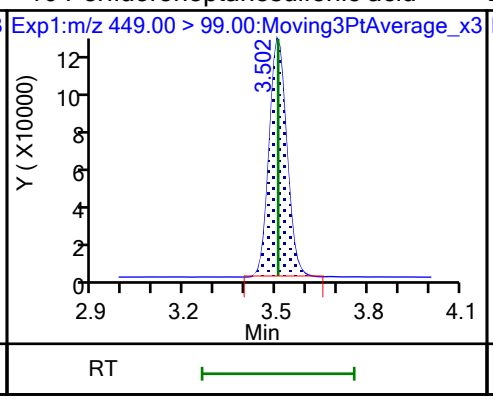
77 DONA



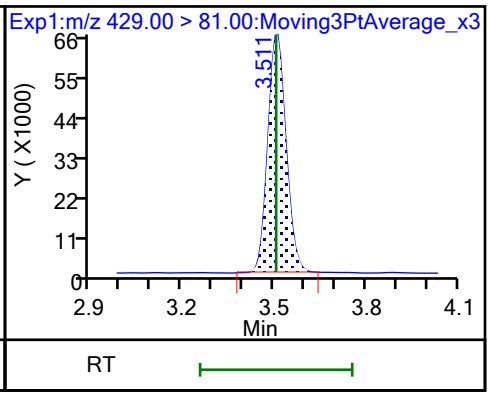
16 Perfluoroheptanesulfonic acid (M)



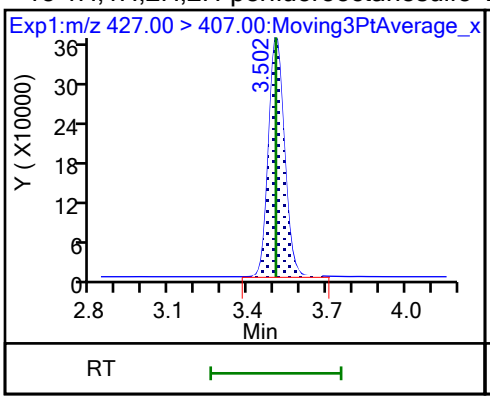
16 Perfluoroheptanesulfonic acid



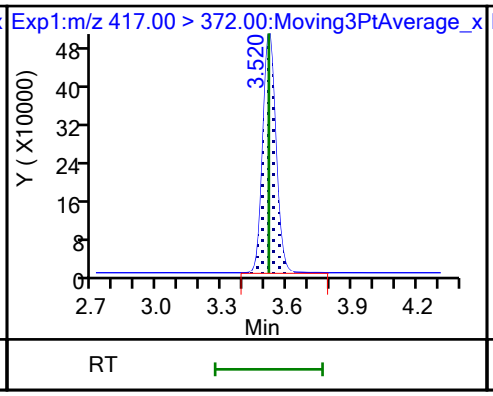
D 12 M2-6:2 FTS



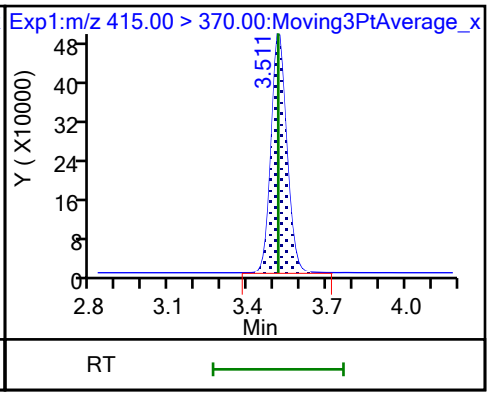
13 1H,1H,2H,2H-perfluorooctanesulfo



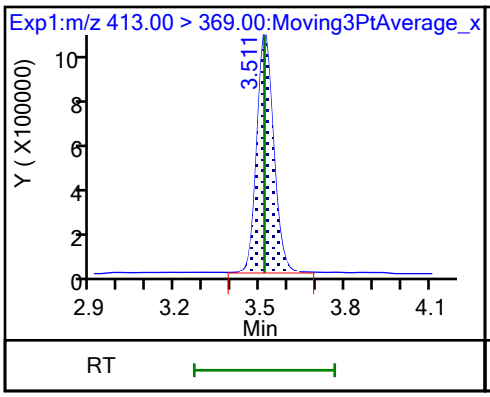
D 14 13C4 PFOA



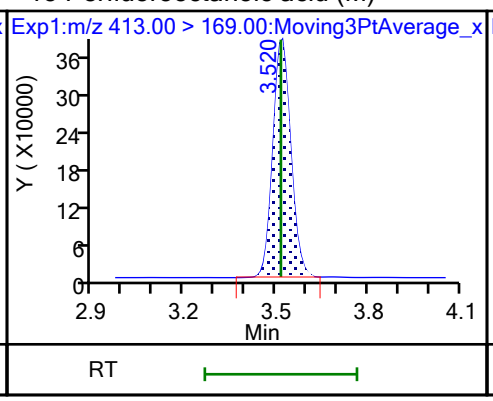
* 62 13C2 PFOA



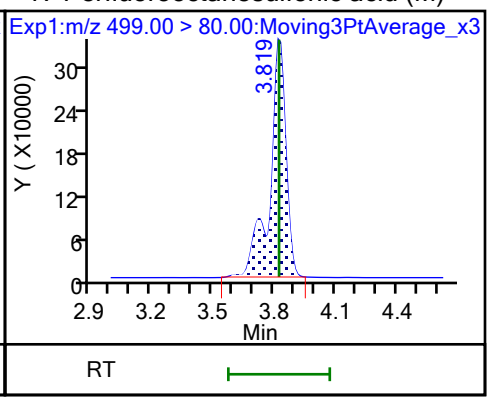
15 Perfluorooctanoic acid



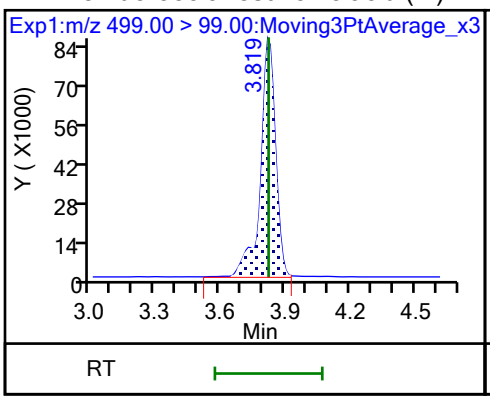
15 Perfluorooctanoic acid (M)



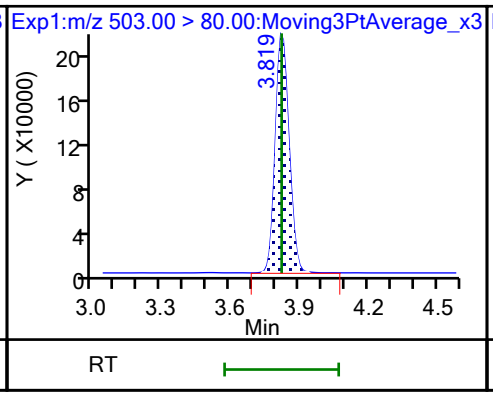
17 Perfluorooctanesulfonic acid (M)



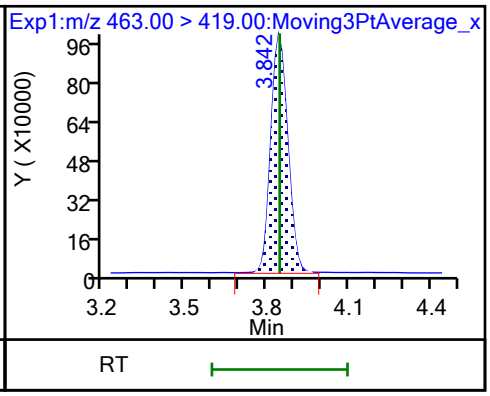
17 Perfluorooctanesulfonic acid (M)



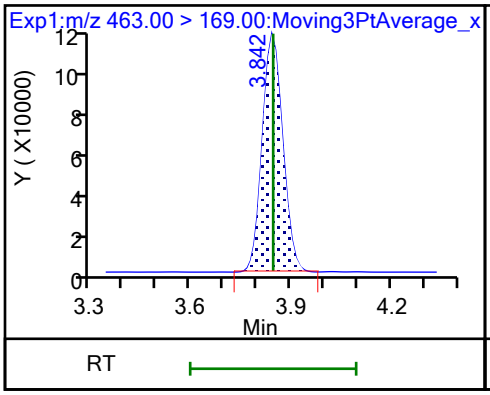
D 18 13C4 PFOS



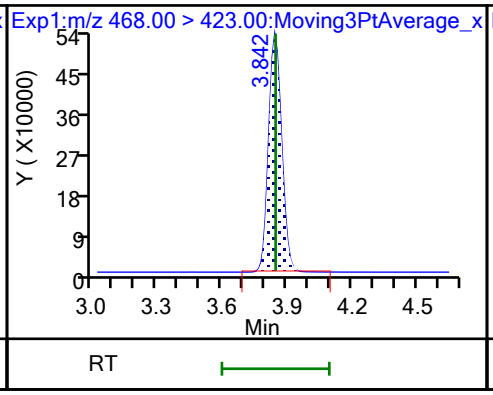
20 Perfluorononanoic acid



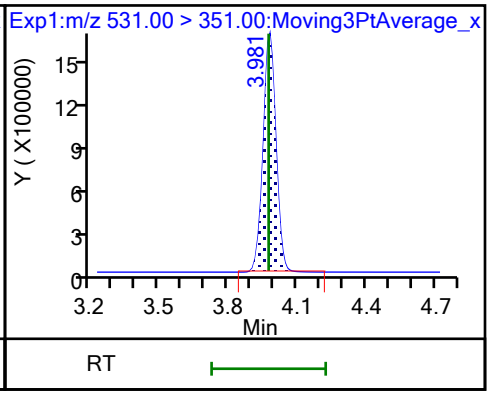
20 Perfluorononanoic acid



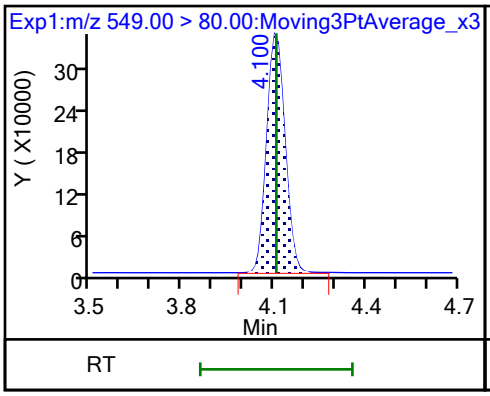
D 19 13C5 PFNA



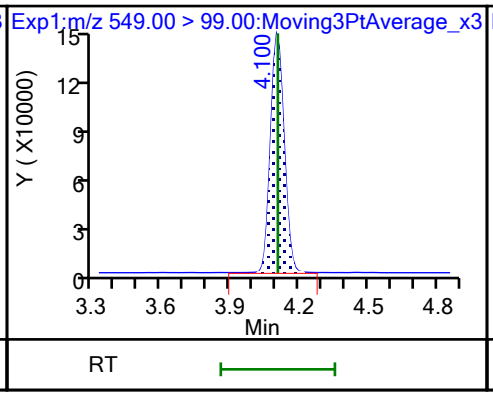
69 9-Chlorohexadecafluoro-3-oxanona (M)



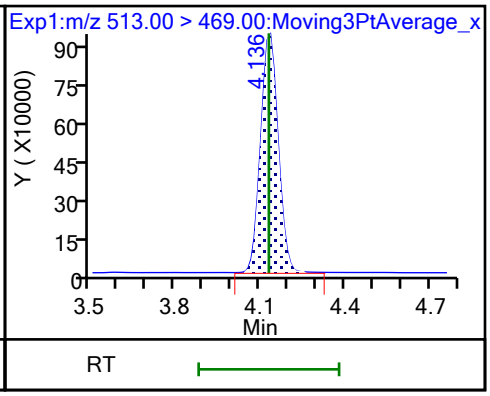
68 Perfluorononanesulfonic acid



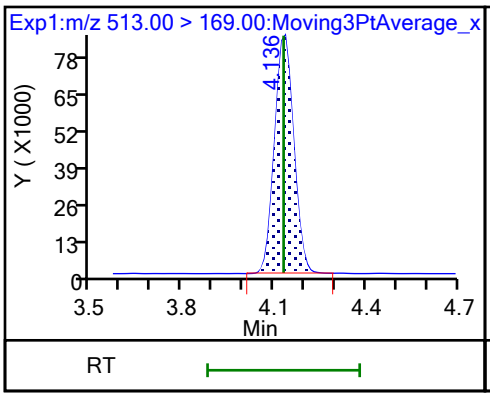
68 Perfluorononanesulfonic acid



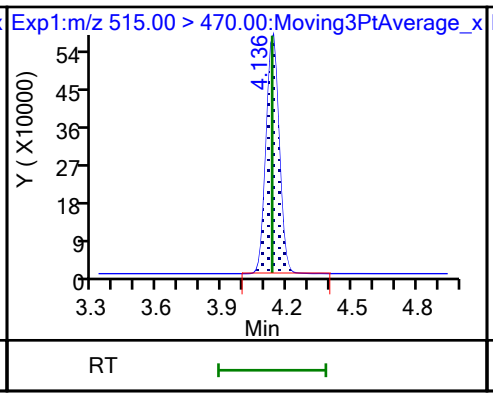
24 Perfluorodecanoic acid



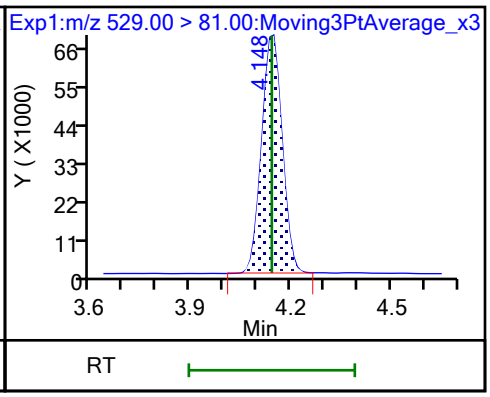
24 Perfluorodecanoic acid



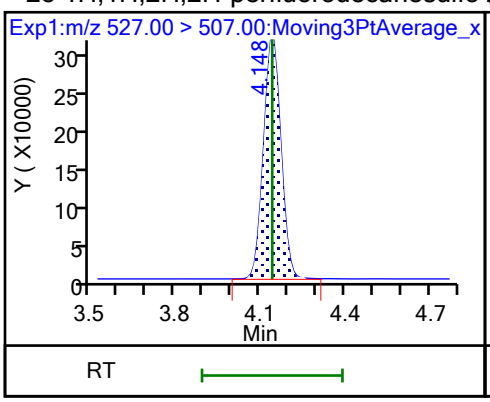
D 23 13C2 PFDA



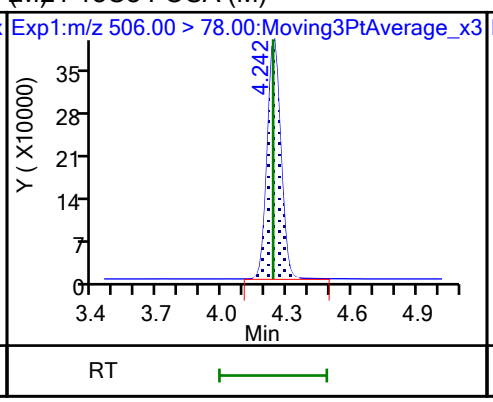
D 26 M2-8:2 FTS



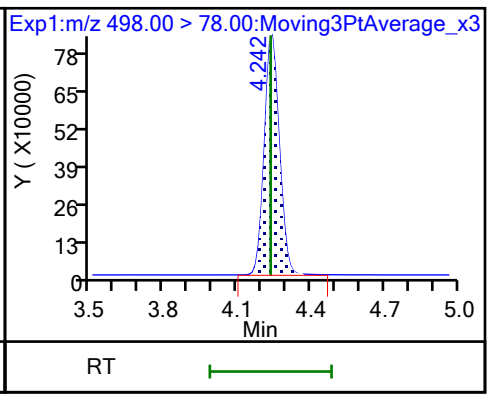
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



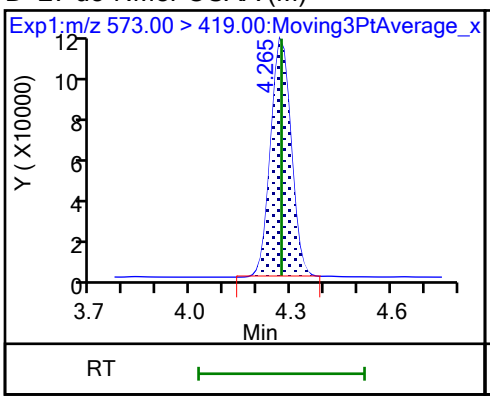
D 21 13C8 FOSA (M)



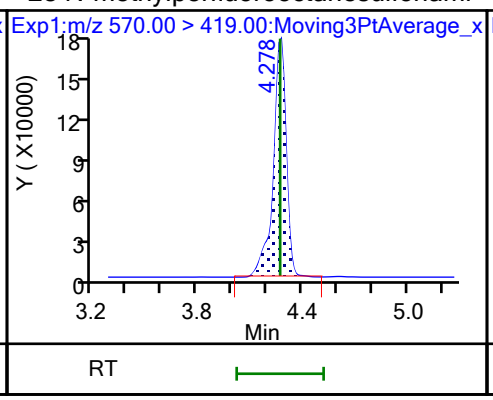
22 Perfluorooctanesulfonamide



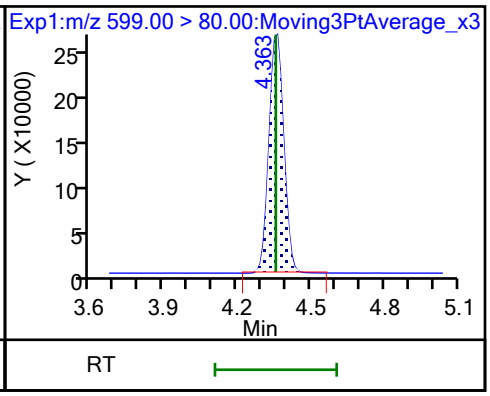
D 27 d3-NMeFOSAA (M)



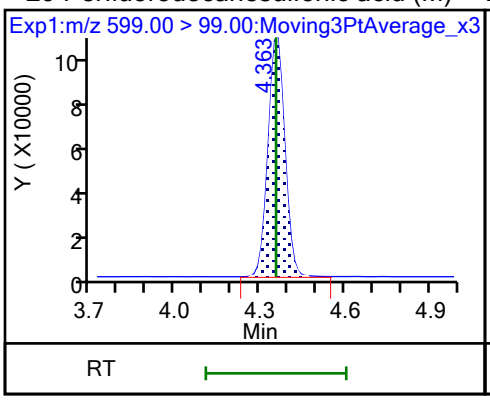
28 N-methylperfluorooctanesulfonami



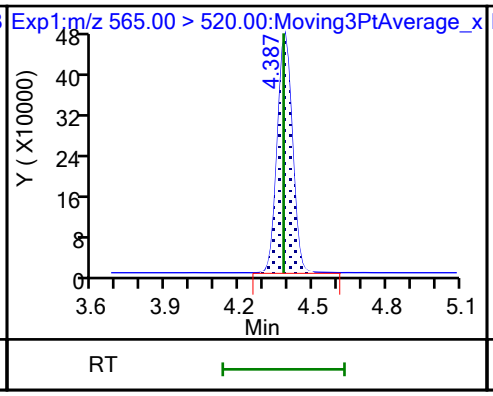
29 Perfluorodecanesulfonic acid



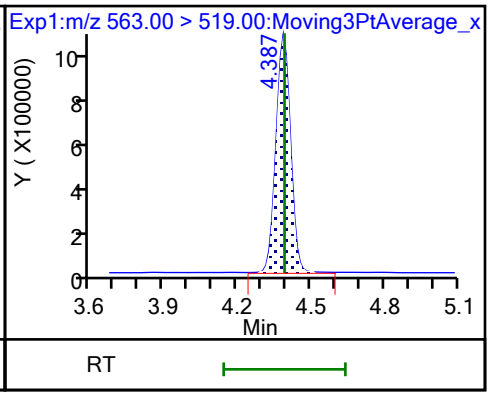
29 Perfluorodecanesulfonic acid (M)



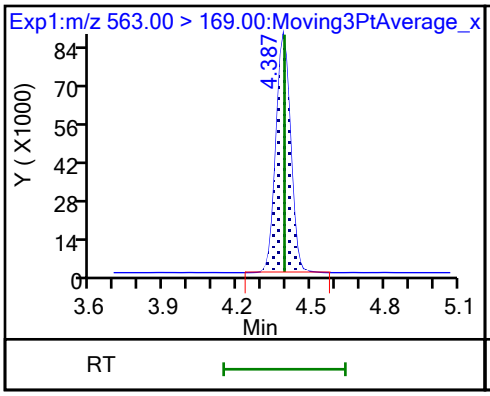
D 30 13C2 PFUnA



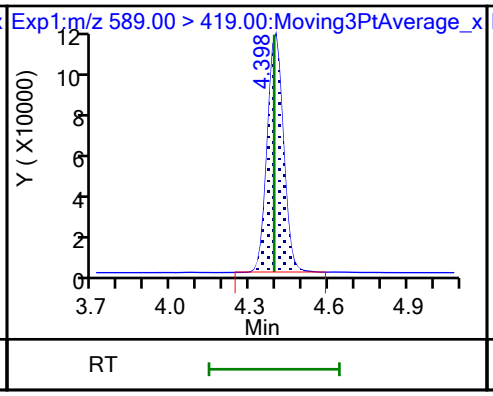
31 Perfluoroundecanoic acid



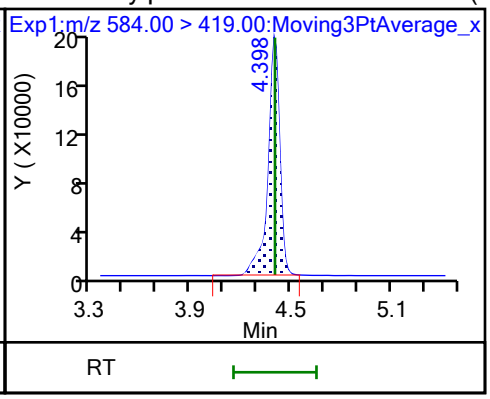
31 Perfluoroundecanoic acid



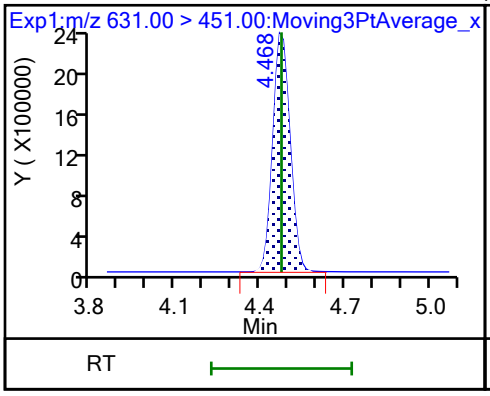
D 32 d5-NEtFOSAA



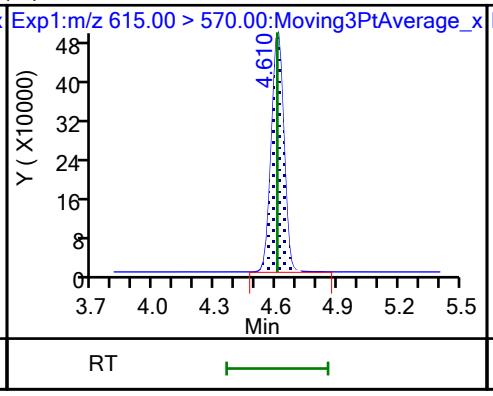
33 N-ethylperfluorooctanesulfonamid (M)



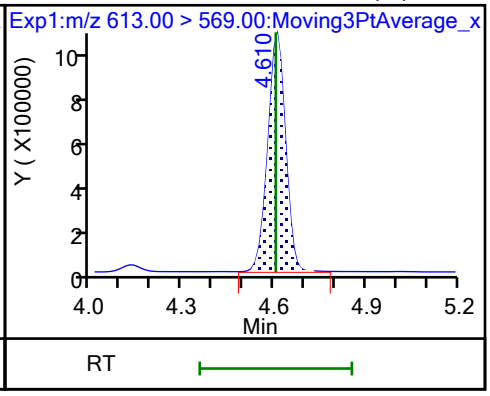
66 11-Chloroeicosafluoro-3-oxaundec (M)



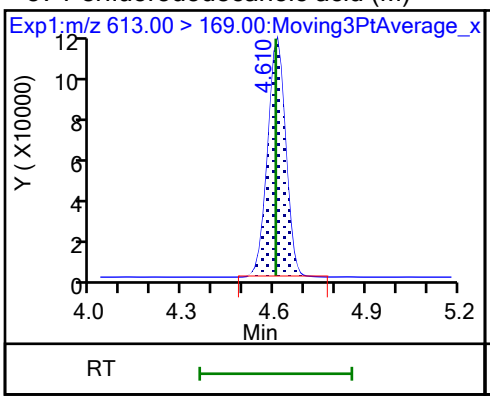
D 36 13C2 PFDoA



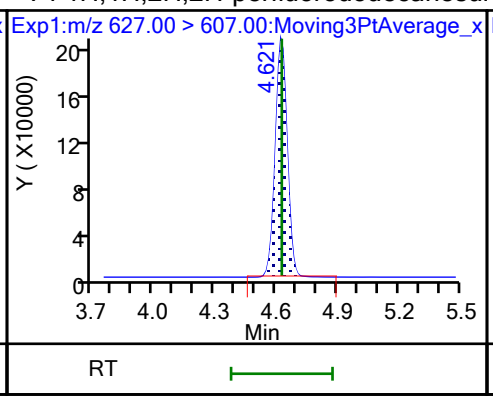
37 Perfluorododecanoic acid (M)



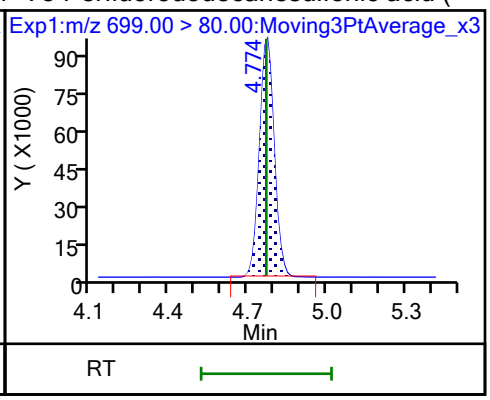
37 Perfluorododecanoic acid (M)



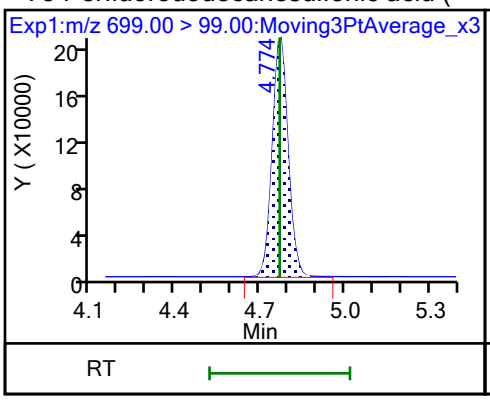
74 1H,1H,2H,2H-perfluorododecanesul



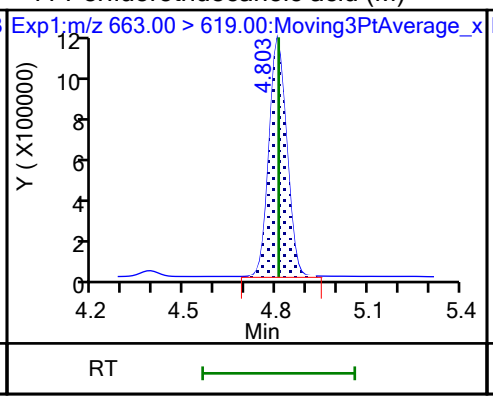
75 Perfluorododecanesulfonic acid (



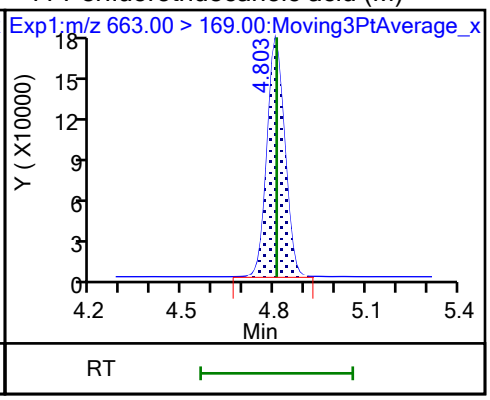
75 Perfluorododecanesulfonic acid (



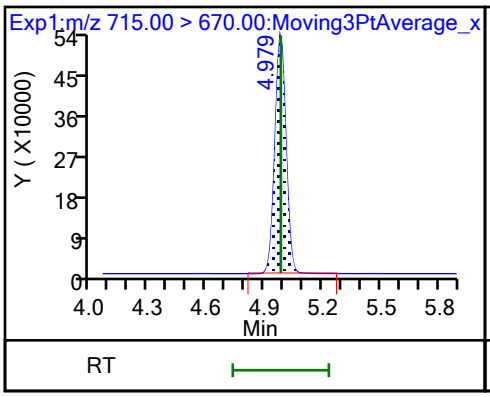
41 Perfluorotridecanoic acid (M)



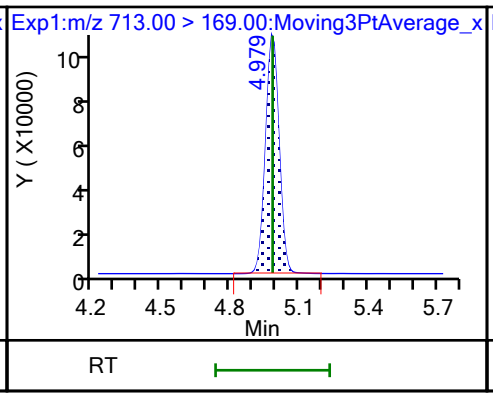
41 Perfluorotridecanoic acid (M)



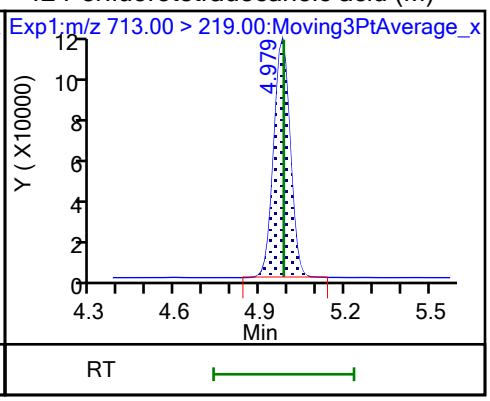
D 43 13C2 PFTeDA



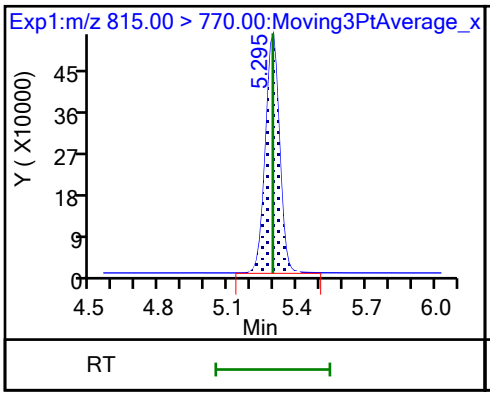
42 Perfluorotetradecanoic acid



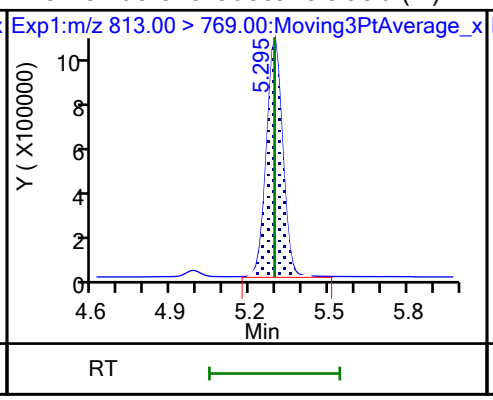
42 Perfluorotetradecanoic acid (M)



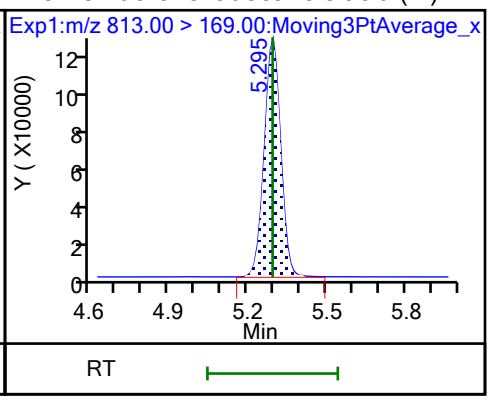
D 44 13C2 PFHxDA



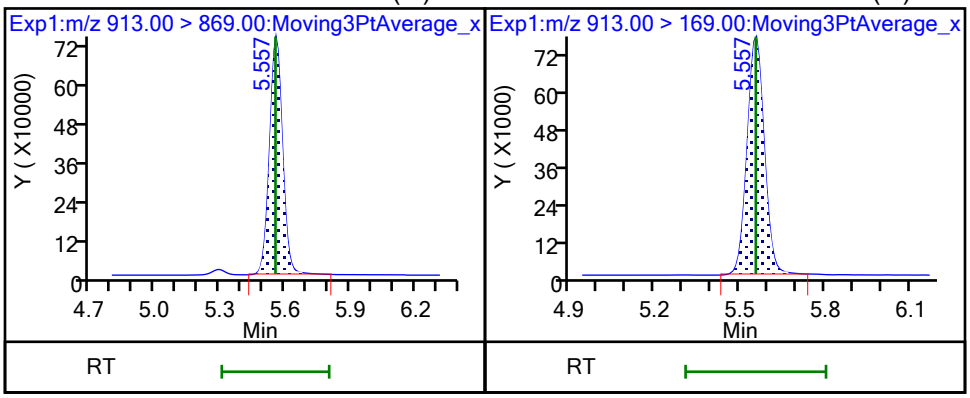
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196633/15 Calibration Date: 10/21/2023 02:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020C15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8745		0.926	1.00	-7.4	30.0
Perfluoropentanoic acid	AveID	1.079	1.082		1.00	1.00	0.2	
Perfluorobutanesulfonic acid	AveID	1.117	1.092		0.867	0.887	-2.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.424		0.945	0.937	0.8	
Perfluorohexanoic acid	AveID	1.100	0.9871		0.897	1.00	-10.3	
Perfluoropentanesulfonic acid	AveID	1.306	1.288		0.928	0.941	-1.4	
HFPODA	AveID	1.001	0.9535		0.952	1.00	-4.8	
Perfluoroheptanoic acid	AveID	1.121	1.087		0.969	1.00	-3.1	
Perfluorohexanesulfonic acid	AveID	1.107	1.035		0.855	0.914	-6.5	
DONA	AveID	5.754	5.649		0.928	0.945	-1.8	
Perfluoroheptanesulfonic acid	AveID	1.445	1.373		0.906	0.953	-5.0	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.863		0.996	0.951	4.8	
Perfluorooctanoic acid	AveID	1.065	0.9679		0.909	1.00	-9.1	
Perfluorooctanesulfonic acid	AveID	1.166	1.071		0.852	0.928	-8.2	
Perfluorononanoic acid	AveID	0.9800	0.9444		0.964	1.00	-3.6	
9Cl-PF3ONS	AveID	3.569	3.762		0.983	0.933	5.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7704		0.835	0.962	-13.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.355		1.03	0.960	7.0	
Perfluorodecanoic acid	AveID	0.999	0.9348		0.935	1.00	-6.5	
Perfluorooctanesulfonamide	AveID	0.9539	0.9765		1.02	1.00	2.4	
NMeFOSAA	AveID	0.9074	0.8598		0.948	1.00	-5.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5966		0.843	0.965	-12.6	
Perfluoroundecanoic acid	AveID	1.031	1.045		1.01	1.00	1.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9841		0.984	1.00	-1.6	
11Cl-PF3OUdS	AveID	5.474	5.827		1.00	0.943	6.5	
Perfluorododecanoic acid	AveID	1.018	0.9662		0.949	1.00	-5.1	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.463		1.07	0.964	11.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2086		0.872	0.968	-9.9	
Perfluorotridecanoic acid	AveID	1.070	1.068		0.998	1.00	-0.2	
Perfluorotetradecanoic acid	AveID	0.1118	0.1041		0.931	1.00	-6.9	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.002		1.00	1.00	0.2	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7099		0.909	1.00	-9.1	
13C4 PFBA	Ave	0.9917	0.9739		1.23	1.25	-1.8	
13C5 PFPeA	Ave	0.7696	0.6836		1.11	1.25	-11.2	
13C3 PFBS	Ave	1.041	0.8700		0.971	1.16	-16.5	
M2-4:2 FTS	Ave	0.1204	0.0971		0.942	1.17	-19.3	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196633/15 Calibration Date: 10/21/2023 02:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020C15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7417		1.18	1.25	-5.3	
13C3 HFPO-DA	Ave	0.1516	0.1352		1.12	1.25	-10.8	
13C4 PFHpA	Ave	0.8590	0.8019		1.17	1.25	-6.6	50.0
18O2 PFHxS	Ave	0.7464	0.6467		1.03	1.18	-13.4	50.0
M2-6:2 FTS	Ave	0.1551	0.1243		0.952	1.19	-19.9	
13C4 PFOA	Ave	0.9731	0.9391		1.21	1.25	-3.5	50.0
13C4 PFOS	Ave	0.4742	0.4190		1.06	1.20	-11.6	50.0
13C5 PFNA	Ave	1.059	0.9629		1.14	1.25	-9.1	50.0
13C2 PFDA	Ave	1.109	1.008		1.14	1.25	-9.1	
M2-8:2 FTS	Ave	0.1744	0.1319		0.905	1.20	-24.4	
13C8 FOSA	Ave	0.9462	0.7865		1.04	1.25	-16.9	
d3-NMeFOSAA	Ave	0.2650	0.2344		1.11	1.25	-11.5	
13C2 PFUnA	Ave	1.047	0.9157		1.09	1.25	-12.5	
d5-NEtFOSAA	Ave	0.2552	0.2176		1.07	1.25	-14.7	
13C2 PFDoA	Ave	1.064	0.9669		1.14	1.25	-9.1	
13C2 PFTeDA	Ave	1.059	0.9003		1.06	1.25	-15.0	
13C2 PFHxDA	Ave	1.221	0.9602		0.983	1.25	-21.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C15.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 21-Oct-2023 02:11:45 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057493-015 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:40:15 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:13:34
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.607	2173455	1.23		98.2	1327	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1520538	0.9262		92.6	157	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1525561	1.11		88.8	1871	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.006	1319921	1.00		100	33.6	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1805656	0.9712		83.5	91577	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1504962	0.8675	Target=2.06	97.8	769	M
298.90 > 99.00	2.467	2.467	0.0	1.000	743385		2.02(1.03-3.09)		292	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	556418	0.9449		101	1824	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	202453	0.9416		80.7	131	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1655097	1.18		94.7	6206	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	1306949	0.8970	Target=14.12	89.7	174	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	91019		14.36(7.06-21.17)		99.6	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.798	-0.001	0.884	1398922	0.9278	Target=2.72	98.6	2407	
349.00 > 99.00	2.797	2.798	-0.001	0.884	475392		2.94(1.36-4.09)		793	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	230205	0.9524		95.2	725	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	301776	1.12		89.2	2010	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.901	1365339	1.02		86.6	5666	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	1092610	0.8548	Target=3.32	93.5	1810	M
399.00 > 99.00	3.165	3.157	0.008	1.000	320109		3.41(1.66-4.98)		334	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.169	-0.004	1.000	1555548	0.9694	Target=4.17	96.9	269	M
363.00 > 169.00	3.165	3.169	-0.004	1.000	384840		4.04(2.09-6.26)		919	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.901	1789485	1.17		93.4	5494	
77 DONA										M
377.00 > 251.00	3.199	3.204	-0.005	0.838	3992920	0.9277	Target=3.33	98.2	1503	M
377.00 > 85.00	3.199	3.204	-0.005	0.838	1090263		3.66(1.66-4.99)		1641	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.506	-0.004	0.917	978925	0.9055	Target=4.83	95.0	2863	
449.00 > 99.00	3.502	3.506	-0.004	0.917	195849		5.00(2.41-7.24)		706	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.506	-0.004	0.997	263552	0.9518		80.1	577	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.506	0.005	1.003	604296	1.00		105	669	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.515	-0.004	1.000	2095683	1.21		96.5	10042	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.515	-0.004		2231631	1.25			6293	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.003	1622736	0.9087	Target=2.88	90.9	75.0	
413.00 > 169.00	3.520	3.515	0.005	1.003	606212		2.68(1.44-4.32)		1048	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.823	-0.004	1.000	743223	0.8518	Target=4.24	91.8	1282	M
499.00 > 99.00	3.819	3.823	-0.004	1.000	166046		4.48(2.12-6.37)		512	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.088	893891	1.06		88.4	3123	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.846	-0.004	1.000	1623545	0.9636	Target=8.34	96.4	259	
463.00 > 169.00	3.842	3.846	-0.004	1.000	198828		8.17(4.17-12.51)		1260	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2148891	1.14		90.9	7033	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.975	0.006	1.042	2625203	0.9833		105	9797	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.106	-0.006	1.074	554401	0.8352	Target=2.17	86.8	2482	
549.00 > 99.00	4.100	4.106	-0.006	1.074	235615		2.35(1.08-3.25)		1086	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.130	0.006	1.000	1682206	0.9354	Target=11.44	93.5	539	
513.00 > 169.00	4.136	4.130	0.006	1.000	166873		10.08(5.72-17.16)		841	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.178	2249418	1.14		90.9	7387	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.178	281910	0.9054		75.6	836	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.142	-0.006	1.000	532241	1.03		107	2976	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.208	1755082	1.04		83.1	7067	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.235	0.007	1.000	1371077	1.02		102	5188	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.271	-0.006	1.215	523134	1.11		88.5	1489	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.271	-0.006	1.000	359827	0.9475		94.8	707	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.356	0.007	1.142	430653	0.8430	Target=2.37	87.4	3292	
599.00 > 99.00	4.363	4.356	0.007	1.142	174049		2.47(1.19-3.56)		1113	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	2043604	1.09		87.5	6306	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.391	-0.004	1.000	1708796	1.01	Target=12.20	101	444	
563.00 > 169.00	4.387	4.391	-0.004	1.000	154451		11.06(6.10-18.31)		883	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.398	4.391	0.007	1.253	485634	1.07		85.3	822	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.403	-0.005	1.000	382314	0.9839		98.4	739	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.475	-0.007	1.170	4110238	1.00		106	4643	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.313	2157777	1.14		90.9	6980	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.604	0.006	1.000	1667886	0.9493	Target=8.47	94.9	99.1	
613.00 > 169.00	4.610	4.604	0.006	1.000	200148		8.33(4.23-12.70)		1325	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.626	-0.005	1.117	331996	1.07		111	4043	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.769	0.005	1.250	151021	0.8722	Target=0.48	90.1	2278	
699.00 > 99.00	4.774	4.769	0.005	1.250	319239		0.47(0.24-0.72)		3615	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.807	-0.004	1.042	1843330	1.00	Target=6.41	99.8	123	M
663.00 > 169.00	4.803	4.807	-0.004	1.042	264582		6.97(3.21-9.62)		1466	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	2009072	1.06		85.0	6167	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.983	-0.004	1.000	167325	0.9311	Target=0.87	93.1	1574	
713.00 > 219.00	4.979	4.983	-0.004	1.000	174750		0.96(0.43-1.30)		2020	M

Report Date: 25-Oct-2023 08:40:16 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C15.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.293	0.003	1.508	2142841	0.9833		78.7	6223	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.293	0.003	1.000	1718432	1.00	Target=7.89	100	122	M
813.00 > 169.00	5.296	5.293	0.003	1.000	217633		7.90(3.94-11.83)		2316	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.557	5.555	0.002	1.049	1216919	0.9090	Target=9.39	90.9	150	M
913.00 > 169.00	5.557	5.555	0.002	1.049	128099		9.50(4.69-14.08)		862	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

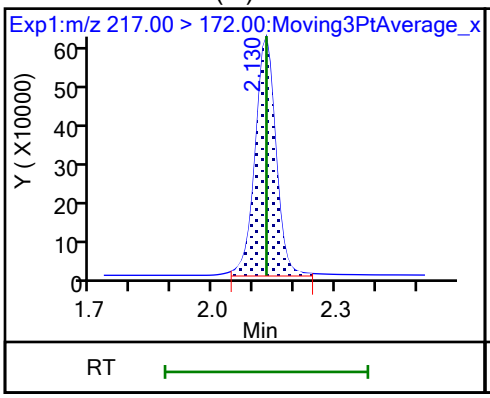
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 08:40:16 Chrom Revision: 2.3 18-Oct-2023 21:16:54

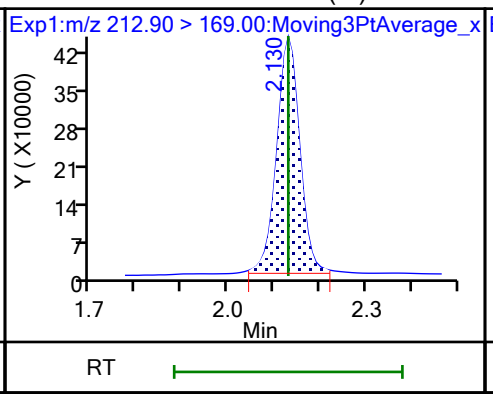
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C15.d
Injection Date: 21-Oct-2023 02:11:45 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

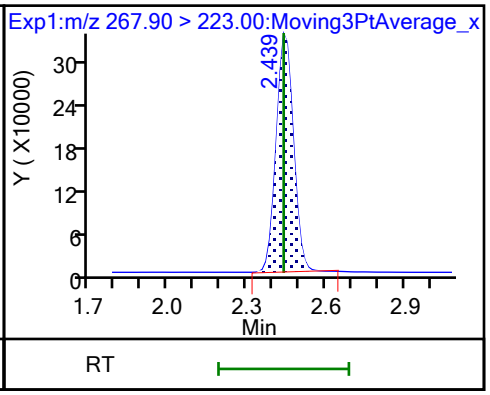
D 1 13C4 PFBA (M)



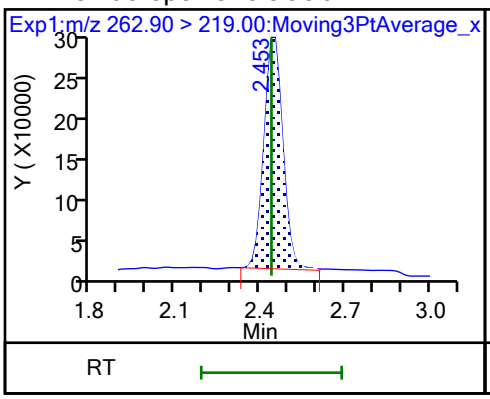
2 Perfluorobutanoic acid (M)



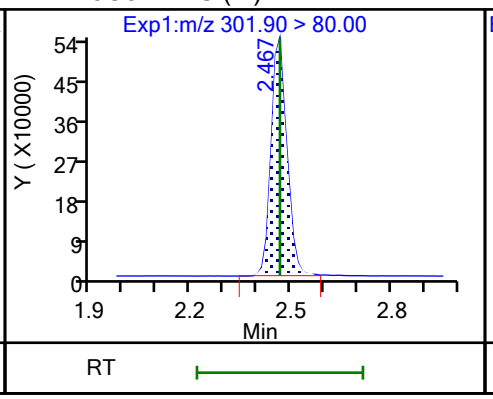
D 3 13C5 PFPeA



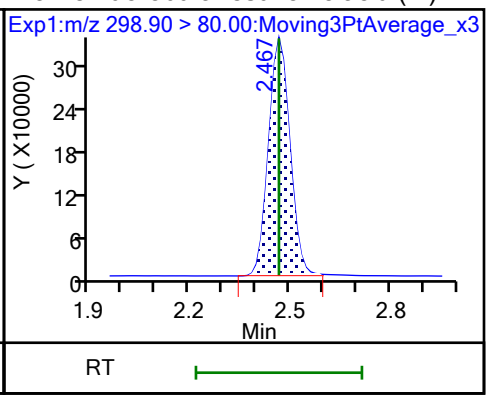
4 Perfluoropentanoic acid



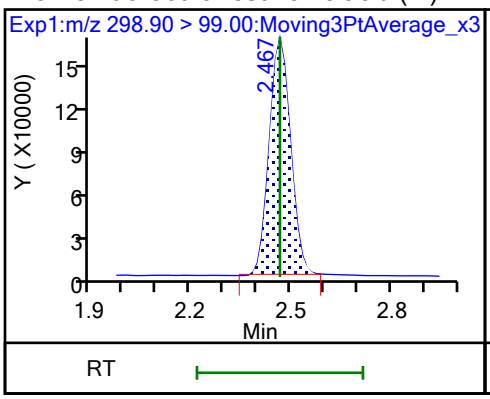
D 47 13C3 PFBS (M)



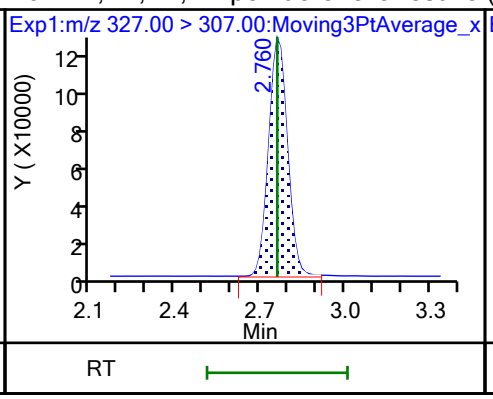
5 Perfluorobutanesulfonic acid (M)



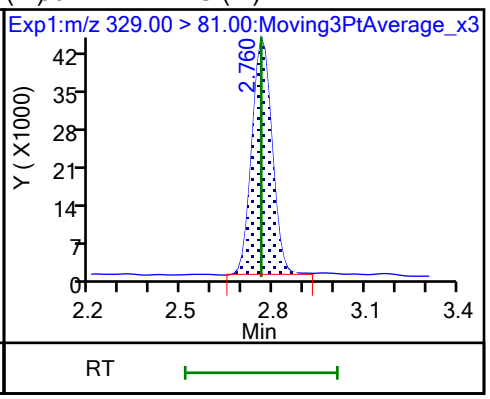
5 Perfluorobutanesulfonic acid (M)



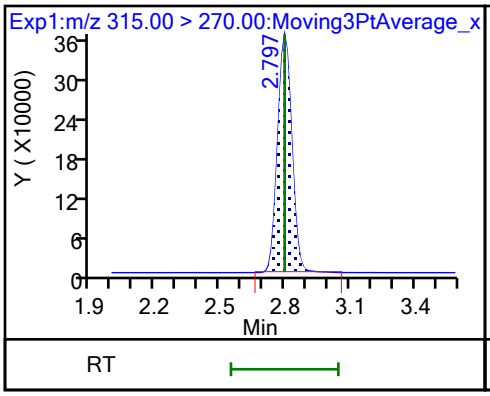
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



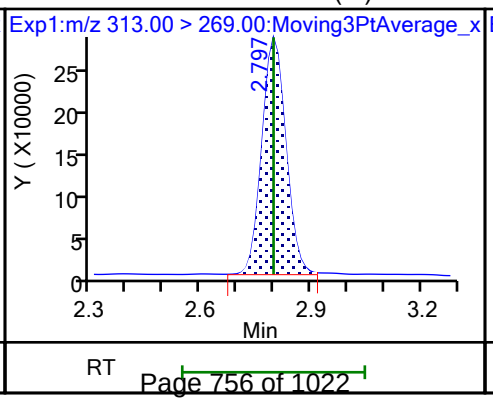
D 60 M2-4:2 FTS (M)



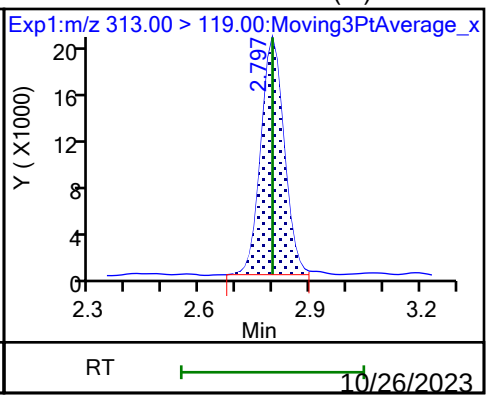
D 7 13C2 PFHxA



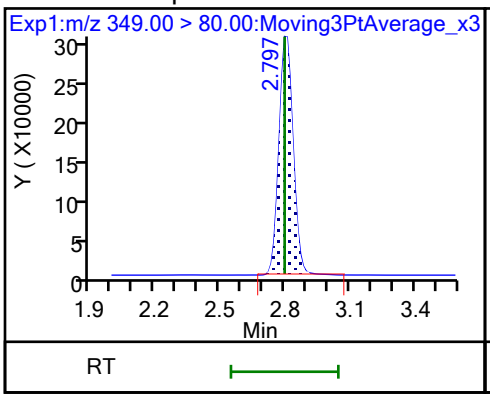
6 Perfluorohexanoic acid (M)



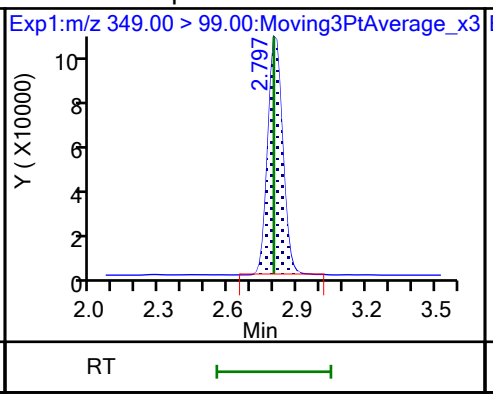
6 Perfluorohexanoic acid (M)



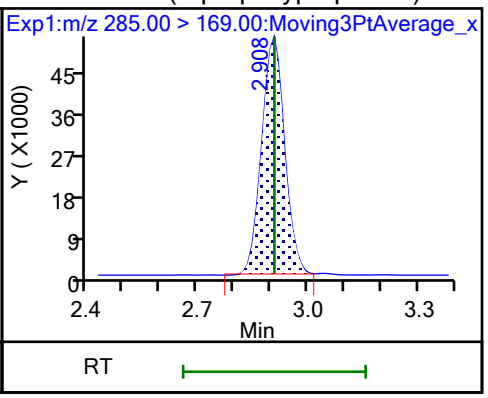
70 Perfluoropentanesulfonic acid



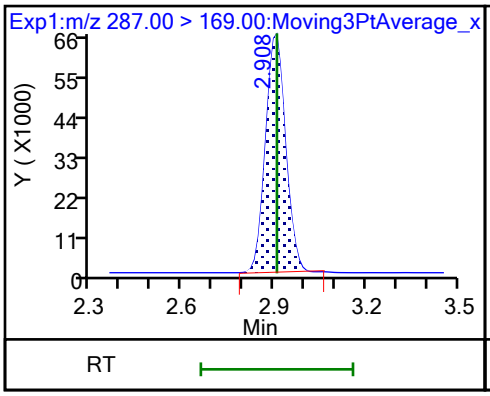
70 Perfluoropentanesulfonic acid



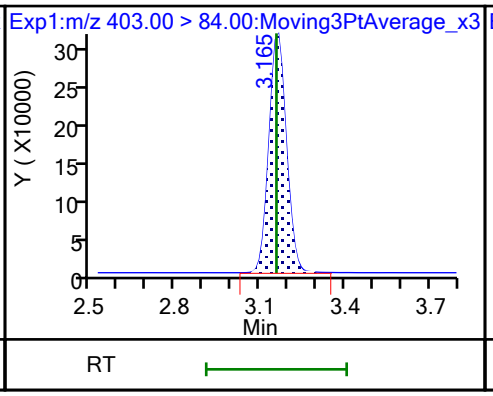
67 Perfluoro(2-propoxypropanoic) ac



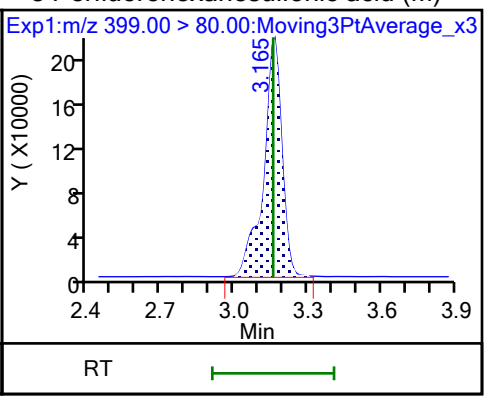
D 64 13C3 HFPO-DA



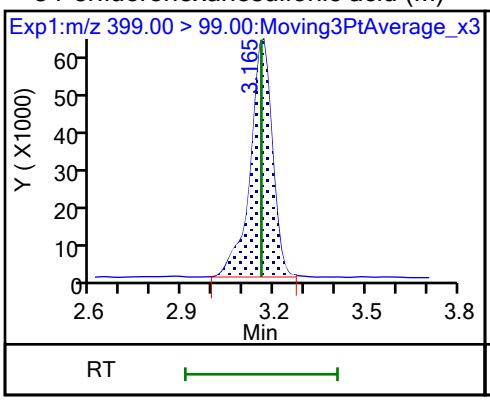
D 11 18O2 PFHxS



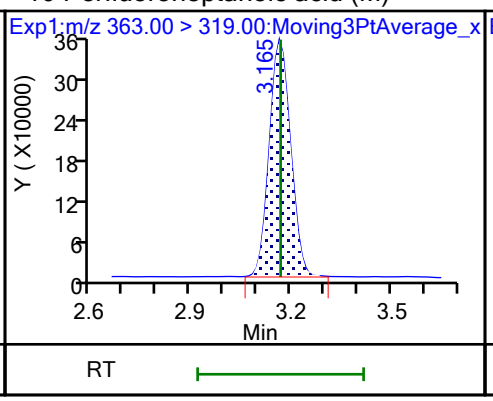
8 Perfluorohexanesulfonic acid (M)



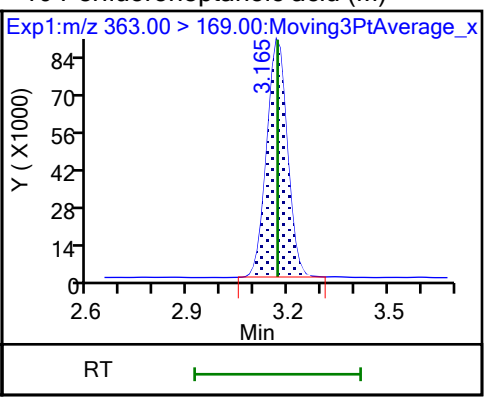
8 Perfluorohexanesulfonic acid (M)



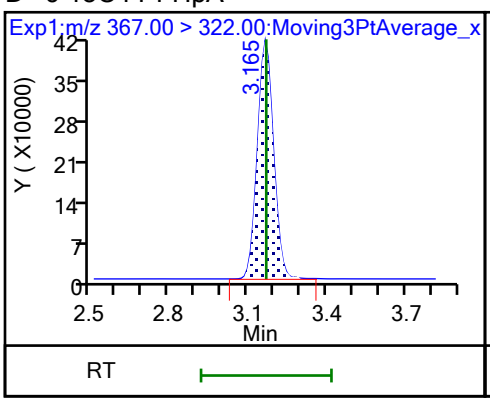
10 Perfluoroheptanoic acid (M)



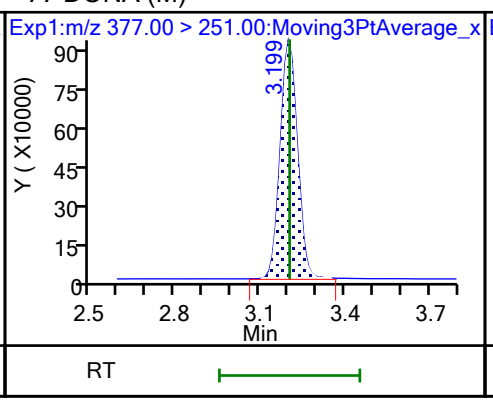
10 Perfluoroheptanoic acid (M)



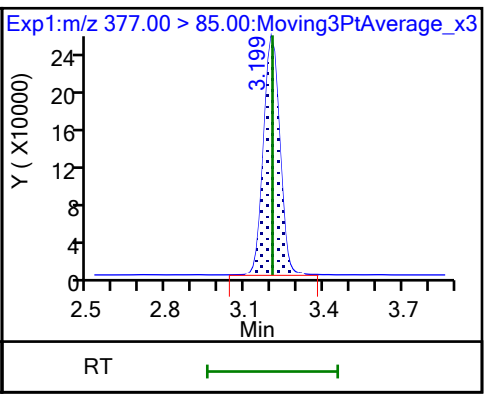
D 9 13C4 PFHpA



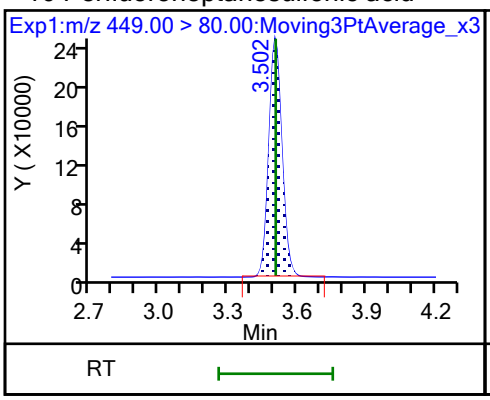
77 DONA (M)



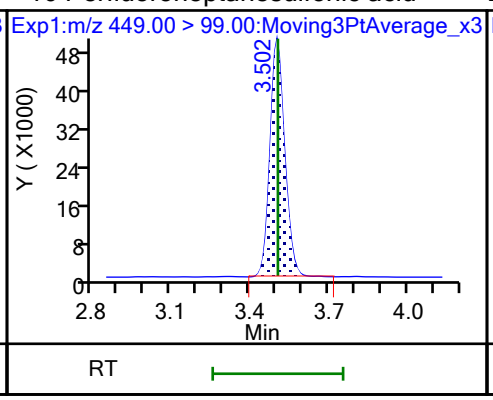
77 DONA



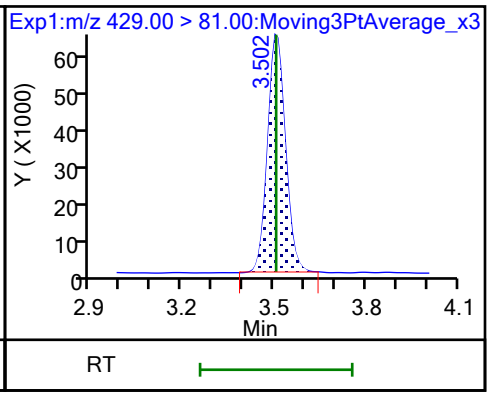
16 Perfluoroheptanesulfonic acid



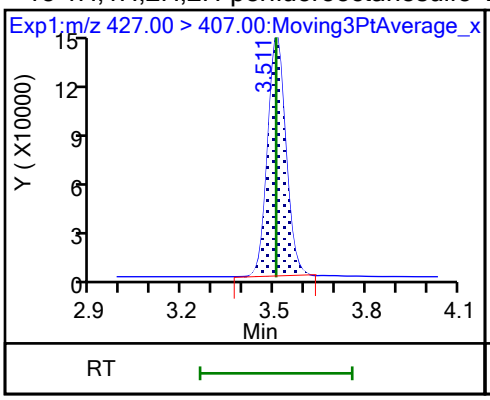
16 Perfluoroheptanesulfonic acid



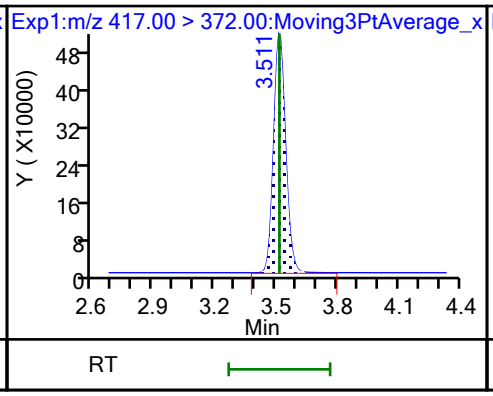
D 12 M2-6:2 FTS



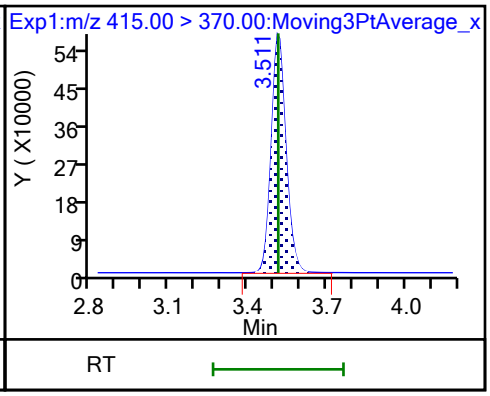
13 1H,1H,2H,2H-perfluorooctanesulfo



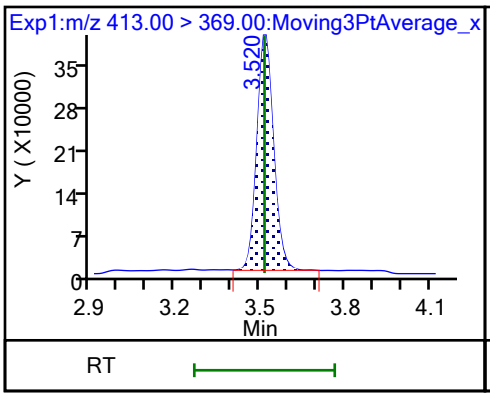
D 14 13C4 PFOA



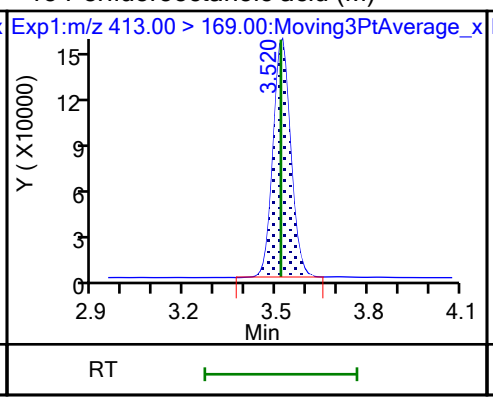
* 62 13C2 PFOA



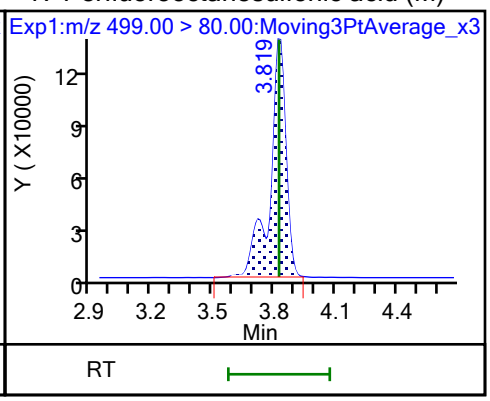
15 Perfluorooctanoic acid



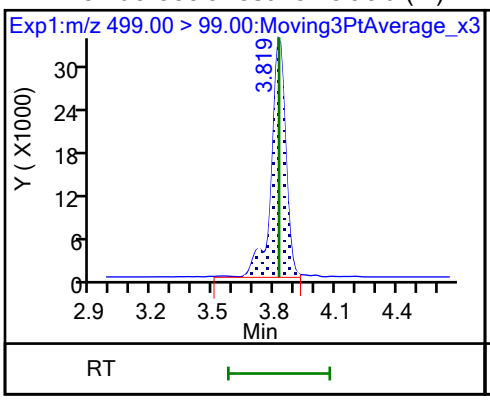
15 Perfluorooctanoic acid (M)



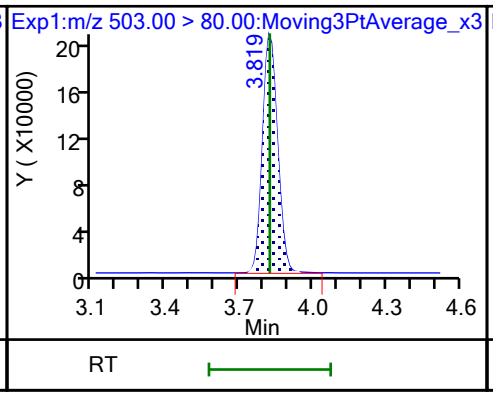
17 Perfluorooctanesulfonic acid (M)



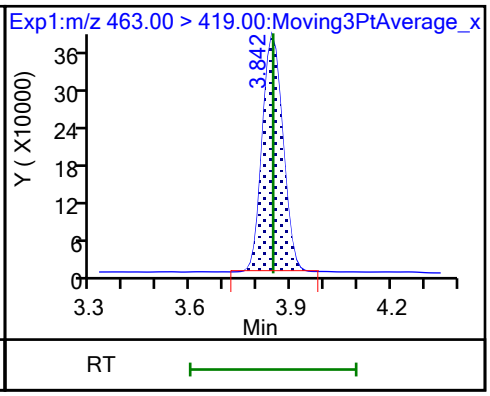
17 Perfluorooctanesulfonic acid (M)



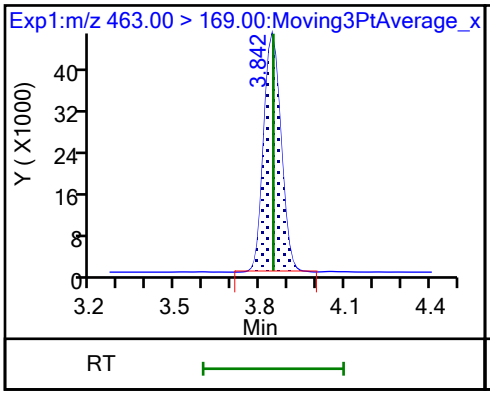
D 18 13C4 PFOS



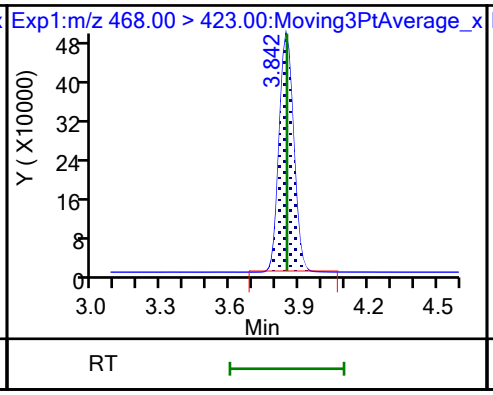
20 Perfluorononanoic acid



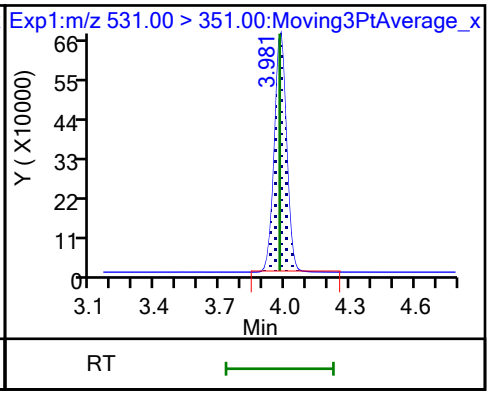
20 Perfluorononanoic acid



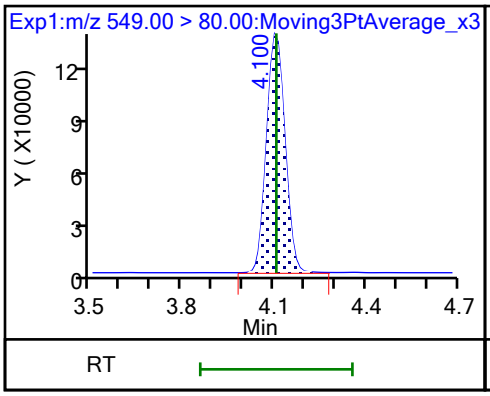
D 19 13C5 PFNA



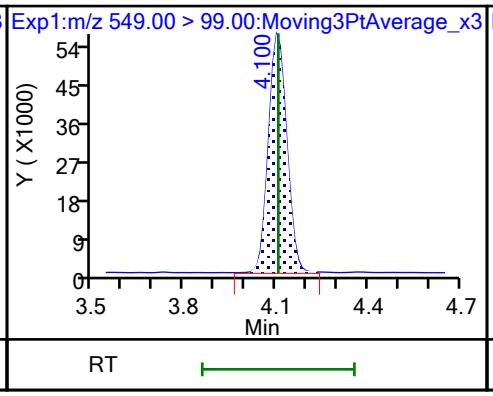
69 9-Chlorohexadecafluoro-3-oxanona (M)



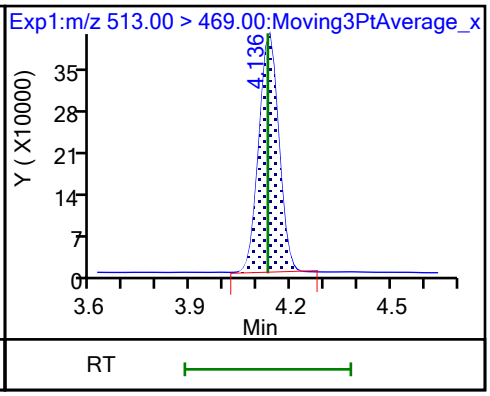
68 Perfluorononanesulfonic acid



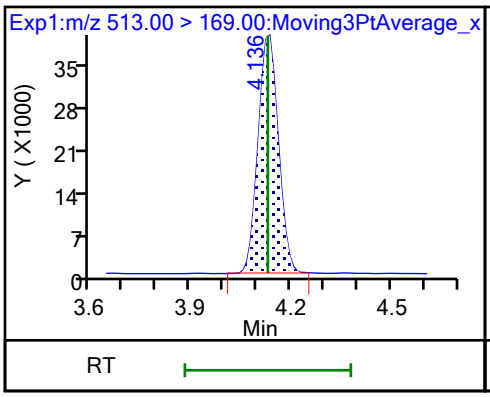
68 Perfluorononanesulfonic acid



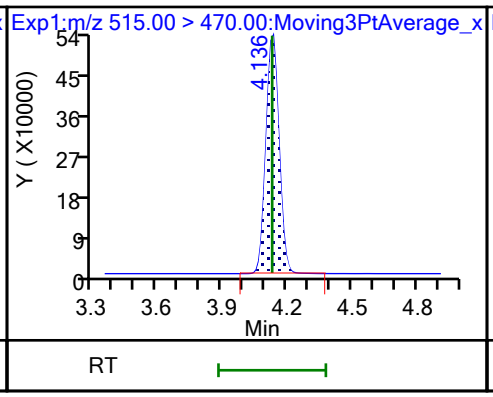
24 Perfluorodecanoic acid



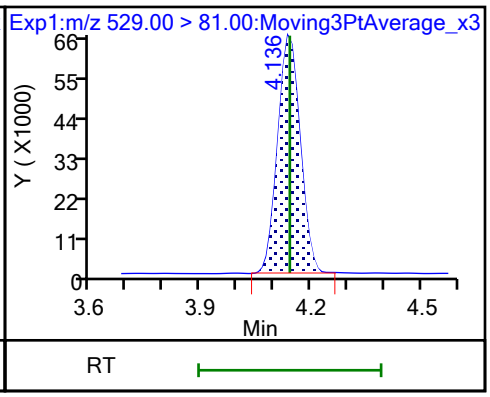
24 Perfluorodecanoic acid



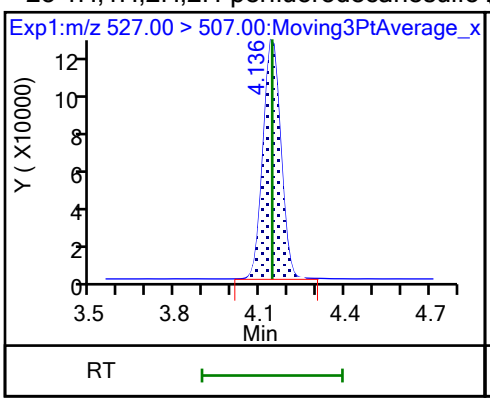
D 23 13C2 PFDA



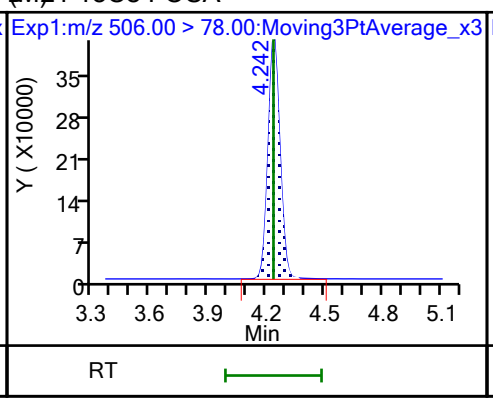
D 26 M2-8:2 FTS



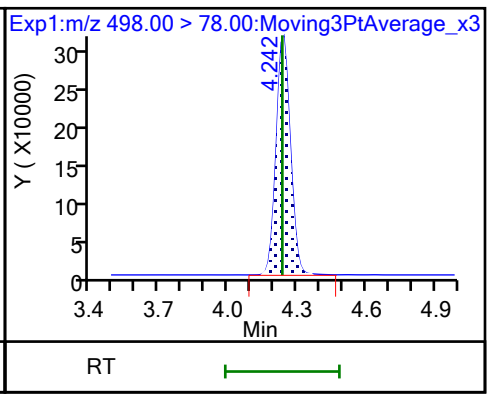
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



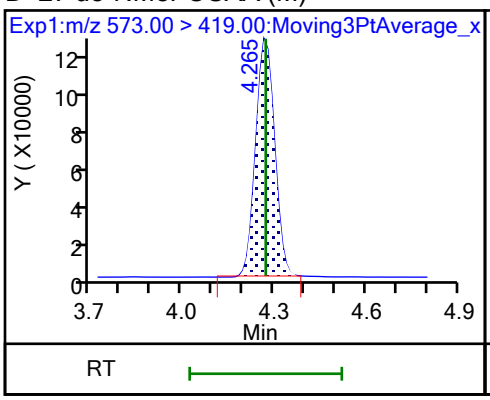
D 21 13C8 FOSA



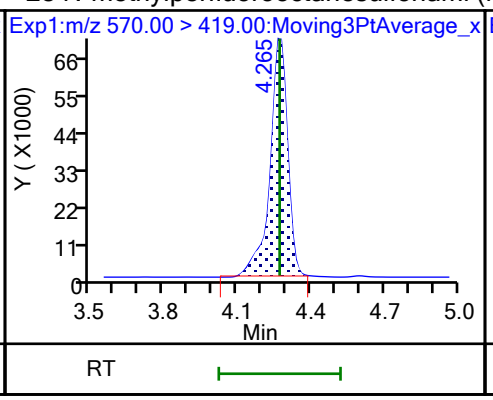
22 Perfluorooctanesulfonamide



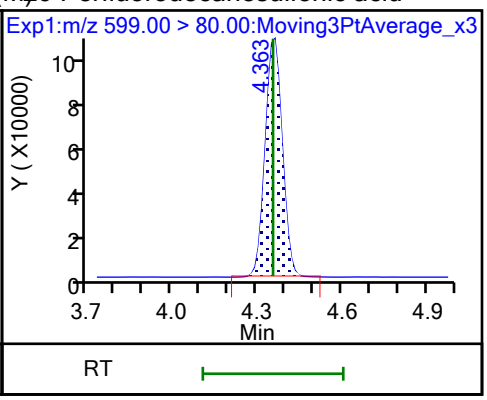
D 27 d3-NMeFOSAA (M)



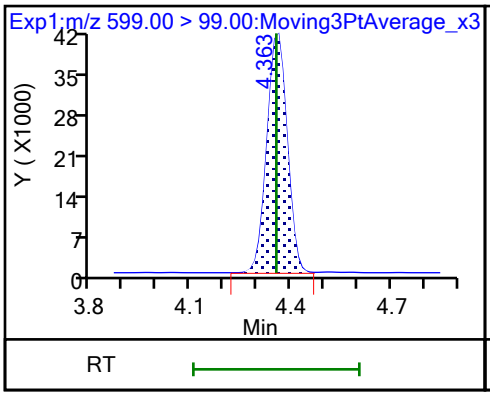
28 N-methylperfluorooctanesulfonami (M)



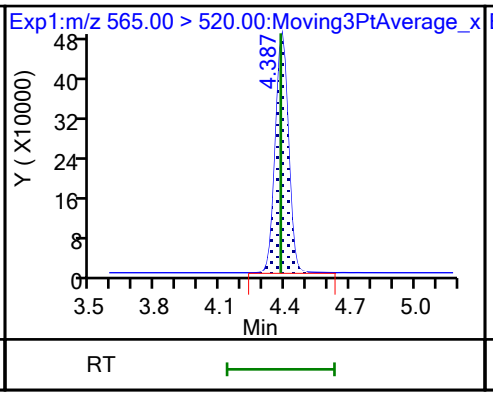
29 Perfluorodecanesulfonic acid



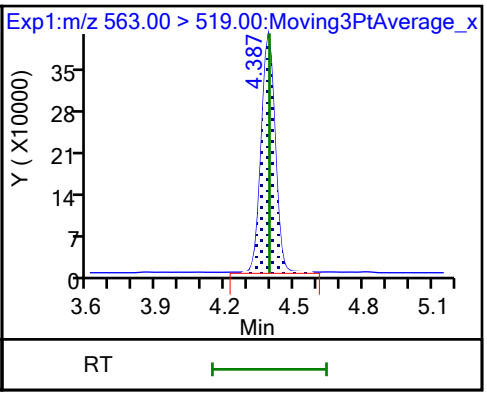
29 Perfluorodecanesulfonic acid



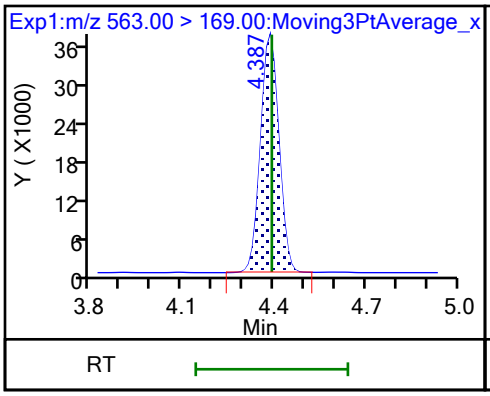
D 30 13C2 PFUnA



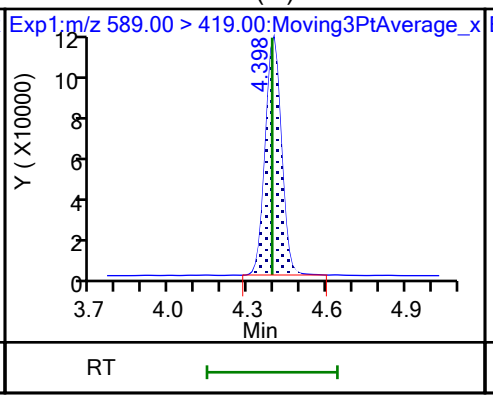
31 Perfluoroundecanoic acid



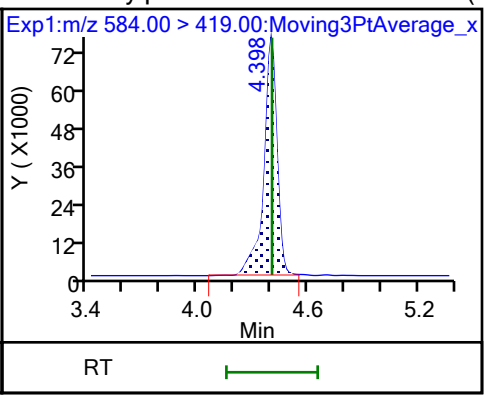
31 Perfluoroundecanoic acid



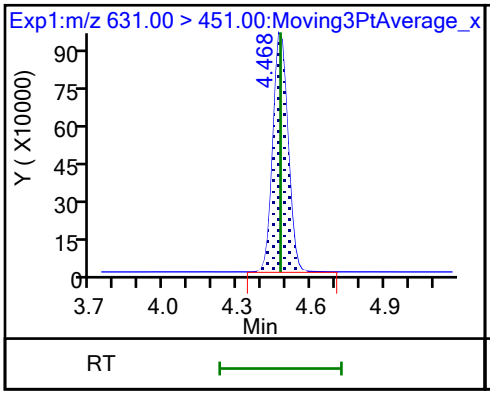
D 32 d5-NEtFOSAA (M)



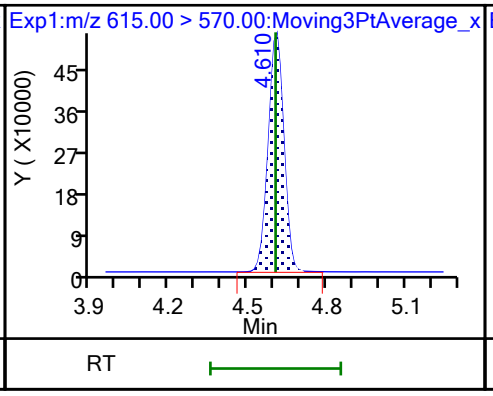
33 N-ethylperfluorooctanesulfonamid (M)



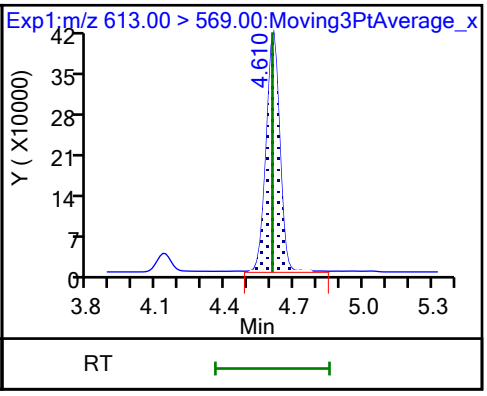
66 11-Chloroeicosafluoro-3-oxaundec



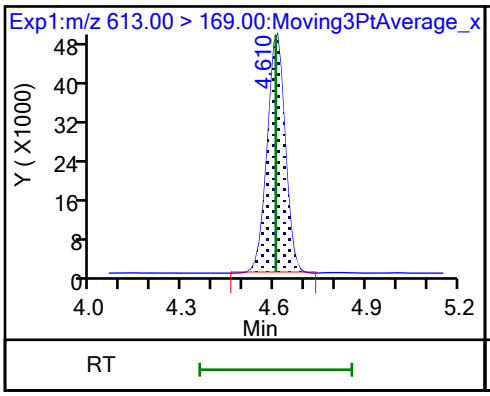
D 36 13C2 PFDoA



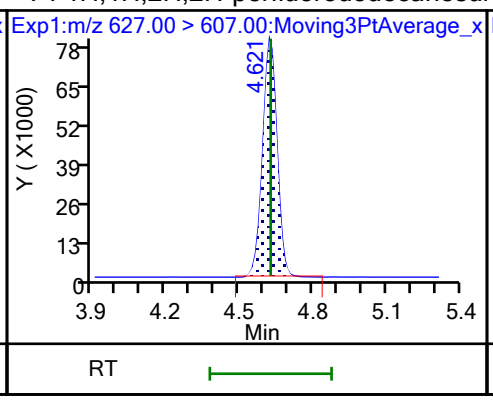
37 Perfluorododecanoic acid



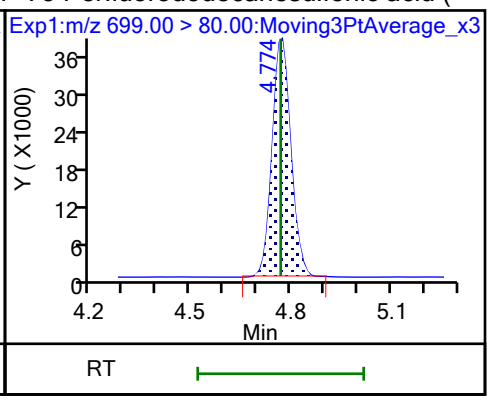
37 Perfluorododecanoic acid



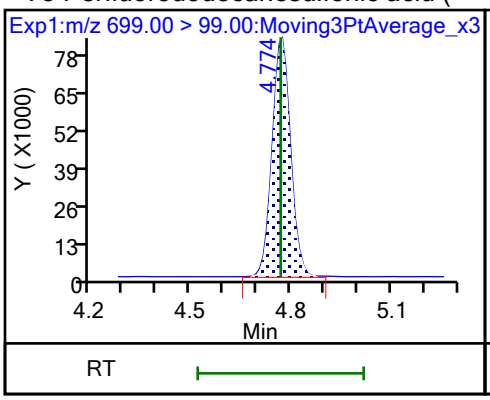
74 1H,1H,2H,2H-perfluorododecanesul



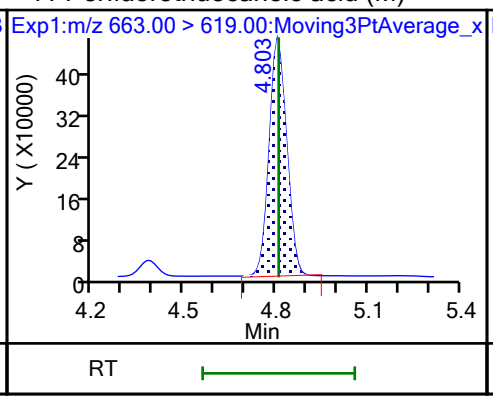
75 Perfluorododecanesulfonic acid (



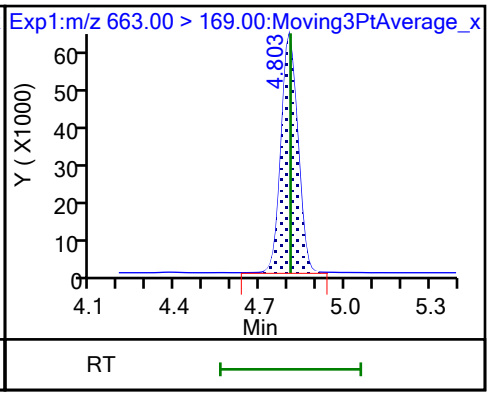
75 Perfluorododecanesulfonic acid (



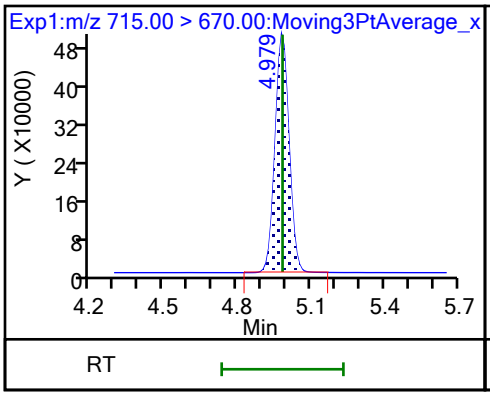
41 Perfluorotridecanoic acid (M)



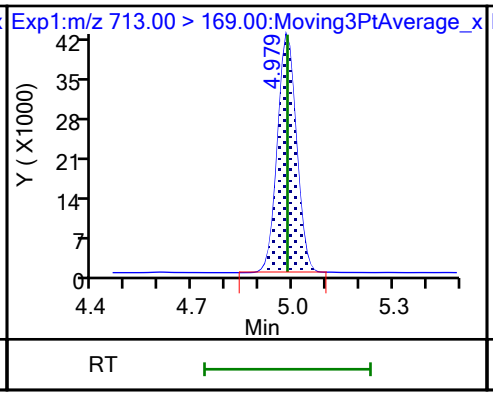
41 Perfluorotridecanoic acid



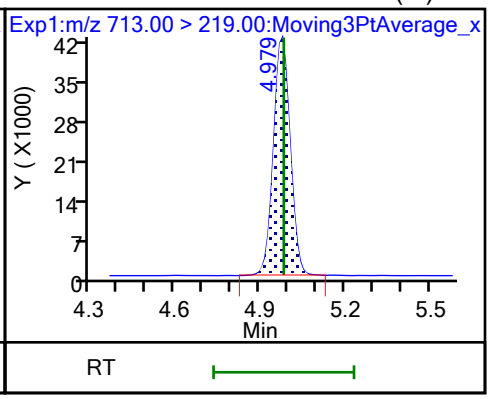
D 43 13C2 PFTeDA



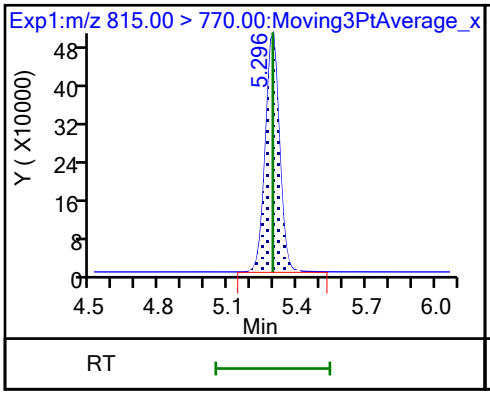
42 Perfluorotetradecanoic acid



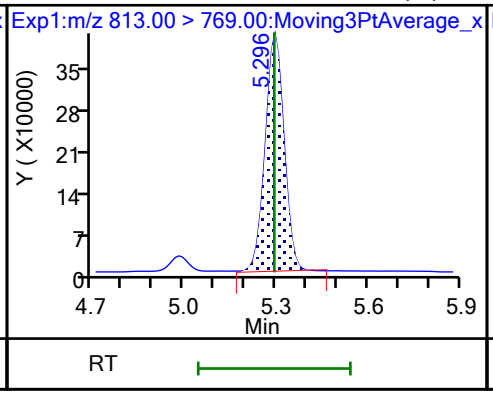
42 Perfluorotetradecanoic acid (M)



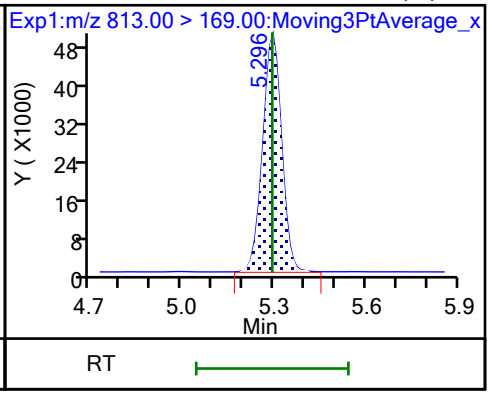
D 44 13C2 PFHxDA



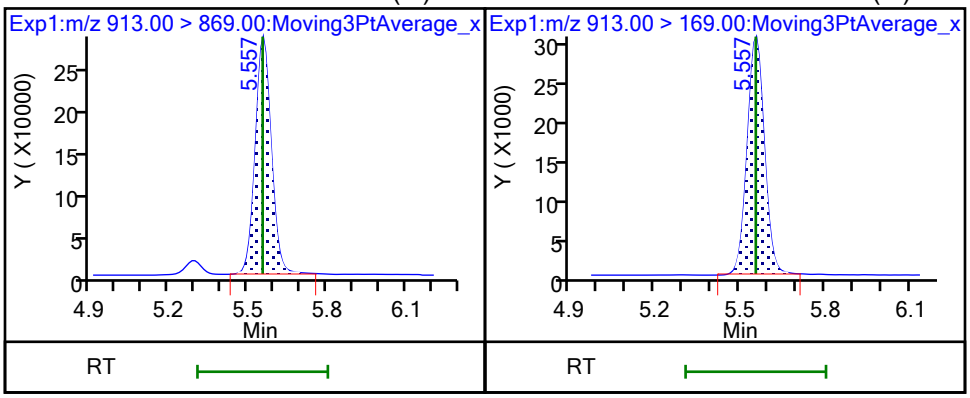
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/1 Calibration Date: 10/21/2023 03:49

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8900		0.943	1.00	-5.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.016		0.941	1.00	-5.9	
Perfluorobutanesulfonic acid	AveID	1.117	1.088		0.864	0.887	-2.6	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.499		0.965	0.937	3.0	
Perfluorohexanoic acid	AveID	1.100	1.047		0.951	1.00	-4.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.296		0.934	0.941	-0.8	
HFPODA	AveID	1.001	0.9444		0.943	1.00	-5.7	
Perfluoroheptanoic acid	AveID	1.121	0.9641		0.860	1.00	-14.0	
Perfluorohexanesulfonic acid	AveID	1.107	1.006		0.831	0.914	-9.1	
DONA	AveID	5.754	6.137		1.01	0.945	6.6	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.799		0.974	0.951	2.4	
Perfluoroheptanesulfonic acid	AveID	1.445	1.406		0.927	0.953	-2.7	
Perfluorooctanoic acid	AveID	1.065	0.996		0.935	1.00	-6.5	
Perfluorooctanesulfonic acid	AveID	1.166	1.044		0.831	0.928	-10.5	
Perfluorononanoic acid	AveID	0.9800	0.8957		0.914	1.00	-8.6	
9Cl-PF3ONS	AveID	3.569	3.923		1.03	0.933	9.9	
Perfluorononanesulfonic acid	AveID	0.8874	0.7608		0.825	0.962	-14.3	
Perfluorodecanoic acid	AveID	0.999	0.9449		0.945	1.00	-5.5	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.374		1.04	0.960	7.9	
Perfluorooctanesulfonamide	AveID	0.9539	0.9584		1.01	1.00	0.5	
NMeFOSAA	AveID	0.9074	0.8844		0.975	1.00	-2.5	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6024		0.851	0.965	-11.8	
Perfluoroundecanoic acid	AveID	1.031	0.997		0.967	1.00	-3.3	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9646		0.964	1.00	-3.6	
11Cl-PF3OUdS	AveID	5.474	5.960		1.03	0.943	8.9	
Perfluorododecanoic acid	AveID	1.018	0.9106		0.895	1.00	-10.5	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.427		1.05	0.964	8.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2209		0.924	0.968	-4.6	
Perfluorotridecanoic acid	AveID	1.070	0.9784		0.915	1.00	-8.5	
Perfluorotetradecanoic acid	AveID	0.1118	0.0965		0.863	1.00	-13.7	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9597		0.960	1.00	-4.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7080		0.907	1.00	-9.3	
13C4 PFBA	Ave	0.9917	1.038		1.31	1.25	4.7	
13C5 PFPeA	Ave	0.7696	0.7624		1.24	1.25	-0.9	
13C3 PFBS	Ave	1.041	0.8760		0.978	1.16	-15.9	
M2-4:2 FTS	Ave	0.1204	0.0948		0.919	1.17	-21.3	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/1 Calibration Date: 10/21/2023 03:49

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7689		1.23	1.25	-1.8	
13C3 HFPO-DA	Ave	0.1516	0.1450		1.20	1.25	-4.3	
18O2 PFHxS	Ave	0.7464	0.6442		1.02	1.18	-13.7	50.0
13C4 PFHpA	Ave	0.8590	0.8821		1.28	1.25	2.7	50.0
M2-6:2 FTS	Ave	0.1551	0.1264		0.968	1.19	-18.5	
13C4 PFOA	Ave	0.9731	0.9917		1.27	1.25	1.9	50.0
13C4 PFOS	Ave	0.4742	0.4014		1.01	1.20	-15.3	50.0
13C5 PFNA	Ave	1.059	1.025		1.21	1.25	-3.2	50.0
13C2 PFDA	Ave	1.109	1.111		1.25	1.25	0.2	
M2-8:2 FTS	Ave	0.1744	0.1350		0.927	1.20	-22.6	
13C8 FOSA	Ave	0.9462	0.7748		1.02	1.25	-18.1	
d3-NMeFOSAA	Ave	0.2650	0.2312		1.09	1.25	-12.8	
13C2 PFUnA	Ave	1.047	0.9940		1.19	1.25	-5.0	
d5-NEtFOSAA	Ave	0.2552	0.2246		1.10	1.25	-12.0	
13C2 PFDoA	Ave	1.064	1.077		1.27	1.25	1.3	
13C2 PFTeDA	Ave	1.059	0.9821		1.16	1.25	-7.3	
13C2 PFHxDA	Ave	1.221	1.016		1.04	1.25	-16.8	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 21-Oct-2023 03:49:45 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057494-001 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:07:38 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 14:58:17
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.130	0.001	0.606	2227674	1.31		105	1698	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.000	1586101	0.9433		94.3	150	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.440	2.439	0.001	0.694	1635572	1.24		99.1	1211	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.439	0.014	1.006	1329088	0.9413		94.1	30.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1747610	0.9779		84.1	102899	M
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.000	1451122	0.8642	Target=2.06	97.4	1216	
298.90 > 99.00	2.467	2.467	0.0	1.000	715143		2.03(1.03-3.09)		303	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	533433	0.9654		103	1265	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.785	189966	0.9191		78.7	131	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.798	2.798	0.0	0.796	1649409	1.23		98.2	1422	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.798	0.0	1.000	1381425	0.9513	Target=14.12	95.1	173	M
313.00 > 119.00	2.798	2.798	0.0	1.000	86826		15.91(7.06-21.17)		85.8	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.798	0.012	0.890	1348130	0.9337	Target=2.72	99.2	2774	
349.00 > 99.00	2.810	2.798	0.012	0.890	462111		2.92(1.36-4.09)		646	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	235047	0.9433		94.3	2428	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	311108	1.20		95.7	2208	
D 11 18O2 PFHxS										
403.00 > 84.00	3.156	3.157	-0.001	0.898	1307361	1.02		86.3	6342	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.168	3.157	0.011	1.004	1016987	0.8310	Target=3.32	90.9	1696	M
399.00 > 99.00	3.156	3.157	-0.001	1.000	293207		3.47(1.66-4.98)		285	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.169	-0.001	1.000	1459534	0.8602	Target=4.17	86.0	276	M
363.00 > 169.00	3.168	3.169	-0.001	1.000	378067		3.86(2.09-6.26)		879	
D 9 13C4 PFHpA										
367.00 > 322.00	3.168	3.169	-0.001	0.902	1892277	1.28		103	8924	
77 DONA										
377.00 > 251.00	3.203	3.204	-0.001	0.838	3995488	1.01	Target=3.33	107	3935	
377.00 > 85.00	3.203	3.204	-0.001	0.838	1013436		3.94(1.66-4.99)		1532	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.505	3.506	-0.001	0.917	923034	0.9270	Target=4.83	97.3	3626	
449.00 > 99.00	3.505	3.506	-0.001	0.917	177192		5.21(2.41-7.24)		617	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.505	3.506	-0.001	0.997	257585	0.9677		81.5	529	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.505	3.506	-0.001	1.000	577461	0.9740		102	617	M
D 14 13C4 PFOA										
417.00 > 372.00	3.514	3.515	-0.001	1.000	2127400	1.27		102	6610	
* 62 13C2 PFOA										
415.00 > 370.00	3.514	3.515	-0.001		2145253	1.25			4849	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.515	-0.001	1.000	1695601	0.9354	Target=2.88	93.5	75.6	M
413.00 > 169.00	3.514	3.515	-0.001	1.000	593133		2.86(1.44-4.32)		1274	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.822	3.823	-0.001	1.000	667410	0.8305	Target=4.24	89.5	1401	M
499.00 > 99.00	3.822	3.823	-0.001	1.000	145718		4.58(2.12-6.37)		474	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.823	-0.001	1.088	823304	1.01		84.7	2807	
20 Perfluorononanoic acid										
463.00 > 419.00	3.845	3.846	-0.001	1.000	1575094	0.9139	Target=8.34	91.4	260	
463.00 > 169.00	3.845	3.846	-0.001	1.000	187578		8.40(4.17-12.51)		1299	
D 19 13C5 PFNA										
468.00 > 423.00	3.845	3.846	-0.001	1.094	2198107	1.21		96.8	8183	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.983	3.975	0.008	1.042	2521914	1.03		110	6314	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.105	4.106	-0.001	1.074	504247	0.8248	Target=2.17	85.7	4978	
549.00 > 99.00	4.105	4.106	-0.001	1.074	208375		2.42(1.08-3.25)		1382	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.129	4.130	-0.001	1.000	1802183	0.9455	Target=11.44	94.5	538	
513.00 > 169.00	4.129	4.130	-0.001	1.000	167905		10.73(5.72-17.16)		897	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.130	-0.001	1.175	2384171	1.25		100	7734	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.141	4.142	-0.001	1.179	277362	0.9267		77.4	908	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.141	4.142	-0.001	1.000	527941	1.04		108	3406	M
D 21 13C8 FOSA										
506.00 > 78.00	4.234	4.235	-0.001	1.205	1662043	1.02		81.9	5128	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.234	4.235	-0.001	1.000	1274353	1.00		100	2956	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.269	4.271	-0.002	1.215	495975	1.09		87.2	1989	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.269	4.271	-0.002	1.000	350928	0.9747		97.5	689	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.354	4.356	-0.002	1.139	400525	0.8512	Target=2.37	88.2	3522	
599.00 > 99.00	4.354	4.356	-0.002	1.139	151966		2.64(1.19-3.56)		2173	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.389	4.380	0.009	1.249	2132469	1.19		95.0	5803	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.389	4.391	-0.002	1.000	1700870	0.9674	Target=12.20	96.7	416	
563.00 > 169.00	4.389	4.391	-0.002	1.000	141772		12.00(6.10-18.31)		938	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.401	4.391	0.010	1.253	481909	1.10		88.0	1167	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.401	4.403	-0.002	1.000	371891	0.9644		96.4	1002	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.473	4.475	-0.002	1.170	3871872	1.03		109	4693	
D 36 13C2 PFDoA										
615.00 > 570.00	4.602	4.604	-0.002	1.310	2311371	1.27		101	8837	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.602	4.604	-0.002	1.000	1683845	0.8947	Target=8.47	89.5	111	
613.00 > 169.00	4.602	4.604	-0.002	1.000	200358		8.40(4.23-12.70)		1675	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.624	4.626	-0.002	1.117	318521	1.05		108	2921	M
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.768	4.769	-0.001	1.247	147327	0.9238	Target=0.48	95.4	2100	M
699.00 > 99.00	4.768	4.769	-0.001	1.247	299049		0.49(0.24-0.72)		4853	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.806	4.807	-0.001	1.044	1809075	0.9145	Target=6.41	91.5	117	M
663.00 > 169.00	4.806	4.807	-0.001	1.044	257626		7.02(3.21-9.62)		2352	
D 43 13C2 PFTeDA										M
715.00 > 670.00	4.982	4.983	-0.001	1.418	2106935	1.16		92.7	3260	M
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.982	4.983	-0.001	1.000	162600	0.8627	Target=0.87	86.3	1461	
713.00 > 219.00	4.982	4.983	-0.001	1.000	182146		0.89(0.43-1.30)		2038	M

Report Date: 25-Oct-2023 09:07:38 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.292	5.293	-0.001	1.506	2179244	1.04		83.2	5148	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.292	5.293	-0.001	1.000	1673220	0.9597	Target=7.89	96.0	117	M
813.00 > 169.00	5.292	5.293	-0.001	1.000	209336		7.99(3.94-11.83)		3059	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.555	0.008	1.051	1234283	0.9066	Target=9.39	90.7	143	M
913.00 > 169.00	5.554	5.555	-0.001	1.049	126411		9.76(4.69-14.08)		660	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

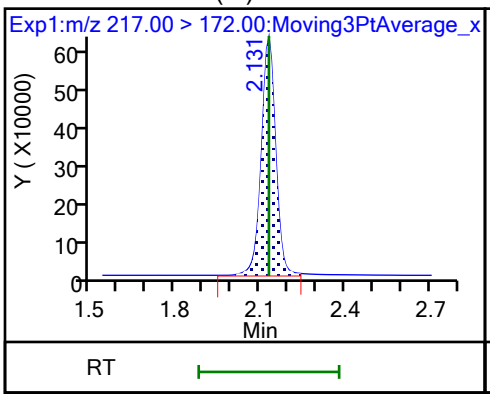
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 09:07:38 Chrom Revision: 2.3 18-Oct-2023 21:16:54

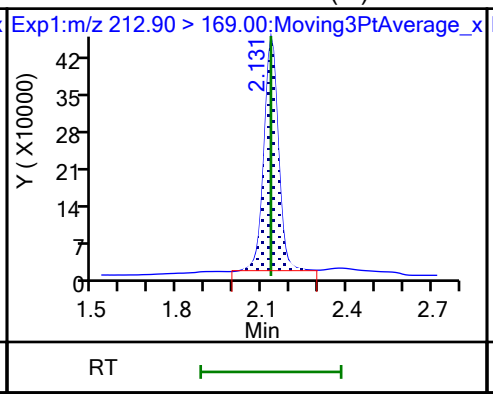
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D01.d
Injection Date: 21-Oct-2023 03:49:45 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

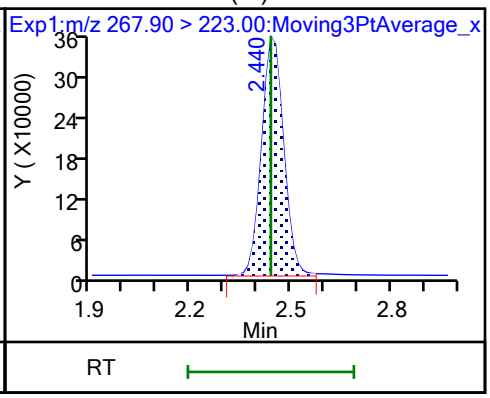
D 1 13C4 PFBA (M)



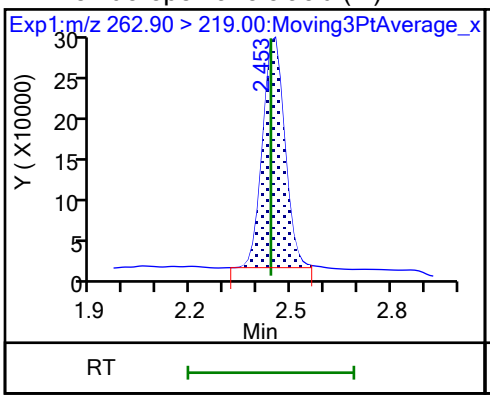
2 Perfluorobutanoic acid (M)



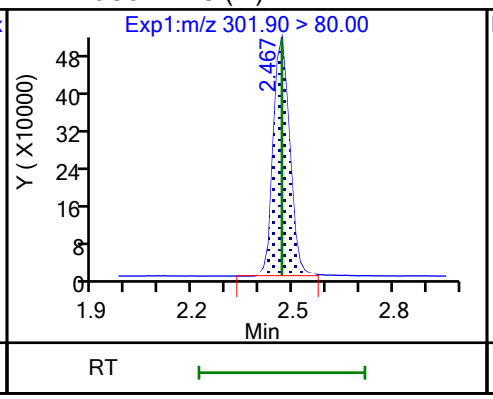
D 3 13C5 PFPeA (M)



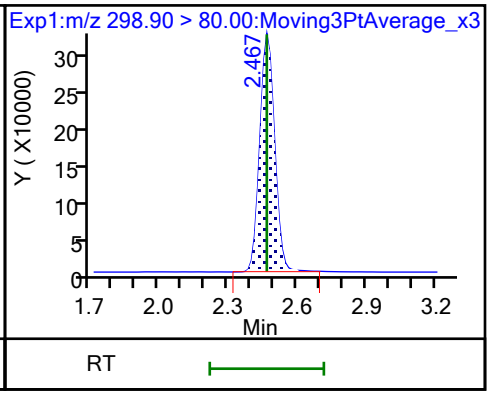
4 Perfluoropentanoic acid (M)



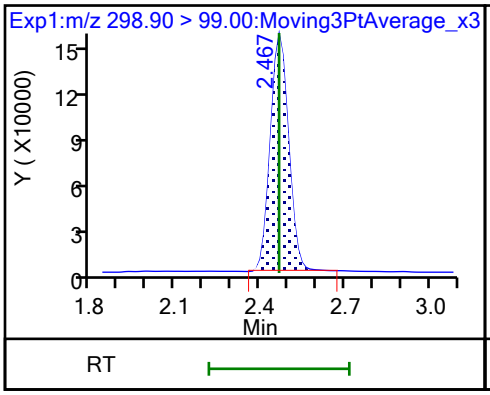
D 47 13C3 PFBS (M)



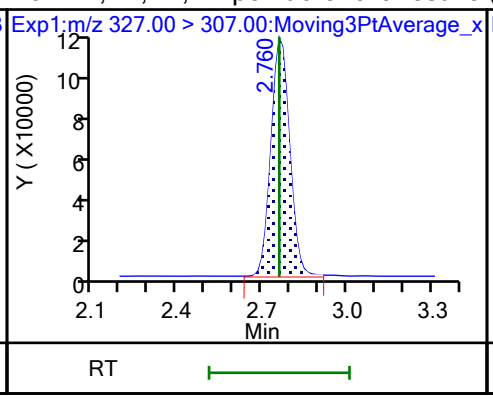
5 Perfluorobutanesulfonic acid



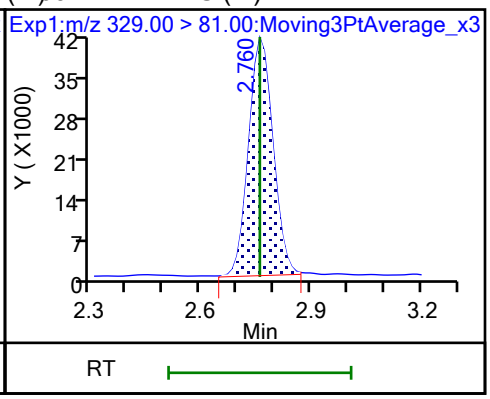
5 Perfluorobutanesulfonic acid



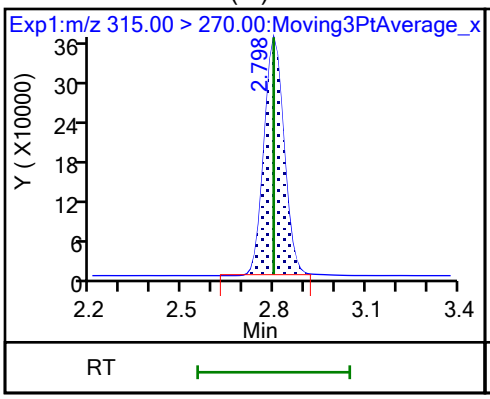
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



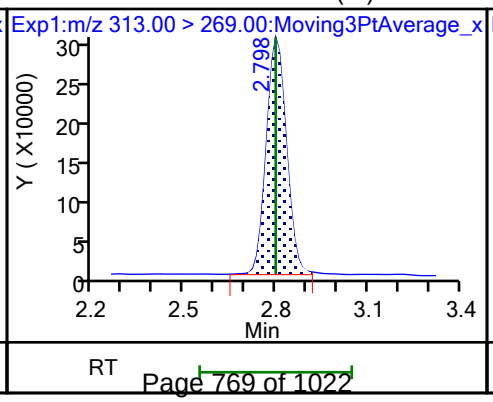
60 M2-4:2 FTS (M)



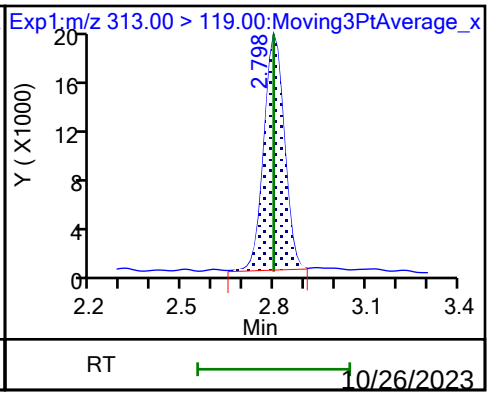
D 7 13C2 PFHxA (M)



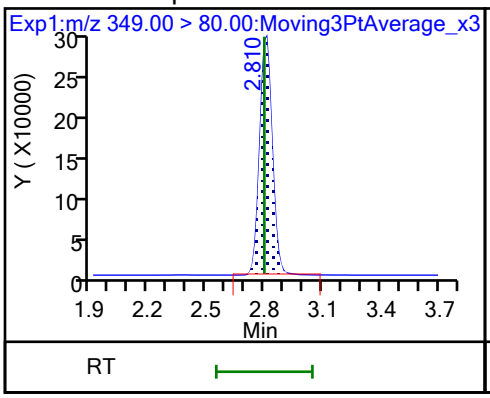
6 Perfluorohexanoic acid (M)



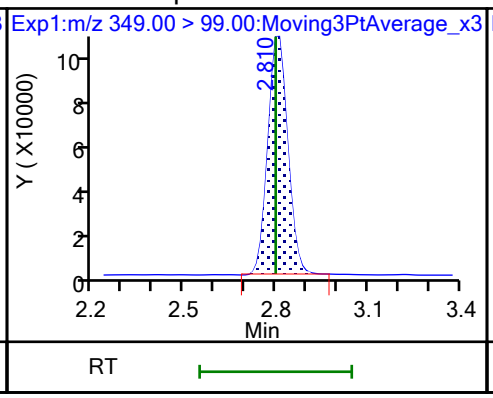
6 Perfluorohexanoic acid



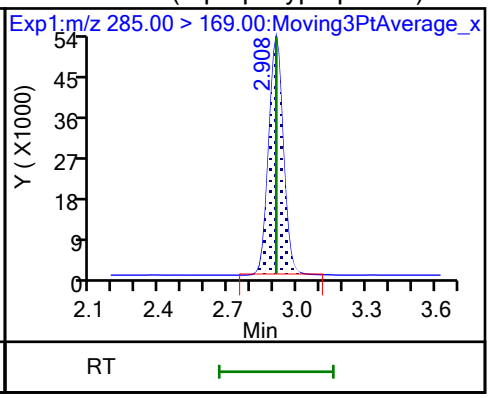
70 Perfluoropentanesulfonic acid



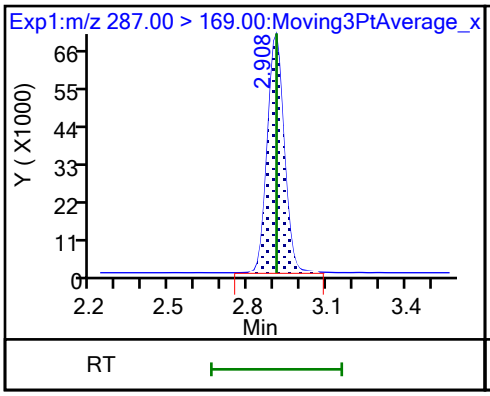
70 Perfluoropentanesulfonic acid



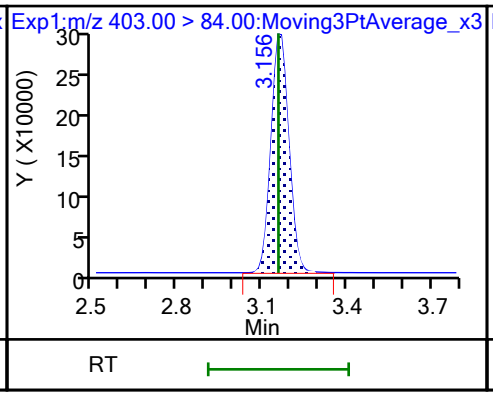
67 Perfluoro(2-propoxypropanoic) ac



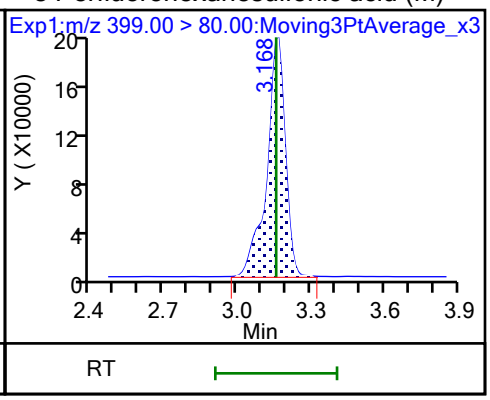
D 64 13C3 HFPO-DA



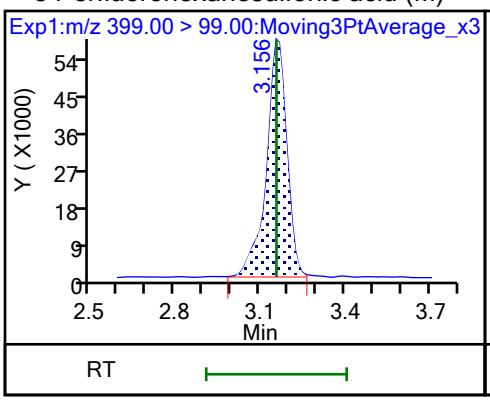
D 11 18O2 PFHxS



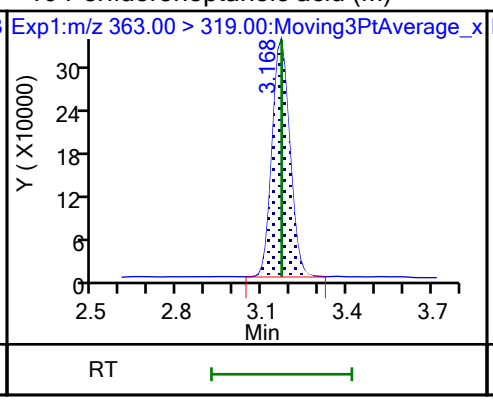
8 Perfluorohexanesulfonic acid (M)



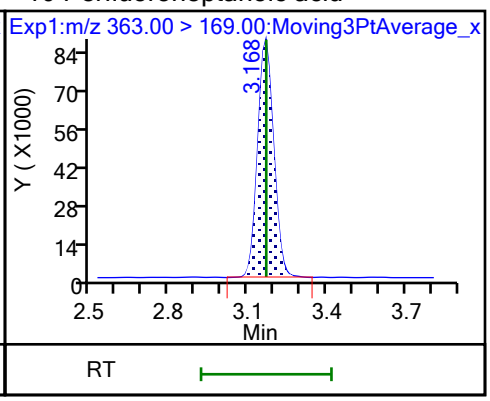
8 Perfluorohexanesulfonic acid (M)



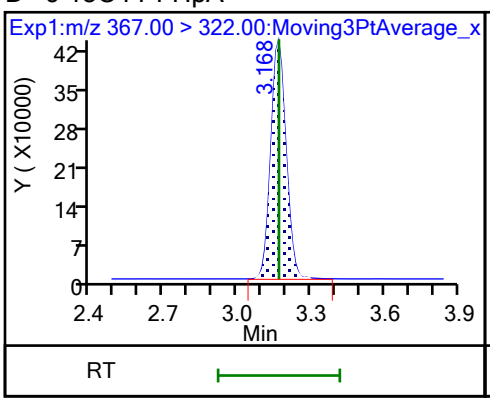
10 Perfluoroheptanoic acid (M)



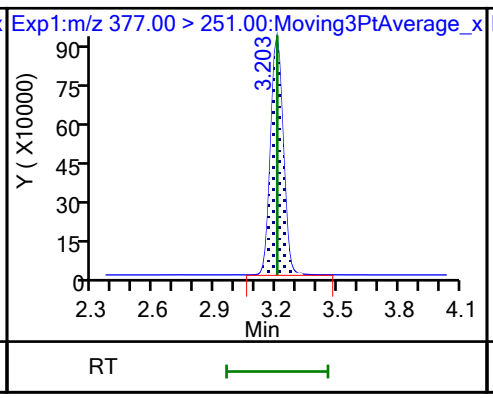
10 Perfluoroheptanoic acid



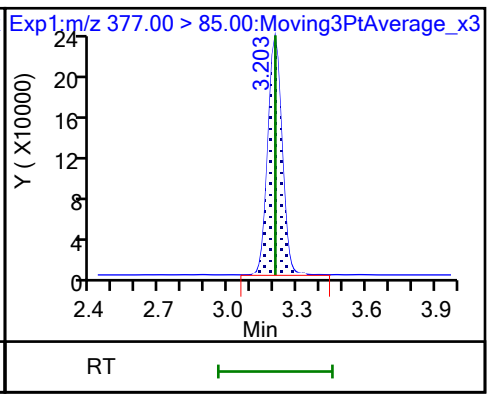
D 9 13C4 PFHpA



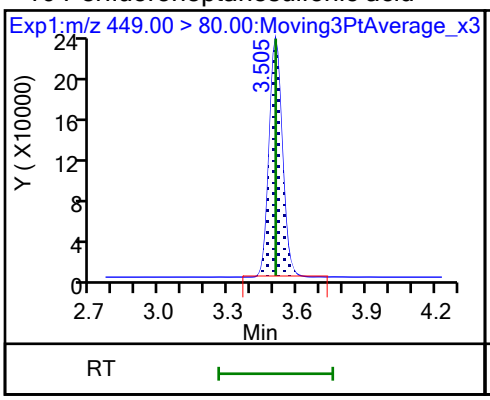
77 DONA



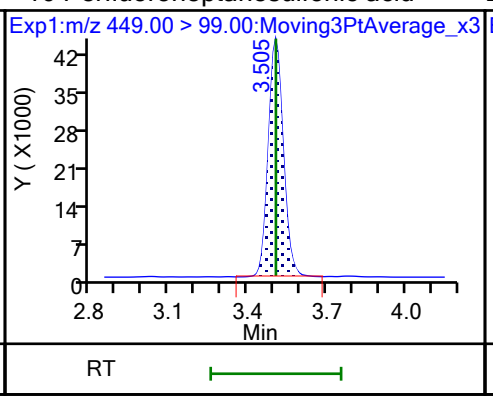
77 DONA



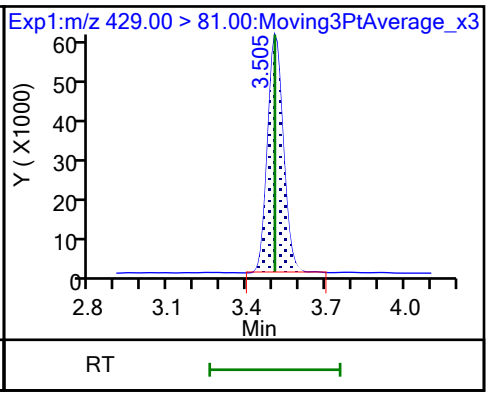
16 Perfluoroheptanesulfonic acid



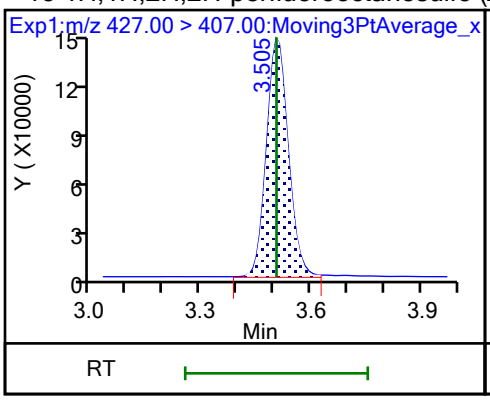
16 Perfluoroheptanesulfonic acid



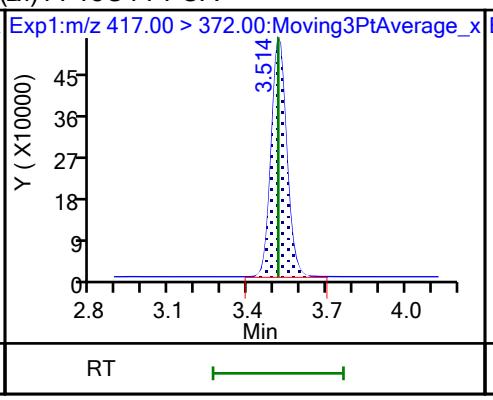
D 12 M2-6:2 FTS



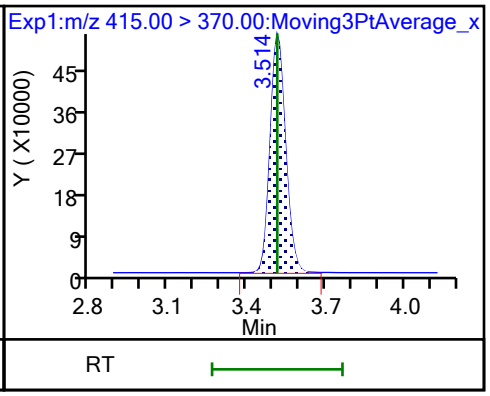
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



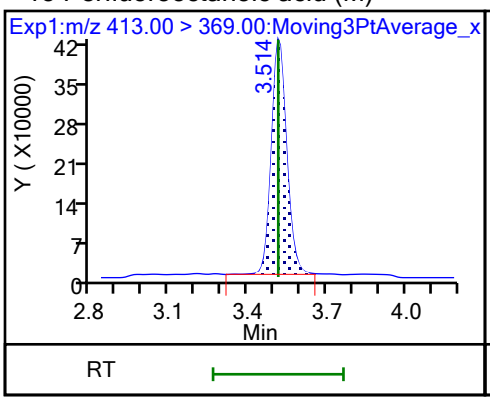
D 14 13C4 PFOA



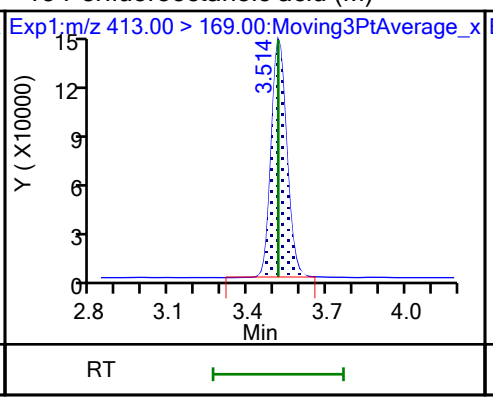
* 62 13C2 PFOA



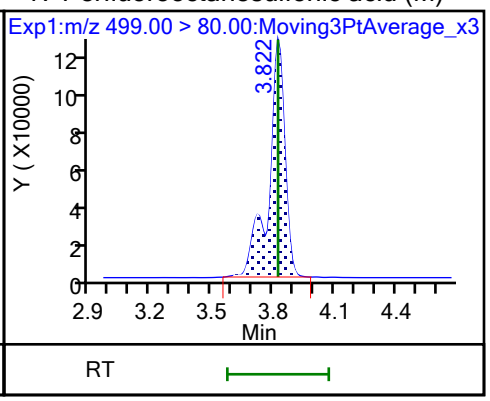
15 Perfluorooctanoic acid (M)



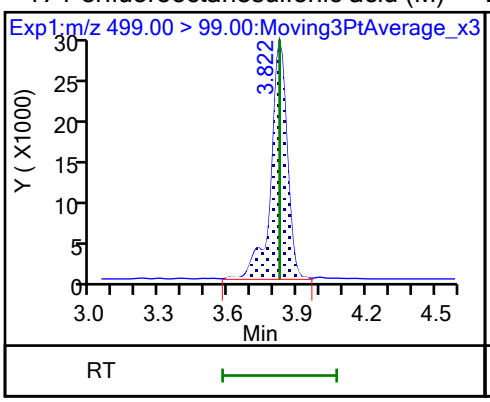
15 Perfluorooctanoic acid (M)



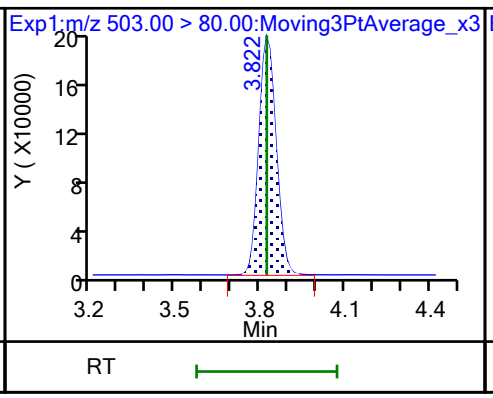
17 Perfluorooctanesulfonic acid (M)



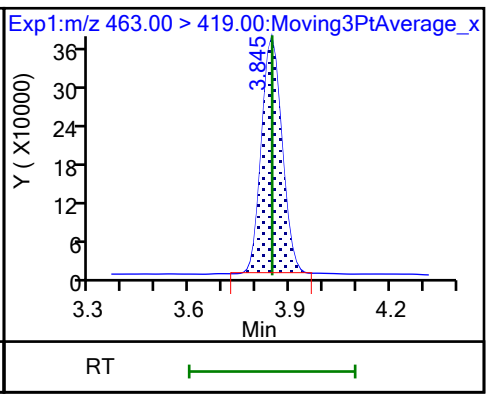
17 Perfluorooctanesulfonic acid (M)



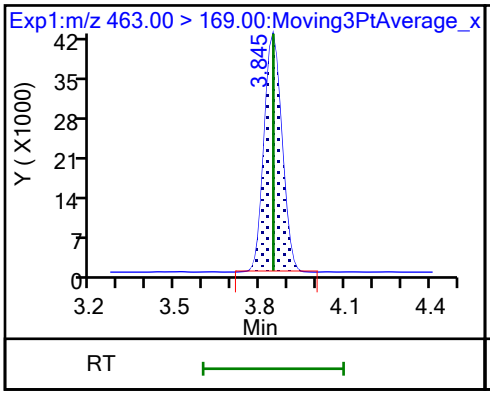
D 18 13C4 PFOS



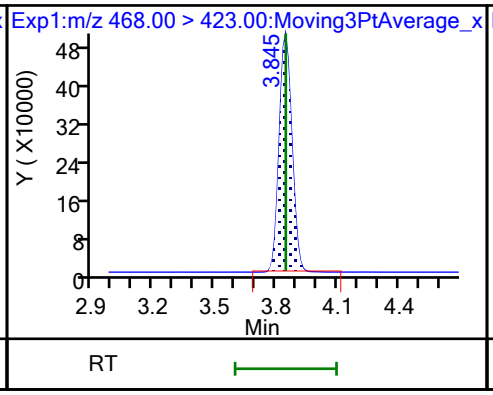
20 Perfluorononanoic acid



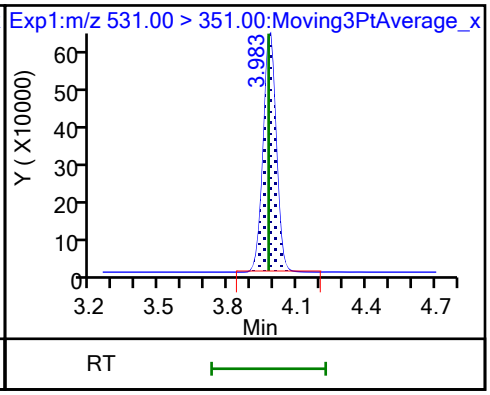
20 Perfluorononanoic acid



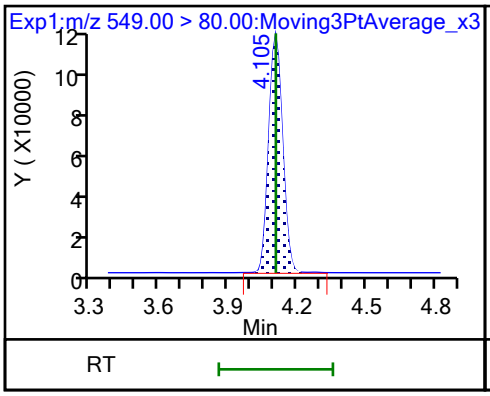
D 19 13C5 PFNA



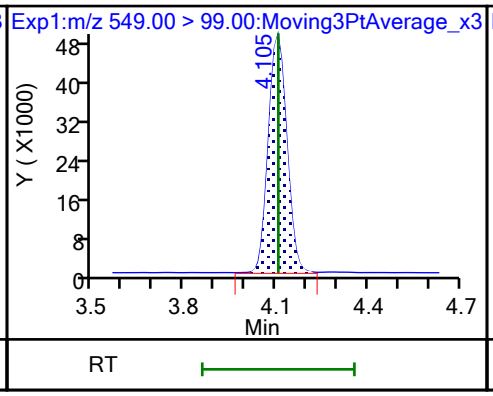
69 9-Chlorohexadecafluoro-3-oxanona



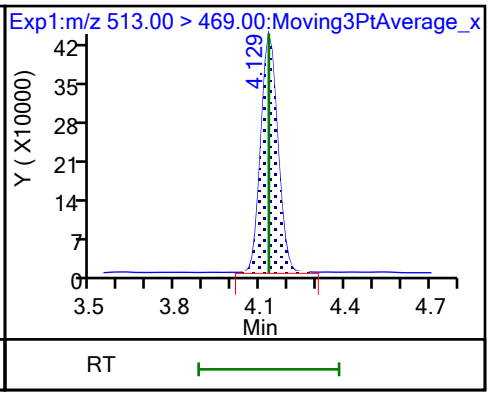
68 Perfluorononanesulfonic acid



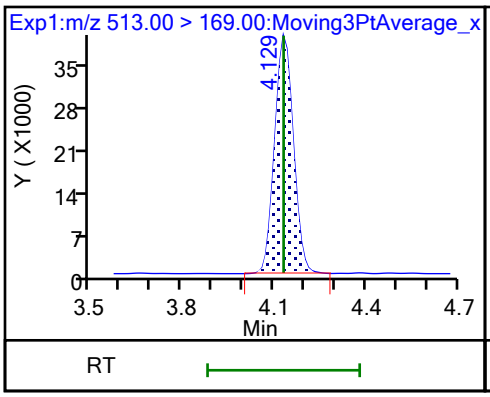
68 Perfluorononanesulfonic acid



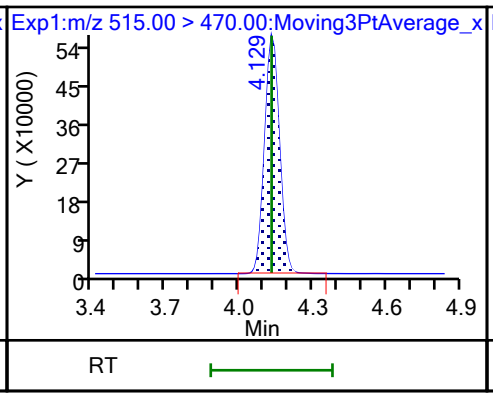
24 Perfluorodecanoic acid



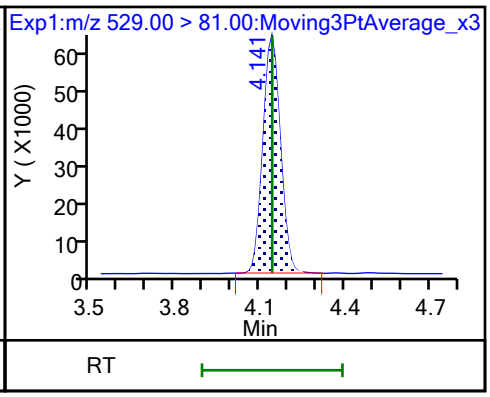
24 Perfluorodecanoic acid



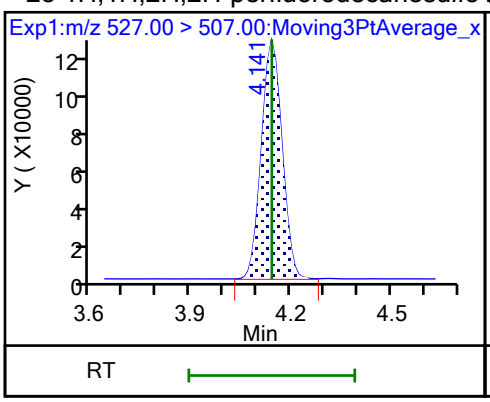
D 23 13C2 PFDA



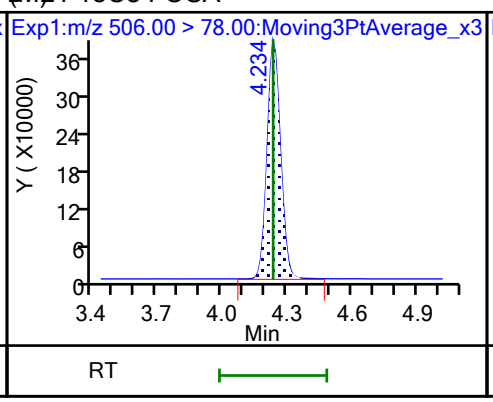
D 26 M2-8:2 FTS



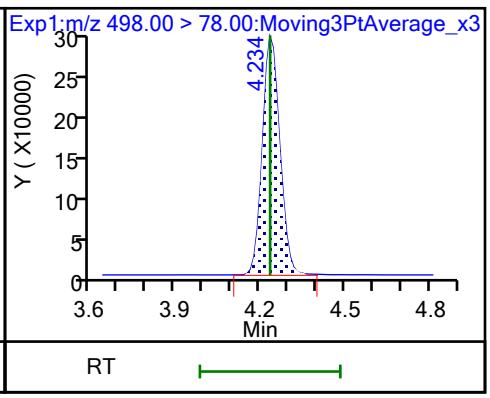
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



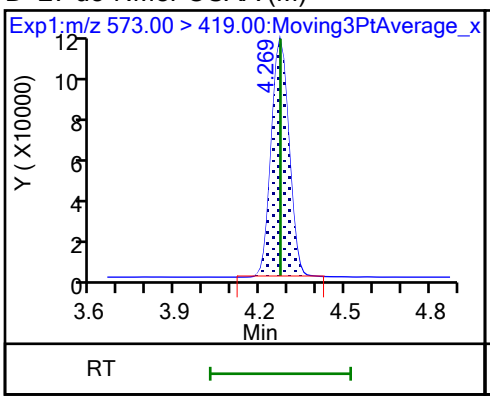
D 21 13C8 FOSA



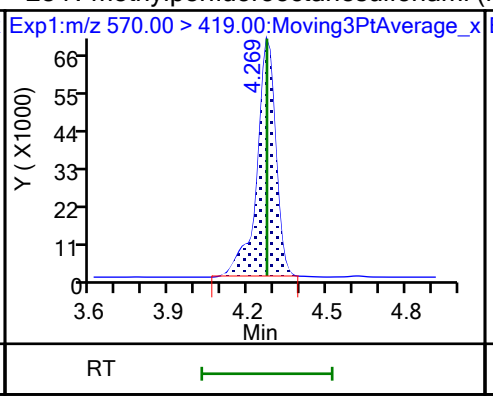
22 Perfluorooctanesulfonamide



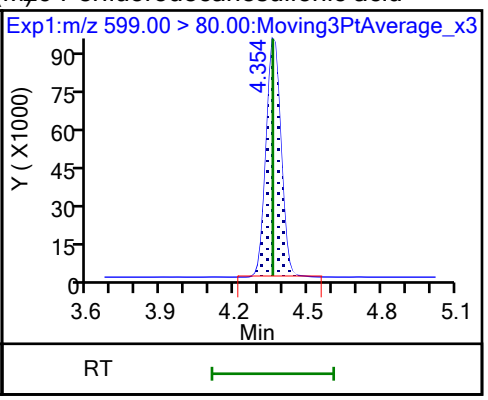
D 27 d3-NMeFOSAA (M)



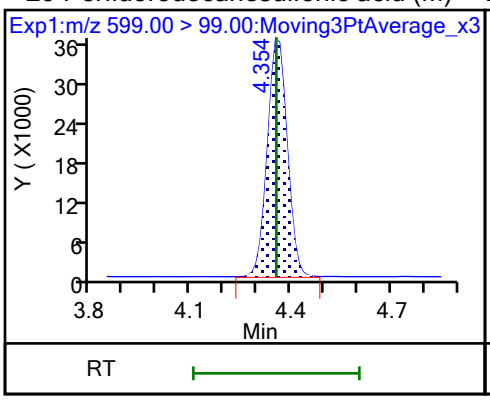
28 N-methylperfluorooctanesulfonami (M)



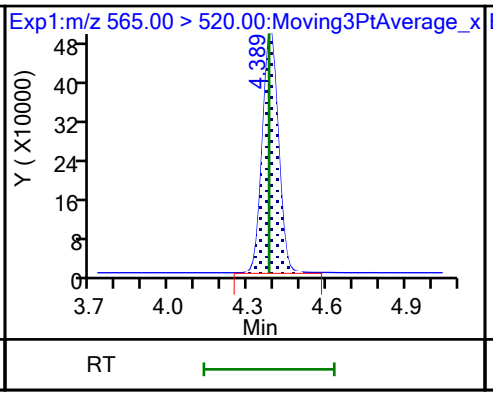
29 Perfluorodecanesulfonic acid



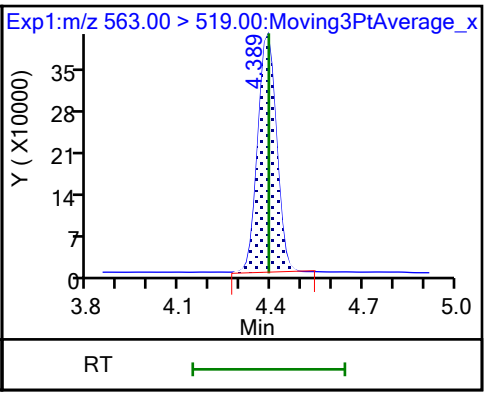
29 Perfluorodecanesulfonic acid (M)



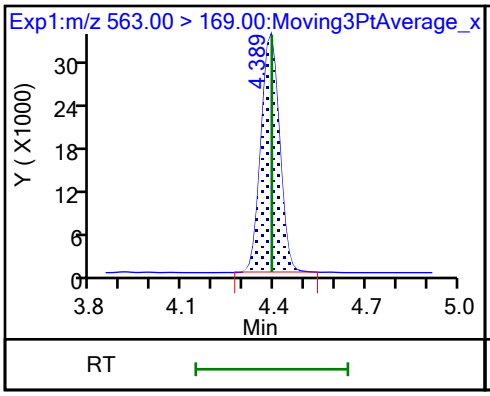
D 30 13C2 PFUnA



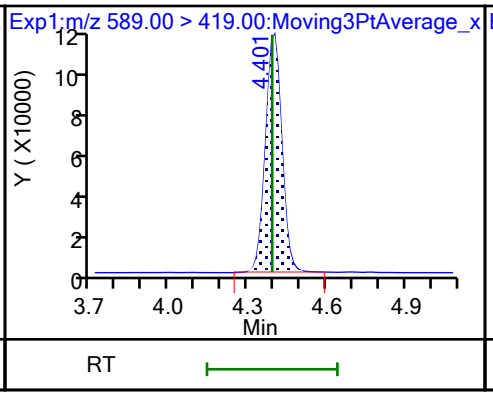
31 Perfluoroundecanoic acid



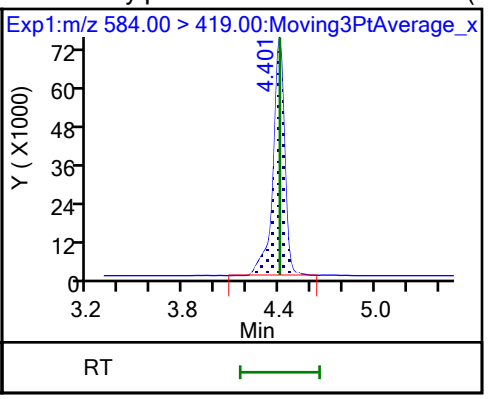
31 Perfluoroundecanoic acid



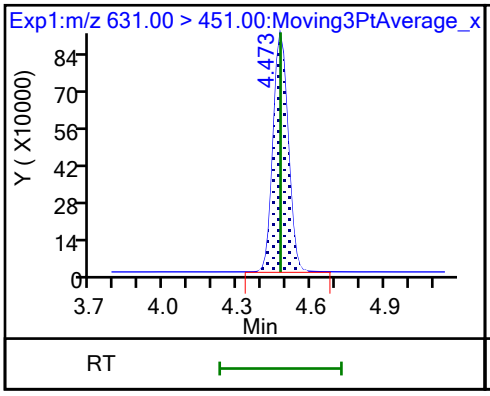
D 32 d5-NEtFOSAA



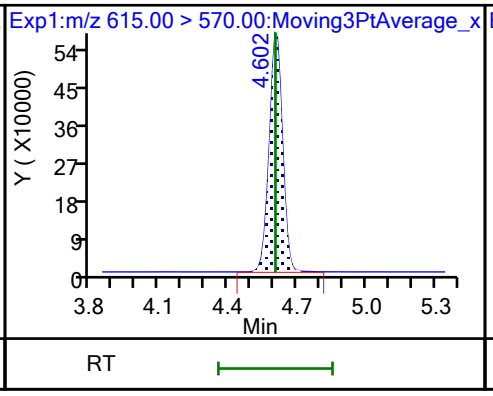
33 N-ethylperfluorooctanesulfonamid (M)



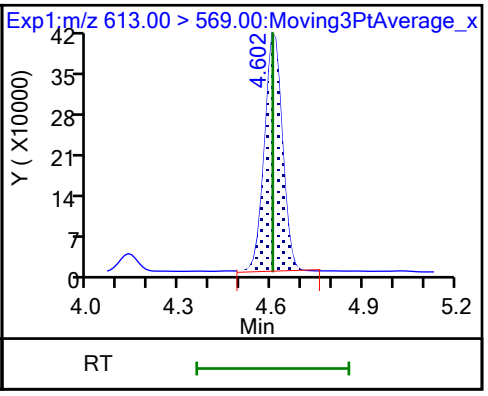
66 11-Chloroeicosafluoro-3-oxaundec



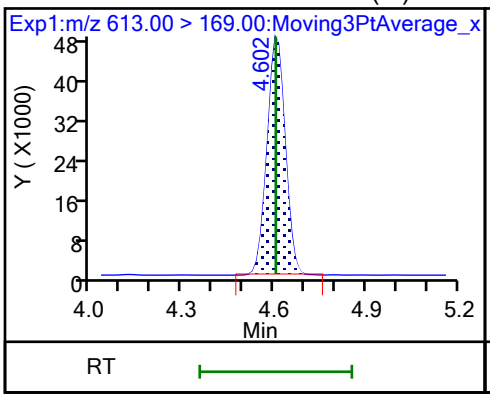
D 36 13C2 PFDoA



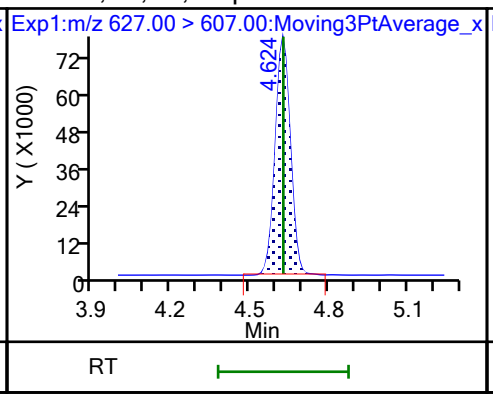
37 Perfluorododecanoic acid



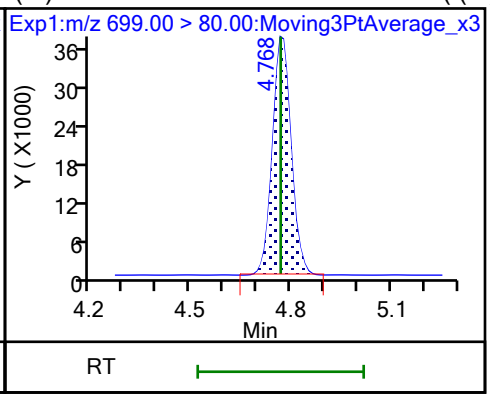
37 Perfluorododecanoic acid (M)



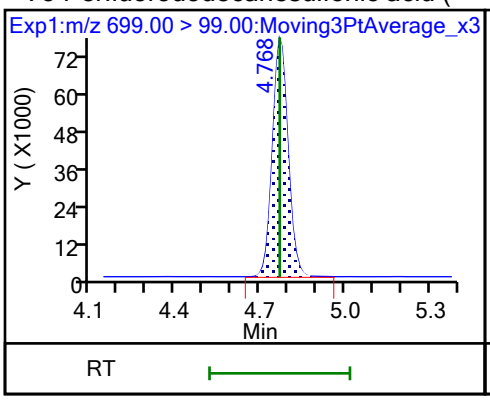
74 1H,1H,2H,2H-perfluorododecanesul (M)



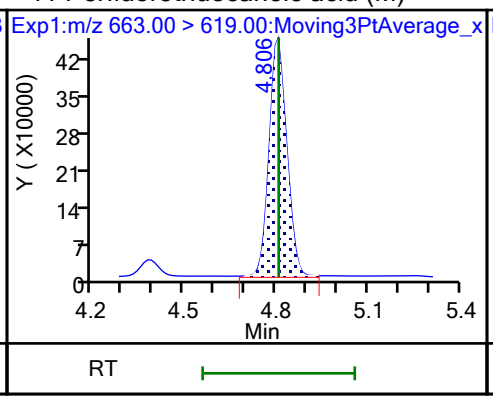
75 Perfluorododecanesulfonic acid ((M)



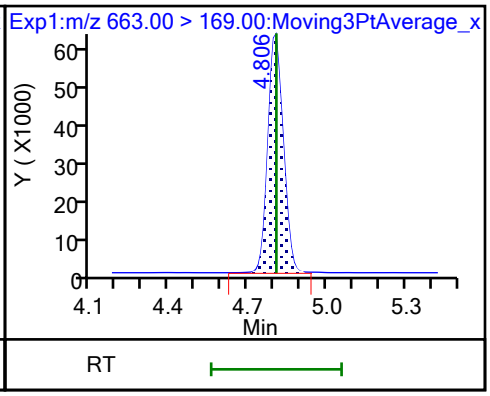
75 Perfluorododecanesulfonic acid (



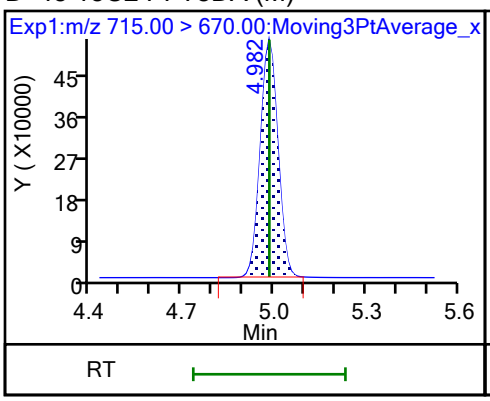
41 Perfluorotridecanoic acid (M)



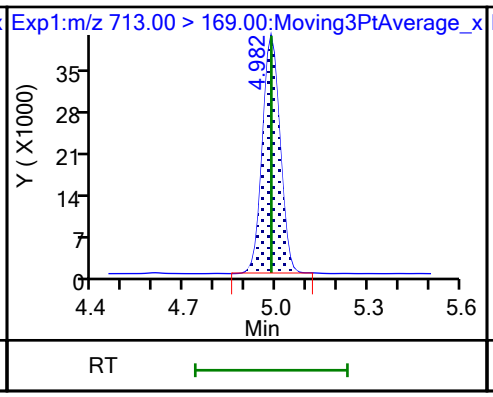
41 Perfluorotridecanoic acid



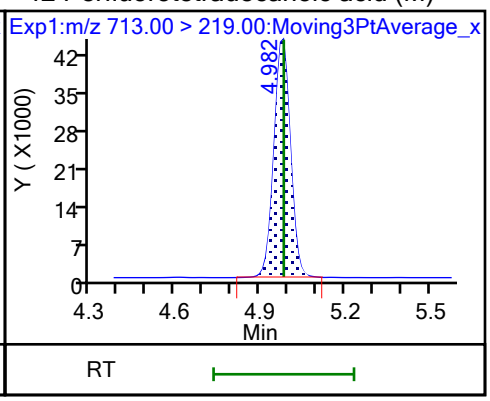
D 43 13C2 PFTeDA (M)



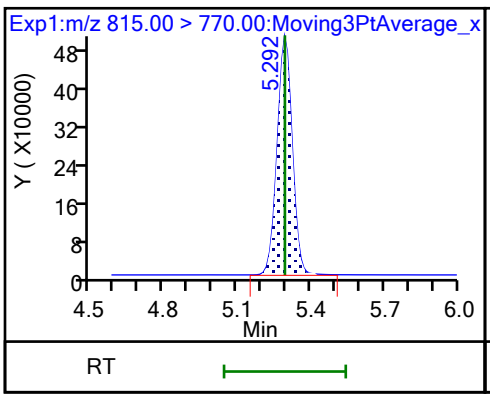
42 Perfluorotetradecanoic acid



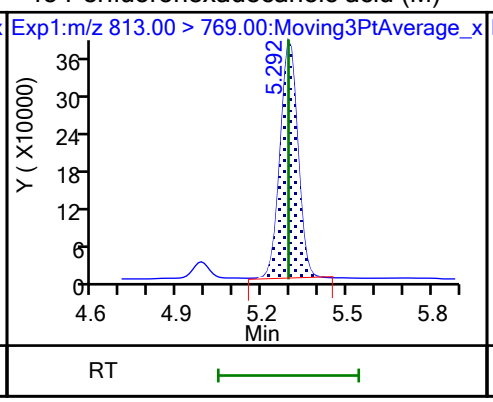
42 Perfluorotetradecanoic acid (M)



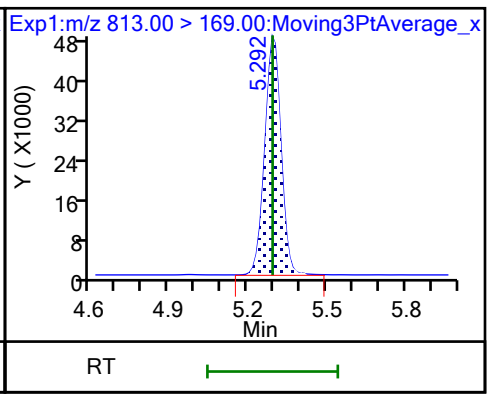
D 44 13C2 PFHxDA



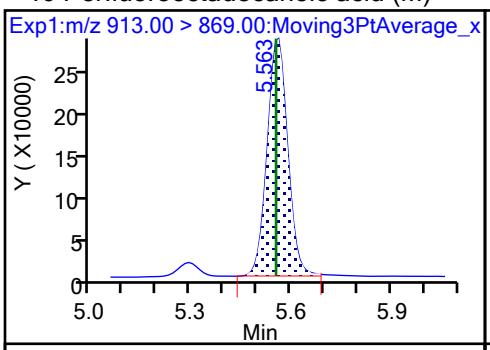
45 Perfluorohexadecanoic acid (M)



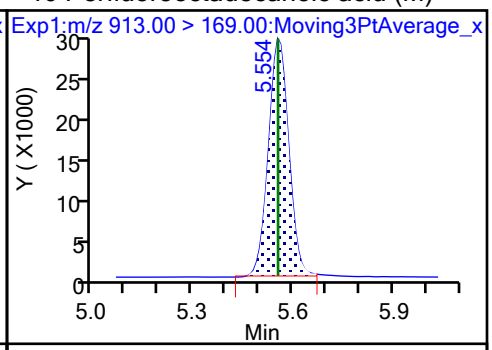
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/14 Calibration Date: 10/21/2023 05:36

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D14.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8928		2.43	2.50	-2.9	30.0
Perfluoropentanoic acid	AveID	1.079	1.070		2.48	2.50	-0.9	
Perfluorobutanesulfonic acid	AveID	1.117	1.097		2.18	2.22	-1.8	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.584		2.47	2.34	5.6	
Perfluorohexanoic acid	AveID	1.100	0.9624		2.19	2.50	-12.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.317		2.37	2.35	0.9	
HFPODA	AveID	1.001	0.9626		2.40	2.50	-3.9	
Perfluorohexanesulfonic acid	AveID	1.107	1.062		2.19	2.29	-4.0	
Perfluoroheptanoic acid	AveID	1.121	1.012		2.26	2.50	-9.7	
DONA	AveID	5.754	6.006		2.47	2.36	4.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.839		2.47	2.38	3.9	
Perfluoroheptanesulfonic acid	AveID	1.445	1.436		2.37	2.38	-0.6	
Perfluorooctanoic acid	AveID	1.065	0.9733		2.28	2.50	-8.6	
Perfluorooctanesulfonic acid	AveID	1.166	1.127		2.24	2.32	-3.4	
Perfluorononanoic acid	AveID	0.9800	0.9472		2.42	2.50	-3.4	
9Cl-PF3ONS	AveID	3.569	3.890		2.54	2.33	9.0	
Perfluorononanesulfonic acid	AveID	0.8874	0.8174		2.22	2.41	-7.9	
Perfluorodecanoic acid	AveID	0.999	0.9212		2.31	2.50	-7.8	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.400		2.62	2.40	9.0	
Perfluorooctanesulfonamide	AveID	0.9539	0.9851		2.58	2.50	3.3	
NMeFOSAA	AveID	0.9074	0.8782		2.42	2.50	-3.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6344		2.24	2.41	-7.1	
Perfluoroundecanoic acid	AveID	1.031	1.006		2.44	2.50	-2.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9659		2.41	2.50	-3.4	
11Cl-PF3OUdS	AveID	5.474	5.917		2.55	2.36	8.1	
Perfluorododecanoic acid	AveID	1.018	0.9236		2.27	2.50	-9.3	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.458		2.67	2.41	10.8	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2162		2.26	2.42	-6.6	
Perfluorotridecanoic acid	AveID	1.070	1.010		2.36	2.50	-5.6	
Perfluorotetradecanoic acid	AveID	0.1118	0.1029		2.30	2.50	-8.0	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.031		2.58	2.50	3.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7133		2.28	2.50	-8.7	
13C4 PFBA	Ave	0.9917	1.063		1.34	1.25	7.2	
13C5 PFPeA	Ave	0.7696	0.7774		1.26	1.25	1.0	
13C3 PFBS	Ave	1.041	0.9584		1.07	1.16	-8.0	
M2-4:2 FTS	Ave	0.1204	0.0978		0.949	1.17	-18.8	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/14 Calibration Date: 10/21/2023 05:36

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D14.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8256		1.32	1.25	5.4	
13C3 HFPO-DA	Ave	0.1516	0.1508		1.24	1.25	-0.5	
18O2 PFHxS	Ave	0.7464	0.6930		1.10	1.18	-7.2	50.0
13C4 PFHpA	Ave	0.8590	0.9115		1.33	1.25	6.1	50.0
M2-6:2 FTS	Ave	0.1551	0.1329		1.02	1.19	-14.3	
13C4 PFOA	Ave	0.9731	1.015		1.30	1.25	4.3	50.0
13C4 PFOS	Ave	0.4742	0.4421		1.11	1.20	-6.8	50.0
13C5 PFNA	Ave	1.059	1.080		1.28	1.25	2.0	50.0
13C2 PFDA	Ave	1.109	1.121		1.26	1.25	1.1	
M2-8:2 FTS	Ave	0.1744	0.1427		0.980	1.20	-18.1	
13C8 FOSA	Ave	0.9462	0.8374		1.11	1.25	-11.5	
d3-NMeFOSAA	Ave	0.2650	0.2488		1.17	1.25	-6.1	
13C2 PFUnA	Ave	1.047	1.033		1.23	1.25	-1.3	
d5-NEtFOSAA	Ave	0.2552	0.2391		1.17	1.25	-6.3	
13C2 PFDoA	Ave	1.064	1.057		1.24	1.25	-0.6	
13C2 PFTeDA	Ave	1.059	1.006		1.19	1.25	-5.1	
13C2 PFHxDA	Ave	1.221	1.069		1.10	1.25	-12.4	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D14.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 21-Oct-2023 05:36:03 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057494-014 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:08:19 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 15:02:50
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.130	0.001	0.607	2098977	1.34		107	1971	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.000	3748022	2.43		97.1	243	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1534394	1.26		101	1754	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	3282320	2.48		99.1	44.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.698	1759366	1.07		92.0	103677	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.006	3680900	2.18	Target=2.06	98.2	1162	M
298.90 > 99.00	2.467	2.467	0.0	1.006	1839460		2.00(1.03-3.09)		464	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1297234	2.47		106	1995	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	180375	0.9485		81.2	97.5	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1629611	1.32		105	7344	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.798	-0.001	1.000	3136689	2.19	Target=14.12	87.5	203	M
313.00 > 119.00	2.797	2.798	-0.001	1.000	214335		14.63(7.06-21.17)		170	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.798	-0.001	0.887	3391238	2.37	Target=2.72	101	1626	M
349.00 > 99.00	2.797	2.798	-0.001	0.887	1150628		2.95(1.36-4.09)		604	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	572910	2.40		96.1	1556	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	297574	1.24		99.5	2283	
D 11 18O2 PFHxS										
403.00 > 84.00	3.155	3.157	-0.003	0.898	1293919	1.10		92.8	7072	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.155	3.157	-0.003	1.000	2656416	2.19	Target=3.32	96.0	2928	M
399.00 > 99.00	3.155	3.157	-0.003	1.000	766085		3.47(1.66-4.98)		592	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.169	-0.003	1.000	3641930	2.26	Target=4.17	90.3	445	M
363.00 > 169.00	3.166	3.169	-0.003	1.000	858381		4.24(2.09-6.26)		960	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.169	-0.003	0.901	1799093	1.33		106	5060	
77 DONA										M
377.00 > 251.00	3.201	3.204	-0.003	0.838	9904534	2.47	Target=3.33	104	5518	M
377.00 > 85.00	3.201	3.204	-0.003	0.838	2610774		3.79(1.66-4.99)		2913	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.506	-0.003	0.917	2388627	2.37	Target=4.83	99.4	5006	M
449.00 > 99.00	3.503	3.506	-0.003	0.917	451716		5.29(2.41-7.24)		896	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.506	-0.003	0.997	249272	1.02		85.7	416	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.506	-0.003	1.000	1416649	2.47		104	1414	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.515	-0.003	1.000	2003358	1.30		104	4554	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.515	-0.003		1973840	1.25			6242	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.515	-0.003	1.000	3899622	2.28	Target=2.88	91.4	170	
413.00 > 169.00	3.512	3.515	-0.003	1.000	1397261		2.79(1.44-4.32)		1607	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.823	-0.003	1.000	1825345	2.24	Target=4.24	96.6	1985	M
499.00 > 99.00	3.820	3.823	-0.003	1.000	397887		4.59(2.12-6.37)		1203	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.823	-0.003	1.088	834164	1.11		93.2	1956	
20 Perfluorononanoic acid										
463.00 > 419.00	3.844	3.846	-0.002	1.000	4038731	2.42	Target=8.34	96.6	627	
463.00 > 169.00	3.844	3.846	-0.002	1.000	464726		8.69(4.17-12.51)		1752	
D 19 13C5 PFNA										M
468.00 > 423.00	3.844	3.846	-0.002	1.094	2131931	1.27		102	3098	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.972	3.975	-0.003	1.040	6333031	2.54		109	15527	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.106	-0.004	1.074	1372179	2.22	Target=2.17	92.1	6470	
549.00 > 99.00	4.102	4.106	-0.004	1.074	561978		2.44(1.08-3.25)		1388	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.126	4.130	-0.004	0.997	4078429	2.30	Target=11.44	92.2	1260	
513.00 > 169.00	4.138	4.130	0.008	1.000	368952		11.05(5.72-17.16)		1180	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.130	0.008	1.178	2213603	1.26		101	4993	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.142	-0.004	1.178	269922	0.9802		81.9	871	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.138	4.142	-0.004	1.000	1298280	2.62		109	4675	M
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.235	-0.003	1.205	1652966	1.11		88.5	4740	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.235	-0.003	1.000	3256565	2.58		103	2916	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.271	-0.003	1.215	490997	1.17		93.9	1835	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.271	-0.003	1.000	862390	2.42		96.8	897	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.352	4.356	-0.004	1.139	1068402	2.24	Target=2.37	92.9	6696	
599.00 > 99.00	4.352	4.356	-0.004	1.139	413114		2.59(1.19-3.56)		2728	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.380	0.008	1.249	2039523	1.23		98.7	6435	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.391	-0.003	1.000	4103832	2.44	Target=12.20	97.6	869	
563.00 > 169.00	4.388	4.391	-0.003	1.000	345434		11.88(6.10-18.31)		3063	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.391	0.008	1.253	471858	1.17		93.7	1045	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.403	-0.004	1.000	911509	2.41		96.6	1951	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.475	-0.006	1.170	9736938	2.55		108	5877	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.604	0.007	1.313	2086345	1.24		99.4	6942	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.604	0.007	1.000	3853891	2.27	Target=8.47	90.7	261	M
613.00 > 169.00	4.611	4.604	0.007	1.000	511154		7.54(4.23-12.70)		4639	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.626	-0.004	1.117	791771	2.67		111	3211	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.769	0.006	1.250	365198	2.26	Target=0.48	93.4	4041	
699.00 > 99.00	4.765	4.769	-0.004	1.247	774713		0.47(0.24-0.72)		6226	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.807	-0.003	1.042	4214163	2.36	Target=6.41	94.4	264	M
663.00 > 169.00	4.804	4.807	-0.003	1.042	645629		6.53(3.21-9.62)		3573	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.983	-0.003	1.418	1985199	1.19		94.9	8661	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.983	-0.003	1.000	408463	2.30	Target=0.87	92.0	3302	M
713.00 > 219.00	4.980	4.983	-0.003	1.000	443524		0.92(0.43-1.30)		2533	M

Report Date: 25-Oct-2023 09:08:19 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D14.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.293	0.003	1.508	2110844	1.10		87.6	5627	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.293	0.003	1.000	4352364	2.58	Target=7.89	103	307	M
813.00 > 169.00	5.296	5.293	0.003	1.000	529086		8.23(3.94-11.83)		4107	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.558	5.555	0.003	1.049	3011280	2.28	Target=9.39	91.3	318	M
913.00 > 169.00	5.558	5.555	0.003	1.049	310809		9.69(4.69-14.08)		1014	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

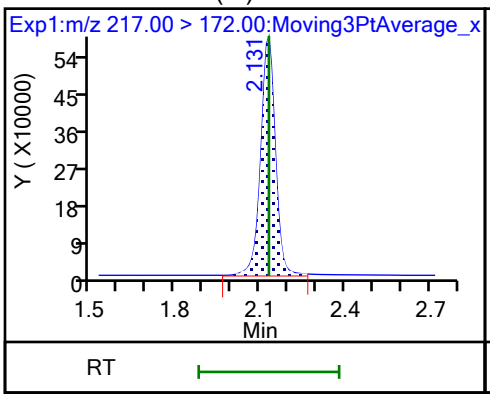
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 09:08:19 Chrom Revision: 2.3 18-Oct-2023 21:16:54

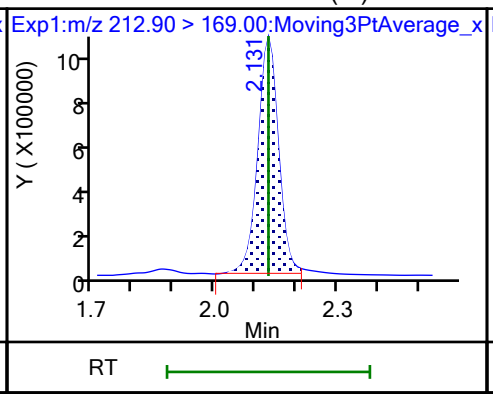
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D14.d
Injection Date: 21-Oct-2023 05:36:03 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

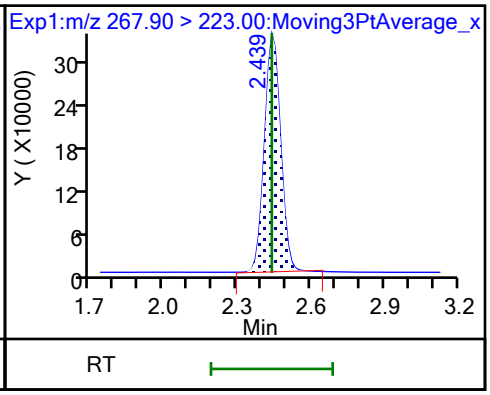
D 1 13C4 PFBA (M)



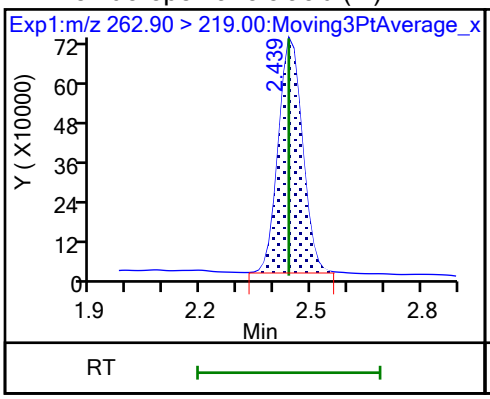
2 Perfluorobutanoic acid (M)



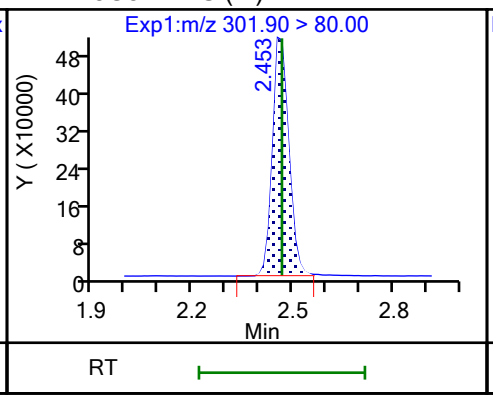
D 3 13C5 PFPeA



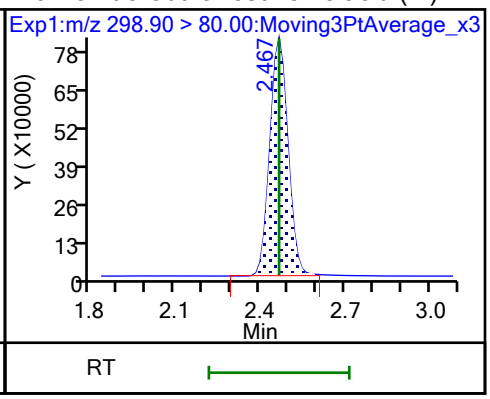
4 Perfluoropentanoic acid (M)



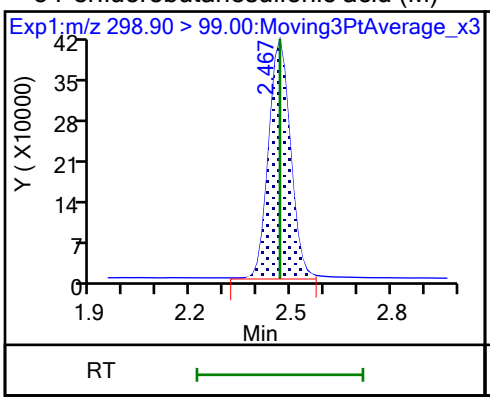
D 47 13C3 PFBS (M)



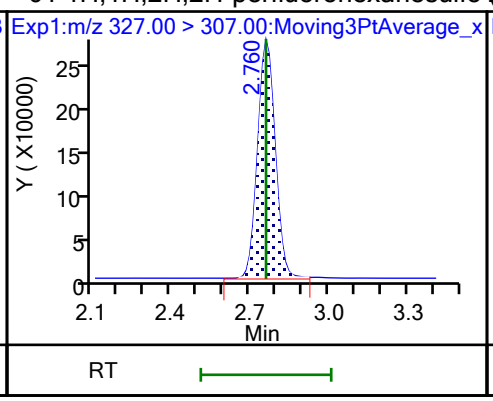
5 Perfluorobutanesulfonic acid (M)



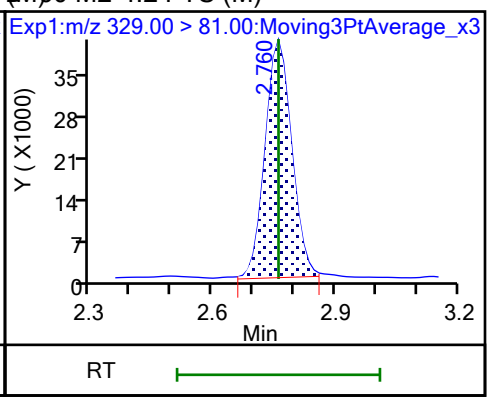
5 Perfluorobutanesulfonic acid (M)



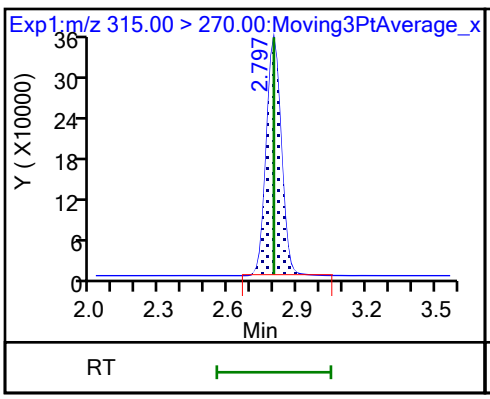
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



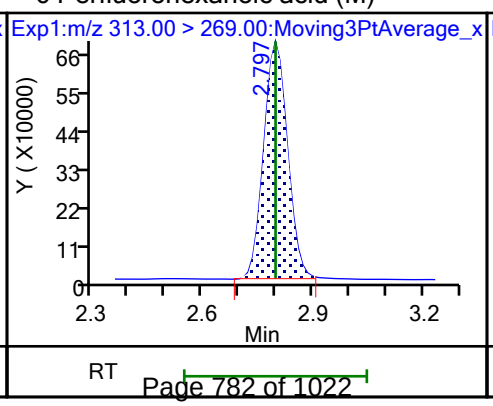
60 M2-4:2 FTS (M)



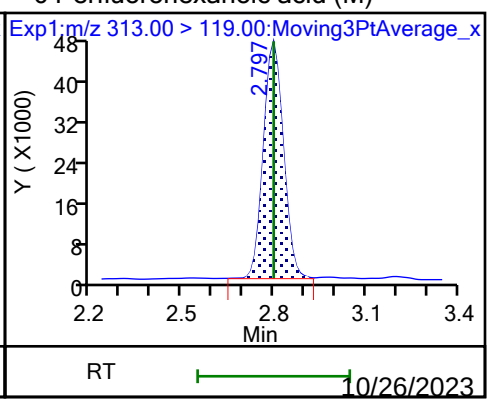
D 7 13C2 PFHxA



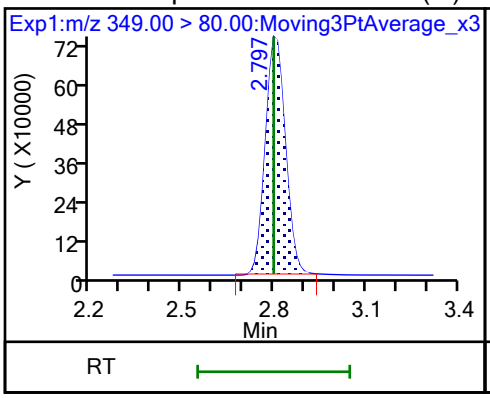
6 Perfluorohexanoic acid (M)



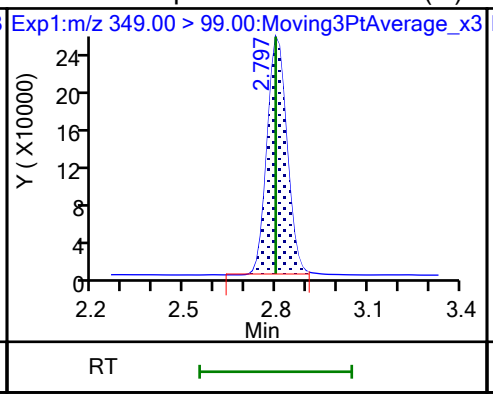
6 Perfluorohexanoic acid (M)



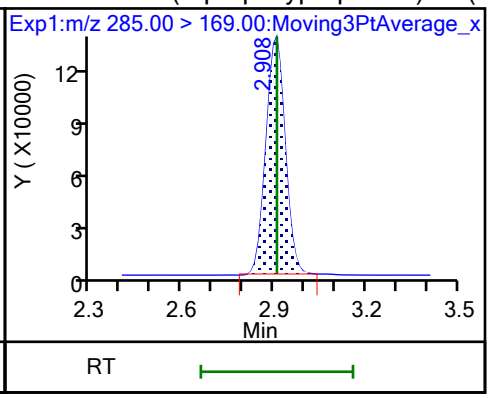
70 Perfluoropentanesulfonic acid (M)



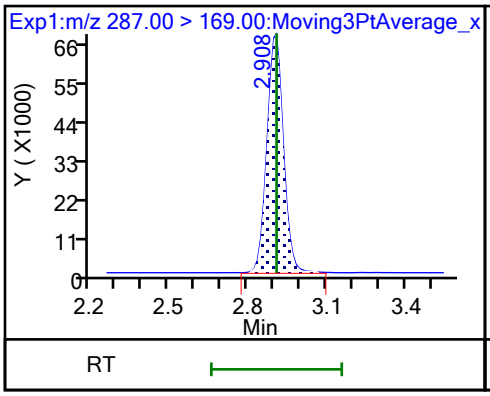
70 Perfluoropentanesulfonic acid (M)



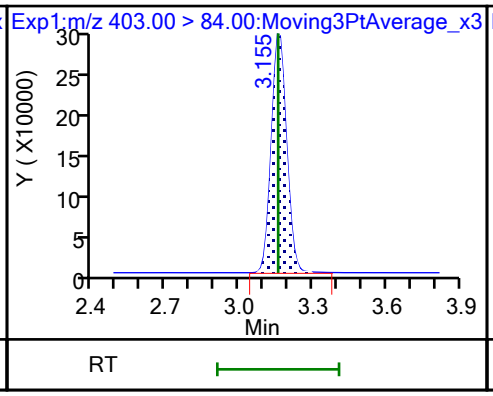
67 Perfluoro(2-propoxypropanoic) ac (M)



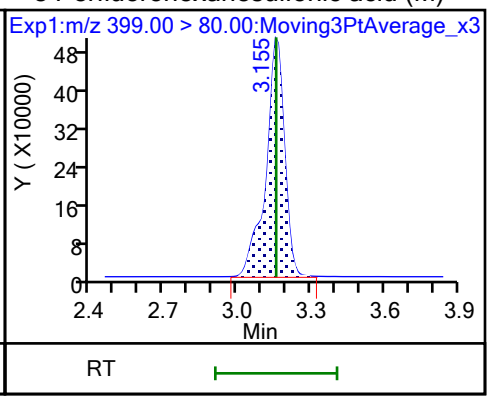
D 64 13C3 HFPO-DA



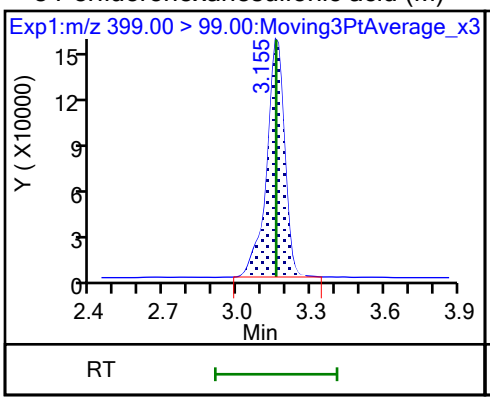
D 11 18O2 PFHxS



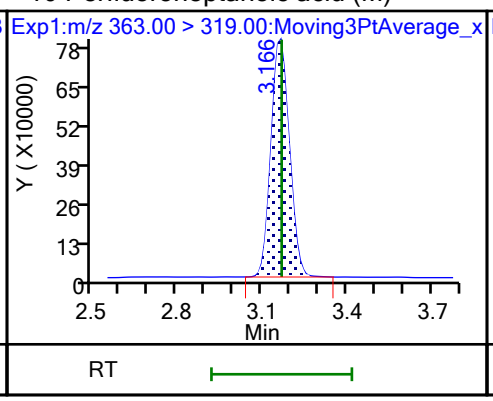
8 Perfluorohexanesulfonic acid (M)



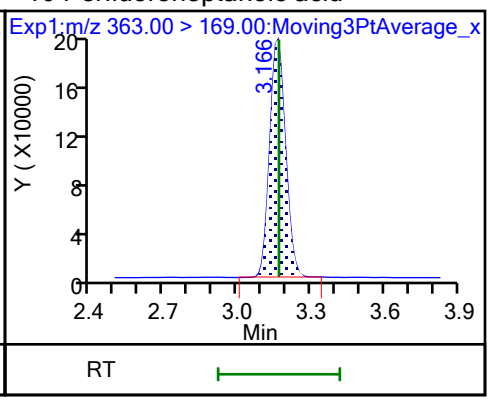
8 Perfluorohexanesulfonic acid (M)



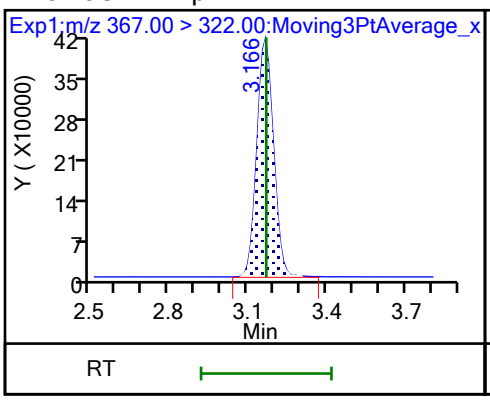
10 Perfluoroheptanoic acid (M)



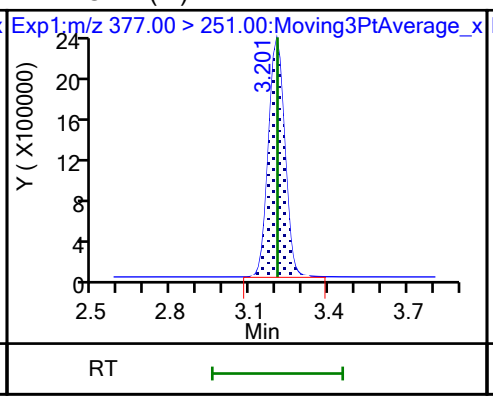
10 Perfluoroheptanoic acid



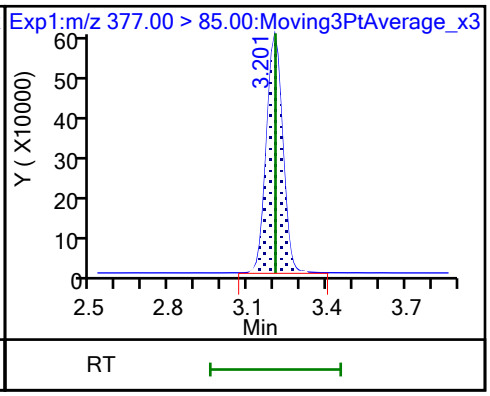
D 9 13C4 PFHpA



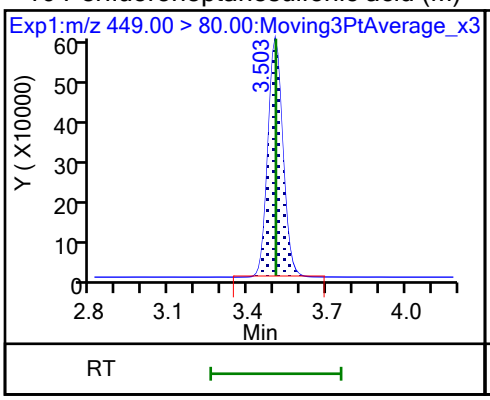
77 DONA (M)



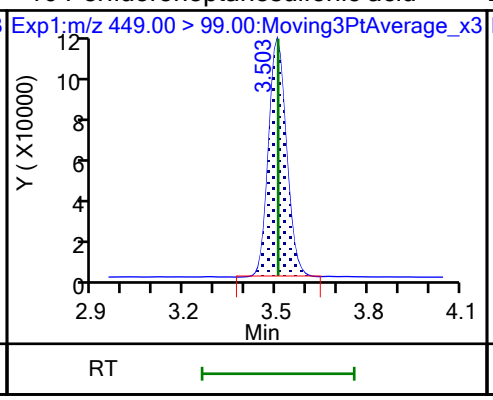
77 DONA



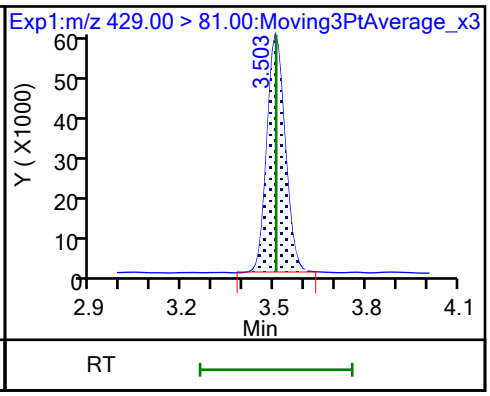
16 Perfluoroheptanesulfonic acid (M)



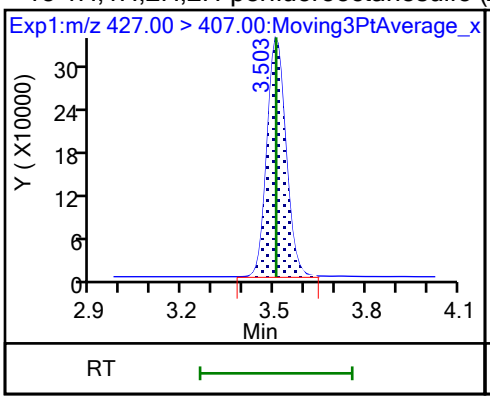
16 Perfluoroheptanesulfonic acid



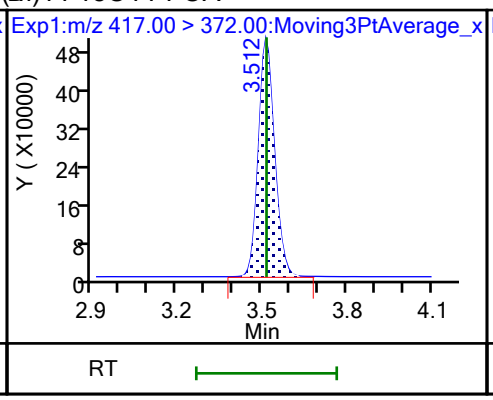
D 12 M2-6:2 FTS



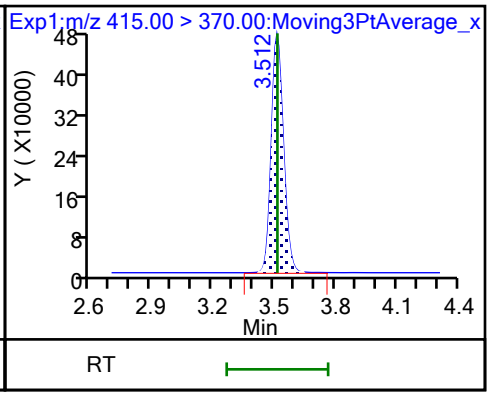
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



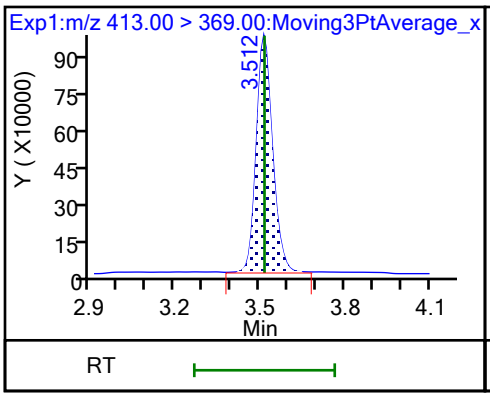
D 14 13C4 PFOA



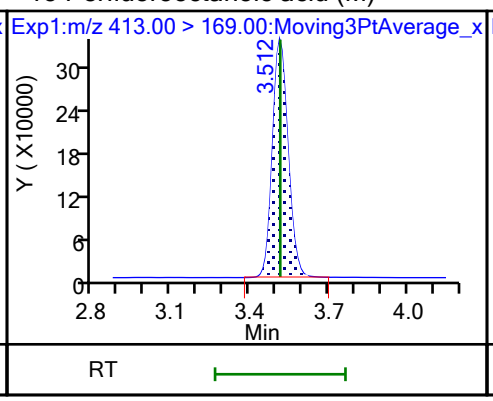
* 62 13C2 PFOA



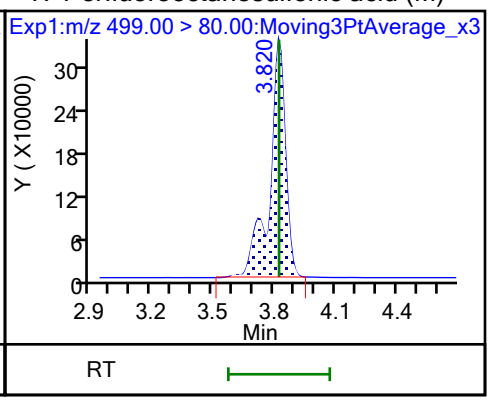
15 Perfluorooctanoic acid



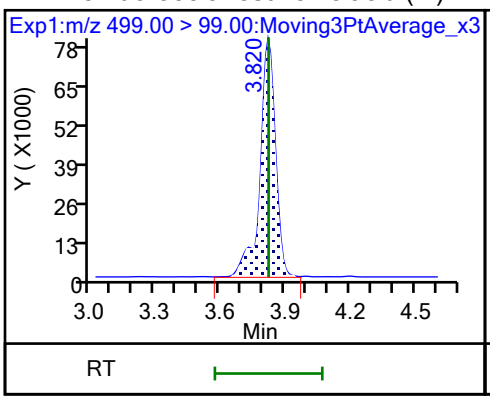
15 Perfluorooctanoic acid (M)



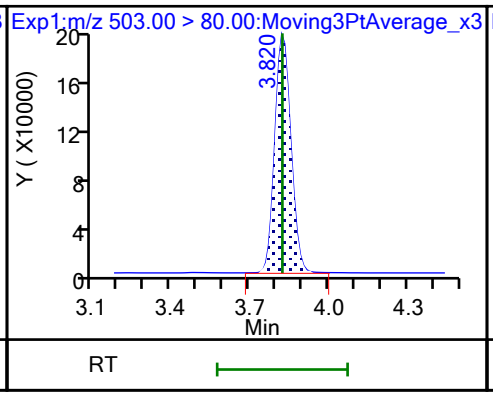
17 Perfluorooctanesulfonic acid (M)



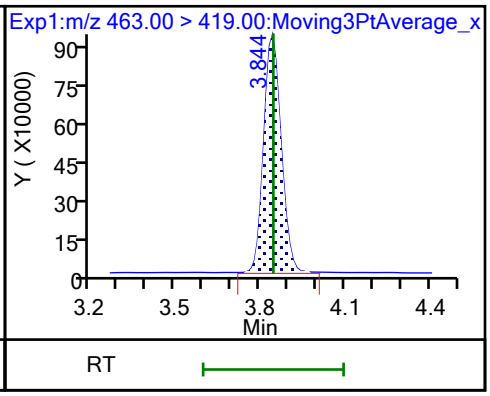
17 Perfluorooctanesulfonic acid (M)



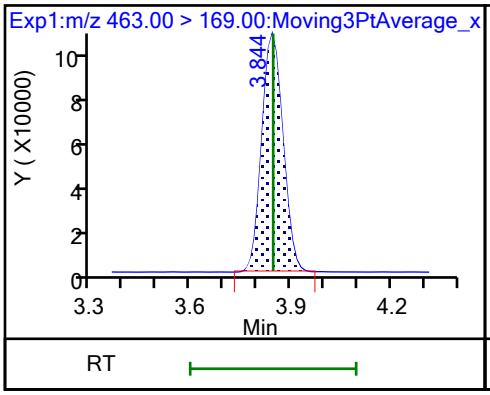
D 18 13C4 PFOS



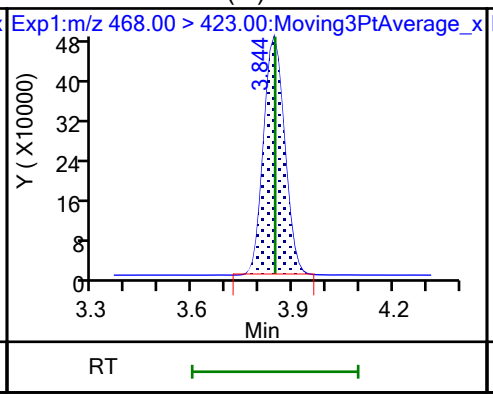
20 Perfluorononanoic acid



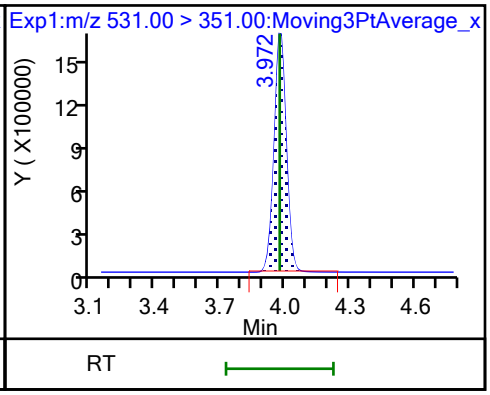
20 Perfluorononanoic acid



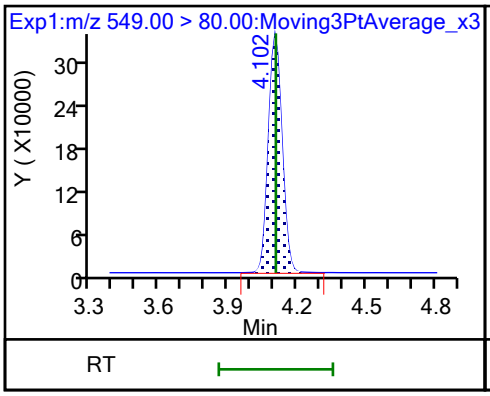
D 19 13C5 PFNA (M)



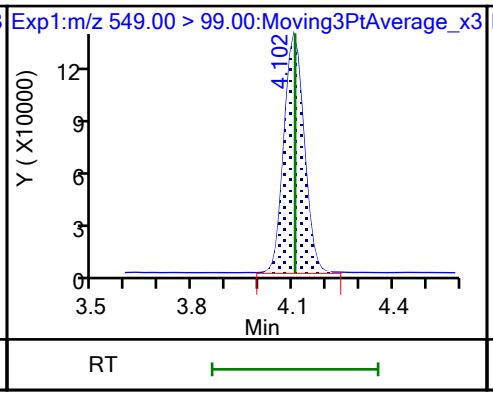
69 9-Chlorohexadecafluoro-3-oxanona



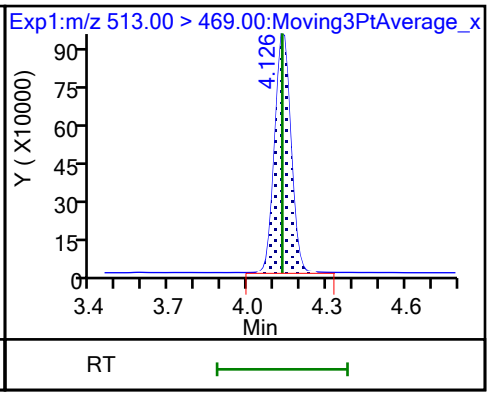
68 Perfluorononanesulfonic acid



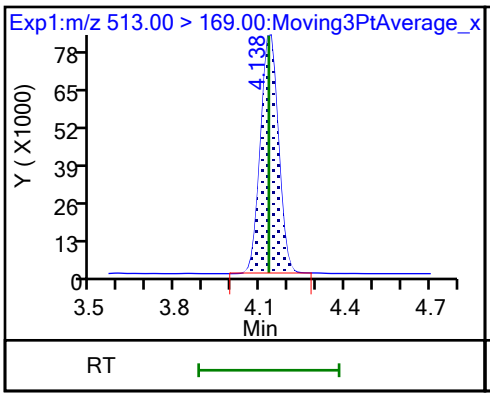
68 Perfluorononanesulfonic acid



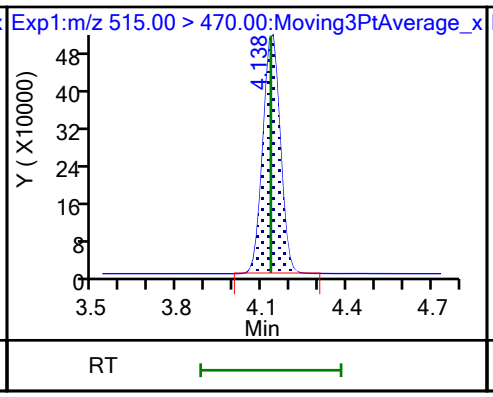
24 Perfluorodecanoic acid



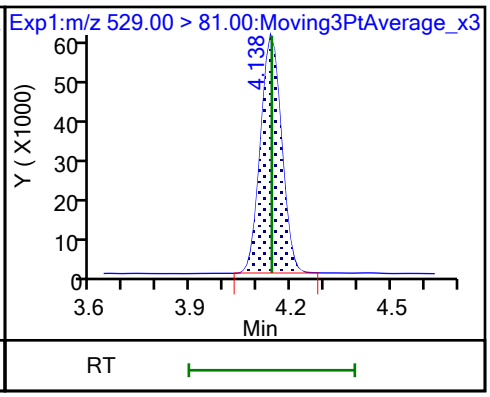
24 Perfluorodecanoic acid



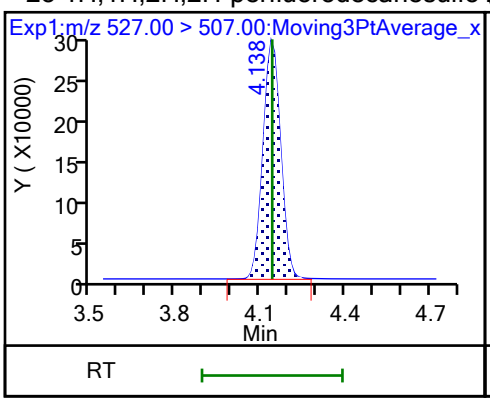
D 23 13C2 PFDA



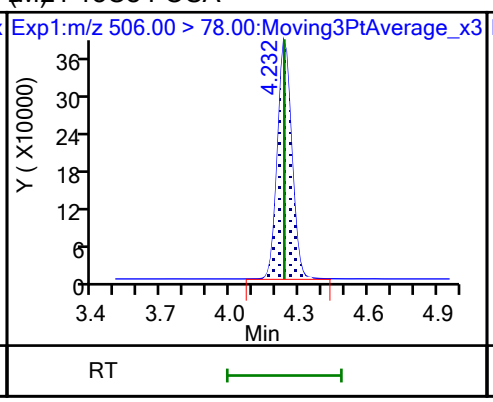
D 26 M2-8:2 FTS



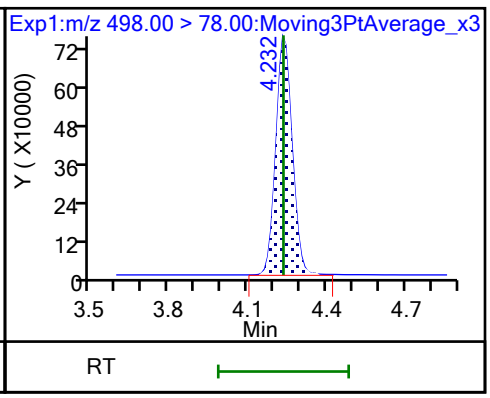
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



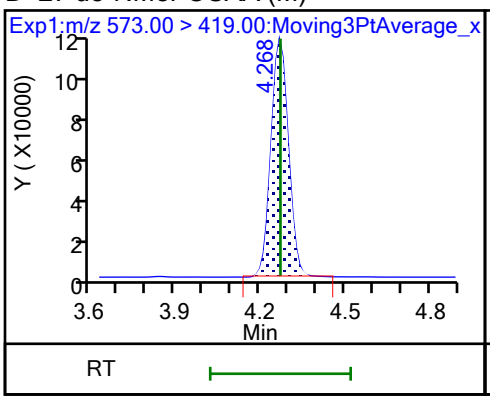
D 21 13C8 FOSA



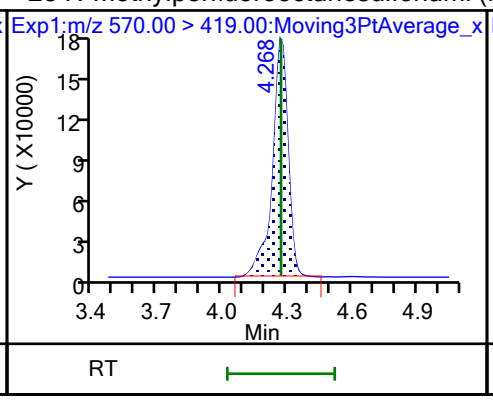
22 Perfluorooctanesulfonamide



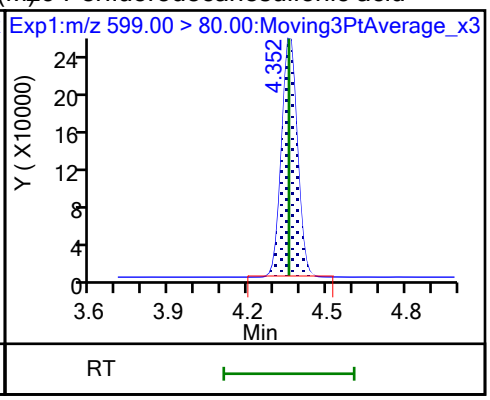
D 27 d3-NMeFOSAA (M)



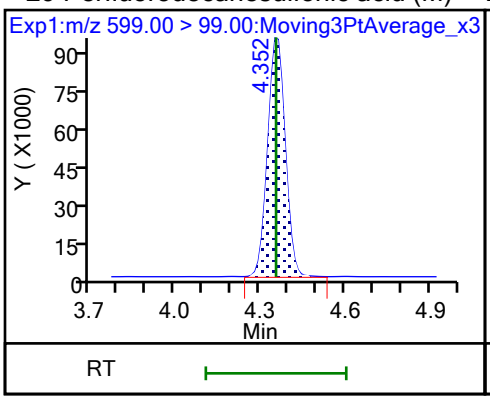
28 N-methylperfluorooctanesulfonami (M)



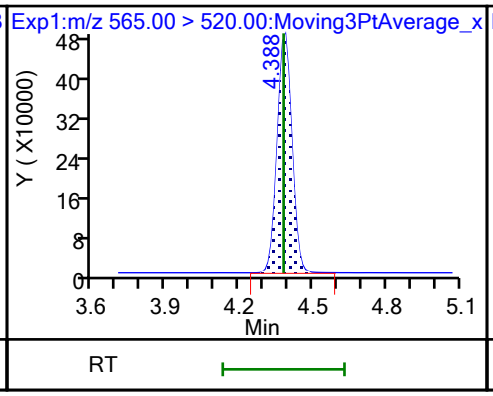
29 Perfluorodecanesulfonic acid



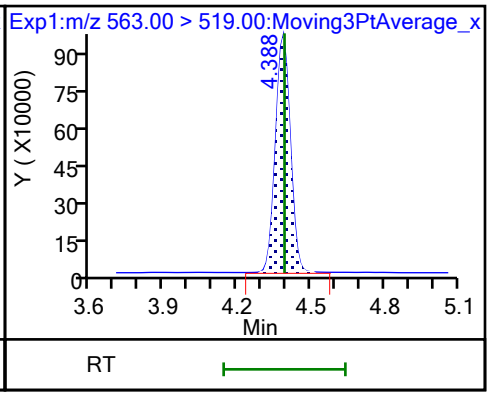
29 Perfluorodecanesulfonic acid (M)



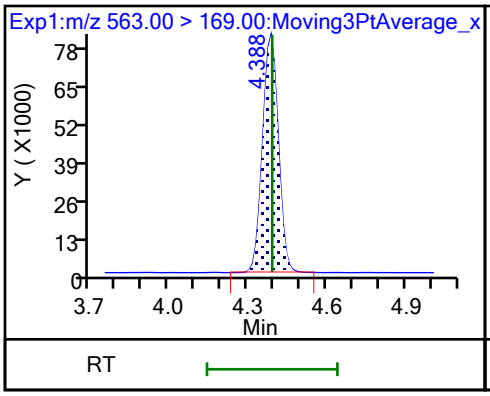
D 30 13C2 PFUnA



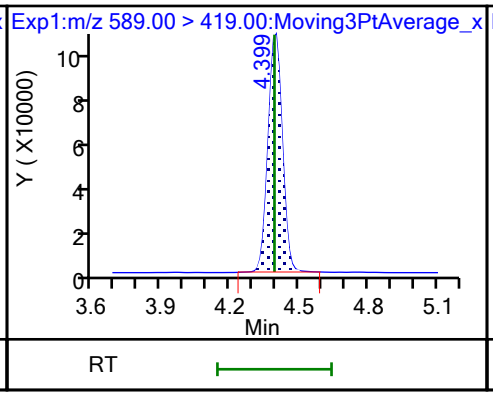
31 Perfluoroundecanoic acid



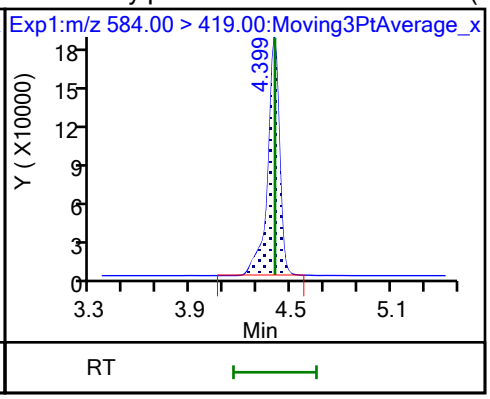
31 Perfluoroundecanoic acid



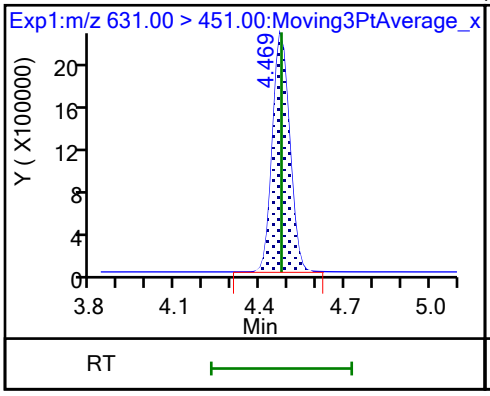
D 32 d5-NEtFOSAA



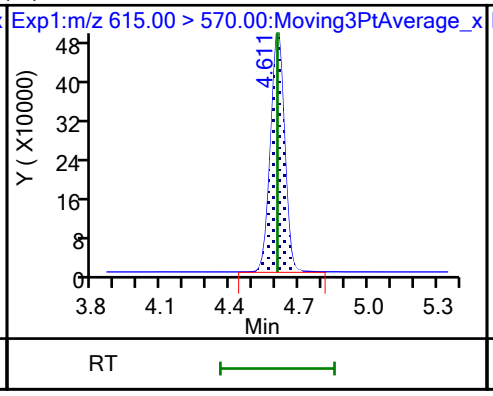
33 N-ethylperfluorooctanesulfonamid (M)



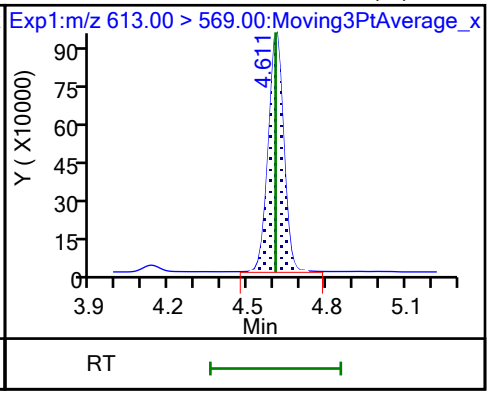
66 11-Chloroeicosafluoro-3-oxaundec (M)



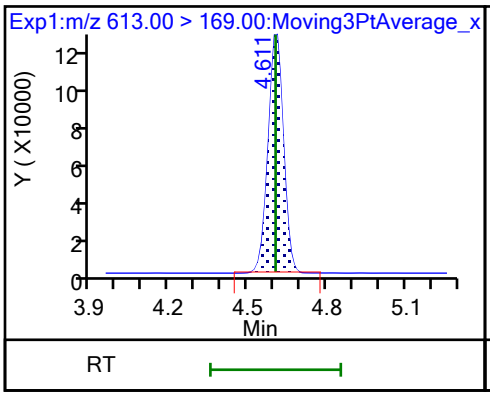
D 36 13C2 PFDoA



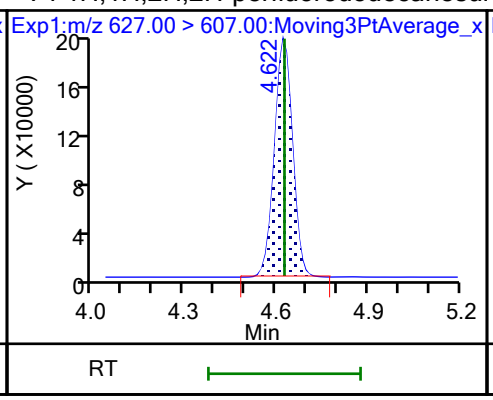
37 Perfluorododecanoic acid (M)



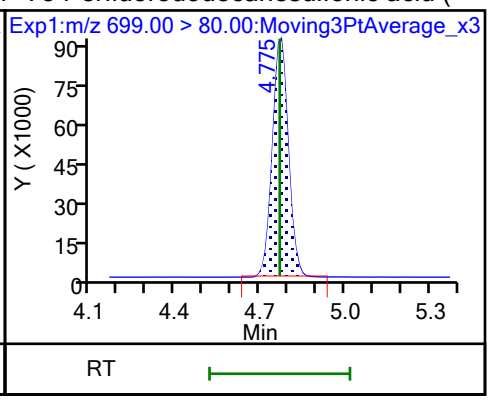
37 Perfluorododecanoic acid



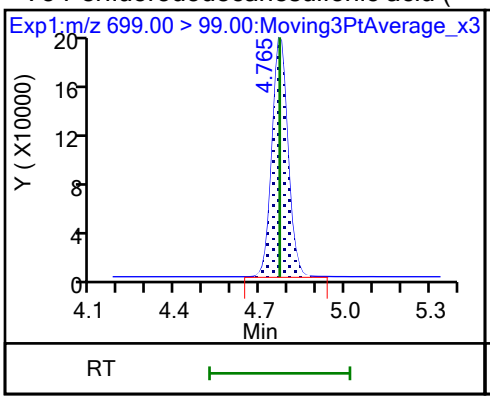
74 1H,1H,2H,2H-perfluorododecanesul



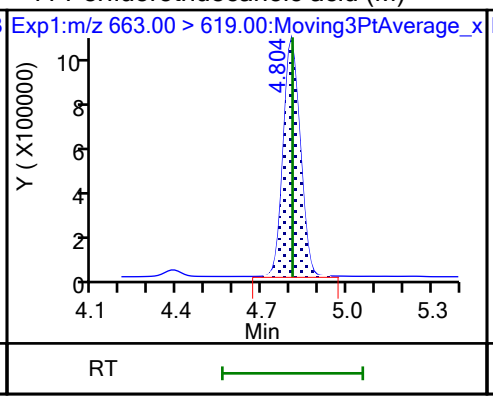
75 Perfluorododecanesulfonic acid (



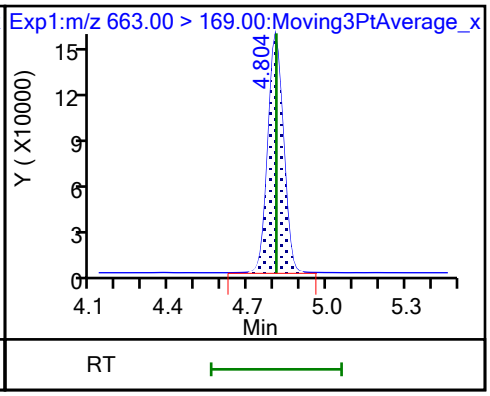
75 Perfluorododecanesulfonic acid (



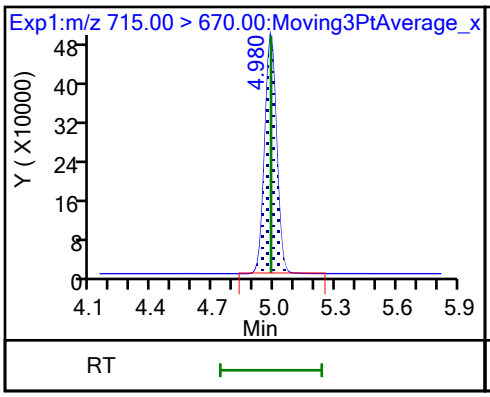
41 Perfluorotridecanoic acid (M)



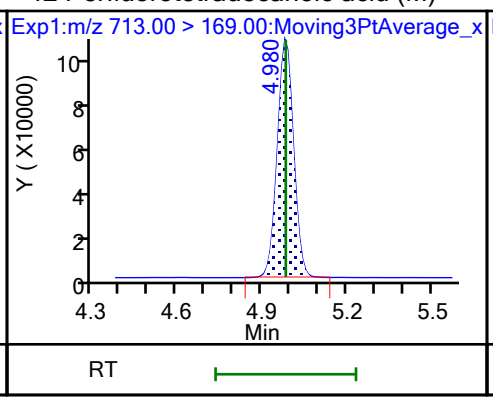
41 Perfluorotridecanoic acid



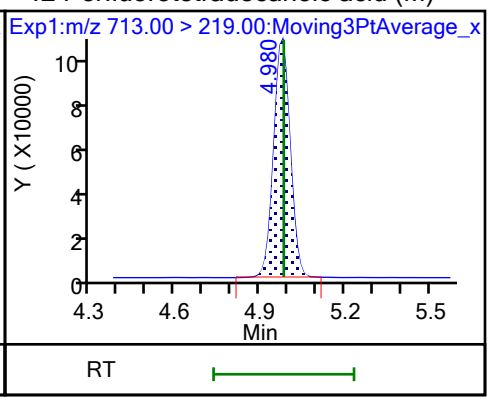
D 43 13C2 PFTeDA



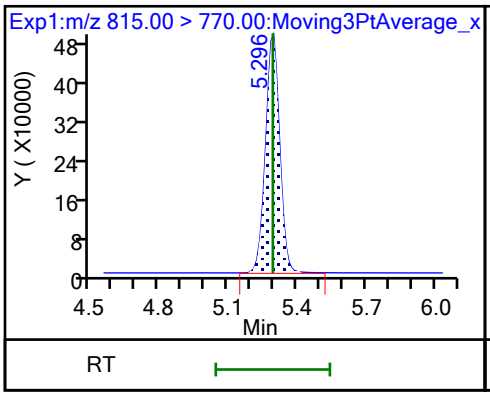
42 Perfluorotetradecanoic acid (M)



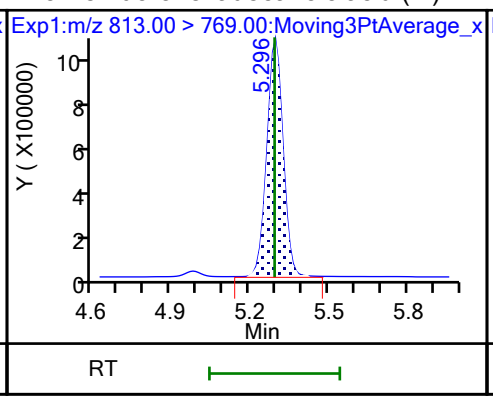
42 Perfluorotetradecanoic acid (M)



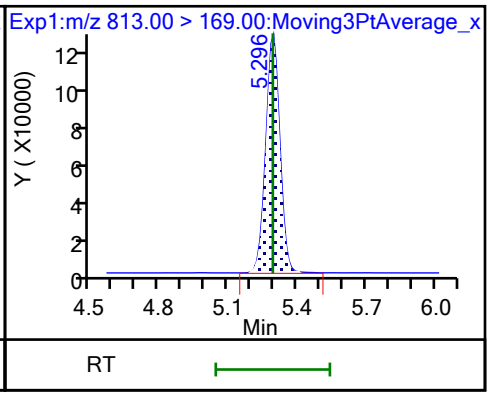
D 44 13C2 PFHxDA



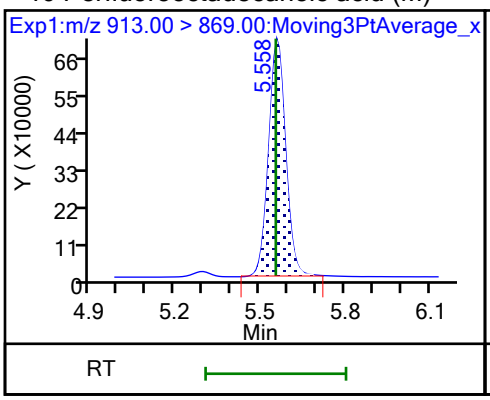
45 Perfluorohexadecanoic acid (M)



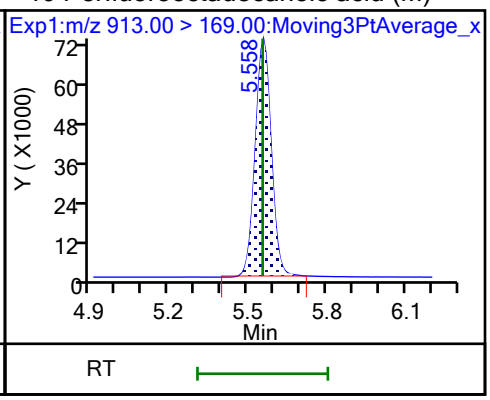
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/27 Calibration Date: 10/21/2023 07:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D27.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8612		0.911	1.00	-8.9	30.0
Perfluoropentanoic acid	AveID	1.079	1.038		0.962	1.00	-3.8	
Perfluorobutanesulfonic acid	AveID	1.117	1.097		0.872	0.887	-1.7	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.511		0.969	0.937	3.4	
Perfluorohexanoic acid	AveID	1.100	0.9821		0.892	1.00	-10.8	
Perfluoropentanesulfonic acid	AveID	1.306	1.317		0.949	0.941	0.9	
HFPODA	AveID	1.001	0.9298		0.929	1.00	-7.1	
Perfluorohexanesulfonic acid	AveID	1.107	1.011		0.835	0.914	-8.7	
Perfluoroheptanoic acid	AveID	1.121	0.9793		0.874	1.00	-12.6	
DONA	AveID	5.754	5.909		0.970	0.945	2.7	
Perfluoroheptanesulfonic acid	AveID	1.445	1.358		0.896	0.953	-6.0	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.648		0.921	0.951	-3.1	
Perfluorooctanoic acid	AveID	1.065	0.9530		0.895	1.00	-10.5	
Perfluorooctanesulfonic acid	AveID	1.166	1.089		0.866	0.928	-6.7	
Perfluorononanoic acid	AveID	0.9800	0.9499		0.969	1.00	-3.1	
9Cl-PF3ONS	AveID	3.569	3.762		0.983	0.933	5.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7877		0.854	0.962	-11.2	
Perfluorodecanoic acid	AveID	0.999	0.9080		0.909	1.00	-9.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.370		1.03	0.960	7.7	
Perfluorooctanesulfonamide	AveID	0.9539	0.9582		1.01	1.00	0.5	
NMeFOSAA	AveID	0.9074	0.8506		0.937	1.00	-6.3	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5810		0.821	0.965	-14.9	
Perfluoroundecanoic acid	AveID	1.031	0.9794		0.950	1.00	-5.0	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9267		0.926	1.00	-7.4	
11Cl-PF3OUdS	AveID	5.474	5.708		0.983	0.943	4.3	
Perfluorododecanoic acid	AveID	1.018	0.9675		0.951	1.00	-4.9	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.410		1.03	0.964	7.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2052		0.858	0.968	-11.4	
Perfluorotridecanoic acid	AveID	1.070	1.071		1.00	1.00	0.0	
Perfluorotetradecanoic acid	AveID	0.1118	0.1004		0.898	1.00	-10.2	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.001		1.00	1.00	0.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7046		0.902	1.00	-9.8	
13C4 PFBA	Ave	0.9917	1.129		1.42	1.25	13.8	
13C5 PFPeA	Ave	0.7696	0.8030		1.30	1.25	4.3	
13C3 PFBS	Ave	1.041	0.9441		1.05	1.16	-9.3	
M2-4:2 FTS	Ave	0.1204	0.1058		1.03	1.17	-12.1	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Lab Sample ID: CCV 200-196634/27 Calibration Date: 10/21/2023 07:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231020D27.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7968		1.27	1.25	1.8	
13C3 HFPO-DA	Ave	0.1516	0.1528		1.26	1.25	0.8	
13C4 PFHpA	Ave	0.8590	0.9161		1.33	1.25	6.6	50.0
18O2 PFHxS	Ave	0.7464	0.7097		1.12	1.18	-4.9	50.0
M2-6:2 FTS	Ave	0.1551	0.1424		1.09	1.19	-8.2	
13C4 PFOA	Ave	0.9731	1.066		1.37	1.25	9.5	50.0
13C4 PFOS	Ave	0.4742	0.4473		1.13	1.20	-5.7	50.0
13C5 PFNA	Ave	1.059	1.092		1.29	1.25	3.1	50.0
13C2 PFDA	Ave	1.109	1.152		1.30	1.25	3.9	
M2-8:2 FTS	Ave	0.1744	0.1434		0.984	1.20	-17.8	
13C8 FOSA	Ave	0.9462	0.8293		1.10	1.25	-12.4	
d3-NMeFOSAA	Ave	0.2650	0.2471		1.17	1.25	-6.7	
13C2 PFUnA	Ave	1.047	1.021		1.22	1.25	-2.4	
d5-NEtFOSAA	Ave	0.2552	0.2417		1.18	1.25	-5.3	
13C2 PFDoA	Ave	1.064	1.012		1.19	1.25	-4.9	
13C2 PFTeDA	Ave	1.059	0.9696		1.14	1.25	-8.5	
13C2 PFHxDA	Ave	1.221	1.038		1.06	1.25	-15.0	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D27.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 21-Oct-2023 07:22:26 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057494-027 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:09:01 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 15:06:19
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	2283412	1.42		114	1850	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1573107	0.9114		91.1	150	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1624312	1.30		104	2156	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.000	1349401	0.9623		96.2	36.4	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1775873	1.05		90.7	76185	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	1487121	0.8716	Target=2.06	98.3	1301	
298.90 > 99.00	2.466	2.467	-0.001	1.000	735155		2.02(1.03-3.09)		320	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	563399	0.9689		103	1946	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	199922	1.03		87.9	155	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.798	-0.001	0.795	1611710	1.27		102	1285	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.798	-0.001	1.000	1266295	0.8925	Target=14.12	89.2	206	
313.00 > 119.00	2.797	2.798	-0.001	1.000	85233		14.86(7.06-21.17)		88.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.798	0.012	0.888	1423569	0.9492	Target=2.72	101	2903	
349.00 > 99.00	2.810	2.798	0.012	0.888	476006		2.99(1.36-4.09)		742	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	229858	0.9287		92.9	1548	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	309021	1.26		101	2074	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.008	0.899	1358063	1.12		95.1	6092	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.008	1.000	1060955	0.8345	Target=3.32	91.3	2032	M
399.00 > 99.00	3.165	3.157	0.008	1.000	312457		3.40(1.66-4.98)		281	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.176	3.169	0.007	1.004	1451673	0.8737	Target=4.17	87.4	292	
363.00 > 169.00	3.176	3.169	0.007	1.004	365200		3.98(2.09-6.26)		605	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.004	0.899	1852923	1.33		107	5100	
77 DONA										
377.00 > 251.00	3.199	3.204	-0.005	0.835	4041119	0.9703	Target=3.33	103	4004	
377.00 > 85.00	3.199	3.204	-0.005	0.835	1045535		3.87(1.66-4.99)		1616	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.506	-0.004	0.914	936721	0.8955	Target=4.83	94.0	3116	
449.00 > 99.00	3.502	3.506	-0.004	0.914	187261		5.00(2.41-7.24)		784	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.506	0.005	0.997	273713	1.09		91.8	671	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.506	0.005	1.000	580433	0.9213		96.9	841	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.515	0.005	1.000	2156095	1.37		110	6377	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.515	0.005		2022701	1.25			7537	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.515	0.005	1.000	1643731	0.8947	Target=2.88	89.5	73.0	
413.00 > 169.00	3.520	3.515	0.005	1.000	594136		2.77(1.44-4.32)		1334	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.823	0.007	1.000	731104	0.8660	Target=4.24	93.3	1509	M
499.00 > 99.00	3.819	3.823	-0.004	0.997	151209		4.84(2.12-6.37)		353	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.823	0.007	1.088	864881	1.13		94.3	3052	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.846	-0.004	1.000	1678001	0.9693	Target=8.34	96.9	280	
463.00 > 169.00	3.842	3.846	-0.004	1.000	201085		8.34(4.17-12.51)		1136	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.091	2208050	1.29		103	11792	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.975	0.006	1.039	2540310	0.9834		105	6784	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.106	-0.006	1.070	548444	0.8540	Target=2.17	88.8	6121	
549.00 > 99.00	4.100	4.106	-0.006	1.070	215731		2.54(1.08-3.25)		814	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.130	0.006	1.000	1692893	0.9086	Target=11.44	90.9	489	
513.00 > 169.00	4.136	4.130	0.006	1.000	154945		10.93(5.72-17.16)		794	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										M
515.00 > 470.00	4.136	4.130	0.006	1.175	2330555	1.30		104	4052	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.175	277809	0.9844		82.2	1126	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.142	0.006	1.003	527928	1.03		108	4162	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.205	1677427	1.10		87.6	4596	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.235	0.007	1.000	1285892	1.00		100	2671	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.271	-0.005	1.212	499884	1.17		93.3	2051	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.271	0.008	1.003	340178	0.9374		93.7	665	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.356	0.007	1.139	405815	0.8210	Target=2.37	85.1	3068	
599.00 > 99.00	4.363	4.356	0.007	1.139	166730		2.43(1.19-3.56)		1404	
D 30 13C2 PFUnA										M
565.00 > 520.00	4.387	4.380	0.007	1.246	2066104	1.22		97.6	6537	M
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.391	-0.004	1.000	1618812	0.9503	Target=12.20	95.0	339	M
563.00 > 169.00	4.387	4.391	-0.004	1.000	137839		11.74(6.10-18.31)		1482	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.391	0.008	1.249	488928	1.18		94.7	1077	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.403	-0.004	1.000	362453	0.9265		92.6	1351	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.475	0.007	1.170	3895836	0.9834		104	4029	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.310	2046940	1.19		95.1	11493	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.604	0.006	1.000	1584260	0.9505	Target=8.47	95.1	104	M
613.00 > 169.00	4.610	4.604	0.006	1.000	188081		8.42(4.23-12.70)		2353	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.626	0.006	1.120	315398	1.03		107	3605	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.769	0.005	1.246	143742	0.8580	Target=0.48	88.6	2877	
699.00 > 99.00	4.774	4.769	0.005	1.246	293366		0.49(0.24-0.72)		3285	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.807	-0.004	1.042	1753492	1.00	Target=6.41	100	108	M
663.00 > 169.00	4.803	4.807	-0.004	1.042	254802		6.88(3.21-9.62)		1603	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.983	0.007	1.417	1961243	1.14		91.5	5516	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.983	0.007	1.000	157507	0.8978	Target=0.87	89.8	2263	
713.00 > 219.00	4.979	4.983	-0.004	0.998	182199		0.86(0.43-1.30)		3765	

Report Date: 25-Oct-2023 09:09:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D27.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.293	0.003	1.504	2099441	1.06		85.0	5195	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.293	0.003	1.000	1680537	1.00	Target=7.89	100	119	M
813.00 > 169.00	5.296	5.293	0.003	1.000	207564		8.10(3.94-11.83)		2568	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.567	5.555	0.012	1.051	1183348	0.9022	Target=9.39	90.2	138	M
913.00 > 169.00	5.558	5.555	0.003	1.049	122608		9.65(4.69-14.08)		979	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

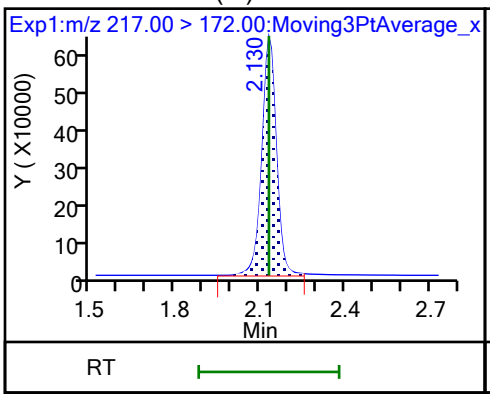
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 09:09:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54

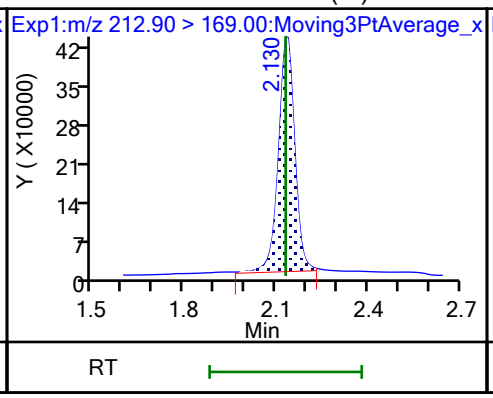
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D27.d
Injection Date: 21-Oct-2023 07:22:26 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

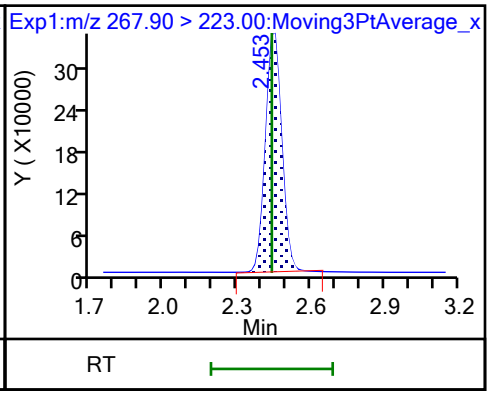
D 1 13C4 PFBA (M)



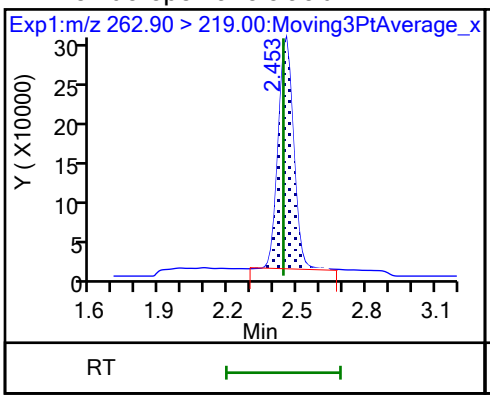
2 Perfluorobutanoic acid (M)



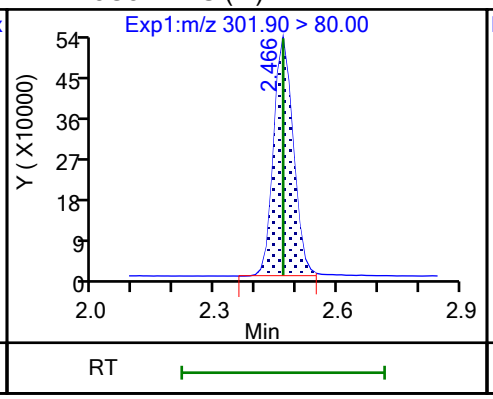
D 3 13C5 PFPeA



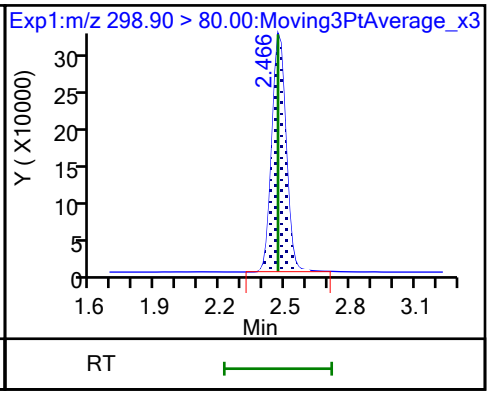
4 Perfluoropentanoic acid



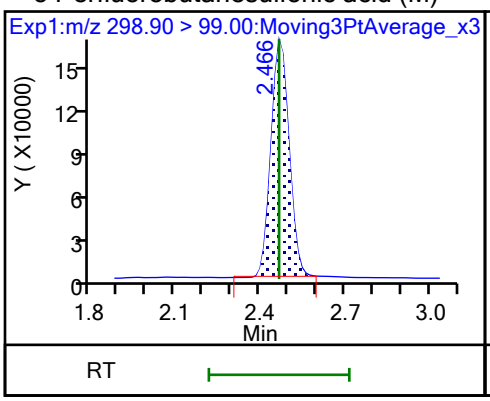
D 47 13C3 PFBS (M)



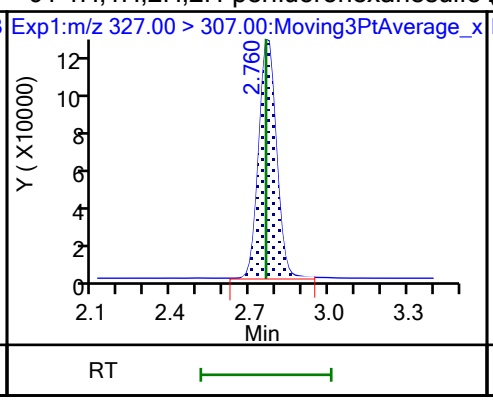
5 Perfluorobutanesulfonic acid



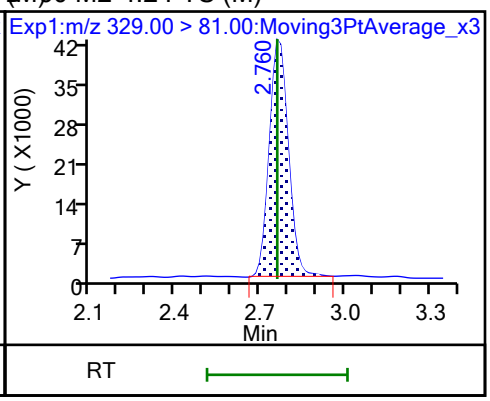
5 Perfluorobutanesulfonic acid (M)



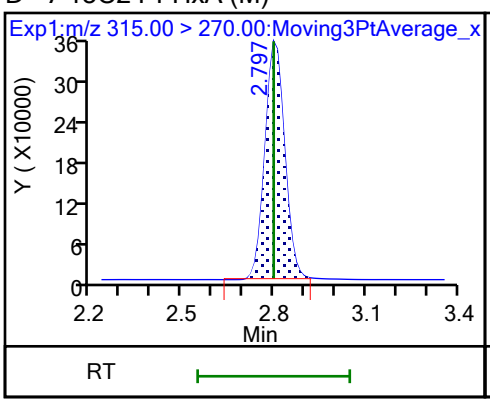
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



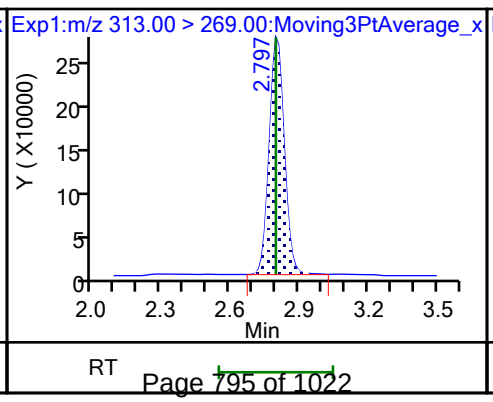
60 M2-4:2 FTS (M)



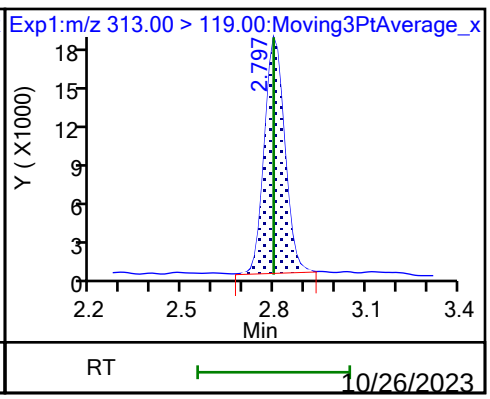
D 7 13C2 PFHxA (M)



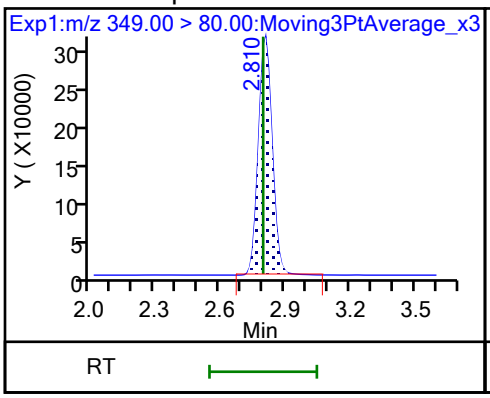
6 Perfluorohexanoic acid



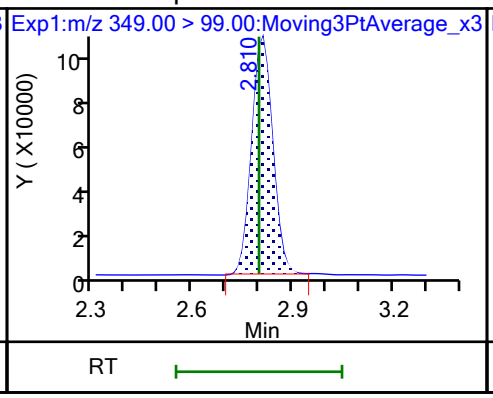
6 Perfluorohexanoic acid



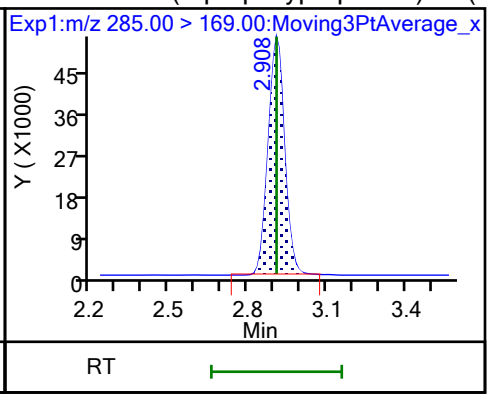
70 Perfluoropentanesulfonic acid



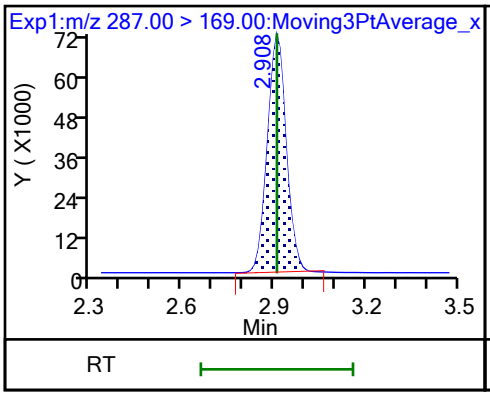
70 Perfluoropentanesulfonic acid



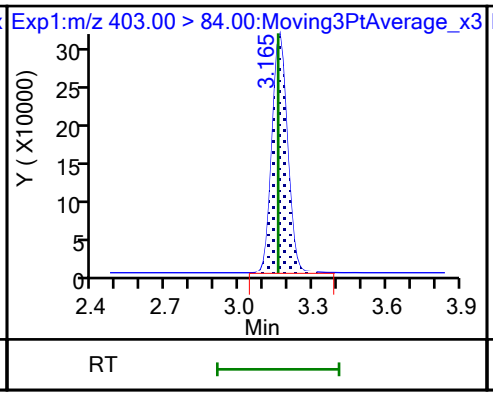
67 Perfluoro(2-propoxypropanoic) ac (M)



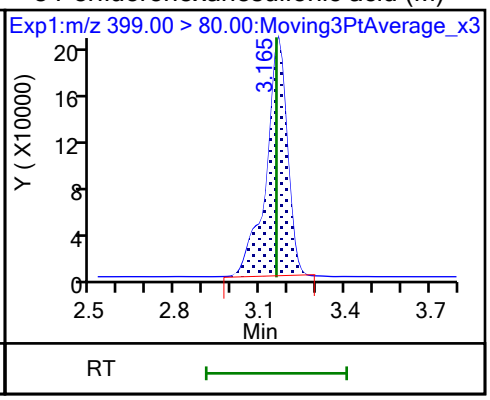
D 64 13C3 HFPO-DA



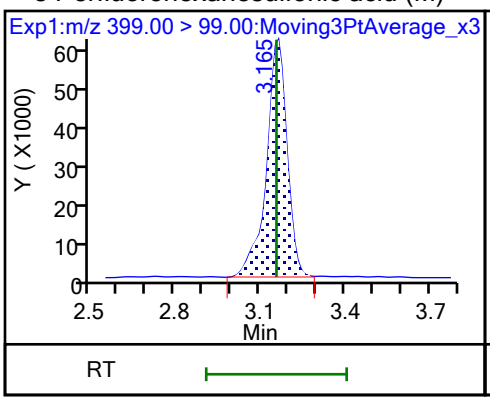
D 11 18O2 PFHxS



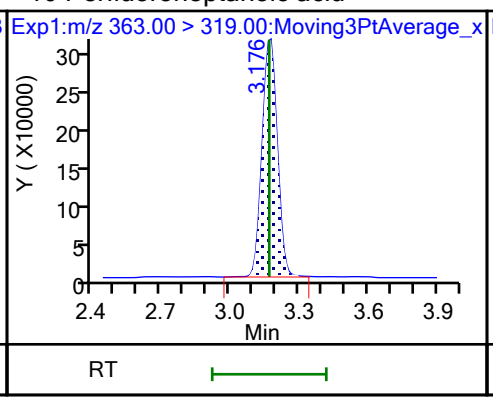
8 Perfluorohexanesulfonic acid (M)



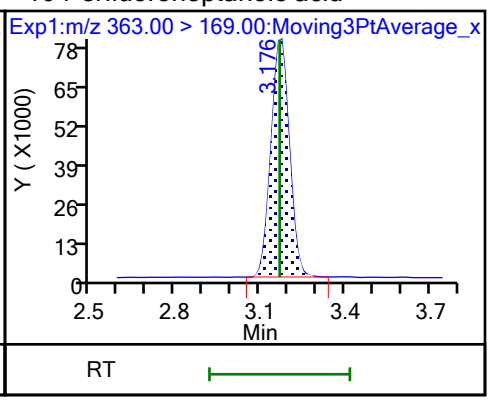
8 Perfluorohexanesulfonic acid (M)



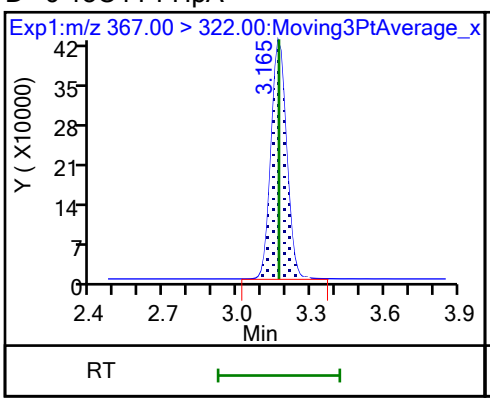
10 Perfluoroheptanoic acid



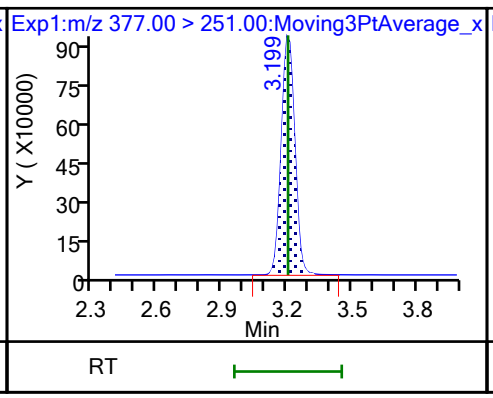
10 Perfluoroheptanoic acid



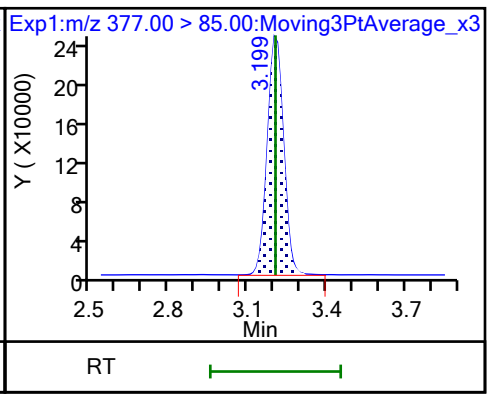
D 9 13C4 PFHpA



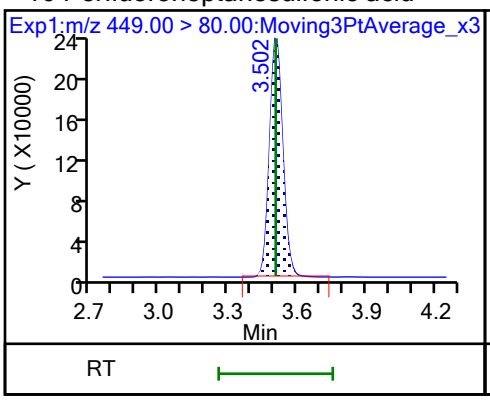
77 DONA



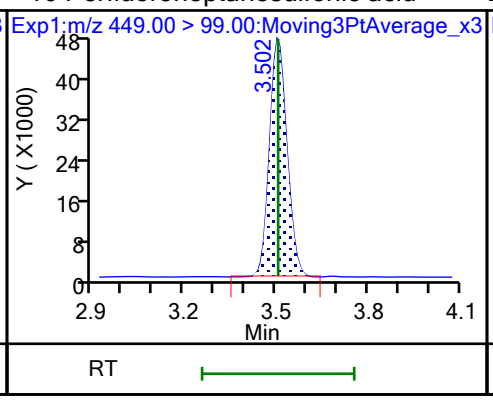
77 DONA



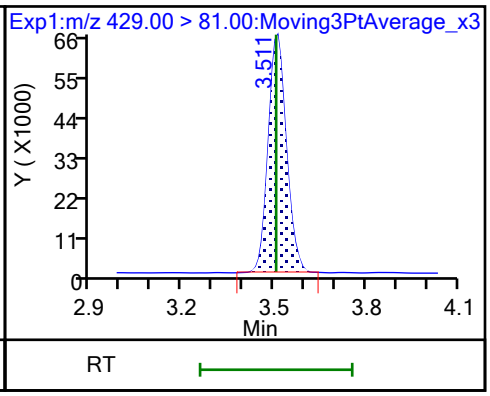
16 Perfluoroheptanesulfonic acid



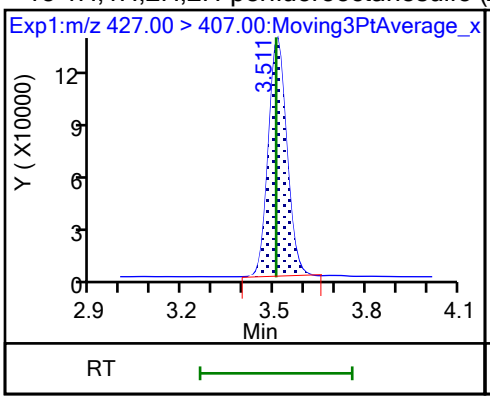
16 Perfluoroheptanesulfonic acid



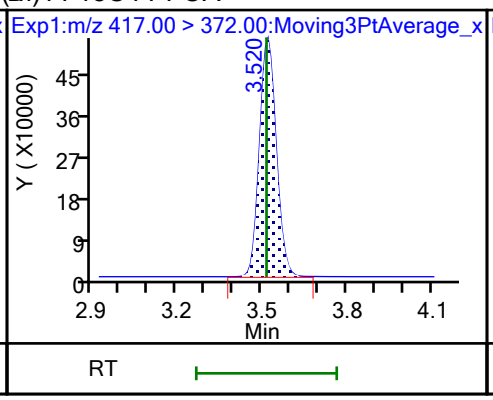
D 12 M2-6:2 FTS



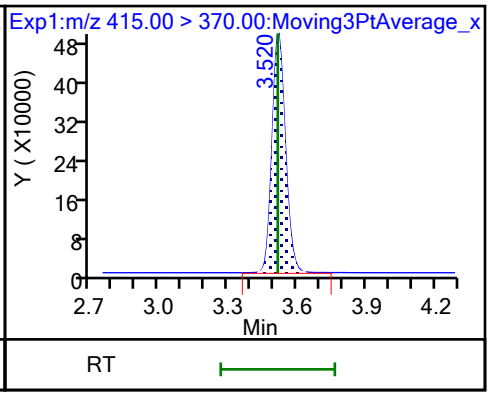
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



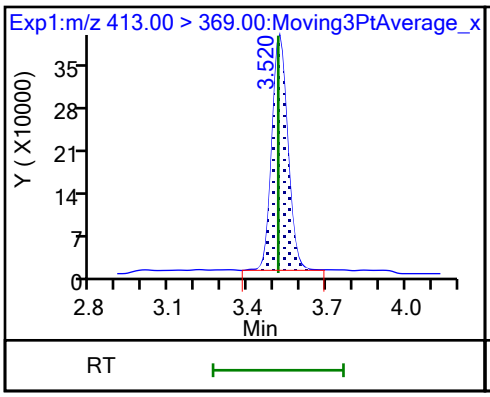
D 14 13C4 PFOA



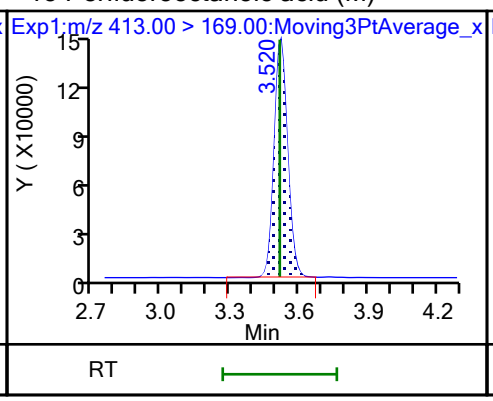
* 62 13C2 PFOA



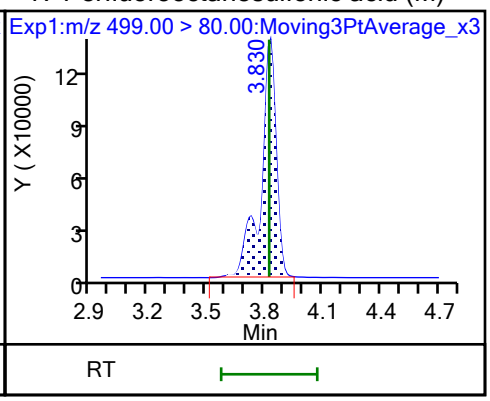
15 Perfluorooctanoic acid



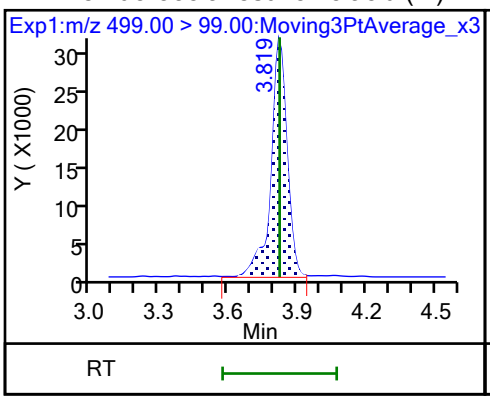
15 Perfluorooctanoic acid (M)



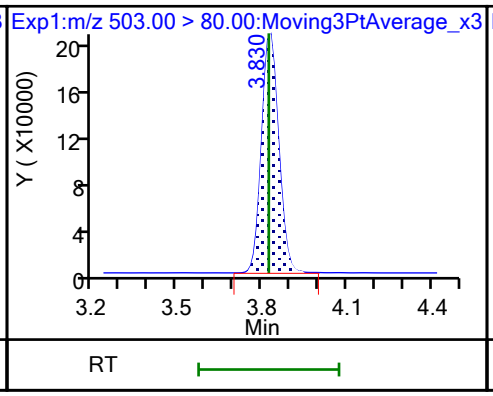
17 Perfluorooctanesulfonic acid (M)



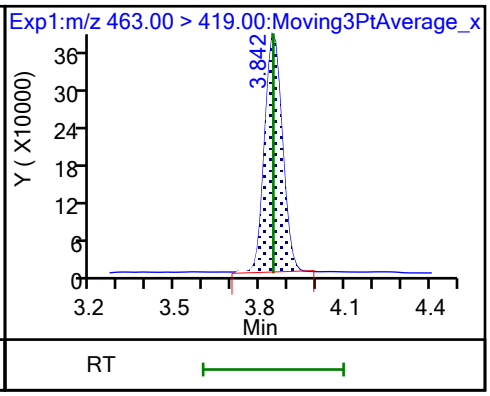
17 Perfluorooctanesulfonic acid (M)



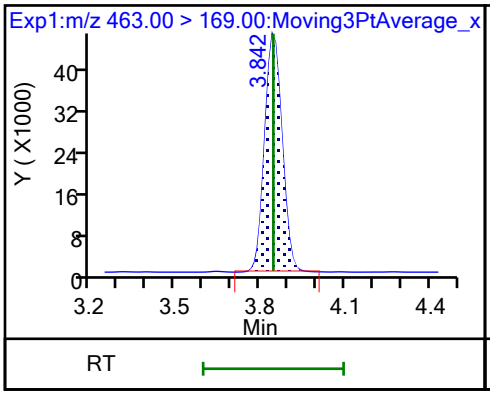
D 18 13C4 PFOS



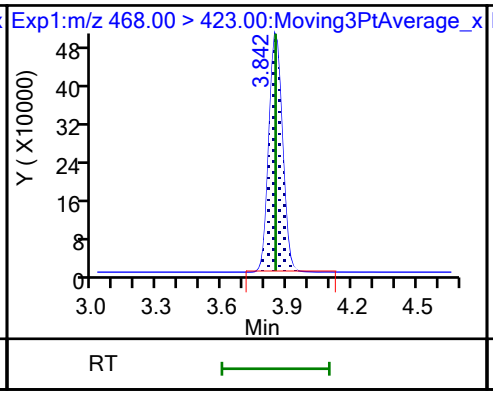
20 Perfluorononanoic acid



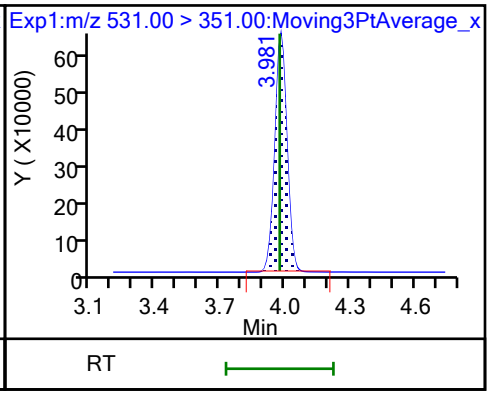
20 Perfluorononanoic acid



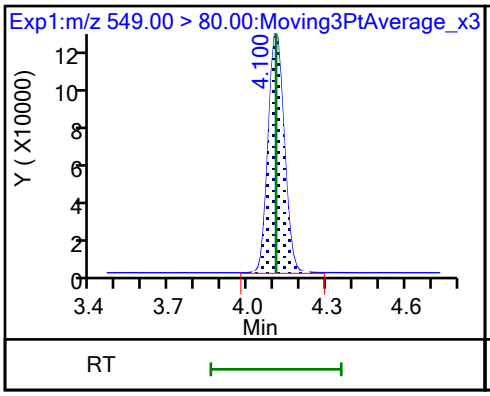
D 19 13C5 PFNA



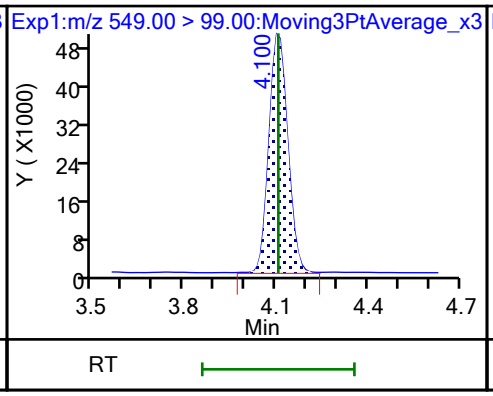
69 9-Chlorohexadecafluoro-3-oxanona



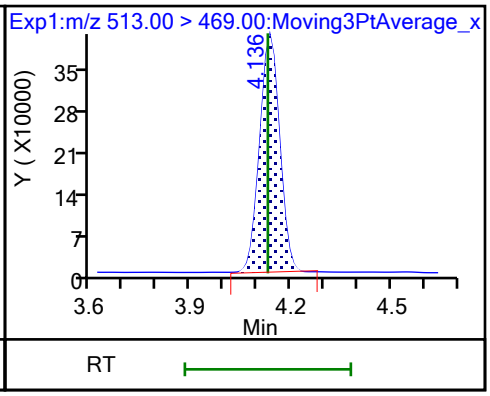
68 Perfluorononanesulfonic acid



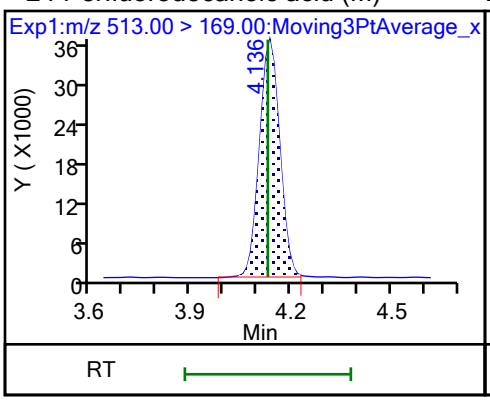
68 Perfluorononanesulfonic acid



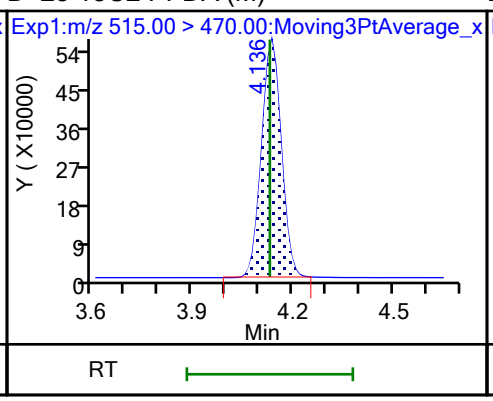
24 Perfluorodecanoic acid



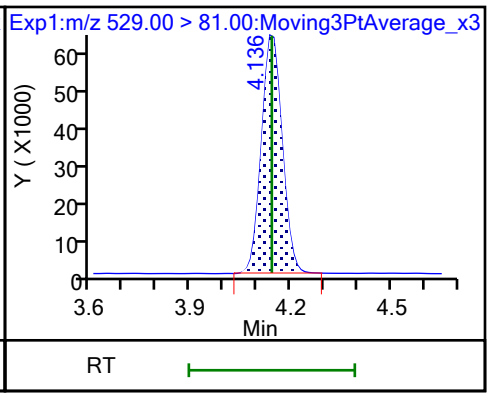
24 Perfluorodecanoic acid (M)



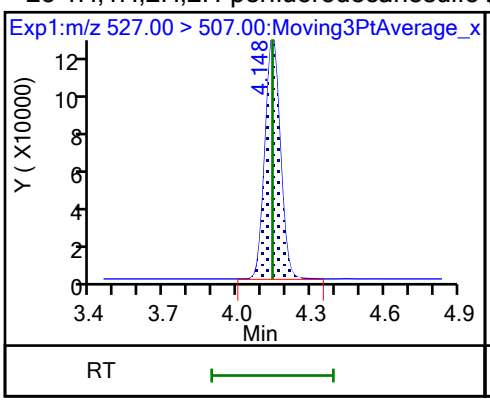
D 23 13C2 PFDA (M)



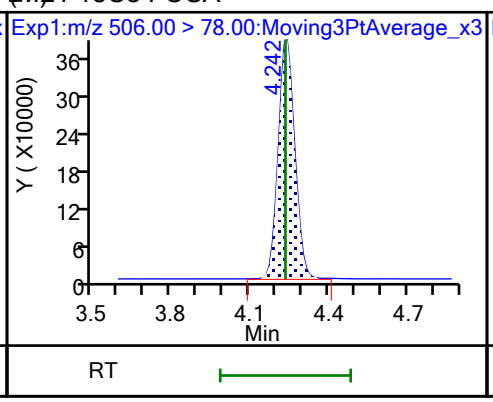
D 26 M2-8:2 FTS



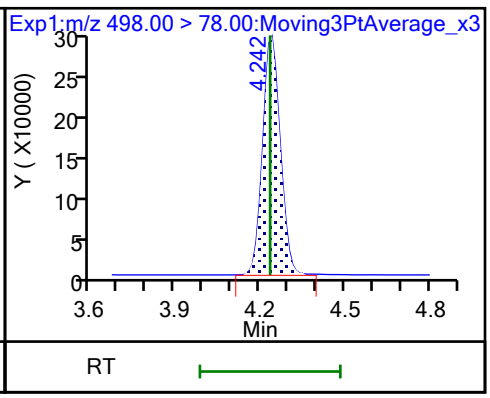
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



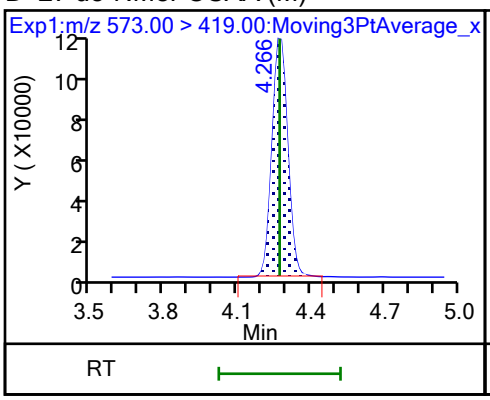
D 21 13C8 FOSA



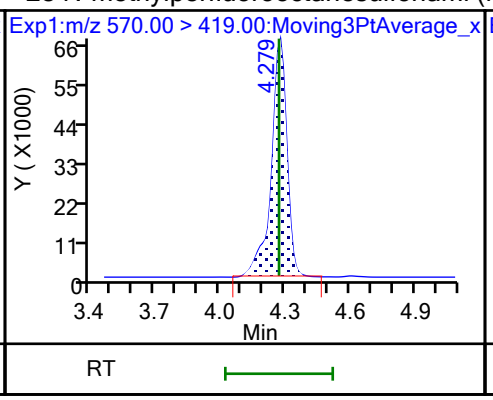
22 Perfluorooctanesulfonamide



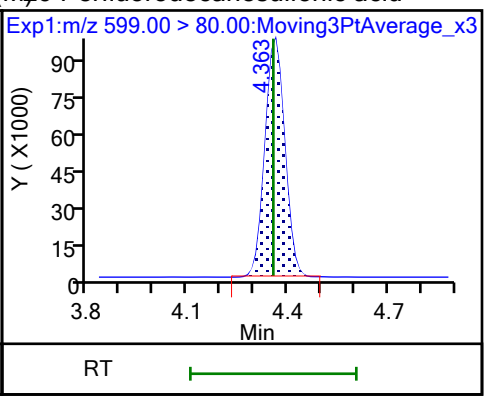
D 27 d3-NMeFOSAA (M)



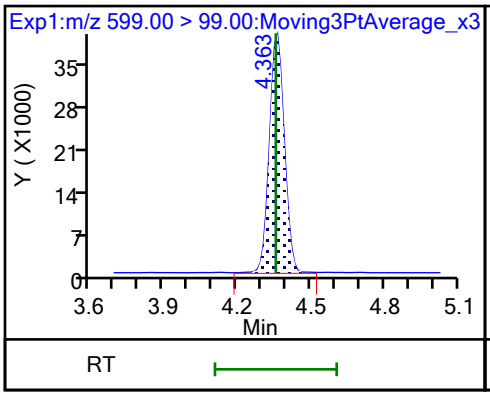
28 N-methylperfluorooctanesulfonami (M)



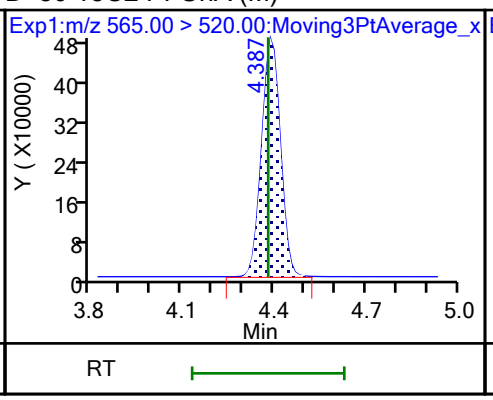
29 Perfluorodecanesulfonic acid



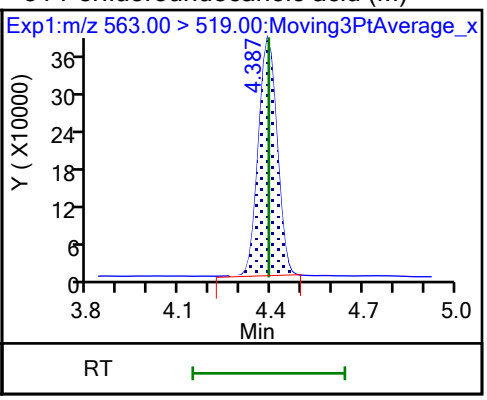
29 Perfluorodecanesulfonic acid



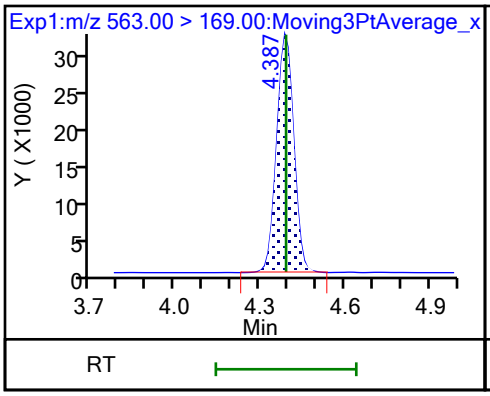
D 30 13C2 PFUnA (M)



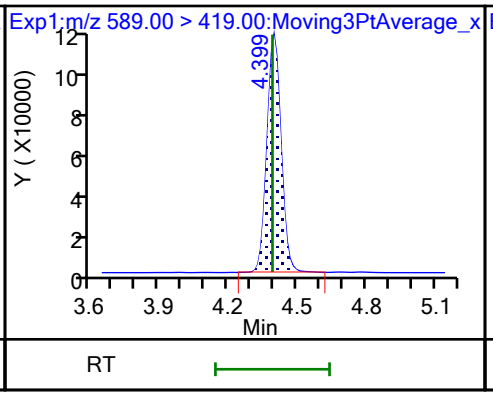
31 Perfluoroundecanoic acid (M)



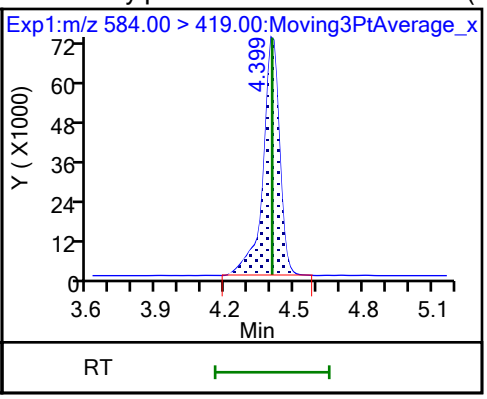
31 Perfluoroundecanoic acid



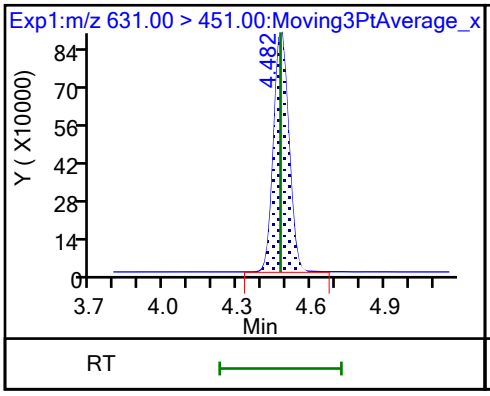
D 32 d5-NEtFOSAA



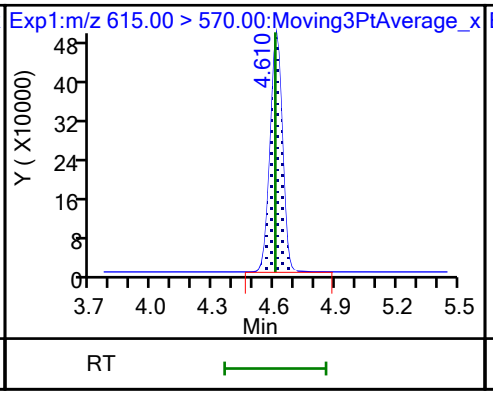
33 N-ethylperfluorooctanesulfonamid (M)



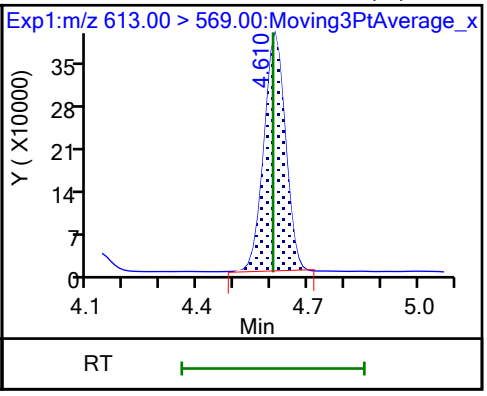
66 11-Chloroeicosafluoro-3-oxaundec



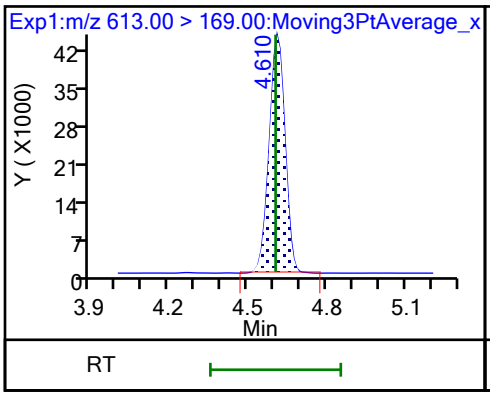
D 36 13C2 PFDoA



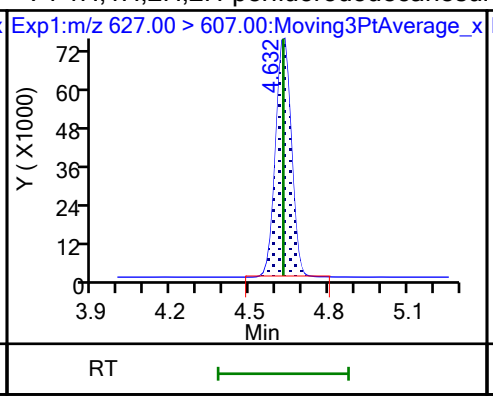
37 Perfluorododecanoic acid (M)



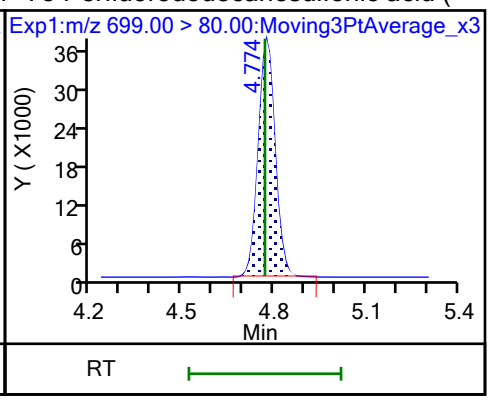
37 Perfluorododecanoic acid



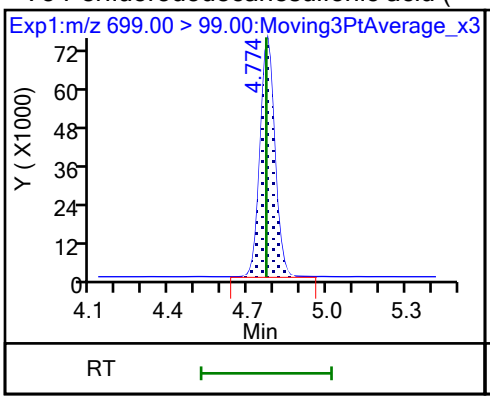
74 1H,1H,2H,2H-perfluorododecanesul



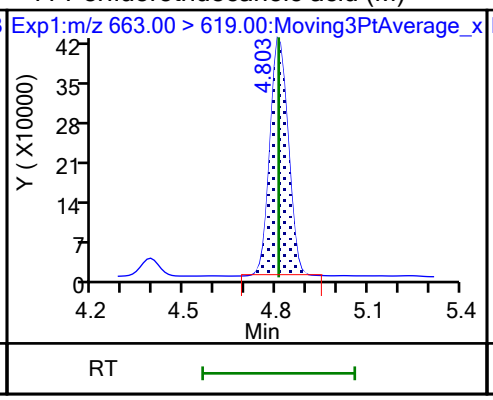
75 Perfluorododecanesulfonic acid (



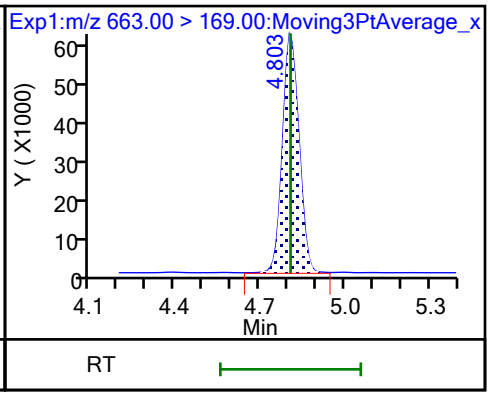
75 Perfluorododecanesulfonic acid (



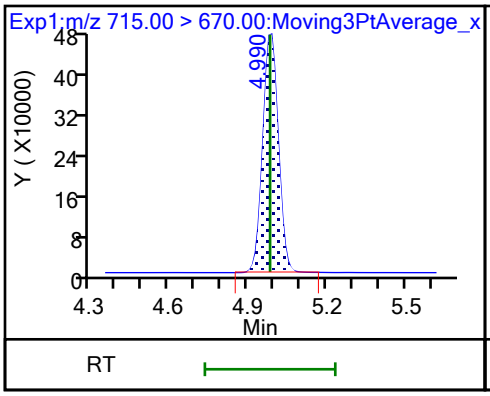
41 Perfluorotridecanoic acid (M)



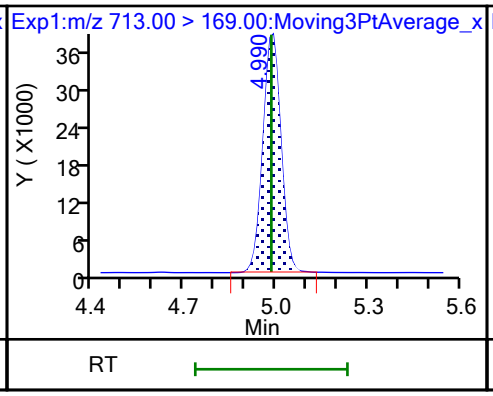
41 Perfluorotridecanoic acid



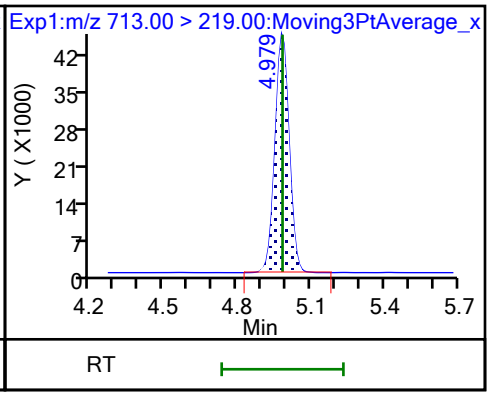
D 43 13C2 PFTeDA



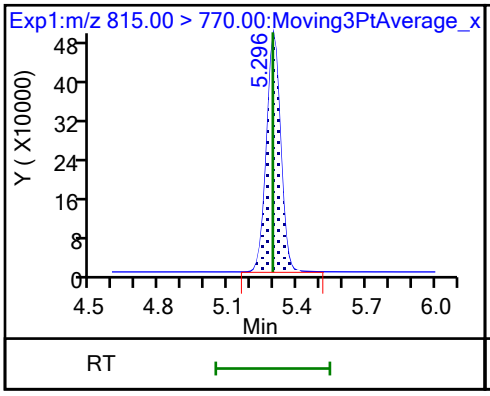
42 Perfluorotetradecanoic acid



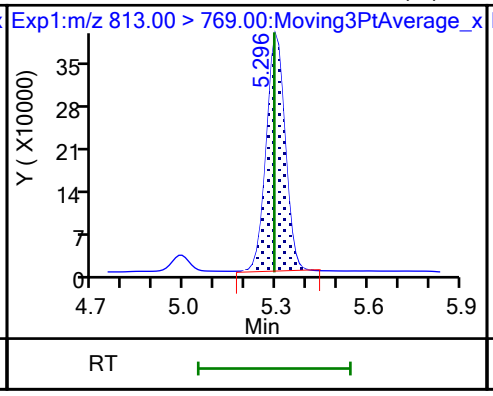
42 Perfluorotetradecanoic acid



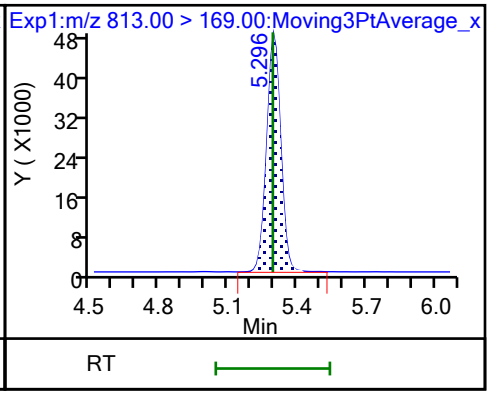
D 44 13C2 PFHxDA



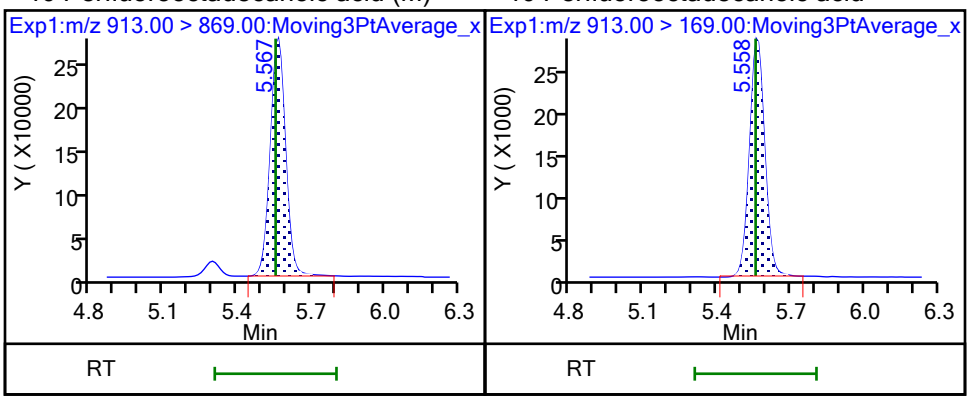
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196590/1-A

Matrix: Water Lab File ID: PA231020C02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 00:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196590/1-A

Matrix: Water Lab File ID: PA231020C02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 00:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	101		50-150
STL01893	13C5 PFPeA	94		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	88		50-150
STL02337	13C3 PFBS	91		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	89		50-150
STL02117	d5-NEtFOSAA	91		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	91		50-150
STL02280	M2-8:2 FTS	83		50-150
STL02255	13C3 HFPO-DA	98		50-150
STL00994	18O2 PFHxS	93		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	94		50-150
STL00998	13C2 PFDoA	89		50-150
STL00995	13C5 PFNA	102		50-150
STL00996	13C2 PFDA	103		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	101		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Lims ID: MB 200-196590/1-A
Client ID:
Sample Type: MB
Inject. Date: 21-Oct-2023 00:25:36 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196590/1-A
Misc. Info.: 200-0057493-002 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:00:12
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	2116832	1.26		101	1451	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.008	28111	-0.0225			2.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.440	2.439	0.001	0.695	1524174	1.17		93.6	1787	
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1871500	1.06		91.3	111653	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.786	211233	1.04		88.8	156	
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.798	0.0	0.797	1631266	1.23		98.5	8011	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.908	0.010	1.007	593	0.002366			6.1	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.898	2.908	-0.010	0.825	312908	1.22		97.6	4012	
D 11 18O2 PFHxS										
403.00 > 84.00	3.155	3.157	-0.002	0.898	1391005	1.10		93.1	5440	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.155	3.157	-0.002	1.000	6149	0.004722	Target=3.32		24.0	
399.00 > 99.00	3.143	3.157	-0.014	0.996	2475		2.48(1.66-4.98)		2.1	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.155	3.169	-0.014	0.898	1886237	1.30		104	7962	
77 DONA										M
377.00 > 251.00	3.189	3.204	-0.015	0.835	3390	0.000780	Target=3.33		4.4	M
377.00 > 85.00	3.202	3.204	-0.002	0.838	1417		2.39(1.66-4.99)		3.5	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.506	-0.003	0.997	284588	1.08		91.3	796	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.506	-0.003	1.000	481	0.000734			0.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.515	-0.003	1.000	2217829	1.35		108	4646	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.515	-0.003		2115457	1.25			12196	
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.823	-0.003	1.088	902742	1.12		94.1	3641	
D 19 13C5 PFNA										
468.00 > 423.00	3.832	3.846	-0.014	1.091	2280473	1.27		102	6061	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.972	3.975	-0.003	1.040	2896	0.001074			12.8	M
D 23 13C2 PFDA										
515.00 > 470.00	4.127	4.130	-0.003	1.175	2427588	1.29		103	9889	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.142	-0.004	1.178	291709	0.9884		82.5	906	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.138	4.142	-0.004	1.000	583	0.001087			14.2	M
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.235	-0.003	1.205	1667295	1.04		83.3	3579	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.235	-0.003	1.000	2806	0.002205			21.8	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.271	-0.003	1.215	501091	1.12		89.4	1391	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.271	0.010	1.003	3524	0.009688			10.7	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.340	4.356	-0.016	1.136	550	0.001066	Target=2.37		8.1	RM
599.00 > 99.00	4.352	4.356	-0.004	1.139	747		0.74(1.19-3.56)		5.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.376	4.380	-0.004	1.246	2233167	1.26		101	6224	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.391	-0.003	1.249	490918	1.14		90.9	879	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.403	-0.003	1.003	2881	0.007334			15.2	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.475	-0.006	1.170	5918	0.001431			10.8	
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.604	-0.004	1.310	2008637	1.12		89.3	5584	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.622	4.626	-0.004	1.117	330	0.001029			6.8	M
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.804	4.807	-0.003	1.044	5314	0.003091	Target=6.41		0.3	
663.00 > 169.00	4.804	4.807	-0.003	1.044	749		7.09(3.21-9.62)		7.9	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.983	-0.003	1.418	1977938	1.10		88.3	6608	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.970	4.983	-0.013	0.998	238	0.001345	Target=0.87		5.1	M
713.00 > 219.00	4.970	4.983	-0.013	0.998	413		0.58(0.43-1.30)		6.2	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.285	5.293	-0.008	1.505	2097456	1.02		81.2	4524	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.285	5.293	-0.008	1.000	6300	0.003754	Target=7.89		0.5	
813.00 > 169.00	5.285	5.293	-0.008	1.000	749		8.41(3.94-11.83)		11.1	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.549	5.555	-0.006	1.050	4275	0.003263	Target=9.39		0.7	M
913.00 > 169.00	5.558	5.555	0.003	1.052	478		8.94(4.69-14.08)		15.1	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

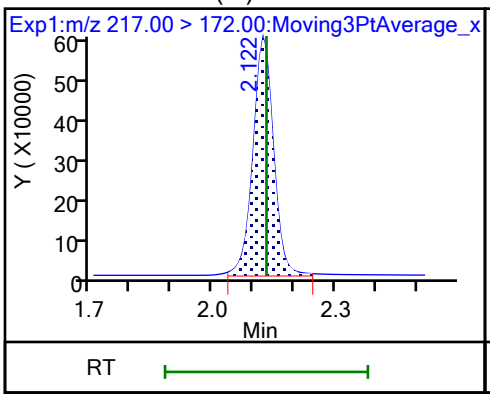
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:43 Chrom Revision: 2.3 18-Oct-2023 21:16:54

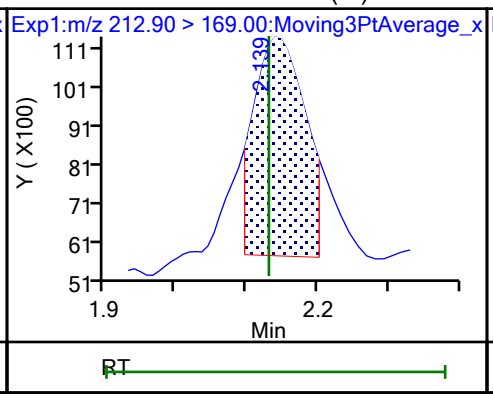
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

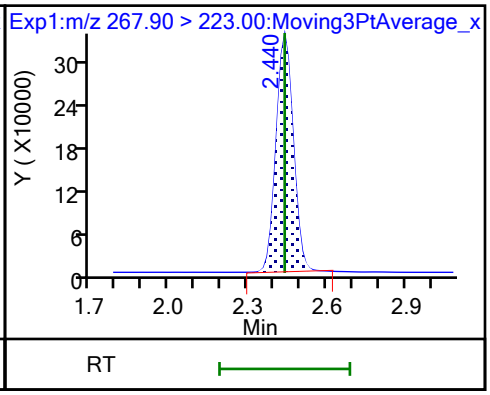
D 1 13C4 PFBA (M)



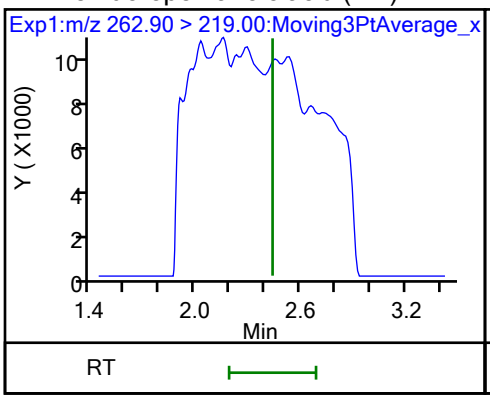
2 Perfluorobutanoic acid (M)



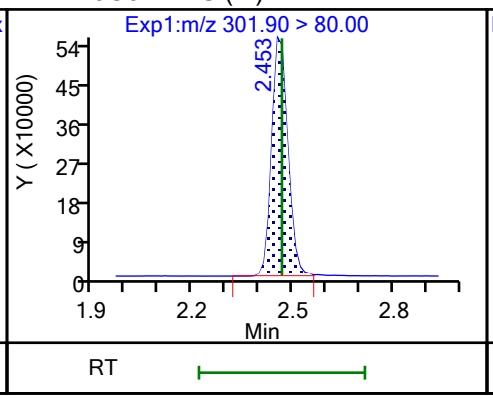
D 3 13C5 PFPeA



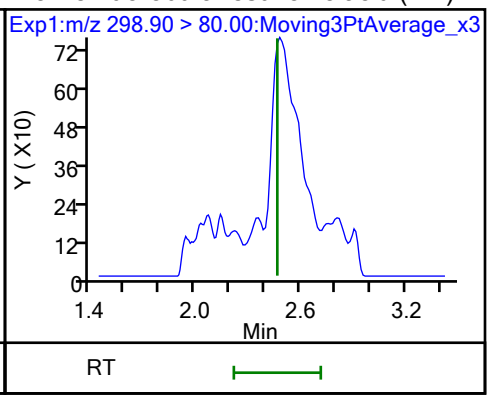
4 Perfluoropentanoic acid (ND)



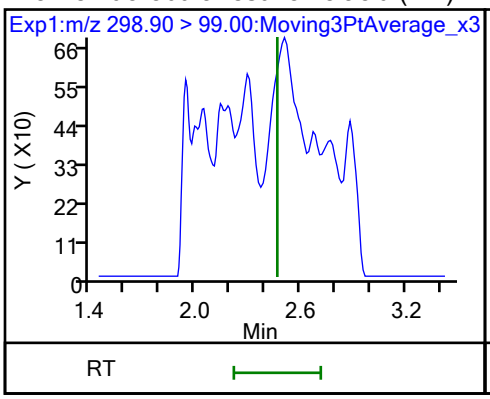
D 47 13C3 PFBS (M)



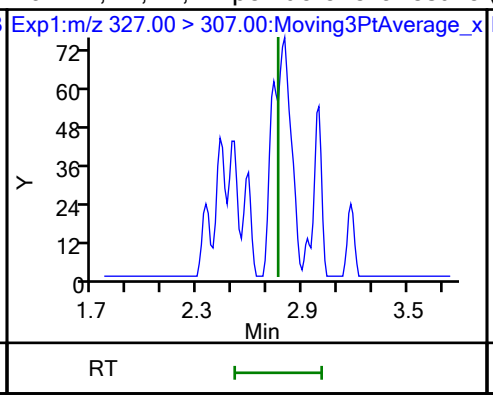
5 Perfluorobutanesulfonic acid (ND)



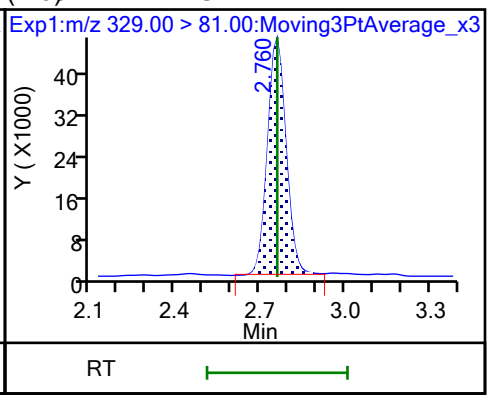
5 Perfluorobutanesulfonic acid (ND)



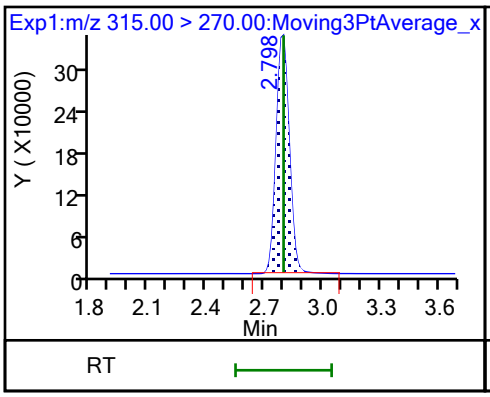
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



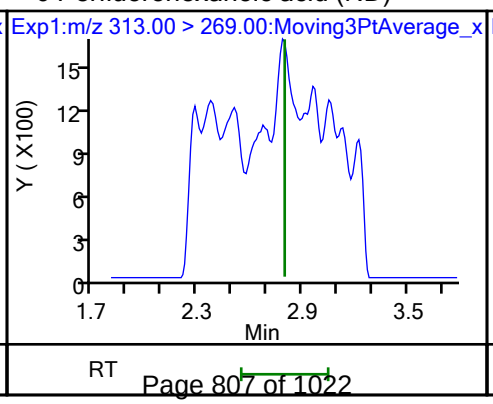
D 60 M2-4:2 FTS



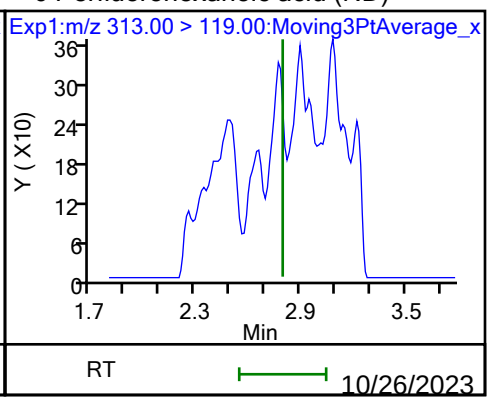
D 7 13C2 PFHxA



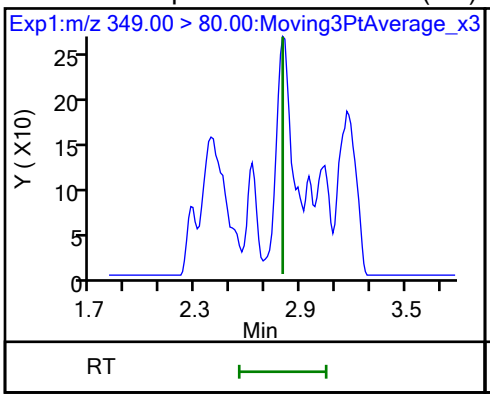
6 Perfluorohexanoic acid (ND)



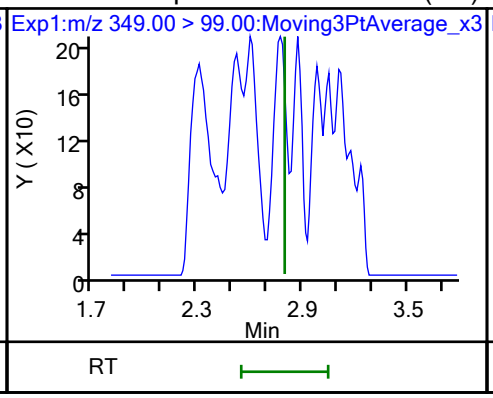
6 Perfluorohexanoic acid (ND)



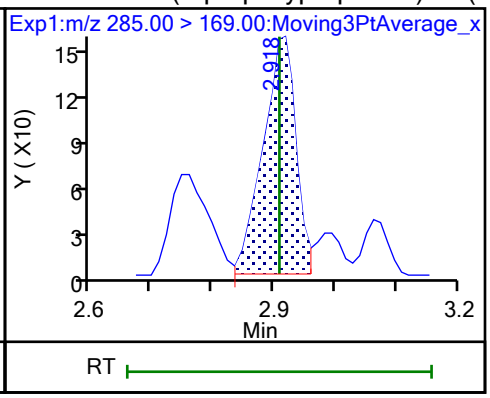
70 Perfluoropentanesulfonic acid (ND)



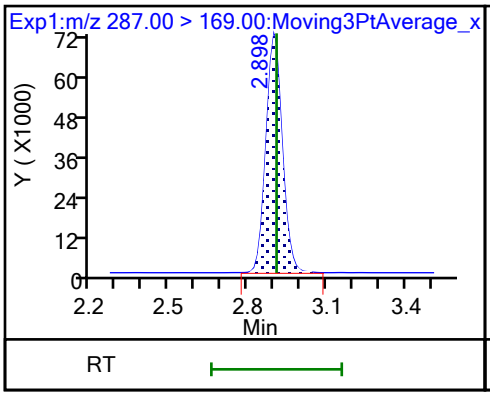
70 Perfluoropentanesulfonic acid (ND)



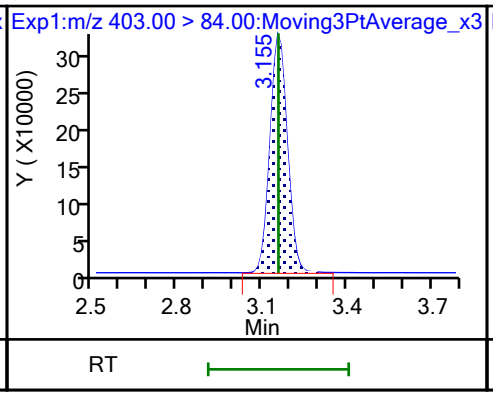
67 Perfluoro(2-propoxypropanoic) ac (M)



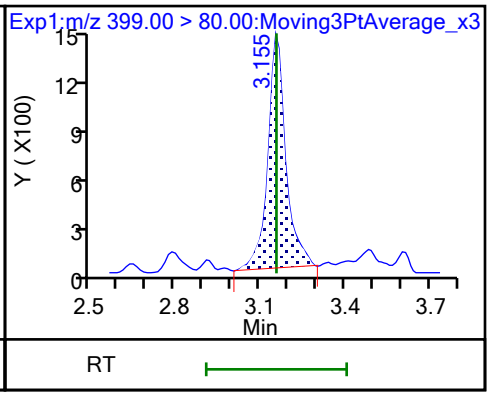
D 64 13C3 HFPO-DA



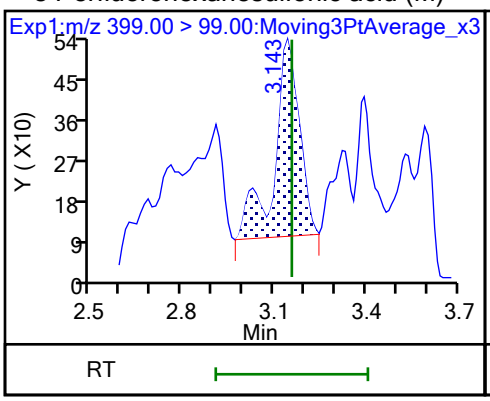
D 11 18O2 PFHxS



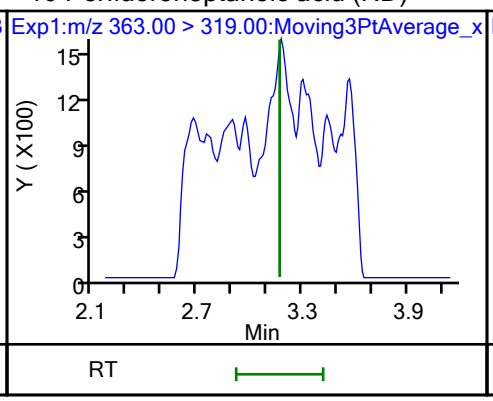
8 Perfluorohexanesulfonic acid



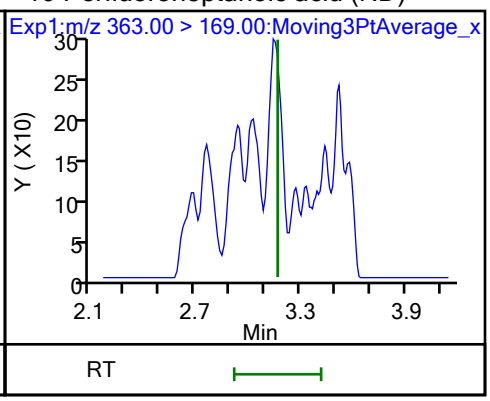
8 Perfluorohexanesulfonic acid (M)



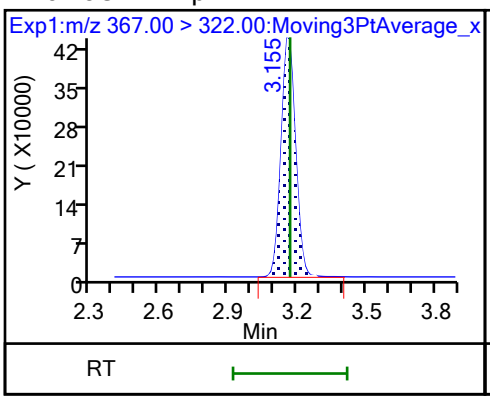
10 Perfluoroheptanoic acid (ND)



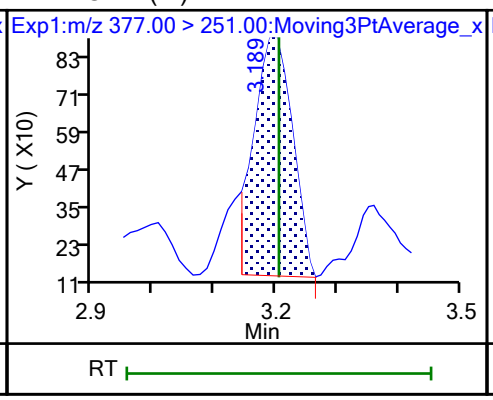
10 Perfluoroheptanoic acid (ND)



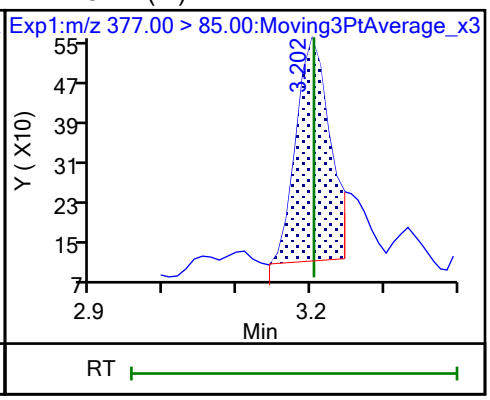
D 9 13C4 PFHpA



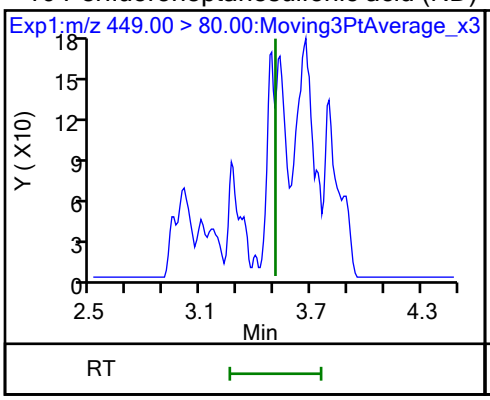
77 DONA (M)



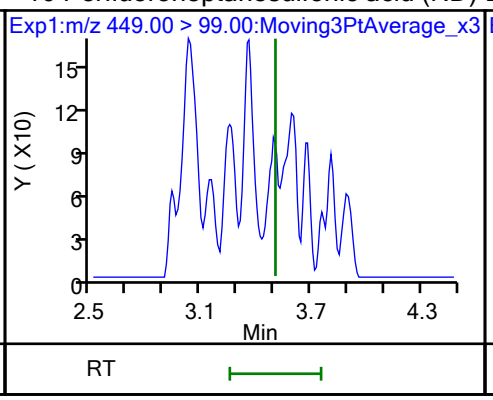
77 DONA (M)

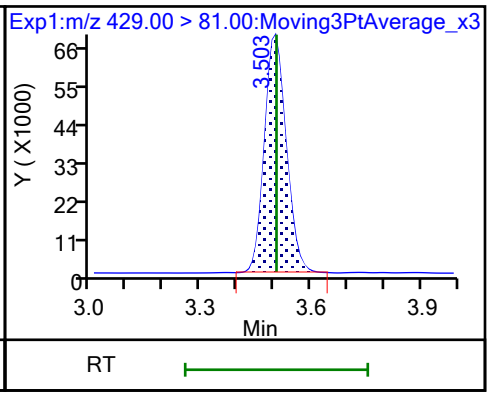


16 Perfluoroheptanesulfonic acid (ND)

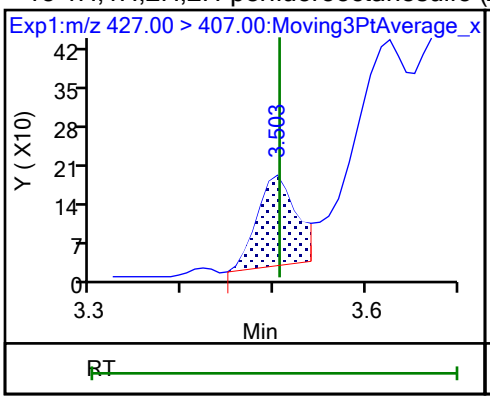


16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS

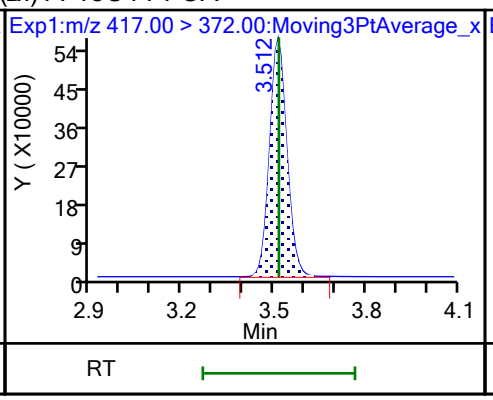




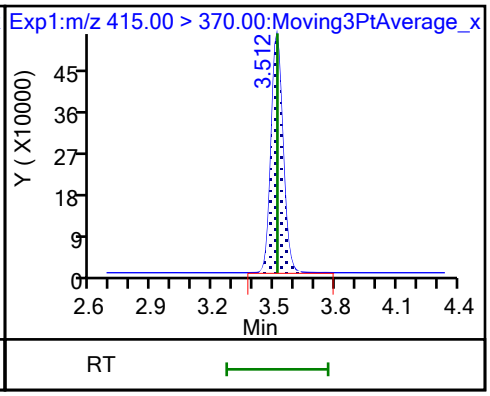
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



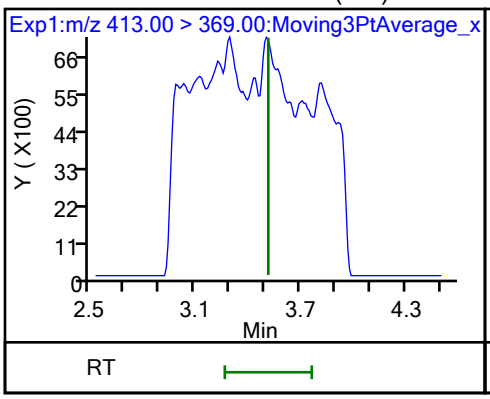
14 13C4 PFOA



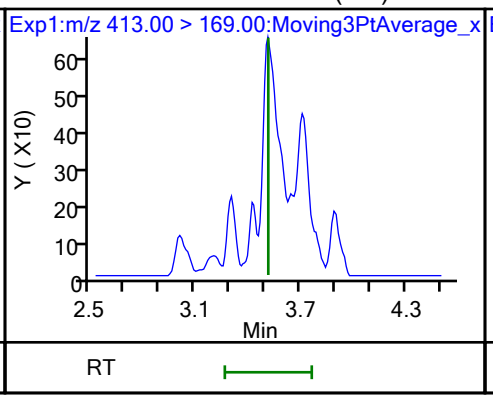
* 62 13C2 PFOA



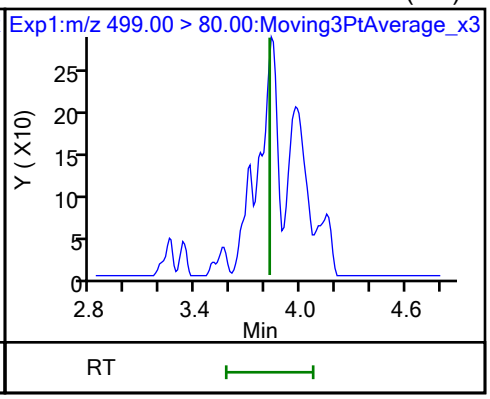
15 Perfluorooctanoic acid (ND)



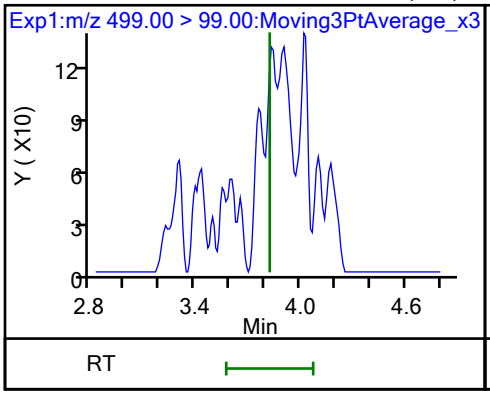
15 Perfluorooctanoic acid (ND)



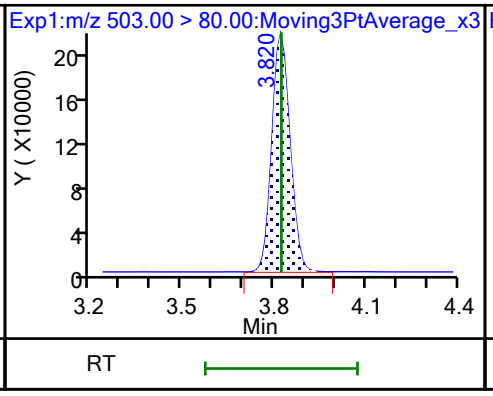
17 Perfluorooctanesulfonic acid (ND)



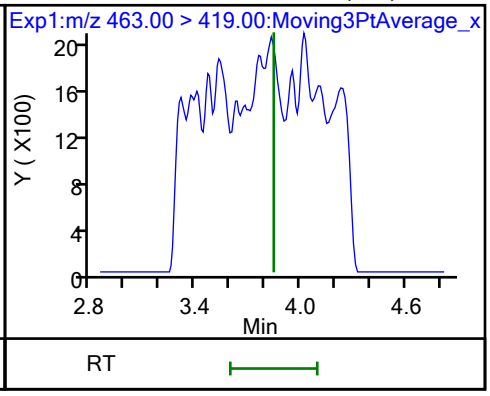
17 Perfluorooctanesulfonic acid (ND)



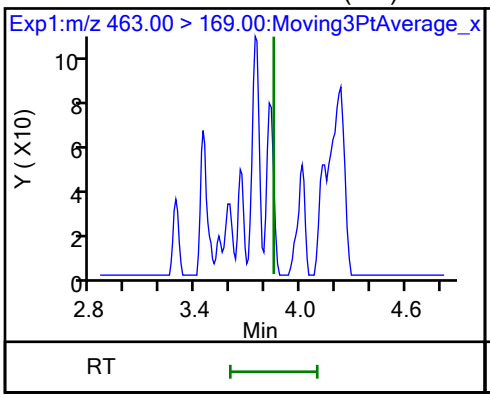
D 18 13C4 PFOS



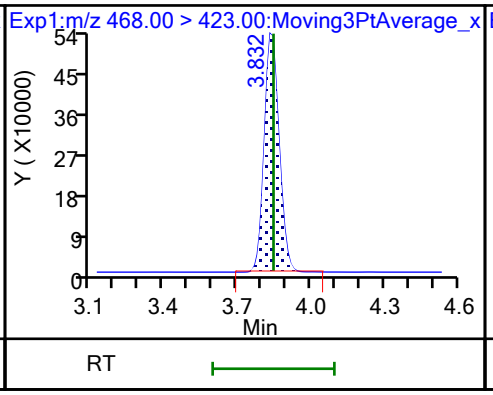
20 Perfluorononanoic acid (ND)



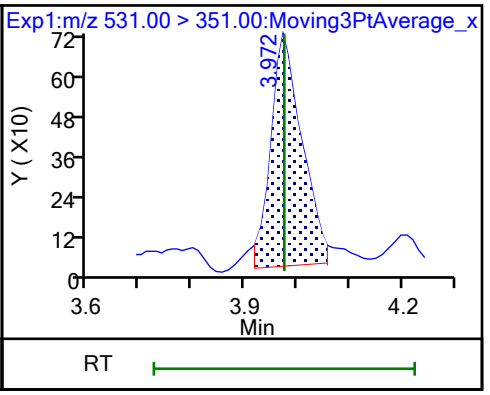
20 Perfluorononanoic acid (ND)



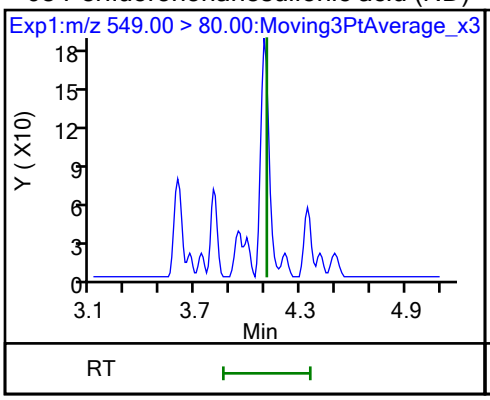
D 19 13C5 PFNA



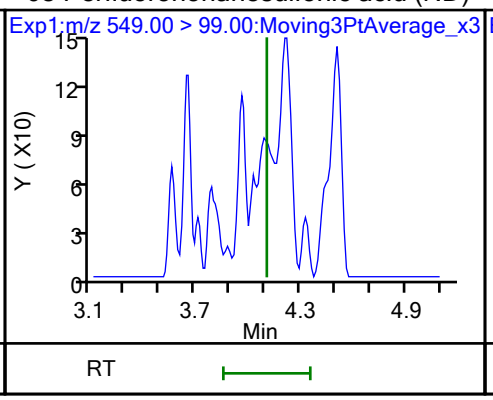
69 9-Chlorohexadecafluoro-3-oxanona (M)



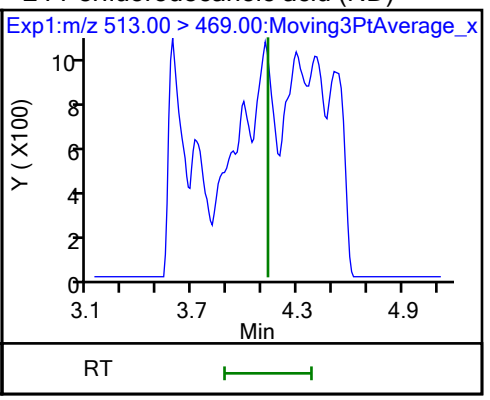
68 Perfluorononanesulfonic acid (ND)



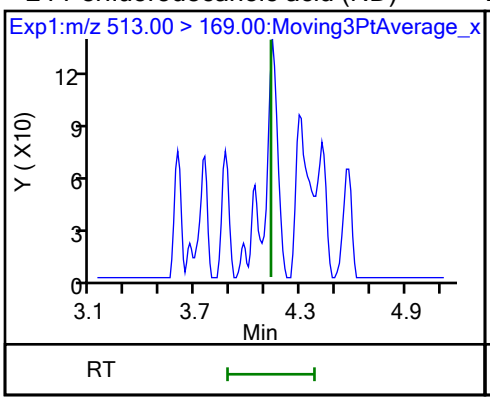
68 Perfluorononanesulfonic acid (ND)



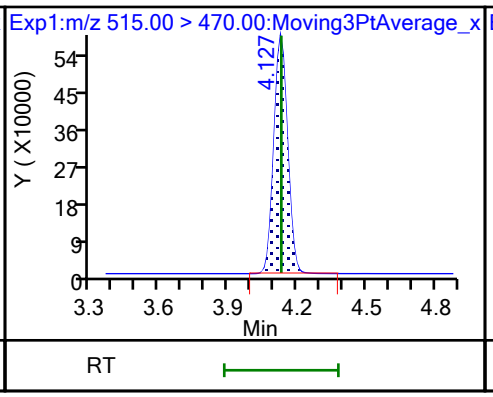
24 Perfluorodecanoic acid (ND)



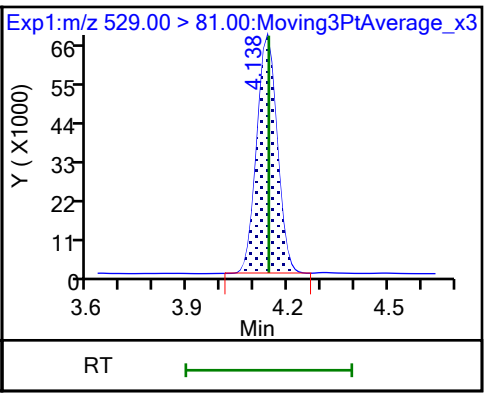
24 Perfluorodecanoic acid (ND)



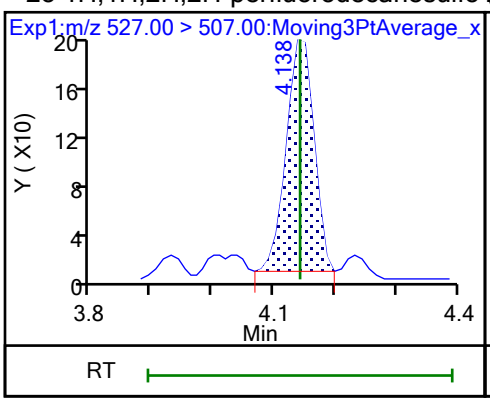
D 23 13C2 PFDA



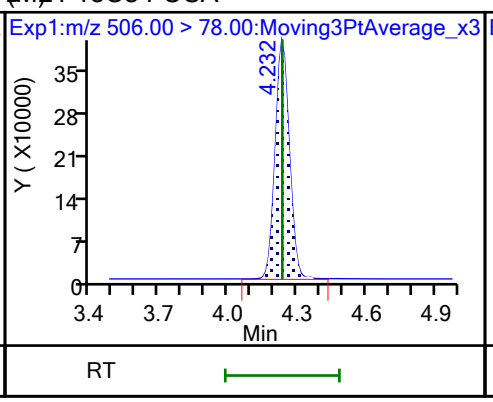
D 26 M2-8:2 FTS



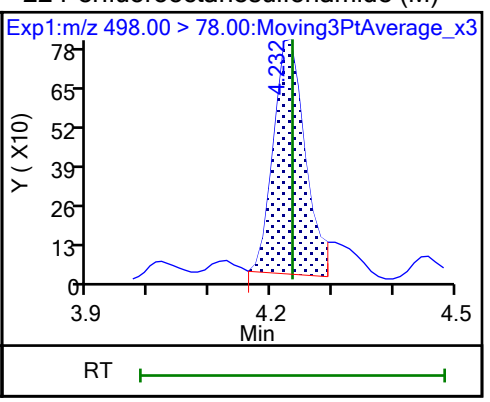
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



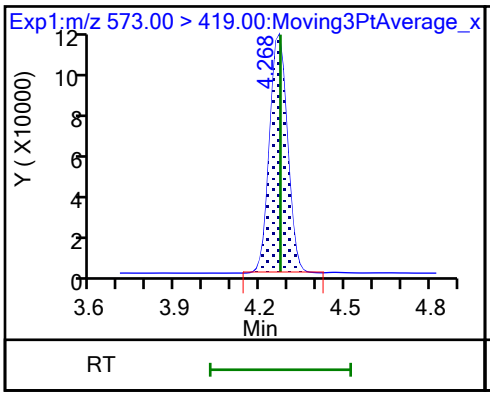
D 21 13C8 FOSA



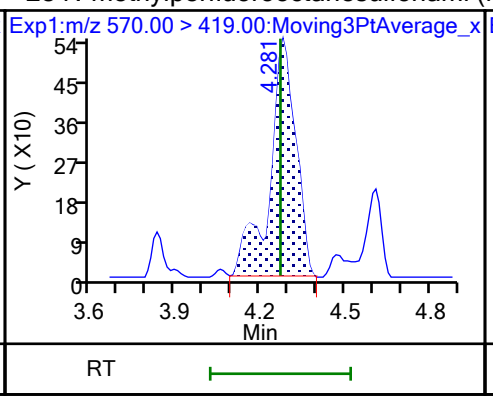
22 Perfluorooctanesulfonamide (M)



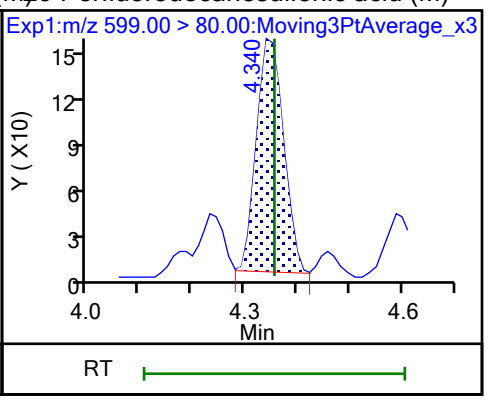
D 27 d3-NMeFOSAA



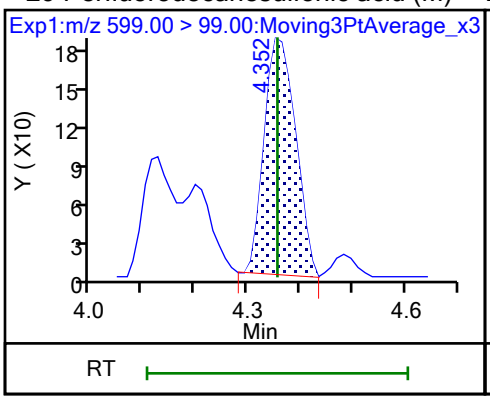
28 N-methylperfluorooctanesulfonami (M)



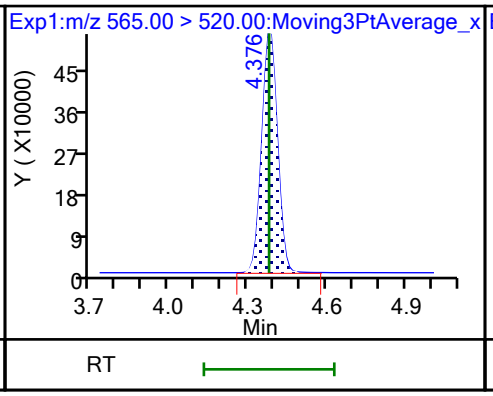
29 Perfluorodecanesulfonic acid (M)



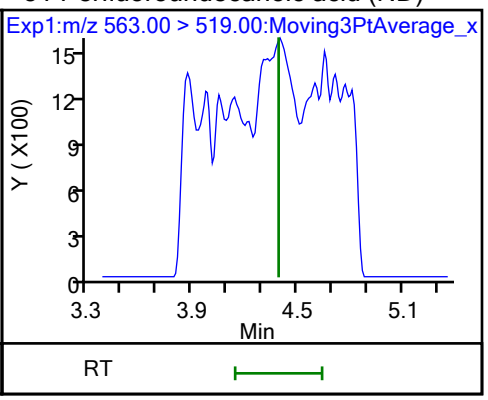
29 Perfluorodecanesulfonic acid (M)



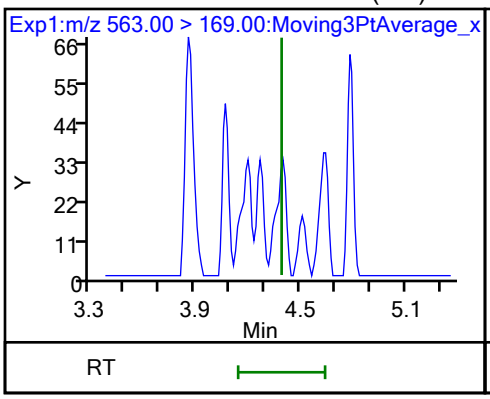
D 30 13C2 PFUnA



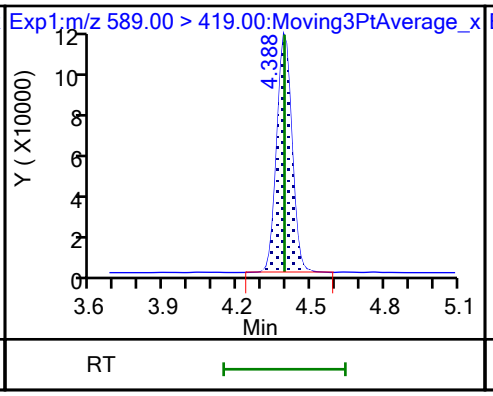
31 Perfluoroundecanoic acid (ND)



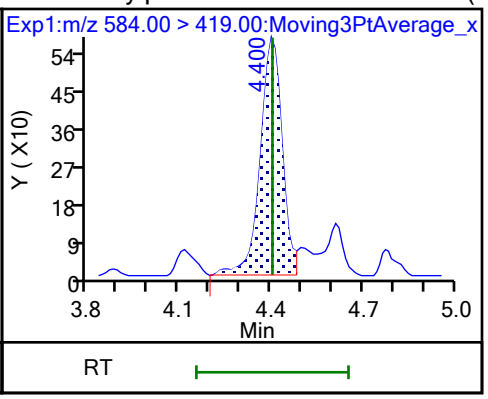
31 Perfluoroundecanoic acid (ND)



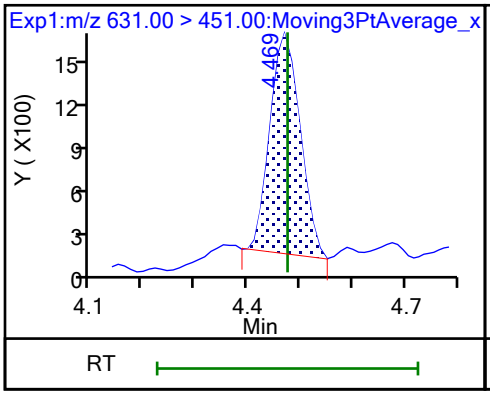
D 32 d5-NEtFOSAA



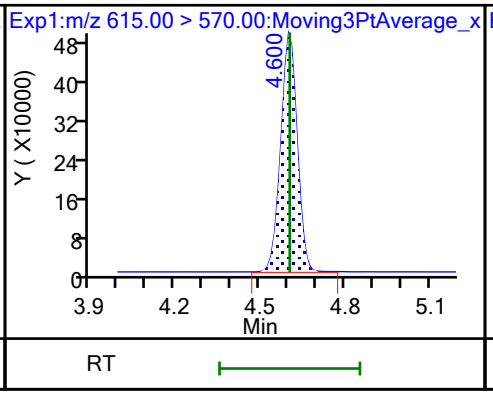
33 N-ethylperfluorooctanesulfonamid (M)



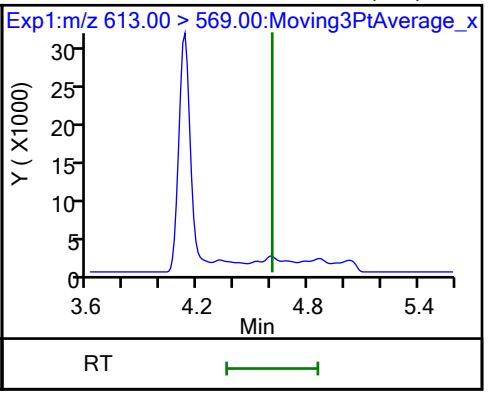
66 11-Chloroeicosafluoro-3-oxaundec



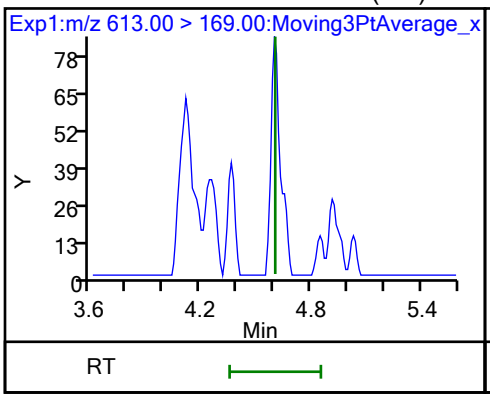
D 36 13C2 PFDoA



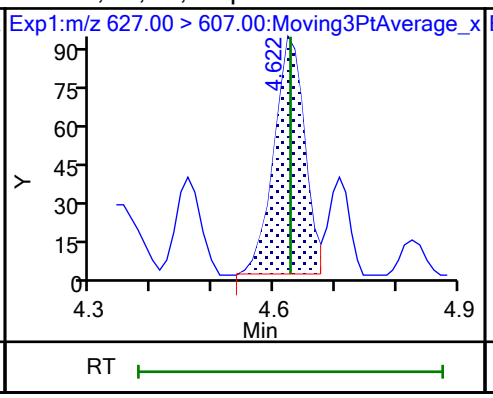
37 Perfluorododecanoic acid (ND)



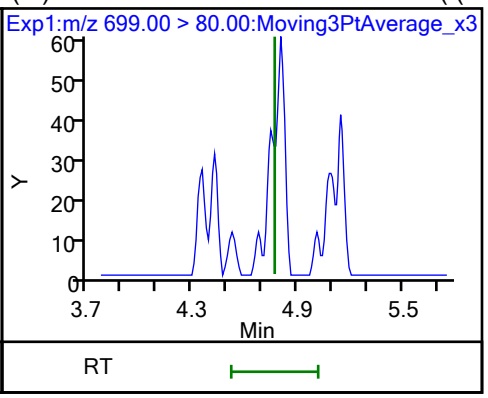
37 Perfluorododecanoic acid (ND)



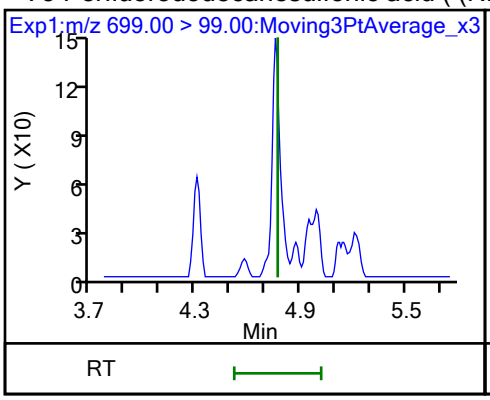
74 1H,1H,2H,2H-perfluorododecanesul (ND)



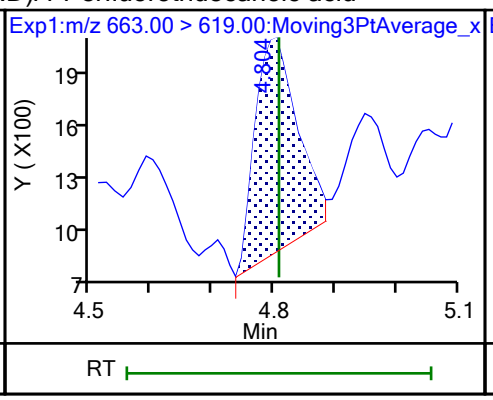
75 Perfluorododecanesulfonic acid ((ND)



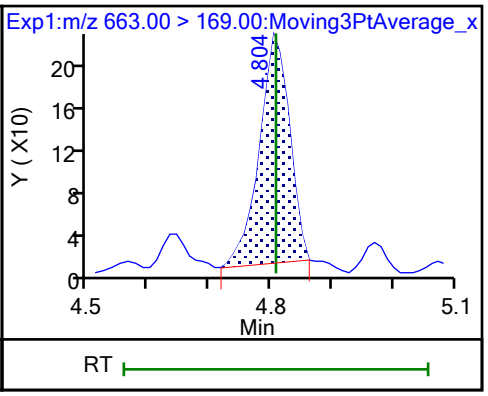
75 Perfluorododecanesulfonic acid ((ND)



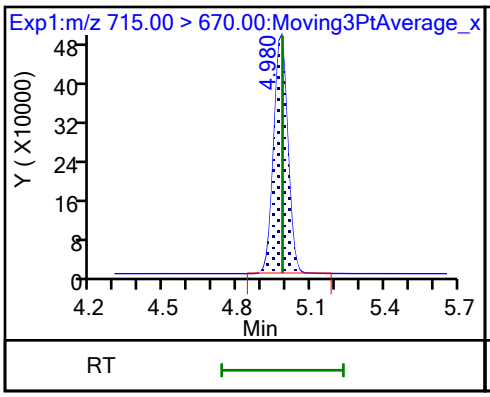
41 Perfluorotridecanoic acid



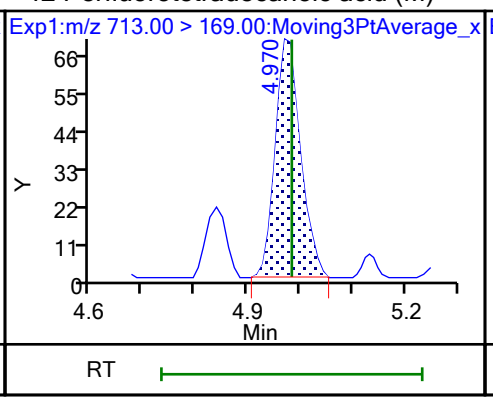
41 Perfluorotridecanoic acid



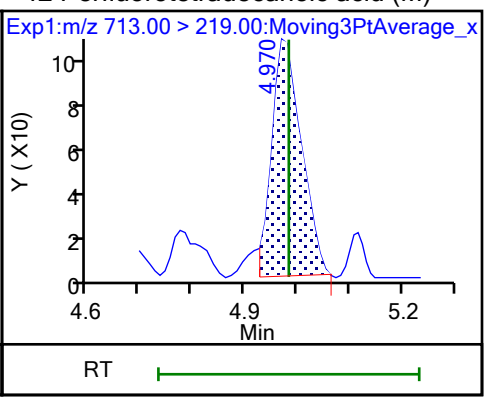
D 43 13C2 PFTeDA



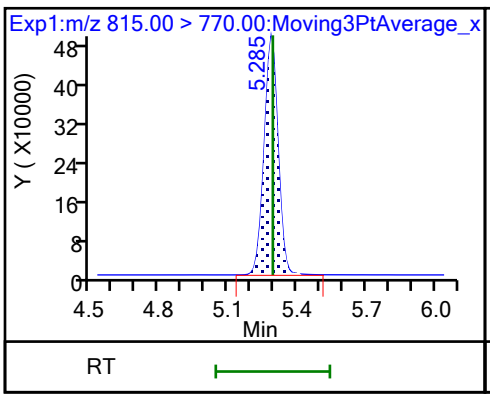
42 Perfluorotetradecanoic acid (M)



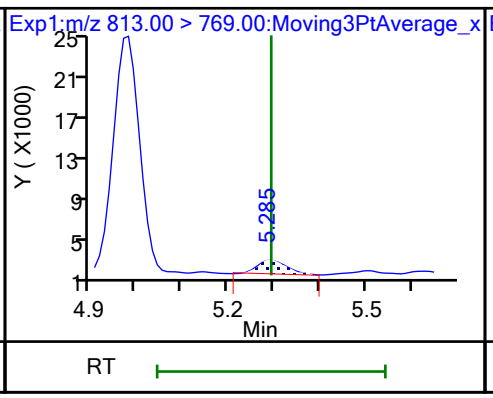
42 Perfluorotetradecanoic acid (M)



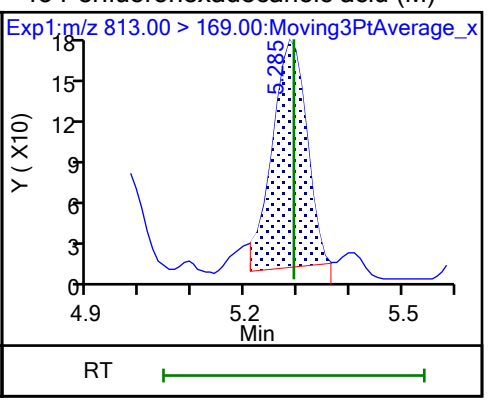
D 44 13C2 PFHxDA



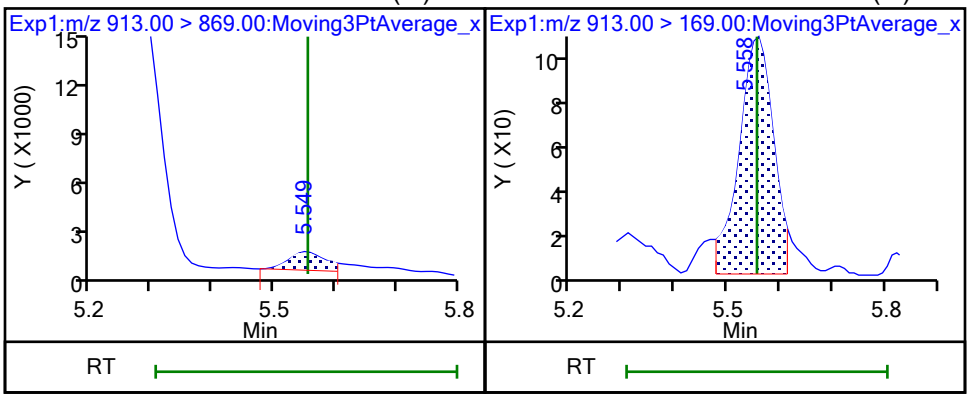
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

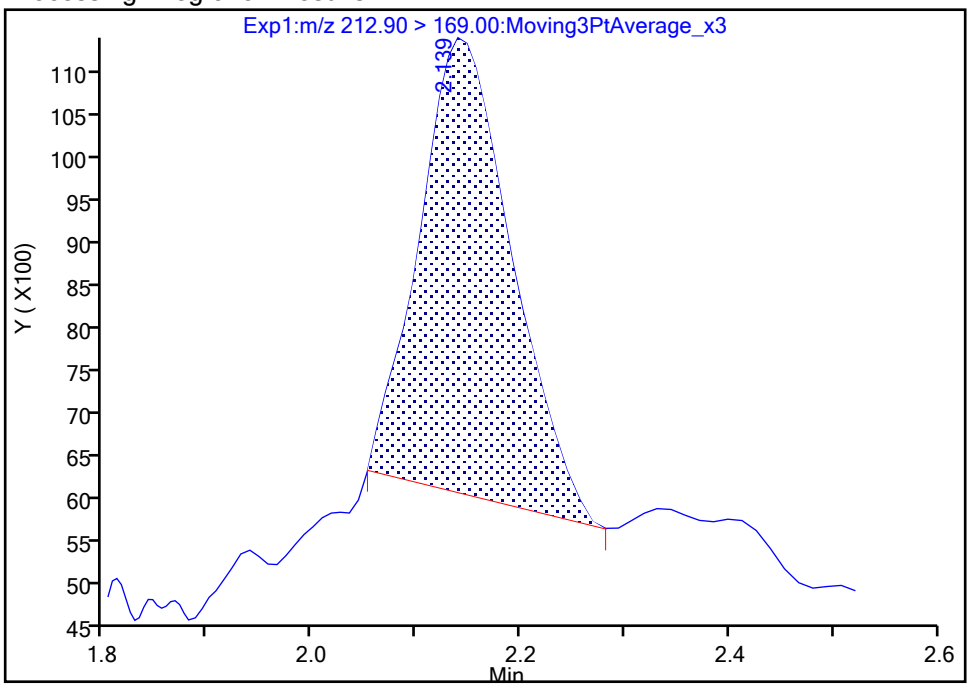
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

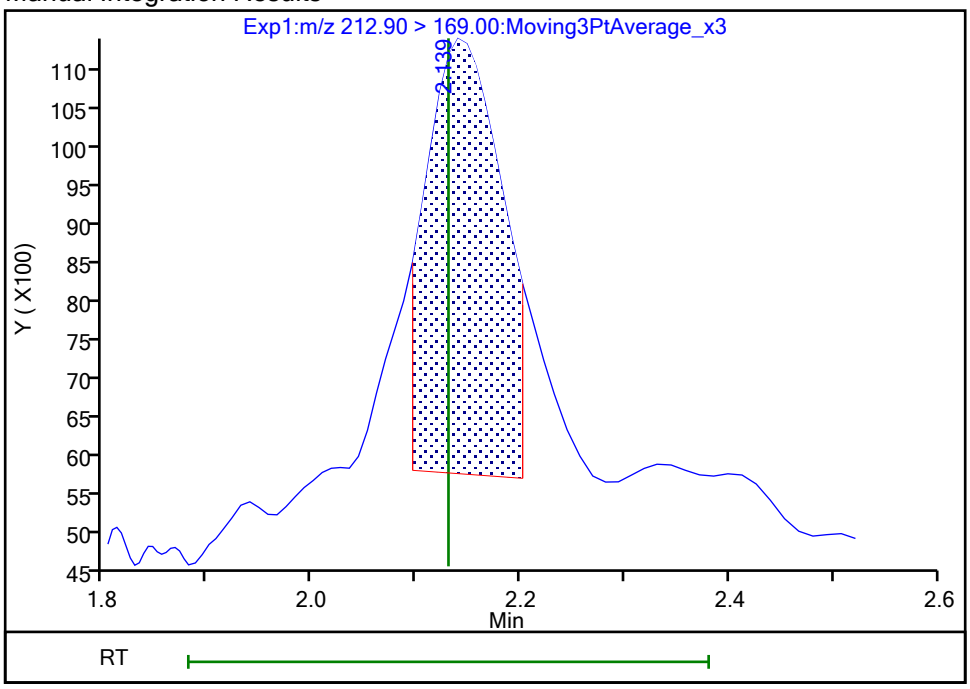
Processing Integration Results

RT: 2.14
Area: 33358
Amount: -0.019100
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 28111
Amount: -0.022527
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:57:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

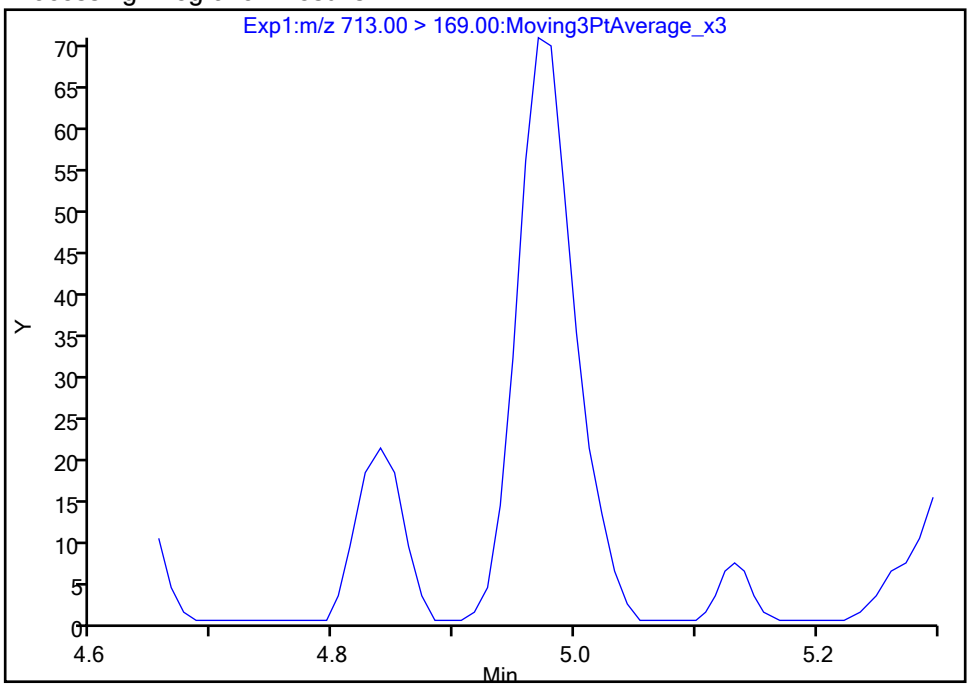
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

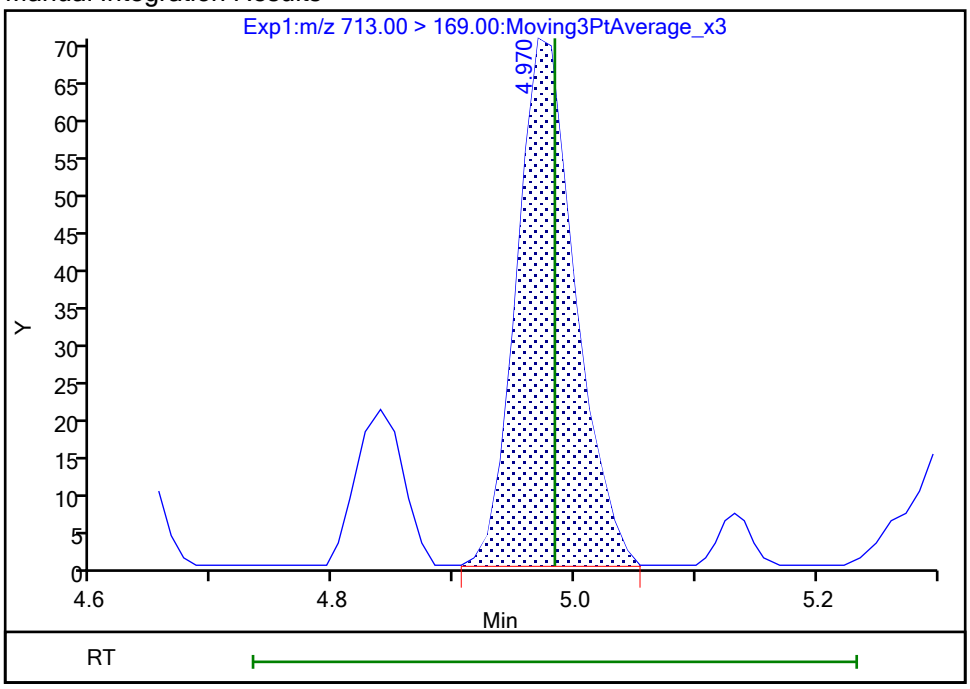
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 238
Amount: 0.001345
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:59:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

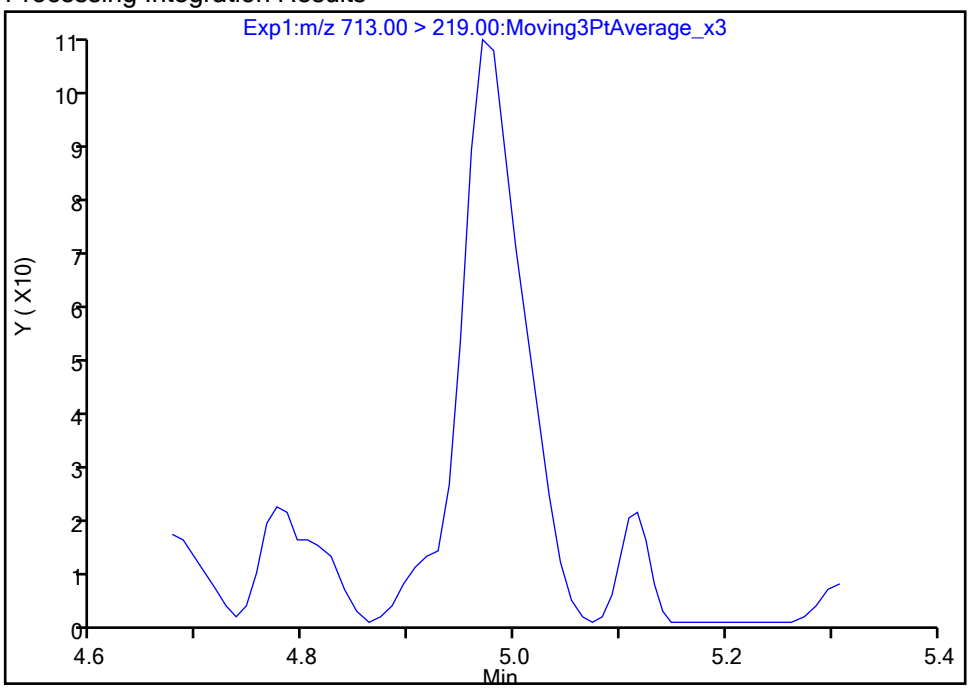
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

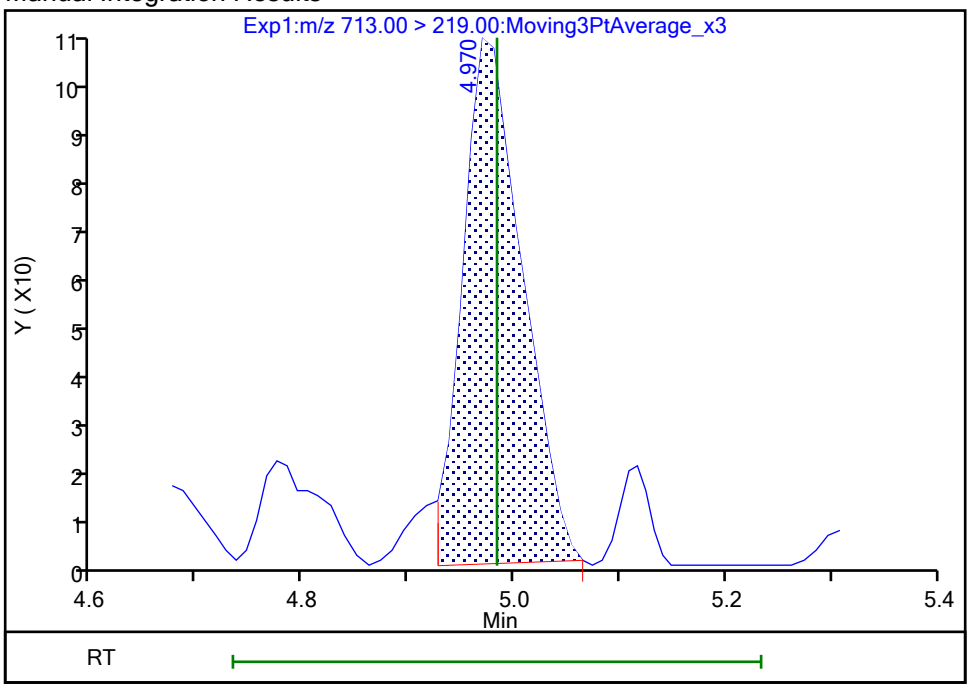
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 413
Amount: 0.001345
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:59:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

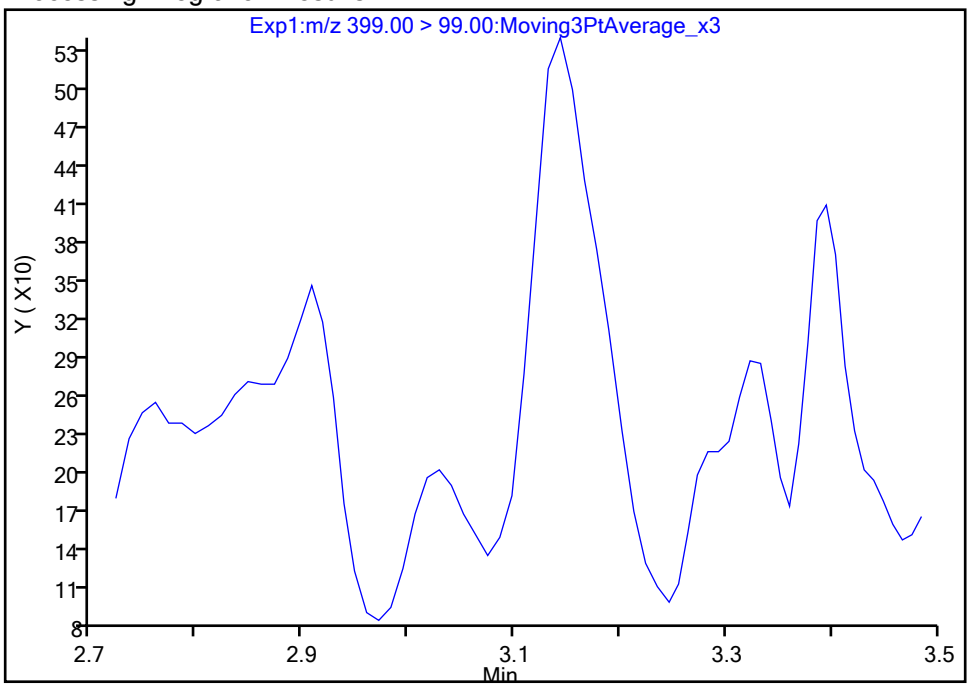
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

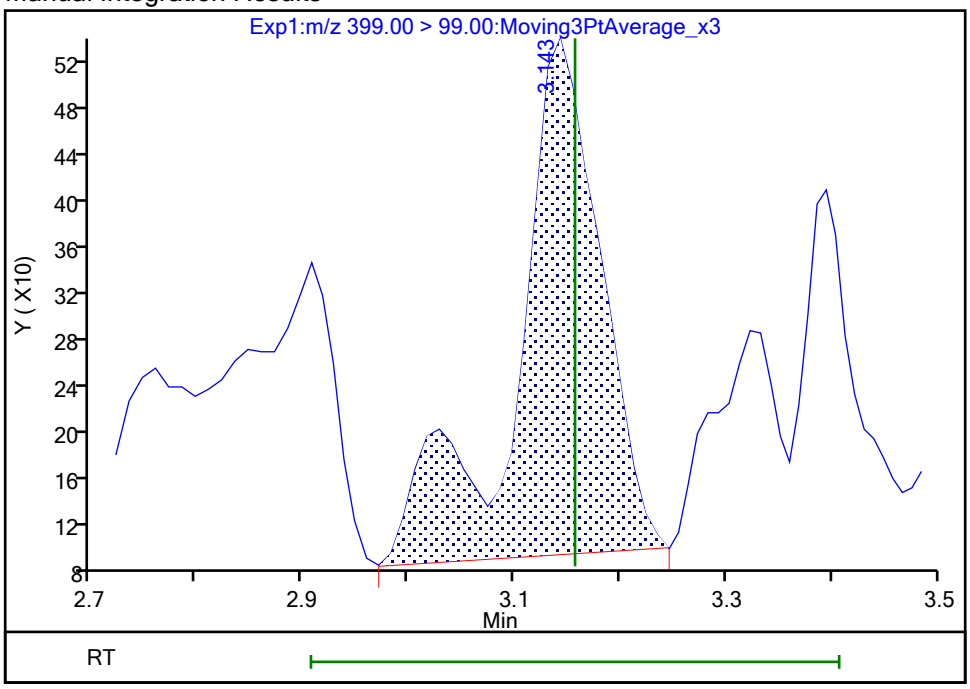
Not Detected
Expected RT: 3.16

Processing Integration Results



Manual Integration Results

RT: 3.14
Area: 2475
Amount: 0.004722
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:57:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

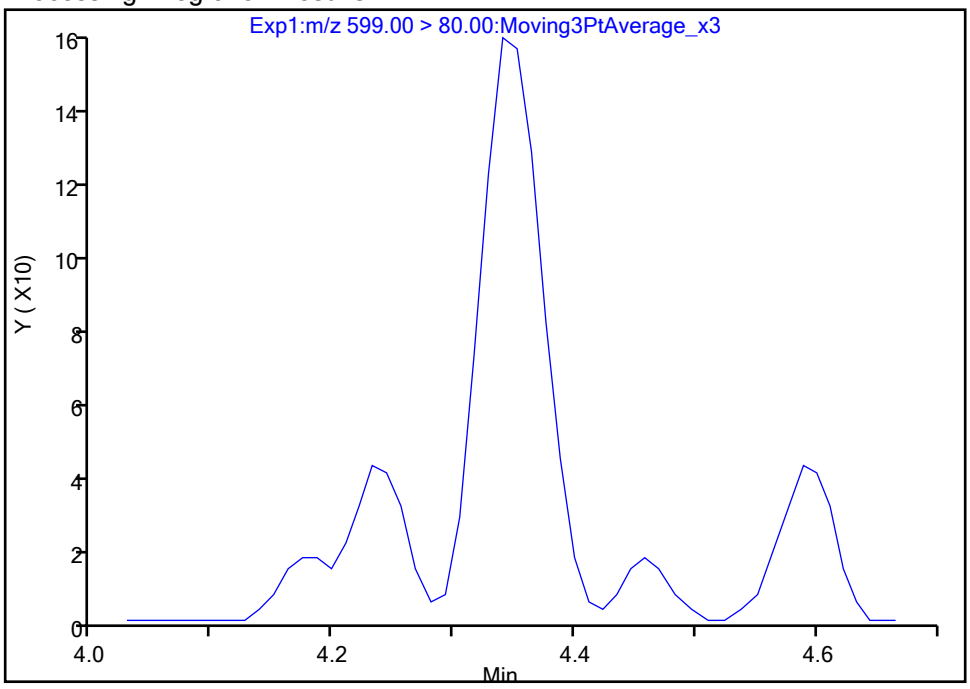
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

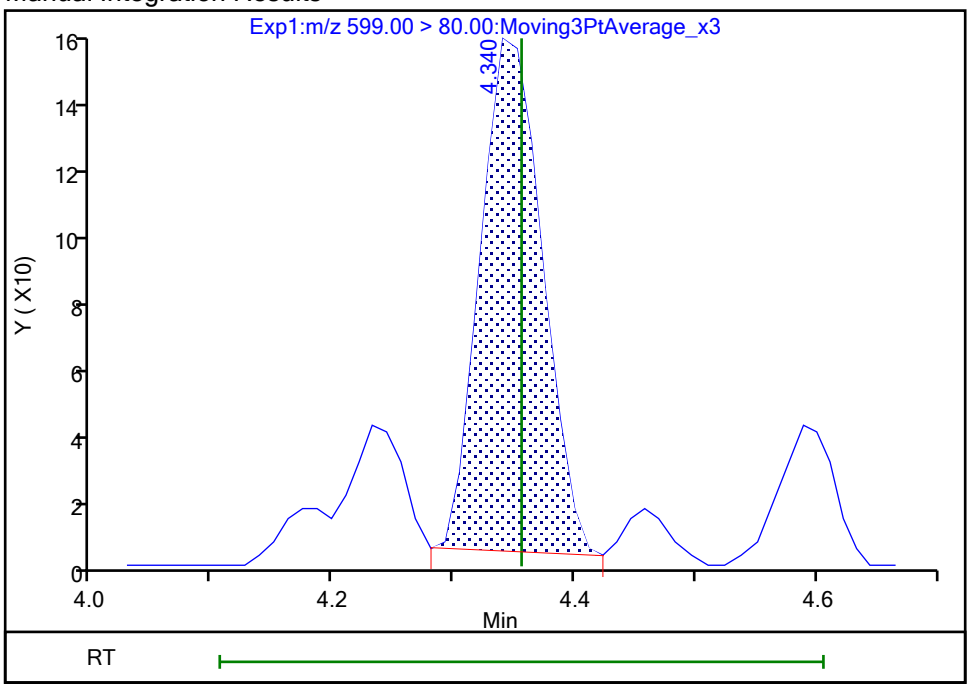
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.34
Area: 550
Amount: 0.001066
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

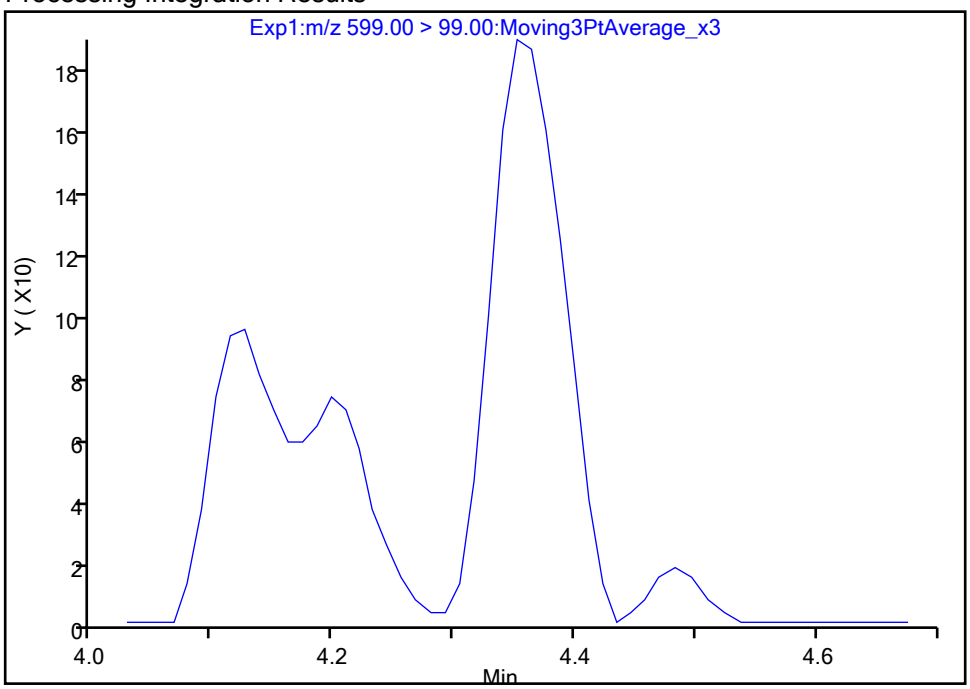
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

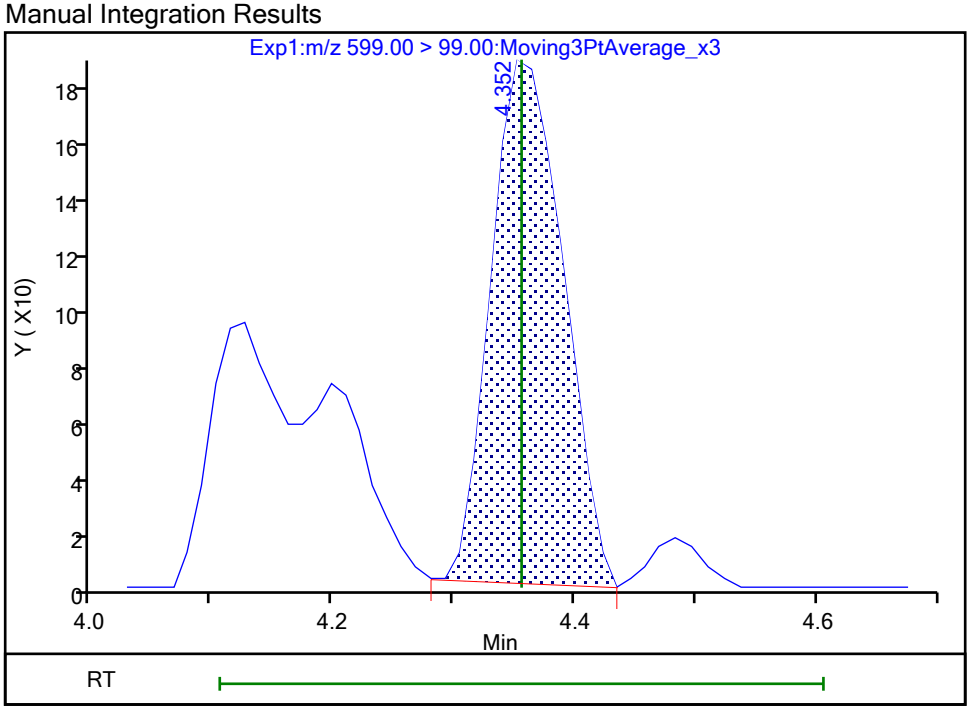
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.35
Area: 747
Amount: 0.001066
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

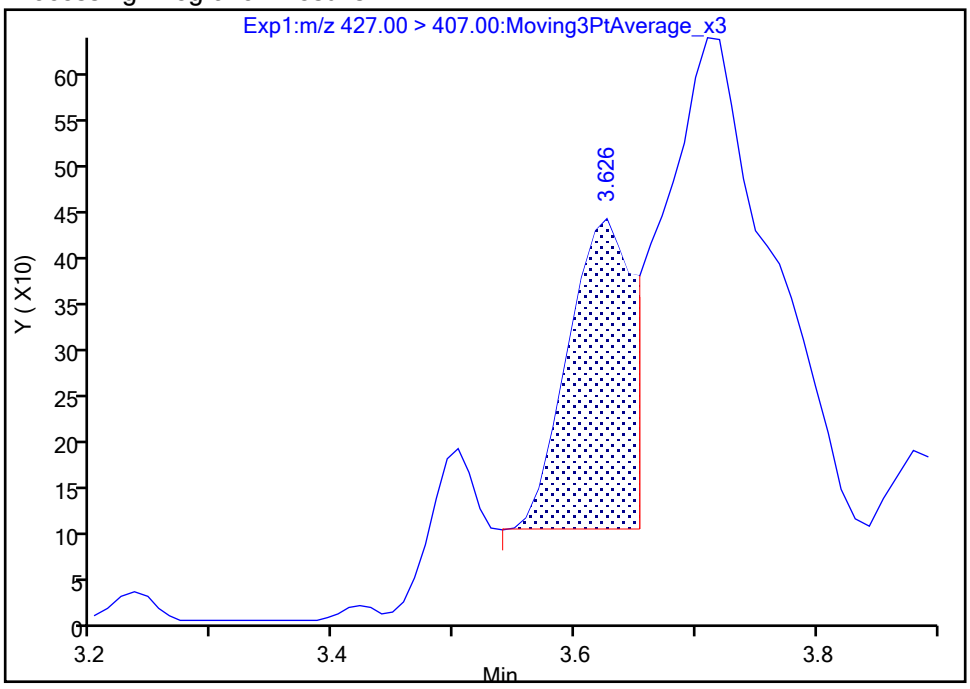
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

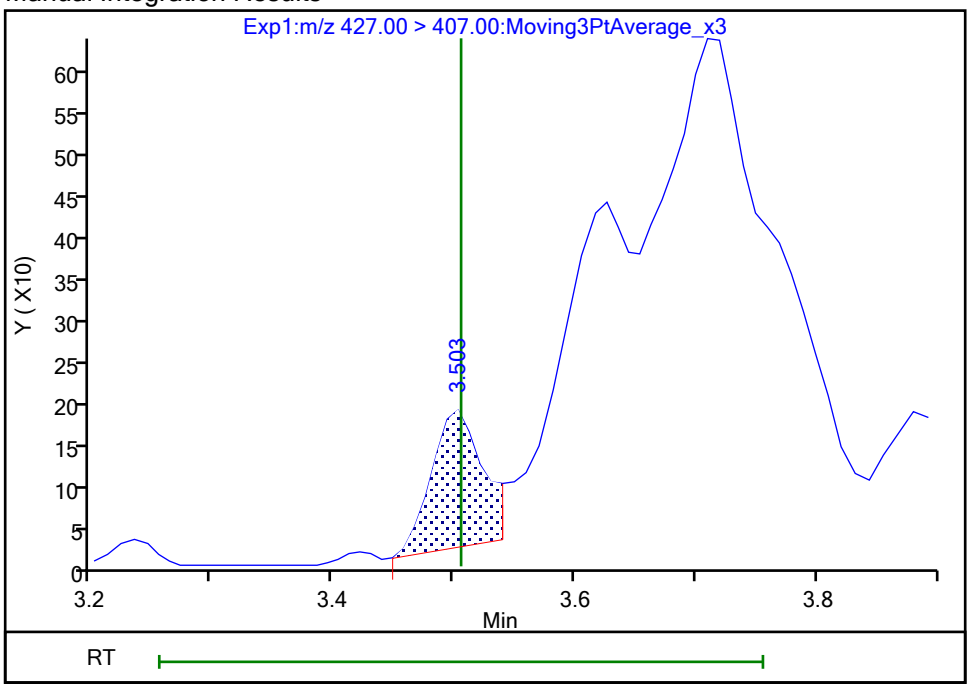
Processing Integration Results

RT: 3.63
Area: 1226
Amount: 0.001872
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 481
Amount: 0.000734
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

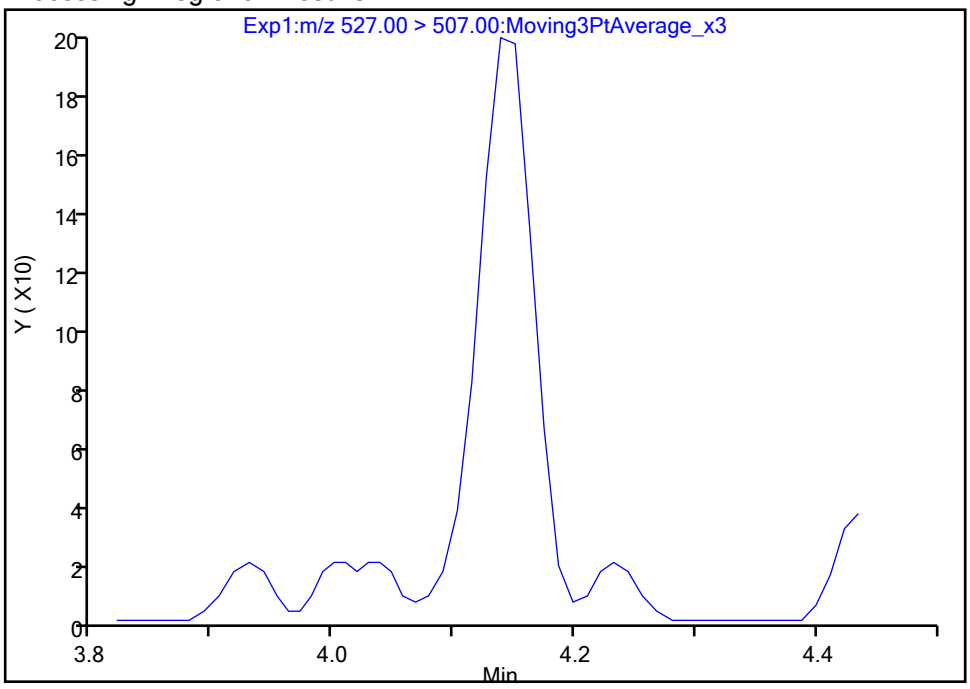
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

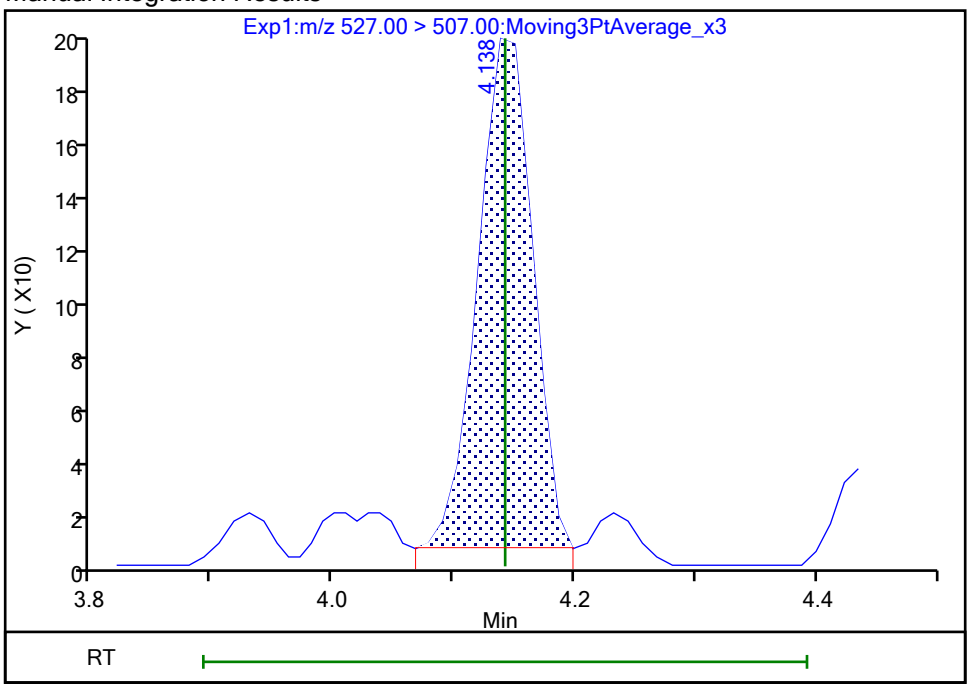
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 583
Amount: 0.001087
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

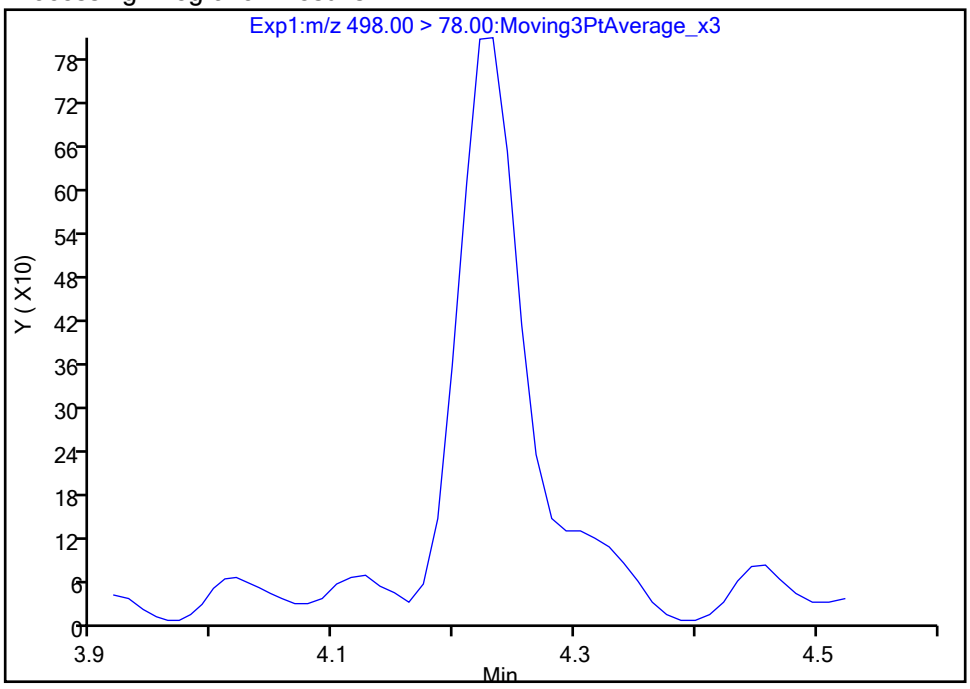
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

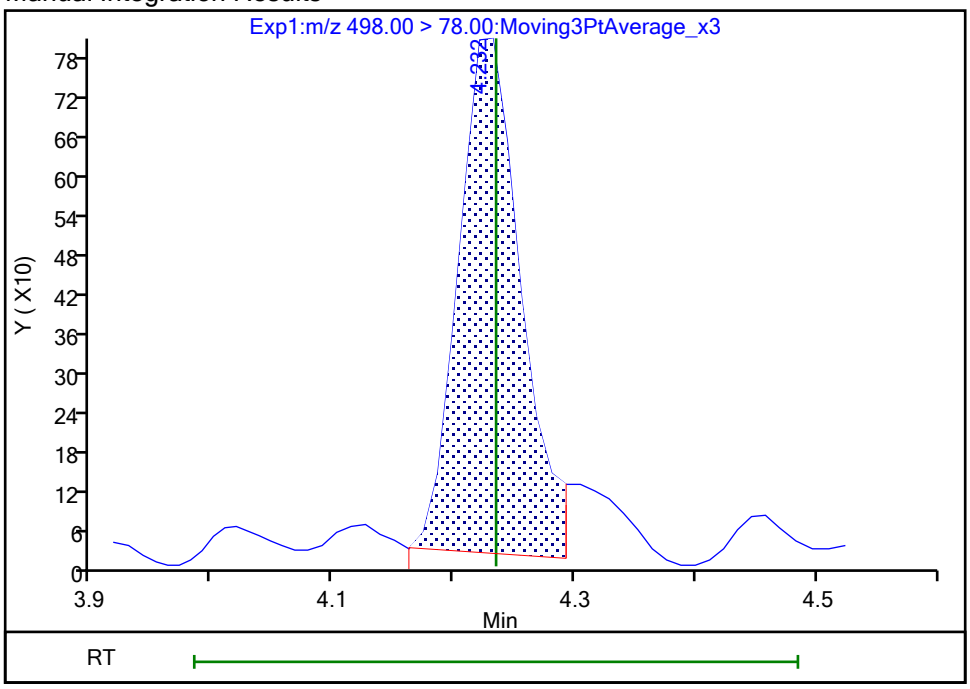
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 2806
Amount: 0.002205
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

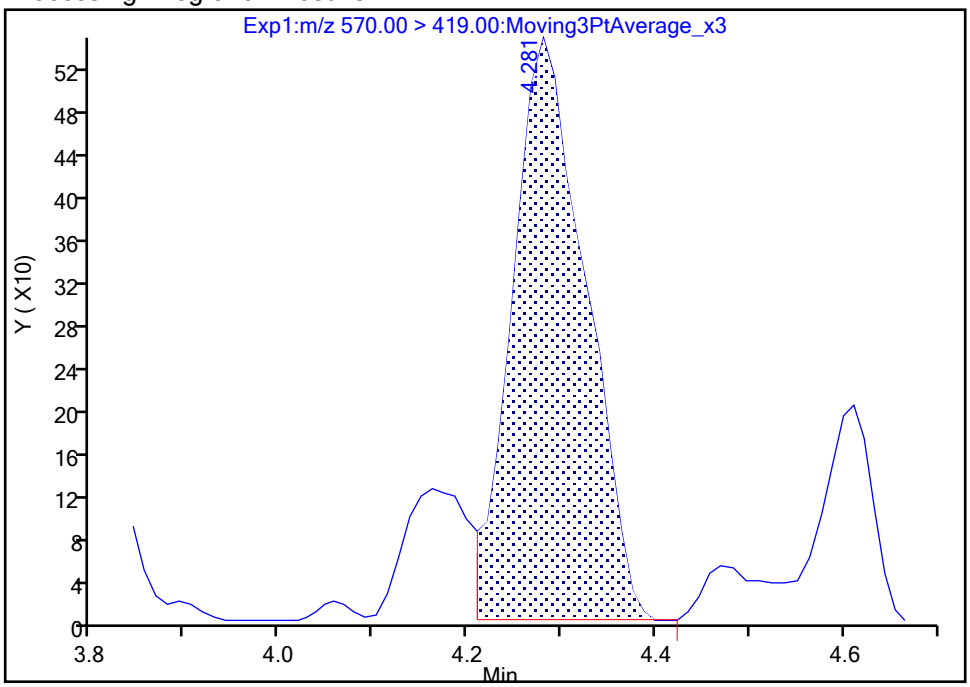
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

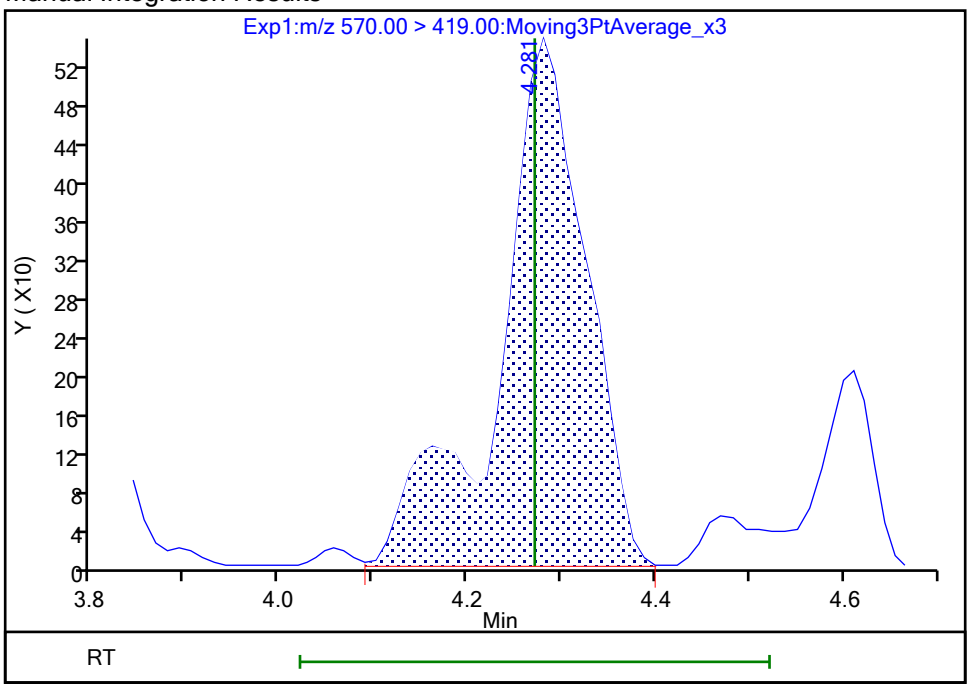
Processing Integration Results

RT: 4.28
Area: 2952
Amount: 0.008115
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 3524
Amount: 0.009688
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

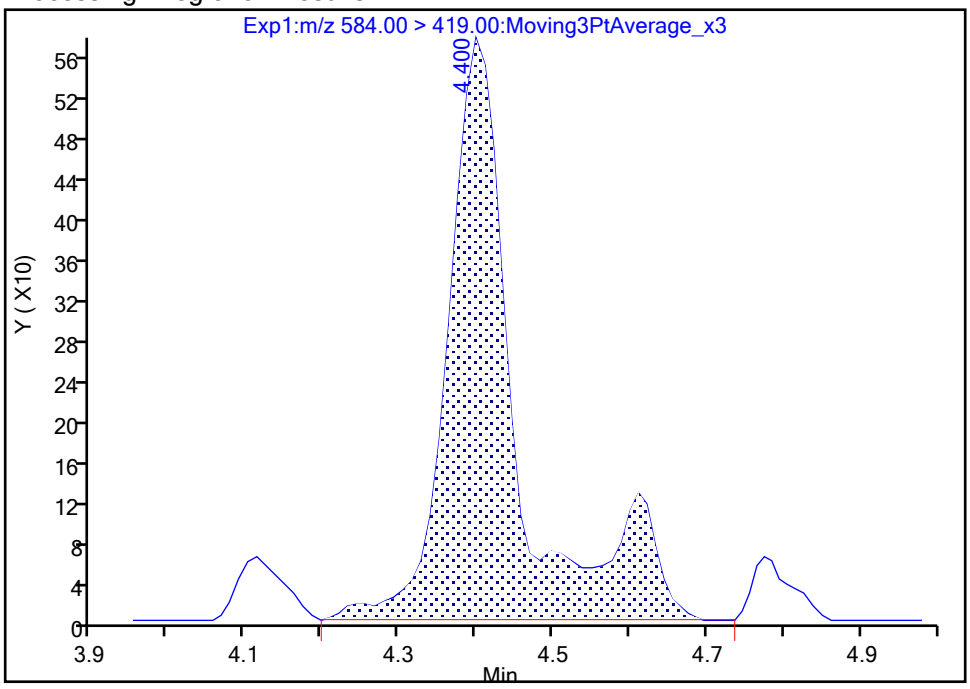
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

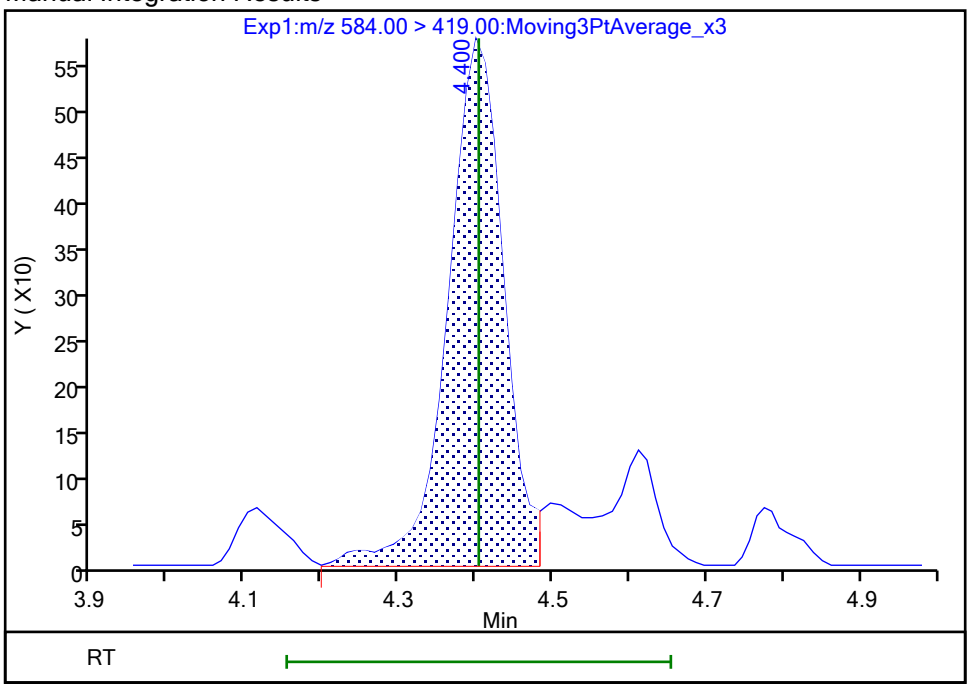
Processing Integration Results

RT: 4.40
Area: 3621
Amount: 0.009218
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 2881
Amount: 0.007334
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:59:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

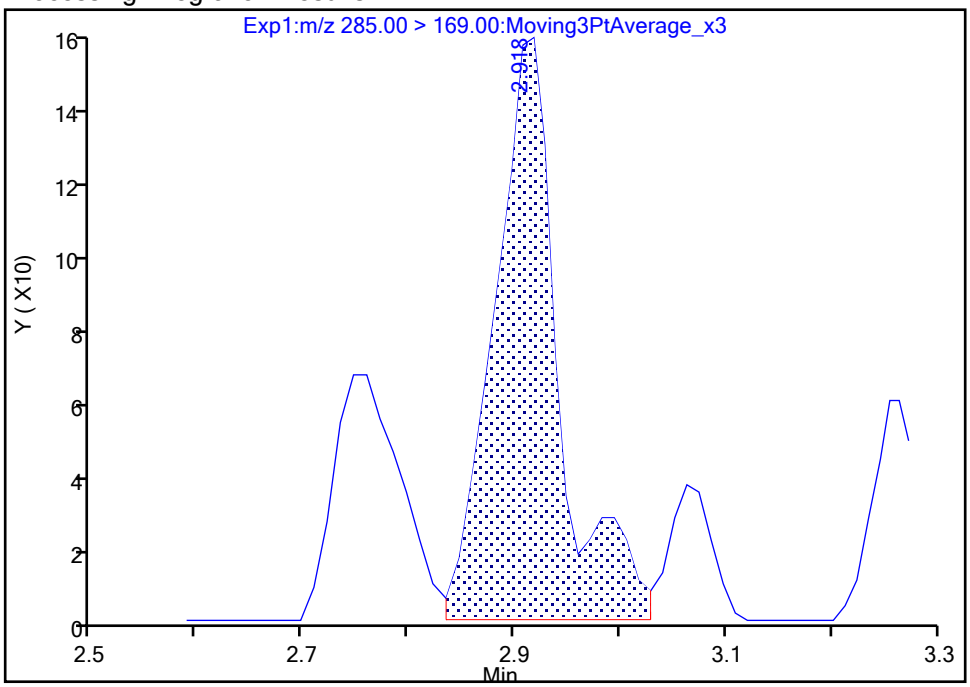
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

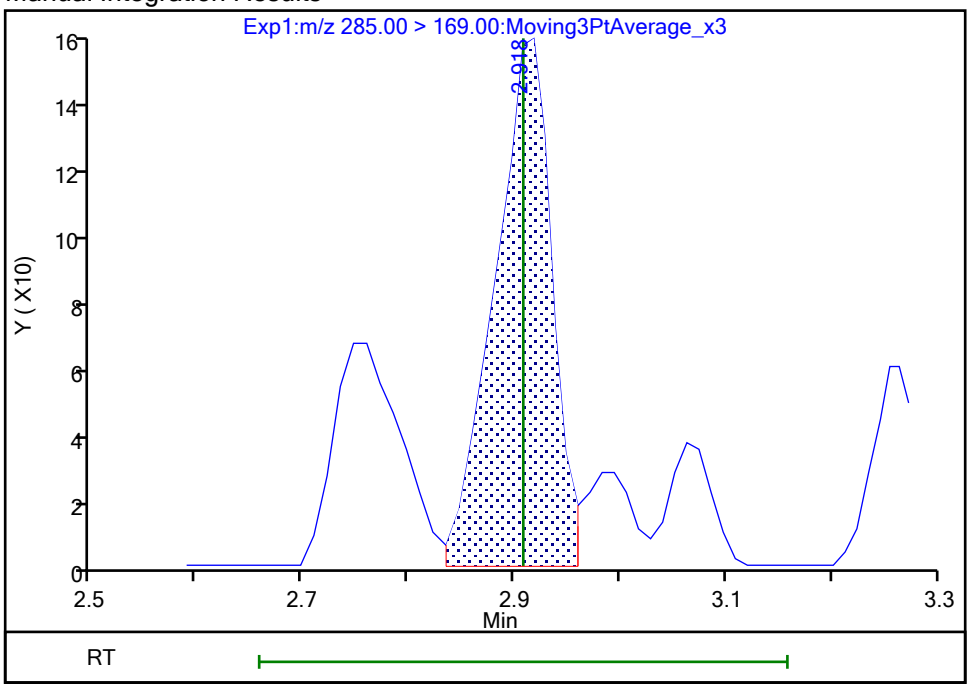
Processing Integration Results

RT: 2.92
Area: 679
Amount: 0.002709
Amount Units: ng/ml



Manual Integration Results

RT: 2.92
Area: 593
Amount: 0.002366
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:57:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

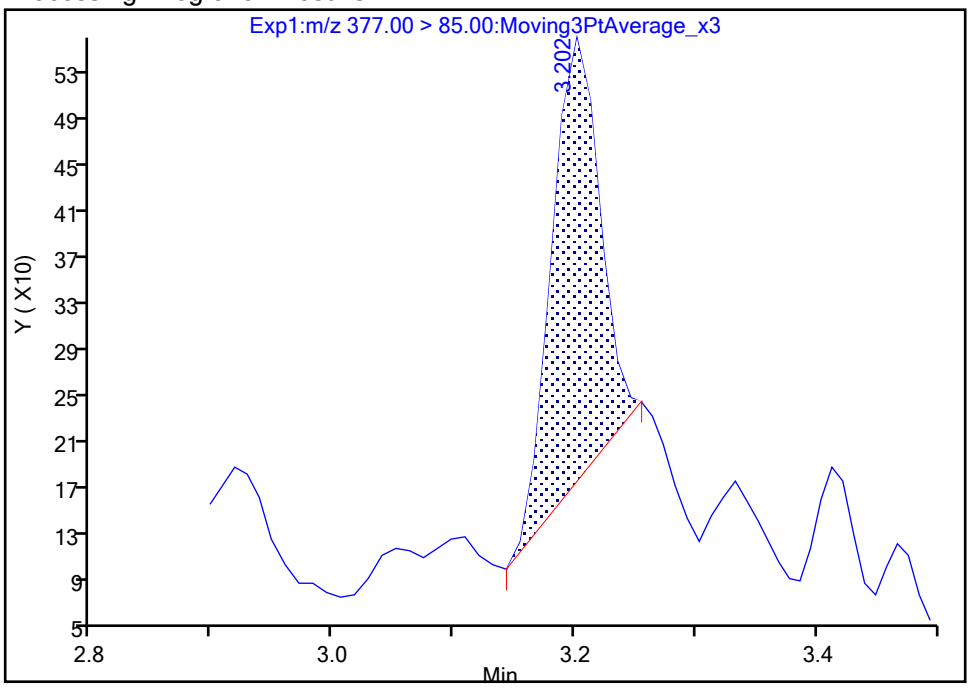
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

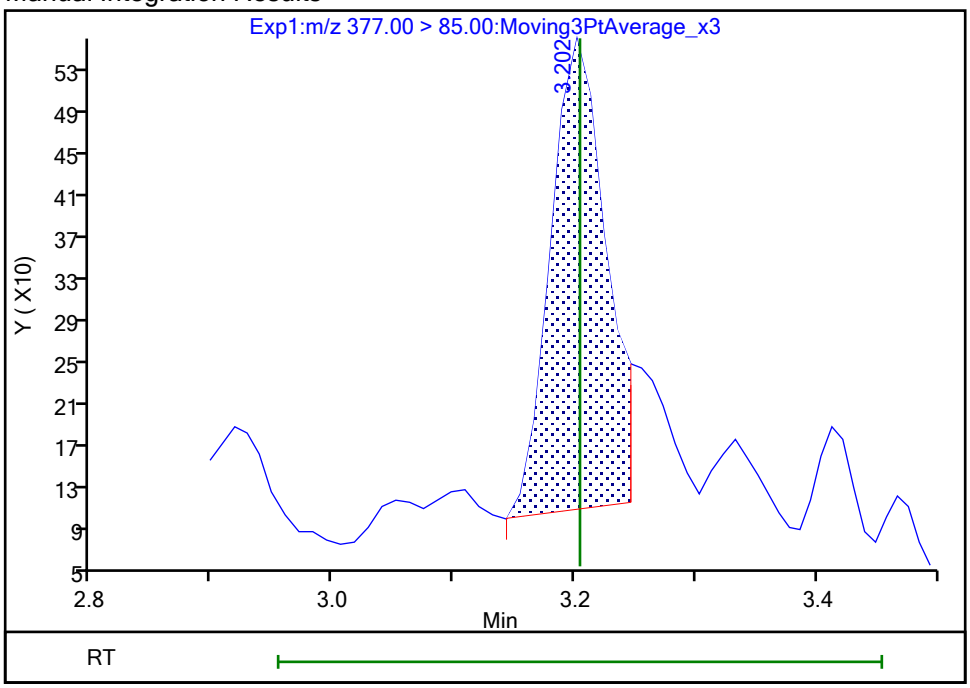
Processing Integration Results

RT: 3.20
Area: 1062
Amount: 0.000727
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 1417
Amount: 0.000780
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:57:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

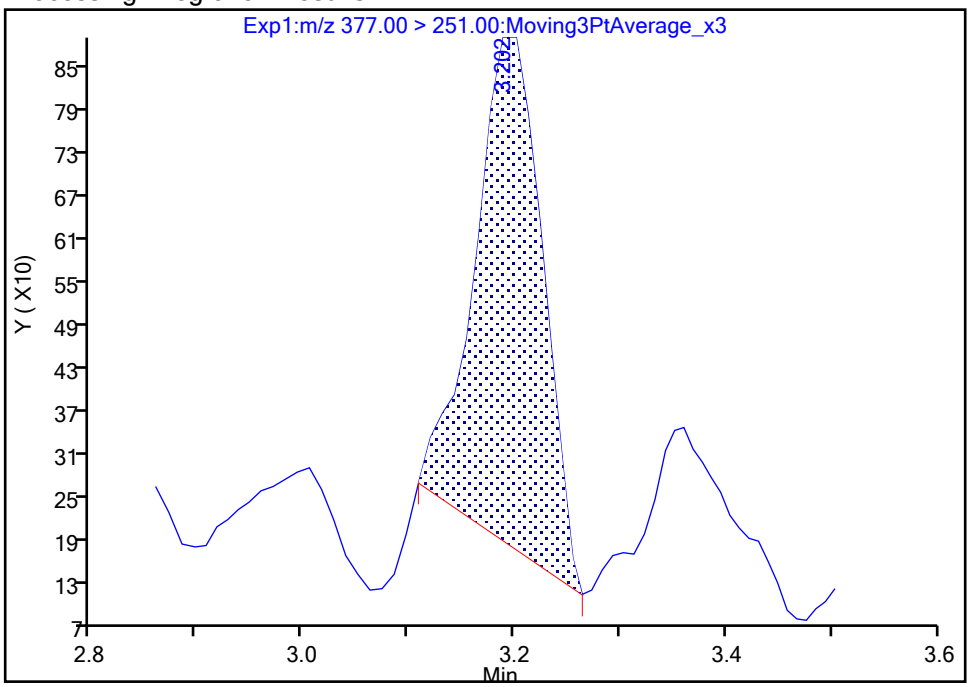
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

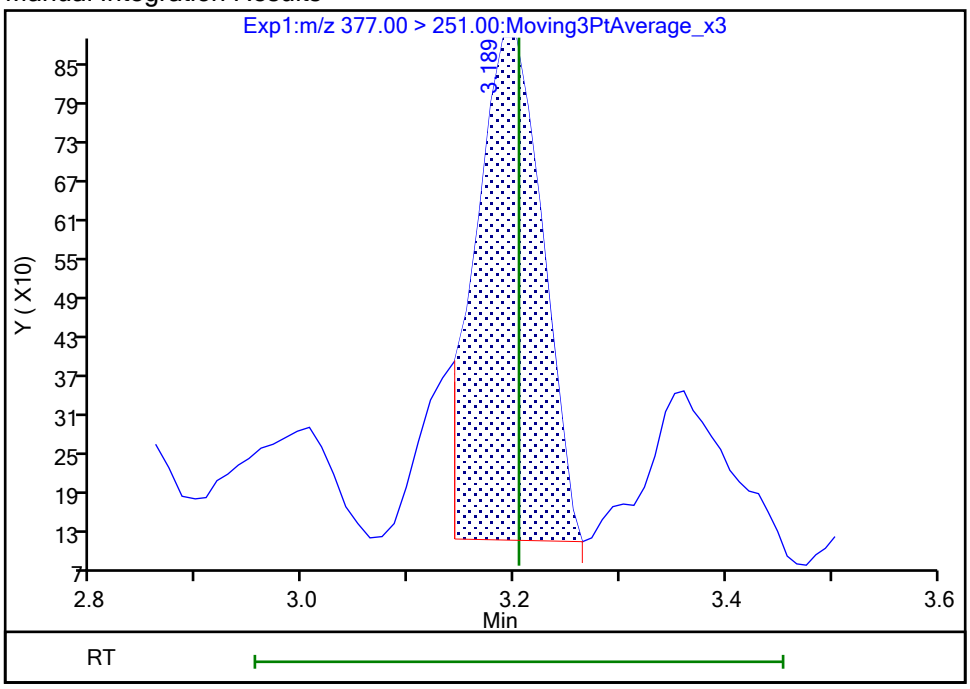
Processing Integration Results

RT: 3.20
Area: 3162
Amount: 0.000727
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 3390
Amount: 0.000780
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:57:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

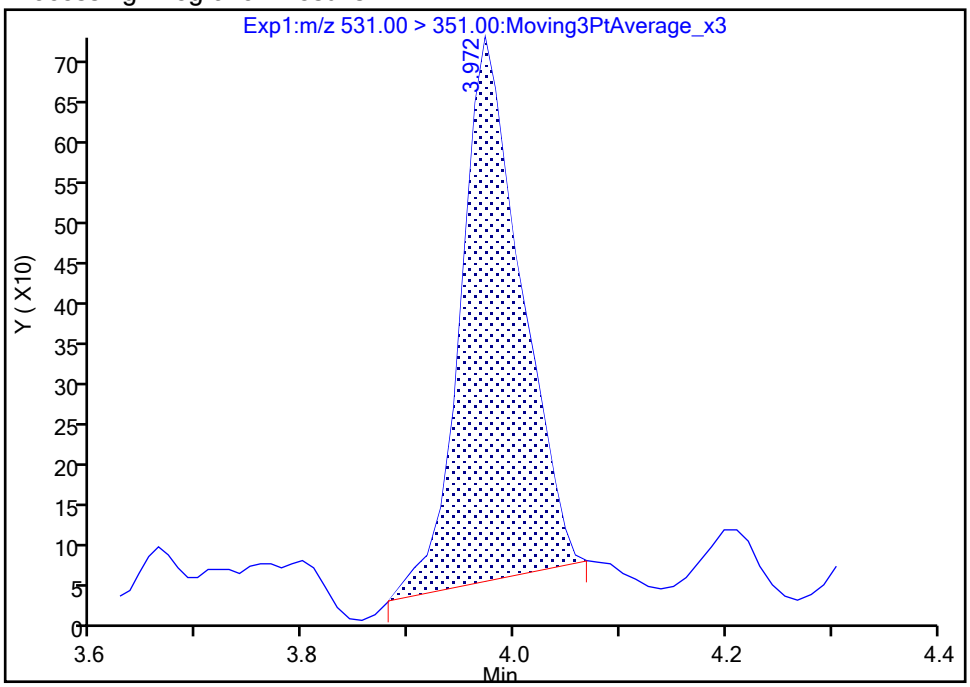
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d				
Injection Date:	21-Oct-2023 00:25:36	Instrument ID:	LC812		
Lims ID:	MB 200-196590/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

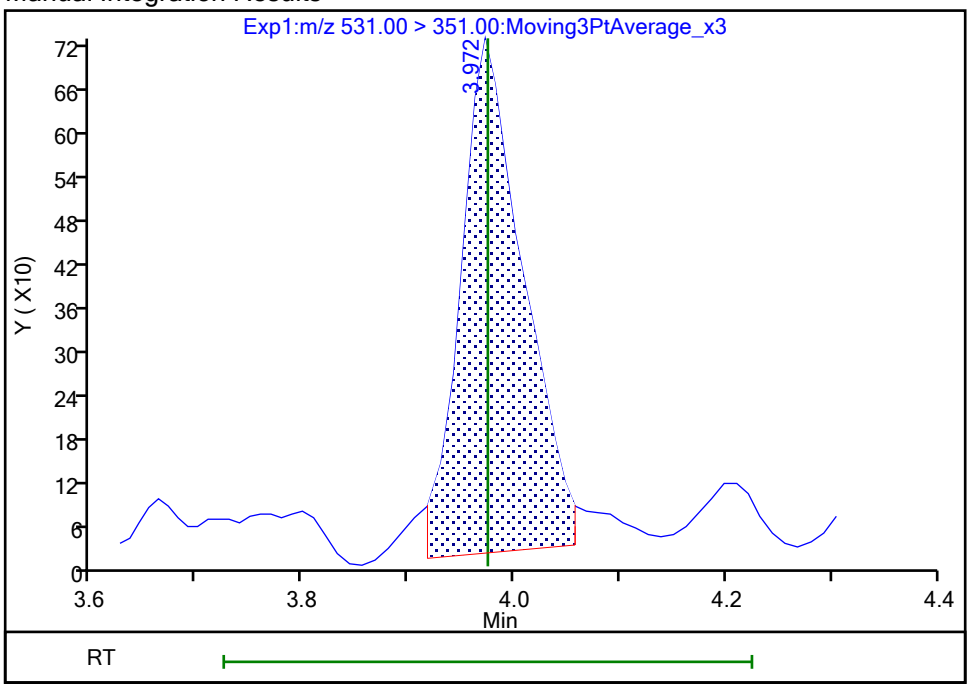
Processing Integration Results

RT: 3.97
Area: 2670
Amount: 0.000990
Amount Units: ng/ml



Manual Integration Results

RT: 3.97
Area: 2896
Amount: 0.001074
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:58:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

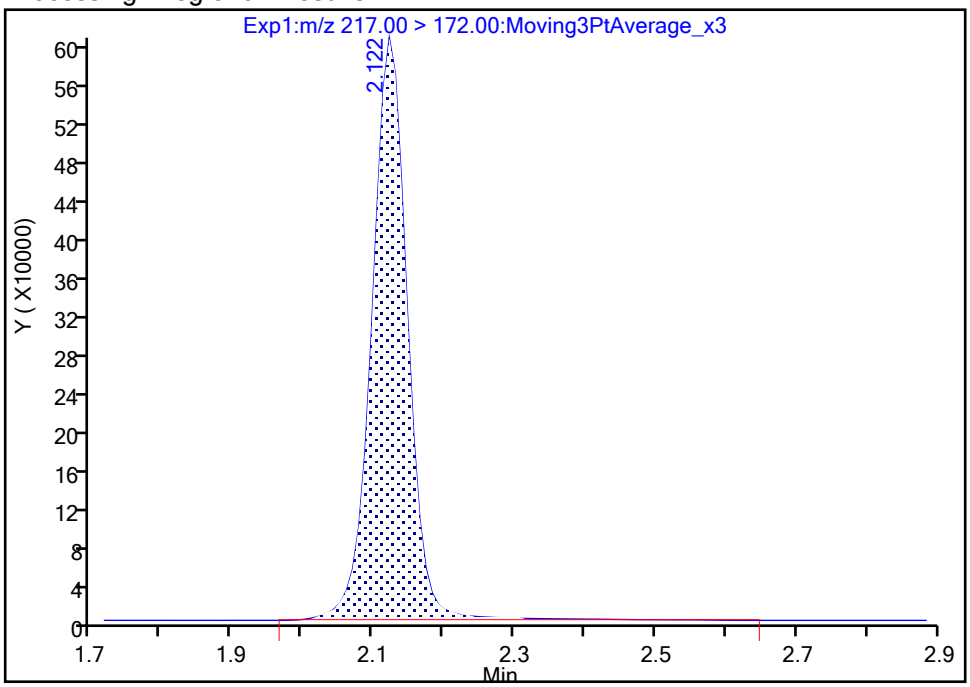
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

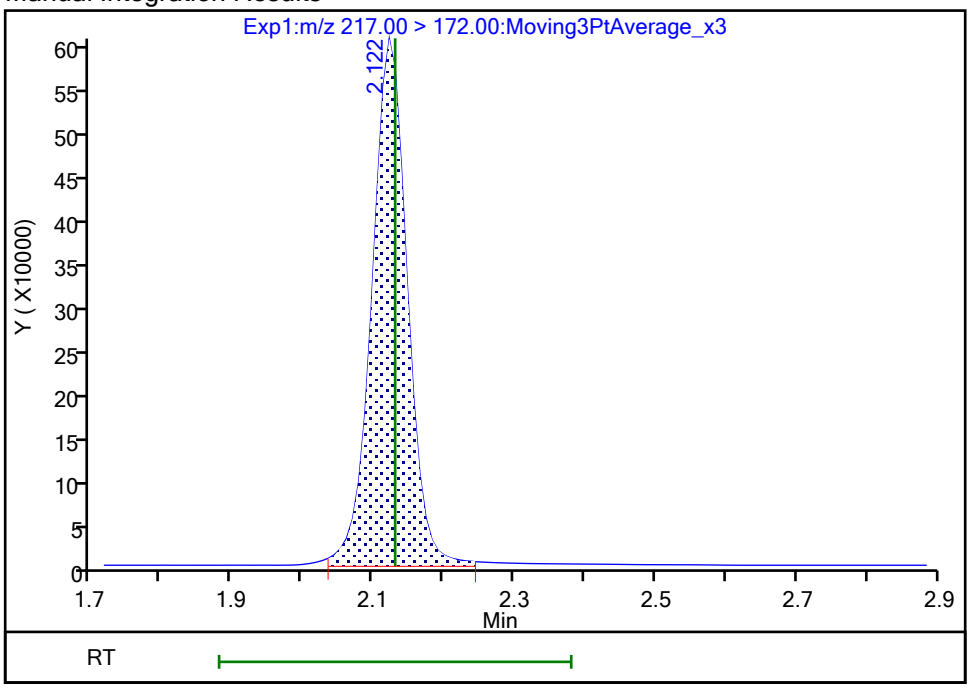
Processing Integration Results

RT: 2.12
Area: 2154342
Amount: 1.283673
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2116832
Amount: 1.261322
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:56:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

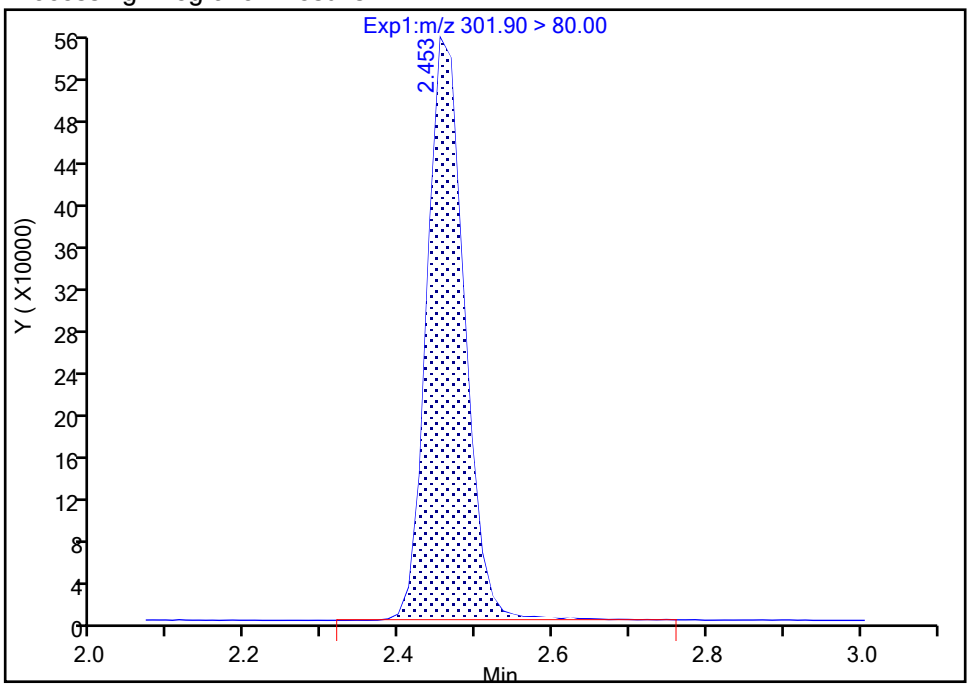
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C02.d
Injection Date: 21-Oct-2023 00:25:36 Instrument ID: LC812
Lims ID: MB 200-196590/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

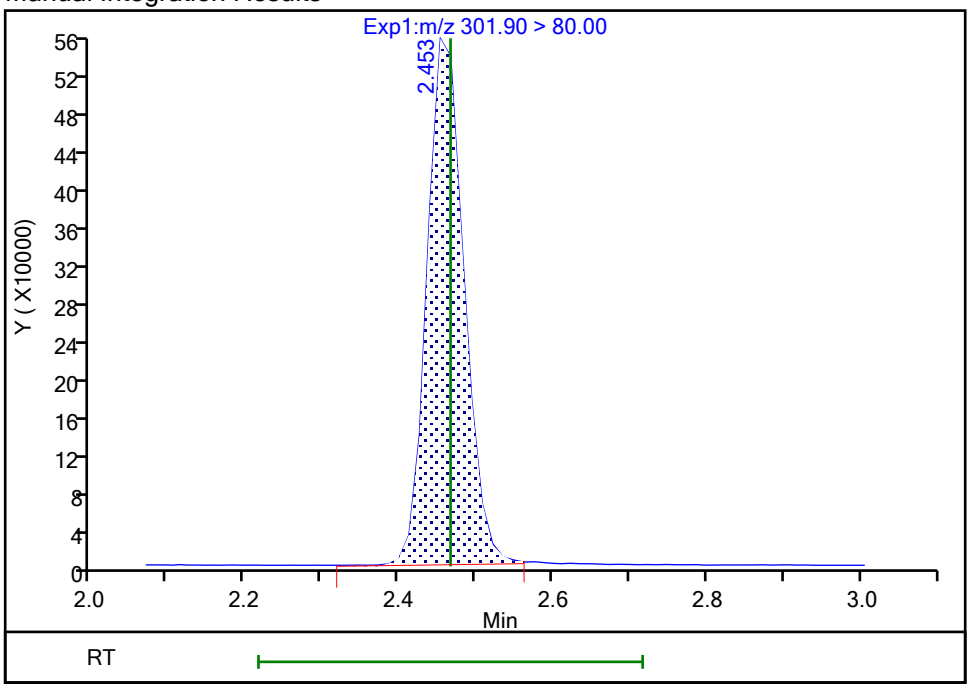
Processing Integration Results

RT: 2.45
Area: 1884424
Amount: 1.069276
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1871500
Amount: 1.061943
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 13:56:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196591/1-A

Matrix: Water | Lab File ID: PA231020D02.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 250(mL) | Date Analyzed: 10/21/2023 03:57

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196591/1-A

Matrix: Water Lab File ID: PA231020D02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 03:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	105		50-150
STL01893	13C5 PFPeA	100		50-150
STL01892	13C4 PFHpA	105		50-150
STL02116	13C2 PFTeDA	81		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	75		50-150
STL02118	d3-NMeFOSAA	86		50-150
STL02117	d5-NEtFOSAA	81		50-150
STL02395	M2-4:2 FTS	82		50-150
STL02279	M2-6:2 FTS	86		50-150
STL02280	M2-8:2 FTS	79		50-150
STL02255	13C3 HFPO-DA	101		50-150
STL00994	18O2 PFHxS	89		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	90		50-150
STL00998	13C2 PFDoA	94		50-150
STL00995	13C5 PFNA	101		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	92		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Lims ID: MB 200-196591/1-A
Client ID:
Sample Type: MB
Inject. Date: 21-Oct-2023 03:57:55 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196591/1-A
Misc. Info.: 200-0057494-002 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:07:38 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 15:11:13
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.607	2289902	1.31		105	1912	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	26170	-0.0251			1.9	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.439	0.0	0.695	1697026	1.25		99.9	1248	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.439	0.014	1.006	3287	0.002244			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.702	1867516	1.02		87.4	94125	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.480	2.467	0.013	1.006	5335	0.002973	Target=2.06		4.7	RM
298.90 > 99.00	2.480	2.467	0.013	1.006	1242		4.30(1.03-3.09)		0.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.785	2.760	0.024	1.009	723	0.001219			8.2	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.786	203897	0.9593		82.2	145	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.798	-0.001	0.797	1696872	1.23		98.2	5394	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	90	0.000334			1.7	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	336565	1.26		101	1851	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.157	0.007	0.901	1390507	1.06		89.3	5991	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.157	0.007	1.000	5566	0.004276	Target=3.32		14.4	M
399.00 > 99.00	3.153	3.157	-0.004	0.996	2176		2.56(1.66-4.98)		2.2	M
10 Perfluoroheptanoic acid										RM
363.00 > 319.00	3.153	3.169	-0.016	0.996	1660	0.000927	Target=4.17		0.3	RM
363.00 > 169.00	3.165	3.169	-0.005	1.000	987		1.68(2.09-6.26)		3.1	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.169	-0.005	0.901	1997330	1.32		105	10145	
77 DONA										RM
377.00 > 251.00	3.211	3.204	0.007	0.841	1982	0.000456	Target=3.33		2.2	RM
377.00 > 85.00	3.187	3.204	-0.017	0.835	1620		1.22(1.66-4.99)		3.0	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.502	3.506	-0.004	0.997	279602	1.02		86.0	539	M
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.493	3.506	-0.013	0.997	666	0.001035			1.7	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.515	0.005	1.003	2257476	1.31		105	5103	
* 62 13C2 PFOA										M
415.00 > 370.00	3.511	3.515	-0.004		2206137	1.25			3424	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.502	3.515	-0.013	0.995	9604	0.004993	Target=2.88		0.4	M
413.00 > 169.00	3.511	3.515	-0.004	0.997	2286		4.20(1.44-4.32)		4.8	M
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.808	3.823	-0.015	0.997	2294	0.002602	Target=4.24		5.6	RM
499.00 > 99.00	3.680	3.823	-0.143	0.964	1234		1.86(2.12-6.37)		2.5	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.823	-0.004	1.088	903119	1.08		90.3	4198	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.846	-0.004	1.094	2357036	1.26		101	5036	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.975	0.006	1.042	1444	0.000535			5.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.130	0.006	1.178	2446062	1.25		100	7429	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.142	-0.006	1.178	292162	0.9492		79.3	824	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.235	0.007	1.208	1559070	0.9336		74.7	4711	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.219	4.235	-0.016	0.995	797	0.000670			6.6	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.271	-0.005	1.215	502831	1.08		86.0	1556	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.271	0.007	1.003	1278	0.003501			2.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.380	0.007	1.249	2135973	1.16		92.5	12189	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.391	0.007	1.253	454963	1.01		80.8	950	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.403	-0.005	1.000	1458	0.004005			7.5	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.475	0.007	1.174	1983	0.000479			2.4	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.604	0.006	1.313	2208724	1.18		94.1	9278	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.610	4.626	-0.016	1.115	295	0.000919			5.7	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.983	-0.004	1.418	1891677	1.01		80.9	5194	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.983	-0.004	1.000	165	0.000975	Target=0.87		3.0	M
713.00 > 219.00	4.990	4.983	0.007	1.002	296		0.56(0.43-1.30)		5.5	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.293	0.003	1.508	2032922	0.9437		75.5	6336	
45 Perfluorohexadecanoic acid										RM
813.00 > 769.00	5.296	5.293	0.003	1.000	4729	0.002908	Target=7.89		0.4	RM
813.00 > 169.00	5.284	5.293	-0.009	0.998	383		12.35(3.94-11.83)		6.1	M
46 Perfluorooctadecanoic acid										RM
913.00 > 869.00	5.576	5.555	0.021	1.053	2348	0.001849	Target=9.39		0.3	RM
913.00 > 169.00	5.557	5.555	0.002	1.049	63		37.27(4.69-14.08)		3.4	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

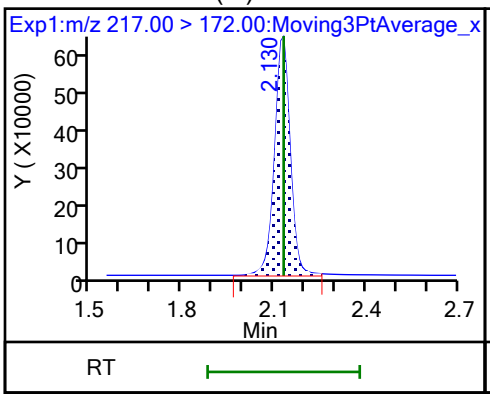
M - Manually Integrated

Report Date: 25-Oct-2023 09:07:42 Chrom Revision: 2.3 18-Oct-2023 21:16:54

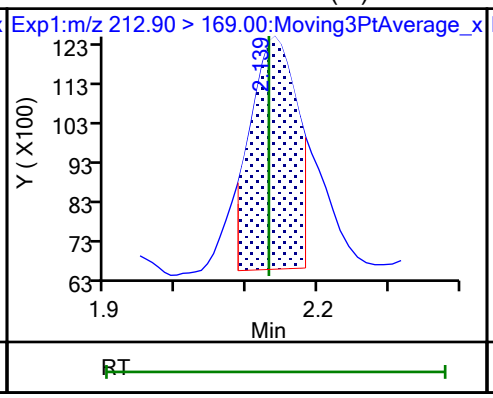
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

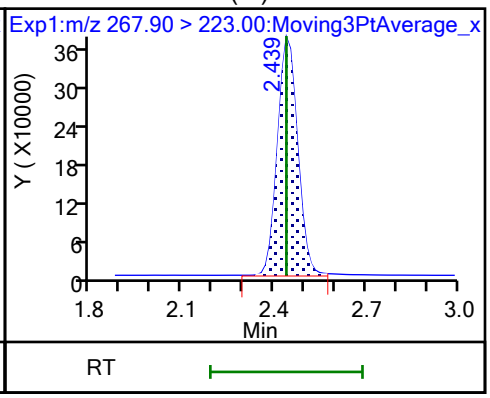
D 1 13C4 PFBA (M)



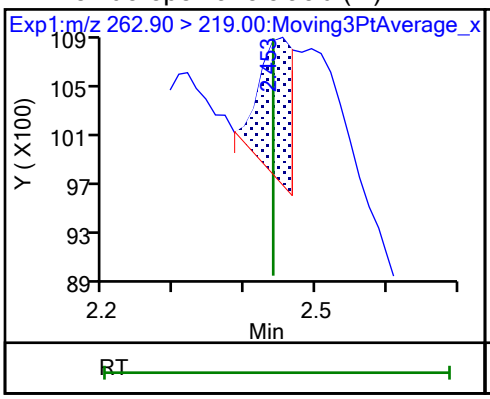
2 Perfluorobutanoic acid (M)



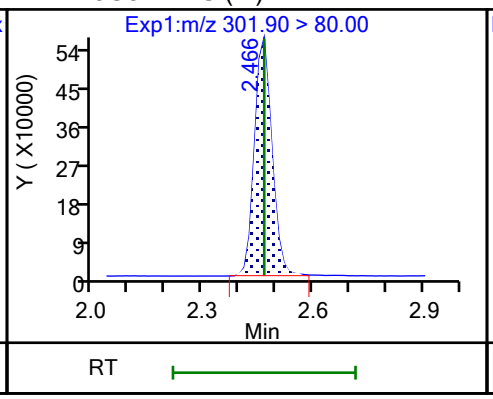
D 3 13C5 PFPeA (M)



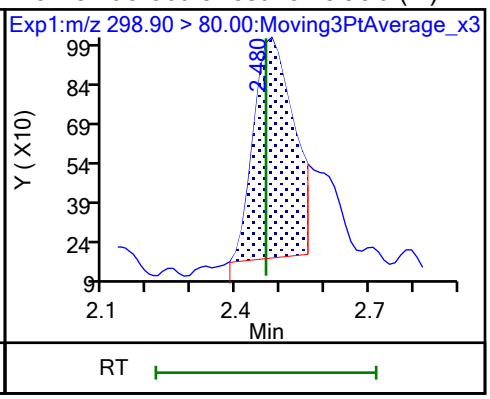
4 Perfluoropentanoic acid (M)



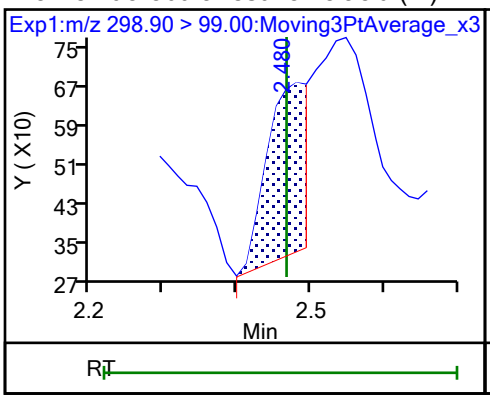
D 47 13C3 PFBS (M)



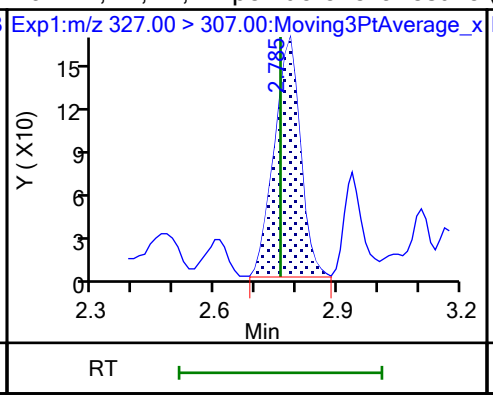
5 Perfluorobutanesulfonic acid (M)



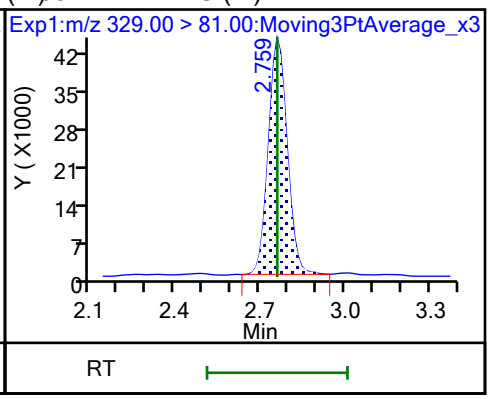
5 Perfluorobutanesulfonic acid (M)



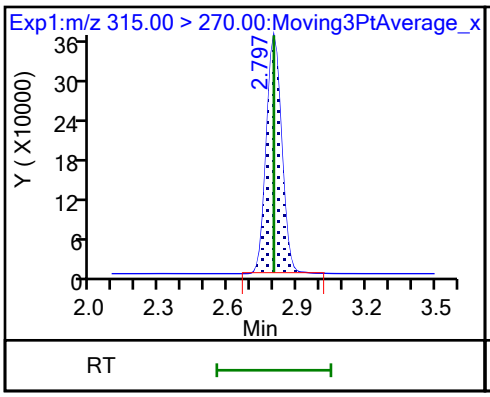
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



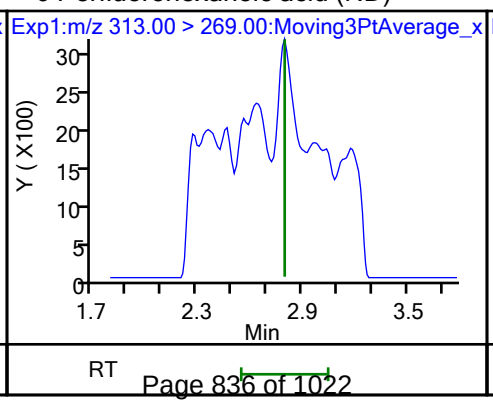
60 M2-4:2 FTS (M)



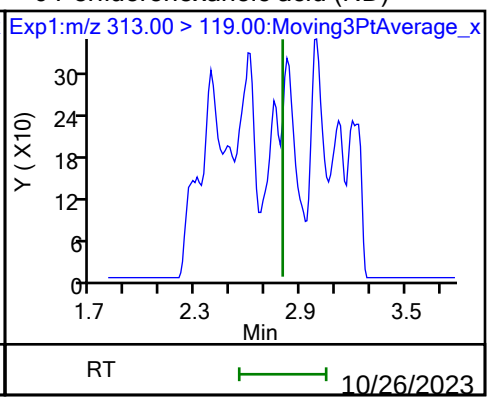
D 7 13C2 PFHxA



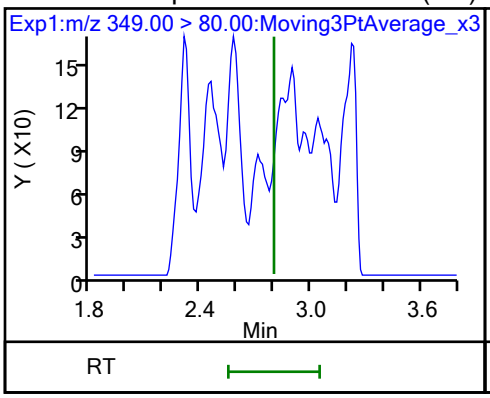
6 Perfluorohexanoic acid (ND)



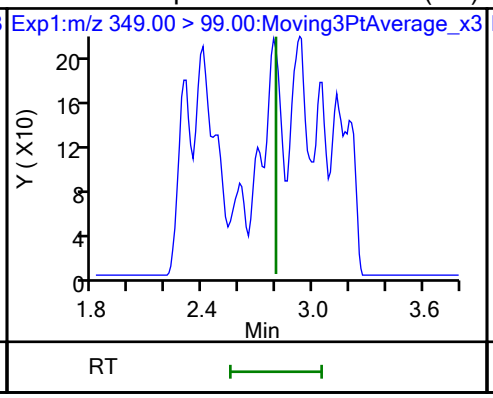
6 Perfluorohexanoic acid (ND)



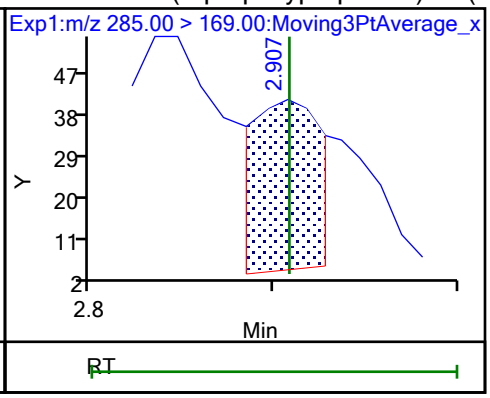
70 Perfluoropentanesulfonic acid (ND)



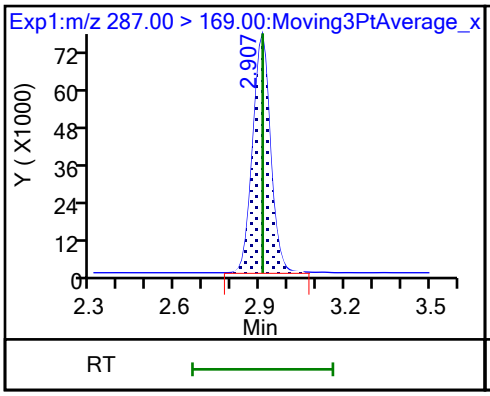
70 Perfluoropentanesulfonic acid (ND)



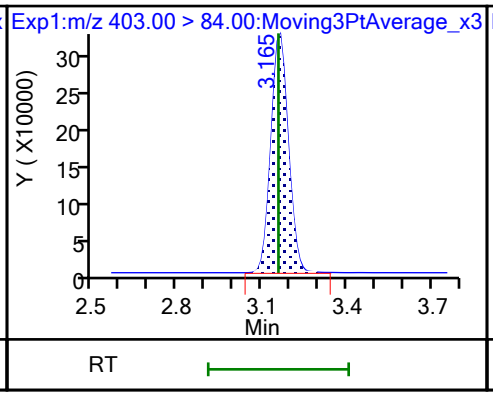
67 Perfluoro(2-propoxypropanoic) ac (M)



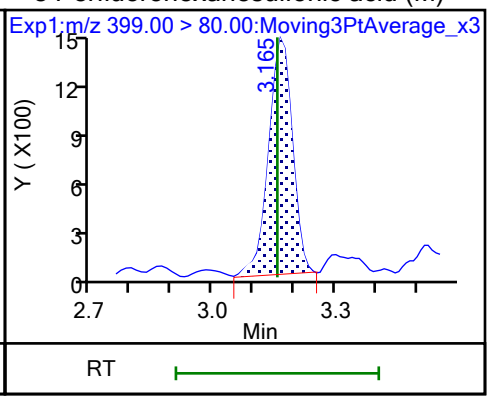
D 64 13C3 HFPO-DA



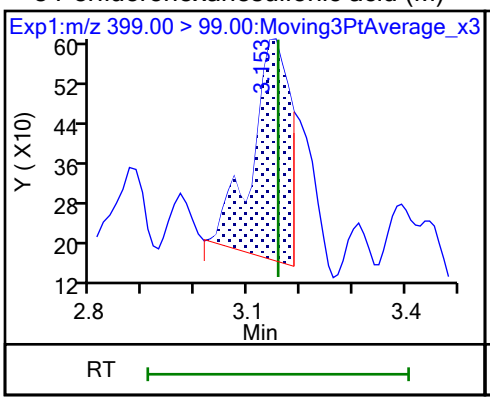
D 11 18O2 PFHxS



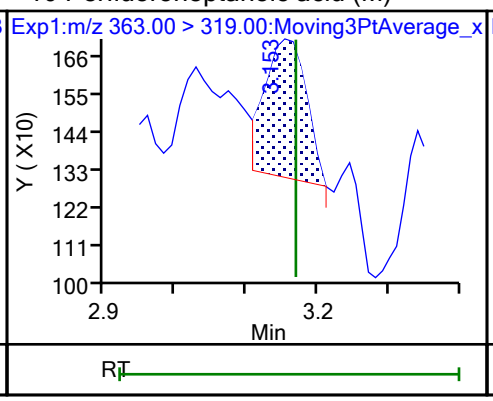
8 Perfluorohexanesulfonic acid (M)



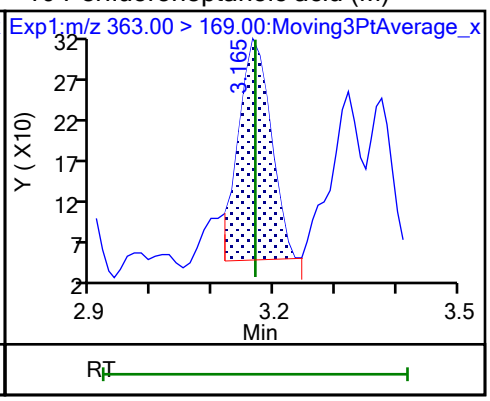
8 Perfluorohexanesulfonic acid (M)



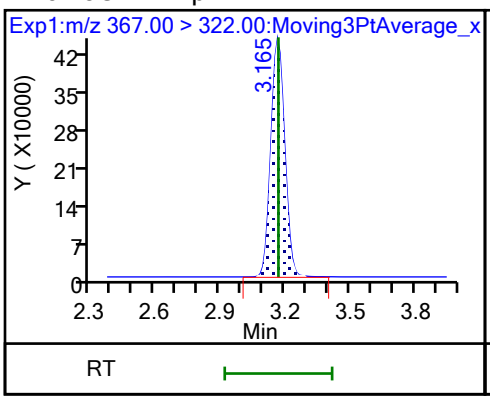
10 Perfluoroheptanoic acid (M)



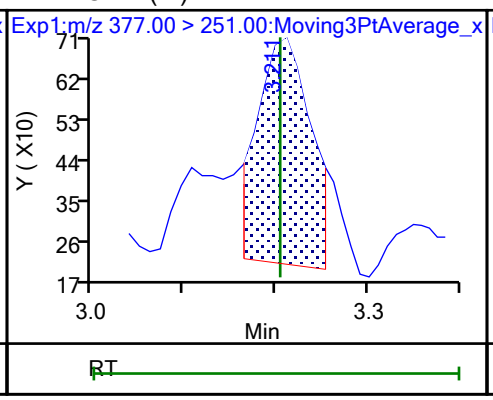
10 Perfluoroheptanoic acid (M)



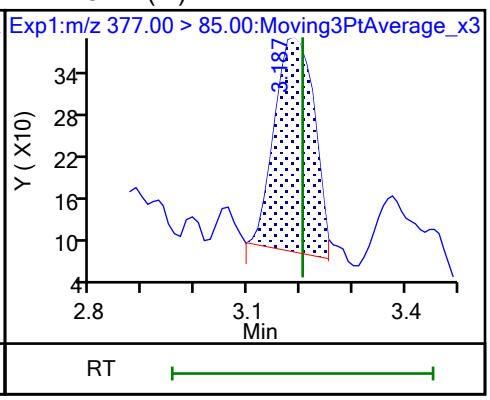
D 9 13C4 PFHpA



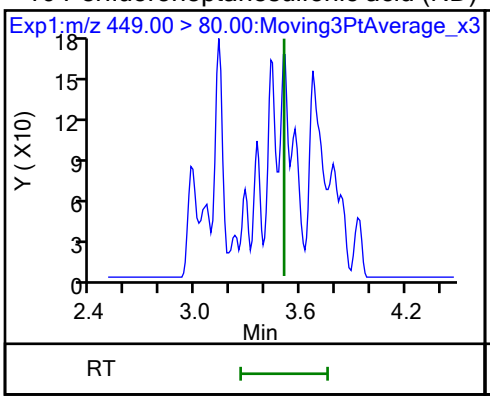
77 DONA (M)



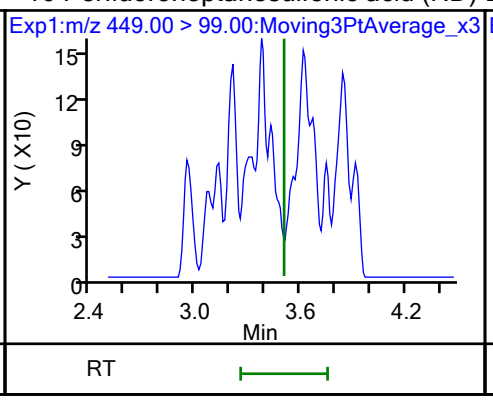
77 DONA (M)

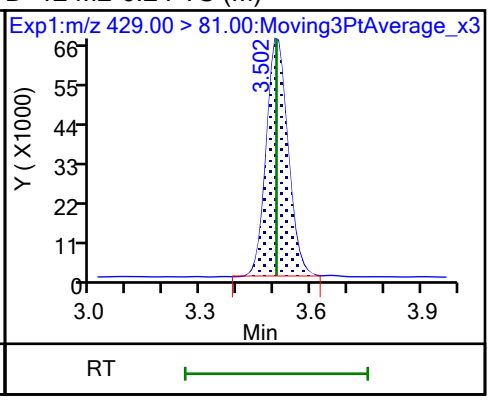


16 Perfluoroheptanesulfonic acid (ND)

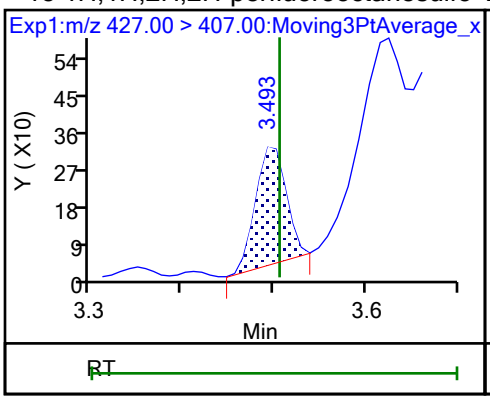


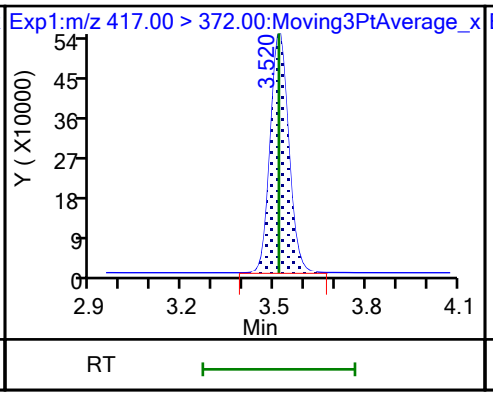
16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS (M)

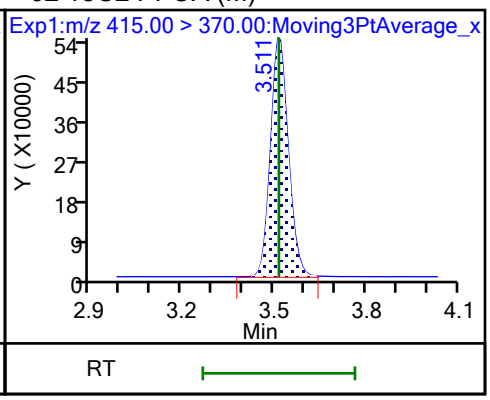




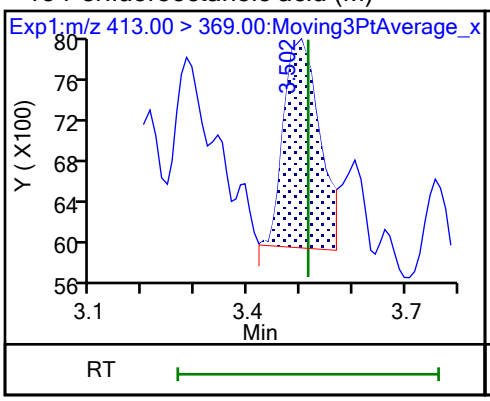
13 1H,1H,2H,2H-perfluorooctanesulfo D 14 13C4 PFOA * 62 13C2 PFOA (M)



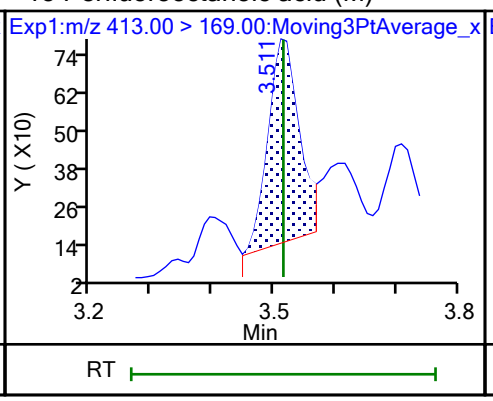




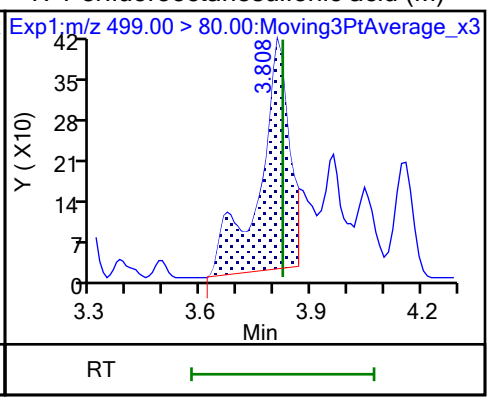
15 Perfluorooctanoic acid (M)



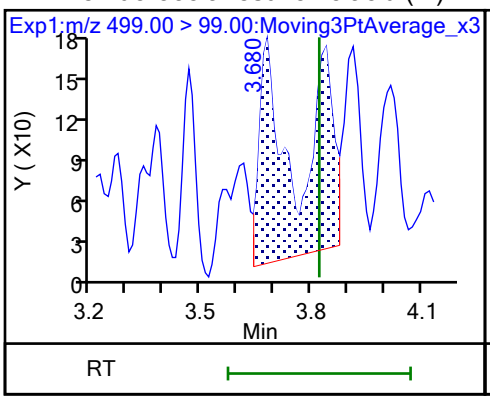
15 Perfluorooctanoic acid (M)

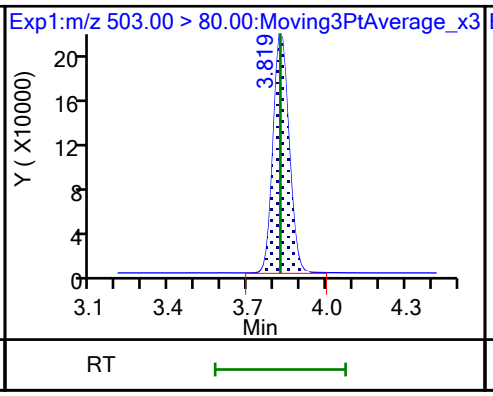


17 Perfluorooctanesulfonic acid (M)

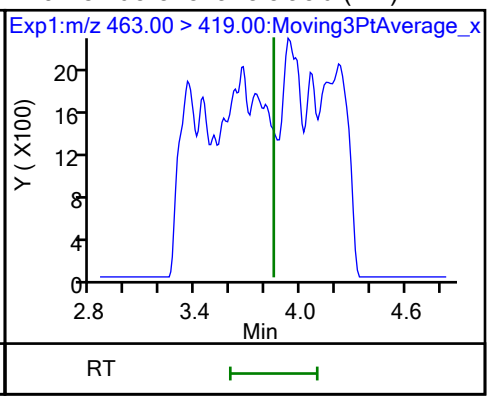


17 Perfluorooctanesulfonic acid (M) D 18 13C4 PFOS

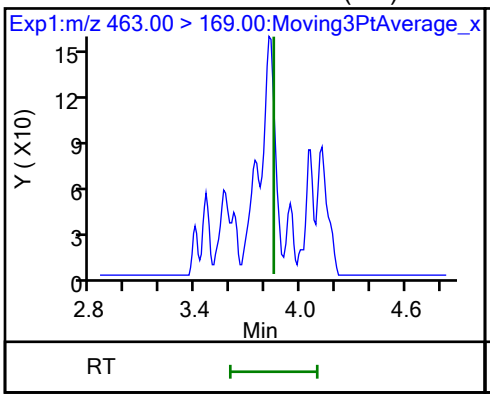




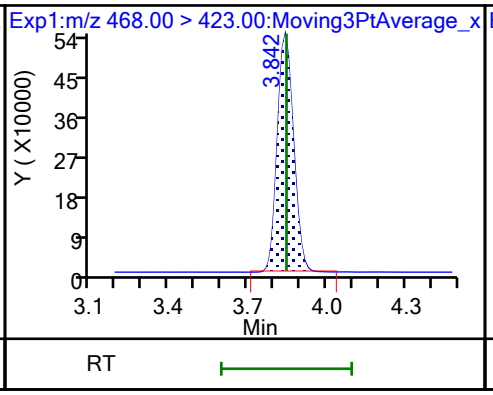
20 Perfluorononanoic acid (ND)



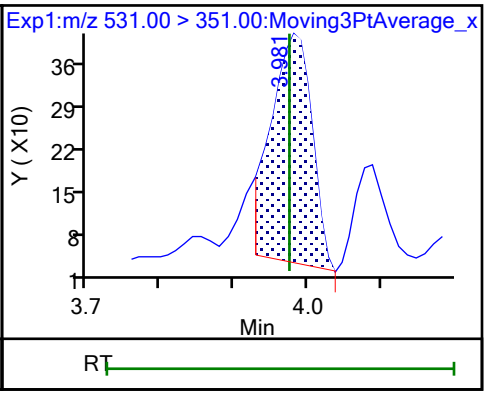
20 Perfluorononanoic acid (ND)



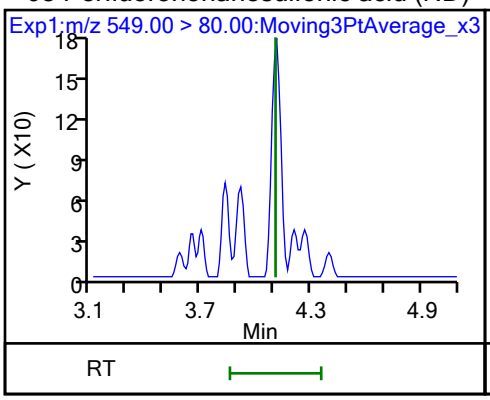
D 19 13C5 PFNA



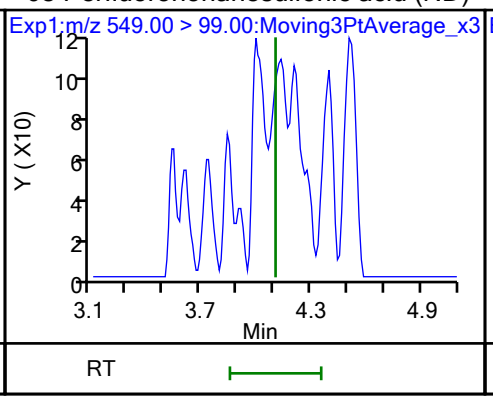
69 9-Chlorohexadecafluoro-3-oxanona (M)



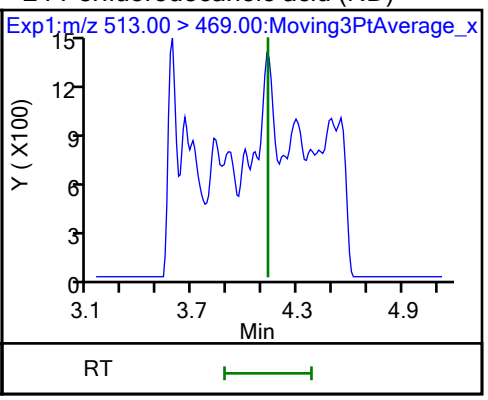
68 Perfluorononanesulfonic acid (ND)



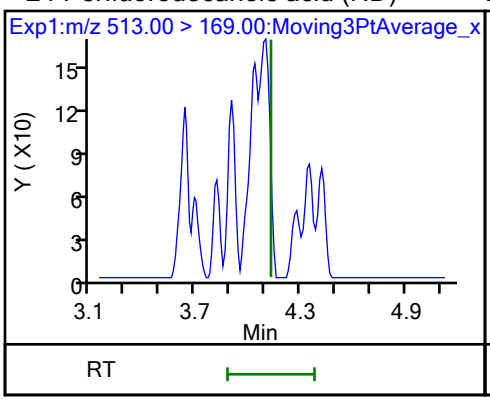
68 Perfluorononanesulfonic acid (ND)



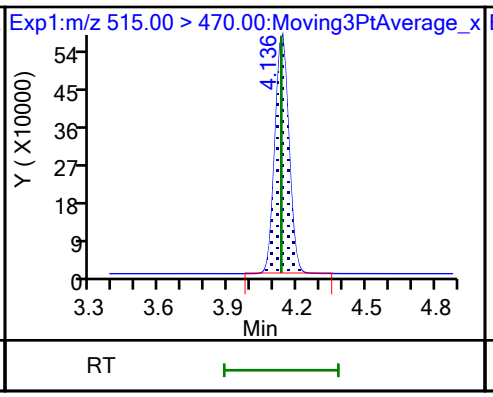
24 Perfluorodecanoic acid (ND)



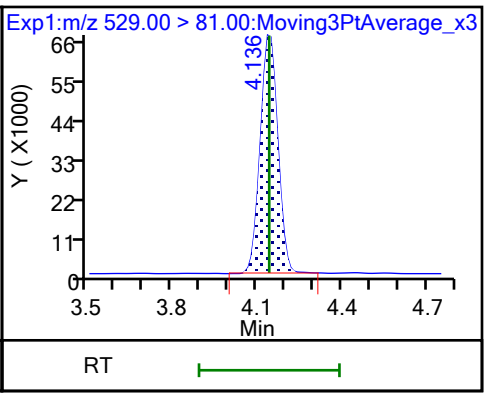
24 Perfluorodecanoic acid (ND)



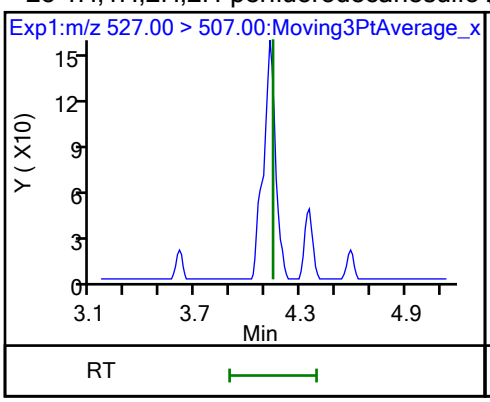
D 23 13C2 PFDA



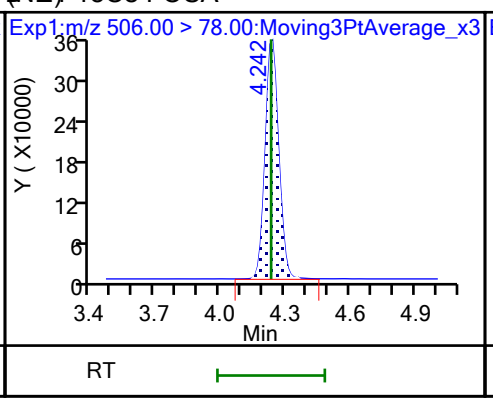
D 26 M2-8:2 FTS



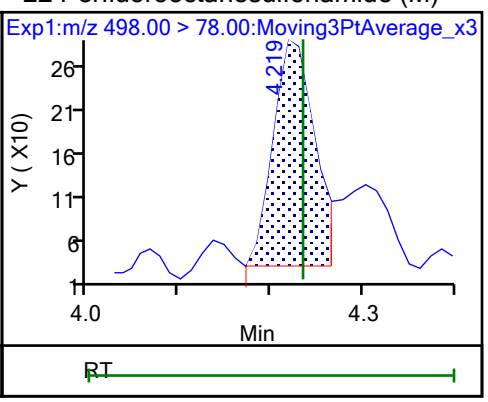
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



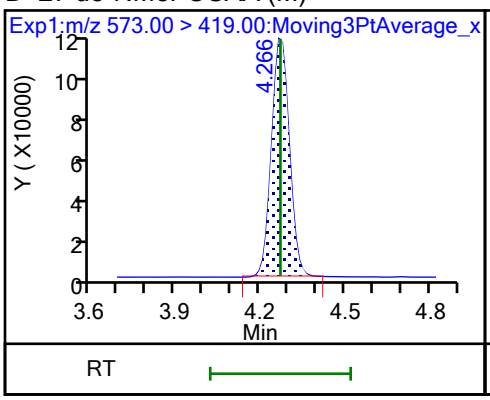
D 21 13C8 FOSA



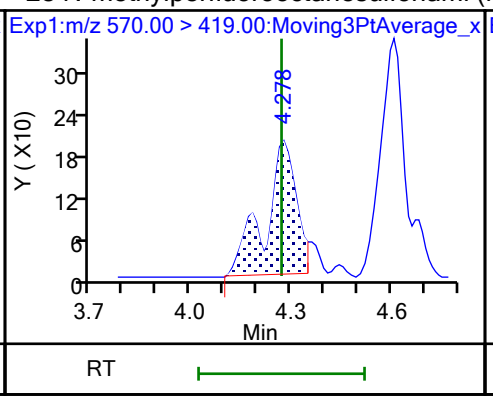
22 Perfluorooctanesulfonamide (M)



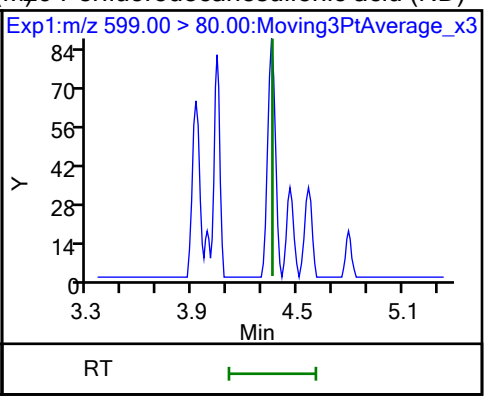
D 27 d3-NMeFOSAA (M)



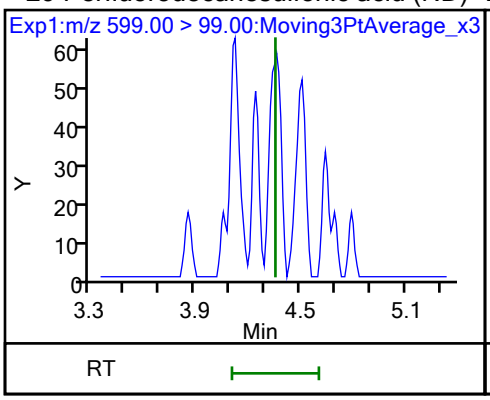
28 N-methylperfluorooctanesulfonami (M)



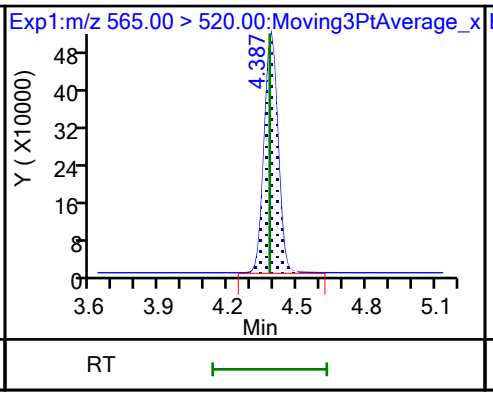
29 Perfluorodecanesulfonic acid (ND)



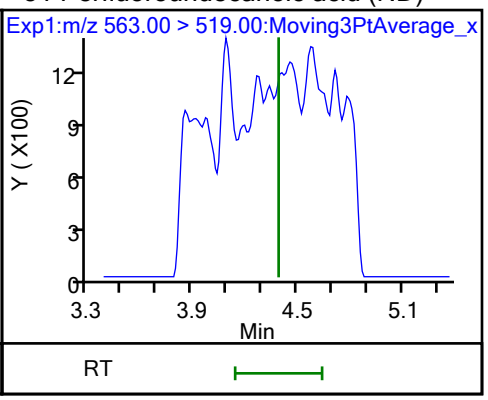
29 Perfluorodecanesulfonic acid (ND)



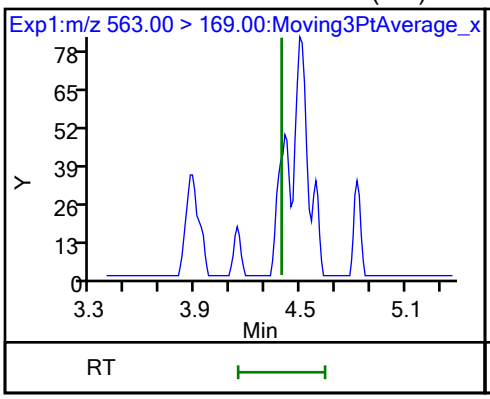
D 30 13C2 PFUnA



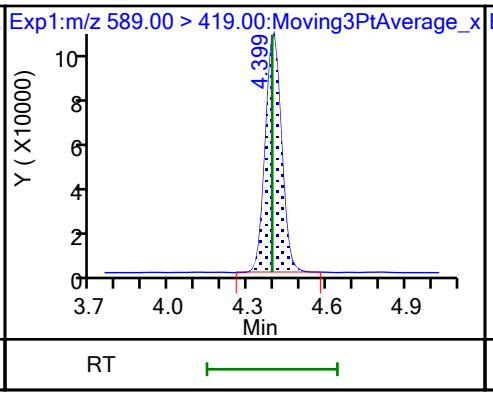
31 Perfluoroundecanoic acid (ND)



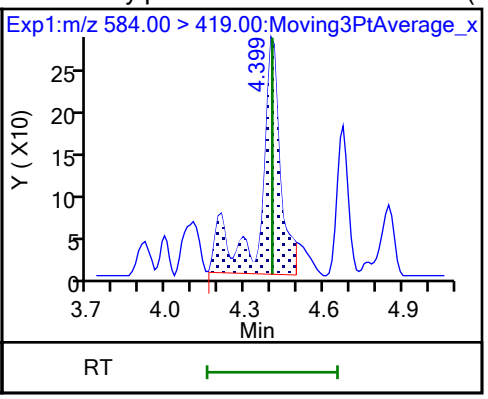
31 Perfluoroundecanoic acid (ND)



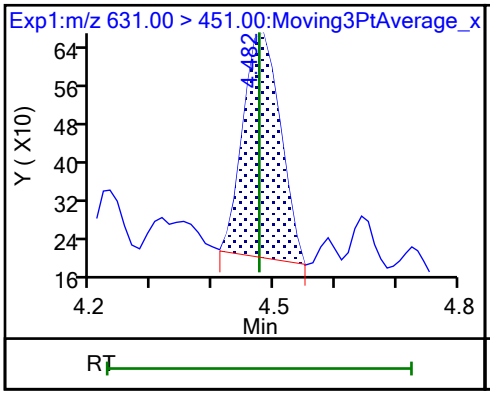
D 32 d5-NEtFOSAA



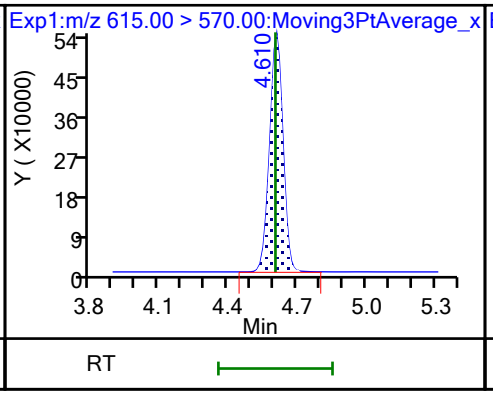
33 N-ethylperfluorooctanesulfonamid (M)



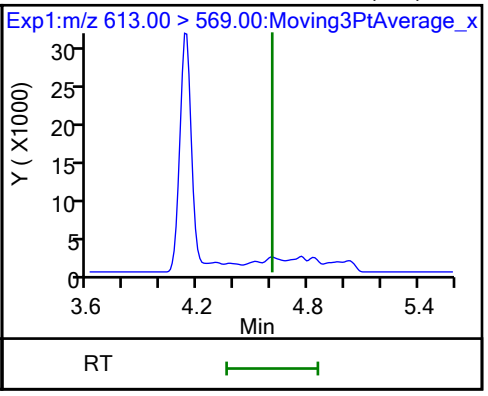
66 11-Chloroeicosafluoro-3-oxaundec



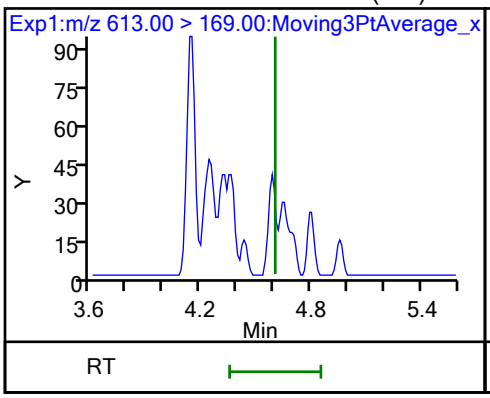
D 36 13C2 PFDoA



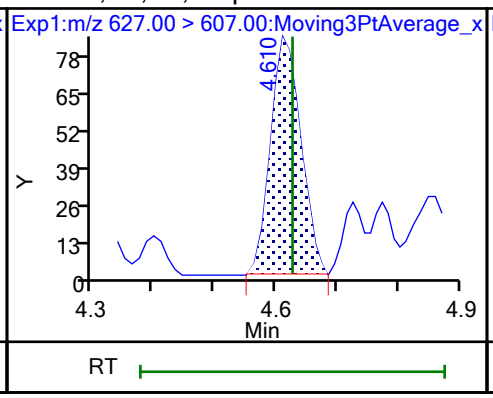
37 Perfluorododecanoic acid (ND)



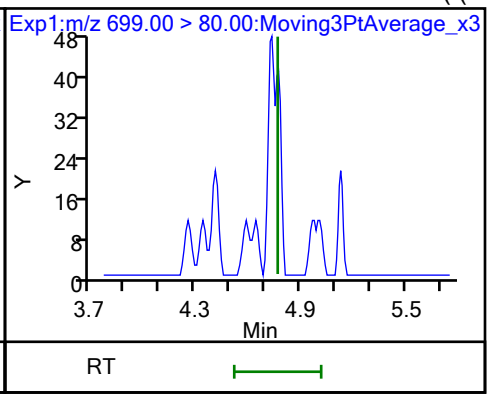
37 Perfluorododecanoic acid (ND)



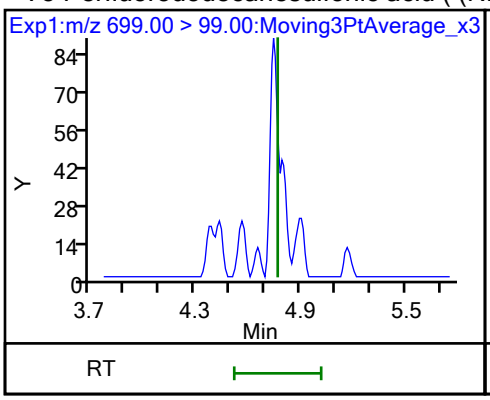
74 1H,1H,2H,2H-perfluorododecanesul



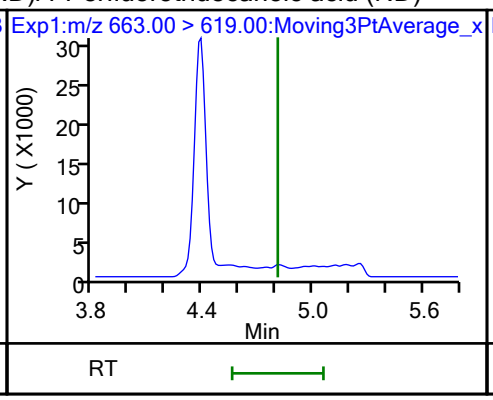
75 Perfluorododecanesulfonic acid ((ND)



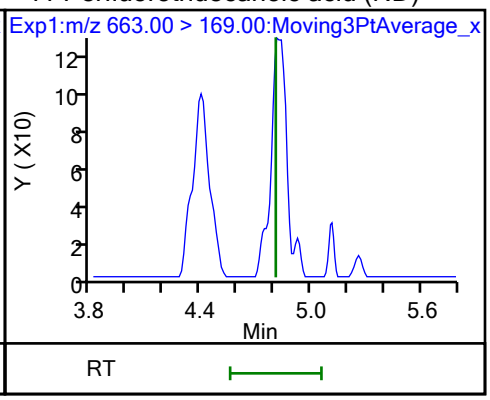
75 Perfluorododecanesulfonic acid ((ND)



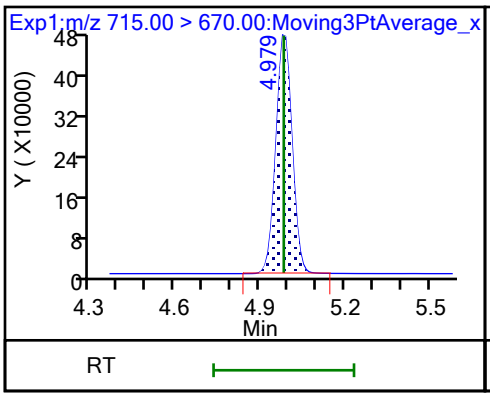
41 Perfluorotridecanoic acid (ND)



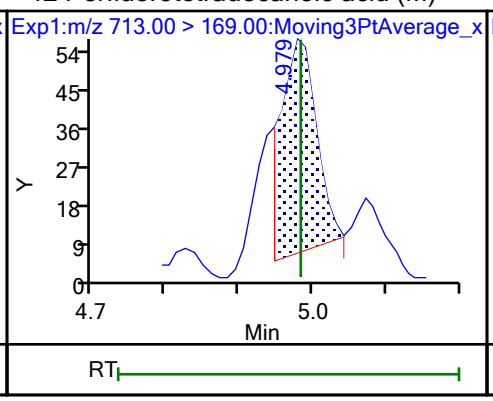
41 Perfluorotridecanoic acid (ND)



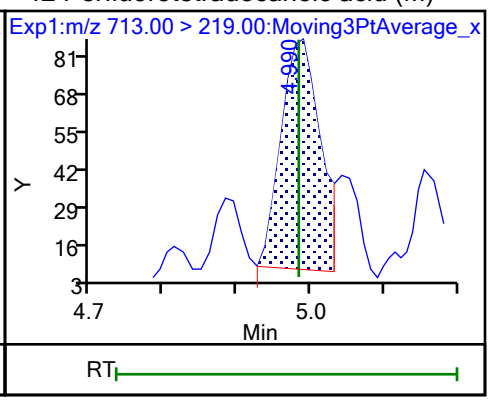
D 43 13C2 PFTeDA



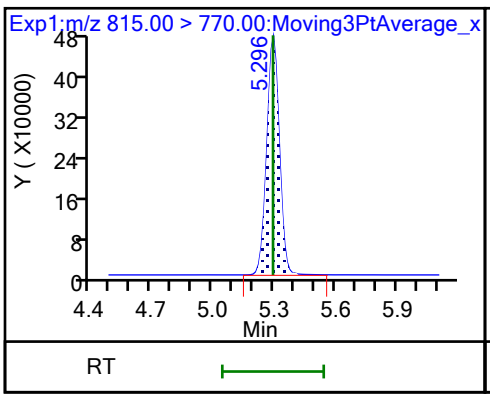
42 Perfluorotetradecanoic acid (M)



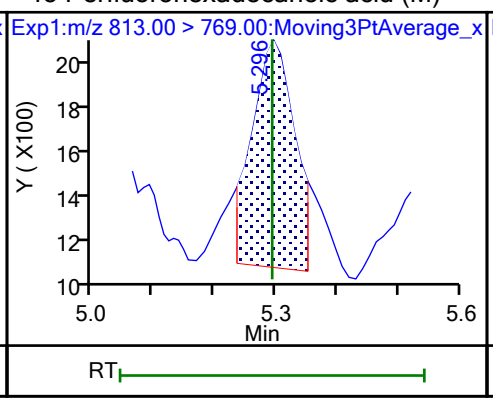
42 Perfluorotetradecanoic acid (M)



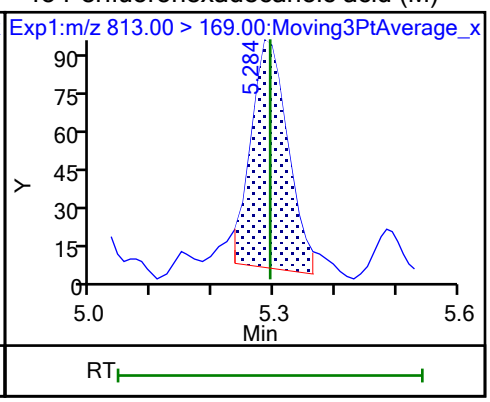
D 44 13C2 PFHxDA



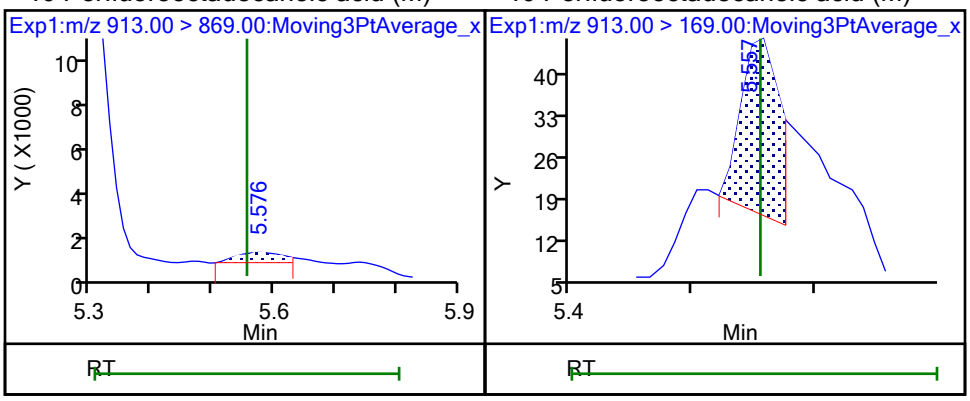
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Eurofins Burlington

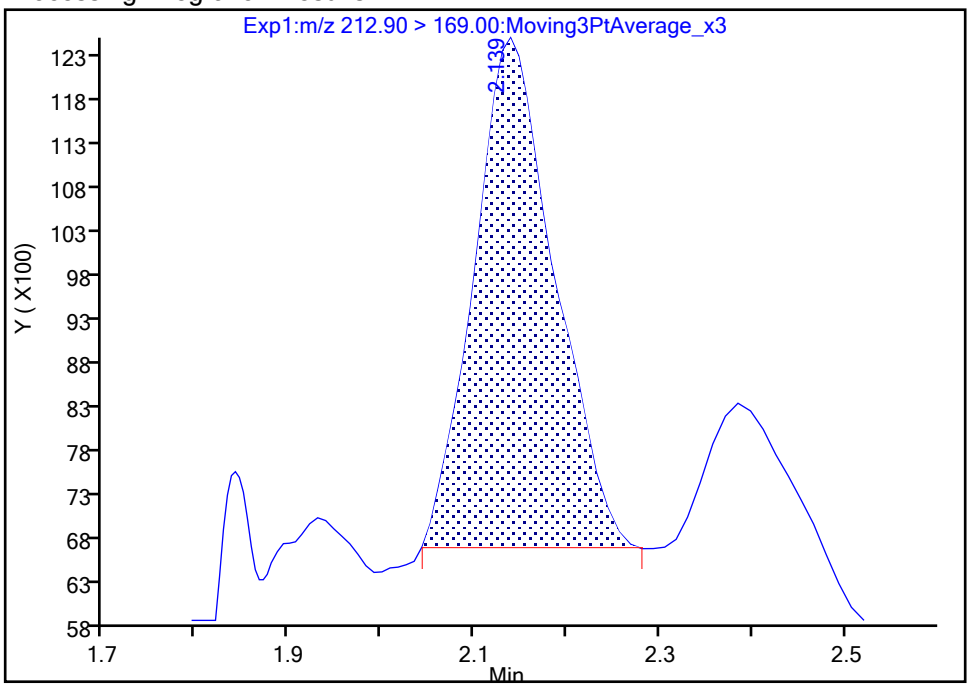
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

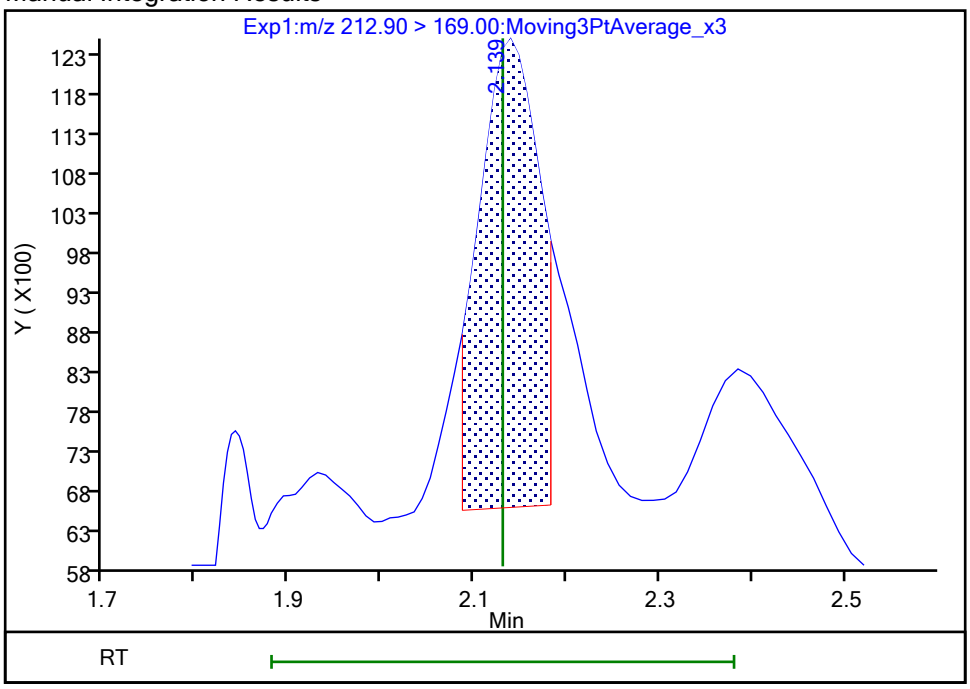
Processing Integration Results

RT: 2.14
Area: 34963
Amount: -0.019778
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 26170
Amount: -0.025086
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

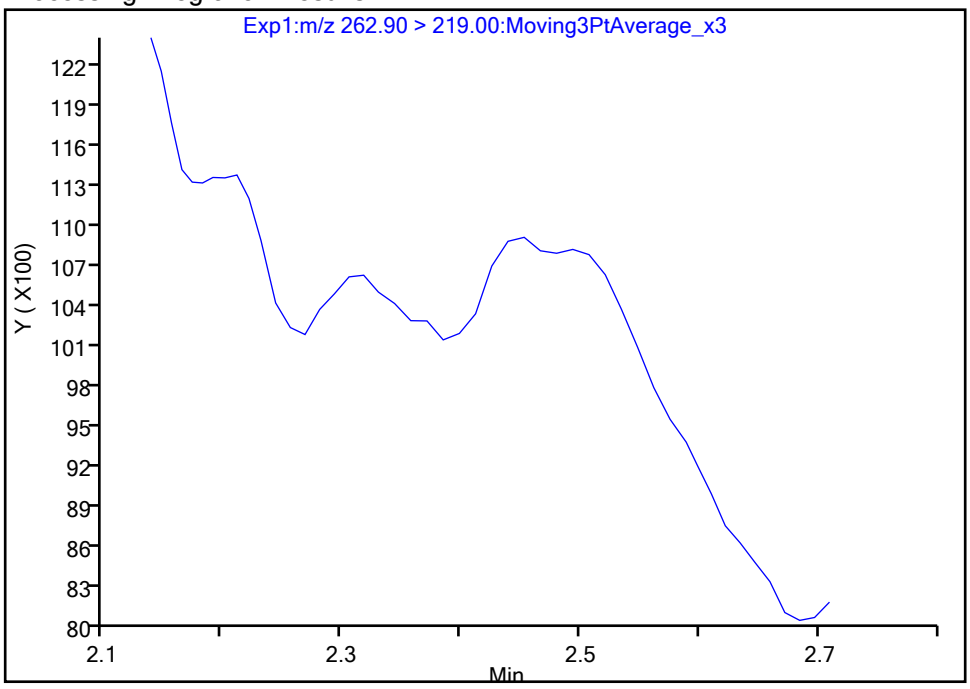
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

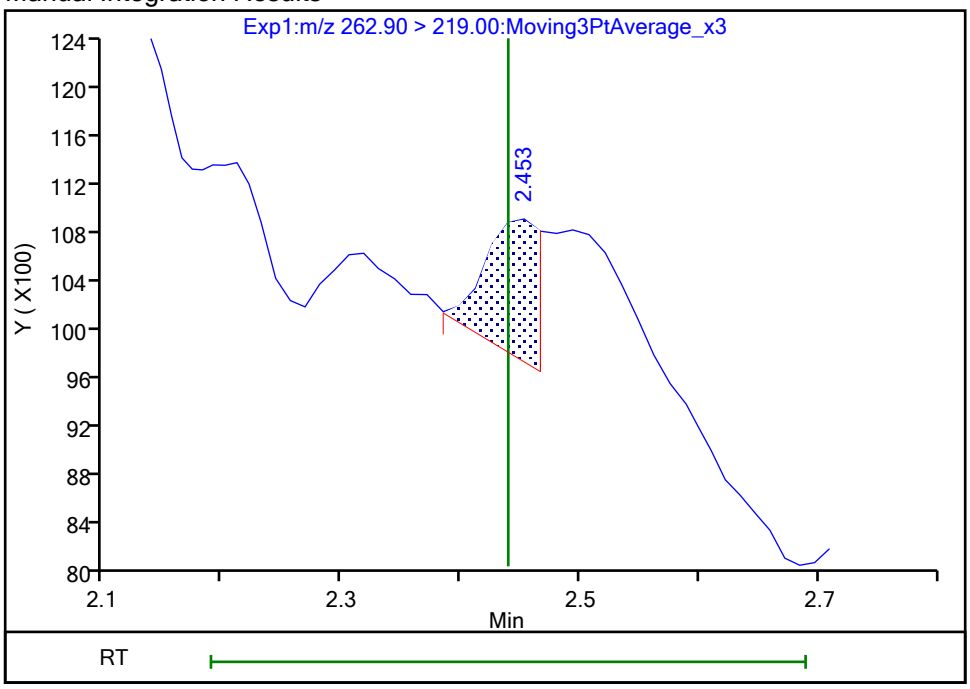
Not Detected
Expected RT: 2.44

Processing Integration Results



Manual Integration Results

RT: 2.45
Area: 3287
Amount: 0.002244
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

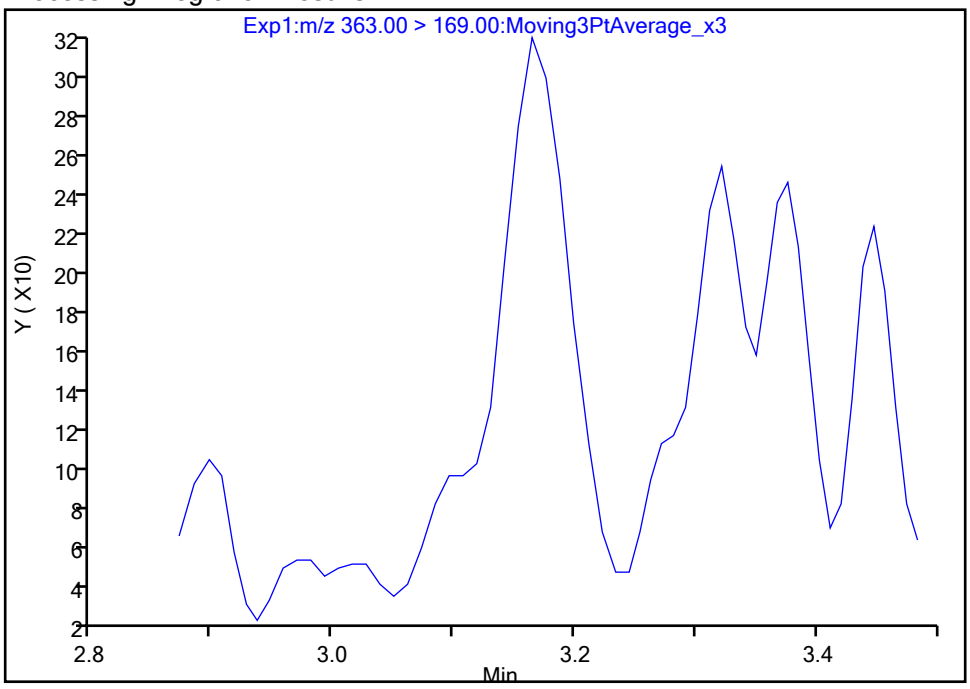
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

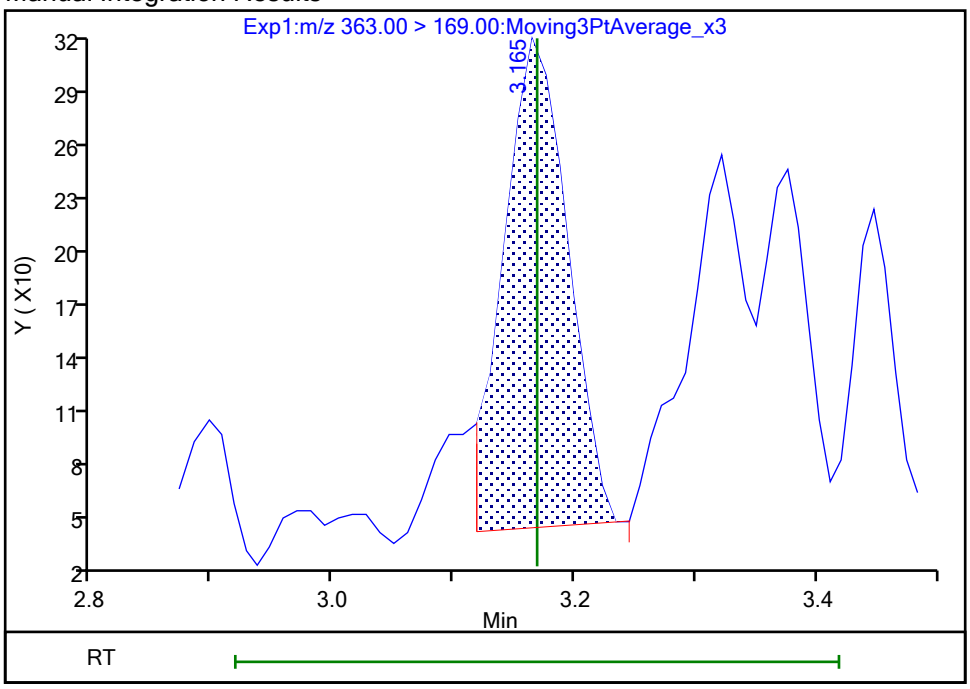
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 987
Amount: 0.000927
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

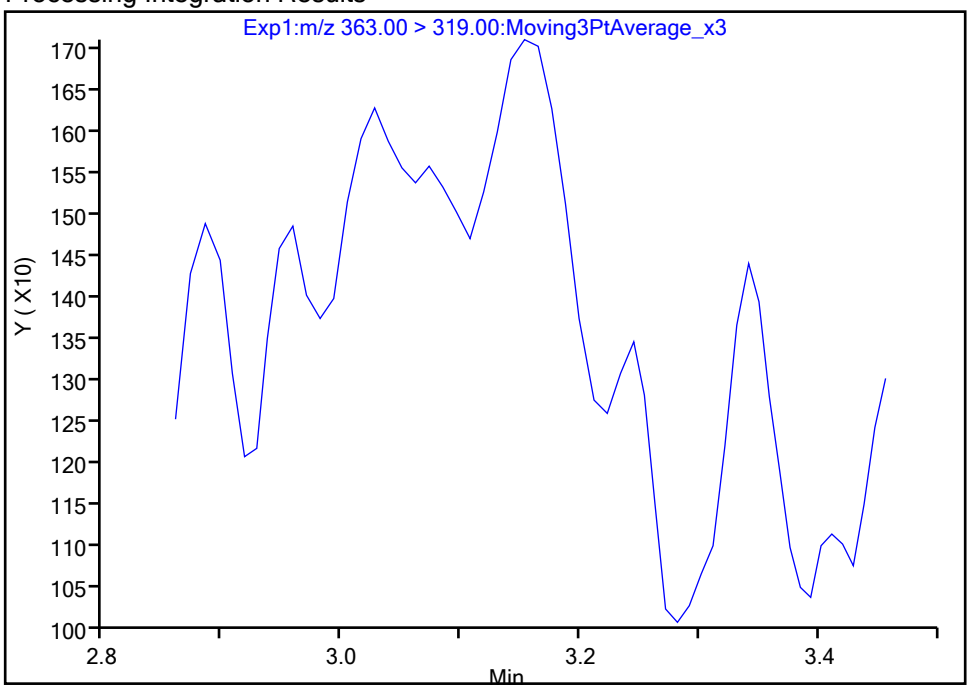
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

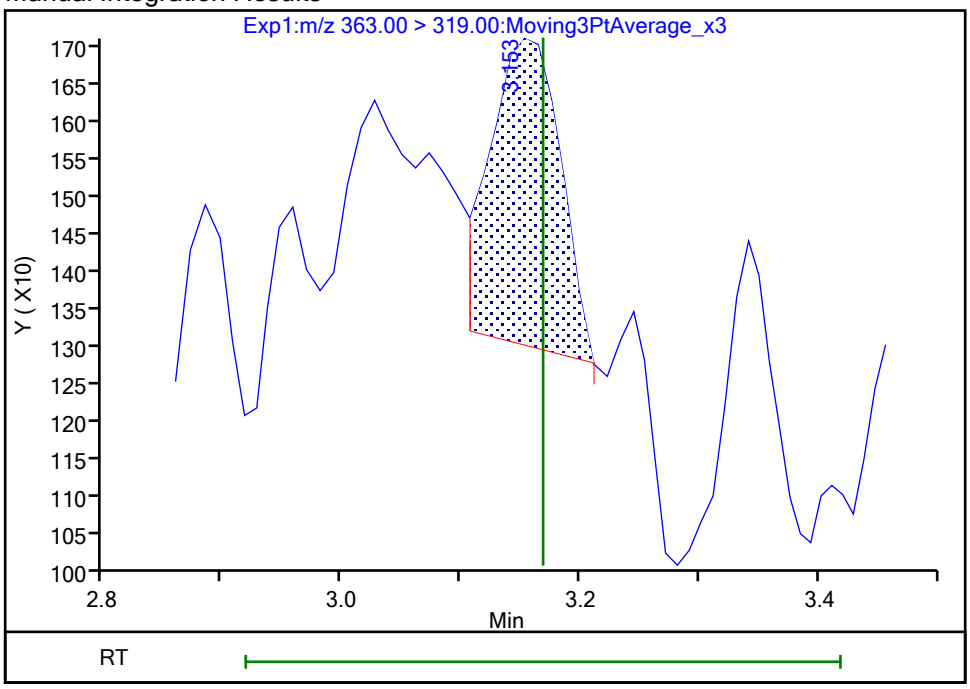
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 1660
Amount: 0.000927
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

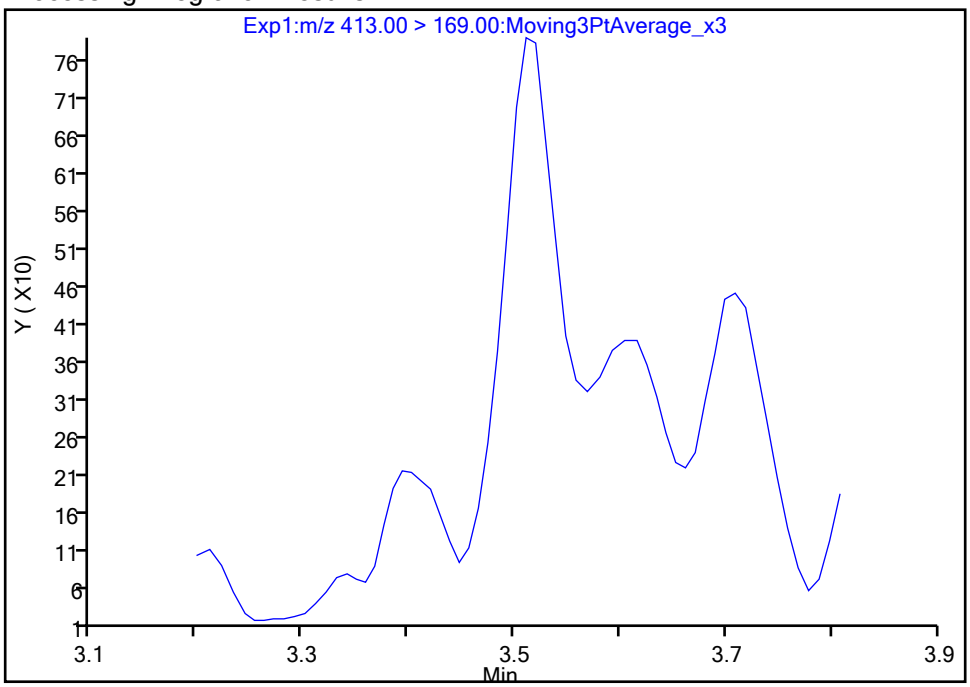
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

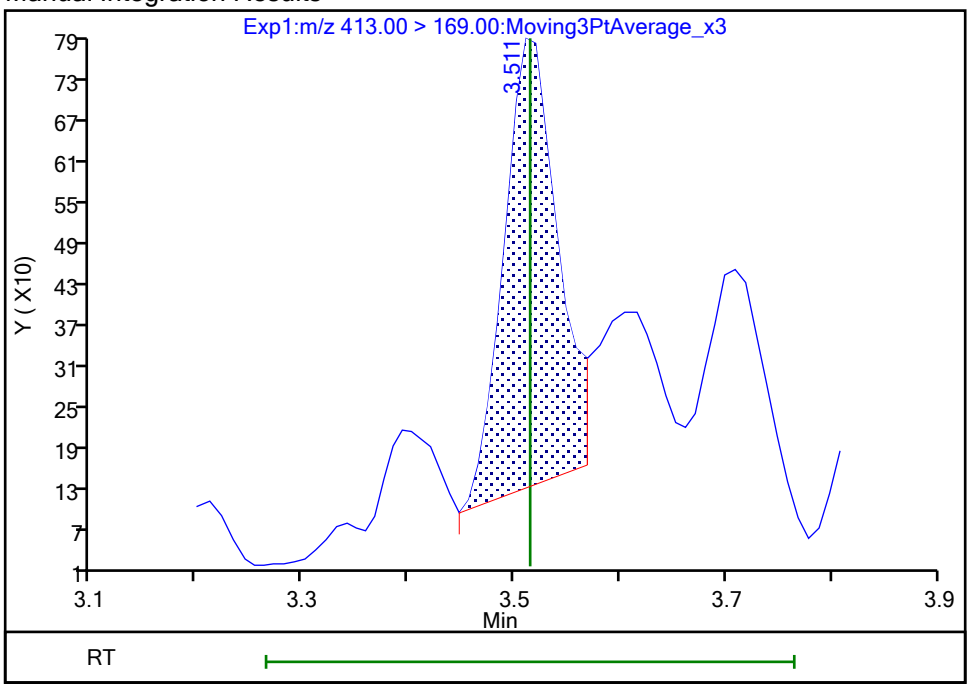
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.51
Area: 2286
Amount: 0.004993
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:09:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

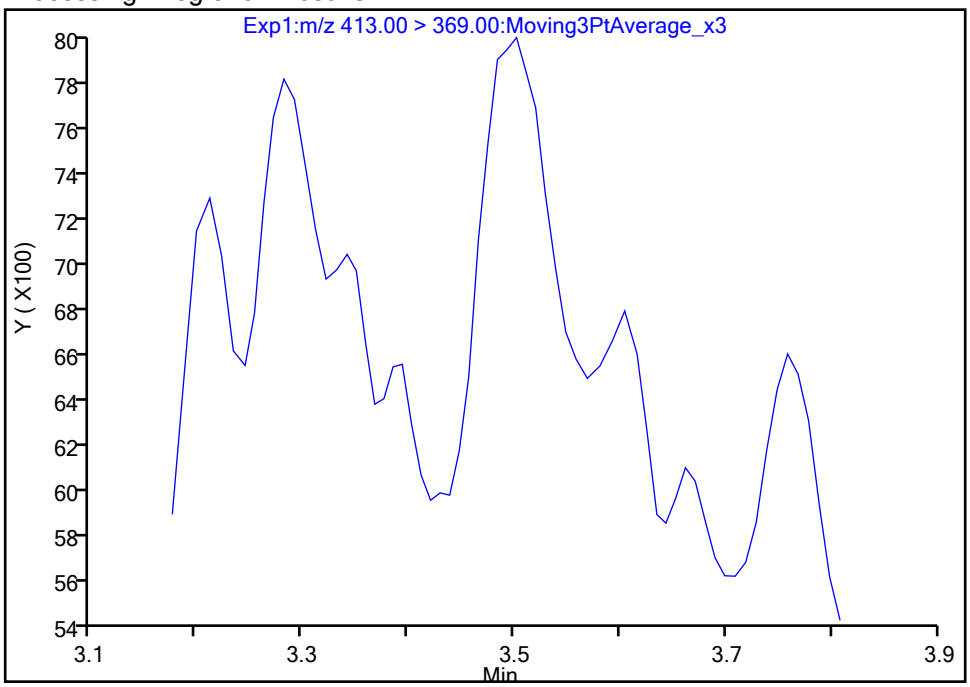
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

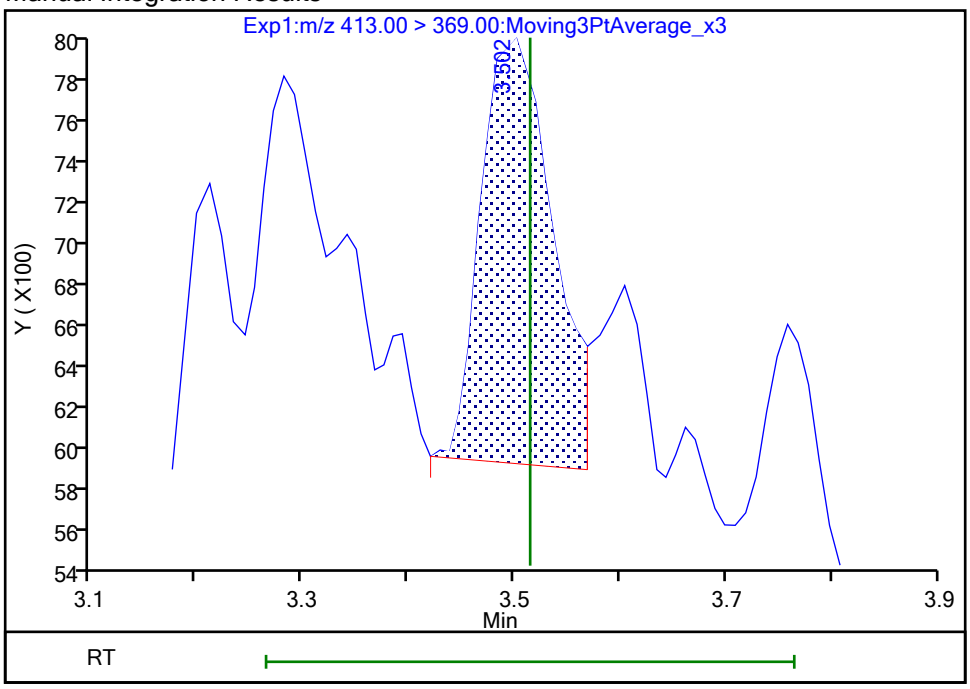
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.50
Area: 9604
Amount: 0.004993
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:09:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

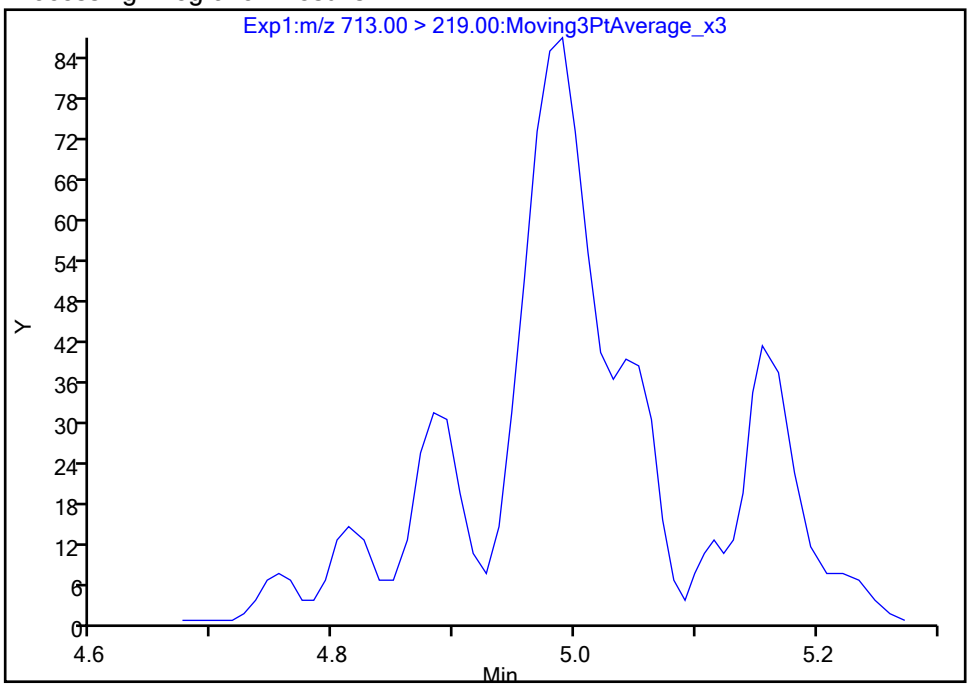
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

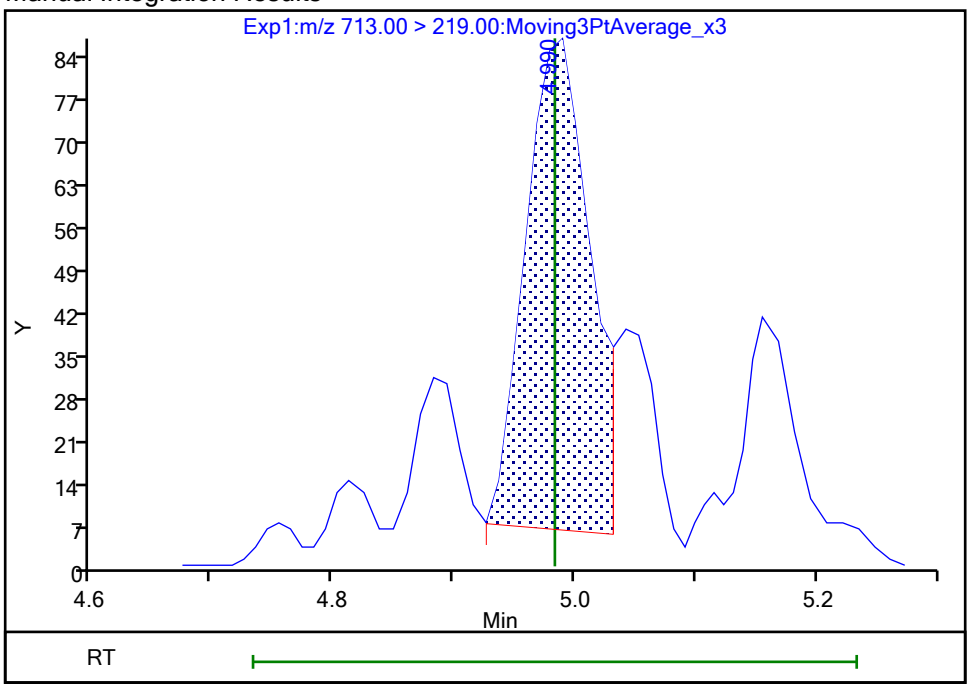
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 296
Amount: 0.000975
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:10:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

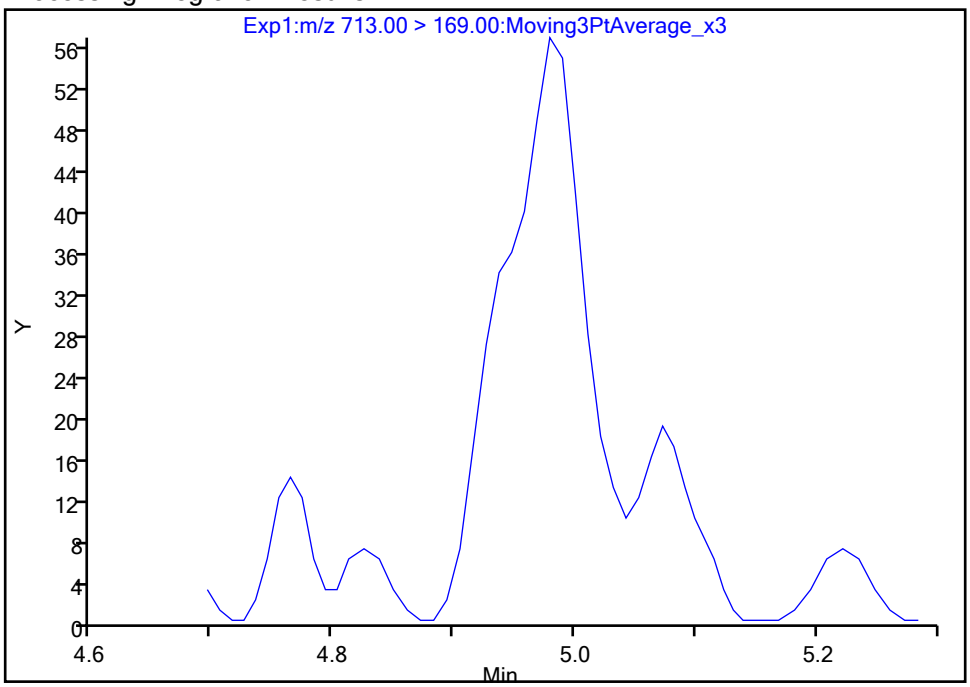
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

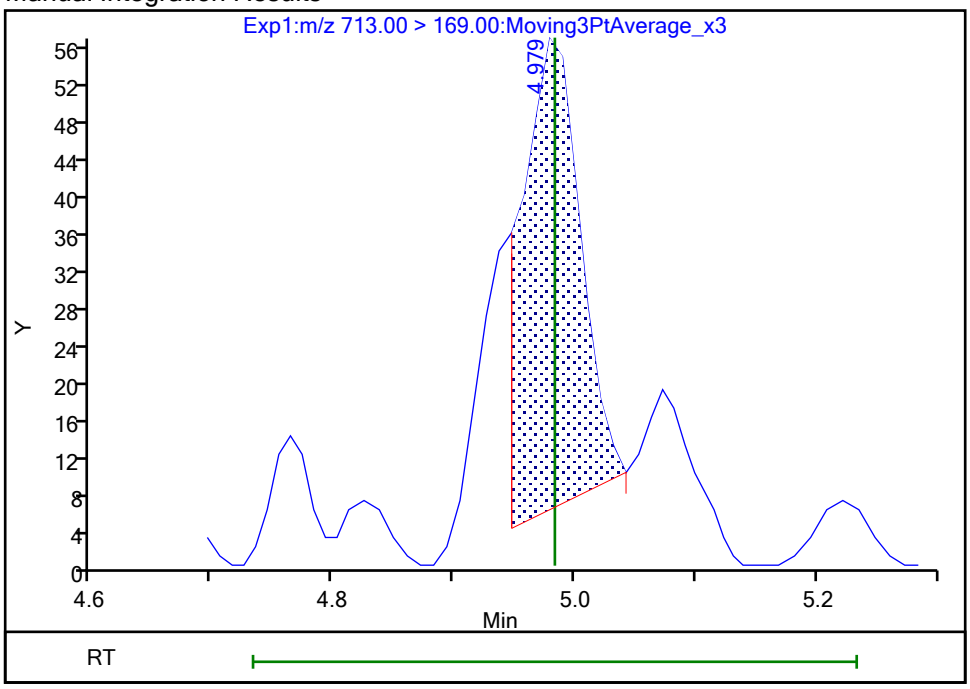
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 165
Amount: 0.000975
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:10:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

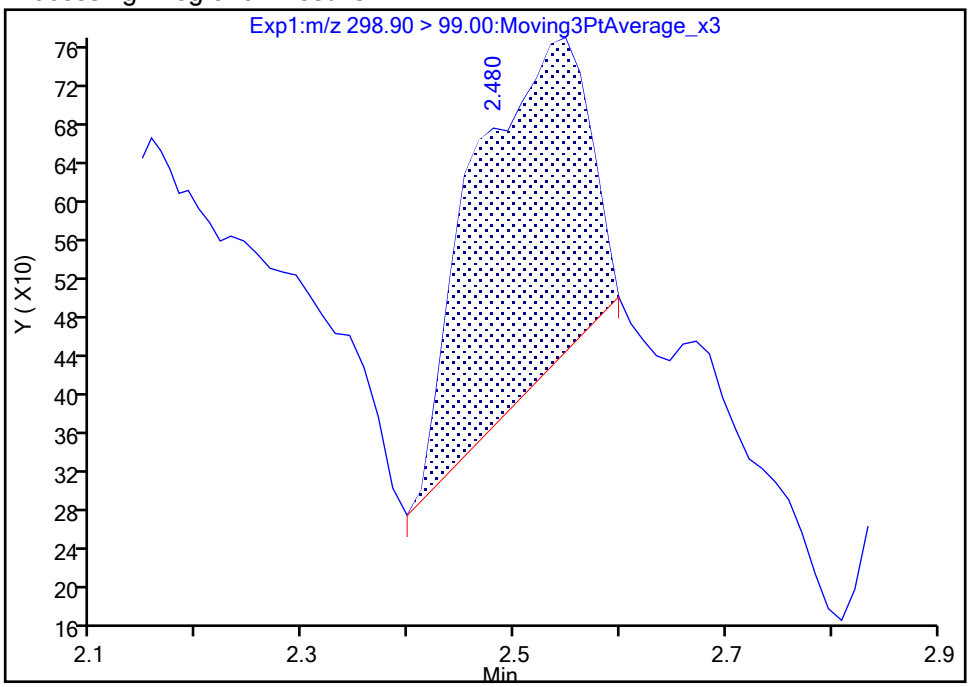
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

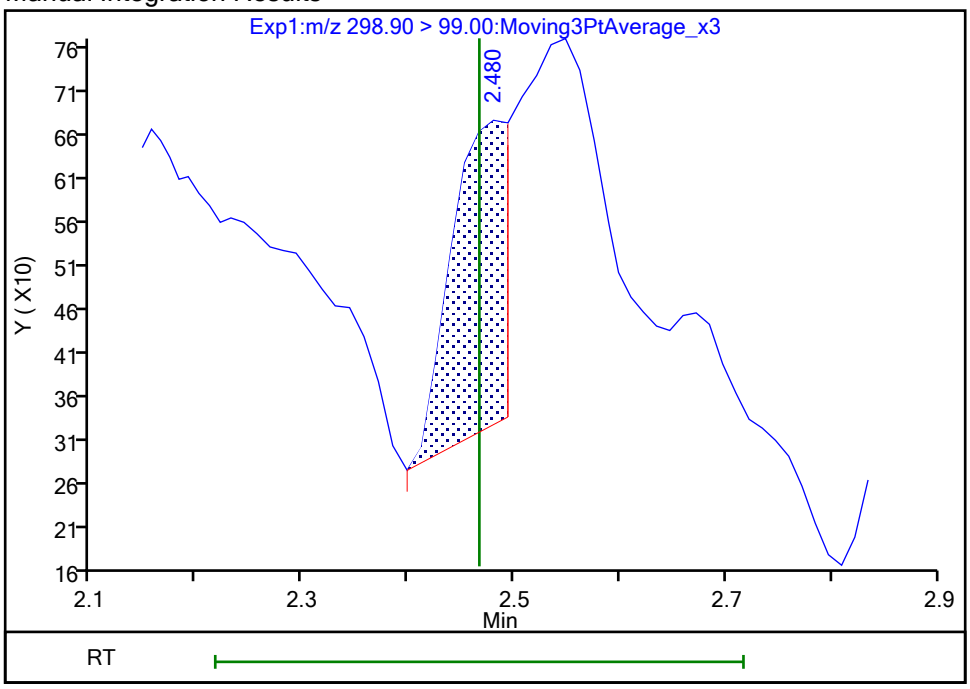
Processing Integration Results

RT: 2.48
Area: 2671
Amount: 0.002261
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 1242
Amount: 0.002973
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

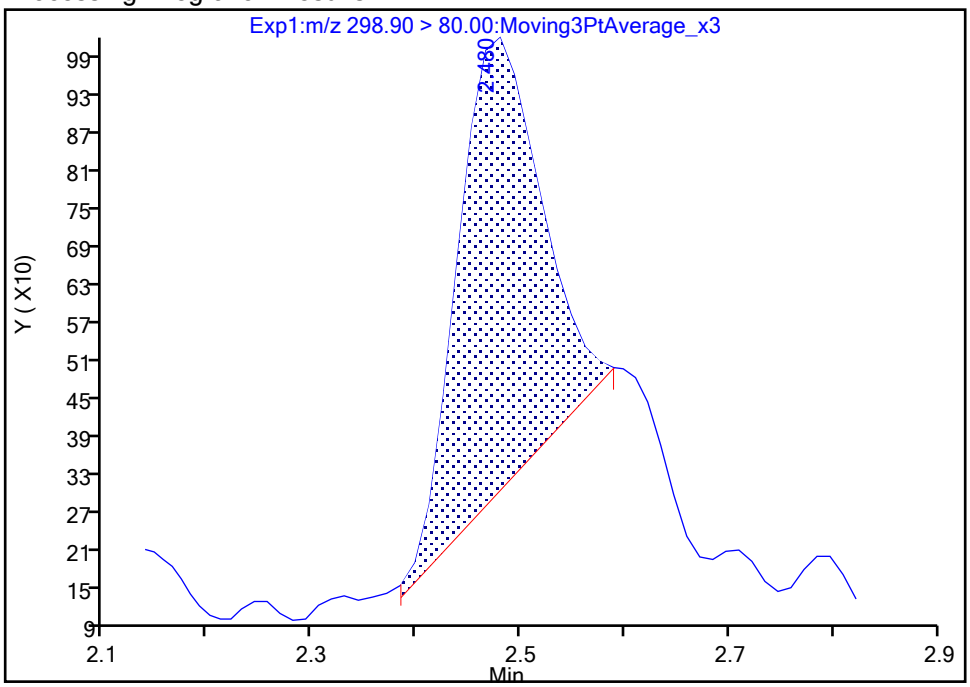
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

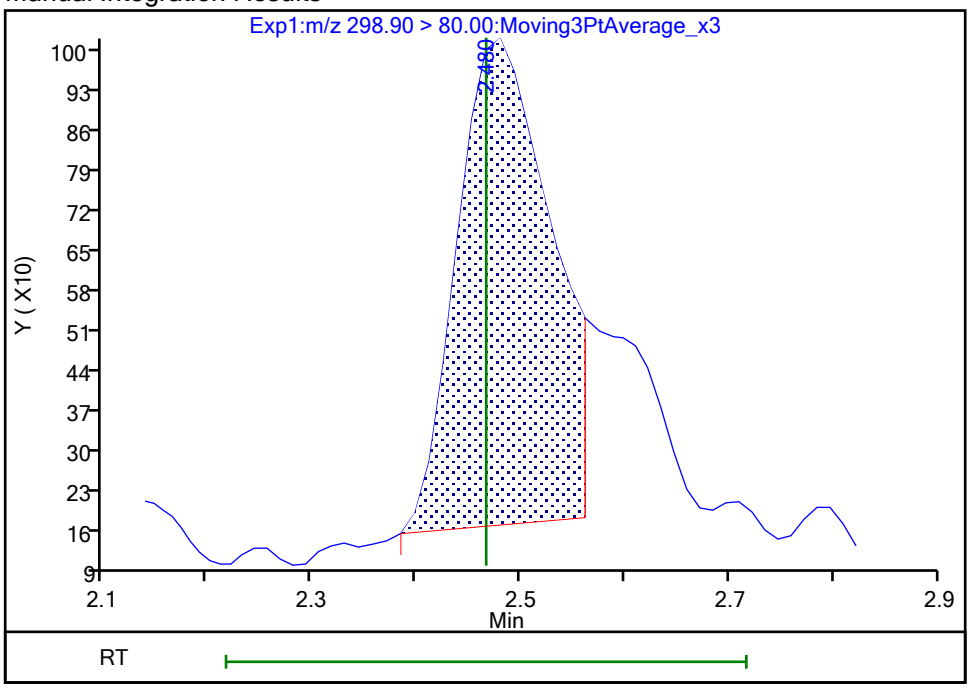
Processing Integration Results

RT: 2.48
Area: 4057
Amount: 0.002261
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 5335
Amount: 0.002973
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

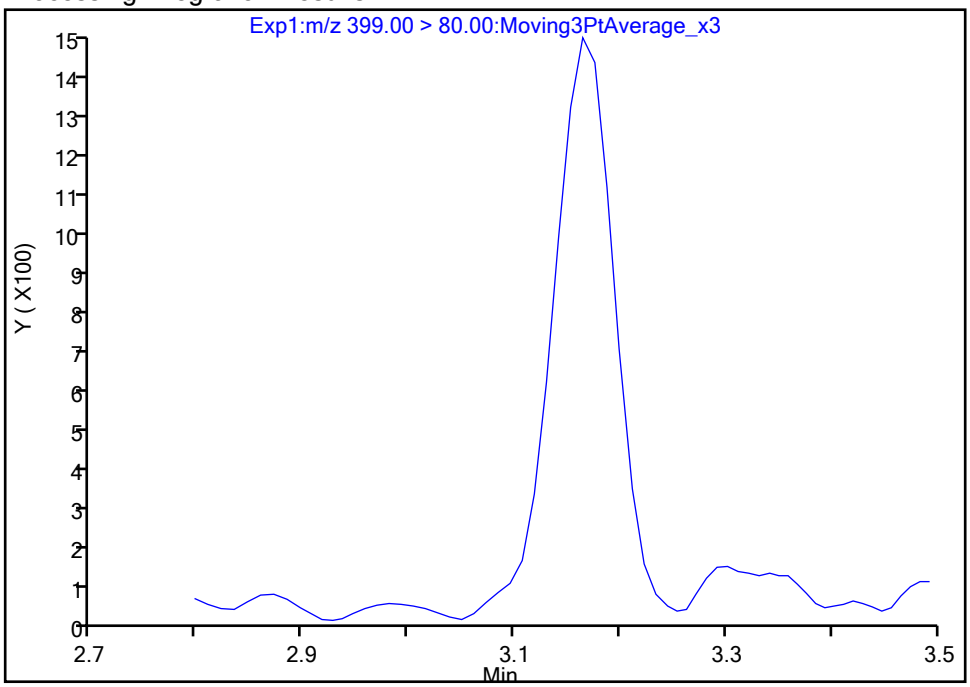
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

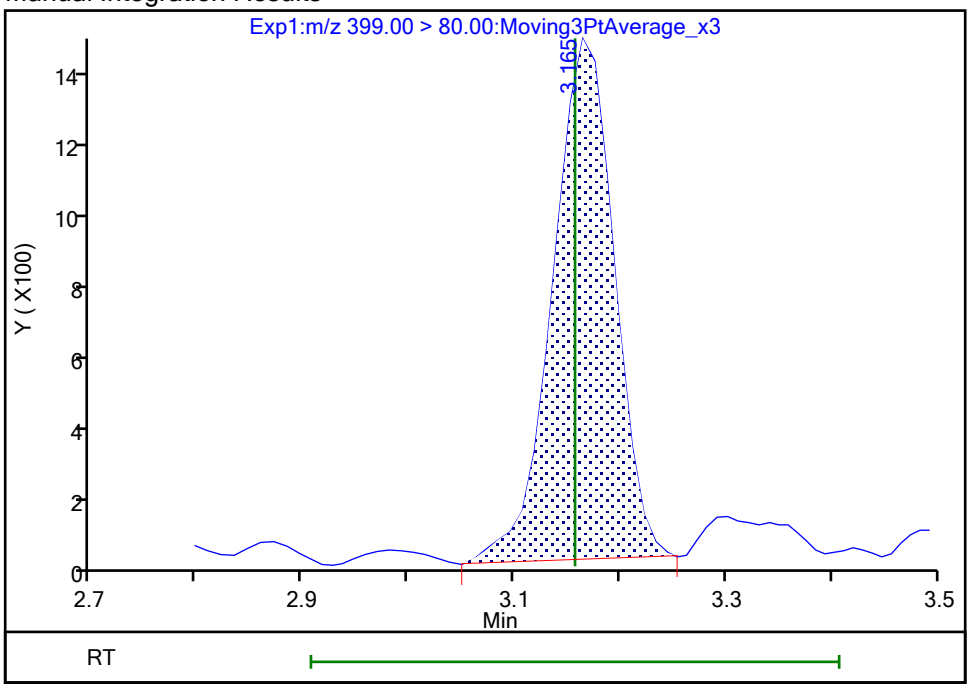
Not Detected
Expected RT: 3.16

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 5566
Amount: 0.004276
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

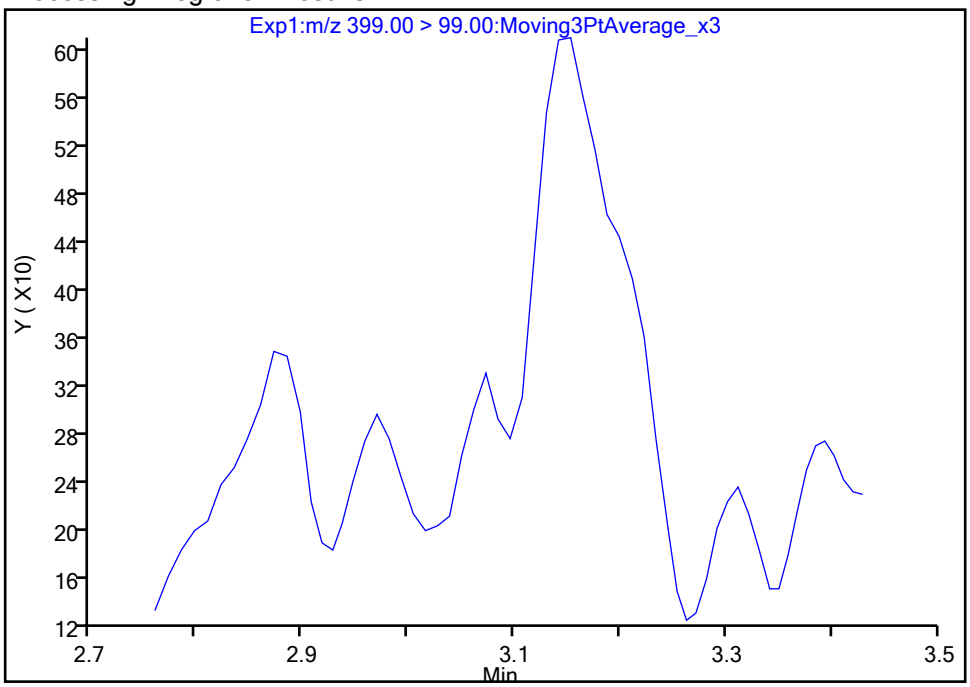
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

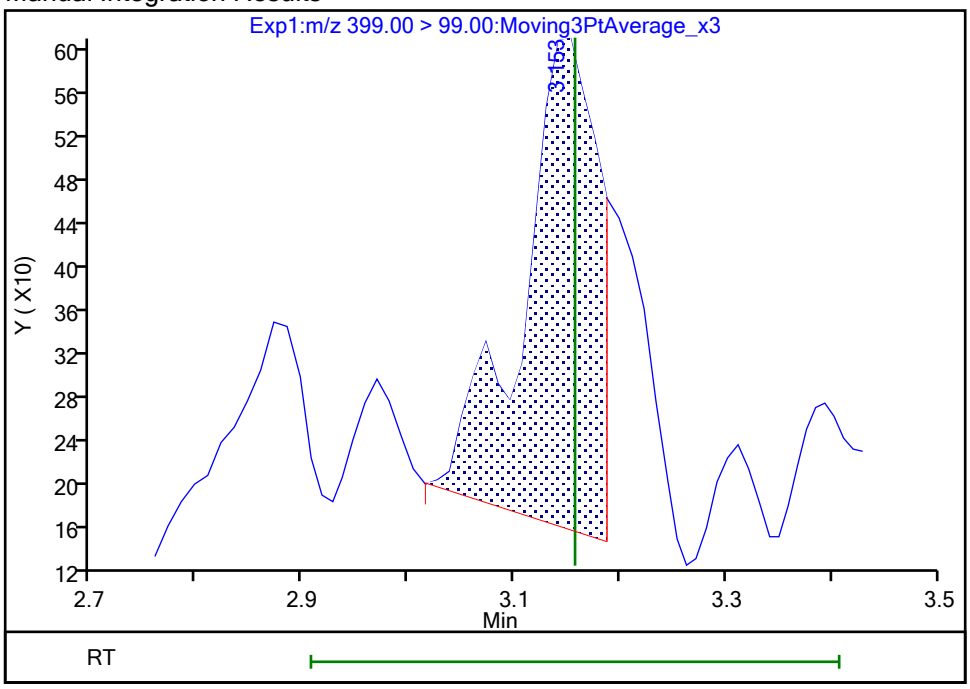
Not Detected
Expected RT: 3.16

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 2176
Amount: 0.004276
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

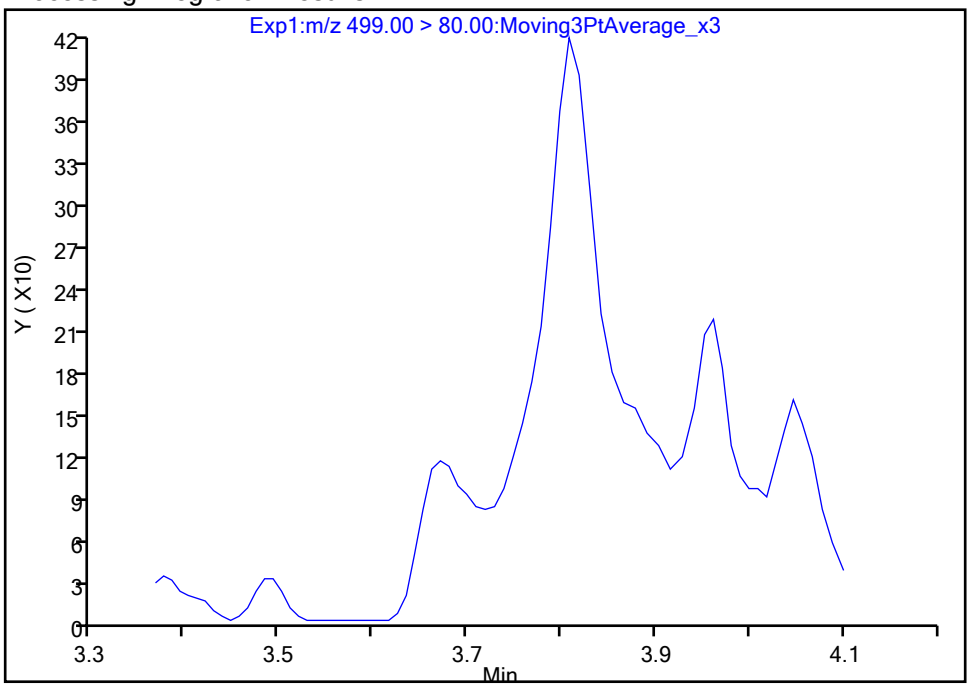
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

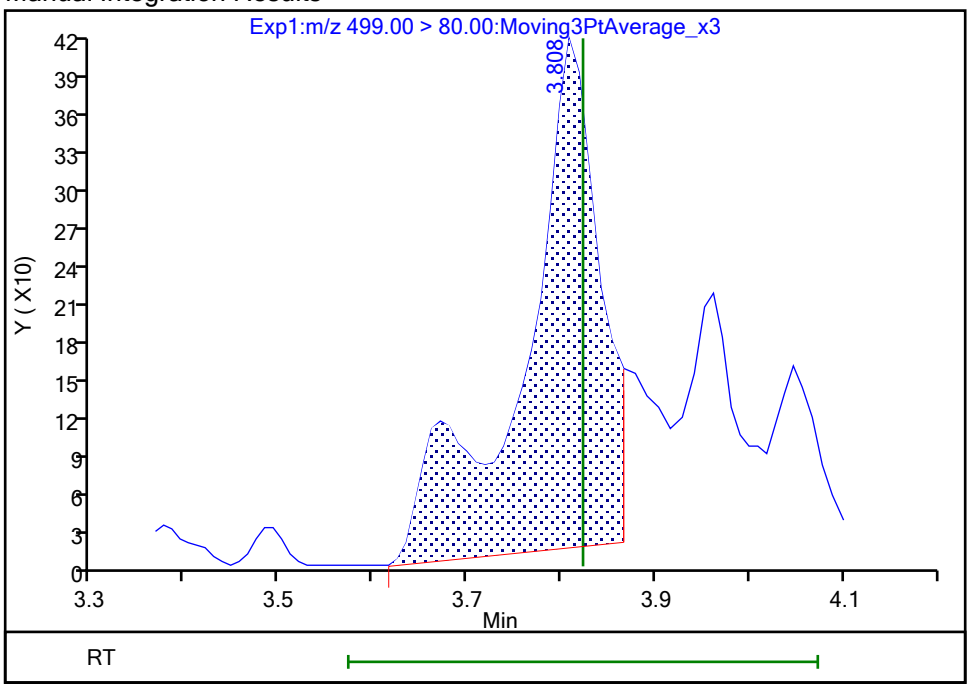
Not Detected
Expected RT: 3.82

Processing Integration Results



RT: 3.81
Area: 2294
Amount: 0.002602
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 23-Oct-2023 15:09:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

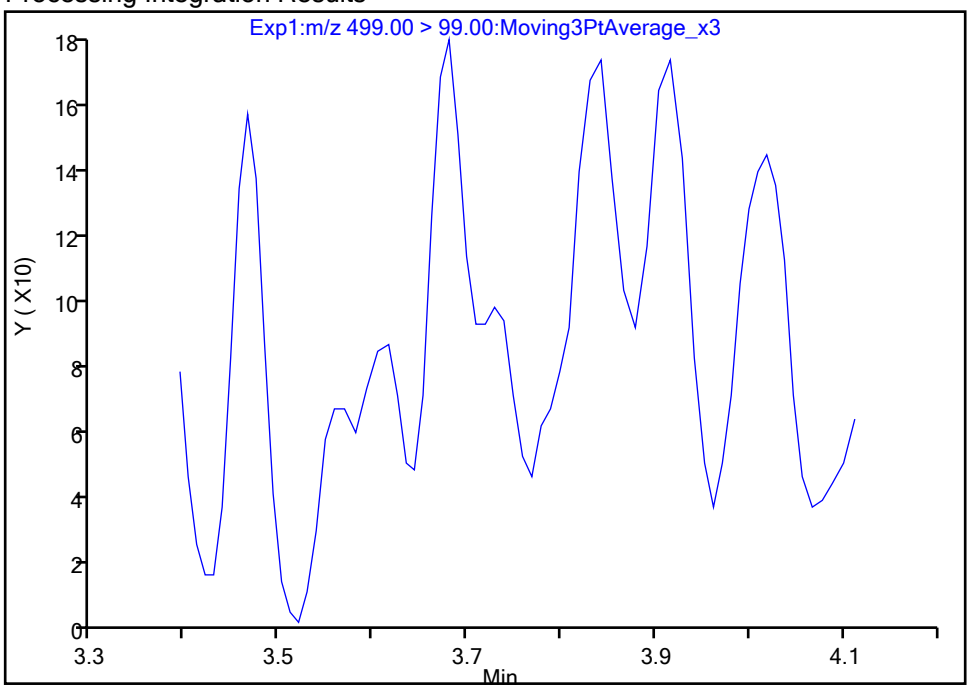
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

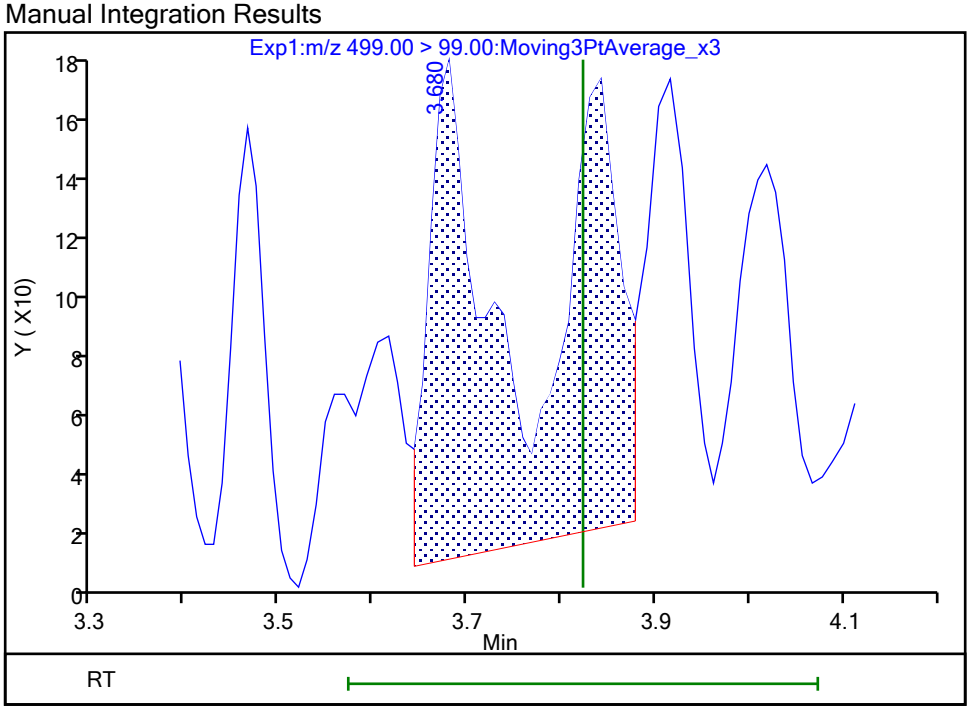
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.68
Area: 1234
Amount: 0.002602
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:09:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

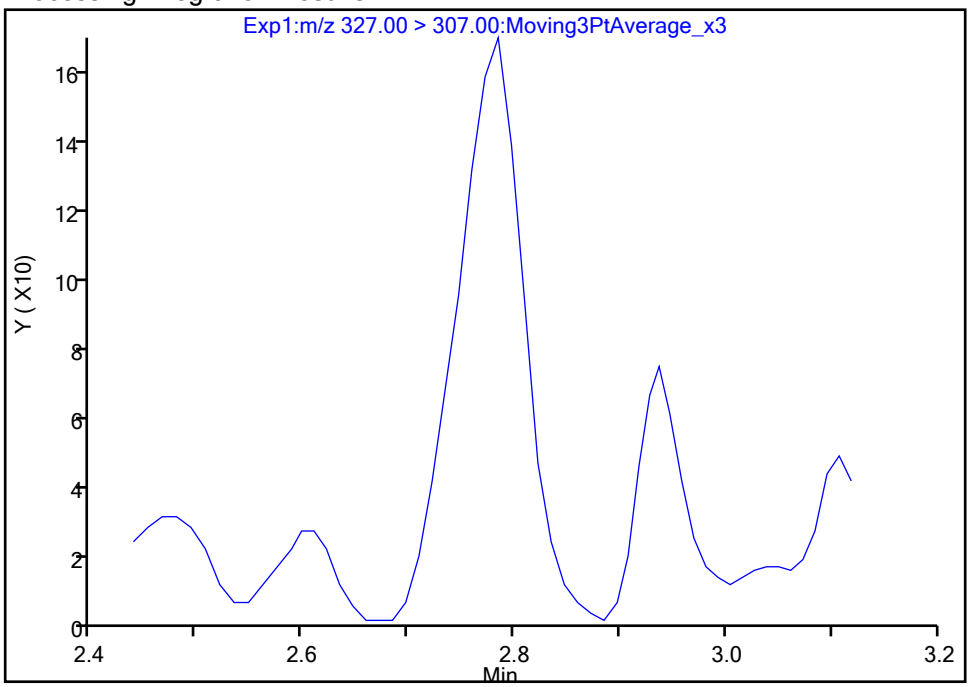
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

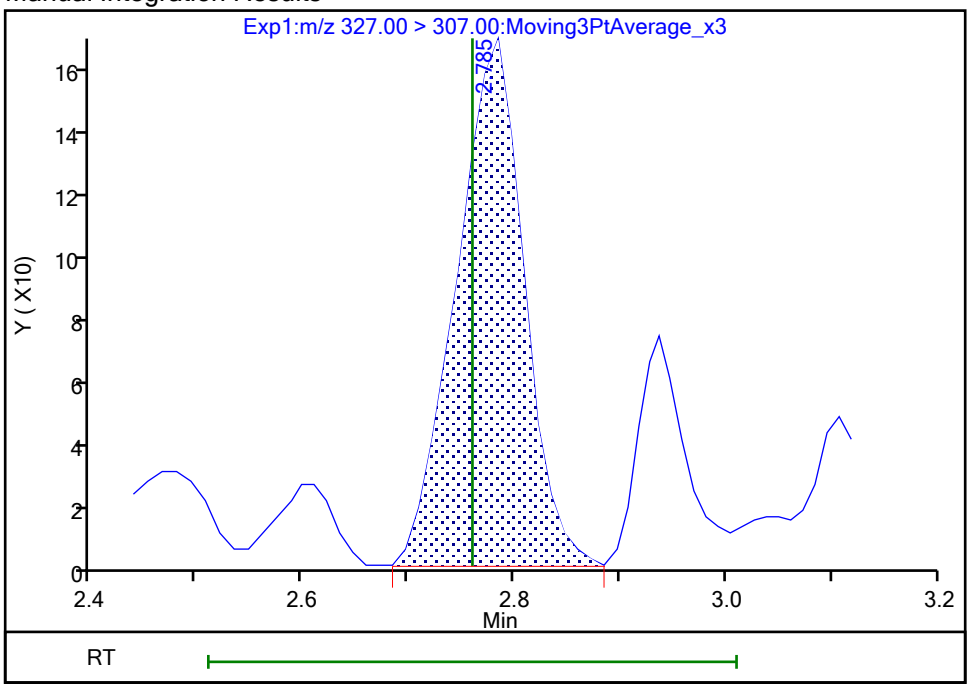
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.78
Area: 723
Amount: 0.001219
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

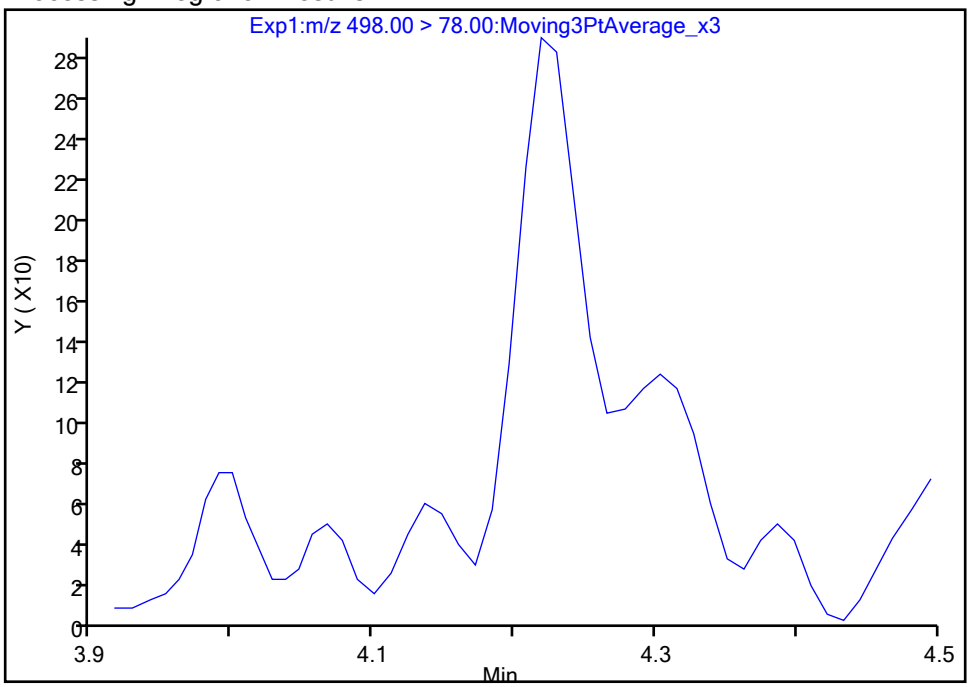
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

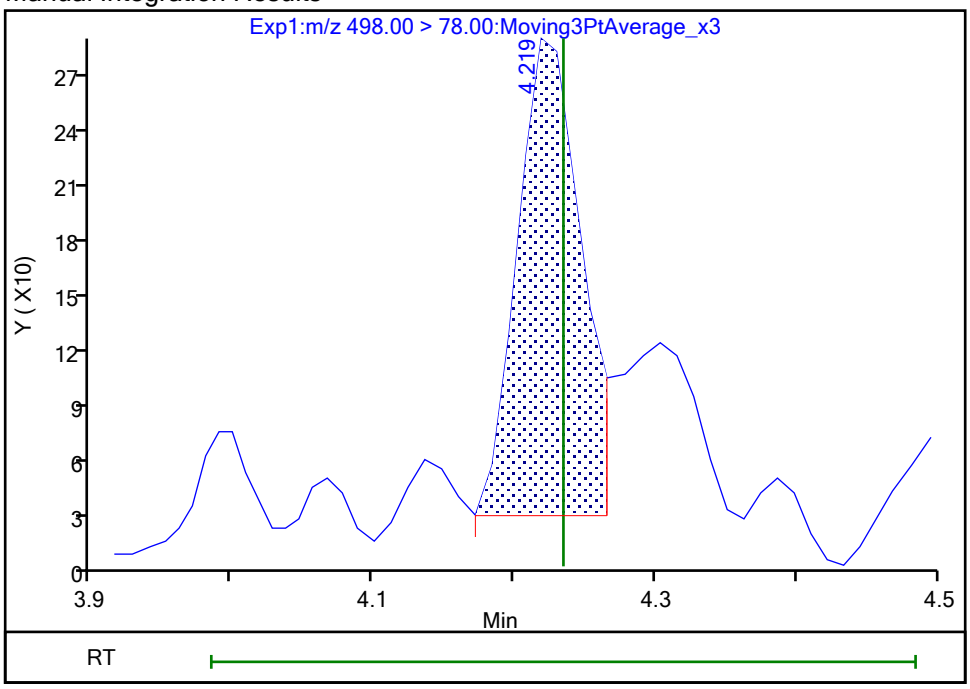
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 797
Amount: 0.000670
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:10:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

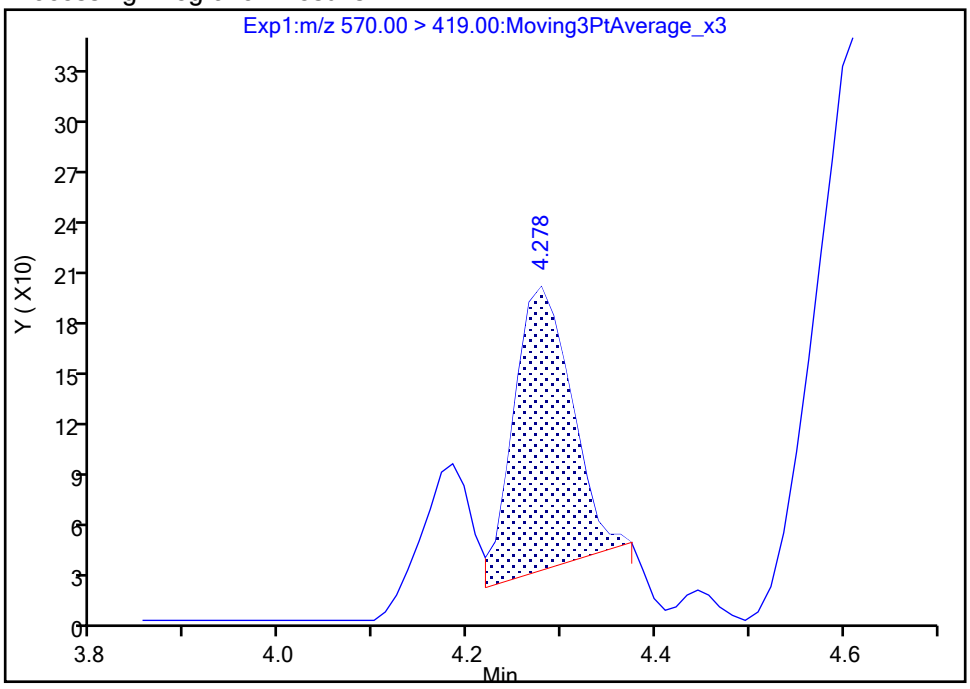
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

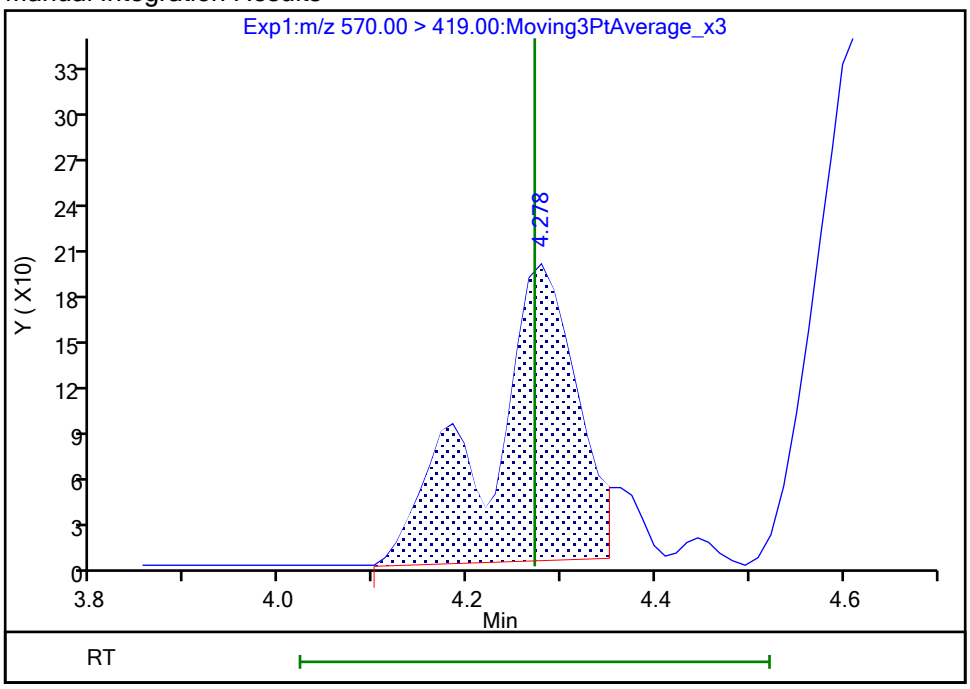
Processing Integration Results

RT: 4.28
Area: 723
Amount: 0.001981
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 1278
Amount: 0.003501
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:10:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

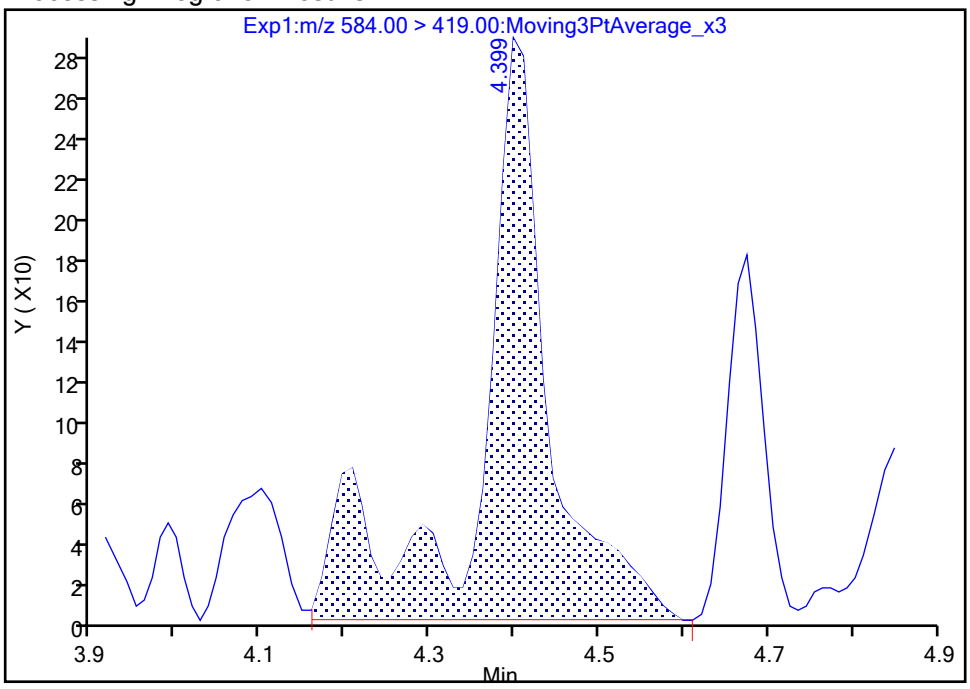
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

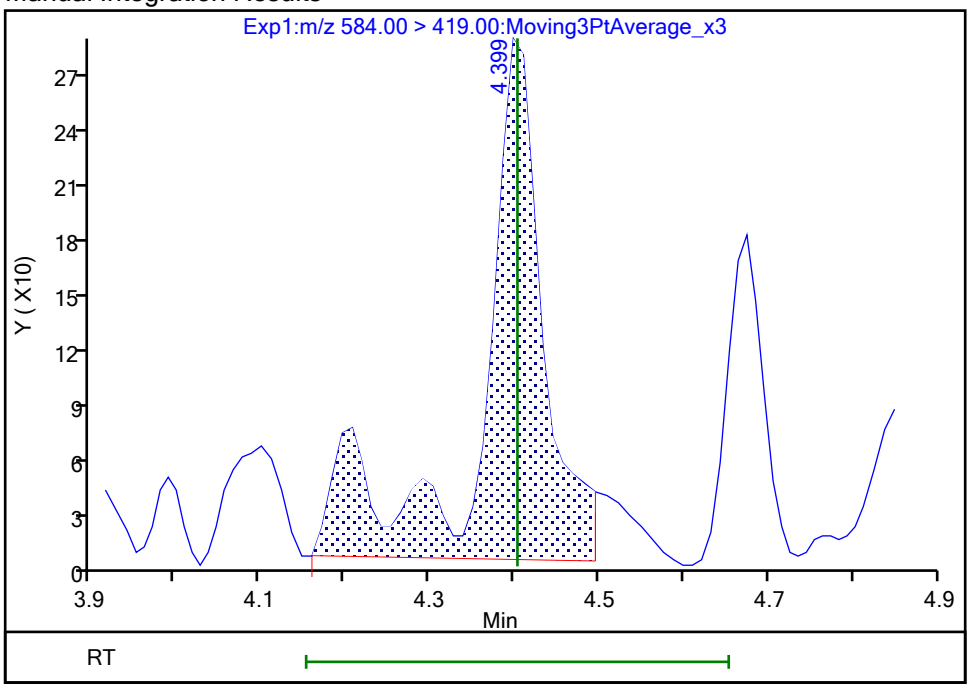
Processing Integration Results

RT: 4.40
Area: 1661
Amount: 0.004563
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 1458
Amount: 0.004005
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:10:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

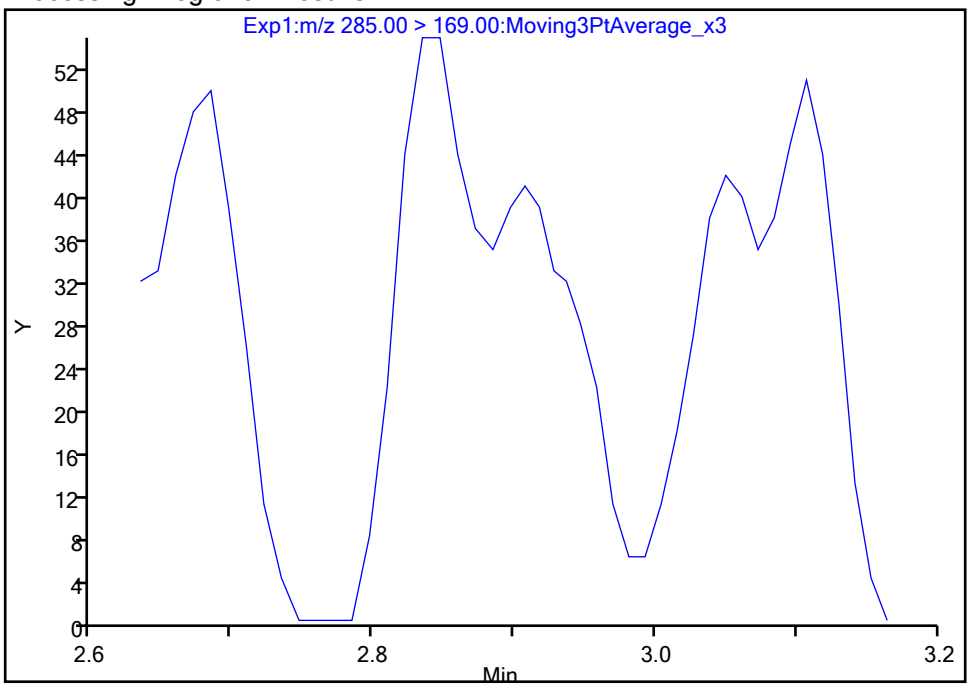
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

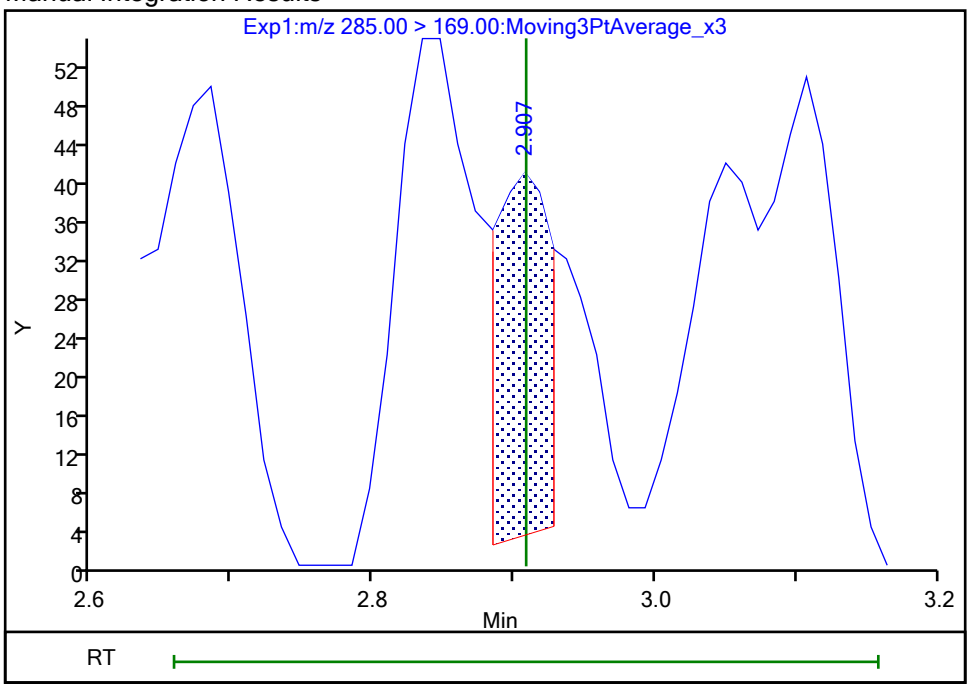
Not Detected
Expected RT: 2.91

Processing Integration Results



Manual Integration Results

RT: 2.91
Area: 90
Amount: 0.000334
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

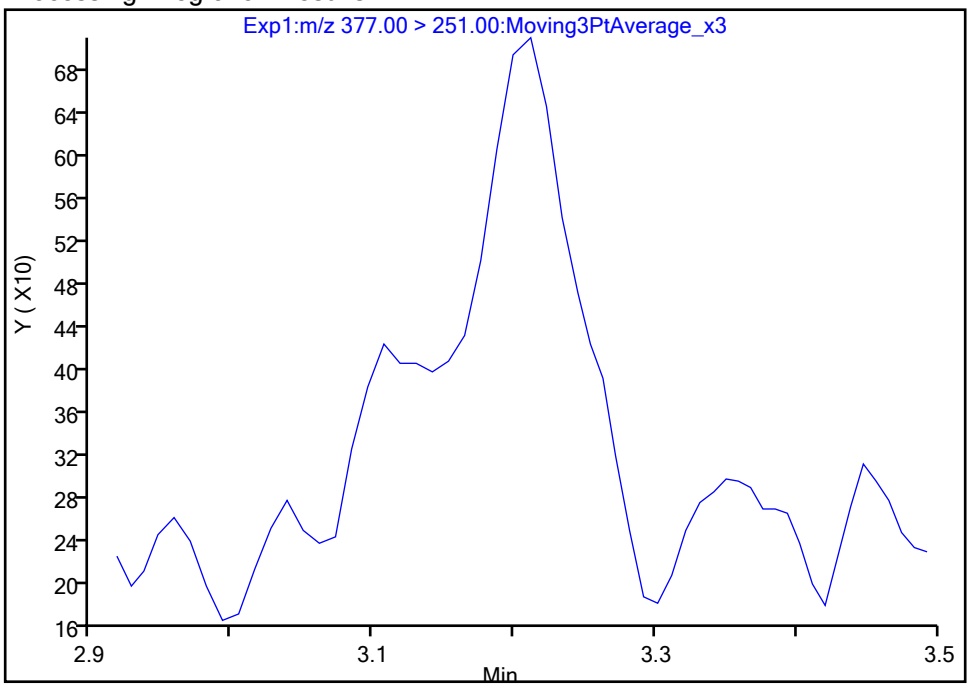
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

77 DONA, CAS: 919005-14-4

Signal: 1

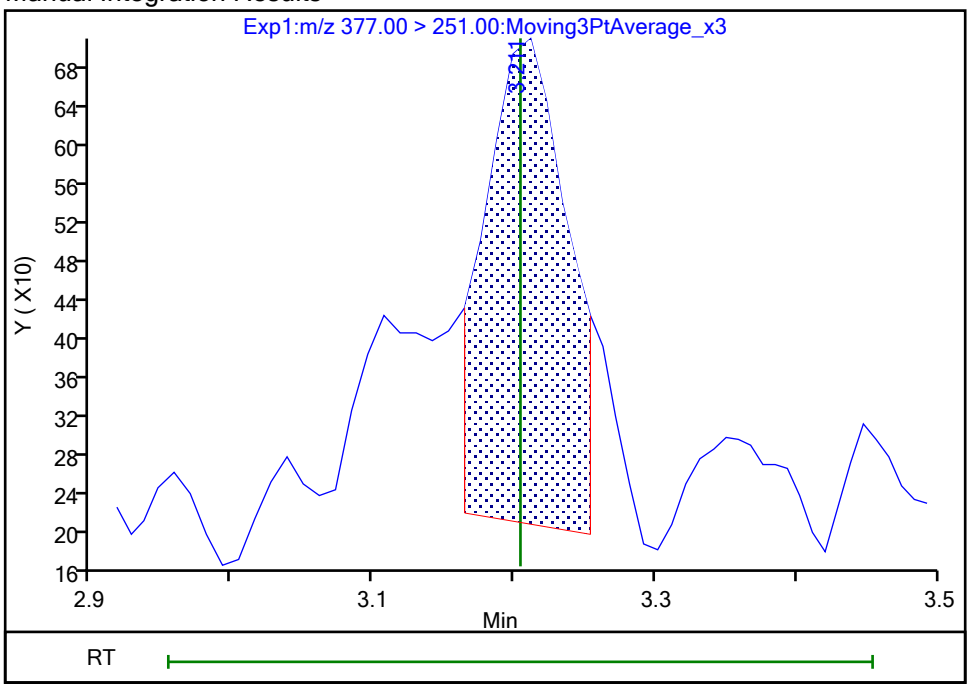
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 1982
Amount: 0.000456
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

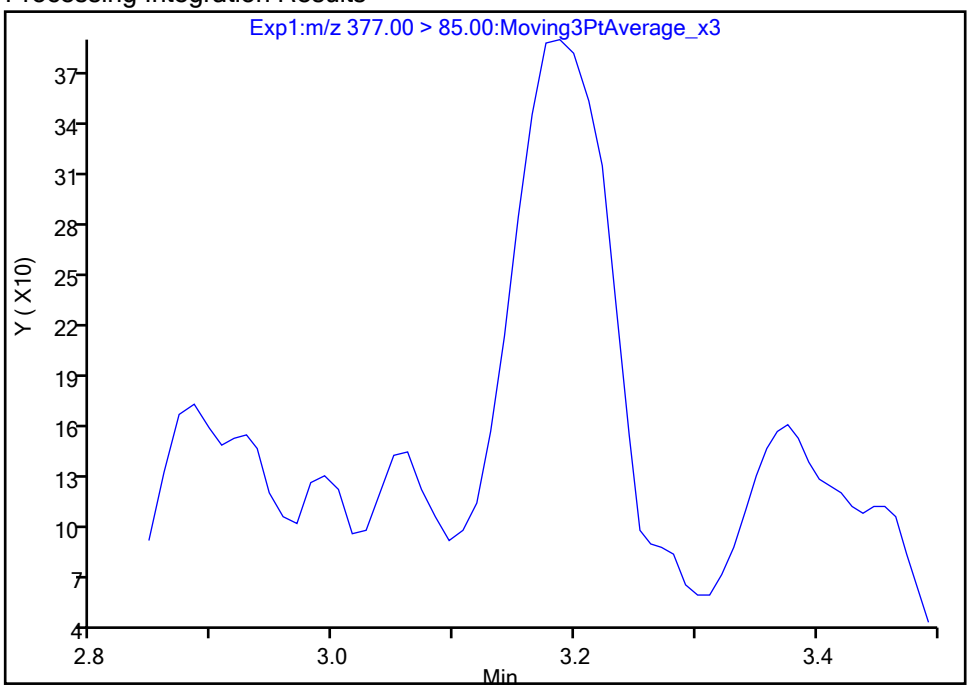
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

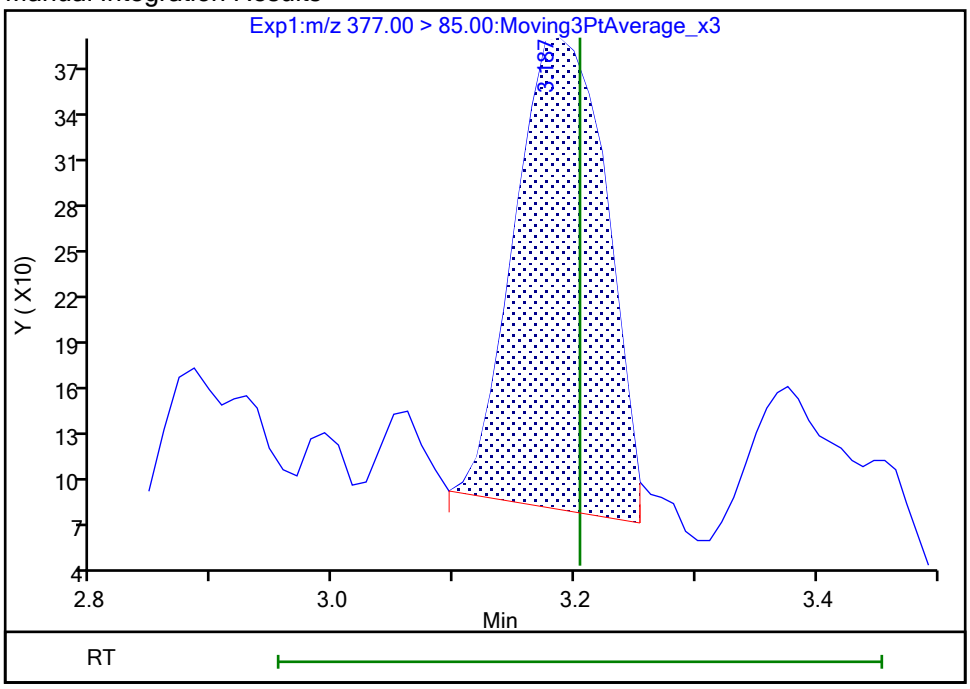
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.19
Area: 1620
Amount: 0.000456
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:08:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

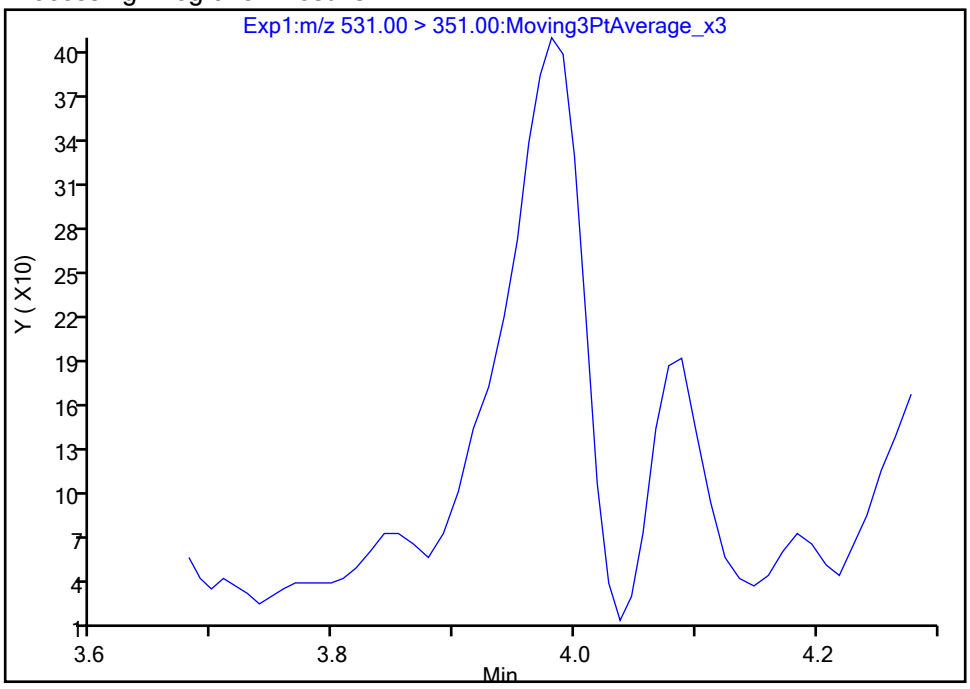
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

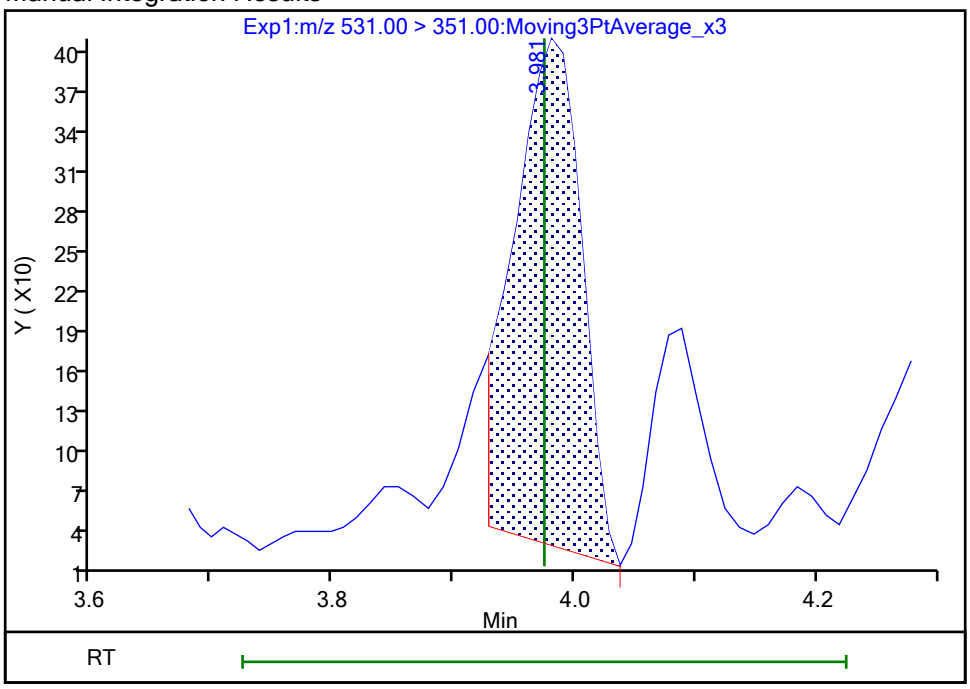
Not Detected
Expected RT: 3.97

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 1444
Amount: 0.000535
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:09:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

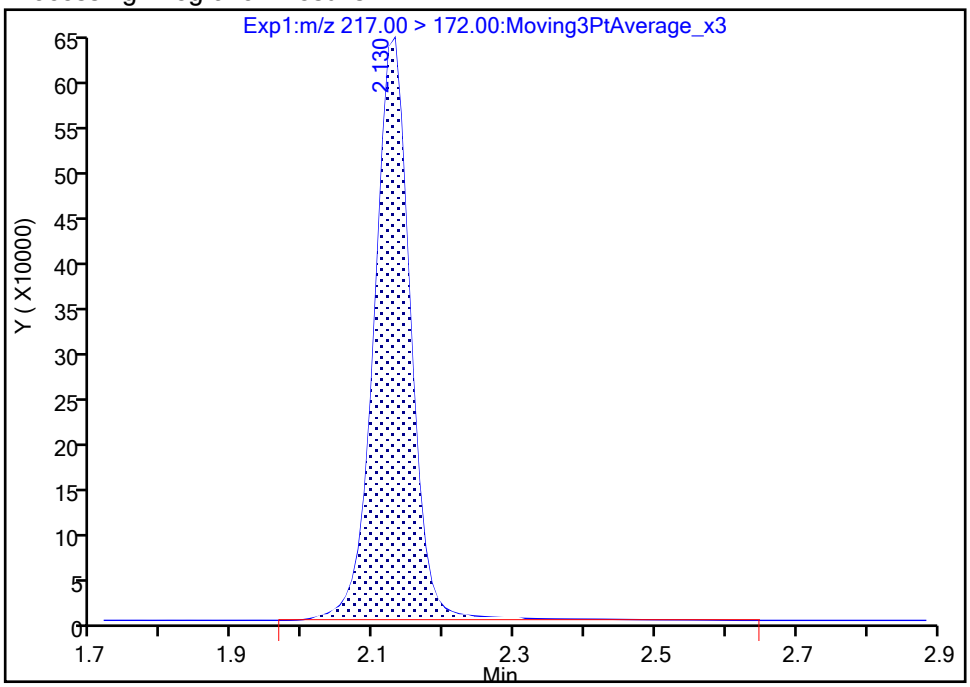
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

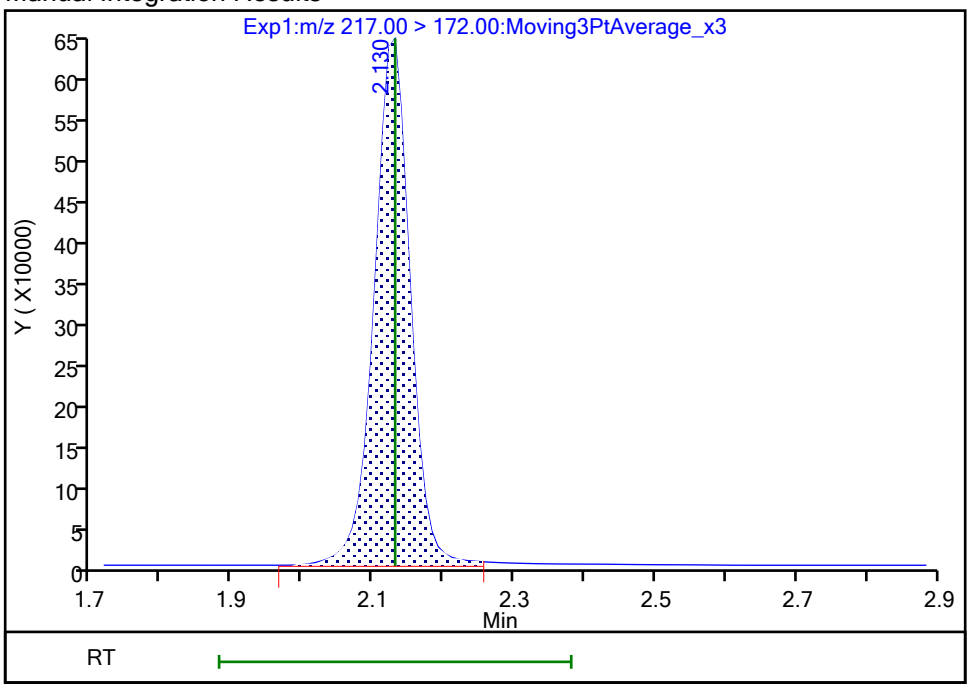
Processing Integration Results

RT: 2.13
Area: 2318162
Amount: 1.322415
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2289902
Amount: 1.308363
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:06:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

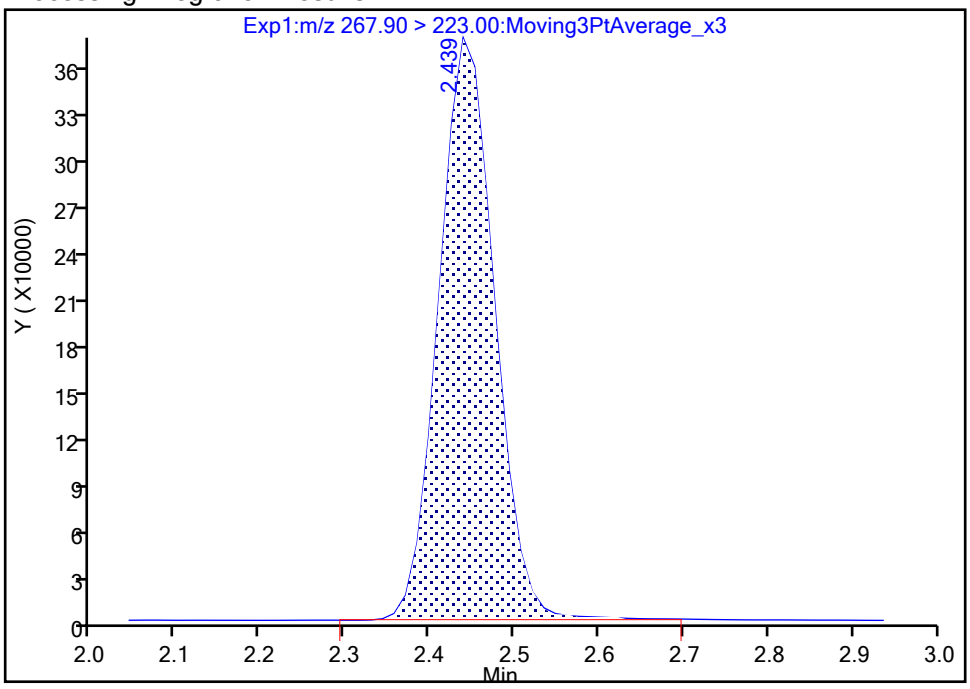
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

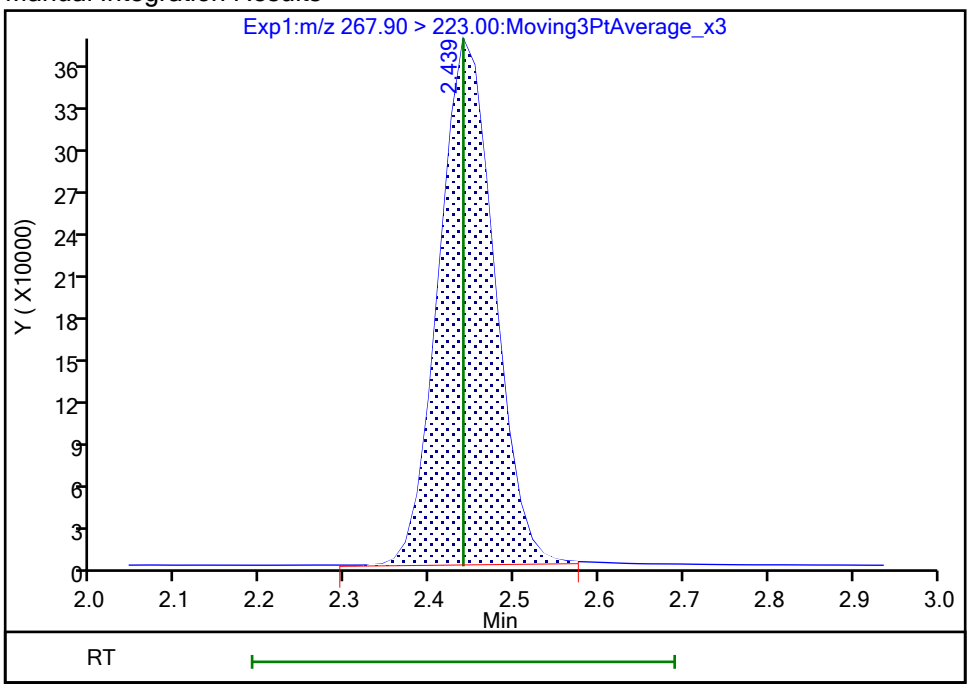
Processing Integration Results

RT: 2.44
Area: 1702319
Amount: 1.251274
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1697026
Amount: 1.249360
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:06:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

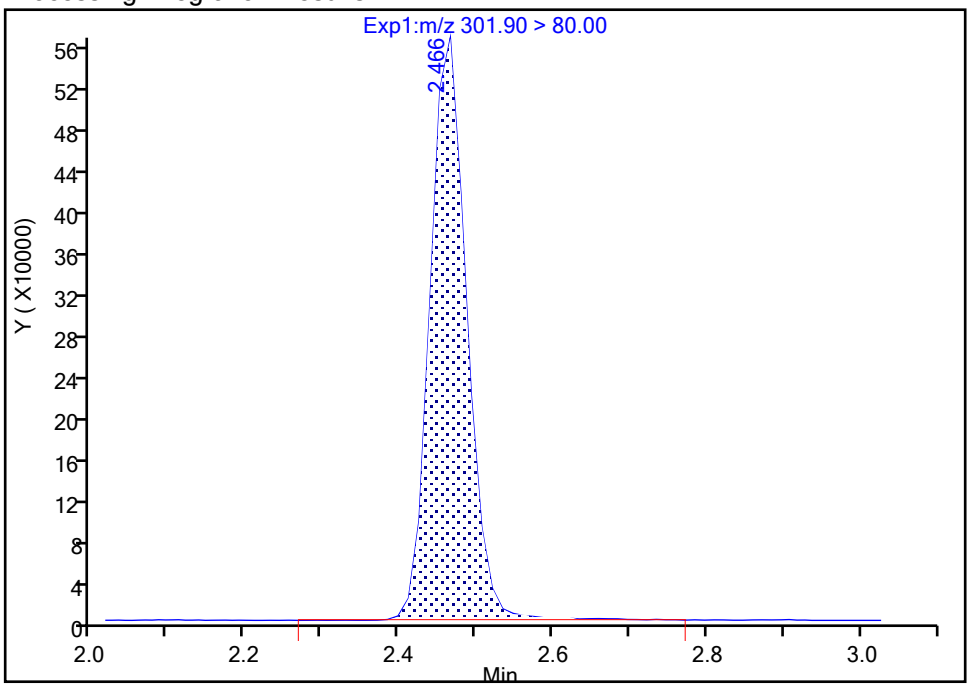
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

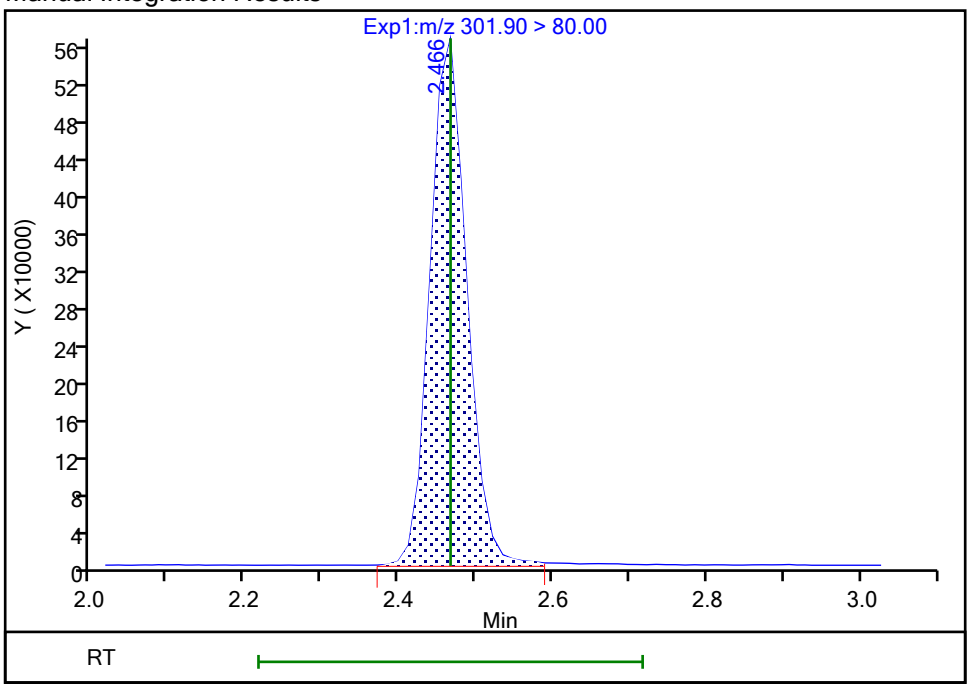
Processing Integration Results

RT: 2.47
Area: 1880762
Amount: 1.021714
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1867516
Amount: 1.016126
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:06:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

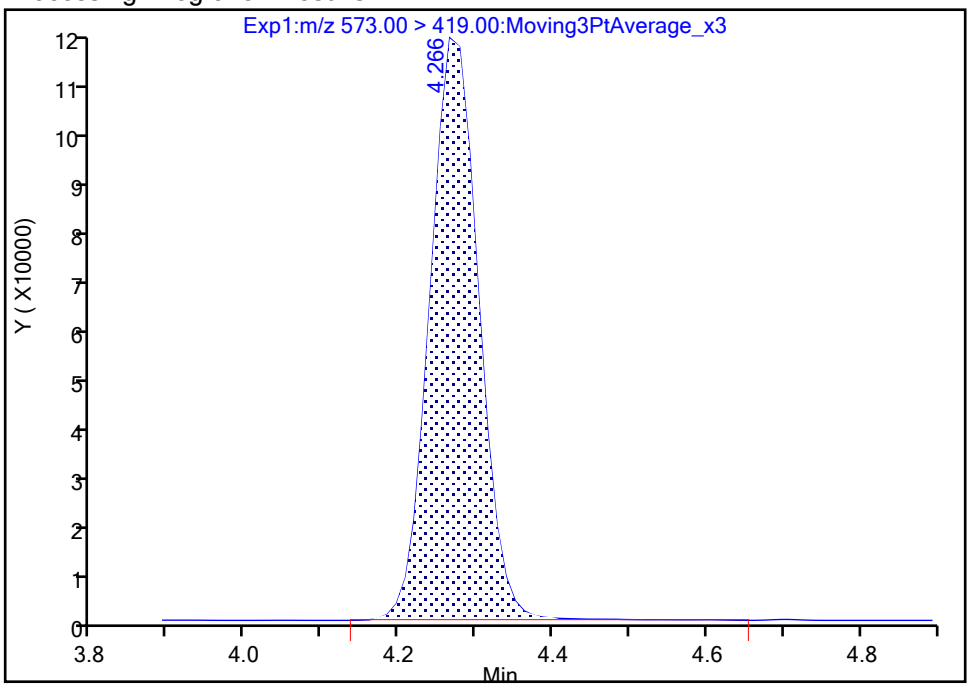
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

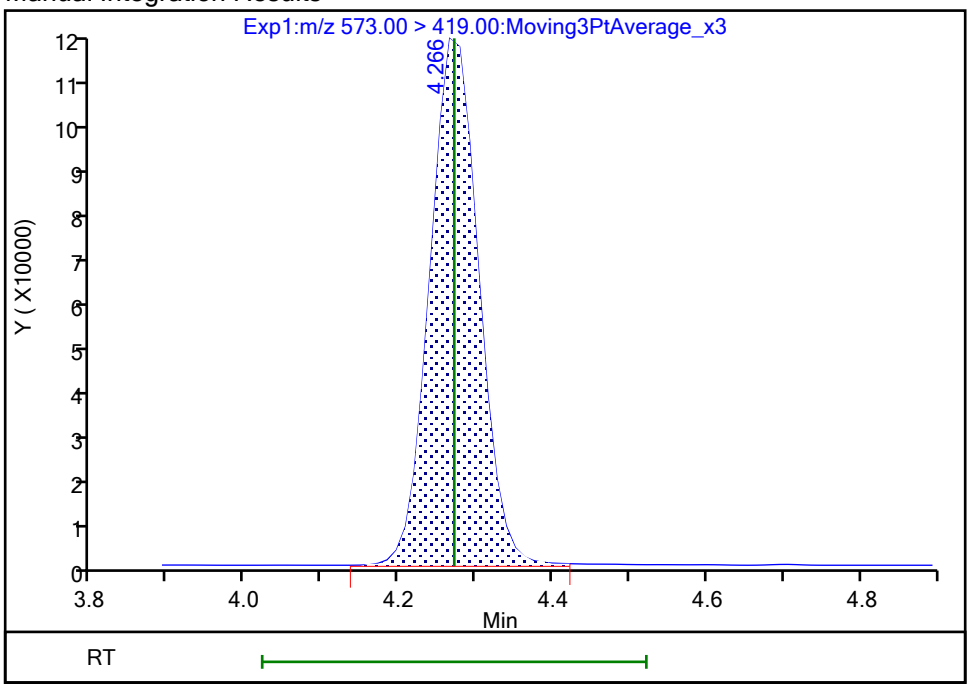
Processing Integration Results

RT: 4.27
Area: 504836
Amount: 1.077635
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 502831
Amount: 1.075056
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

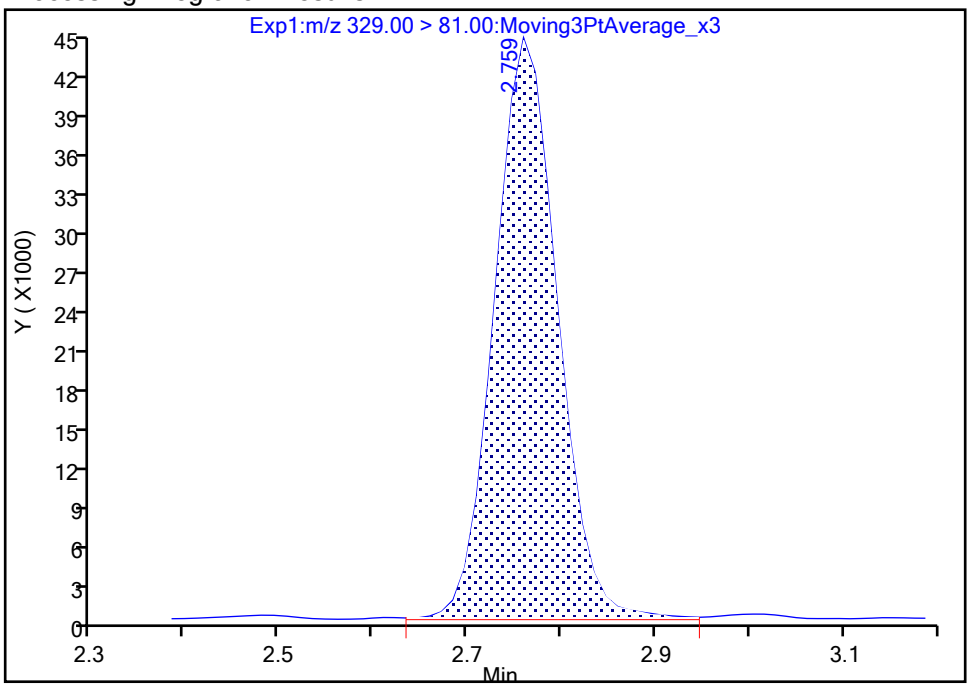
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

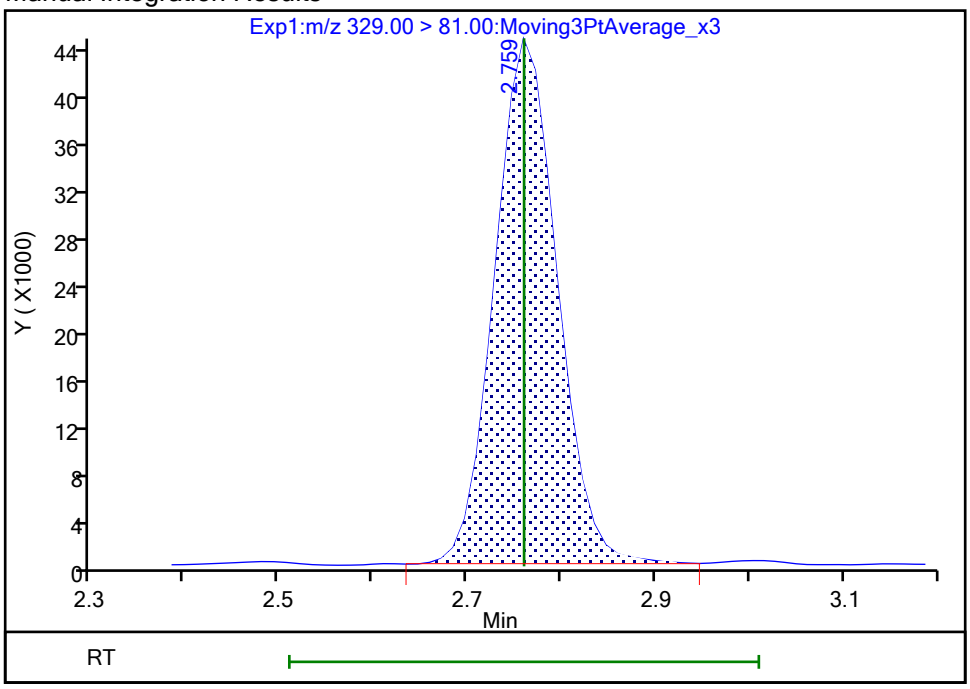
Processing Integration Results

RT: 2.76
Area: 206279
Amount: 0.968986
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 203897
Amount: 0.959314
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:06:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

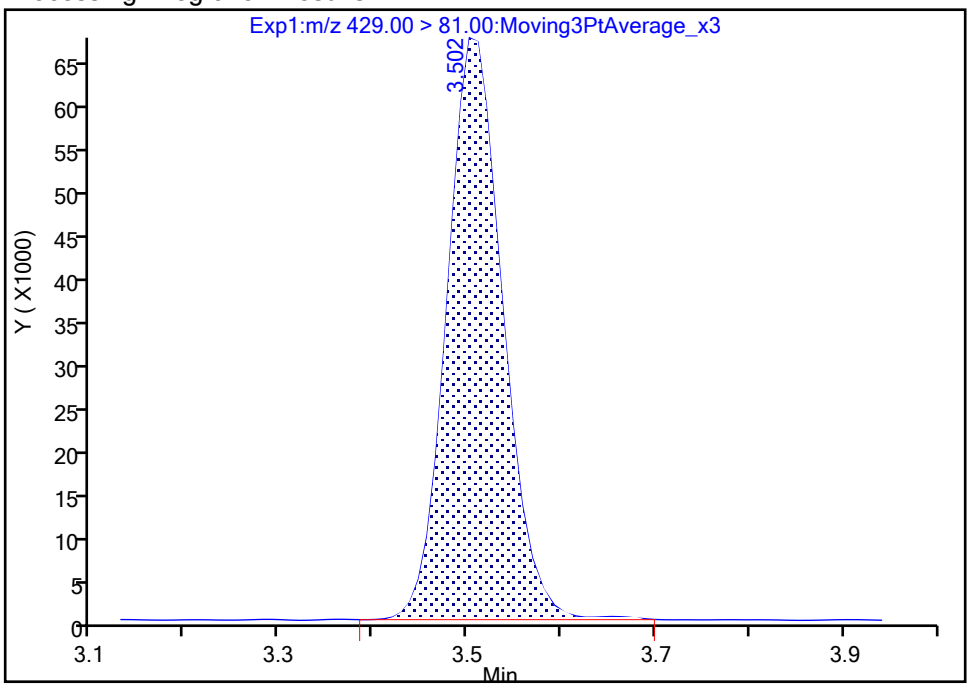
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d				
Injection Date:	21-Oct-2023 03:57:55	Instrument ID:	LC812		
Lims ID:	MB 200-196591/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

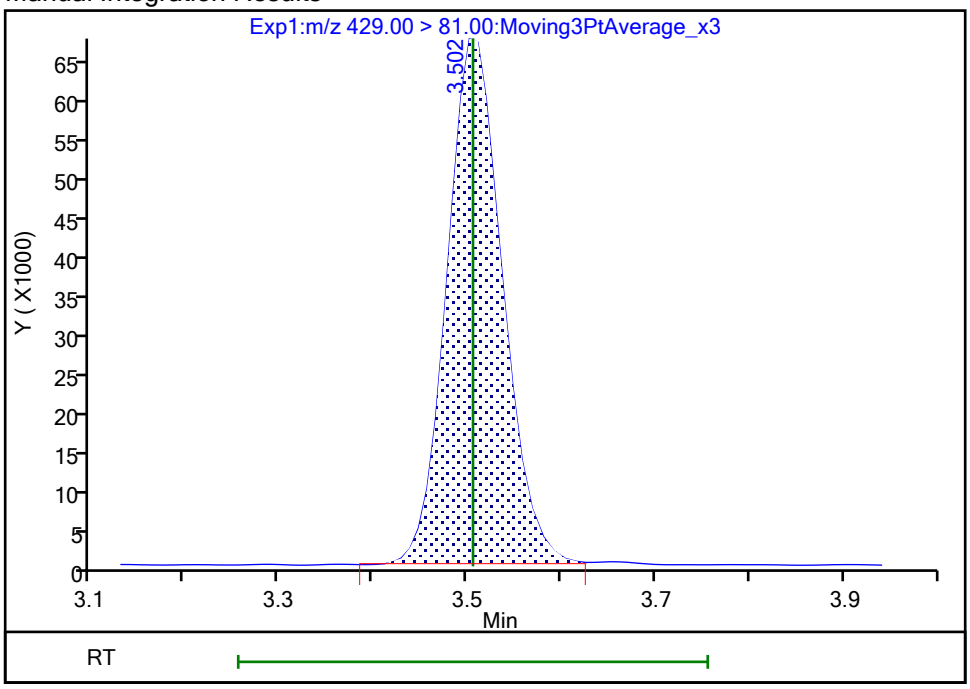
Processing Integration Results

RT: 3.50
Area: 280641
Amount: 1.023556
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 279602
Amount: 1.021382
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

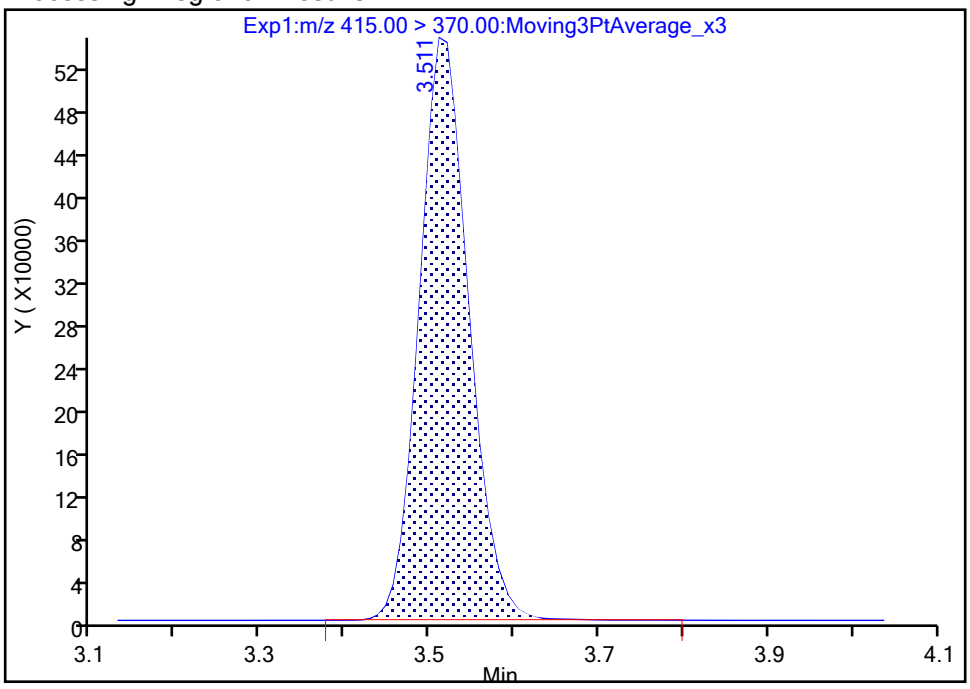
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D02.d
Injection Date: 21-Oct-2023 03:57:55 Instrument ID: LC812
Lims ID: MB 200-196591/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

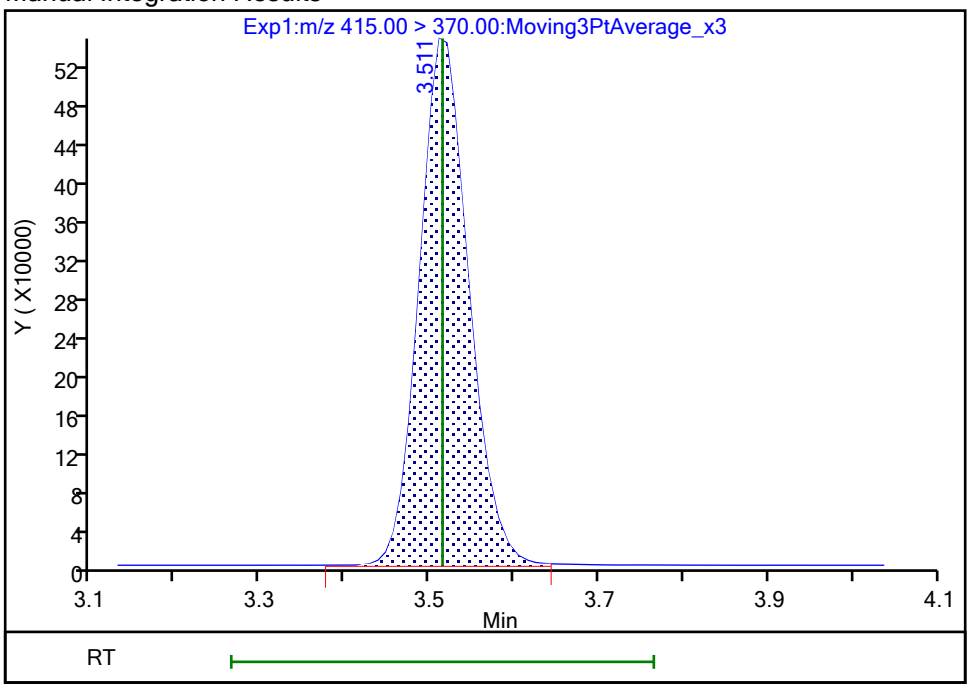
Processing Integration Results

RT: 3.51
Area: 2209632
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2206137
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:07:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196590/2-A

Matrix: Water Lab File ID: PA231020C03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 00:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	81.84		5.00	1.20
2706-90-3	Perfluoropentanoic acid	84.33		2.00	0.68
307-24-4	Perfluorohexanoic acid	74.90		2.00	0.65
375-85-9	Perfluoroheptanoic acid	79.10		2.00	0.54
335-67-1	Perfluorooctanoic acid	75.96		2.00	0.76
375-95-1	Perfluorononanoic acid	81.93		2.00	0.49
335-76-2	Perfluorodecanoic acid	80.79		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	83.42		2.00	0.55
307-55-1	Perfluorododecanoic acid	82.05		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	79.10		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	77.12		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	77.87		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	81.48		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	73.06		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	77.87		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	72.73		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	68.96		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	73.14		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	82.84		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	84.77		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	87.47		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	88.09		2.00	0.92
2355-31-9	NMeFOSAA	77.55		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	82.36		5.00	1.60
13252-13-6	HFPODA	86.11		4.00	1.10
919005-14-4	DONA	85.15		2.00	0.42
756426-58-1	9Cl-PF3ONS	84.36		2.00	0.32
763051-92-9	11Cl-PF3OUdS	76.76		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196590/2-A

Matrix: Water Lab File ID: PA231020C03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 00:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		50-150
STL01893	13C5 PFPeA	98		50-150
STL01892	13C4 PFHpA	103		50-150
STL02116	13C2 PFTeDA	83		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	79		50-150
STL02118	d3-NMeFOSAA	94		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	84		50-150
STL02279	M2-6:2 FTS	86		50-150
STL02280	M2-8:2 FTS	81		50-150
STL02255	13C3 HFPO-DA	89		50-150
STL00994	18O2 PFHxS	91		50-150
STL00993	13C2 PFHxA	107		50-150
STL00991	13C4 PFOS	92		50-150
STL00998	13C2 PFDoA	91		50-150
STL00995	13C5 PFNA	98		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Lims ID: LCS 200-196590/2-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Oct-2023 00:33:45 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196590/2-A
Misc. Info.: 200-0057493-003 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:04:31
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.130	-0.009	0.604	2118501	1.28		103	1456	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.121	2.130	-0.009	1.000	3198285	2.05		102	321	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1571200	1.23		98.1	2013	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	2859627	2.11		105	78.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1745081	1.01		86.6	87718	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	3263997	1.95	Target=2.06	110	1347	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	1552196		2.10(1.03-3.09)		627	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.757	2.760	-0.003	1.000	1180808	2.07		111	10782	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.757	2.760	-0.003	0.786	196036	0.9778		83.8	141	
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.798	-0.003	0.796	1743873	1.34		107	8612	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.795	2.798	-0.003	1.000	2874838	1.87	Target=14.12	93.6	616	M
313.00 > 119.00	2.795	2.798	-0.003	1.000	194108		14.81(7.06-21.17)		227	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.795	2.798	-0.003	0.884	3002285	2.04	Target=2.72	108	5026	M
349.00 > 99.00	2.795	2.798	-0.003	0.884	1007243		2.98(1.36-4.09)		2020	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.908	-0.003	1.000	484513	2.15		108	6780	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.828	280989	1.11		89.1	2743	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.157	0.005	0.901	1334667	1.07		90.8	6809	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.157	0.005	1.000	2282123	1.83	Target=3.32	99.9	3441	M
399.00 > 99.00	3.162	3.157	0.005	1.000	654789		3.49(1.66-4.98)		550	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.169	-0.007	1.000	3272645	1.98	Target=4.17	98.9	662	M
363.00 > 169.00	3.162	3.169	-0.007	1.000	798193		4.10(2.09-6.26)		1022	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.169	-0.007	0.901	1845680	1.29		103	7230	
77 DONA										
377.00 > 251.00	3.196	3.204	-0.008	0.836	8880433	2.13	Target=3.33	113	9729	
377.00 > 85.00	3.196	3.204	-0.008	0.836	2334333		3.80(1.66-4.99)		3948	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.501	3.506	-0.005	0.915	2039712	1.95	Target=4.83	102	4560	M
449.00 > 99.00	3.501	3.506	-0.005	0.915	403440		5.06(2.41-7.24)		1164	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.506	-0.005	0.997	263844	1.02		86.0	470	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.501	3.506	-0.005	1.000	1286975	2.12		111	2287	M
D 14 13C4 PFOA										
417.00 > 372.00	3.510	3.515	-0.005	1.000	2084882	1.29		103	10126	
* 62 13C2 PFOA										
415.00 > 370.00	3.510	3.515	-0.005		2080973	1.25			15503	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.510	3.515	-0.005	1.000	3373746	1.90	Target=2.88	95.0	168	
413.00 > 169.00	3.519	3.515	0.004	1.003	1204470		2.80(1.44-4.32)		2363	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.823	0.001	1.000	1537572	1.82	Target=4.24	98.0	3241	M
499.00 > 99.00	3.814	3.823	-0.009	0.997	339156		4.53(2.12-6.37)		1101	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.823	0.001	1.090	866316	1.10		91.8	3305	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.846	-0.010	1.000	3451646	2.05	Target=8.34	102	589	
463.00 > 169.00	3.836	3.846	-0.010	1.000	375262		9.20(4.17-12.51)		2110	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.846	-0.010	1.093	2149296	1.22		97.5	6570	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.975	0.002	1.040	5457081	2.11		113	13866	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.096	4.106	-0.010	1.071	1109023	1.72	Target=2.17	89.6	3673	
549.00 > 99.00	4.096	4.106	-0.010	1.071	464492		2.39(1.08-3.25)		1899	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.130	0.002	1.000	3692670	2.02	Target=11.44	101	1420	
513.00 > 169.00	4.132	4.130	0.002	1.000	347465		10.63(5.72-17.16)		1262	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.130	0.002	1.177	2286922	1.24		99.1	18968	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.132	4.142	-0.010	1.177	282417	0.9727		81.2	790	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.132	4.142	-0.010	1.000	1135310	2.19		114	3964	M
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.235	0.002	1.207	1557841	0.9890		79.1	3136	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.235	0.002	1.000	2617871	2.20		110	4682	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.261	4.271	-0.010	1.214	517889	1.17		93.9	1358	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.274	4.271	0.003	1.003	728839	1.94		96.9	1002	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.358	4.356	0.002	1.140	905279	1.83	Target=2.37	94.7	3425	
599.00 > 99.00	4.358	4.356	0.002	1.140	340353		2.66(1.19-3.56)		3735	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.380	0.002	1.248	2093561	1.20		96.1	4868	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.391	-0.009	1.000	3599975	2.09	Target=12.20	104	932	
563.00 > 169.00	4.382	4.391	-0.009	1.000	303411		11.87(6.10-18.31)		2555	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.394	4.391	0.003	1.252	465920	1.10		87.7	1242	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.403	-0.009	1.000	767599	2.06		103	1020	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.475	-0.011	1.167	7614755	1.92		102	9748	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.604	0.002	1.312	2023047	1.14		91.4	4071	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.606	4.604	0.002	1.000	3379196	2.05	Target=8.47	103	213	M
613.00 > 169.00	4.606	4.604	0.002	1.000	399228		8.46(4.23-12.70)		2907	M
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.626	-0.009	1.117	666333	2.15		111	7398	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.770	4.769	0.001	1.247	281019	1.67	Target=0.48	86.5	3344	
699.00 > 99.00	4.770	4.769	0.001	1.247	598970		0.47(0.24-0.72)		6433	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.807	-0.008	1.042	3423888	1.98	Target=6.41	98.9	207	M
663.00 > 169.00	4.799	4.807	-0.008	1.042	506729		6.76(3.21-9.62)		3022	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.977	4.983	-0.006	1.418	1840511	1.04		83.5	6033	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.977	4.983	-0.006	1.000	317406	1.93	Target=0.87	96.4	2805	M
713.00 > 219.00	4.977	4.983	-0.006	1.000	332441		0.95(0.43-1.30)		2520	M

Report Date: 25-Oct-2023 08:39:46 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.283	5.293	-0.010	1.505	2058122	1.01		81.0	5517	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.294	5.293	0.001	1.002	3393436	2.06	Target=7.89	103	237	M
813.00 > 169.00	5.283	5.293	-0.010	1.000	424967		7.99(3.94-11.83)		4759	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.547	5.555	-0.008	1.050	2505562	1.95	Target=9.39	97.4	283	M
913.00 > 169.00	5.547	5.555	-0.008	1.050	260998		9.60(4.69-14.08)		1216	M

QC Flag Legend

Processing Flags

Review Flags

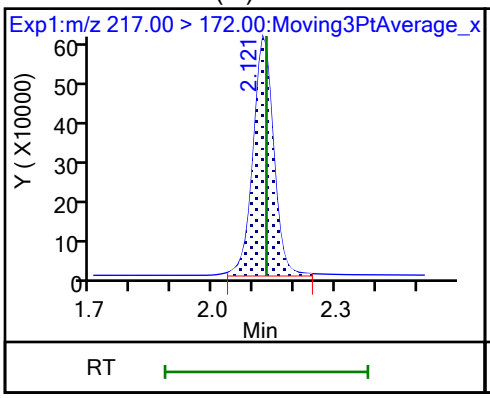
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:46 Chrom Revision: 2.3 18-Oct-2023 21:16:54

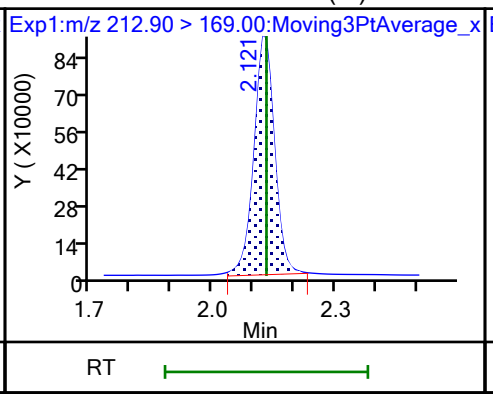
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

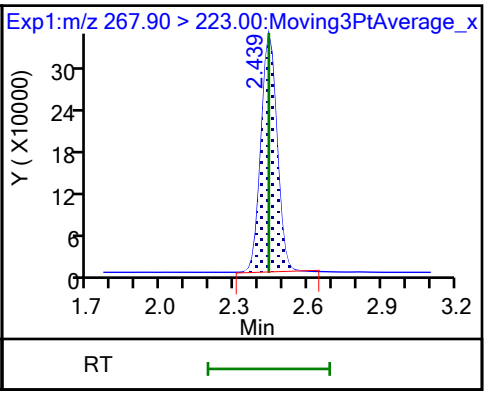
D 1 13C4 PFBA (M)



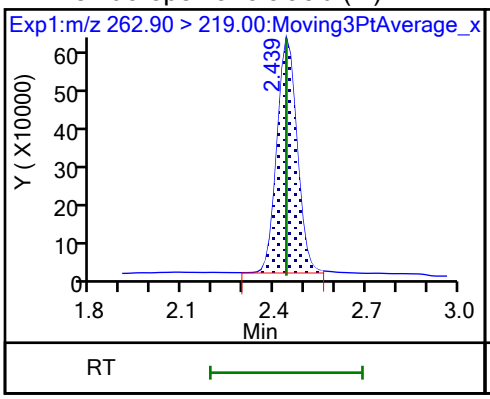
2 Perfluorobutanoic acid (M)



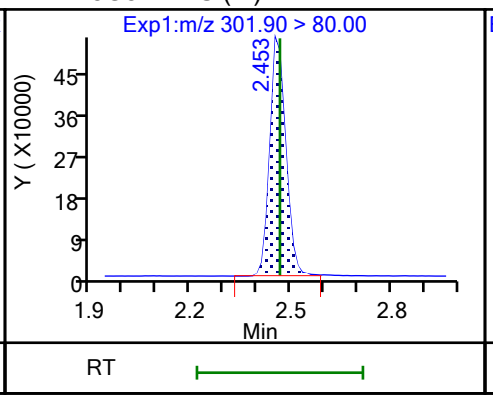
D 3 13C5 PFPeA



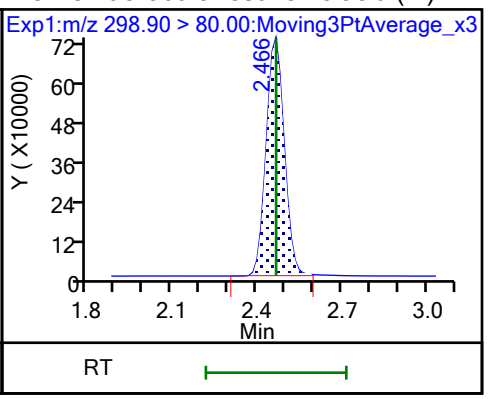
4 Perfluoropentanoic acid (M)



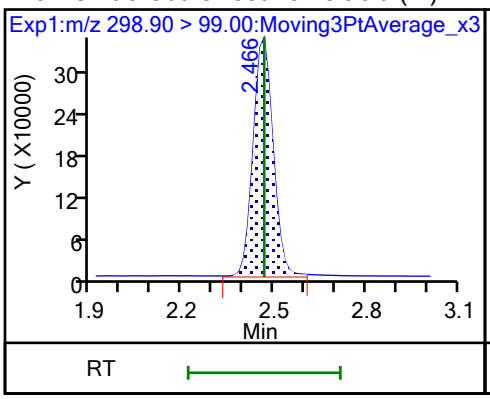
D 47 13C3 PFBS (M)



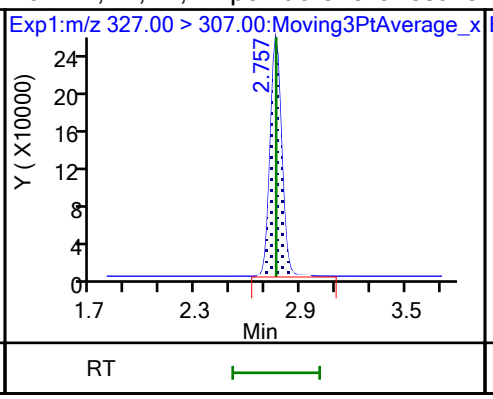
5 Perfluorobutanesulfonic acid (M)



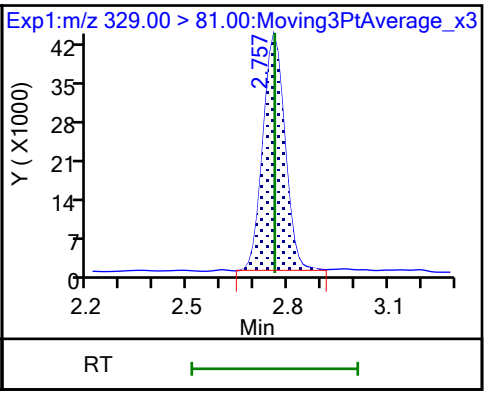
5 Perfluorobutanesulfonic acid (M)



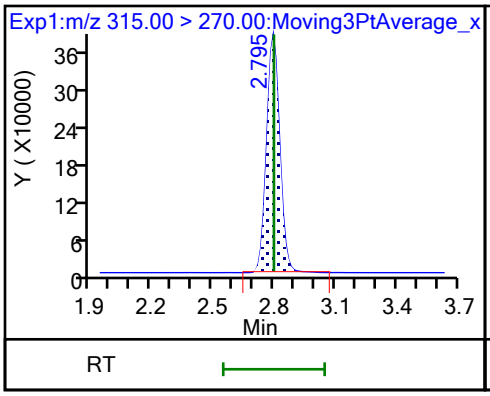
61 1H,1H,2H,2H-perfluorohexanesulfo



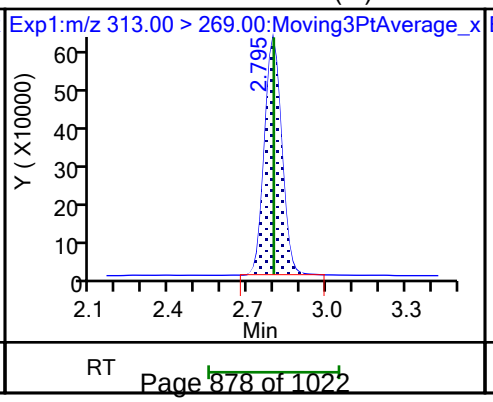
D 60 M2-4:2 FTS



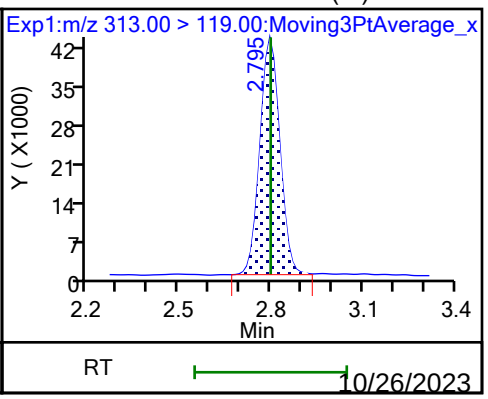
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

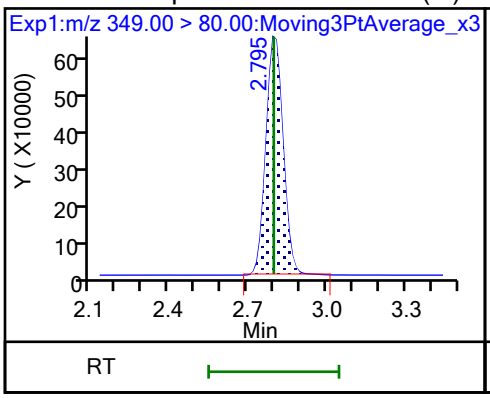


6 Perfluorohexanoic acid (M)

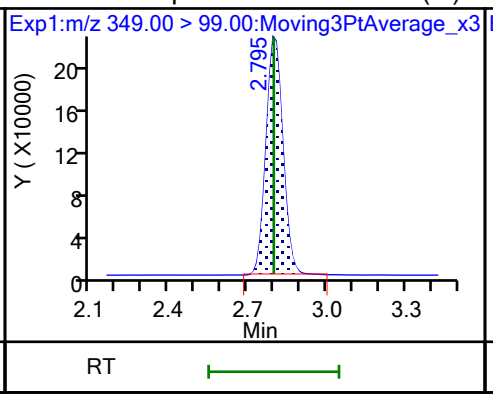


10/26/2023
2:28 PM

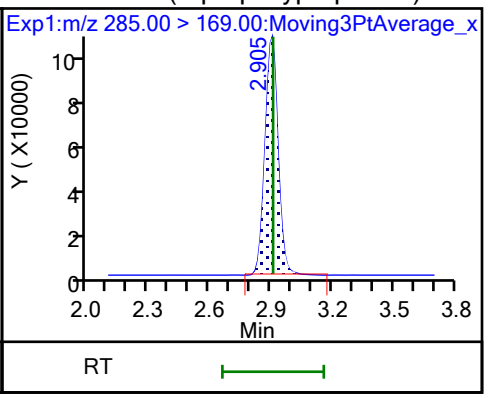
70 Perfluoropentanesulfonic acid (M)



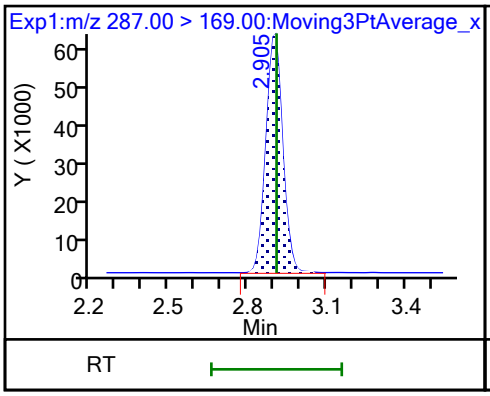
70 Perfluoropentanesulfonic acid (M)



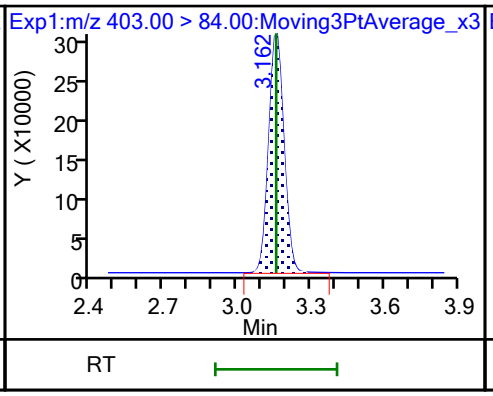
67 Perfluoro(2-propoxypropanoic) ac



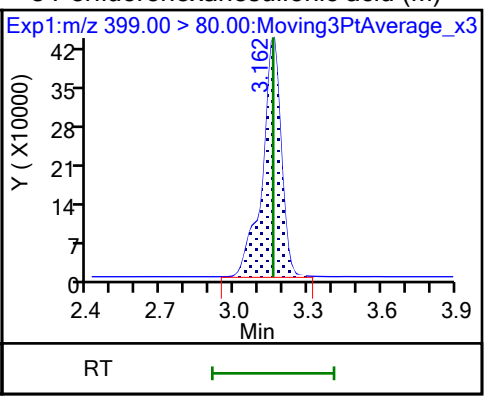
D 64 13C3 HFPO-DA



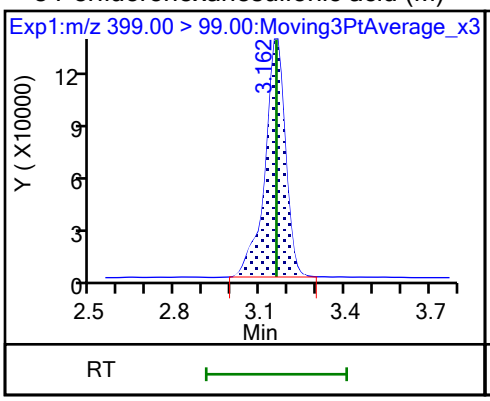
D 11 18O2 PFHxS



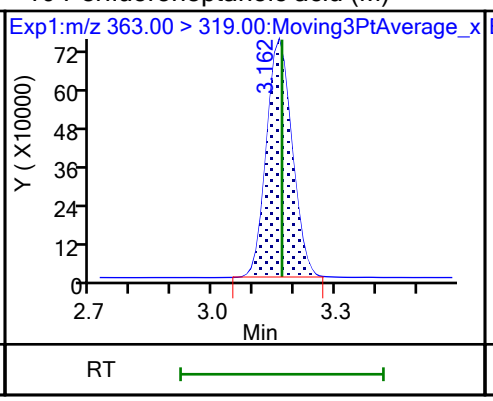
8 Perfluorohexanesulfonic acid (M)



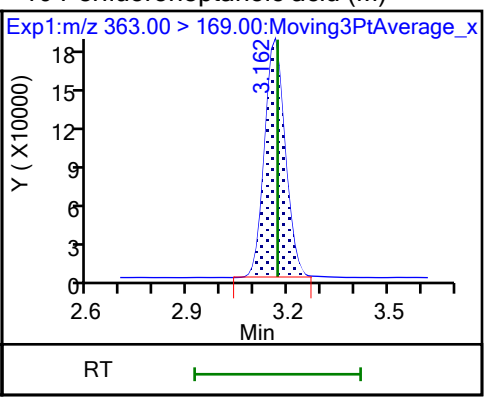
8 Perfluorohexanesulfonic acid (M)



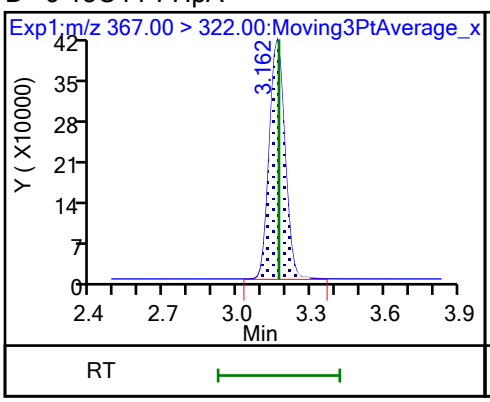
10 Perfluoroheptanoic acid (M)



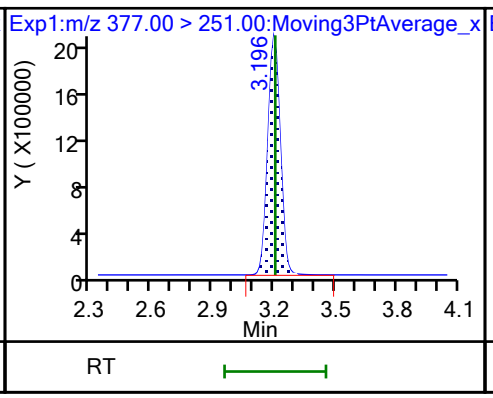
10 Perfluoroheptanoic acid (M)



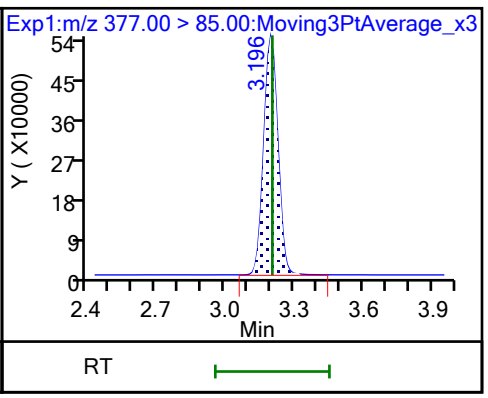
D 9 13C4 PFHpA



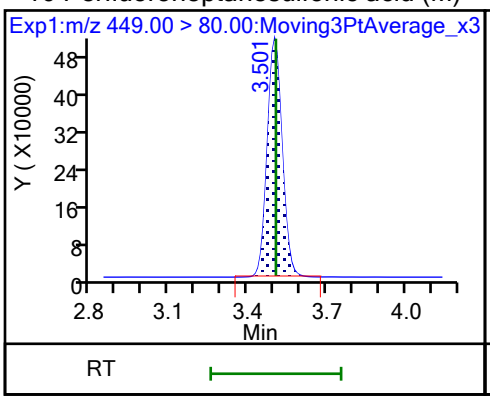
77 DONA



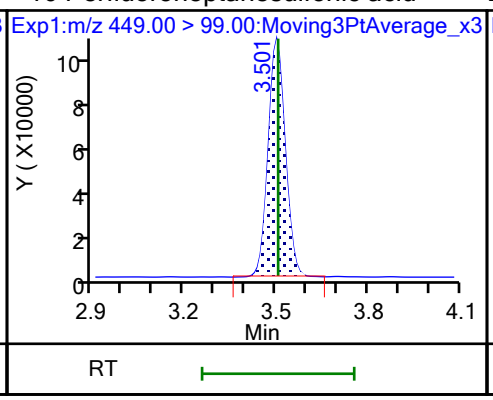
77 DONA



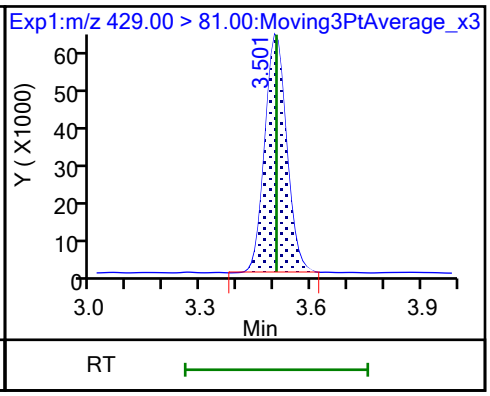
16 Perfluoroheptanesulfonic acid (M)



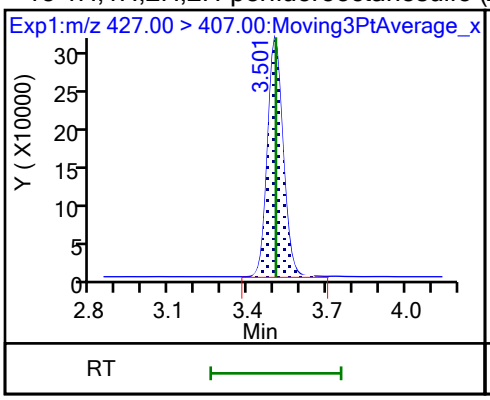
16 Perfluoroheptanesulfonic acid



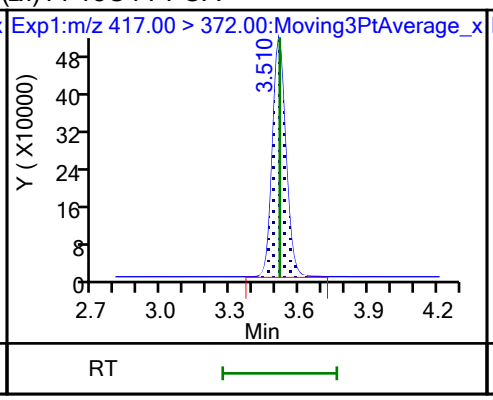
D 12 M2-6:2 FTS



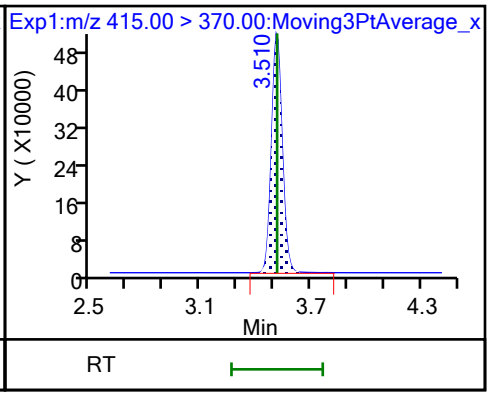
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



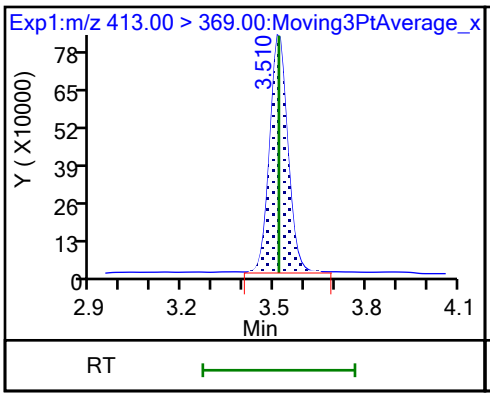
D 14 13C4 PFOA



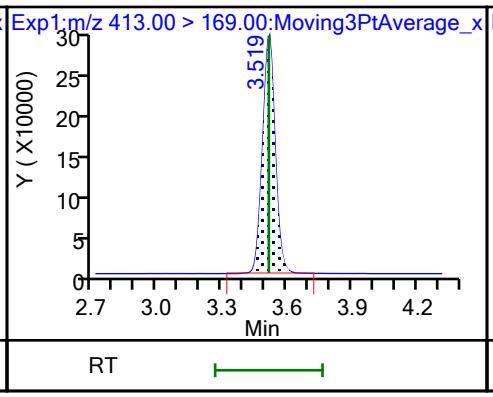
* 62 13C2 PFOA



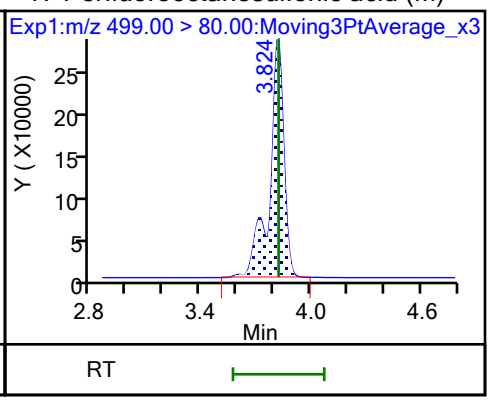
15 Perfluorooctanoic acid



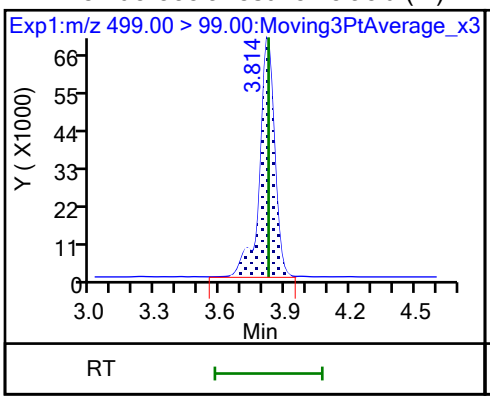
15 Perfluorooctanoic acid



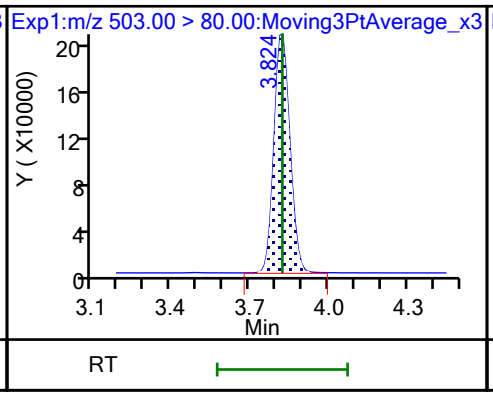
17 Perfluorooctanesulfonic acid (M)



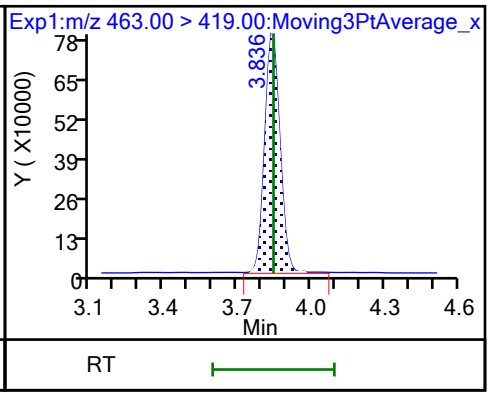
17 Perfluorooctanesulfonic acid (M)



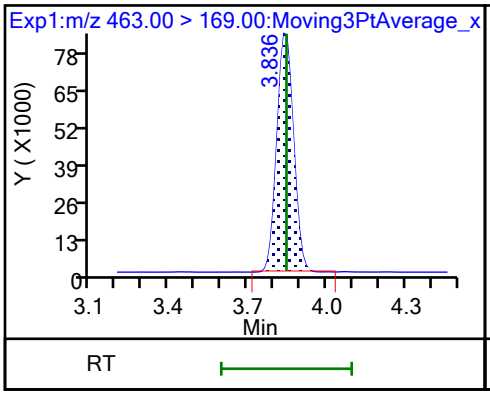
D 18 13C4 PFOS



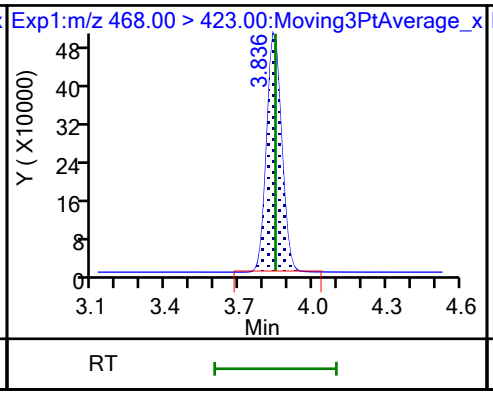
20 Perfluorononanoic acid



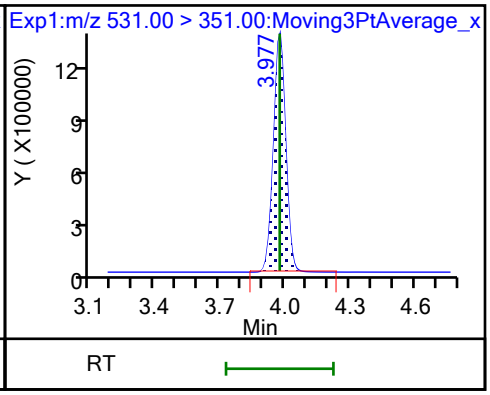
20 Perfluorononanoic acid



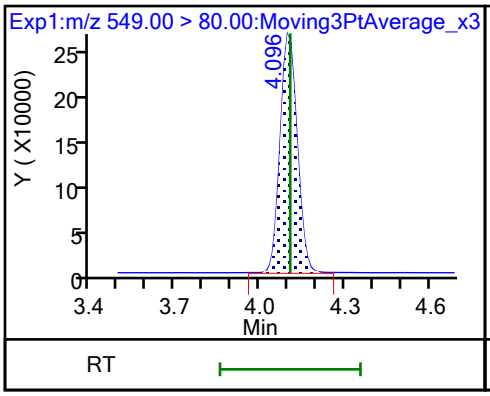
D 19 13C5 PFNA



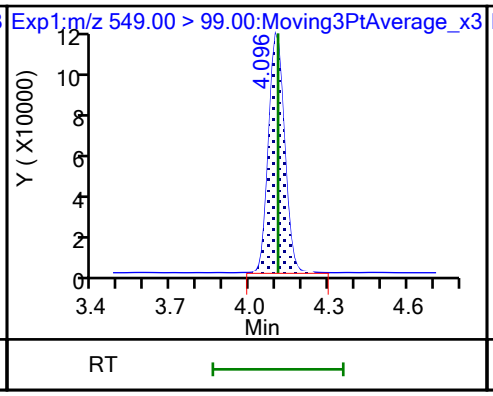
69 9-Chlorohexadecafluoro-3-oxanona



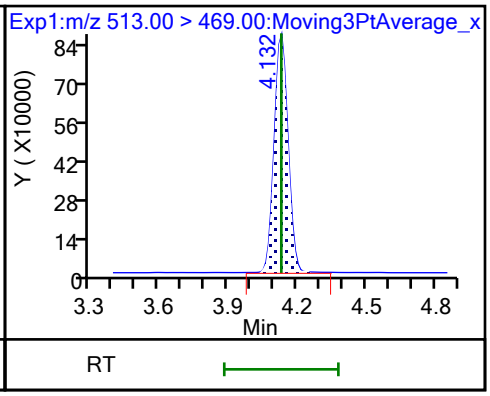
68 Perfluorononanesulfonic acid



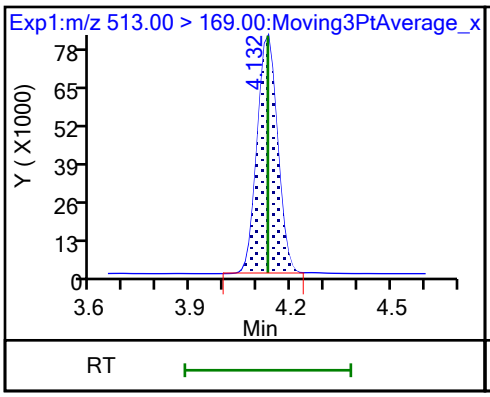
68 Perfluorononanesulfonic acid



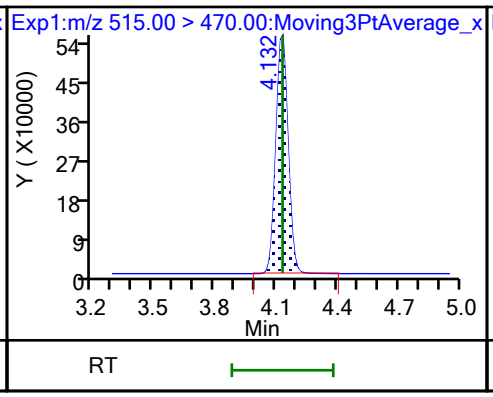
24 Perfluorodecanoic acid



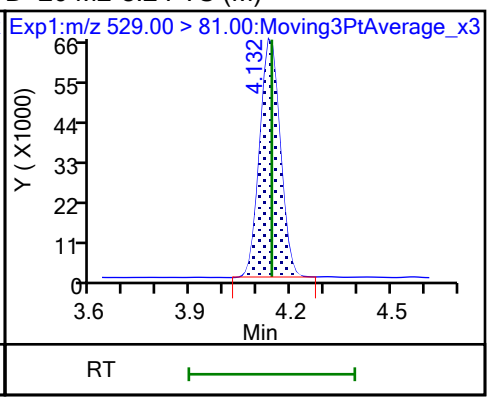
24 Perfluorodecanoic acid



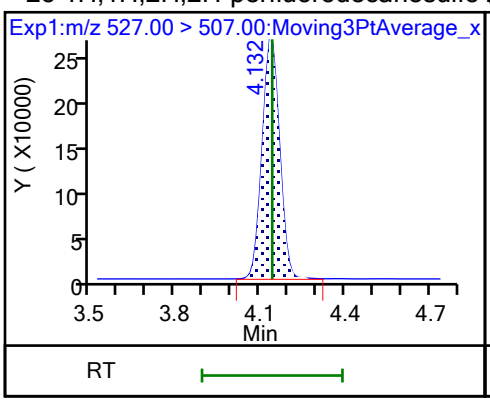
D 23 13C2 PFDA



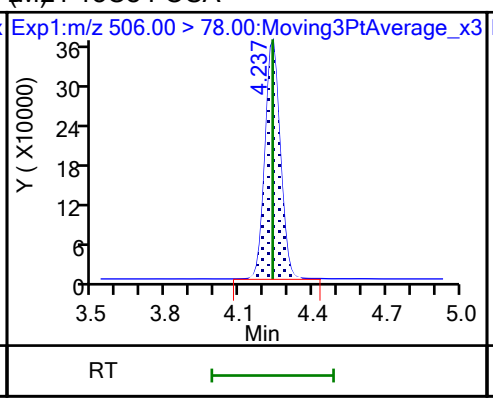
D 26 M2-8:2 FTS (M)



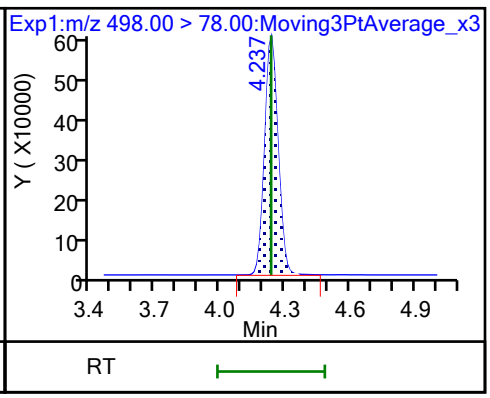
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



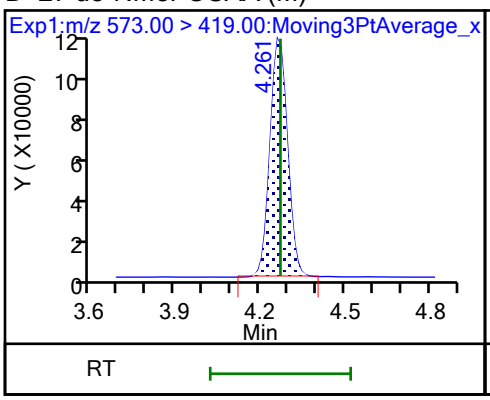
D 21 13C8 FOSA



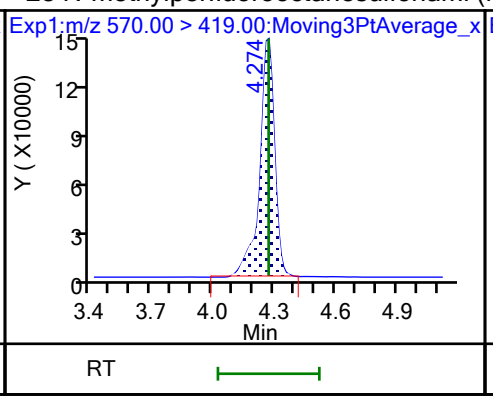
22 Perfluorooctanesulfonamide



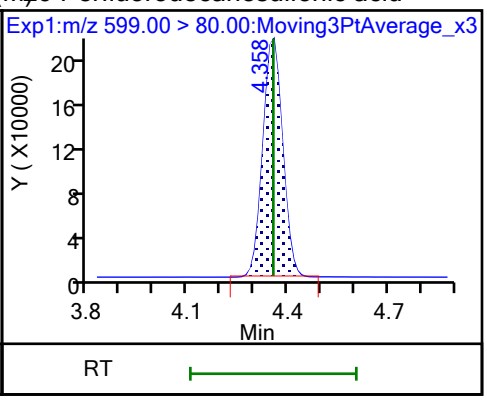
D 27 d3-NMeFOSAA (M)



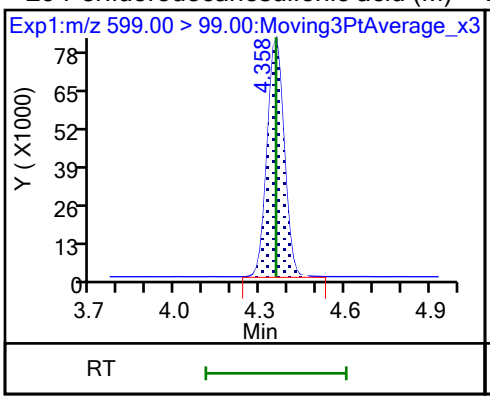
28 N-methylperfluorooctanesulfonami (M)



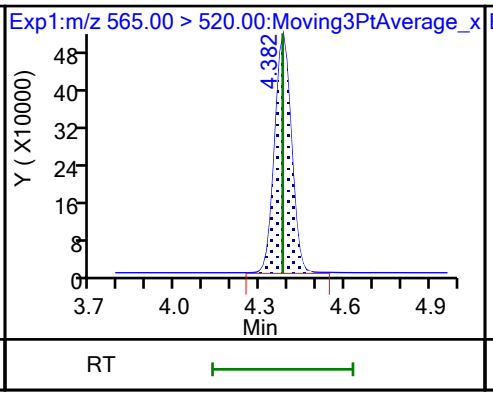
29 Perfluorodecanesulfonic acid



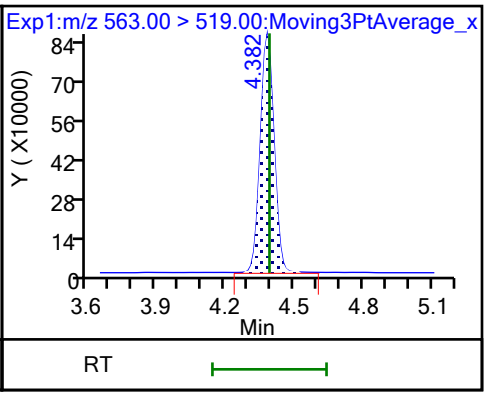
29 Perfluorodecanesulfonic acid (M)



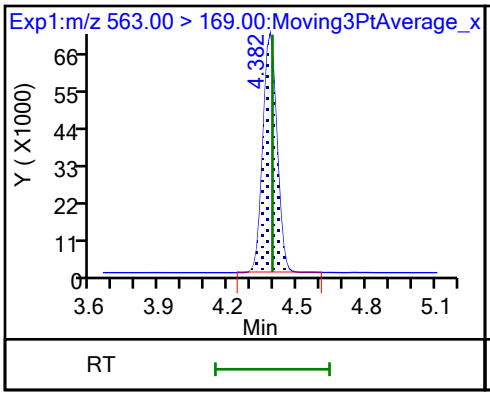
D 30 13C2 PFUnA



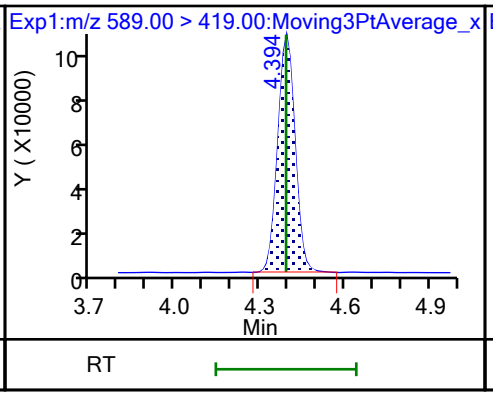
31 Perfluoroundecanoic acid



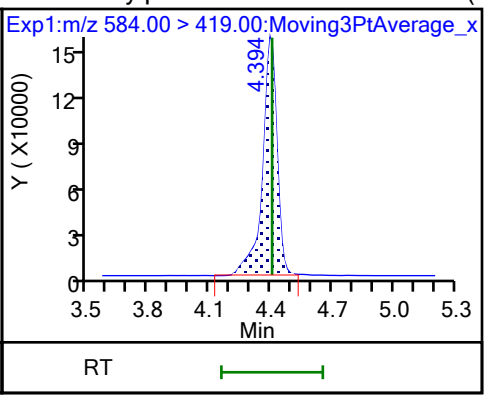
31 Perfluoroundecanoic acid



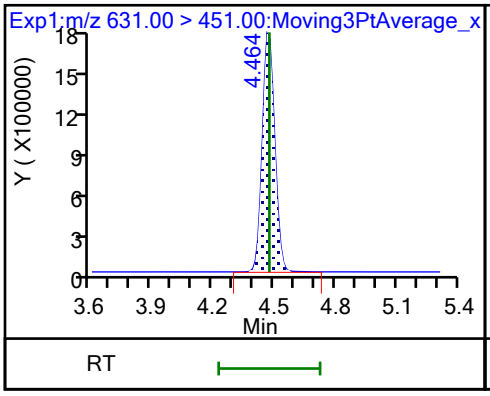
D 32 d5-NEtFOSAA



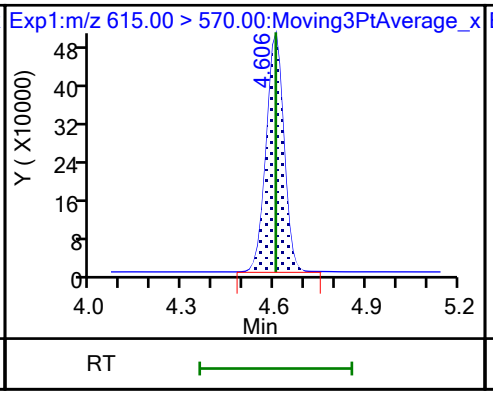
33 N-ethylperfluorooctanesulfonamid (M)



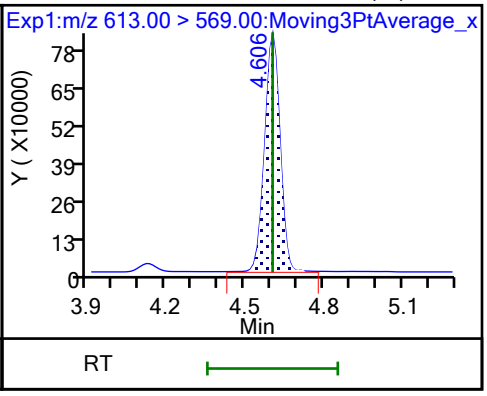
66 11-Chloroeicosafluoro-3-oxaundec



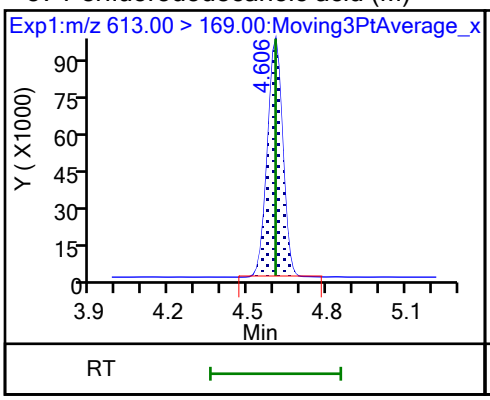
D 36 13C2 PFDoA



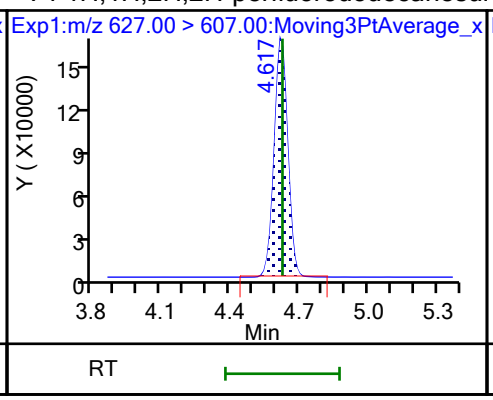
37 Perfluorododecanoic acid (M)



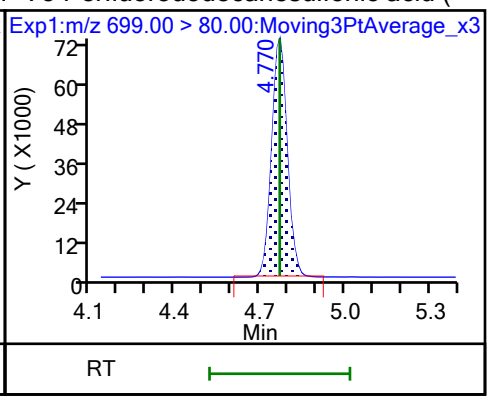
37 Perfluorododecanoic acid (M)



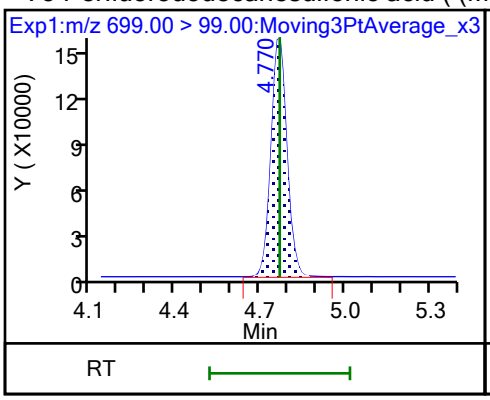
74 1H,1H,2H,2H-perfluorododecanesul



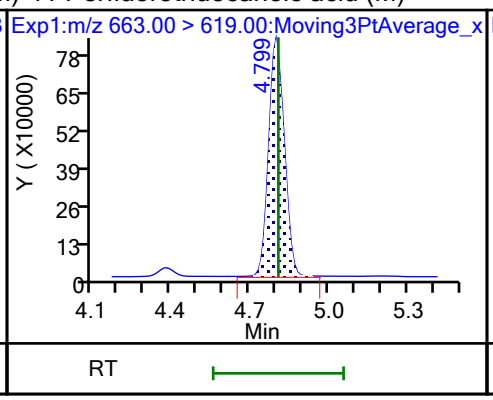
75 Perfluorododecanesulfonic acid (



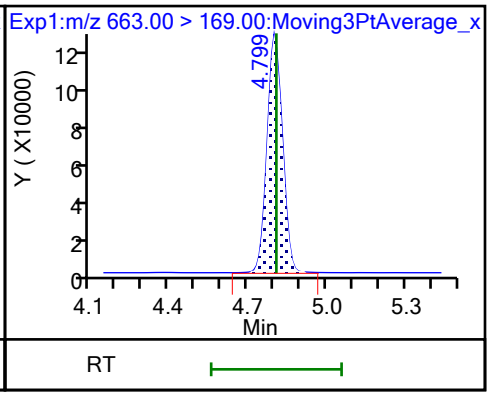
75 Perfluorododecanesulfonic acid ((M)



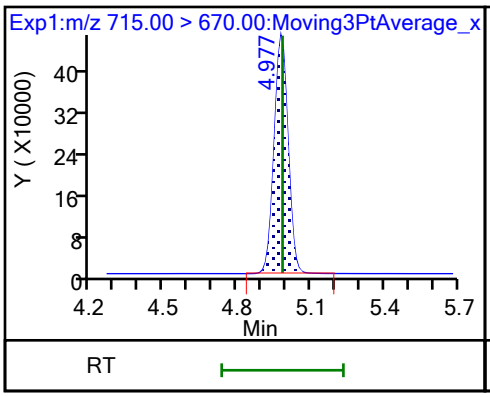
41 Perfluorotridecanoic acid (M)



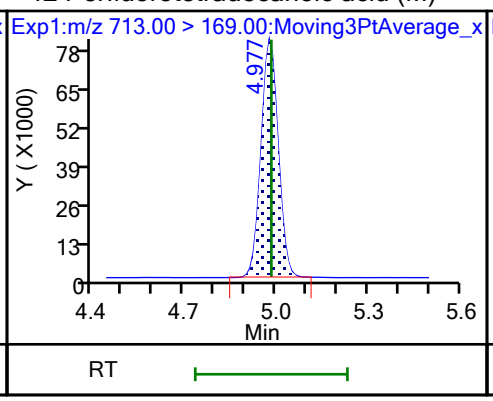
41 Perfluorotridecanoic acid



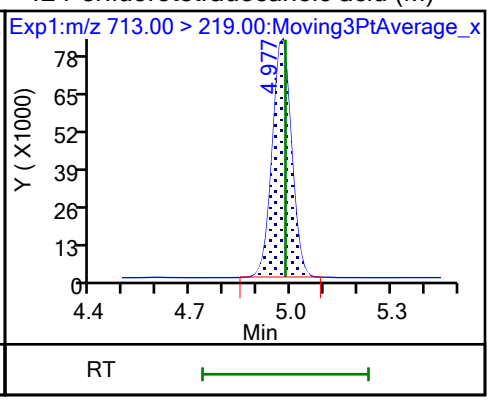
D 43 13C2 PFTeDA



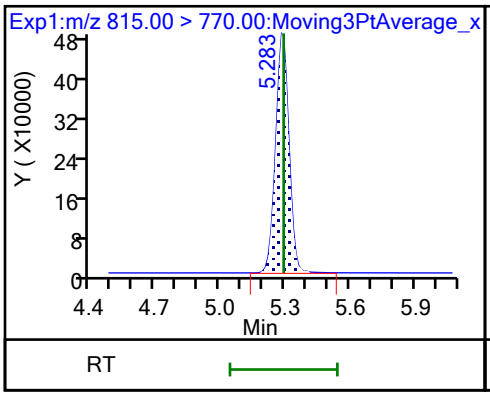
42 Perfluorotetradecanoic acid (M)



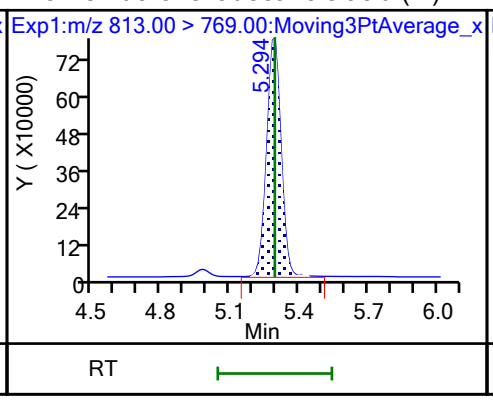
42 Perfluorotetradecanoic acid (M)



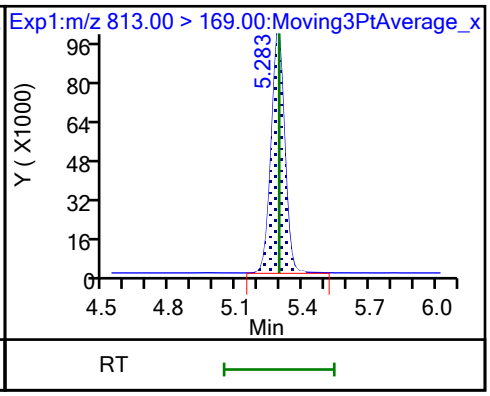
D 44 13C2 PFHxDA



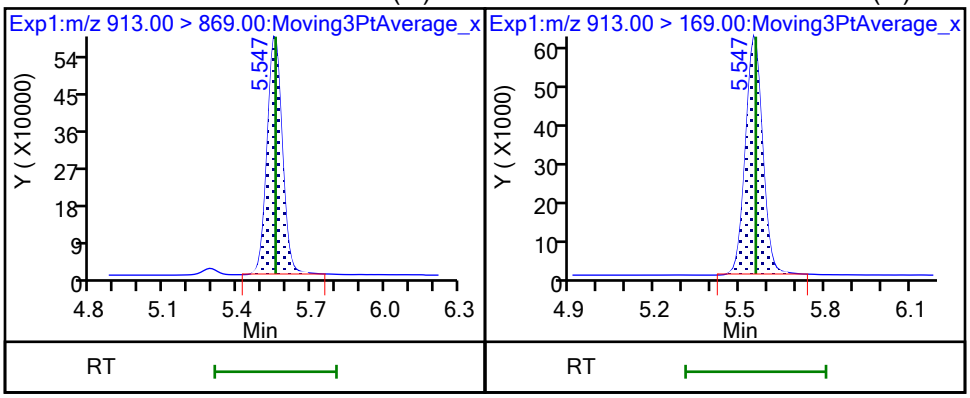
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

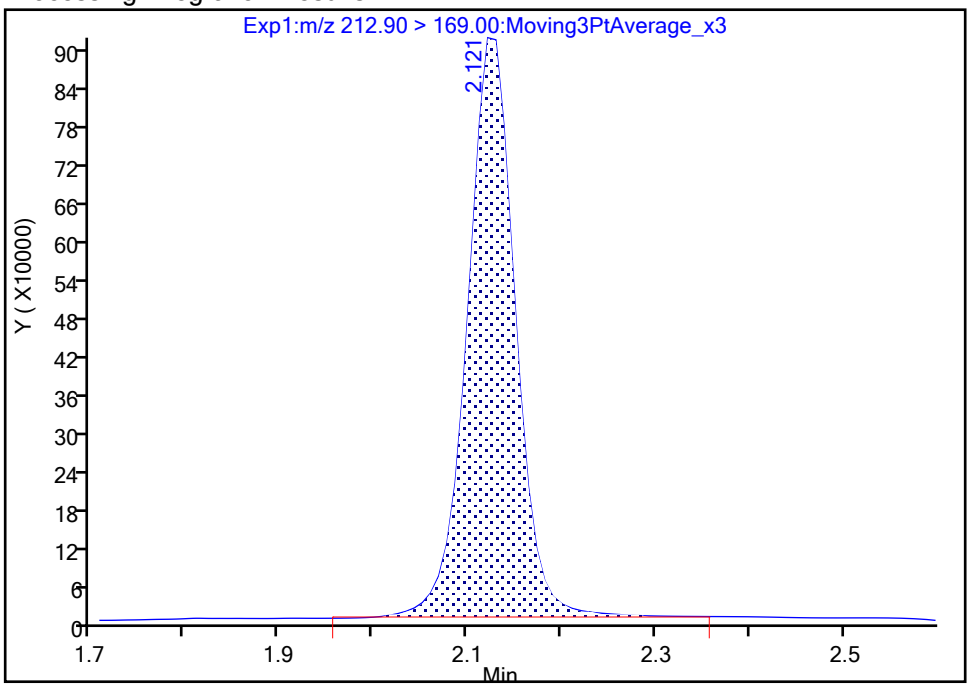
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

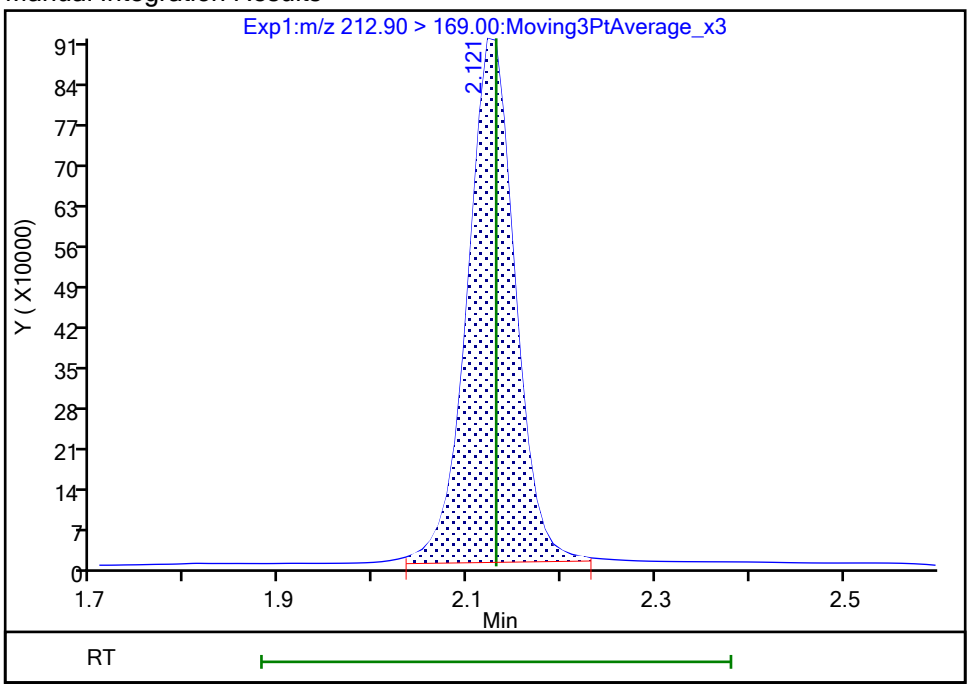
Processing Integration Results

RT: 2.12
Area: 3230397
Amount: 2.066970
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 3198285
Amount: 2.046016
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

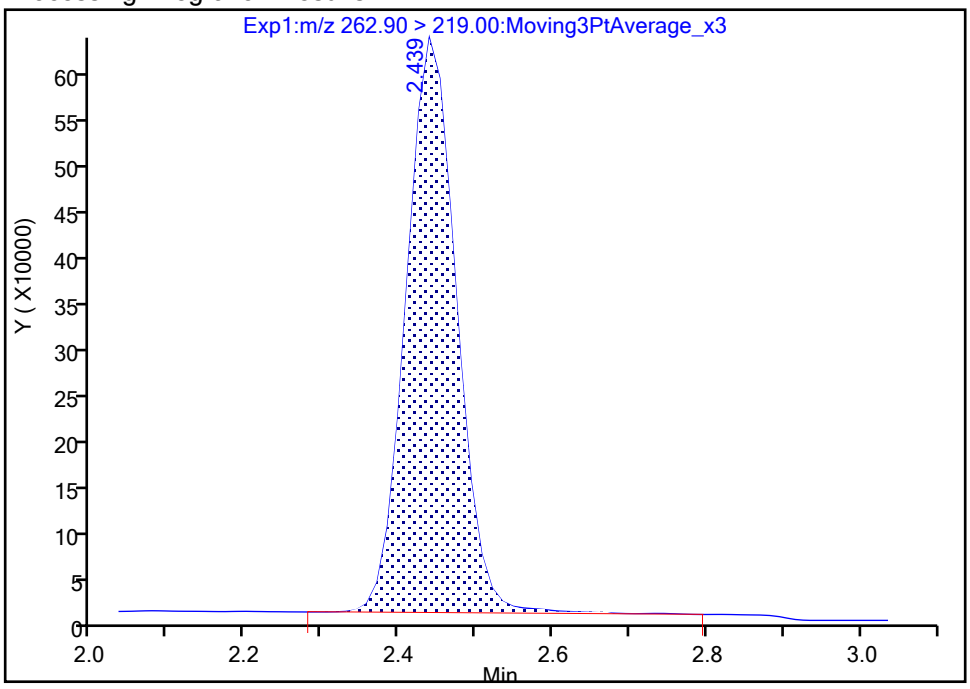
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

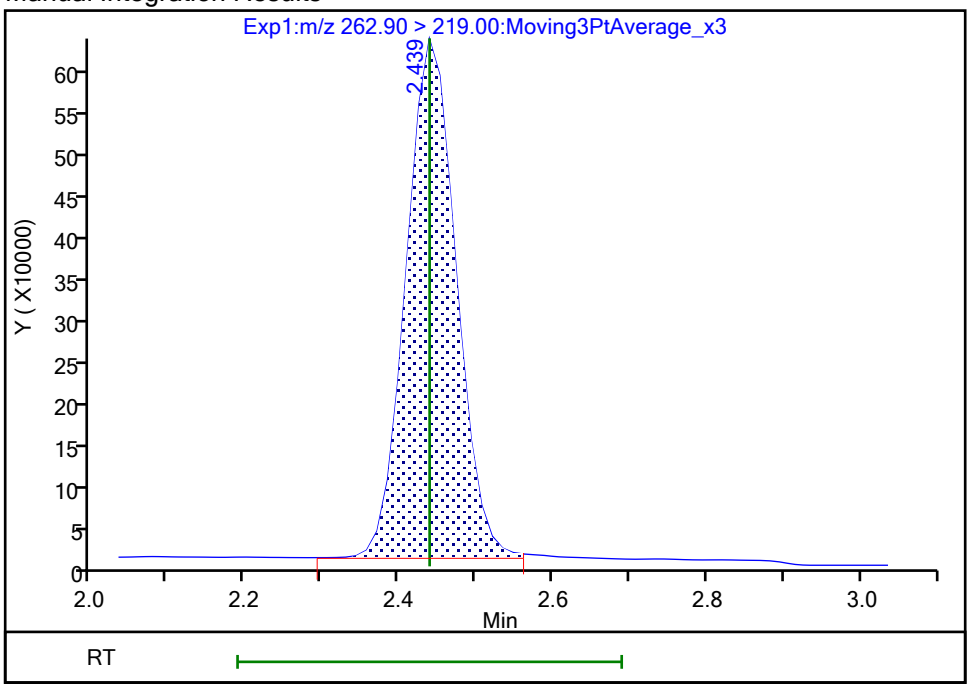
Processing Integration Results

RT: 2.44
Area: 2886085
Amount: 2.127714
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 2859627
Amount: 2.108208
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

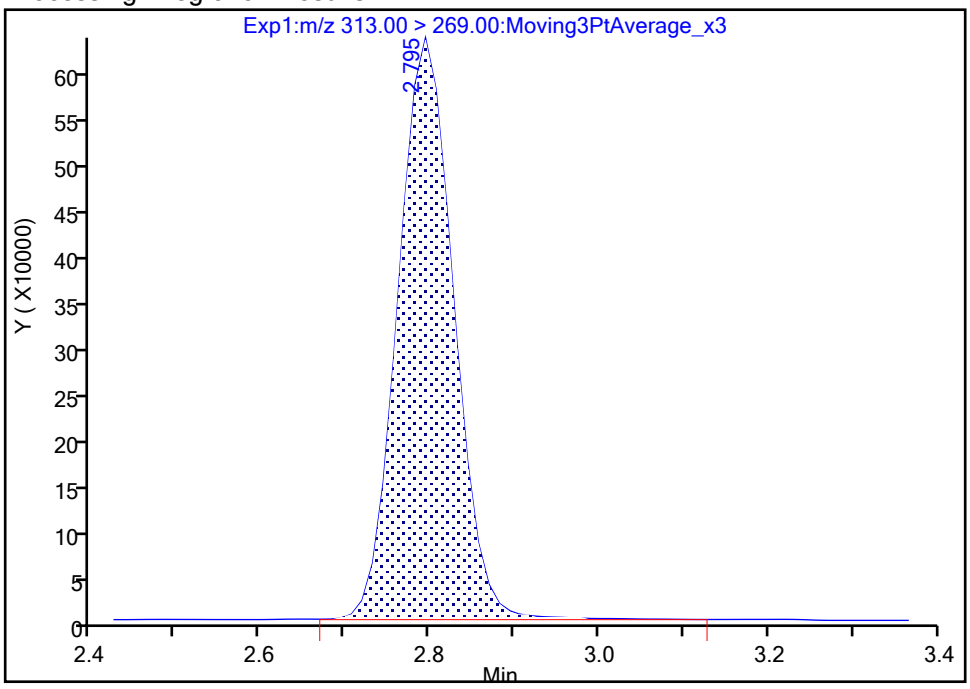
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

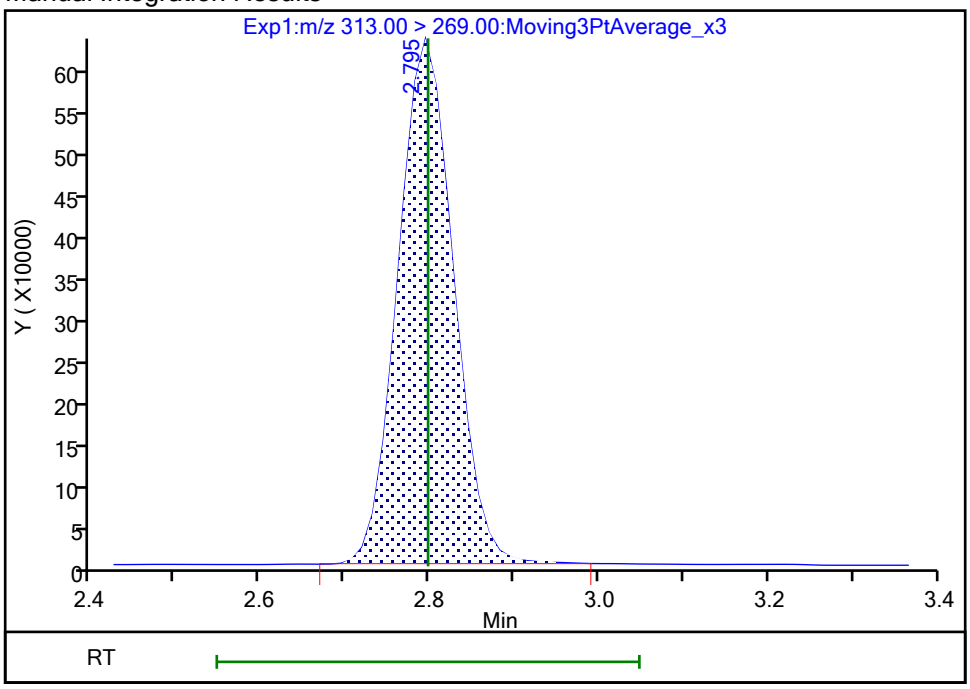
Processing Integration Results

RT: 2.79
Area: 2888543
Amount: 1.881488
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 2874838
Amount: 1.872561
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

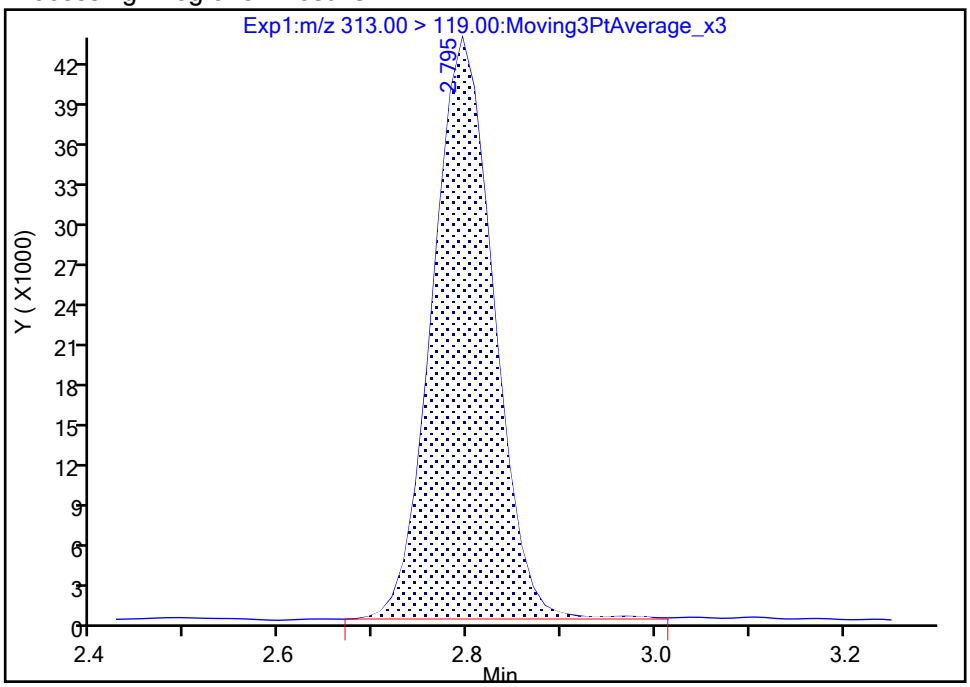
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

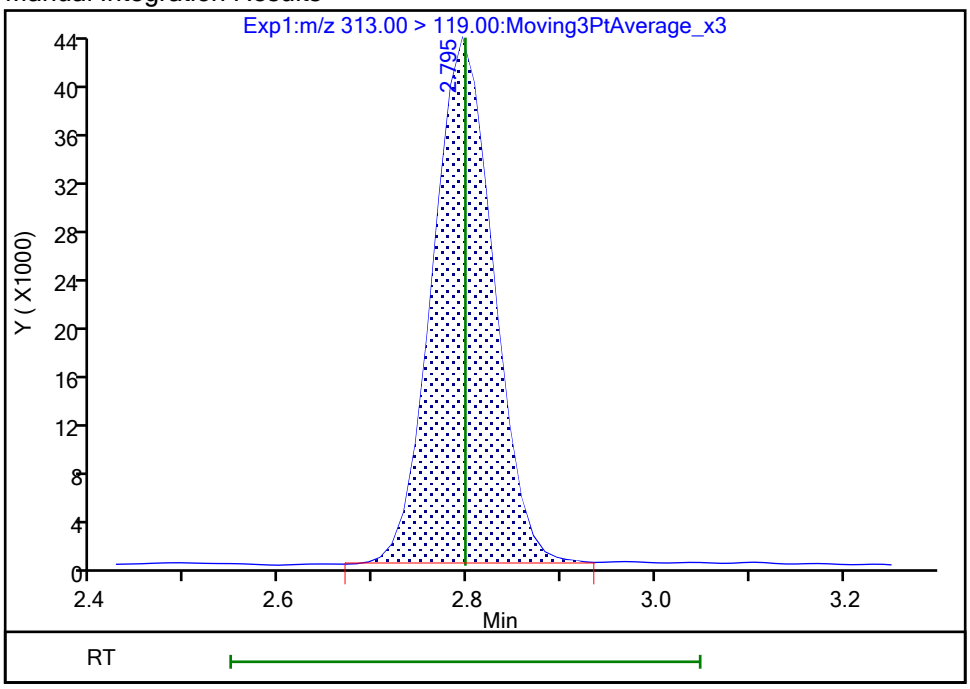
Processing Integration Results

RT: 2.79
Area: 195008
Amount: 1.881488
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 194108
Amount: 1.872561
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

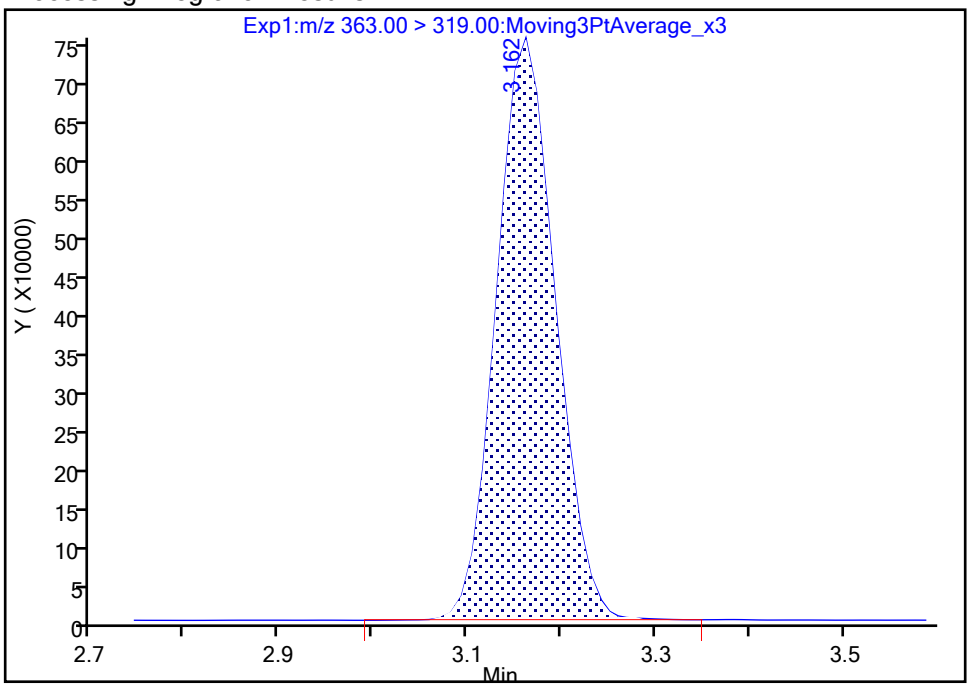
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

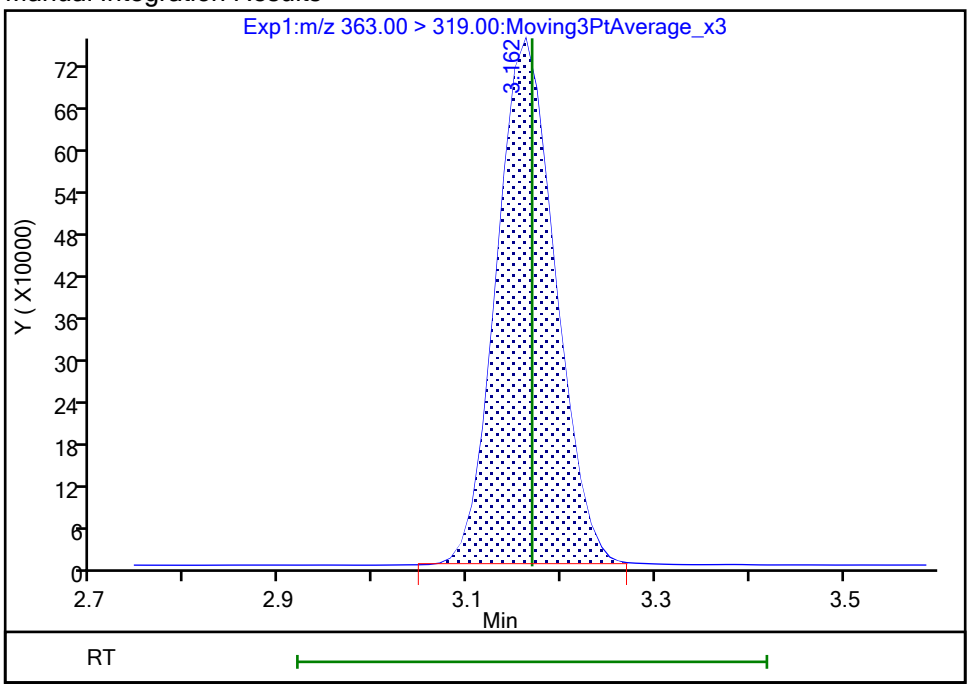
Processing Integration Results

RT: 3.16
Area: 3282878
Amount: 1.983568
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 3272645
Amount: 1.977385
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:02:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

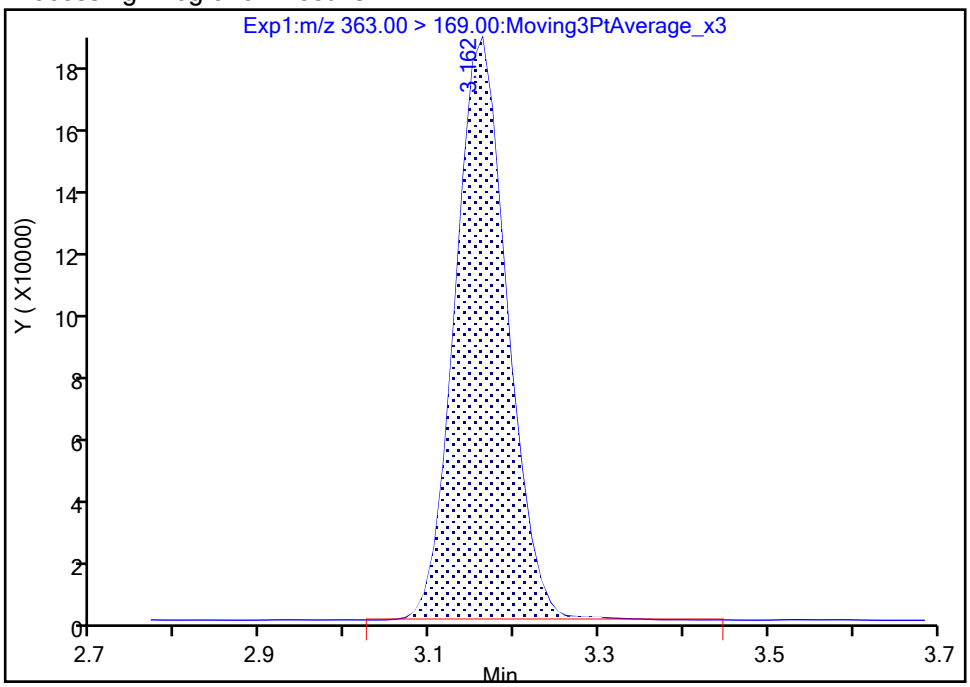
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

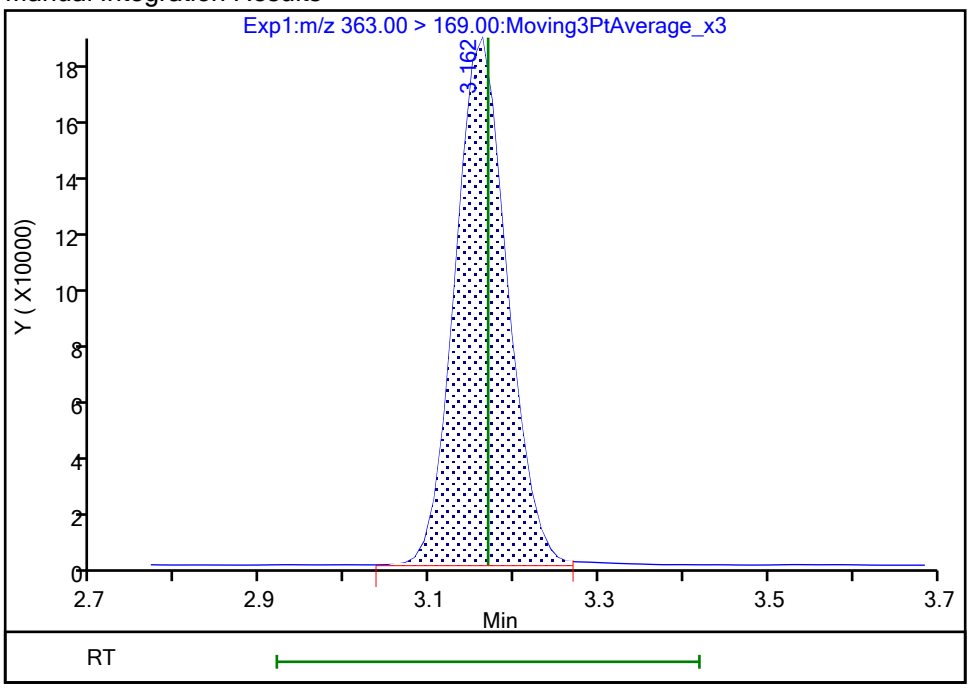
Processing Integration Results

RT: 3.16
Area: 802038
Amount: 1.983568
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 798193
Amount: 1.977385
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:02:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

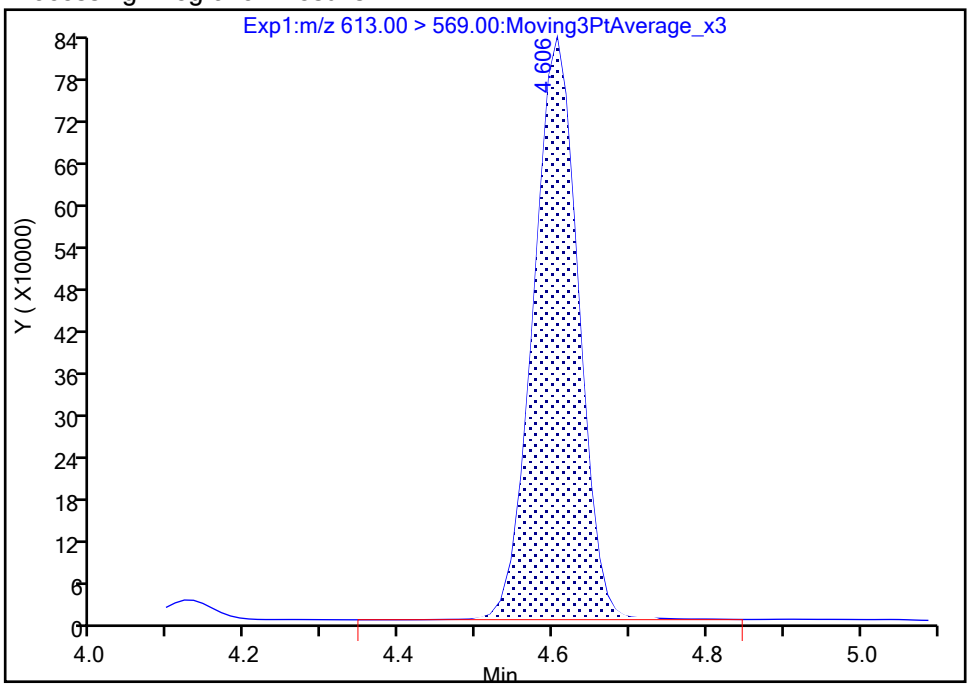
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

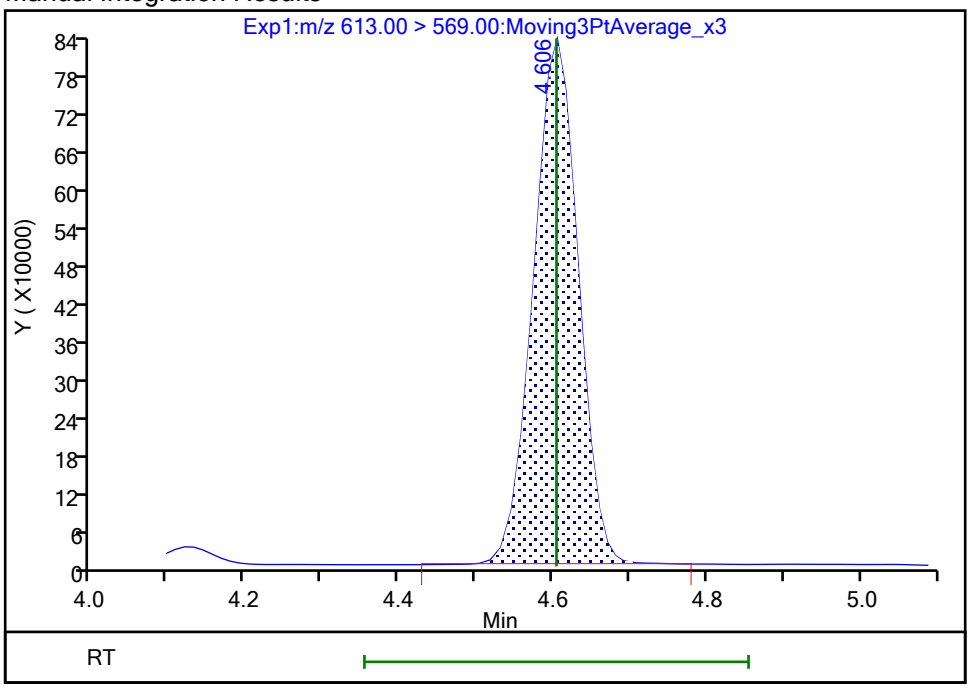
Processing Integration Results

RT: 4.61
Area: 3395142
Amount: 2.061051
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 3379196
Amount: 2.051371
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

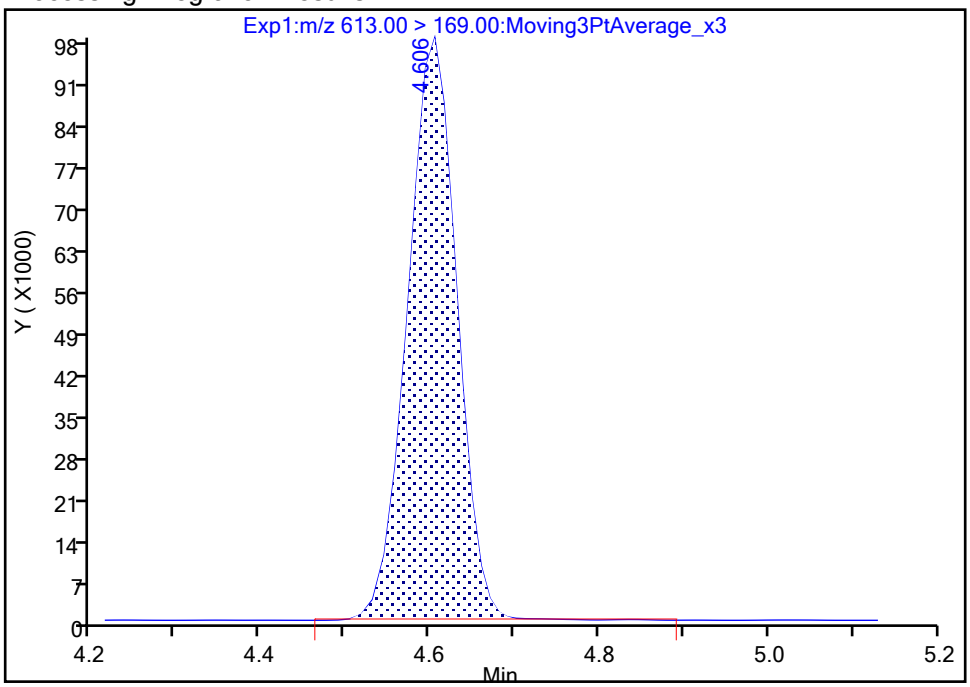
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

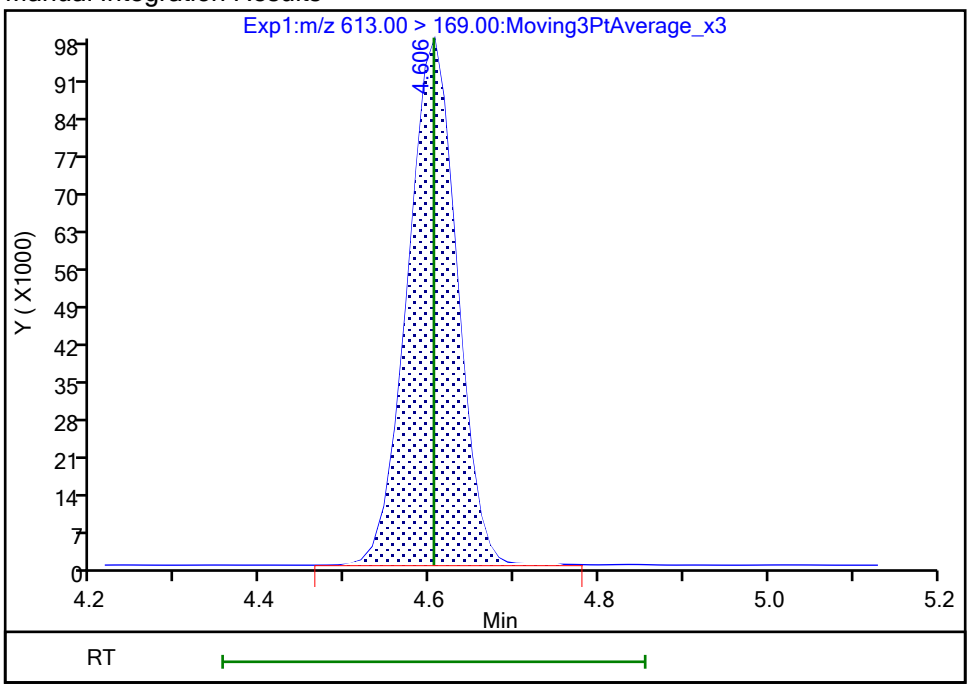
Processing Integration Results

RT: 4.61
Area: 400586
Amount: 2.061051
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 399228
Amount: 2.051371
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

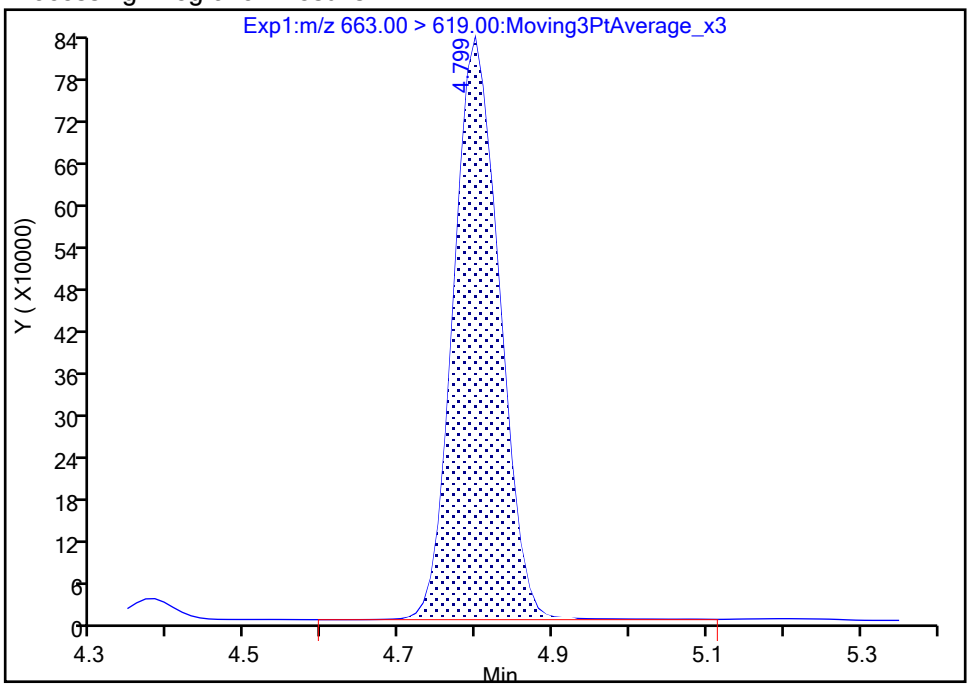
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

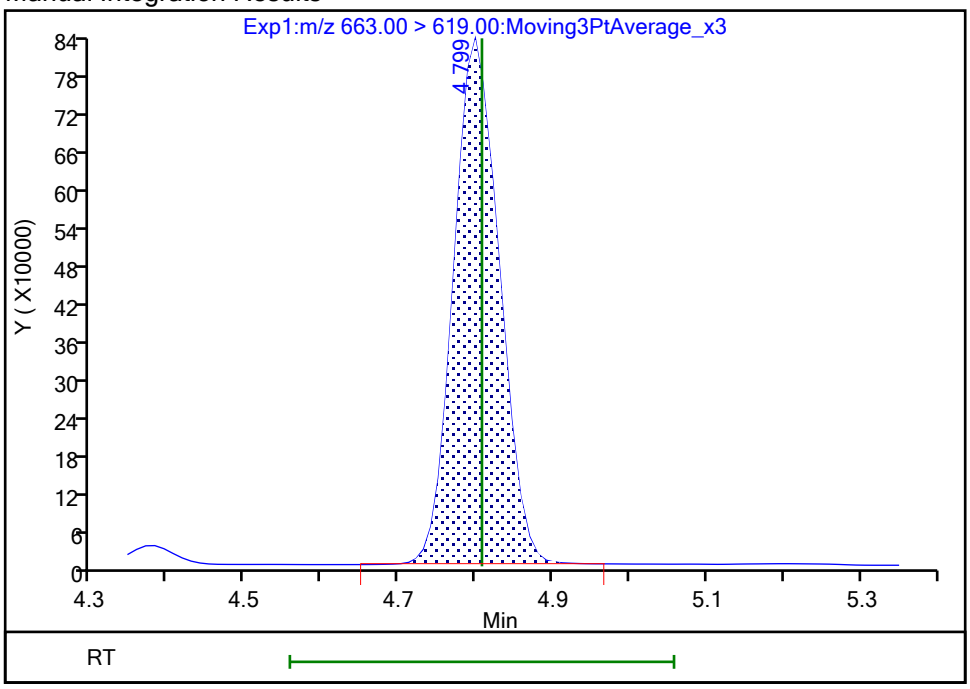
Processing Integration Results

RT: 4.80
Area: 3474096
Amount: 2.006496
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 3423888
Amount: 1.977498
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

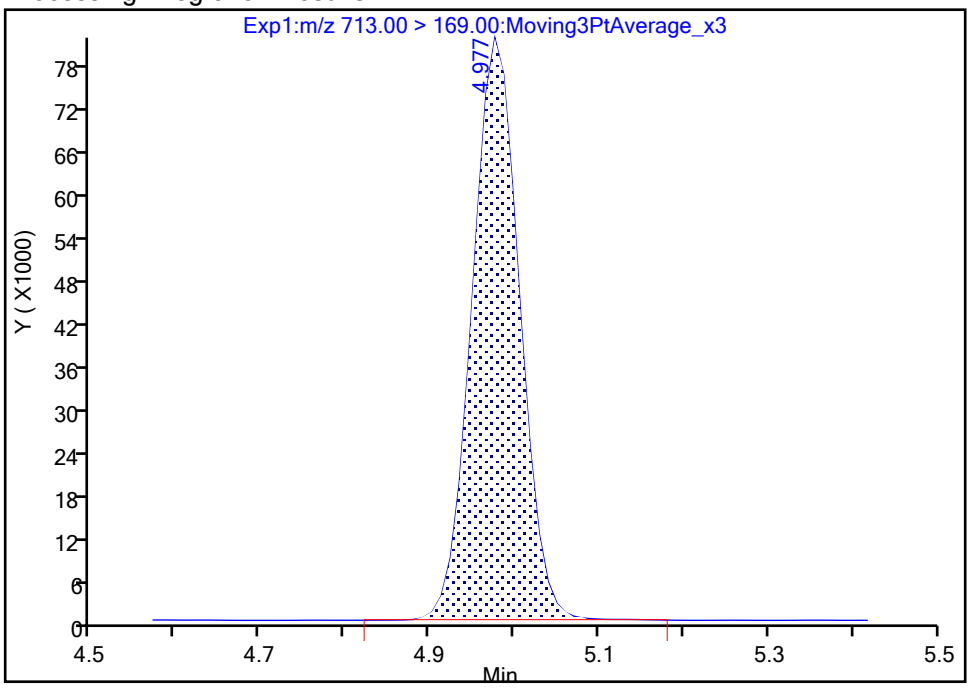
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

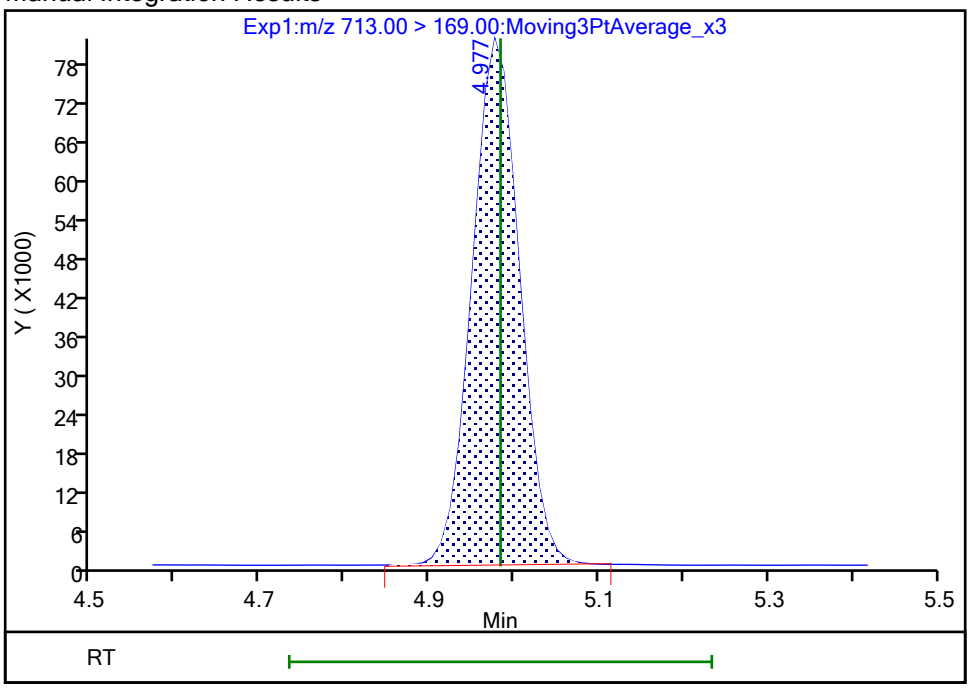
Processing Integration Results

RT: 4.98
Area: 318580
Amount: 1.935065
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 317406
Amount: 1.927934
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:04:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

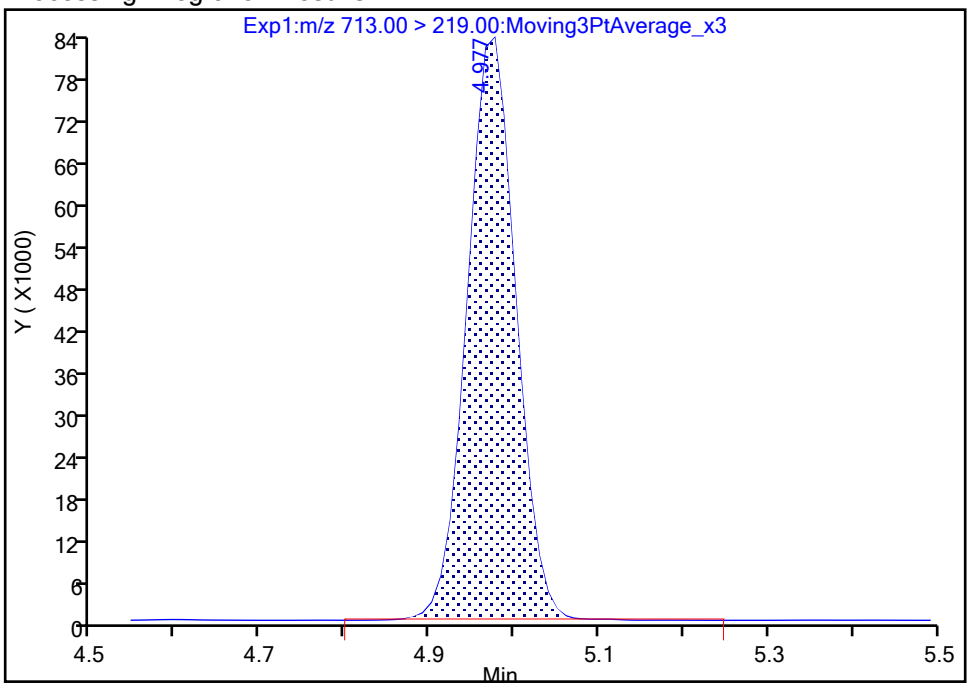
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

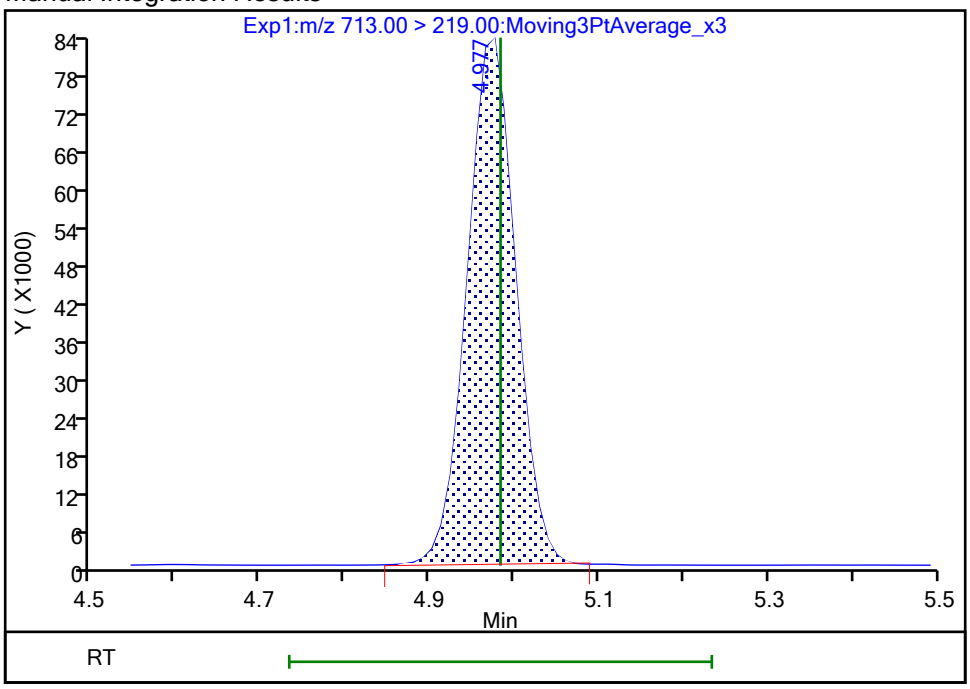
Processing Integration Results

RT: 4.98
Area: 334553
Amount: 1.935065
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 332441
Amount: 1.927934
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:04:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

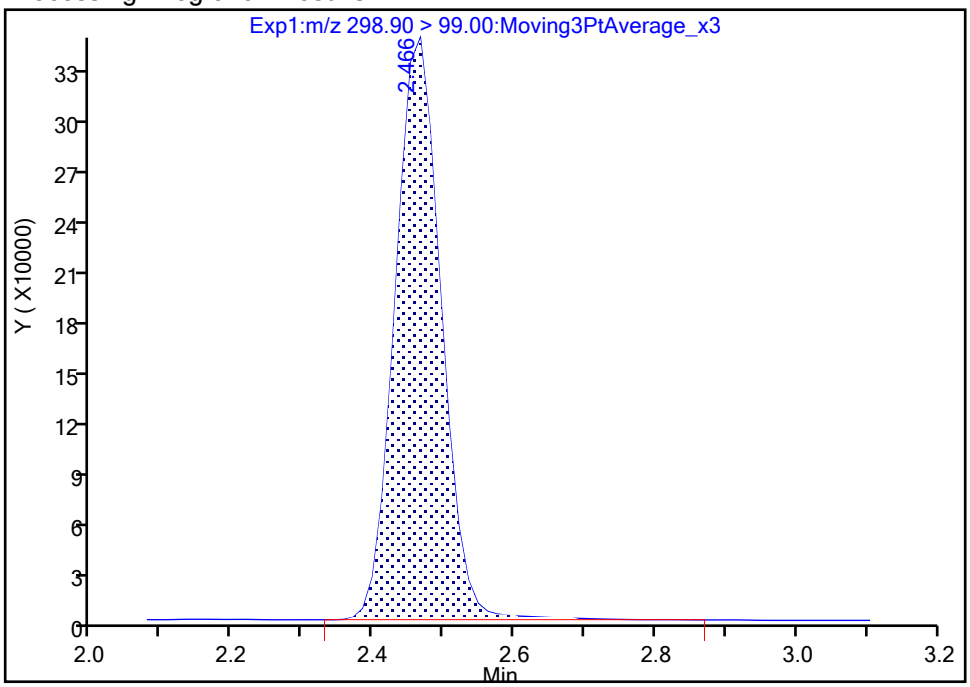
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

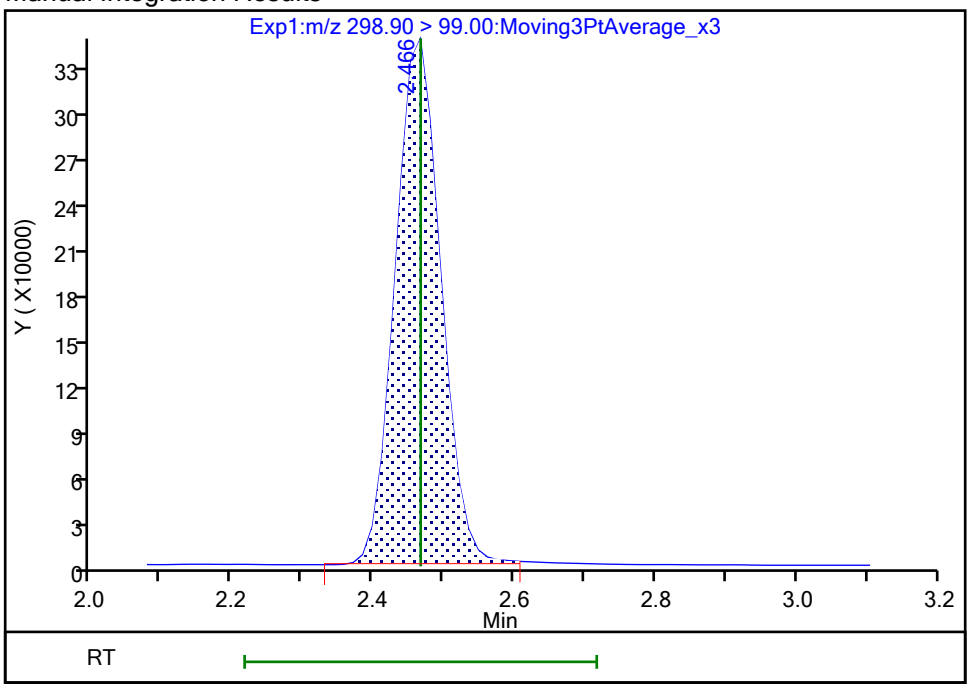
Processing Integration Results

RT: 2.47
Area: 1562449
Amount: 1.958091
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1552196
Amount: 1.946753
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

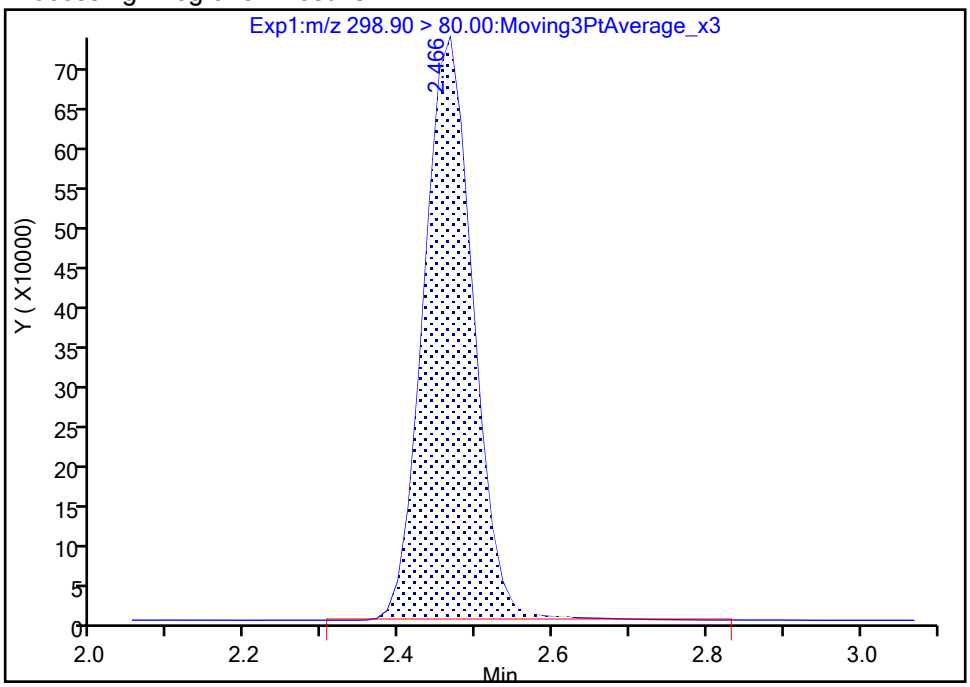
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

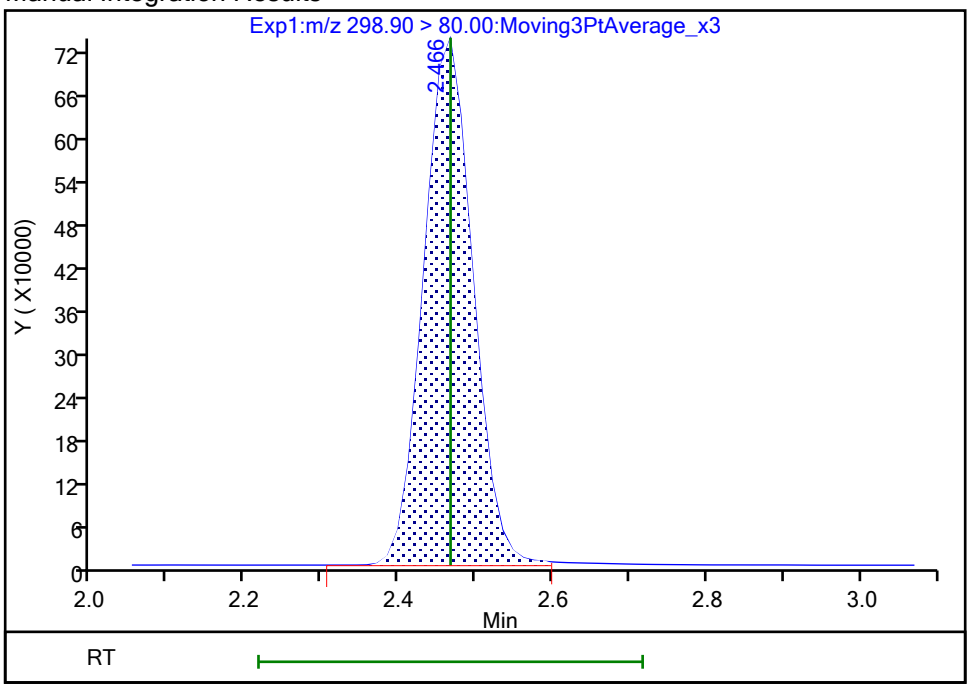
Processing Integration Results

RT: 2.47
Area: 3283007
Amount: 1.958091
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 3263997
Amount: 1.946753
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

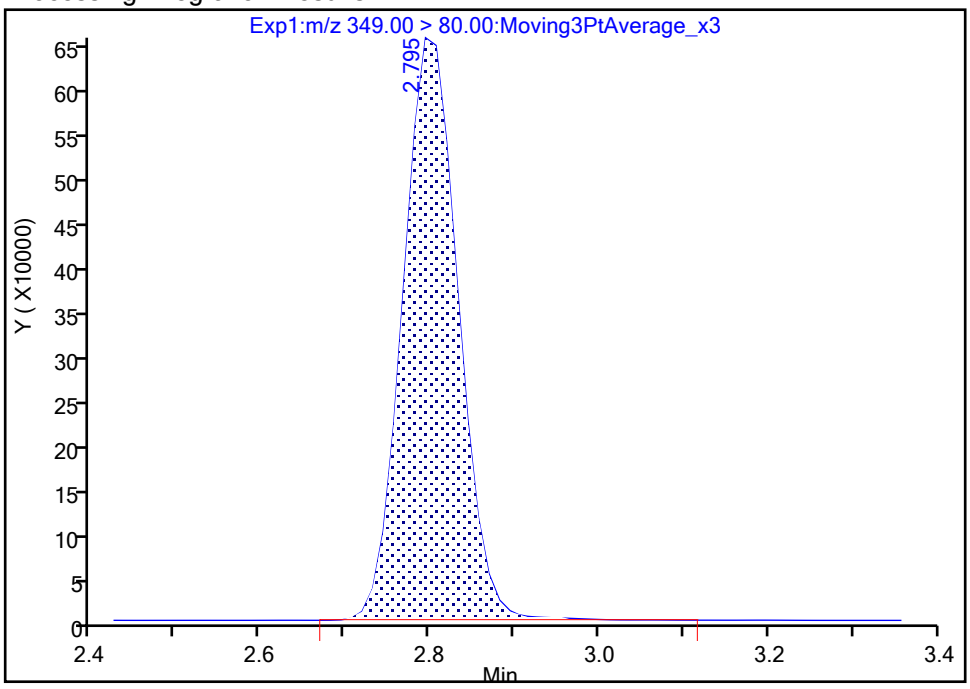
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

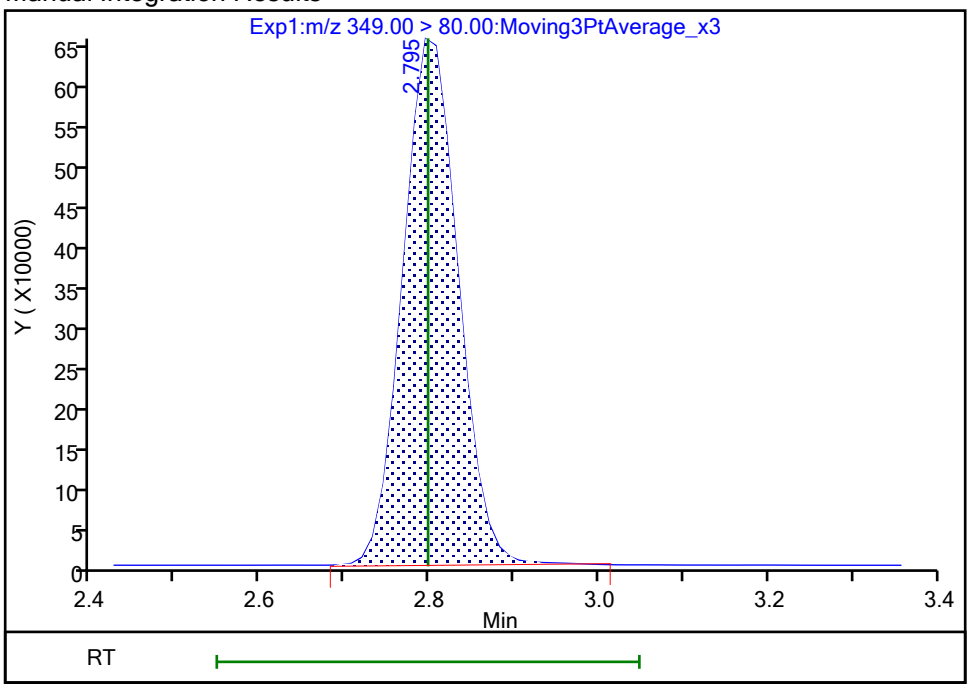
Processing Integration Results

RT: 2.79
Area: 3008975
Amount: 2.041445
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 3002285
Amount: 2.036906
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

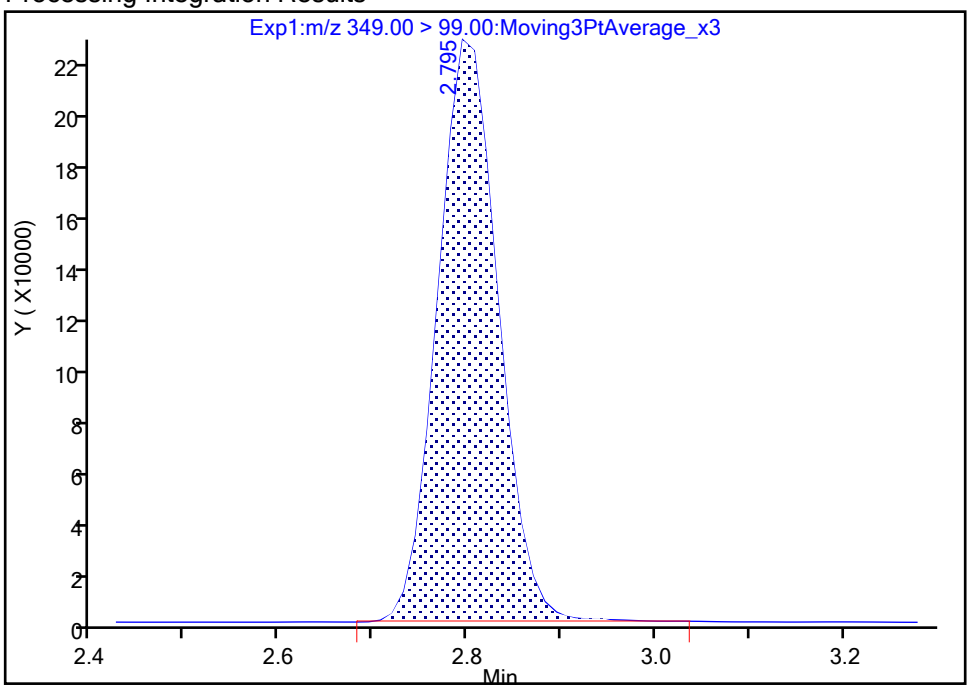
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

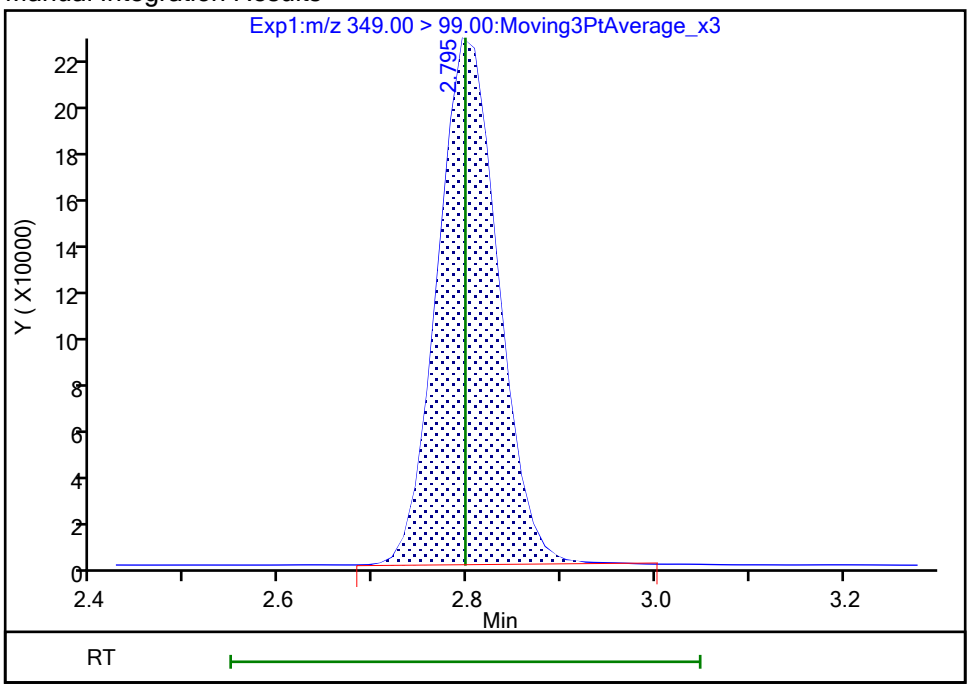
Processing Integration Results

RT: 2.79
Area: 1007902
Amount: 2.041445
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1007243
Amount: 2.036906
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

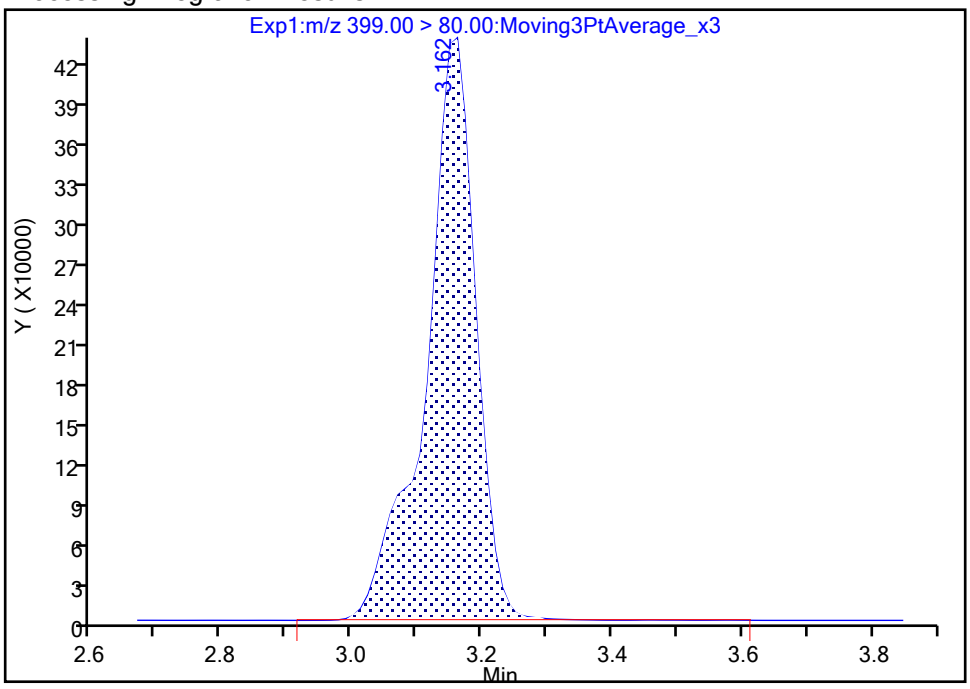
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

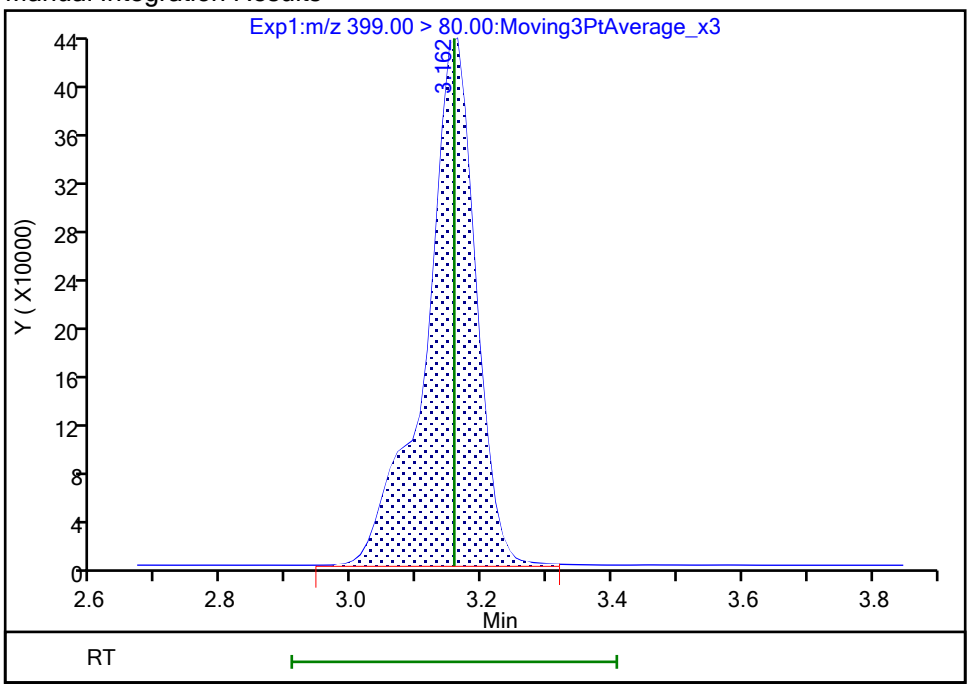
Processing Integration Results

RT: 3.16
Area: 2286365
Amount: 1.829925
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2282123
Amount: 1.826530
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

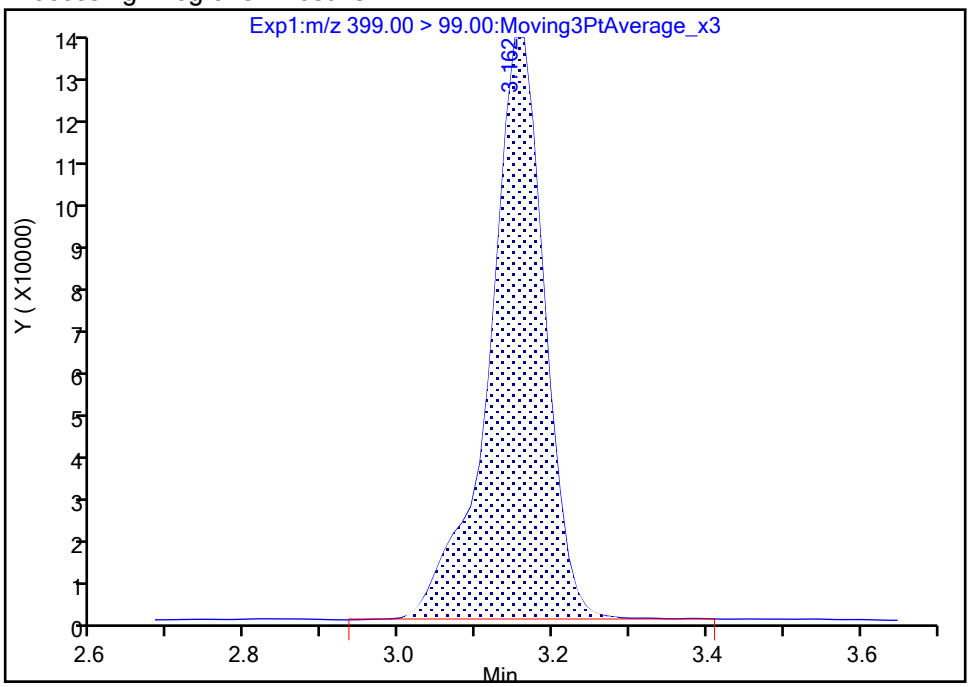
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

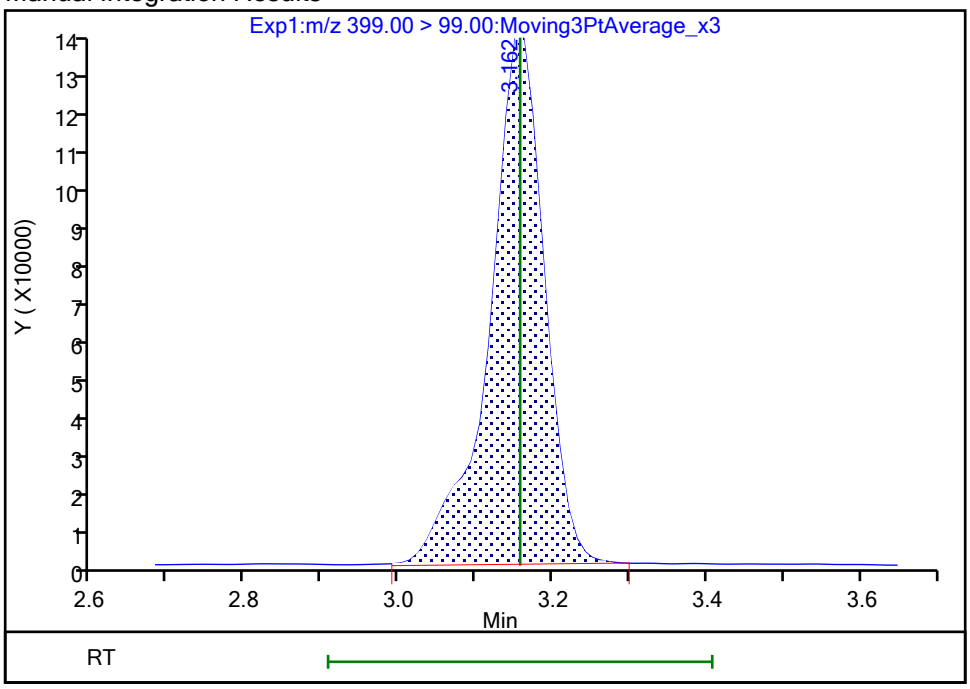
Processing Integration Results

RT: 3.16
Area: 658576
Amount: 1.829925
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 654789
Amount: 1.826530
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:01:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

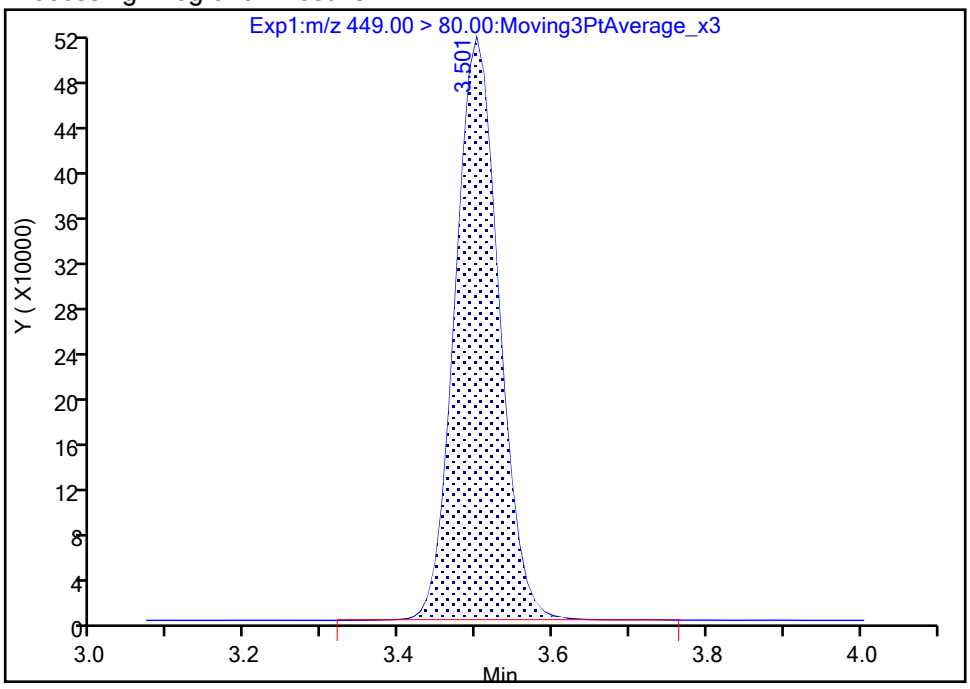
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

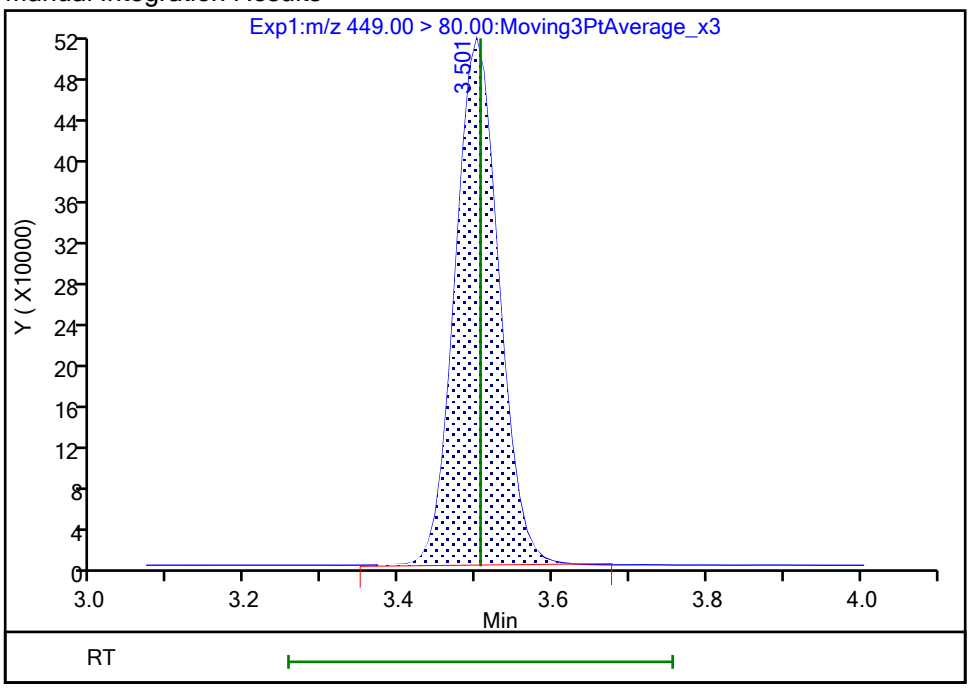
Processing Integration Results

RT: 3.50
Area: 2044571
Amount: 1.951465
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 2039712
Amount: 1.946827
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:02:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

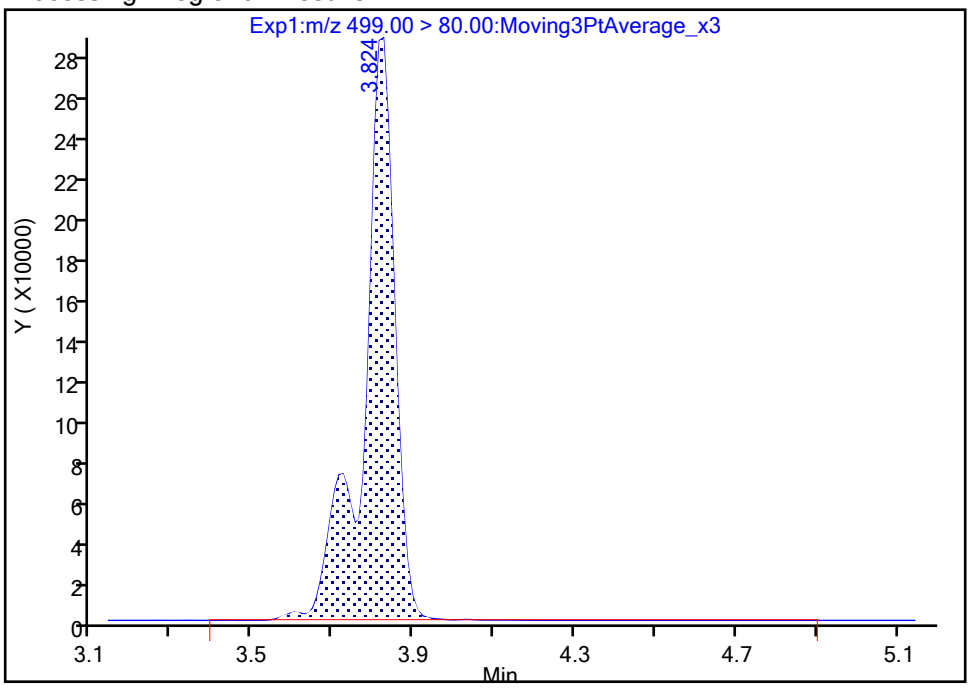
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

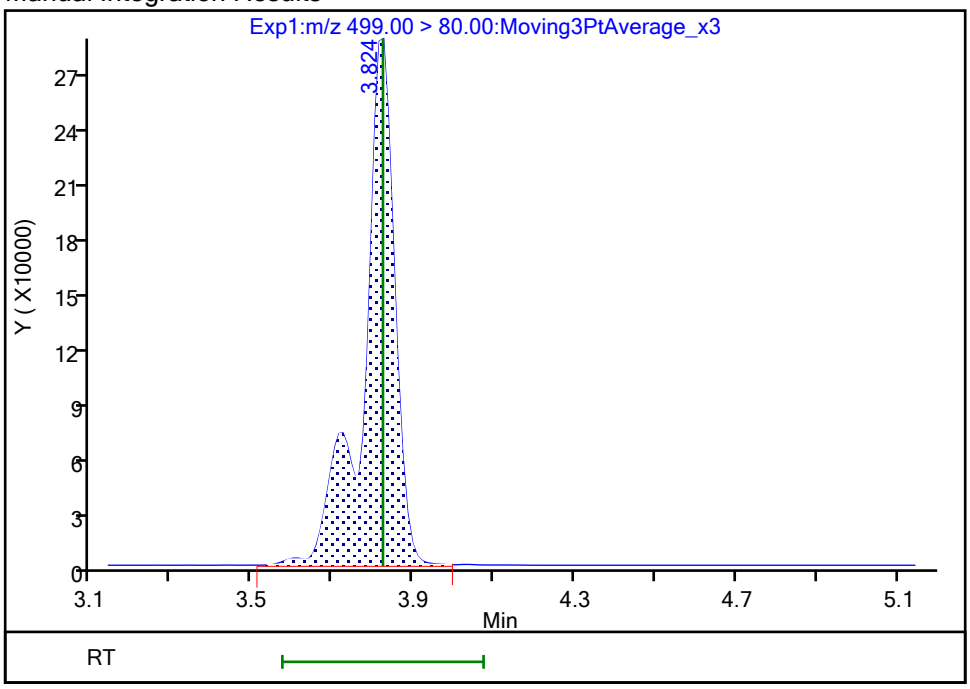
Processing Integration Results

RT: 3.82
Area: 1542485
Amount: 1.824137
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1537572
Amount: 1.818327
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:02:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

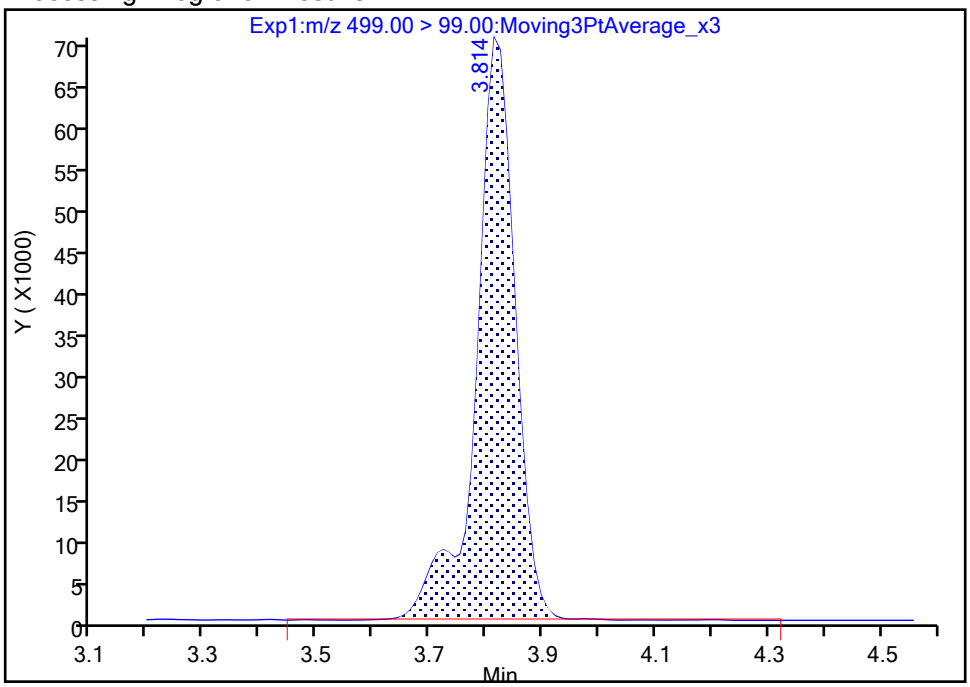
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

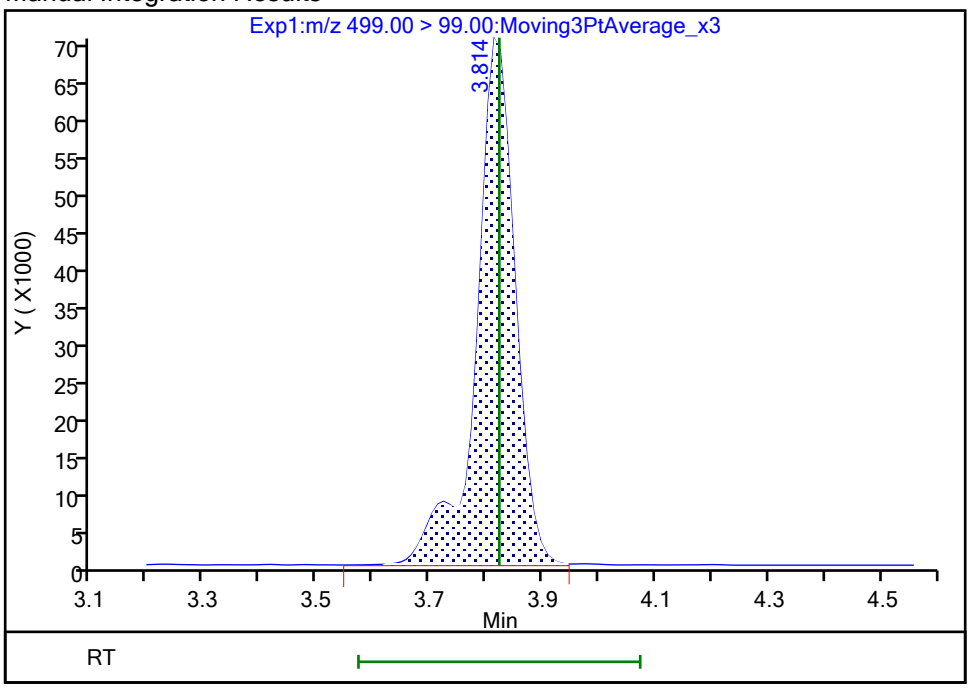
Processing Integration Results

RT: 3.81
Area: 341296
Amount: 1.824137
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 339156
Amount: 1.818327
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

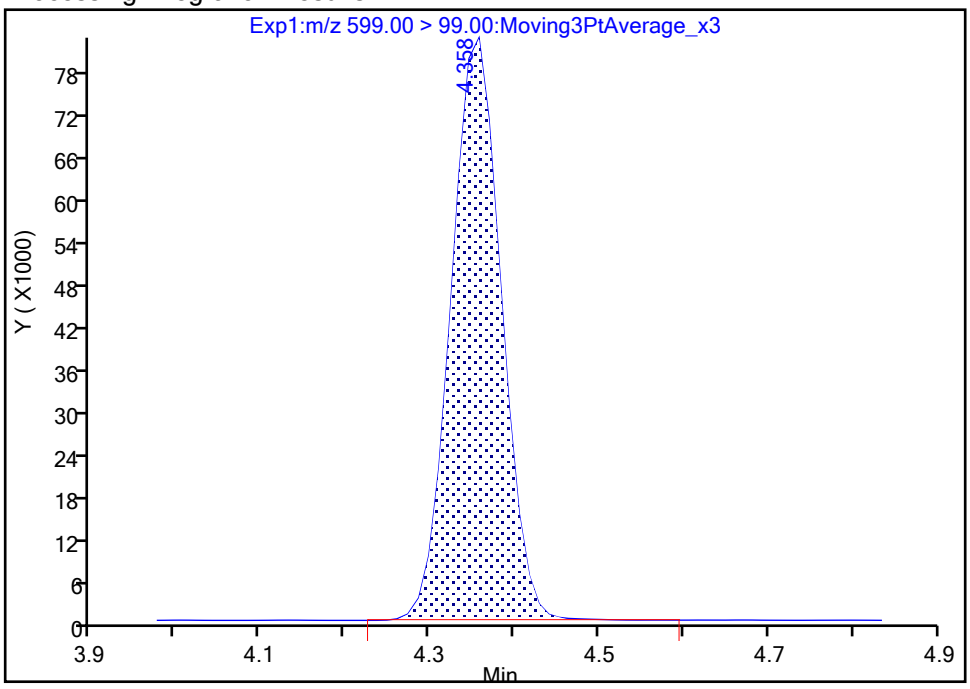
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

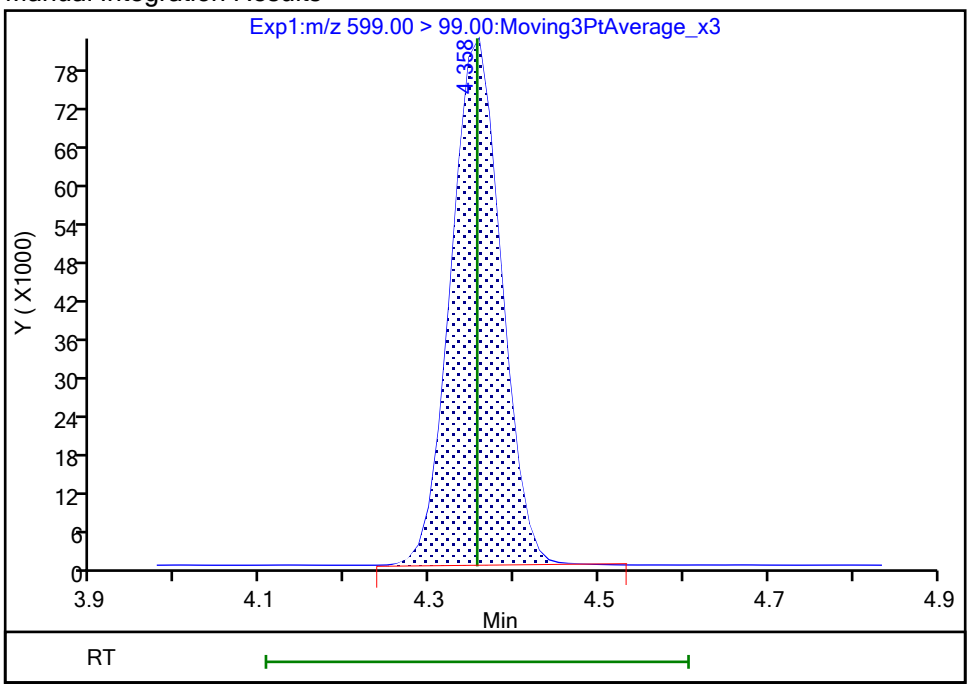
Processing Integration Results

RT: 4.36
Area: 340814
Amount: 1.828448
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 340353
Amount: 1.828448
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

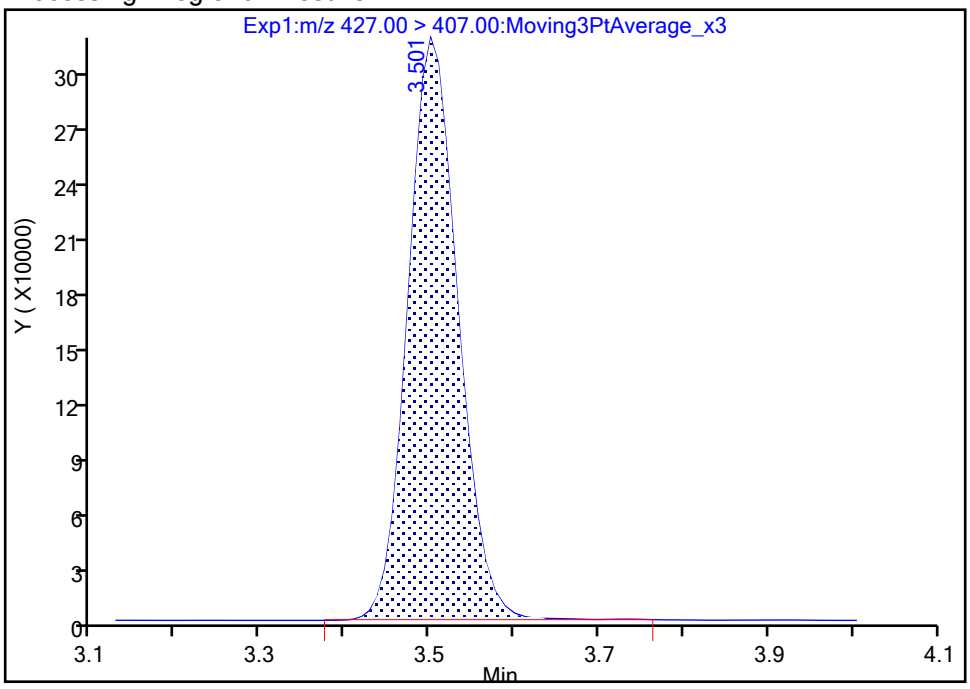
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

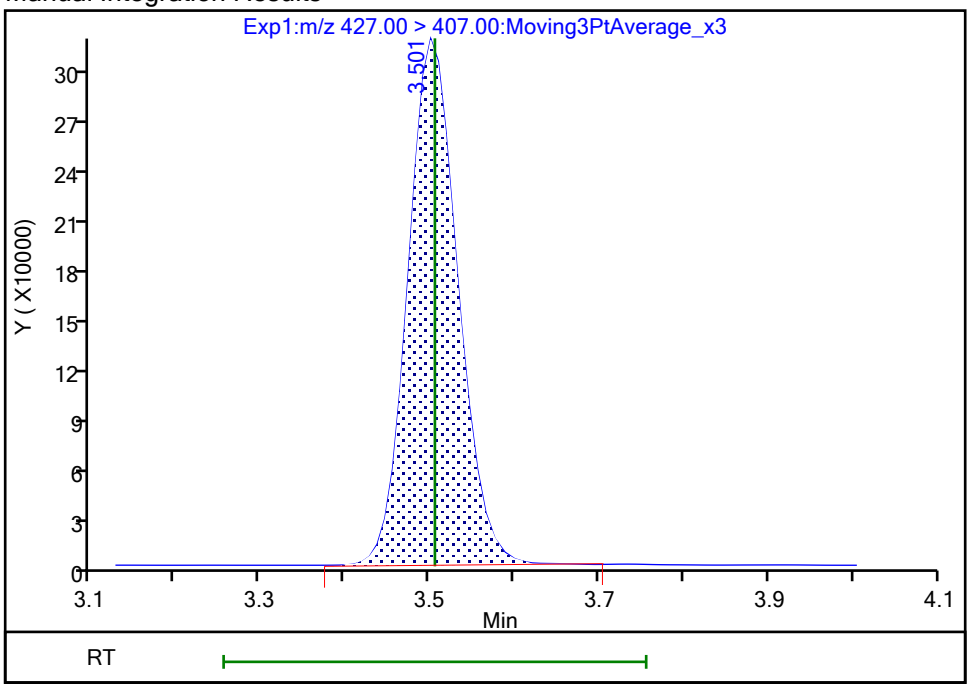
Processing Integration Results

RT: 3.50
Area: 1289310
Amount: 2.123093
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 1286975
Amount: 2.119248
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:02:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

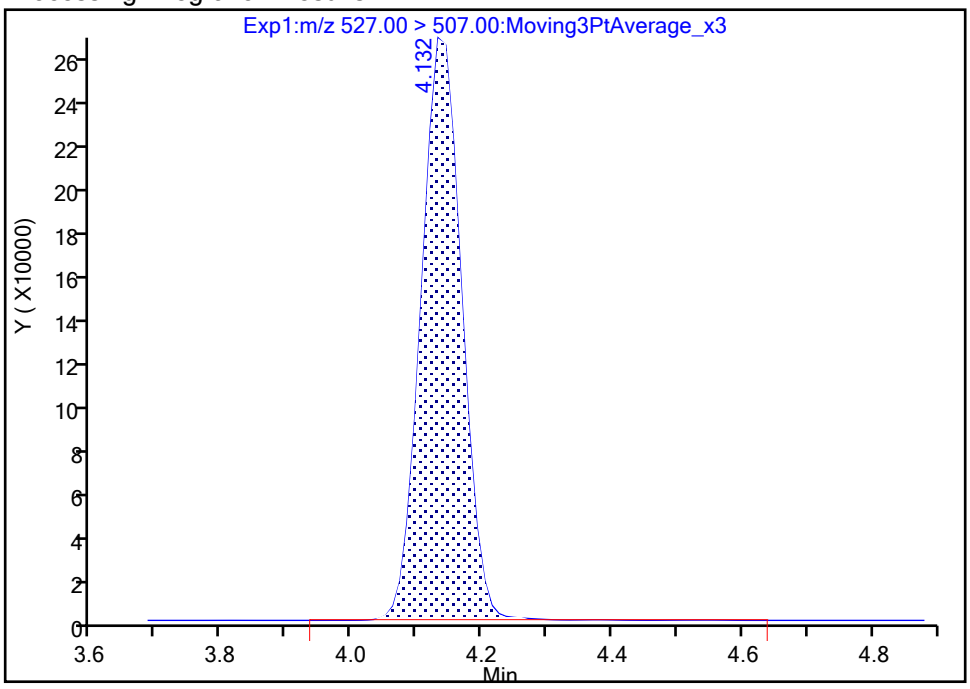
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d
Injection Date: 21-Oct-2023 00:33:45 Instrument ID: LC812
Lims ID: LCS 200-196590/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

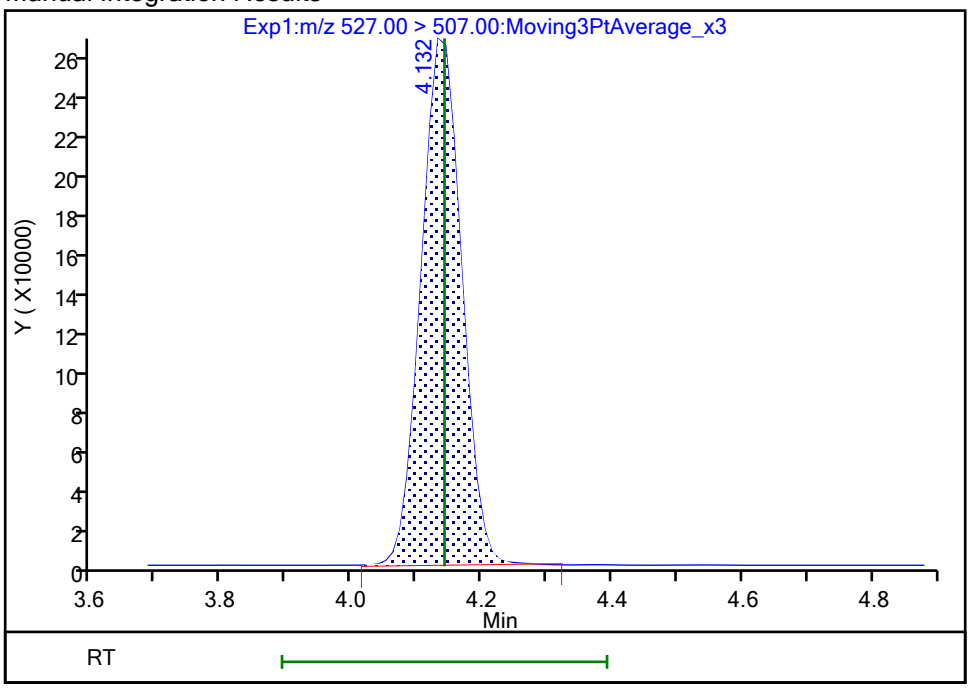
Processing Integration Results

RT: 4.13
Area: 1139718
Amount: 2.195167
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 1135310
Amount: 2.186677
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

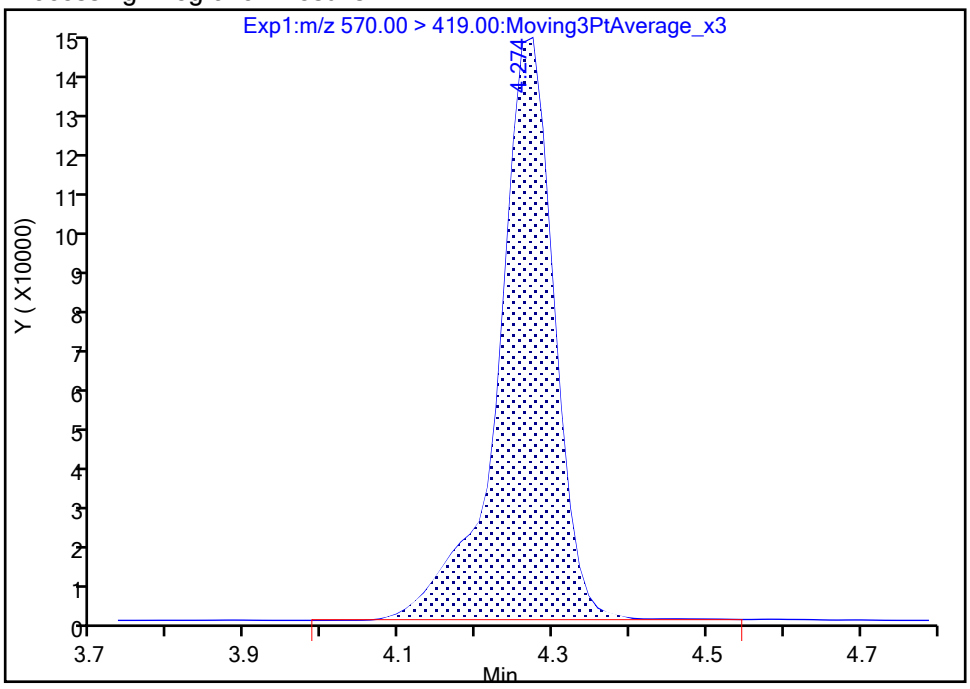
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

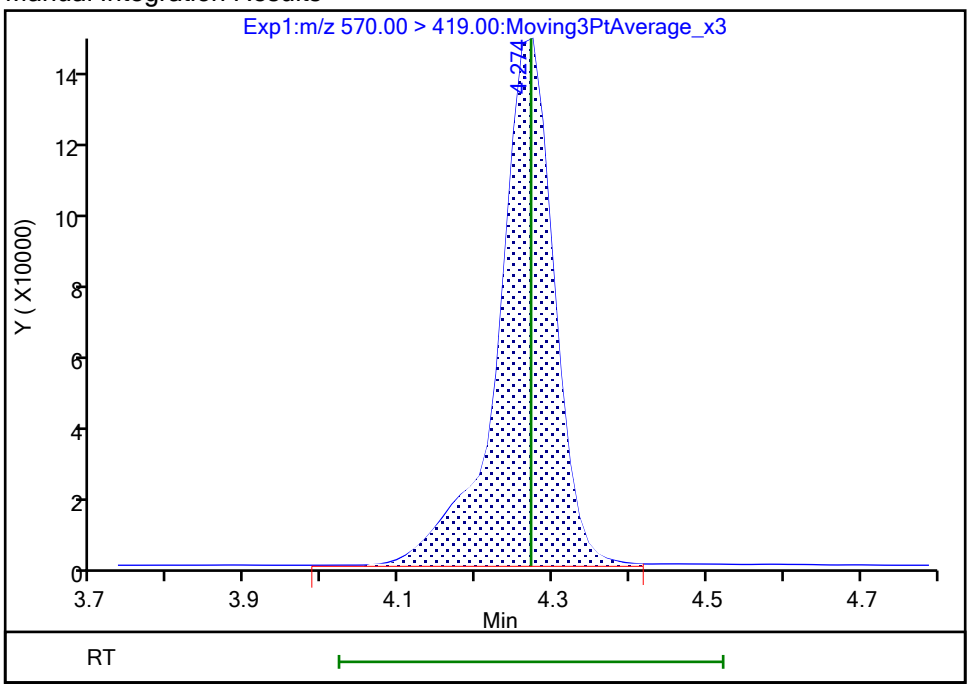
Processing Integration Results

RT: 4.27
Area: 731342
Amount: 1.945319
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 728839
Amount: 1.938661
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

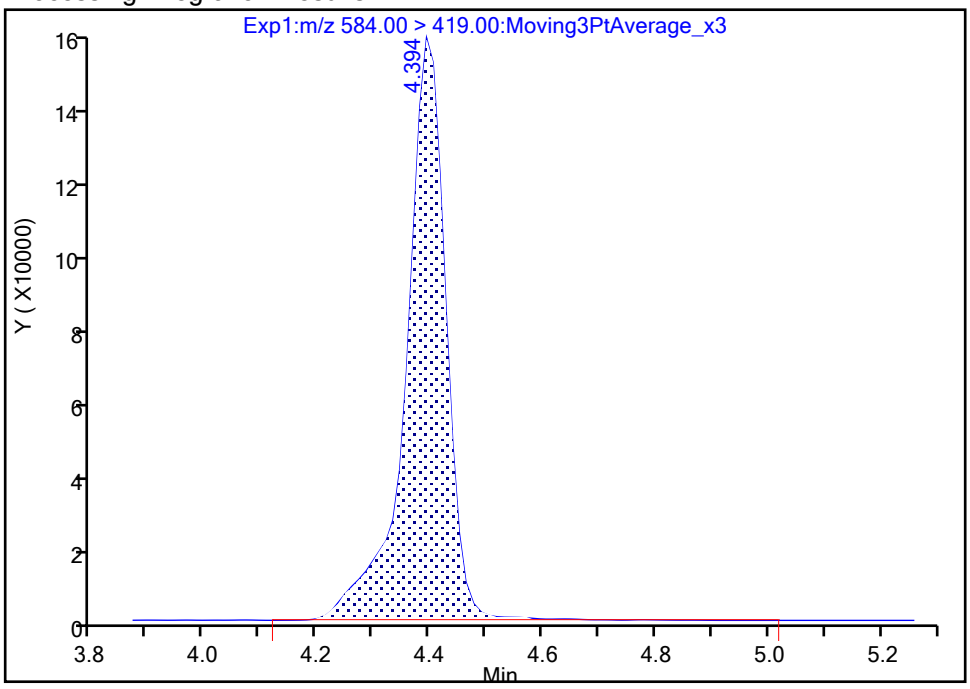
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

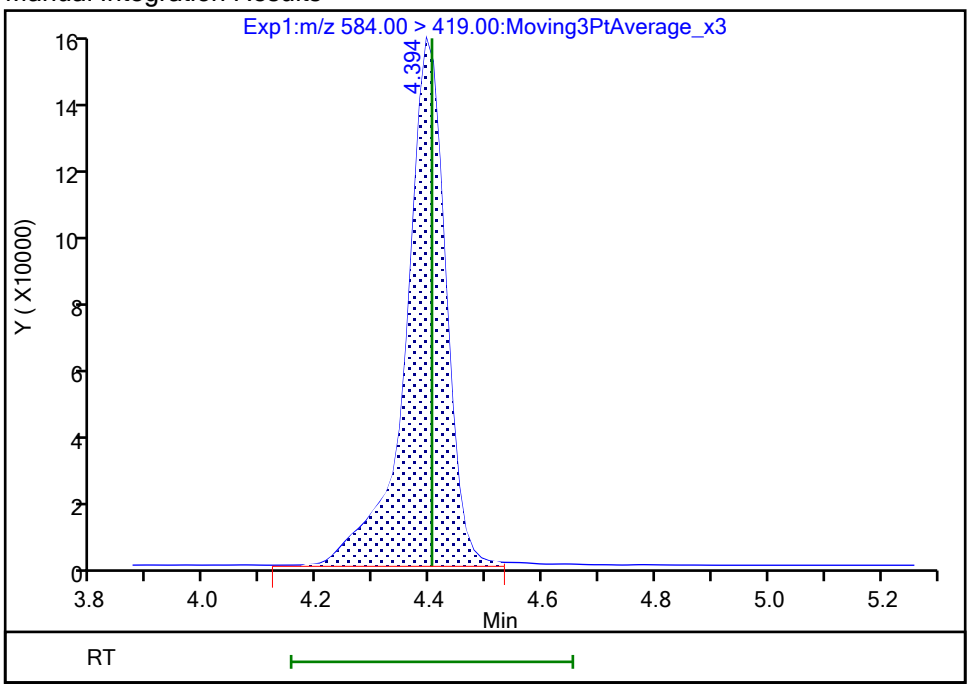
Processing Integration Results

RT: 4.39
Area: 773257
Amount: 2.074130
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 767599
Amount: 2.058954
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:03:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

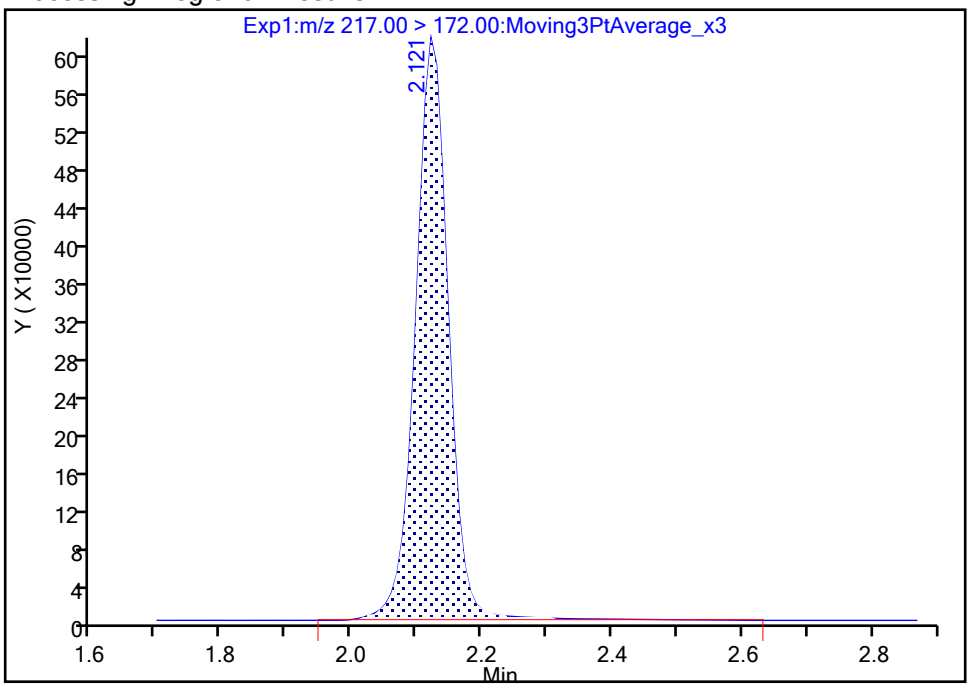
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

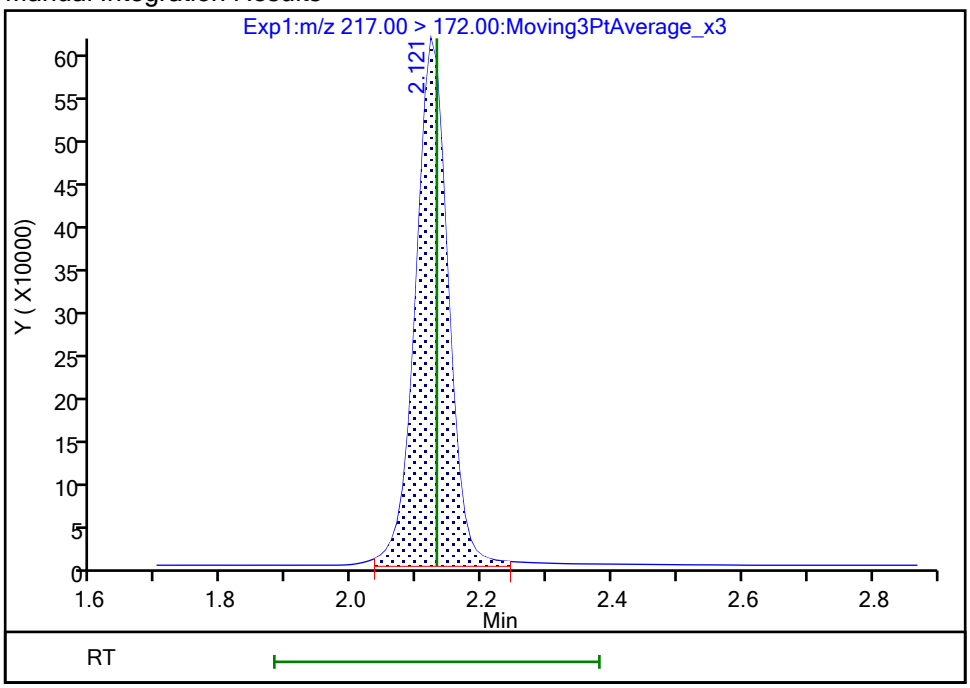
Processing Integration Results

RT: 2.12
Area: 2155535
Amount: 1.305667
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2118501
Amount: 1.283235
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:00:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

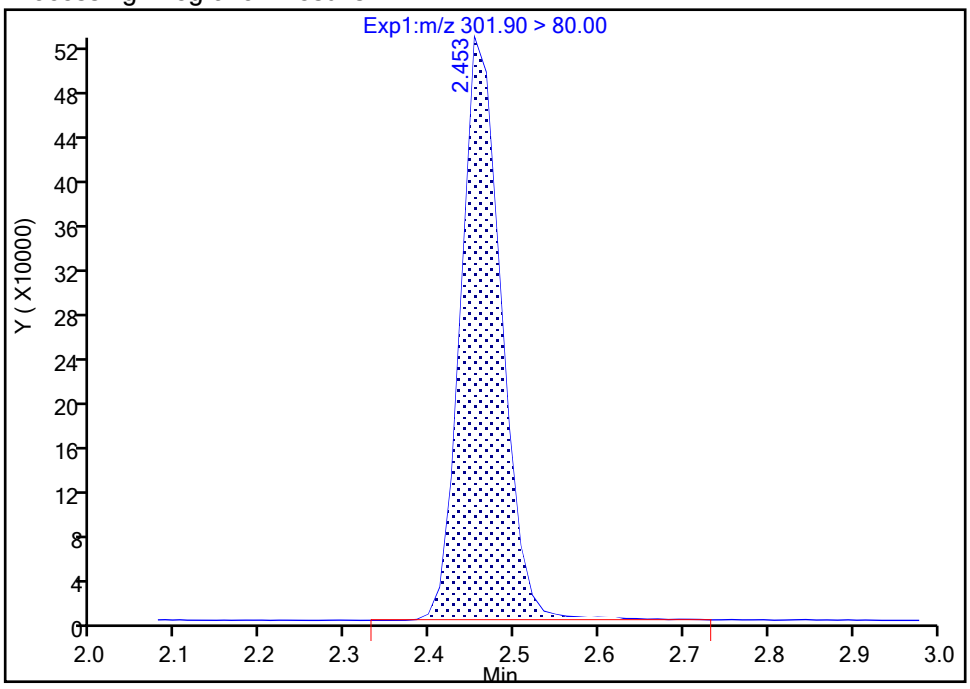
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

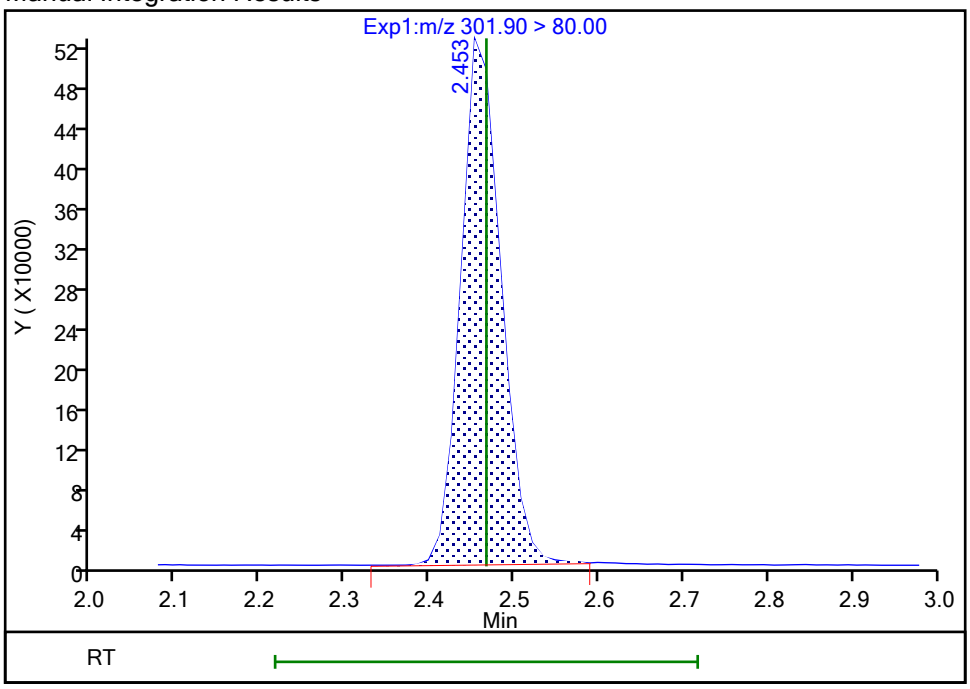
Processing Integration Results

RT: 2.45
Area: 1754399
Amount: 1.011993
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1745081
Amount: 1.006618
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:00:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

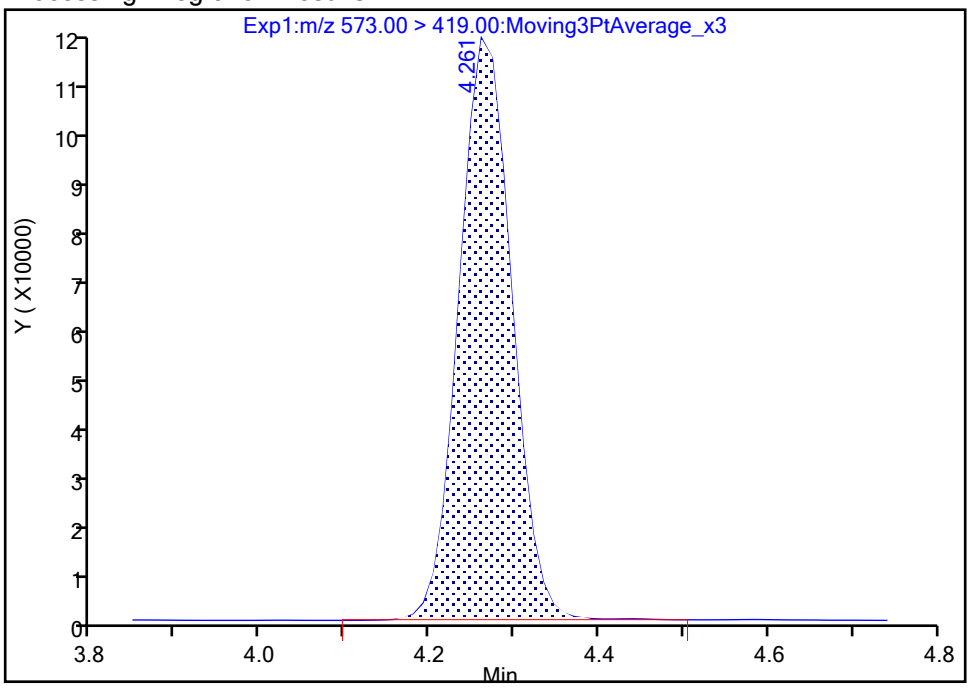
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

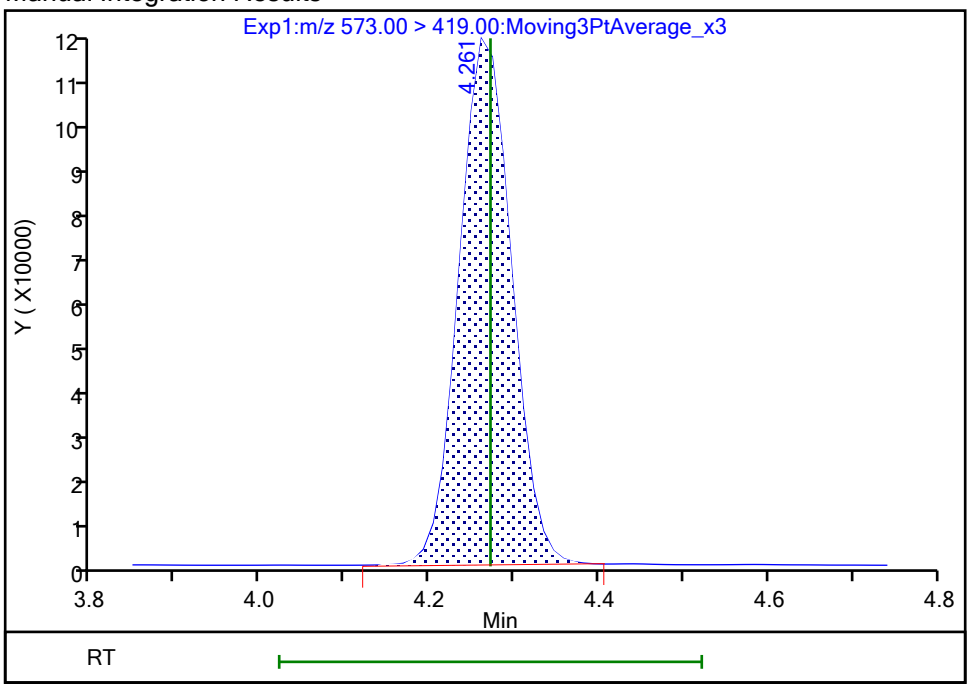
Processing Integration Results

RT: 4.26
Area: 520321
Amount: 1.179360
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 517889
Amount: 1.173848
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:00:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

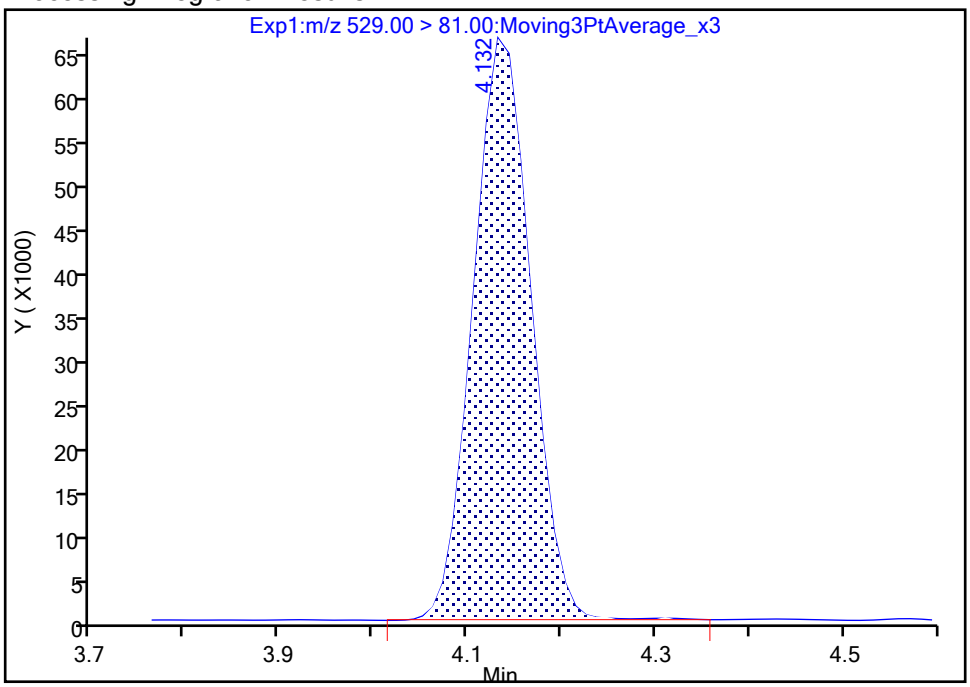
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C03.d				
Injection Date:	21-Oct-2023 00:33:45	Instrument ID:	LC812		
Lims ID:	LCS 200-196590/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

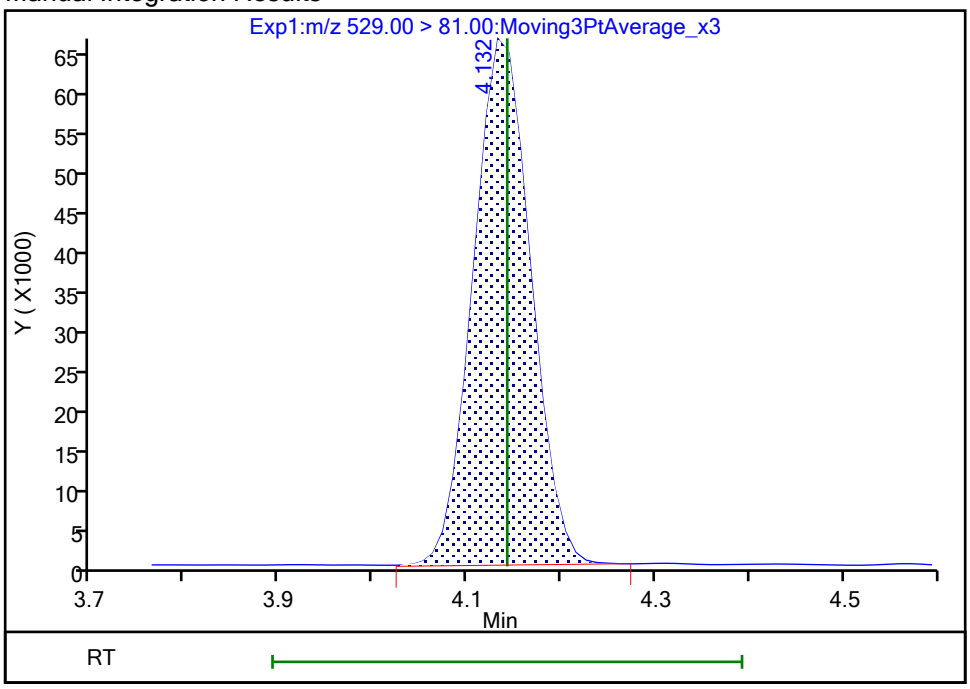
Processing Integration Results

RT: 4.13
Area: 283920
Amount: 0.977915
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 282417
Amount: 0.972738
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:00:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 200-196591/2-A

Matrix: Water | Lab File ID: PA231020D03.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 250(mL) | Date Analyzed: 10/21/2023 04:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.64		5.00	1.20
2706-90-3	Perfluoropentanoic acid	38.19		2.00	0.68
307-24-4	Perfluorohexanoic acid	36.33		2.00	0.65
375-85-9	Perfluoroheptanoic acid	36.38		2.00	0.54
335-67-1	Perfluorooctanoic acid	40.04		2.00	0.76
375-95-1	Perfluorononanoic acid	40.17		2.00	0.49
335-76-2	Perfluorodecanoic acid	37.43		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	42.37		2.00	0.55
307-55-1	Perfluorododecanoic acid	36.79		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	37.85		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	34.44		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.59		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	37.91		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	35.19		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	37.35		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	35.53		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	33.40		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	33.12		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	38.44		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	39.32		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	44.49		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	41.13		2.00	0.92
2355-31-9	NMeFOSAA	40.18		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	37.11		5.00	1.60
13252-13-6	HFPODA	41.18		4.00	1.10
919005-14-4	DONA	41.11		2.00	0.42
756426-58-1	9Cl-PF3ONS	40.52		2.00	0.32
763051-92-9	11Cl-PF3OUdS	36.66		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 200-196591/2-A

Matrix: Water | Lab File ID: PA231020D03.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 250(mL) | Date Analyzed: 10/21/2023 04:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	96		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	79		50-150
STL02337	13C3 PFBS	85		50-150
STL01056	13C8 FOSA	76		50-150
STL02118	d3-NMeFOSAA	84		50-150
STL02117	d5-NEtFOSAA	86		50-150
STL02395	M2-4:2 FTS	82		50-150
STL02279	M2-6:2 FTS	83		50-150
STL02280	M2-8:2 FTS	73		50-150
STL02255	13C3 HFPO-DA	93		50-150
STL00994	18O2 PFHxS	86		50-150
STL00993	13C2 PFHxA	97		50-150
STL00991	13C4 PFOS	85		50-150
STL00998	13C2 PFDoA	87		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	90		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Lims ID: LCS 200-196591/2-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Oct-2023 04:06:06 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196591/2-A
Misc. Info.: 200-0057494-003 Plate: 1 Rack: 4
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 09:07:38 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: nampitakw Date: 23-Oct-2023 15:14:32
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.130	-0.009	0.604	2166588	1.28		102	1934	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.121	2.130	-0.009	1.000	1578112	0.9660		96.6	149	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.438	2.439	-0.001	0.695	1578936	1.20		96.2	1306	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.438	2.439	-0.001	1.000	1301292	0.9547		95.5	31.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.452	2.467	-0.015	0.699	1747117	0.9837		84.6	85627	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	1493364	0.8897	Target=2.06	100	849	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	724894		2.06(1.03-3.09)		319	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.756	2.760	-0.004	1.000	552071	0.9611		103	1783	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.756	2.760	-0.004	0.785	197490	0.9615		82.4	127	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.794	2.798	-0.004	0.796	1618651	1.21		97.0	6227	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.794	2.798	-0.004	1.000	1294378	0.9083	Target=14.12	90.8	181	M
313.00 > 119.00	2.794	2.798	-0.004	1.000	95258		13.59(7.06-21.17)		89.9	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.794	2.798	-0.004	0.884	1359394	0.9478	Target=2.72	101	1321	M
349.00 > 99.00	2.794	2.798	-0.004	0.884	468874		2.90(1.36-4.09)		920	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.904	2.908	-0.004	1.000	248343	1.03		103	3872	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.904	2.908	-0.004	0.828	301212	1.17		93.2	3663	
D 11 18O2 PFHxS										
403.00 > 84.00	3.161	3.157	0.004	0.901	1298680	1.02		86.3	9135	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.161	3.157	0.004	1.000	1069611	0.8798	Target=3.32	96.3	2001	M
399.00 > 99.00	3.161	3.157	0.004	1.000	309734		3.45(1.66-4.98)		309	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.161	3.169	-0.008	1.000	1548372	0.9095	Target=4.17	91.0	299	M
363.00 > 169.00	3.161	3.169	-0.008	1.000	374467		4.13(2.09-6.26)		1015	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.161	3.169	-0.008	0.901	1898512	1.30		104	5328	
77 DONA										M
377.00 > 251.00	3.196	3.204	-0.008	0.836	4088123	1.03	Target=3.33	109	2349	M
377.00 > 85.00	3.196	3.204	-0.008	0.836	1082680		3.78(1.66-4.99)		1632	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.500	3.506	-0.006	0.915	932837	0.9338	Target=4.83	98.0	2428	M
449.00 > 99.00	3.500	3.506	-0.006	0.915	178806		5.22(2.41-7.24)		567	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.500	3.506	-0.006	0.997	260726	0.9856		83.0	525	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.500	3.506	-0.006	1.000	589968	0.9831		103	737	M
D 14 13C4 PFOA										
417.00 > 372.00	3.509	3.515	-0.006	1.000	2119625	1.28		102	7551	
* 62 13C2 PFOA										M
415.00 > 370.00	3.509	3.515	-0.006		2131992	1.25			4910	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.509	3.515	-0.006	1.000	1807782	1.00	Target=2.88	100	79.6	M
413.00 > 169.00	3.518	3.515	0.003	1.003	607627		2.98(1.44-4.32)		846	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.823	0.001	1.000	716228	0.8883	Target=4.24	95.7	1517	M
499.00 > 99.00	3.814	3.823	-0.009	0.997	155999		4.59(2.12-6.37)		382	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.823	0.001	1.090	826049	1.02		85.5	4654	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.846	-0.010	1.000	1676655	1.00	Target=8.34	100	294	
463.00 > 169.00	3.836	3.846	-0.010	1.000	190559		8.80(4.17-12.51)		1160	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.846	-0.010	1.093	2129557	1.18		94.3	7124	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.975	0.002	1.040	2499410	1.01		109	7519	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.097	4.106	-0.009	1.071	512187	0.8350	Target=2.17	86.8	3440	
549.00 > 99.00	4.097	4.106	-0.009	1.071	210464		2.43(1.08-3.25)		1035	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.133	4.130	0.002	1.000	1693162	0.9358	Target=11.44	93.6	529	
513.00 > 169.00	4.133	4.130	0.002	1.000	164947		10.26(5.72-17.16)		1033	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.133	4.130	0.002	1.178	2263186	1.20		95.7	7711	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.133	4.142	-0.010	1.178	260189	0.8747		73.0	834	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.133	4.142	-0.010	1.000	532019	1.11		116	3562	M
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.235	0.002	1.207	1526524	0.9459		75.7	4774	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.235	0.002	1.000	1197663	1.03		103	3344	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.261	4.271	-0.010	1.214	473206	1.05		83.8	1370	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.274	4.271	0.003	1.003	345068	1.00		100	561	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.358	4.356	0.002	1.140	390891	0.8280	Target=2.37	85.8	3247	
599.00 > 99.00	4.358	4.356	0.002	1.140	150602		2.60(1.19-3.56)		2078	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.380	0.002	1.249	2016200	1.13		90.3	7278	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.391	-0.009	1.000	1760804	1.06	Target=12.20	106	406	M
563.00 > 169.00	4.382	4.391	-0.009	1.000	144682		12.17(6.10-18.31)		979	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.394	4.391	0.003	1.252	467557	1.07		85.9	1205	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.403	-0.009	1.000	347095	0.9278		92.8	1100	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.475	-0.011	1.167	3467771	0.9165		97.2	4606	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.604	0.002	1.313	1973662	1.09		87.0	7085	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.606	4.604	0.002	1.000	1478012	0.9197	Target=8.47	92.0	102	M
613.00 > 169.00	4.606	4.604	0.002	1.000	175334		8.43(4.23-12.70)		1093	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.626	-0.009	1.117	298482	1.04		108	3013	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.769	0.001	1.247	123684	0.7730	Target=0.48	79.9	1703	
699.00 > 99.00	4.770	4.769	0.001	1.247	252594		0.49(0.24-0.72)		4101	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.799	4.807	-0.008	1.042	1598474	0.9463	Target=6.41	94.6	102	
663.00 > 169.00	4.799	4.807	-0.008	1.042	231280		6.91(3.21-9.62)		2539	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.977	4.983	-0.006	1.418	1780421	0.9854		78.8	5265	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.977	4.983	-0.006	1.000	137132	0.8611	Target=0.87	86.1	2611	
713.00 > 219.00	4.977	4.983	-0.006	1.000	159031		0.86(0.43-1.30)		2209	

Report Date: 25-Oct-2023 09:07:46 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.283	5.293	-0.010	1.506	1909286	0.9171		73.4	5678	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.294	5.293	0.001	1.002	1613899	1.06	Target=7.89	106	126	M
813.00 > 169.00	5.294	5.293	0.001	1.002	190780		8.46(3.94-11.83)		2746	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.556	5.555	0.001	1.052	1142156	0.9576	Target=9.39	95.8	145	M
913.00 > 169.00	5.547	5.555	-0.008	1.050	118199		9.66(4.69-14.08)		991	M

QC Flag Legend

Processing Flags

Review Flags

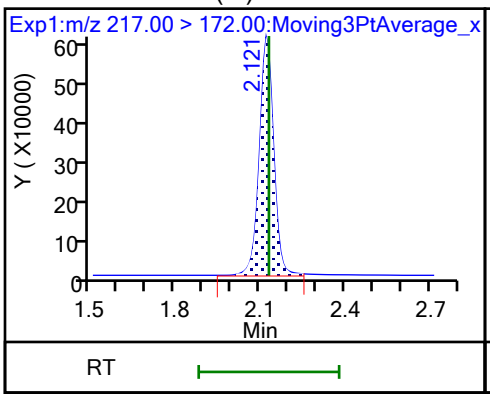
M - Manually Integrated

Report Date: 25-Oct-2023 09:07:46 Chrom Revision: 2.3 18-Oct-2023 21:16:54

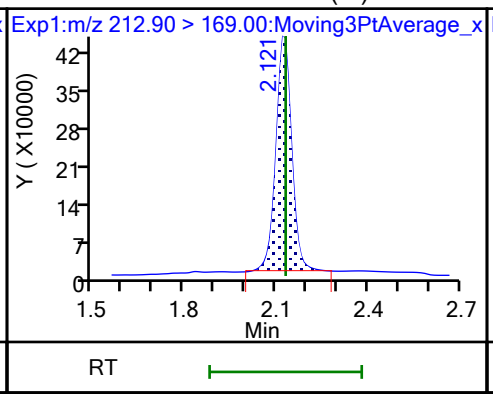
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

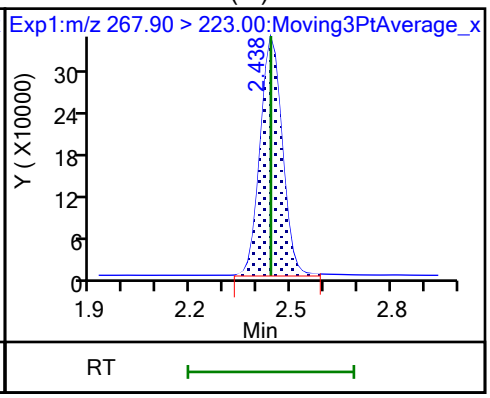
D 1 13C4 PFBA (M)



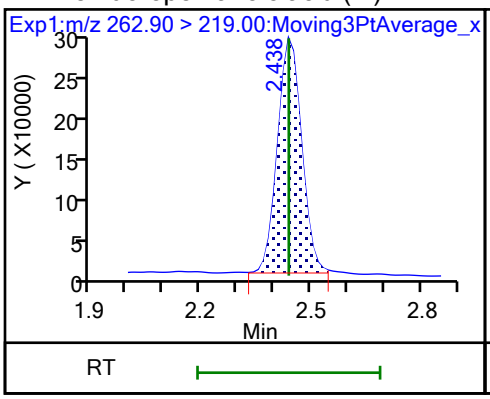
2 Perfluorobutanoic acid (M)



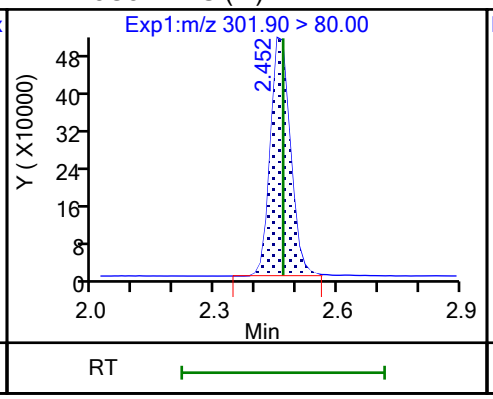
D 3 13C5 PFPeA (M)



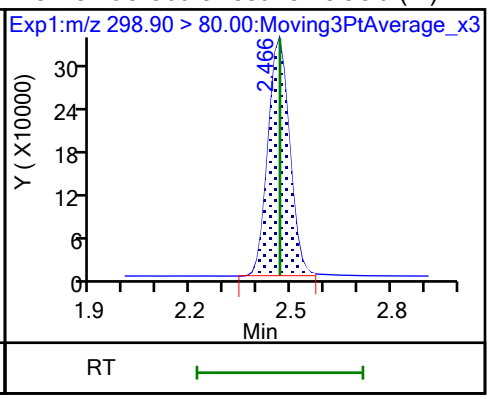
4 Perfluoropentanoic acid (M)



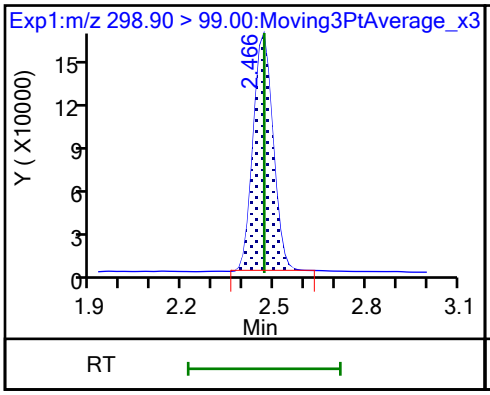
D 47 13C3 PFBS (M)



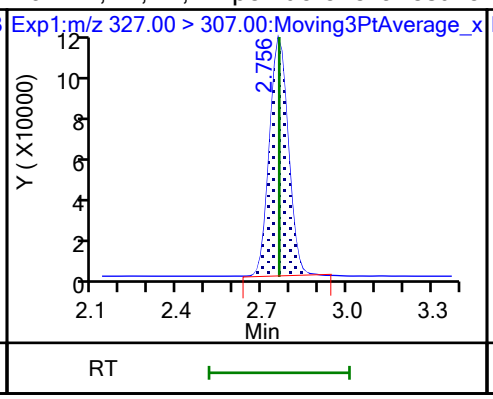
5 Perfluorobutanesulfonic acid (M)



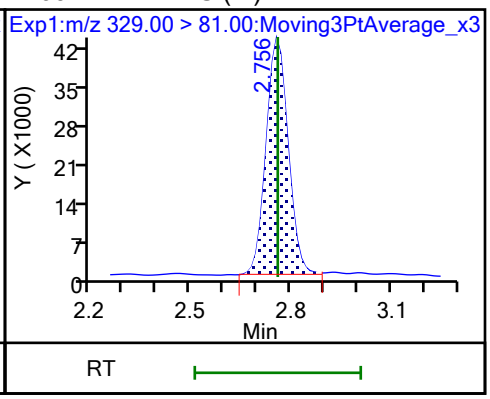
5 Perfluorobutanesulfonic acid



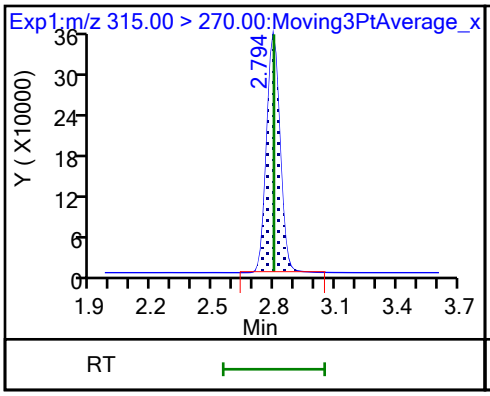
61 1H,1H,2H,2H-perfluorohexanesulfo



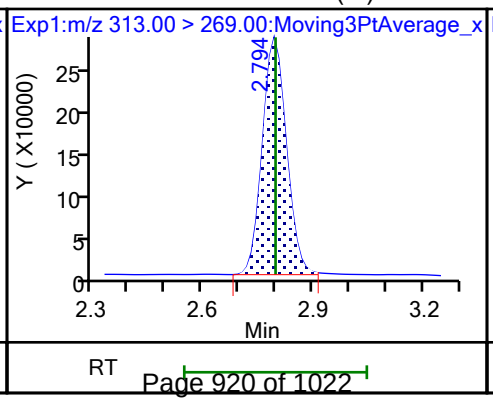
D 60 M2-4:2 FTS (M)



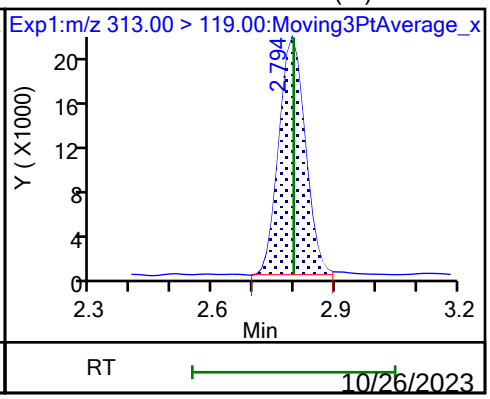
D 7 13C2 PFHxA



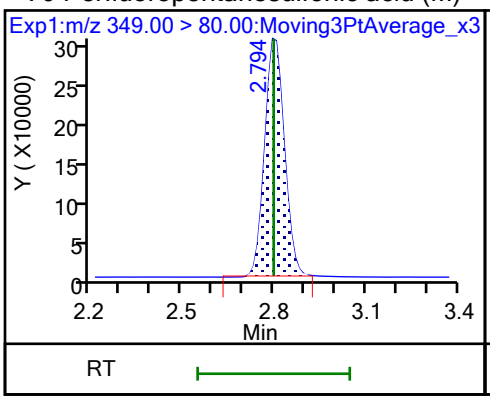
6 Perfluorohexanoic acid (M)



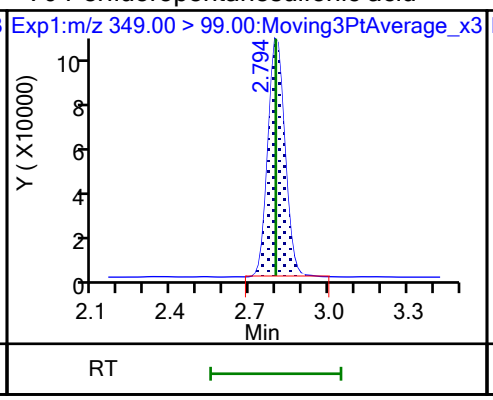
6 Perfluorohexanoic acid (M)



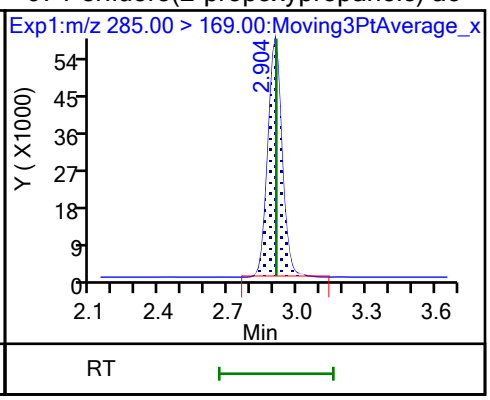
70 Perfluoropentanesulfonic acid (M)



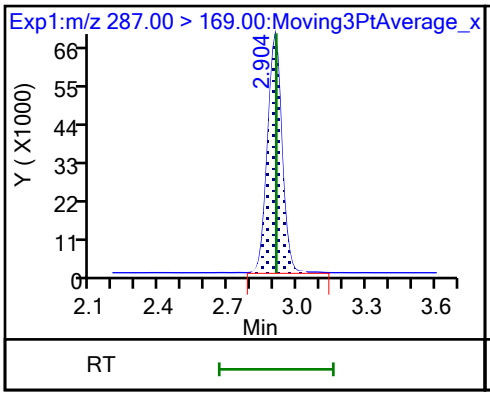
70 Perfluoropentanesulfonic acid



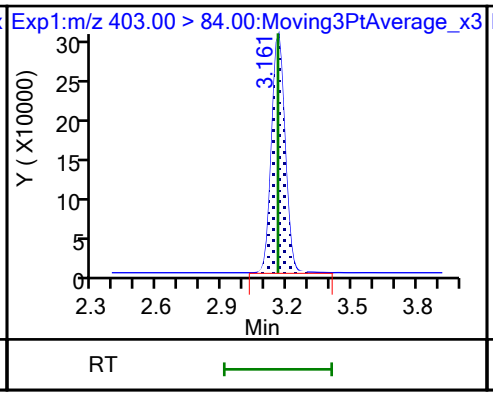
67 Perfluoro(2-propoxypropanoic) ac



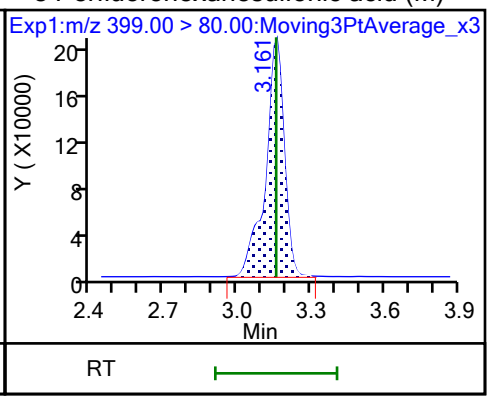
D 64 13C3 HFPO-DA



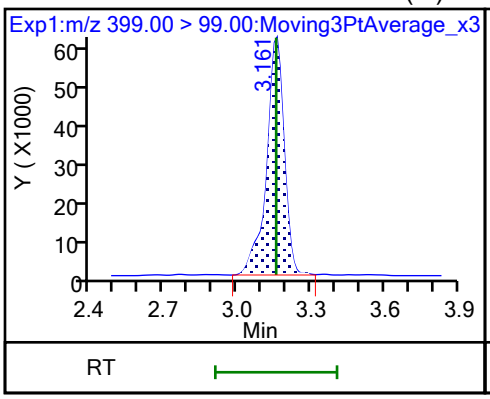
D 11 18O2 PFHxS



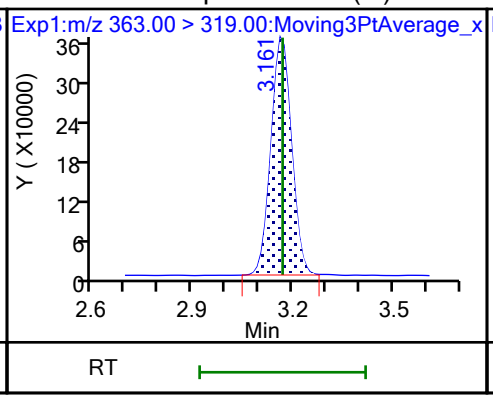
8 Perfluorohexanesulfonic acid (M)



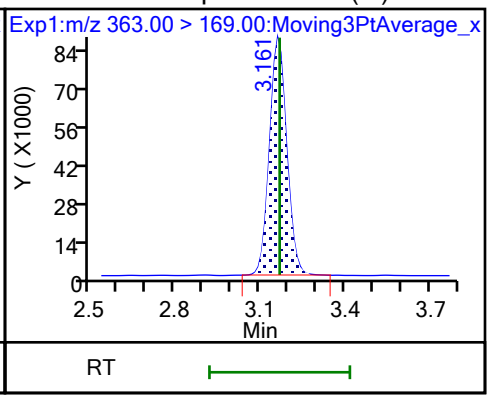
8 Perfluorohexanesulfonic acid (M)



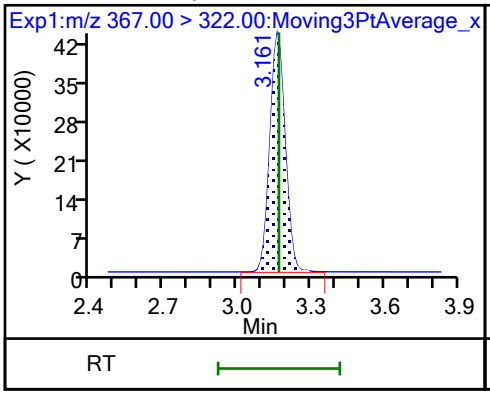
10 Perfluoroheptanoic acid (M)



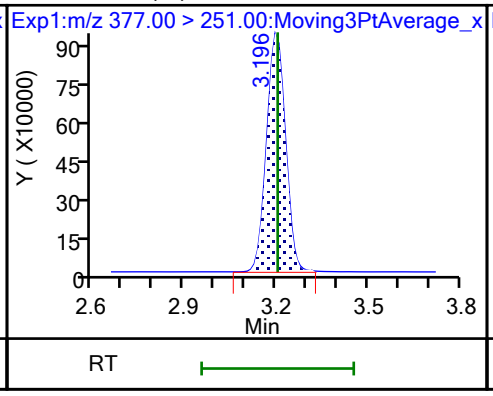
10 Perfluoroheptanoic acid (M)



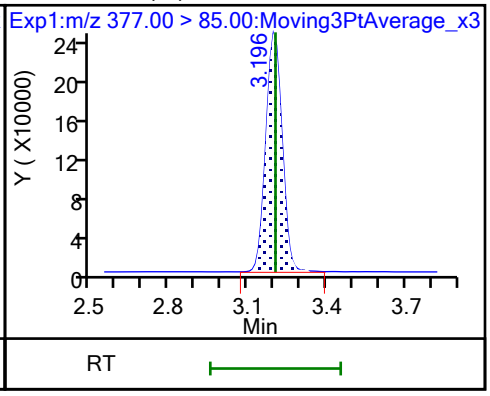
D 9 13C4 PFHpA



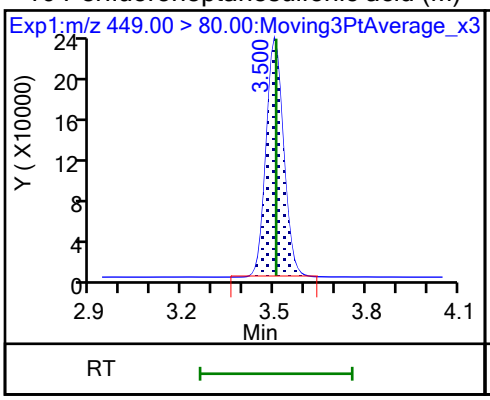
77 DONA (M)



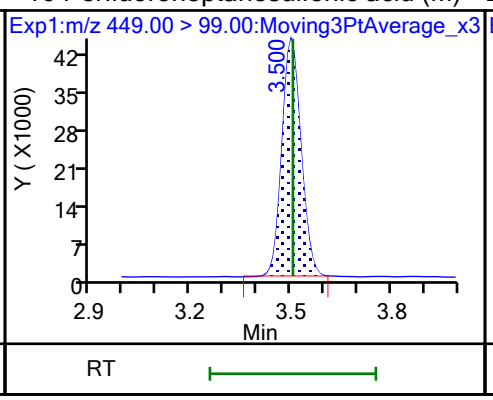
77 DONA (M)



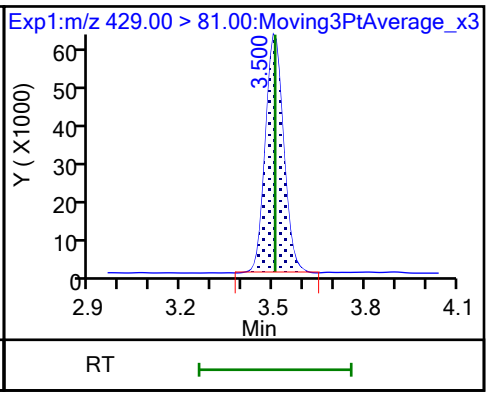
16 Perfluoroheptanesulfonic acid (M)



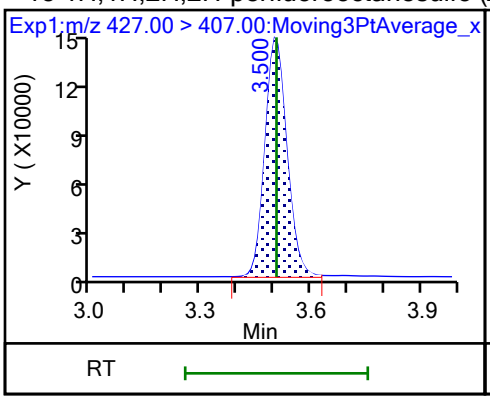
16 Perfluoroheptanesulfonic acid (M)



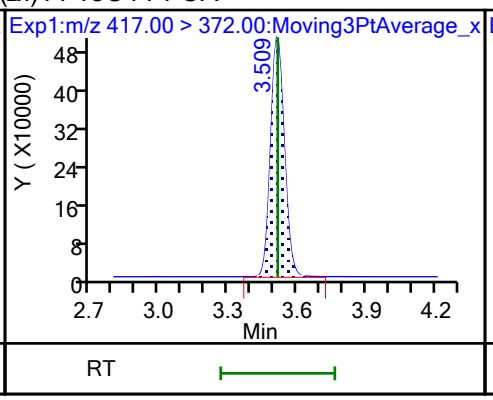
D 12 M2-6:2 FTS



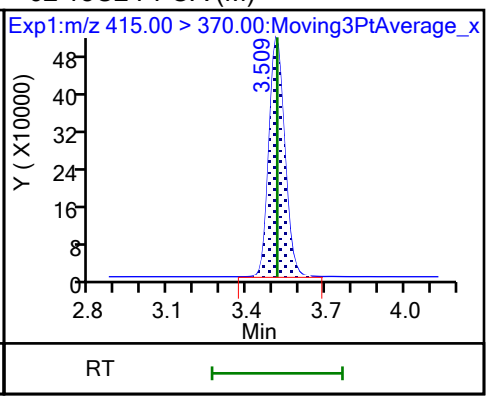
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



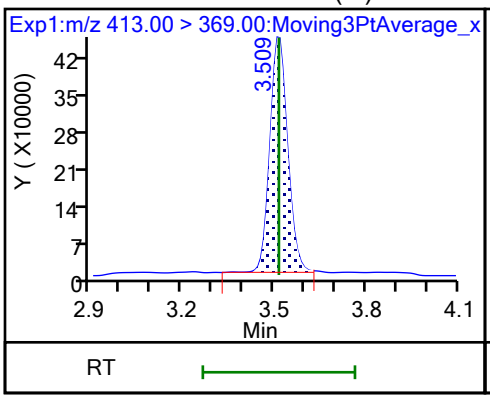
D 14 13C4 PFOA



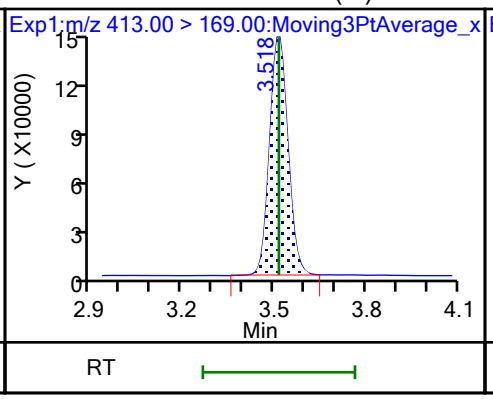
* 62 13C2 PFOA (M)



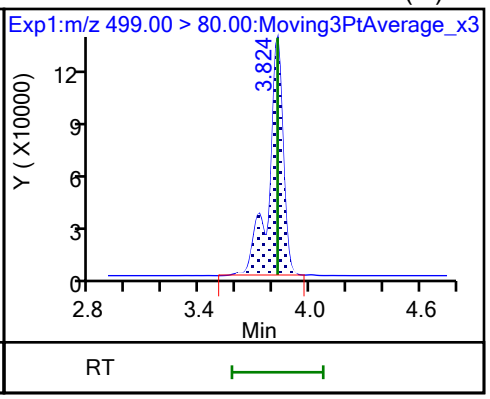
15 Perfluorooctanoic acid (M)



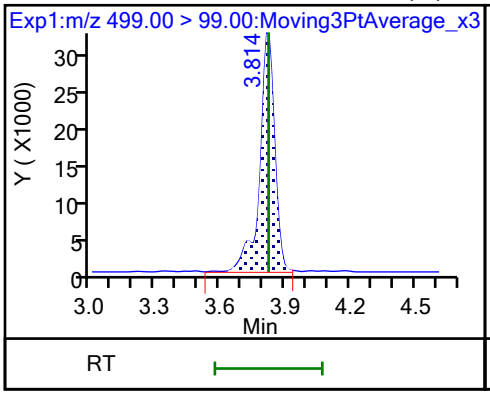
15 Perfluorooctanoic acid (M)



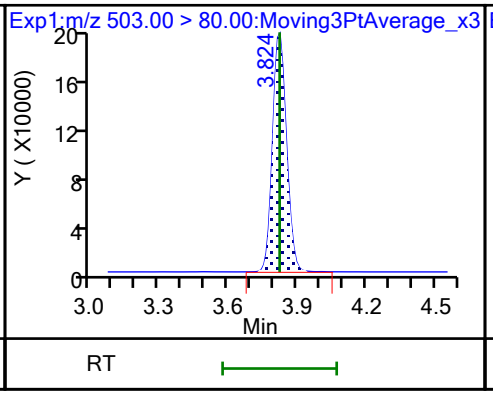
17 Perfluorooctanesulfonic acid (M)



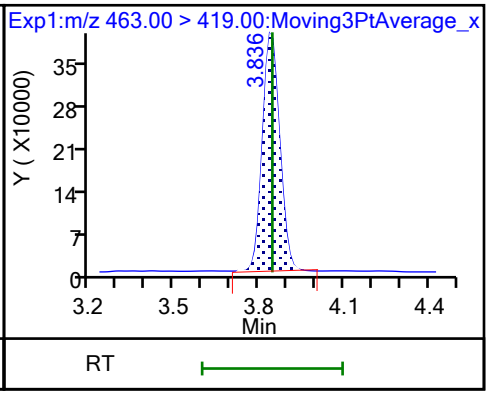
17 Perfluorooctanesulfonic acid (M)



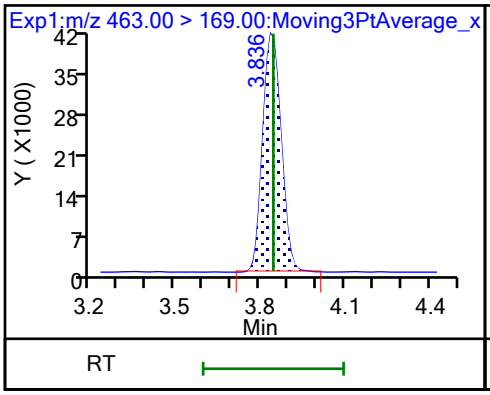
D 18 13C4 PFOS



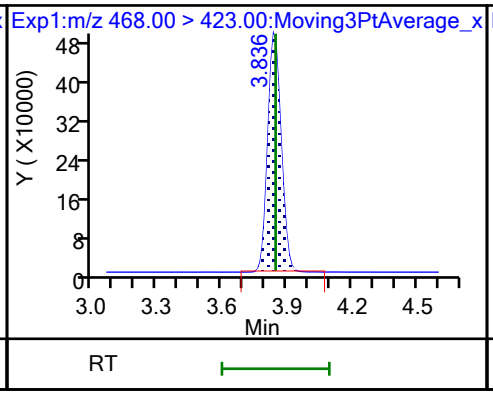
20 Perfluorononanoic acid



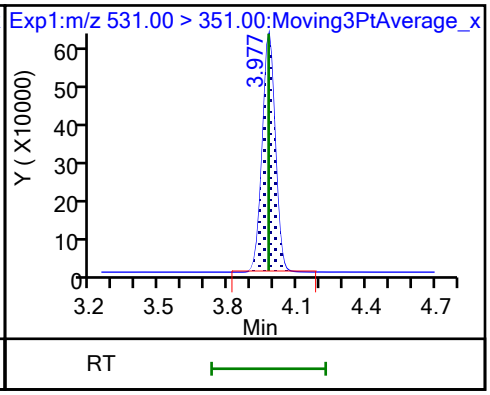
20 Perfluorononanoic acid



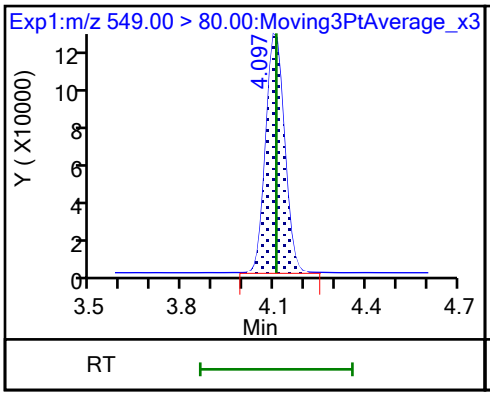
D 19 13C5 PFNA



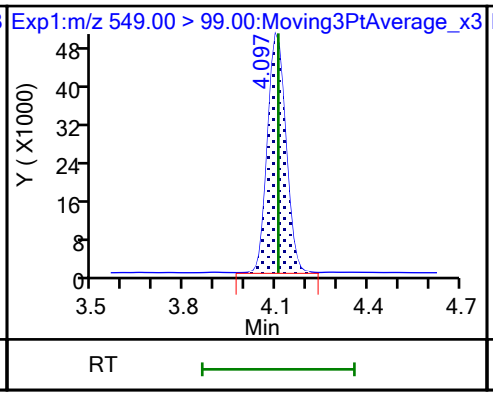
69 9-Chlorohexadecafluoro-3-oxanona



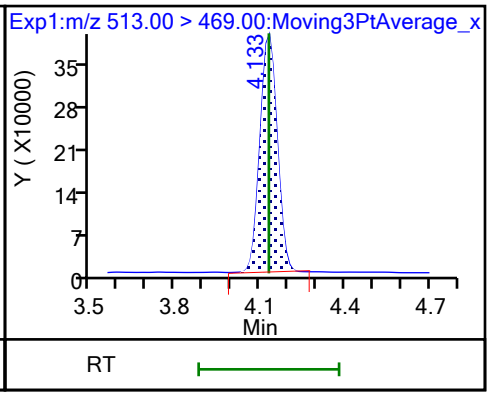
68 Perfluorononanesulfonic acid



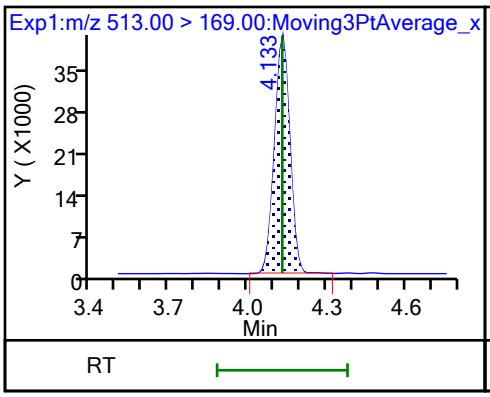
68 Perfluorononanesulfonic acid



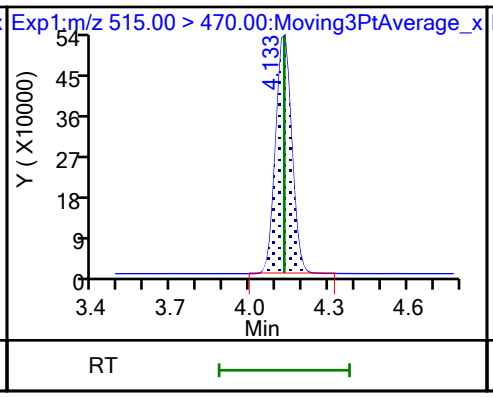
24 Perfluorodecanoic acid



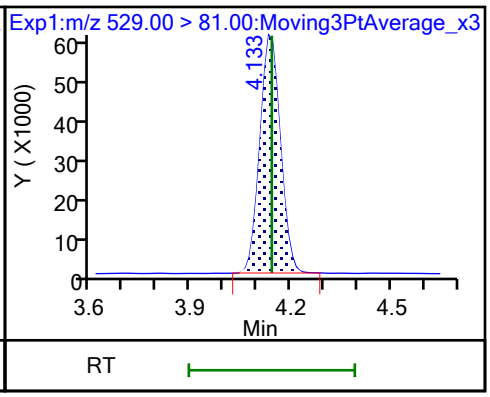
24 Perfluorodecanoic acid



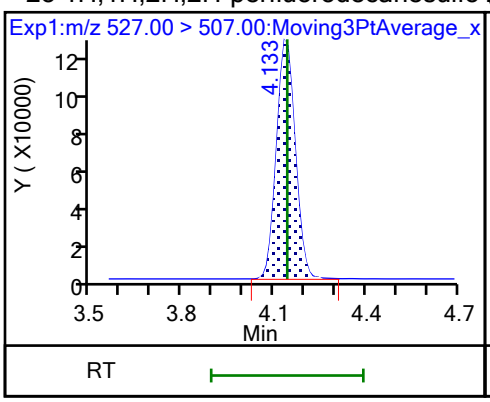
D 23 13C2 PFDA



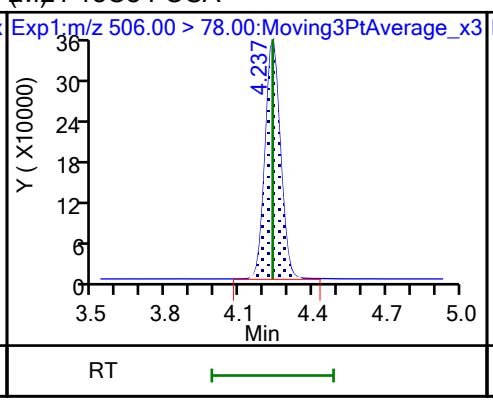
D 26 M2-8:2 FTS



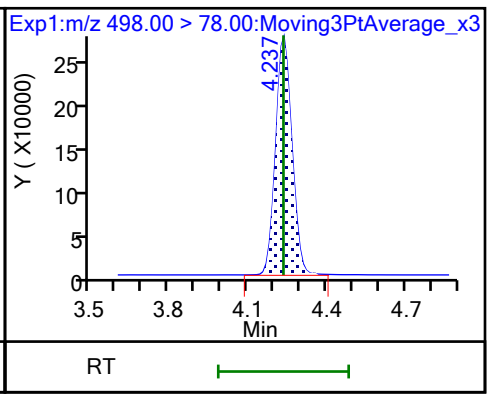
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



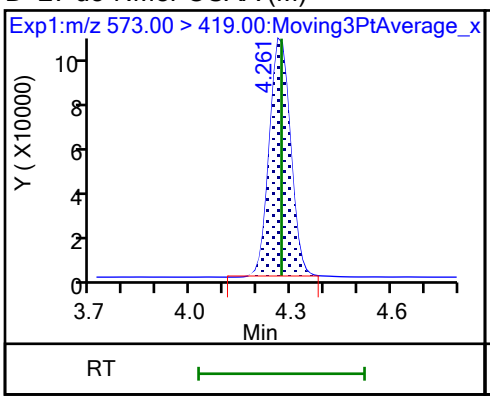
D 21 13C8 FOSA



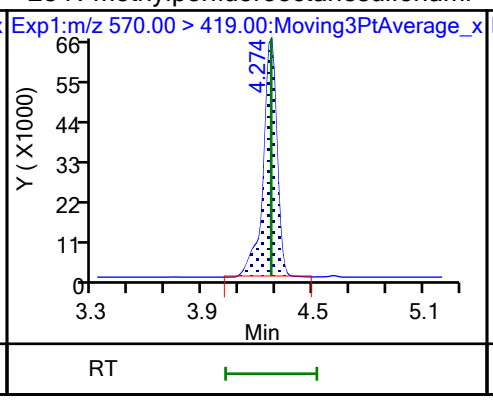
22 Perfluorooctanesulfonamide



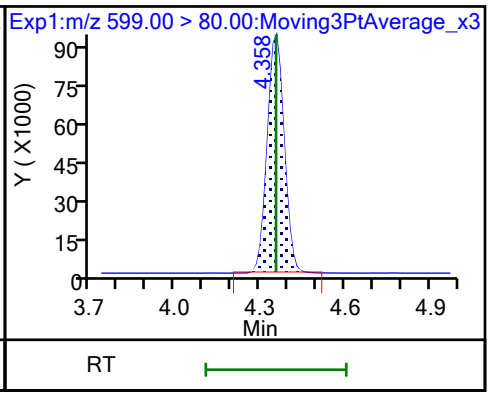
D 27 d3-NMeFOSAA (M)



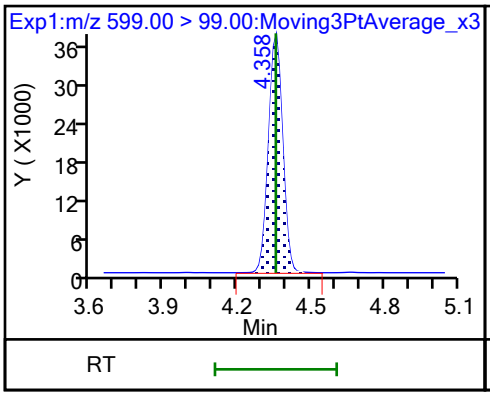
28 N-methylperfluorooctanesulfonami



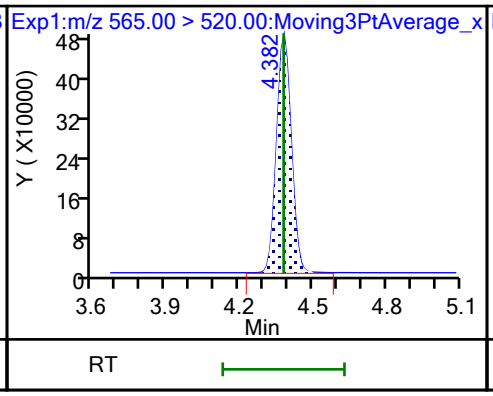
29 Perfluorodecanesulfonic acid



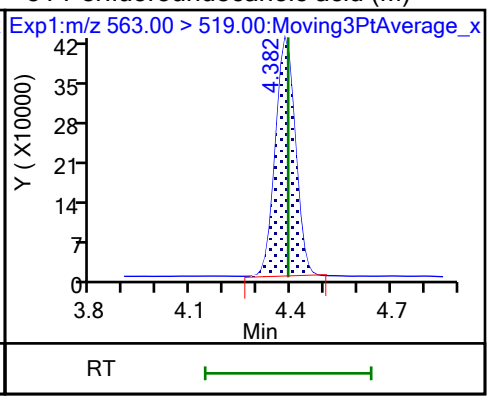
29 Perfluorodecanesulfonic acid



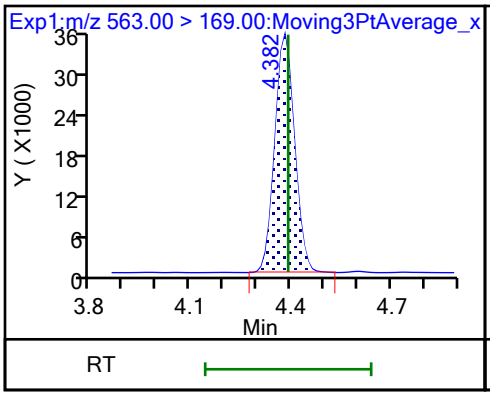
D 30 13C2 PFUnA



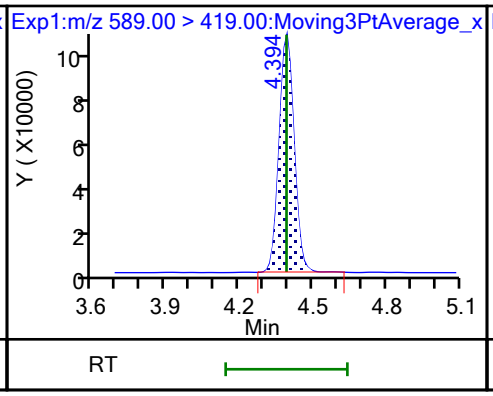
31 Perfluoroundecanoic acid (M)



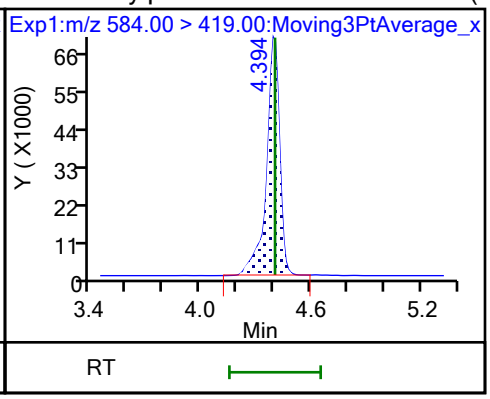
31 Perfluoroundecanoic acid



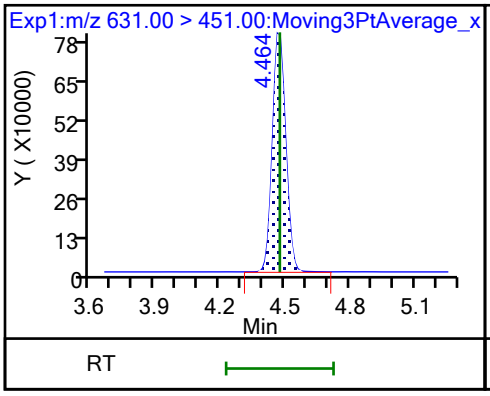
D 32 d5-NEtFOSAA



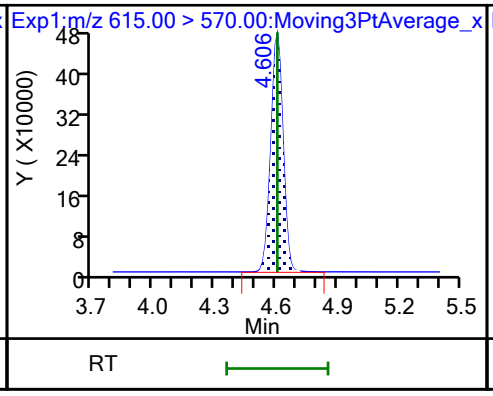
33 N-ethylperfluorooctanesulfonamid (M)



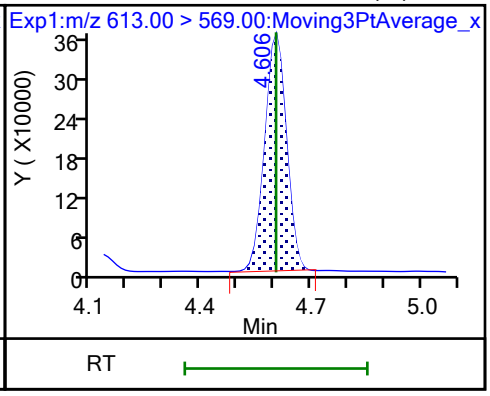
66 11-Chloroeicosafluoro-3-oxaundec



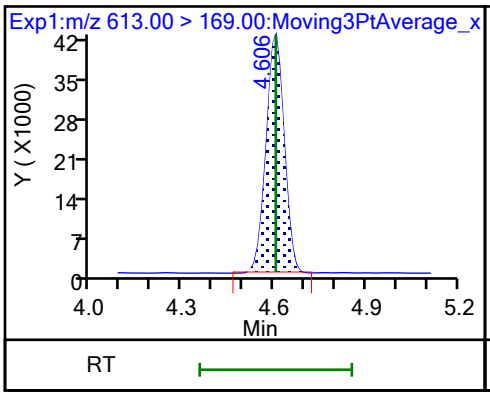
D 36 13C2 PFDoA



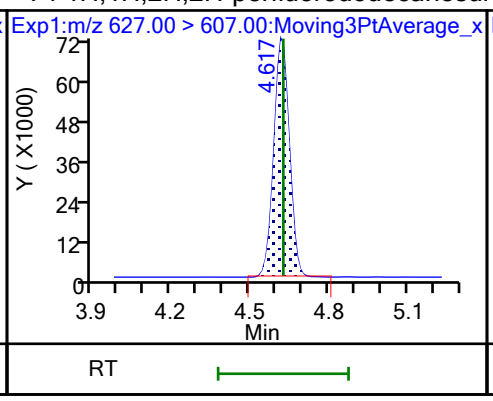
37 Perfluorododecanoic acid (M)



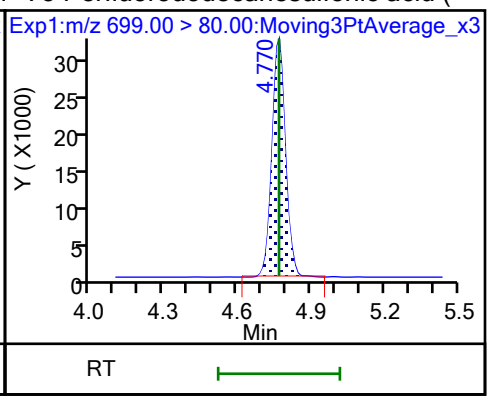
37 Perfluorododecanoic acid



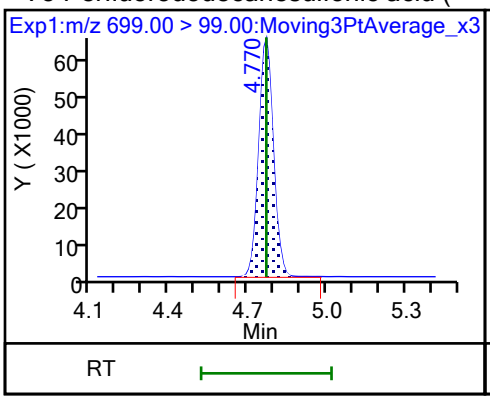
74 1H,1H,2H,2H-perfluorododecanesul



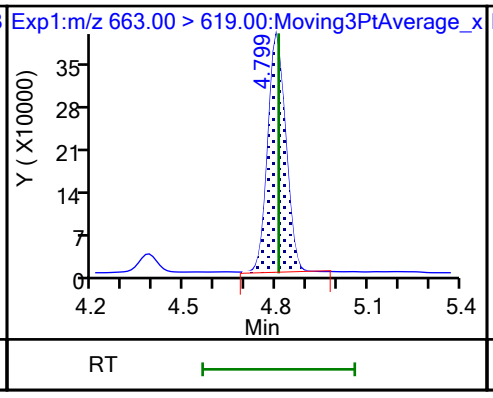
75 Perfluorododecanesulfonic acid (



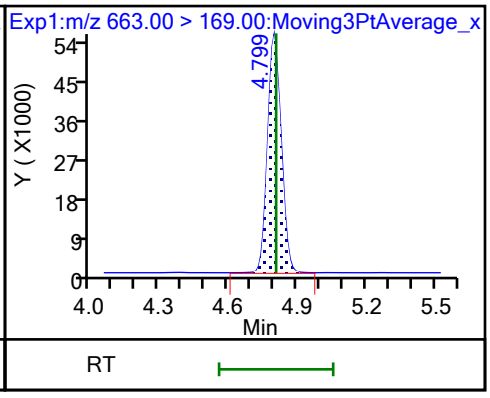
75 Perfluorododecanesulfonic acid (



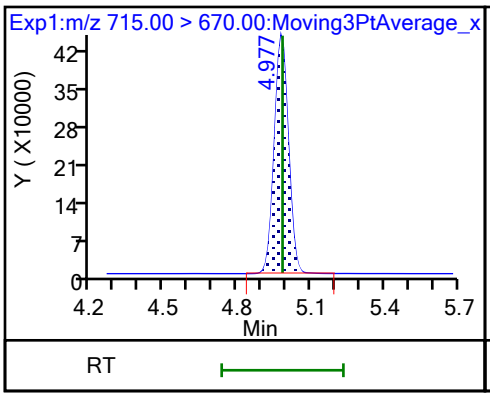
41 Perfluorotridecanoic acid



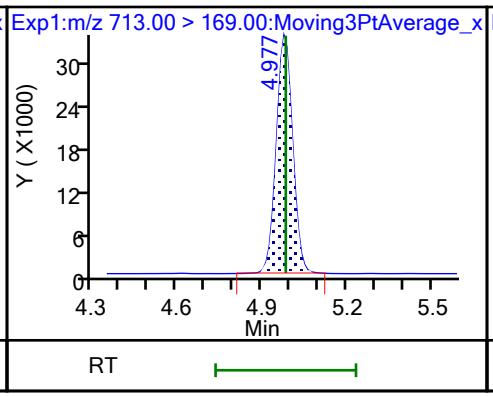
41 Perfluorotridecanoic acid



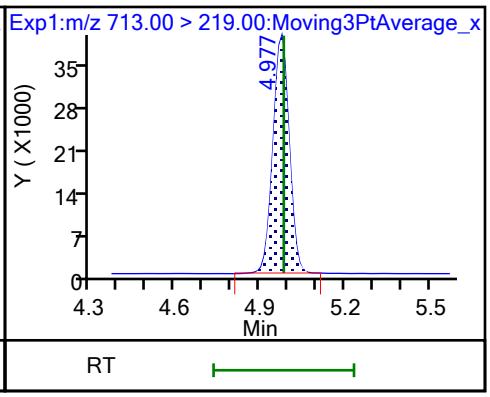
D 43 13C2 PFTeDA



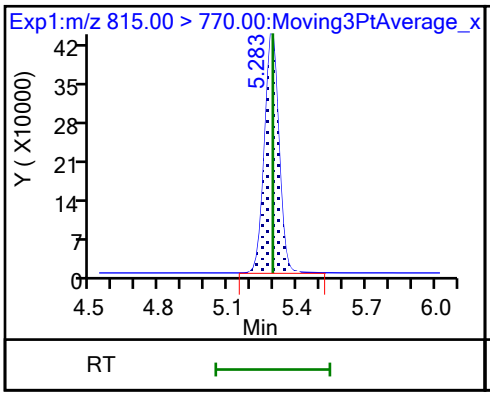
42 Perfluorotetradecanoic acid



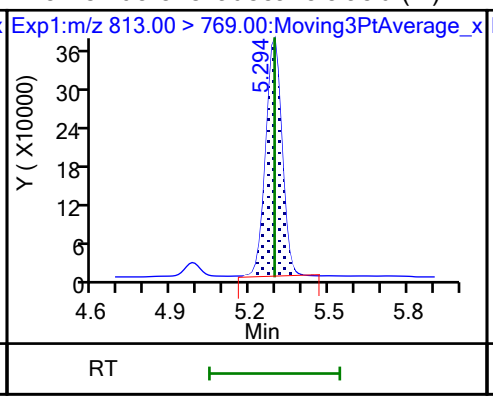
42 Perfluorotetradecanoic acid



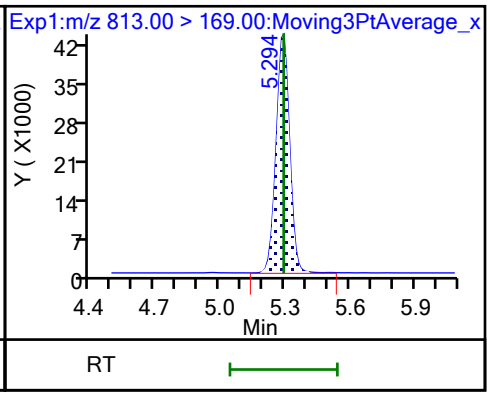
D 44 13C2 PFHxDA



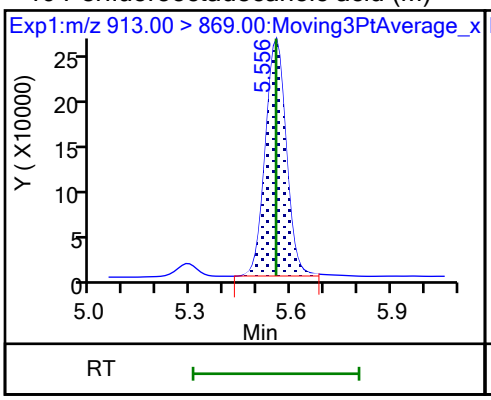
45 Perfluorohexadecanoic acid (M)



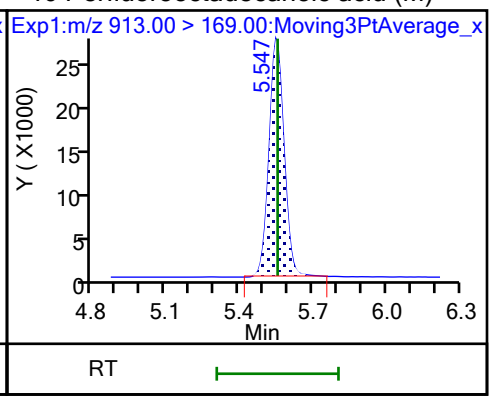
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

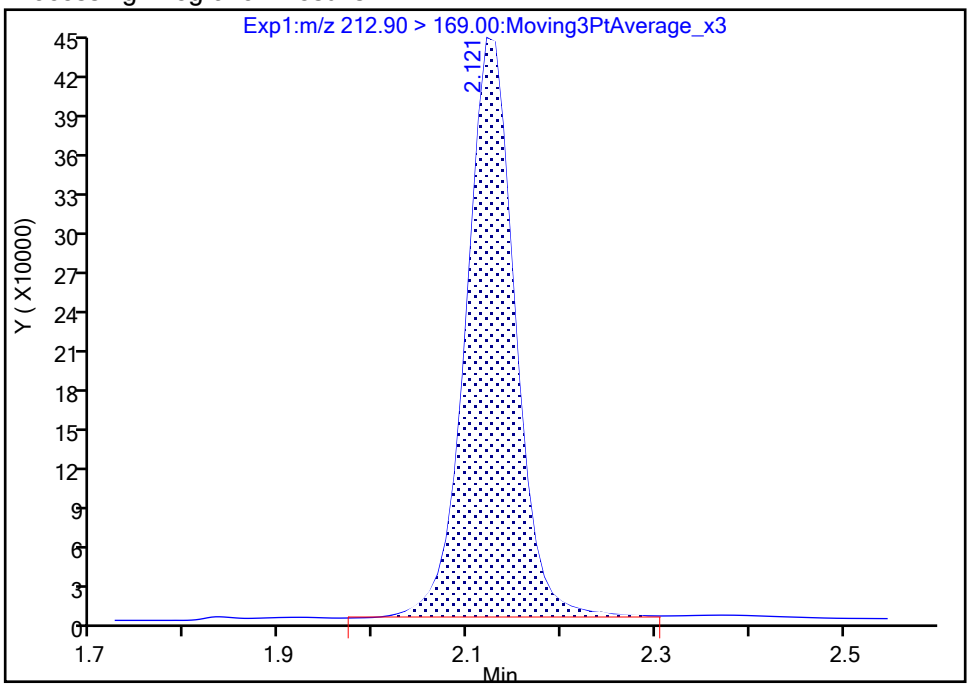
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

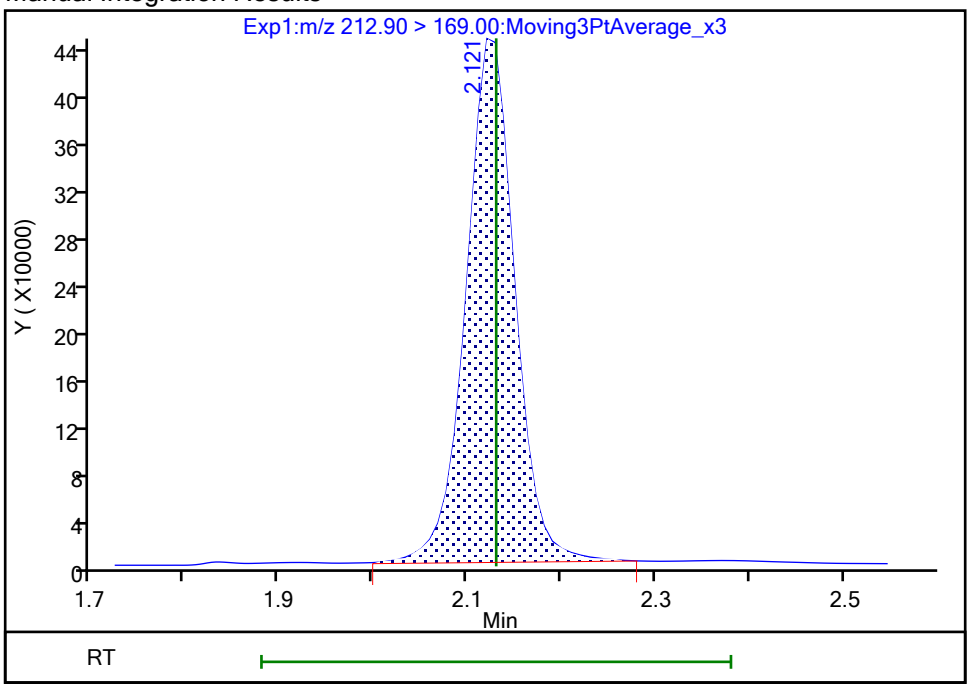
Processing Integration Results

RT: 2.12
Area: 1584716
Amount: 0.970203
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1578112
Amount: 0.965989
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

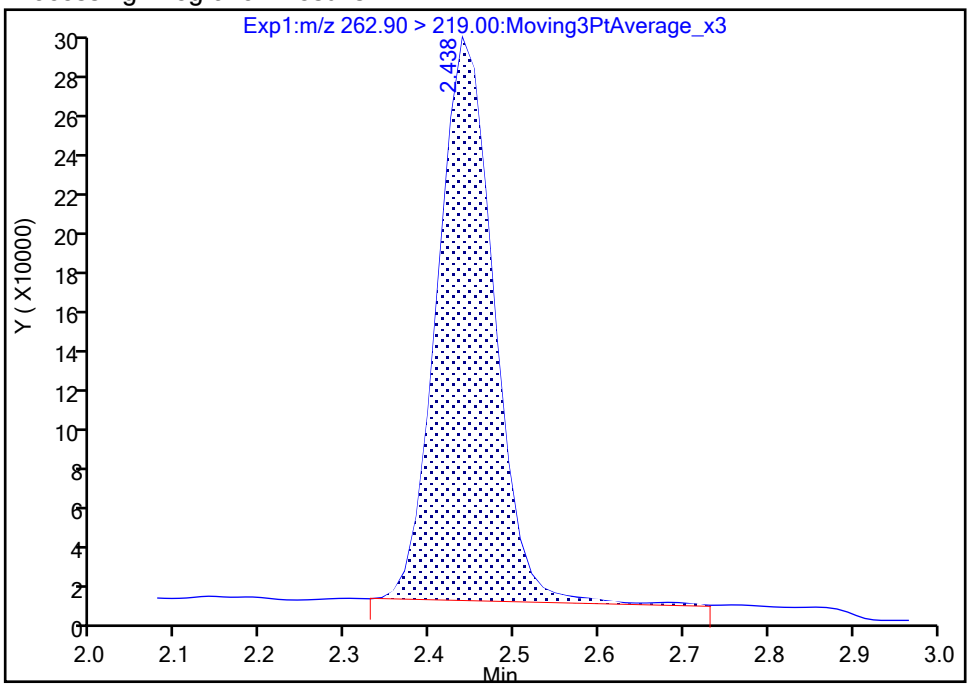
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

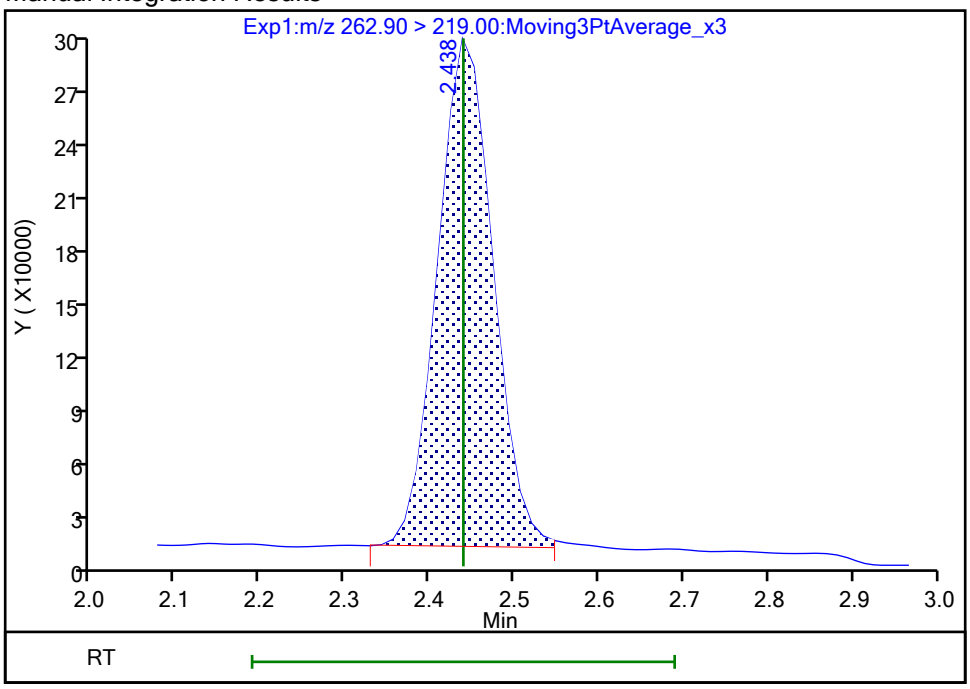
Processing Integration Results

RT: 2.44
Area: 1317695
Amount: 0.966687
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1301292
Amount: 0.954654
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

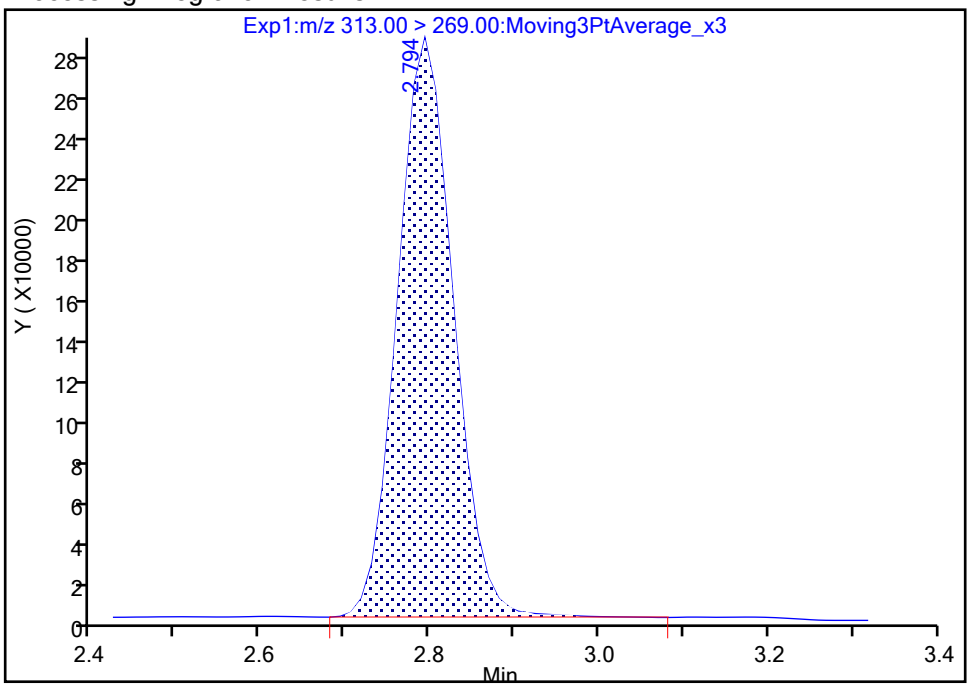
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

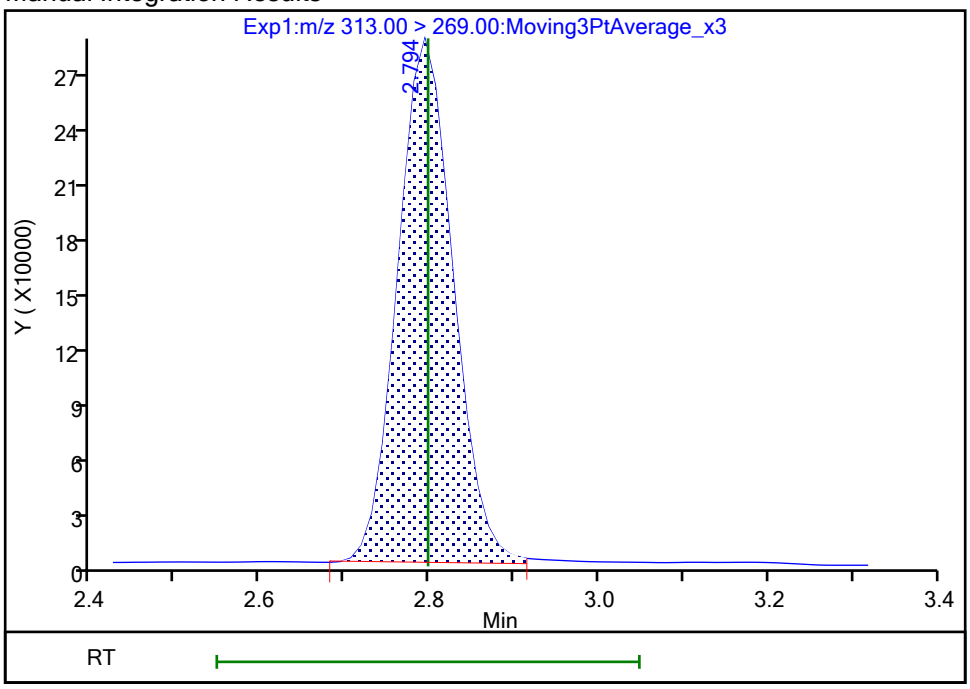
Processing Integration Results

RT: 2.79
Area: 1301017
Amount: 0.912992
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1294378
Amount: 0.908334
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

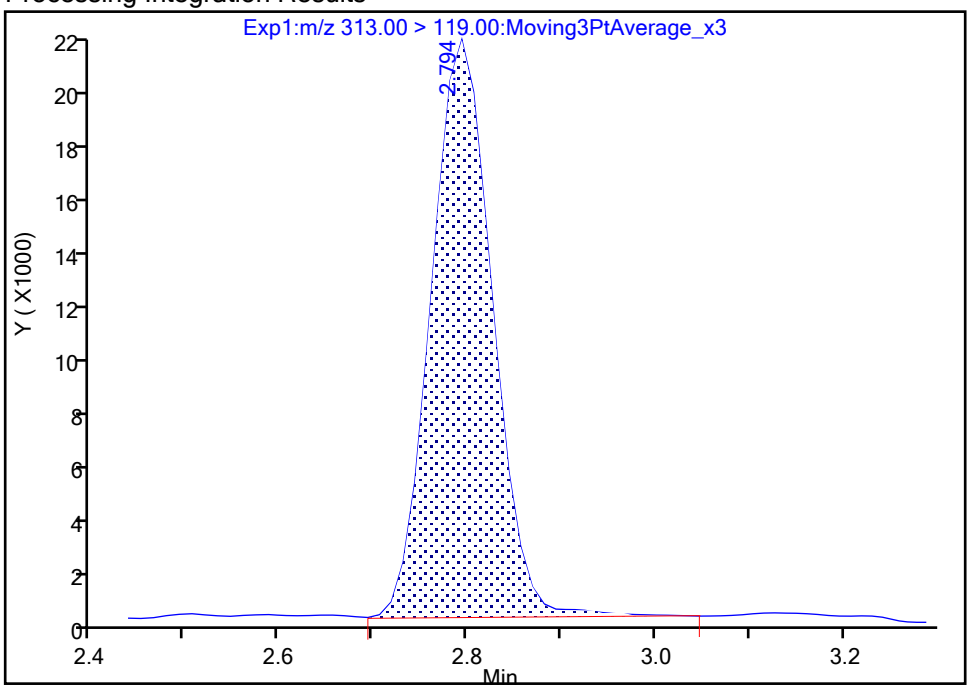
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

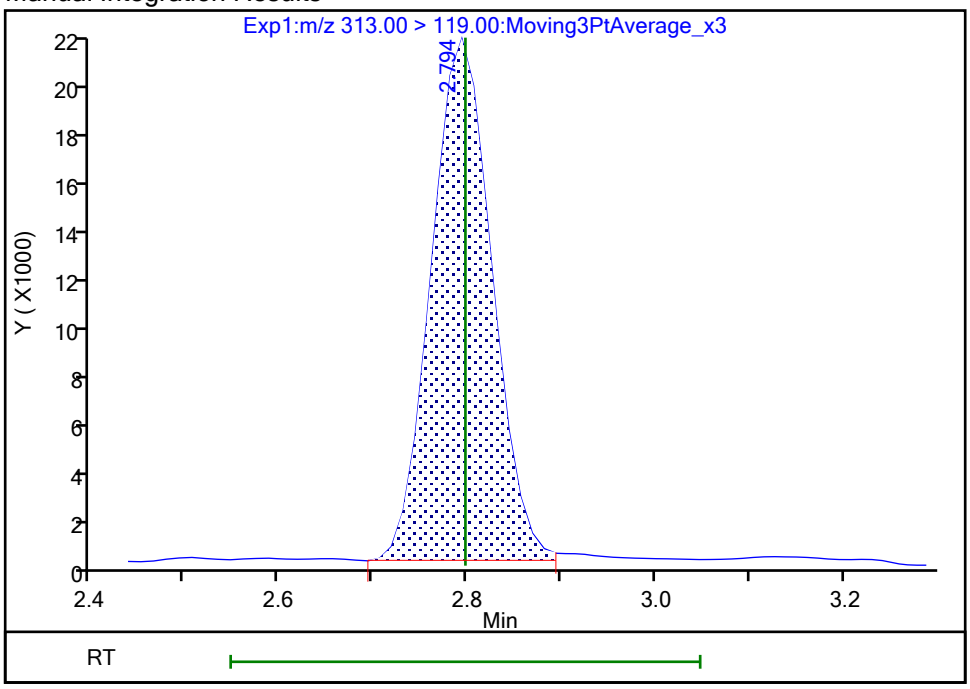
Processing Integration Results

RT: 2.79
Area: 96300
Amount: 0.912992
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 95258
Amount: 0.908334
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

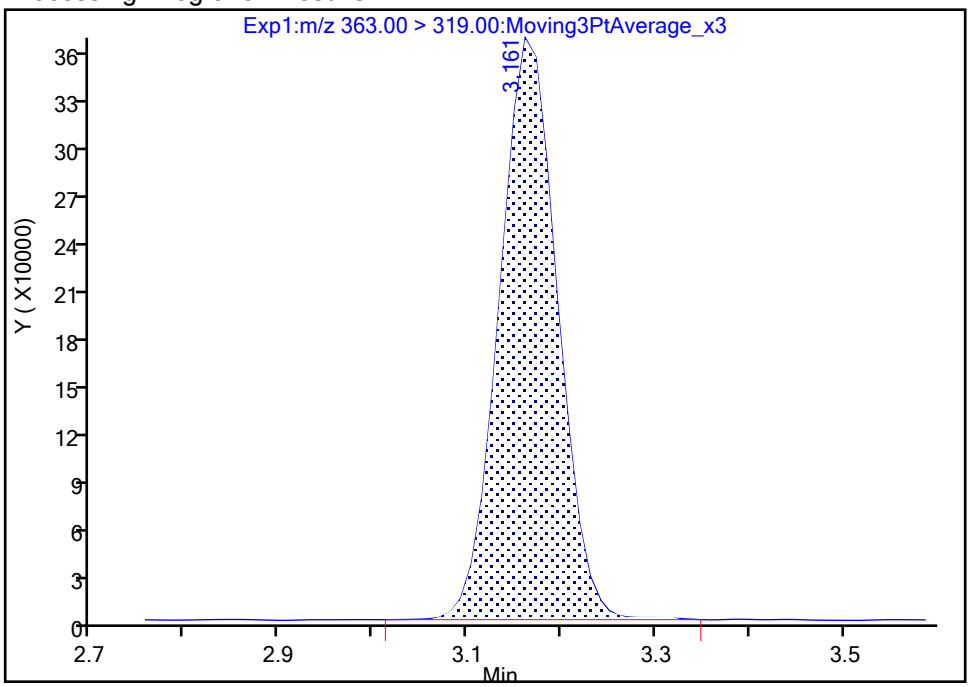
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

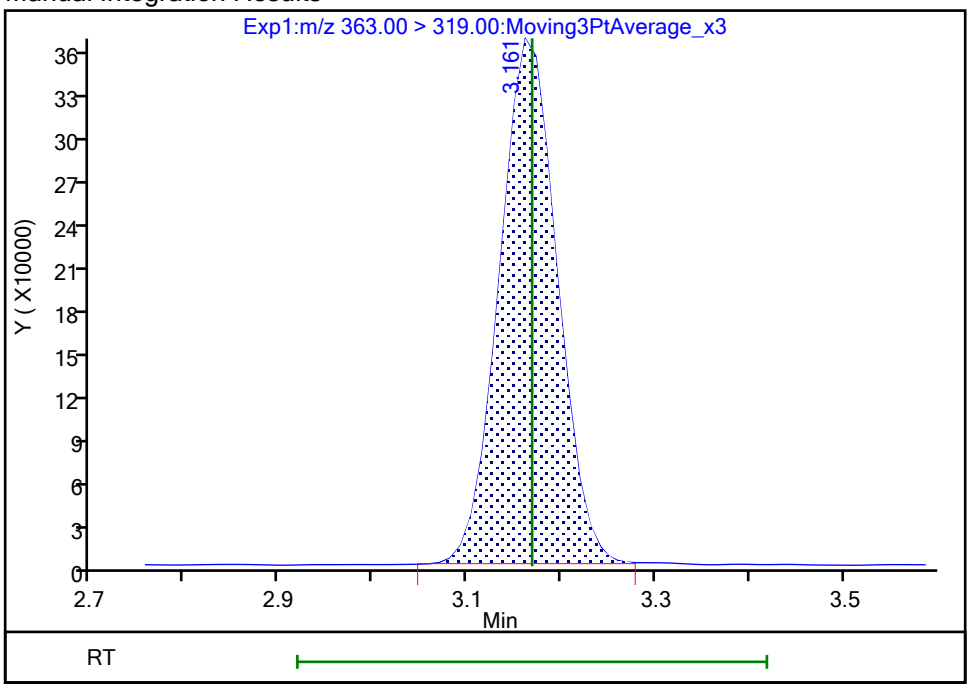
Processing Integration Results

RT: 3.16
Area: 1566209
Amount: 0.919994
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1548372
Amount: 0.909517
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

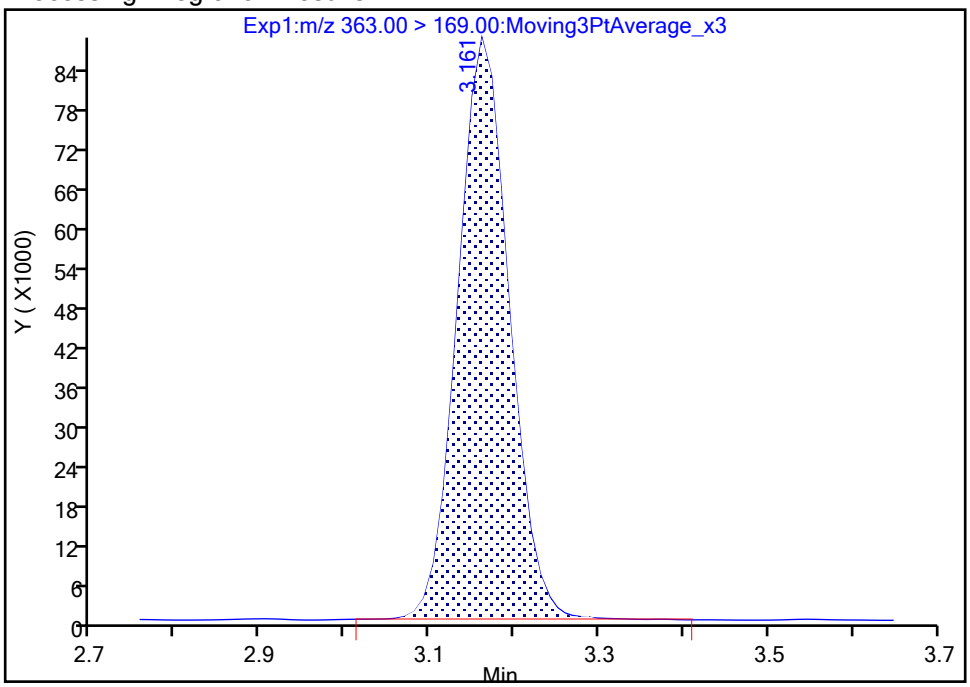
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

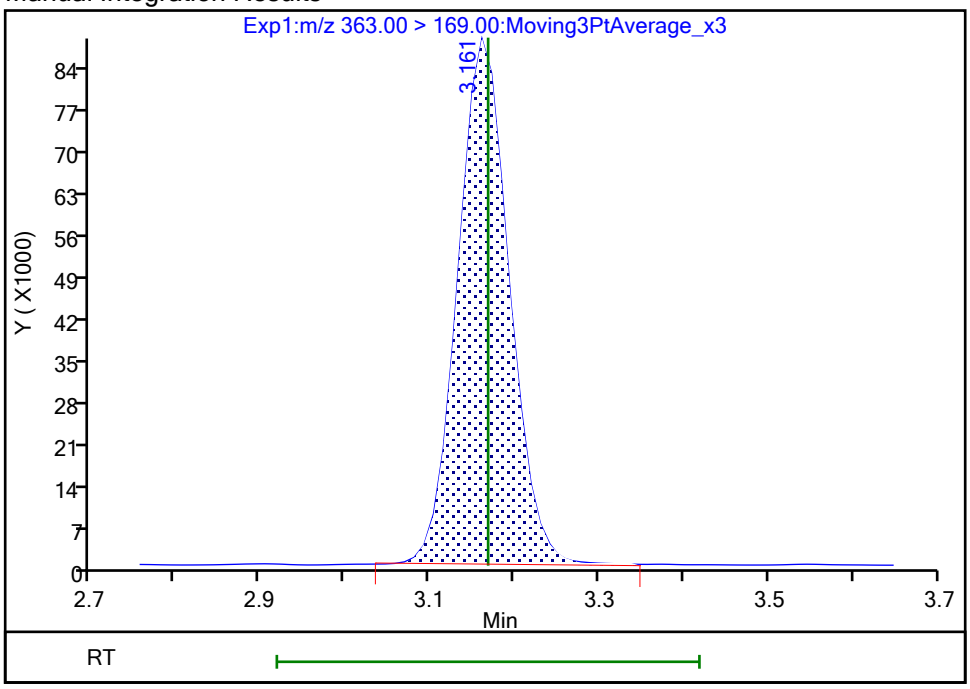
Processing Integration Results

RT: 3.16
Area: 375412
Amount: 0.919994
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 374467
Amount: 0.909517
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

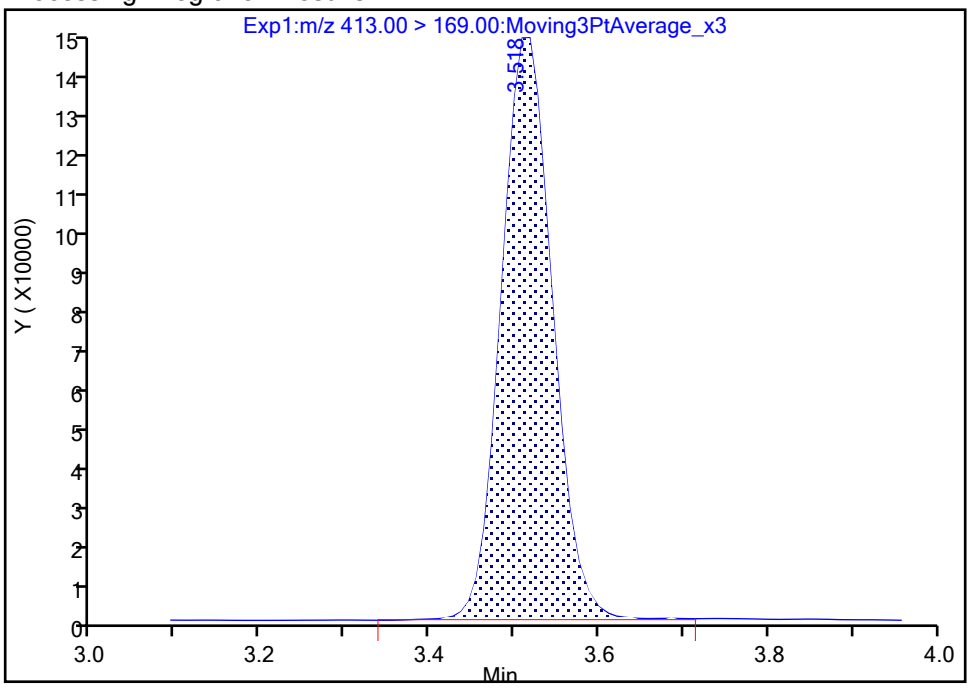
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

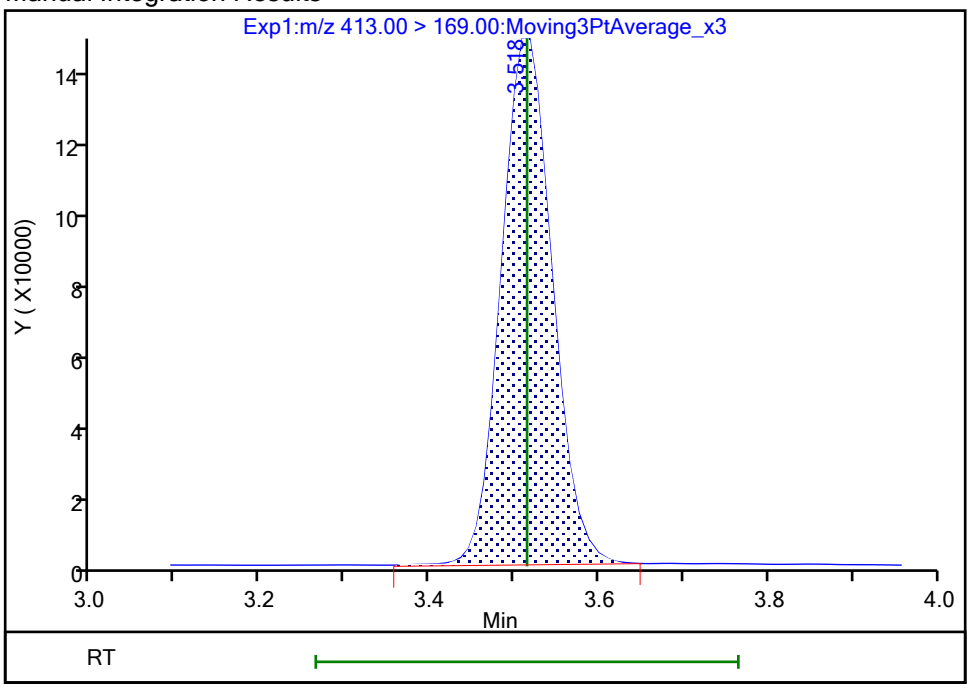
Processing Integration Results

RT: 3.52
Area: 609337
Amount: 1.026900
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 607627
Amount: 1.000900
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

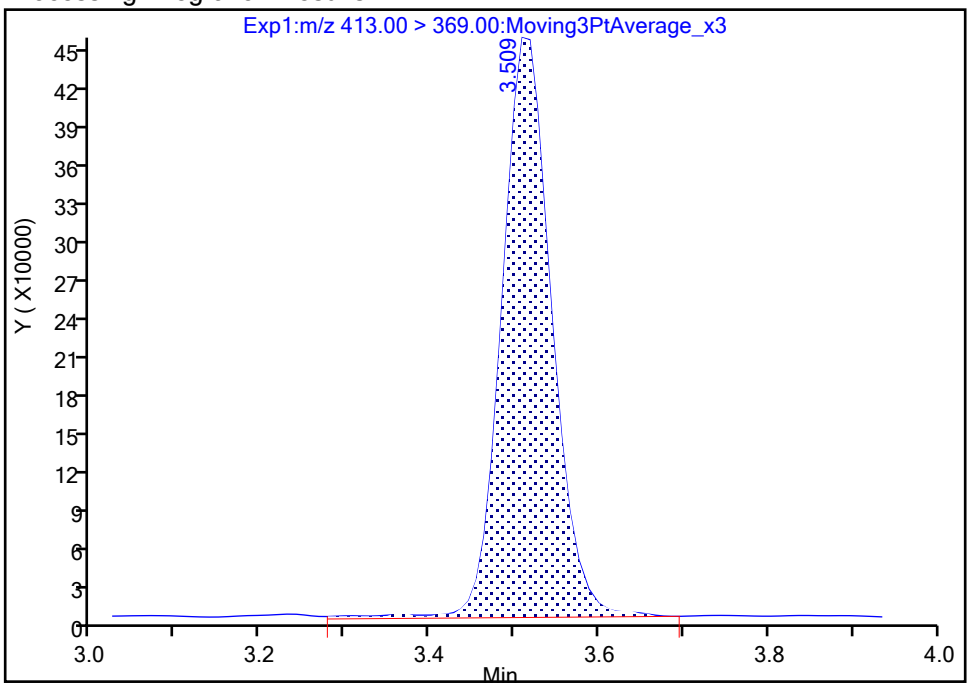
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

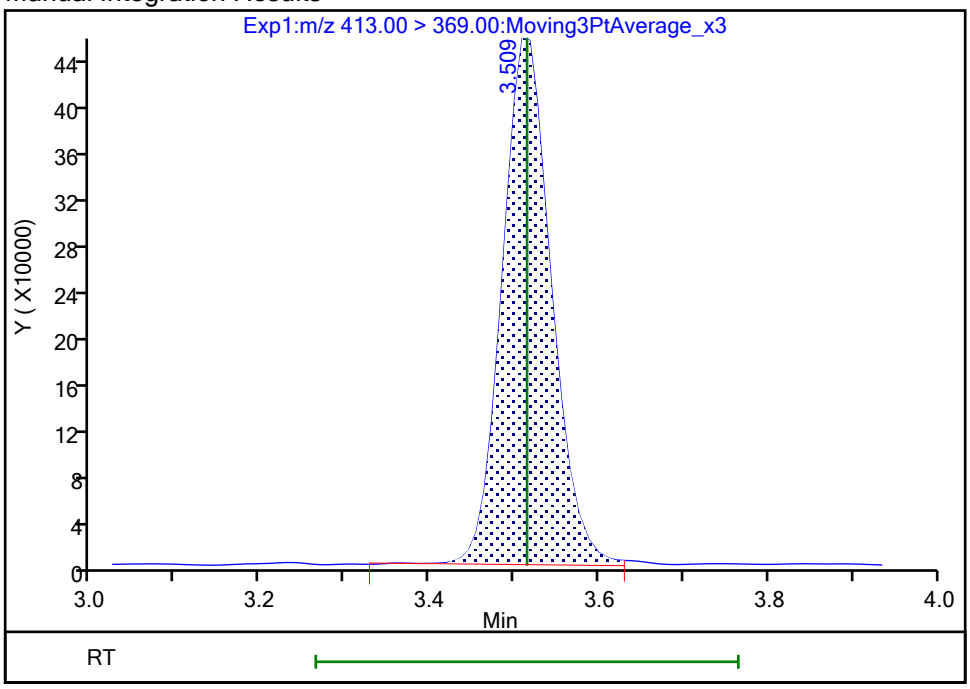
Processing Integration Results

RT: 3.51
Area: 1854742
Amount: 1.026900
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1807782
Amount: 1.000900
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

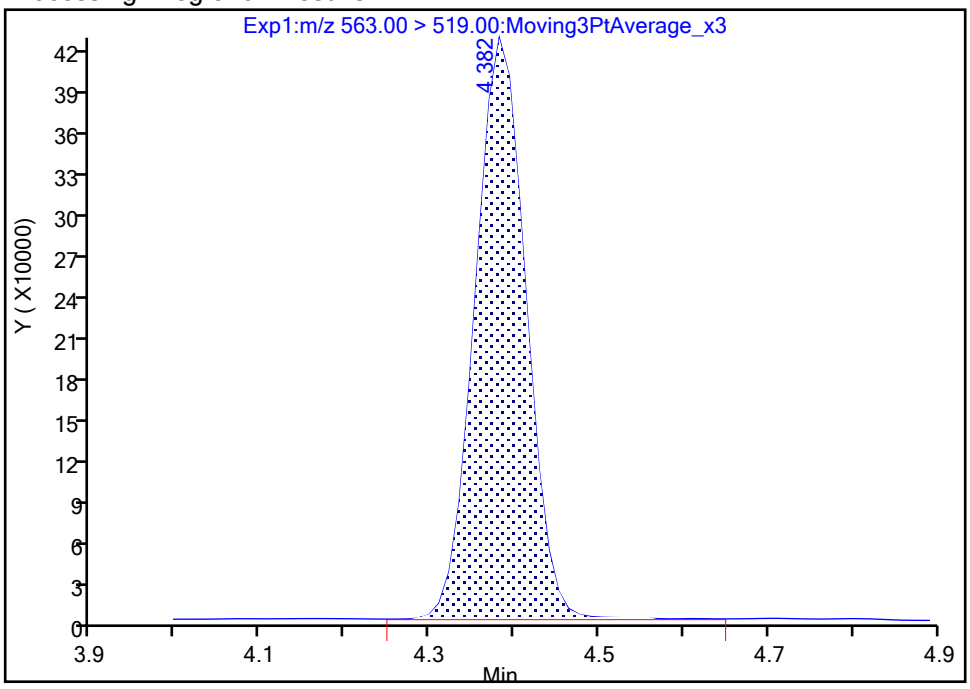
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

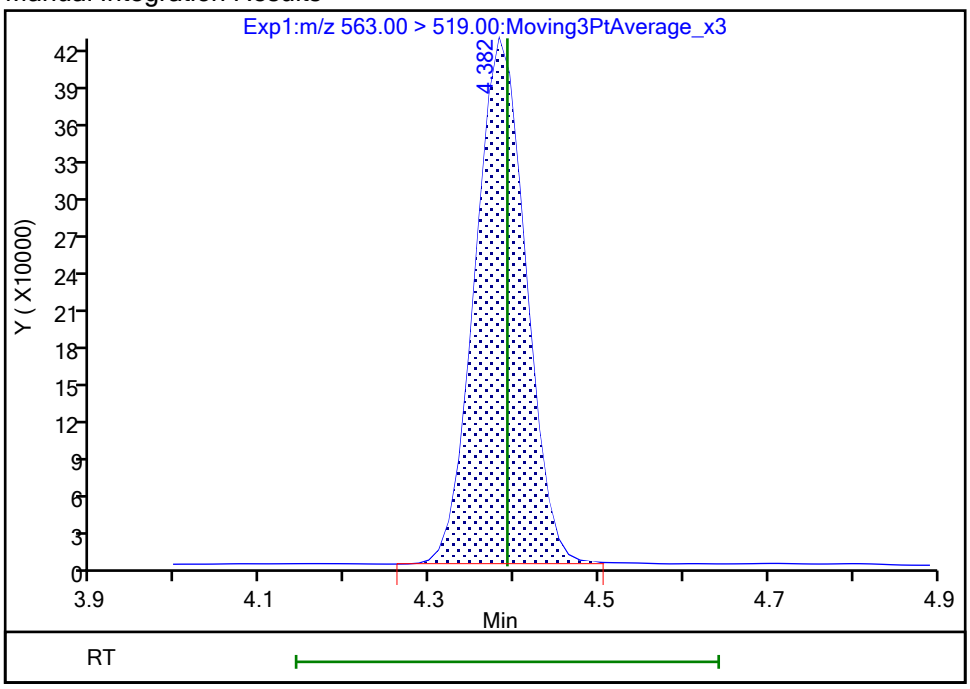
Processing Integration Results

RT: 4.38
Area: 1773258
Amount: 1.066695
Amount Units: ng/ml



Manual Integration Results

RT: 4.38
Area: 1760804
Amount: 1.059204
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

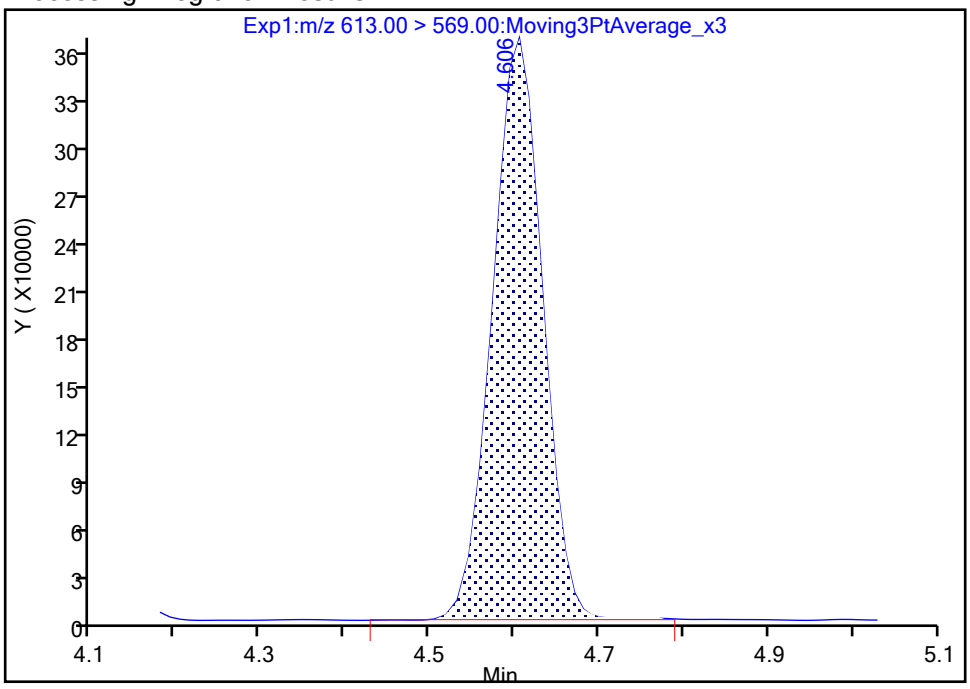
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

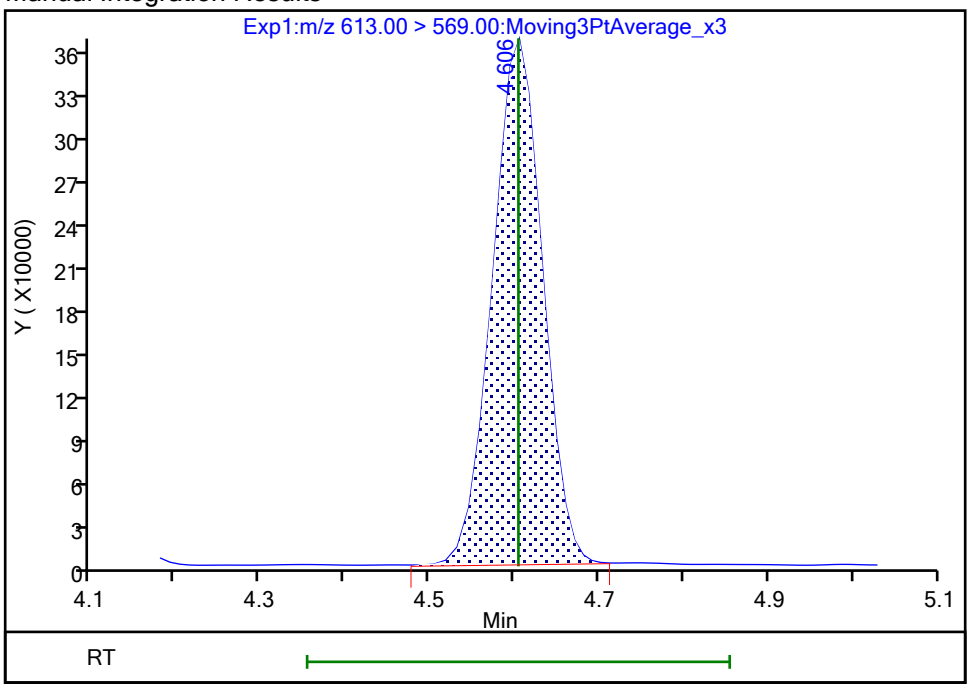
Processing Integration Results

RT: 4.61
Area: 1487136
Amount: 0.925369
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 1478012
Amount: 0.919691
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:14:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

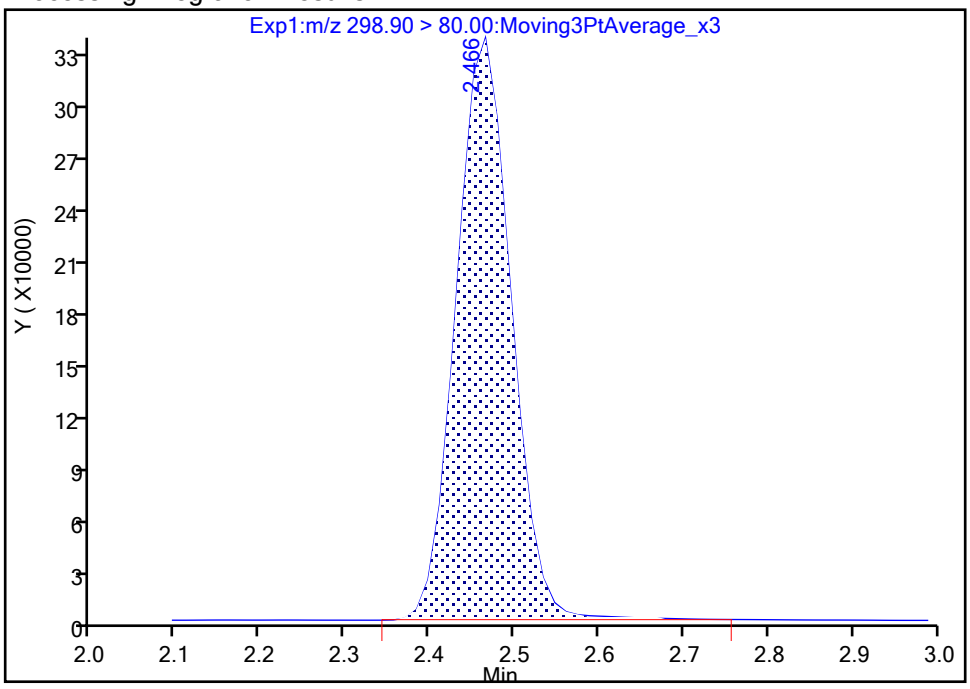
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

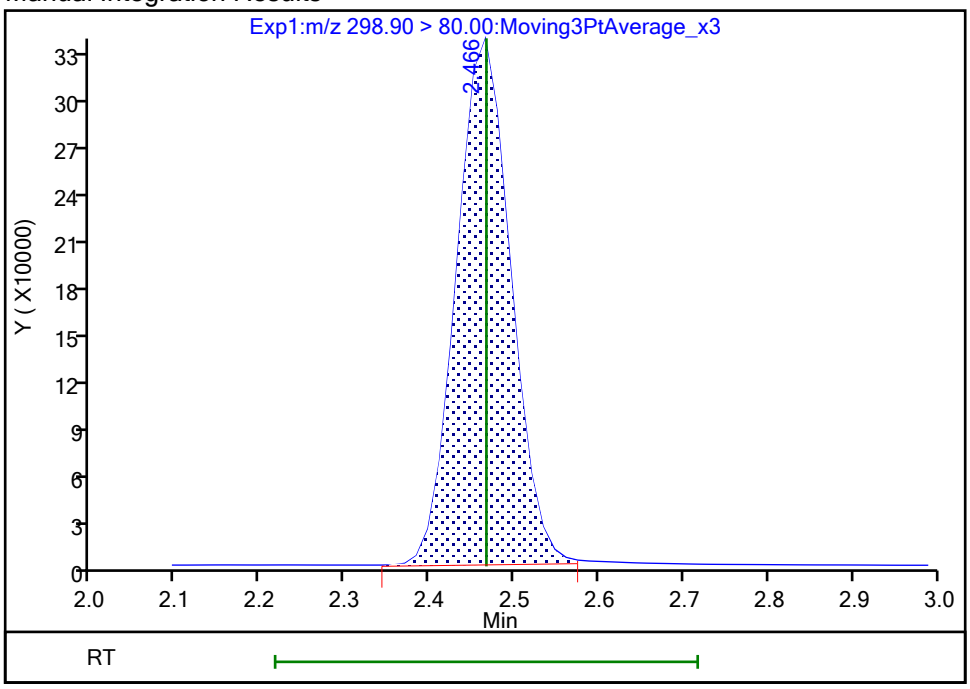
Processing Integration Results

RT: 2.47
Area: 1504337
Amount: 0.896189
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1493364
Amount: 0.889652
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

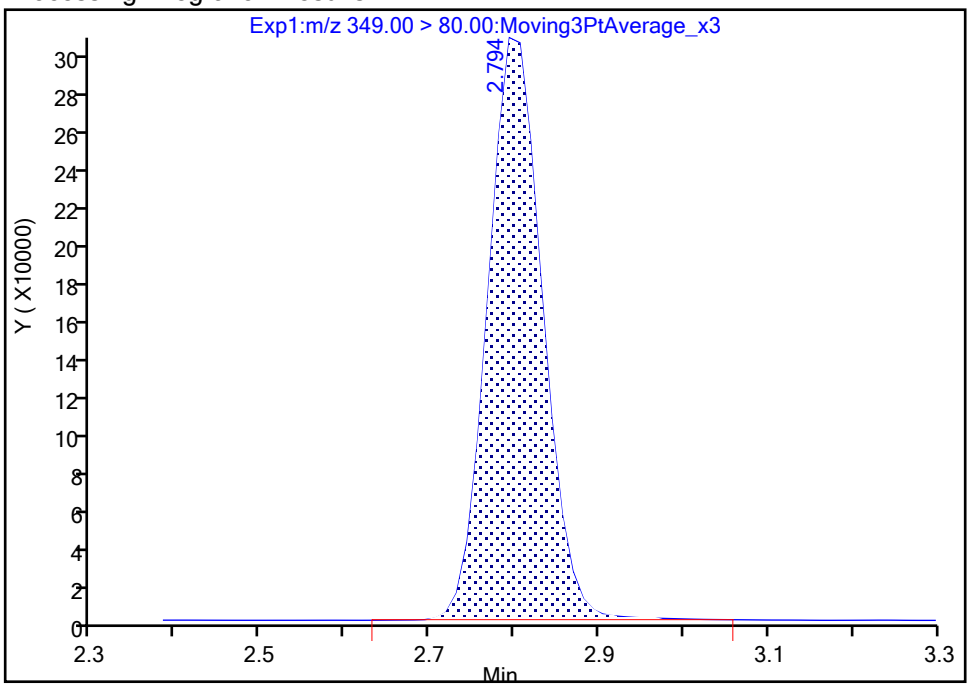
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

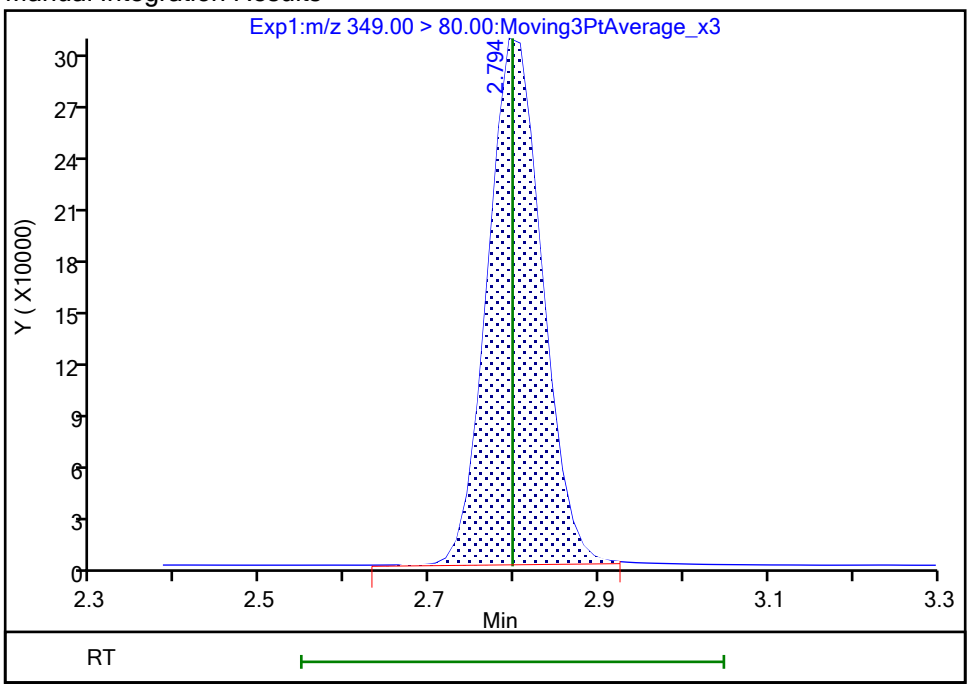
Processing Integration Results

RT: 2.79
Area: 1364409
Amount: 0.951337
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1359394
Amount: 0.947840
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

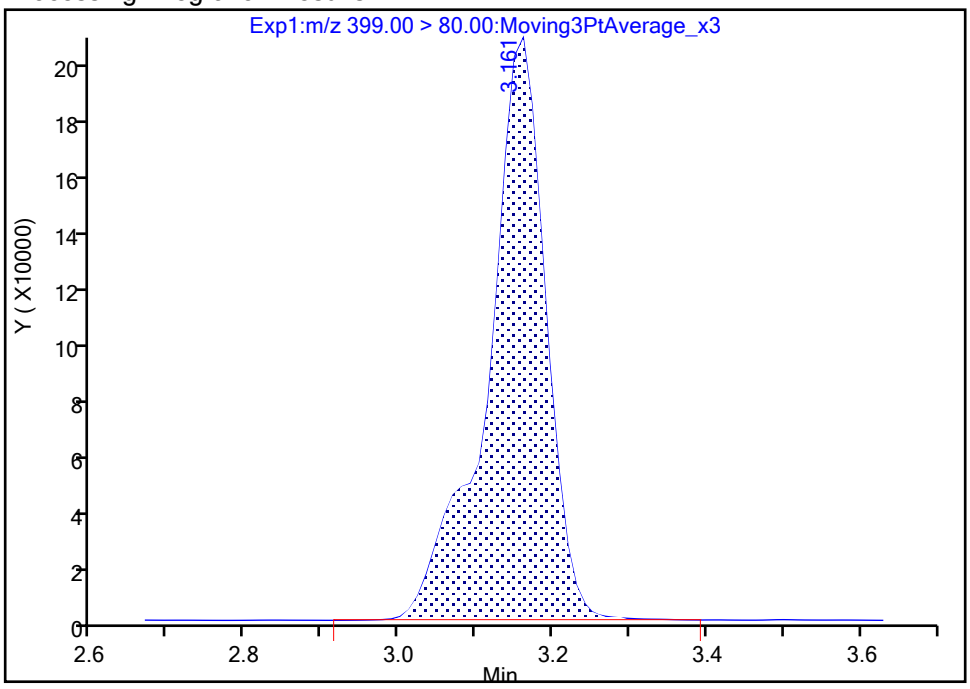
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

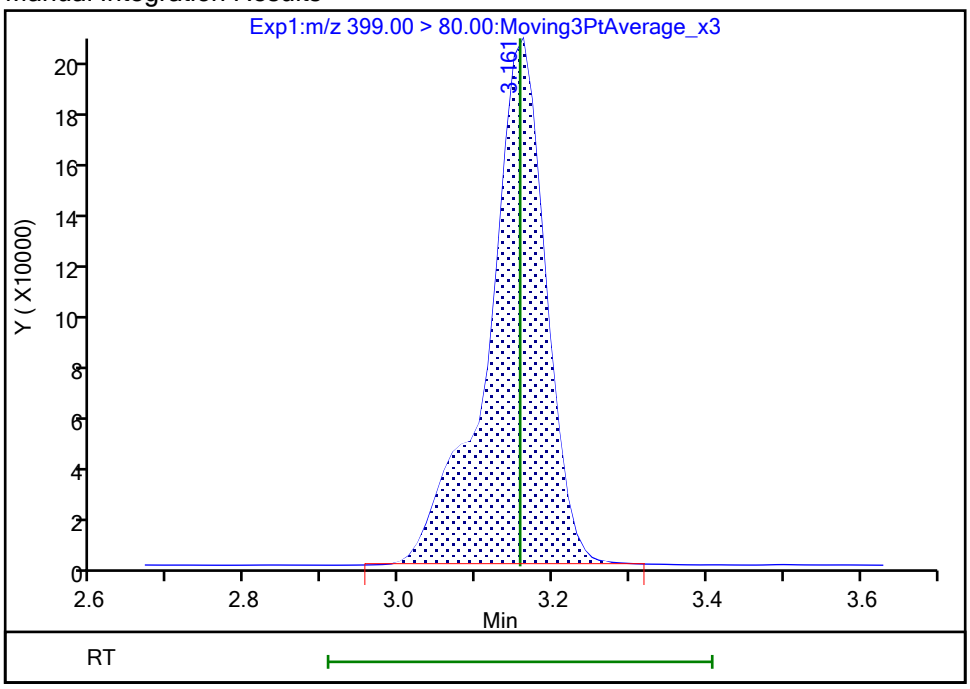
Processing Integration Results

RT: 3.16
Area: 1075148
Amount: 0.884355
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1069611
Amount: 0.879801
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

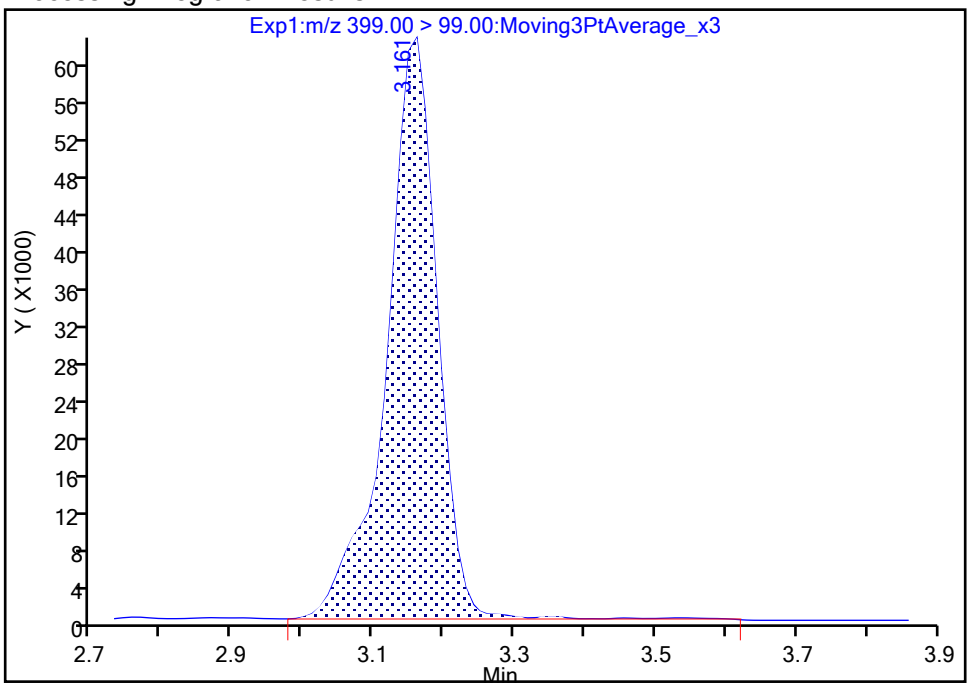
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

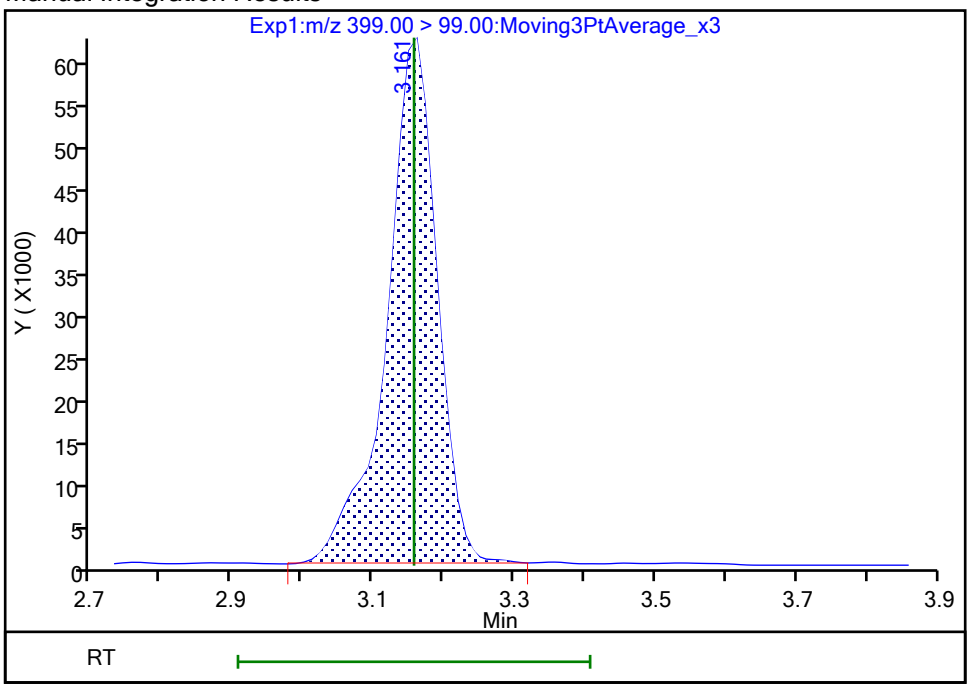
Processing Integration Results

RT: 3.16
Area: 313901
Amount: 0.884355
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 309734
Amount: 0.879801
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

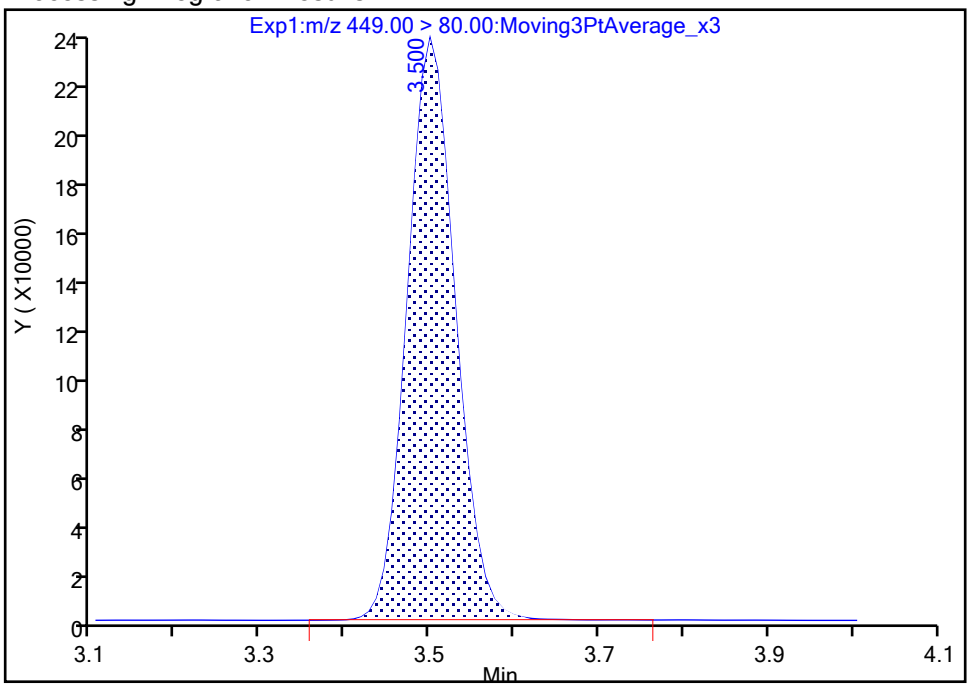
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

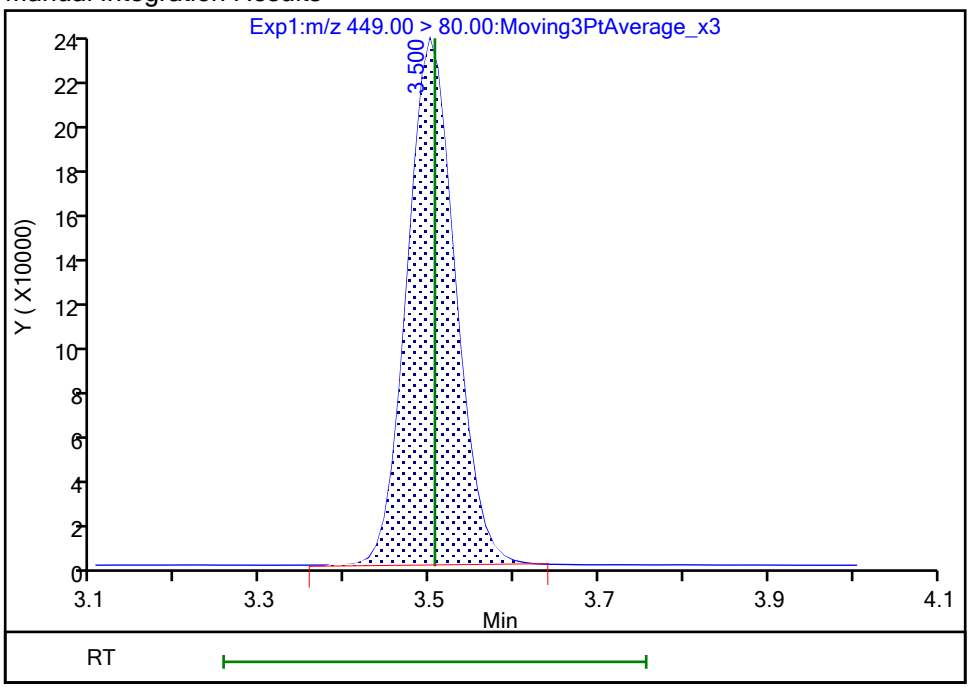
Processing Integration Results

RT: 3.50
Area: 933683
Amount: 0.934606
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 932837
Amount: 0.933759
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

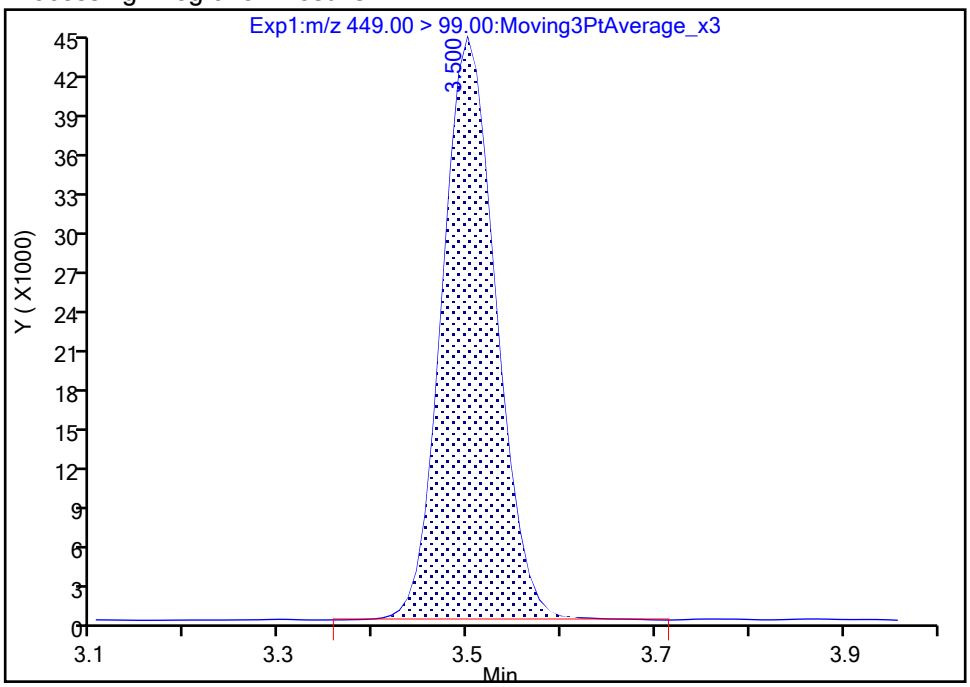
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

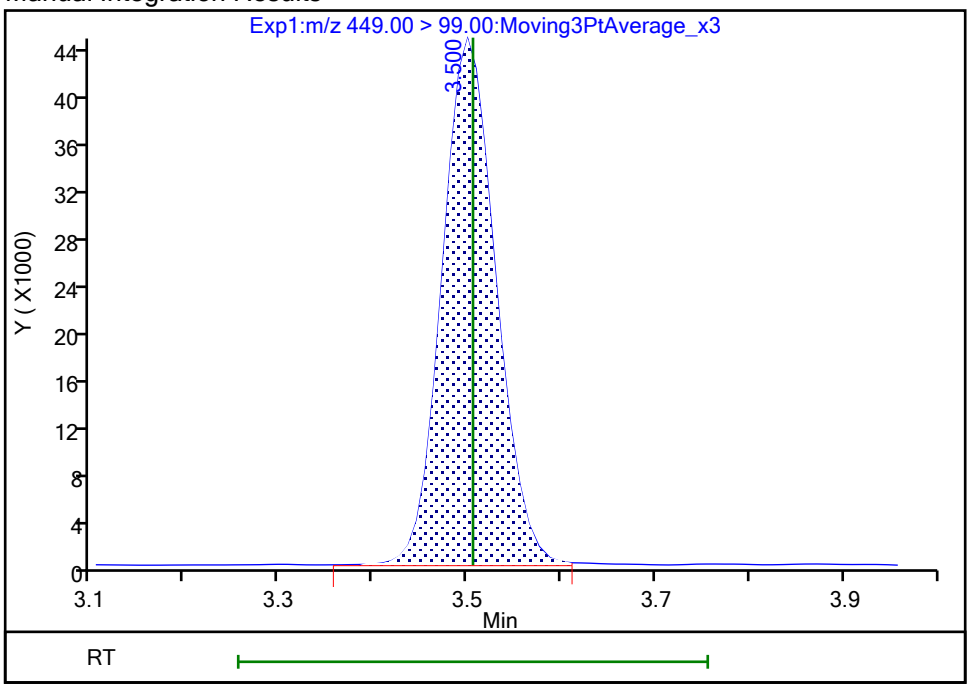
Processing Integration Results

RT: 3.50
Area: 179310
Amount: 0.934606
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 178806
Amount: 0.933759
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

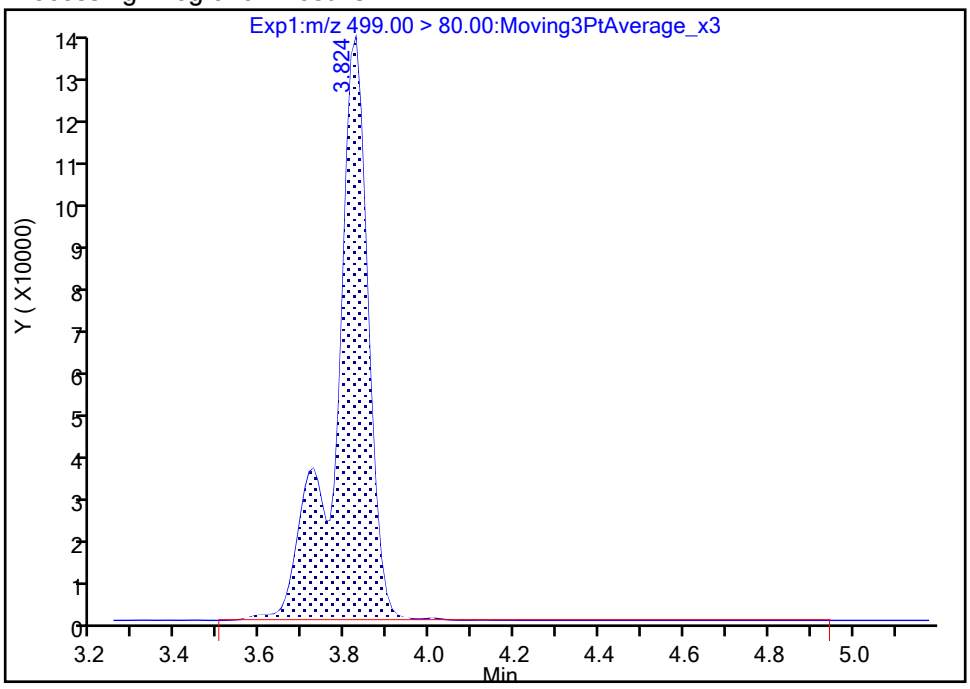
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

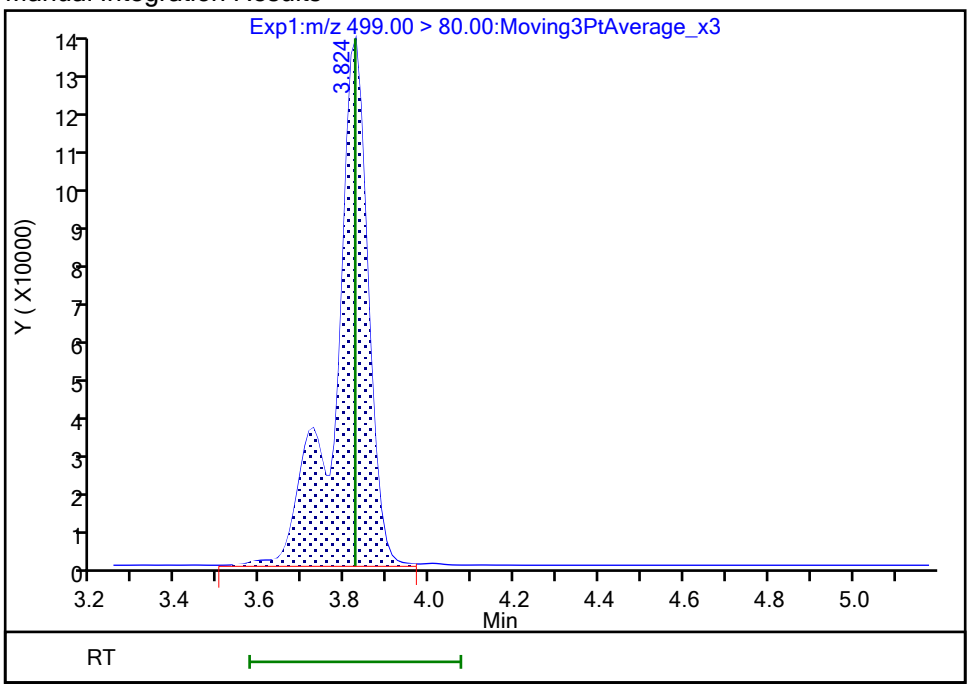
Processing Integration Results

RT: 3.82
Area: 718772
Amount: 0.891452
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 716228
Amount: 0.888297
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

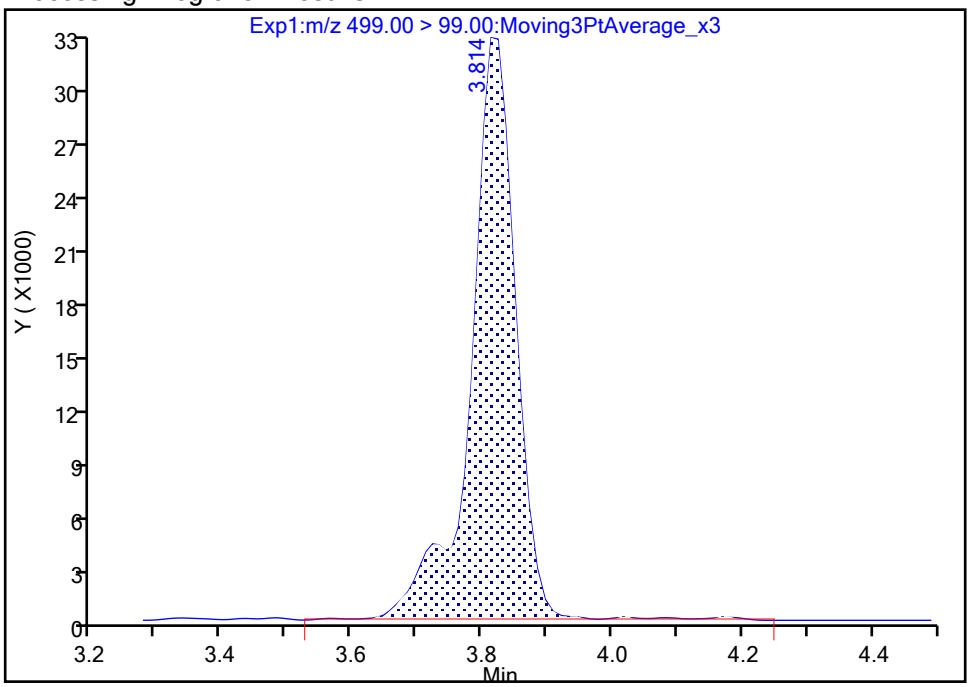
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

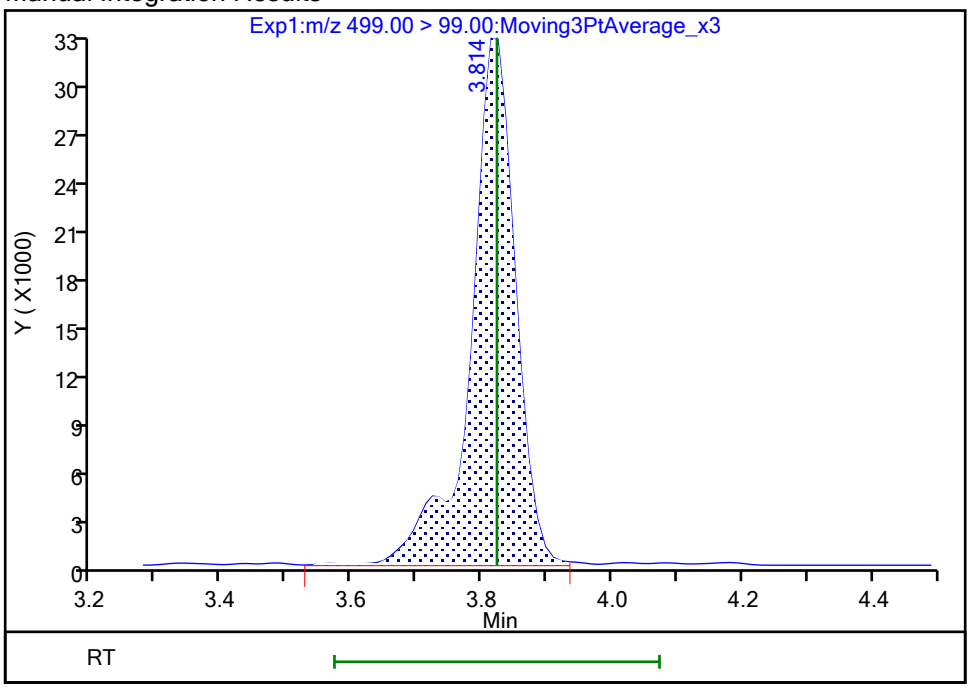
Processing Integration Results

RT: 3.81
Area: 158764
Amount: 0.891452
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 155999
Amount: 0.888297
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

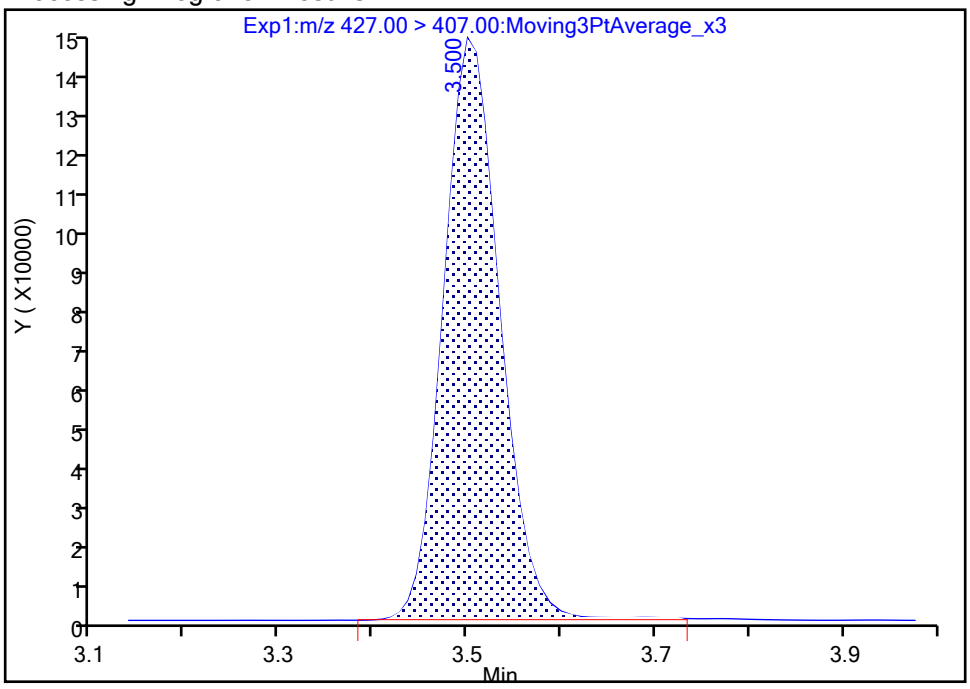
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

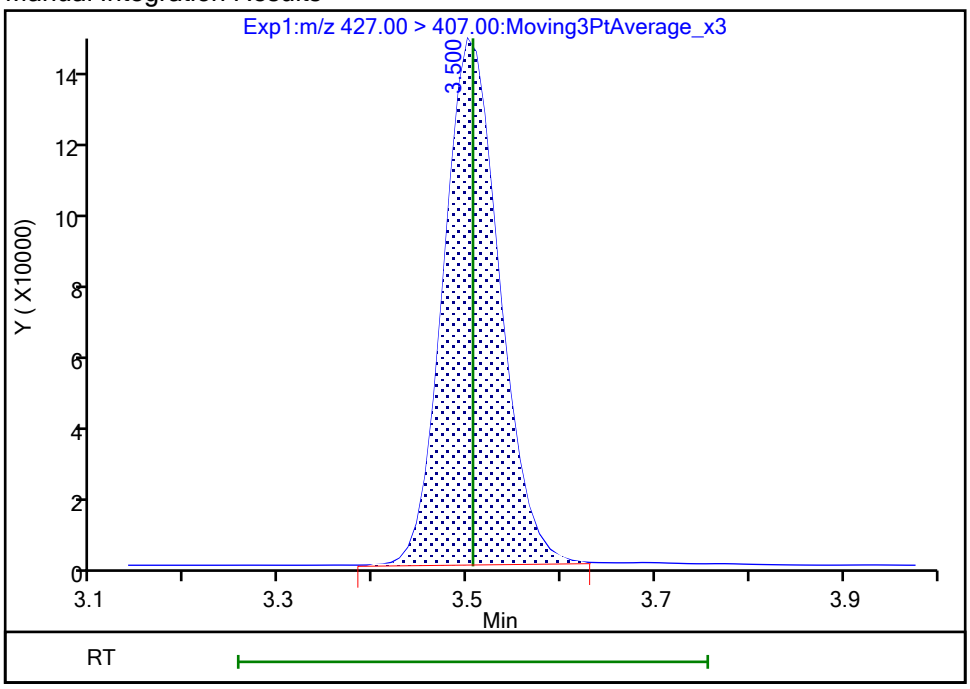
Processing Integration Results

RT: 3.50
Area: 591695
Amount: 0.985990
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 589968
Amount: 0.983112
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

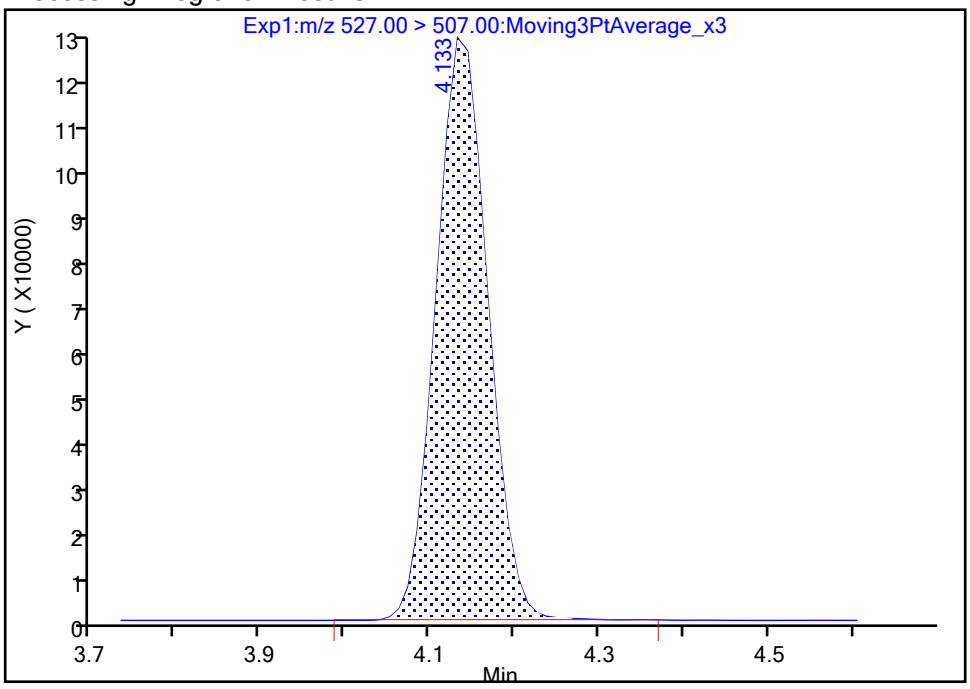
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

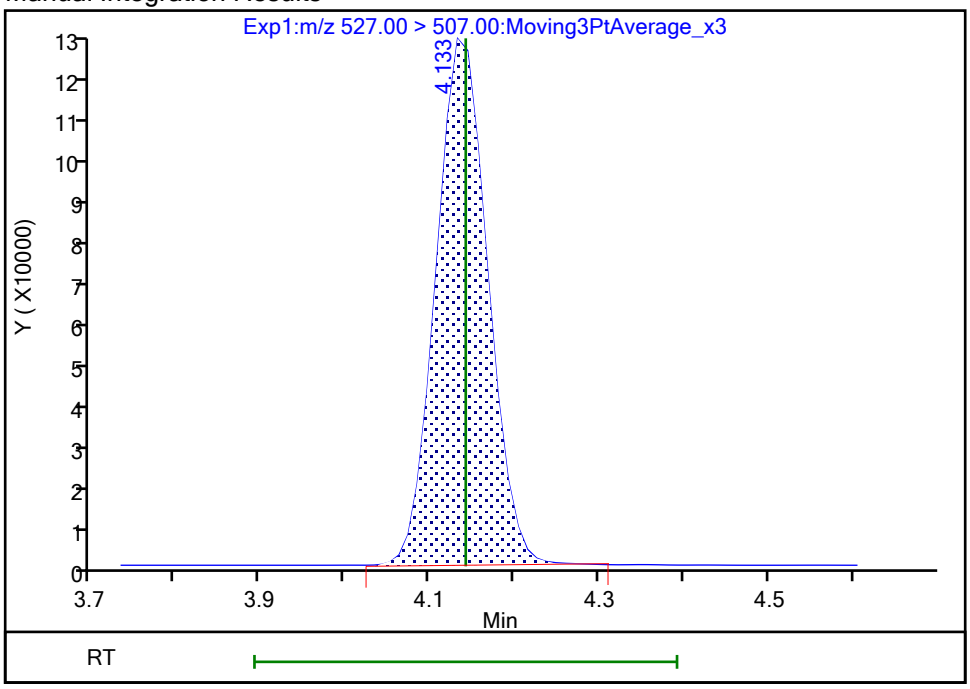
Processing Integration Results

RT: 4.13
Area: 532574
Amount: 1.113402
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 532019
Amount: 1.112242
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

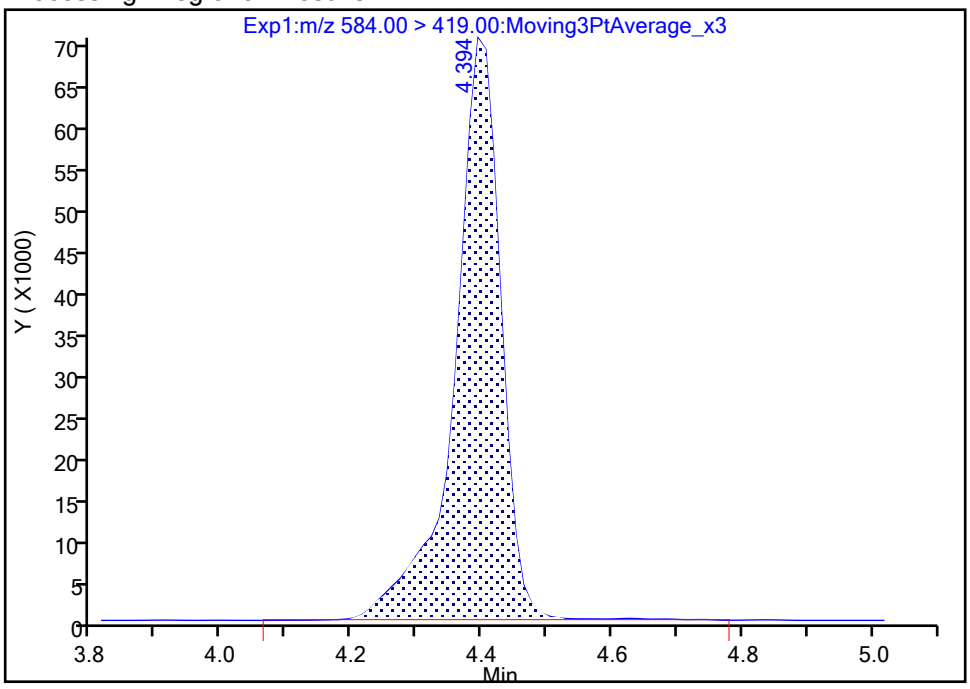
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

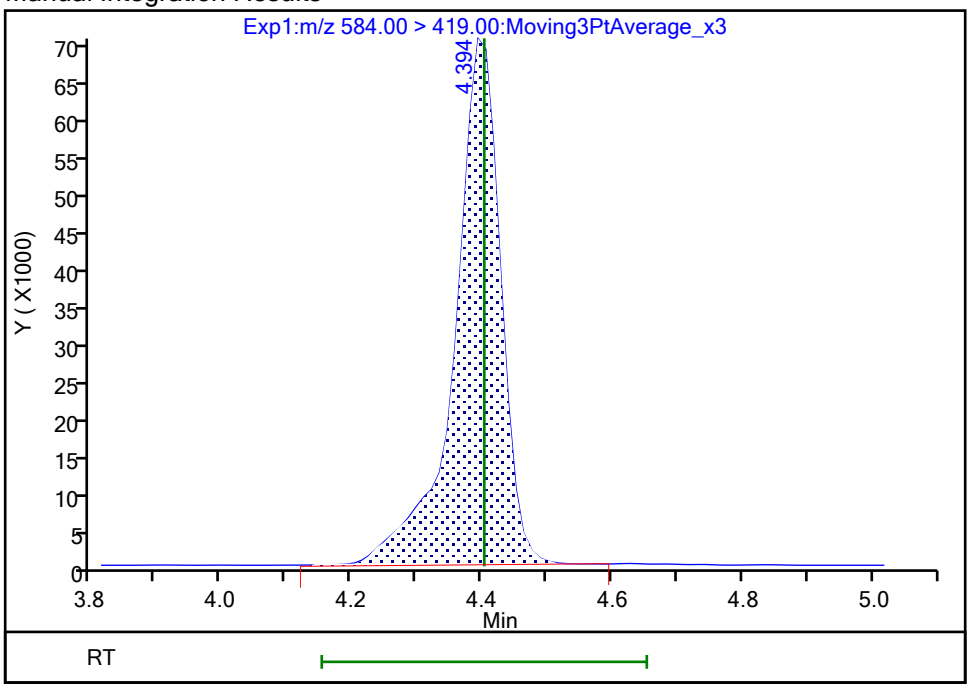
Processing Integration Results

RT: 4.39
Area: 351262
Amount: 0.938902
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 347095
Amount: 0.927764
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:14:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

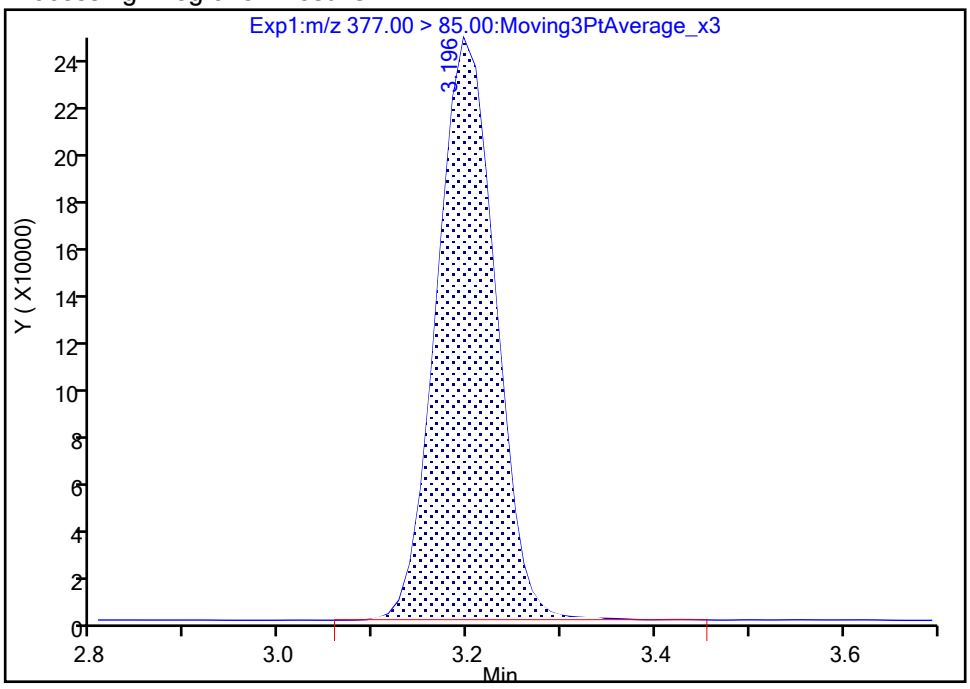
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

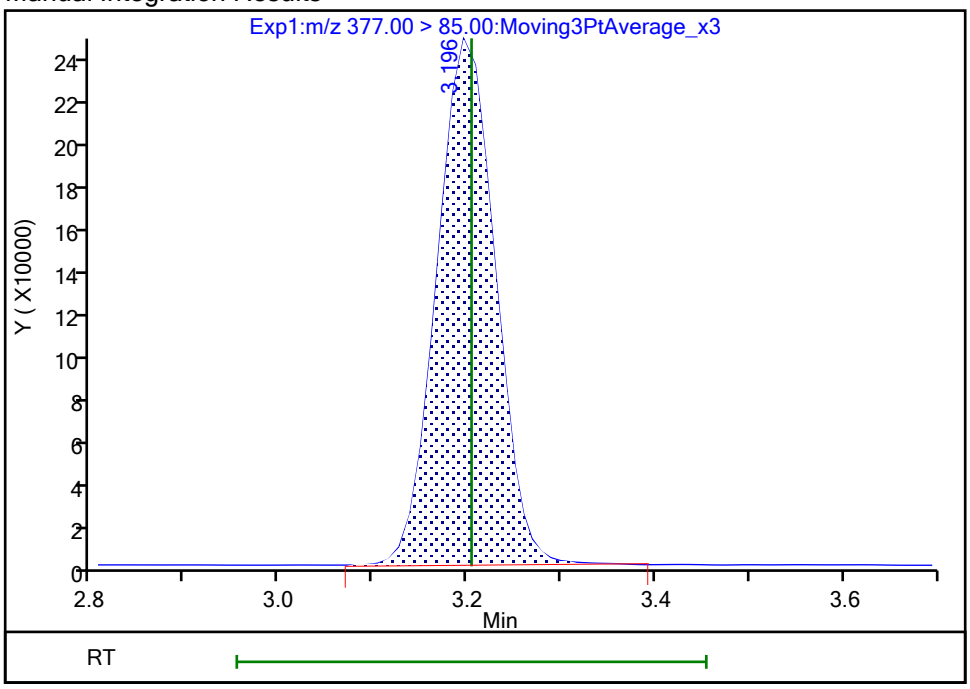
Processing Integration Results

RT: 3.20
Area: 1084049
Amount: 1.029683
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 1082680
Amount: 1.027781
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

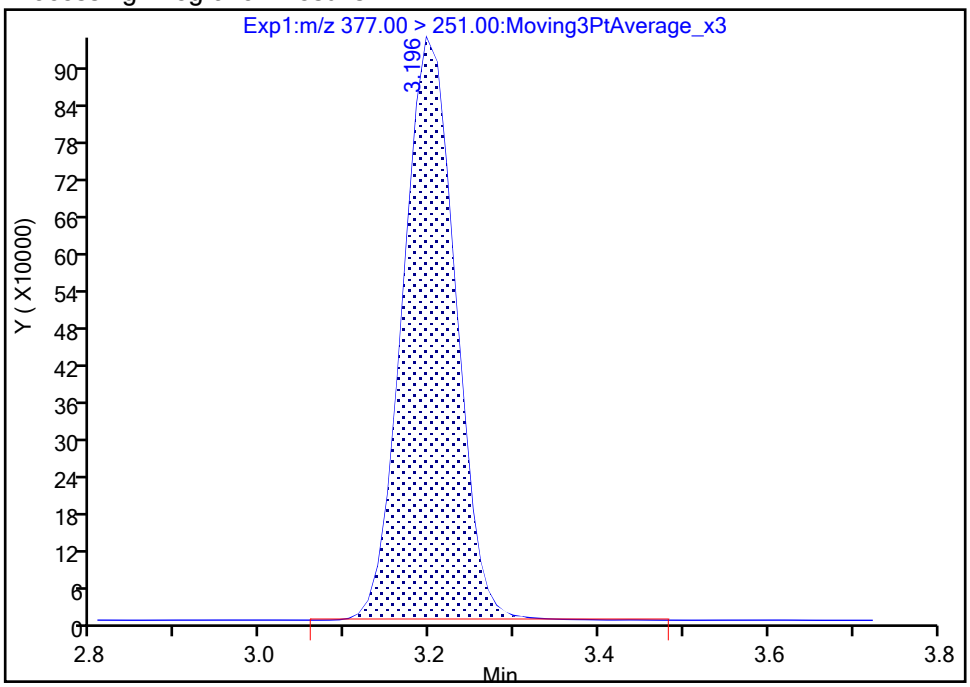
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

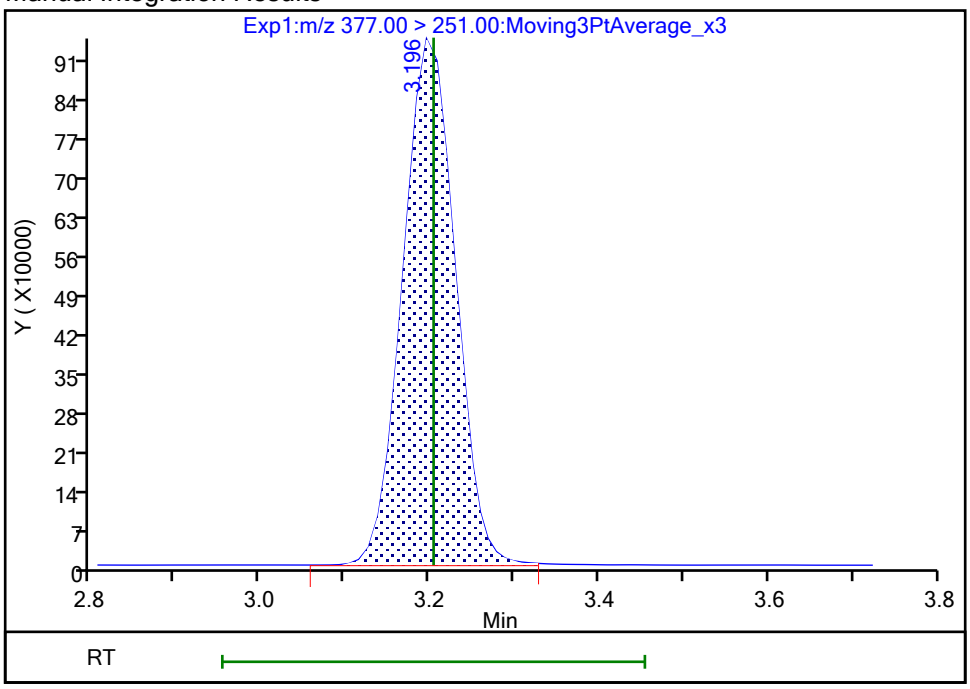
Processing Integration Results

RT: 3.20
Area: 4095690
Amount: 1.029683
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 4088123
Amount: 1.027781
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:13:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

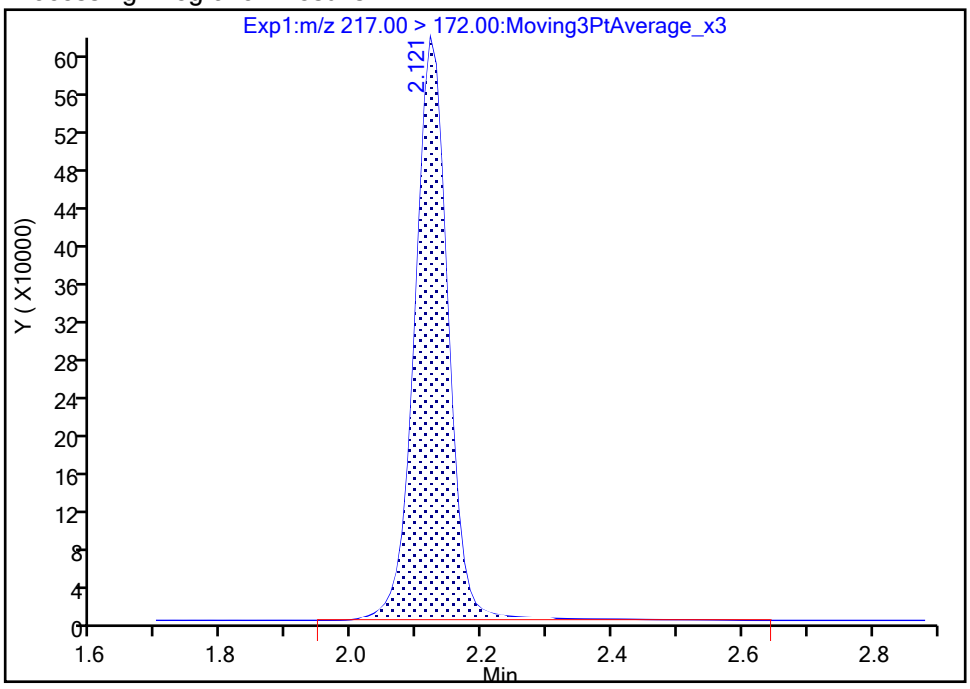
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

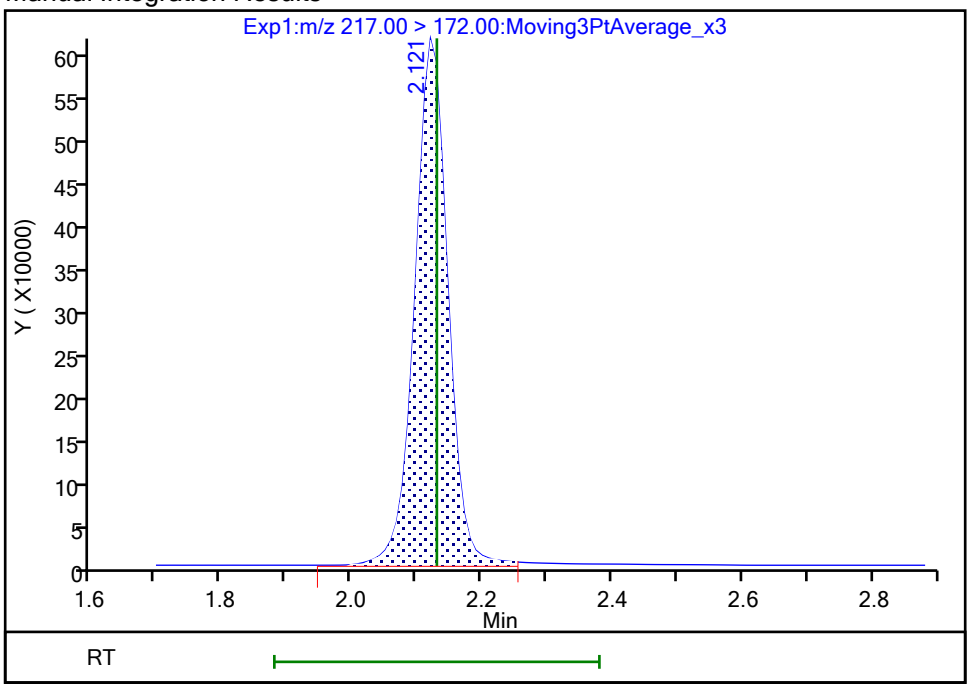
Processing Integration Results

RT: 2.12
Area: 2193194
Amount: 1.296042
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2166588
Amount: 1.280957
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:11:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

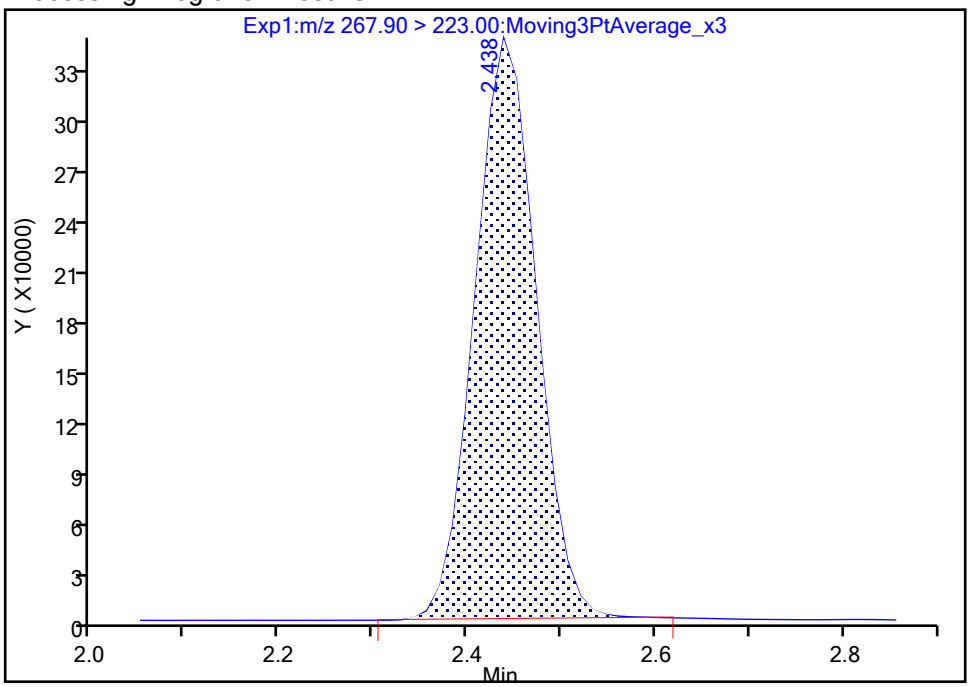
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

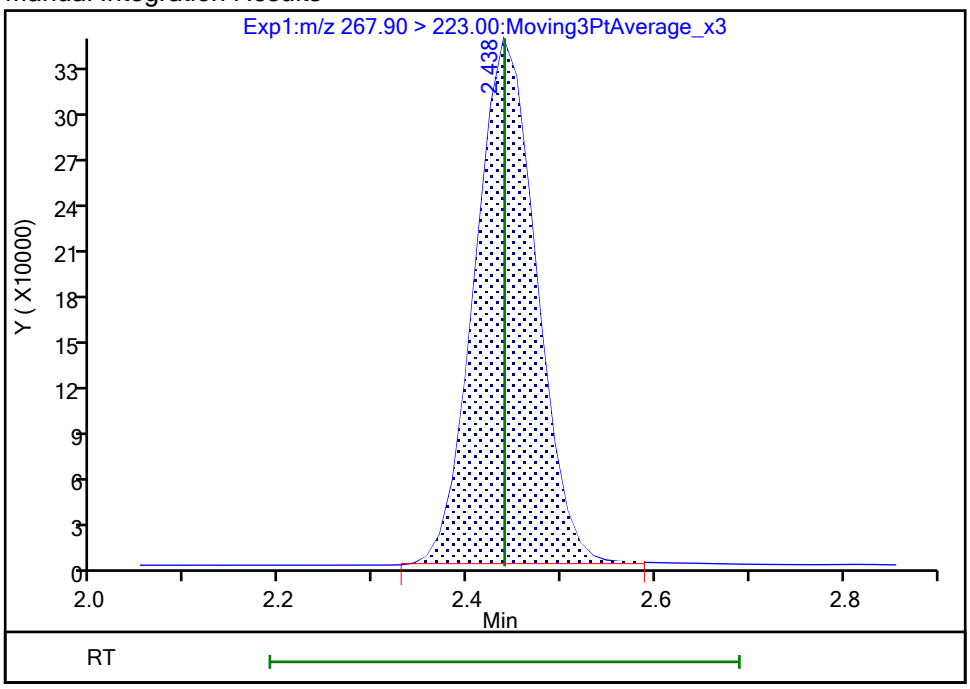
Processing Integration Results

RT: 2.44
Area: 1573950
Amount: 1.198452
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1578936
Amount: 1.202847
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:11:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

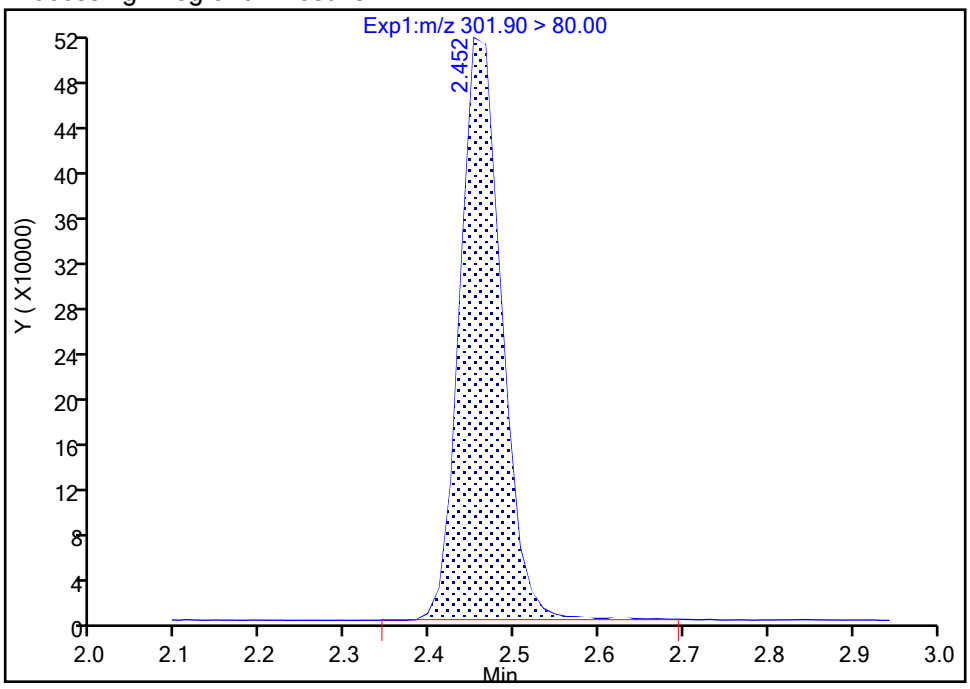
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

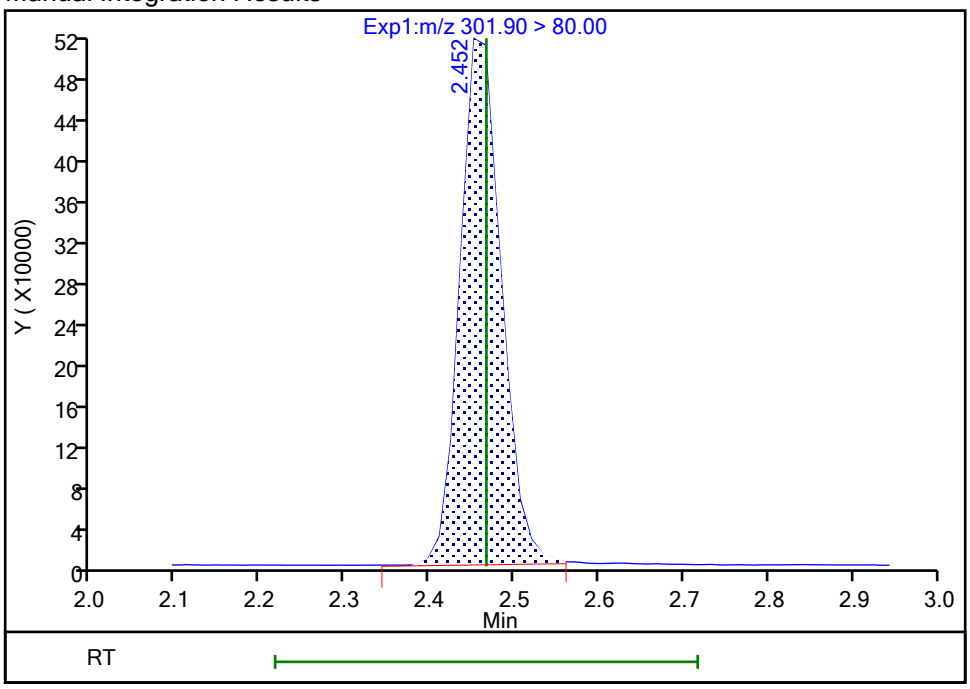
Processing Integration Results

RT: 2.45
Area: 1755408
Amount: 0.987852
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1747117
Amount: 0.983676
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:11:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

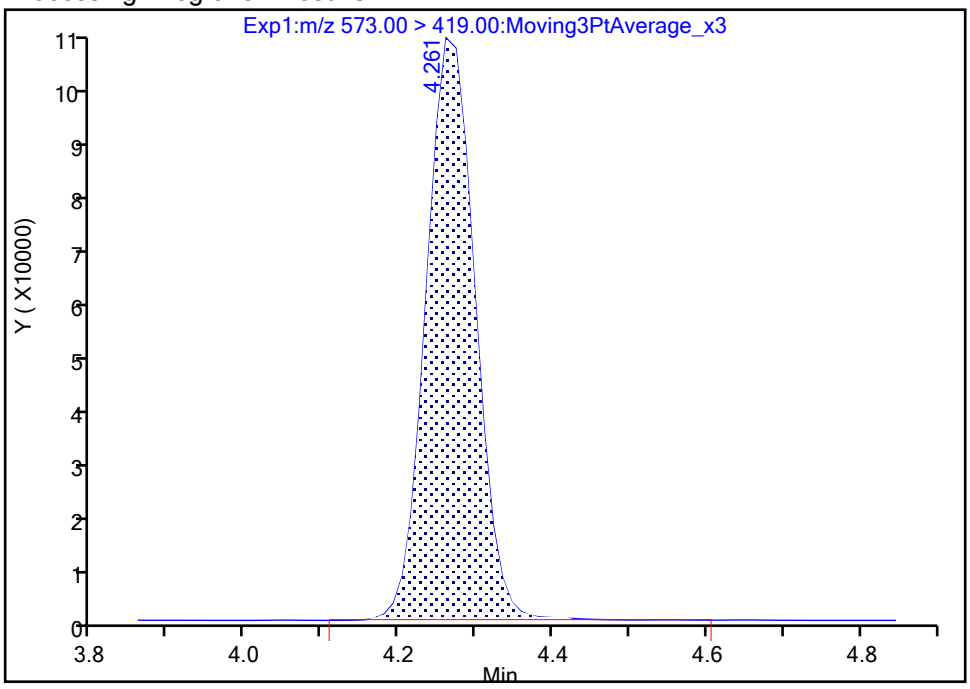
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

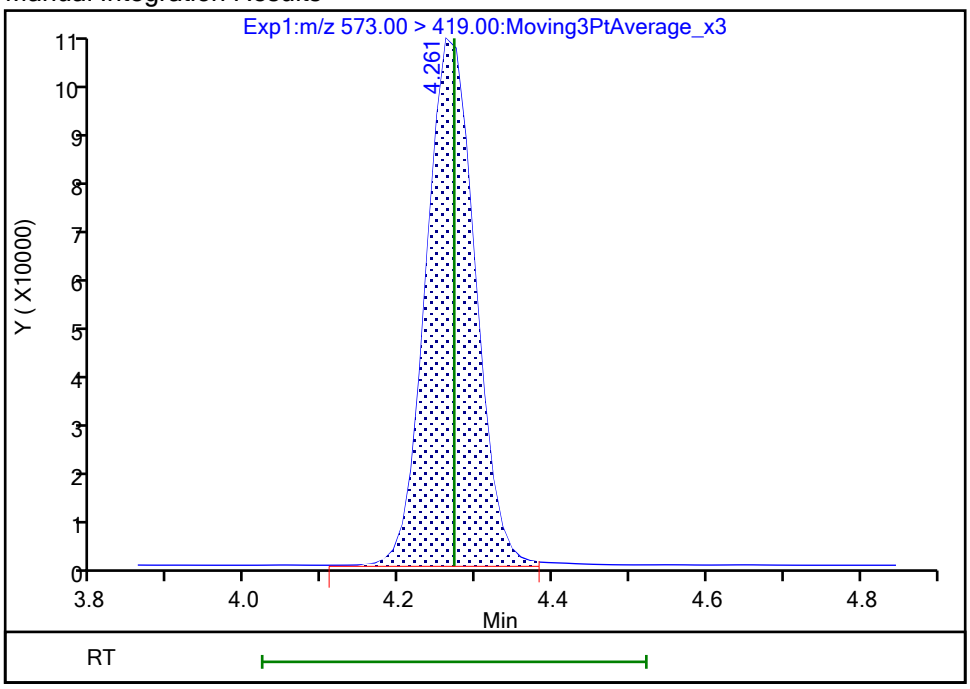
Processing Integration Results

RT: 4.26
Area: 475318
Amount: 1.051051
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 473206
Amount: 1.046902
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:11:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

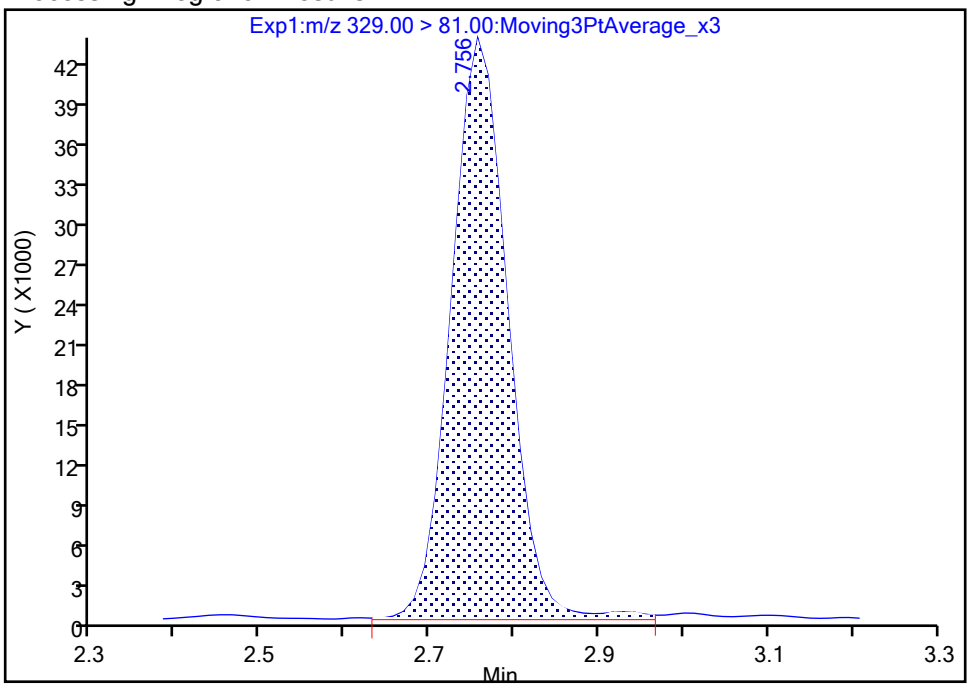
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d				
Injection Date:	21-Oct-2023 04:06:06	Instrument ID:	LC812		
Lims ID:	LCS 200-196591/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

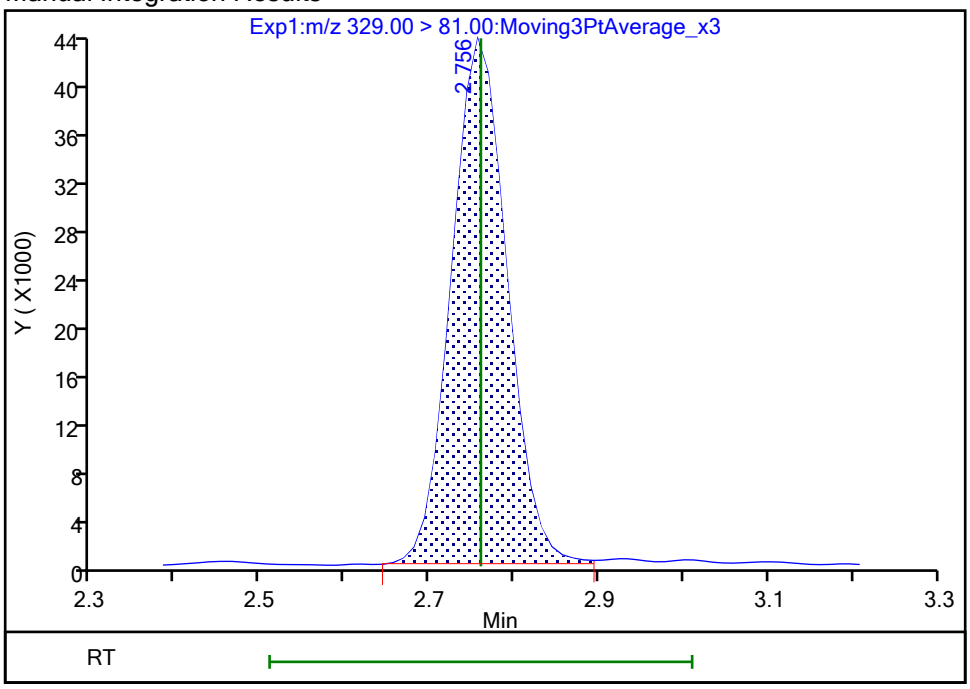
Processing Integration Results

RT: 2.76
Area: 202975
Amount: 0.987696
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 197490
Amount: 0.961484
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:11:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

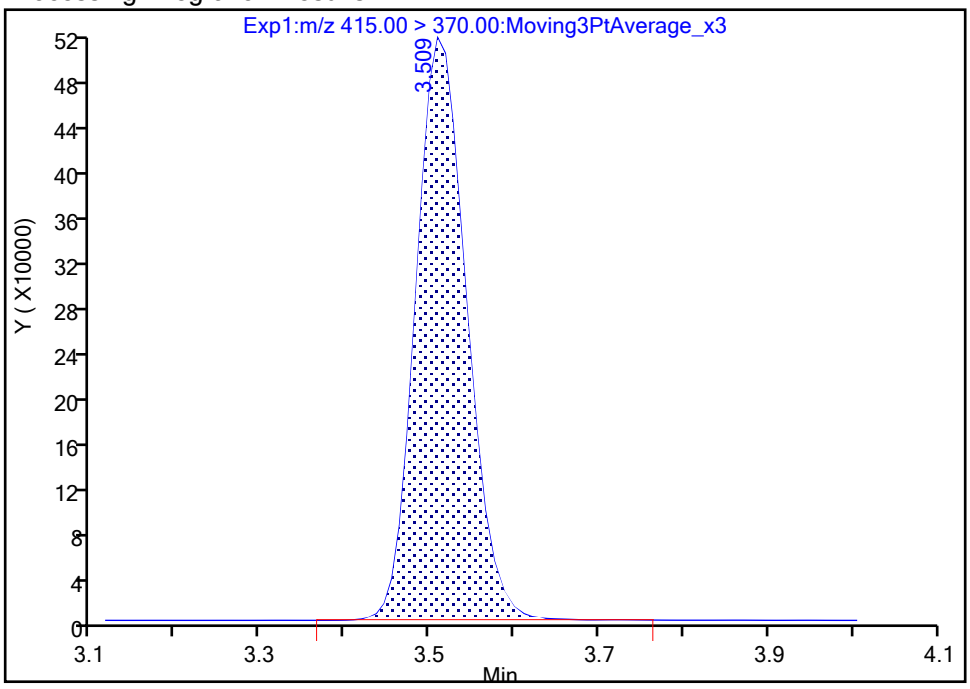
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57494.b\PA231020D03.d
Injection Date: 21-Oct-2023 04:06:06 Instrument ID: LC812
Lims ID: LCS 200-196591/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

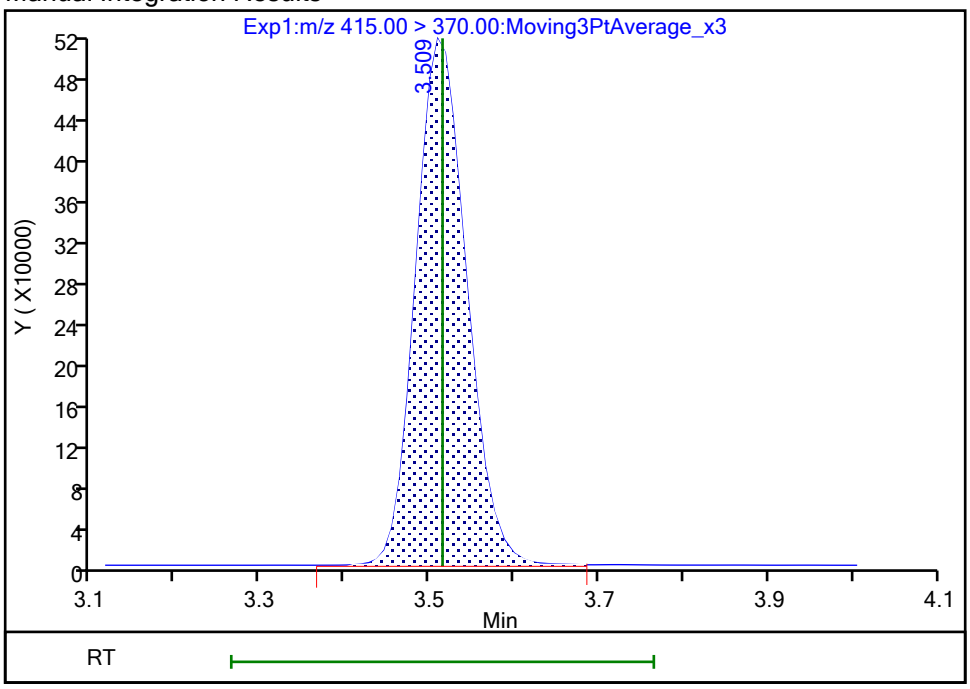
Processing Integration Results

RT: 3.51
Area: 2133054
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2131992
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 23-Oct-2023 15:12:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196590/3-A

Matrix: Water Lab File ID: PA231020C04.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) Date Analyzed: 10/21/2023 00:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	84.10		5.00	1.20
2706-90-3	Perfluoropentanoic acid	84.94		2.00	0.68
307-24-4	Perfluorohexanoic acid	80.77		2.00	0.65
375-85-9	Perfluoroheptanoic acid	82.00		2.00	0.54
335-67-1	Perfluorooctanoic acid	76.22		2.00	0.76
375-95-1	Perfluorononanoic acid	81.35		2.00	0.49
335-76-2	Perfluorodecanoic acid	78.33		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	87.83		2.00	0.55
307-55-1	Perfluorododecanoic acid	77.14		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	86.36		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	75.33		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	76.06		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	83.06		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	73.68		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	78.43		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	74.19		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	70.85		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	68.97		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	84.33		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	84.62		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	89.10		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	92.01		2.00	0.92
2355-31-9	NMeFOSAA	85.34		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	82.85		5.00	1.60
13252-13-6	HFPODA	86.08		4.00	1.10
919005-14-4	DONA	85.01		2.00	0.42
756426-58-1	9Cl-PF3ONS	85.20		2.00	0.32
763051-92-9	11Cl-PF3OUdS	79.50		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 200-196590/3-A

Matrix: Water | Lab File ID: PA231020C04.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:45

Sample wt/vol: 250(mL) | Date Analyzed: 10/21/2023 00:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196633 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	94		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	86		50-150
STL02337	13C3 PFBS	88		50-150
STL01056	13C8 FOSA	80		50-150
STL02118	d3-NMeFOSAA	89		50-150
STL02117	d5-NEtFOSAA	89		50-150
STL02395	M2-4:2 FTS	87		50-150
STL02279	M2-6:2 FTS	88		50-150
STL02280	M2-8:2 FTS	80		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	88		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	92		50-150
STL00998	13C2 PFDoA	91		50-150
STL00995	13C5 PFNA	97		50-150
STL00996	13C2 PFDA	95		50-150
STL00990	13C4 PFOA	104		50-150
STL00997	13C2 PFUnA	93		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Lims ID: LCSD 200-196590/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 21-Oct-2023 00:41:56 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196590/3-A
Misc. Info.: 200-0057493-004 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 08:39:39 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1677

First Level Reviewer: khanphomeea Date: 23-Oct-2023 14:09:26
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.130	-0.009	0.603	2072231	1.28		102	2011	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	3212956	2.10		105	324	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1479640	1.18		94.2	1336	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	2712417	2.12		106	72.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.452	2.467	-0.015	0.697	1735429	1.02		87.8	128100	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	3170579	1.90	Target=2.06	107	1527	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	1595466		1.99(1.03-3.09)		612	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.757	2.760	-0.003	1.000	1229994	2.11		112	10288	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.784	200590	1.02		87.4	148	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.794	2.798	-0.004	0.794	1559333	1.22		97.6	9122	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.794	2.798	-0.004	1.000	2772083	2.02	Target=14.12	101	639	M
313.00 > 119.00	2.794	2.798	-0.004	1.000	191358		14.49(7.06-21.17)		218	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.807	2.798	0.009	0.888	2907081	2.08	Target=2.72	110	4301	M
349.00 > 99.00	2.794	2.798	-0.004	0.884	998006		2.91(1.36-4.09)		1611	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.908	-0.003	1.000	511372	2.15		108	7847	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.826	296677	1.20		96.0	3291	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.157	0.005	0.899	1267645	1.04		88.0	5453	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.157	0.005	1.000	2185953	1.84	Target=3.32	101	3059	M
399.00 > 99.00	3.162	3.157	0.005	1.000	643515		3.40(1.66-4.98)		557	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.169	-0.007	1.000	3154956	2.05	Target=4.17	103	702	M
363.00 > 169.00	3.162	3.169	-0.007	1.000	762106		4.14(2.09-6.26)		1086	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.169	-0.007	0.899	1716280	1.22		98.0	5722	
77 DONA										
377.00 > 251.00	3.196	3.204	-0.008	0.836	8665389	2.13	Target=3.33	112	9073	
377.00 > 85.00	3.196	3.204	-0.008	0.836	2347489		3.69(1.66-4.99)		2983	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.500	3.506	-0.006	0.915	2007997	1.96	Target=4.83	103	4970	
449.00 > 99.00	3.500	3.506	-0.006	0.915	391916		5.12(2.41-7.24)		1141	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.500	3.506	-0.006	0.995	263910	1.04		87.8	639	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.500	3.506	-0.006	1.000	1285054	2.12		111	1349	M
D 14 13C4 PFOA										
417.00 > 372.00	3.509	3.515	-0.006	0.997	2072734	1.31		104	13723	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.515	0.004		2039871	1.25			5452	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.519	3.515	0.004	1.003	3365501	1.91	Target=2.88	95.3	151	
413.00 > 169.00	3.509	3.515	-0.006	1.000	1171420		2.87(1.44-4.32)		1806	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.823	0.001	1.000	1532968	1.85	Target=4.24	99.9	2069	M
499.00 > 99.00	3.824	3.823	0.001	1.000	330240		4.64(2.12-6.37)		978	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.823	0.001	1.087	846778	1.09		91.6	3241	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.846	-0.010	1.000	3334211	2.03	Target=8.34	102	557	
463.00 > 169.00	3.836	3.846	-0.010	1.000	379397		8.79(4.17-12.51)		1933	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.846	-0.010	1.090	2091091	1.21		96.8	8653	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.976	3.975	0.001	1.040	5387213	2.13		114	8959	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.096	4.106	-0.010	1.071	1113718	1.77	Target=2.17	92.1	3523	M
549.00 > 99.00	4.096	4.106	-0.010	1.071	457874		2.43(1.08-3.25)		1653	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.130	0.002	1.000	3372237	1.96	Target=11.44	97.9	1181	
513.00 > 169.00	4.132	4.130	0.002	1.000	320251		10.53(5.72-17.16)		2403	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.130	0.002	1.174	2153992	1.19		95.2	5694	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.142	0.002	1.178	273427	0.9607		80.2	892	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.142	0.002	1.000	1119665	2.23		116	6314	M
D 21 13C8 FOSA										
506.00 > 78.00	4.236	4.235	0.001	1.204	1547851	1.00		80.2	4110	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.236	4.235	0.001	1.000	2716955	2.30		115	8036	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.273	4.271	0.002	1.214	479003	1.11		88.6	1070	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.273	4.271	0.002	1.000	741874	2.13		107	770	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.357	4.356	0.001	1.139	834489	1.72	Target=2.37	89.3	4443	
599.00 > 99.00	4.357	4.356	0.001	1.139	344652		2.42(1.19-3.56)		2030	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.380	0.001	1.245	1977432	1.16		92.6	13344	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.381	4.391	-0.010	1.000	3579989	2.20	Target=12.20	110	868	
563.00 > 169.00	4.381	4.391	-0.010	1.000	291411		12.29(6.10-18.31)		2338	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.391	0.002	1.249	461292	1.11		88.6	1005	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.403	-0.010	1.000	764497	2.07		104	1373	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.475	0.002	1.171	7708998	1.99		105	8417	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.604	0.001	1.309	1982262	1.14		91.3	10645	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.604	0.001	1.000	3112706	1.93	Target=8.47	96.4	207	M
613.00 > 169.00	4.605	4.604	0.001	1.000	401634		7.75(4.23-12.70)		3268	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.626	-0.010	1.114	664693	2.21		115	7933	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.769	4.769	0.0	1.247	282821	1.72	Target=0.48	89.1	3392	
699.00 > 99.00	4.769	4.769	0.0	1.247	585353		0.48(0.24-0.72)		3107	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.798	4.807	-0.009	1.042	3662682	2.16	Target=6.41	108	232	M
663.00 > 169.00	4.798	4.807	-0.009	1.042	507371		7.22(3.21-9.62)		2531	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.983	0.0	1.416	1864408	1.08		86.3	4719	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.983	4.983	0.0	1.000	314082	1.88	Target=0.87	94.2	2234	
713.00 > 219.00	4.973	4.983	-0.010	0.998	359982		0.87(0.43-1.30)		3740	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.293	5.293	0.0	1.504	1937652	0.9728		77.8	4449	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.293	5.293	0.0	1.000	3485140	2.25	Target=7.89	112	262	M
813.00 > 169.00	5.293	5.293	0.0	1.000	417852		8.34(3.94-11.83)		3350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.555	5.555	0.0	1.049	2482432	2.05	Target=9.39	103	289	M
913.00 > 169.00	5.555	5.555	0.0	1.049	256181		9.69(4.69-14.08)		948	M

QC Flag Legend

Processing Flags

Review Flags

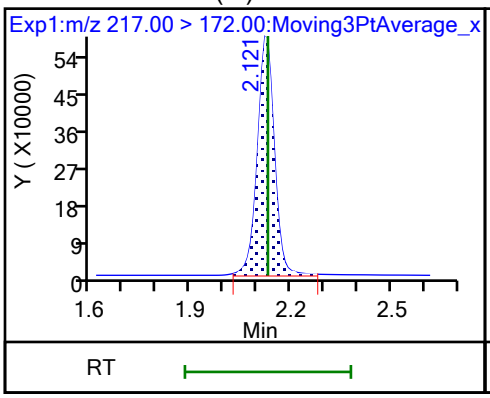
M - Manually Integrated

Report Date: 25-Oct-2023 08:39:49 Chrom Revision: 2.3 18-Oct-2023 21:16:54

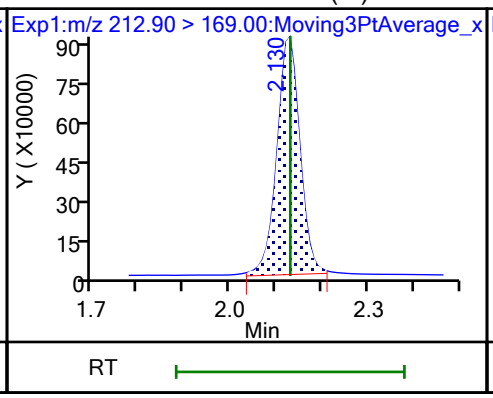
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

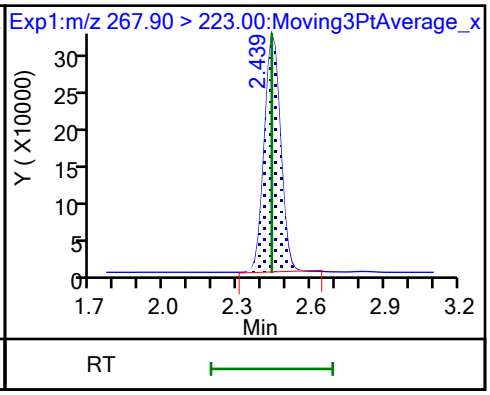
D 1 13C4 PFBA (M)



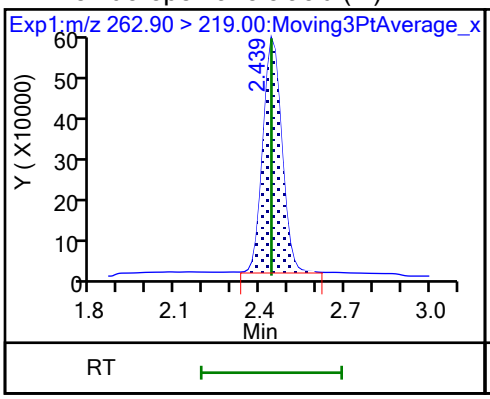
2 Perfluorobutanoic acid (M)



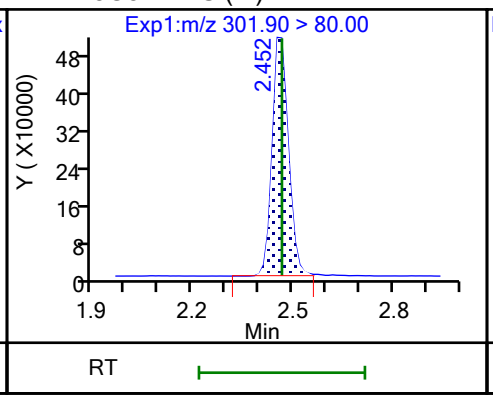
D 3 13C5 PFPeA



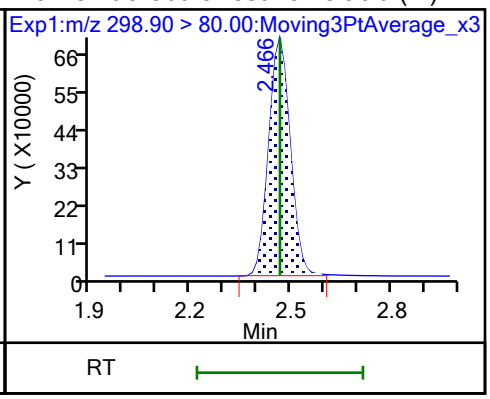
4 Perfluoropentanoic acid (M)



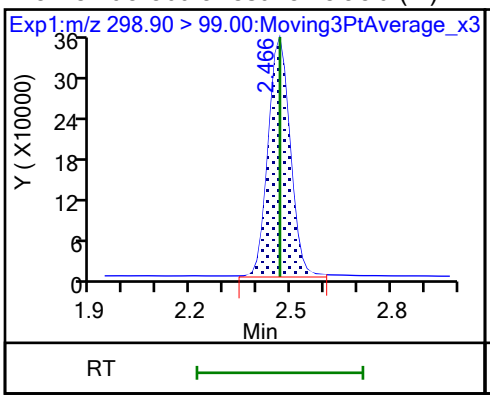
D 47 13C3 PFBS (M)



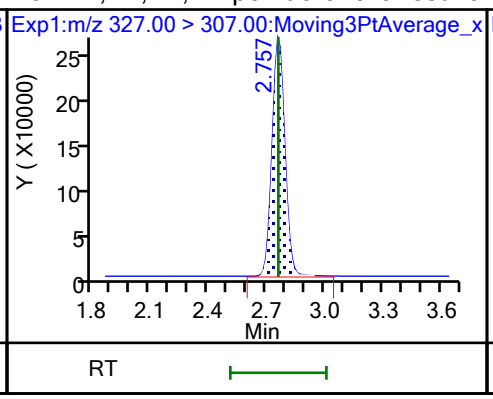
5 Perfluorobutanesulfonic acid (M)



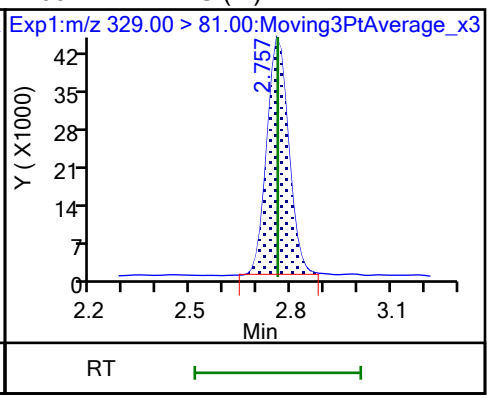
5 Perfluorobutanesulfonic acid (M)



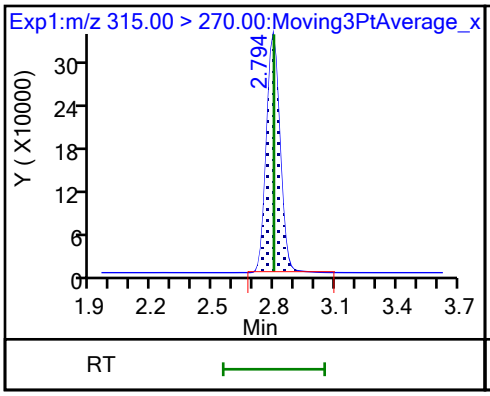
61 1H,1H,2H,2H-perfluorohexanesulfo



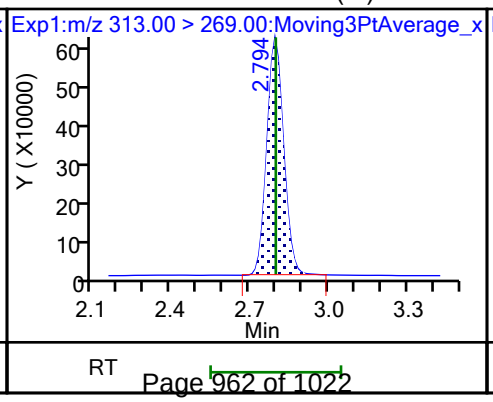
D 60 M2-4:2 FTS (M)



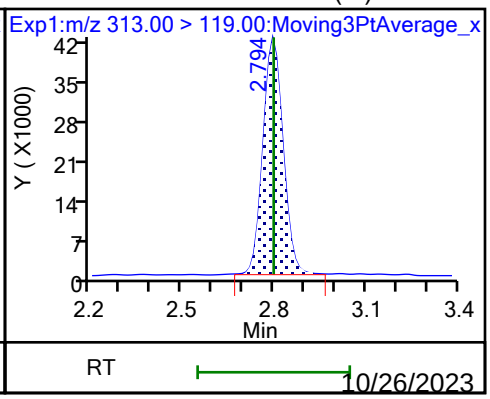
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

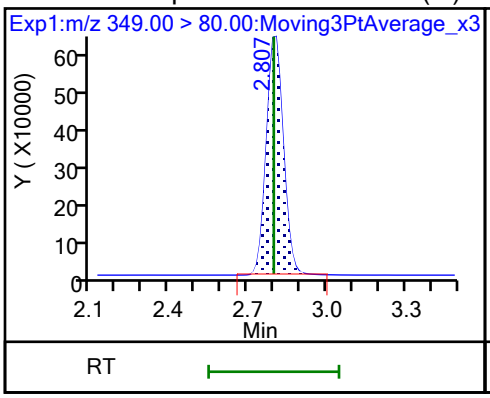


6 Perfluorohexanoic acid (M)

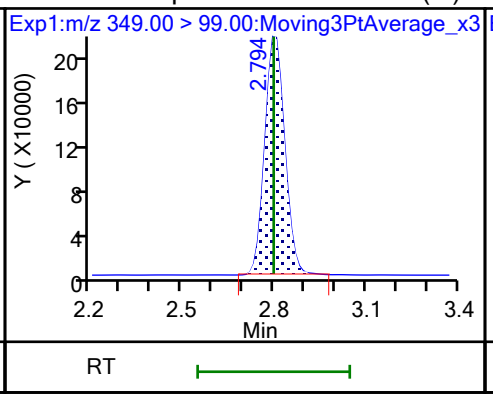


10/26/2023
2:28 PM

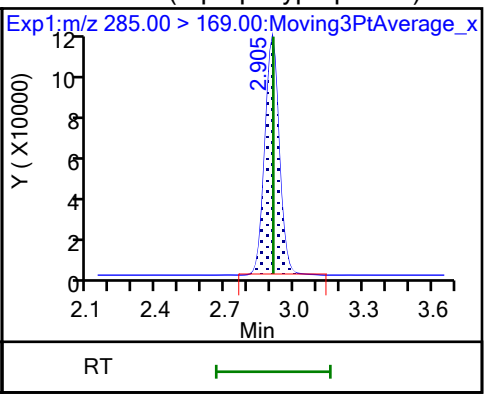
70 Perfluoropentanesulfonic acid (M)



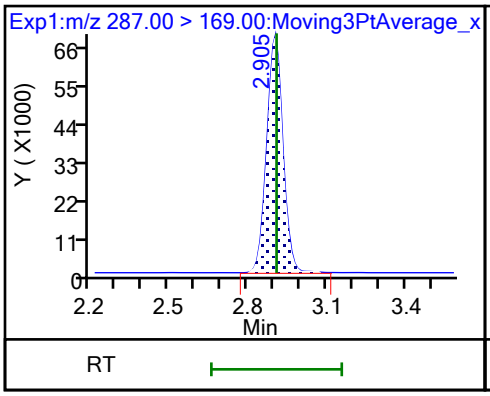
70 Perfluoropentanesulfonic acid (M)



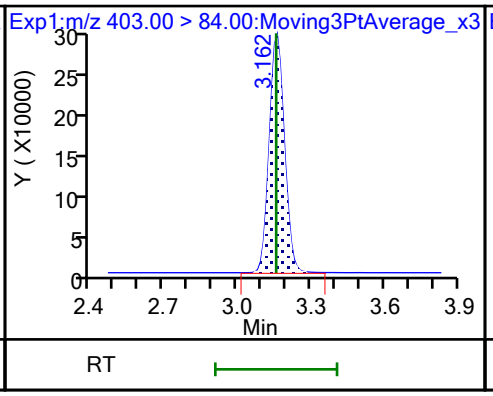
67 Perfluoro(2-propoxypropanoic) ac



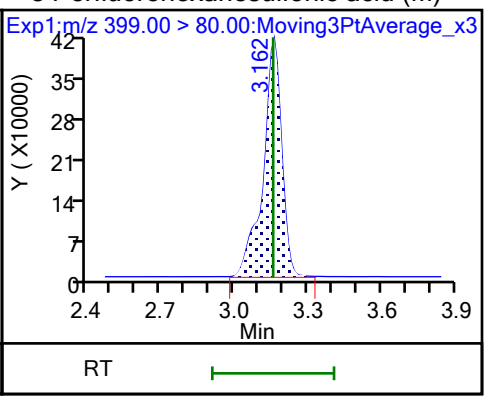
D 64 13C3 HFPO-DA



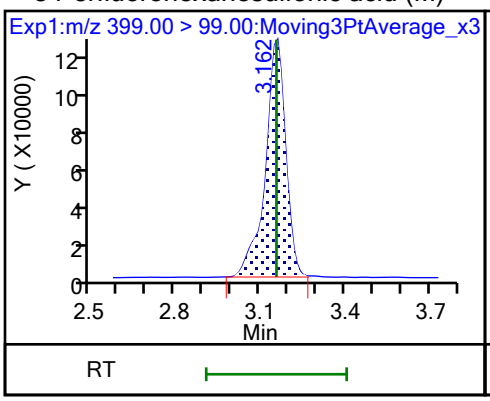
D 11 18O2 PFHxS



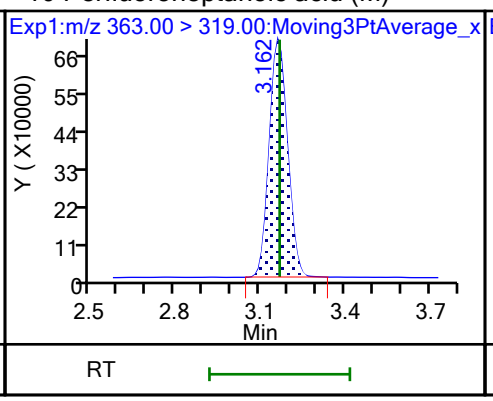
8 Perfluorohexanesulfonic acid (M)



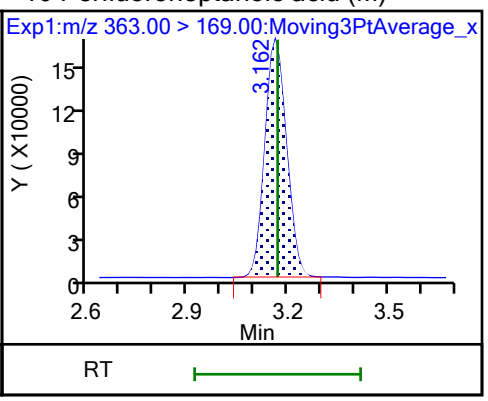
8 Perfluorohexanesulfonic acid (M)



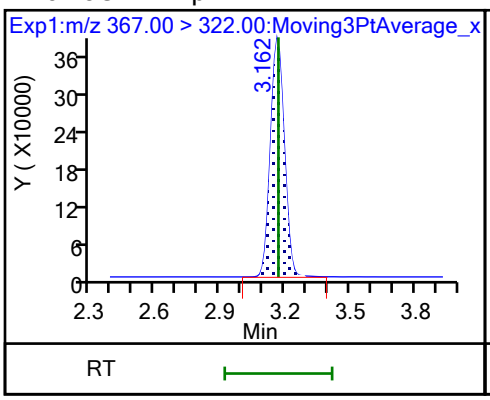
10 Perfluoroheptanoic acid (M)



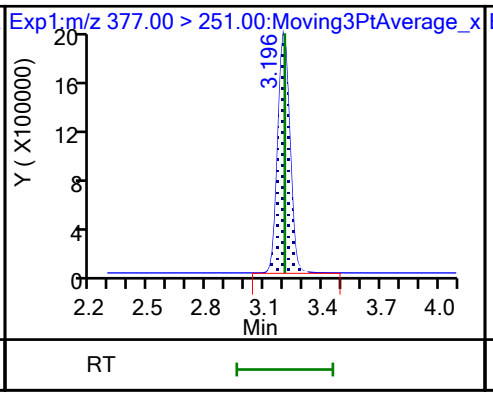
10 Perfluoroheptanoic acid (M)



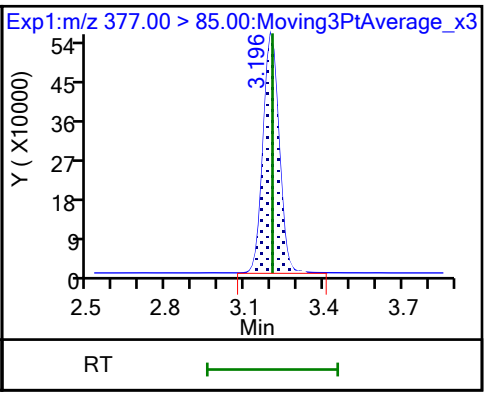
D 9 13C4 PFHpA



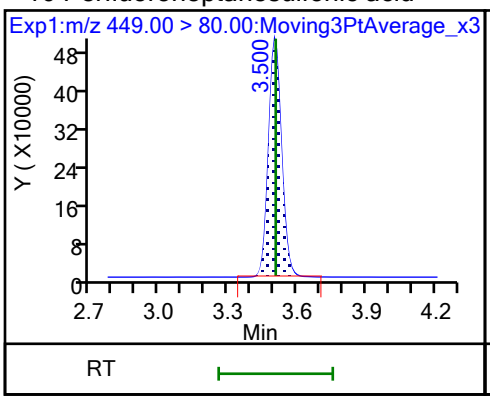
77 DONA



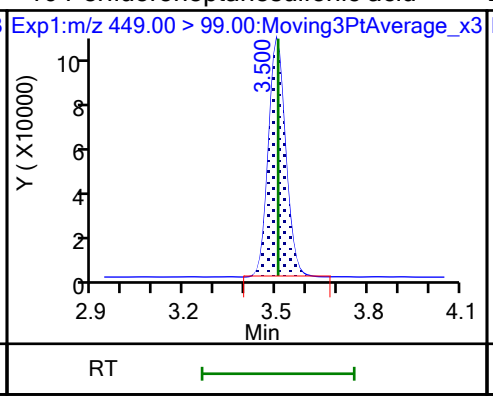
77 DONA



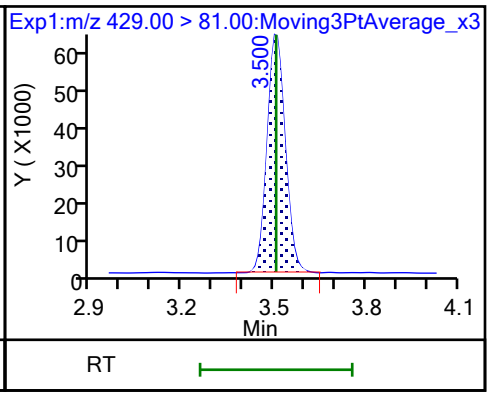
16 Perfluoroheptanesulfonic acid



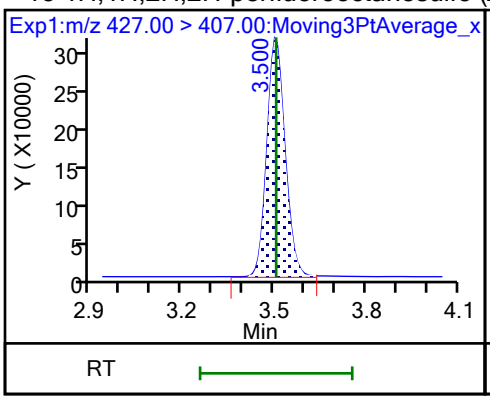
16 Perfluoroheptanesulfonic acid



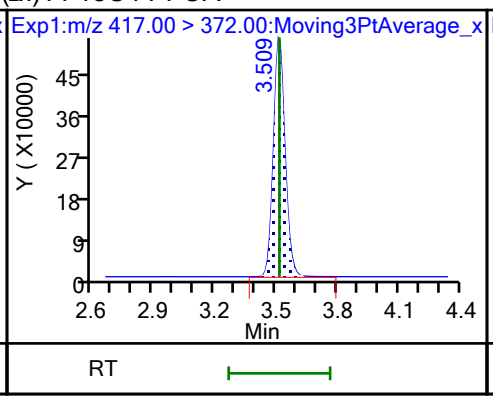
D 12 M2-6:2 FTS



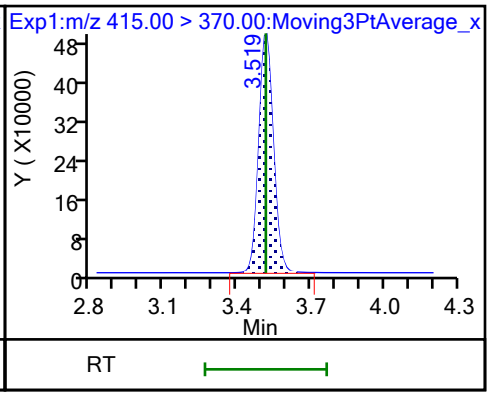
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



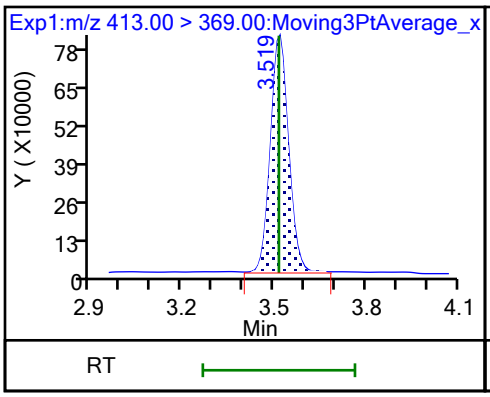
D 14 13C4 PFOA



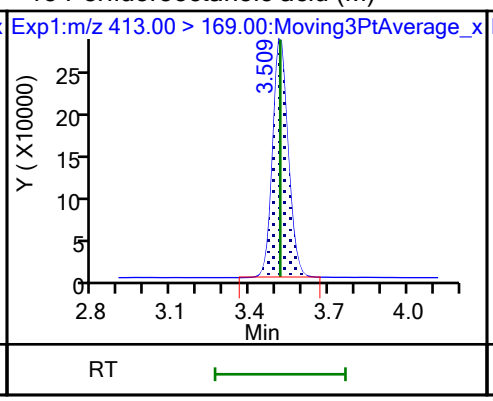
* 62 13C2 PFOA



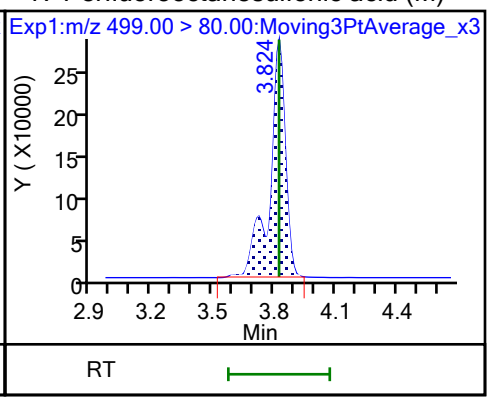
15 Perfluorooctanoic acid



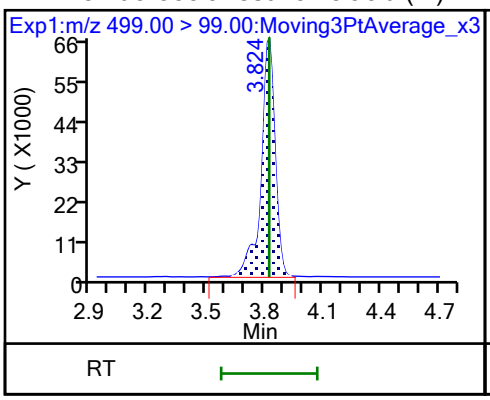
15 Perfluorooctanoic acid (M)



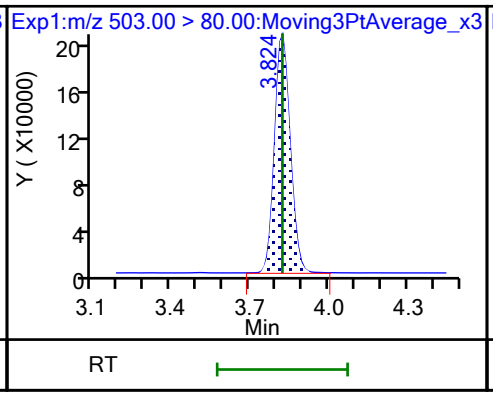
17 Perfluorooctanesulfonic acid (M)



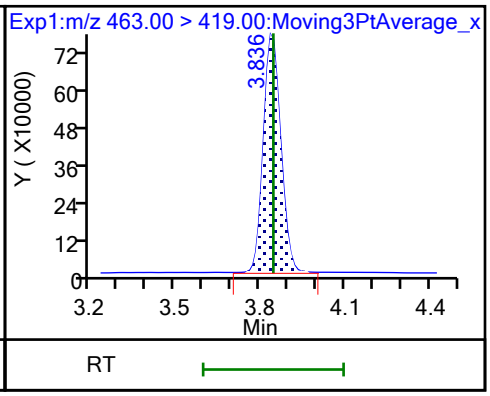
17 Perfluorooctanesulfonic acid (M)



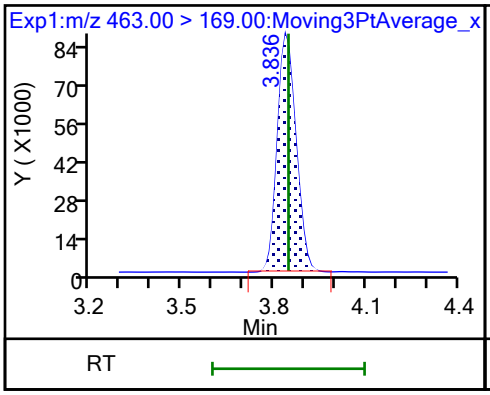
D 18 13C4 PFOS



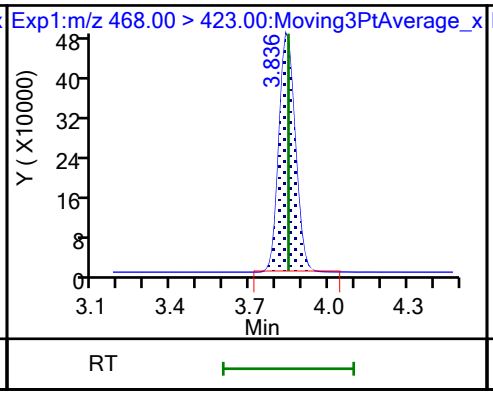
20 Perfluorononanoic acid



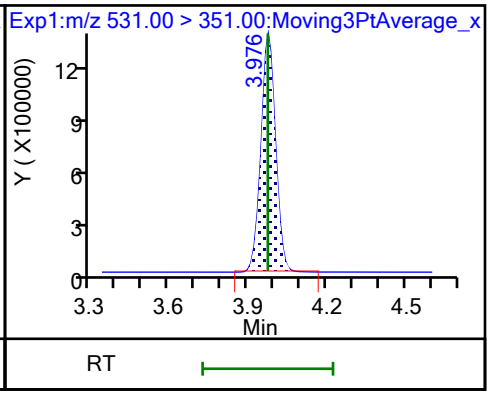
20 Perfluorononanoic acid



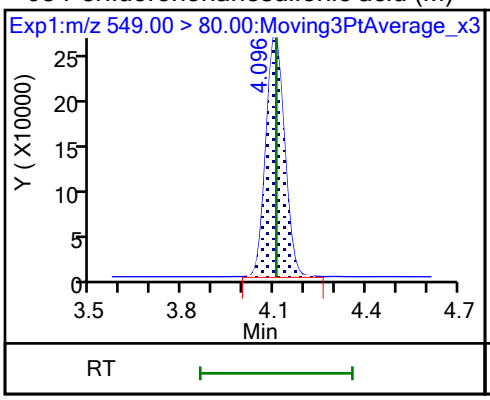
D 19 13C5 PFNA



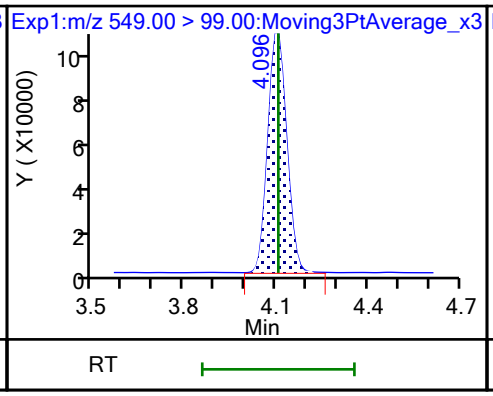
69 9-Chlorohexadecafluoro-3-oxanona (M)



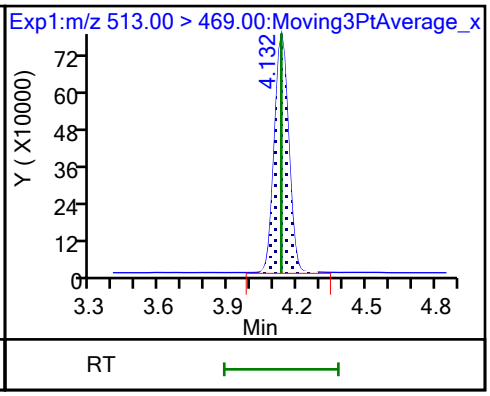
68 Perfluorononanesulfonic acid (M)



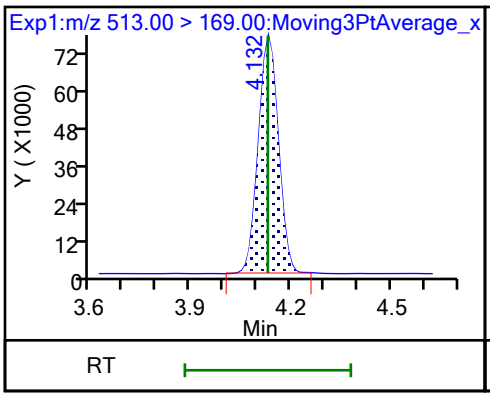
68 Perfluorononanesulfonic acid



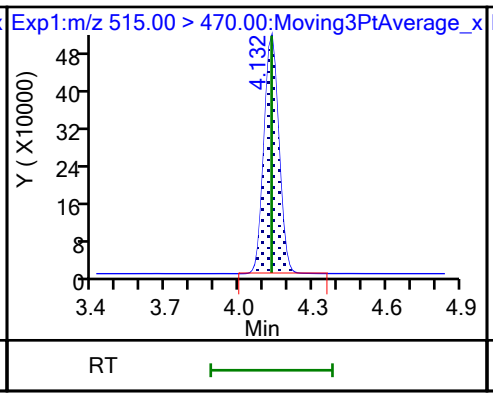
24 Perfluorodecanoic acid



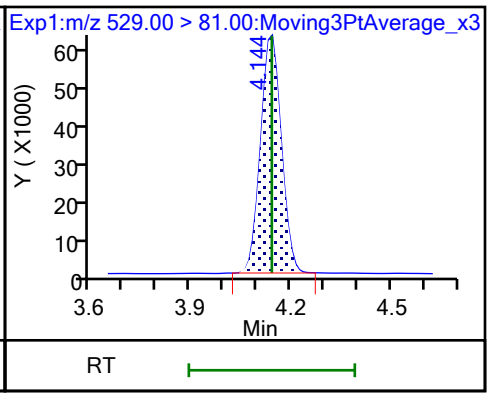
24 Perfluorodecanoic acid



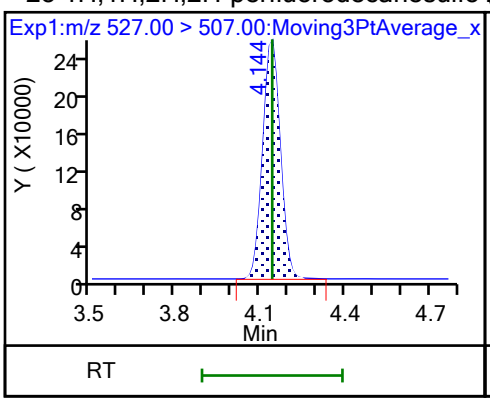
D 23 13C2 PFDA



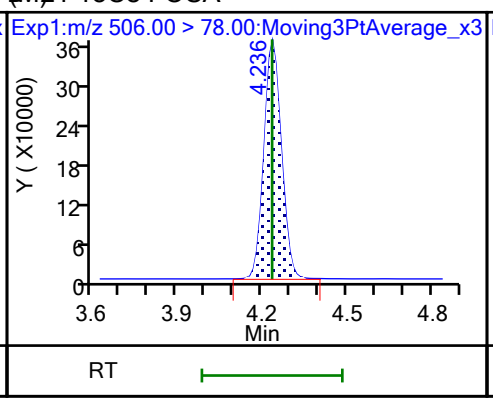
D 26 M2-8:2 FTS



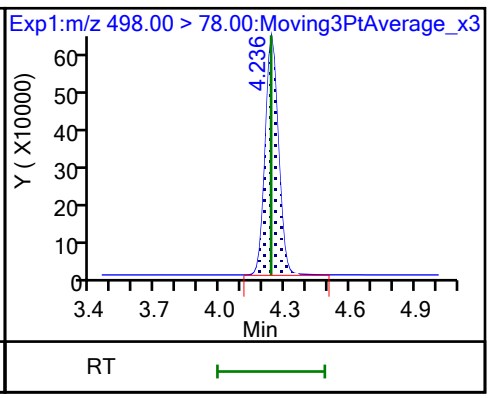
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



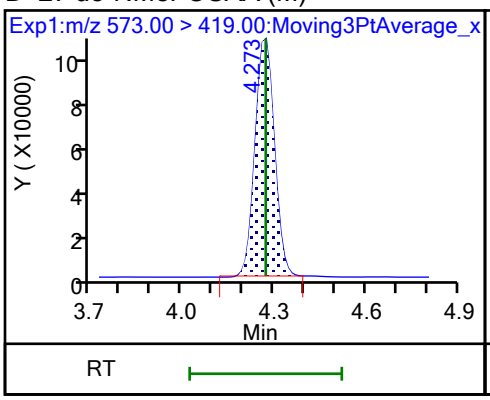
D 21 13C8 FOSA



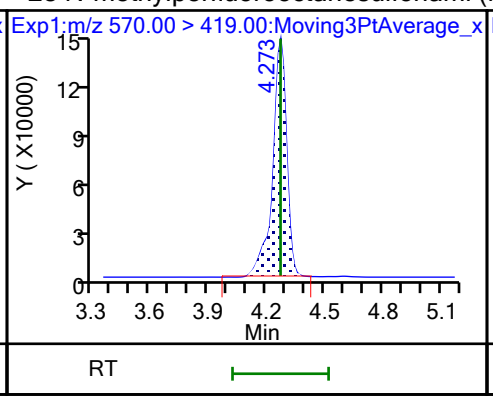
22 Perfluorooctanesulfonamide



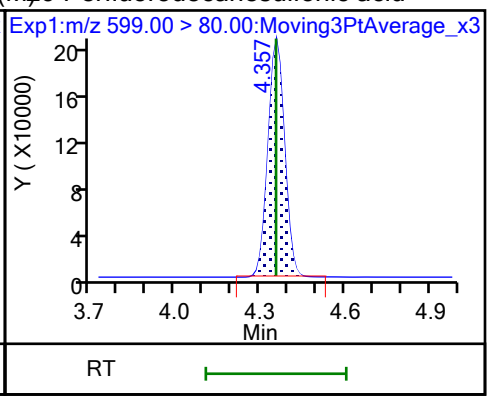
D 27 d3-NMeFOSAA (M)



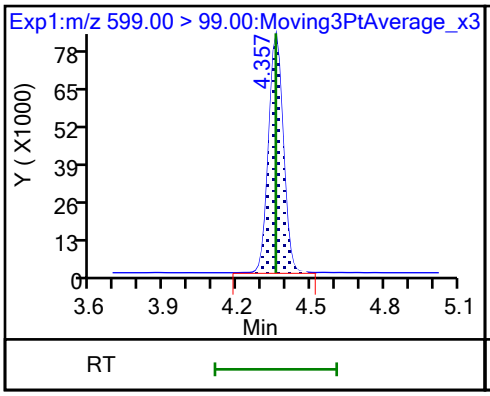
28 N-methylperfluorooctanesulfonami (M)



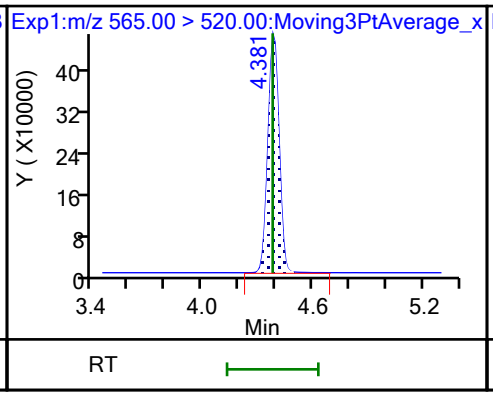
29 Perfluorodecanesulfonic acid



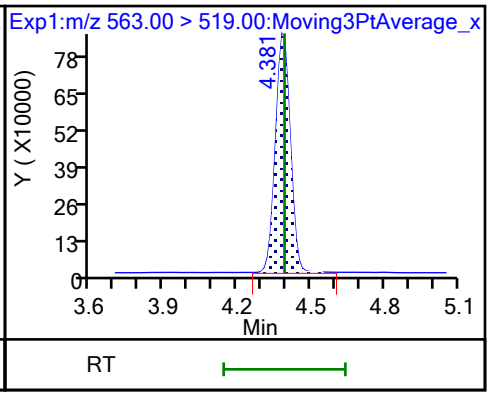
29 Perfluorodecanesulfonic acid



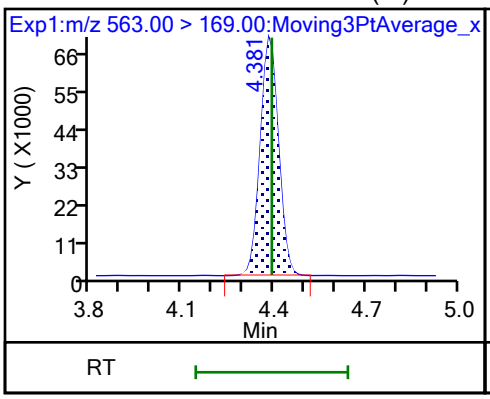
D 30 13C2 PFUnA



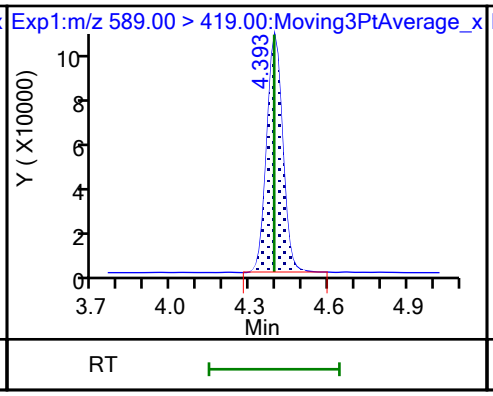
31 Perfluoroundecanoic acid



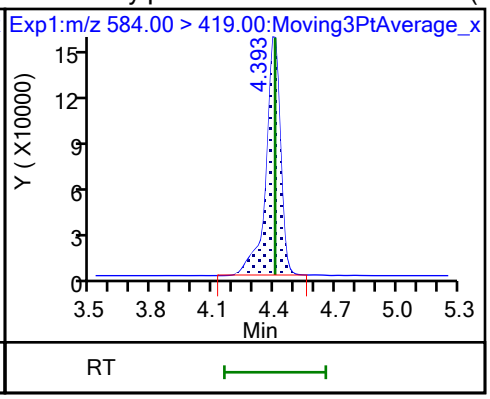
31 Perfluoroundecanoic acid (M)



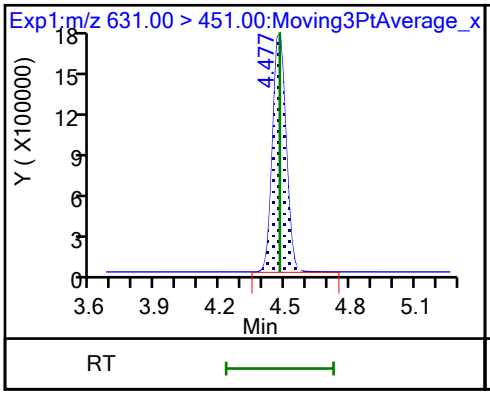
D 32 d5-NEtFOSAA



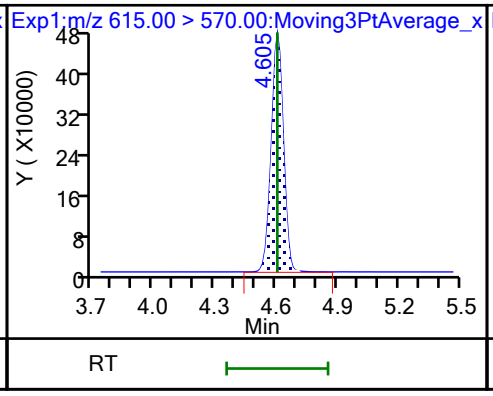
33 N-ethylperfluorooctanesulfonamid (M)



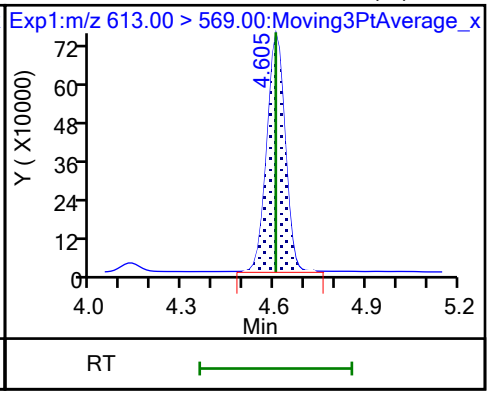
66 11-Chloroeicosafluoro-3-oxaundec



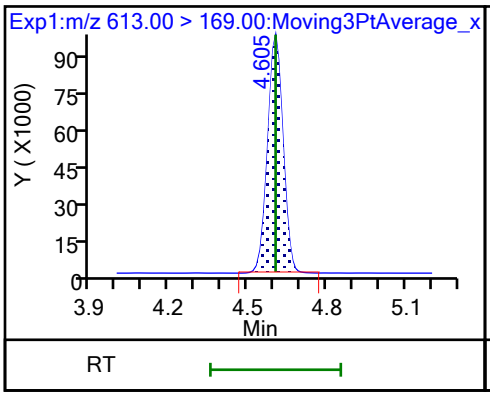
D 36 13C2 PFDoA



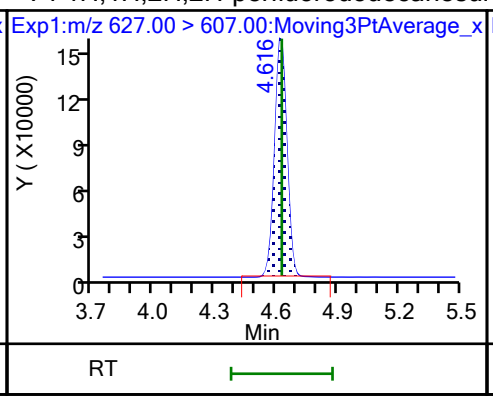
37 Perfluorododecanoic acid (M)



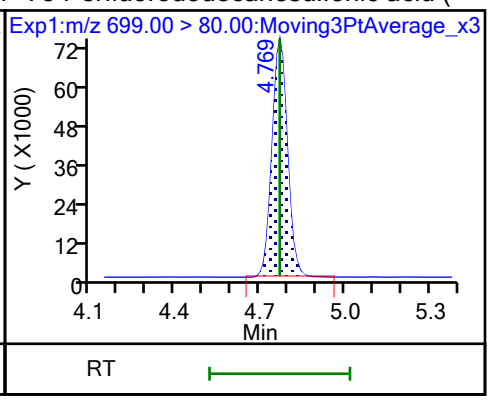
37 Perfluorododecanoic acid



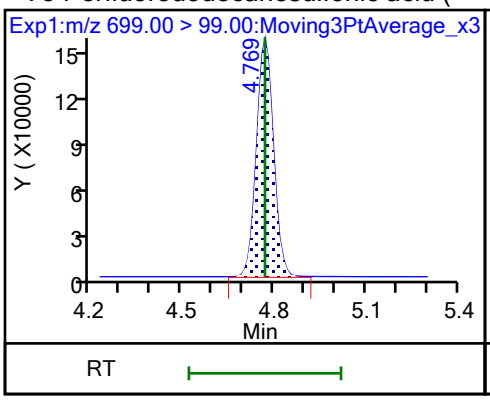
74 1H,1H,2H,2H-perfluorododecanesul



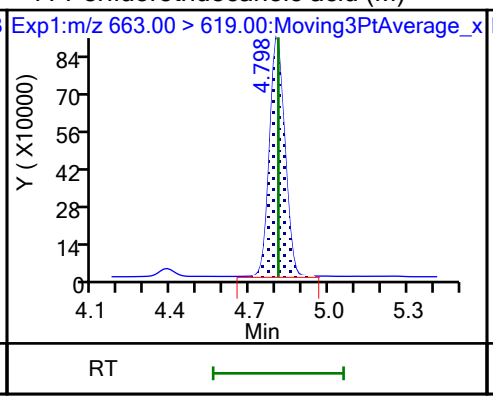
75 Perfluorododecanesulfonic acid (



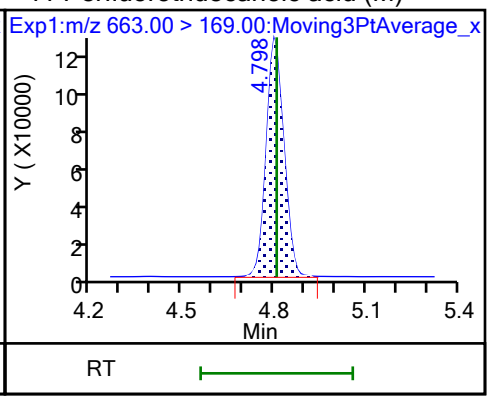
75 Perfluorododecanesulfonic acid (



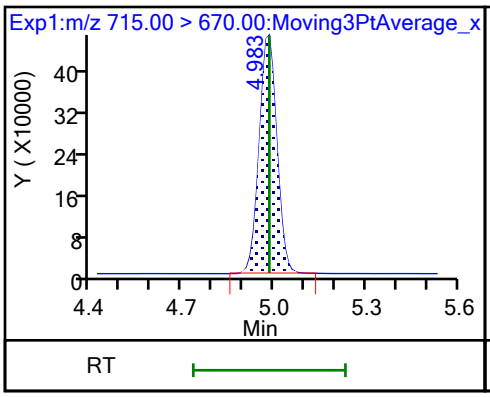
41 Perfluorotridecanoic acid (M)



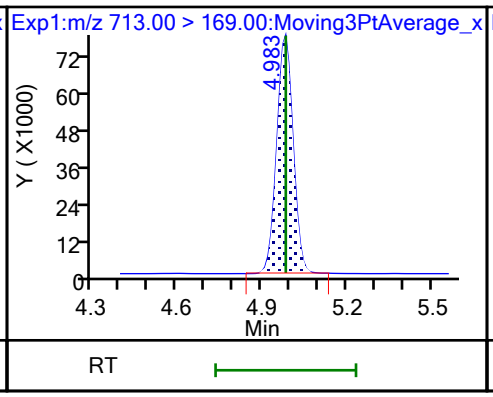
41 Perfluorotridecanoic acid (M)



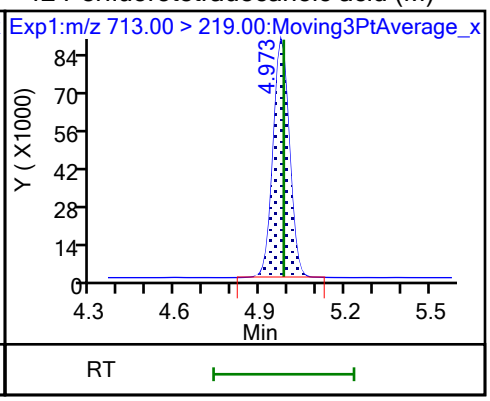
D 43 13C2 PFTeDA



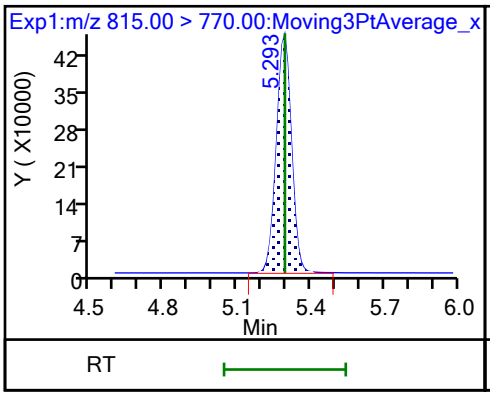
42 Perfluorotetradecanoic acid



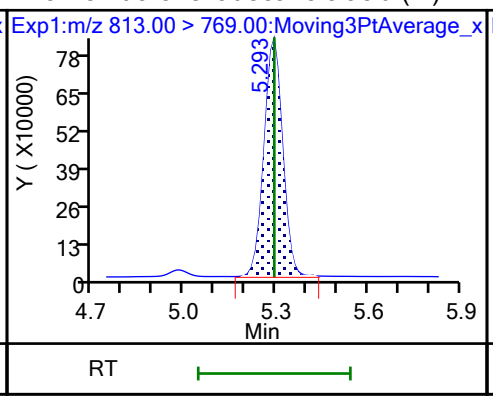
42 Perfluorotetradecanoic acid (M)



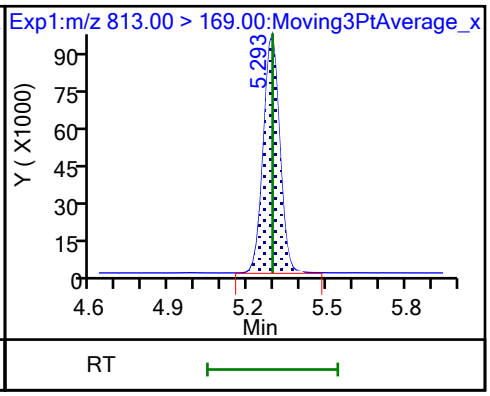
D 44 13C2 PFHxDA



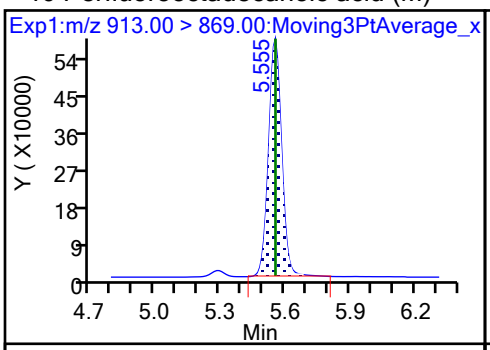
45 Perfluorohexadecanoic acid (M)



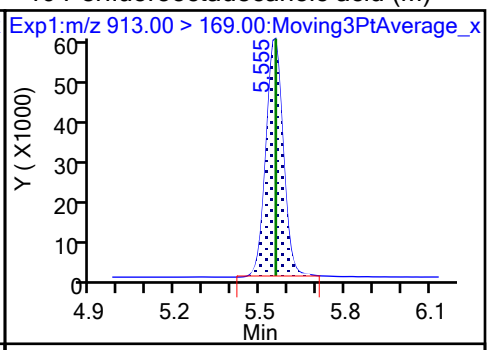
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

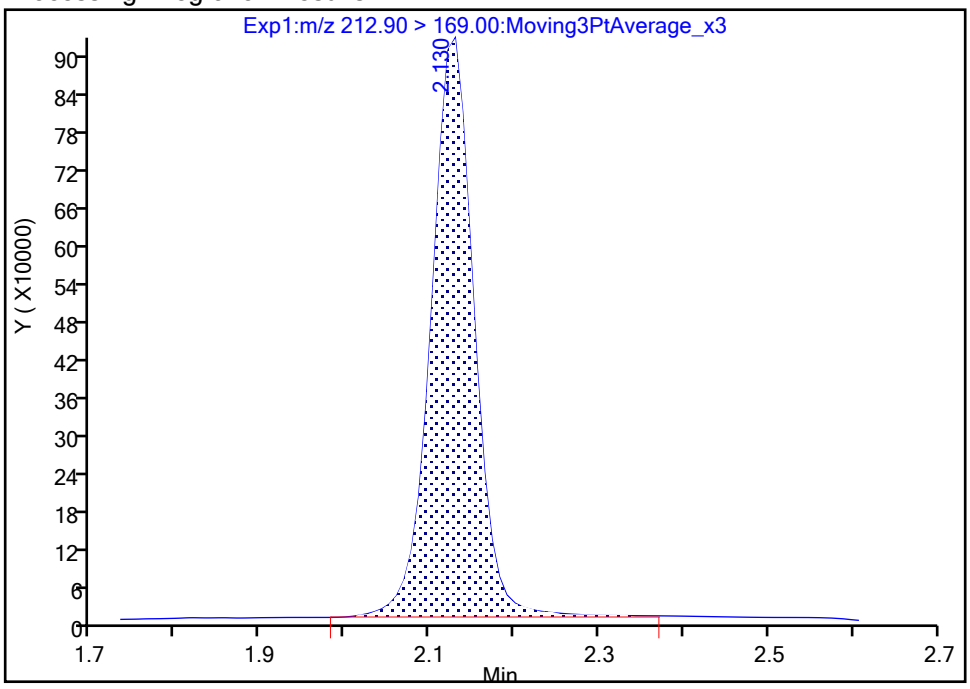
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

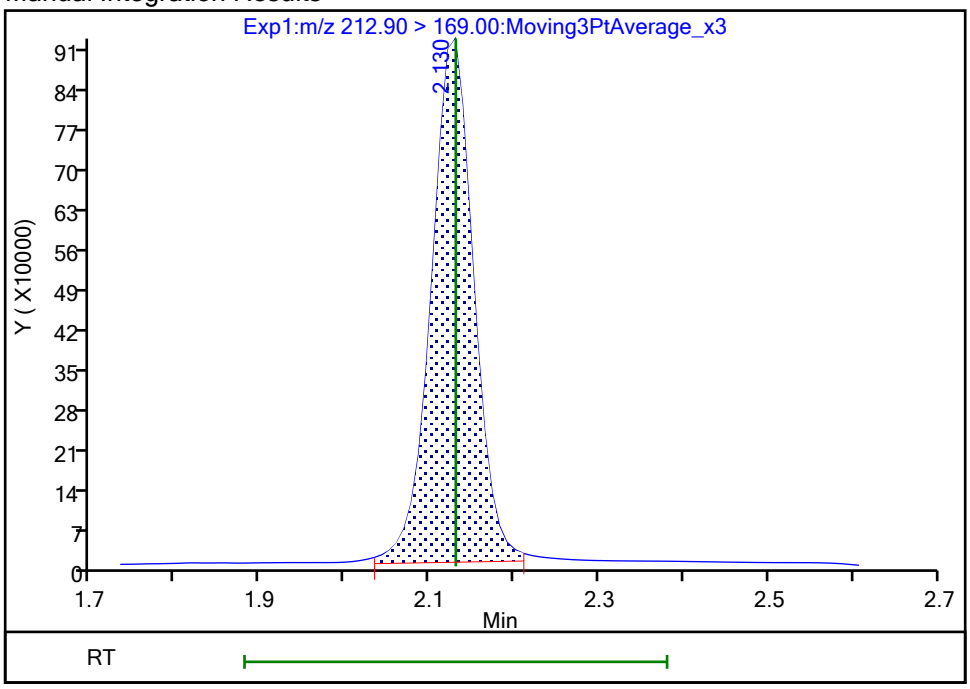
Processing Integration Results

RT: 2.13
Area: 3254991
Amount: 2.130441
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 3212956
Amount: 2.102400
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:05:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

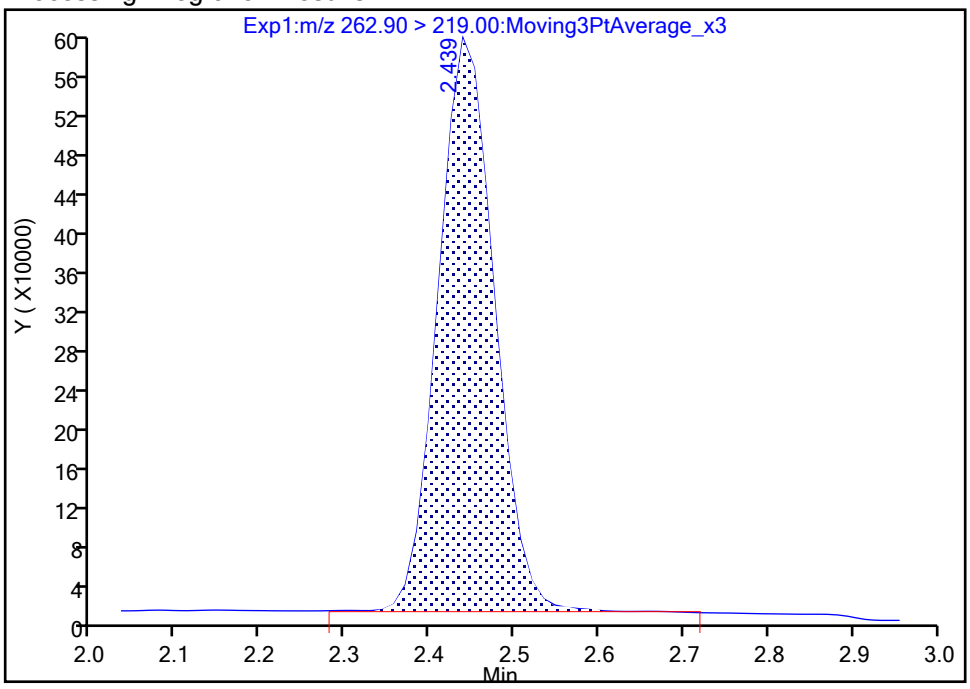
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

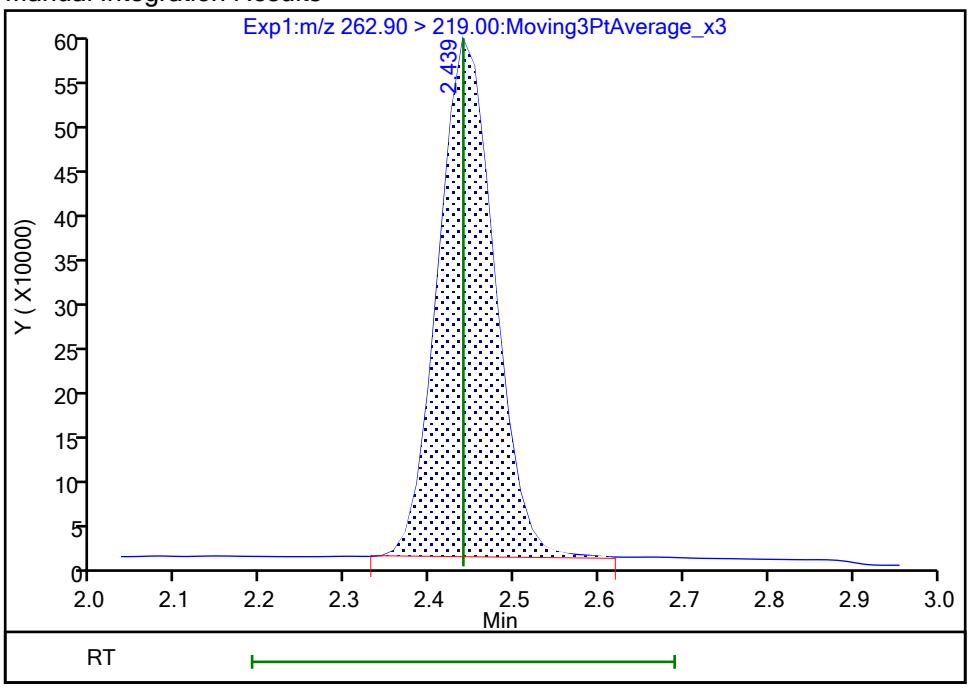
Processing Integration Results

RT: 2.44
Area: 2729414
Amount: 2.136727
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 2712417
Amount: 2.123421
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:05:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

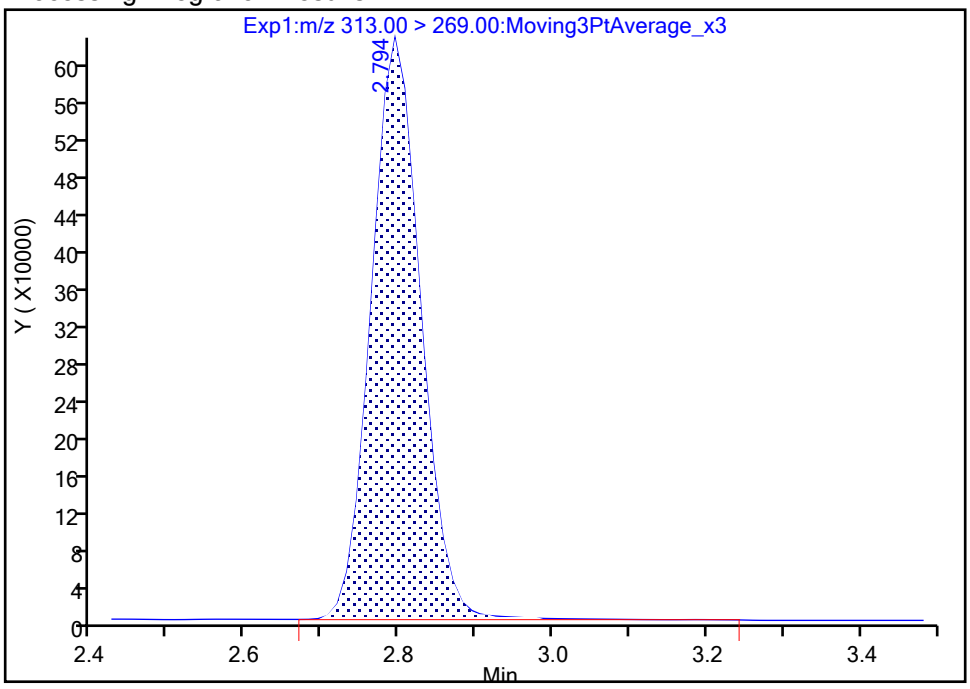
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

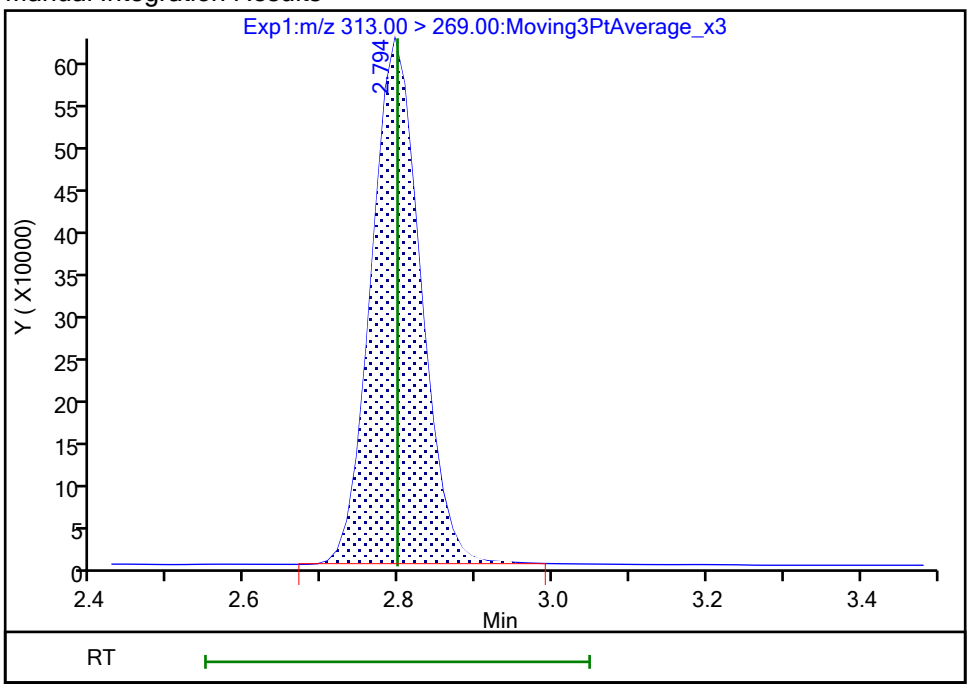
Processing Integration Results

RT: 2.79
Area: 2792137
Amount: 2.033927
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 2772083
Amount: 2.019318
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

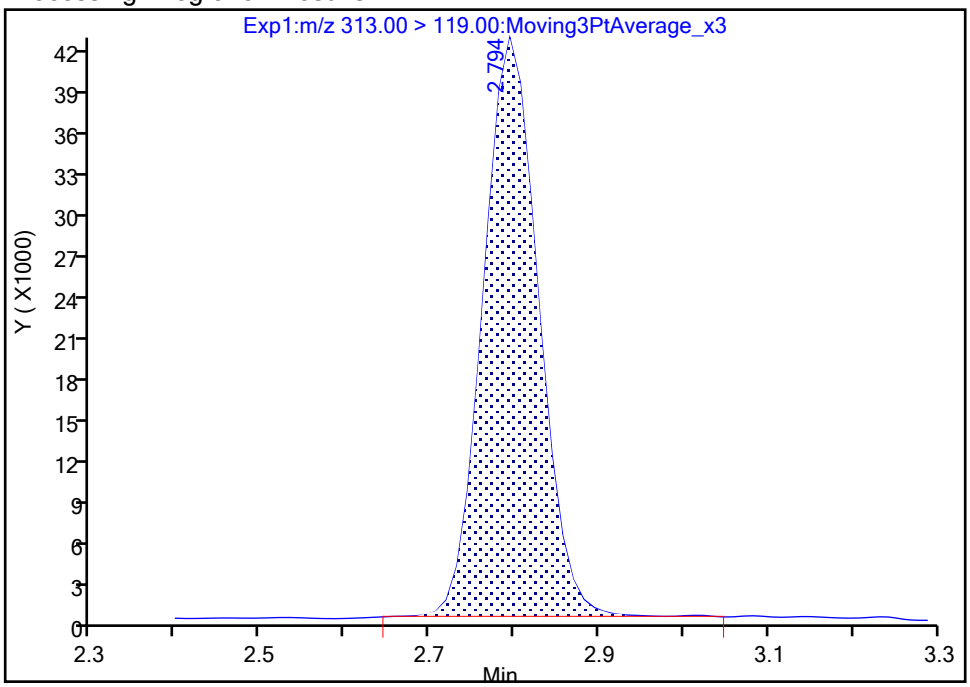
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

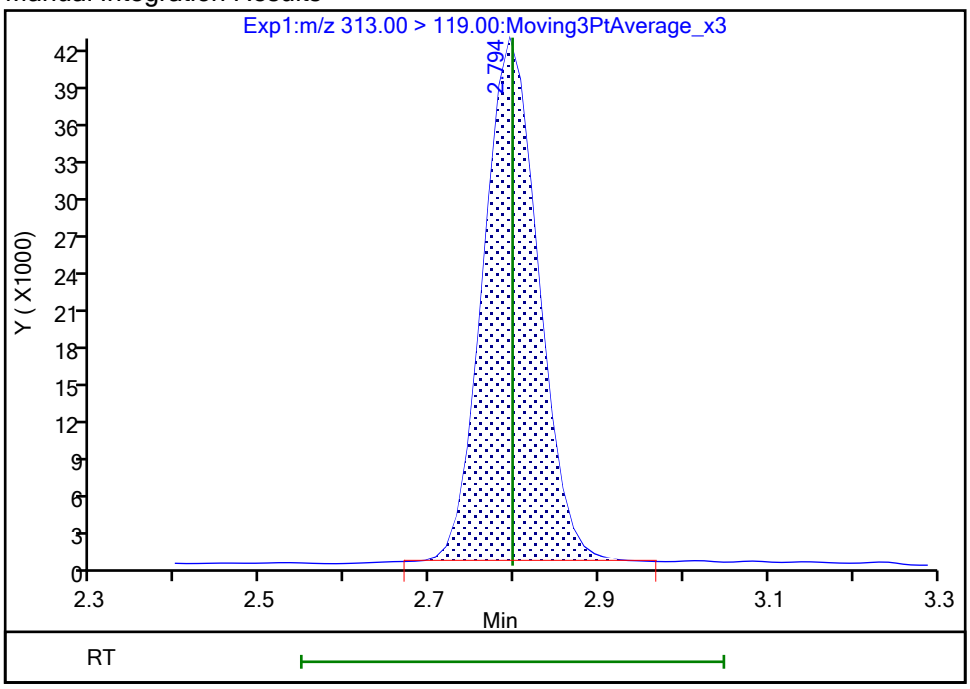
Processing Integration Results

RT: 2.79
Area: 192653
Amount: 2.033927
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 191358
Amount: 2.019318
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

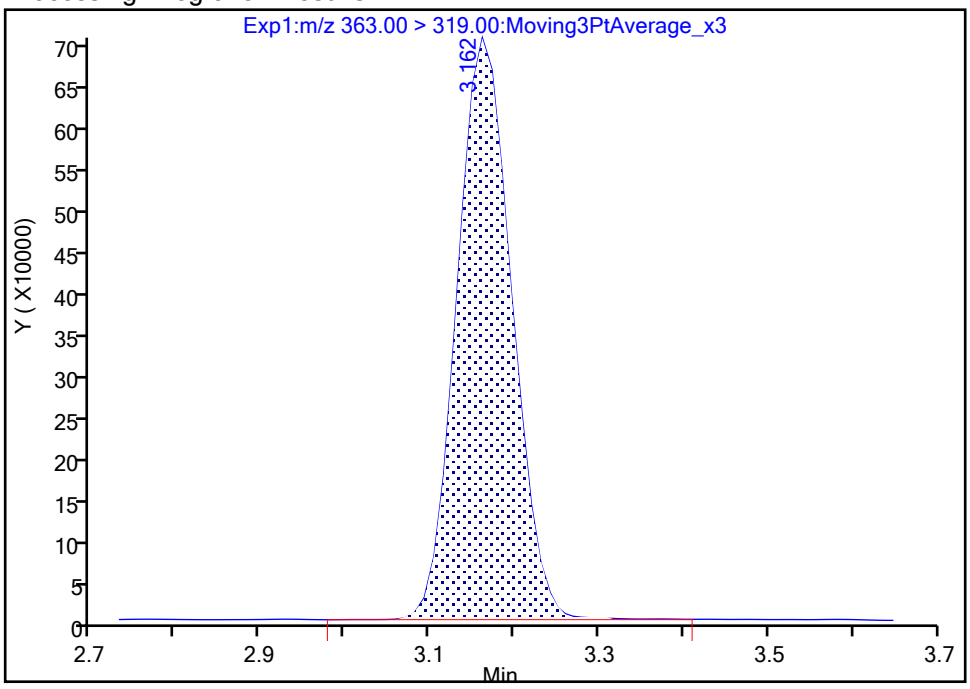
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

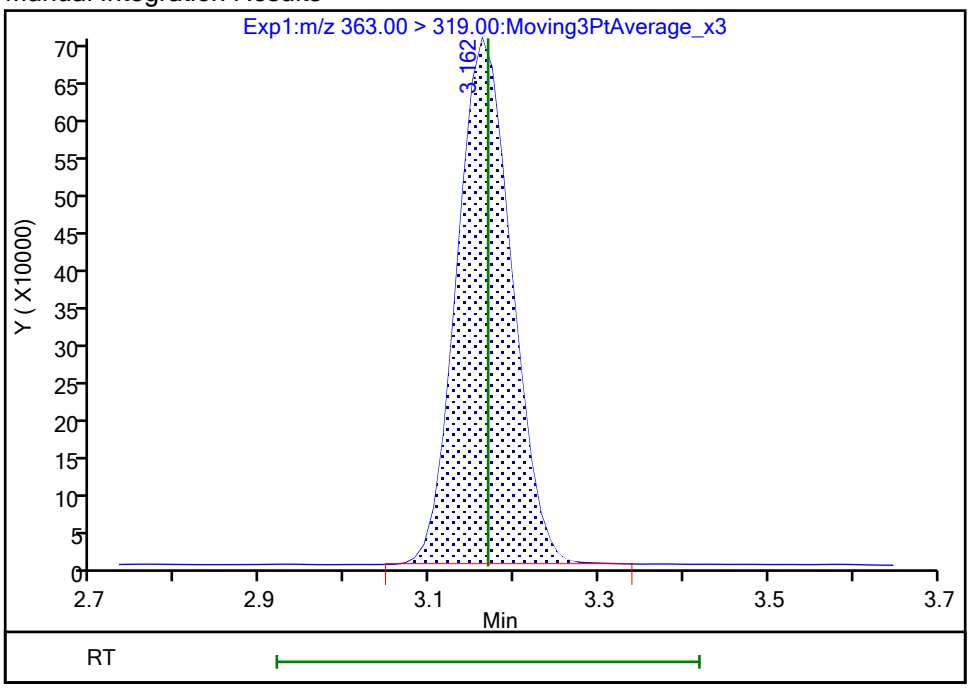
Processing Integration Results

RT: 3.16
Area: 3162956
Amount: 2.055199
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 3154956
Amount: 2.050001
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

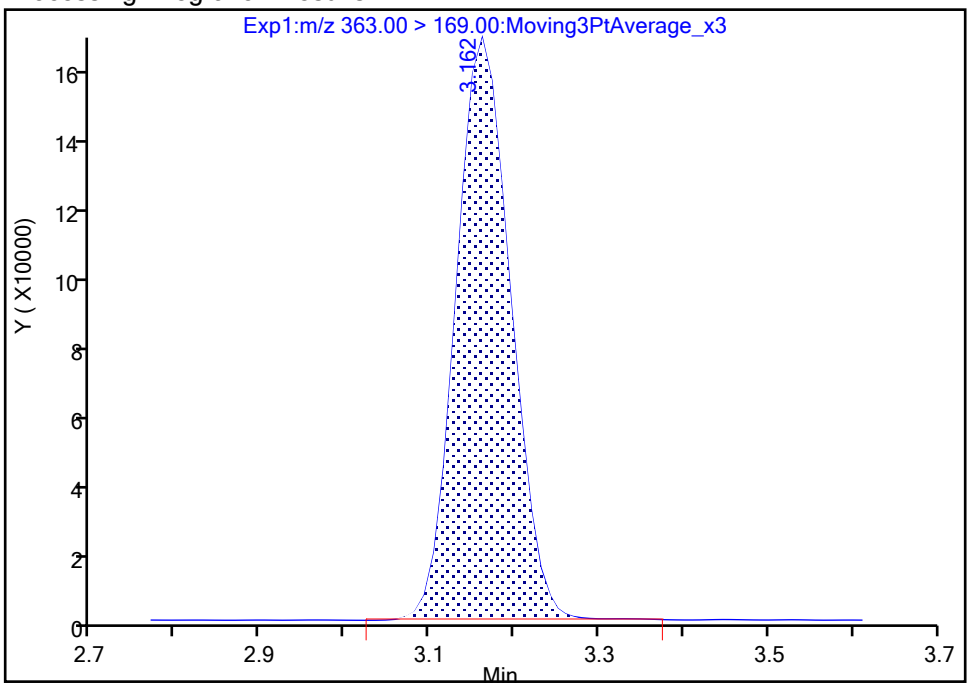
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

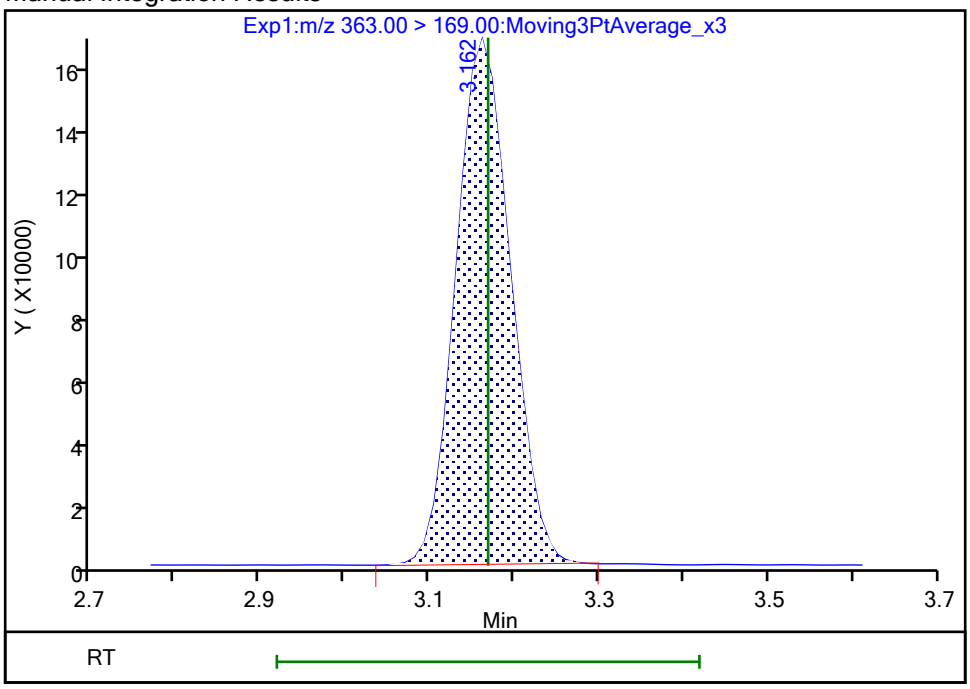
Processing Integration Results

RT: 3.16
Area: 765460
Amount: 2.055199
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 762106
Amount: 2.050001
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

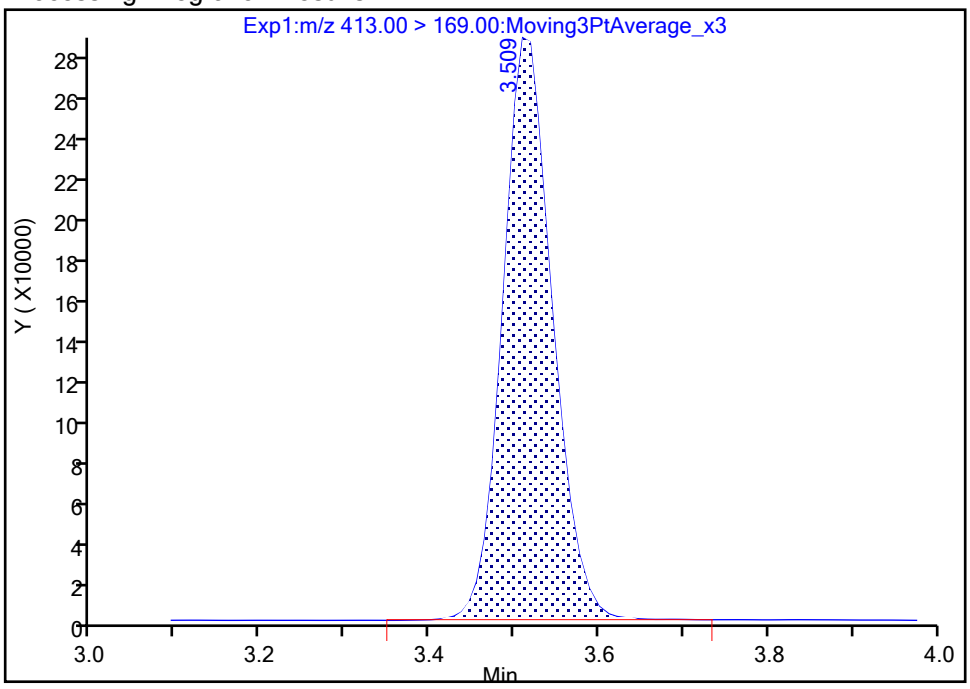
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

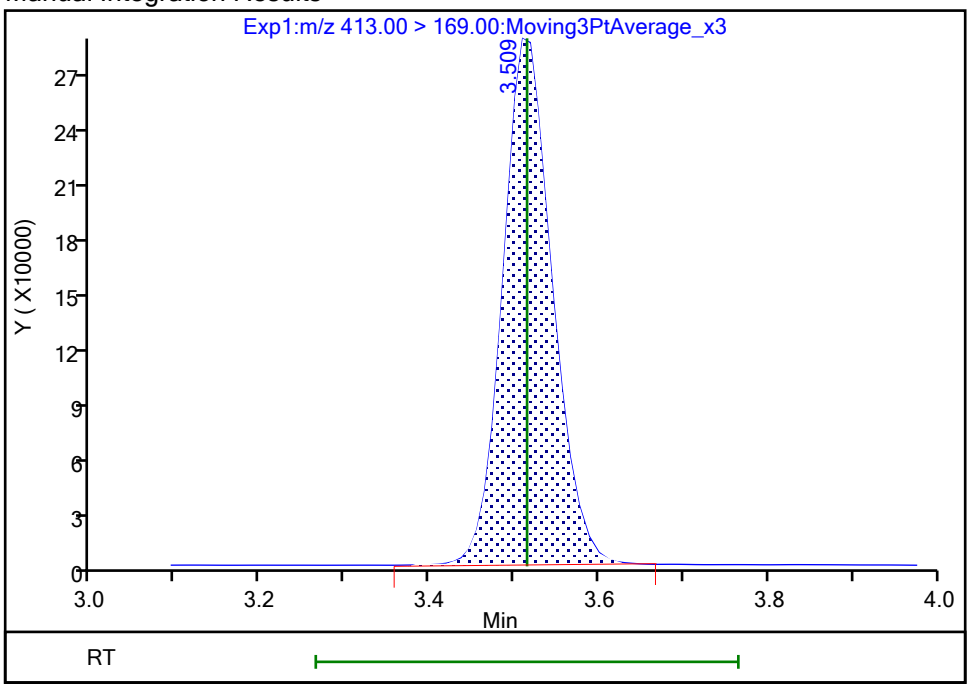
Processing Integration Results

RT: 3.51
Area: 1174188
Amount: 1.905503
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1171420
Amount: 1.905503
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

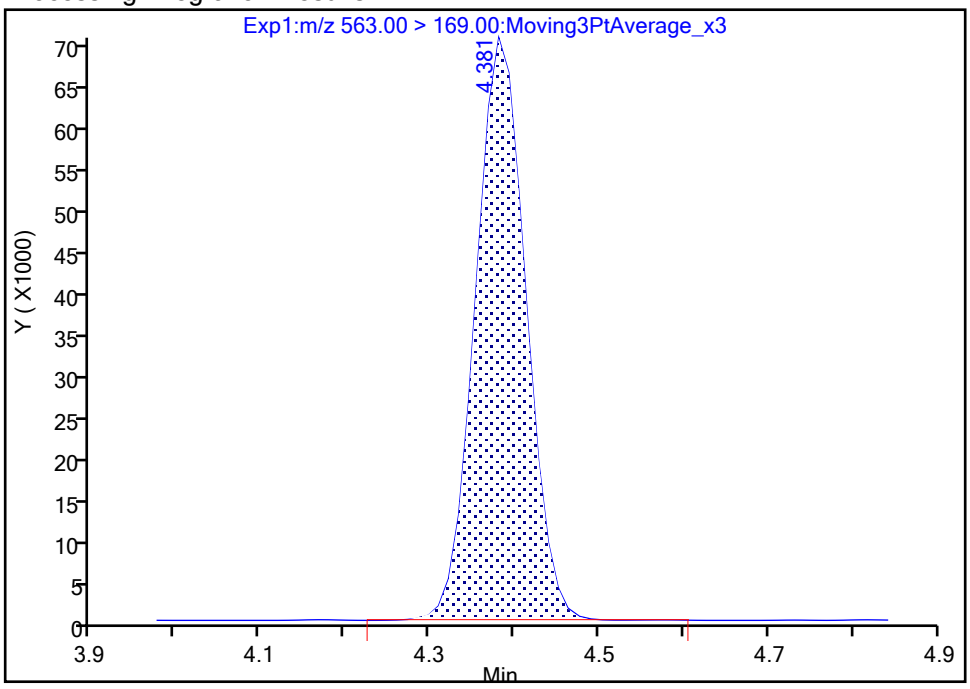
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

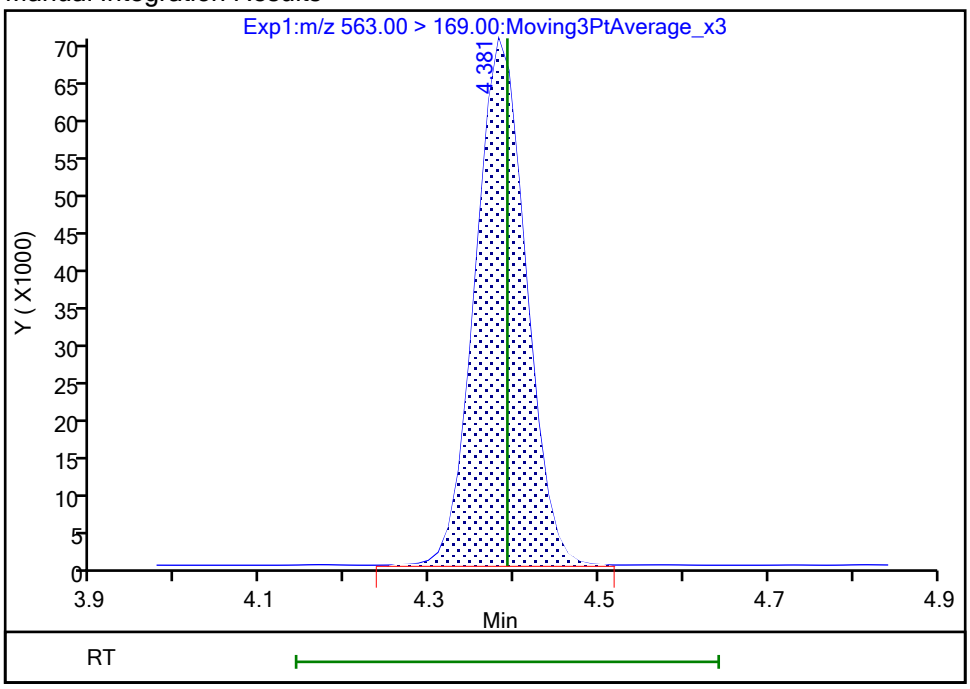
Processing Integration Results

RT: 4.38
Area: 291650
Amount: 2.195747
Amount Units: ng/ml



Manual Integration Results

RT: 4.38
Area: 291411
Amount: 2.195747
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

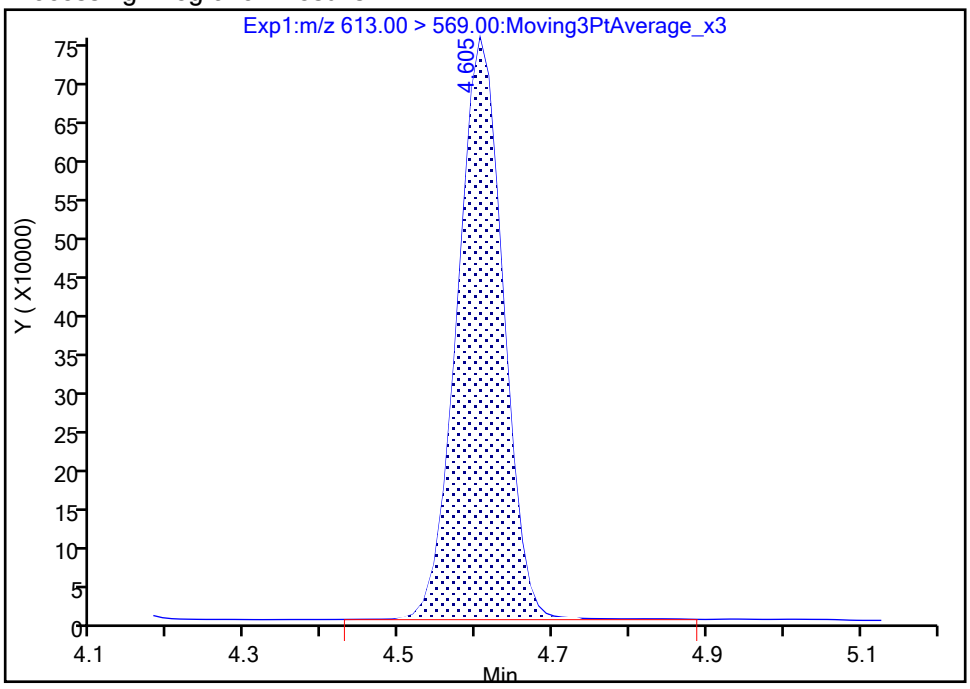
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

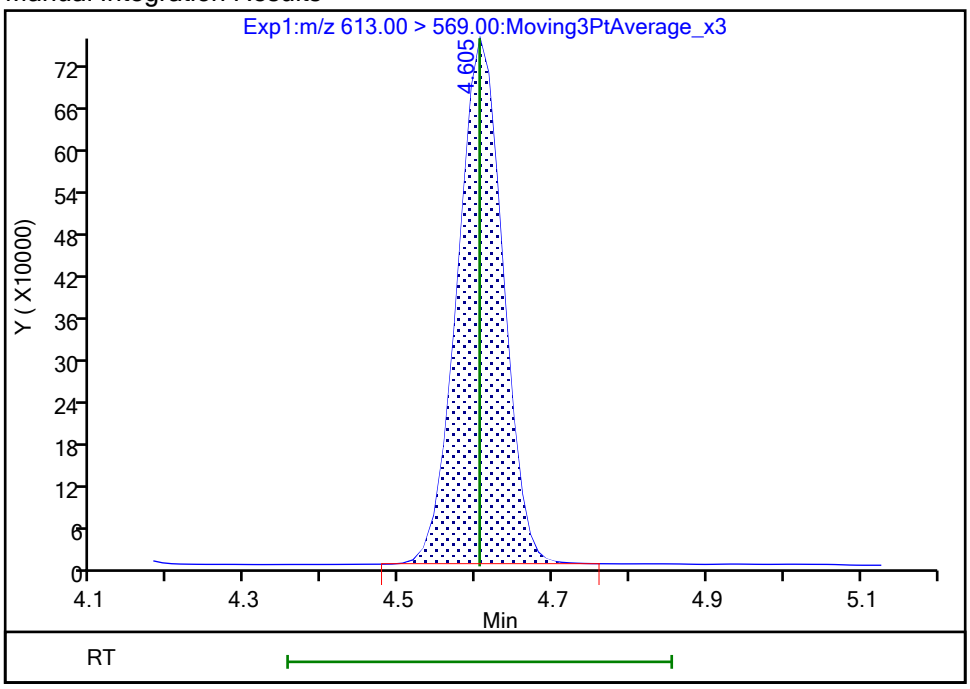
Processing Integration Results

RT: 4.61
Area: 3129677
Amount: 1.938989
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 3112706
Amount: 1.928474
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

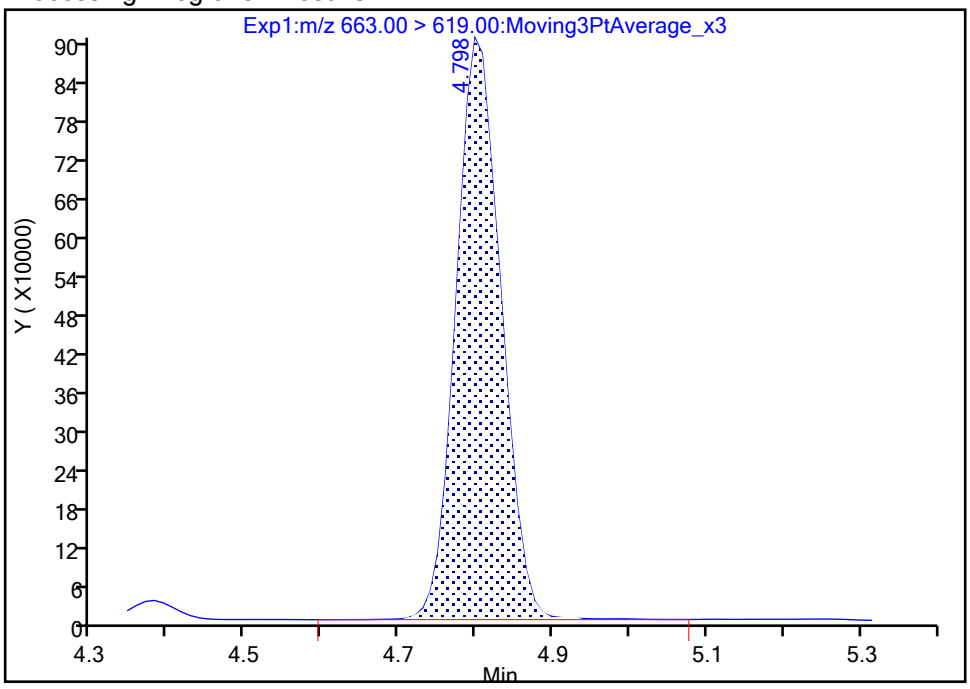
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

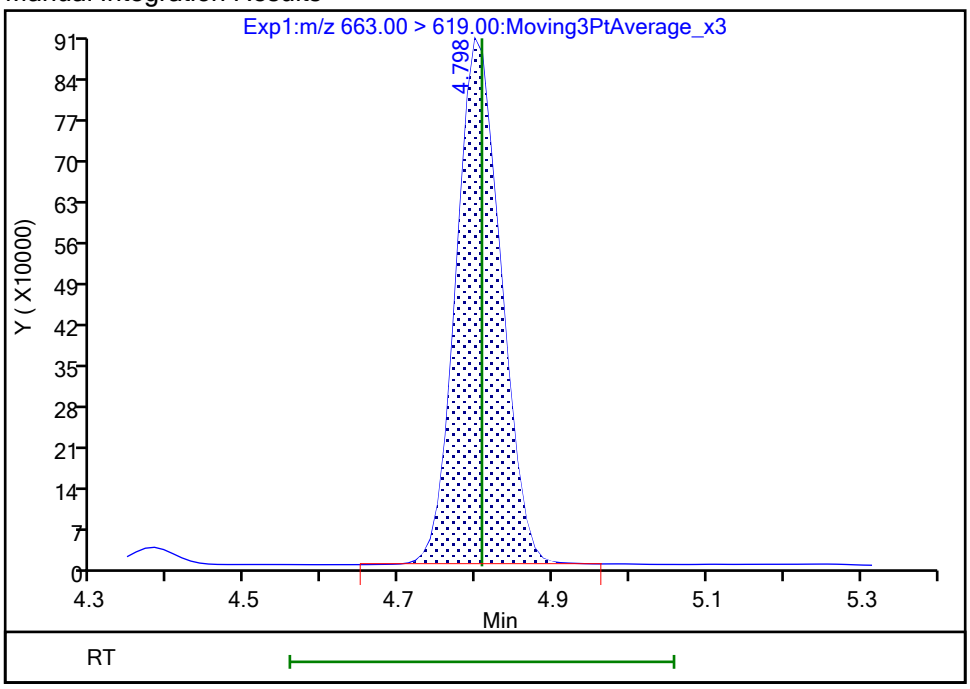
Processing Integration Results

RT: 4.80
Area: 3712056
Amount: 2.188043
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 3662682
Amount: 2.158940
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

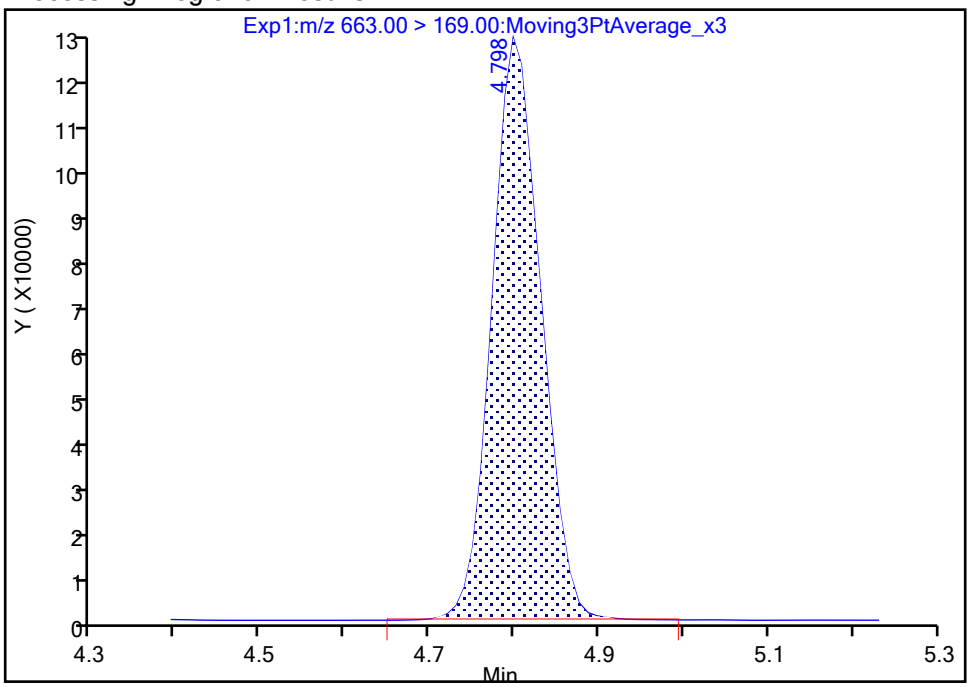
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

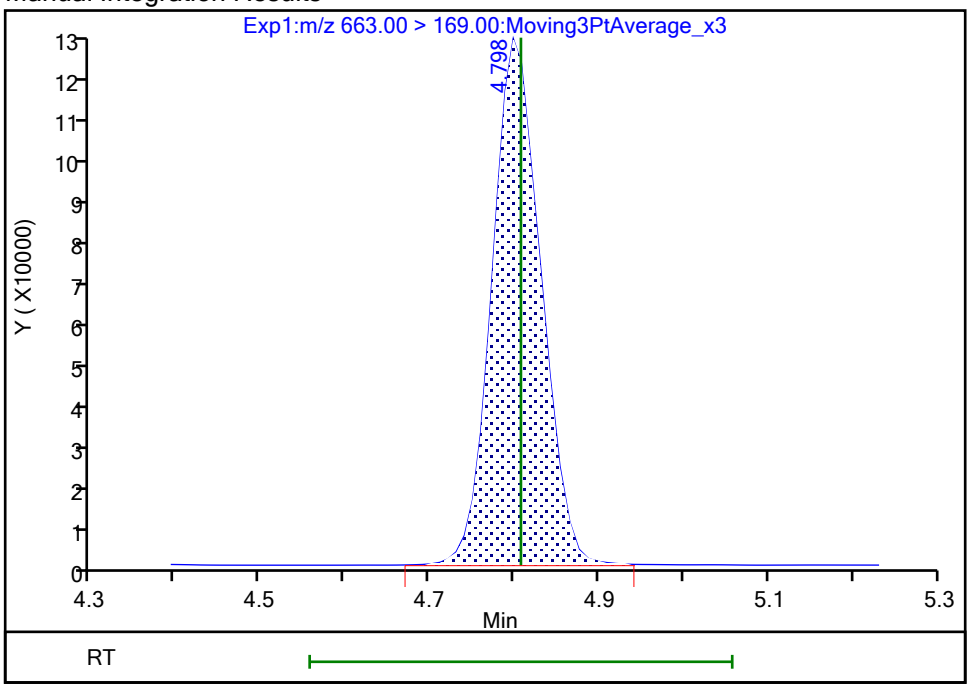
Processing Integration Results

RT: 4.80
Area: 509525
Amount: 2.188043
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 507371
Amount: 2.158940
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:09:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

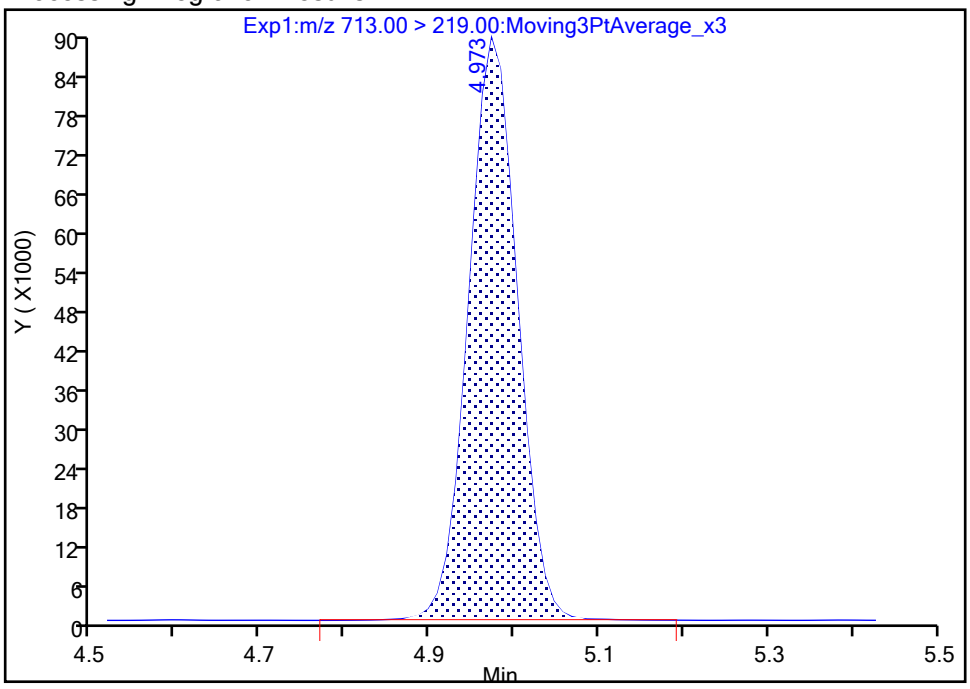
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

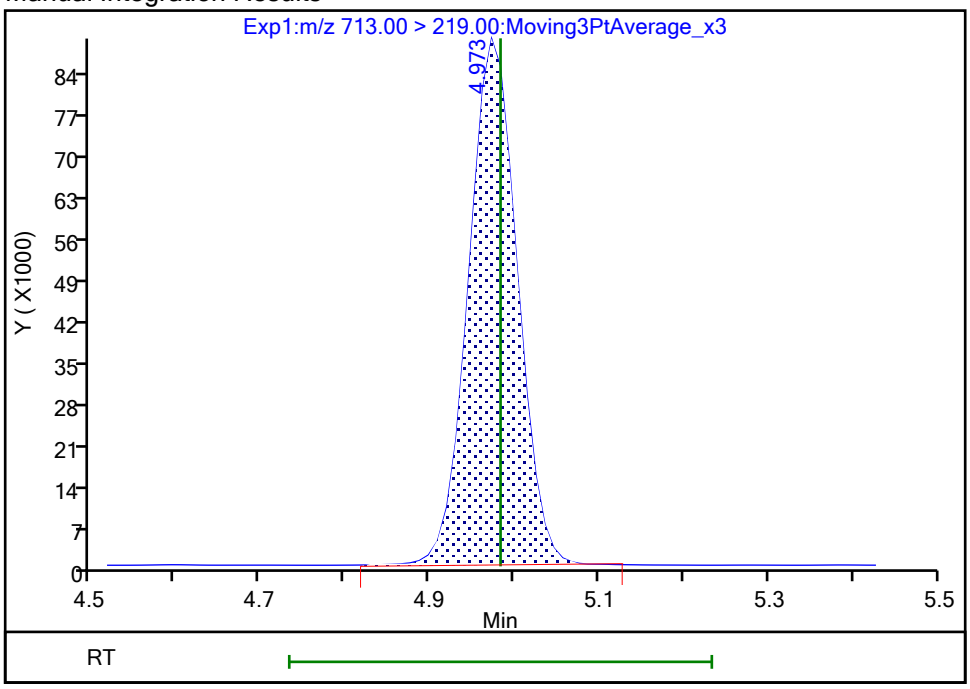
Processing Integration Results

RT: 4.97
Area: 361137
Amount: 1.883292
Amount Units: ng/ml



Manual Integration Results

RT: 4.97
Area: 359982
Amount: 1.883292
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:09:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

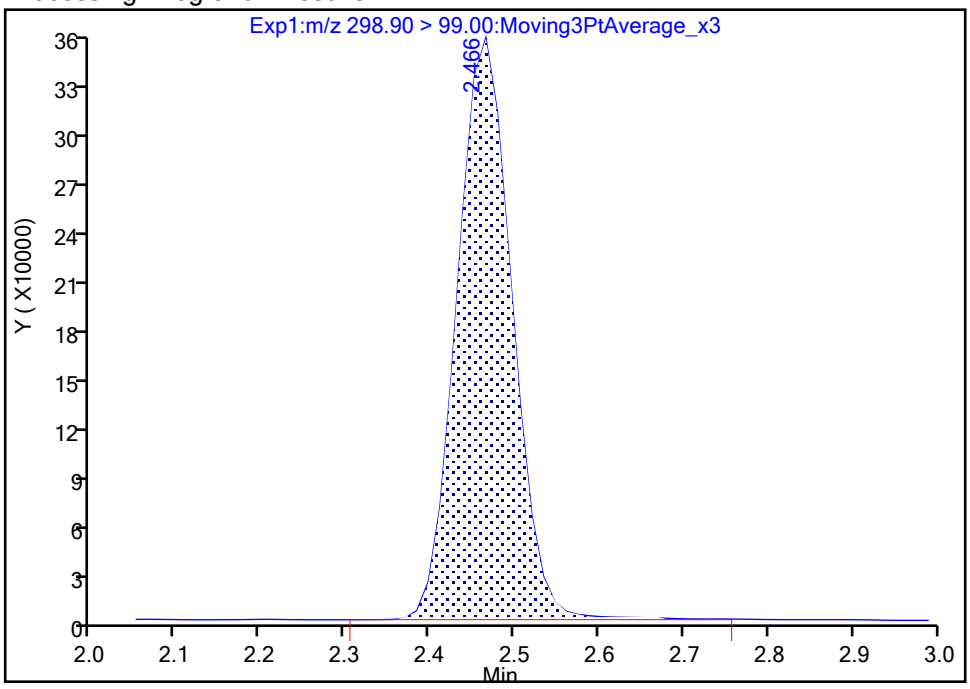
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

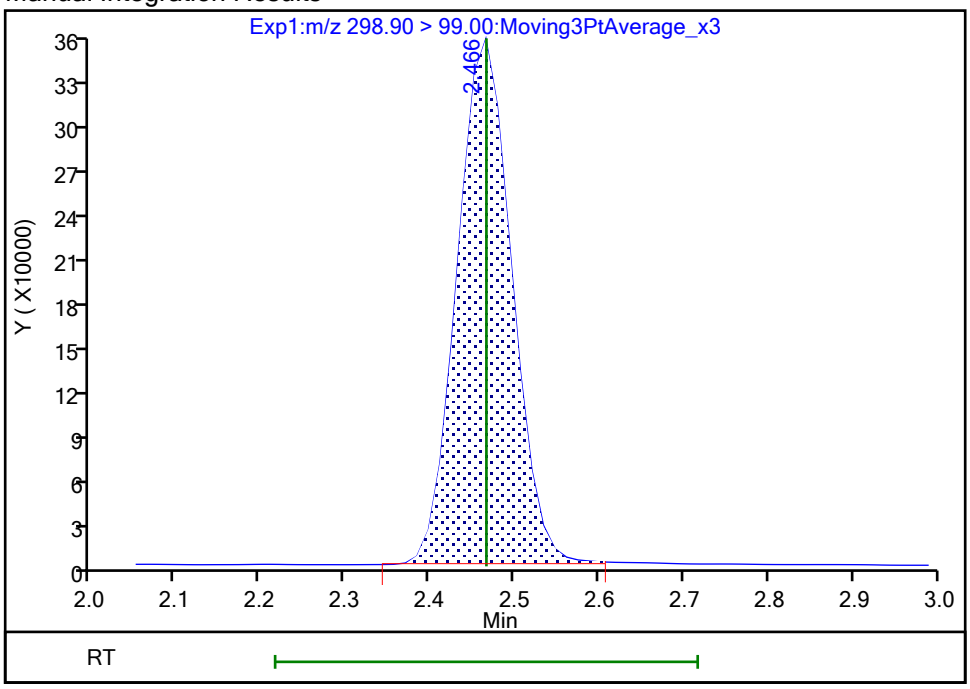
Processing Integration Results

RT: 2.47
Area: 1601933
Amount: 1.913772
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1595466
Amount: 1.901553
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

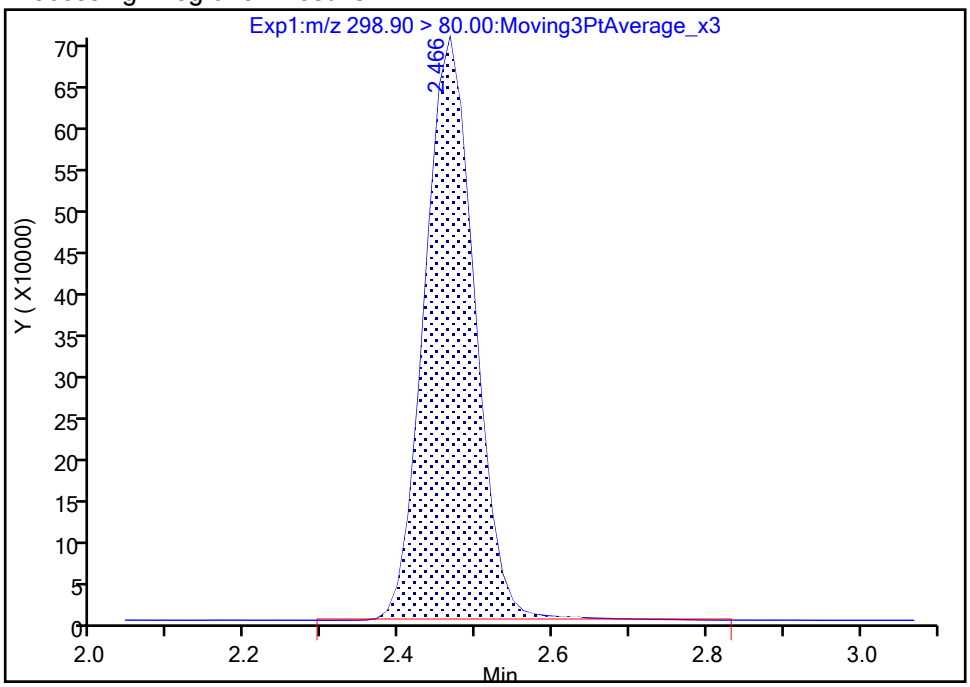
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

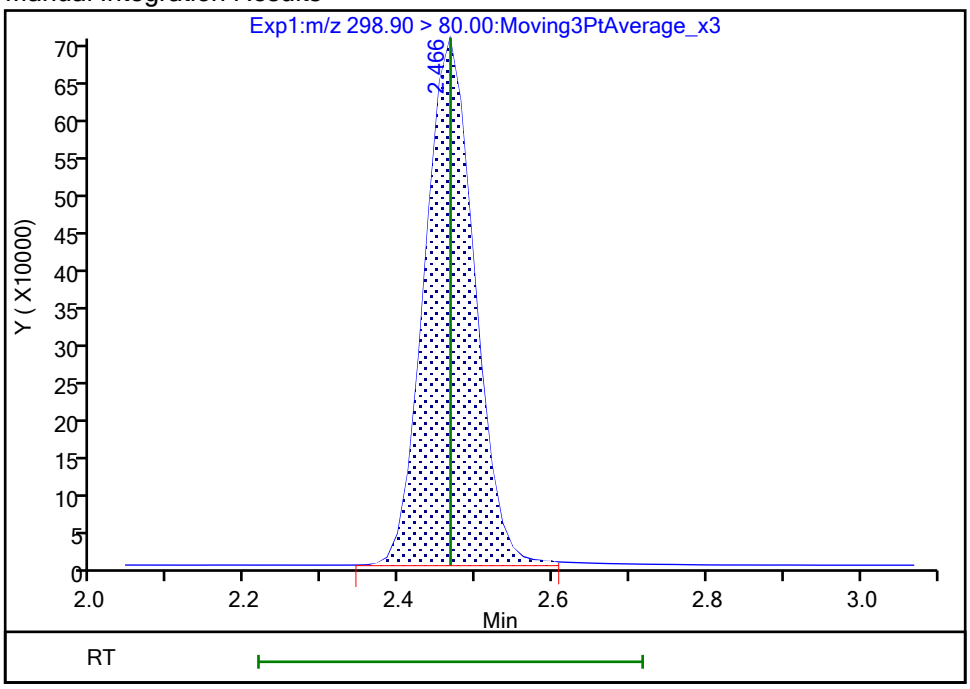
Processing Integration Results

RT: 2.47
Area: 3190953
Amount: 1.913772
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 3170579
Amount: 1.901553
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

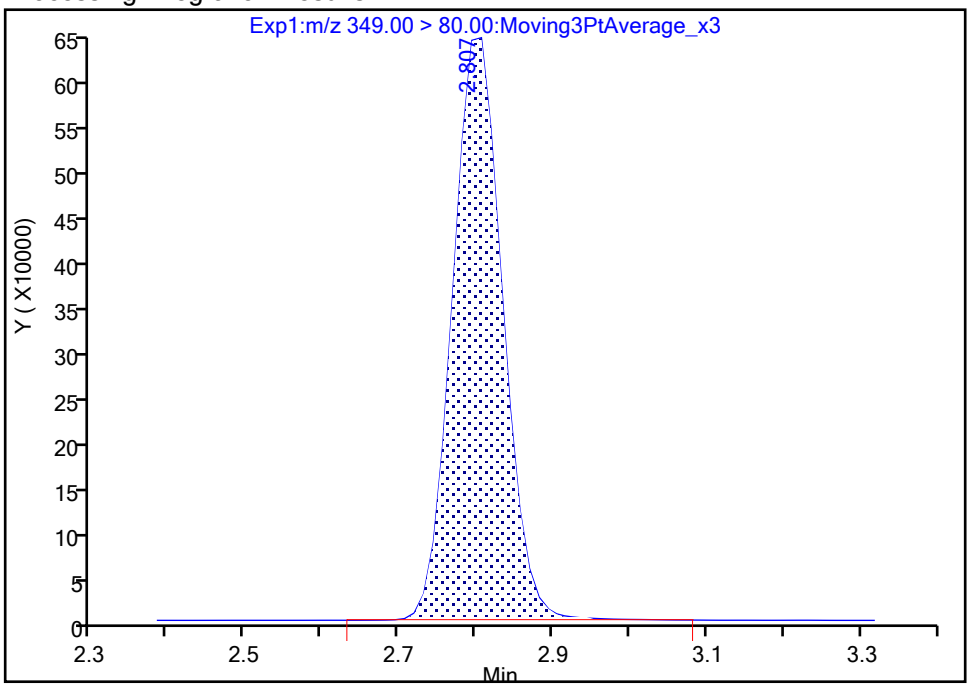
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

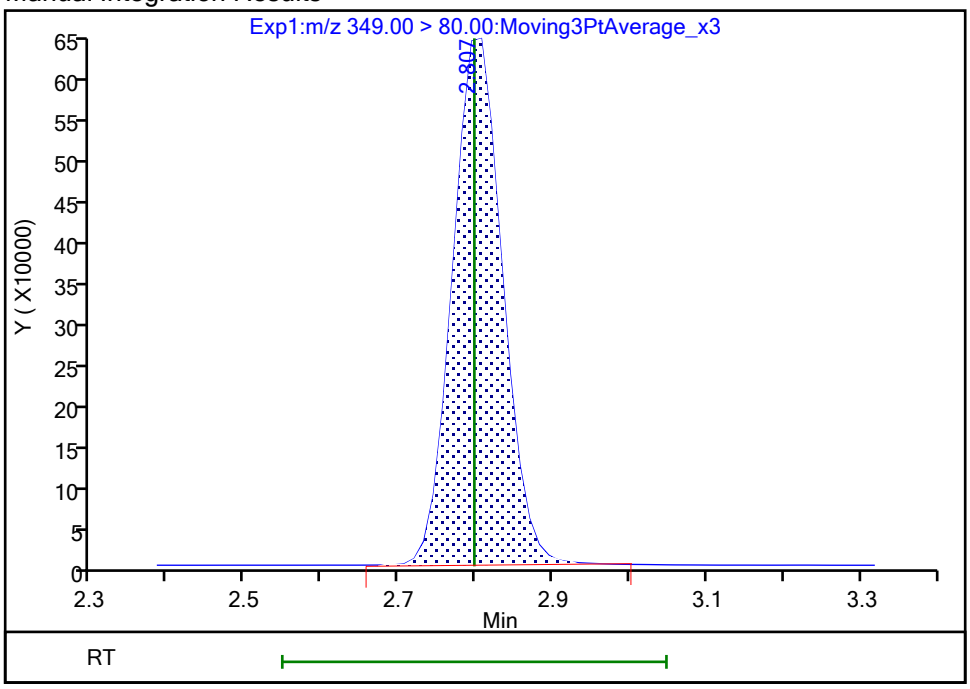
Processing Integration Results

RT: 2.81
Area: 2916491
Amount: 2.083315
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 2907081
Amount: 2.076594
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

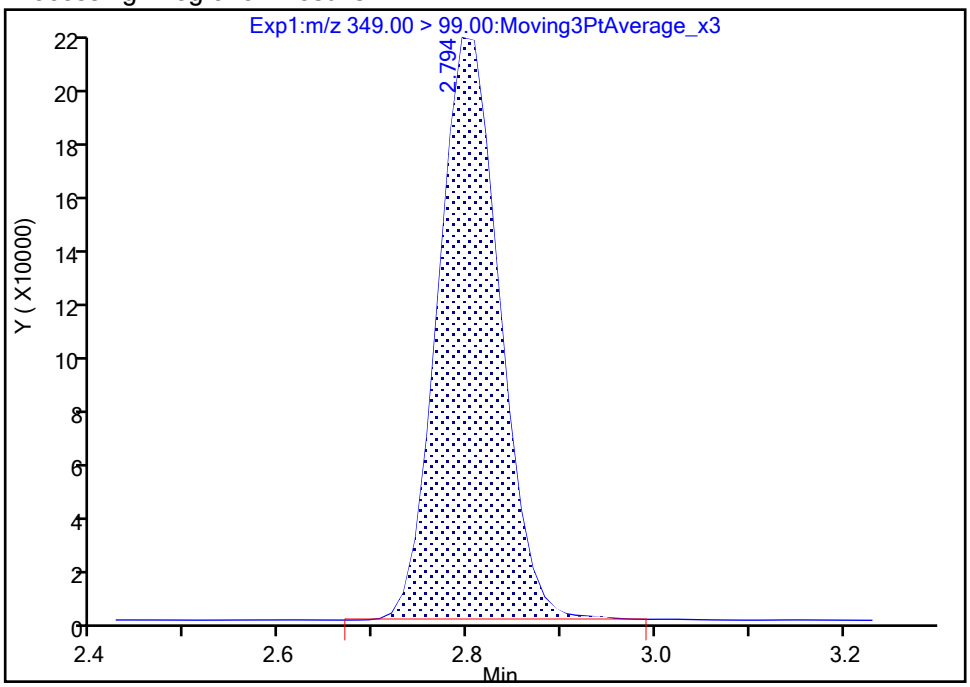
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

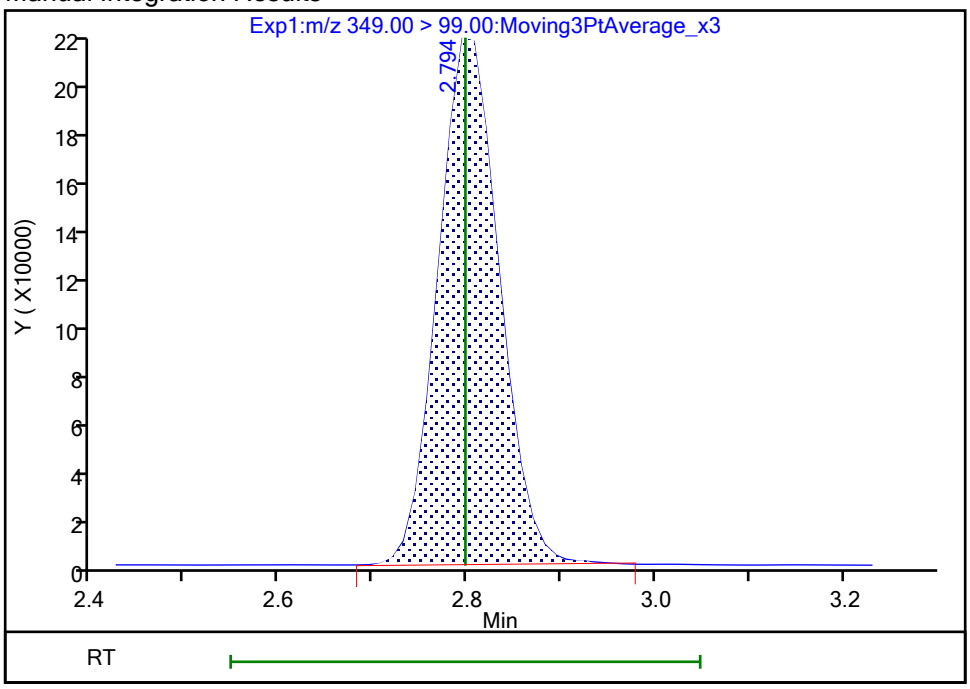
Processing Integration Results

RT: 2.79
Area: 998710
Amount: 2.083315
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 998006
Amount: 2.076594
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

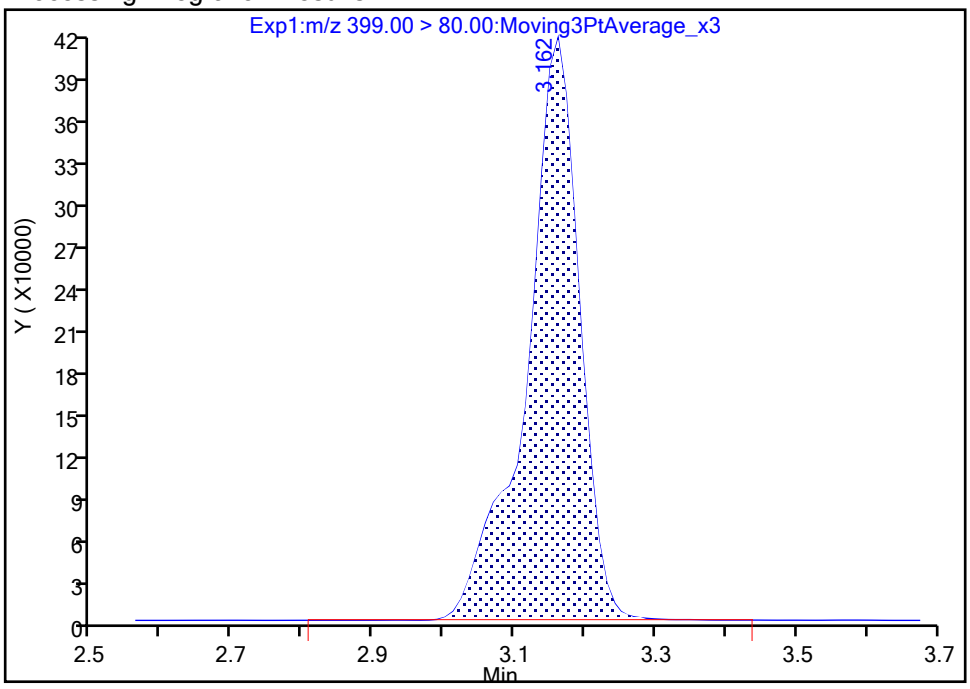
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

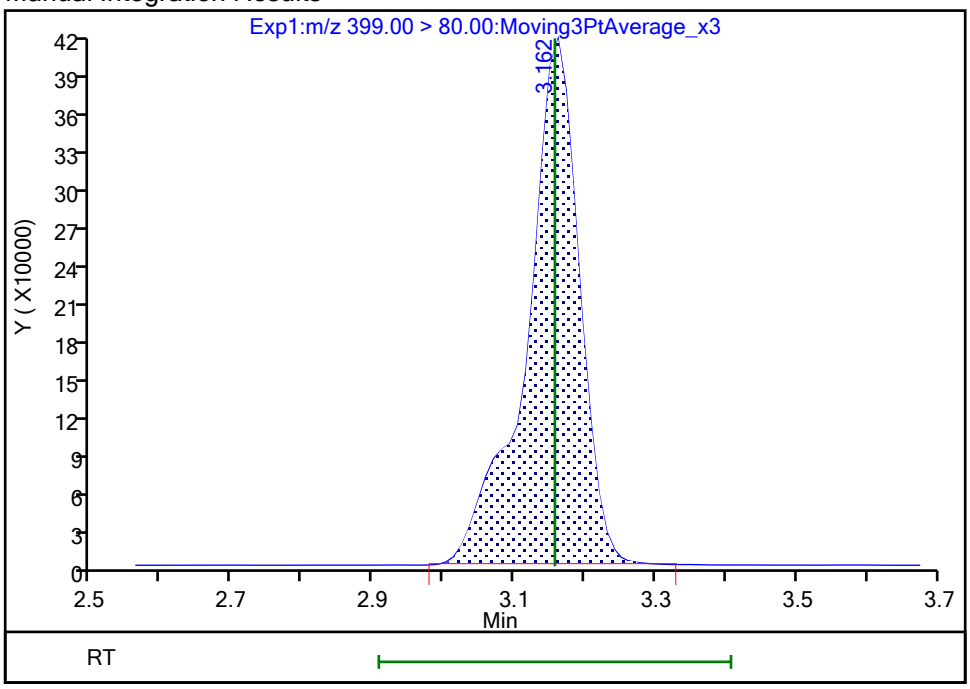
Processing Integration Results

RT: 3.16
Area: 2192239
Amount: 1.847358
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2185953
Amount: 1.842061
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

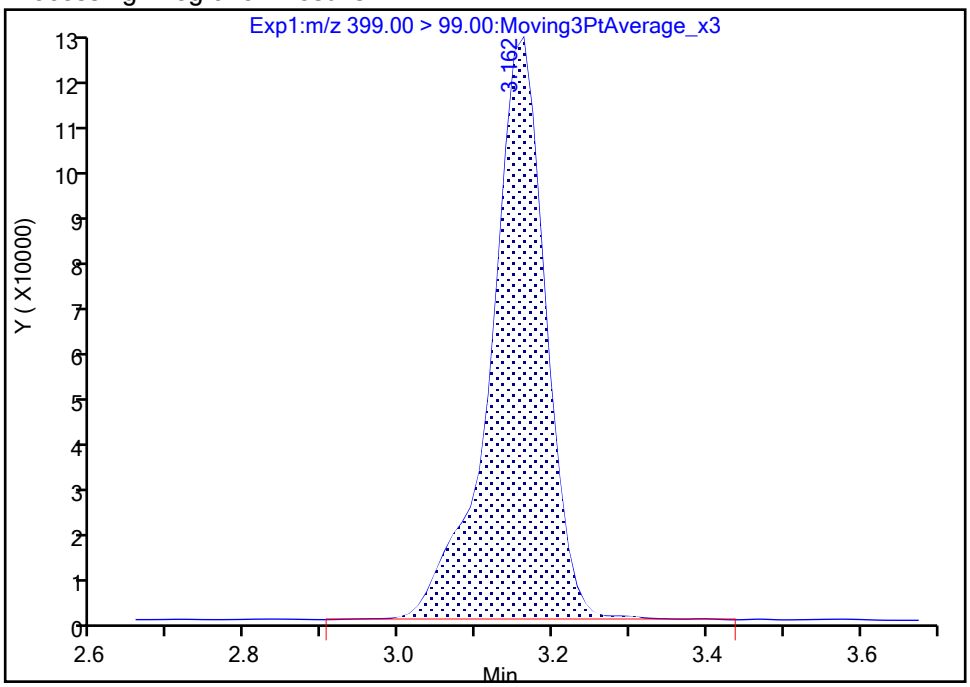
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

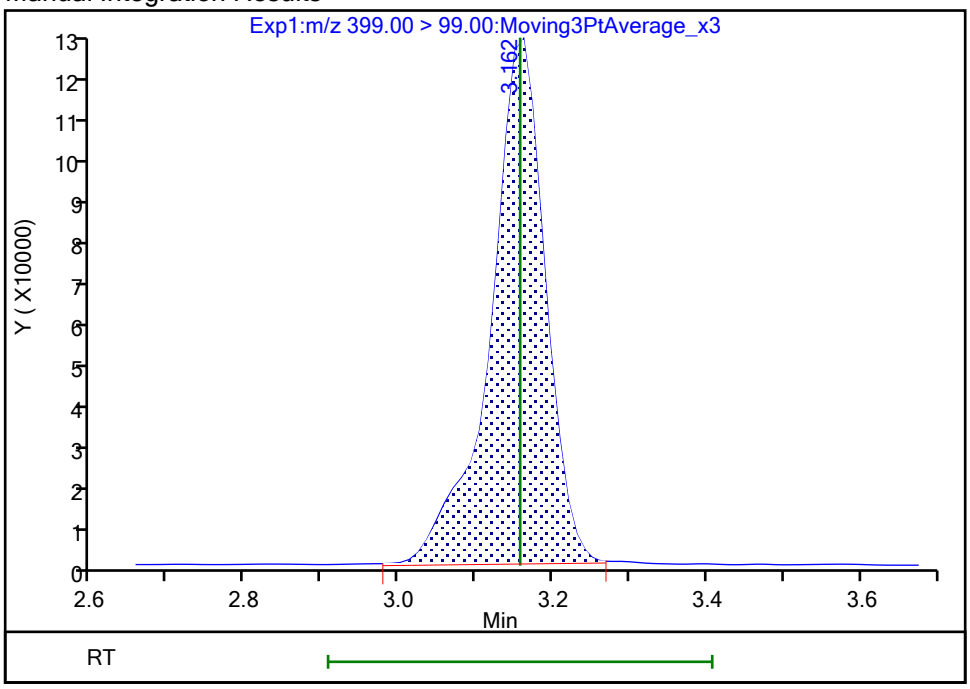
Processing Integration Results

RT: 3.16
Area: 648496
Amount: 1.847358
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 643515
Amount: 1.842061
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:06:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

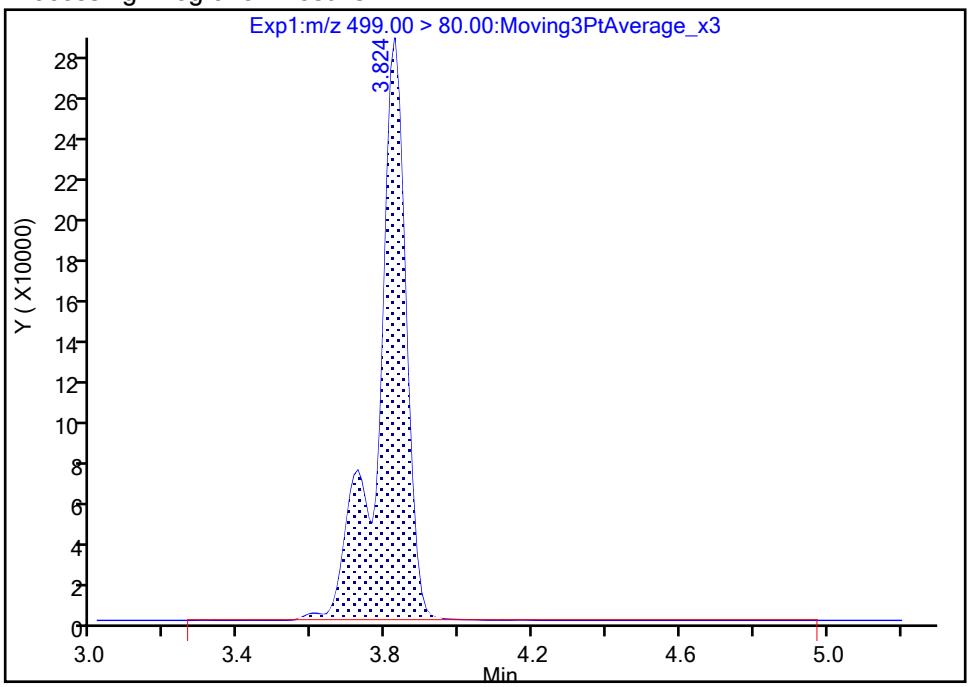
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

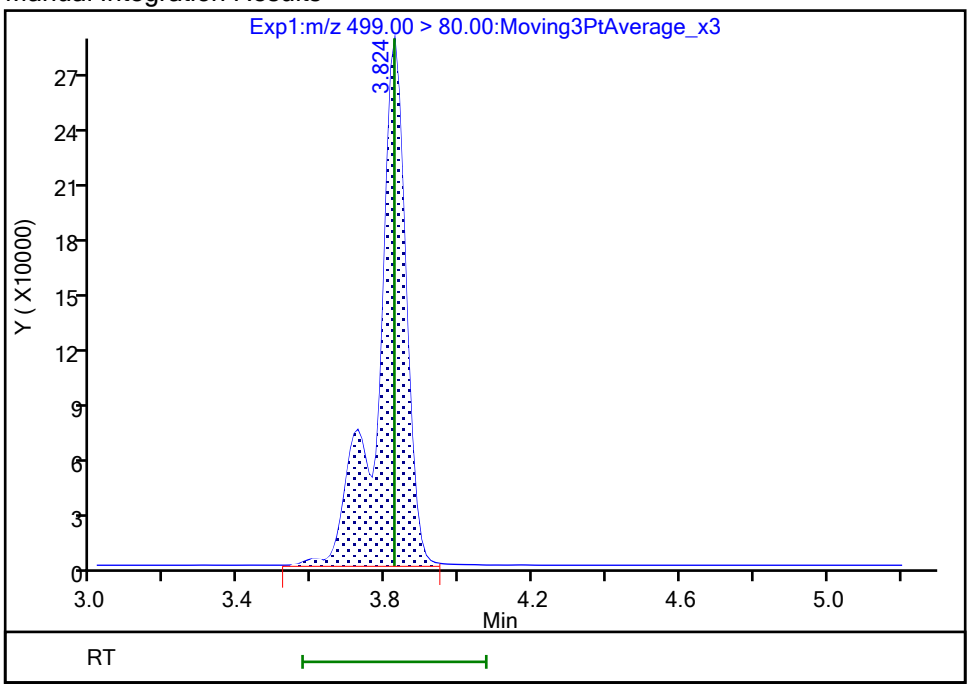
Processing Integration Results

RT: 3.82
Area: 1539050
Amount: 1.862070
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1532968
Amount: 1.854712
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

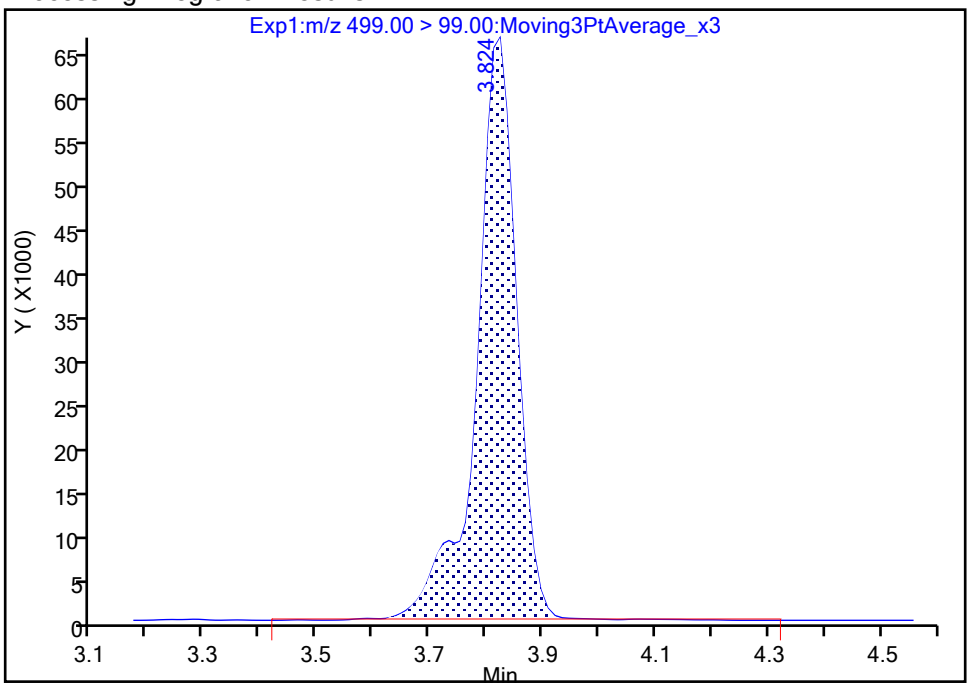
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

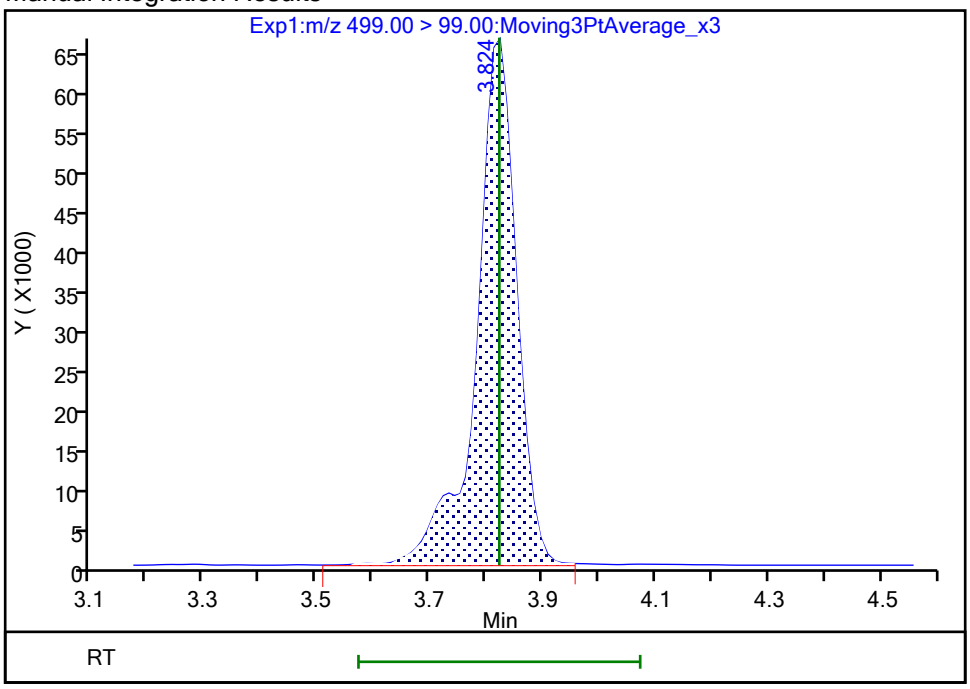
Processing Integration Results

RT: 3.82
Area: 333078
Amount: 1.862070
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 330240
Amount: 1.854712
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

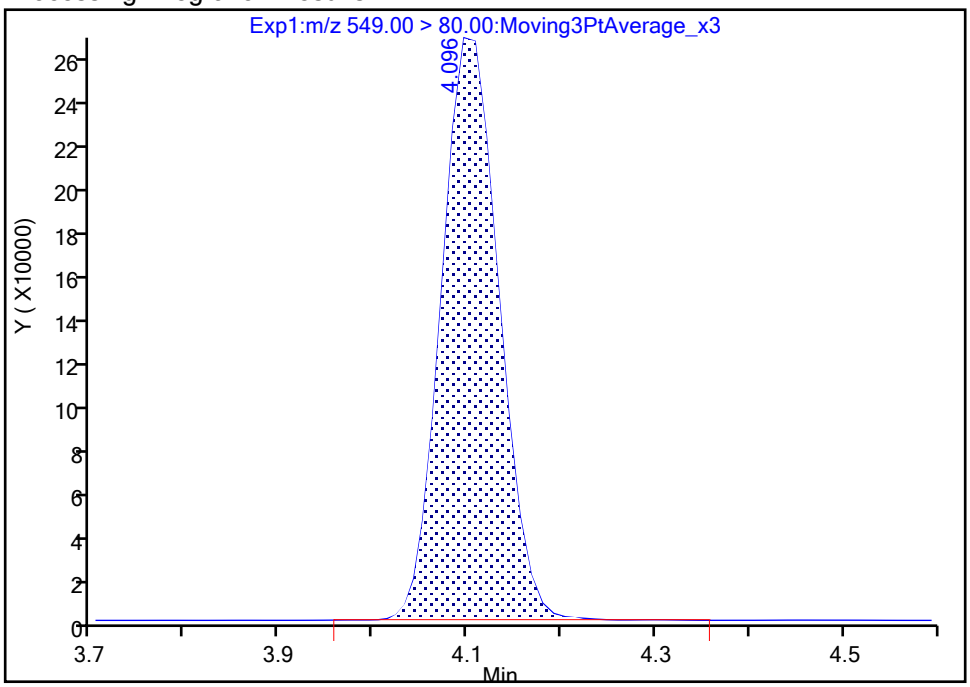
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

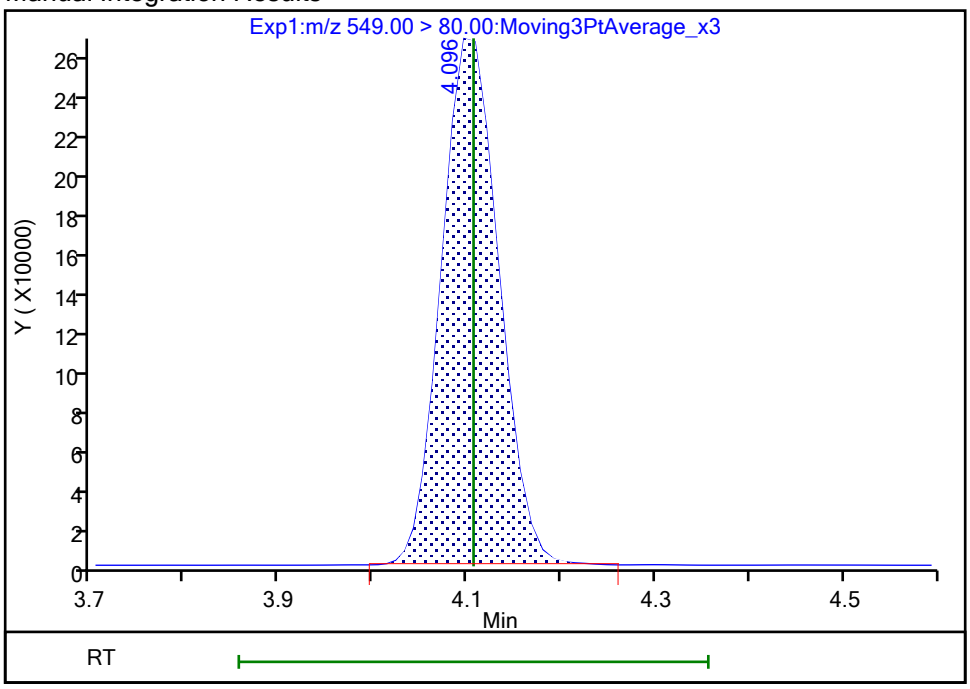
Processing Integration Results

RT: 4.10
Area: 1116383
Amount: 1.775434
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 1113718
Amount: 1.771196
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

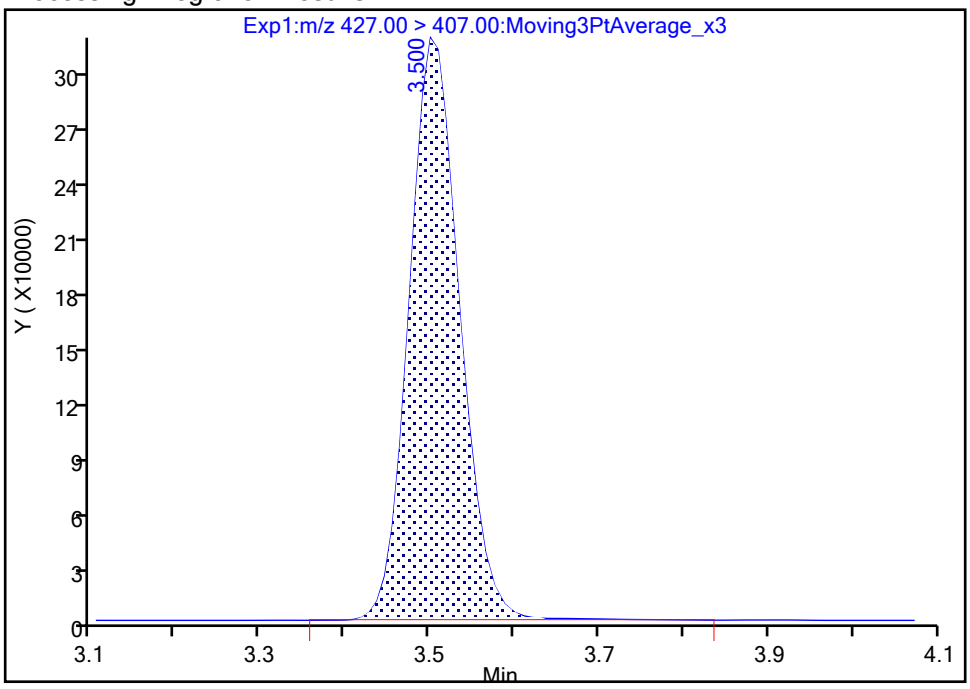
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

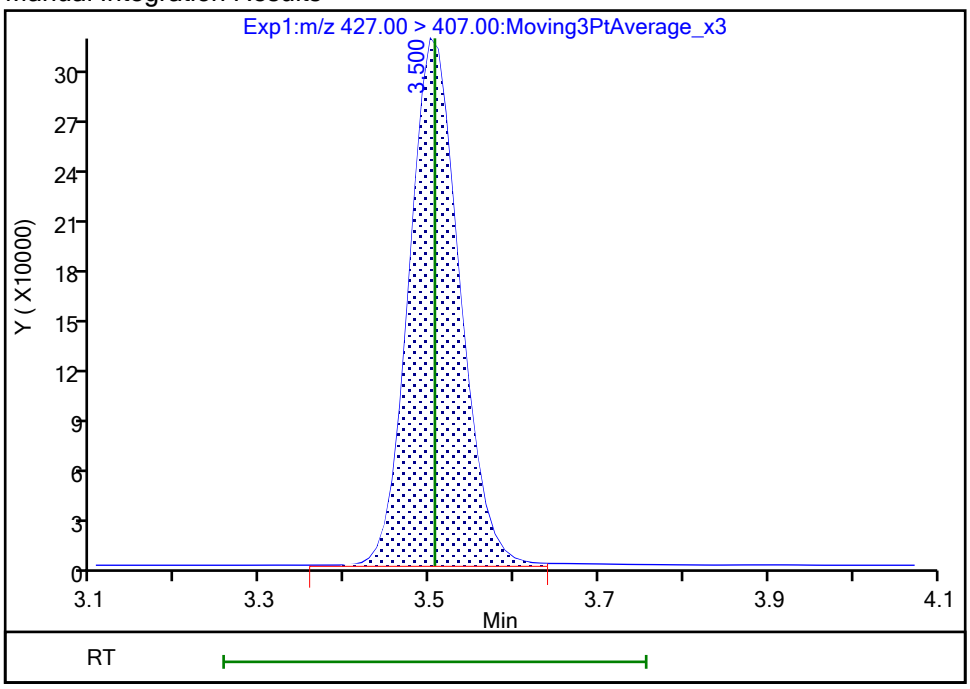
Processing Integration Results

RT: 3.50
Area: 1290510
Amount: 2.124538
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 1285054
Amount: 2.115556
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

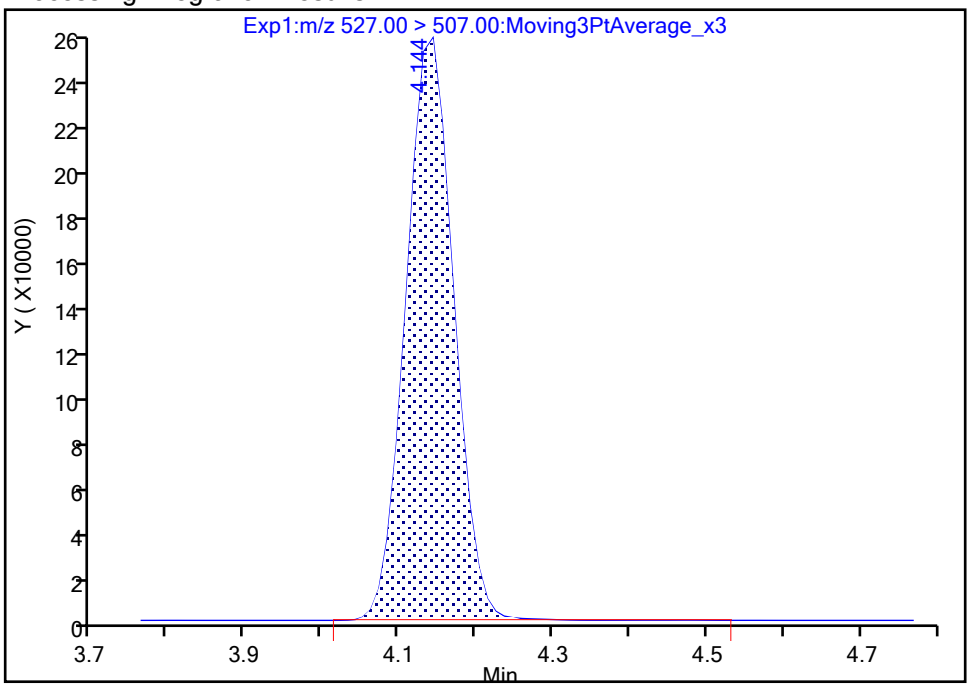
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

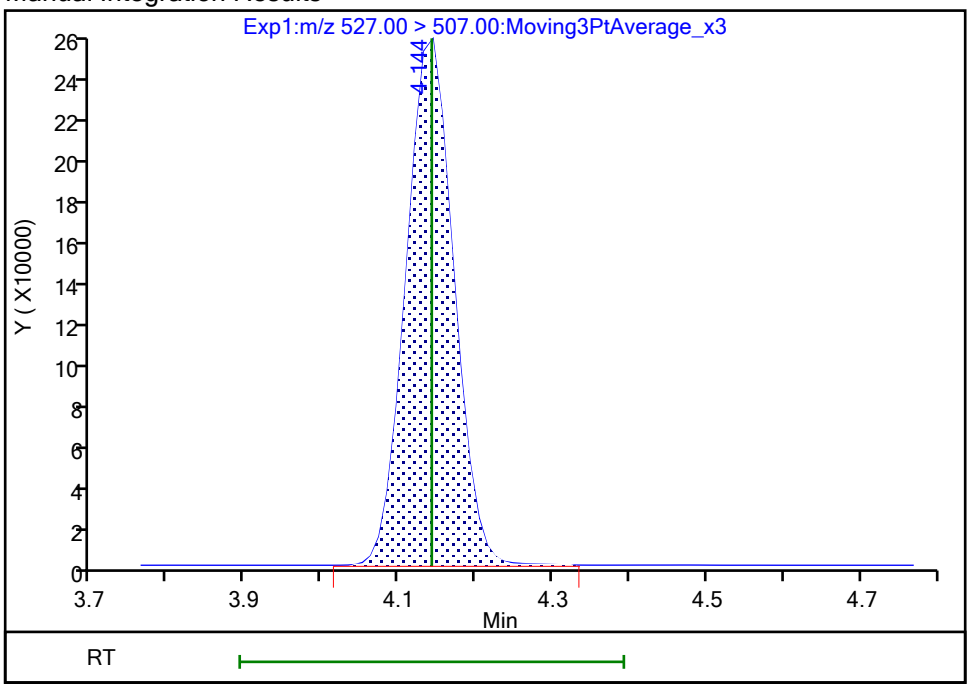
Processing Integration Results

RT: 4.14
Area: 1120998
Amount: 2.230101
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1119665
Amount: 2.227449
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

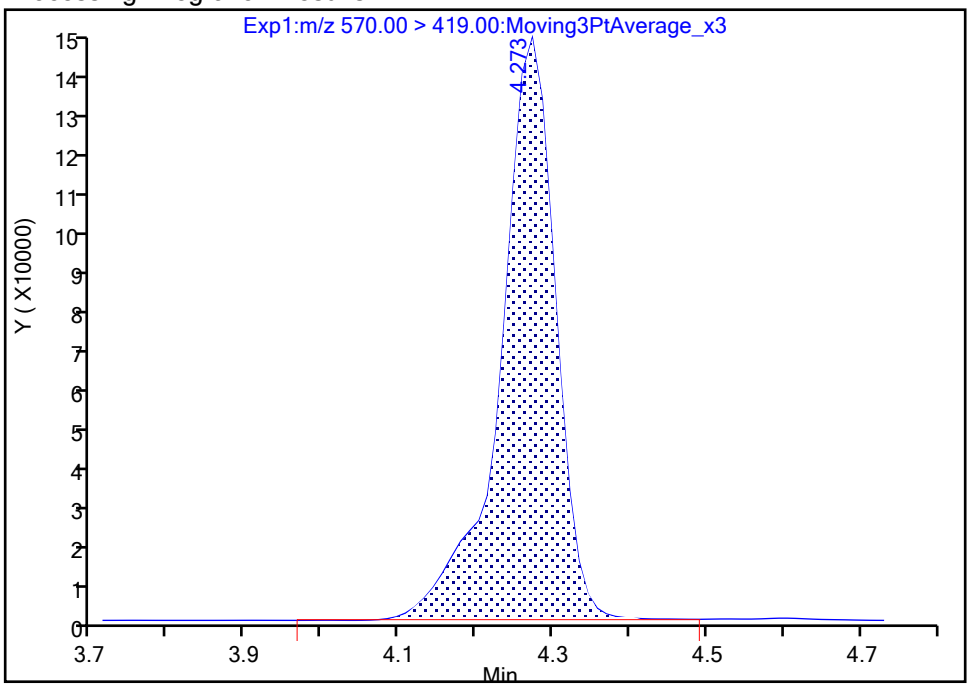
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

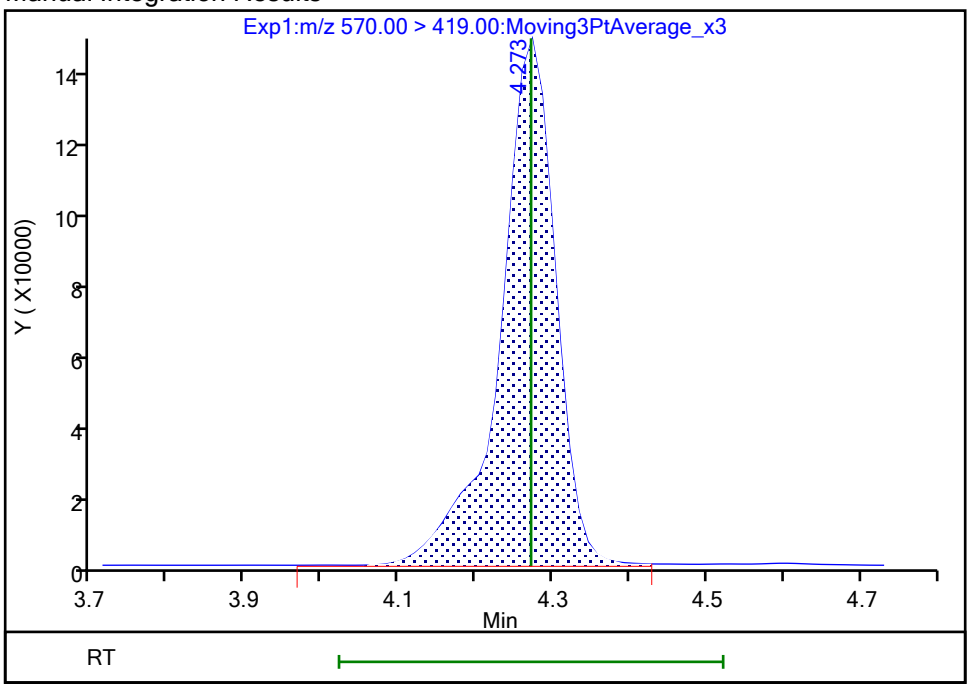
Processing Integration Results

RT: 4.27
Area: 743045
Amount: 2.136898
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 741874
Amount: 2.133530
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

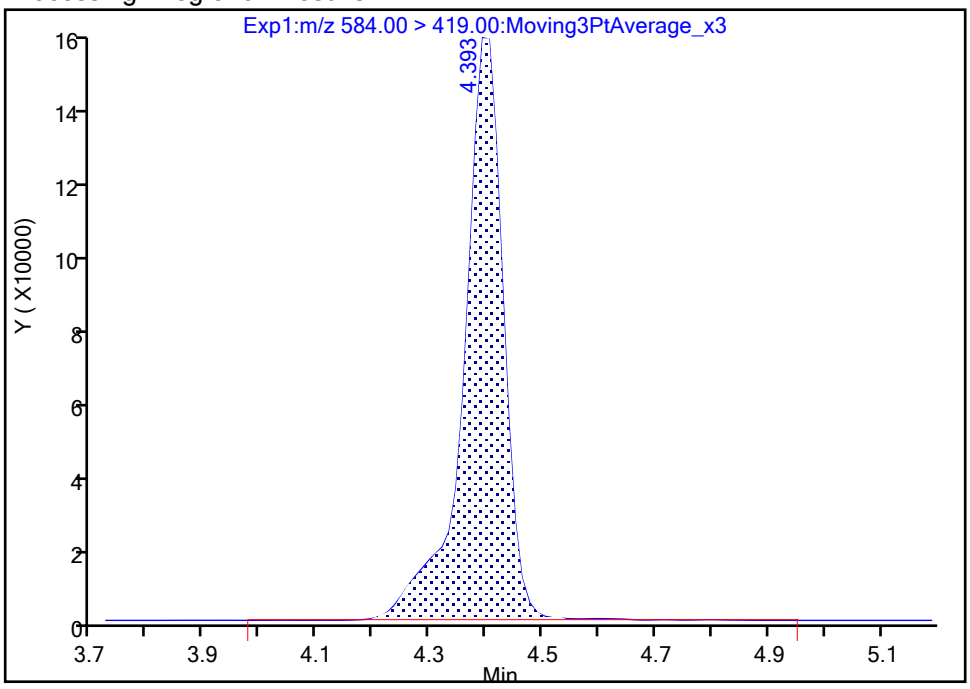
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

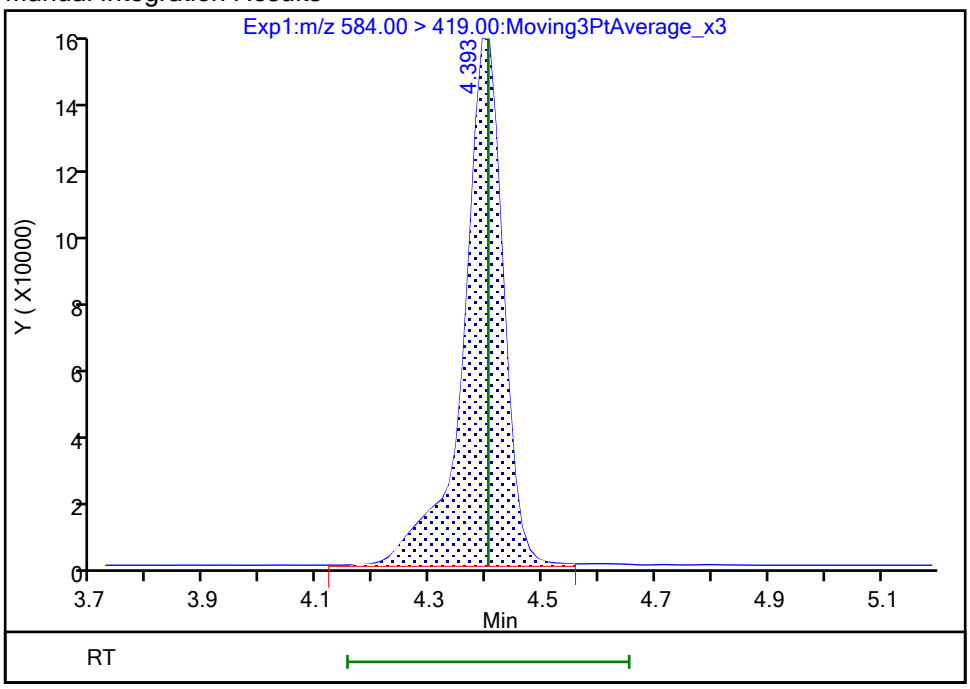
Processing Integration Results

RT: 4.39
Area: 768672
Amount: 2.082518
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 764497
Amount: 2.071207
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:08:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

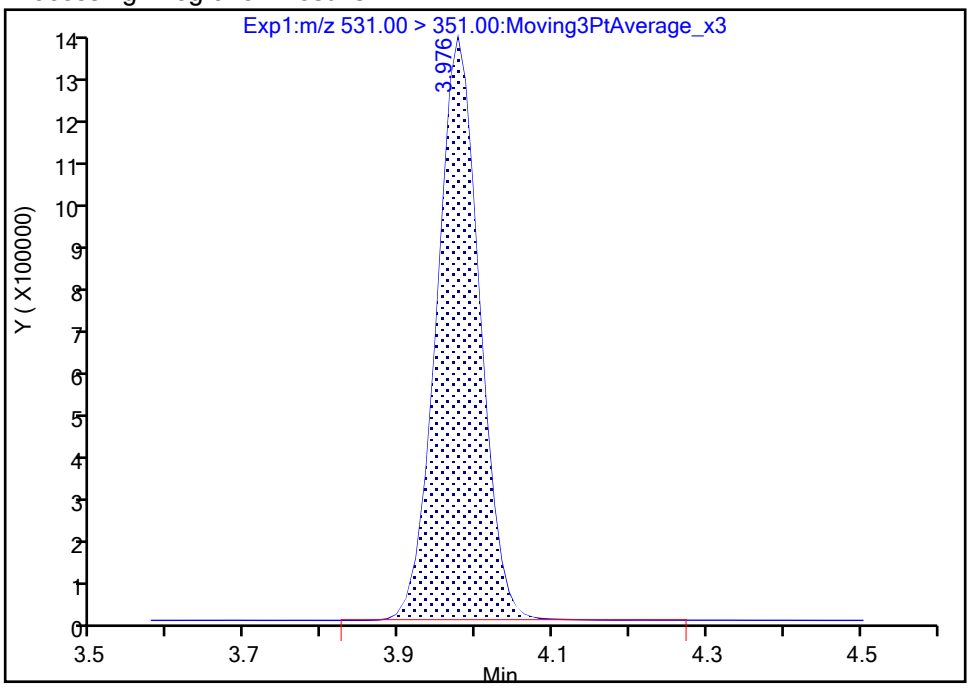
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

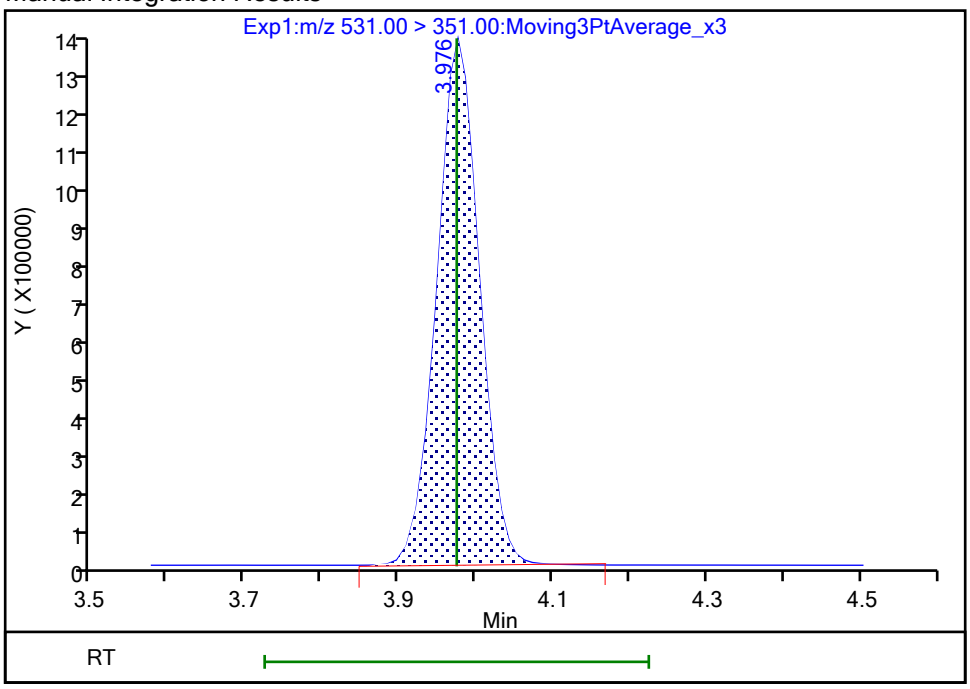
Processing Integration Results

RT: 3.98
Area: 5391172
Amount: 2.131646
Amount Units: ng/ml



Manual Integration Results

RT: 3.98
Area: 5387213
Amount: 2.130081
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:07:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

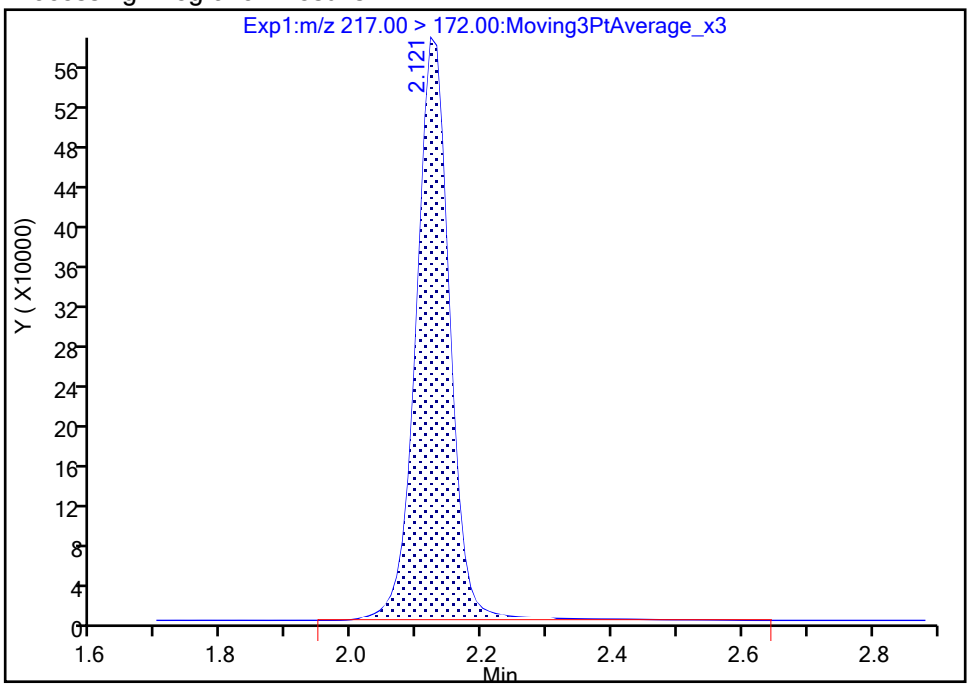
Data File: \\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d
Injection Date: 21-Oct-2023 00:41:56 Instrument ID: LC812
Lims ID: LCSD 200-196590/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

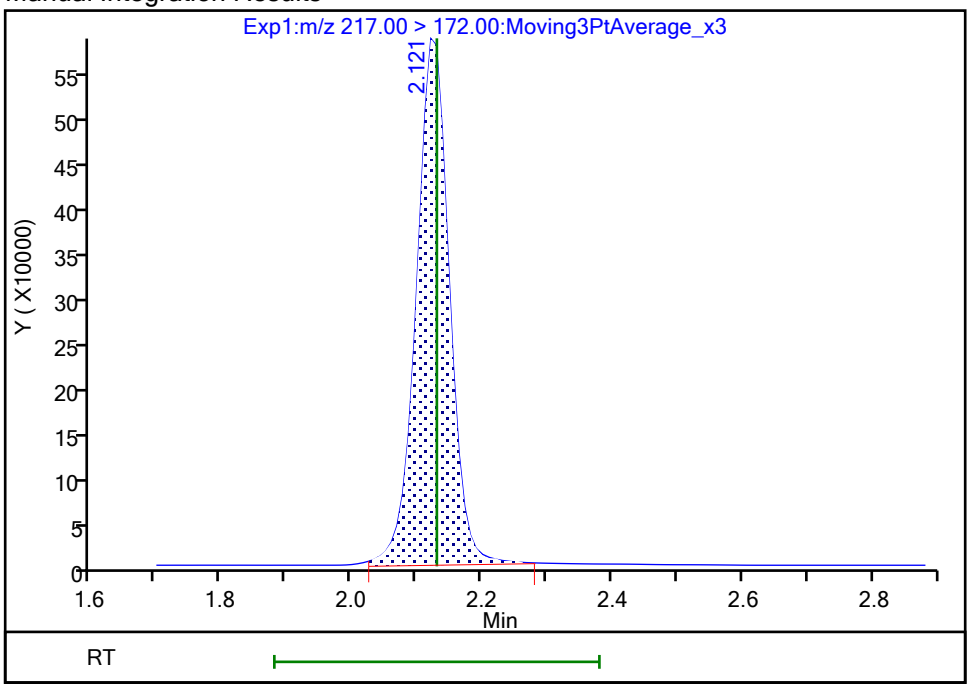
Processing Integration Results

RT: 2.12
Area: 2099791
Amount: 1.297530
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2072231
Amount: 1.280499
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:04:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

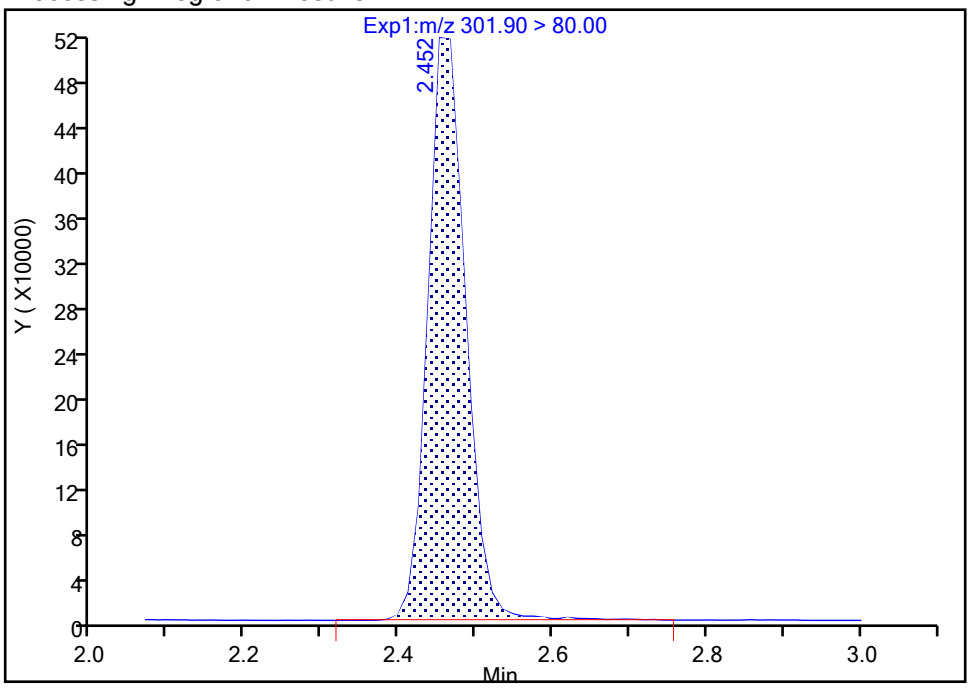
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

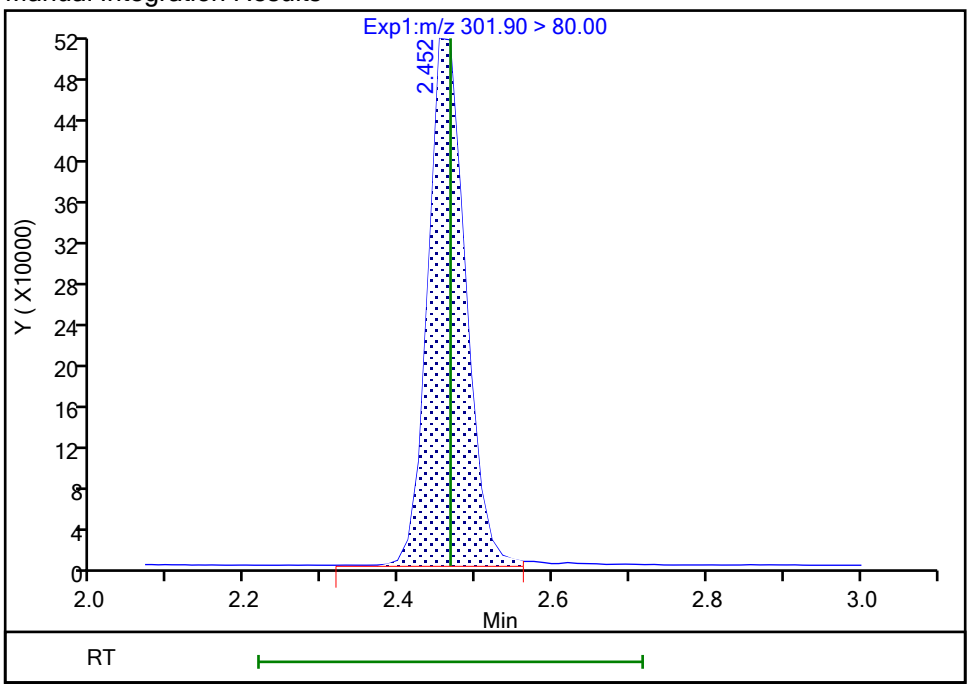
Processing Integration Results

RT: 2.45
Area: 1751367
Amount: 1.030600
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1735429
Amount: 1.021221
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:05:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

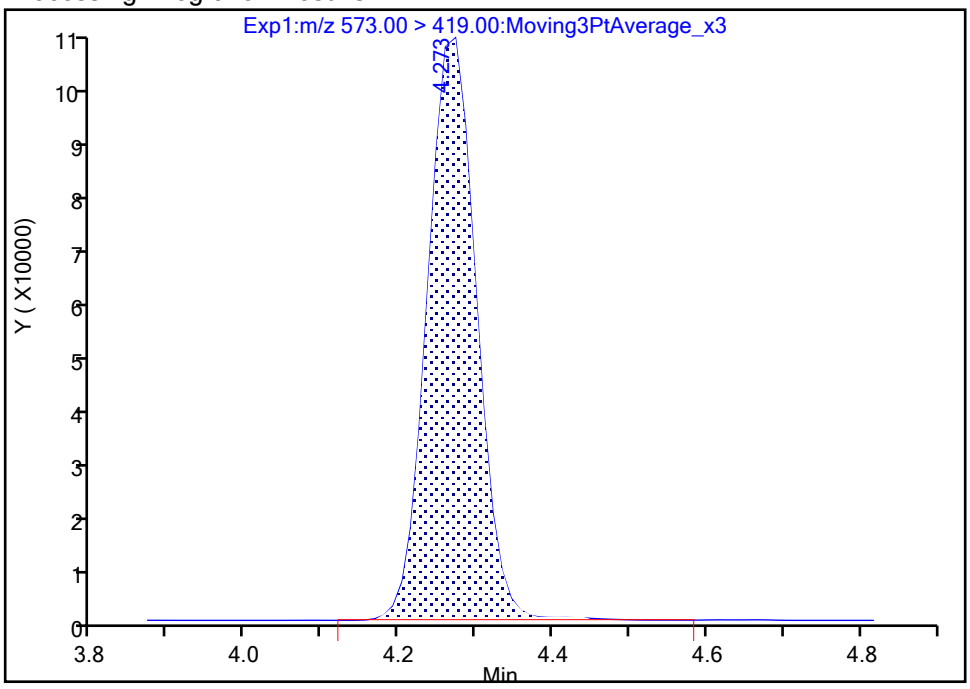
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

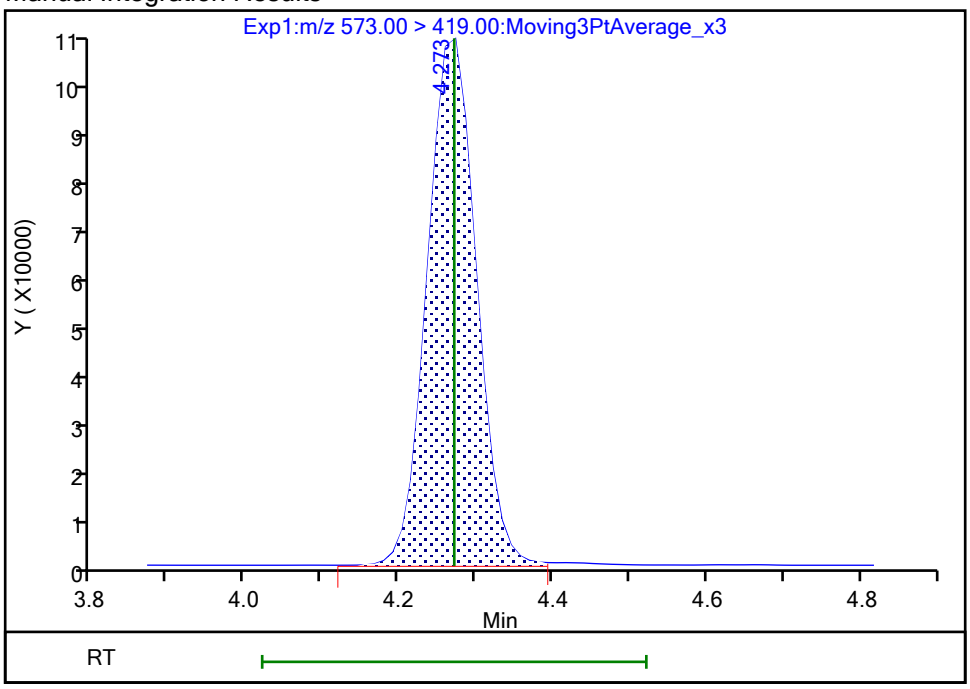
Processing Integration Results

RT: 4.27
Area: 481256
Amount: 1.112794
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 479003
Amount: 1.107585
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:05:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

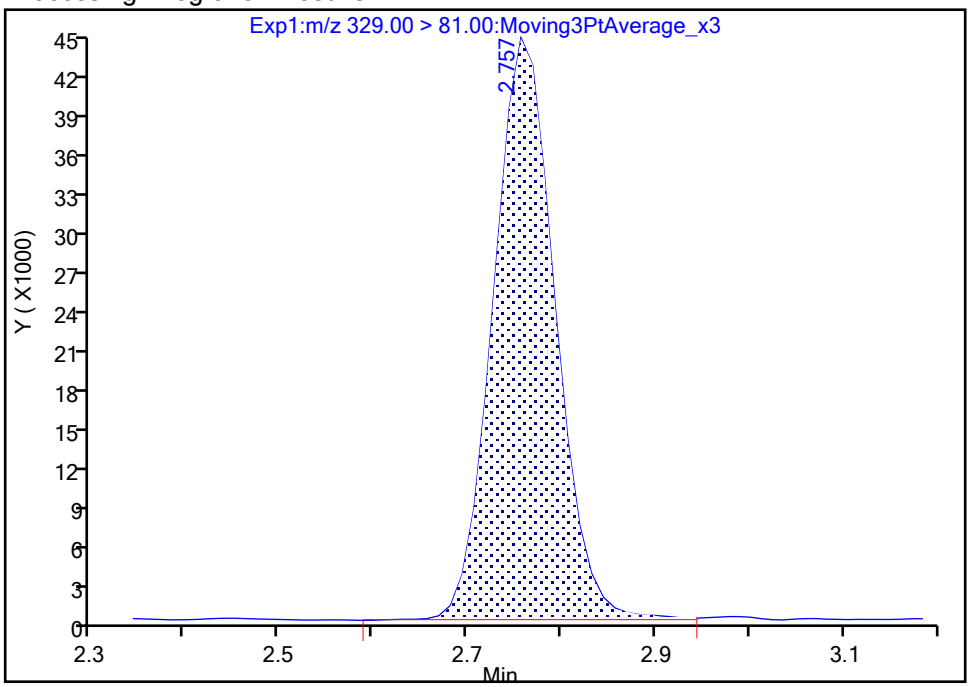
Data File:	\\chromfs\Burlington\ChromData\LC812\20231020-57493.b\PA231020C04.d				
Injection Date:	21-Oct-2023 00:41:56	Instrument ID:	LC812		
Lims ID:	LCSD 200-196590/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

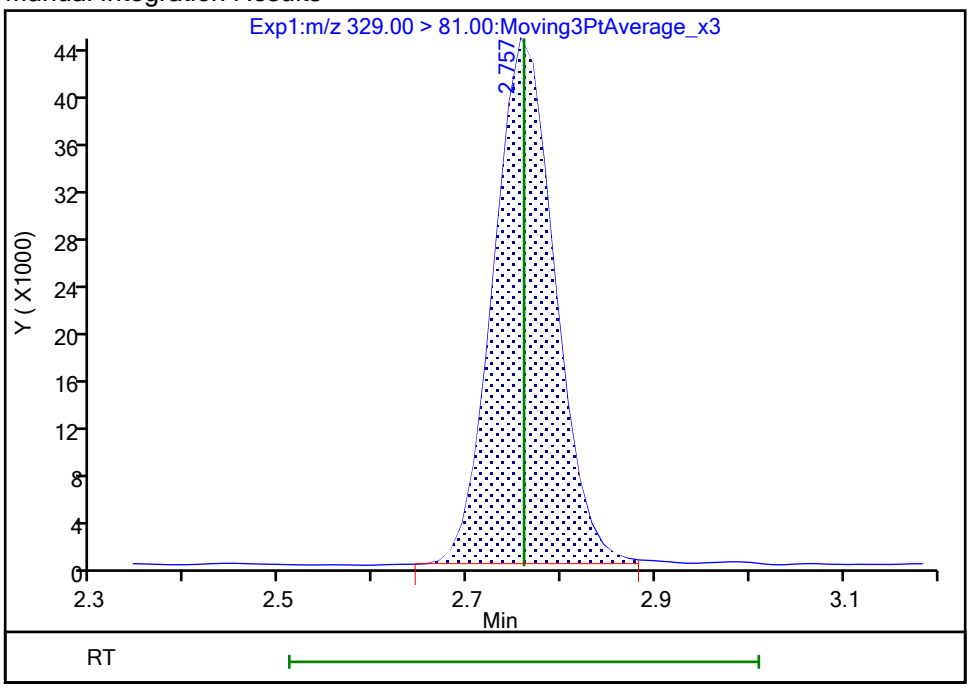
Processing Integration Results

RT: 2.76
Area: 202573
Amount: 1.030769
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 200590
Amount: 1.020678
Amount Units: ng/ml



Reviewer: khanphomeea, 23-Oct-2023 14:05:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 MS | Lab Sample ID: 460-290219-1 MS

Matrix: Water | Lab File ID: PA231020D21.d

Analysis Method: 537 (modified) | Date Collected: 10/12/2023 09:27

Extraction Method: 3535 | Date Extracted: 10/19/2023 13:52

Sample wt/vol: 291.6(mL) | Date Analyzed: 10/21/2023 06:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	37.54		4.29	1.03
2706-90-3	Perfluoropentanoic acid	35.21		1.71	0.58
307-24-4	Perfluorohexanoic acid	34.10		1.71	0.56
375-85-9	Perfluoroheptanoic acid	32.14		1.71	0.46
335-67-1	Perfluorooctanoic acid	42.84		1.71	0.65
375-95-1	Perfluorononanoic acid	36.50		1.71	0.42
335-76-2	Perfluorodecanoic acid	32.35		1.71	0.39
2058-94-8	Perfluoroundecanoic acid	30.31		1.71	0.47
307-55-1	Perfluorododecanoic acid	29.11		1.71	0.42
72629-94-8	Perfluorotridecanoic acid	28.05		1.71	0.41
376-06-7	Perfluorotetradecanoic acid	29.77		1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	28.88		1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	32.47		1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	37.23		1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	34.11		1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	180.0		1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	28.41		1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	25.45		1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	32.47		1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	33.71		4.29	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	35.48		1.71	0.66
754-91-6	Perfluorooctanesulfonamide	33.89		1.71	0.79
2355-31-9	NMeFOSAA	32.08		4.29	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	30.12		4.29	1.37
13252-13-6	HFPODA	33.66		3.43	0.94
919005-14-4	DONA	31.99		1.71	0.36
756426-58-1	9Cl-PF3ONS	34.57		1.71	0.27
763051-92-9	11Cl-PF3OUdS	28.81		1.71	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 MS Lab Sample ID: 460-290219-1 MS

Matrix: Water Lab File ID: PA231020D21.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:27

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 291.6(mL) Date Analyzed: 10/21/2023 06:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	86		50-150
STL01893	13C5 PFPeA	95		50-150
STL01892	13C4 PFHpA	103		50-150
STL02116	13C2 PFTeDA	82		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	76		50-150
STL02118	d3-NMeFOSAA	87		50-150
STL02117	d5-NEtFOSAA	92		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	96		50-150
STL02280	M2-8:2 FTS	86		50-150
STL02255	13C3 HFPO-DA	103		50-150
STL00994	18O2 PFHxS	88		50-150
STL00993	13C2 PFHxA	96		50-150
STL00991	13C4 PFOS	89		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	102		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	96		50-150

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 MSD Lab Sample ID: 460-290219-1 MSD

Matrix: Water Lab File ID: PA231020D22.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:27

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 291.4(mL) Date Analyzed: 10/21/2023 06:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	36.67		4.29	1.03
2706-90-3	Perfluoropentanoic acid	36.59		1.72	0.58
307-24-4	Perfluorohexanoic acid	34.72		1.72	0.56
375-85-9	Perfluoroheptanoic acid	36.66		1.72	0.46
335-67-1	Perfluorooctanoic acid	43.72		1.72	0.65
375-95-1	Perfluorononanoic acid	35.33		1.72	0.42
335-76-2	Perfluorodecanoic acid	35.50		1.72	0.39
2058-94-8	Perfluoroundecanoic acid	31.06		1.72	0.47
307-55-1	Perfluorododecanoic acid	32.06		1.72	0.42
72629-94-8	Perfluorotridecanoic acid	30.31		1.72	0.41
376-06-7	Perfluorotetradecanoic acid	30.85		1.72	0.55
375-73-5	Perfluorobutanesulfonic acid	29.63		1.72	0.53
2706-91-4	Perfluoropentanesulfonic acid	32.78		1.72	0.43
355-46-4	Perfluorohexanesulfonic acid	37.05		1.72	0.47
375-92-8	Perfluoroheptanesulfonic acid	33.79		1.72	0.35
1763-23-1	Perfluorooctanesulfonic acid	186.9		1.72	0.73
68259-12-1	Perfluorononanesulfonic acid	30.27		1.72	0.34
335-77-3	Perfluorodecanesulfonic acid	29.64		1.72	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	32.60		1.72	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	34.03		4.29	1.12
39108-34-4	8:2 Fluorotelomer sulfonic acid	36.77		1.72	0.66
754-91-6	Perfluorooctanesulfonamide	35.50		1.72	0.79
2355-31-9	NMeFOSAA	33.25		4.29	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	31.21		4.29	1.37
13252-13-6	HFPODA	36.50		3.43	0.94
919005-14-4	DONA	31.83		1.72	0.36
756426-58-1	9Cl-PF3ONS	35.59		1.72	0.27
763051-92-9	11Cl-PF3OUdS	31.99		1.72	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Client Sample ID: MW90AR-101223-0927-95 MSD Lab Sample ID: 460-290219-1 MSD

Matrix: Water Lab File ID: PA231020D22.d

Analysis Method: 537 (modified) Date Collected: 10/12/2023 09:27

Extraction Method: 3535 Date Extracted: 10/19/2023 13:52

Sample wt/vol: 291.4(mL) Date Analyzed: 10/21/2023 06:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196634 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	74		50-150
STL01893	13C5 PFPeA	83		50-150
STL01892	13C4 PFHpA	87		50-150
STL02116	13C2 PFTeDA	82		50-150
STL02337	13C3 PFBS	80		50-150
STL01056	13C8 FOSA	73		50-150
STL02118	d3-NMeFOSAA	87		50-150
STL02117	d5-NEtFOSAA	89		50-150
STL02395	M2-4:2 FTS	82		50-150
STL02279	M2-6:2 FTS	85		50-150
STL02280	M2-8:2 FTS	80		50-150
STL02255	13C3 HFPO-DA	85		50-150
STL00994	18O2 PFHxS	84		50-150
STL00993	13C2 PFHxA	90		50-150
STL00991	13C4 PFOS	83		50-150
STL00998	13C2 PFDoA	87		50-150
STL00995	13C5 PFNA	85		50-150
STL00996	13C2 PFDA	90		50-150
STL00990	13C4 PFOA	93		50-150
STL00997	13C2 PFUnA	89		50-150

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Instrument ID: LC812 Start Date: 07/26/2023 16:44

Analysis Batch Number: 193912 End Date: 07/26/2023 18:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:08	1		C-18 4.6(mm)
IC 200-193912/5		07/26/2023 17:16	1	PA230726ICAL05.d	C-18 4.6(mm)
IC 200-193912/6		07/26/2023 17:25	1	PA230726ICAL06.d	C-18 4.6(mm)
IC 200-193912/7		07/26/2023 17:33	1	PA230726ICAL07.d	C-18 4.6(mm)
ICISAV 200-193912/8		07/26/2023 17:41	1	PA230726ICAL08.d	C-18 4.6(mm)
IC 200-193912/9		07/26/2023 17:49	1	PA230726ICAL09.d	C-18 4.6(mm)
IC 200-193912/10		07/26/2023 17:57	1	PA230726ICAL10.d	C-18 4.6(mm)
IC 200-193912/11		07/26/2023 18:05	1	PA230726ICAL11.d	C-18 4.6(mm)
ICB 200-193912/12		07/26/2023 18:13	1	PA230726ICAL12.d	C-18 4.6(mm)
ICV 200-193912/13		07/26/2023 18:22	1	PA230726ICAL13.d	C-18 4.6(mm)
ZZZZZ		07/26/2023 18:30	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Instrument ID: LC812 Start Date: 10/20/2023 17:04

Analysis Batch Number: 196630 End Date: 10/20/2023 20:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 200-196630/4		10/20/2023 17:04	1	PA231020A04.d	C-18 4.6(mm)
CCVLIS 200-196630/5		10/20/2023 17:12	1	PA231020A05.d	C-18 4.6(mm)
ZZZZZ		10/20/2023 17:20	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 17:28	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 17:37	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 17:45	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 17:53	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:01	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:09	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:17	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:26	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:34	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:42	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 18:50	1		C-18 4.6(mm)
CCV 200-196630/18		10/20/2023 18:58	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:06	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:15	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:23	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:31	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:39	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:47	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 19:55	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 20:04	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 20:12	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 20:20	1		C-18 4.6(mm)
ZZZZZ		10/20/2023 20:28	1		C-18 4.6(mm)
CCV 200-196630/30		10/20/2023 20:36	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Instrument ID: LC812 Start Date: 10/21/2023 00:17

Analysis Batch Number: 196633 End Date: 10/21/2023 03:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196633/1		10/21/2023 00:17	1	PA231020C01.d	C-18 4.6(mm)
MB 200-196590/1-A		10/21/2023 00:25	1	PA231020C02.d	C-18 4.6(mm)
LCS 200-196590/2-A		10/21/2023 00:33	1	PA231020C03.d	C-18 4.6(mm)
LCSD 200-196590/3-A		10/21/2023 00:41	1	PA231020C04.d	C-18 4.6(mm)
460-290219-6	1000-101223-0003	10/21/2023 00:50	1	PA231020C05.d	C-18 4.6(mm)
460-290219-7	MW89A-101223-0946-96	10/21/2023 00:58	1	PA231020C06.d	C-18 4.6(mm)
460-290219-8	MW89-101223-1056-25	10/21/2023 01:06	1	PA231020C07.d	C-18 4.6(mm)
460-290219-9	MW17A-101223-1206-29	10/21/2023 01:14	1	PA231020C08.d	C-18 4.6(mm)
460-290219-10	MW17B-101223-1306-96	10/21/2023 01:22	1	PA231020C09.d	C-18 4.6(mm)
460-290219-11	MW82-101223-1411-30	10/21/2023 01:30	1	PA231020C10.d	C-18 4.6(mm)
460-290219-12	1000-101223-0002	10/21/2023 01:39	1	PA231020C11.d	C-18 4.6(mm)
ZZZZZ		10/21/2023 01:47	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 01:55	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 02:03	1		C-18 4.6(mm)
CCV 200-196633/15		10/21/2023 02:11	1	PA231020C15.d	C-18 4.6(mm)
ZZZZZ		10/21/2023 02:19	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 02:28	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 02:36	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 02:44	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 02:52	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 03:00	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 03:08	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 03:17	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 03:25	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 03:33	1		C-18 4.6(mm)
CCV 200-196633/26		10/21/2023 03:41	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Instrument ID: LC812 Start Date: 10/21/2023 03:49

Analysis Batch Number: 196634 End Date: 10/21/2023 07:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196634/1		10/21/2023 03:49	1	PA231020D01.d	C-18 4.6(mm)
MB 200-196591/1-A		10/21/2023 03:57	1	PA231020D02.d	C-18 4.6(mm)
LCS 200-196591/2-A		10/21/2023 04:06	1	PA231020D03.d	C-18 4.6(mm)
ZZZZZ		10/21/2023 04:14	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 04:22	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 04:30	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 04:38	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 04:46	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 04:55	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 05:03	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 05:11	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 05:19	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 05:27	1		C-18 4.6(mm)
CCV 200-196634/14		10/21/2023 05:36	1	PA231020D14.d	C-18 4.6(mm)
ZZZZZ		10/21/2023 05:44	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 05:52	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 06:00	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 06:08	1		C-18 4.6(mm)
ZZZZZ		10/21/2023 06:16	1		C-18 4.6(mm)
460-290219-1	MW90AR-101223-0927-95	10/21/2023 06:25	1	PA231020D20.d	C-18 4.6(mm)
460-290219-1 MS	MW90AR-101223-0927-95 MS	10/21/2023 06:33	1	PA231020D21.d	C-18 4.6(mm)
460-290219-1 MSD	MW90AR-101223-0927-95 MSD	10/21/2023 06:41	1	PA231020D22.d	C-18 4.6(mm)
460-290219-2	MW90R-101223-1030-26	10/21/2023 06:49	1	PA231020D23.d	C-18 4.6(mm)
460-290219-3	MW41R-101223-1137-29.5	10/21/2023 06:57	1	PA231020D24.d	C-18 4.6(mm)
460-290219-4	MW14A-101223-1231-40	10/21/2023 07:06	1	PA231020D25.d	C-18 4.6(mm)
460-290219-5	MW83R-101223-1346-29	10/21/2023 07:14	1	PA231020D26.d	C-18 4.6(mm)
CCV 200-196634/27		10/21/2023 07:22	1	PA231020D27.d	C-18 4.6(mm)

537 (modified)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LCPFAS28NCICV 00014	PFAS23NClC7 00001	PFAS32NCBLK20 00025	PFAS32NCIC1 00015	PFAS32NCIC2 00014
IC 200-193912/5		537 (modified)		1 mL				100 uL	
IC 200-193912/6		537 (modified)		1 mL					100 uL
IC 200-193912/7		537 (modified)		1 mL					
ICISAV 200-193912/8		537 (modified)		1 mL					
IC 200-193912/9		537 (modified)		1 mL					
IC 200-193912/10		537 (modified)		1 mL					
IC 200-193912/11		537 (modified)		1 mL		100 uL			
ICB 200-193912/12		537 (modified)		1 mL			100 uL		
ICV 200-193912/13		537 (modified)		1 mL	100 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS32NCIC3 00016	PFAS32NCIC4 00042	PFAS32NCIC5 00035	PFAS32NCIC6 00014		
IC 200-193912/5		537 (modified)							
IC 200-193912/6		537 (modified)							
IC 200-193912/7		537 (modified)		100 uL					
ICISAV 200-193912/8		537 (modified)			100 uL				
IC 200-193912/9		537 (modified)				100 uL			
IC 200-193912/10		537 (modified)					100 uL		
IC 200-193912/11		537 (modified)							
ICB 200-193912/12		537 (modified)							
ICV 200-193912/13		537 (modified)							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 196590 Batch Start Date: 10/19/23 13:45 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/20/23 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00061	LCPFIDA21_spk 00020
MB 200-196590/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196590/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
LCSD 200-196590/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
460-290219-A-6	1000-101223-0003	3535, 537 (modified)	T	319.49 g	27.54 g	292 mL	10 mL		100 uL
460-290219-A-7	MW89A-101223-0946-96	3535, 537 (modified)	T	314.13 g	27.52 g	286.6 mL	10 mL		100 uL
460-290219-A-8	MW89-101223-1056-25	3535, 537 (modified)	T	322.54 g	27.70 g	294.8 mL	10 mL		100 uL
460-290219-A-9	MW17A-101223-1206-29	3535, 537 (modified)	T	319.44 g	27.20 g	292.2 mL	10 mL		100 uL
460-290219-A-10	MW17B-101223-1306-96	3535, 537 (modified)	T	311.63 g	27.35 g	284.3 mL	10 mL		100 uL
460-290219-A-11	MW82-101223-1411-30	3535, 537 (modified)	T	314.30 g	27.23 g	287.1 mL	10 mL		100 uL
460-290219-A-12	1000-101223-0002	3535, 537 (modified)	T	325.89 g	27.81 g	298.1 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00065					
MB 200-196590/1		3535, 537 (modified)		100 uL					
LCS 200-196590/2		3535, 537 (modified)		100 uL					
LCSD 200-196590/3		3535, 537 (modified)		100 uL					
460-290219-A-6	1000-101223-0003	3535, 537 (modified)	T	100 uL					
460-290219-A-7	MW89A-101223-0946-96	3535, 537 (modified)	T	100 uL					
460-290219-A-8	MW89-101223-1056-25	3535, 537 (modified)	T	100 uL					
460-290219-A-9	MW17A-101223-1206-29	3535, 537 (modified)	T	100 uL					
460-290219-A-10	MW17B-101223-1306-96	3535, 537 (modified)	T	100 uL					
460-290219-A-11	MW82-101223-1411-30	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 196590 Batch Start Date: 10/19/23 13:45 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/20/23 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00065					
460-290219-A-12	1000-101223-0002	3535, 537 (modified)	T	100 uL					

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	MLK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: C MTX: F IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 196591 Batch Start Date: 10/19/23 13:52 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/20/23 14:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196591/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196591/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
460-290219-A-1	MW90AR-101223-0927-95	3535, 537 (modified)	T	316.31 g	27.53 g	288.8 mL	10 mL		100 uL
460-290219-A-1 MS	MW90AR-101223-0927-95	3535, 537 (modified)	T	319.43 g	27.87 g	291.6 mL	10 mL	25 uL	100 uL
460-290219-A-1 MSD	MW90AR-101223-0927-95	3535, 537 (modified)	T	319.08 g	27.73 g	291.4 mL	10 mL	25 uL	100 uL
460-290219-A-2	MW90R-101223-1030-26	3535, 537 (modified)	T	321.56 g	27.63 g	293.9 mL	10 mL		100 uL
460-290219-A-3	MW41R-101223-1137-29.5	3535, 537 (modified)	T	326.92 g	28.09 g	298.8 mL	10 mL		100 uL
460-290219-A-4	MW14A-101223-1231-40	3535, 537 (modified)	T	331.33 g	27.73 g	303.6 mL	10 mL		100 uL
460-290219-A-5	MW83R-101223-1346-29	3535, 537 (modified)	T	327.18 g	27.63 g	299.6 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00065					
MB 200-196591/1		3535, 537 (modified)		100 uL					
LCS 200-196591/2		3535, 537 (modified)		100 uL					
460-290219-A-1	MW90AR-101223-0927-95	3535, 537 (modified)	T	100 uL					
460-290219-A-1 MS	MW90AR-101223-0927-95	3535, 537 (modified)	T	100 uL					
460-290219-A-1 MSD	MW90AR-101223-0927-95	3535, 537 (modified)	T	100 uL					
460-290219-A-2	MW90R-101223-1030-26	3535, 537 (modified)	T	100 uL					
460-290219-A-3	MW41R-101223-1137-29.5	3535, 537 (modified)	T	100 uL					
460-290219-A-4	MW14A-101223-1231-40	3535, 537 (modified)	T	100 uL					
460-290219-A-5	MW83R-101223-1346-29	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 196591 Batch Start Date: 10/19/23 13:52 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/20/23 14:15

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	MLK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: C MTX: F IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290219-1

SDG No.:

Batch Number: 196630 Batch Start Date: 10/20/23 17:04 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196630/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196630/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

290219

Chain of Custody Record

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: Dimitri Quafisi	Site Contact:	Date:	COC No:
Haley & Aldrich	Email: DQuafisi@haleyaldrich.com	Lab Contact:	Carrier:	1 of 1 COCs
65 Rockside Rd, Suite 200	Tel/Fax:			Sampler: EST Associates
Cleveland, OH 44131	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
216.706.1314	TAT if different from Below: ☐ 2 weeks ☑ 1 week ☐ 2 days ☐ 1 day			Walk-in Client:
216.739.0560				Lab Sampling:
Job #:				Job / SDG No.
Site: Racer Ewing				
Lab Project # 46013839				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PFAS (537 1M)	Sample Specific Notes:
MW90AR-101223-0927-95	10/12/23	927		GW	6			X	MS/MSD
MW90R-101223-1036-26		1036			2			X	
MW41R-101223-1137-29.5		1137			2			X	
MW14AR-101223-1231-40		1231			2			X	
MW83R-101223-1346-29		1346			2			X	
1000-101223-0003		800			2			X	
MW89A-101223-0946-96		946			2			X	
MW89-101223-1056-25		1056			2			X	
MW17A-101223-1206-29		1206			2			X	
MW17B-101223-1306-96		1306			2			X	
MW82R-101223-1411-30		1411		↓	2			X	
1000-101223-0002	↓	825		AQ	2			X	

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if
☐ Return to Client ☐ Disposal by Lab

460-290219 Chain of Custody

Special Instructions/QC Requirements & Comments. Dissolved Metals field filtered

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd: 5.5 Corr'd: 5.5	Therm ID No.: 10
Relinquished by:	Company: EST	Date/Time: 10/12/23	Received by:	Company: ETA	Date/Time: 10/12/23 15:15
Relinquished by:	Company: ETA	Date/Time: 10/12 1530	Received in Laboratory by:	Company: ETA	Date/Time: 10/12

ETA 10/12 1900

10/12/23 1900

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 290219

Number of Coolers: 1 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.5 °C	5.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below

Sample No(s). adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: PG Date: 10/12/23

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Tempe, Kristyn L	Carrier Tracking No(s):	COC No: 460-69524 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290219-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/24/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email	WO #:			
Project Name: Racer, Ewing/Trenton	Project #: 46010893			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW90AR-101223-0927-95 (460-290219-1)	10/12/23	09.27 Eastern		Water			X	2	
MW90AR-101223-0927-95 (460-290219-1MS)	10/12/23	09 27 Eastern	MS	Water			X	2	
MW90AR-101223-0927-95 (460-290219-1MSD)	10/12/23	09 27 Eastern	MSD	Water			X	2	
MW90R-101223-1030-26 (460-290219-2)	10/12/23	10 30 Eastern		Water			X	2	
MW41R-101223-1137-29.5 (460-290219-3)	10/12/23	11.37 Eastern		Water			X	2	
MW14A-101223-1231-40 (460-290219-4)	10/12/23	12.31 Eastern		Water			X	2	
MW83R-101223-1346-29 (460-290219-5)	10/12/23	13:46 Eastern		Water			X	2	
1000-101223-0003 (460-290219-6)	10/12/23	08:00 Eastern		Water			X	2	
MW89A-101223-0946-96 (460-290219-7)	10/12/23	09.46 Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shi... ody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing... changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody a... t, LLC

460-290219 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be as...
Unconfirmed	☐ Return To Client ☐ Dis... ths
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:

Relinquished by:	Date/Time: 10/17/23 1900	Company: FEDEX	Received by:	Date/Time: 10/18/23 1010	Company: ETA BUR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/26/2023 2:28 PM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Tempe, Kristyn L	Carrier Tracking No(s):	COC No: 460-69524.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Kristyn Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290219-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/24/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer, Ewing/Trenton	Project #: 46010893			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW89-101223-1056-25 (460-290219-8)	10/12/23	10:56 Eastern		Water			X	2	
MW17A-101223-1206-29 (460-290219-9)	10/12/23	12:06 Eastern		Water			X	2	
MW17B-101223-1306-96 (460-290219-10)	10/12/23	13 06 Eastern		Water			X	2	
MW82-101223-1411-30 (460-290219-11)	10/12/23	14:11 Eastern		Water			X	2	
1000-101223-0002 (460-290219-12)	10/12/23	08:25 Eastern		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 10/17/23 1400	Company: ESE	Received by:	Date/Time: 10/18/23 1010	Company: EMA Burl
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Page 118 of 122
10/26/2023 2:28 PM

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 17OCT23
ACTWGT: 14.95 LB
CAD: 0619082/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
PO: YES

REF: 8460-174221

FedEx Express

2 of 4
MPS# 0283 6553 1010 3162
Mstr# 6553 1010 3151

WED - 18 OCT 10:30A
PRIORITY OVERNIGHT

0201

NX BTVA

05403
VT-US BTV

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 17OCT23
ACTWGT: 64.45 LB
CAD: 0619082/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
PO: YES

REF: 8460-174221

FedEx Express

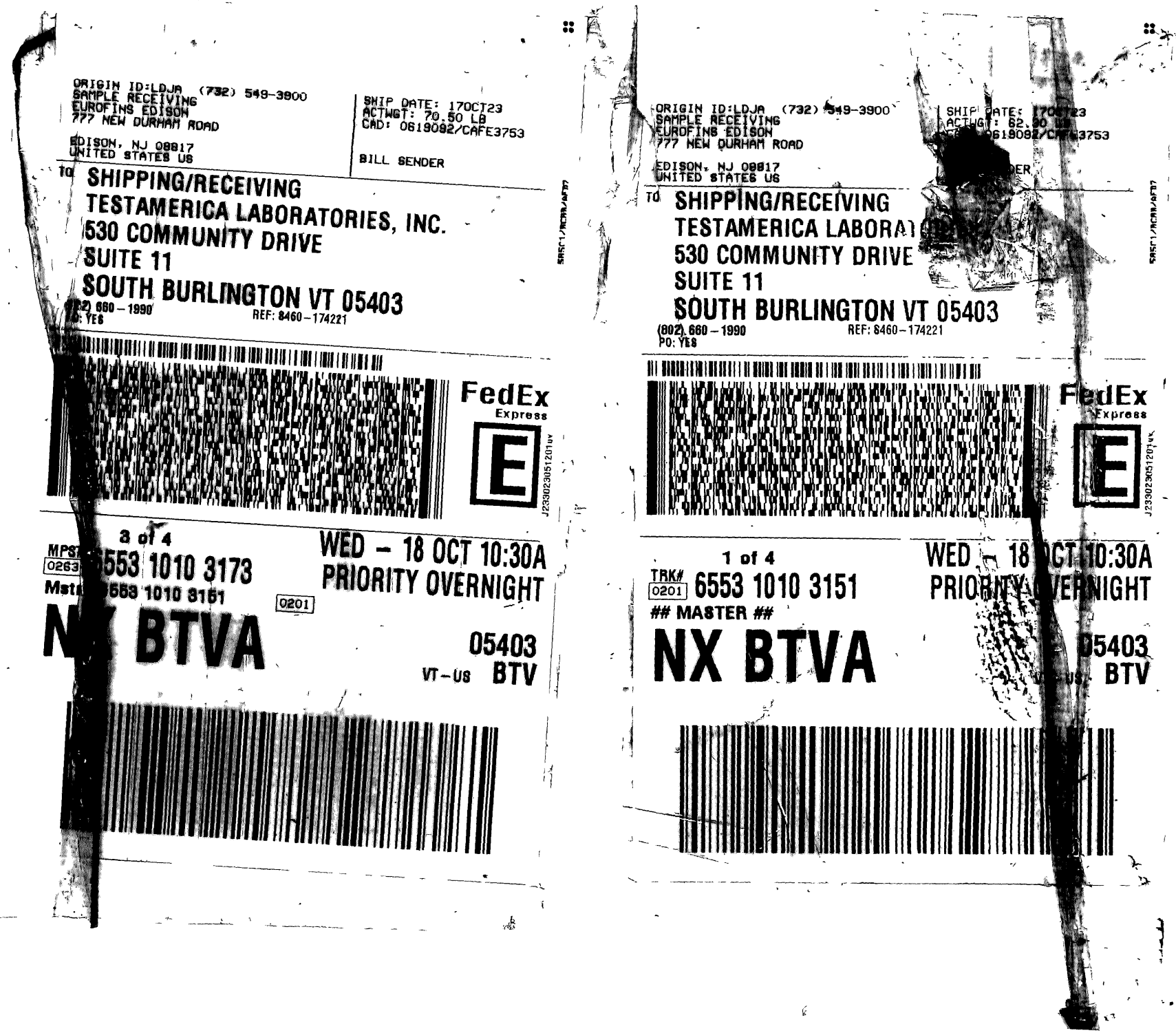
4 of 4
MPS# 0283 6553 1010 3184
Mstr# 6553 1010 3151

WED - 18 OCT 10:30A
PRIORITY OVERNIGHT

0201

NX BTVA

05403
VT-US BTV



ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 17OCT23
ACTWGT: 70.50 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
PO: YES
REF: 8460-174221

FedEx Express

E

J233023051201uv

3 of 4
MPS# 6553 1010 3173
0263
Mst# 6553 1010 3151
0201

WED - 18 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 17OCT23
ACTWGT: 62.30 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
PO: YES
REF: 8460-174221

FedEx Express

E

J233023051201uv

1 of 4
TRK# 6553 1010 3151
0201
MASTER

WED - 18 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290219-1

Login Number: 290219
List Number: 1
Creator: Hall, Alonzo

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290219-1

Login Number: 290219
List Number: 2
Creator: Dawicki, Don C

List Source: Eurofins Burlington
List Creation: 10/18/23 02:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1969952, 54, 55
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6c, 1.1c, 1.6c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 10/31/2023 4:00 PM

JOB DESCRIPTION

Racer, Ewing

JOB NUMBER

460-290375-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/31/2023 4:00 PM

Authorized for release by
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 5

- Report Narrative 5
- Sample Summary 7
- Detection Summary 8
- Method Summary 11
- Client Sample Results 12
- Isotope Dilution Summary 23
- QC Sample Results 25
- Definitions 32
- QC Association 33
- Chronicle 34
- Certification Summary 36

Organic Sample Data 37

- LCMS 37
  - Method PFC IDA 37
    - Method PFC IDA QC Summary 38
    - Method PFC IDA Sample Data 55
    - Standards Data 511
      - Method PFC IDA ICAL Data 511
      - Method PFC IDA CCAL Data 628
    - Raw QC Data 758
      - Method PFC IDA Blank Data 758
      - Method PFC IDA LCS/LCSD Data 841
    - Method PFC IDA Run Logs 996
    - Method PFC IDA Prep Data 1001

Table of Contents

Shipping and Receiving Documents 1008

Client Chain of Custody 1009

Sample Receipt Checklist 1013

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing

Report Number: 460-290375-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/13/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Samples 1000-101323-0002 (460-290375-1), MW39A-101323-0826-70 (460-290375-2), MW39-101323-0921-17 (460-290375-3), MW91-101323-1021-26 (460-290375-4), MW91A-101323-1116-66 (460-290375-5), MW88-101323-0831-80.5 (460-290375-6), MW92A-101323-1006-70 (460-290375-7), MW92-101323-1056-36 (460-290375-8) and MW92B-101323-1156-92 (460-290375-9) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC-IDA - 537 (modified). The samples were prepared on 10/20/2023 and analyzed on 10/23/2023, 10/24/2023 and 10/27/2023.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196645.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196646.

Method 537 (modified): The “I” qualifier associated with sample MW39A-101323-0826-70 (460-290375-2) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

13C4 PFBA Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: MW92A-101323-1006-70 (460-290375-7). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample(s).

Method 537 (modified): The “I” qualifier associated with sample MW92-101323-1056-36 (460-290375-8) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

Results for samples MW92A-101323-1006-70 (460-290375-7), MW92-101323-1056-36 (460-290375-8) and MW92B-101323-1156-92 (460-290375-9) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Samples MW92A-101323-1006-70 (460-290375-7)[5X], MW92-101323-1056-36 (460-290375-8)[5X] and MW92B-101323-1156-92 (460-290375-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the PFAS analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290375-1	1000-101323-0002	Water	10/13/23 11:30	10/13/23 19:00
460-290375-2	MW39A-101323-0826-70	Water	10/13/23 08:26	10/13/23 19:00
460-290375-3	MW39-101323-0921-17	Water	10/13/23 09:21	10/13/23 19:00
460-290375-4	MW91-101323-1021-26	Water	10/13/23 10:21	10/13/23 19:00
460-290375-5	MW91A-101323-1116-66	Water	10/13/23 11:16	10/13/23 19:00
460-290375-6	MW88-101323-0831-80.5	Water	10/13/23 08:31	10/13/23 19:00
460-290375-7	MW92A-101323-1006-70	Water	10/13/23 10:06	10/13/23 19:00
460-290375-8	MW92-101323-1056-36	Water	10/13/23 10:56	10/13/23 19:00
460-290375-9	MW92B-101323-1156-92	Water	10/13/23 11:56	10/13/23 19:00

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Client Sample ID: 1000-101323-0002 — Lab Sample ID: 460-290375-1

No Detections.

Client Sample ID: MW39A-101323-0826-70 — Lab Sample ID: 460-290375-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	6.60		3.97	0.95	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	3.63		1.59	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	10.4		1.59	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	3.99		1.59	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	16.6		1.59	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	0.56	J	1.59	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.48	J I	1.59	0.37	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	9.07		1.59	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	12.9		1.59	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	28.4		1.59	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	6.30		1.59	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	395		1.59	0.67	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	10.3		3.97	1.03	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW39-101323-0921-17 — Lab Sample ID: 460-290375-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	1.53	J	4.03	0.97	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	0.59	J	1.61	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	0.64	J	1.61	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	0.49	J	1.61	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	5.14		1.61	0.61	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	0.88	J	1.61	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	1.17	J	1.61	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.67	J	1.61	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	4.05		1.61	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.74	J	1.61	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	30.7		1.61	0.68	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW91-101323-1021-26 — Lab Sample ID: 460-290375-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	17.9		3.98	0.95	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	28.8		1.59	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	30.2		1.59	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	13.9		1.59	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	45.1		1.59	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	5.90		1.59	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.48	J	1.59	0.37	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.50		1.59	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	2.98		1.59	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	16.0		1.59	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	4.19		1.59	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	325		1.59	0.68	ng/L	1		537 (modified)	Total/NA
HFPODA	1.57	J	3.18	0.87	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Client Sample ID: MW91A-101323-1116-66 — Lab Sample ID: 460-290375-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	10.8		3.98	0.96	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	5.34		1.59	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	12.0		1.59	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	4.22		1.59	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	25.3		1.59	0.61	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.28	J	1.59	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.45	J	1.59	0.37	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	15.0		1.59	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	21.2		1.59	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	50.3		1.59	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	9.10		1.59	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	631		1.59	0.68	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW88-101323-0831-80.5 — Lab Sample ID: 460-290375-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	1.35	J	1.71	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	0.78	J	1.71	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	1.15	J	1.71	0.65	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.47	J	1.71	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	1.65	J	1.71	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.54	J	1.71	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	43.9		1.71	0.73	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW92A-101323-1006-70 — Lab Sample ID: 460-290375-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	9.62		4.39	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	5.05		1.76	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	16.0		1.76	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	5.76		1.76	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	38.6		1.76	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.41	J	1.76	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.76	J	1.76	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	8.79		1.76	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	11.0		1.76	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	37.6		1.76	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	16.9		1.76	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.78	J	1.76	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	1610	D	8.78	3.73	ng/L	5		537 (modified)	Total/NA

Client Sample ID: MW92-101323-1056-36 — Lab Sample ID: 460-290375-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	5.28		4.36	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	4.09		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	15.9		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	6.10		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	36.2		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.19	J	1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.42	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	9.35		1.74	0.54	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW92-101323-1056-36 (Continued) — Lab Sample ID: 460-290375-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanesulfonic acid	12.7		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	40.7		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	17.1		1.74	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.54	J I	1.74	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	1420	D	8.72	3.71	ng/L	5		537 (modified)	Total/NA

Client Sample ID: MW92B-101323-1156-92 — Lab Sample ID: 460-290375-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	6.30		4.36	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	4.41		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	16.2		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	5.38		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	38.6		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.34	J	1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.42	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	8.88		1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	12.1		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	41.2		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	16.5		1.74	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.46	J	1.74	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	1470	D	8.72	3.71	ng/L	5		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET BUR
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: 1000-101323-0002

Date Collected: 10/13/23 11:30
Date Received: 10/13/23 19:00

Lab Sample ID: 460-290375-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.26	U	4.26	1.02	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluoropentanoic acid	1.71	U	1.71	0.58	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorohexanoic acid	1.71	U	1.71	0.55	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluoroheptanoic acid	1.71	U	1.71	0.46	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorooctanoic acid	1.71	U	1.71	0.65	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorononanoic acid	1.71	U	1.71	0.42	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorodecanoic acid	1.71	U	1.71	0.39	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluoroundecanoic acid	1.71	U	1.71	0.47	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorododecanoic acid	1.71	U	1.71	0.42	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorotridecanoic acid	1.71	U	1.71	0.41	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorotetradecanoic acid	1.71	U	1.71	0.55	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorobutanesulfonic acid	1.71	U	1.71	0.53	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluoropentanesulfonic acid	1.71	U	1.71	0.43	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorohexanesulfonic acid	1.71	U	1.71	0.47	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluoroheptanesulfonic acid	1.71	U	1.71	0.35	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorooctanesulfonic acid	1.71	U	1.71	0.73	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorononanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorodecanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/20/23 19:55	10/23/23 18:47	1
4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46	ng/L		10/20/23 19:55	10/23/23 18:47	1
6:2 Fluorotelomer sulfonic acid	4.26	U	4.26	1.11	ng/L		10/20/23 19:55	10/23/23 18:47	1
8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66	ng/L		10/20/23 19:55	10/23/23 18:47	1
Perfluorooctanesulfonamide	1.71	U	1.71	0.78	ng/L		10/20/23 19:55	10/23/23 18:47	1
NMeFOSAA	4.26	U	4.26	1.62	ng/L		10/20/23 19:55	10/23/23 18:47	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.26	U	4.26	1.36	ng/L		10/20/23 19:55	10/23/23 18:47	1
HFPODA	3.41	U	3.41	0.94	ng/L		10/20/23 19:55	10/23/23 18:47	1
DONA	1.71	U	1.71	0.36	ng/L		10/20/23 19:55	10/23/23 18:47	1
9Cl-PF3ONS	1.71	U	1.71	0.27	ng/L		10/20/23 19:55	10/23/23 18:47	1
11Cl-PF3OUdS	1.71	U	1.71	0.74	ng/L		10/20/23 19:55	10/23/23 18:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*111*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C5 PFPeA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C4 PFHpA	*107*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C2 PFTeDA	*91*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C3 PFBS	*102*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C8 FOSA	*94*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
d3-NMeFOSAA	*102*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
d5-NEtFOSAA	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
M2-4:2 FTS	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
M2-6:2 FTS	*105*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
M2-8:2 FTS	*98*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C3 HFPO-DA	*94*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
18O2 PFHxS	*108*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C2 PFHxA	*112*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C4 PFOS	*107*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C2 PFDoA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C5 PFNA	*105*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C2 PFDA	*106*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*
13C4 PFOA	*106*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:47*	*1*

Client Sample ID: 1000-101323-0002

Lab Sample ID: 460-290375-1

Date Collected: 10/13/23 11:30
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	112		50 - 150	10/20/23 19:55	10/23/23 18:47	1

Client Sample ID: MW39A-101323-0826-70

Lab Sample ID: 460-290375-2

Date Collected: 10/13/23 08:26
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**6.60**		3.97	0.95	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluoropentanoic acid	**3.63**		1.59	0.54	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorohexanoic acid	**10.4**		1.59	0.52	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluoroheptanoic acid	**3.99**		1.59	0.43	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorooctanoic acid	**16.6**		1.59	0.60	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorononanoic acid	**0.56**	**J**	1.59	0.39	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorodecanoic acid	**0.48**	**J I**	1.59	0.37	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluoroundecanoic acid	1.59	U	1.59	0.44	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorododecanoic acid	1.59	U	1.59	0.39	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorotridecanoic acid	1.59	U	1.59	0.38	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorotetradecanoic acid	1.59	U	1.59	0.51	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorobutanesulfonic acid	**9.07**		1.59	0.49	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluoropentanesulfonic acid	**12.9**		1.59	0.40	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorohexanesulfonic acid	**28.4**		1.59	0.44	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluoroheptanesulfonic acid	**6.30**		1.59	0.33	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorooctanesulfonic acid	**395**		1.59	0.67	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorononanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorodecanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 18:55	1
4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43	ng/L		10/20/23 19:55	10/23/23 18:55	1
6:2 Fluorotelomer sulfonic acid	**10.3**		3.97	1.03	ng/L		10/20/23 19:55	10/23/23 18:55	1
8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61	ng/L		10/20/23 19:55	10/23/23 18:55	1
Perfluorooctanesulfonamide	1.59	U	1.59	0.73	ng/L		10/20/23 19:55	10/23/23 18:55	1
NMeFOSAA	3.97	U	3.97	1.51	ng/L		10/20/23 19:55	10/23/23 18:55	1
N-ethylperfluorooctanesulfonamidoacetic acid	3.97	U	3.97	1.27	ng/L		10/20/23 19:55	10/23/23 18:55	1
HFPODA	3.17	U	3.17	0.87	ng/L		10/20/23 19:55	10/23/23 18:55	1
DONA	1.59	U	1.59	0.33	ng/L		10/20/23 19:55	10/23/23 18:55	1
9Cl-PF3ONS	1.59	U	1.59	0.25	ng/L		10/20/23 19:55	10/23/23 18:55	1
11Cl-PF3OUdS	1.59	U	1.59	0.69	ng/L		10/20/23 19:55	10/23/23 18:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	103		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C5 PFPeA	107		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C4 PFHpA	96		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C2 PFTeDA	99		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C3 PFBS	106		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C8 FOSA	101		50 - 150	10/20/23 19:55	10/23/23 18:55	1
d3-NMeFOSAA	107		50 - 150	10/20/23 19:55	10/23/23 18:55	1
d5-NEtFOSAA	113		50 - 150	10/20/23 19:55	10/23/23 18:55	1
M2-4:2 FTS	90		50 - 150	10/20/23 19:55	10/23/23 18:55	1
M2-6:2 FTS	99		50 - 150	10/20/23 19:55	10/23/23 18:55	1
M2-8:2 FTS	95		50 - 150	10/20/23 19:55	10/23/23 18:55	1
13C3 HFPO-DA	100		50 - 150	10/20/23 19:55	10/23/23 18:55	1

Client Sample ID: MW39A-101323-0826-70

Lab Sample ID: 460-290375-2

Date Collected: 10/13/23 08:26

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*109*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C2 PFHxA	*105*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C4 PFOS	*110*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C2 PFDoA	*112*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C5 PFNA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C2 PFDA	*106*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C4 PFOA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*
13C2 PFUnA	*114*		*50 - 150*	*10/20/23 19:55*	*10/23/23 18:55*	*1*

Client Sample ID: MW39-101323-0921-17

Lab Sample ID: 460-290375-3

Date Collected: 10/13/23 09:21

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**1.53**	**J**	4.03	0.97	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluoropentanoic acid	**0.59**	**J**	1.61	0.55	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorohexanoic acid	**0.64**	**J**	1.61	0.52	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluoroheptanoic acid	**0.49**	**J**	1.61	0.44	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorooctanoic acid	**5.14**		1.61	0.61	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorononanoic acid	**0.88**	**J**	1.61	0.39	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorodecanoic acid	1.61	U	1.61	0.37	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluoroundecanoic acid	1.61	U	1.61	0.44	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorododecanoic acid	1.61	U	1.61	0.39	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorotridecanoic acid	1.61	U	1.61	0.39	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorotetradecanoic acid	1.61	U	1.61	0.52	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorobutanesulfonic acid	**1.17**	**J**	1.61	0.50	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluoropentanesulfonic acid	**0.67**	**J**	1.61	0.40	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorohexanesulfonic acid	**4.05**		1.61	0.44	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluoroheptanesulfonic acid	**0.74**	**J**	1.61	0.33	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorooctanesulfonic acid	**30.7**		1.61	0.68	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorononanesulfonic acid	1.61	U	1.61	0.32	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorodecanesulfonic acid	1.61	U	1.61	0.32	ng/L		10/20/23 19:55	10/23/23 19:03	1
4:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.44	ng/L		10/20/23 19:55	10/23/23 19:03	1
6:2 Fluorotelomer sulfonic acid	4.03	U	4.03	1.05	ng/L		10/20/23 19:55	10/23/23 19:03	1
8:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.62	ng/L		10/20/23 19:55	10/23/23 19:03	1
Perfluorooctanesulfonamide	1.61	U	1.61	0.74	ng/L		10/20/23 19:55	10/23/23 19:03	1
NMeFOSAA	4.03	U	4.03	1.53	ng/L		10/20/23 19:55	10/23/23 19:03	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.03	U	4.03	1.29	ng/L		10/20/23 19:55	10/23/23 19:03	1
HFPODA	3.22	U	3.22	0.89	ng/L		10/20/23 19:55	10/23/23 19:03	1
DONA	1.61	U	1.61	0.34	ng/L		10/20/23 19:55	10/23/23 19:03	1
9Cl-PF3ONS	1.61	U	1.61	0.26	ng/L		10/20/23 19:55	10/23/23 19:03	1
11Cl-PF3OUdS	1.61	U	1.61	0.70	ng/L		10/20/23 19:55	10/23/23 19:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C4 PFHpA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C2 PFTeDA	*86*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C3 PFBS	*95*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*

Client Sample ID: MW39-101323-0921-17

Lab Sample ID: 460-290375-3

Date Collected: 10/13/23 09:21

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*93*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
d3-NMeFOSAA	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
M2-4:2 FTS	*93*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
M2-6:2 FTS	*93*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
M2-8:2 FTS	*89*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C3 HFPO-DA	*87*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
18O2 PFHxS	*102*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C2 PFHxA	*92*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C4 PFOS	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C2 PFDoA	*99*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C5 PFNA	*101*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C4 PFOA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*
13C2 PFUnA	*98*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:03*	*1*

Client Sample ID: MW91-101323-1021-26

Lab Sample ID: 460-290375-4

Date Collected: 10/13/23 10:21

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**17.9**		3.98	0.95	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluoropentanoic acid	**28.8**		1.59	0.54	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorohexanoic acid	**30.2**		1.59	0.52	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluoroheptanoic acid	**13.9**		1.59	0.43	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorooctanoic acid	**45.1**		1.59	0.60	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorononanoic acid	**5.90**		1.59	0.39	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorodecanoic acid	**1.48**	**J**	1.59	0.37	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluoroundecanoic acid	1.59	U	1.59	0.44	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorododecanoic acid	1.59	U	1.59	0.39	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorotridecanoic acid	1.59	U	1.59	0.38	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorotetradecanoic acid	1.59	U	1.59	0.51	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorobutanesulfonic acid	**3.50**		1.59	0.49	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluoropentanesulfonic acid	**2.98**		1.59	0.40	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorohexanesulfonic acid	**16.0**		1.59	0.44	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluoroheptanesulfonic acid	**4.19**		1.59	0.33	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorooctanesulfonic acid	**325**		1.59	0.68	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorononanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorodecanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 19:19	1
4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43	ng/L		10/20/23 19:55	10/23/23 19:19	1
6:2 Fluorotelomer sulfonic acid	3.98	U	3.98	1.03	ng/L		10/20/23 19:55	10/23/23 19:19	1
8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61	ng/L		10/20/23 19:55	10/23/23 19:19	1
Perfluorooctanesulfonamide	1.59	U	1.59	0.73	ng/L		10/20/23 19:55	10/23/23 19:19	1
NMeFOSAA	3.98	U	3.98	1.51	ng/L		10/20/23 19:55	10/23/23 19:19	1
N-ethylperfluorooctanesulfonamidoacetic acid	3.98	U	3.98	1.27	ng/L		10/20/23 19:55	10/23/23 19:19	1
HFPODA	**1.57**	**J**	3.18	0.87	ng/L		10/20/23 19:55	10/23/23 19:19	1
DONA	1.59	U	1.59	0.33	ng/L		10/20/23 19:55	10/23/23 19:19	1
9Cl-PF3ONS	1.59	U	1.59	0.25	ng/L		10/20/23 19:55	10/23/23 19:19	1

Client Sample ID: MW91-101323-1021-26

Lab Sample ID: 460-290375-4

Date Collected: 10/13/23 10:21
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	1.59	U	1.59	0.69	ng/L		10/20/23 19:55	10/23/23 19:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*83*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C5 PFPeA	*93*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C4 PFHpA	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C2 PFTeDA	*94*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C3 PFBS	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C8 FOSA	*94*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
d3-NMeFOSAA	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
d5-NEtFOSAA	*98*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
M2-4:2 FTS	*97*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
M2-6:2 FTS	*102*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
M2-8:2 FTS	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C3 HFPO-DA	*90*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
18O2 PFHxS	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C2 PFHxA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C4 PFOS	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C2 PFDoA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C5 PFNA	*97*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C2 PFDA	*107*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C4 PFOA	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*
13C2 PFUnA	*99*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:19*	*1*

Client Sample ID: MW91A-101323-1116-66

Lab Sample ID: 460-290375-5

Date Collected: 10/13/23 11:16
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**10.8**		3.98	0.96	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluoropentanoic acid	**5.34**		1.59	0.54	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorohexanoic acid	**12.0**		1.59	0.52	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluoroheptanoic acid	**4.22**		1.59	0.43	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorooctanoic acid	**25.3**		1.59	0.61	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorononanoic acid	**1.28**	**J**	1.59	0.39	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorodecanoic acid	**0.45**	**J**	1.59	0.37	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluoroundecanoic acid	1.59	U	1.59	0.44	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorododecanoic acid	1.59	U	1.59	0.39	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorotridecanoic acid	1.59	U	1.59	0.38	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorotetradecanoic acid	1.59	U	1.59	0.51	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorobutanesulfonic acid	**15.0**		1.59	0.49	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluoropentanesulfonic acid	**21.2**		1.59	0.40	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorohexanesulfonic acid	**50.3**		1.59	0.44	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluoroheptanesulfonic acid	**9.10**		1.59	0.33	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorooctanesulfonic acid	**631**		1.59	0.68	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorononanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 19:27	1
Perfluorodecanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/20/23 19:55	10/23/23 19:27	1
4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43	ng/L		10/20/23 19:55	10/23/23 19:27	1
6:2 Fluorotelomer sulfonic acid	3.98	U	3.98	1.04	ng/L		10/20/23 19:55	10/23/23 19:27	1
8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61	ng/L		10/20/23 19:55	10/23/23 19:27	1

Client Sample ID: MW91A-101323-1116-66

Lab Sample ID: 460-290375-5

Date Collected: 10/13/23 11:16

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide	1.59	U	1.59	0.73	ng/L		10/20/23 19:55	10/23/23 19:27	1
NMeFOSAA	3.98	U	3.98	1.51	ng/L		10/20/23 19:55	10/23/23 19:27	1
N-ethylperfluorooctanesulfonamidoacetic acid	3.98	U	3.98	1.27	ng/L		10/20/23 19:55	10/23/23 19:27	1
HFPODA	3.19	U	3.19	0.88	ng/L		10/20/23 19:55	10/23/23 19:27	1
DONA	1.59	U	1.59	0.33	ng/L		10/20/23 19:55	10/23/23 19:27	1
9Cl-PF3ONS	1.59	U	1.59	0.25	ng/L		10/20/23 19:55	10/23/23 19:27	1
11Cl-PF3OUdS	1.59	U	1.59	0.69	ng/L		10/20/23 19:55	10/23/23 19:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*85*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C5 PFPeA	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C4 PFHpA	*106*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C2 PFTeDA	*98*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C3 PFBS	*105*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C8 FOSA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
d3-NMeFOSAA	*112*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
d5-NEtFOSAA	*114*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
M2-4:2 FTS	*103*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
M2-6:2 FTS	*105*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
M2-8:2 FTS	*110*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C3 HFPO-DA	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
18O2 PFHxS	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C2 PFHxA	*101*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C4 PFOS	*111*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C2 PFDoA	*104*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C5 PFNA	*110*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C2 PFDA	*115*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C4 PFOA	*108*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*
13C2 PFUnA	*114*		*50 - 150*	*10/20/23 19:55*	*10/23/23 19:27*	*1*

Client Sample ID: MW88-101323-0831-80.5

Lab Sample ID: 460-290375-6

Date Collected: 10/13/23 08:31

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.29	U	4.29	1.03	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluoropentanoic acid	1.71	U	1.71	0.58	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorohexanoic acid	**1.35**	**J**	1.71	0.56	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluoroheptanoic acid	**0.78**	**J**	1.71	0.46	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorooctanoic acid	**1.15**	**J**	1.71	0.65	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorononanoic acid	1.71	U	1.71	0.42	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorodecanoic acid	1.71	U	1.71	0.39	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluoroundecanoic acid	1.71	U	1.71	0.47	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorododecanoic acid	1.71	U	1.71	0.42	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorotridecanoic acid	1.71	U	1.71	0.41	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorotetradecanoic acid	1.71	U	1.71	0.55	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorobutanesulfonic acid	1.71	U	1.71	0.53	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluoropentanesulfonic acid	**0.47**	**J**	1.71	0.43	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorohexanesulfonic acid	**1.65**	**J**	1.71	0.47	ng/L		10/20/23 20:02	10/23/23 23:49	1

Client Sample ID: MW88-101323-0831-80.5

Lab Sample ID: 460-290375-6

Date Collected: 10/13/23 08:31
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid	**0.54**	**J**	1.71	0.35	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorooctanesulfonic acid	**43.9**		1.71	0.73	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorononanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorodecanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/20/23 20:02	10/23/23 23:49	1
4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46	ng/L		10/20/23 20:02	10/23/23 23:49	1
6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11	ng/L		10/20/23 20:02	10/23/23 23:49	1
8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66	ng/L		10/20/23 20:02	10/23/23 23:49	1
Perfluorooctanesulfonamide	1.71	U	1.71	0.79	ng/L		10/20/23 20:02	10/23/23 23:49	1
NMeFOSAA	4.29	U	4.29	1.63	ng/L		10/20/23 20:02	10/23/23 23:49	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37	ng/L		10/20/23 20:02	10/23/23 23:49	1
HFPODA	3.43	U	3.43	0.94	ng/L		10/20/23 20:02	10/23/23 23:49	1
DONA	1.71	U	1.71	0.36	ng/L		10/20/23 20:02	10/23/23 23:49	1
9Cl-PF3ONS	1.71	U	1.71	0.27	ng/L		10/20/23 20:02	10/23/23 23:49	1
11Cl-PF3OUdS	1.71	U	1.71	0.75	ng/L		10/20/23 20:02	10/23/23 23:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C5 PFPeA	*98*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C4 PFHpA	*98*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C2 PFTeDA	*75*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C3 PFBS	*95*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C8 FOSA	*91*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
d3-NMeFOSAA	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
d5-NEtFOSAA	*109*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
M2-4:2 FTS	*104*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
M2-8:2 FTS	*97*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C3 HFPO-DA	*94*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
18O2 PFHxS	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C2 PFHxA	*92*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C4 PFOS	*107*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C2 PFDoA	*104*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C5 PFNA	*101*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C2 PFDA	*106*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C4 PFOA	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*
13C2 PFUnA	*109*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:49*	*1*

Client Sample ID: MW92A-101323-1006-70

Lab Sample ID: 460-290375-7

Date Collected: 10/13/23 10:06
Matrix: Water
Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**9.62**		4.39	1.05	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluoropentanoic acid	**5.05**		1.76	0.60	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorohexanoic acid	**16.0**		1.76	0.57	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluoroheptanoic acid	**5.76**		1.76	0.47	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorooctanoic acid	**38.6**		1.76	0.67	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorononanoic acid	**1.41**	**J**	1.76	0.43	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorodecanoic acid	**0.76**	**J**	1.76	0.40	ng/L		10/20/23 20:02	10/23/23 23:57	1

Client Sample ID: MW92A-101323-1006-70

Date Collected: 10/13/23 10:06
Date Received: 10/13/23 19:00

Lab Sample ID: 460-290375-7

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid	1.76	U	1.76	0.48	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorododecanoic acid	1.76	U	1.76	0.43	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorotridecanoic acid	1.76	U	1.76	0.42	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorotetradecanoic acid	1.76	U	1.76	0.56	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorobutanesulfonic acid	**8.79**		1.76	0.54	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluoropentanesulfonic acid	**11.0**		1.76	0.44	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorohexanesulfonic acid	**37.6**		1.76	0.48	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluoroheptanesulfonic acid	**16.9**		1.76	0.36	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorononanesulfonic acid	**0.78**	**J**	1.76	0.35	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorodecanesulfonic acid	1.76	U	1.76	0.35	ng/L		10/20/23 20:02	10/23/23 23:57	1
4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.47	ng/L		10/20/23 20:02	10/23/23 23:57	1
6:2 Fluorotelomer sulfonic acid	4.39	U	4.39	1.14	ng/L		10/20/23 20:02	10/23/23 23:57	1
8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68	ng/L		10/20/23 20:02	10/23/23 23:57	1
Perfluorooctanesulfonamide	1.76	U	1.76	0.81	ng/L		10/20/23 20:02	10/23/23 23:57	1
NMeFOSAA	4.39	U	4.39	1.67	ng/L		10/20/23 20:02	10/23/23 23:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.39	U	4.39	1.40	ng/L		10/20/23 20:02	10/23/23 23:57	1
HFPODA	3.51	U	3.51	0.97	ng/L		10/20/23 20:02	10/23/23 23:57	1
DONA	1.76	U	1.76	0.37	ng/L		10/20/23 20:02	10/23/23 23:57	1
9Cl-PF3ONS	1.76	U	1.76	0.28	ng/L		10/20/23 20:02	10/23/23 23:57	1
11Cl-PF3OUdS	1.76	U	1.76	0.76	ng/L		10/20/23 20:02	10/23/23 23:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*27*	*5-	*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C5 PFPeA	*84*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C4 PFHpA	*113*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C2 PFTeDA	*102*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C3 PFBS	*109*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C8 FOSA	*107*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
d3-NMeFOSAA	*112*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
d5-NEtFOSAA	*116*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
M2-4:2 FTS	*104*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
M2-8:2 FTS	*114*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C3 HFPO-DA	*94*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
18O2 PFHxS	*112*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C2 PFHxA	*99*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C4 PFOS	*107*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C2 PFDoA	*119*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C5 PFNA	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C2 PFDA	*106*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C4 PFOA	*108*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*
13C2 PFUnA	*122*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:57*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**1610**	**D**	8.78	3.73	ng/L		10/20/23 20:02	10/27/23 10:16	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*98*		*50 - 150*	*10/20/23 20:02*	*10/27/23 10:16*	*5*

Client Sample ID: MW92-101323-1056-36

Date Collected: 10/13/23 10:56
Date Received: 10/13/23 19:00

Lab Sample ID: 460-290375-8

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**5.28**		4.36	1.05	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluoropentanoic acid	**4.09**		1.74	0.59	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorohexanoic acid	**15.9**		1.74	0.57	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluoroheptanoic acid	**6.10**		1.74	0.47	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorooctanoic acid	**36.2**		1.74	0.66	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorononanoic acid	**1.19**	**J**	1.74	0.43	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorodecanoic acid	**0.42**	**J**	1.74	0.40	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorobutanesulfonic acid	**9.35**		1.74	0.54	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluoropentanesulfonic acid	**12.7**		1.74	0.44	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorohexanesulfonic acid	**40.7**		1.74	0.48	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluoroheptanesulfonic acid	**17.1**		1.74	0.36	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorononanesulfonic acid	**0.54**	**J I**	1.74	0.35	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/20/23 20:02	10/24/23 00:05	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/20/23 20:02	10/24/23 00:05	1
6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13	ng/L		10/20/23 20:02	10/24/23 00:05	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/20/23 20:02	10/24/23 00:05	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/20/23 20:02	10/24/23 00:05	1
NMeFOSAA	4.36	U	4.36	1.66	ng/L		10/20/23 20:02	10/24/23 00:05	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40	ng/L		10/20/23 20:02	10/24/23 00:05	1
HFPODA	3.49	U	3.49	0.96	ng/L		10/20/23 20:02	10/24/23 00:05	1
DONA	1.74	U	1.74	0.37	ng/L		10/20/23 20:02	10/24/23 00:05	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/20/23 20:02	10/24/23 00:05	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/20/23 20:02	10/24/23 00:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*61*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C5 PFPeA	*105*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C4 PFHpA	*112*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C2 PFTeDA	*100*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C3 PFBS	*110*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C8 FOSA	*105*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
d3-NMeFOSAA	*112*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
d5-NEtFOSAA	*114*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
M2-4:2 FTS	*101*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
M2-6:2 FTS	*103*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
M2-8:2 FTS	*112*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C3 HFPO-DA	*105*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
18O2 PFHxS	*114*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C2 PFHxA	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C4 PFOS	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C2 PFDoA	*113*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C5 PFNA	*99*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C2 PFDA	*111*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C4 PFOA	*113*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*
13C2 PFUnA	*119*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:05*	*1*

Client Sample ID: MW92-101323-1056-36

Lab Sample ID: 460-290375-8

Date Collected: 10/13/23 10:56

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**1420**	**D**	8.72	3.71	ng/L		10/20/23 20:02	10/27/23 10:24	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*98*		*50 - 150*	*10/20/23 20:02*	*10/27/23 10:24*	*5*

Client Sample ID: MW92B-101323-1156-92

Lab Sample ID: 460-290375-9

Date Collected: 10/13/23 11:56

Matrix: Water

Date Received: 10/13/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**6.30**		4.36	1.05	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluoropentanoic acid	**4.41**		1.74	0.59	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorohexanoic acid	**16.2**		1.74	0.57	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluoroheptanoic acid	**5.38**		1.74	0.47	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorooctanoic acid	**38.6**		1.74	0.66	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorononanoic acid	**1.34**	**J**	1.74	0.43	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorodecanoic acid	**0.42**	**J**	1.74	0.40	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorobutanesulfonic acid	**8.88**		1.74	0.54	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluoropentanesulfonic acid	**12.1**		1.74	0.44	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorohexanesulfonic acid	**41.2**		1.74	0.48	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluoroheptanesulfonic acid	**16.5**		1.74	0.36	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorononanesulfonic acid	**0.46**	**J**	1.74	0.35	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/20/23 20:02	10/24/23 00:14	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/20/23 20:02	10/24/23 00:14	1
6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13	ng/L		10/20/23 20:02	10/24/23 00:14	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/20/23 20:02	10/24/23 00:14	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/20/23 20:02	10/24/23 00:14	1
NMeFOSAA	4.36	U	4.36	1.66	ng/L		10/20/23 20:02	10/24/23 00:14	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40	ng/L		10/20/23 20:02	10/24/23 00:14	1
HFPODA	3.49	U	3.49	0.96	ng/L		10/20/23 20:02	10/24/23 00:14	1
DONA	1.74	U	1.74	0.37	ng/L		10/20/23 20:02	10/24/23 00:14	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/20/23 20:02	10/24/23 00:14	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/20/23 20:02	10/24/23 00:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*60*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C5 PFPeA	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C4 PFHpA	*113*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C2 PFTeDA	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C3 PFBS	*112*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C8 FOSA	*105*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
d3-NMeFOSAA	*110*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
d5-NEtFOSAA	*116*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
M2-4:2 FTS	*105*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
M2-6:2 FTS	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
M2-8:2 FTS	*109*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*

Client Sample ID: MW92B-101323-1156-92

Date Collected: 10/13/23 11:56
Date Received: 10/13/23 19:00

Lab Sample ID: 460-290375-9

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*101*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
18O2 PFHxS	*112*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C2 PFHxA	*101*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C4 PFOS	*104*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C2 PFDoA	*113*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C5 PFNA	*99*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C2 PFDA	*114*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C4 PFOA	*107*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*
13C2 PFUnA	*119*		*50 - 150*	*10/20/23 20:02*	*10/24/23 00:14*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**1470**	**D**	8.72	3.71	ng/L		10/20/23 20:02	10/27/23 10:32	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*90*		*50 - 150*	*10/20/23 20:02*	*10/27/23 10:32*	*5*

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	C4PFHA	PFTDA	C3PFBS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290375-1	1000-101323-0002	111	103	107	91	102	94	102	104
460-290375-2	MW39A-101323-0826-70	103	107	96	99	106	101	107	113
460-290375-3	MW39-101323-0921-17	94	92	100	86	95	93	96	97
460-290375-4	MW91-101323-1021-26	83	93	104	94	96	94	96	98
460-290375-5	MW91A-101323-1116-66	85	96	106	98	105	100	112	114
460-290375-6	MW88-101323-0831-80.5	90	98	98	75	95	91	100	109
460-290375-7	MW92A-101323-1006-70	27 *5-	84	113	102	109	107	112	116
460-290375-7 - DL	MW92A-101323-1006-70								
460-290375-8	MW92-101323-1056-36	61	105	112	100	110	105	112	114
460-290375-8 - DL	MW92-101323-1056-36								
460-290375-9	MW92B-101323-1156-92	60	104	113	104	112	105	110	116
460-290375-9 - DL	MW92B-101323-1156-92								
LCS 200-196645/2-A	Lab Control Sample	111	106	108	92	100	90	100	97
LCS 200-196646/2-A	Lab Control Sample	110	106	111	95	101	93	106	102
LCSD 200-196645/3-A	Lab Control Sample Dup	113	103	107	89	99	95	106	106
LCSD 200-196646/3-A	Lab Control Sample Dup	102	97	93	78	93	82	94	88
MB 200-196645/1-A	Method Blank	102	92	99	63	87	72	82	74
MB 200-196646/1-A	Method Blank	103	99	92	88	97	92	100	99

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	PFHxS	PFHxA	PFOS	PFDoA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290375-1	1000-101323-0002	100	105	98	94	108	112	107	103
460-290375-2	MW39A-101323-0826-70	90	99	95	100	109	105	110	112
460-290375-3	MW39-101323-0921-17	93	93	89	87	102	92	103	99
460-290375-4	MW91-101323-1021-26	97	102	100	90	104	100	104	103
460-290375-5	MW91A-101323-1116-66	103	105	110	96	104	101	111	104
460-290375-6	MW88-101323-0831-80.5	104	108	97	94	100	92	107	104
460-290375-7	MW92A-101323-1006-70	104	108	114	94	112	99	107	119
460-290375-7 - DL	MW92A-101323-1006-70							98	
460-290375-8	MW92-101323-1056-36	101	103	112	105	114	104	104	113
460-290375-8 - DL	MW92-101323-1056-36							98	
460-290375-9	MW92B-101323-1156-92	105	104	109	101	112	101	104	113
460-290375-9 - DL	MW92B-101323-1156-92							90	
LCS 200-196645/2-A	Lab Control Sample	99	100	97	102	108	108	110	95
LCS 200-196646/2-A	Lab Control Sample	100	100	93	99	110	111	110	101
LCSD 200-196645/3-A	Lab Control Sample Dup	99	101	93	94	109	107	111	109
LCSD 200-196646/3-A	Lab Control Sample Dup	90	91	85	96	98	95	99	87
MB 200-196645/1-A	Method Blank	85	91	84	81	95	100	96	74
MB 200-196646/1-A	Method Blank	94	98	90	85	101	102	101	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFNA	PFDA	PFOA	PFUnA				
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)				
460-290375-1	1000-101323-0002	105	106	106	112				
460-290375-2	MW39A-101323-0826-70	100	106	103	114				
460-290375-3	MW39-101323-0921-17	101	100	103	98				
460-290375-4	MW91-101323-1021-26	97	107	103	99				
460-290375-5	MW91A-101323-1116-66	110	115	108	114				
460-290375-6	MW88-101323-0831-80.5	101	106	100	109				
460-290375-7	MW92A-101323-1006-70	100	106	108	122				

Isotope Dilution Summary

Client: Haley & Aldrich, Inc. Job ID: 460-290375-1
Project/Site: Racer, Ewing

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFNA	PFDA	PFOA	PFUnA				
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)				
460-290375-7 - DL	MW92A-101323-1006-70								
460-290375-8	MW92-101323-1056-36	99	111	113	119				
460-290375-8 - DL	MW92-101323-1056-36								
460-290375-9	MW92B-101323-1156-92	99	114	107	119				
460-290375-9 - DL	MW92B-101323-1156-92								
LCS 200-196645/2-A	Lab Control Sample	105	108	106	99				
LCS 200-196646/2-A	Lab Control Sample	105	107	105	105				
LCSD 200-196645/3-A	Lab Control Sample Dup	110	111	106	101				
LCSD 200-196646/3-A	Lab Control Sample Dup	95	97	101	90				
MB 200-196645/1-A	Method Blank	90	89	103	85				
MB 200-196646/1-A	Method Blank	99	98	108	104				

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
PFHxS = 18O2 PFHxS
PFHxA = 13C2 PFHxA
PFOS = 13C4 PFOS
PFDoA = 13C2 PFDoA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFOA = 13C4 PFOA
PFUnA = 13C2 PFUnA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-196645/1-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196645

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/20/23 19:55	10/23/23 16:11	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/20/23 19:55	10/23/23 16:11	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/20/23 19:55	10/23/23 16:11	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/20/23 19:55	10/23/23 16:11	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/20/23 19:55	10/23/23 16:11	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/20/23 19:55	10/23/23 16:11	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/20/23 19:55	10/23/23 16:11	1
HFPODA	4.00	U	4.00	1.10	ng/L		10/20/23 19:55	10/23/23 16:11	1
DONA	2.00	U	2.00	0.42	ng/L		10/20/23 19:55	10/23/23 16:11	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/20/23 19:55	10/23/23 16:11	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/20/23 19:55	10/23/23 16:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C4 PFHpA	*99*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C2 PFTeDA	*63*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C3 PFBS	*87*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C8 FOSA	*72*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
d3-NMeFOSAA	*82*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
d5-NEtFOSAA	*74*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
M2-4:2 FTS	*85*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C3 HFPO-DA	*81*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
18O2 PFHxS	*95*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C2 PFHxA	*100*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C4 PFOS	*96*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C2 PFDoA	*74*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C5 PFNA	*90*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*
13C2 PFDA	*89*		*50 - 150*	*10/20/23 19:55*	*10/23/23 16:11*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196645/1-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196645

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	103		50 - 150	10/20/23 19:55	10/23/23 16:11	1
13C2 PFUnA	85		50 - 150	10/20/23 19:55	10/23/23 16:11	1

Lab Sample ID: LCS 200-196645/2-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	80.0	79.14		ng/L		99	70 - 130
Perfluoropentanoic acid	80.0	76.49		ng/L		96	70 - 130
Perfluorohexanoic acid	80.0	76.88		ng/L		96	70 - 130
Perfluoroheptanoic acid	80.0	79.09		ng/L		99	70 - 130
Perfluorooctanoic acid	80.0	80.94		ng/L		101	70 - 130
Perfluorononanoic acid	80.0	74.11		ng/L		93	70 - 130
Perfluorodecanoic acid	80.0	73.82		ng/L		92	70 - 130
Perfluoroundecanoic acid	80.0	79.73		ng/L		100	70 - 130
Perfluorododecanoic acid	80.0	81.57		ng/L		102	70 - 130
Perfluorotridecanoic acid	80.0	76.69		ng/L		96	70 - 130
Perfluorotetradecanoic acid	80.0	72.62		ng/L		91	70 - 130
Perfluorobutanesulfonic acid	71.0	71.91		ng/L		101	70 - 130
Perfluoropentanesulfonic acid	75.3	75.32		ng/L		100	70 - 130
Perfluorohexanesulfonic acid	73.1	68.09		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid	76.2	73.12		ng/L		96	70 - 130
Perfluorooctanesulfonic acid	74.2	67.57		ng/L		91	70 - 130
Perfluorononanesulfonic acid	77.0	66.88		ng/L		87	70 - 130
Perfluorodecanesulfonic acid	77.2	65.64		ng/L		85	70 - 130
4:2 Fluorotelomer sulfonic acid	75.0	75.04		ng/L		100	70 - 130
6:2 Fluorotelomer sulfonic acid	76.1	76.66		ng/L		101	60 - 140
8:2 Fluorotelomer sulfonic acid	76.8	82.17		ng/L		107	70 - 130
Perfluorooctanesulfonamide	80.0	83.78		ng/L		105	70 - 130
NMeFOSAA	80.0	79.92		ng/L		100	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	73.50		ng/L		92	70 - 130
HFPODA	80.0	68.11		ng/L		85	60 - 140
DONA	75.6	73.95		ng/L		98	70 - 130
9Cl-PF3ONS	74.6	75.13		ng/L		101	70 - 130
11Cl-PF3OUdS	75.4	69.14		ng/L		92	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	111		50 - 150
13C5 PFPeA	106		50 - 150
13C4 PFHpA	108		50 - 150
13C2 PFTeDA	92		50 - 150
13C3 PFBS	100		50 - 150
13C8 FOSA	90		50 - 150
d3-NMeFOSAA	100		50 - 150
d5-NEtFOSAA	97		50 - 150
M2-4:2 FTS	99		50 - 150
M2-6:2 FTS	100		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196645/2-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196645

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-8:2 FTS	97		50 - 150
13C3 HFPO-DA	102		50 - 150
18O2 PFHxS	108		50 - 150
13C2 PFHxA	108		50 - 150
13C4 PFOS	110		50 - 150
13C2 PFDoA	95		50 - 150
13C5 PFNA	105		50 - 150
13C2 PFDA	108		50 - 150
13C4 PFOA	106		50 - 150
13C2 PFUnA	99		50 - 150

Lab Sample ID: LCSD 200-196645/3-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196645

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			80.0	78.86		ng/L		99	70 - 130	0	30
Perfluoropentanoic acid			80.0	83.62		ng/L		105	70 - 130	9	30
Perfluorohexanoic acid			80.0	75.24		ng/L		94	70 - 130	2	30
Perfluoroheptanoic acid			80.0	74.70		ng/L		93	70 - 130	6	30
Perfluorooctanoic acid			80.0	79.82		ng/L		100	70 - 130	1	30
Perfluorononanoic acid			80.0	81.17		ng/L		101	70 - 130	9	30
Perfluorodecanoic acid			80.0	76.08		ng/L		95	70 - 130	3	30
Perfluoroundecanoic acid			80.0	84.04		ng/L		105	70 - 130	5	30
Perfluorododecanoic acid			80.0	71.90		ng/L		90	70 - 130	13	30
Perfluorotridecanoic acid			80.0	73.27		ng/L		92	70 - 130	5	30
Perfluorotetradecanoic acid			80.0	76.23		ng/L		95	70 - 130	5	30
Perfluorobutanesulfonic acid			71.0	71.60		ng/L		101	70 - 130	0	30
Perfluoropentanesulfonic acid			75.3	74.32		ng/L		99	70 - 130	1	30
Perfluorohexanesulfonic acid			73.1	66.85		ng/L		91	70 - 130	2	30
Perfluoroheptanesulfonic acid			76.2	74.22		ng/L		97	70 - 130	1	30
Perfluorooctanesulfonic acid			74.2	68.27		ng/L		92	70 - 130	1	30
Perfluorononanesulfonic acid			77.0	66.88		ng/L		87	70 - 130	0	30
Perfluorodecanesulfonic acid			77.2	69.68		ng/L		90	70 - 130	6	30
4:2 Fluorotelomer sulfonic acid			75.0	76.79		ng/L		102	70 - 130	2	30
6:2 Fluorotelomer sulfonic acid			76.1	77.33		ng/L		102	60 - 140	1	30
8:2 Fluorotelomer sulfonic acid			76.8	84.56		ng/L		110	70 - 130	3	30
Perfluorooctanesulfonamide			80.0	85.71		ng/L		107	70 - 130	2	30
NMeFOSAA			80.0	75.94		ng/L		95	70 - 130	5	30
N-ethylperfluorooctanesulfonamidoacetic acid			80.0	76.98		ng/L		96	70 - 130	5	30
HFPODA			80.0	82.57		ng/L		103	60 - 140	19	30
DONA			75.6	71.91		ng/L		95	70 - 130	3	30
9Cl-PF3ONS			74.6	75.74		ng/L		101	70 - 130	1	30
11Cl-PF3OUdS			75.4	73.24		ng/L		97	60 - 140	6	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	113		50 - 150
13C5 PFPeA	103		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196645/3-A
Matrix: Water
Analysis Batch: 196686

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196645

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFHpA	*107*		*50 - 150*
13C2 PFTeDA	*89*		*50 - 150*
13C3 PFBS	*99*		*50 - 150*
13C8 FOSA	*95*		*50 - 150*
d3-NMeFOSAA	*106*		*50 - 150*
d5-NEtFOSAA	*106*		*50 - 150*
M2-4:2 FTS	*99*		*50 - 150*
M2-6:2 FTS	*101*		*50 - 150*
M2-8:2 FTS	*93*		*50 - 150*
13C3 HFPO-DA	*94*		*50 - 150*
18O2 PFHxS	*109*		*50 - 150*
13C2 PFHxA	*107*		*50 - 150*
13C4 PFOS	*111*		*50 - 150*
13C2 PFDoA	*109*		*50 - 150*
13C5 PFNA	*110*		*50 - 150*
13C2 PFDA	*111*		*50 - 150*
13C4 PFOA	*106*		*50 - 150*
13C2 PFUnA	*101*		*50 - 150*

Lab Sample ID: MB 200-196646/1-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/20/23 20:02	10/23/23 23:25	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/20/23 20:02	10/23/23 23:25	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/20/23 20:02	10/23/23 23:25	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/20/23 20:02	10/23/23 23:25	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/20/23 20:02	10/23/23 23:25	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/20/23 20:02	10/23/23 23:25	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/20/23 20:02	10/23/23 23:25	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196646/1-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPODA	4.00	U	4.00	1.10	ng/L		10/20/23 20:02	10/23/23 23:25	1
DONA	2.00	U	2.00	0.42	ng/L		10/20/23 20:02	10/23/23 23:25	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/20/23 20:02	10/23/23 23:25	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/20/23 20:02	10/23/23 23:25	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C5 PFPeA	*99*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C4 PFHpA	*92*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C3 PFBS	*97*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C8 FOSA	*92*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
d3-NMeFOSAA	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
d5-NEtFOSAA	*99*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
M2-4:2 FTS	*94*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
M2-6:2 FTS	*98*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
M2-8:2 FTS	*90*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C3 HFPO-DA	*85*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
18O2 PFHxS	*101*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C2 PFHxA	*102*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C4 PFOS	*101*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C2 PFDoA	*100*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C5 PFNA	*99*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C2 PFDA	*98*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C4 PFOA	*108*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*
13C2 PFUnA	*104*		*50 - 150*	*10/20/23 20:02*	*10/23/23 23:25*	*1*

Lab Sample ID: LCS 200-196646/2-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	40.0	38.52		ng/L		96	70 - 130
Perfluoropentanoic acid	40.0	39.11		ng/L		98	70 - 130
Perfluorohexanoic acid	40.0	34.59		ng/L		86	70 - 130
Perfluoroheptanoic acid	40.0	38.88		ng/L		97	70 - 130
Perfluorooctanoic acid	40.0	41.09		ng/L		103	70 - 130
Perfluorononanoic acid	40.0	39.70		ng/L		99	70 - 130
Perfluorodecanoic acid	40.0	39.69		ng/L		99	70 - 130
Perfluoroundecanoic acid	40.0	40.70		ng/L		102	70 - 130
Perfluorododecanoic acid	40.0	37.42		ng/L		94	70 - 130
Perfluorotridecanoic acid	40.0	37.52		ng/L		94	70 - 130
Perfluorotetradecanoic acid	40.0	36.55		ng/L		91	70 - 130
Perfluorobutanesulfonic acid	35.5	35.01		ng/L		99	70 - 130
Perfluoropentanesulfonic acid	37.6	35.67		ng/L		95	70 - 130
Perfluorohexanesulfonic acid	36.6	33.46		ng/L		92	70 - 130
Perfluoroheptanesulfonic acid	38.1	35.98		ng/L		94	70 - 130
Perfluorooctanesulfonic acid	37.1	34.06		ng/L		92	70 - 130
Perfluorononanesulfonic acid	38.5	33.14		ng/L		86	70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196646/2-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196646

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorodecanesulfonic acid			38.6	33.57		ng/L		87	70 - 130		
4:2 Fluorotelomer sulfonic acid			37.5	37.31		ng/L		100	70 - 130		
6:2 Fluorotelomer sulfonic acid			38.0	40.04		ng/L		105	60 - 140		
8:2 Fluorotelomer sulfonic acid			38.4	42.77		ng/L		111	70 - 130		
Perfluorooctanesulfonamide			40.0	41.50		ng/L		104	70 - 130		
NMeFOSAA			40.0	37.80		ng/L		94	70 - 130		
N-ethylperfluorooctanesulfonamidoacetic acid			40.0	38.78		ng/L		97	70 - 130		
HFPODA			40.0	37.79		ng/L		94	60 - 140		
DONA			37.8	36.20		ng/L		96	70 - 130		
9Cl-PF3ONS			37.3	37.24		ng/L		100	70 - 130		
11Cl-PF3OUdS			37.7	34.72		ng/L		92	60 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*110*		*50 - 150*
13C5 PFPeA	*106*		*50 - 150*
13C4 PFHpA	*111*		*50 - 150*
13C2 PFTeDA	*95*		*50 - 150*
13C3 PFBS	*101*		*50 - 150*
13C8 FOSA	*93*		*50 - 150*
d3-NMeFOSAA	*106*		*50 - 150*
d5-NEtFOSAA	*102*		*50 - 150*
M2-4:2 FTS	*100*		*50 - 150*
M2-6:2 FTS	*100*		*50 - 150*
M2-8:2 FTS	*93*		*50 - 150*
13C3 HFPO-DA	*99*		*50 - 150*
18O2 PFHxS	*110*		*50 - 150*
13C2 PFHxA	*111*		*50 - 150*
13C4 PFOS	*110*		*50 - 150*
13C2 PFDoA	*101*		*50 - 150*
13C5 PFNA	*105*		*50 - 150*
13C2 PFDA	*107*		*50 - 150*
13C4 PFOA	*105*		*50 - 150*
13C2 PFUnA	*105*		*50 - 150*

Lab Sample ID: LCSD 200-196646/3-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196646

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			40.0	39.00		ng/L		97	70 - 130	1	30
Perfluoropentanoic acid			40.0	40.34		ng/L		101	70 - 130	3	30
Perfluorohexanoic acid			40.0	38.61		ng/L		97	70 - 130	11	30
Perfluoroheptanoic acid			40.0	40.98		ng/L		102	70 - 130	5	30
Perfluorooctanoic acid			40.0	36.90		ng/L		92	70 - 130	11	30
Perfluorononanoic acid			40.0	38.99		ng/L		97	70 - 130	2	30
Perfluorodecanoic acid			40.0	35.53		ng/L		89	70 - 130	11	30
Perfluoroundecanoic acid			40.0	37.23		ng/L		93	70 - 130	9	30
Perfluorododecanoic acid			40.0	37.01		ng/L		93	70 - 130	1	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196646/3-A
Matrix: Water
Analysis Batch: 196689

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196646

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorotridecanoic acid			40.0	37.48		ng/L		94	70 - 130	0	30
Perfluorotetradecanoic acid			40.0	36.60		ng/L		91	70 - 130	0	30
Perfluorobutanesulfonic acid			35.5	35.89		ng/L		101	70 - 130	2	30
Perfluoropentanesulfonic acid			37.6	37.24		ng/L		99	70 - 130	4	30
Perfluorohexanesulfonic acid			36.6	34.70		ng/L		95	70 - 130	4	30
Perfluoroheptanesulfonic acid			38.1	36.57		ng/L		96	70 - 130	2	30
Perfluorooctanesulfonic acid			37.1	34.91		ng/L		94	70 - 130	2	30
Perfluorononanesulfonic acid			38.5	32.77		ng/L		85	70 - 130	1	30
Perfluorodecanesulfonic acid			38.6	31.44		ng/L		81	70 - 130	7	30
4:2 Fluorotelomer sulfonic acid			37.5	39.31		ng/L		105	70 - 130	5	30
6:2 Fluorotelomer sulfonic acid			38.0	40.42		ng/L		106	60 - 140	1	30
8:2 Fluorotelomer sulfonic acid			38.4	42.53		ng/L		111	70 - 130	1	30
Perfluorooctanesulfonamide			40.0	41.39		ng/L		103	70 - 130	0	30
NMeFOSAA			40.0	38.60		ng/L		96	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid			40.0	39.63		ng/L		99	70 - 130	2	30
HFPODA			40.0	38.34		ng/L		96	60 - 140	1	30
DONA			37.8	37.89		ng/L		100	70 - 130	5	30
9Cl-PF3ONS			37.3	38.34		ng/L		103	70 - 130	3	30
11Cl-PF3OUdS			37.7	32.77		ng/L		87	60 - 140	6	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*102*		*50 - 150*
13C5 PFPeA	*97*		*50 - 150*
13C4 PFHpA	*93*		*50 - 150*
13C2 PFTeDA	*78*		*50 - 150*
13C3 PFBS	*93*		*50 - 150*
13C8 FOSA	*82*		*50 - 150*
d3-NMeFOSAA	*94*		*50 - 150*
d5-NEtFOSAA	*88*		*50 - 150*
M2-4:2 FTS	*90*		*50 - 150*
M2-6:2 FTS	*91*		*50 - 150*
M2-8:2 FTS	*85*		*50 - 150*
13C3 HFPO-DA	*96*		*50 - 150*
18O2 PFHxS	*98*		*50 - 150*
13C2 PFHxA	*95*		*50 - 150*
13C4 PFOS	*99*		*50 - 150*
13C2 PFDoA	*87*		*50 - 150*
13C5 PFNA	*95*		*50 - 150*
13C2 PFDA	*97*		*50 - 150*
13C4 PFOA	*101*		*50 - 150*
13C2 PFUnA	*90*		*50 - 150*

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 196645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290375-1	1000-101323-0002	Total/NA	Water	3535	
460-290375-2	MW39A-101323-0826-70	Total/NA	Water	3535	
460-290375-3	MW39-101323-0921-17	Total/NA	Water	3535	
460-290375-4	MW91-101323-1021-26	Total/NA	Water	3535	
460-290375-5	MW91A-101323-1116-66	Total/NA	Water	3535	
MB 200-196645/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196645/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196645/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 196646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290375-6	MW88-101323-0831-80.5	Total/NA	Water	3535	
460-290375-7 - DL	MW92A-101323-1006-70	Total/NA	Water	3535	
460-290375-7	MW92A-101323-1006-70	Total/NA	Water	3535	
460-290375-8 - DL	MW92-101323-1056-36	Total/NA	Water	3535	
460-290375-8	MW92-101323-1056-36	Total/NA	Water	3535	
460-290375-9 - DL	MW92B-101323-1156-92	Total/NA	Water	3535	
460-290375-9	MW92B-101323-1156-92	Total/NA	Water	3535	
MB 200-196646/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196646/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196646/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 196686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290375-1	1000-101323-0002	Total/NA	Water	537 (modified)	196645
460-290375-2	MW39A-101323-0826-70	Total/NA	Water	537 (modified)	196645
460-290375-3	MW39-101323-0921-17	Total/NA	Water	537 (modified)	196645
460-290375-4	MW91-101323-1021-26	Total/NA	Water	537 (modified)	196645
460-290375-5	MW91A-101323-1116-66	Total/NA	Water	537 (modified)	196645
MB 200-196645/1-A	Method Blank	Total/NA	Water	537 (modified)	196645
LCS 200-196645/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196645
LCSD 200-196645/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196645

Analysis Batch: 196689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290375-6	MW88-101323-0831-80.5	Total/NA	Water	537 (modified)	196646
460-290375-7	MW92A-101323-1006-70	Total/NA	Water	537 (modified)	196646
460-290375-8	MW92-101323-1056-36	Total/NA	Water	537 (modified)	196646
460-290375-9	MW92B-101323-1156-92	Total/NA	Water	537 (modified)	196646
MB 200-196646/1-A	Method Blank	Total/NA	Water	537 (modified)	196646
LCS 200-196646/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196646
LCSD 200-196646/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196646

Analysis Batch: 196839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290375-7 - DL	MW92A-101323-1006-70	Total/NA	Water	537 (modified)	196646
460-290375-8 - DL	MW92-101323-1056-36	Total/NA	Water	537 (modified)	196646
460-290375-9 - DL	MW92B-101323-1156-92	Total/NA	Water	537 (modified)	196646

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Client Sample ID: 1000-101323-0002
Lab Sample ID: 460-290375-1
Date Collected: 10/13/23 11:30
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196645	EK	EET BUR	10/20/23 19:55
Total/NA	Analysis	537 (modified)		1	196686	BWC	EET BUR	10/23/23 18:47

Client Sample ID: MW39A-101323-0826-70
Lab Sample ID: 460-290375-2
Date Collected: 10/13/23 08:26
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196645	EK	EET BUR	10/20/23 19:55
Total/NA	Analysis	537 (modified)		1	196686	BWC	EET BUR	10/23/23 18:55

Client Sample ID: MW39-101323-0921-17
Lab Sample ID: 460-290375-3
Date Collected: 10/13/23 09:21
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196645	EK	EET BUR	10/20/23 19:55
Total/NA	Analysis	537 (modified)		1	196686	BWC	EET BUR	10/23/23 19:03

Client Sample ID: MW91-101323-1021-26
Lab Sample ID: 460-290375-4
Date Collected: 10/13/23 10:21
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196645	EK	EET BUR	10/20/23 19:55
Total/NA	Analysis	537 (modified)		1	196686	BWC	EET BUR	10/23/23 19:19

Client Sample ID: MW91A-101323-1116-66
Lab Sample ID: 460-290375-5
Date Collected: 10/13/23 11:16
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196645	EK	EET BUR	10/20/23 19:55
Total/NA	Analysis	537 (modified)		1	196686	BWC	EET BUR	10/23/23 19:27

Client Sample ID: MW88-101323-0831-80.5
Lab Sample ID: 460-290375-6
Date Collected: 10/13/23 08:31
Matrix: Water
Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)		1	196689	BWC	EET BUR	10/23/23 23:49

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Client Sample ID: MW92A-101323-1006-70

Lab Sample ID: 460-290375-7

Date Collected: 10/13/23 10:06

Matrix: Water

Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)		1	196689	BWC	EET BUR	10/23/23 23:57
Total/NA	Prep	3535	DL		196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)	DL	5	196839	BWC	EET BUR	10/27/23 10:16

Client Sample ID: MW92-101323-1056-36

Lab Sample ID: 460-290375-8

Date Collected: 10/13/23 10:56

Matrix: Water

Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)		1	196689	BWC	EET BUR	10/24/23 00:05
Total/NA	Prep	3535	DL		196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)	DL	5	196839	BWC	EET BUR	10/27/23 10:24

Client Sample ID: MW92B-101323-1156-92

Lab Sample ID: 460-290375-9

Date Collected: 10/13/23 11:56

Matrix: Water

Date Received: 10/13/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)		1	196689	BWC	EET BUR	10/24/23 00:14
Total/NA	Prep	3535	DL		196646	EK	EET BUR	10/20/23 20:02
Total/NA	Analysis	537 (modified)	DL	5	196839	BWC	EET BUR	10/27/23 10:32

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290375-1

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-23
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-24
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399140830	08-31-24

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
1000-101323-0002	460-290375-1	111	103	102	100	112	94	107	108
MW39A-101323-0826-70	460-290375-2	103	107	106	90	105	100	96	109
MW39-101323-0921-17	460-290375-3	94	92	95	93	92	87	100	102
MW91-101323-1021-26	460-290375-4	83	93	96	97	100	90	104	104
MW91A-101323-1116-66	460-290375-5	85	96	105	103	101	96	106	104
MW88-101323-0831-80.5	460-290375-6	90	98	95	104	92	94	98	100
MW92A-101323-1006-70	460-290375-7	27 *5-	84	109	104	99	94	113	112
MW92-101323-1056-36	460-290375-8	61	105	110	101	104	105	112	114
MW92B-101323-1156-92	460-290375-9	60	104	112	105	101	101	113	112
	MB 200-196645/1-A	102	92	87	85	100	81	99	95
	MB 200-196646/1-A	103	99	97	94	102	85	92	101
	LCS 200-196645/2-A	111	106	100	99	108	102	108	108
	LCS 200-196646/2-A	110	106	101	100	111	99	111	110
	LCSD 200-196645/3-A	113	103	99	99	107	94	107	109
	LCSD 200-196646/3-A	102	97	93	90	95	96	93	98

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #
1000-101323-0002	460-290375-1	105	106	107	105	106	98	94	102
MW39A-101323-0826-70	460-290375-2	99	103	110	100	106	95	101	107
MW39-101323-0921-17	460-290375-3	93	103	103	101	100	89	93	96
MW91-101323-1021-26	460-290375-4	102	103	104	97	107	100	94	96
MW91A-101323-1116-66	460-290375-5	105	108	111	110	115	110	100	112
MW88-101323-0831-80.5	460-290375-6	108	100	107	101	106	97	91	100
MW92A-101323-1006-70	460-290375-7	108	108	107	100	106	114	107	112
MW92-101323-1056-36	460-290375-8	103	113	104	99	111	112	105	112
MW92B-101323-1156-92	460-290375-9	104	107	104	99	114	109	105	110
	MB 200-196645/1-A	91	103	96	90	89	84	72	82
	MB 200-196646/1-A	98	108	101	99	98	90	92	100
	LCS 200-196645/2-A	100	106	110	105	108	97	90	100
	LCS 200-196646/2-A	100	105	110	105	107	93	93	106
	LCSD 200-196645/3-A	101	106	111	110	111	93	95	106
	LCSD 200-196646/3-A	91	101	99	95	97	85	82	94

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
1000-101323-0002	460-290375-1	112	104	103	91
MW39A-101323-0826-70	460-290375-2	114	113	112	99
MW39-101323-0921-17	460-290375-3	98	97	99	86
MW91-101323-1021-26	460-290375-4	99	98	103	94
MW91A-101323-1116-66	460-290375-5	114	114	104	98
MW88-101323-0831-80.5	460-290375-6	109	109	104	75
MW92A-101323-1006-70	460-290375-7	122	116	119	102
MW92-101323-1056-36	460-290375-8	119	114	113	100
MW92B-101323-1156-92	460-290375-9	119	116	113	104
	MB 200-196645/1-A	85	74	74	63
	MB 200-196646/1-A	104	99	100	88
	LCS 200-196645/2-A	99	97	95	92
	LCS 200-196646/2-A	105	102	101	95
	LCSD 200-196645/3-A	101	106	109	89
	LCSD 200-196646/3-A	90	88	87	78

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFOS #
MW92A-101323-1006-70 DL	460-290375-7 DL	98
MW92-101323-1056-36 DL	460-290375-8 DL	98
MW92B-101323-1156-92 DL	460-290375-9 DL	90

	QC LIMITS
PFOS = 13C4 PFOS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023A09.d

Lab ID: LCS 200-196645/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	79.14	99	70-130	
Perfluoropentanoic acid	80.0	76.49	96	70-130	
Perfluorohexanoic acid	80.0	76.88	96	70-130	
Perfluoroheptanoic acid	80.0	79.09	99	70-130	
Perfluorooctanoic acid	80.0	80.94	101	70-130	
Perfluorononanoic acid	80.0	74.11	93	70-130	
Perfluorodecanoic acid	80.0	73.82	92	70-130	
Perfluoroundecanoic acid	80.0	79.73	100	70-130	
Perfluorododecanoic acid	80.0	81.57	102	70-130	
Perfluorotridecanoic acid	80.0	76.69	96	70-130	
Perfluorotetradecanoic acid	80.0	72.62	91	70-130	
Perfluorobutanesulfonic acid	71.0	71.91	101	70-130	
Perfluoropentanesulfonic acid	75.3	75.32	100	70-130	
Perfluorohexanesulfonic acid	73.1	68.09	93	70-130	
Perfluoroheptanesulfonic acid	76.2	73.12	96	70-130	
Perfluorooctanesulfonic acid	74.2	67.57	91	70-130	
Perfluorononanesulfonic acid	77.0	66.88	87	70-130	
Perfluorodecanesulfonic acid	77.2	65.64	85	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	75.04	100	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	76.66	101	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	82.17	107	70-130	
Perfluorooctanesulfonamide	80.0	83.78	105	70-130	
NMeFOSAA	80.0	79.92	100	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	73.50	92	70-130	
HFPODA	80.0	68.11	85	60-140	
DONA	75.6	73.95	98	70-130	
9Cl-PF3ONS	74.6	75.13	101	70-130	
11Cl-PF3OUdS	75.4	69.14	92	60-140	
13C4 PFBA	50.0	55.54	111	50-150	
13C5 PFPeA	50.0	53.07	106	50-150	
13C4 PFHpA	50.0	53.96	108	50-150	
13C2 PFTeDA	50.0	45.81	92	50-150	
13C3 PFBS	46.5	46.56	100	50-150	
13C8 FOSA	50.0	45.16	90	50-150	
d3-NMeFOSAA	50.0	49.97	100	50-150	
d5-NEtFOSAA	50.0	48.68	97	50-150	
M2-4:2 FTS	46.7	46.45	99	50-150	
M2-6:2 FTS	47.5	47.59	100	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023A09.d

Lab ID: LCS 200-196645/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	46.56	97	50-150	
13C3 HFPO-DA	50.0	51.07	102	50-150	
18O2 PFHxS	47.3	51.16	108	50-150	
13C2 PFHxA	50.0	53.77	108	50-150	
13C4 PFOS	47.8	52.57	110	50-150	
13C2 PFDoA	50.0	47.41	95	50-150	
13C5 PFNA	50.0	52.50	105	50-150	
13C2 PFDA	50.0	53.88	108	50-150	
13C4 PFOA	50.0	53.20	106	50-150	
13C2 PFUnA	50.0	49.38	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023C03.d

Lab ID: LCS 200-196646/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.52	96	70-130	
Perfluoropentanoic acid	40.0	39.11	98	70-130	
Perfluorohexanoic acid	40.0	34.59	86	70-130	
Perfluoroheptanoic acid	40.0	38.88	97	70-130	
Perfluorooctanoic acid	40.0	41.09	103	70-130	
Perfluorononanoic acid	40.0	39.70	99	70-130	
Perfluorodecanoic acid	40.0	39.69	99	70-130	
Perfluoroundecanoic acid	40.0	40.70	102	70-130	
Perfluorododecanoic acid	40.0	37.42	94	70-130	
Perfluorotridecanoic acid	40.0	37.52	94	70-130	
Perfluorotetradecanoic acid	40.0	36.55	91	70-130	
Perfluorobutanesulfonic acid	35.5	35.01	99	70-130	
Perfluoropentanesulfonic acid	37.6	35.67	95	70-130	
Perfluorohexanesulfonic acid	36.6	33.46	92	70-130	
Perfluoroheptanesulfonic acid	38.1	35.98	94	70-130	
Perfluorooctanesulfonic acid	37.1	34.06	92	70-130	
Perfluorononanesulfonic acid	38.5	33.14	86	70-130	
Perfluorodecanesulfonic acid	38.6	33.57	87	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	37.31	100	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	40.04	105	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	42.77	111	70-130	
Perfluorooctanesulfonamide	40.0	41.50	104	70-130	
NMeFOSAA	40.0	37.80	94	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	38.78	97	70-130	
HFPODA	40.0	37.79	94	60-140	
DONA	37.8	36.20	96	70-130	
9Cl-PF3ONS	37.3	37.24	100	70-130	
11Cl-PF3OUdS	37.7	34.72	92	60-140	
13C4 PFBA	50.0	55.12	110	50-150	
13C5 PFPeA	50.0	53.17	106	50-150	
13C4 PFHpA	50.0	55.50	111	50-150	
13C2 PFTeDA	50.0	47.48	95	50-150	
13C3 PFBS	46.5	46.83	101	50-150	
13C8 FOSA	50.0	46.45	93	50-150	
d3-NMeFOSAA	50.0	52.86	106	50-150	
d5-NEtFOSAA	50.0	50.87	102	50-150	
M2-4:2 FTS	46.7	46.70	100	50-150	
M2-6:2 FTS	47.5	47.40	100	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023C03.d

Lab ID: LCS 200-196646/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	44.63	93	50-150	
13C3 HFPO-DA	50.0	49.49	99	50-150	
18O2 PFHxS	47.3	52.11	110	50-150	
13C2 PFHxA	50.0	55.51	111	50-150	
13C4 PFOS	47.8	52.57	110	50-150	
13C2 PFDoA	50.0	50.47	101	50-150	
13C5 PFNA	50.0	52.58	105	50-150	
13C2 PFDA	50.0	53.32	107	50-150	
13C4 PFOA	50.0	52.26	105	50-150	
13C2 PFUnA	50.0	52.70	105	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023A10.d

Lab ID: LCSD 200-196645/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	78.86	99	0	30	70-130	
Perfluoropentanoic acid	80.0	83.62	105	9	30	70-130	
Perfluorohexanoic acid	80.0	75.24	94	2	30	70-130	
Perfluoroheptanoic acid	80.0	74.70	93	6	30	70-130	
Perfluorooctanoic acid	80.0	79.82	100	1	30	70-130	
Perfluorononanoic acid	80.0	81.17	101	9	30	70-130	
Perfluorodecanoic acid	80.0	76.08	95	3	30	70-130	
Perfluoroundecanoic acid	80.0	84.04	105	5	30	70-130	
Perfluorododecanoic acid	80.0	71.90	90	13	30	70-130	
Perfluorotridecanoic acid	80.0	73.27	92	5	30	70-130	
Perfluorotetradecanoic acid	80.0	76.23	95	5	30	70-130	
Perfluorobutanesulfonic acid	71.0	71.60	101	0	30	70-130	
Perfluoropentanesulfonic acid	75.3	74.32	99	1	30	70-130	
Perfluorohexanesulfonic acid	73.1	66.85	91	2	30	70-130	
Perfluoroheptanesulfonic acid	76.2	74.22	97	1	30	70-130	
Perfluorooctanesulfonic acid	74.2	68.27	92	1	30	70-130	
Perfluorononanesulfonic acid	77.0	66.88	87	0	30	70-130	
Perfluorodecanesulfonic acid	77.2	69.68	90	6	30	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	76.79	102	2	30	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	77.33	102	1	30	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	84.56	110	3	30	70-130	
Perfluorooctanesulfonamide	80.0	85.71	107	2	30	70-130	
NMeFOSAA	80.0	75.94	95	5	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	76.98	96	5	30	70-130	
HFPODA	80.0	82.57	103	19	30	60-140	
DONA	75.6	71.91	95	3	30	70-130	
9Cl-PF3ONS	74.6	75.74	101	1	30	70-130	
11Cl-PF3OUdS	75.4	73.24	97	6	30	60-140	
13C4 PFBA	50.0	56.70	113			50-150	
13C5 PFPeA	50.0	51.30	103			50-150	
13C4 PFHpA	50.0	53.46	107			50-150	
13C2 PFTeDA	50.0	44.38	89			50-150	
13C3 PFBS	46.5	45.88	99			50-150	
13C8 FOSA	50.0	47.26	95			50-150	
d3-NMeFOSAA	50.0	53.24	106			50-150	
d5-NEtFOSAA	50.0	52.85	106			50-150	
M2-4:2 FTS	46.7	46.44	99			50-150	
M2-6:2 FTS	47.5	47.74	101			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023A10.d

Lab ID: LCSD 200-196645/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	44.74	93			50-150	
13C3 HFPO-DA	50.0	47.05	94			50-150	
18O2 PFHxS	47.3	51.60	109			50-150	
13C2 PFHxA	50.0	53.58	107			50-150	
13C4 PFOS	47.8	52.99	111			50-150	
13C2 PFDoA	50.0	54.55	109			50-150	
13C5 PFNA	50.0	55.14	110			50-150	
13C2 PFDA	50.0	55.72	111			50-150	
13C4 PFOA	50.0	53.20	106			50-150	
13C2 PFUnA	50.0	50.65	101			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023C04.d

Lab ID: LCSD 200-196646/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	39.00	97	1	30	70-130	
Perfluoropentanoic acid	40.0	40.34	101	3	30	70-130	
Perfluorohexanoic acid	40.0	38.61	97	11	30	70-130	
Perfluoroheptanoic acid	40.0	40.98	102	5	30	70-130	
Perfluorooctanoic acid	40.0	36.90	92	11	30	70-130	
Perfluorononanoic acid	40.0	38.99	97	2	30	70-130	
Perfluorodecanoic acid	40.0	35.53	89	11	30	70-130	
Perfluoroundecanoic acid	40.0	37.23	93	9	30	70-130	
Perfluorododecanoic acid	40.0	37.01	93	1	30	70-130	
Perfluorotridecanoic acid	40.0	37.48	94	0	30	70-130	
Perfluorotetradecanoic acid	40.0	36.60	91	0	30	70-130	
Perfluorobutanesulfonic acid	35.5	35.89	101	2	30	70-130	
Perfluoropentanesulfonic acid	37.6	37.24	99	4	30	70-130	
Perfluorohexanesulfonic acid	36.6	34.70	95	4	30	70-130	
Perfluoroheptanesulfonic acid	38.1	36.57	96	2	30	70-130	
Perfluorooctanesulfonic acid	37.1	34.91	94	2	30	70-130	
Perfluorononanesulfonic acid	38.5	32.77	85	1	30	70-130	
Perfluorodecanesulfonic acid	38.6	31.44	81	7	30	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	39.31	105	5	30	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	40.42	106	1	30	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	42.53	111	1	30	70-130	
Perfluorooctanesulfonamide	40.0	41.39	103	0	30	70-130	
NMeFOSAA	40.0	38.60	96	2	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	39.63	99	2	30	70-130	
HFPODA	40.0	38.34	96	1	30	60-140	
DONA	37.8	37.89	100	5	30	70-130	
9Cl-PF3ONS	37.3	38.34	103	3	30	70-130	
11Cl-PF3OUdS	37.7	32.77	87	6	30	60-140	
13C4 PFBA	50.0	50.80	102			50-150	
13C5 PFPeA	50.0	48.26	97			50-150	
13C4 PFHpA	50.0	46.34	93			50-150	
13C2 PFTeDA	50.0	39.23	78			50-150	
13C3 PFBS	46.5	43.33	93			50-150	
13C8 FOSA	50.0	40.94	82			50-150	
d3-NMeFOSAA	50.0	46.77	94			50-150	
d5-NEtFOSAA	50.0	43.81	88			50-150	
M2-4:2 FTS	46.7	42.26	90			50-150	
M2-6:2 FTS	47.5	43.38	91			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023C04.d

Lab ID: LCSD 200-196646/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	40.85	85			50-150	
13C3 HFPO-DA	50.0	47.77	96			50-150	
18O2 PFHxS	47.3	46.14	98			50-150	
13C2 PFHxA	50.0	47.34	95			50-150	
13C4 PFOS	47.8	47.19	99			50-150	
13C2 PFDoA	50.0	43.64	87			50-150	
13C5 PFNA	50.0	47.68	95			50-150	
13C2 PFDA	50.0	48.59	97			50-150	
13C4 PFOA	50.0	50.66	101			50-150	
13C2 PFUnA	50.0	45.17	90			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab File ID: PA231023A08.d Lab Sample ID: MB 200-196645/1-A

Matrix: Water Date Extracted: 10/20/2023 19:55

Instrument ID: LC812 Date Analyzed: 10/23/2023 16:11

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196645/2-A	PA231023A09.d	10/23/2023 16:20
	LCSD 200-196645/3-A	PA231023A10.d	10/23/2023 16:28
1000-101323-0002	460-290375-1	PA231023A27.d	10/23/2023 18:47
MW39A-101323-0826-70	460-290375-2	PA231023A28.d	10/23/2023 18:55
MW39-101323-0921-17	460-290375-3	PA231023A29.d	10/23/2023 19:03
MW91-101323-1021-26	460-290375-4	PA231023A31.d	10/23/2023 19:19
MW91A-101323-1116-66	460-290375-5	PA231023A32.d	10/23/2023 19:27

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab File ID: PA231023C02.d Lab Sample ID: MB 200-196646/1-A

Matrix: Water Date Extracted: 10/20/2023 20:02

Instrument ID: LC812 Date Analyzed: 10/23/2023 23:25

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196646/2-A	PA231023C03.d	10/23/2023 23:33
	LCSD 200-196646/3-A	PA231023C04.d	10/23/2023 23:41
MW88-101323-0831-80.5	460-290375-6	PA231023C05.d	10/23/2023 23:49
MW92A-101323-1006-70	460-290375-7	PA231023C06.d	10/23/2023 23:57
MW92-101323-1056-36	460-290375-8	PA231023C07.d	10/24/2023 00:05
MW92B-101323-1156-92	460-290375-9	PA231023C08.d	10/24/2023 00:14
MW92A-101323-1006-70 DL	460-290375-7 DL	PA231026E02.d	10/27/2023 10:16
MW92-101323-1056-36 DL	460-290375-8 DL	PA231026E03.d	10/27/2023 10:24
MW92B-101323-1156-92 DL	460-290375-9 DL	PA231026E04.d	10/27/2023 10:32

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument I LC812 Calibration Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.6(mm) Calibration End Date: 07/26/2023 18:05

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		1938034	3.46				
UPPER LIMIT		2907051	3.66				
LOWER LIMIT		969017	3.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-193912/12		2117259	3.46				
ICV 200-193912/13		2099437	3.47				
CCB 200-196686/4		2210905	3.52				
CCVLIS 200-196686/5		2261885	3.52				
CCB 200-196833/4		2022263	3.50				
CCVLIS 200-196833/5		1978630	3.51				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Sample No.: CCVLIS 200-196686/5 Date Analyzed: 10/23/2023 15:47

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231023A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2261885	3.52				
UPPER LIMIT		3392828	3.72				
LOWER LIMIT		1130943	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-196645/1-A		2263276	3.51				
LCS 200-196645/2-A		2008343	3.52				
LCSD 200-196645/3-A		2001840	3.52				
CCV 200-196686/19		2152687	3.52				
460-290375-1	1000-101323-0002	2049077	3.52				
460-290375-2	MW39A-101323-0826-70	1846279	3.52				
460-290375-3	MW39-101323-0921-17	2044331	3.51				
CCV 200-196686/30		1993308	3.52				
460-290375-4	MW91-101323-1021-26	1894260	3.52				
460-290375-5	MW91A-101323-1116-66	1755274	3.51				
CCV 200-196686/33		2009994	3.52				
CCV 200-196689/1		1964387	3.52				
MB 200-196646/1-A		2156900	3.52				
LCS 200-196646/2-A		2073642	3.51				
LCSD 200-196646/3-A		2154821	3.52				
460-290375-6	MW88-101323-0831-80.5	1954927	3.51				
460-290375-7	MW92A-101323-1006-70	1782385	3.52				
460-290375-8	MW92-101323-1056-36	1819899	3.52				
460-290375-9	MW92B-101323-1156-92	1786173	3.52				
CCV 200-196689/15		2019639	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Sample No.: CCVLIS 200-196833/5 Date Analyzed: 10/26/2023 21:03

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231026A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		1978630	3.51				
UPPER LIMIT		2967945	3.71				
LOWER LIMIT		989315	3.31				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196839/1		2098703	3.52				
460-290375-7 DL	MW92A-101323-1006-70 DL	403165*3	3.52				
460-290375-8 DL	MW92-101323-1056-36 DL	409015*3	3.51				
460-290375-9 DL	MW92B-101323-1156-92 DL	442897*3	3.52				
CCV 200-196839/13		2069548	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290375-1

SDG No.:

Client Sample ID: 1000-101323-0002 | Lab Sample ID: 460-290375-1

Matrix: Water | Lab File ID: PA231023A27.d

Analysis Method: 537 (modified) | Date Collected: 10/13/2023 11:30

Extraction Method: 3535 | Date Extracted: 10/20/2023 19:55

Sample wt/vol: 293.1(mL) | Date Analyzed: 10/23/2023 18:47

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.26	U	4.26	1.02
2706-90-3	Perfluoropentanoic acid	1.71	U	1.71	0.58
307-24-4	Perfluorohexanoic acid	1.71	U	1.71	0.55
375-85-9	Perfluoroheptanoic acid	1.71	U	1.71	0.46
335-67-1	Perfluorooctanoic acid	1.71	U	1.71	0.65
375-95-1	Perfluorononanoic acid	1.71	U	1.71	0.42
335-76-2	Perfluorodecanoic acid	1.71	U	1.71	0.39
2058-94-8	Perfluoroundecanoic acid	1.71	U	1.71	0.47
307-55-1	Perfluorododecanoic acid	1.71	U	1.71	0.42
72629-94-8	Perfluorotridecanoic acid	1.71	U	1.71	0.41
376-06-7	Perfluorotetradecanoic acid	1.71	U	1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	1.71	U	1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	1.71	U	1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	1.71	U	1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	1.71	U	1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	1.71	U	1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	1.71	U	1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	1.71	U	1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.26	U	4.26	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66
754-91-6	Perfluorooctanesulfonamide	1.71	U	1.71	0.78
2355-31-9	NMeFOSAA	4.26	U	4.26	1.62
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.26	U	4.26	1.36
13252-13-6	HFPODA	3.41	U	3.41	0.94
919005-14-4	DONA	1.71	U	1.71	0.36
756426-58-1	9Cl-PF3ONS	1.71	U	1.71	0.27
763051-92-9	11Cl-PF3OUdS	1.71	U	1.71	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: 1000-101323-0002 Lab Sample ID: 460-290375-1

Matrix: Water Lab File ID: PA231023A27.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:30

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 293.1(mL) Date Analyzed: 10/23/2023 18:47

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	111		50-150
STL01893	13C5 PFPeA	103		50-150
STL01892	13C4 PFHpA	107		50-150
STL02116	13C2 PFTeDA	91		50-150
STL02337	13C3 PFBS	102		50-150
STL01056	13C8 FOSA	94		50-150
STL02118	d3-NMeFOSAA	102		50-150
STL02117	d5-NEtFOSAA	104		50-150
STL02395	M2-4:2 FTS	100		50-150
STL02279	M2-6:2 FTS	105		50-150
STL02280	M2-8:2 FTS	98		50-150
STL02255	13C3 HFPO-DA	94		50-150
STL00994	18O2 PFHxS	108		50-150
STL00993	13C2 PFHxA	112		50-150
STL00991	13C4 PFOS	107		50-150
STL00998	13C2 PFDoA	103		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	106		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	112		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d
Lims ID: 460-290375-A-1-A
Client ID: 1000-101323-0002
Sample Type: Client
Inject. Date: 23-Oct-2023 18:47:03 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-1-A
Misc. Info.: 200-0057509-027 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:08 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 13:59:10
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2264530	1.39		111	1639	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	34573	-0.0198			2.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1621086	1.28		103	2397	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	2009	0.001436			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	2029806	1.19		102	102631	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.747	2.760	-0.013	0.995	463	0.000694			3.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	229479	1.16		99.6	128	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1800364	1.40		112	1424	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.797	0.013	1.004	11116	0.007013	Target=14.12		2.3	M
313.00 > 119.00	2.797	2.797	0.0	1.000	915		12.15(7.06-21.17)		1.2	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	293157	1.18		94.4	1229	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.899	1560058	1.28		108	5850	
8 Perfluorohexanesulfonic acid										RM
399.00 > 80.00	3.166	3.168	-0.002	1.000	5721	0.003917	Target=3.32		14.3	RM
399.00 > 99.00	3.166	3.168	-0.002	1.000	768		7.45(1.66-4.98)		1.3	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.177	3.168	0.009	1.004	6204	0.003681	Target=4.17		1.3	M
363.00 > 169.00	3.177	3.168	0.009	1.004	1642		3.78(2.09-6.26)		3.3	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.168	-0.002	0.899	1879741	1.33		107	10756	
77 DONA										RM
377.00 > 251.00	3.189	3.203	-0.014	0.832	243	0.00005072	Target=3.33		0.5	RM
377.00 > 85.00	3.201	3.203	-0.002	0.835	489		0.50(1.66-4.99)		1.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.505	0.007	0.997	317096	1.25		105	712	
15 Perfluorooctanoic acid										RM
413.00 > 369.00	3.521	3.514	0.007	1.000	22520	0.0125	Target=2.88		0.8	RM
413.00 > 169.00	3.530	3.514	0.016	1.003	4603		4.89(1.44-4.32)		8.1	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.523	-0.002	1.000	2108068	1.32		106	7940	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.523	-0.002		2049077	1.25			3053	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.820	3.822	-0.002	0.997	2306	0.002374	Target=4.24		5.4	RM
499.00 > 99.00	3.880	3.822	0.058	1.013	1365		1.69(2.12-6.37)		1.9	M
D 18 13C4 PFOS										
503.00 > 80.00	3.832	3.822	0.010	1.088	994994	1.28		107	7600	
20 Perfluorononanoic acid										RM
463.00 > 419.00	3.855	3.845	0.010	1.003	5028	0.002821	Target=8.34		0.7	RM
463.00 > 169.00	3.843	3.845	-0.002	1.000	141		35.66(4.17-12.51)		1.6	M
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.845	-0.002	1.092	2273473	1.31		105	7250	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.129	0.009	1.000	1971	0.001021	Target=11.44		0.7	M
513.00 > 169.00	4.150	4.129	0.021	1.003	238		8.28(5.72-17.16)		2.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.175	2413499	1.33		106	6017	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.175	337061	1.18		98.5	995	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.141	0.009	1.003	868	0.001401			14.2	M
D 21 13C8 FOSA										
506.00 > 78.00	4.244	4.234	0.010	1.205	1826404	1.18		94.2	4338	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.244	4.234	0.010	1.000	563	0.000404			5.8	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.267	4.270	-0.003	1.212	552915	1.27		102	2144	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.280	4.270	0.010	1.003	756	0.001884			2.4	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2400842	1.40		112	7851	

Report Date: 25-Oct-2023 15:13:27 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.249	541399	1.29		104	1244	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.411	4.401	0.010	1.003	303	0.000699			1.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2244635	1.29		103	8333	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.414	1984896	1.14		91.4	6542	

QC Flag Legend

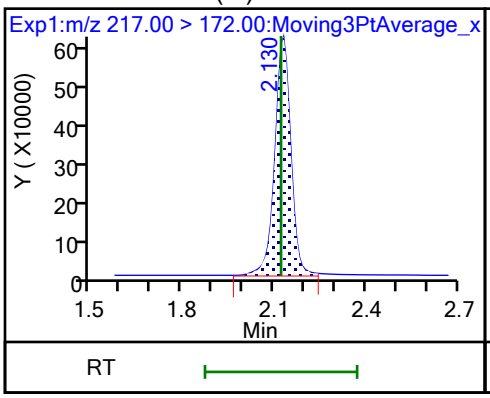
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 25-Oct-2023 15:13:27 Chrom Revision: 2.3 18-Oct-2023 21:16:54

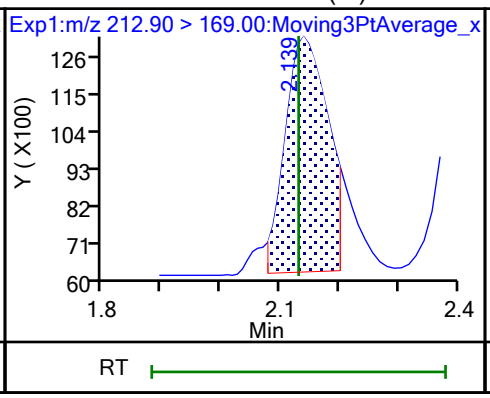
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d
Injection Date: 23-Oct-2023 18:47:03 Instrument ID: LC812
Lims ID: 460-290375-A-1-A Lab Sample ID: 200-290375-1
Client ID: 1000-101323-0002
Operator ID: LC812user ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

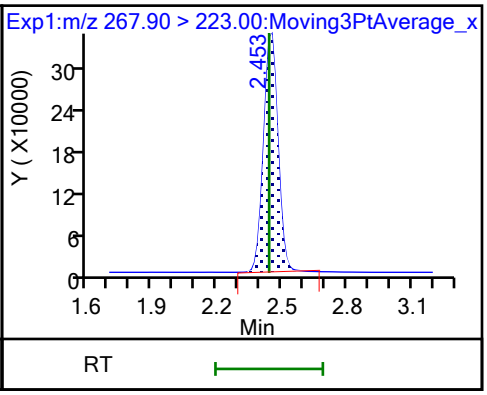
D 1 13C4 PFBA (M)



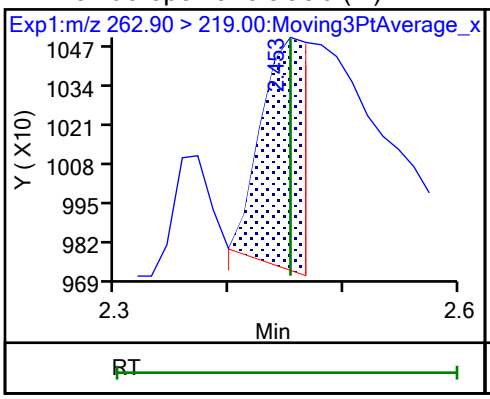
2 Perfluorobutanoic acid (M)



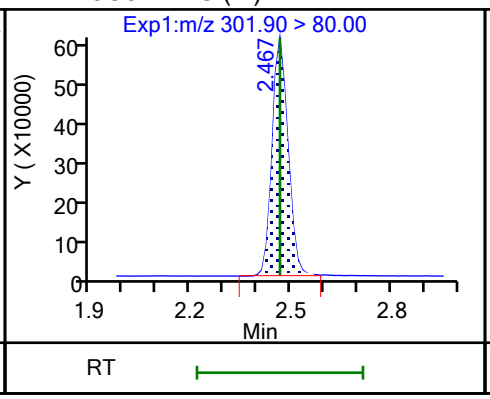
D 3 13C5 PFPeA



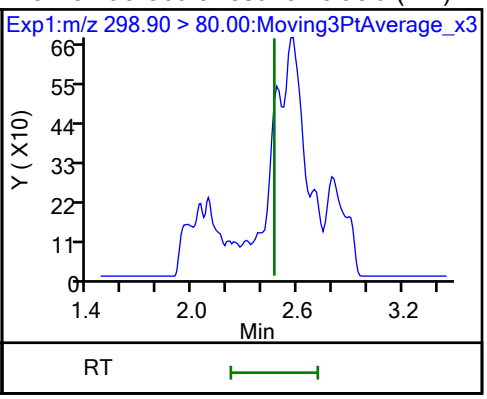
4 Perfluoropentanoic acid (M)



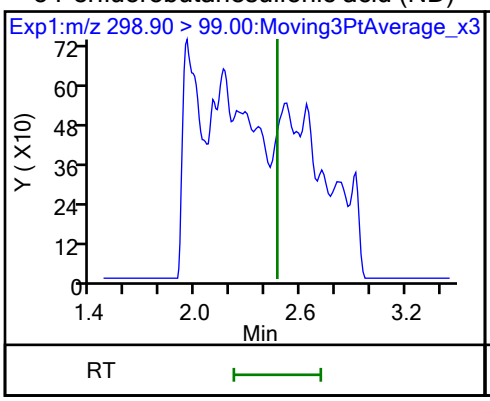
D 47 13C3 PFBS (M)



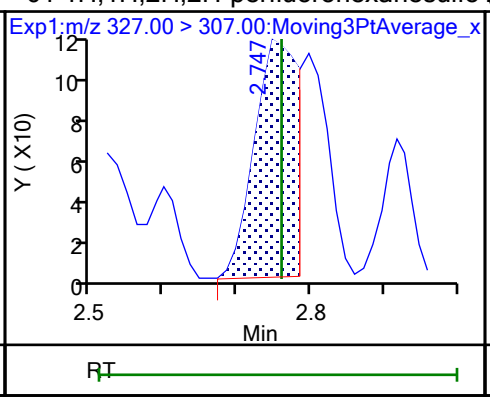
5 Perfluorobutanesulfonic acid (ND)



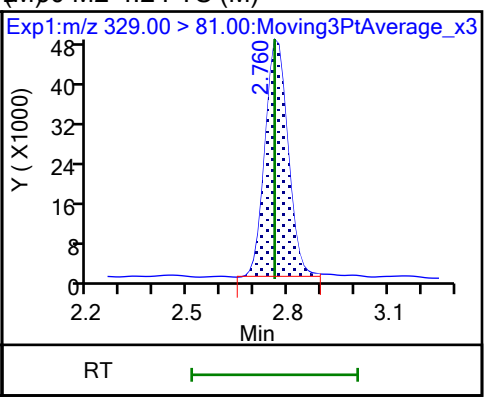
5 Perfluorobutanesulfonic acid (ND)



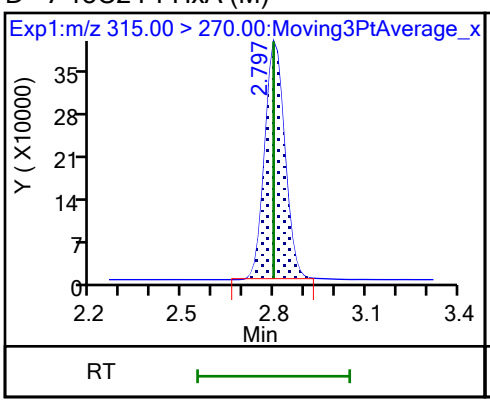
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



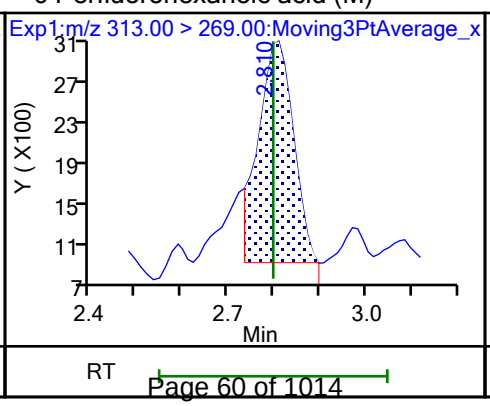
60 M2-4:2 FTS (M)



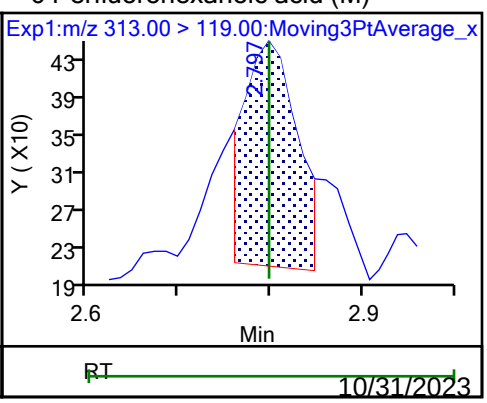
D 7 13C2 PFHxA (M)



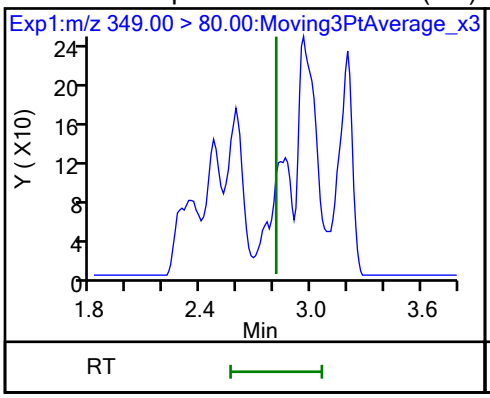
6 Perfluorohexanoic acid (M)



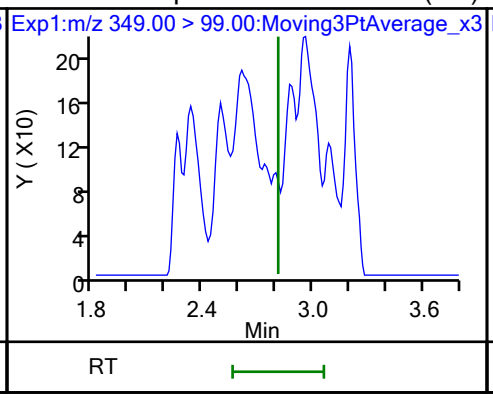
6 Perfluorohexanoic acid (M)



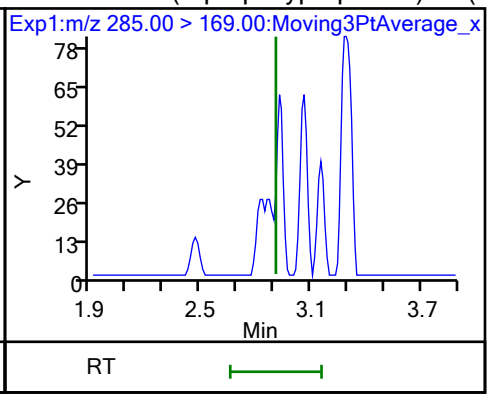
70 Perfluoropentanesulfonic acid (ND)



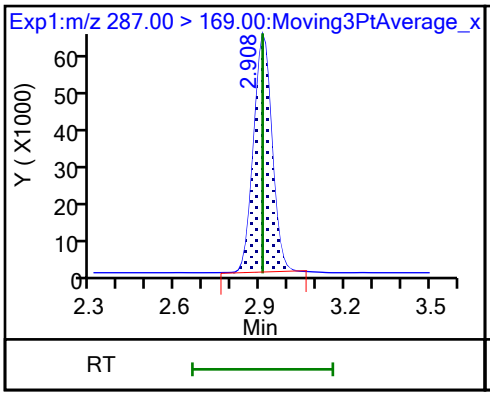
70 Perfluoropentanesulfonic acid (ND)



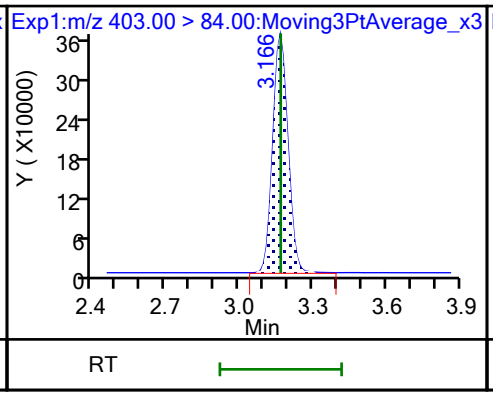
67 Perfluoro(2-propoxypropanoic) ac (ND)



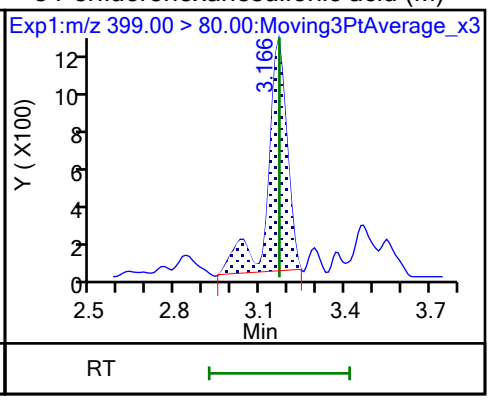
D 64 13C3 HFPO-DA



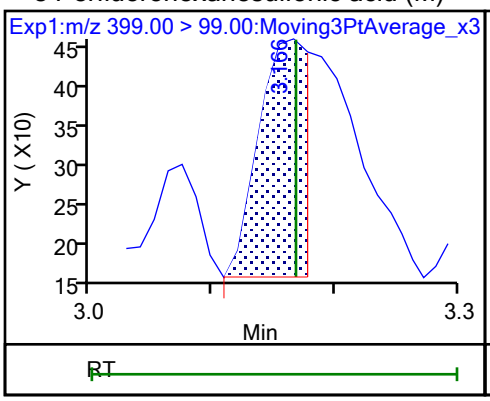
D 11 18O2 PFHxS



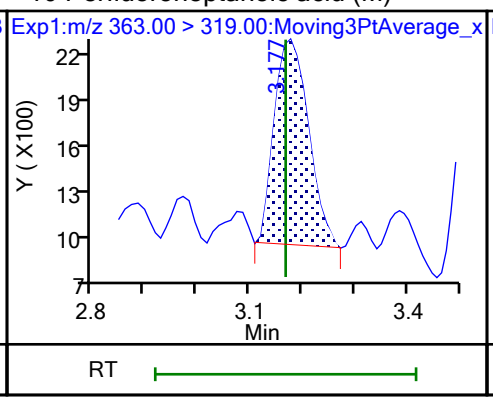
8 Perfluorohexanesulfonic acid (M)



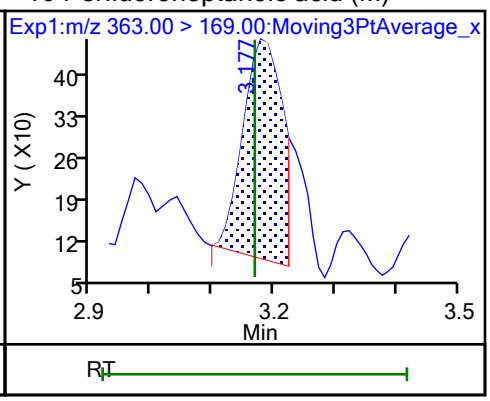
8 Perfluorohexanesulfonic acid (M)



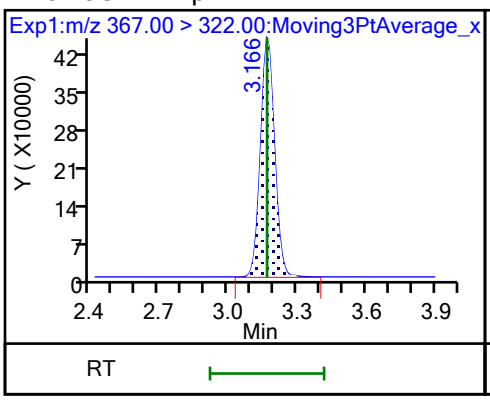
10 Perfluoroheptanoic acid (M)



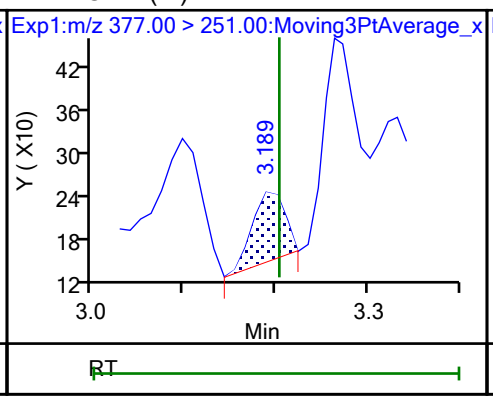
10 Perfluoroheptanoic acid (M)



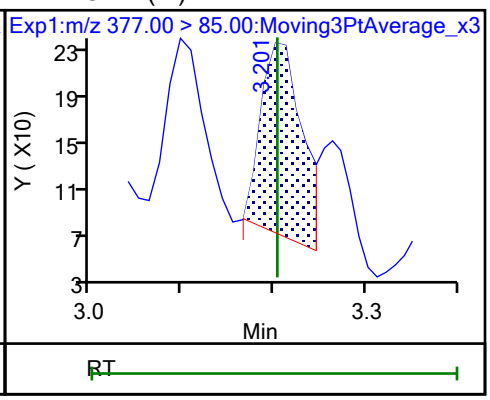
D 9 13C4 PFHpA



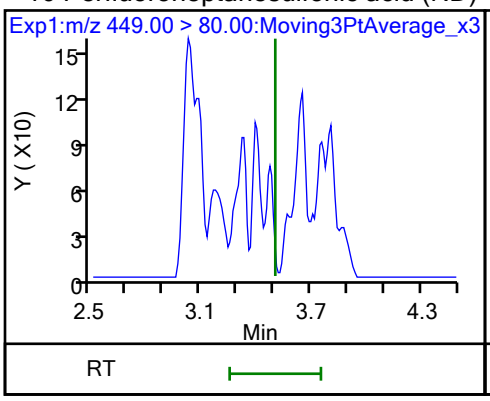
77 DONA (M)



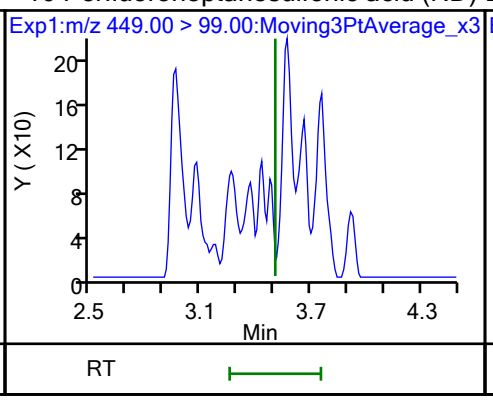
77 DONA (M)

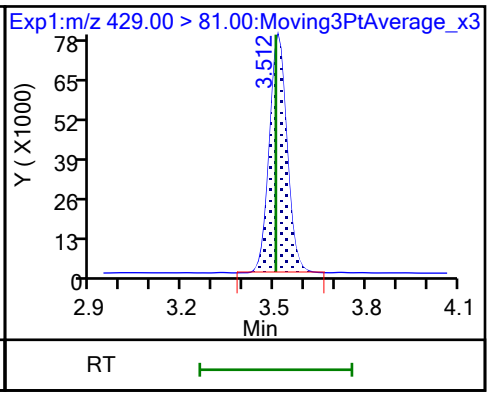


16 Perfluoroheptanesulfonic acid (ND)

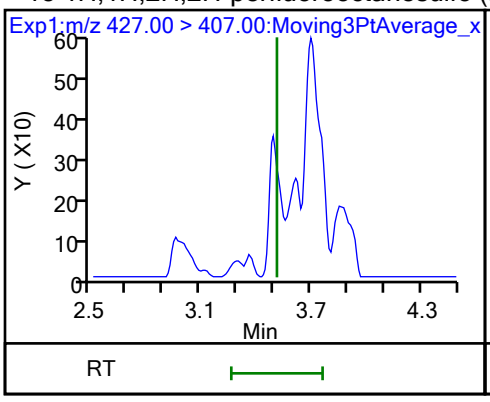


16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS

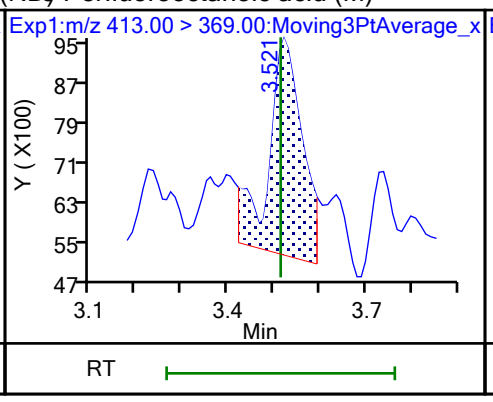




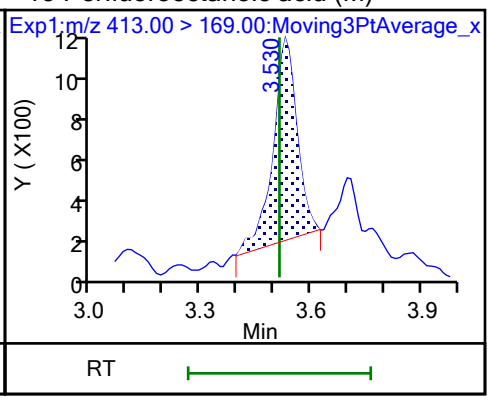
13 1H,1H,2H,2H-perfluorooctanesulfo (ND)



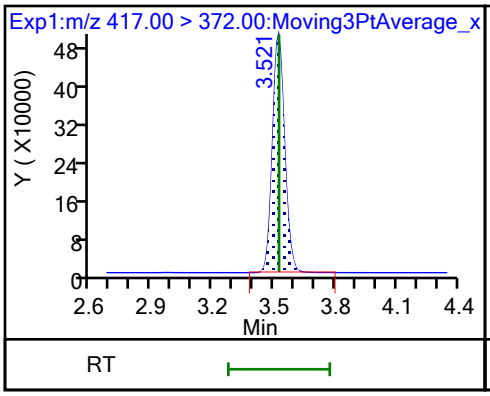
D 15 Perfluorooctanoic acid (M)



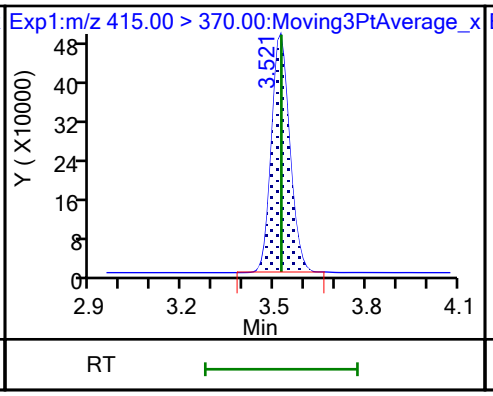
15 Perfluorooctanoic acid (M)



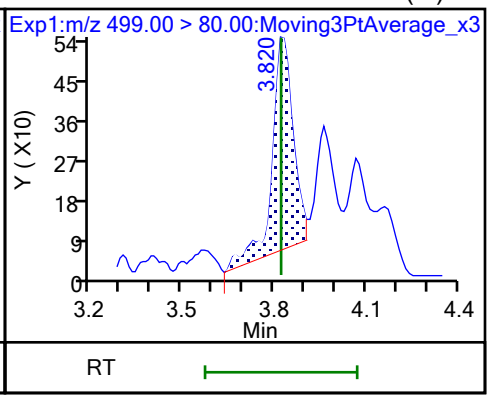
D 14 13C4 PFOA



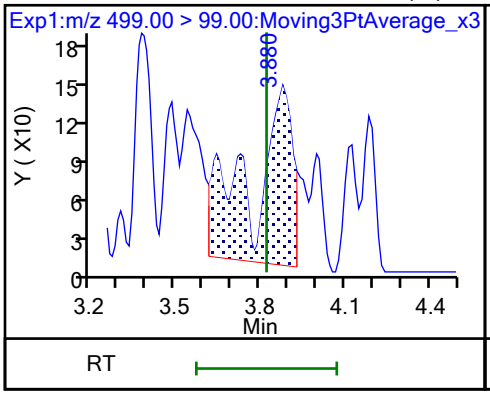
* 62 13C2 PFOA



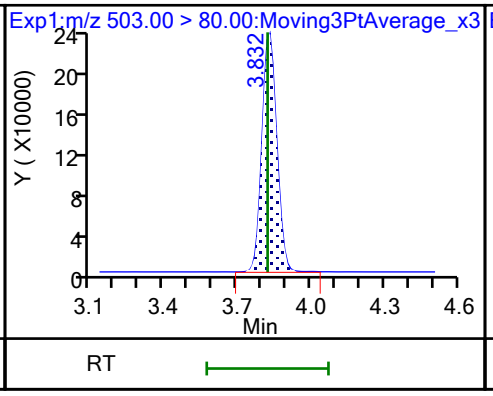
17 Perfluorooctanesulfonic acid (M)



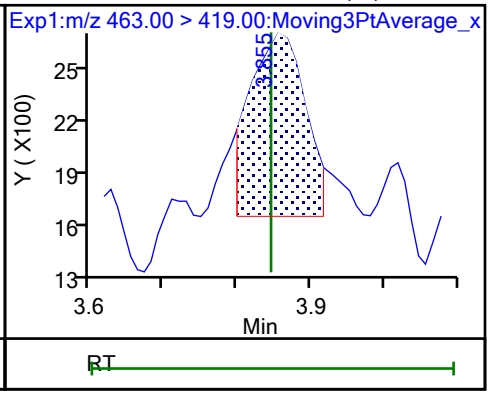
17 Perfluorooctanesulfonic acid (M)



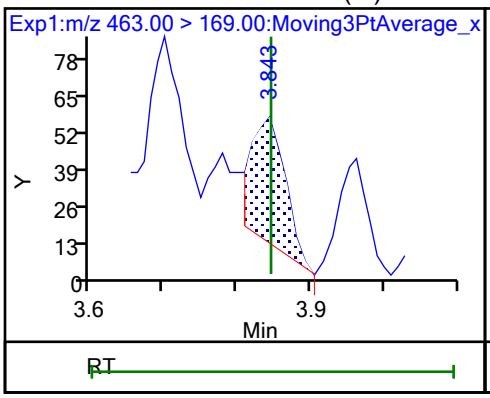
D 18 13C4 PFOS



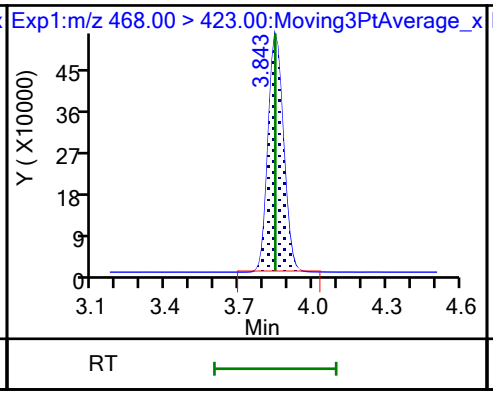
20 Perfluorononanoic acid (M)



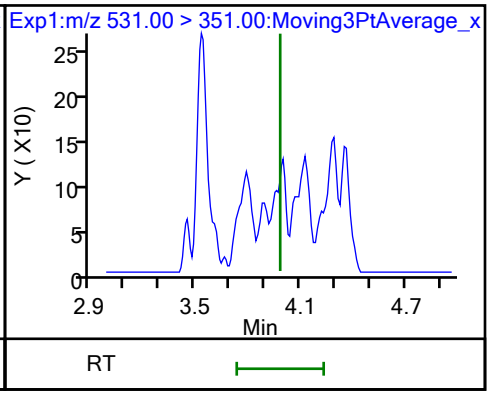
20 Perfluorononanoic acid (M)



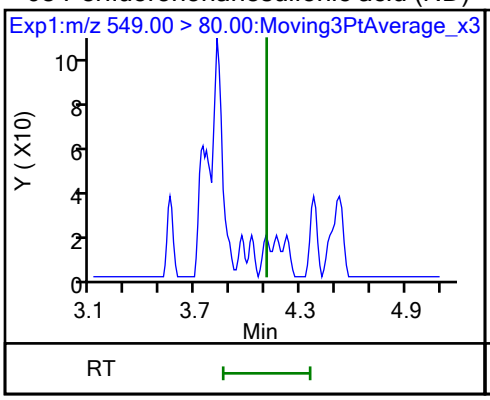
D 19 13C5 PFNA



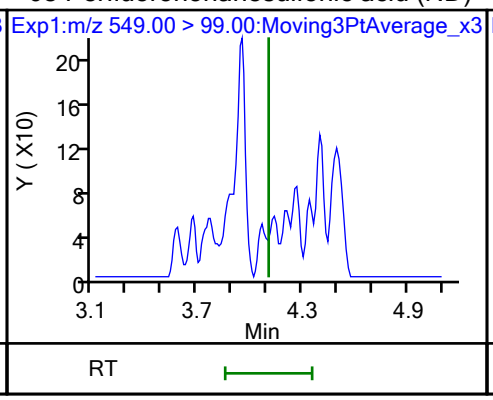
69 9-Chlorohexadecafluoro-3-oxanona (ND)



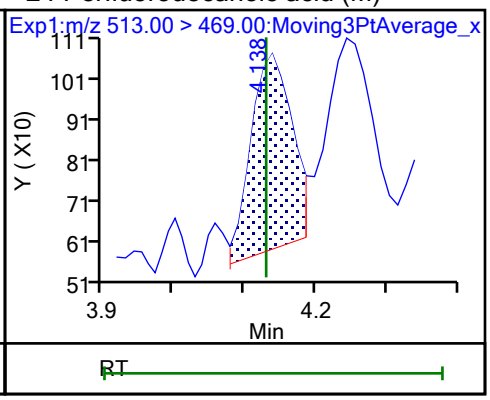
68 Perfluorononanesulfonic acid (ND)



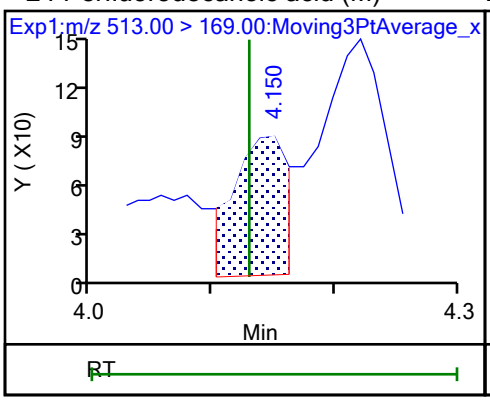
68 Perfluorononanesulfonic acid (ND)



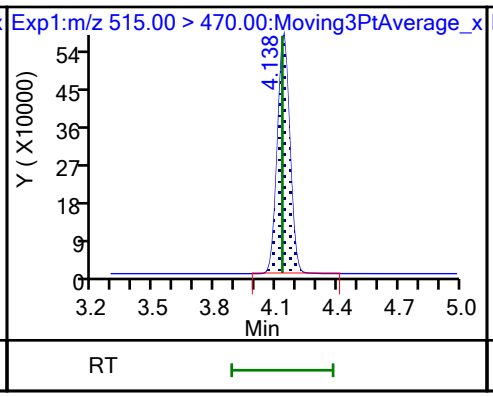
24 Perfluorodecanoic acid (M)



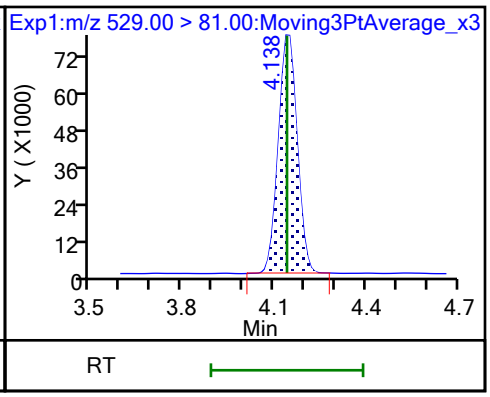
24 Perfluorodecanoic acid (M)



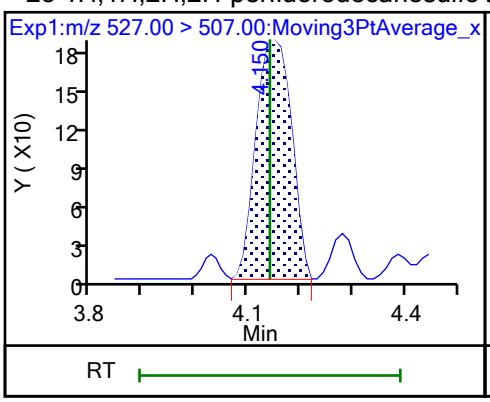
D 23 13C2 PFDA



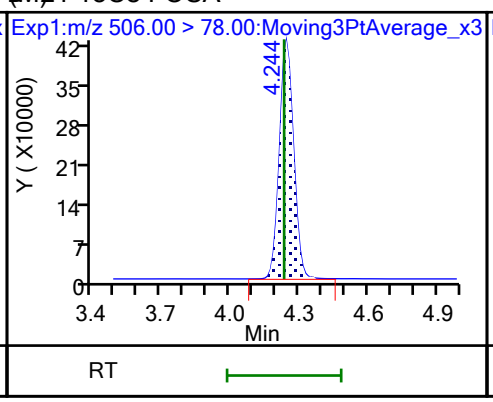
D 26 M2-8:2 FTS



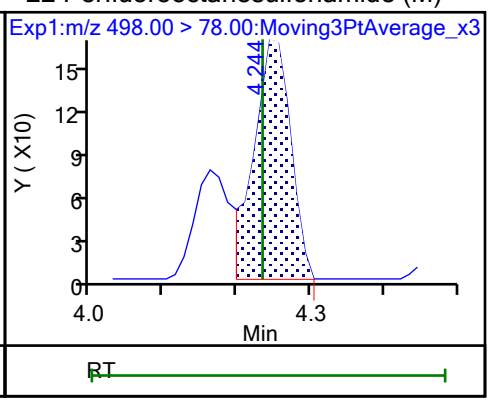
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



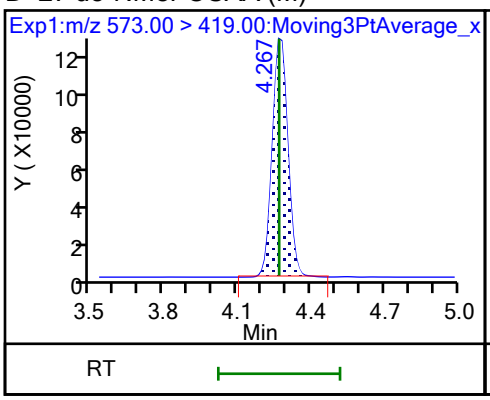
D 21 13C8 FOSA



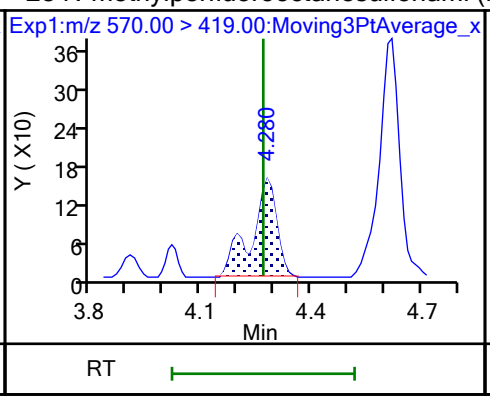
22 Perfluorooctanesulfonamide (M)



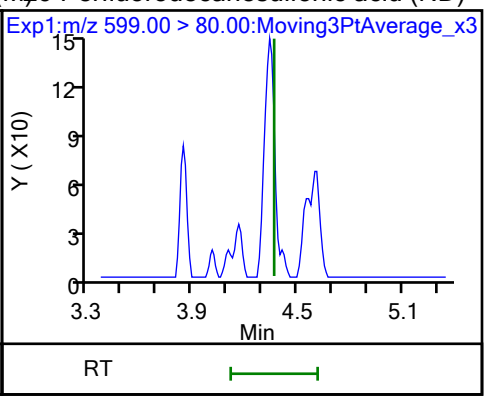
D 27 d3-NMeFOSAA (M)



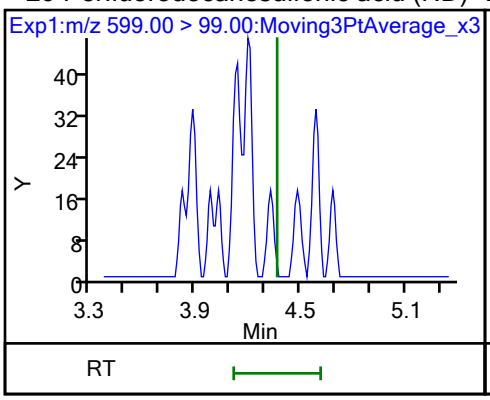
28 N-methylperfluorooctanesulfonami (M)



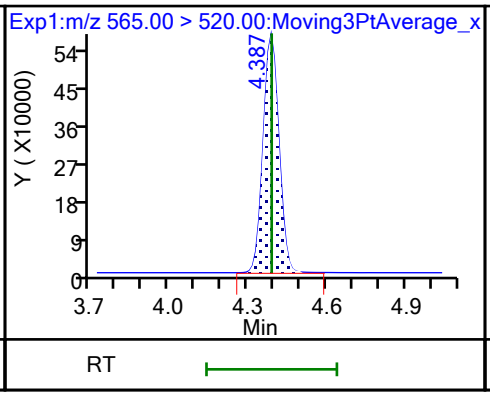
29 Perfluorodecanesulfonic acid (ND)



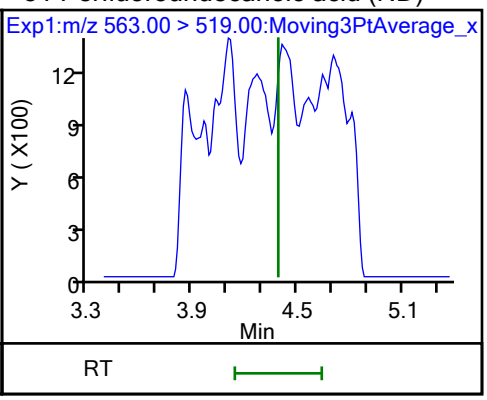
29 Perfluorodecanesulfonic acid (ND)



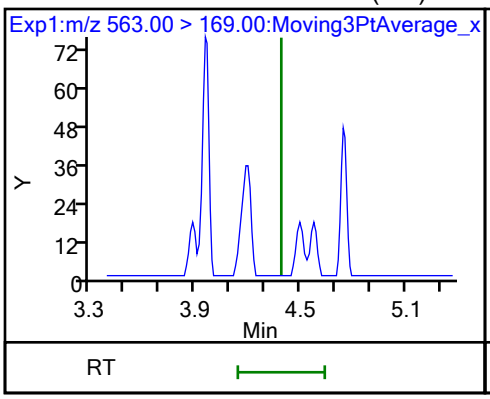
D 30 13C2 PFUnA



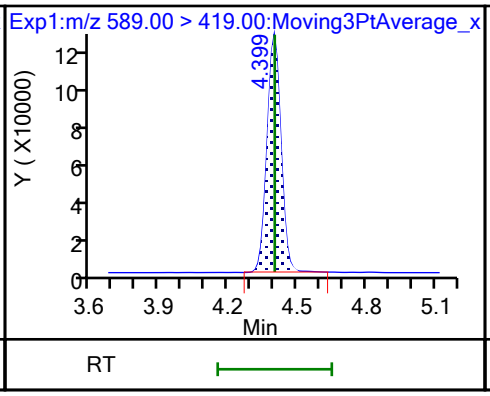
31 Perfluoroundecanoic acid (ND)



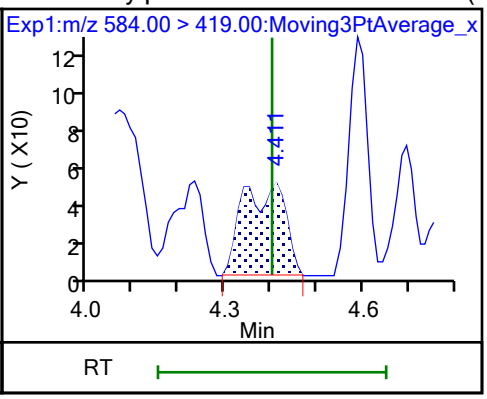
31 Perfluoroundecanoic acid (ND)



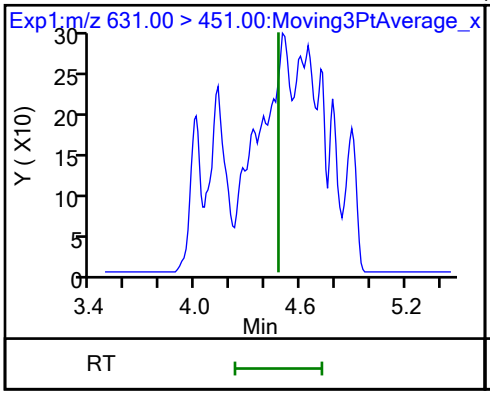
D 32 d5-NEtFOSAA



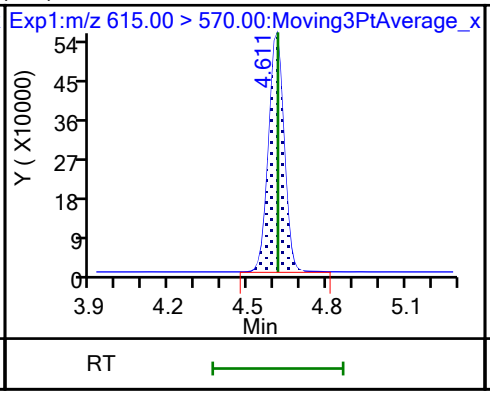
33 N-ethylperfluorooctanesulfonamid (M)



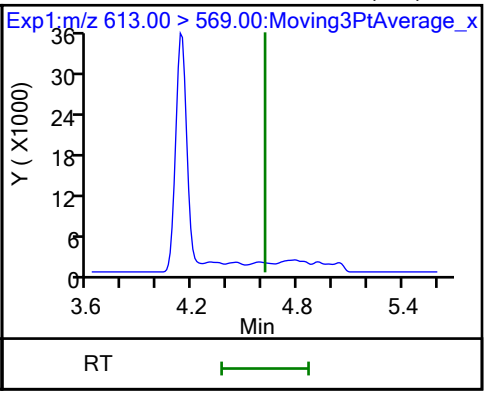
66 11-Chloroeicosafluoro-3-oxaundec (ND)



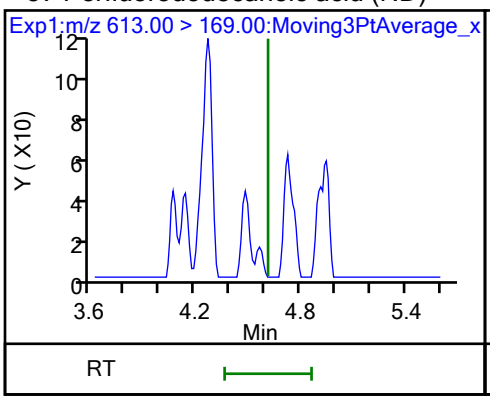
D 36 13C2 PFDoA



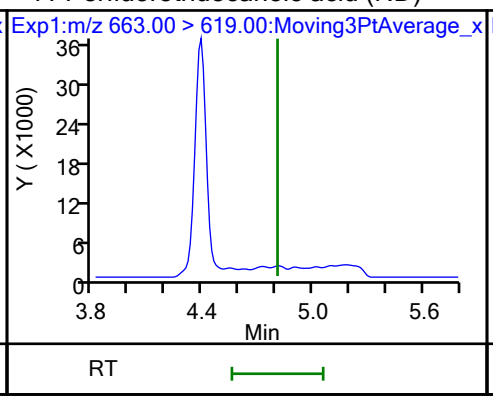
37 Perfluorododecanoic acid (ND)



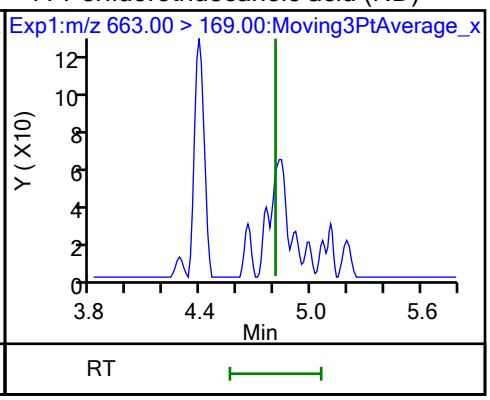
37 Perfluorododecanoic acid (ND)



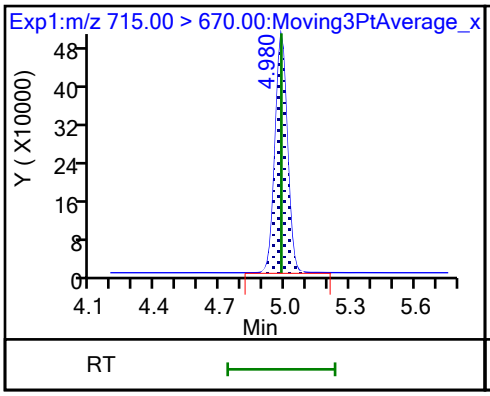
41 Perfluorotridecanoic acid (ND)



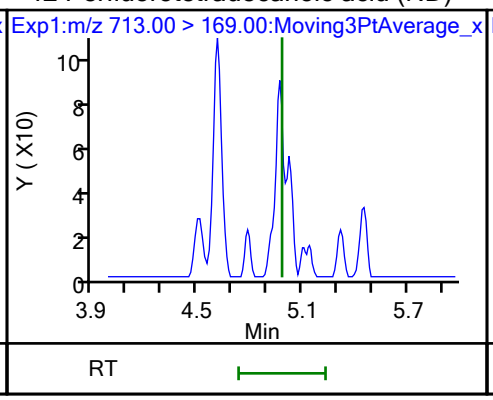
41 Perfluorotridecanoic acid (ND)



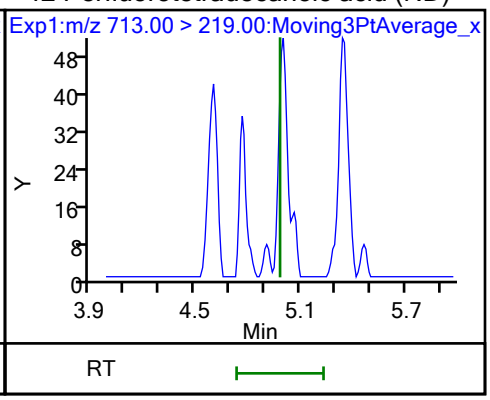
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

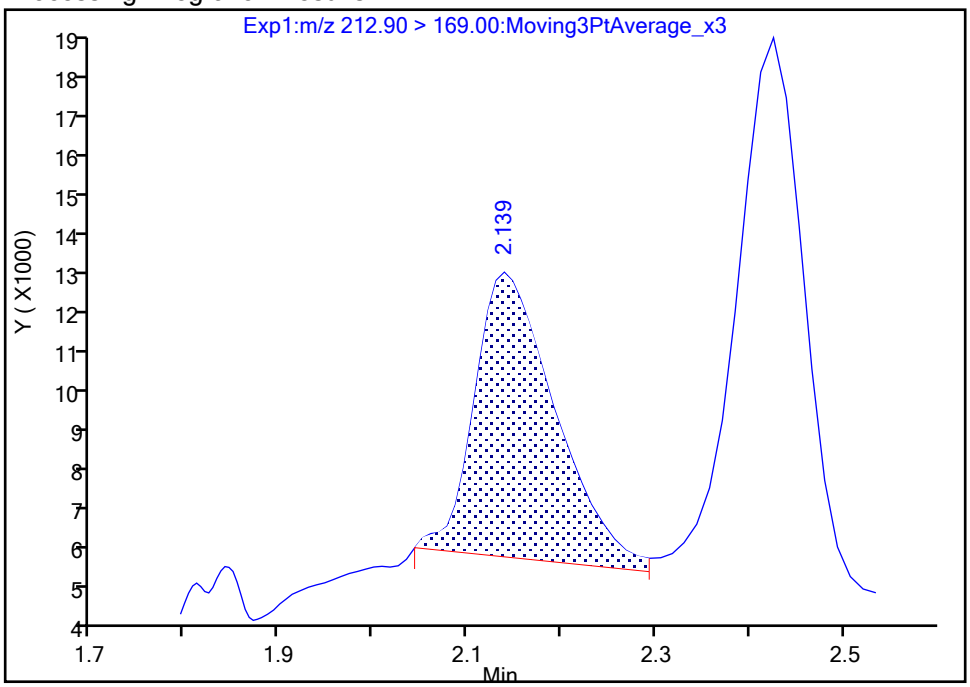
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

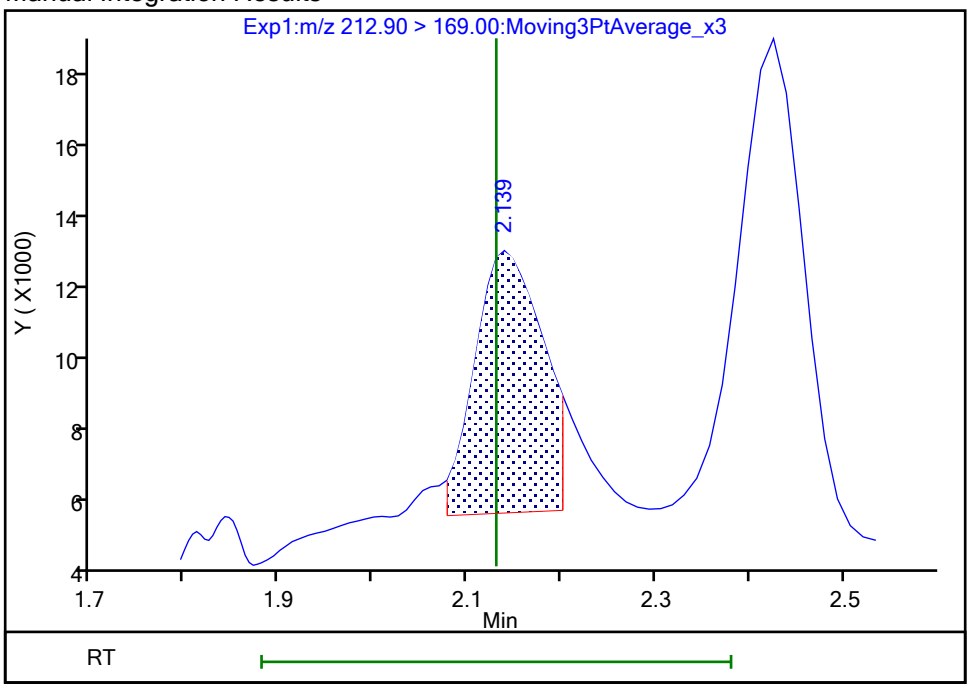
Processing Integration Results

RT: 2.14
Area: 40986
Amount: -0.015865
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 34573
Amount: -0.019779
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

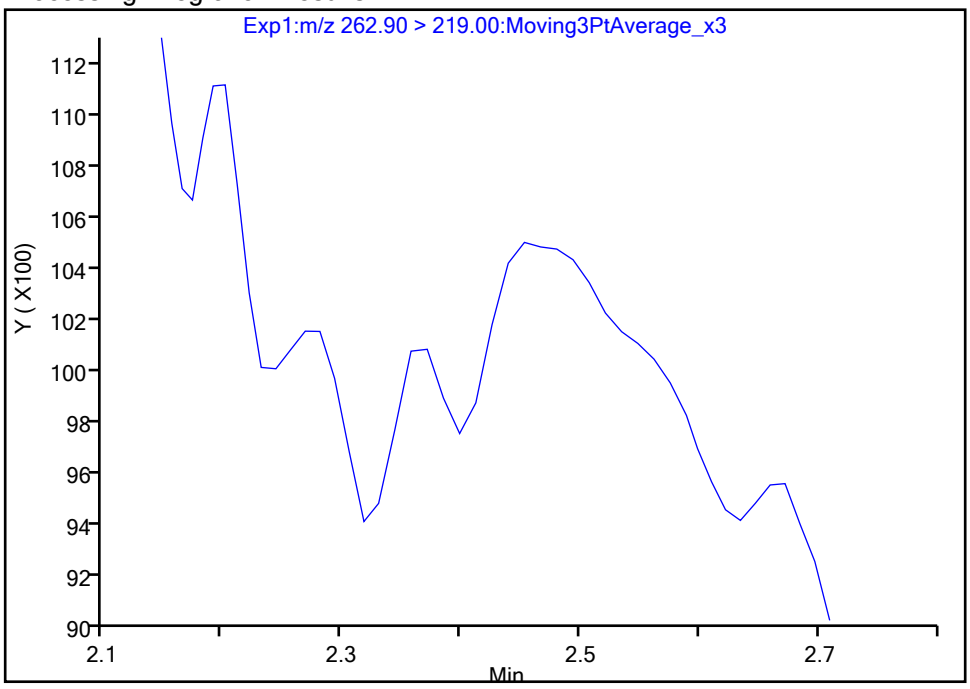
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

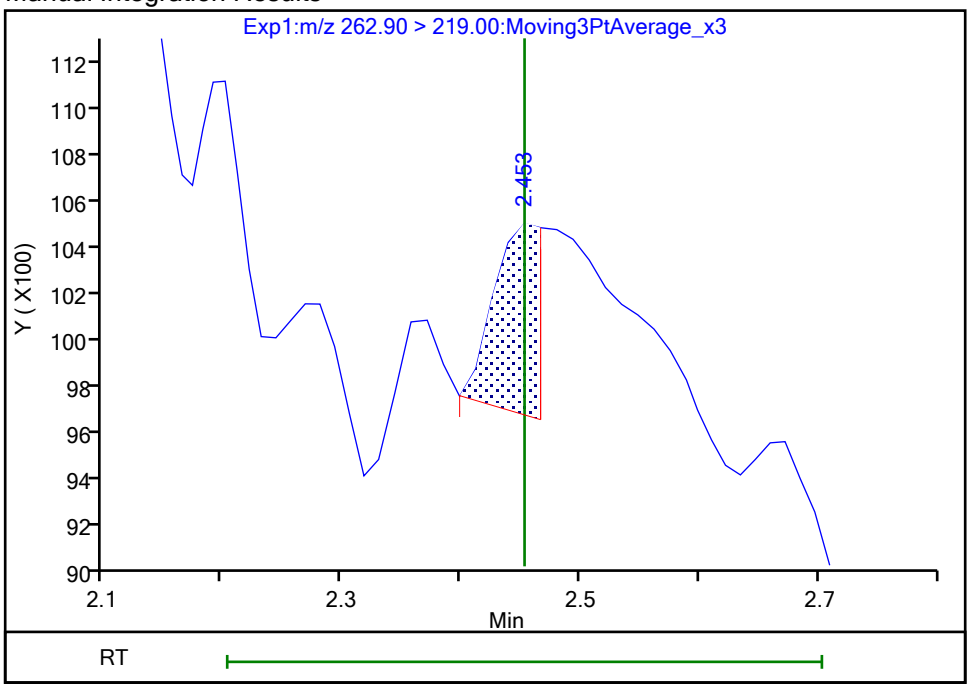
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.45
Area: 2009
Amount: 0.001436
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

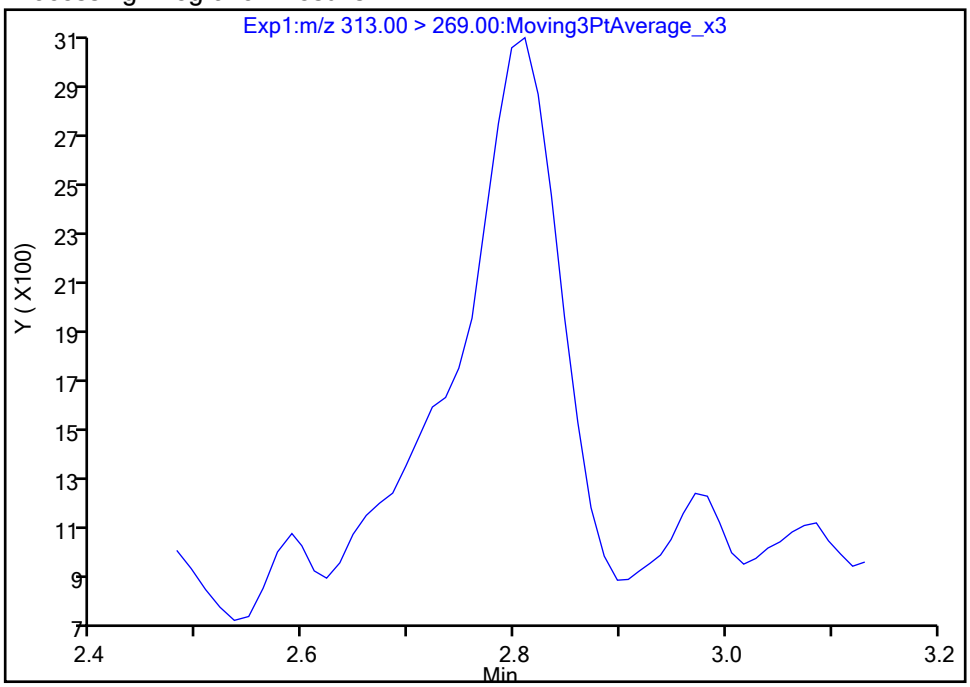
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

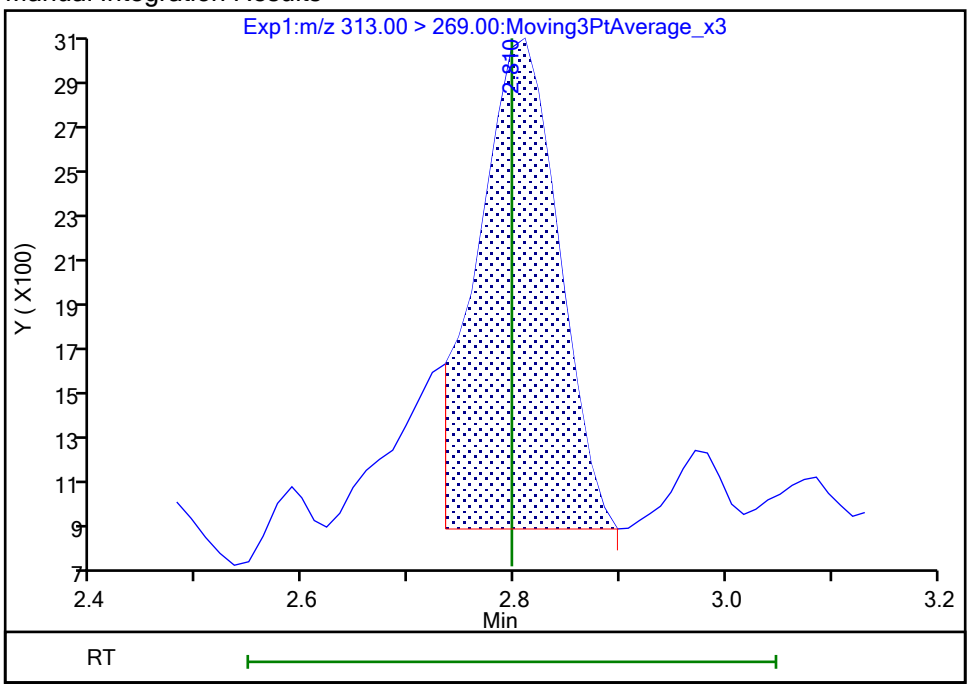
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.81
Area: 11116
Amount: 0.007013
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

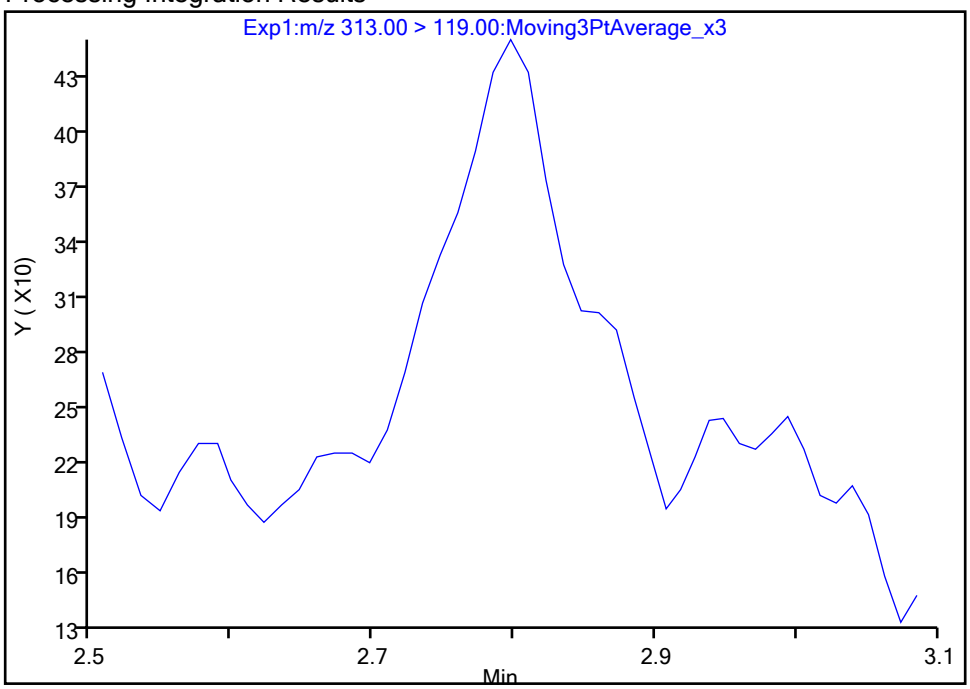
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

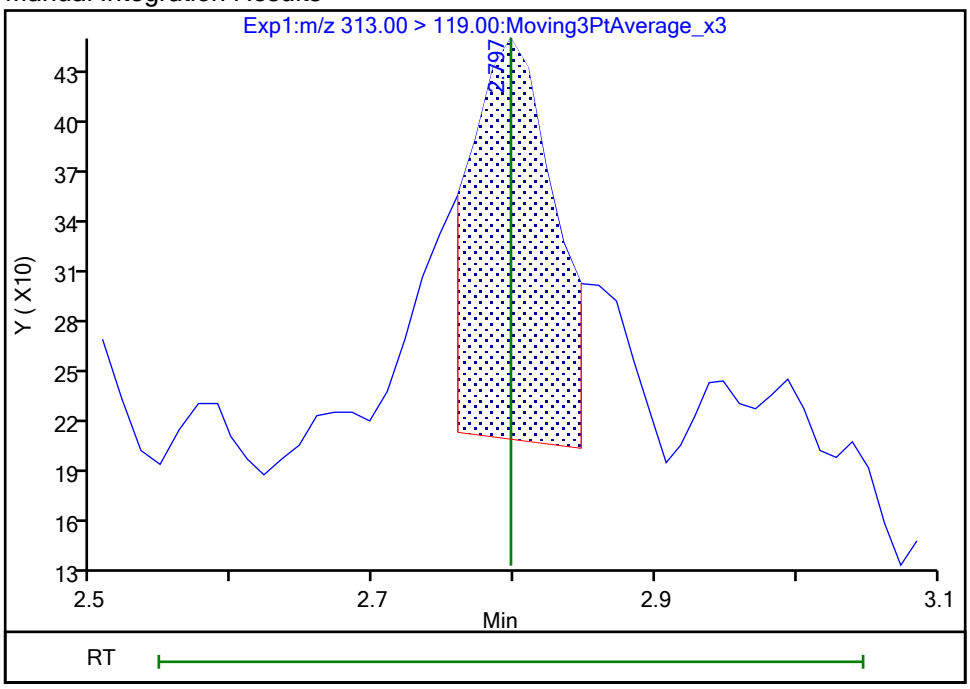
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 915
Amount: 0.007013
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

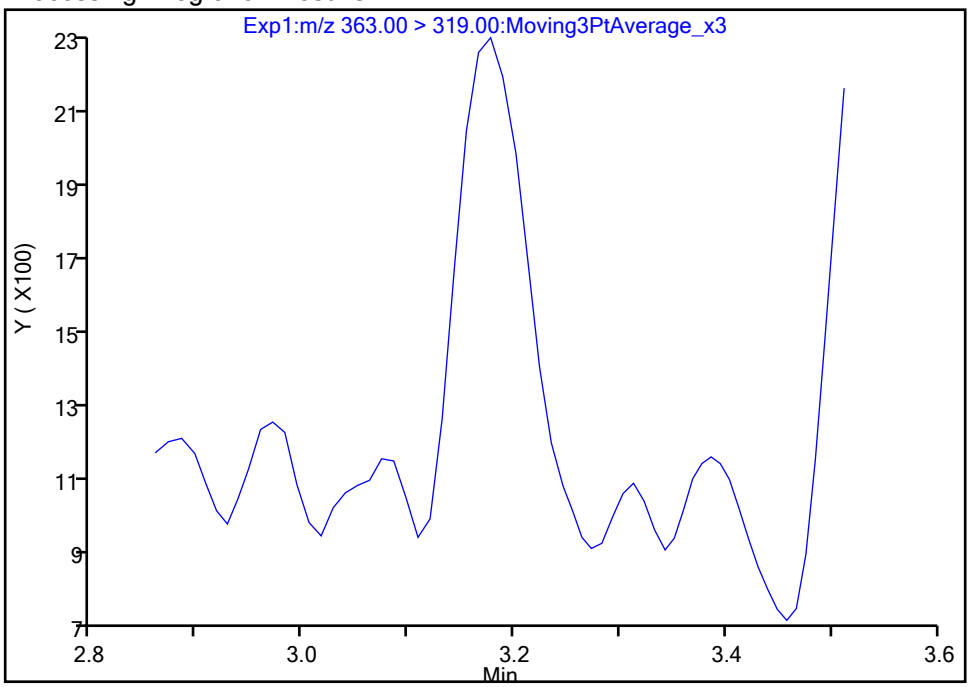
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

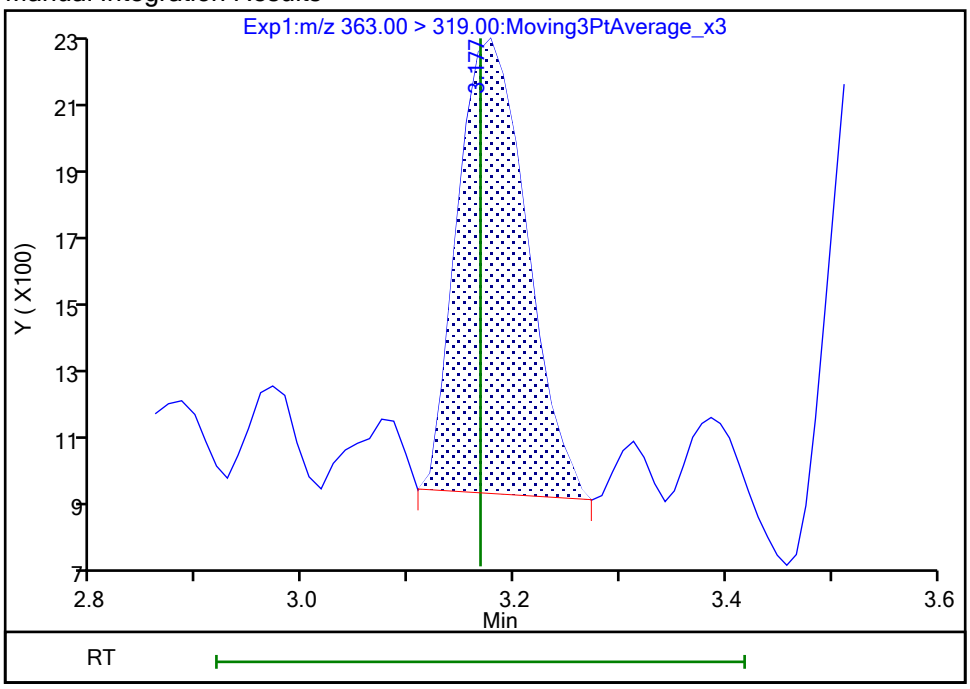
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.18
Area: 6204
Amount: 0.003681
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

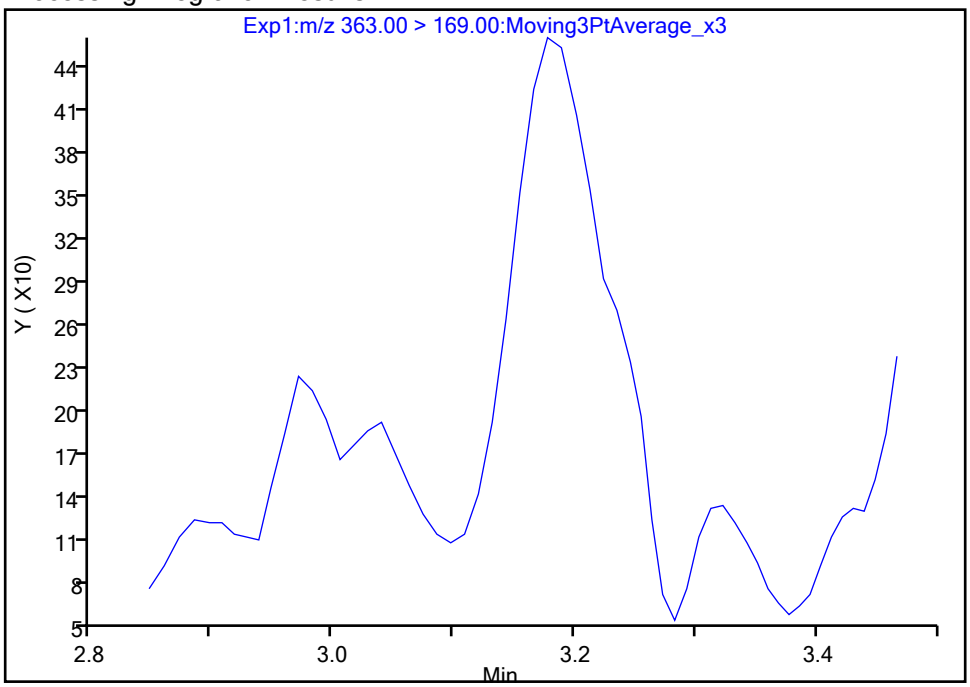
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

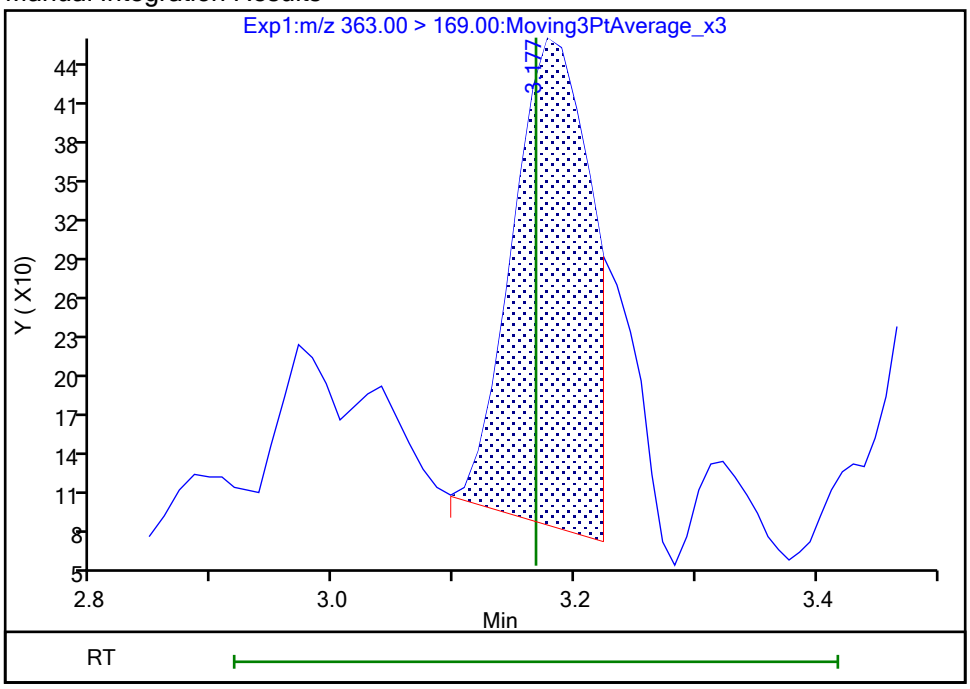
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.18
Area: 1642
Amount: 0.003681
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

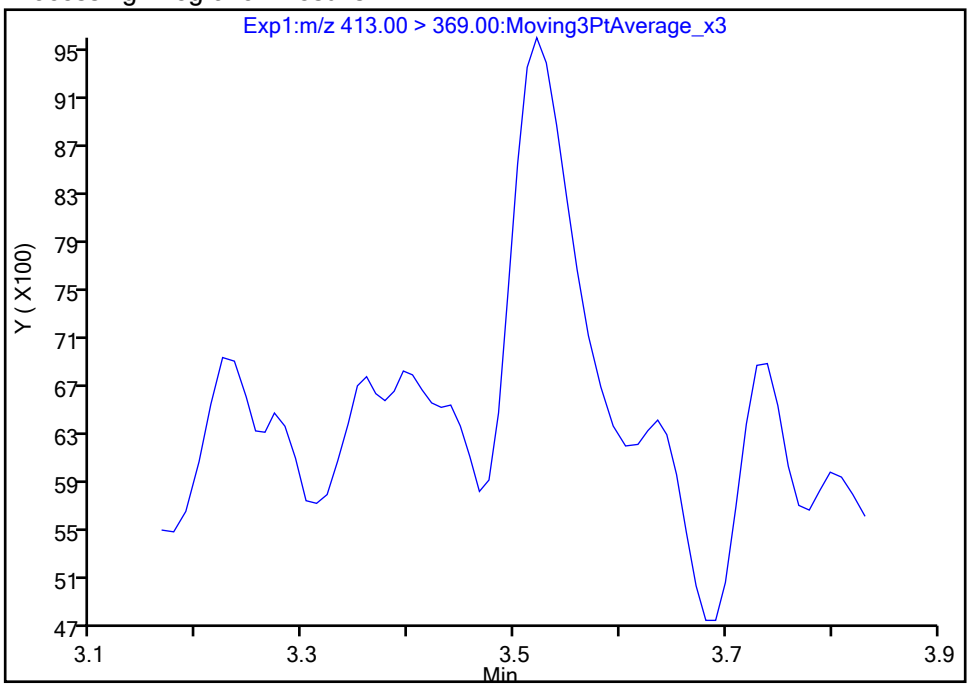
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

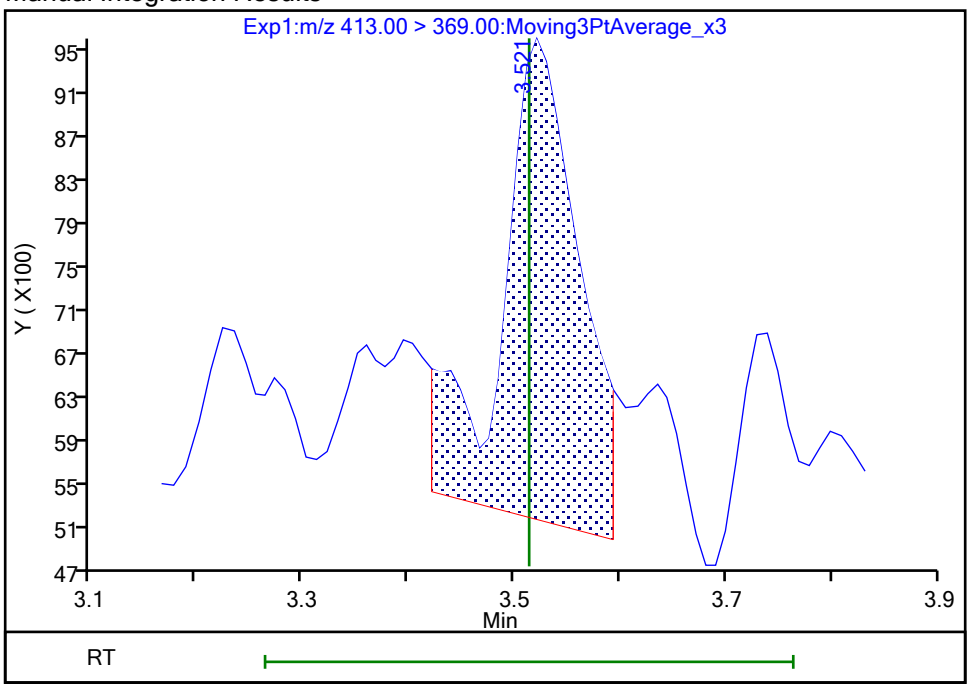
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.52
Area: 22520
Amount: 0.012537
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

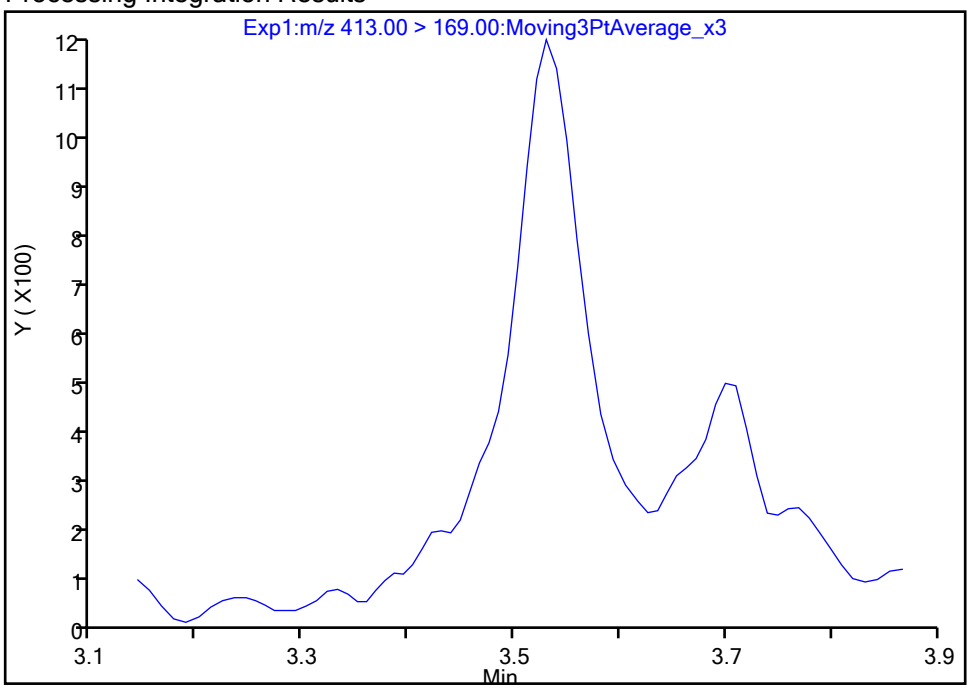
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

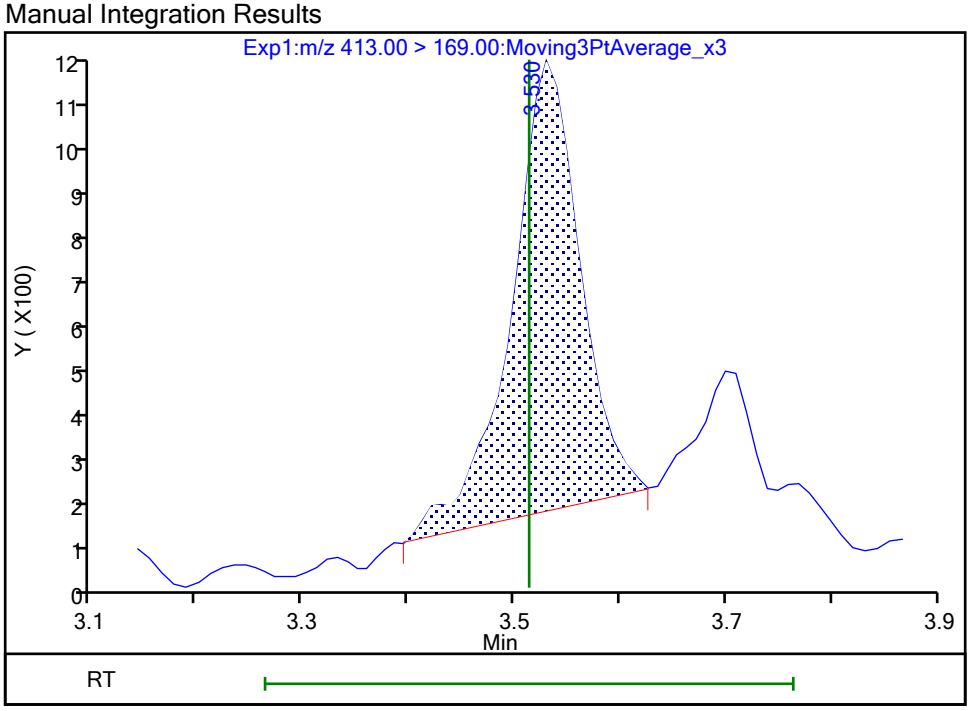
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.53
Area: 4603
Amount: 0.012537
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

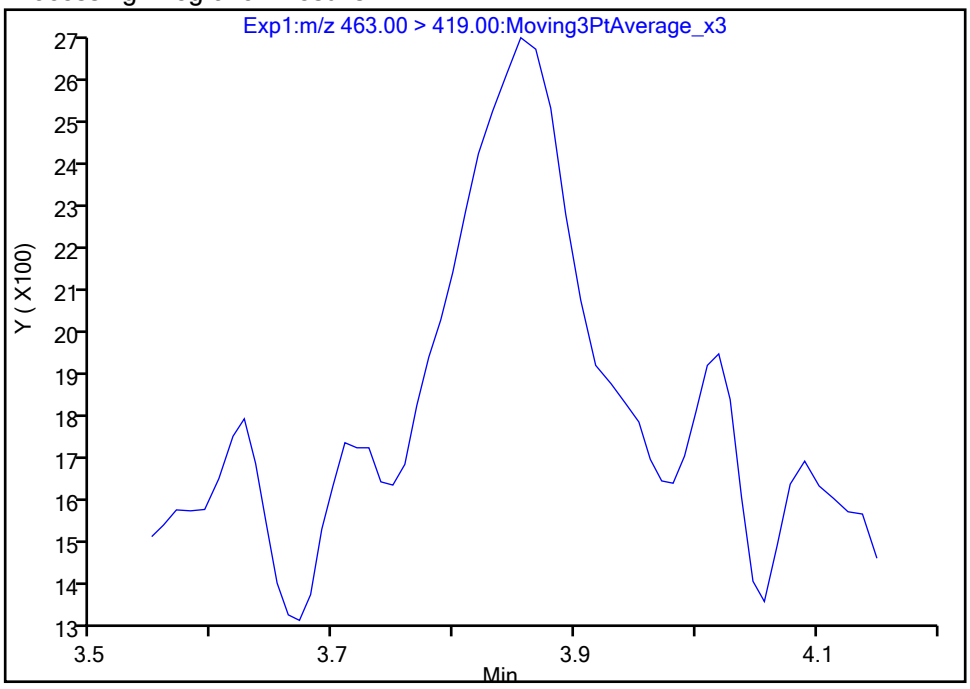
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

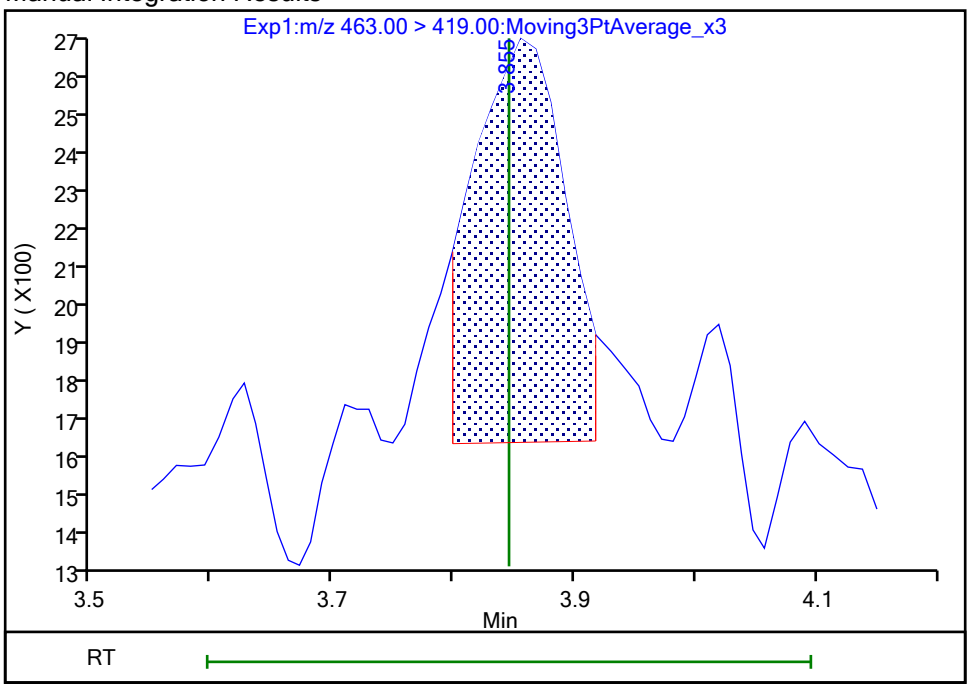
Not Detected
Expected RT: 3.85

Processing Integration Results



Manual Integration Results

RT: 3.86
Area: 5028
Amount: 0.002821
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

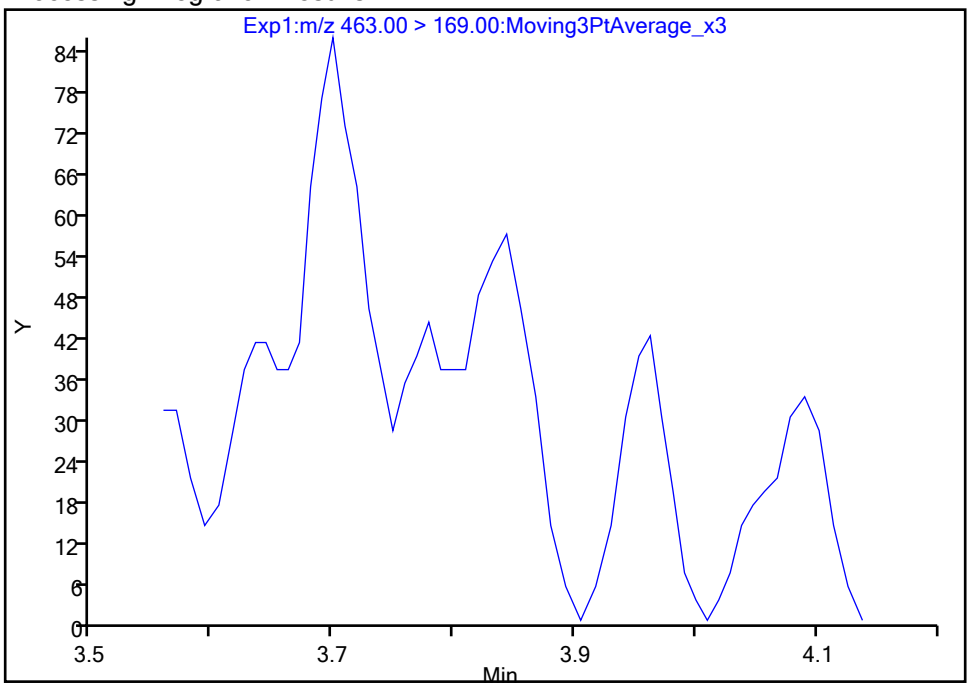
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

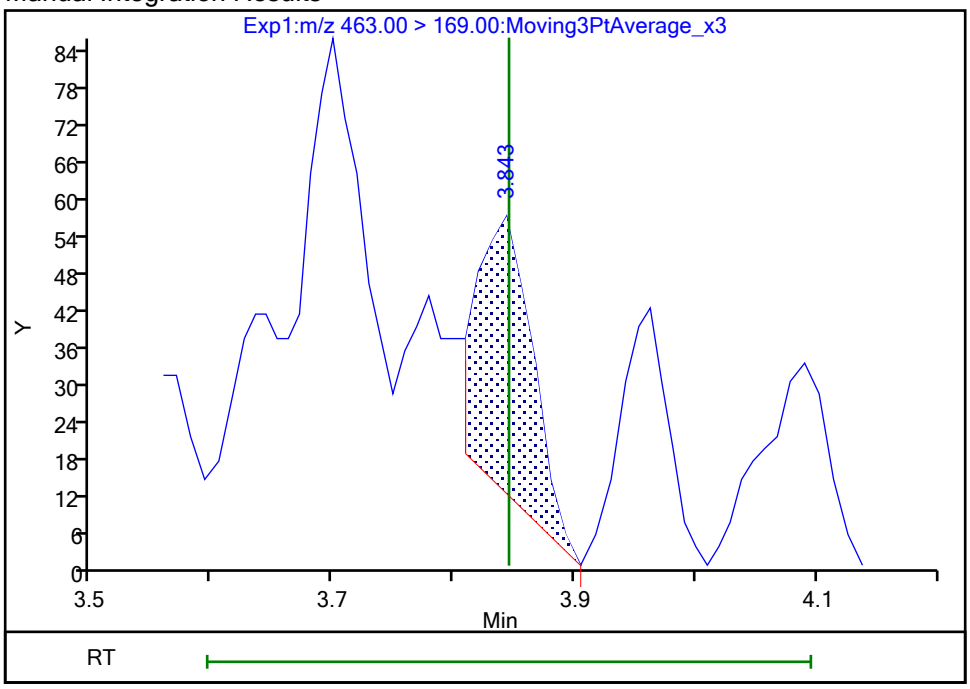
Not Detected
Expected RT: 3.85

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 141
Amount: 0.002821
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

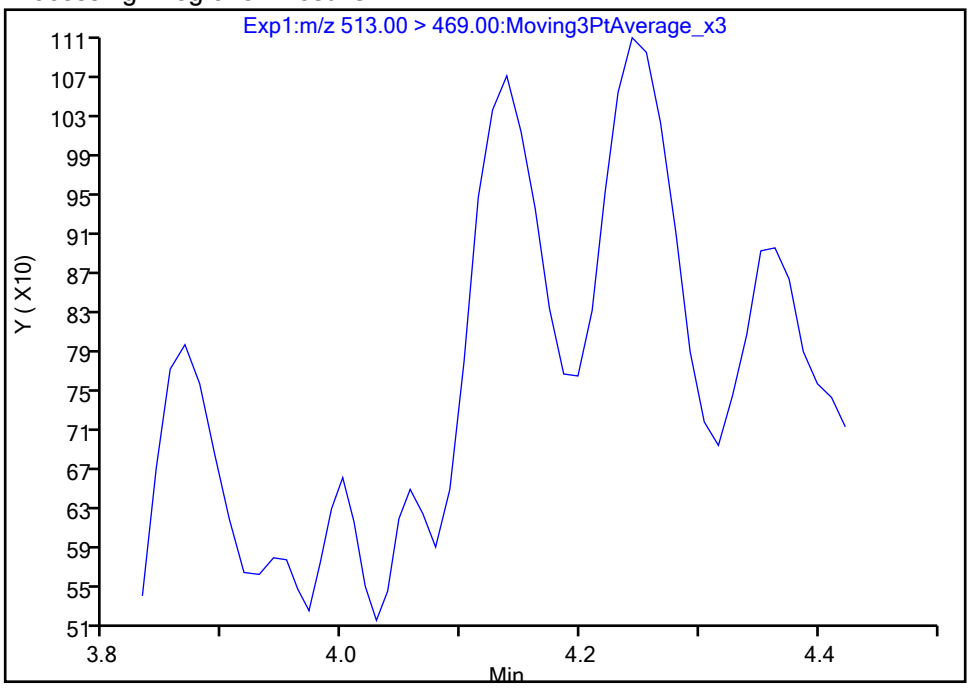
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

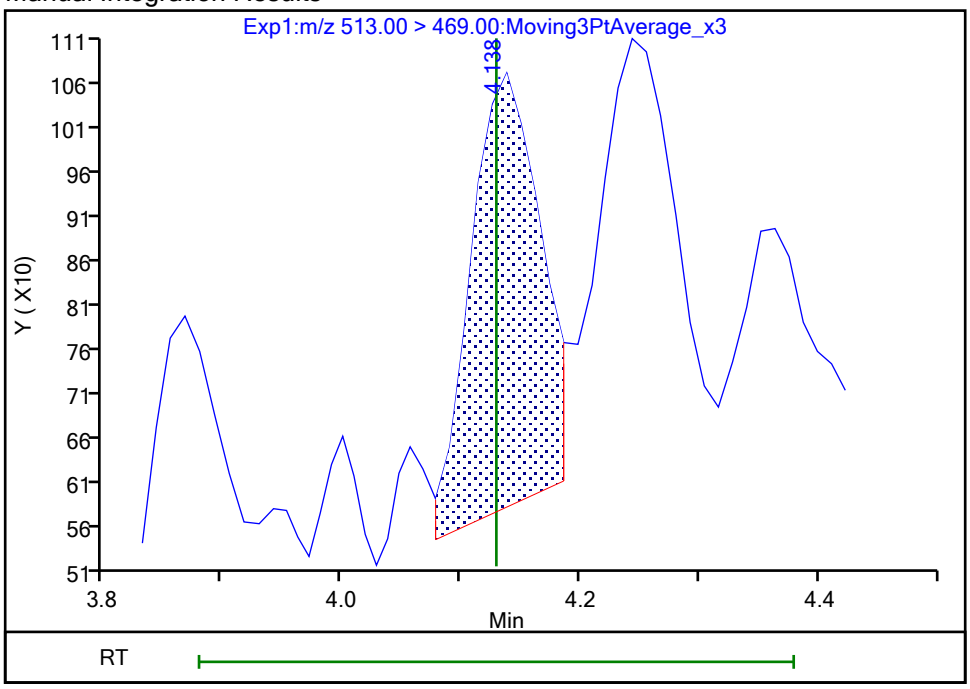
Not Detected
Expected RT: 4.13

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 1971
Amount: 0.001021
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

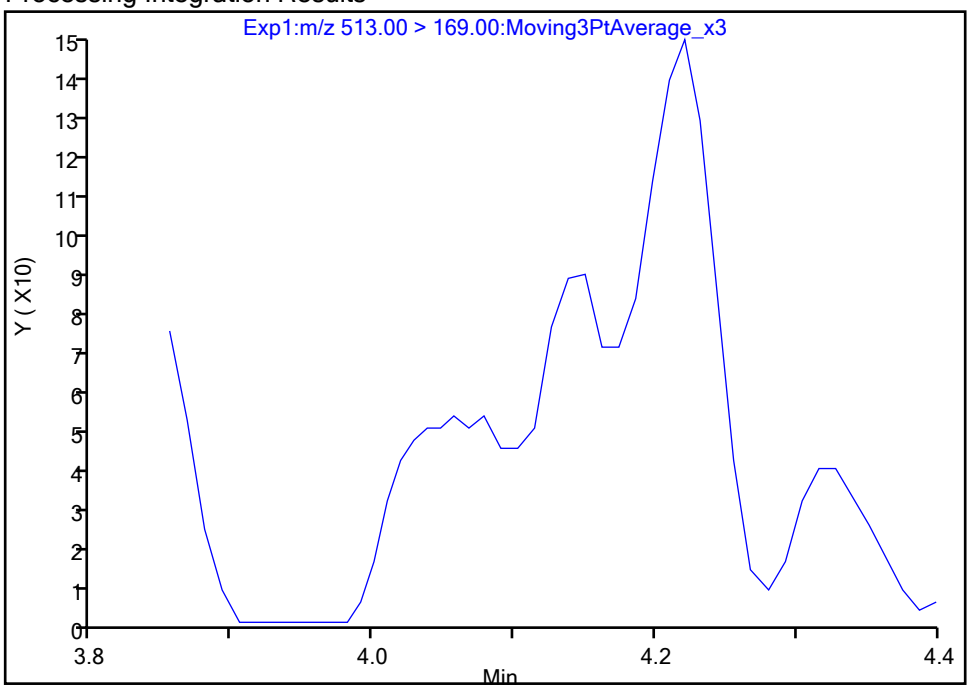
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

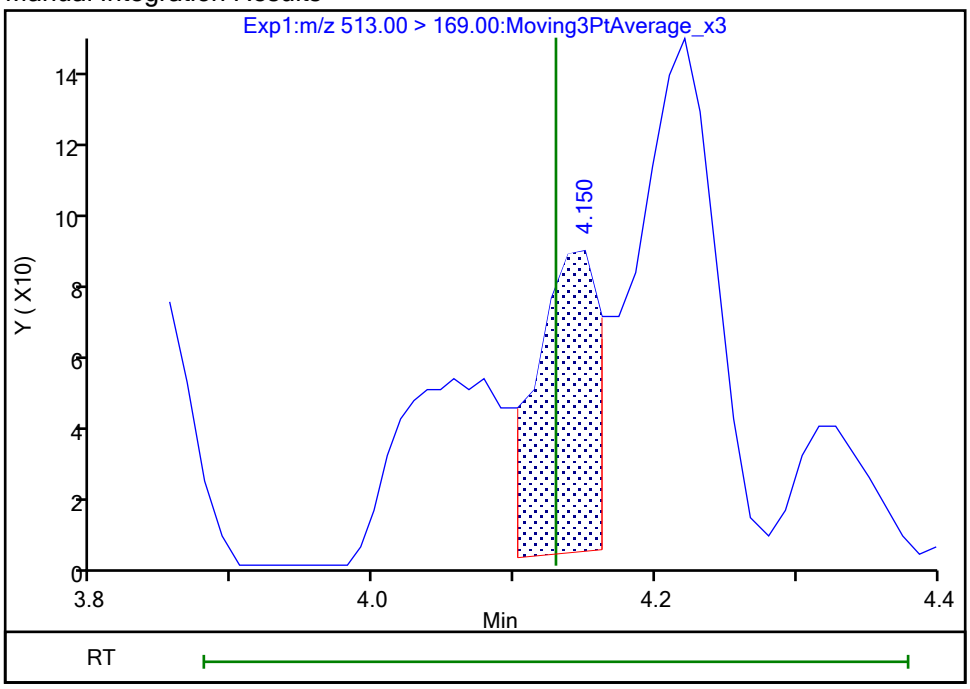
Processing Integration Results

Not Detected
Expected RT: 4.13



Manual Integration Results

RT: 4.15
Area: 238
Amount: 0.001021
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

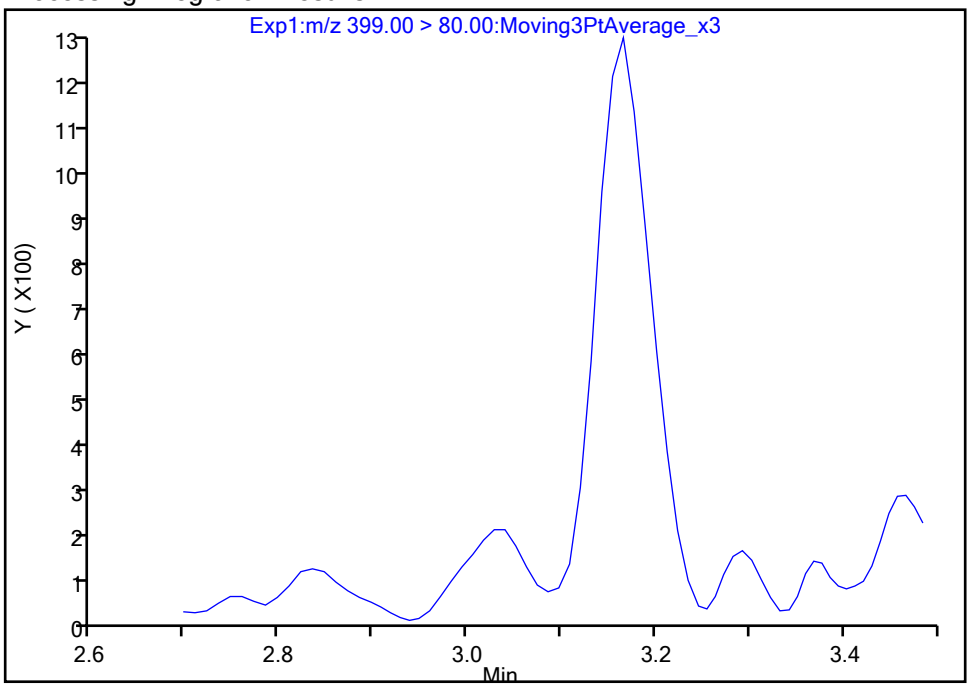
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

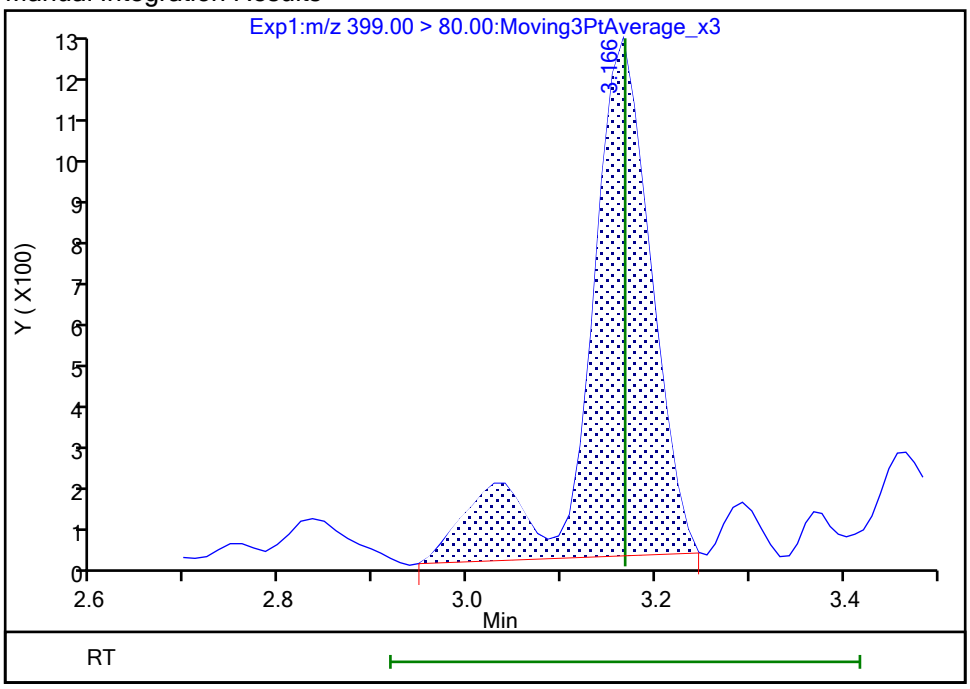
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 5721
Amount: 0.003917
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

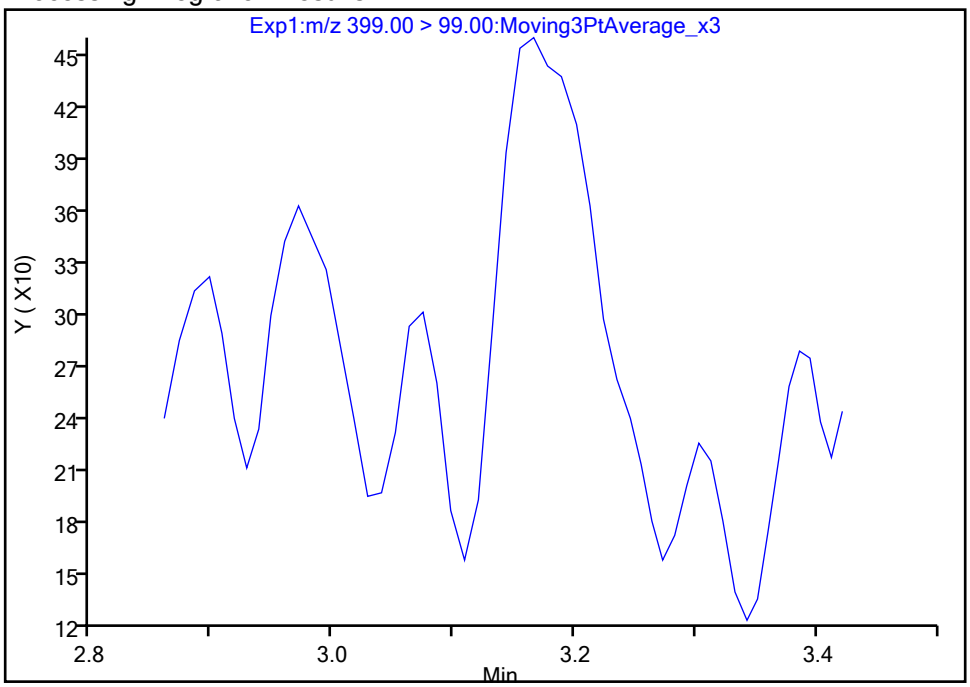
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

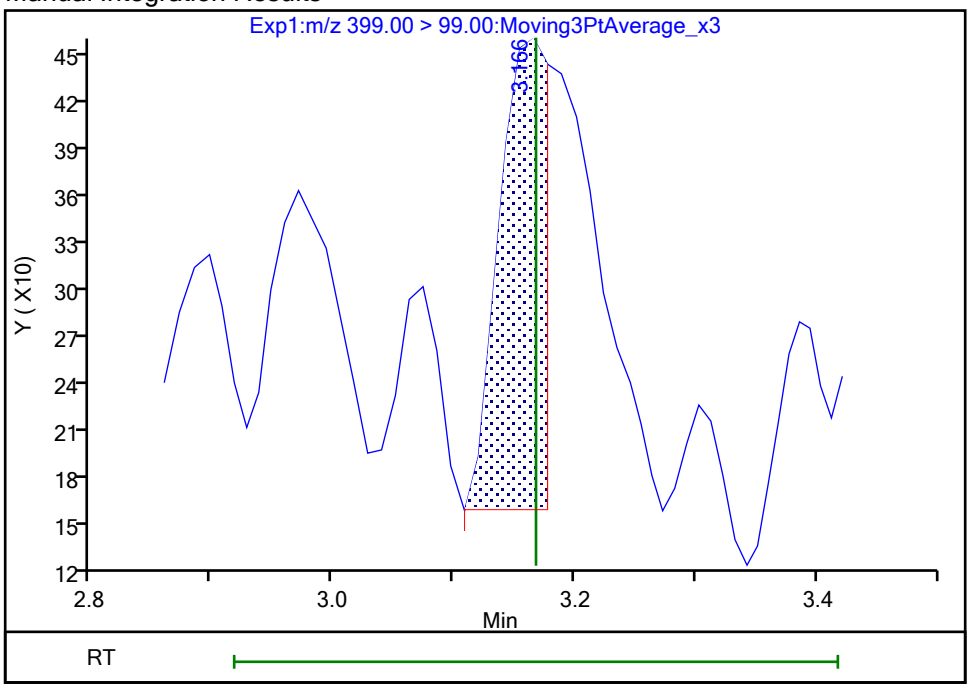
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 768
Amount: 0.003917
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

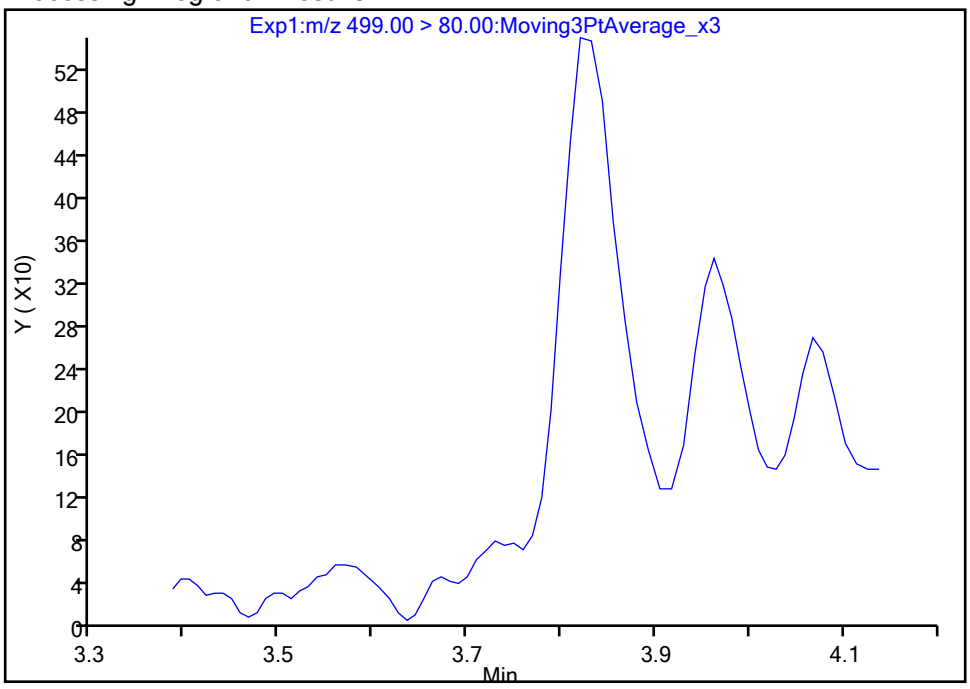
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

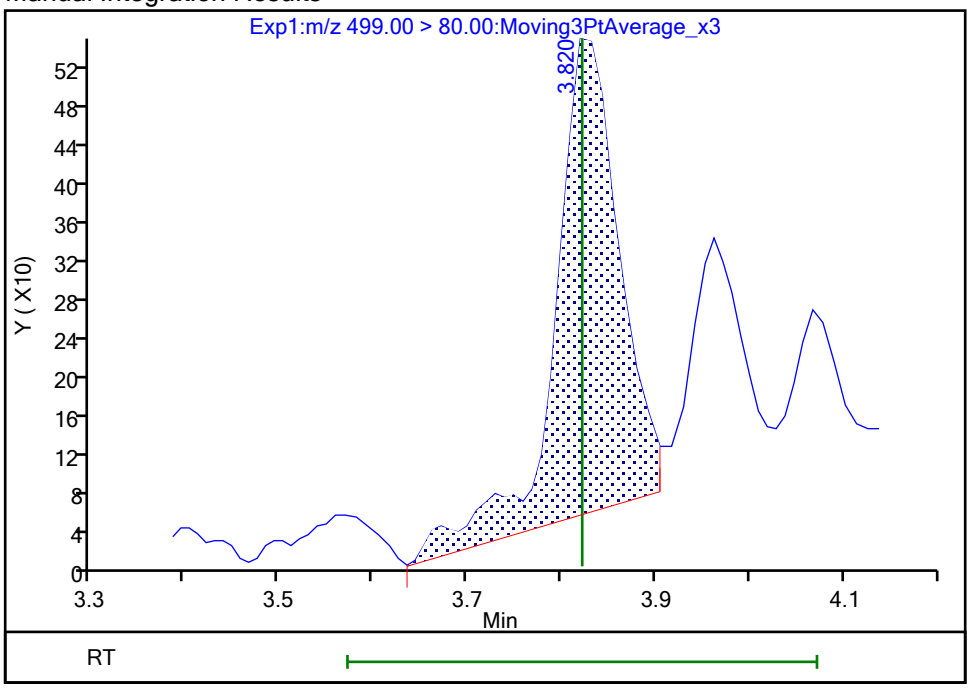
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.82
Area: 2306
Amount: 0.002374
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

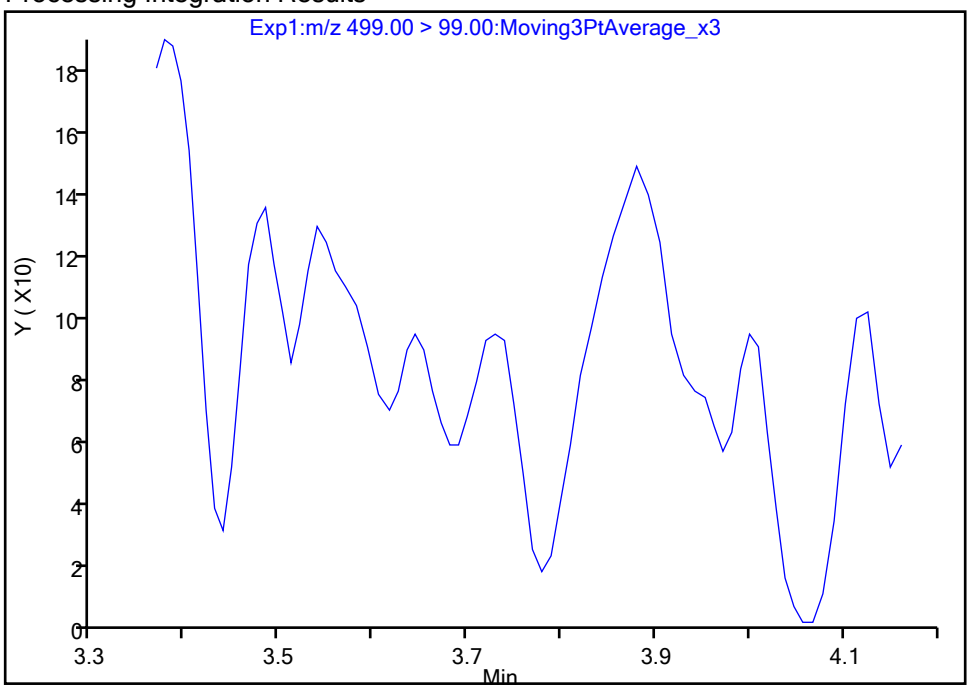
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

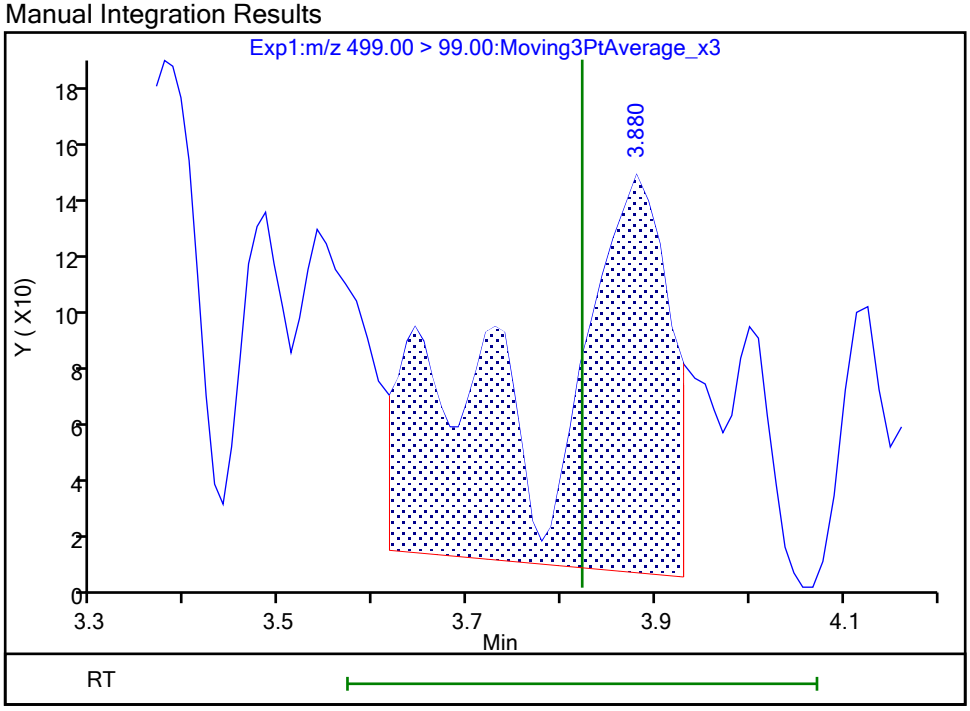
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.88
Area: 1365
Amount: 0.002374
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

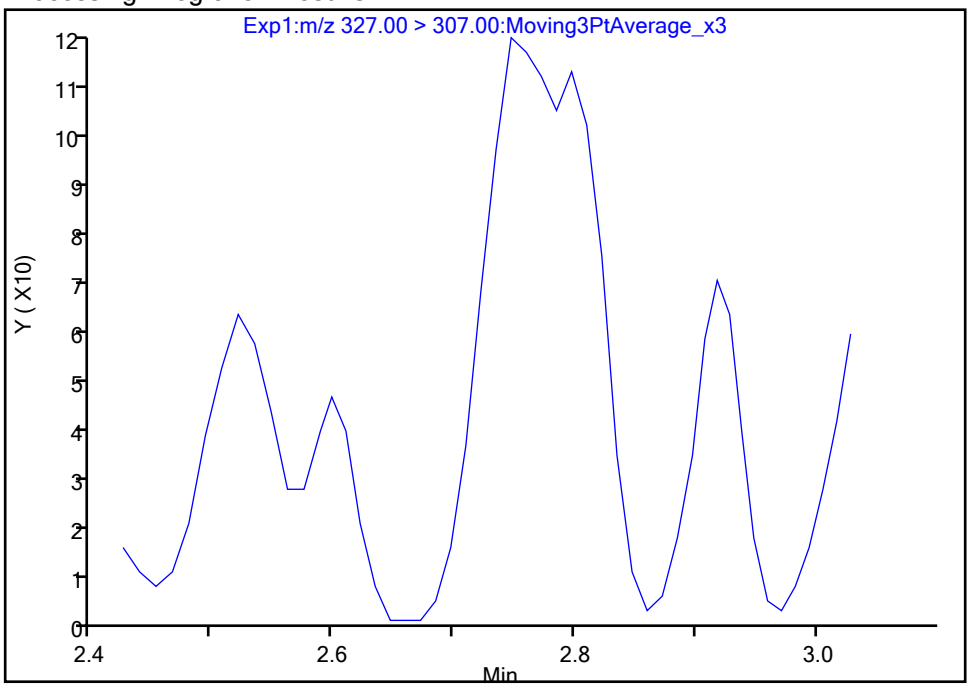
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

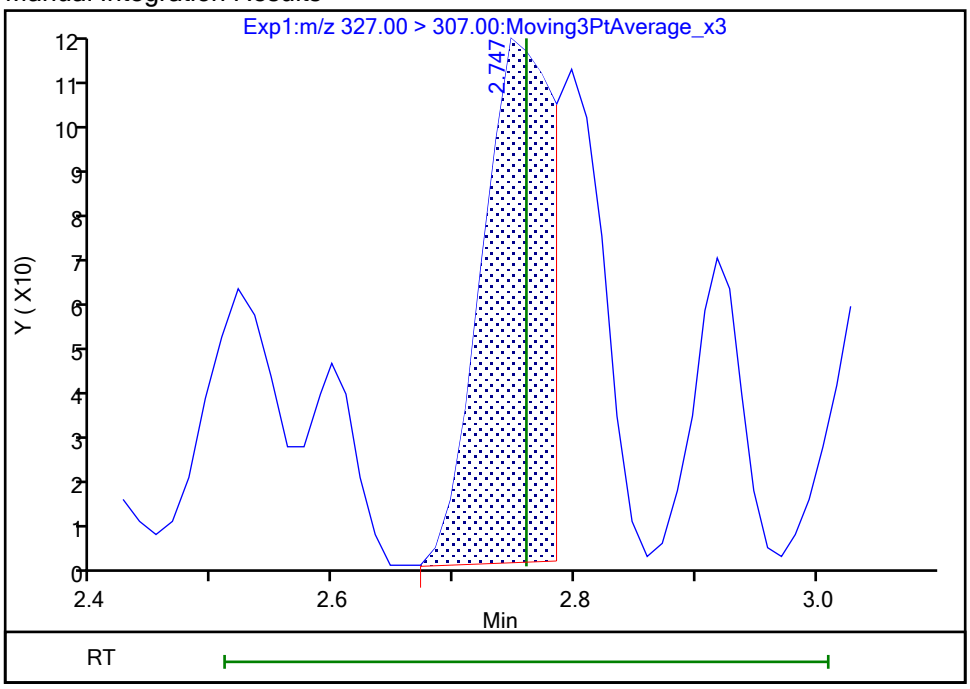
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 463
Amount: 0.000694
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:56:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

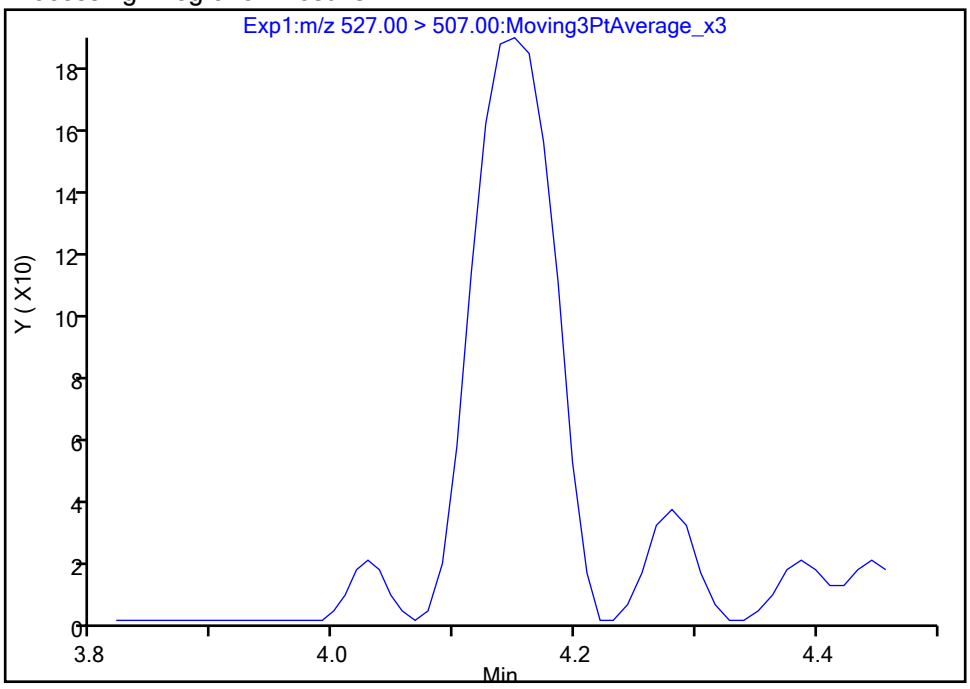
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

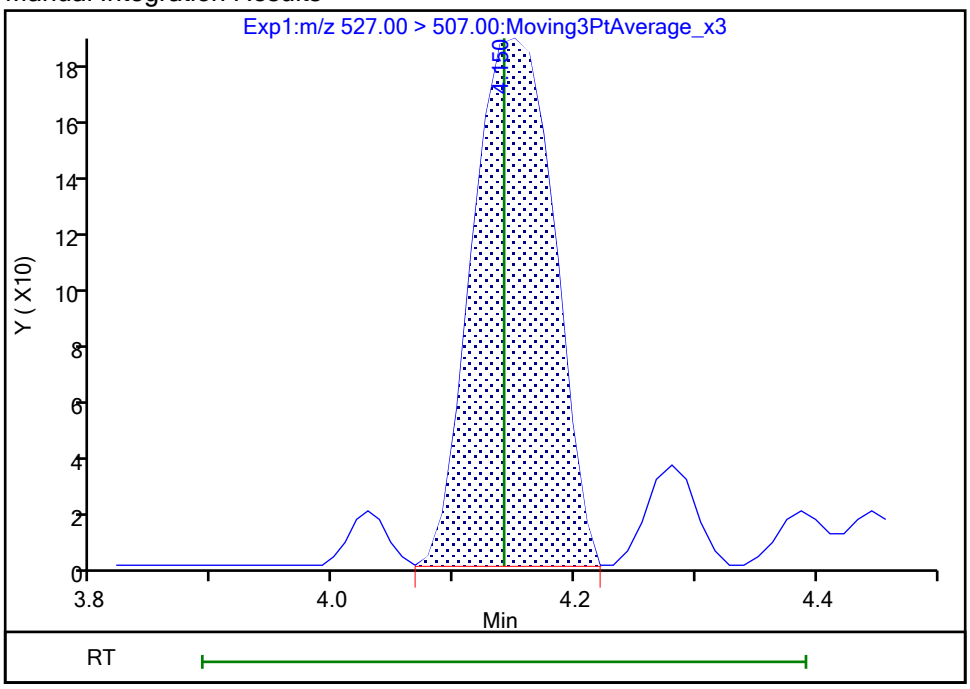
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 868
Amount: 0.001401
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

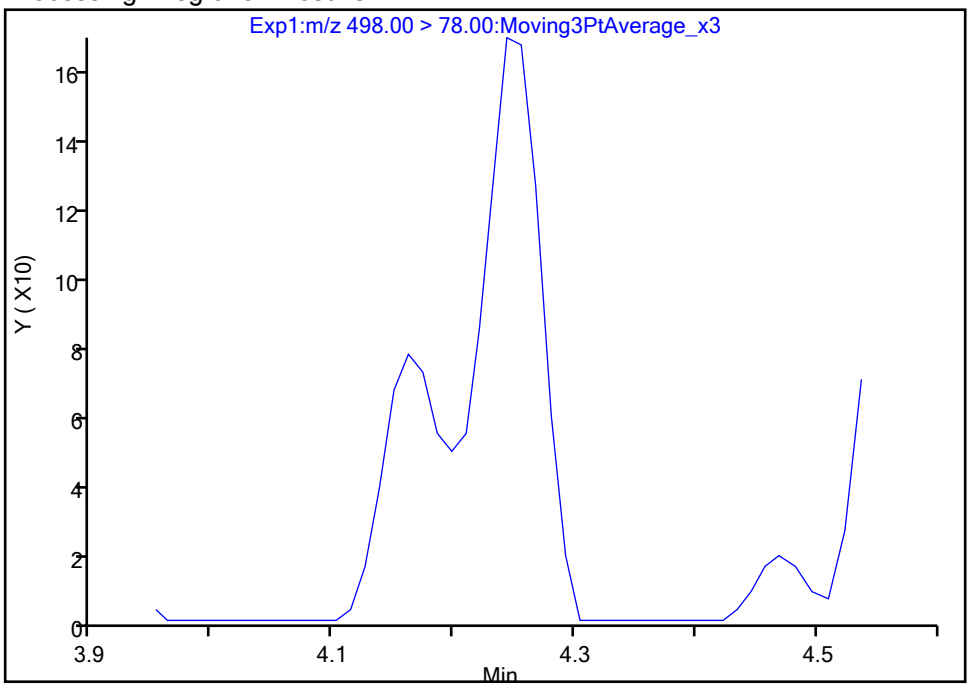
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

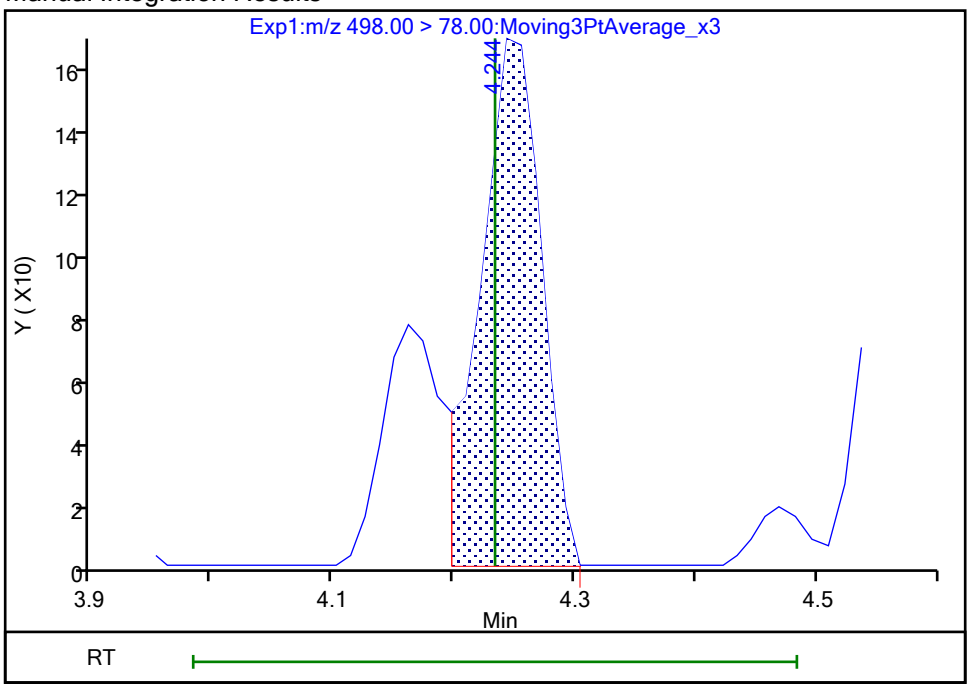
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 563
Amount: 0.000404
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

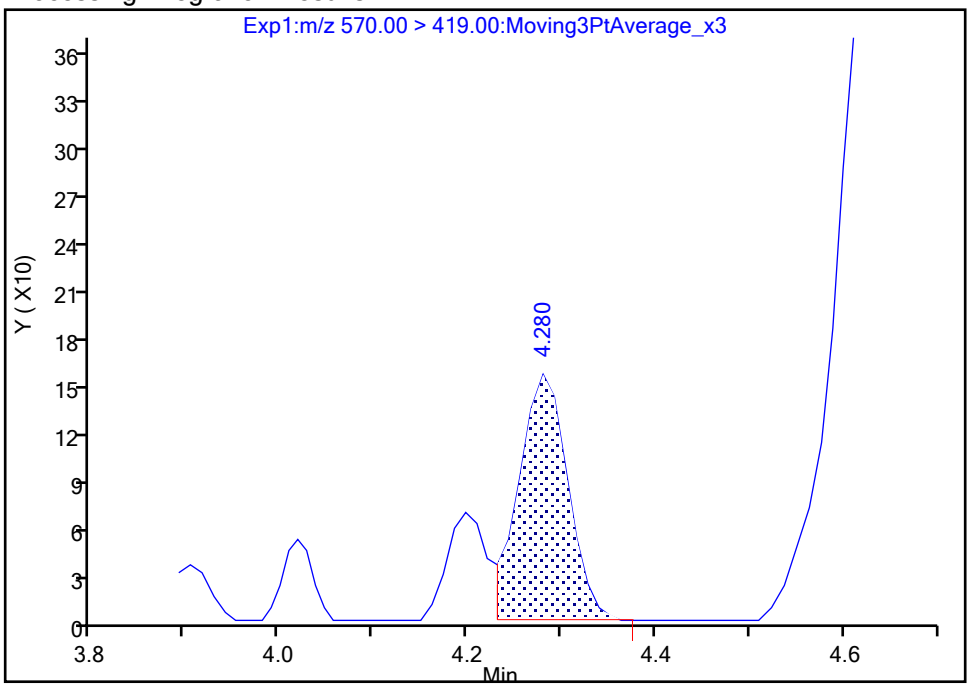
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

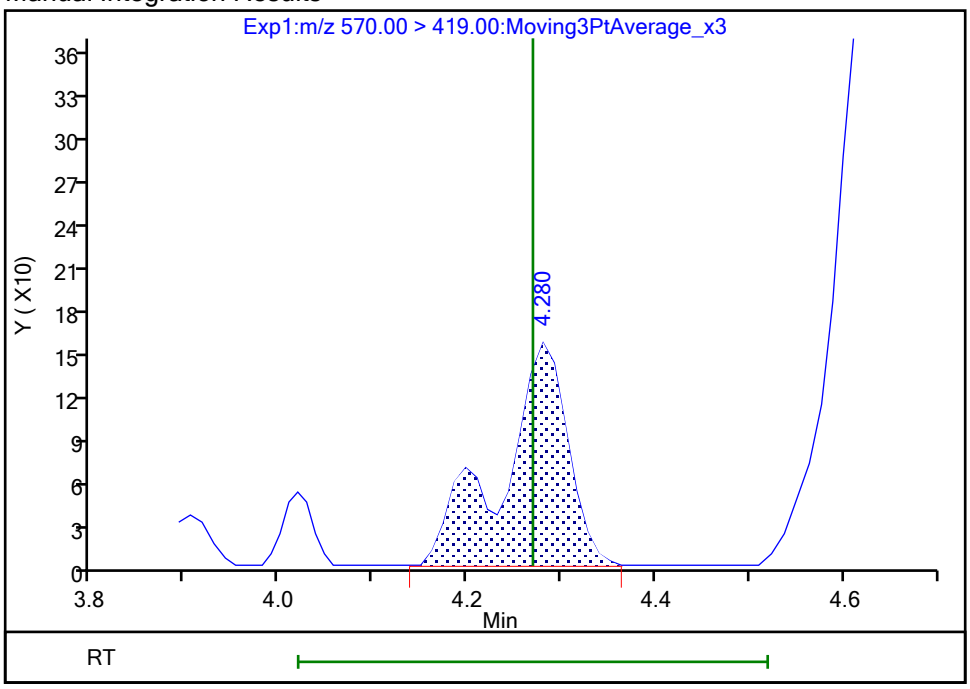
Processing Integration Results

RT: 4.28
Area: 558
Amount: 0.001390
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 756
Amount: 0.001884
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

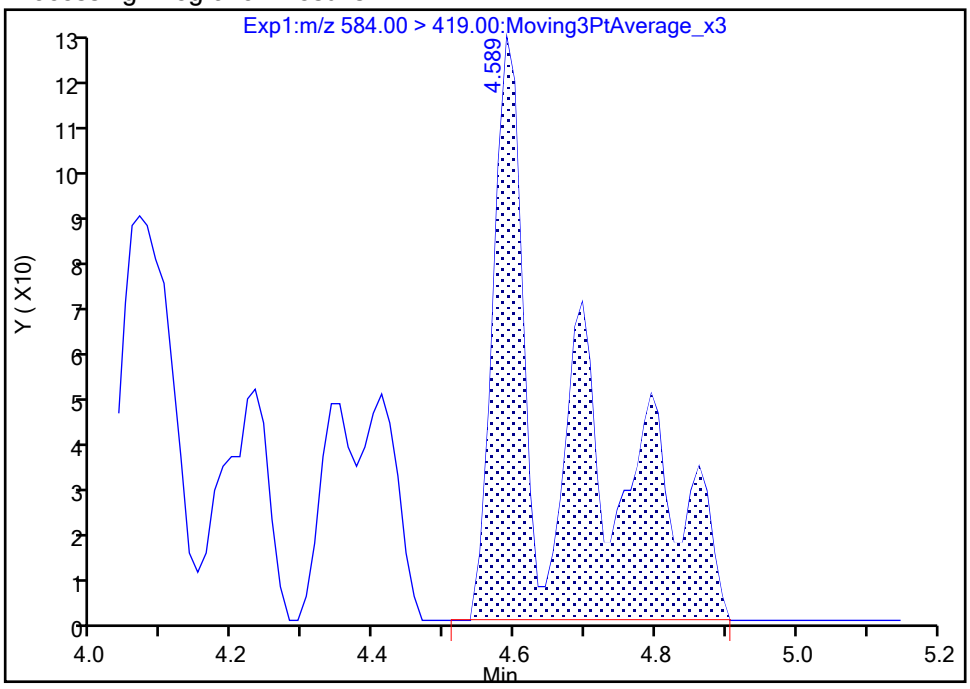
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

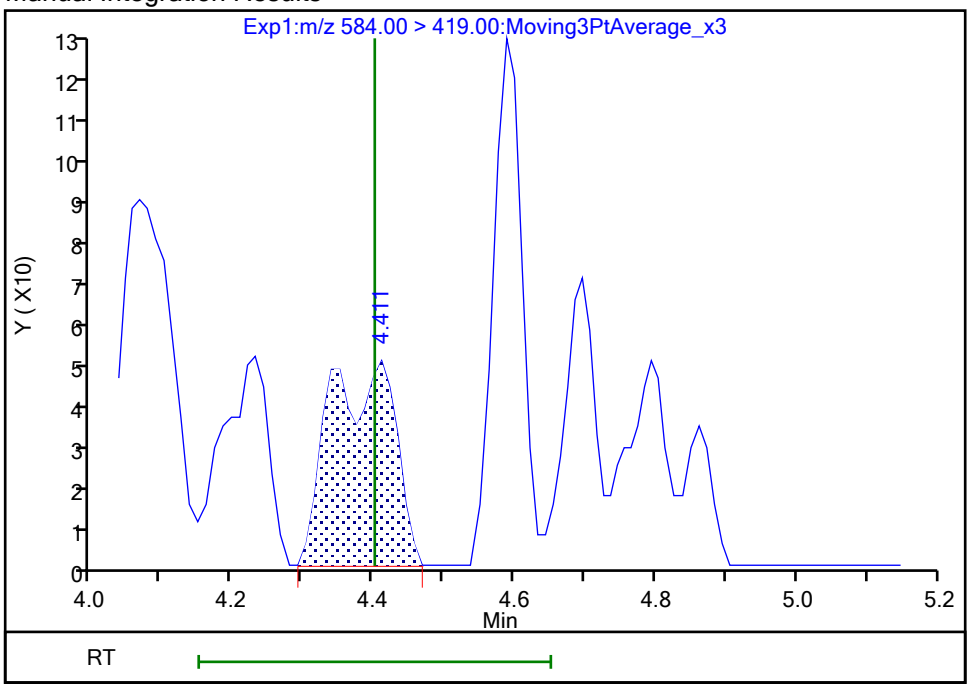
Processing Integration Results

RT: 4.59
Area: 797
Amount: 0.001840
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 303
Amount: 0.000699
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:58:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

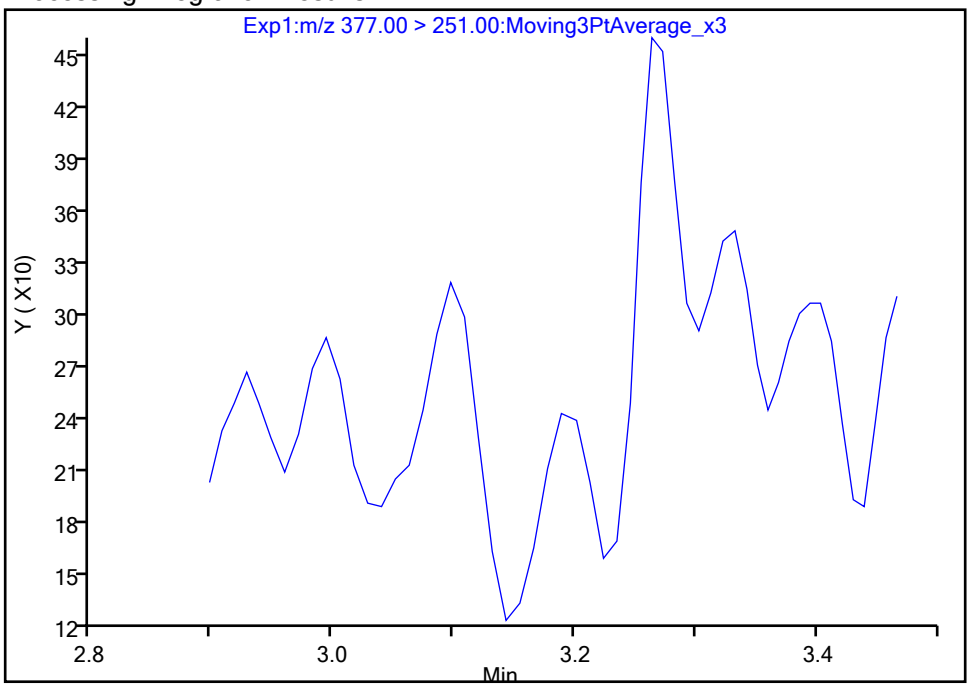
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

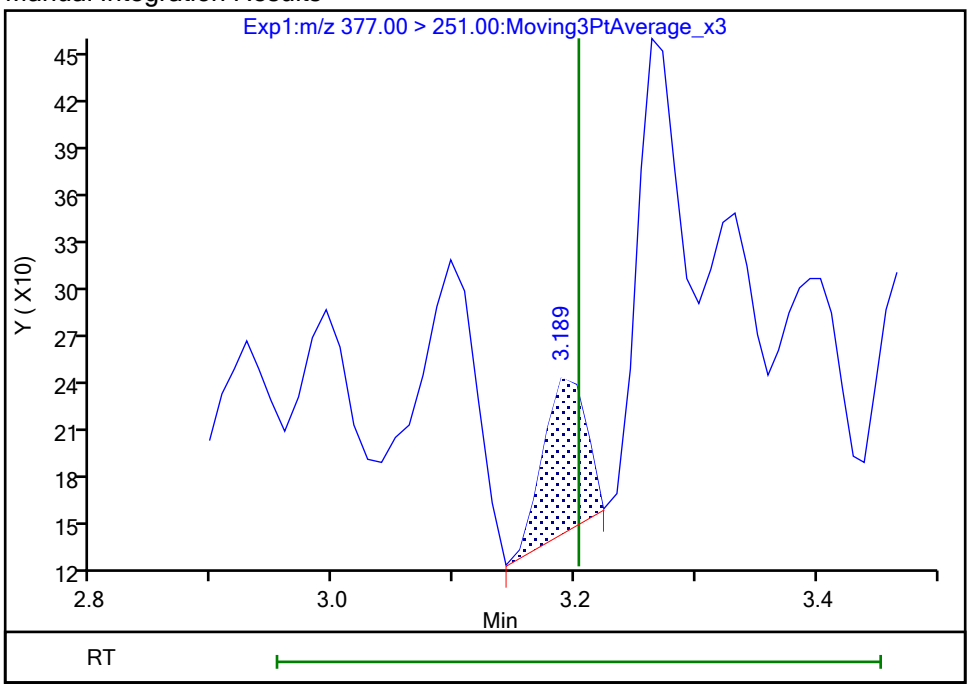
Processing Integration Results

Not Detected
Expected RT: 3.20



Manual Integration Results

RT: 3.19
Area: 243
Amount: 0.000051
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

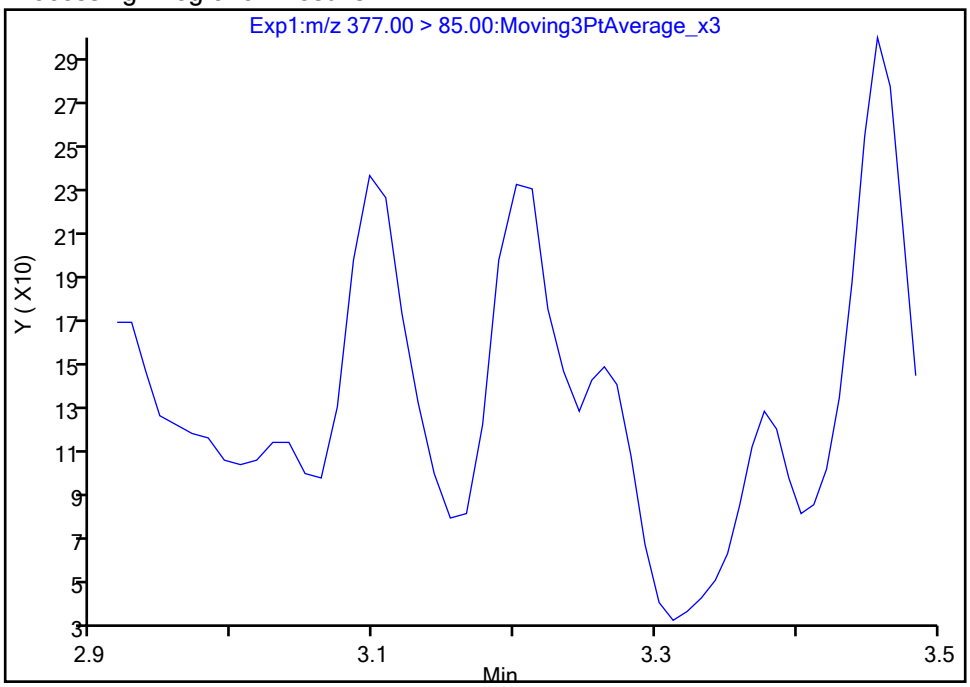
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

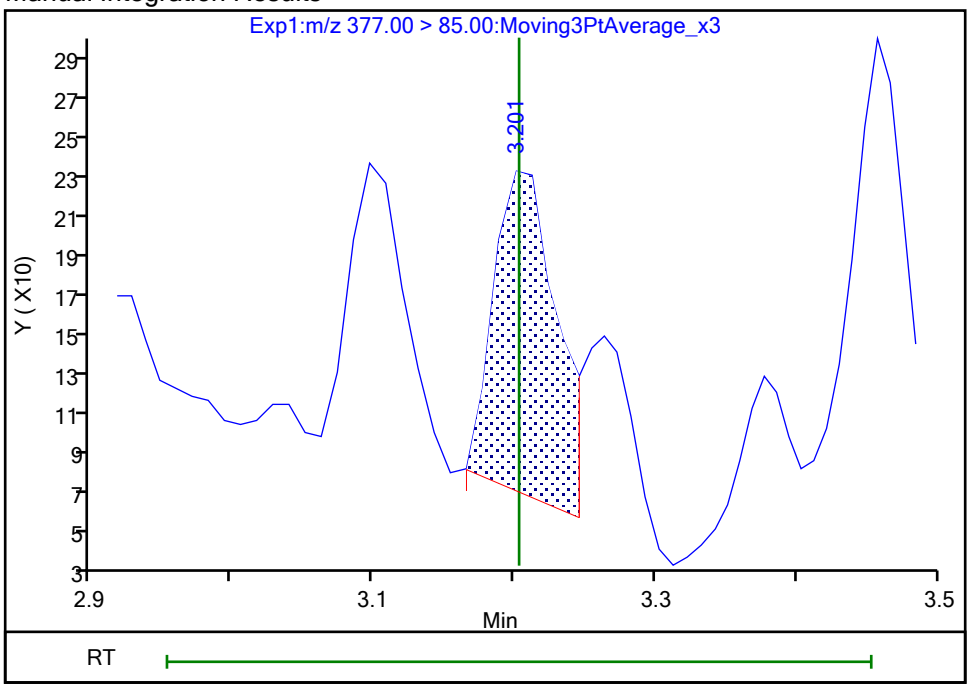
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 489
Amount: 0.000051
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:57:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

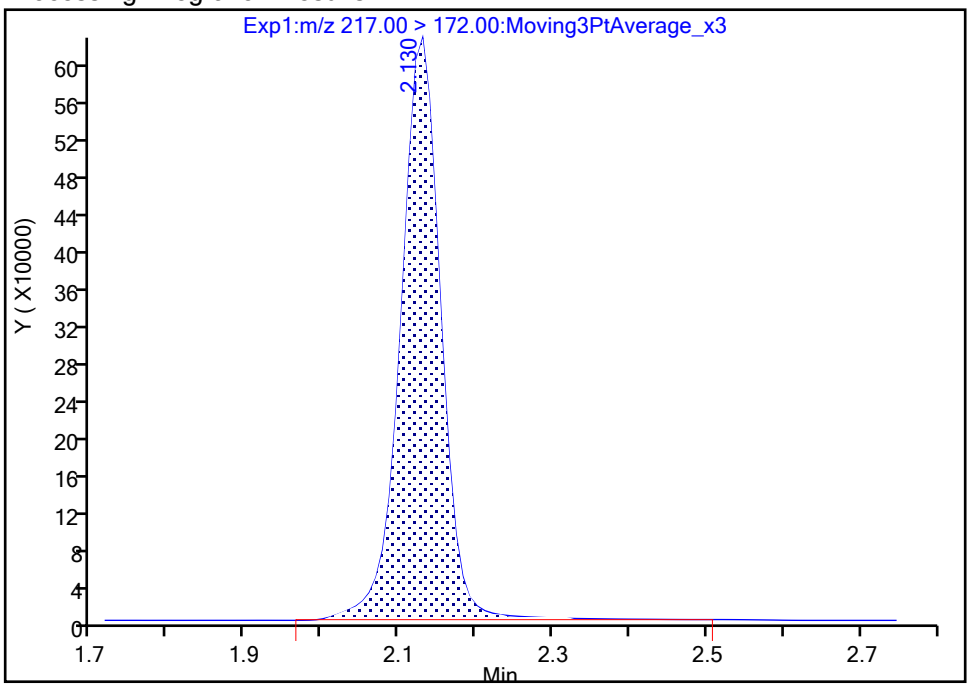
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

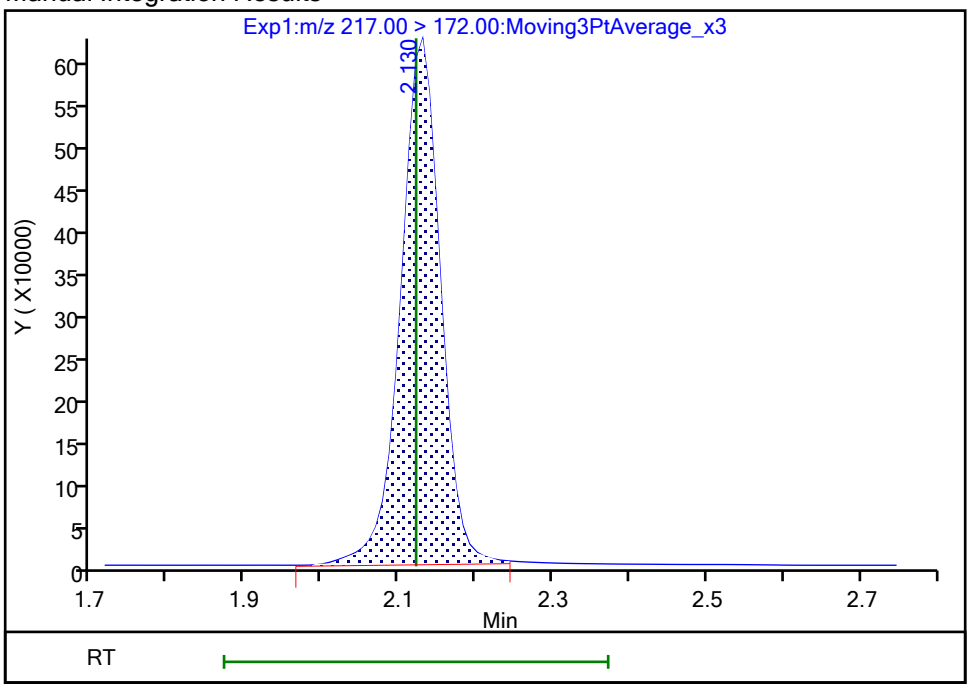
Processing Integration Results

RT: 2.13
Area: 2283987
Amount: 1.405010
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2264530
Amount: 1.393040
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:54:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

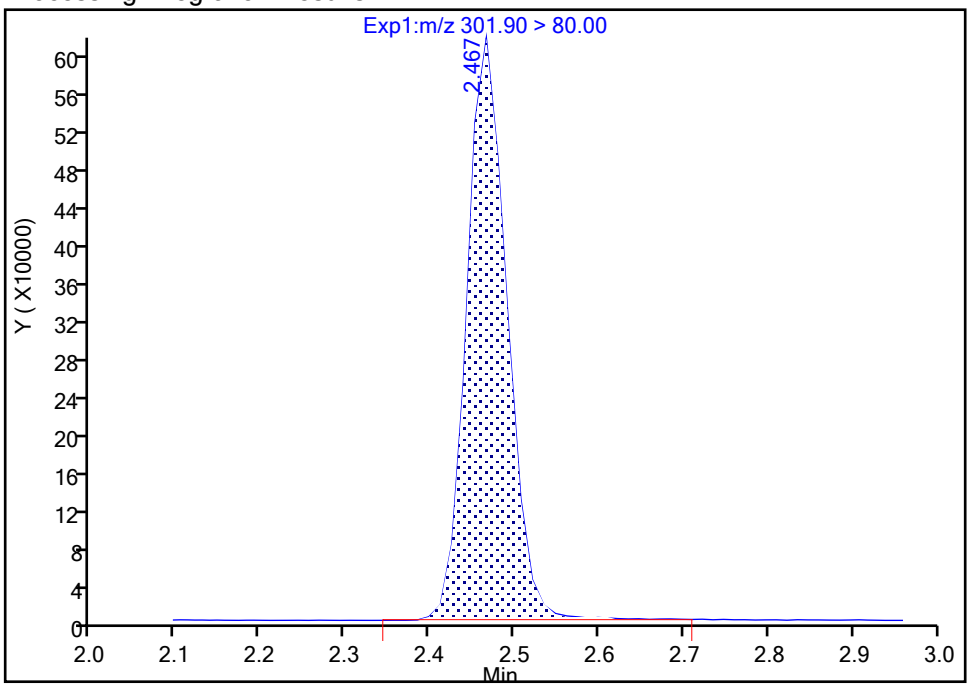
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

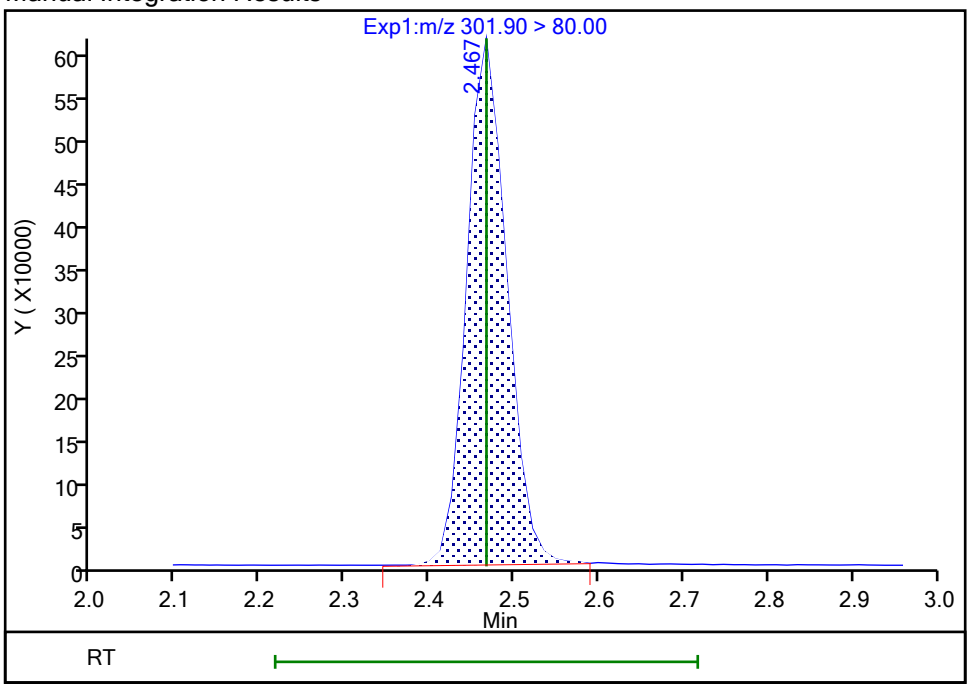
Processing Integration Results

RT: 2.47
Area: 2036461
Amount: 1.192981
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2029806
Amount: 1.189082
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

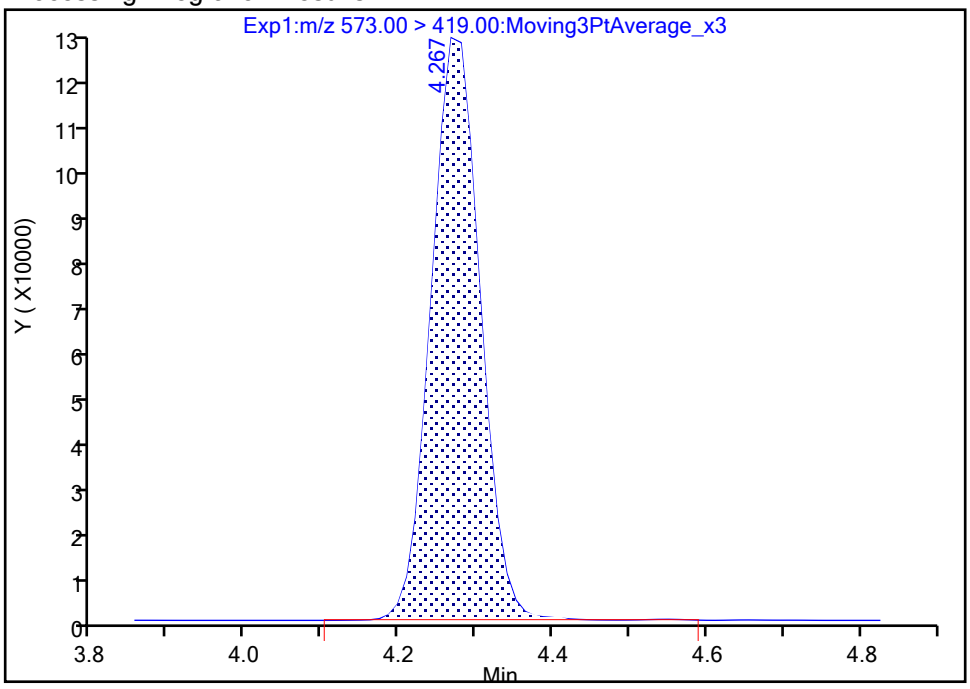
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

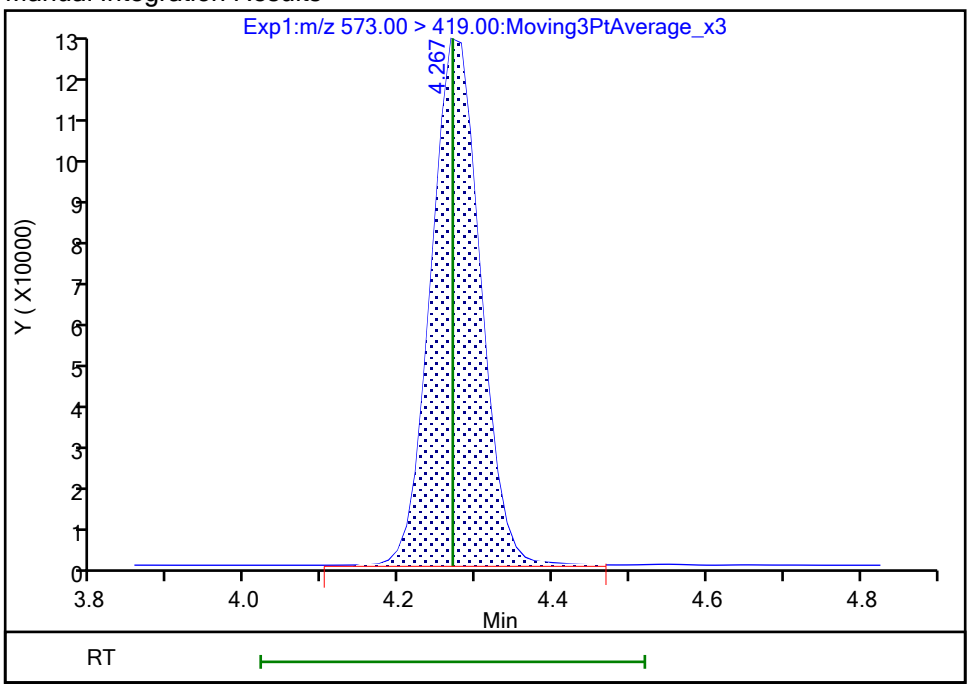
Processing Integration Results

RT: 4.27
Area: 553576
Amount: 1.274267
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 552915
Amount: 1.272745
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

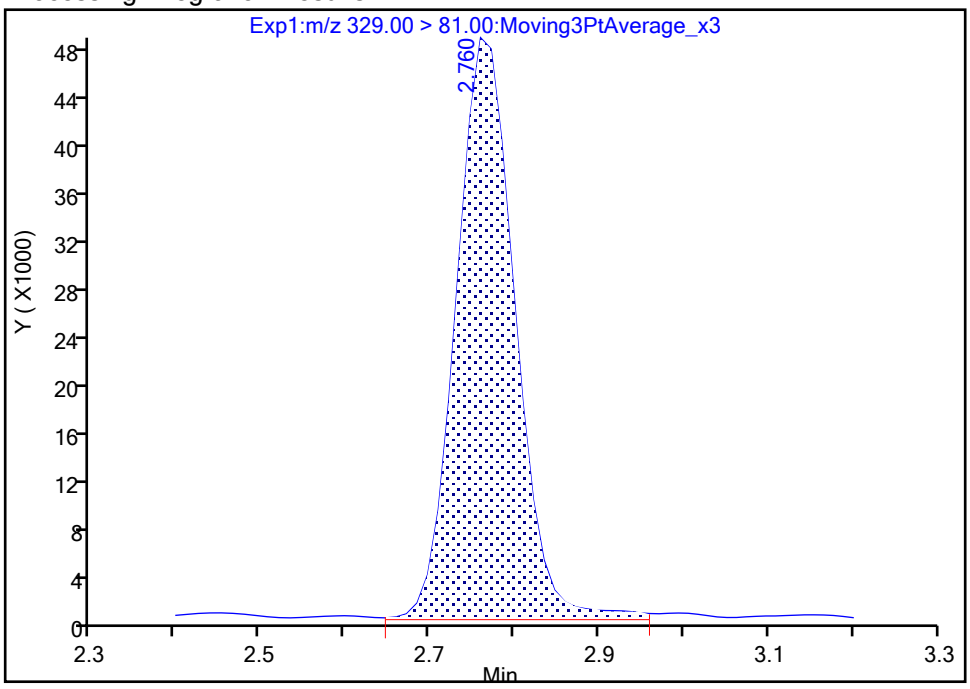
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

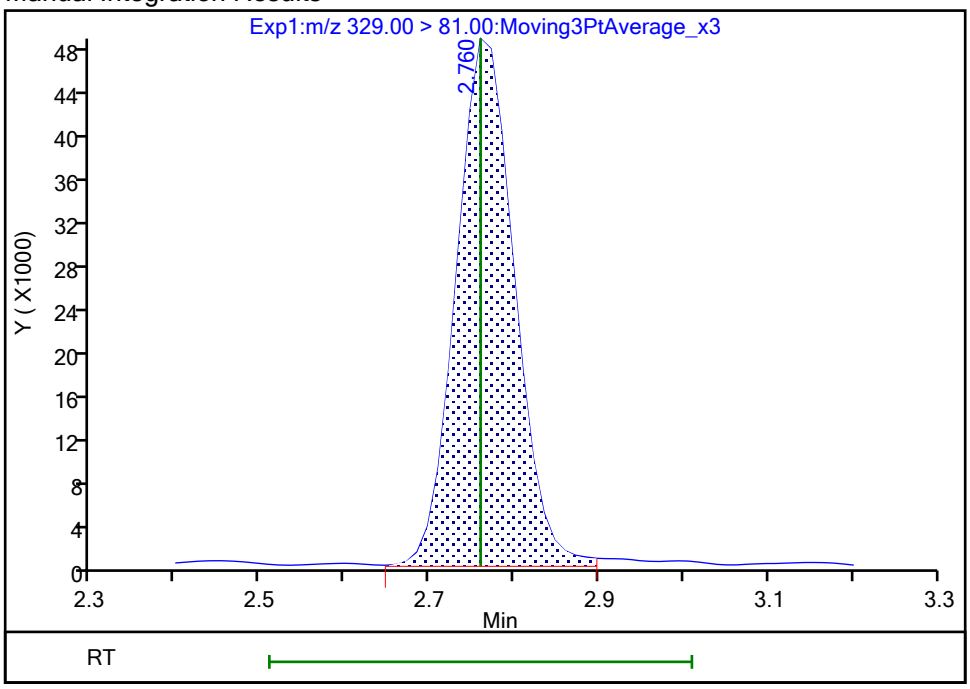
Processing Integration Results

RT: 2.76
Area: 235518
Amount: 1.193021
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 229479
Amount: 1.162431
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

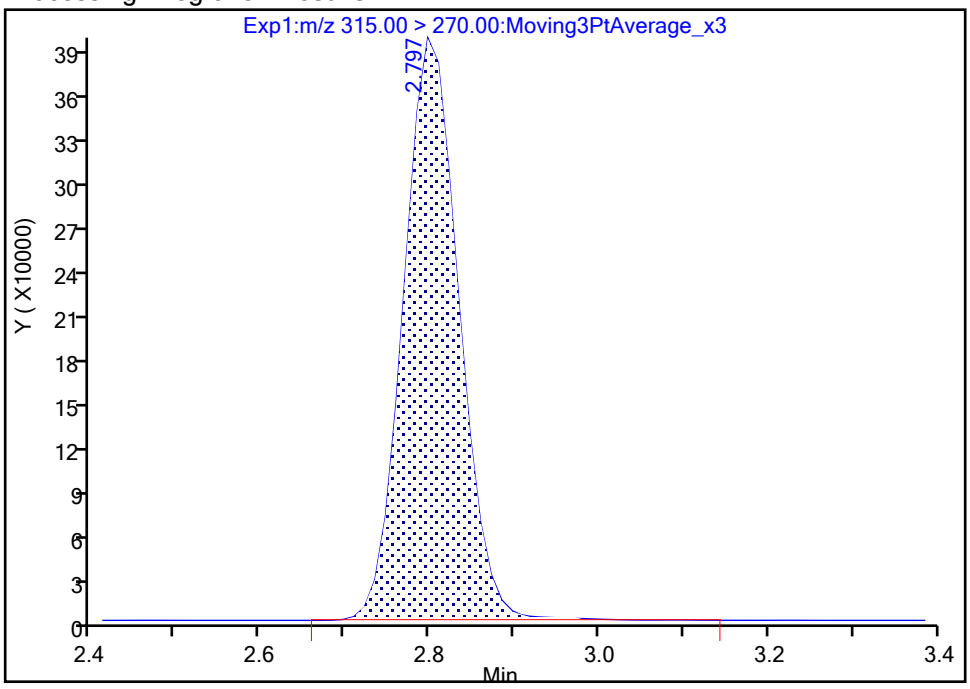
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A27.d				
Injection Date:	23-Oct-2023 18:47:03	Instrument ID:	LC812		
Lims ID:	460-290375-A-1-A	Lab Sample ID:	200-290375-1		
Client ID:	1000-101323-0002				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

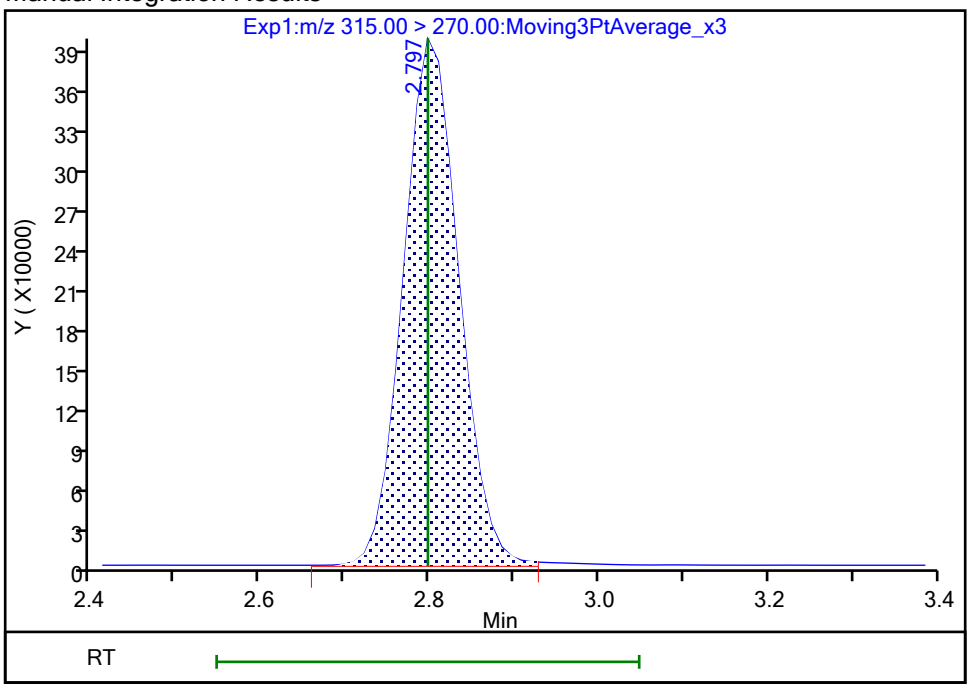
Processing Integration Results

RT: 2.80
Area: 1808865
Amount: 1.409359
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1800364
Amount: 1.402736
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:55:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW39A-101323-0826-70 Lab Sample ID: 460-290375-2

Matrix: Water Lab File ID: PA231023A28.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 08:26

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 315(mL) Date Analyzed: 10/23/2023 18:55

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	6.60		3.97	0.95
2706-90-3	Perfluoropentanoic acid	3.63		1.59	0.54
307-24-4	Perfluorohexanoic acid	10.4		1.59	0.52
375-85-9	Perfluoroheptanoic acid	3.99		1.59	0.43
335-67-1	Perfluorooctanoic acid	16.6		1.59	0.60
375-95-1	Perfluorononanoic acid	0.56	J	1.59	0.39
335-76-2	Perfluorodecanoic acid	0.48	J I	1.59	0.37
2058-94-8	Perfluoroundecanoic acid	1.59	U	1.59	0.44
307-55-1	Perfluorododecanoic acid	1.59	U	1.59	0.39
72629-94-8	Perfluorotridecanoic acid	1.59	U	1.59	0.38
376-06-7	Perfluorotetradecanoic acid	1.59	U	1.59	0.51
375-73-5	Perfluorobutanesulfonic acid	9.07		1.59	0.49
2706-91-4	Perfluoropentanesulfonic acid	12.9		1.59	0.40
355-46-4	Perfluorohexanesulfonic acid	28.4		1.59	0.44
375-92-8	Perfluoroheptanesulfonic acid	6.30		1.59	0.33
1763-23-1	Perfluorooctanesulfonic acid	395		1.59	0.67
68259-12-1	Perfluorononanesulfonic acid	1.59	U	1.59	0.32
335-77-3	Perfluorodecanesulfonic acid	1.59	U	1.59	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	10.3		3.97	1.03
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61
754-91-6	Perfluorooctanesulfonamide	1.59	U	1.59	0.73
2355-31-9	NMeFOSAA	3.97	U	3.97	1.51
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	3.97	U	3.97	1.27
13252-13-6	HFPODA	3.17	U	3.17	0.87
919005-14-4	DONA	1.59	U	1.59	0.33
756426-58-1	9Cl-PF3ONS	1.59	U	1.59	0.25
763051-92-9	11Cl-PF3OUdS	1.59	U	1.59	0.69

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW39A-101323-0826-70 Lab Sample ID: 460-290375-2

Matrix: Water Lab File ID: PA231023A28.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 08:26

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 315(mL) Date Analyzed: 10/23/2023 18:55

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		50-150
STL01893	13C5 PFPeA	107		50-150
STL01892	13C4 PFHpA	96		50-150
STL02116	13C2 PFTeDA	99		50-150
STL02337	13C3 PFBS	106		50-150
STL01056	13C8 FOSA	101		50-150
STL02118	d3-NMeFOSAA	107		50-150
STL02117	d5-NEtFOSAA	113		50-150
STL02395	M2-4:2 FTS	90		50-150
STL02279	M2-6:2 FTS	99		50-150
STL02280	M2-8:2 FTS	95		50-150
STL02255	13C3 HFPO-DA	100		50-150
STL00994	18O2 PFHxS	109		50-150
STL00993	13C2 PFHxA	105		50-150
STL00991	13C4 PFOS	110		50-150
STL00998	13C2 PFDoA	112		50-150
STL00995	13C5 PFNA	100		50-150
STL00996	13C2 PFDA	106		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	114		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d
Lims ID: 460-290375-A-2-A
Client ID: MW39A-101323-0826-70
Sample Type: Client
Inject. Date: 23-Oct-2023 18:55:13 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-2-A
Misc. Info.: 200-0057509-028 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:08 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:04:53
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.122	-0.001	0.603	1889855	1.29		103	1375	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	340260	0.2080			19.6	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1520878	1.34		107	741	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	150285	0.1145			1.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1886923	1.23		106	29395	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	517904	0.2857	Target=2.06		7.2	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	285631		1.81(1.03-3.09)		21.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.759	2.760	-0.001	1.000	388	0.000715			1.0	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.784	186503	1.05		89.8	11.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1516781	1.31		105	1979	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	435978	0.3265	Target=14.12		9.7	M
313.00 > 119.00	2.797	2.797	0.0	1.000	31627		13.78(7.06-21.17)		16.3	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	636940	0.4076	Target=2.72		24.3	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	350008		1.82(1.36-4.09)		81.5	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	1547	0.006920			11.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	279120	1.25		99.8	3450	
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.168	-0.004	0.899	1415090	1.28		109	6310	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.168	-0.004	1.000	1183991	0.8938	Target=3.32		133	M
399.00 > 99.00	3.153	3.168	-0.015	0.996	712531		1.66(1.66-4.98)		462	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.164	3.168	-0.004	1.000	171819	0.1256	Target=4.17		5.2	M
363.00 > 169.00	3.164	3.168	-0.004	1.000	37880		4.54(2.09-6.26)		21.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.168	-0.004	0.899	1526109	1.20		96.2	6346	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.915	220907	0.1984	Target=4.83		16.2	M
449.00 > 99.00	3.493	3.505	-0.012	0.913	83200		2.66(2.41-7.24)		8.6	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.511	3.505	0.006	0.997	270639	1.18		99.5	66.3	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	202563	0.3252			327	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.514	-0.003	1.000	823515	0.5217	Target=2.88		19.9	M
413.00 > 169.00	3.511	3.514	-0.003	1.000	261809		3.15(1.44-4.32)		258	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	0.997	1852522	1.29		103	6243	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1846279	1.25			4166	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.826	3.822	0.004	1.000	11185905	12.4	Target=4.24		2380	M
499.00 > 99.00	3.816	3.822	-0.006	0.997	3903810		2.87(2.12-6.37)		1773	M
D 18 13C4 PFOS										
503.00 > 80.00	3.826	3.822	0.004	1.087	920620	1.31		110	593	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.838	3.845	-0.007	1.000	27070	0.0176	Target=8.34		2.3	M
463.00 > 169.00	3.850	3.845	0.005	1.003	3227		8.39(4.17-12.51)		6.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.838	3.845	-0.007	1.090	1956819	1.25		100	4867	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.989	3.983	0.006	1.042	1645	0.000598			2.7	M
24 Perfluorodecanoic acid										RM
513.00 > 469.00	4.135	4.129	0.006	1.000	26182	0.0151	Target=11.44		4.0	RM
513.00 > 169.00	4.135	4.129	0.006	1.000	1147		22.83(5.72-17.16)		5.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.135	4.129	0.006	1.175	2170447	1.33		106	7531	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.135	4.141	-0.006	1.175	292265	1.13		94.7	379	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.135	4.141	-0.006	1.000	487	0.000906			8.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										M
506.00 > 78.00	4.240	4.234	0.006	1.205	1763238	1.26		101	4259	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.240	4.234	0.006	1.000	1996	0.001483			8.5	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.264	4.270	-0.006	1.211	523694	1.34		107	1741	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.147	4.270	-0.123	0.972	484	0.001273			1.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.385	4.390	-0.005	1.246	2198283	1.42		114	14634	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.385	4.390	-0.005	1.000	5116	0.002823	Target=12.20		1.1	RM
563.00 > 169.00	4.385	4.390	-0.005	1.000	91		56.22(6.10-18.31)		1.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.397	4.401	-0.004	1.249	530190	1.41		113	1332	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.218	4.401	-0.183	0.959	710	0.001674			2.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.598	4.613	-0.015	1.306	2198432	1.40		112	9711	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.598	4.613	-0.015	1.000	2965	0.001656	Target=8.47		0.3	RM
613.00 > 169.00	4.609	4.613	-0.004	1.002	67		44.25(4.23-12.70)		1.7	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.978	4.982	-0.004	1.414	1942782	1.24		99.3	5803	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

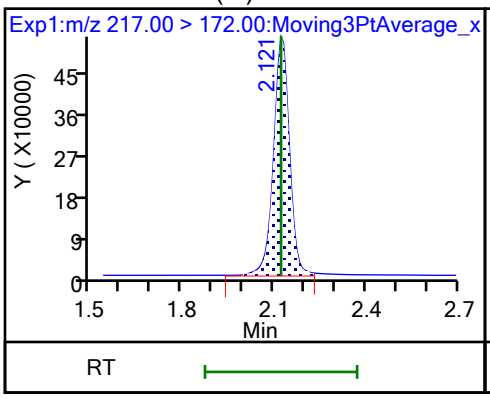
M - Manually Integrated

Report Date: 25-Oct-2023 15:13:31 Chrom Revision: 2.3 18-Oct-2023 21:16:54

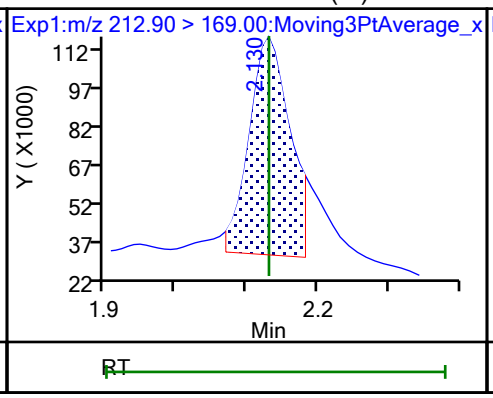
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d
Injection Date: 23-Oct-2023 18:55:13 Instrument ID: LC812
Lims ID: 460-290375-A-2-A Lab Sample ID: 200-290375-2
Client ID: MW39A-101323-0826-70
Operator ID: LC812user ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

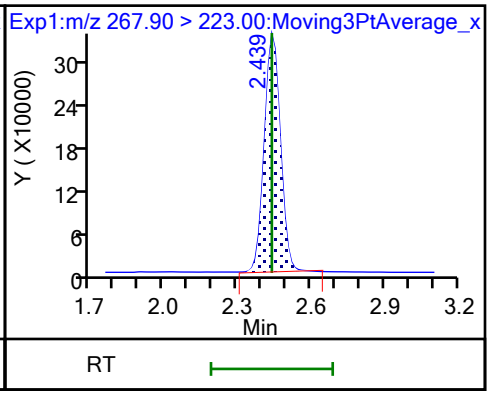
D 1 13C4 PFBA (M)



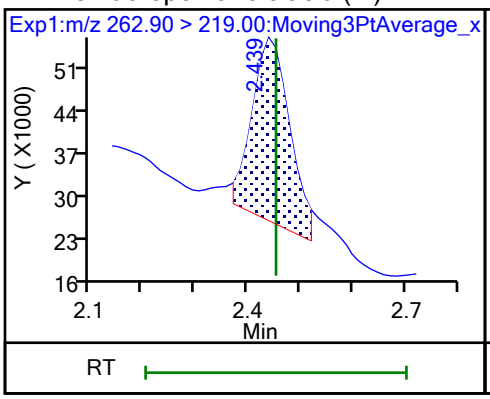
2 Perfluorobutanoic acid (M)



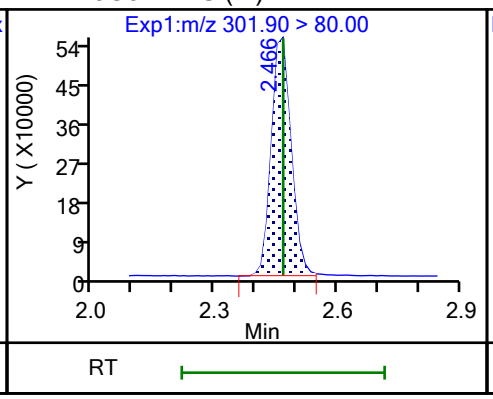
D 3 13C5 PFPeA



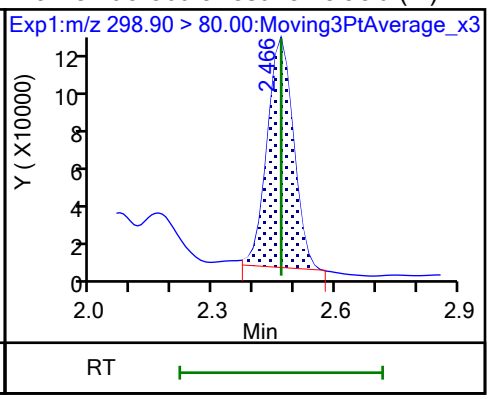
4 Perfluoropentanoic acid (M)



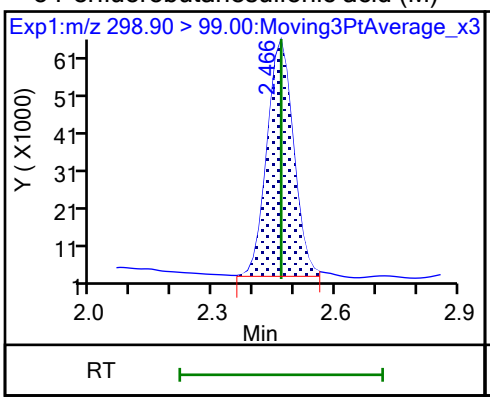
D 47 13C3 PFBS (M)



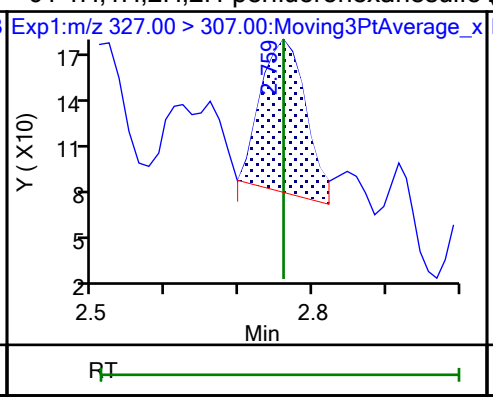
5 Perfluorobutanesulfonic acid (M)



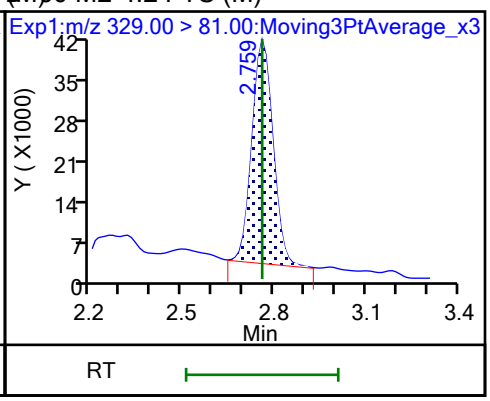
5 Perfluorobutanesulfonic acid (M)



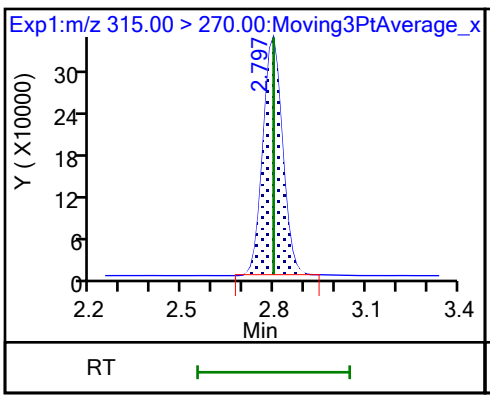
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



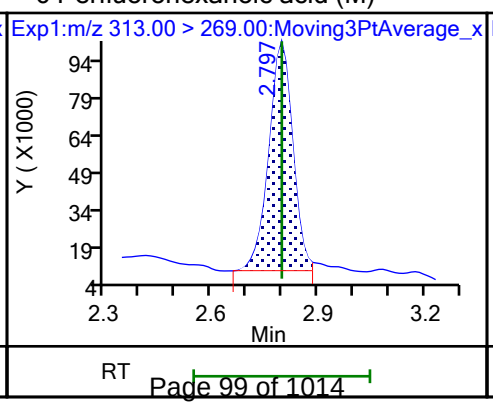
60 M2-4:2 FTS (M)



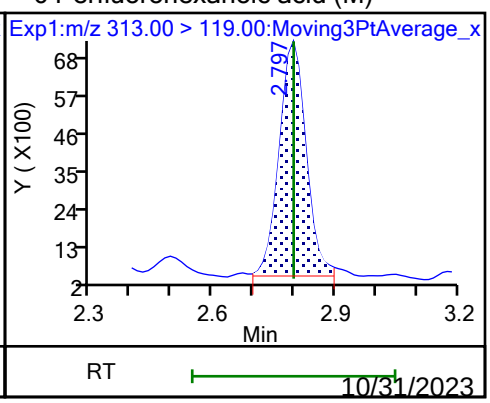
D 7 13C2 PFHxA



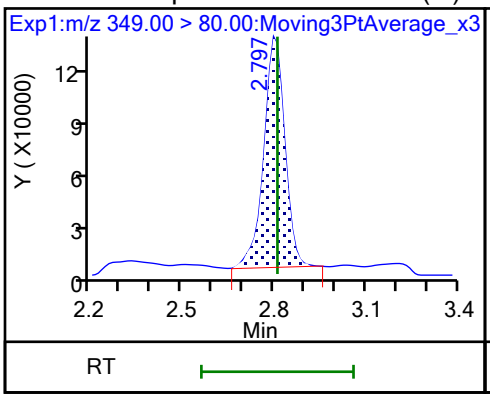
6 Perfluorohexanoic acid (M)



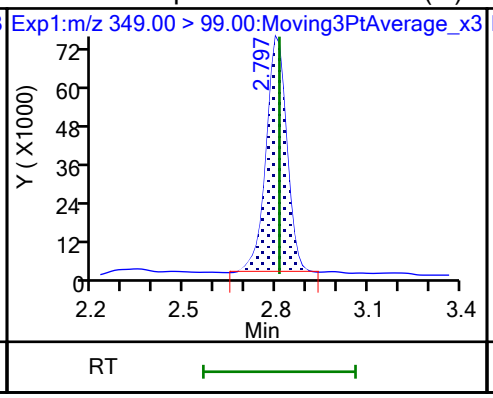
6 Perfluorohexanoic acid (M)



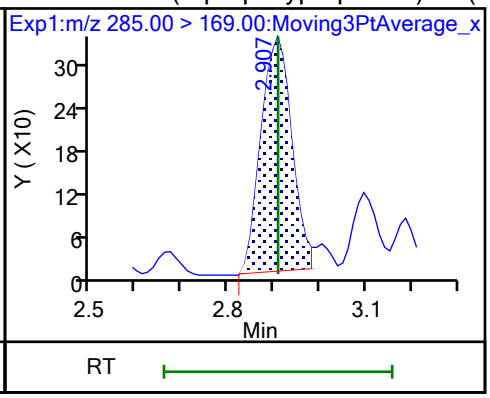
70 Perfluoropentanesulfonic acid (M)



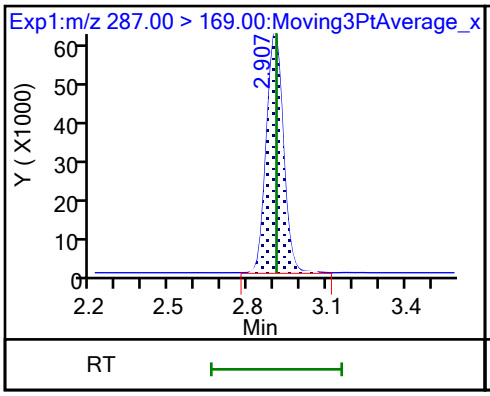
70 Perfluoropentanesulfonic acid (M)



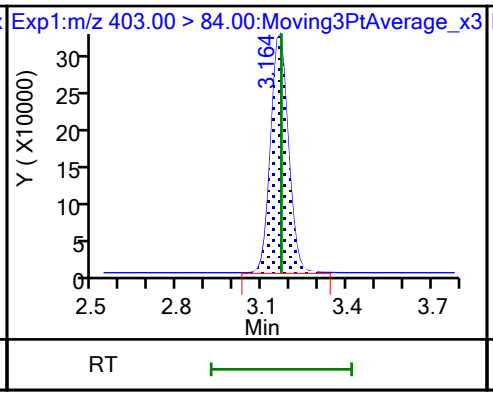
67 Perfluoro(2-propoxypropanoic) ac (M)



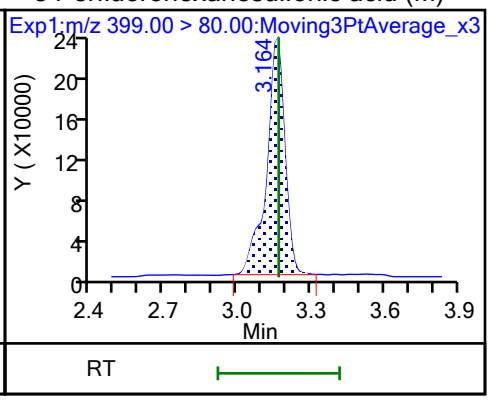
D 64 13C3 HFPO-DA



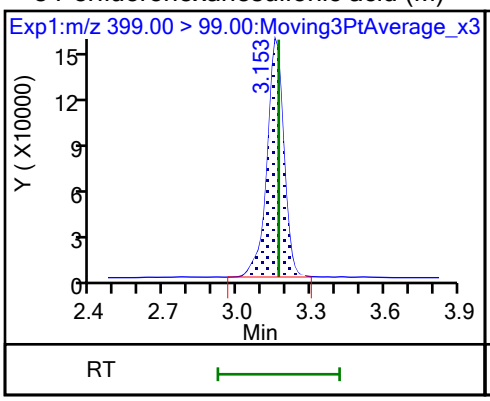
D 11 18O2 PFHxS



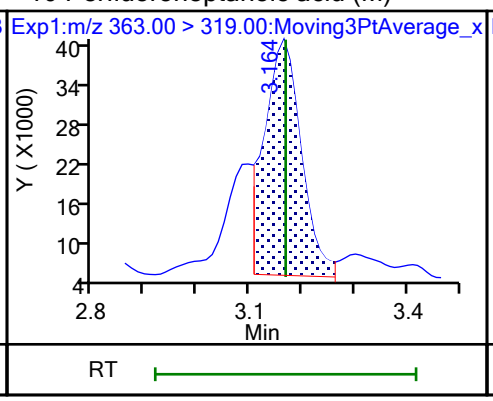
8 Perfluorohexanesulfonic acid (M)



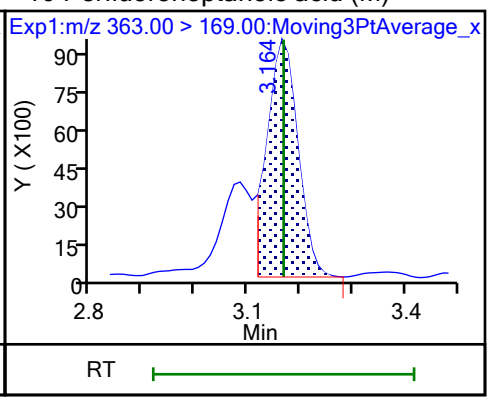
8 Perfluorohexanesulfonic acid (M)



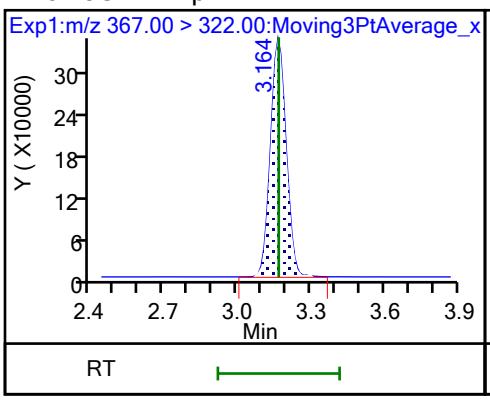
10 Perfluoroheptanoic acid (M)



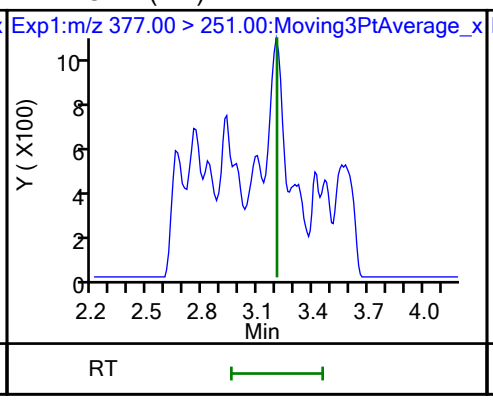
10 Perfluoroheptanoic acid (M)



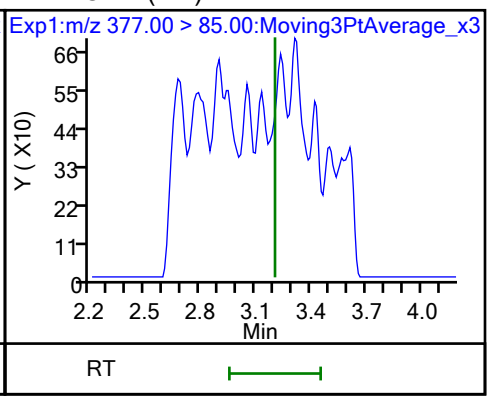
D 9 13C4 PFHpA



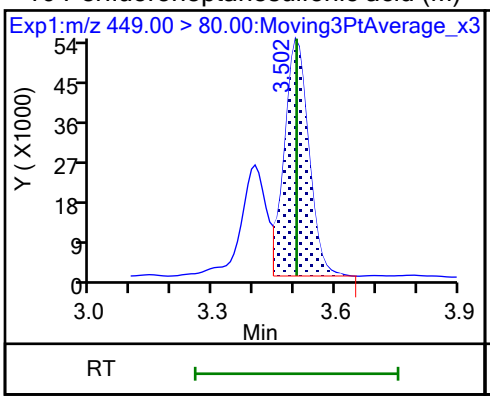
77 DONA (ND)



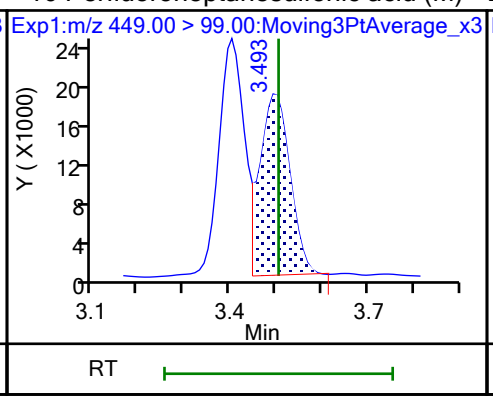
77 DONA (ND)



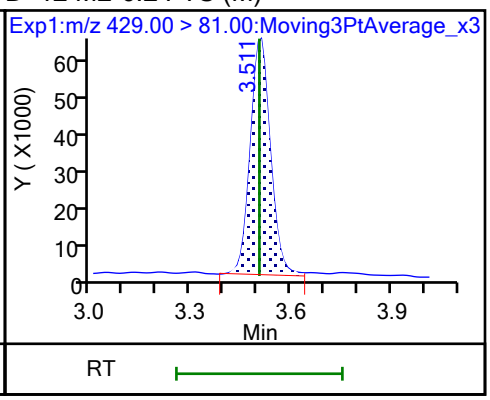
16 Perfluoroheptanesulfonic acid (M)



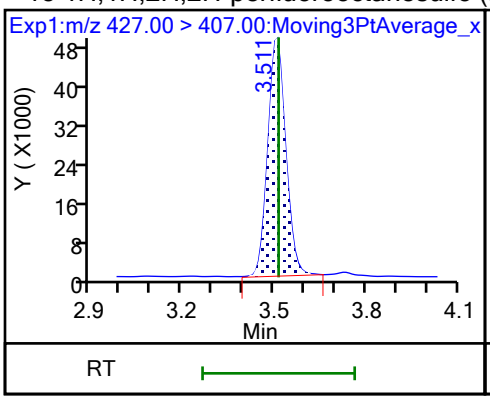
16 Perfluoroheptanesulfonic acid (M)



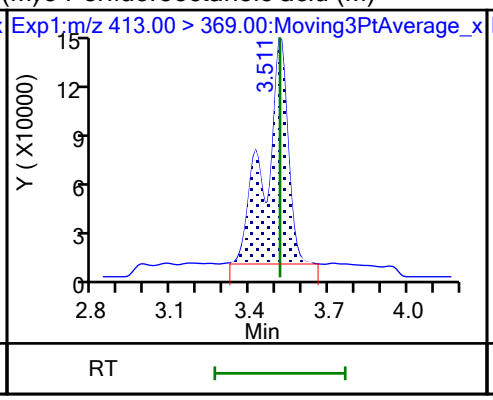
D 12 M2-6:2 FTS (M)



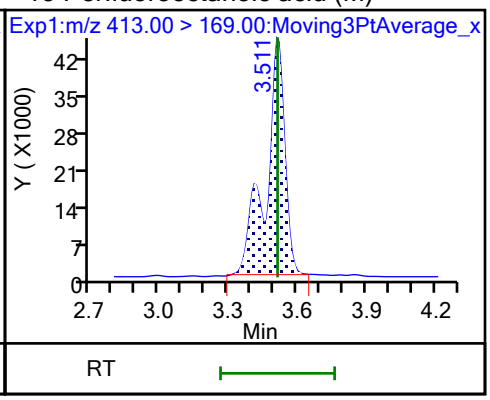
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



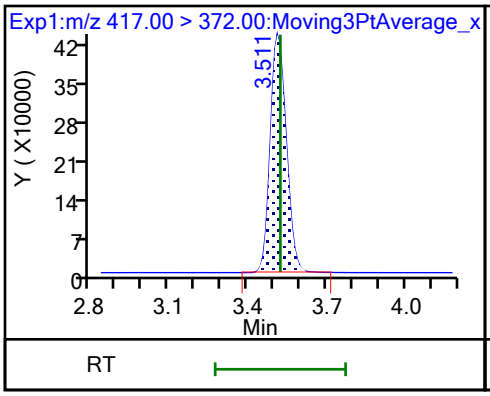
15 Perfluorooctanoic acid (M)



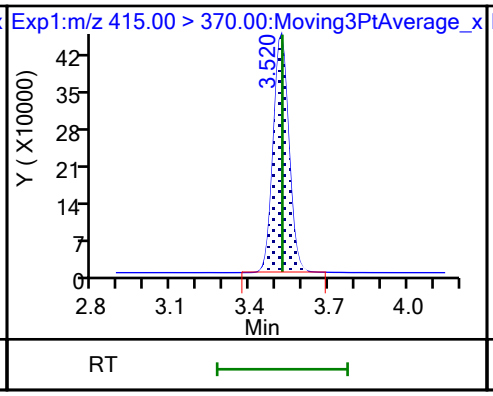
15 Perfluorooctanoic acid (M)



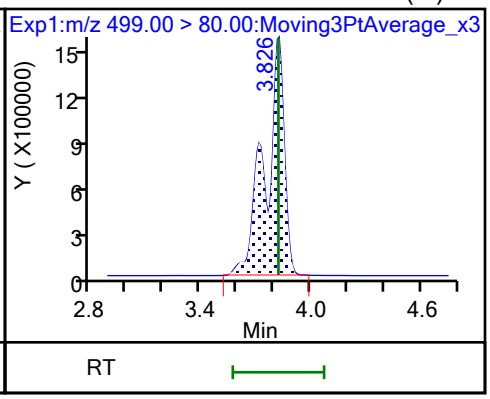
D 14 13C4 PFOA



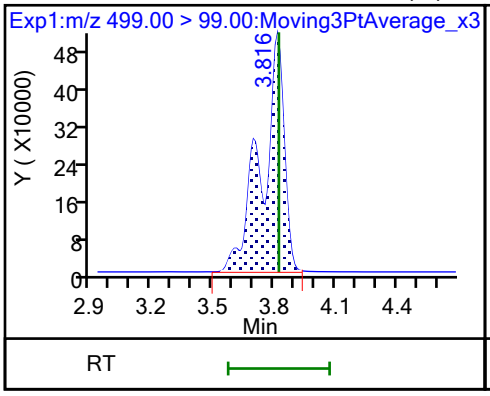
* 62 13C2 PFOA



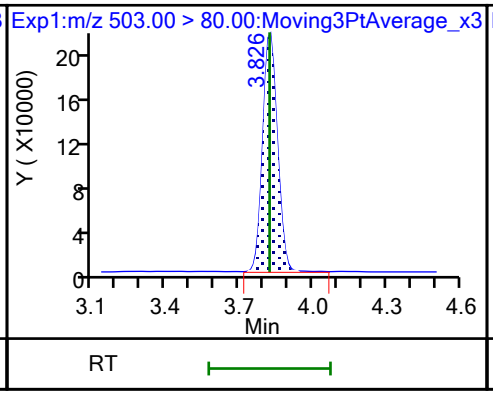
17 Perfluorooctanesulfonic acid (M)



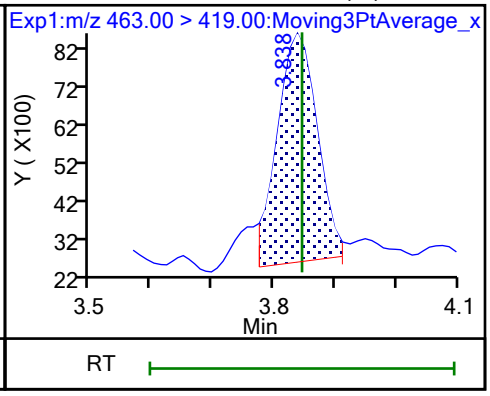
17 Perfluorooctanesulfonic acid (M)



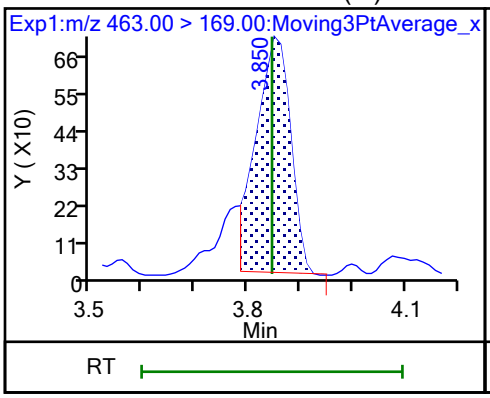
D 18 13C4 PFOS



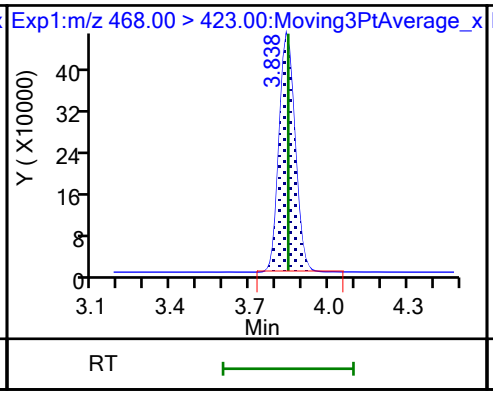
20 Perfluorononanoic acid (M)



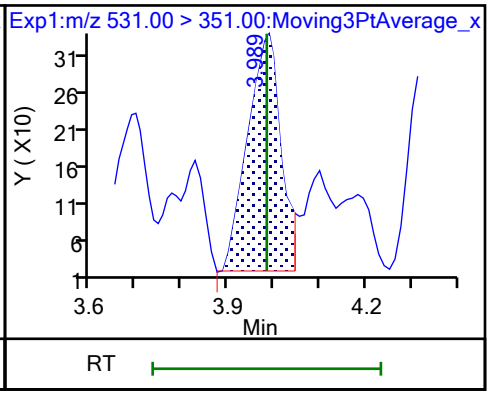
20 Perfluorononanoic acid (M)



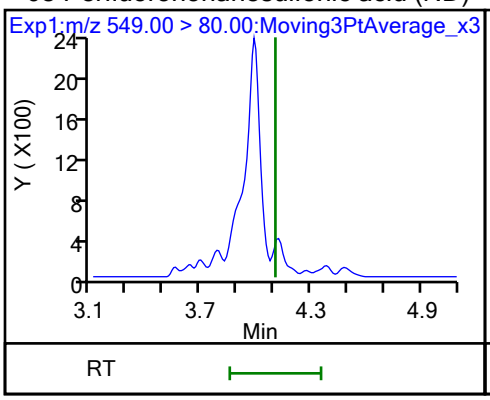
D 19 13C5 PFNA



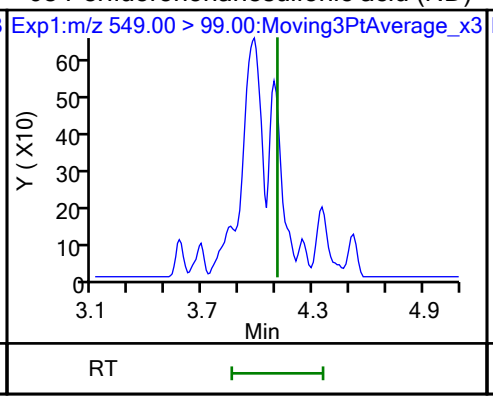
69 9-Chlorohexadecafluoro-3-oxanona (M)



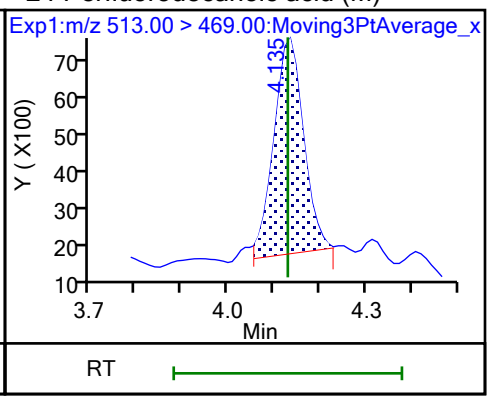
68 Perfluorononanesulfonic acid (ND)



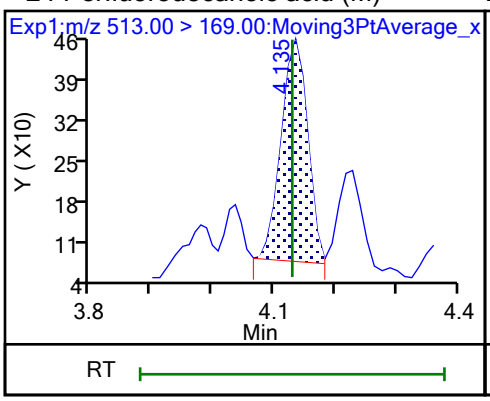
68 Perfluorononanesulfonic acid (ND)



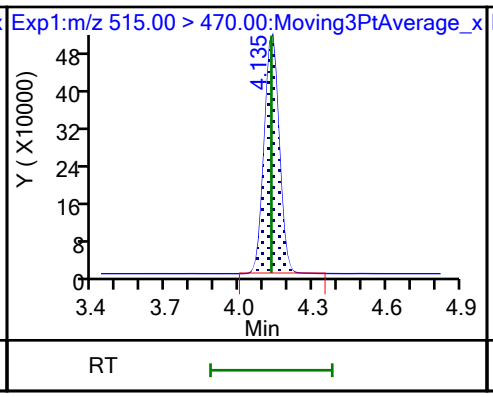
24 Perfluorodecanoic acid (M)



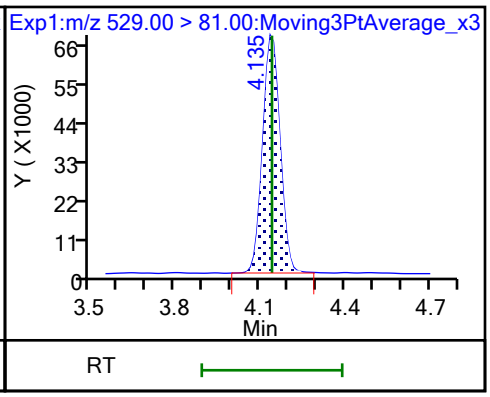
24 Perfluorodecanoic acid (M)



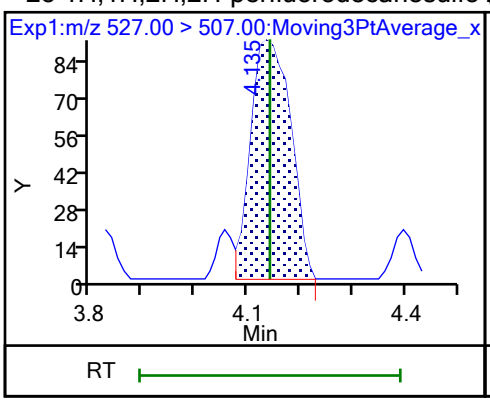
D 23 13C2 PFDA



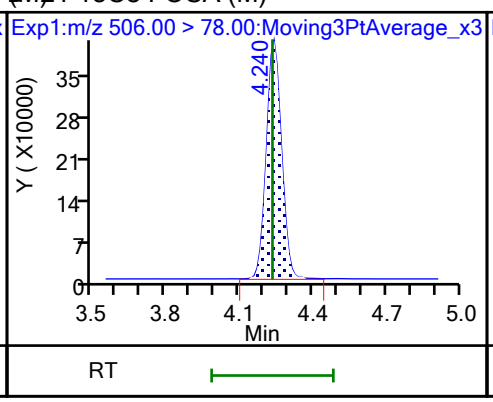
D 26 M2-8:2 FTS



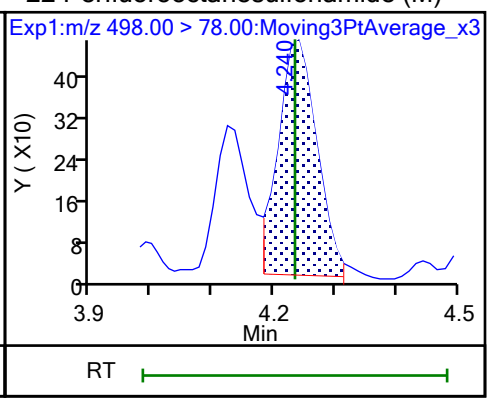
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



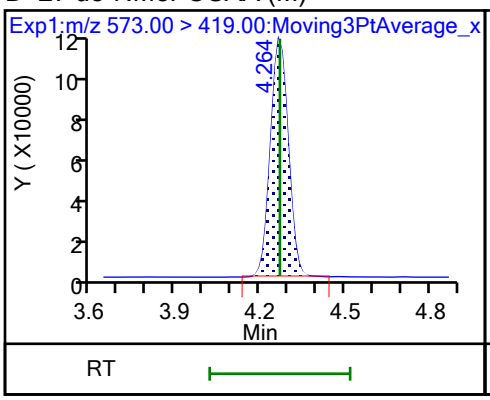
D 21 13C8 FOSA (M)



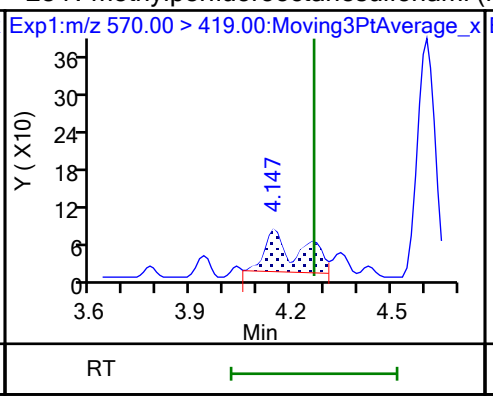
22 Perfluorooctanesulfonamide (M)



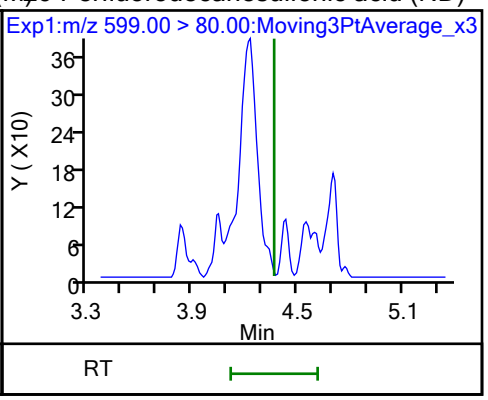
D 27 d3-NMeFOSAA (M)



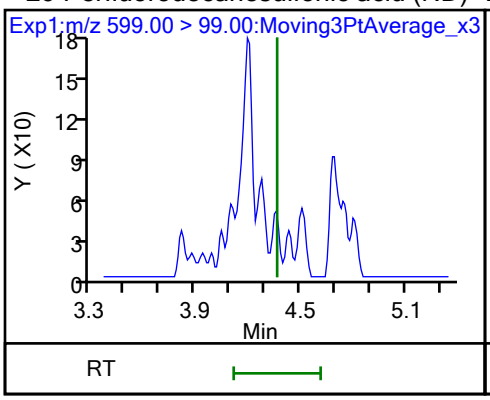
28 N-methylperfluorooctanesulfonami (M)



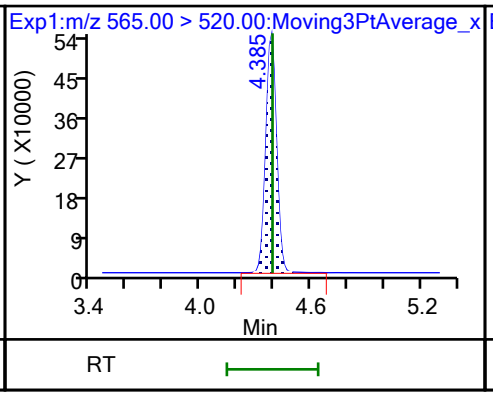
29 Perfluorodecanesulfonic acid (ND)



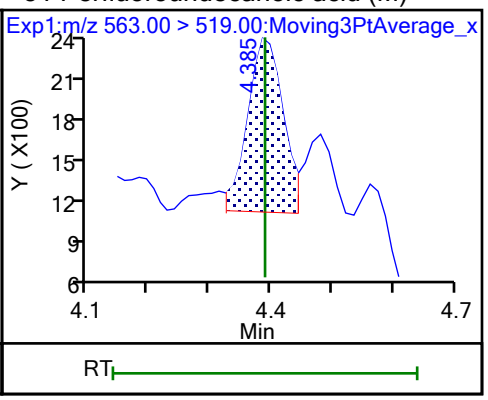
29 Perfluorodecanesulfonic acid (ND)



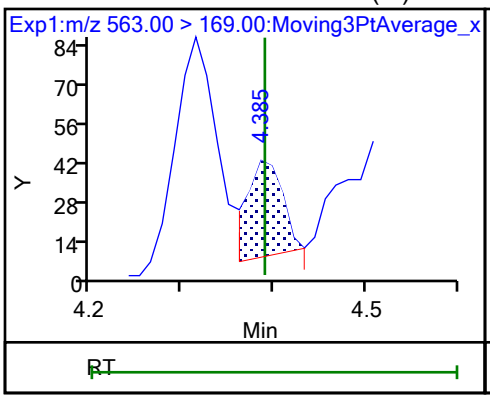
D 30 13C2 PFUnA



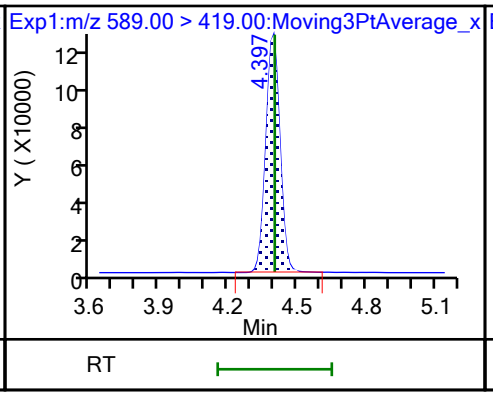
31 Perfluoroundecanoic acid (M)



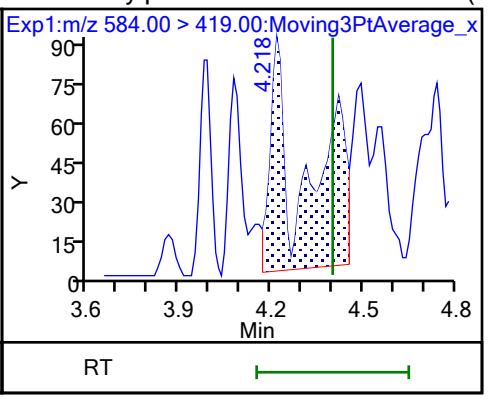
31 Perfluoroundecanoic acid (M)



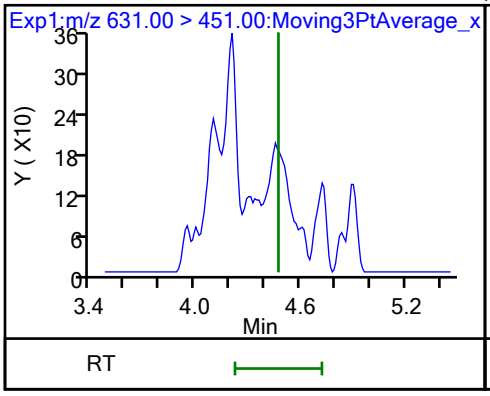
D 32 d5-NEtFOSAA



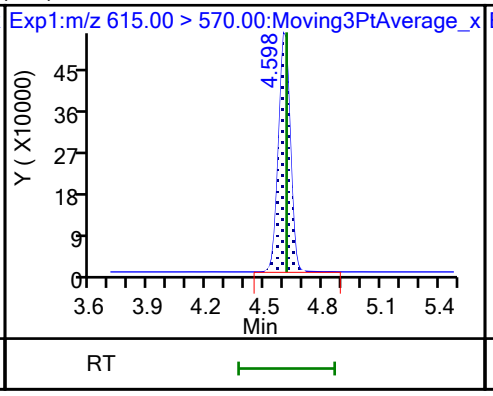
33 N-ethylperfluorooctanesulfonamid (M)



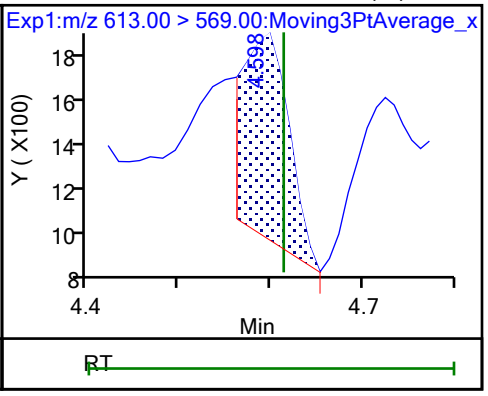
66 11-Chloroeicosafluoro-3-oxaundec (ND)



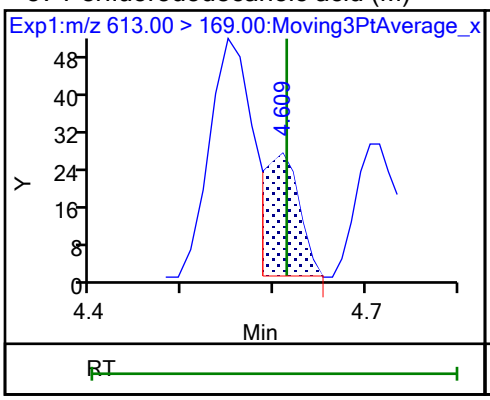
D 36 13C2 PFDoA



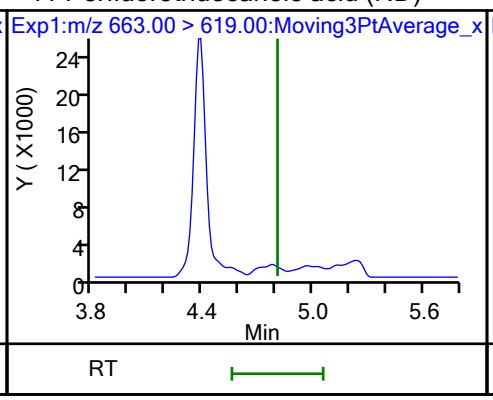
37 Perfluorododecanoic acid (M)



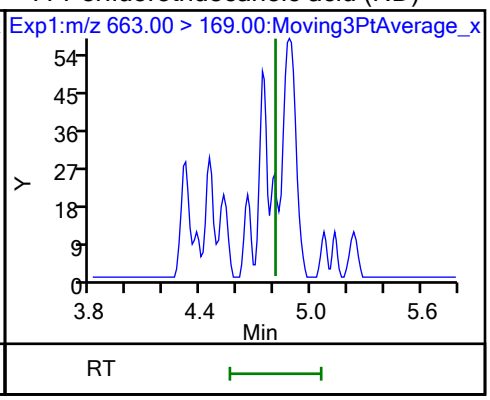
37 Perfluorododecanoic acid (M)



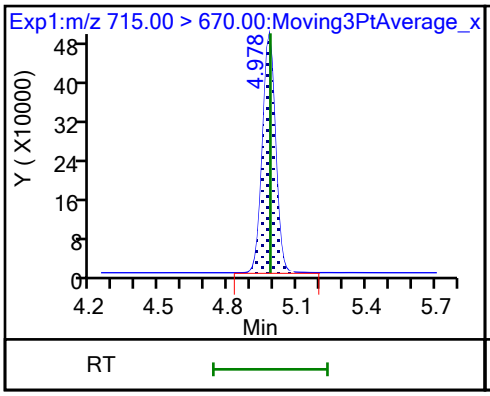
41 Perfluorotridecanoic acid (ND)



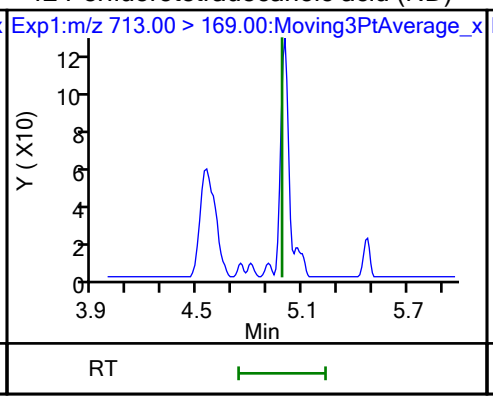
41 Perfluorotridecanoic acid (ND)



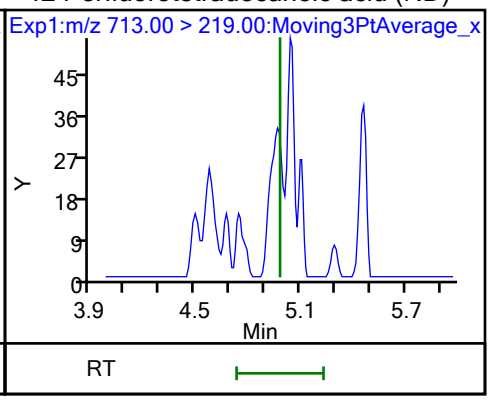
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

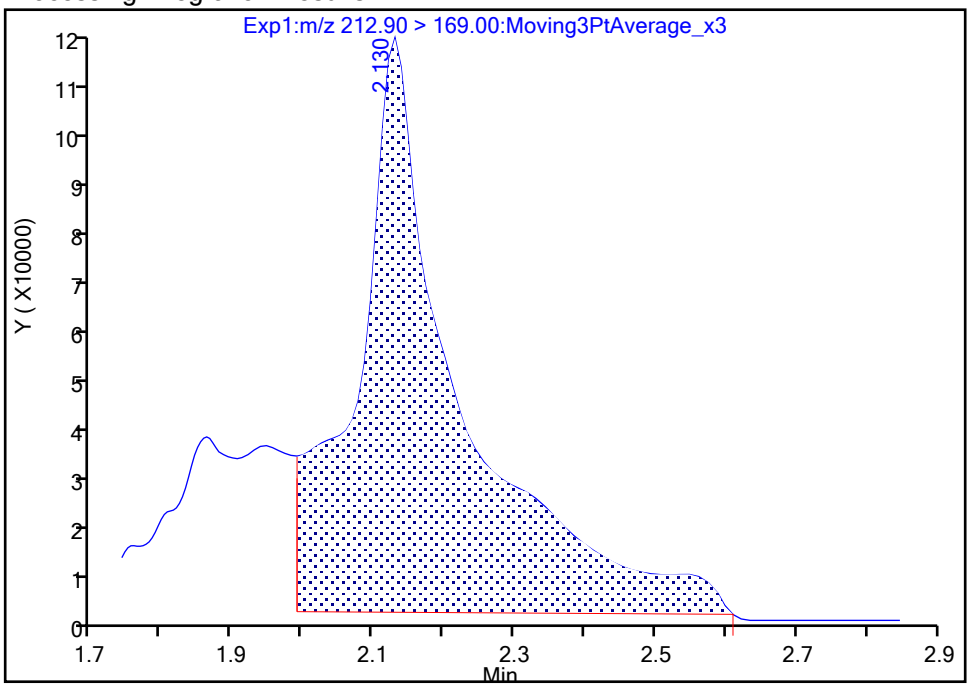
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

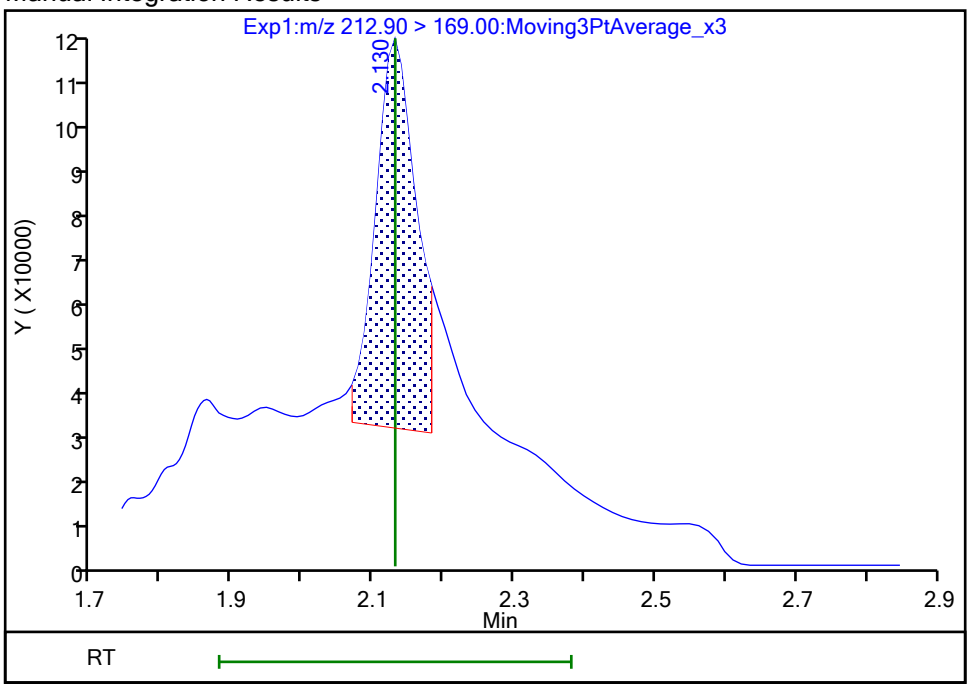
Processing Integration Results

RT: 2.13
Area: 1178129
Amount: 0.820859
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 340260
Amount: 0.208000
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

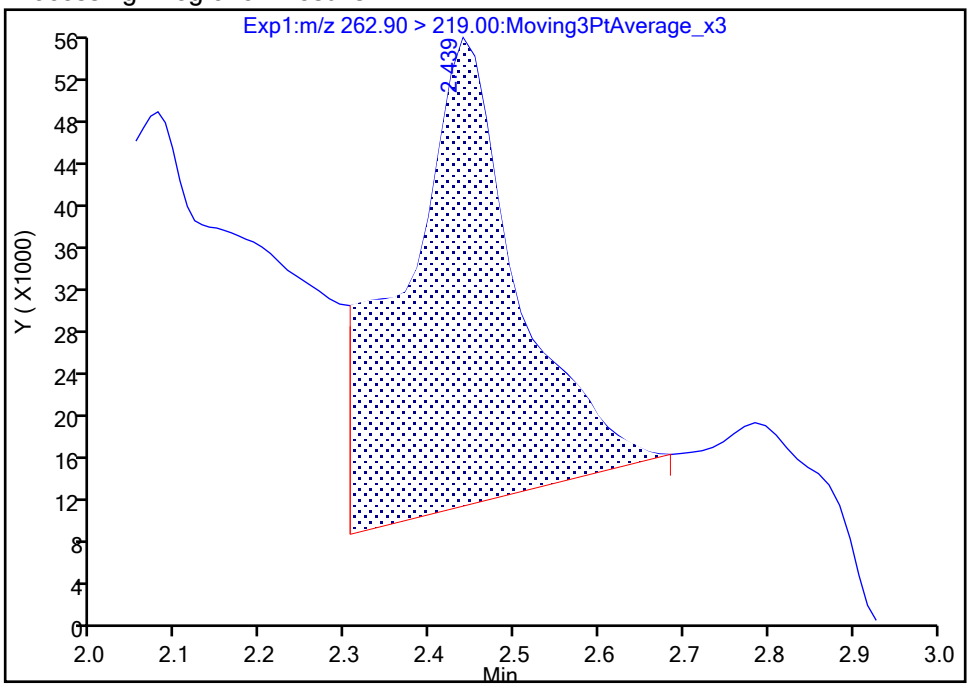
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

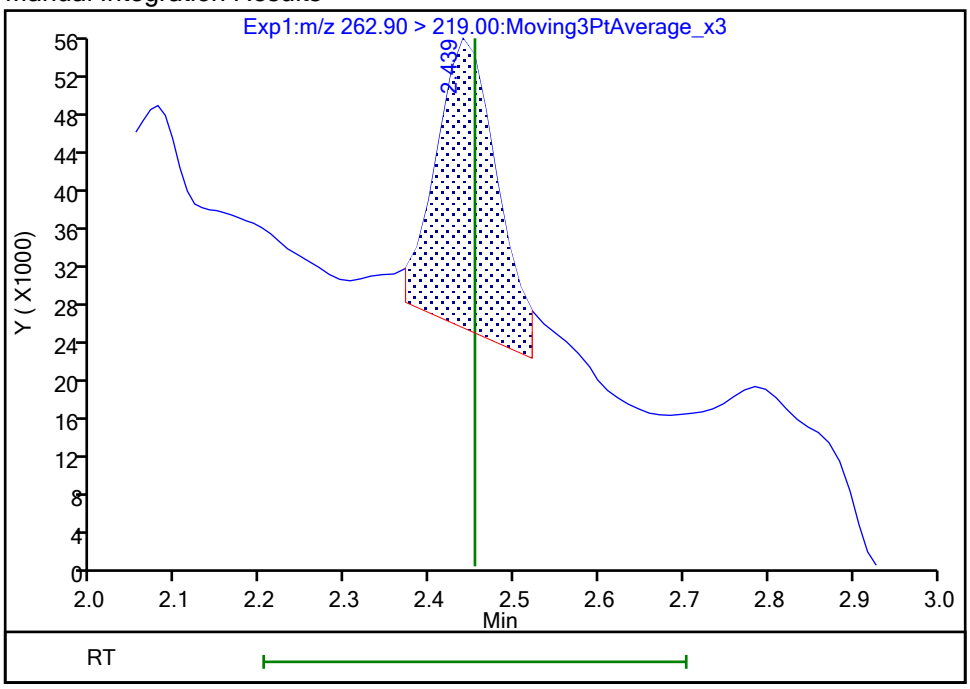
Processing Integration Results

RT: 2.44
Area: 412888
Amount: 0.314466
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 150285
Amount: 0.114461
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

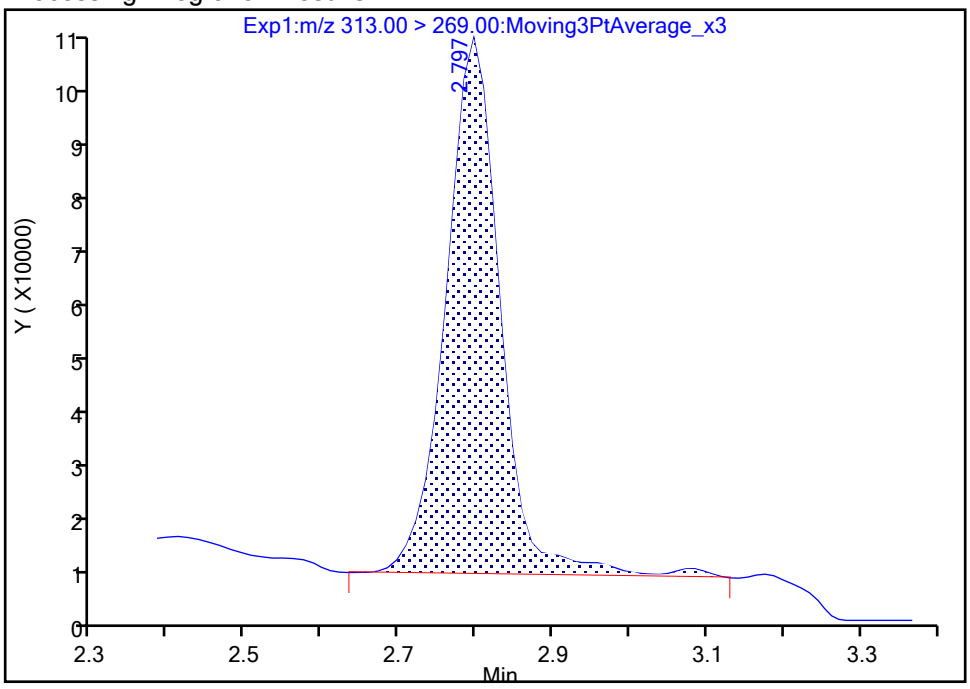
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

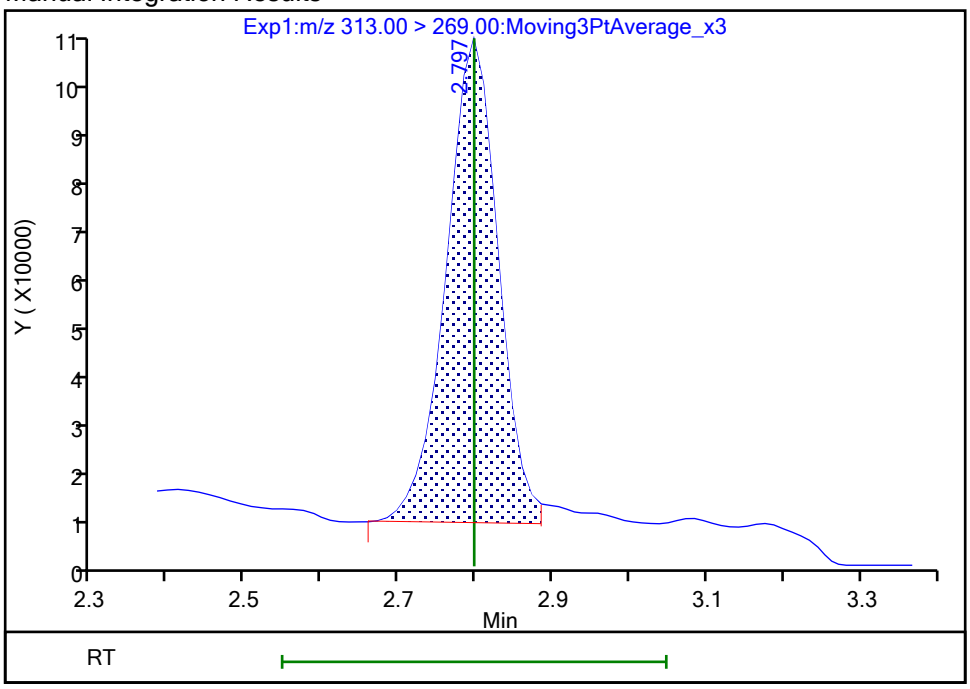
Processing Integration Results

RT: 2.80
Area: 461960
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 435978
Amount: 0.326497
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

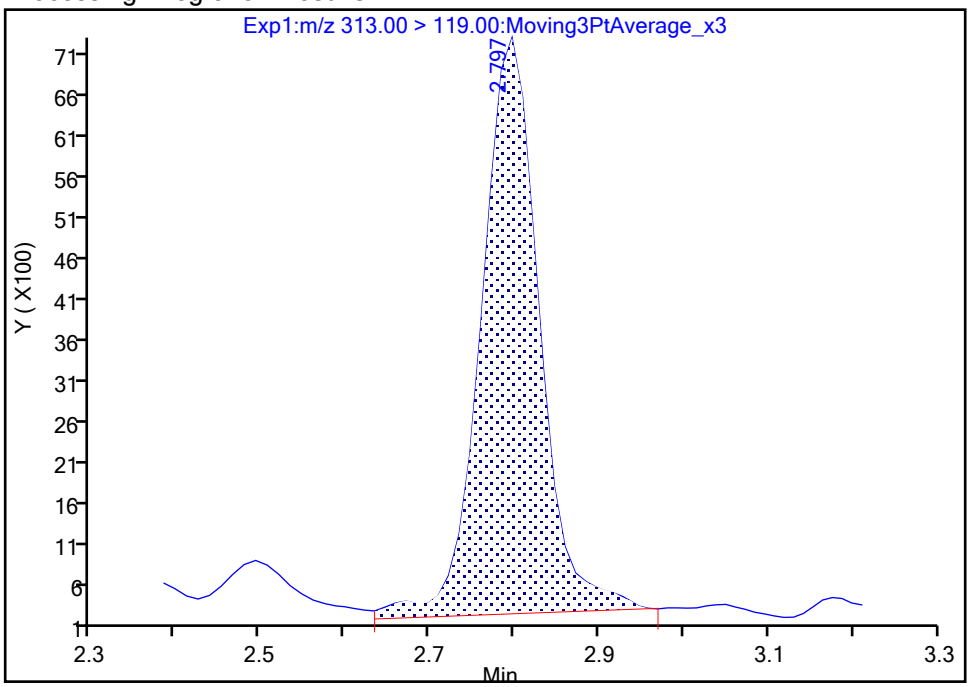
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

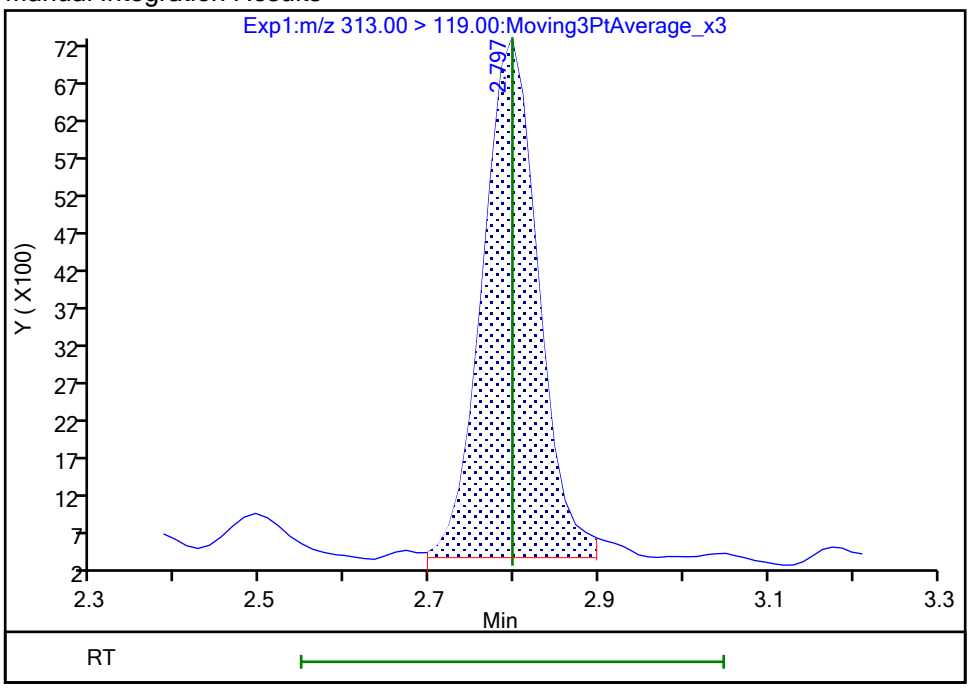
Processing Integration Results

RT: 2.80
Area: 33614
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 31627
Amount: 0.326497
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

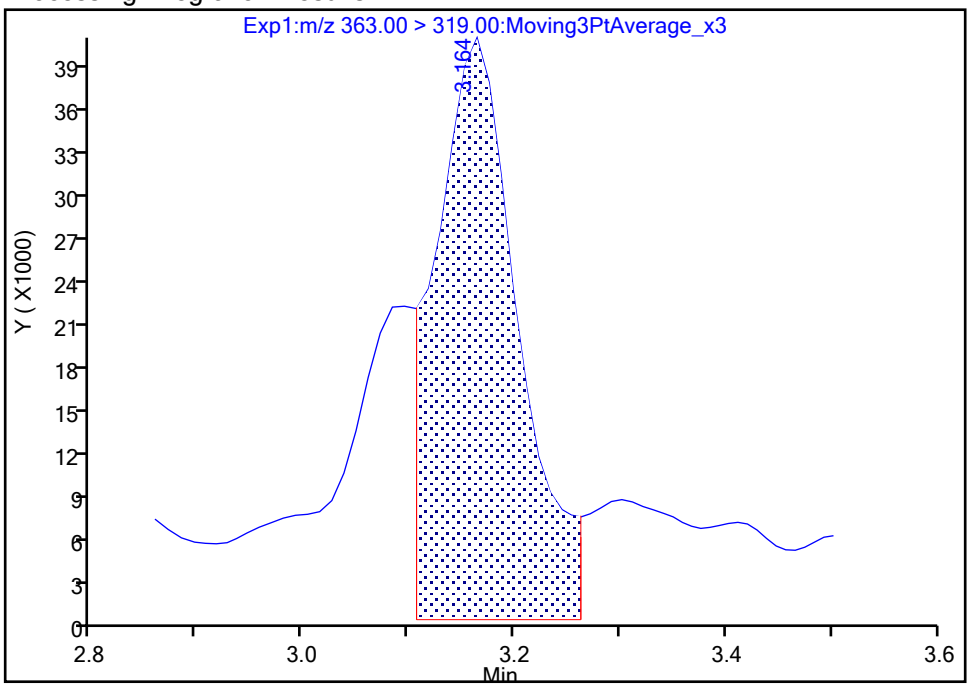
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

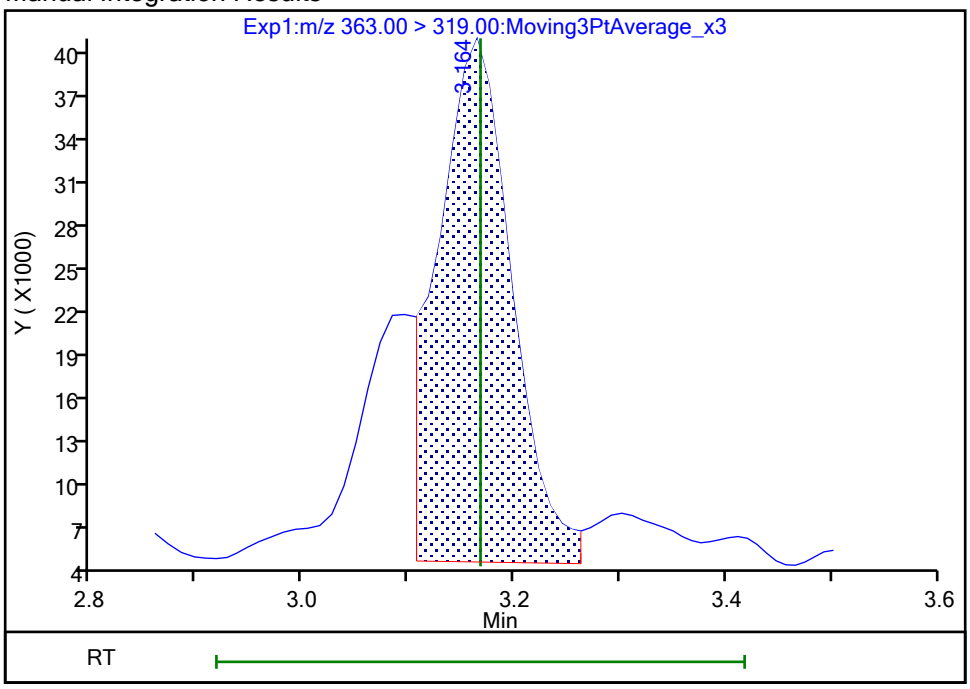
Processing Integration Results

RT: 3.16
Area: 219962
Amount: 0.160735
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 171819
Amount: 0.125555
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 15:08:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

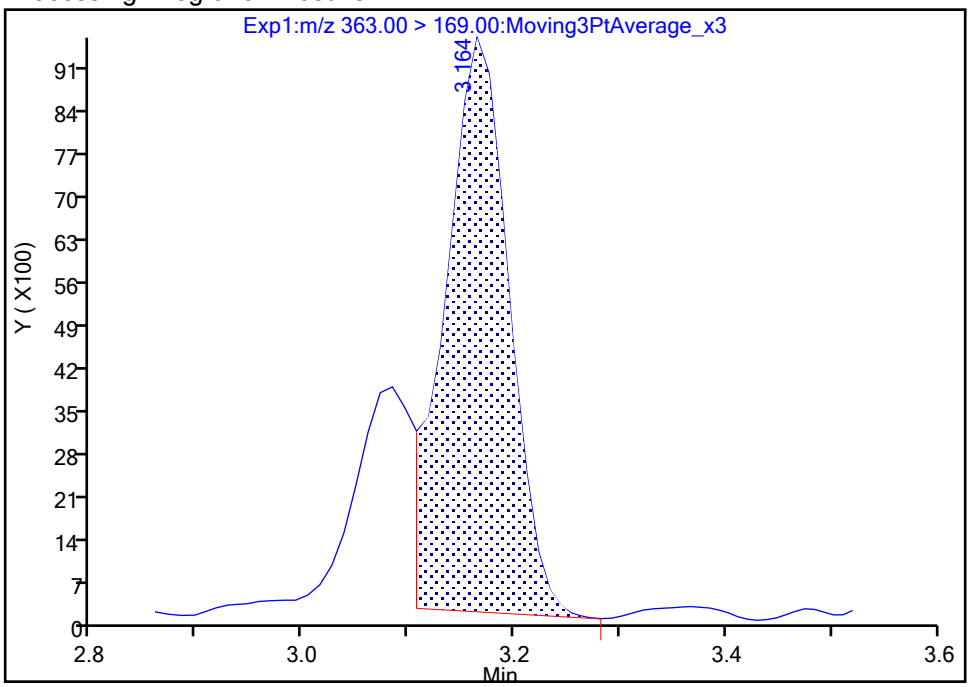
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

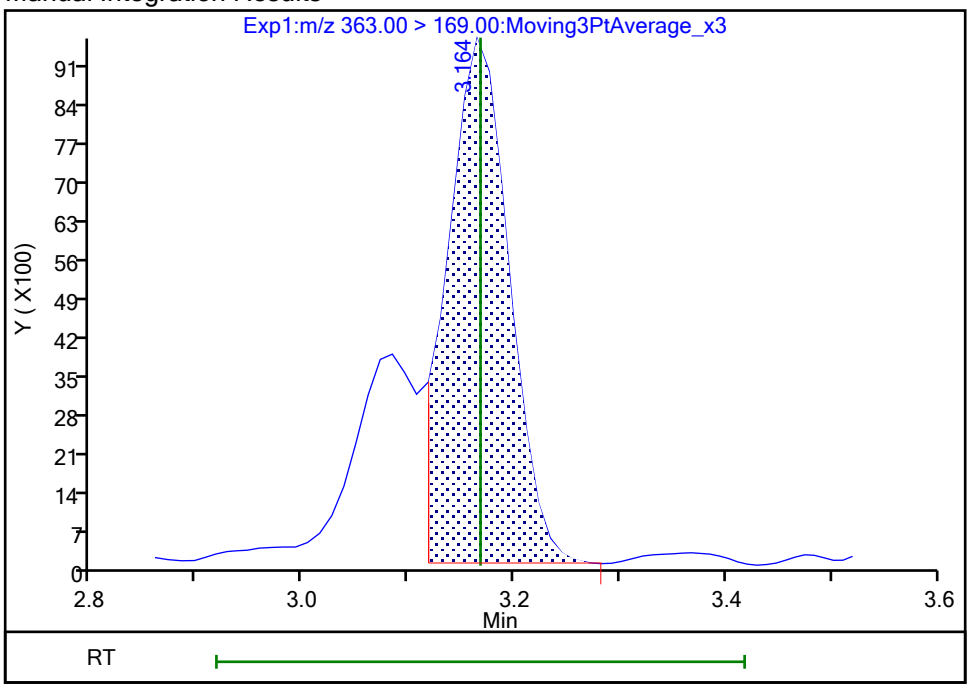
Processing Integration Results

RT: 3.16
Area: 39390
Amount: 0.160735
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 37880
Amount: 0.125555
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 15:08:45 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

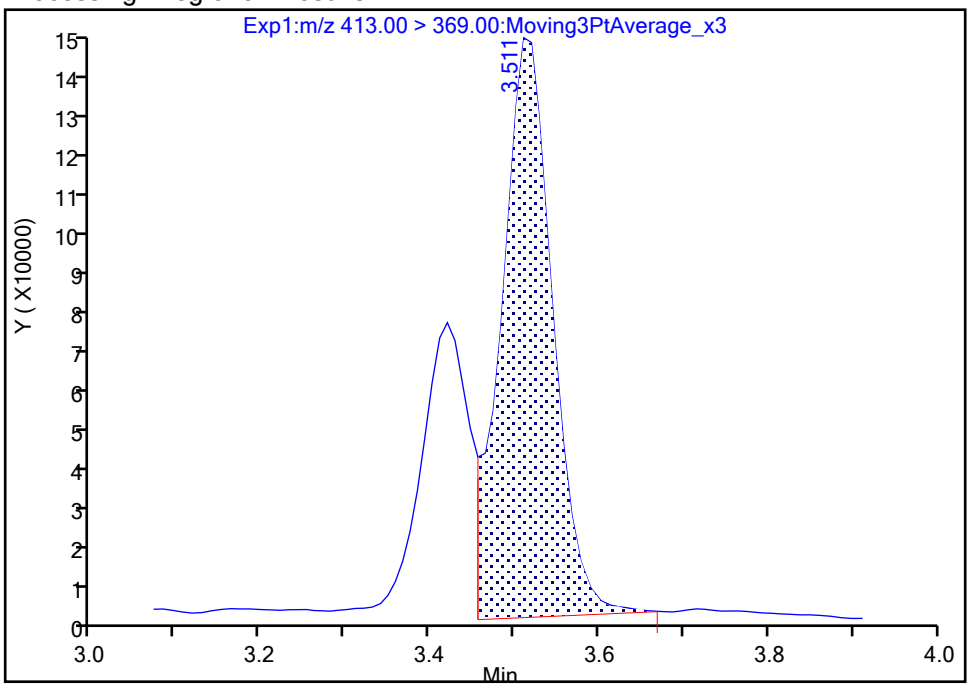
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

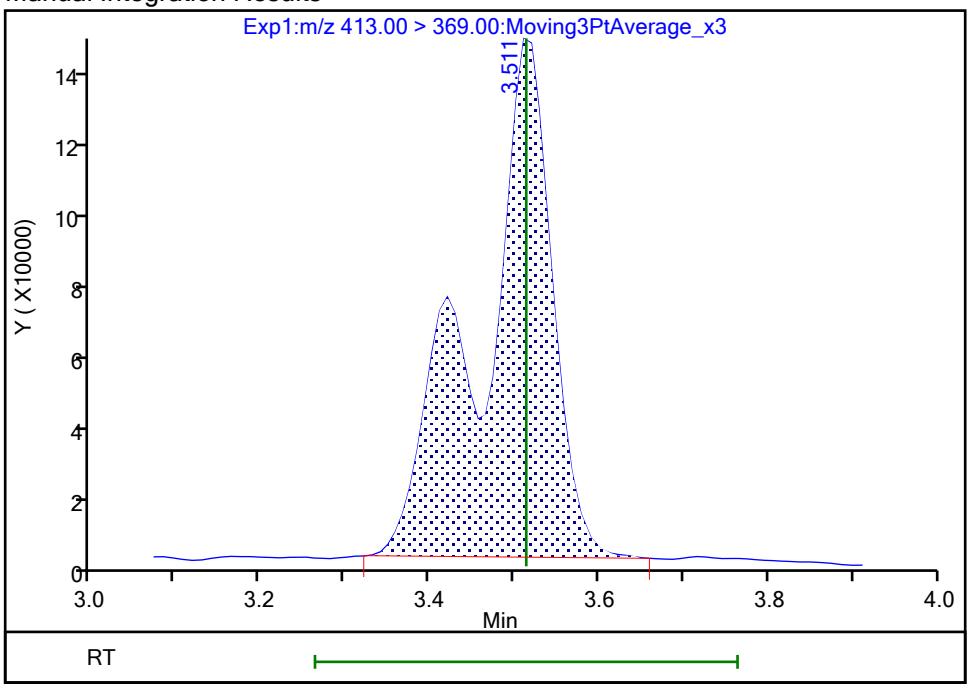
Processing Integration Results

RT: 3.51
Area: 584565
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 823515
Amount: 0.521689
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

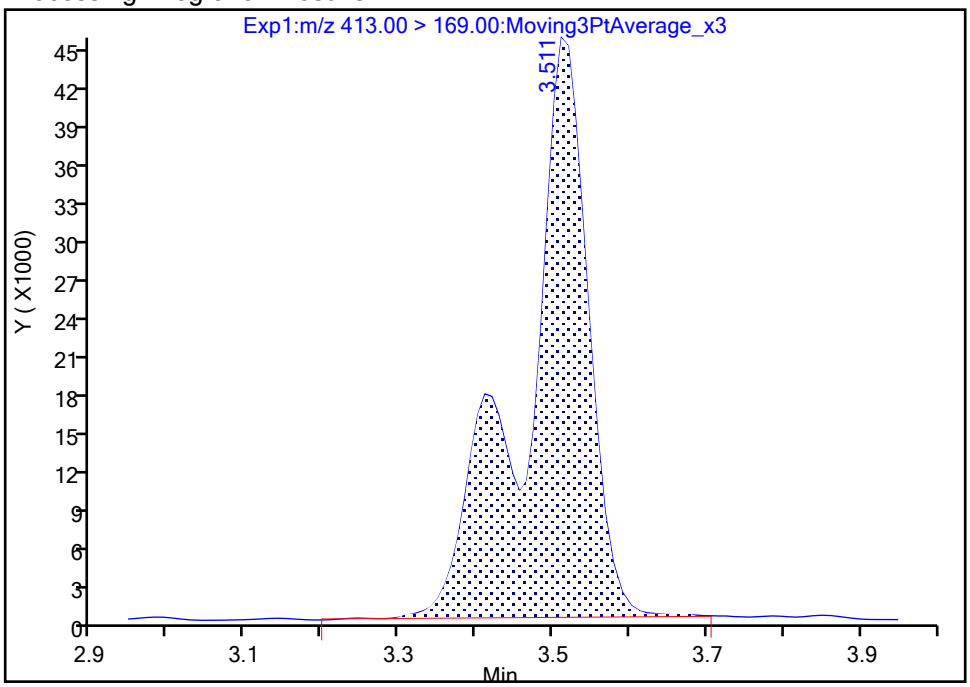
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

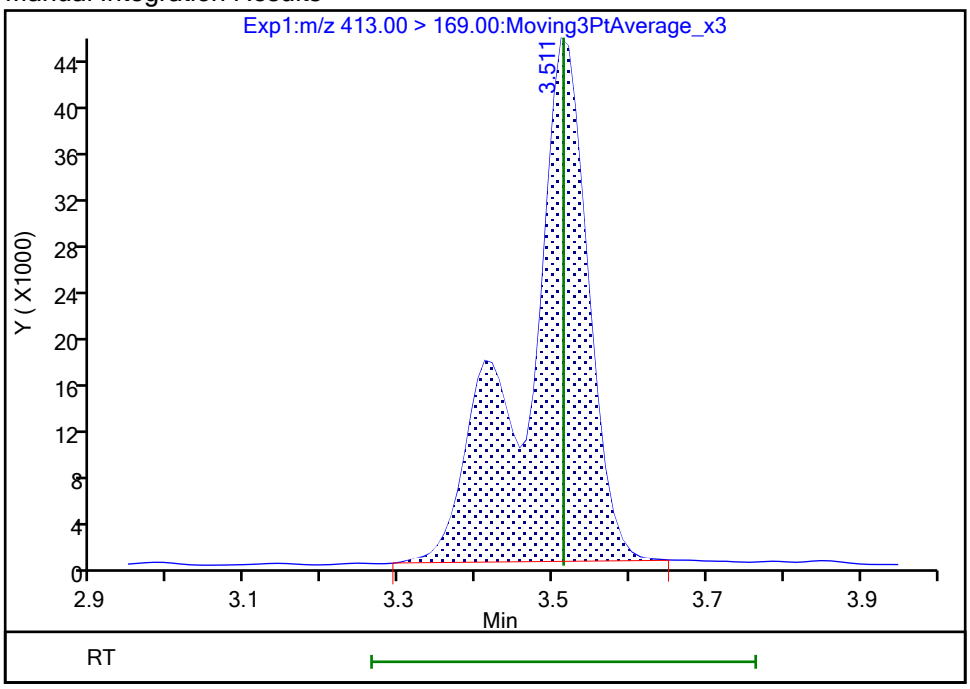
Processing Integration Results

RT: 3.51
Area: 264794
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 261809
Amount: 0.521689
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

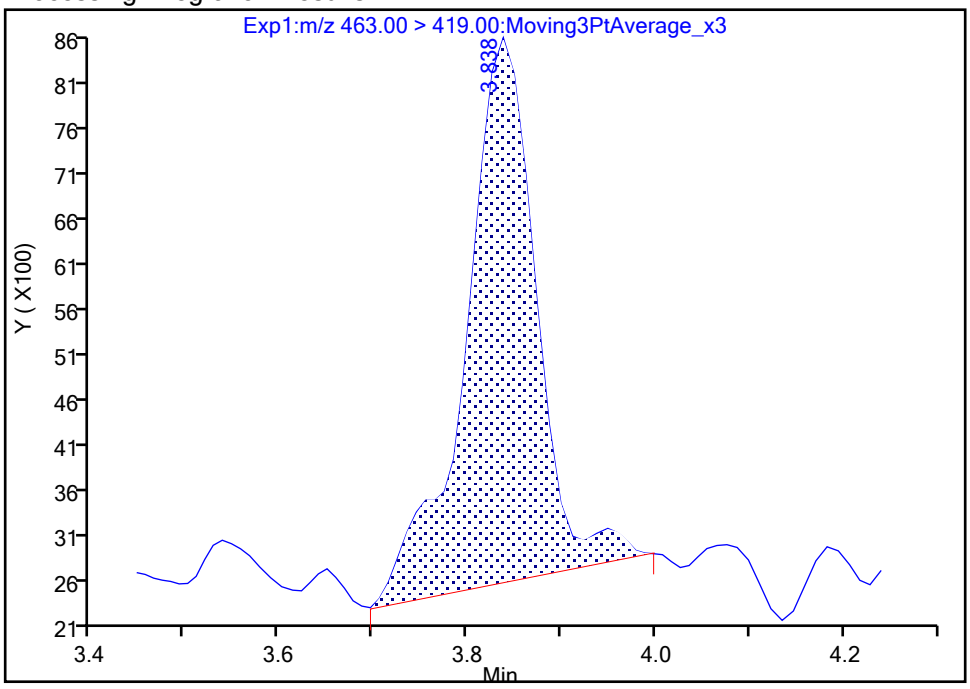
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

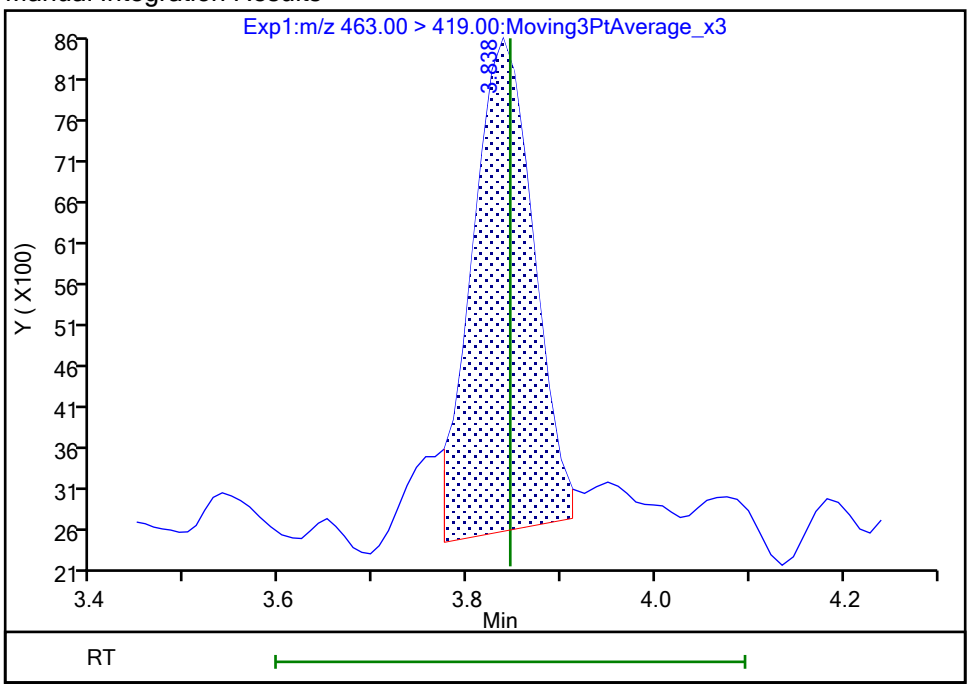
Processing Integration Results

RT: 3.84
Area: 31407
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 27070
Amount: 0.017644
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

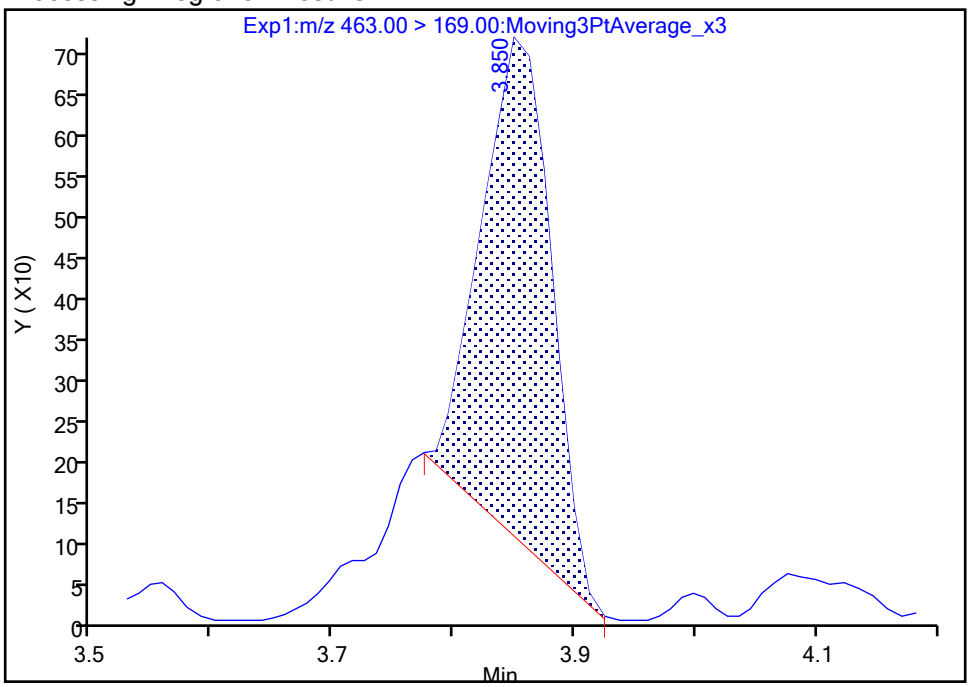
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

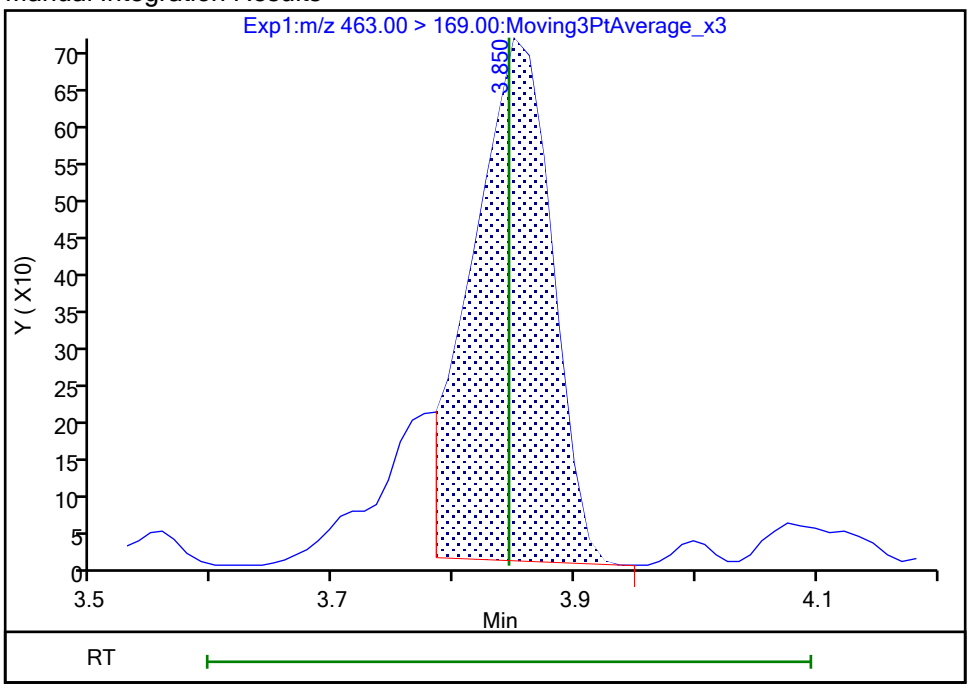
Processing Integration Results

RT: 3.85
Area: 2474
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 3227
Amount: 0.017644
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

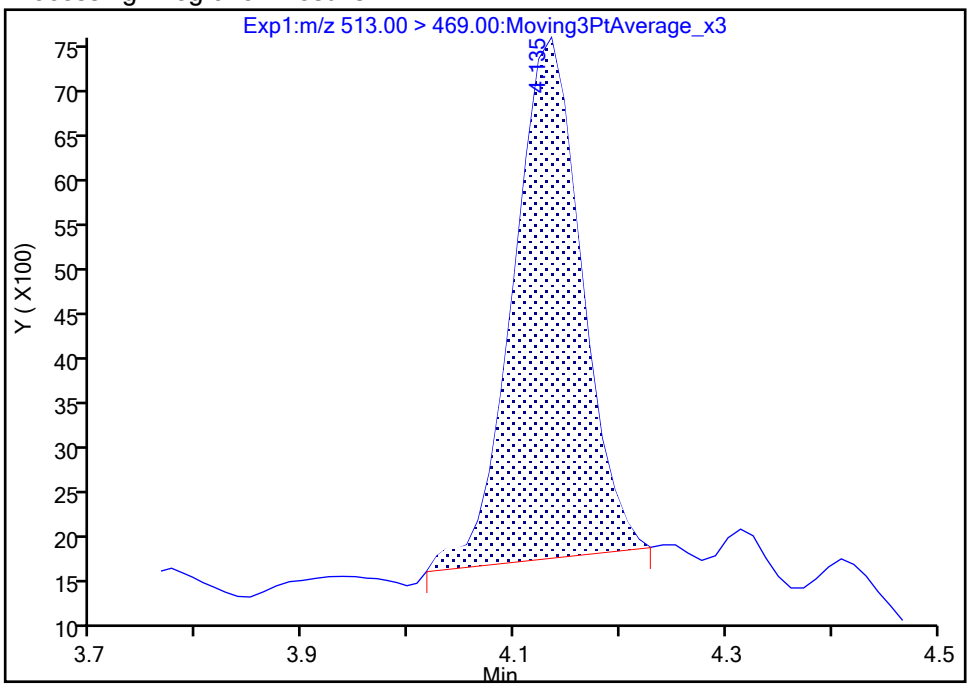
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

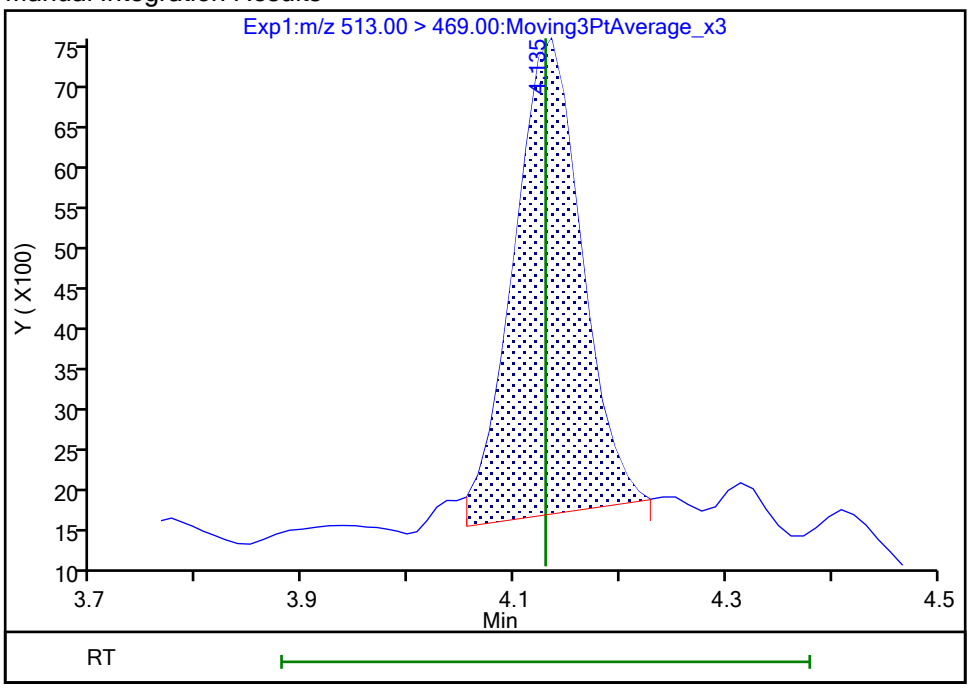
Processing Integration Results

RT: 4.13
Area: 26041
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 26182
Amount: 0.015088
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:03:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

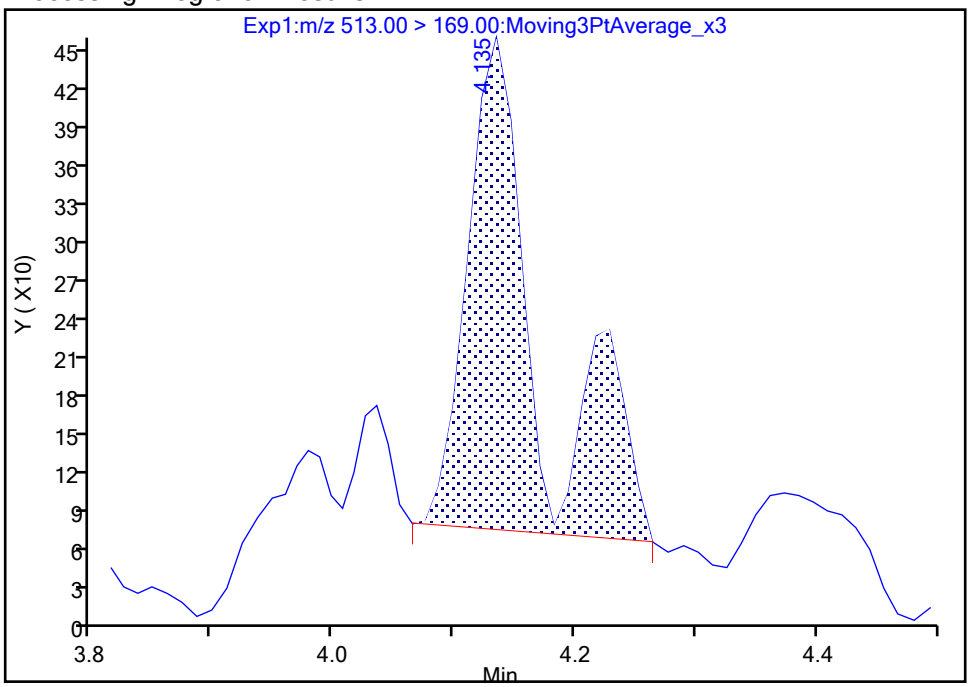
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

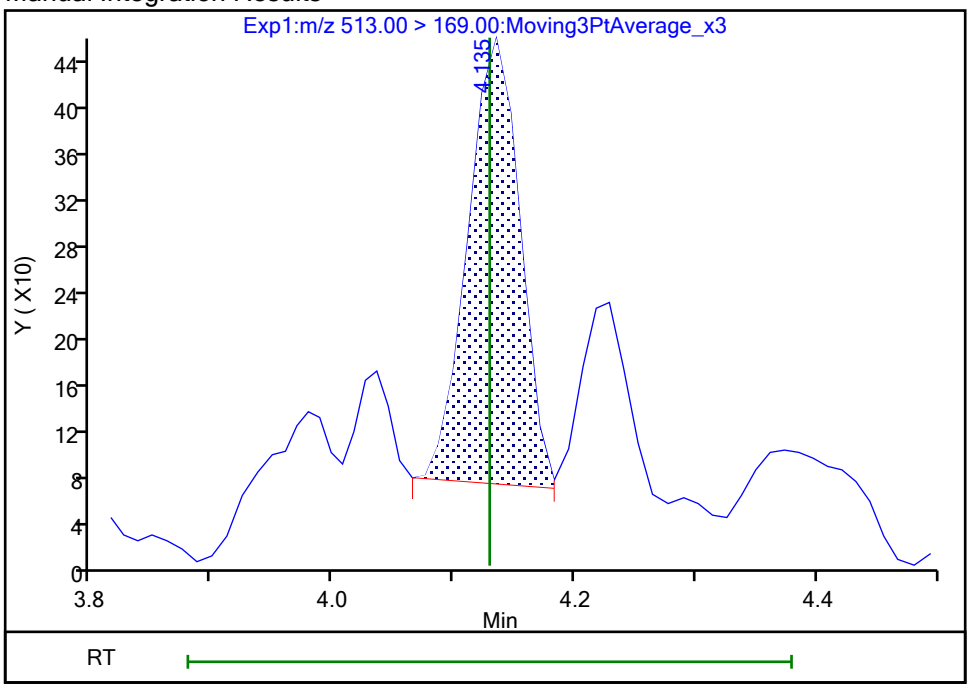
Processing Integration Results

RT: 4.13
Area: 1567
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 1147
Amount: 0.015088
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:03:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

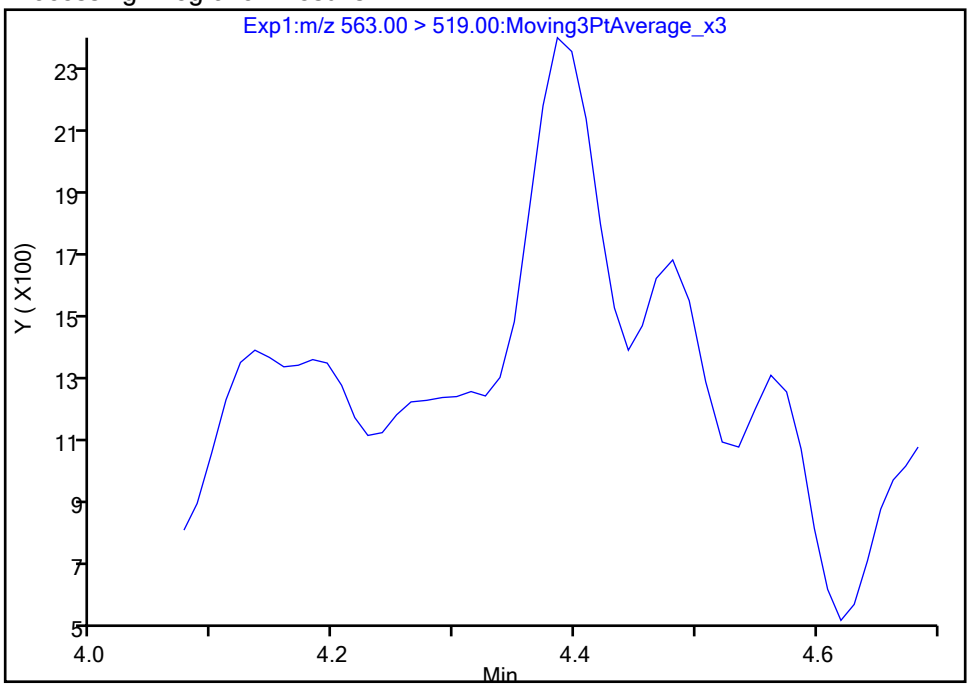
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

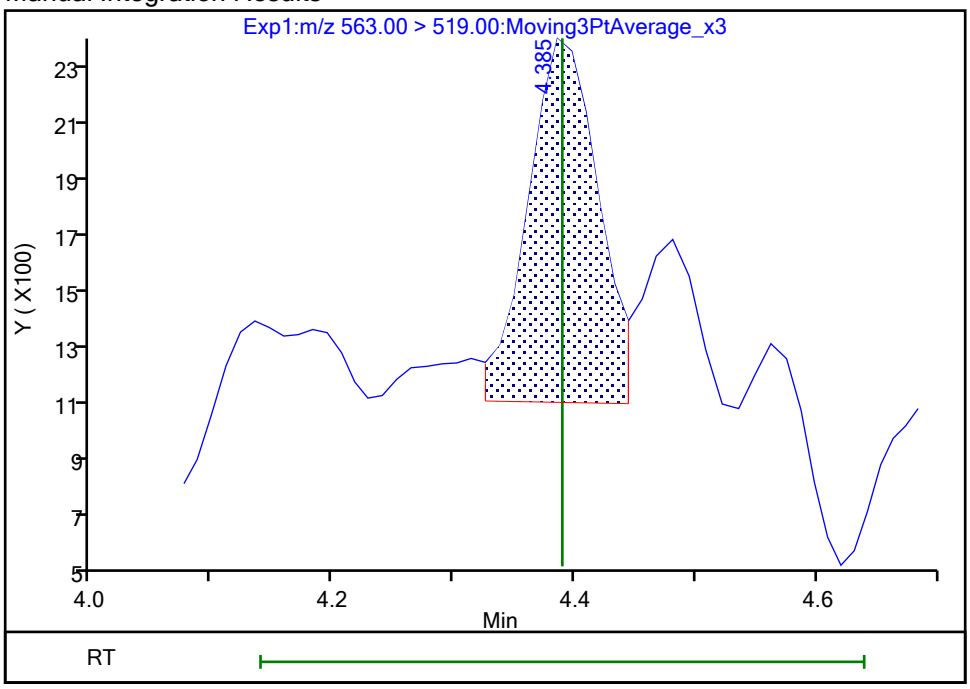
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 5116
Amount: 0.002823
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:04:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

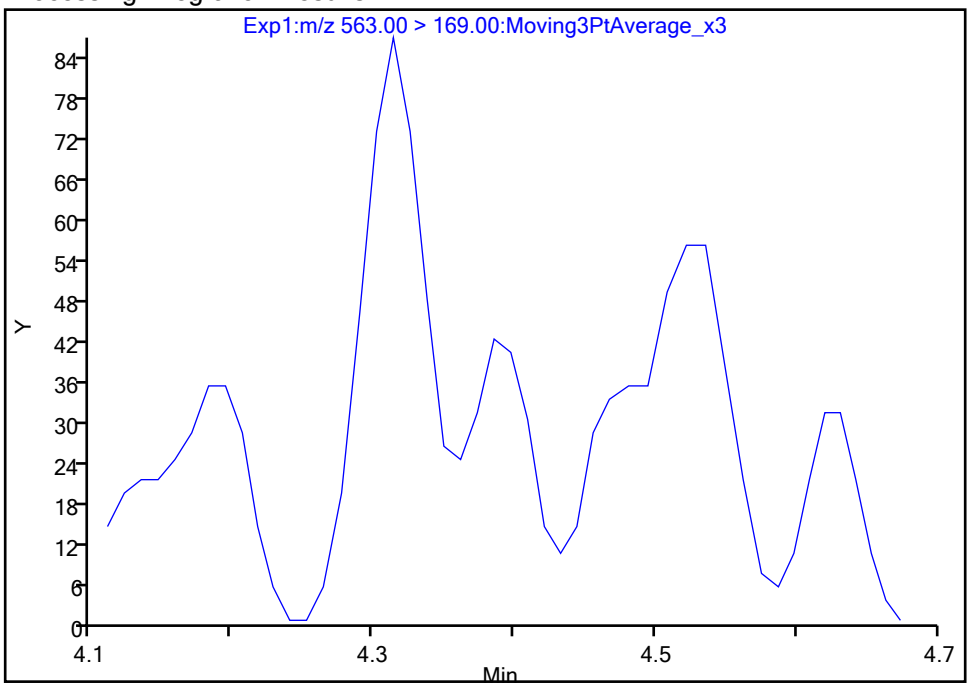
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

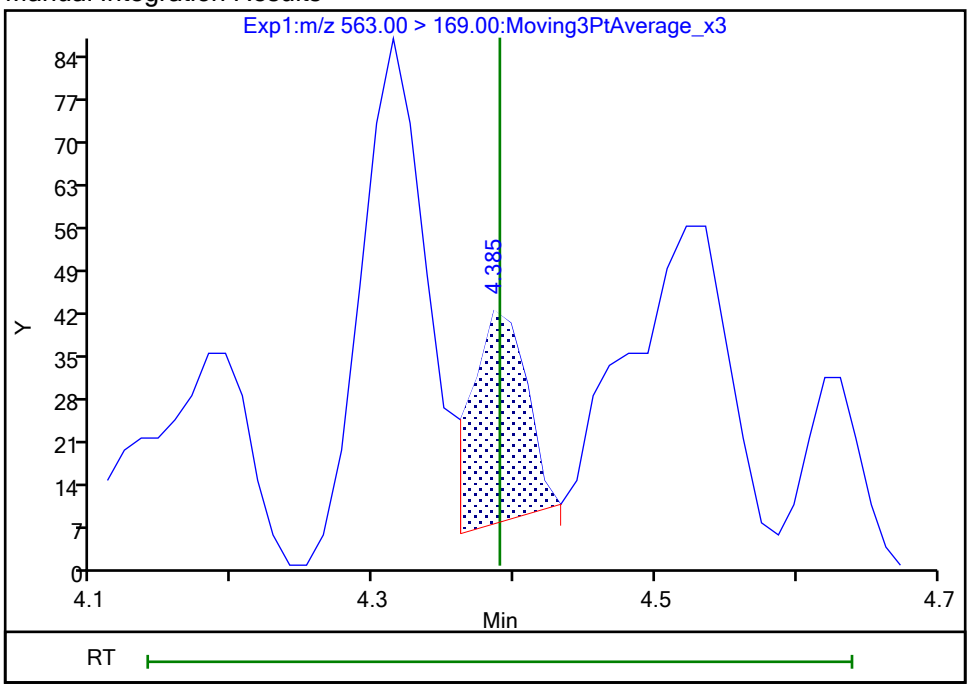
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 91
Amount: 0.002823
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:04:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

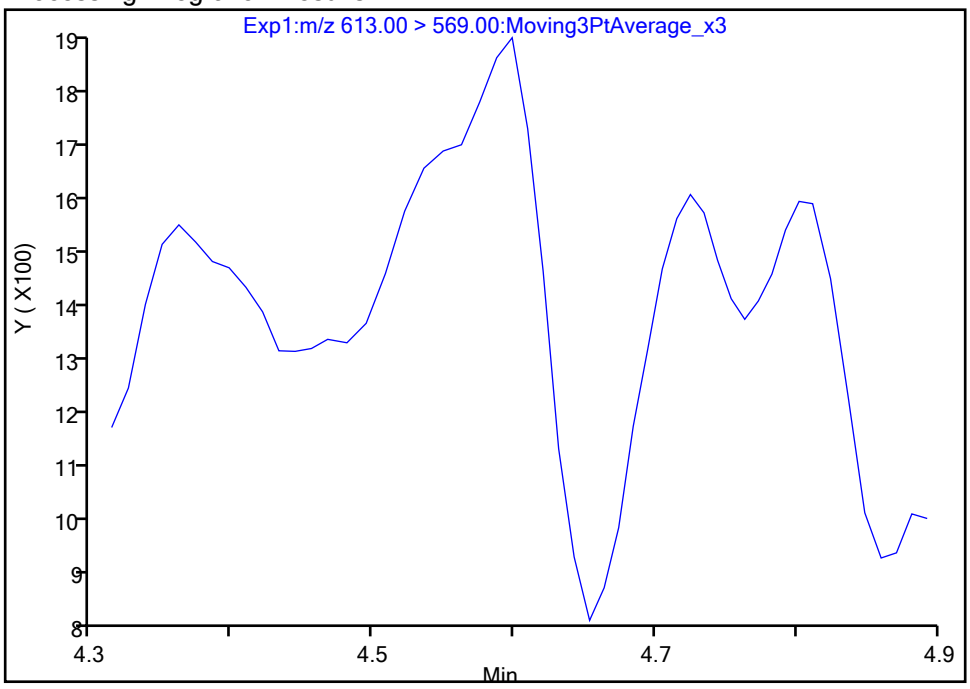
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

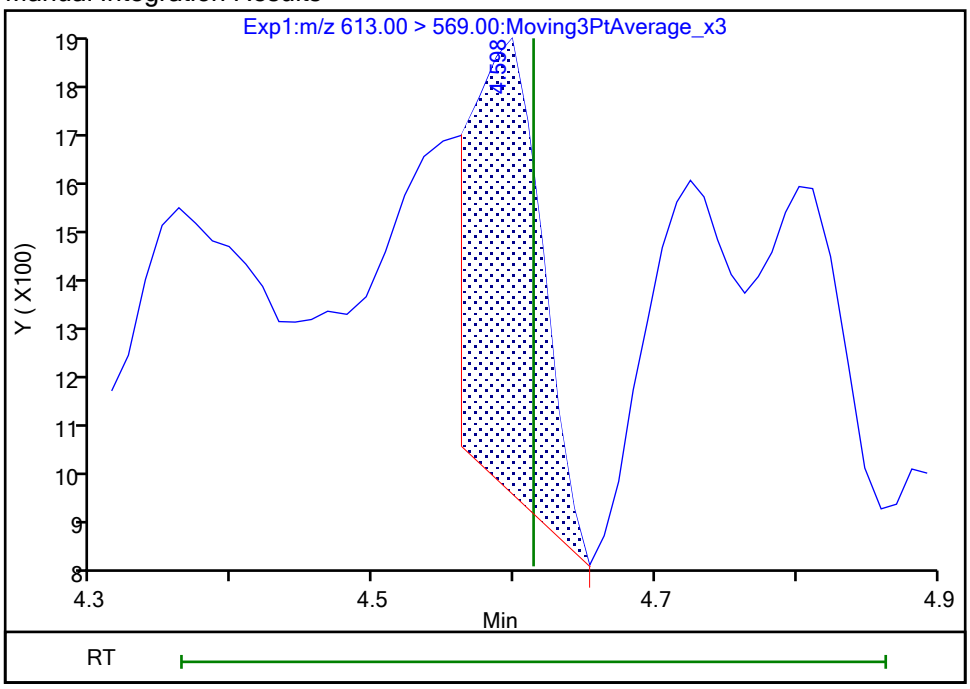
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 2965
Amount: 0.001656
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:04:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

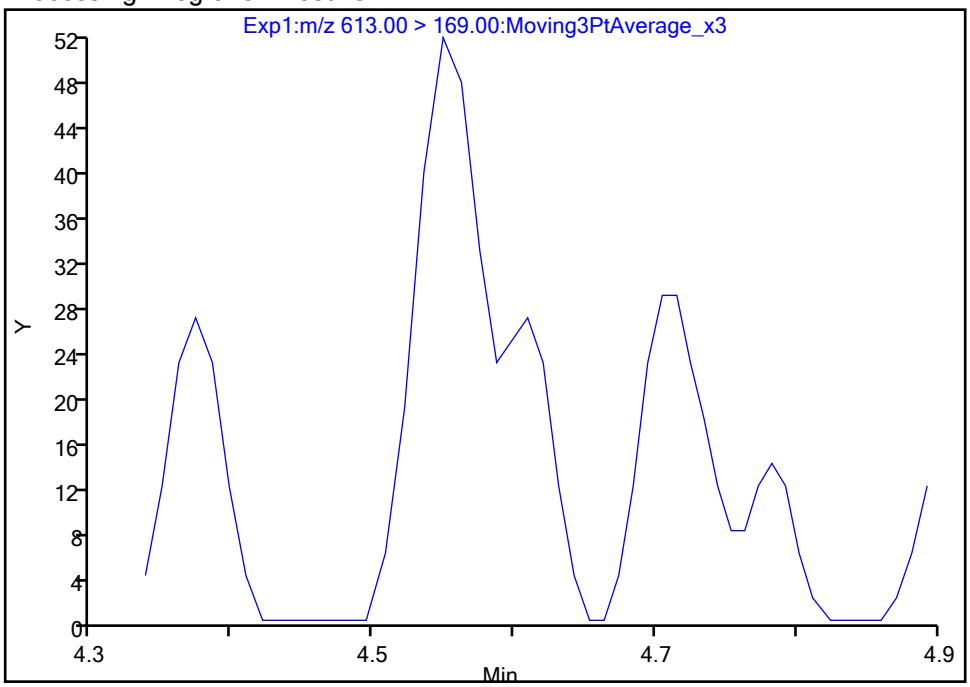
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

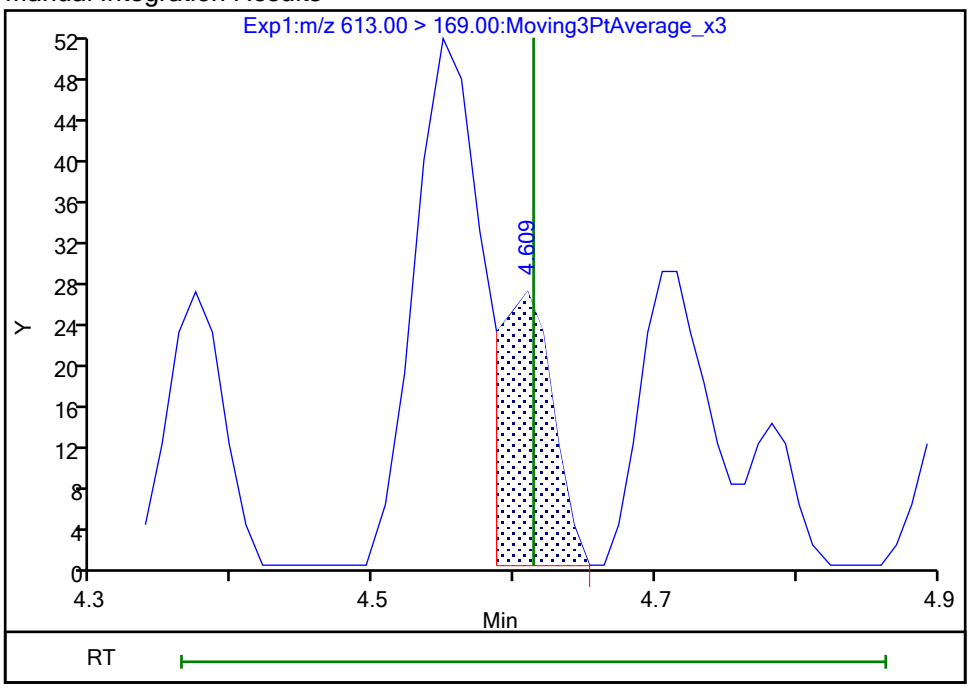
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 67
Amount: 0.001656
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:04:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

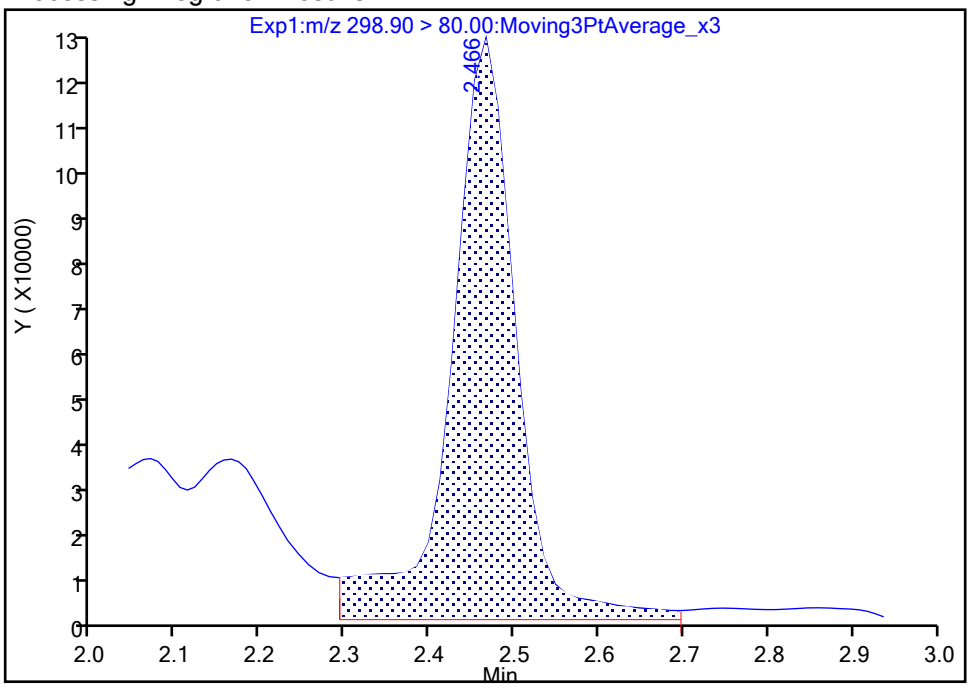
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

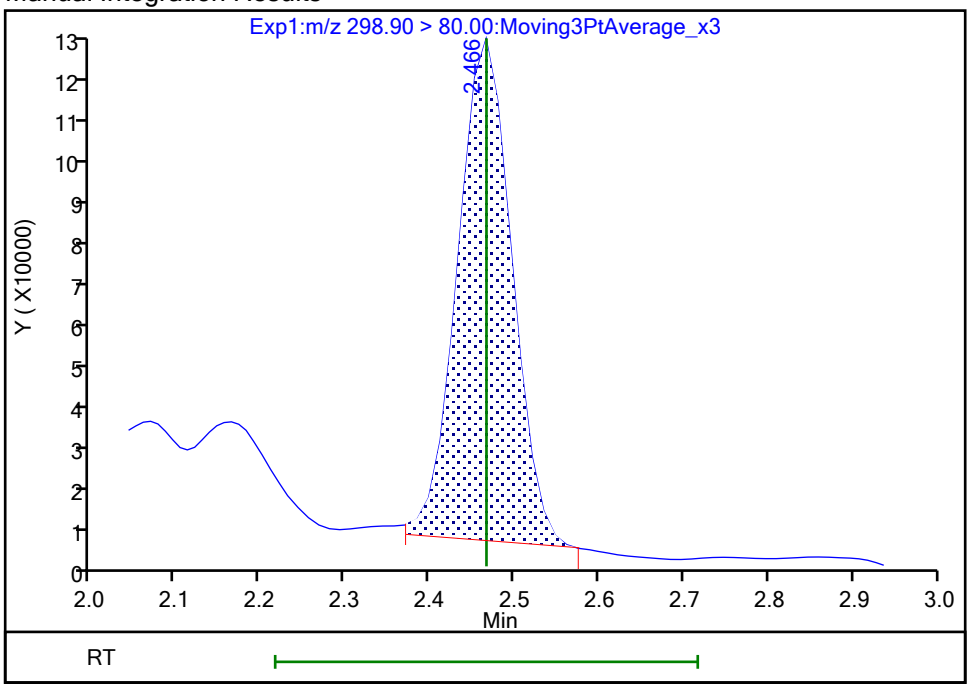
Processing Integration Results

RT: 2.47
Area: 660953
Amount: 0.364580
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 517904
Amount: 0.285675
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

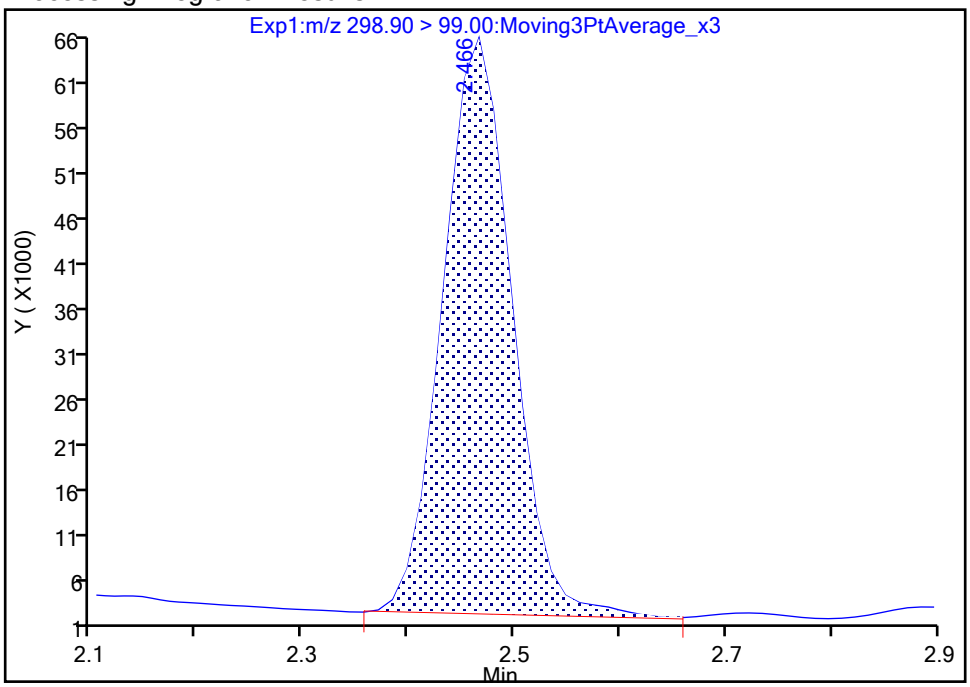
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

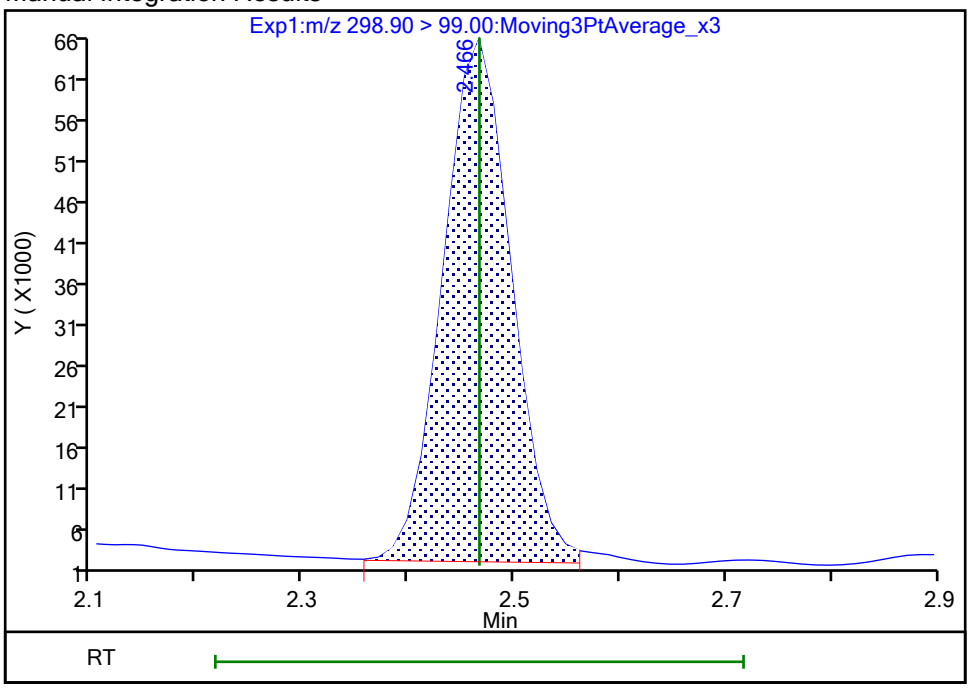
Processing Integration Results

RT: 2.47
Area: 291971
Amount: 0.364580
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 285631
Amount: 0.285675
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:00:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

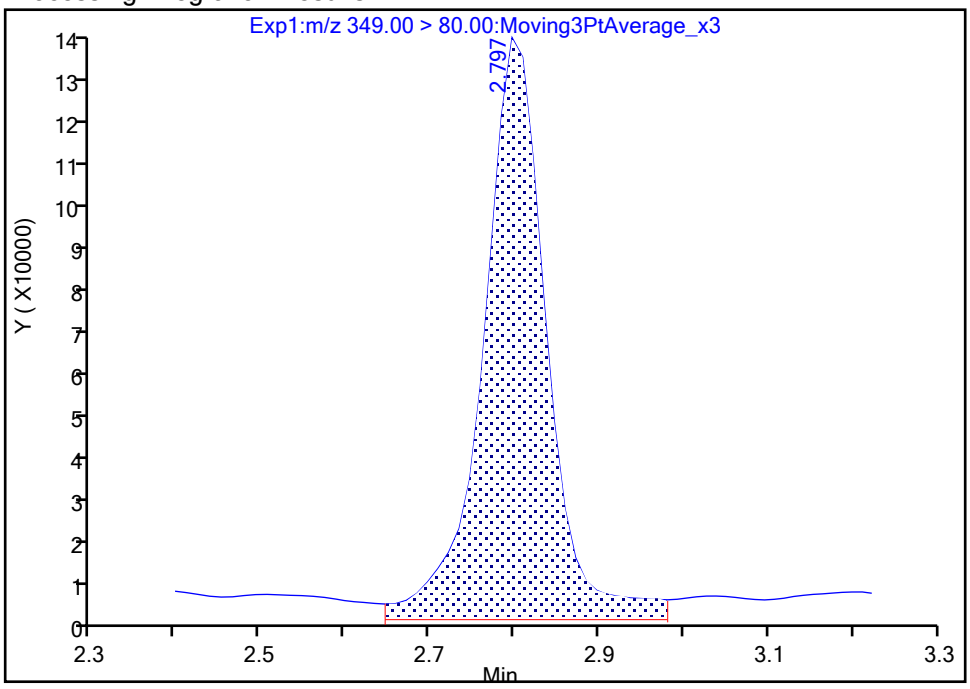
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

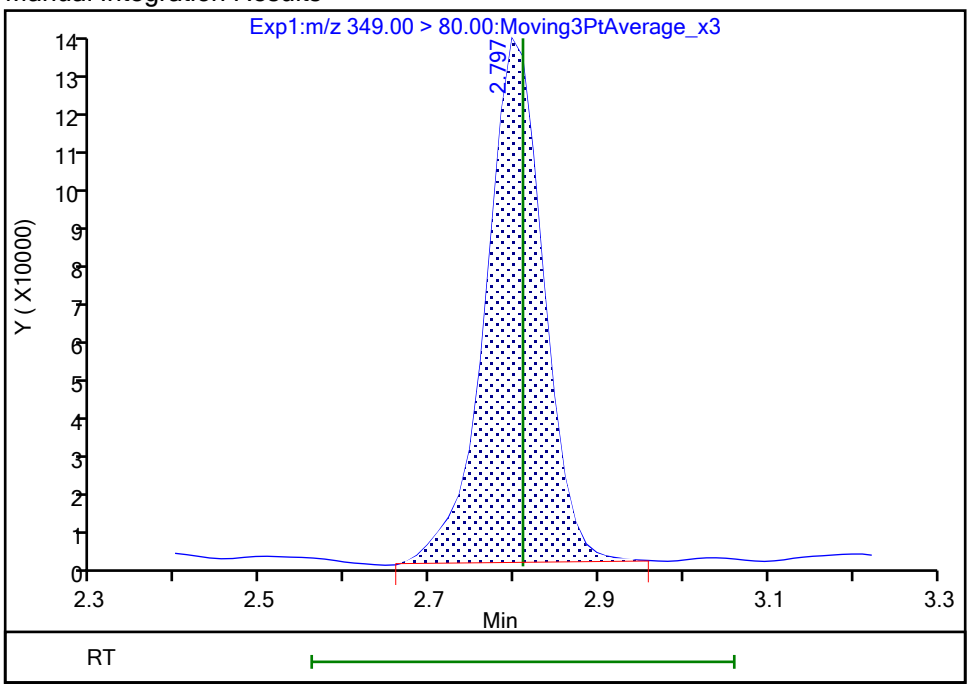
Processing Integration Results

RT: 2.80
Area: 728187
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 636940
Amount: 0.407574
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

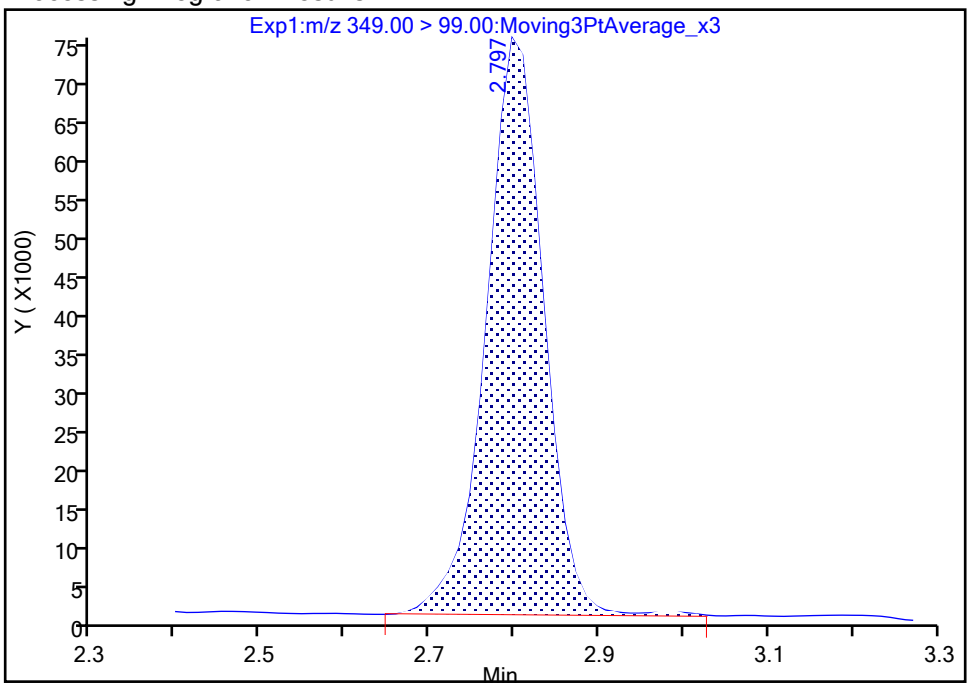
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

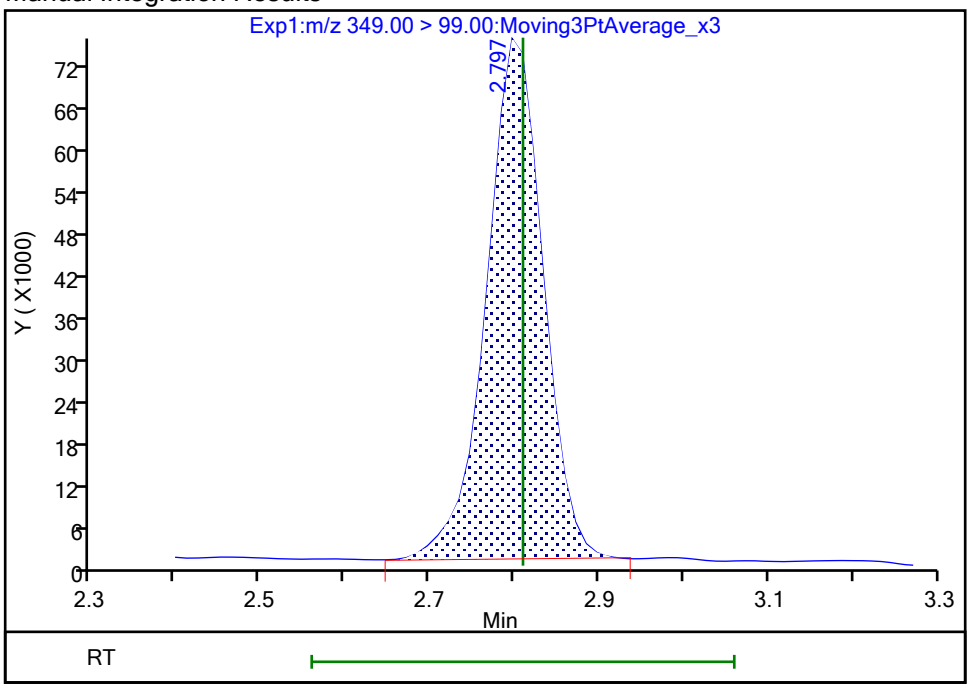
Processing Integration Results

RT: 2.80
Area: 353465
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 350008
Amount: 0.407574
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

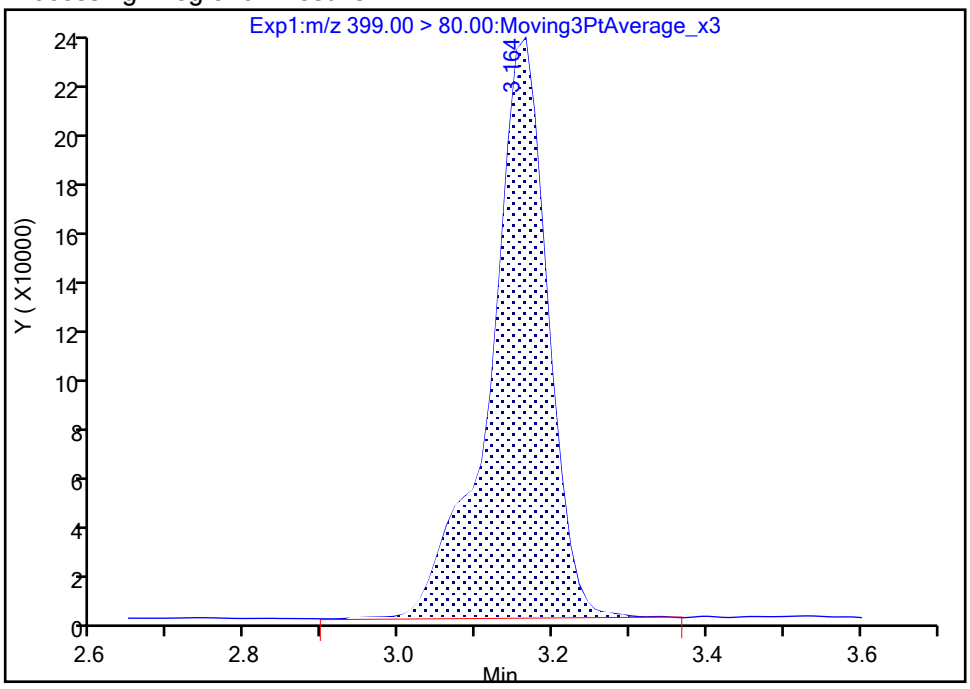
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

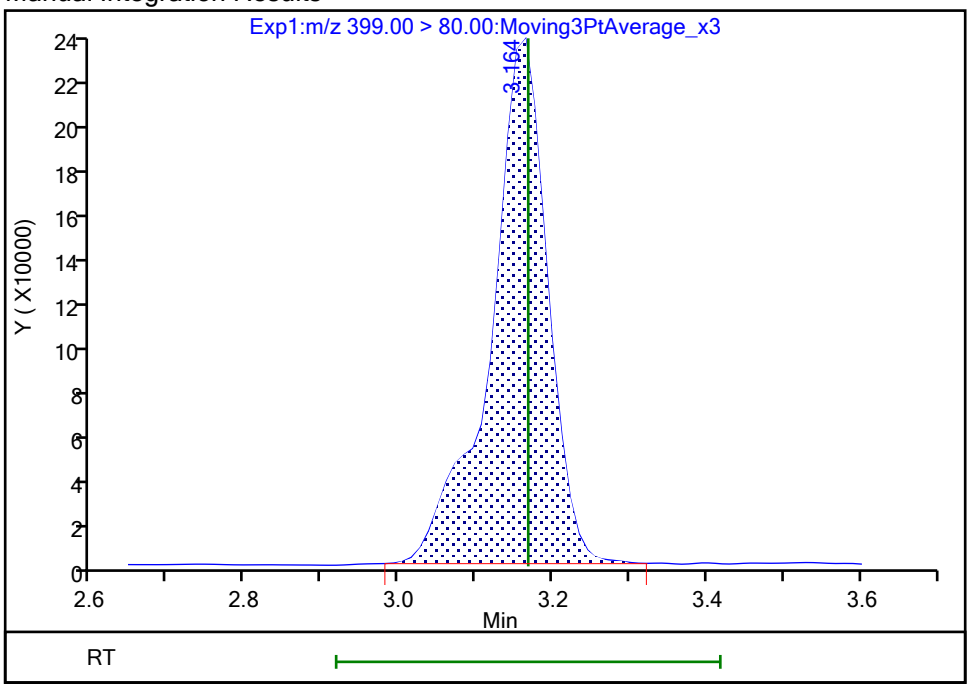
Processing Integration Results

RT: 3.16
Area: 1205707
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1183991
Amount: 0.893769
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

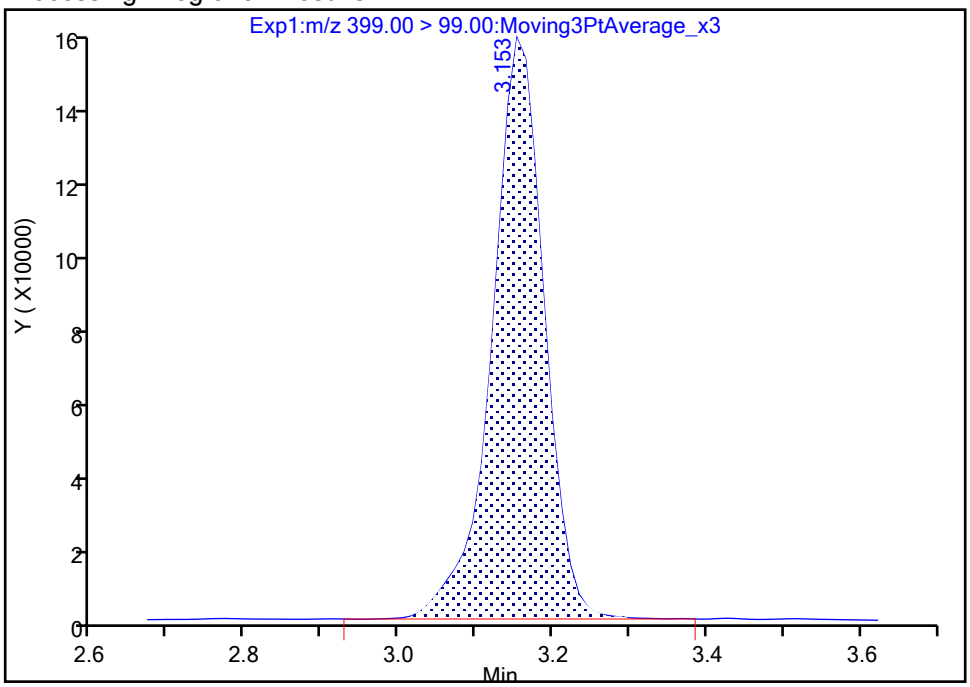
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

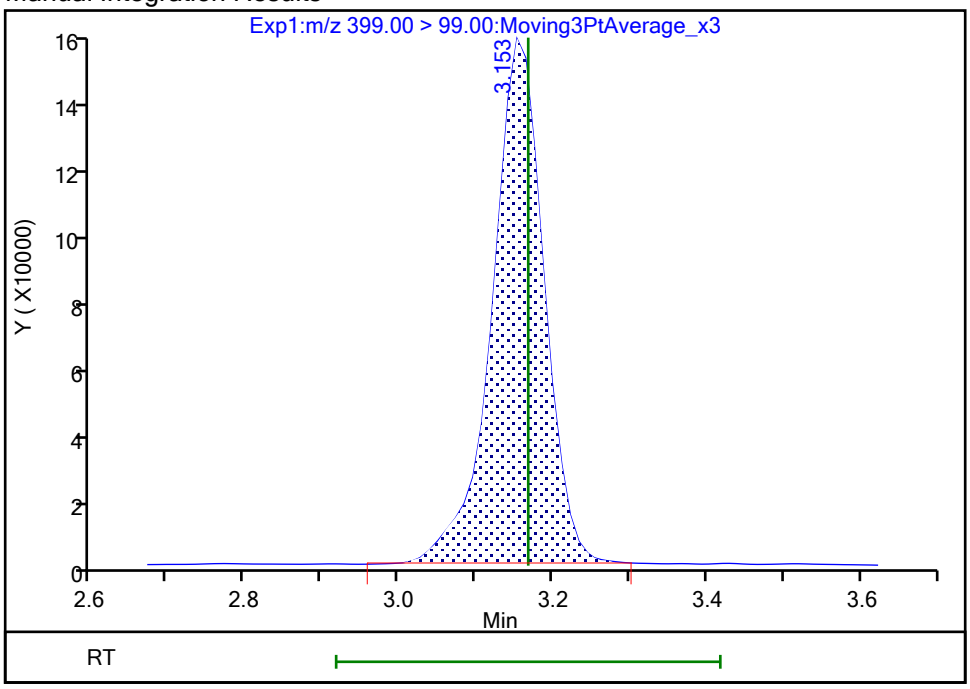
Processing Integration Results

RT: 3.15
Area: 716487
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 712531
Amount: 0.893769
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

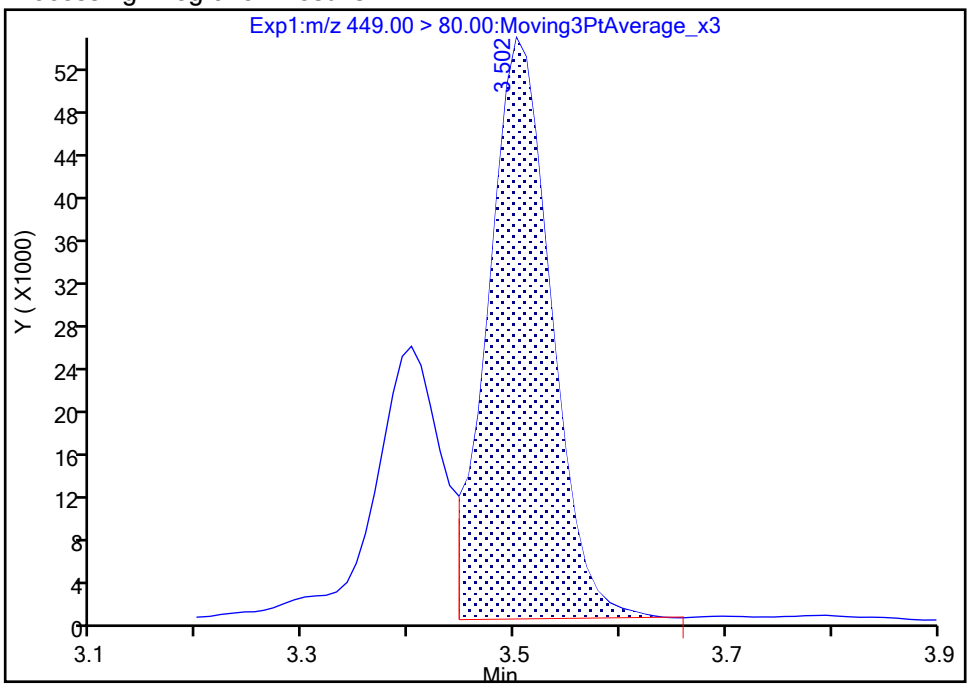
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

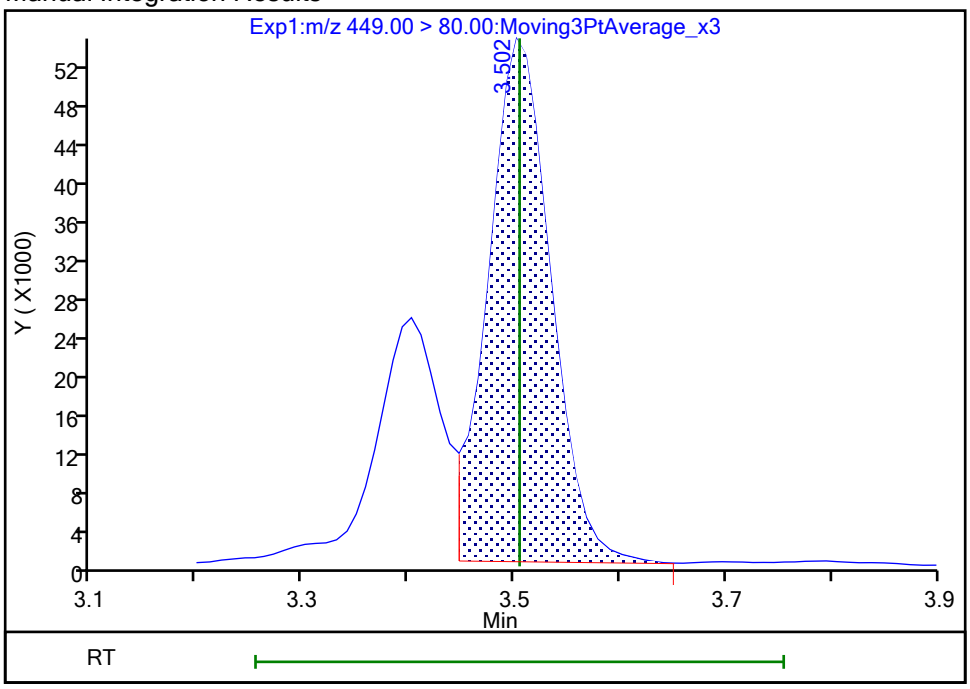
Processing Integration Results

RT: 3.50
Area: 224230
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 220907
Amount: 0.198410
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

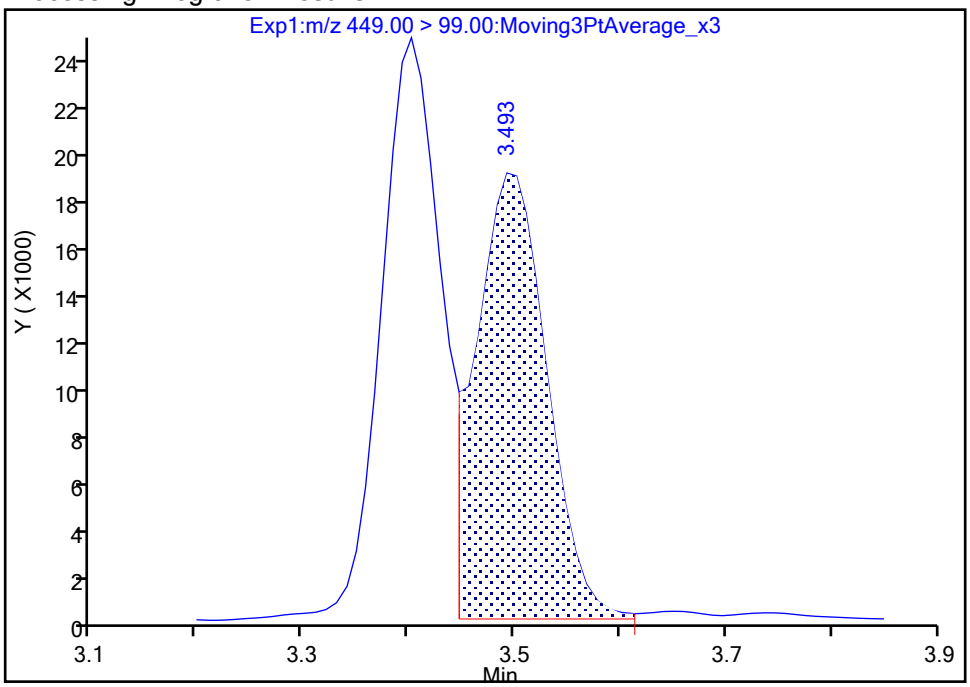
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

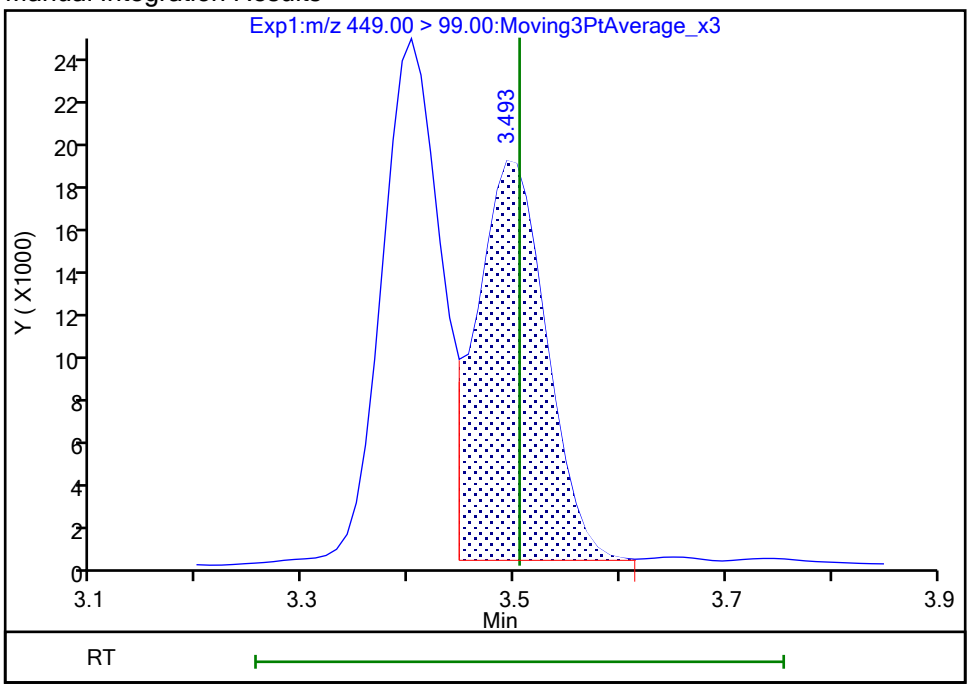
Processing Integration Results

RT: 3.49
Area: 84727
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 83200
Amount: 0.198410
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

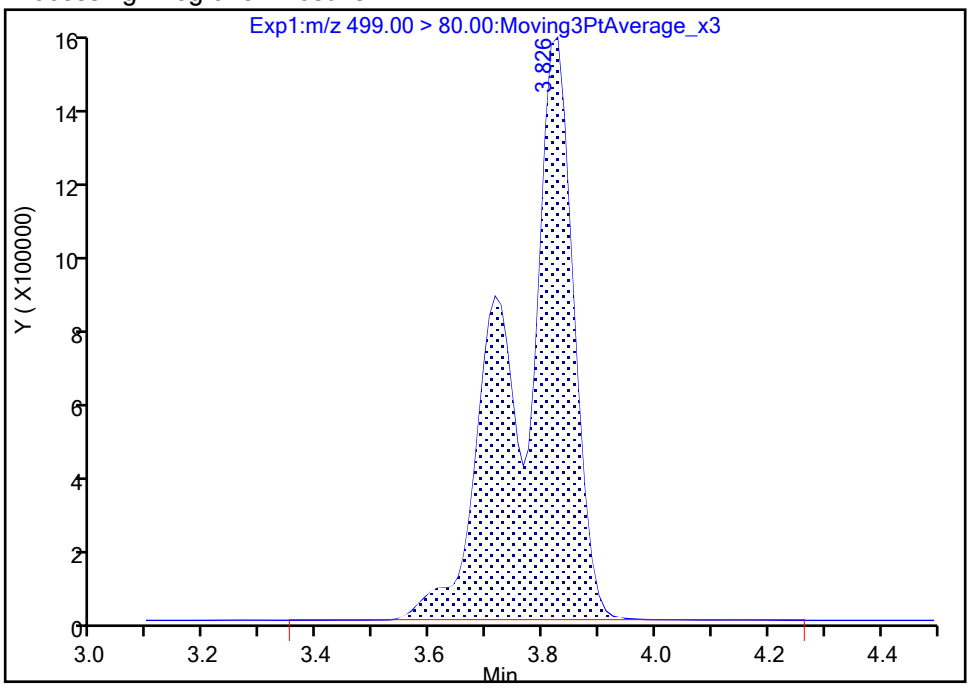
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

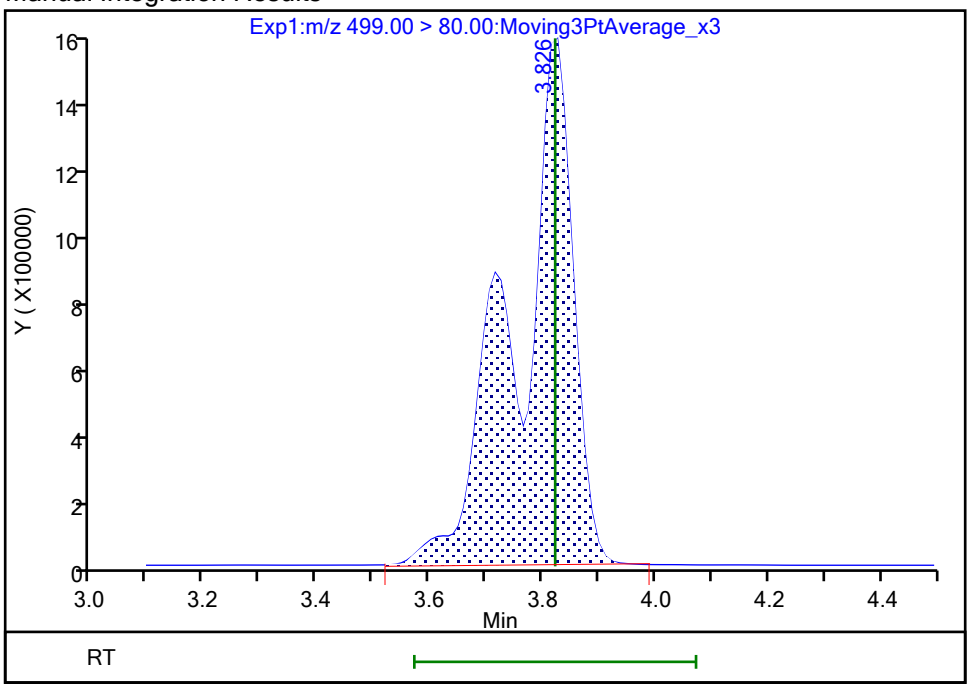
Processing Integration Results

RT: 3.83
Area: 11224195
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 11185905
Amount: 12.448115
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

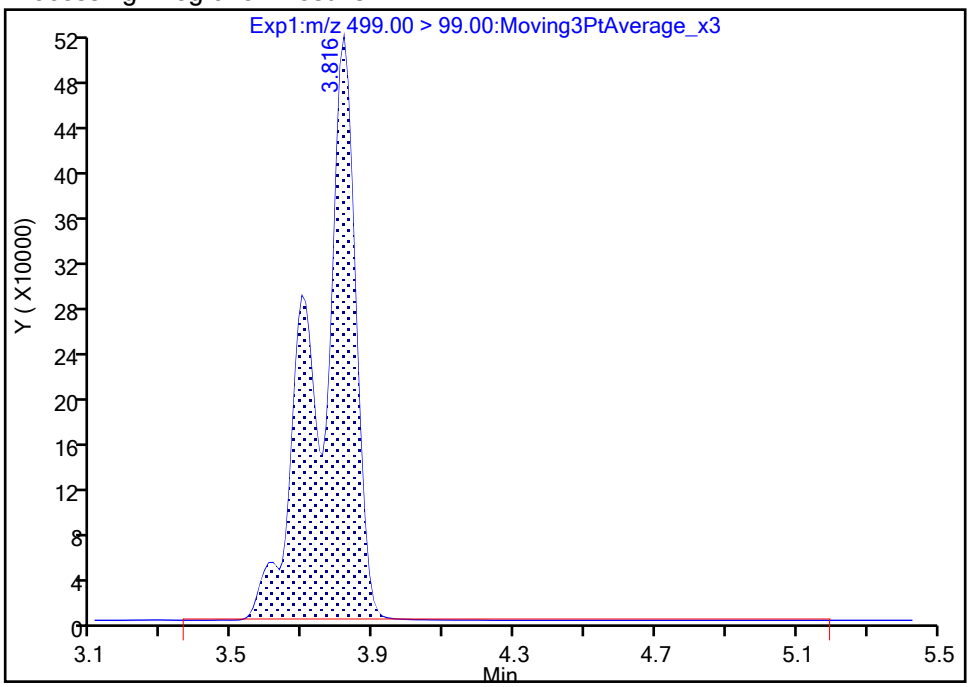
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

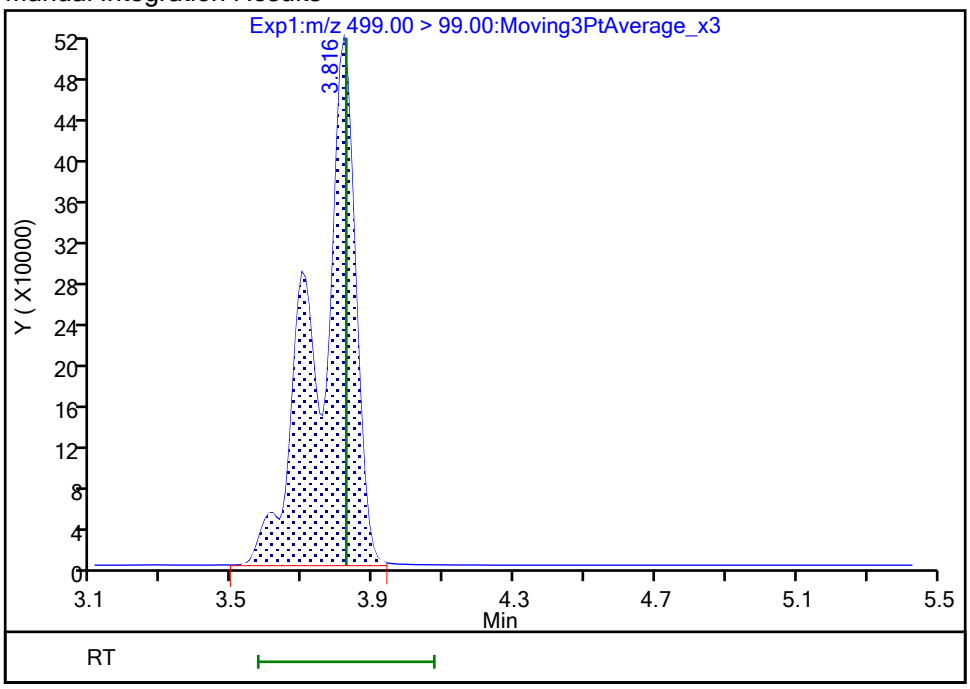
Processing Integration Results

RT: 3.82
Area: 3916780
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3903810
Amount: 12.448115
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

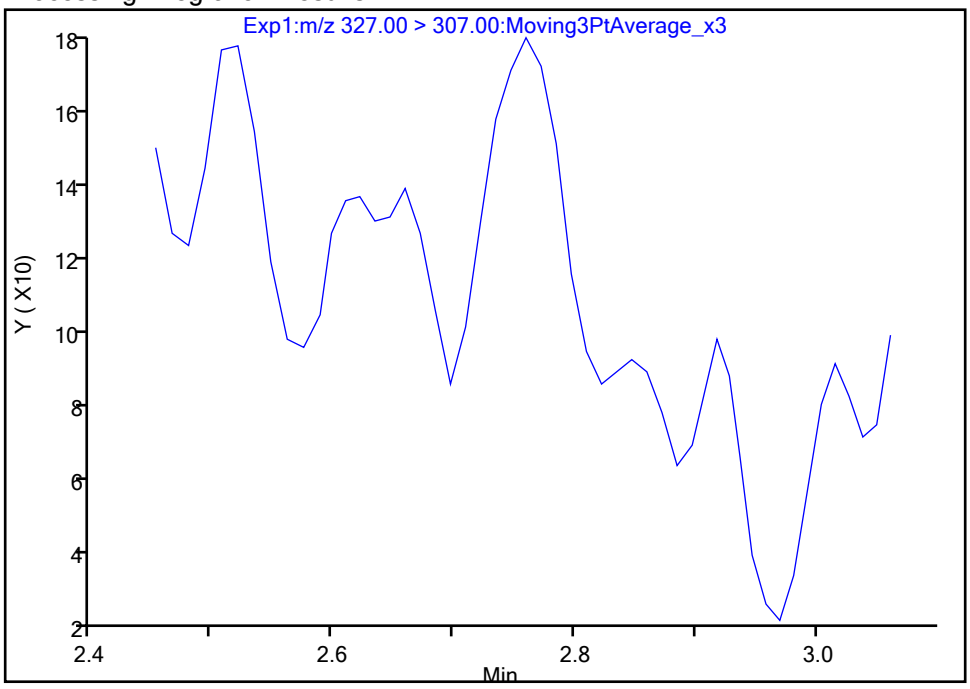
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

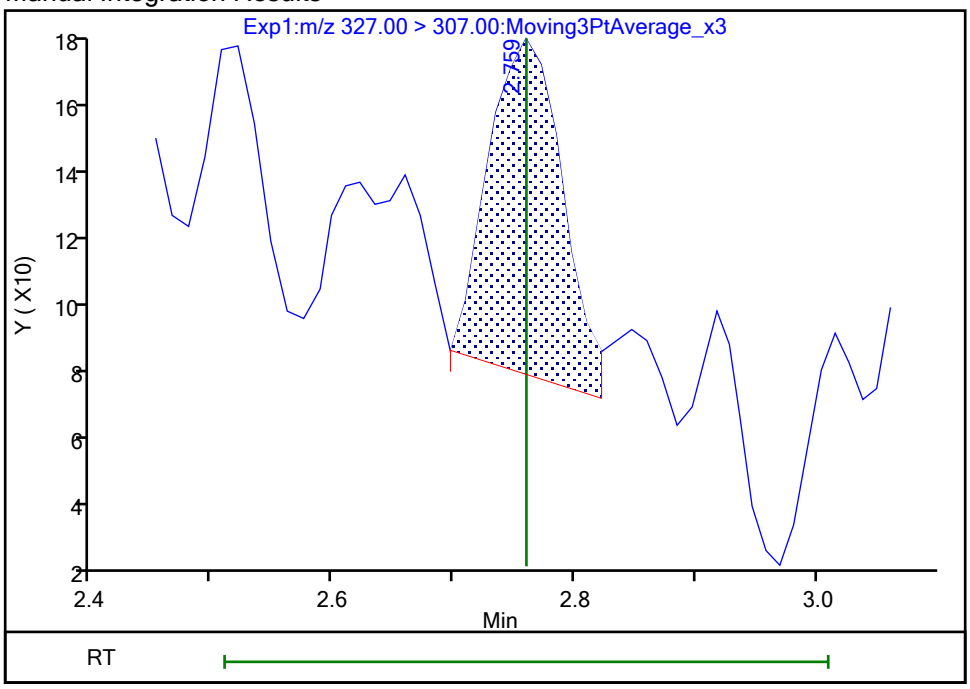
Not Detected
Expected RT: 2.76

Processing Integration Results



RT: 2.76
Area: 388
Amount: 0.000715
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 24-Oct-2023 14:00:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

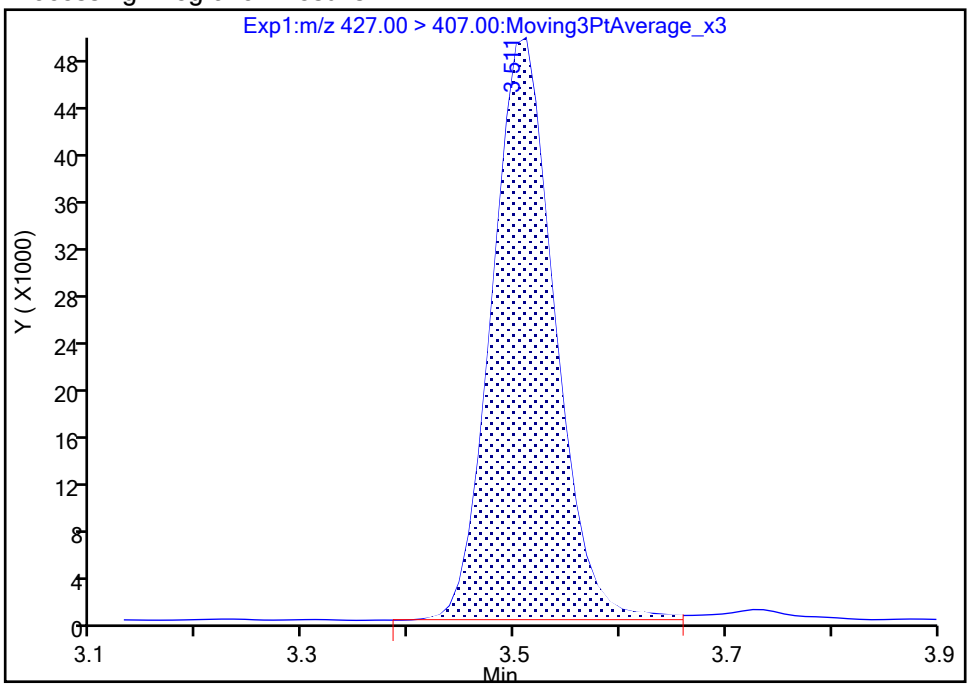
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

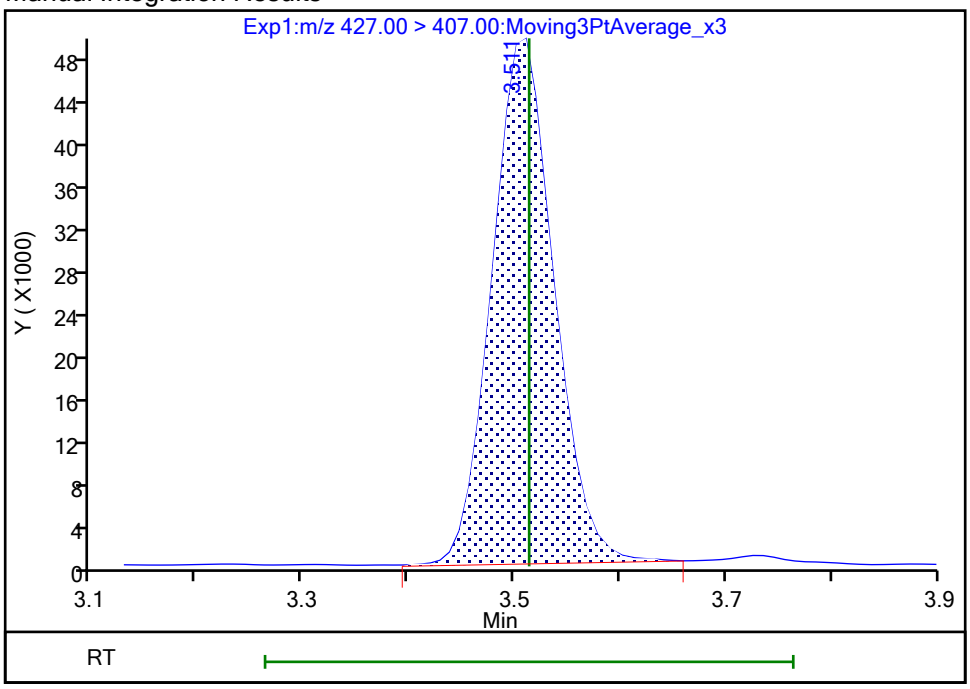
Processing Integration Results

RT: 3.51
Area: 205712
Amount: 0.330239
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 202563
Amount: 0.325184
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

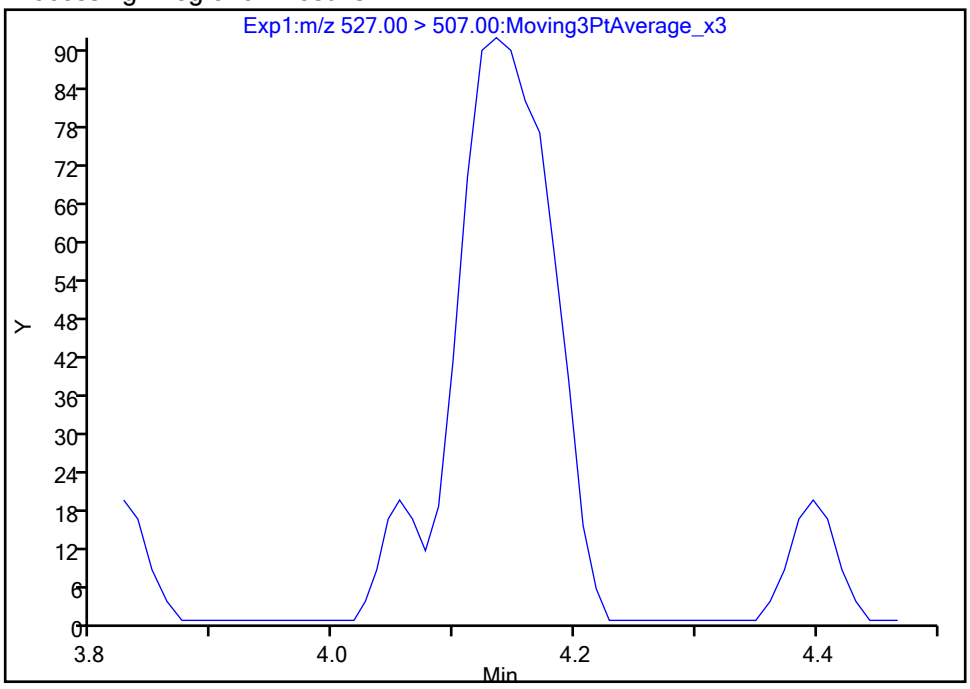
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

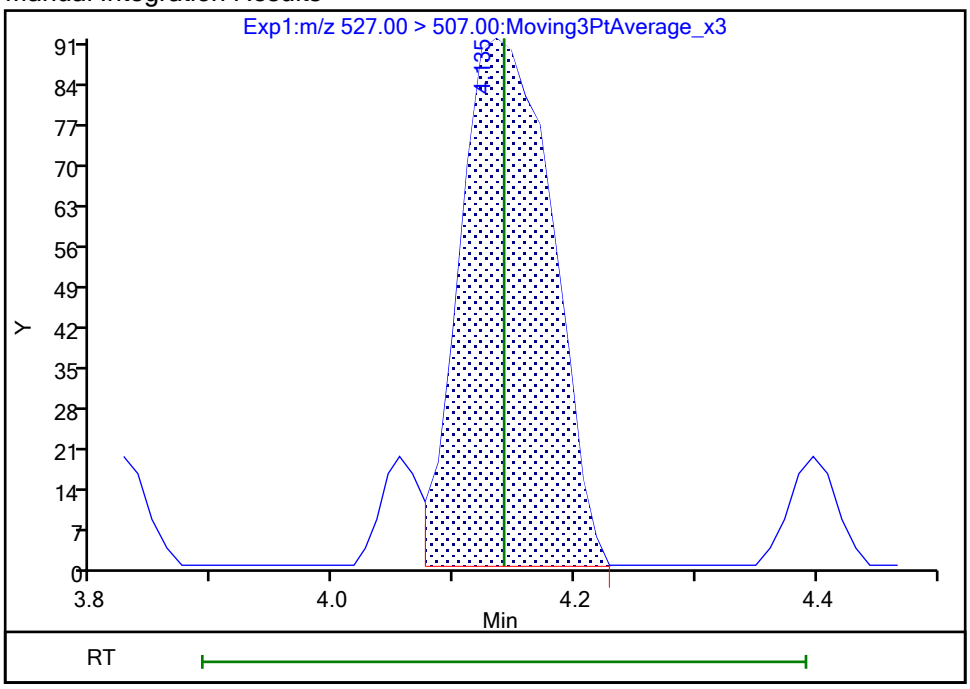
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.13
Area: 487
Amount: 0.000906
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:03:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

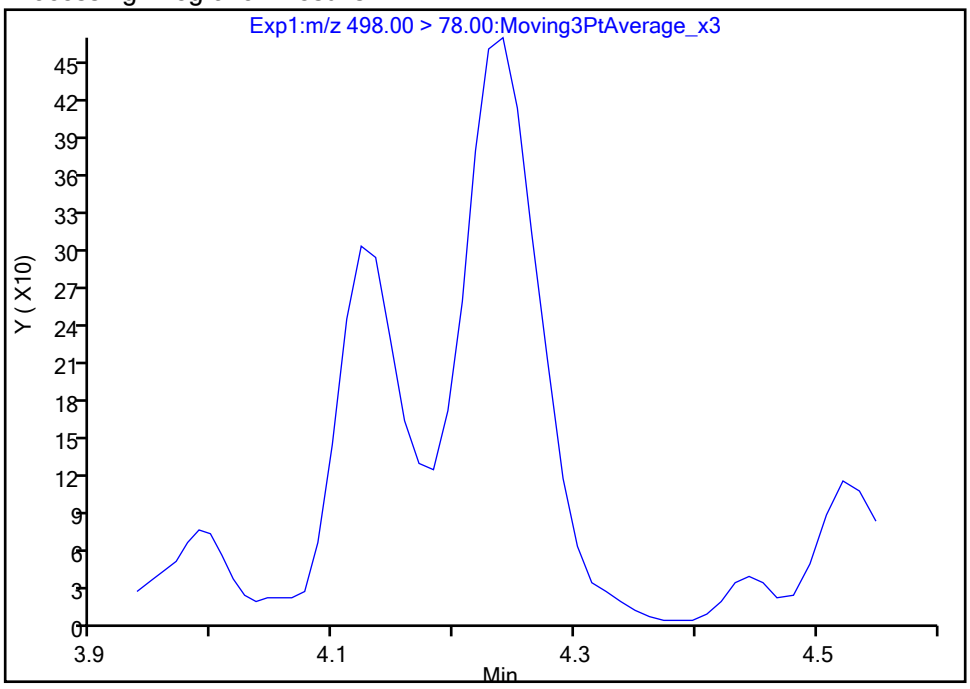
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

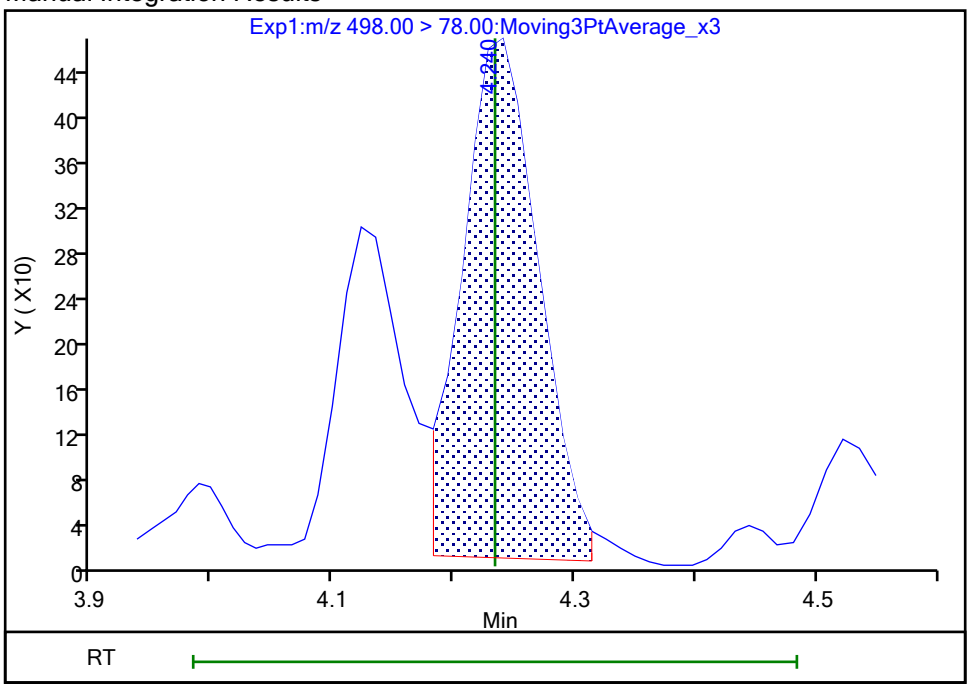
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1996
Amount: 0.001483
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:03:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

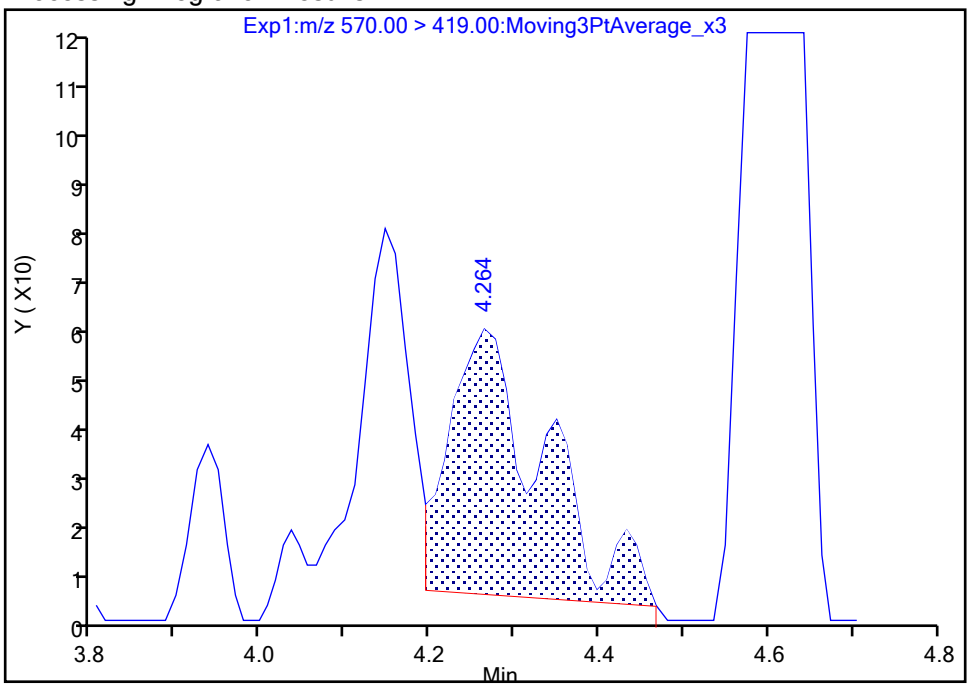
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

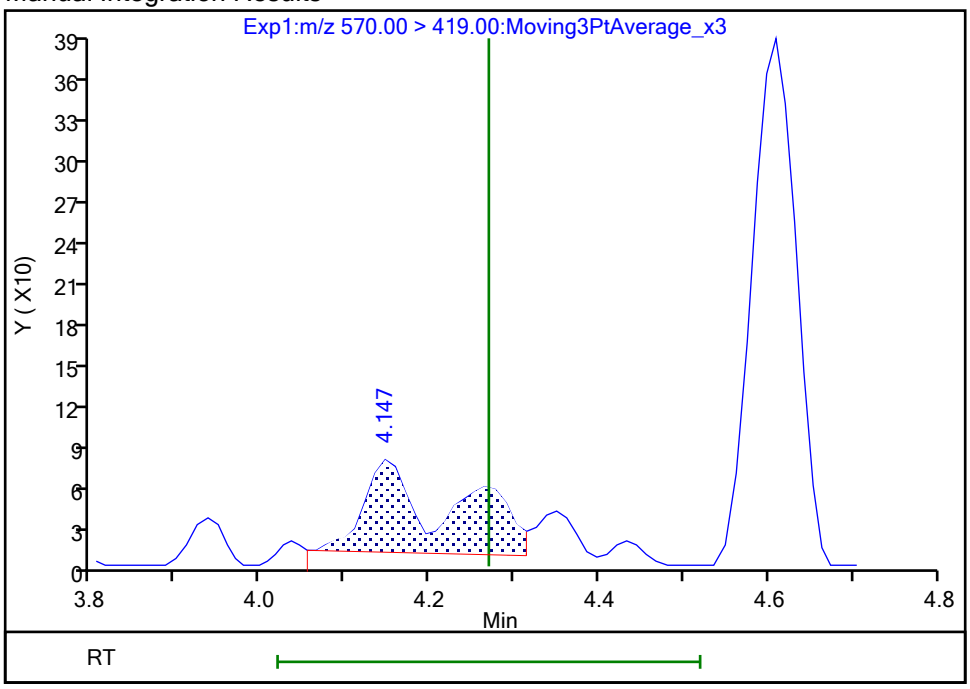
Processing Integration Results

RT: 4.26
Area: 410
Amount: 0.001078
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 484
Amount: 0.001273
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:03:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

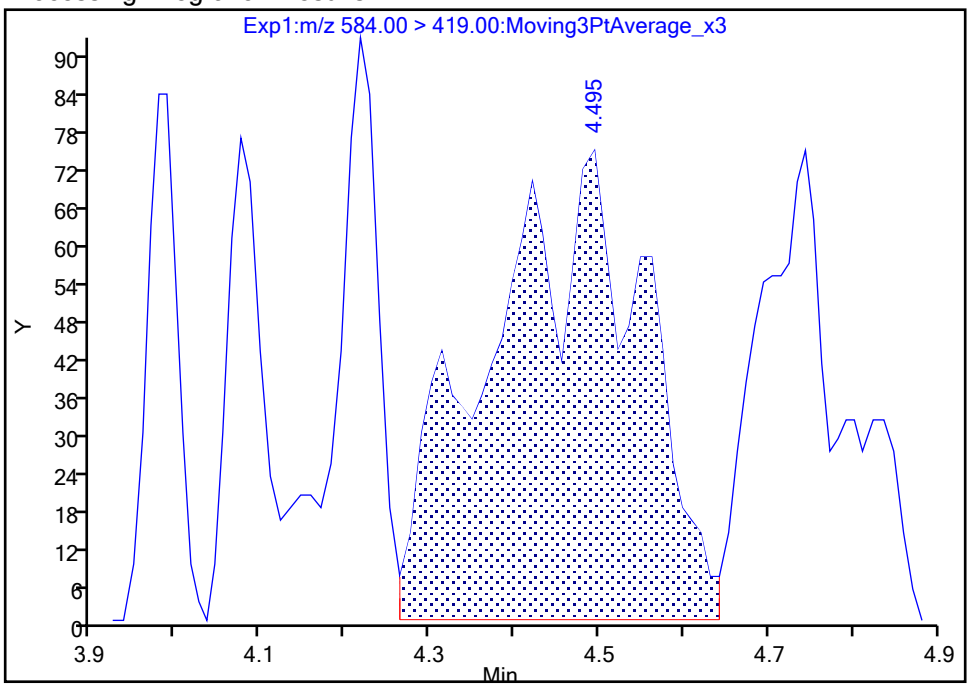
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

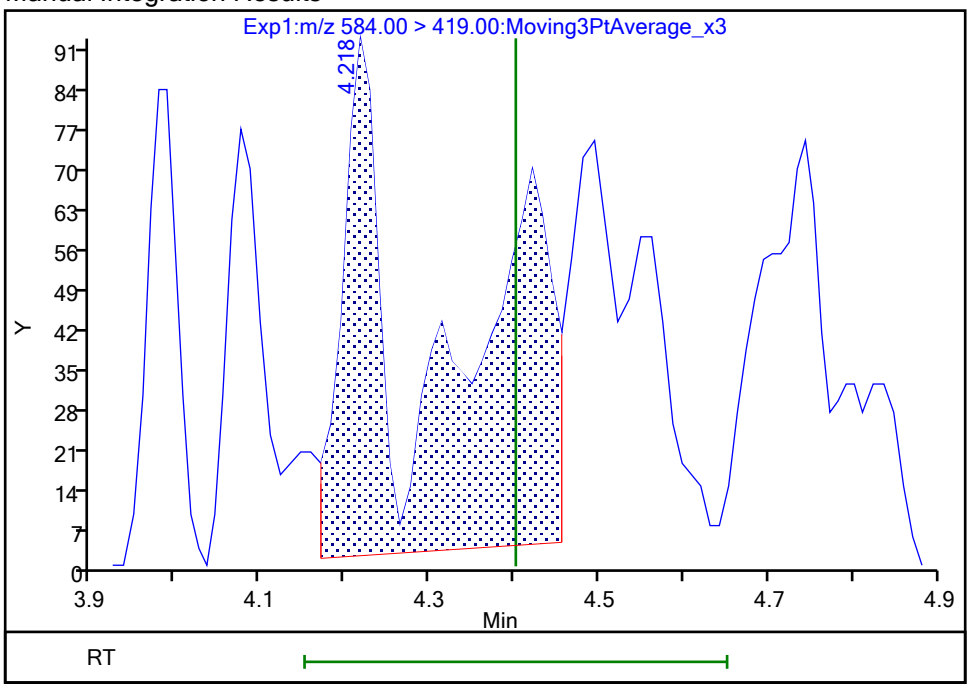
Processing Integration Results

RT: 4.49
Area: 954
Amount: 0.002249
Amount Units: ng/ml



Manual Integration Results

RT: 4.22
Area: 710
Amount: 0.001674
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:04:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

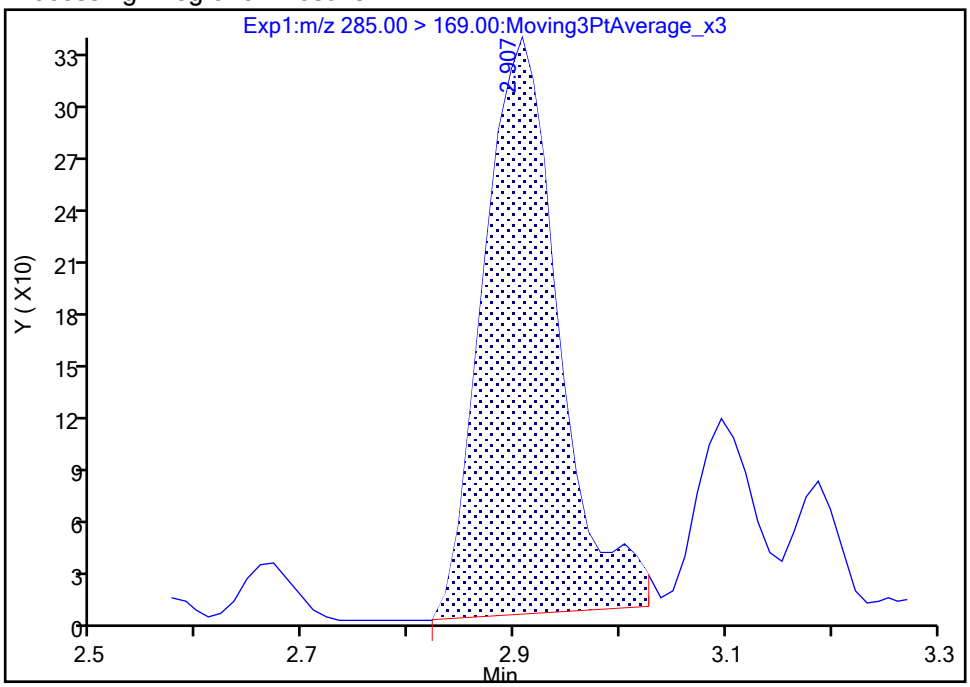
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

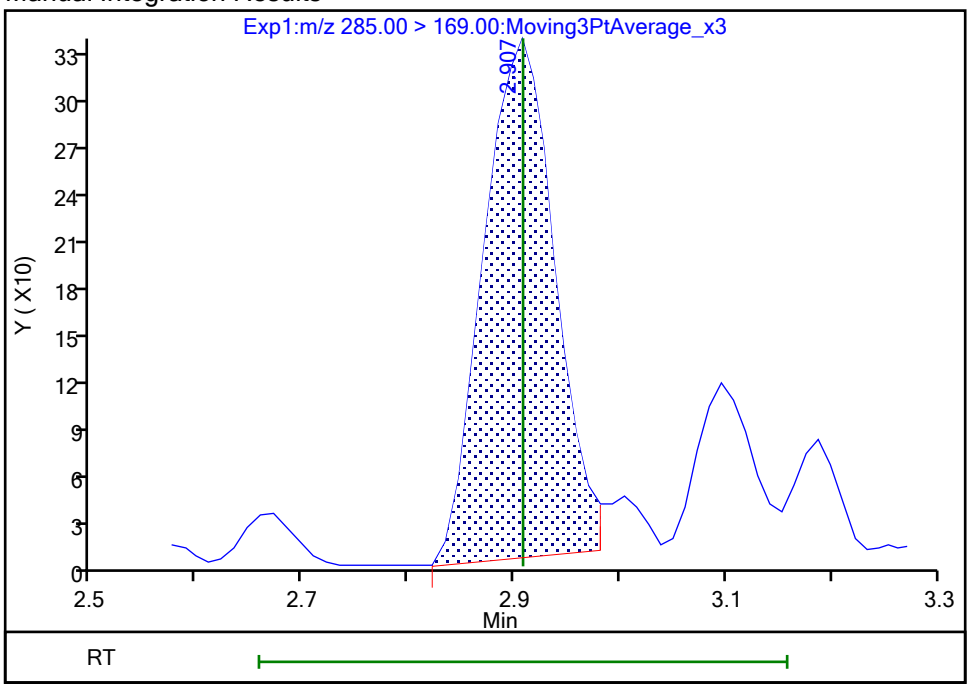
Processing Integration Results

RT: 2.91
Area: 1646
Amount: 0.007363
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 1547
Amount: 0.006920
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:01:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

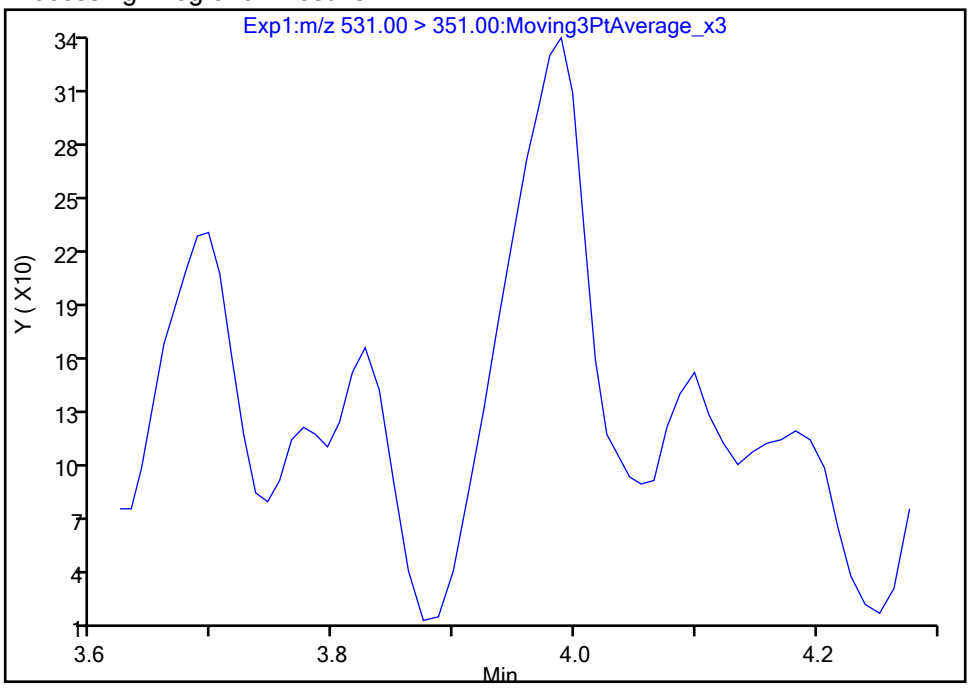
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

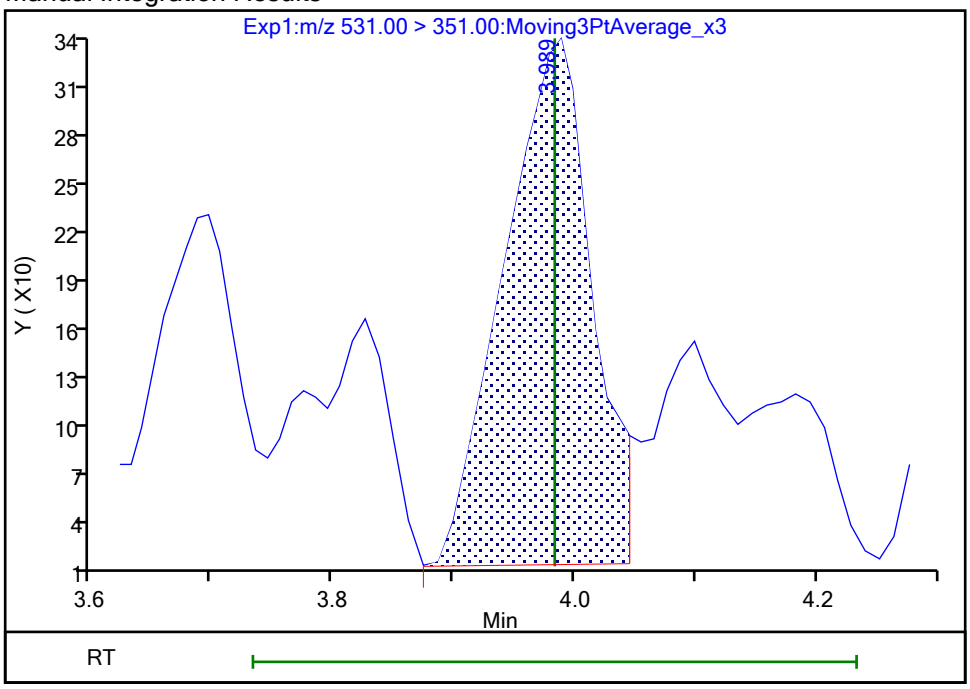
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 1645
Amount: 0.000598
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:02:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

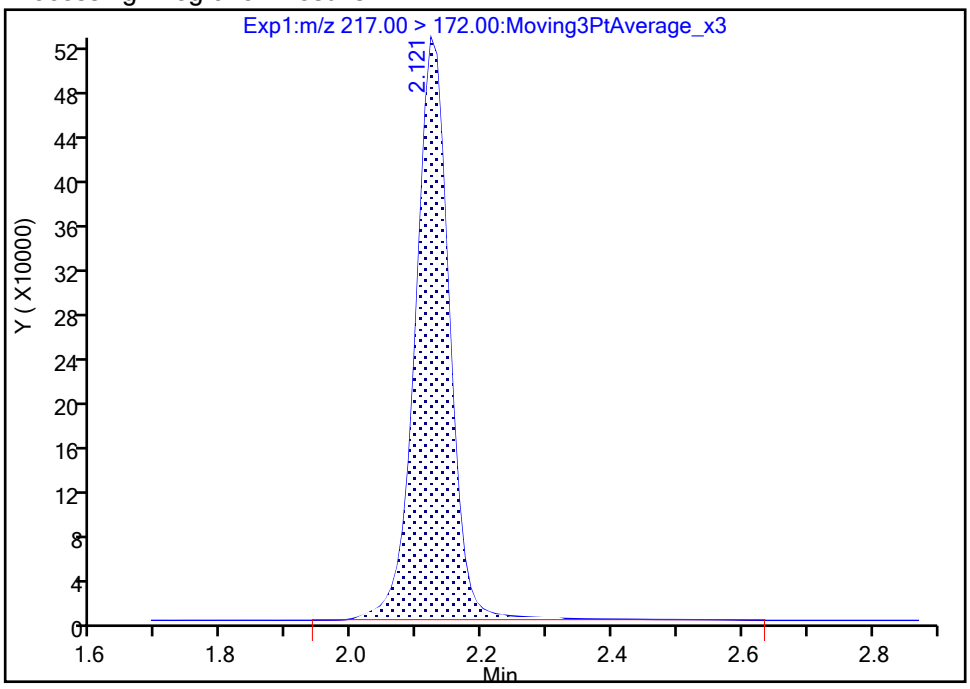
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

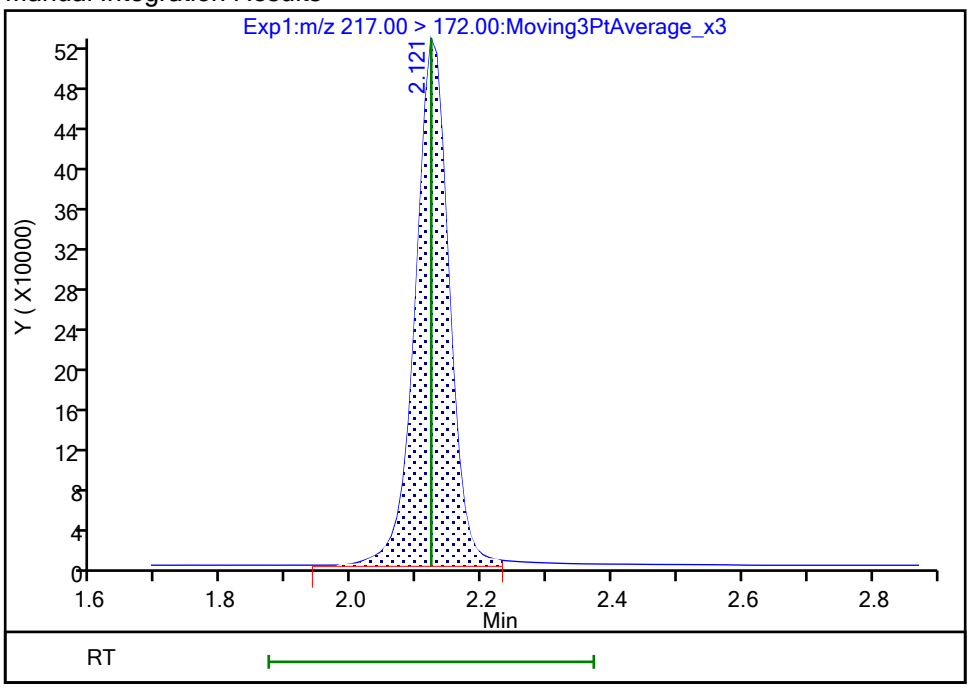
Processing Integration Results

RT: 2.12
Area: 1921110
Amount: 1.311592
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1889855
Amount: 1.290254
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

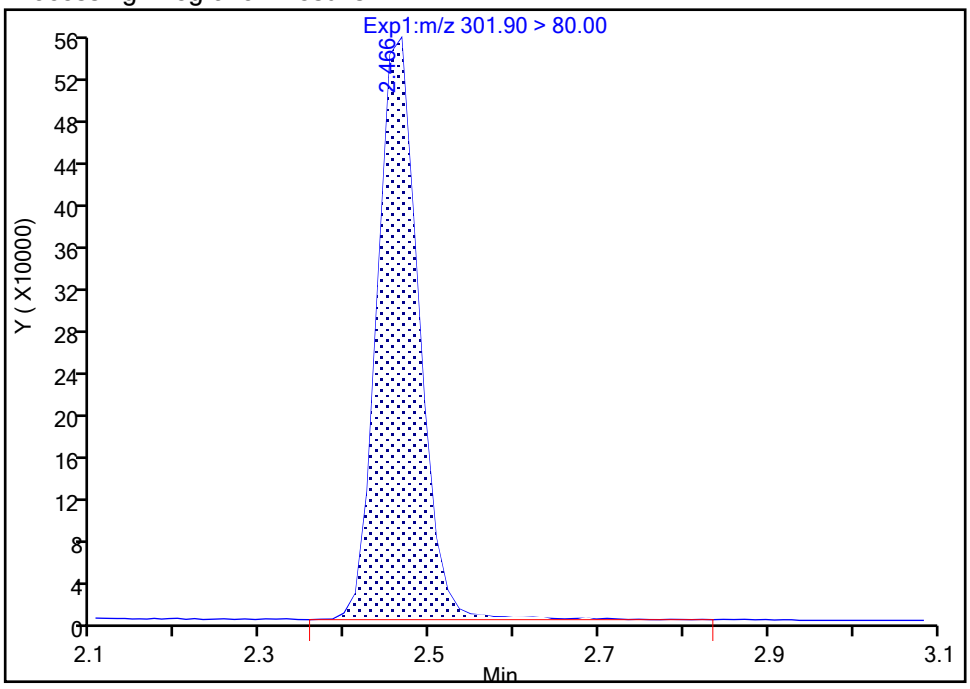
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

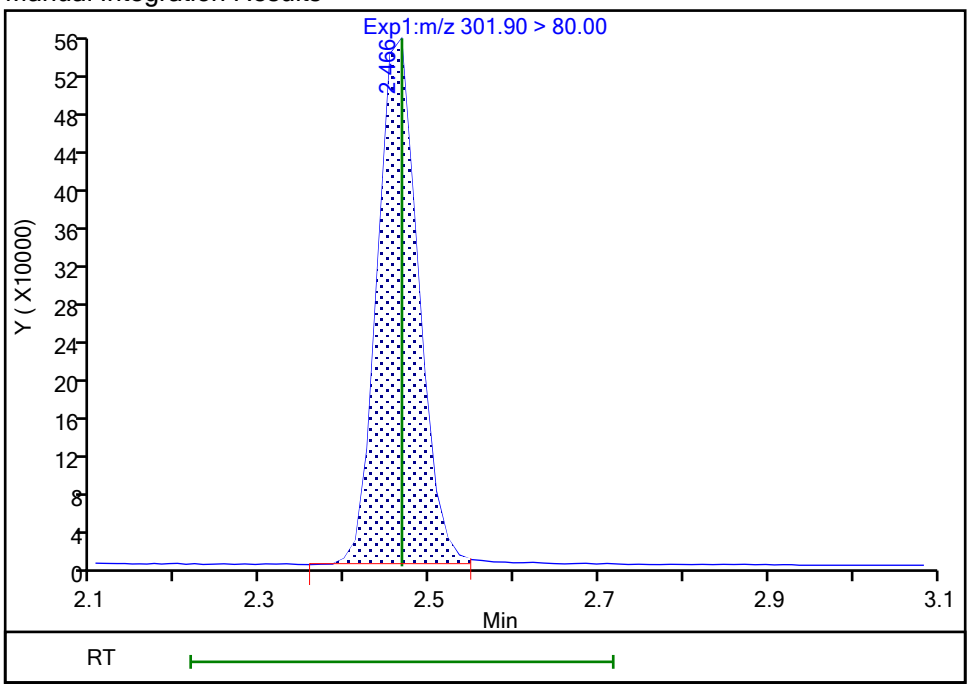
Processing Integration Results

RT: 2.47
Area: 1908849
Amount: 1.241051
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1886923
Amount: 1.226796
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

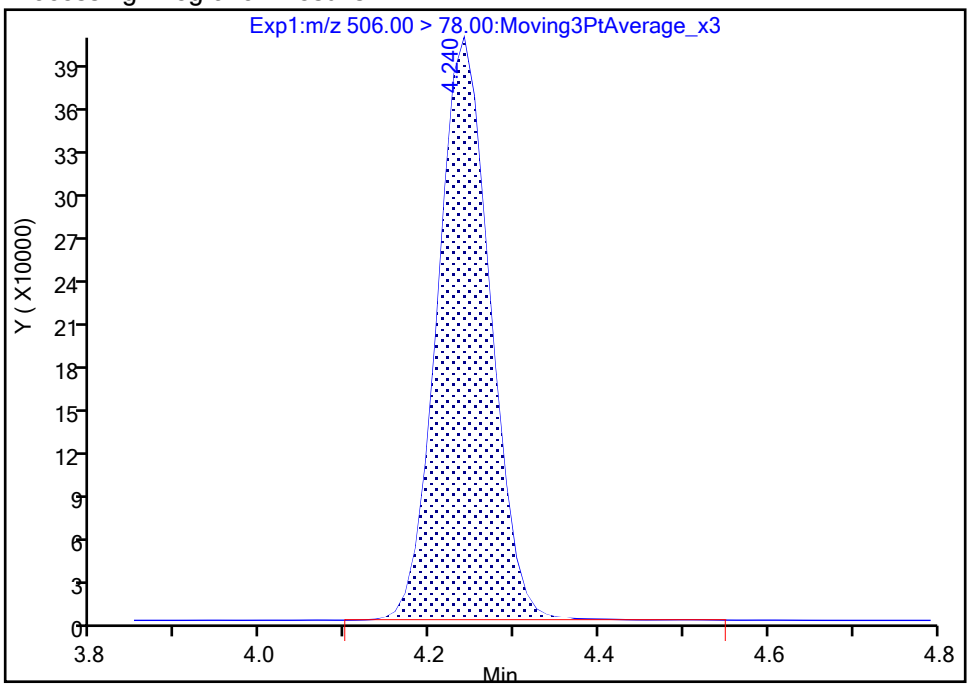
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

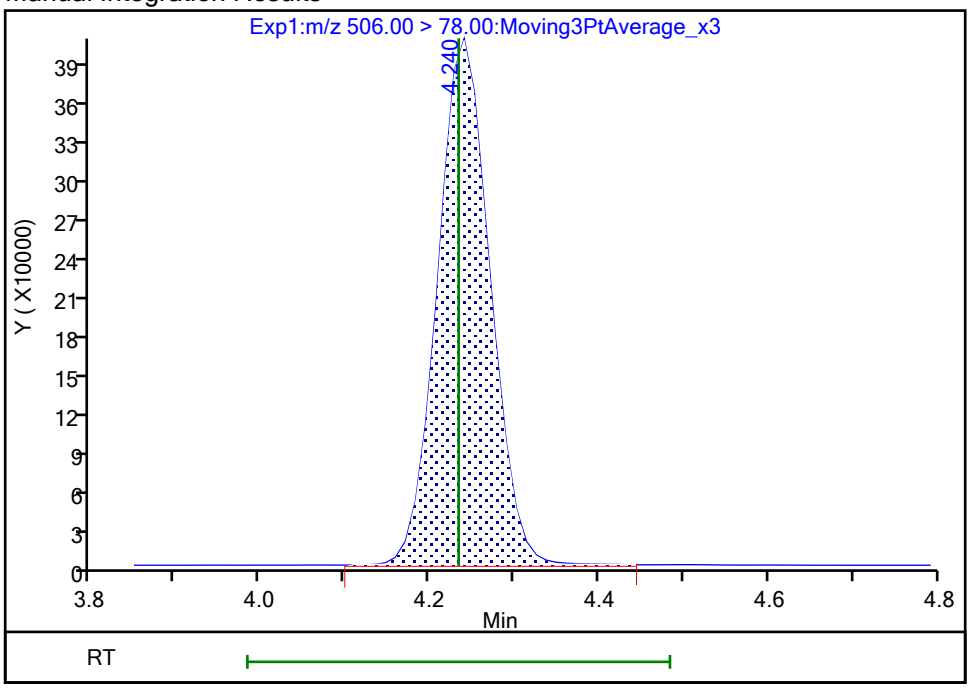
Processing Integration Results

RT: 4.24
Area: 1764496
Amount: 1.262545
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1763238
Amount: 1.261645
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

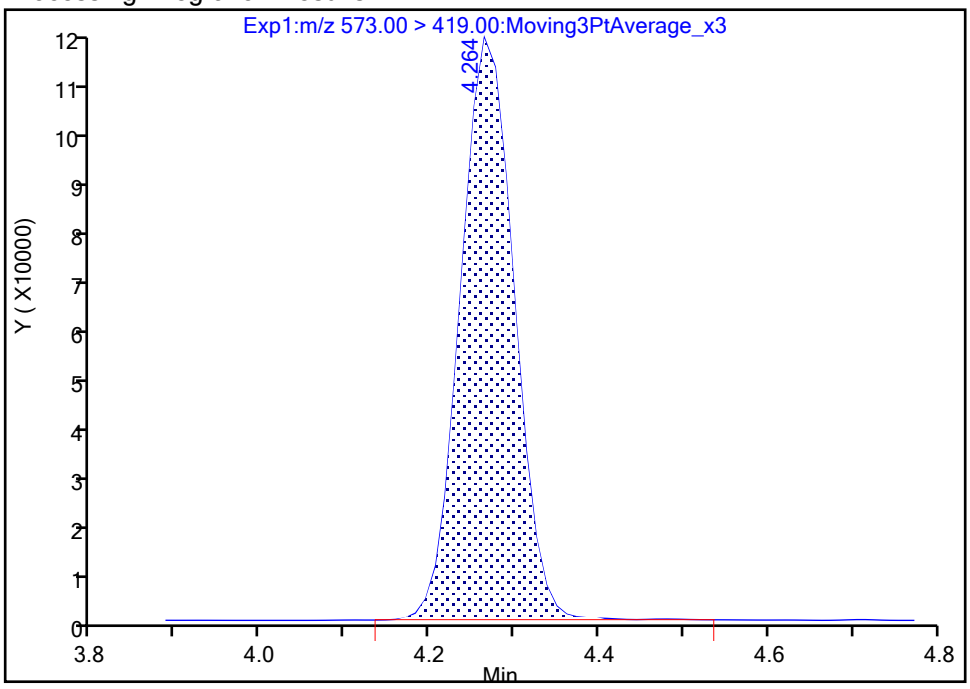
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

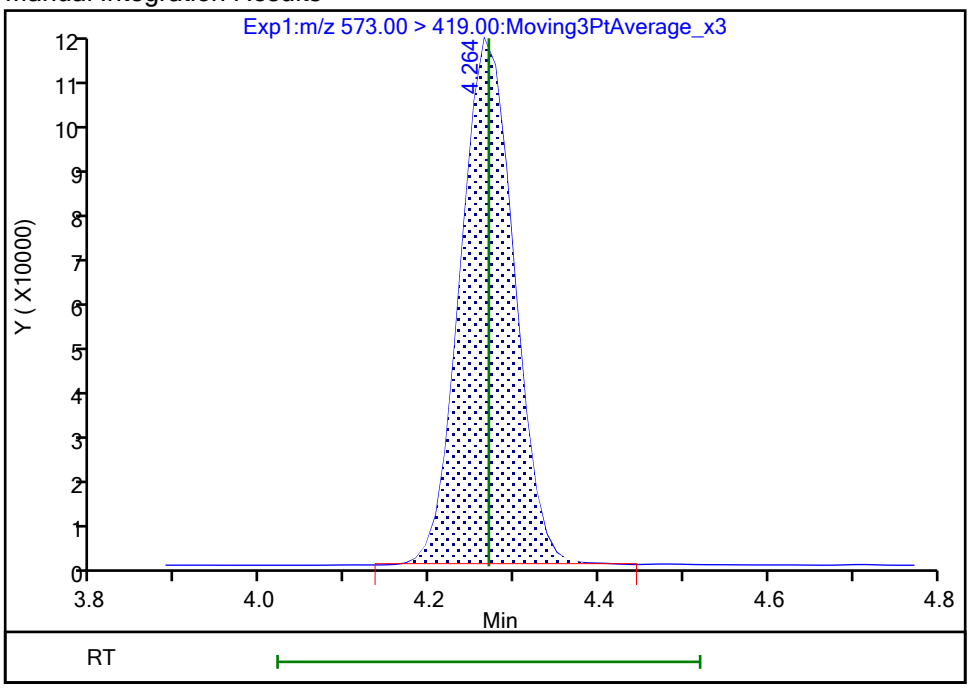
Processing Integration Results

RT: 4.26
Area: 524183
Amount: 1.339143
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 523694
Amount: 1.337894
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

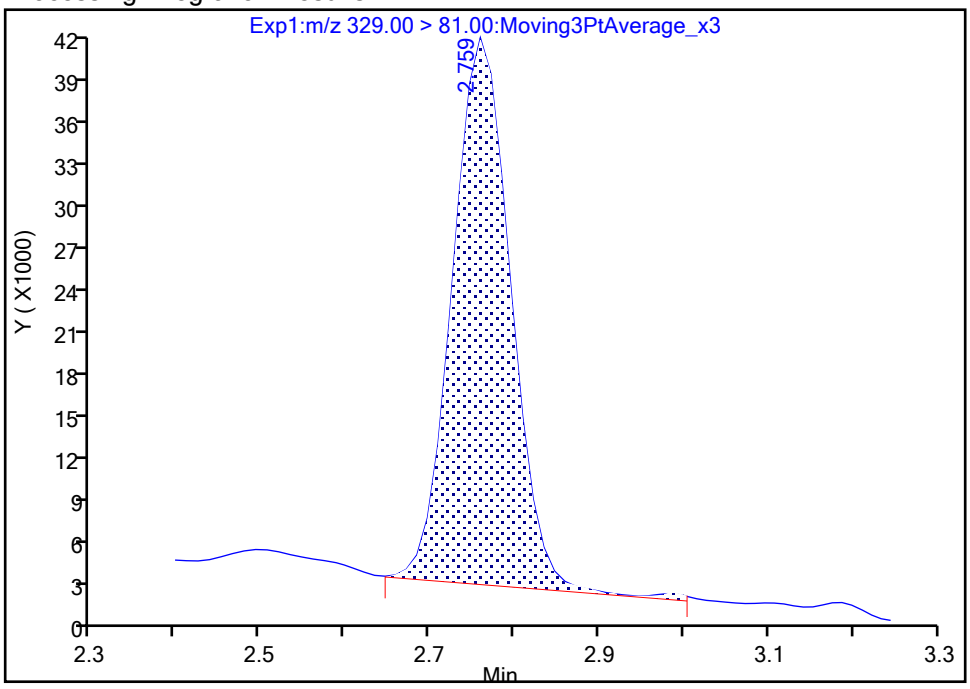
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

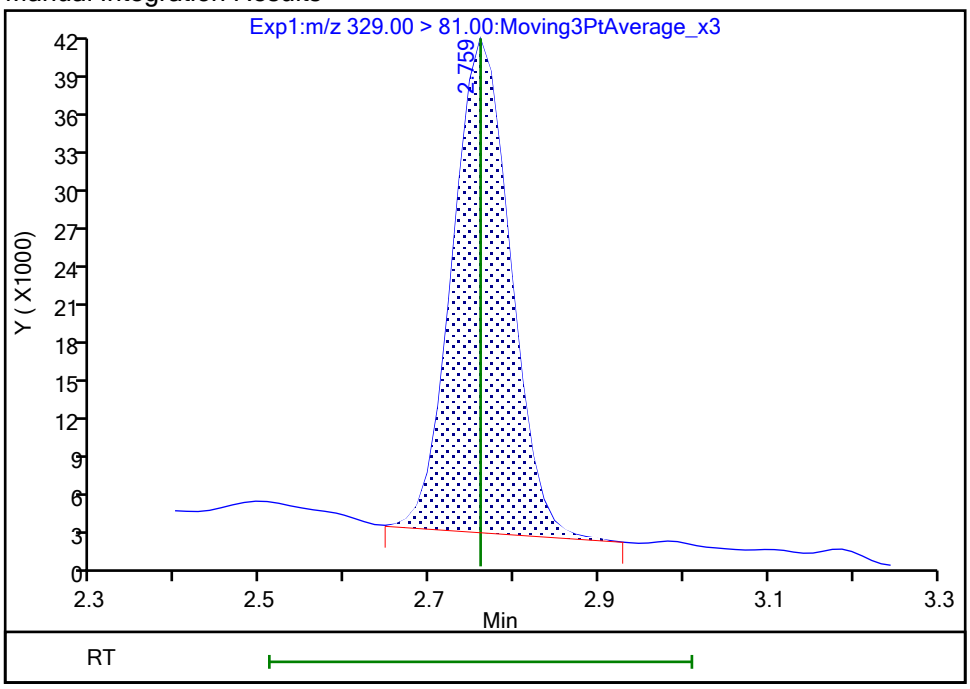
Processing Integration Results

RT: 2.76
Area: 187660
Amount: 1.055010
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 186503
Amount: 1.048506
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

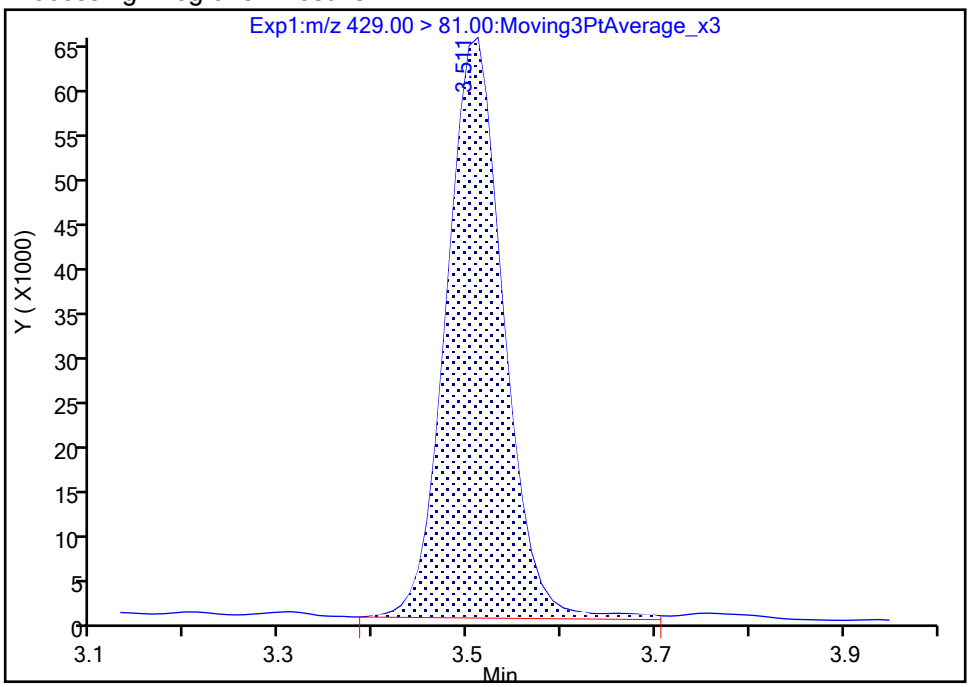
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A28.d				
Injection Date:	23-Oct-2023 18:55:13	Instrument ID:	LC812		
Lims ID:	460-290375-A-2-A	Lab Sample ID:	200-290375-2		
Client ID:	MW39A-101323-0826-70				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

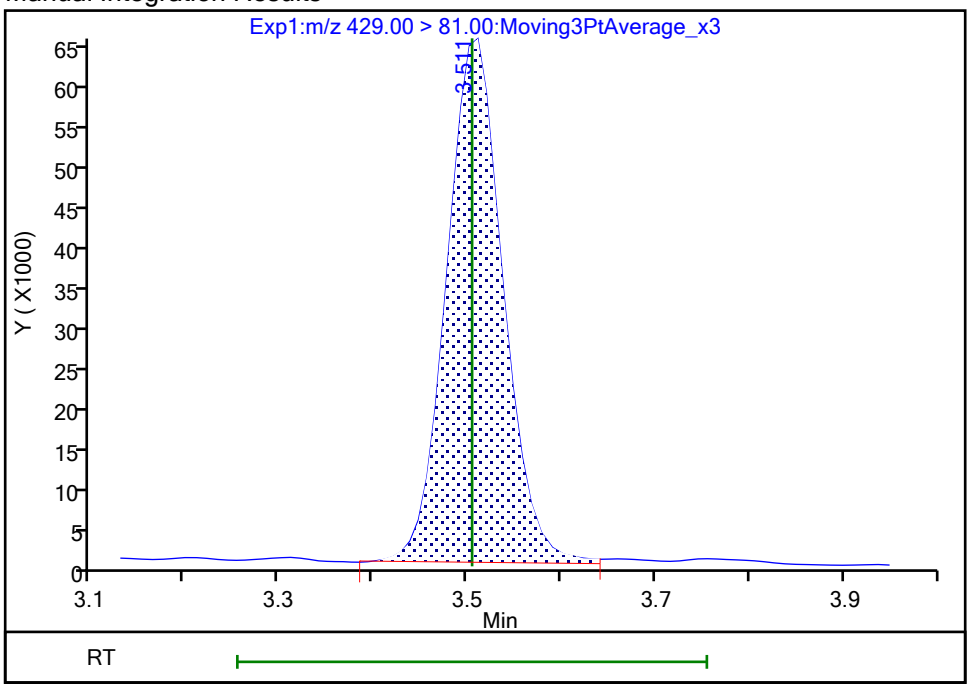
Processing Integration Results

RT: 3.51
Area: 272630
Amount: 1.190027
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 270639
Amount: 1.181336
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:59:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW39-101323-0921-17 Lab Sample ID: 460-290375-3

Matrix: Water Lab File ID: PA231023A29.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 09:21

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 310.3(mL) Date Analyzed: 10/23/2023 19:03

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	1.53	J	4.03	0.97
2706-90-3	Perfluoropentanoic acid	0.59	J	1.61	0.55
307-24-4	Perfluorohexanoic acid	0.64	J	1.61	0.52
375-85-9	Perfluoroheptanoic acid	0.49	J	1.61	0.44
335-67-1	Perfluorooctanoic acid	5.14		1.61	0.61
375-95-1	Perfluorononanoic acid	0.88	J	1.61	0.39
335-76-2	Perfluorodecanoic acid	1.61	U	1.61	0.37
2058-94-8	Perfluoroundecanoic acid	1.61	U	1.61	0.44
307-55-1	Perfluorododecanoic acid	1.61	U	1.61	0.39
72629-94-8	Perfluorotridecanoic acid	1.61	U	1.61	0.39
376-06-7	Perfluorotetradecanoic acid	1.61	U	1.61	0.52
375-73-5	Perfluorobutanesulfonic acid	1.17	J	1.61	0.50
2706-91-4	Perfluoropentanesulfonic acid	0.67	J	1.61	0.40
355-46-4	Perfluorohexanesulfonic acid	4.05		1.61	0.44
375-92-8	Perfluoroheptanesulfonic acid	0.74	J	1.61	0.33
1763-23-1	Perfluorooctanesulfonic acid	30.7		1.61	0.68
68259-12-1	Perfluorononanesulfonic acid	1.61	U	1.61	0.32
335-77-3	Perfluorodecanesulfonic acid	1.61	U	1.61	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.03	U	4.03	1.05
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.62
754-91-6	Perfluorooctanesulfonamide	1.61	U	1.61	0.74
2355-31-9	NMeFOSAA	4.03	U	4.03	1.53
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.03	U	4.03	1.29
13252-13-6	HFPODA	3.22	U	3.22	0.89
919005-14-4	DONA	1.61	U	1.61	0.34
756426-58-1	9Cl-PF3ONS	1.61	U	1.61	0.26
763051-92-9	11Cl-PF3OUdS	1.61	U	1.61	0.70

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW39-101323-0921-17 Lab Sample ID: 460-290375-3

Matrix: Water Lab File ID: PA231023A29.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 09:21

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 310.3(mL) Date Analyzed: 10/23/2023 19:03

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	94		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	100		50-150
STL02116	13C2 PFTeDA	86		50-150
STL02337	13C3 PFBS	95		50-150
STL01056	13C8 FOSA	93		50-150
STL02118	d3-NMeFOSAA	96		50-150
STL02117	d5-NEtFOSAA	97		50-150
STL02395	M2-4:2 FTS	93		50-150
STL02279	M2-6:2 FTS	93		50-150
STL02280	M2-8:2 FTS	89		50-150
STL02255	13C3 HFPO-DA	87		50-150
STL00994	18O2 PFHxS	102		50-150
STL00993	13C2 PFHxA	92		50-150
STL00991	13C4 PFOS	103		50-150
STL00998	13C2 PFDoA	99		50-150
STL00995	13C5 PFNA	101		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d
Lims ID: 460-290375-A-3-A
Client ID: MW39-101323-0921-17
Sample Type: Client
Inject. Date: 23-Oct-2023 19:03:24 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-3-A
Misc. Info.: 200-0057509-029 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:08 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:09:10
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	1906655	1.18		94.0	1629	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.130	-0.008	1.000	121784	0.0474			11.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1440748	1.14		91.6	1158	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	22609	0.0182			0.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1885010	1.11		95.2	27294	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.006	65590	0.0362	Target=2.06		3.5	M
298.90 > 99.00	2.467	2.467	0.0	1.006	33547		1.96(1.03-3.09)		5.1	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	212804	1.08		92.5	25.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1476699	1.15		92.3	2578	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	25895	0.0199	Target=14.12		1.0	M
313.00 > 119.00	2.797	2.797	0.0	1.000	1735		14.93(7.06-21.17)		1.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.887	34142	0.0209	Target=2.72		4.6	M
349.00 > 99.00	2.797	2.810	-0.013	0.887	11761		2.90(1.36-4.09)		4.7	
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.897	2.908	-0.011	0.825	268874	1.08		86.8	1751	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.154	3.168	-0.014	0.898	1479372	1.21		102	6273	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.154	3.168	-0.014	1.000	174211	0.1258	Target=3.32		41.9	M
399.00 > 99.00	3.154	3.168	-0.014	1.000	66039		2.64(1.66-4.98)		46.7	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.154	3.168	-0.014	0.996	23812	0.0151	Target=4.17		1.9	
363.00 > 169.00	3.165	3.168	-0.003	1.000	4787		4.97(2.09-6.26)		6.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.901	1763607	1.26		100	5173	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.917	26427	0.0229	Target=4.83		6.2	M
449.00 > 99.00	3.493	3.505	-0.012	0.915	8419		3.14(2.41-7.24)		5.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.997	278980	1.10		92.6	173	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.514	-0.003	1.000	279571	0.1595	Target=2.88		8.2	M
413.00 > 169.00	3.521	3.514	0.006	1.003	102388		2.73(1.44-4.32)		134	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	1.000	2057643	1.29		103	7894	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.523	-0.012		2044331	1.25			5702	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.709	3.822	-0.113	0.971	885332	0.9524	Target=4.24		437	M
499.00 > 99.00	3.690	3.822	-0.132	0.966	302137		2.93(2.12-6.37)		305	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.822	-0.003	1.088	952319	1.23		103	1005	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	47246	0.0274	Target=8.34		5.1	M
463.00 > 169.00	3.831	3.845	-0.014	0.997	5194		9.10(4.17-12.51)		18.6	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.094	2196982	1.27		101	7221	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.983	-0.012	1.040	723	0.000254			2.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.129	-0.005	1.175	2265251	1.25		99.9	10075	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.178	303578	1.06		88.9	514	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	1.000	486	0.000871			7.3	M
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.234	-0.004	1.205	1795035	1.16		92.8	6008	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.234	-0.004	1.000	836	0.000610			4.9	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.270	-0.004	1.215	522804	1.21		96.5	1346	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.254	4.270	-0.016	0.997	1127	0.002970			4.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 30 13C2 PFUnA										
565.00 > 520.00	4.375	4.390	-0.015	1.246	2096967	1.22		98.0	6880	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.387	4.401	-0.014	1.249	507553	1.22		97.3	1267	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.387	4.401	-0.014	1.000	2113	0.005203			4.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.613	-0.014	1.310	2163661	1.24		99.5	8812	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.599	4.613	-0.014	1.000	7985	0.004532	Target=8.47		0.4	R
613.00 > 169.00	4.610	4.613	-0.003	1.002	316		25.27(4.23-12.70)		4.5	M
41 Perfluorotridecanoic acid										RM
663.00 > 619.00	4.803	4.806	-0.003	1.044	3752	0.002026	Target=6.41		0.2	RM
663.00 > 169.00	4.793	4.806	-0.013	1.042	274		13.69(3.21-9.62)		4.8	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.418	1855679	1.07		85.7	6586	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.969	4.982	-0.013	0.998	393	0.002368	Target=0.87		13.4	RM
713.00 > 219.00	4.979	4.982	-0.003	1.000	293		1.34(0.43-1.30)		7.2	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

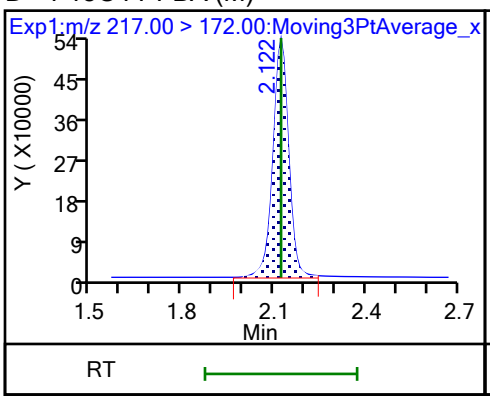
M - Manually Integrated

Report Date: 25-Oct-2023 15:13:36 Chrom Revision: 2.3 18-Oct-2023 21:16:54

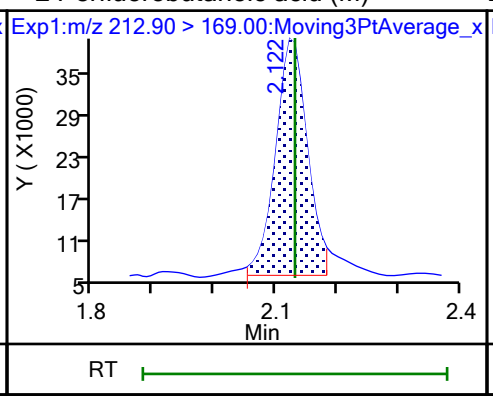
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d
Injection Date: 23-Oct-2023 19:03:24 Instrument ID: LC812
Lims ID: 460-290375-A-3-A Lab Sample ID: 200-290375-3
Client ID: MW39-101323-0921-17
Operator ID: LC812user ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

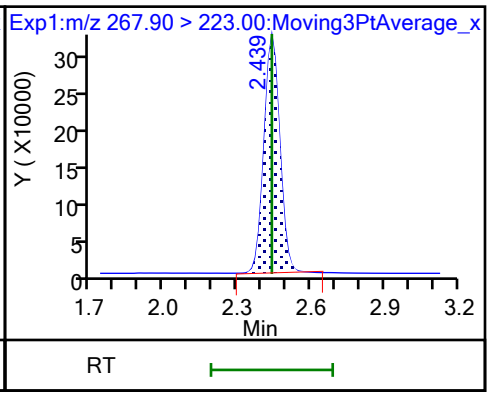
D 1 13C4 PFBA (M)



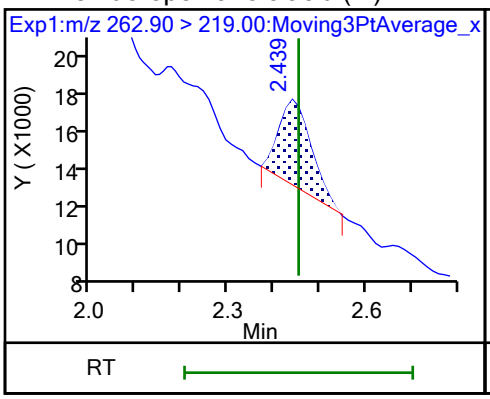
2 Perfluorobutanoic acid (M)



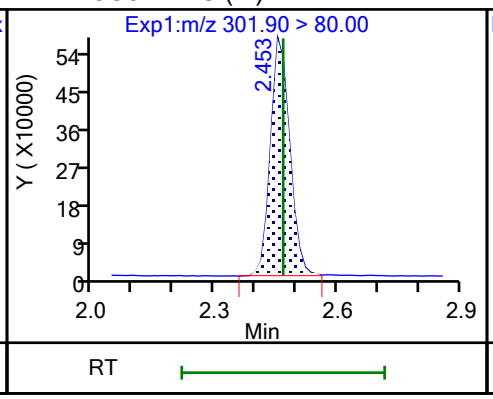
D 3 13C5 PFPeA



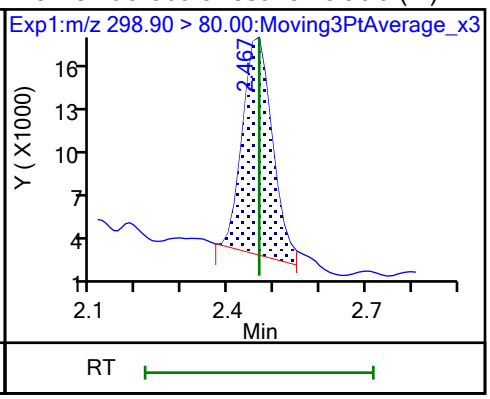
4 Perfluoropentanoic acid (M)



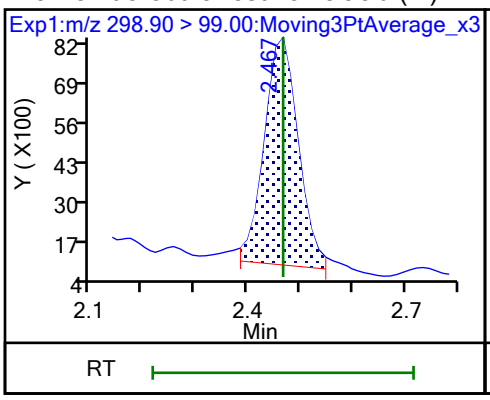
D 47 13C3 PFBS (M)



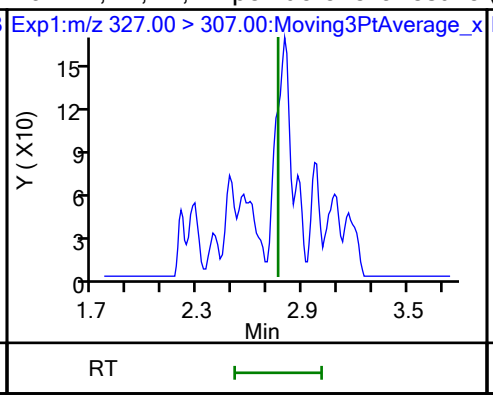
5 Perfluorobutanesulfonic acid (M)



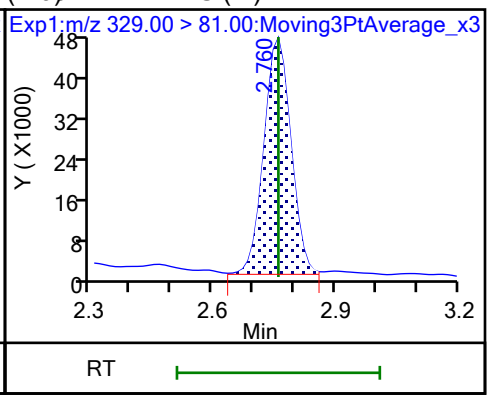
5 Perfluorobutanesulfonic acid (M)



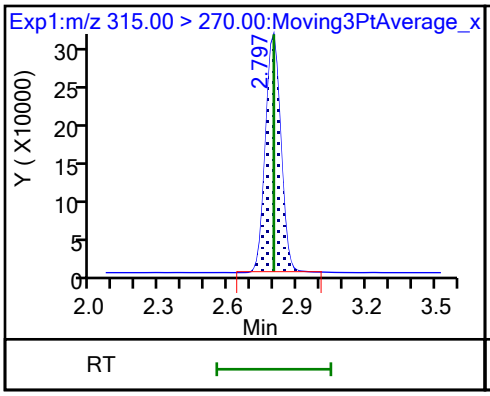
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



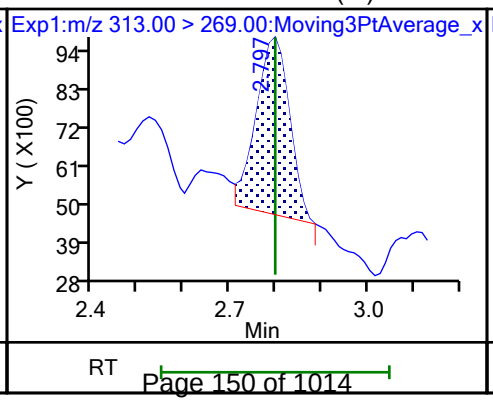
D 50 M2-4:2 FTS (M)



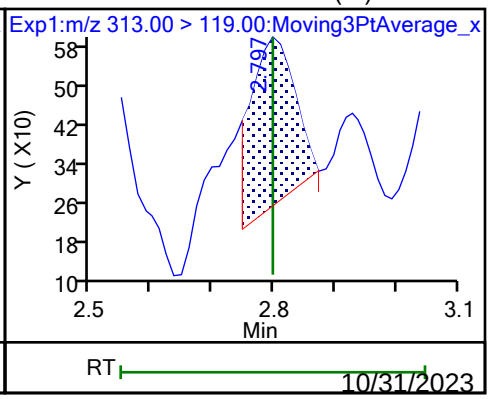
D 7 13C2 PFHxA



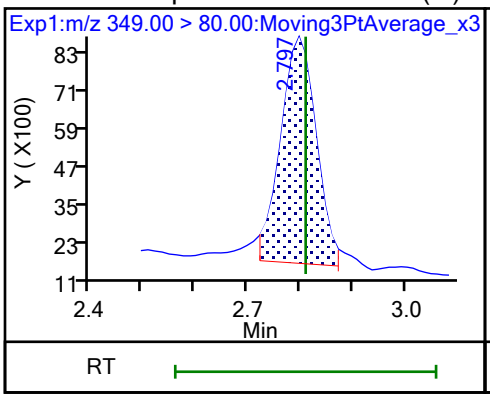
6 Perfluorohexanoic acid (M)



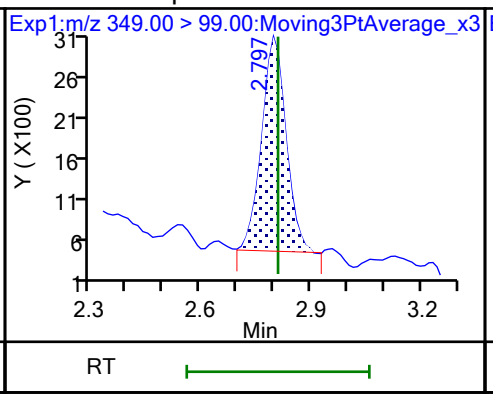
6 Perfluorohexanoic acid (M)



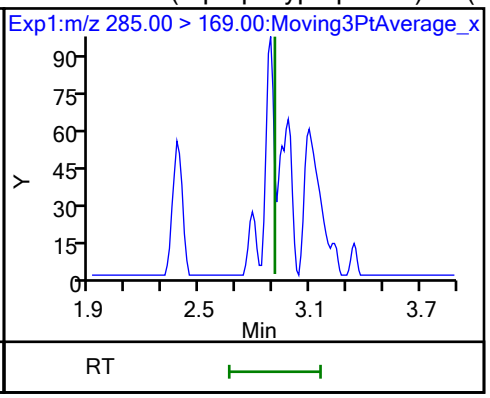
70 Perfluoropentanesulfonic acid (M)



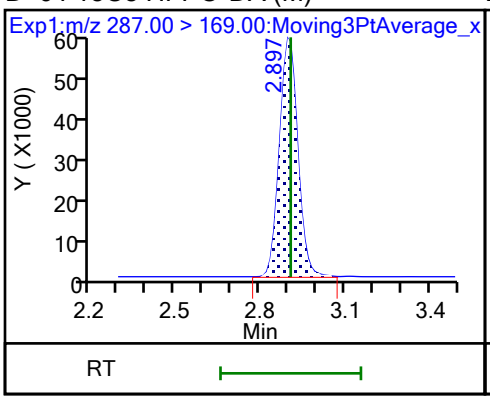
70 Perfluoropentanesulfonic acid



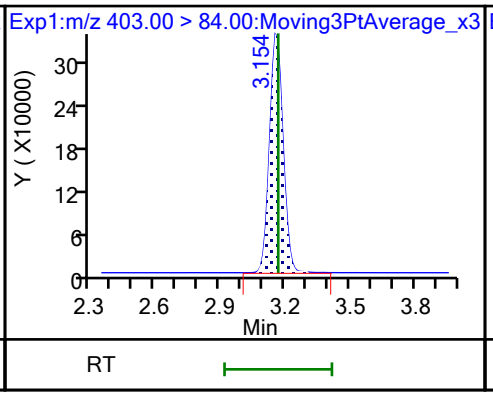
67 Perfluoro(2-propoxypropanoic) ac (ND)



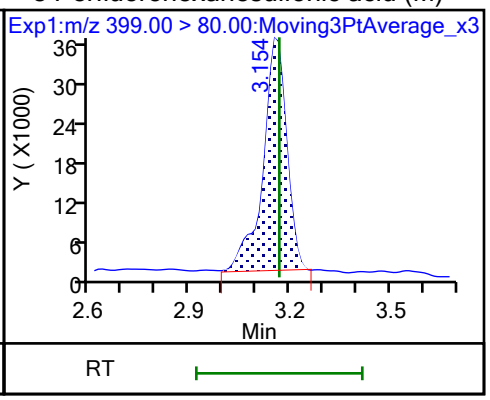
D 64 13C3 HFPO-DA (M)



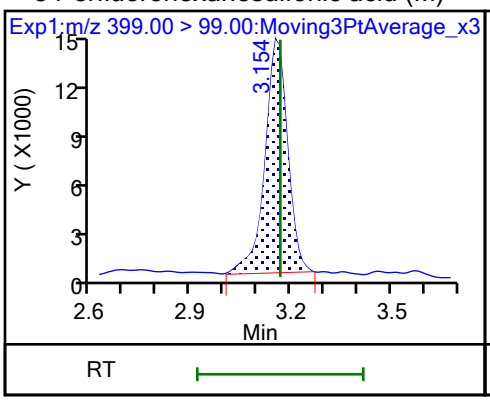
D 11 18O2 PFHxS



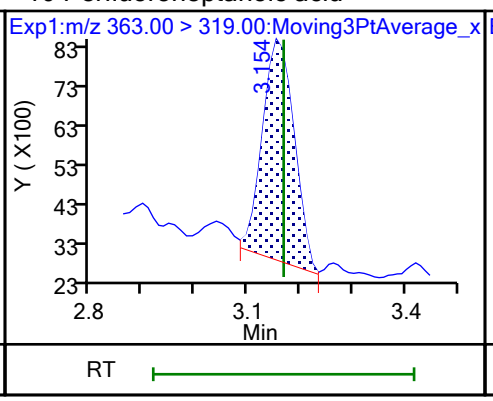
8 Perfluorohexanesulfonic acid (M)



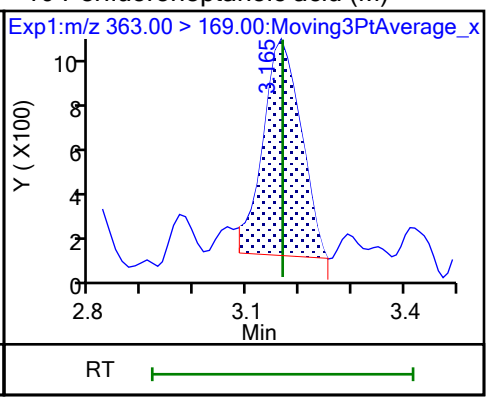
8 Perfluorohexanesulfonic acid (M)



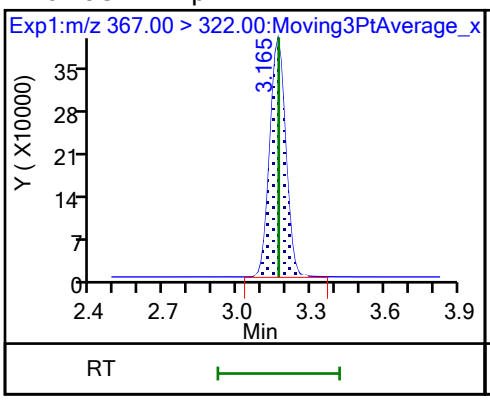
10 Perfluoroheptanoic acid



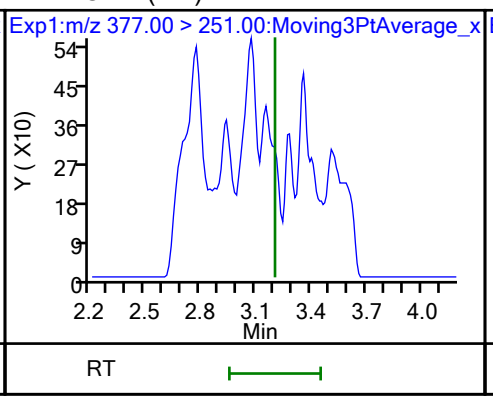
10 Perfluoroheptanoic acid (M)



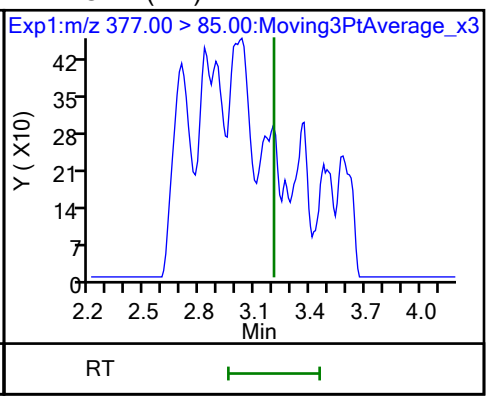
D 9 13C4 PFHpA



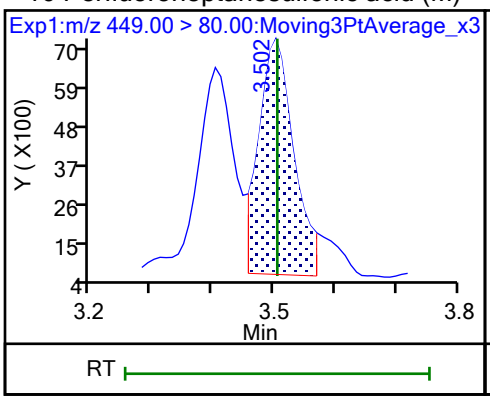
77 DONA (ND)



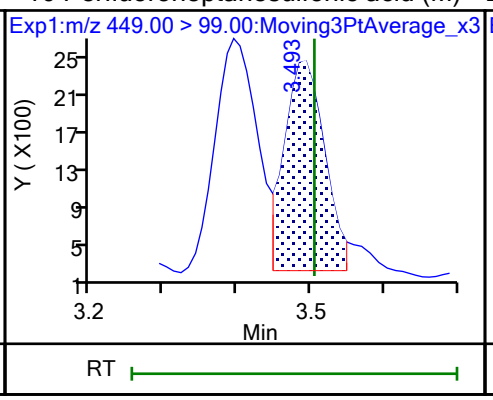
77 DONA (ND)



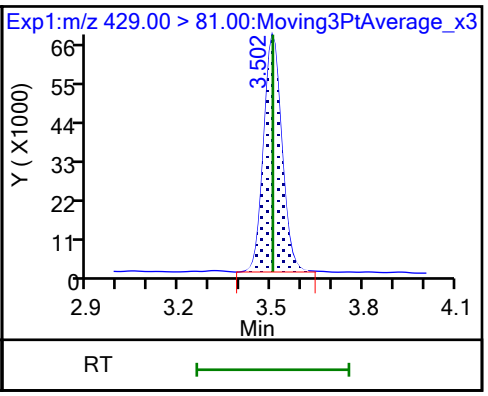
16 Perfluoroheptanesulfonic acid (M)



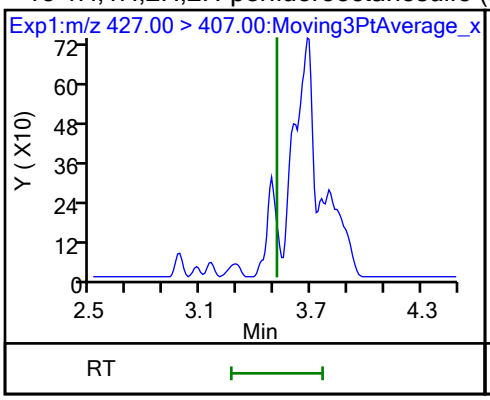
16 Perfluoroheptanesulfonic acid (M)



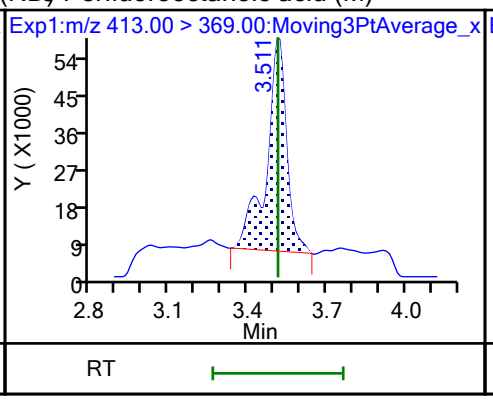
D 12 M2-6:2 FTS



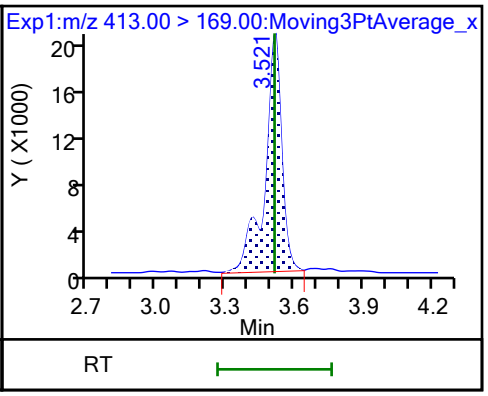
13 1H,1H,2H,2H-perfluorooctanesulfo (NDS)



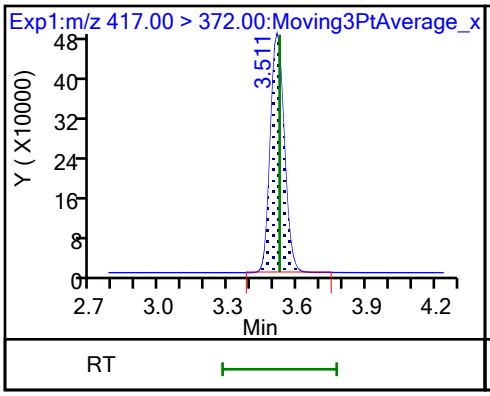
15 Perfluorooctanoic acid (M)



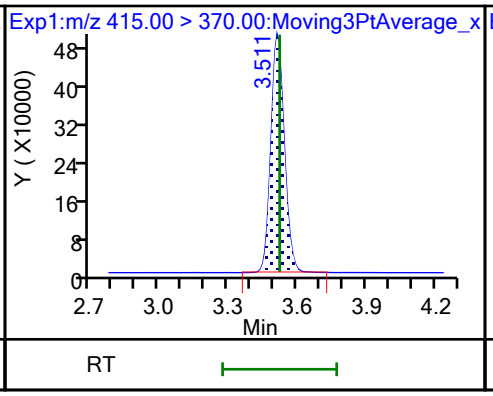
15 Perfluorooctanoic acid



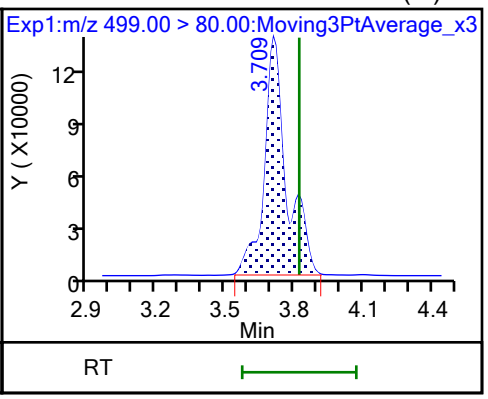
D 14 13C4 PFOA



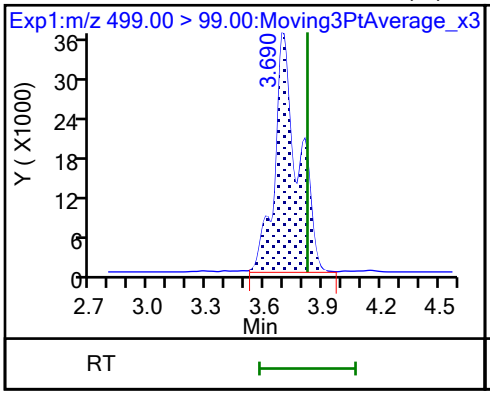
* 62 13C2 PFOA



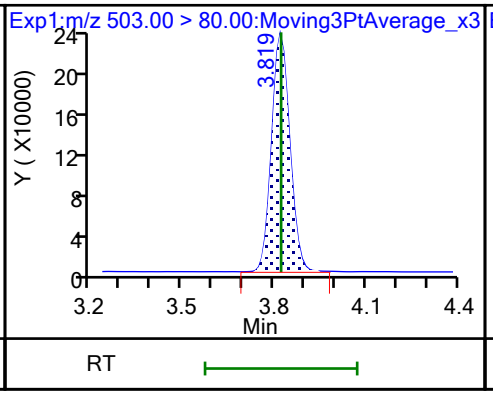
17 Perfluorooctanesulfonic acid (M)



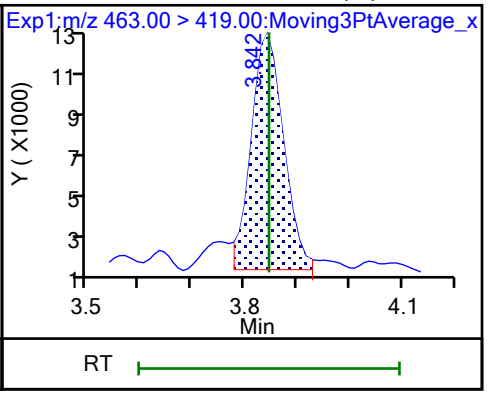
17 Perfluorooctanesulfonic acid (M)



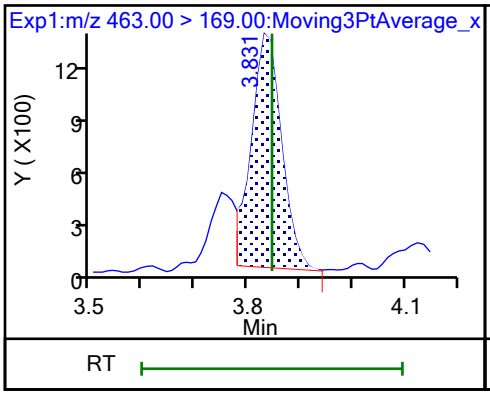
D 18 13C4 PFOS



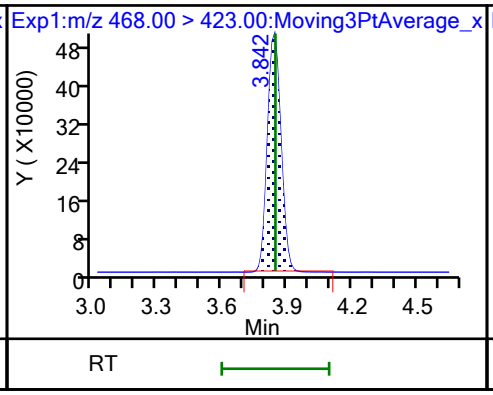
20 Perfluorononanoic acid (M)



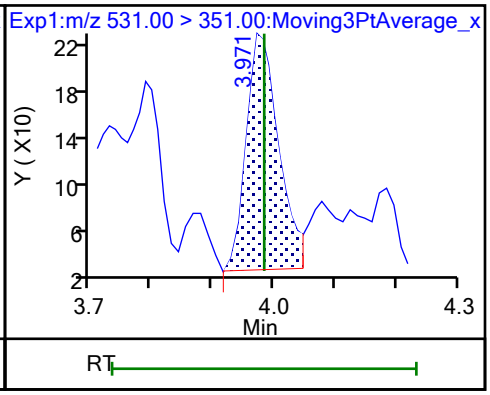
20 Perfluorononanoic acid



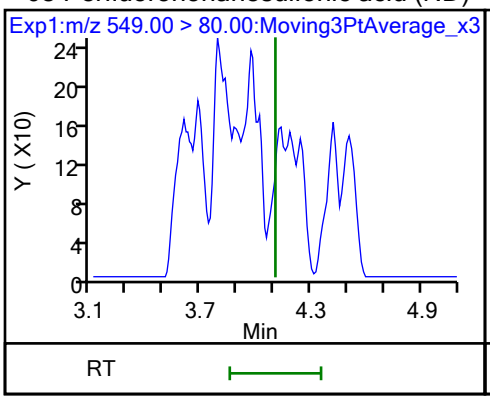
D 19 13C5 PFNA



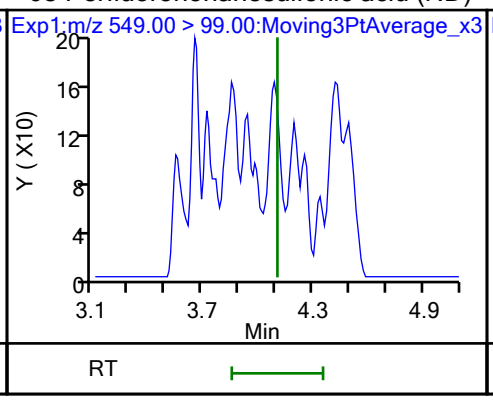
69 9-Chlorohexadecafluoro-3-oxanona (M)



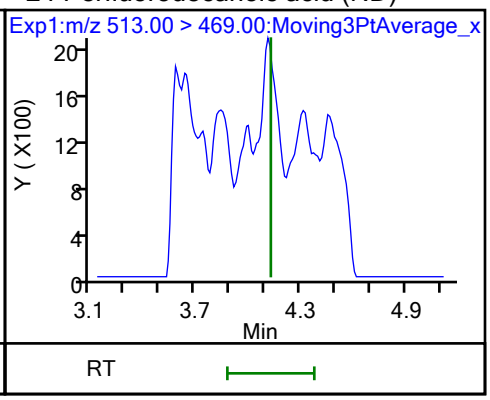
68 Perfluorononanesulfonic acid (ND)



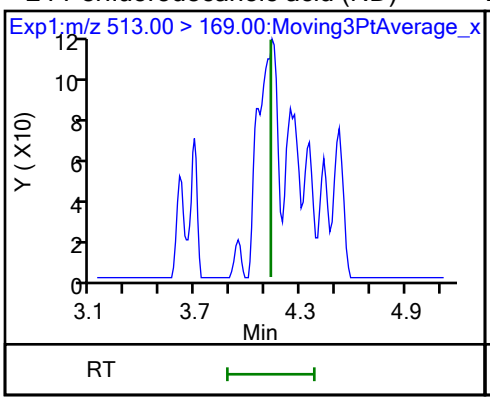
68 Perfluorononanesulfonic acid (ND)



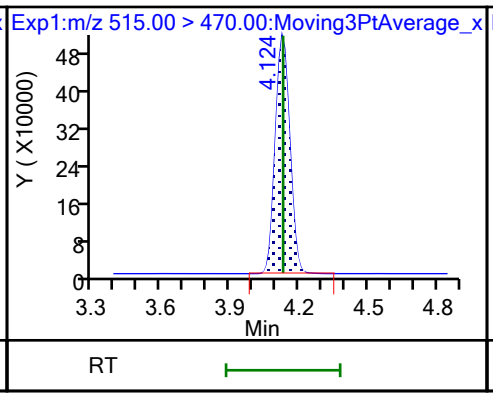
24 Perfluorodecanoic acid (ND)



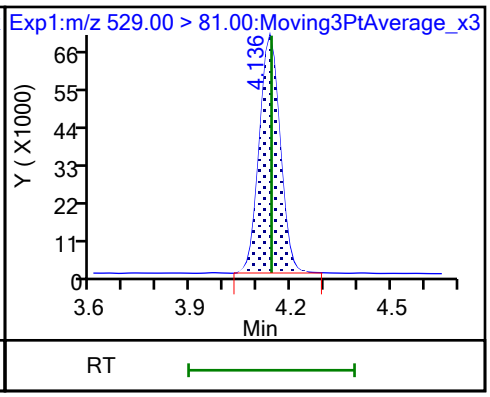
24 Perfluorodecanoic acid (ND)



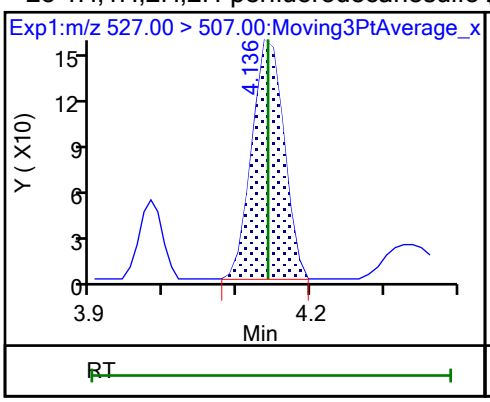
D 23 13C2 PFDA



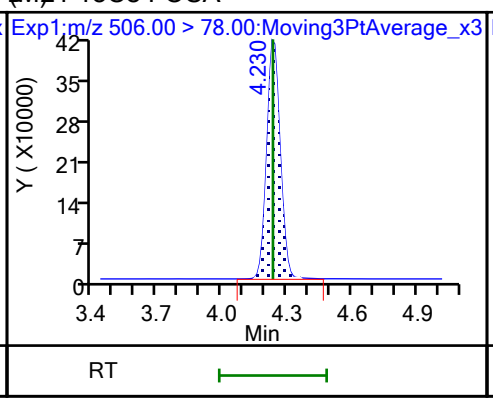
D 26 M2-8:2 FTS



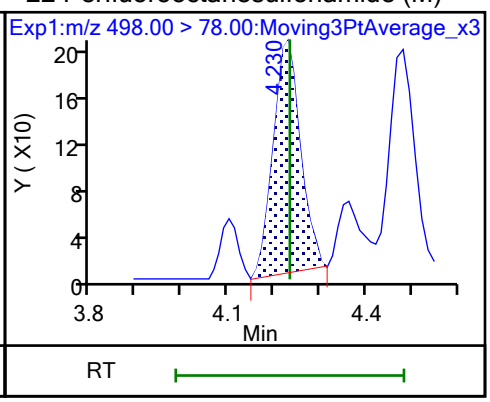
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



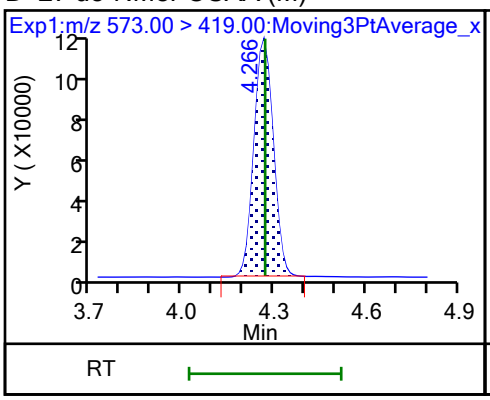
D 21 13C8 FOSA



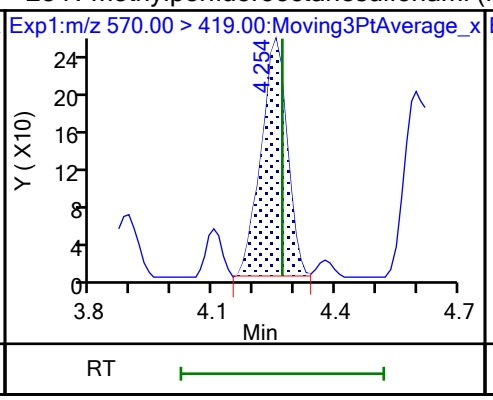
22 Perfluorooctanesulfonamide (M)



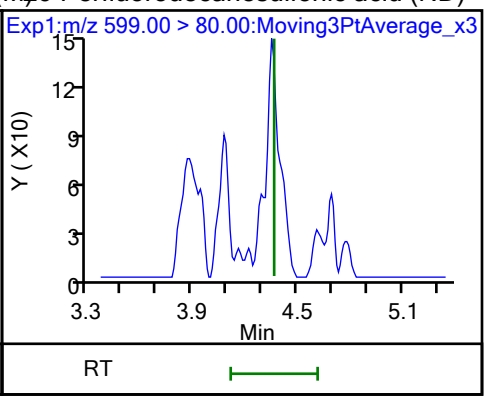
D 27 d3-NMeFOSAA (M)



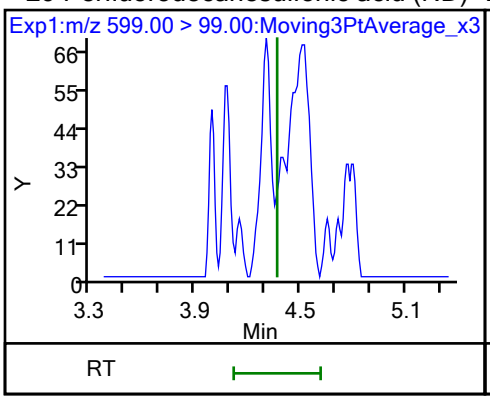
28 N-methylperfluorooctanesulfonami (M)



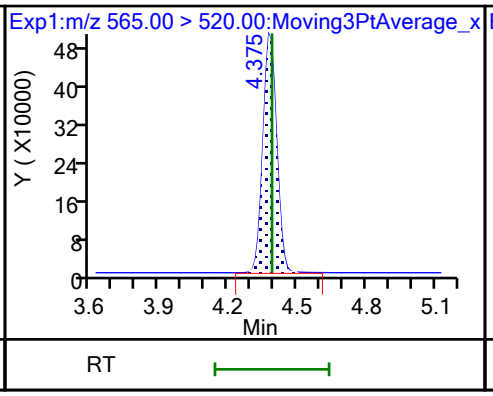
29 Perfluorodecanesulfonic acid (ND)



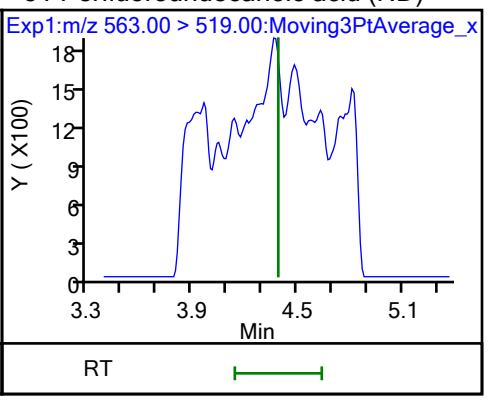
29 Perfluorodecanesulfonic acid (ND)



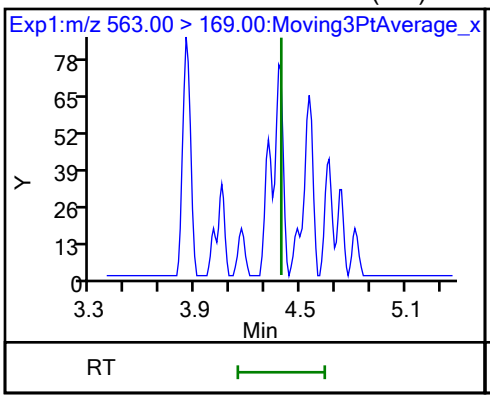
D 30 13C2 PFUnA



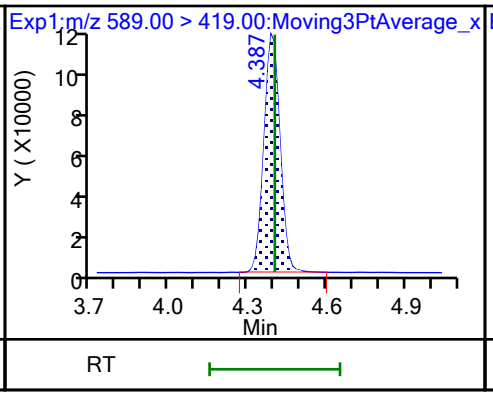
31 Perfluoroundecanoic acid (ND)



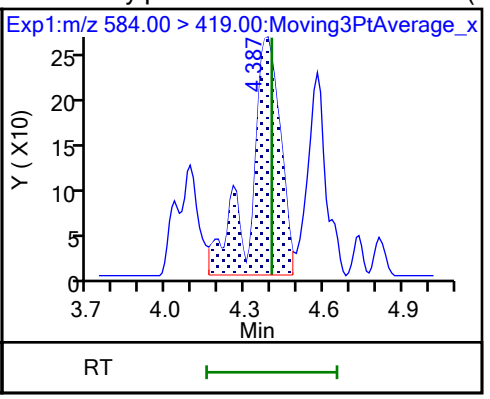
31 Perfluoroundecanoic acid (ND)



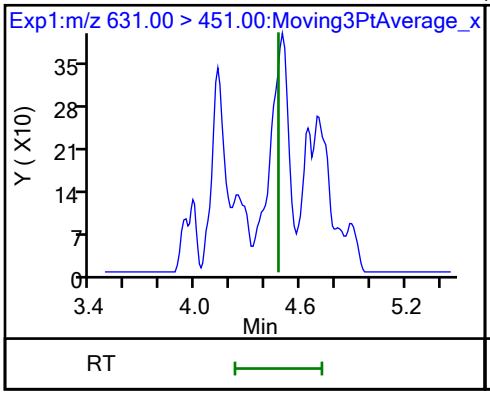
D 32 d5-NEtFOSAA



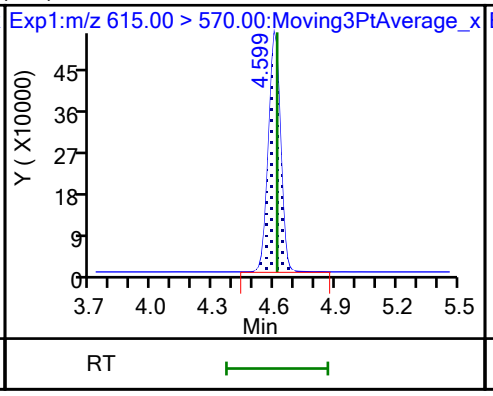
33 N-ethylperfluorooctanesulfonamid (M)



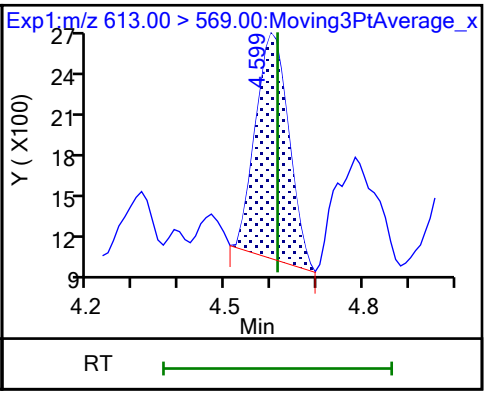
66 11-Chloroeicosafluoro-3-oxaundec (ND)



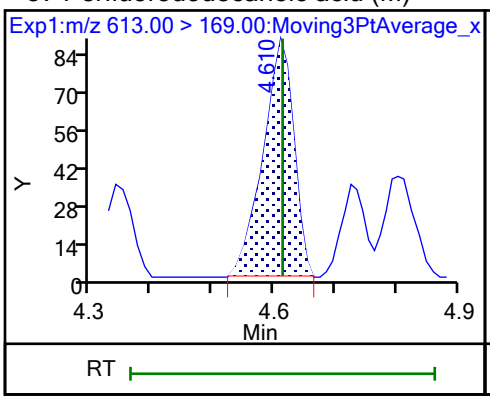
D 36 13C2 PFDoA



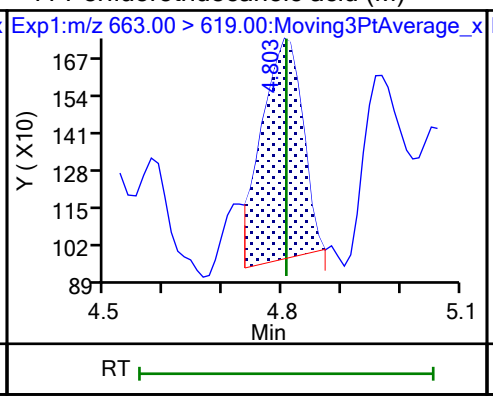
37 Perfluorododecanoic acid



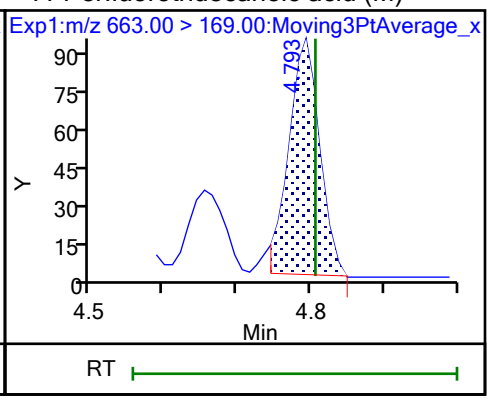
37 Perfluorododecanoic acid (M)



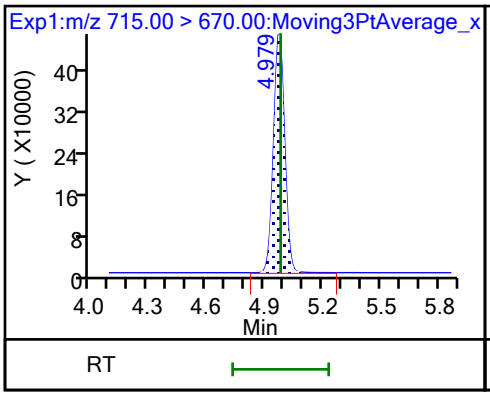
41 Perfluorotridecanoic acid (M)



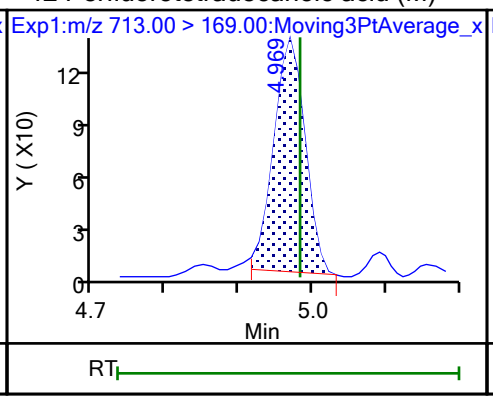
41 Perfluorotridecanoic acid (M)



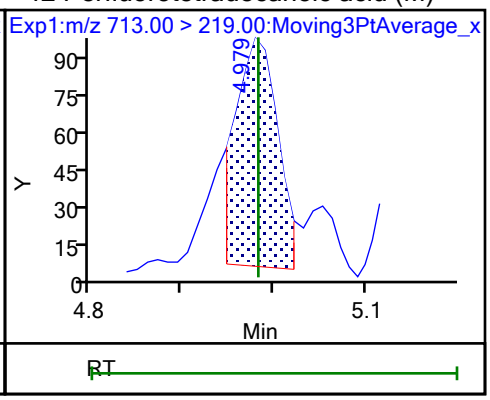
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

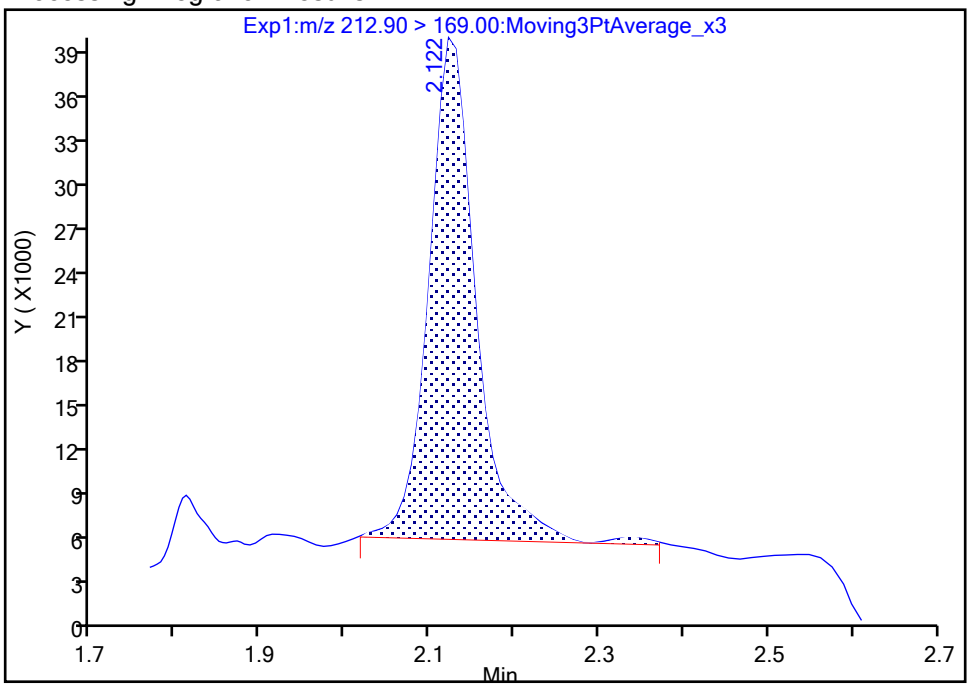
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

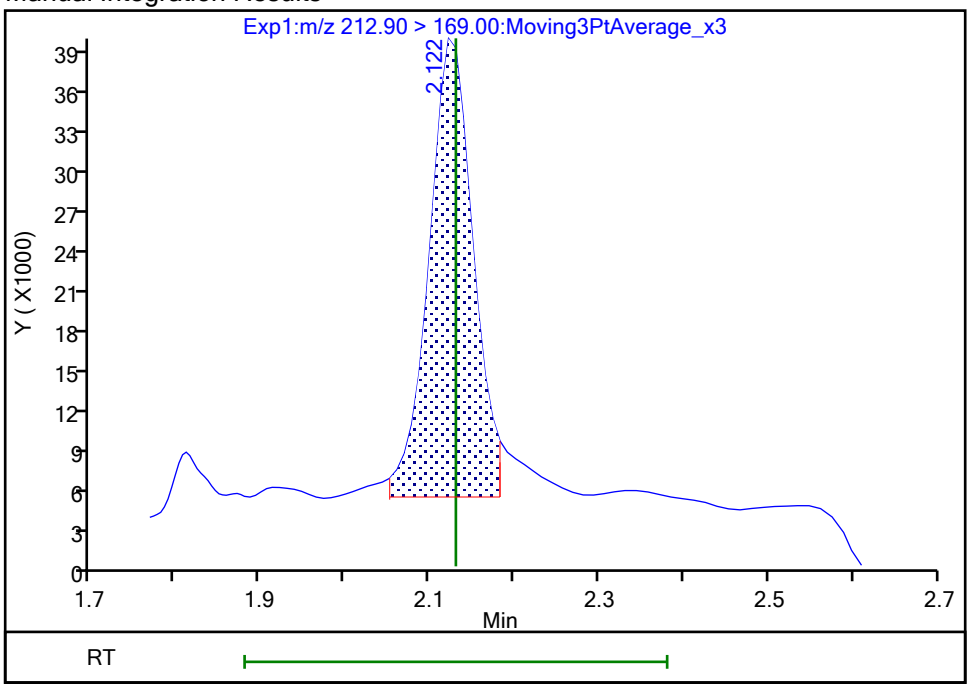
Processing Integration Results

RT: 2.12
Area: 129350
Amount: 0.052896
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 121784
Amount: 0.047410
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

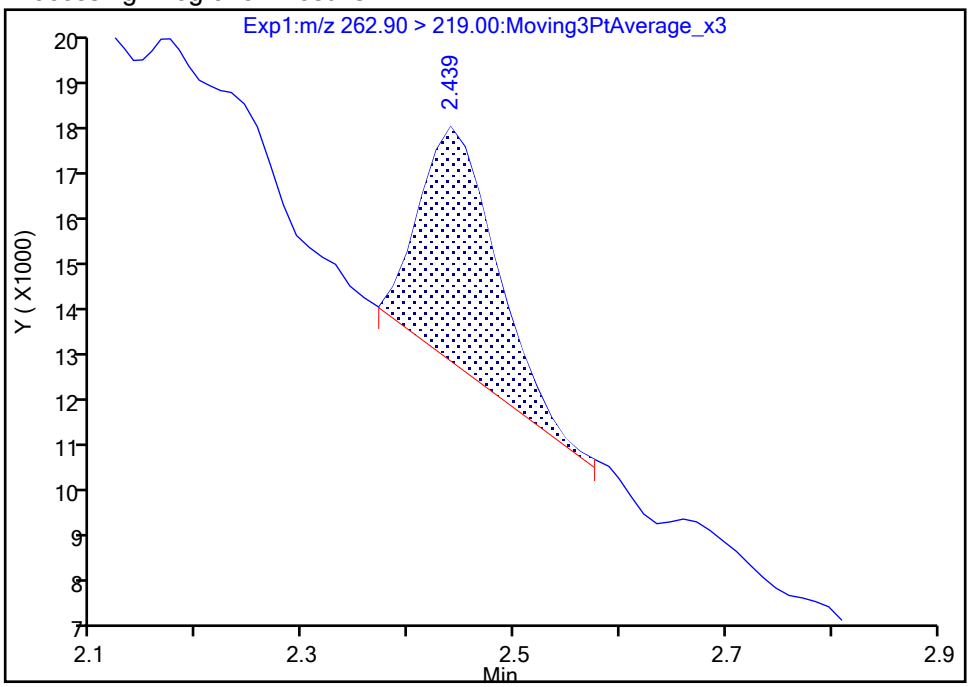
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

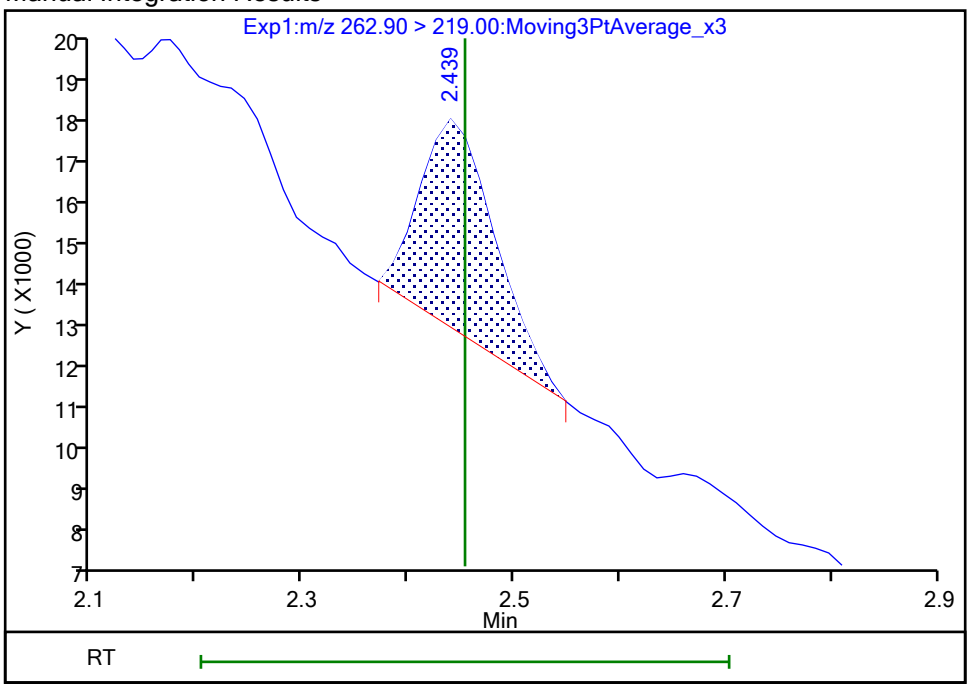
Processing Integration Results

RT: 2.44
Area: 23415
Amount: 0.018825
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 22609
Amount: 0.018177
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

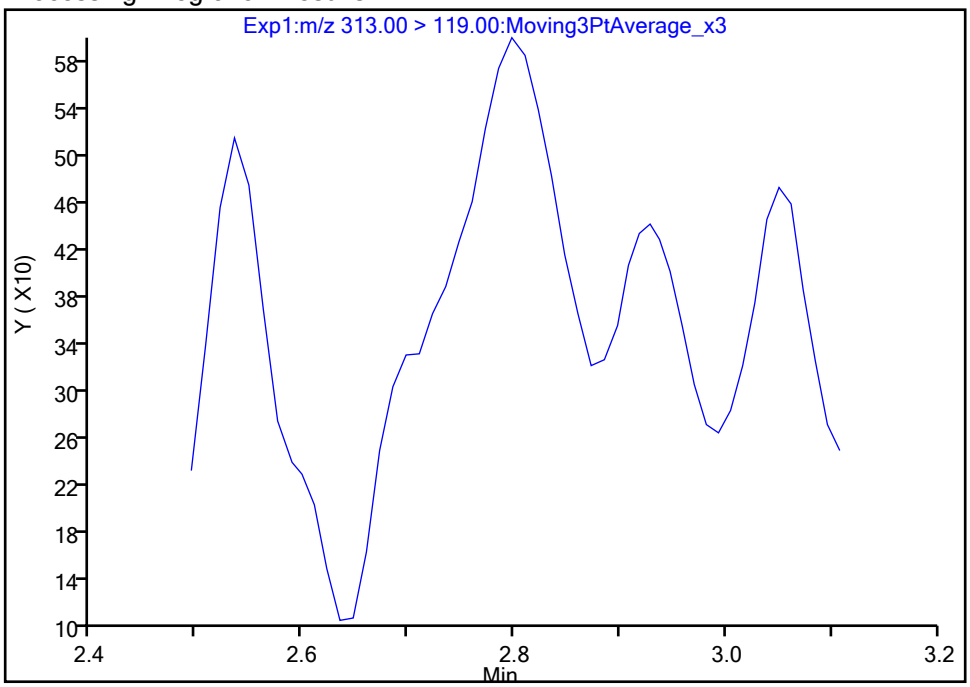
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

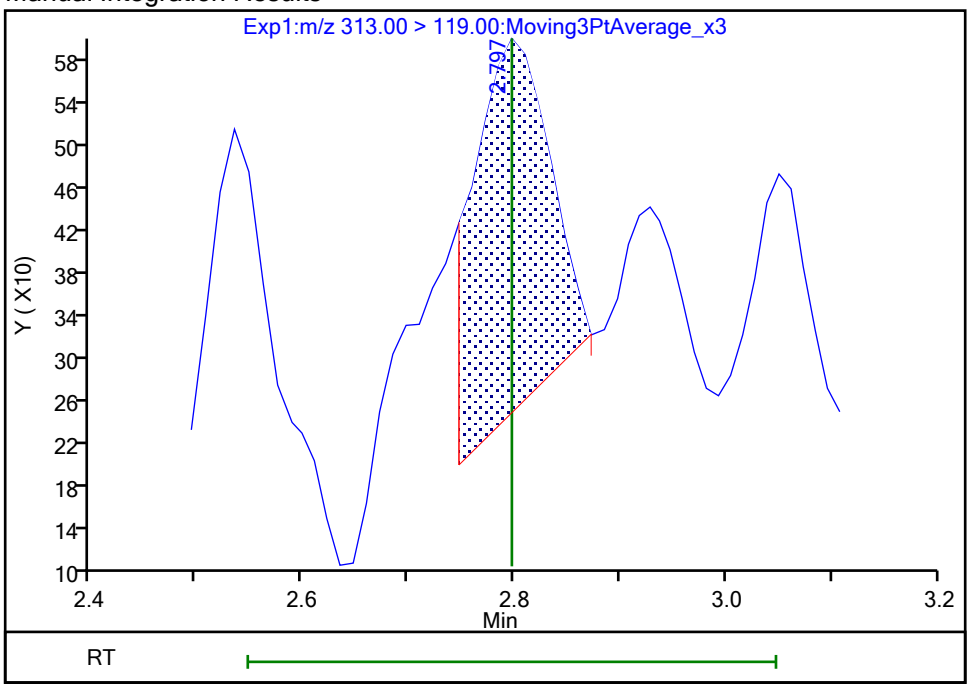
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 1735
Amount: 0.019919
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

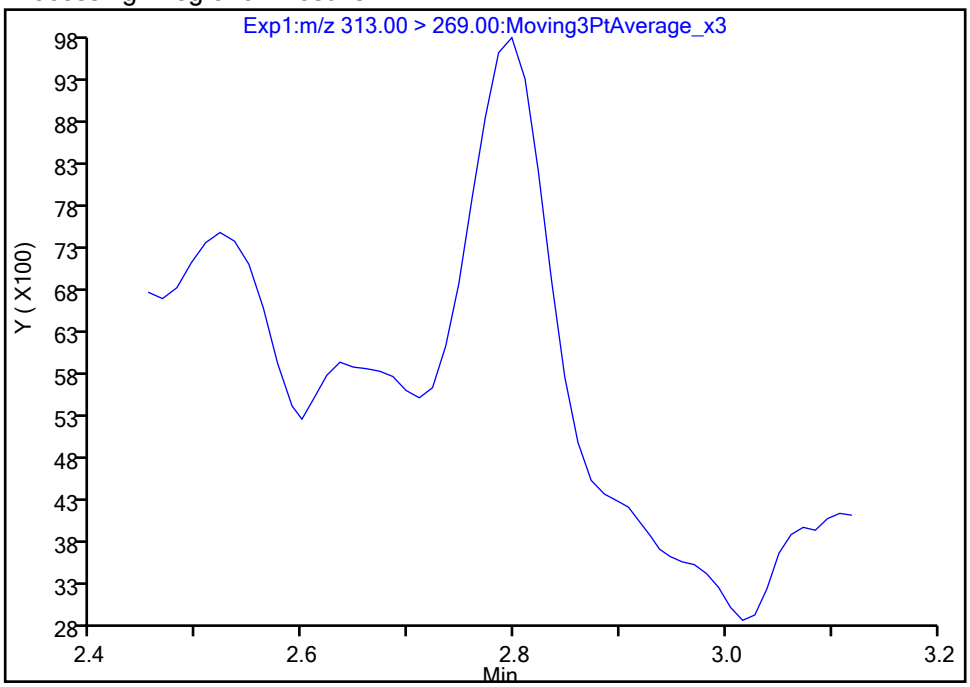
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

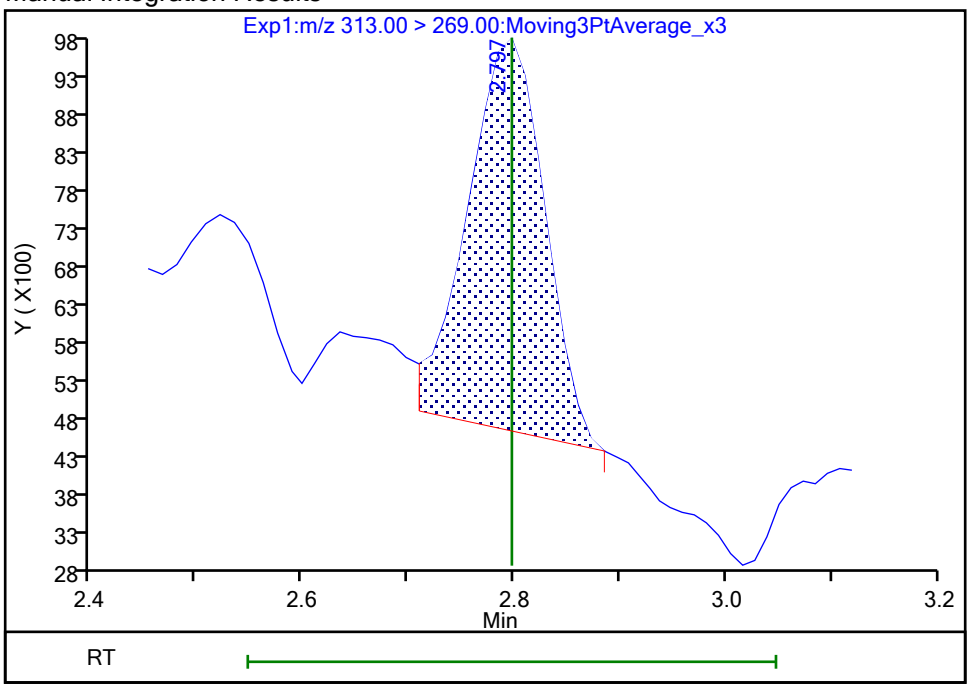
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 25895
Amount: 0.019919
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

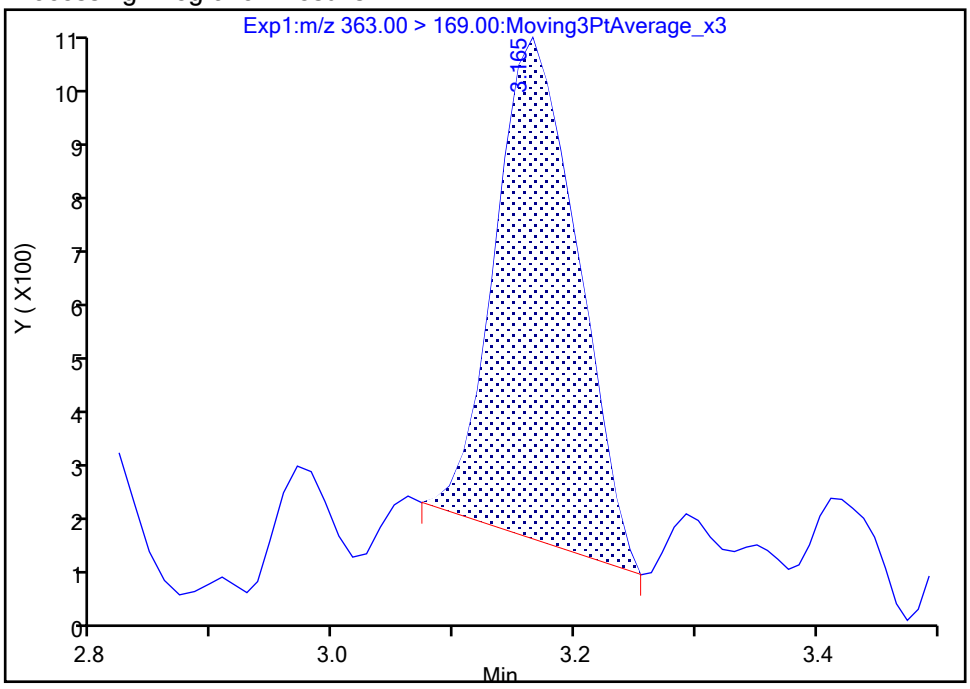
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

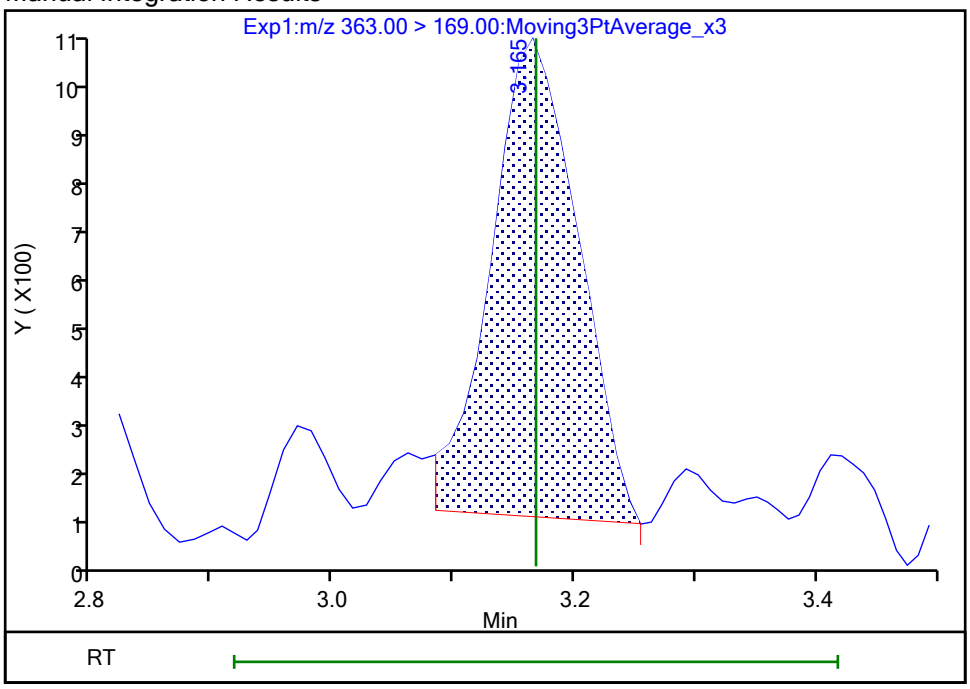
Processing Integration Results

RT: 3.17
Area: 4315
Amount: 0.015057
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 4787
Amount: 0.015057
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

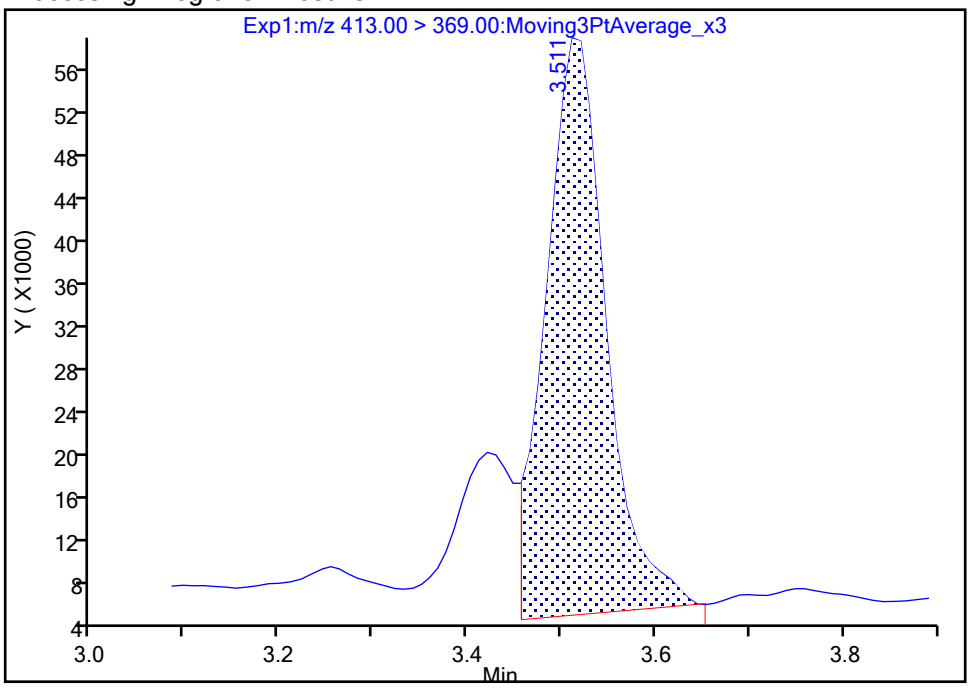
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

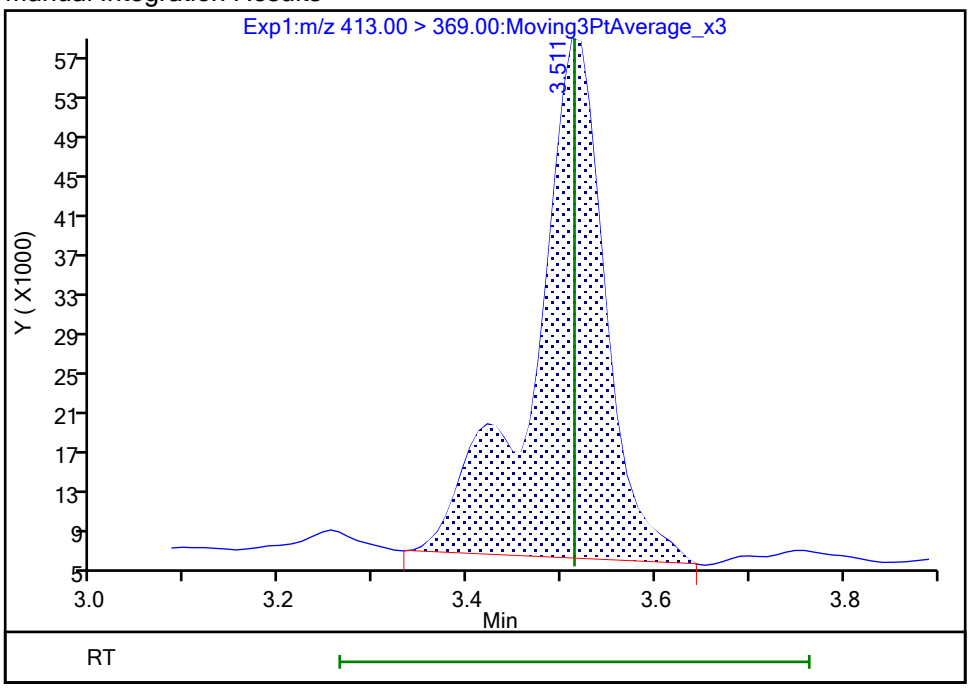
Processing Integration Results

RT: 3.51
Area: 240758
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 279571
Amount: 0.159450
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

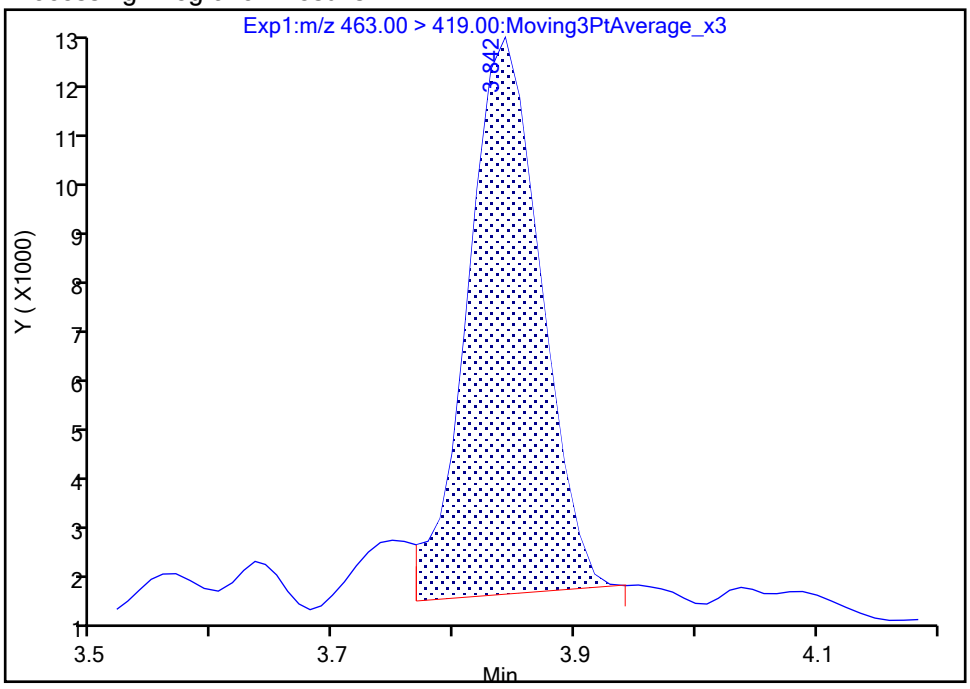
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

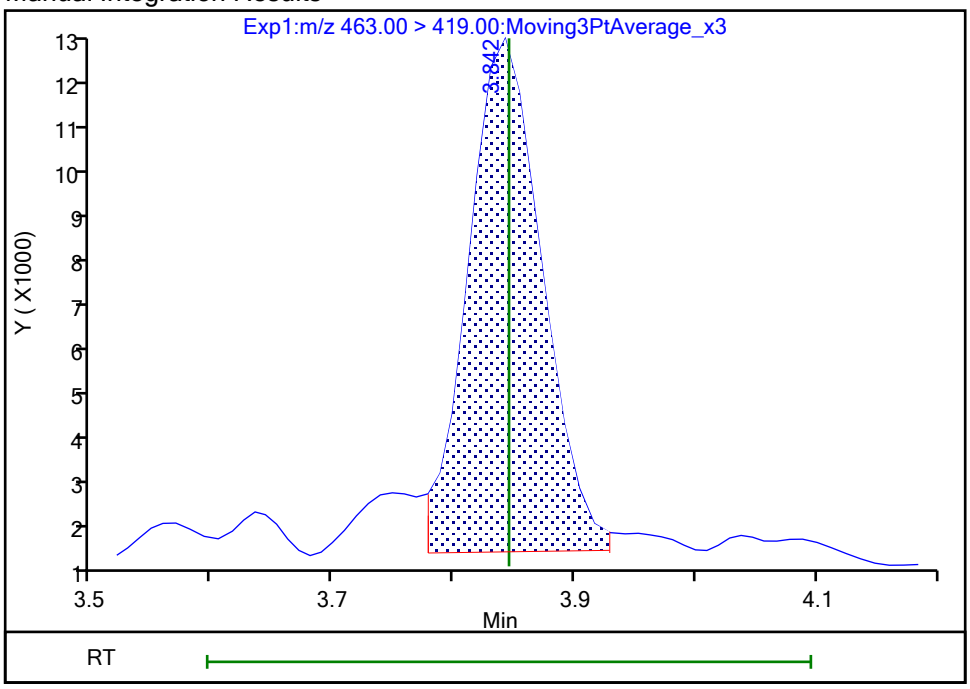
Processing Integration Results

RT: 3.84
Area: 45721
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 47246
Amount: 0.027428
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

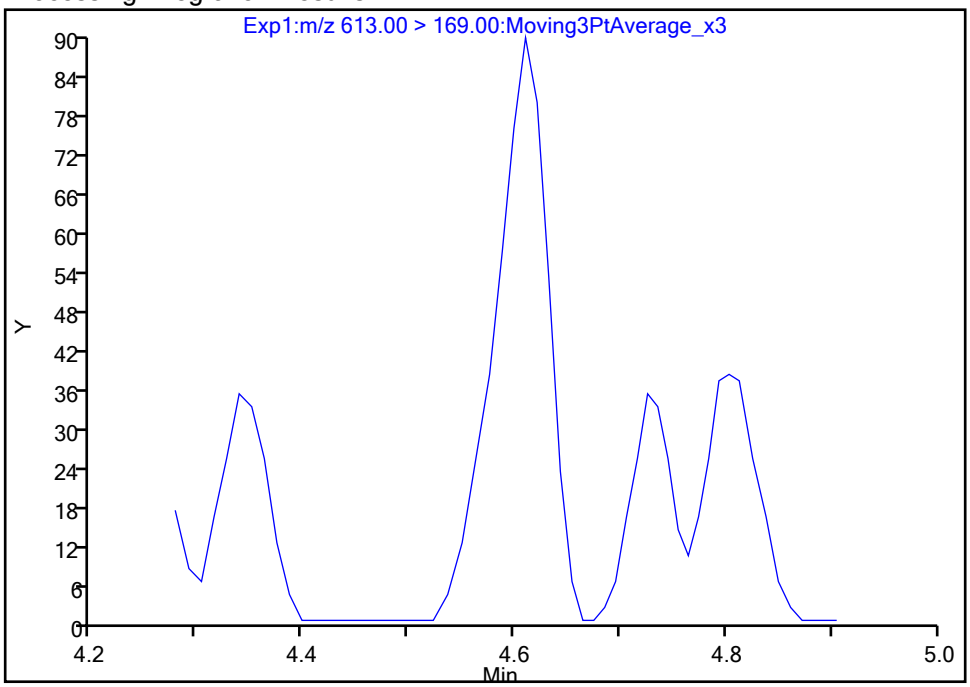
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

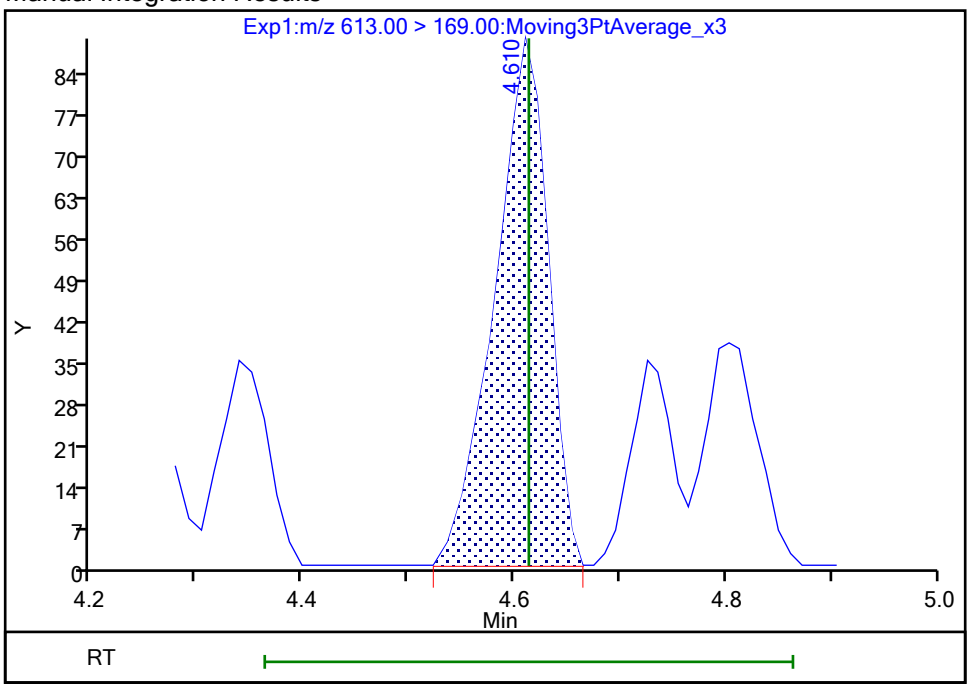
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 316
Amount: 0.004532
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

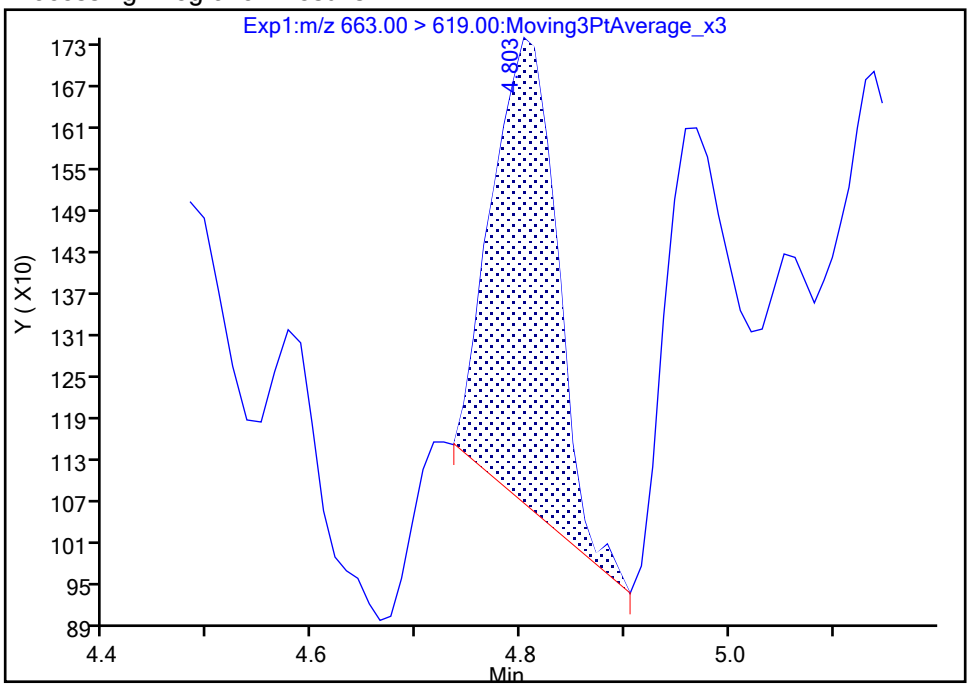
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

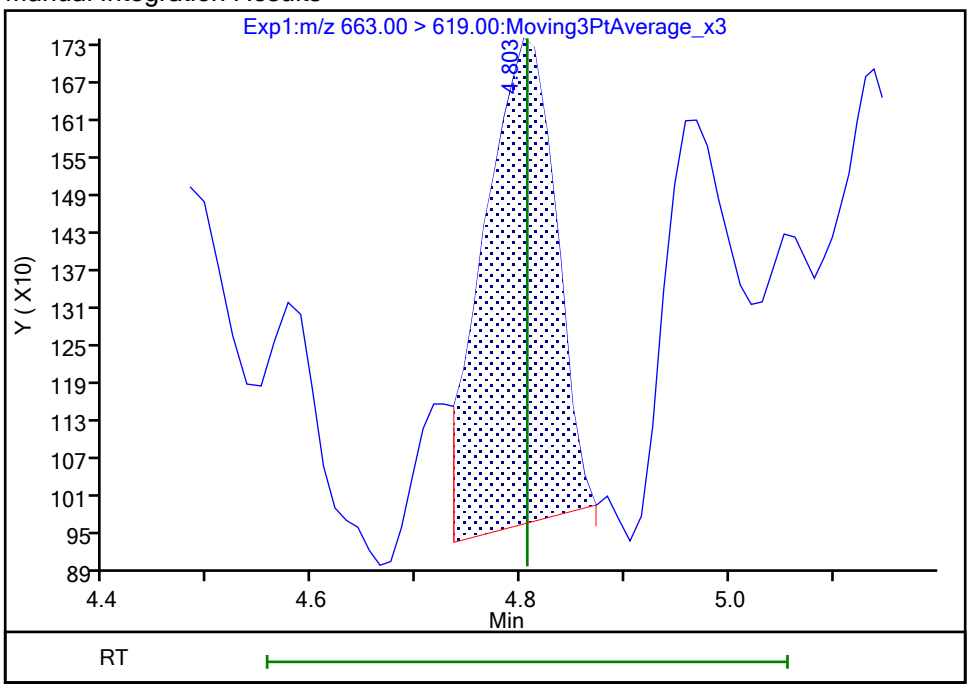
Processing Integration Results

RT: 4.80
Area: 2961
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 3752
Amount: 0.002026
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

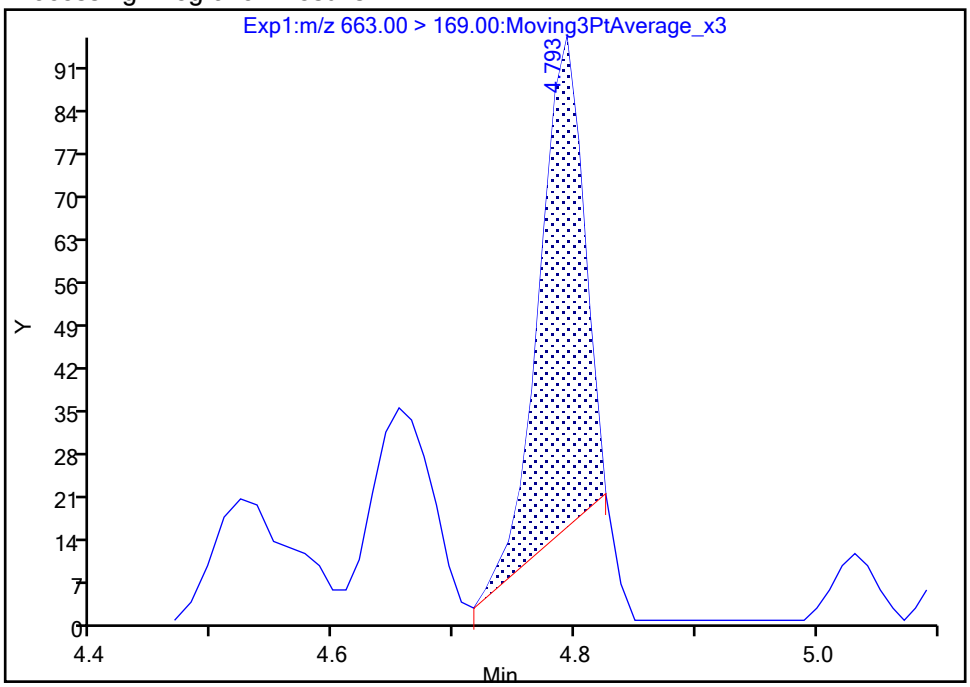
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

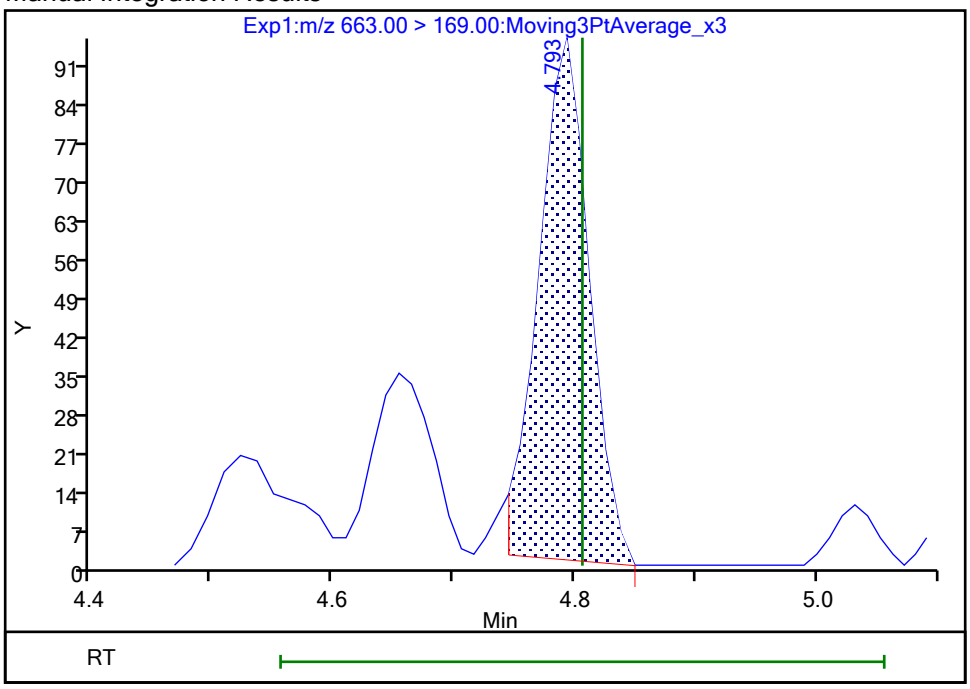
Processing Integration Results

RT: 4.79
Area: 205
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.79
Area: 274
Amount: 0.002026
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

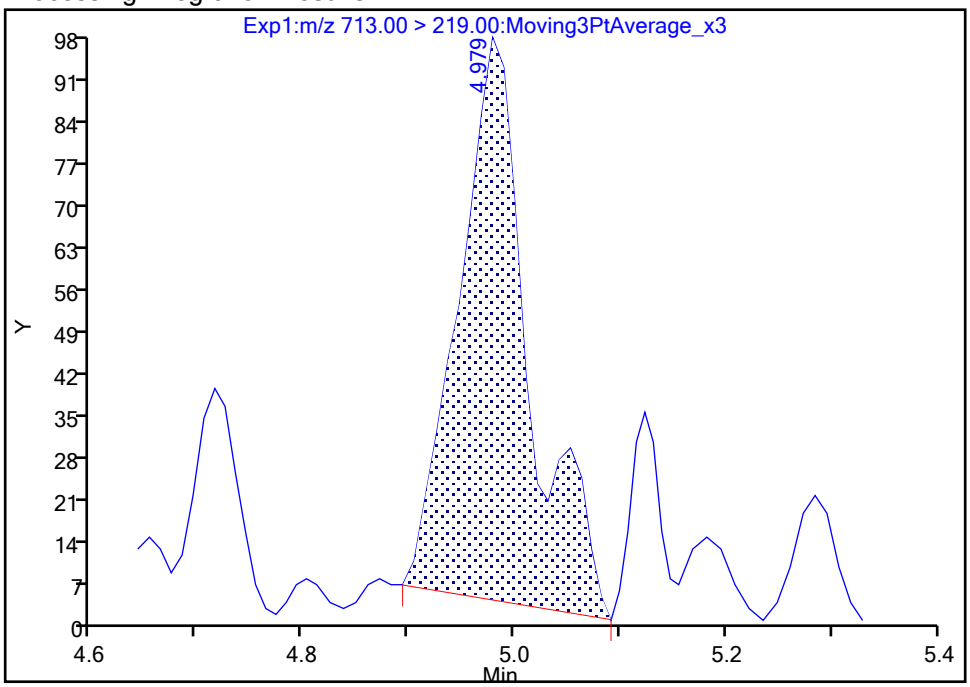
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

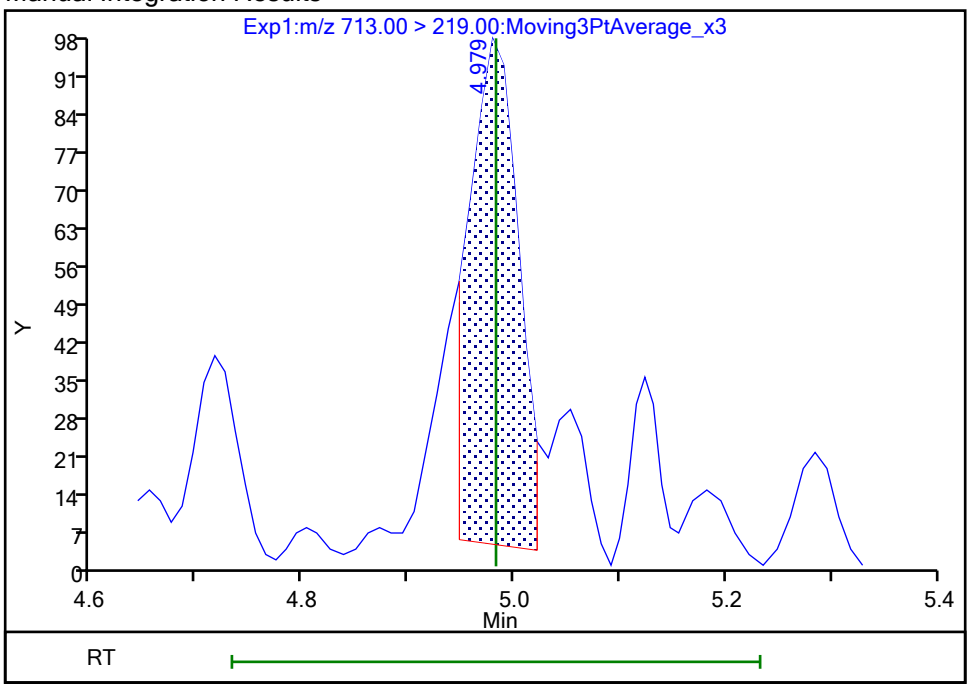
Processing Integration Results

RT: 4.98
Area: 441
Amount: 0.002325
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 293
Amount: 0.002368
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:09:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

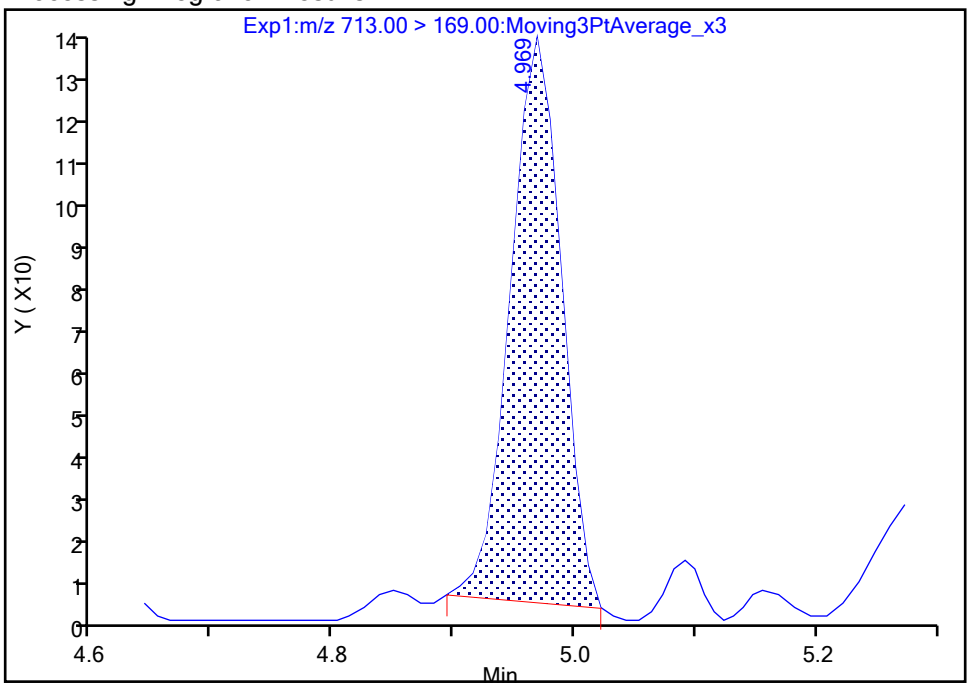
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

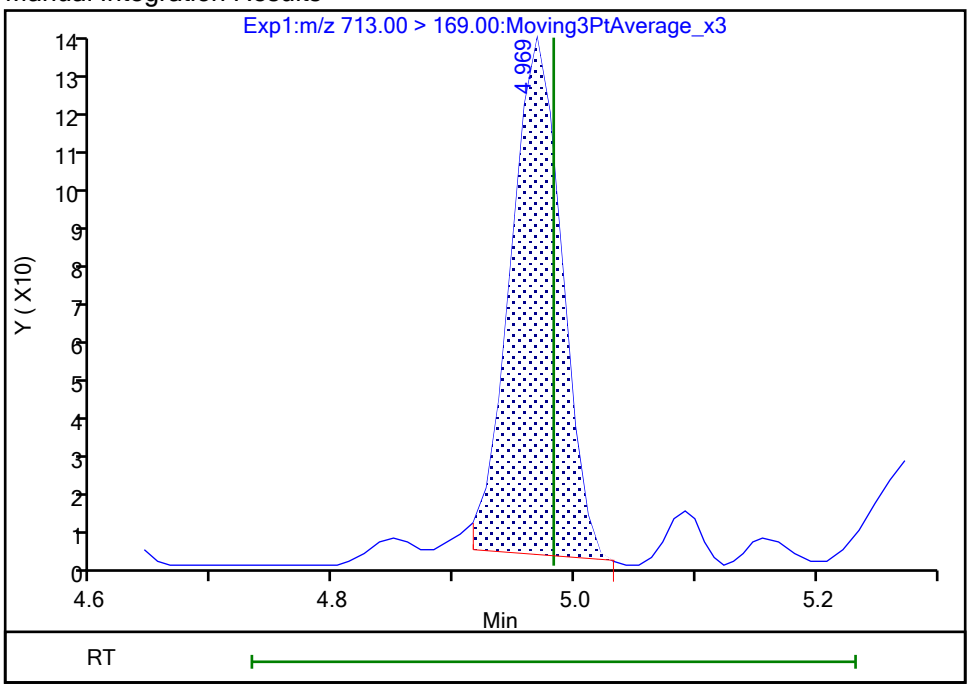
Processing Integration Results

RT: 4.97
Area: 386
Amount: 0.002325
Amount Units: ng/ml



Manual Integration Results

RT: 4.97
Area: 393
Amount: 0.002368
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:09:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

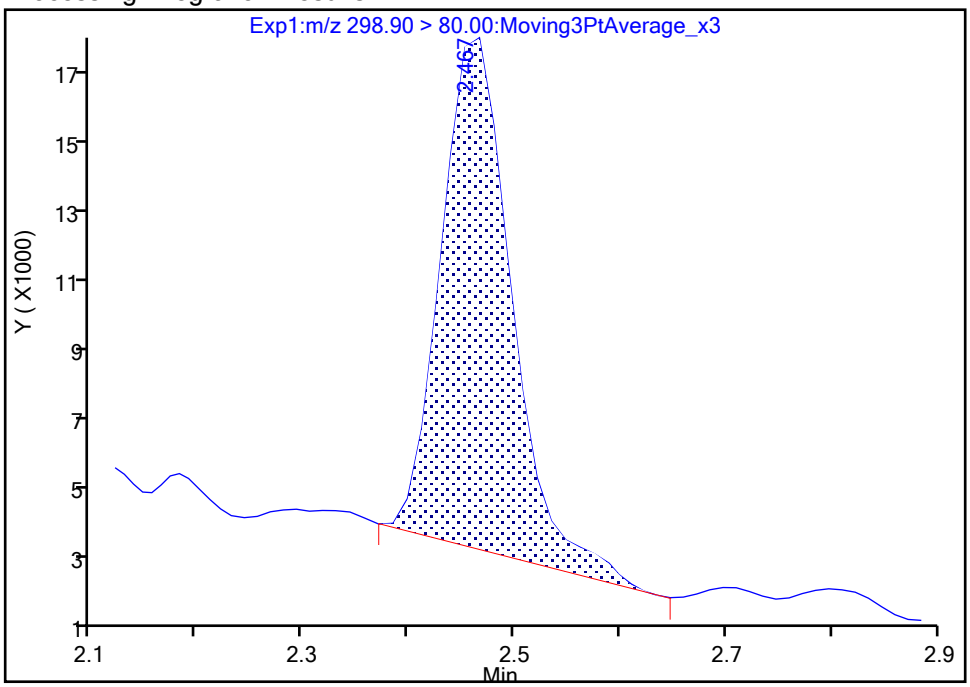
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

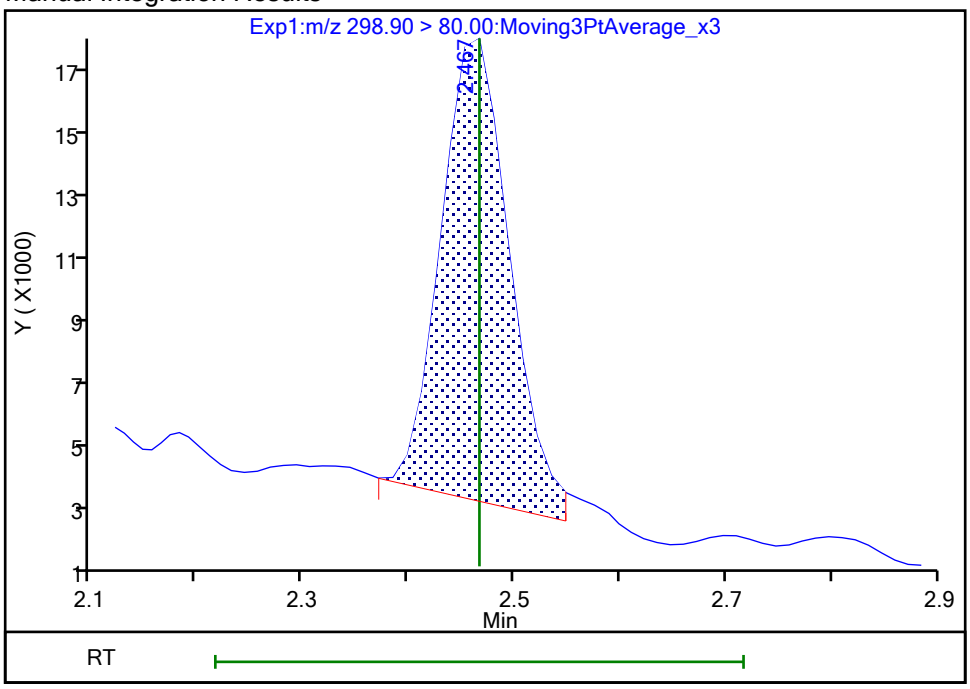
Processing Integration Results

RT: 2.47
Area: 68174
Amount: 0.037643
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 65590
Amount: 0.036216
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

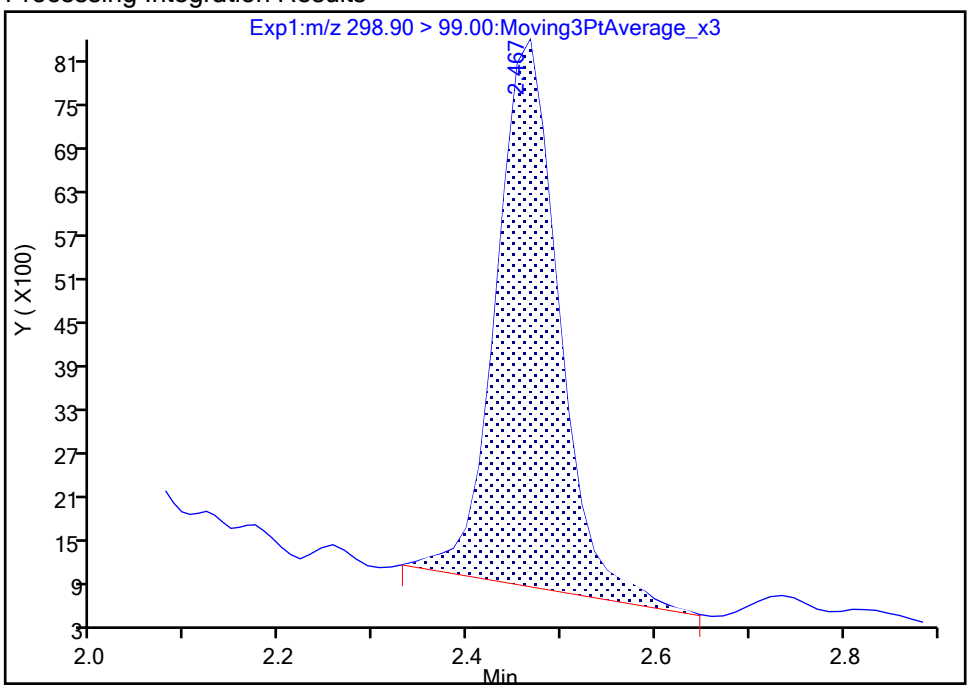
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

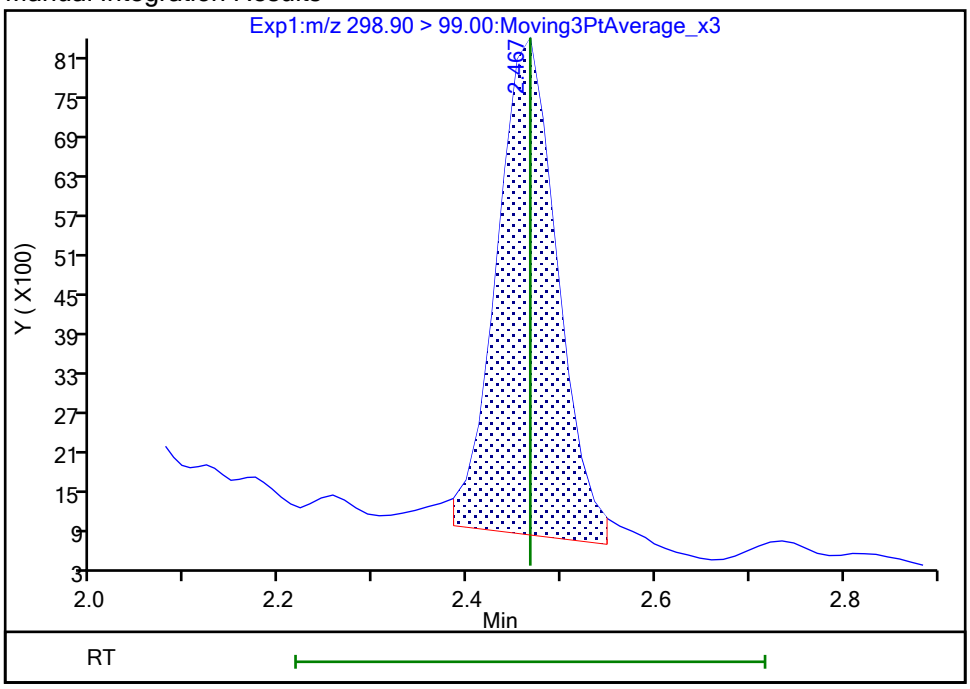
Processing Integration Results

RT: 2.47
Area: 34753
Amount: 0.037643
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 33547
Amount: 0.036216
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

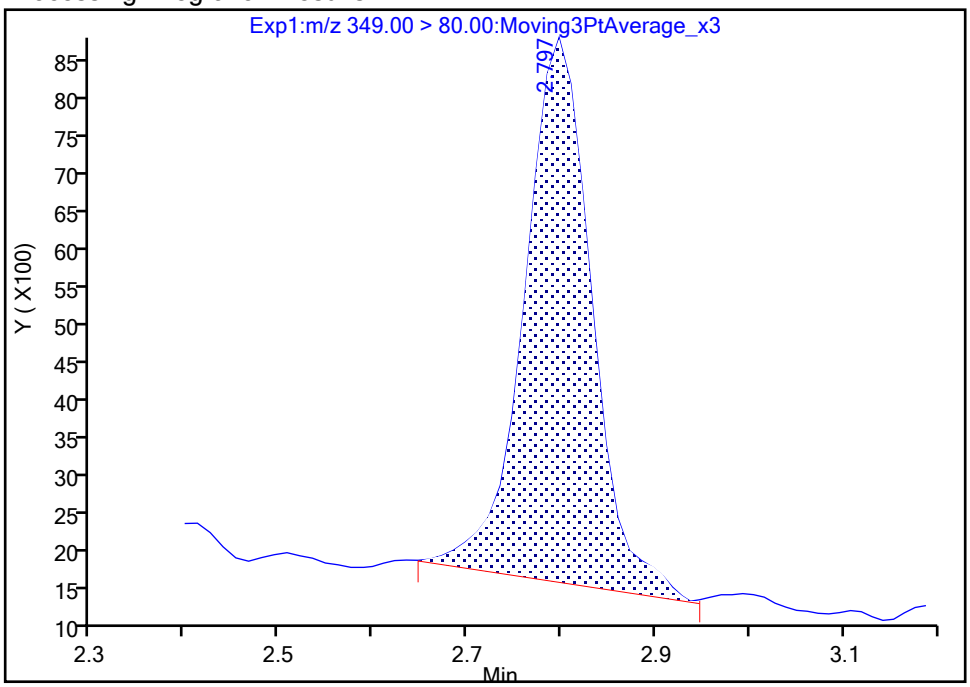
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

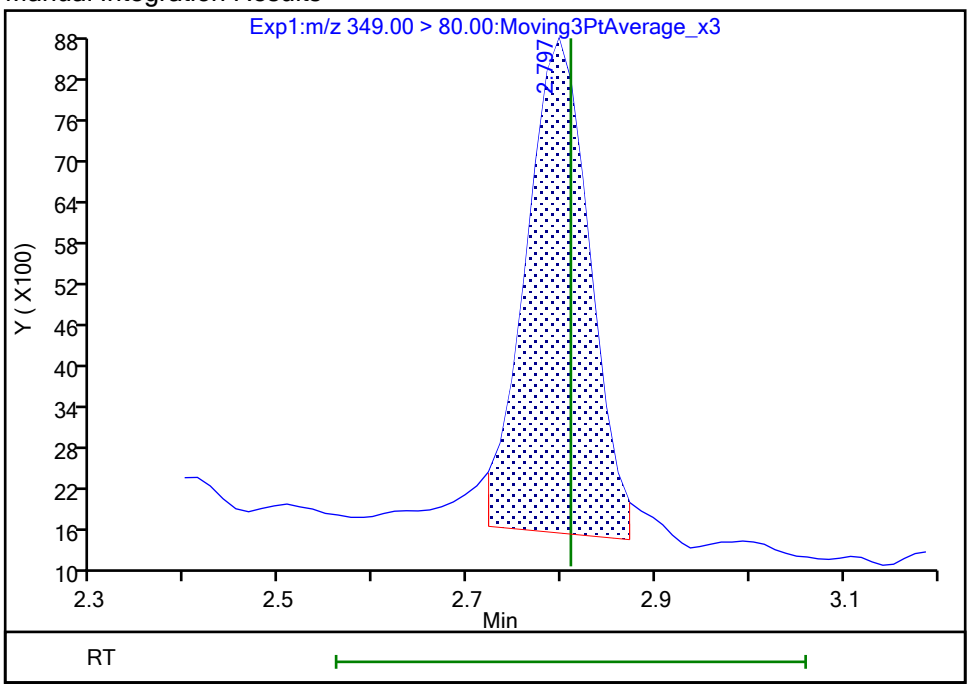
Processing Integration Results

RT: 2.80
Area: 36060
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 34142
Amount: 0.020898
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

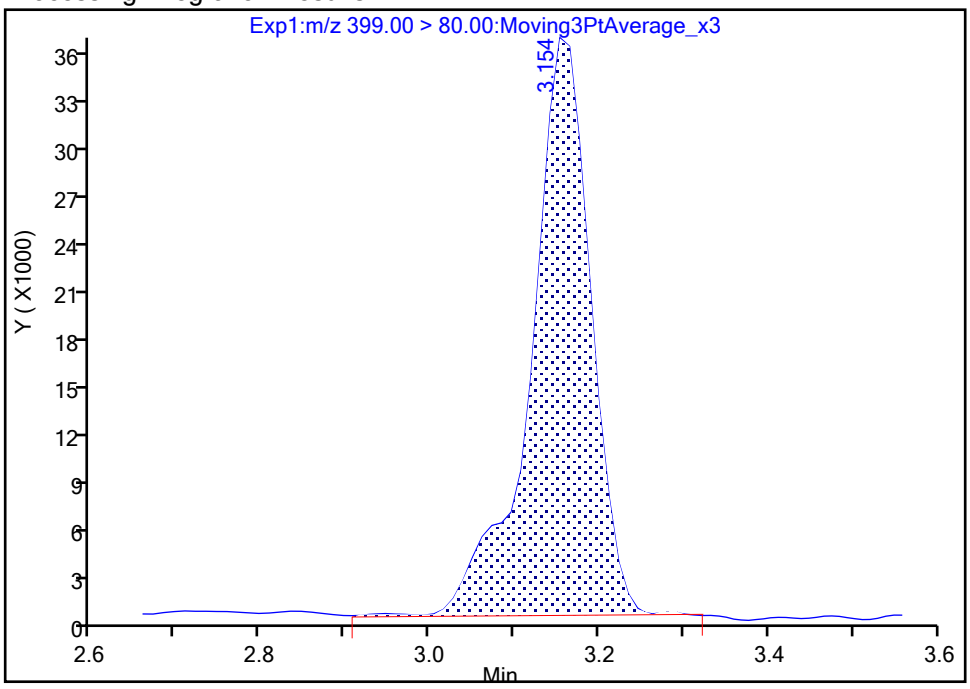
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

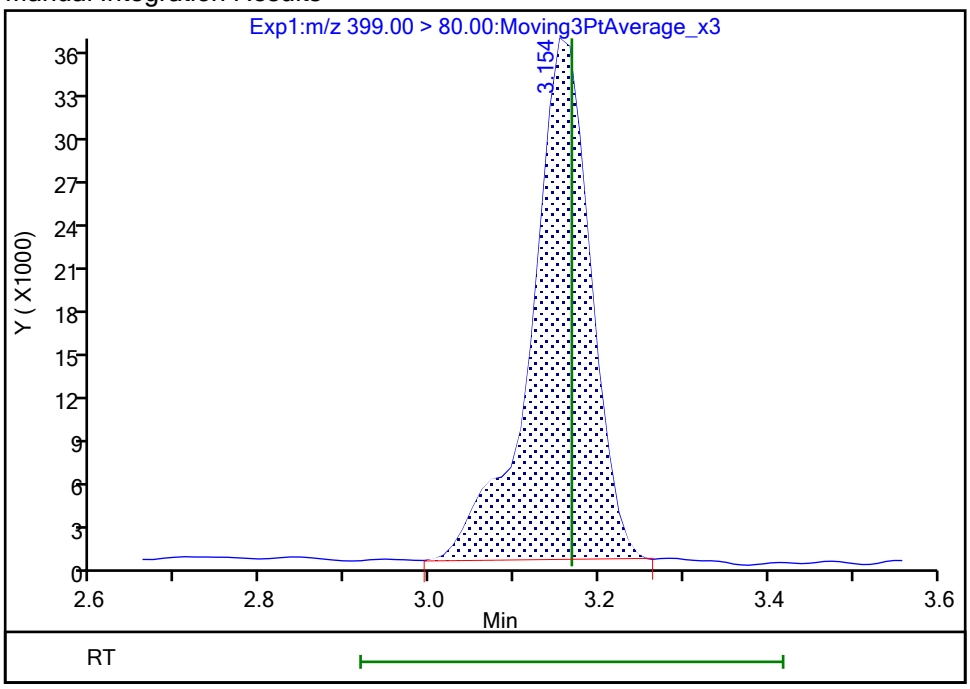
Processing Integration Results

RT: 3.15
Area: 176061
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 174211
Amount: 0.125794
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

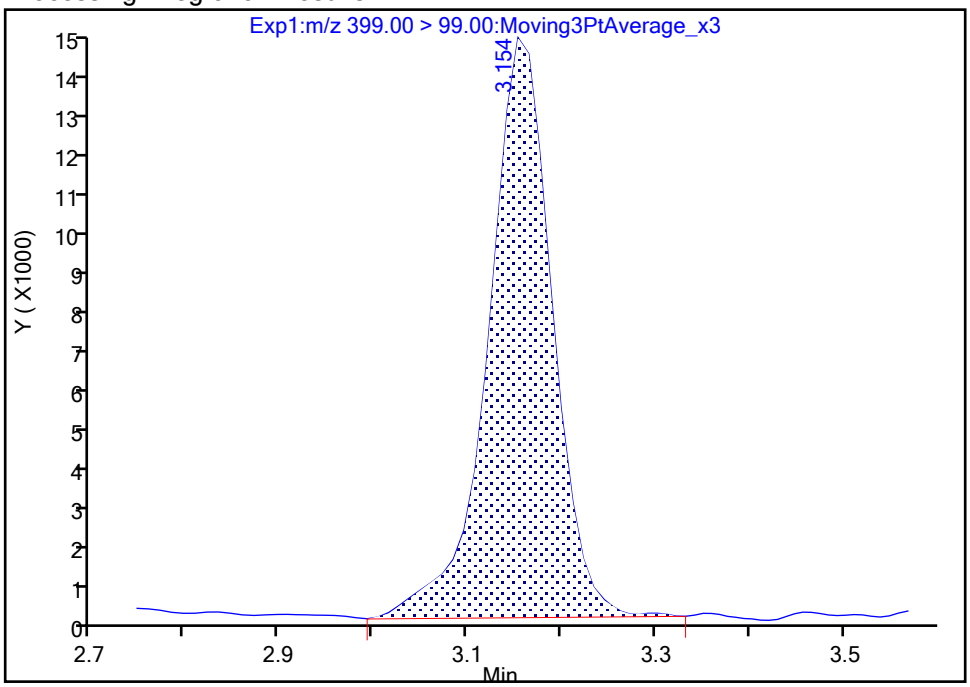
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

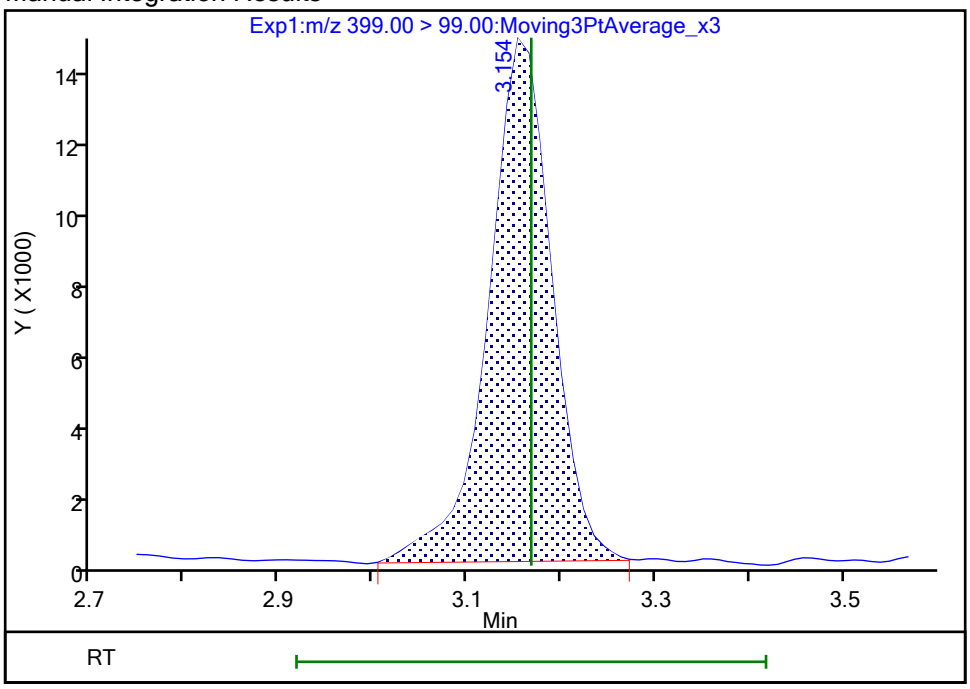
Processing Integration Results

RT: 3.15
Area: 67108
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 66039
Amount: 0.125794
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:06:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

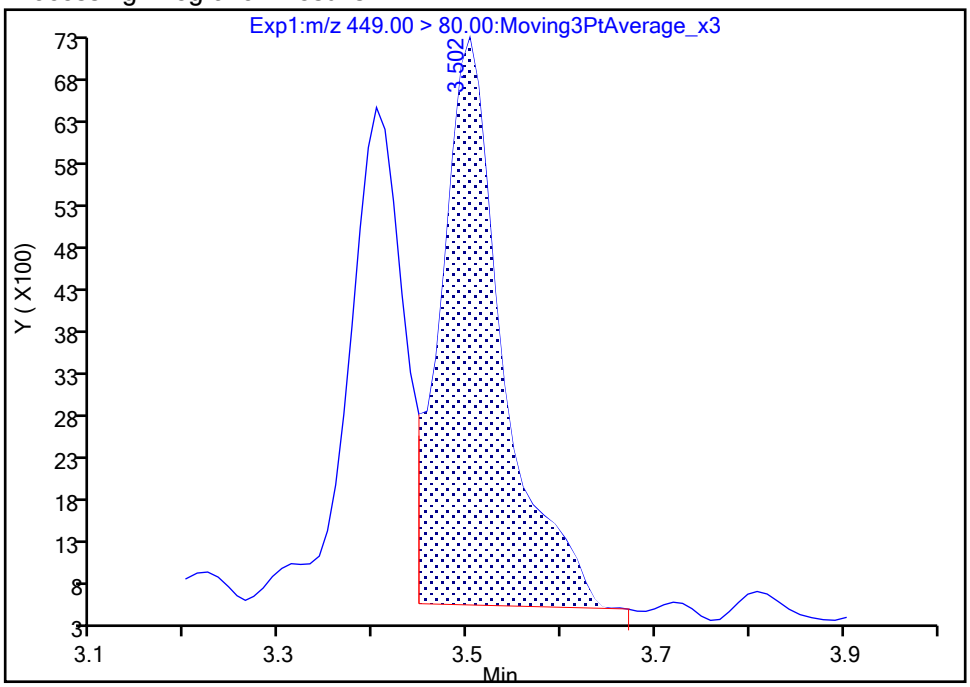
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

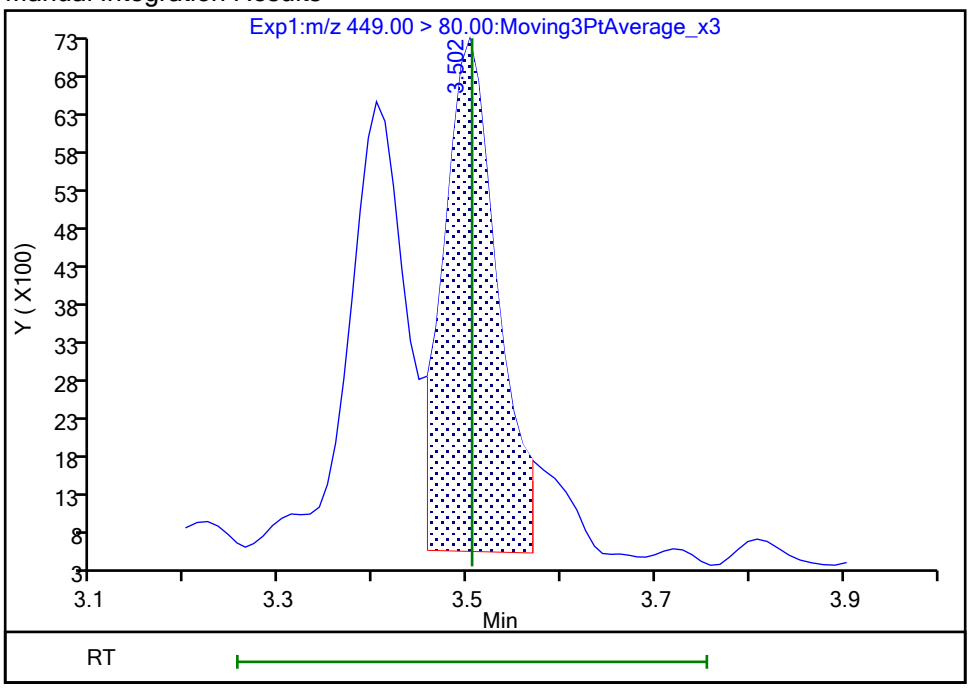
Processing Integration Results

RT: 3.50
Area: 30745
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 26427
Amount: 0.022946
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

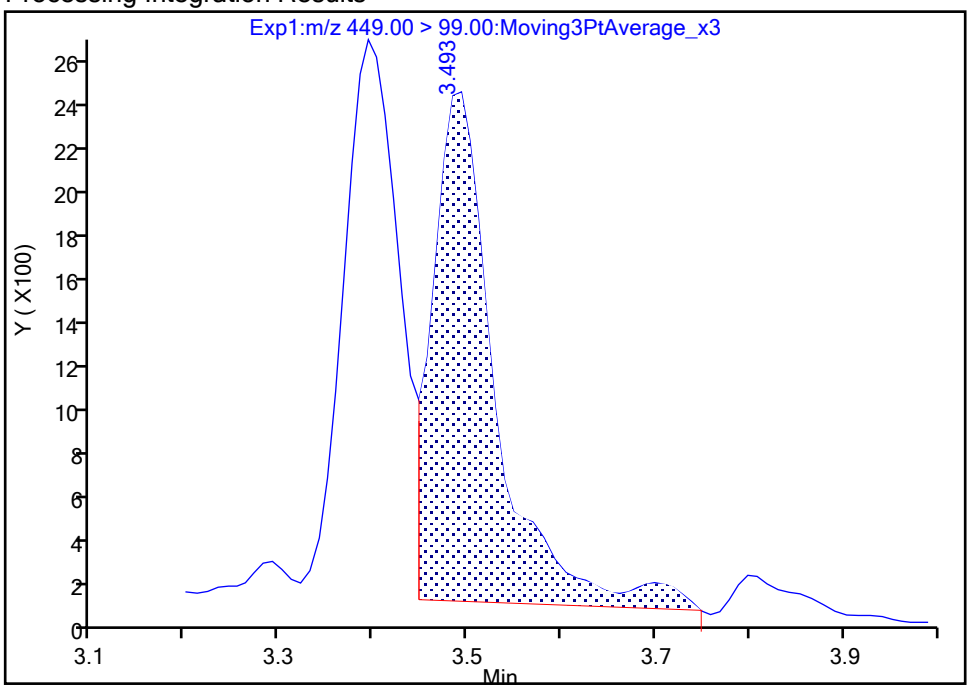
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

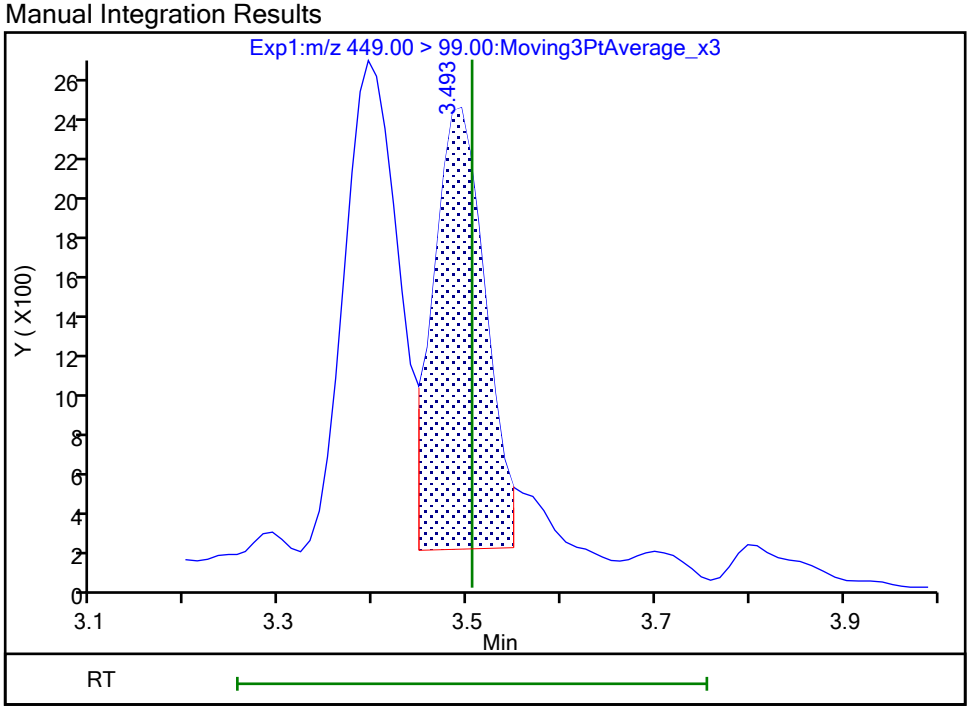
Processing Integration Results

RT: 3.49
Area: 10796
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 8419
Amount: 0.022946
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

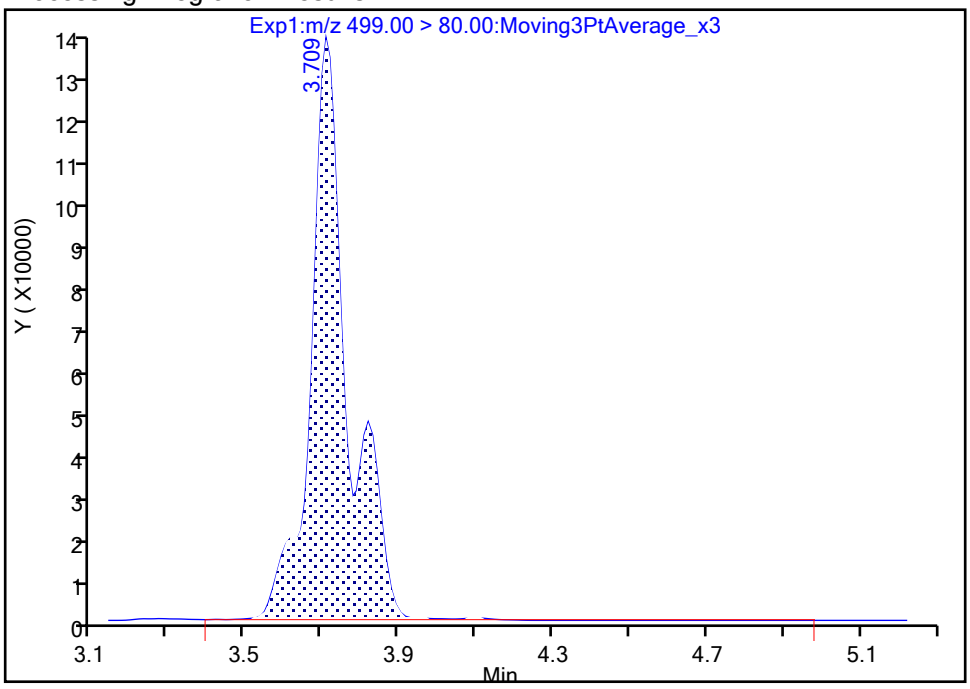
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

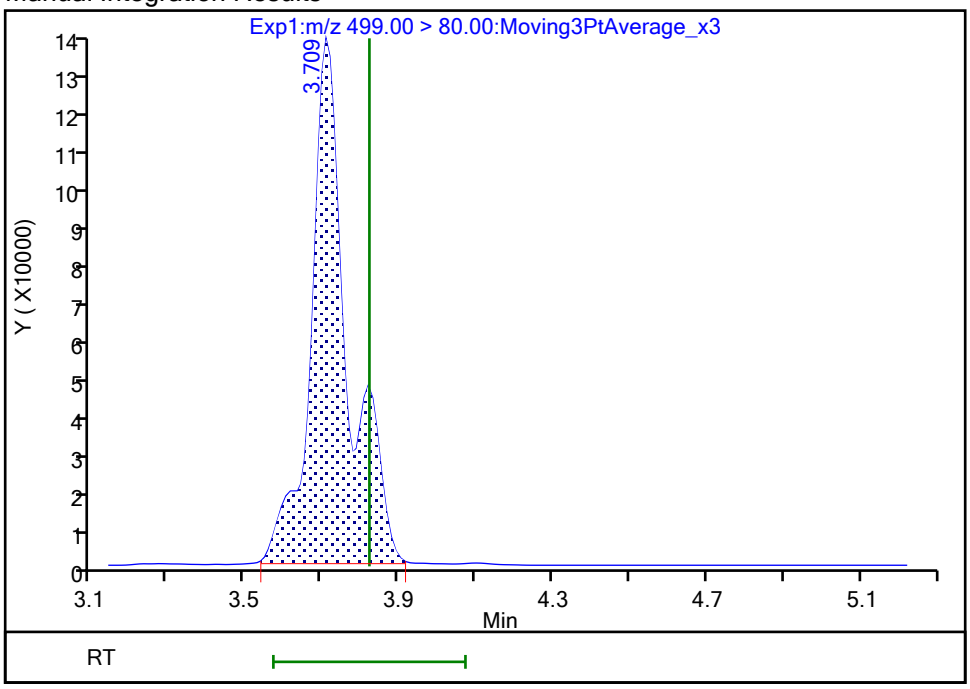
Processing Integration Results

RT: 3.71
Area: 900219
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.71
Area: 885332
Amount: 0.952438
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

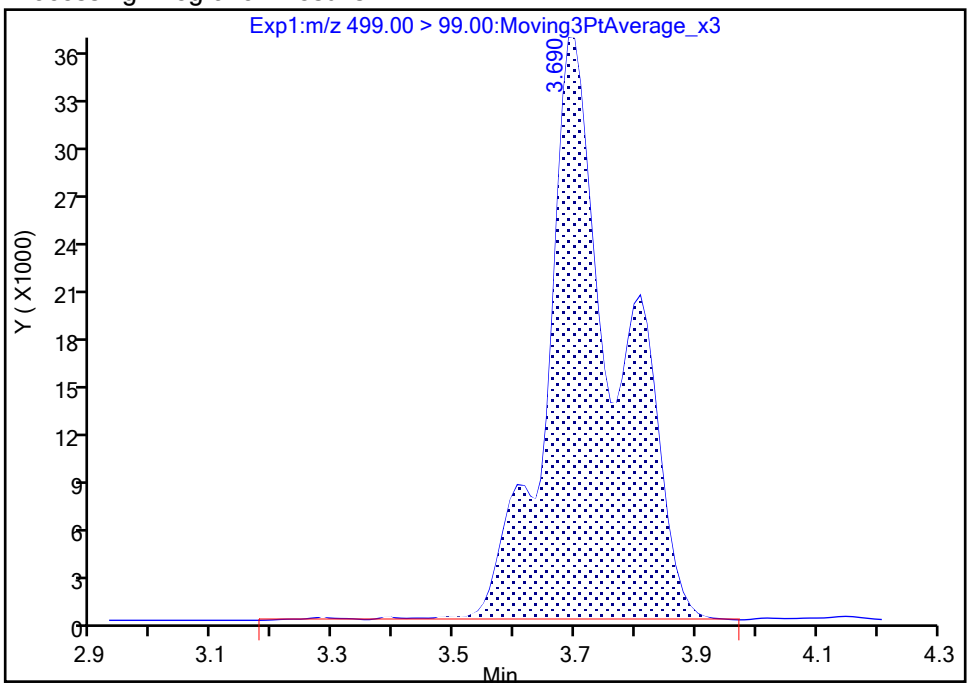
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

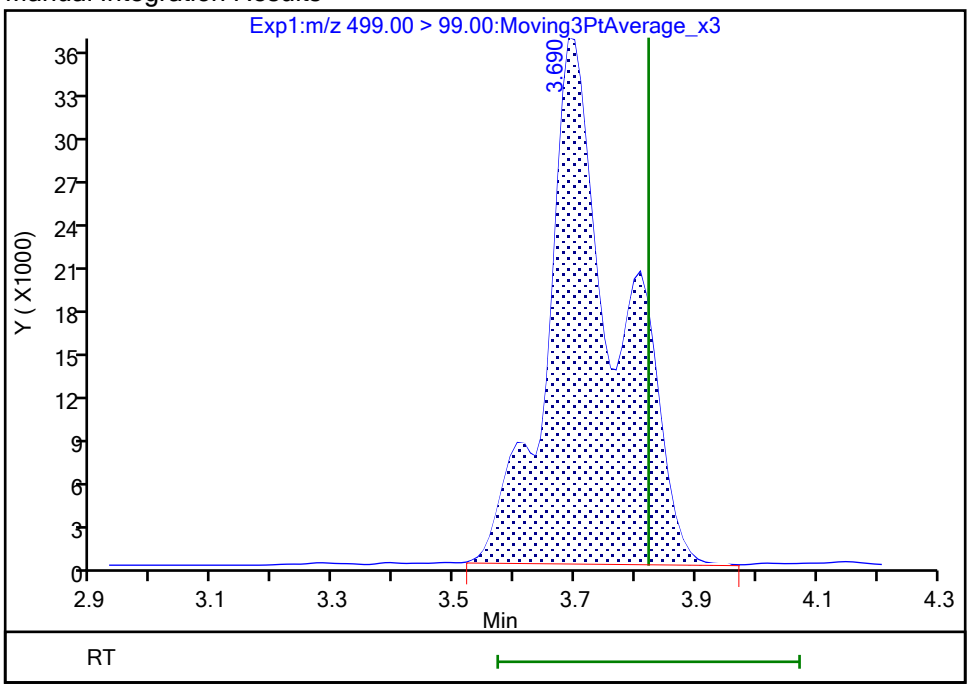
Processing Integration Results

RT: 3.69
Area: 306532
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.69
Area: 302137
Amount: 0.952438
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:07:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

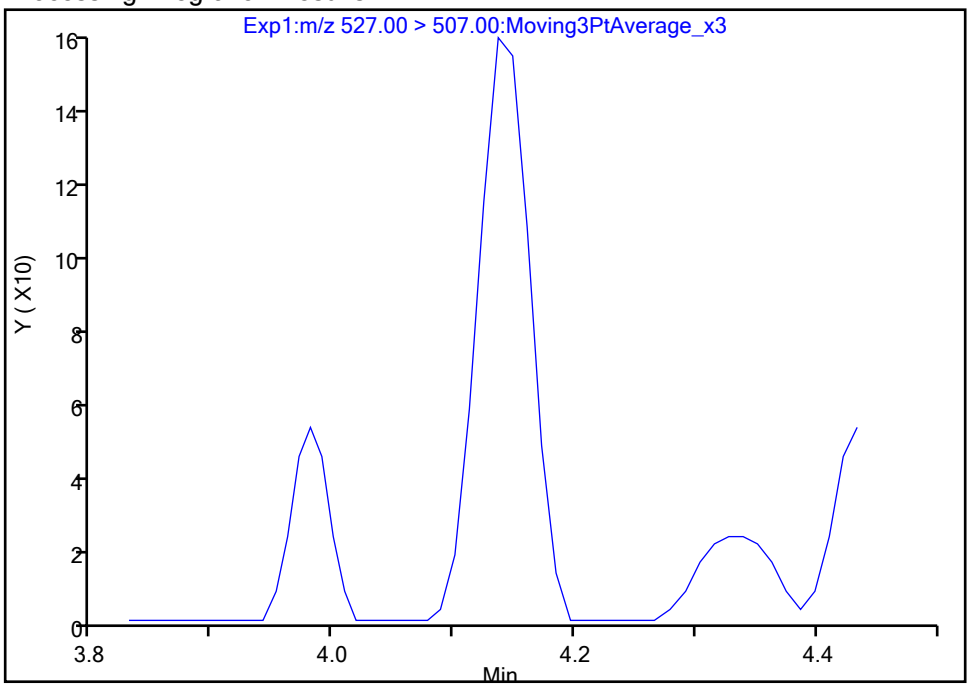
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

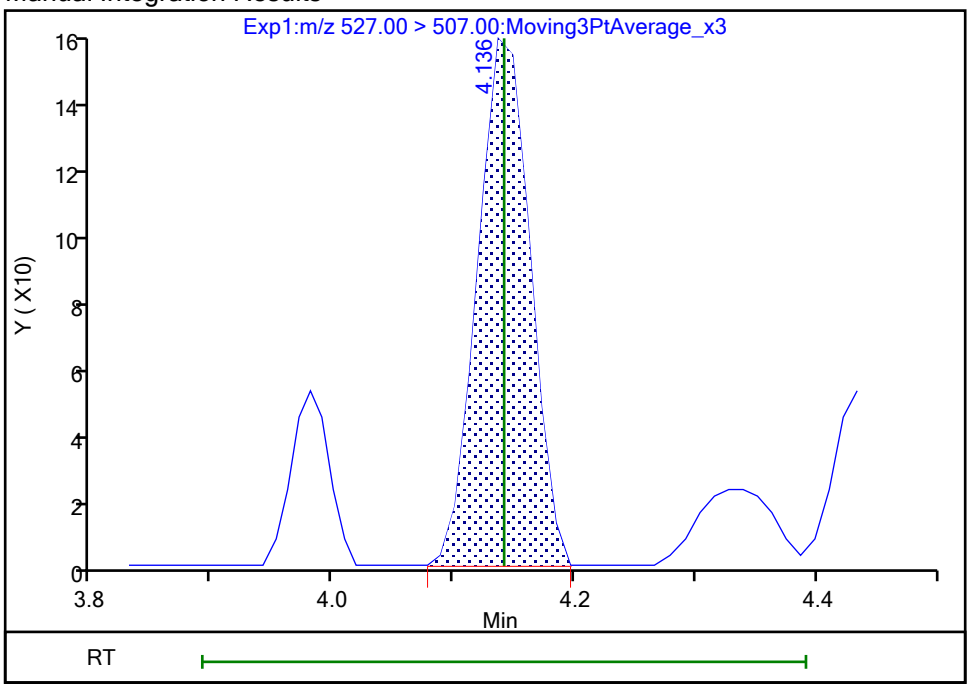
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 486
Amount: 0.000871
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

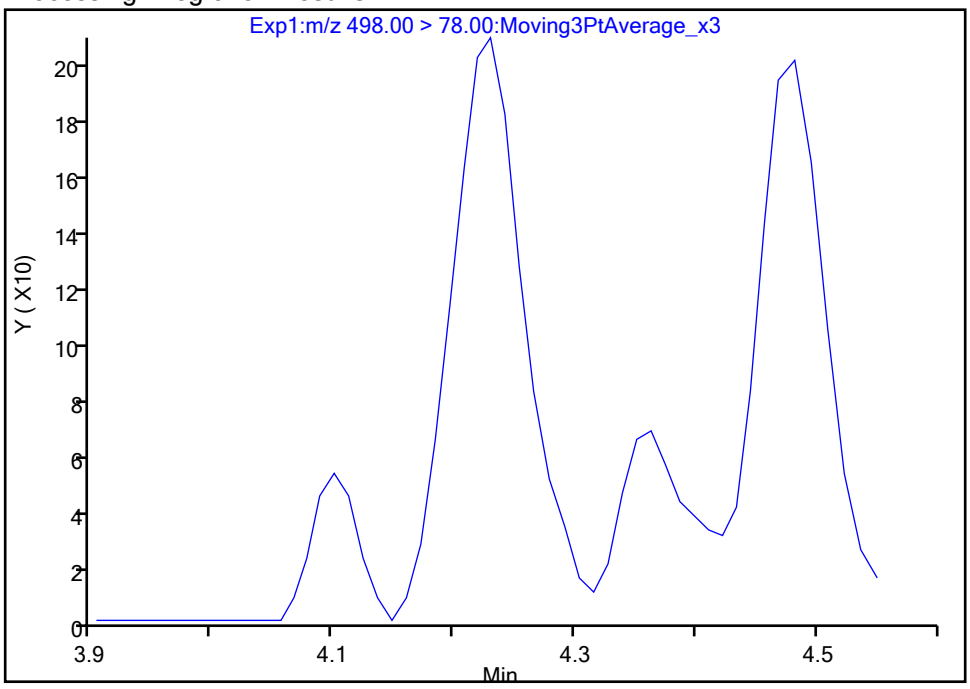
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

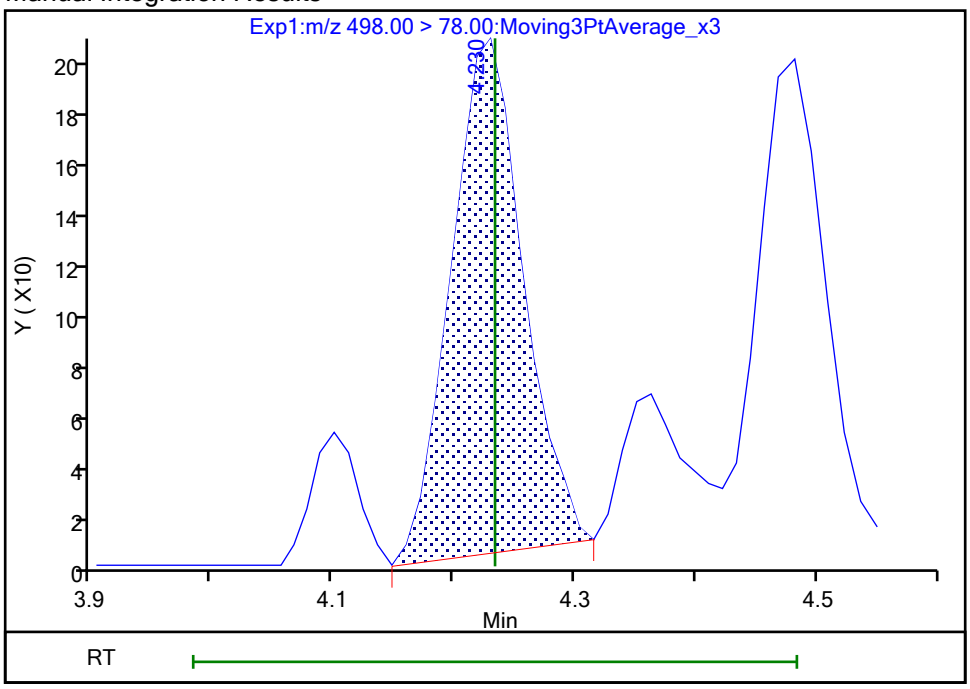
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 836
Amount: 0.000610
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

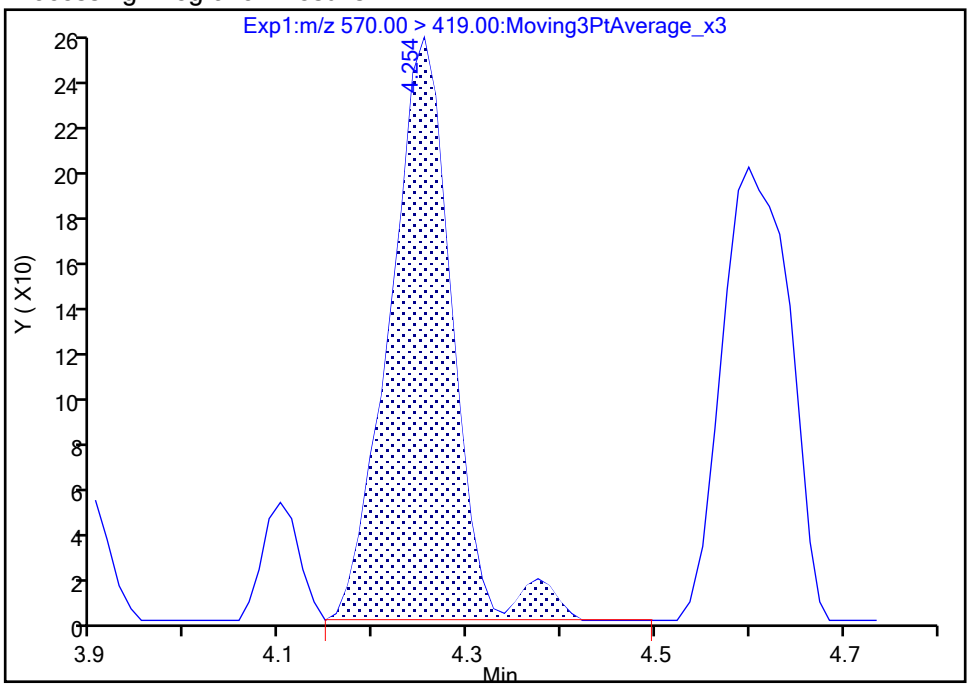
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

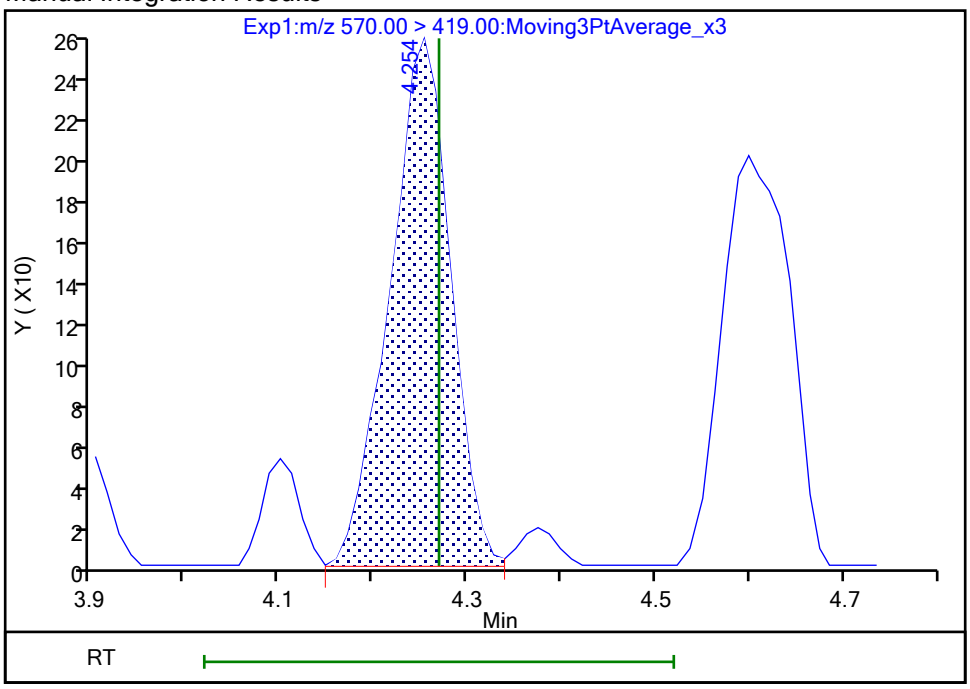
Processing Integration Results

RT: 4.25
Area: 1176
Amount: 0.003099
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 1127
Amount: 0.002970
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

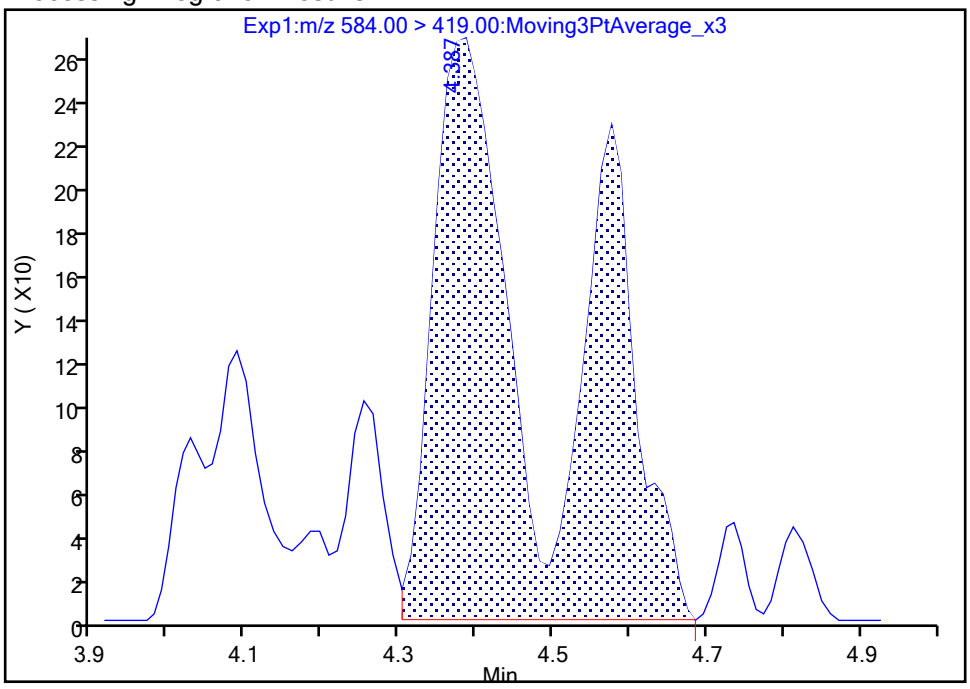
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

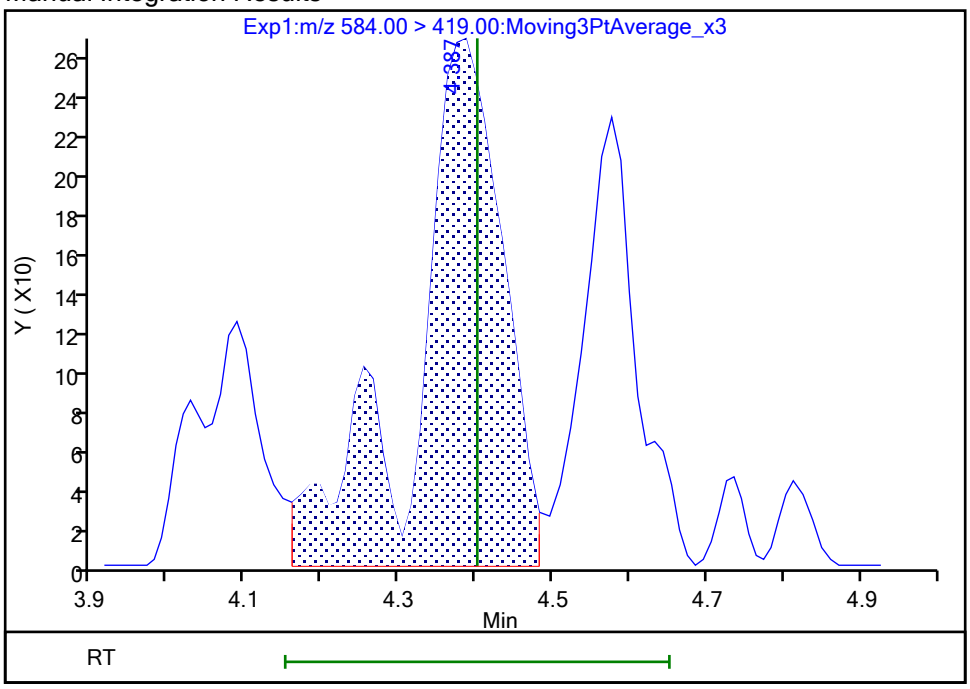
Processing Integration Results

RT: 4.39
Area: 2786
Amount: 0.006860
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2113
Amount: 0.005203
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:08:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

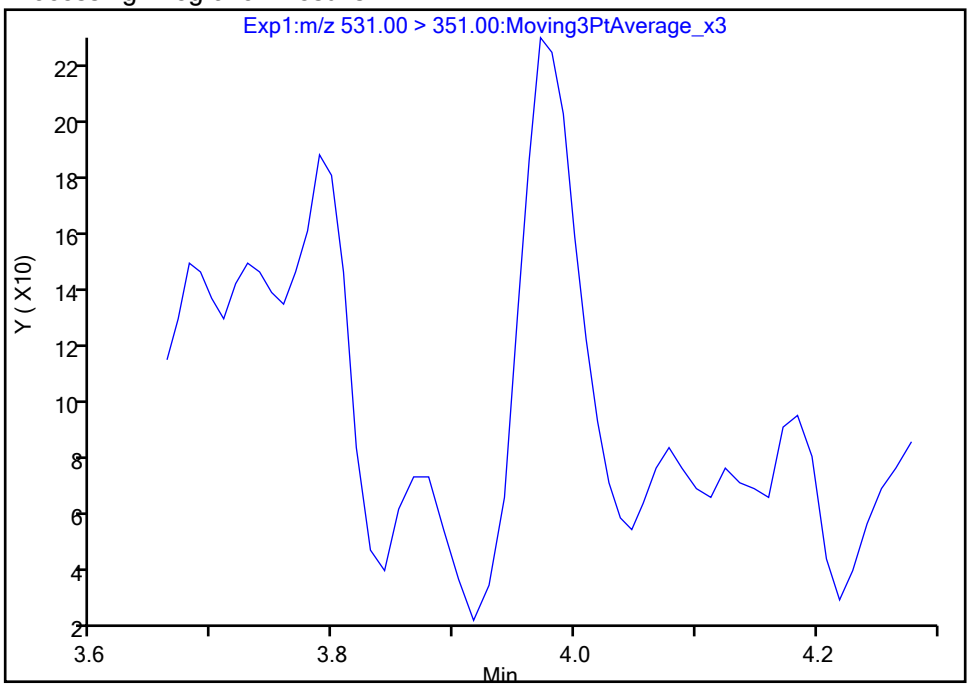
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

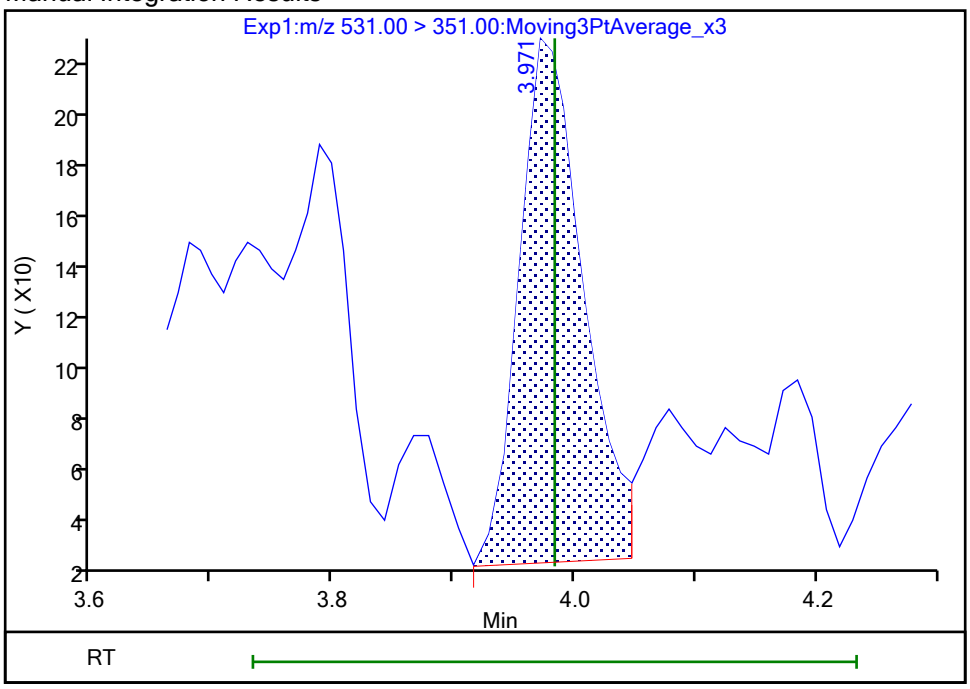
Not Detected
Expected RT: 3.98

Processing Integration Results



RT: 3.97
Area: 723
Amount: 0.000254
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 24-Oct-2023 14:07:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

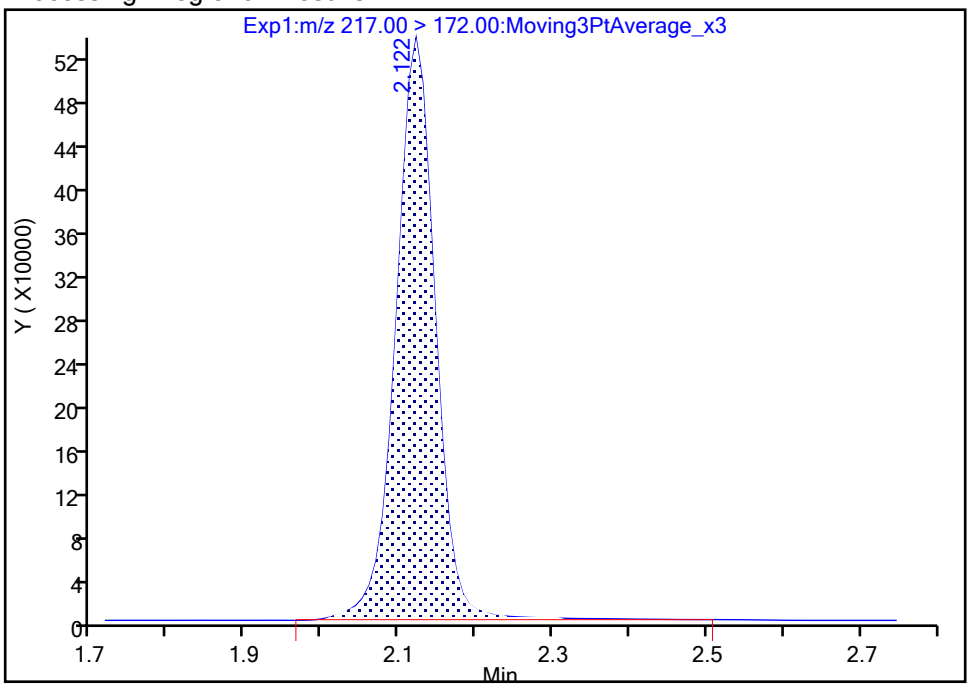
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

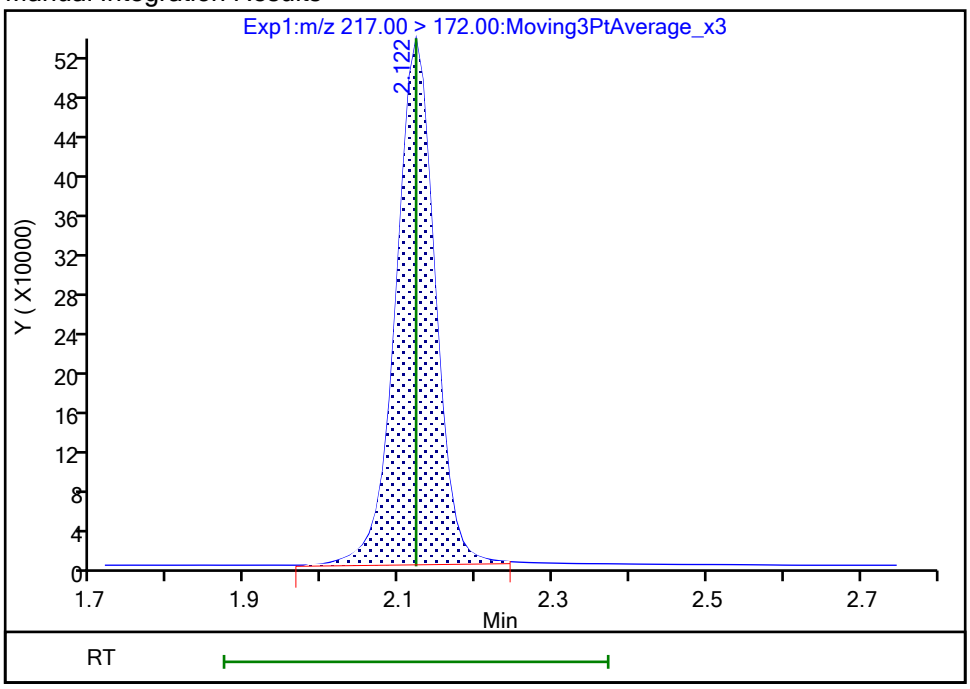
Processing Integration Results

RT: 2.12
Area: 1922727
Amount: 1.185524
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1906655
Amount: 1.175614
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

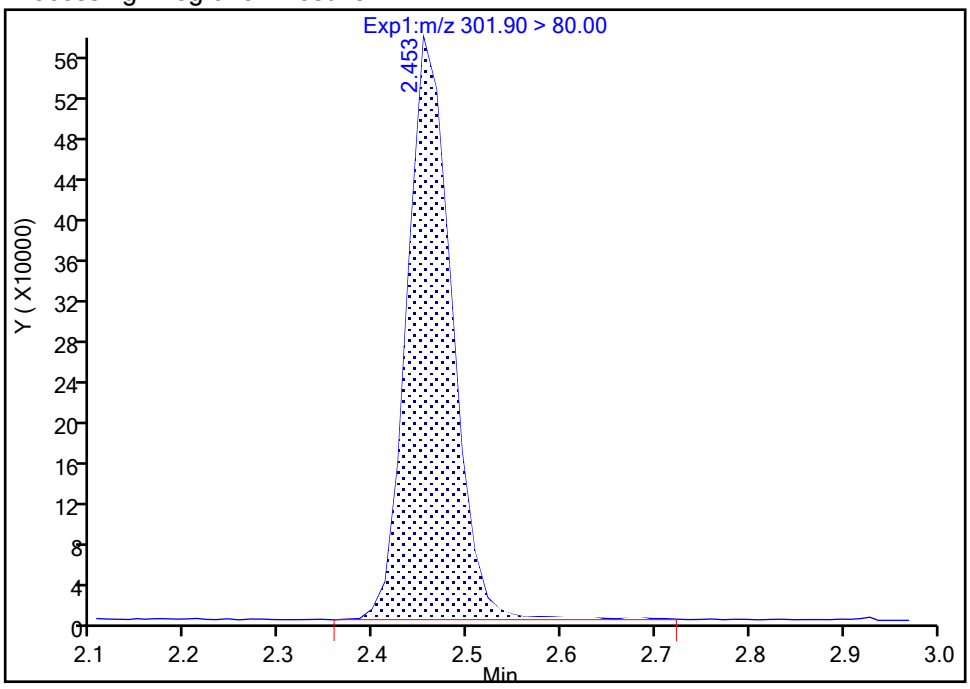
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

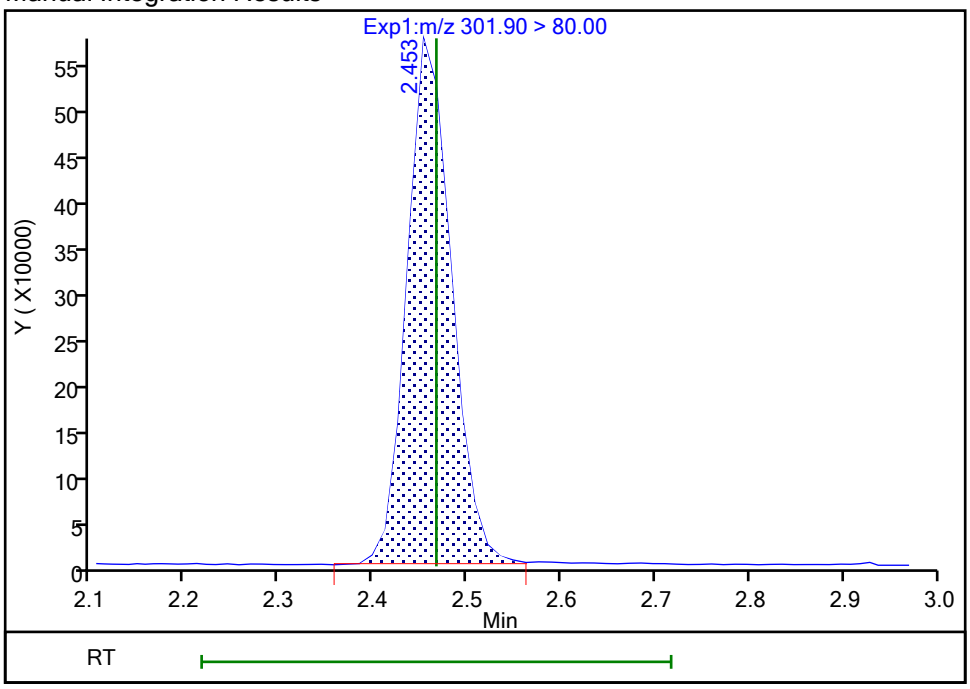
Processing Integration Results

RT: 2.45
Area: 1898002
Amount: 1.114451
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1885010
Amount: 1.106823
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

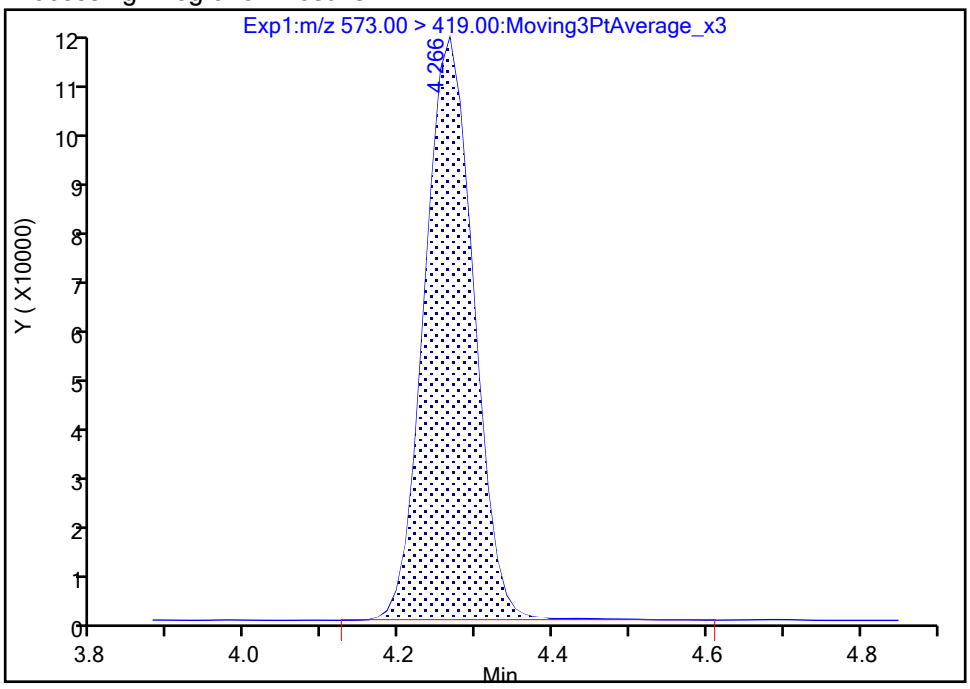
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

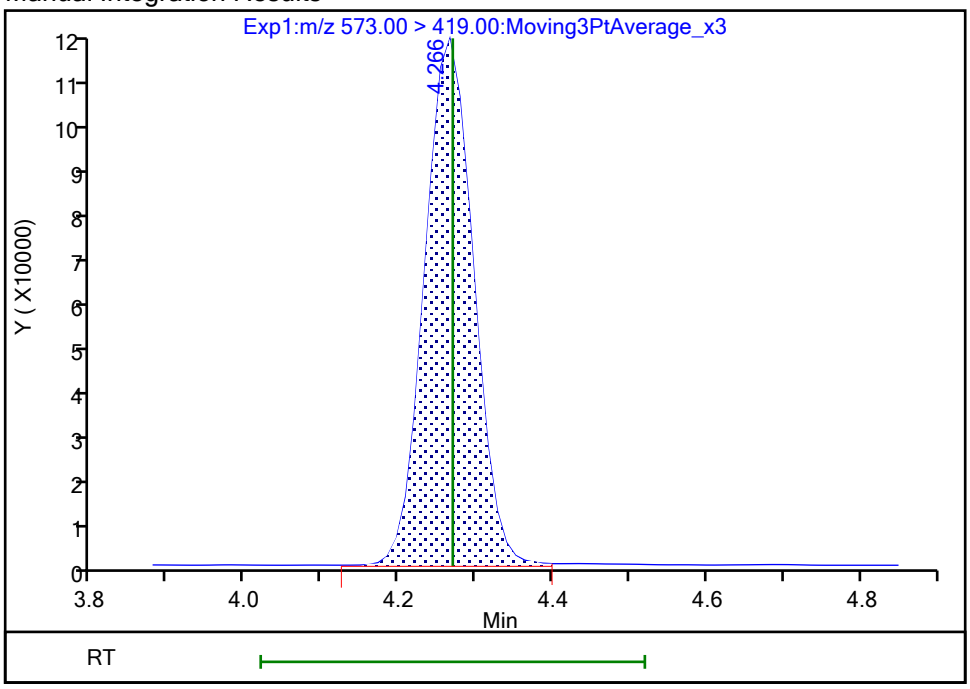
Processing Integration Results

RT: 4.27
Area: 525096
Amount: 1.211515
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 522804
Amount: 1.206227
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

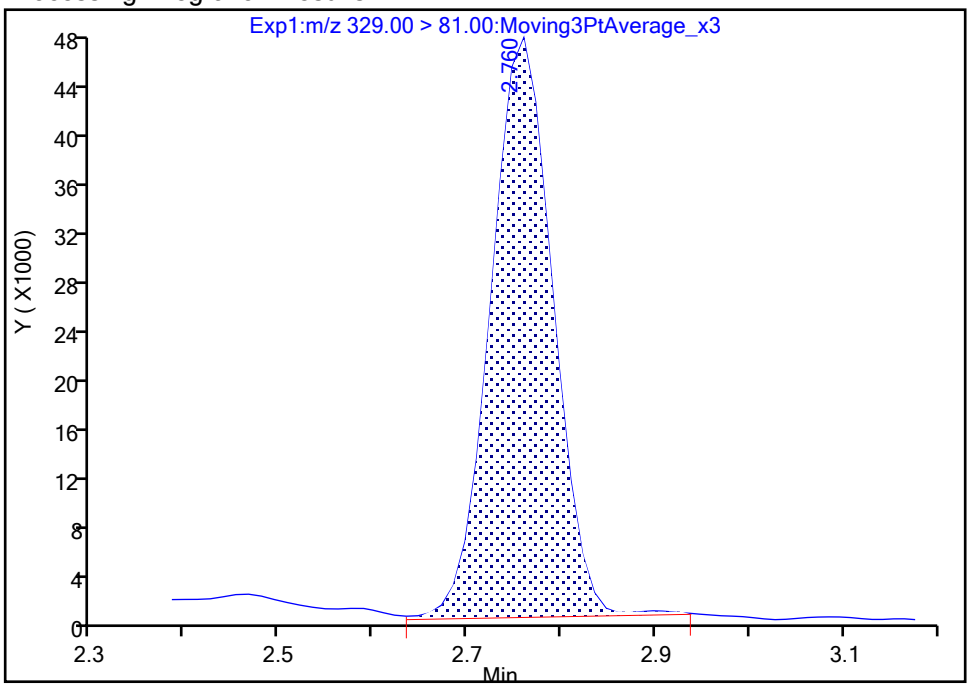
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

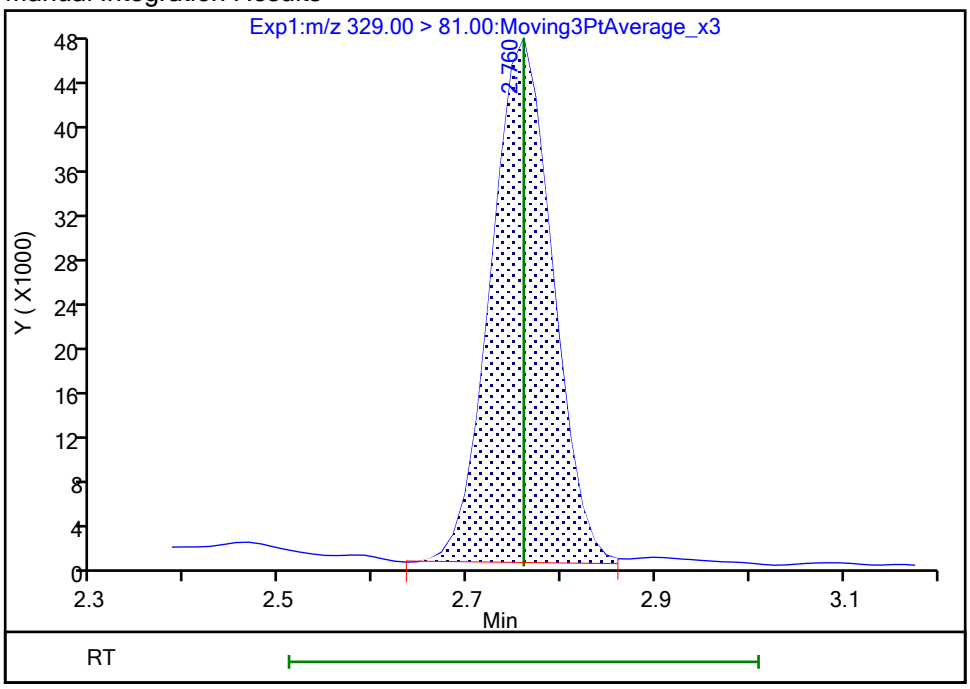
Processing Integration Results

RT: 2.76
Area: 214254
Amount: 1.087828
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 212804
Amount: 1.080466
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

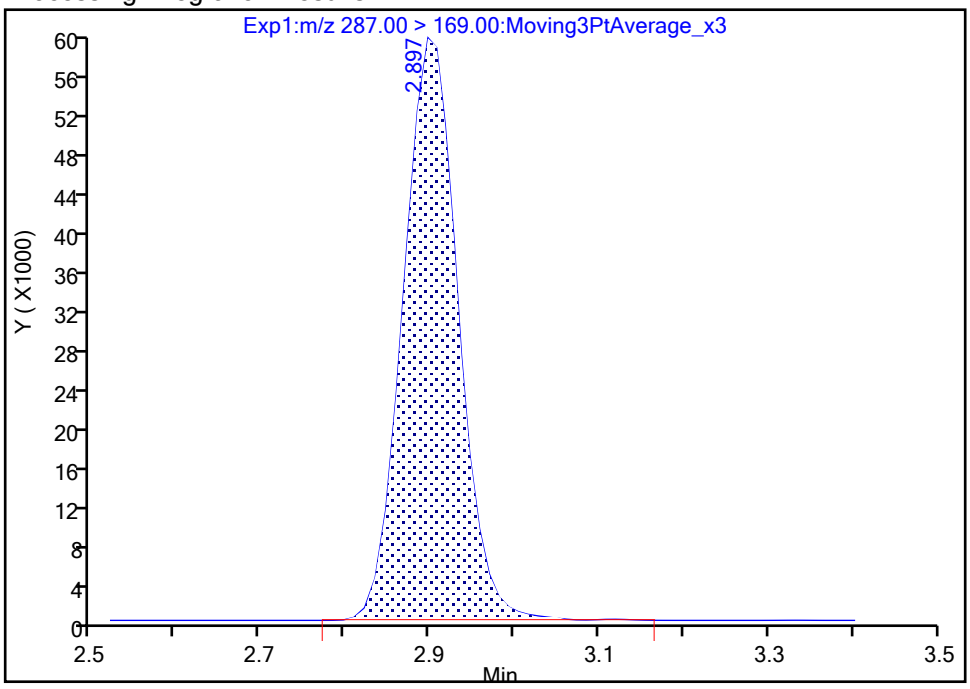
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A29.d				
Injection Date:	23-Oct-2023 19:03:24	Instrument ID:	LC812		
Lims ID:	460-290375-A-3-A	Lab Sample ID:	200-290375-3		
Client ID:	MW39-101323-0921-17				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

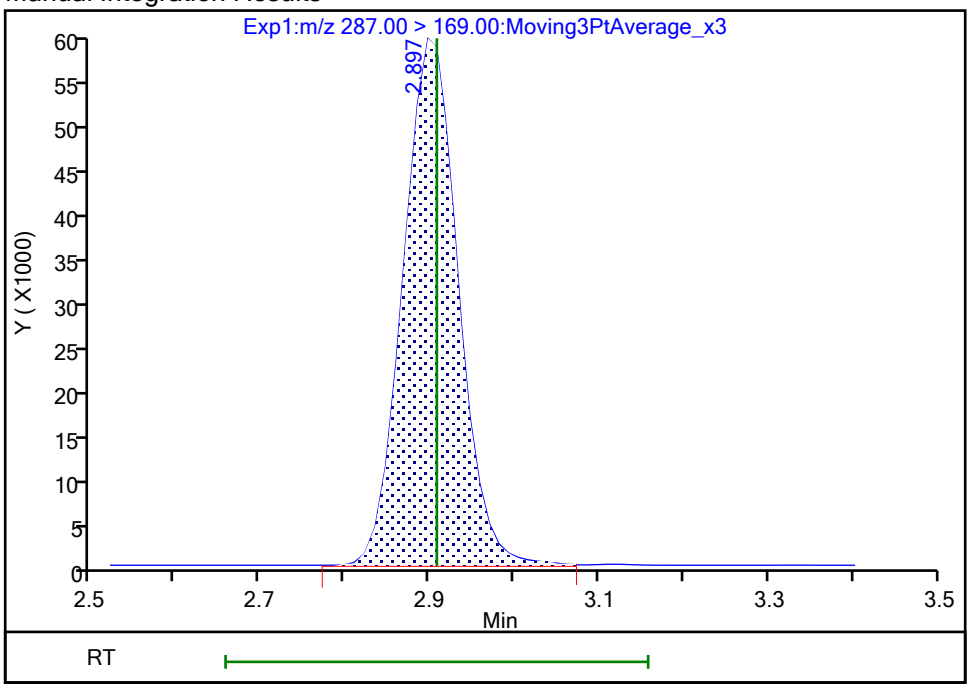
Processing Integration Results

RT: 2.90
Area: 269195
Amount: 1.086099
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 268874
Amount: 1.084804
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:05:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW91-101323-1021-26 | Lab Sample ID: 460-290375-4

Matrix: Water | Lab File ID: PA231023A31.d

Analysis Method: 537 (modified) | Date Collected: 10/13/2023 10:21

Extraction Method: 3535 | Date Extracted: 10/20/2023 19:55

Sample wt/vol: 314.3(mL) | Date Analyzed: 10/23/2023 19:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	17.9		3.98	0.95
2706-90-3	Perfluoropentanoic acid	28.8		1.59	0.54
307-24-4	Perfluorohexanoic acid	30.2		1.59	0.52
375-85-9	Perfluoroheptanoic acid	13.9		1.59	0.43
335-67-1	Perfluorooctanoic acid	45.1		1.59	0.60
375-95-1	Perfluorononanoic acid	5.90		1.59	0.39
335-76-2	Perfluorodecanoic acid	1.48	J	1.59	0.37
2058-94-8	Perfluoroundecanoic acid	1.59	U	1.59	0.44
307-55-1	Perfluorododecanoic acid	1.59	U	1.59	0.39
72629-94-8	Perfluorotridecanoic acid	1.59	U	1.59	0.38
376-06-7	Perfluorotetradecanoic acid	1.59	U	1.59	0.51
375-73-5	Perfluorobutanesulfonic acid	3.50		1.59	0.49
2706-91-4	Perfluoropentanesulfonic acid	2.98		1.59	0.40
355-46-4	Perfluorohexanesulfonic acid	16.0		1.59	0.44
375-92-8	Perfluoroheptanesulfonic acid	4.19		1.59	0.33
1763-23-1	Perfluorooctanesulfonic acid	325		1.59	0.68
68259-12-1	Perfluorononanesulfonic acid	1.59	U	1.59	0.32
335-77-3	Perfluorodecanesulfonic acid	1.59	U	1.59	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	3.98	U	3.98	1.03
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61
754-91-6	Perfluorooctanesulfonamide	1.59	U	1.59	0.73
2355-31-9	NMeFOSAA	3.98	U	3.98	1.51
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	3.98	U	3.98	1.27
13252-13-6	HFPODA	1.57	J	3.18	0.87
919005-14-4	DONA	1.59	U	1.59	0.33
756426-58-1	9Cl-PF3ONS	1.59	U	1.59	0.25
763051-92-9	11Cl-PF3OUdS	1.59	U	1.59	0.69

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW91-101323-1021-26 Lab Sample ID: 460-290375-4

Matrix: Water Lab File ID: PA231023A31.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:21

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 314.3(mL) Date Analyzed: 10/23/2023 19:19

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	83		50-150
STL01893	13C5 PFPeA	93		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	94		50-150
STL02337	13C3 PFBS	96		50-150
STL01056	13C8 FOSA	94		50-150
STL02118	d3-NMeFOSAA	96		50-150
STL02117	d5-NEtFOSAA	98		50-150
STL02395	M2-4:2 FTS	97		50-150
STL02279	M2-6:2 FTS	102		50-150
STL02280	M2-8:2 FTS	100		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	100		50-150
STL00991	13C4 PFOS	104		50-150
STL00998	13C2 PFDoA	103		50-150
STL00995	13C5 PFNA	97		50-150
STL00996	13C2 PFDA	107		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	99		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d
Lims ID: 460-290375-A-4-A
Client ID: MW91-101323-1021-26
Sample Type: Client
Inject. Date: 23-Oct-2023 19:19:43 ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-4-A
Misc. Info.: 200-0057509-031 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:40 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:19:21
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	1561290	1.04		83.1	1665	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	680268	0.5614			37.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1359143	1.17		93.2	403	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1061227	0.9044			4.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1768579	1.12		96.4	24692	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	186956	0.1100	Target=2.06		3.9	M
298.90 > 99.00	2.467	2.467	0.0	1.000	90538		2.06(1.03-3.09)		5.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	205808	1.13		96.6	9.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1483223	1.25		100	3180	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1240431	0.9500	Target=14.12		14.1	M
313.00 > 119.00	2.797	2.797	0.0	1.000	93127		13.32(7.06-21.17)		29.9	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.887	143749	0.0936	Target=2.72		7.8	M
349.00 > 99.00	2.810	2.810	0.0	0.887	64414		2.23(1.36-4.09)		9.3	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	10266	0.0495			102	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	259041	1.13		90.2	1601	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.899	1390540	1.23		104	6685	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.168	-0.002	1.000	653594	0.5021	Target=3.32		72.3	M
399.00 > 99.00	3.166	3.168	-0.002	1.000	239181		2.73(1.66-4.98)		51.9	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	1.000	661472	0.4356	Target=4.17		14.9	M
363.00 > 169.00	3.166	3.168	-0.002	1.000	164623		4.02(2.09-6.26)		107	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.168	-0.002	0.899	1693299	1.30		104	6611	
77 DONA										RM
377.00 > 251.00	3.201	3.203	-0.002	0.835	2597	0.000605	Target=3.33		0.7	RM
377.00 > 85.00	3.201	3.203	-0.002	0.835	1808		1.44(1.66-4.99)		0.8	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.505	-0.002	0.914	142149	0.1318	Target=4.83		15.6	M
449.00 > 99.00	3.503	3.505	-0.002	0.914	43744		3.25(2.41-7.24)		12.7	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.505	0.007	0.997	283730	1.21		102	67.6	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.514	-0.011	0.997	6357	0.009734			10.2	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.514	0.007	1.000	2299485	1.42	Target=2.88		48.4	M
413.00 > 169.00	3.521	3.514	0.007	1.000	831104		2.77(1.44-4.32)		947	
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.523	-0.002	1.000	1902682	1.29		103	4835	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.523	-0.002		1894260	1.25			5533	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.832	3.822	0.010	1.000	8889089	10.2	Target=4.24		1994	M
499.00 > 99.00	3.820	3.822	-0.002	0.997	2587984		3.43(2.12-6.37)		1312	M
D 18 13C4 PFOS										
503.00 > 80.00	3.832	3.822	0.010	1.088	891944	1.24		104	448	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.844	3.845	-0.001	1.000	284023	0.1854	Target=8.34		15.8	M
463.00 > 169.00	3.844	3.845	-0.001	1.000	32572		8.72(4.17-12.51)		64.4	M
D 19 13C5 PFNA										M
468.00 > 423.00	3.844	3.845	-0.001	1.092	1953429	1.22		97.4	2202	M
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.983	-0.002	1.039	2883	0.001082			5.3	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.129	0.009	1.000	83306	0.0466	Target=11.44		9.9	M
513.00 > 169.00	4.138	4.129	0.009	1.000	8070		10.32(5.72-17.16)		28.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.175	2238013	1.33		107	12536	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.138	4.141	-0.003	1.175	317106	1.20		100	303	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.141	0.009	1.003	1407	0.002414			25.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.244	4.234	0.010	1.205	1677707	1.17		93.6	3666	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.244	4.234	0.010	1.000	5200	0.004062			7.2	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.270	-0.002	1.212	484306	1.21		96.5	899	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.270	-0.002	1.000	2272	0.006462			6.2	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.352	4.366	-0.014	1.136	2599	0.005099	Target=2.37		6.4	M
599.00 > 99.00	4.364	4.366	-0.002	1.139	999		2.60(1.19-3.56)		8.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	1971058	1.24		99.4	10050	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.390	-0.002	1.000	19638	0.0121	Target=12.20		3.6	M
563.00 > 169.00	4.388	4.390	-0.002	1.000	1899		10.34(6.10-18.31)		10.7	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.249	474755	1.23		98.2	1119	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.411	4.401	0.010	1.003	4452	0.0117			17.2	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.473	-0.004	1.166	3903	0.000955			7.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2083498	1.29		103	6317	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.613	-0.002	1.000	3929	0.002316	Target=8.47		0.4	M
613.00 > 169.00	4.611	4.613	-0.002	1.000	721		5.45(4.23-12.70)		7.2	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.826	4.806	0.020	1.047	3051	0.001711	Target=6.41		0.2	M
663.00 > 169.00	4.813	4.806	0.007	1.044	404		7.55(3.21-9.62)		5.5	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.414	1877039	1.17		93.5	5361	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

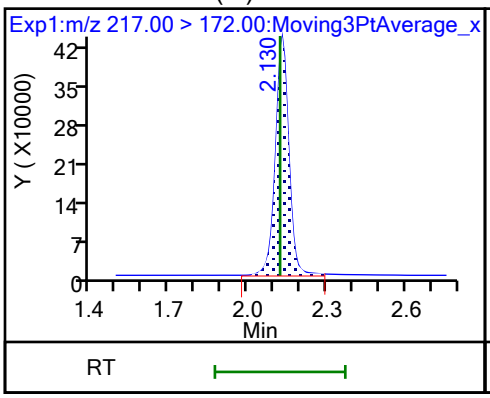
M - Manually Integrated

Report Date: 25-Oct-2023 15:13:46 Chrom Revision: 2.3 18-Oct-2023 21:16:54

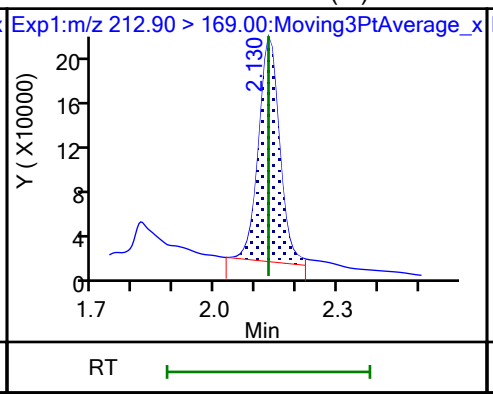
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d
Injection Date: 23-Oct-2023 19:19:43 Instrument ID: LC812
Lims ID: 460-290375-A-4-A Lab Sample ID: 200-290375-4
Client ID: MW91-101323-1021-26
Operator ID: LC812user ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

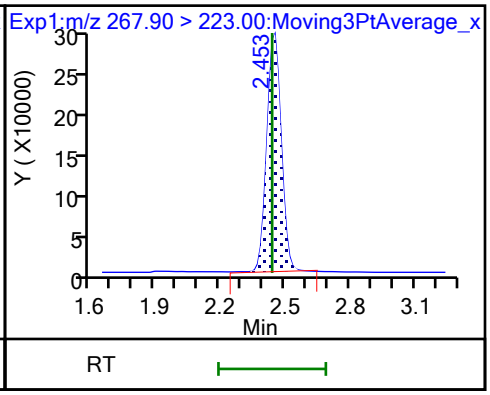
D 1 13C4 PFBA (M)



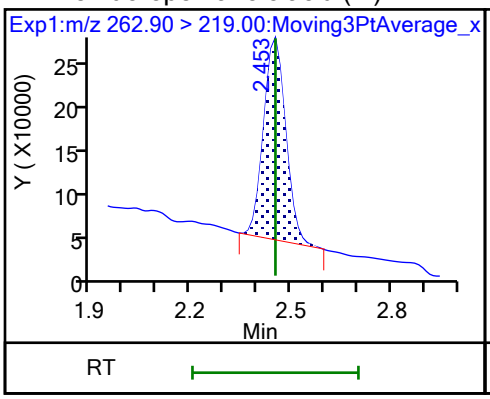
2 Perfluorobutanoic acid (M)



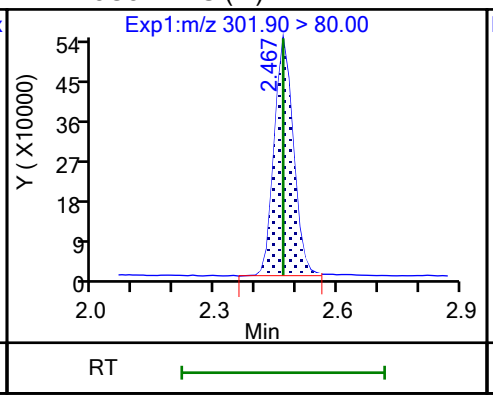
D 3 13C5 PFPeA



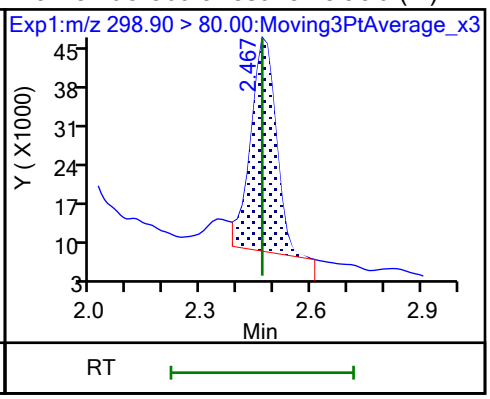
4 Perfluoropentanoic acid (M)



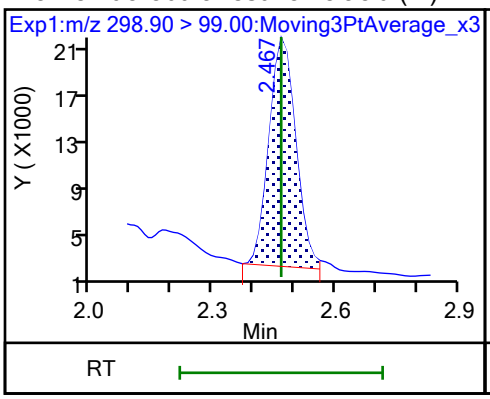
D 47 13C3 PFBS (M)



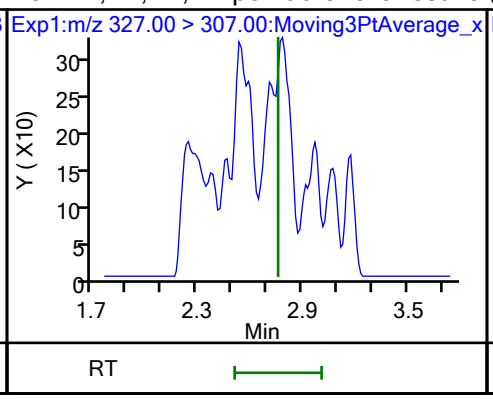
5 Perfluorobutanesulfonic acid (M)



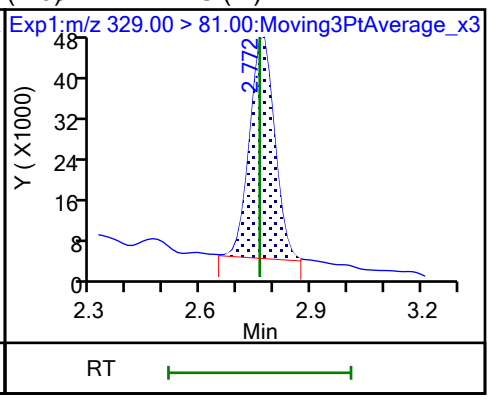
5 Perfluorobutanesulfonic acid (M)



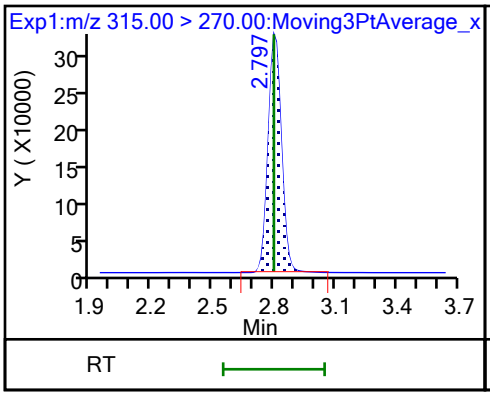
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



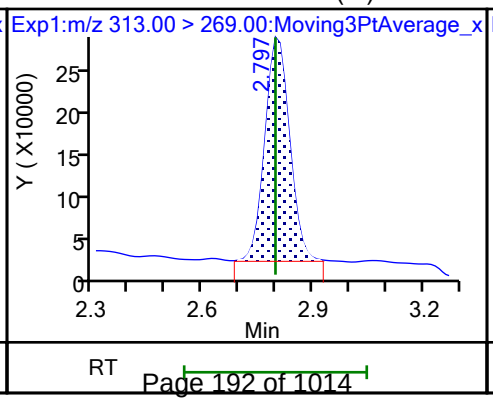
D 80 M2-4:2 FTS (M)



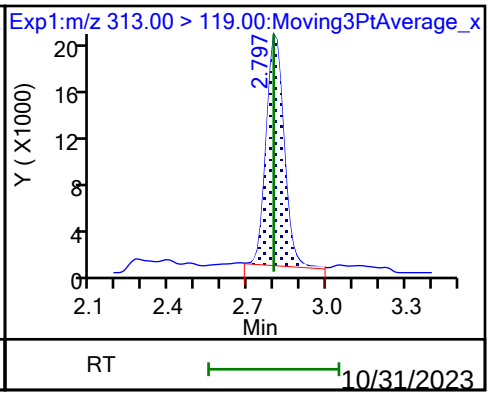
D 7 13C2 PFHxA



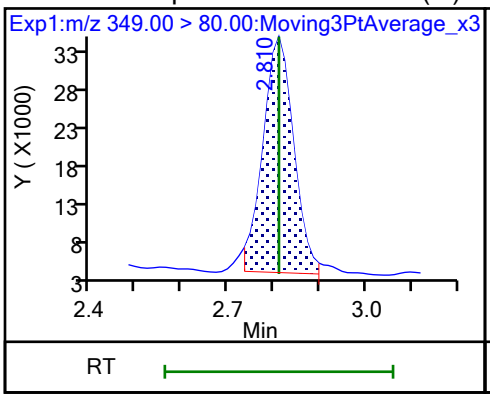
6 Perfluorohexanoic acid (M)



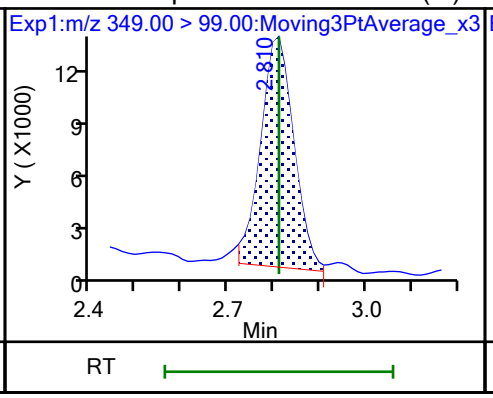
6 Perfluorohexanoic acid



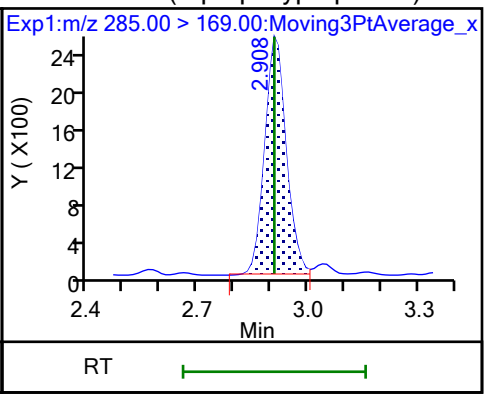
70 Perfluoropentanesulfonic acid (M)



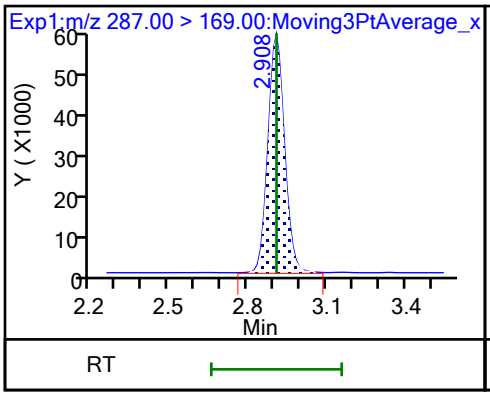
70 Perfluoropentanesulfonic acid (M)



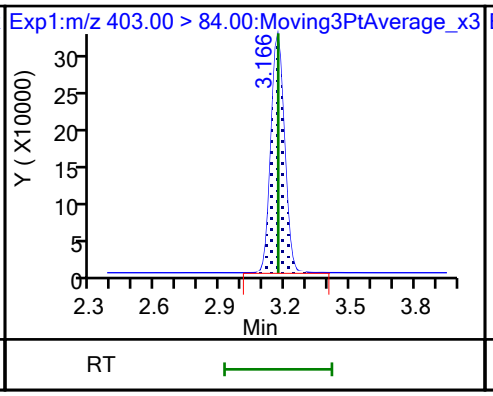
67 Perfluoro(2-propoxypropanoic) ac



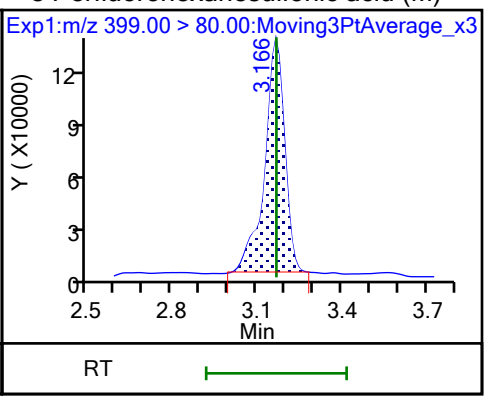
D 64 13C3 HFPO-DA



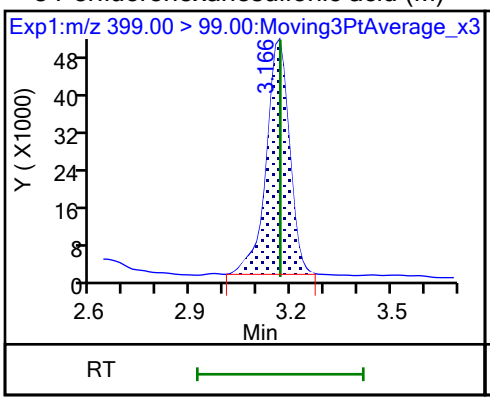
D 11 18O2 PFHxS



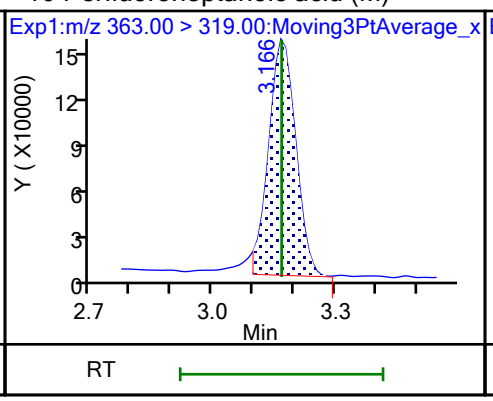
8 Perfluorohexanesulfonic acid (M)



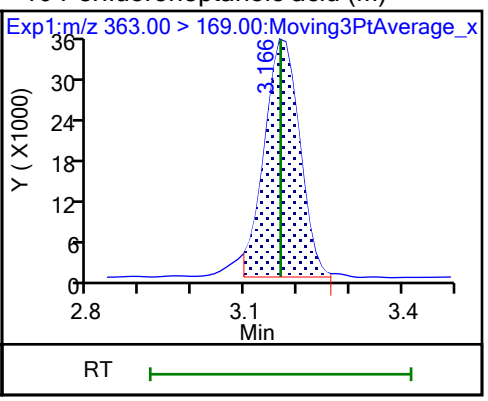
8 Perfluorohexanesulfonic acid (M)



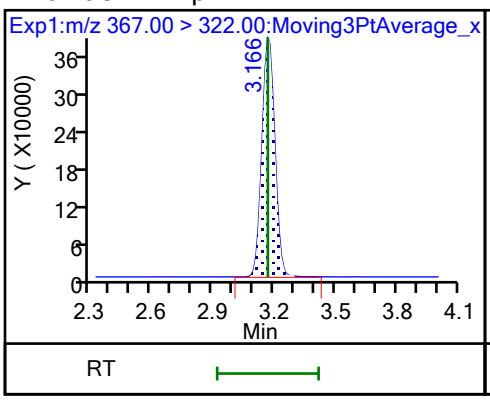
10 Perfluoroheptanoic acid (M)



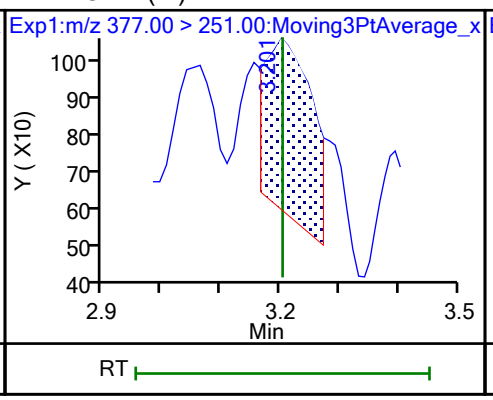
10 Perfluoroheptanoic acid (M)



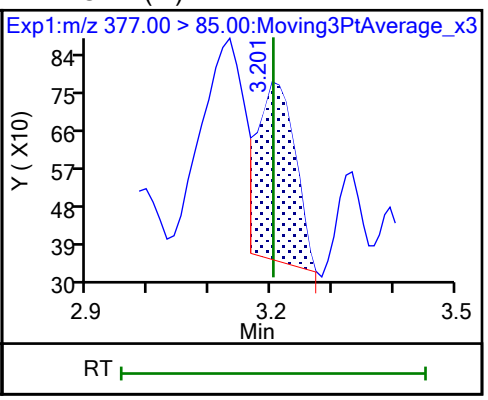
D 9 13C4 PFHpA



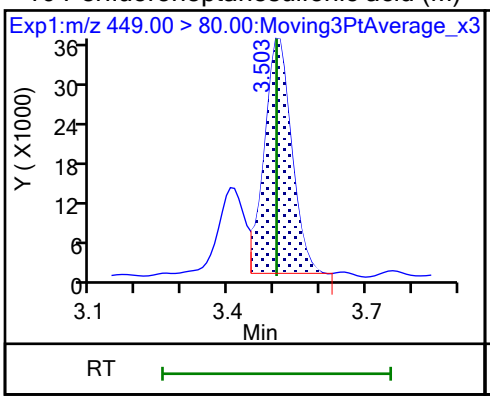
77 DONA (M)



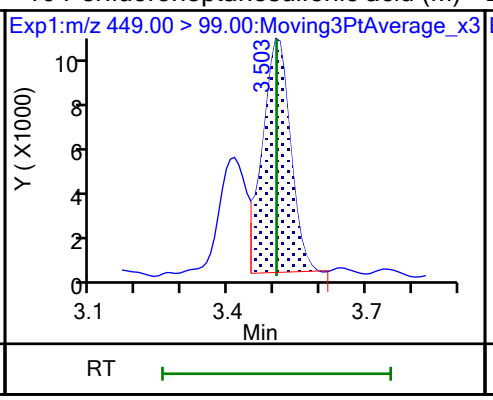
77 DONA (M)



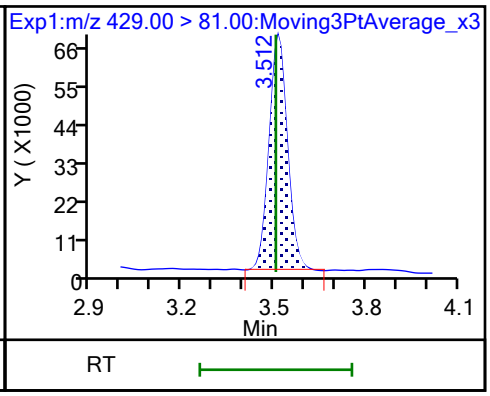
16 Perfluoroheptanesulfonic acid (M)



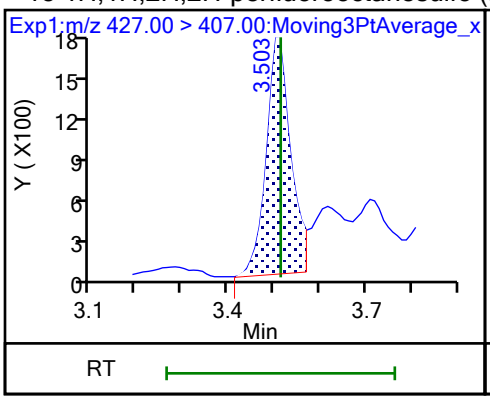
16 Perfluoroheptanesulfonic acid (M)



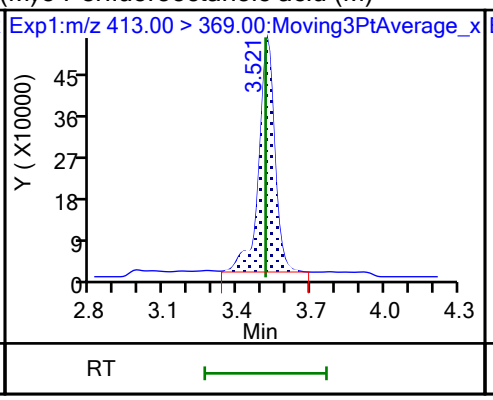
D 12 M2-6:2 FTS



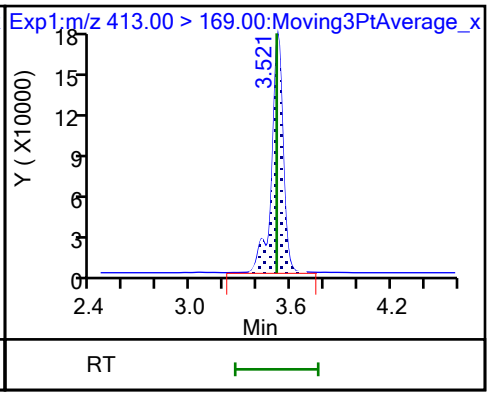
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



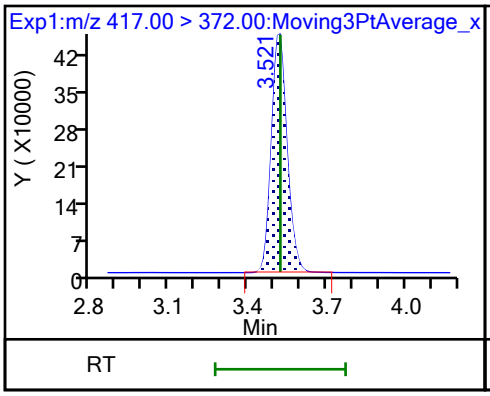
15 Perfluorooctanoic acid (M)



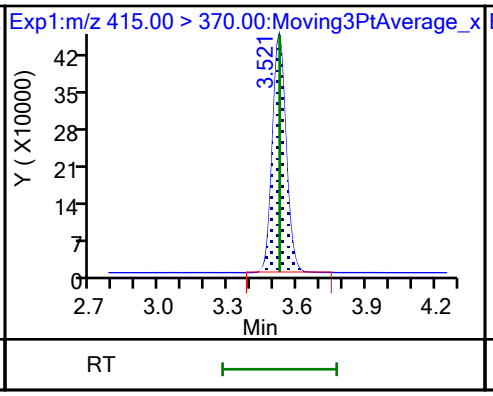
15 Perfluorooctanoic acid



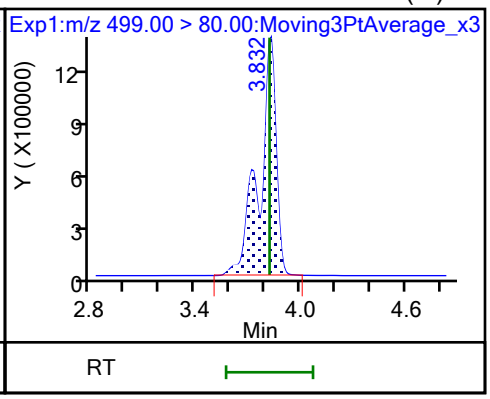
D 14 13C4 PFOA



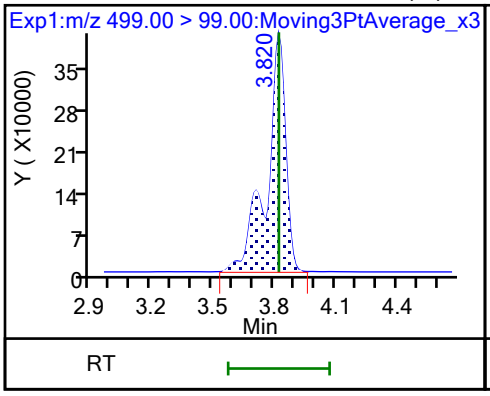
* 62 13C2 PFOA



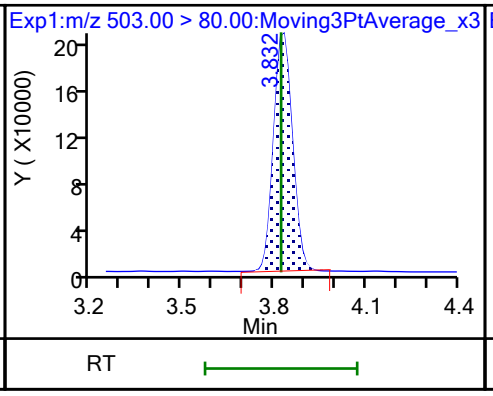
17 Perfluorooctanesulfonic acid (M)



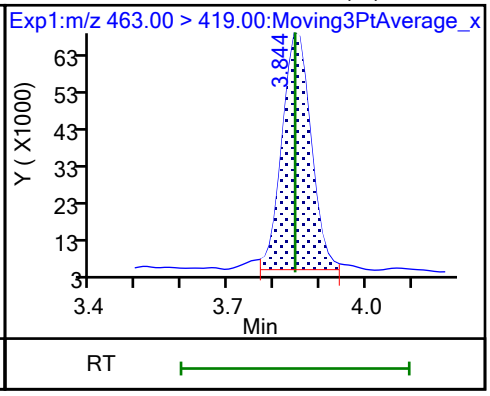
17 Perfluorooctanesulfonic acid (M)



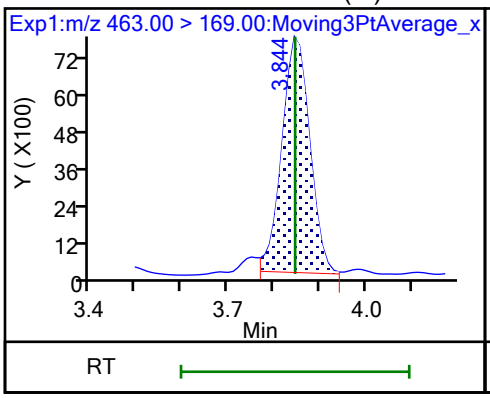
D 18 13C4 PFOS



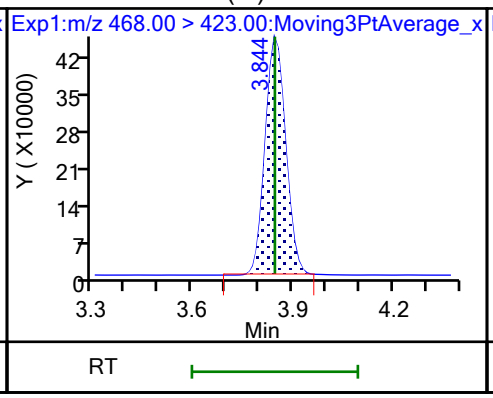
20 Perfluorononanoic acid (M)



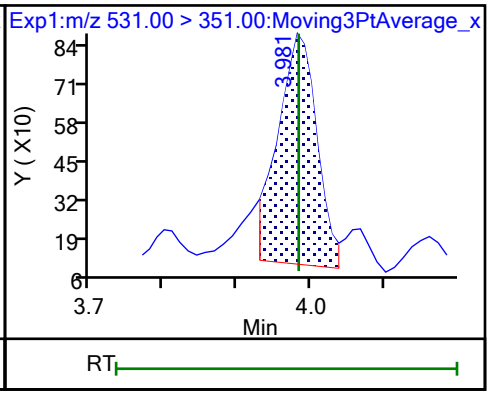
20 Perfluorononanoic acid (M)



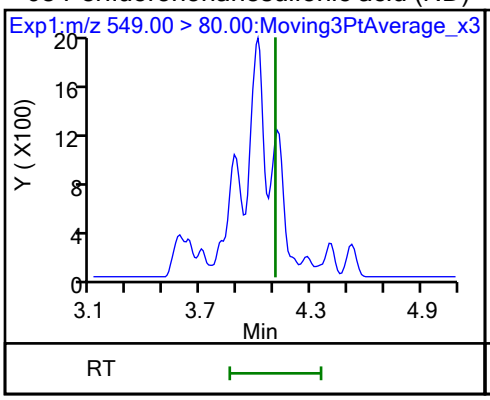
D 19 13C5 PFNA (M)



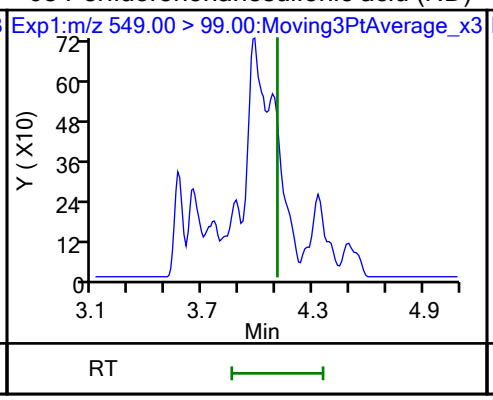
69 9-Chlorohexadecafluoro-3-oxanona (M)



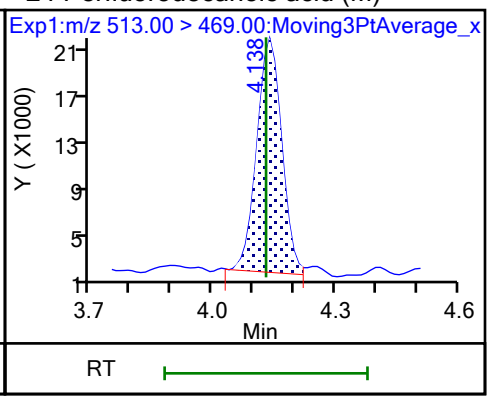
68 Perfluorononanesulfonic acid (ND)



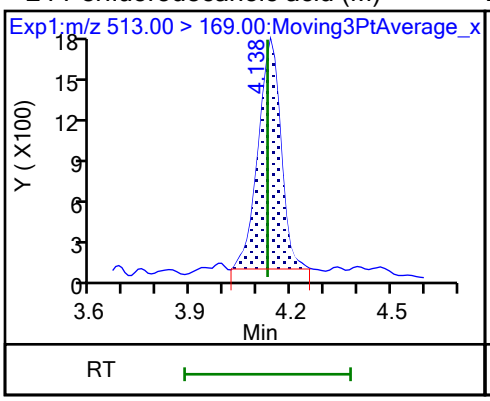
68 Perfluorononanesulfonic acid (ND)



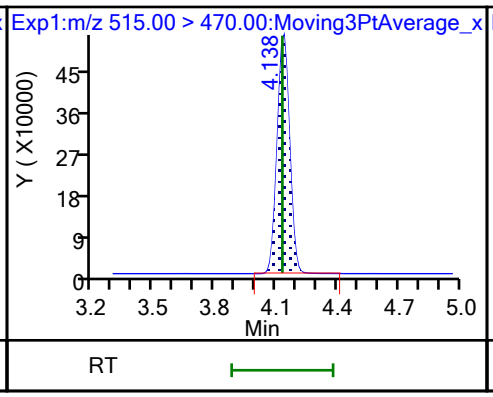
24 Perfluorodecanoic acid (M)



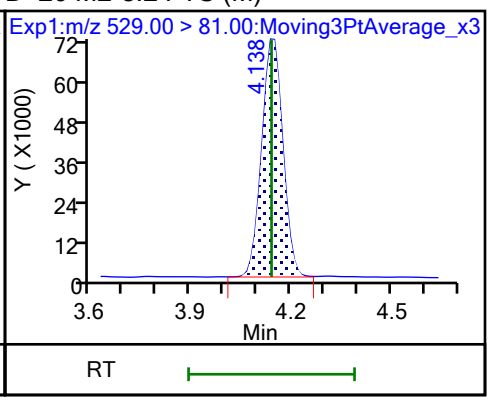
24 Perfluorodecanoic acid (M)



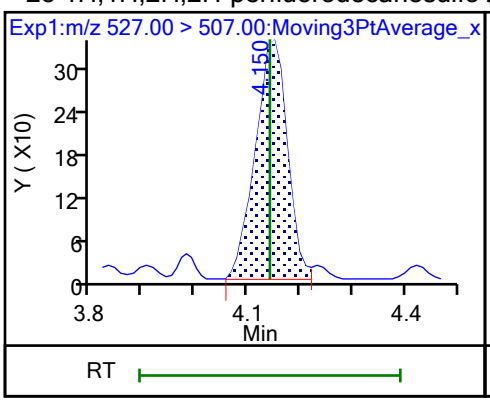
D 23 13C2 PFDA



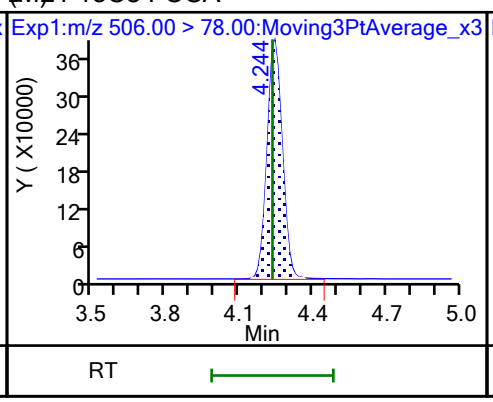
D 26 M2-8:2 FTS (M)



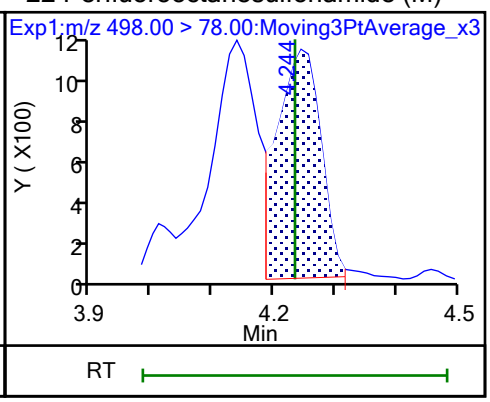
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



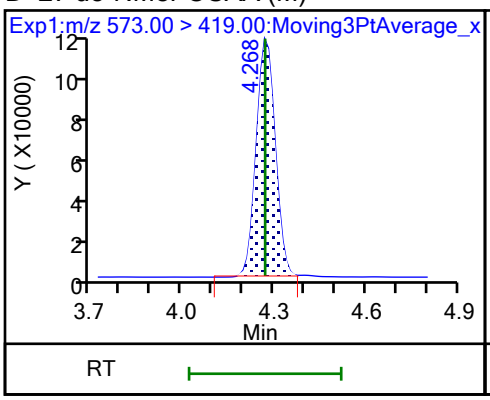
D 21 13C8 FOSA



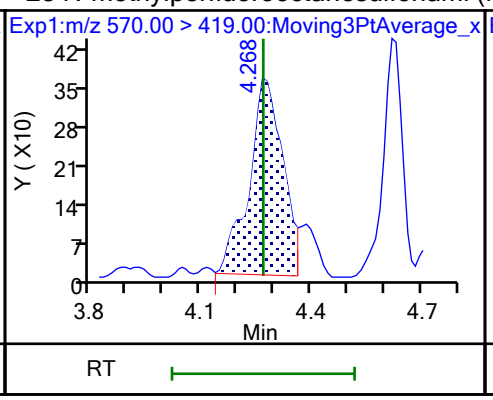
22 Perfluorooctanesulfonamide (M)



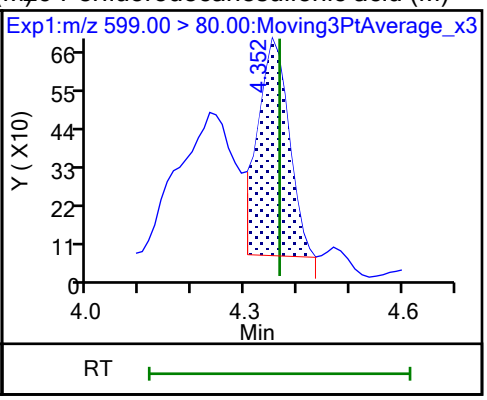
D 27 d3-NMeFOSAA (M)



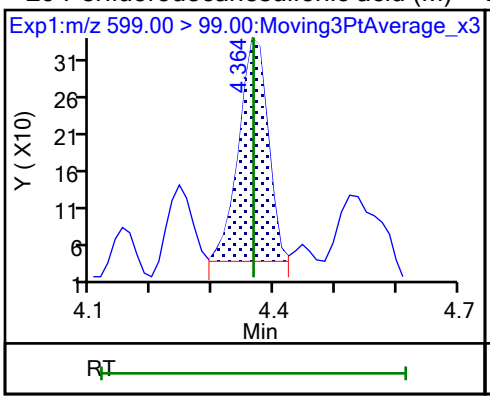
28 N-methylperfluorooctanesulfonami (M)



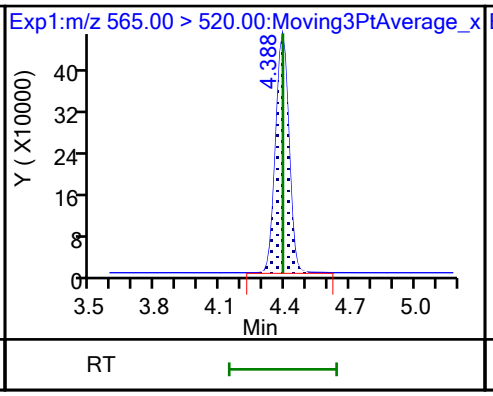
29 Perfluorodecanesulfonic acid (M)



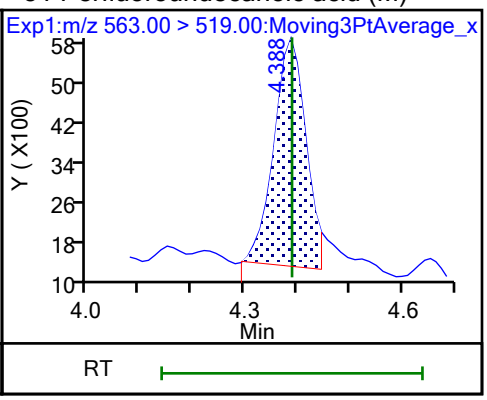
29 Perfluorodecanesulfonic acid (M)



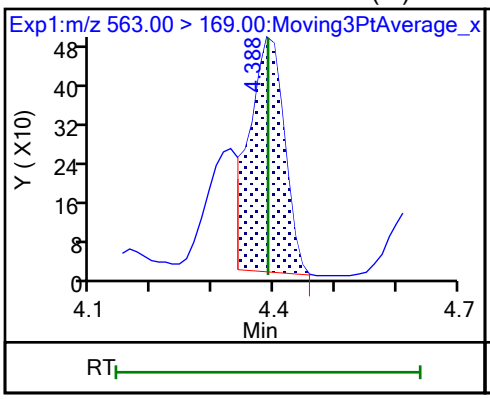
D 30 13C2 PFUnA



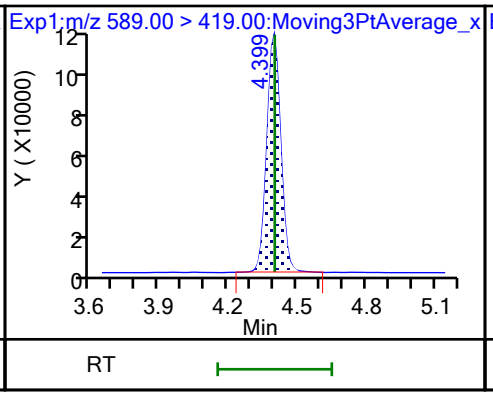
31 Perfluoroundecanoic acid (M)



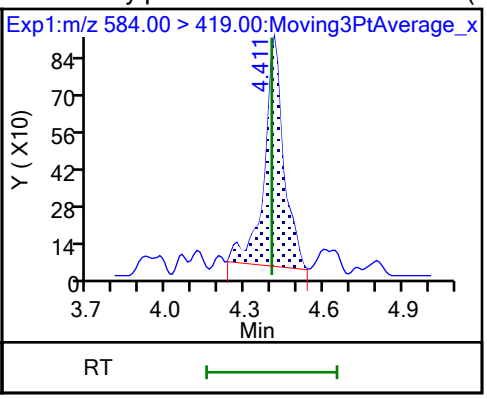
31 Perfluoroundecanoic acid (M)



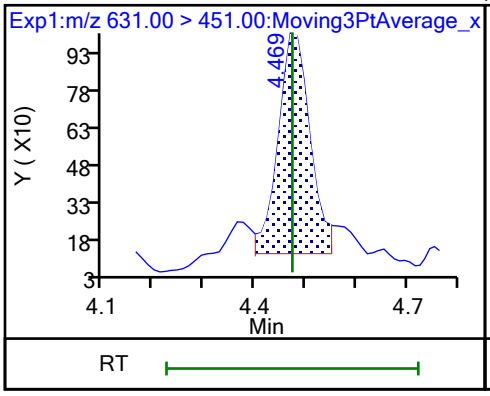
D 32 d5-NEtFOSAA



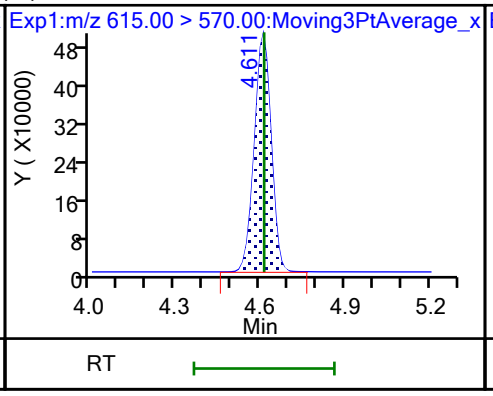
33 N-ethylperfluorooctanesulfonamid (M)



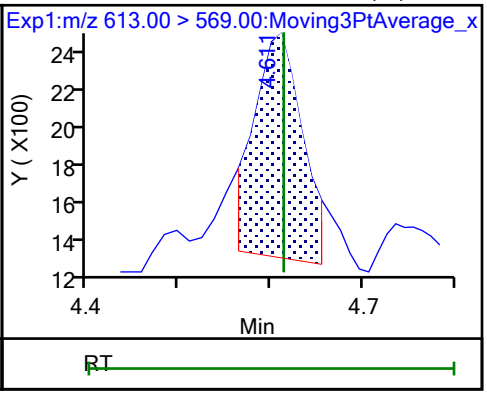
66 11-Chloroeicosafluoro-3-oxaundec (M)



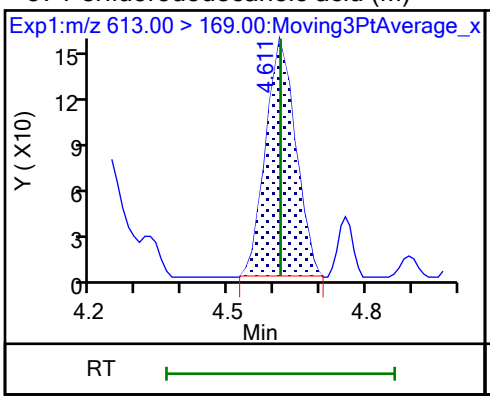
D 36 13C2 PFDoA



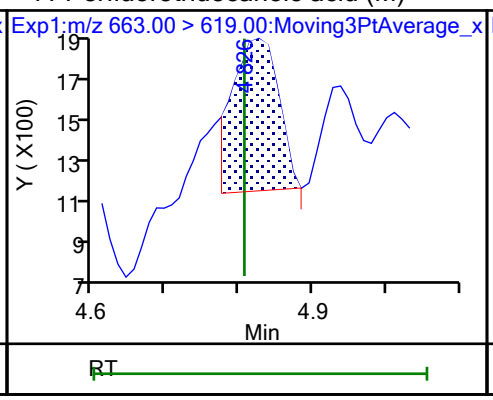
37 Perfluorododecanoic acid (M)



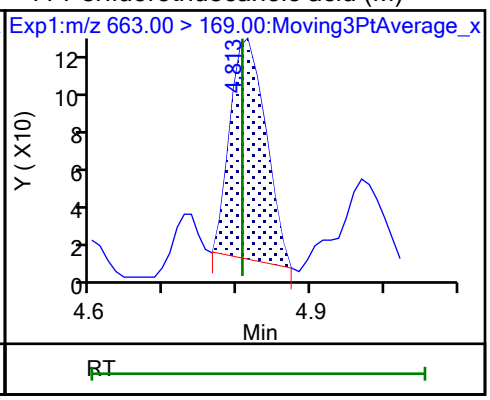
37 Perfluorododecanoic acid (M)



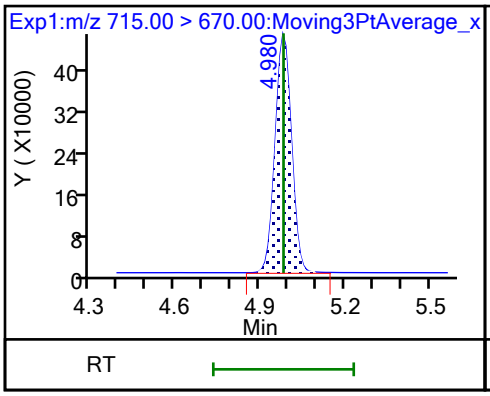
41 Perfluorotridecanoic acid (M)



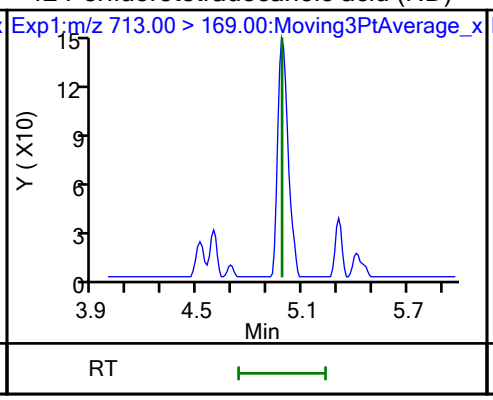
41 Perfluorotridecanoic acid (M)



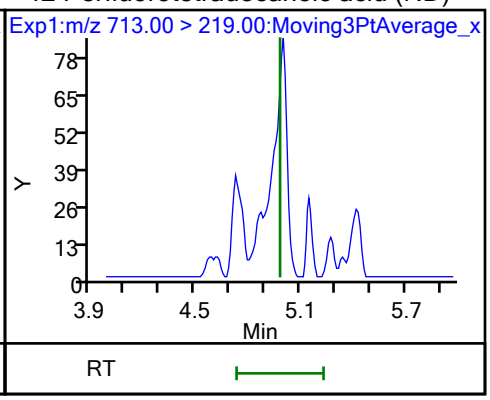
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

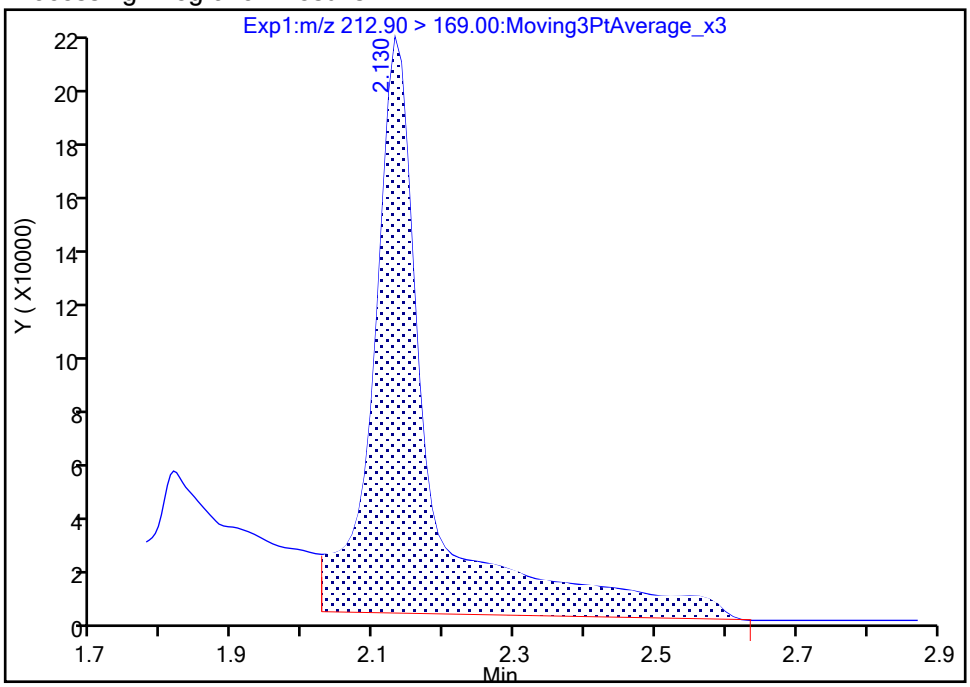
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

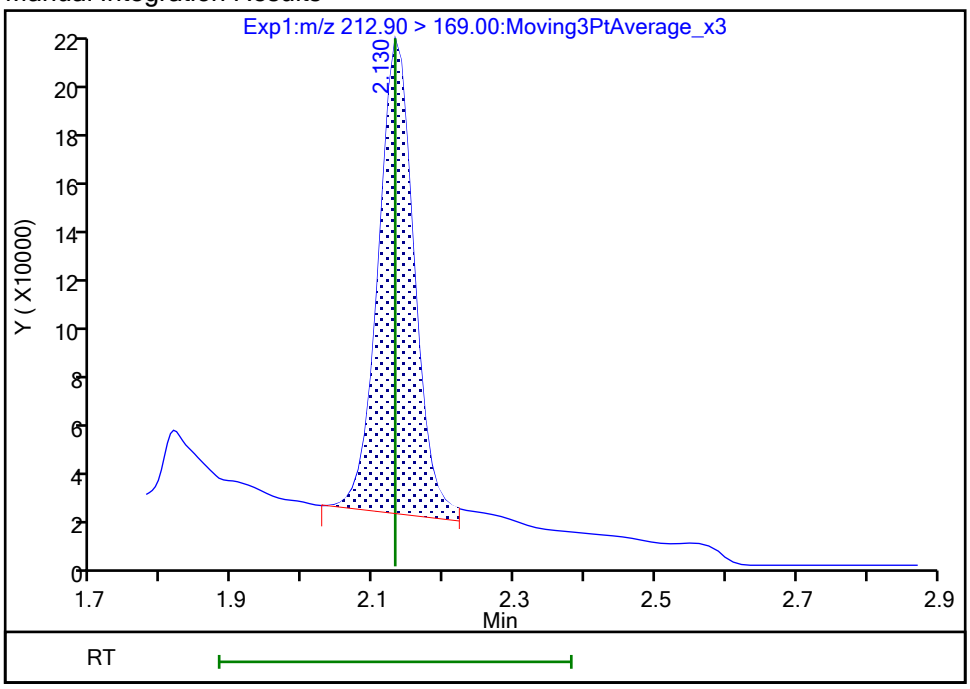
Processing Integration Results

RT: 2.13
Area: 1177484
Amount: 1.001637
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 680268
Amount: 0.561412
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

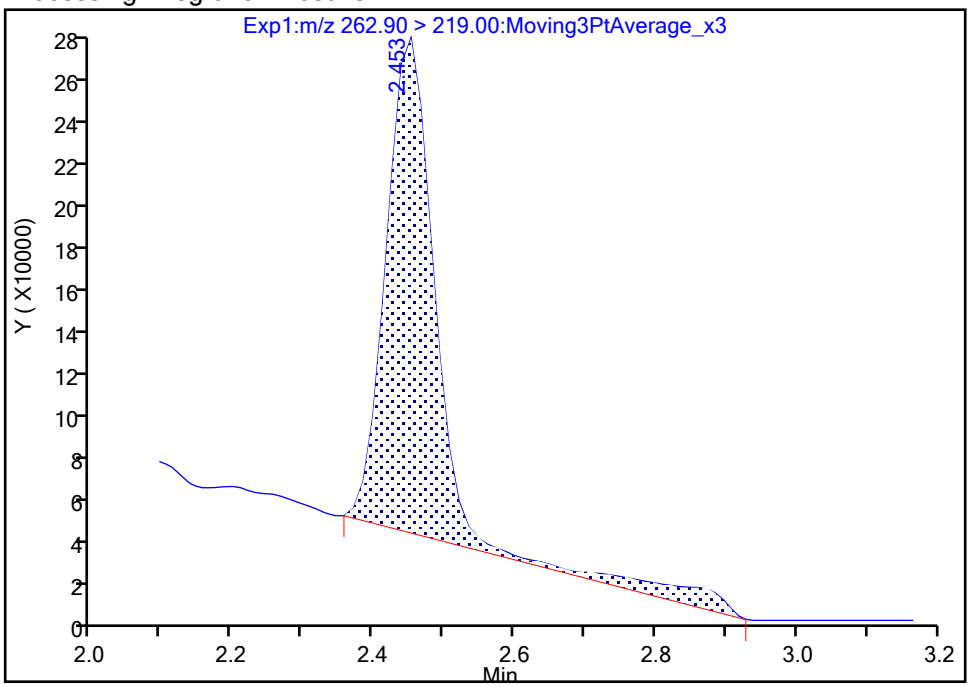
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

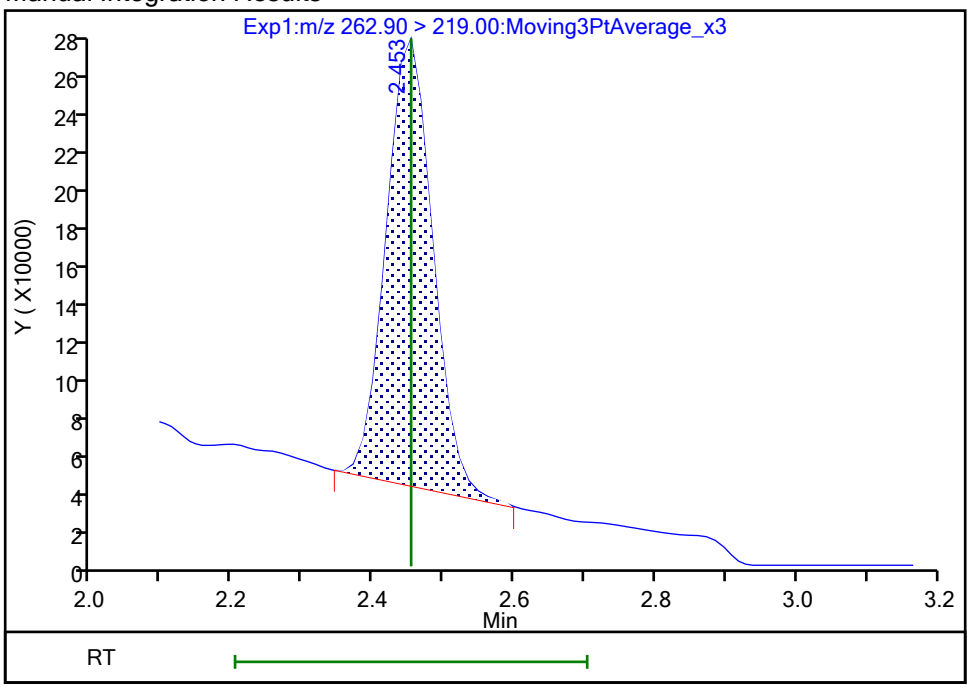
Processing Integration Results

RT: 2.45
Area: 1167202
Amount: 0.994756
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1061227
Amount: 0.904438
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

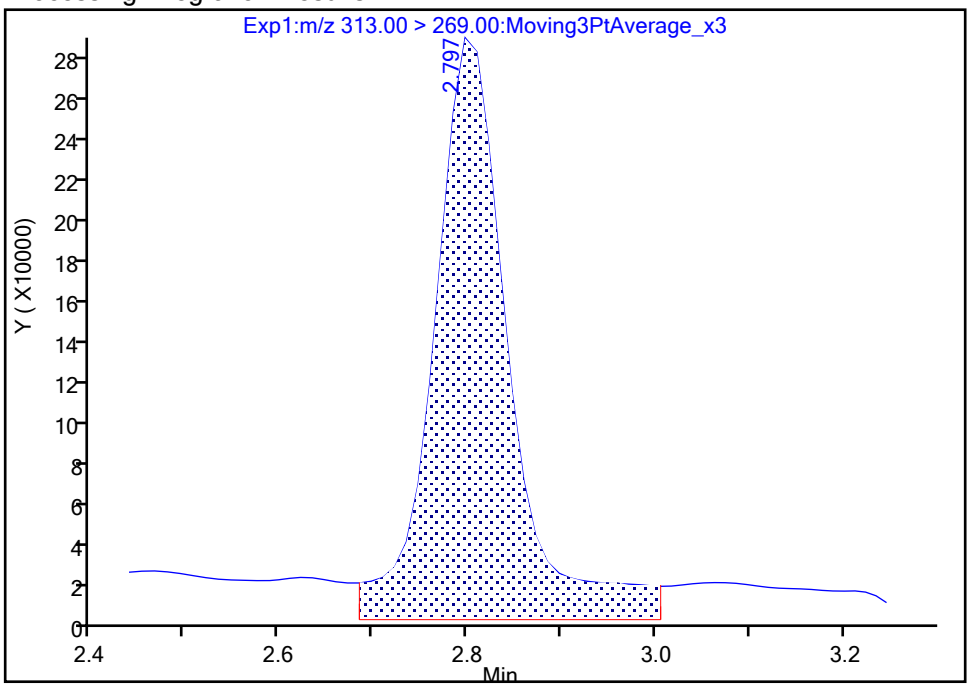
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

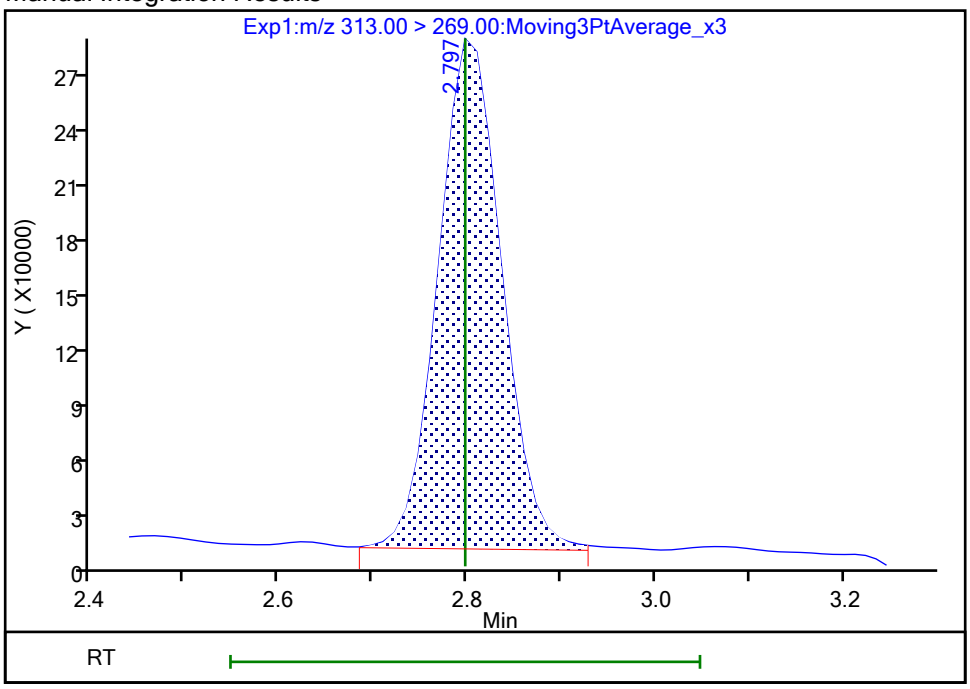
Processing Integration Results

RT: 2.80
Area: 1578588
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1240431
Amount: 0.949956
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

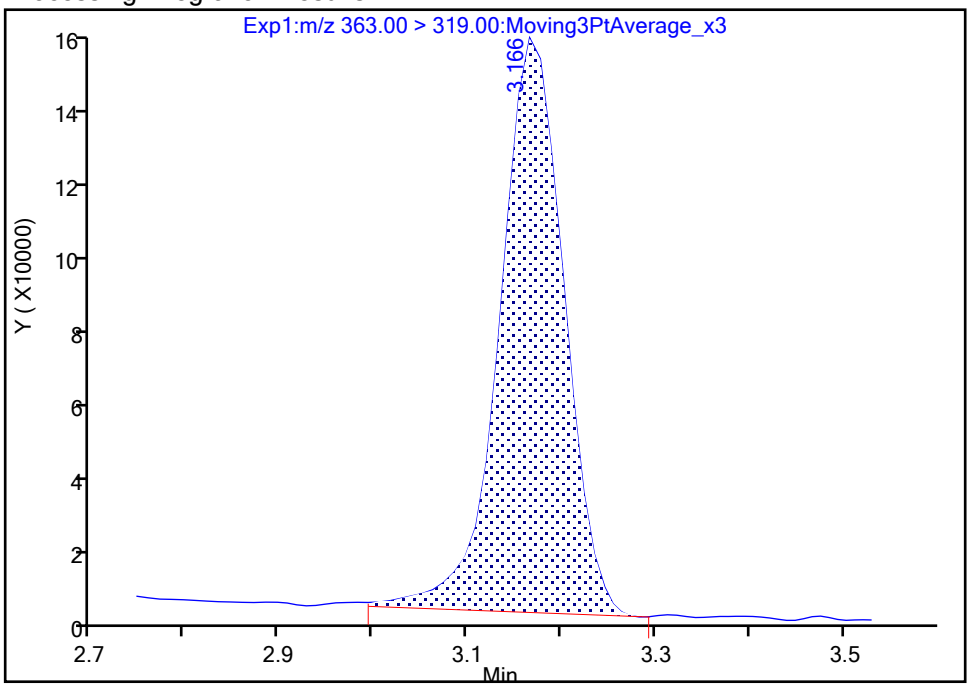
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

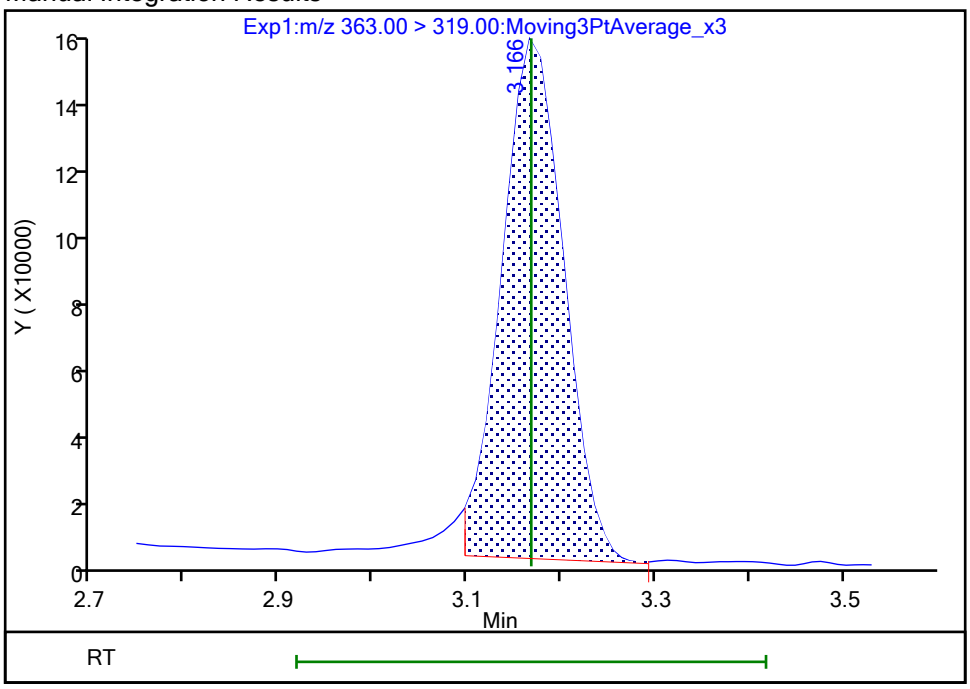
Processing Integration Results

RT: 3.17
Area: 690504
Amount: 0.454759
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 661472
Amount: 0.435639
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

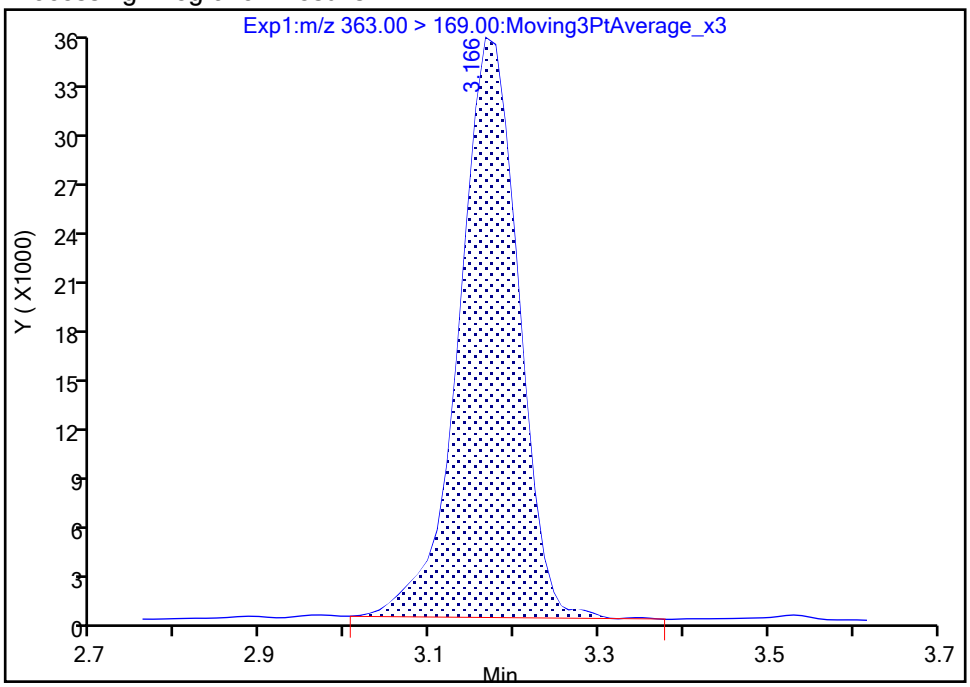
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

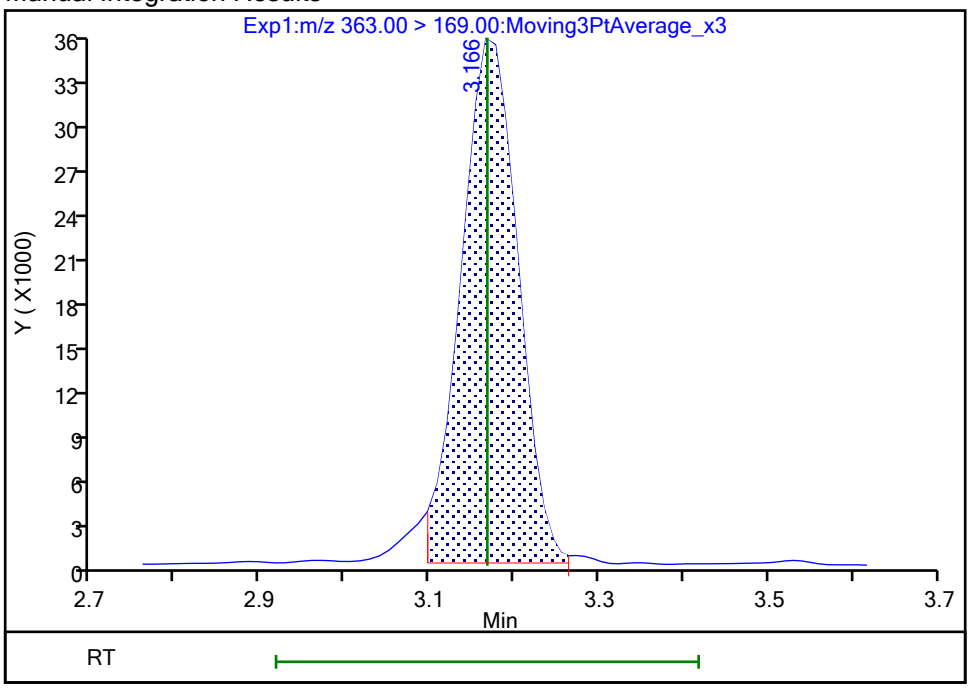
Processing Integration Results

RT: 3.17
Area: 172102
Amount: 0.454759
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 164623
Amount: 0.435639
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

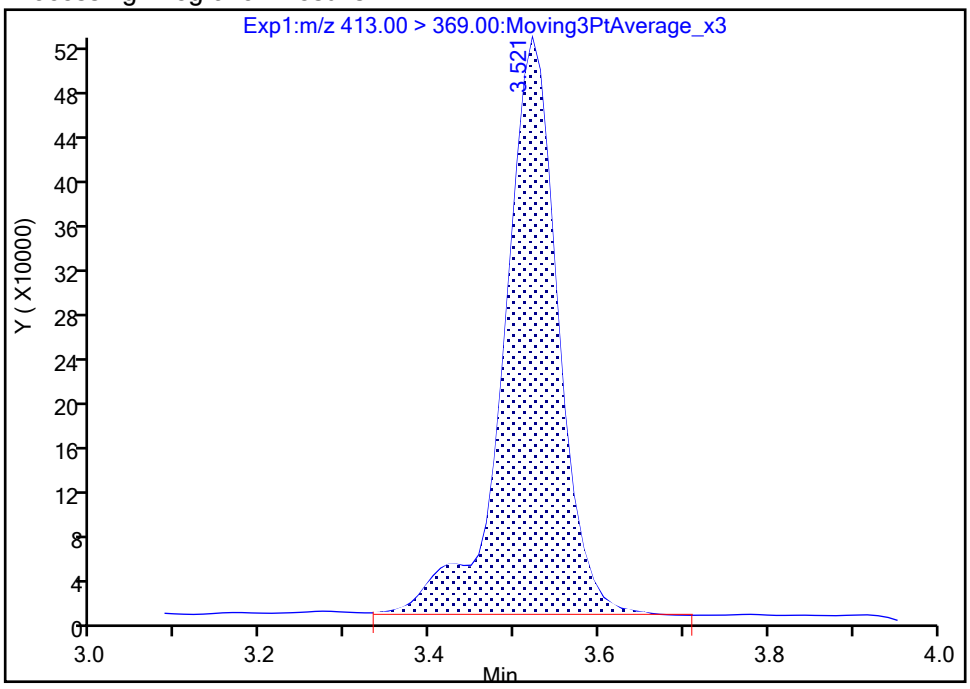
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

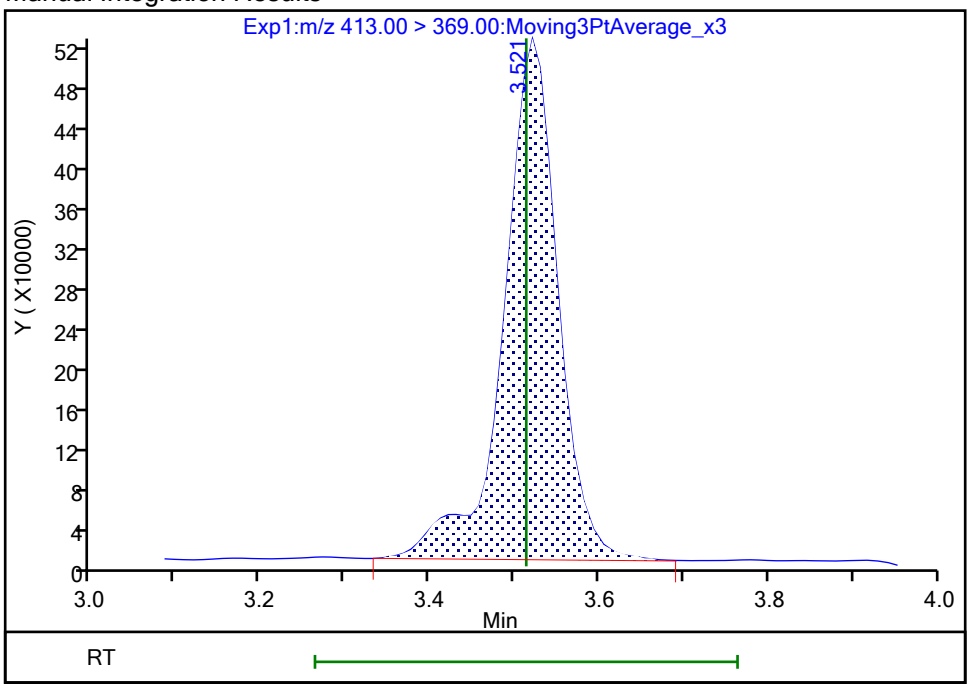
Processing Integration Results

RT: 3.52
Area: 2317403
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 2299485
Amount: 1.418299
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

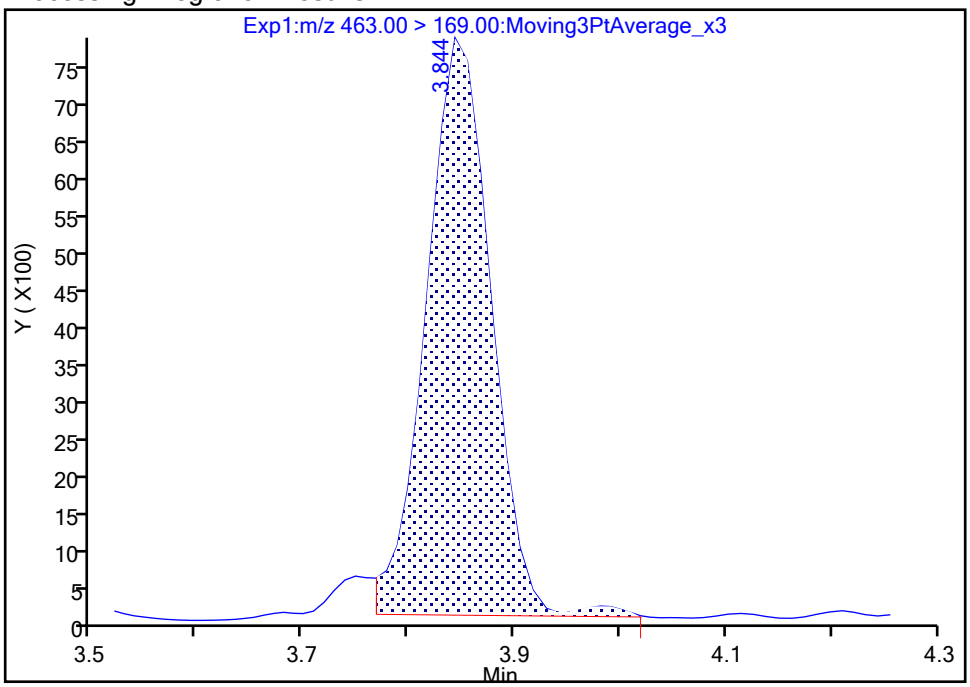
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

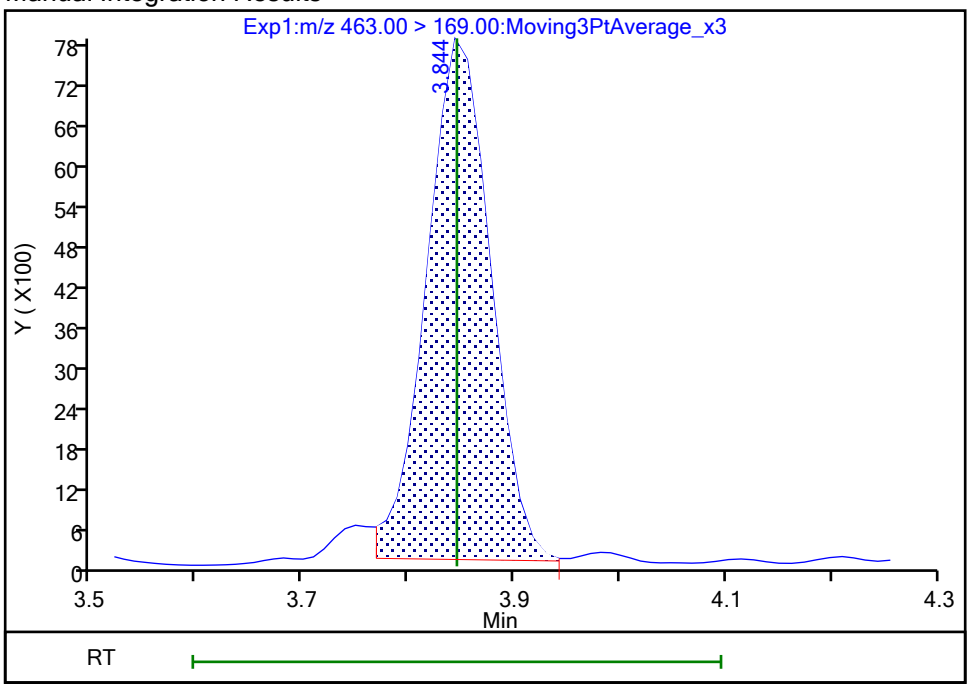
Processing Integration Results

RT: 3.84
Area: 32916
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 32572
Amount: 0.185446
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

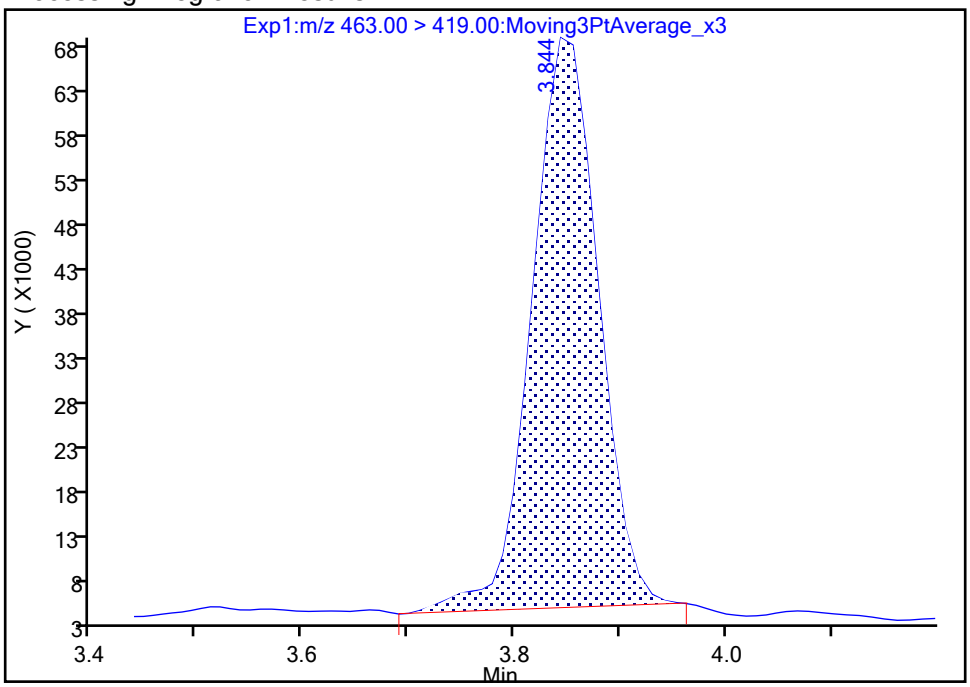
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

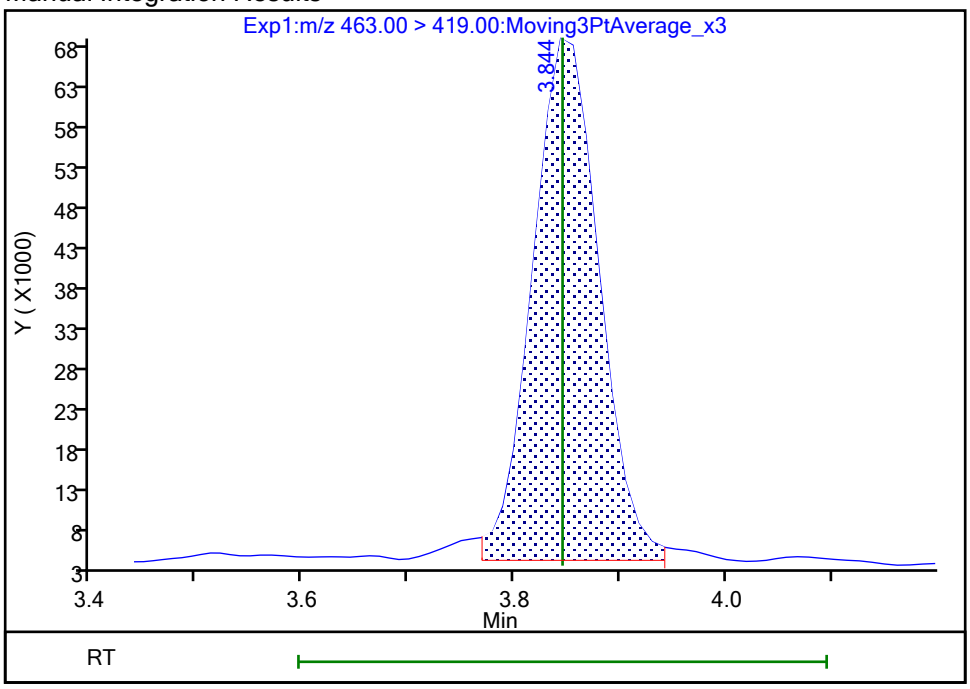
Processing Integration Results

RT: 3.84
Area: 281630
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 284023
Amount: 0.185446
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

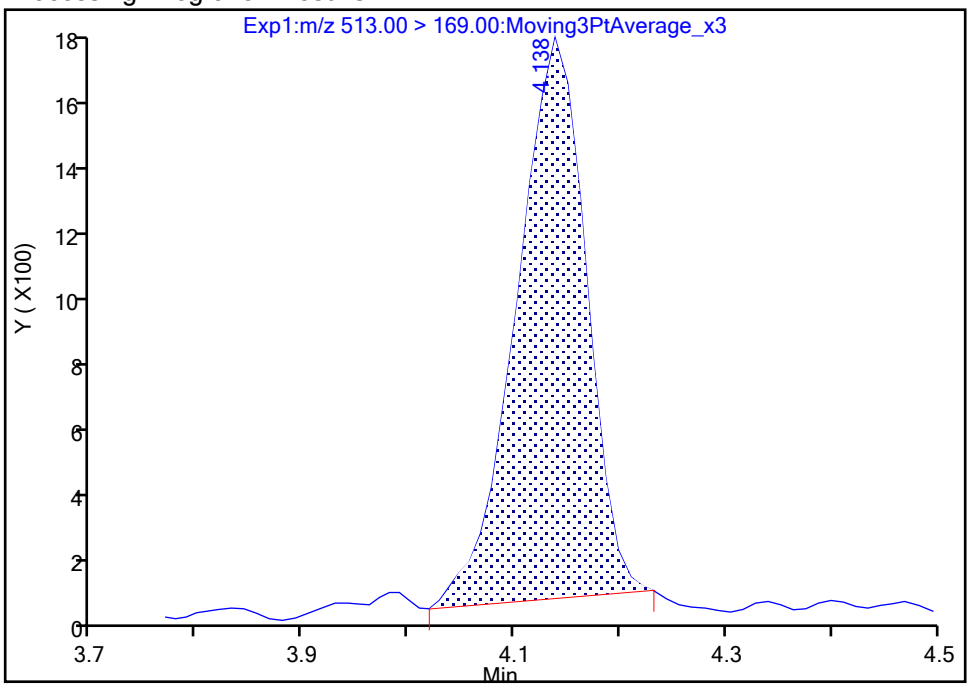
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

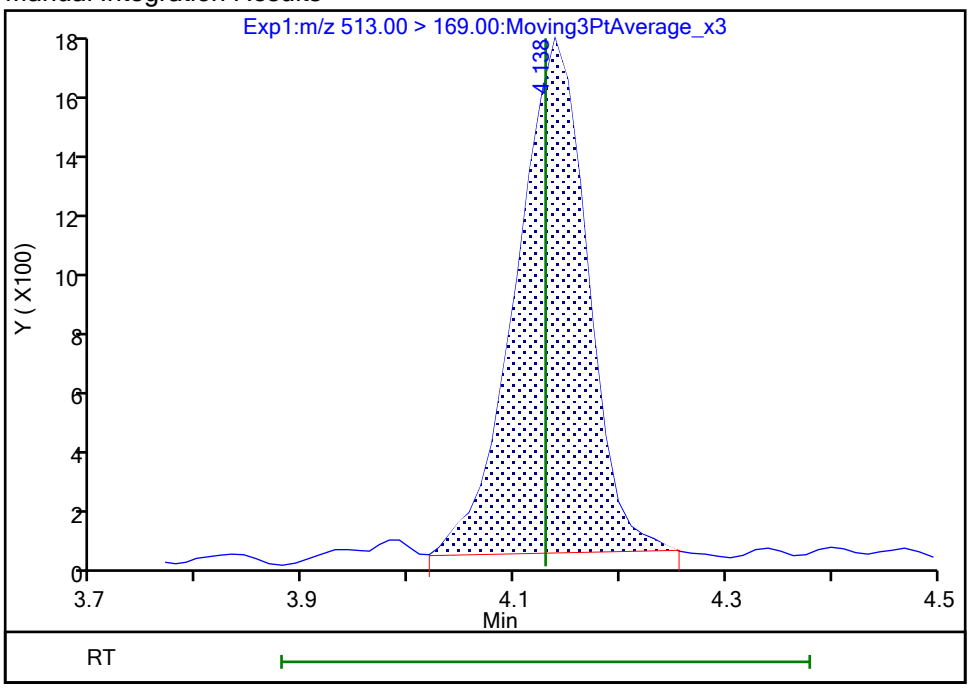
Processing Integration Results

RT: 4.14
Area: 7766
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 8070
Amount: 0.046559
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

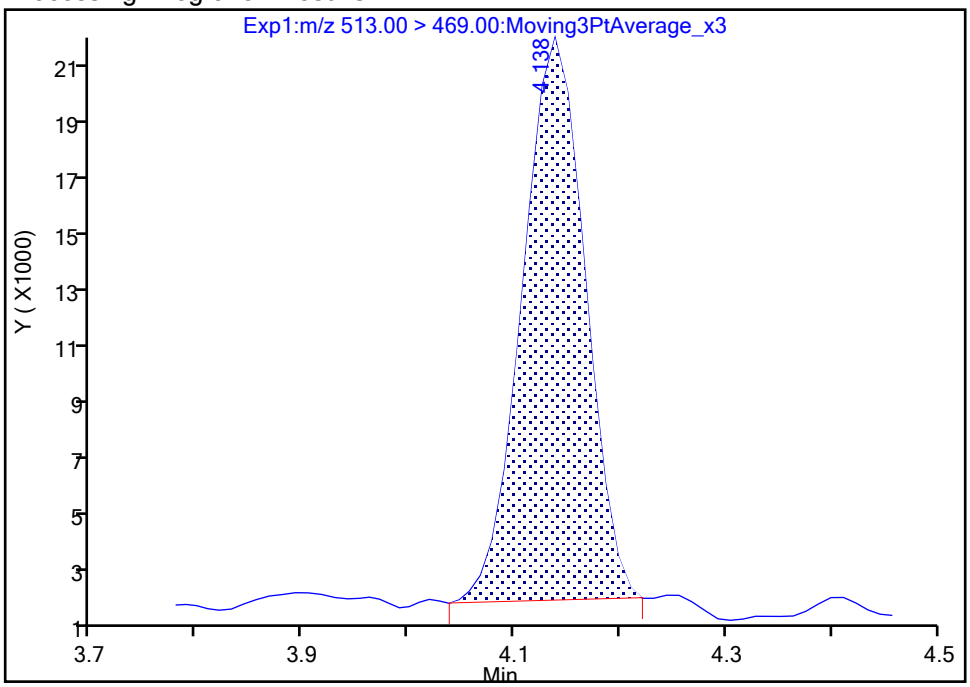
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

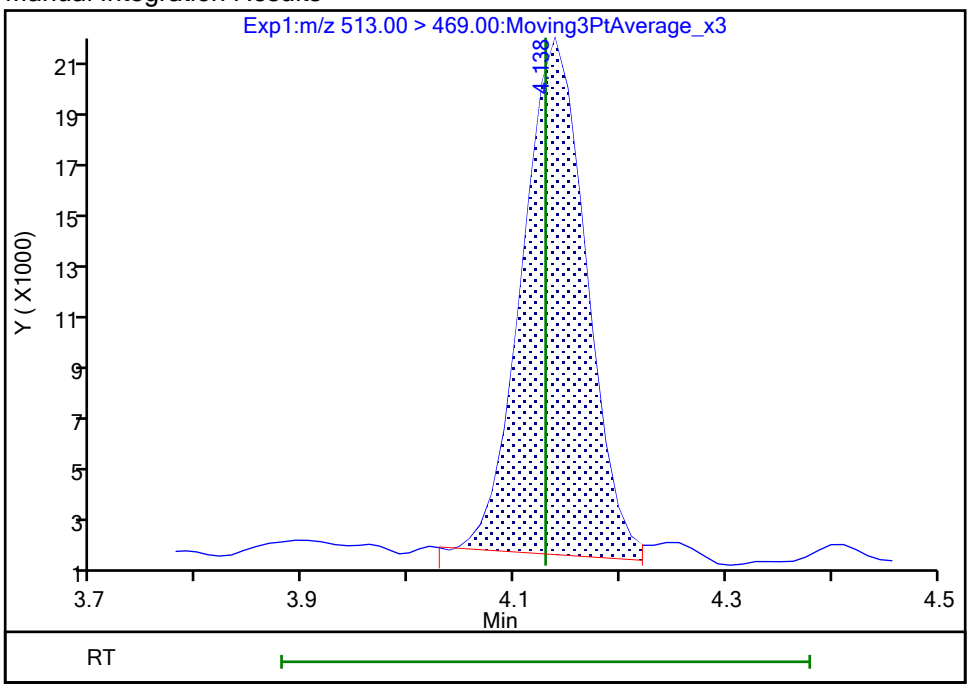
Processing Integration Results

RT: 4.14
Area: 80540
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 83306
Amount: 0.046559
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 15:10:06 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

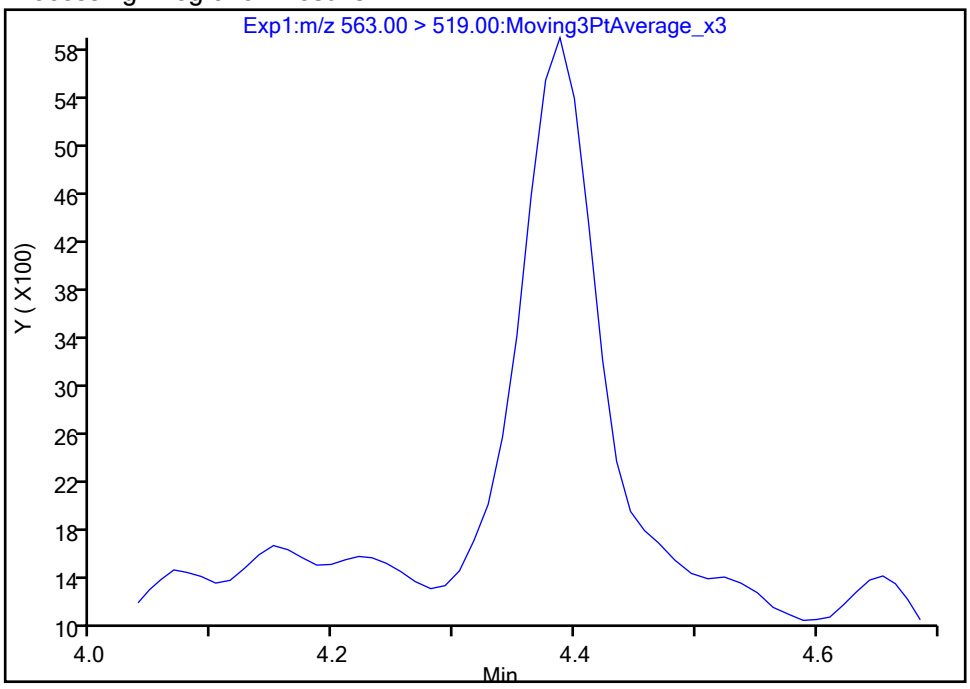
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

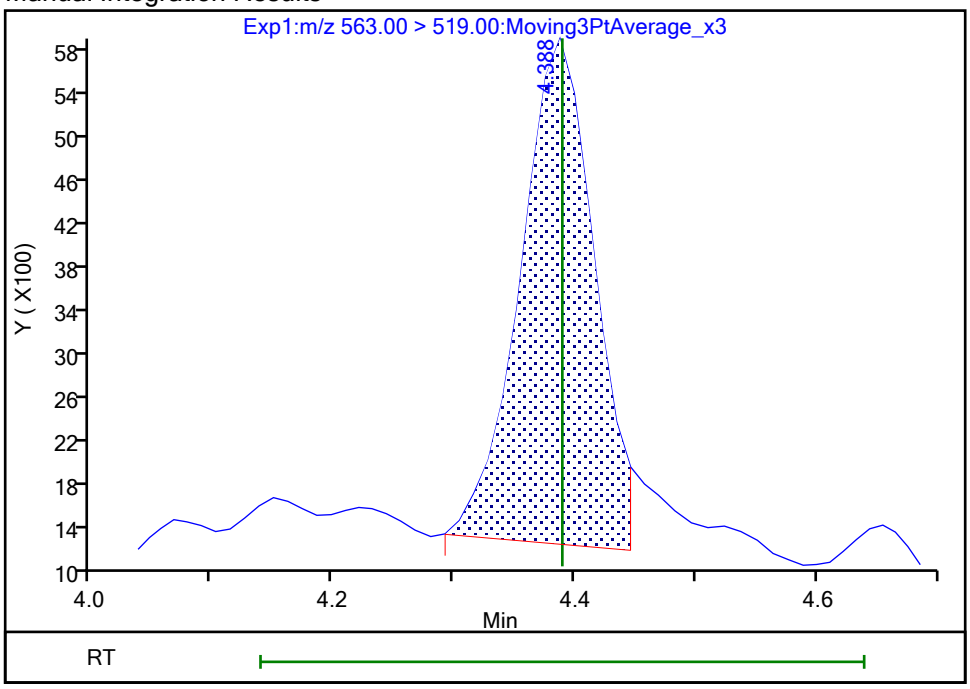
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 19638
Amount: 0.012084
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

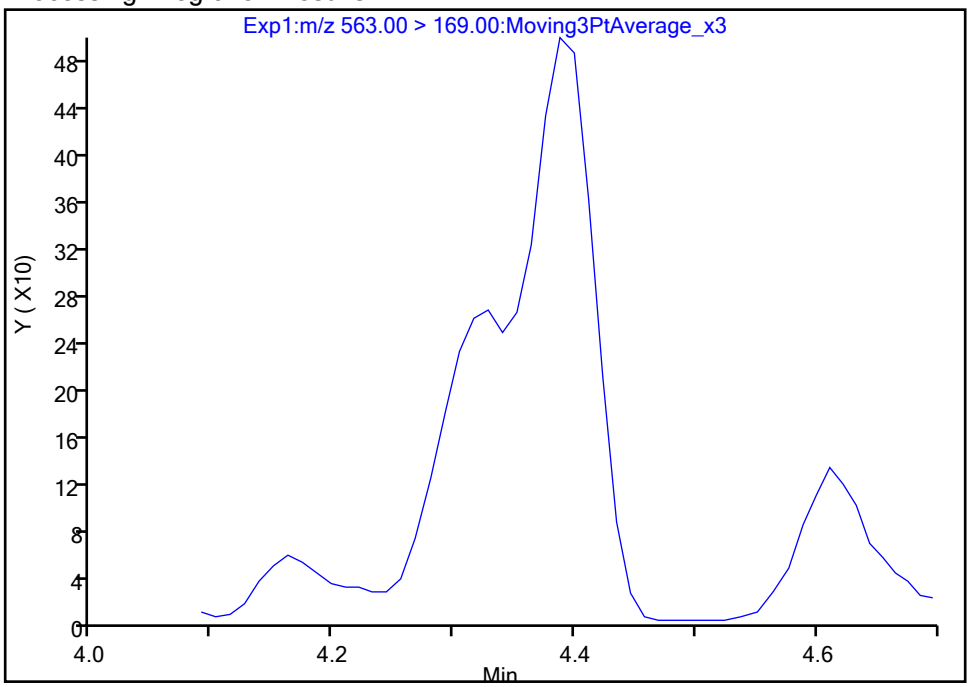
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

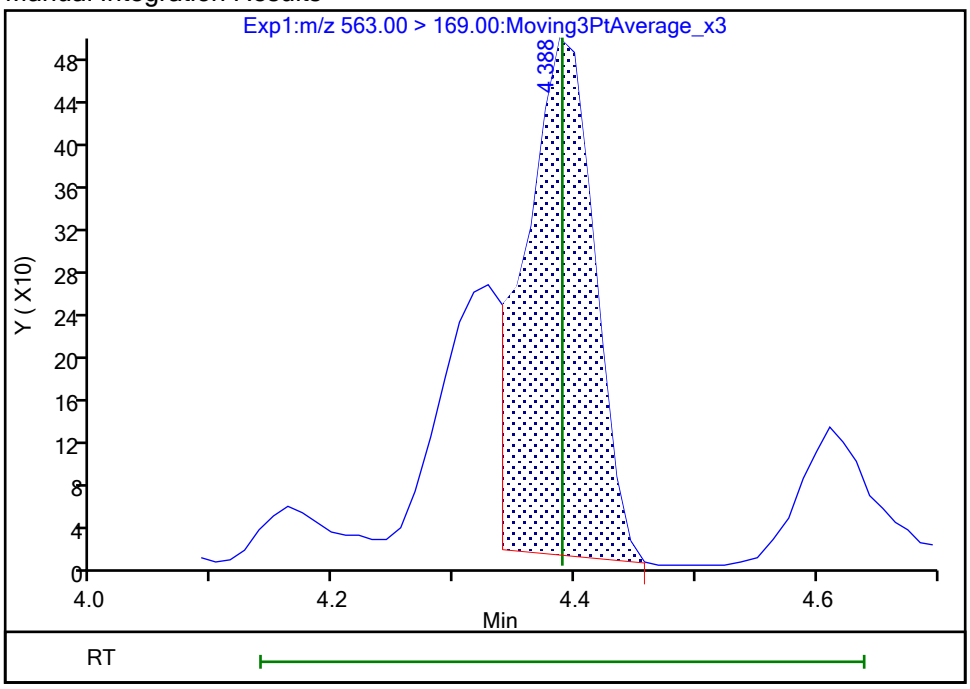
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 1899
Amount: 0.012084
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

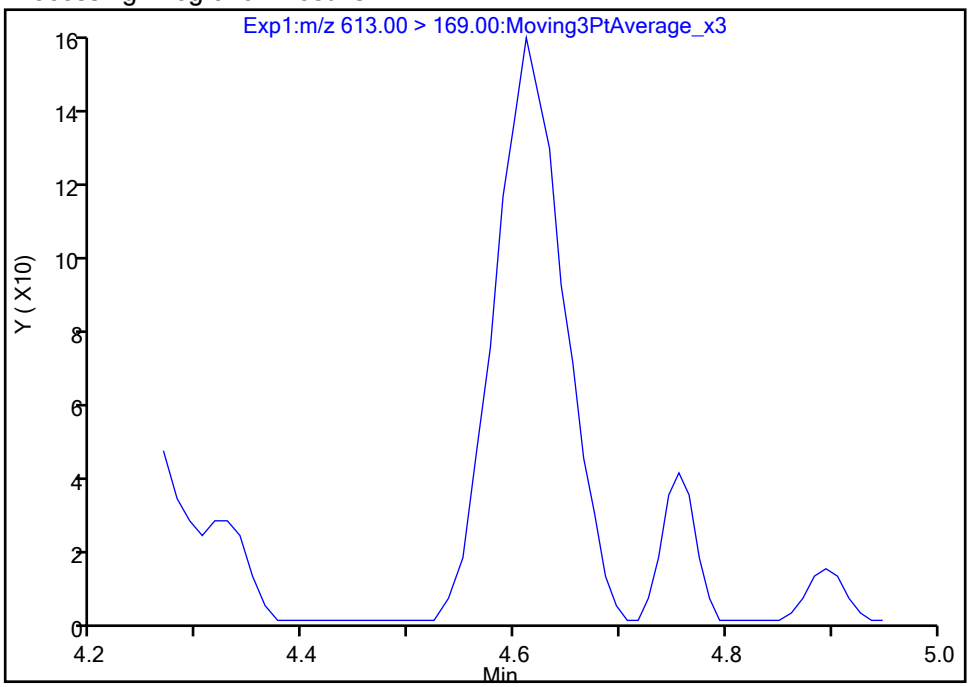
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

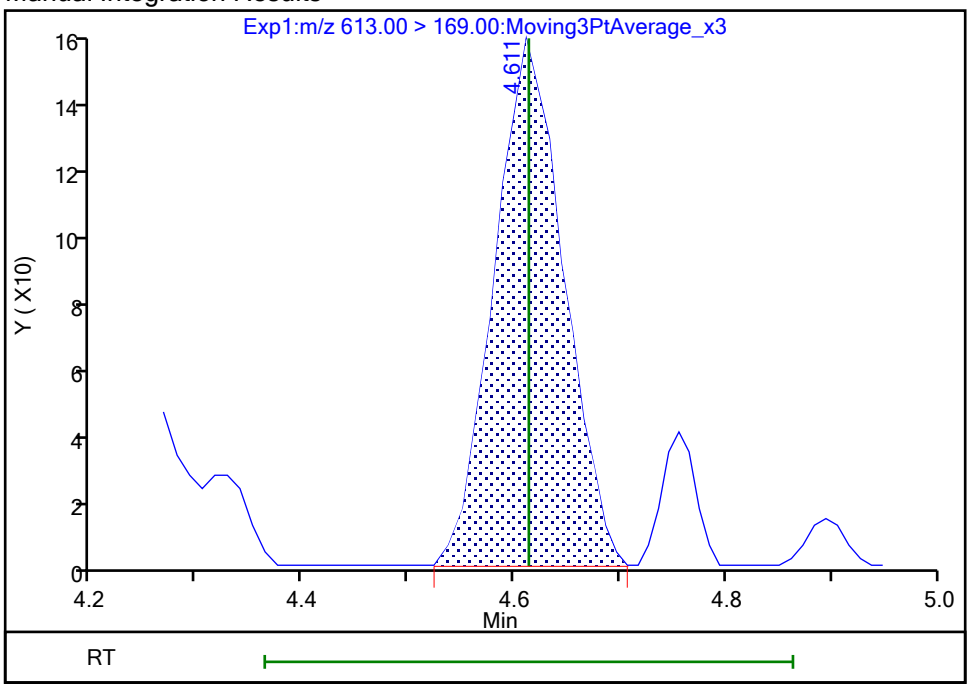
Not Detected
Expected RT: 4.61

Processing Integration Results



RT: 4.61
Area: 721
Amount: 0.002316
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 24-Oct-2023 14:18:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

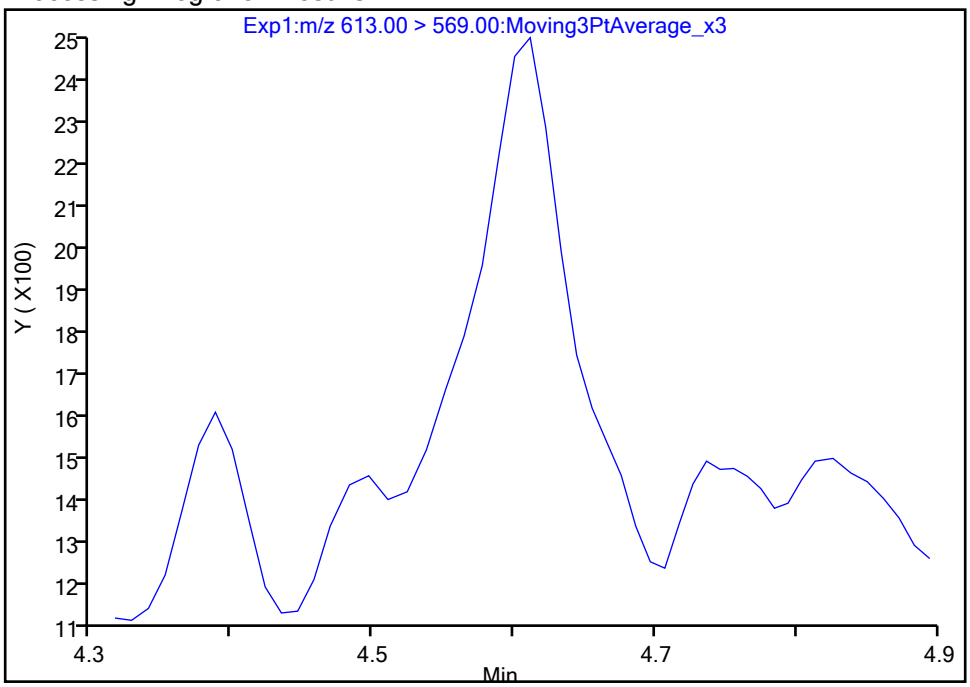
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

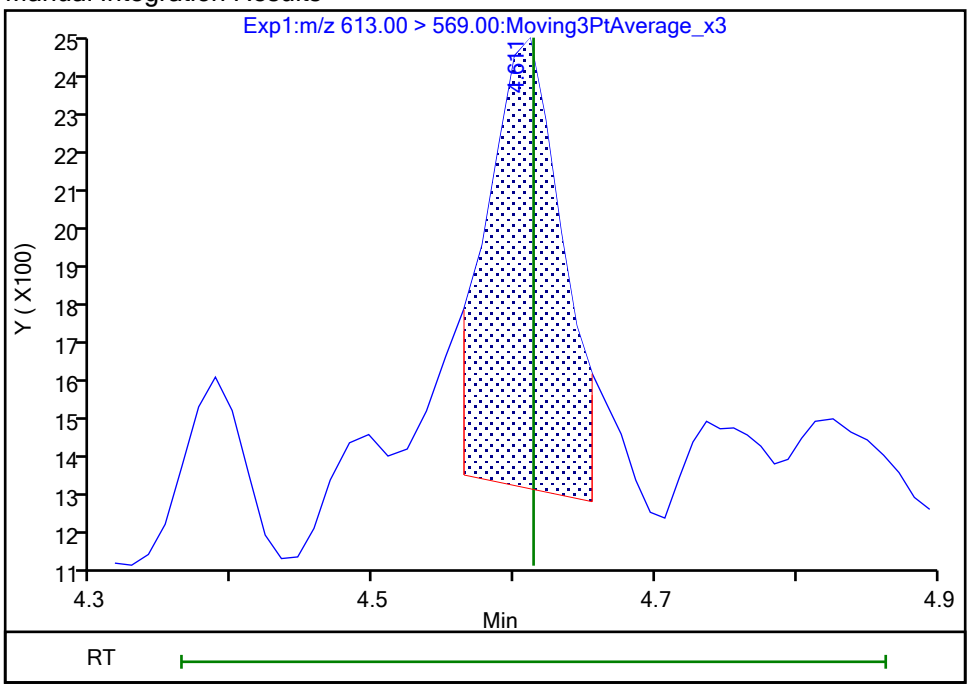
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 3929
Amount: 0.002316
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

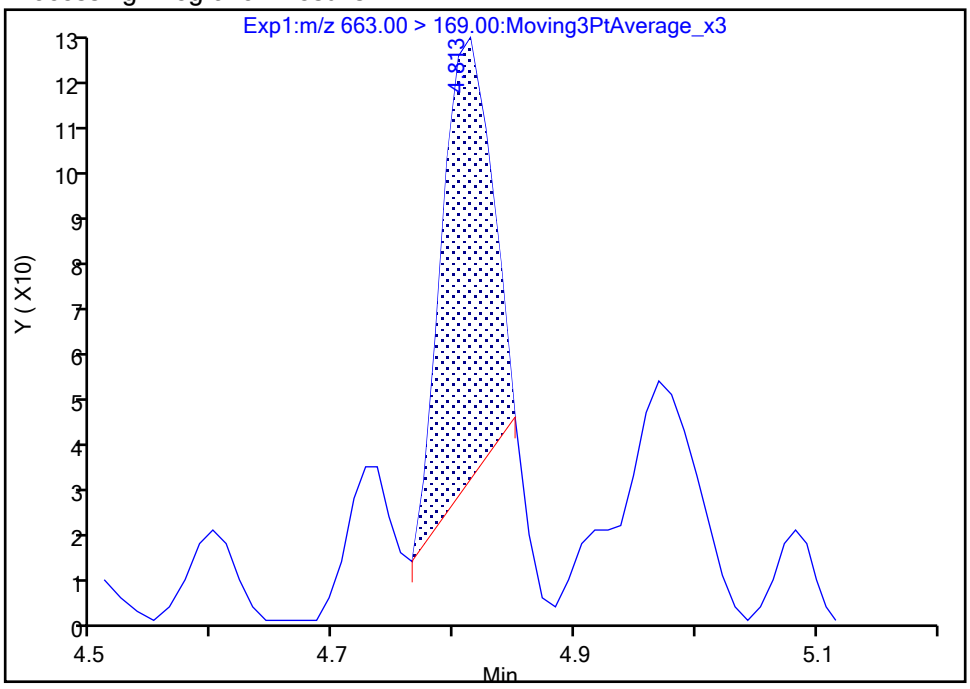
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

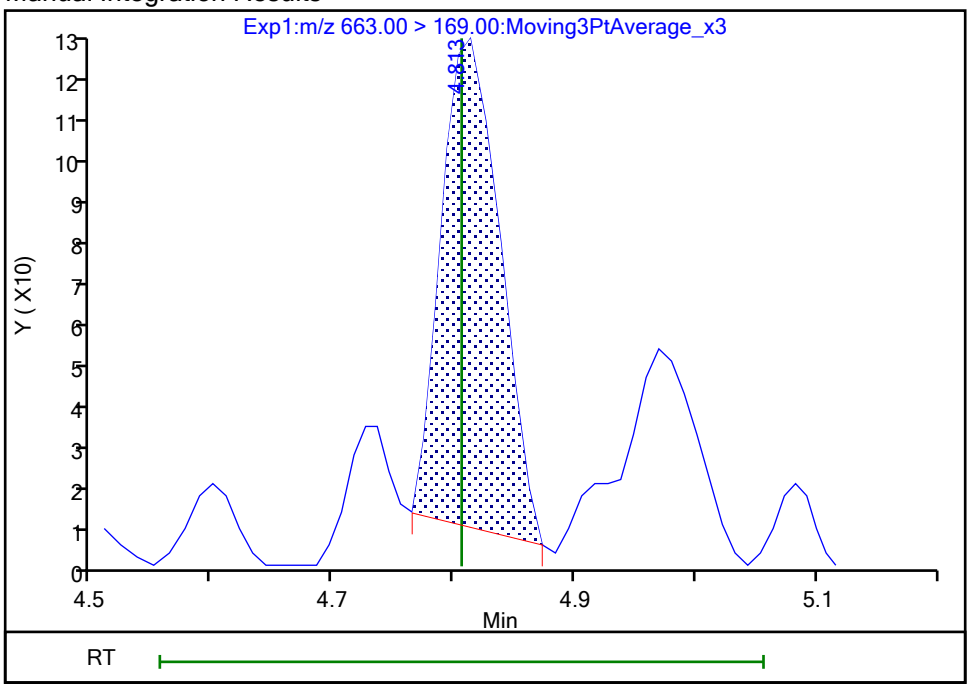
Processing Integration Results

RT: 4.81
Area: 283
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.81
Area: 404
Amount: 0.001711
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

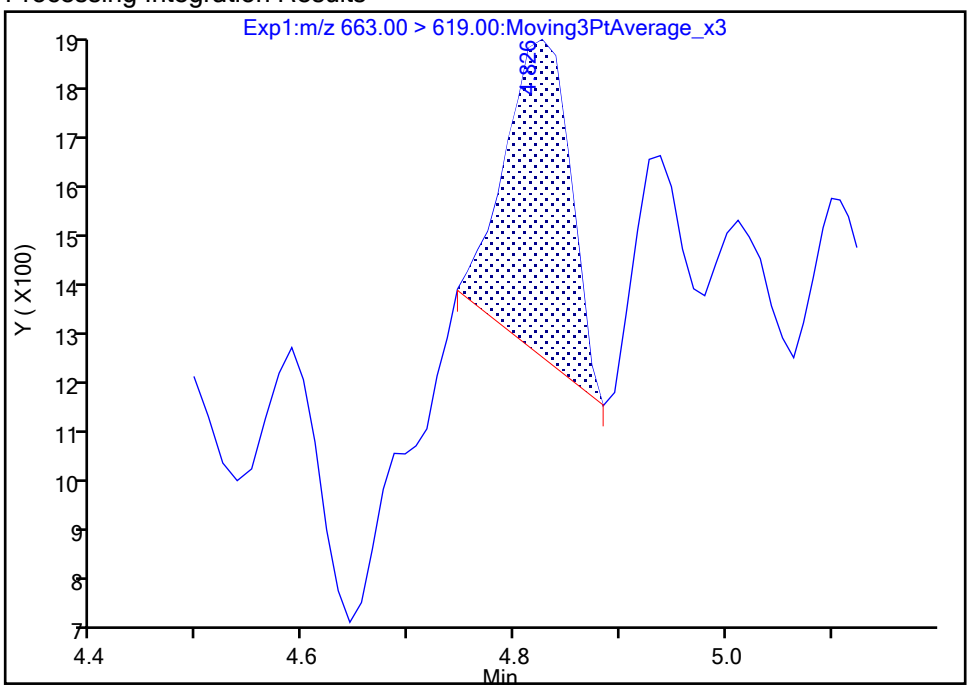
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

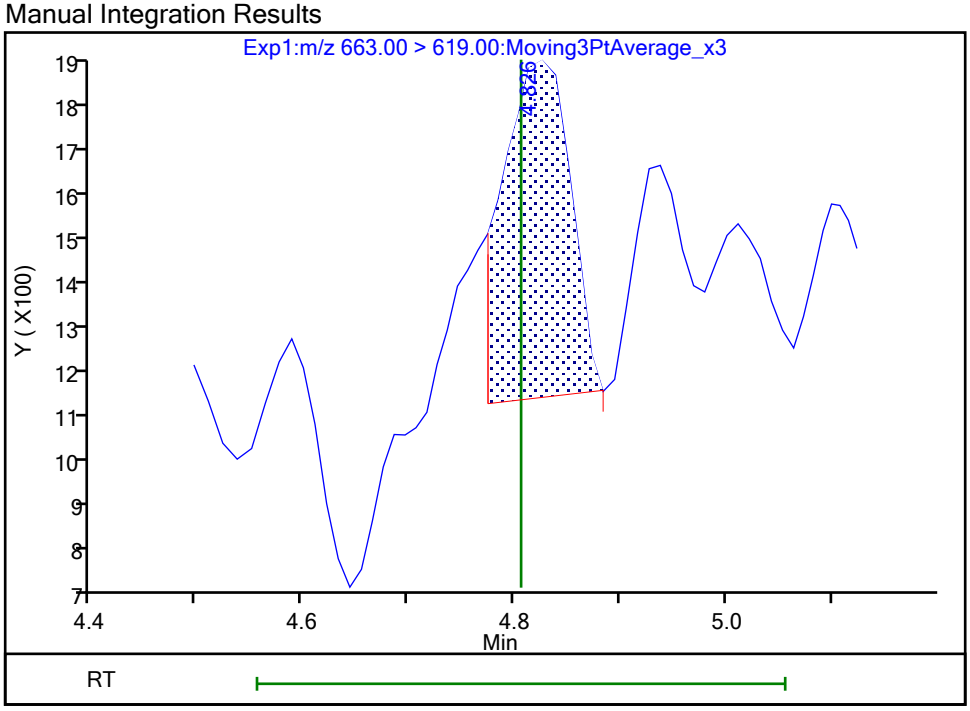
Processing Integration Results

RT: 4.83
Area: 2532
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.83
Area: 3051
Amount: 0.001711
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

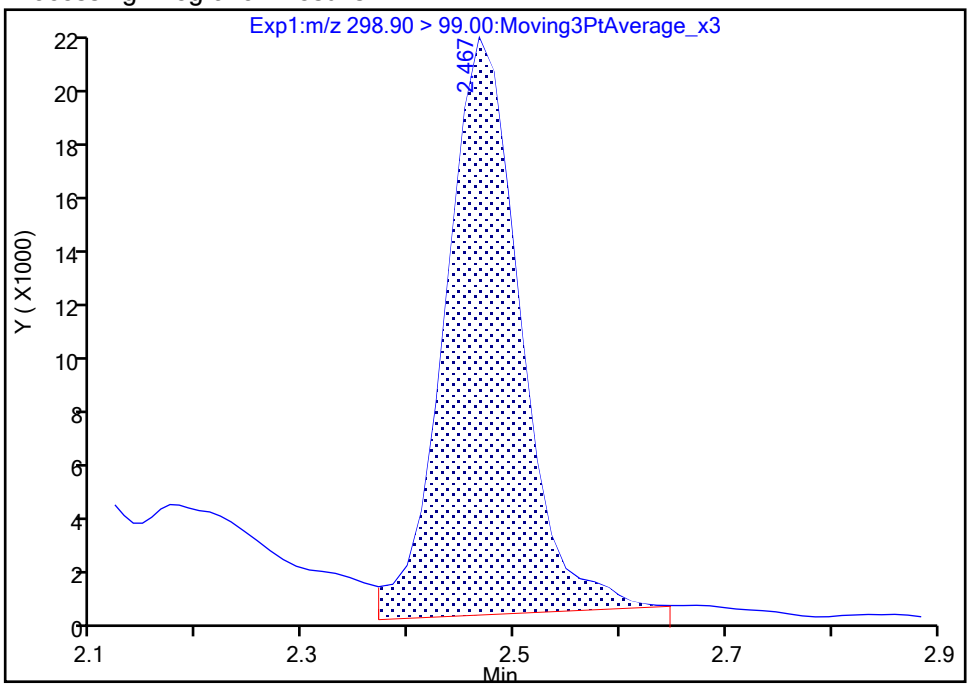
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

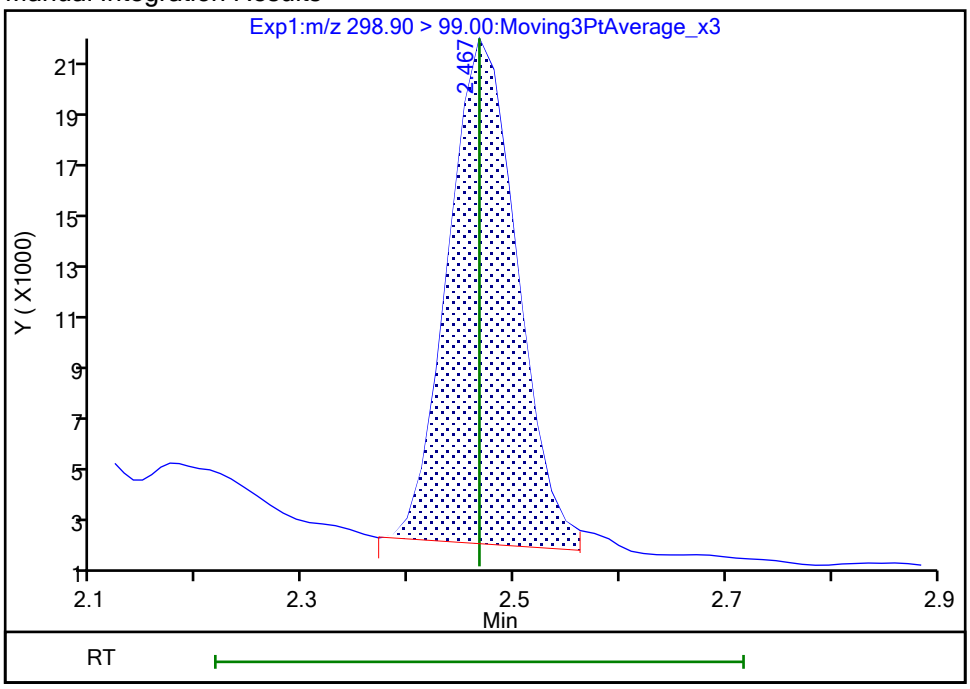
Processing Integration Results

RT: 2.47
Area: 101864
Amount: 0.197097
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 90538
Amount: 0.110025
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

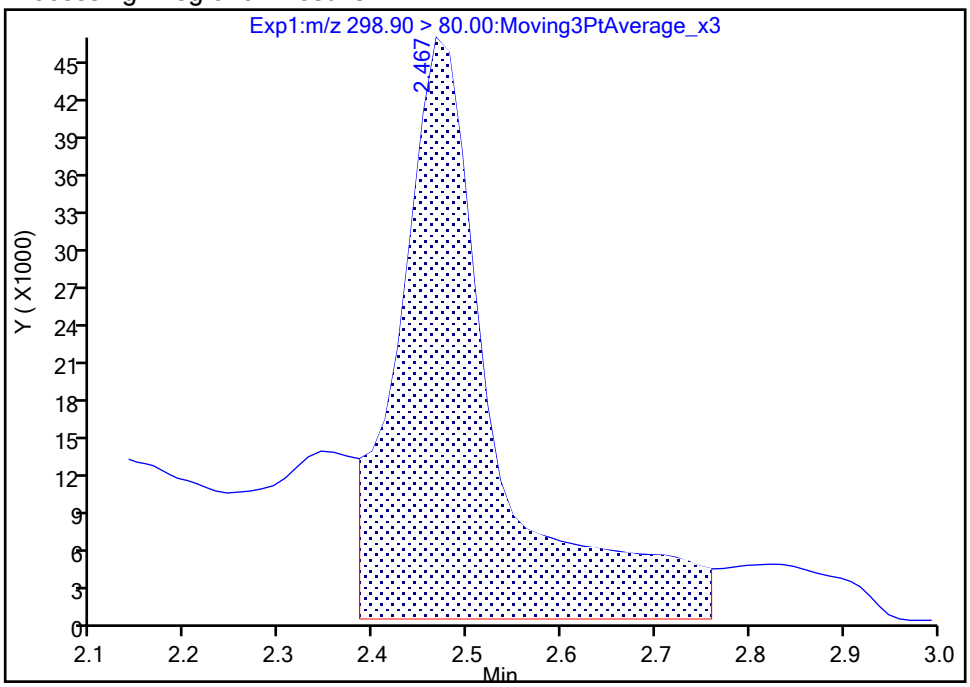
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

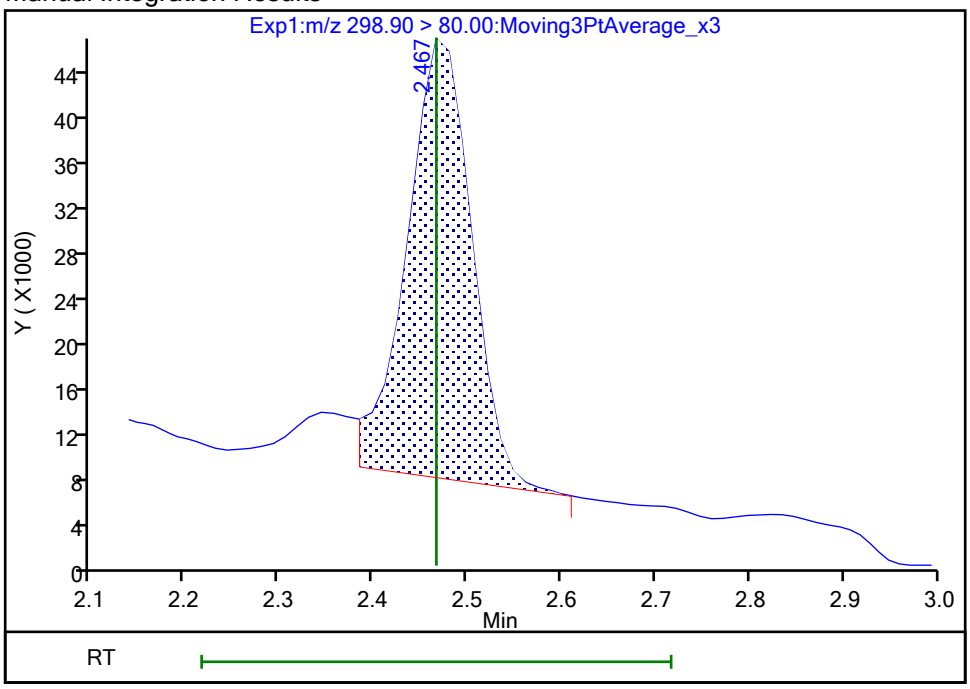
Processing Integration Results

RT: 2.47
Area: 334909
Amount: 0.197097
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 186956
Amount: 0.110025
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

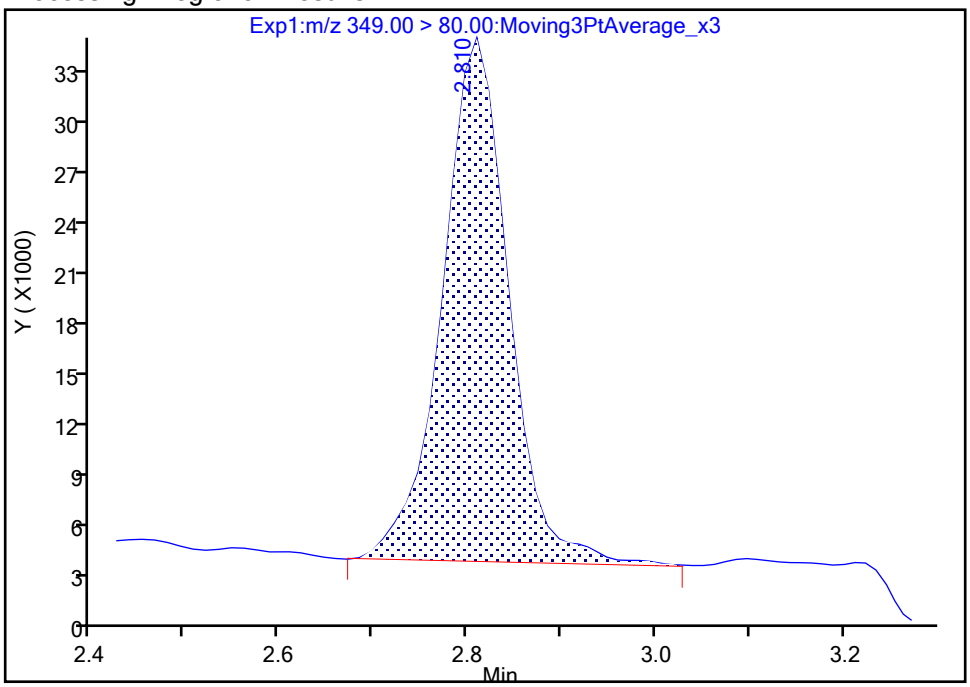
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

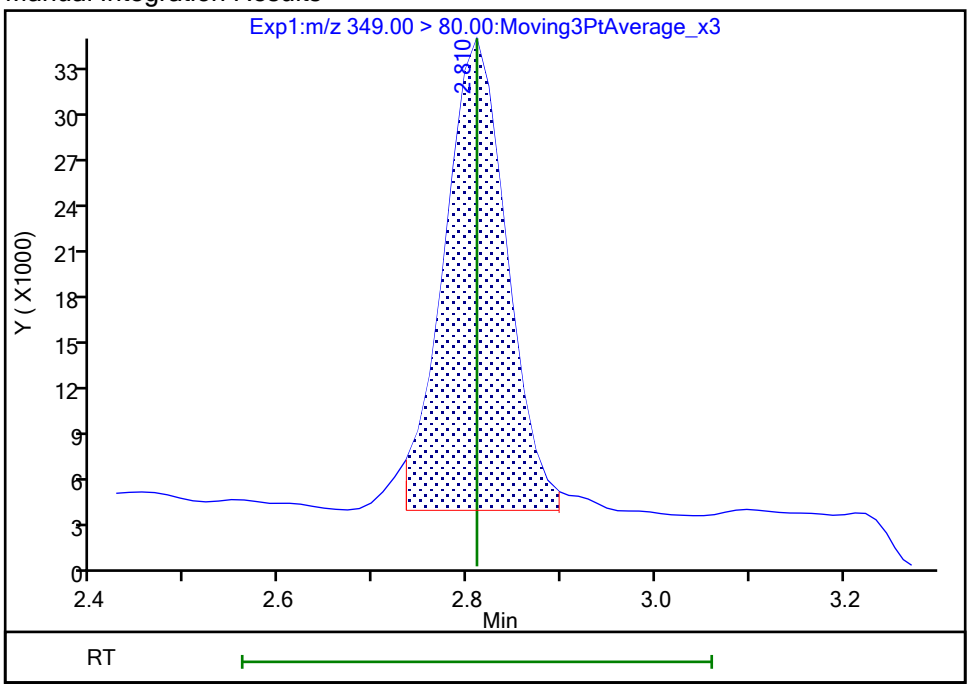
Processing Integration Results

RT: 2.81
Area: 152947
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 143749
Amount: 0.093608
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

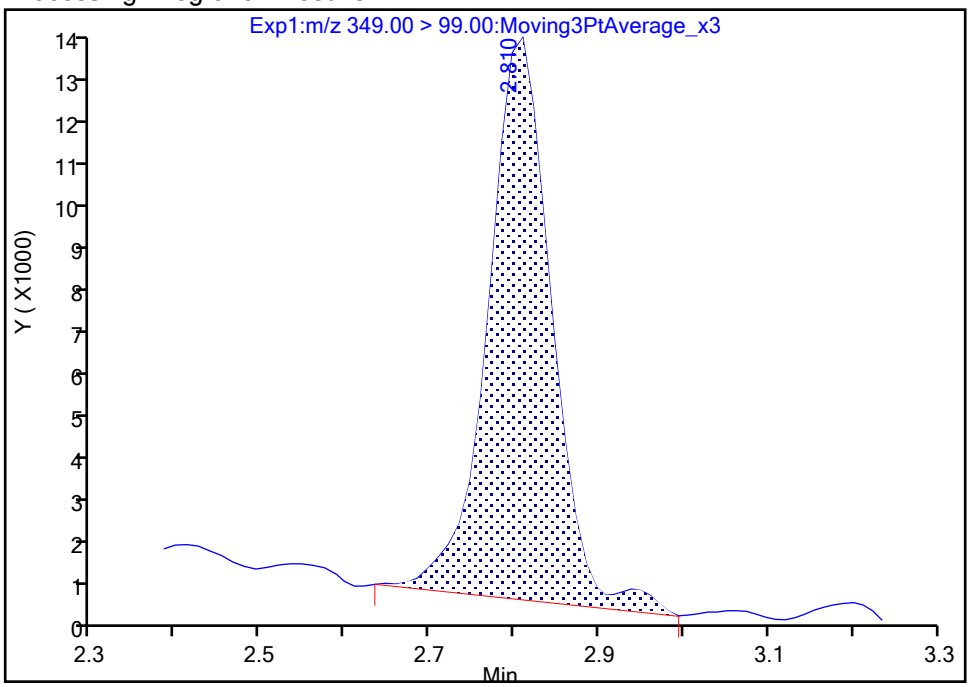
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

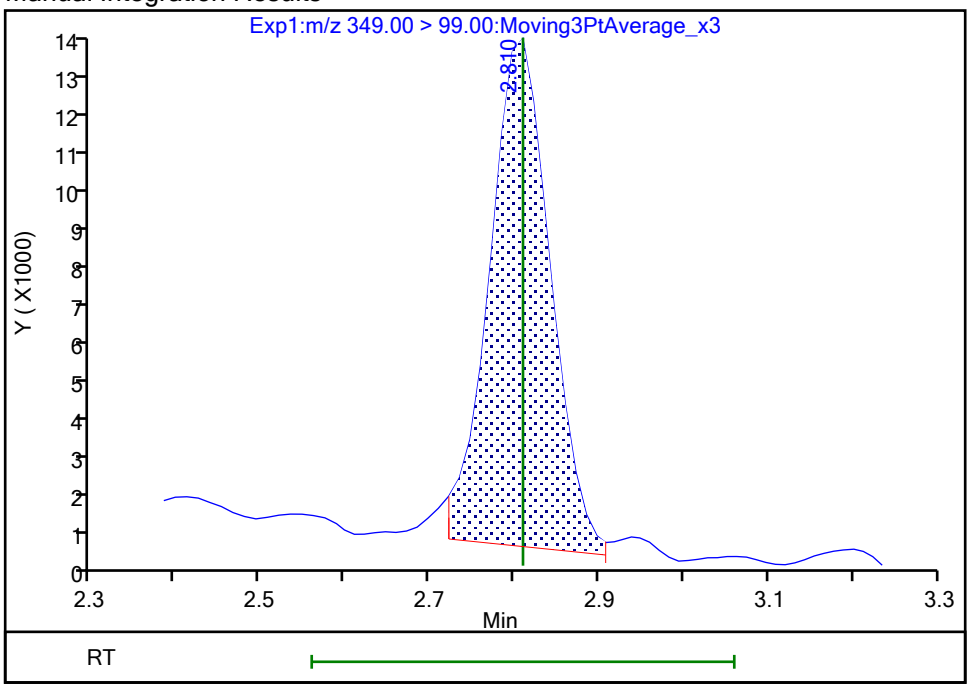
Processing Integration Results

RT: 2.81
Area: 67794
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 64414
Amount: 0.093608
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

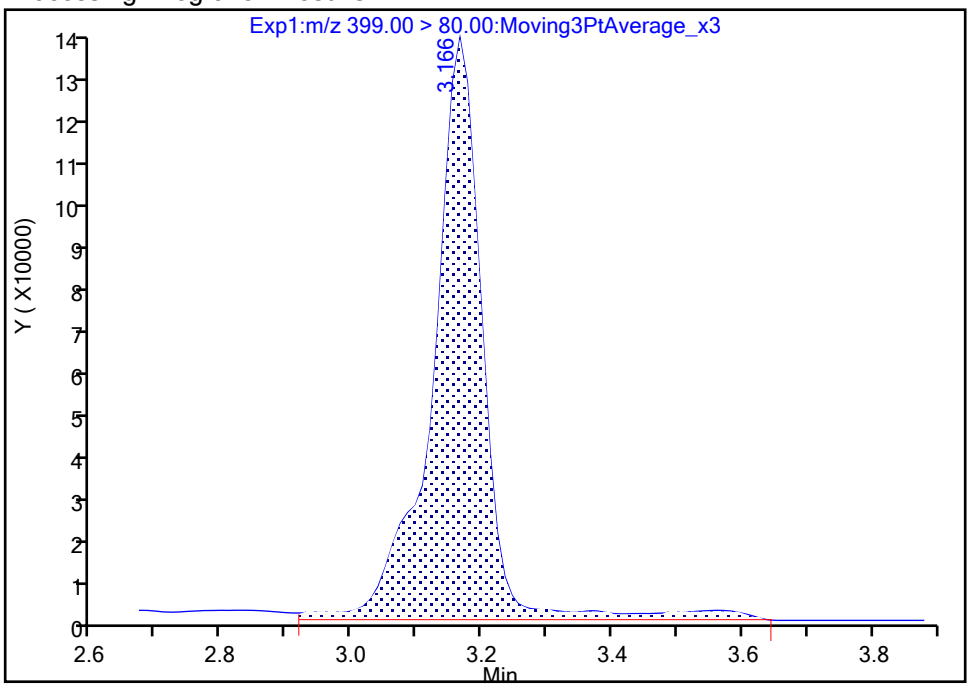
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

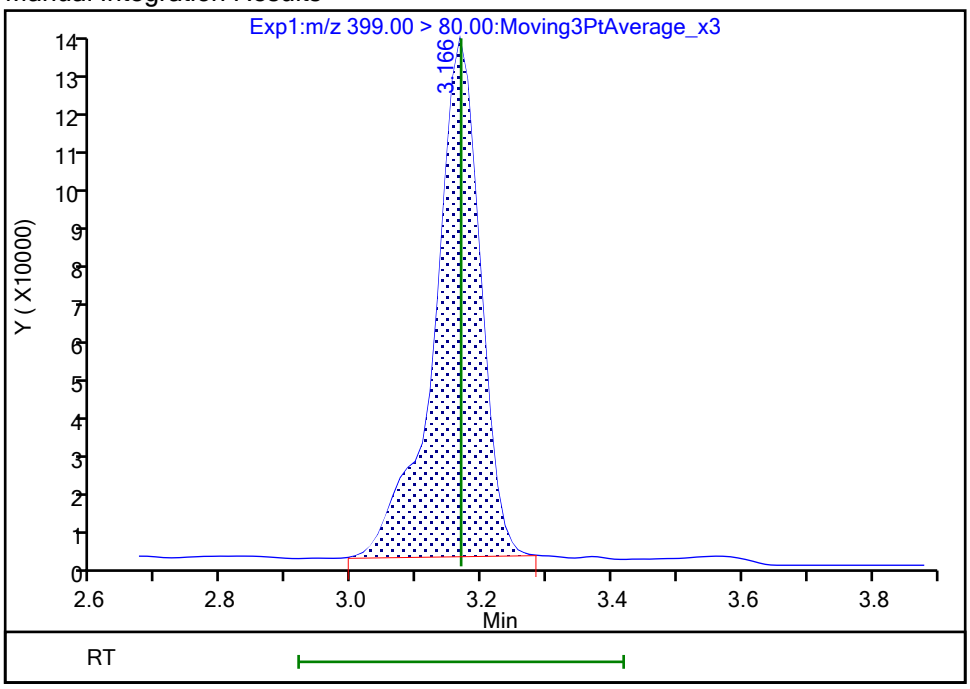
Processing Integration Results

RT: 3.17
Area: 739306
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 653594
Amount: 0.502094
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

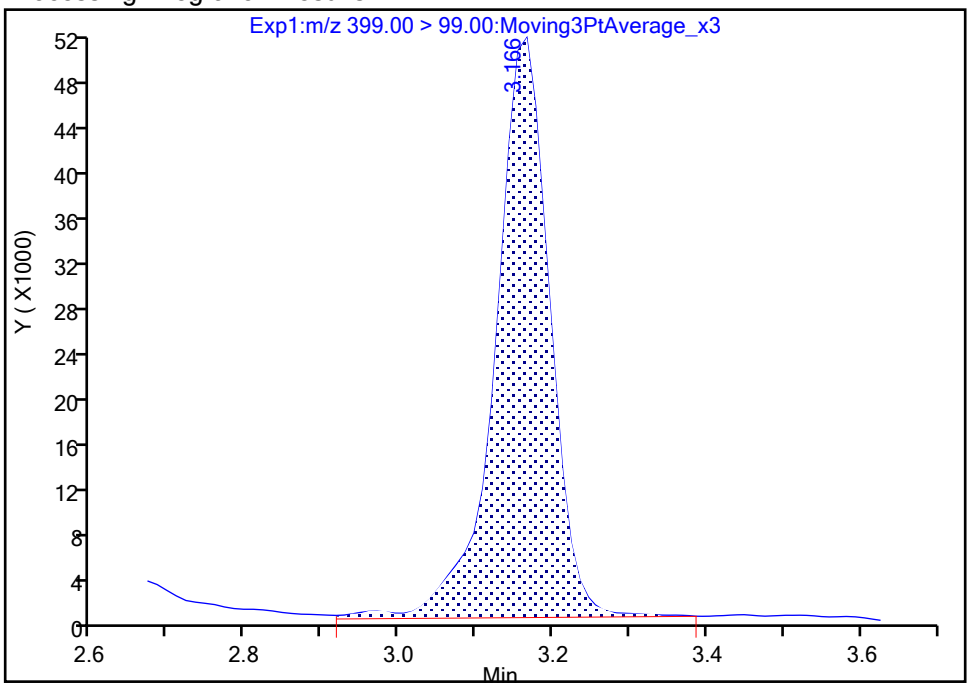
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

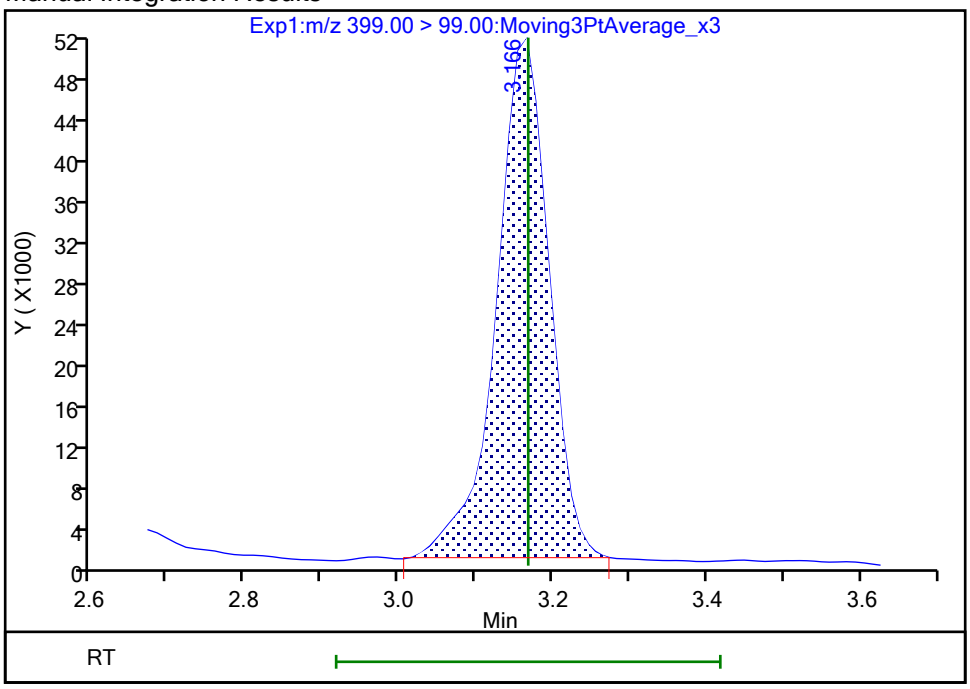
Processing Integration Results

RT: 3.17
Area: 250558
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 239181
Amount: 0.502094
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:15:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

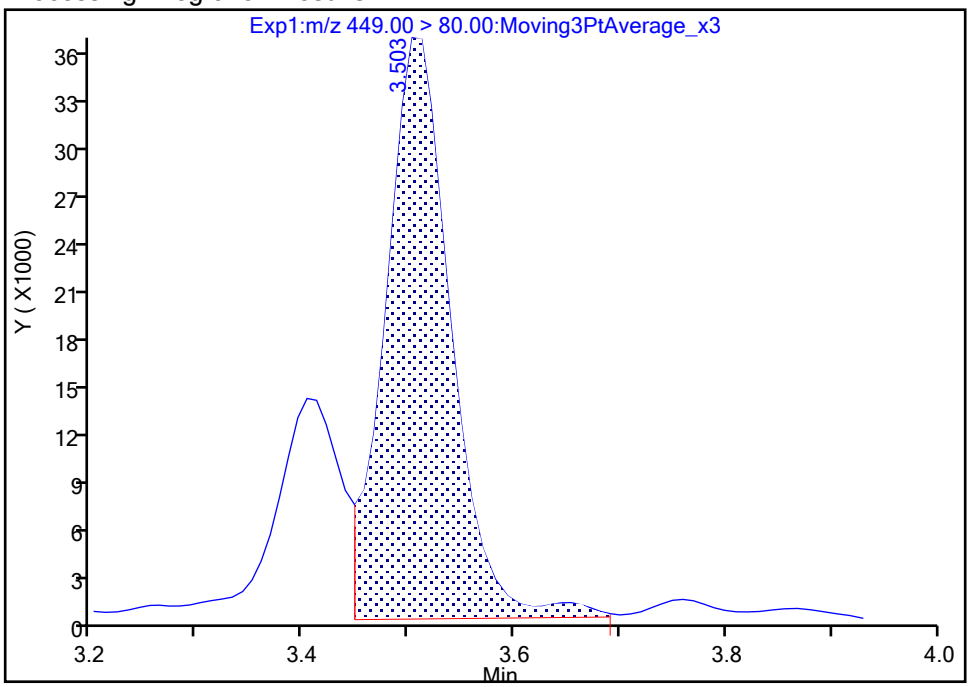
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

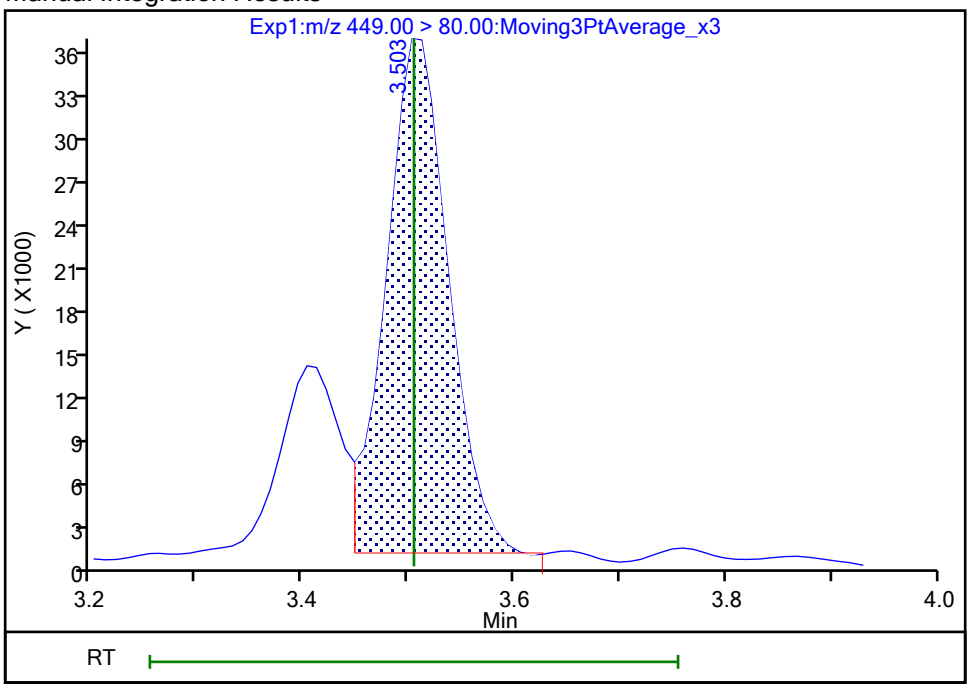
Processing Integration Results

RT: 3.50
Area: 153333
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 142149
Amount: 0.131777
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

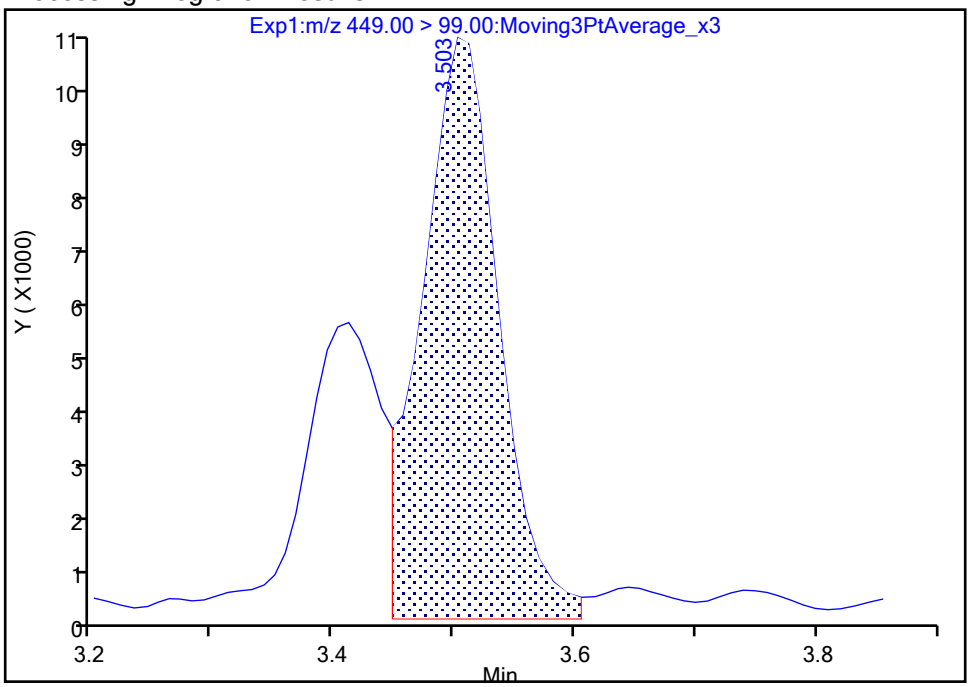
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

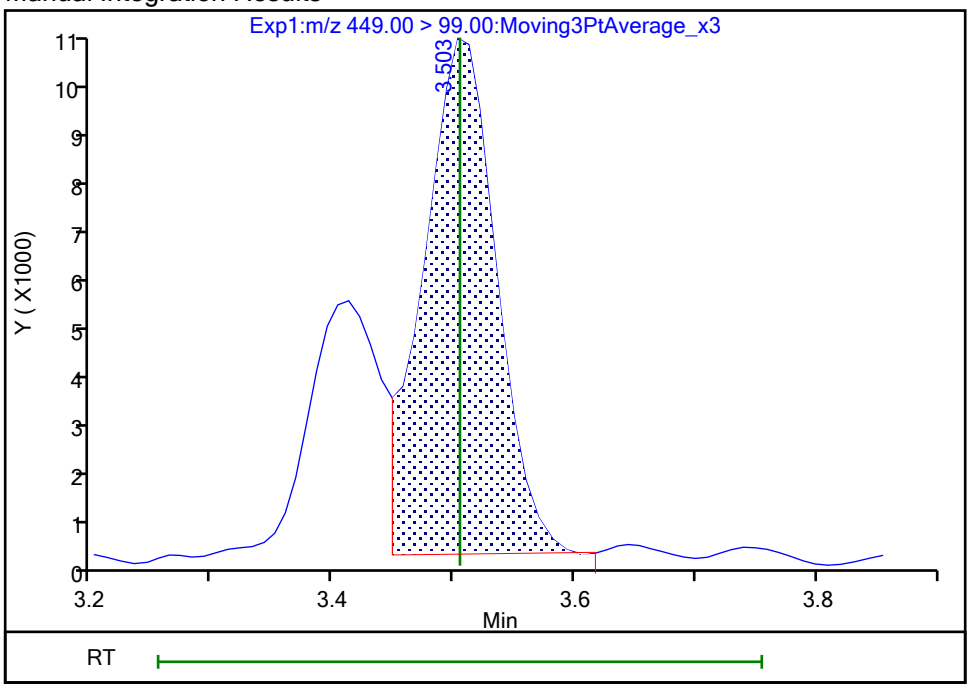
Processing Integration Results

RT: 3.50
Area: 47726
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 43744
Amount: 0.131777
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

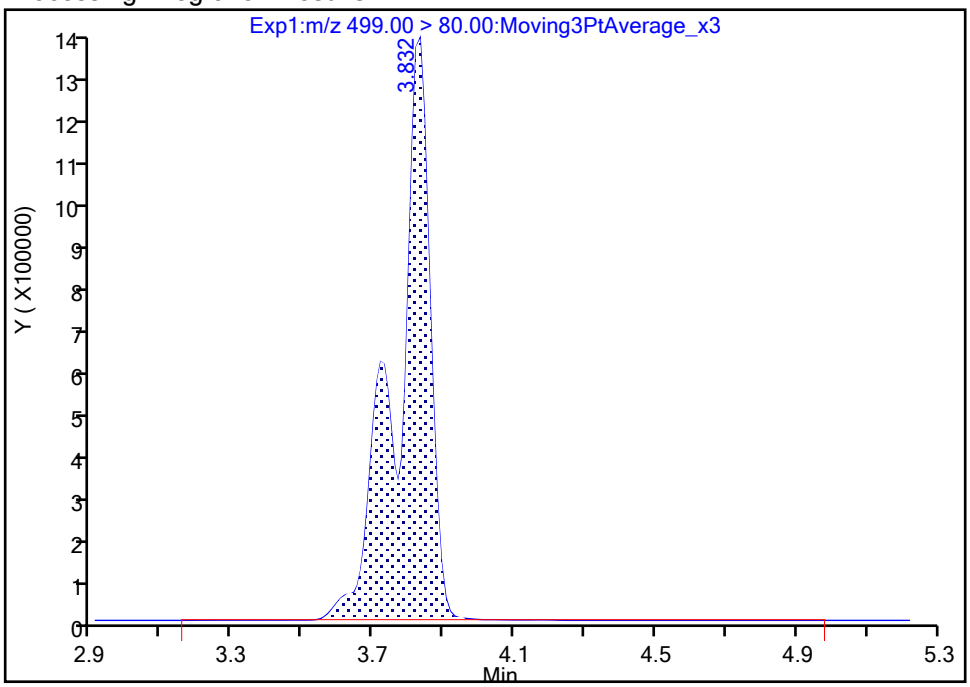
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

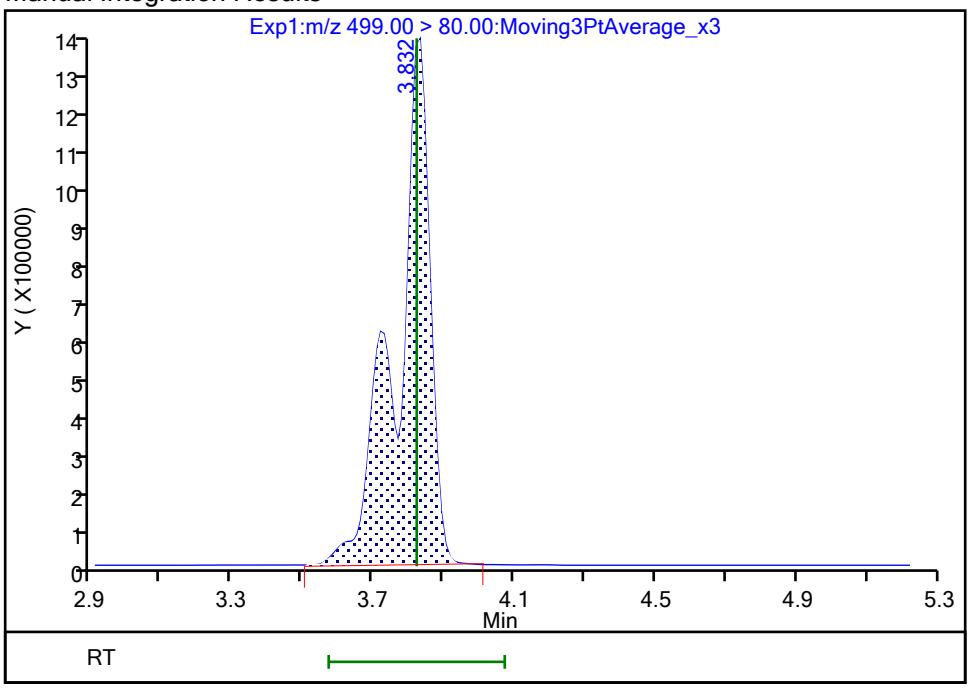
Processing Integration Results

RT: 3.83
Area: 8934526
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 8889089
Amount: 10.210159
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

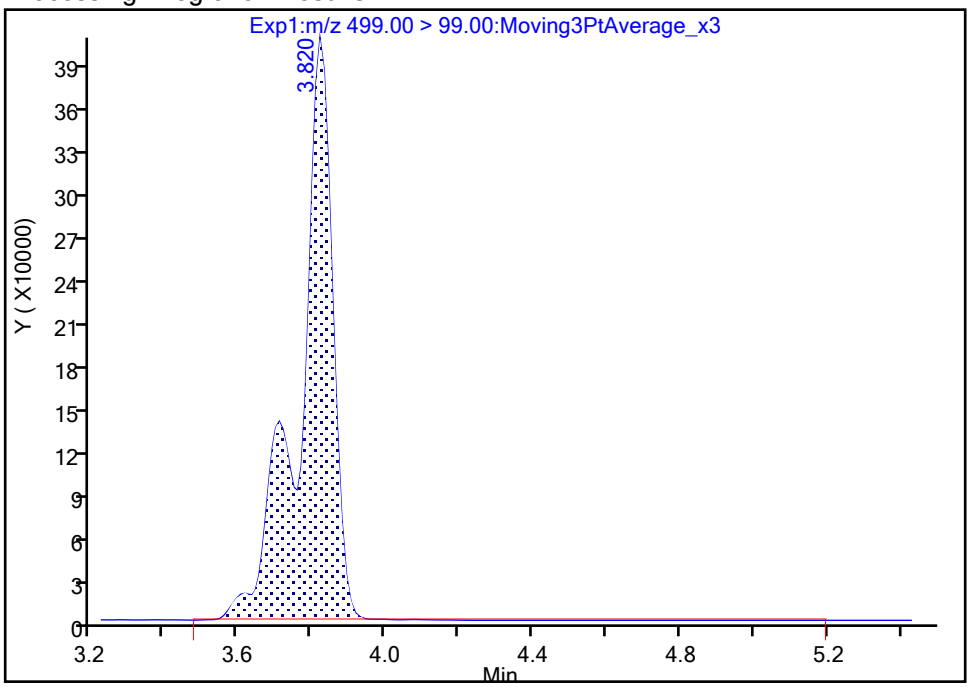
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

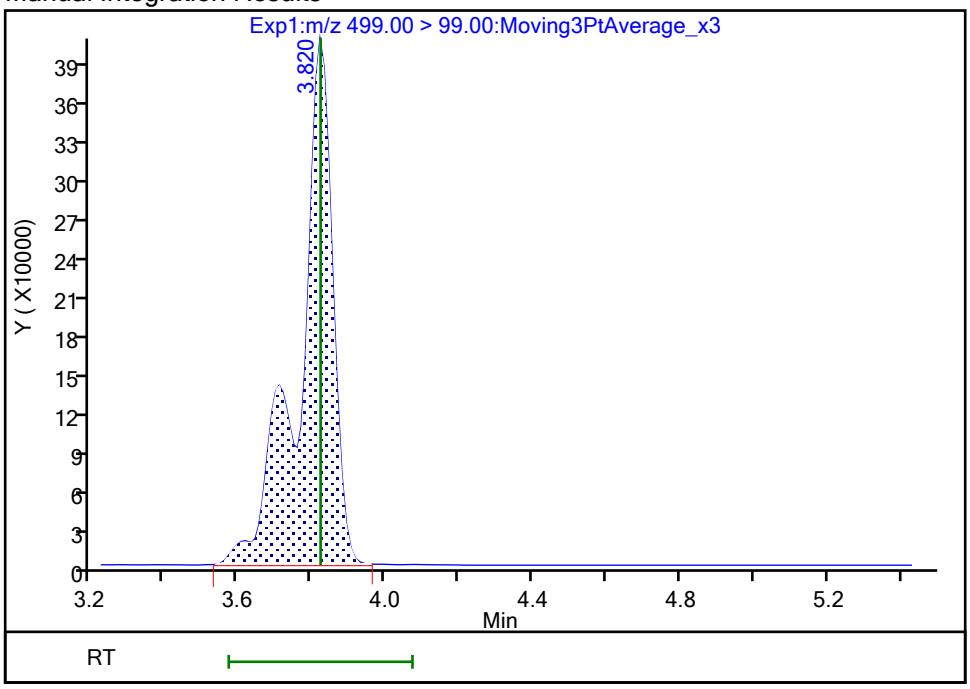
Processing Integration Results

RT: 3.82
Area: 2601136
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2587984
Amount: 10.210159
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

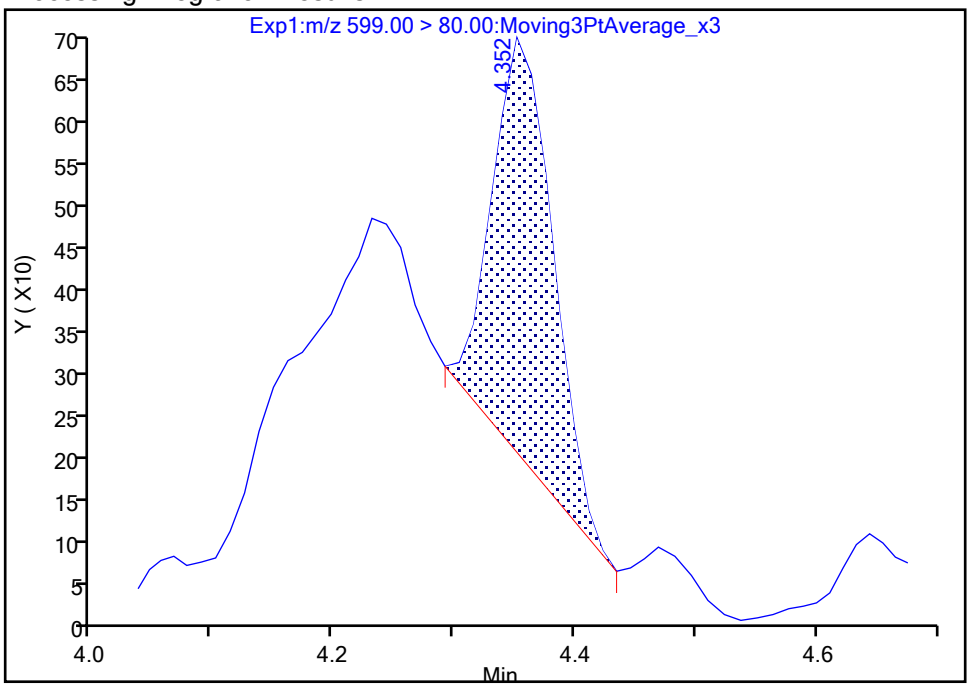
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

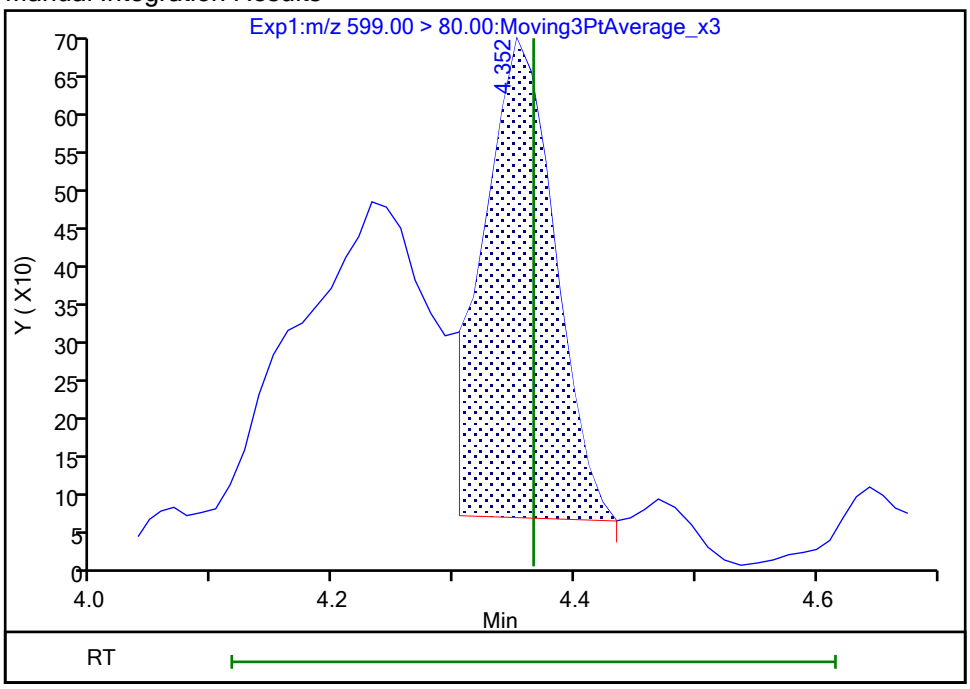
Processing Integration Results

RT: 4.35
Area: 1755
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 2599
Amount: 0.005099
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

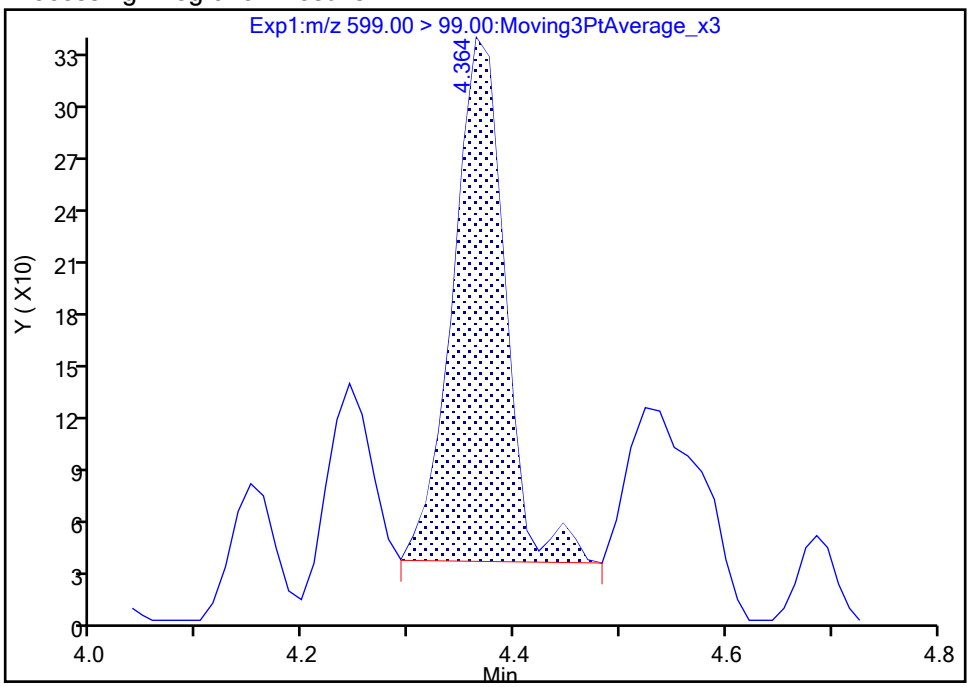
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

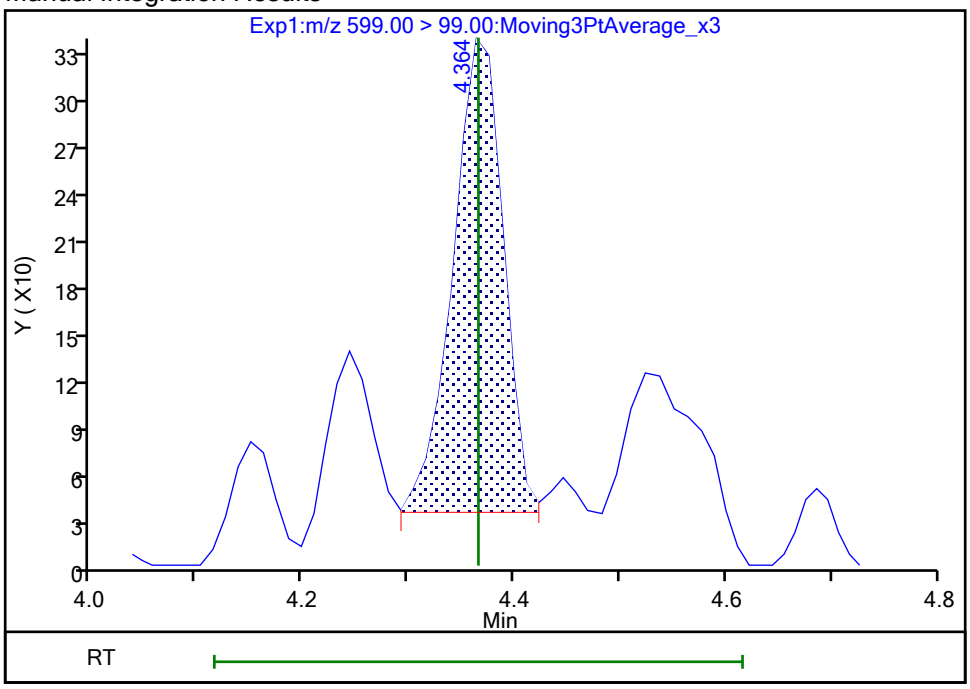
Processing Integration Results

RT: 4.36
Area: 1041
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 999
Amount: 0.005099
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

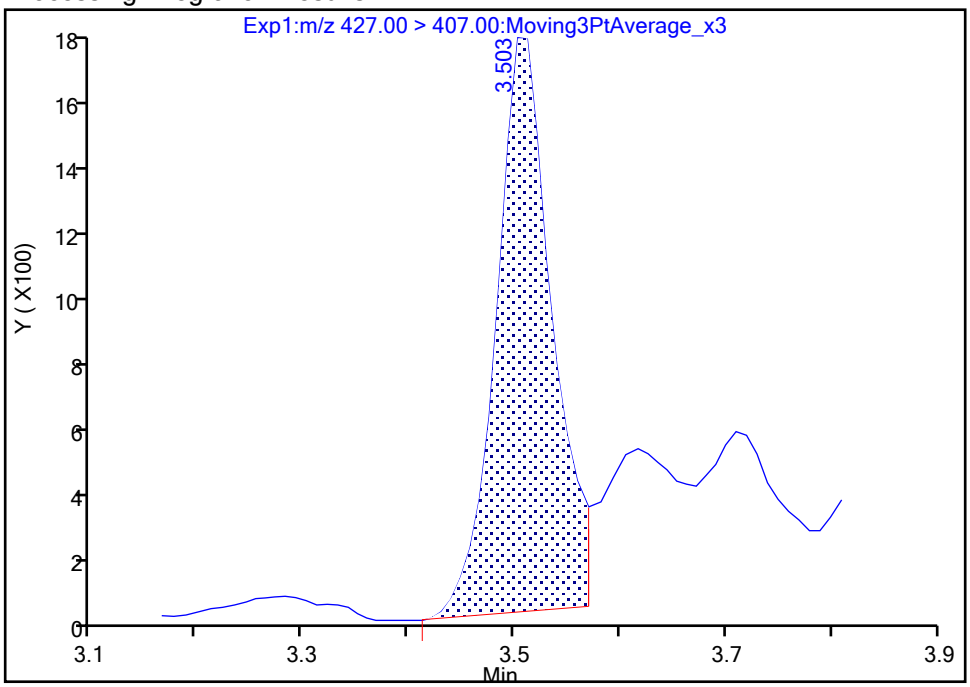
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

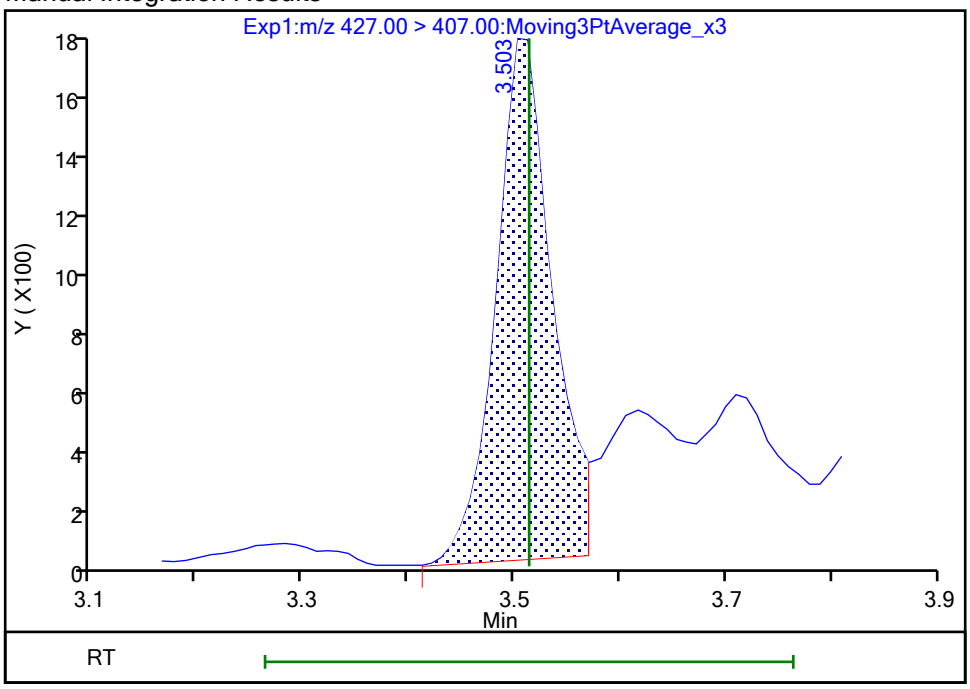
Processing Integration Results

RT: 3.50
Area: 6295
Amount: 0.009639
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 6357
Amount: 0.009734
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

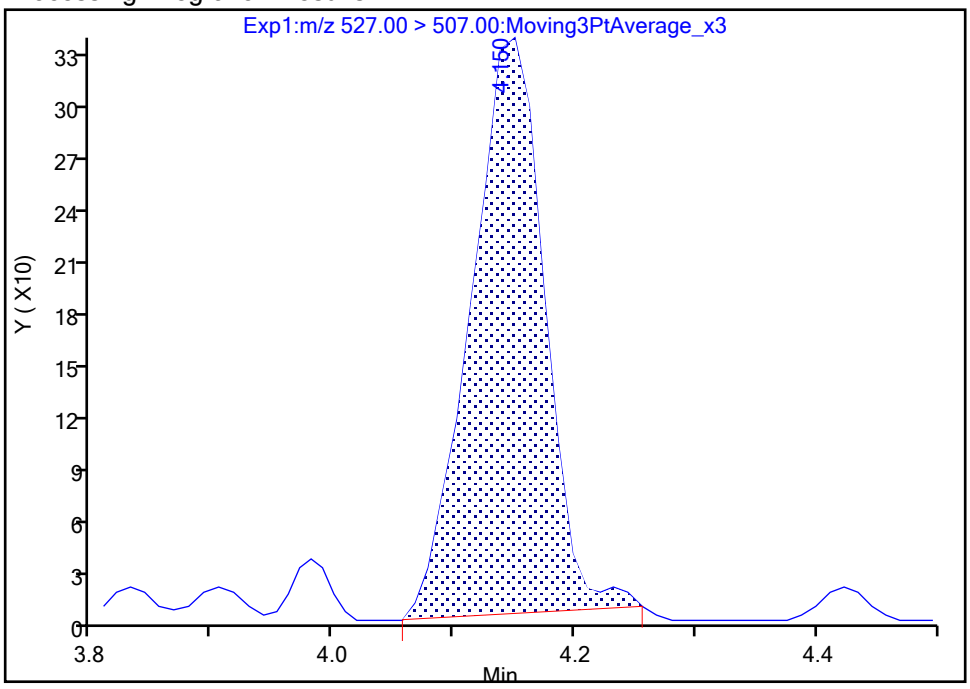
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

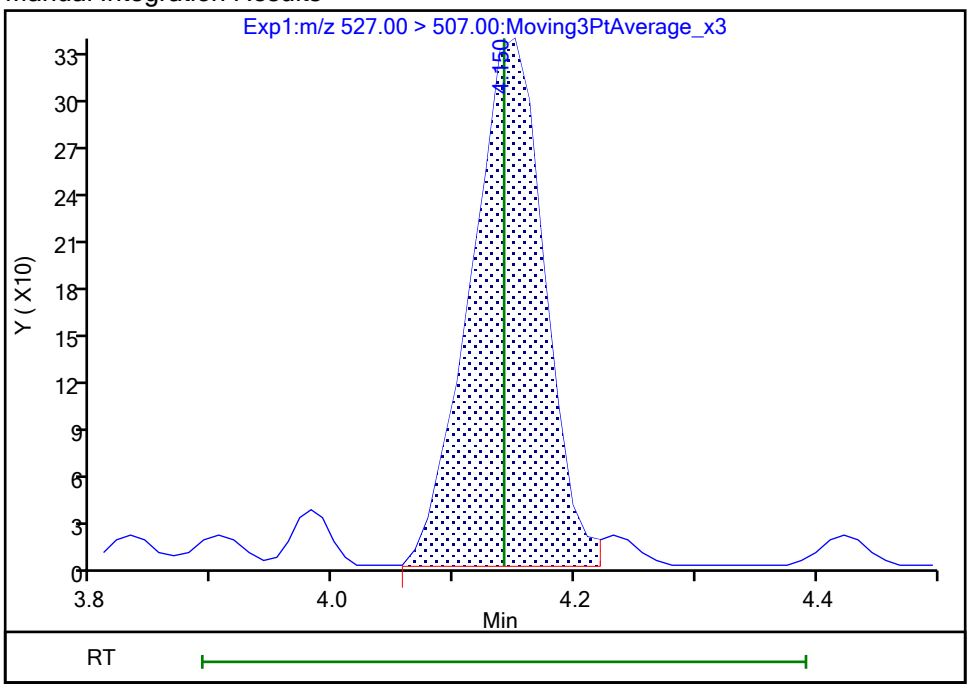
Processing Integration Results

RT: 4.15
Area: 1392
Amount: 0.002388
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 1407
Amount: 0.002414
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

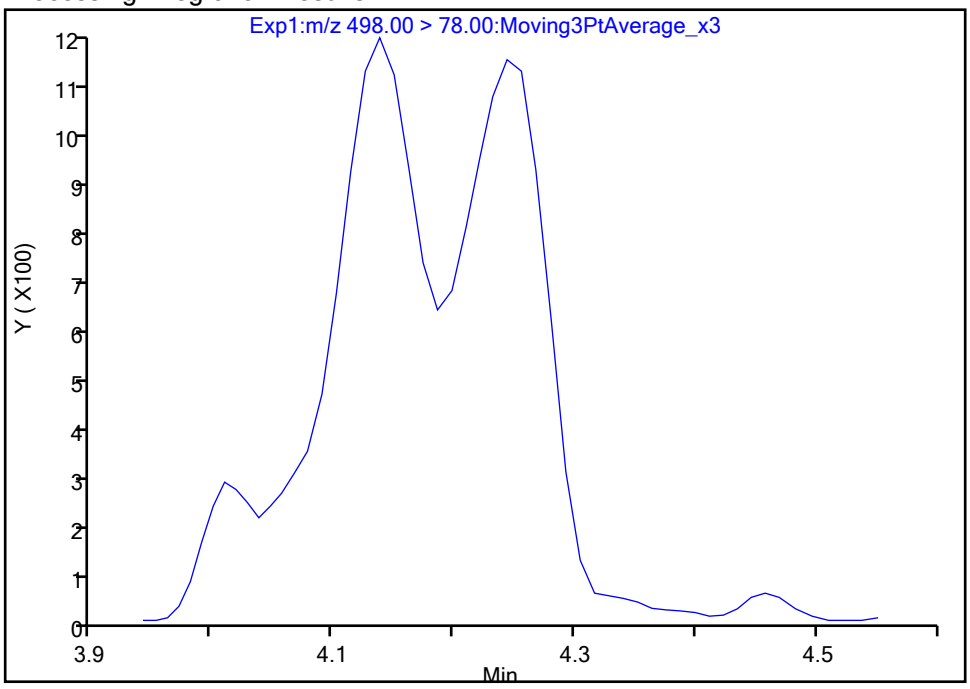
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

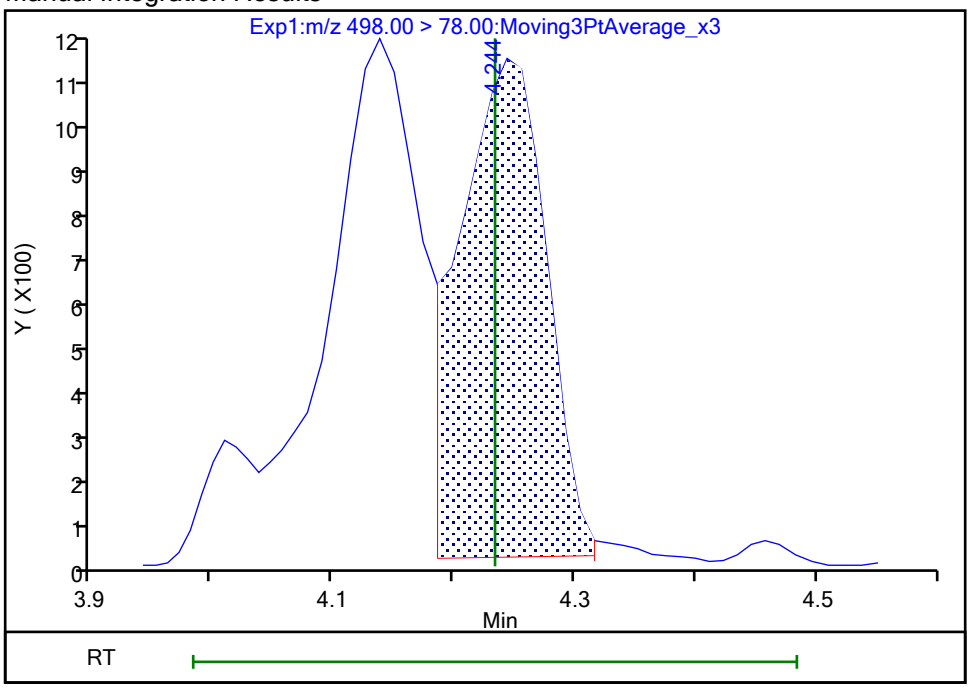
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 5200
Amount: 0.004062
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

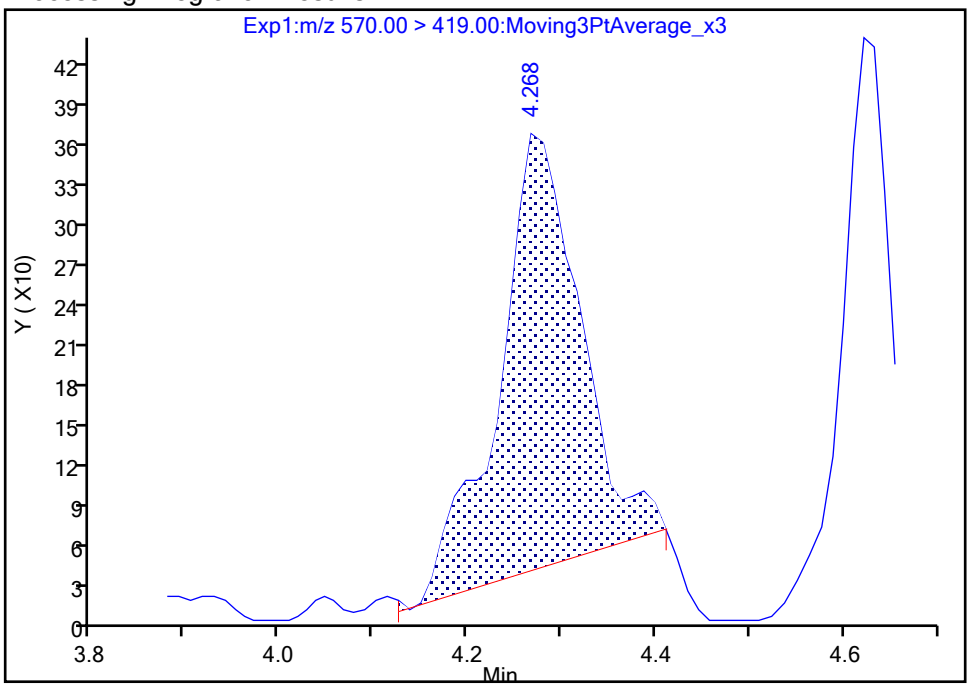
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

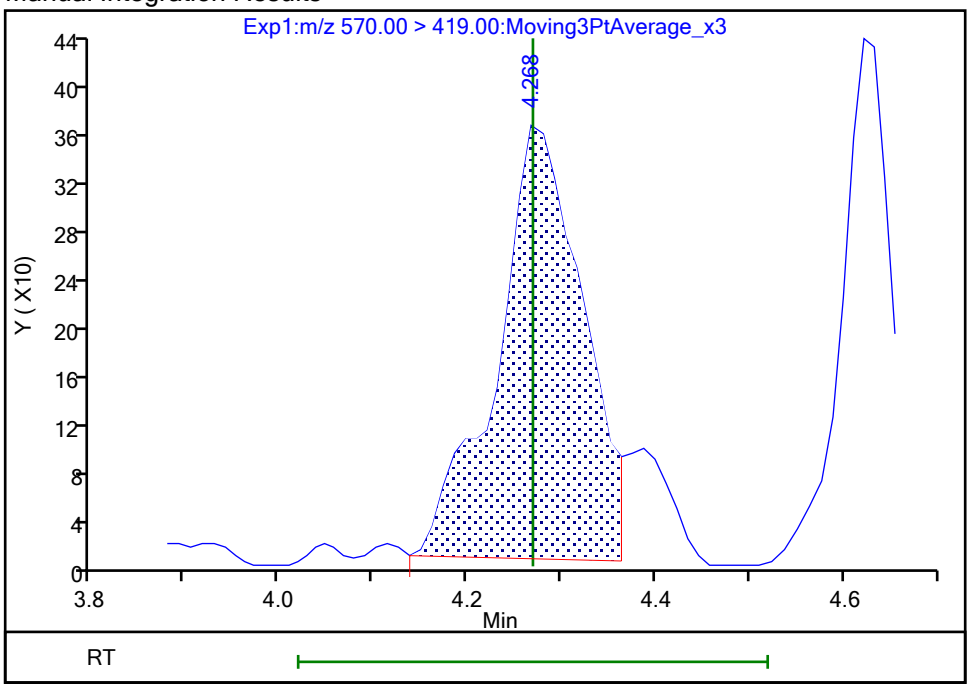
Processing Integration Results

RT: 4.27
Area: 1976
Amount: 0.005620
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 2272
Amount: 0.006462
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

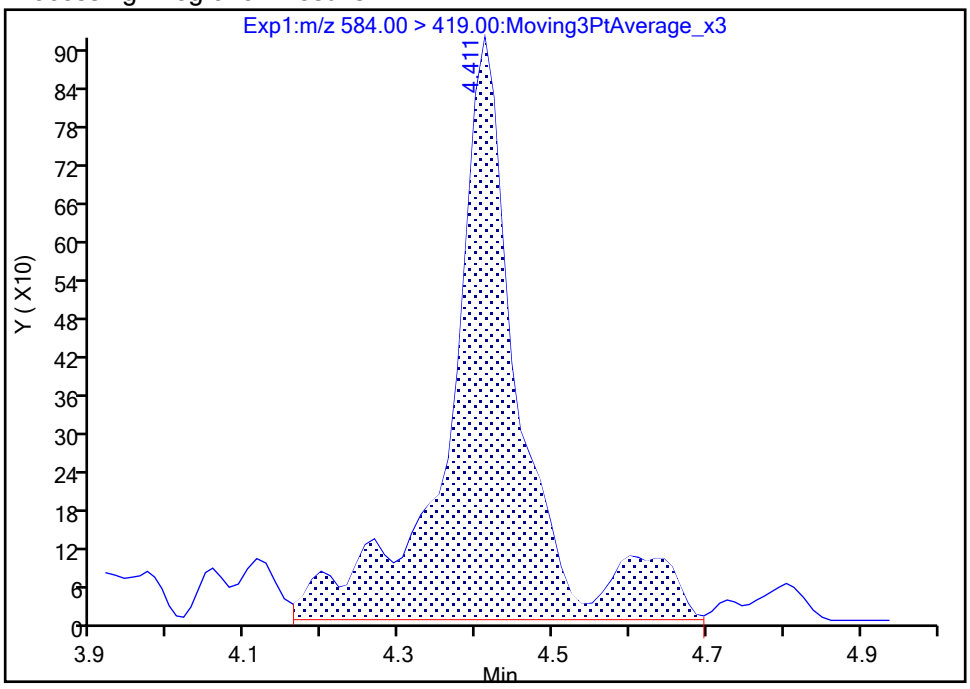
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

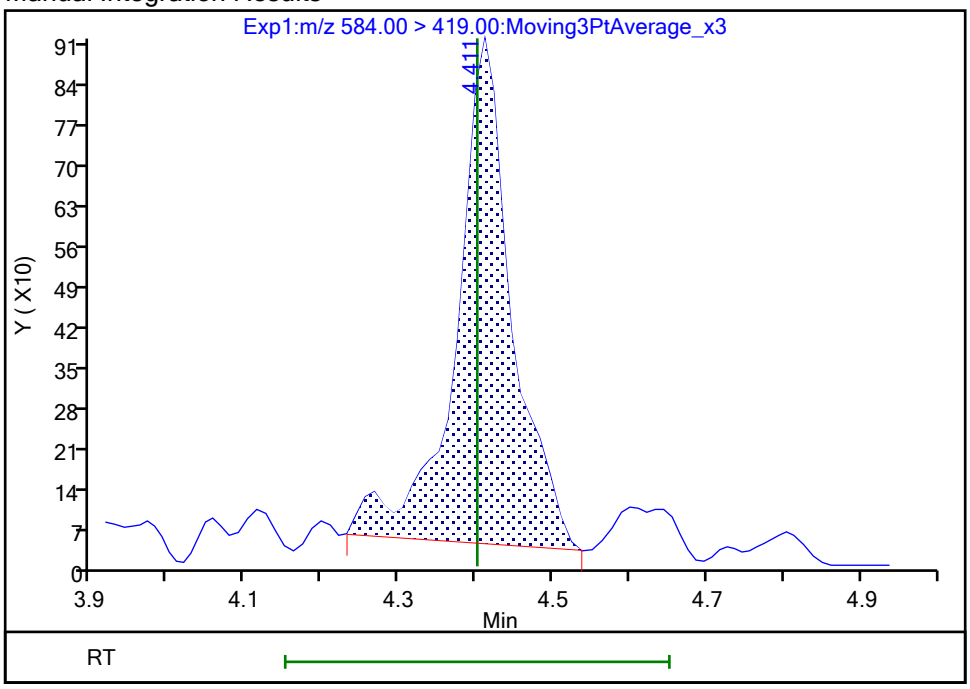
Processing Integration Results

RT: 4.41
Area: 6032
Amount: 0.015879
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 4452
Amount: 0.011720
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

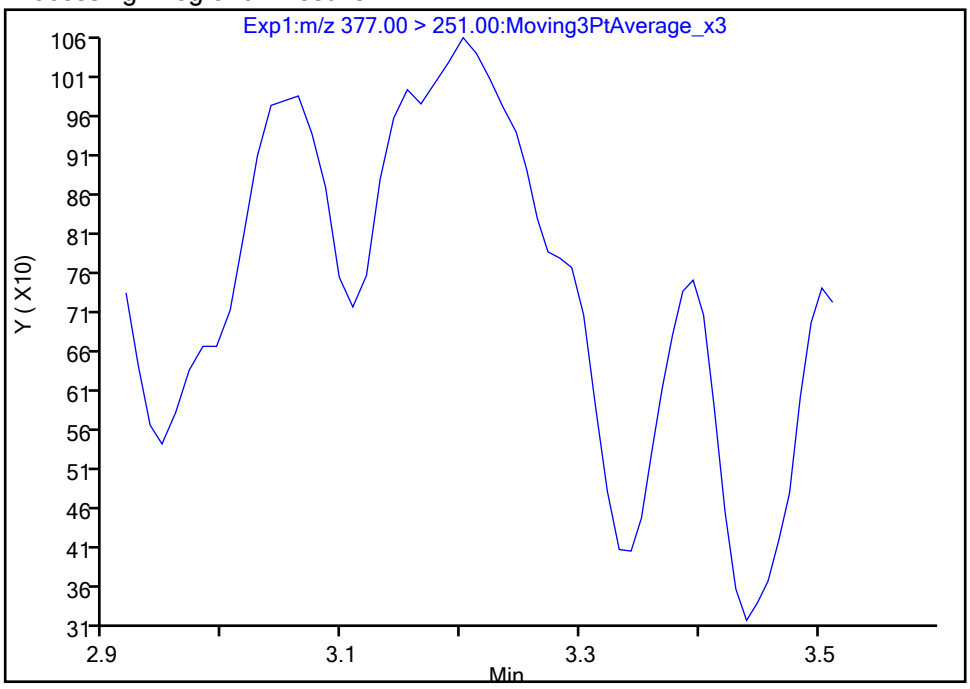
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

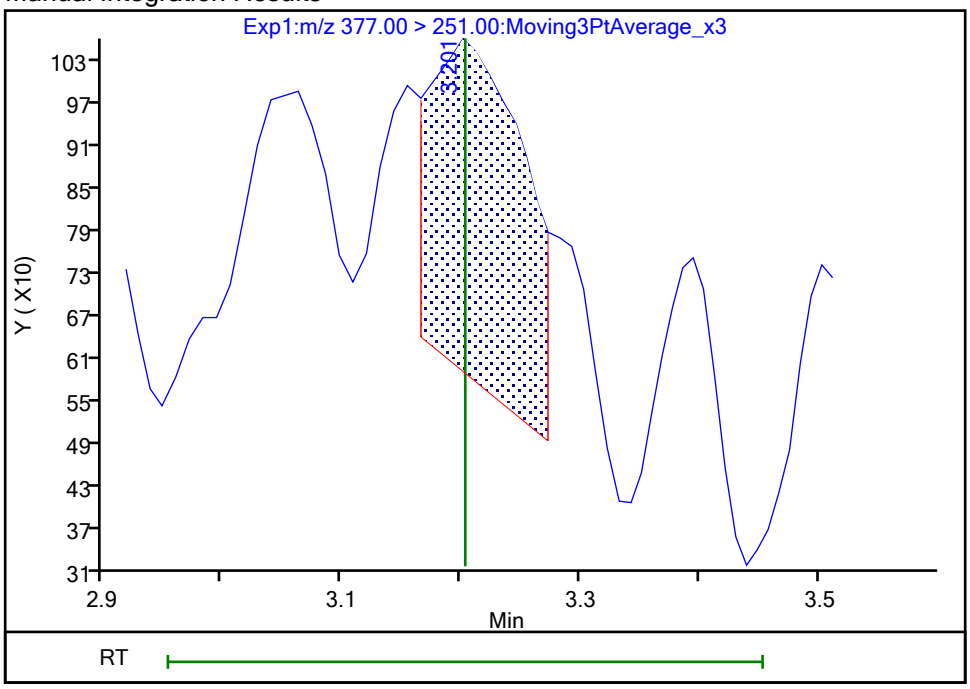
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 2597
Amount: 0.000605
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

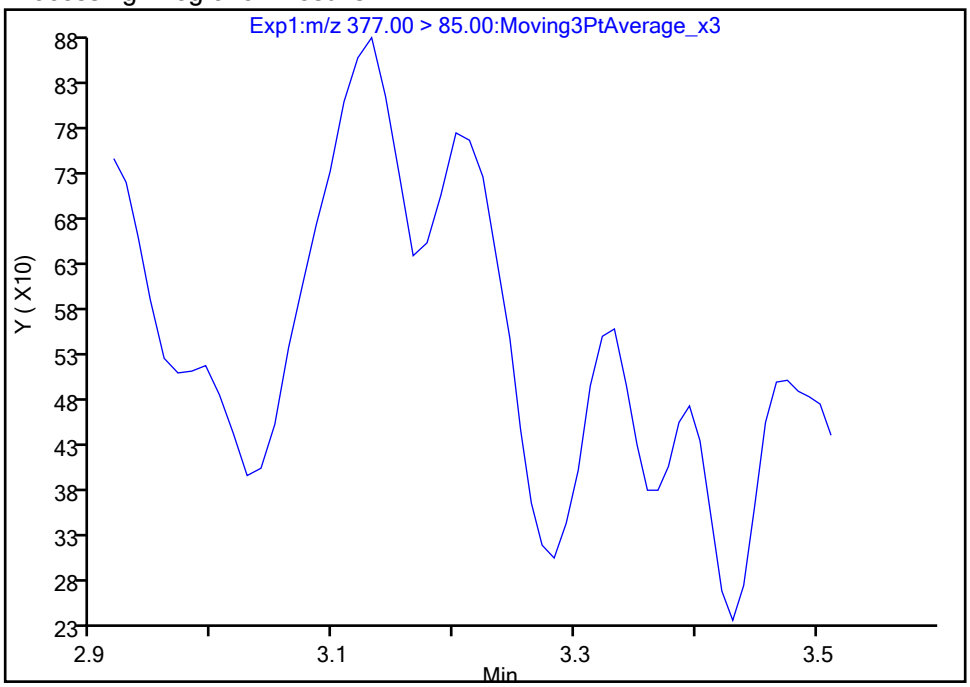
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

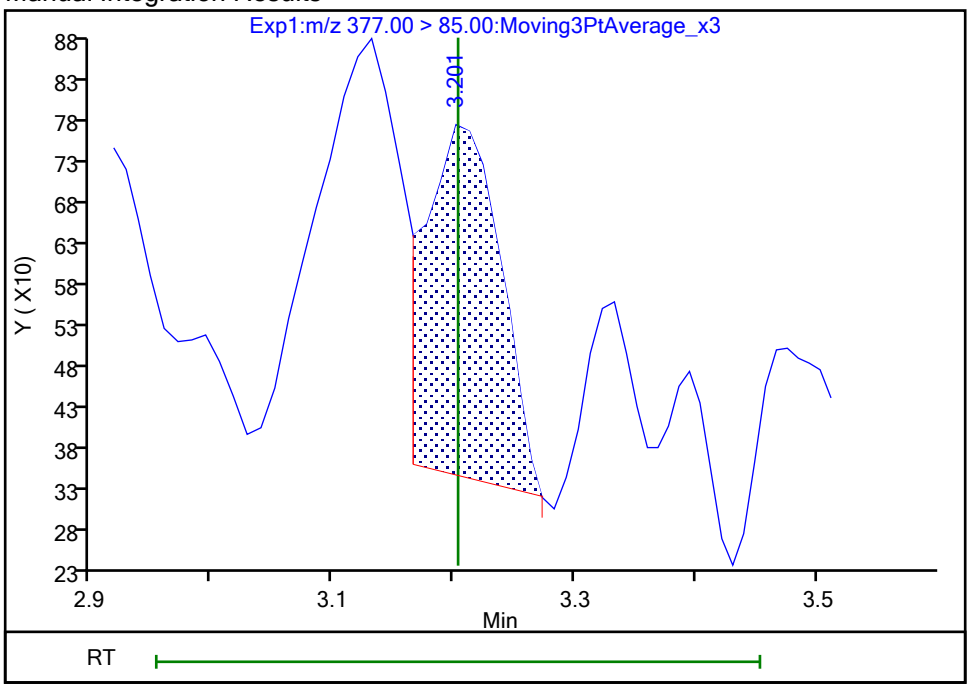
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 1808
Amount: 0.000605
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:16:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

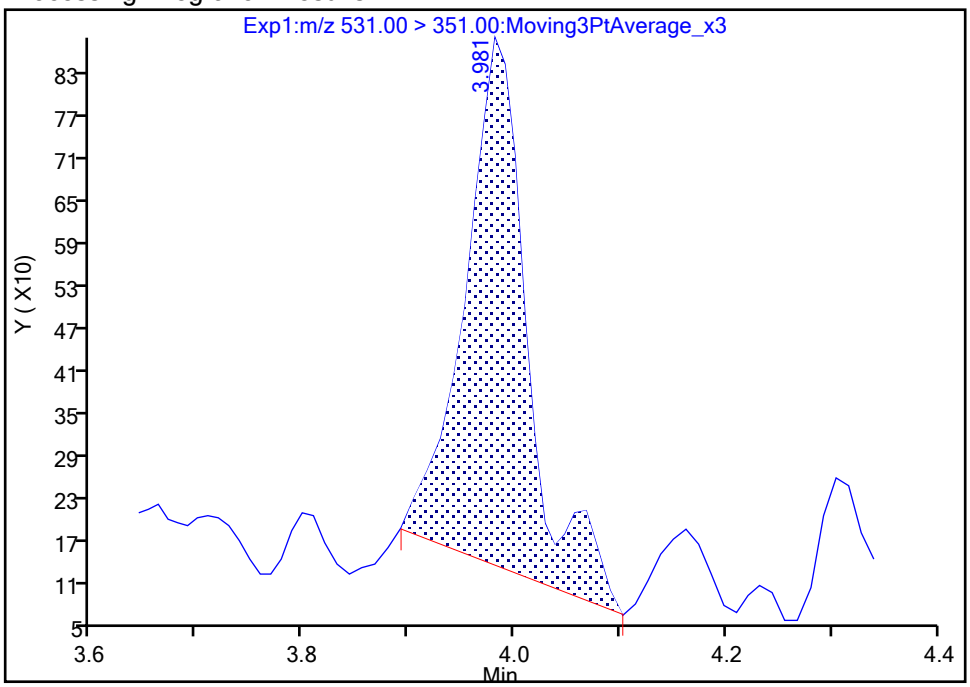
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

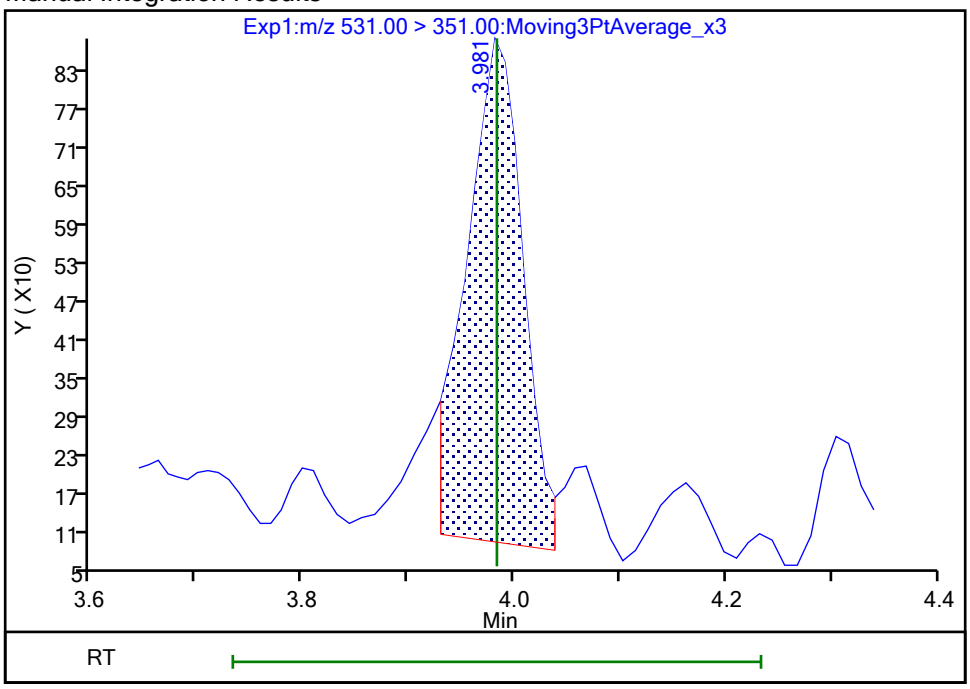
Processing Integration Results

RT: 3.98
Area: 3066
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.98
Area: 2883
Amount: 0.001082
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:17:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

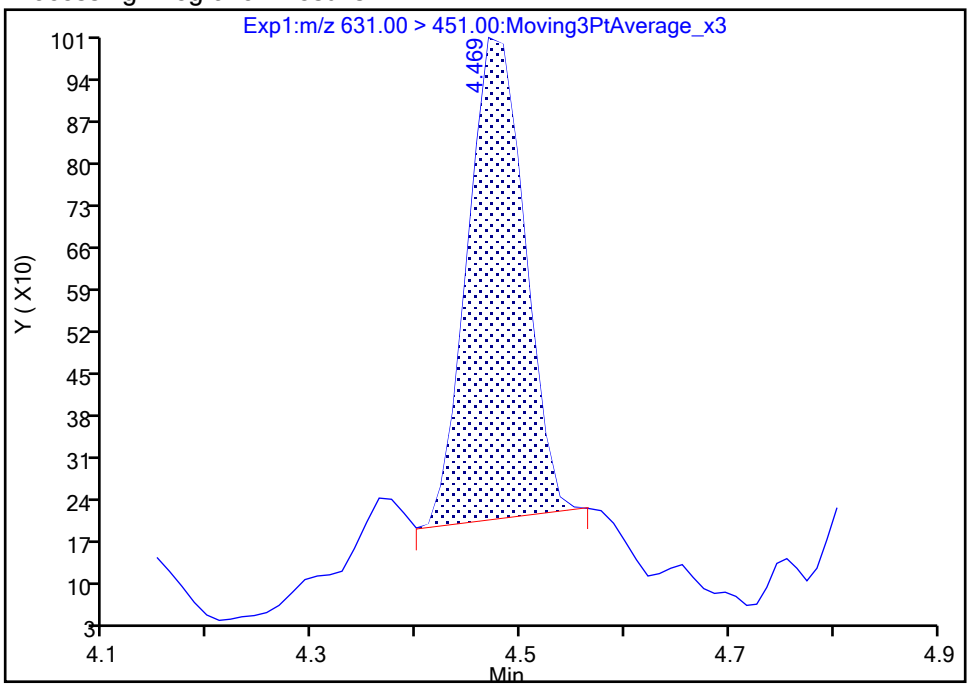
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

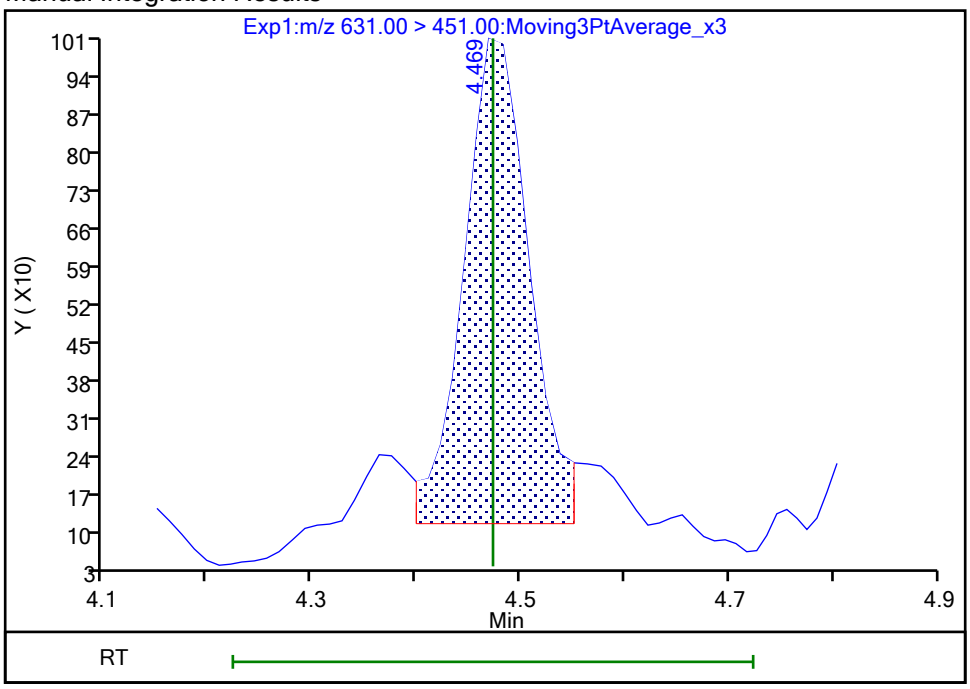
Processing Integration Results

RT: 4.47
Area: 3054
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 3903
Amount: 0.000955
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:18:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

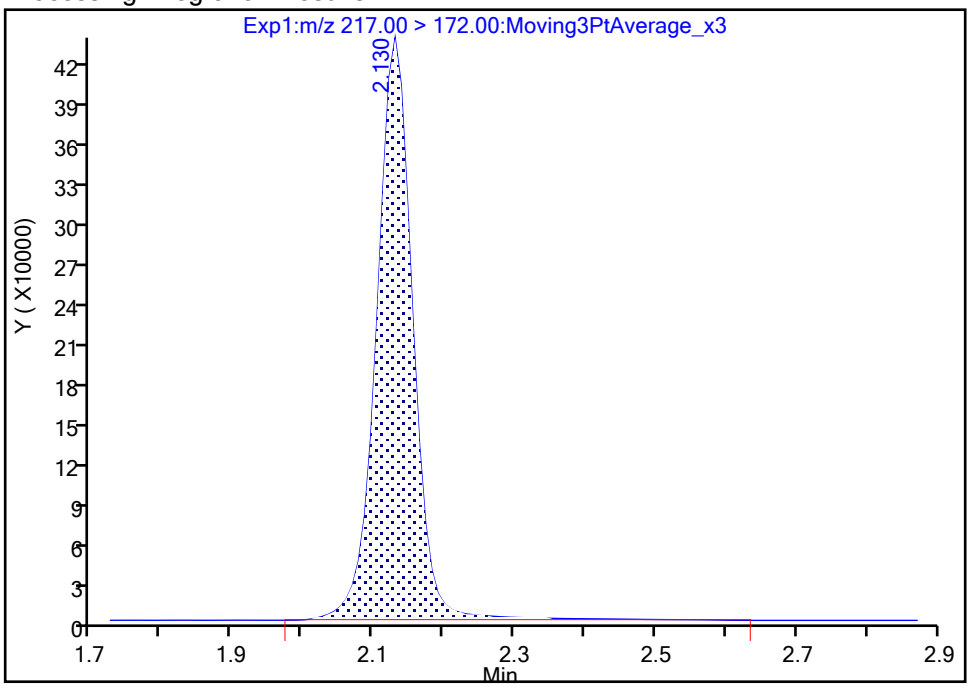
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

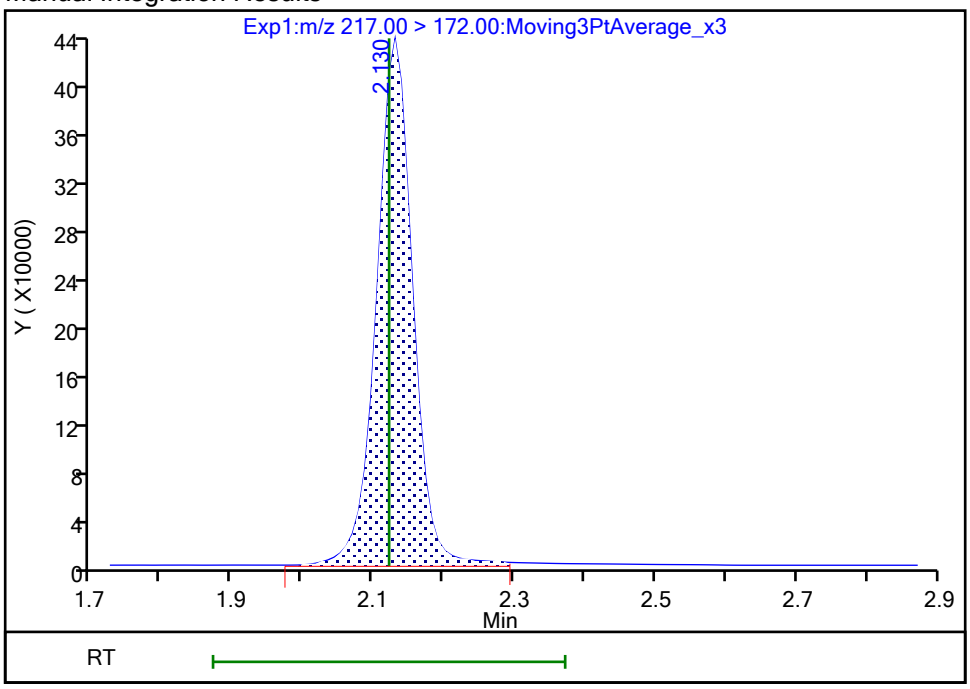
Processing Integration Results

RT: 2.13
Area: 1579956
Amount: 1.051355
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1561290
Amount: 1.038934
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:13:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

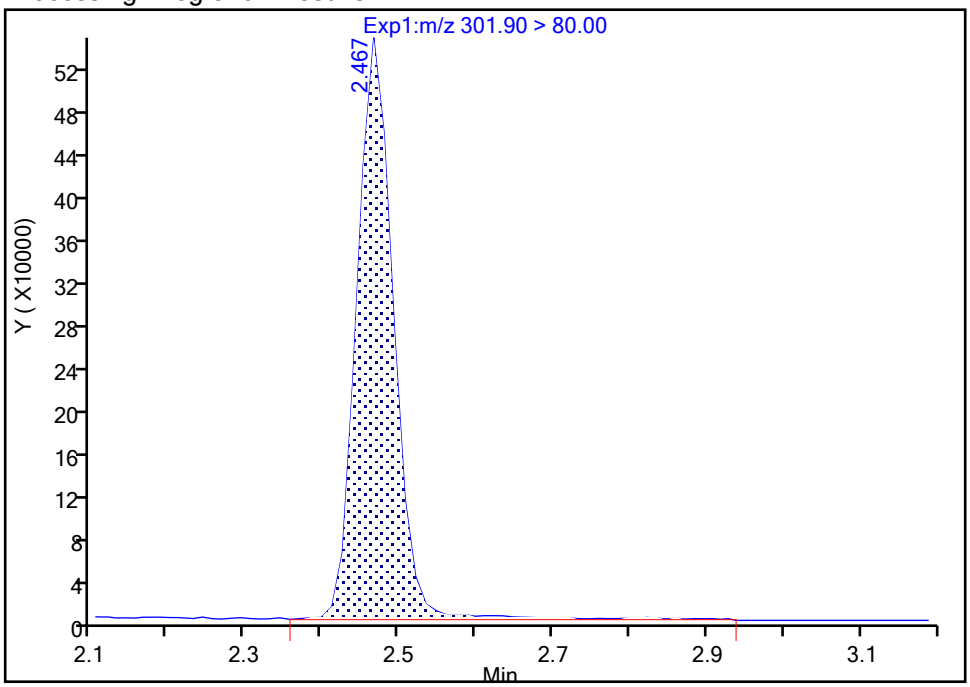
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

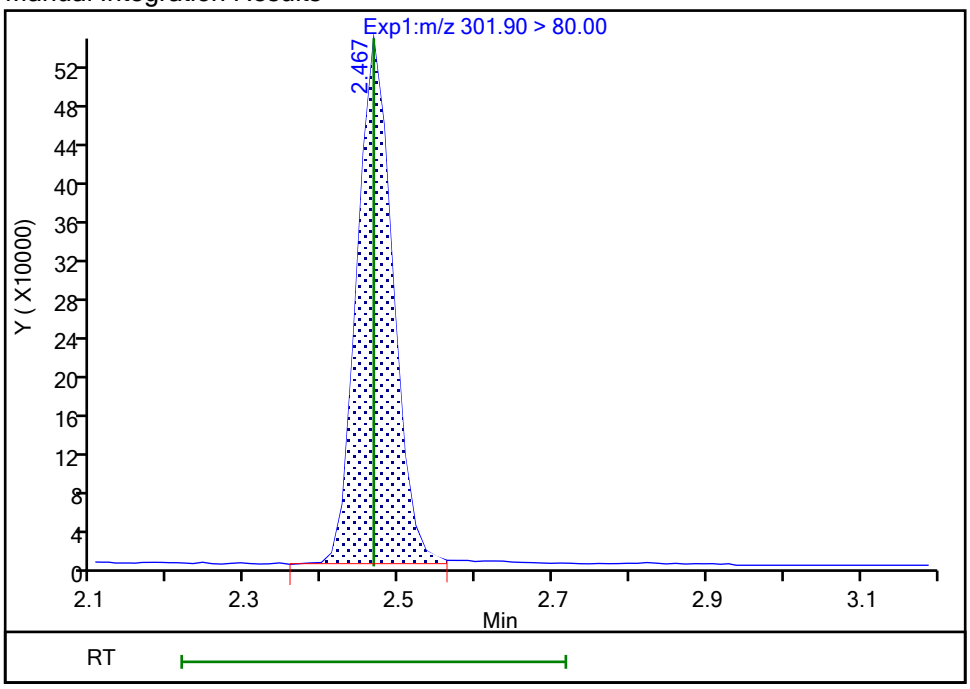
Processing Integration Results

RT: 2.47
Area: 1823776
Amount: 1.155706
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1768579
Amount: 1.120728
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:13:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

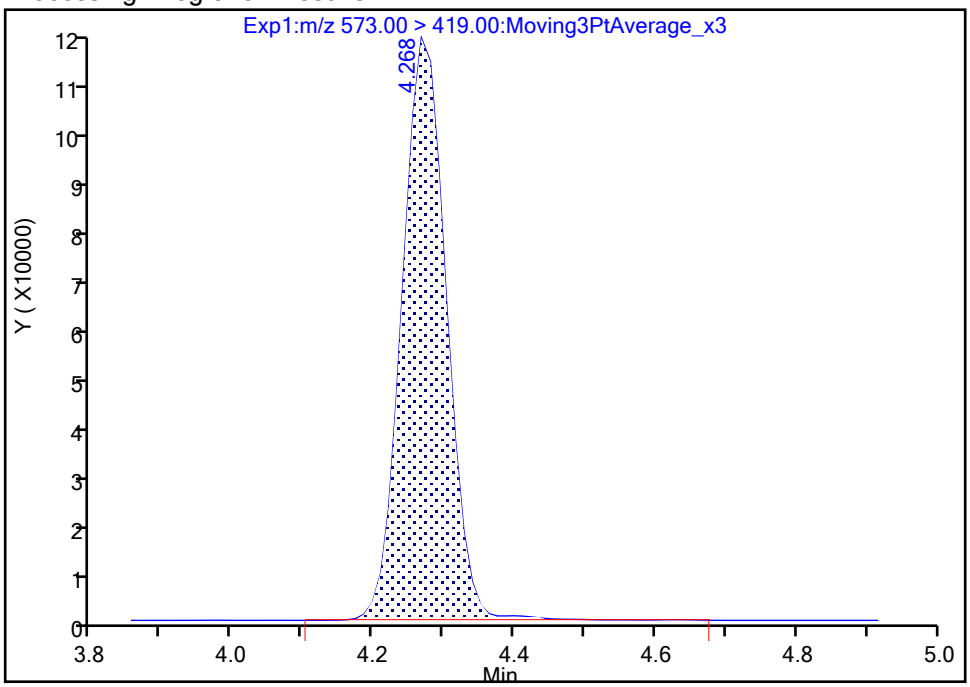
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

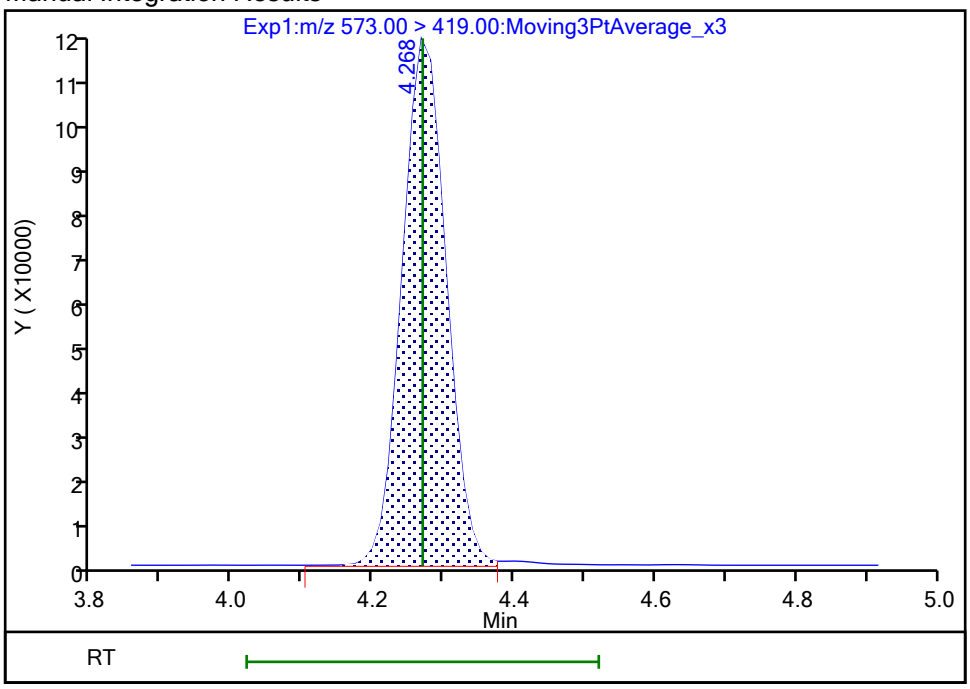
Processing Integration Results

RT: 4.27
Area: 488694
Amount: 1.216855
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 484306
Amount: 1.205929
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

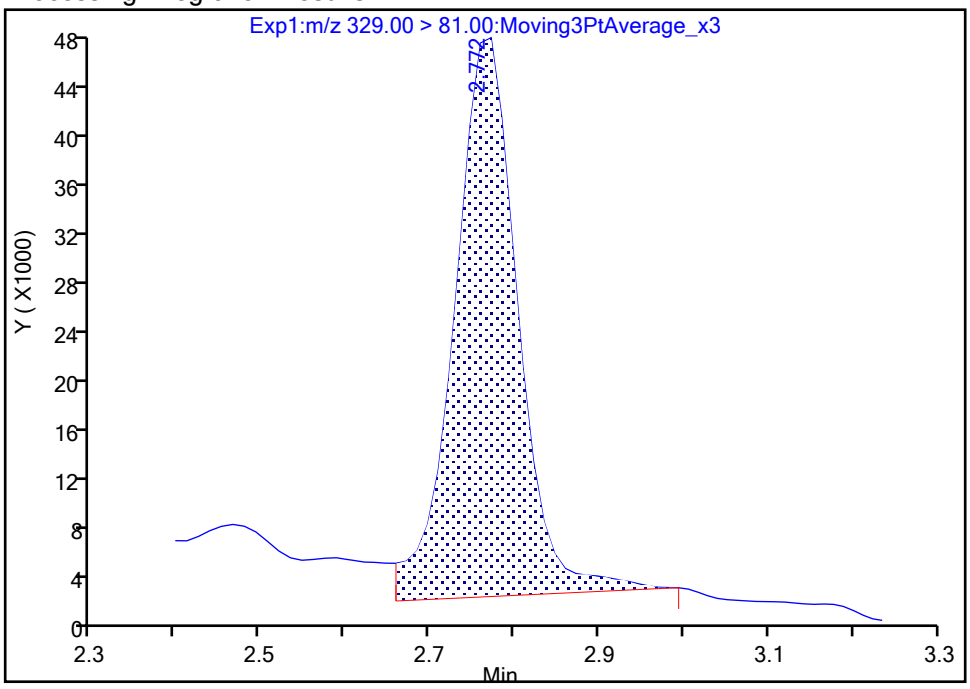
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

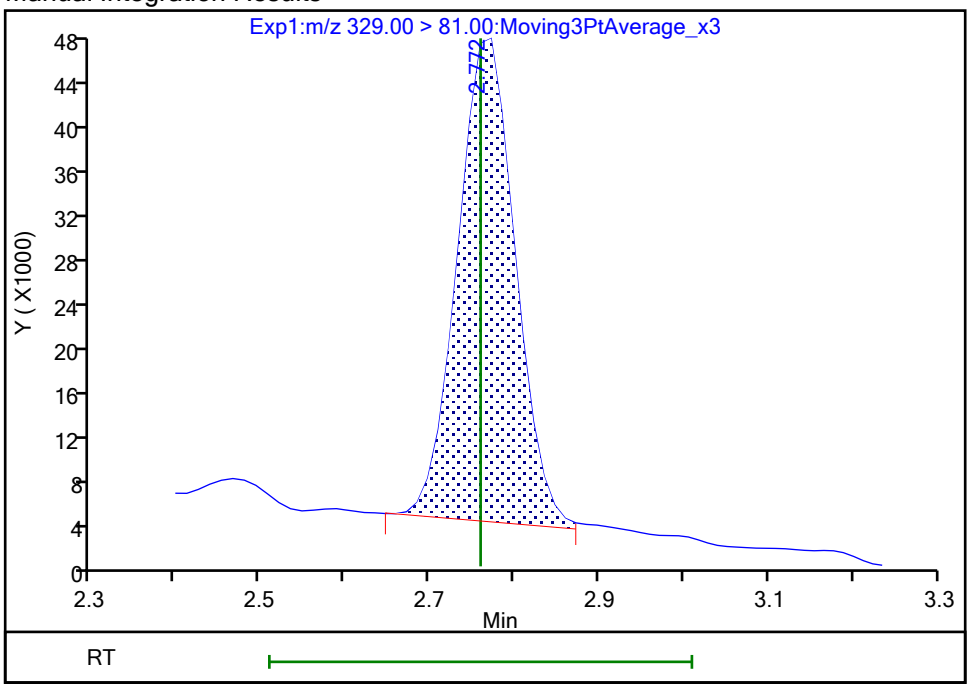
Processing Integration Results

RT: 2.77
Area: 237193
Amount: 1.299705
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 205808
Amount: 1.127730
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:13:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

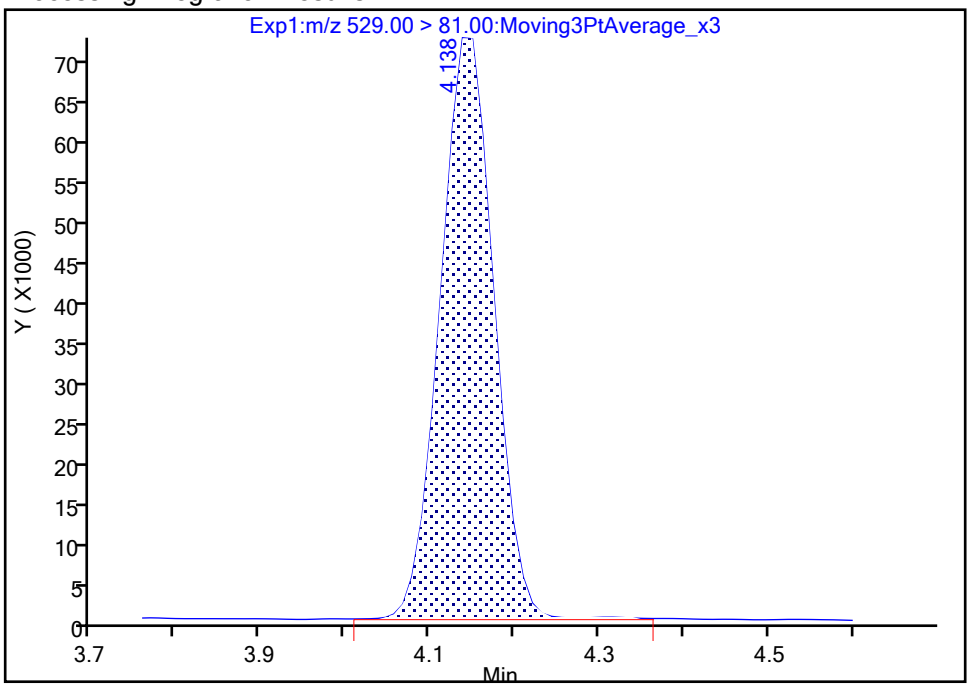
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

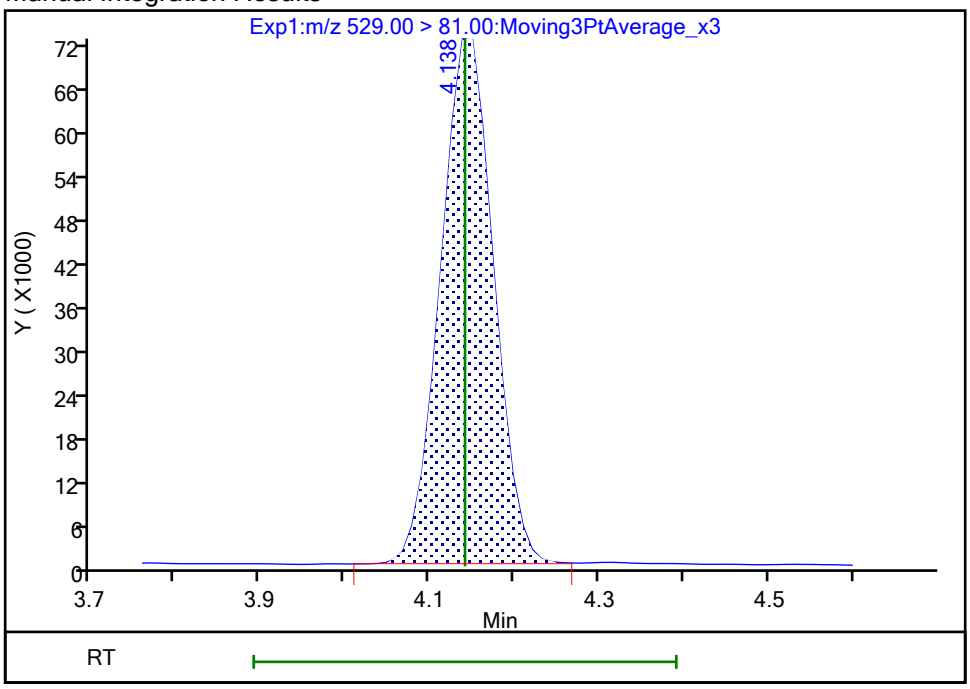
Processing Integration Results

RT: 4.14
Area: 317676
Amount: 1.202033
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 317106
Amount: 1.199876
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

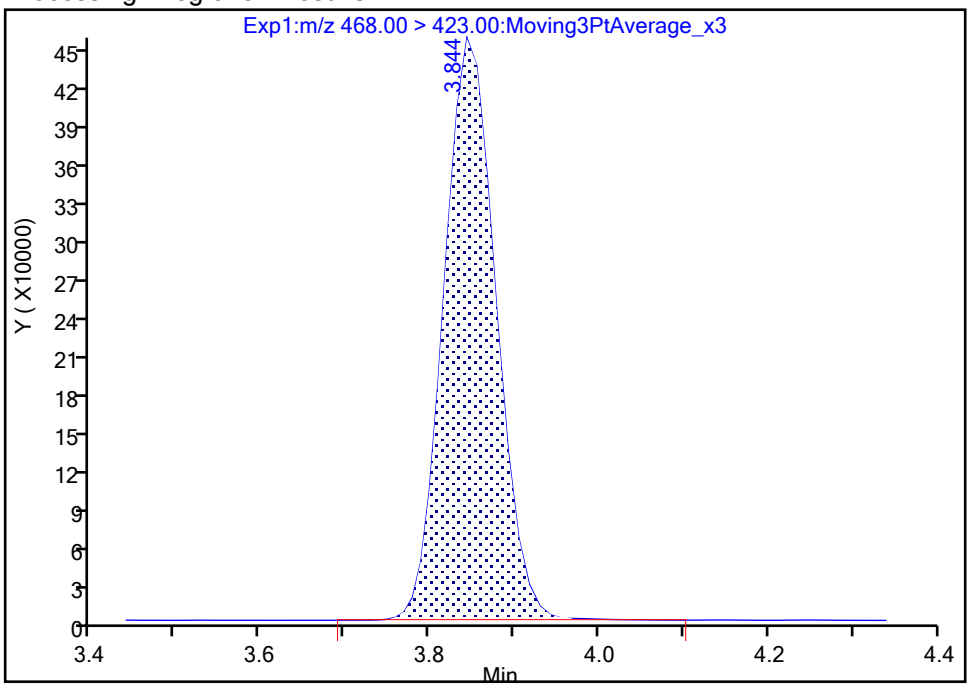
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A31.d				
Injection Date:	23-Oct-2023 19:19:43	Instrument ID:	LC812		
Lims ID:	460-290375-A-4-A	Lab Sample ID:	200-290375-4		
Client ID:	MW91-101323-1021-26				
Operator ID:	LC812user	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 19 13C5 PFNA, CAS: STL00995

Signal: 1

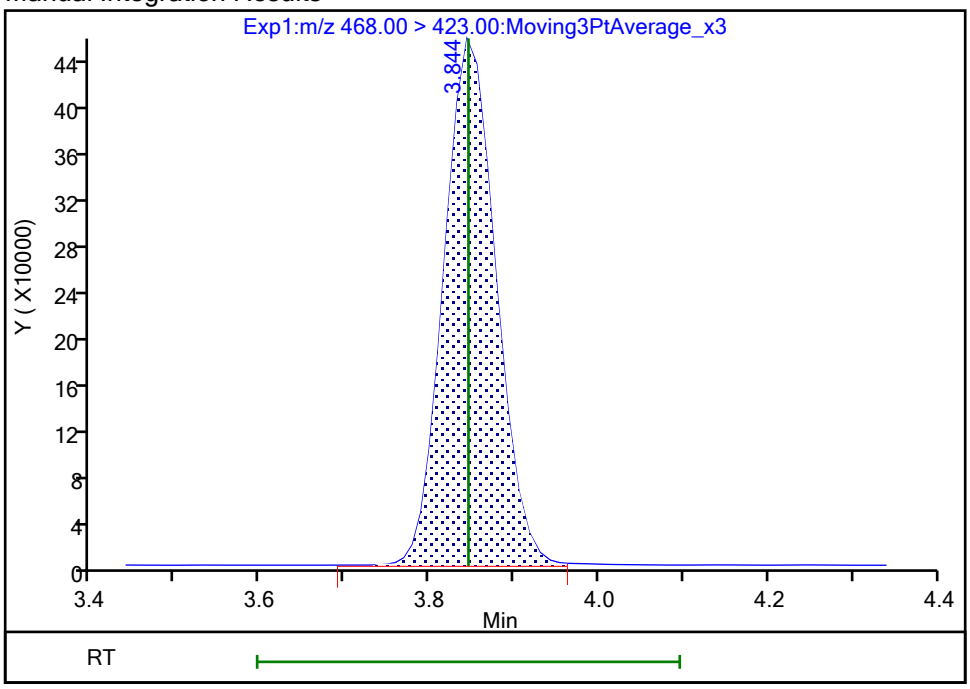
Processing Integration Results

RT: 3.84
Area: 1958537
Amount: 1.220457
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 1953429
Amount: 1.217274
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:14:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW91A-101323-1116-66 Lab Sample ID: 460-290375-5

Matrix: Water Lab File ID: PA231023A32.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:16

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 313.9(mL) Date Analyzed: 10/23/2023 19:27

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	10.8		3.98	0.96
2706-90-3	Perfluoropentanoic acid	5.34		1.59	0.54
307-24-4	Perfluorohexanoic acid	12.0		1.59	0.52
375-85-9	Perfluoroheptanoic acid	4.22		1.59	0.43
335-67-1	Perfluorooctanoic acid	25.3		1.59	0.61
375-95-1	Perfluorononanoic acid	1.28	J	1.59	0.39
335-76-2	Perfluorodecanoic acid	0.45	J	1.59	0.37
2058-94-8	Perfluoroundecanoic acid	1.59	U	1.59	0.44
307-55-1	Perfluorododecanoic acid	1.59	U	1.59	0.39
72629-94-8	Perfluorotridecanoic acid	1.59	U	1.59	0.38
376-06-7	Perfluorotetradecanoic acid	1.59	U	1.59	0.51
375-73-5	Perfluorobutanesulfonic acid	15.0		1.59	0.49
2706-91-4	Perfluoropentanesulfonic acid	21.2		1.59	0.40
355-46-4	Perfluorohexanesulfonic acid	50.3		1.59	0.44
375-92-8	Perfluoroheptanesulfonic acid	9.10		1.59	0.33
1763-23-1	Perfluorooctanesulfonic acid	631		1.59	0.68
68259-12-1	Perfluorononanesulfonic acid	1.59	U	1.59	0.32
335-77-3	Perfluorodecanesulfonic acid	1.59	U	1.59	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	3.98	U	3.98	1.04
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61
754-91-6	Perfluorooctanesulfonamide	1.59	U	1.59	0.73
2355-31-9	NMeFOSAA	3.98	U	3.98	1.51
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	3.98	U	3.98	1.27
13252-13-6	HFPODA	3.19	U	3.19	0.88
919005-14-4	DONA	1.59	U	1.59	0.33
756426-58-1	9Cl-PF3ONS	1.59	U	1.59	0.25
763051-92-9	11Cl-PF3OUdS	1.59	U	1.59	0.69

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW91A-101323-1116-66 Lab Sample ID: 460-290375-5

Matrix: Water Lab File ID: PA231023A32.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:16

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 313.9(mL) Date Analyzed: 10/23/2023 19:27

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	85		50-150
STL01893	13C5 PFPeA	96		50-150
STL01892	13C4 PFHpA	106		50-150
STL02116	13C2 PFTeDA	98		50-150
STL02337	13C3 PFBS	105		50-150
STL01056	13C8 FOSA	100		50-150
STL02118	d3-NMeFOSAA	112		50-150
STL02117	d5-NEtFOSAA	114		50-150
STL02395	M2-4:2 FTS	103		50-150
STL02279	M2-6:2 FTS	105		50-150
STL02280	M2-8:2 FTS	110		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	101		50-150
STL00991	13C4 PFOS	111		50-150
STL00998	13C2 PFDoA	104		50-150
STL00995	13C5 PFNA	110		50-150
STL00996	13C2 PFDA	115		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	114		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d
Lims ID: 460-290375-A-5-A
Client ID: MW91A-101323-1116-66
Sample Type: Client
Inject. Date: 23-Oct-2023 19:27:54 ALS Bottle#: 29 Worklist Smp#: 32
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-5-A
Misc. Info.: 200-0057509-032 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:40 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:24:30
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.122	-0.001	0.604	1471505	1.06		84.5	1709	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	405710	0.3402			11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.439	0.0	0.695	1297493	1.20		96.0	288	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	187627	0.1675			0.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1784215	1.22		105	16291	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	808062	0.4714	Target=2.06		5.7	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	427932		1.89(1.03-3.09)		37.5	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.786	204256	1.21		103	4.4	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1385846	1.26		101	2293	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	459199	0.3764	Target=14.12		3.0	M
313.00 > 119.00	2.797	2.797	0.0	1.000	31307		14.67(7.06-21.17)		7.5	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	943660	0.6659	Target=2.72		11.6	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	543412		1.74(1.36-4.09)		91.5	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	255077	1.20		95.9	2257	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.901	1283267	1.22		104	7367	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1895932	1.58	Target=3.32		58.8	M
399.00 > 99.00	3.153	3.168	-0.015	0.996	1126462		1.68(1.66-4.98)		441	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	190507	0.1323	Target=4.17		2.5	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	46992		4.05(2.09-6.26)		22.4	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.901	1605399	1.33		106	4394	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.917	304005	0.2858	Target=4.83		10.5	M
449.00 > 99.00	3.493	3.505	-0.012	0.915	115364		2.64(2.41-7.24)		8.4	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.997	270721	1.24		105	19.6	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.003	653	0.001048			1.5	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.003	1244351	0.7936	Target=2.88		14.5	M
413.00 > 169.00	3.520	3.514	0.006	1.003	410031		3.03(1.44-4.32)		342	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	1.000	1840138	1.35		108	4404	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.523	-0.012		1755274	1.25			4345	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.822	-0.004	1.000	17013334	19.8	Target=4.24		1551	M
499.00 > 99.00	3.818	3.822	-0.004	1.000	6001306		2.83(2.12-6.37)		2022	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.822	-0.004	1.088	879555	1.32		111	151	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	64311	0.0401	Target=8.34		2.4	M
463.00 > 169.00	3.842	3.845	-0.003	1.000	8201		7.84(4.17-12.51)		9.3	M
D 19 13C5 PFNA										M
468.00 > 423.00	3.842	3.845	-0.003	1.094	2046716	1.38		110	3152	M
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.983	-0.012	1.040	865	0.000329			0.8	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.129	0.007	1.003	25103	0.0140	Target=11.44		1.2	M
513.00 > 169.00	4.136	4.129	0.007	1.003	2333		10.76(5.72-17.16)		9.8	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.129	-0.005	1.175	2236172	1.44		115	9272	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.178	321831	1.31		110	155	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	1.000	818	0.001383			8.9	M
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.234	0.007	1.208	1661978	1.25		100	3929	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.241	4.234	0.007	1.000	2535	0.001999			6.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.270	-0.005	1.215	521875	1.40		112	1563	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.270	0.008	1.003	392	0.001035			1.9	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.249	2089976	1.42		114	10740	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.386	4.390	-0.004	1.000	2258	0.001310	Target=12.20		0.4	RM
563.00 > 169.00	4.410	4.390	0.020	1.005	546		4.14(6.10-18.31)		4.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.253	510312	1.42		114	1168	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.401	-0.003	1.000	2059	0.005042			4.5	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.473	-0.005	1.170	801	0.000199			2.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.313	1946790	1.30		104	6951	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.418	1822956	1.23		98.0	5532	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

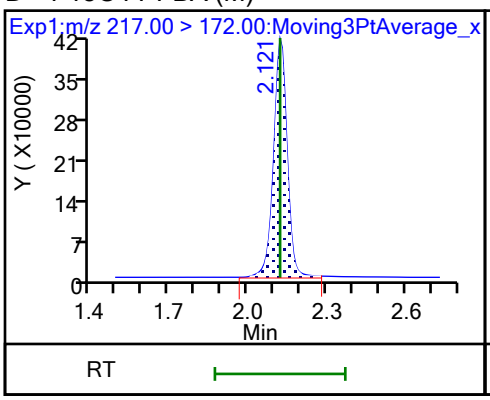
M - Manually Integrated

Report Date: 25-Oct-2023 15:13:51 Chrom Revision: 2.3 18-Oct-2023 21:16:54

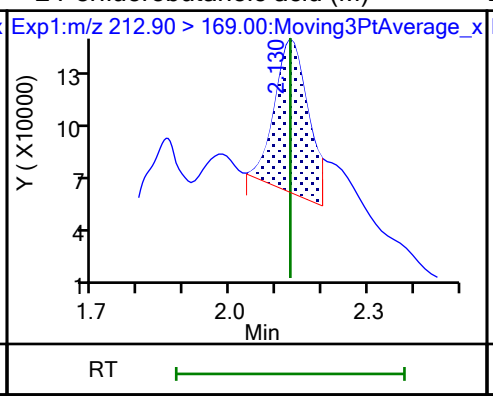
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d
Injection Date: 23-Oct-2023 19:27:54 Instrument ID: LC812
Lims ID: 460-290375-A-5-A Lab Sample ID: 200-290375-5
Client ID: MW91A-101323-1116-66
Operator ID: LC812user ALS Bottle#: 29 Worklist Smp#: 32
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

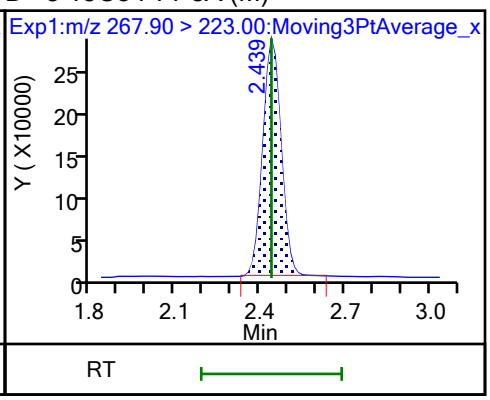
D 1 13C4 PFBA (M)



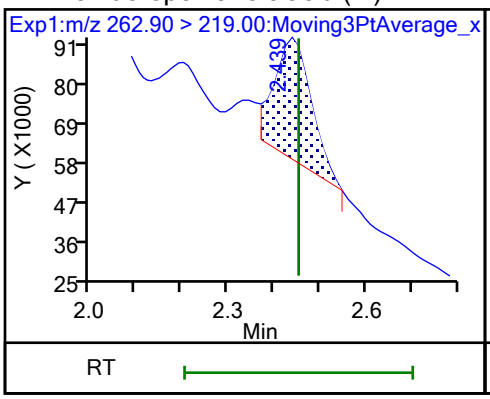
2 Perfluorobutanoic acid (M)



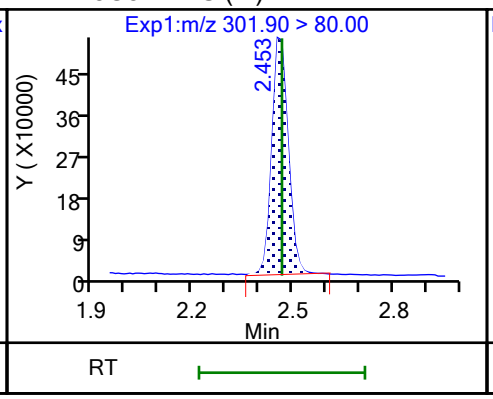
D 3 13C5 PFPeA (M)



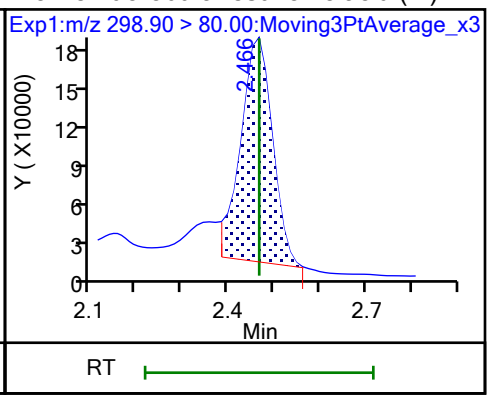
4 Perfluoropentanoic acid (M)



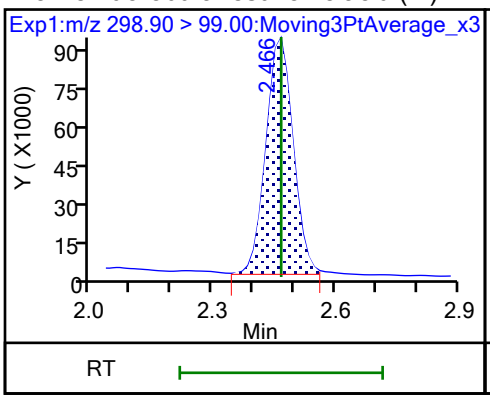
D 47 13C3 PFBS (M)



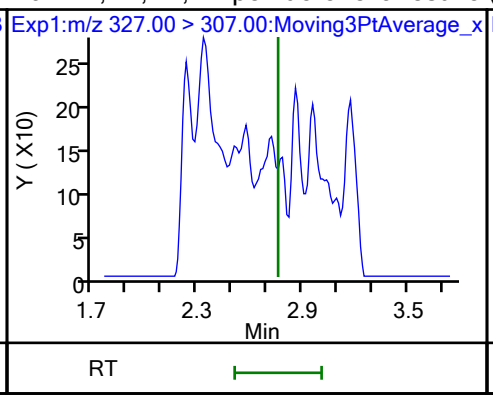
5 Perfluorobutanesulfonic acid (M)



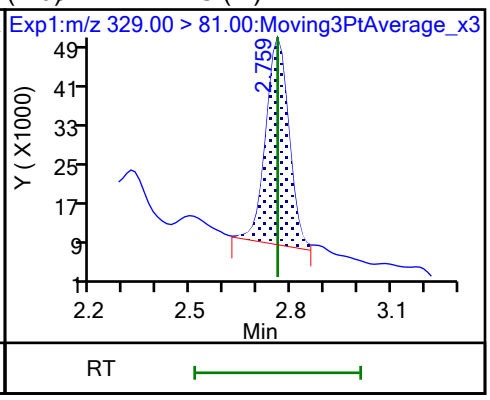
5 Perfluorobutanesulfonic acid (M)



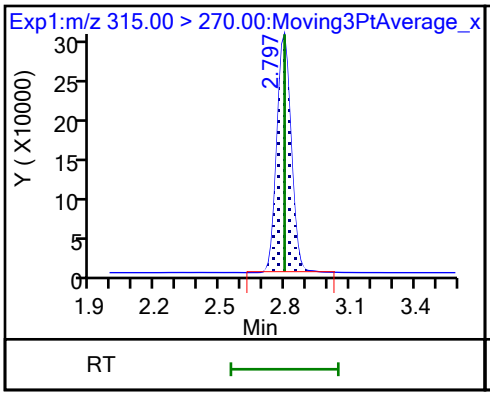
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



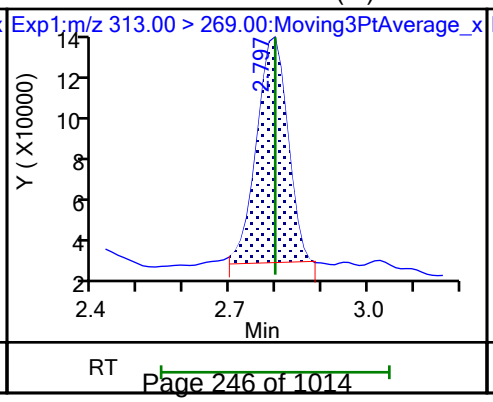
D 60 M2-4:2 FTS (M)



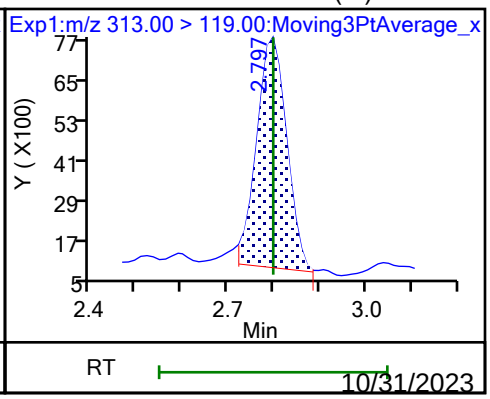
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

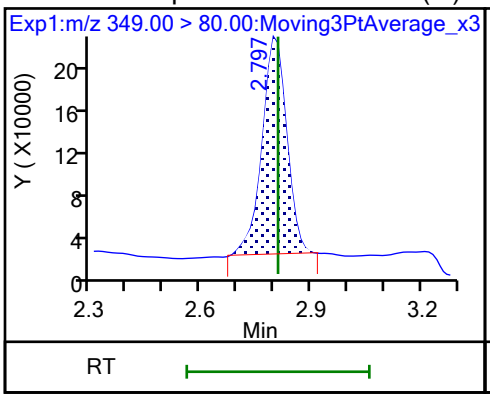


6 Perfluorohexanoic acid (M)

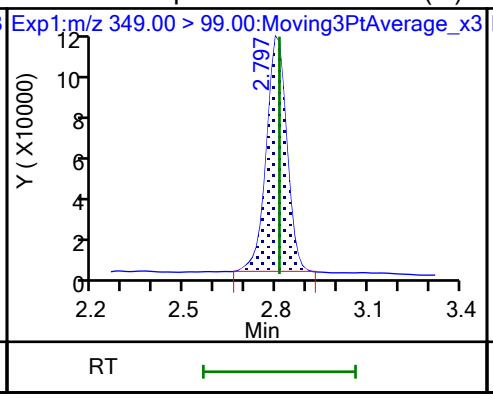


10/31/2023
4:00 PM

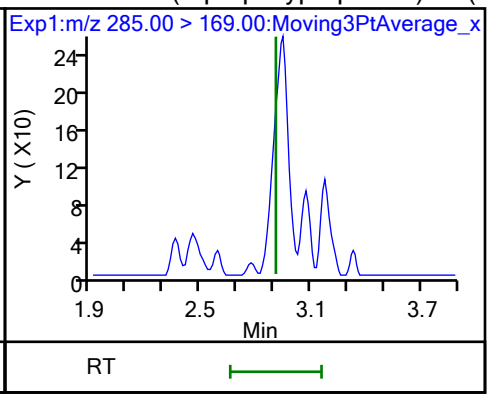
70 Perfluoropentanesulfonic acid (M)



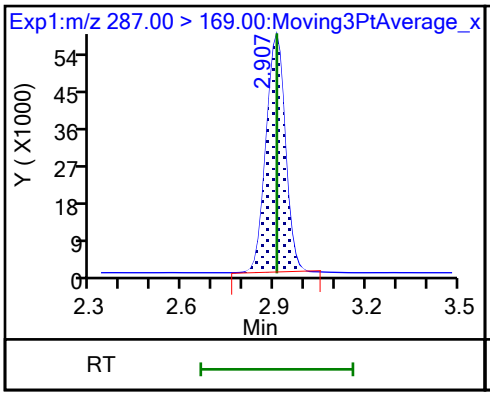
70 Perfluoropentanesulfonic acid (M)



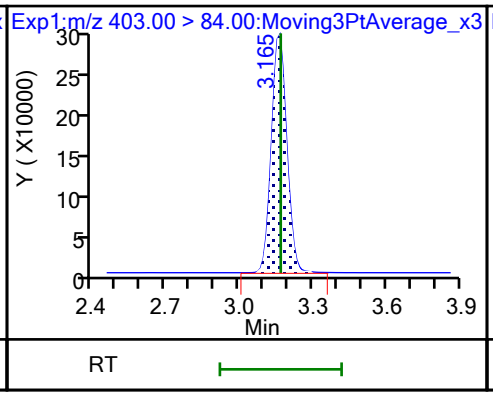
67 Perfluoro(2-propoxypropanoic) ac (ND)



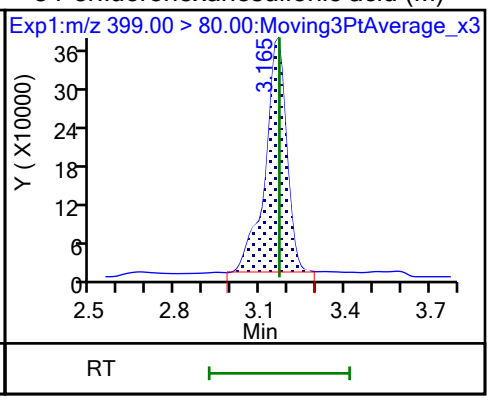
D 64 13C3 HFPO-DA



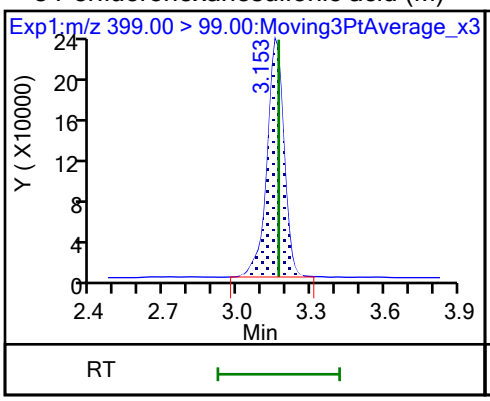
D 11 18O2 PFHxS



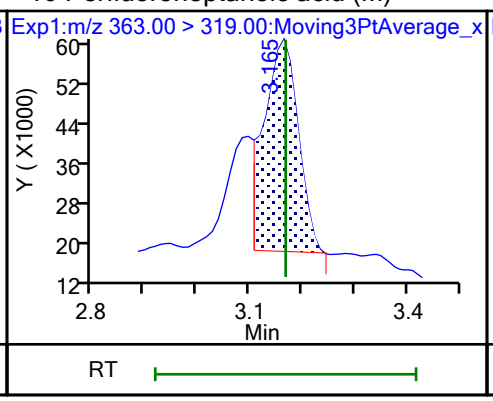
8 Perfluorohexanesulfonic acid (M)



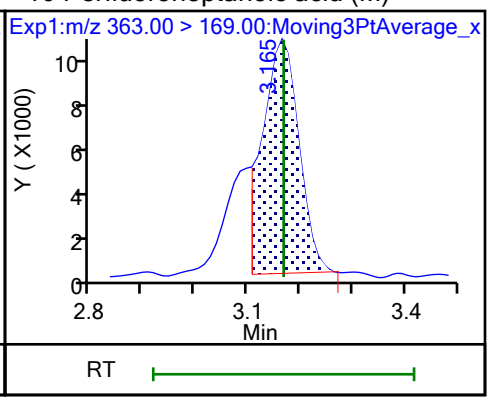
8 Perfluorohexanesulfonic acid (M)



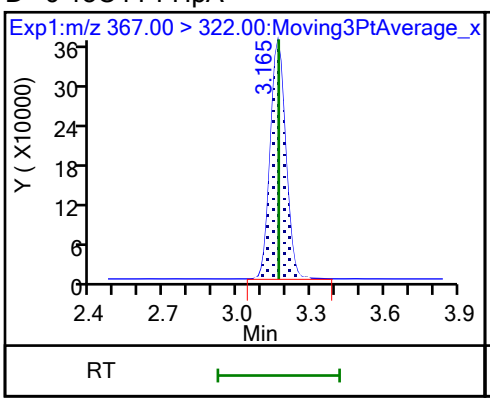
10 Perfluoroheptanoic acid (M)



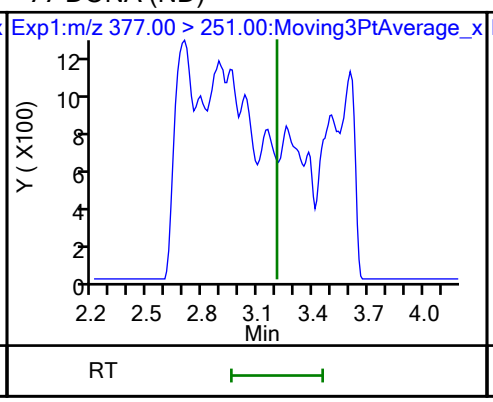
10 Perfluoroheptanoic acid (M)



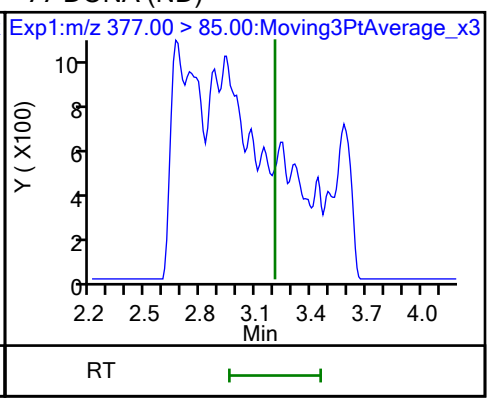
D 9 13C4 PFHpA



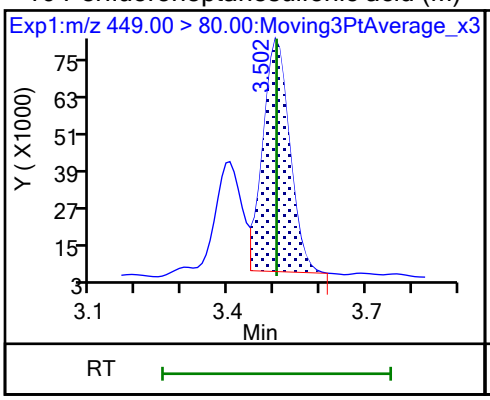
77 DONA (ND)



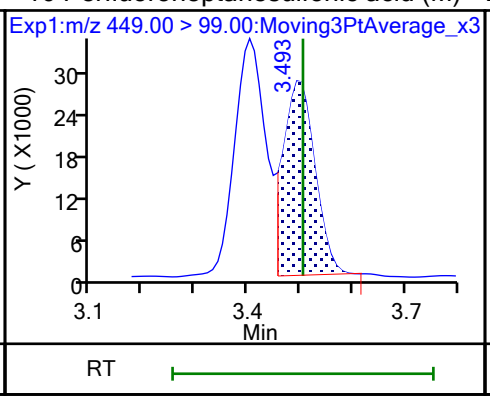
77 DONA (ND)



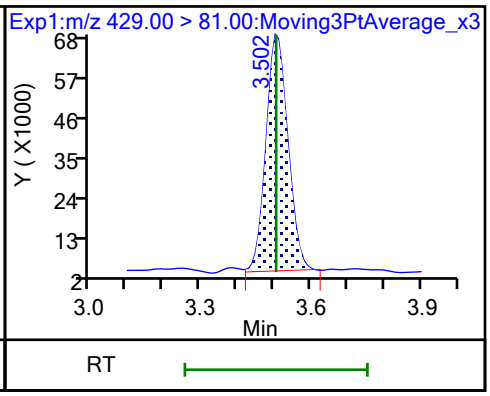
16 Perfluoroheptanesulfonic acid (M)



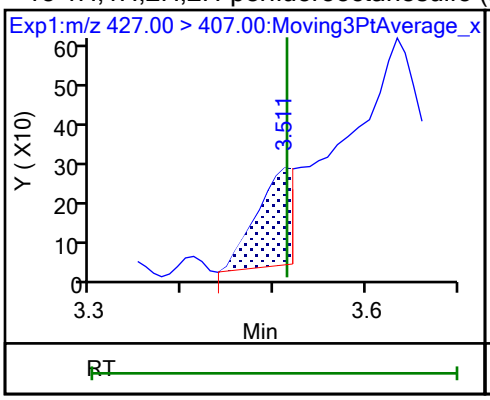
16 Perfluoroheptanesulfonic acid (M)



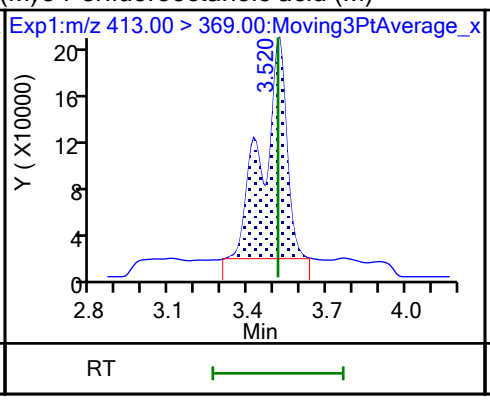
D 12 M2-6:2 FTS



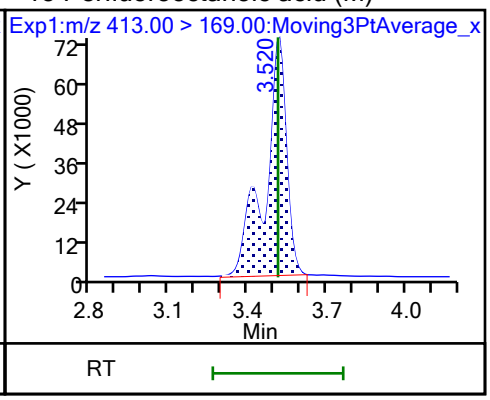
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



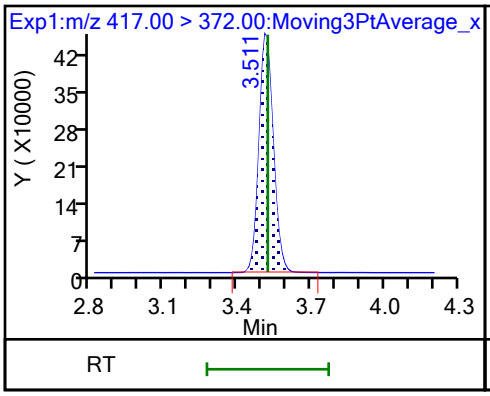
15 Perfluorooctanoic acid (M)



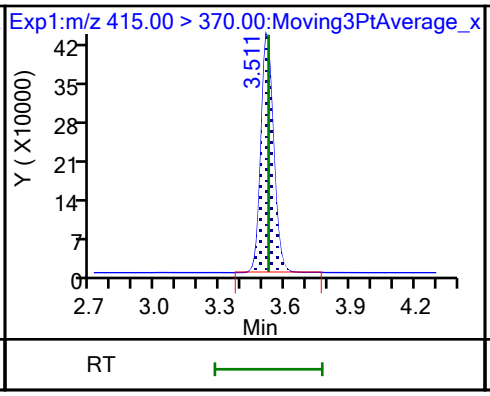
15 Perfluorooctanoic acid (M)



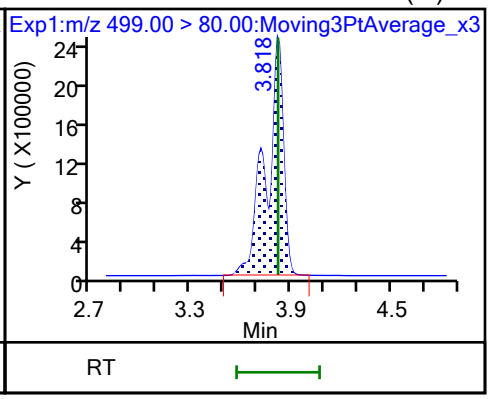
D 14 13C4 PFOA



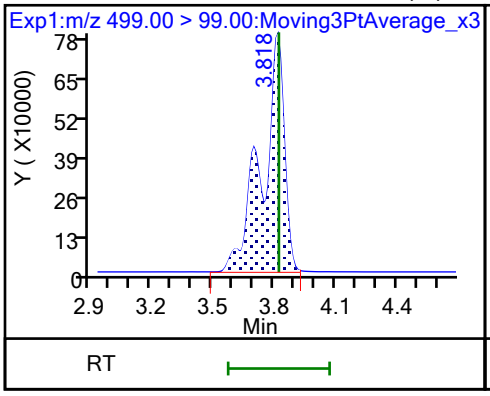
* 62 13C2 PFOA



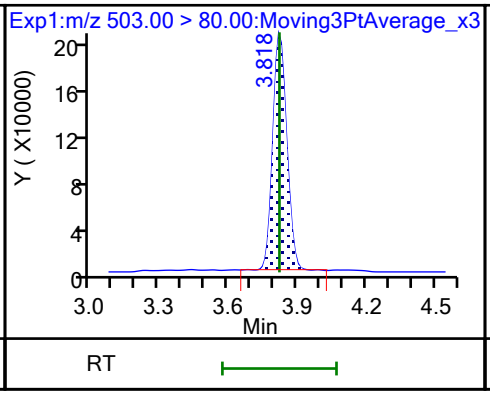
17 Perfluorooctanesulfonic acid (M)



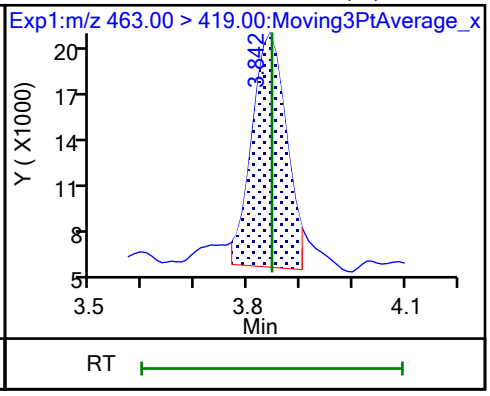
17 Perfluorooctanesulfonic acid (M)



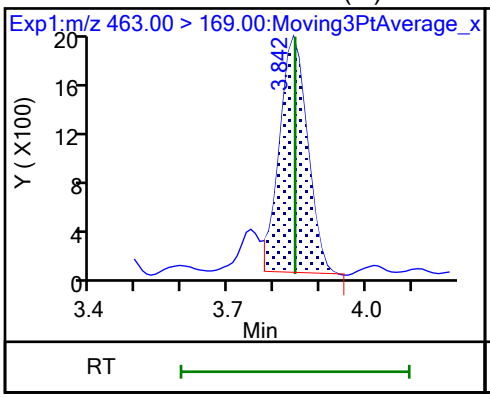
D 18 13C4 PFOS



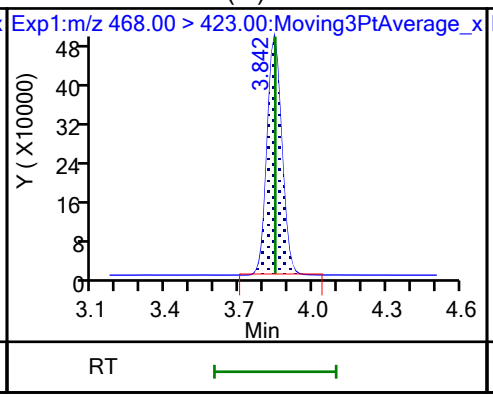
20 Perfluorononanoic acid (M)



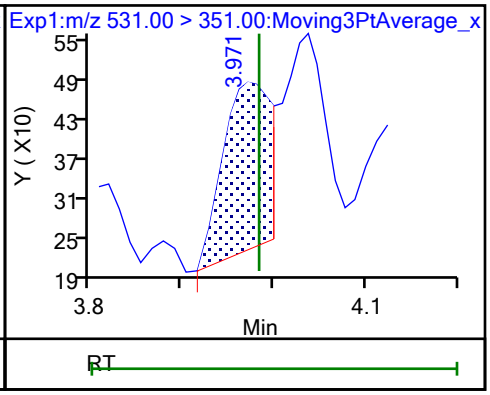
20 Perfluorononanoic acid (M)



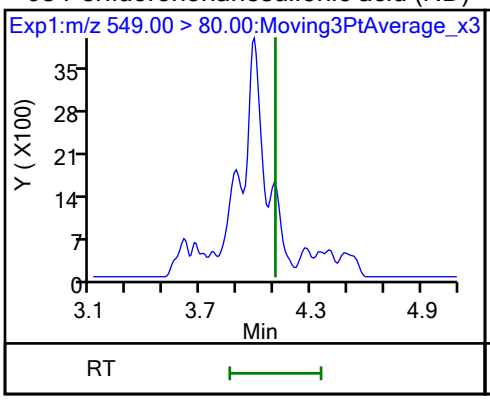
D 19 13C5 PFNA (M)



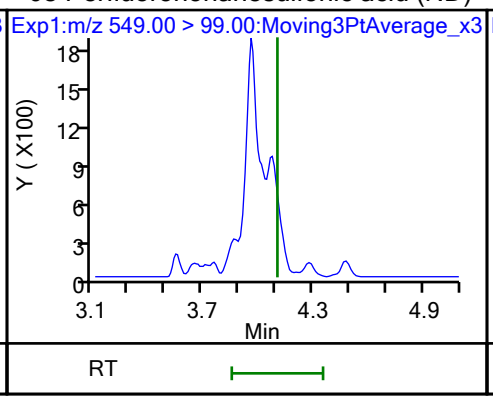
69 9-Chlorohexadecafluoro-3-oxanona (M)



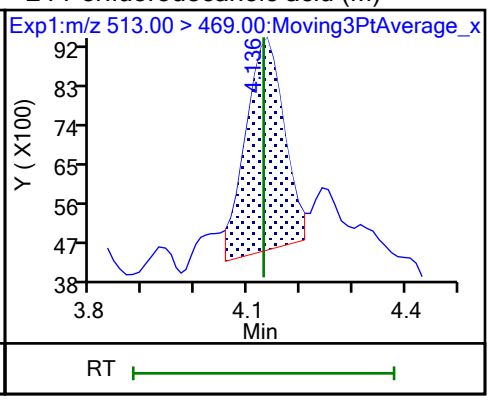
68 Perfluorononanesulfonic acid (ND)



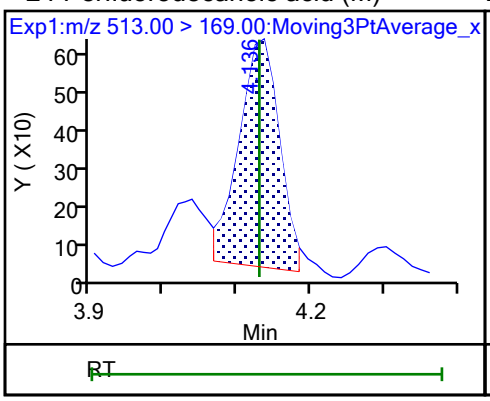
68 Perfluorononanesulfonic acid (ND)



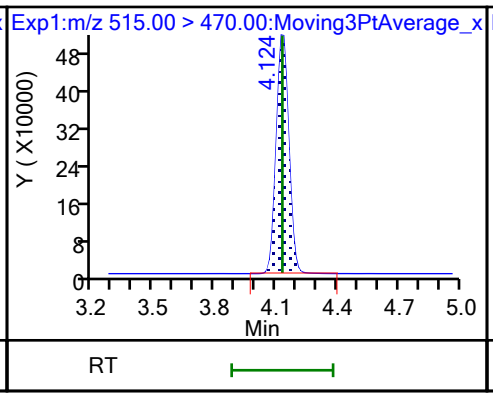
24 Perfluorodecanoic acid (M)



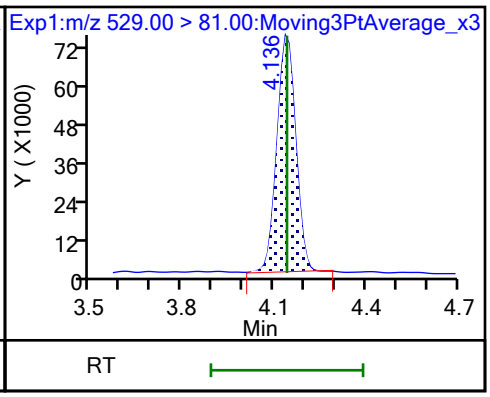
24 Perfluorodecanoic acid (M)



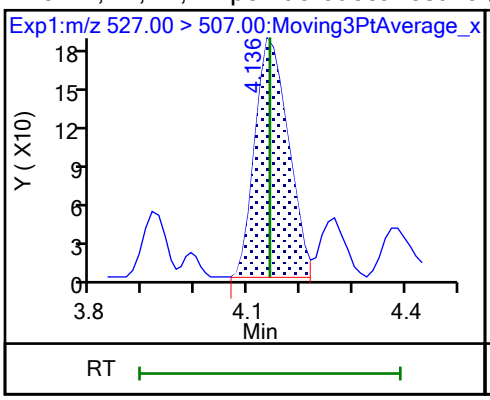
D 23 13C2 PFDA



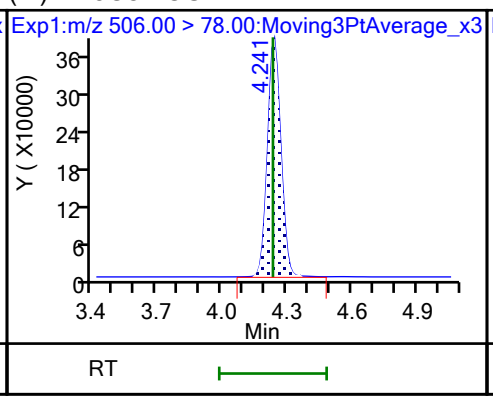
D 26 M2-8:2 FTS



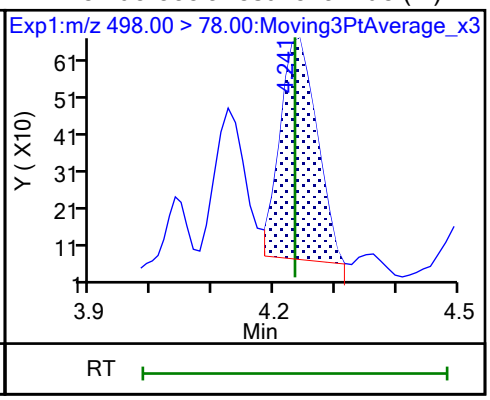
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



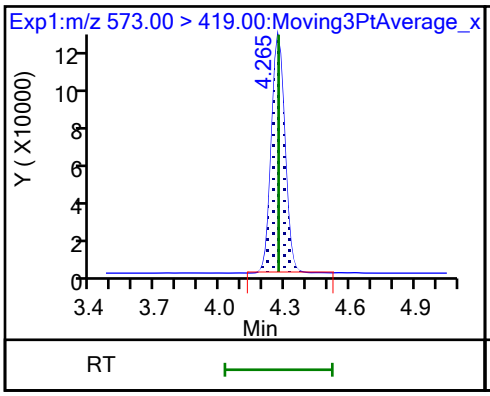
D 21 13C8 FOSA



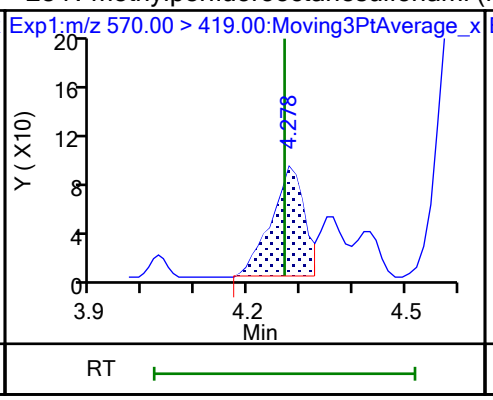
22 Perfluorooctanesulfonamide (M)



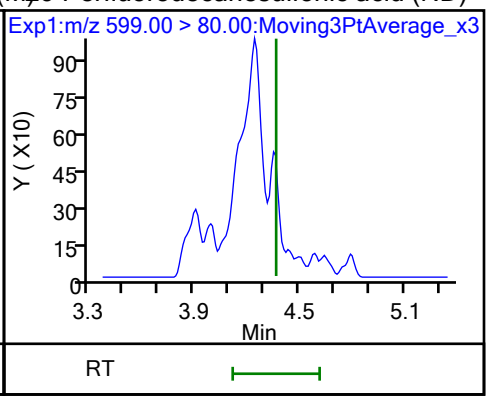
D 27 d3-NMeFOSAA



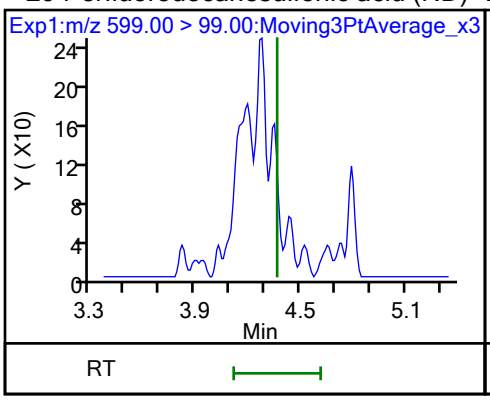
28 N-methylperfluorooctanesulfonami (M)



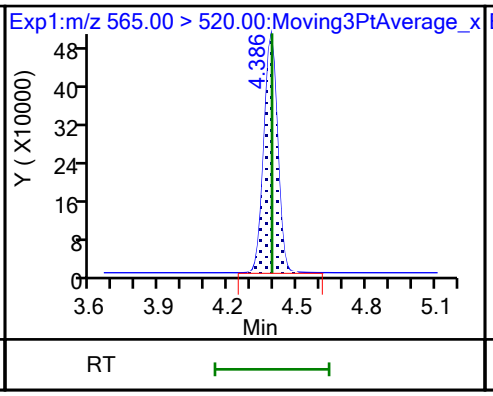
29 Perfluorodecanesulfonic acid (ND)



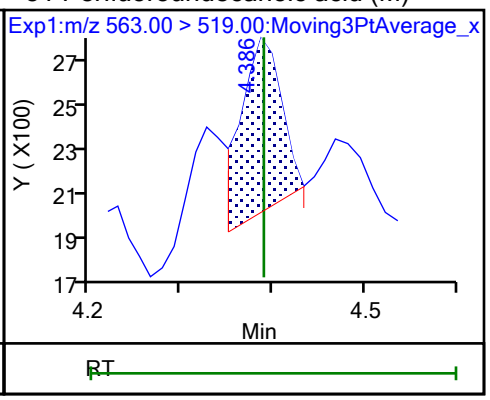
29 Perfluorodecanesulfonic acid (ND)



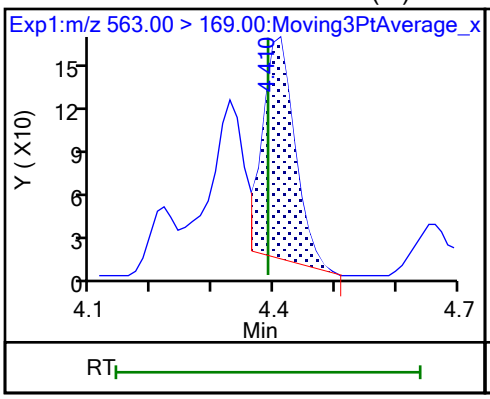
D 30 13C2 PFUnA



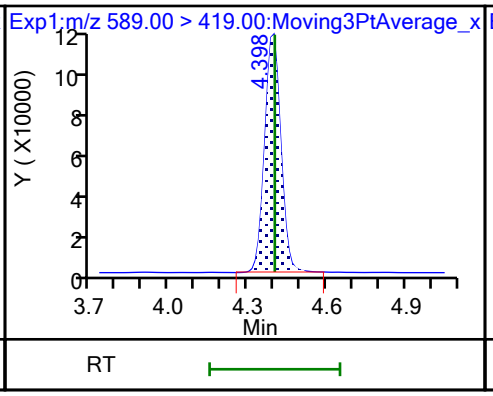
31 Perfluoroundecanoic acid (M)



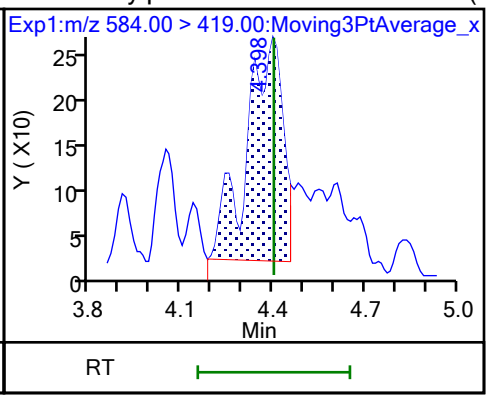
31 Perfluoroundecanoic acid (M)



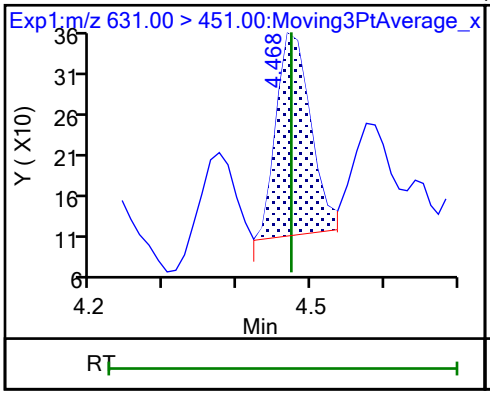
D 32 d5-NEtFOSAA



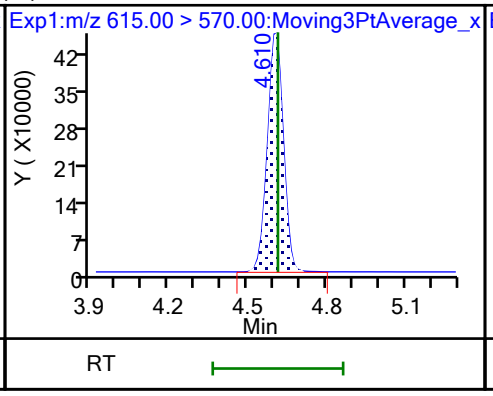
33 N-ethylperfluorooctanesulfonamid (M)



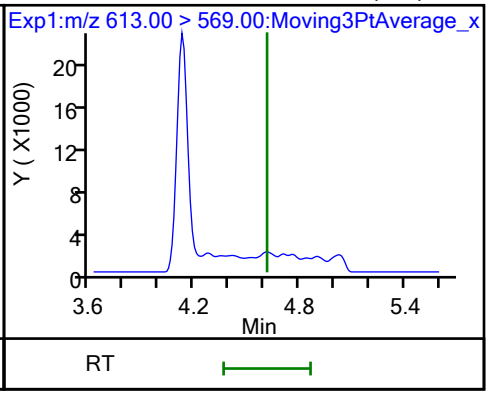
66 11-Chloroeicosafluoro-3-oxaundec (M)



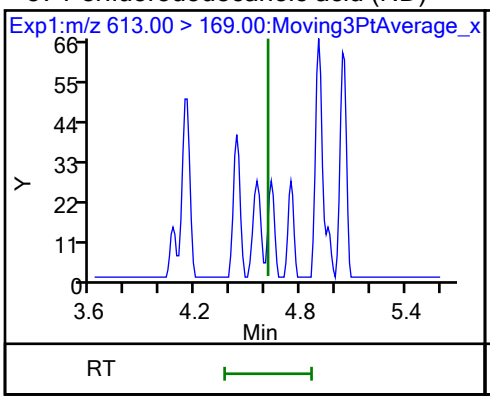
D 36 13C2 PFDoA



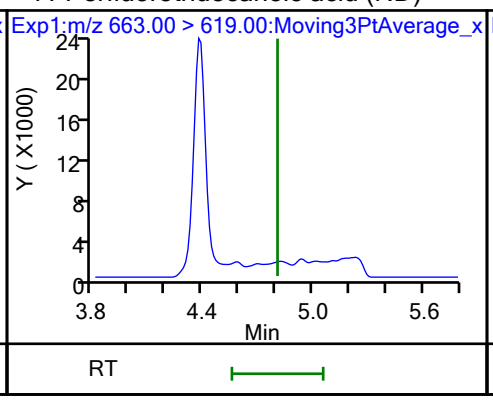
37 Perfluorododecanoic acid (ND)



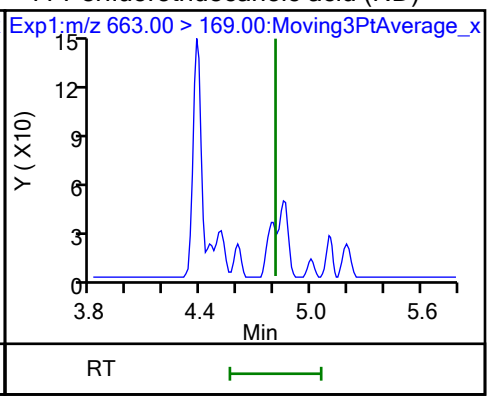
37 Perfluorododecanoic acid (ND)



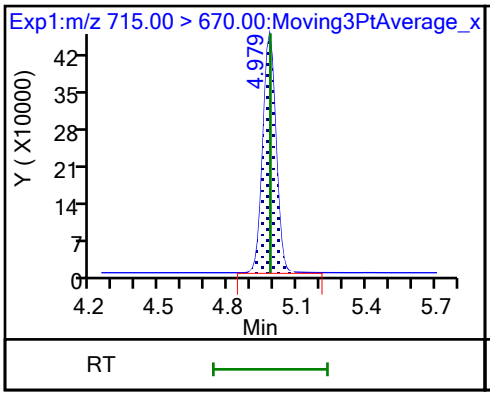
41 Perfluorotridecanoic acid (ND)



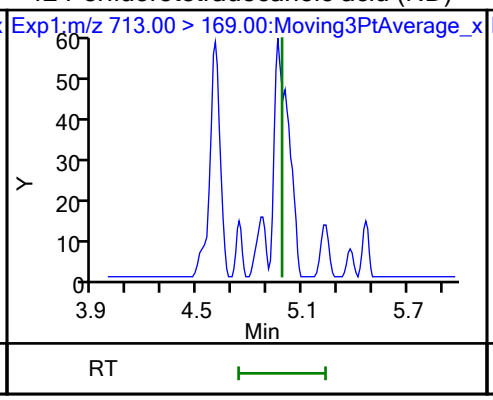
41 Perfluorotridecanoic acid (ND)



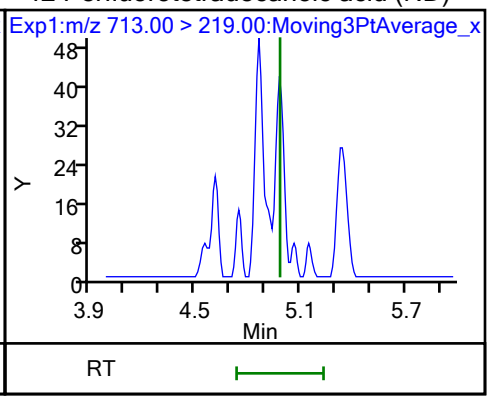
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

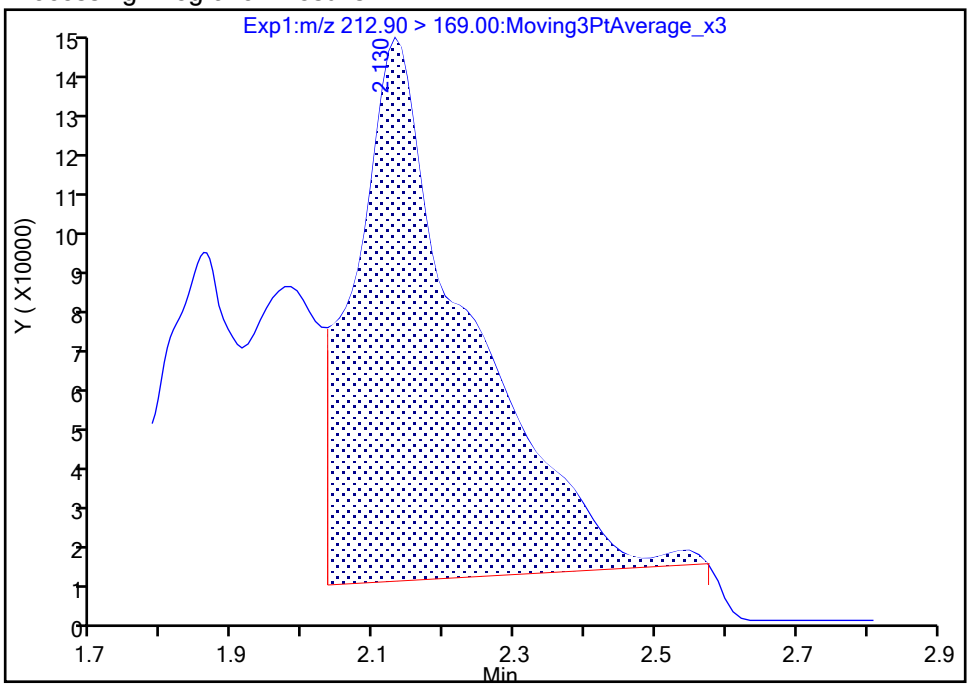
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

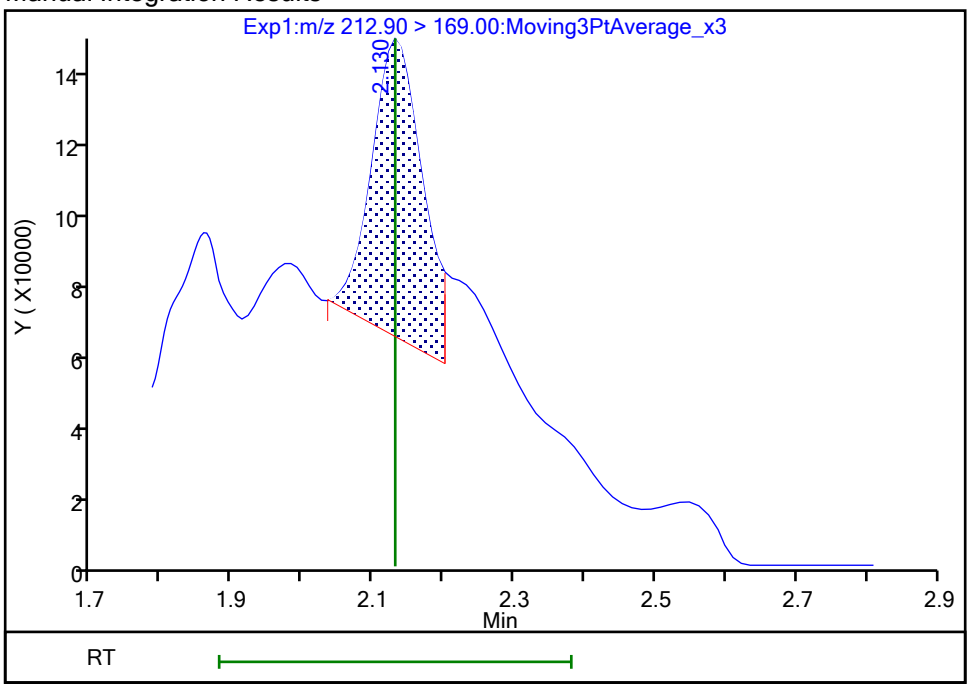
Processing Integration Results

RT: 2.13
Area: 1504083
Amount: 1.372055
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 405710
Amount: 0.340241
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

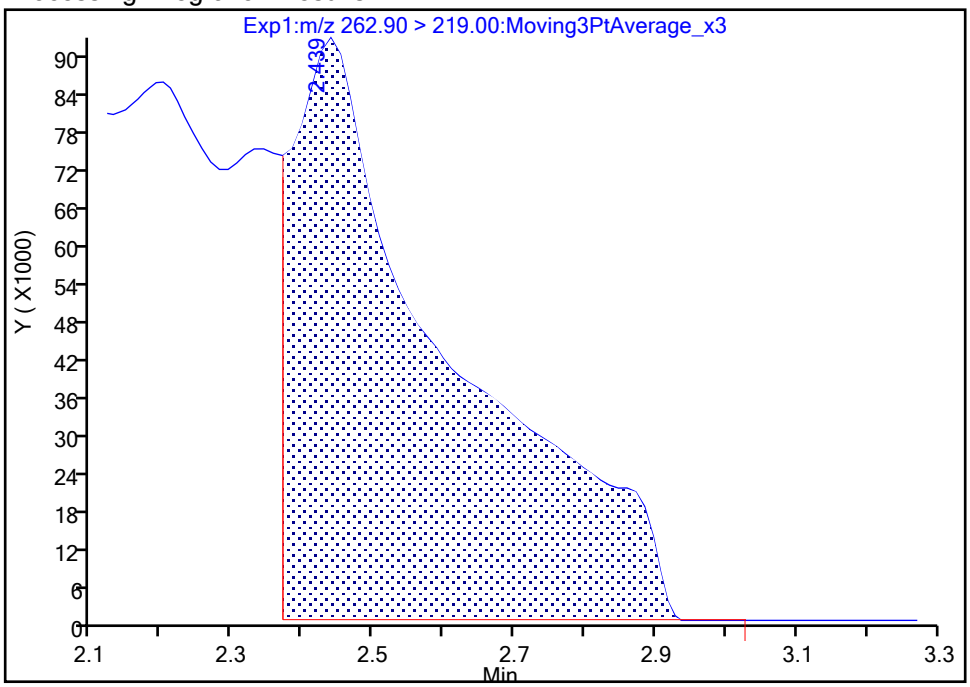
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

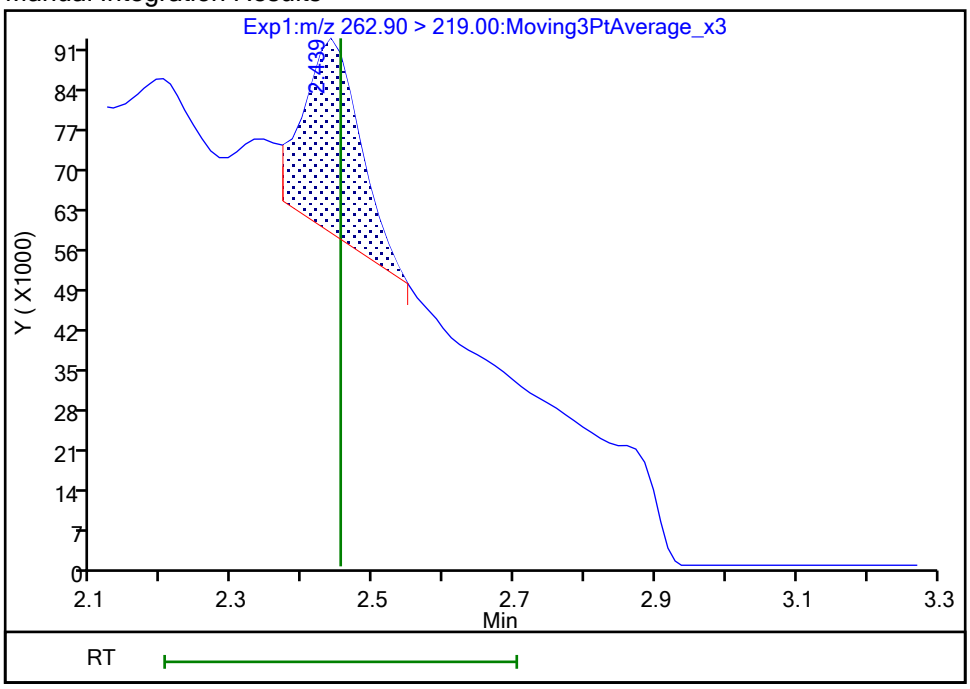
Processing Integration Results

RT: 2.44
Area: 1453081
Amount: 1.297240
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 187627
Amount: 0.167504
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

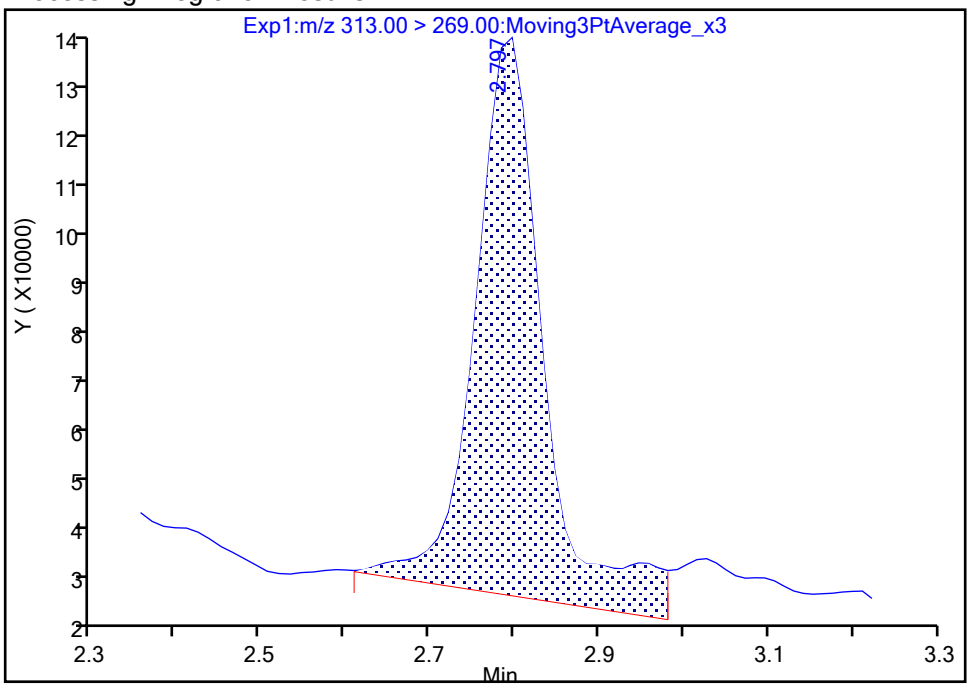
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

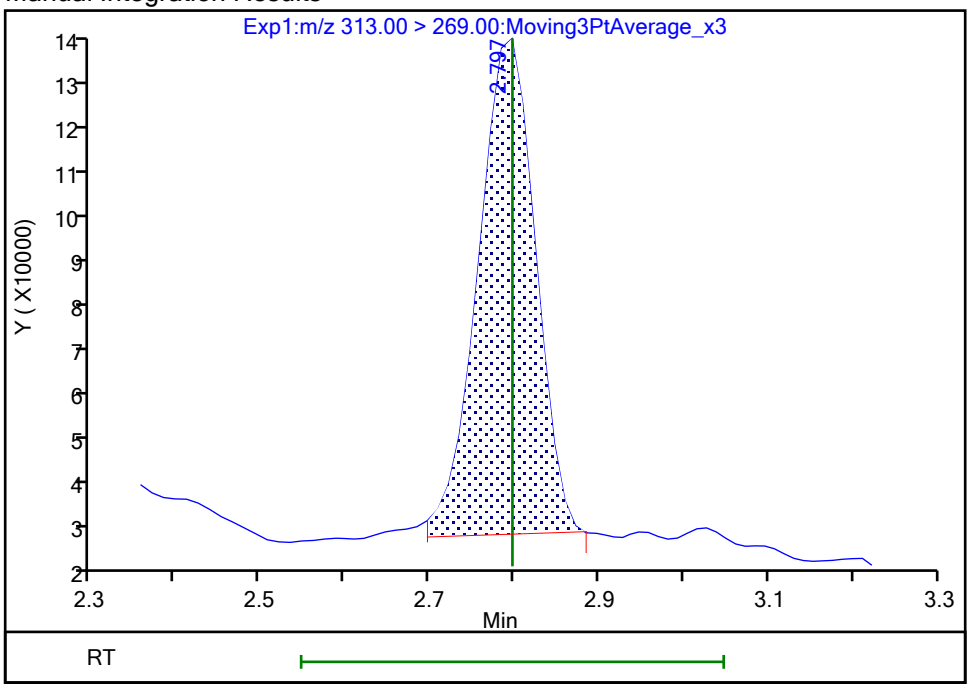
Processing Integration Results

RT: 2.80
Area: 582891
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 459199
Amount: 0.376377
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

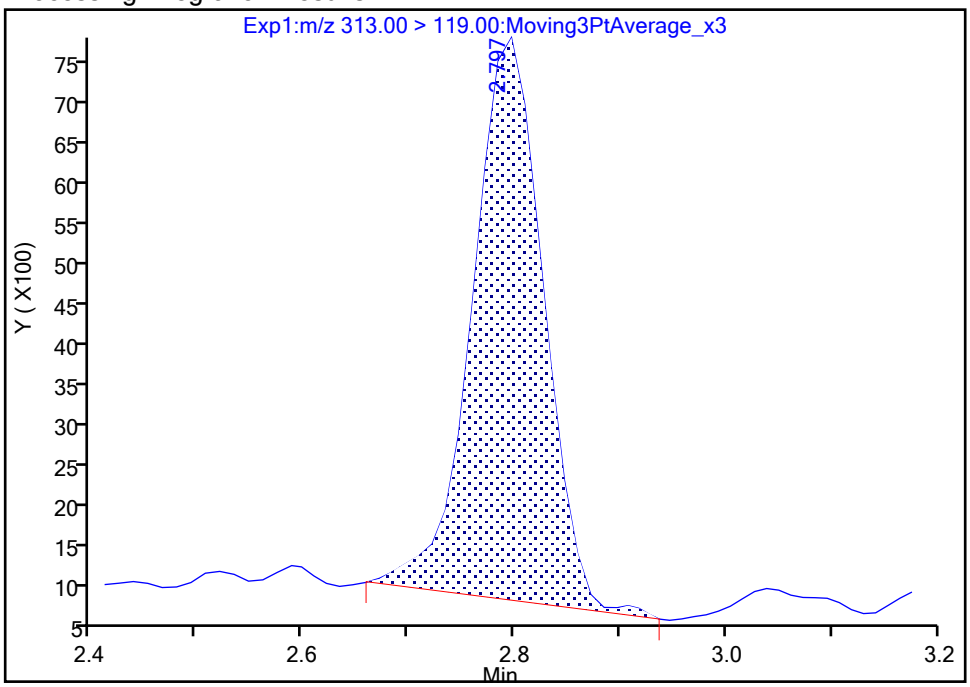
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

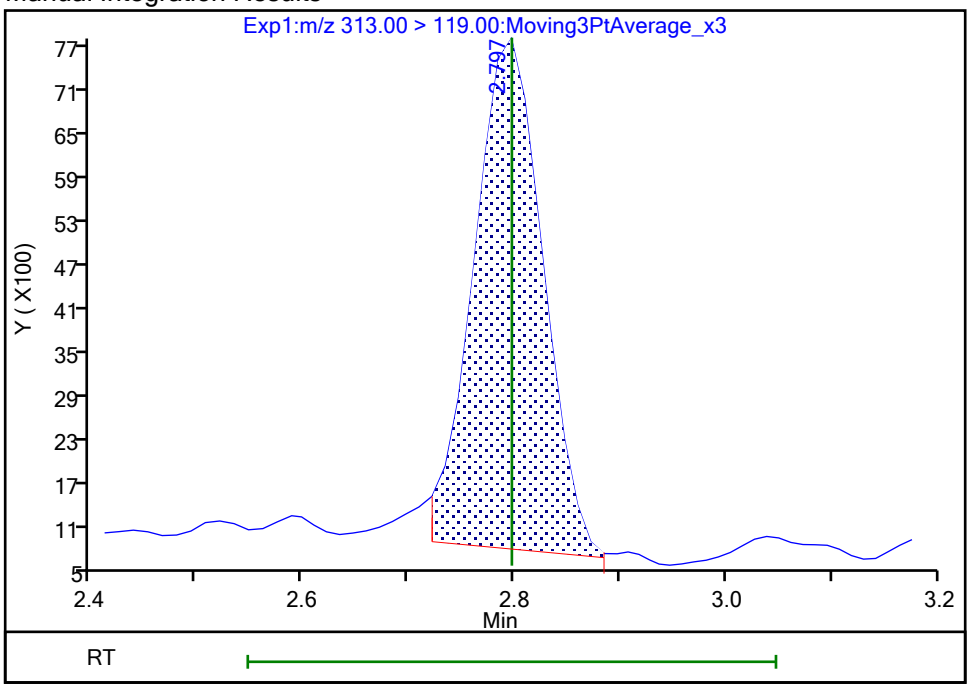
Processing Integration Results

RT: 2.80
Area: 32362
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 31307
Amount: 0.376377
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

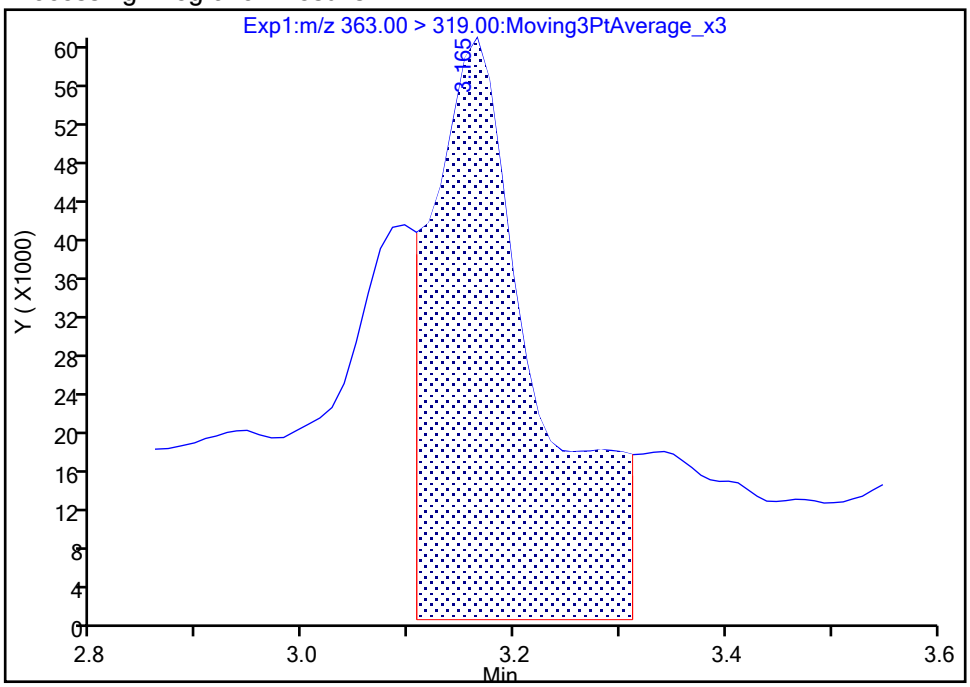
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

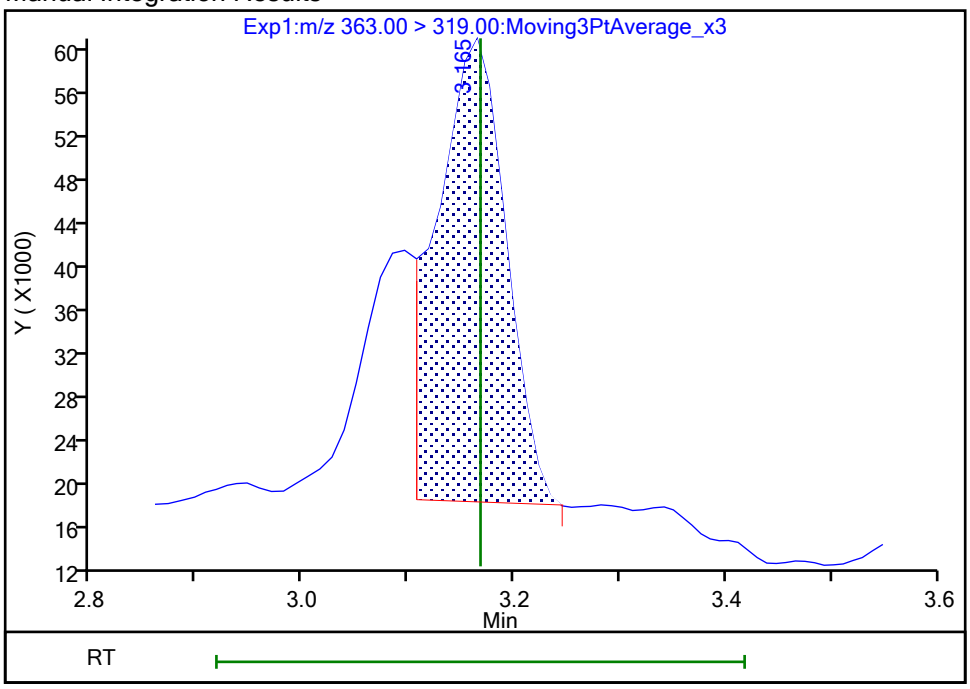
Processing Integration Results

RT: 3.16
Area: 409610
Amount: 0.284535
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 190507
Amount: 0.132336
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

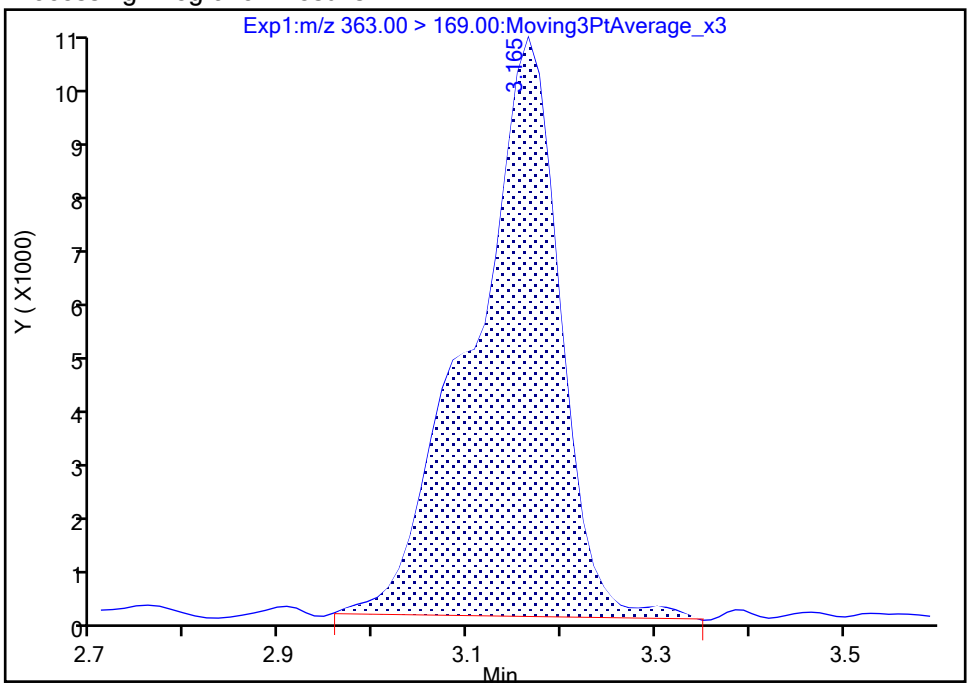
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

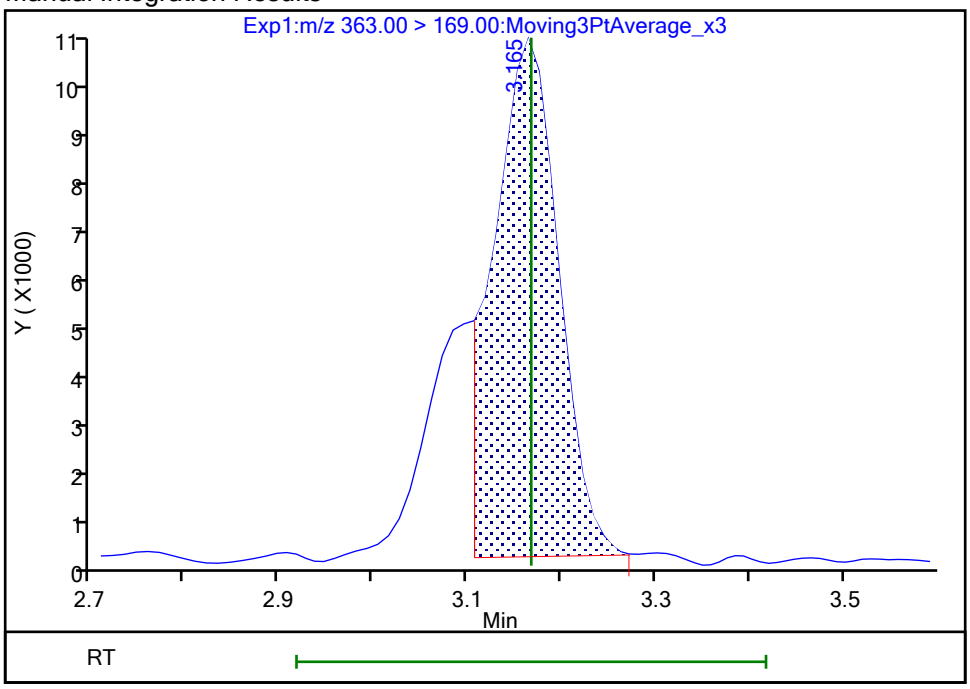
Processing Integration Results

RT: 3.16
Area: 65250
Amount: 0.284535
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 46992
Amount: 0.132336
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

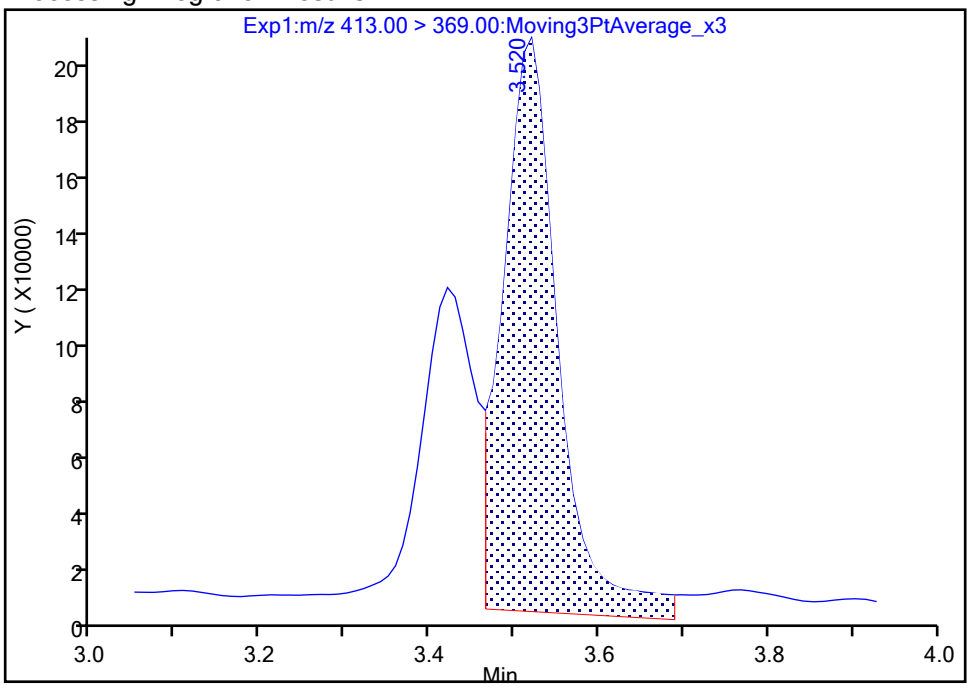
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

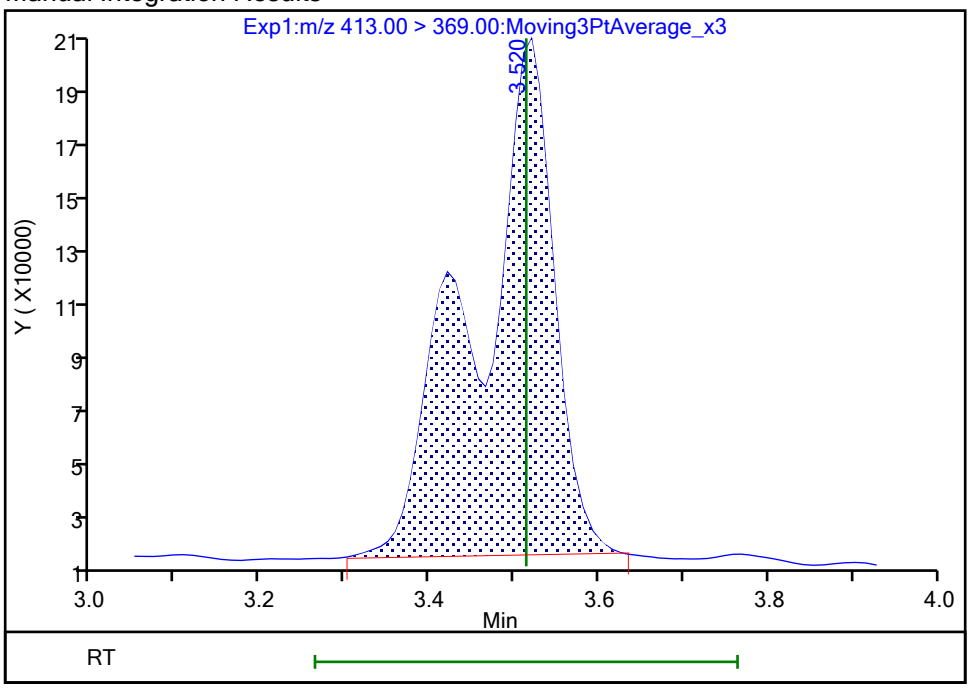
Processing Integration Results

RT: 3.52
Area: 904330
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1244351
Amount: 0.793590
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

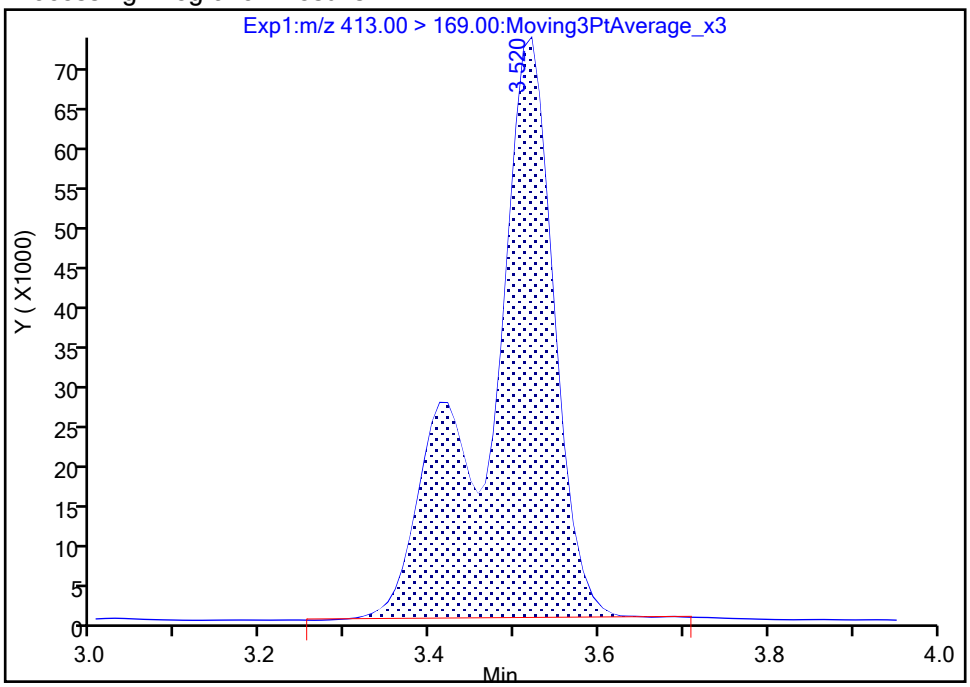
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

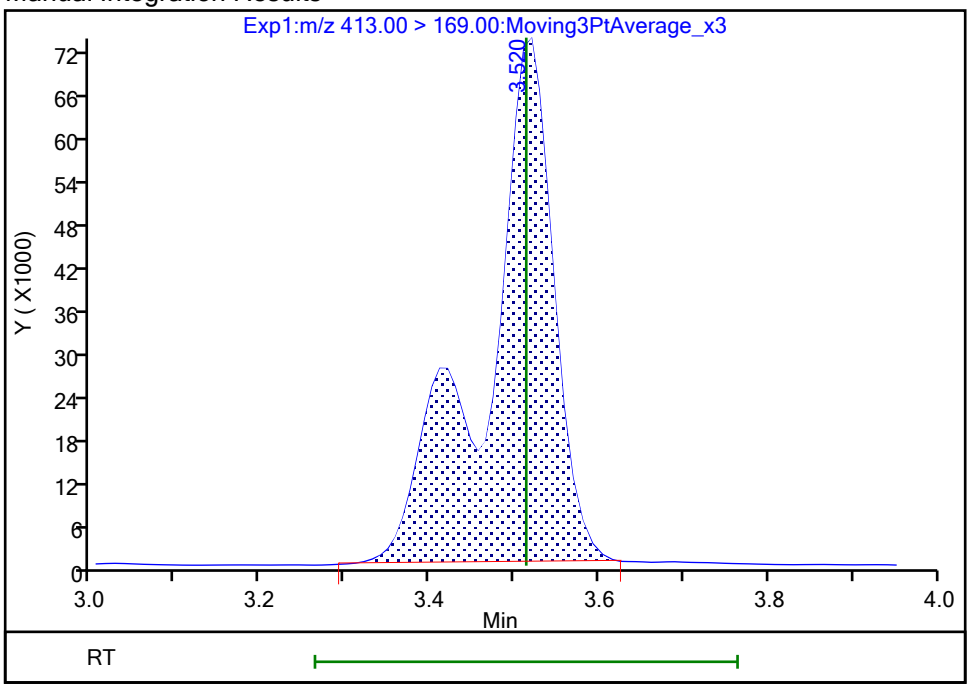
Processing Integration Results

RT: 3.52
Area: 413697
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 410031
Amount: 0.793590
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

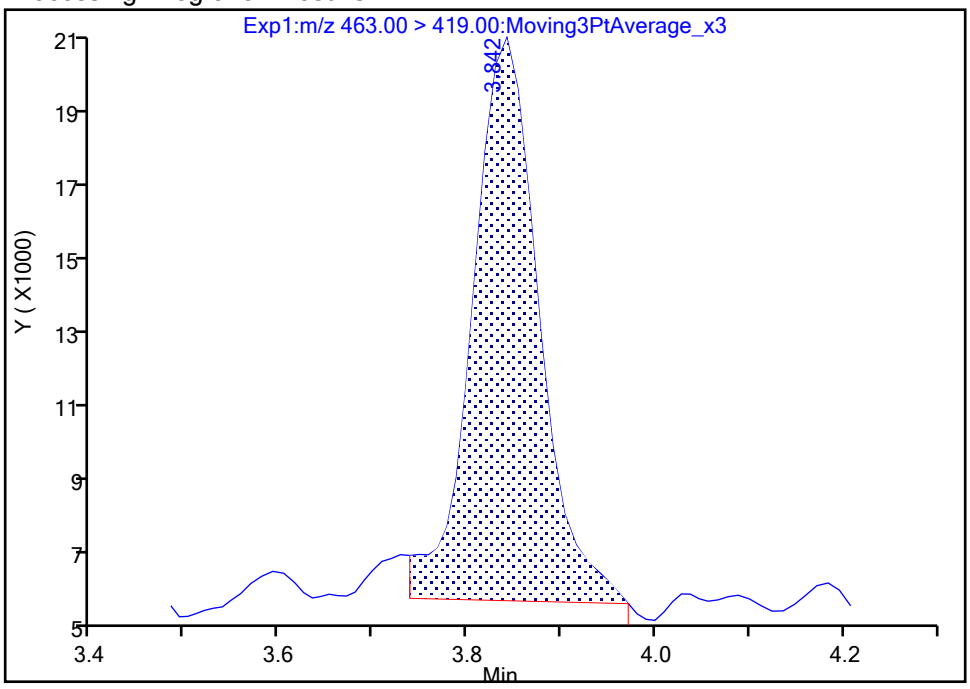
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

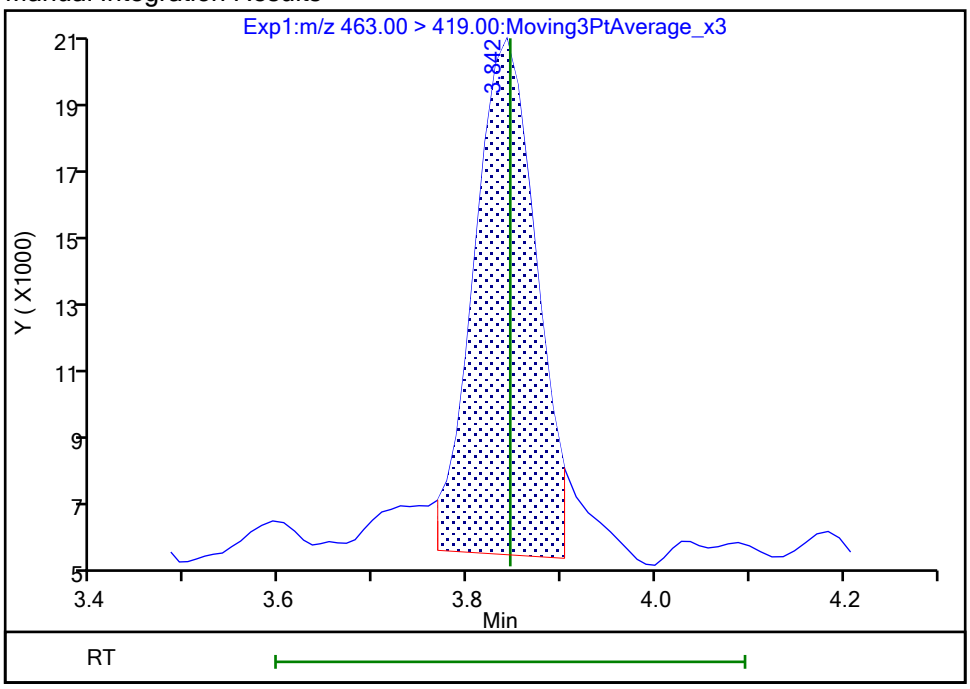
Processing Integration Results

RT: 3.84
Area: 68475
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 64311
Amount: 0.040077
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

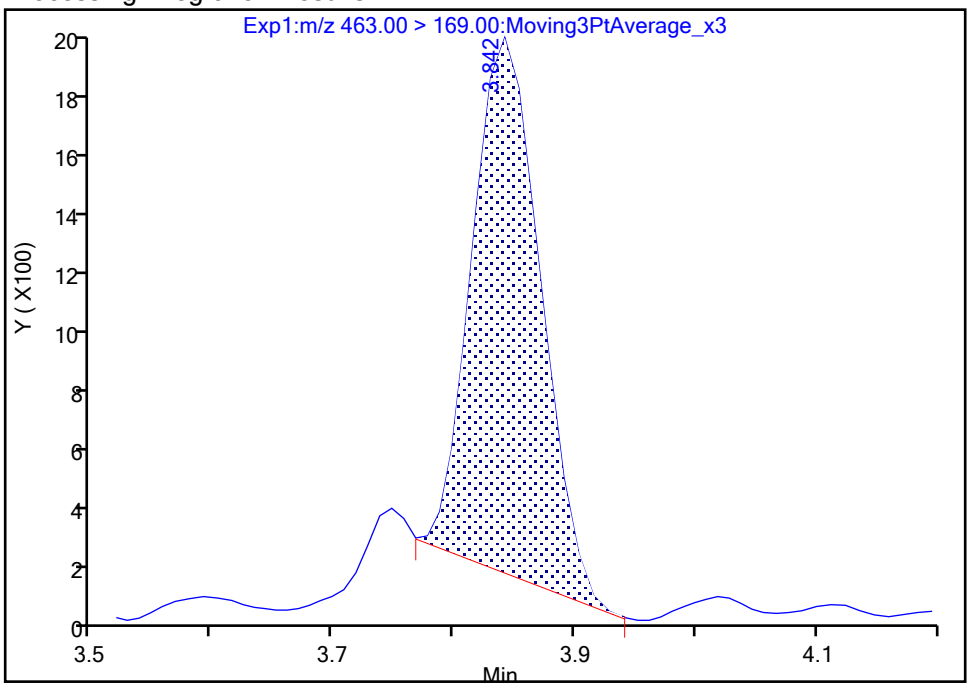
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

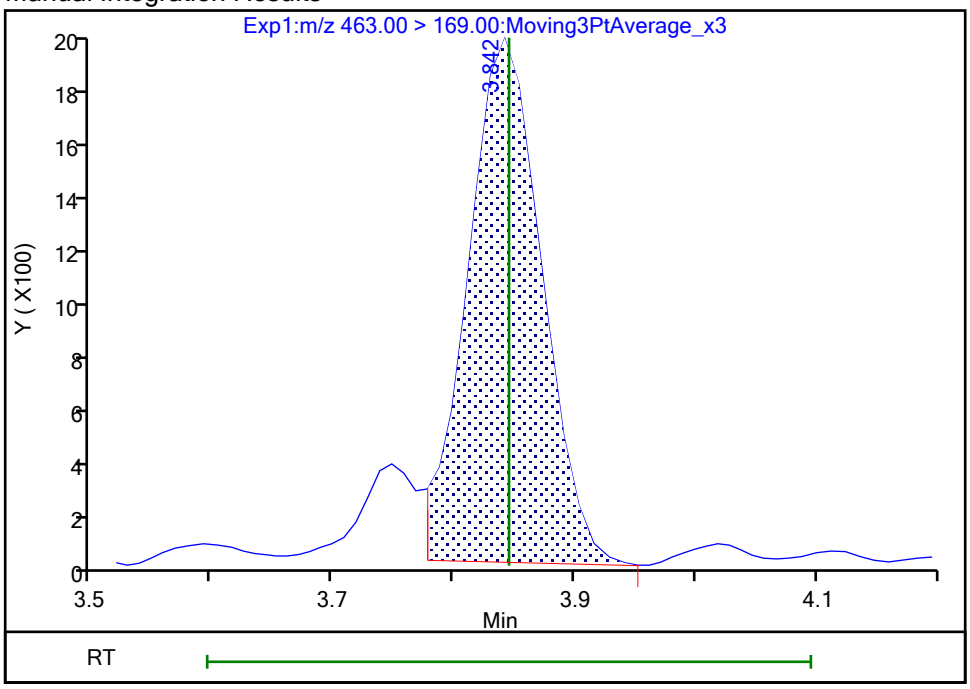
Processing Integration Results

RT: 3.84
Area: 7050
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 8201
Amount: 0.040077
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

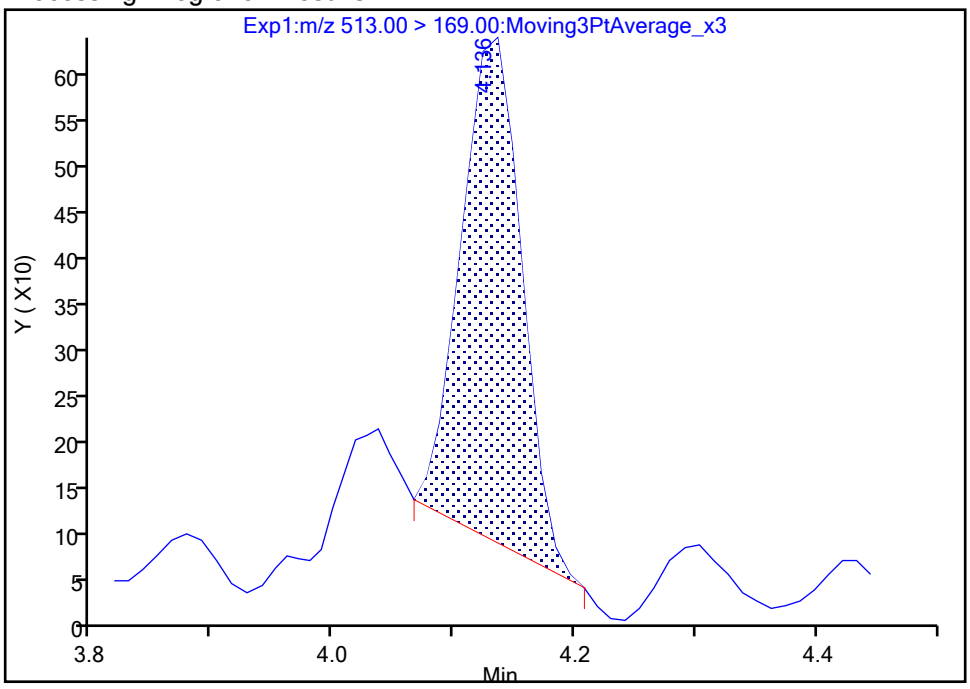
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

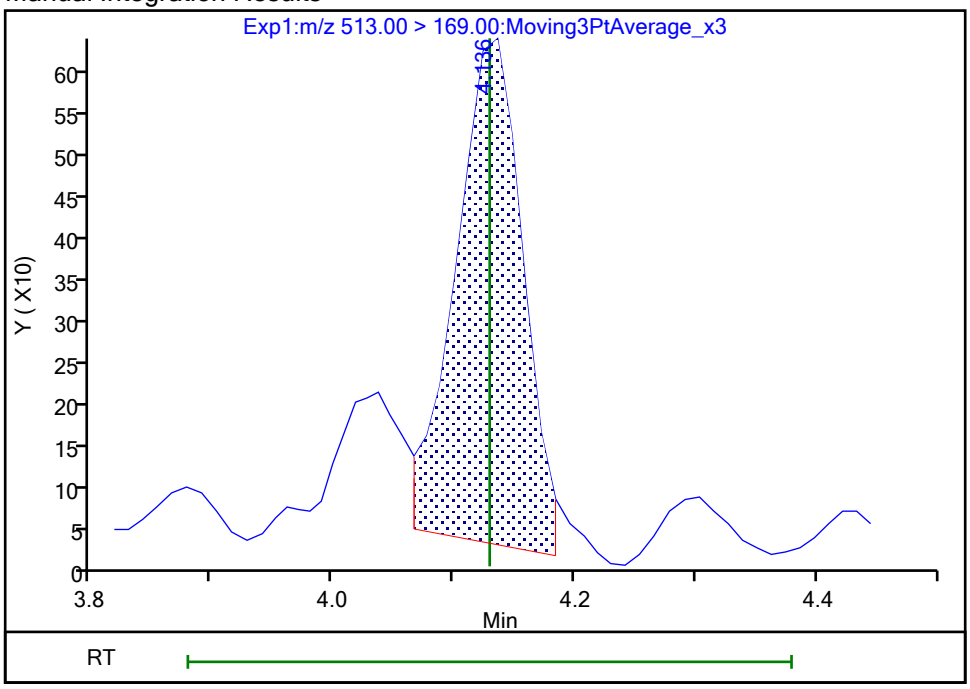
Processing Integration Results

RT: 4.14
Area: 1905
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2333
Amount: 0.014041
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

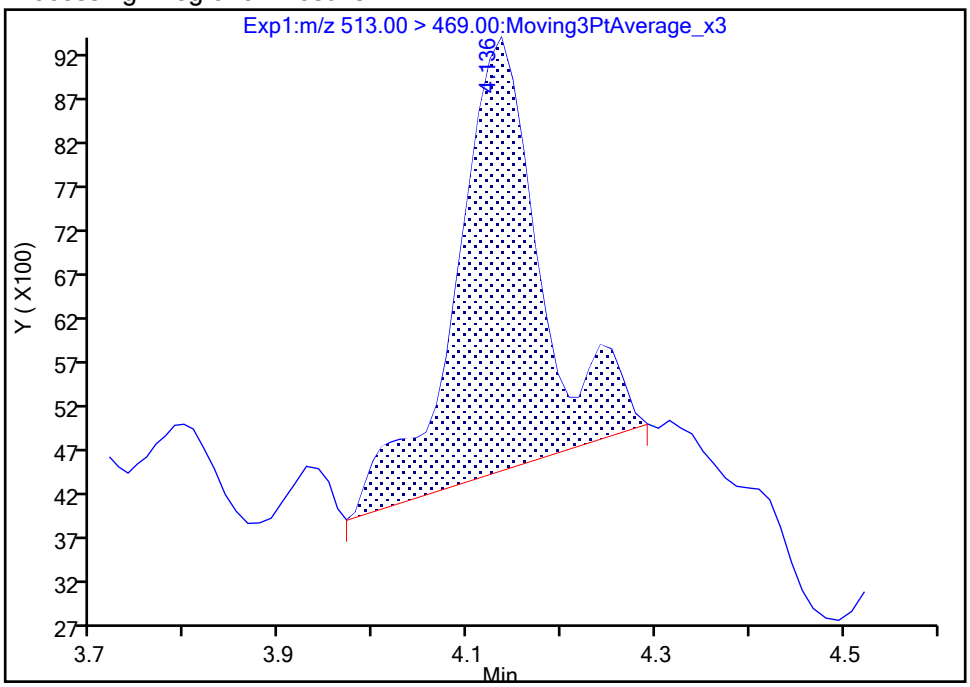
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

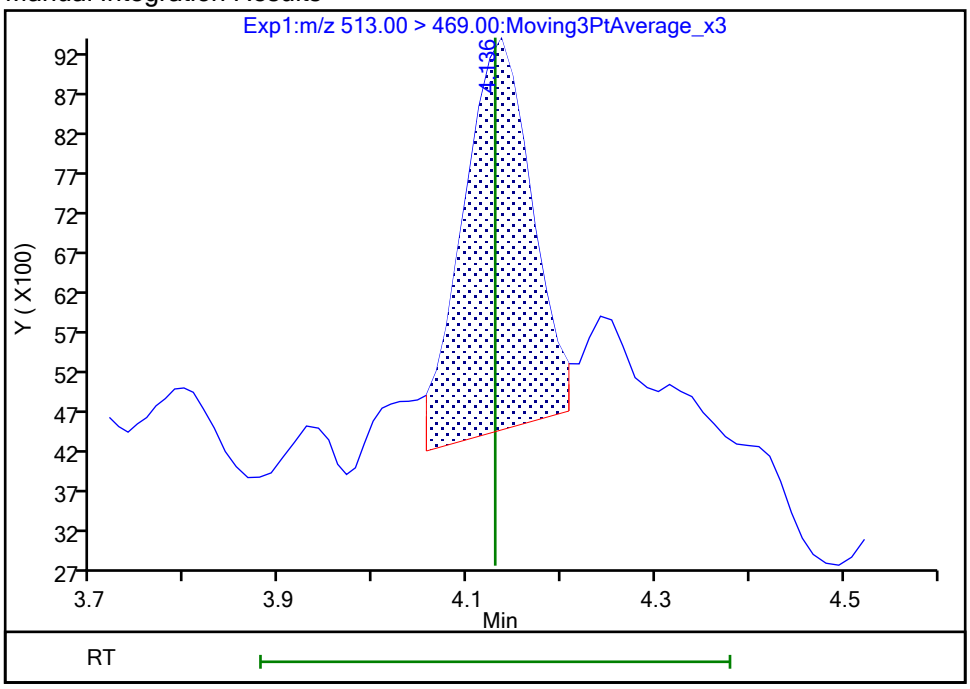
Processing Integration Results

RT: 4.14
Area: 31033
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 25103
Amount: 0.014041
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

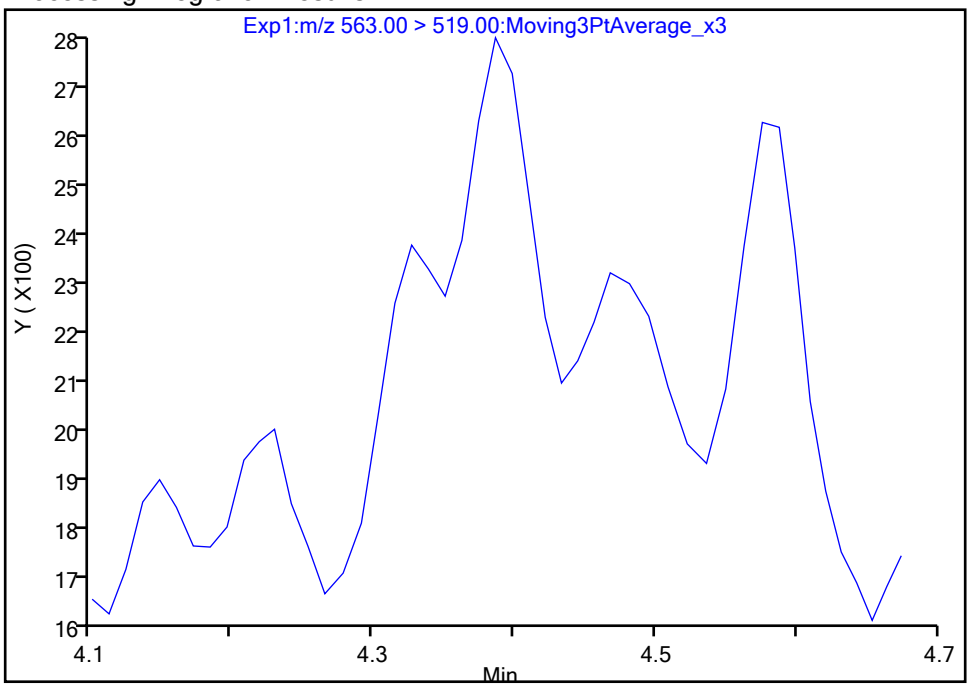
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

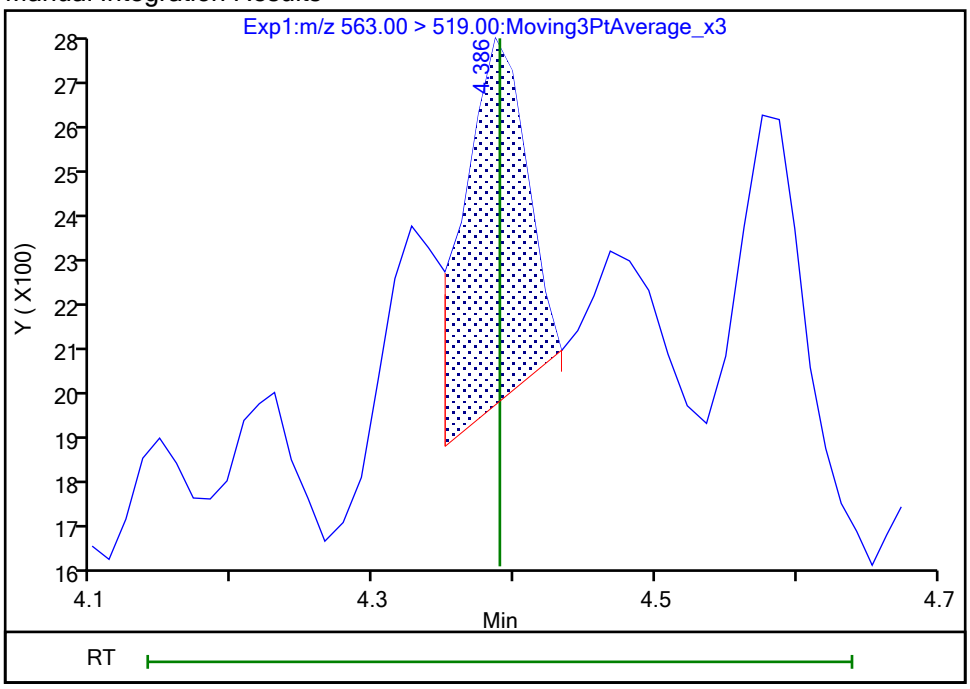
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 2258
Amount: 0.001310
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:24:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

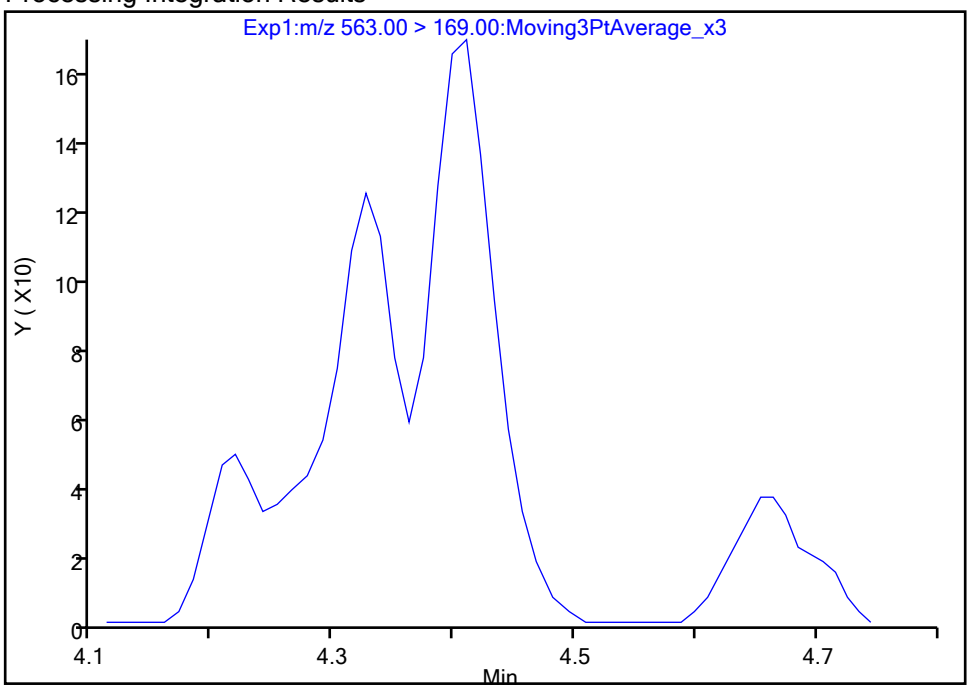
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

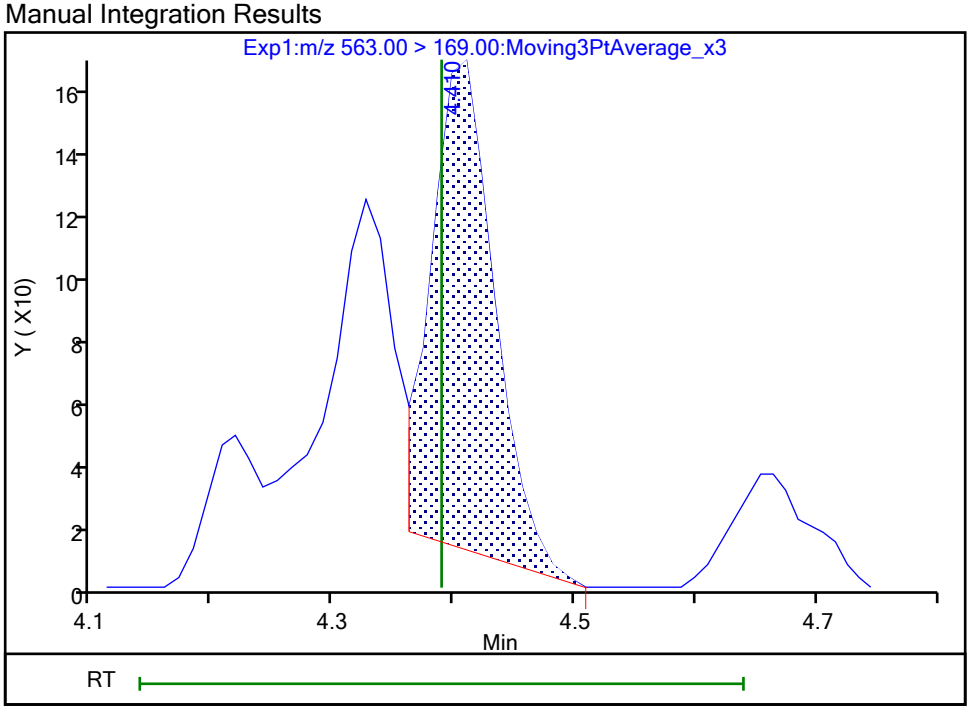
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.41
Area: 546
Amount: 0.001310
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:24:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

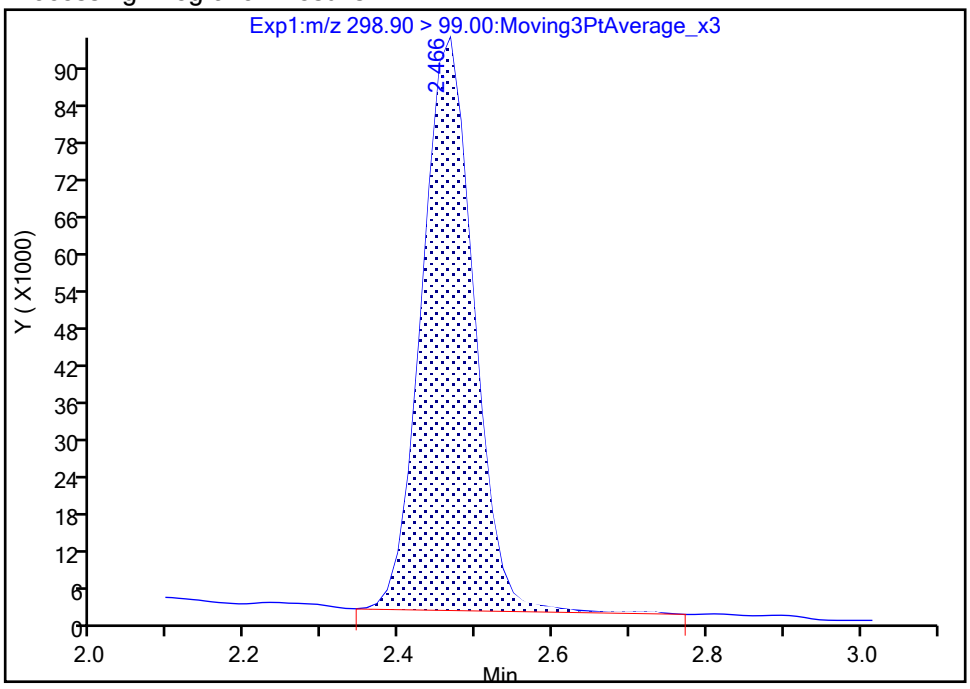
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

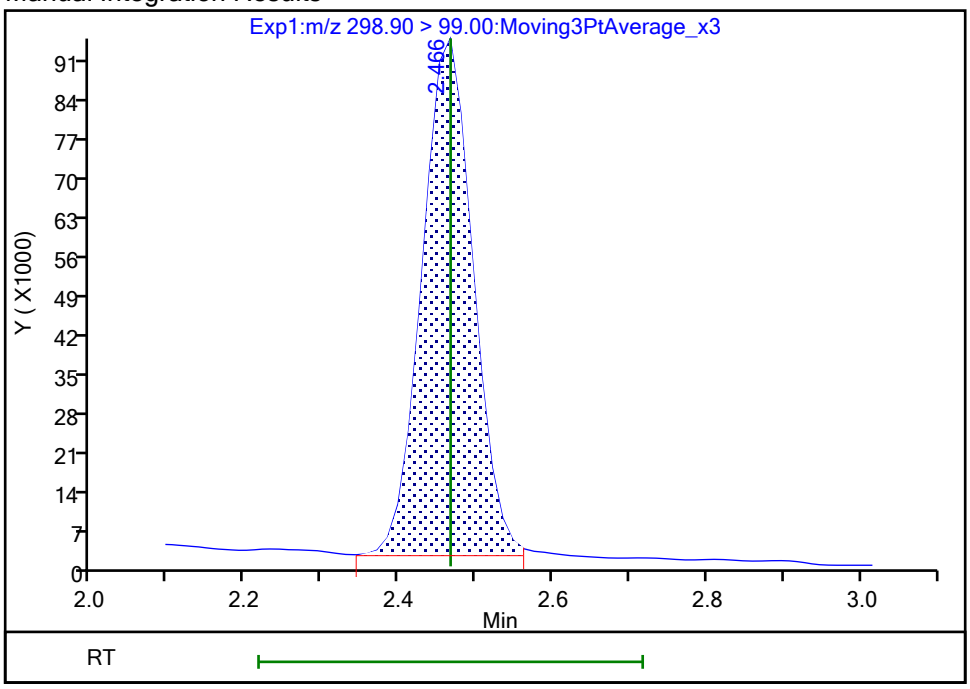
Processing Integration Results

RT: 2.47
Area: 434942
Amount: 0.579486
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 427932
Amount: 0.471383
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

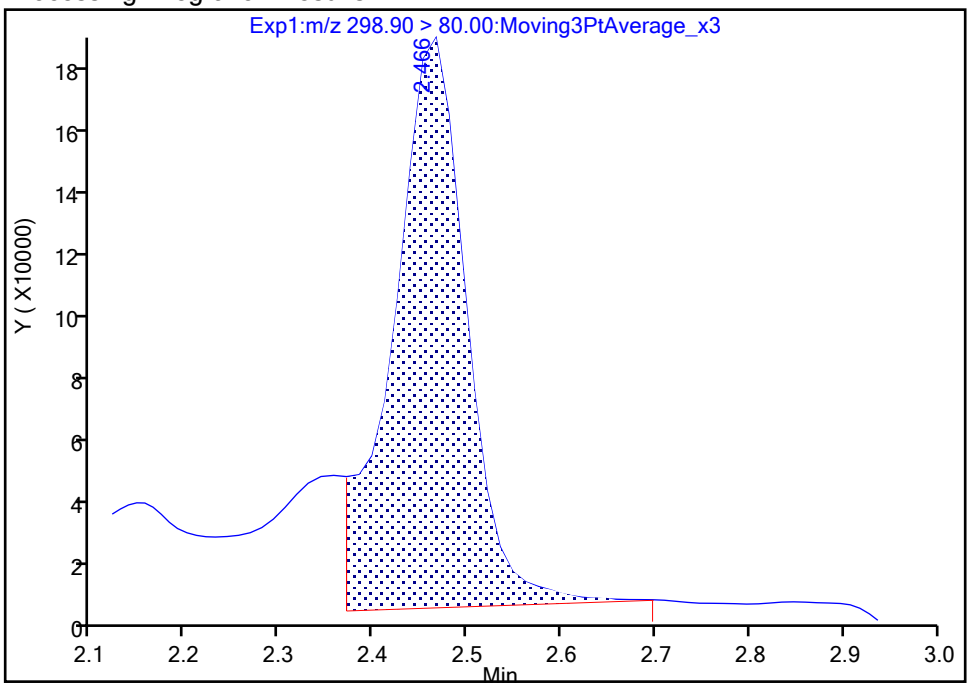
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

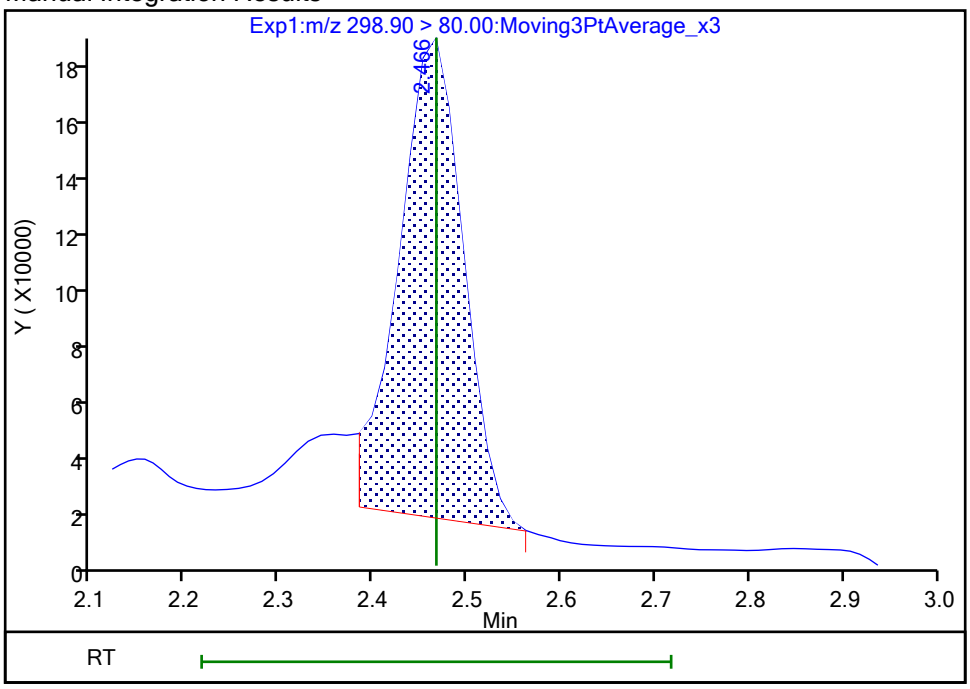
Processing Integration Results

RT: 2.47
Area: 993375
Amount: 0.579486
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 808062
Amount: 0.471383
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

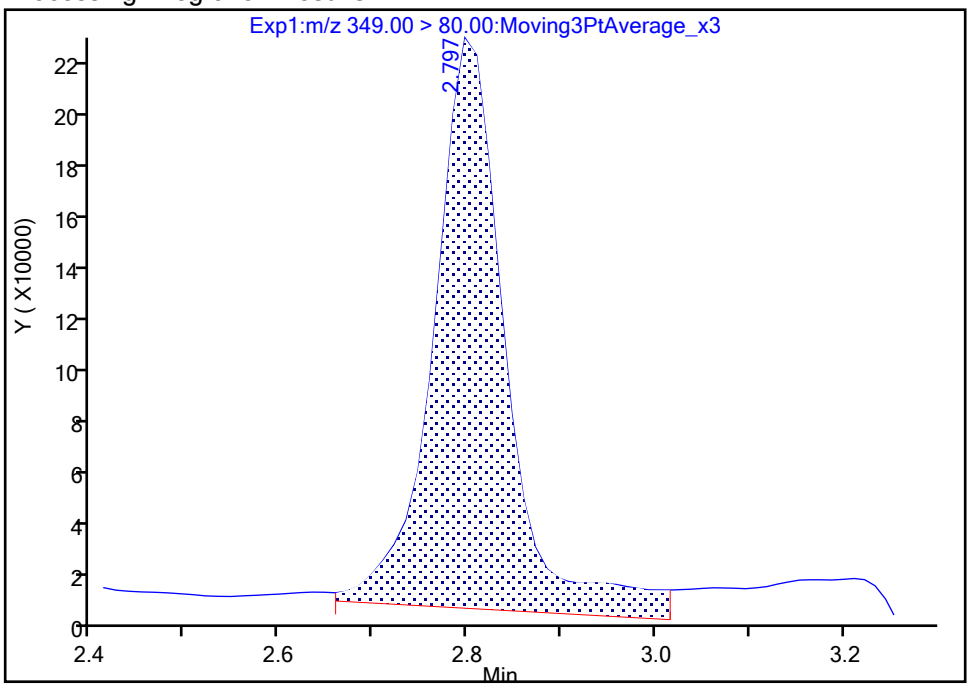
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

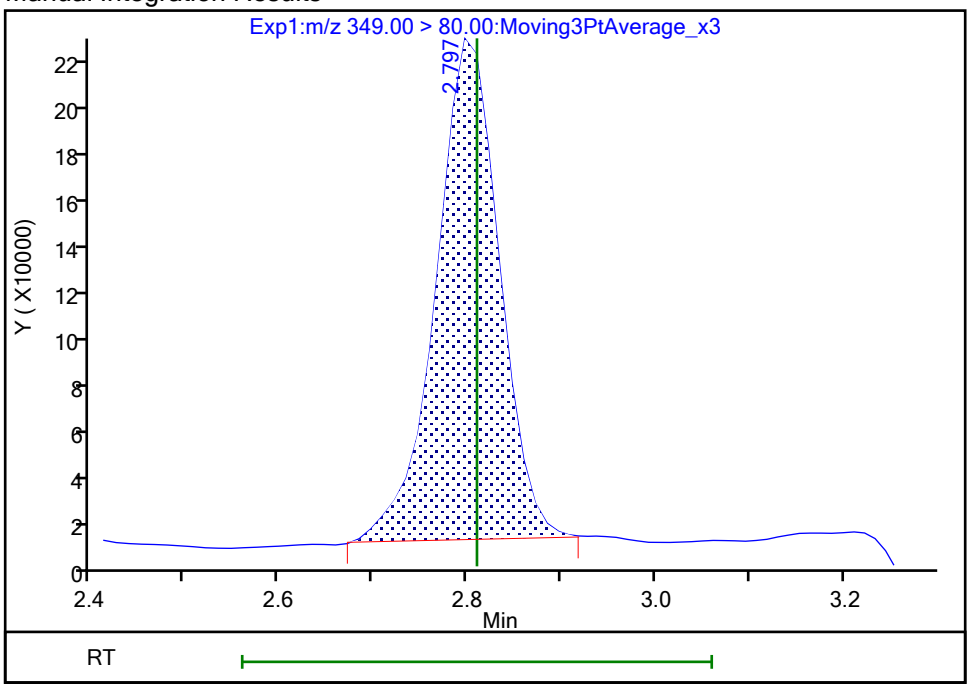
Processing Integration Results

RT: 2.80
Area: 1133719
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 943660
Amount: 0.665872
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

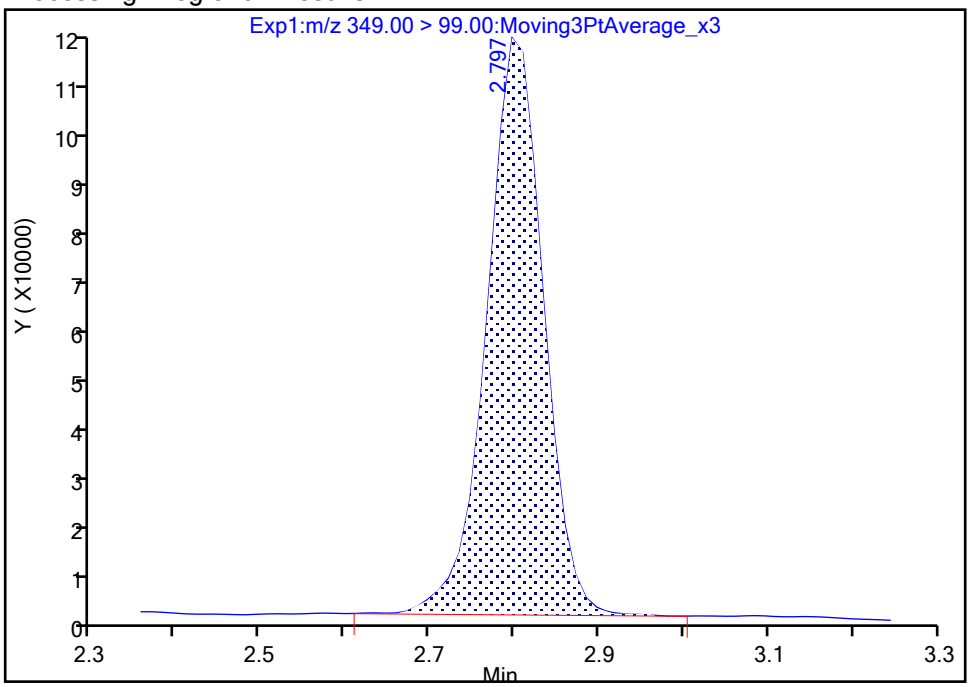
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

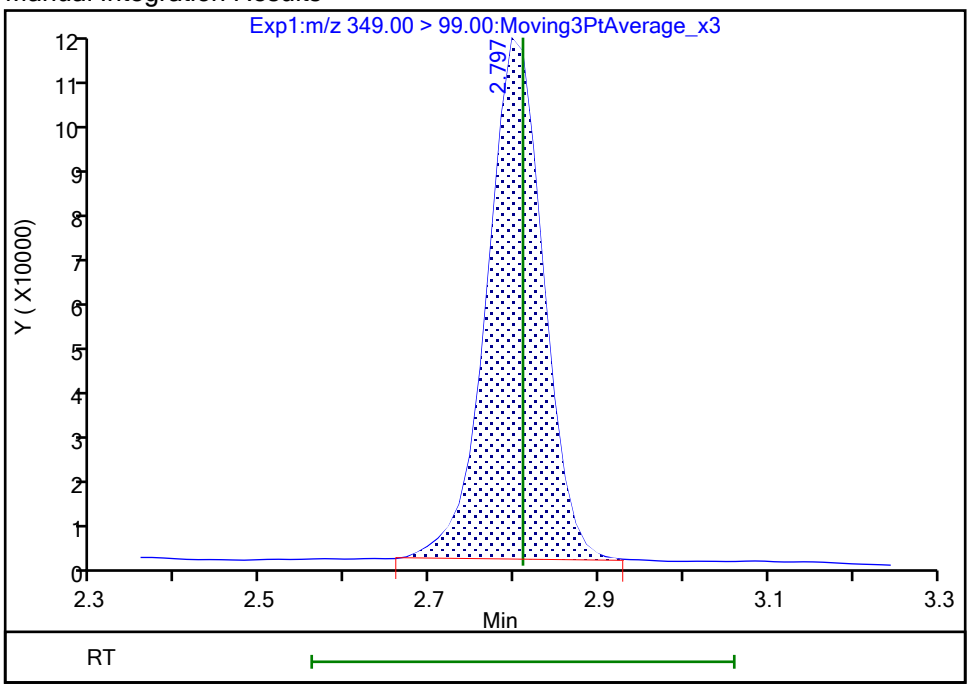
Processing Integration Results

RT: 2.80
Area: 546157
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 543412
Amount: 0.665872
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

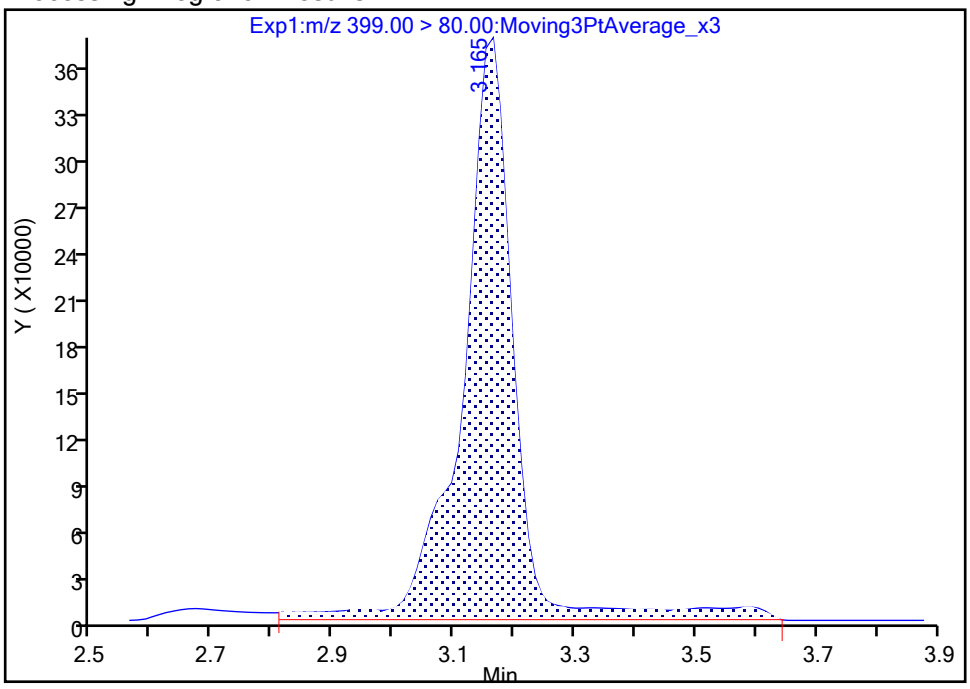
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

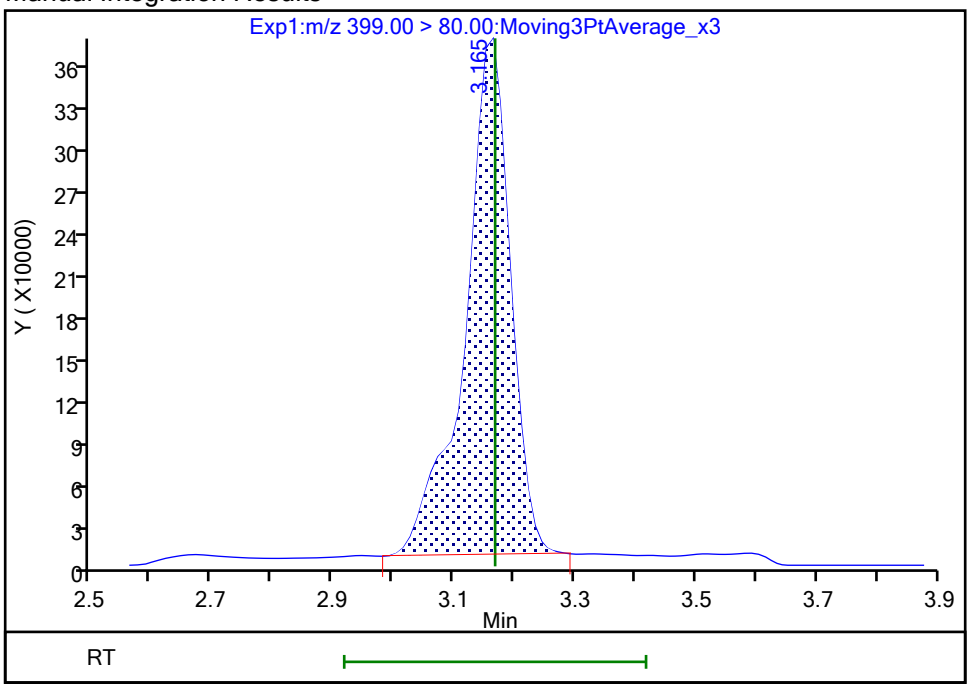
Processing Integration Results

RT: 3.16
Area: 2228037
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1895932
Amount: 1.578216
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

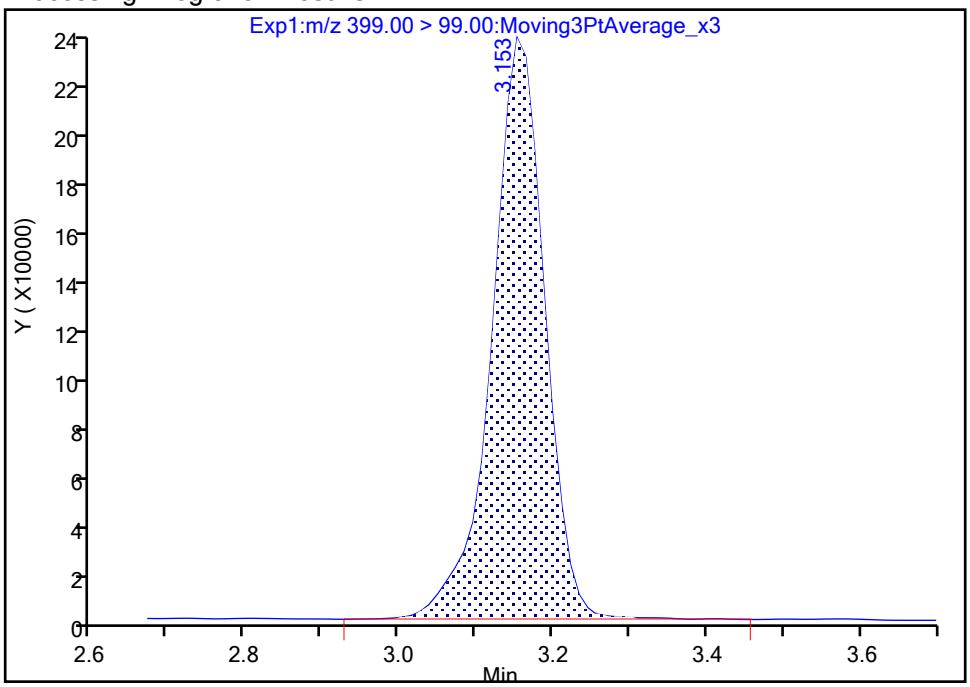
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

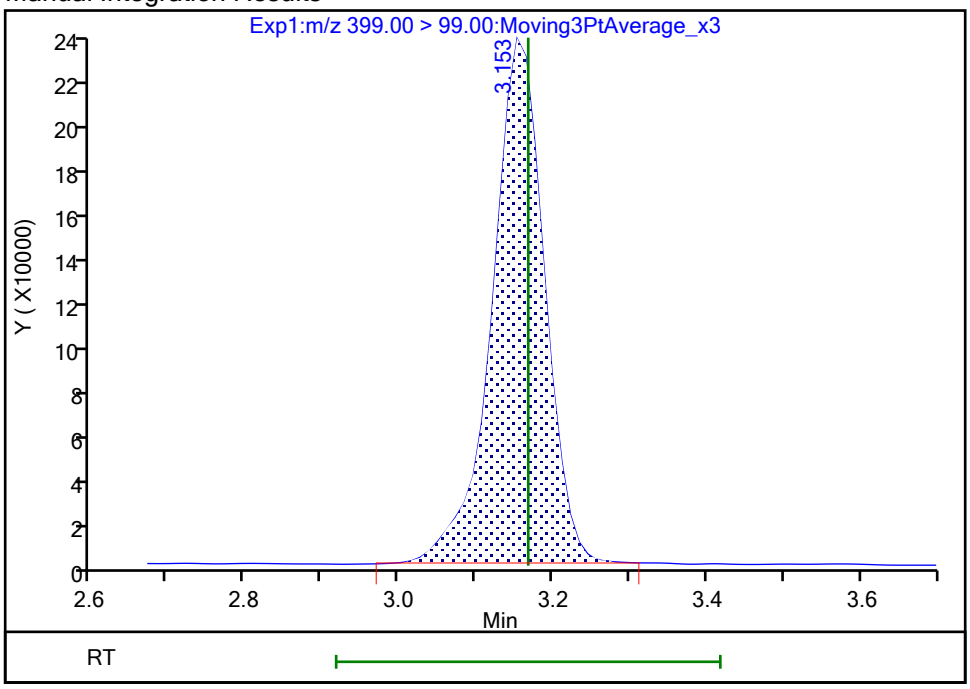
Processing Integration Results

RT: 3.15
Area: 1143119
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 1126462
Amount: 1.578216
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

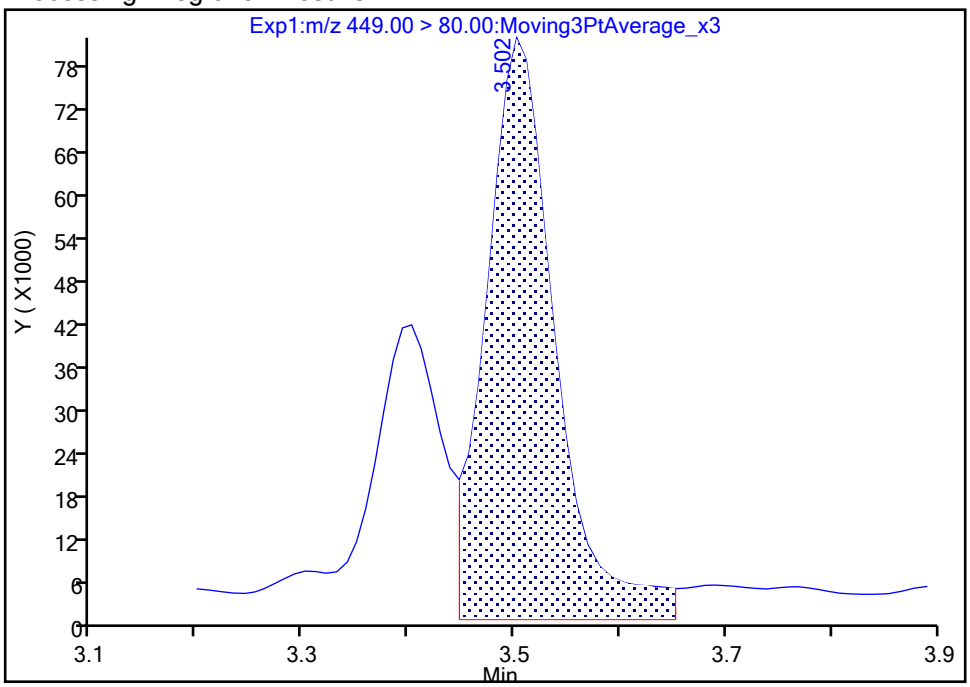
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

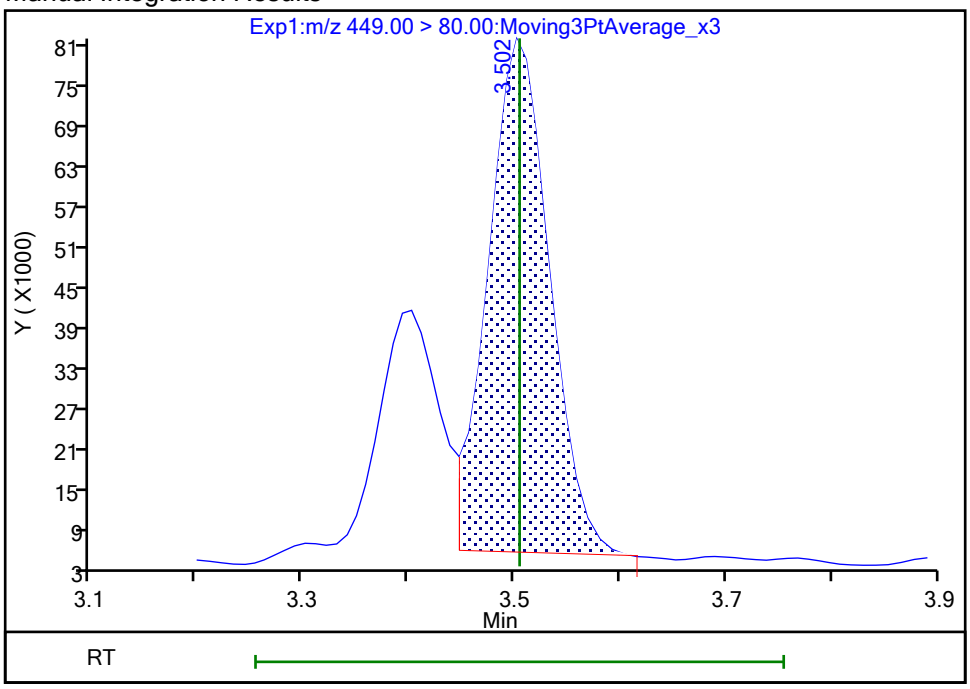
Processing Integration Results

RT: 3.50
Area: 368472
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 304005
Amount: 0.285794
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

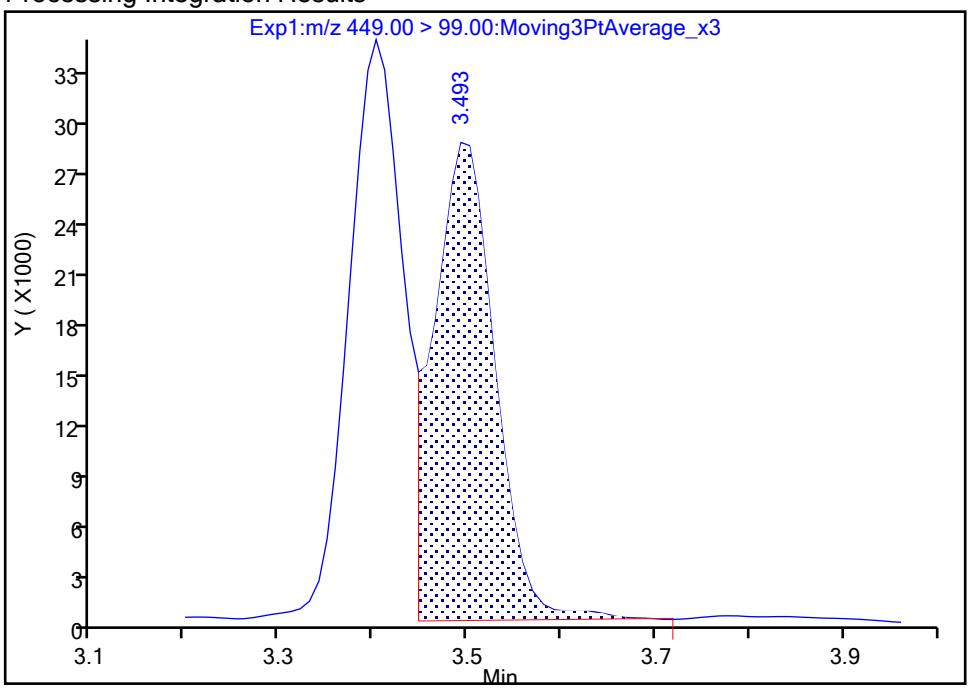
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

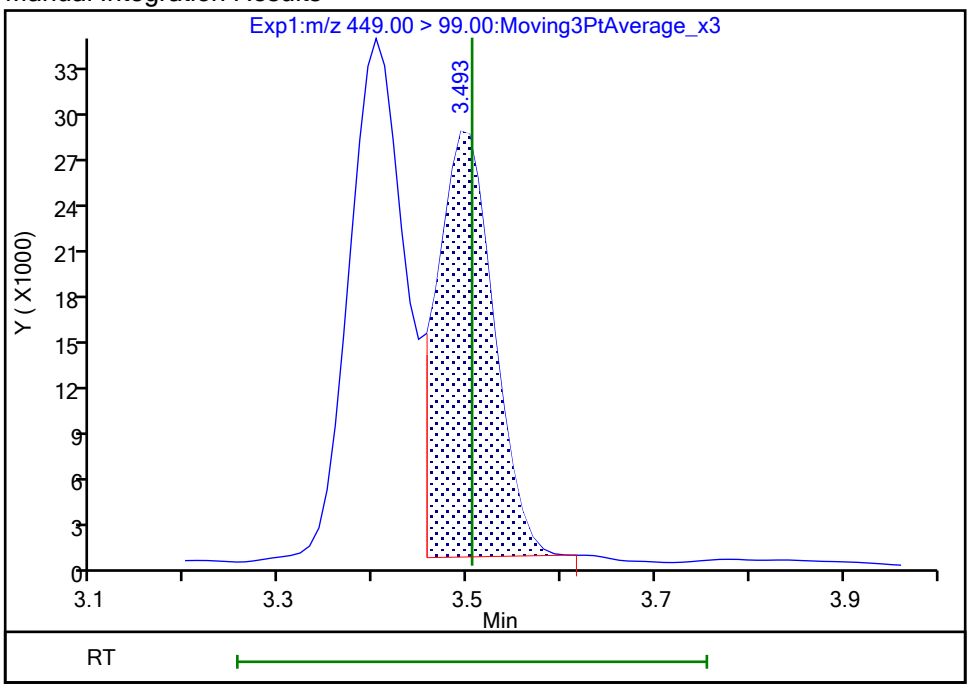
Processing Integration Results

RT: 3.49
Area: 128953
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 115364
Amount: 0.285794
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:21:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

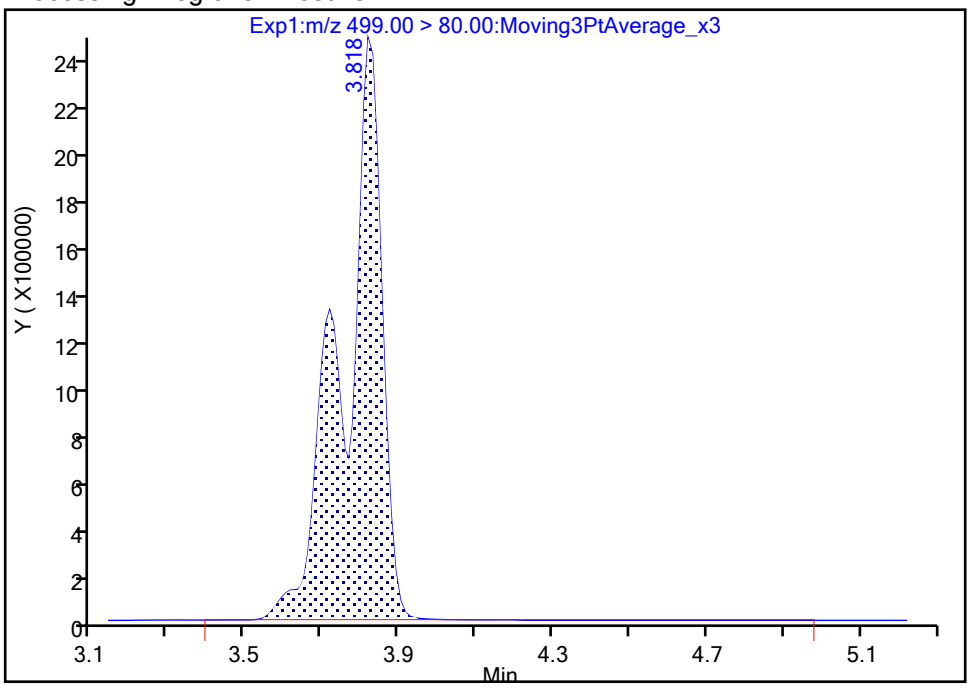
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

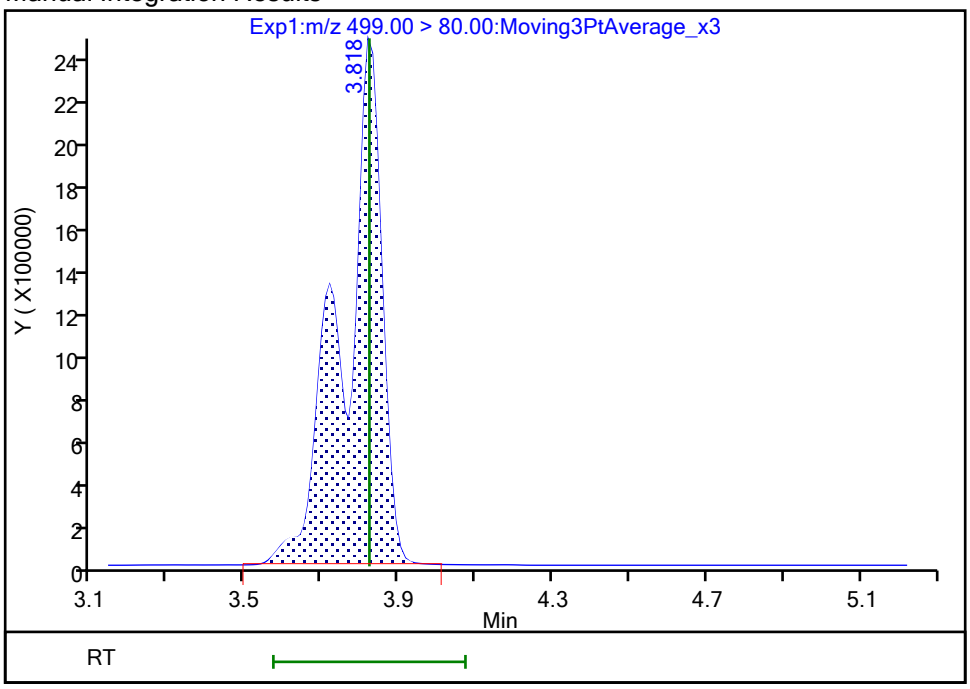
Processing Integration Results

RT: 3.82
Area: 17099093
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 17013334
Amount: 19.817063
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

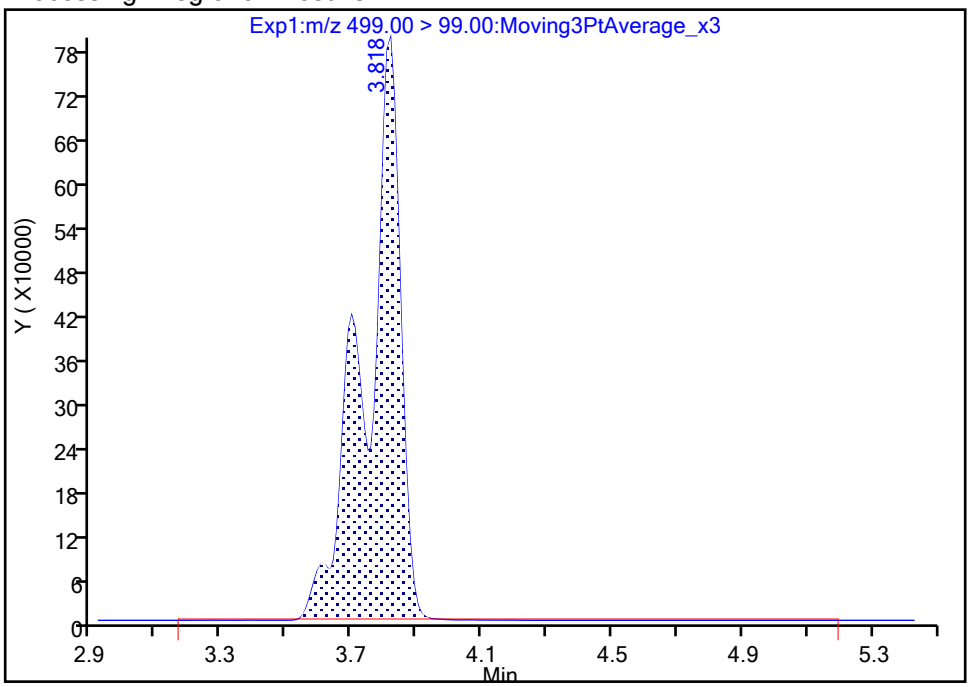
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

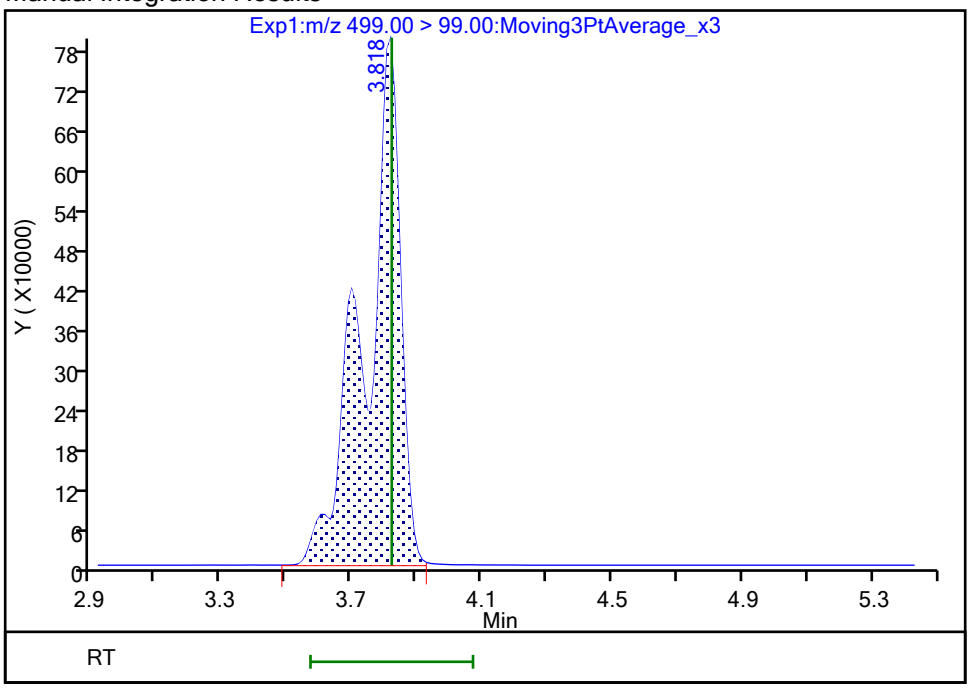
Processing Integration Results

RT: 3.82
Area: 6022228
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 6001306
Amount: 19.817063
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

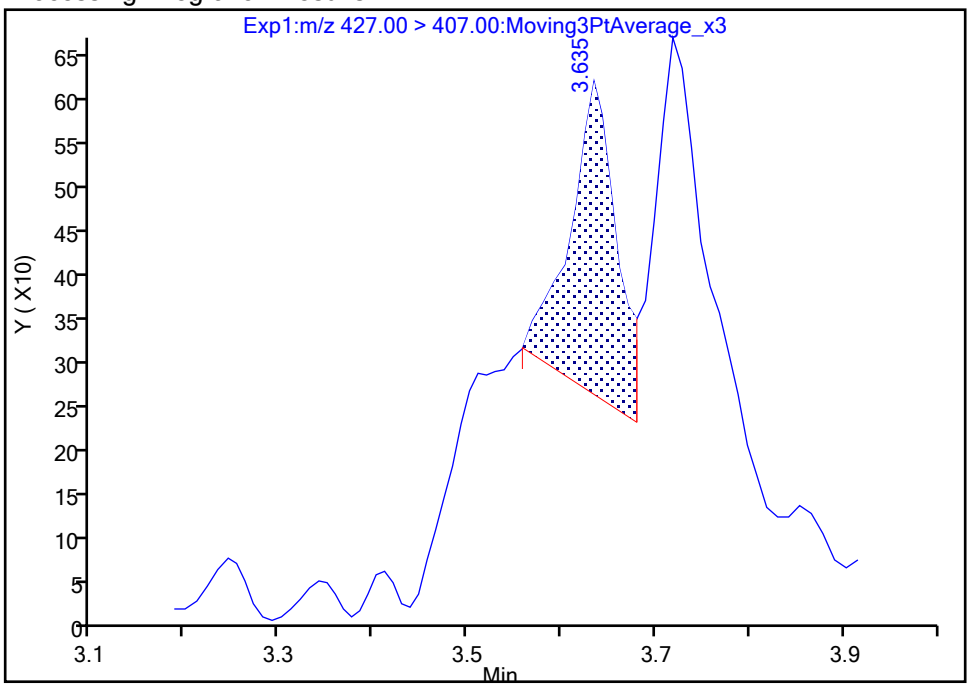
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

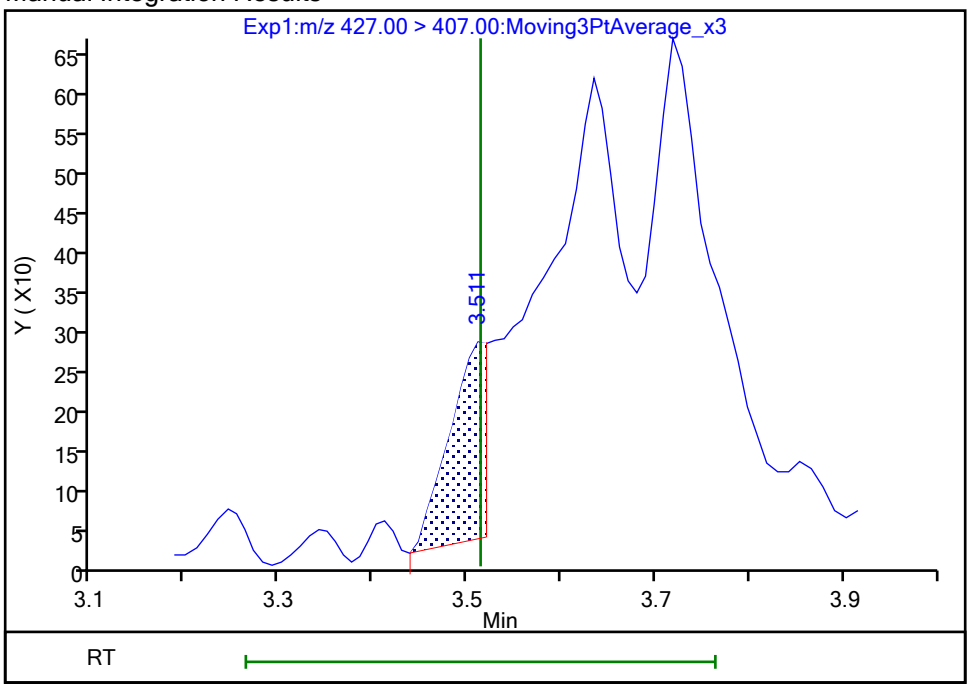
Processing Integration Results

RT: 3.63
Area: 1223
Amount: 0.001963
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 653
Amount: 0.001048
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:22:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

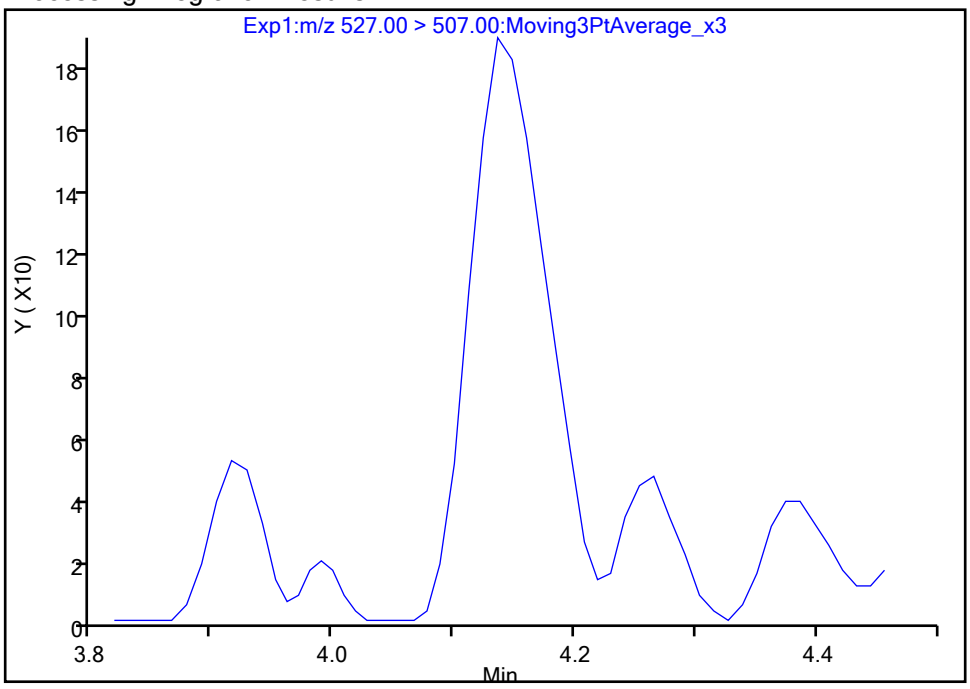
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

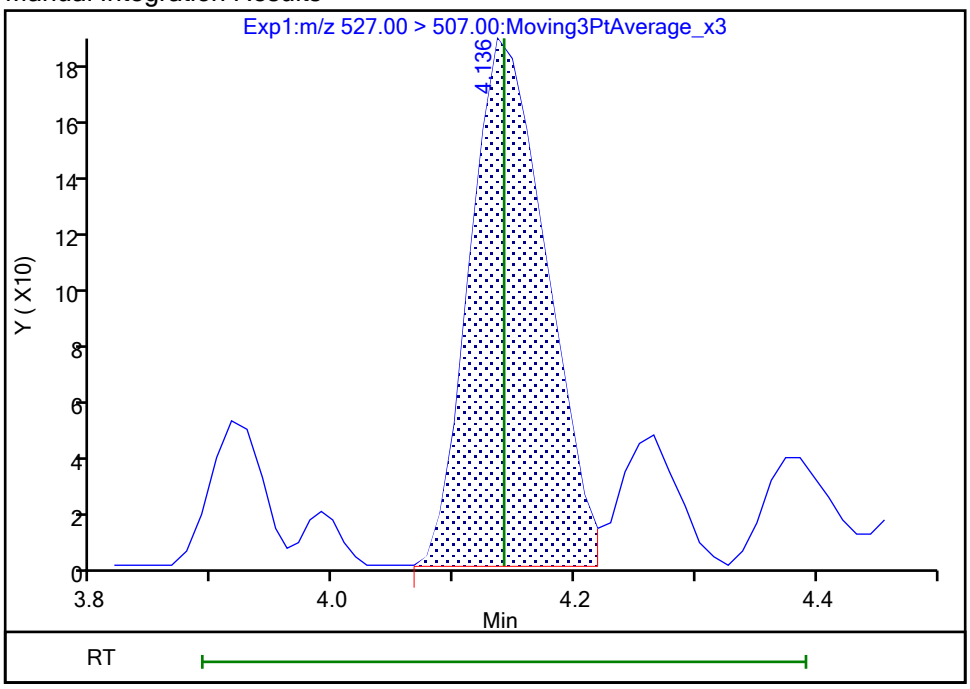
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 818
Amount: 0.001383
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

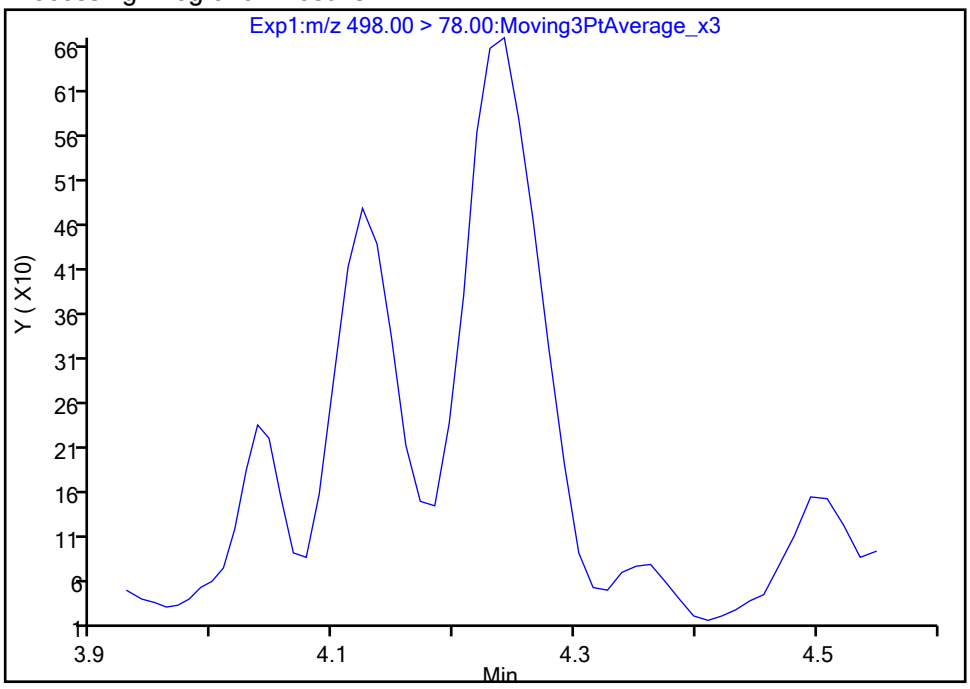
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

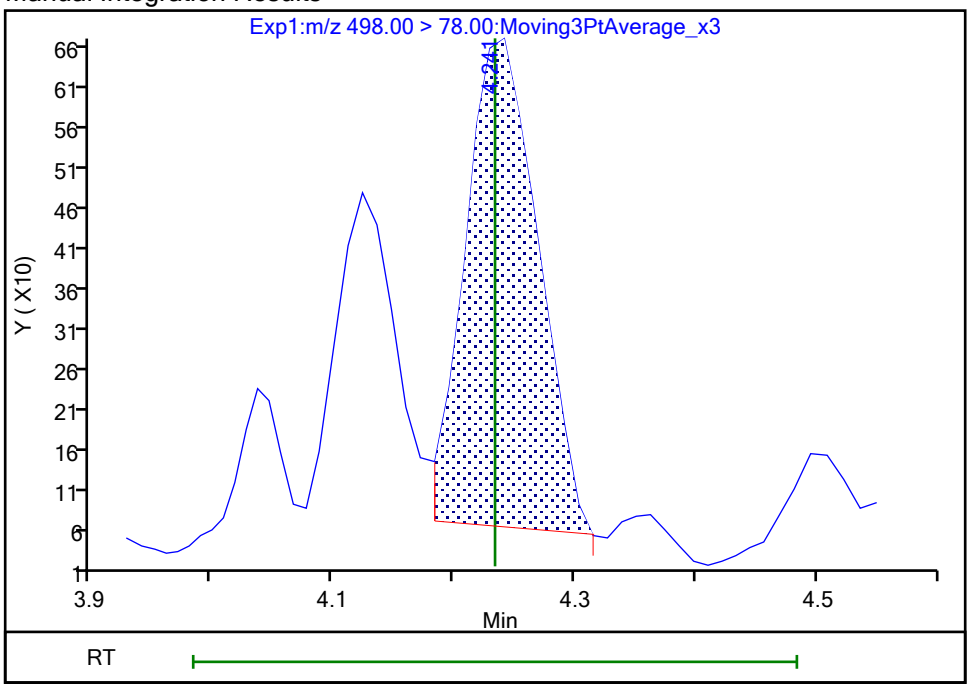
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 2535
Amount: 0.001999
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

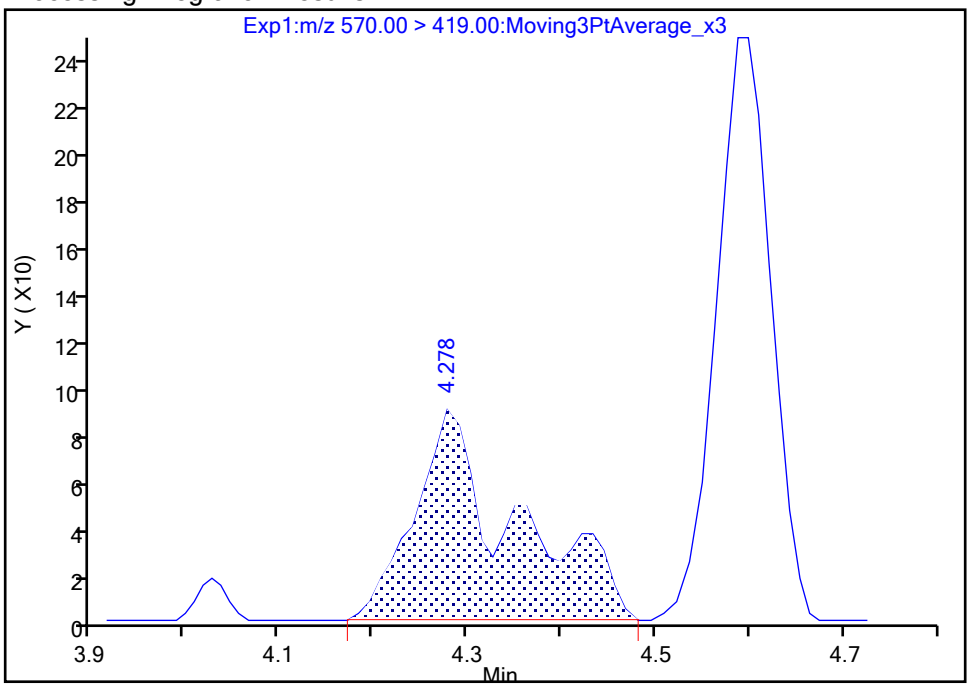
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

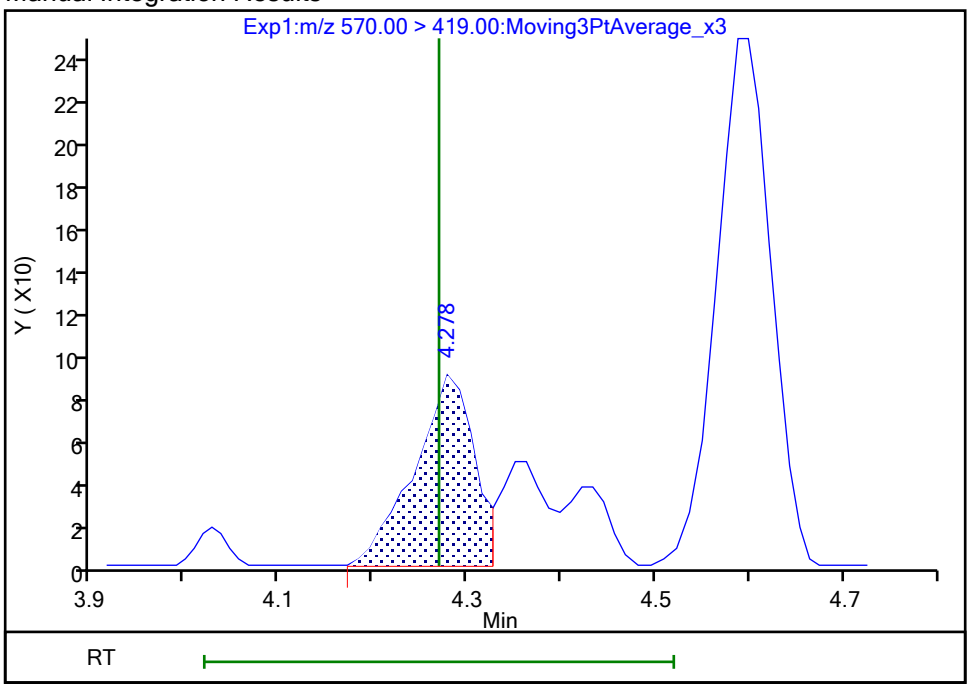
Processing Integration Results

RT: 4.28
Area: 669
Amount: 0.001766
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 392
Amount: 0.001035
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

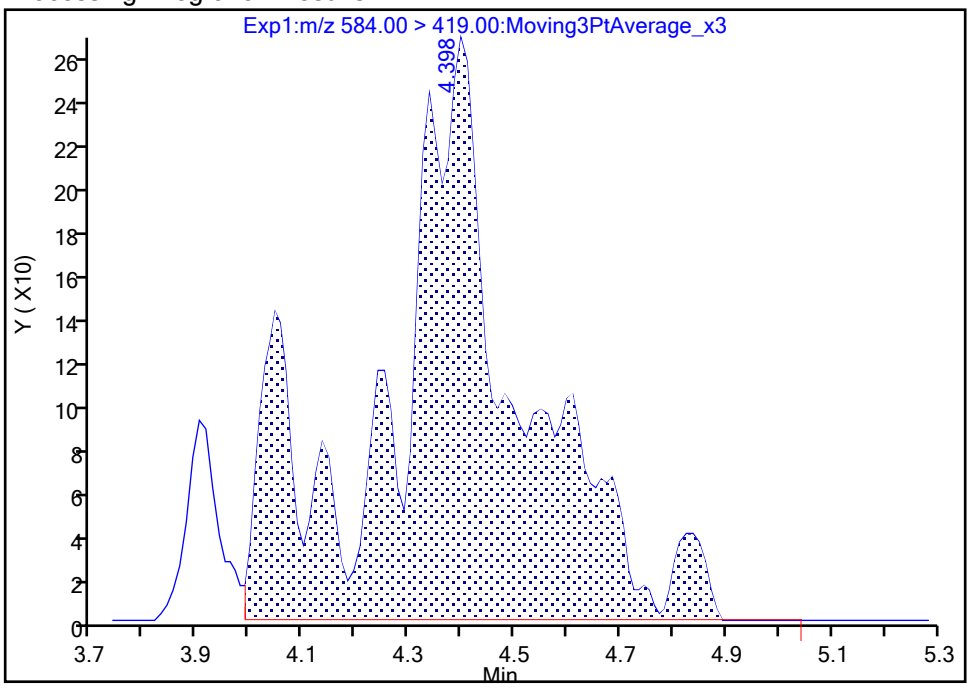
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

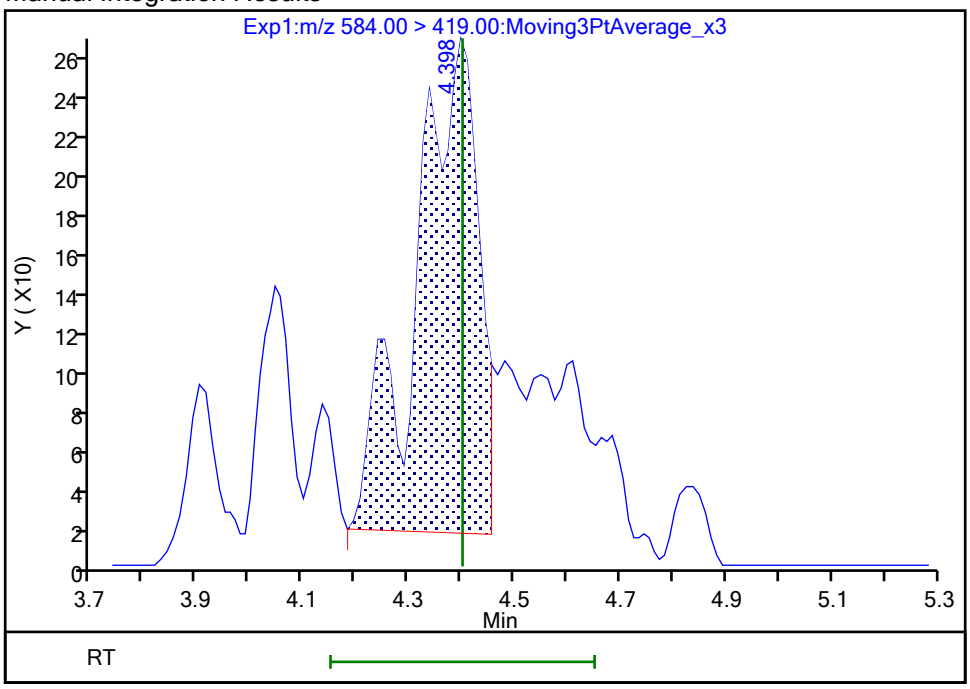
Processing Integration Results

RT: 4.40
Area: 4686
Amount: 0.011476
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 2059
Amount: 0.005042
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:24:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

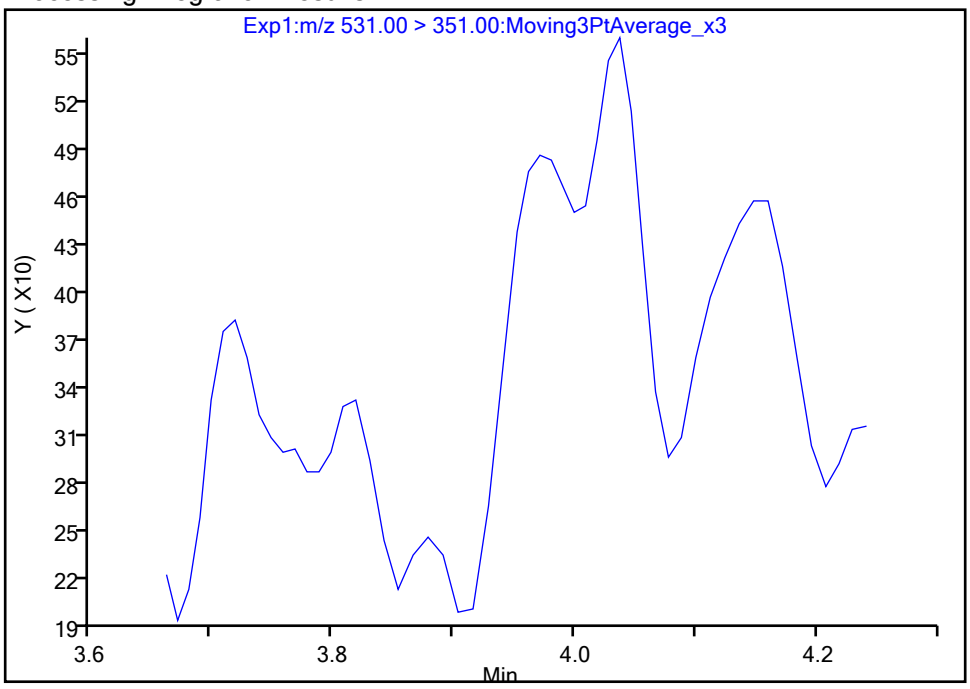
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

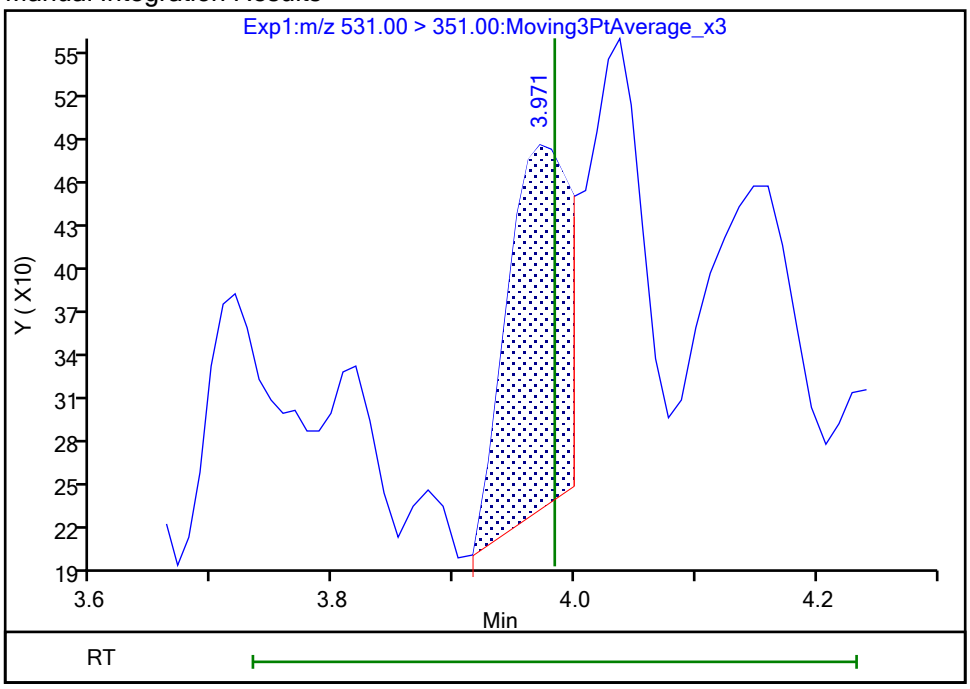
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 865
Amount: 0.000329
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:23:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

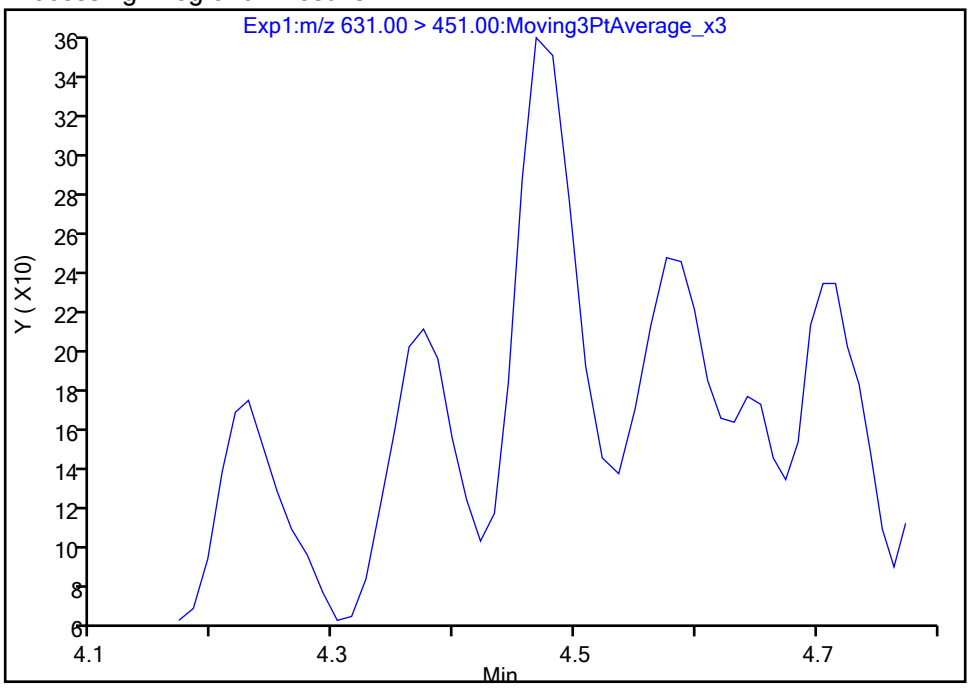
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

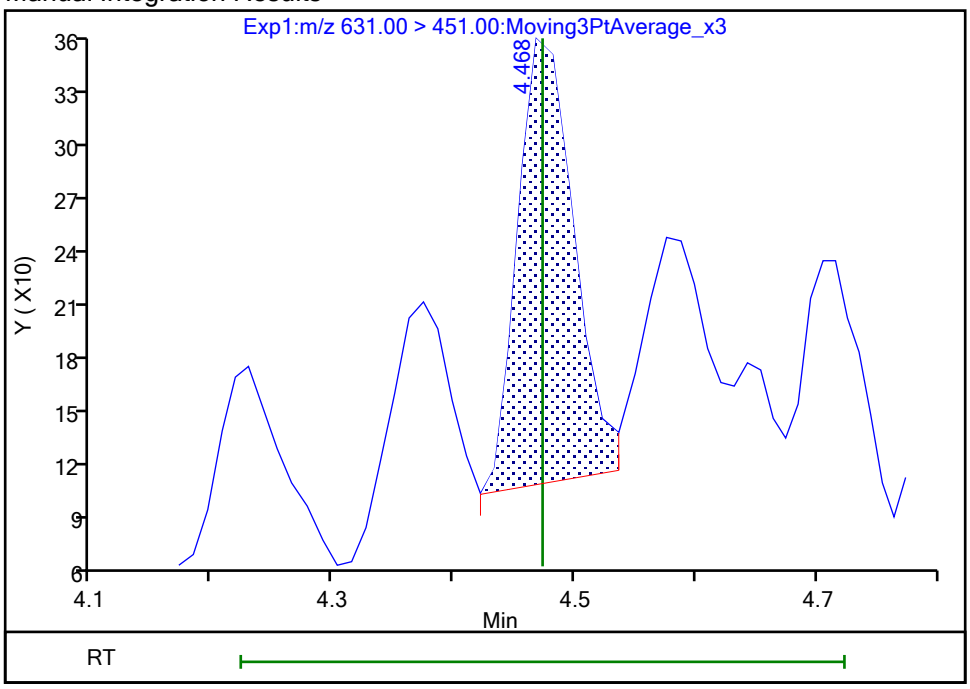
Not Detected
Expected RT: 4.47

Processing Integration Results



Manual Integration Results

RT: 4.47
Area: 801
Amount: 0.000199
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:24:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

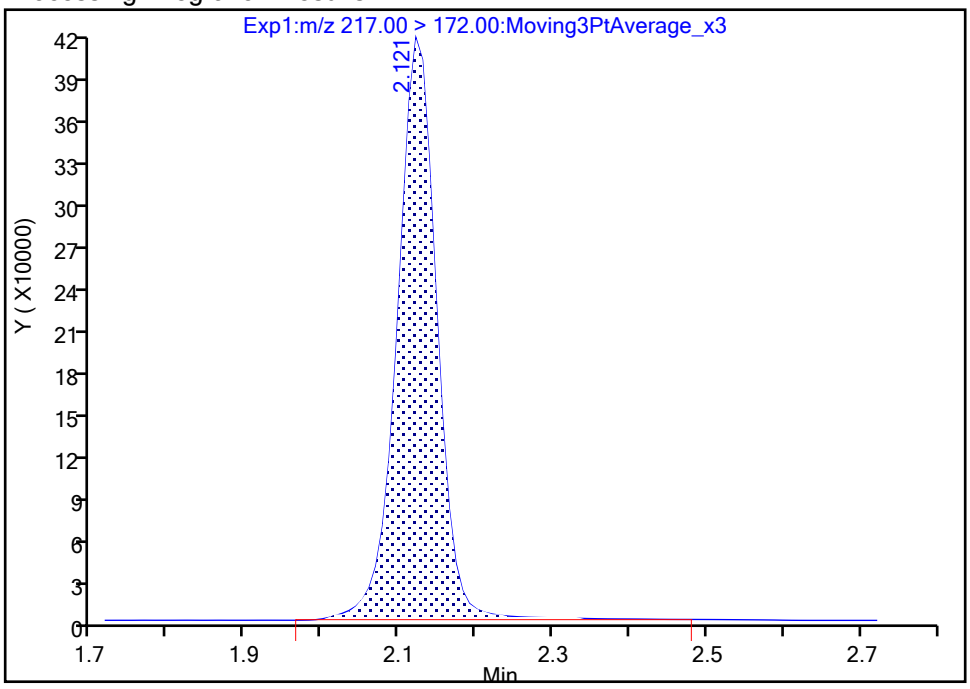
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

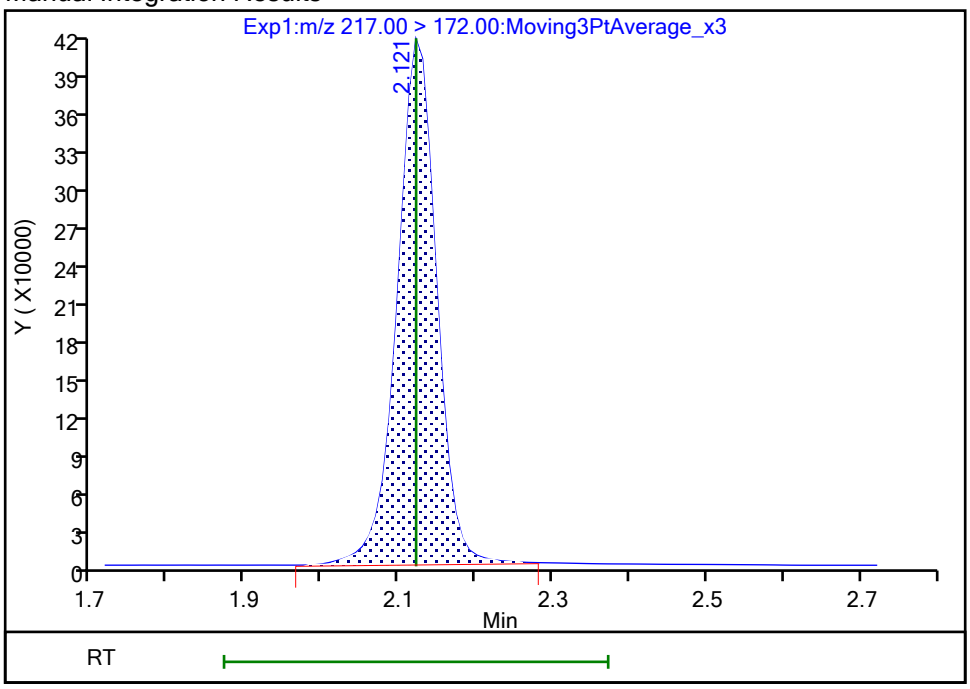
Processing Integration Results

RT: 2.12
Area: 1478890
Amount: 1.062025
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1471505
Amount: 1.056722
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

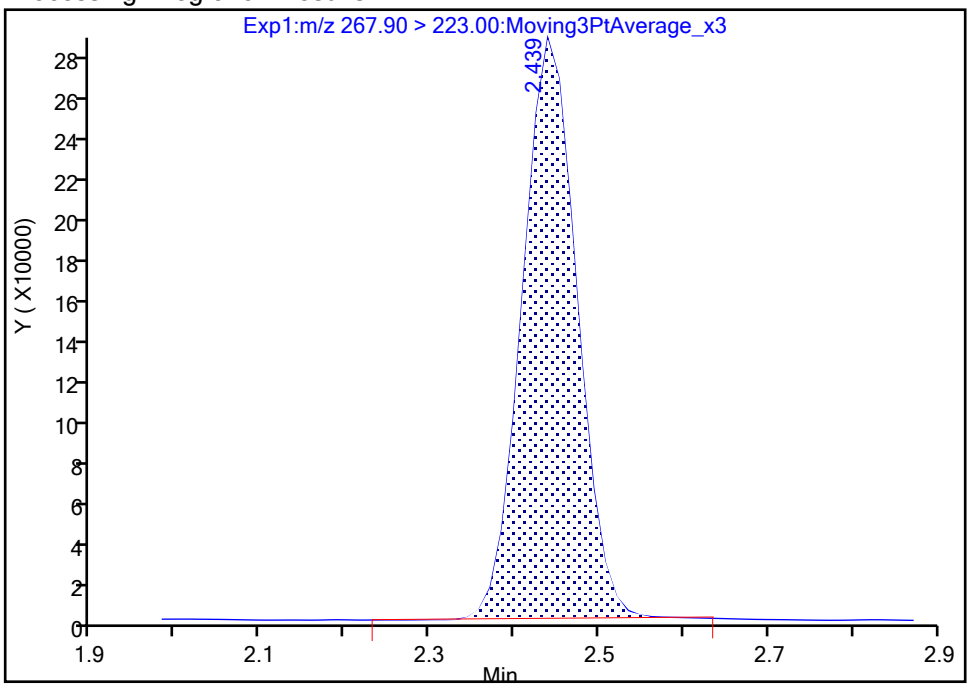
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

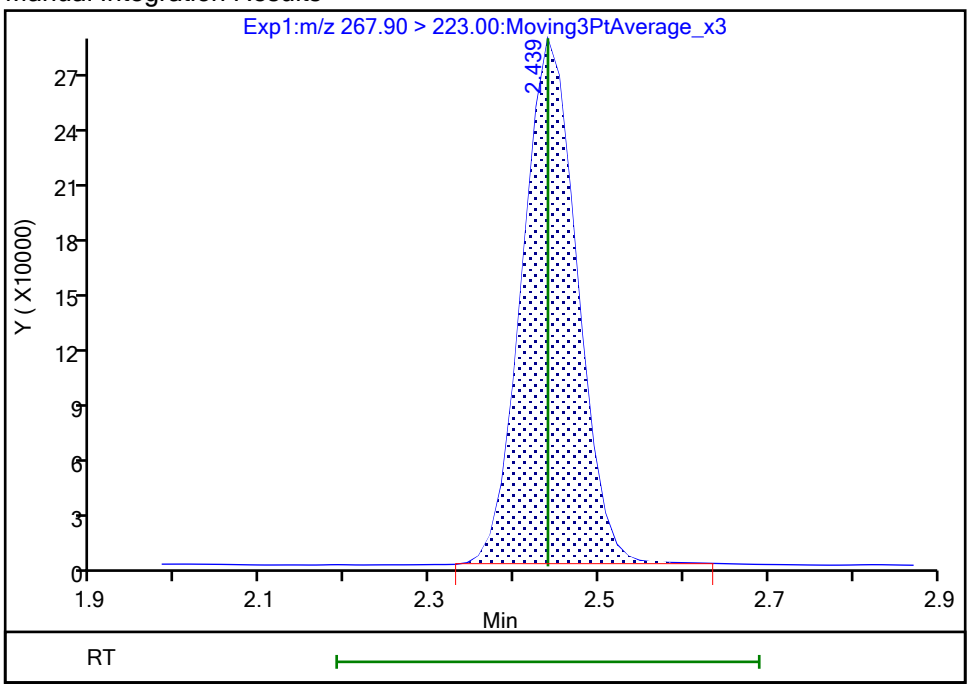
Processing Integration Results

RT: 2.44
Area: 1297707
Amount: 1.200779
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1297493
Amount: 1.200581
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

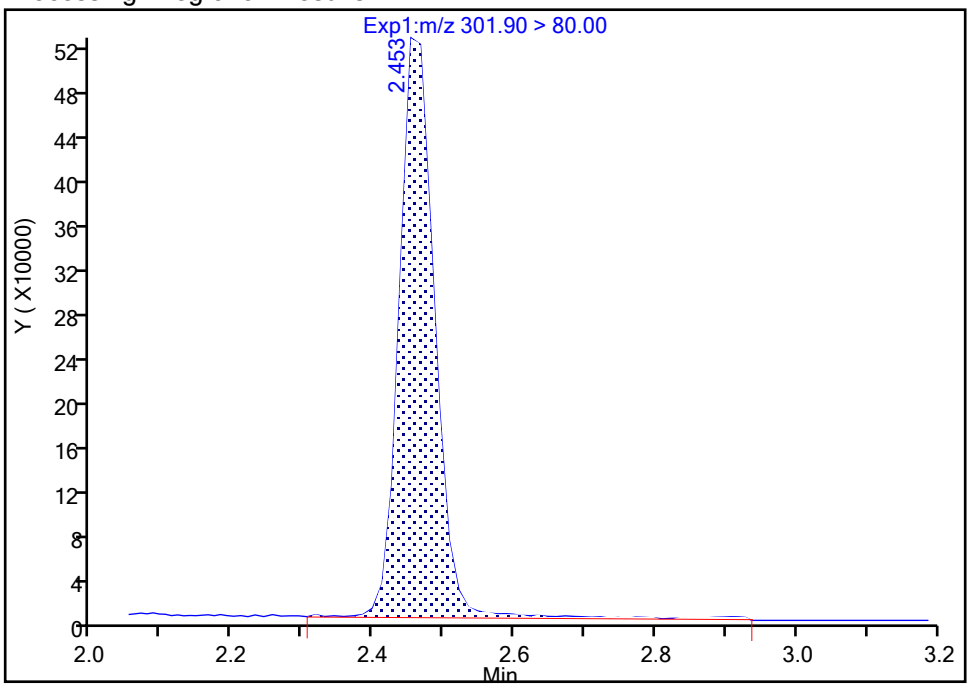
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

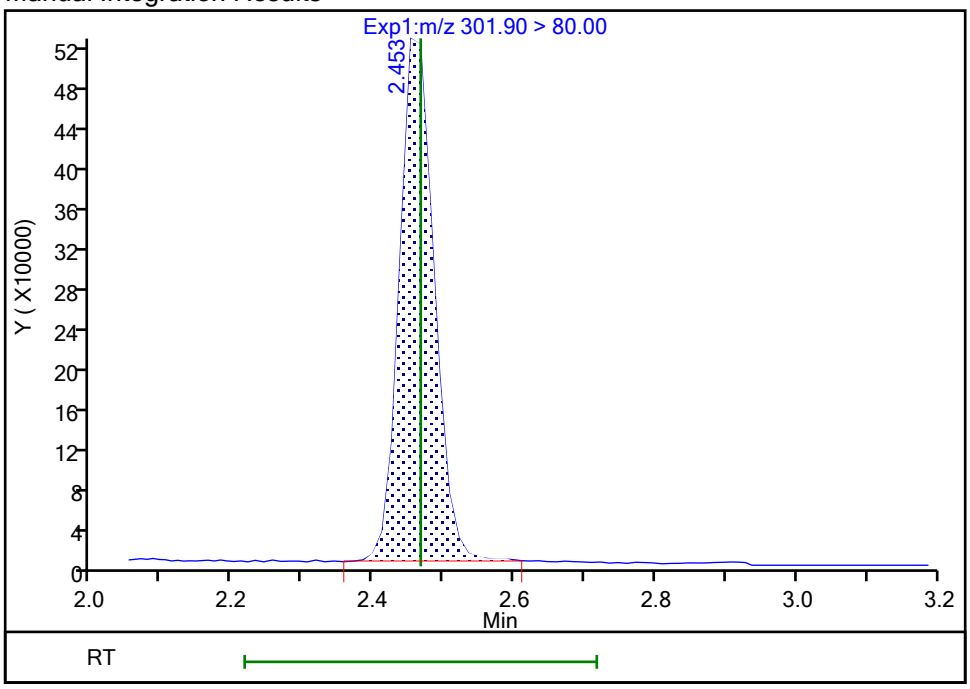
Processing Integration Results

RT: 2.45
Area: 1850379
Amount: 1.265410
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1784215
Amount: 1.220163
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

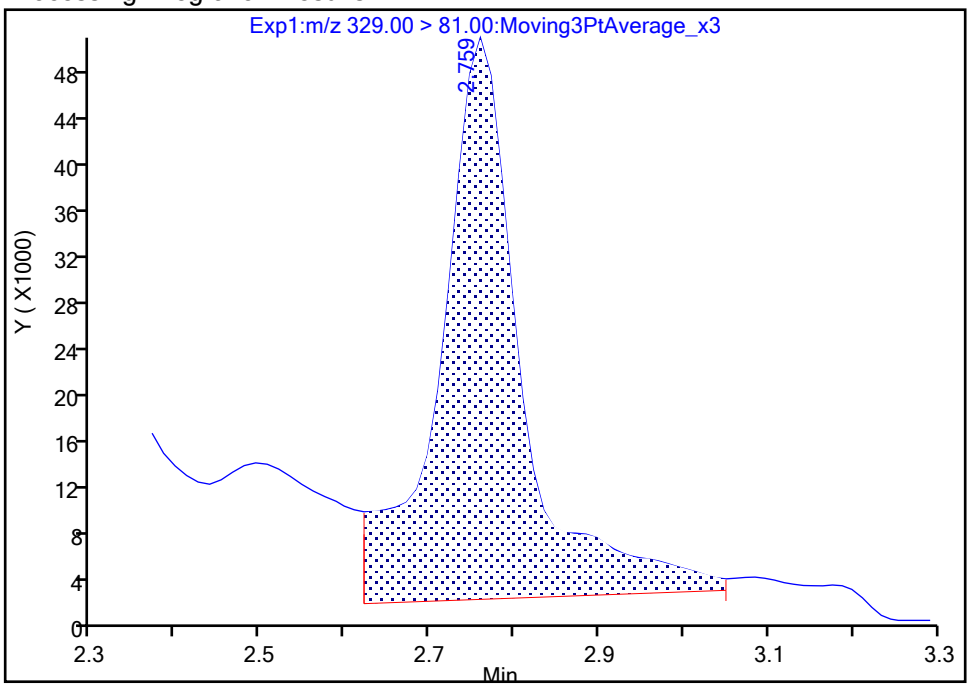
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

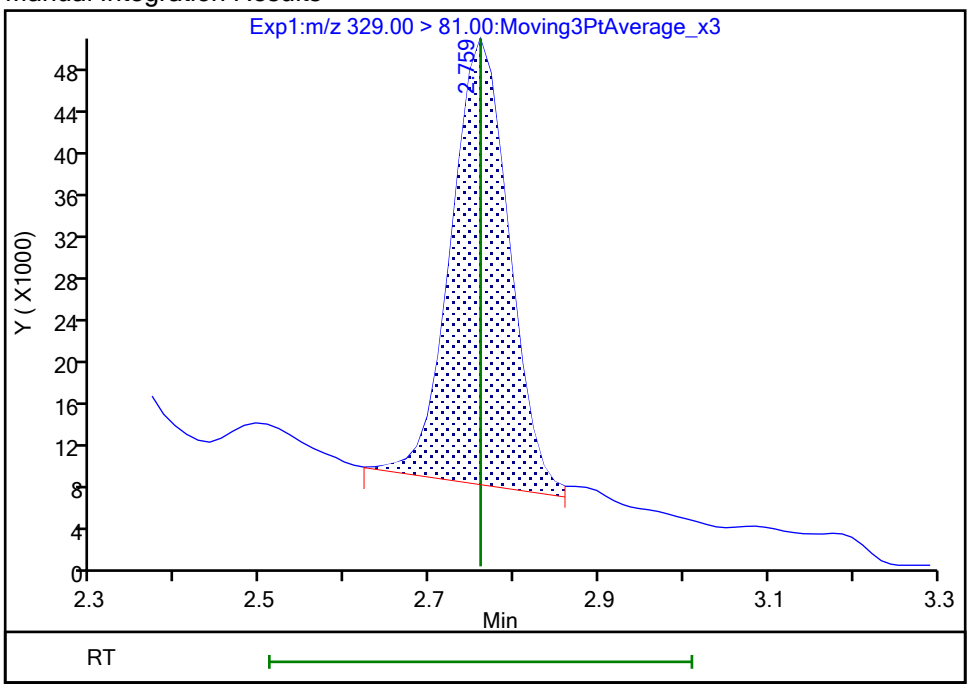
Processing Integration Results

RT: 2.76
Area: 329143
Amount: 1.946355
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 204256
Amount: 1.207848
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:19:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

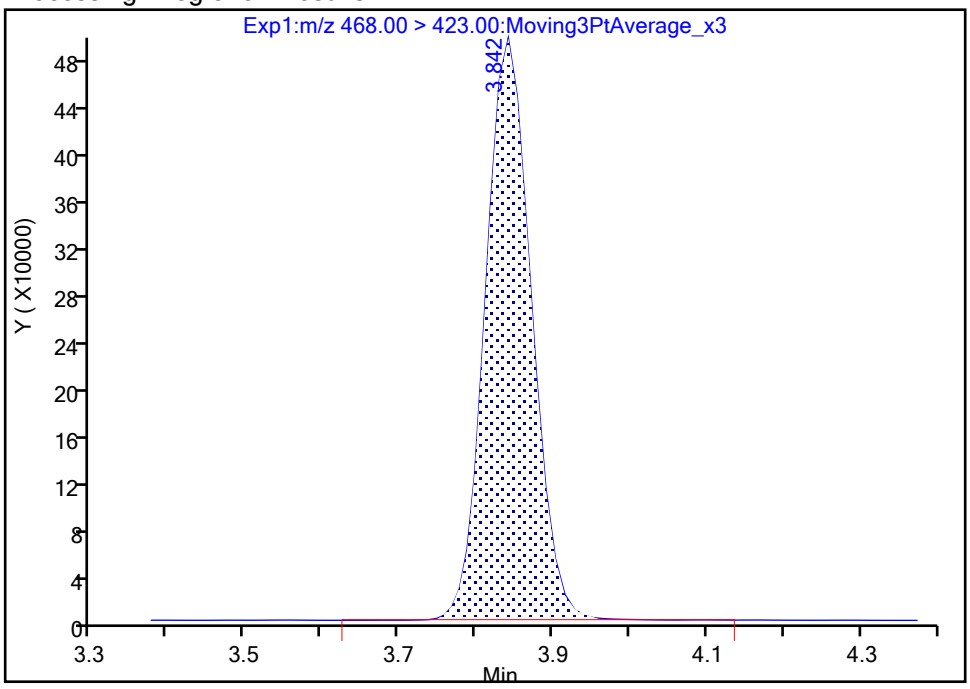
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A32.d				
Injection Date:	23-Oct-2023 19:27:54	Instrument ID:	LC812		
Lims ID:	460-290375-A-5-A	Lab Sample ID:	200-290375-5		
Client ID:	MW91A-101323-1116-66				
Operator ID:	LC812user	ALS Bottle#:	29	Worklist Smp#:	32
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 19 13C5 PFNA, CAS: STL00995

Signal: 1

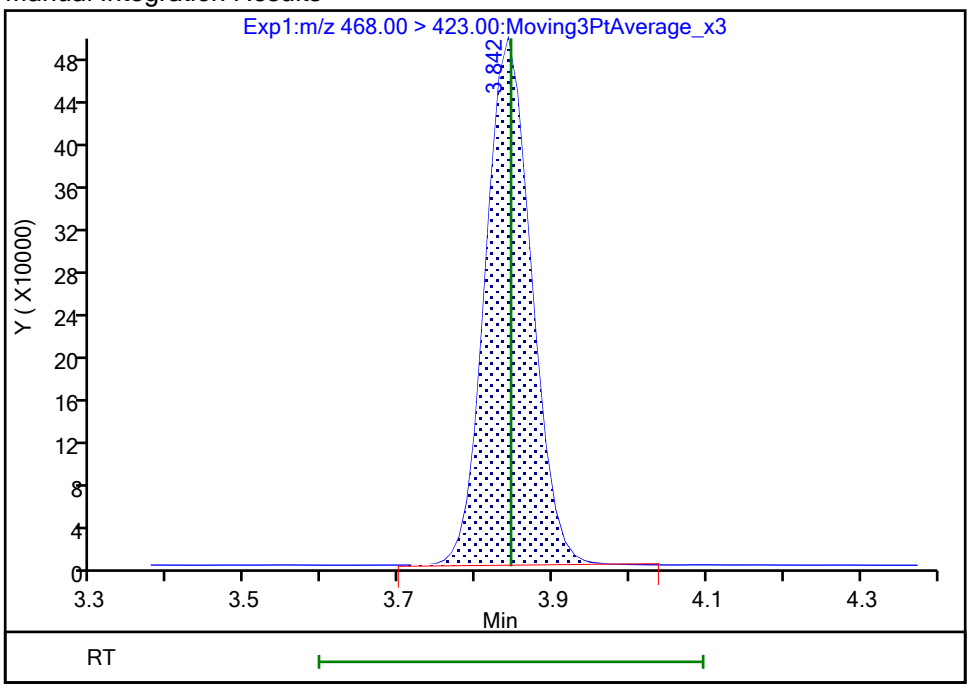
Processing Integration Results

RT: 3.84
Area: 2049753
Amount: 1.378437
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 2046716
Amount: 1.376395
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 14:20:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW88-101323-0831-80.5 | Lab Sample ID: 460-290375-6

Matrix: Water | Lab File ID: PA231023C05.d

Analysis Method: 537 (modified) | Date Collected: 10/13/2023 08:31

Extraction Method: 3535 | Date Extracted: 10/20/2023 20:02

Sample wt/vol: 291.6(mL) | Date Analyzed: 10/23/2023 23:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.29	U	4.29	1.03
2706-90-3	Perfluoropentanoic acid	1.71	U	1.71	0.58
307-24-4	Perfluorohexanoic acid	1.35	J	1.71	0.56
375-85-9	Perfluoroheptanoic acid	0.78	J	1.71	0.46
335-67-1	Perfluorooctanoic acid	1.15	J	1.71	0.65
375-95-1	Perfluorononanoic acid	1.71	U	1.71	0.42
335-76-2	Perfluorodecanoic acid	1.71	U	1.71	0.39
2058-94-8	Perfluoroundecanoic acid	1.71	U	1.71	0.47
307-55-1	Perfluorododecanoic acid	1.71	U	1.71	0.42
72629-94-8	Perfluorotridecanoic acid	1.71	U	1.71	0.41
376-06-7	Perfluorotetradecanoic acid	1.71	U	1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	1.71	U	1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	0.47	J	1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	1.65	J	1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	0.54	J	1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	43.9		1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	1.71	U	1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	1.71	U	1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66
754-91-6	Perfluorooctanesulfonamide	1.71	U	1.71	0.79
2355-31-9	NMeFOSAA	4.29	U	4.29	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37
13252-13-6	HFPODA	3.43	U	3.43	0.94
919005-14-4	DONA	1.71	U	1.71	0.36
756426-58-1	9Cl-PF3ONS	1.71	U	1.71	0.27
763051-92-9	11Cl-PF3OUdS	1.71	U	1.71	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW88-101323-0831-80.5 Lab Sample ID: 460-290375-6

Matrix: Water Lab File ID: PA231023C05.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 08:31

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 291.6(mL) Date Analyzed: 10/23/2023 23:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	90		50-150
STL01893	13C5 PFPeA	98		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	75		50-150
STL02337	13C3 PFBS	95		50-150
STL01056	13C8 FOSA	91		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	109		50-150
STL02395	M2-4:2 FTS	104		50-150
STL02279	M2-6:2 FTS	108		50-150
STL02280	M2-8:2 FTS	97		50-150
STL02255	13C3 HFPO-DA	94		50-150
STL00994	18O2 PFHxS	100		50-150
STL00993	13C2 PFHxA	92		50-150
STL00991	13C4 PFOS	107		50-150
STL00998	13C2 PFDoA	104		50-150
STL00995	13C5 PFNA	101		50-150
STL00996	13C2 PFDA	106		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	109		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d
Lims ID: 460-290375-A-6-A
Client ID: MW88-101323-0831-80.5
Sample Type: Client
Inject. Date: 23-Oct-2023 23:49:31 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-6-A
Misc. Info.: 200-0057511-005 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:19:02
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	1736808	1.12		89.6	968	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.440	2.439	0.001	0.695	1471726	1.22		97.8	393	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1807969	1.11		95.5	23916	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	25115	0.0145	Target=2.06		0.3	M
298.90 > 99.00	2.467	2.467	0.0	1.000	14890		1.69(1.03-3.09)		0.6	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.005	1160	0.001751			1.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	227822	1.21		104	17.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.796	1411558	1.15		92.2	2472	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	48884	0.0393	Target=14.12		0.7	M
313.00 > 119.00	2.785	2.797	-0.012	0.996	3743		13.06(7.06-21.17)		1.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	21045	0.0138	Target=2.72		0.8	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	15312		1.37(1.36-4.09)		2.2	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	2058	0.009188			10.3	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	279648	1.18		94.4	2923	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.901	1380748	1.18		100	3945	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.155	3.168	-0.013	0.996	62268	0.0482	Target=3.32		4.7	
399.00 > 99.00	3.155	3.168	-0.013	0.996	30511		2.04(1.66-4.98)		7.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	1.000	33471	0.0228	Target=4.17		1.0	M
363.00 > 169.00	3.177	3.168	0.009	1.004	9594		3.49(2.09-6.26)		4.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.168	-0.002	0.901	1638073	1.22		97.6	2911	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.505	-0.002	0.917	17894	0.0157	Target=4.83		2.4	M
449.00 > 99.00	3.494	3.505	-0.011	0.915	5544		3.23(2.41-7.24)		1.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.505	-0.002	0.997	311273	1.28		108	57.3	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.514	-0.011	1.000	2003	0.002796			4.8	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.514	-0.002	1.000	54348	0.0334	Target=2.88		1.3	M
413.00 > 169.00	3.512	3.514	-0.002	1.000	15050		3.61(1.44-4.32)		8.6	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.523	-0.011	1.000	1907692	1.25		100	8284	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.523	-0.011		1954927	1.25			6878	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.822	-0.002	1.000	1181214	1.28	Target=4.24		179	M
499.00 > 99.00	3.820	3.822	-0.002	1.000	337420		3.50(2.12-6.37)		189	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.822	-0.002	1.088	944578	1.27		107	245	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.844	3.845	-0.001	1.000	17950	0.0109	Target=8.34		1.0	M
463.00 > 169.00	3.844	3.845	-0.001	1.000	2624		6.84(4.17-12.51)		6.4	M
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.845	-0.001	1.094	2096944	1.27		101	4174	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.972	3.983	-0.011	1.040	1441	0.000511			2.9	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.102	4.105	-0.003	1.074	2119	0.003021	Target=2.17		1.1	
549.00 > 99.00	4.102	4.105	-0.003	1.074	1180		1.80(1.08-3.25)		1.5	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.126	4.129	-0.003	1.000	12302	0.006691	Target=11.44		1.3	
513.00 > 169.00	4.138	4.129	0.009	1.003	2017		6.10(5.72-17.16)		3.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.129	-0.003	1.175	2299795	1.33		106	7986	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.178	317784	1.17		97.3	144	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.126	4.141	-0.015	0.997	418	0.000715			2.7	M
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.234	-0.002	1.205	1689165	1.14		91.3	5173	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.244	4.234	0.010	1.003	3855	0.002991			12.1	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.270	-0.002	1.215	519112	1.25		100	1182	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.292	4.270	0.022	1.006	2150	0.005705			4.5	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.364	4.366	-0.002	1.142	1038	0.001923	Target=2.37		1.7	M
599.00 > 99.00	4.340	4.366	-0.026	1.136	407		2.55(1.19-3.56)		2.1	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.249	2225767	1.36		109	10063	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.390	-0.002	1.000	11053	0.006023	Target=12.20		1.7	M
563.00 > 169.00	4.364	4.390	-0.026	0.995	1112		9.94(6.10-18.31)		5.6	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.401	-0.013	1.249	544316	1.36		109	965	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.388	4.401	-0.013	1.000	1855	0.004259			4.3	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.473	-0.004	1.170	3698	0.000855			7.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.613	-0.013	1.310	2163835	1.30		104	6038	
41 Perfluorotridecanoic acid										RM
663.00 > 619.00	4.794	4.806	-0.012	1.042	6469	0.003493	Target=6.41		0.5	RM
663.00 > 169.00	4.794	4.806	-0.012	1.042	539		12.00(3.21-9.62)		7.6	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.418	1559427	0.9413		75.3	5483	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

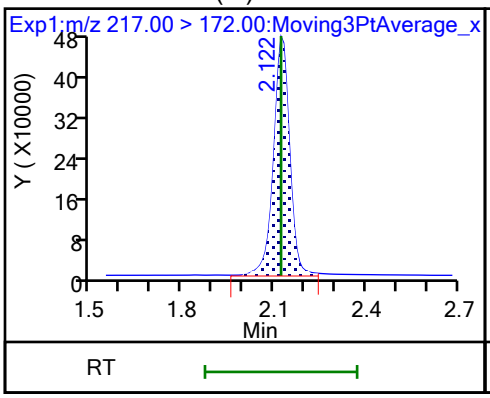
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:27 Chrom Revision: 2.3 18-Oct-2023 21:16:54

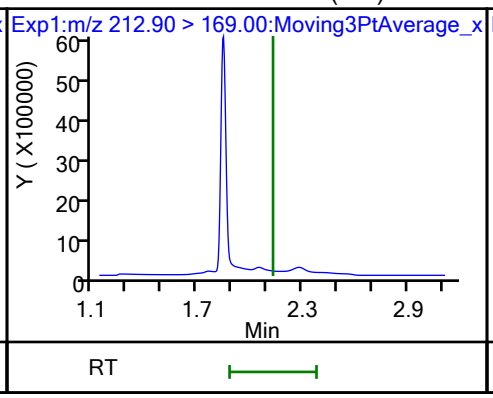
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d
Injection Date: 23-Oct-2023 23:49:31 Instrument ID: LC812
Lims ID: 460-290375-A-6-A Lab Sample ID: 200-290375-6
Client ID: MW88-101323-0831-80.5
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

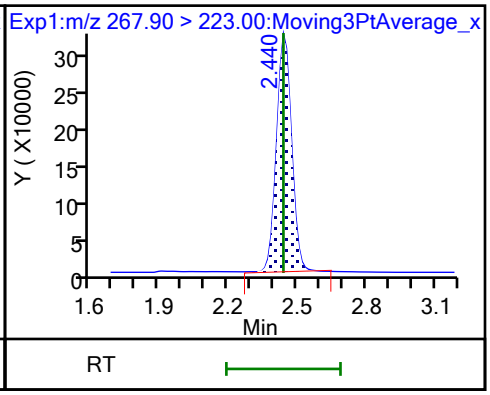
D 1 13C4 PFBA (M)



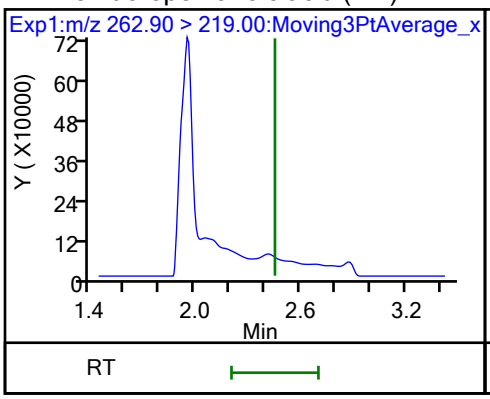
2 Perfluorobutanoic acid (ND)



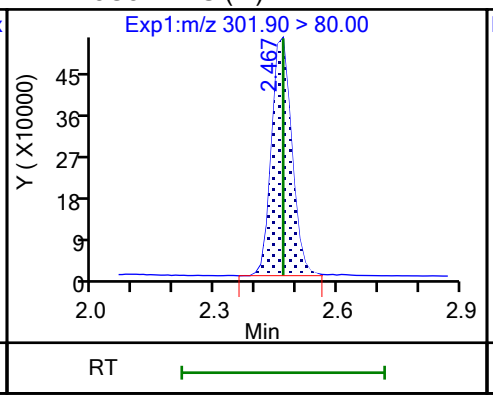
D 3 13C5 PFPeA



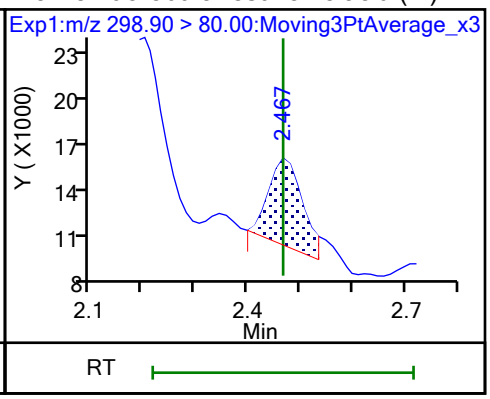
4 Perfluoropentanoic acid (ND)



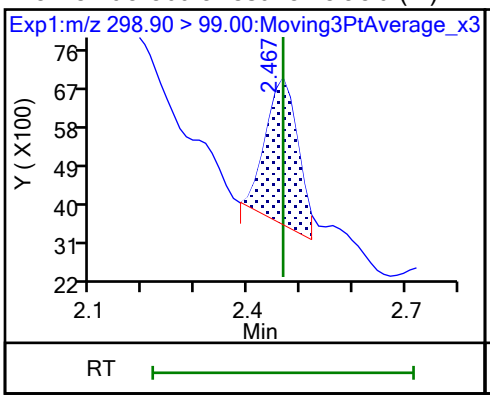
D 47 13C3 PFBS (M)



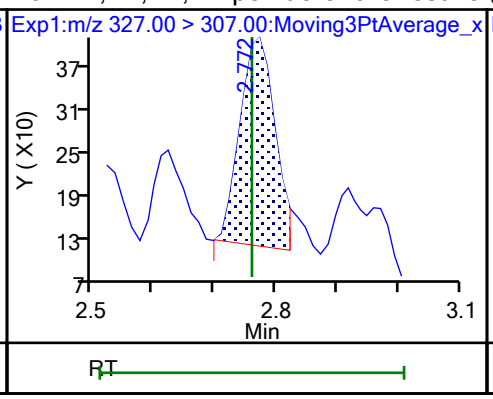
5 Perfluorobutanesulfonic acid (M)



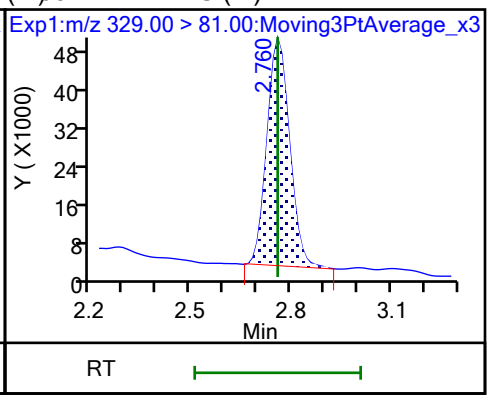
5 Perfluorobutanesulfonic acid (M)



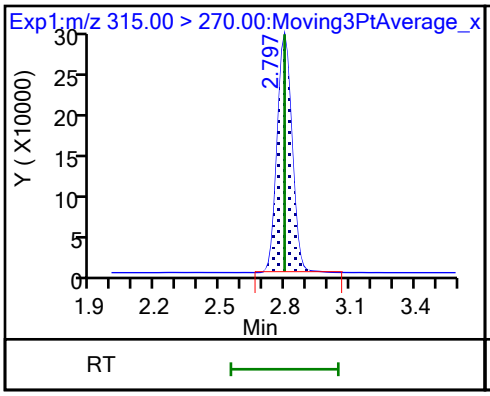
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



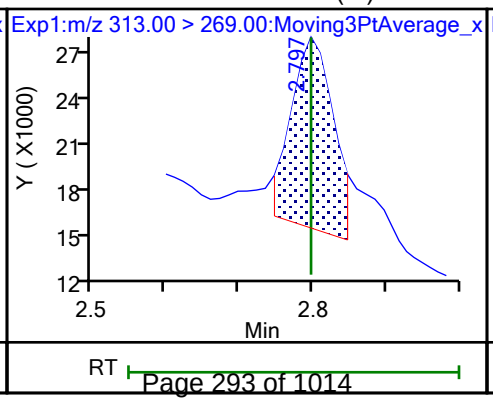
60 M2-4:2 FTS (M)



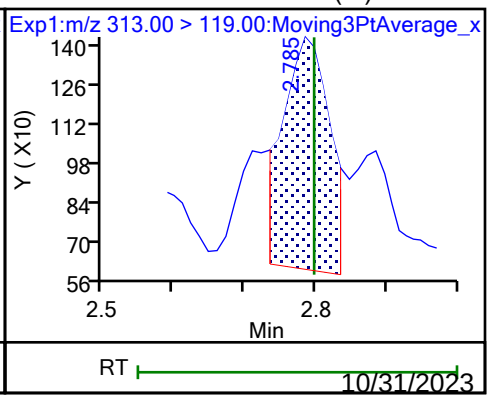
D 7 13C2 PFHxA



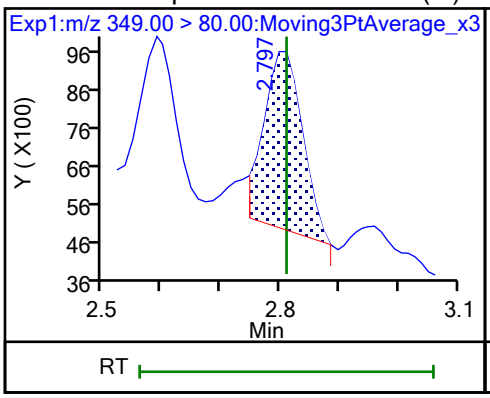
6 Perfluorohexanoic acid (M)



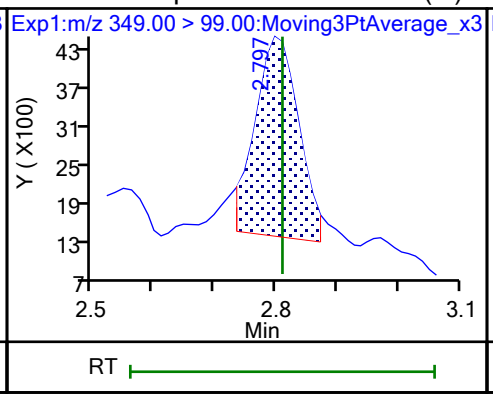
6 Perfluorohexanoic acid (M)



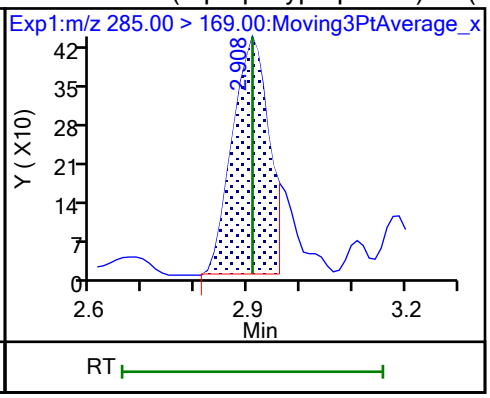
70 Perfluoropentanesulfonic acid (M)



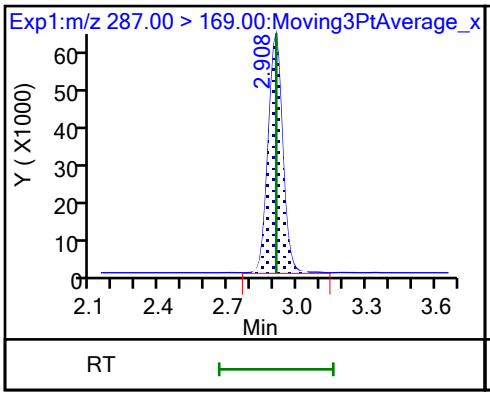
70 Perfluoropentanesulfonic acid (M)



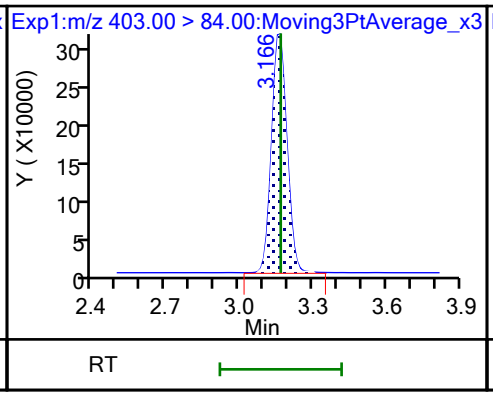
67 Perfluoro(2-propoxypropanoic) ac (M)



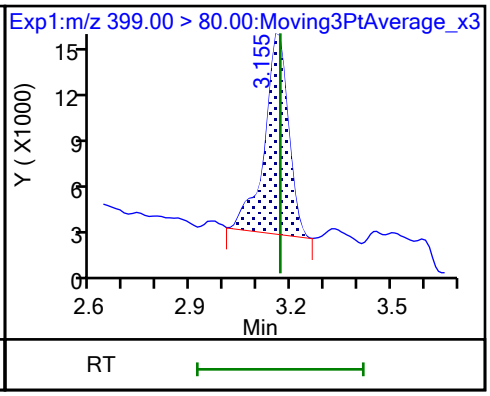
D 64 13C3 HFPO-DA



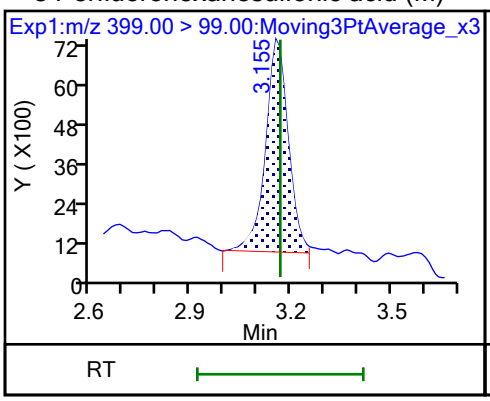
D 11 18O2 PFHxS



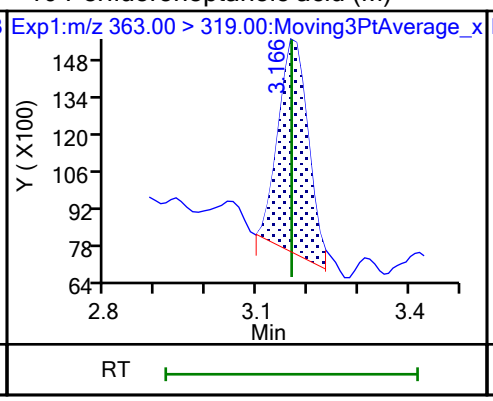
8 Perfluorohexanesulfonic acid



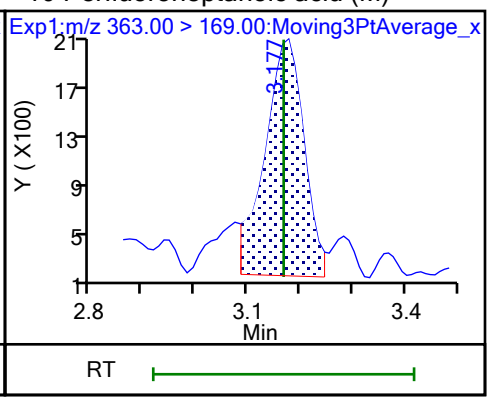
8 Perfluorohexanesulfonic acid (M)



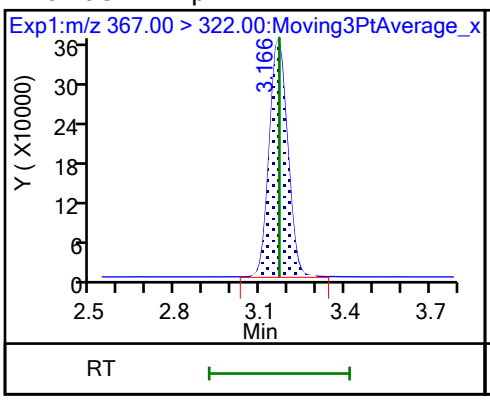
10 Perfluoroheptanoic acid (M)



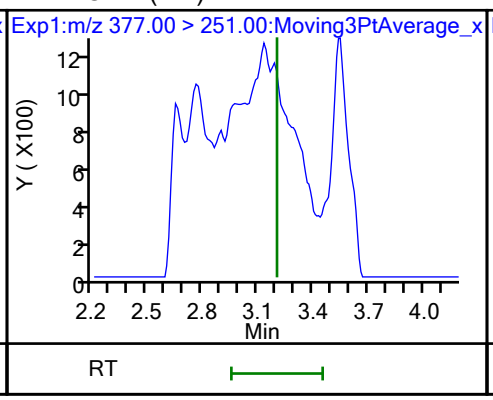
10 Perfluoroheptanoic acid (M)



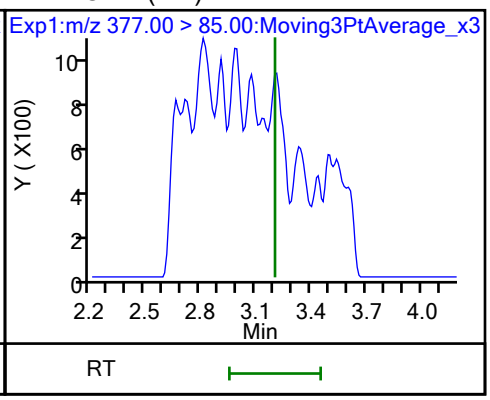
D 9 13C4 PFHpA



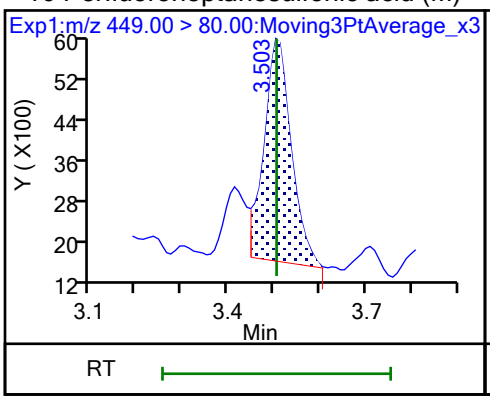
77 DONA (ND)



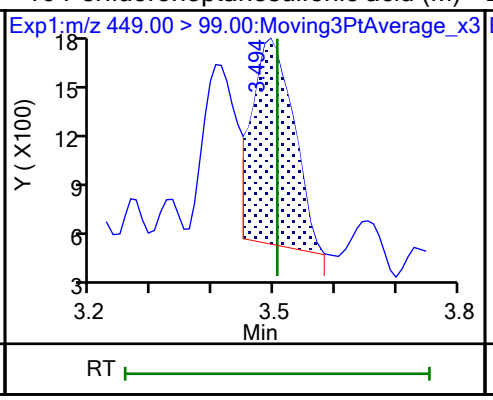
77 DONA (ND)



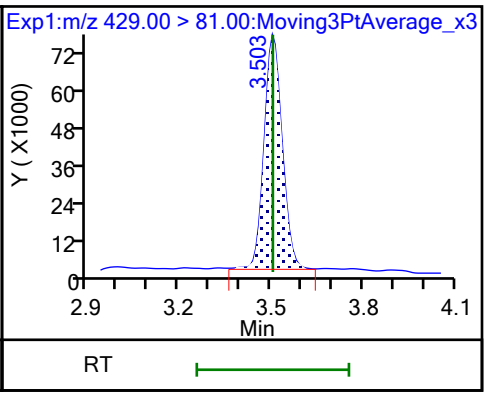
16 Perfluoroheptanesulfonic acid (M)



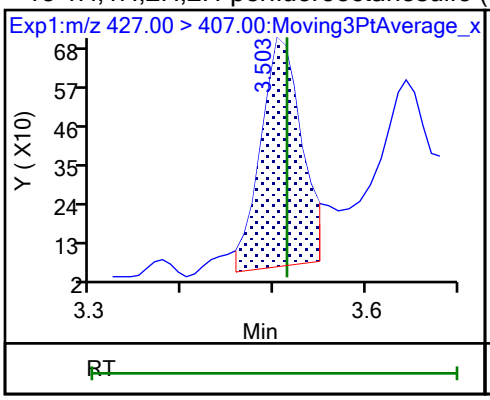
16 Perfluoroheptanesulfonic acid (M)



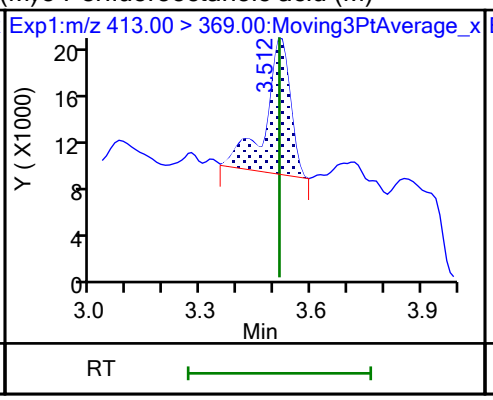
D 12 M2-6:2 FTS



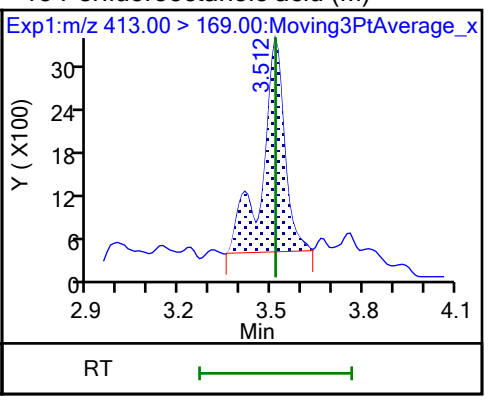
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



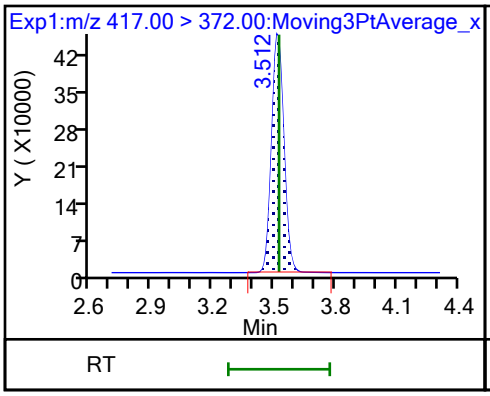
15 Perfluorooctanoic acid (M)



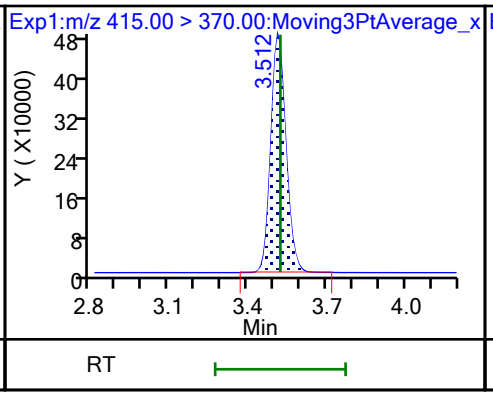
15 Perfluorooctanoic acid (M)



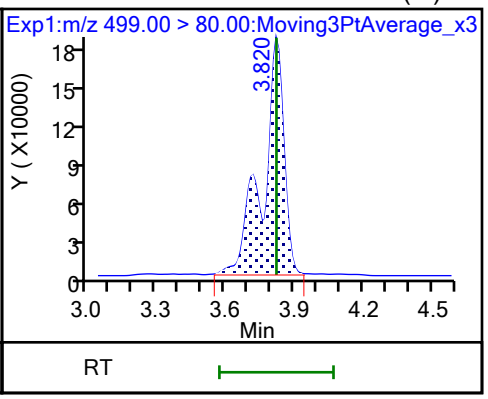
D 14 13C4 PFOA



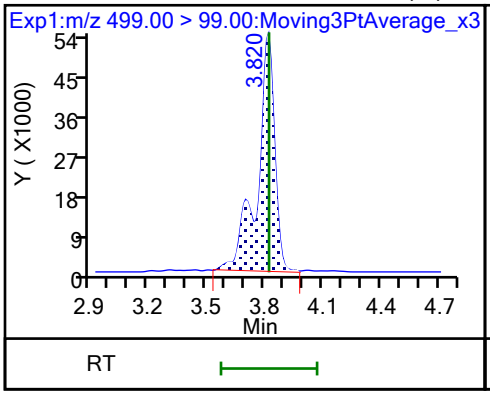
* 62 13C2 PFOA



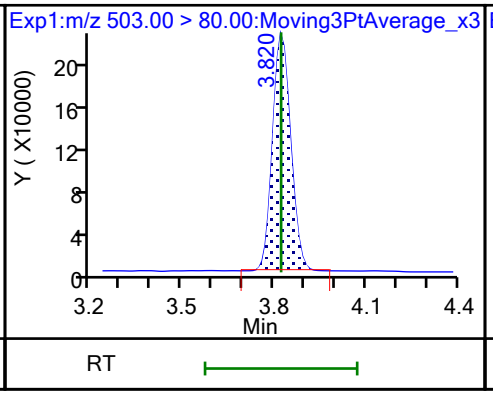
17 Perfluorooctanesulfonic acid (M)



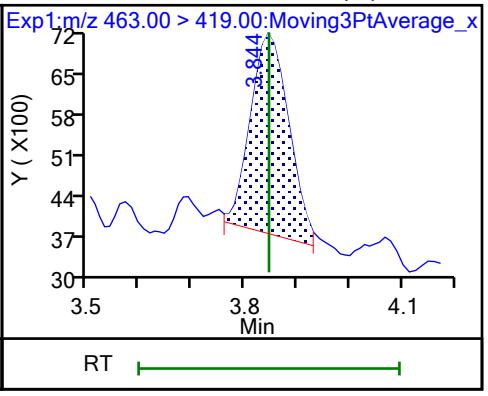
17 Perfluorooctanesulfonic acid (M)



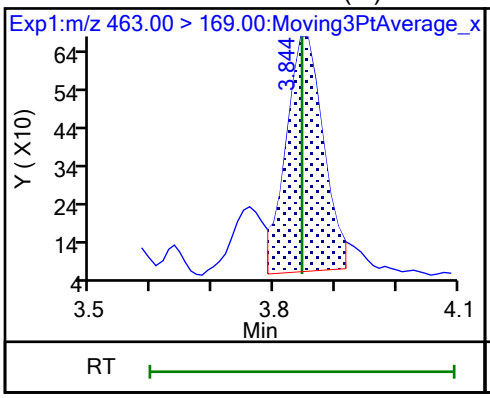
D 18 13C4 PFOS



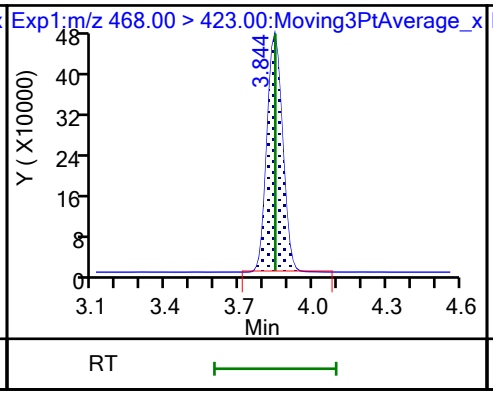
20 Perfluorononanoic acid (M)



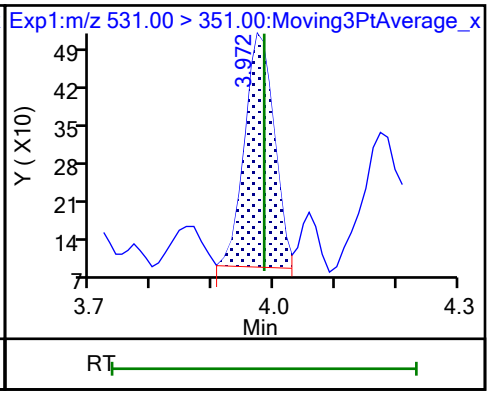
20 Perfluorononanoic acid (M)



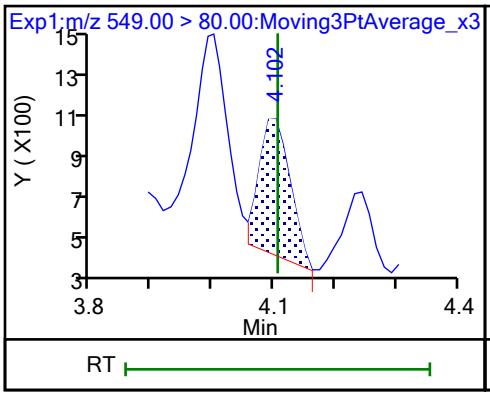
D 19 13C5 PFNA



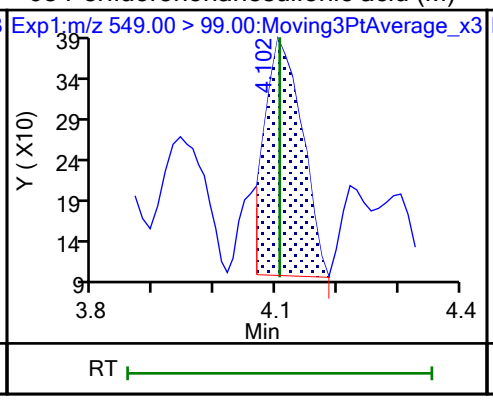
69 9-Chlorohexadecafluoro-3-oxanona (M)



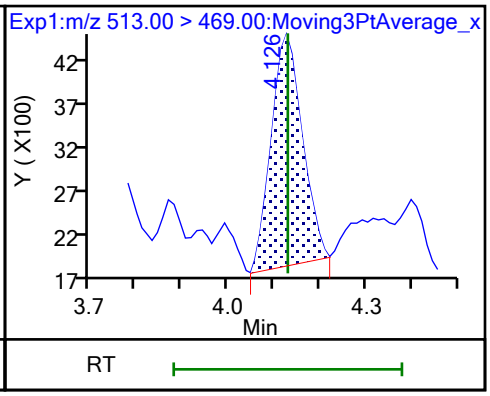
68 Perfluorononanesulfonic acid



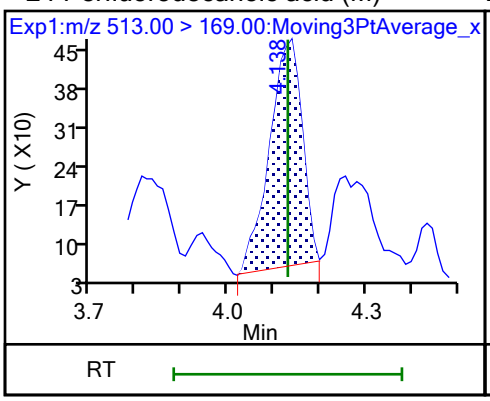
68 Perfluorononanesulfonic acid (M)



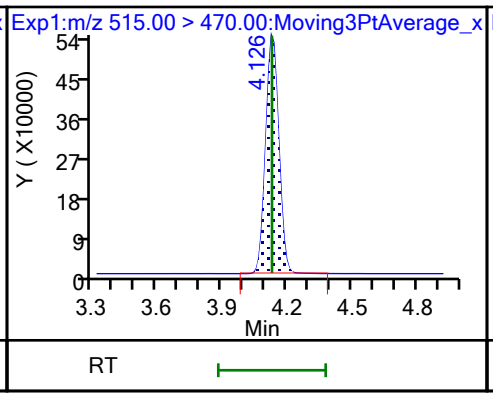
24 Perfluorodecanoic acid



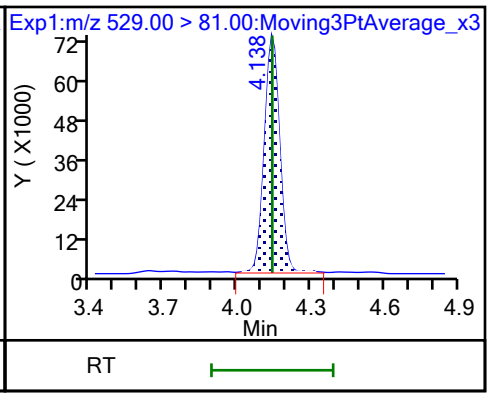
24 Perfluorodecanoic acid (M)



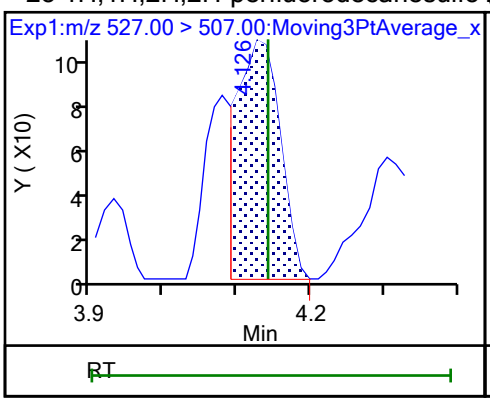
D 23 13C2 PFDA



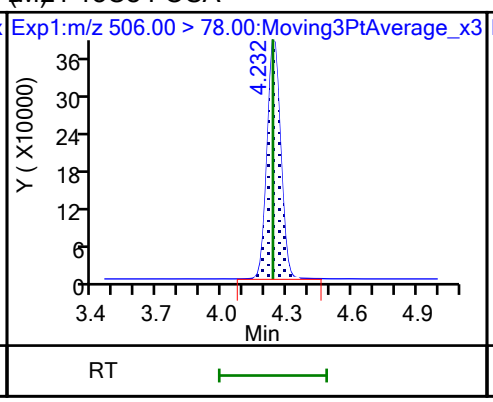
D 26 M2-8:2 FTS



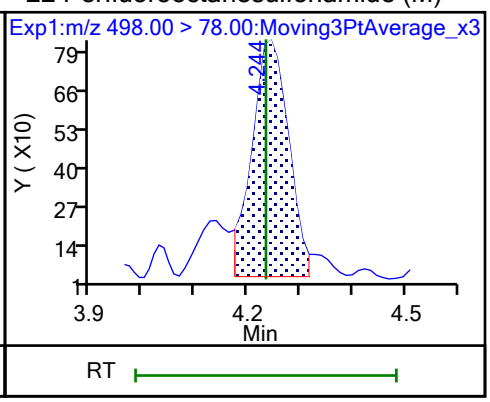
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



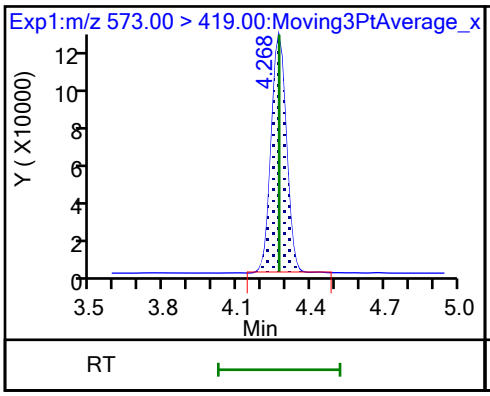
D 21 13C8 FOSA



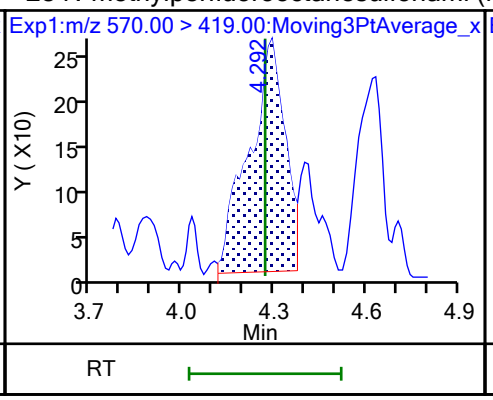
22 Perfluorooctanesulfonamide (M)



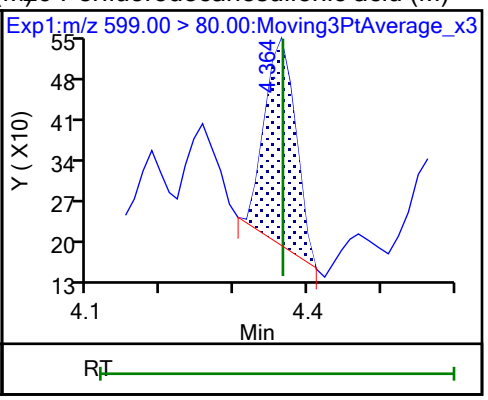
D 27 d3-NMeFOSAA



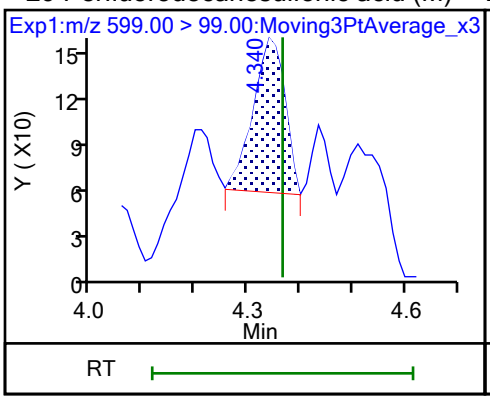
28 N-methylperfluorooctanesulfonami (M)



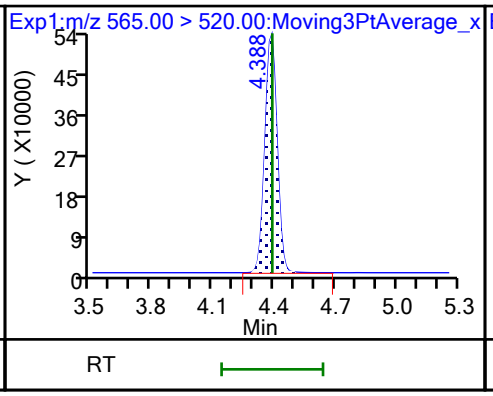
29 Perfluorodecanesulfonic acid (M)



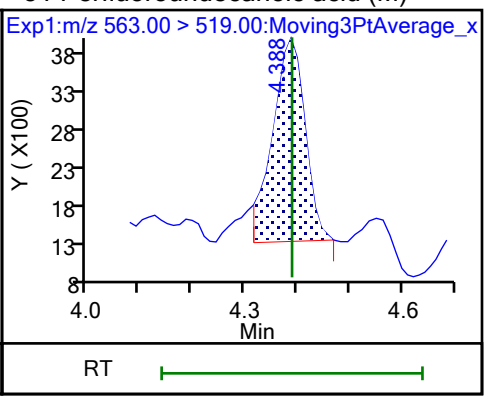
29 Perfluorodecanesulfonic acid (M)



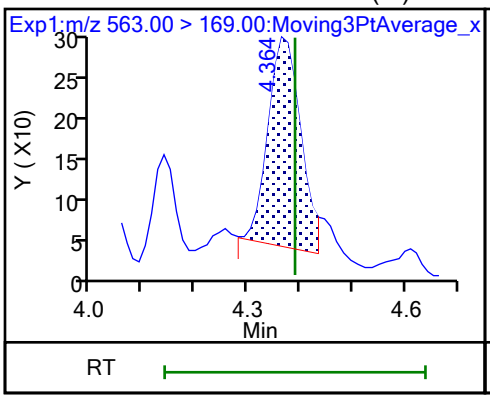
D 30 13C2 PFUnA



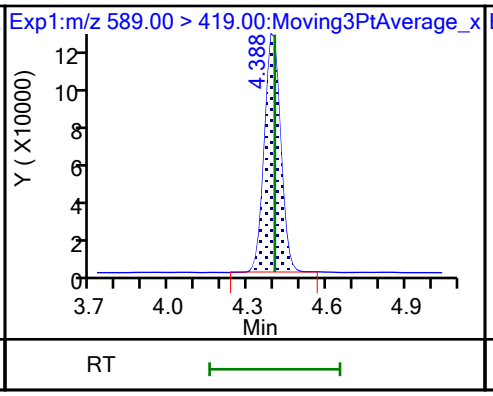
31 Perfluoroundecanoic acid (M)



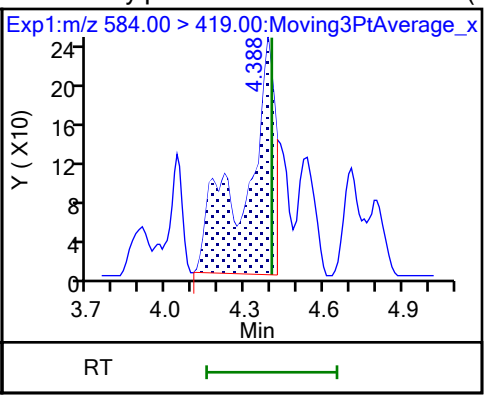
31 Perfluoroundecanoic acid (M)



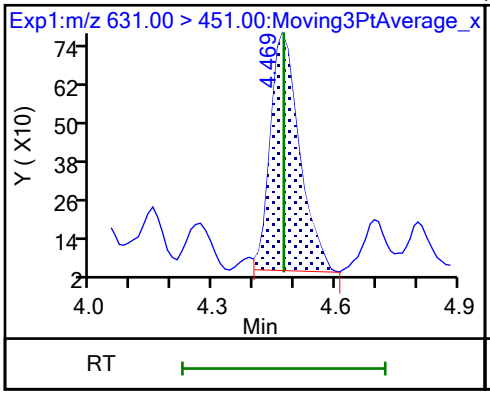
D 32 d5-NEtFOSAA



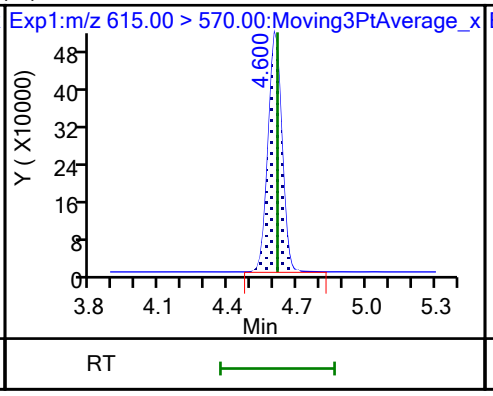
33 N-ethylperfluorooctanesulfonamid (M)



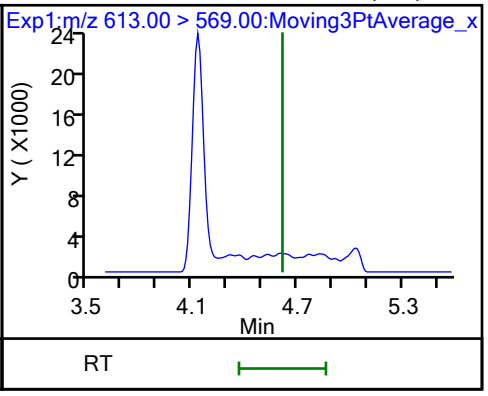
66 11-Chloroeicosafluoro-3-oxaundec (M)



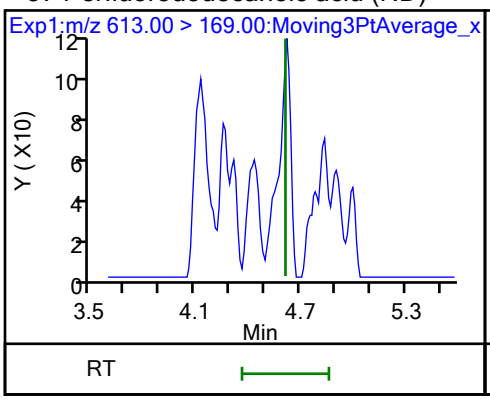
D 36 13C2 PFDoA



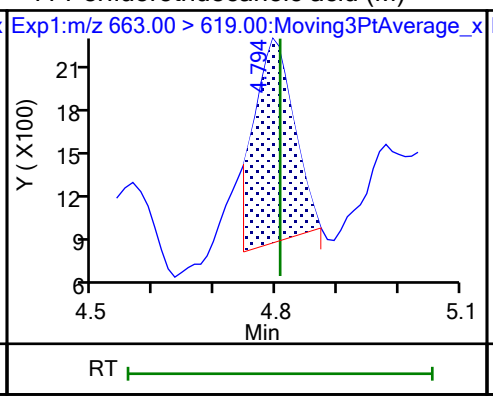
37 Perfluorododecanoic acid (ND)



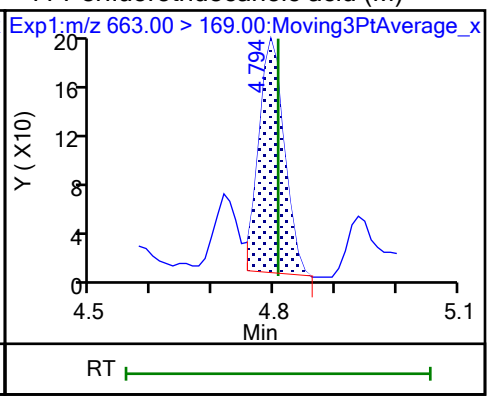
37 Perfluorododecanoic acid (ND)



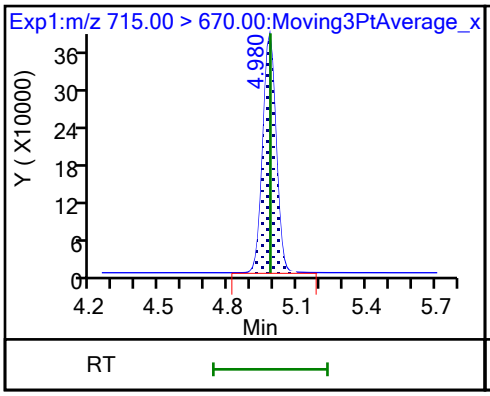
41 Perfluorotridecanoic acid (M)



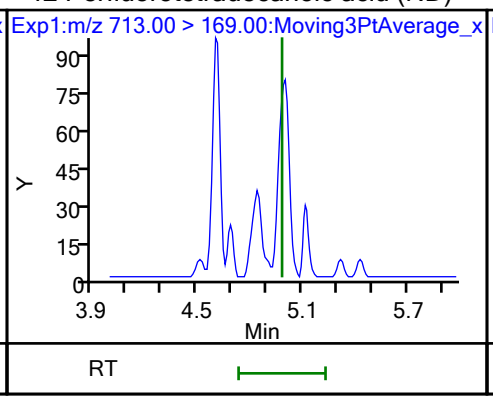
41 Perfluorotridecanoic acid (M)



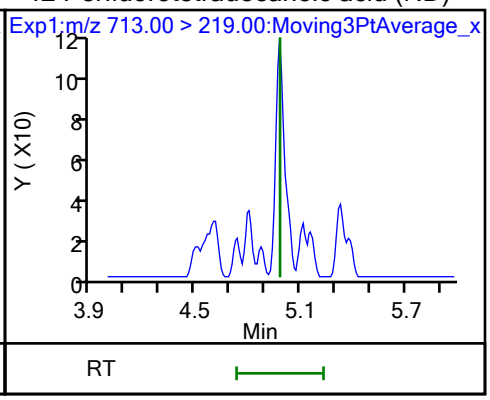
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

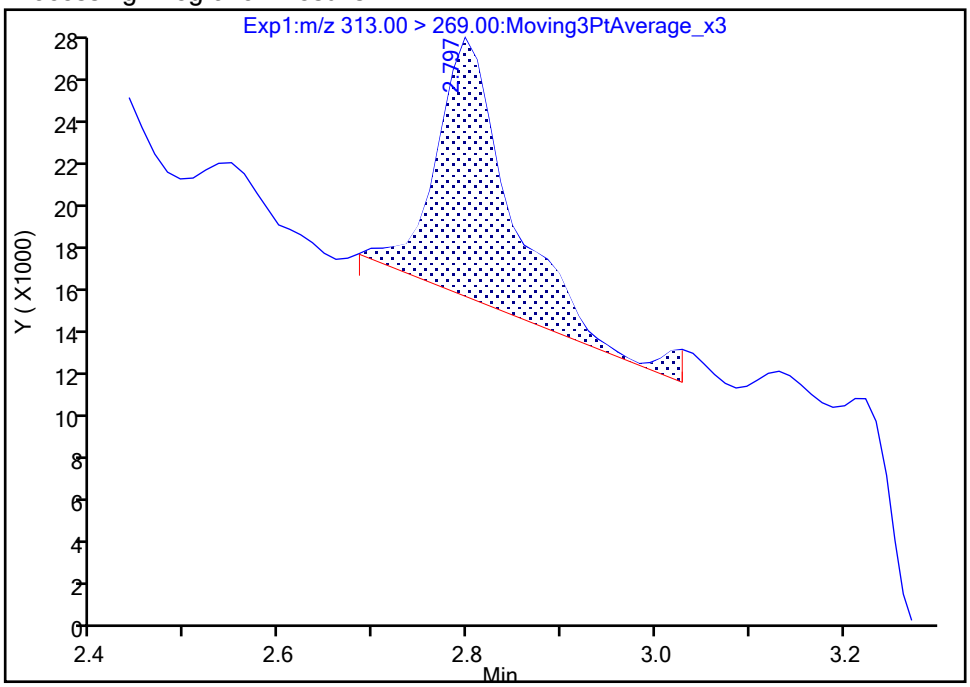
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

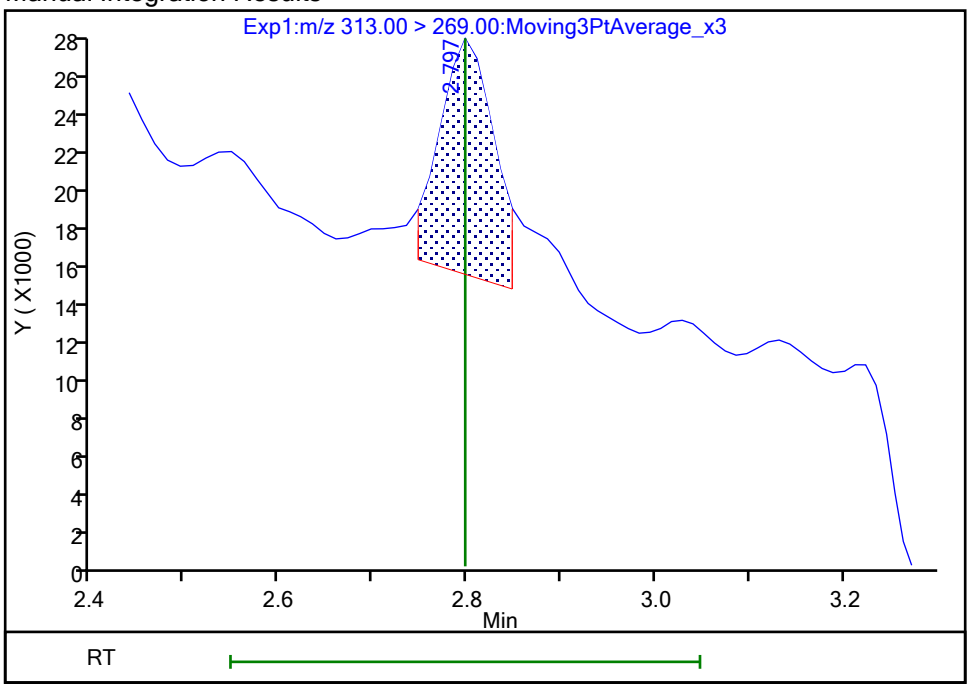
Processing Integration Results

RT: 2.80
Area: 68296
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 48884
Amount: 0.039337
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

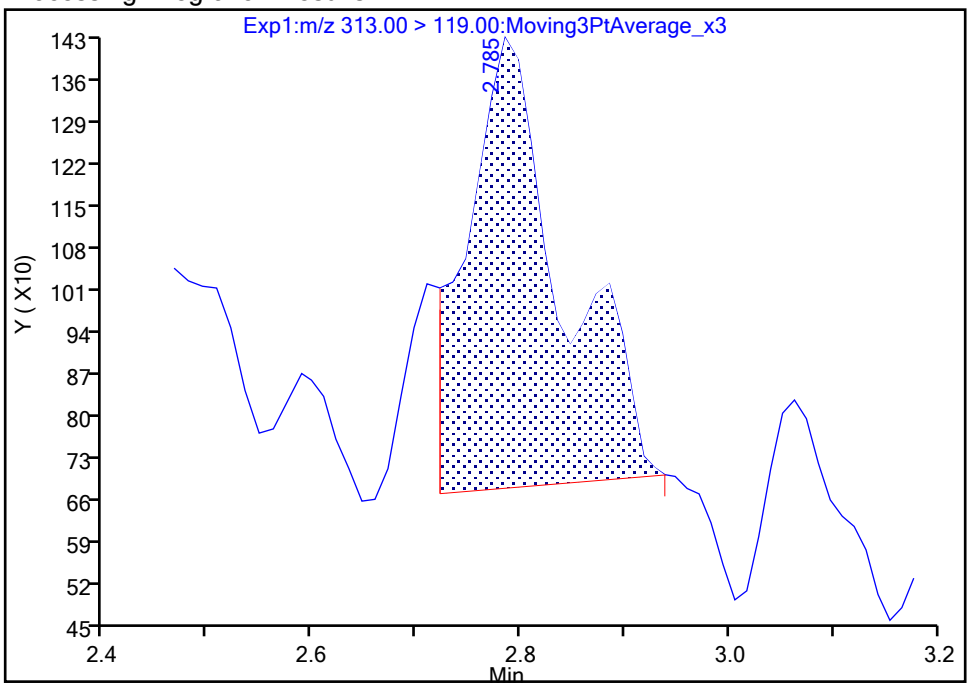
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

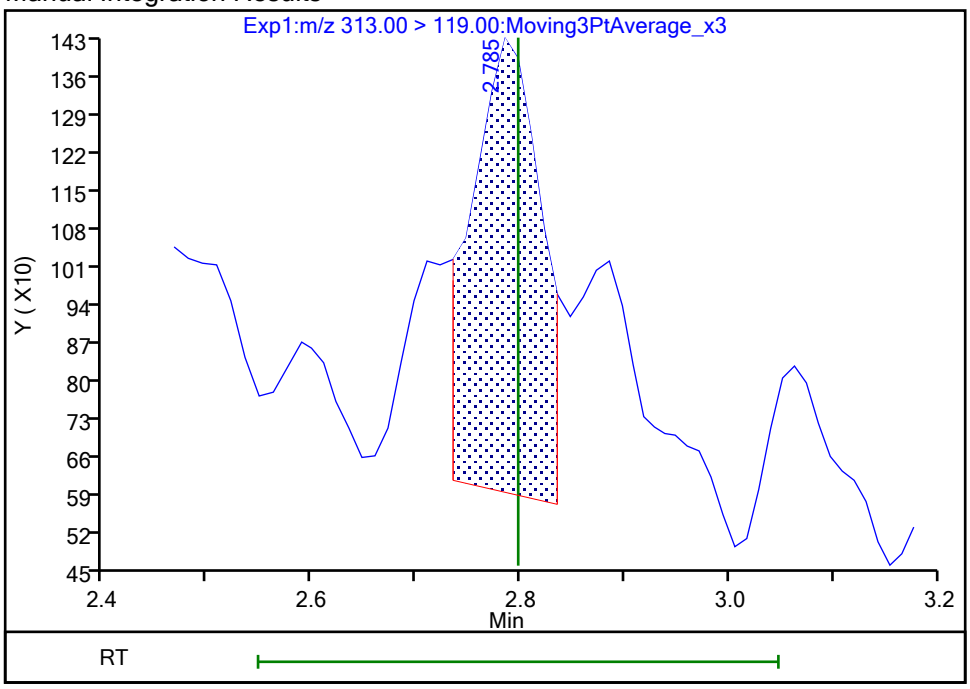
Processing Integration Results

RT: 2.78
Area: 4713
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.78
Area: 3743
Amount: 0.039337
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 17:57:21 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

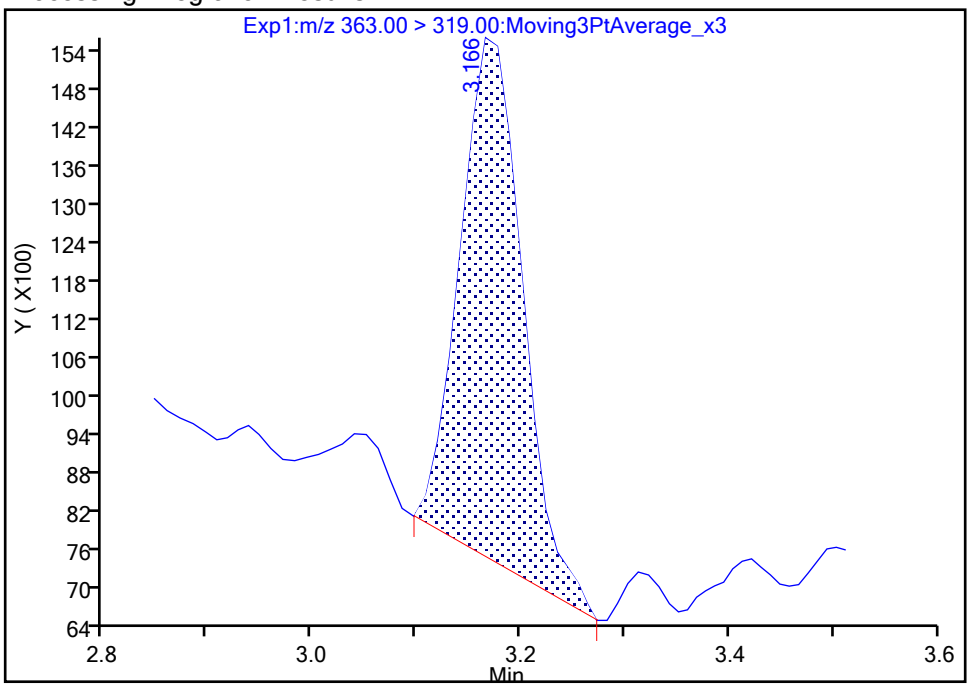
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

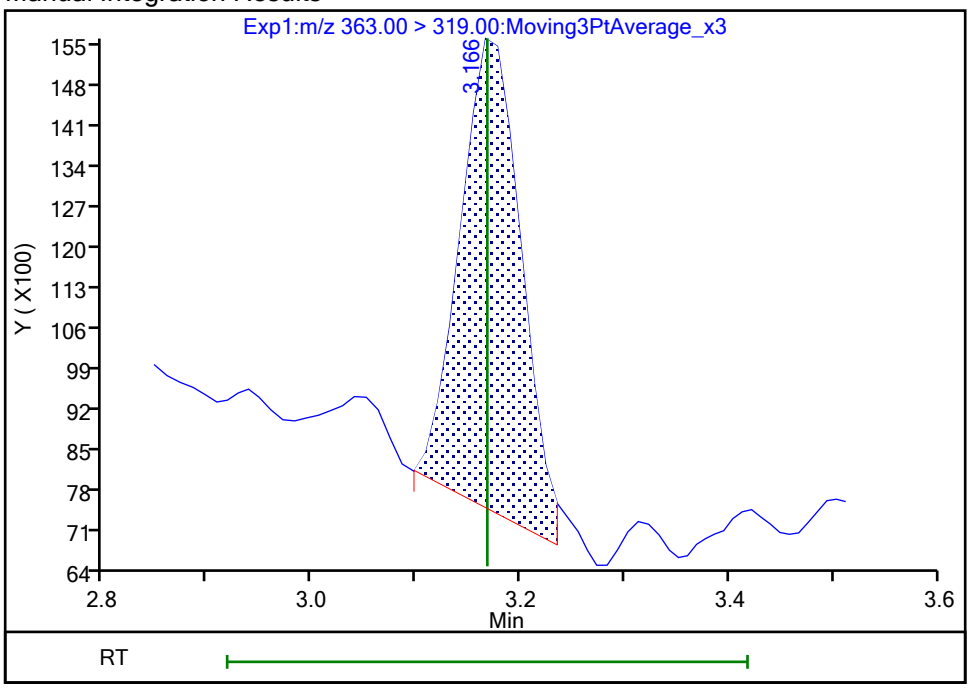
Processing Integration Results

RT: 3.17
Area: 34283
Amount: 0.023340
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 33471
Amount: 0.022787
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

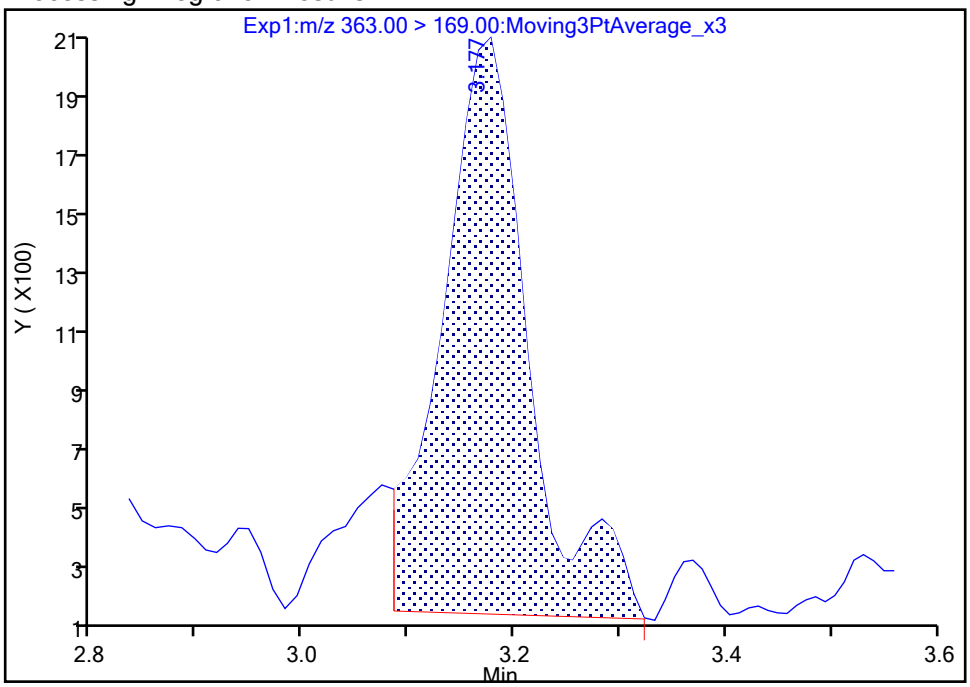
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

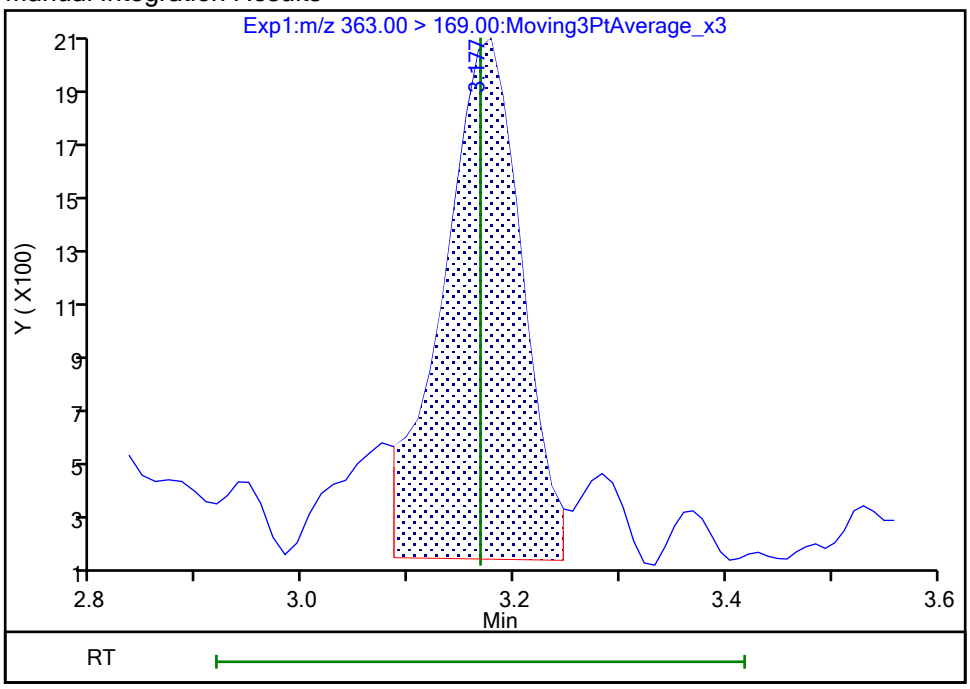
Processing Integration Results

RT: 3.18
Area: 10559
Amount: 0.023340
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 9594
Amount: 0.022787
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

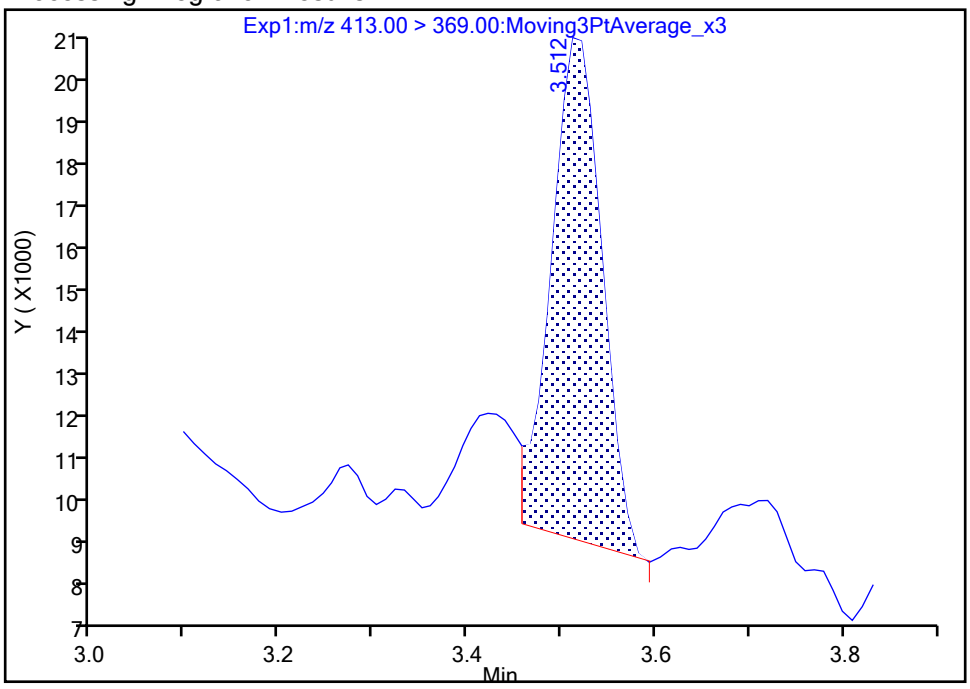
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

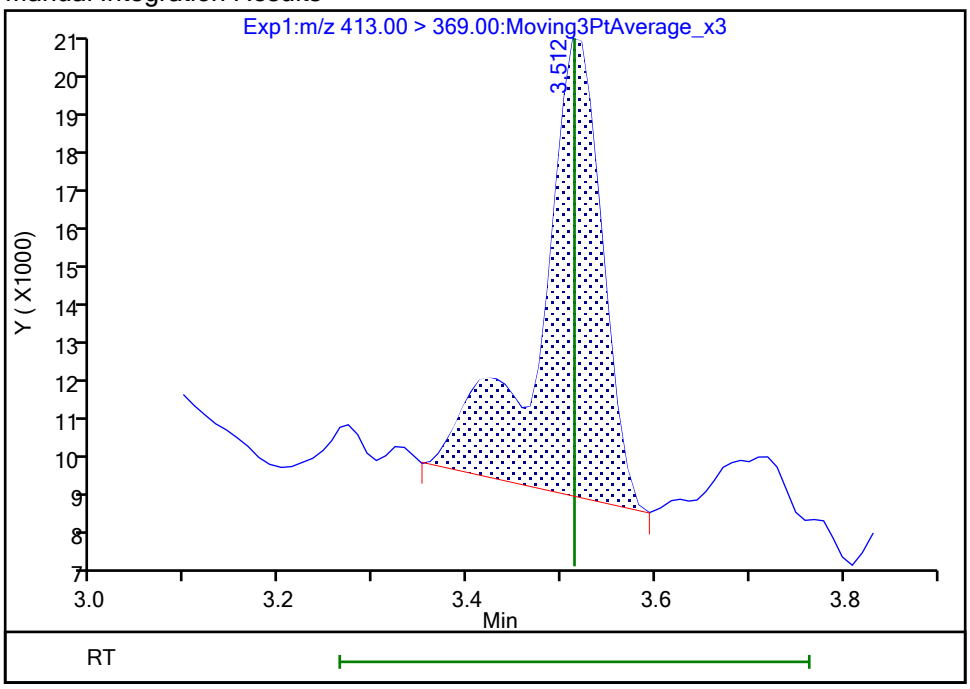
Processing Integration Results

RT: 3.51
Area: 43290
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 54348
Amount: 0.033433
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

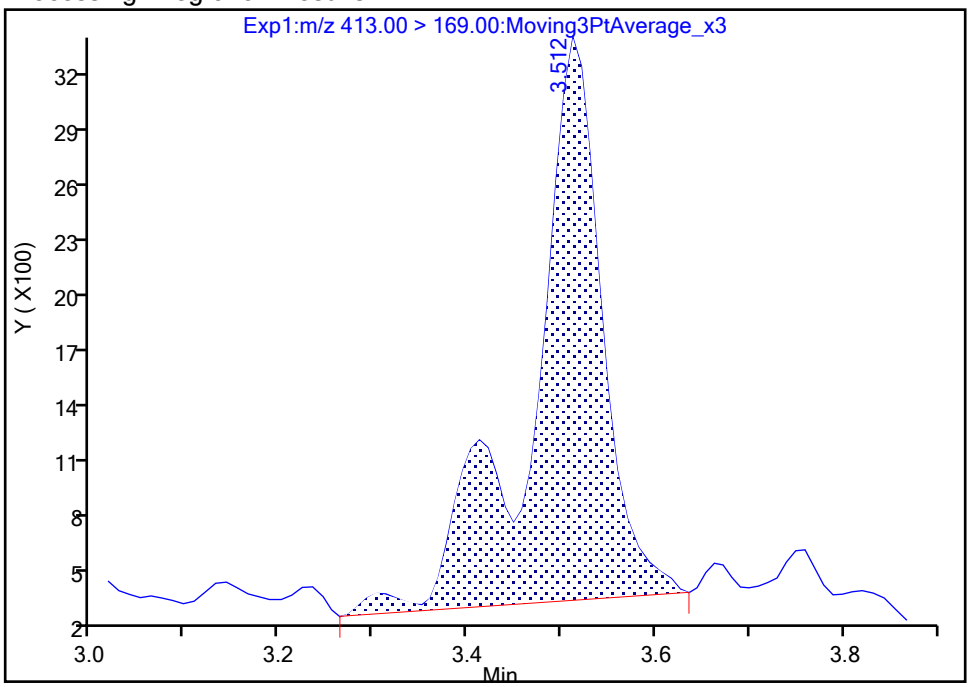
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

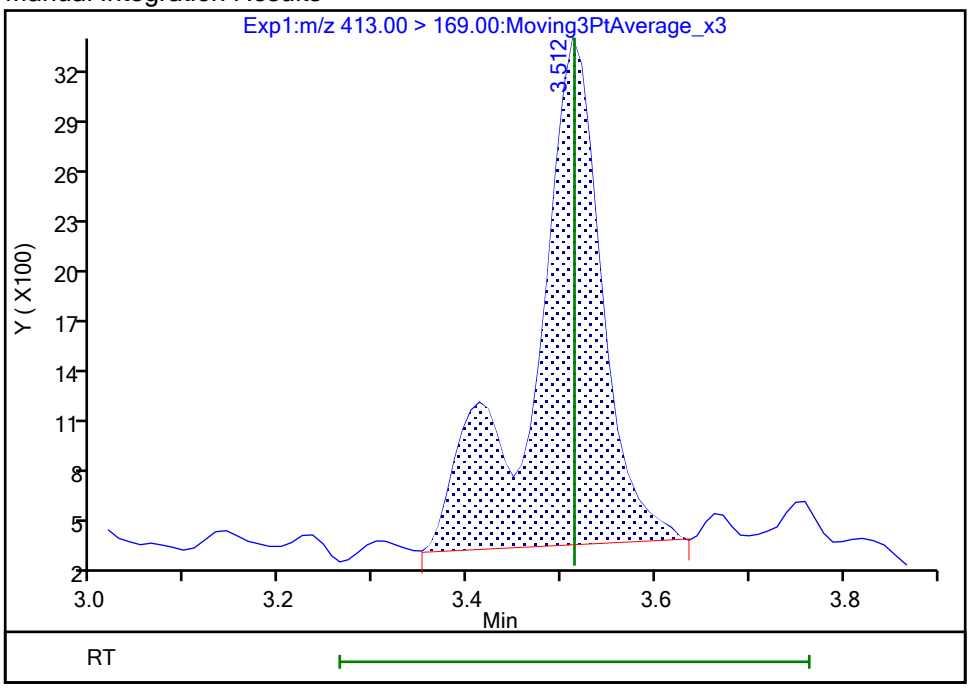
Processing Integration Results

RT: 3.51
Area: 15671
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 15050
Amount: 0.033433
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

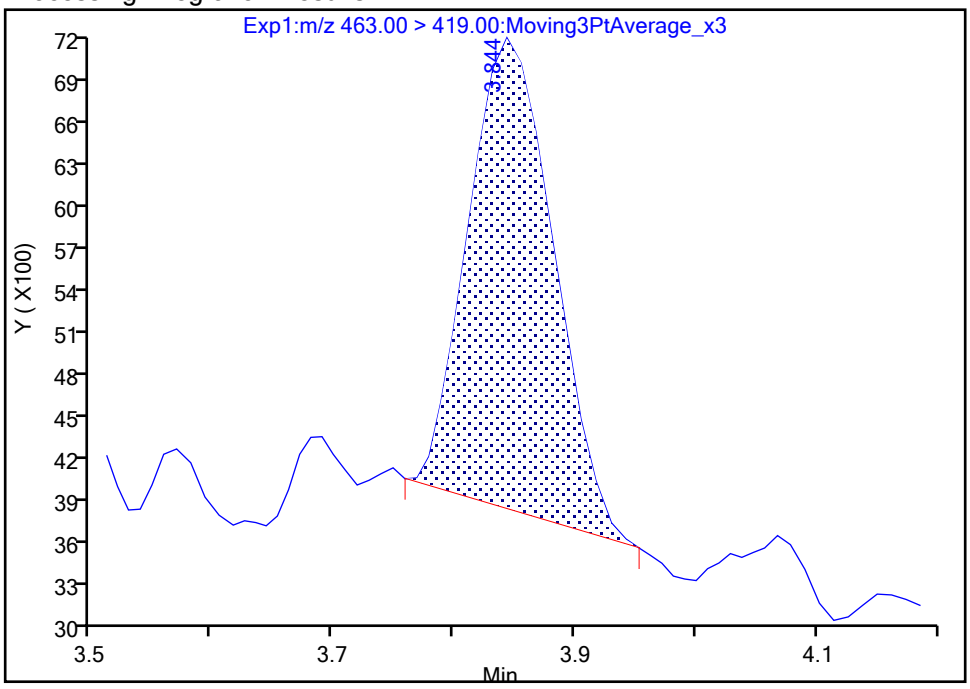
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

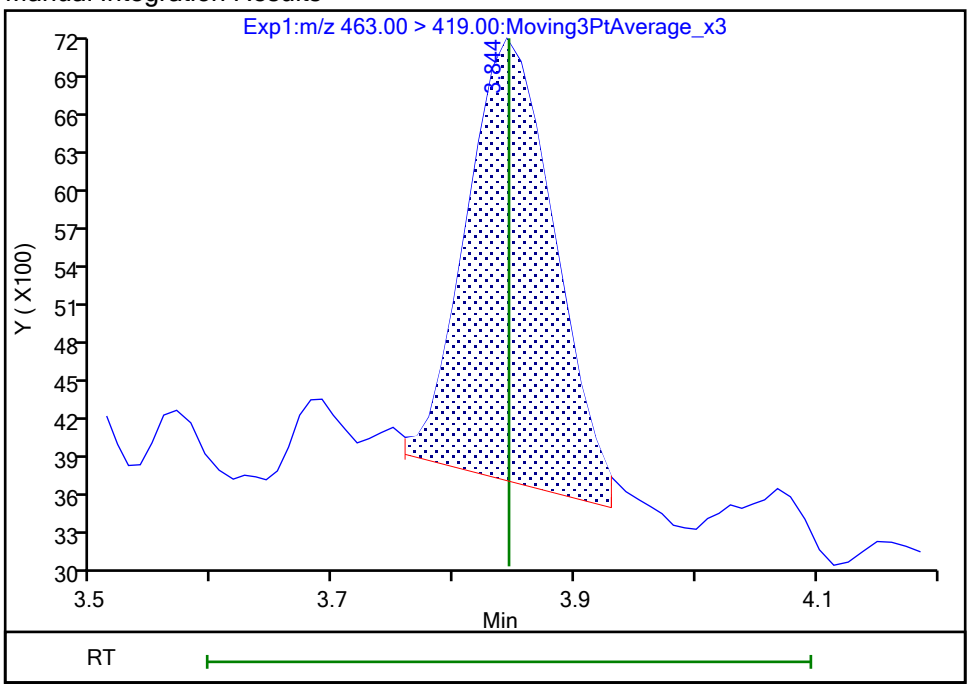
Processing Integration Results

RT: 3.84
Area: 16630
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 17950
Amount: 0.010918
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

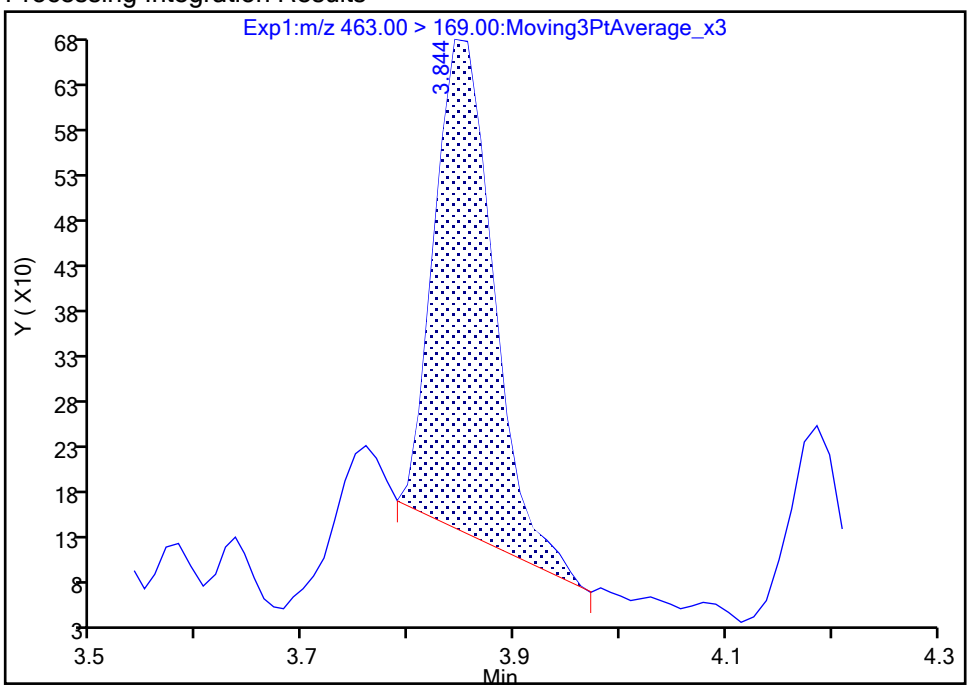
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

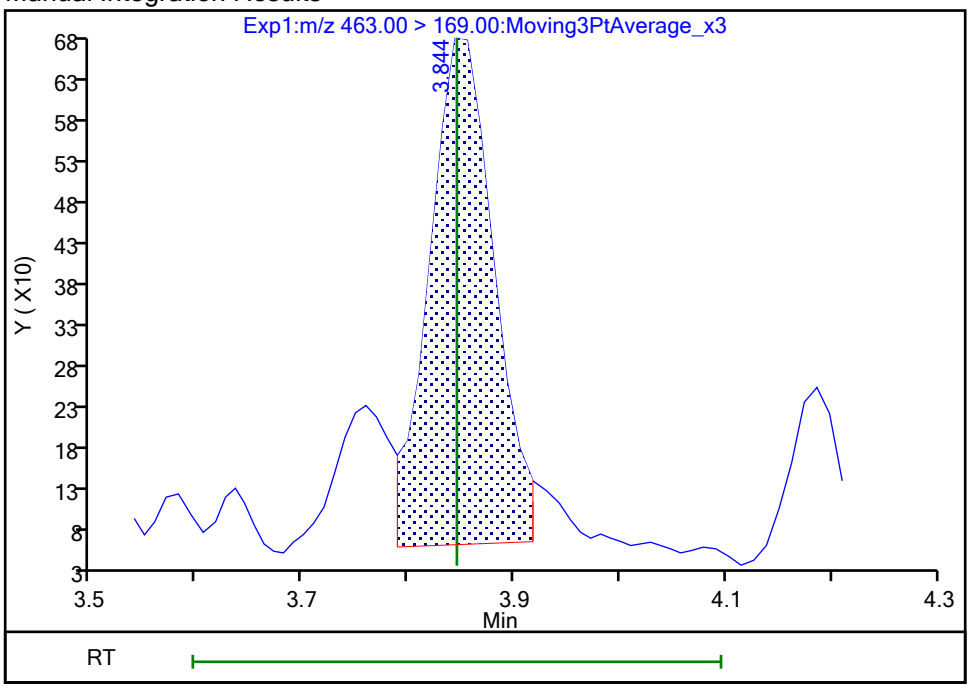
Processing Integration Results

RT: 3.84
Area: 2124
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 2624
Amount: 0.010918
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

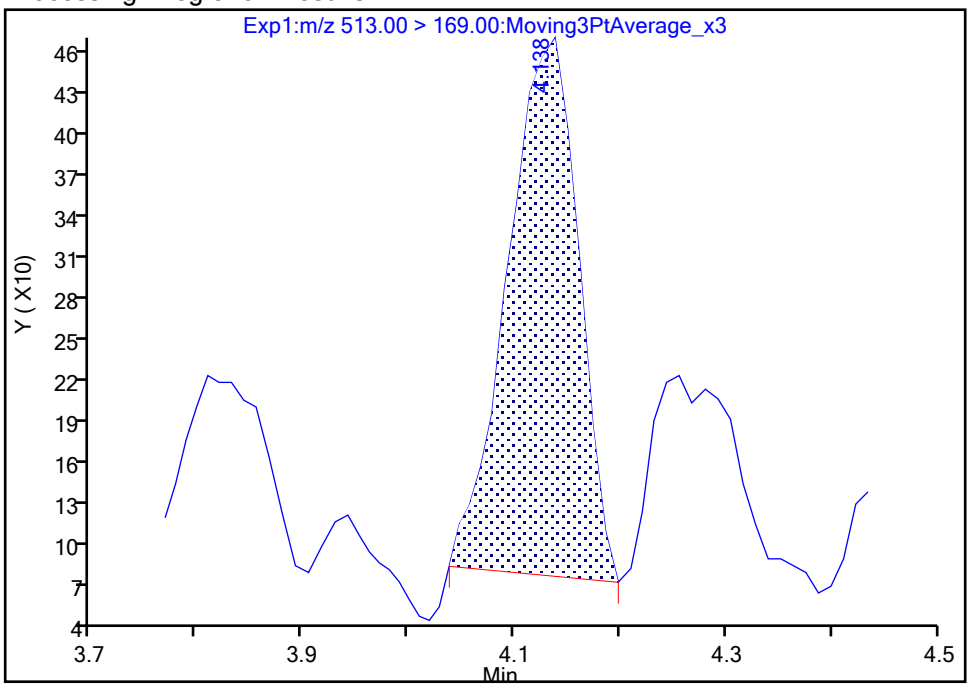
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

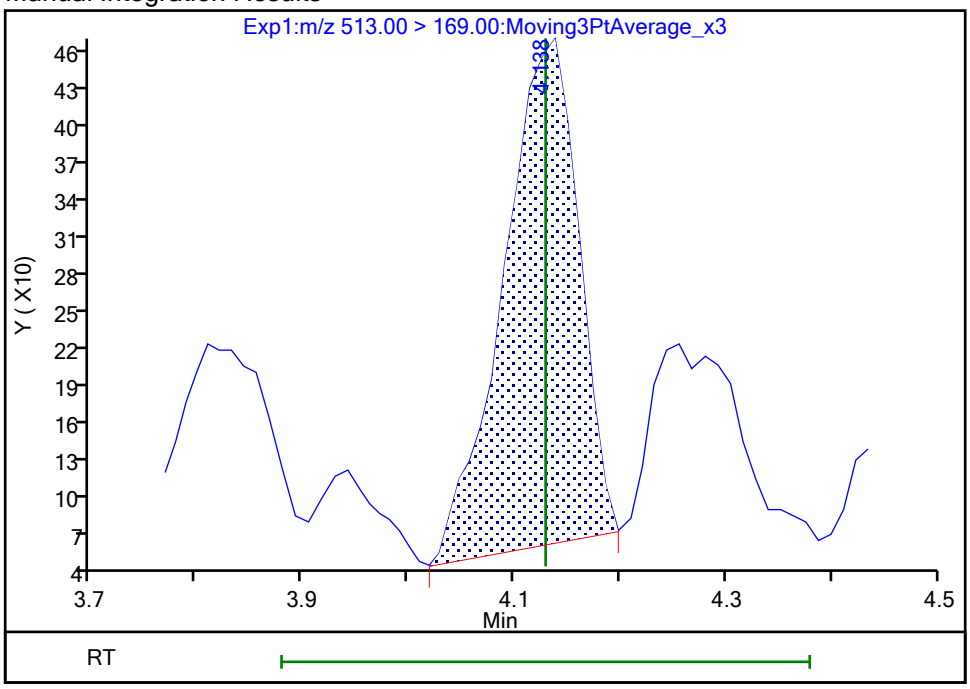
Processing Integration Results

RT: 4.14
Area: 1824
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2017
Amount: 0.006691
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

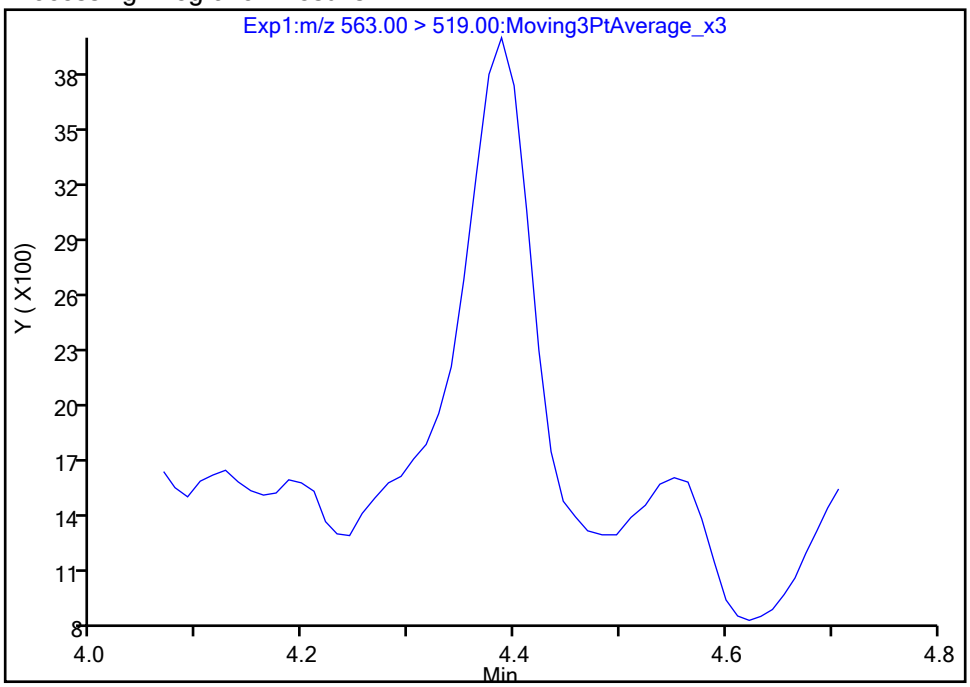
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

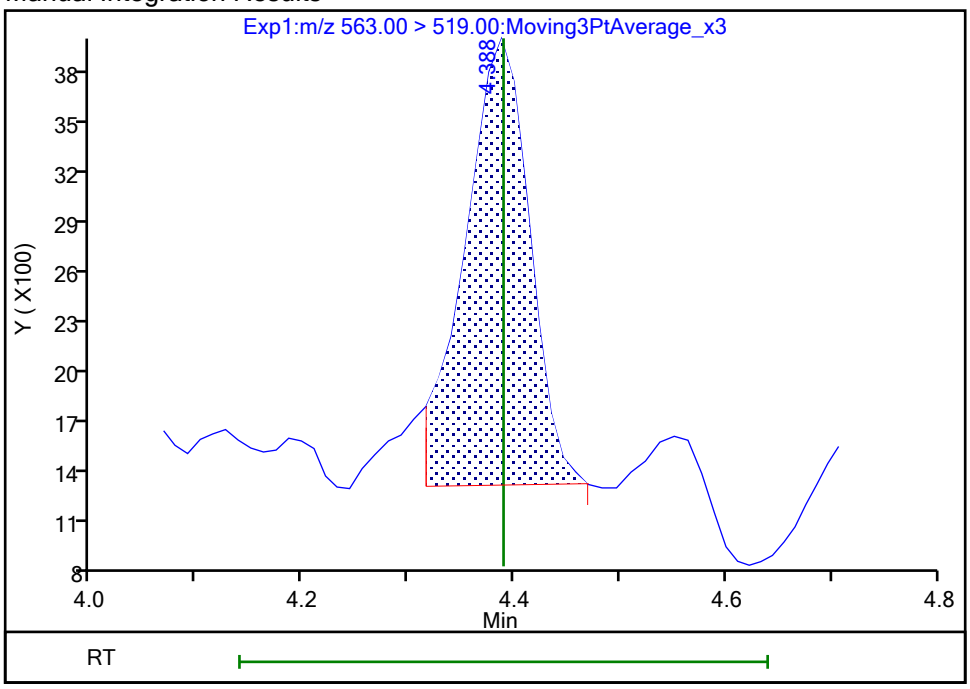
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 11053
Amount: 0.006023
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

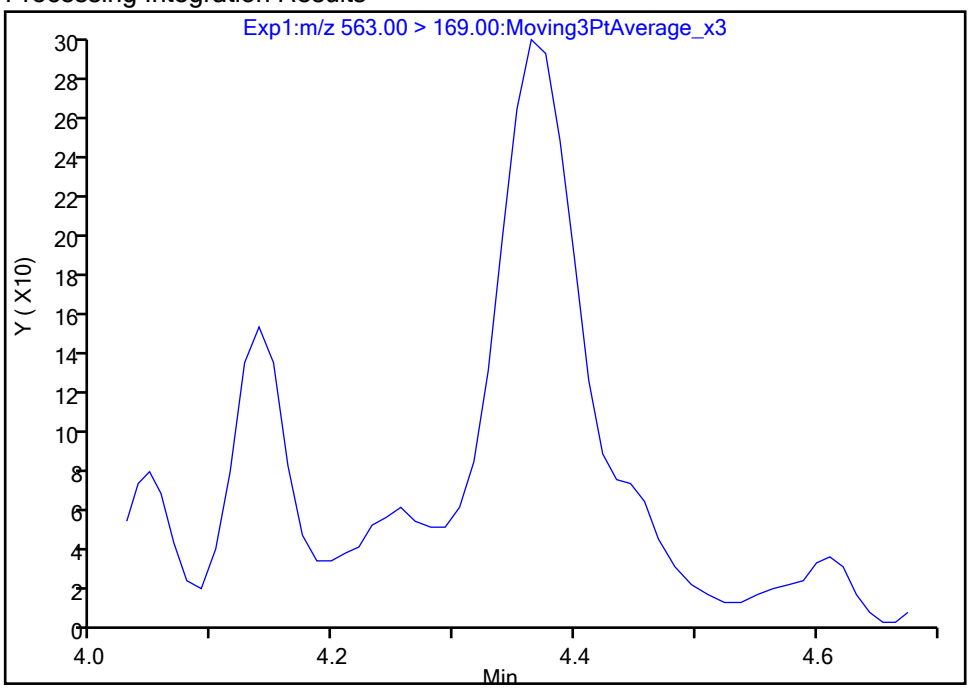
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

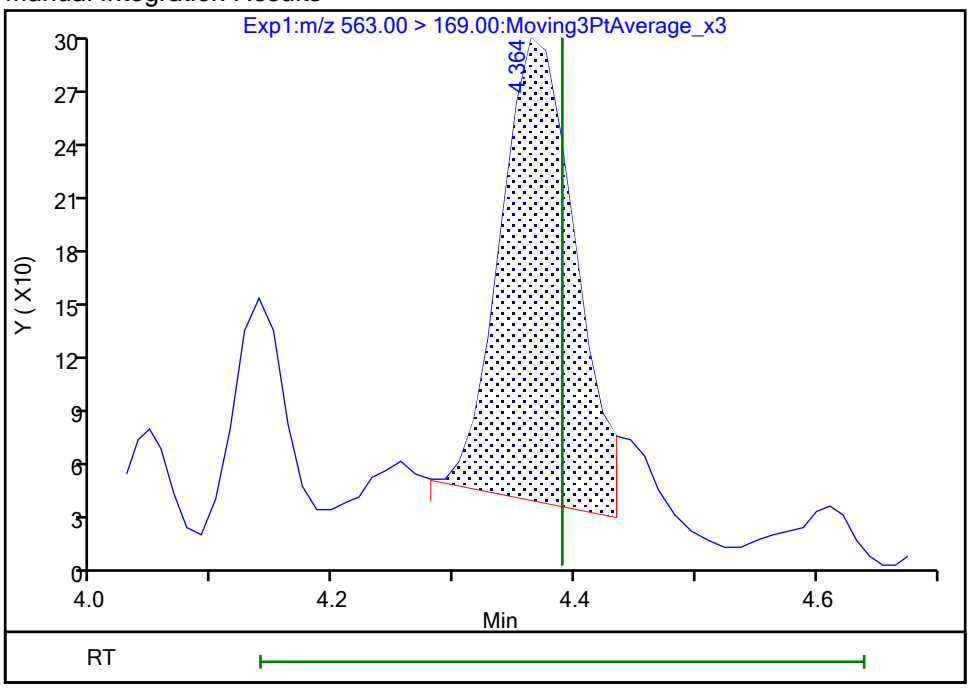
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 1112
Amount: 0.006023
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

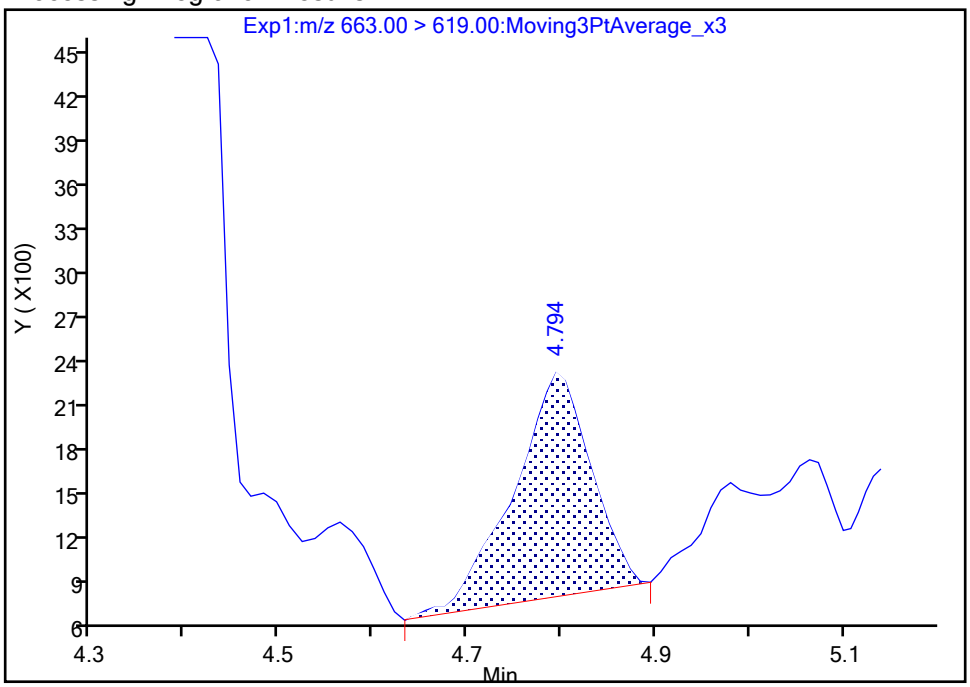
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

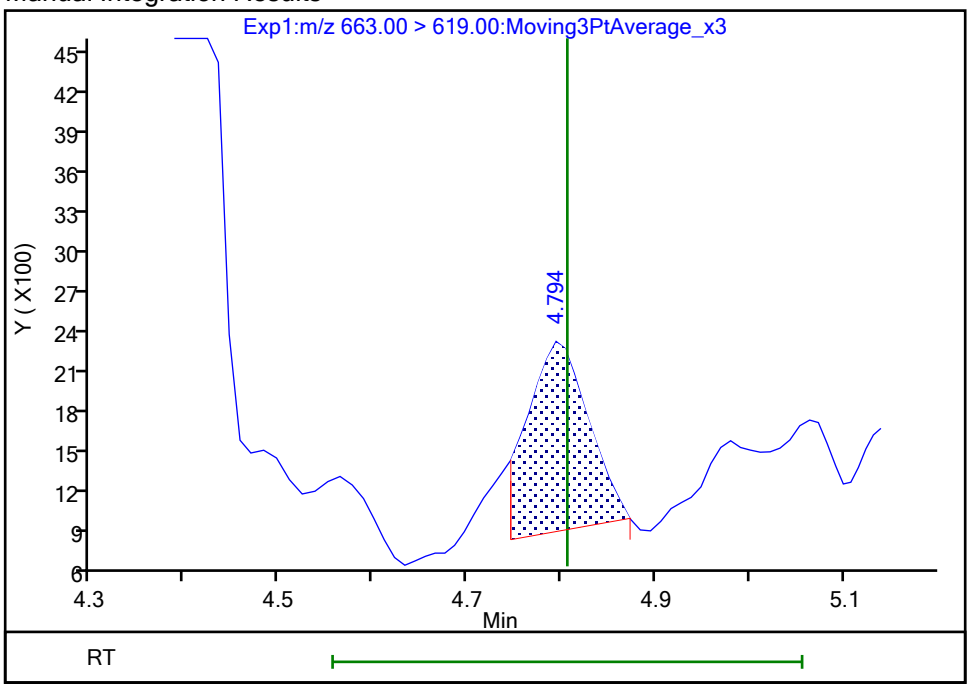
Processing Integration Results

RT: 4.79
Area: 8812
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.79
Area: 6469
Amount: 0.003493
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

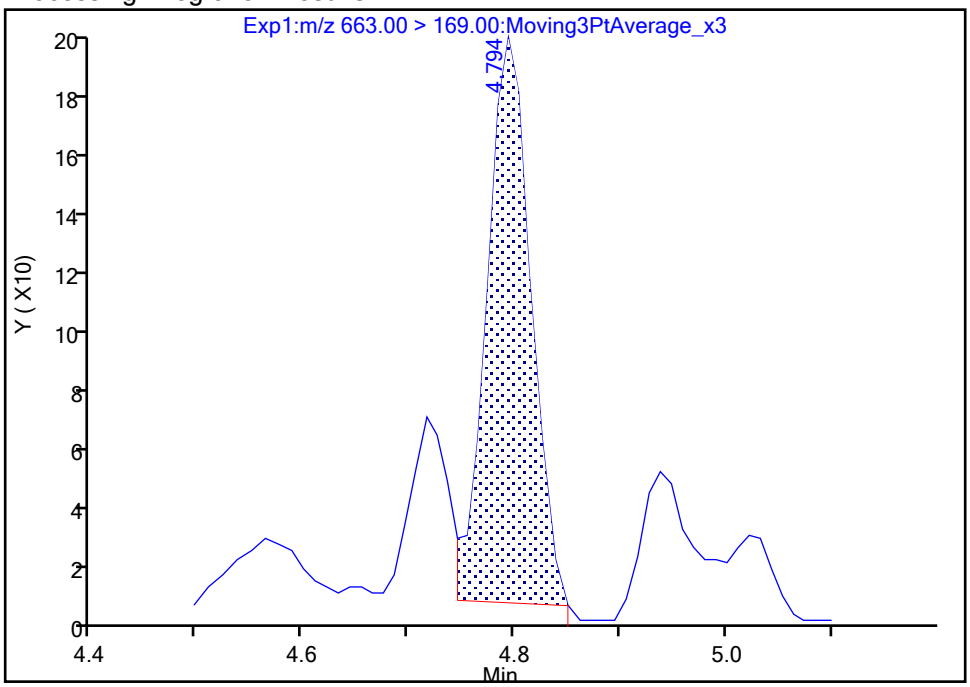
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

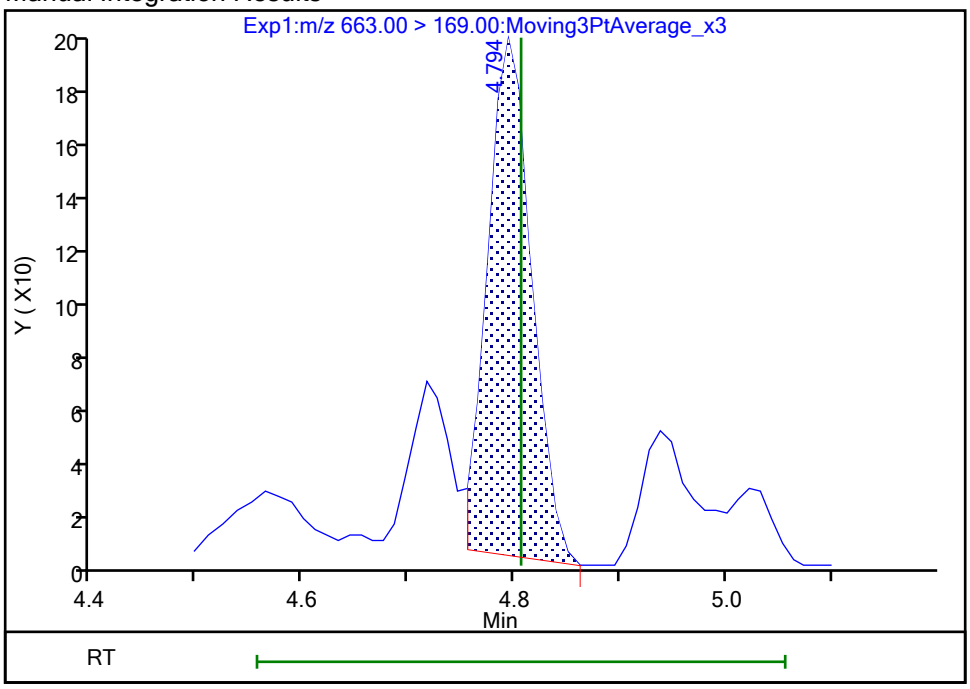
Processing Integration Results

RT: 4.79
Area: 535
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.79
Area: 539
Amount: 0.003493
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

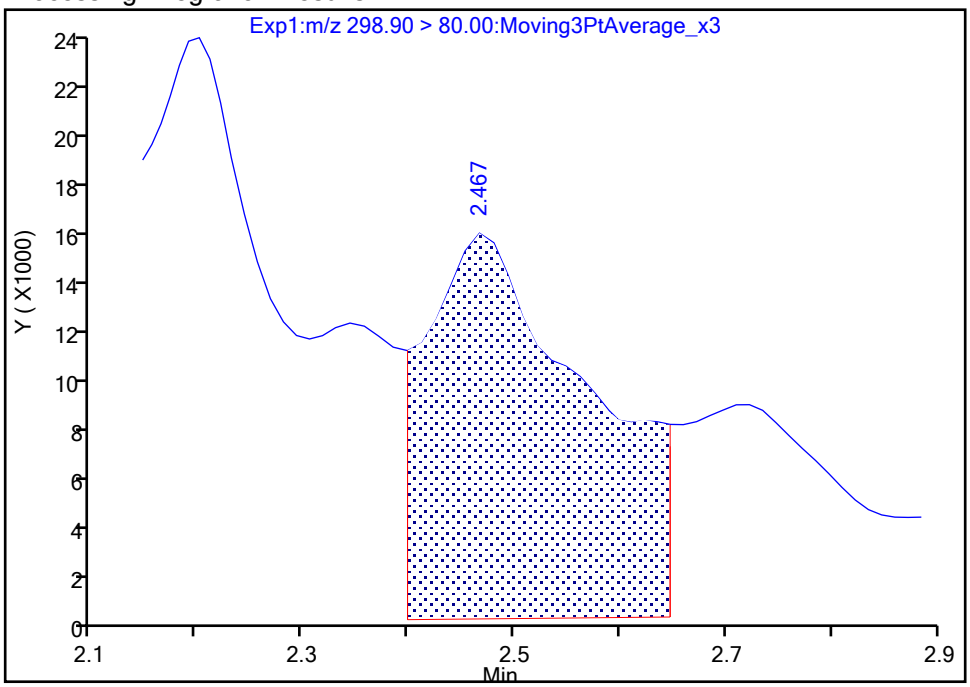
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

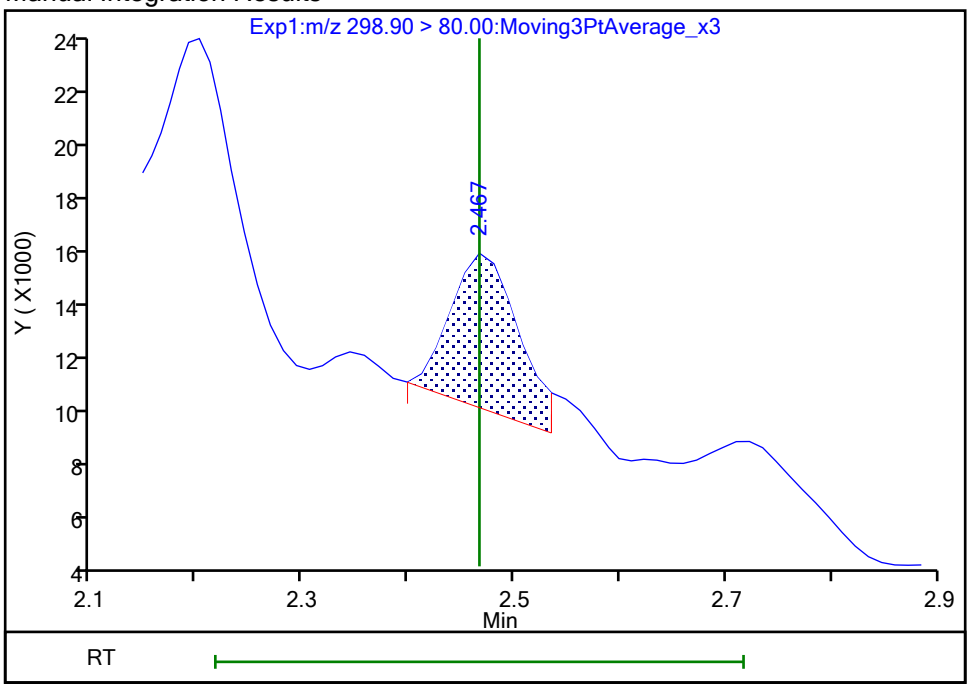
Processing Integration Results

RT: 2.47
Area: 164554
Amount: 0.094731
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 25115
Amount: 0.014458
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:14:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

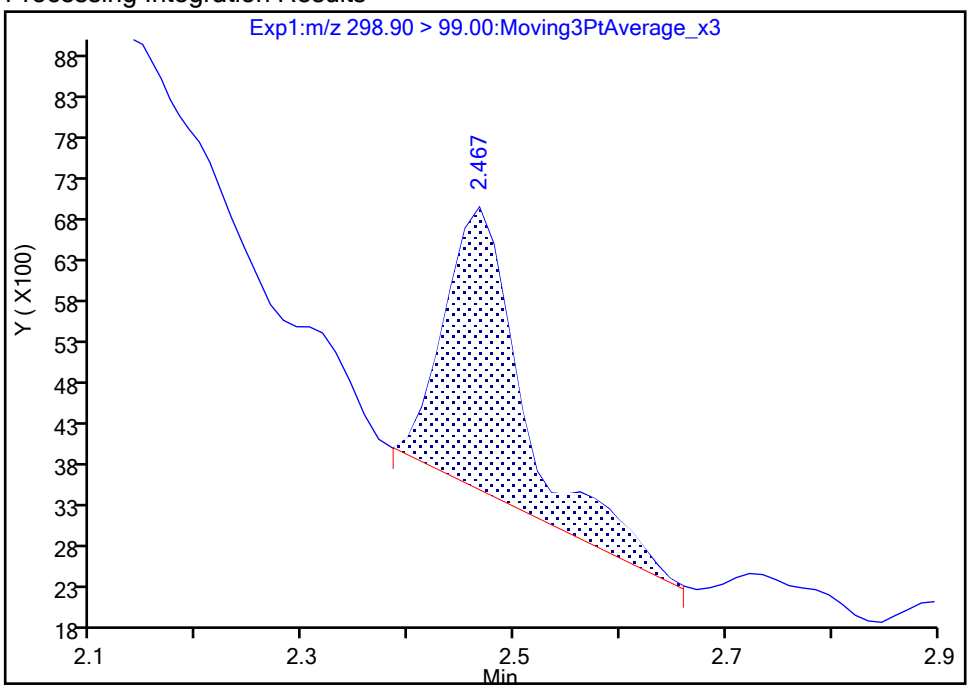
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

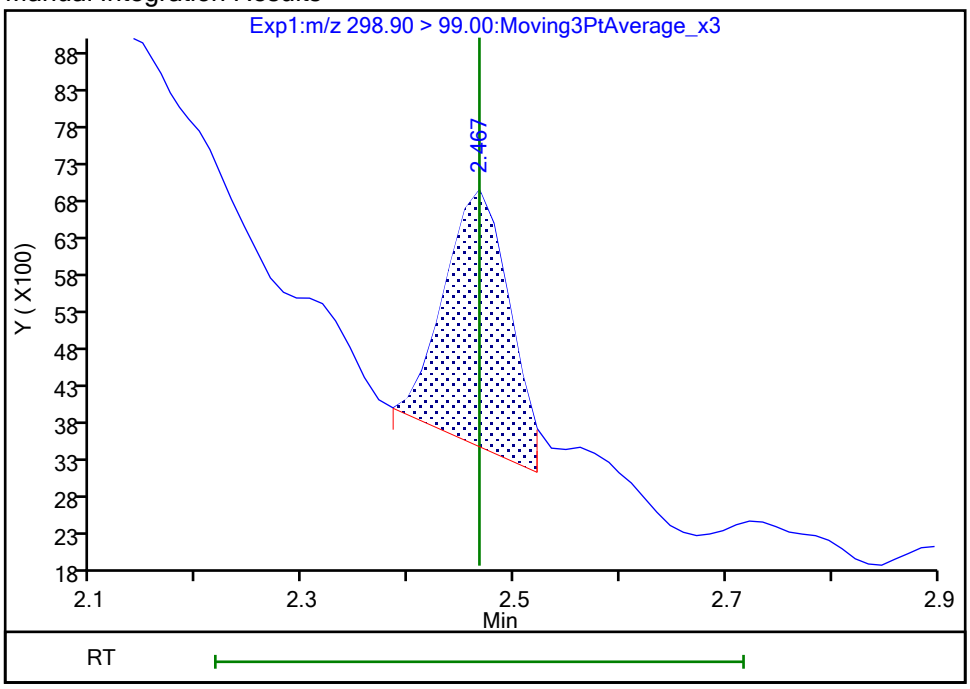
Processing Integration Results

RT: 2.47
Area: 18021
Amount: 0.094731
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 14890
Amount: 0.014458
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:14:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

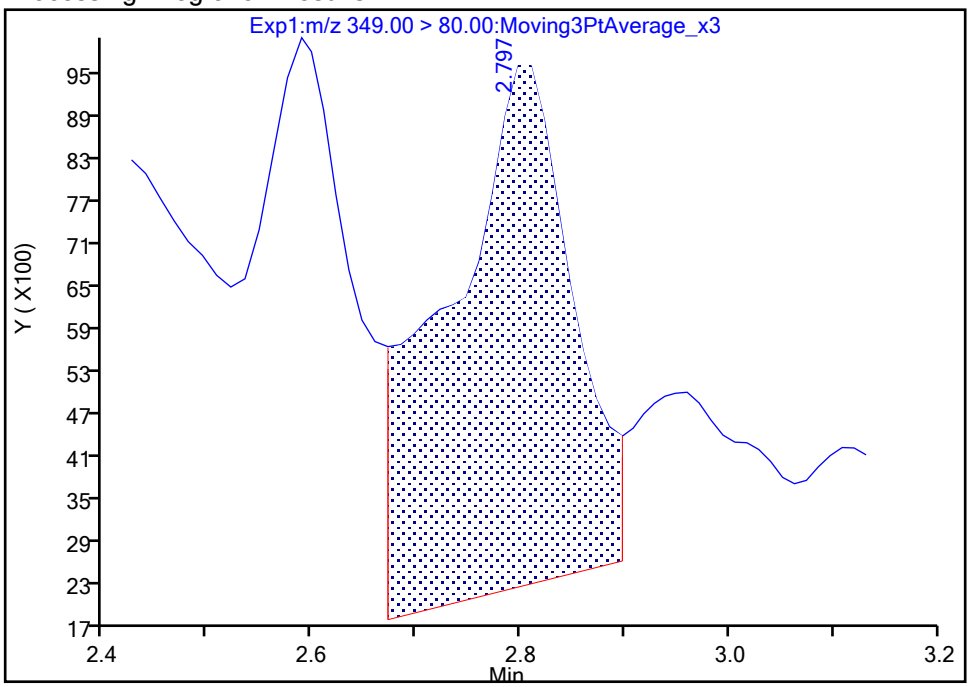
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

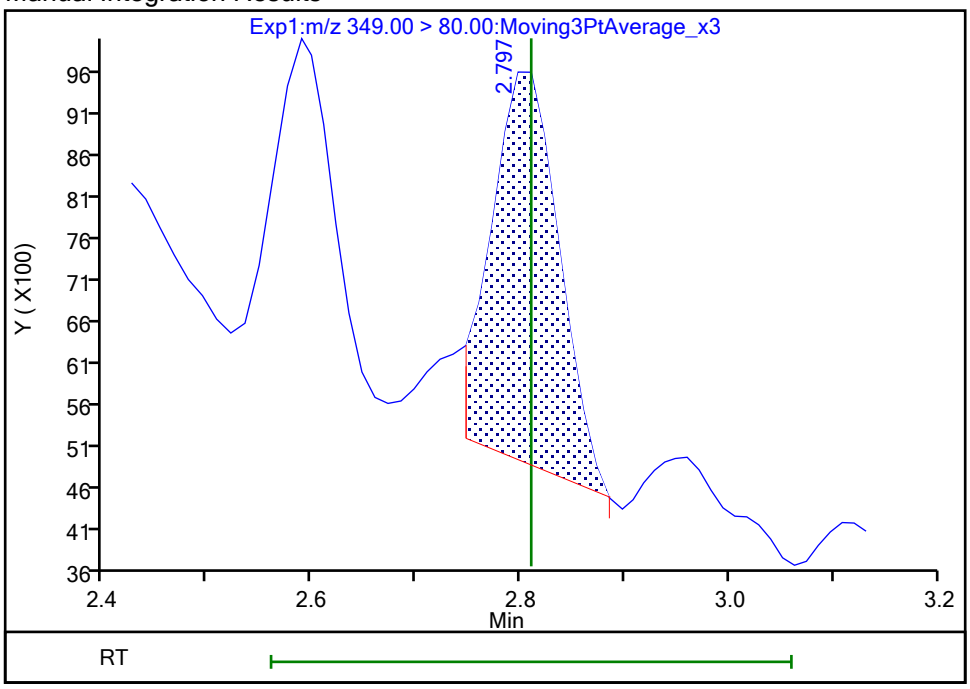
Processing Integration Results

RT: 2.80
Area: 61926
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 21045
Amount: 0.013802
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

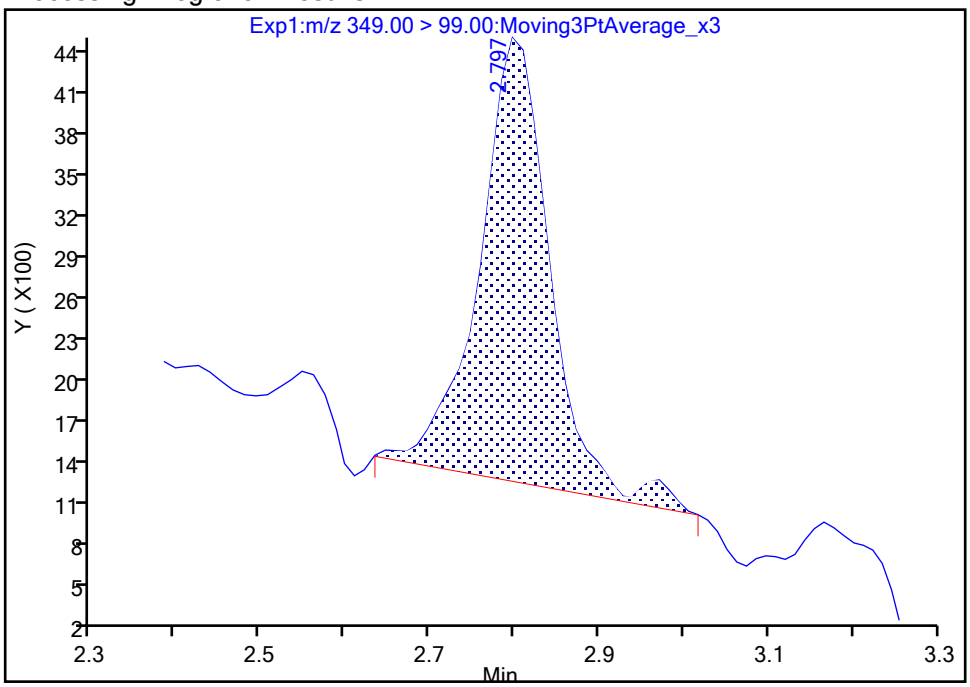
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

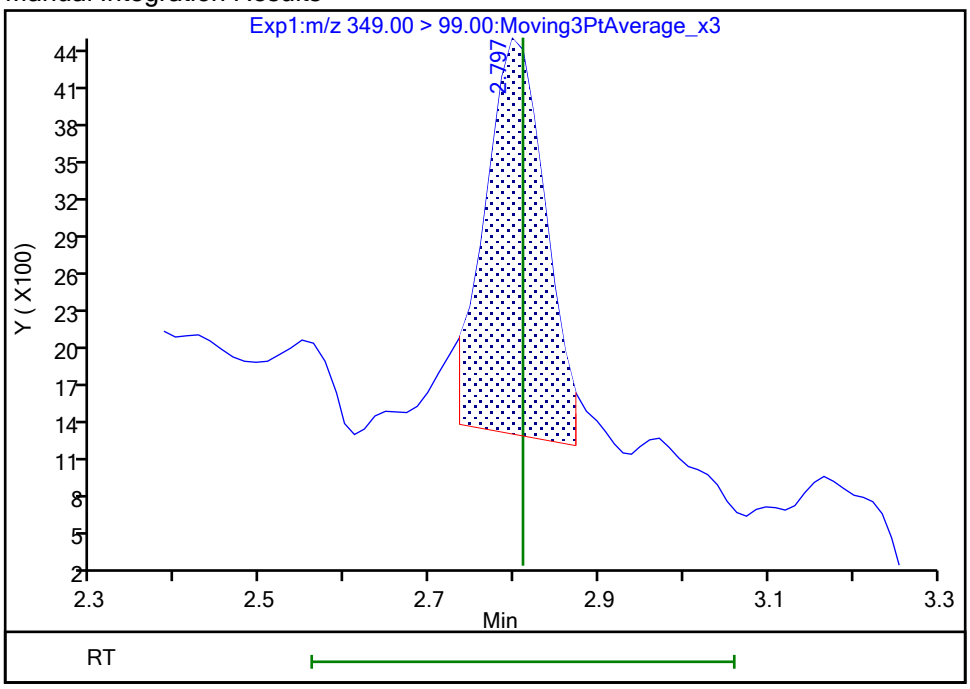
Processing Integration Results

RT: 2.80
Area: 18374
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 15312
Amount: 0.013802
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

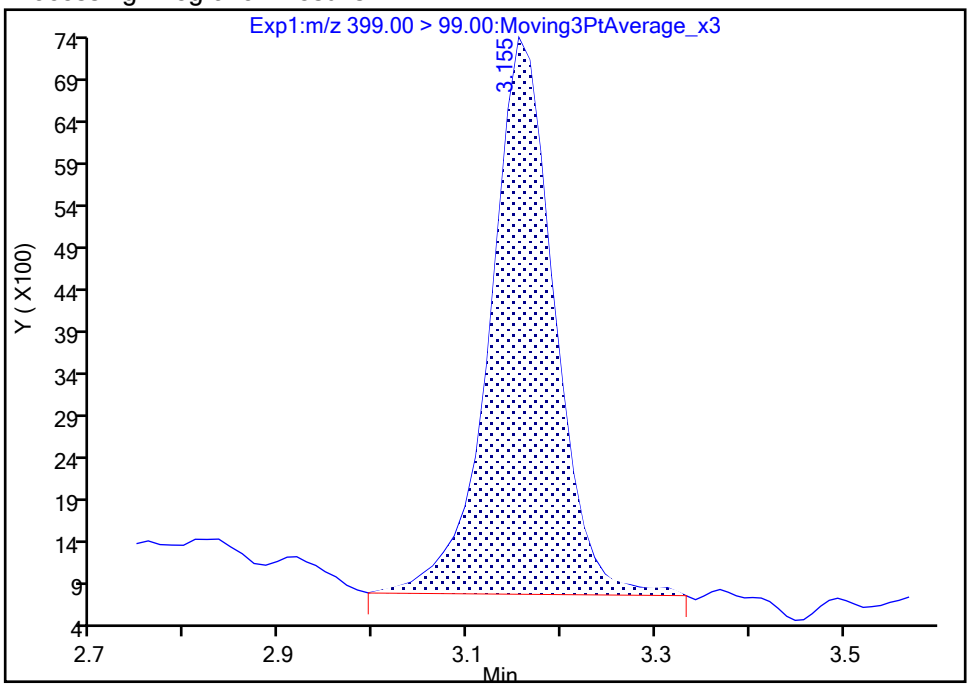
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

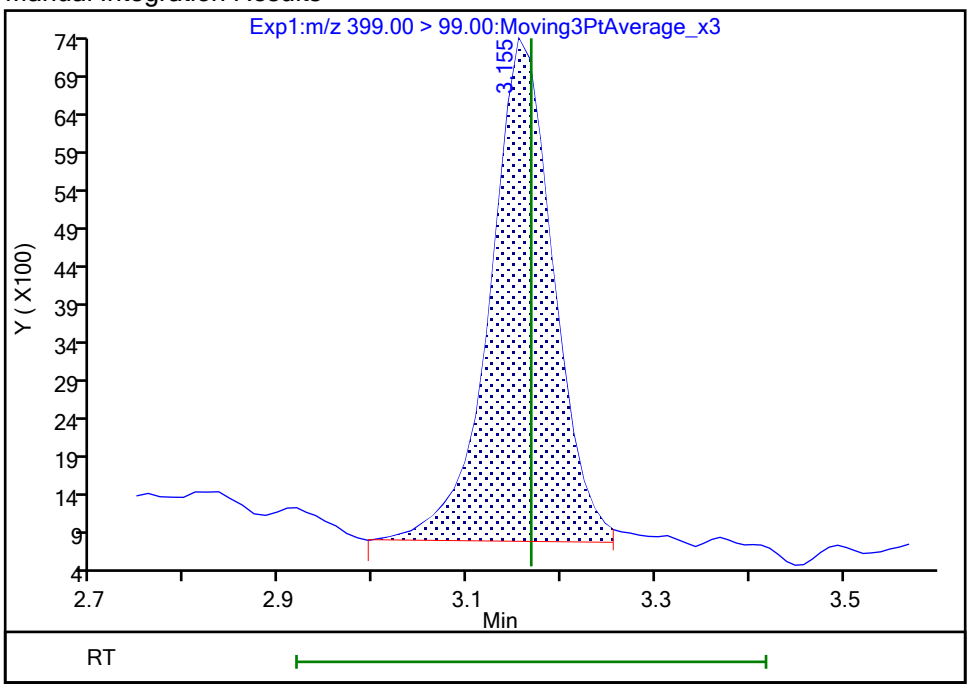
Processing Integration Results

RT: 3.15
Area: 30937
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 30511
Amount: 0.048174
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

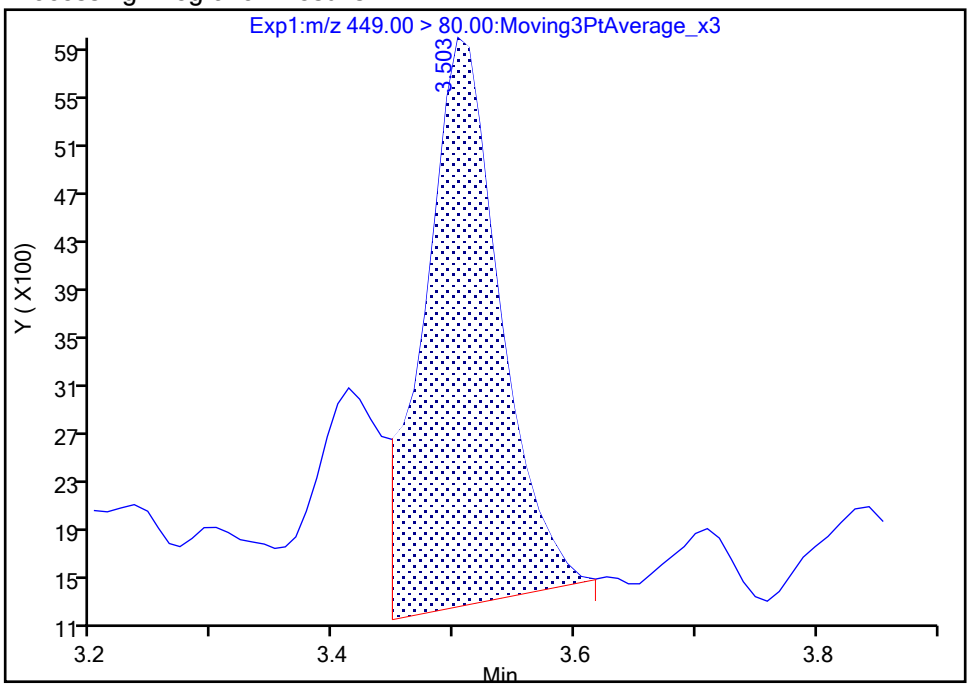
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

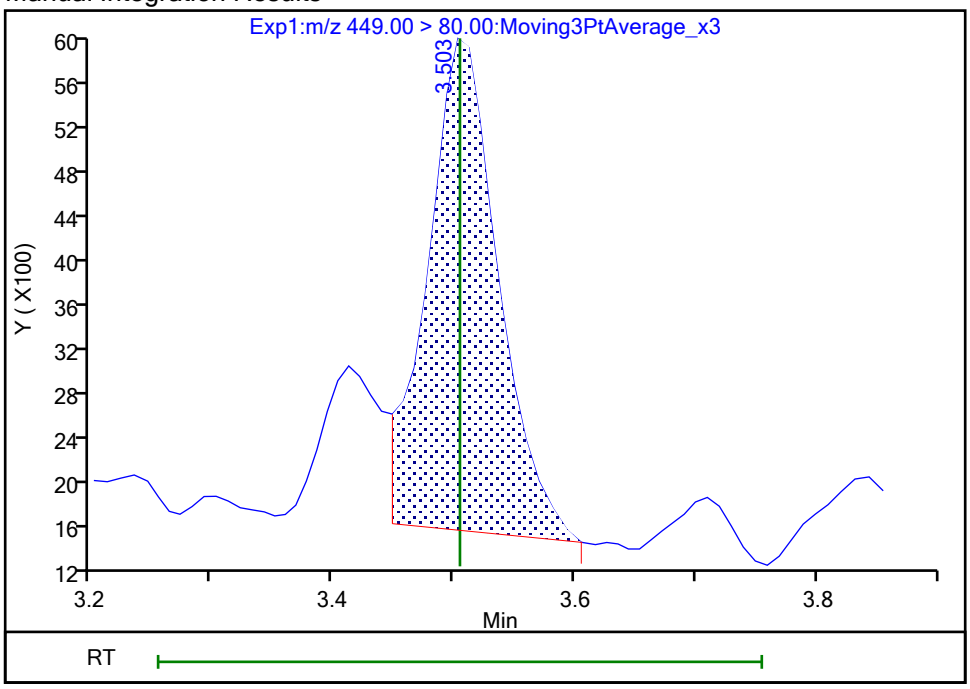
Processing Integration Results

RT: 3.50
Area: 20589
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 17894
Amount: 0.015664
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

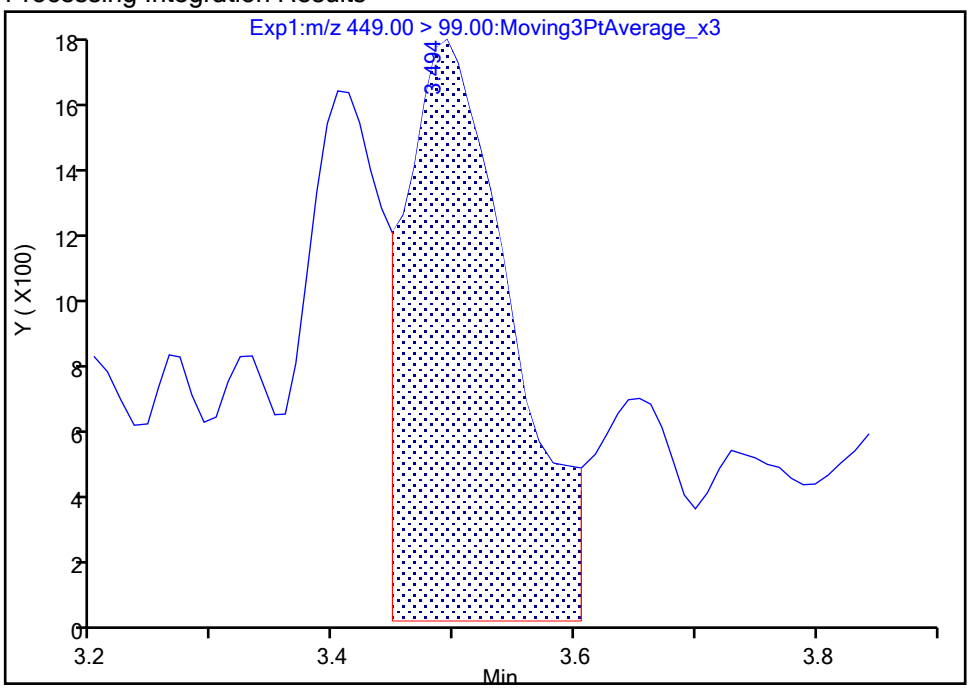
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

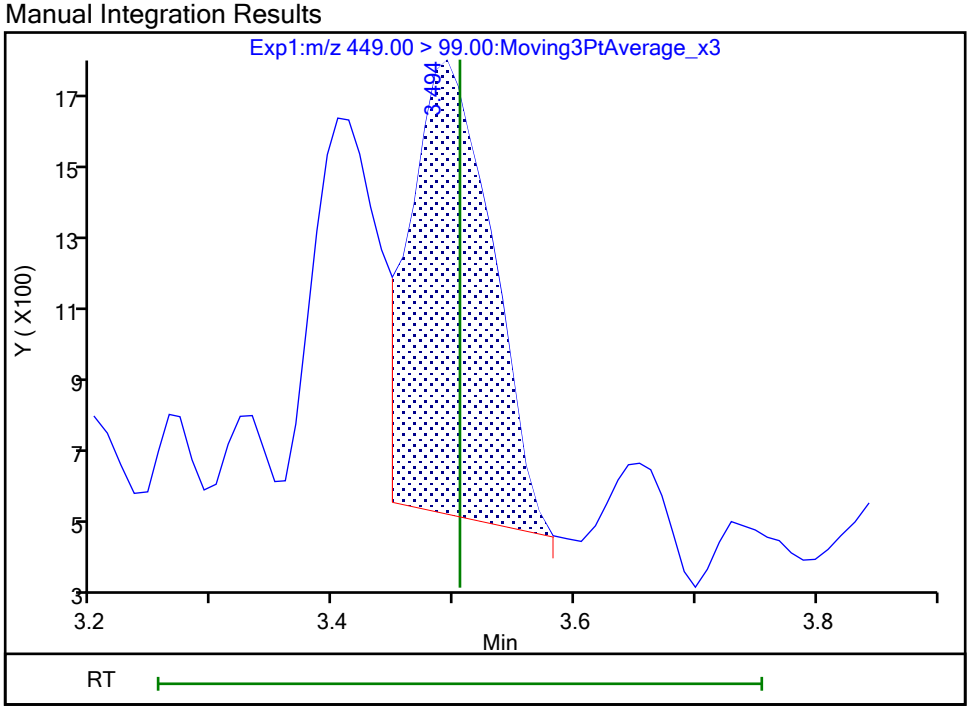
Processing Integration Results

RT: 3.49
Area: 10283
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 5544
Amount: 0.015664
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

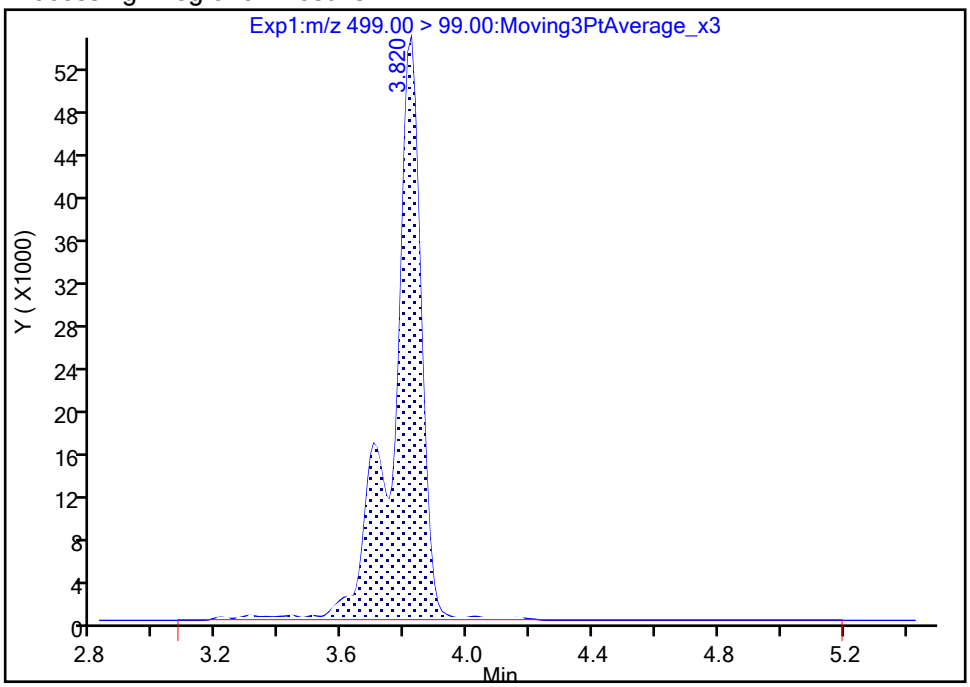
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

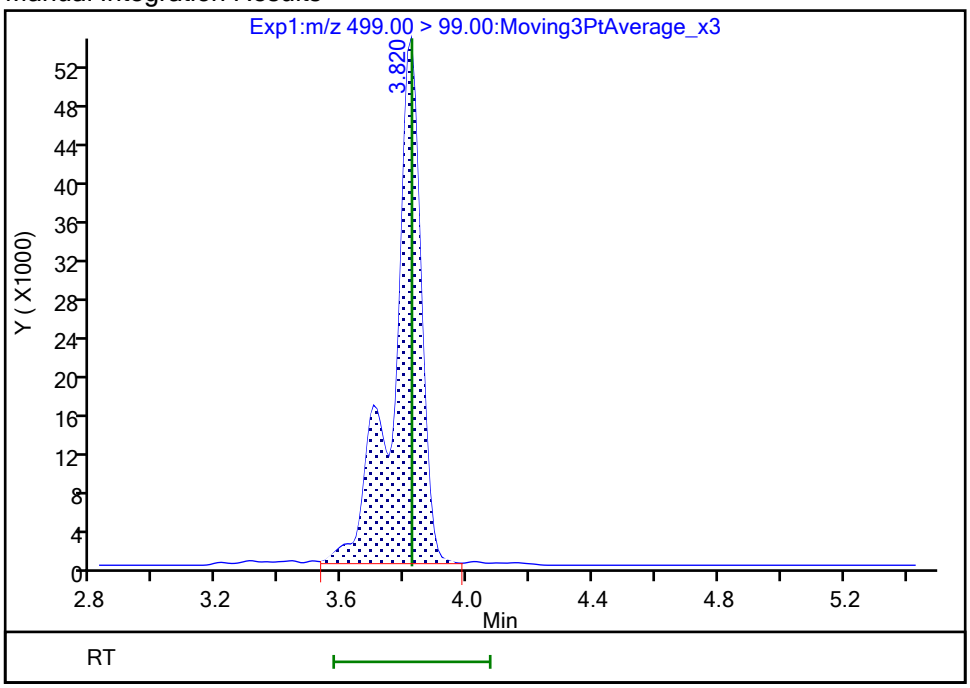
Processing Integration Results

RT: 3.82
Area: 354507
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 337420
Amount: 1.281161
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

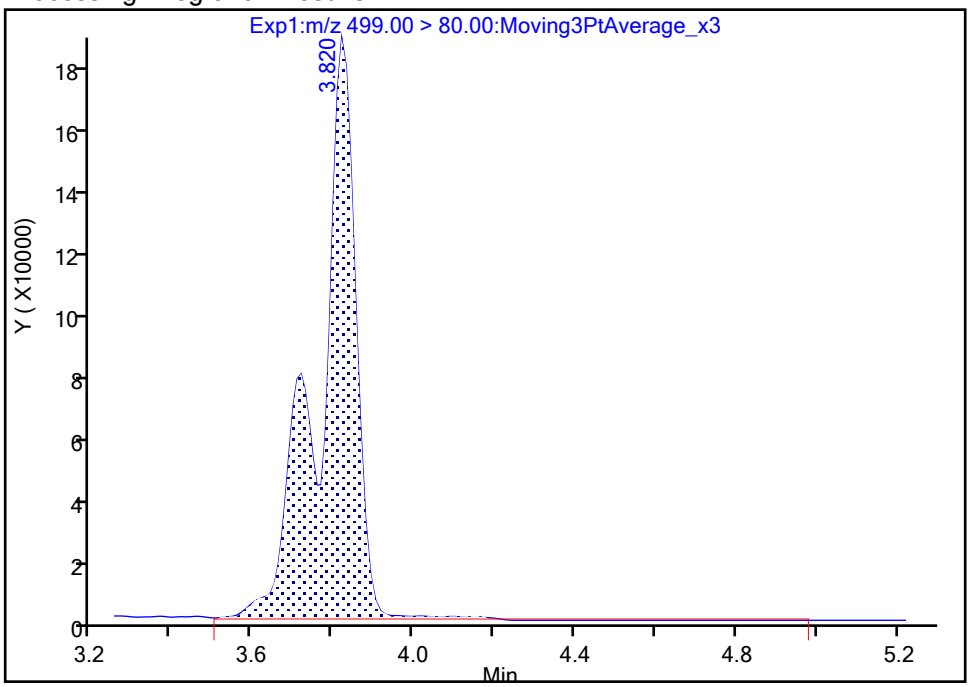
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

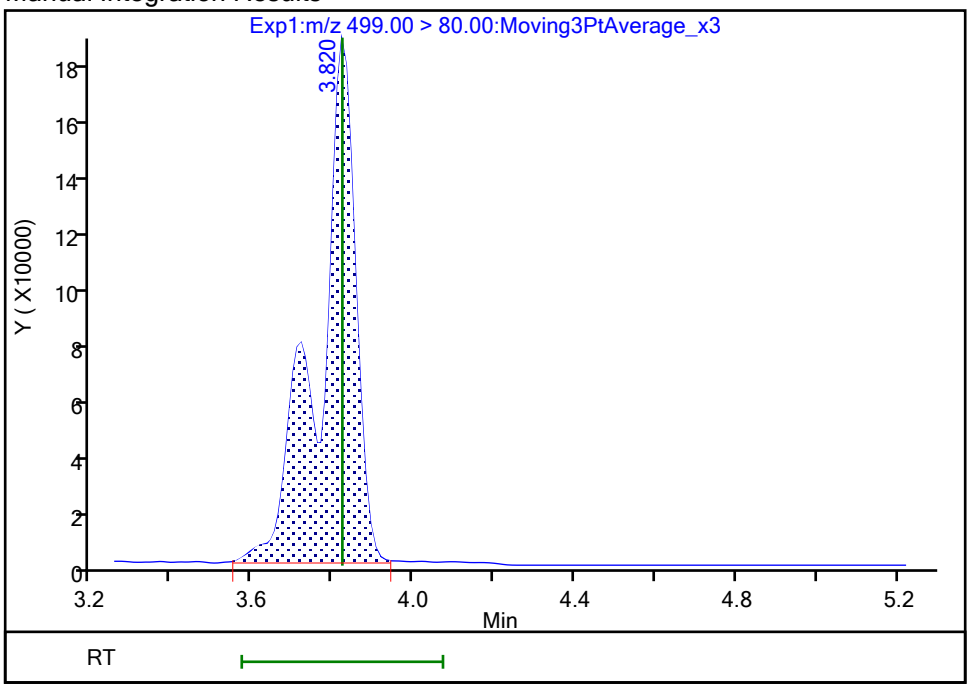
Processing Integration Results

RT: 3.82
Area: 1222915
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1181214
Amount: 1.281161
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

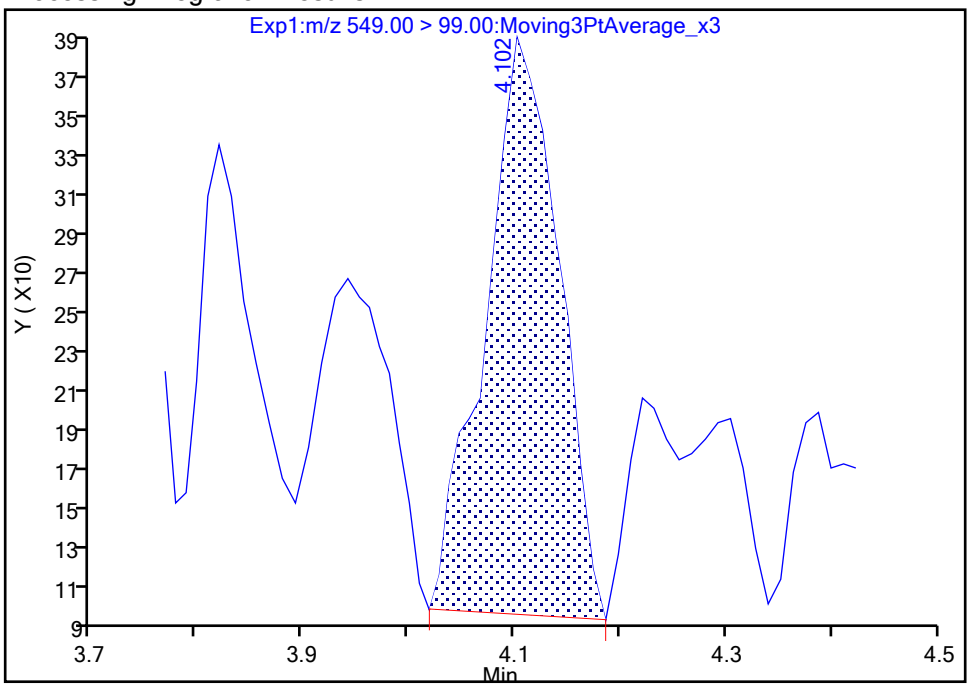
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

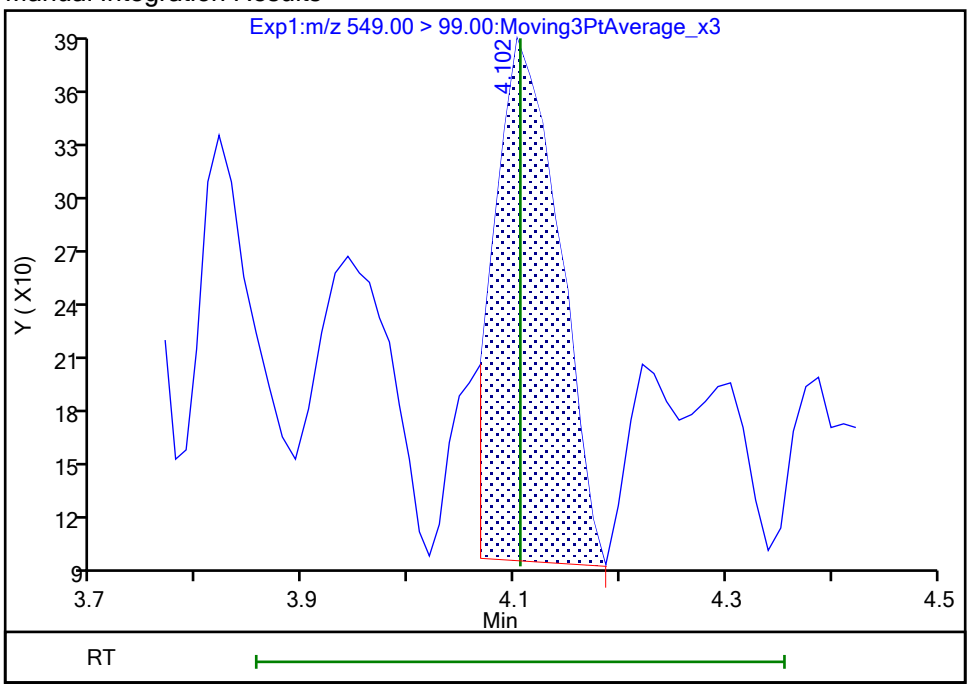
Processing Integration Results

RT: 4.10
Area: 1366
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 1180
Amount: 0.003021
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

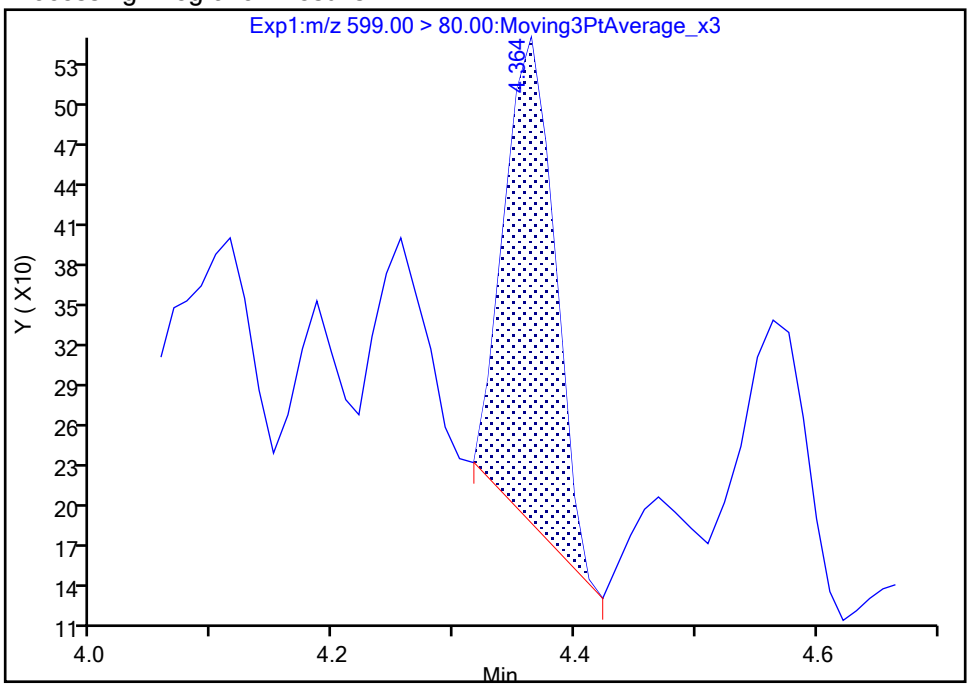
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

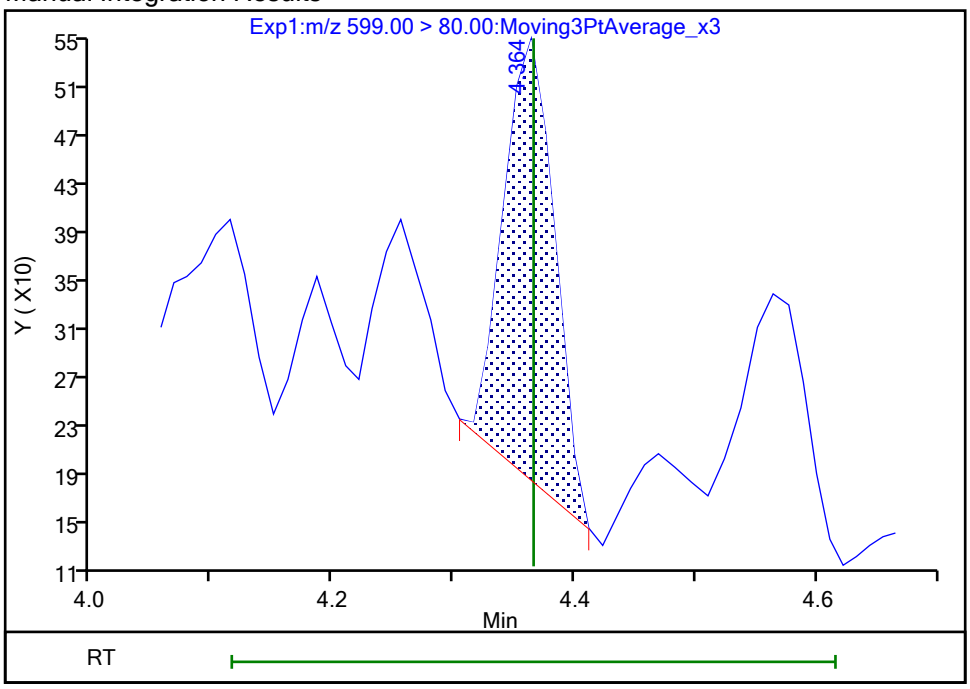
Processing Integration Results

RT: 4.36
Area: 1027
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 1038
Amount: 0.001923
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

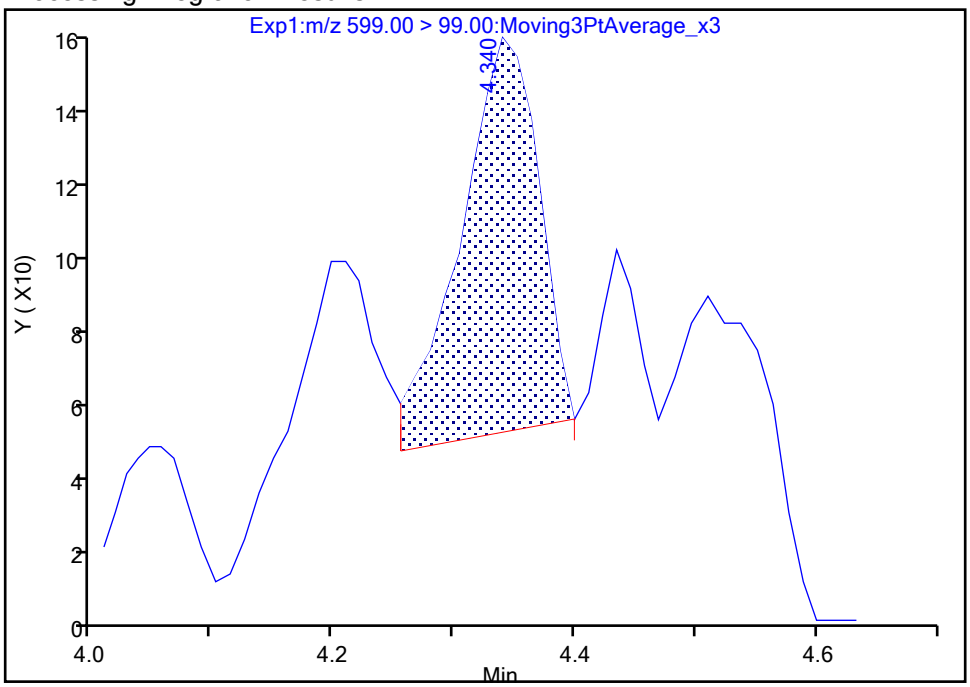
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

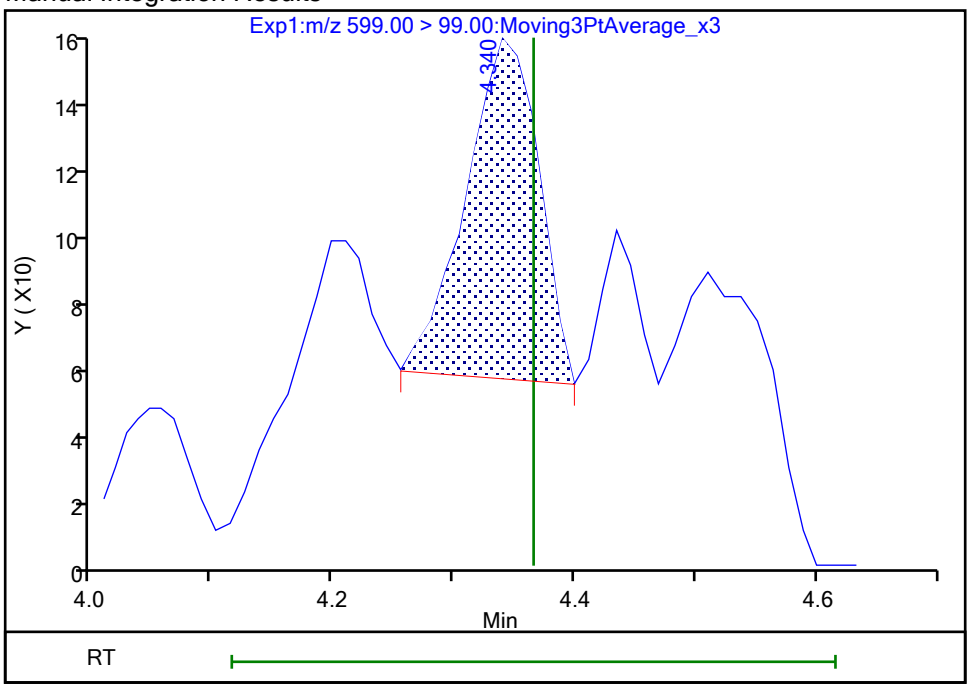
Processing Integration Results

RT: 4.34
Area: 459
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.34
Area: 407
Amount: 0.001923
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

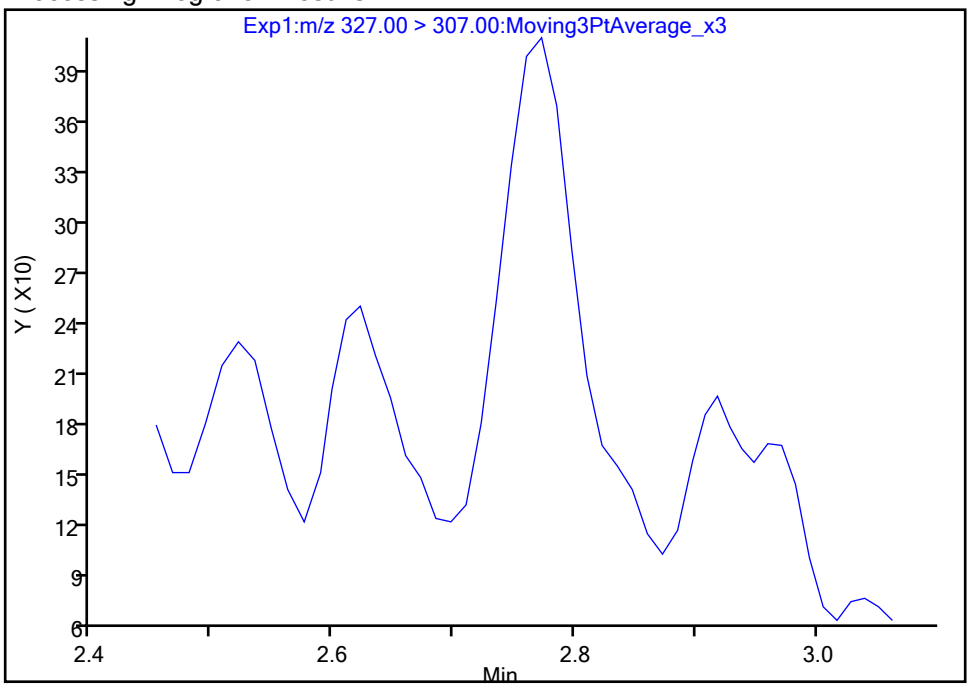
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

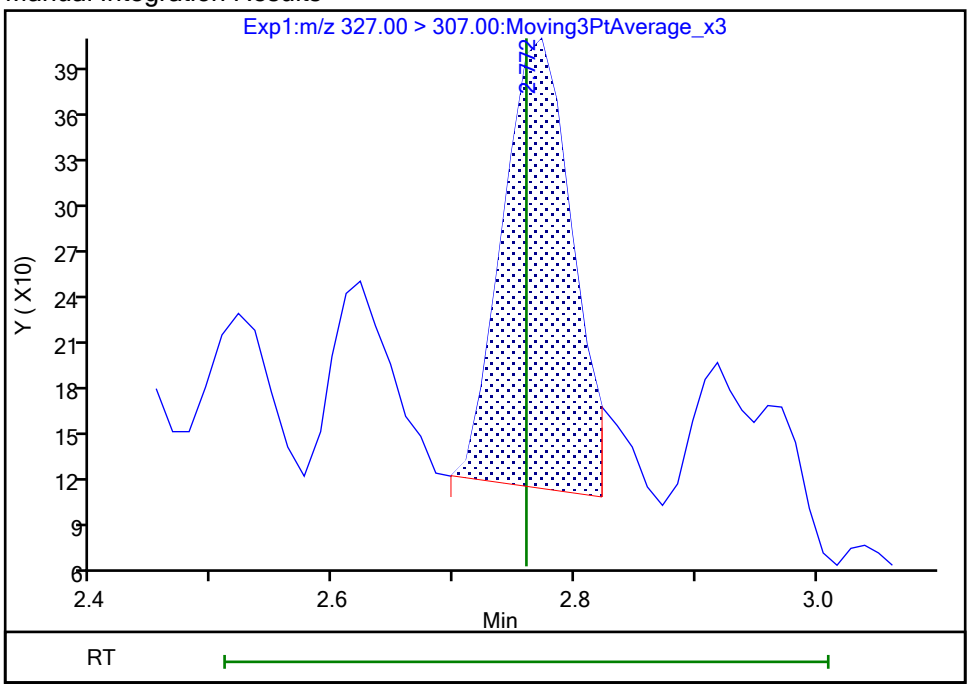
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 1160
Amount: 0.001751
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:14:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

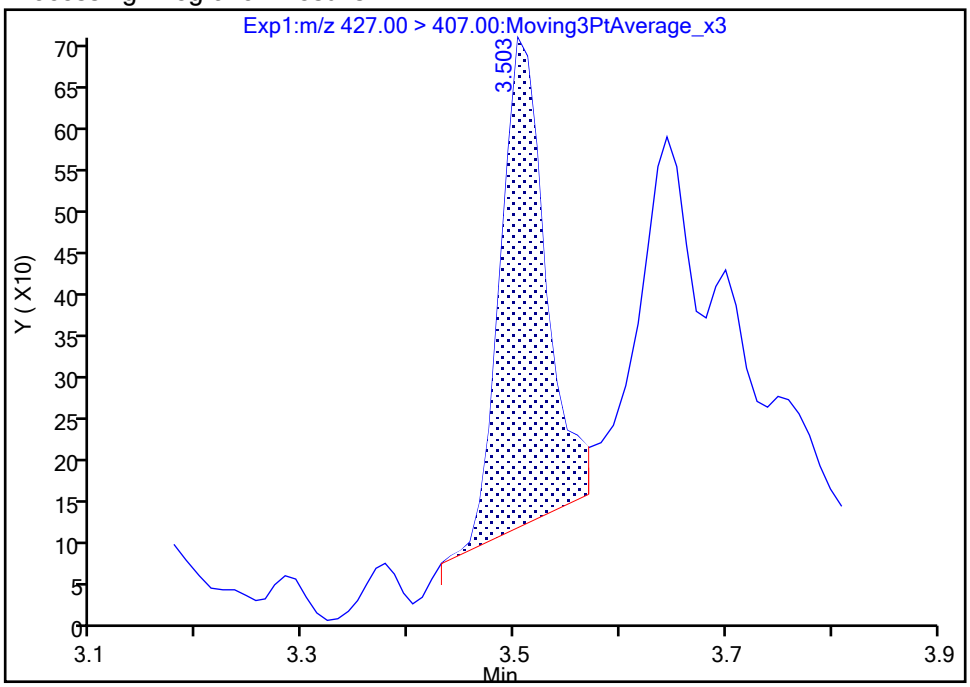
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

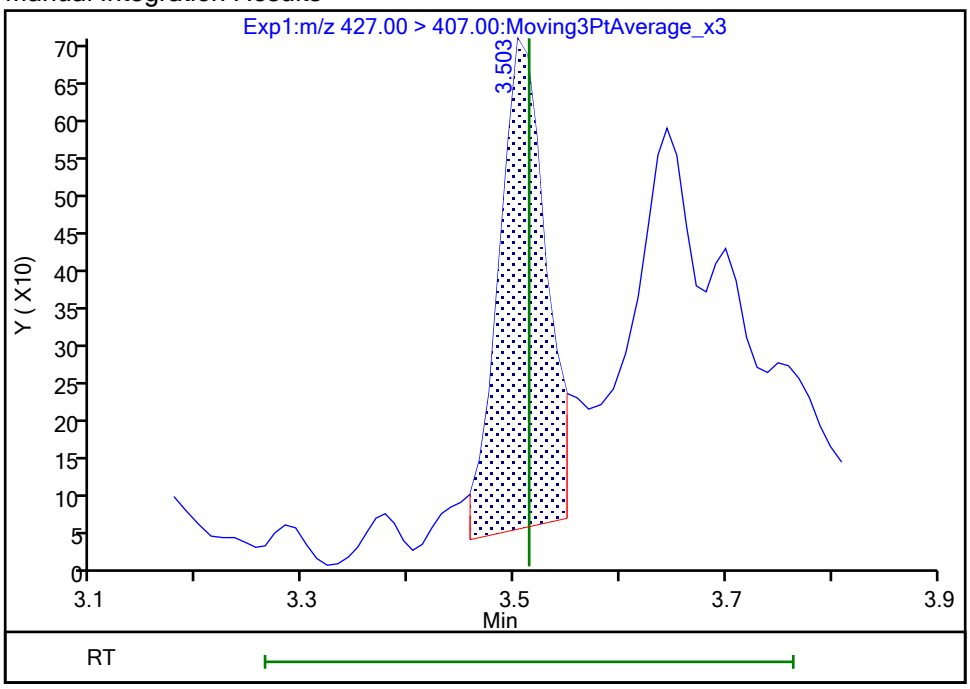
Processing Integration Results

RT: 3.50
Area: 1748
Amount: 0.002440
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 2003
Amount: 0.002796
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:16:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

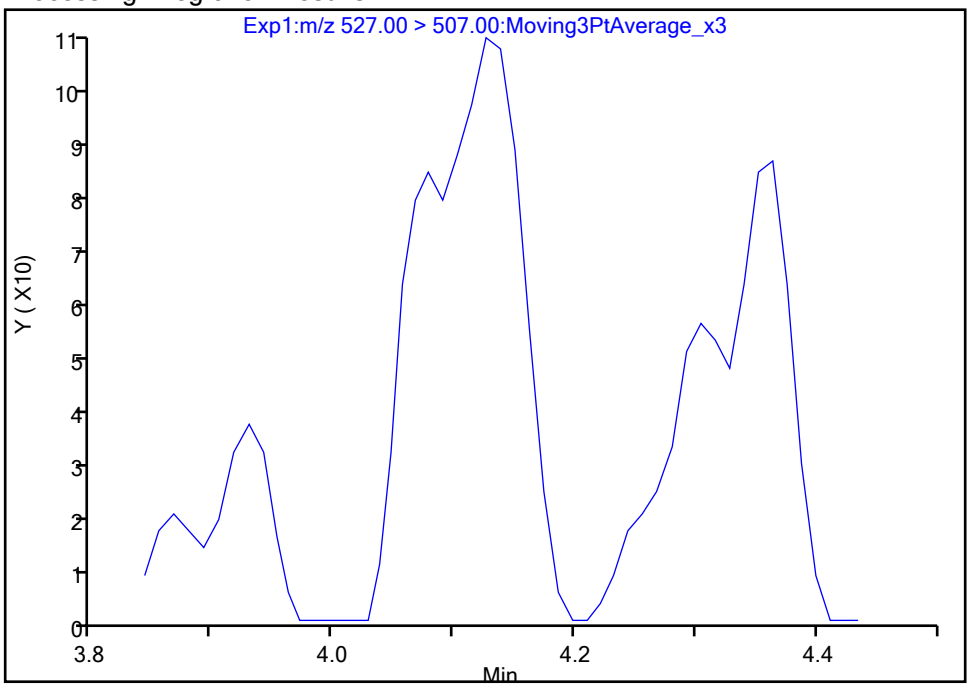
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

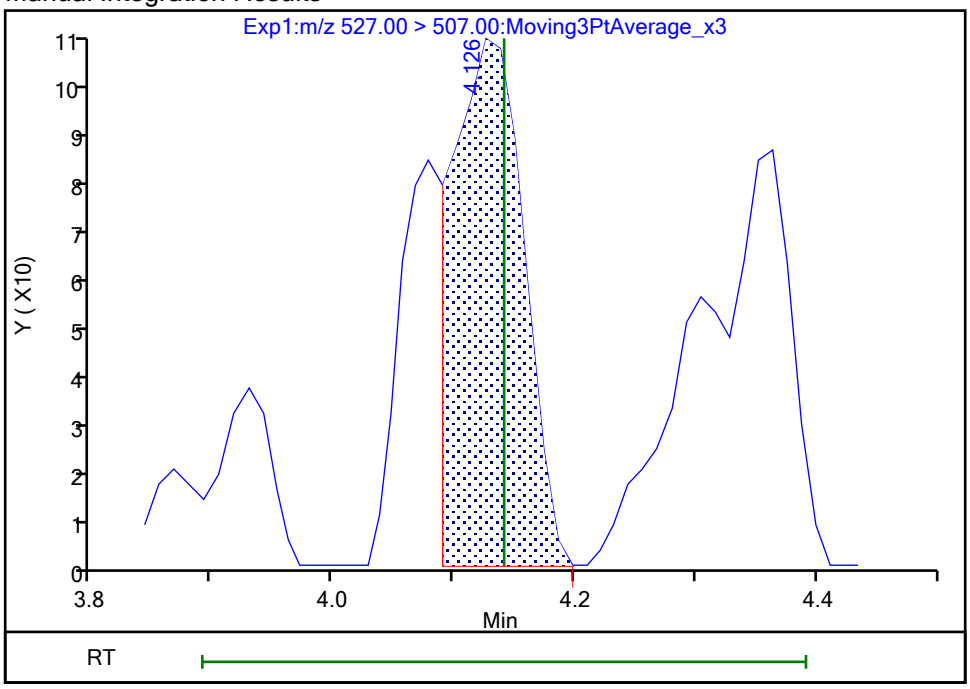
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.13
Area: 418
Amount: 0.000715
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

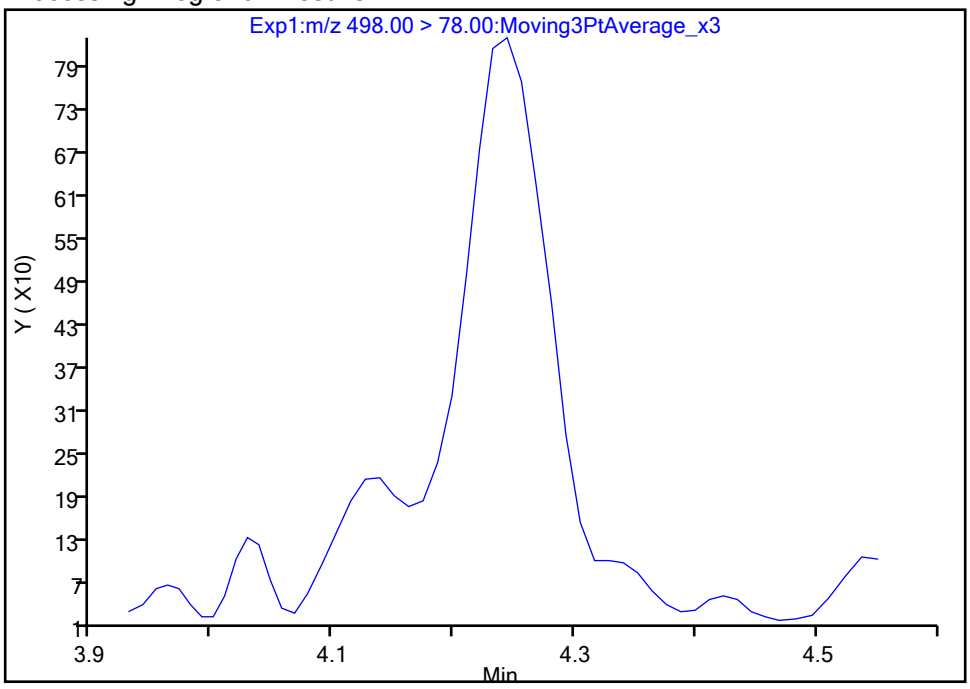
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

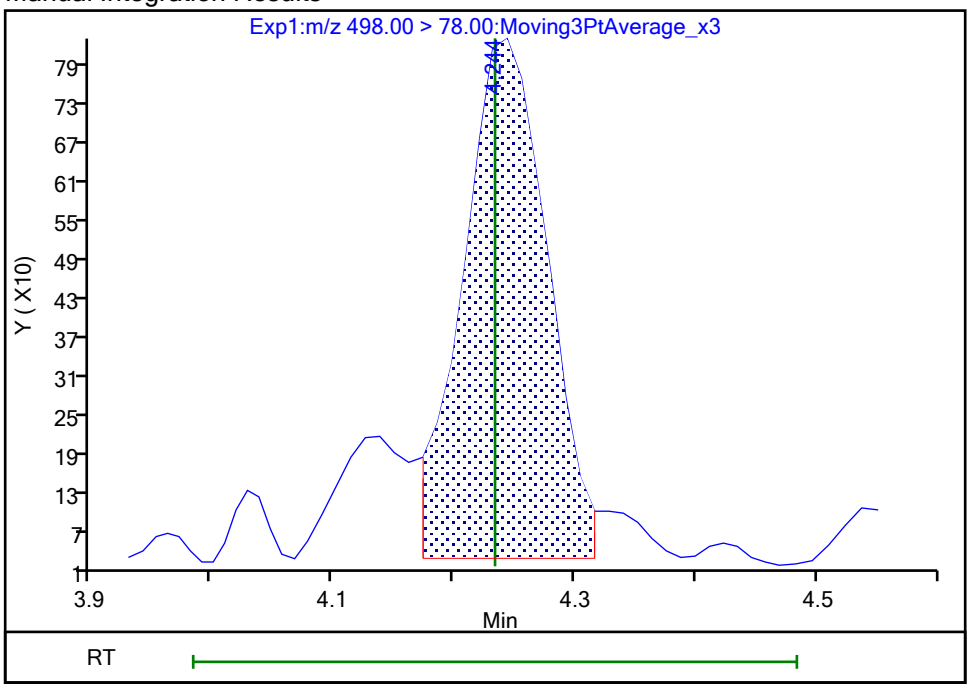
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 3855
Amount: 0.002991
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

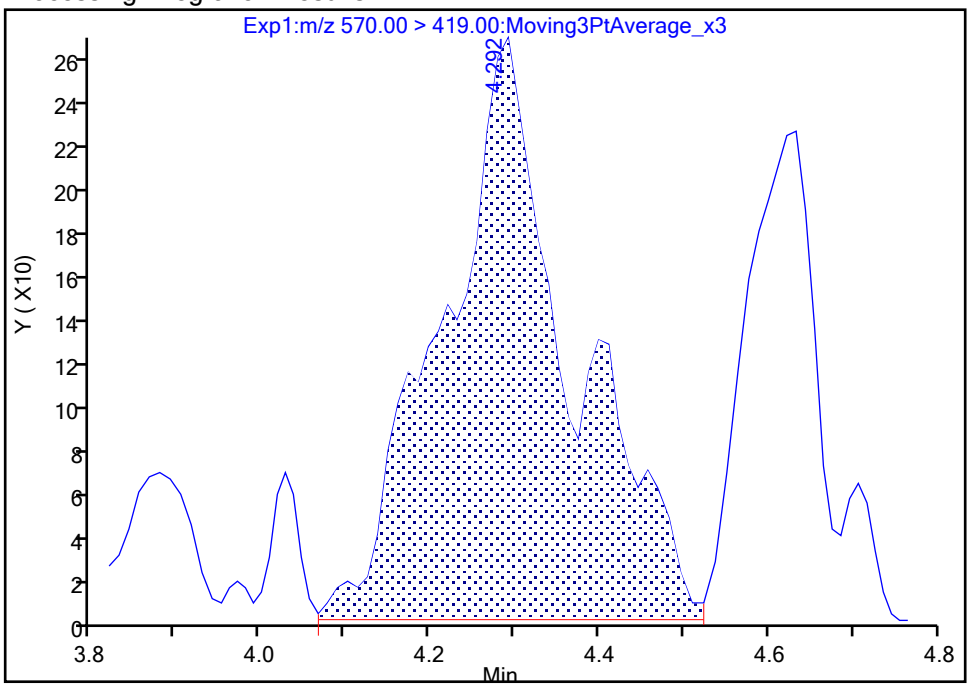
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

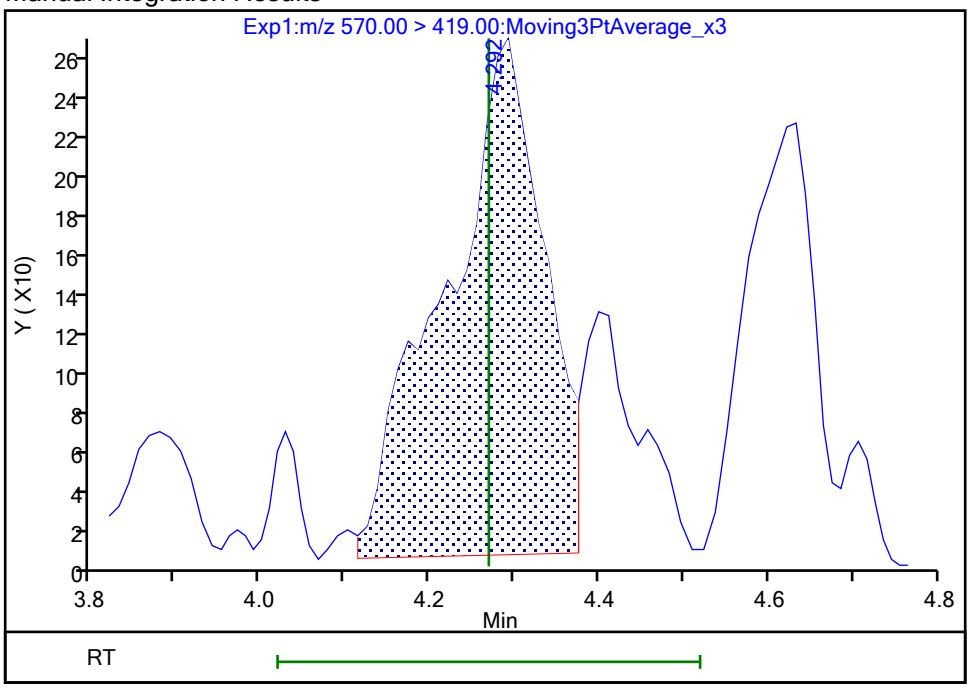
Processing Integration Results

RT: 4.29
Area: 2862
Amount: 0.007595
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 2150
Amount: 0.005705
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

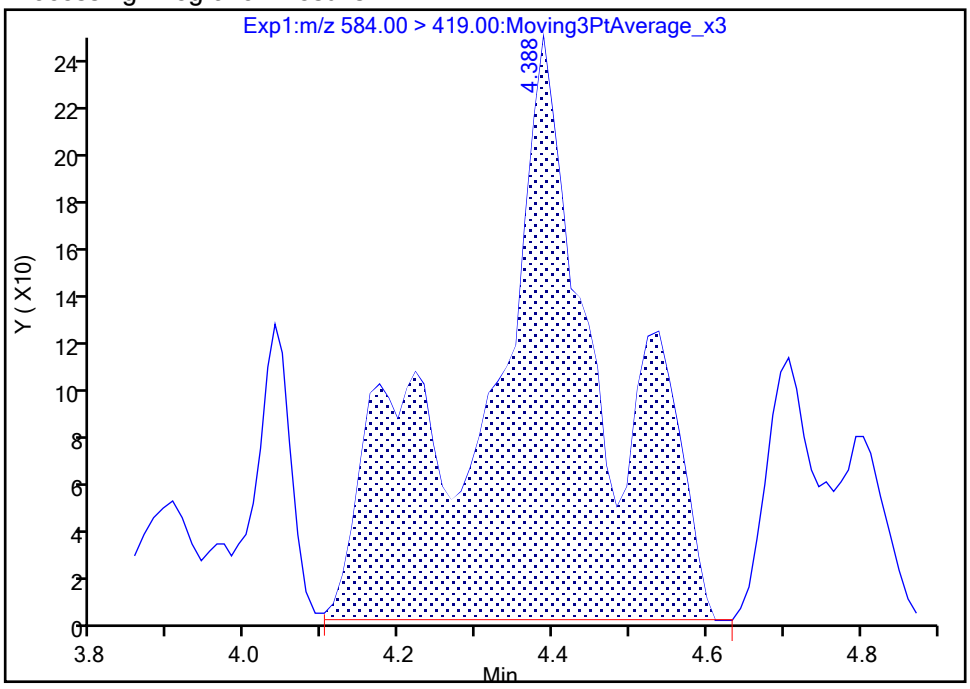
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

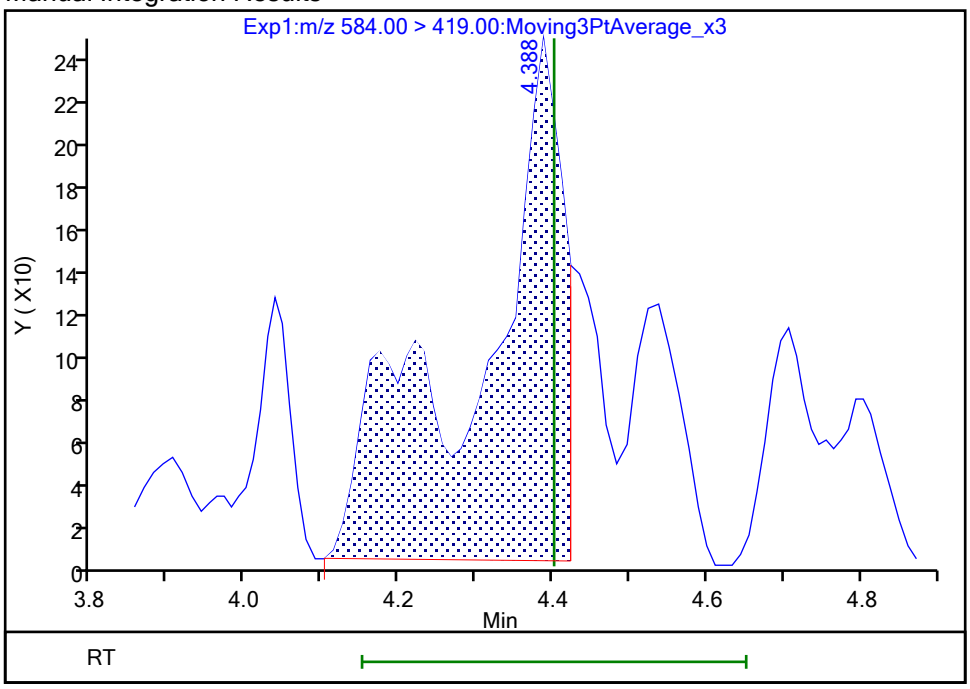
Processing Integration Results

RT: 4.39
Area: 2821
Amount: 0.006477
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 1855
Amount: 0.004259
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

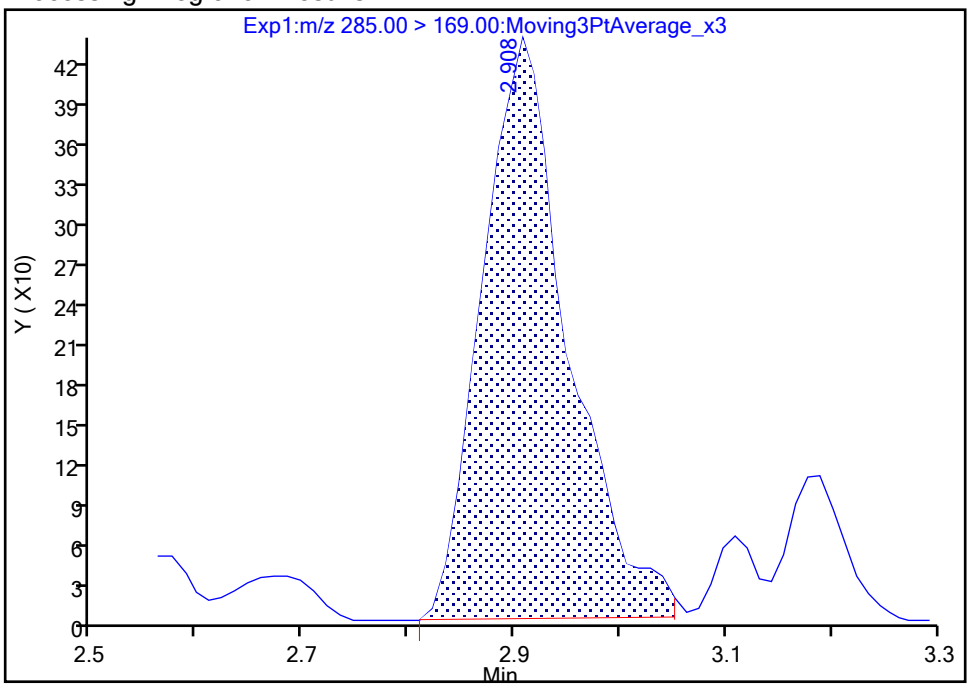
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

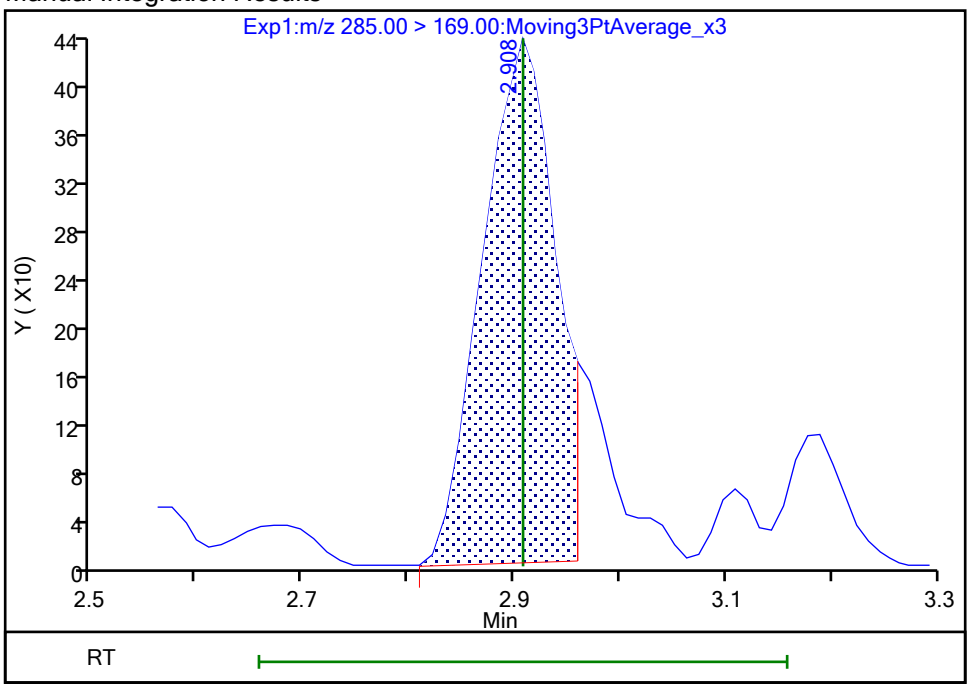
Processing Integration Results

RT: 2.91
Area: 2453
Amount: 0.010952
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 2058
Amount: 0.009188
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:15:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

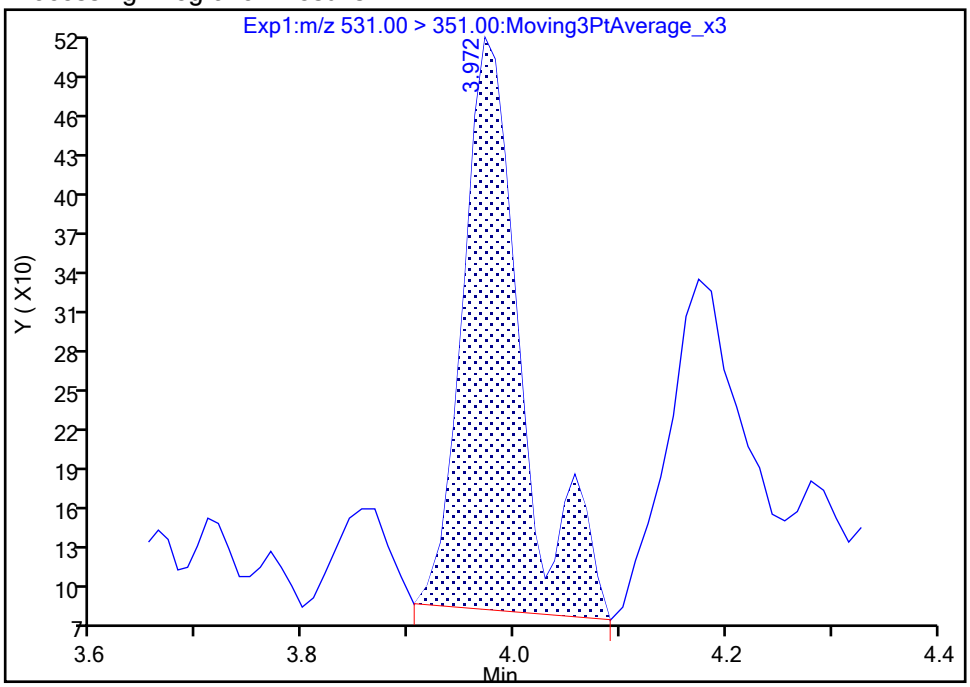
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

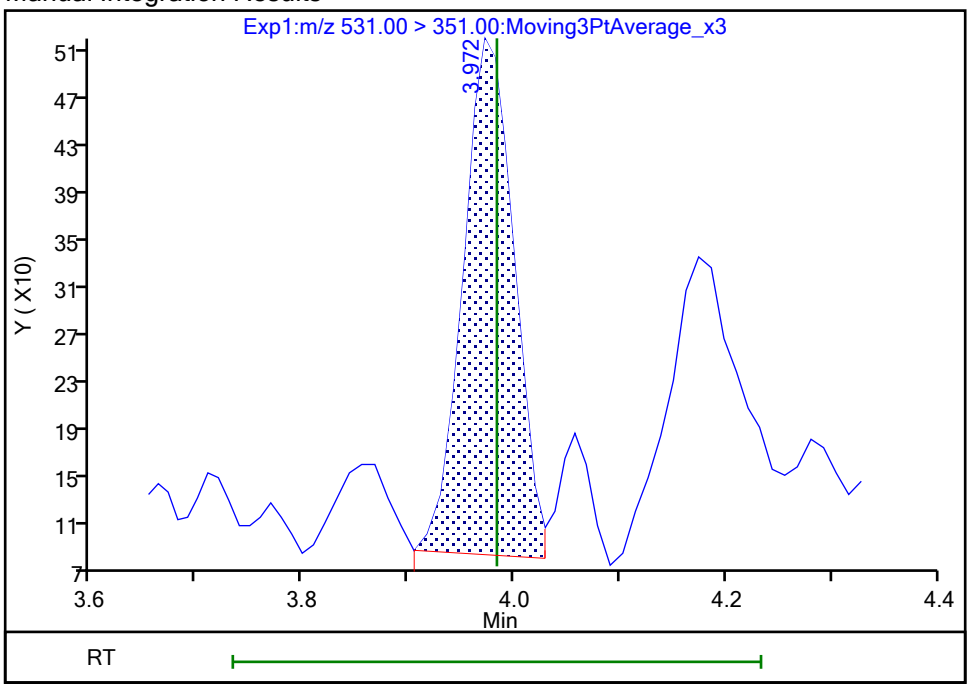
Processing Integration Results

RT: 3.97
Area: 1665
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.97
Area: 1441
Amount: 0.000511
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:17:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

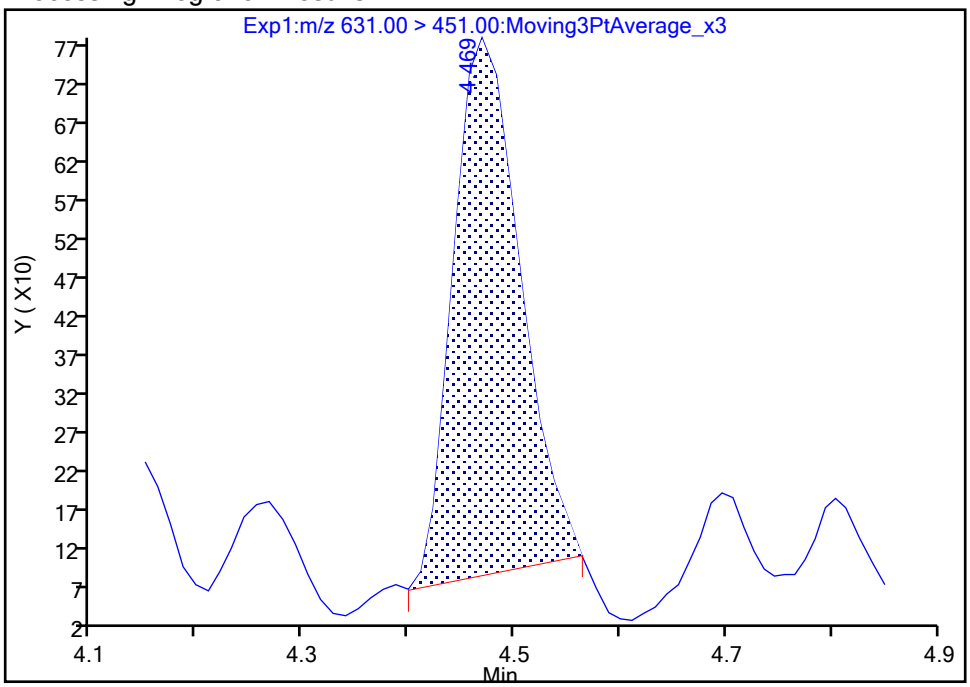
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

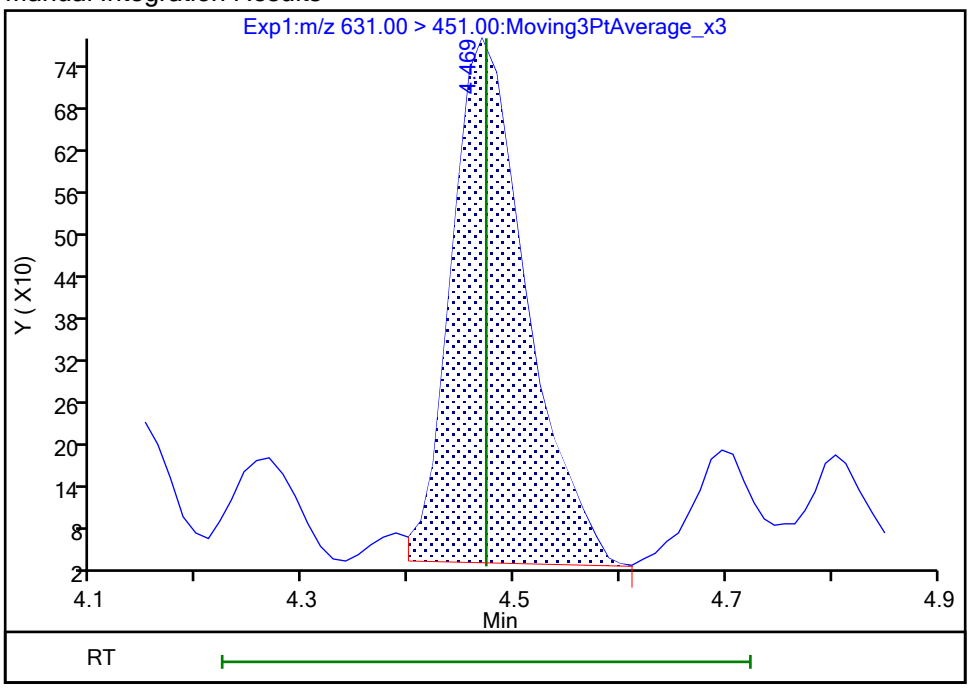
Processing Integration Results

RT: 4.47
Area: 3055
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 3698
Amount: 0.000855
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:18:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

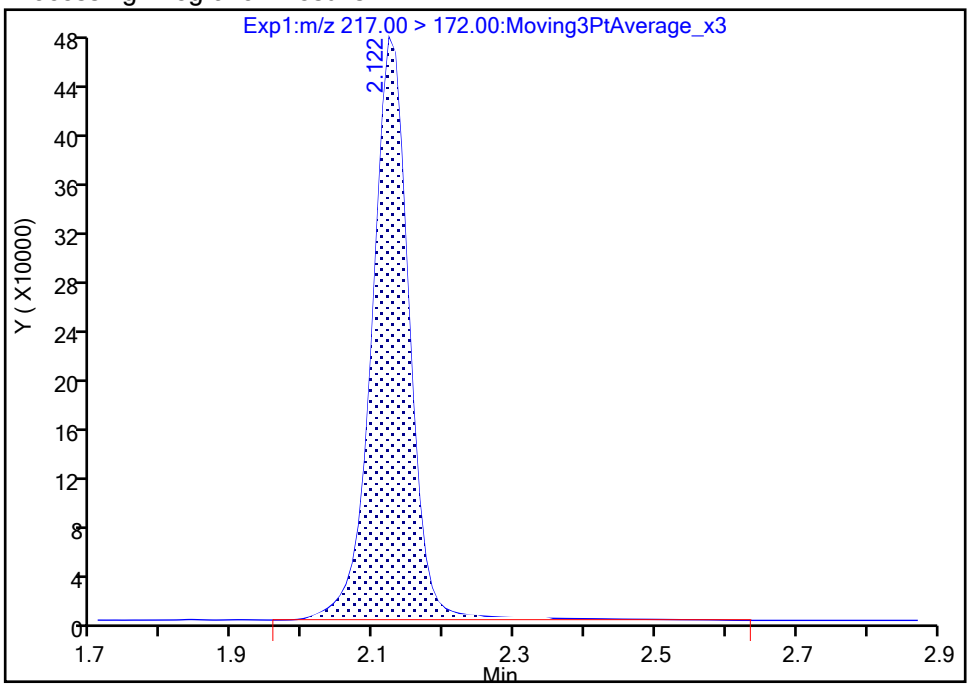
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

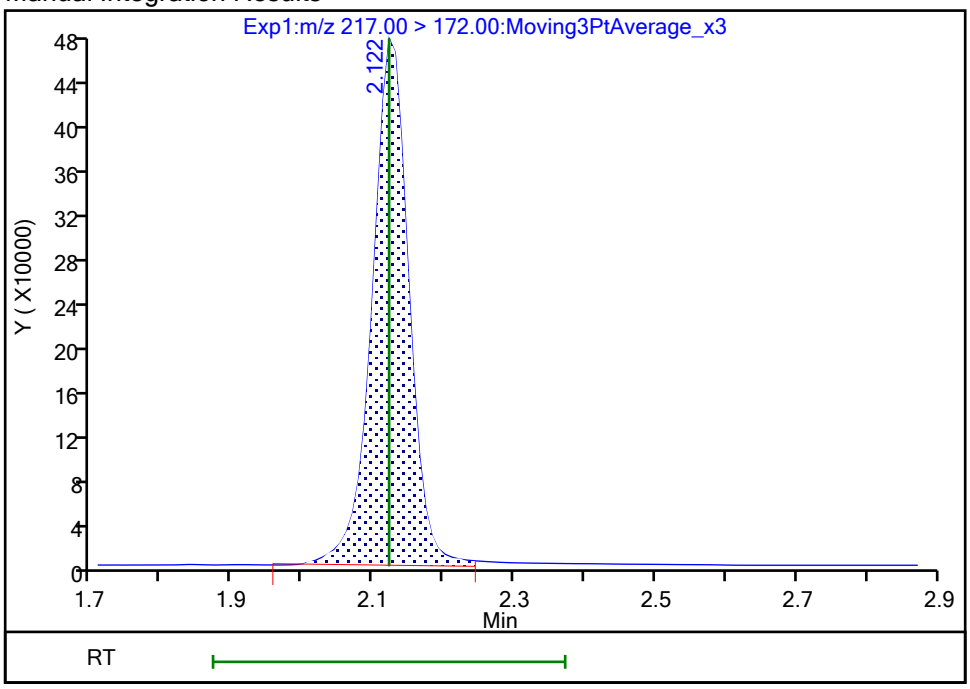
Processing Integration Results

RT: 2.12
Area: 1765213
Amount: 1.138179
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1736808
Amount: 1.119864
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:13:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

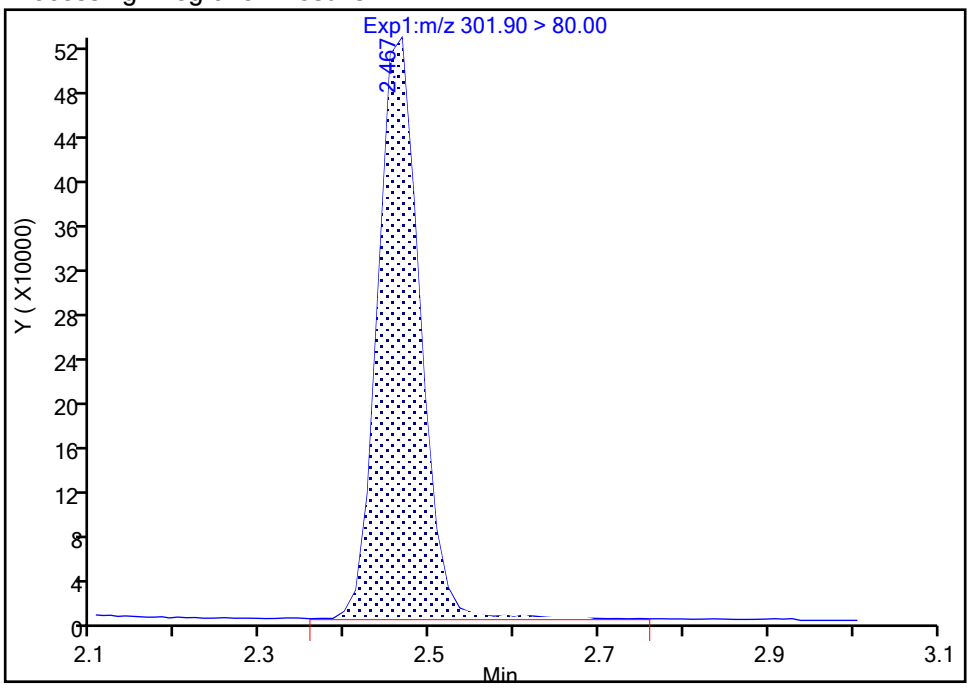
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

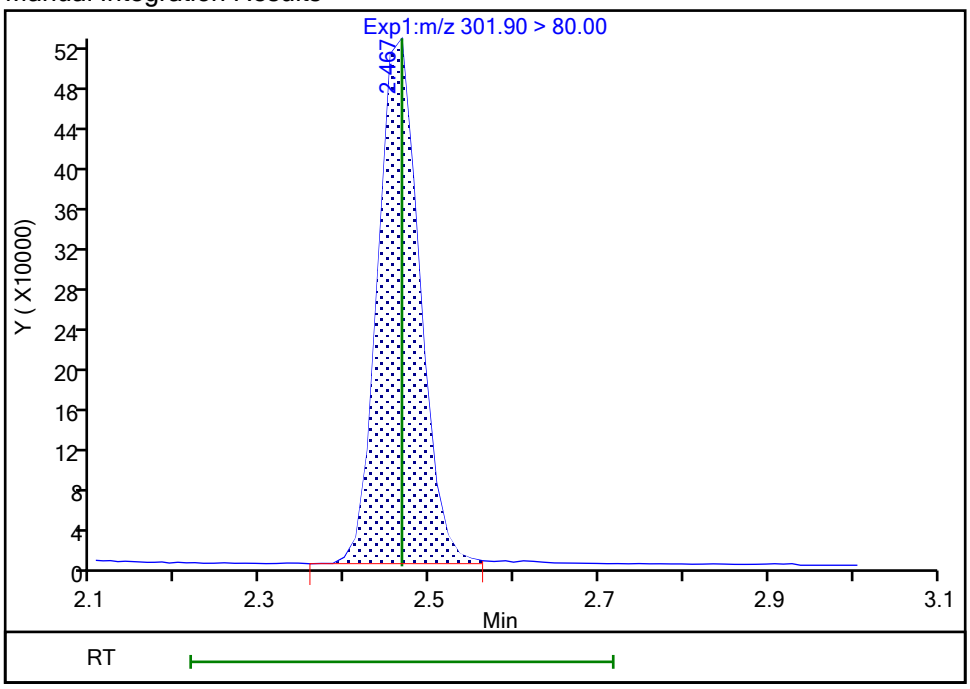
Processing Integration Results

RT: 2.47
Area: 1822296
Amount: 1.118933
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1807969
Amount: 1.110135
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:13:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

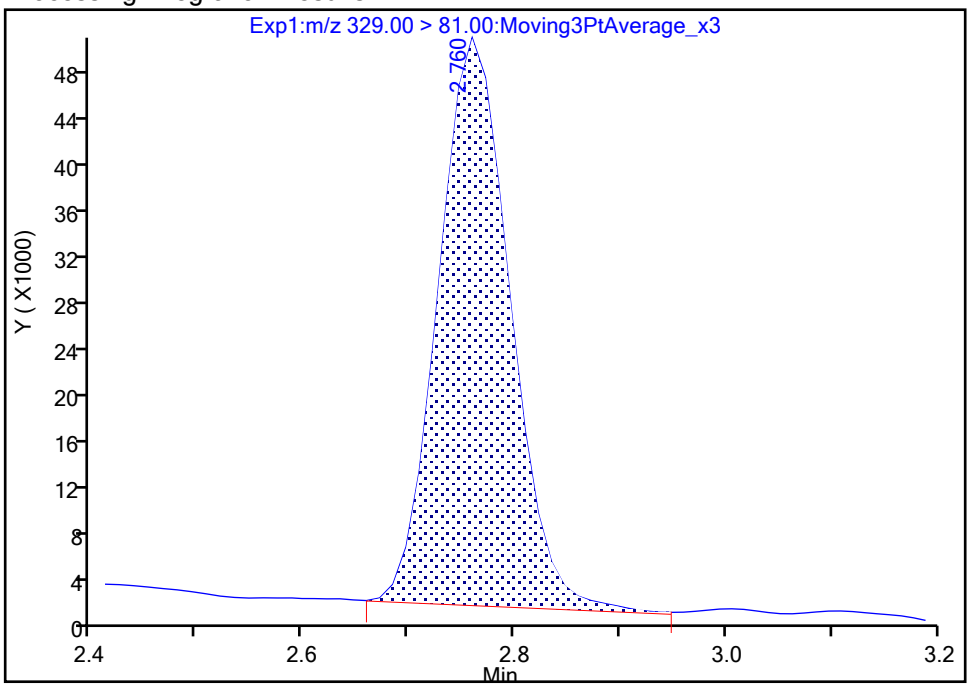
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C05.d				
Injection Date:	23-Oct-2023 23:49:31	Instrument ID:	LC812		
Lims ID:	460-290375-A-6-A	Lab Sample ID:	200-290375-6		
Client ID:	MW88-101323-0831-80.5				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

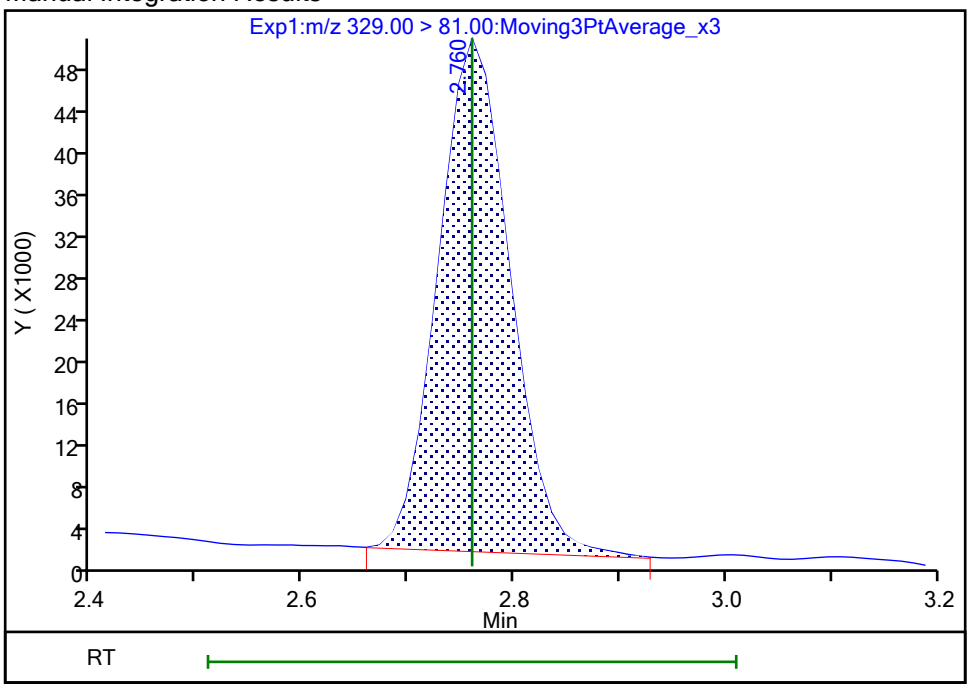
Processing Integration Results

RT: 2.76
Area: 228626
Amount: 1.213885
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 227822
Amount: 1.209616
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:14:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92A-101323-1006-70 Lab Sample ID: 460-290375-7

Matrix: Water Lab File ID: PA231023C06.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:06

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 284.8(mL) Date Analyzed: 10/23/2023 23:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	9.62		4.39	1.05
2706-90-3	Perfluoropentanoic acid	5.05		1.76	0.60
307-24-4	Perfluorohexanoic acid	16.0		1.76	0.57
375-85-9	Perfluoroheptanoic acid	5.76		1.76	0.47
335-67-1	Perfluorooctanoic acid	38.6		1.76	0.67
375-95-1	Perfluorononanoic acid	1.41	J	1.76	0.43
335-76-2	Perfluorodecanoic acid	0.76	J	1.76	0.40
2058-94-8	Perfluoroundecanoic acid	1.76	U	1.76	0.48
307-55-1	Perfluorododecanoic acid	1.76	U	1.76	0.43
72629-94-8	Perfluorotridecanoic acid	1.76	U	1.76	0.42
376-06-7	Perfluorotetradecanoic acid	1.76	U	1.76	0.56
375-73-5	Perfluorobutanesulfonic acid	8.79		1.76	0.54
2706-91-4	Perfluoropentanesulfonic acid	11.0		1.76	0.44
355-46-4	Perfluorohexanesulfonic acid	37.6		1.76	0.48
375-92-8	Perfluoroheptanesulfonic acid	16.9		1.76	0.36
68259-12-1	Perfluorononanesulfonic acid	0.78	J	1.76	0.35
335-77-3	Perfluorodecanesulfonic acid	1.76	U	1.76	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.39	U	4.39	1.14
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68
754-91-6	Perfluorooctanesulfonamide	1.76	U	1.76	0.81
2355-31-9	NMeFOSAA	4.39	U	4.39	1.67
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.39	U	4.39	1.40
13252-13-6	HFPODA	3.51	U	3.51	0.97
919005-14-4	DONA	1.76	U	1.76	0.37
756426-58-1	9Cl-PF3ONS	1.76	U	1.76	0.28
763051-92-9	11Cl-PF3OUdS	1.76	U	1.76	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92A-101323-1006-70 Lab Sample ID: 460-290375-7

Matrix: Water Lab File ID: PA231023C06.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:06

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 284.8(mL) Date Analyzed: 10/23/2023 23:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	27	*5-	50-150
STL01893	13C5 PFPeA	84		50-150
STL01892	13C4 PFHpA	113		50-150
STL02116	13C2 PFTeDA	102		50-150
STL02337	13C3 PFBS	109		50-150
STL01056	13C8 FOSA	107		50-150
STL02118	d3-NMeFOSAA	112		50-150
STL02117	d5-NEtFOSAA	116		50-150
STL02395	M2-4:2 FTS	104		50-150
STL02279	M2-6:2 FTS	108		50-150
STL02280	M2-8:2 FTS	114		50-150
STL02255	13C3 HFPO-DA	94		50-150
STL00994	18O2 PFHxS	112		50-150
STL00993	13C2 PFHxA	99		50-150
STL00991	13C4 PFOS	107		50-150
STL00998	13C2 PFDoA	119		50-150
STL00995	13C5 PFNA	100		50-150
STL00996	13C2 PFDA	106		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	122		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d
Lims ID: 460-290375-A-7-A
Client ID: MW92A-101323-1006-70
Sample Type: Client
Inject. Date: 23-Oct-2023 23:57:41 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-7-A
Misc. Info.: 200-0057511-006 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:24:38
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	472257	0.3340		26.7	918	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.130	-0.008	1.000	107544	0.2739			5.8	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.694	1148728	1.05		83.7	753	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	142689	0.1439			1.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1889554	1.27		109	31694	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	454625	0.2504	Target=2.06		8.8	M
298.90 > 99.00	2.467	2.467	0.0	1.000	222218		2.05(1.03-3.09)		39.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.748	2.760	-0.012	0.995	798	0.001321			1.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.785	207639	1.21		104	6.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.797	0.001	0.796	1385469	1.24		99.3	3171	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.797	0.001	1.000	556167	0.4560	Target=14.12		5.8	M
313.00 > 119.00	2.798	2.797	0.001	1.000	35955		15.47(7.06-21.17)		11.3	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.798	2.810	-0.012	0.886	487865	0.3129	Target=2.72		9.6	M
349.00 > 99.00	2.798	2.810	-0.012	0.886	270379		1.80(1.36-4.09)		68.2	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	1128	0.005570			13.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.827	252843	1.17		93.6	1928	
D 11 18O2 PFHxS										
403.00 > 84.00	3.157	3.168	-0.011	0.898	1412013	1.33		112	11167	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.157	3.168	-0.011	1.000	1416119	1.07	Target=3.32		77.0	M
399.00 > 99.00	3.157	3.168	-0.011	1.000	734437		1.93(1.66-4.98)		319	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.169	3.168	0.001	1.004	253823	0.1642	Target=4.17		4.7	M
363.00 > 169.00	3.169	3.168	0.001	1.004	61646		4.12(2.09-6.26)		21.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.157	3.168	-0.011	0.898	1724336	1.41		113	3279	
77 DONA										RM
377.00 > 251.00	3.204	3.203	0.001	0.838	706	0.000169	Target=3.33		0.4	RM
377.00 > 85.00	3.215	3.203	0.012	0.841	720		0.98(1.66-4.99)		0.4	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.506	3.505	0.001	0.917	506486	0.4823	Target=4.83		20.4	M
449.00 > 99.00	3.497	3.505	-0.008	0.915	151640		3.34(2.41-7.24)		13.6	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.506	3.505	0.001	0.997	282753	1.28		108	29.6	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.506	3.514	-0.008	1.000	1233	0.001895			2.1	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.515	3.514	0.001	1.000	1754979	1.10	Target=2.88		28.0	M
413.00 > 169.00	3.515	3.514	0.001	1.000	603922		2.91(1.44-4.32)		560	M
D 14 13C4 PFOA										
417.00 > 372.00	3.515	3.523	-0.008	1.000	1874469	1.35		108	5049	
* 62 13C2 PFOA										
415.00 > 370.00	3.515	3.523	-0.008		1782385	1.25			4243	
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.823	3.822	0.001	1.000	38146483	45.0	Target=4.24		2126	EM
499.00 > 99.00	3.812	3.822	-0.010	0.997	12378768		3.08(2.12-6.37)		5517	M
D 18 13C4 PFOS										
503.00 > 80.00	3.823	3.822	0.001	1.088	868262	1.28		107	227	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.846	3.845	0.001	1.000	59414	0.0401	Target=8.34		3.0	M
463.00 > 169.00	3.835	3.845	-0.010	0.997	8153		7.29(4.17-12.51)		14.3	
D 19 13C5 PFNA										
468.00 > 423.00	3.846	3.845	0.001	1.094	1887969	1.25		100	2685	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.975	3.983	-0.008	1.040	711	0.000274			1.1	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.094	4.105	-0.011	1.071	14256	0.0221	Target=2.17		2.3	M
549.00 > 99.00	4.082	4.105	-0.023	1.068	11753		1.21(1.08-3.25)		6.2	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.130	4.129	0.001	1.000	35953	0.0215	Target=11.44		2.2	M
513.00 > 169.00	4.130	4.129	0.001	1.000	3238		11.10(5.72-17.16)		10.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.130	4.129	0.001	1.175	2090004	1.32		106	5673	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.142	4.141	0.001	1.179	338375	1.36		114	226	
D 21 13C8 FOSA										
506.00 > 78.00	4.235	4.234	0.001	1.205	1803359	1.34		107	5663	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.235	4.234	0.001	1.000	957	0.000695			2.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.272	4.270	0.002	1.215	528925	1.40		112	1700	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.272	4.270	0.002	1.000	486	0.001266			4.2	M
29 Perfluorodecanesulfonic acid										RMa
599.00 > 80.00	4.356	4.366	-0.010	1.139	2430	0.004897	Target=2.37		1.8	Ra
599.00 > 99.00	4.344	4.366	-0.022	1.136	2614		0.93(1.19-3.56)		7.6	
D 30 13C2 PFUnA										
565.00 > 520.00	4.380	4.390	-0.010	1.246	2279514	1.53		122	10238	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.392	4.401	-0.009	1.249	529826	1.46		116	1049	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.392	4.401	-0.009	1.000	2350	0.005543			7.5	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.462	4.473	-0.011	1.167	553	0.000139			1.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.310	2261770	1.49		119	10461	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.616	4.613	0.003	1.002	1386	0.000753	Target=8.47		0.2	M
613.00 > 169.00	4.616	4.613	0.003	1.002	239		5.80(4.23-12.70)		3.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.982	0.001	1.418	1927497	1.28		102	5929	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.973	4.982	-0.009	0.998	154	0.000893	Target=0.87		3.4	M
713.00 > 219.00	4.973	4.982	-0.009	0.998	302		0.51(0.43-1.30)		6.9	M

QC Flag Legend

Processing Flags
- R - Failed Signal Ratio Test
- E - Exceeded Maximum Amount

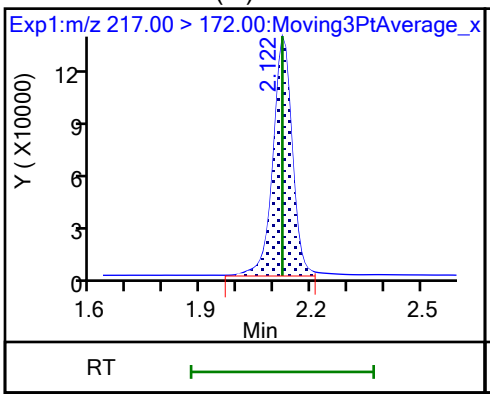
Review Flags
- M - Manually Integrated
- a - User Assigned ID

Report Date: 25-Oct-2023 19:58:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54

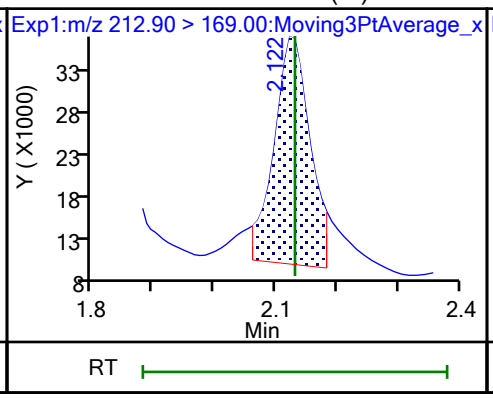
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d
Injection Date: 23-Oct-2023 23:57:41 Instrument ID: LC812
Lims ID: 460-290375-A-7-A Lab Sample ID: 200-290375-7
Client ID: MW92A-101323-1006-70
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

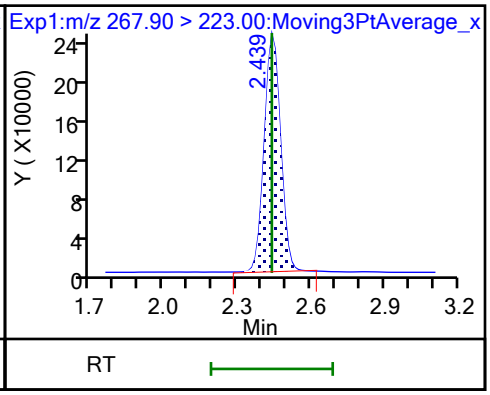
D 1 13C4 PFBA (M)



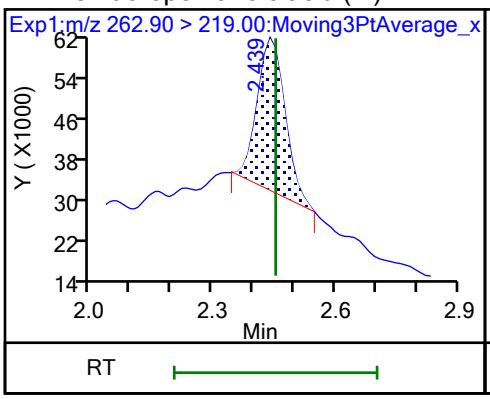
2 Perfluorobutanoic acid (M)



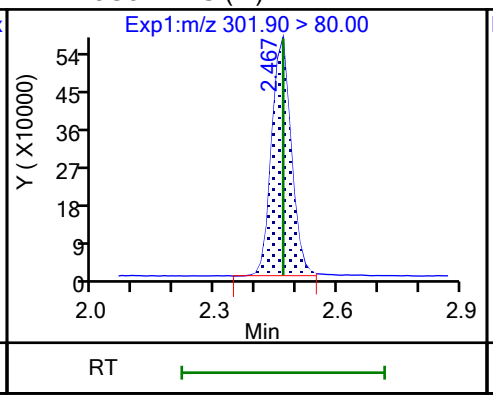
D 3 13C5 PFPeA



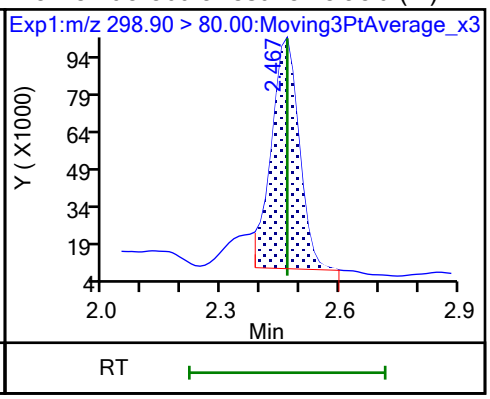
4 Perfluoropentanoic acid (M)



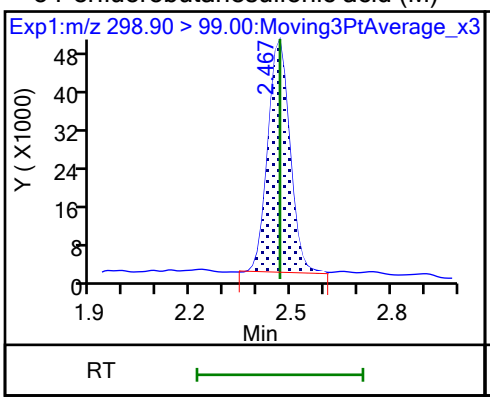
D 47 13C3 PFBS (M)



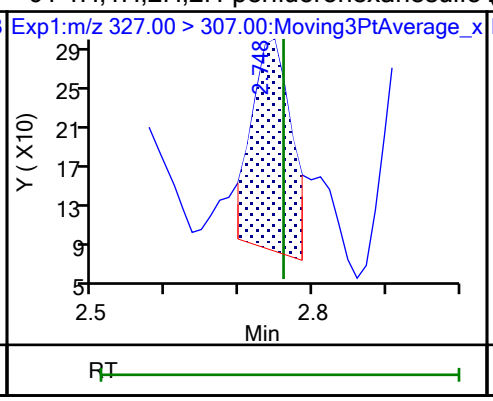
5 Perfluorobutanesulfonic acid (M)



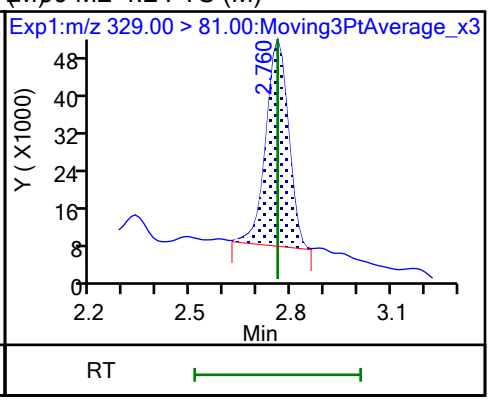
5 Perfluorobutanesulfonic acid (M)



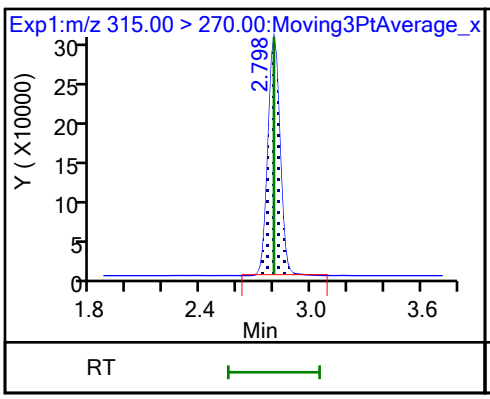
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



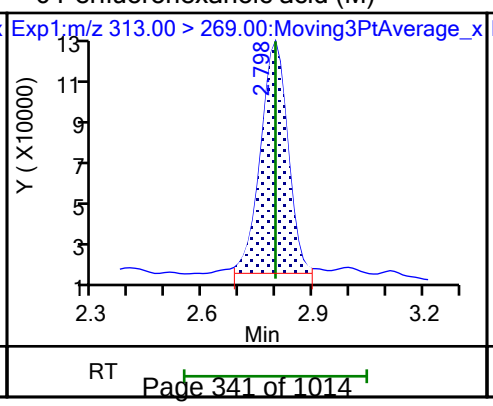
60 M2-4:2 FTS (M)



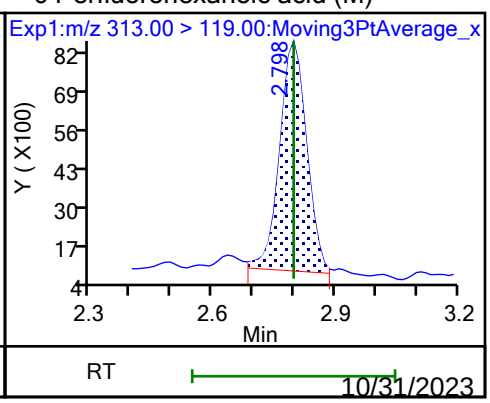
D 7 13C2 PFHxA



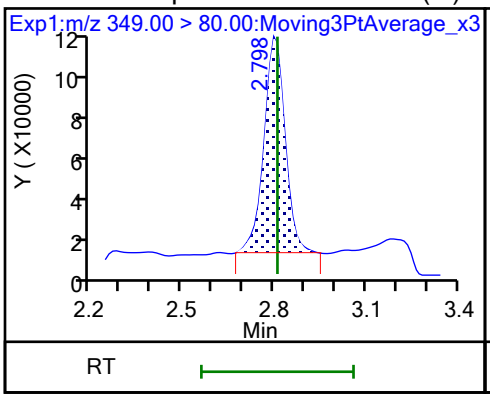
6 Perfluorohexanoic acid (M)



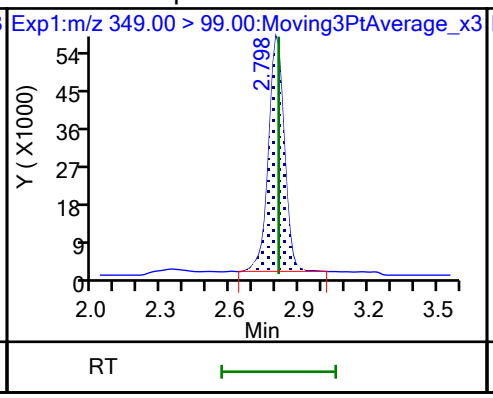
6 Perfluorohexanoic acid (M)



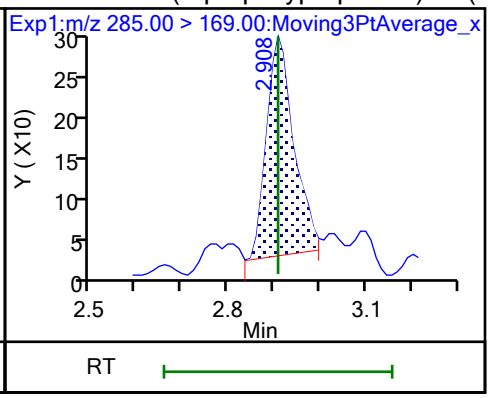
70 Perfluoropentanesulfonic acid (M)



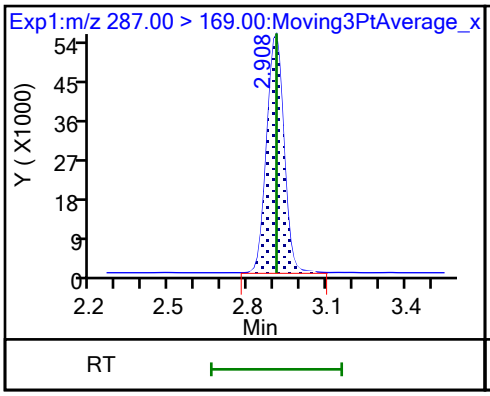
70 Perfluoropentanesulfonic acid



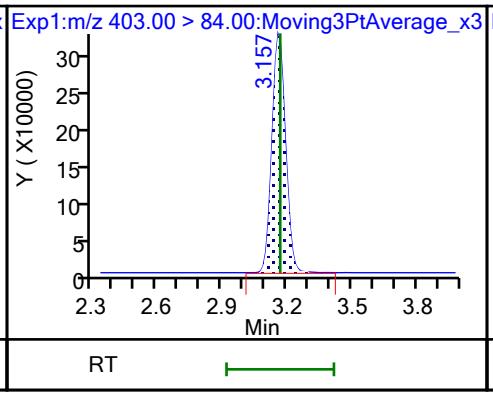
67 Perfluoro(2-propoxypropanoic) ac (M)



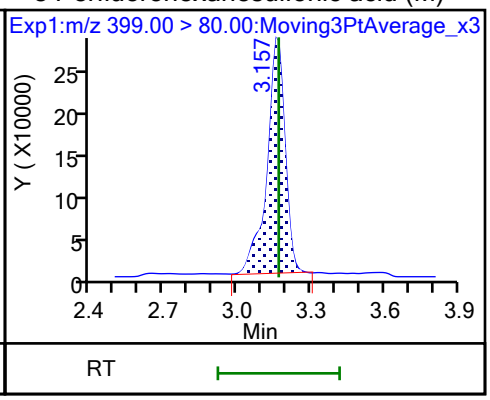
D 64 13C3 HFPO-DA



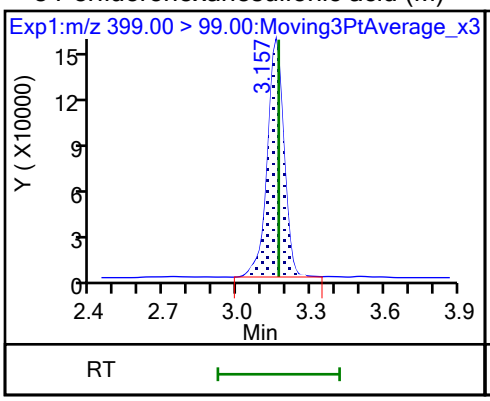
D 11 18O2 PFHxS



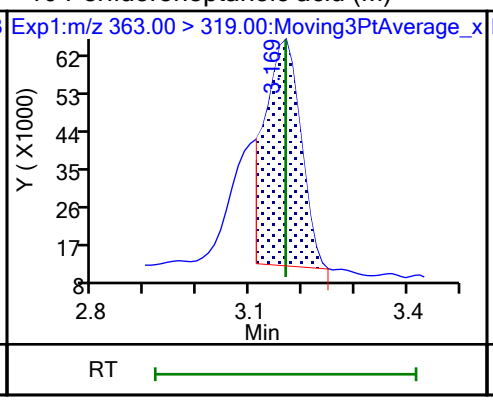
8 Perfluorohexanesulfonic acid (M)



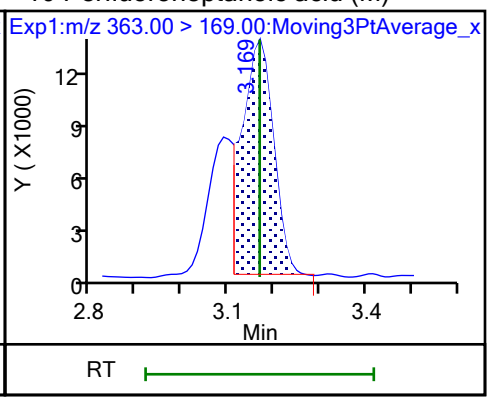
8 Perfluorohexanesulfonic acid (M)



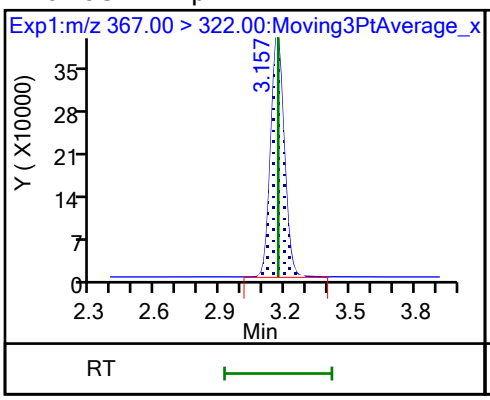
10 Perfluoroheptanoic acid (M)



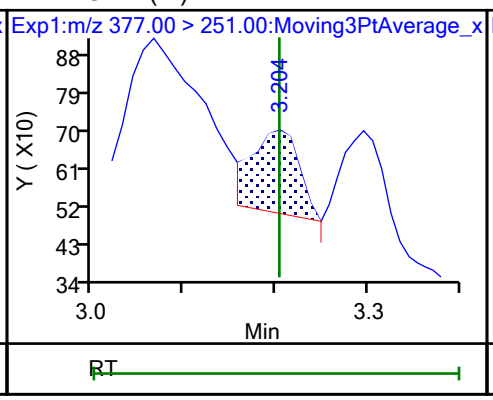
10 Perfluoroheptanoic acid (M)



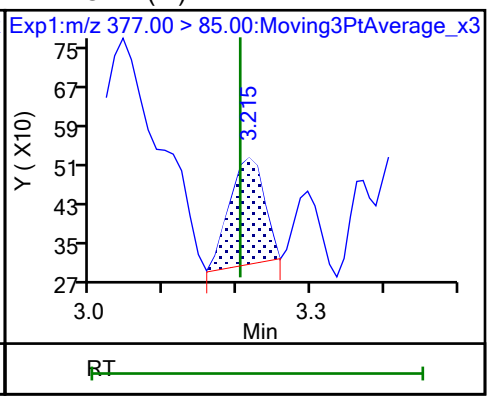
D 9 13C4 PFHpA



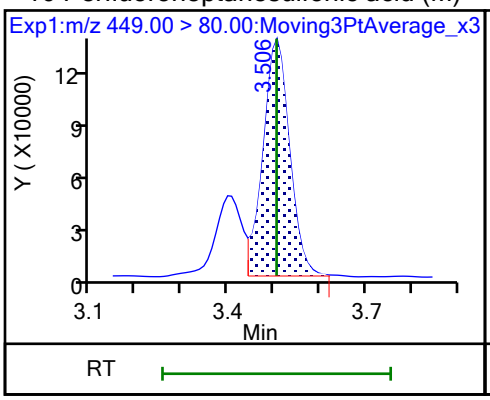
77 DONA (M)



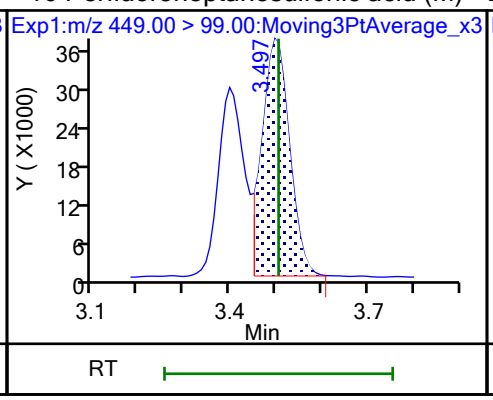
77 DONA (M)



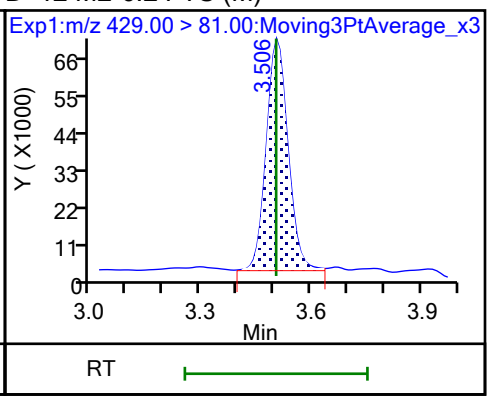
16 Perfluoroheptanesulfonic acid (M)



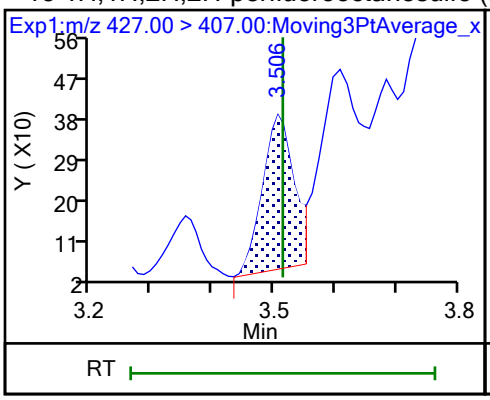
16 Perfluoroheptanesulfonic acid (M)



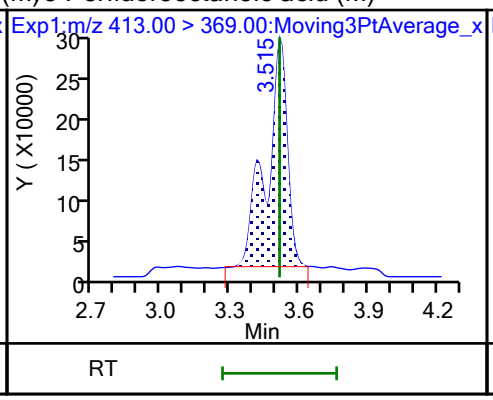
D 12 M2-6:2 FTS (M)



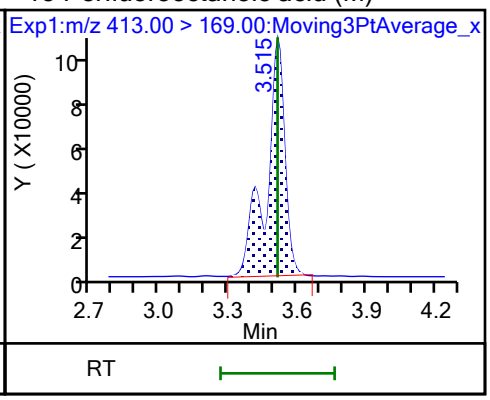
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



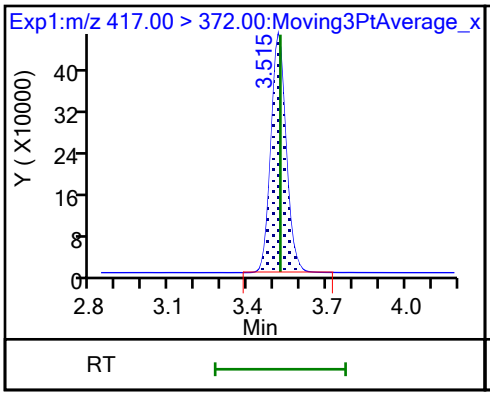
15 Perfluorooctanoic acid (M)



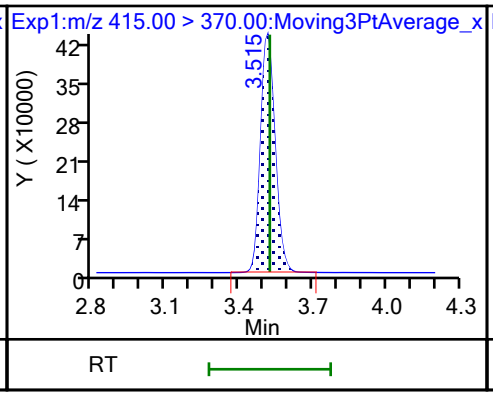
15 Perfluorooctanoic acid (M)



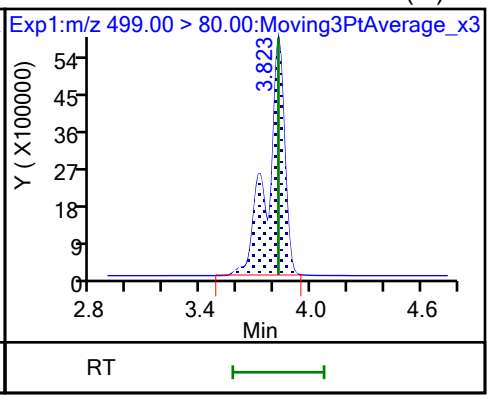
D 14 13C4 PFOA



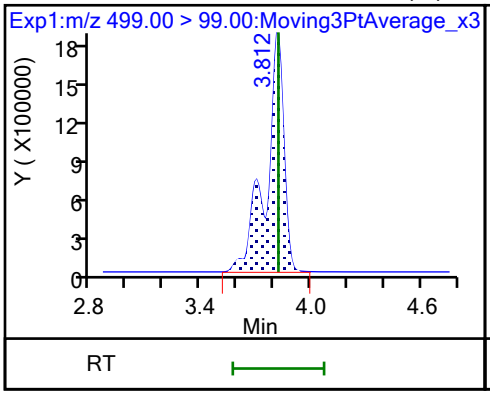
* 62 13C2 PFOA



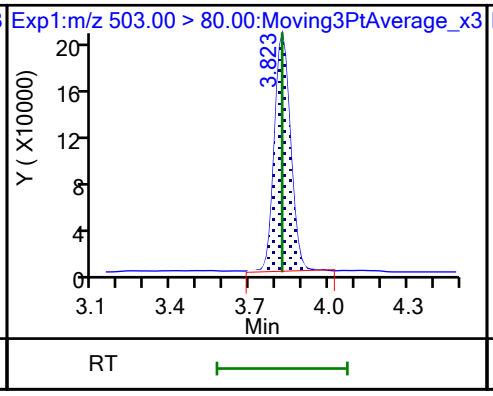
17 Perfluorooctanesulfonic acid (M)



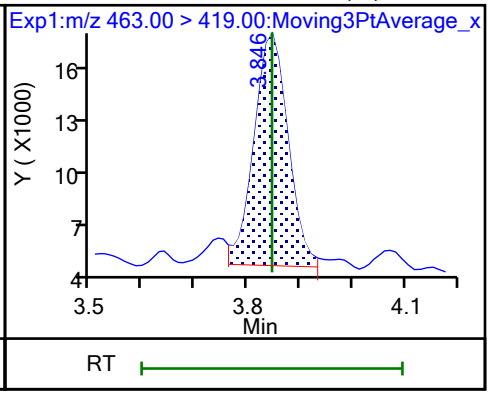
17 Perfluorooctanesulfonic acid (M)



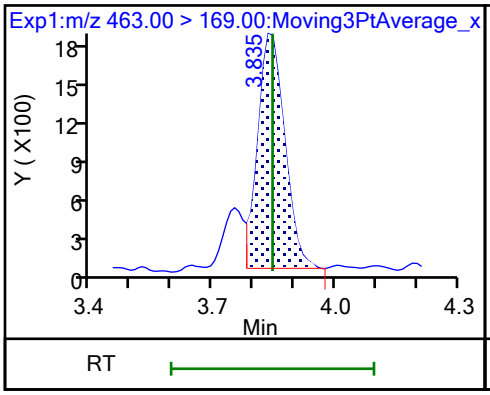
D 18 13C4 PFOS



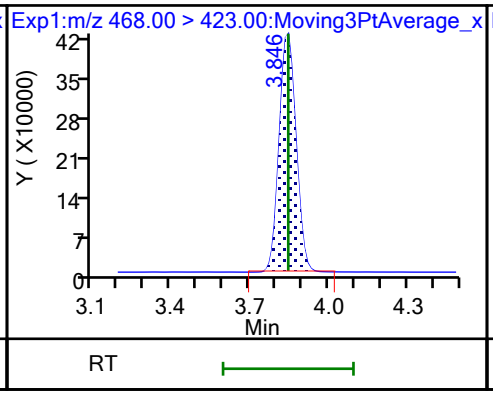
20 Perfluorononanoic acid (M)



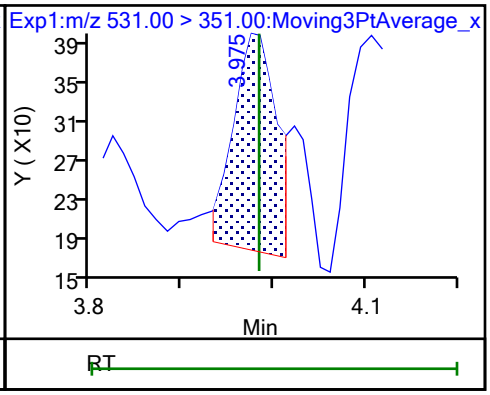
20 Perfluorononanoic acid



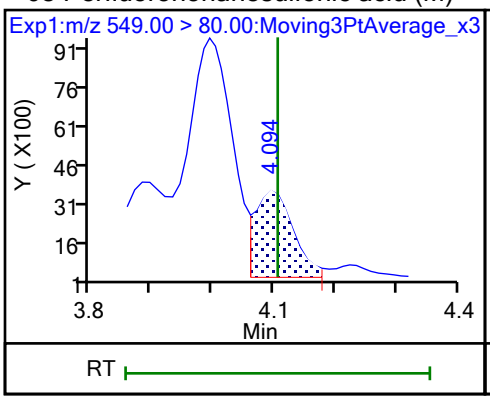
D 19 13C5 PFNA



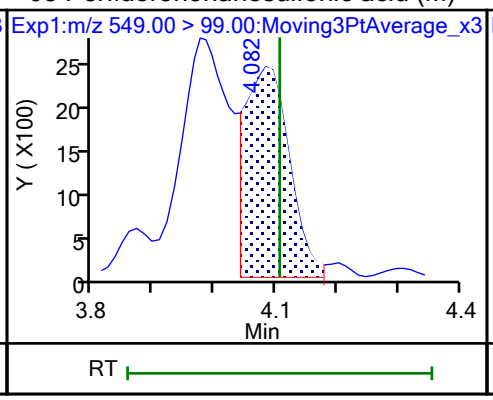
69 9-Chlorohexadecafluoro-3-oxanona (M)



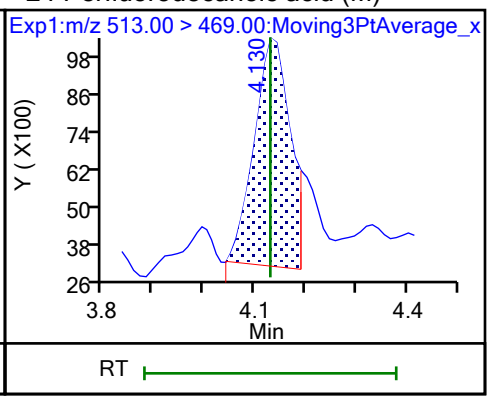
68 Perfluorononanesulfonic acid (M)



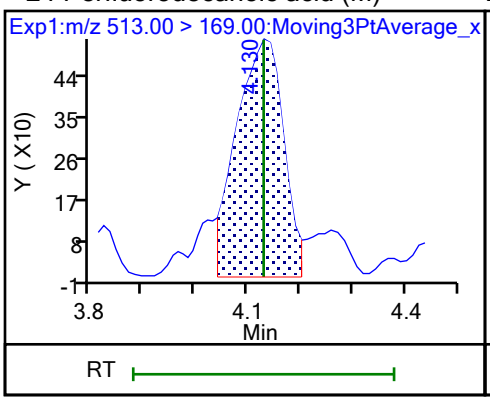
68 Perfluorononanesulfonic acid (M)



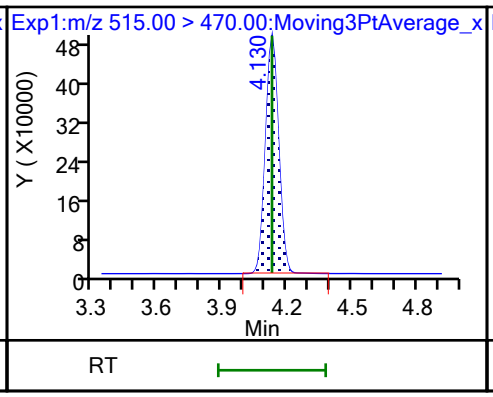
24 Perfluorodecanoic acid (M)



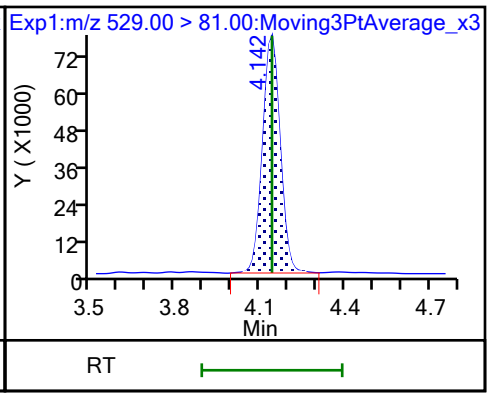
24 Perfluorodecanoic acid (M)



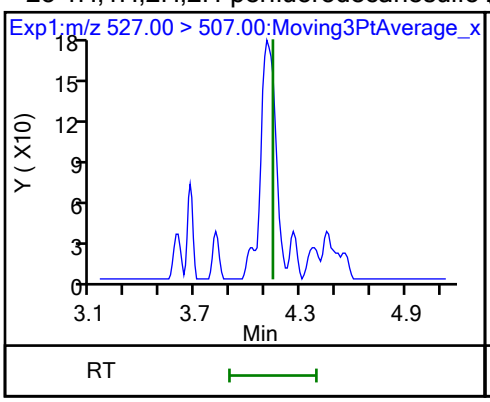
D 23 13C2 PFDA



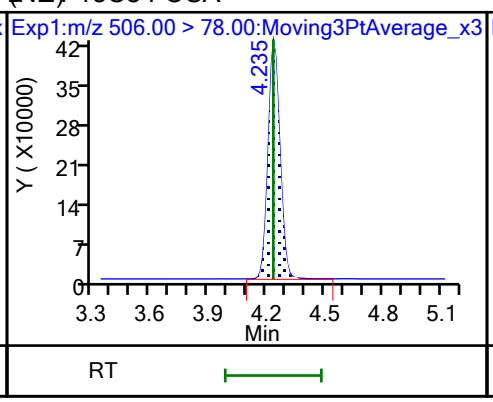
D 26 M2-8:2 FTS



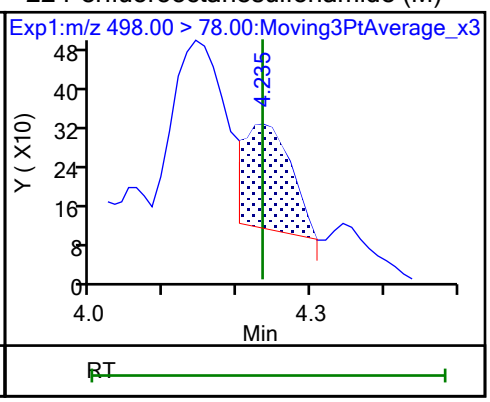
25 1H,1H,2H,2H-perfluorodecanesulfo (M2)



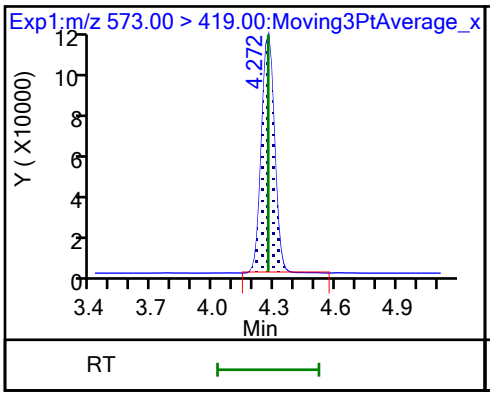
D 21 13C8 FOSA



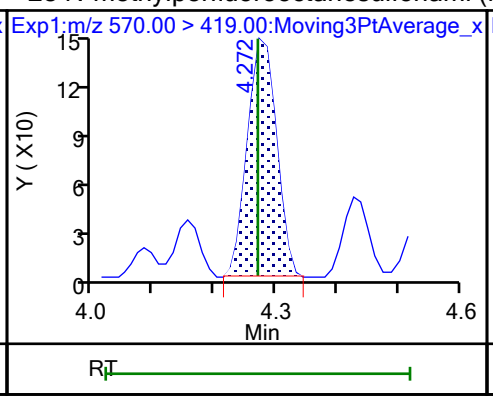
22 Perfluorooctanesulfonamide (M)



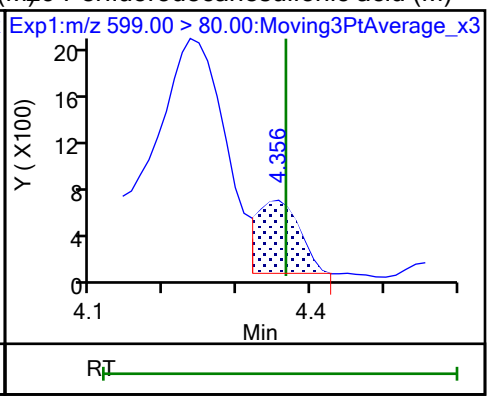
D 27 d3-NMeFOSAA



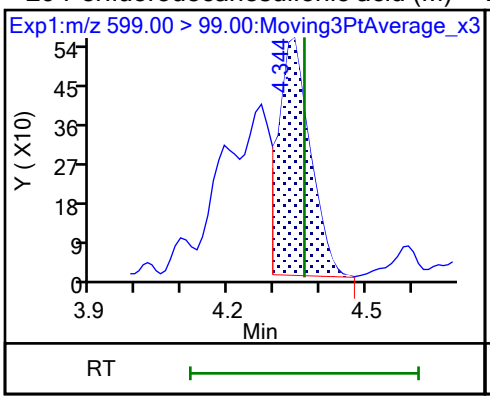
28 N-methylperfluorooctanesulfonami (M)



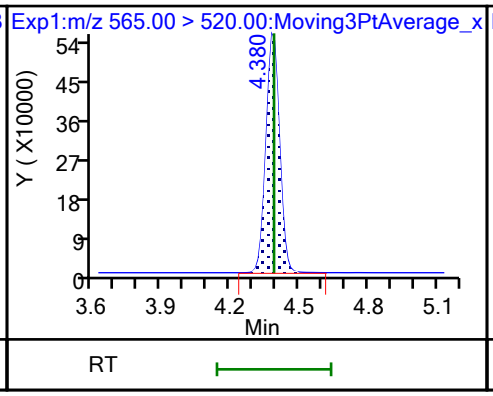
29 Perfluorodecanesulfonic acid (M)



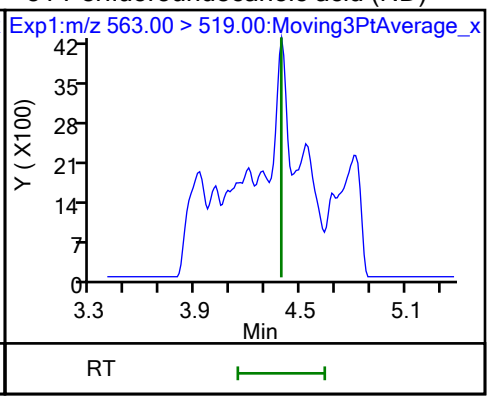
29 Perfluorodecanesulfonic acid (M)



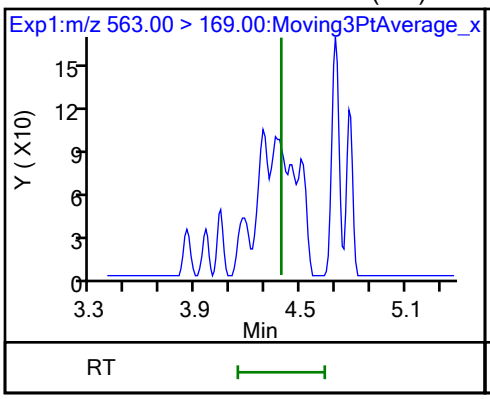
D 30 13C2 PFUnA



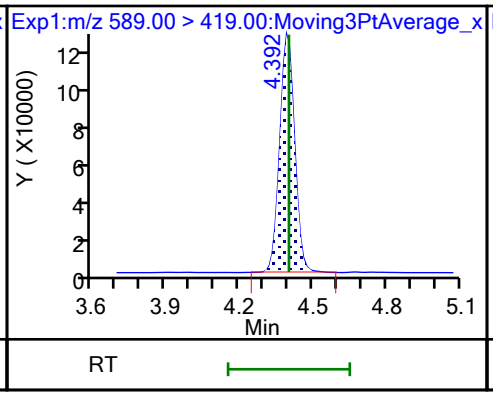
31 Perfluoroundecanoic acid (ND)



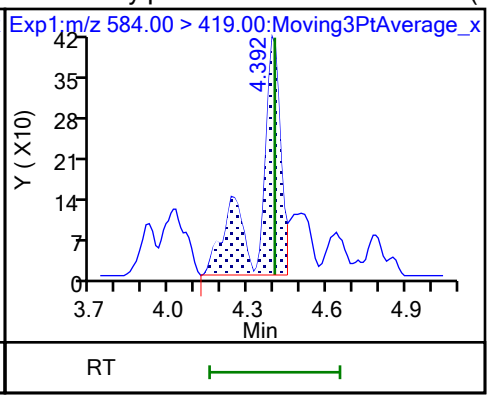
31 Perfluoroundecanoic acid (ND)



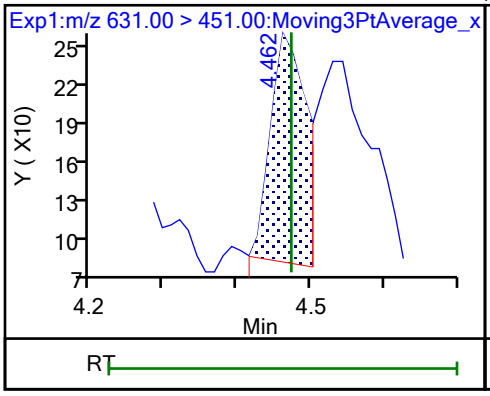
D 32 d5-NEtFOSAA



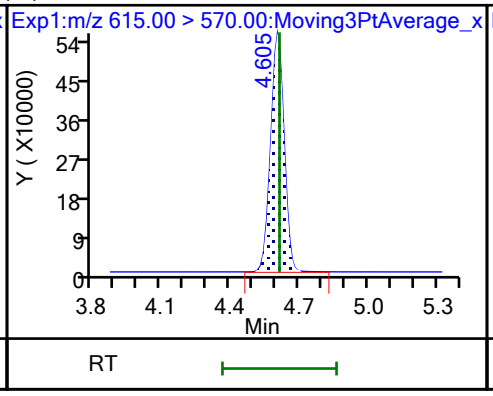
33 N-ethylperfluorooctanesulfonamid (M)



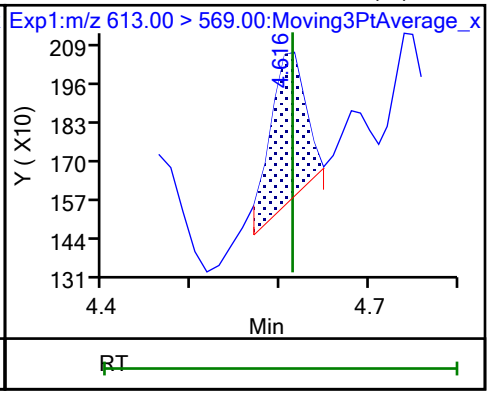
66 11-Chloroeicosafluoro-3-oxaundec (M)



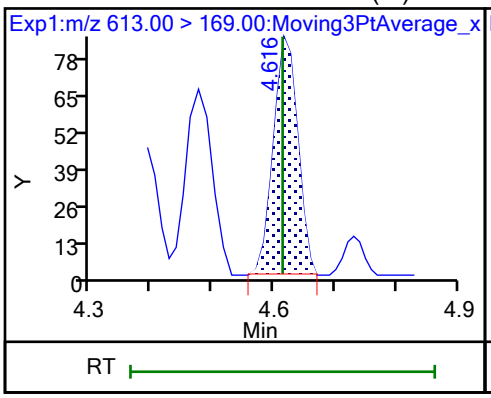
D 36 13C2 PFDoA



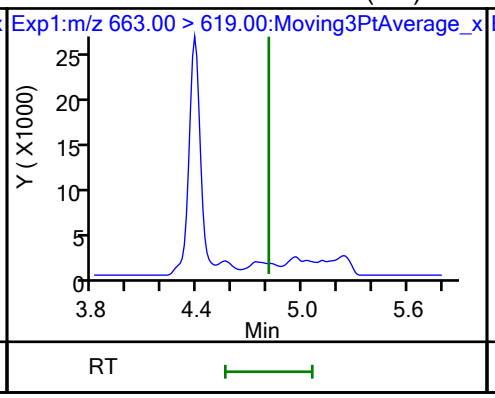
37 Perfluorododecanoic acid (M)



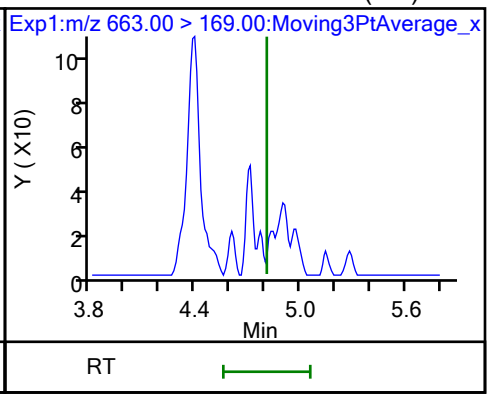
37 Perfluorododecanoic acid (M)



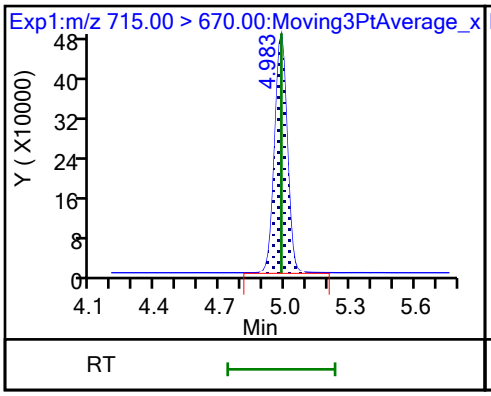
41 Perfluorotridecanoic acid (ND)



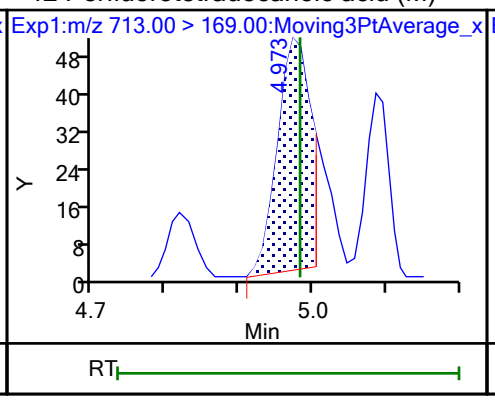
41 Perfluorotridecanoic acid (ND)



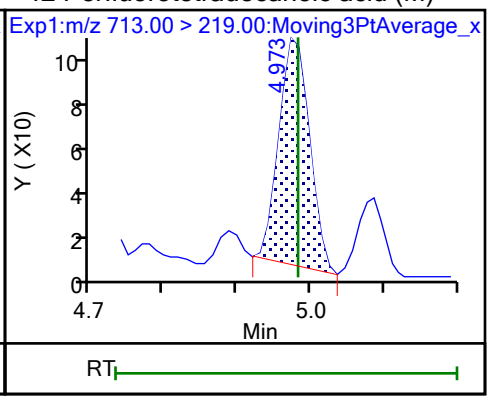
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

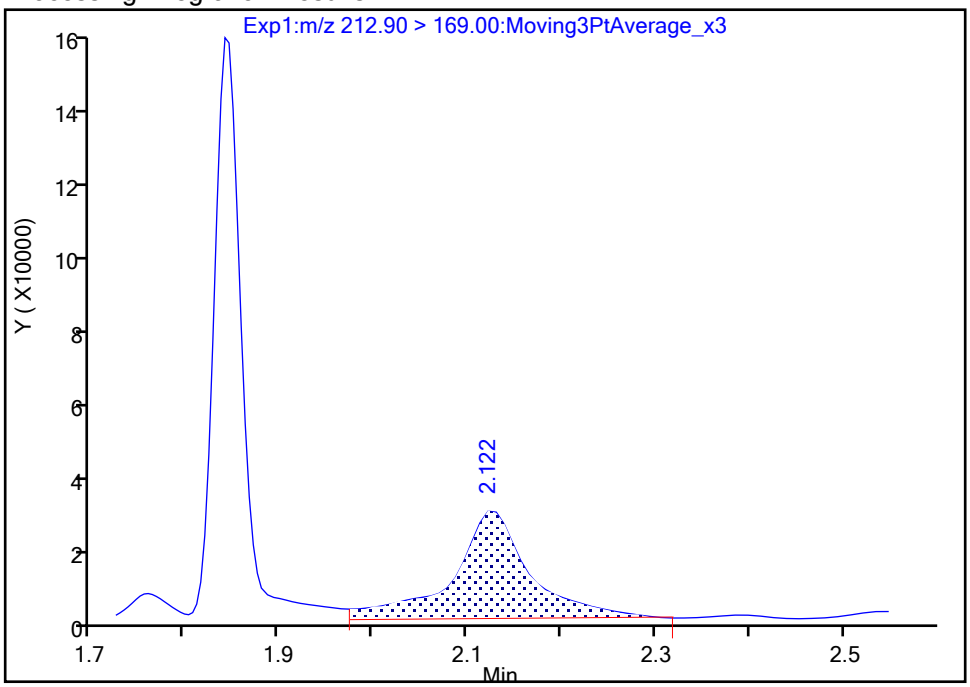
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

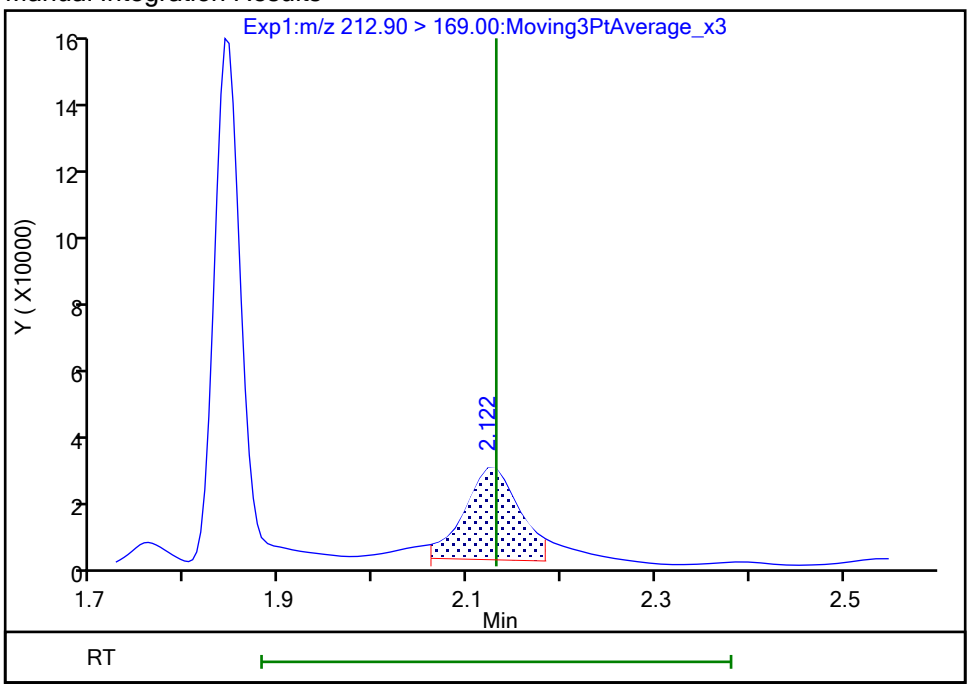
Processing Integration Results

RT: 2.12
Area: 164308
Amount: 0.440059
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 107544
Amount: 0.273906
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:19:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

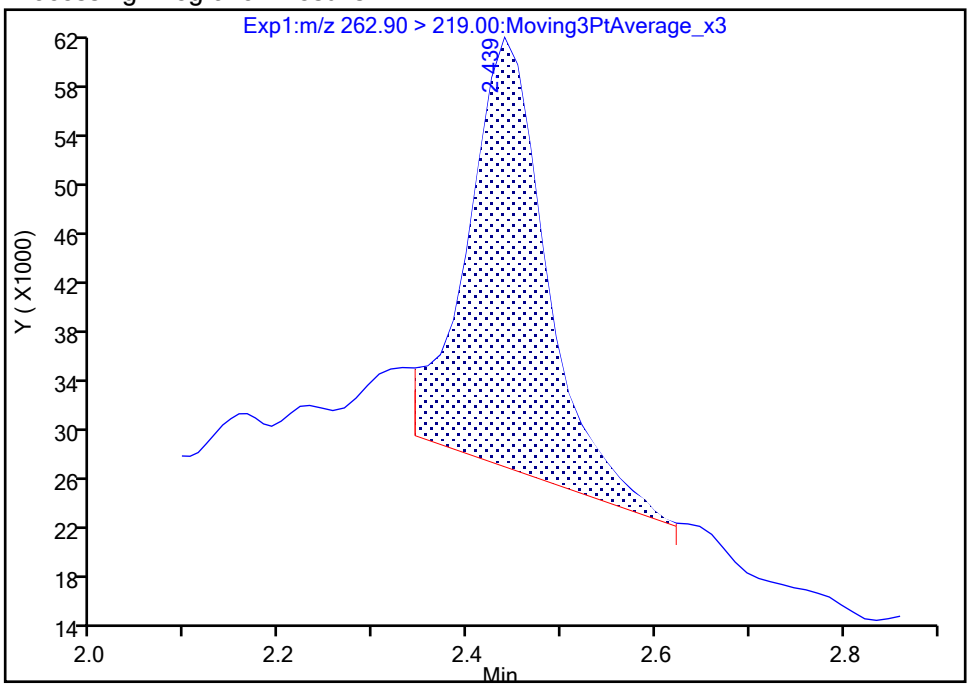
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

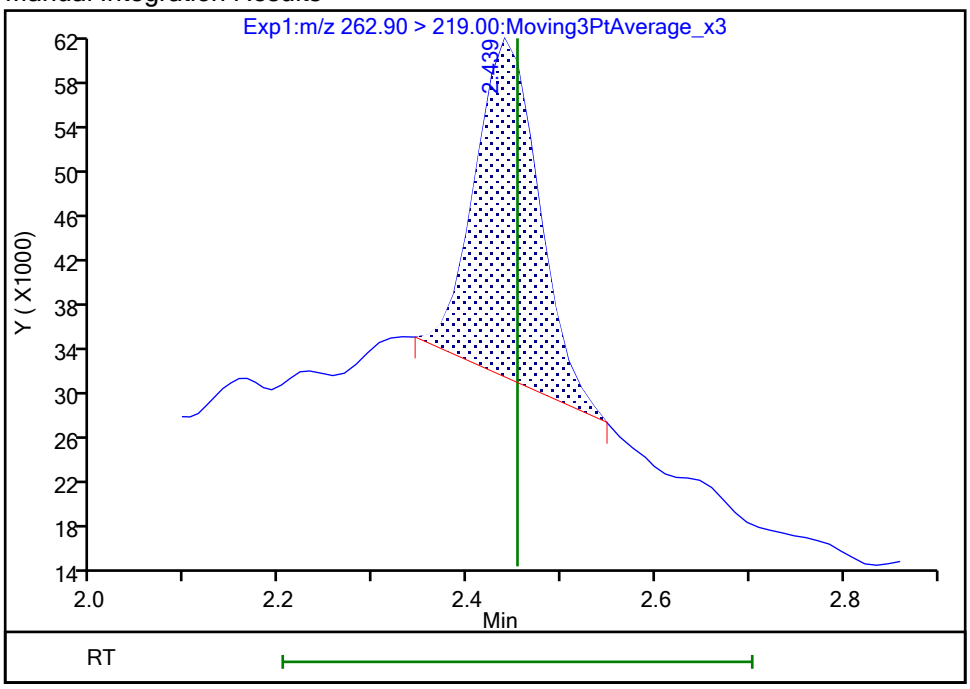
Processing Integration Results

RT: 2.44
Area: 201881
Amount: 0.203570
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 142689
Amount: 0.143883
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:01:18 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

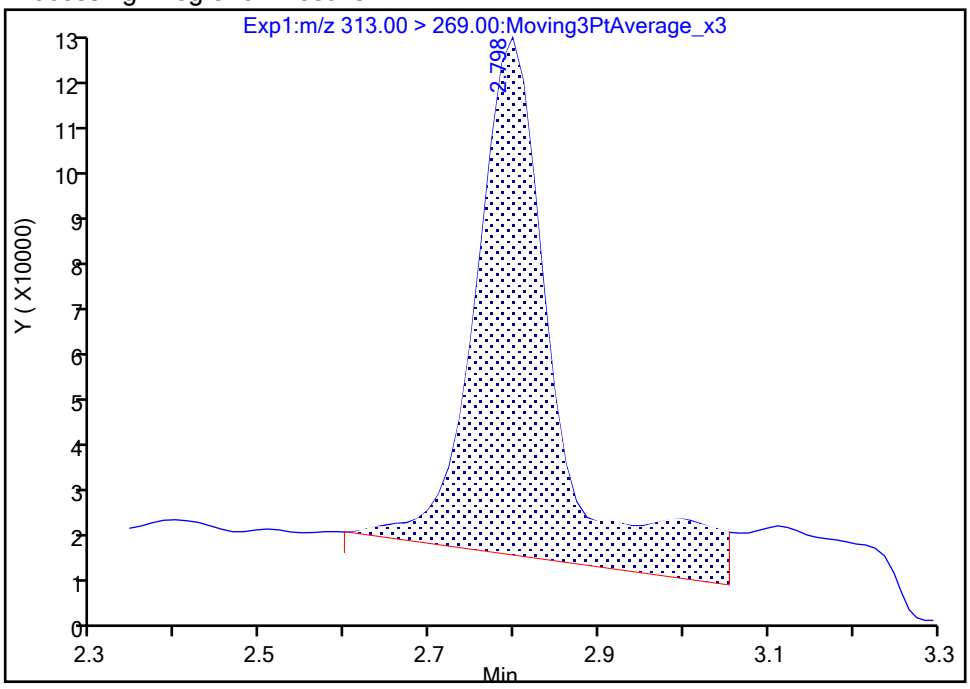
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

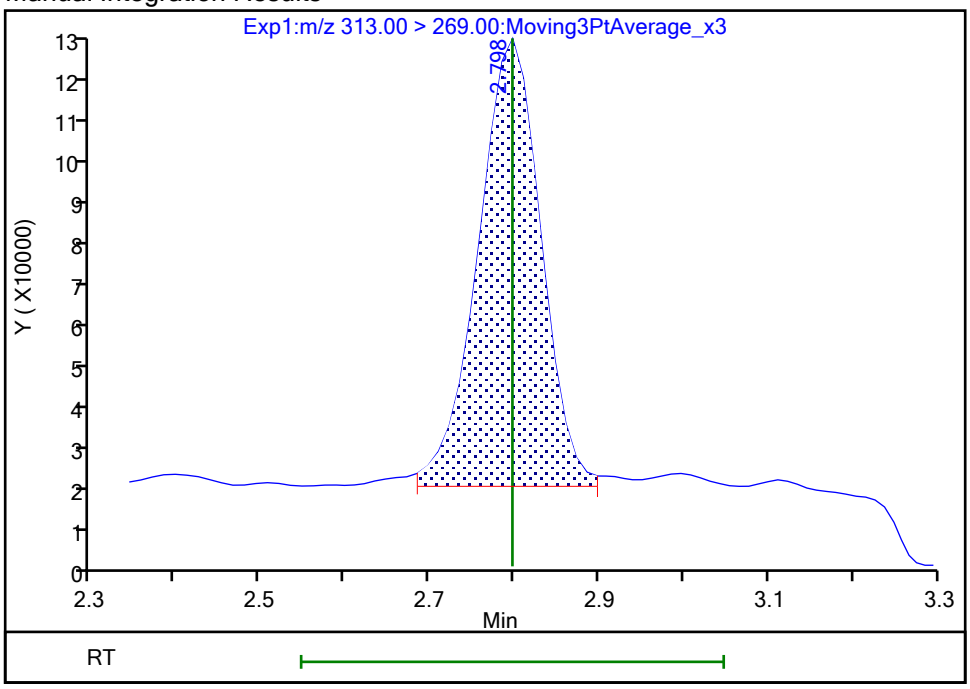
Processing Integration Results

RT: 2.80
Area: 737735
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 556167
Amount: 0.455980
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:00:44 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

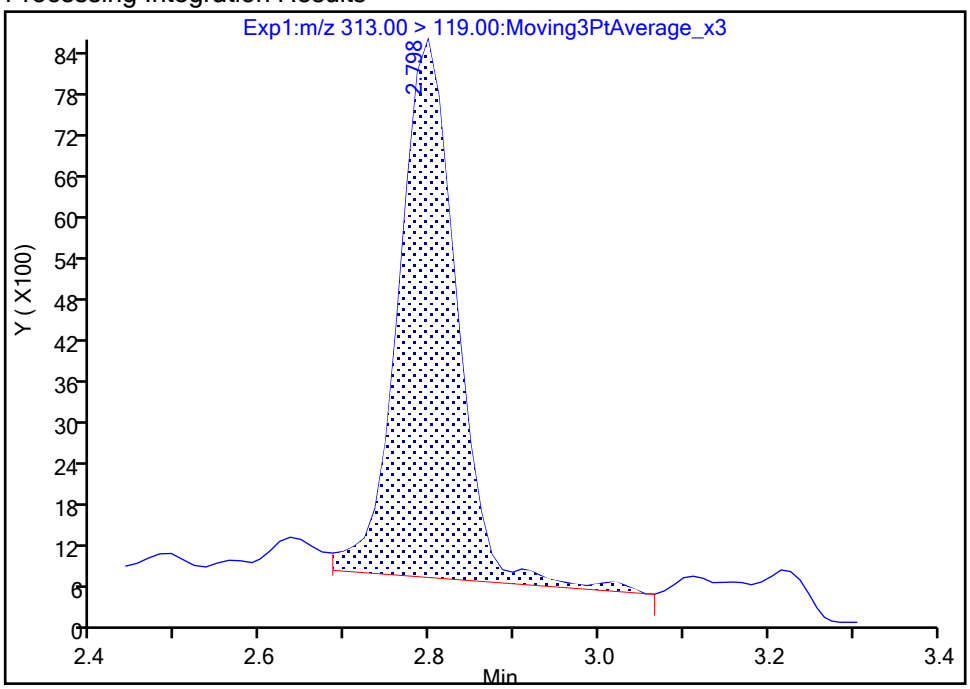
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

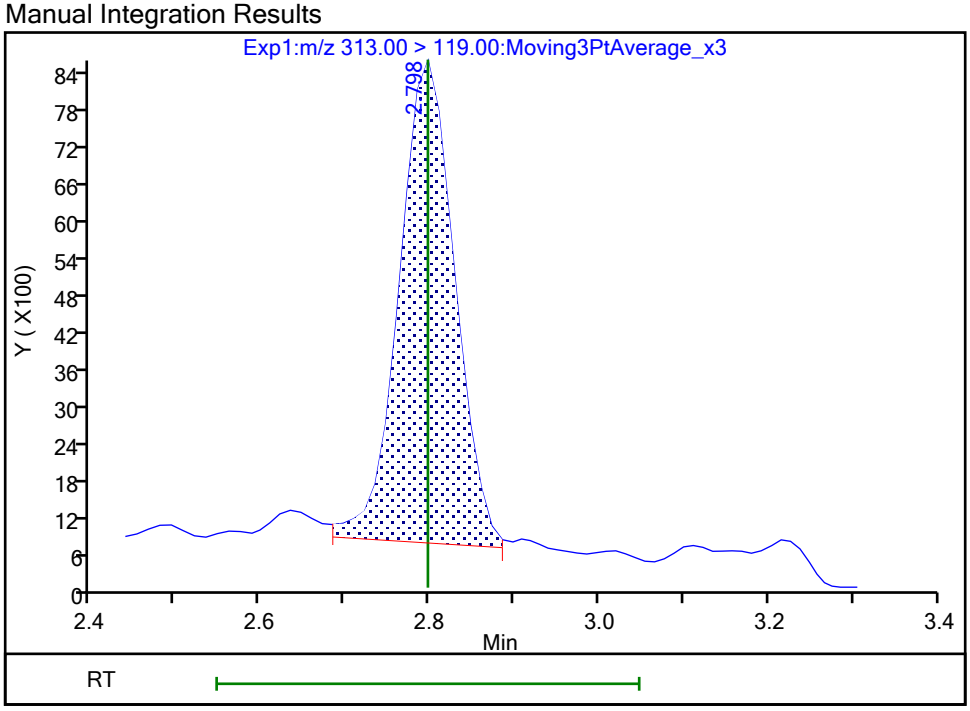
Processing Integration Results

RT: 2.80
Area: 37844
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 35955
Amount: 0.455980
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:00:46 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

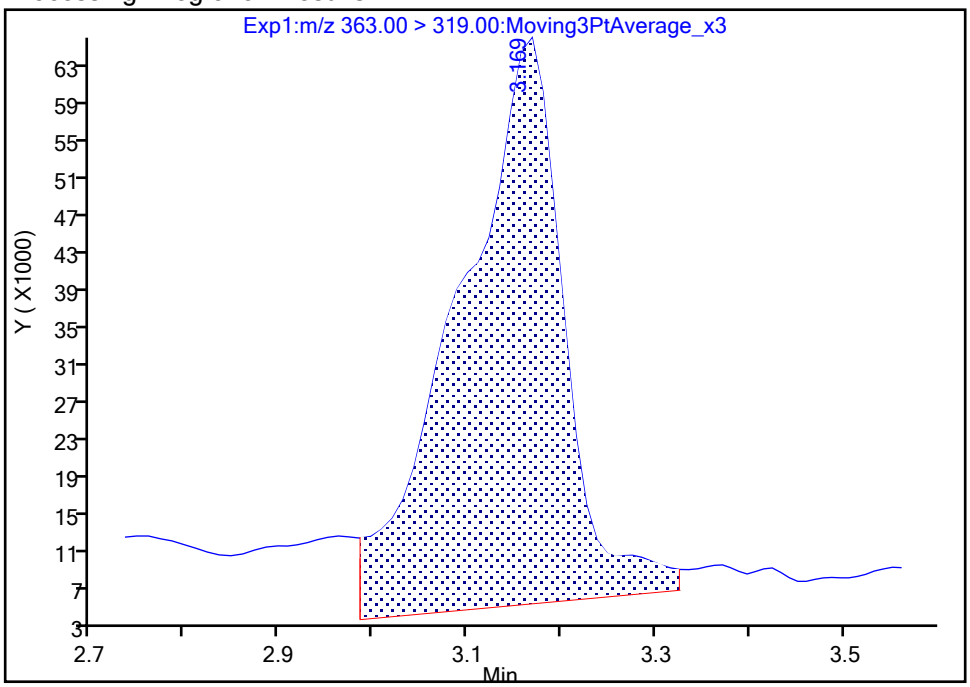
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

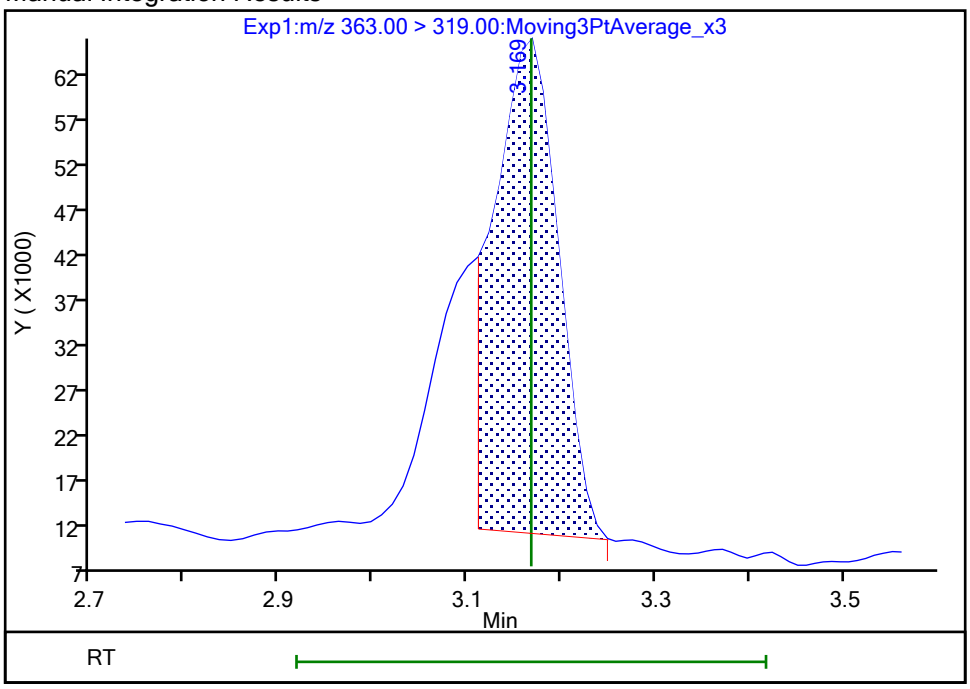
Processing Integration Results

RT: 3.17
Area: 474988
Amount: 0.307192
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 253823
Amount: 0.164156
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

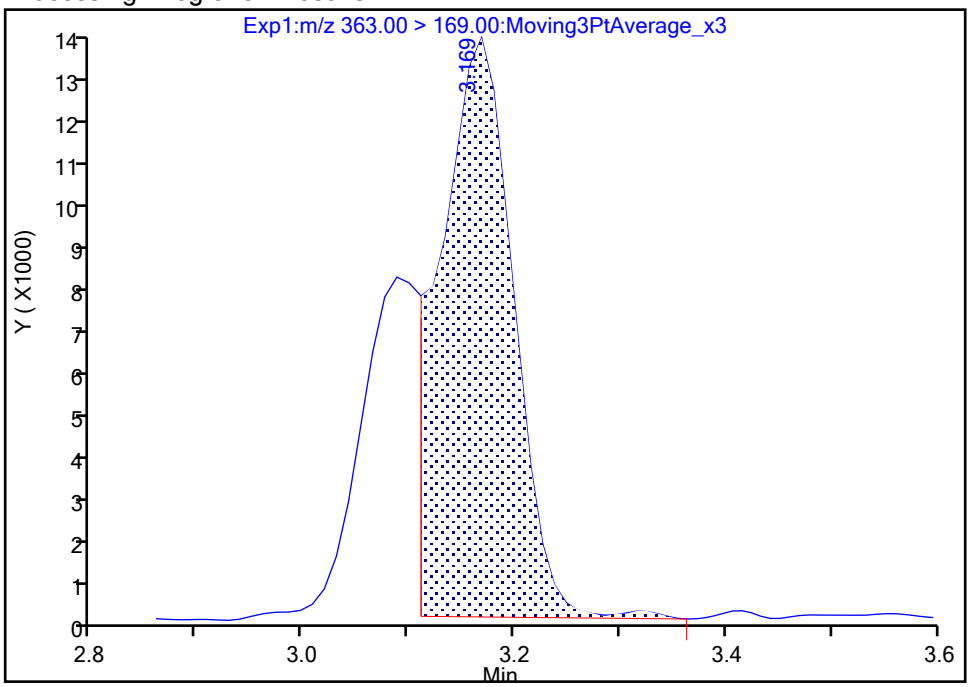
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

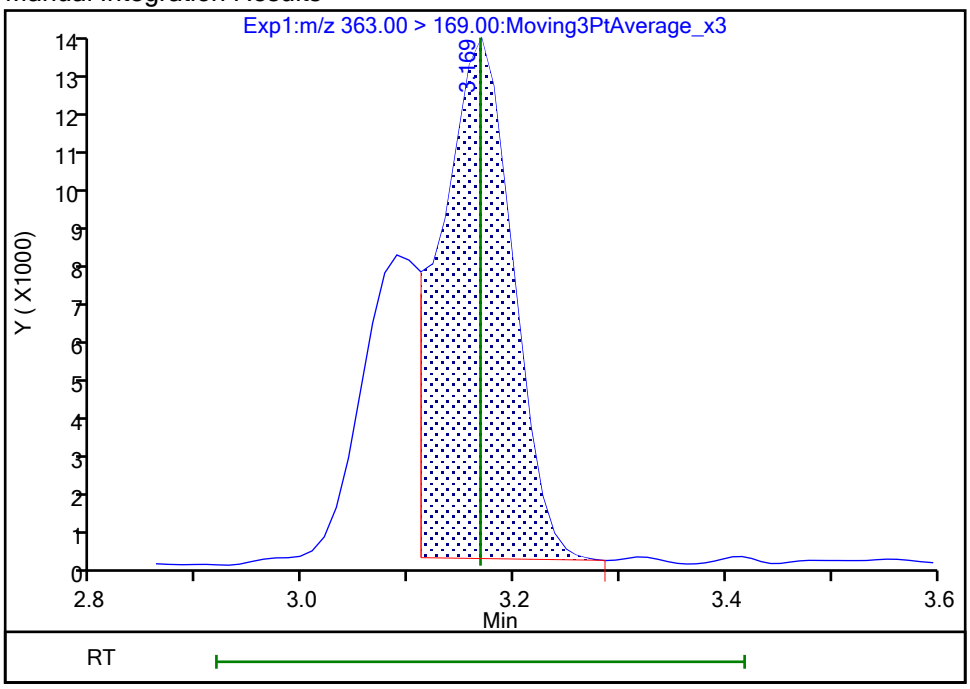
Processing Integration Results

RT: 3.17
Area: 62971
Amount: 0.307192
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 61646
Amount: 0.164156
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

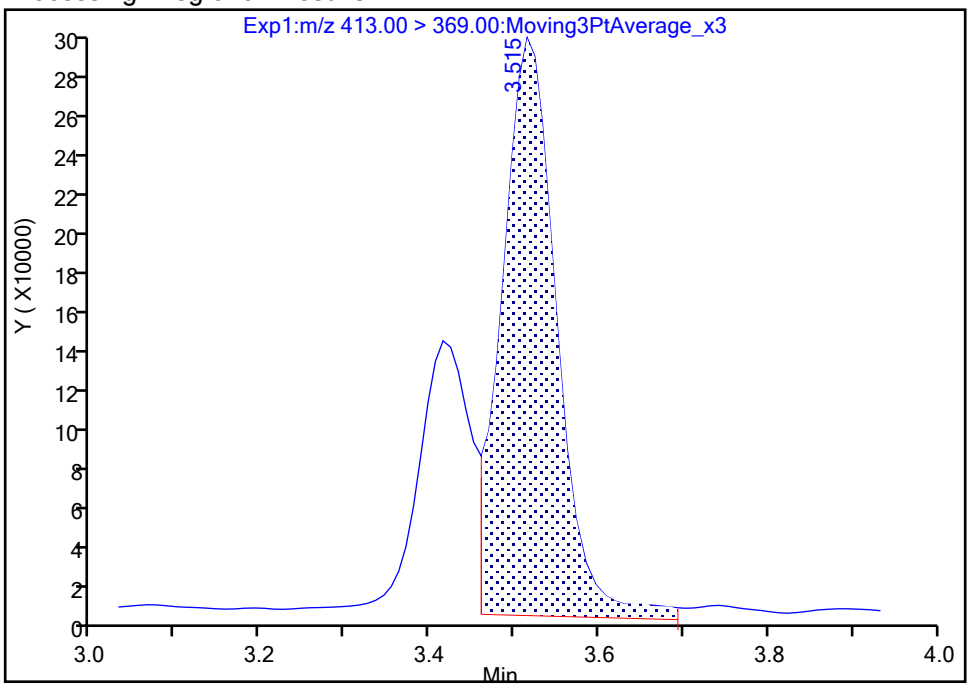
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

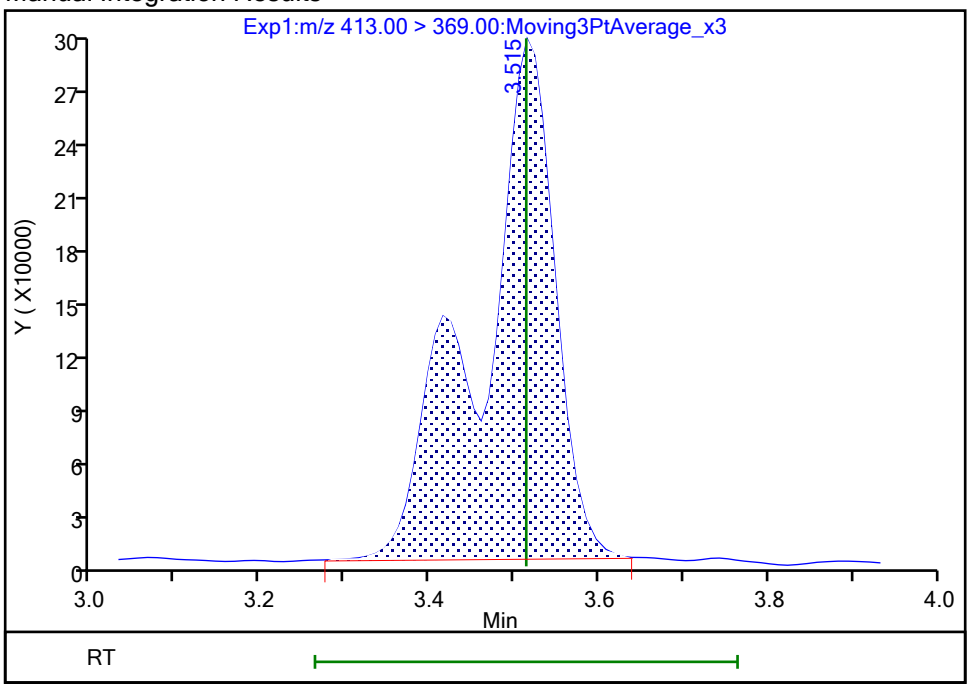
Processing Integration Results

RT: 3.51
Area: 1296752
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1754979
Amount: 1.098746
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:22:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

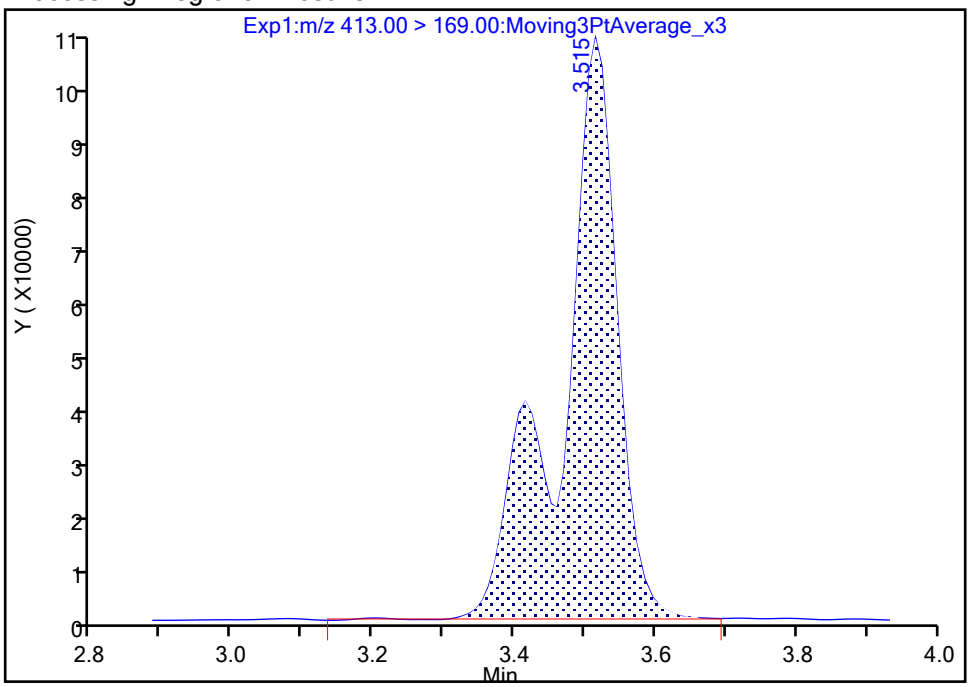
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

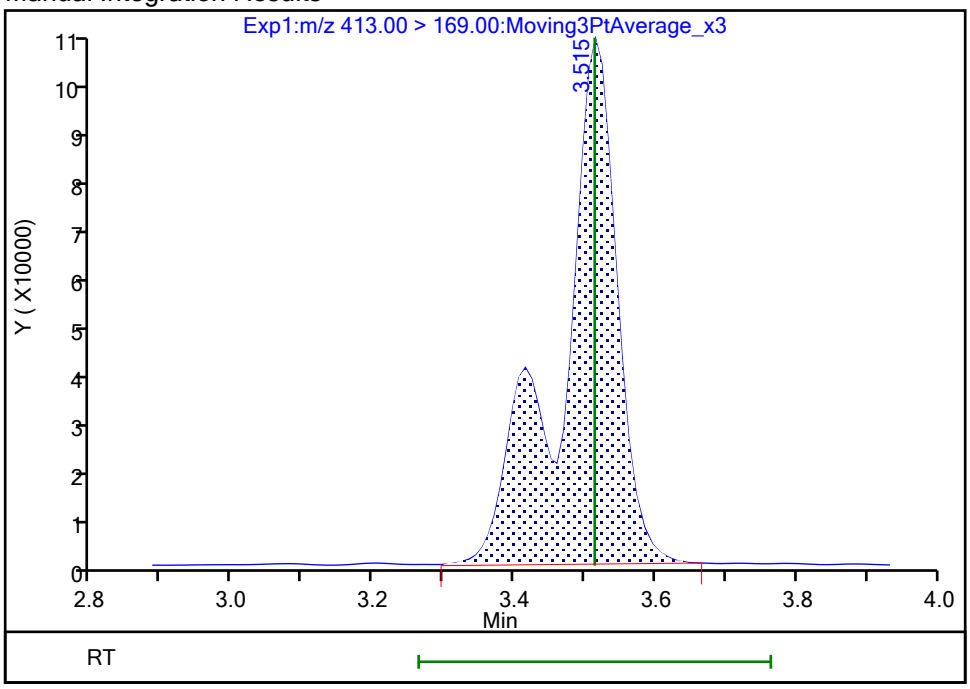
Processing Integration Results

RT: 3.51
Area: 607375
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 603922
Amount: 1.098746
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:22:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

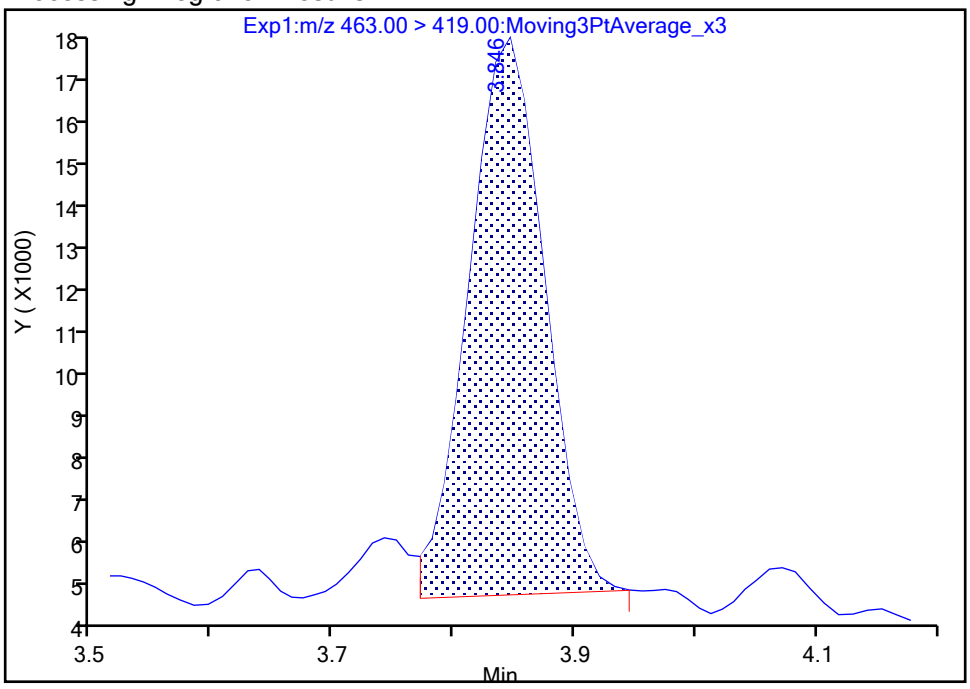
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

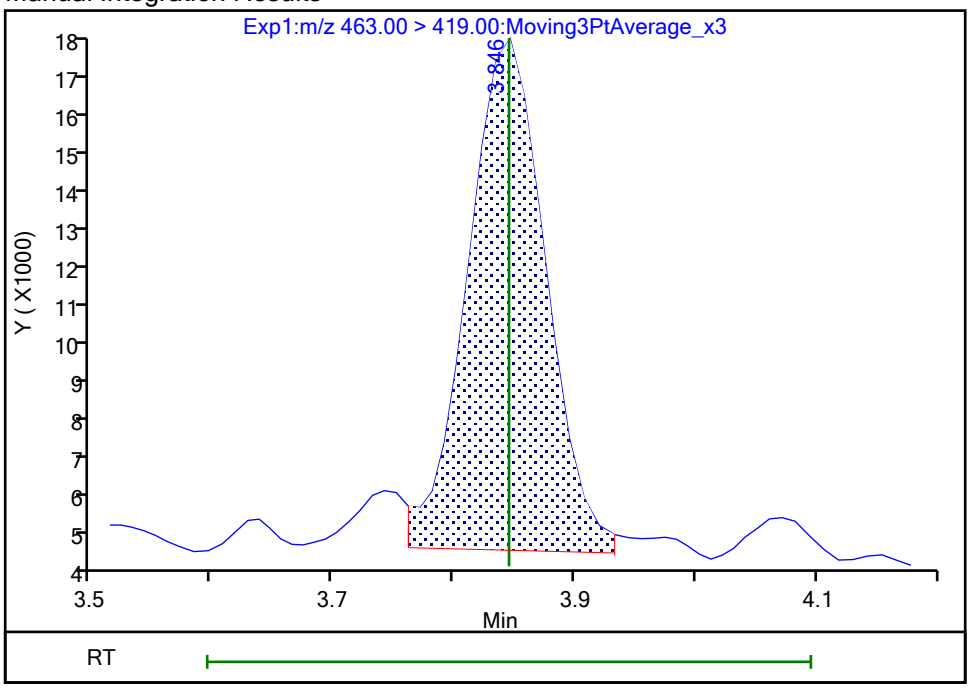
Processing Integration Results

RT: 3.85
Area: 56646
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 59414
Amount: 0.040138
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:23:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

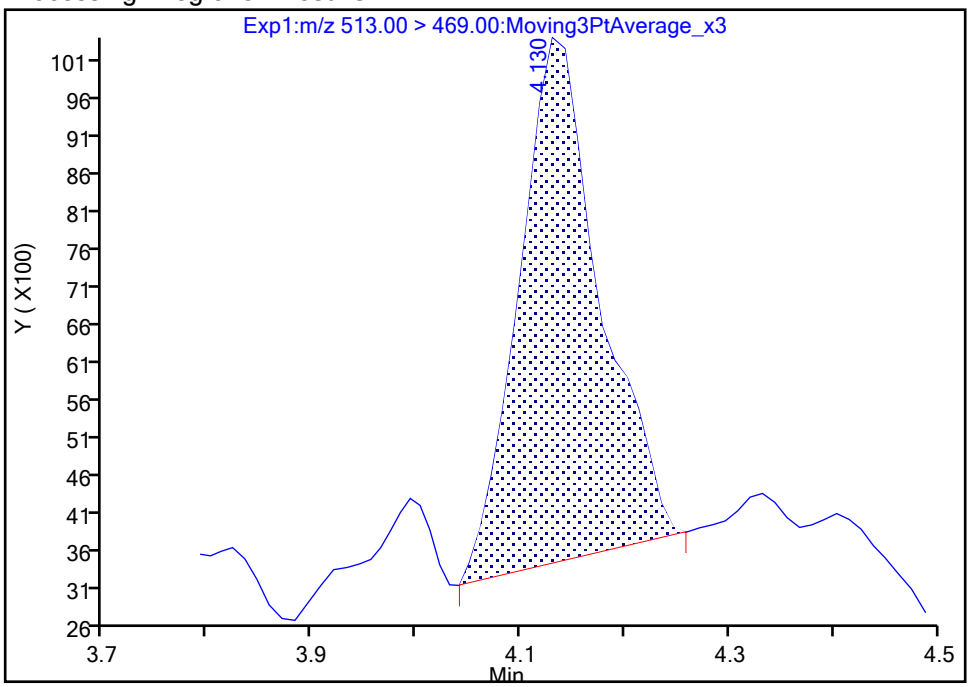
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

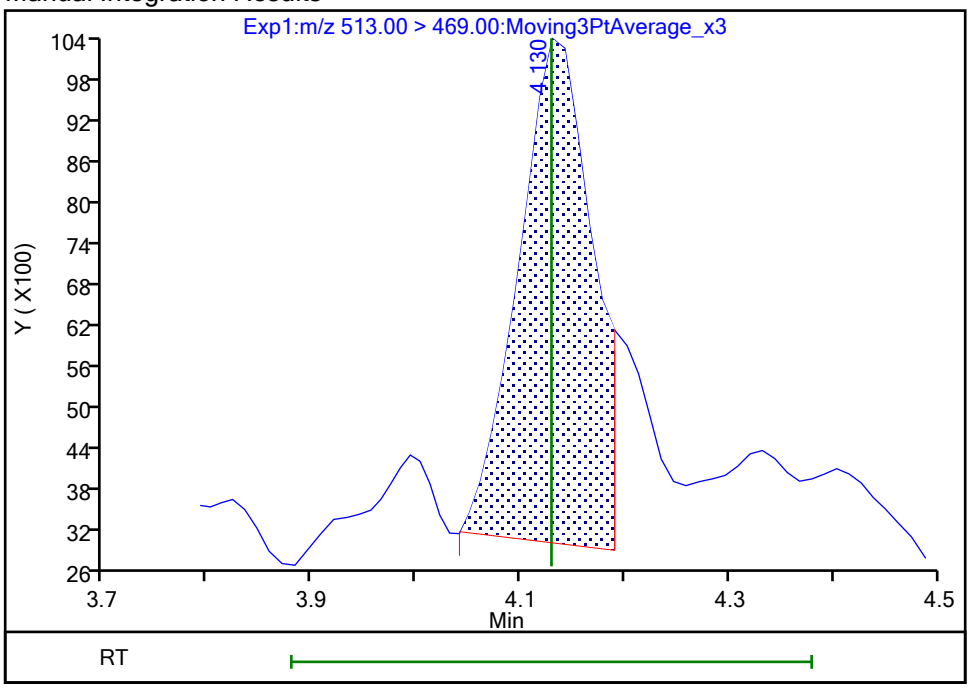
Processing Integration Results

RT: 4.13
Area: 37649
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 35953
Amount: 0.021517
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:01:37 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

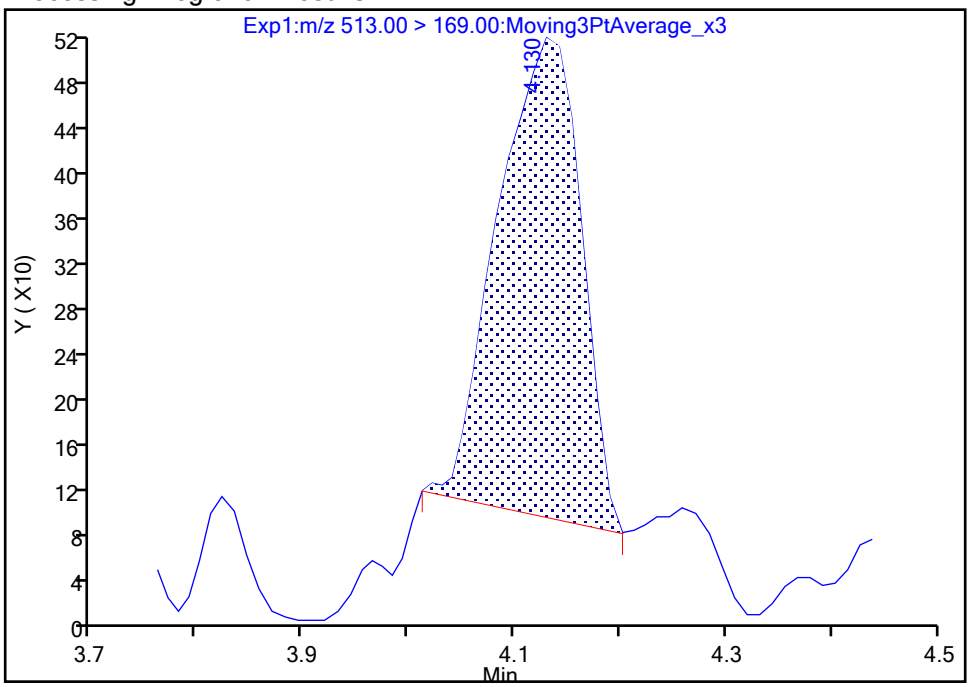
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

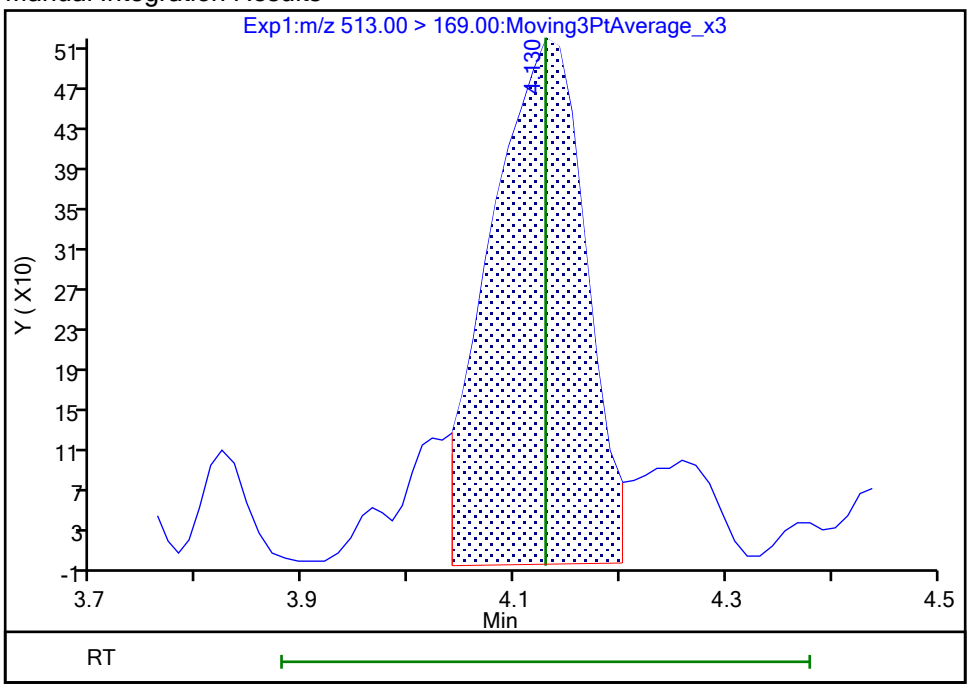
Processing Integration Results

RT: 4.13
Area: 2329
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 3238
Amount: 0.021517
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:01:43 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

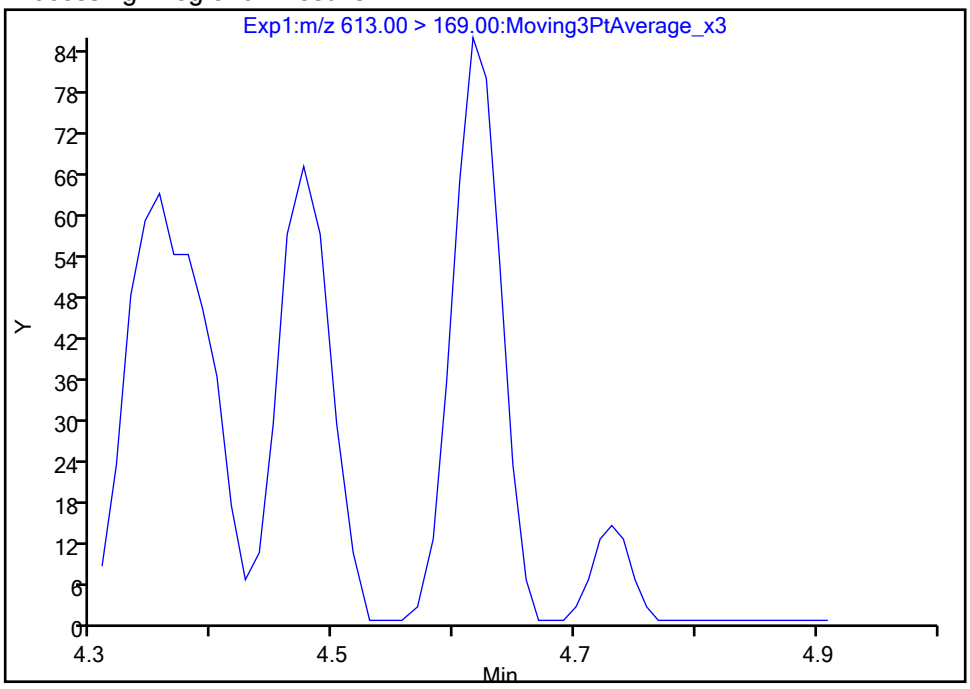
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

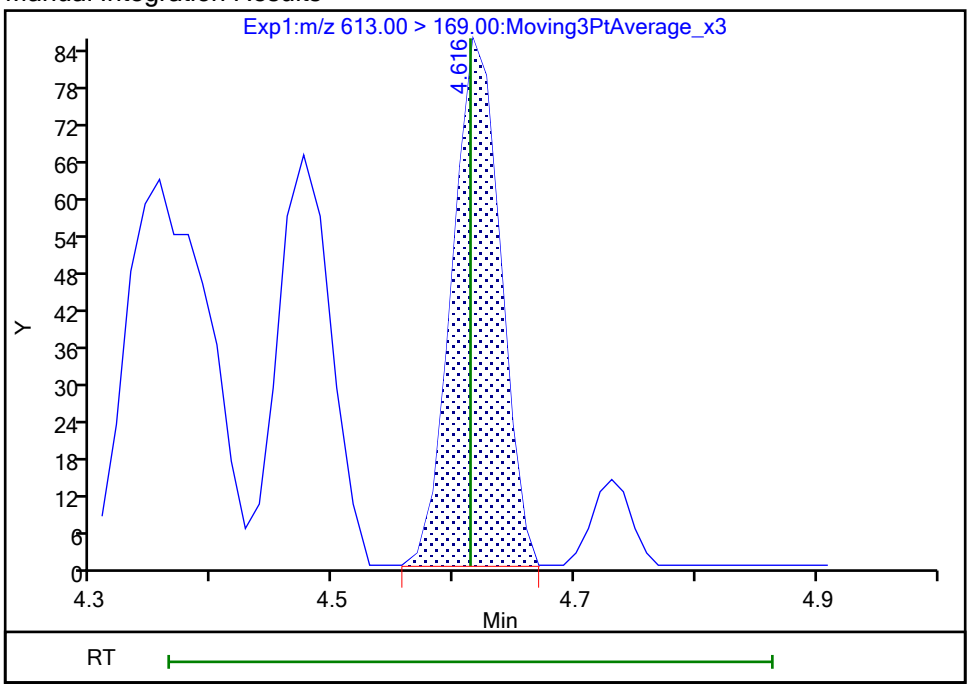
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 239
Amount: 0.000753
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

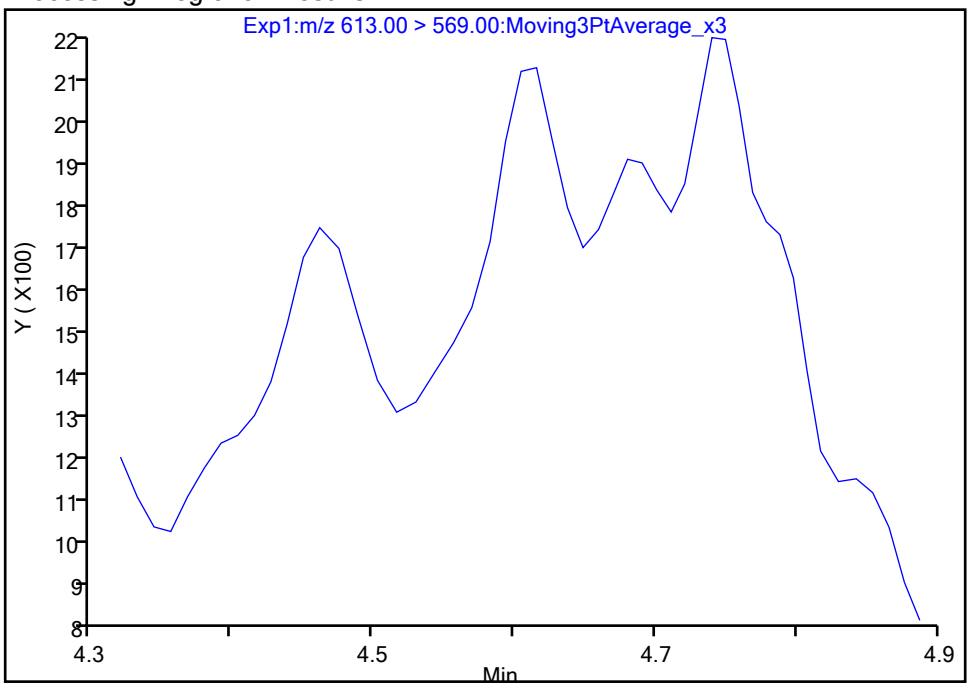
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

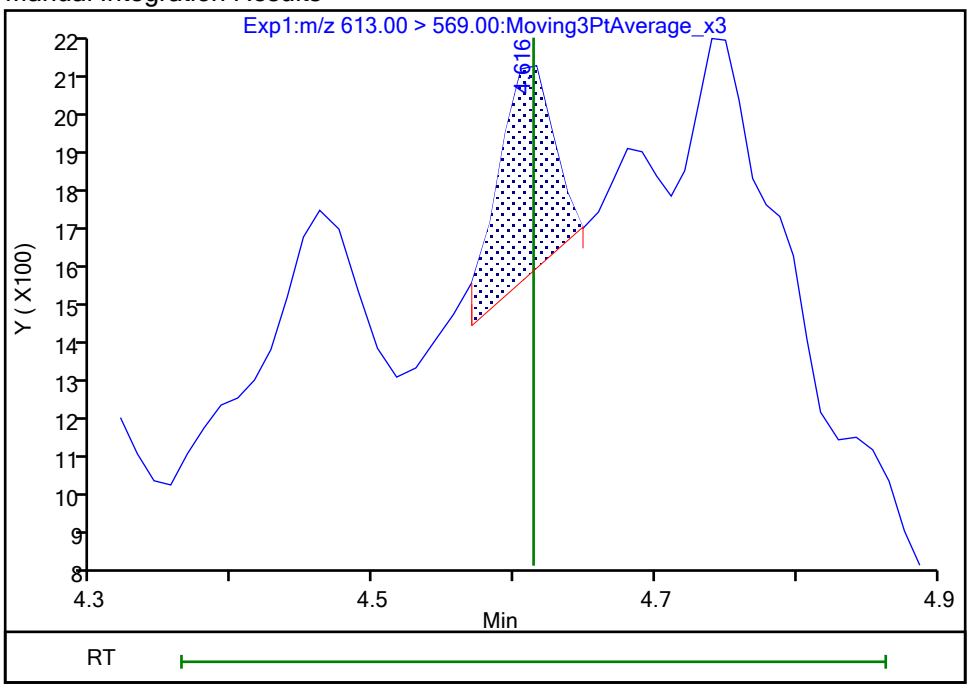
Not Detected
Expected RT: 4.61

Processing Integration Results



RT: 4.62
Area: 1386
Amount: 0.000753
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 24-Oct-2023 15:24:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

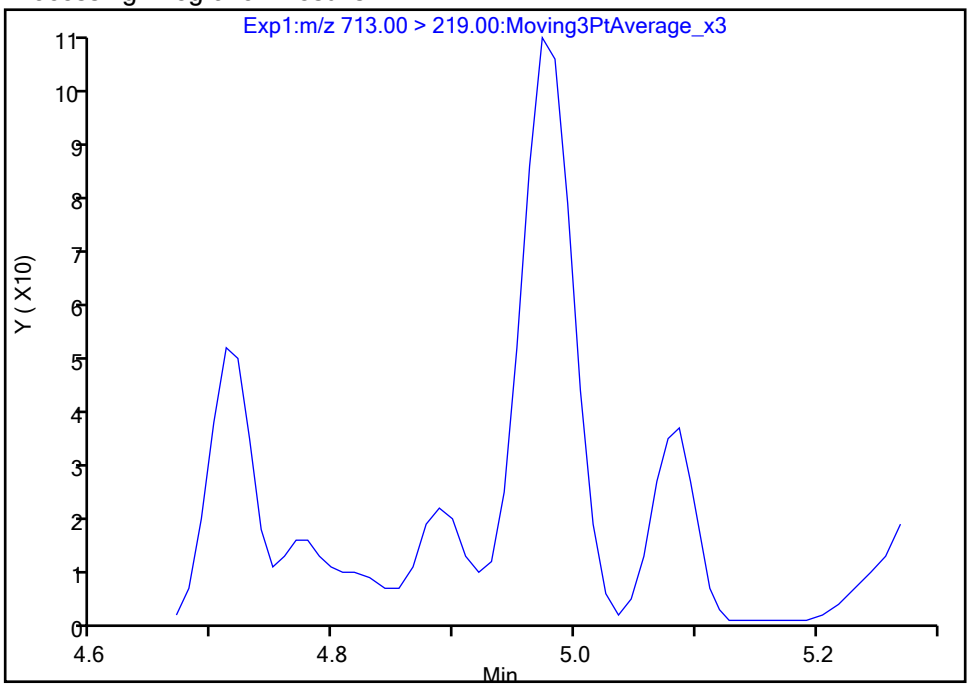
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

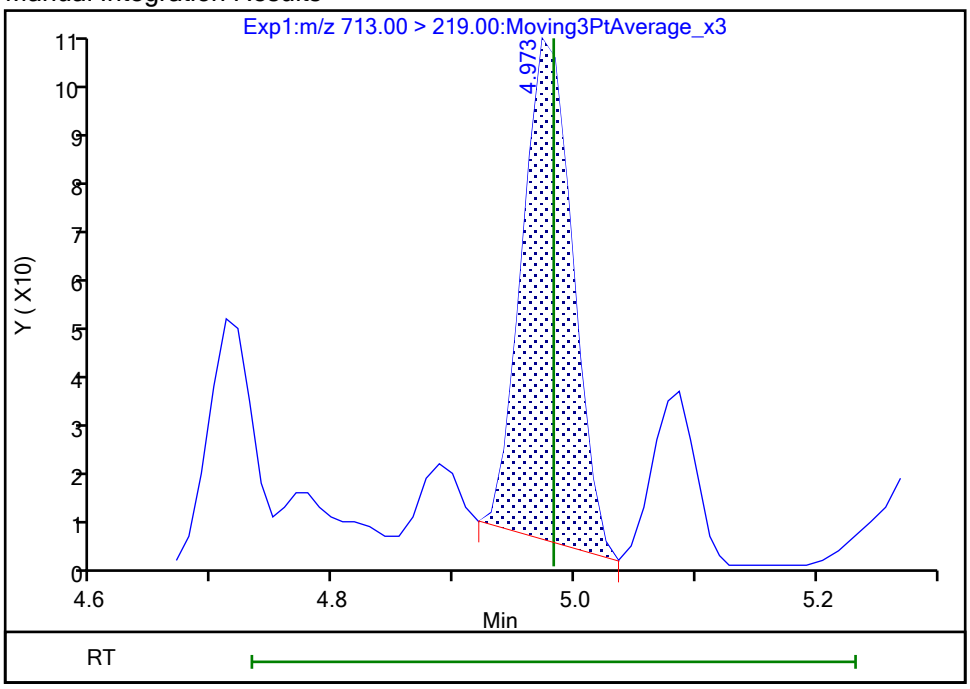
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 302
Amount: 0.000893
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

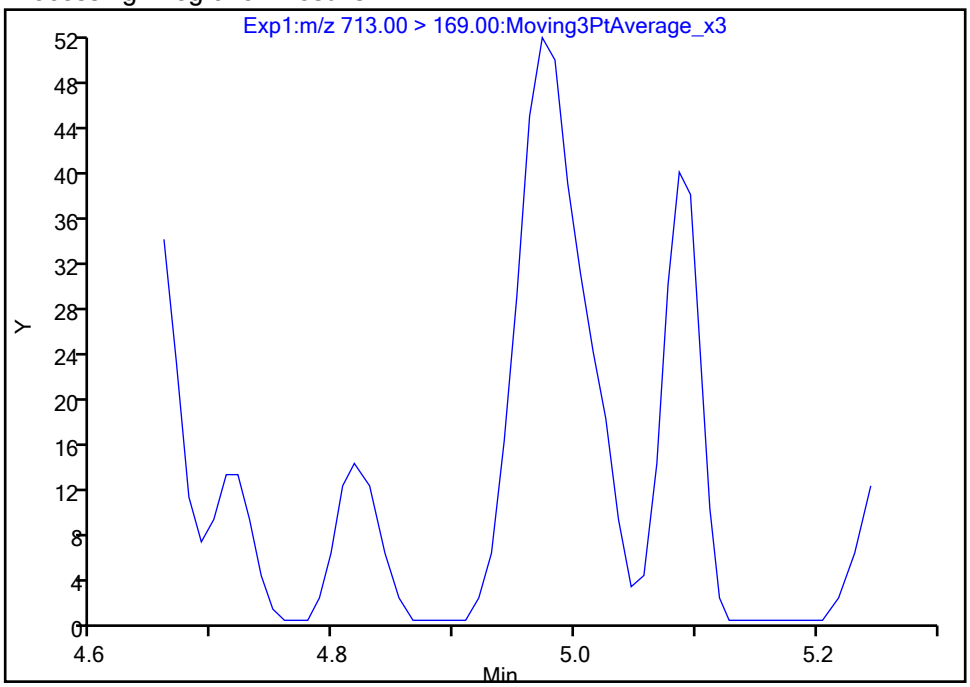
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

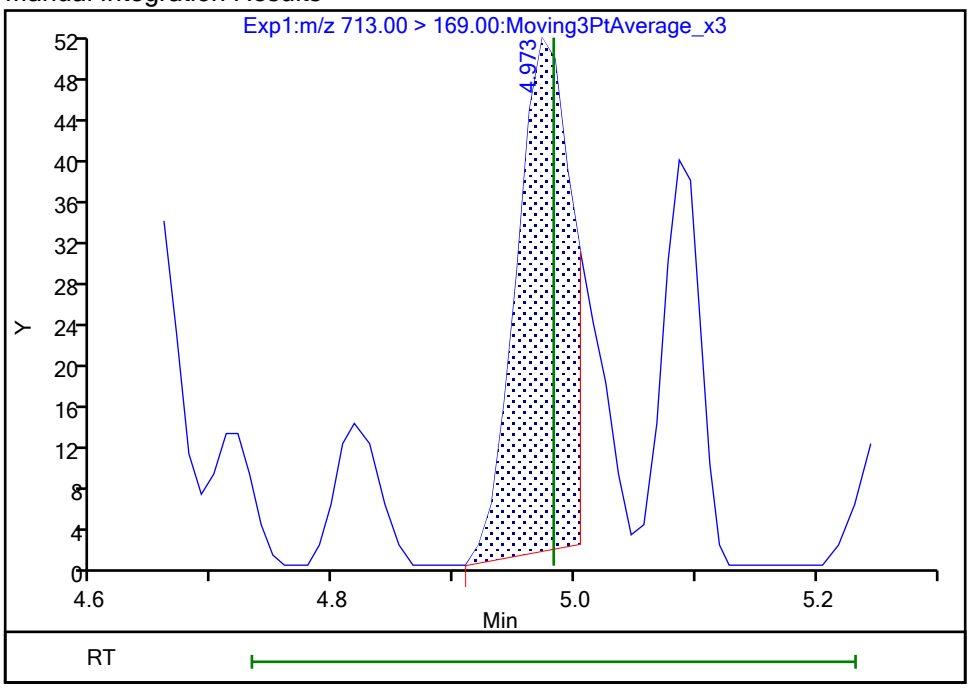
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 154
Amount: 0.000893
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

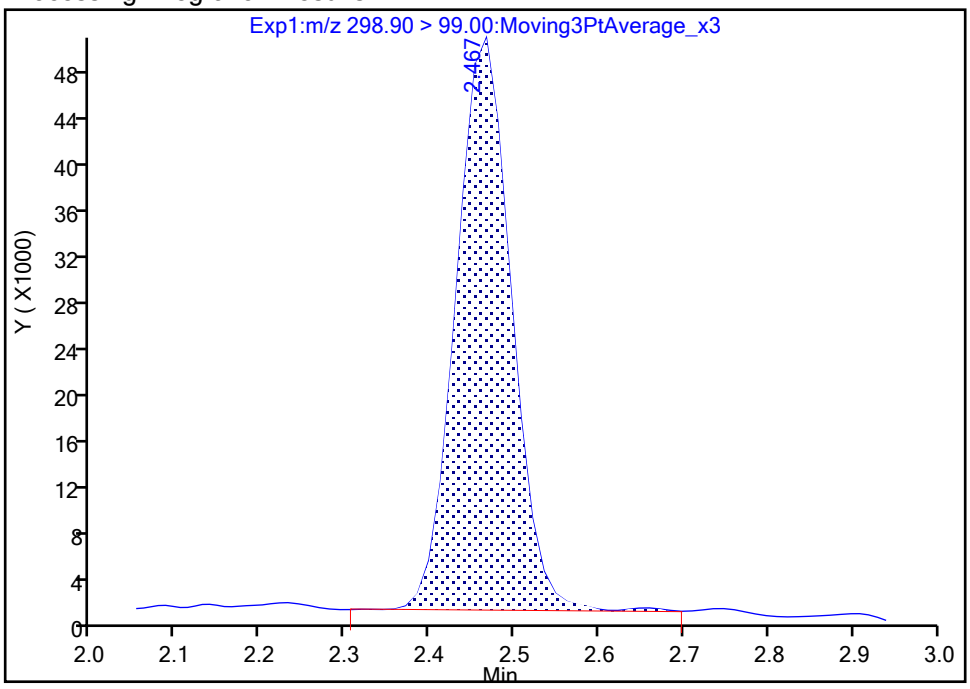
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

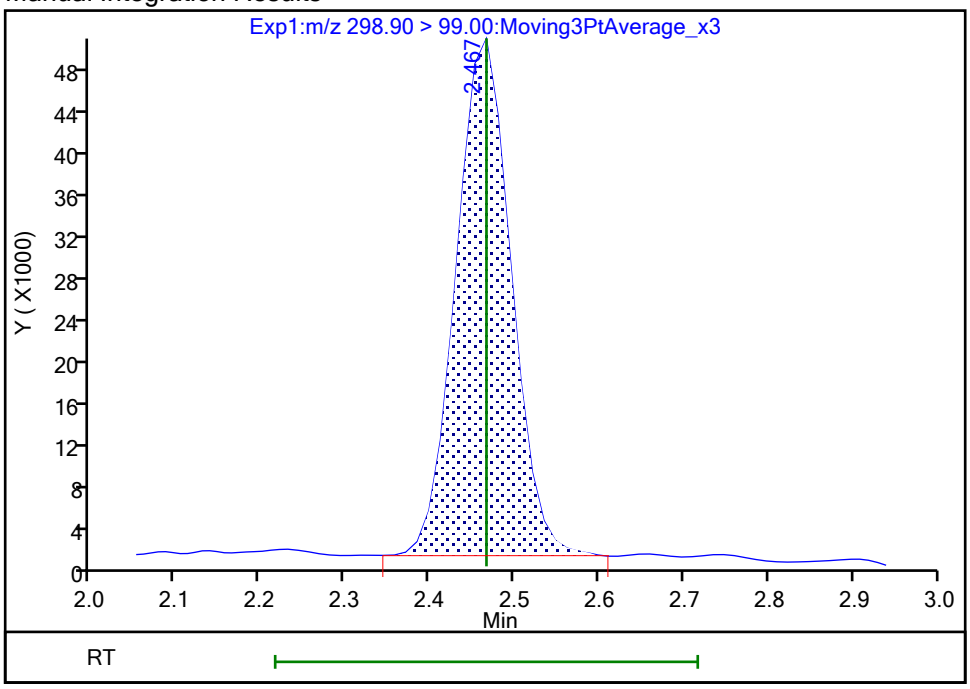
Processing Integration Results

RT: 2.47
Area: 223597
Amount: 0.414548
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 222218
Amount: 0.250421
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:20:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

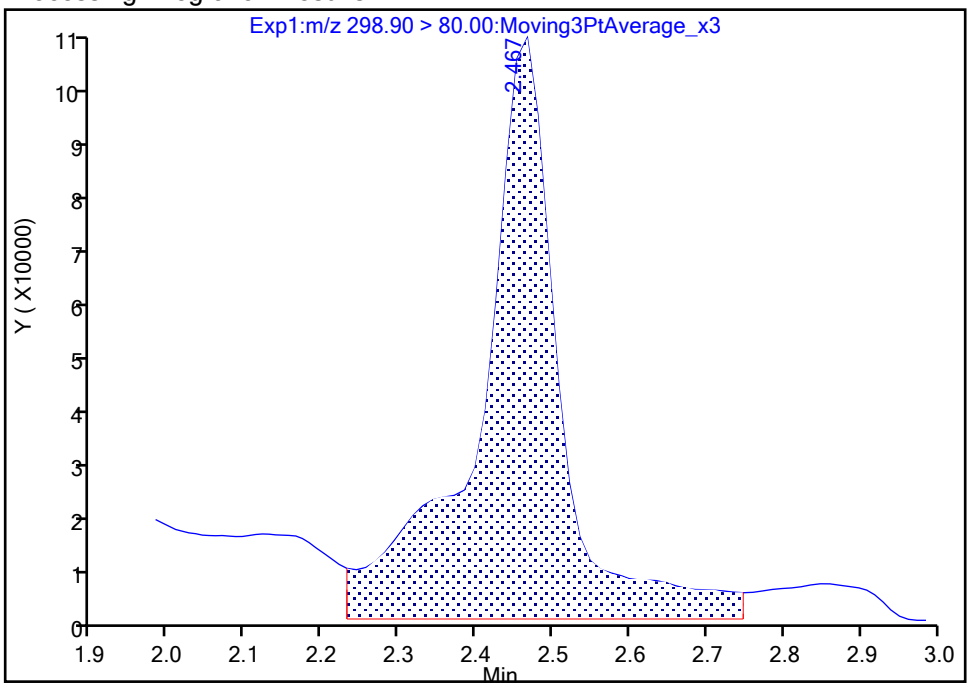
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

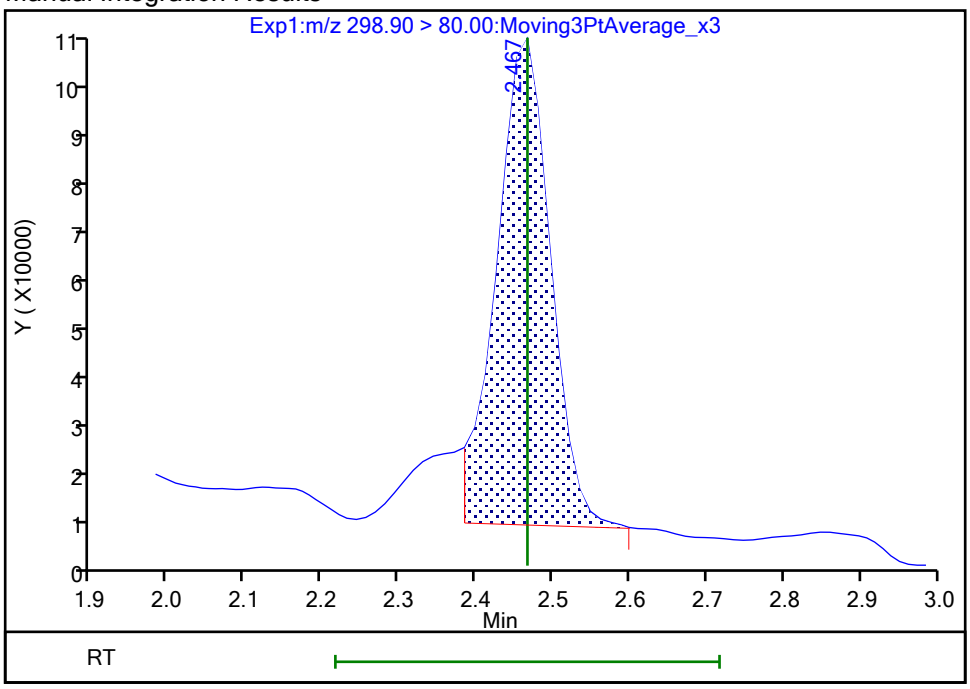
Processing Integration Results

RT: 2.47
Area: 752588
Amount: 0.414548
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 454625
Amount: 0.250421
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:20:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

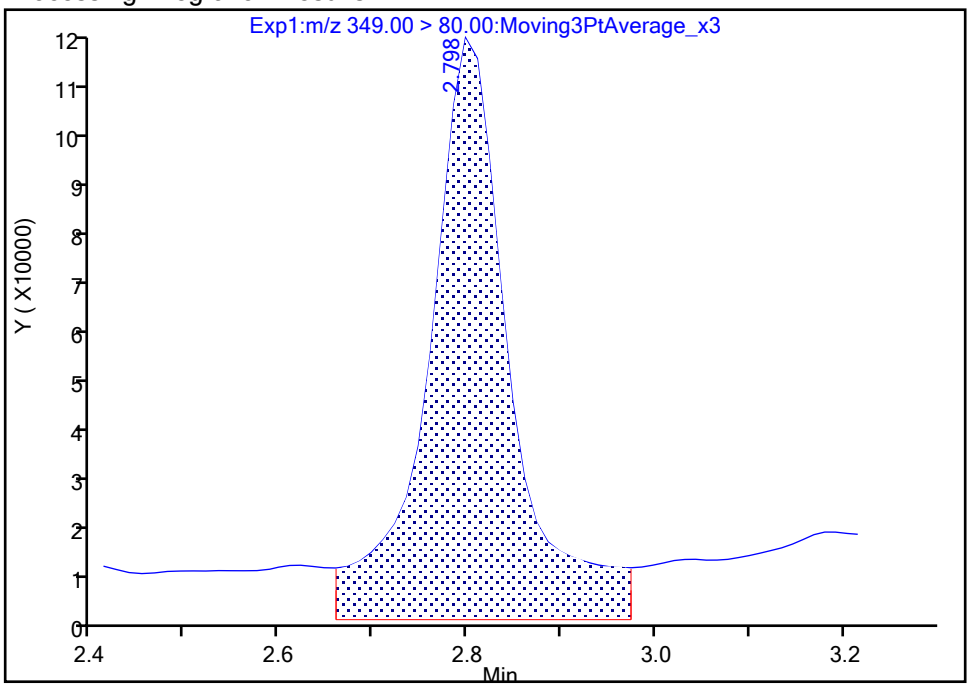
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

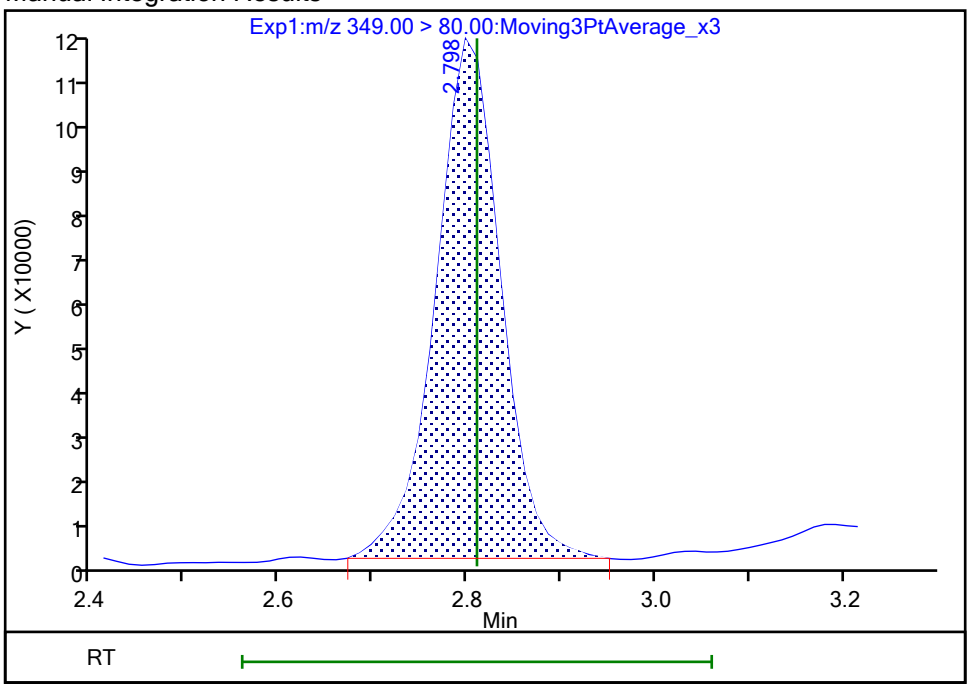
Processing Integration Results

RT: 2.80
Area: 681957
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 487865
Amount: 0.312862
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:20:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

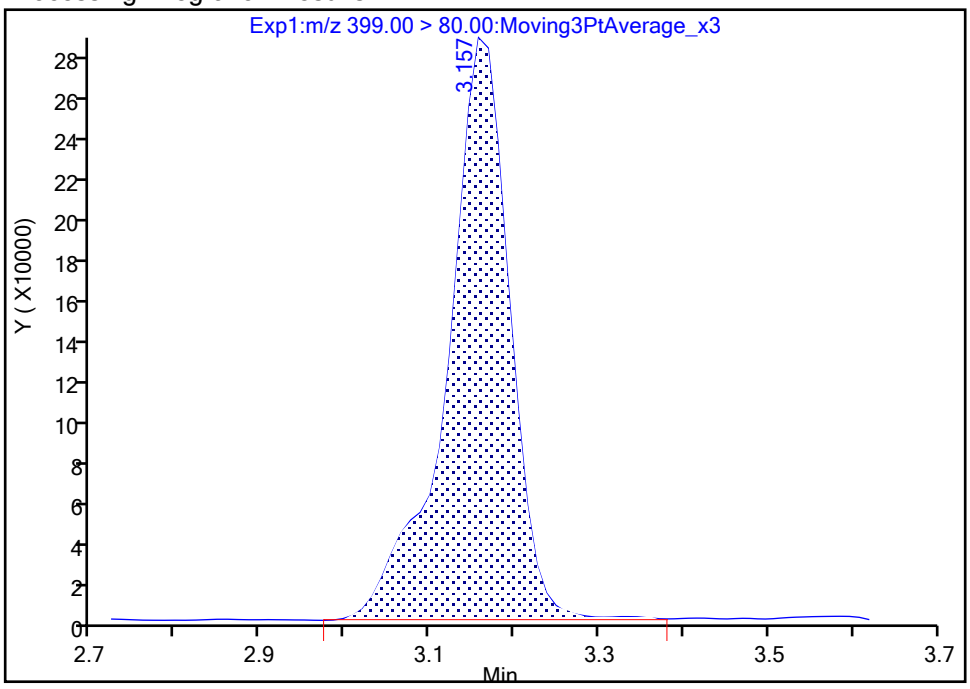
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

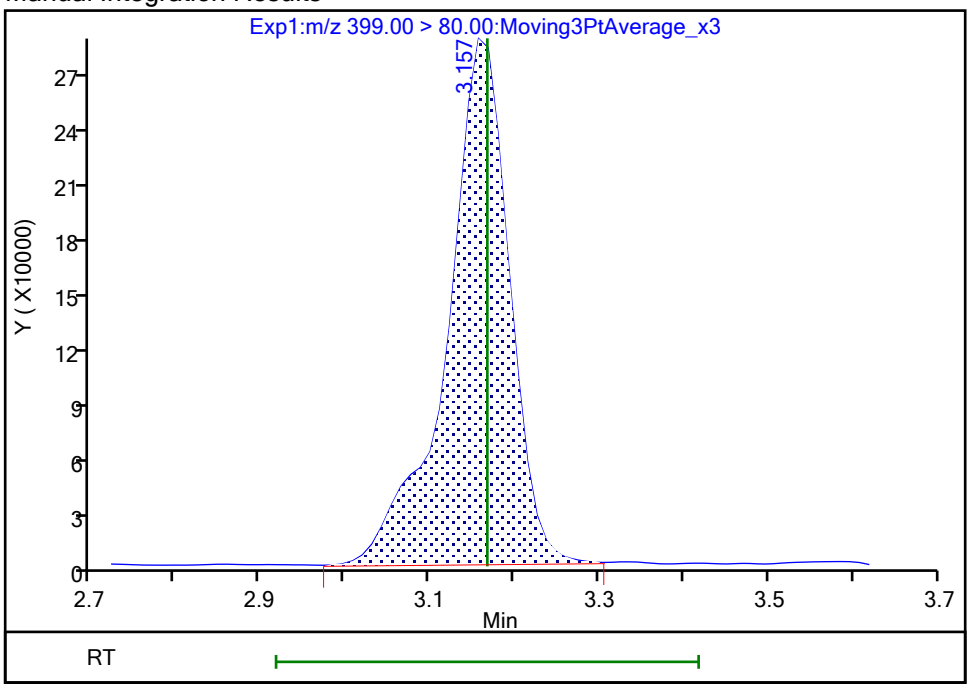
Processing Integration Results

RT: 3.16
Area: 1428744
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1416119
Amount: 1.071326
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

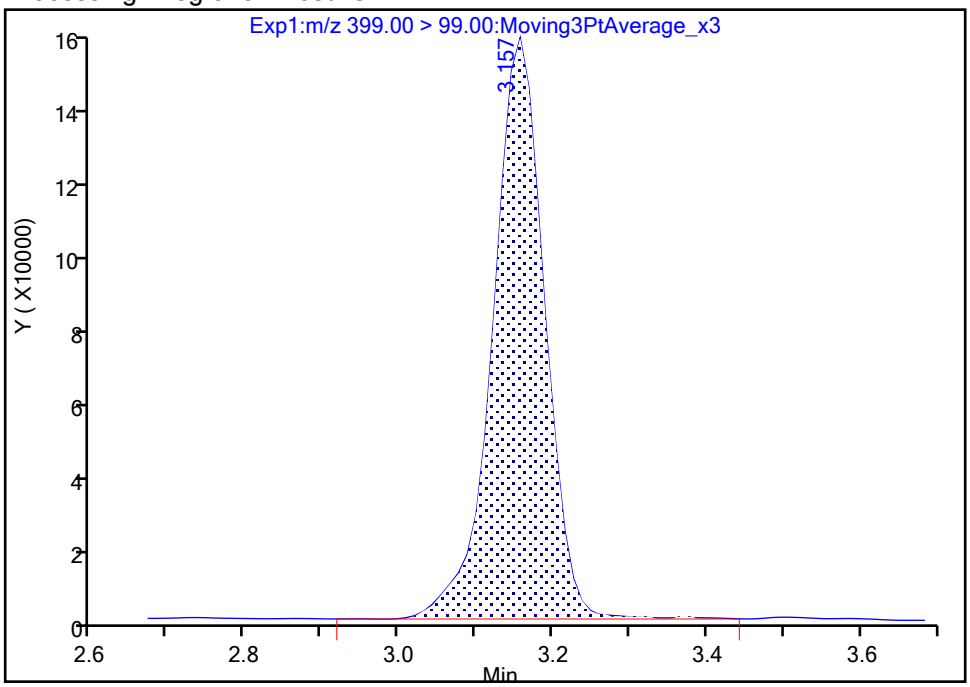
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

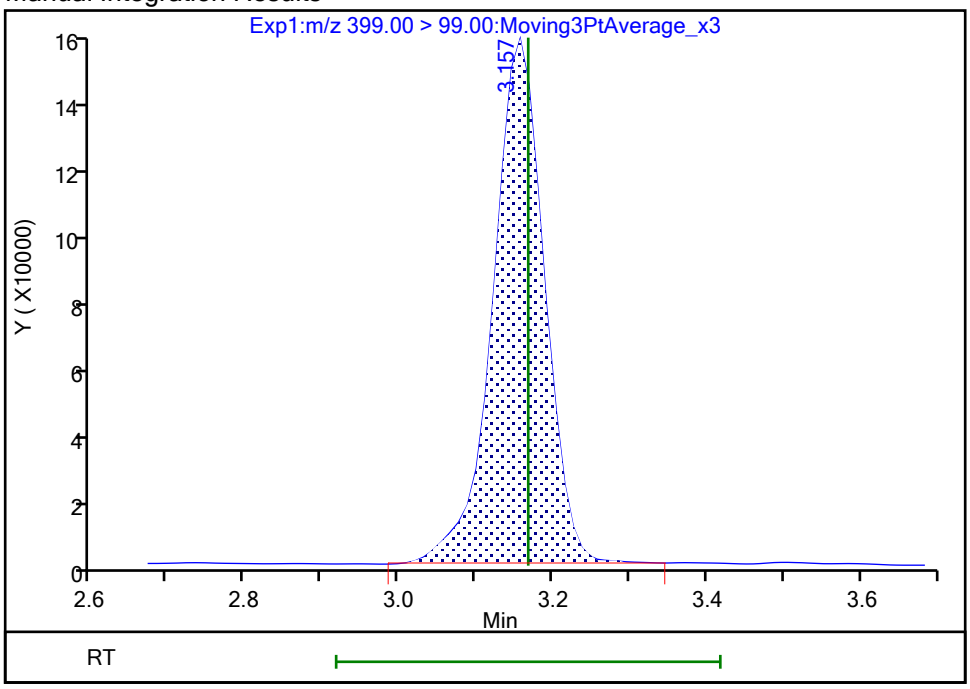
Processing Integration Results

RT: 3.16
Area: 745231
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 734437
Amount: 1.071326
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

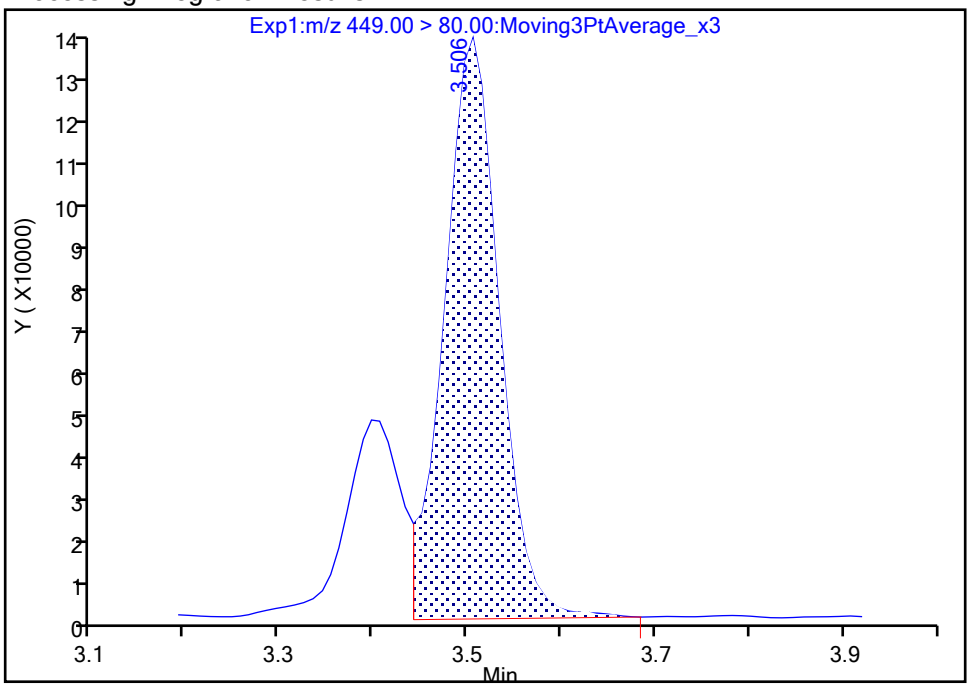
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

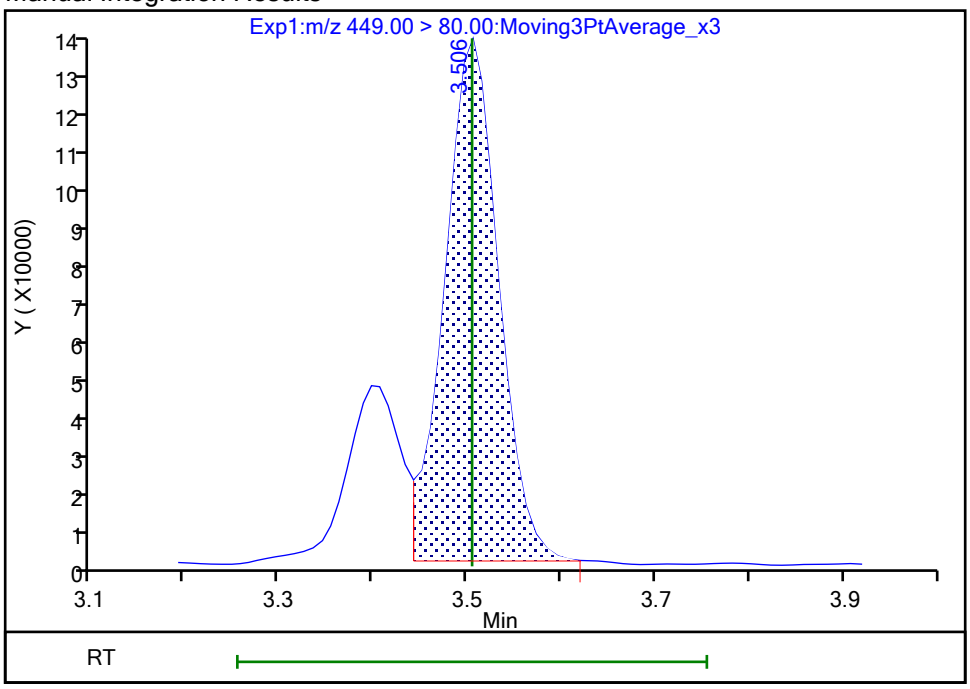
Processing Integration Results

RT: 3.51
Area: 522481
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 506486
Amount: 0.482338
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

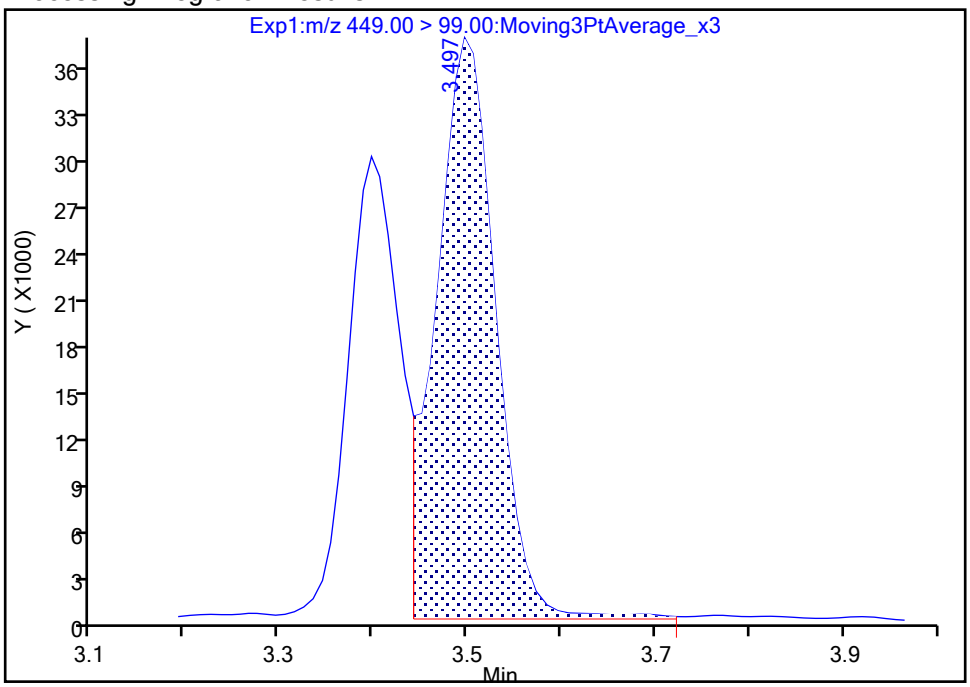
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

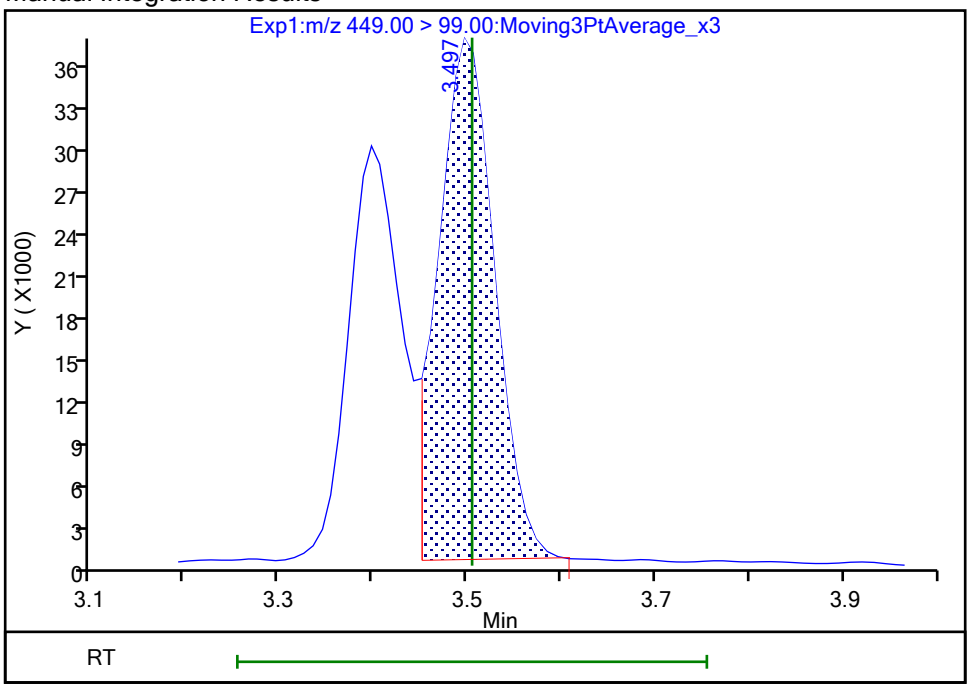
Processing Integration Results

RT: 3.50
Area: 165616
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 151640
Amount: 0.482338
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

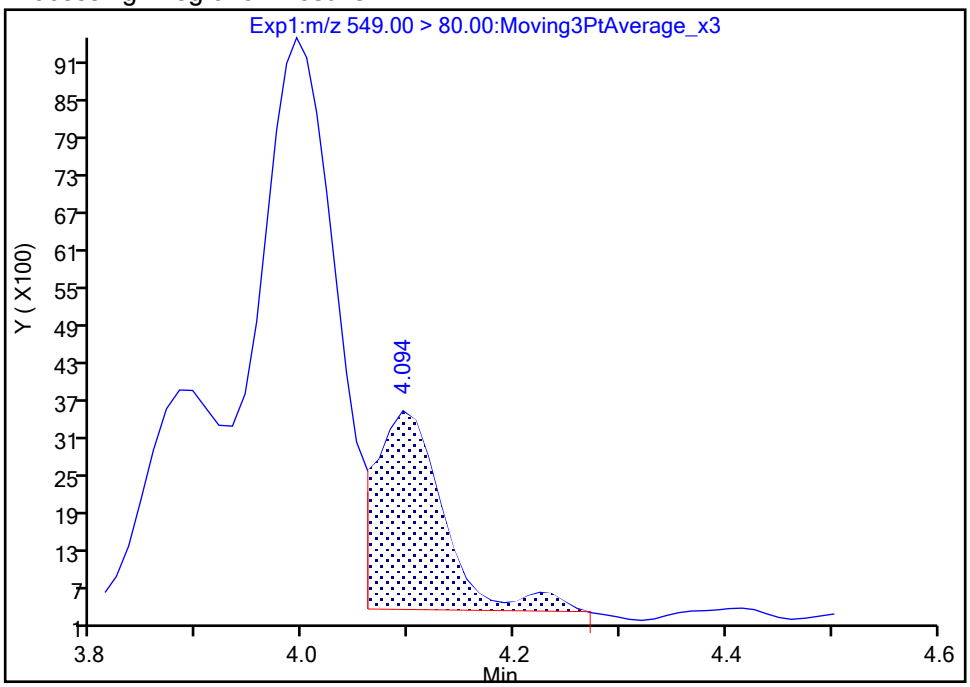
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

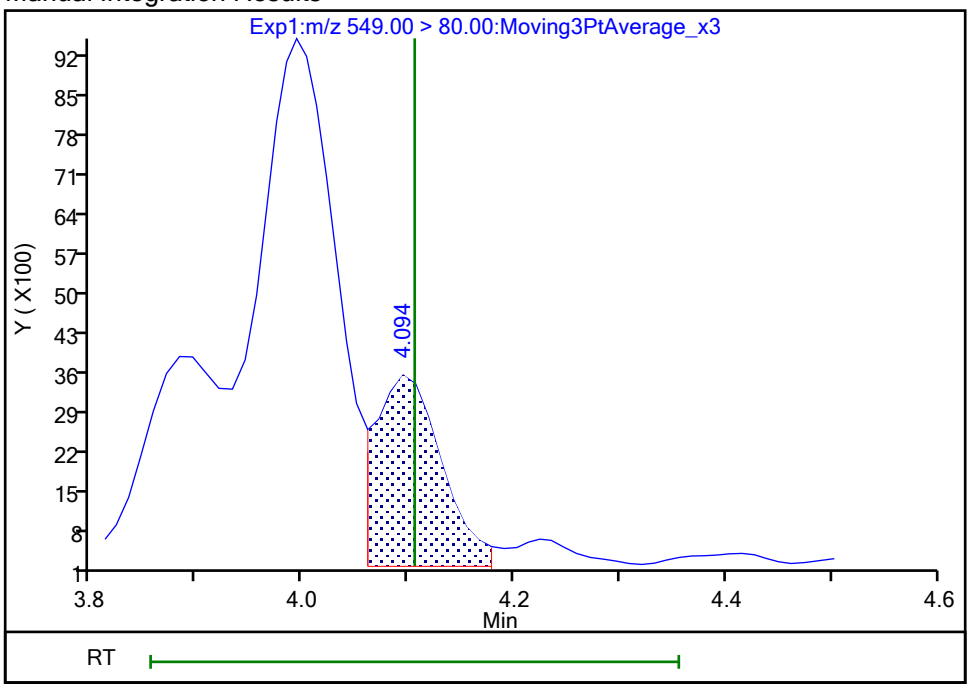
Processing Integration Results

RT: 4.09
Area: 14055
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 14256
Amount: 0.022111
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:02:13 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

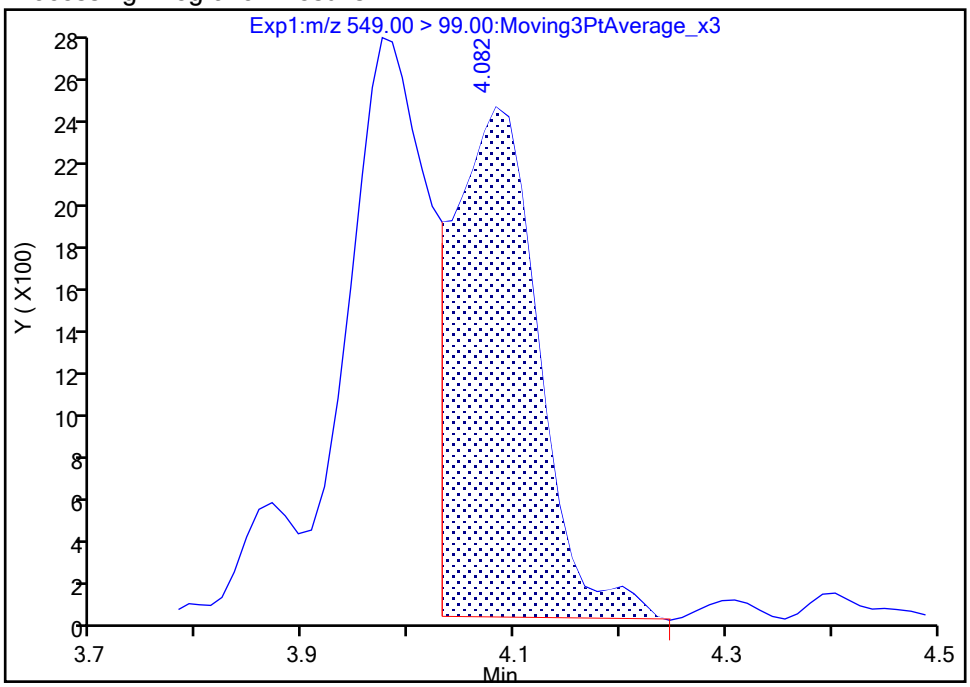
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

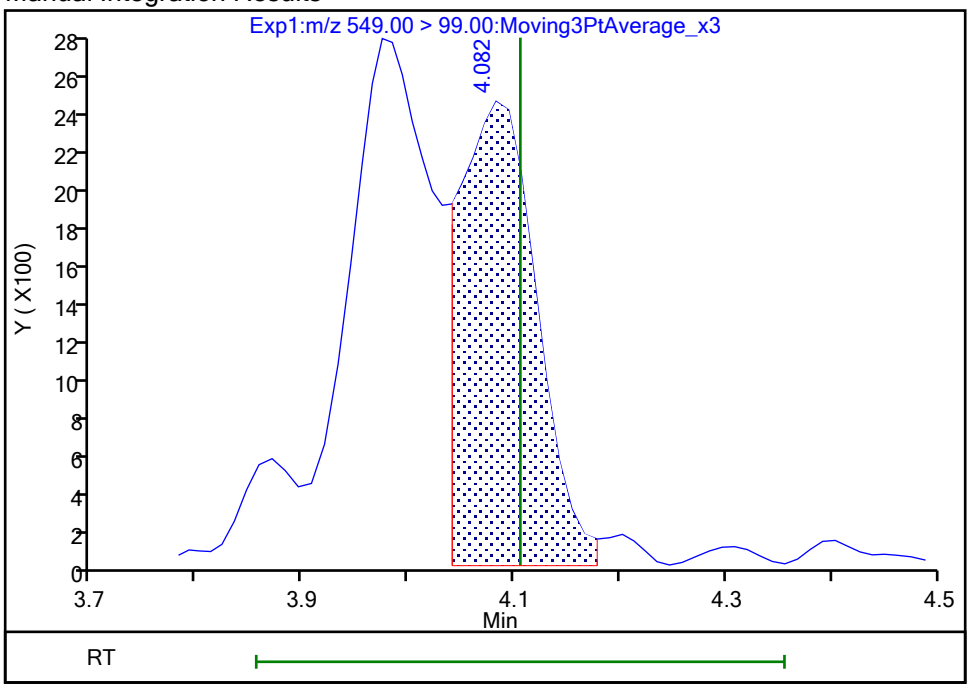
Processing Integration Results

RT: 4.08
Area: 13064
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.08
Area: 11753
Amount: 0.022111
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 18:02:21 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

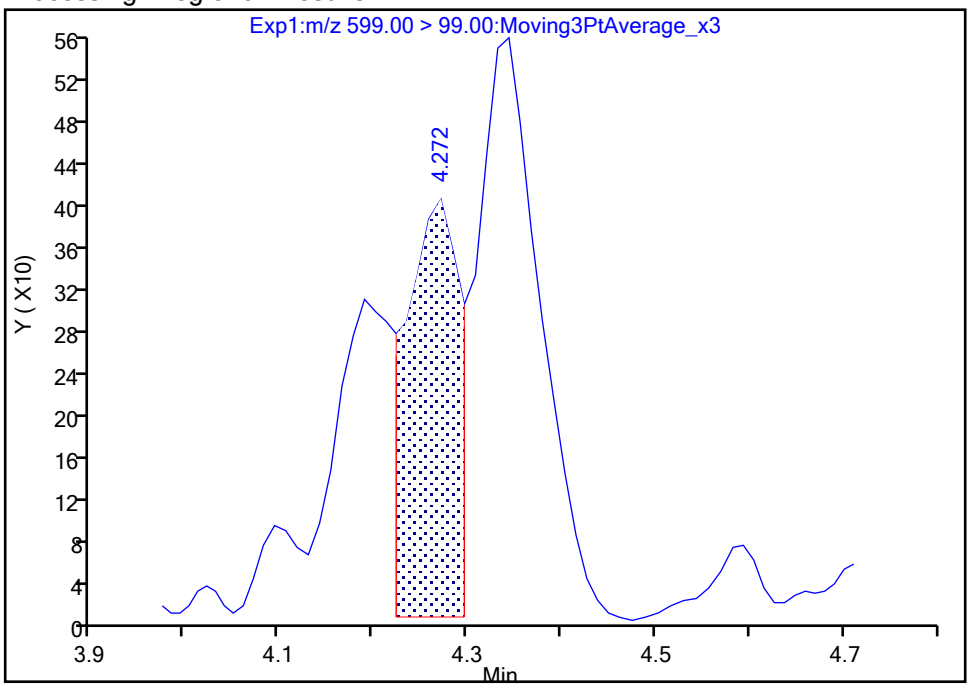
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

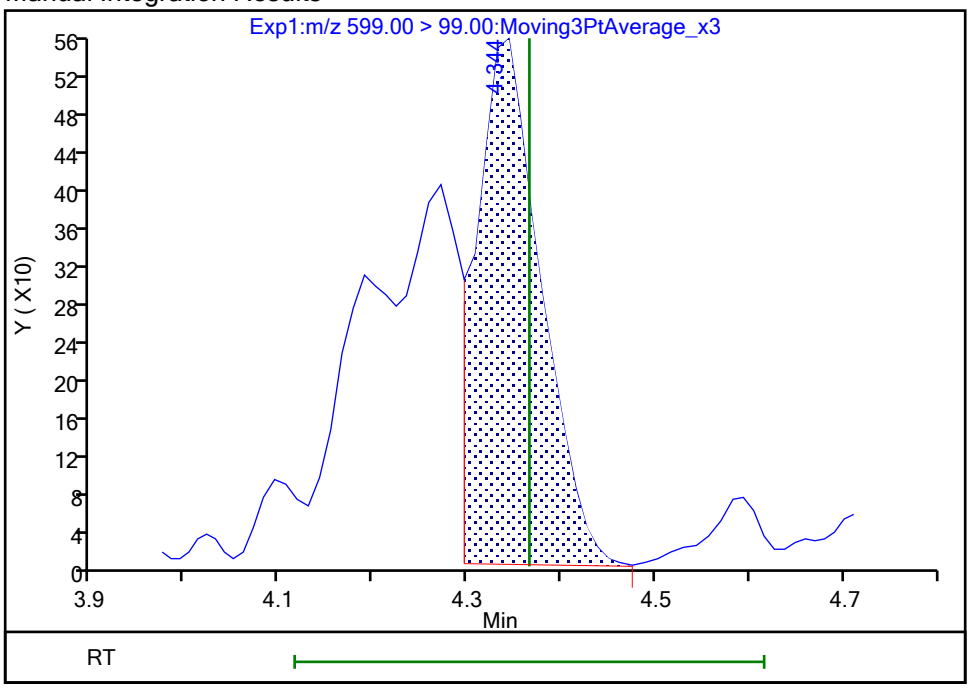
Processing Integration Results

RT: 4.27
Area: 1485
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.34
Area: 2614
Amount: 0.004897
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:23:47 07:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

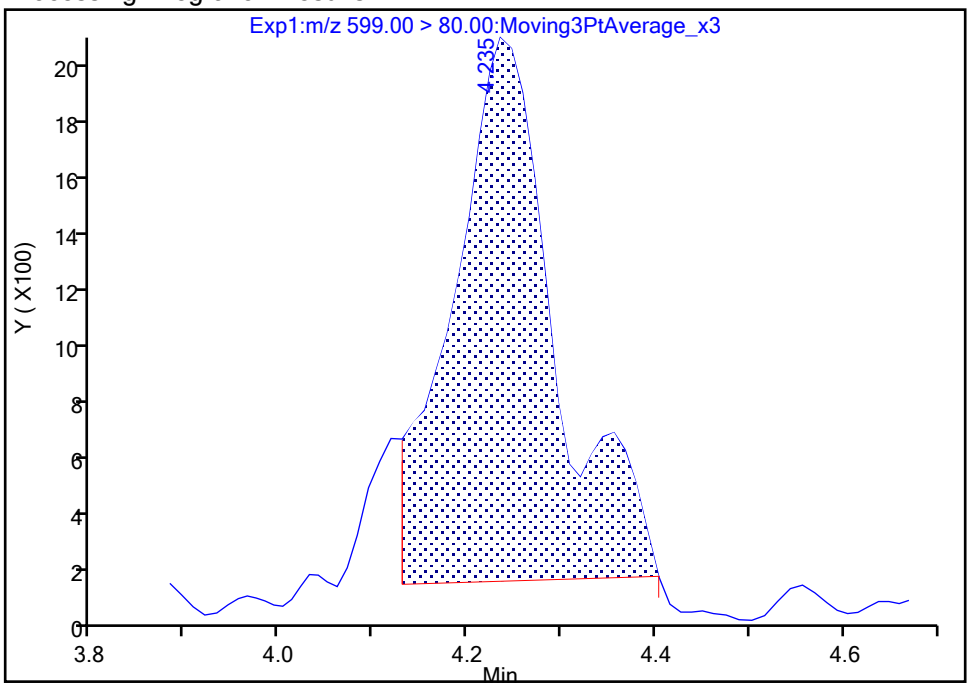
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

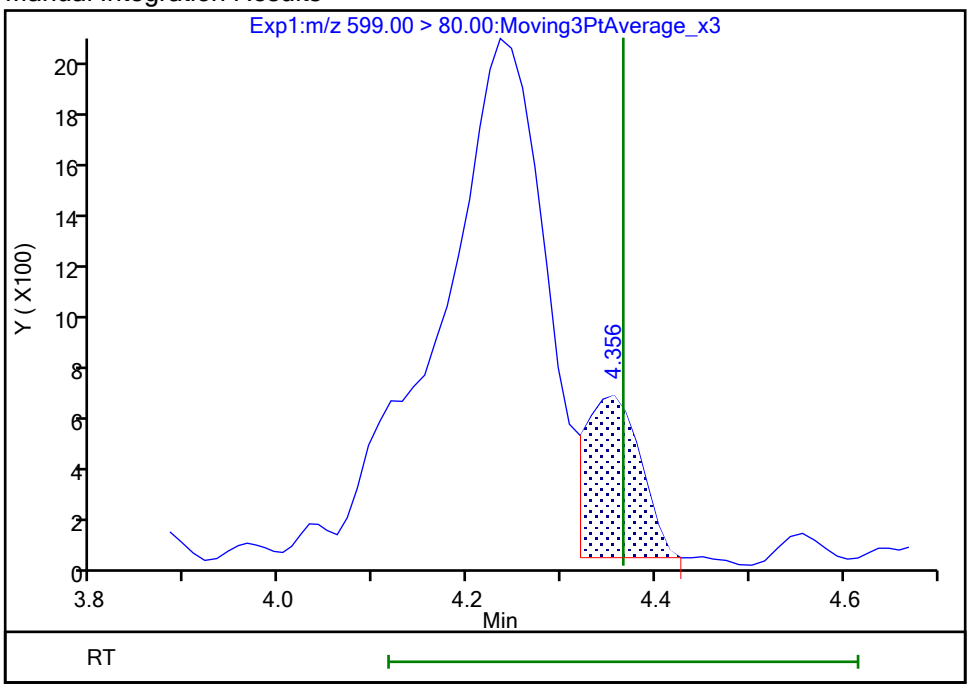
Processing Integration Results

RT: 4.23
Area: 14076
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 2430
Amount: 0.004897
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 17:58:54 -04:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Missed Peak

Eurofins Burlington

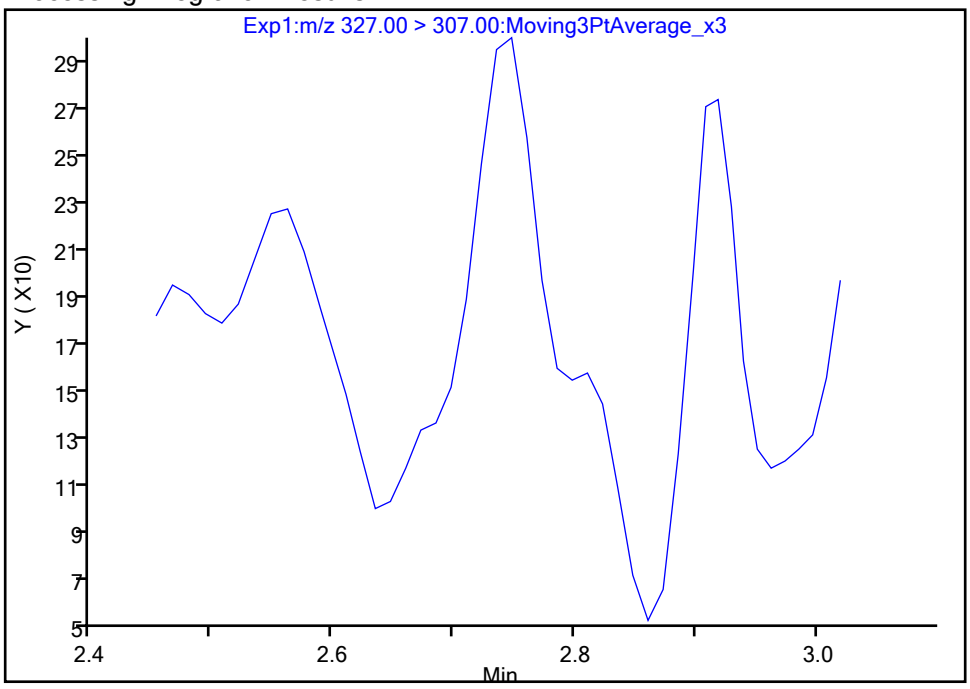
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

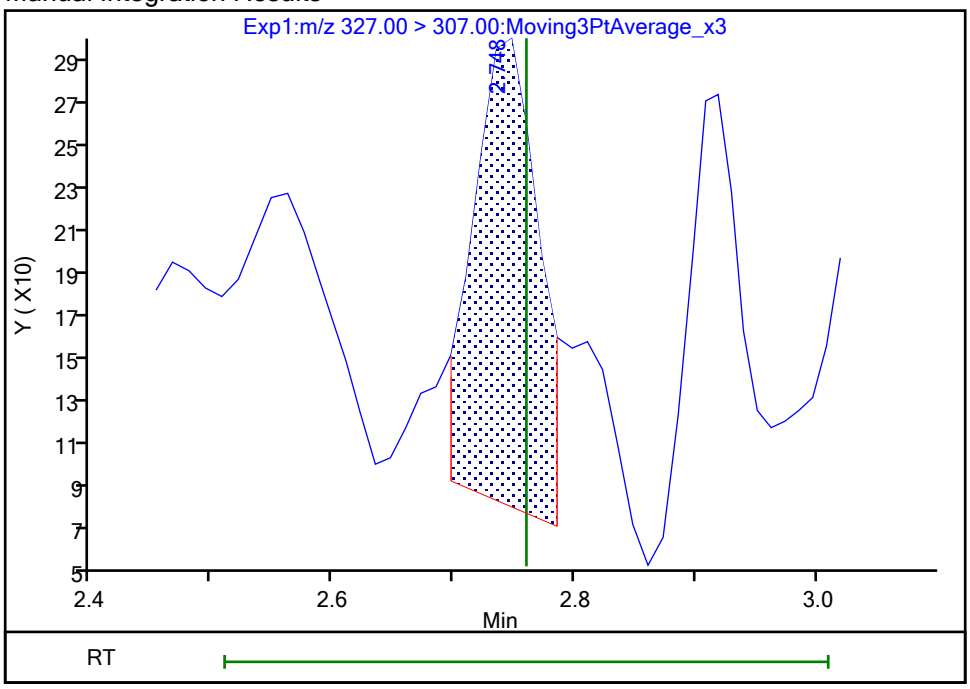
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 798
Amount: 0.001321
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:20:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

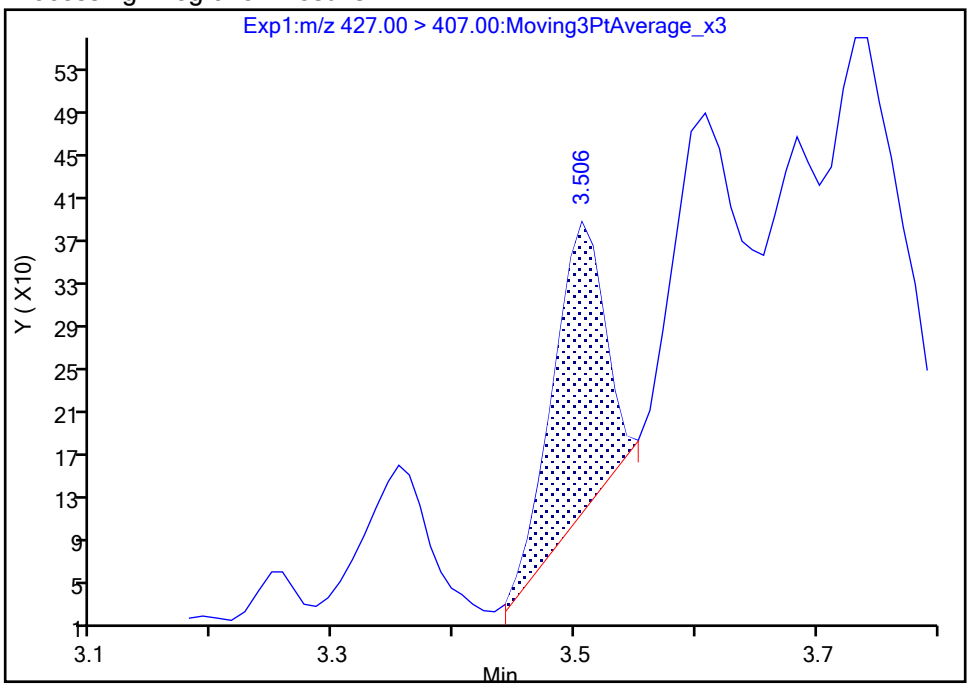
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

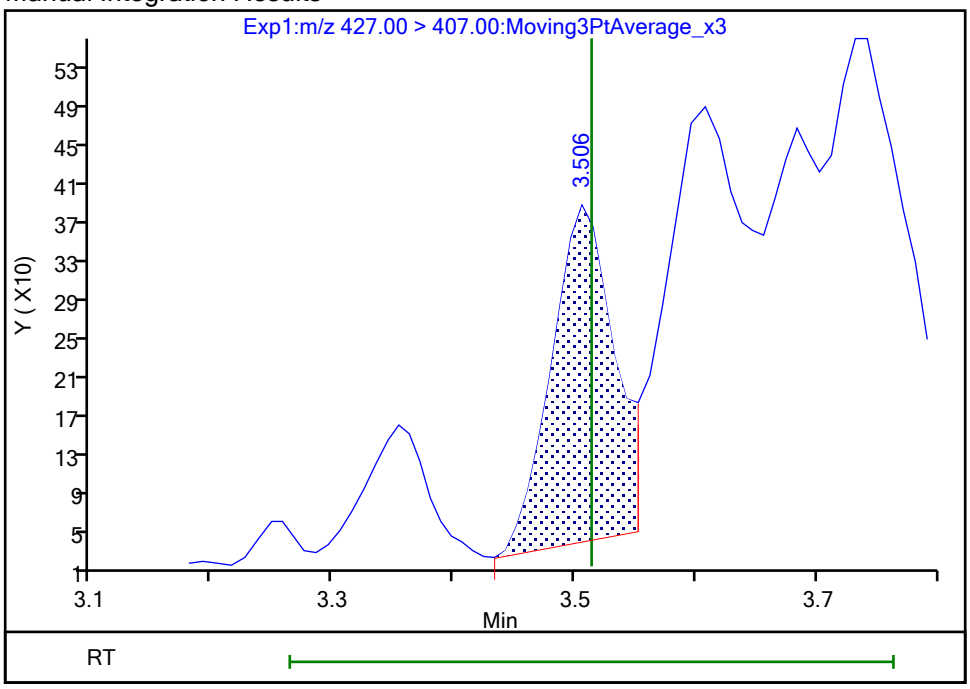
Processing Integration Results

RT: 3.51
Area: 803
Amount: 0.001234
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1233
Amount: 0.001895
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

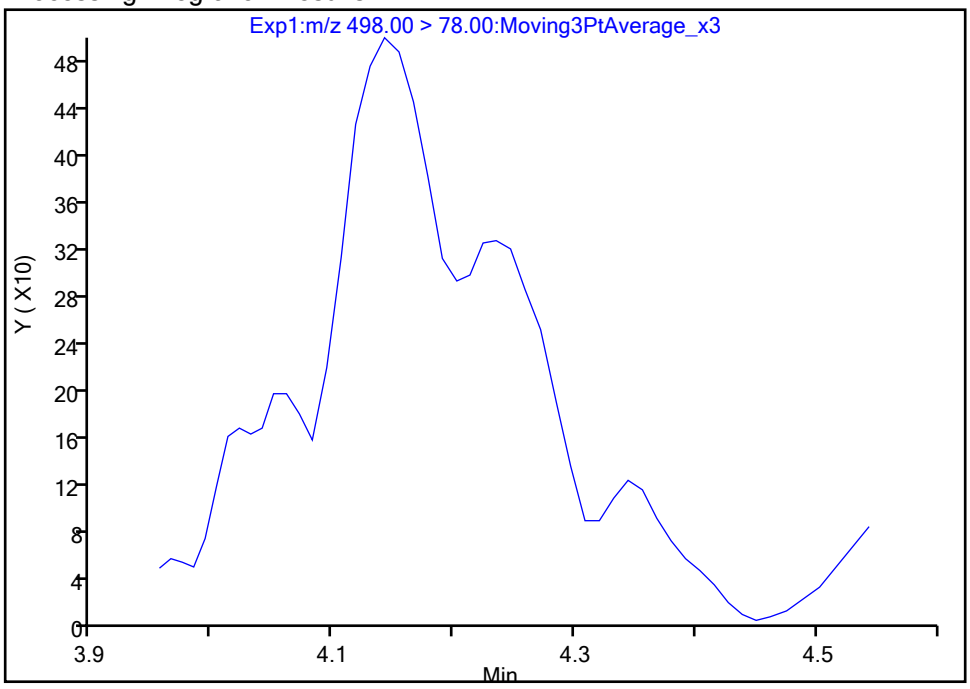
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

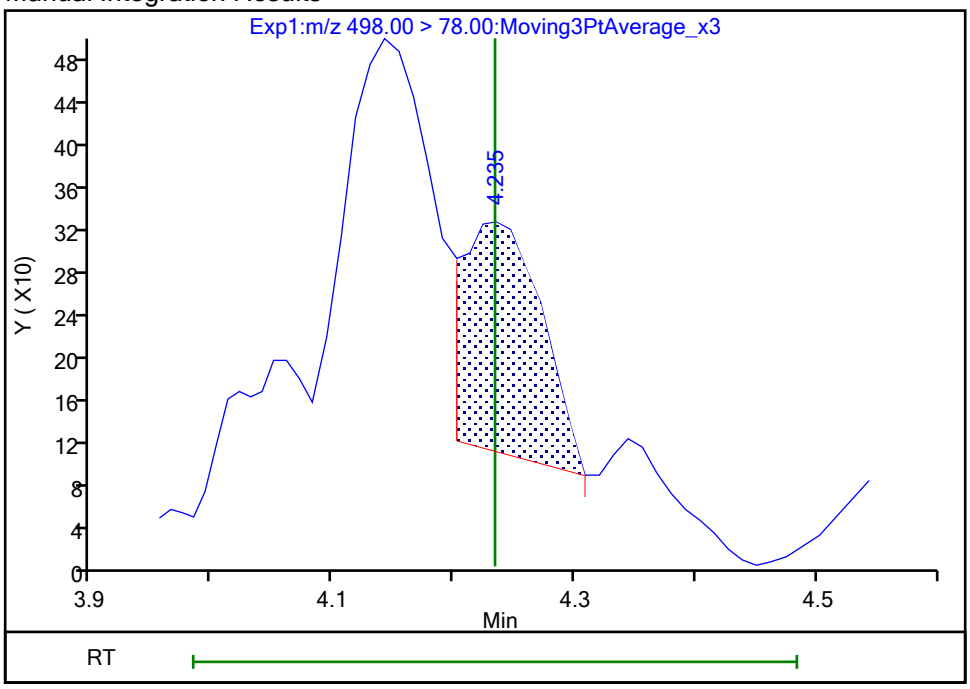
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 957
Amount: 0.000695
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:23:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

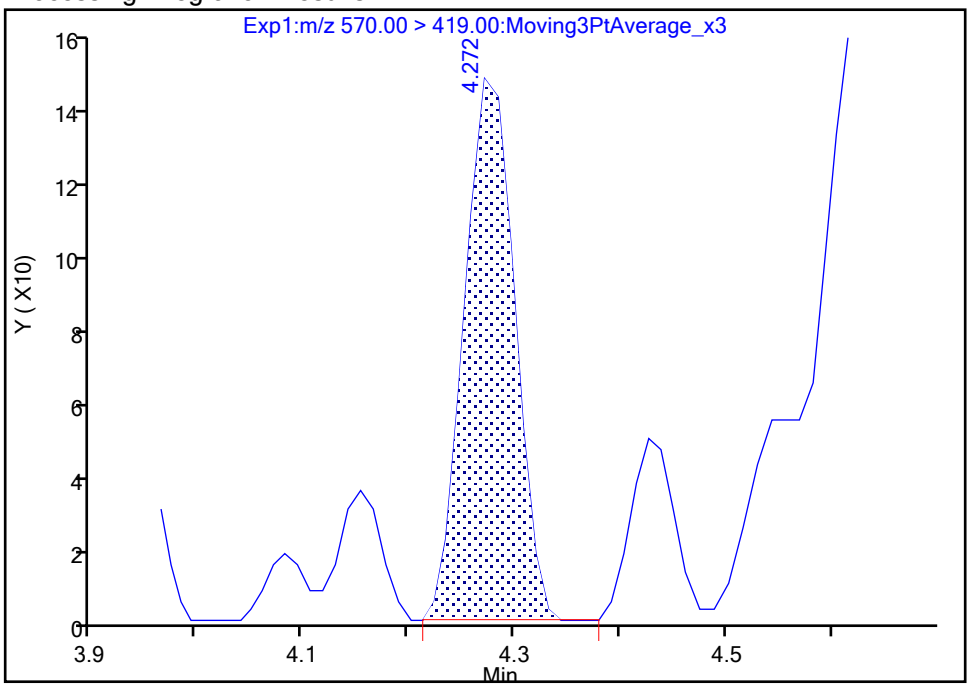
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

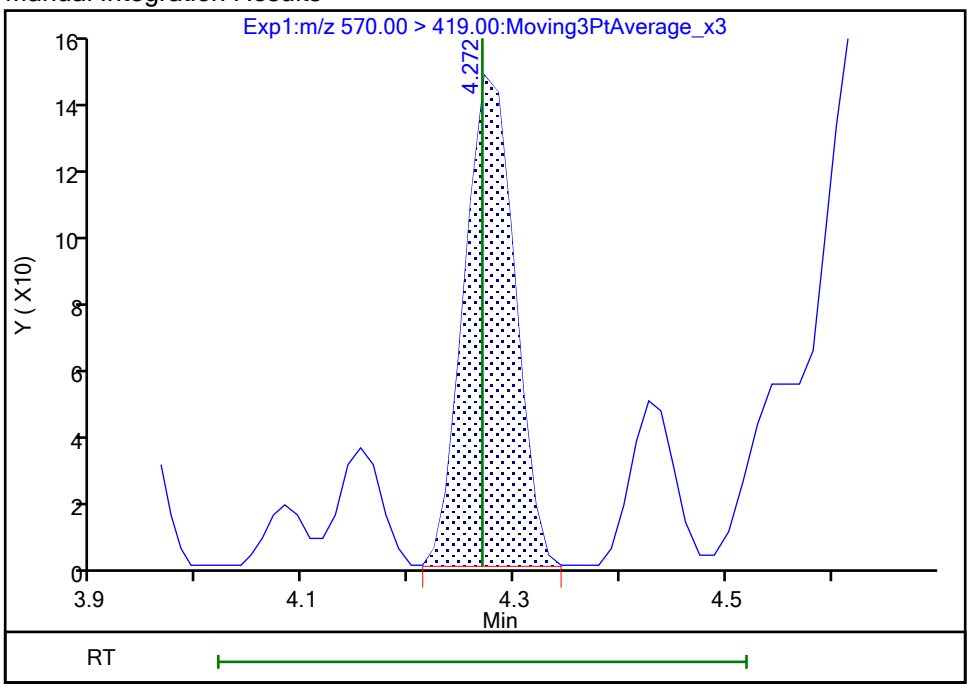
Processing Integration Results

RT: 4.27
Area: 486
Amount: 0.001266
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 486
Amount: 0.001266
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:23:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

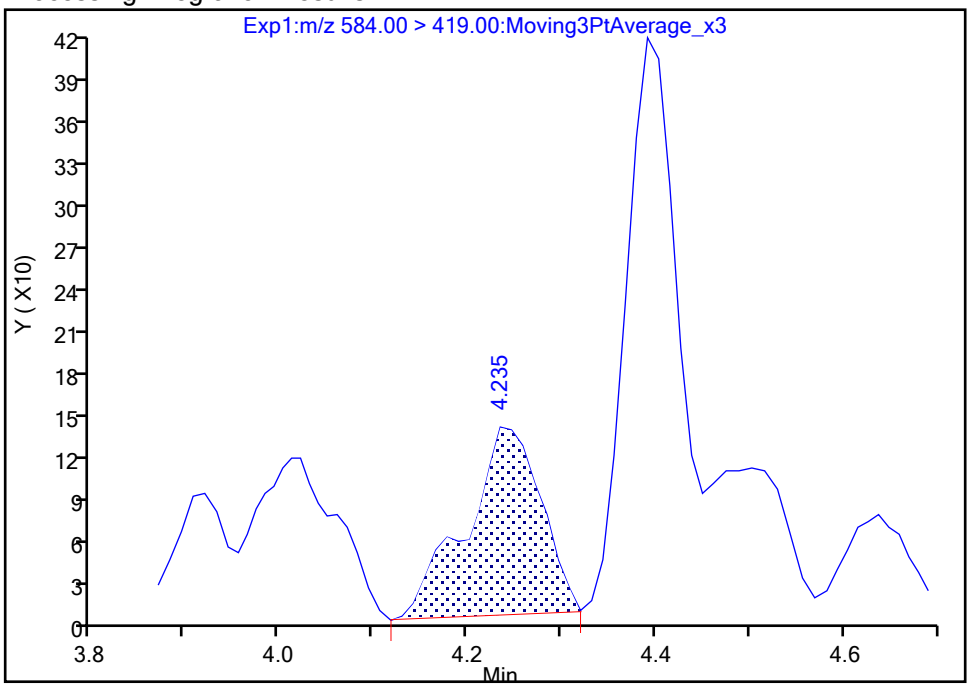
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

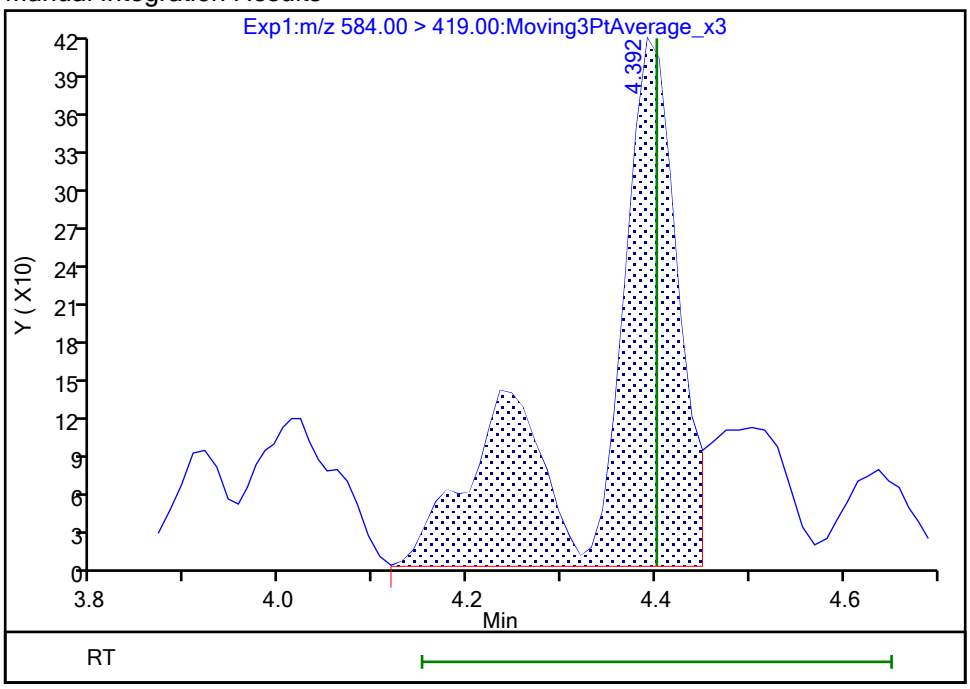
Processing Integration Results

RT: 4.23
Area: 734
Amount: 0.001731
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2350
Amount: 0.005543
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

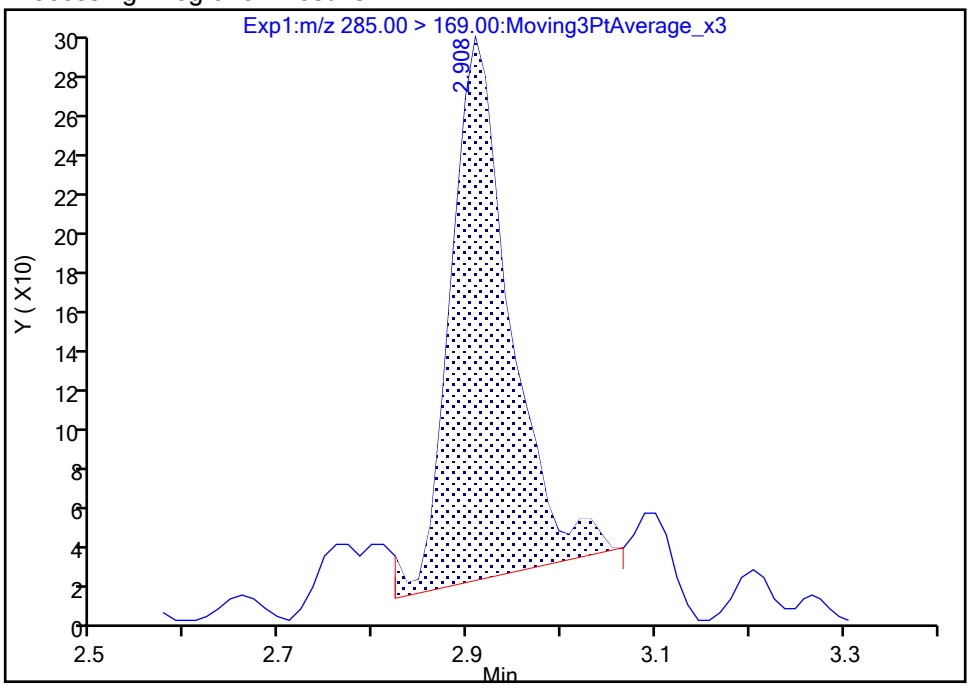
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

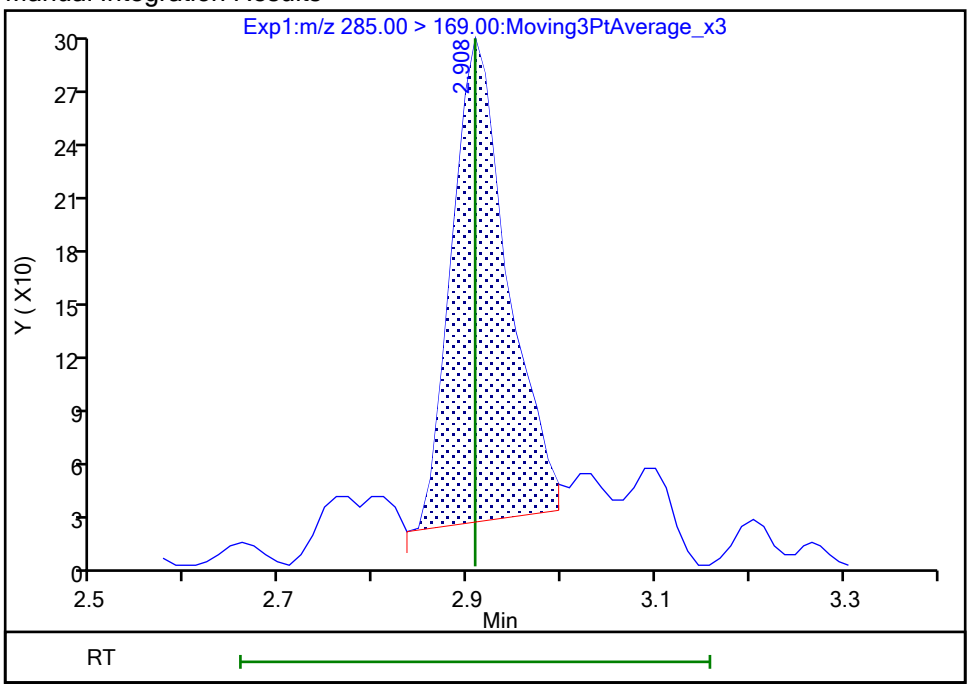
Processing Integration Results

RT: 2.91
Area: 1227
Amount: 0.006059
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 1128
Amount: 0.005570
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:20:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

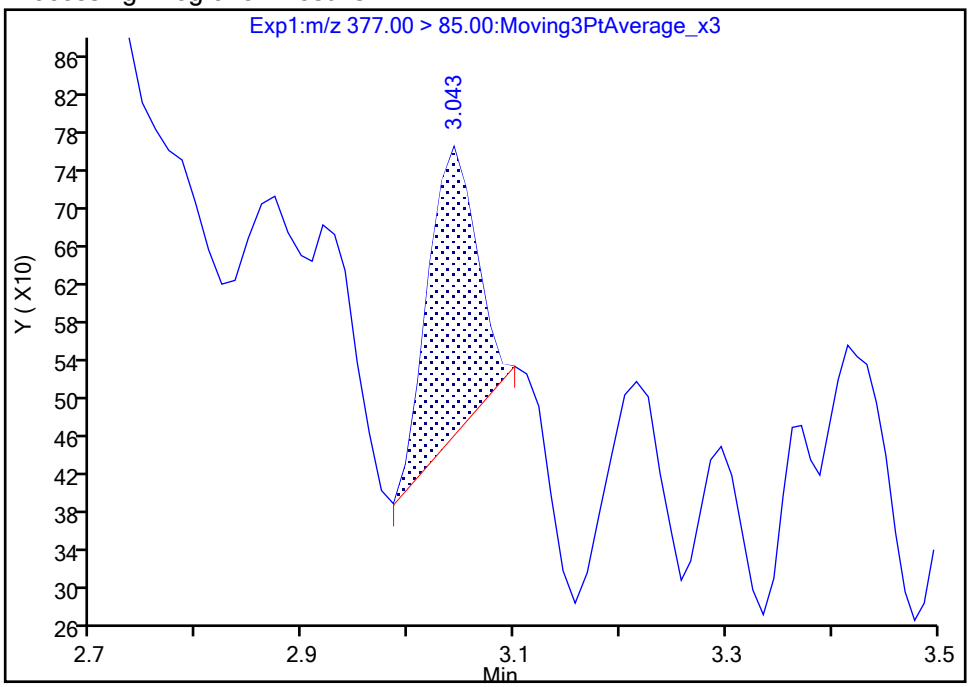
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

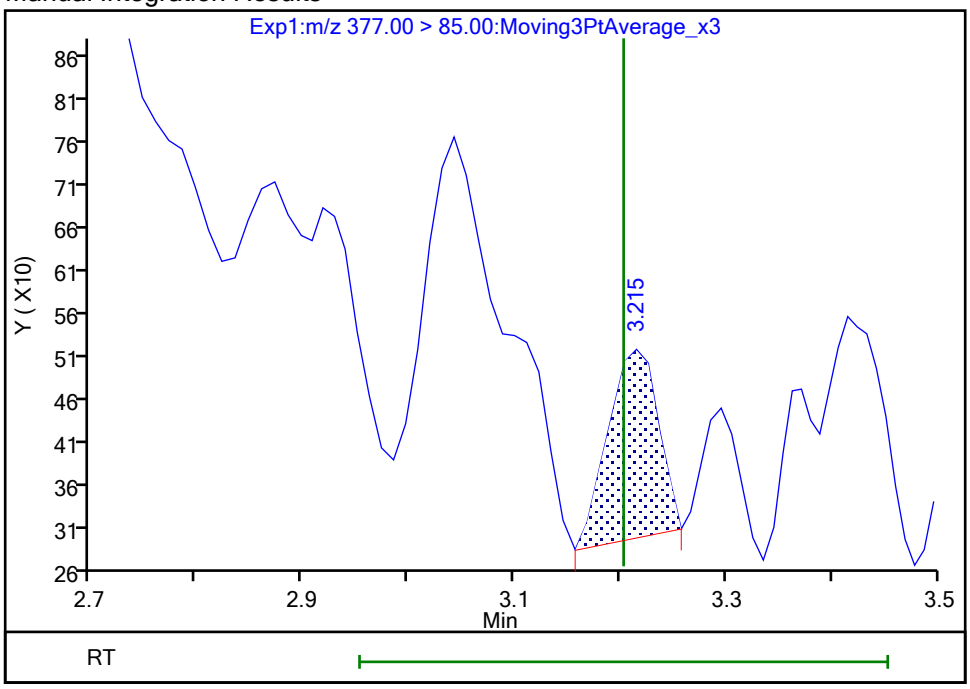
Processing Integration Results

RT: 3.04
Area: 965
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.22
Area: 720
Amount: 0.000169
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

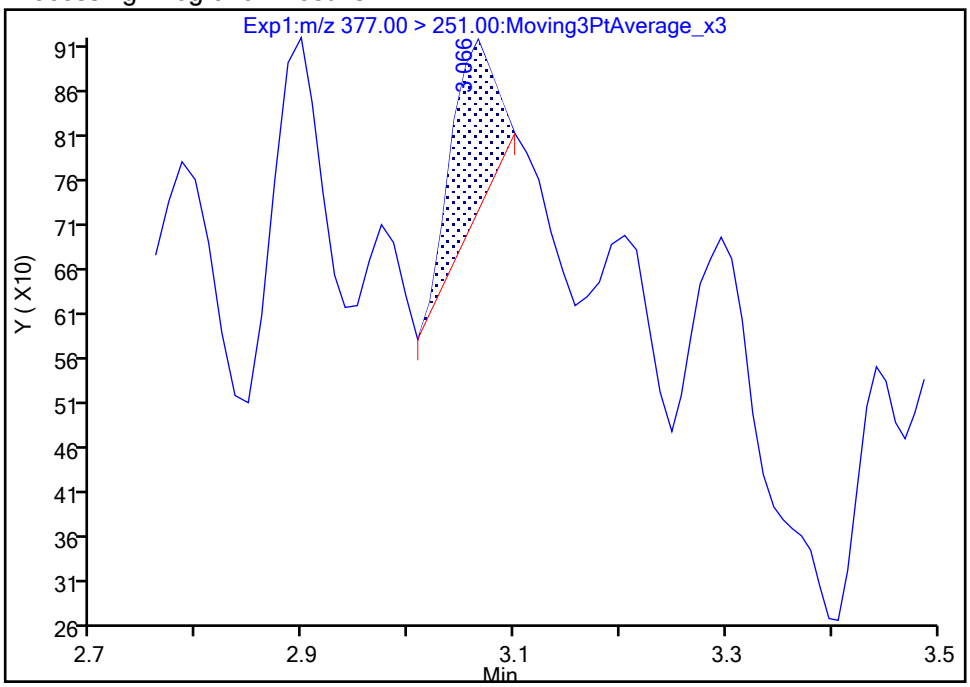
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

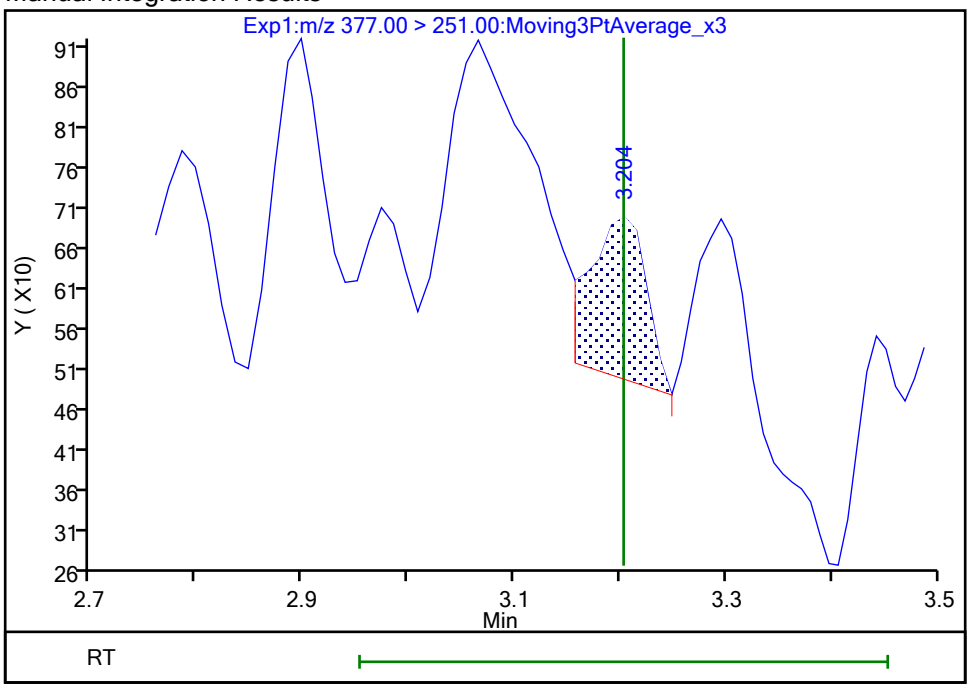
Processing Integration Results

RT: 3.07
Area: 559
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 706
Amount: 0.000169
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:21:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

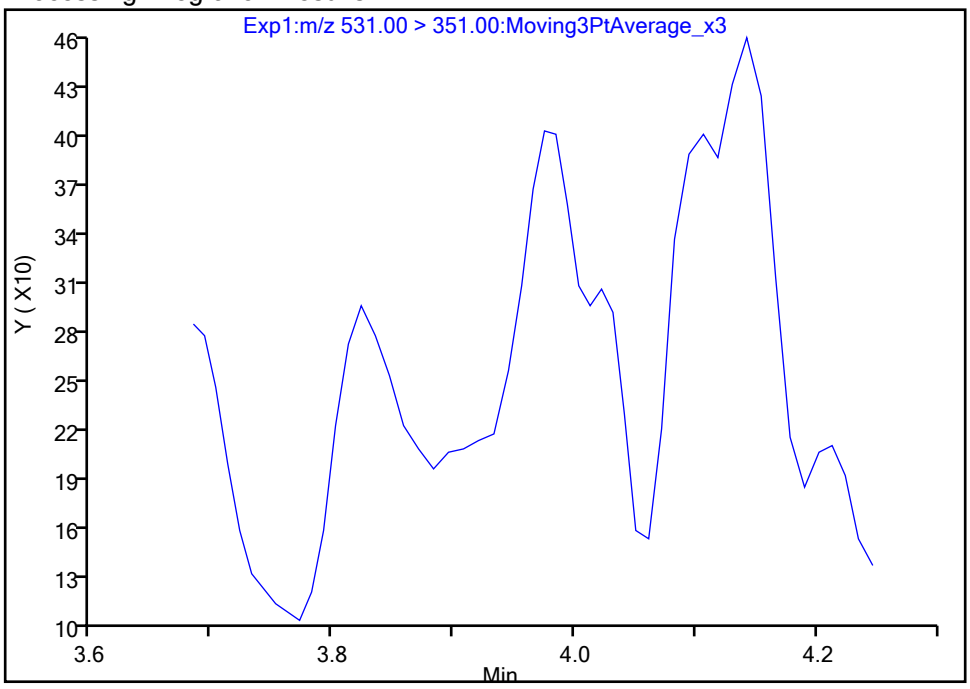
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

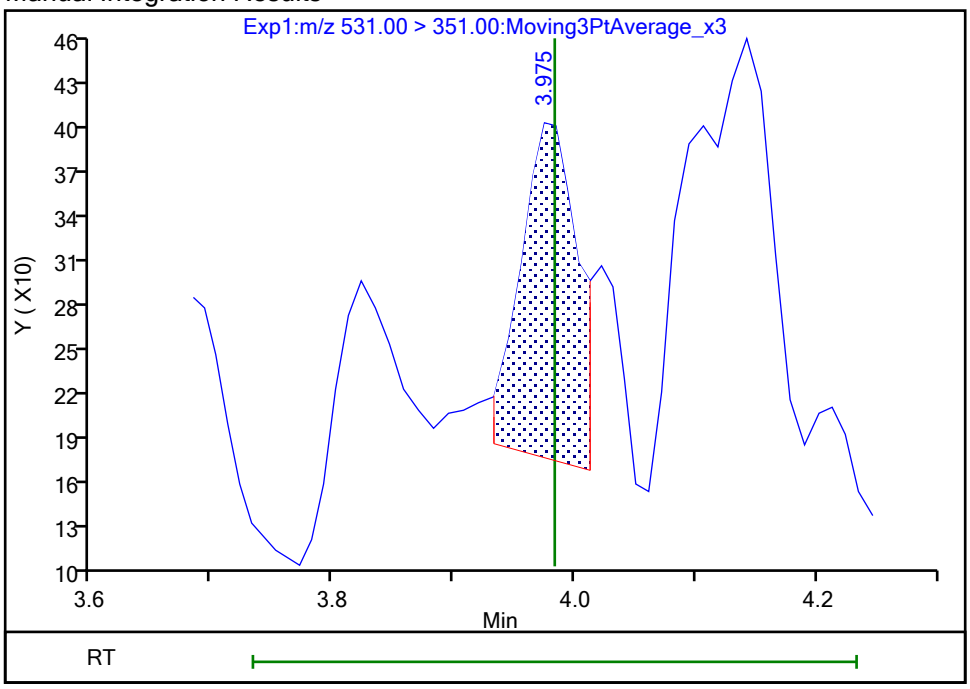
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 711
Amount: 0.000274
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:23:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

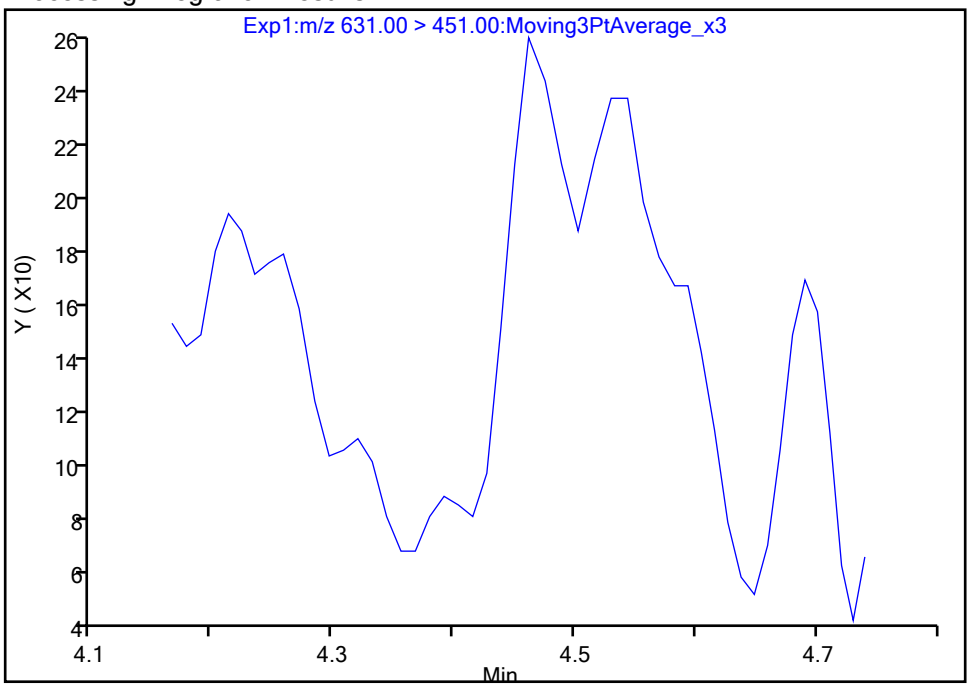
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

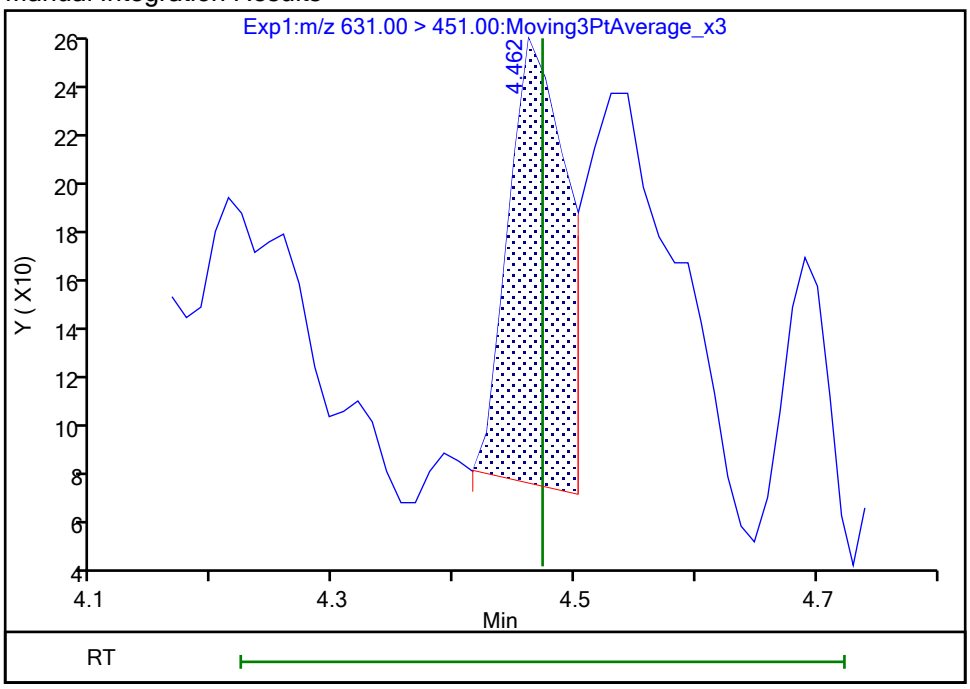
Not Detected
Expected RT: 4.47

Processing Integration Results



Manual Integration Results

RT: 4.46
Area: 553
Amount: 0.000139
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

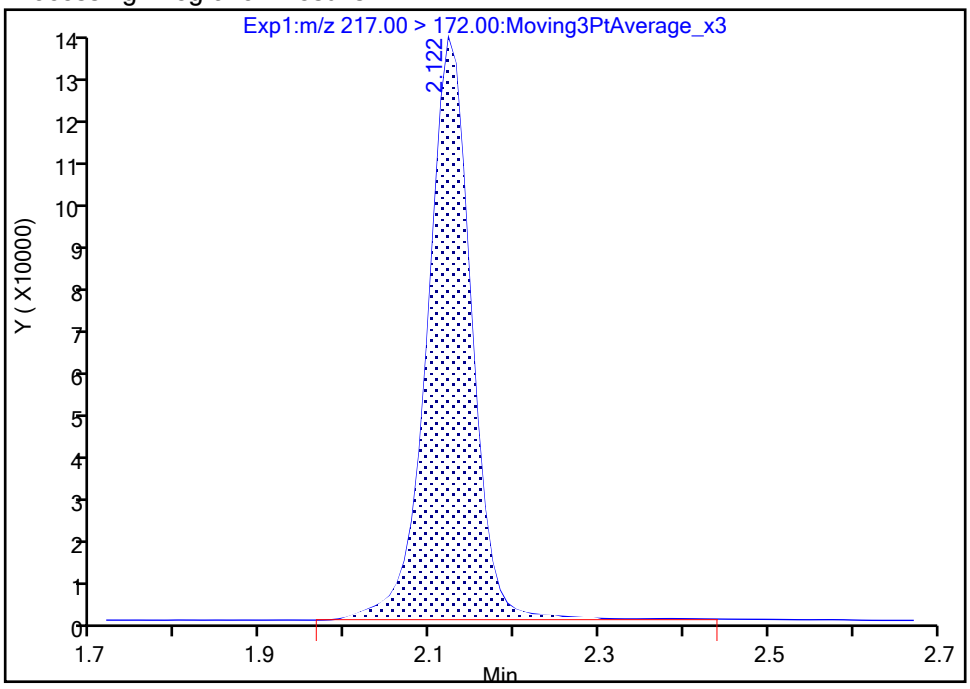
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

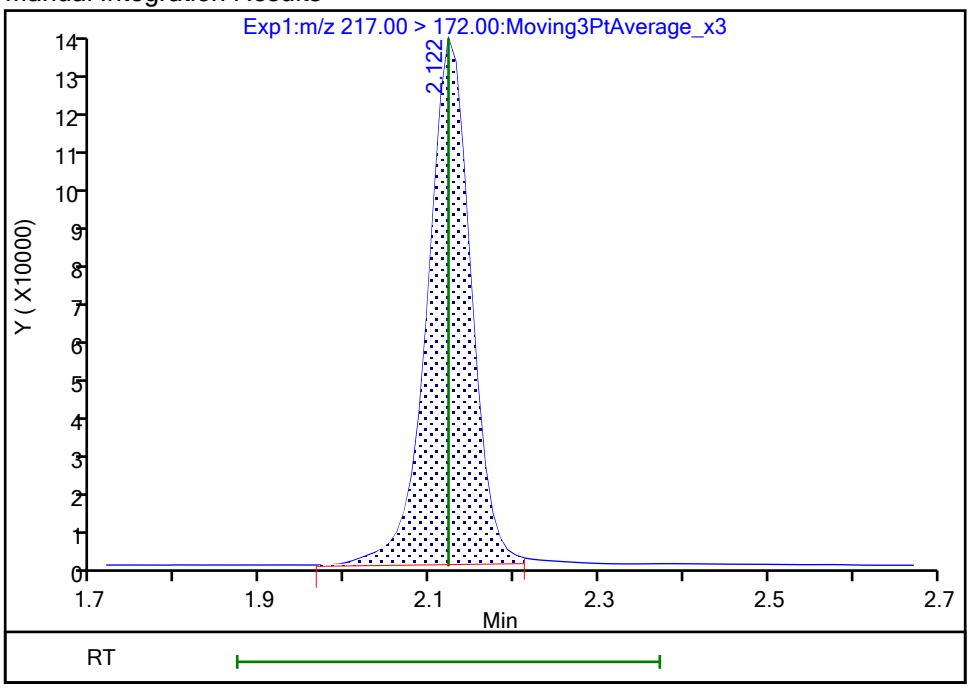
Processing Integration Results

RT: 2.12
Area: 477244
Amount: 0.337507
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 472257
Amount: 0.333980
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:19:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

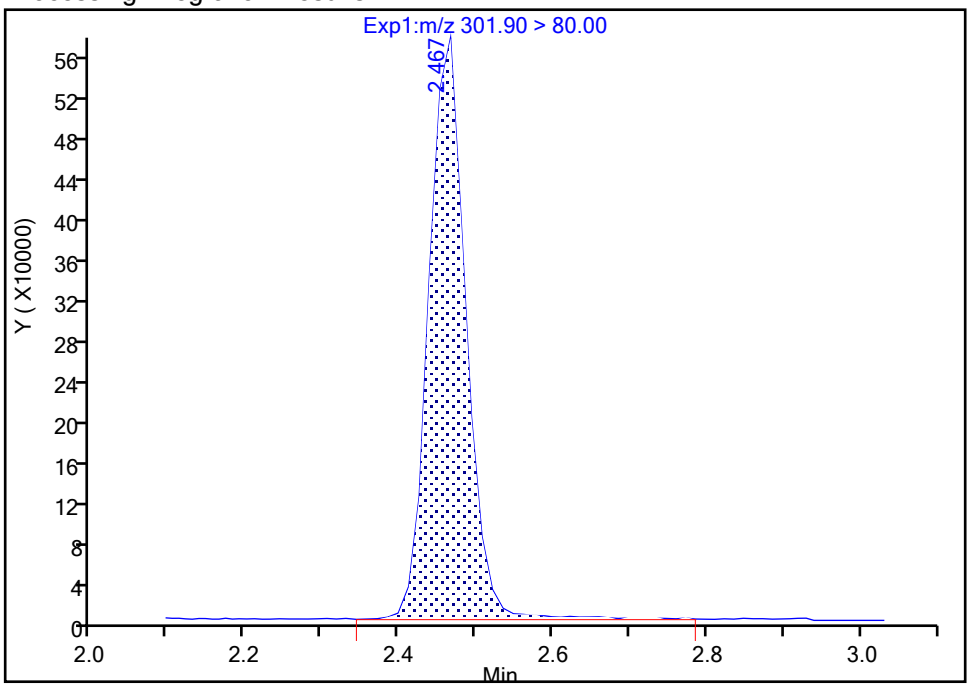
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

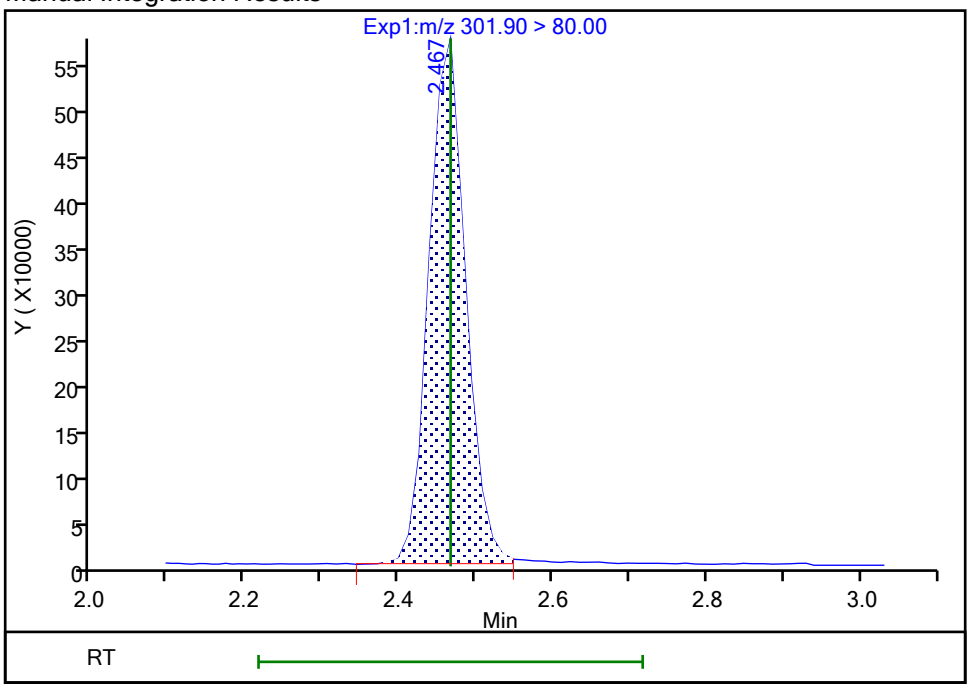
Processing Integration Results

RT: 2.47
Area: 1915873
Amount: 1.290270
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1889554
Amount: 1.272546
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:19:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

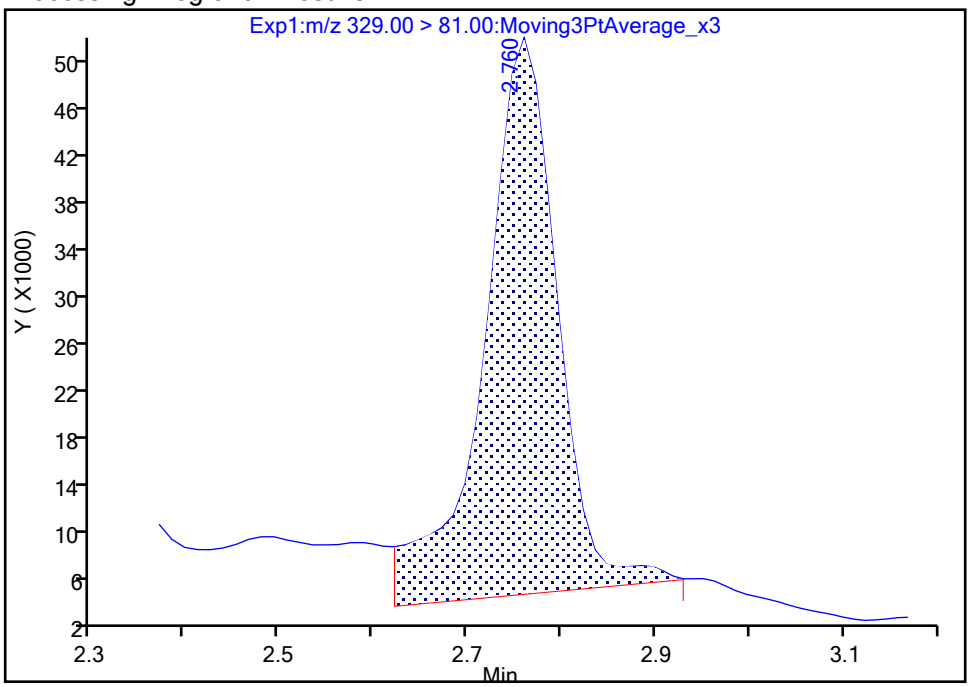
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

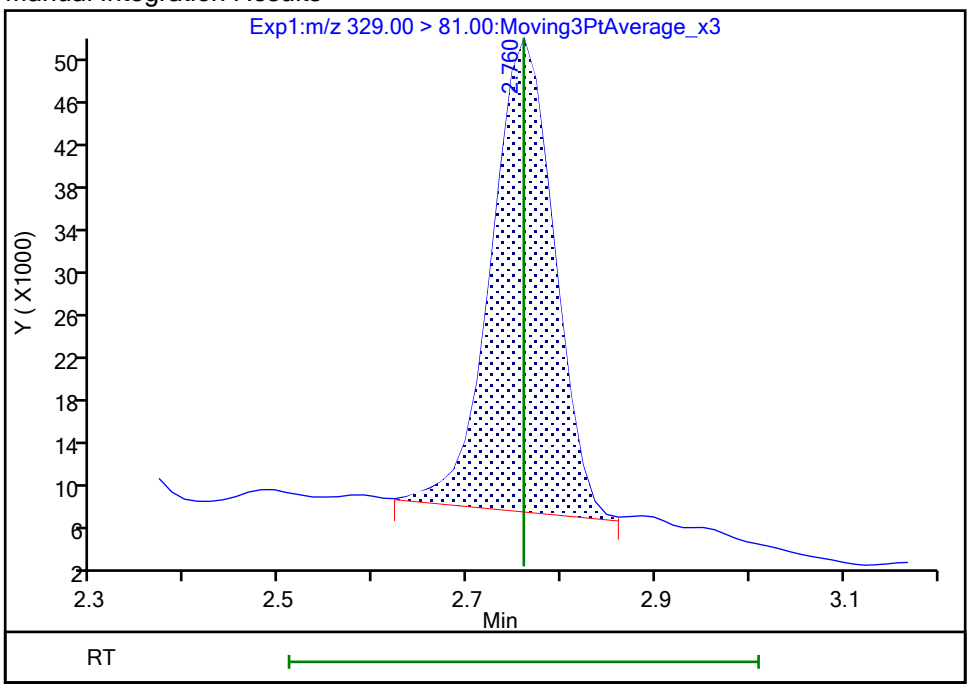
Processing Integration Results

RT: 2.76
Area: 256615
Amount: 1.494386
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 207639
Amount: 1.209177
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:19:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

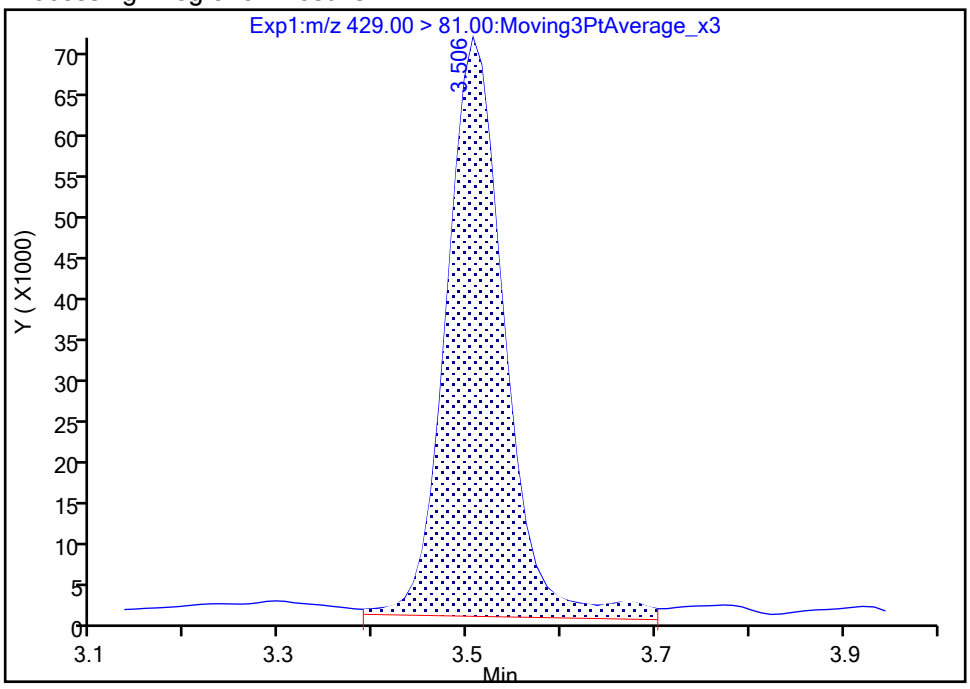
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C06.d				
Injection Date:	23-Oct-2023 23:57:41	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

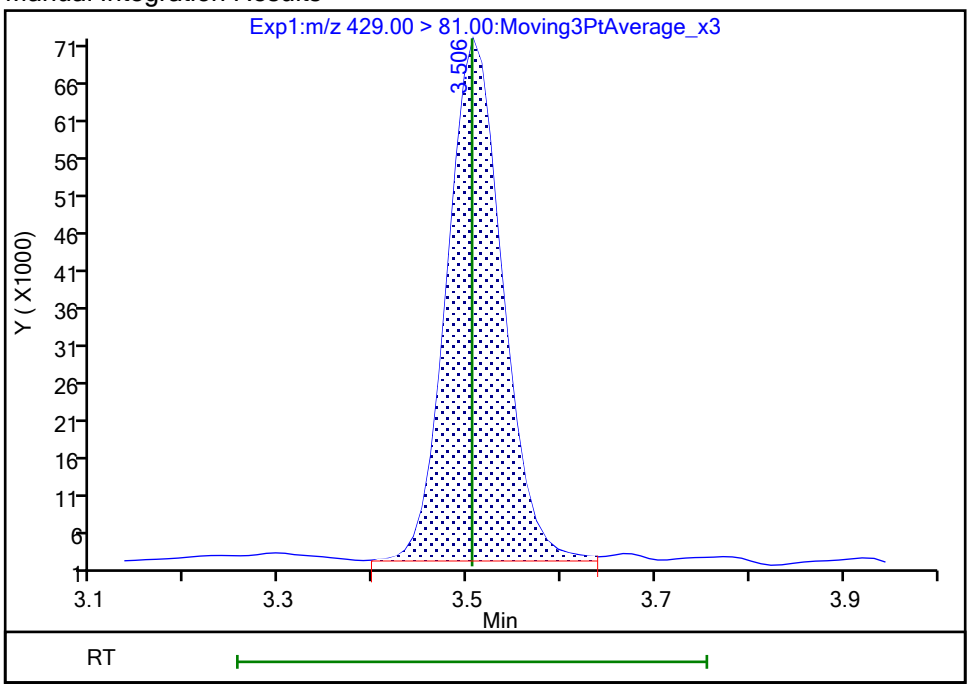
Processing Integration Results

RT: 3.51
Area: 303984
Amount: 1.374452
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 282753
Amount: 1.278457
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:19:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92A-101323-1006-70 DL Lab Sample ID: 460-290375-7 DL

Matrix: Water Lab File ID: PA231026E02.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:06

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 284.8(mL) Date Analyzed: 10/27/2023 10:16

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	1610	D	8.78	3.73

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E02.d
Lims ID: 460-290375-A-7-A
Client ID: MW92A-101323-1006-70
Sample Type: Client
Inject. Date: 27-Oct-2023 10:16:14 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Sample Info: 460-290375-A-7-A
Misc. Info.: 200-0057578-002 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:51:27
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	100464	0.0628		25.1	490	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.139	2.131	0.008	1.004	63532	0.1340			3.4	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	234645	0.1891		75.6	429	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	40939	0.0404			0.7	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.701	390015	0.2322		99.9	17965	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	106974	0.0571	Target=2.06		9.3	
298.90 > 99.00	2.466	2.467	-0.001	1.000	47924		2.23(1.03-3.09)		15.8	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	53368	0.2748		118	6.6	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	280762	0.2224		88.9	861	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	105794	0.0856	Target=14.12		4.3	
313.00 > 119.00	2.785	2.797	-0.012	0.996	9126		11.59(7.06-21.17)		7.3	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.884	129371	0.0824	Target=2.72		9.1	
349.00 > 99.00	2.797	2.797	0.0	0.884	58369		2.22(1.36-4.09)		45.5	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.885	2.897	-0.012	0.996	665	0.003122			4.0	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.908	-0.011	0.823	53193	0.2176		87.1	507	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.153	0.012	0.899	284389	0.2363		99.9	1805	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.165	3.153	0.012	1.000	289952	0.2178	Target=3.32		68.8	
399.00 > 99.00	3.153	3.153	0.0	0.996	144280		2.01(1.66-4.98)		91.5	
10 Perfluoroheptanoic acid										R
363.00 > 319.00	3.165	3.165	0.0	1.000	93583	0.0613	Target=4.17		3.9	R
363.00 > 169.00	3.165	3.165	0.0	1.000	13935		6.72(2.09-6.26)		17.1	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.899	340759	0.2460		98.4	1467	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.915	98121	0.0909	Target=4.83		18.1	
449.00 > 99.00	3.502	3.502	0.0	0.915	32695		3.00(2.41-7.24)		11.9	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.502	0.009	0.997	71987	0.2878		121	27.5	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	0.997	938	0.001132			1.6	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.512	0.008	1.003	263465	0.1570	Target=2.88		6.0	
413.00 > 169.00	3.520	3.512	0.008	1.003	120982		2.18(1.44-4.32)		137	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.512	-0.001	0.997	393854	0.2510		100	2626	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.512	0.008		403165	0.2500			2621	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.826	3.819	0.007	1.000	8004722	9.19	Target=4.24		3451	M
499.00 > 99.00	3.816	3.819	-0.003	0.997	2456173		3.26(2.12-6.37)		2026	M
D 18 13C4 PFOS										
503.00 > 80.00	3.826	3.819	0.007	1.087	178474	0.2334		97.7	134	
D 19 13C5 PFNA										
468.00 > 423.00	3.850	3.842	0.008	1.094	487011	0.2852		114	2522	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.970	3.971	-0.001	1.037	1831	0.000687			4.2	
68 Perfluorononanesulfonic acid										R
549.00 > 80.00	3.989	4.101	-0.112	1.042	9359	0.0141	Target=2.17		11.0	R
549.00 > 99.00	3.970	4.101	-0.131	1.037	2294		4.08(1.08-3.25)		5.8	
D 23 13C2 PFDA										
515.00 > 470.00	4.135	4.125	0.010	1.175	498942	0.2790		112	6840	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.937	4.136	-0.199	0.952	911	0.000457	Target=11.44		0.3	R
513.00 > 169.00	3.970	4.136	-0.166	0.960	264		3.45(5.72-17.16)		2.0	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.135	4.136	-0.001	1.175	73117	0.2600		109	113	
D 21 13C8 FOSA										
506.00 > 78.00	4.228	4.230	-0.002	1.201	342029	0.2241		89.7	1422	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.264	4.266	-0.002	1.211	100269	0.2346		93.8	655	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.290	4.266	0.024	1.006	1112	0.003055			11.8	
29 Perfluorodecanesulfonic acid										R
599.00 > 80.00	4.228	4.351	-0.123	1.105	2982	0.005847	Target=2.37		13.9	R
599.00 > 99.00	4.217	4.351	-0.134	1.102	512		5.82(1.19-3.56)		3.3	
D 30 13C2 PFUnA										
565.00 > 520.00	4.385	4.387	-0.002	1.246	427316	0.2531		101	1670	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.397	4.399	-0.002	1.249	98467	0.2393		95.7	277	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.421	4.399	0.022	1.005	2371	0.006019			7.9	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.481	4.468	0.013	1.171	3200	0.000783			4.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.609	4.610	-0.001	1.309	424547	0.2475		99.0	1522	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.980	0.009	1.417	354798	0.2077		83.1	1165	

QC Flag Legend

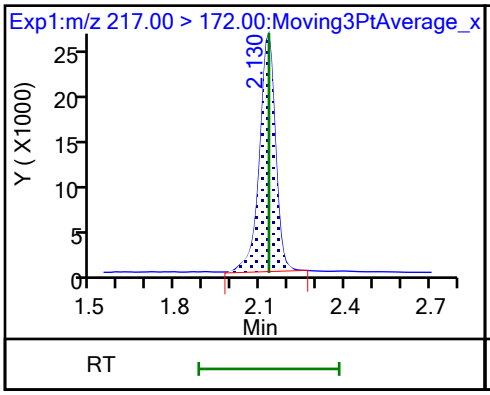
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 27-Oct-2023 18:44:21 Chrom Revision: 2.3 18-Oct-2023 21:16:54

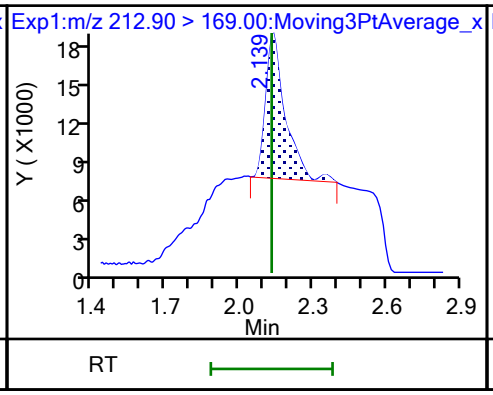
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E02.d
Injection Date: 27-Oct-2023 10:16:14 Instrument ID: LC812
Lims ID: 460-290375-A-7-A Lab Sample ID: 200-290375-7
Client ID: MW92A-101323-1006-70
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

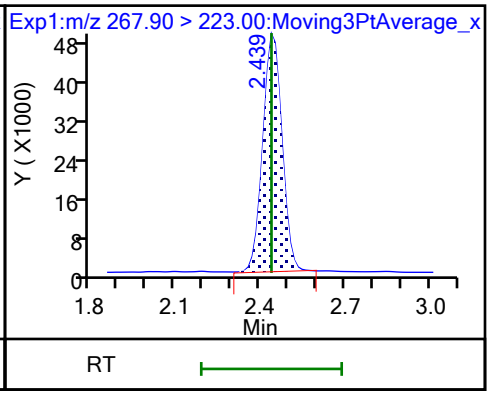
D 1 13C4 PFBA



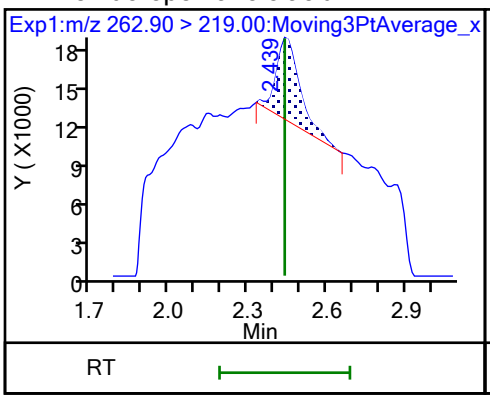
2 Perfluorobutanoic acid



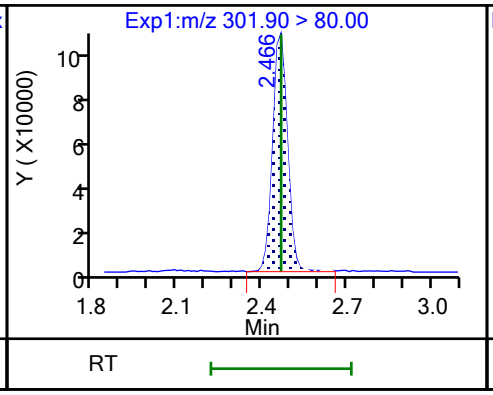
D 3 13C5 PFPeA



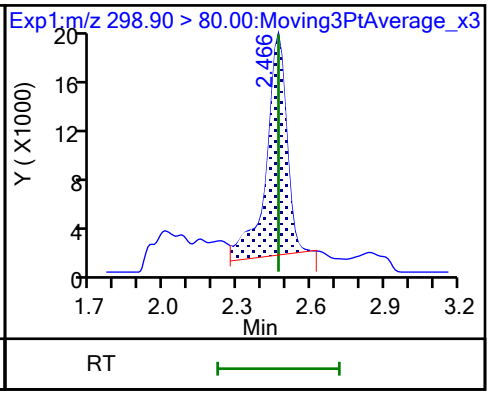
4 Perfluoropentanoic acid



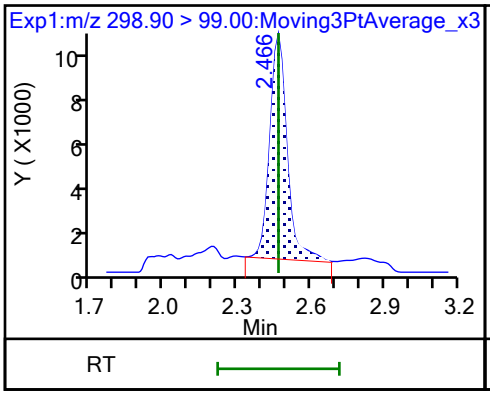
D 47 13C3 PFBS



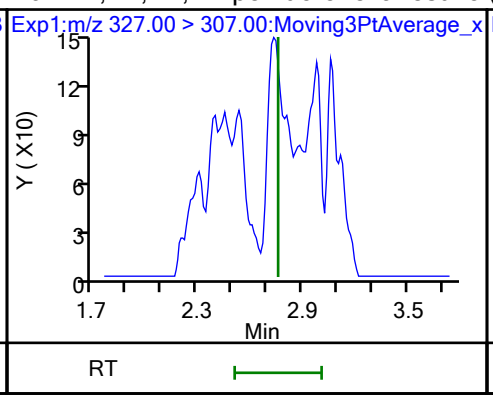
5 Perfluorobutanesulfonic acid



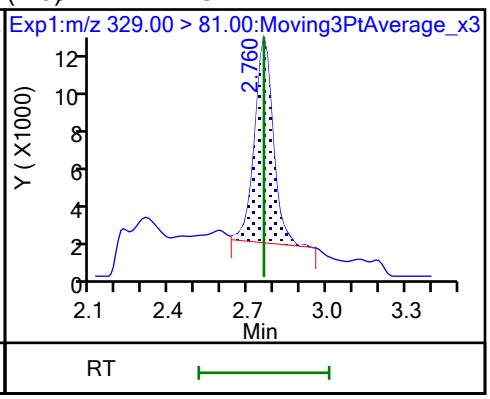
5 Perfluorobutanesulfonic acid



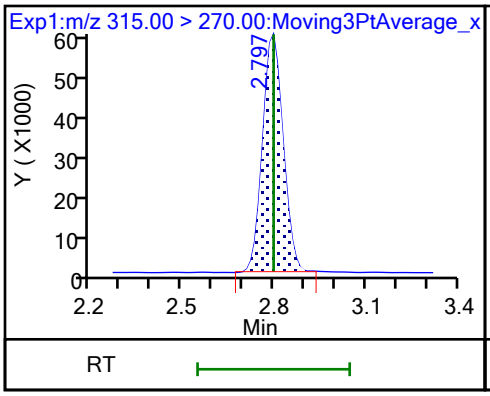
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



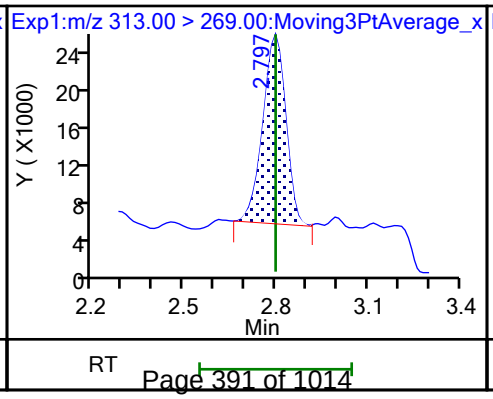
D 30 M2-4:2 FTS



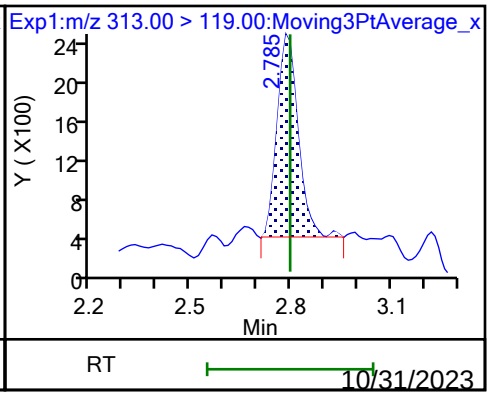
D 7 13C2 PFHxA



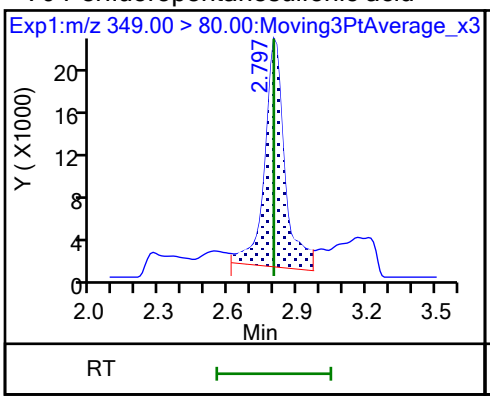
6 Perfluorohexanoic acid



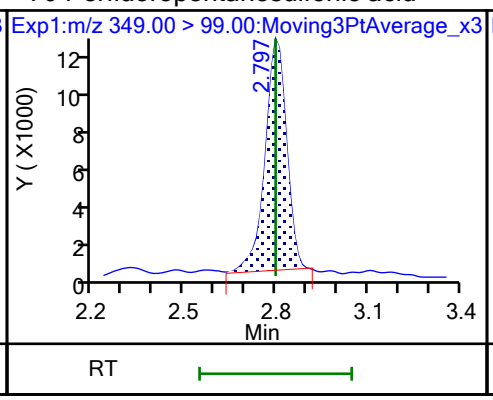
6 Perfluorohexanoic acid



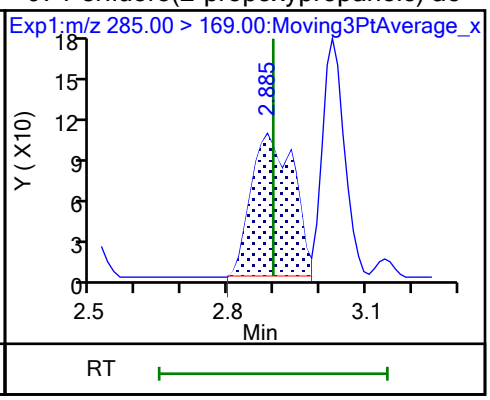
70 Perfluoropentanesulfonic acid



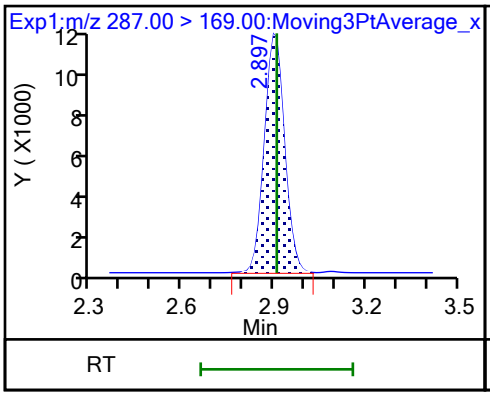
70 Perfluoropentanesulfonic acid



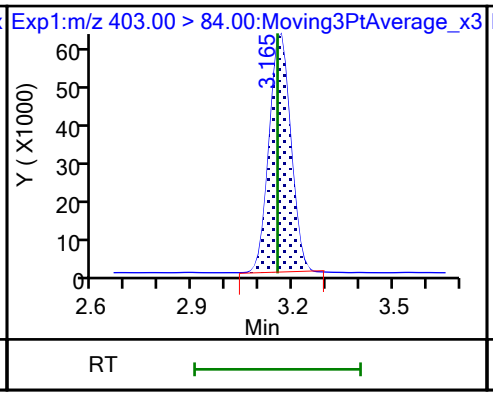
67 Perfluoro(2-propoxypropanoic) ac



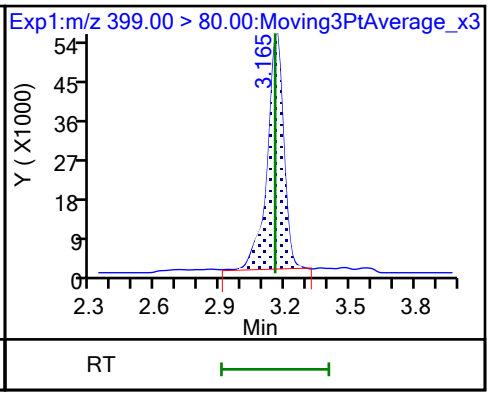
D 64 13C3 HFPO-DA



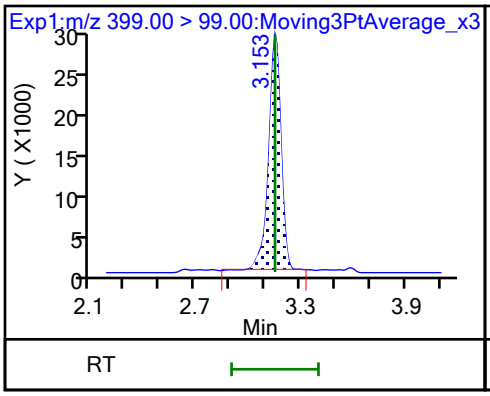
D 11 18O2 PFHxS



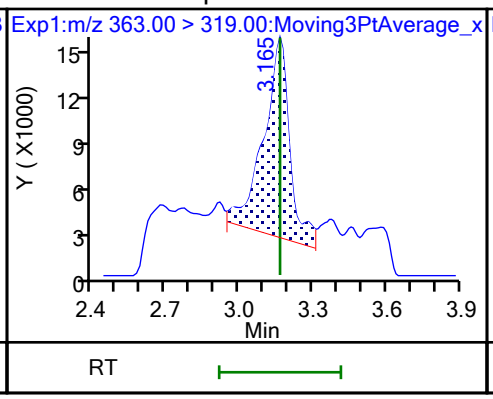
8 Perfluorohexanesulfonic acid



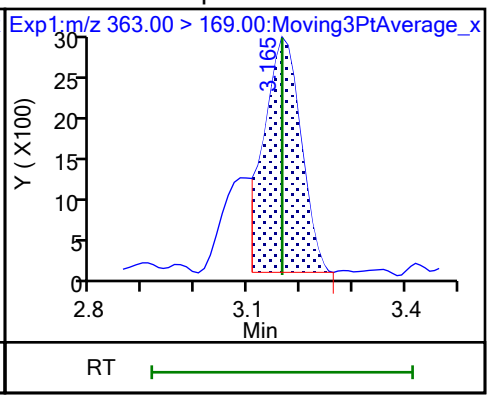
8 Perfluorohexanesulfonic acid



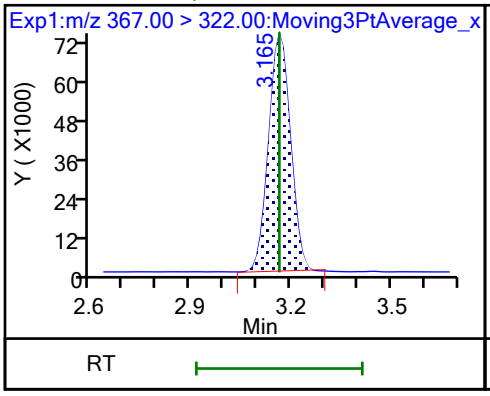
10 Perfluoroheptanoic acid



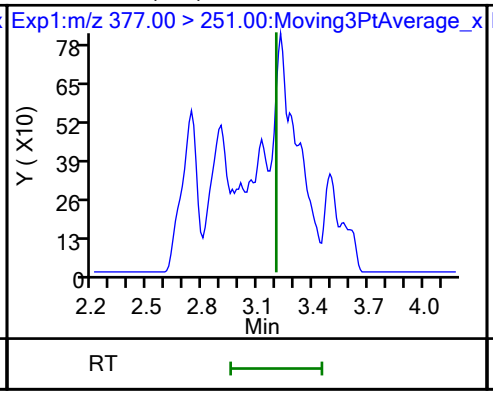
10 Perfluoroheptanoic acid



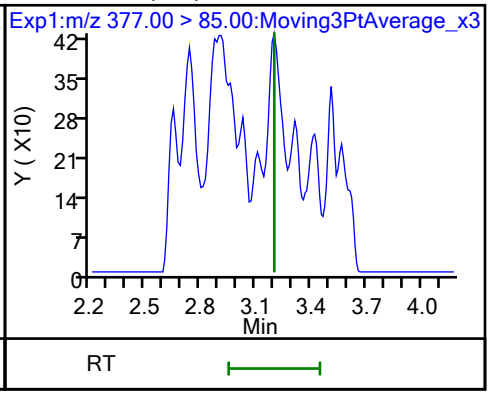
D 9 13C4 PFHpA



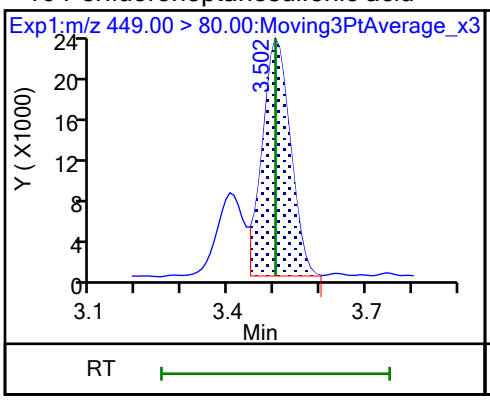
77 DONA (ND)



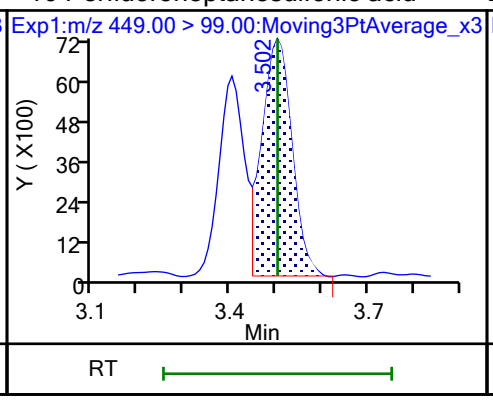
77 DONA (ND)



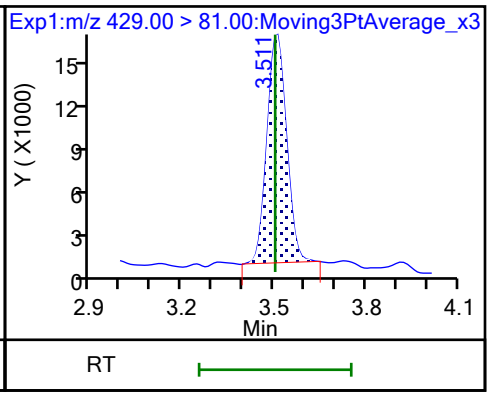
16 Perfluoroheptanesulfonic acid



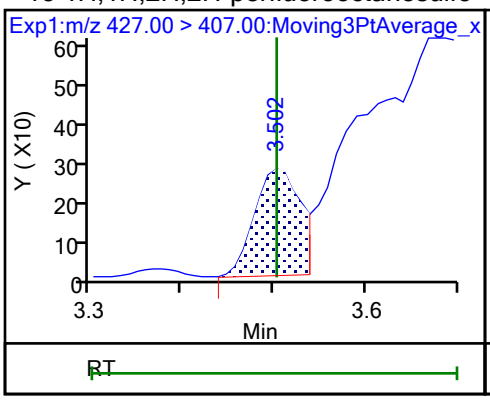
16 Perfluoroheptanesulfonic acid



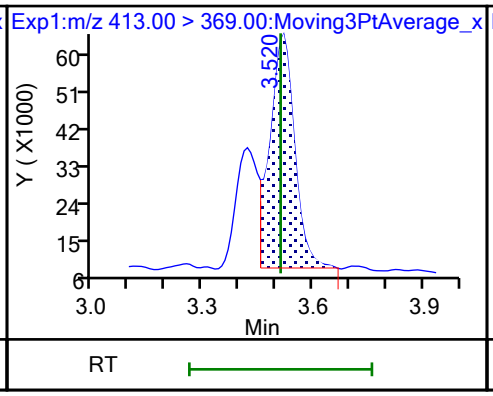
D 12 M2-6:2 FTS



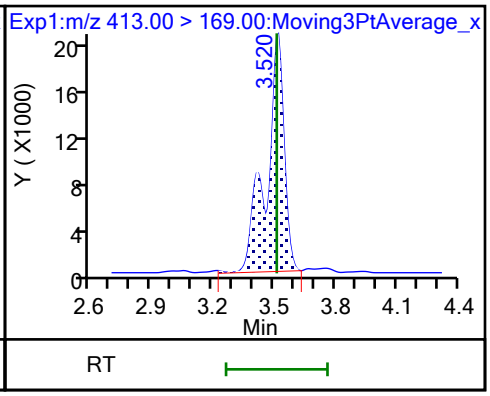
13 1H,1H,2H,2H-perfluorooctanesulfo



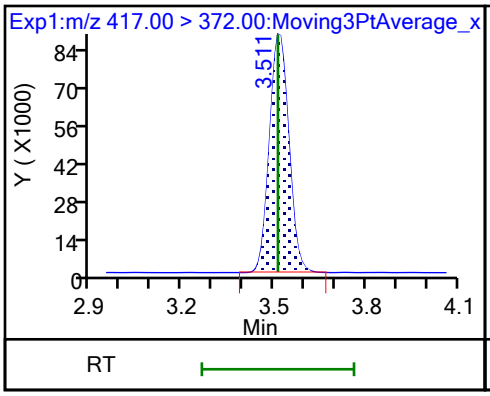
15 Perfluorooctanoic acid



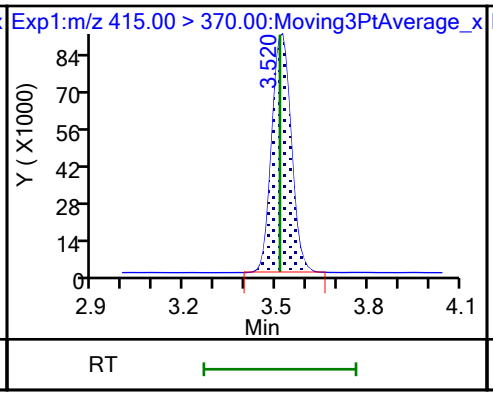
15 Perfluorooctanoic acid



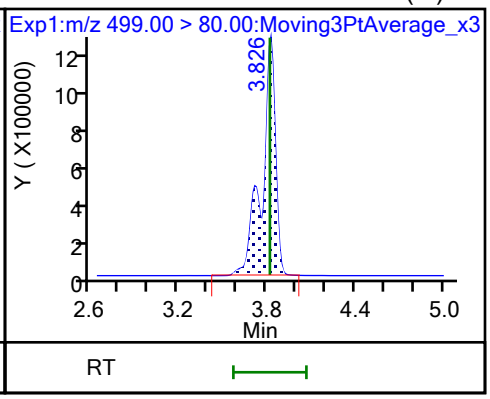
D 14 13C4 PFOA



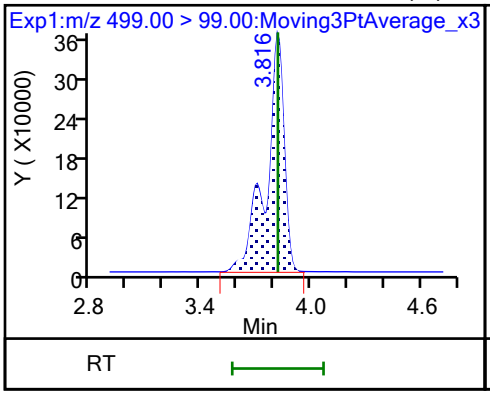
* 62 13C2 PFOA



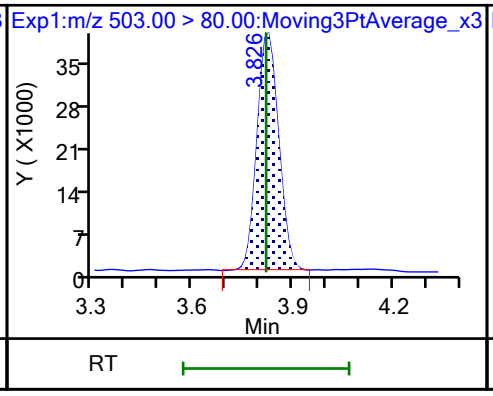
17 Perfluorooctanesulfonic acid (M)



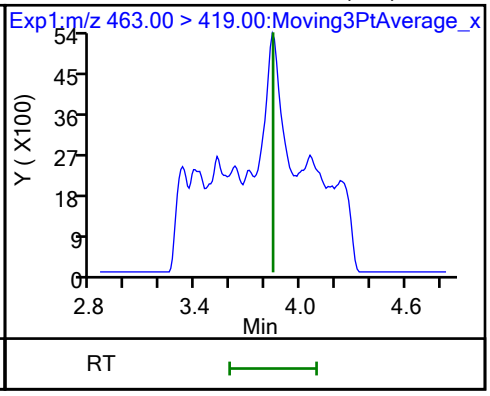
17 Perfluorooctanesulfonic acid (M)



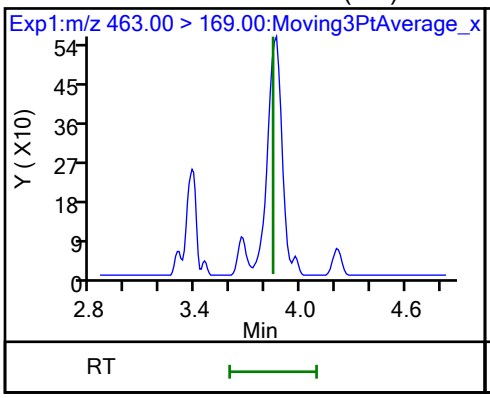
D 18 13C4 PFOS



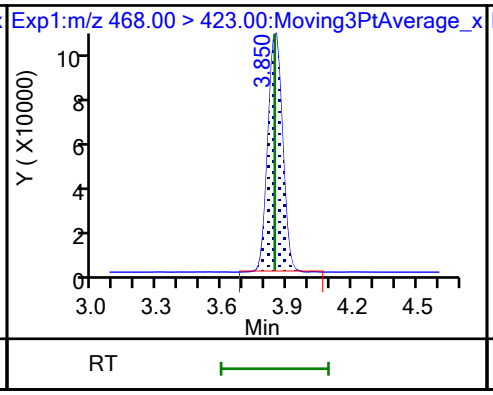
20 Perfluorononanoic acid (ND)



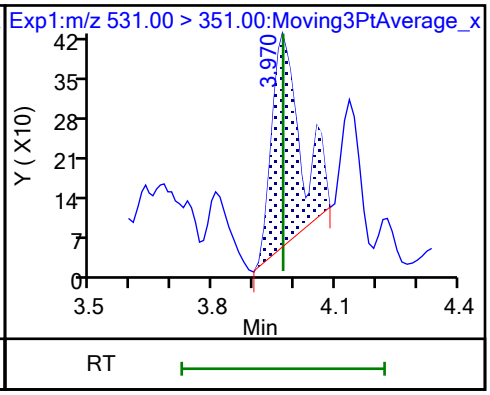
20 Perfluorononanoic acid (ND)



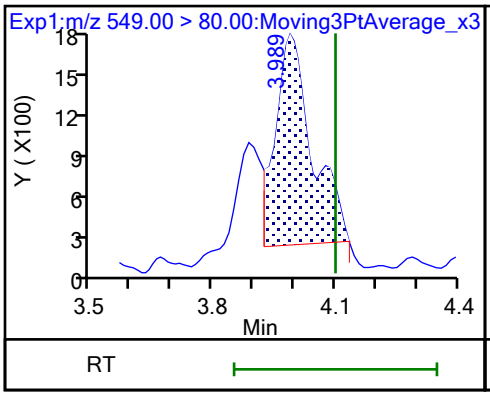
D 19 13C5 PFNA



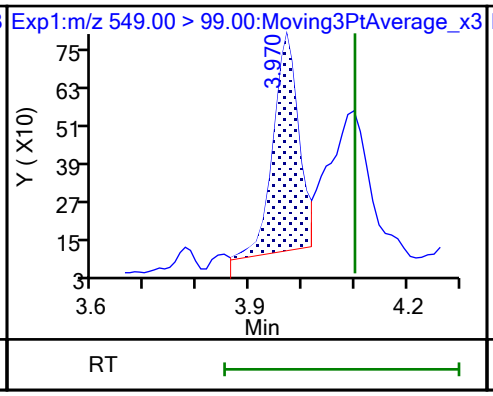
69 9-Chlorohexadecafluoro-3-oxanona



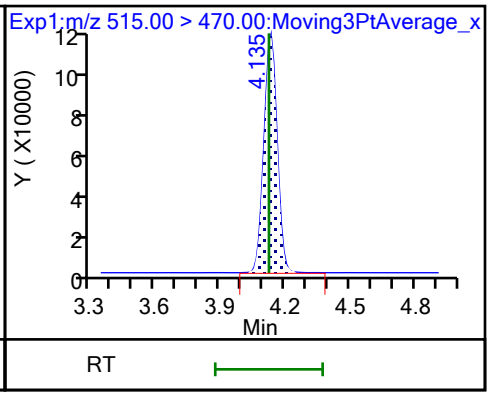
68 Perfluorononanesulfonic acid



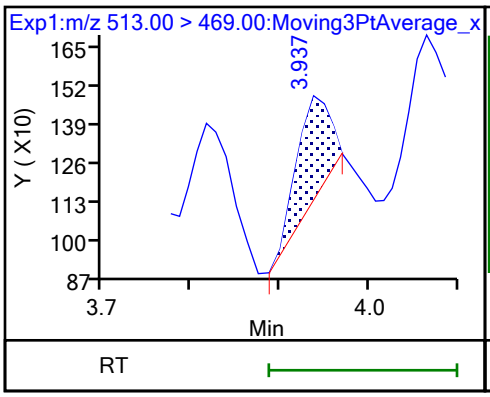
68 Perfluorononanesulfonic acid



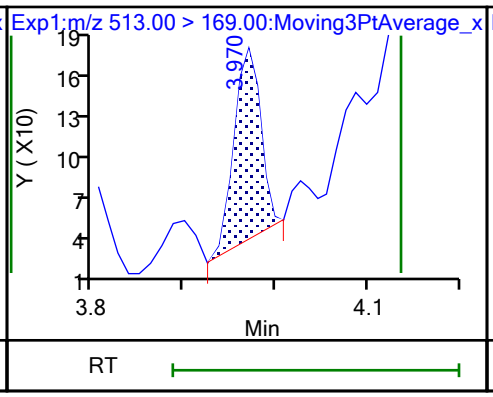
D 23 13C2 PFDA



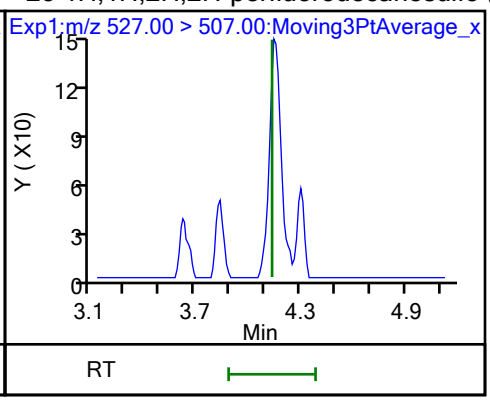
24 Perfluorodecanoic acid



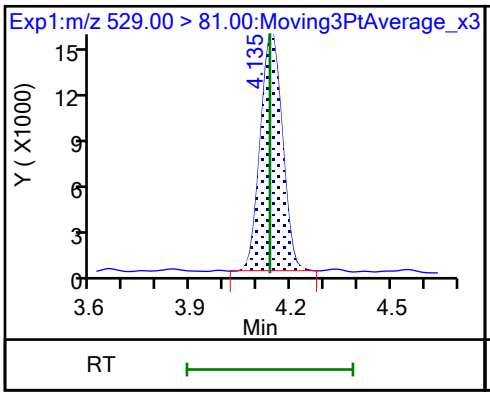
24 Perfluorodecanoic acid



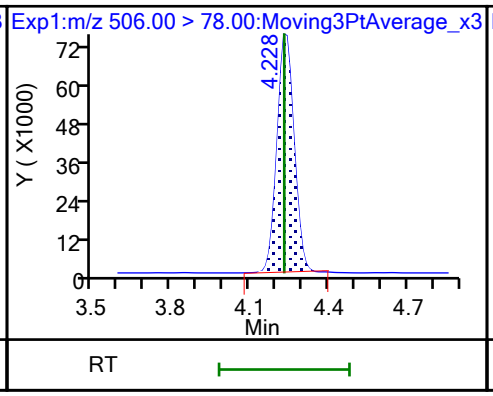
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



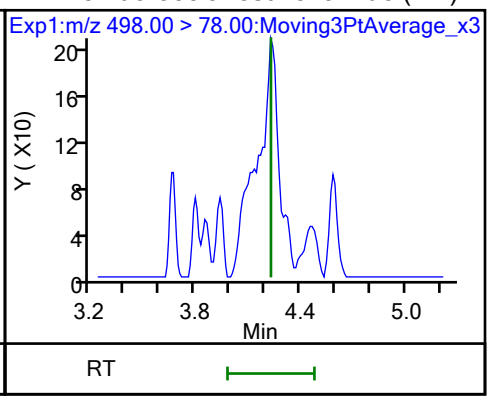
D 26 M2-8:2 FTS



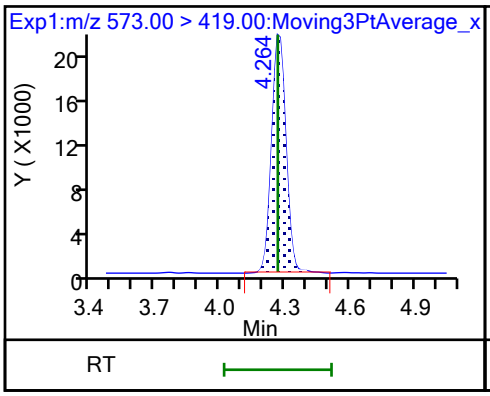
D 21 13C8 FOSA



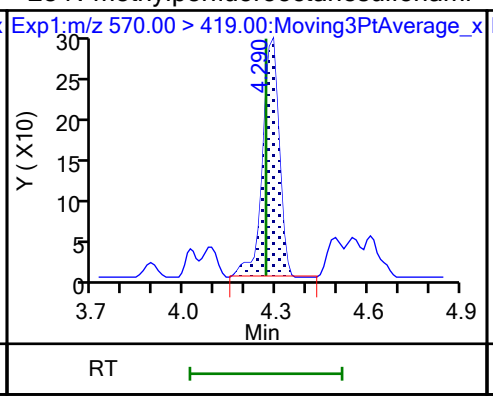
22 Perfluorooctanesulfonamide (ND)



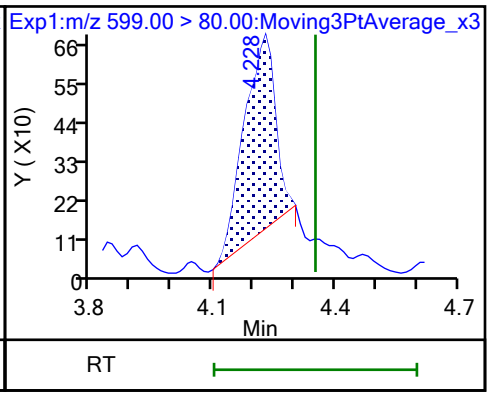
D 27 d3-NMeFOSAA



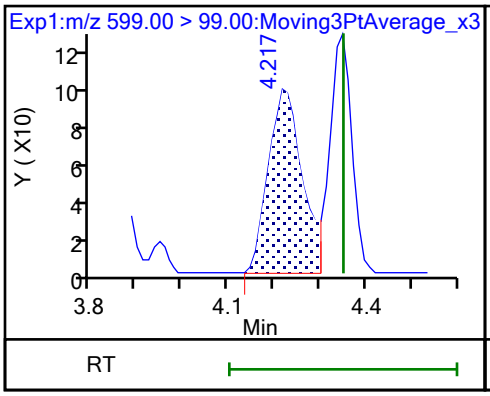
28 N-methylperfluorooctanesulfonami



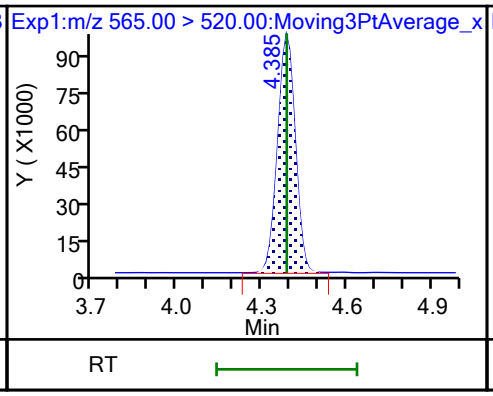
29 Perfluorodecanesulfonic acid



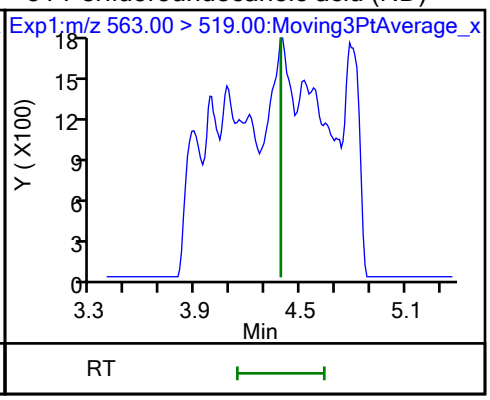
29 Perfluorodecanesulfonic acid



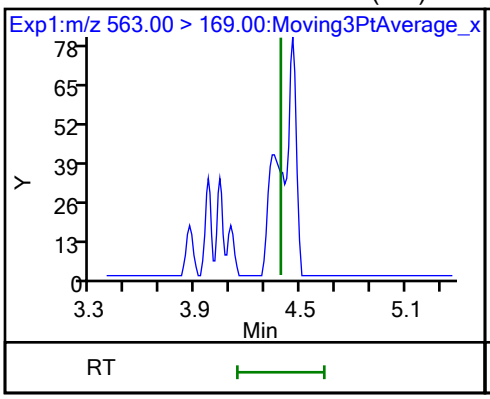
D 30 13C2 PFUnA



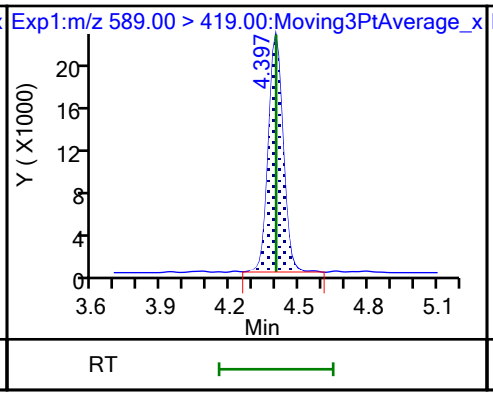
31 Perfluoroundecanoic acid (ND)



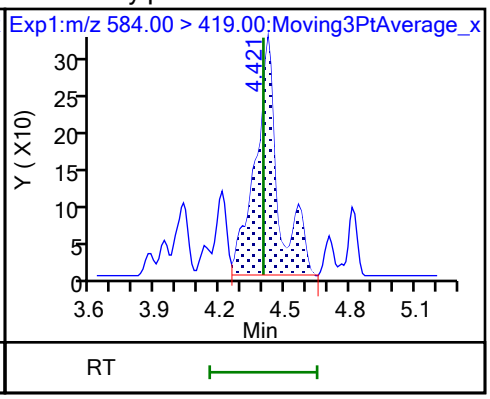
31 Perfluoroundecanoic acid (ND)



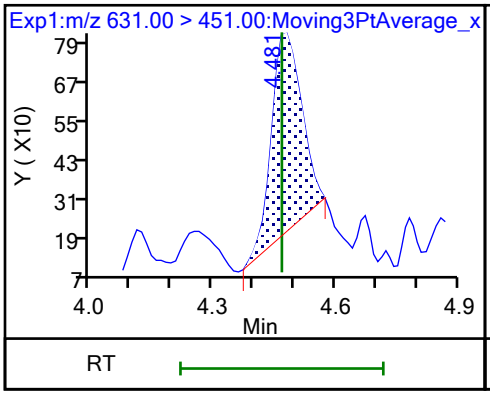
D 32 d5-NEtFOSAA



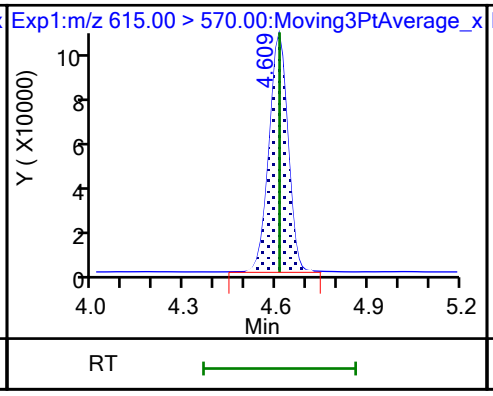
33 N-ethylperfluorooctanesulfonamid



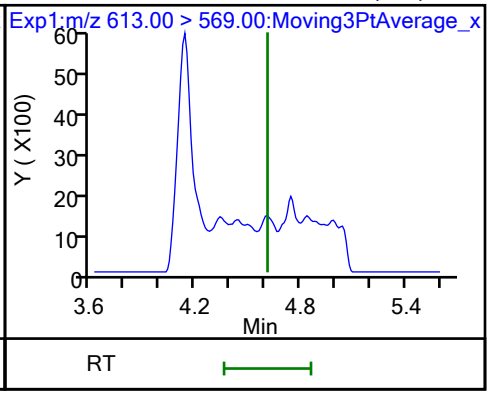
66 11-Chloroeicosafluoro-3-oxaundec



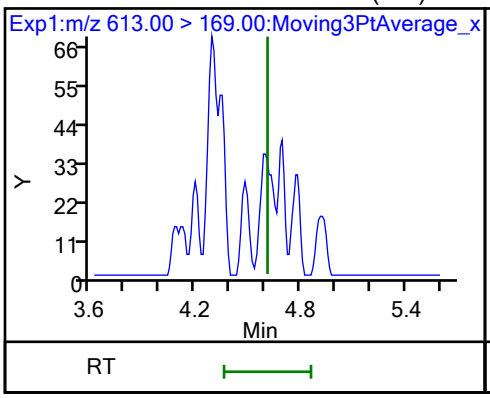
D 36 13C2 PFDoA



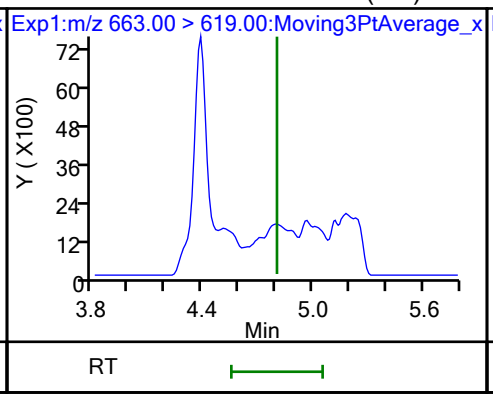
37 Perfluorododecanoic acid (ND)



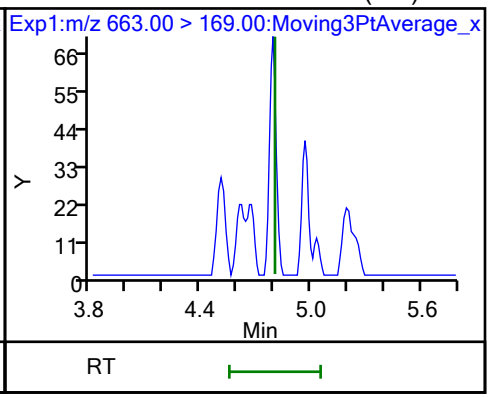
37 Perfluorododecanoic acid (ND)



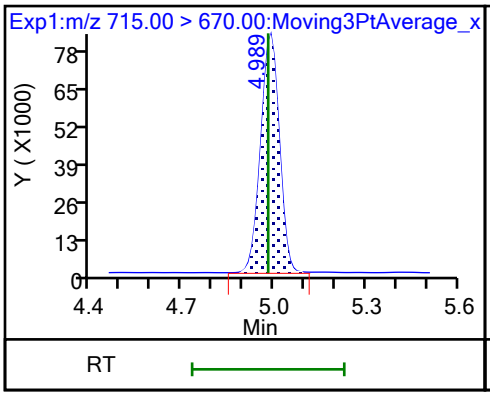
41 Perfluorotridecanoic acid (ND)



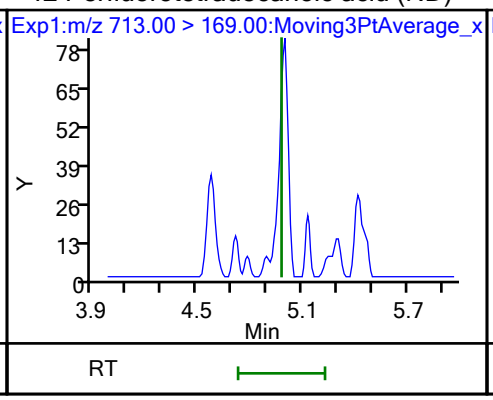
41 Perfluorotridecanoic acid (ND)



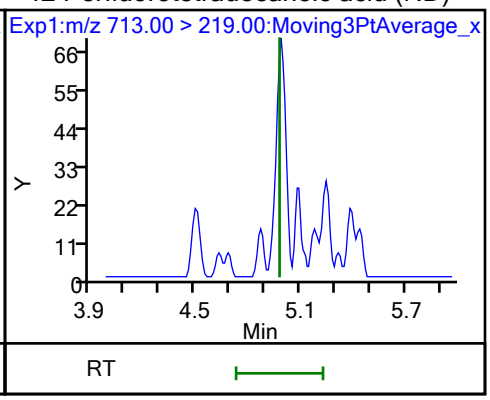
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

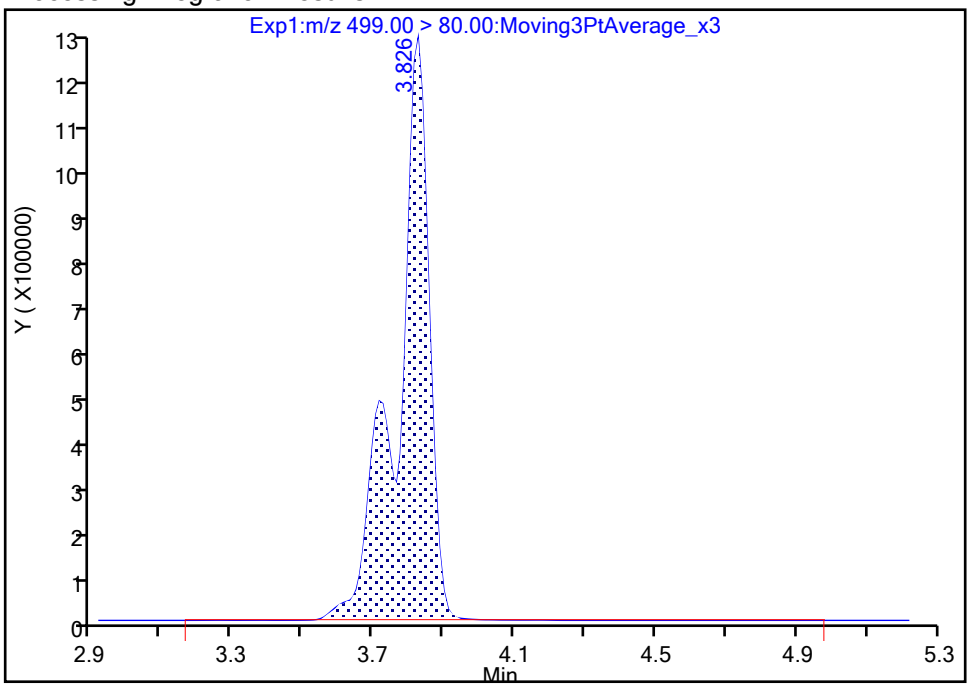
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E02.d				
Injection Date:	27-Oct-2023 10:16:14	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

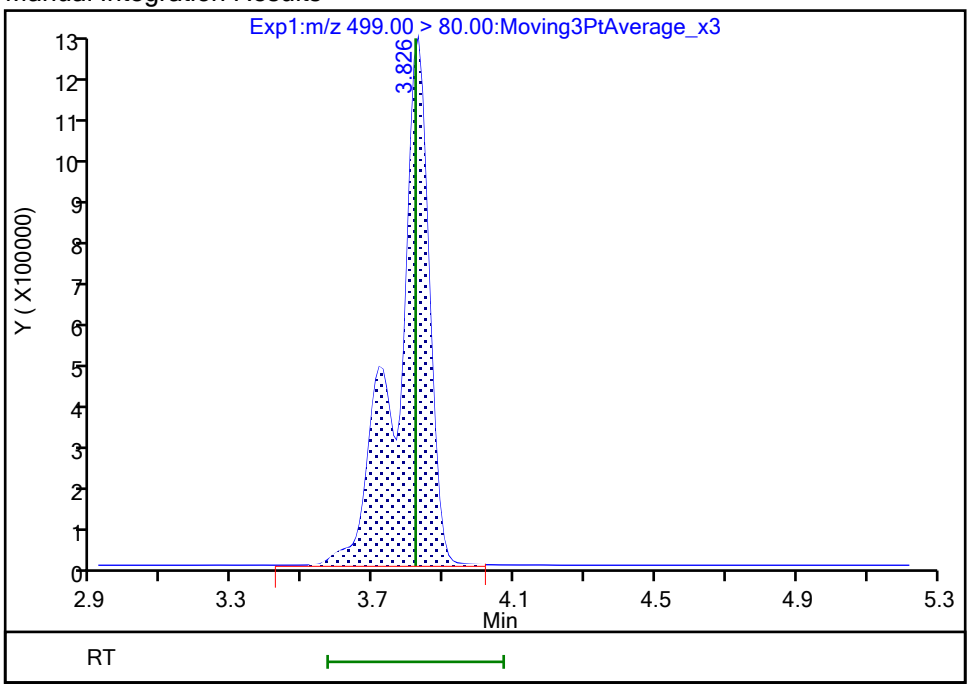
Processing Integration Results

RT: 3.83
Area: 8026628
Amount: 9.215121
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 8004722
Amount: 9.189971
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:50:49 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

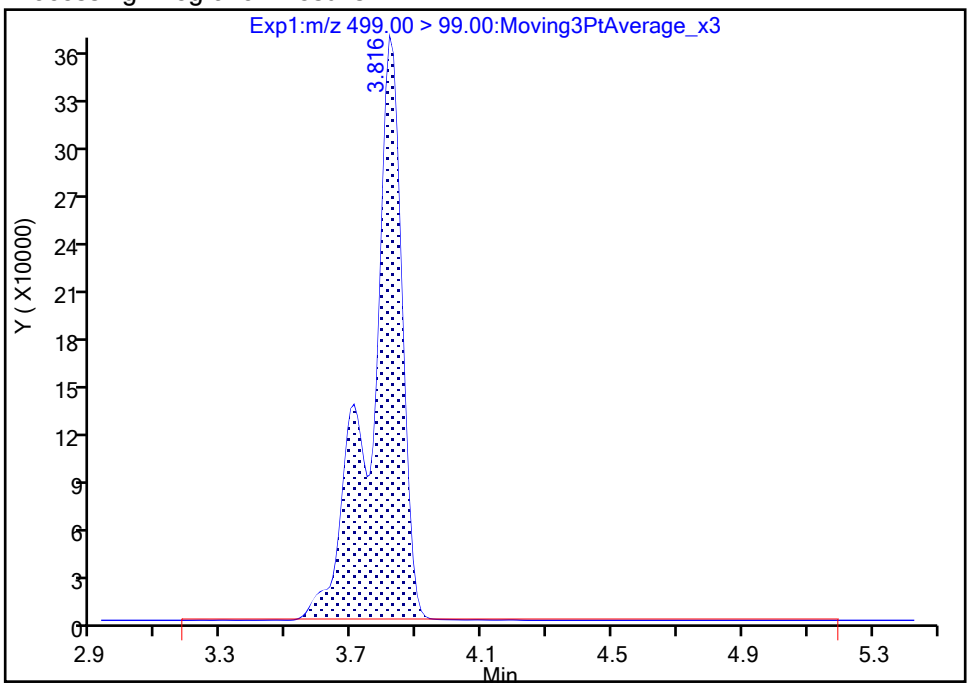
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E02.d				
Injection Date:	27-Oct-2023 10:16:14	Instrument ID:	LC812		
Lims ID:	460-290375-A-7-A	Lab Sample ID:	200-290375-7		
Client ID:	MW92A-101323-1006-70				
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

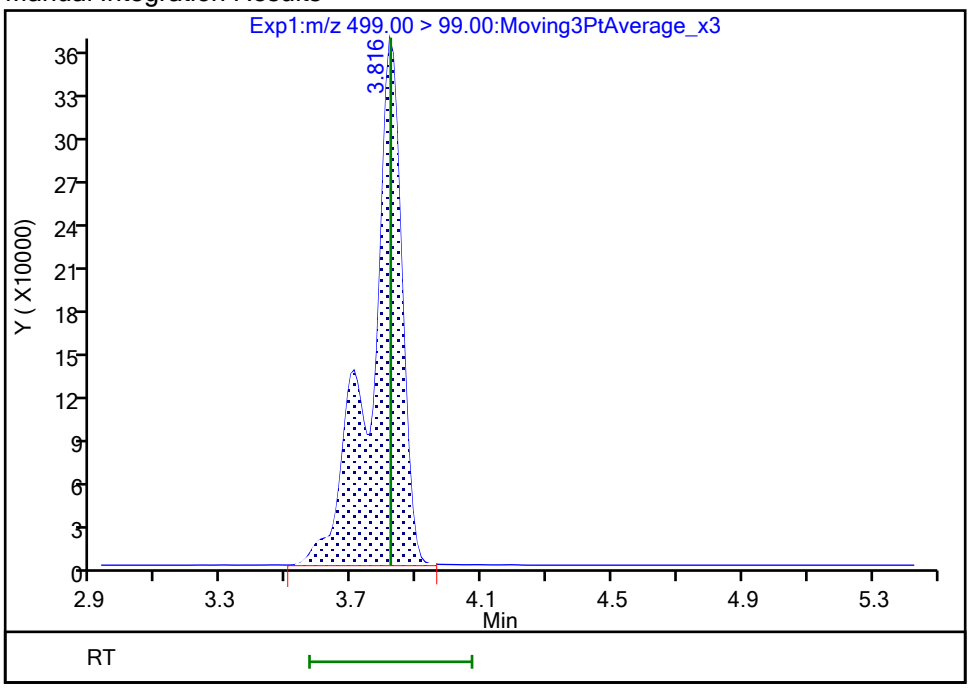
Processing Integration Results

RT: 3.82
Area: 2466018
Amount: 9.215121
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2456173
Amount: 9.189971
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:50:55 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92-101323-1056-36 | Lab Sample ID: 460-290375-8

Matrix: Water | Lab File ID: PA231023C07.d

Analysis Method: 537 (modified) | Date Collected: 10/13/2023 10:56

Extraction Method: 3535 | Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) | Date Analyzed: 10/24/2023 00:05

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.28		4.36	1.05
2706-90-3	Perfluoropentanoic acid	4.09		1.74	0.59
307-24-4	Perfluorohexanoic acid	15.9		1.74	0.57
375-85-9	Perfluoroheptanoic acid	6.10		1.74	0.47
335-67-1	Perfluorooctanoic acid	36.2		1.74	0.66
375-95-1	Perfluorononanoic acid	1.19	J	1.74	0.43
335-76-2	Perfluorodecanoic acid	0.42	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	9.35		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	12.7		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	40.7		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	17.1		1.74	0.36
68259-12-1	Perfluorononanesulfonic acid	0.54	J I	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.36	U	4.36	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40
13252-13-6	HFPODA	3.49	U	3.49	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92-101323-1056-36 Lab Sample ID: 460-290375-8

Matrix: Water Lab File ID: PA231023C07.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:56

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) Date Analyzed: 10/24/2023 00:05

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	61		50-150
STL01893	13C5 PFPeA	105		50-150
STL01892	13C4 PFHpA	112		50-150
STL02116	13C2 PFTeDA	100		50-150
STL02337	13C3 PFBS	110		50-150
STL01056	13C8 FOSA	105		50-150
STL02118	d3-NMeFOSAA	112		50-150
STL02117	d5-NEtFOSAA	114		50-150
STL02395	M2-4:2 FTS	101		50-150
STL02279	M2-6:2 FTS	103		50-150
STL02280	M2-8:2 FTS	112		50-150
STL02255	13C3 HFPO-DA	105		50-150
STL00994	18O2 PFHxS	114		50-150
STL00993	13C2 PFHxA	104		50-150
STL00991	13C4 PFOS	104		50-150
STL00998	13C2 PFDoA	113		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	111		50-150
STL00990	13C4 PFOA	113		50-150
STL00997	13C2 PFUnA	119		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d
Lims ID: 460-290375-A-8-A
Client ID: MW92-101323-1056-36
Sample Type: Client
Inject. Date: 24-Oct-2023 00:05:52 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-8-A
Misc. Info.: 200-0057511-007 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:29:39
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	1109731	0.7686		61.5	1408	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	154407	0.1515			11.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1468202	1.31		105	693	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	148646	0.1173			1.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1931528	1.27		110	23677	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	497278	0.2680	Target=2.06		1.5	M
298.90 > 99.00	2.467	2.467	0.0	1.000	259052		1.92(1.03-3.09)		32.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.747	2.760	-0.013	0.995	326	0.000542			0.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	206921	1.18		101	5.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1486866	1.30		104	1925	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	598359	0.4571	Target=14.12		7.5	M
313.00 > 119.00	2.797	2.797	0.0	1.000	38591		15.51(7.06-21.17)		13.3	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	586066	0.3628	Target=2.72		11.3	M
349.00 > 99.00	2.810	2.810	0.0	0.888	326467		1.80(1.36-4.09)		84.6	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.918	2.908	0.010	1.004	1437	0.006194			14.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	289633	1.31		105	1480	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1462872	1.35		114	6164	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1598759	1.17	Target=3.32		96.3	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	822119		1.94(1.66-4.98)		431	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	275620	0.1749	Target=4.17		5.7	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	65727		4.19(2.09-6.26)		24.7	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1757060	1.40		112	4656	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	508988	0.4904	Target=4.83		20.0	M
449.00 > 99.00	3.511	3.505	0.006	0.917	155546		3.27(2.41-7.24)		12.4	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.511	3.505	0.006	0.997	276983	1.23		103	32.0	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	632	0.000991			1.6	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1764382	1.04	Target=2.88		29.7	M
413.00 > 169.00	3.520	3.514	0.006	1.000	598277		2.95(1.44-4.32)		563	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	1997317	1.41		113	6584	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1819899	1.25			7007	
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.830	3.822	0.008	1.000	35731086	42.7	Target=4.24		2907	EM
499.00 > 99.00	3.819	3.822	-0.003	0.997	11763541		3.04(2.12-6.37)		4290	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	858202	1.24		104	220	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	0.997	50804	0.0340	Target=8.34		2.5	M
463.00 > 169.00	3.854	3.845	0.009	1.000	5607		9.06(4.17-12.51)		8.2	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.845	0.009	1.095	1903511	1.23		98.8	3087	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.990	3.983	0.007	1.042	920	0.000359			1.5	M
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.112	4.105	0.007	1.074	9914	0.0156	Target=2.17		2.1	R
549.00 > 99.00	4.088	4.105	-0.017	1.067	9338		1.06(1.08-3.25)		5.2	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.129	0.007	1.000	21411	0.0119	Target=11.44		1.7	
513.00 > 169.00	4.136	4.129	0.007	1.000	2434		8.80(5.72-17.16)		9.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2244683	1.39		111	11148	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.141	0.007	1.178	340270	1.34		112	252	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	361	0.000577			4.1	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1799623	1.31		105	3026	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.234	0.008	1.000	2947	0.002146			9.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.278	4.270	0.008	1.215	541605	1.40		112	1725	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.291	4.270	0.021	1.003	342	0.000870			1.8	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.004	1.246	2259041	1.48		119	12759	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.390	-0.004	1.000	7737	0.004154	Target=12.20		1.1	M
563.00 > 169.00	4.398	4.390	0.008	1.003	624		12.40(6.10-18.31)		4.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.249	529577	1.43		114	1105	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.401	0.009	1.003	2099	0.004953			5.9	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.482	4.473	0.009	1.170	852	0.000217			1.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2180457	1.41		113	8173	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	1930804	1.25		100	5781	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.968	4.982	-0.014	0.998	167	0.000967	Target=0.87		3.9	M
713.00 > 219.00	4.979	4.982	-0.003	1.000	274		0.61(0.43-1.30)		7.8	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

E - Exceeded Maximum Amount

Review Flags

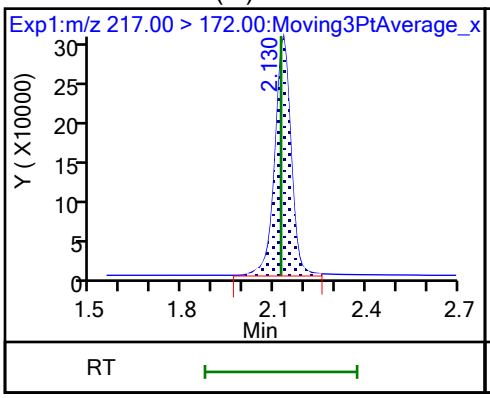
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:33 Chrom Revision: 2.3 18-Oct-2023 21:16:54

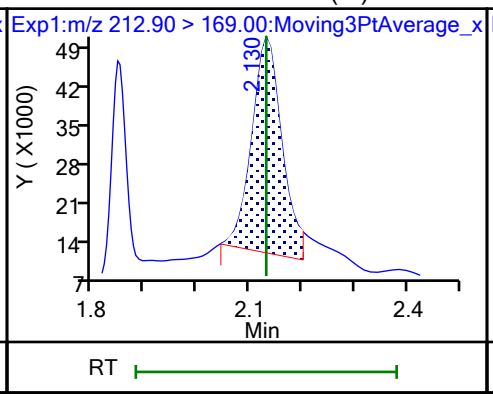
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d
Injection Date: 24-Oct-2023 00:05:52 Instrument ID: LC812
Lims ID: 460-290375-A-8-A Lab Sample ID: 200-290375-8
Client ID: MW92-101323-1056-36
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

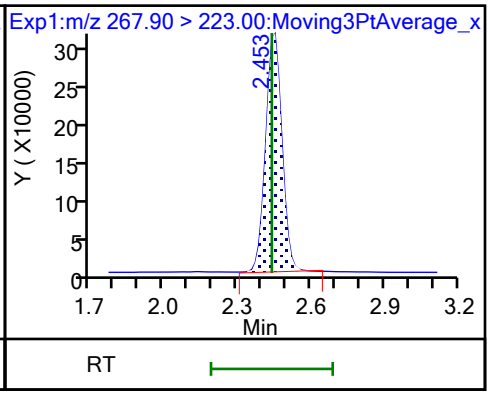
D 1 13C4 PFBA (M)



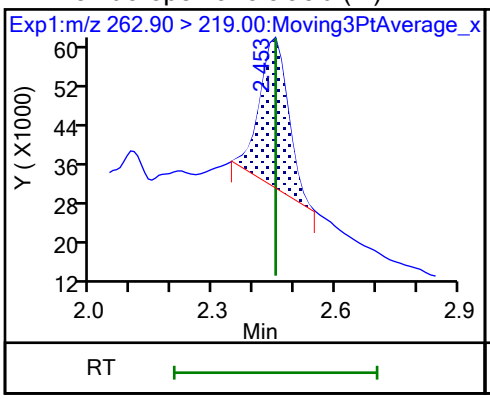
2 Perfluorobutanoic acid (M)



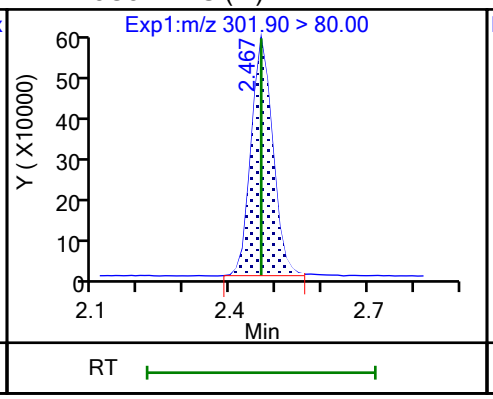
D 3 13C5 PFPeA



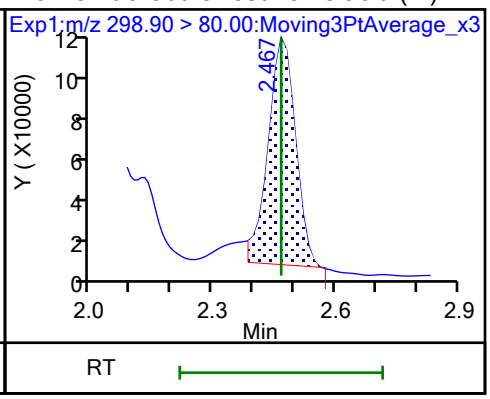
4 Perfluoropentanoic acid (M)



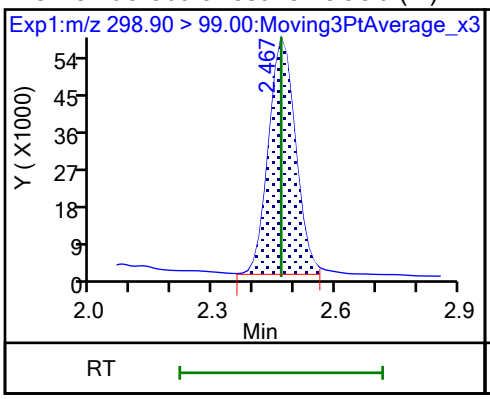
D 47 13C3 PFBS (M)



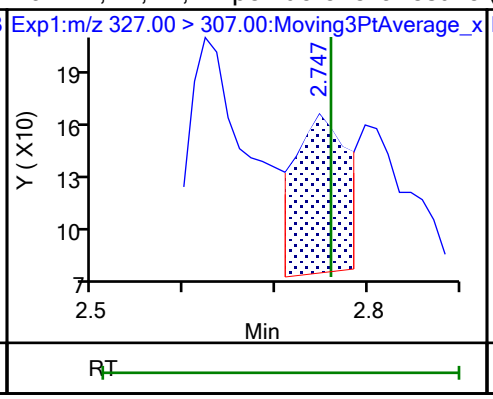
5 Perfluorobutanesulfonic acid (M)



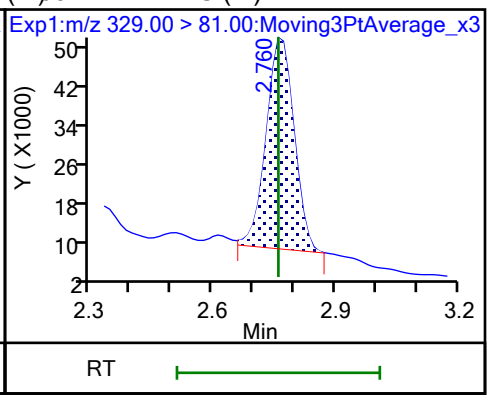
5 Perfluorobutanesulfonic acid (M)



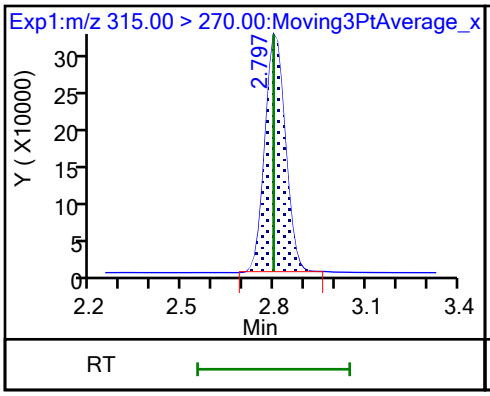
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



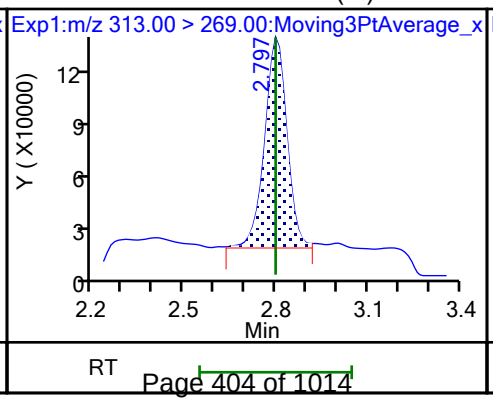
60 M2-4:2 FTS (M)



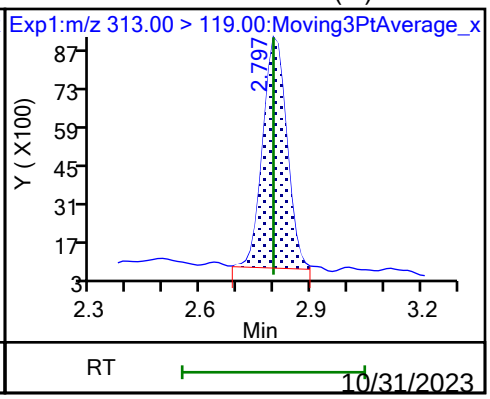
D 7 13C2 PFHxA



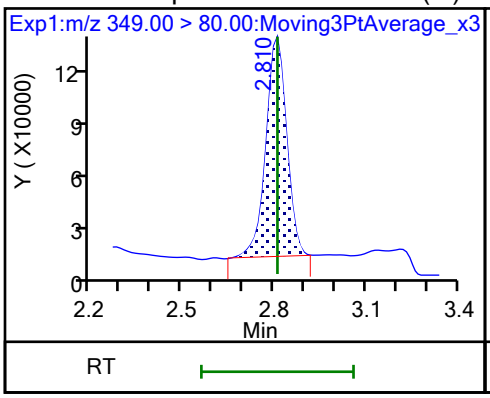
6 Perfluorohexanoic acid (M)



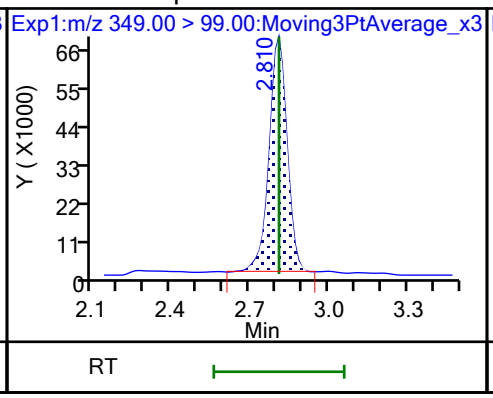
6 Perfluorohexanoic acid (M)



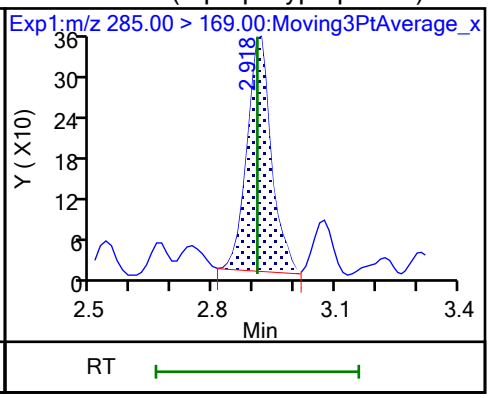
70 Perfluoropentanesulfonic acid (M)



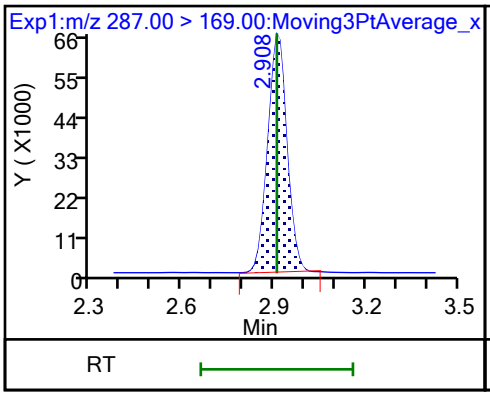
70 Perfluoropentanesulfonic acid



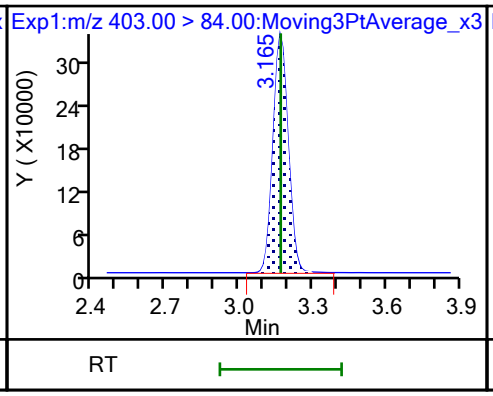
67 Perfluoro(2-propoxypropanoic) ac



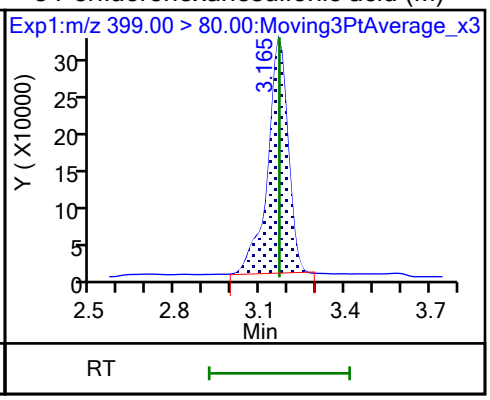
D 64 13C3 HFPO-DA



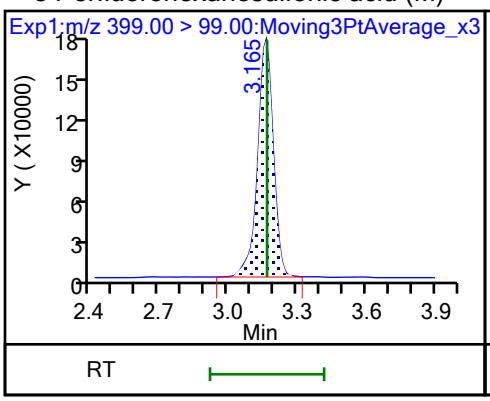
D 11 18O2 PFHxS



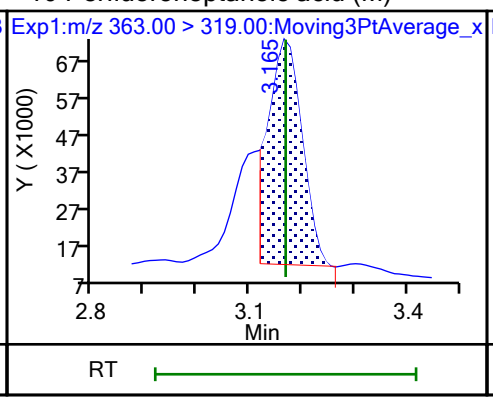
8 Perfluorohexanesulfonic acid (M)



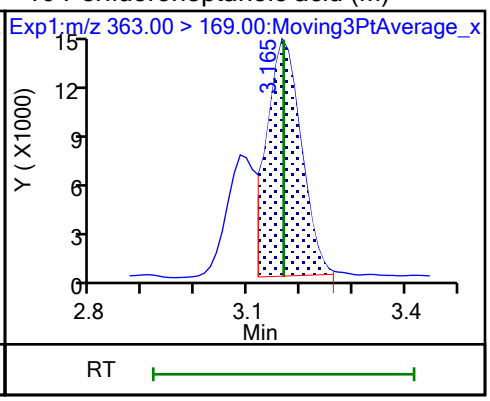
8 Perfluorohexanesulfonic acid (M)



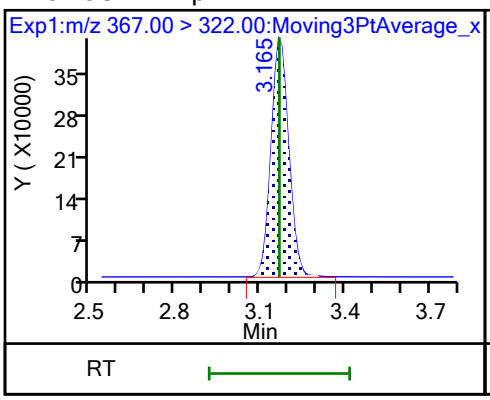
10 Perfluoroheptanoic acid (M)



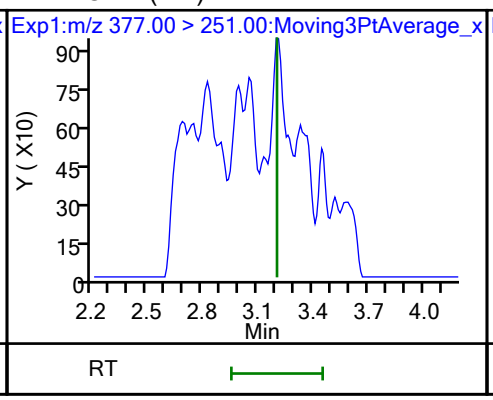
10 Perfluoroheptanoic acid (M)



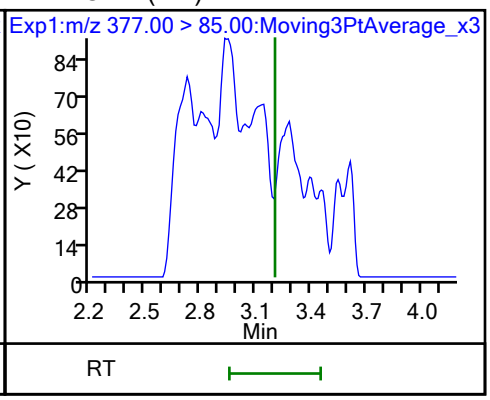
D 9 13C4 PFHpA



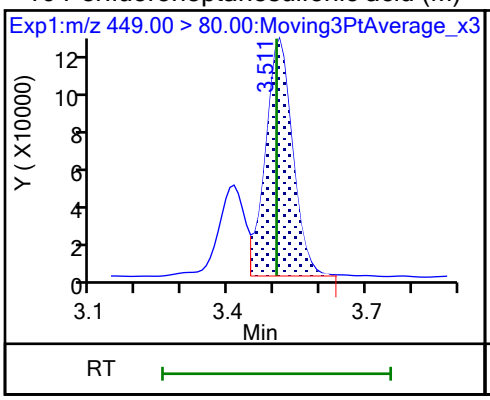
77 DONA (ND)



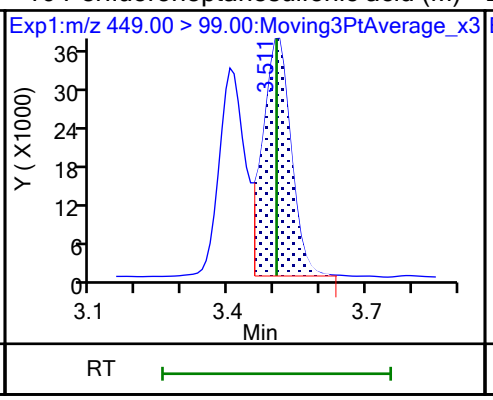
77 DONA (ND)



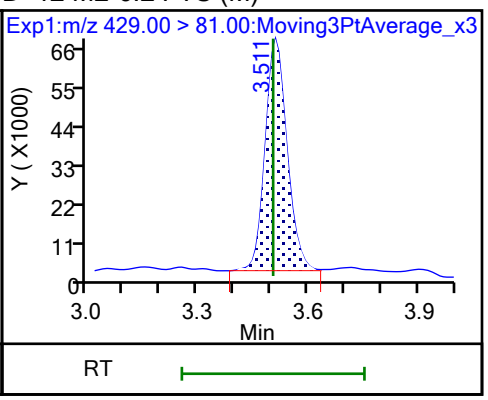
16 Perfluoroheptanesulfonic acid (M)



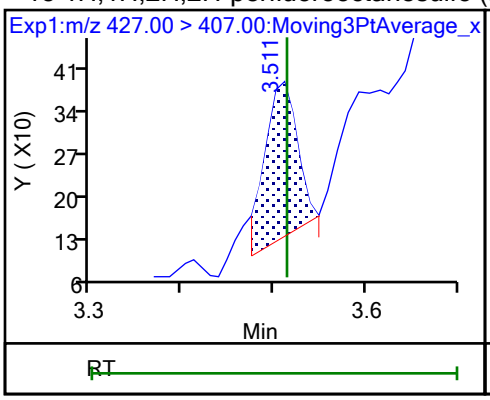
16 Perfluoroheptanesulfonic acid (M)



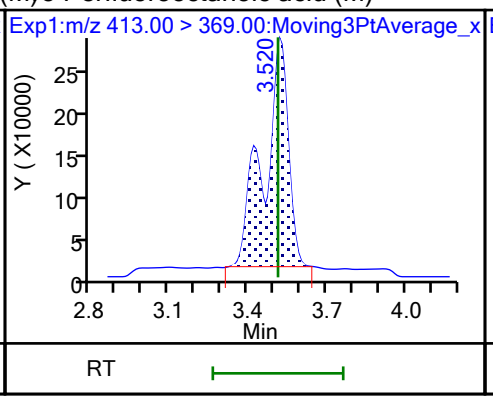
D 12 M2-6:2 FTS (M)



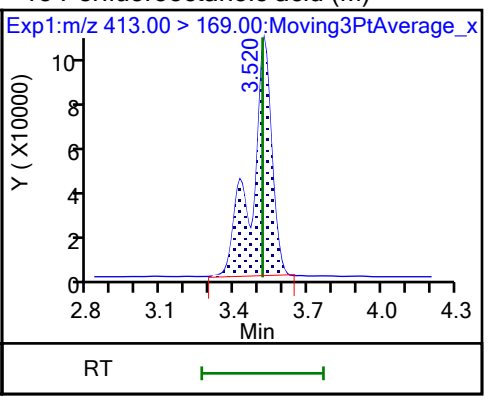
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



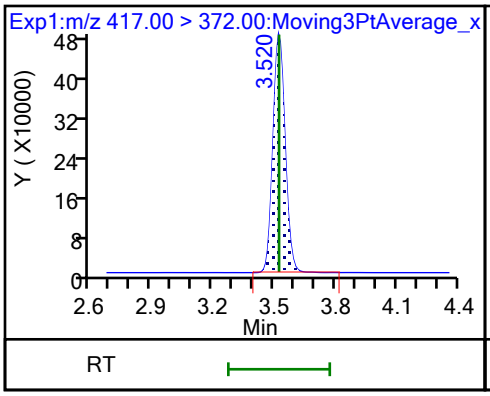
15 Perfluorooctanoic acid (M)



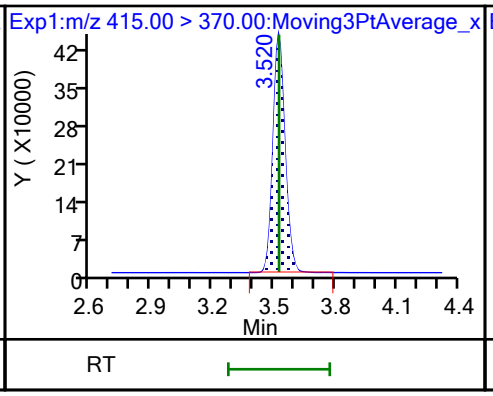
15 Perfluorooctanoic acid (M)



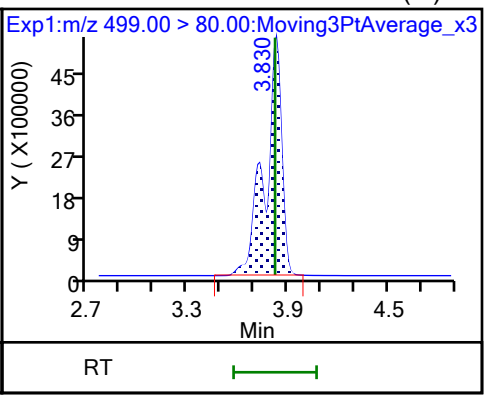
D 14 13C4 PFOA



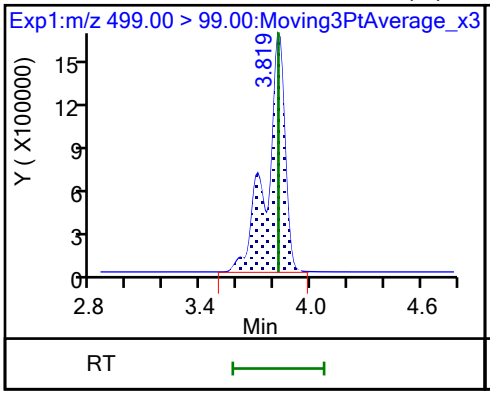
* 62 13C2 PFOA



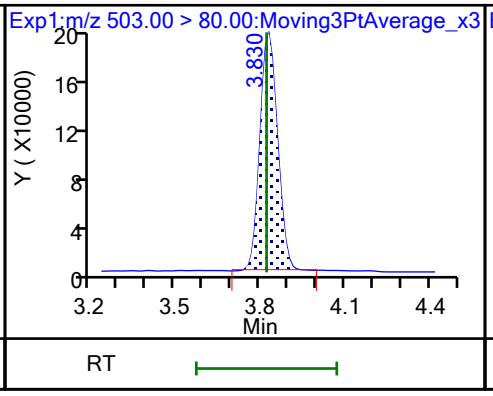
17 Perfluorooctanesulfonic acid (M)



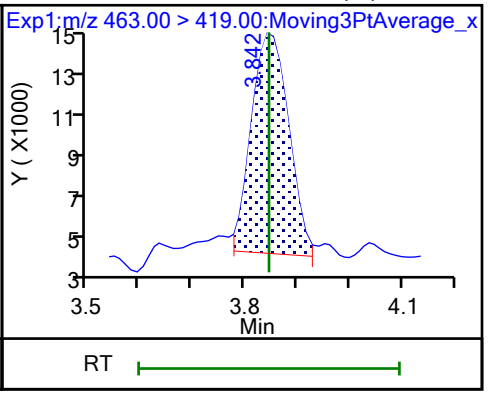
17 Perfluorooctanesulfonic acid (M)



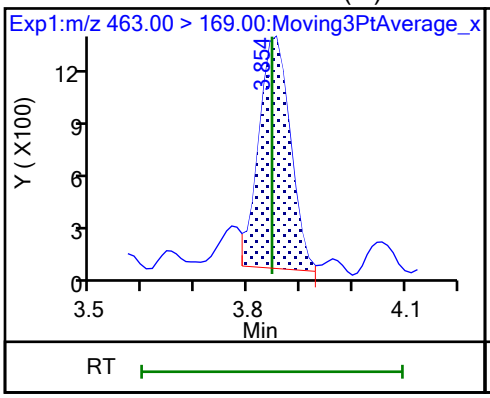
D 18 13C4 PFOS



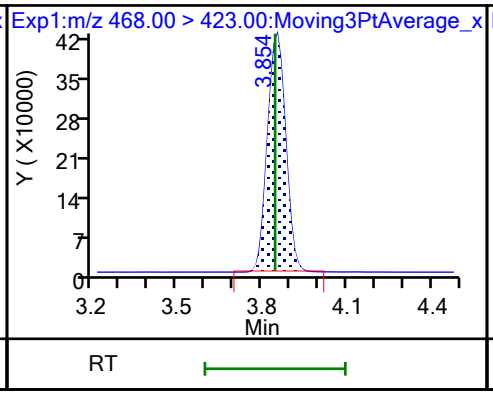
20 Perfluorononanoic acid (M)



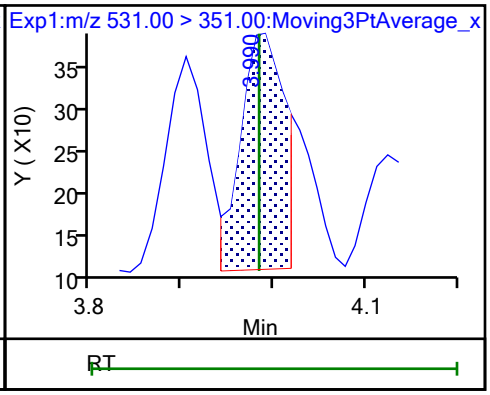
20 Perfluorononanoic acid (M)



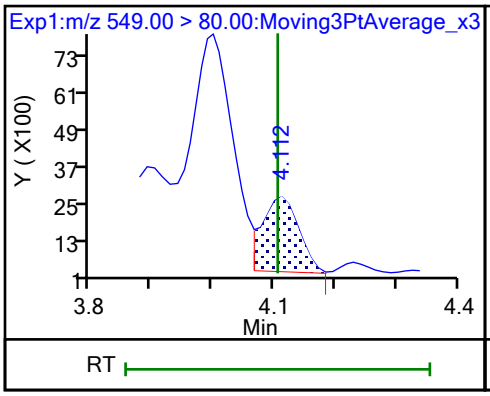
D 19 13C5 PFNA



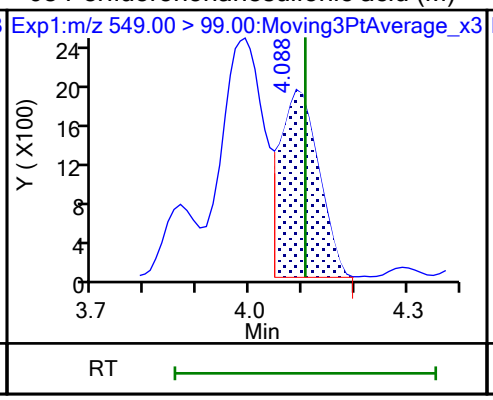
69 9-Chlorohexadecafluoro-3-oxanona (M)



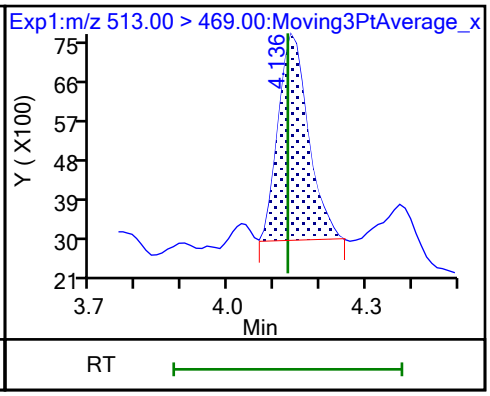
68 Perfluorononanesulfonic acid



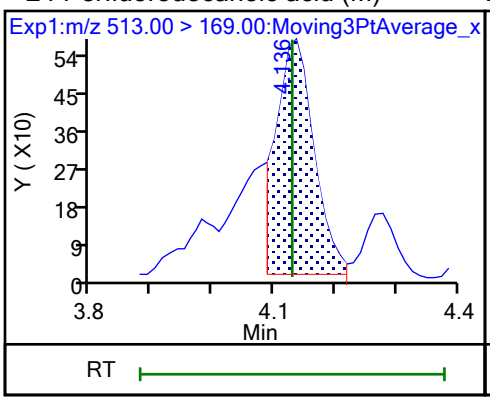
68 Perfluorononanesulfonic acid (M)



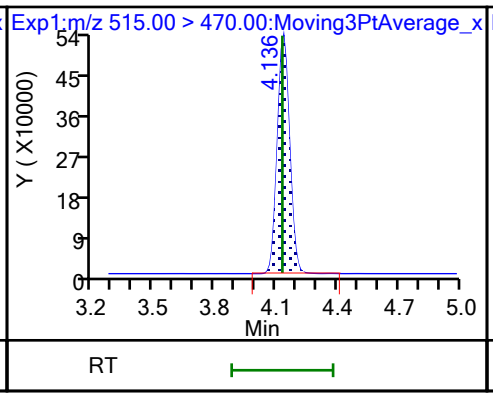
24 Perfluorodecanoic acid



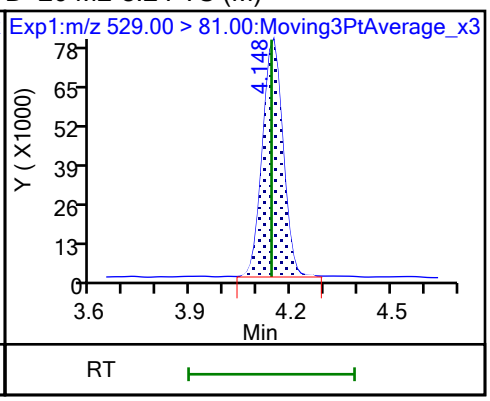
24 Perfluorodecanoic acid (M)



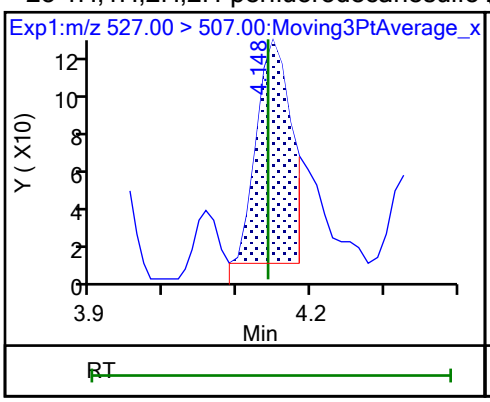
D 23 13C2 PFDA



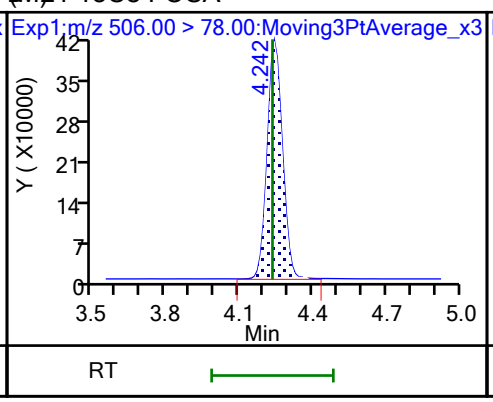
D 26 M2-8:2 FTS (M)



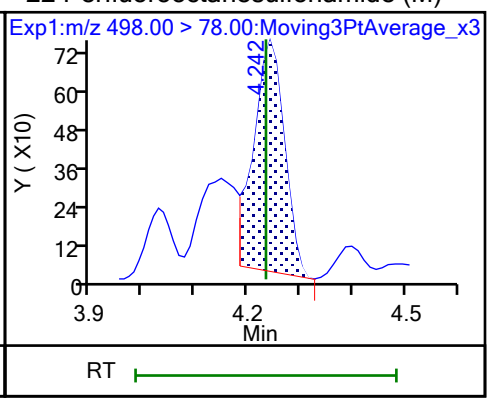
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



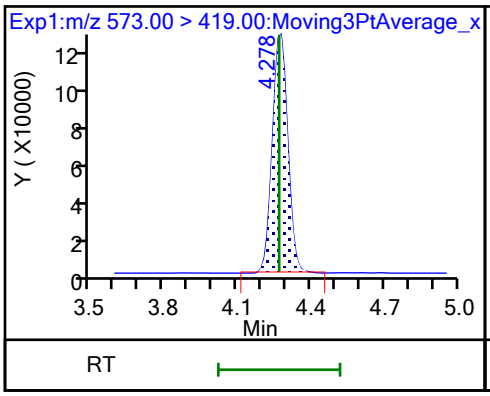
D 21 13C8 FOSA



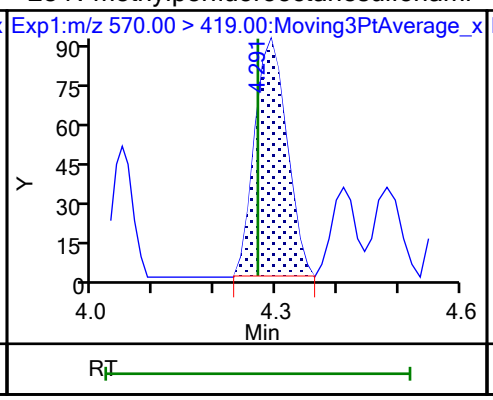
22 Perfluorooctanesulfonamide (M)



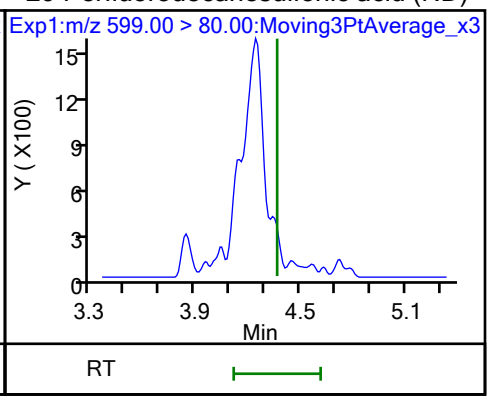
D 27 d3-NMeFOSAA



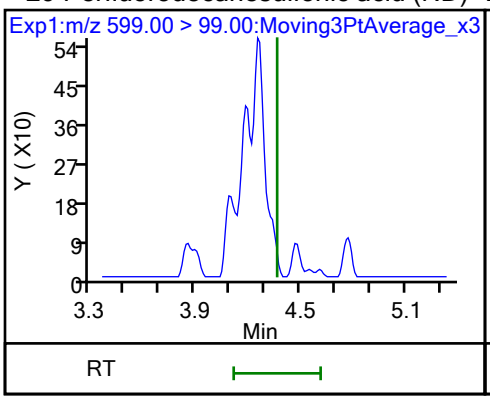
28 N-methylperfluorooctanesulfonami



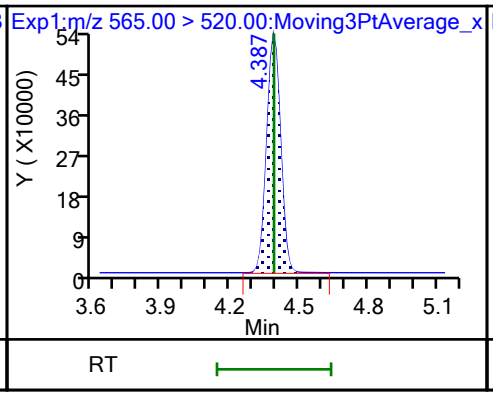
29 Perfluorodecanesulfonic acid (ND)



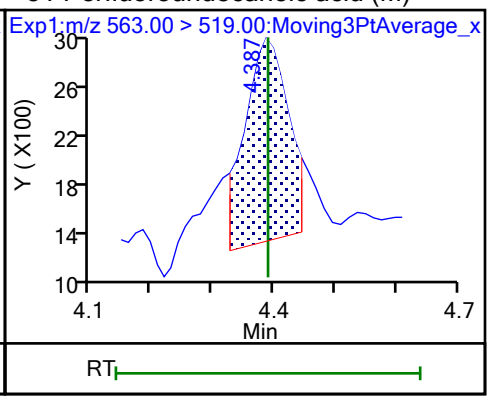
29 Perfluorodecanesulfonic acid (ND)



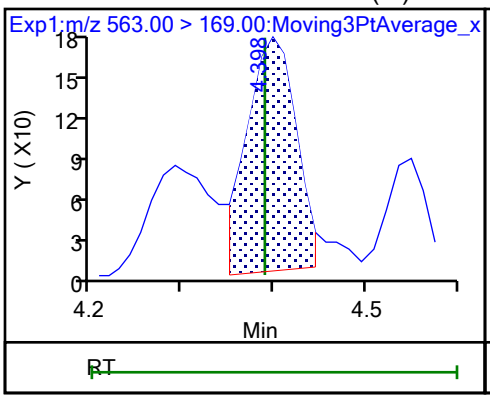
D 30 13C2 PFUnA



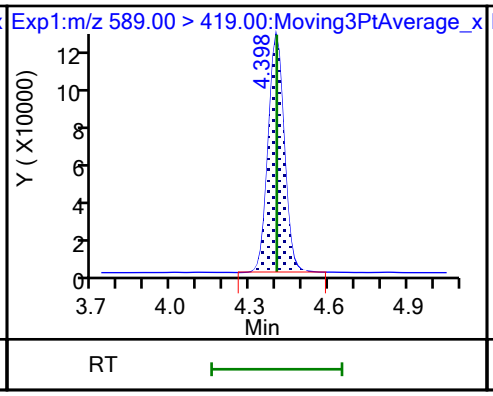
31 Perfluoroundecanoic acid (M)



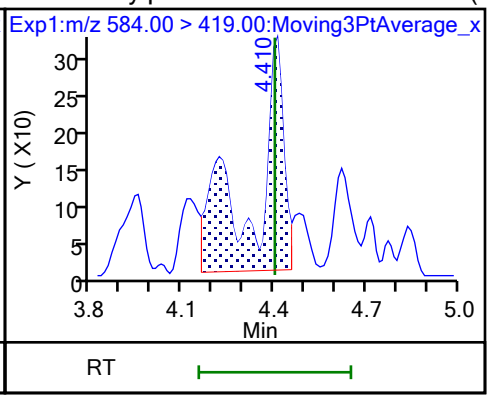
31 Perfluoroundecanoic acid (M)



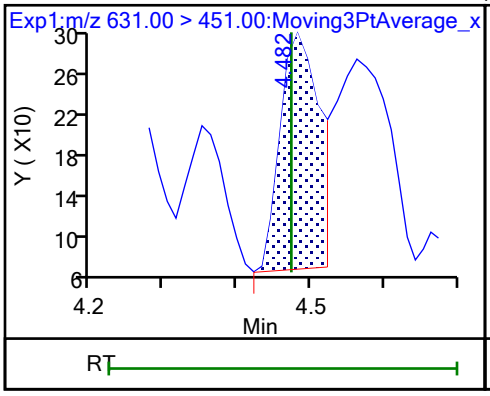
D 32 d5-NEtFOSAA



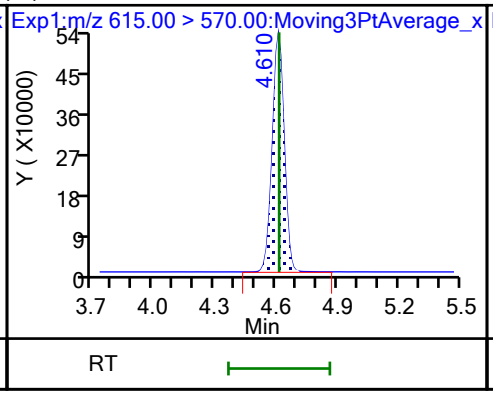
33 N-ethylperfluorooctanesulfonamid (M)



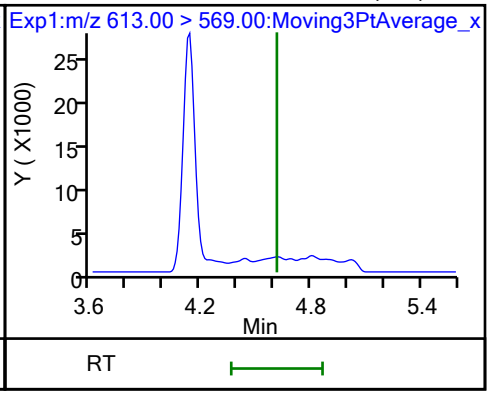
66 11-Chloroeicosafluoro-3-oxaundec (M)



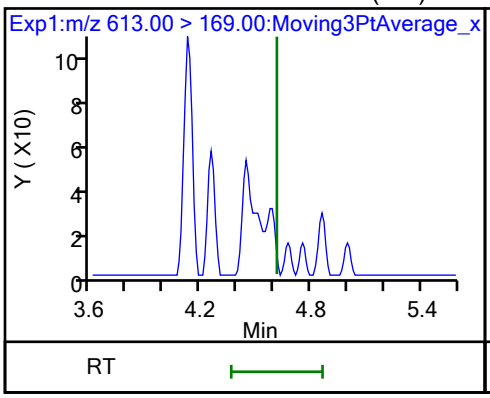
D 36 13C2 PFDoA



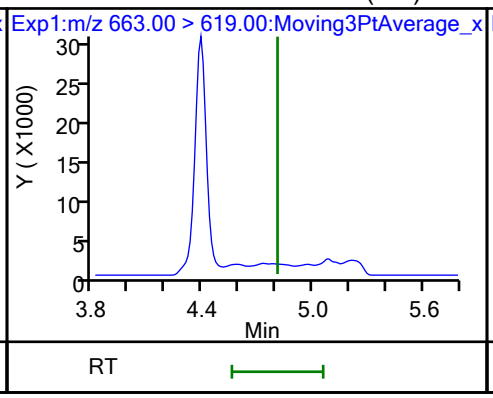
37 Perfluorododecanoic acid (ND)



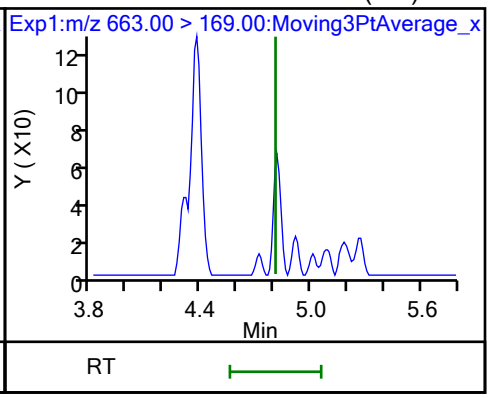
37 Perfluorododecanoic acid (ND)



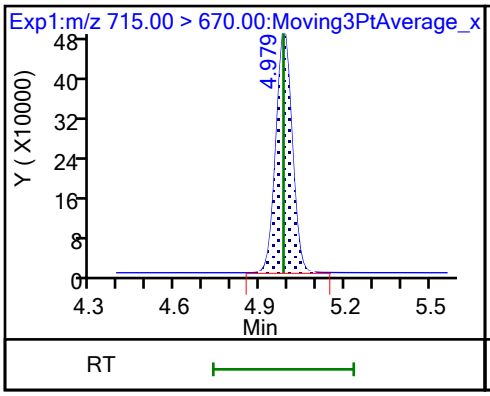
41 Perfluorotridecanoic acid (ND)



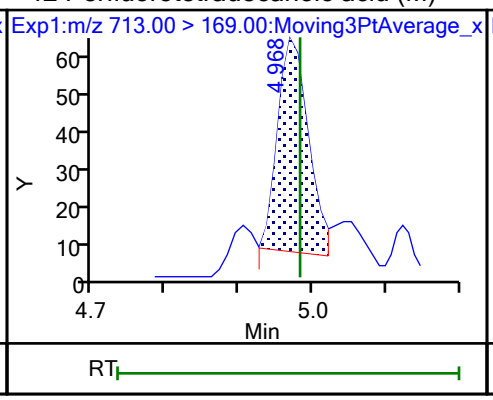
41 Perfluorotridecanoic acid (ND)



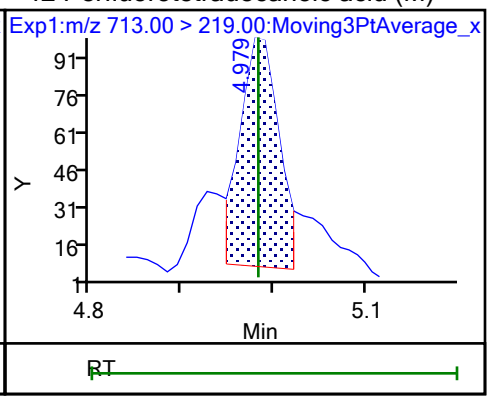
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

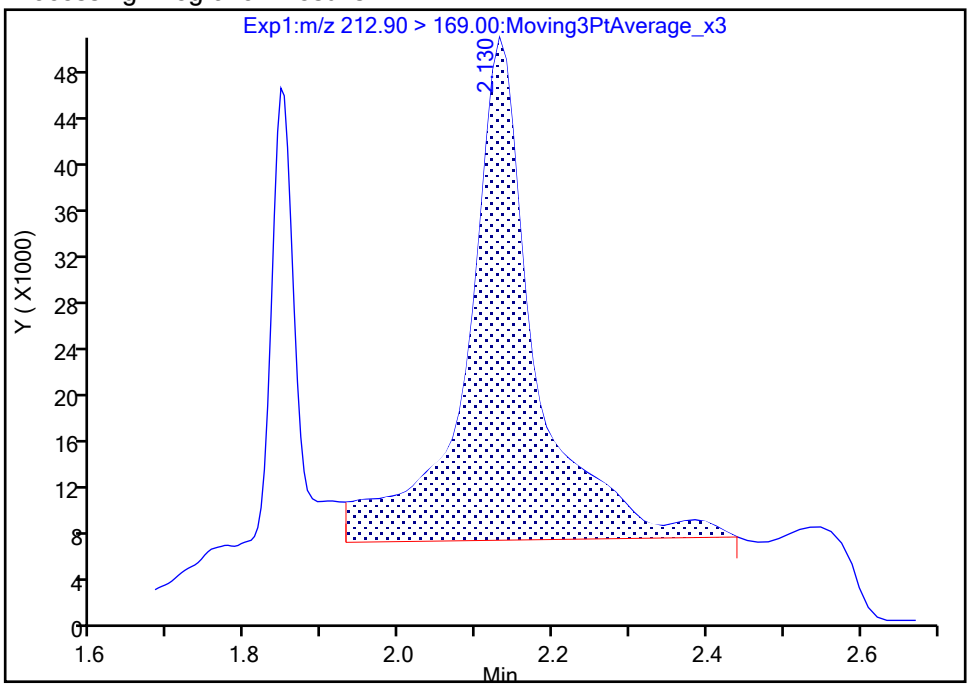
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

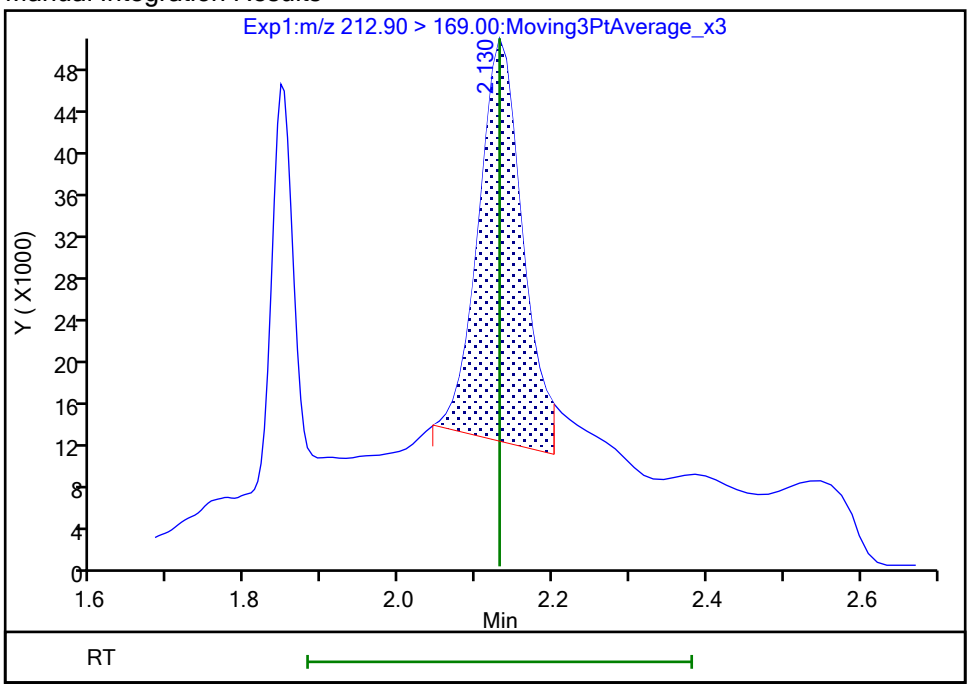
Processing Integration Results

RT: 2.13
Area: 273853
Amount: 0.300241
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 154407
Amount: 0.151453
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:47:23 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

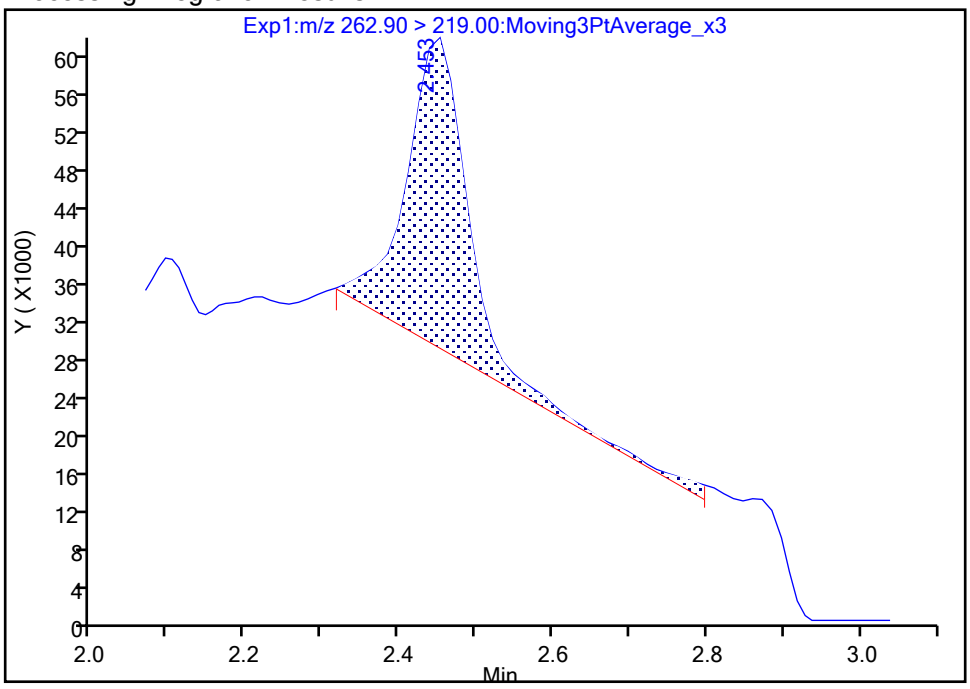
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

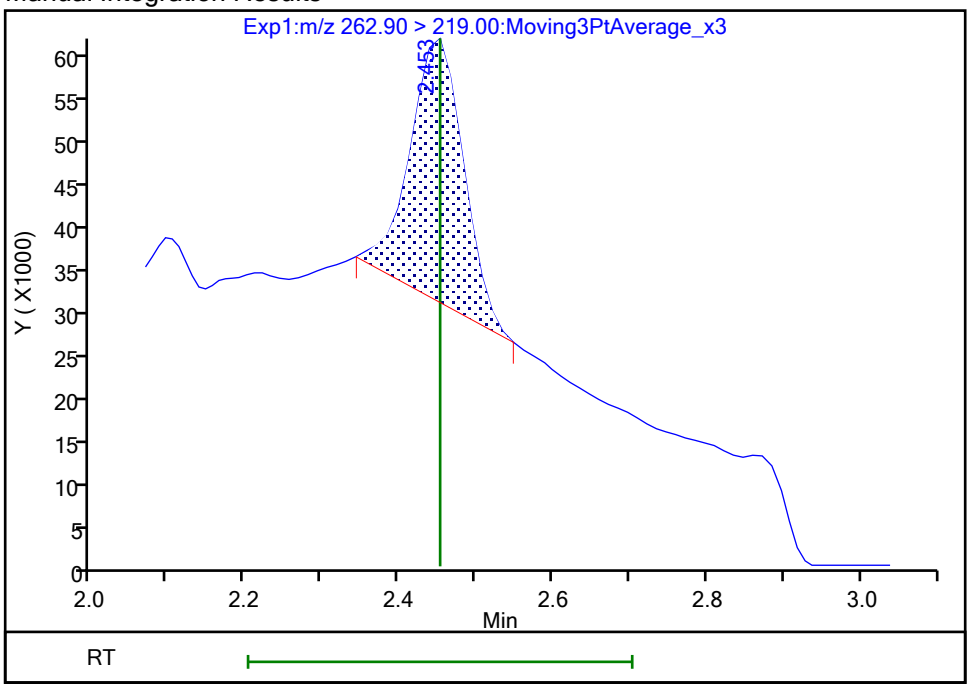
Processing Integration Results

RT: 2.45
Area: 186495
Amount: 0.147135
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 148646
Amount: 0.117274
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:47:07 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

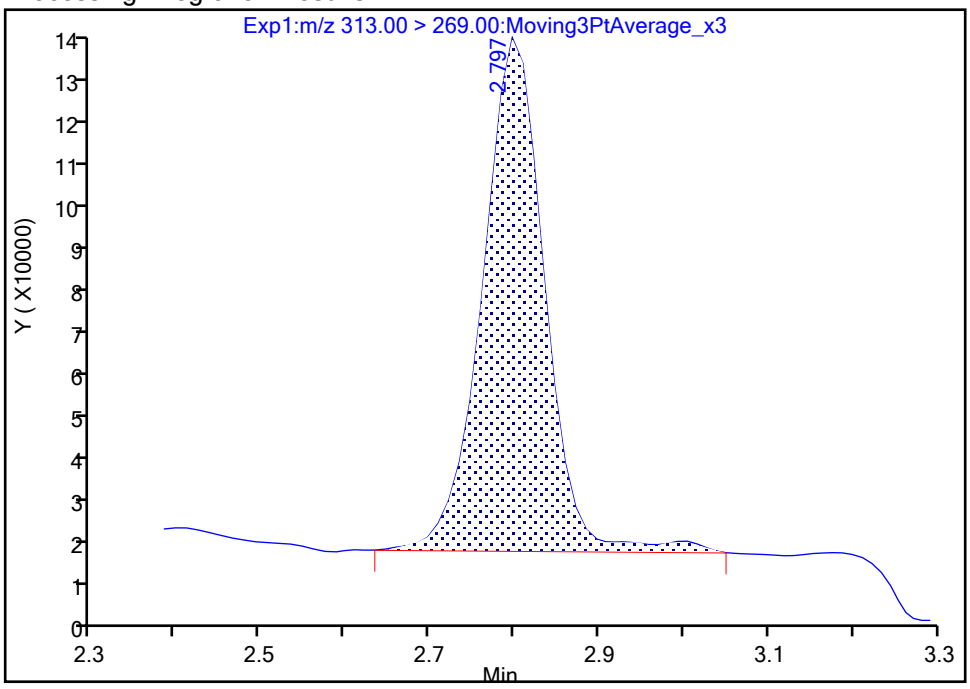
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

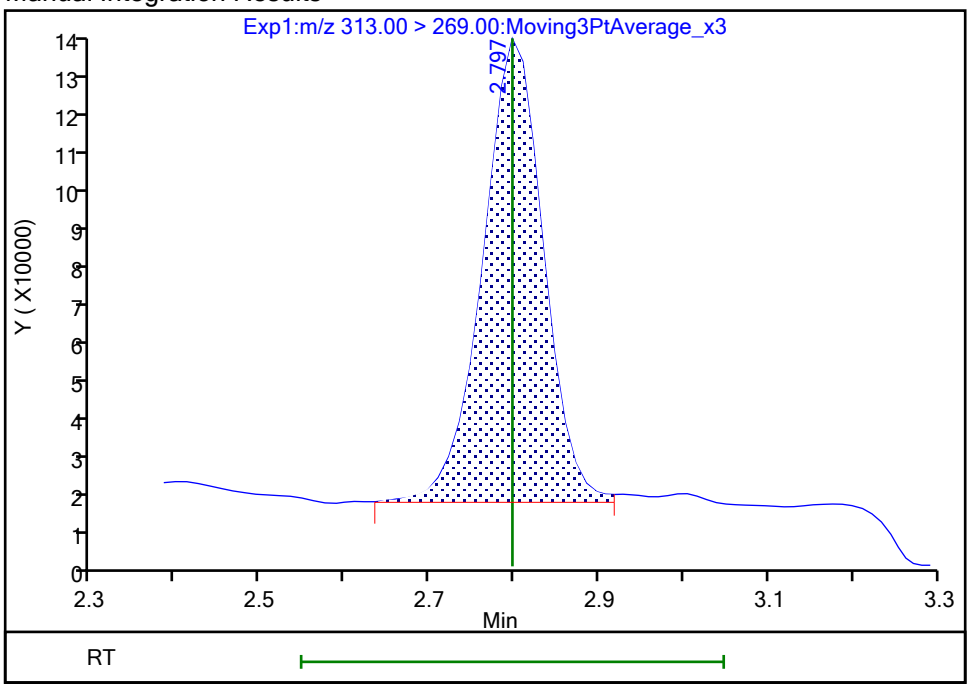
Processing Integration Results

RT: 2.80
Area: 612855
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 598359
Amount: 0.457117
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

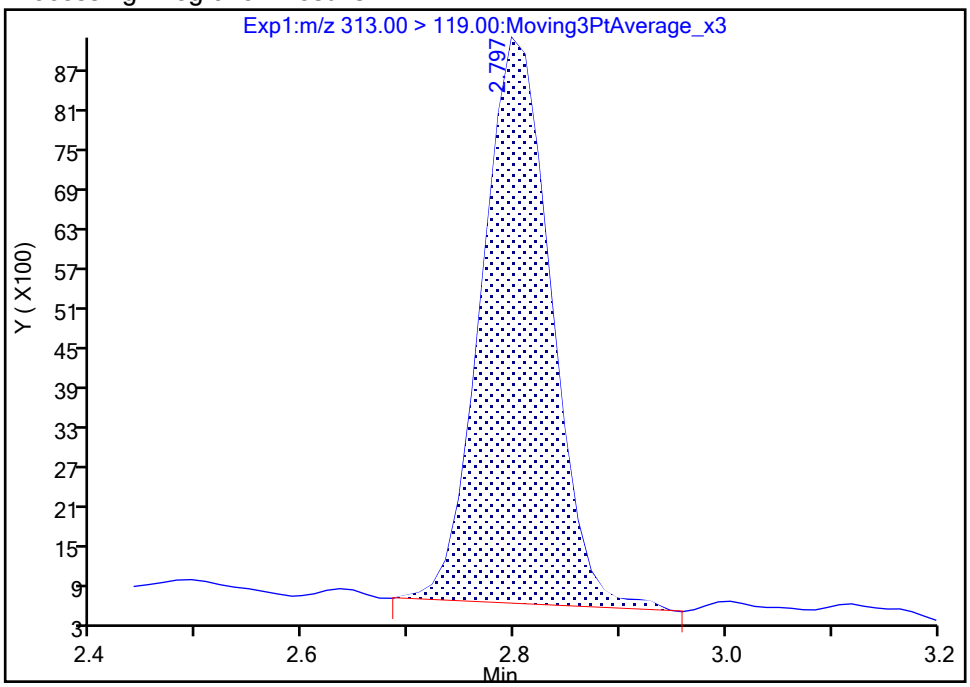
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

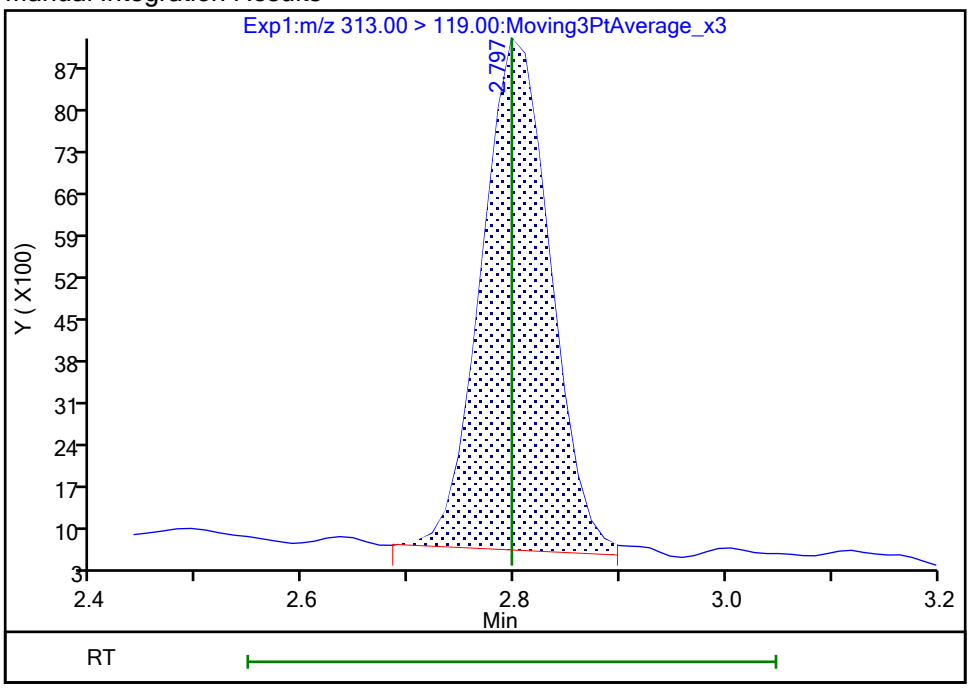
Processing Integration Results

RT: 2.80
Area: 38978
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 38591
Amount: 0.457117
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

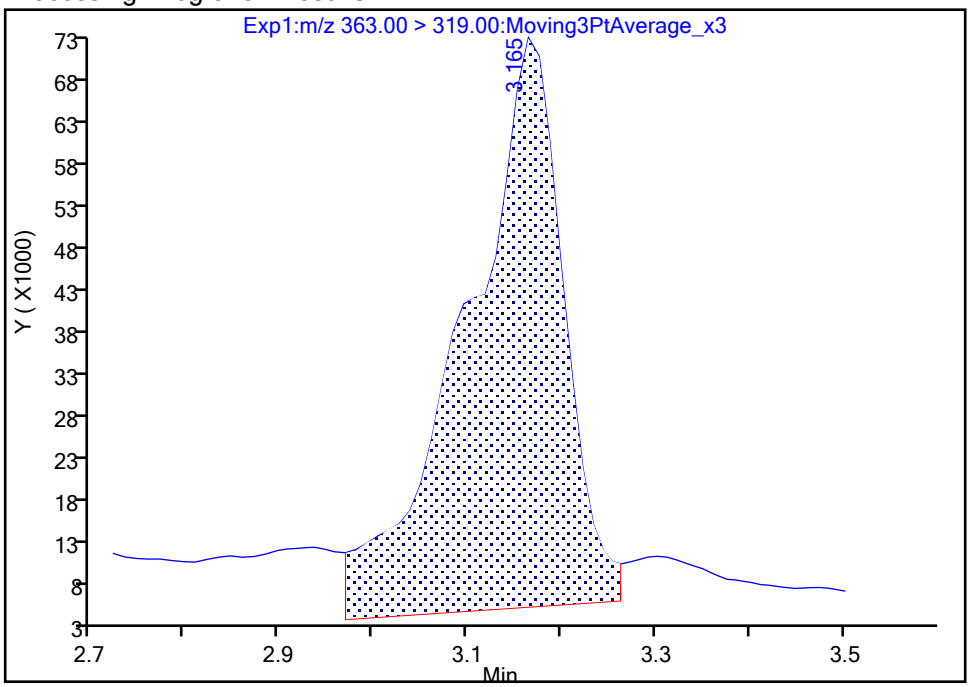
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

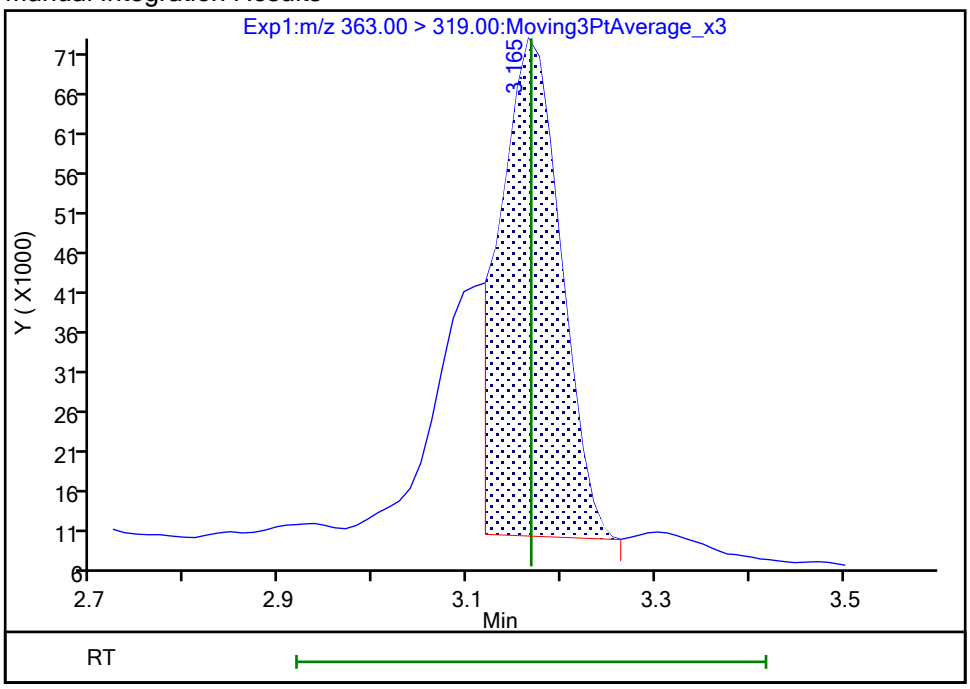
Processing Integration Results

RT: 3.16
Area: 496038
Amount: 0.314831
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 275620
Amount: 0.174933
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

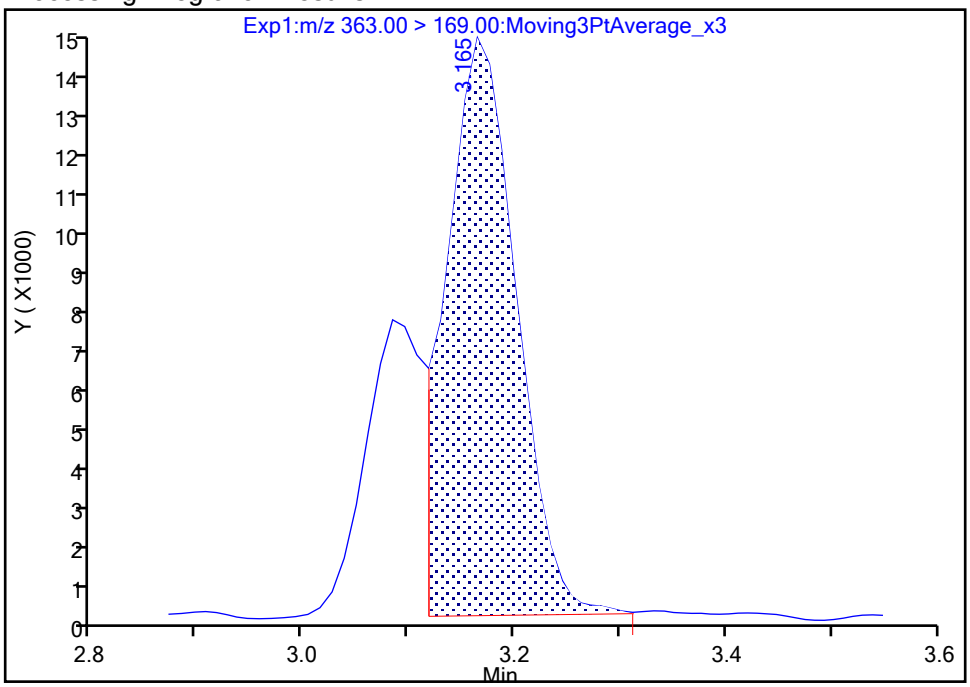
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

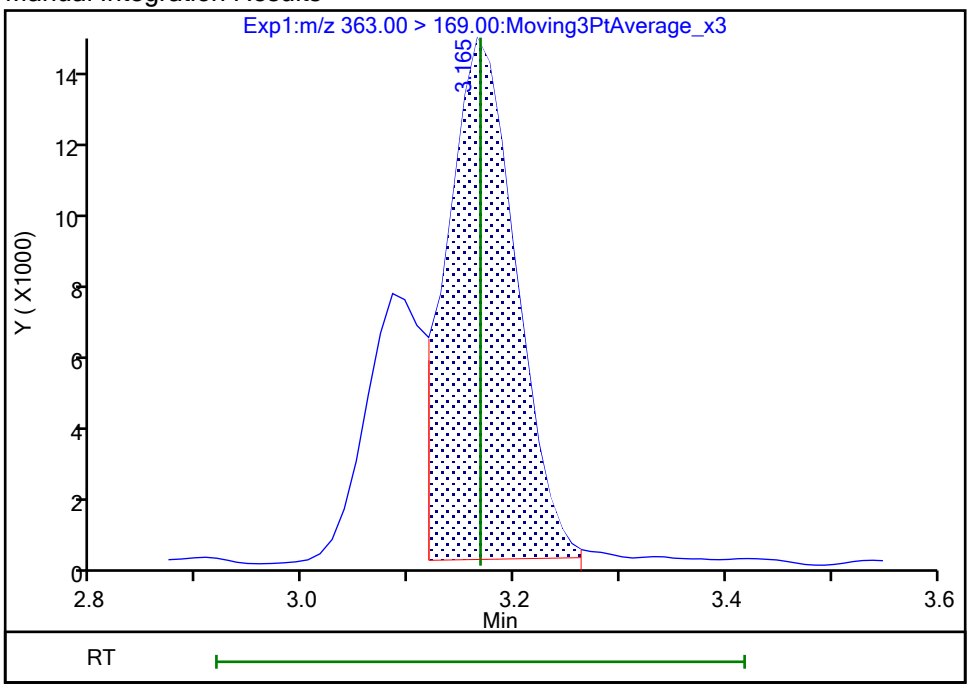
Processing Integration Results

RT: 3.16
Area: 66089
Amount: 0.314831
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 65727
Amount: 0.174933
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

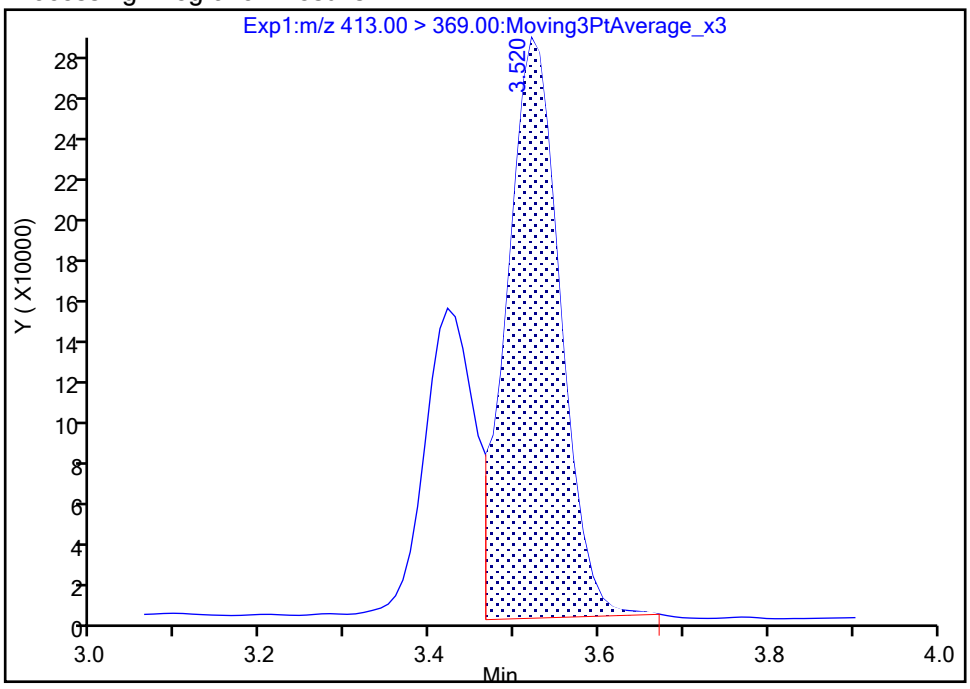
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

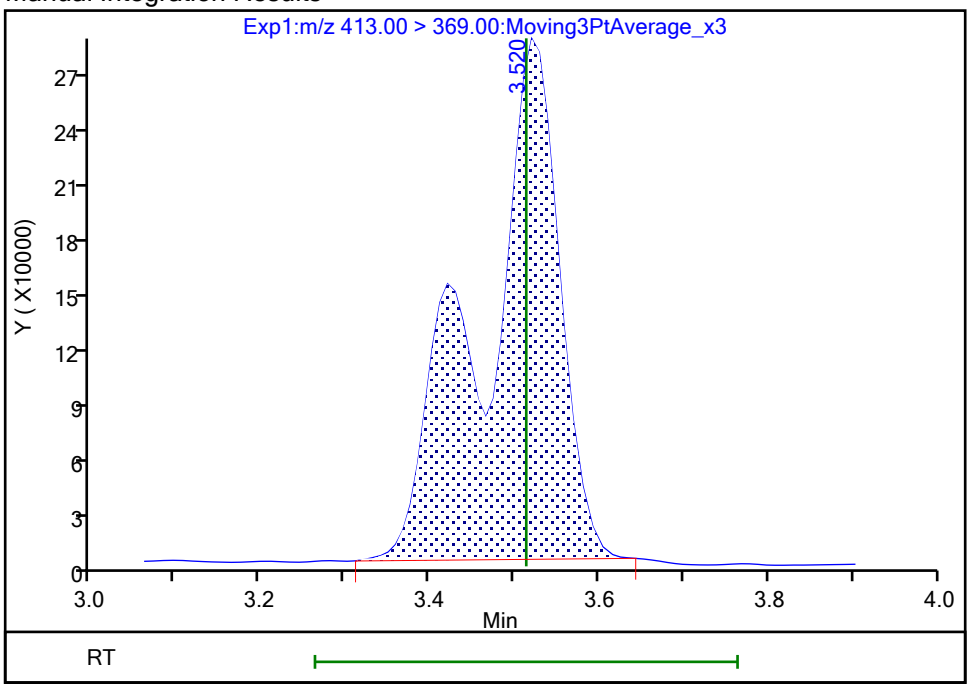
Processing Integration Results

RT: 3.52
Area: 1212368
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1764382
Amount: 1.036691
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

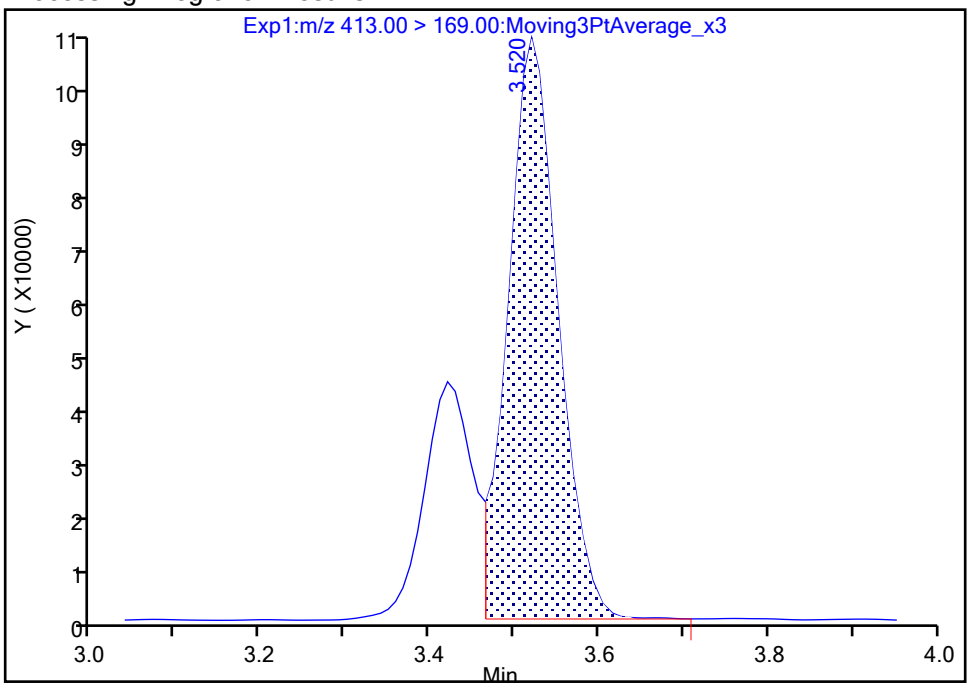
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

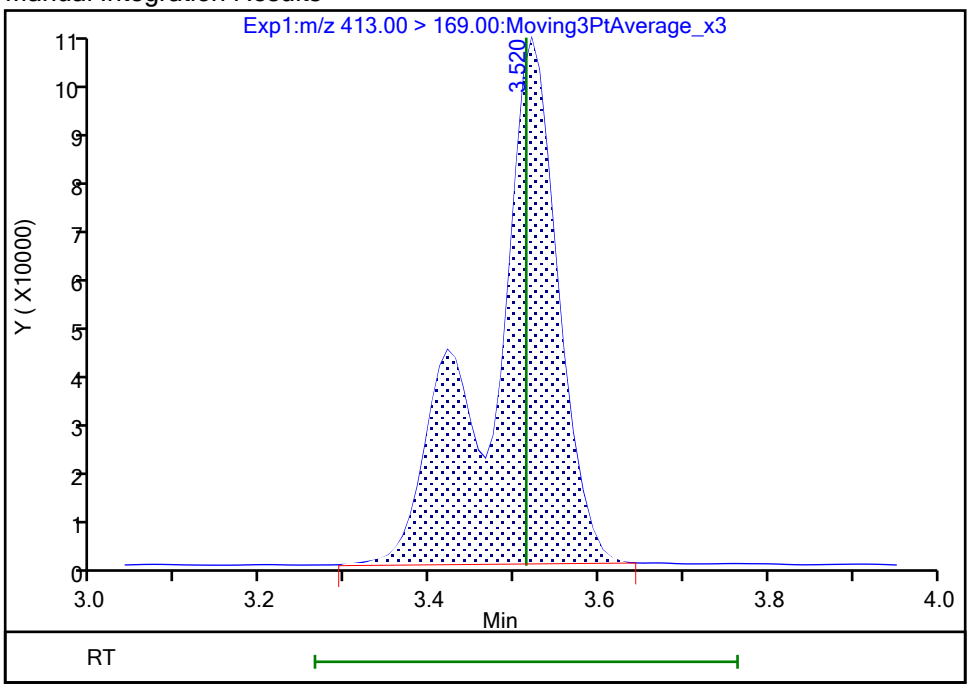
Processing Integration Results

RT: 3.52
Area: 429921
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 598277
Amount: 1.036691
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

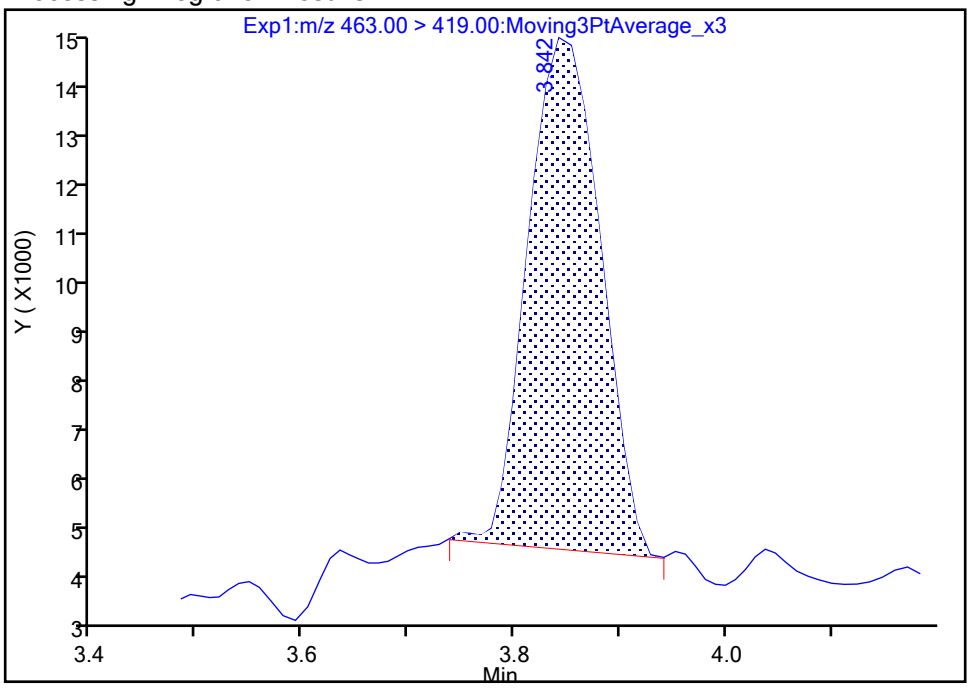
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

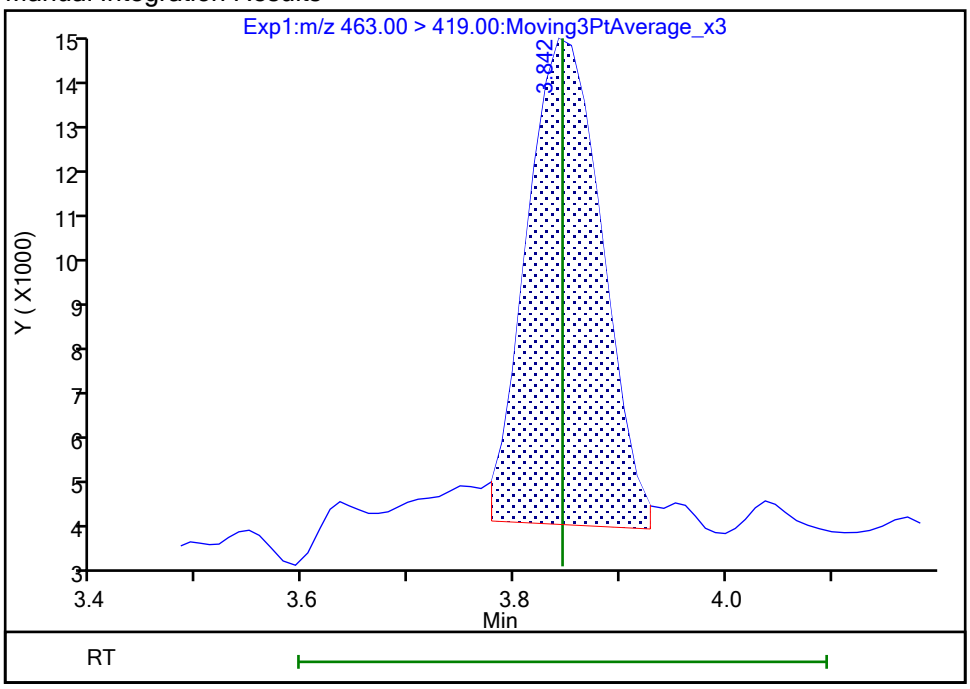
Processing Integration Results

RT: 3.84
Area: 46662
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 50804
Amount: 0.034041
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

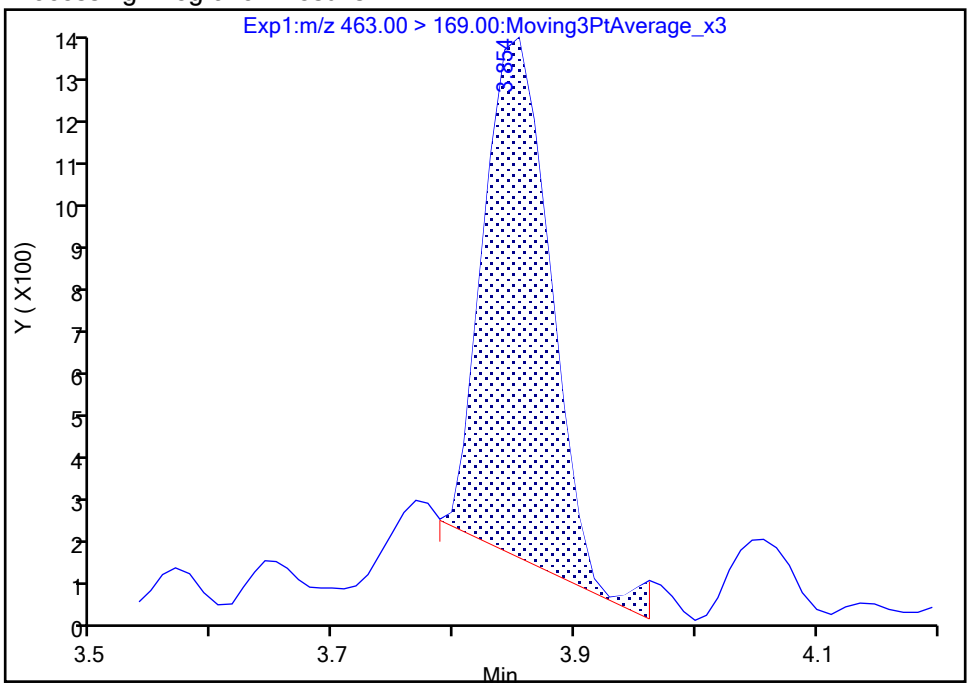
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

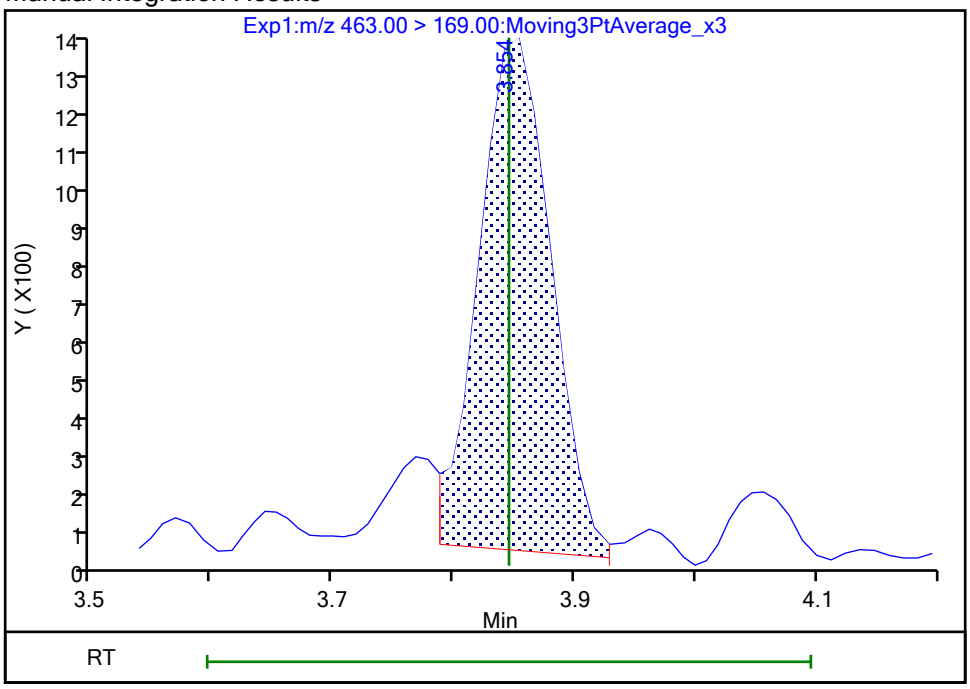
Processing Integration Results

RT: 3.85
Area: 4798
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 5607
Amount: 0.034041
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

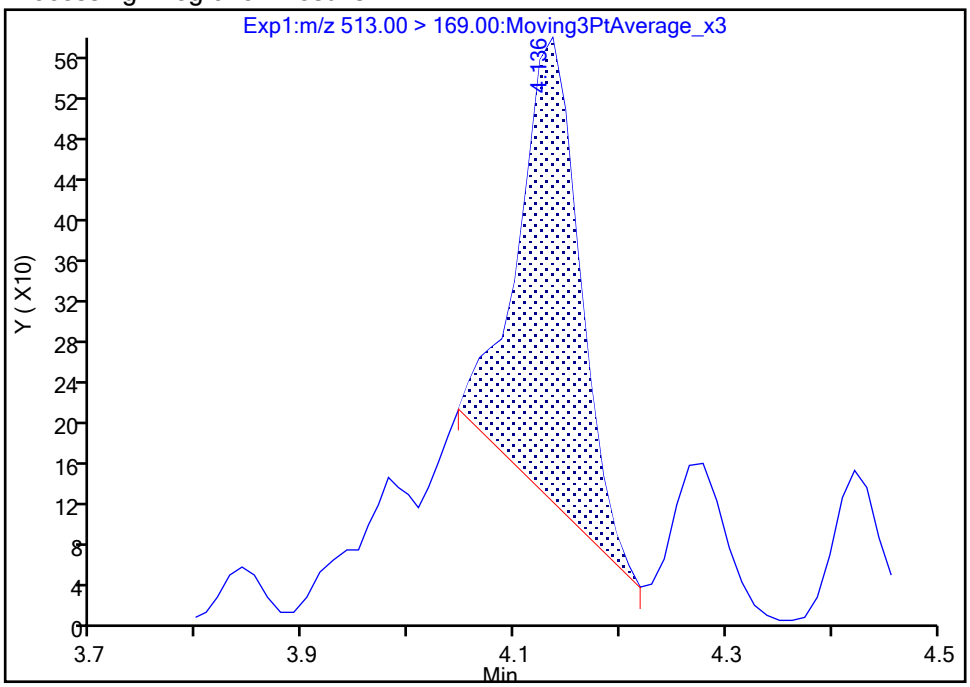
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

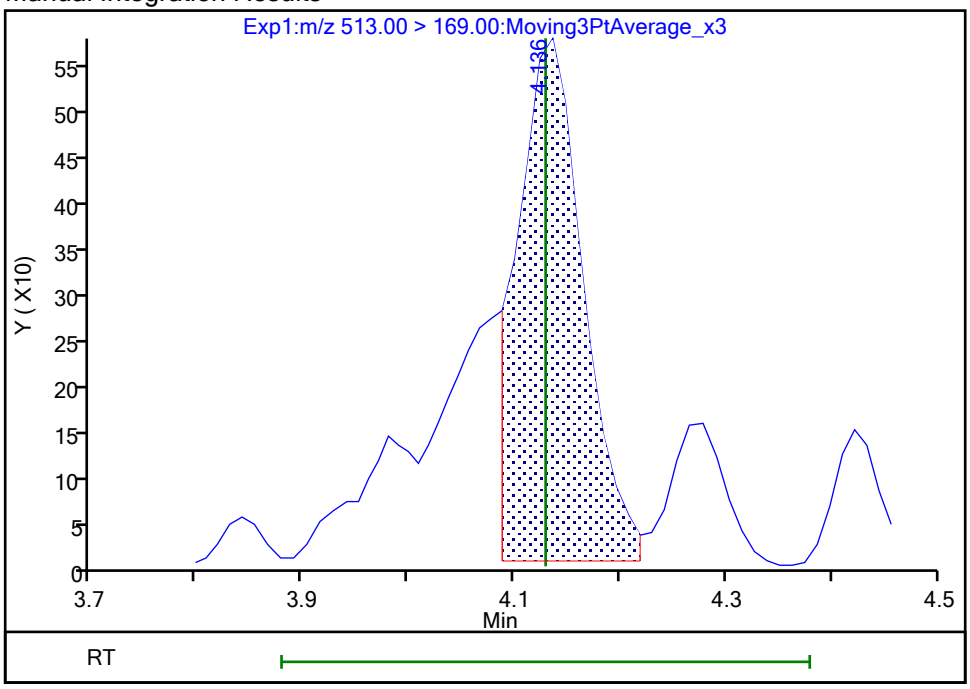
Processing Integration Results

RT: 4.14
Area: 1870
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2434
Amount: 0.011931
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:47:42 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

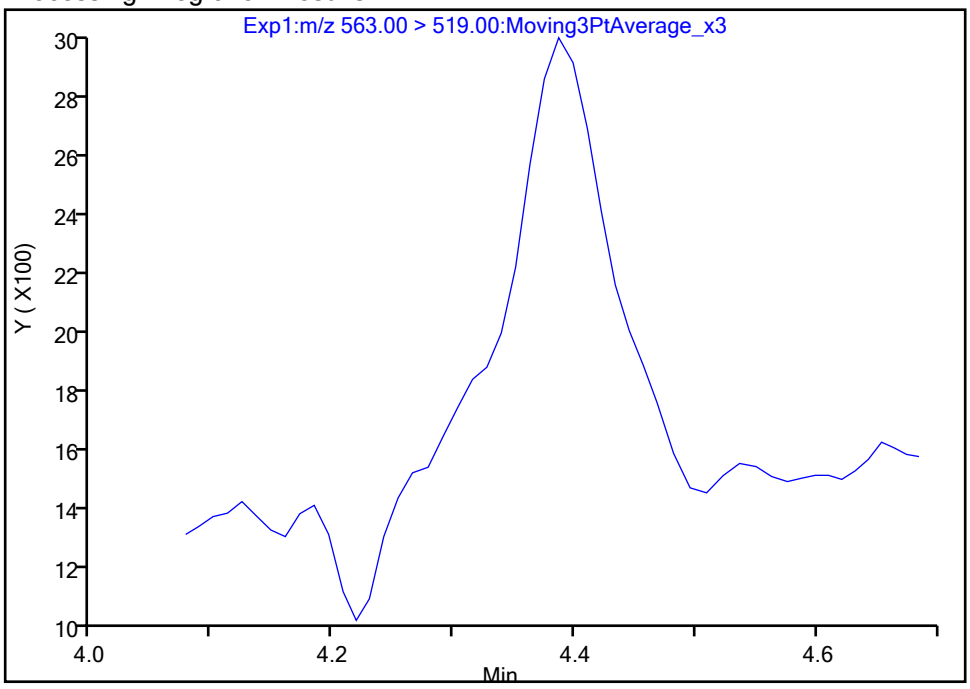
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

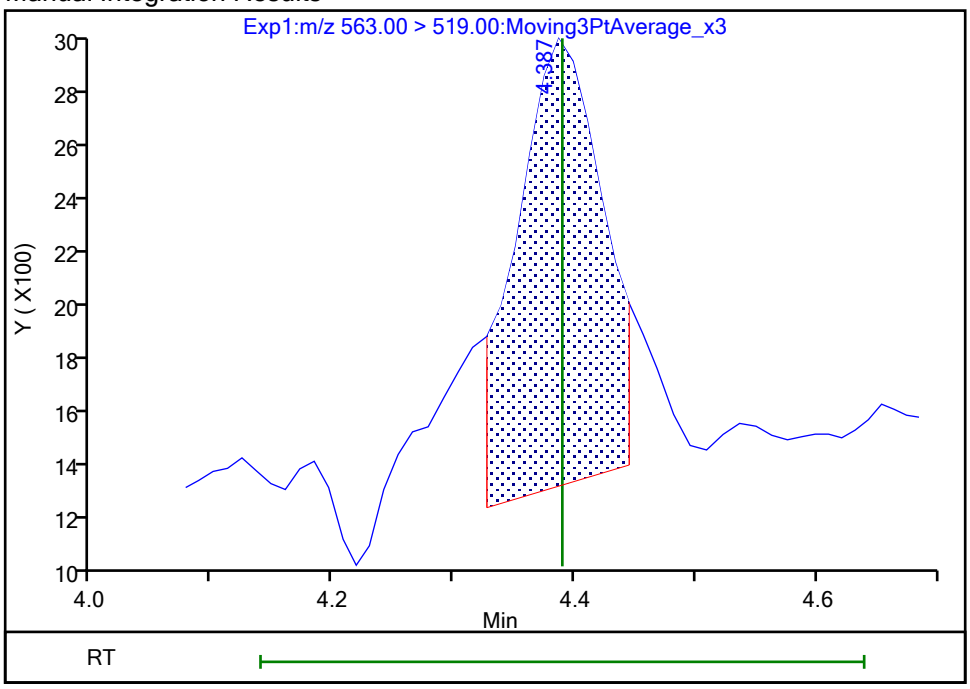
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 7737
Amount: 0.004154
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

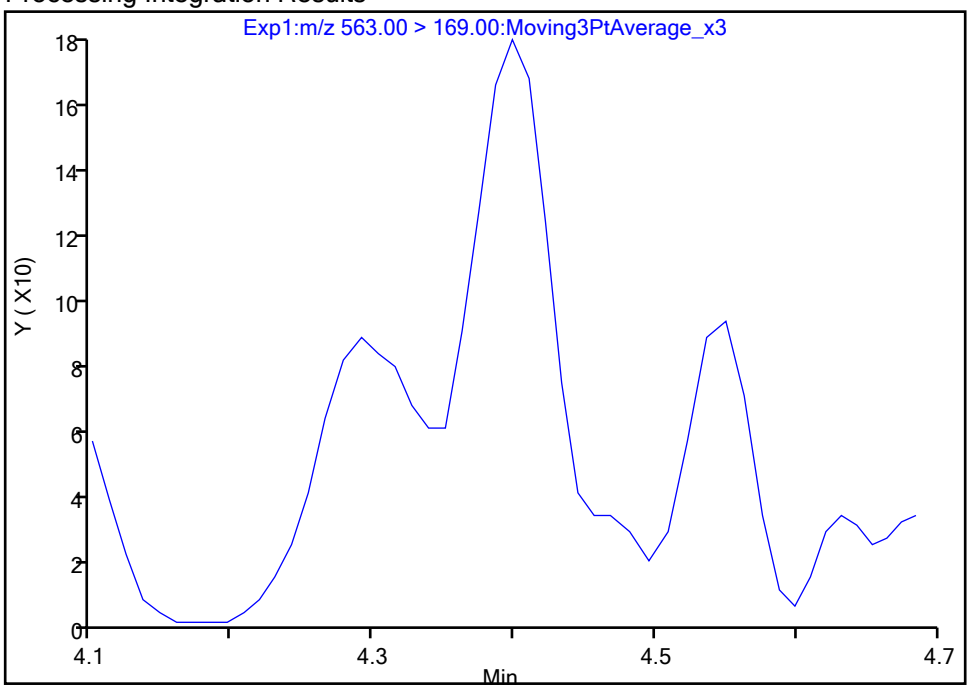
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

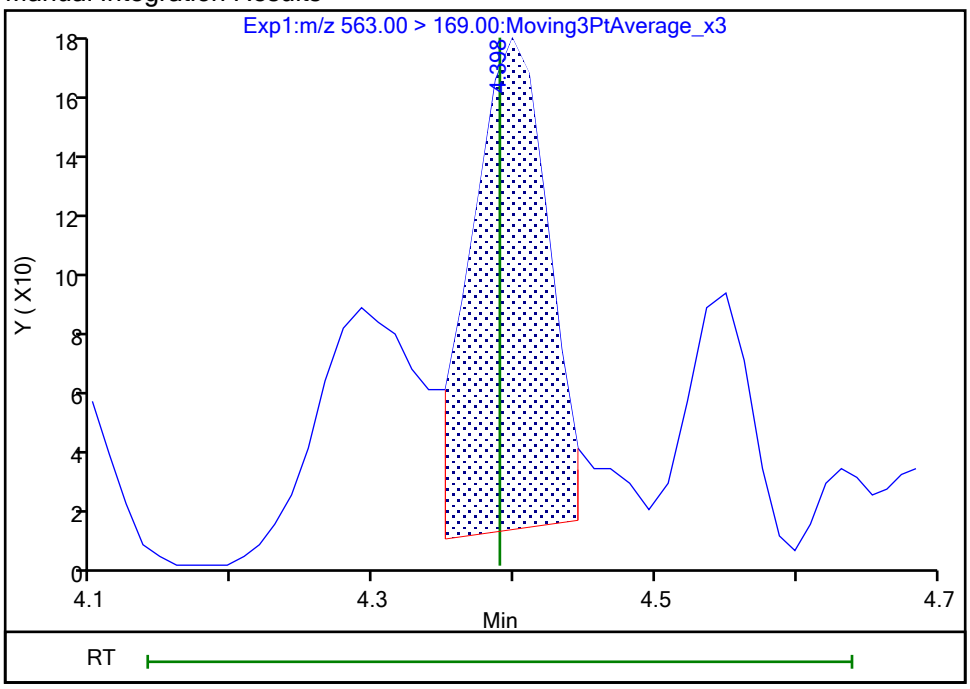
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.40
Area: 624
Amount: 0.004154
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

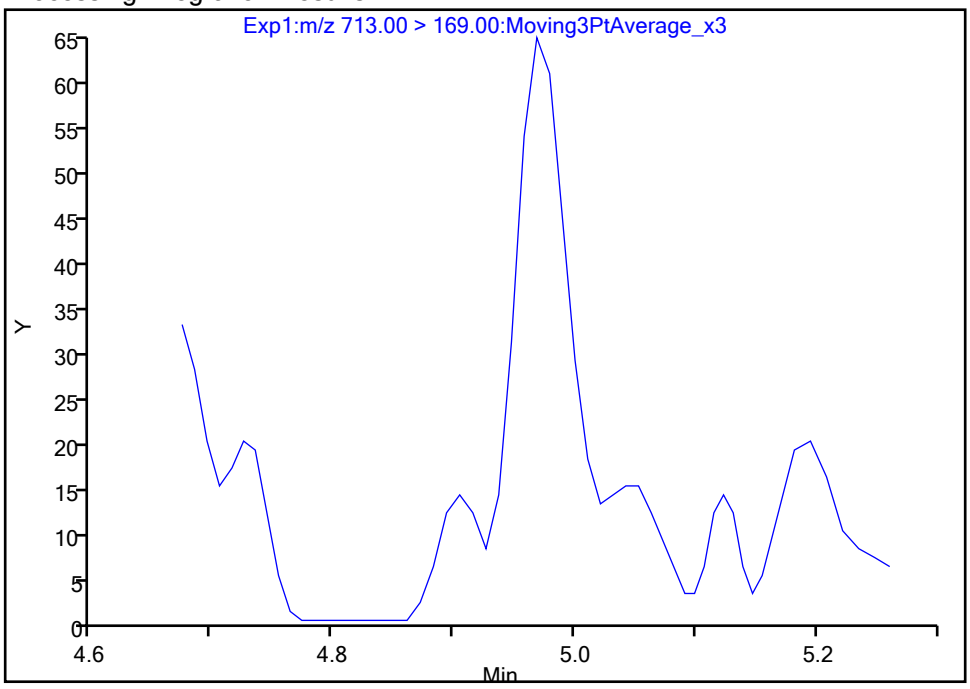
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

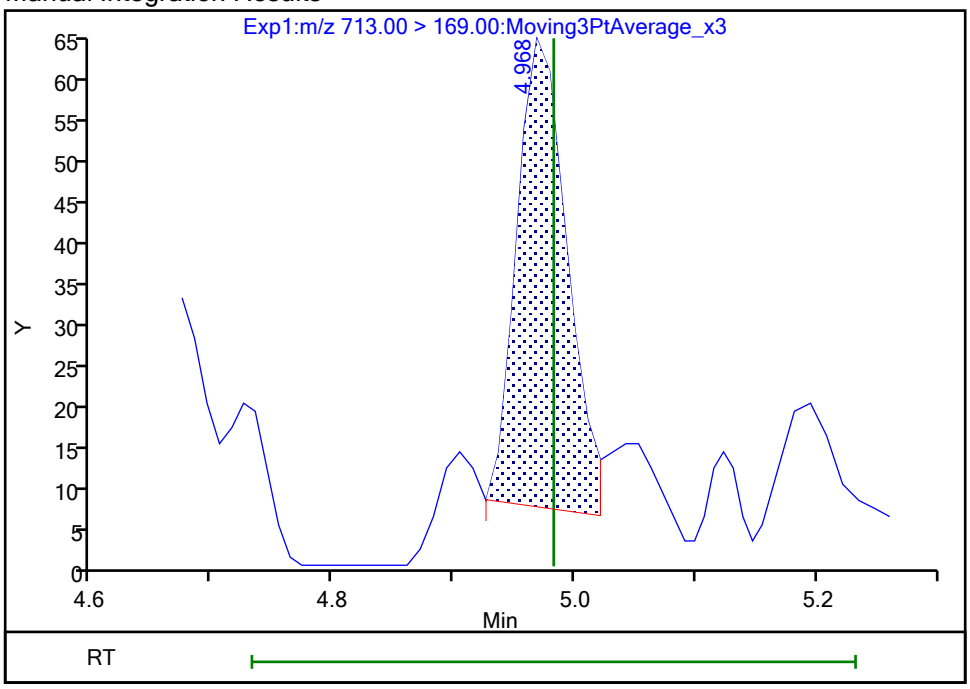
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 167
Amount: 0.000967
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

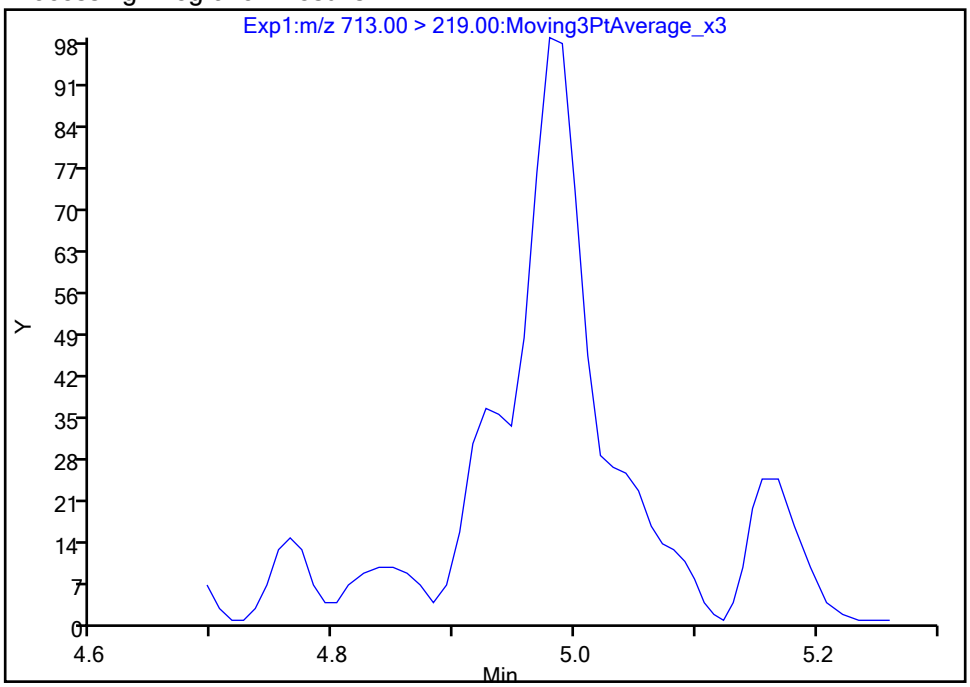
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

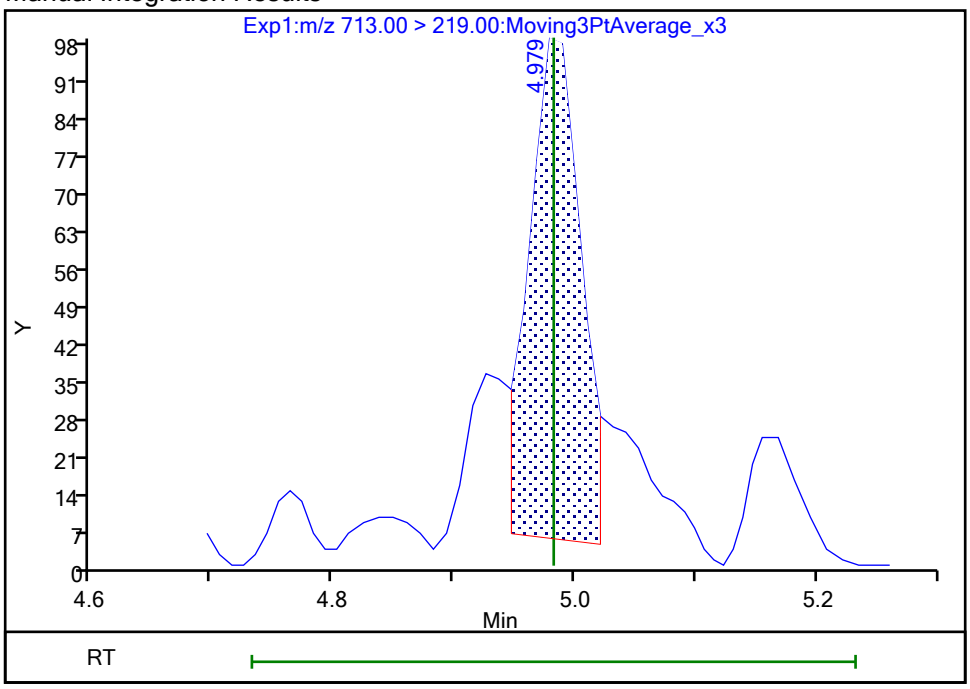
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 274
Amount: 0.000967
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

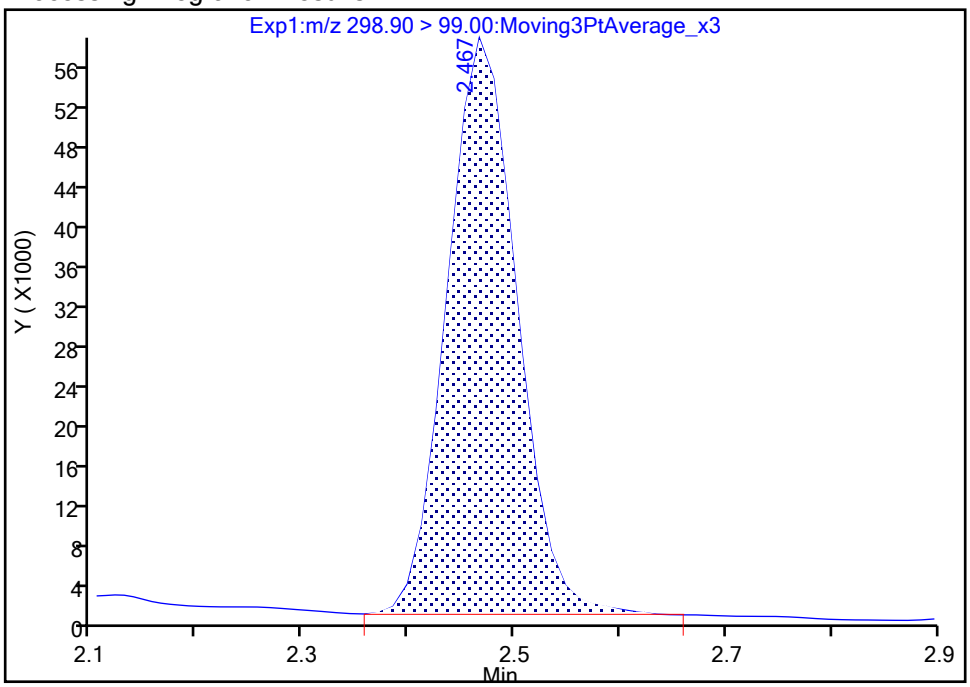
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

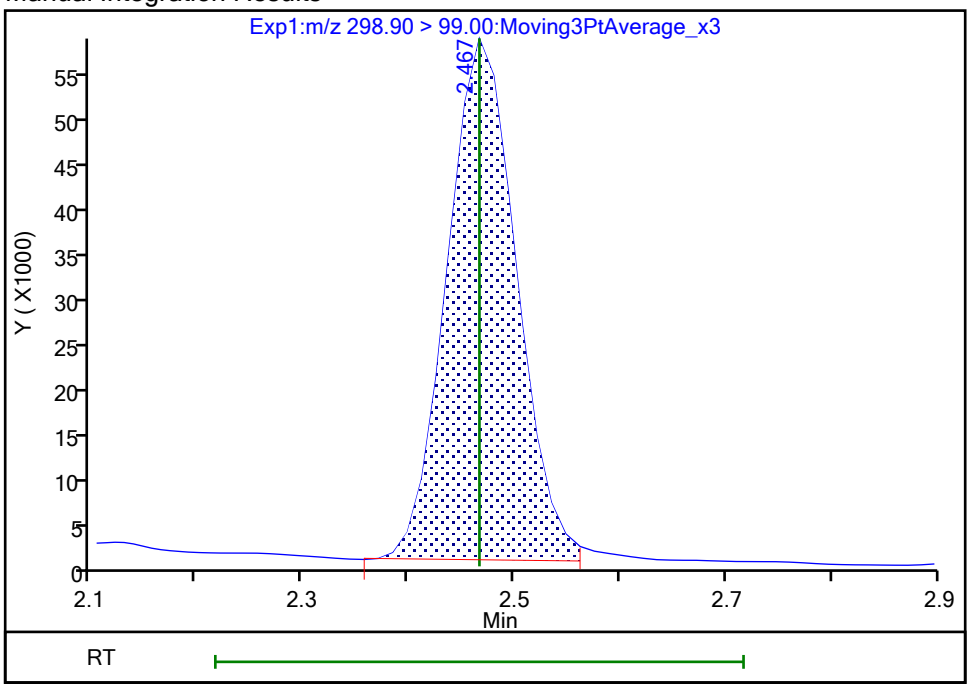
Processing Integration Results

RT: 2.47
Area: 261753
Amount: 0.385337
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 259052
Amount: 0.267963
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:25:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

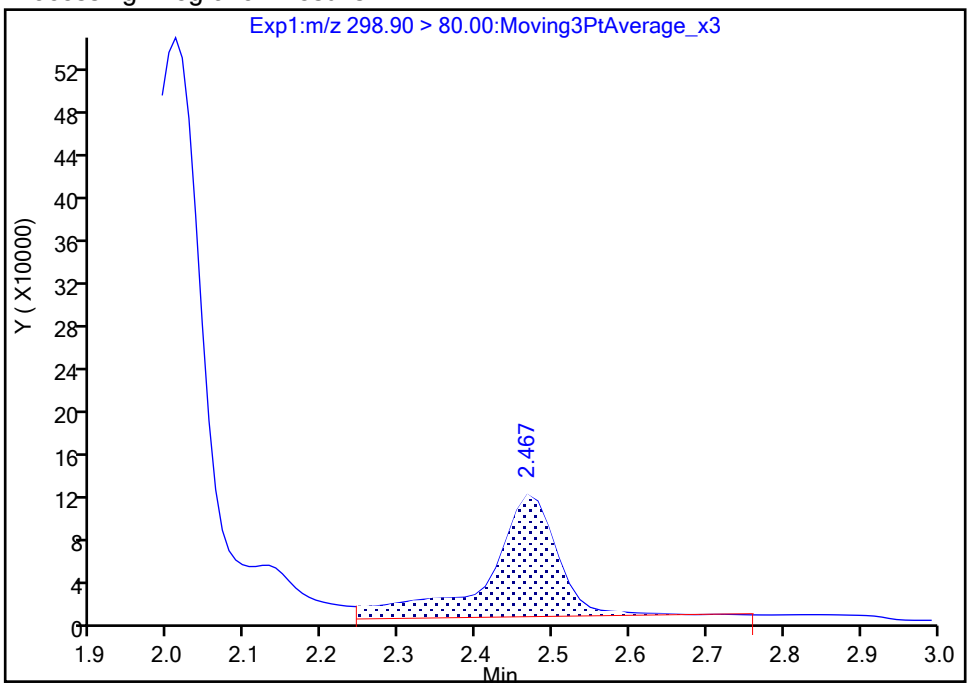
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

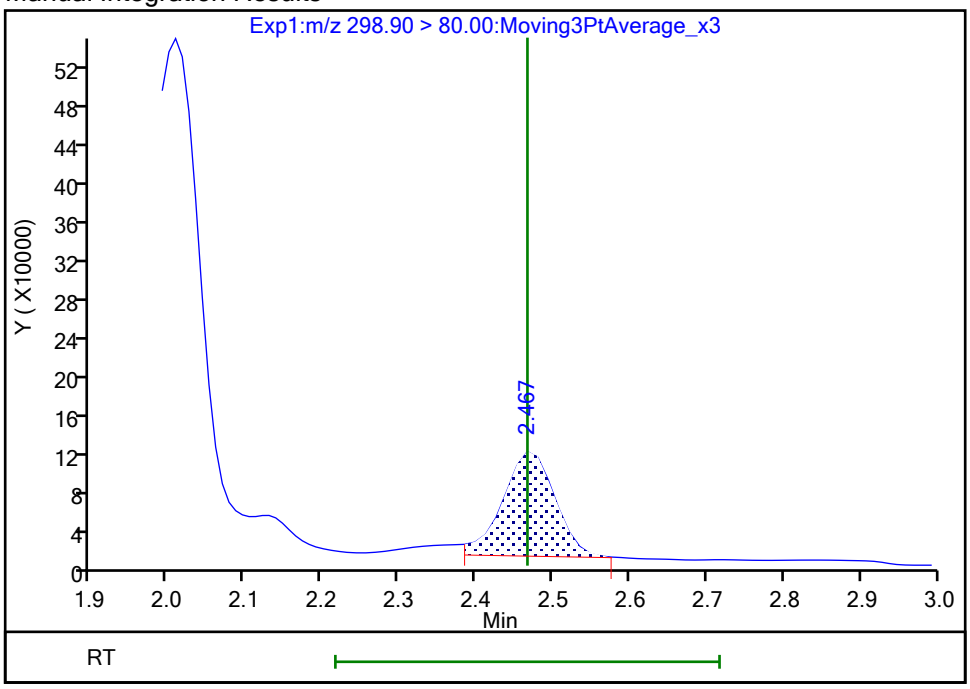
Processing Integration Results

RT: 2.47
Area: 715098
Amount: 0.385337
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 497278
Amount: 0.267963
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:25:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

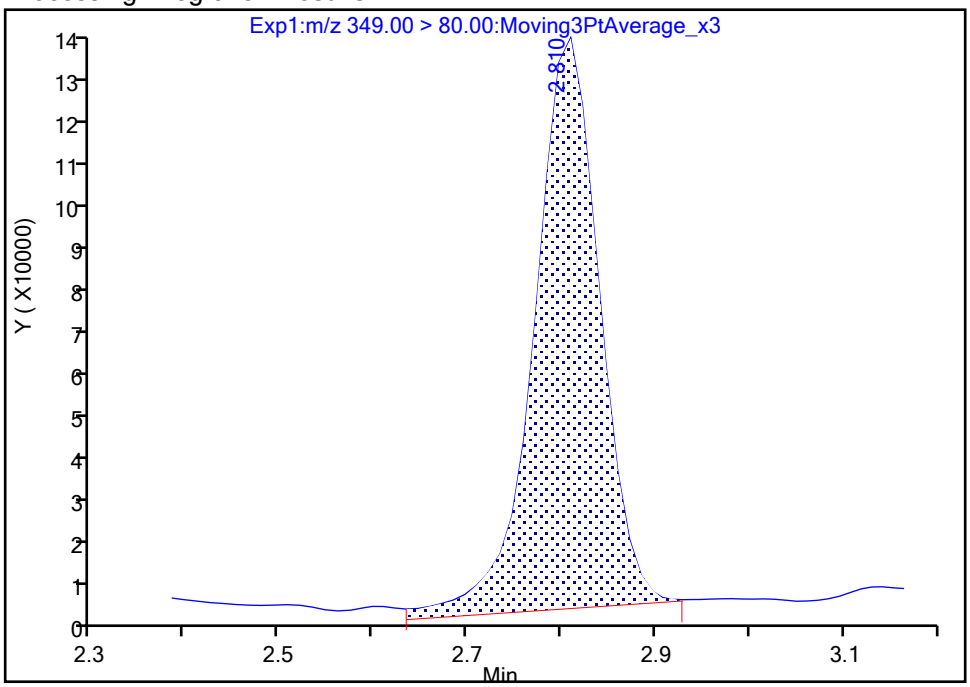
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

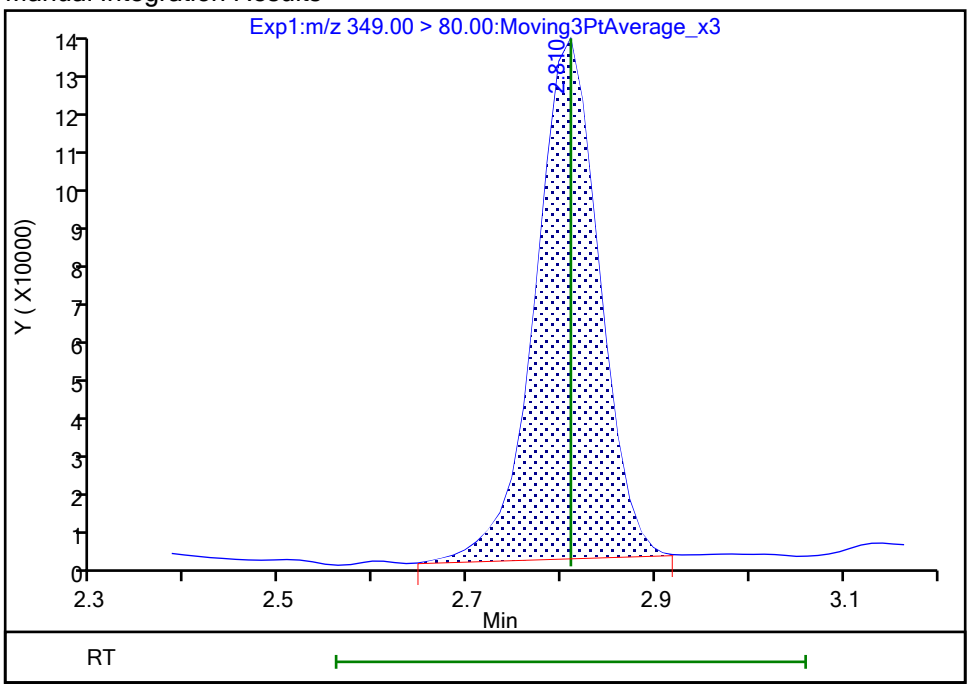
Processing Integration Results

RT: 2.81
Area: 609651
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 586066
Amount: 0.362771
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

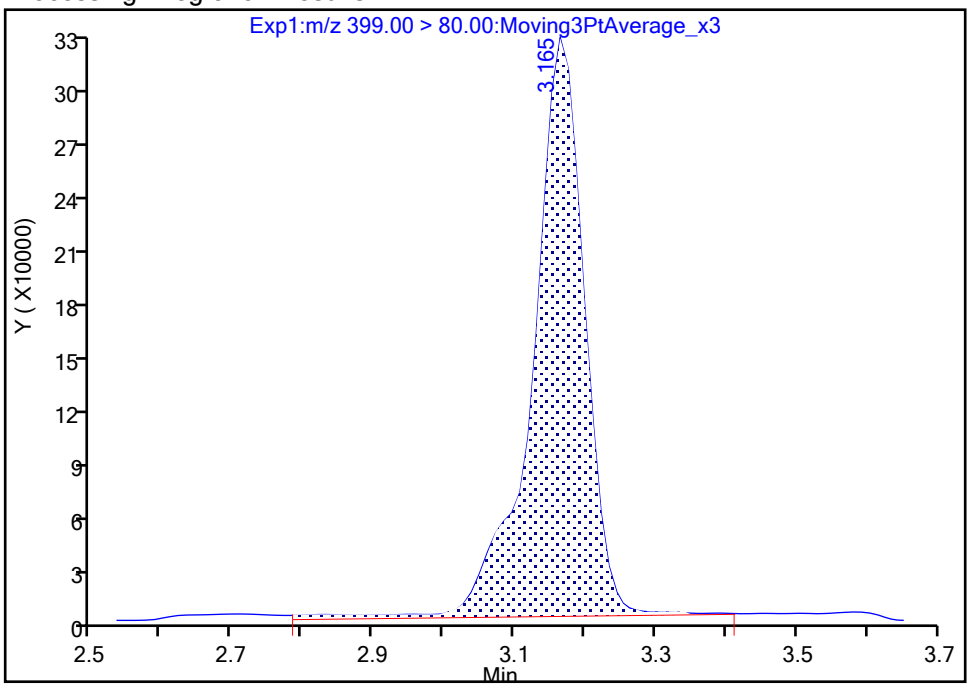
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

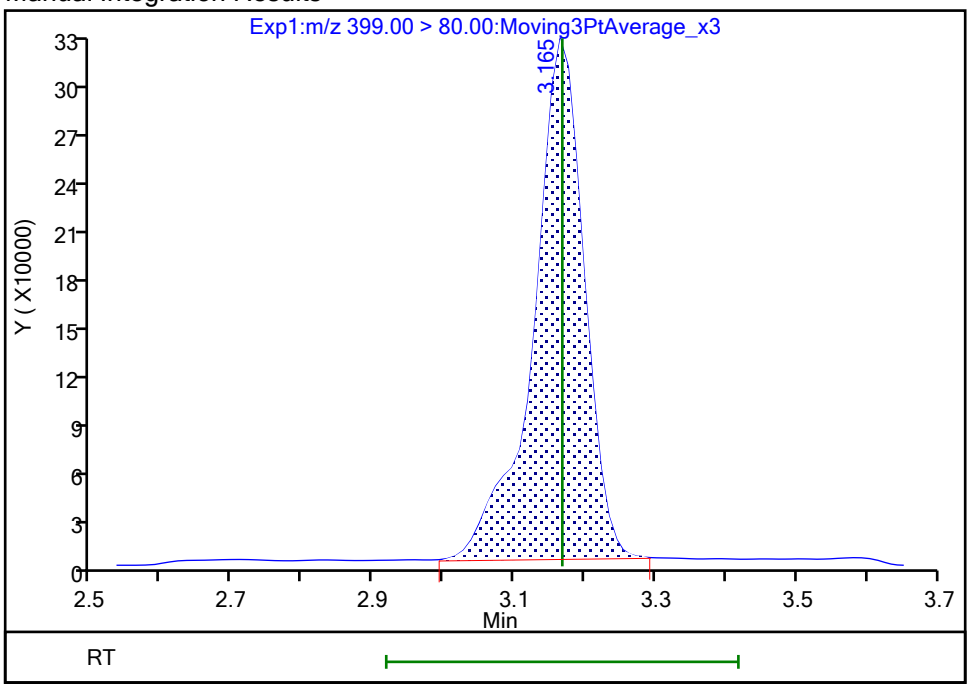
Processing Integration Results

RT: 3.16
Area: 1650246
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1598759
Amount: 1.167448
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

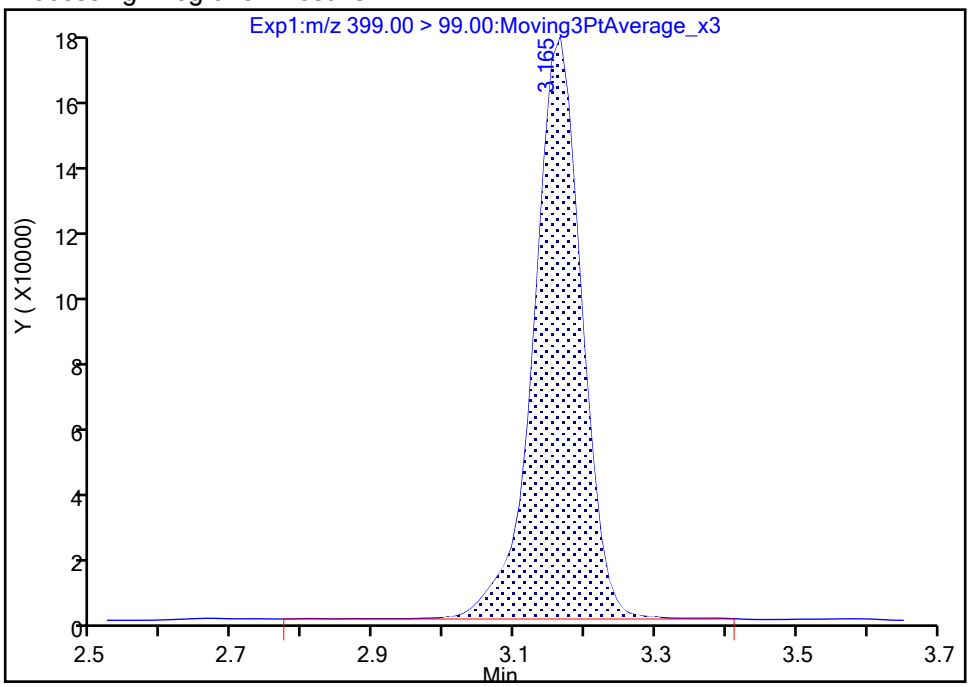
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

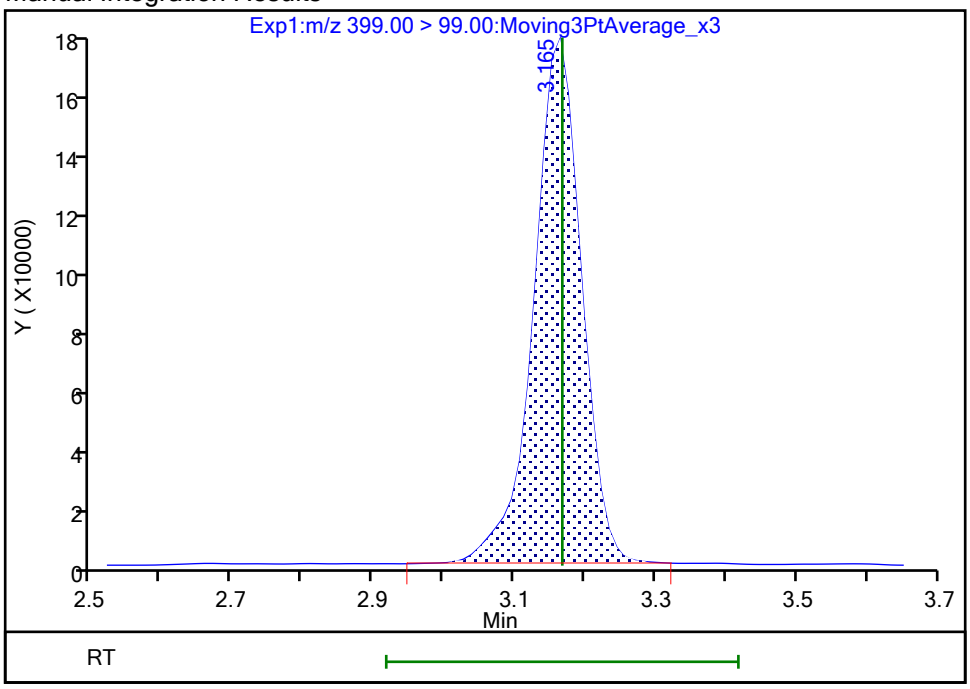
Processing Integration Results

RT: 3.16
Area: 832146
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 822119
Amount: 1.167448
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

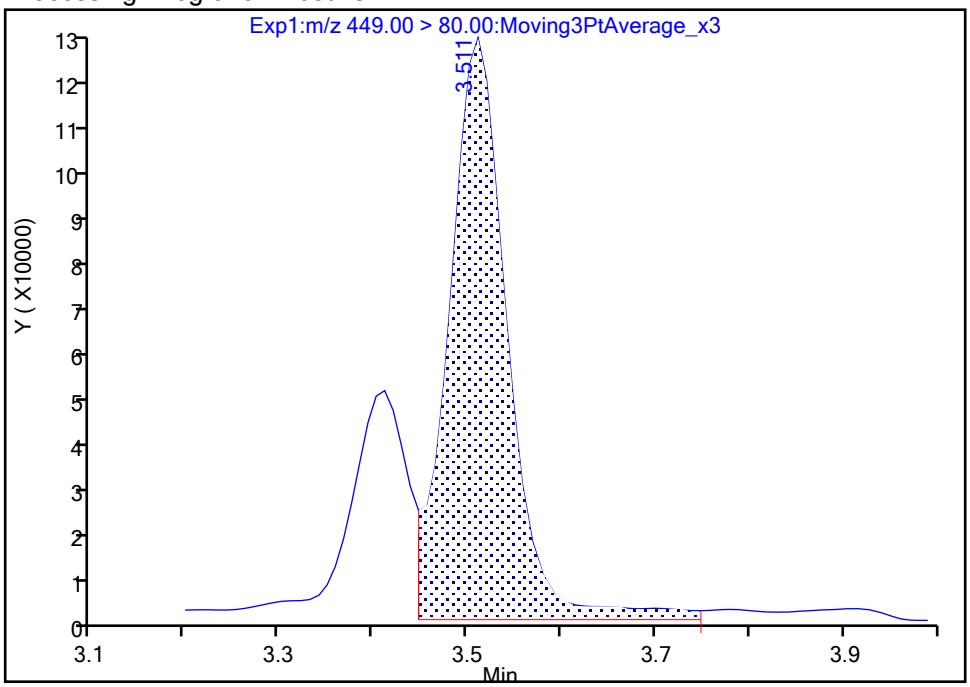
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

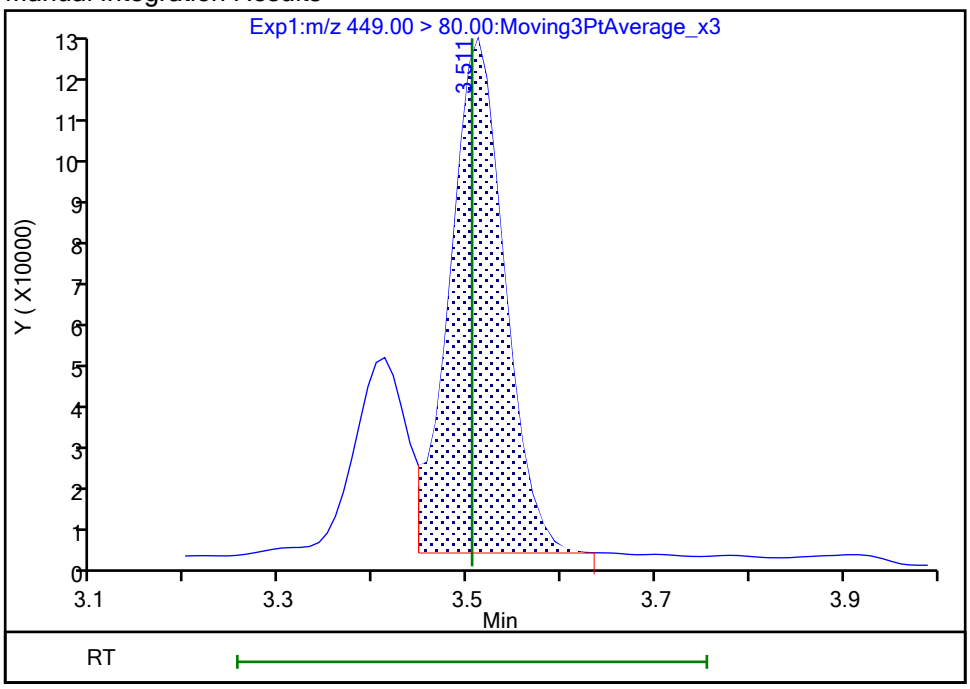
Processing Integration Results

RT: 3.51
Area: 558916
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 508988
Amount: 0.490403
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

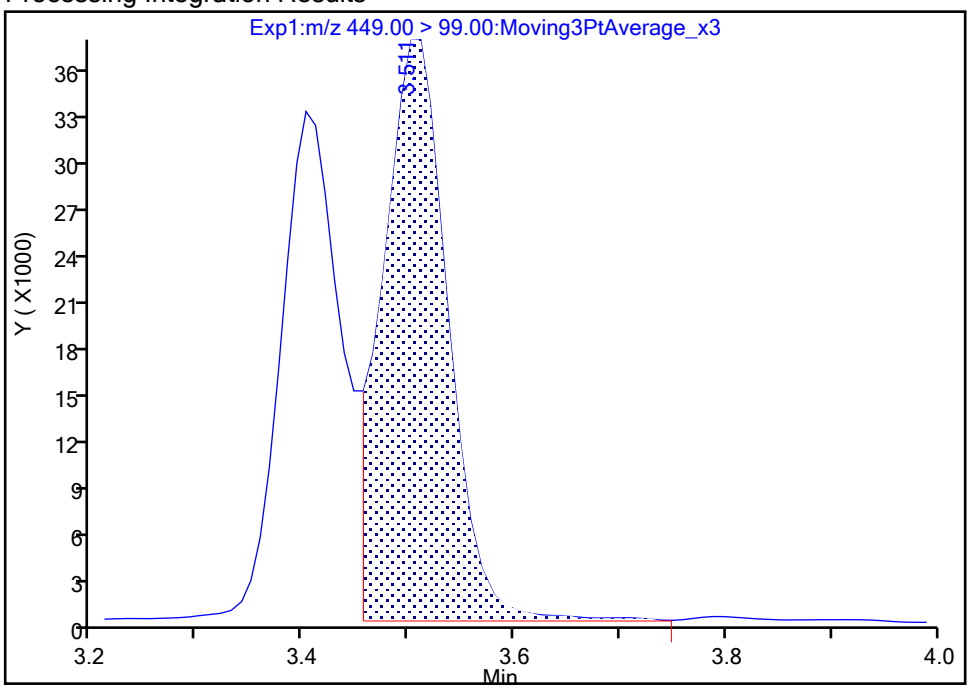
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

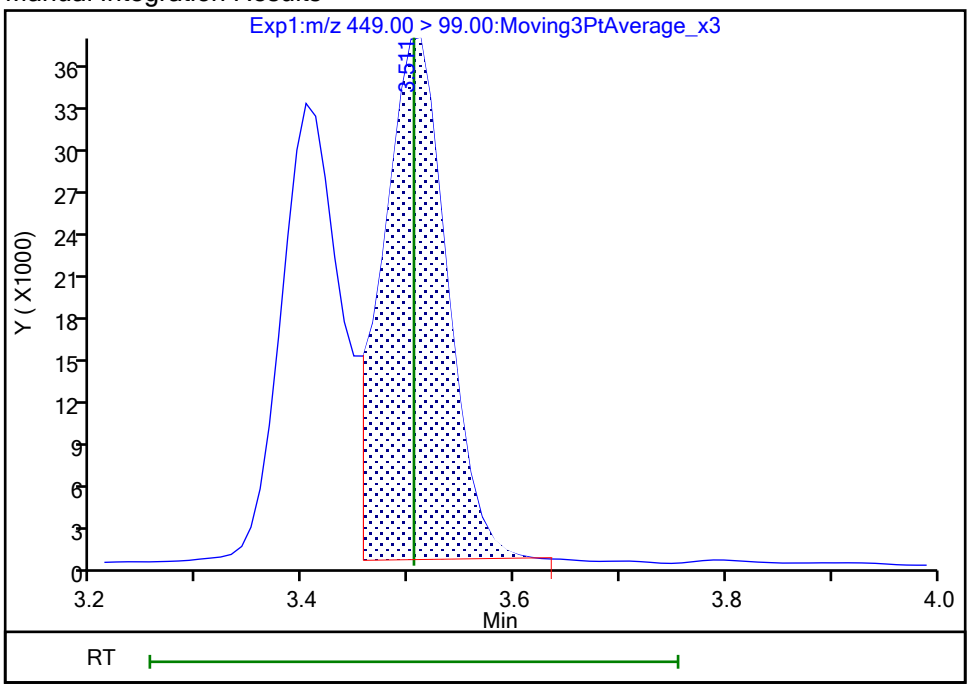
Processing Integration Results

RT: 3.51
Area: 159288
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 155546
Amount: 0.490403
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

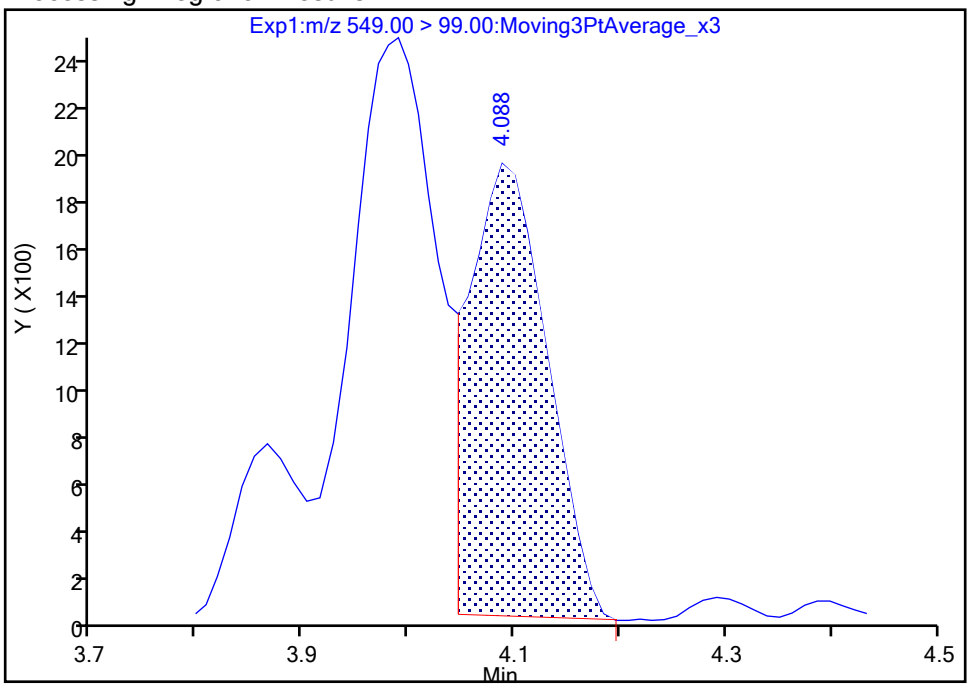
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

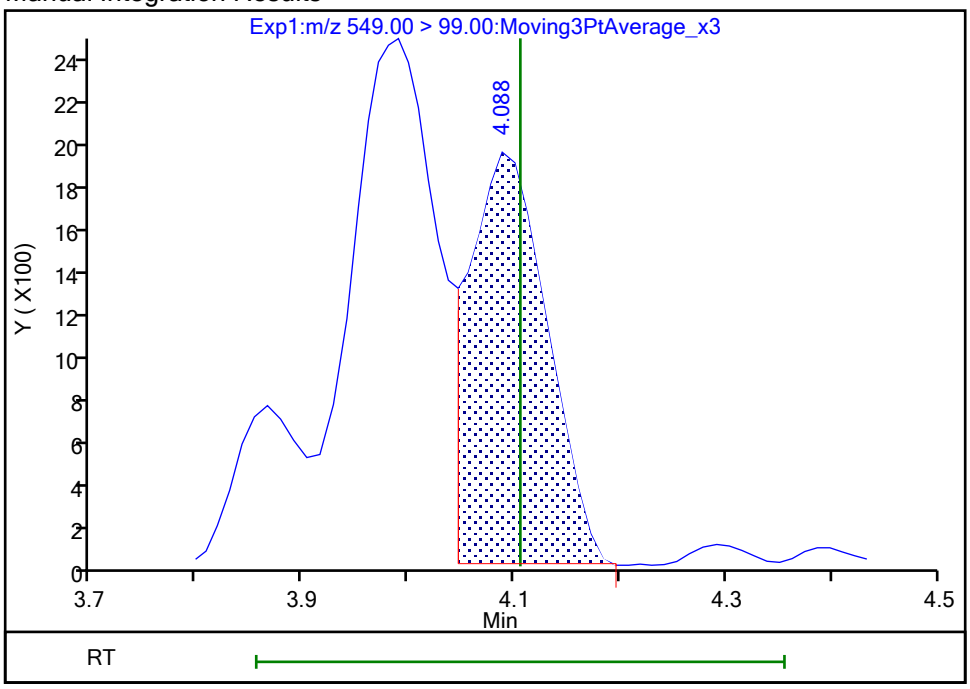
Processing Integration Results

RT: 4.09
Area: 9262
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 9338
Amount: 0.015557
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

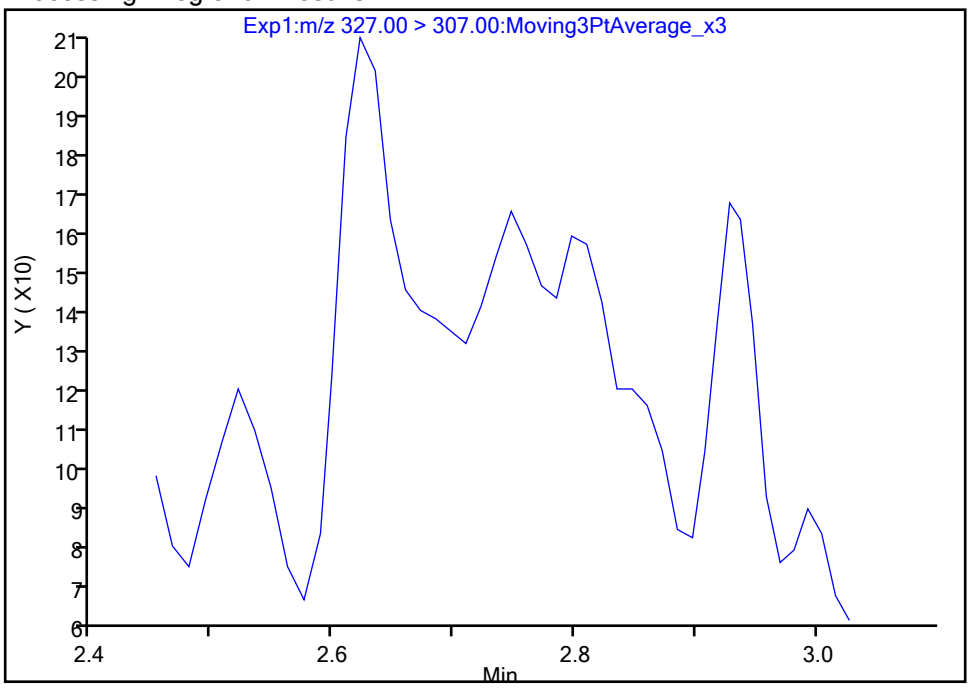
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

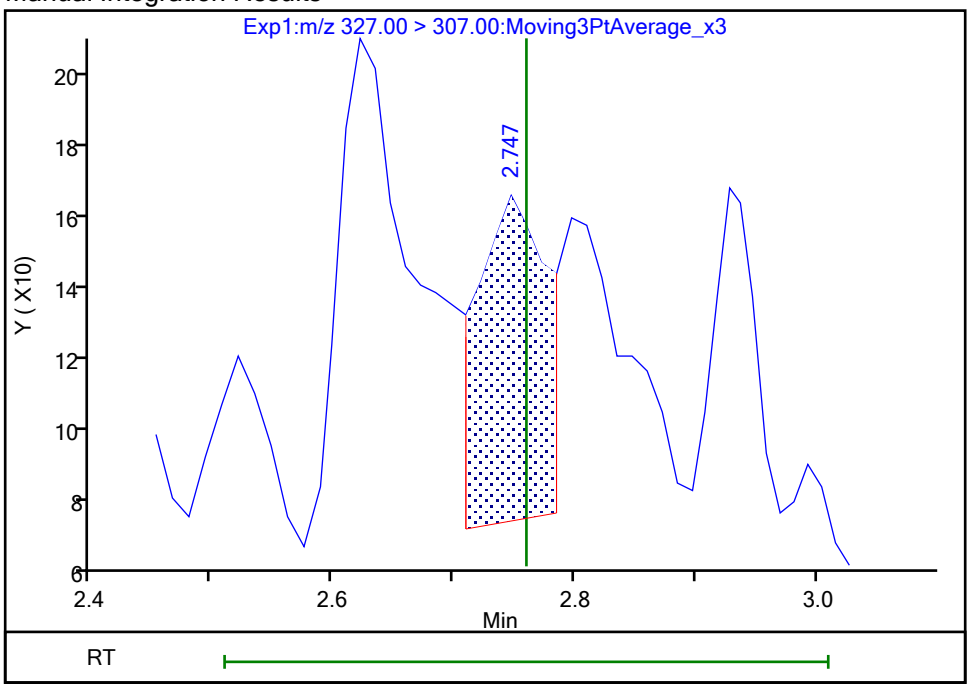
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 326
Amount: 0.000542
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:26:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

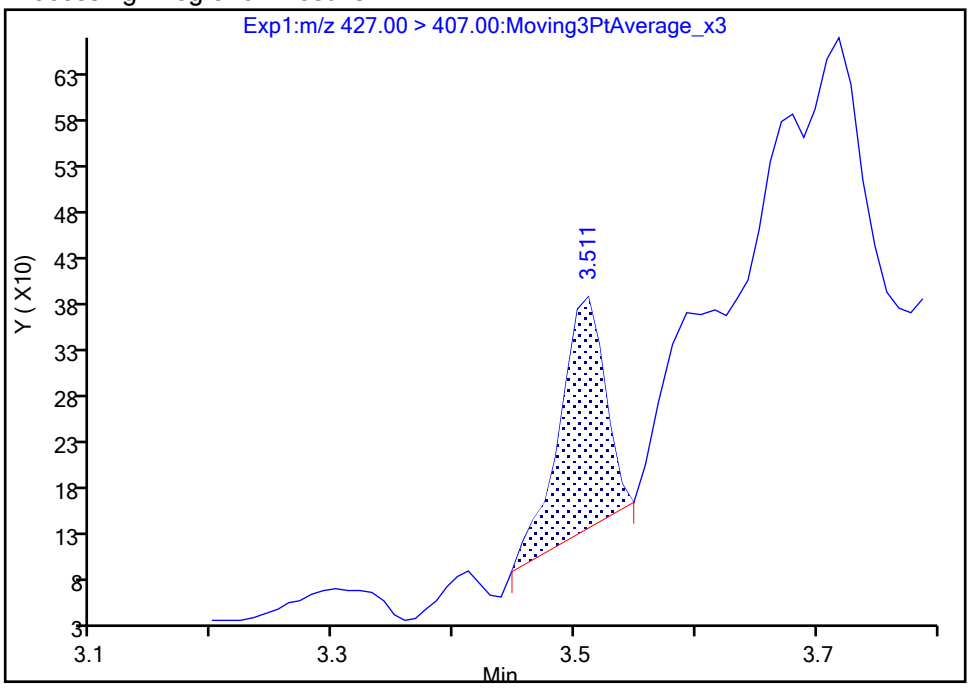
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

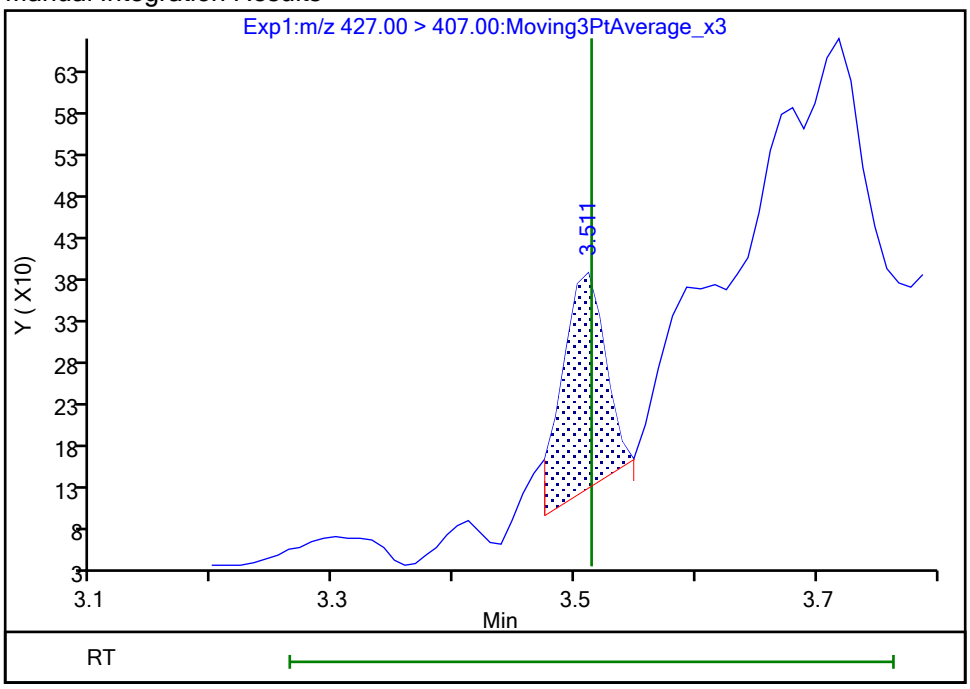
Processing Integration Results

RT: 3.51
Area: 653
Amount: 0.001024
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 632
Amount: 0.000991
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:27:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

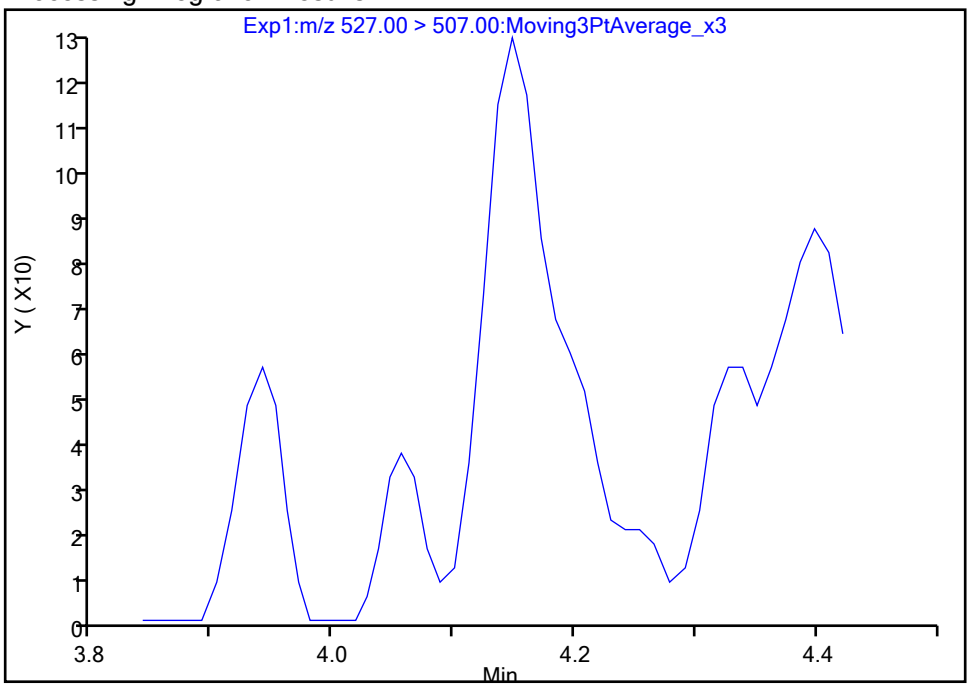
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

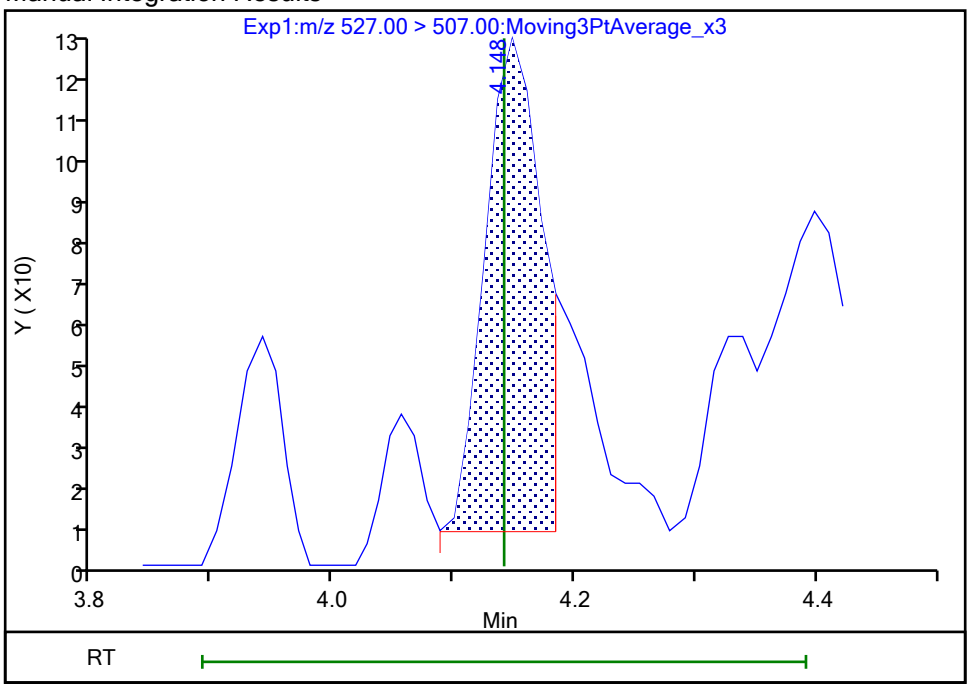
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 361
Amount: 0.000577
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

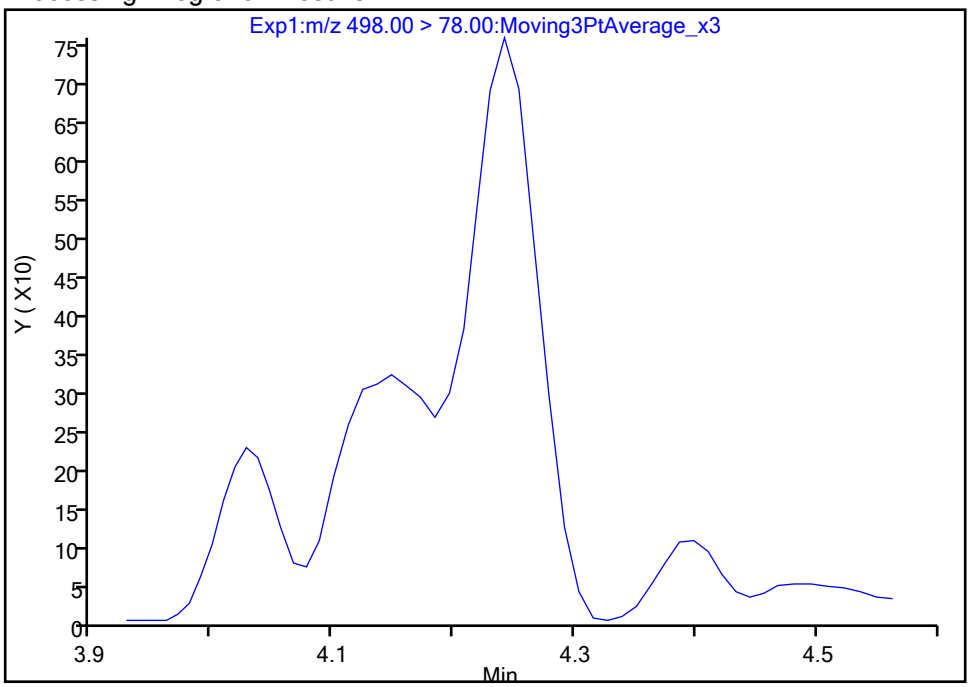
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

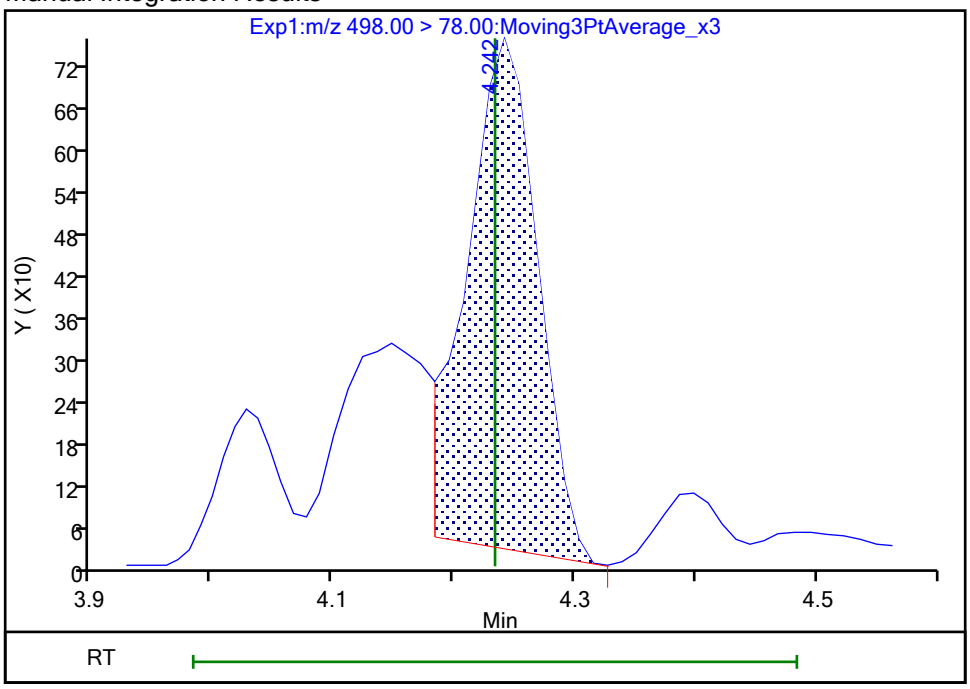
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 2947
Amount: 0.002146
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

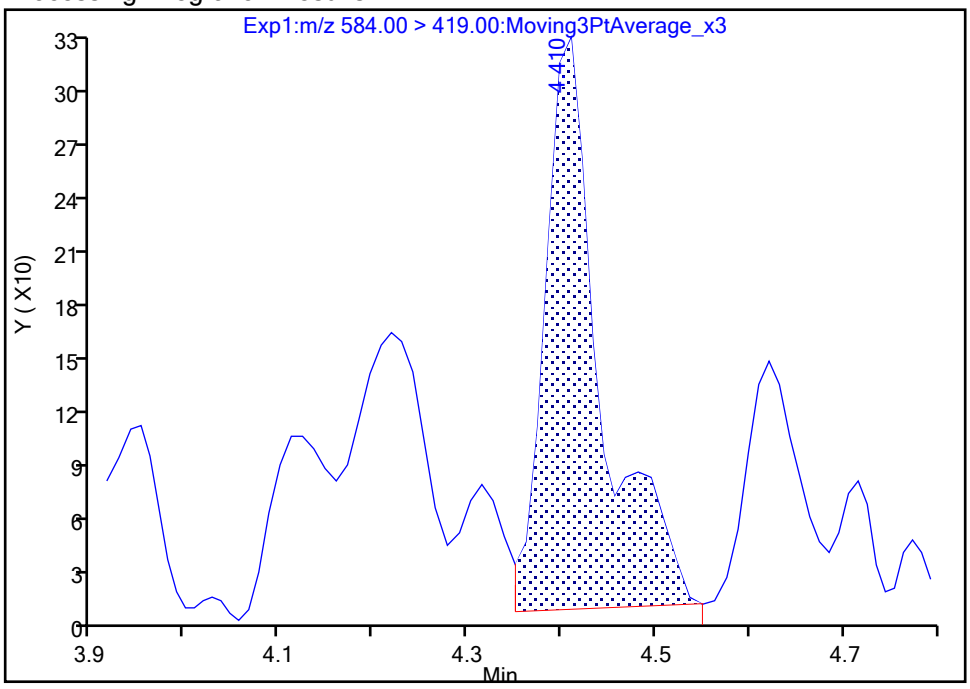
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

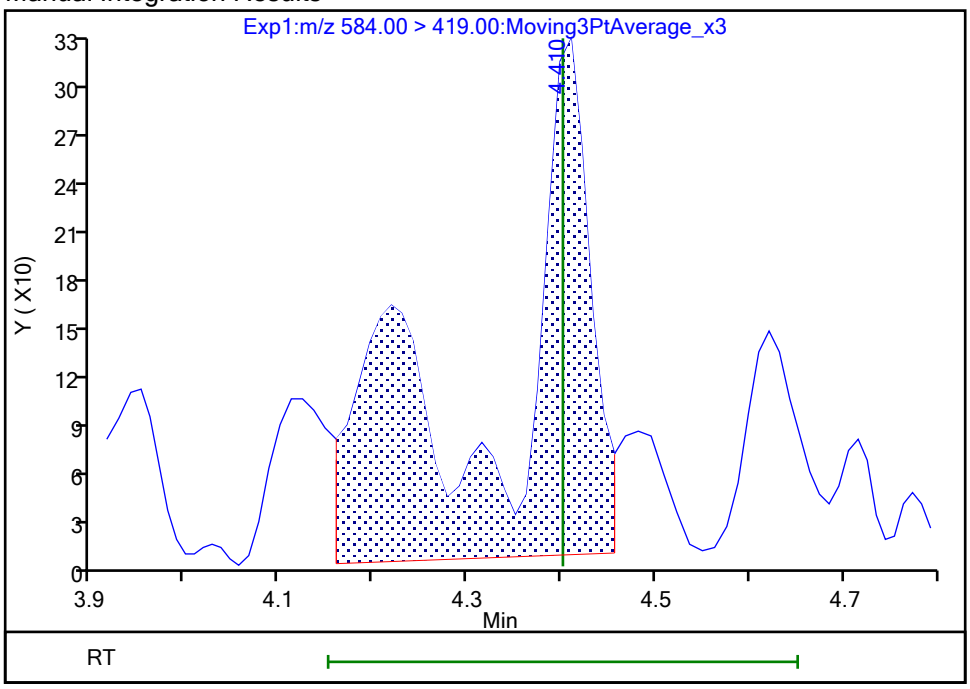
Processing Integration Results

RT: 4.41
Area: 1323
Amount: 0.003122
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 2099
Amount: 0.004953
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

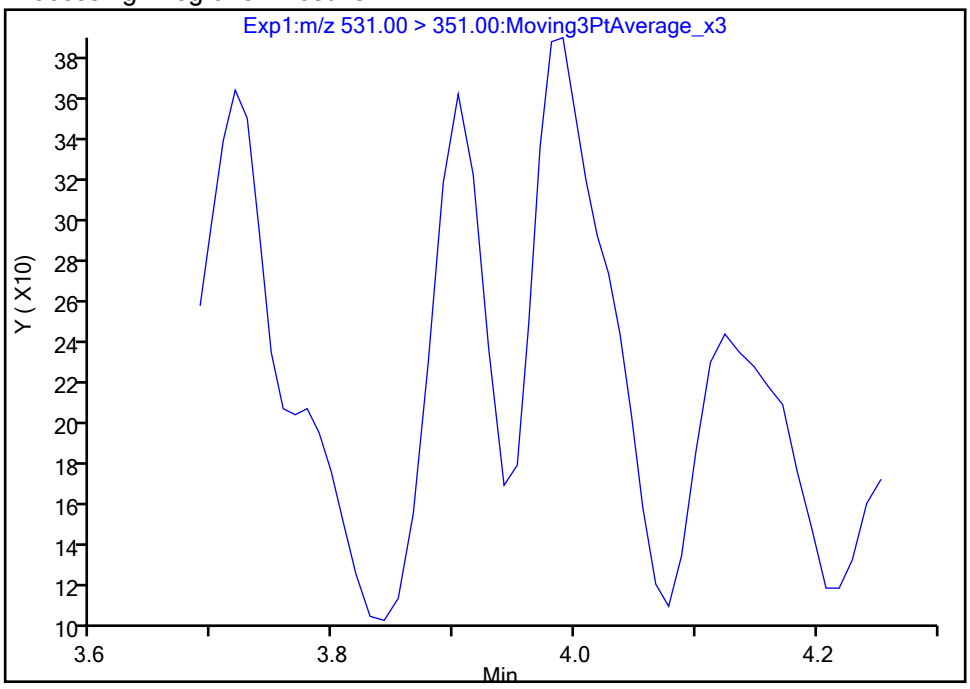
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

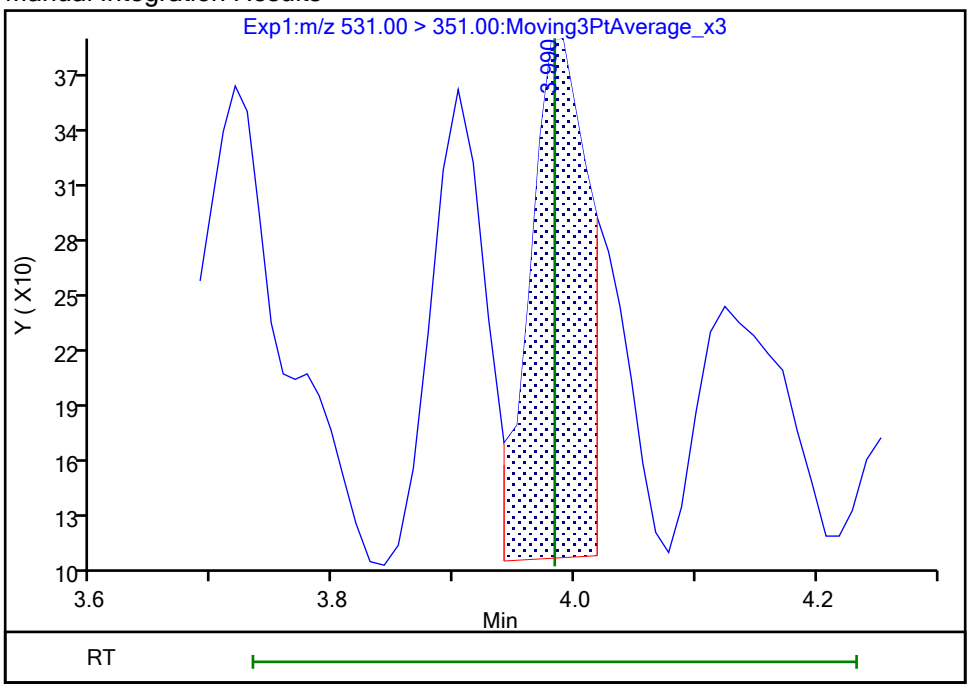
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 920
Amount: 0.000359
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:28:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

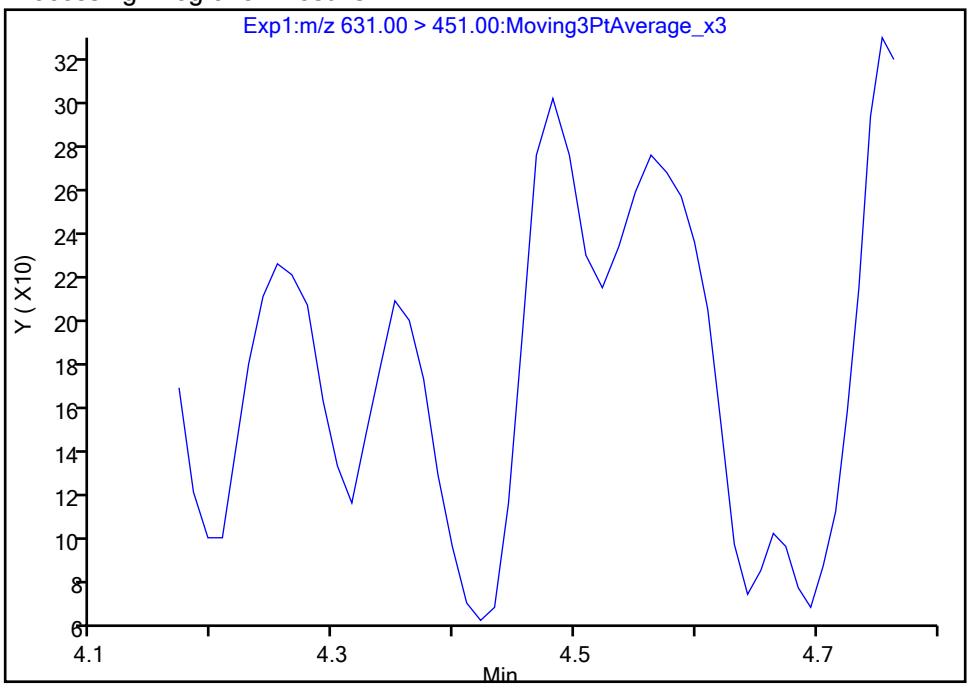
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

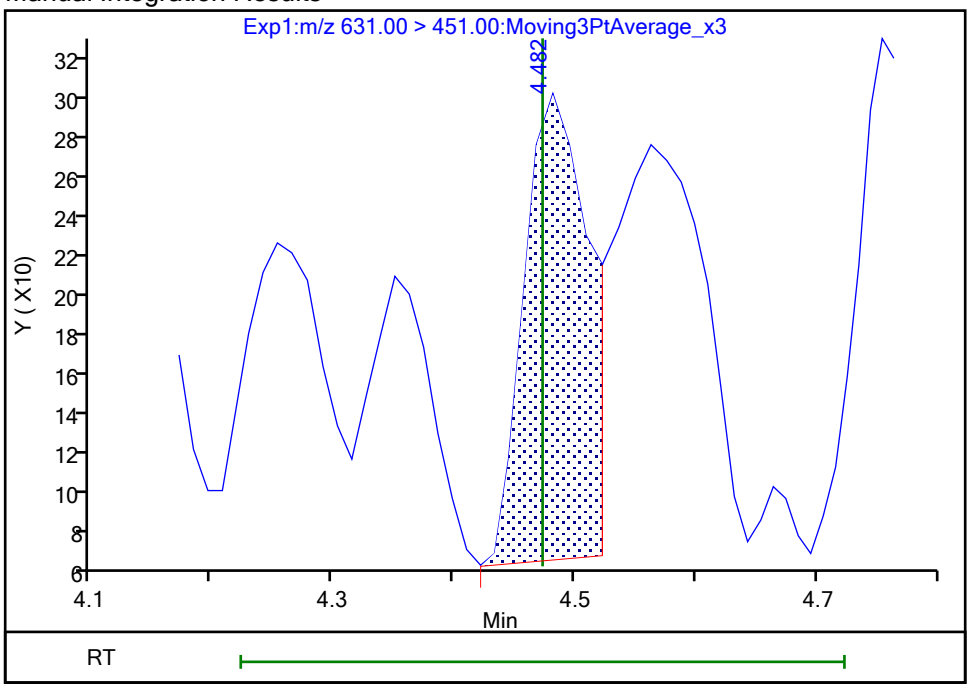
Not Detected
Expected RT: 4.47

Processing Integration Results



Manual Integration Results

RT: 4.48
Area: 852
Amount: 0.000217
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

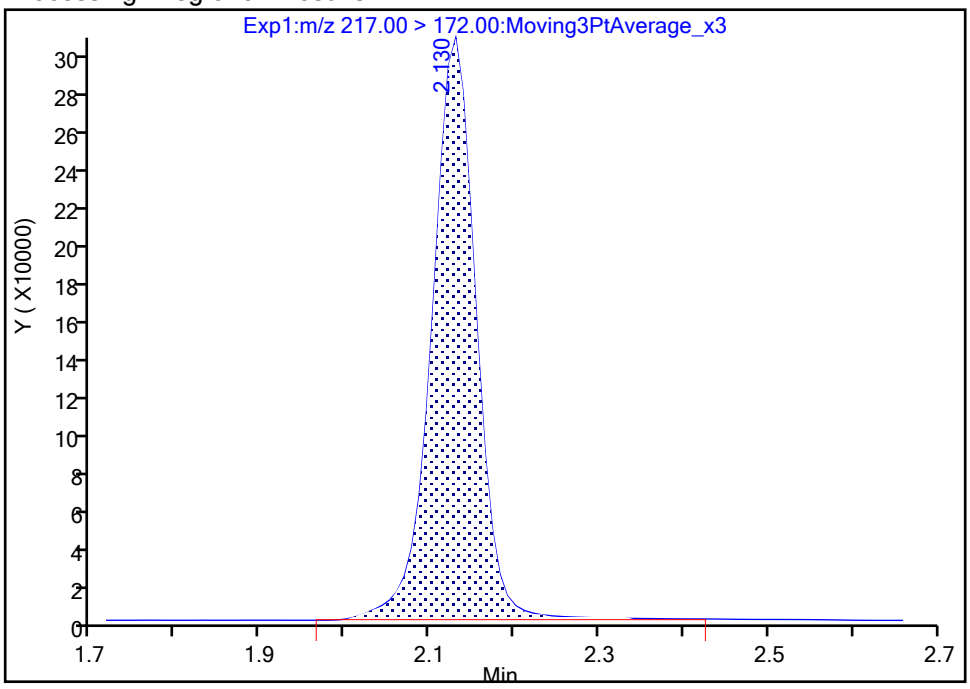
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

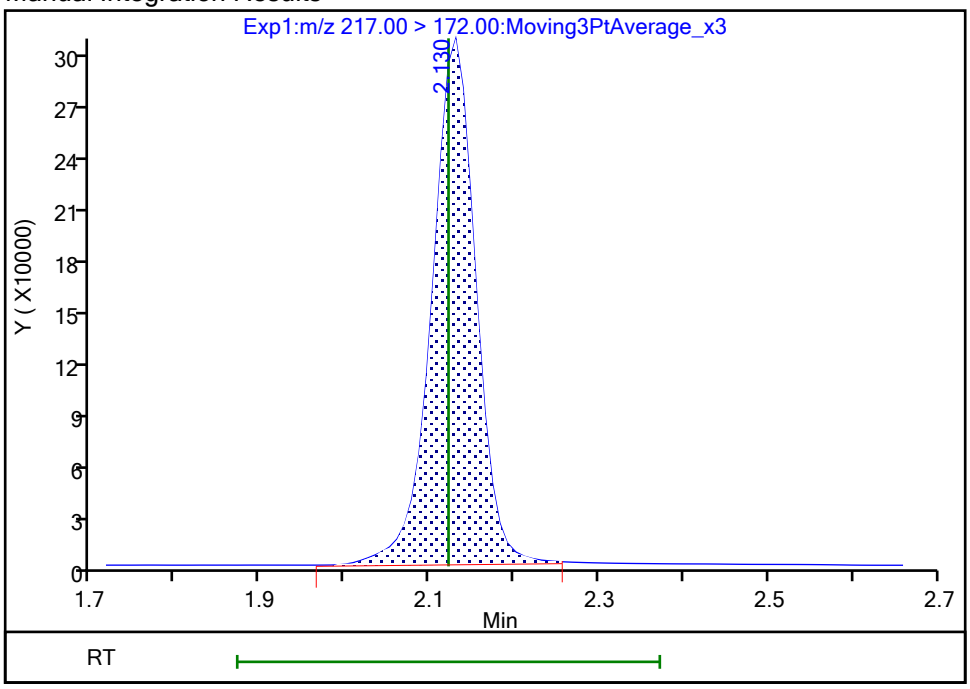
Processing Integration Results

RT: 2.13
Area: 1114996
Amount: 0.772271
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1109731
Amount: 0.768625
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

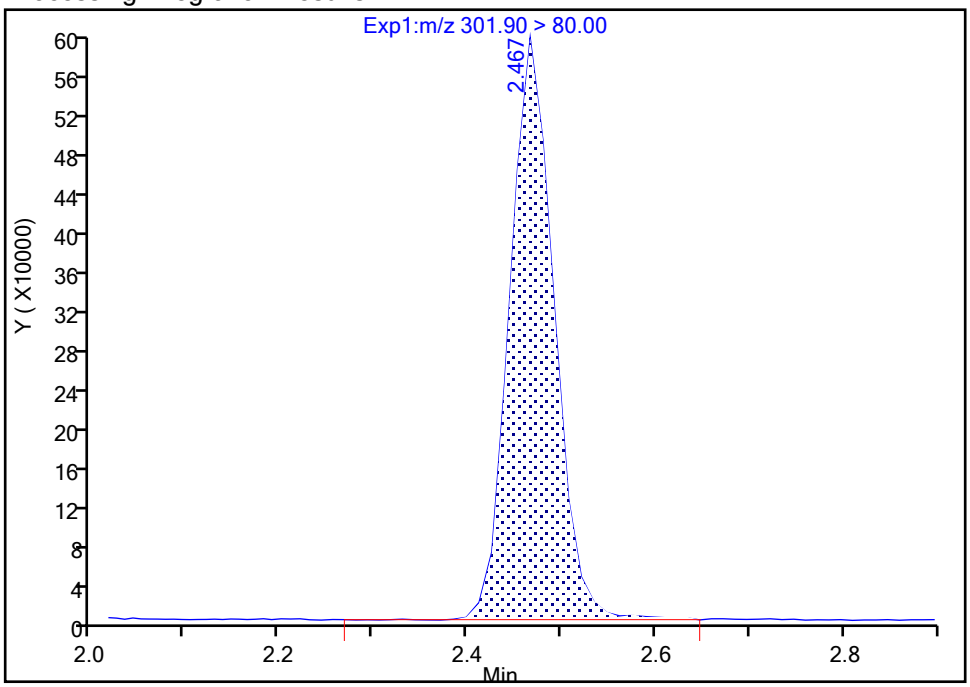
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

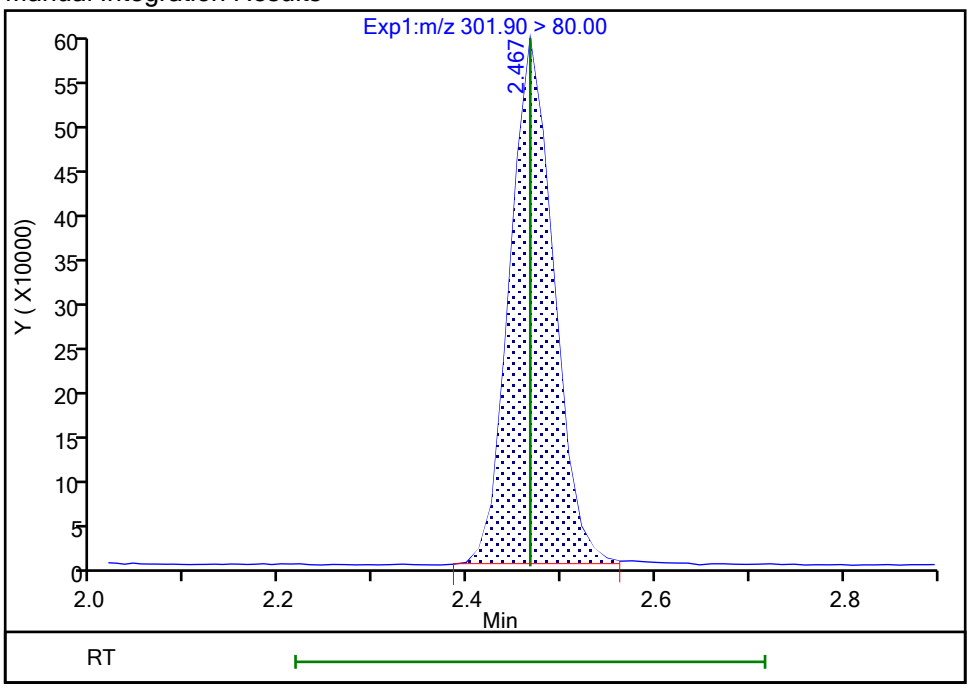
Processing Integration Results

RT: 2.47
Area: 1948035
Amount: 1.284887
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1931528
Amount: 1.274000
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:24:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

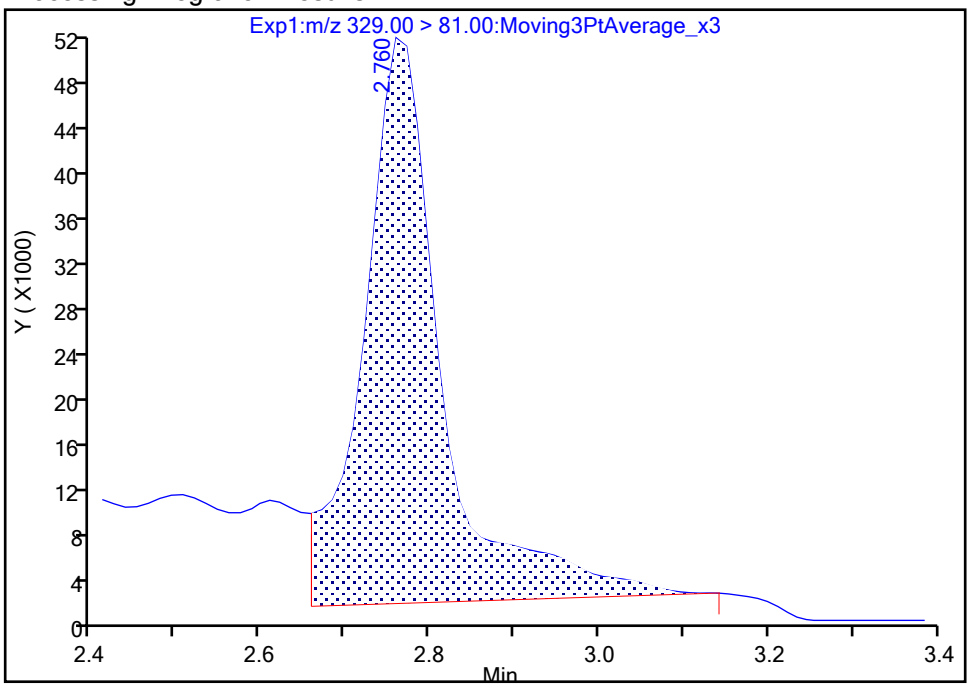
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

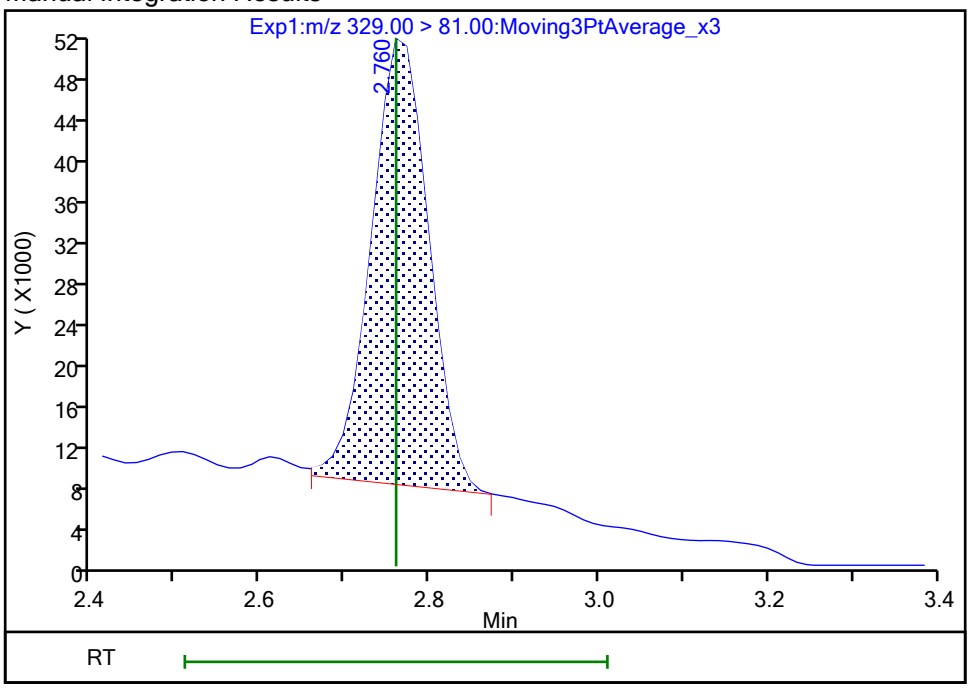
Processing Integration Results

RT: 2.76
Area: 325101
Amount: 1.854186
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 206921
Amount: 1.180157
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:25:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

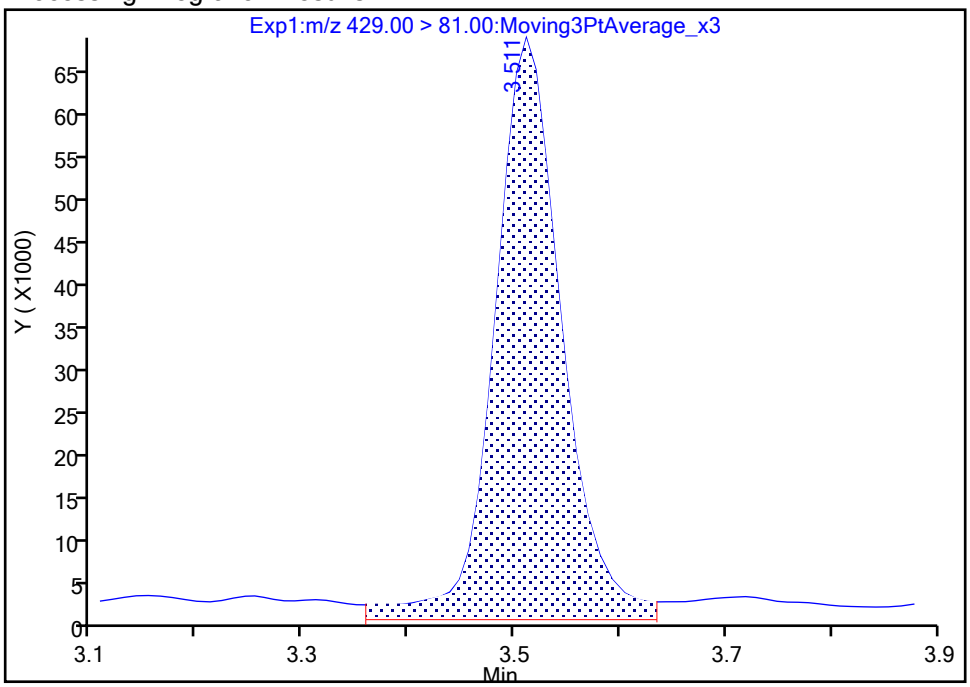
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

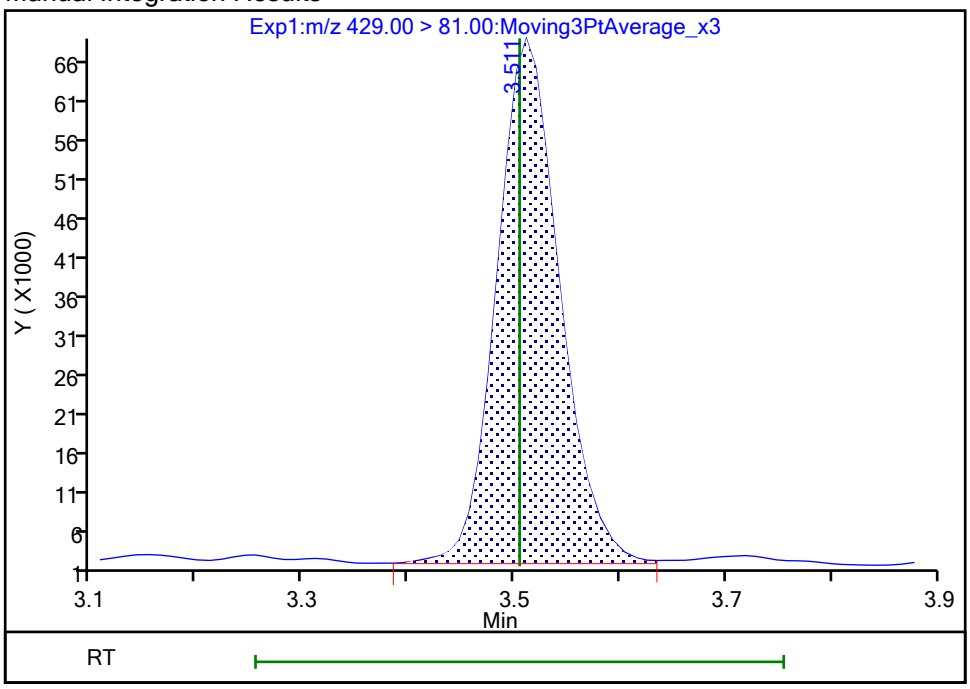
Processing Integration Results

RT: 3.51
Area: 306410
Amount: 1.356863
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 276983
Amount: 1.226553
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:25:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

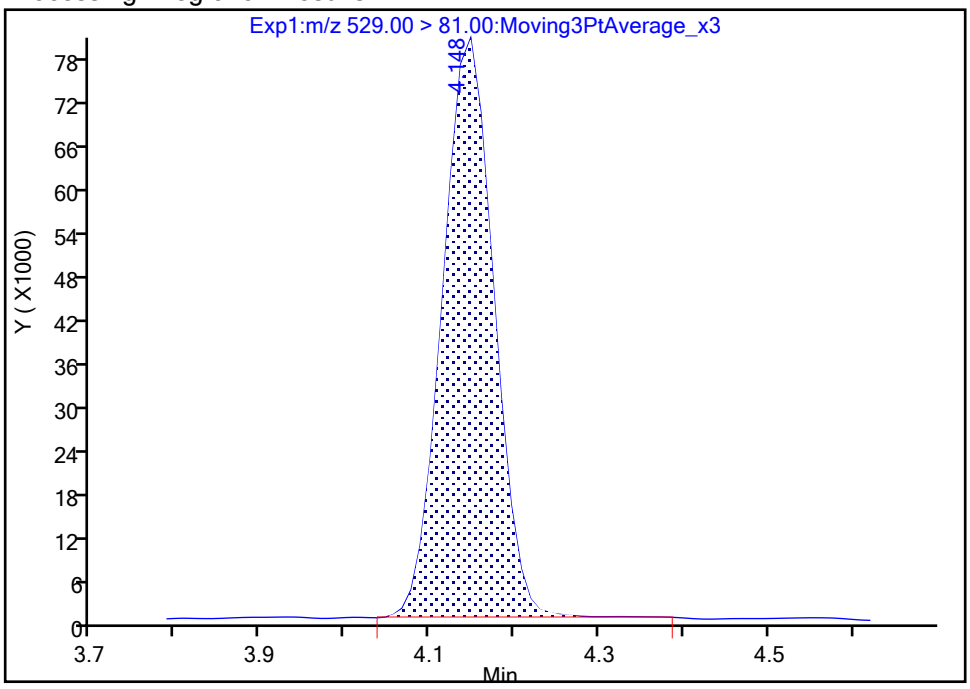
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C07.d				
Injection Date:	24-Oct-2023 00:05:52	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

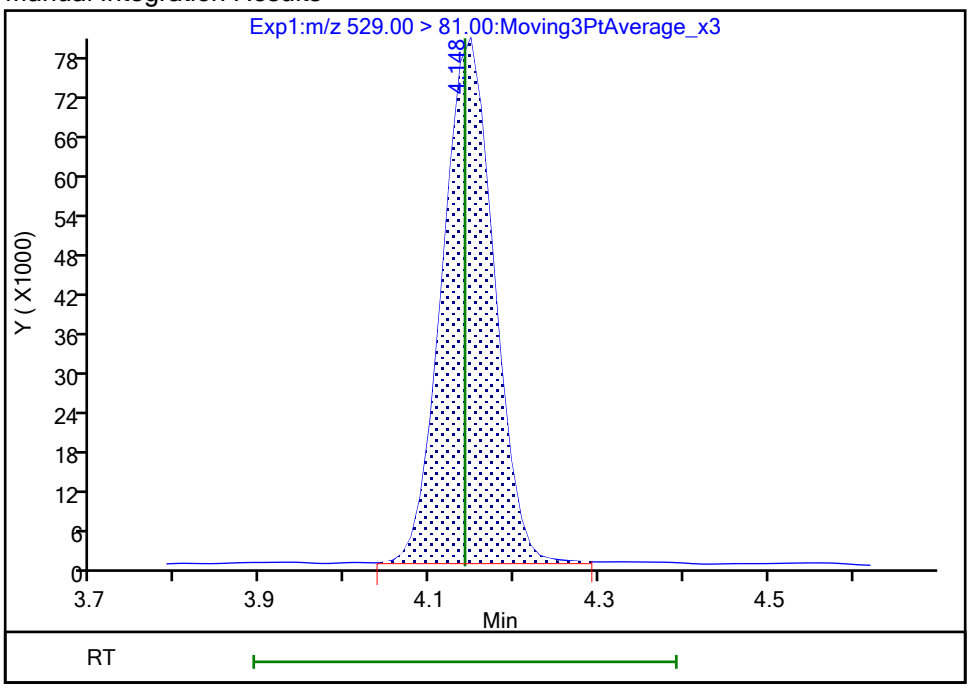
Processing Integration Results

RT: 4.15
Area: 340727
Amount: 1.341933
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 340276
Amount: 1.340157
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:25:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92-101323-1056-36 DL Lab Sample ID: 460-290375-8 DL

Matrix: Water Lab File ID: PA231026E03.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 10:56

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) Date Analyzed: 10/27/2023 10:24

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	1420	D	8.72	3.71

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E03.d
Lims ID: 460-290375-A-8-A
Client ID: MW92-101323-1056-36
Sample Type: Client
Inject. Date: 27-Oct-2023 10:24:26 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Sample Info: 460-290375-A-8-A
Misc. Info.: 200-0057578-003 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:56:23
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.122	2.131	-0.009	0.604	243108	0.1498		59.9	1003	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.131	2.131	0.0	1.004	69211	0.0378			4.1	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	286236	0.2273		90.9	386	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	37740	0.0305			0.7	
D 47 13C3 PFBS										
301.90 > 80.00	2.453	2.467	-0.014	0.698	384355	0.2256		97.0	11913	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.006	117256	0.0635	Target=2.06		1.2	
298.90 > 99.00	2.453	2.467	-0.014	1.000	53075		2.21(1.03-3.09)		14.6	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.747	2.760	-0.013	0.782	67420	0.3422		147	6.1	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.796	287498	0.2244		89.8	819	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.785	2.797	-0.012	0.996	128135	0.1013	Target=14.12		5.9	
313.00 > 119.00	2.785	2.797	-0.012	0.996	8758		14.63(7.06-21.17)		5.1	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	141633	0.0873	Target=2.72		10.3	
349.00 > 99.00	2.797	2.797	0.0	0.887	61767		2.29(1.36-4.09)		49.0	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.918	2.897	0.021	1.007	484	0.002114			6.1	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.908	-0.011	0.825	57160	0.2305		92.2	620	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.155	3.153	0.002	0.898	293882	0.2407		102	1742	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.155	3.153	0.002	1.000	318305	0.2314	Target=3.32		84.6	
399.00 > 99.00	3.155	3.153	0.002	1.000	164984		1.93(1.66-4.98)		152	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.155	3.165	-0.010	1.000	77415	0.0474	Target=4.17		3.5	
363.00 > 169.00	3.166	3.165	0.001	1.004	19736		3.92(2.09-6.26)		27.8	
D 9 13C4 PFHpA										
367.00 > 322.00	3.155	3.165	-0.010	0.898	364615	0.2595		104	2777	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.503	3.502	0.001	0.917	100805	0.0917	Target=4.83		16.7	
449.00 > 99.00	3.485	3.502	-0.017	0.912	29140		3.46(2.41-7.24)		10.0	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.502	0.001	0.997	70650	0.2784		117	28.6	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.476	3.502	-0.026	0.992	247	0.000304			0.8	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.512	3.512	0.0	1.000	260050	0.1499	Target=2.88		6.0	
413.00 > 169.00	3.512	3.512	0.0	1.000	114895		2.26(1.44-4.32)		130	
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.512	0.0	1.000	407288	0.2558		102	2330	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.512	0.0		409015	0.2500			1792	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.821	3.819	0.002	1.000	7217675	8.13	Target=4.24		2652	M
499.00 > 99.00	3.810	3.819	-0.009	0.997	2277868		3.17(2.12-6.37)		2649	M
D 18 13C4 PFOS										
503.00 > 80.00	3.821	3.819	0.002	1.088	181832	0.2344		98.1	225	
D 19 13C5 PFNA										
468.00 > 423.00	3.832	3.842	-0.010	1.091	467820	0.2700		108	2362	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.991	4.101	-0.110	1.045	7977	0.0118	Target=2.17		16.1	
549.00 > 99.00	3.982	4.101	-0.119	1.042	3021		2.64(1.08-3.25)		5.6	
D 23 13C2 PFDA										
515.00 > 470.00	4.127	4.125	0.002	1.175	493752	0.2722		109	2515	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.139	4.136	0.003	1.178	72872	0.2554		107	131	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.230	0.002	1.205	346600	0.2239		89.6	1899	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.266	0.002	1.215	96617	0.2228		89.1	1054	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.268	4.266	0.002	1.000	298	0.000850			2.5	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.387	0.001	1.249	452463	0.2642		106	3568	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.399	-0.011	1.249	102498	0.2455		98.2	419	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.423	4.399	0.024	1.008	2025	0.004938			7.0	
D 36 13C2 PFDoA										
615.00 > 570.00	4.601	4.610	-0.009	1.310	420039	0.2413		96.5	1717	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.981	4.980	0.001	1.418	363103	0.2095		83.8	1375	

QC Flag Legend

Processing Flags

Review Flags

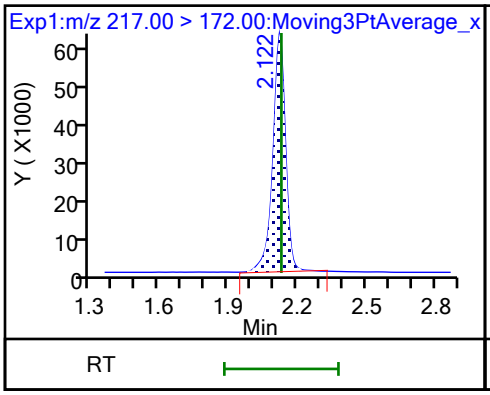
M - Manually Integrated

Report Date: 27-Oct-2023 18:44:24 Chrom Revision: 2.3 18-Oct-2023 21:16:54

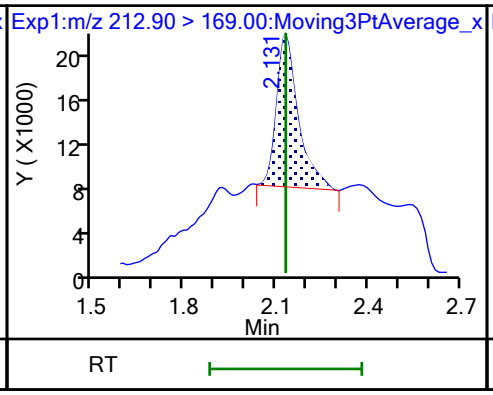
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E03.d
Injection Date: 27-Oct-2023 10:24:26 Instrument ID: LC812
Lims ID: 460-290375-A-8-A Lab Sample ID: 200-290375-8
Client ID: MW92-101323-1056-36
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

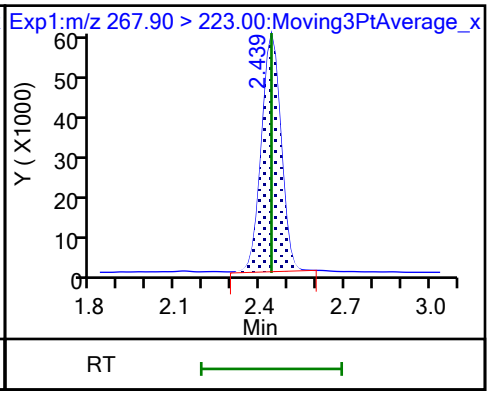
D 1 13C4 PFBA



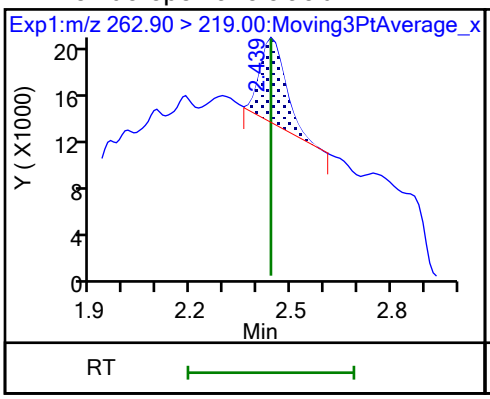
2 Perfluorobutanoic acid



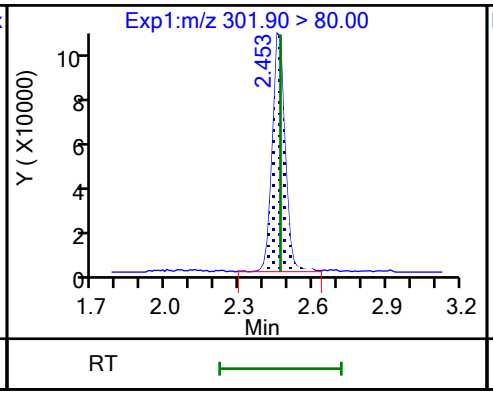
D 3 13C5 PFPeA



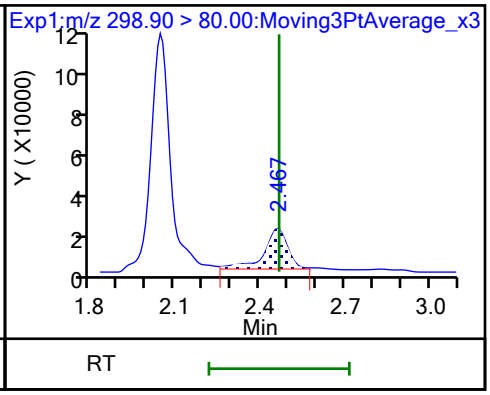
4 Perfluoropentanoic acid



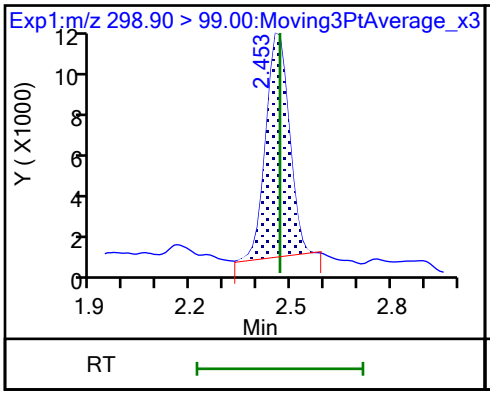
D 47 13C3 PFBS



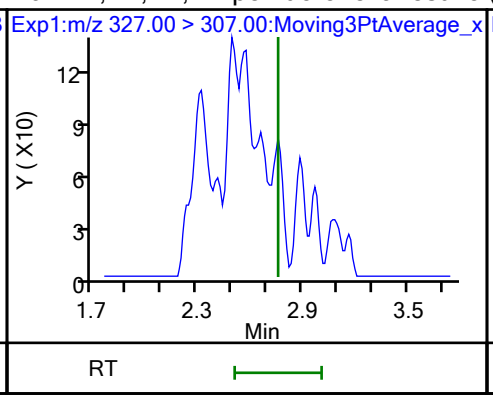
5 Perfluorobutanesulfonic acid



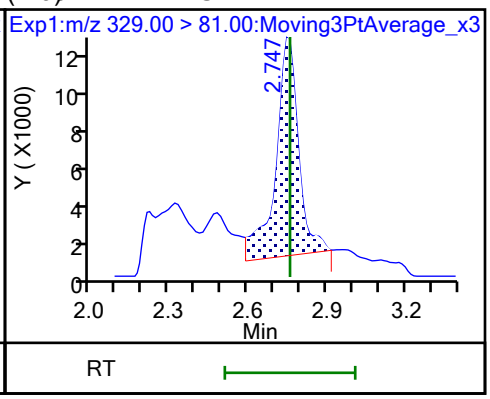
5 Perfluorobutanesulfonic acid



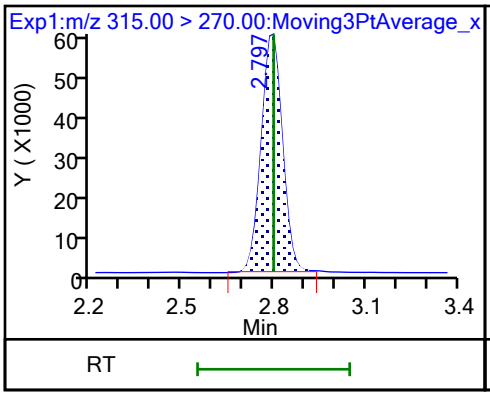
61 1H,1H,2H,2H-perfluorohexanesulfo (DNU)



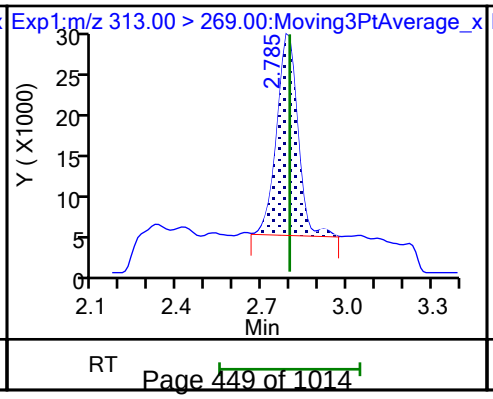
D 80 M2-4:2 FTS



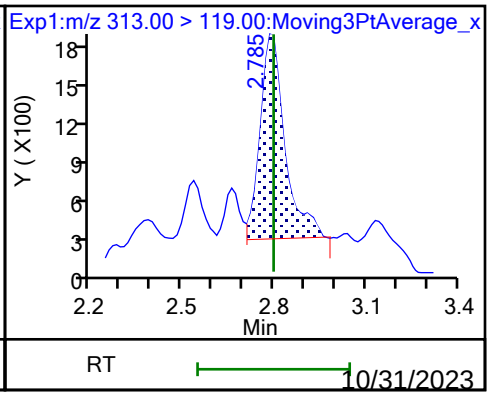
D 7 13C2 PFHxA



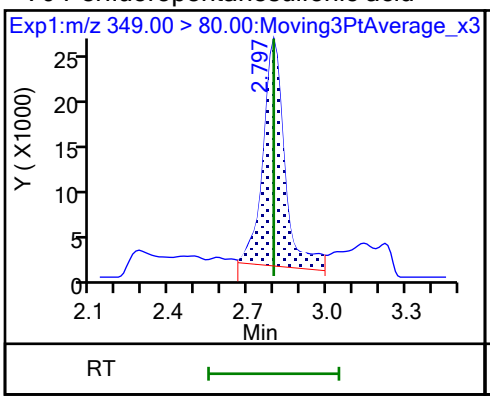
6 Perfluorohexanoic acid



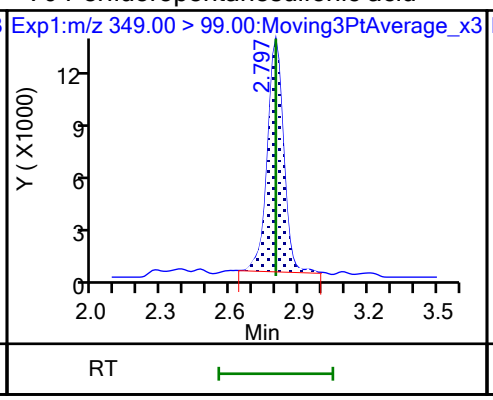
6 Perfluorohexanoic acid



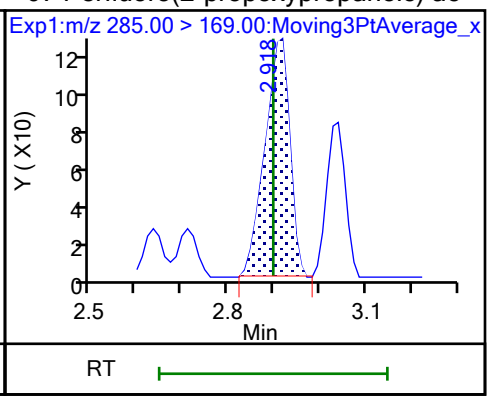
70 Perfluoropentanesulfonic acid



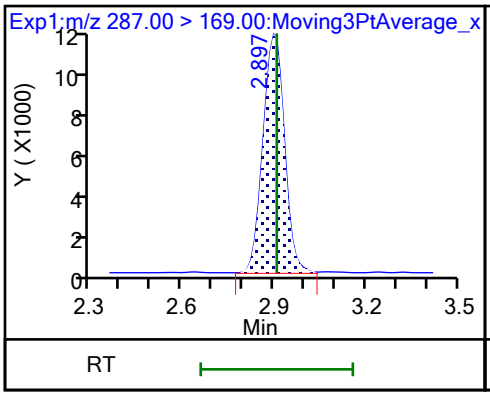
70 Perfluoropentanesulfonic acid



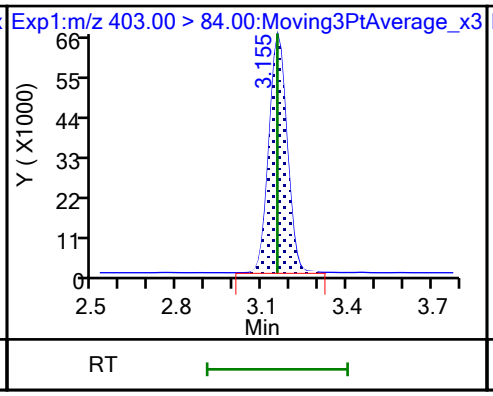
67 Perfluoro(2-propoxypropanoic) ac



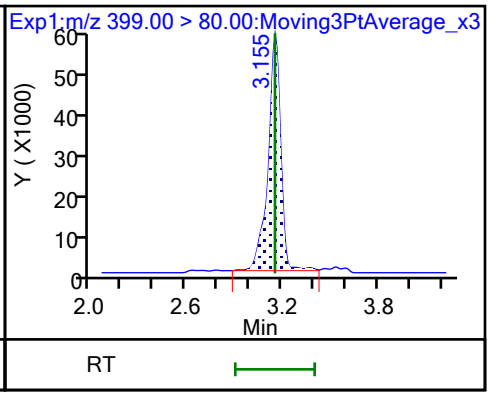
D 64 13C3 HFPO-DA



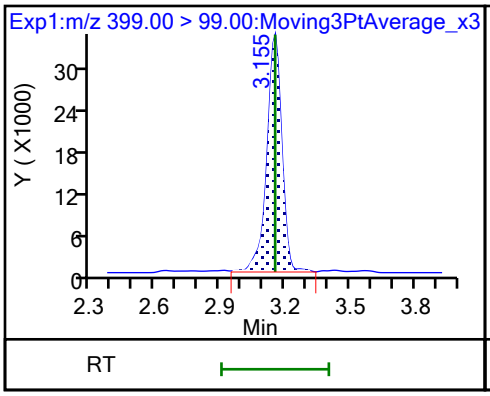
D 11 18O2 PFHxS



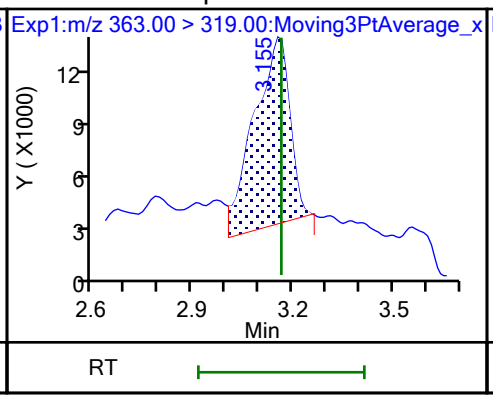
8 Perfluorohexanesulfonic acid



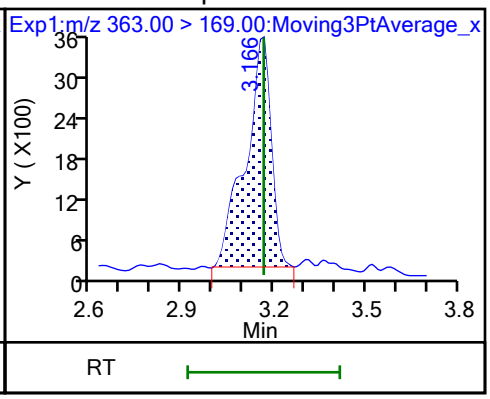
8 Perfluorohexanesulfonic acid



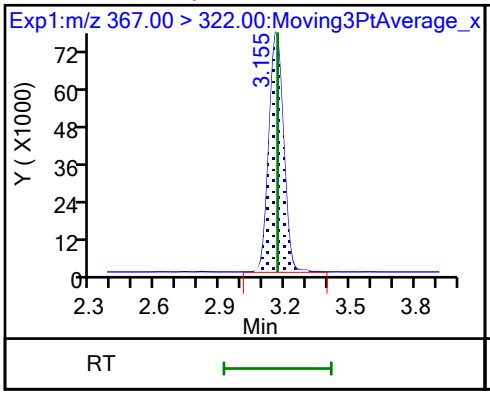
10 Perfluoroheptanoic acid



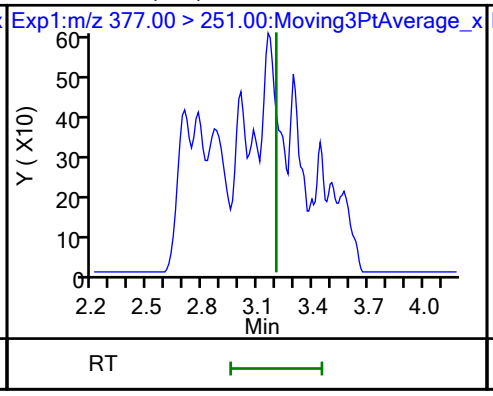
10 Perfluoroheptanoic acid



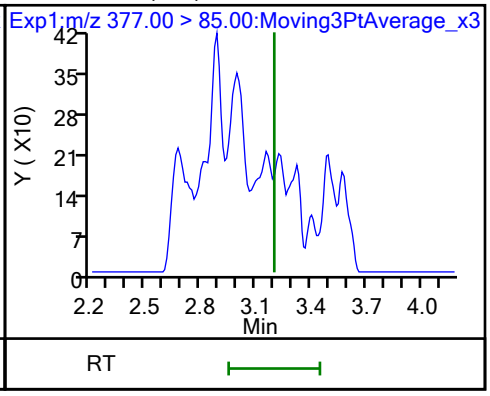
D 9 13C4 PFHpA



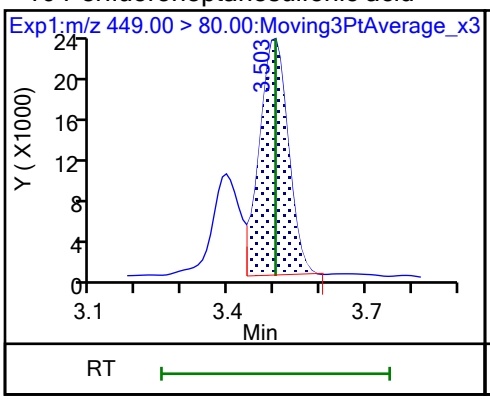
77 DONA (ND)



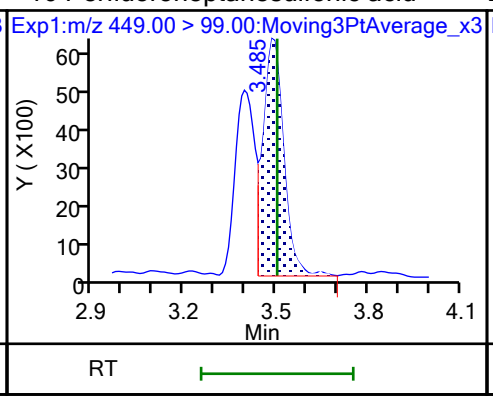
77 DONA (ND)



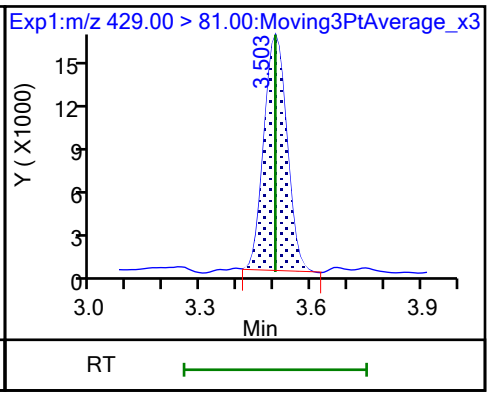
16 Perfluoroheptanesulfonic acid



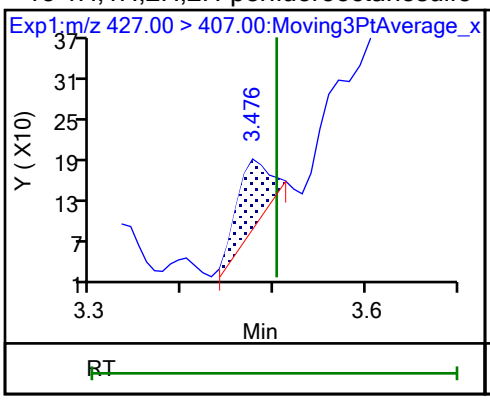
16 Perfluoroheptanesulfonic acid



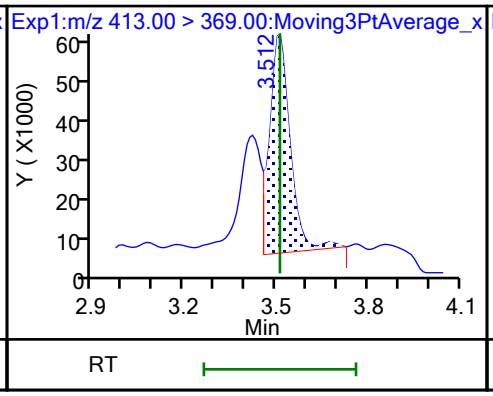
D 12 M2-6:2 FTS



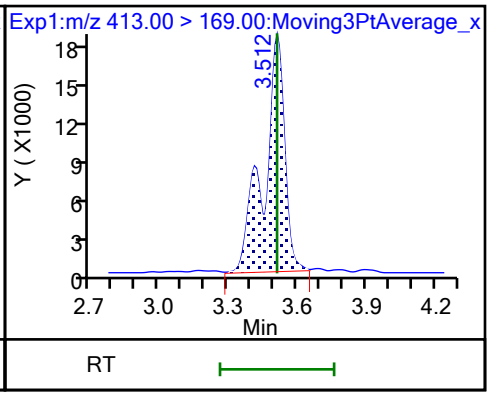
13 1H,1H,2H,2H-perfluorooctanesulfo



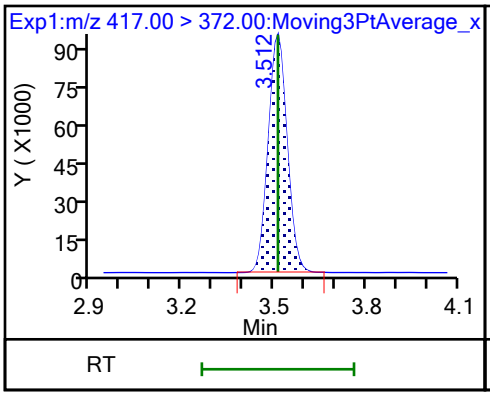
15 Perfluorooctanoic acid



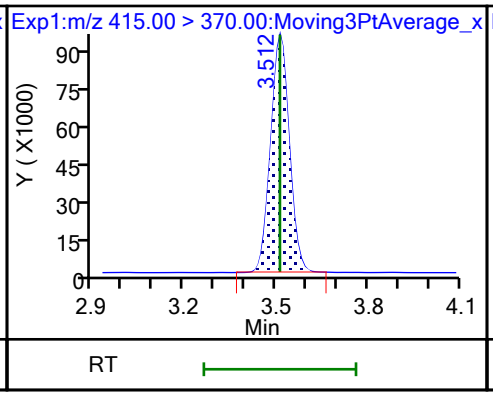
15 Perfluorooctanoic acid



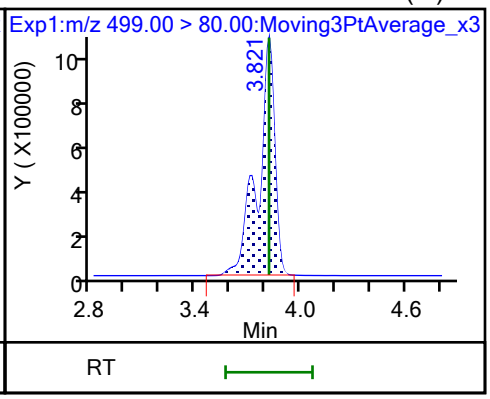
D 14 13C4 PFOA



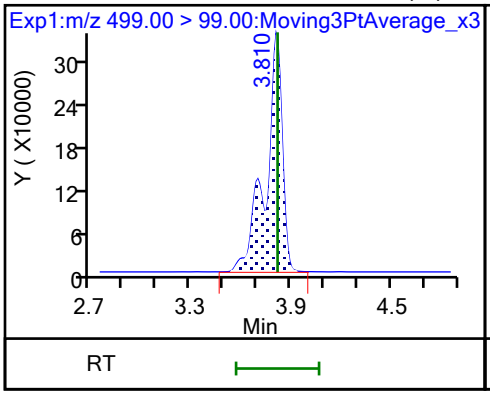
* 62 13C2 PFOA



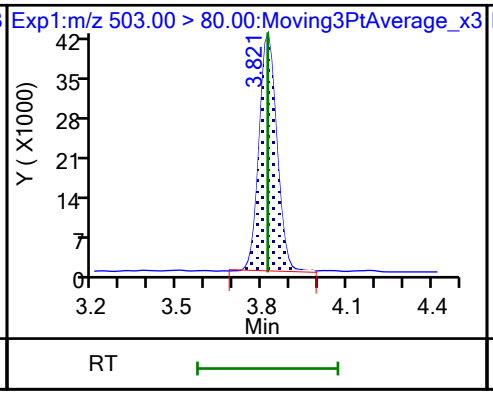
17 Perfluorooctanesulfonic acid (M)



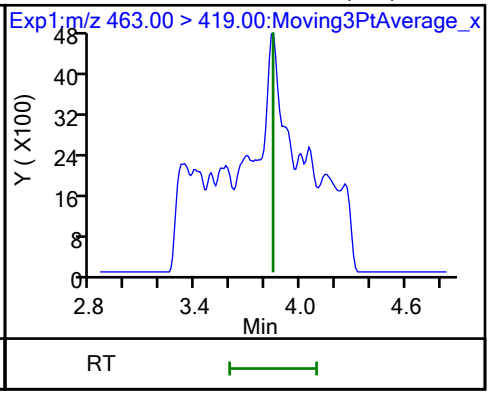
17 Perfluorooctanesulfonic acid (M)



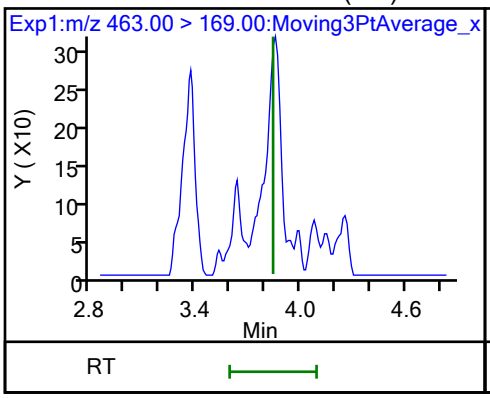
D 18 13C4 PFOS



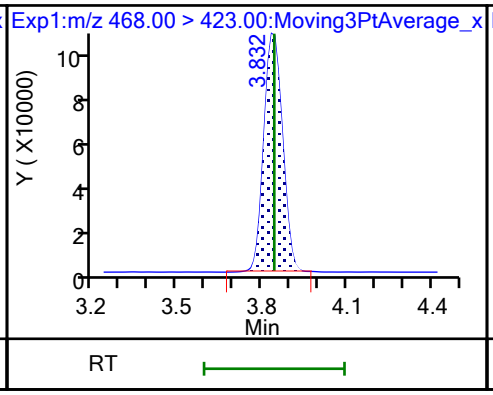
20 Perfluorononanoic acid (ND)



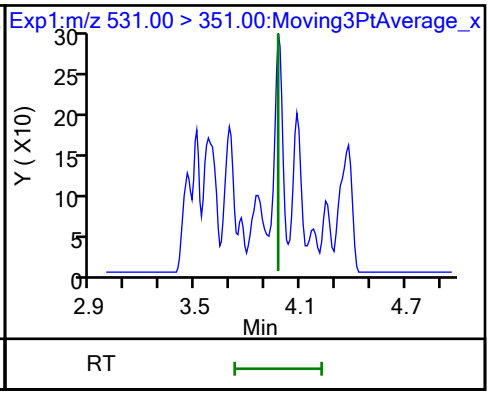
20 Perfluorononanoic acid (ND)



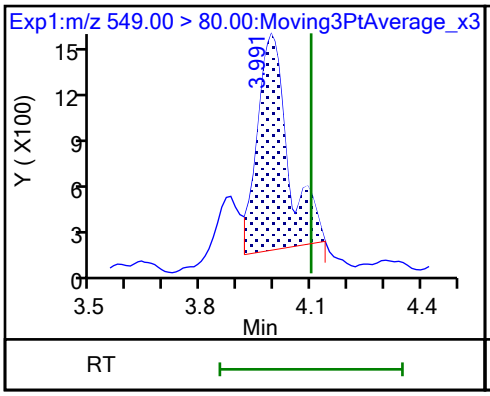
D 19 13C5 PFNA



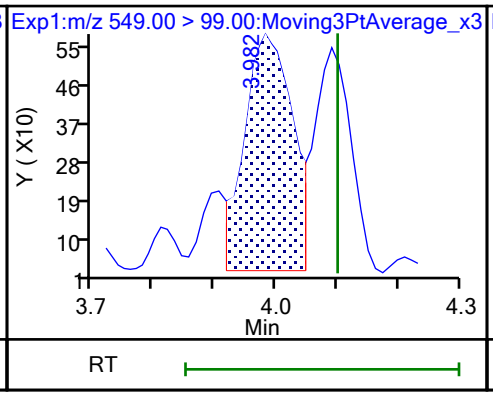
69 9-Chlorohexadecafluoro-3-oxanona (ND)



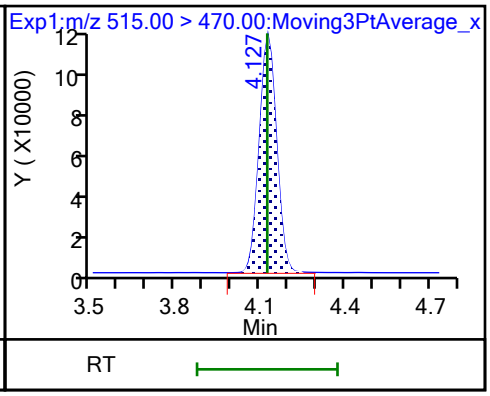
68 Perfluorononanesulfonic acid



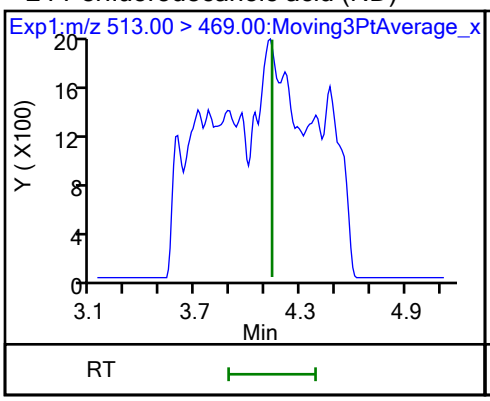
68 Perfluorononanesulfonic acid



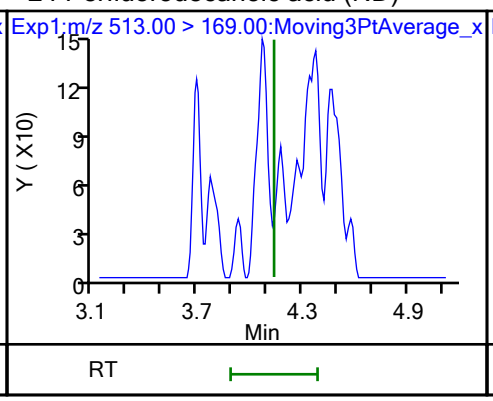
D 23 13C2 PFDA



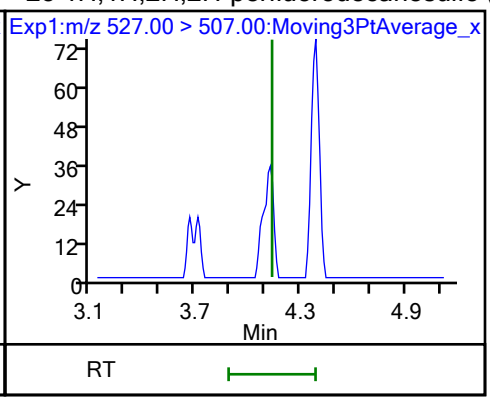
24 Perfluorodecanoic acid (ND)



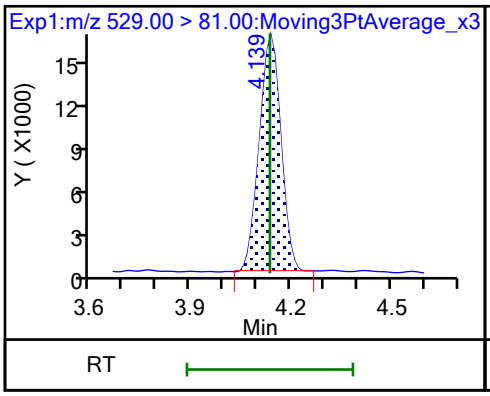
24 Perfluorodecanoic acid (ND)



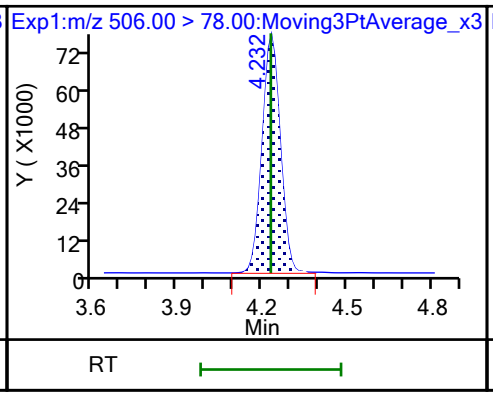
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



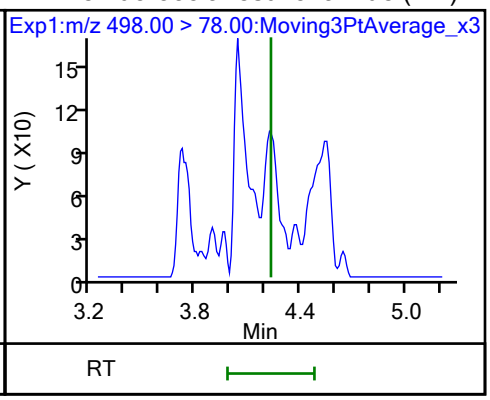
D 26 M2-8:2 FTS



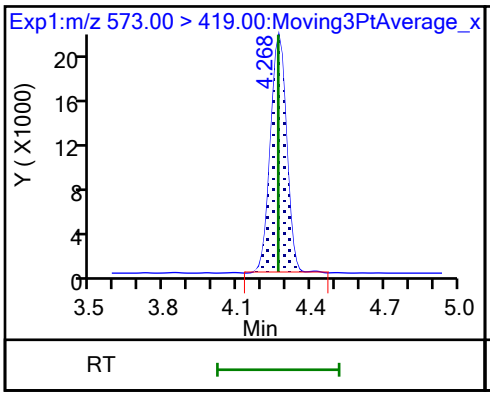
D 21 13C8 FOSA



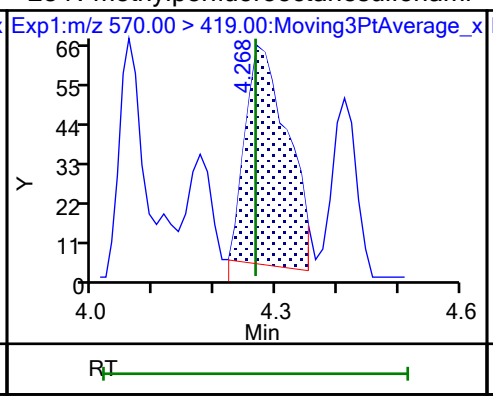
22 Perfluorooctanesulfonamide (ND)



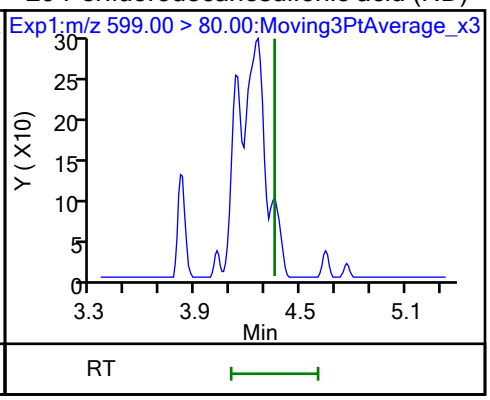
D 27 d3-NMeFOSAA



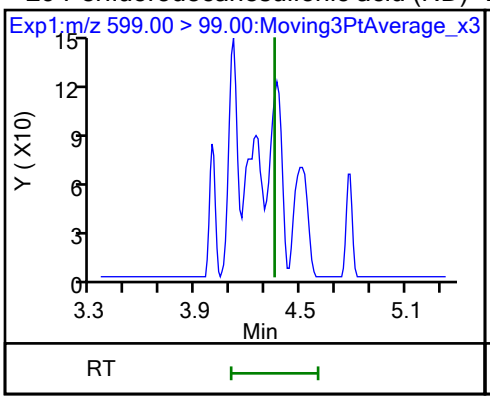
28 N-methylperfluorooctanesulfonami



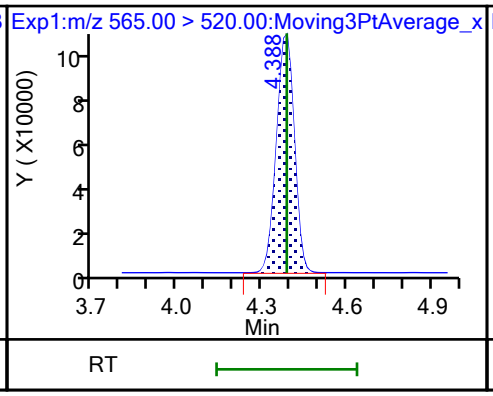
29 Perfluorodecanesulfonic acid (ND)



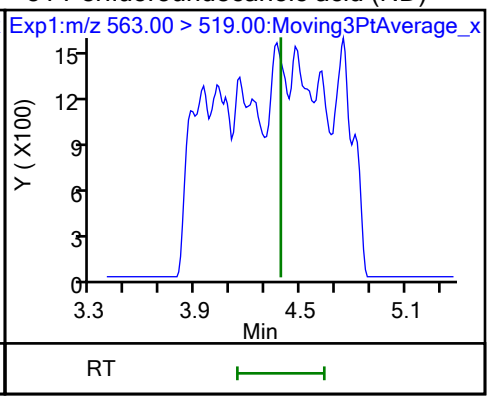
29 Perfluorodecanesulfonic acid (ND)



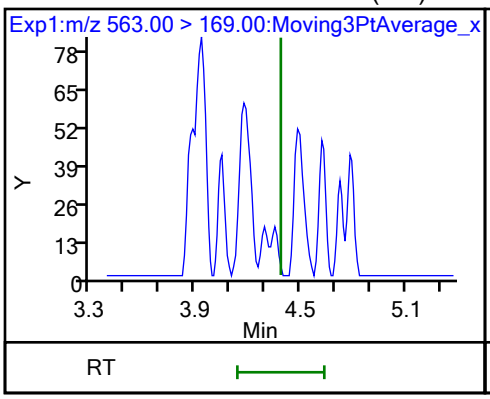
D 30 13C2 PFUnA



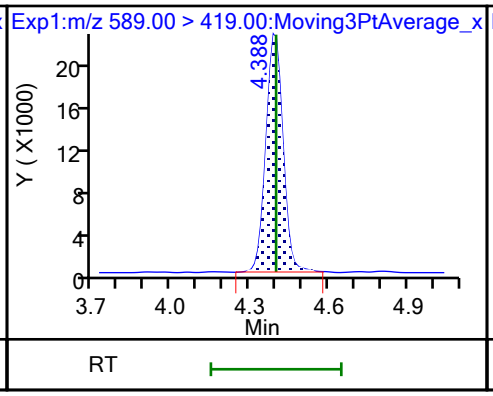
31 Perfluoroundecanoic acid (ND)



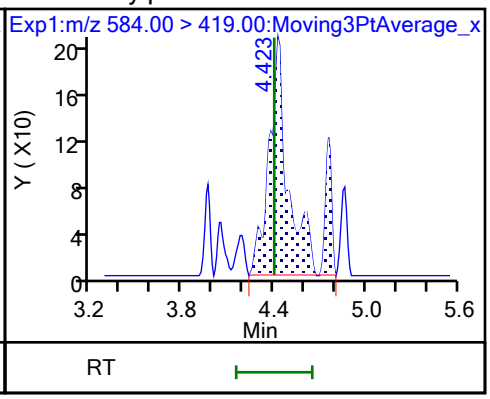
31 Perfluoroundecanoic acid (ND)



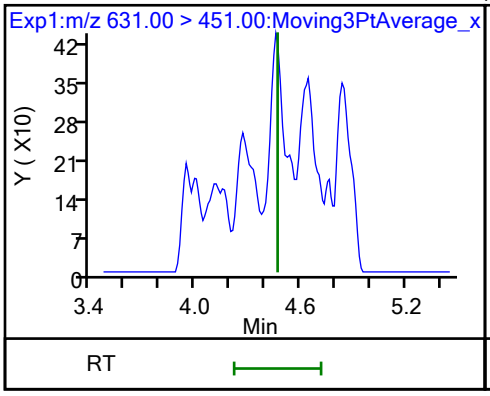
D 32 d5-NEtFOSAA



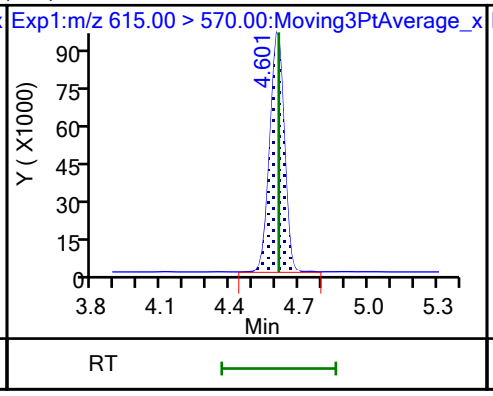
33 N-ethylperfluorooctanesulfonamid



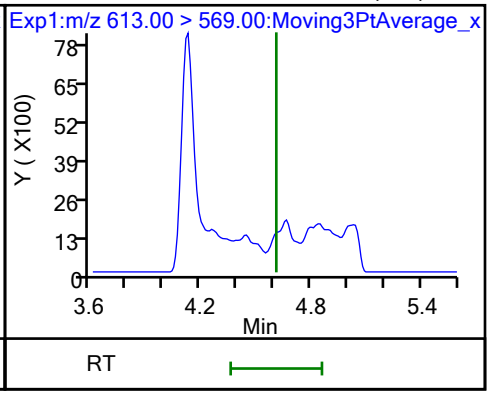
66 11-Chloroeicosafluoro-3-oxaundec (ND)



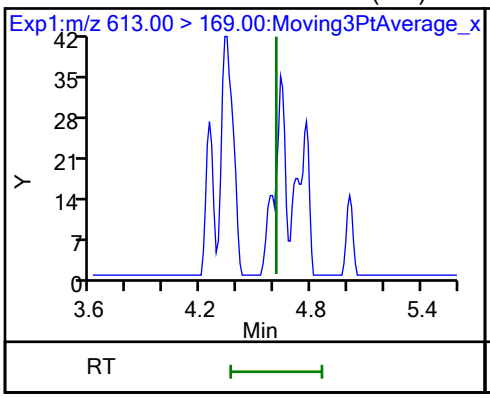
D 36 13C2 PFDoA



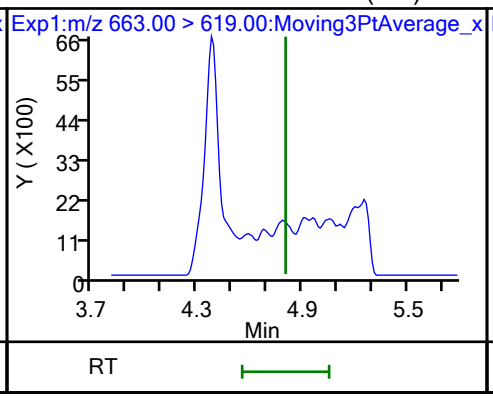
37 Perfluorododecanoic acid (ND)



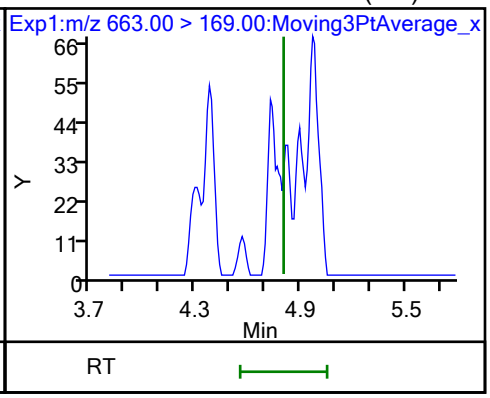
37 Perfluorododecanoic acid (ND)



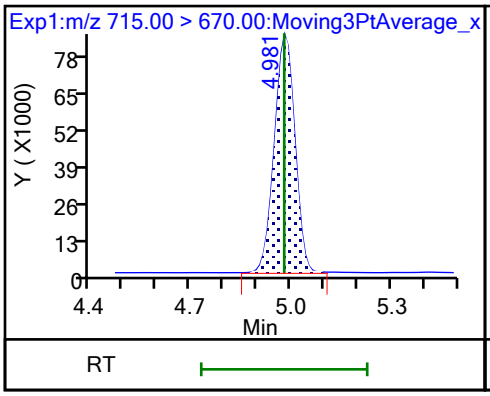
41 Perfluorotridecanoic acid (ND)



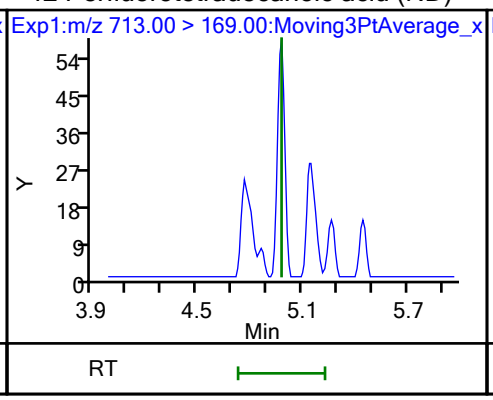
41 Perfluorotridecanoic acid (ND)



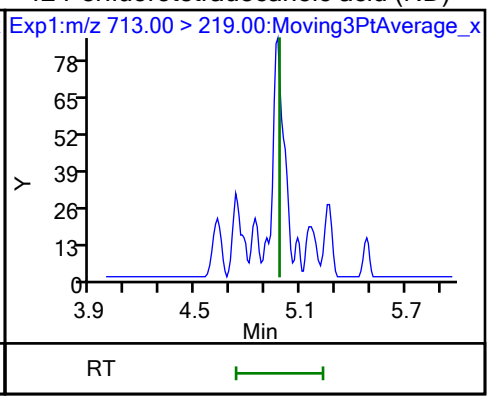
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

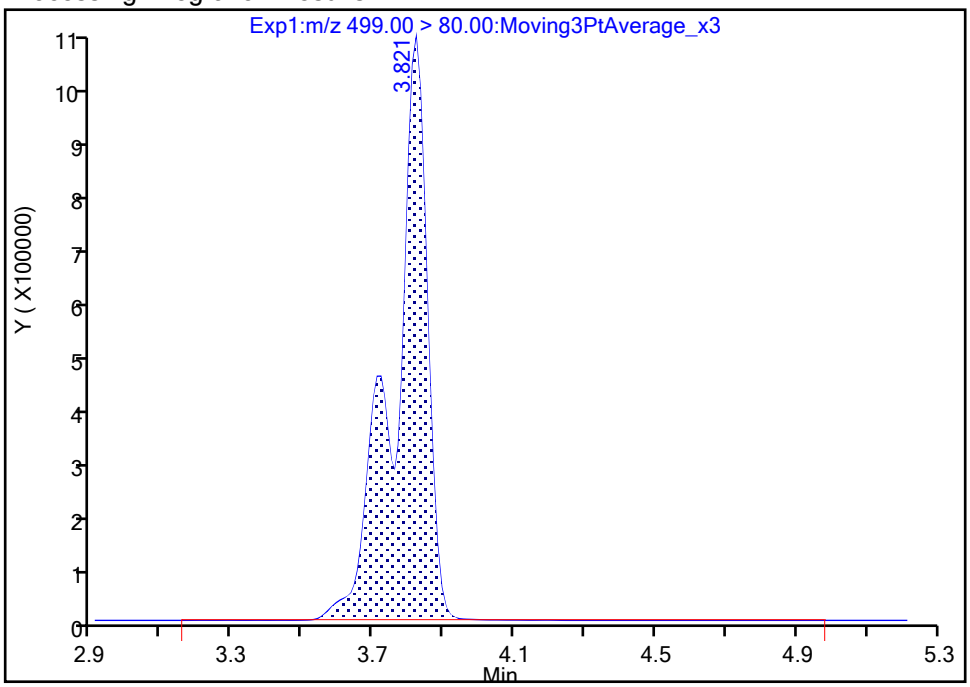
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E03.d				
Injection Date:	27-Oct-2023 10:24:26	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

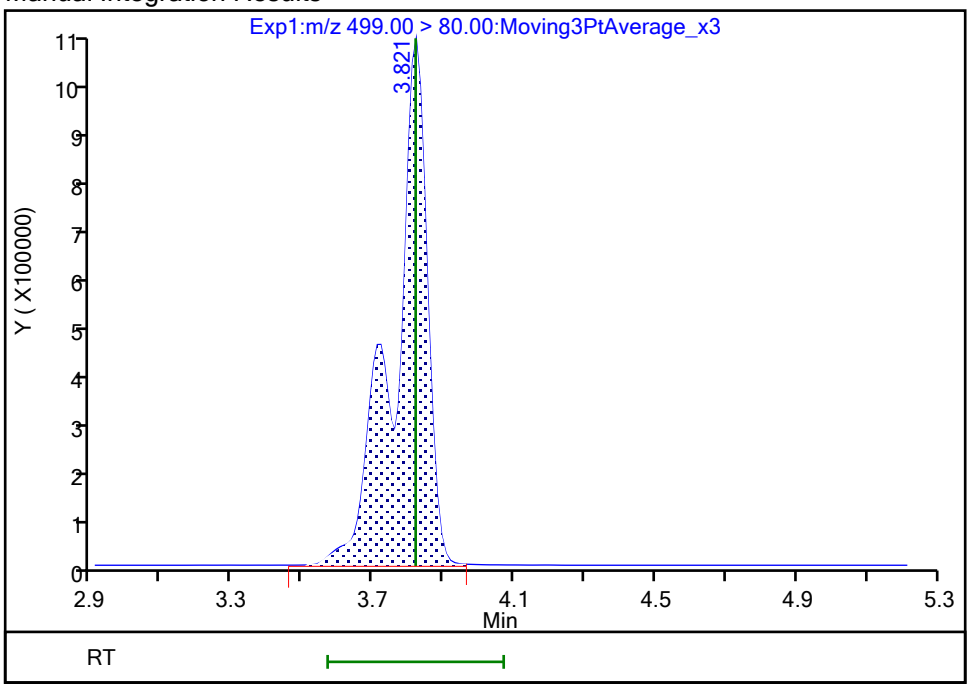
Processing Integration Results

RT: 3.82
Area: 7239231
Amount: 8.157648
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 7217675
Amount: 8.133357
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:55:44 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

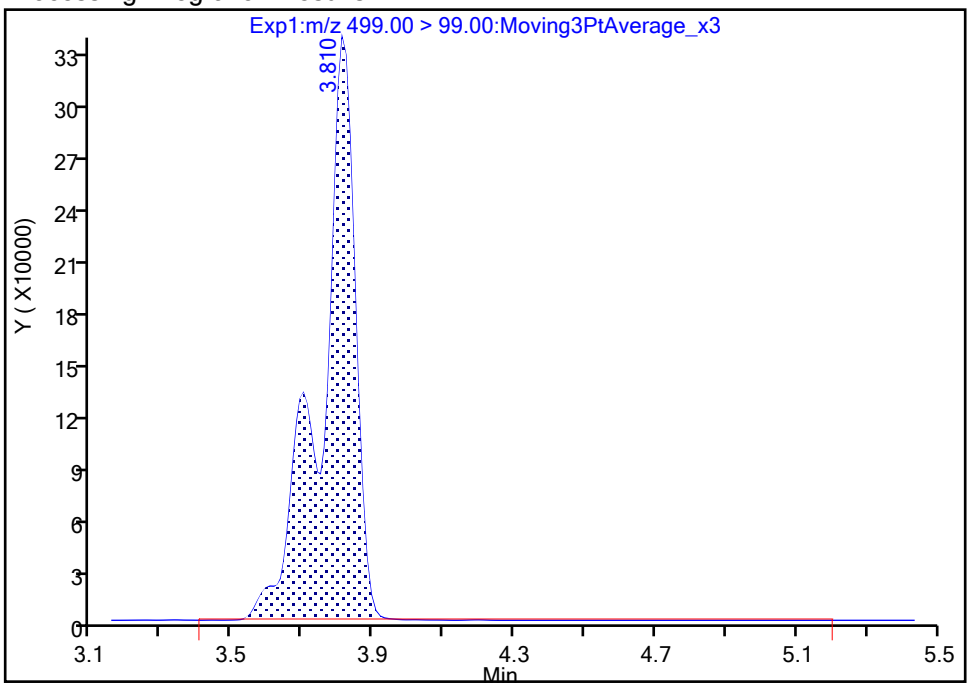
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E03.d				
Injection Date:	27-Oct-2023 10:24:26	Instrument ID:	LC812		
Lims ID:	460-290375-A-8-A	Lab Sample ID:	200-290375-8		
Client ID:	MW92-101323-1056-36				
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

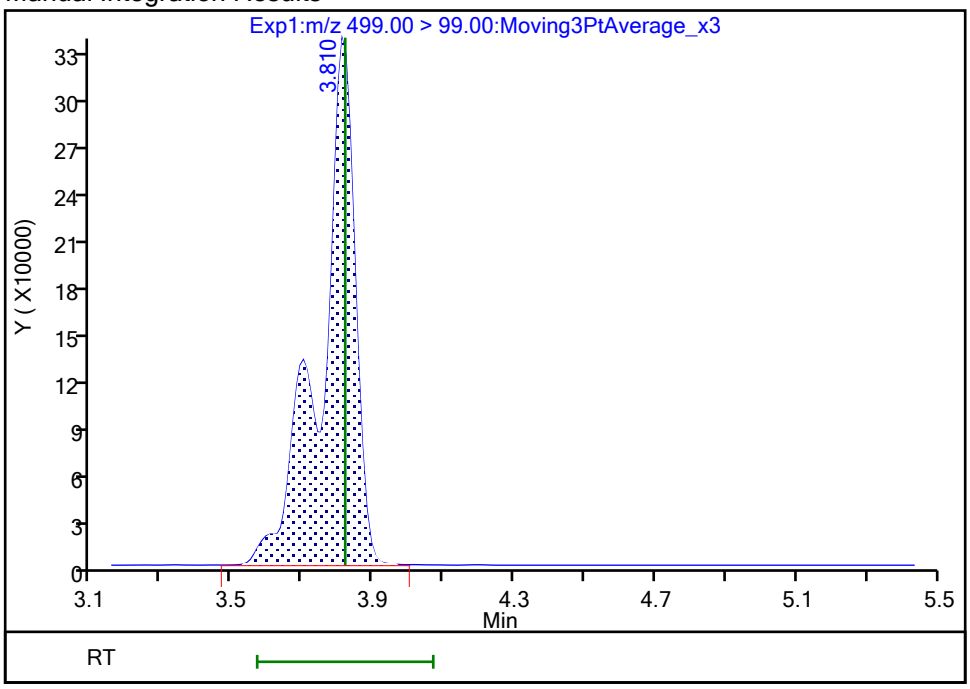
Processing Integration Results

RT: 3.81
Area: 2281743
Amount: 8.157648
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 2277868
Amount: 8.133357
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:55:49 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92B-101323-1156-92 Lab Sample ID: 460-290375-9

Matrix: Water Lab File ID: PA231023C08.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:56

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) Date Analyzed: 10/24/2023 00:14

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	6.30		4.36	1.05
2706-90-3	Perfluoropentanoic acid	4.41		1.74	0.59
307-24-4	Perfluorohexanoic acid	16.2		1.74	0.57
375-85-9	Perfluoroheptanoic acid	5.38		1.74	0.47
335-67-1	Perfluorooctanoic acid	38.6		1.74	0.66
375-95-1	Perfluorononanoic acid	1.34	J	1.74	0.43
335-76-2	Perfluorodecanoic acid	0.42	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	8.88		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	12.1		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	41.2		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	16.5		1.74	0.36
68259-12-1	Perfluorononanesulfonic acid	0.46	J	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.36	U	4.36	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40
13252-13-6	HFPODA	3.49	U	3.49	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92B-101323-1156-92 Lab Sample ID: 460-290375-9

Matrix: Water Lab File ID: PA231023C08.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:56

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) Date Analyzed: 10/24/2023 00:14

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	60		50-150
STL01893	13C5 PFPeA	104		50-150
STL01892	13C4 PFHpA	113		50-150
STL02116	13C2 PFTeDA	104		50-150
STL02337	13C3 PFBS	112		50-150
STL01056	13C8 FOSA	105		50-150
STL02118	d3-NMeFOSAA	110		50-150
STL02117	d5-NEtFOSAA	116		50-150
STL02395	M2-4:2 FTS	105		50-150
STL02279	M2-6:2 FTS	104		50-150
STL02280	M2-8:2 FTS	109		50-150
STL02255	13C3 HFPO-DA	101		50-150
STL00994	18O2 PFHxS	112		50-150
STL00993	13C2 PFHxA	101		50-150
STL00991	13C4 PFOS	104		50-150
STL00998	13C2 PFDoA	113		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	114		50-150
STL00990	13C4 PFOA	107		50-150
STL00997	13C2 PFUnA	119		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d
Lims ID: 460-290375-A-9-A
Client ID: MW92B-101323-1156-92
Sample Type: Client
Inject. Date: 24-Oct-2023 00:14:02 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290375-A-9-A
Misc. Info.: 200-0057511-008 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:34:35
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.603	1069856	0.7550		60.4	1551	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	171502	0.1807			12.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1429681	1.30		104	711	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	156019	0.1264			1.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1933598	1.30		112	26966	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	473119	0.2547	Target=2.06		1.4	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	246956		1.92(1.03-3.09)		34.0	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	606	0.000990			1.5	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	210482	1.22		105	5.8	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1412747	1.26		101	3094	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	579159	0.4657	Target=14.12		7.4	M
313.00 > 119.00	2.797	2.797	0.0	1.000	38782		14.93(7.06-21.17)		13.6	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	538300	0.3459	Target=2.72		11.0	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	300177		1.79(1.36-4.09)		79.4	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.897	2.908	-0.011	0.996	1109	0.005063			9.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	273500	1.26		101	639	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1409365	1.32		112	8210	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1560122	1.18	Target=3.32		95.7	M
399.00 > 99.00	3.153	3.168	-0.015	0.996	801459		1.95(1.66-4.98)		398	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	240238	0.1543	Target=4.17		4.9	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	56606		4.24(2.09-6.26)		23.9	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1735959	1.41		113	5580	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.915	482736	0.4739	Target=4.83		19.2	M
449.00 > 99.00	3.502	3.505	-0.003	0.915	158383		3.05(2.41-7.24)		13.6	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.995	273095	1.23		104	32.9	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.514	-0.012	1.000	1185	0.001885			1.7	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.514	-0.003	0.997	1747022	1.11	Target=2.88		29.3	M
413.00 > 169.00	3.520	3.514	0.006	1.000	582983		3.00(1.44-4.32)		571	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	1852469	1.33		107	6791	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1786173	1.25			4360	
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.826	3.822	0.004	1.000	34107270	41.5	Target=4.24		2057	EM
499.00 > 99.00	3.816	3.822	-0.006	0.997	11122782		3.07(2.12-6.37)		3685	M
D 18 13C4 PFOS										
503.00 > 80.00	3.826	3.822	0.004	1.087	842237	1.24		104	215	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.850	3.845	0.005	1.003	56684	0.0385	Target=8.34		3.1	M
463.00 > 169.00	3.862	3.845	0.017	1.006	5795		9.78(4.17-12.51)		8.2	M
D 19 13C5 PFNA										
468.00 > 423.00	3.838	3.845	-0.007	1.090	1877063	1.24		99.2	4311	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.998	3.983	0.015	1.045	393	0.000156			0.8	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.111	4.105	0.006	1.074	8190	0.0131	Target=2.17		1.9	M
549.00 > 99.00	4.076	4.105	-0.029	1.065	6651		1.23(1.08-3.25)		4.3	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.123	4.129	-0.006	0.997	21840	0.0121	Target=11.44		1.8	M
513.00 > 169.00	4.135	4.129	0.006	1.000	1683		12.98(5.72-17.16)		5.6	
D 23 13C2 PFDA										
515.00 > 470.00	4.135	4.129	0.006	1.175	2260579	1.43		114	8229	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.135	4.141	-0.006	1.175	325832	1.31		109	204	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.239	4.234	0.005	1.204	1780007	1.32		105	4349	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.239	4.234	0.005	1.000	1293	0.000952			4.0	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.263	4.270	-0.007	1.211	522240	1.38		110	2252	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.251	4.270	-0.019	0.997	431	0.001137			1.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.384	4.390	-0.006	1.245	2215517	1.48		119	8883	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.396	4.401	-0.005	1.249	527325	1.45		116	1162	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.396	4.401	-0.005	1.000	1881	0.004458			4.2	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.480	4.473	0.007	1.171	783	0.000203			1.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.597	4.613	-0.016	1.306	2150782	1.41		113	5139	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.978	4.982	-0.004	1.414	1967875	1.30		104	3970	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

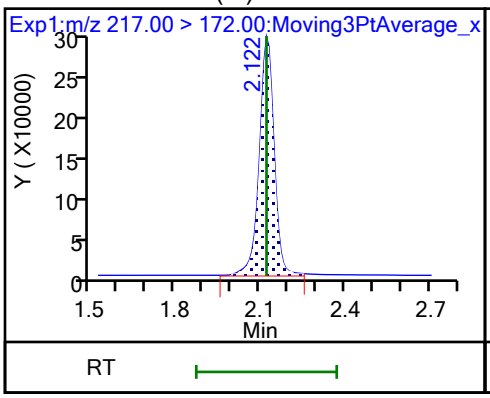
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:35 Chrom Revision: 2.3 18-Oct-2023 21:16:54

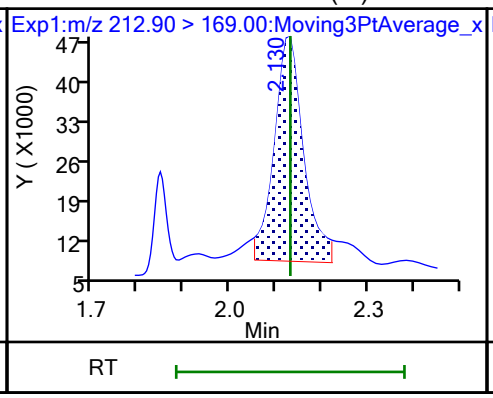
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d
Injection Date: 24-Oct-2023 00:14:02 Instrument ID: LC812
Lims ID: 460-290375-A-9-A Lab Sample ID: 200-290375-9
Client ID: MW92B-101323-1156-92
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

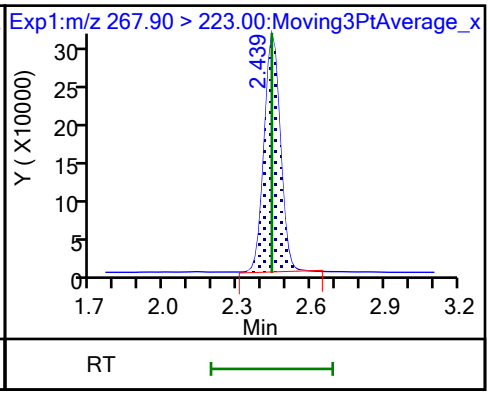
D 1 13C4 PFBA (M)



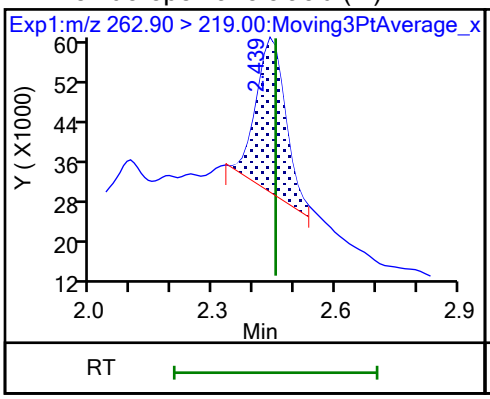
2 Perfluorobutanoic acid (M)



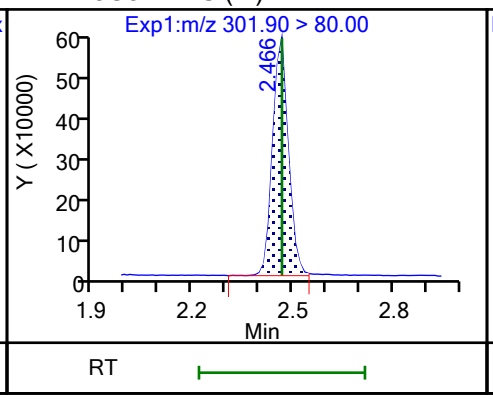
D 3 13C5 PFPeA



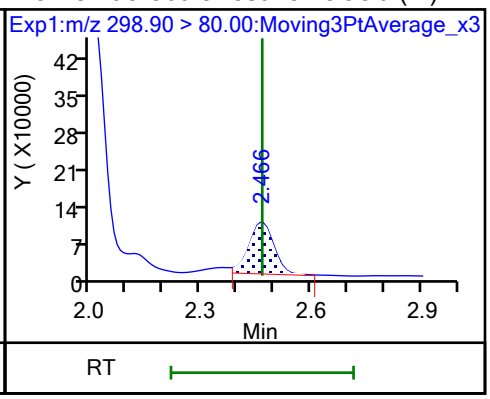
4 Perfluoropentanoic acid (M)



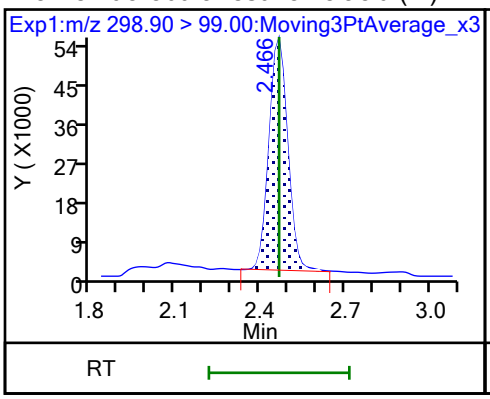
D 47 13C3 PFBS (M)



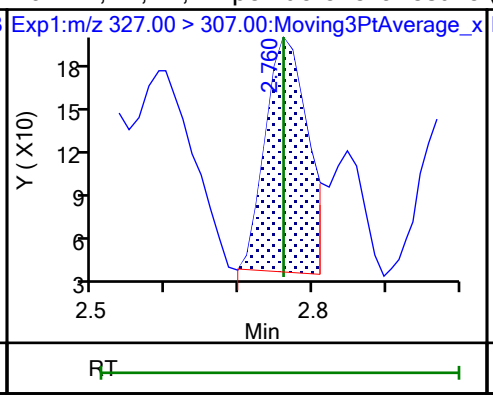
5 Perfluorobutanesulfonic acid (M)



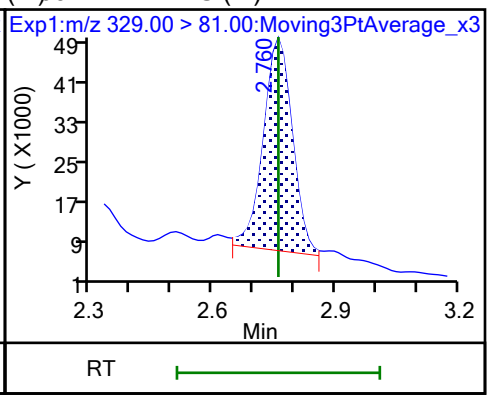
5 Perfluorobutanesulfonic acid (M)



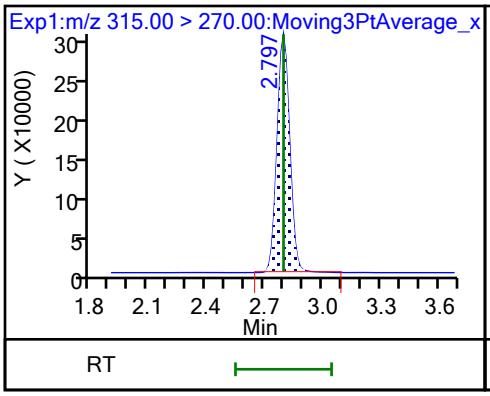
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



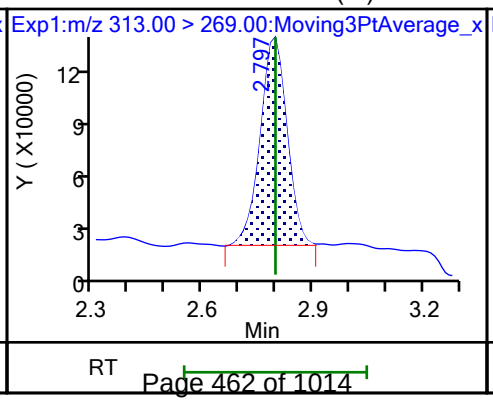
60 M2-4:2 FTS (M)



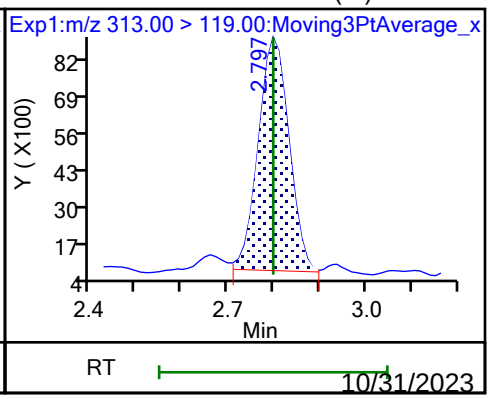
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

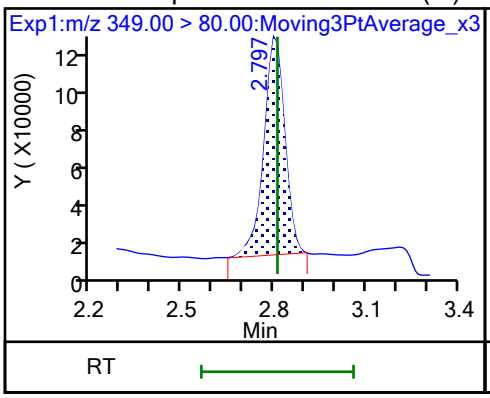


6 Perfluorohexanoic acid (M)

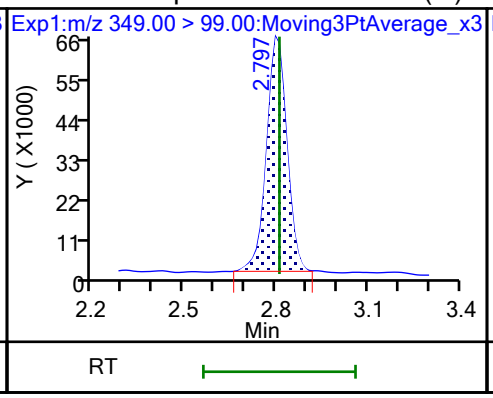


10/31/2023
4:00 PM

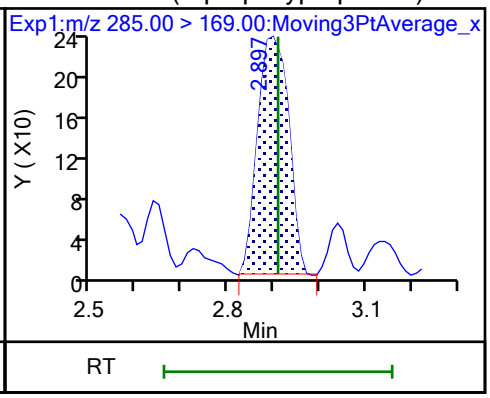
70 Perfluoropentanesulfonic acid (M)



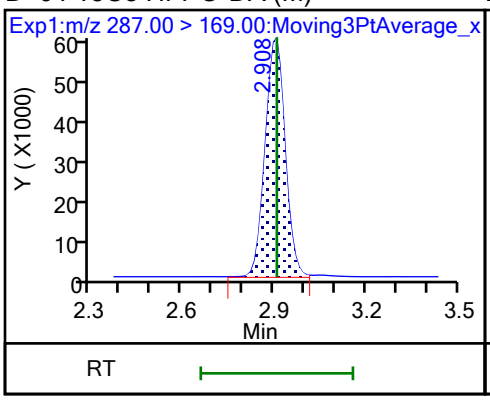
70 Perfluoropentanesulfonic acid (M)



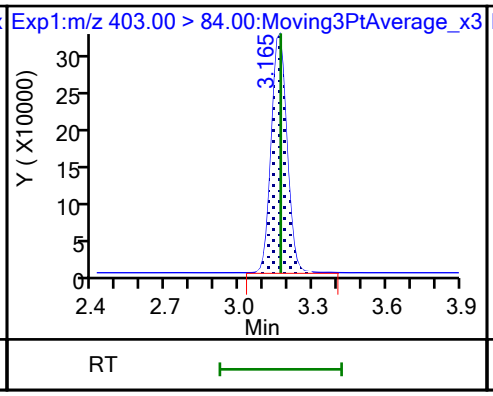
67 Perfluoro(2-propoxypropanoic) ac



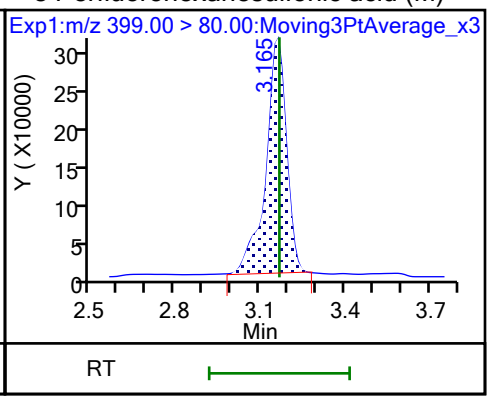
D 64 13C3 HFPO-DA (M)



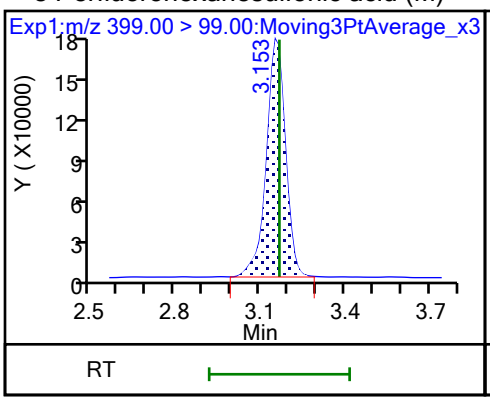
D 11 18O2 PFHxS



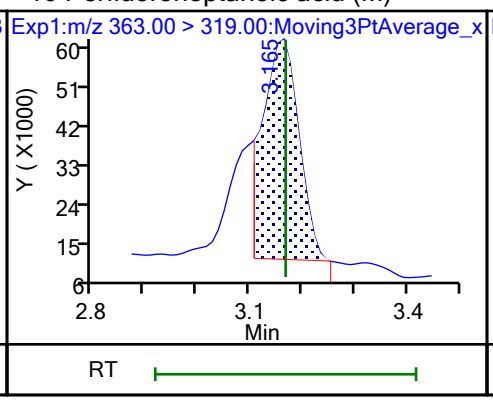
8 Perfluorohexanesulfonic acid (M)



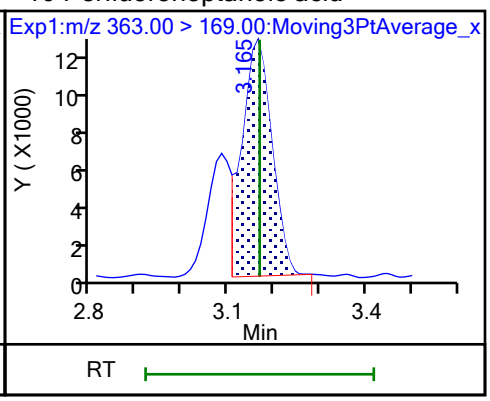
8 Perfluorohexanesulfonic acid (M)



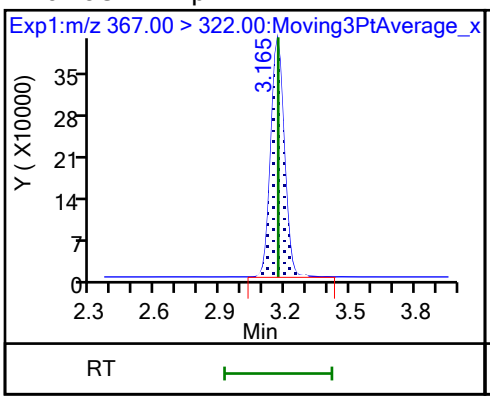
10 Perfluoroheptanoic acid (M)



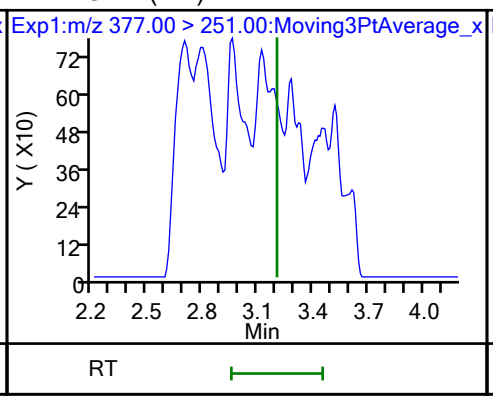
10 Perfluoroheptanoic acid



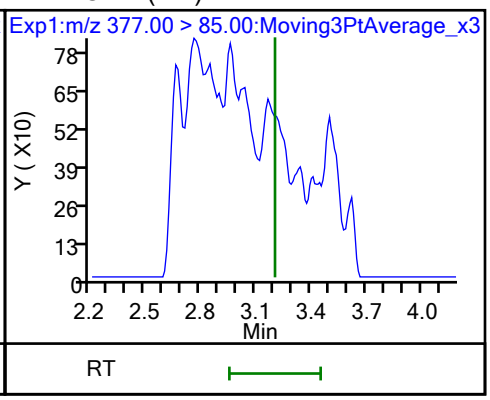
D 9 13C4 PFHpA



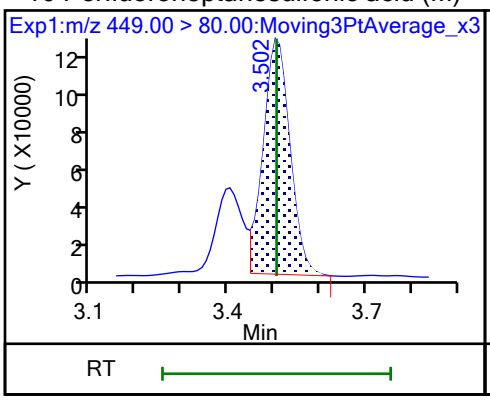
77 DONA (ND)



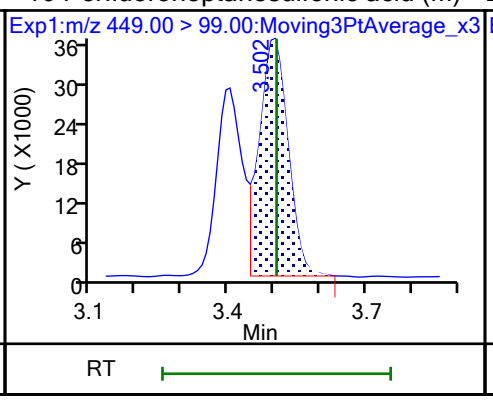
77 DONA (ND)



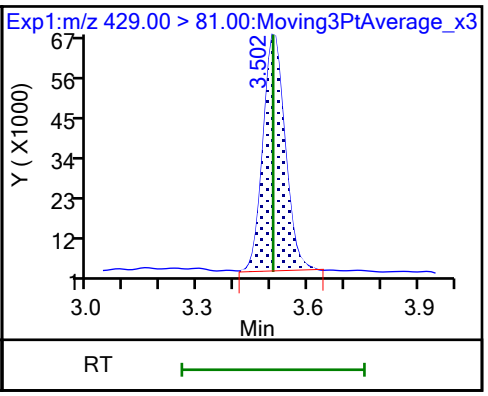
16 Perfluoroheptanesulfonic acid (M)



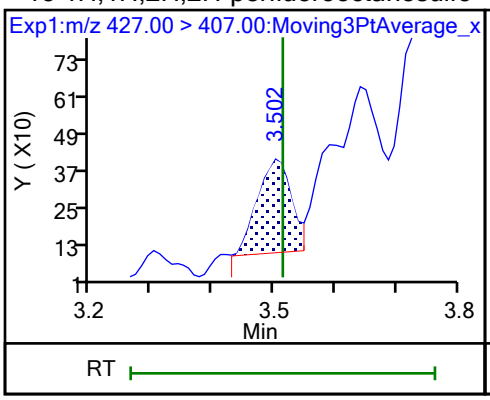
16 Perfluoroheptanesulfonic acid (M)



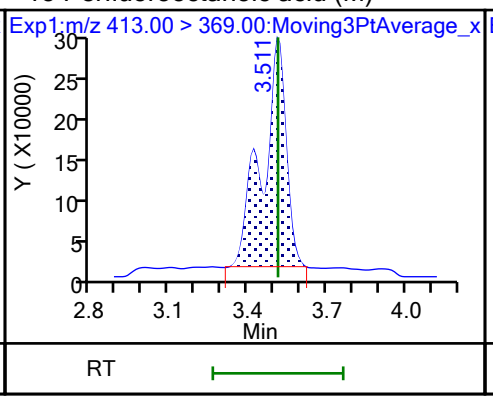
D 12 M2-6:2 FTS



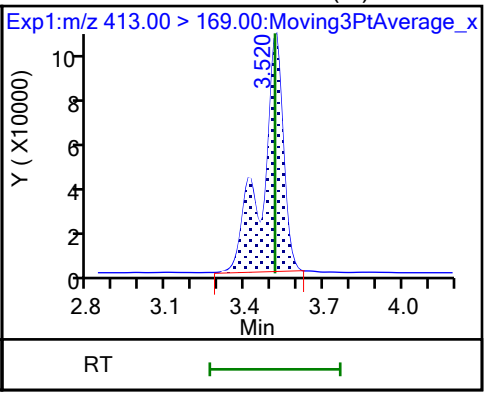
13 1H,1H,2H,2H-perfluorooctanesulfo



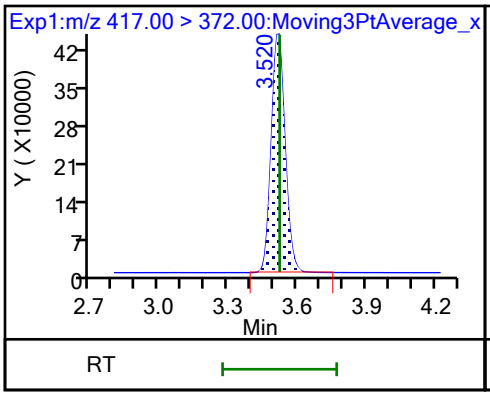
15 Perfluorooctanoic acid (M)



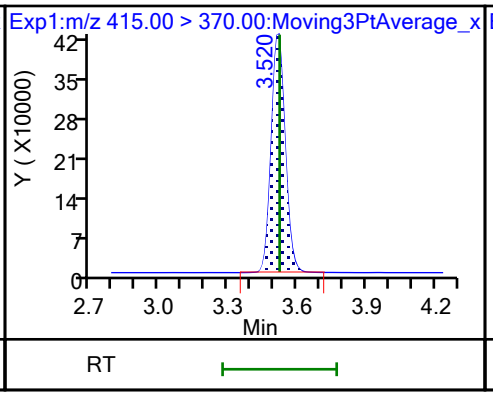
15 Perfluorooctanoic acid (M)



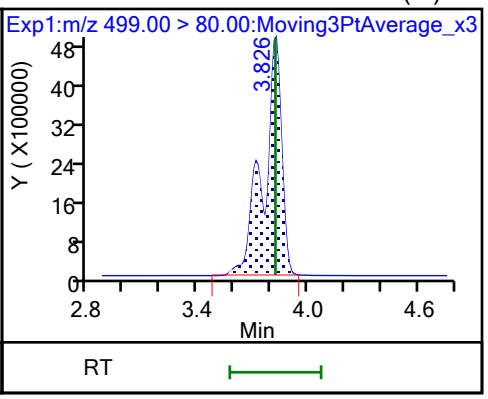
D 14 13C4 PFOA



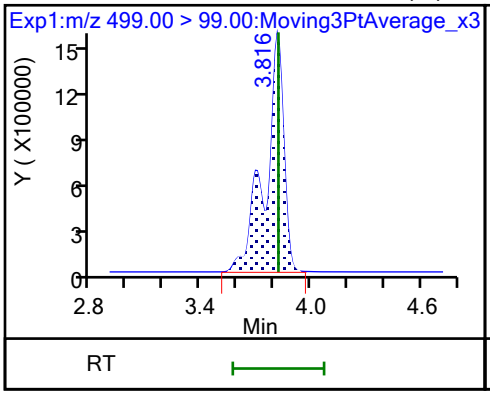
* 62 13C2 PFOA



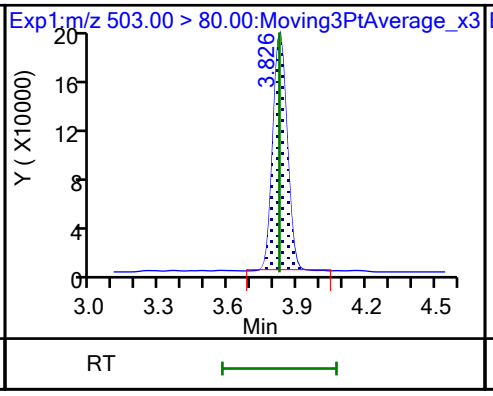
17 Perfluorooctanesulfonic acid (M)



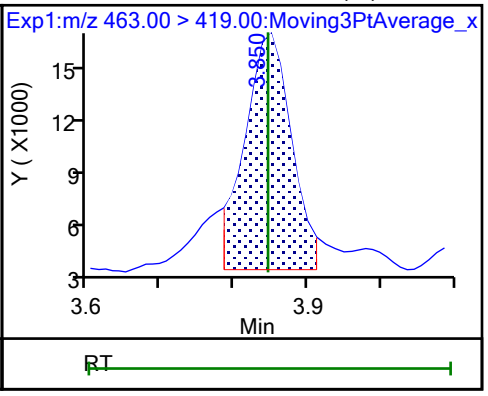
17 Perfluorooctanesulfonic acid (M)



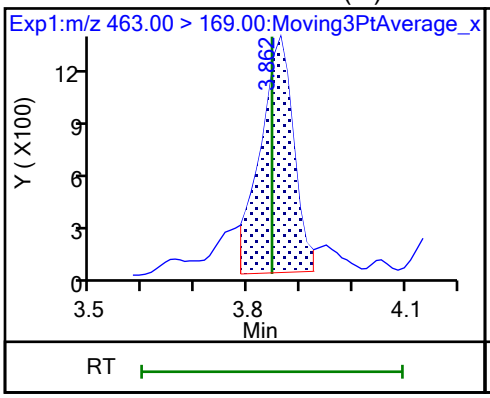
D 18 13C4 PFOS



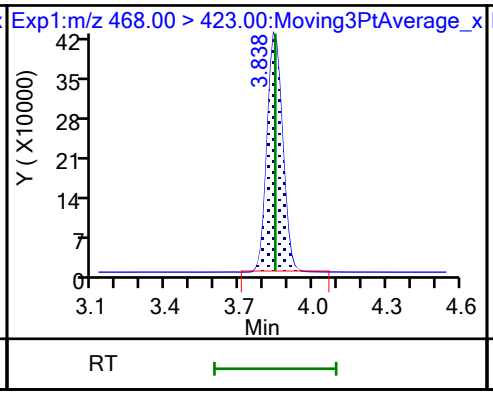
20 Perfluorononanoic acid (M)



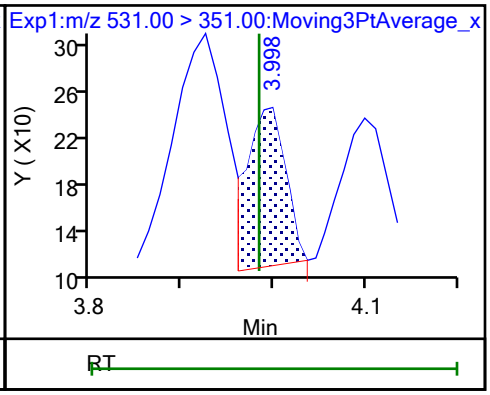
20 Perfluorononanoic acid (M)



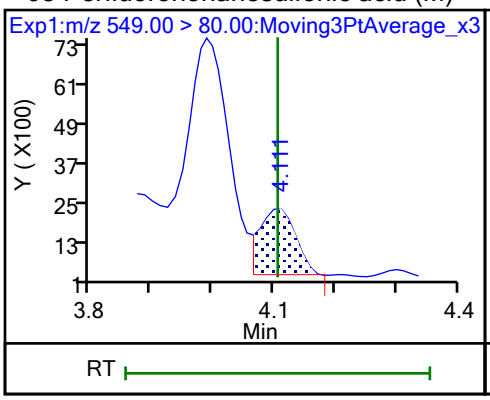
D 19 13C5 PFNA



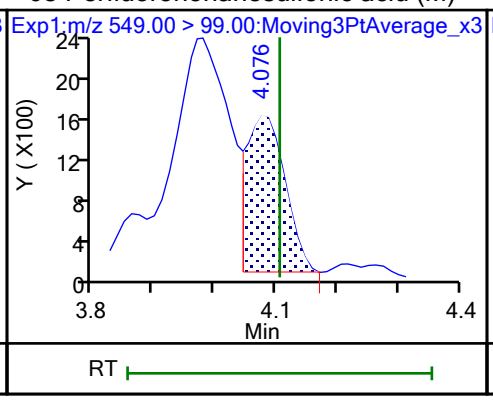
69 9-Chlorohexadecafluoro-3-oxanona (M)



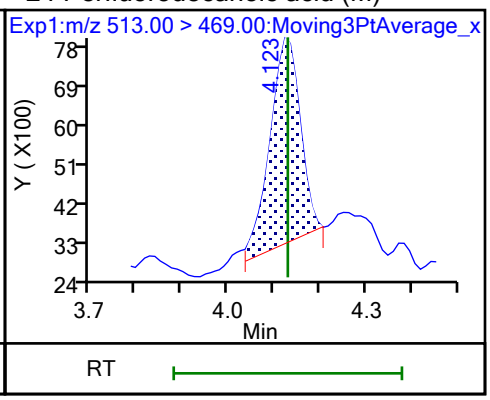
68 Perfluorononanesulfonic acid (M)



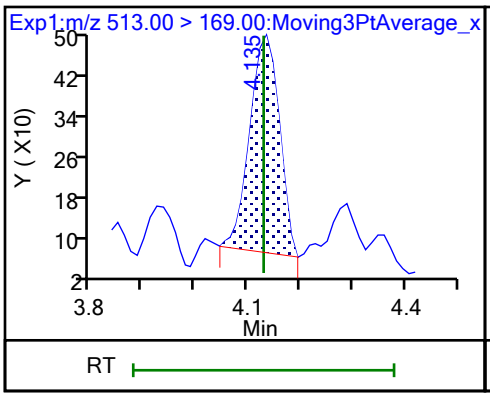
68 Perfluorononanesulfonic acid (M)



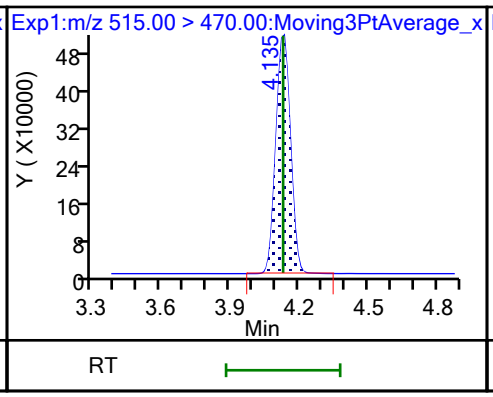
24 Perfluorodecanoic acid (M)



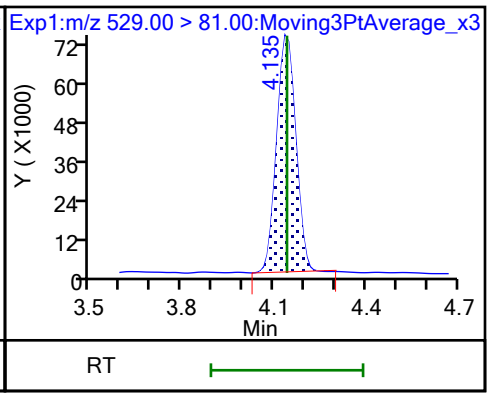
24 Perfluorodecanoic acid



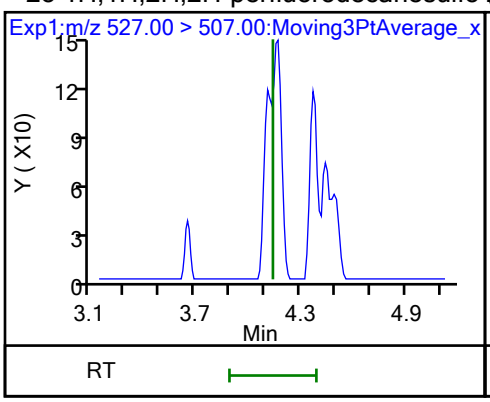
D 23 13C2 PFDA



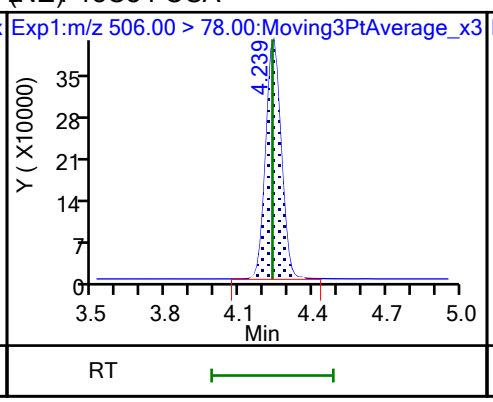
D 26 M2-8:2 FTS



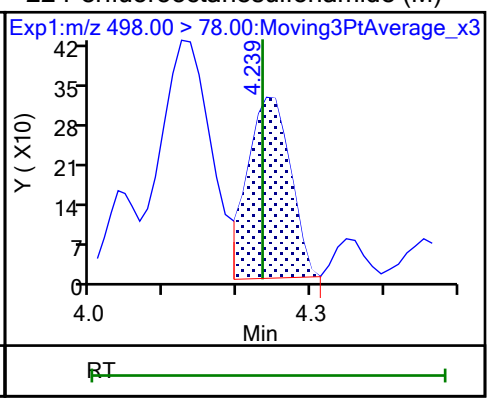
25 1H,1H,2H,2H-perfluorodecanesulfo (M2)



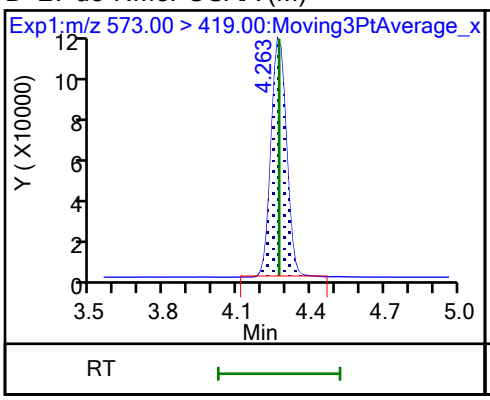
D 21 13C8 FOSA



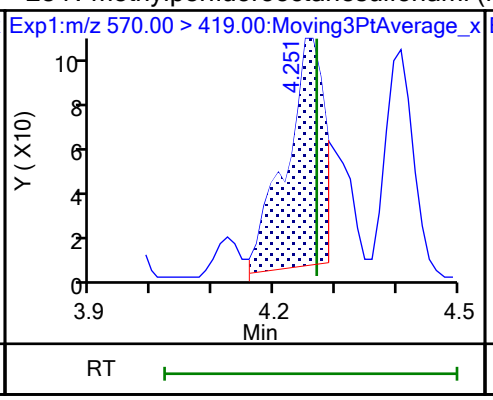
22 Perfluorooctanesulfonamide (M)



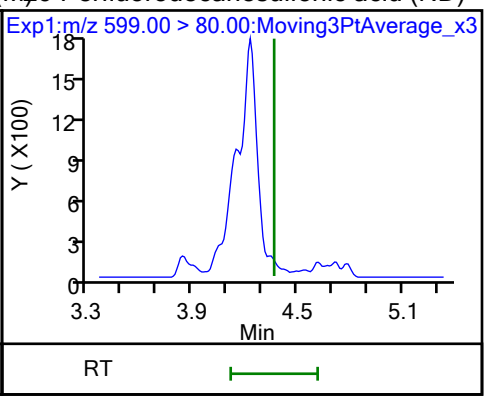
D 27 d3-NMeFOSAA (M)



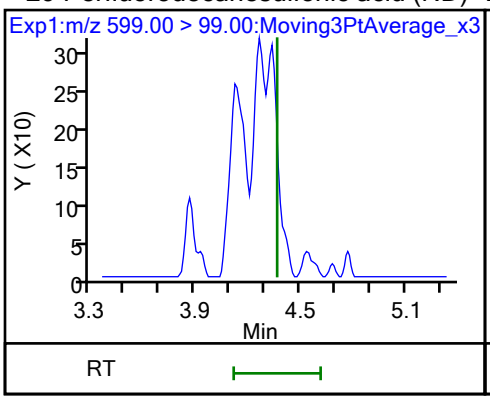
28 N-methylperfluorooctanesulfonami (M)



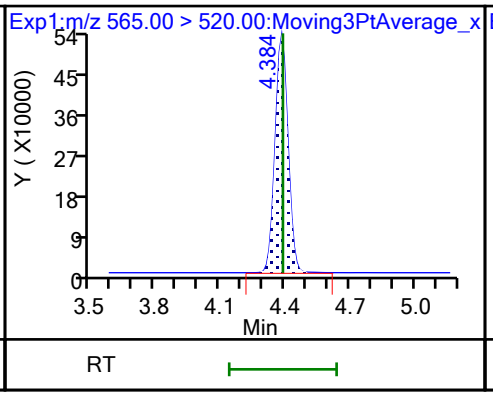
29 Perfluorodecanesulfonic acid (ND)



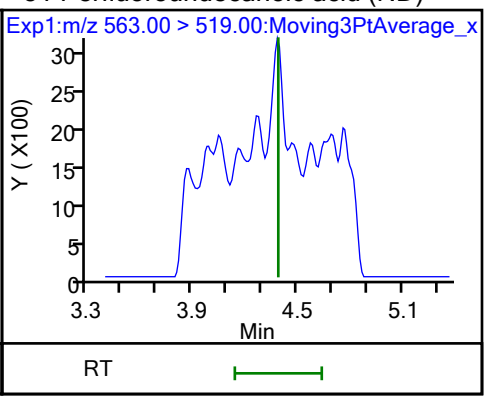
29 Perfluorodecanesulfonic acid (ND)



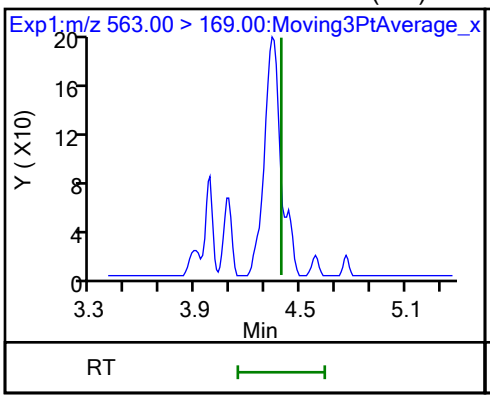
D 30 13C2 PFUnA



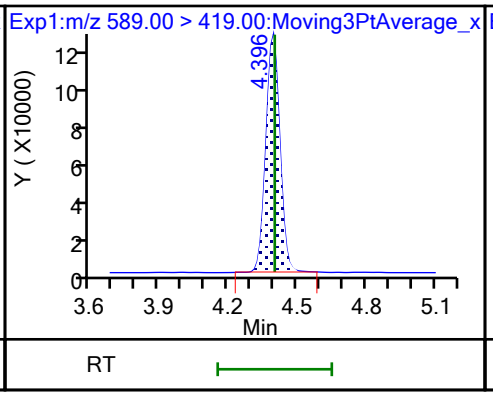
31 Perfluoroundecanoic acid (ND)



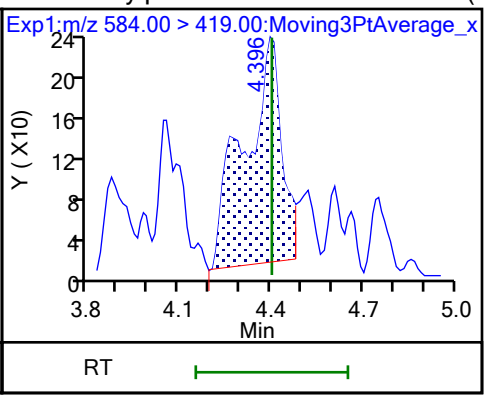
31 Perfluoroundecanoic acid (ND)



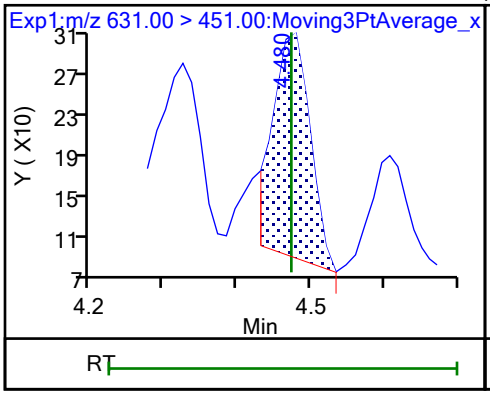
D 32 d5-NEtFOSAA



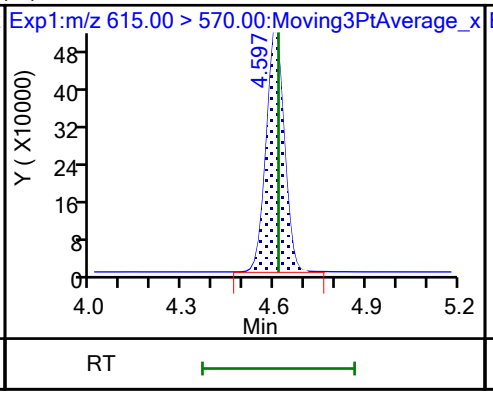
33 N-ethylperfluorooctanesulfonamid (M)



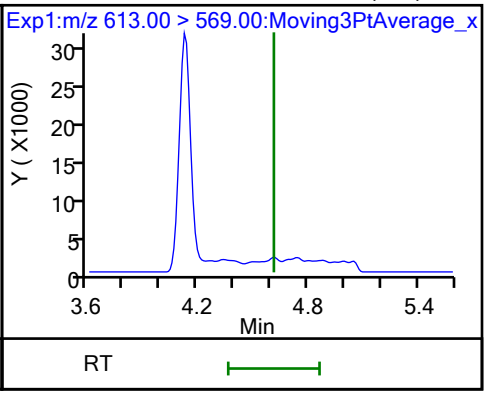
66 11-Chloroeicosafluoro-3-oxaundec (M)



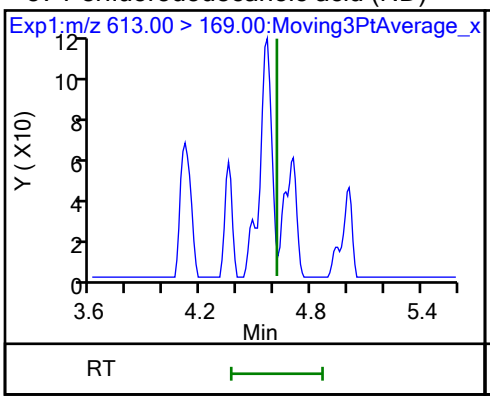
D 36 13C2 PFDoA



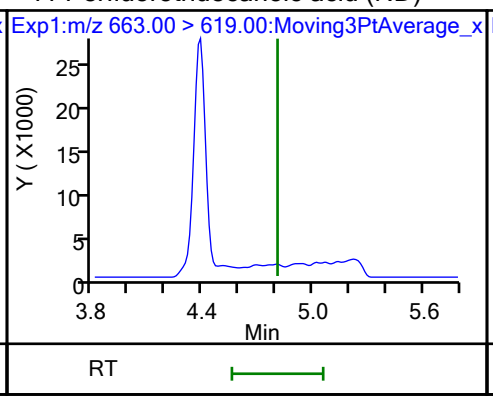
37 Perfluorododecanoic acid (ND)



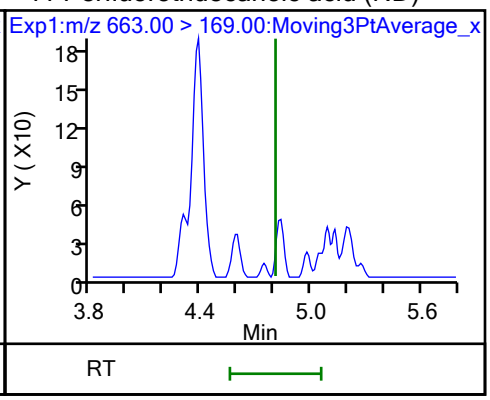
37 Perfluorododecanoic acid (ND)



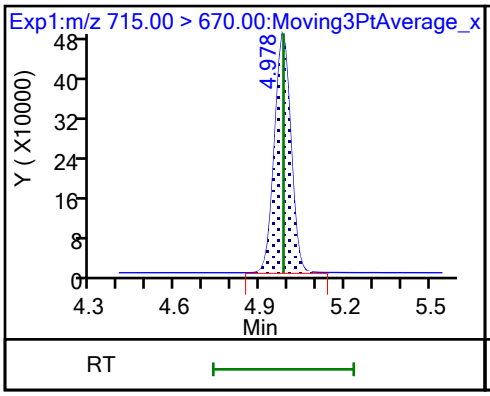
41 Perfluorotridecanoic acid (ND)



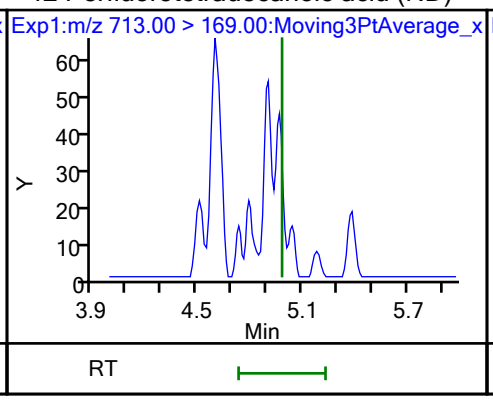
41 Perfluorotridecanoic acid (ND)



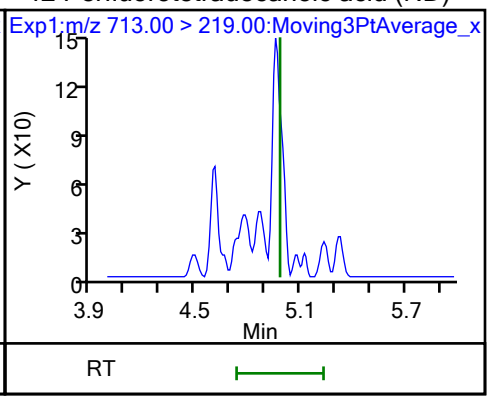
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

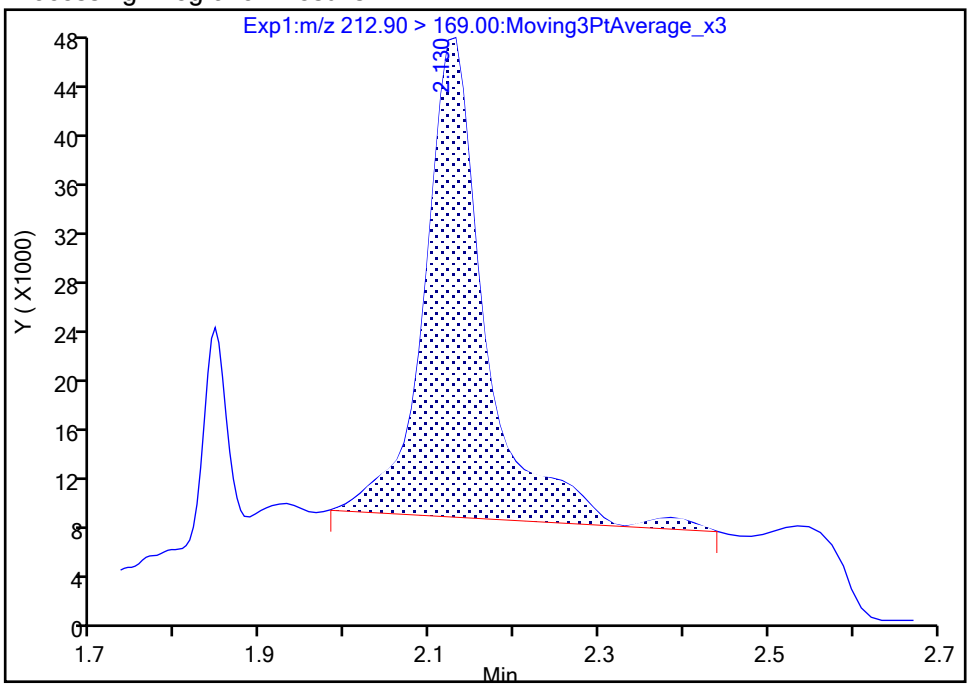
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

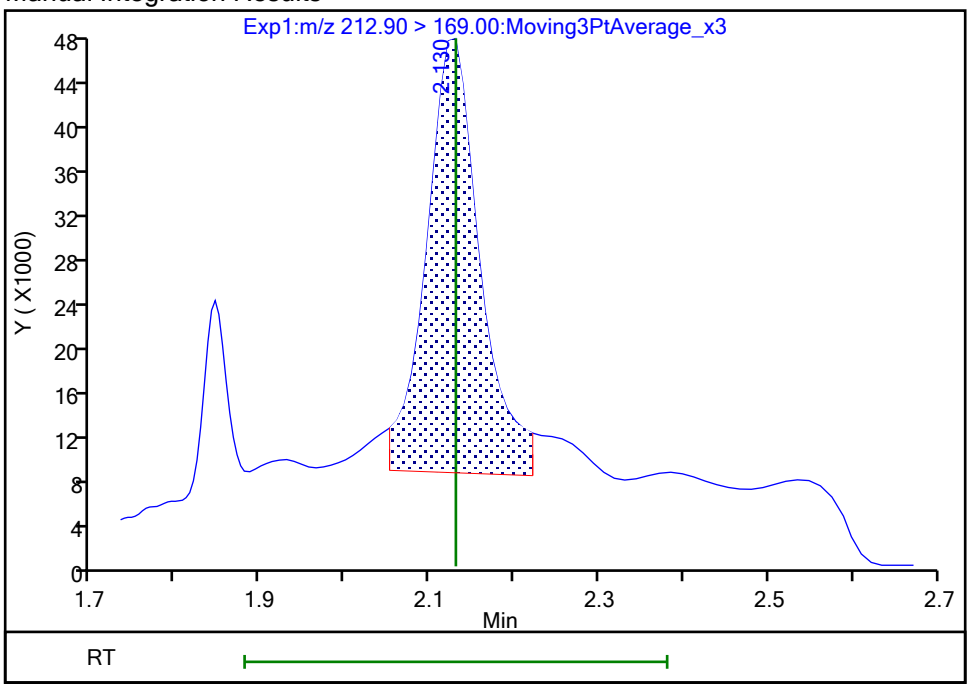
Processing Integration Results

RT: 2.13
Area: 194013
Amount: 0.209796
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 171502
Amount: 0.180710
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:30:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

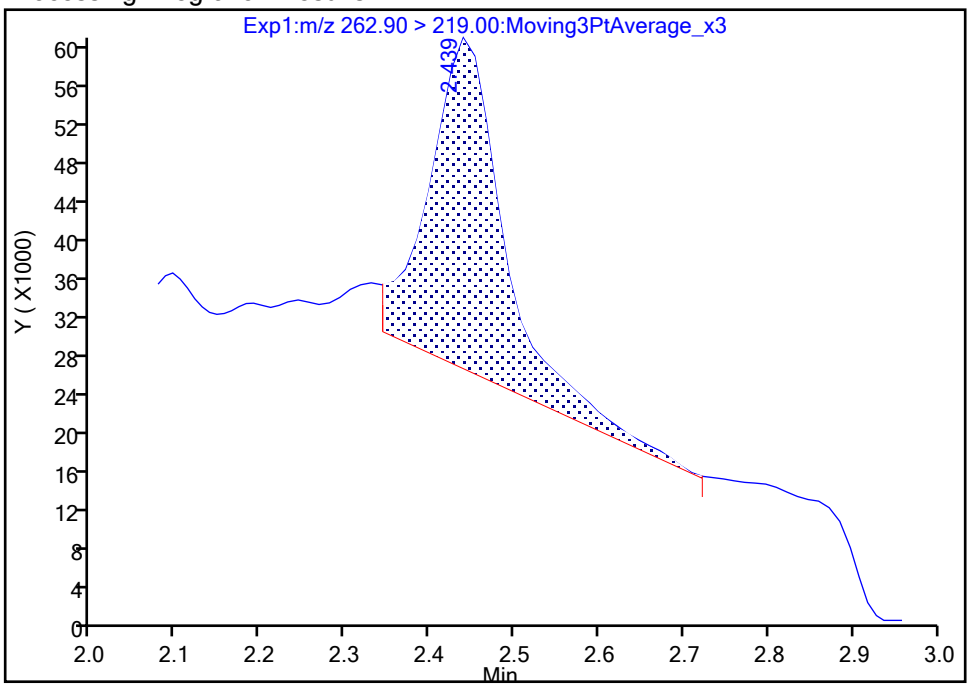
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

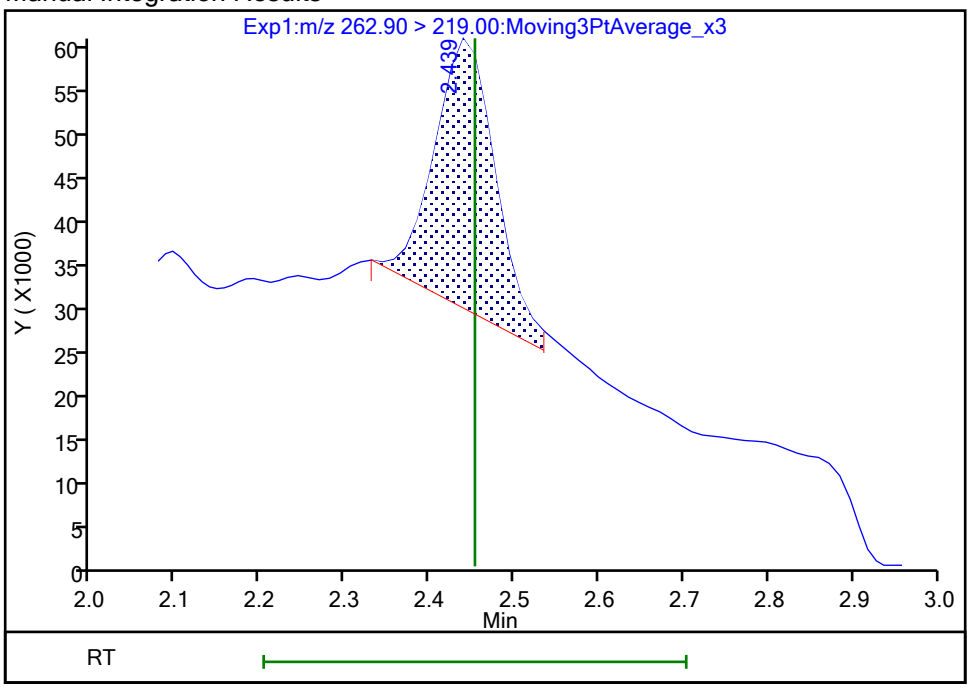
Processing Integration Results

RT: 2.44
Area: 215543
Amount: 0.174635
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 156019
Amount: 0.126408
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:48:44 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

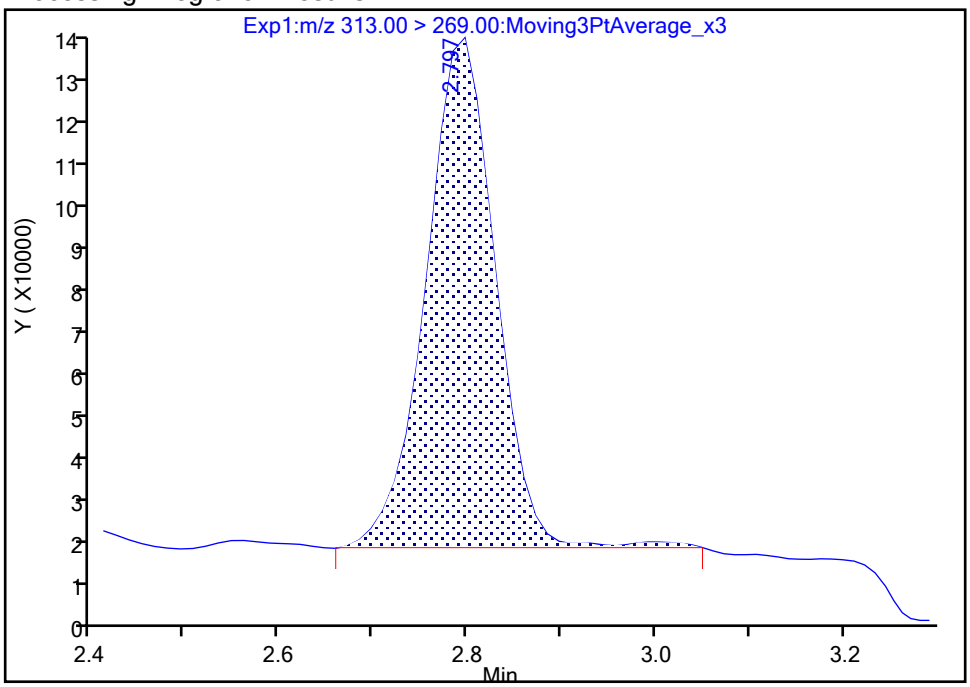
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

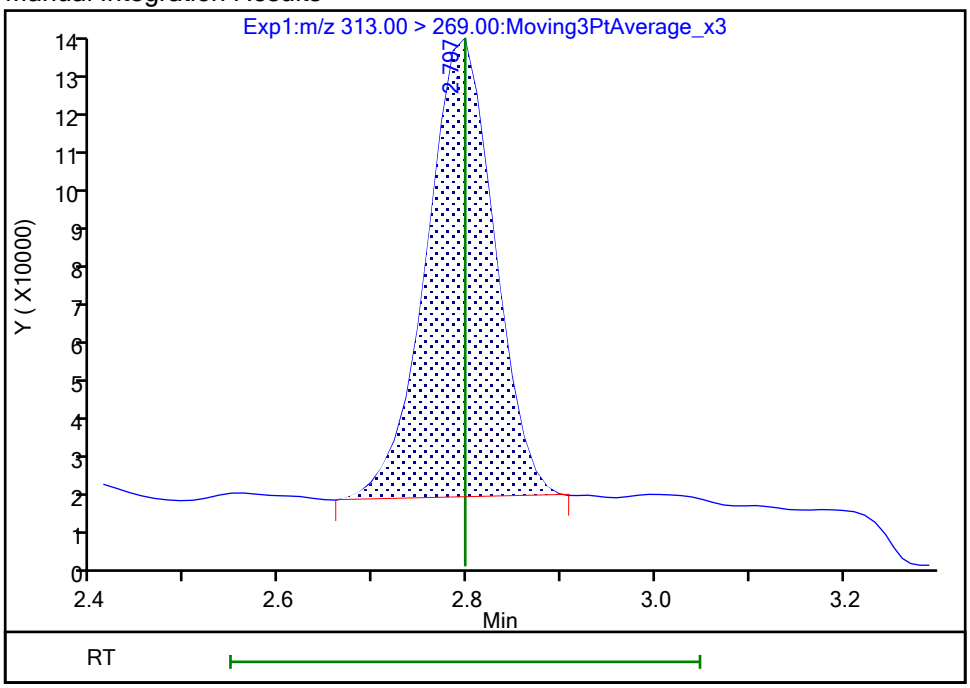
Processing Integration Results

RT: 2.80
Area: 595180
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 579159
Amount: 0.465662
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

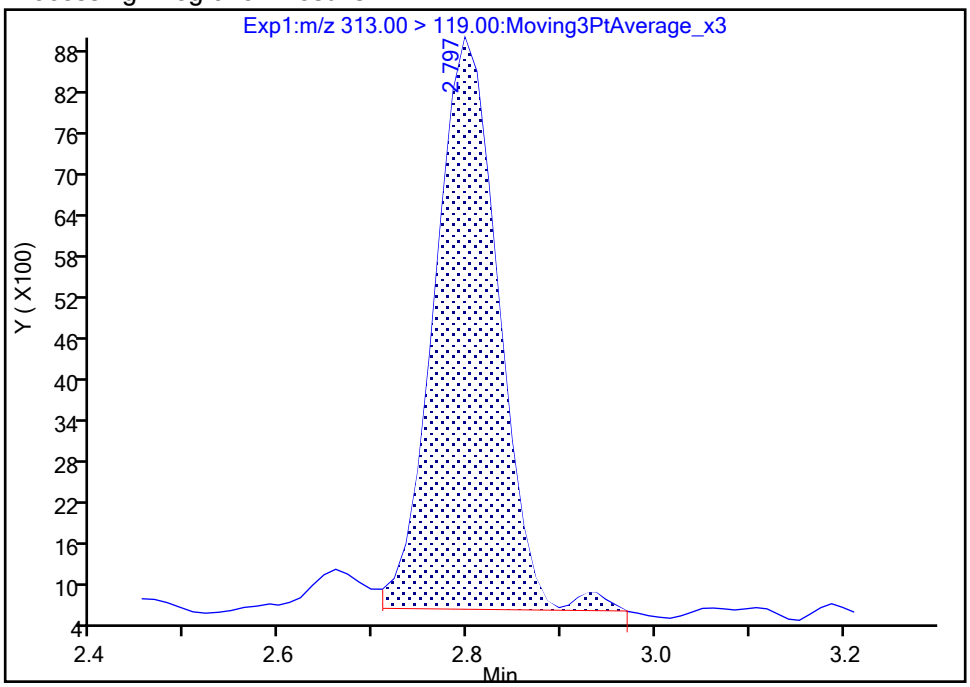
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

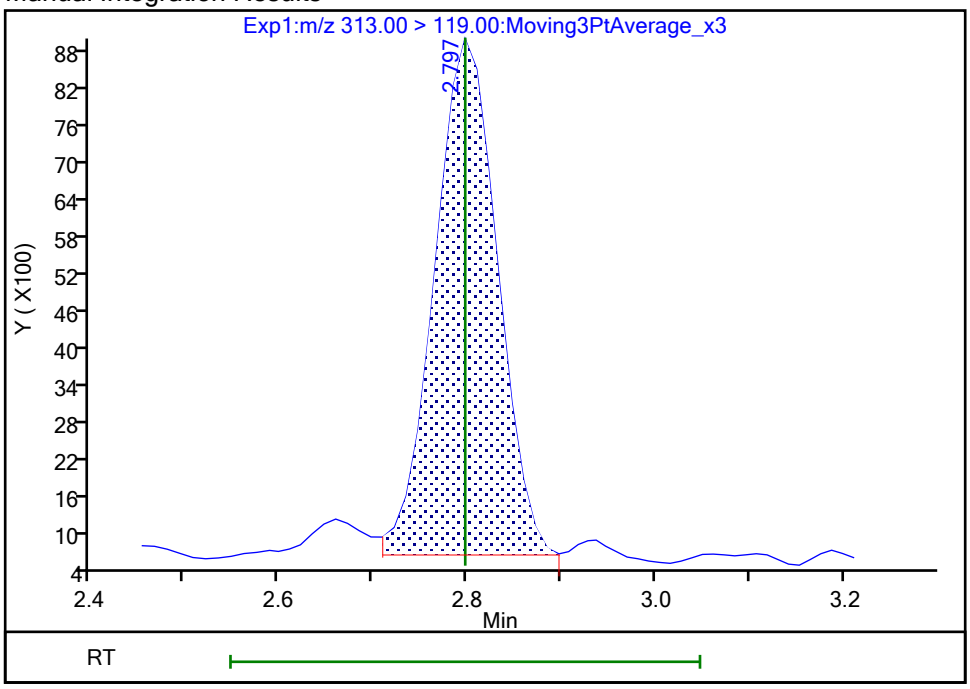
Processing Integration Results

RT: 2.80
Area: 39435
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 38782
Amount: 0.465662
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

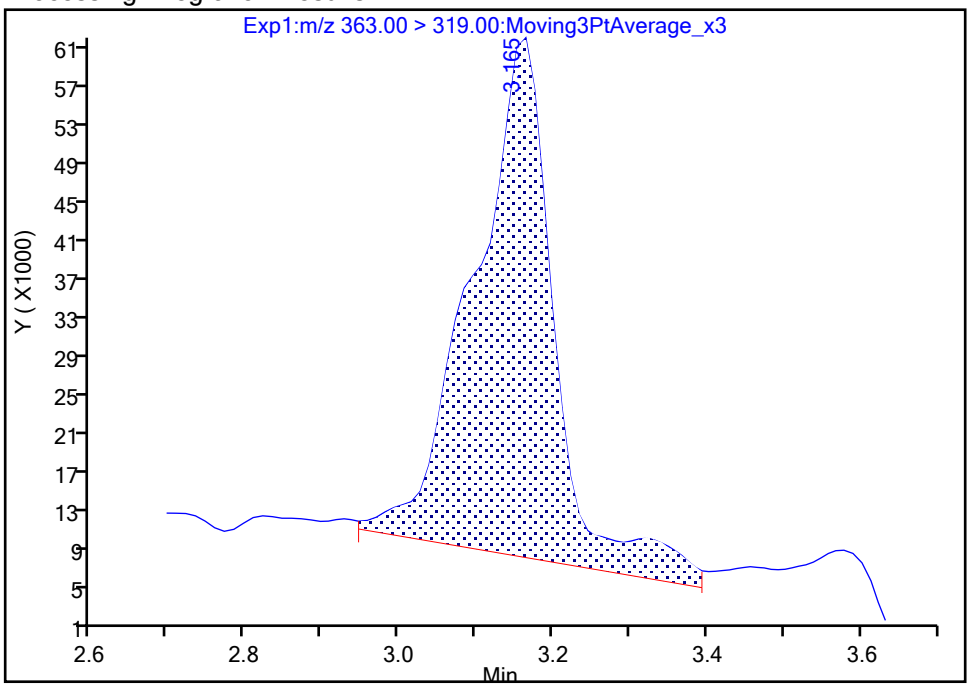
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

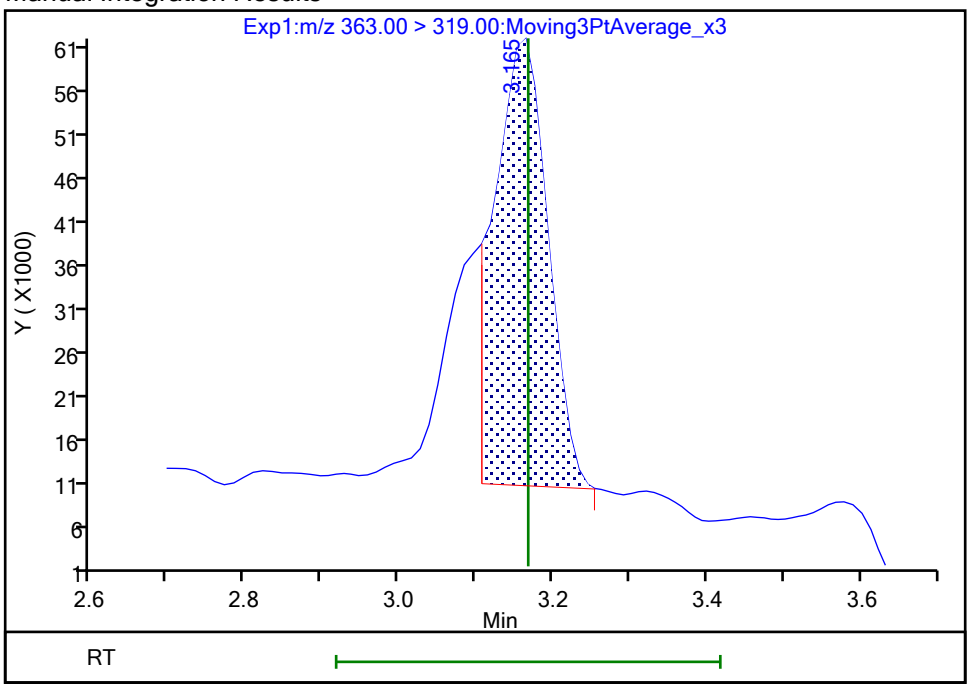
Processing Integration Results

RT: 3.16
Area: 396777
Amount: 0.254892
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 240238
Amount: 0.154330
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:32:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

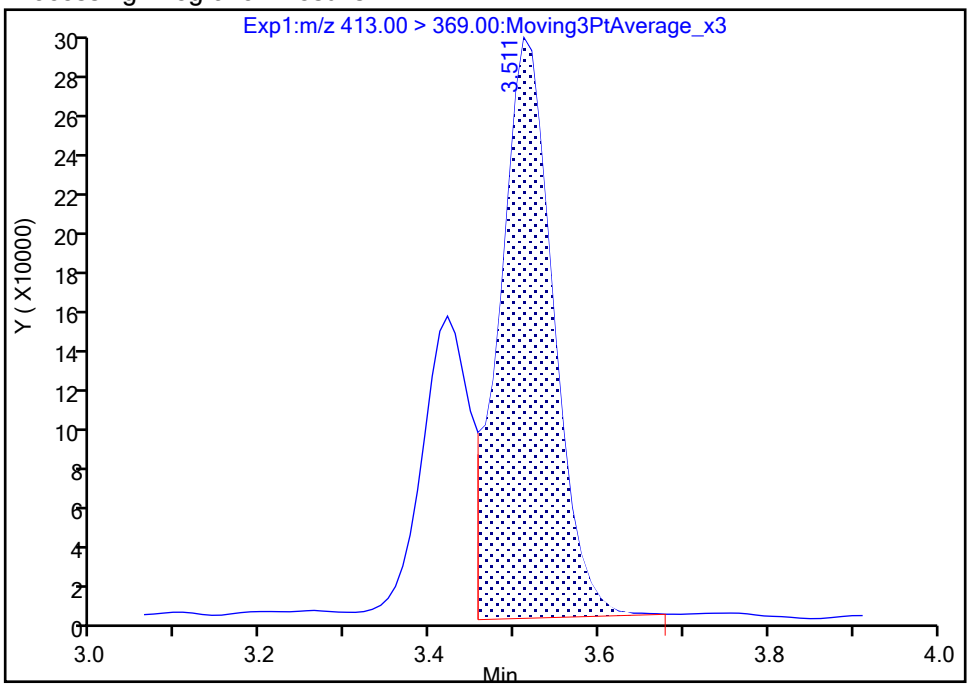
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

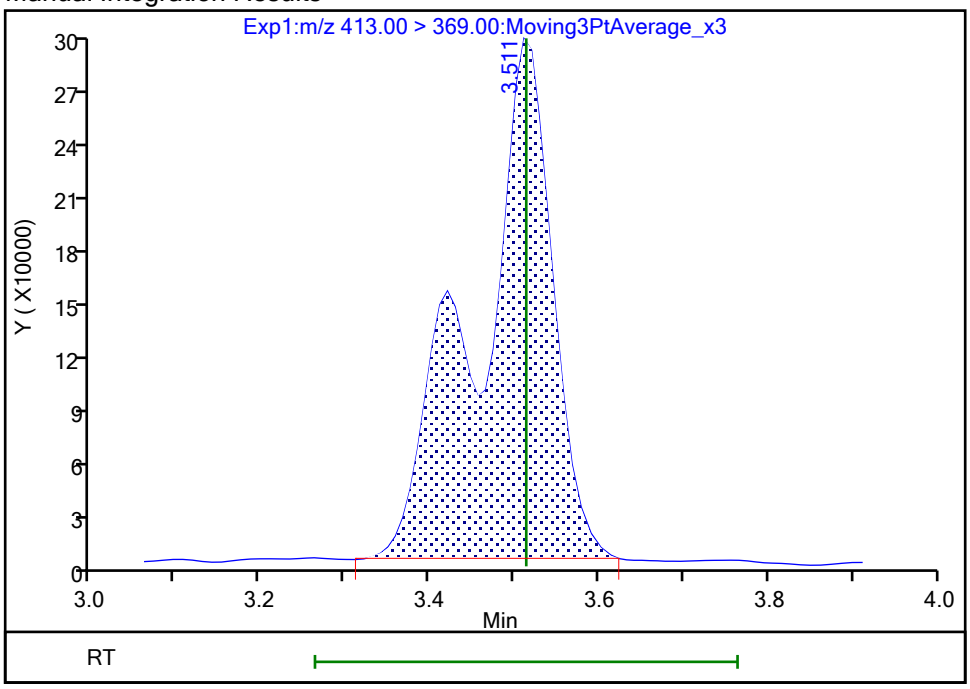
Processing Integration Results

RT: 3.51
Area: 1235392
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1747022
Amount: 1.106754
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:32:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

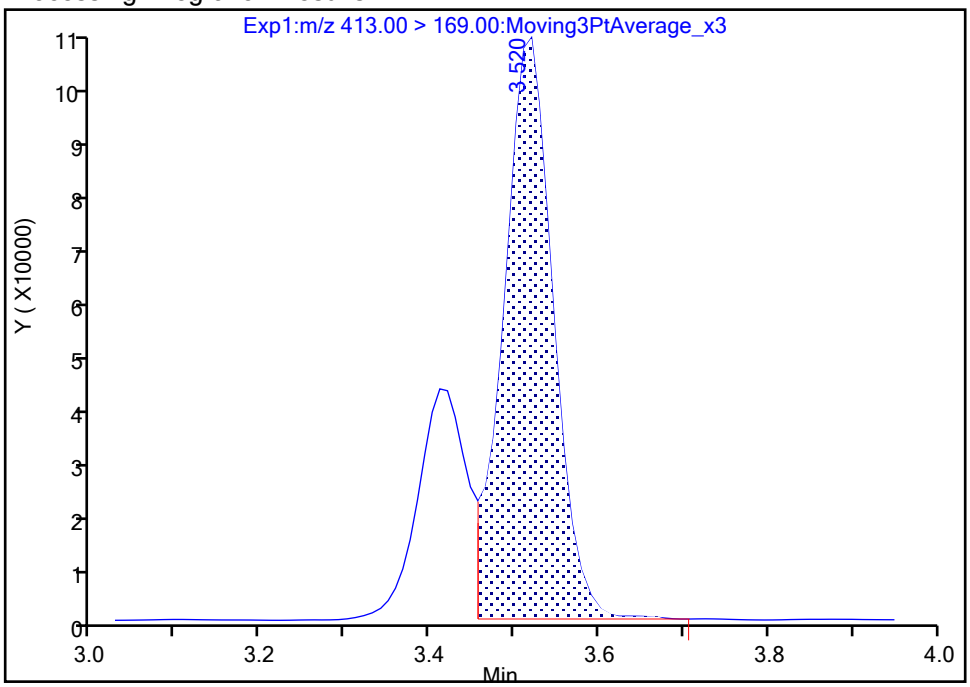
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

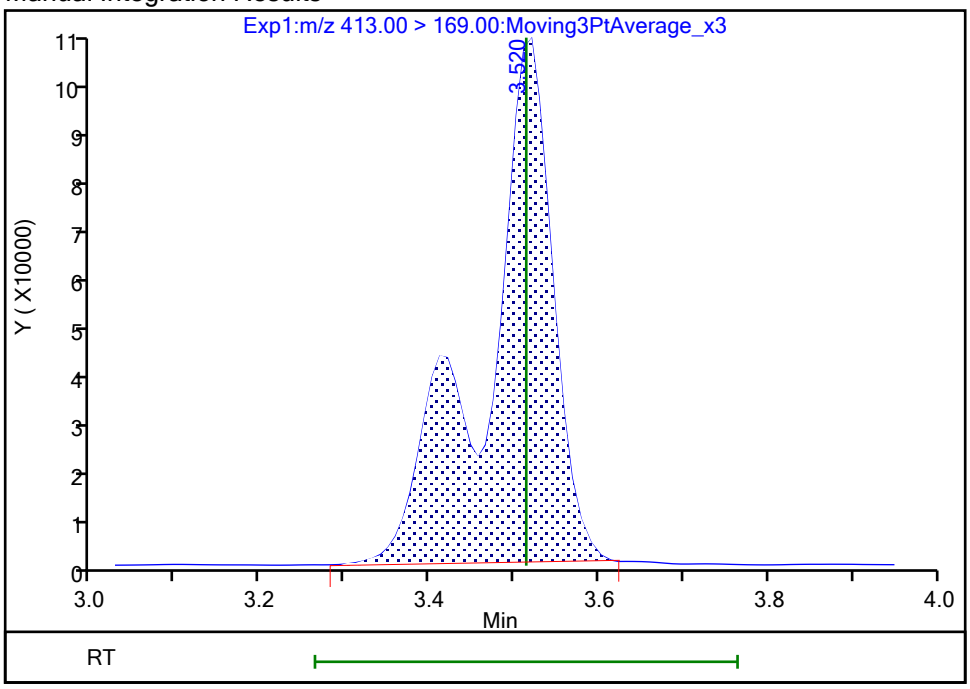
Processing Integration Results

RT: 3.52
Area: 424787
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 582983
Amount: 1.106754
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:32:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

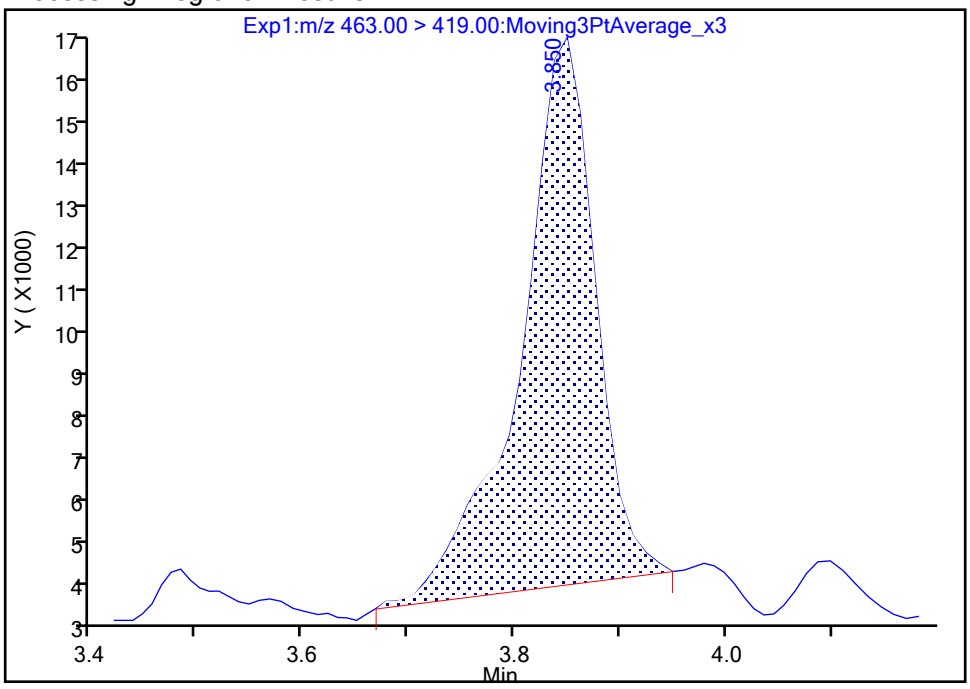
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

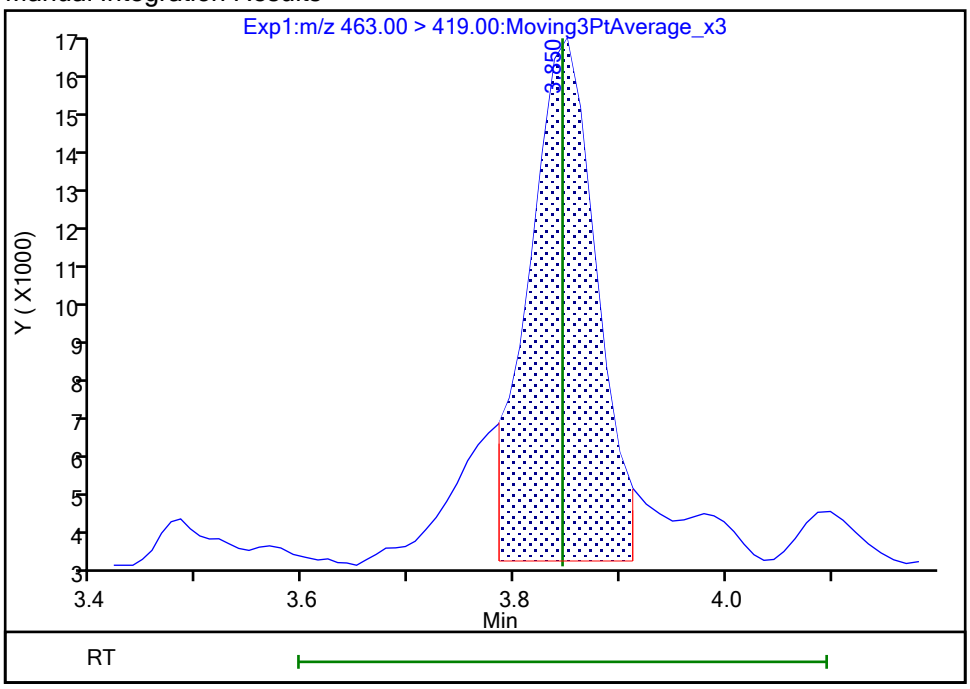
Processing Integration Results

RT: 3.85
Area: 60010
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 56684
Amount: 0.038516
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:48:55 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

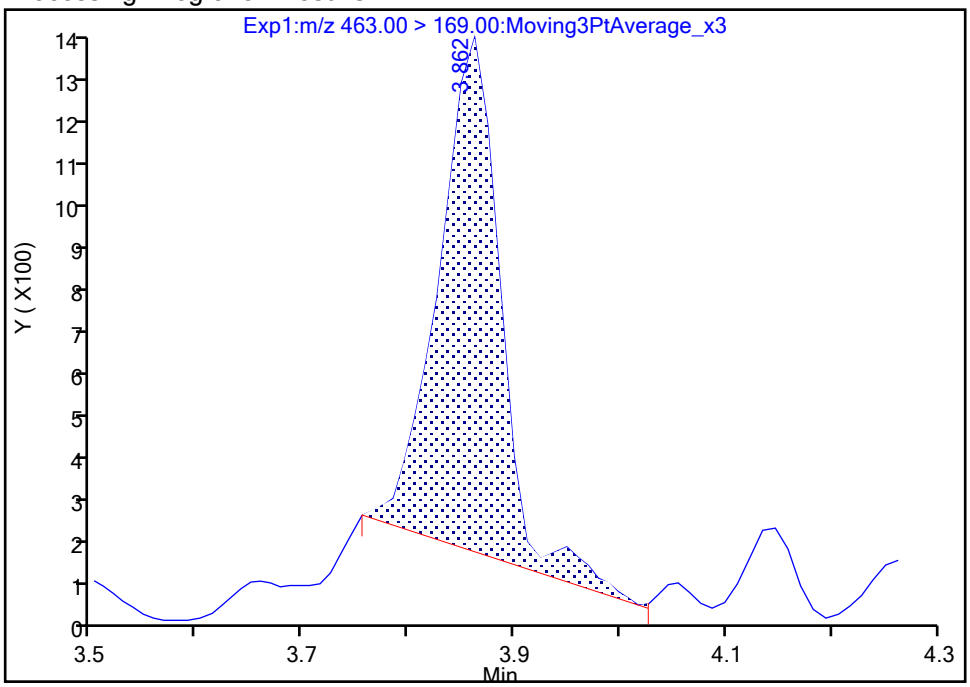
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

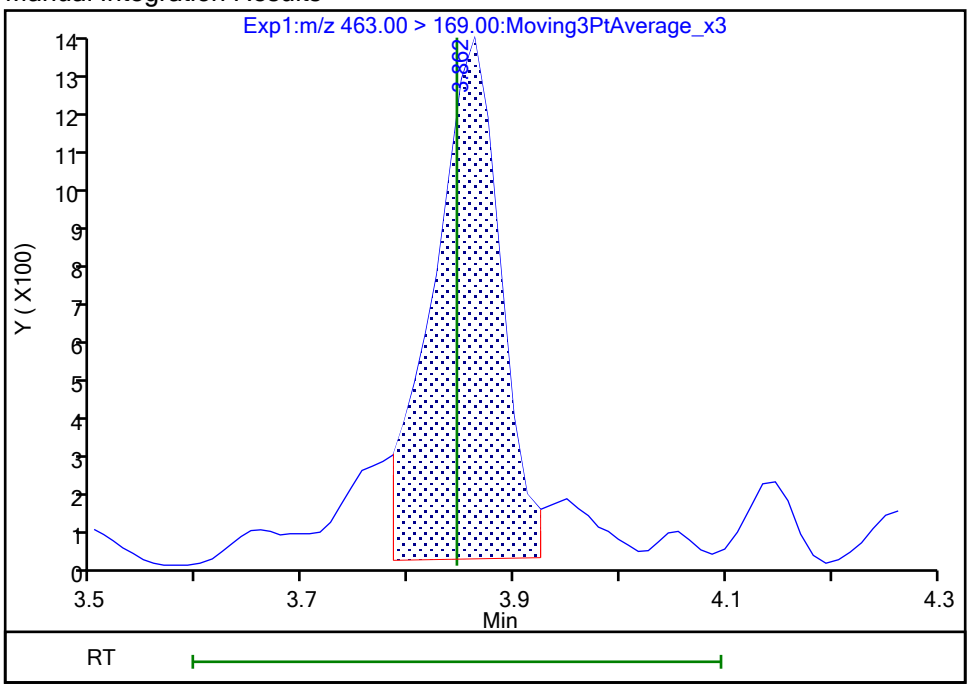
Processing Integration Results

RT: 3.86
Area: 4851
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.86
Area: 5795
Amount: 0.038516
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 19:49:00 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

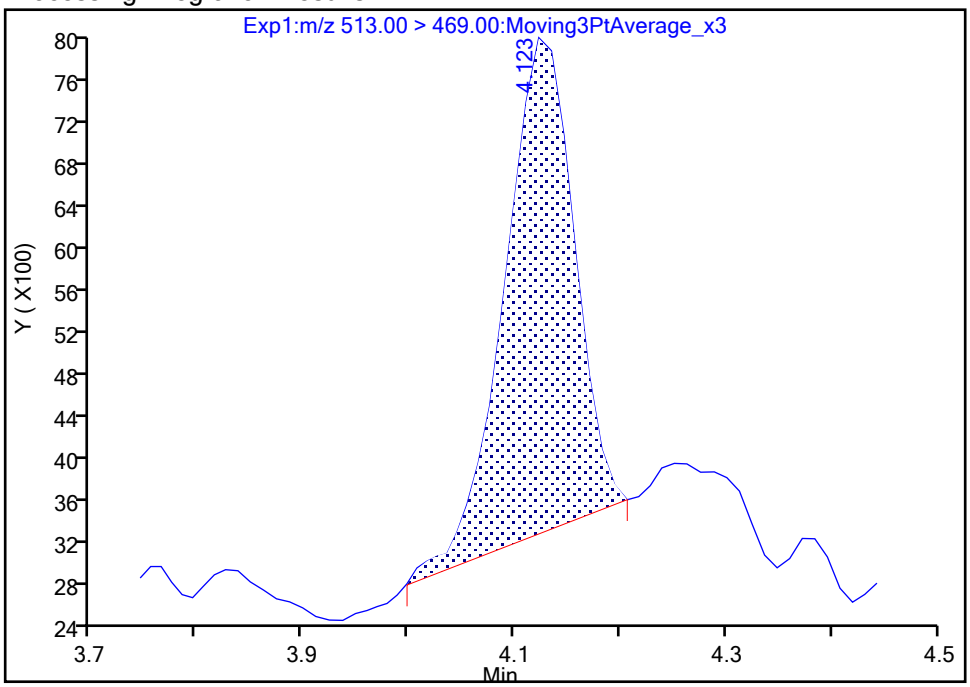
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

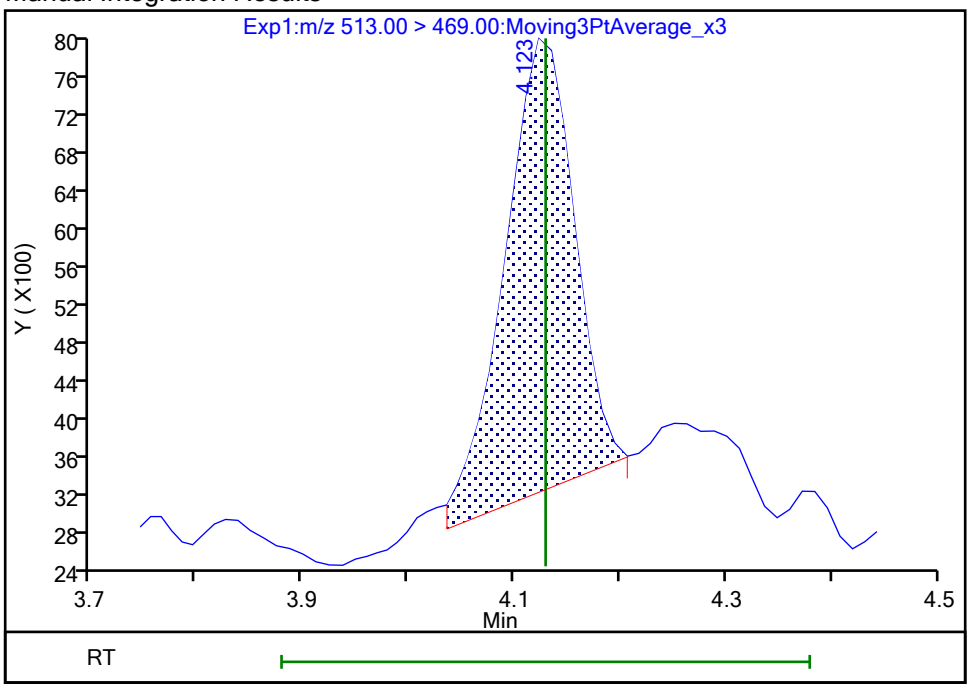
Processing Integration Results

RT: 4.12
Area: 21570
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 21840
Amount: 0.012084
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:33:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

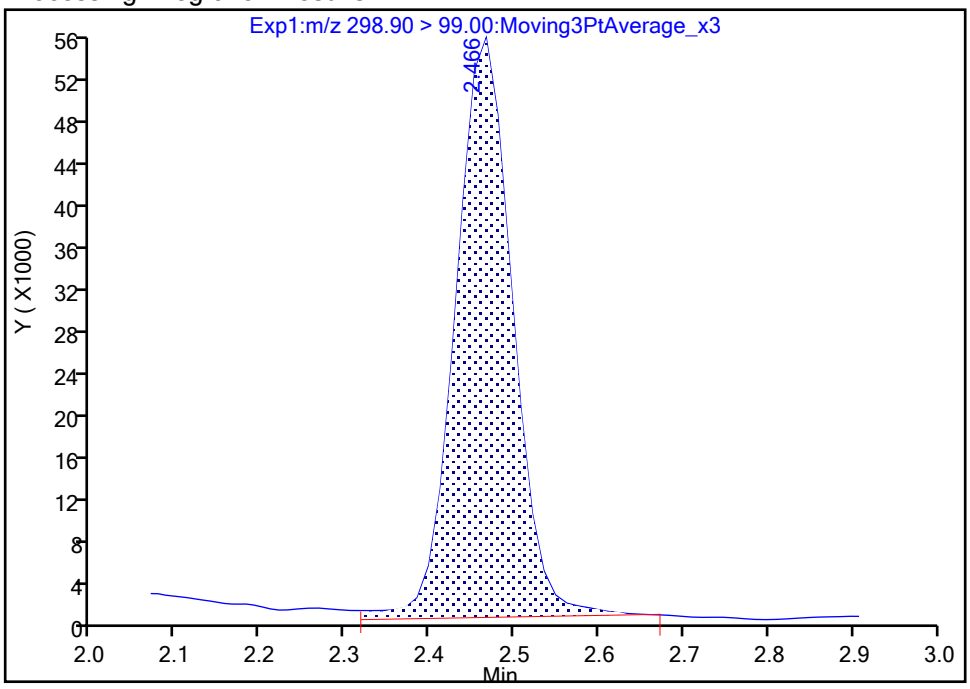
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

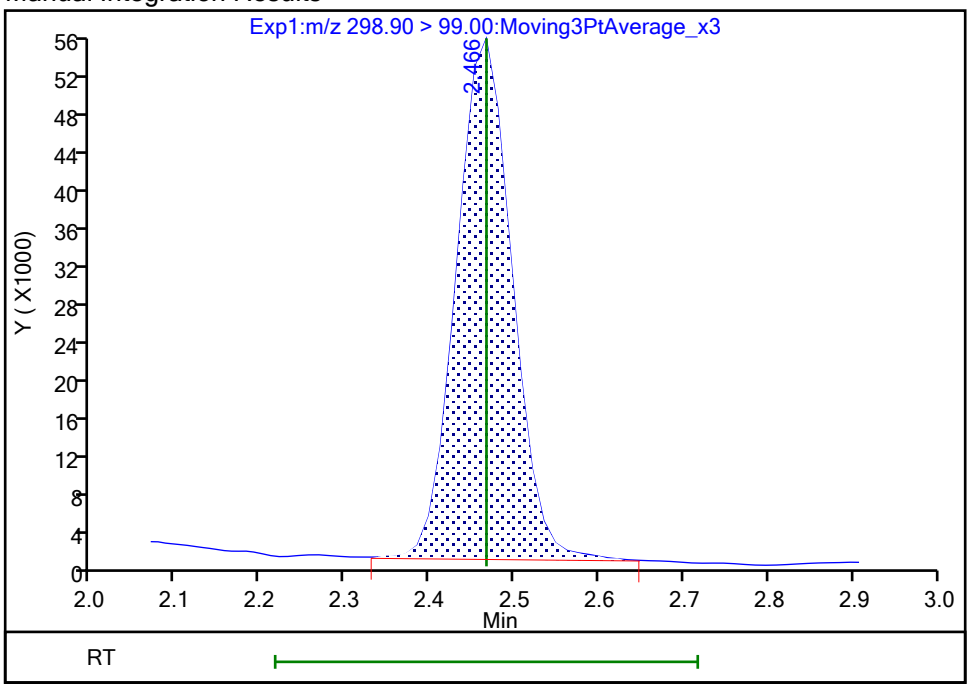
Processing Integration Results

RT: 2.47
Area: 257246
Amount: 0.256486
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 246956
Amount: 0.254672
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

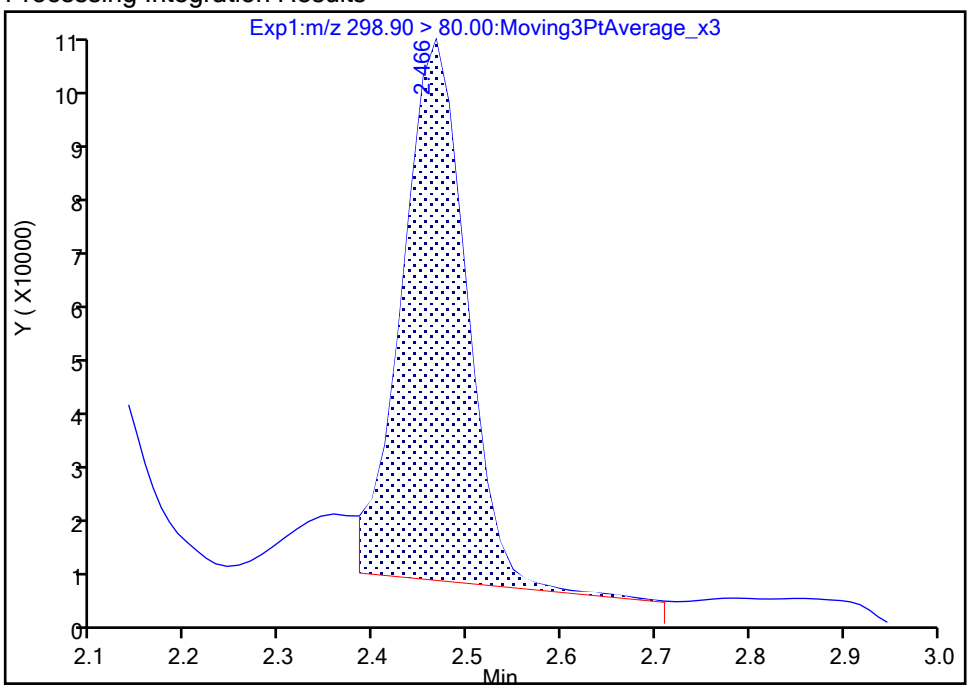
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

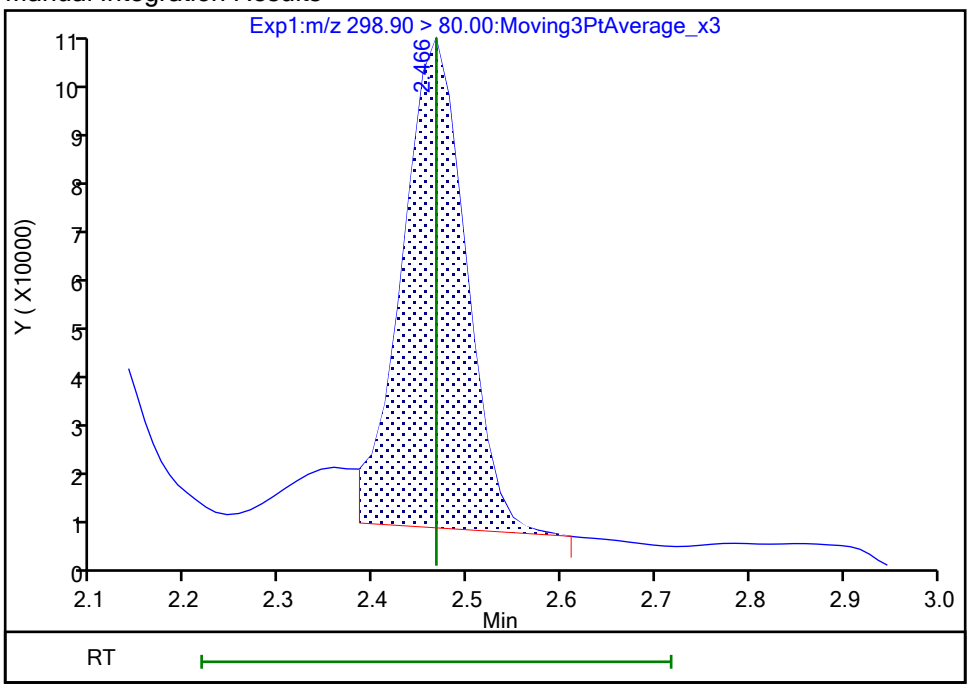
Processing Integration Results

RT: 2.47
Area: 476490
Amount: 0.256486
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 473119
Amount: 0.254672
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

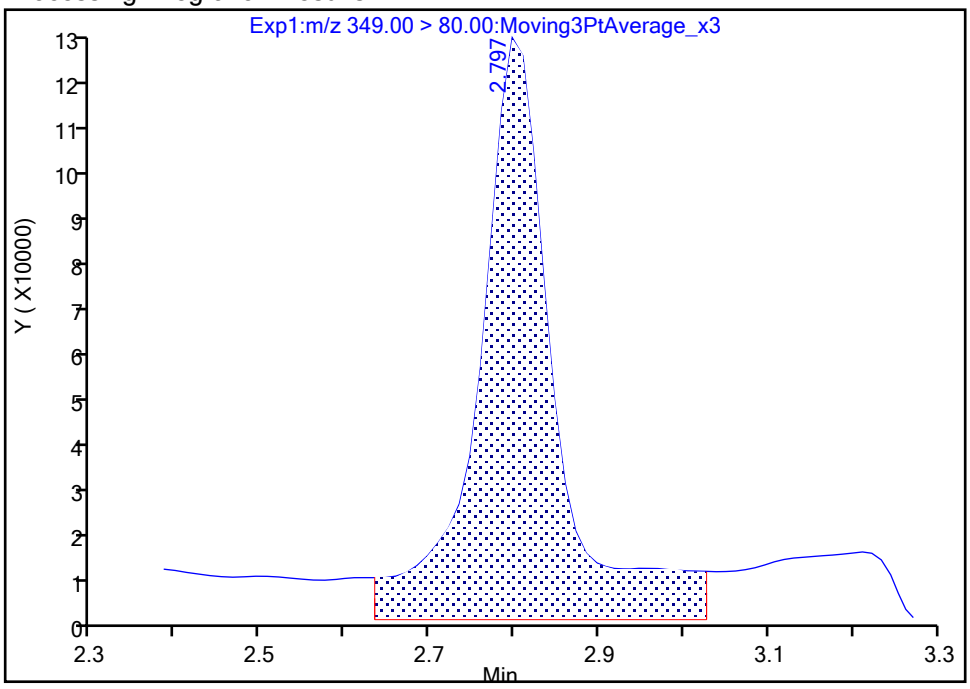
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

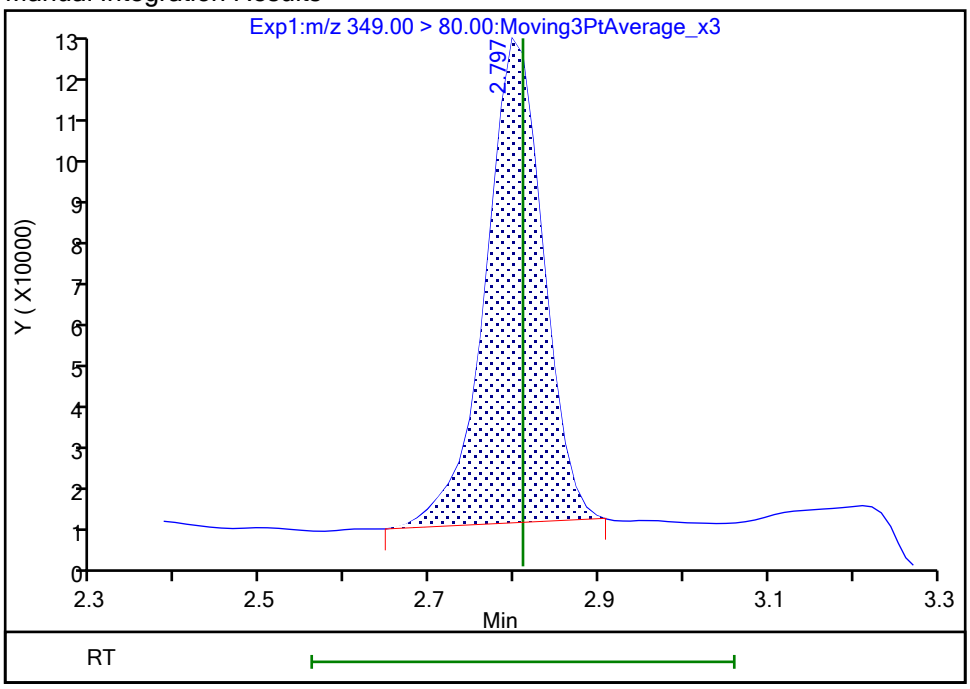
Processing Integration Results

RT: 2.80
Area: 783996
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 538300
Amount: 0.345854
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

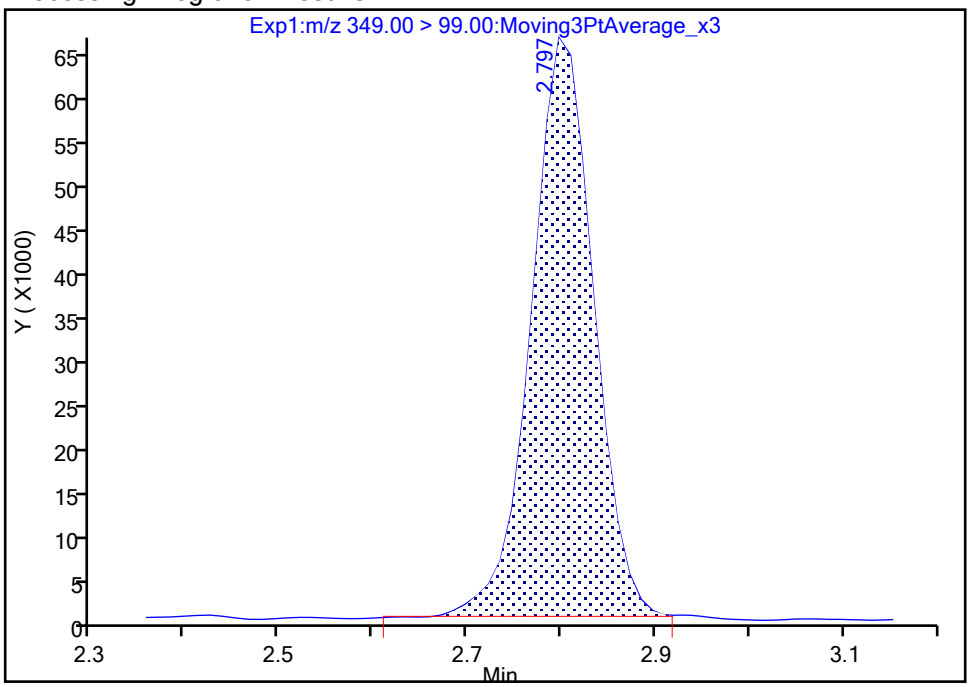
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

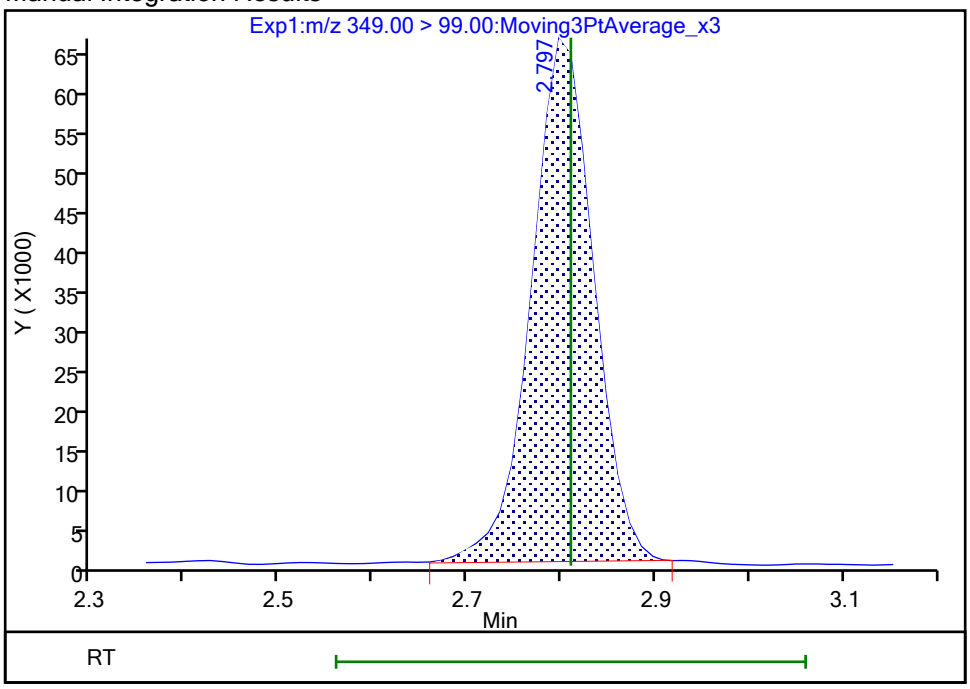
Processing Integration Results

RT: 2.80
Area: 300578
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 300177
Amount: 0.345854
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

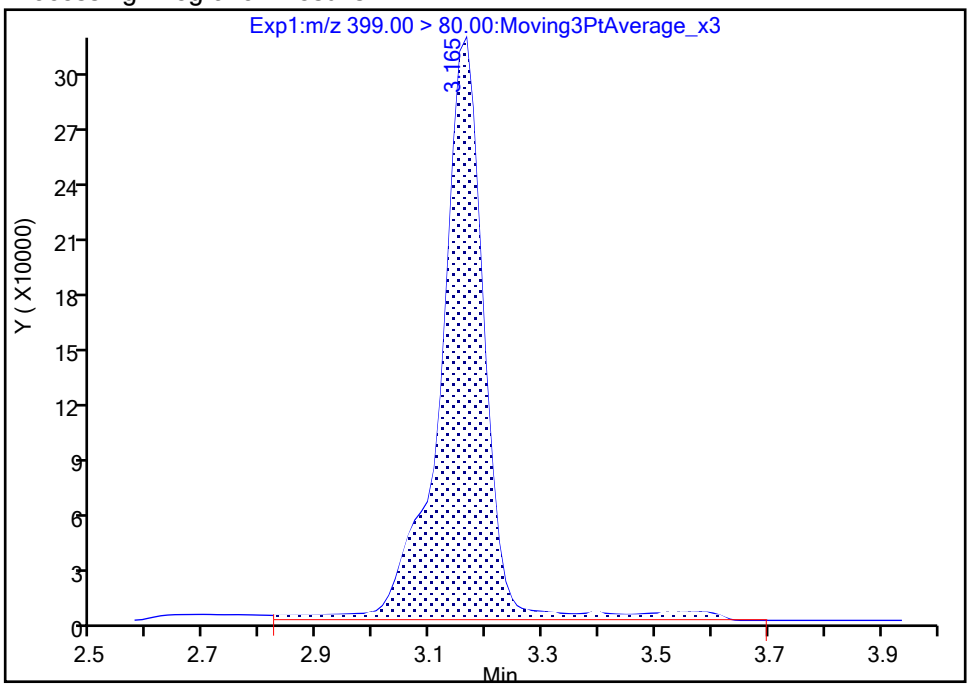
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

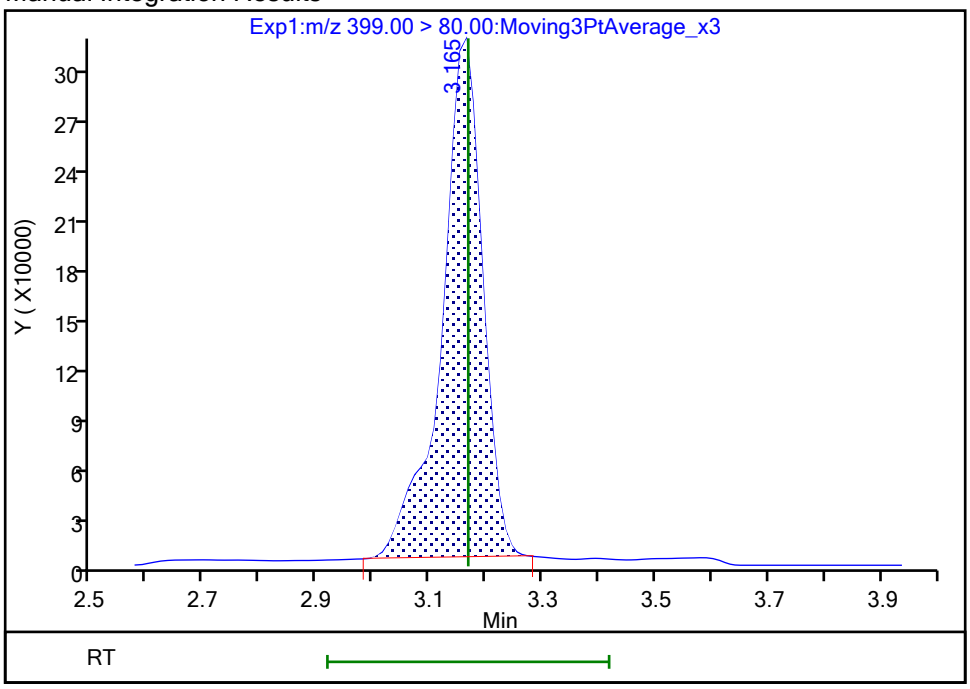
Processing Integration Results

RT: 3.16
Area: 1752152
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1560122
Amount: 1.182485
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

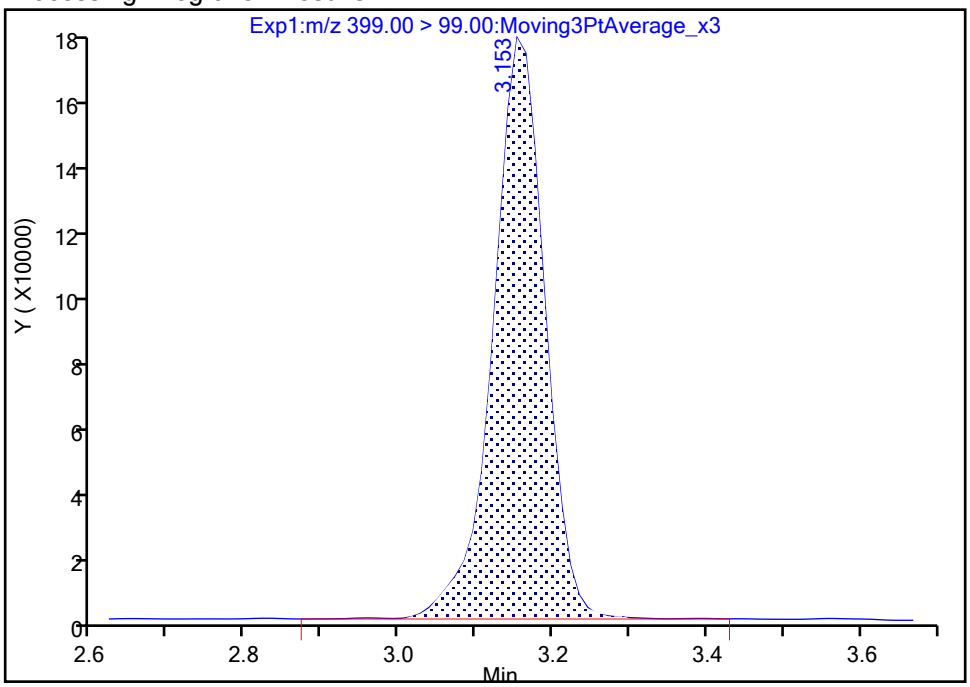
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

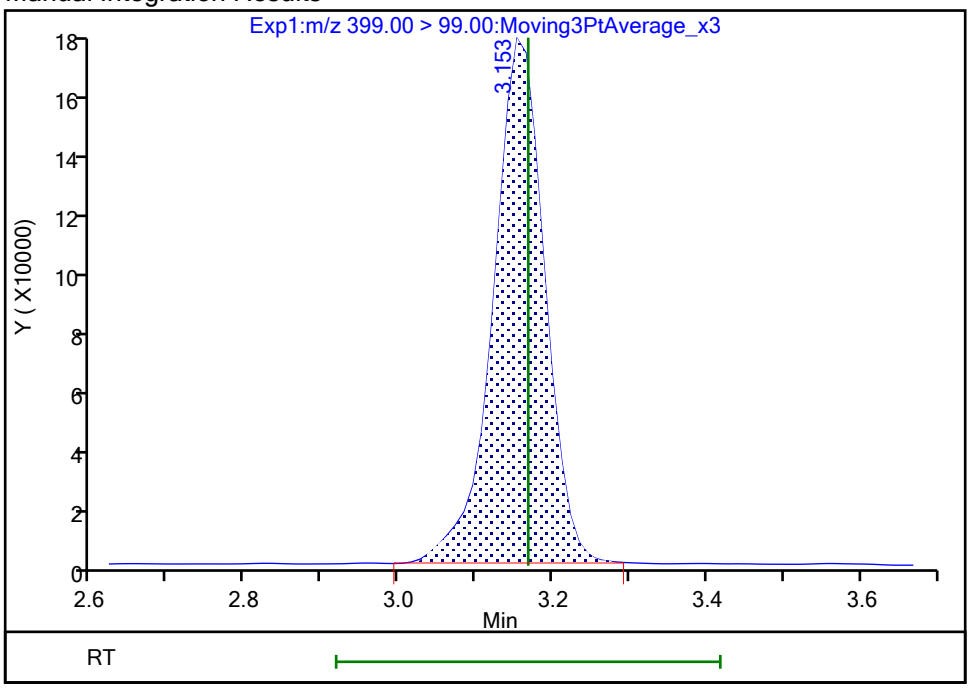
Processing Integration Results

RT: 3.15
Area: 808965
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 801459
Amount: 1.182485
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

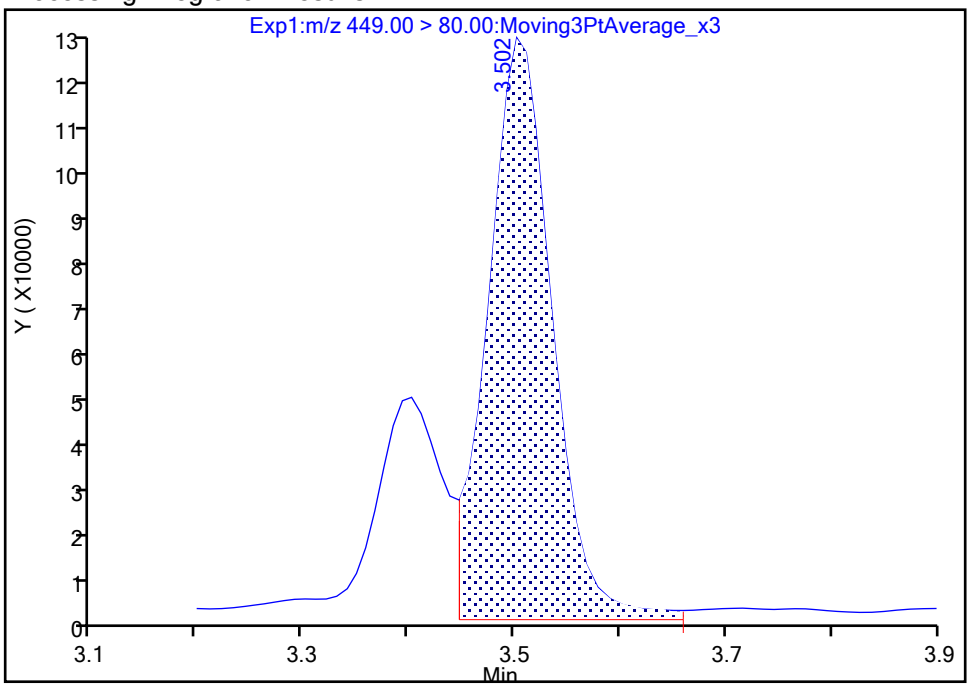
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

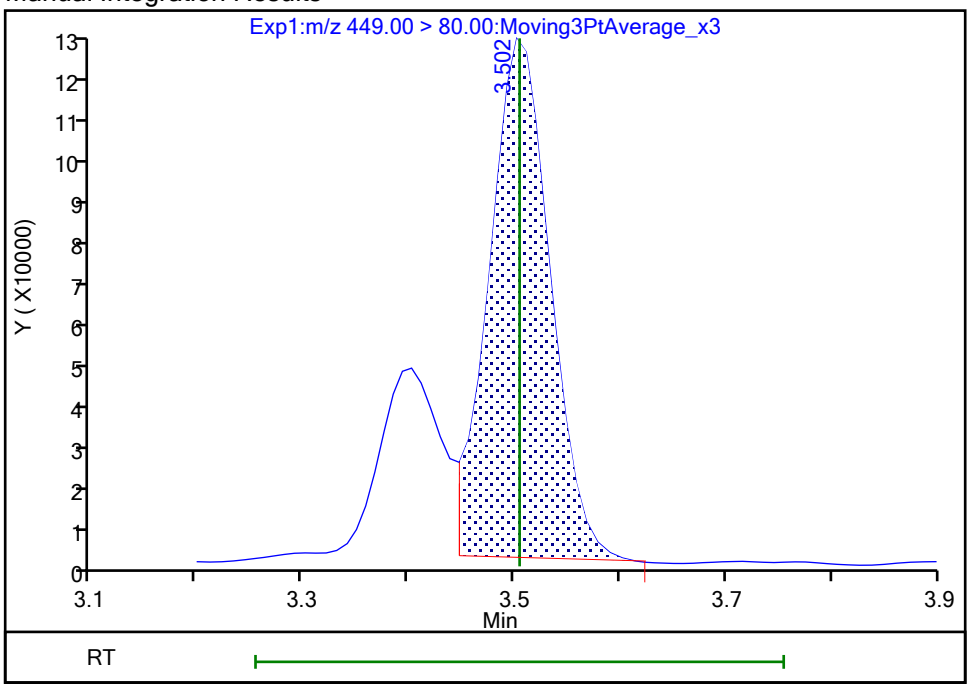
Processing Integration Results

RT: 3.50
Area: 519102
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 482736
Amount: 0.473926
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:32:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

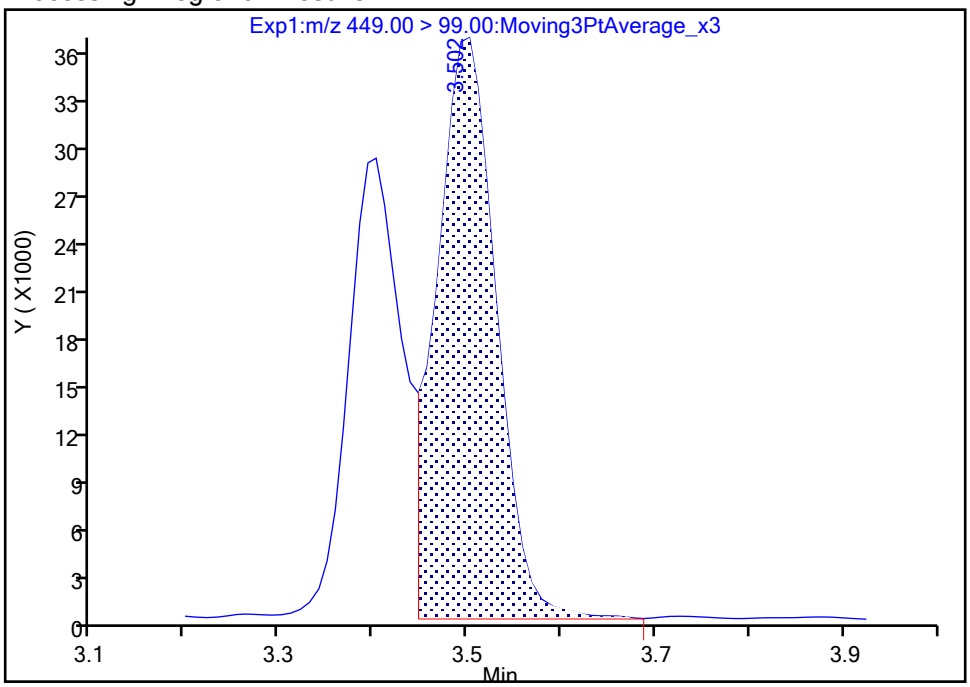
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

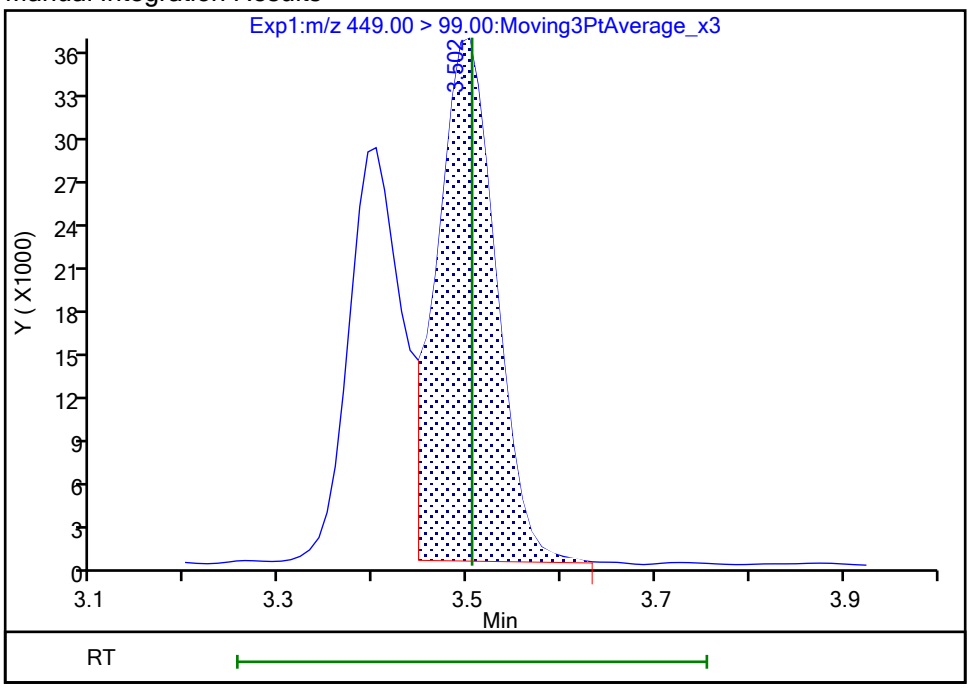
Processing Integration Results

RT: 3.50
Area: 162612
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 158383
Amount: 0.473926
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:32:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

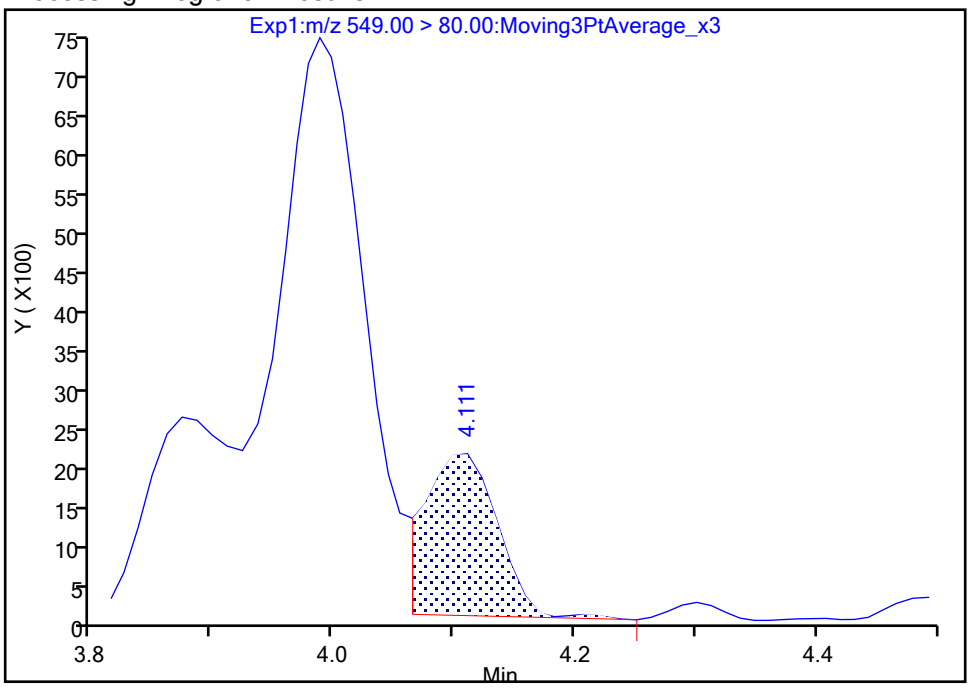
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

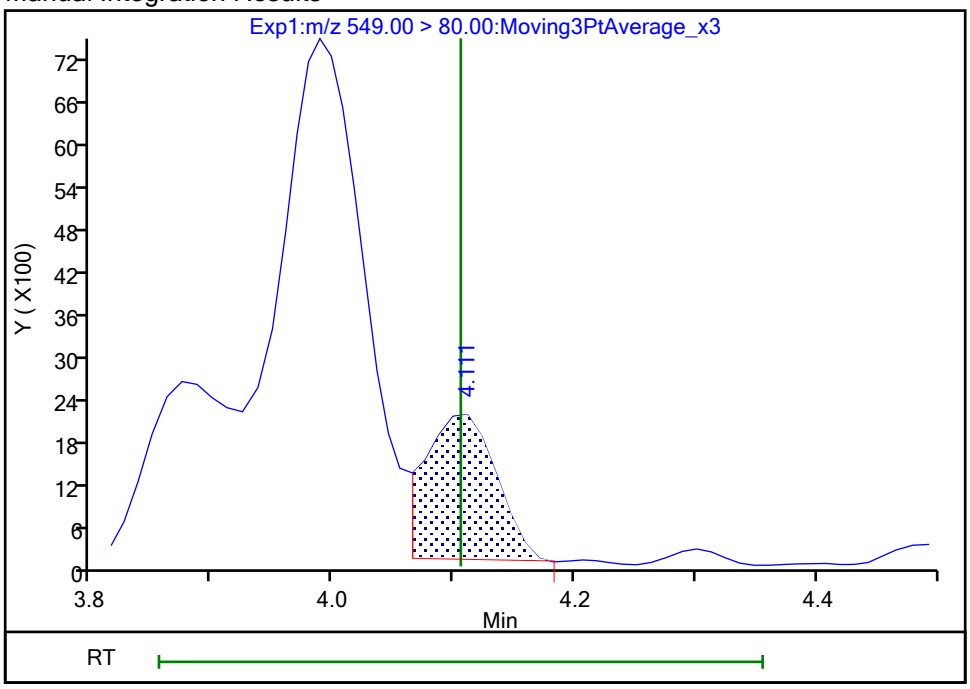
Processing Integration Results

RT: 4.11
Area: 8385
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 8190
Amount: 0.013095
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:33:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

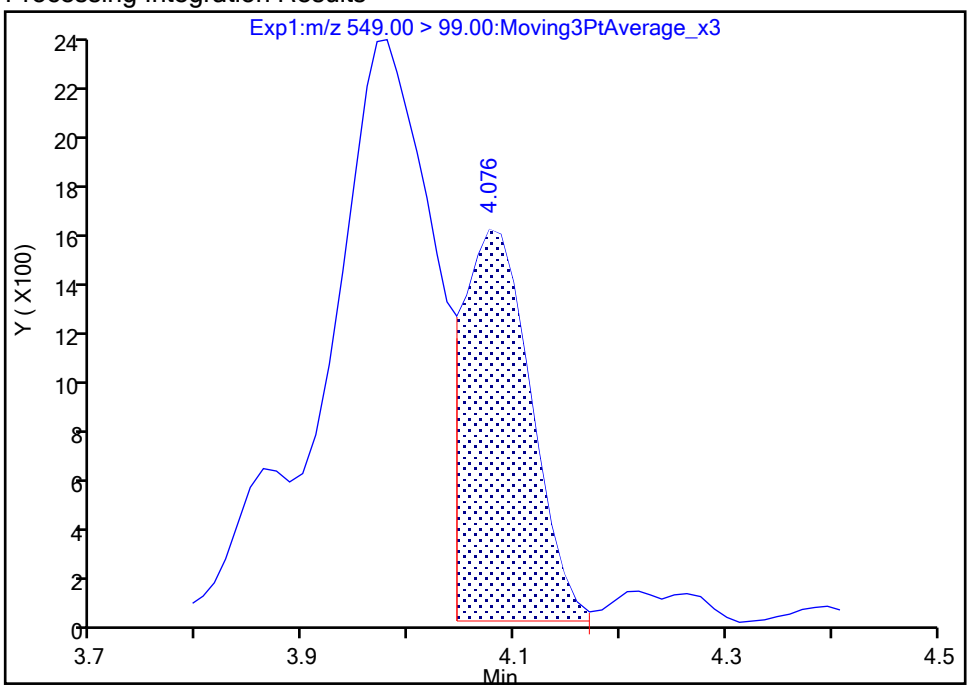
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

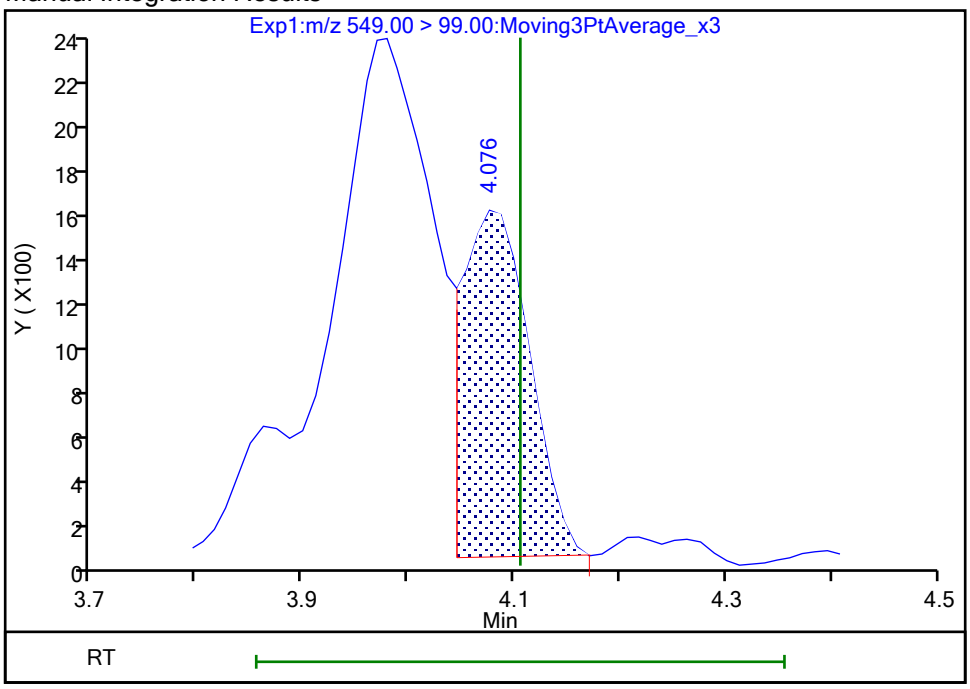
Processing Integration Results

RT: 4.08
Area: 6918
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.08
Area: 6651
Amount: 0.013095
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:33:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

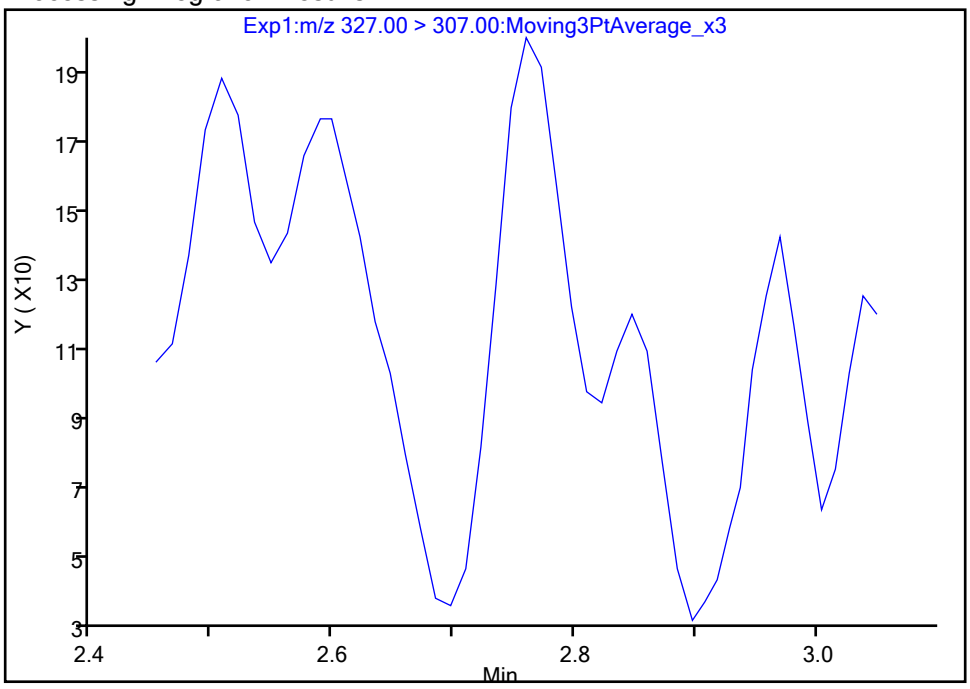
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

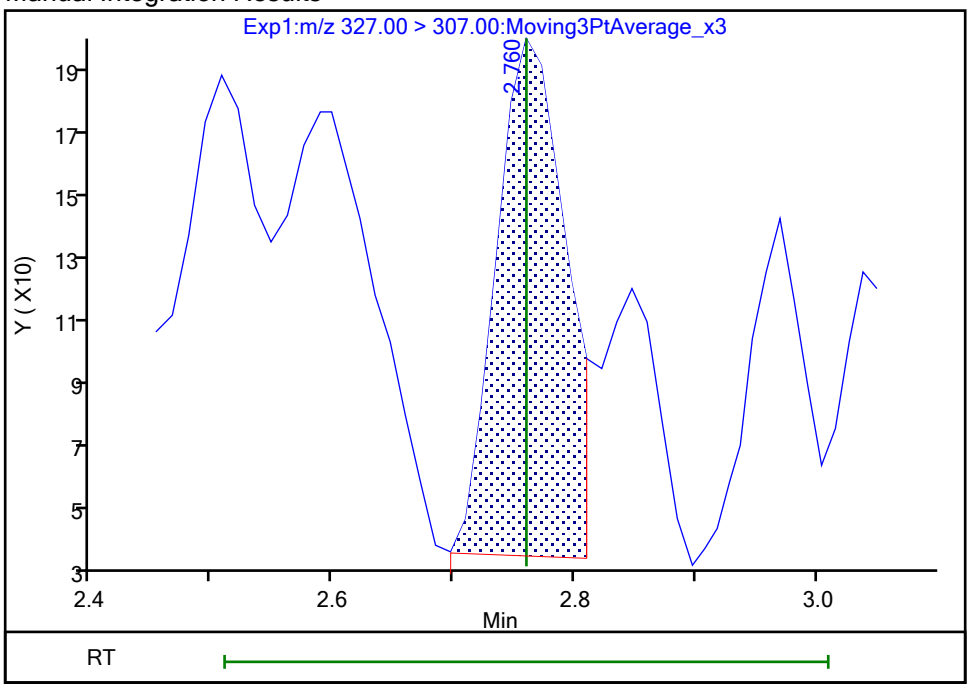
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 606
Amount: 0.000990
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:31:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

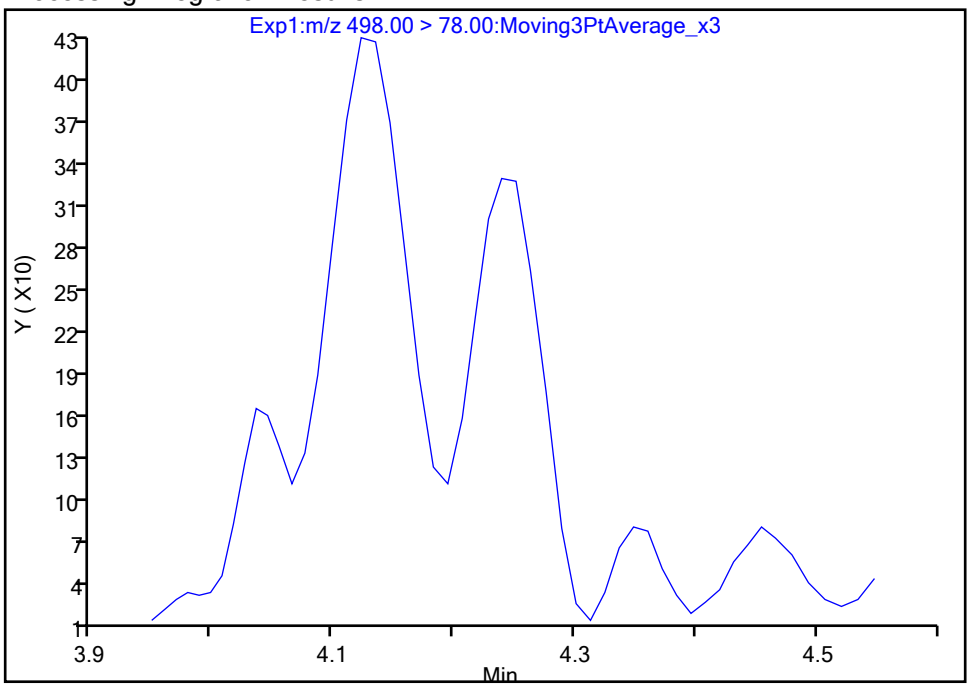
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

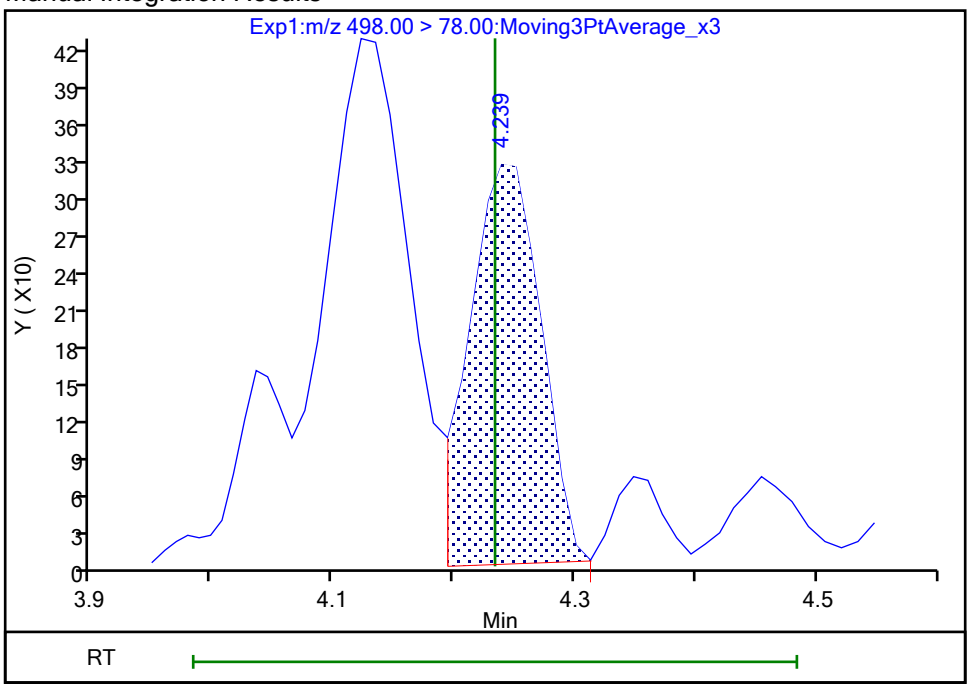
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1293
Amount: 0.000952
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:33:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

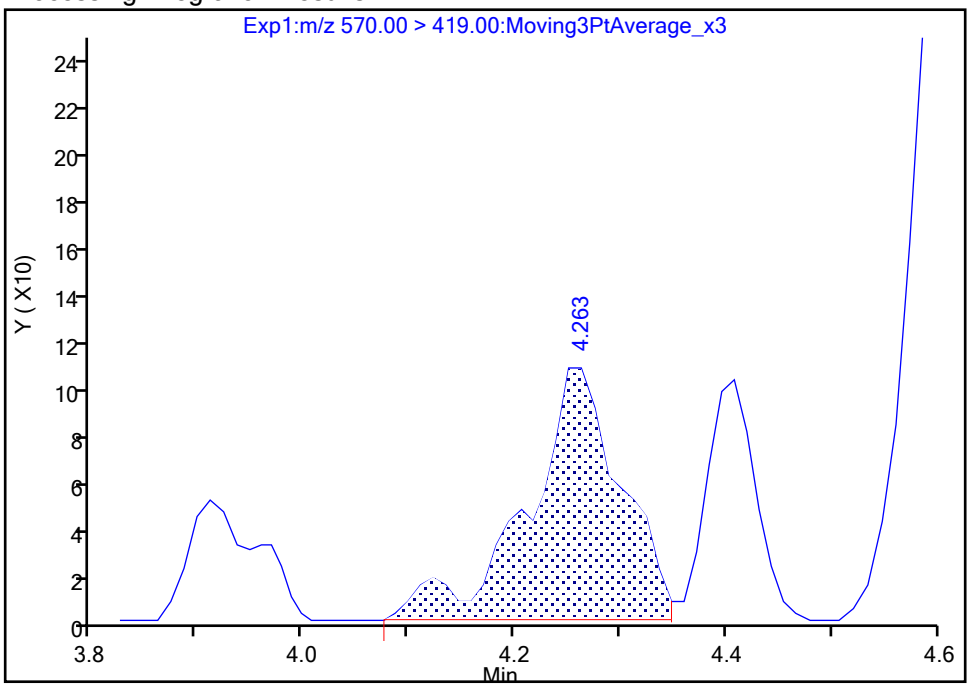
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

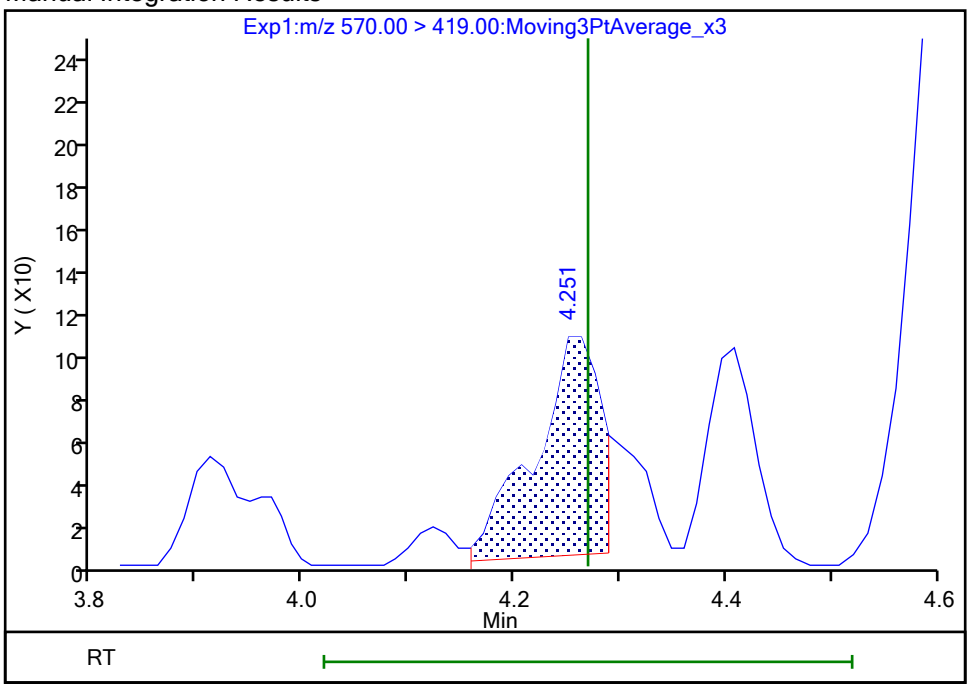
Processing Integration Results

RT: 4.26
Area: 662
Amount: 0.001746
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 431
Amount: 0.001137
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:34:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

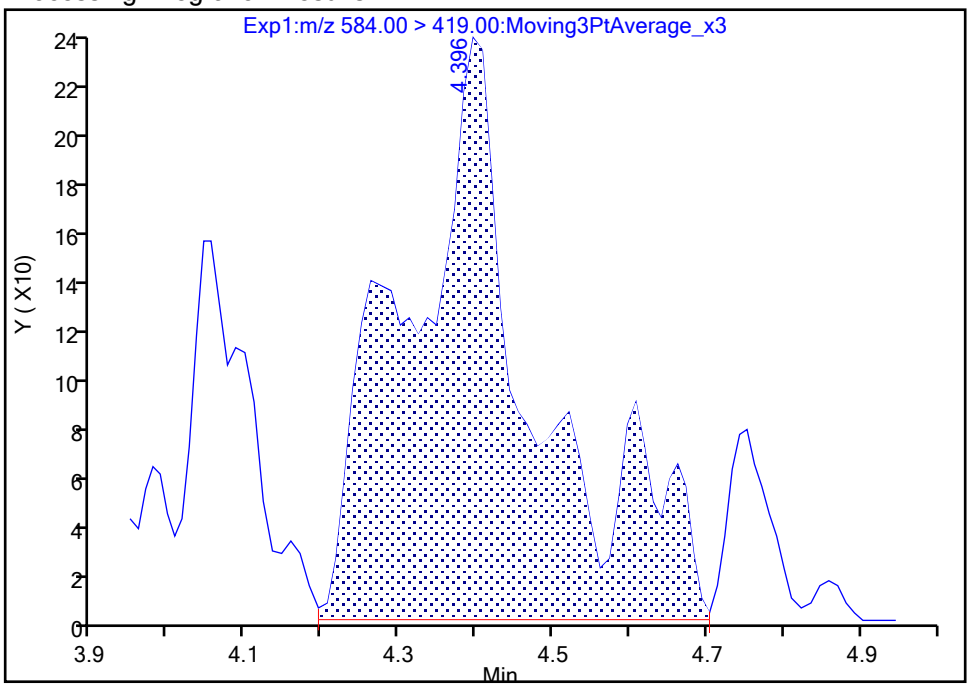
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

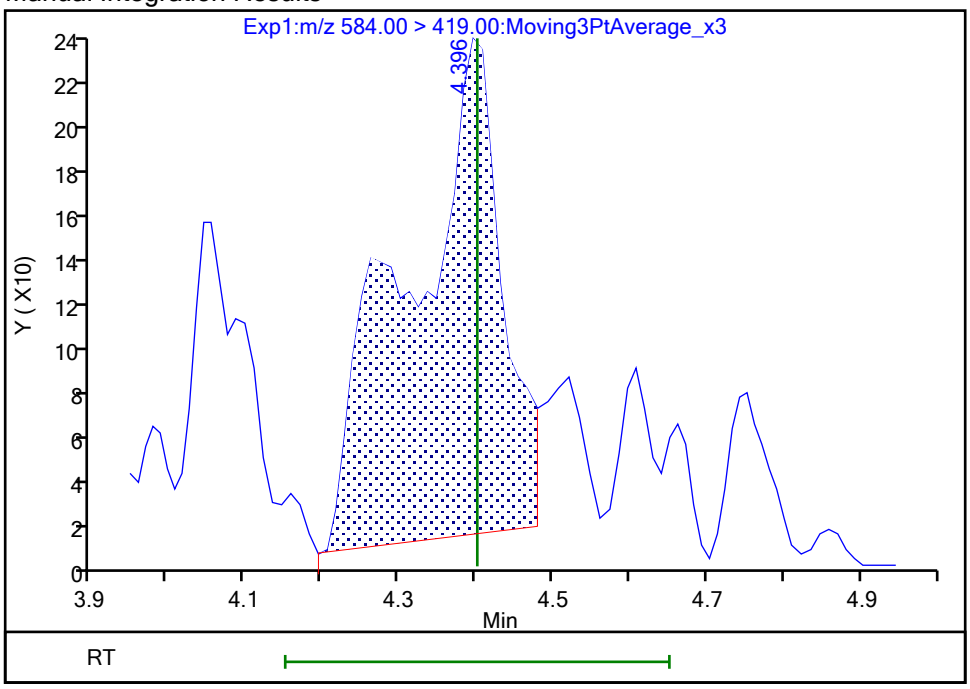
Processing Integration Results

RT: 4.40
Area: 2795
Amount: 0.006624
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 1881
Amount: 0.004458
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:34:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

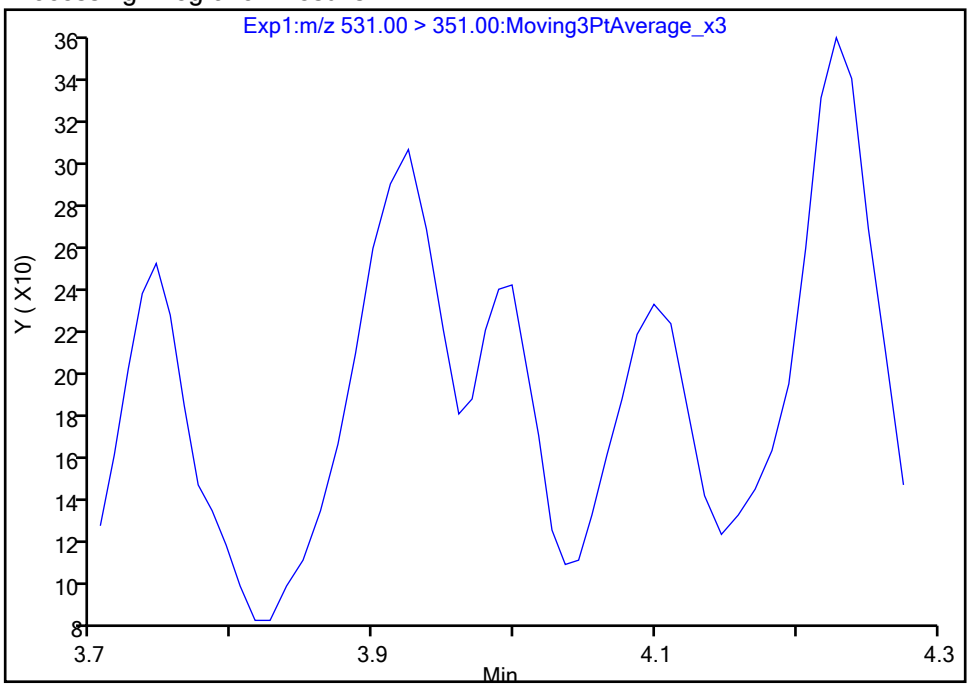
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

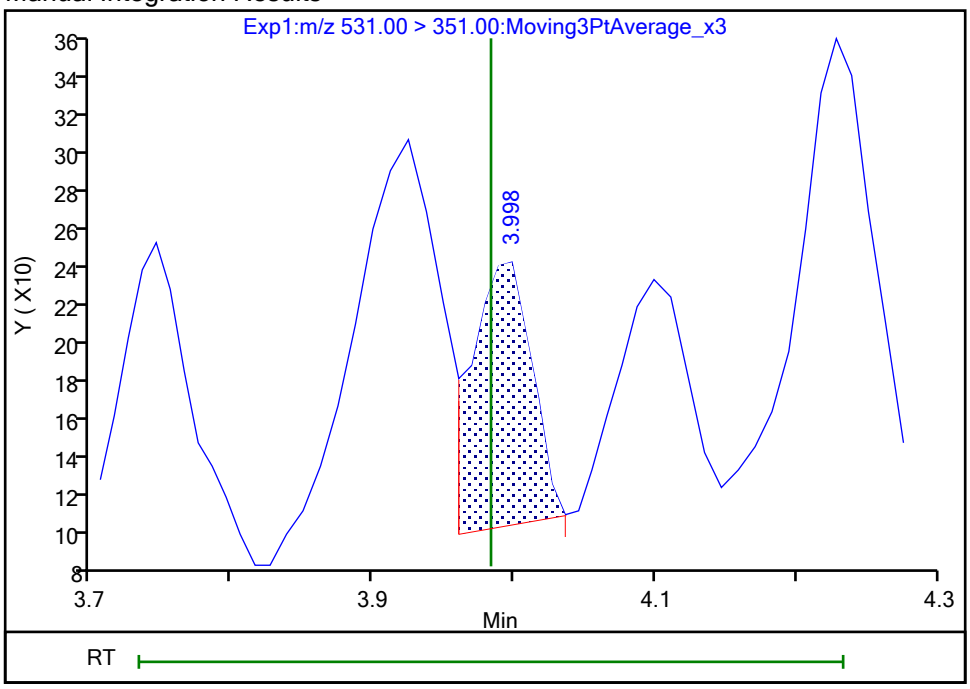
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 4.00
Area: 393
Amount: 0.000156
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:33:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

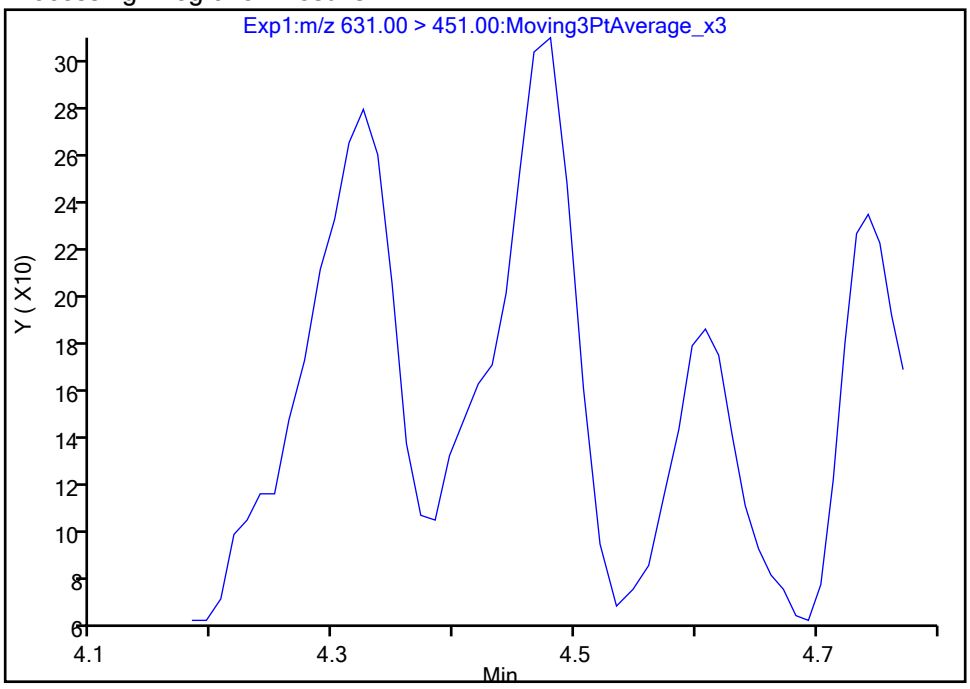
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

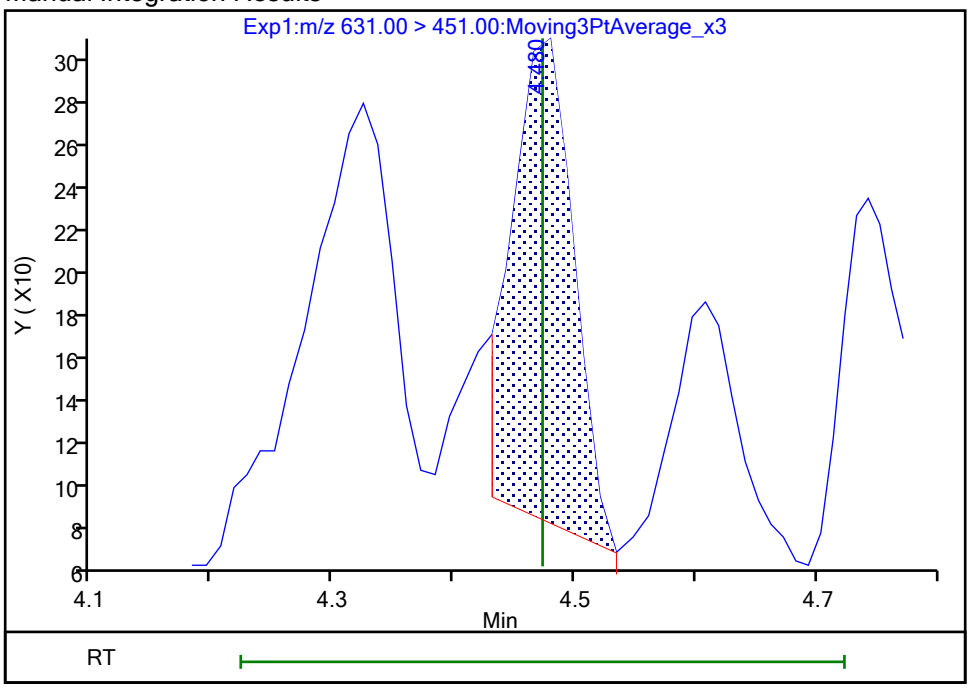
Not Detected
Expected RT: 4.47

Processing Integration Results



Manual Integration Results

RT: 4.48
Area: 783
Amount: 0.000203
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:34:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

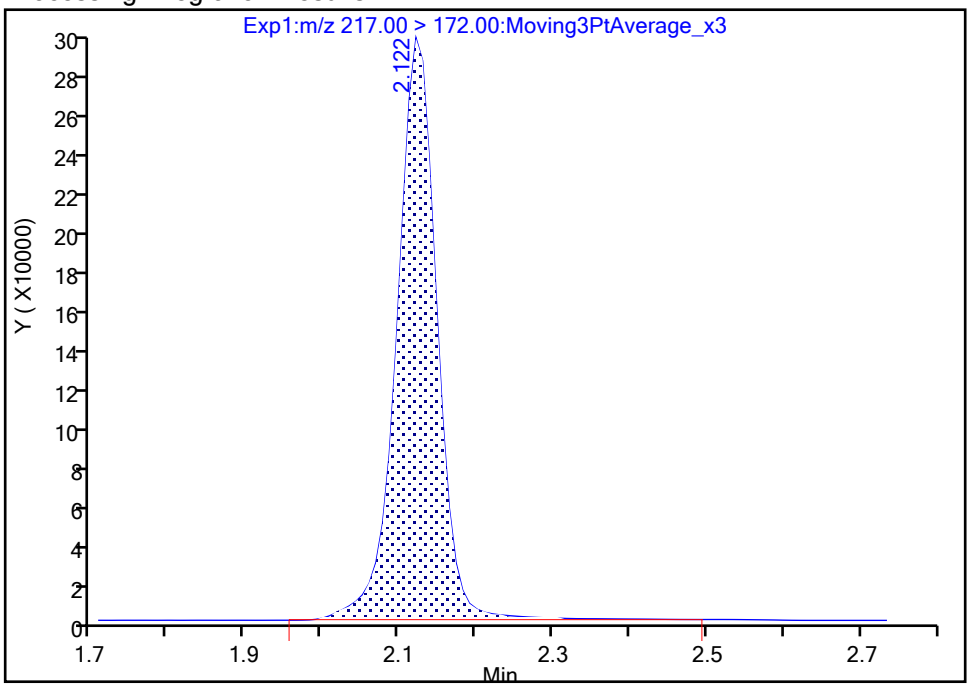
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

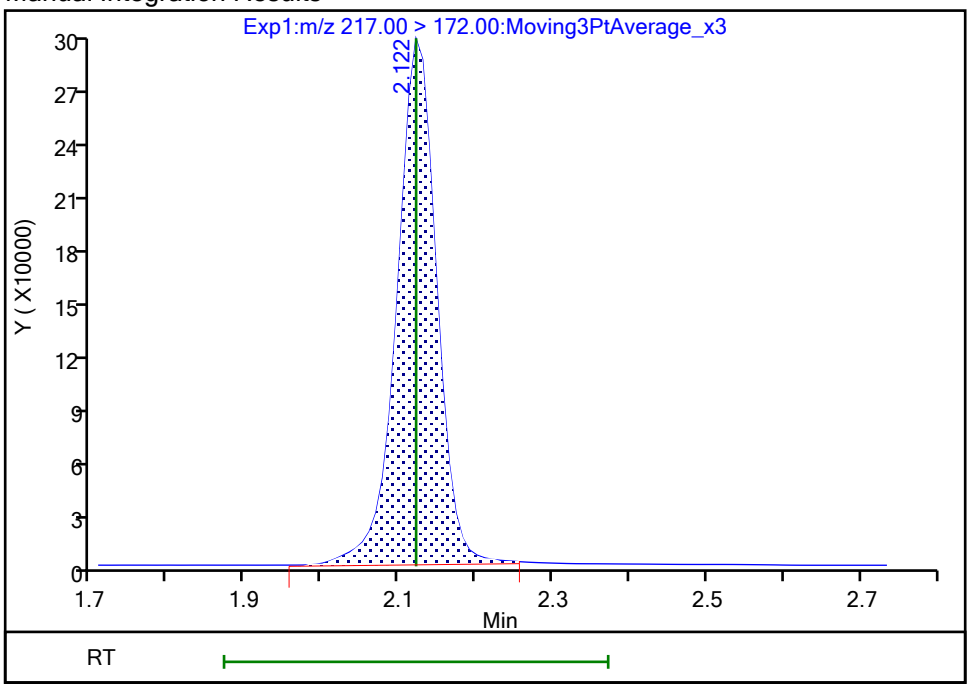
Processing Integration Results

RT: 2.12
Area: 1077037
Amount: 0.760066
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1069856
Amount: 0.754998
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

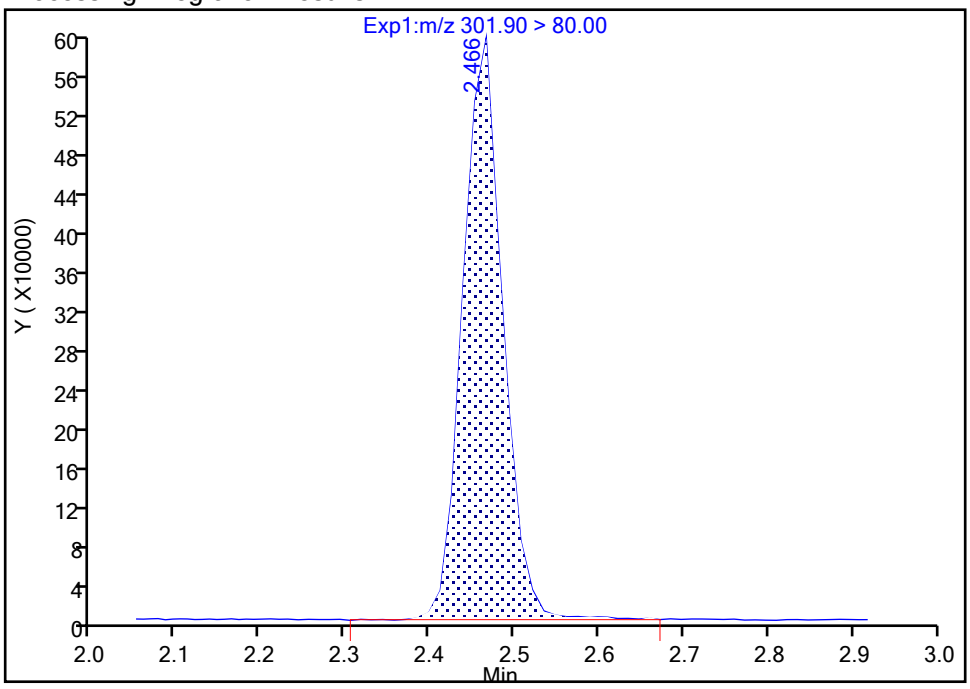
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

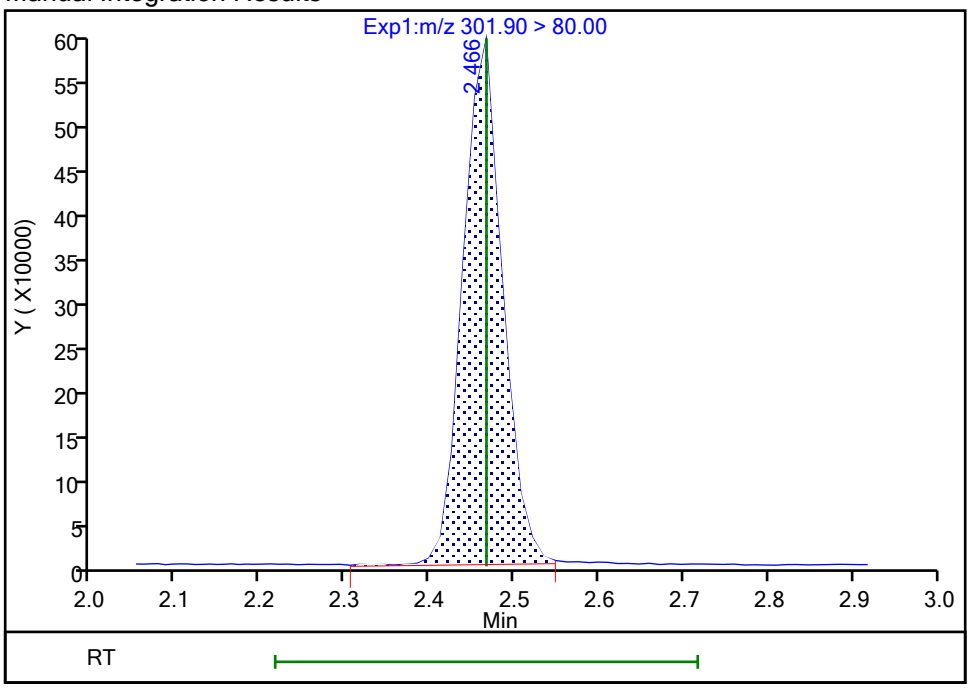
Processing Integration Results

RT: 2.47
Area: 1949668
Amount: 1.310246
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1933598
Amount: 1.299446
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:29:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

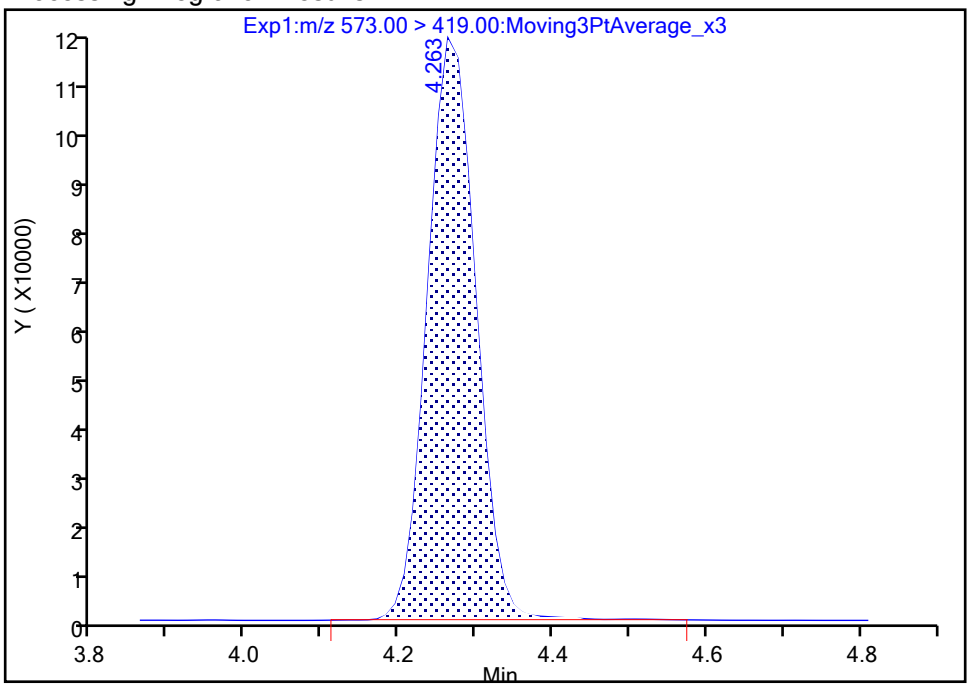
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

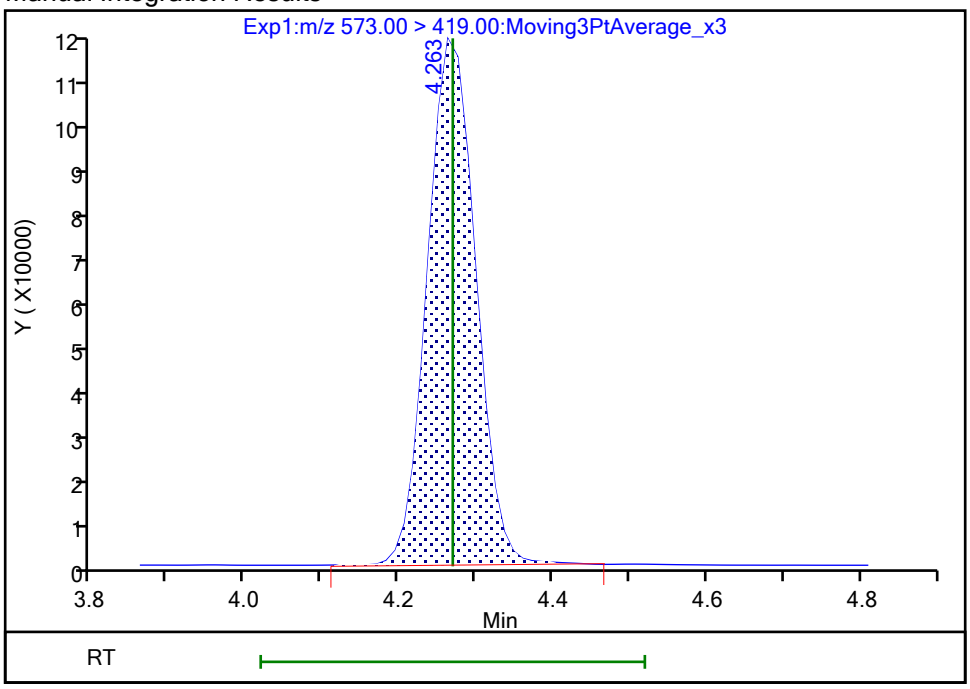
Processing Integration Results

RT: 4.26
Area: 522890
Amount: 1.380792
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 522240
Amount: 1.379076
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:30:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

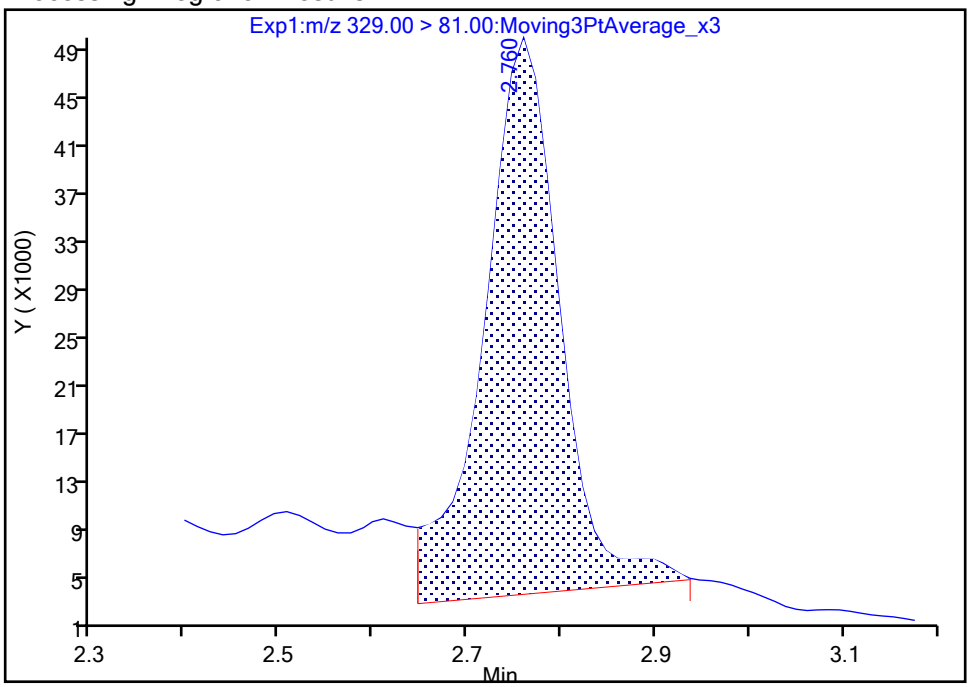
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

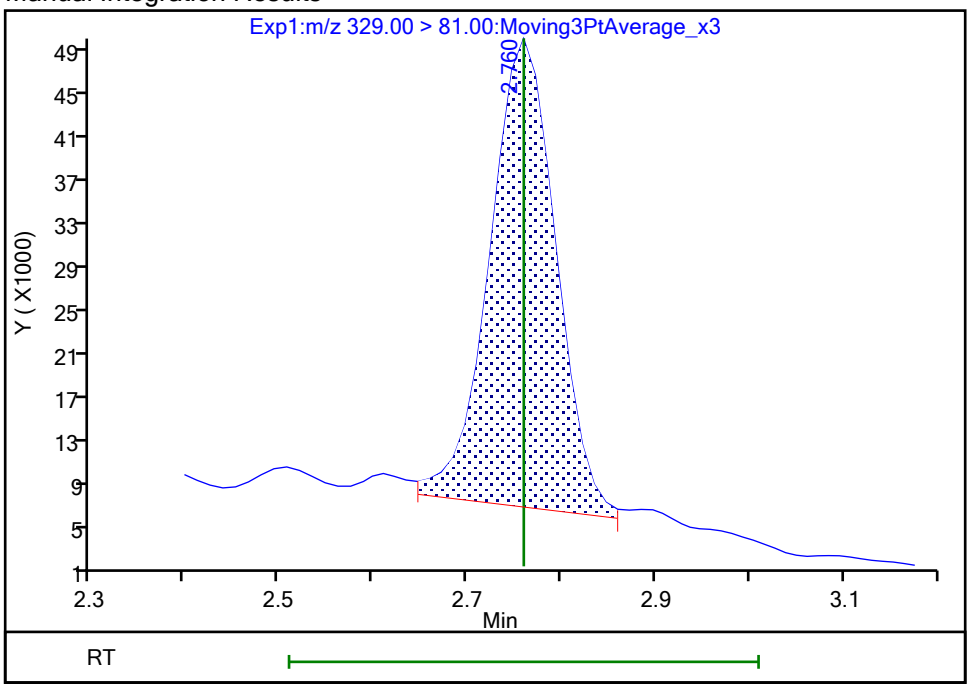
Processing Integration Results

RT: 2.76
Area: 257363
Amount: 1.495564
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 210482
Amount: 1.223133
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:30:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

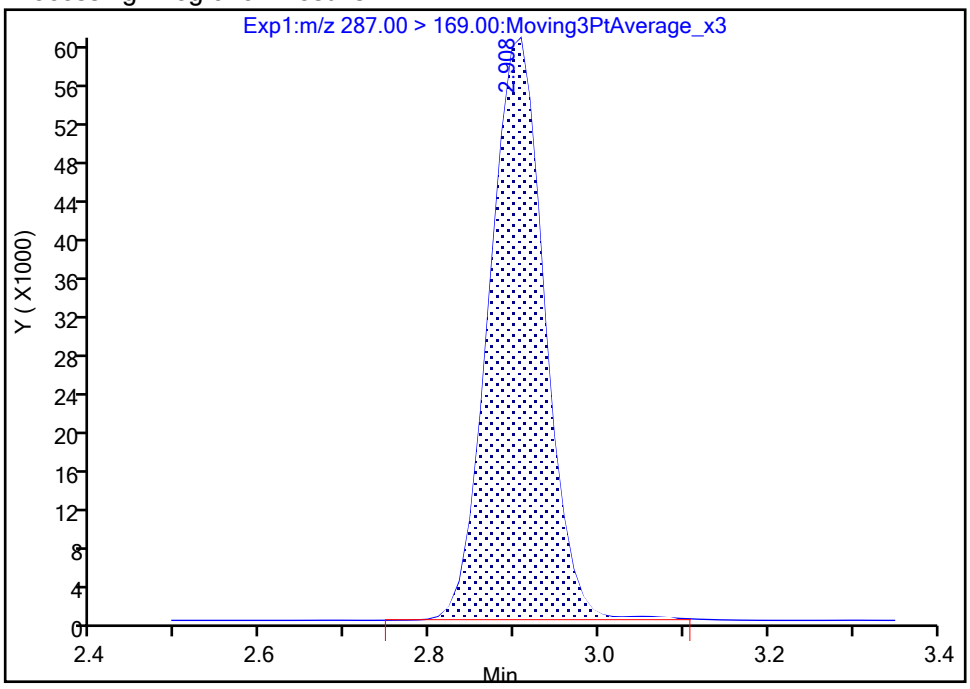
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C08.d				
Injection Date:	24-Oct-2023 00:14:02	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

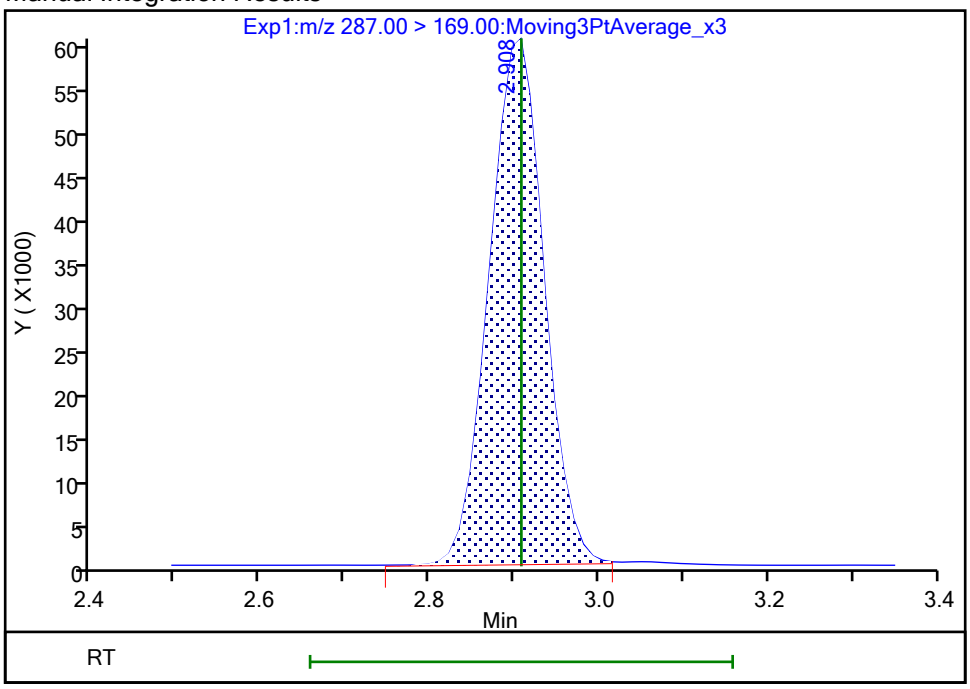
Processing Integration Results

RT: 2.91
Area: 274509
Amount: 1.267613
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 273500
Amount: 1.262953
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:30:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: MW92B-101323-1156-92 DL Lab Sample ID: 460-290375-9 DL

Matrix: Water Lab File ID: PA231026E04.d

Analysis Method: 537 (modified) Date Collected: 10/13/2023 11:56

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 286.7(mL) Date Analyzed: 10/27/2023 10:32

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	1470	D	8.72	3.71

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	90		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E04.d
Lims ID: 460-290375-A-9-A
Client ID: MW92B-101323-1156-92
Sample Type: Client
Inject. Date: 27-Oct-2023 10:32:37 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Sample Info: 460-290375-A-9-A
Misc. Info.: 200-0057578-004 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:57:49
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	228545	0.1301		52.0	912	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.139	2.131	0.008	1.004	68768	0.0423			3.9	
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	274145	0.2011		80.4	403	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	0.994	35363	0.0299			0.7	
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.701	385503	0.2090		89.9	14188	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.000	101038	0.0546	Target=2.06		1.5	
298.90 > 99.00	2.467	2.467	0.0	1.000	51144		1.98(1.03-3.09)		15.3	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	64728	0.3034		130	6.3	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	318289	0.2295		91.8	908	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	129318	0.0923	Target=14.12		5.4	
313.00 > 119.00	2.810	2.797	0.013	1.004	7070		18.29(7.06-21.17)		5.2	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.888	139770	0.0863	Target=2.72		10.8	
349.00 > 99.00	2.810	2.797	0.013	0.888	59759		2.34(1.36-4.09)		50.3	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.928	2.897	0.031	1.007	809	0.003727			16.5	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	54200	0.2019		80.7	308	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.153	0.012	0.899	293177	0.2217		93.7	2961	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.165	3.153	0.012	1.000	325479	0.2372	Target=3.32		89.9	
399.00 > 99.00	3.165	3.153	0.012	1.000	163355		1.99(1.66-4.98)		110	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.165	0.0	1.000	52164	0.0334	Target=4.17		3.3	
363.00 > 169.00	3.165	3.165	0.0	1.000	12782		4.08(2.09-6.26)		16.7	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.899	348194	0.2288		91.5	1965	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.502	0.009	0.917	111685	0.1025	Target=4.83		18.7	
449.00 > 99.00	3.502	3.502	0.0	0.914	34107		3.27(2.41-7.24)		12.9	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.502	0.009	0.997	69773	0.2539		107	30.8	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.689	3.502	0.187	1.051	736	0.000917			2.4	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.512	0.008	1.000	314826	0.1875	Target=2.88		6.0	
413.00 > 169.00	3.520	3.512	0.008	1.000	114555		2.75(1.44-4.32)		167	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.512	0.008	1.000	394128	0.2286		91.4	2888	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.512	0.008		442897	0.2500			2113	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.819	0.011	1.000	7389208	8.40	Target=4.24		5099	M
499.00 > 99.00	3.819	3.819	0.0	0.997	2321272		3.18(2.12-6.37)		2363	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.819	0.011	1.088	180218	0.2145		89.8	202	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.091	465054	0.2479		99.2	1858	
68 Perfluorononanesulfonic acid										R
549.00 > 80.00	3.999	4.101	-0.102	1.044	7231	0.0108	Target=2.17		12.4	R
549.00 > 99.00	3.971	4.101	-0.130	1.037	718		10.07(1.08-3.25)		4.1	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.125	0.011	1.175	466728	0.2376		95.0	2576	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.136	0.012	1.178	73653	0.2384		99.5	134	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.230	0.012	1.205	360657	0.2152		86.1	2169	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.279	4.266	0.013	1.215	112388	0.2394		95.8	877	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.246	435280	0.2347		93.9	2848	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.250	101249	0.2240		89.6	271	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.599	4.399	0.200	1.046	477	0.001178			1.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.310	419580	0.2226		89.0	1913	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.417	391346	0.2085		83.4	1612	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

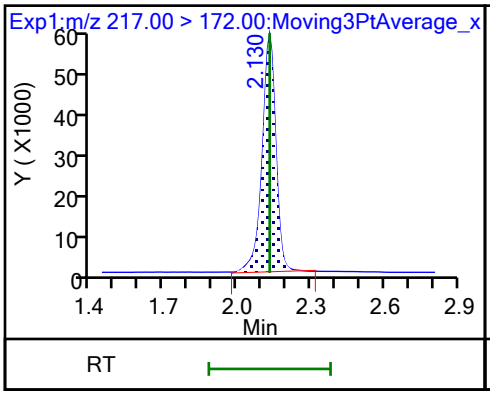
M - Manually Integrated

Report Date: 27-Oct-2023 18:44:27 Chrom Revision: 2.3 18-Oct-2023 21:16:54

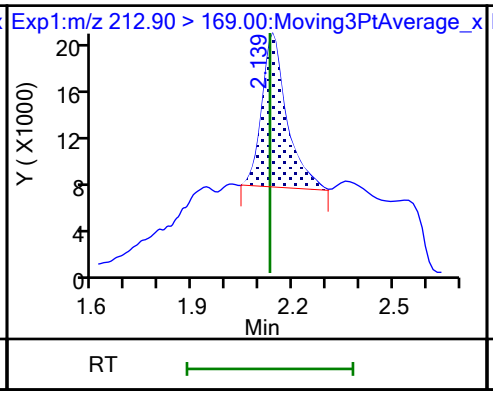
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E04.d
Injection Date: 27-Oct-2023 10:32:37 Instrument ID: LC812
Lims ID: 460-290375-A-9-A Lab Sample ID: 200-290375-9
Client ID: MW92B-101323-1156-92
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

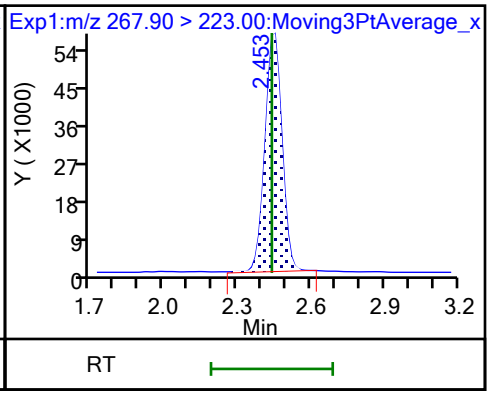
D 1 13C4 PFBA



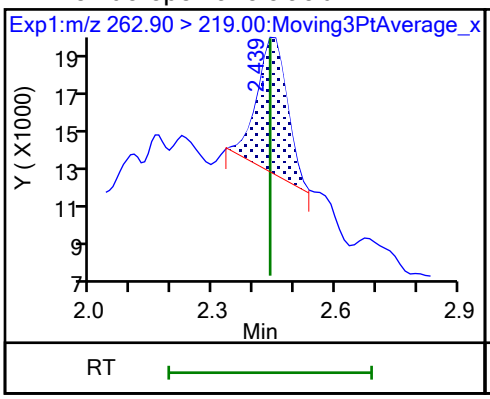
2 Perfluorobutanoic acid



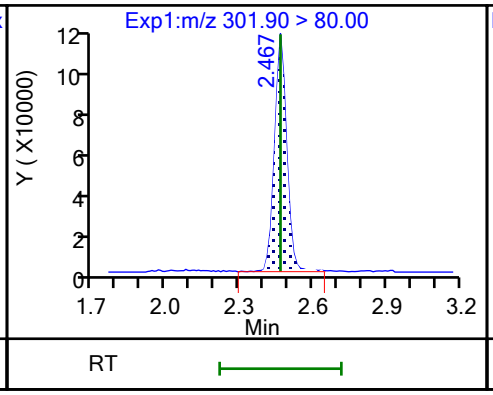
D 3 13C5 PFPeA



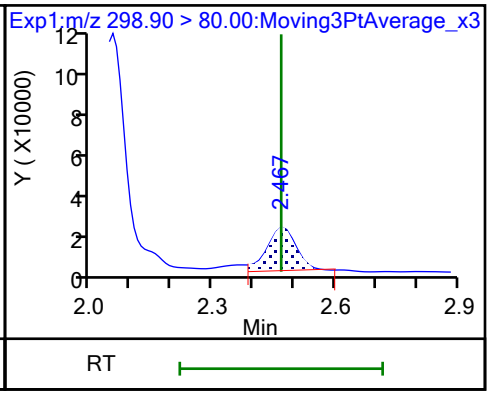
4 Perfluoropentanoic acid



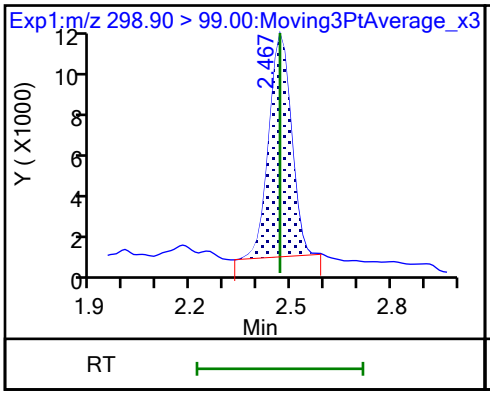
D 47 13C3 PFBS



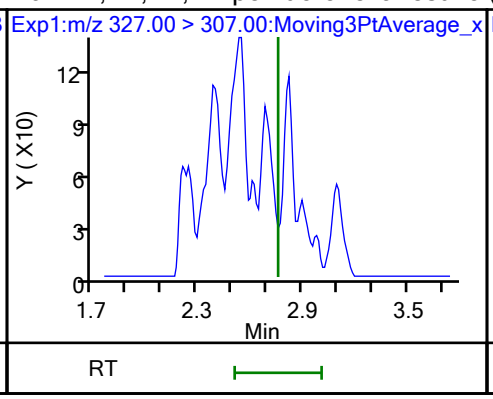
5 Perfluorobutanesulfonic acid



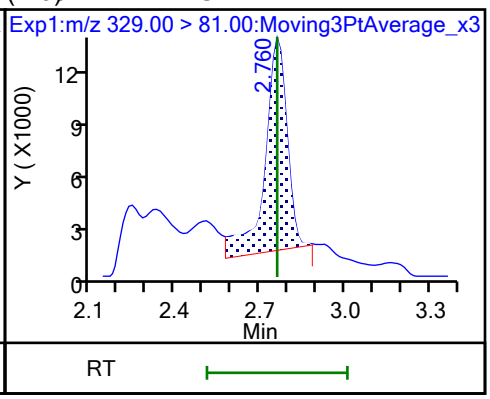
5 Perfluorobutanesulfonic acid



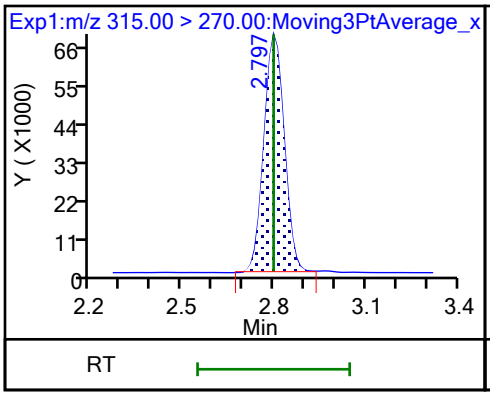
61 1H,1H,2H,2H-perfluorohexanesulfo (NEG)



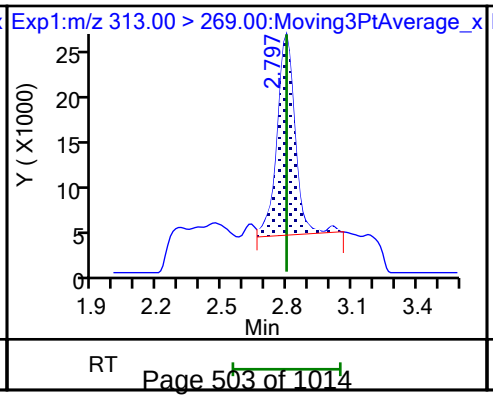
D 50 M2-4:2 FTS



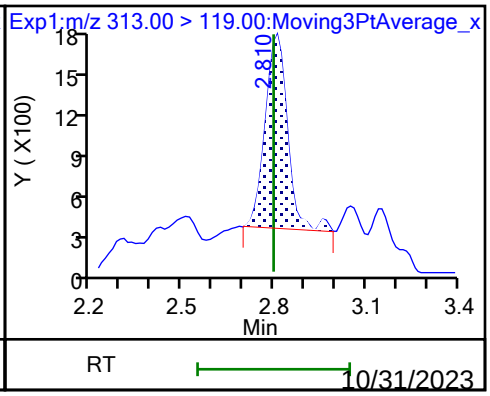
D 7 13C2 PFHxA



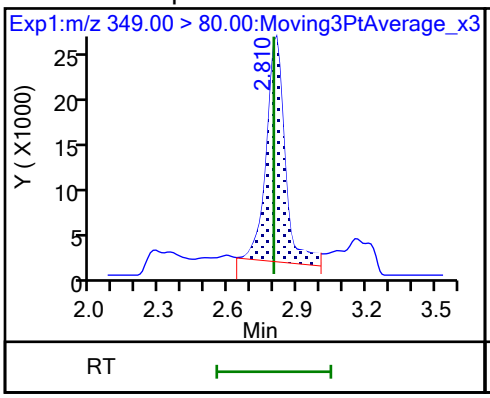
6 Perfluorohexanoic acid



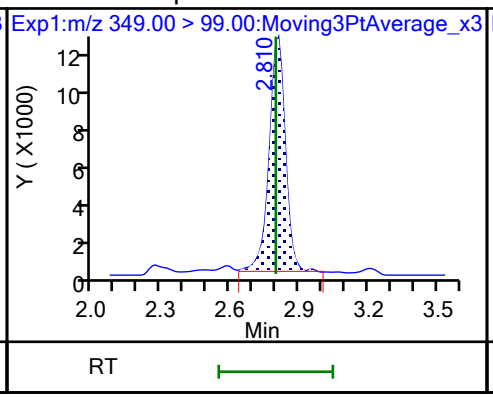
6 Perfluorohexanoic acid



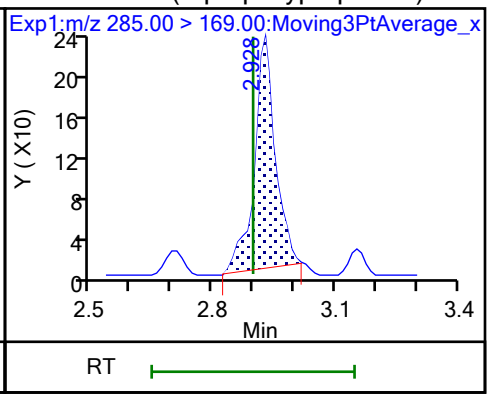
70 Perfluoropentanesulfonic acid



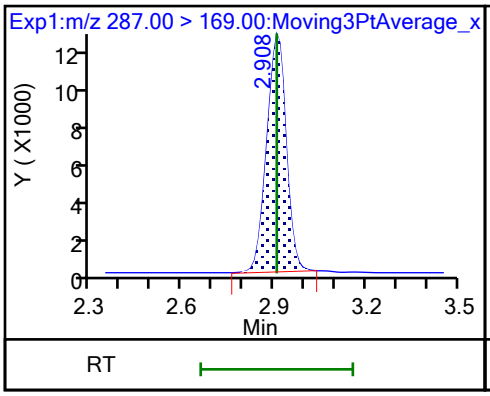
70 Perfluoropentanesulfonic acid



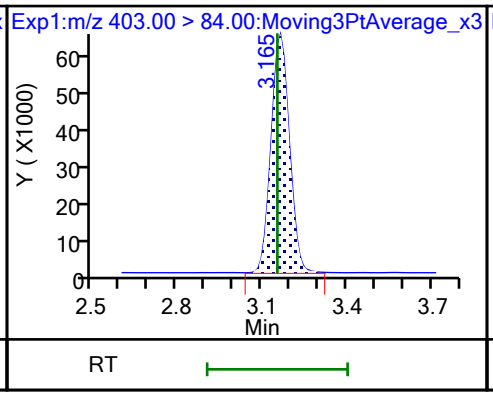
67 Perfluoro(2-propoxypropanoic) ac



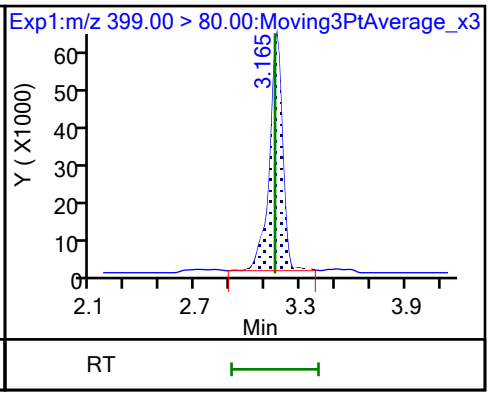
D 64 13C3 HFPO-DA



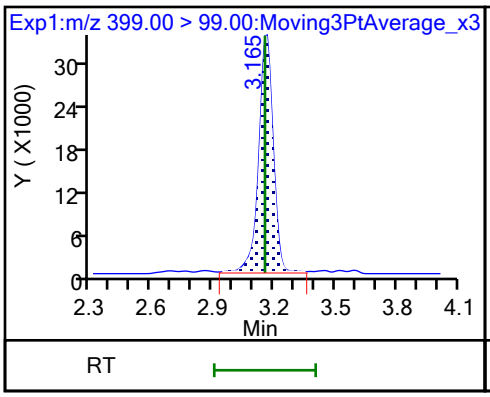
D 11 18O2 PFHxS



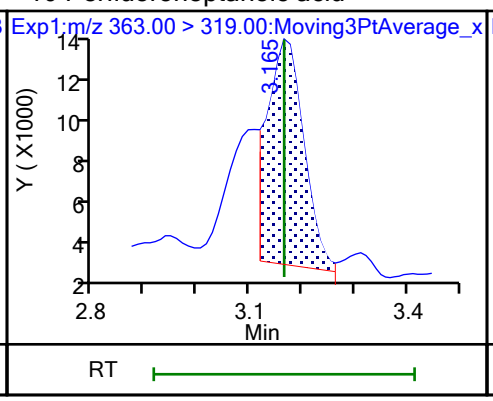
8 Perfluorohexanesulfonic acid



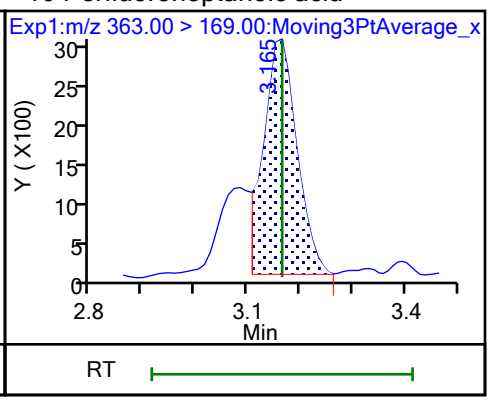
8 Perfluorohexanesulfonic acid



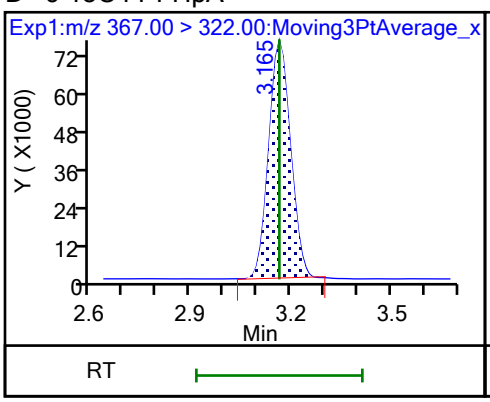
10 Perfluoroheptanoic acid



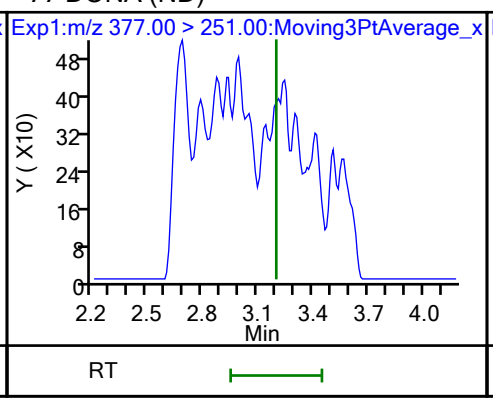
10 Perfluoroheptanoic acid



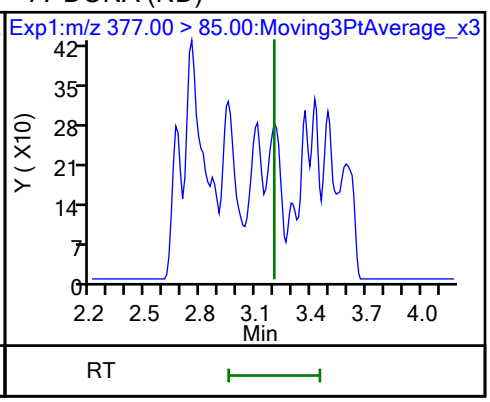
D 9 13C4 PFHpA



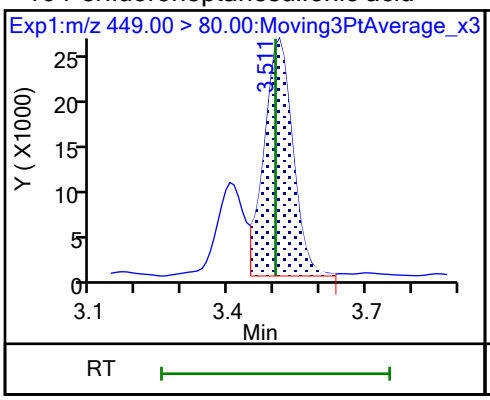
77 DONA (ND)



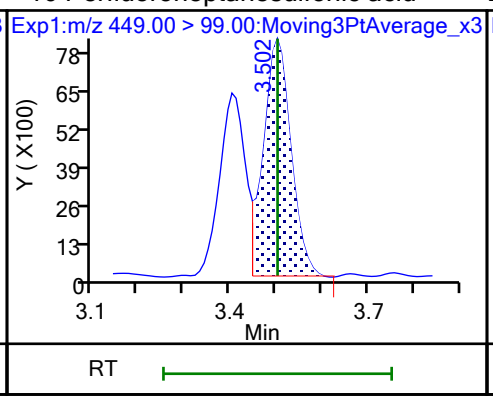
77 DONA (ND)



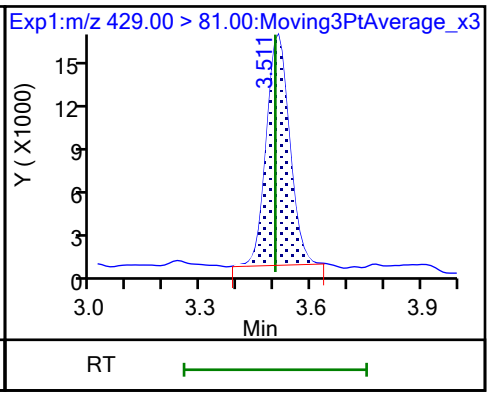
16 Perfluoroheptanesulfonic acid



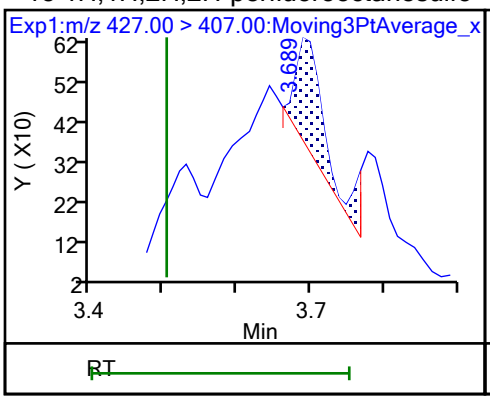
16 Perfluoroheptanesulfonic acid



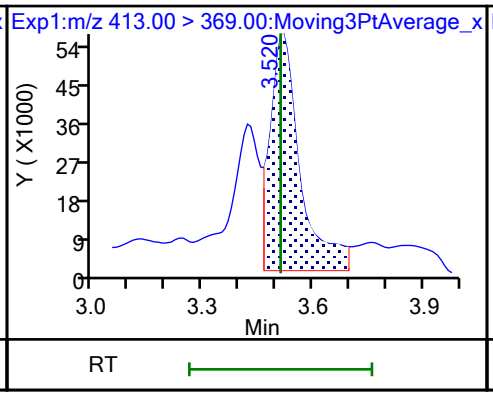
D 12 M2-6:2 FTS



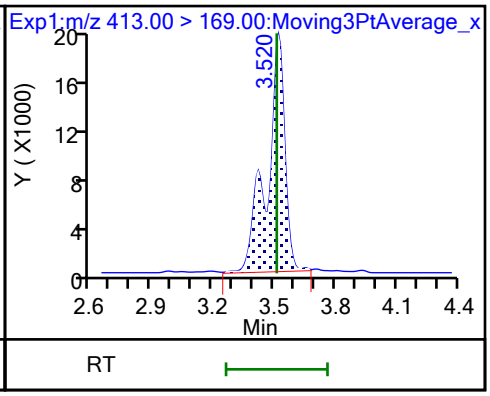
13 1H,1H,2H,2H-perfluorooctanesulfo



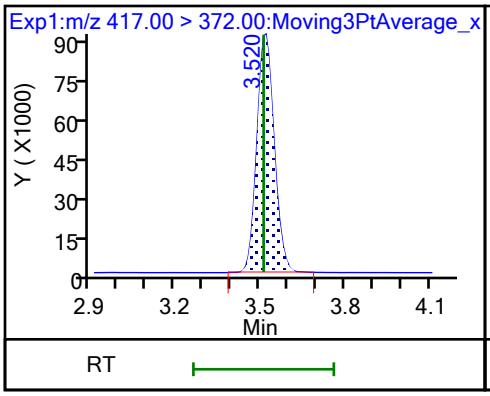
15 Perfluorooctanoic acid



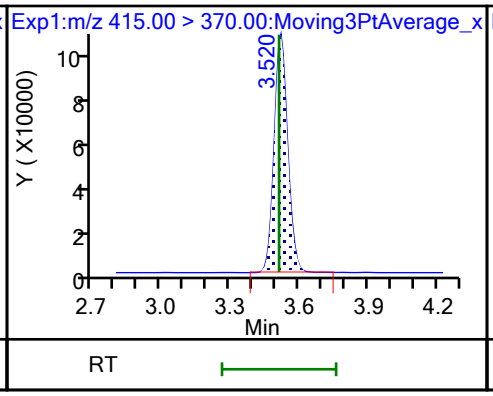
15 Perfluorooctanoic acid



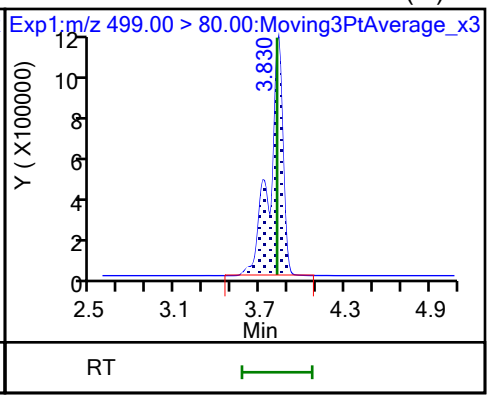
D 14 13C4 PFOA



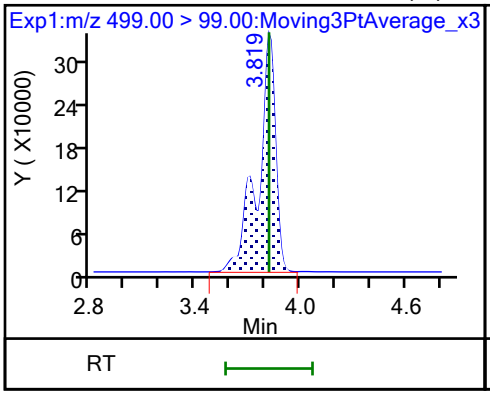
* 62 13C2 PFOA



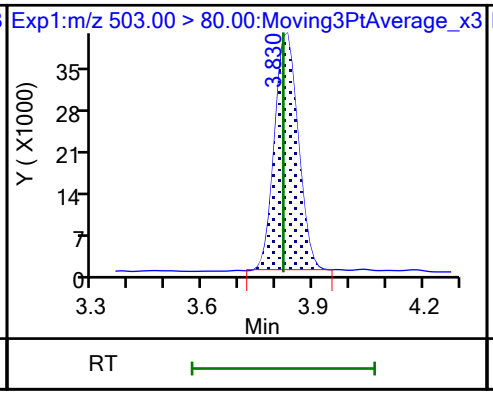
17 Perfluorooctanesulfonic acid (M)



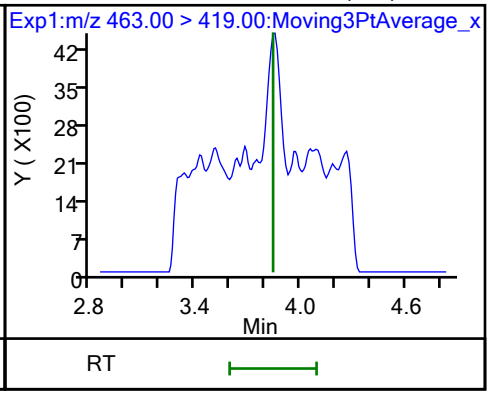
17 Perfluorooctanesulfonic acid (M)



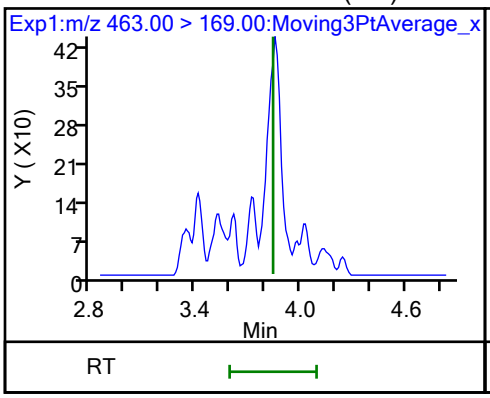
D 18 13C4 PFOS



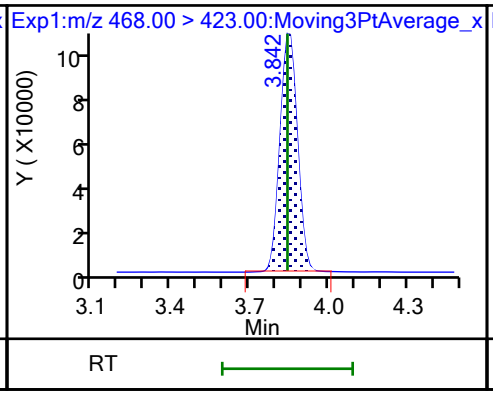
20 Perfluorononanoic acid (ND)



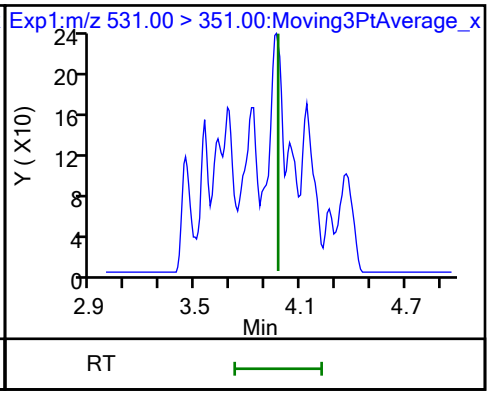
20 Perfluorononanoic acid (ND)



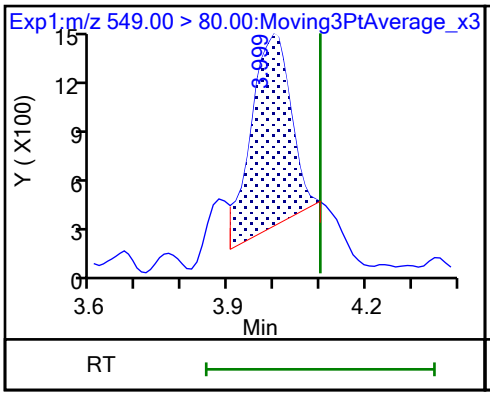
D 19 13C5 PFNA



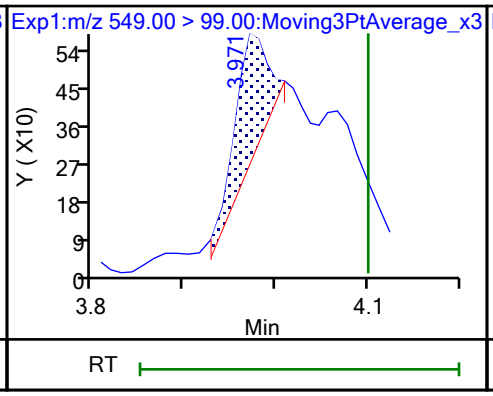
69 9-Chlorohexadecafluoro-3-oxanona (ND)



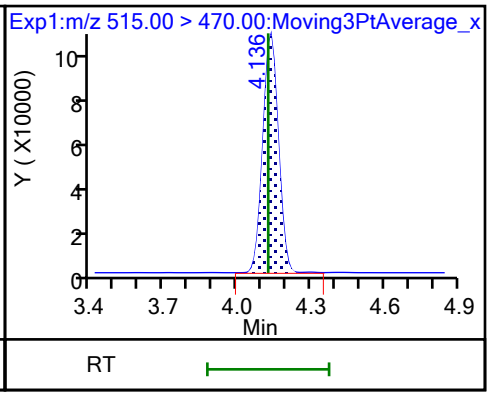
68 Perfluorononanesulfonic acid



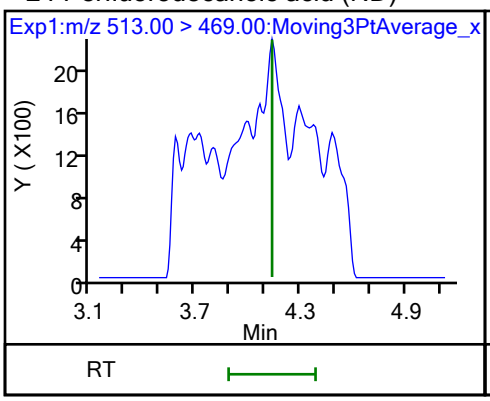
68 Perfluorononanesulfonic acid



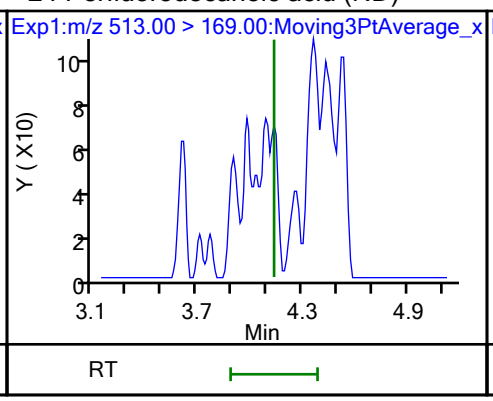
D 23 13C2 PFDA



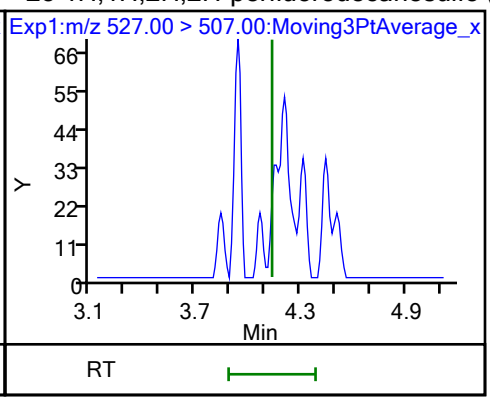
24 Perfluorodecanoic acid (ND)



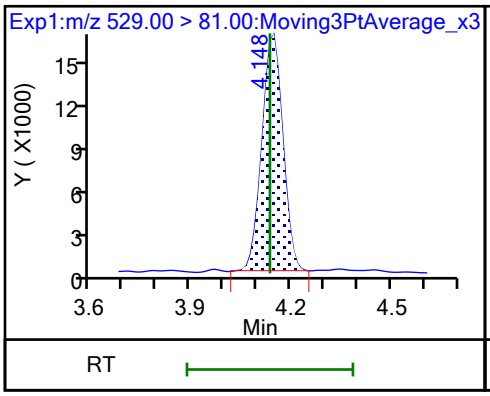
24 Perfluorodecanoic acid (ND)



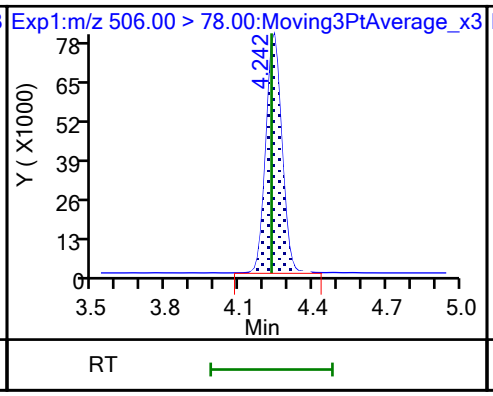
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



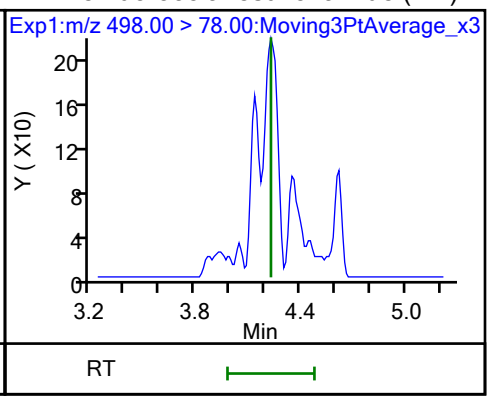
D 26 M2-8:2 FTS



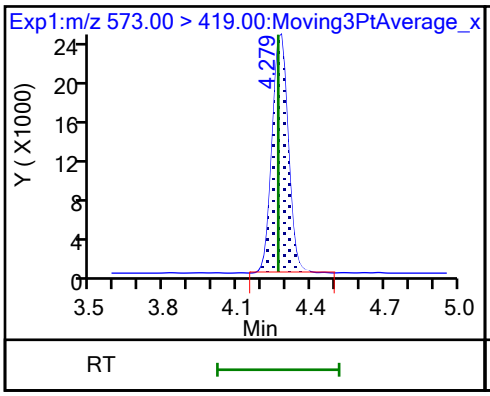
D 21 13C8 FOSA



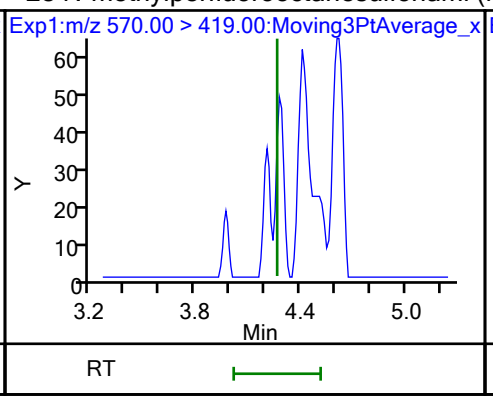
22 Perfluorooctanesulfonamide (ND)



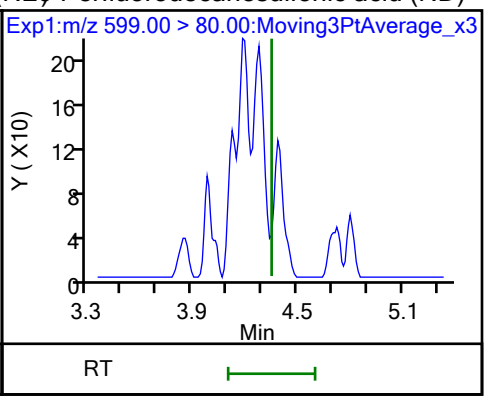
D 27 d3-NMeFOSAA



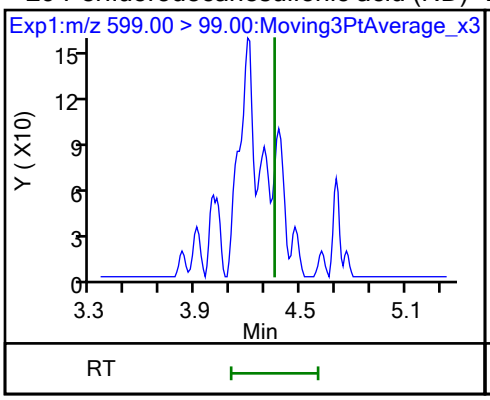
28 N-methylperfluorooctanesulfonami (ND)



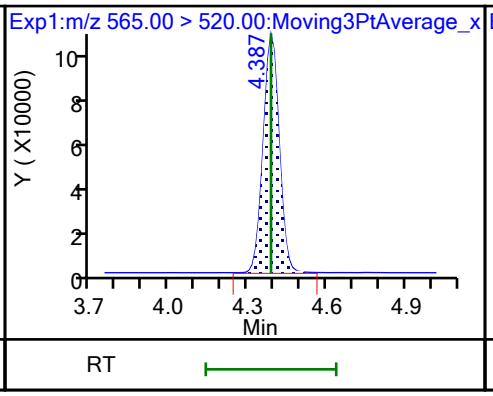
29 Perfluorodecanesulfonic acid (ND)



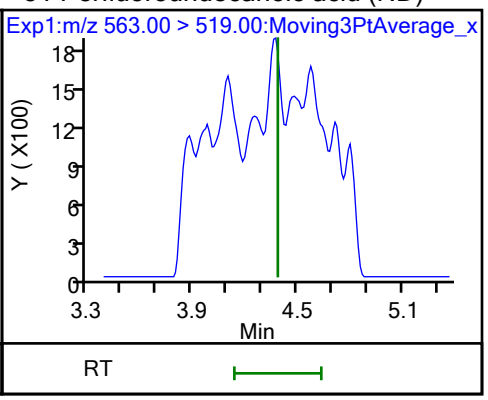
29 Perfluorodecanesulfonic acid (ND)



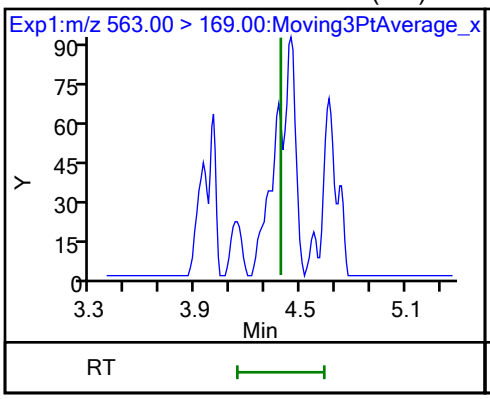
D 30 13C2 PFUnA



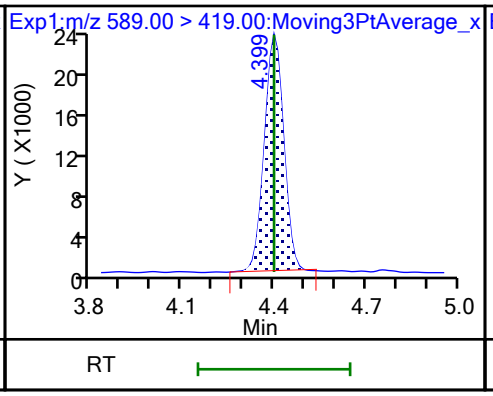
31 Perfluoroundecanoic acid (ND)



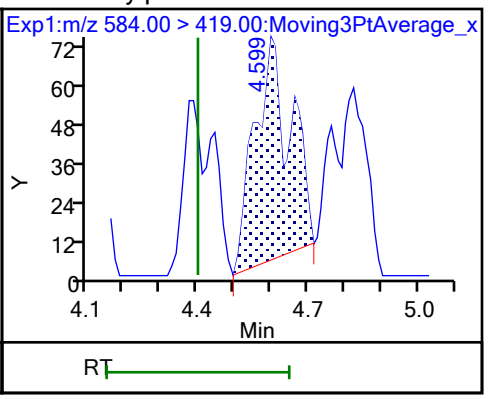
31 Perfluoroundecanoic acid (ND)



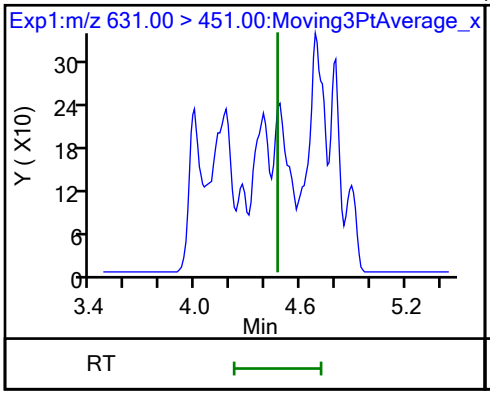
D 32 d5-NEtFOSAA



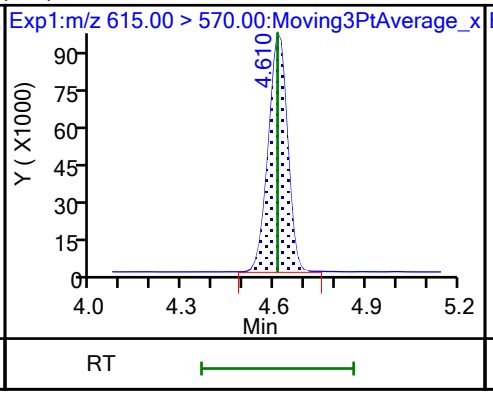
33 N-ethylperfluorooctanesulfonamid



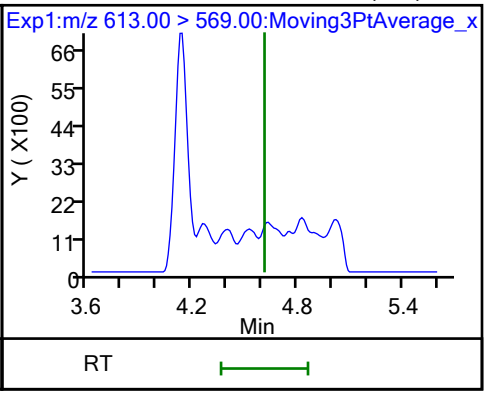
66 11-Chloroeicosafluoro-3-oxaundec (ND)



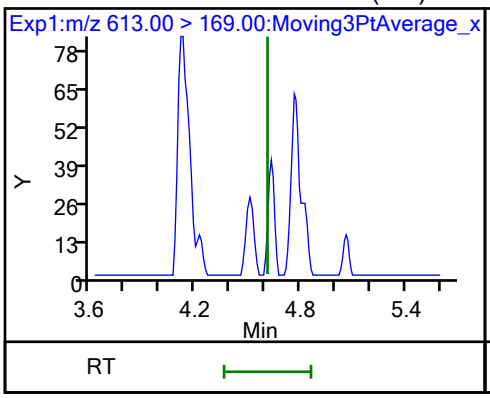
D 36 13C2 PFDoA



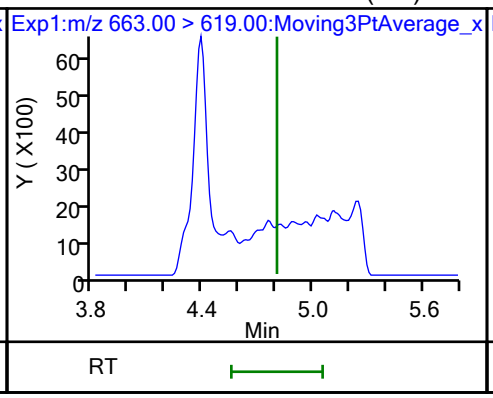
37 Perfluorododecanoic acid (ND)



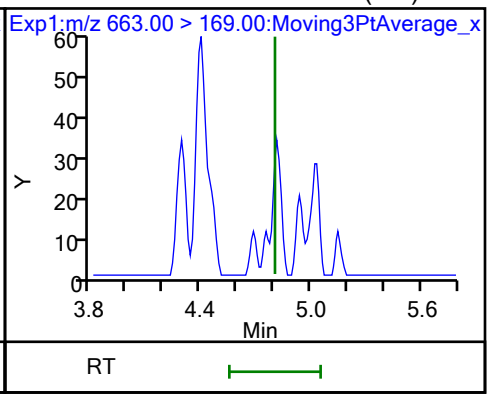
37 Perfluorododecanoic acid (ND)



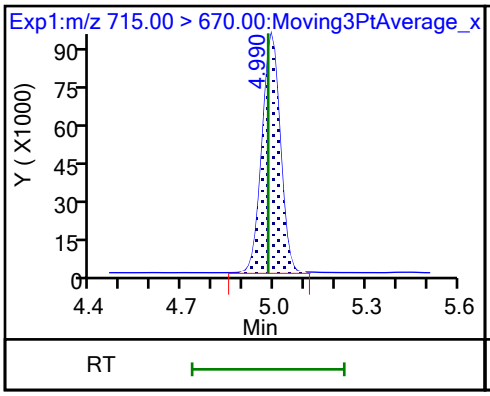
41 Perfluorotridecanoic acid (ND)



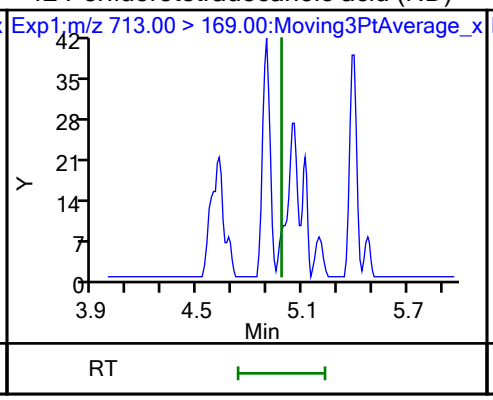
41 Perfluorotridecanoic acid (ND)



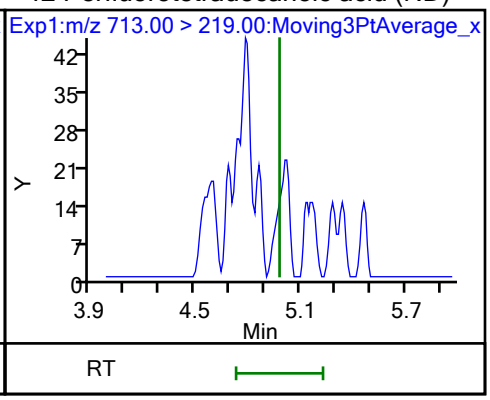
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

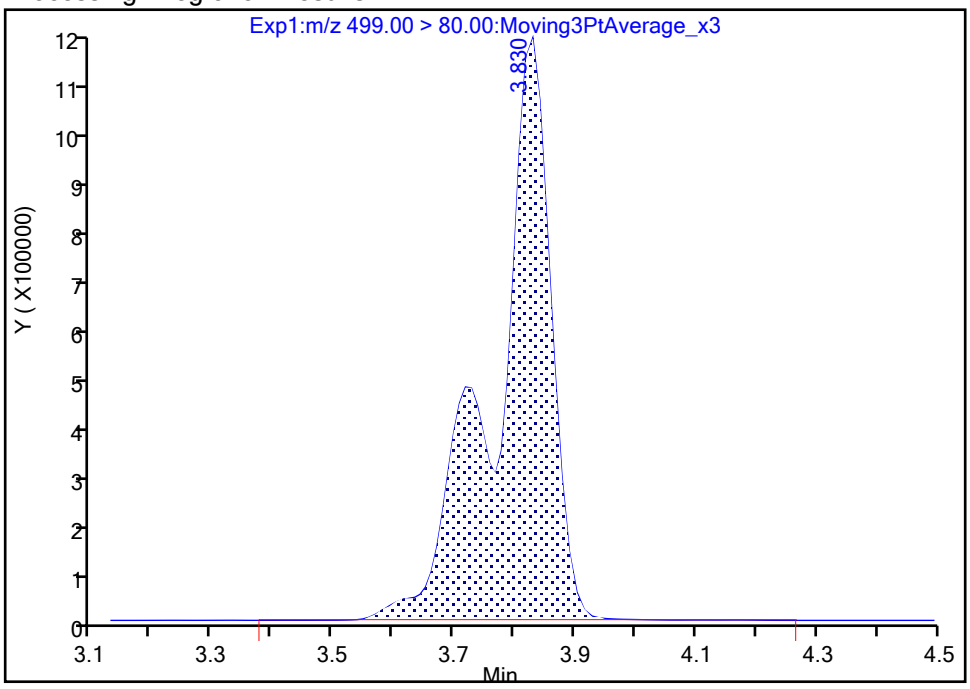
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E04.d				
Injection Date:	27-Oct-2023 10:32:37	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

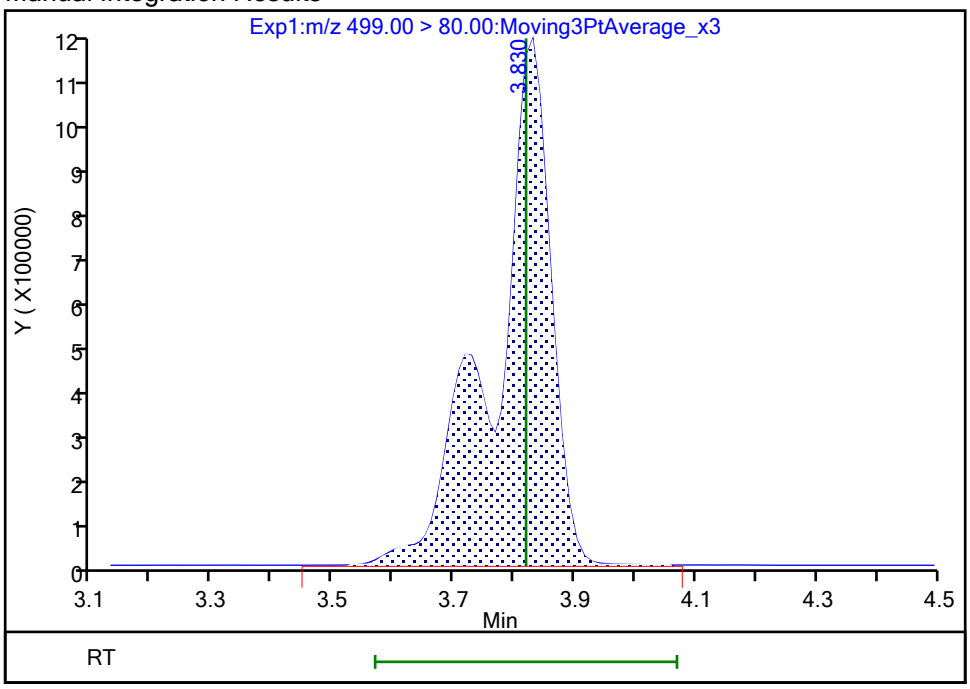
Processing Integration Results

RT: 3.83
Area: 7403555
Amount: 8.417536
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 7389208
Amount: 8.401224
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:57:24 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

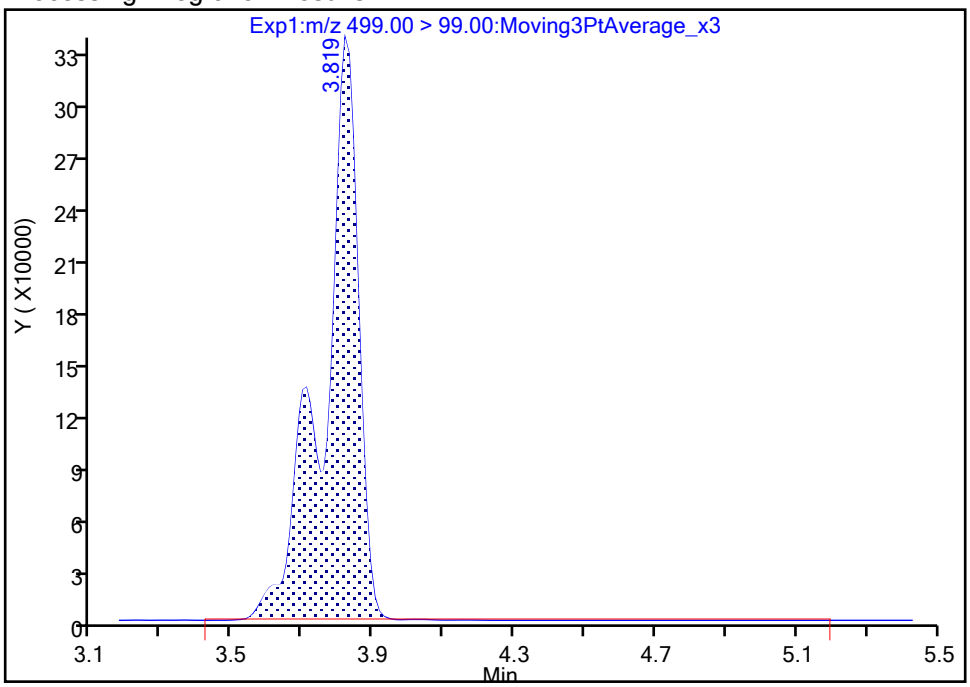
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E04.d				
Injection Date:	27-Oct-2023 10:32:37	Instrument ID:	LC812		
Lims ID:	460-290375-A-9-A	Lab Sample ID:	200-290375-9		
Client ID:	MW92B-101323-1156-92				
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

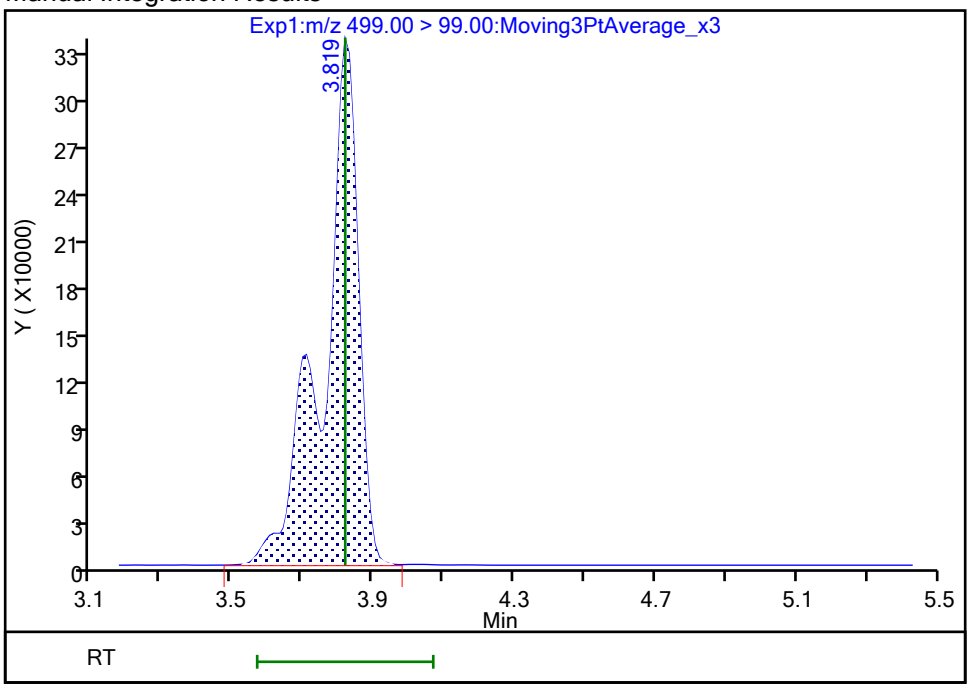
Processing Integration Results

RT: 3.82
Area: 2326925
Amount: 8.417536
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2321272
Amount: 8.401224
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:57:38 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.6524 0.9526	1.2498 0.8290	1.0107	0.9321	0.9433	L2ID	0.0370	0.9043							0.9970		0.9900
Perfluoropentanoic acid	0.9814 1.1023	1.2167 0.9980	1.0808	1.1330	1.0416	AveID		1.0791				7.6		20.0			
Perfluorobutanesulfonic acid	1.1612 1.1003	1.1884 0.9103	1.1783	1.1604	1.1195	AveID		1.1169				8.6		20.0			
4:2 Fluorotelomer sulfonic acid	3.4184 3.3656	3.9768 3.1033	3.3451	3.2188	3.3429	AveID		3.3958				8.2		20.0			
Perfluorohexanoic acid	1.1882 1.0691	1.1566 1.0070	1.1410	1.0537	1.0877	AveID		1.1005				5.8		20.0			
Perfluoropentanesulfonic acid	1.4845 1.2935	1.4521 1.1291	1.2900	1.2829	1.2091	AveID		1.3059				9.6		20.0			
HFPODA	0.9814 0.9865	1.0329 1.0173	1.0323	0.9948	0.9631	AveID		1.0012				2.7		20.0			
Perfluorohexanesulfonic acid	1.2928 1.0776	1.1776 1.0324	1.0608	1.0404	1.0673	AveID		1.1070				8.6		20.0			
Perfluoroheptanoic acid	1.2326 1.1236	1.2826 0.9928	1.0542	1.0768	1.0835	AveID		1.1209				9.1		20.0			
DONA	6.2912 5.4323	5.8563 +++++	5.6532	5.8591	5.4332	AveID		5.7542				5.6		20.0			
Perfluoroheptanesulfonic acid	1.5386 1.5214	1.4429 1.3749	1.4126	1.3983	1.4277	AveID		1.4452				4.3		20.0			
6:2 Fluorotelomer sulfonic acid	3.0797 2.6772	2.9248 2.3586	2.8187	2.5735	2.6999	AveID		2.7332				8.6		20.0			
Perfluorooctanoic acid	1.2162 0.9982	1.1278 1.0173	1.0470	1.0322	1.0174	AveID		1.0651				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid	1.2942 1.1749	1.2075 1.1201	1.1227	1.1283	1.1172	AveID		1.1664				5.6		20.0			
Perfluorononanoic acid	1.0909 0.9315	1.0135 0.8900	0.9991	0.9692	0.9662	AveID		0.9800				6.5		20.0			
9Cl-PF3ONS	4.1020 3.5800	3.6236 2.9351	3.5909	3.5582	3.5944	AveID		3.5692				9.5		20.0			
Perfluorononanesulfonic acid	0.9328 0.9318	0.8683 0.8687	0.8784	0.8769	0.8548	AveID		0.8874				3.6		20.0			
Perfluorodecanoic acid	1.0281 0.9602	1.0154 0.8863	1.0541	1.0439	1.0074	AveID		0.9994				5.8		20.0			
8:2 Fluorotelomer sulfonic acid	2.4547 2.0072	2.6137 1.8970	2.2575	2.0908	2.0894	AveID		2.2015				11.6		20.0			
Perfluorooctanesulfonamide	1.0228 0.9436	0.9703 0.8970	0.9494	0.9521	0.9419	AveID		0.9539				4.0		20.0			
NMeFOSAA	0.9443 0.8812	0.9804 0.8681	0.9111	0.8934	0.8734	AveID		0.9074				4.6		20.0			
Perfluorodecanesulfonic acid	0.7041 0.7196	0.6658 0.6468	0.6593	0.6839	0.7012	AveID		0.6830				3.9		20.0			
Perfluoroundecanoic acid	1.0537 0.9843	1.1393 0.9061	1.0315	1.0530	1.0465	AveID		1.0306				6.9		20.0			
N-ethylperfluorooctanesulfonamidoacetic acid	1.2597 0.9339	1.0412 0.9751	0.9527	0.9331	0.9057	AveID		1.0002				12.2		20.0			
11Cl-PF3OUdS	6.1952 4.9604	5.5951 +++++	5.4392	5.5008	5.1507	AveID		5.4735				7.8		20.0			
Perfluorododecanoic acid	1.1479 1.0203	1.0537 0.8606	1.0533	0.9749	1.0139	AveID		1.0178				8.6		20.0			
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	1.4856 1.2641	1.3967 1.2755	1.3186	1.2286	1.2426	AveID		1.3160				7.1		20.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2394 0.2329	0.2672 0.2134	0.2319	0.2233	0.2121	AveID		0.2315				8.1		20.0			
Perfluorotridecanoic acid	1.2114 1.0324	1.0619 0.8831	1.1223	1.0731	1.1045	AveID		1.0698				9.4		20.0			
Perfluorotetradecanoic acid	0.1299 0.1049	0.1180 0.1087	0.1103	0.1048	0.1060	AveID		0.1118				8.2		20.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.1830 0.9749	1.1040 0.8219	0.9746	0.9651	0.9768	AveID		1.0000				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoro-n-octadecanoic acid (PFODA)	0.8629 0.7648	0.8634 0.6721	0.7865	0.8020	0.7147	AveI n		0.7809				9.1		20.0			
13C4 PFBA	1.0672 0.9509	0.9641 0.9862	0.9676	0.9942	1.0117	Ave		0.9917				3.9		50.0			
13C5 PFPeA	0.8654 0.7385	0.7296 0.7399	0.7610	0.7877	0.7652	Ave		0.7696				6.1		50.0			
13C3 PFBS	1.0756 1.0192	0.9876 1.1612	0.9549	1.0294	1.0615	Ave		1.0413				6.4		50.0			
M2-4:2 FTS	0.1343 0.1194	0.1086 0.1243	0.1164	0.1216	0.1185	Ave		0.1204				6.5		50.0			
13C2 PFHxA	0.8778 0.7694	0.7838 0.7387	0.7436	0.7956	0.7718	Ave		0.7830				5.9		50.0			
13C3 HFPO-DA	0.1643 0.1519	0.1501 0.1535	0.1409	0.1528	0.1474	Ave		0.1516				4.7		50.0			
18O2 PFHxS	0.7448 0.7507	0.6904 0.8129	0.7226	0.7607	0.7427	Ave		0.7464				5.0		50.0			
13C4 PFHpA	0.8886 0.8385	0.8151 0.8749	0.8445	0.8653	0.8858	Ave		0.8590				3.2		50.0			
M2-6:2 FTS	0.1544 0.1505	0.1511 0.1604	0.1460	0.1626	0.1607	Ave		0.1551				4.0		50.0			
13C4 PFOA	0.9601 0.9669	0.9919 0.9091	0.9657	0.9965	1.0218	Ave		0.9731				3.7		50.0			
13C4 PFOS	0.4674 0.4580	0.4521 0.5077	0.4662	0.4873	0.4807	Ave		0.4742				4.0		50.0			
13C5 PFNA	1.1059 1.0804	0.9837 1.0672	1.0142	1.1040	1.0572	Ave		1.0590				4.3		50.0			
13C2 PFDA	1.1803 1.1318	1.0494 1.1115	1.0411	1.0951	1.1528	Ave		1.1089				4.6		50.0			
M2-8:2 FTS	0.1812 0.1848	0.1605 0.1855	0.1573	0.1785	0.1730	Ave		0.1744				6.5		50.0			
13C8 FOSA	0.8923 0.9862	0.9301 0.9872	0.9041	0.9724	0.9514	Ave		0.9462				4.1		50.0			
d3-NMeFOSAA	0.2790 0.2660	0.2549 0.2833	0.2456	0.2672	0.2590	Ave		0.2650				5.0		50.0			
13C2 PFUnA	1.1562 1.0399	0.9889 1.0045	1.0013	1.0578	1.0784	Ave		1.0467				5.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
d5-NEtFOSAA	0.2684 0.2609	0.2442 0.2414	0.2482	0.2513	0.2718	Ave		0.2552				4.7		50.0			
13C2 PFDoA	1.0873 1.0291	1.0666 1.1188	1.0211	1.0940	1.0303	Ave		1.0639				3.6		50.0			
13C2 PFTeDA	1.0903 1.0729	1.0314 1.0760	1.0078	1.0703	1.0665	Ave		1.0593				2.7		50.0			
13C2 PFHxDA	1.3133 1.1726	1.1714 1.2858	1.1658	1.2481	1.1872	Ave		1.2206				5.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290375-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid		L2ID	148954 12675387	192635 29150051	774804	1439078	3820872	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanoic acid		AveID	71742 11390973	141937 26331175	651716	1385943	3191311	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorobutanesulfonic acid		AveID	93584 13919716	166434 33432260	790713	1645342	4220392	0.0444 8.87	0.0887 22.2	0.444	0.887	2.22
4:2 Fluorotelomer sulfonic acid		AveID	36330 5267048	64699 12889559	288946	569311	1486720	0.0469 9.37	0.0937 23.4	0.469	0.937	2.34
Perfluorohexanoic acid		AveID	88105 11510430	144941 26521589	672203	1301870	3361171	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanesulfonic acid		AveID	87889 12787110	150824 30796216	694967	1426185	3383549	0.0471 9.41	0.0941 23.5	0.471	0.941	2.35
HFPODA		AveID	13619 2096317	24788 5568235	115257	235976	568553	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorohexanesulfonic acid		AveID	74343 10346652	118807 27349473	555092	1123331	2901162	0.0457 9.14	0.0914 22.9	0.457	0.914	2.29
Perfluoroheptanoic acid		AveID	92528 13183148	167142 30971904	705383	1446925	3843212	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
DONA		AveID	234702 32898209	400019 +++++	1973200	4190396	9881253	0.0473 9.45	0.0945 +++++	0.473	0.945	2.36
Perfluoroheptanesulfonic acid		AveID	57887 9291673	99394 23718890	497245	1008539	2618603	0.0477 9.53	0.0953 23.8	0.477	0.953	2.38
6:2 Fluorotelomer sulfonic acid		AveID	38205 5360896	67191 12827492	310157	618135	1652144	0.0476 9.51	0.0951 23.8	0.476	0.951	2.38
Perfluorooctanoic acid		AveID	98642 13504480	178853 32974345	801060	1597361	4162515	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorooctanesulfonic acid		AveID	47415 6987392	80998 18816206	384806	792430	1995347	0.0464 9.28	0.0928 23.2	0.464	0.928	2.32
Perfluorononanoic acid		AveID	101909 14082035	159396 33868175	802848	1661649	4090183	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
9Cl-PF3ONS		AveID	151088	244371	1237458	2512476	6453976	0.0467	0.0933	0.467	0.933	2.33

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21405197	49573864				9.33	23.3			
Perfluorononanesulfonic acid		AveID	35424 5744699	60375 15127922	312103	638462	1582540	0.0481 9.62	0.0962 24.1	0.481	0.962	2.41
Perfluorodecanoic acid		AveID	102502 15207258	170377 35125264	869526	1775242	4650088	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
8:2 Fluorotelomer sulfonic acid		AveID	36060 4983035	64388 12048759	270156	556332	1389051	0.0480 9.60	0.0960 24.0	0.480	0.960	2.40
Perfluorooctanesulfonamide		AveID	77087 13020569	144294 31572610	680067	1437750	3587757	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
NMeFOSAA		AveID	22256 3280076	39956 8770277	177278	370720	905881	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorodecanesulfonic acid		AveID	26824 4450137	46440 11299421	234996	499466	1302171	0.0483 9.65	0.0965 24.1	0.483	0.965	2.41
Perfluoroundecanoic acid		AveID	102917 14323125	180134 32455800	818335	1729770	4518784	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	28562 3409503	40651 8392085	187350	364226	985607	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
11Cl-PF3OUdS		AveID	230633 29976782	381367 +++++	1894487	3925775	9347621	0.0472 9.43	0.0943 +++++	0.472	0.943	2.36
Perfluorododecanoic acid		AveID	105433 14693173	179683 34331936	852163	1656352	4182445	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)		AveID	21915 3151402	34552 8134970	158460	328276	829529	0.0482 9.64	0.0964 24.1	0.482	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	9148 1445002	18698 3739893	82920	163618	395113	0.0484 9.68	0.0968 24.2	0.484	0.968	2.42
Perfluorotridecanoic acid		AveID	111264 14866529	181083 35226779	907955	1823052	4556433	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorotetradecanoic acid		AveID	11967 1575221	19454 4171778	88102	174160	452708	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		AveID	131230 15997184	206767 37681202	900190	1870661	4643411	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	95729 12548221	161712 30813591	726427	1554372	3397685	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
13C4 PFBA	13PFOA	Ave	2253572 1663241	1926725 1758198	1916527	1929850	2025338	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290375-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C5 PFPeA	13PFOA	Ave	1827623 1291692	1458161 1319141	1507442	1529086	1531883	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 PFBS	13PFOA	Ave	2112456 1657995	1835537 1925353	1758991	1858340	1976378	1.16 1.16	1.16 1.16	1.16	1.16	1.16
M2-4:2 FTS	13PFOA	Ave	264843 194992	202715 207012	215257	220382	221658	1.17 1.17	1.17 1.17	1.17	1.17	1.17
13C2 PFHxA	13PFOA	Ave	1853797 1345799	1566461 1316912	1472867	1544435	1545081	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 HFPO-DA	13PFOA	Ave	346930 265620	299977 273677	279126	296521	295164	1.25 1.25	1.25 1.25	1.25	1.25	1.25
18O2 PFHxS	13PFOA	Ave	1487994 1242233	1305238 1370941	1353967	1396957	1406672	1.18 1.18	1.18 1.18	1.18	1.18	1.18
13C4 PFHpA	13PFOA	Ave	1876608 1466571	1628956 1559821	1672833	1679653	1773444	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-6:2 FTS	13PFOA	Ave	309808 250039	286854 271643	274798	299923	305639	1.19 1.19	1.19 1.19	1.19	1.19	1.19
13C4 PFOA	13PFOA	Ave	2027588 1691186	1982384 1620734	1912820	1934463	2045642	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C4 PFOS	13PFOA	Ave	943517 765818	863764 865311	882764	904398	919926	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C5 PFNA	13PFOA	Ave	2335475 1889768	1965971 1902682	2008931	2143126	2116548	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDA	13PFOA	Ave	2492424 1979736	2097344 1981566	2062234	2125756	2307904	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	13PFOA	Ave	366485 309678	307295 316911	298552	331913	331708	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C8 FOSA	13PFOA	Ave	1884229 1724931	1858847 1759972	1790735	1887535	1904586	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290375-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d3-NMeFOSAA	13PFOA	Ave	589245 465286	509447 505130	486461	518688	518571	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFUnA	13PFOA	Ave	2441700 1818926	1976379 1790927	1983358	2053330	2158999	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d5-NEtFOSAA	13PFOA	Ave	566846 456350	488020 430319	491633	487913	544137	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDoA	13PFOA	Ave	2296115 1800020	2131572 1994604	2022512	2123640	2062631	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	13PFOA	Ave	2302510 1876594	2061289 1918275	1996289	2077683	2135161	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFHxDA	13PFOA	Ave	2773326 2051028	2341179 2292454	2309121	2422773	2376838	1.25 1.25	1.25 1.25	1.25	1.25	1.25

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Jul-2023 17:16:50 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 1
Misc. Info.: 200-0056441-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:27:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.112	2.103	0.009	0.616	2253572	1.35		108	1147	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.120	2.112	0.008	1.004	148954	0.0505		101	7.7	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.704	1827623	1.41		112	783	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.411	2.411	0.0	1.000	71742	0.0455		90.9	3.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.708	2112456	1.20		103	64154	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	93584	0.0461	Target=2.07	104	18.4	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	42190		2.22(1.04-3.11)	104	8.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.693	2.694	-0.001	0.786	264843	1.30		111	103	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.693	2.694	-0.001	1.000	36330	0.0472		101	404	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.797	1853797	1.40		112	1419	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	88105	0.0540	Target=14.29	108	11.4	M
313.00 > 119.00	2.718	2.731	-0.013	0.995	5337		16.51(7.15-21.44)	108	3.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.896	87889	0.0535	Target=2.78	114	123	M
349.00 > 99.00	2.731	2.731	0.0	0.896	29458		2.98(1.39-4.17)	114	37.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.806	2.844	-0.038	0.819	346930	1.36		108	1501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.806	2.844	-0.038	1.000	13619	0.0490		98.0	101	
D 11 18O2 PFHxS										
403.00 > 84.00	3.046	3.092	-0.046	0.889	1487994	1.18		99.8	3478	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.046	3.092	-0.046	1.000	74343	0.0534	Target=3.23	117	116	M
399.00 > 99.00	3.046	3.092	-0.046	1.000	22455		3.31(1.62-4.84)	117	14.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.058	3.104	-0.046	1.000	92528	0.0550	Target=4.11	110	17.1	M
363.00 > 169.00	3.058	3.104	-0.046	1.000	21986		4.21(2.06-6.17)	110	17.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.058	3.104	-0.046	0.892	1876608	1.29		103	5156	
77 DONA										
377.00 > 251.00	3.092	3.138	-0.046	0.824	234702	0.0517	Target=3.28	109	257	
377.00 > 85.00	3.092	3.138	-0.046	0.824	72544		3.24(1.64-4.92)	109	83.1	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.408	3.446	-0.038	0.908	57887	0.0507	Target=4.71	106	138	
449.00 > 99.00	3.408	3.446	-0.038	0.908	11640		4.97(2.36-7.07)	106	22.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.417	3.446	-0.029	0.997	309808	1.18		99.6	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.417	3.446	-0.029	1.000	38205	0.0536		113	138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.426	3.464	-0.038	1.000	98642	0.0571	Target=2.90	114	6.8	M
413.00 > 169.00	3.426	3.464	-0.038	1.000	31899		3.09(1.45-4.35)	114	28.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.426	3.464	-0.038	1.000	2027588	1.23		98.7	5902	
* 62 13C2 PFOA										
415.00 > 370.00	3.426	3.464	-0.038		2111765	1.25			5485	
D 18 13C4 PFOS										
503.00 > 80.00	3.754	3.783	-0.029	1.096	943517	1.18		98.6	4119	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.754	3.783	-0.029	1.000	47415	0.0515	Target=4.11	111	65.8	M
499.00 > 99.00	3.754	3.783	-0.029	1.000	11529		4.11(2.05-6.16)	111	16.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.774	3.793	-0.019	1.101	2335475	1.31		104	6410	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.774	3.803	-0.029	1.000	101909	0.0557	Target=8.48	111	17.9	M
463.00 > 169.00	3.764	3.803	-0.039	0.997	10750		9.48(4.24-12.72)	111	35.9	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.922	3.947	-0.025	1.045	151088	0.0536		115	288	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.063	4.074	-0.011	1.082	35424	0.0506	Target=2.17	105	275	M
549.00 > 99.00	4.063	4.074	-0.011	1.082	15853		2.23(1.08-3.25)	105	31.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.084	4.108	-0.024	1.192	2492424	1.33		106	10504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.084	4.108	-0.024	1.000	102502	0.0514	Target=10.55	103	25.3	
513.00 > 169.00	4.084	4.108	-0.024	1.000	10265		9.99(5.27-15.82)	103	39.8	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.096	4.108	-0.012	1.196	366485	1.24		104	569	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.096	4.120	-0.024	1.000	36060	0.0535		112	260	M
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.224	1884229	1.18		94.3	3520	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	77087	0.0536		107	320	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.237	4.249	-0.012	1.237	589245	1.32		105	1006	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.260	-0.011	1.003	22256	0.0520		104	39.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.334	4.346	-0.012	1.155	26824	0.0497	Target=2.28	103	168	
599.00 > 99.00	4.334	4.346	-0.012	1.155	12867		2.08(1.14-3.42)	103	59.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.275	2441700	1.38		110	9527	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.000	102917	0.0511	Target=11.30	102	27.7	
563.00 > 169.00	4.370	4.382	-0.012	1.000	10486		9.81(5.65-16.96)	102	73.6	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.382	4.393	-0.011	1.279	566846	1.31		105	864	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.382	4.393	-0.011	1.000	28562	0.0630		126	124	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.189	230633	0.0534		113	329	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.344	2296115	1.28		102	6831	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	105433	0.0564	Target=8.15	113	10.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	13359		7.89(4.07-12.22)	113	79.9	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.130	21915	0.0544		113	524	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.780	4.779	0.001	1.273	9148	0.0501	Target=0.50	103	110	M
699.00 > 99.00	4.780	4.779	0.001	1.273	18434		0.50(0.25-0.75)	103	160	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	111264	0.0566	Target=6.61	113	12.0	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	15139		7.35(3.31-9.92)	113	149	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.459	2302510	1.29		103	7005	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.002	11967	0.0581	Target=0.96	116	150	
713.00 > 219.00	4.998	5.008	-0.010	1.000	11422		1.05(0.48-1.44)	116	211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	131230	0.0591	Target=7.69	118	14.7	
813.00 > 169.00	5.328	5.328	0.0	1.000	16433		7.99(3.85-11.54)	118	172	
D 44 13C2 PFHxDA										M
815.00 > 770.00	5.328	5.328	0.0	1.555	2773326	1.34		108	1764	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.620	5.611	0.009	1.055	95729	0.0553	Target=9.13	111	15.3	M
913.00 > 169.00	5.620	5.611	0.009	1.055	9904		9.67(4.56-13.69)	111	101	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

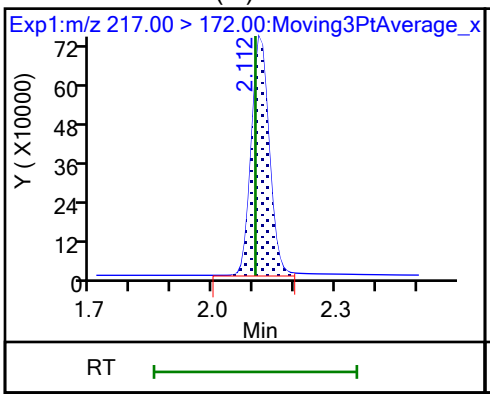
PFAS32NCIC1_00015 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:37 Chrom Revision: 2.3 19-Jul-2023 18:28:48

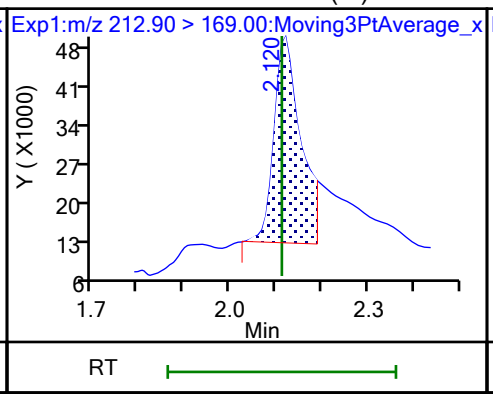
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Injection Date: 26-Jul-2023 17:16:50 Instrument ID: LC812
Lims ID: IC 1
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

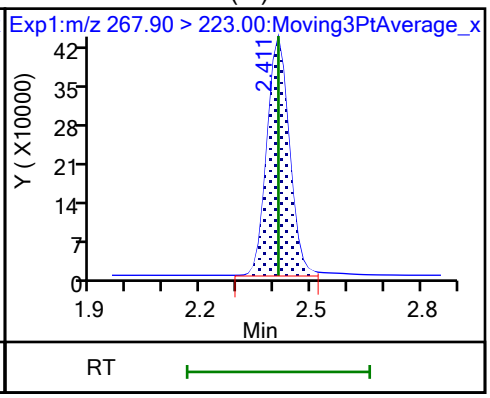
D 1 13C4 PFBA (M)



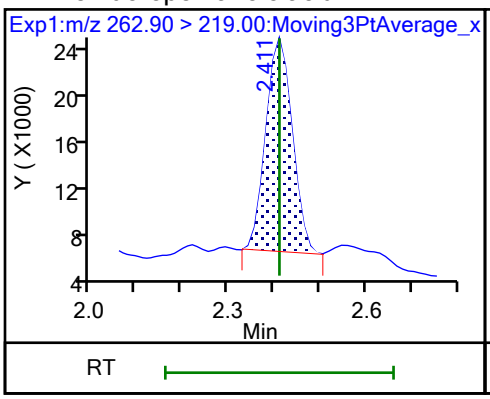
2 Perfluorobutanoic acid (M)



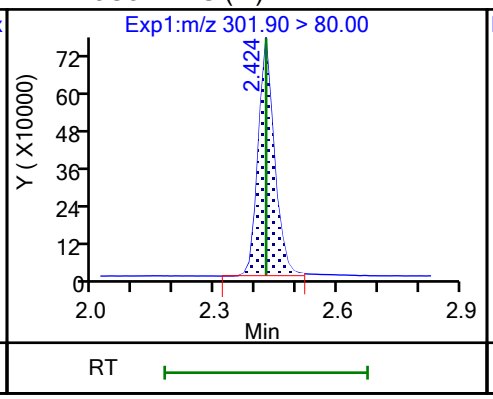
D 3 13C5 PFPeA (M)



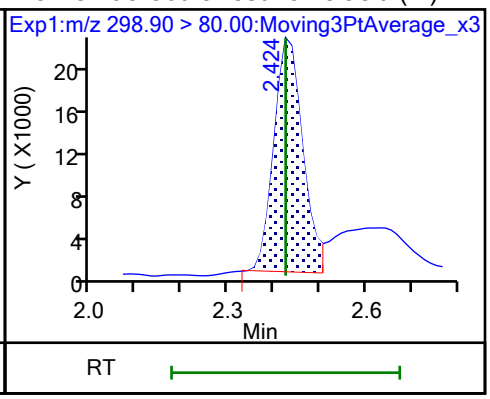
4 Perfluoropentanoic acid



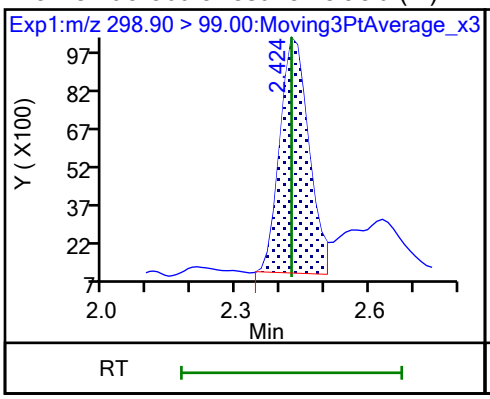
D 47 13C3 PFBS (M)



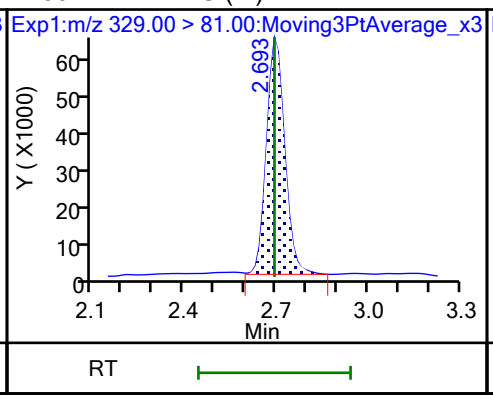
5 Perfluorobutanesulfonic acid (M)



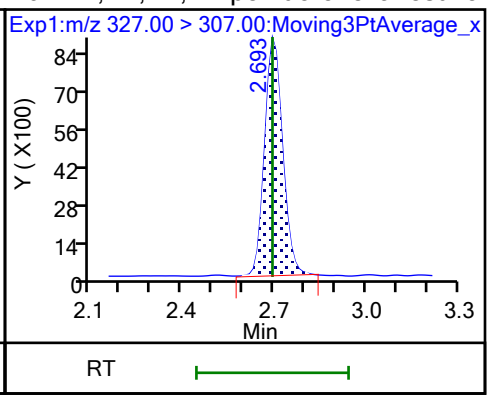
5 Perfluorobutanesulfonic acid (M)



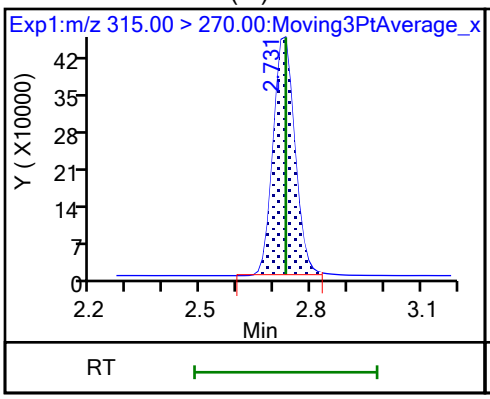
D 60 M2-4:2 FTS (M)



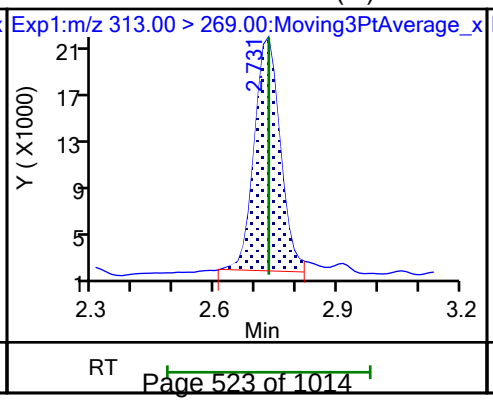
61 1H,1H,2H,2H-perfluorohexanesulfo



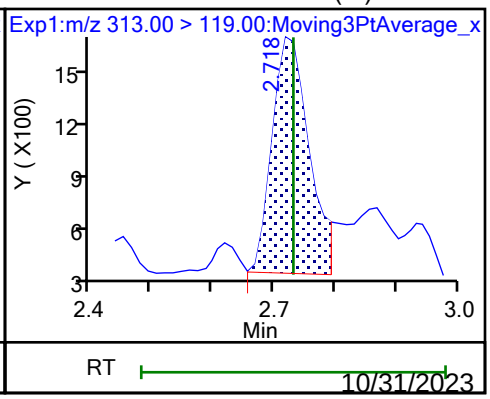
D 7 13C2 PFHxA (M)



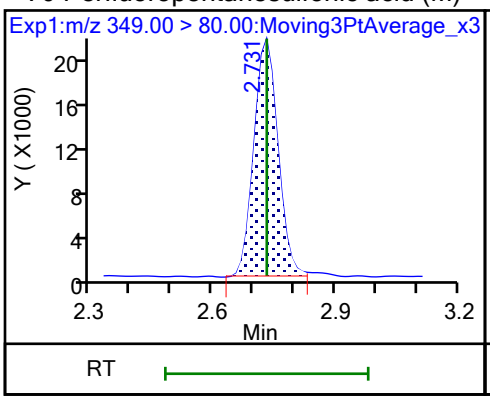
6 Perfluorohexanoic acid (M)



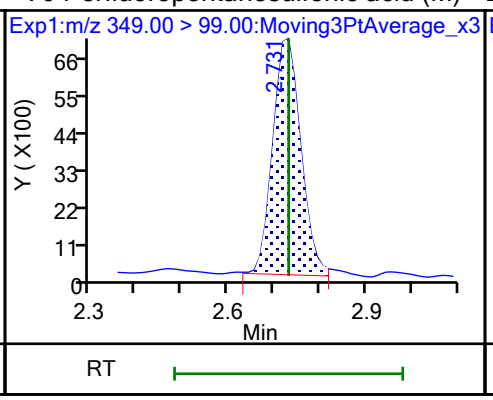
6 Perfluorohexanoic acid (M)



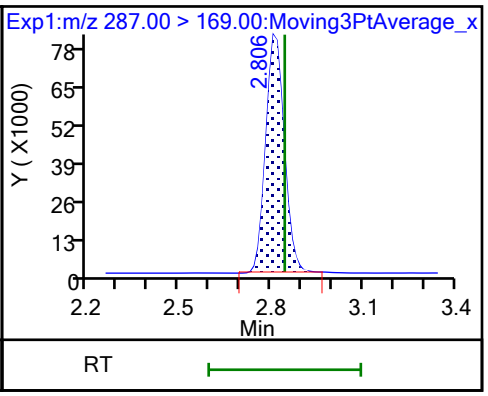
70 Perfluoropentanesulfonic acid (M)



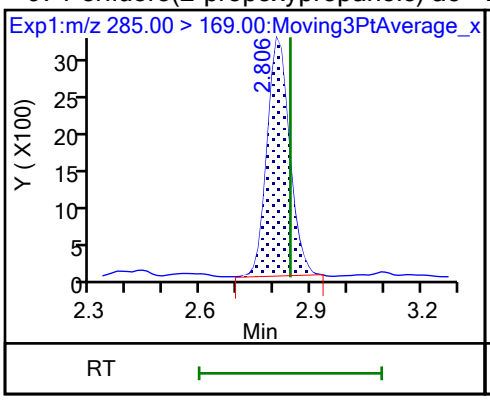
70 Perfluoropentanesulfonic acid (M)



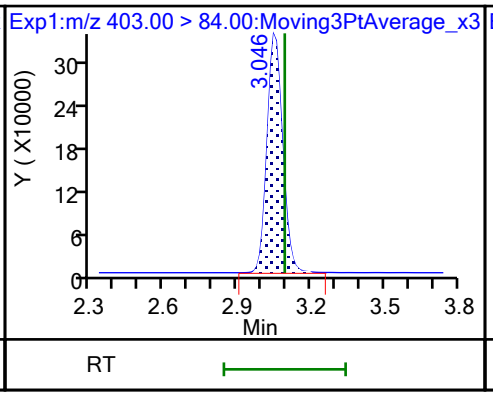
D 64 13C3 HFPO-DA



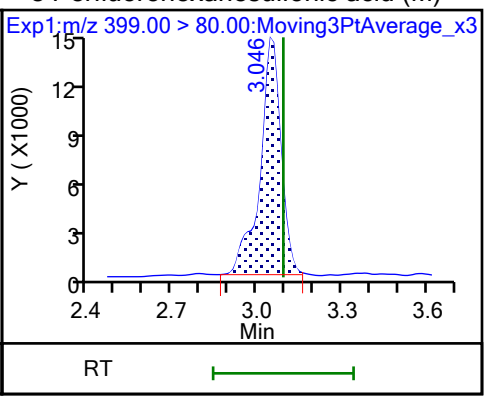
67 Perfluoro(2-propoxypropanoic) ac



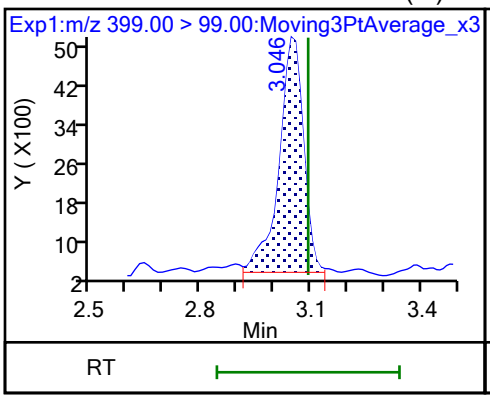
D 11 18O2 PFHxS



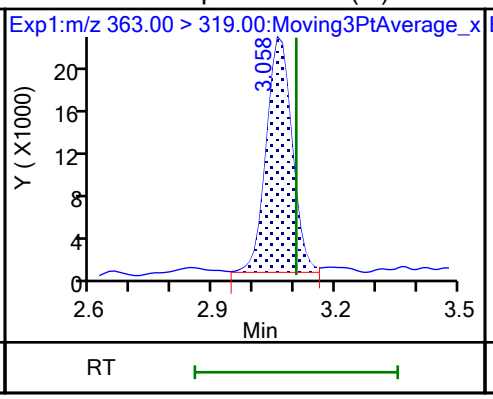
8 Perfluorohexanesulfonic acid (M)



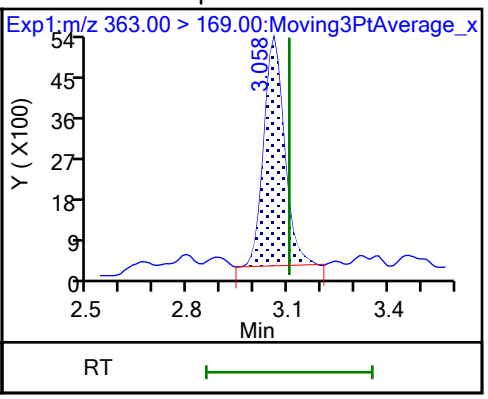
8 Perfluorohexanesulfonic acid (M)



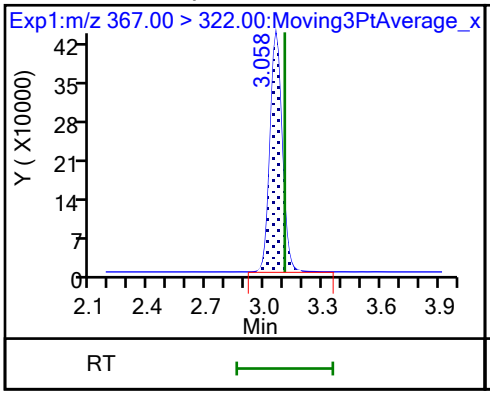
10 Perfluoroheptanoic acid (M)



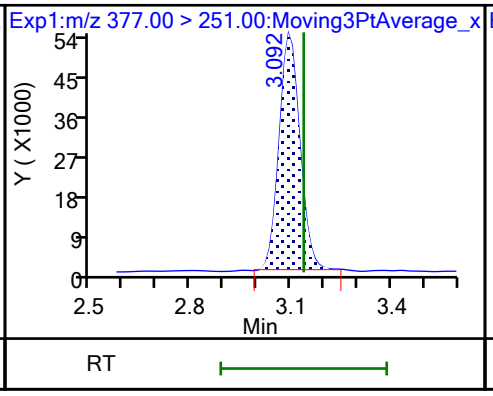
10 Perfluoroheptanoic acid



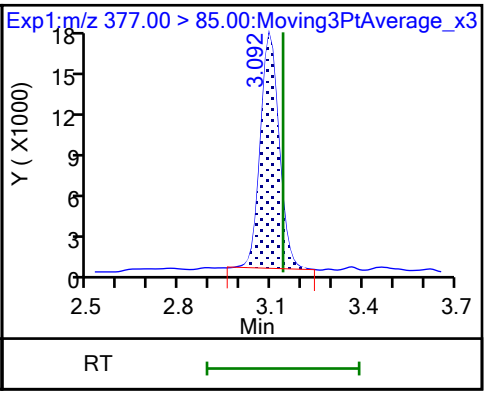
D 9 13C4 PFHpA



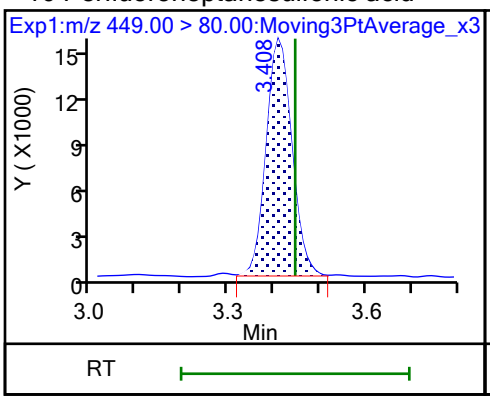
77 DONA



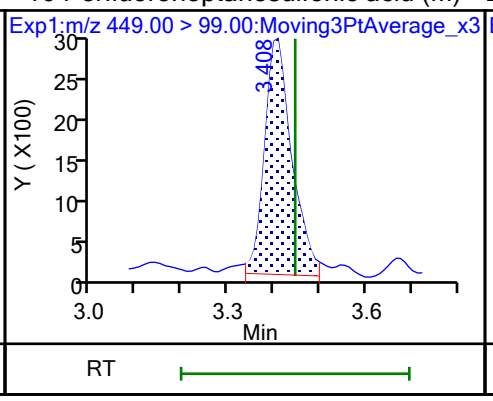
77 DONA



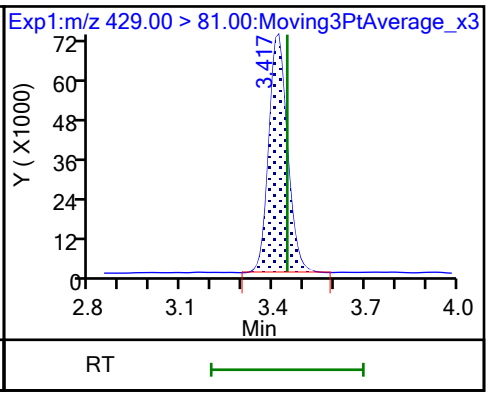
16 Perfluoroheptanesulfonic acid



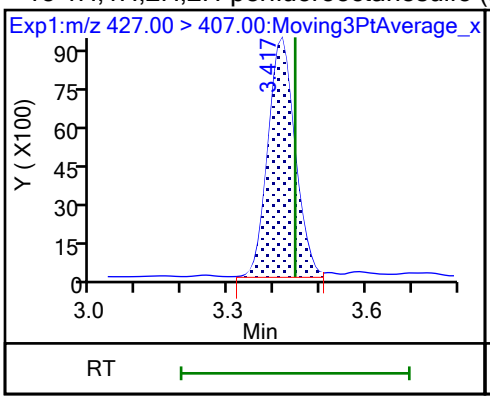
16 Perfluoroheptanesulfonic acid (M)



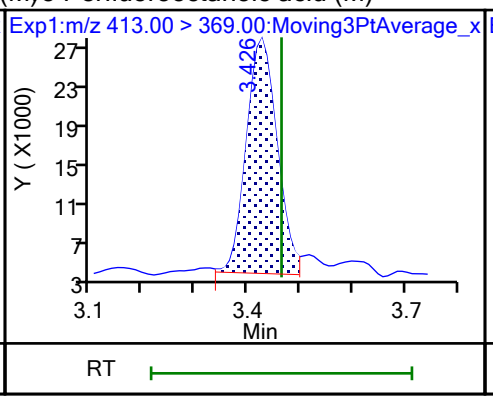
D 12 M2-6:2 FTS



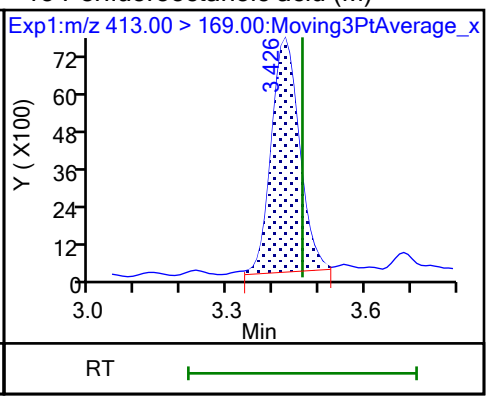
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



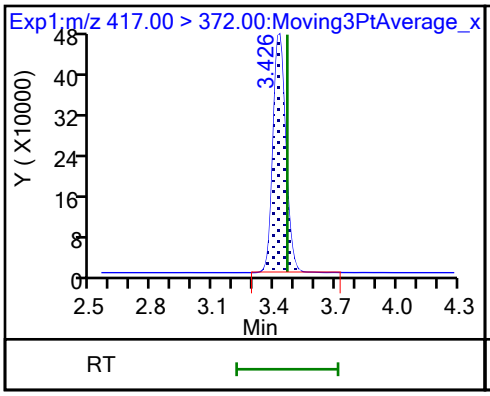
15 Perfluorooctanoic acid (M)



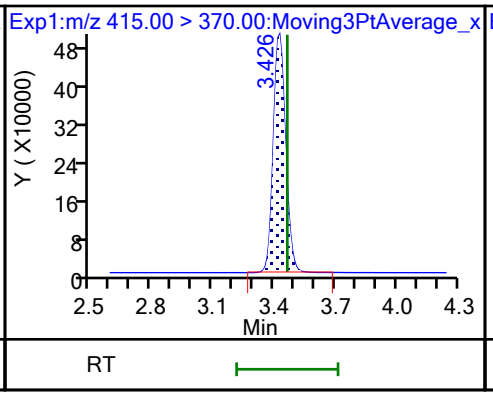
15 Perfluorooctanoic acid (M)



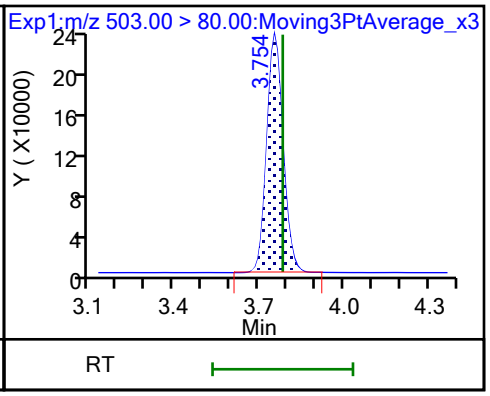
D 14 13C4 PFOA



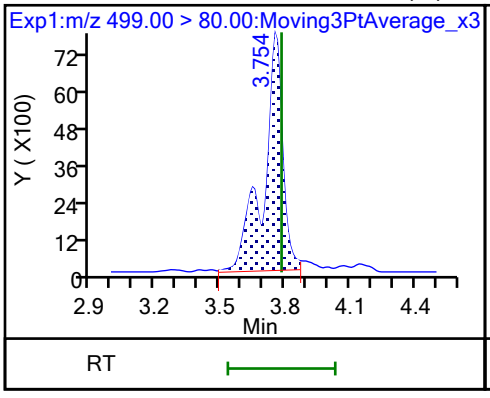
* 62 13C2 PFOA



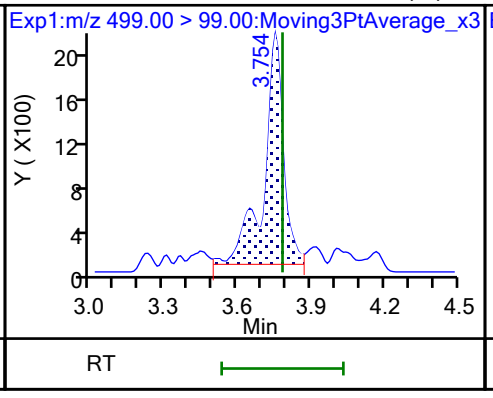
D 18 13C4 PFOS



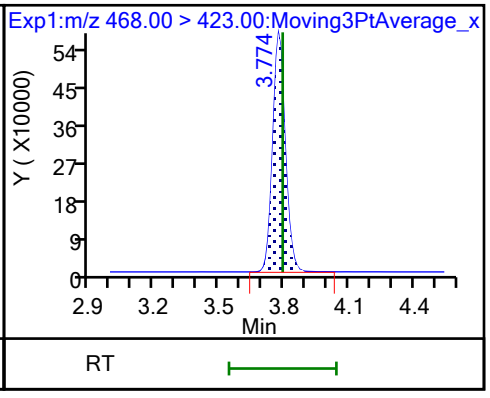
17 Perfluorooctanesulfonic acid (M)



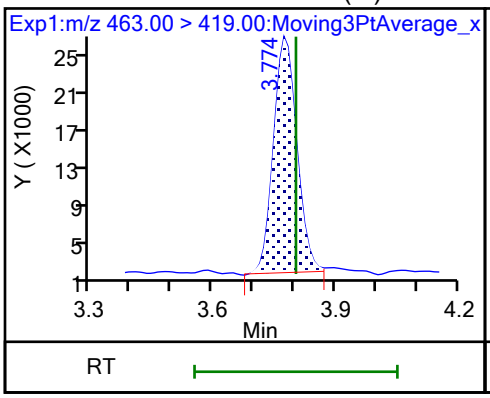
17 Perfluorooctanesulfonic acid (M)



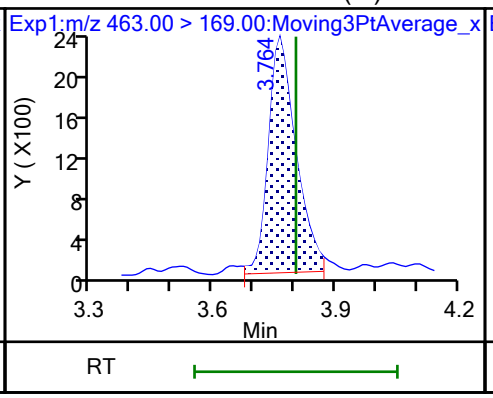
D 19 13C5 PFNA



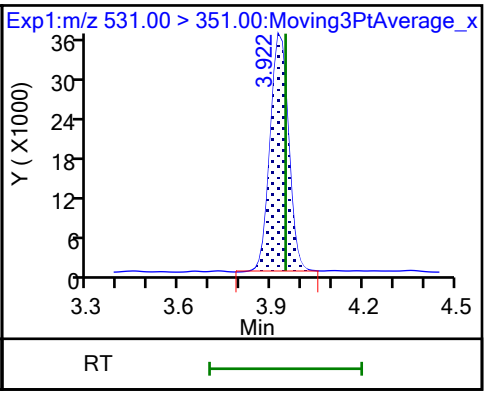
20 Perfluorononanoic acid (M)



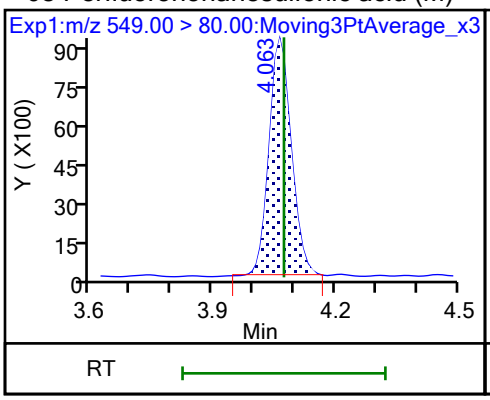
20 Perfluorononanoic acid (M)



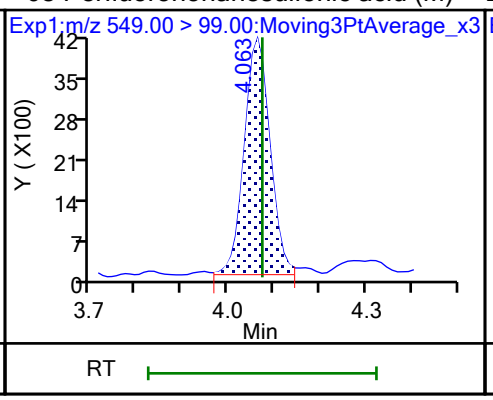
69 9-Chlorohexadecafluoro-3-oxanona



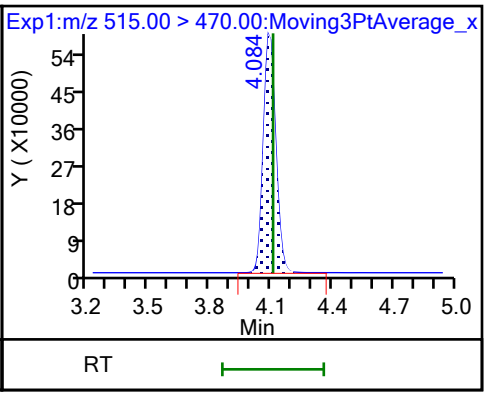
68 Perfluorononanesulfonic acid (M)



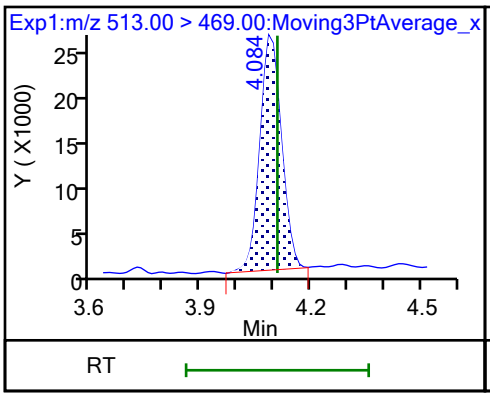
68 Perfluorononanesulfonic acid (M)



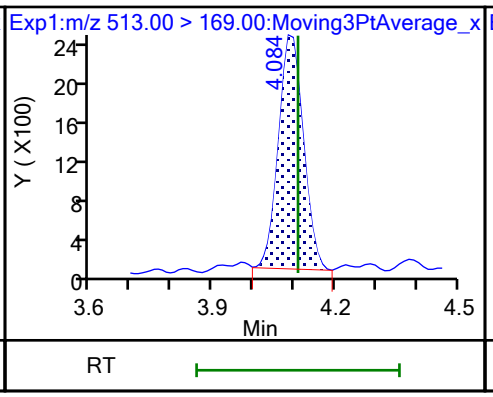
D 23 13C2 PFDA



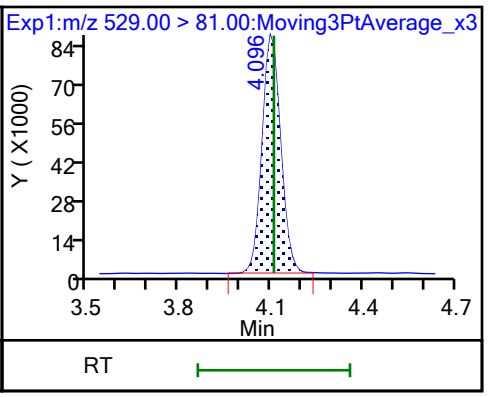
24 Perfluorodecanoic acid



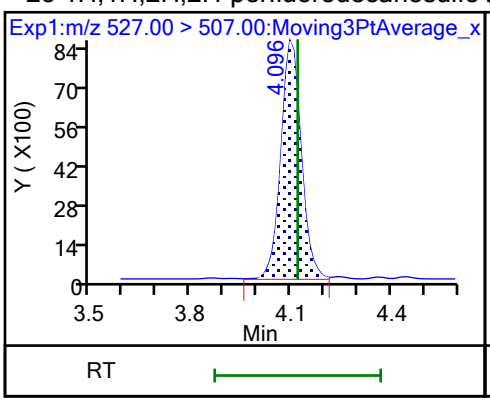
24 Perfluorodecanoic acid



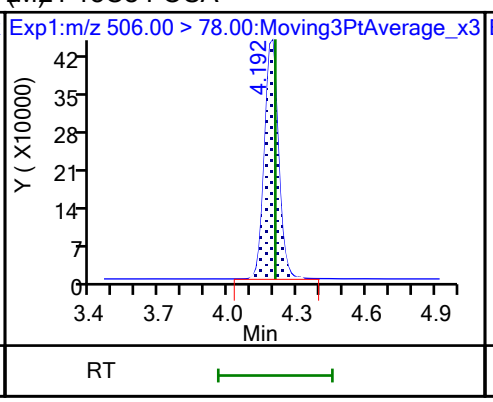
D 26 M2-8:2 FTS



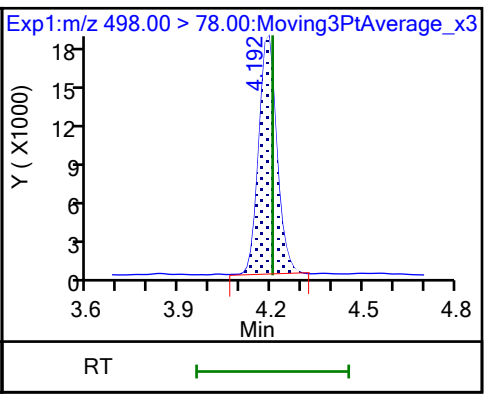
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



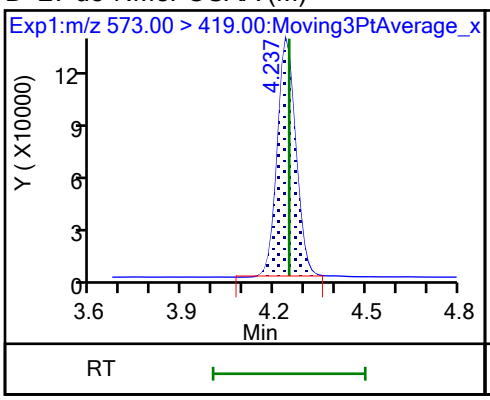
D 21 13C8 FOSA



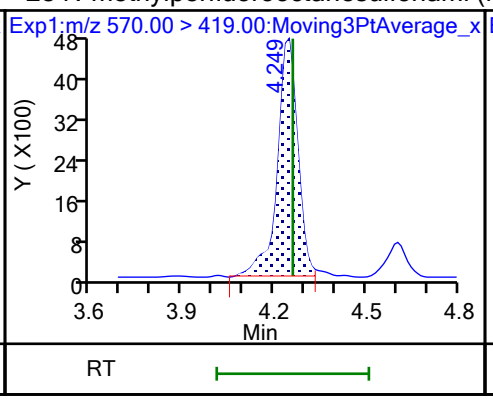
22 Perfluorooctanesulfonamide



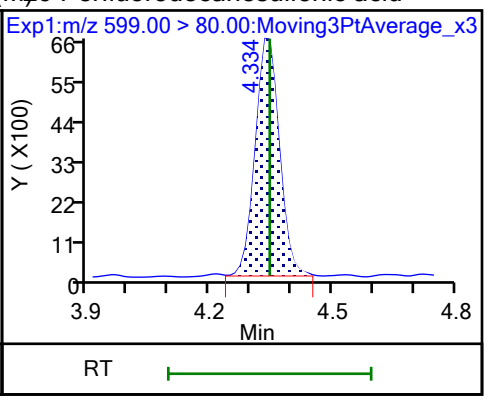
D 27 d3-NMeFOSAA (M)



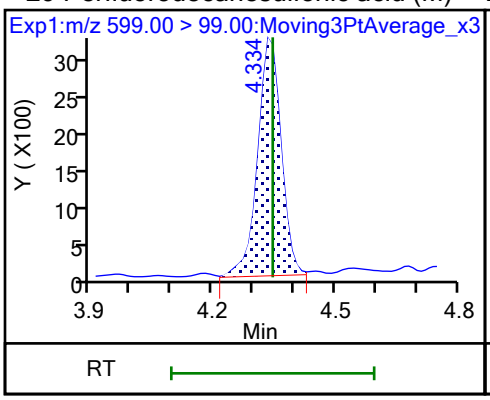
28 N-methylperfluorooctanesulfonami (M)



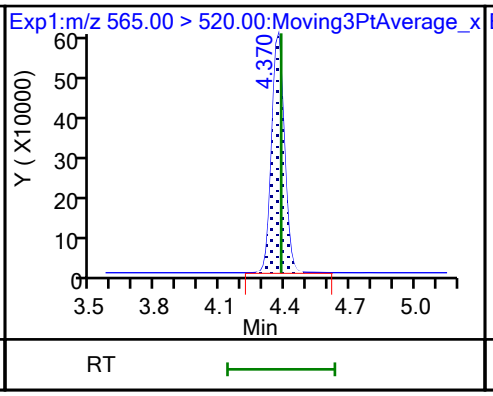
29 Perfluorodecanesulfonic acid



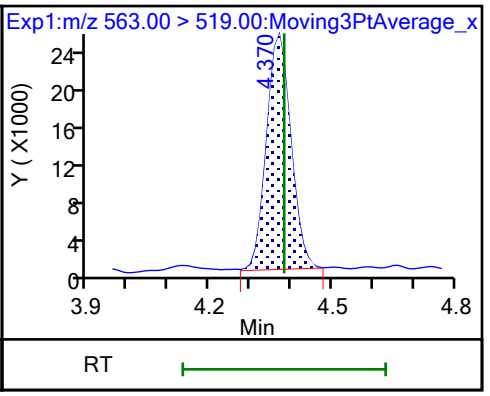
29 Perfluorodecanesulfonic acid (M)



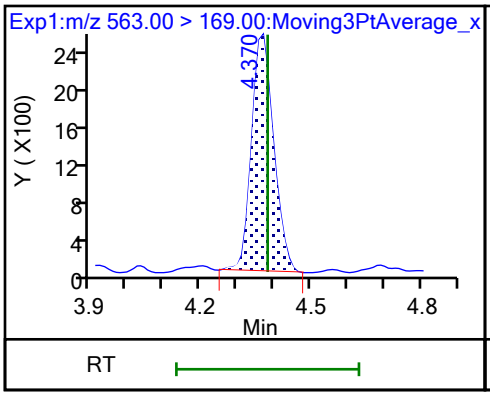
D 30 13C2 PFUnA



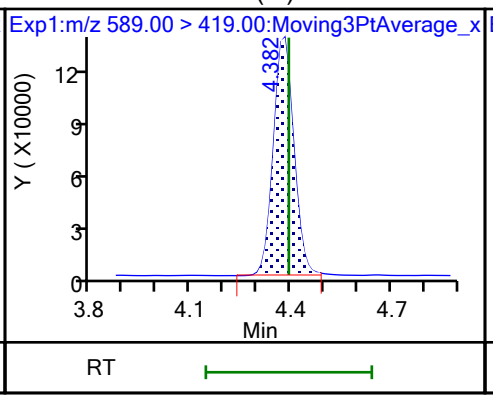
31 Perfluoroundecanoic acid



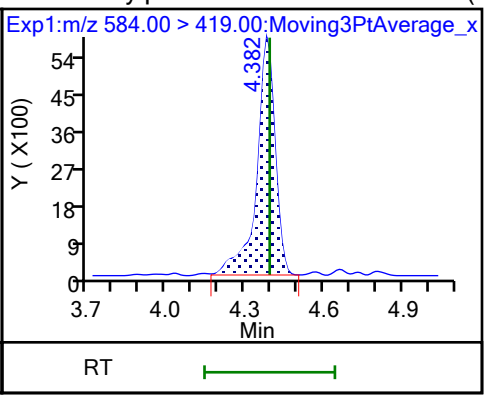
31 Perfluoroundecanoic acid



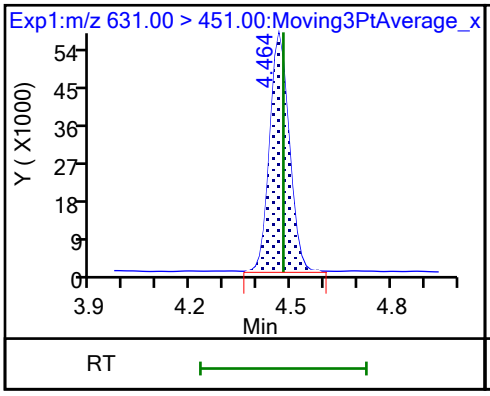
D 32 d5-NEtFOSAA (M)



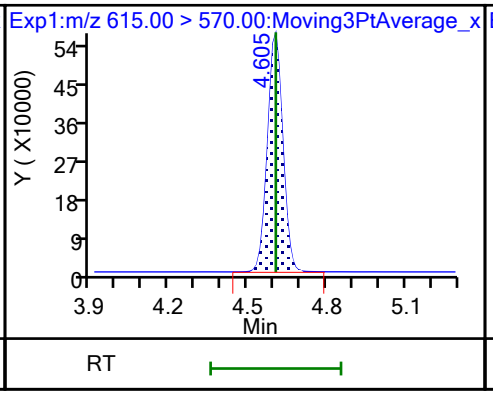
33 N-ethylperfluorooctanesulfonamid (M)



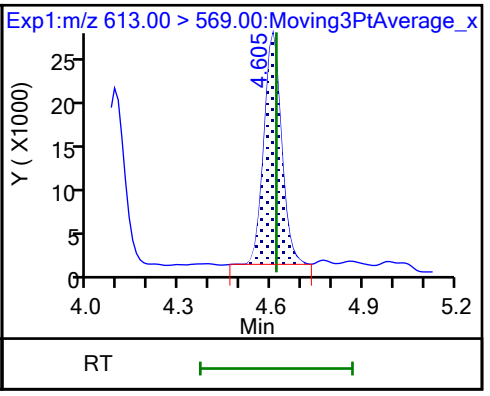
66 11-Chloroeicosafluoro-3-oxaundec



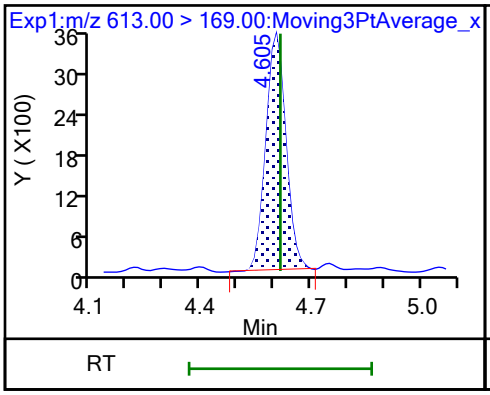
D 36 13C2 PFDoA



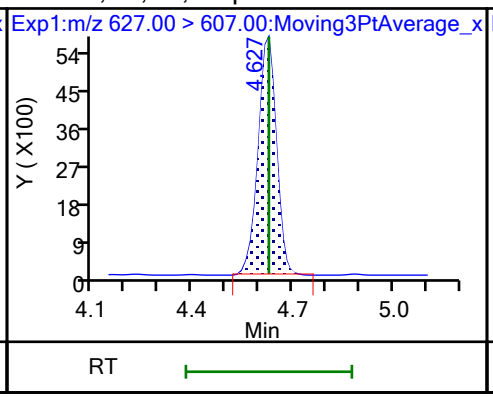
37 Perfluorododecanoic acid



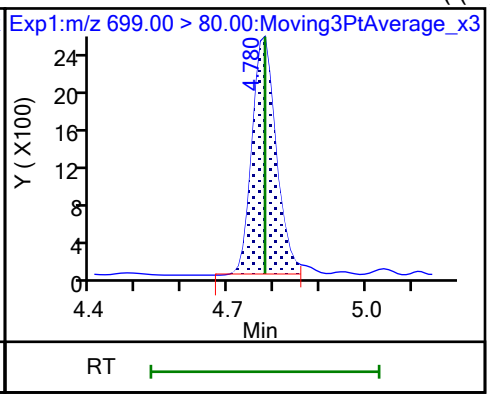
37 Perfluorododecanoic acid



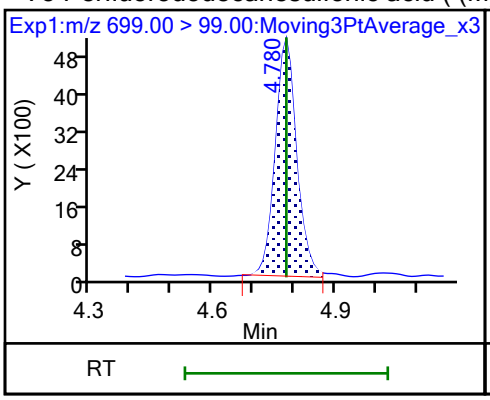
74 1H,1H,2H,2H-perfluorododecanesul



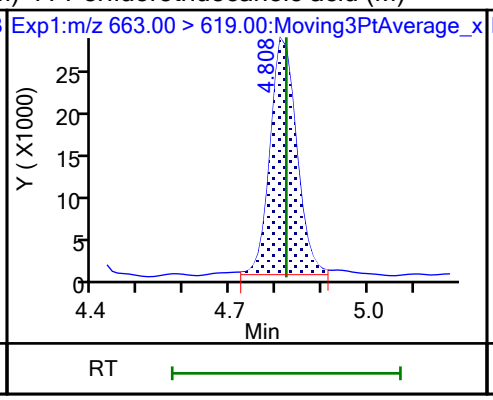
75 Perfluorododecanesulfonic acid ((M)



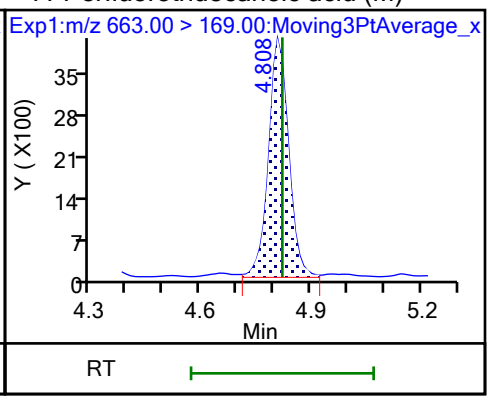
75 Perfluorododecanesulfonic acid ((M)



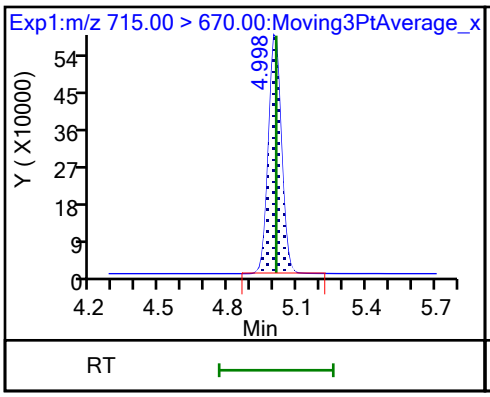
41 Perfluorotridecanoic acid (M)



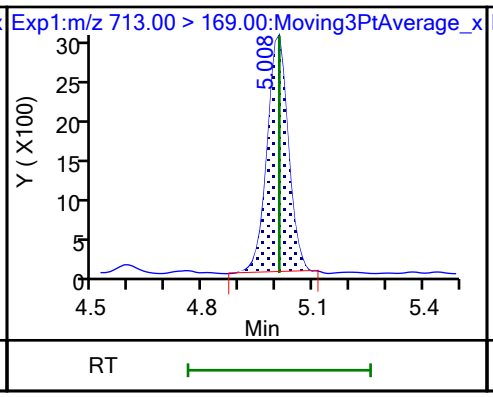
41 Perfluorotridecanoic acid (M)



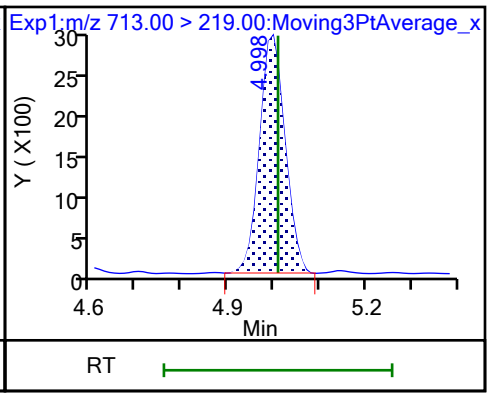
D 43 13C2 PFTeDA



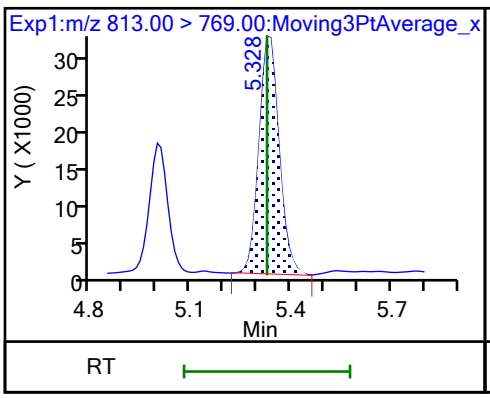
42 Perfluorotetradecanoic acid



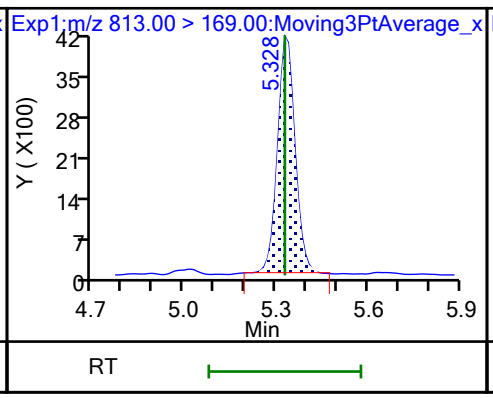
42 Perfluorotetradecanoic acid



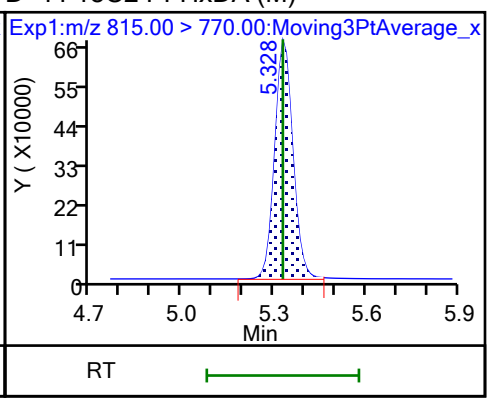
45 Perfluorohexadecanoic acid



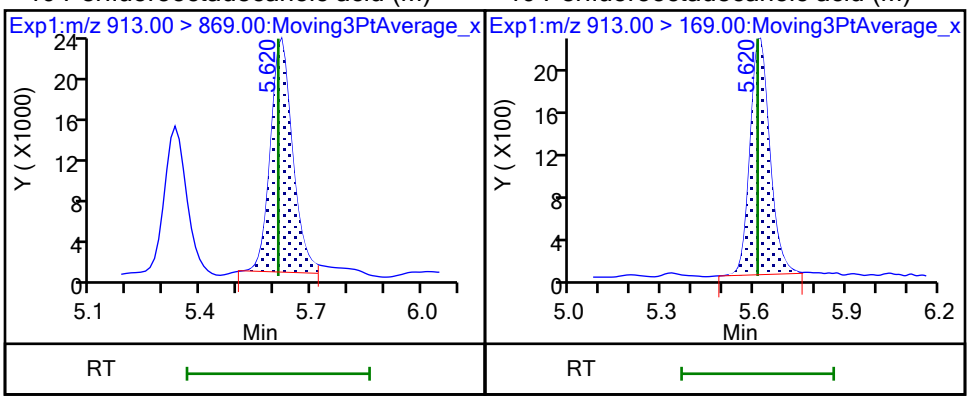
45 Perfluorohexadecanoic acid



D 44 13C2 PFHxDA (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Jul-2023 17:25:00 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 200-0056441-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:42 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:45:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	1926725	1.22		97.2	993	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	192635	0.0973		97.3	11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1458161	1.19		94.8	648	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	141937	0.1128		113	6.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.699	1835537	1.10		94.8	58282	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	166434	0.0944	Target=2.07	106	35.5	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	85051		1.96(1.04-3.11)	106	17.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	202715	1.05		90.2	72.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.718	2.694	0.024	1.000	64699	0.1097		117	613	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1566461	1.25		100	1391	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	144941	0.1051	Target=14.29	105	19.0	M
313.00 > 119.00	2.755	2.731	0.024	1.000	10821		13.39(7.15-21.44)	105	7.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.755	2.731	0.024	0.885	150824	0.1046	Target=2.78	111	211	M
349.00 > 99.00	2.755	2.731	0.024	0.885	53128		2.84(1.39-4.17)	111	51.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.826	299977	1.24		99.0	1628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.868	2.844	0.024	1.000	24788	0.1032		103	273	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1305238	1.09		92.5	2984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	118807	0.0972	Target=3.23	106	250	M
399.00 > 99.00	3.114	3.092	0.022	1.000	38530		3.08(1.62-4.84)	106	21.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.126	3.104	0.022	1.004	167142	0.1144	Target=4.11	114	33.0	M
363.00 > 169.00	3.126	3.104	0.022	1.004	38992		4.29(2.06-6.17)	114	33.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1628956	1.19		94.9	4384	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	400019	0.0962	Target=3.28	102	466	
377.00 > 85.00	3.160	3.138	0.022	0.835	118017		3.39(1.64-4.92)	102	143	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.461	3.446	0.015	0.915	99394	0.0951	Target=4.71	99.8	250	
449.00 > 99.00	3.461	3.446	0.015	0.915	23637		4.21(2.36-7.07)	99.8	50.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	286854	1.16		97.4	368	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.470	3.446	0.024	1.003	67191	0.1018		107	230	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.470	3.464	0.006	1.000	178853	0.1059	Target=2.90	106	14.0	M
413.00 > 169.00	3.479	3.464	0.015	1.003	59442		3.01(1.45-4.35)	106	72.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	1982384	1.27		102	5935	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		1998562	1.25			4141	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	863764	1.14		95.3	3395	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	80998	0.0961	Target=4.11	104	153	M
499.00 > 99.00	3.783	3.783	0.0	1.000	22759		3.56(2.05-6.16)	104	37.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1965971	1.16		92.9	4371	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.803	3.803	0.0	1.000	159396	0.1034	Target=8.48	103	30.7	
463.00 > 169.00	3.803	3.803	0.0	1.000	20785		7.67(4.24-12.72)	103	124	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.046	244371	0.0947		102	482	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.084	4.074	0.010	1.080	60375	0.0941	Target=2.17	97.8	490	
549.00 > 99.00	4.074	4.074	0.0	1.077	30462		1.98(1.08-3.25)	97.8	79.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2097344	1.18		94.6	8331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.108	4.108	0.0	1.000	170377	0.1016	Target=10.55	102	41.1	M
513.00 > 169.00	4.108	4.108	0.0	1.000	16328		10.43(5.27-15.82)	102	43.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	307295	1.10		92.0	634	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	64388	0.1140		119	478	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1858847	1.23		98.3	3368	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	144294	0.1017		102	567	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	509447	1.20		96.2	2611	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.260	0.001	1.003	39956	0.1080		108	67.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.346	0.0	1.149	46440	0.0941	Target=2.28	97.5	269	
599.00 > 99.00	4.346	4.346	0.0	1.149	23477		1.98(1.14-3.42)	97.5	80.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.263	1976379	1.18		94.5	7486	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.382	0.0	1.000	180134	0.1105	Target=11.30	111	48.4	
563.00 > 169.00	4.382	4.382	0.0	1.000	13744		13.11(5.65-16.96)	111	83.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	488020	1.20		95.7	1048	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	40651	0.1041		104	155	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	381367	0.0964		102	559	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	2131572	1.25		100	9591	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.616	-0.011	1.000	179683	0.1035	Target=8.15	104	19.1	M
613.00 > 169.00	4.605	4.616	-0.011	1.000	22765		7.89(4.07-12.22)	104	200	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.627	4.627	0.0	1.123	34552	0.1023		106	582	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	18698	0.1118	Target=0.50	115	275	
699.00 > 99.00	4.780	4.779	0.001	1.263	34305		0.55(0.25-0.75)	115	396	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	181083	0.0993	Target=6.61	99.3	22.2	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	27094		6.68(3.31-9.92)	99.3	218	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2061289	1.22		97.4	7140	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	19454	0.1055	Target=0.96	106	217	
713.00 > 219.00	4.998	5.008	-0.010	1.000	19131		1.02(0.48-1.44)	106	242	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	206767	0.1104	Target=7.69	110	24.0	
813.00 > 169.00	5.328	5.328	0.0	1.000	26550		7.79(3.85-11.54)	110	351	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.535	2341179	1.20		96.0	5506	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	161712	0.1106	Target=9.13	111	27.0	M
913.00 > 169.00	5.611	5.611	0.0	1.053	16958		9.54(4.56-13.69)	111	117	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

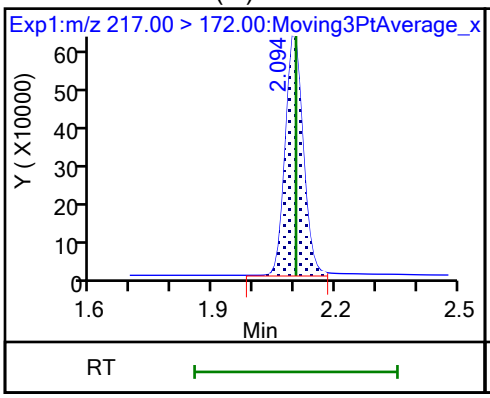
PFAS32NCIC2_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:44 Chrom Revision: 2.3 19-Jul-2023 18:28:48

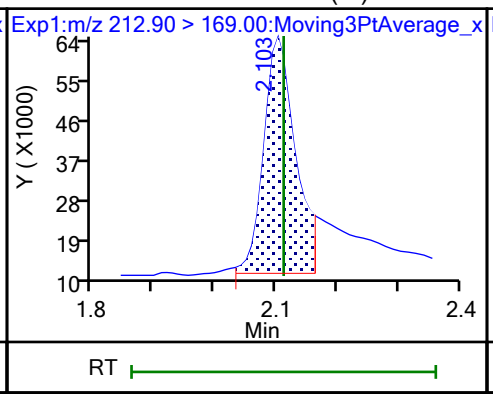
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Injection Date: 26-Jul-2023 17:25:00 Instrument ID: LC812
Lims ID: IC 2
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

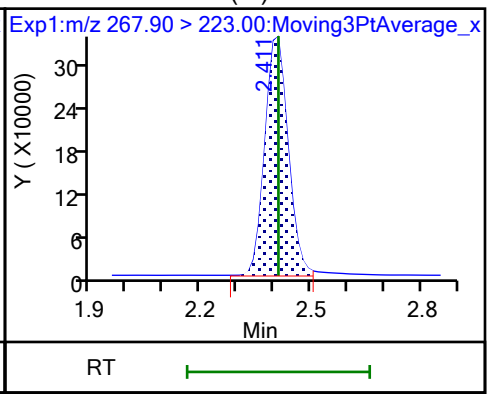
D 1 13C4 PFBA (M)



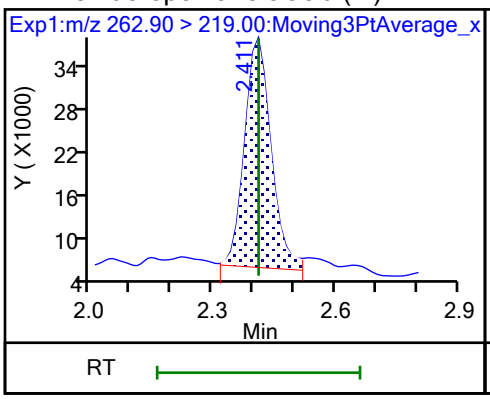
2 Perfluorobutanoic acid (M)



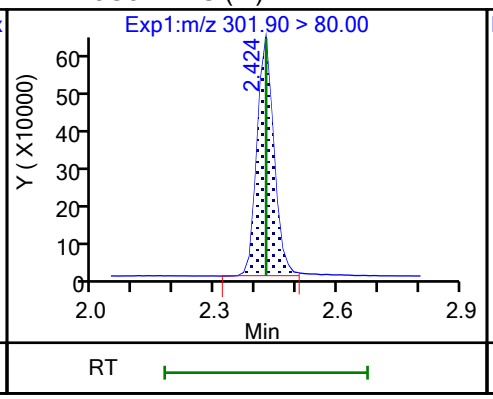
D 3 13C5 PFPeA (M)



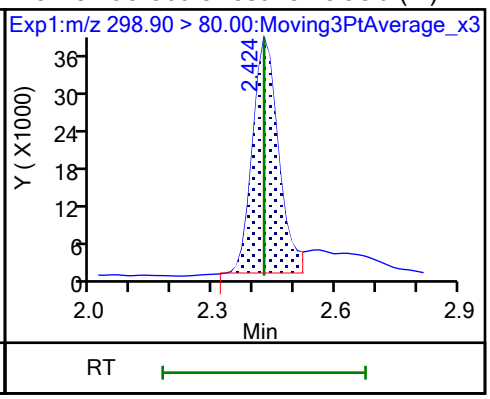
4 Perfluoropentanoic acid (M)



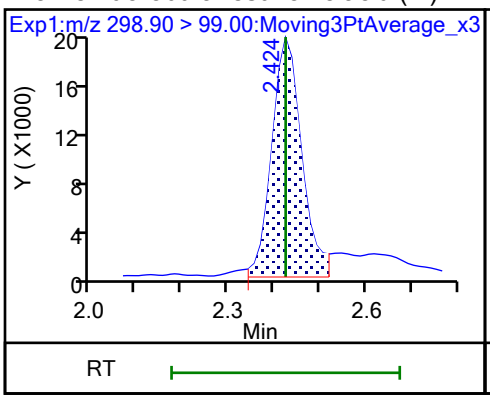
D 47 13C3 PFBS (M)



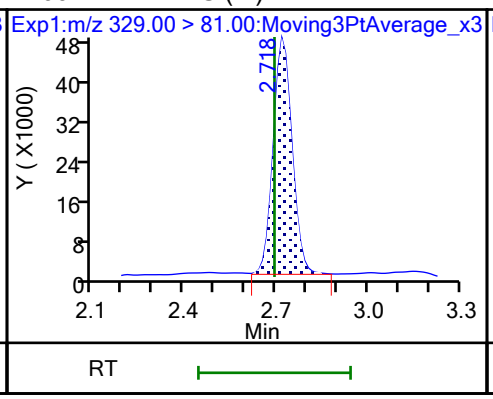
5 Perfluorobutanesulfonic acid (M)



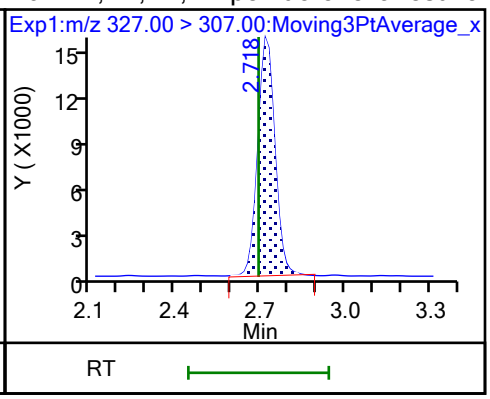
5 Perfluorobutanesulfonic acid (M)



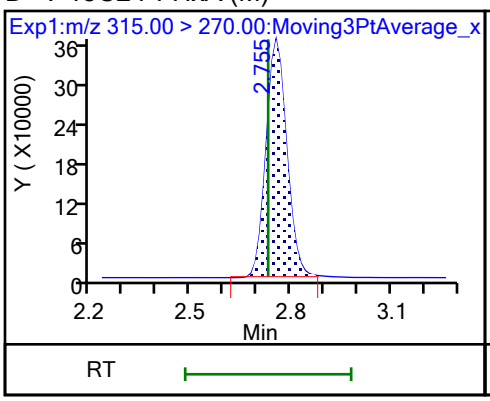
D 60 M2-4:2 FTS (M)



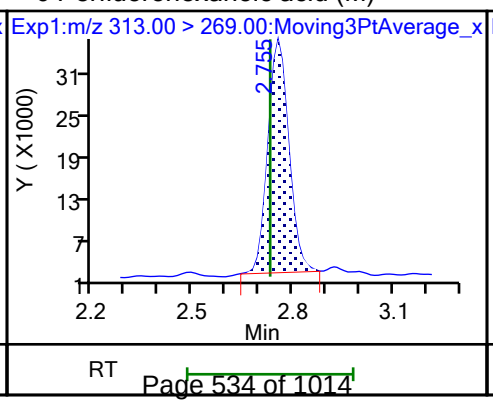
61 1H,1H,2H,2H-perfluorohexanesulfo



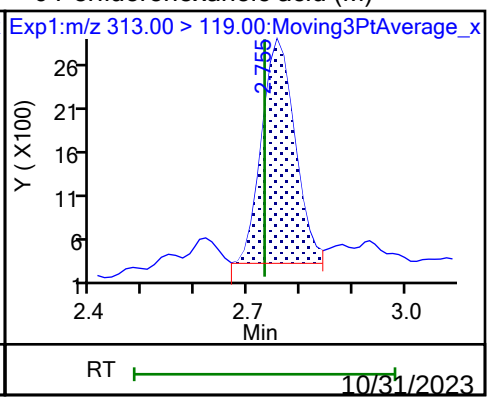
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

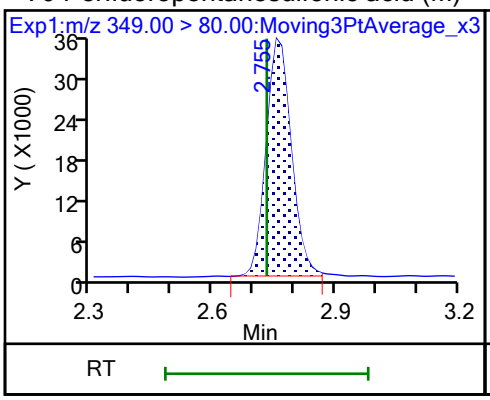


6 Perfluorohexanoic acid (M)

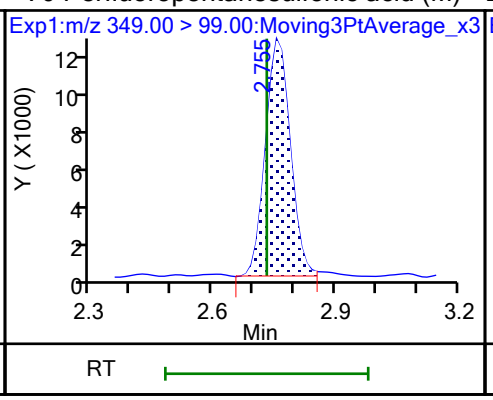


10/31/2023
4:00 PM

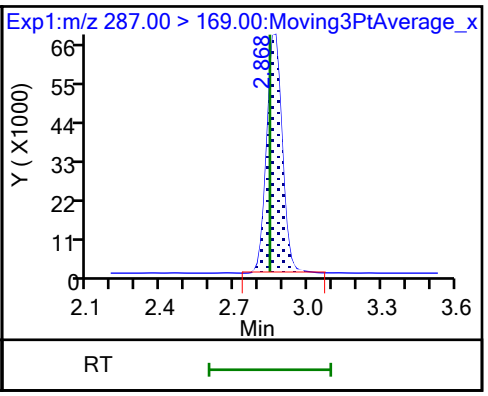
70 Perfluoropentanesulfonic acid (M)



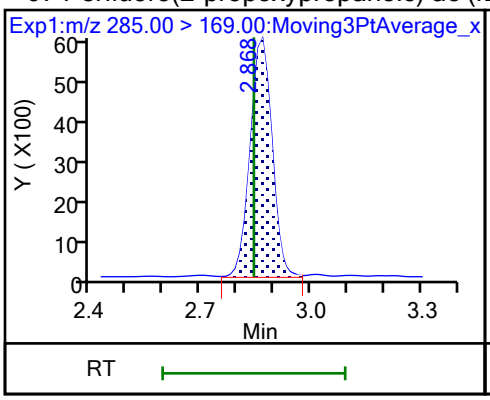
70 Perfluoropentanesulfonic acid (M)



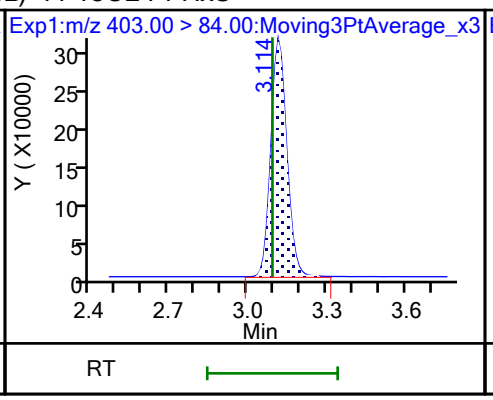
D 64 13C3 HFPO-DA



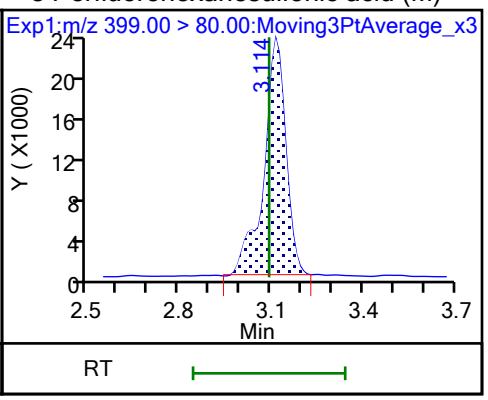
67 Perfluoro(2-propoxypropanoic) ac (M)



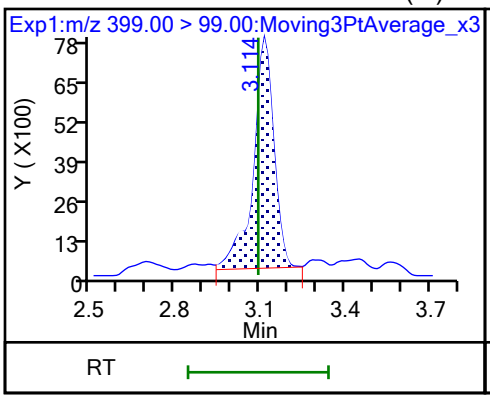
D 11 18O2 PFHxS



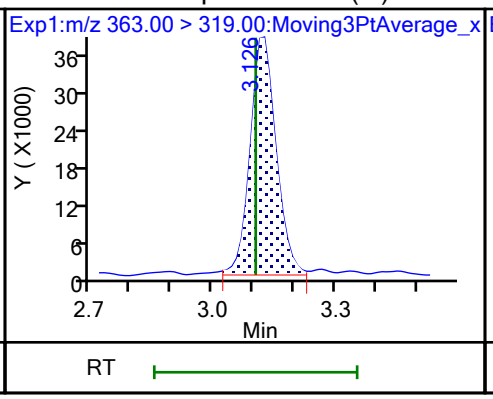
8 Perfluorohexanesulfonic acid (M)



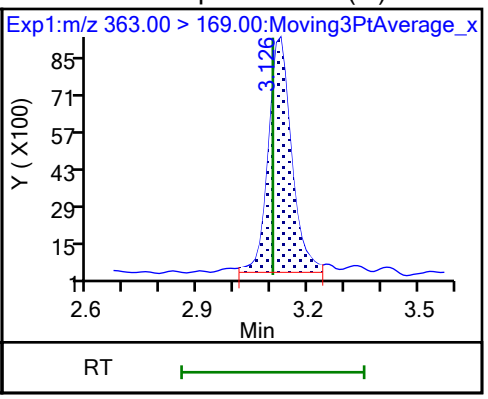
8 Perfluorohexanesulfonic acid (M)



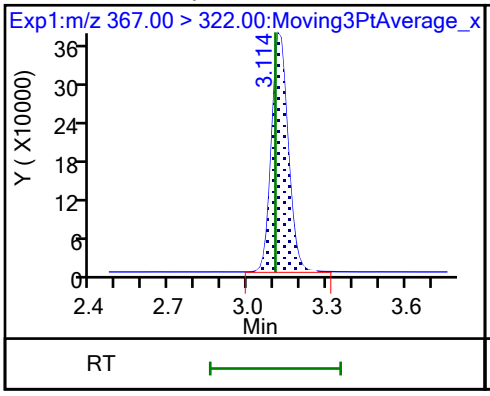
10 Perfluoroheptanoic acid (M)



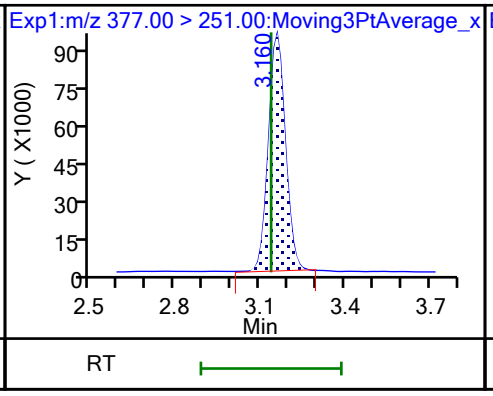
10 Perfluoroheptanoic acid (M)



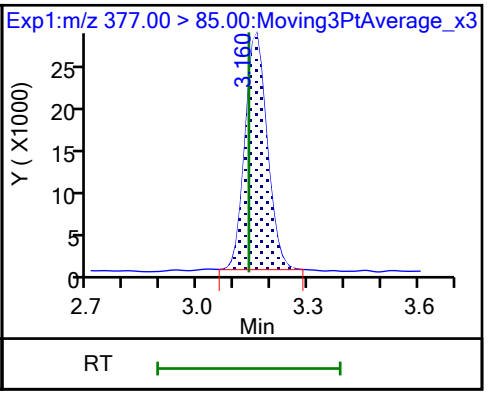
D 9 13C4 PFHpA



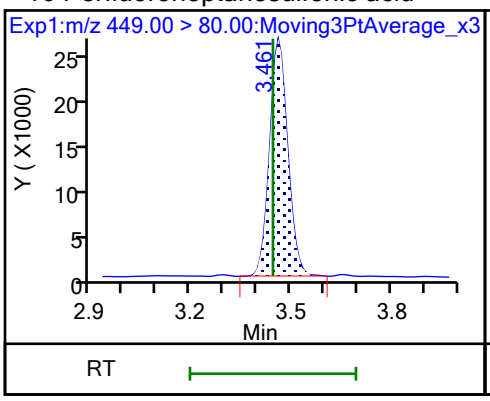
77 DONA



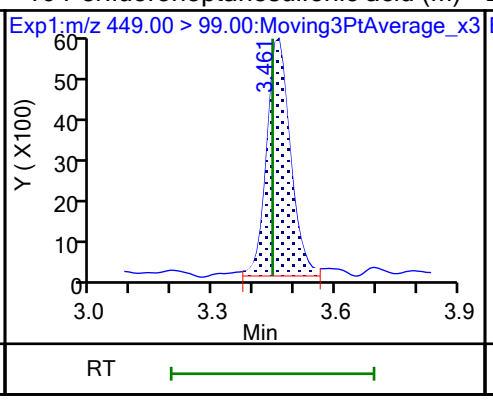
77 DONA



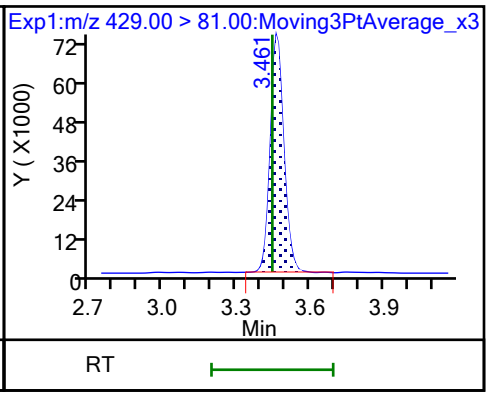
16 Perfluoroheptanesulfonic acid



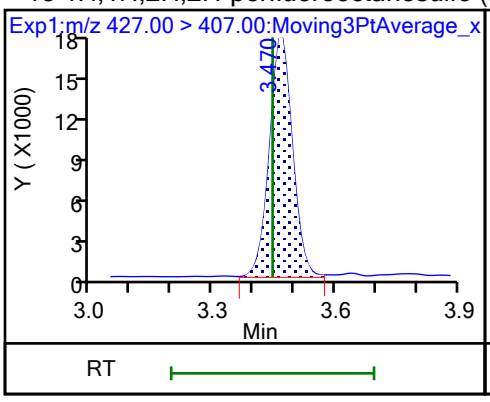
16 Perfluoroheptanesulfonic acid (M)



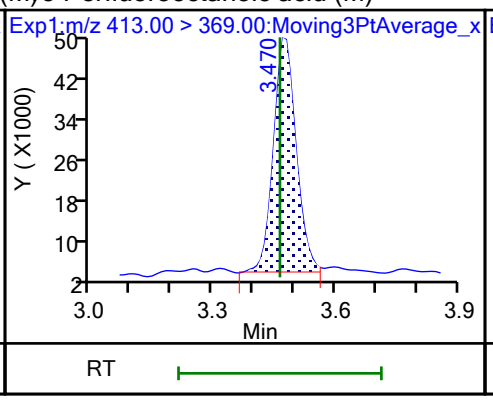
D 12 M2-6:2 FTS



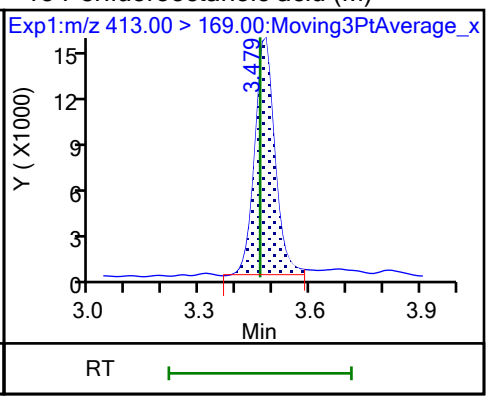
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



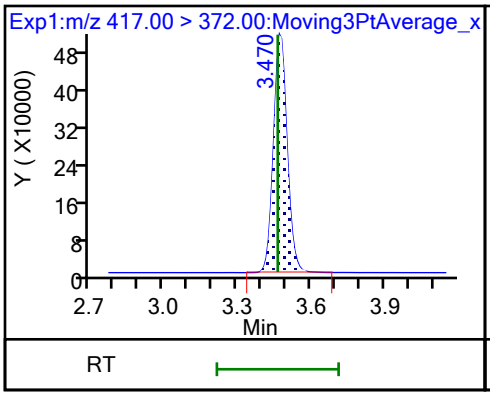
15 Perfluorooctanoic acid (M)



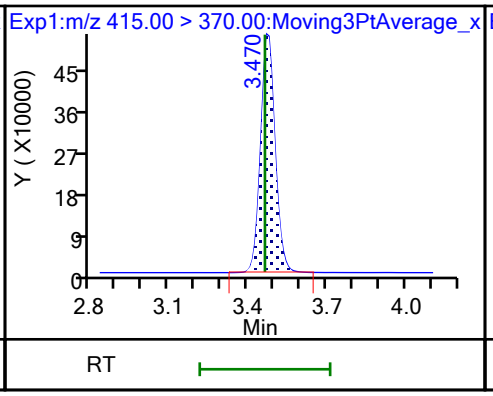
15 Perfluorooctanoic acid (M)



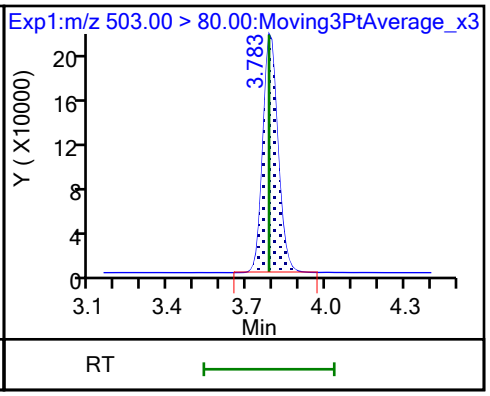
D 14 13C4 PFOA



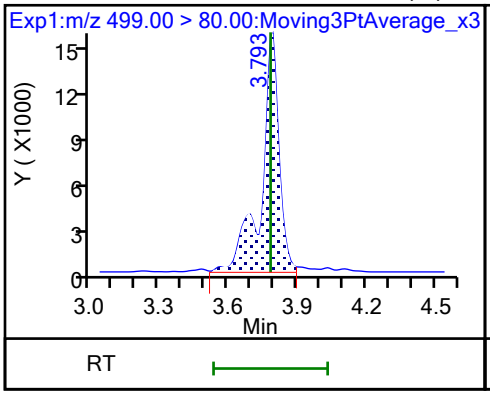
* 62 13C2 PFOA



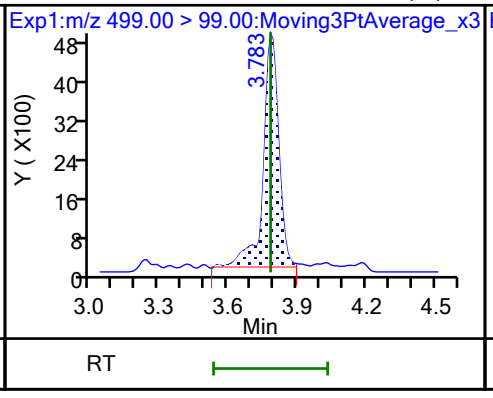
D 18 13C4 PFOS



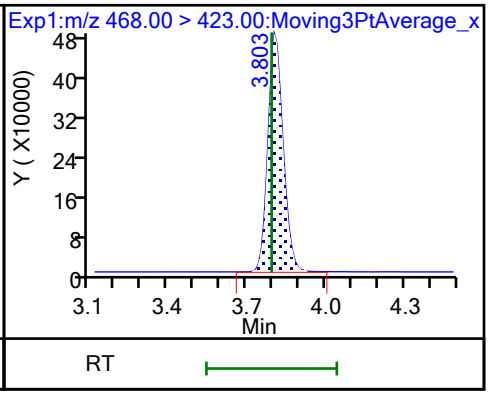
17 Perfluorooctanesulfonic acid (M)



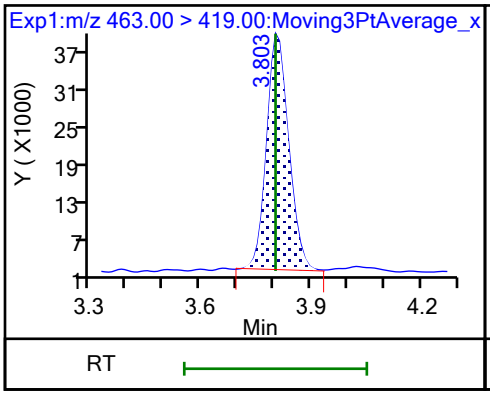
17 Perfluorooctanesulfonic acid (M)



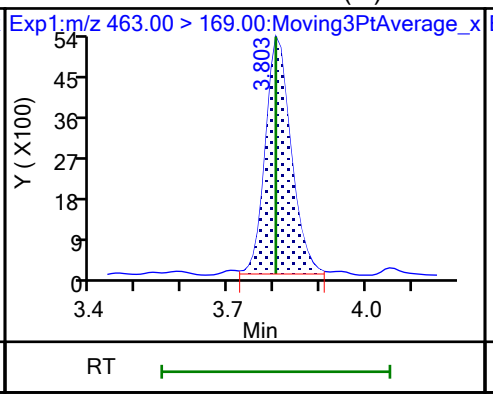
D 19 13C5 PFNA



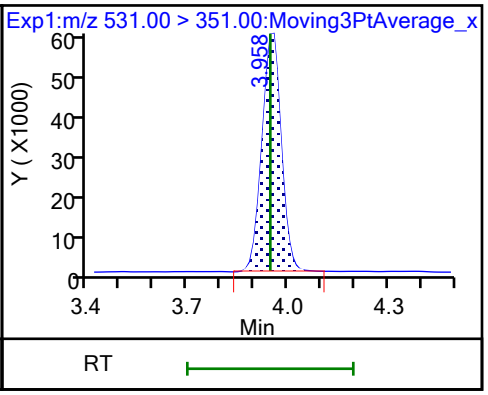
20 Perfluorononanoic acid



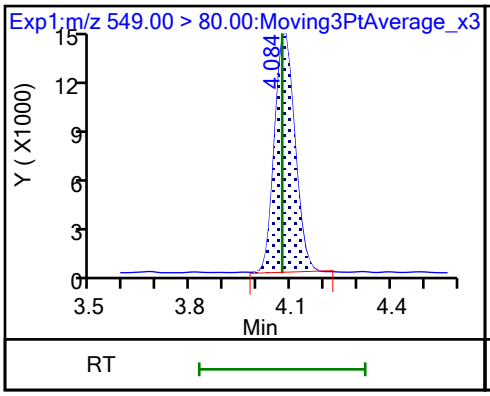
20 Perfluorononanoic acid (M)



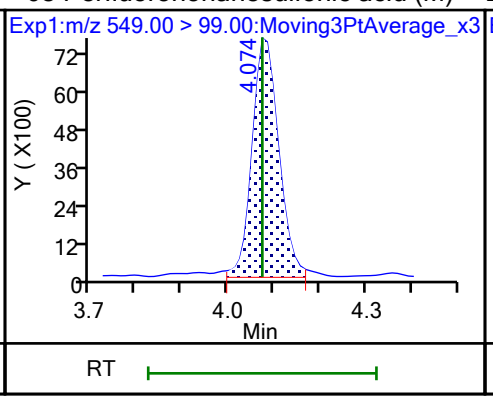
69 9-Chlorohexadecafluoro-3-oxanona



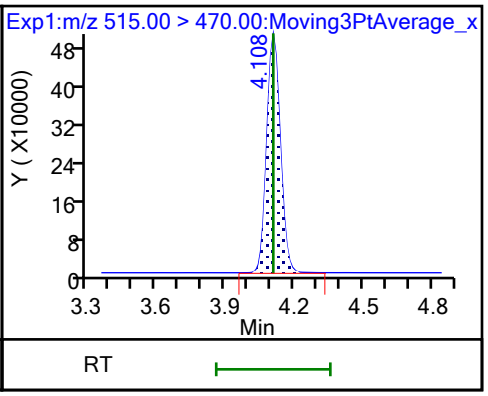
68 Perfluorononanesulfonic acid



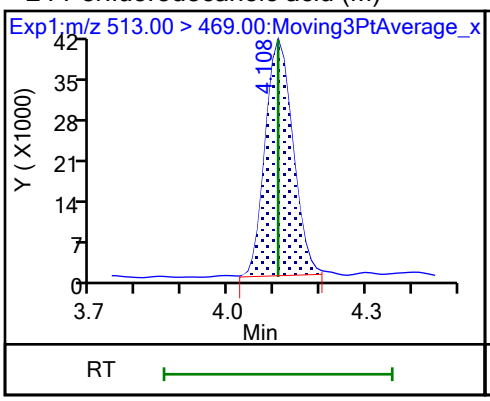
68 Perfluorononanesulfonic acid (M)



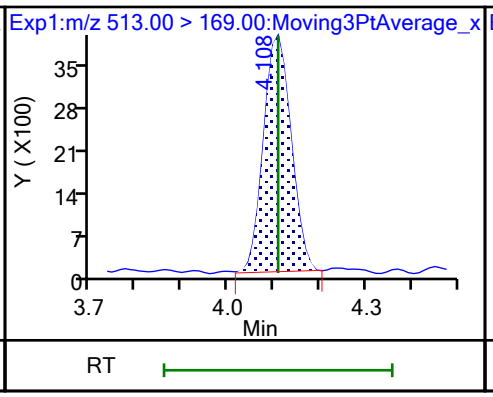
D 23 13C2 PFDA



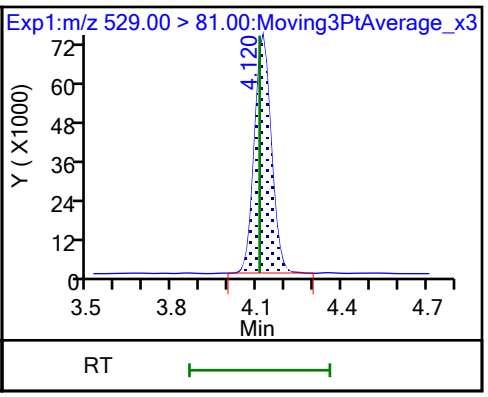
24 Perfluorodecanoic acid (M)



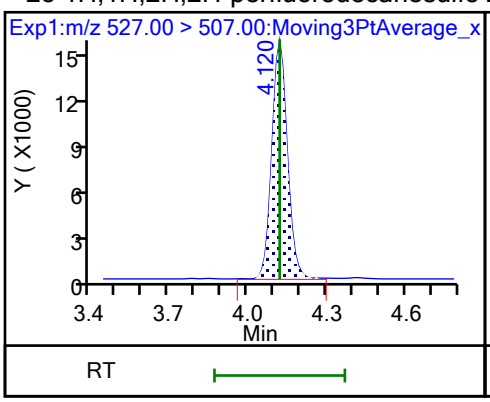
24 Perfluorodecanoic acid



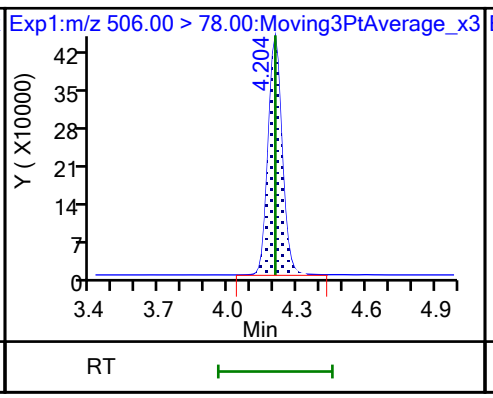
D 26 M2-8:2 FTS



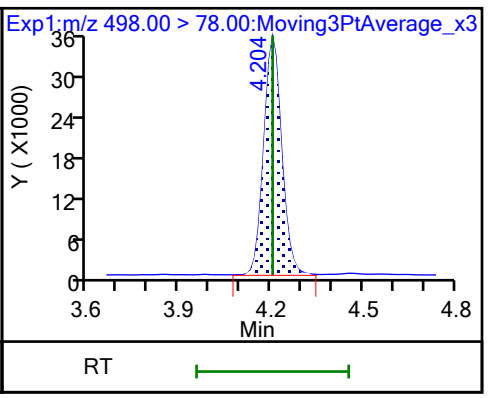
25 1H,1H,2H,2H-perfluorodecanesulfo



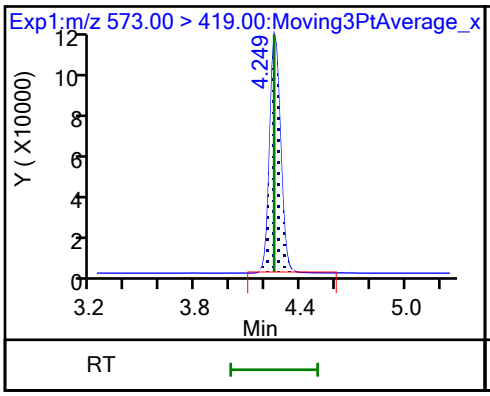
D 21 13C8 FOSA



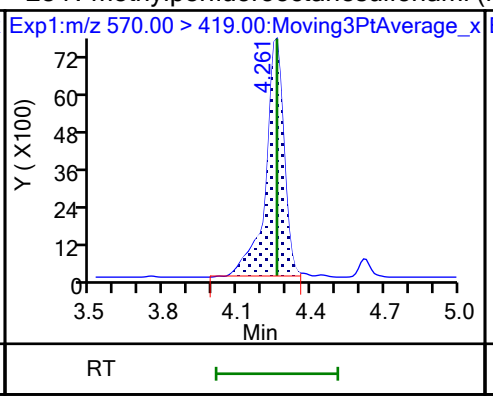
22 Perfluorooctanesulfonamide



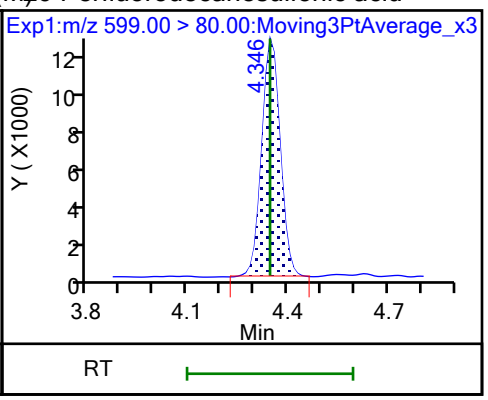
D 27 d3-NMeFOSAA



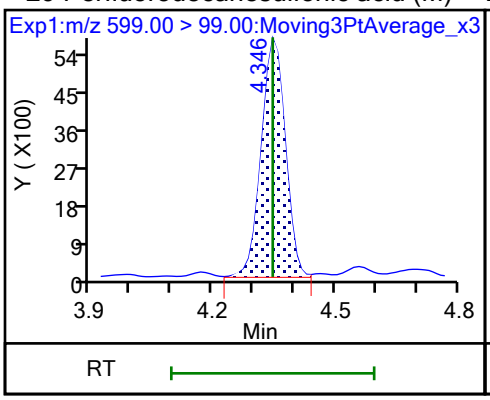
28 N-methylperfluorooctanesulfonami (M)



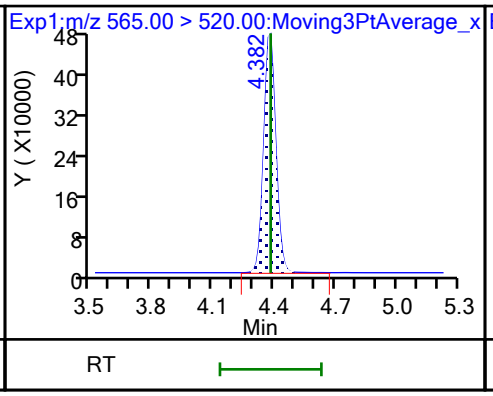
29 Perfluorodecanesulfonic acid



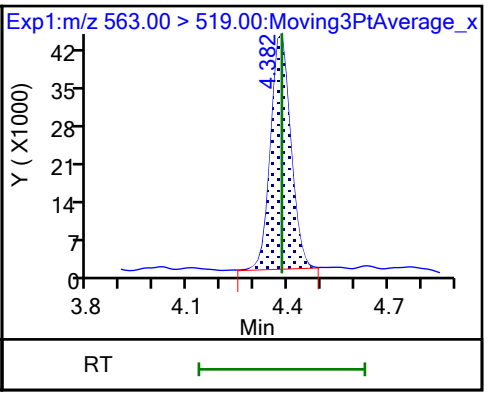
29 Perfluorodecanesulfonic acid (M)



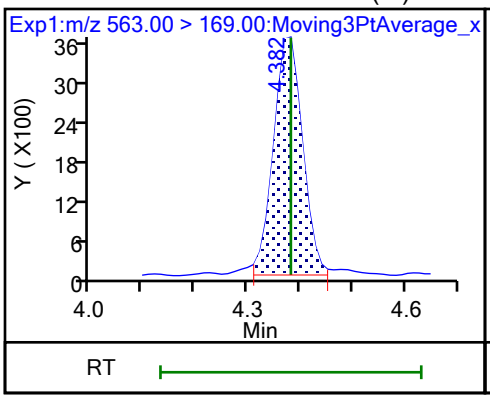
D 30 13C2 PFUnA



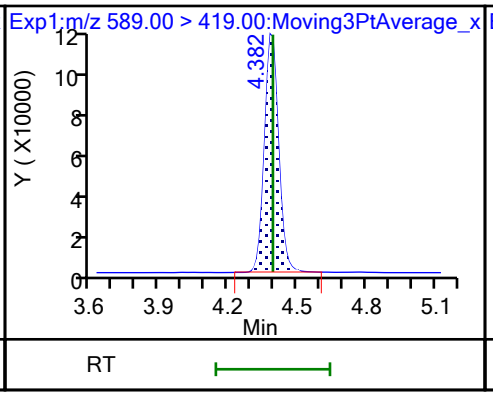
31 Perfluoroundecanoic acid



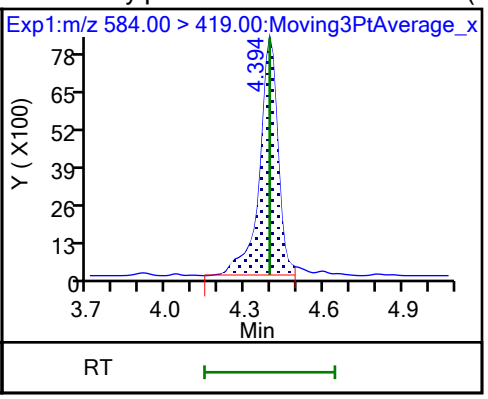
31 Perfluoroundecanoic acid (M)



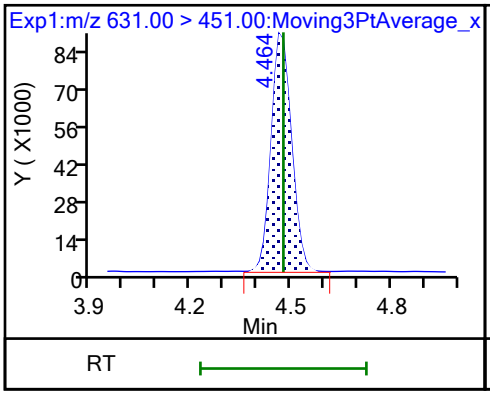
D 32 d5-NEtFOSAA



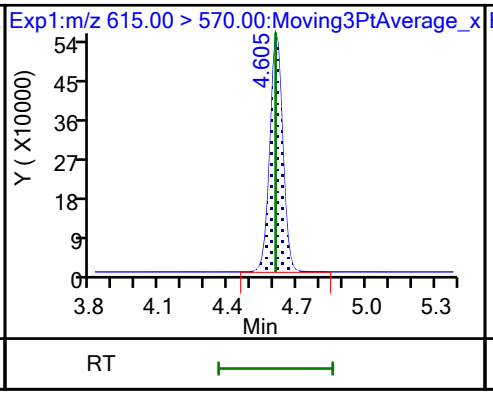
33 N-ethylperfluorooctanesulfonamid (M)



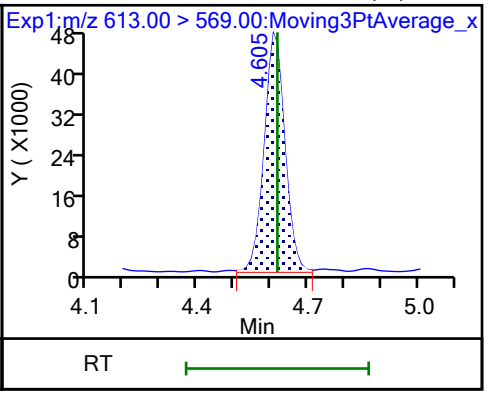
66 11-Chloroeicosafluoro-3-oxaundec



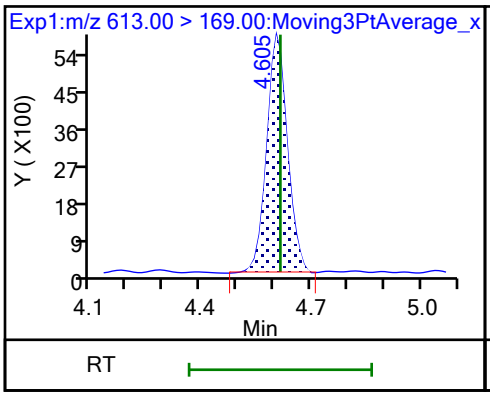
D 36 13C2 PFDoA



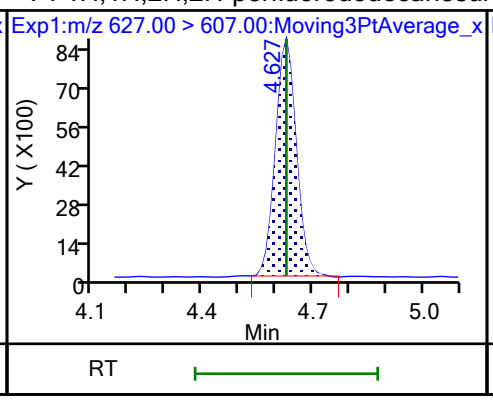
37 Perfluorododecanoic acid (M)



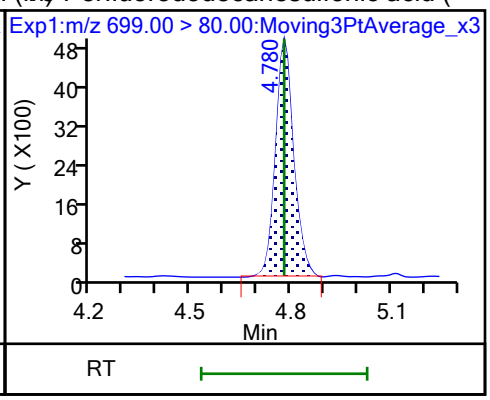
37 Perfluorododecanoic acid



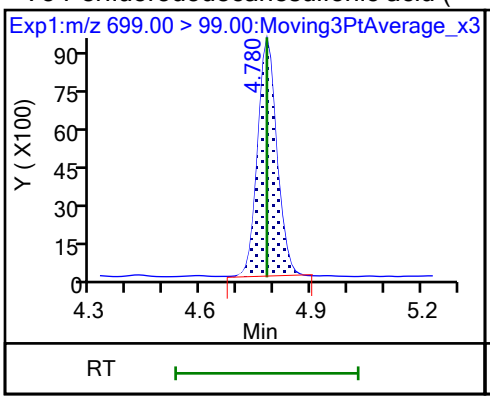
74 1H,1H,2H,2H-perfluorododecanesul (M)



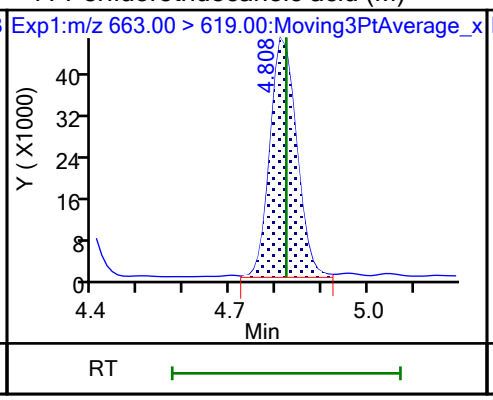
75 Perfluorododecanesulfonic acid (



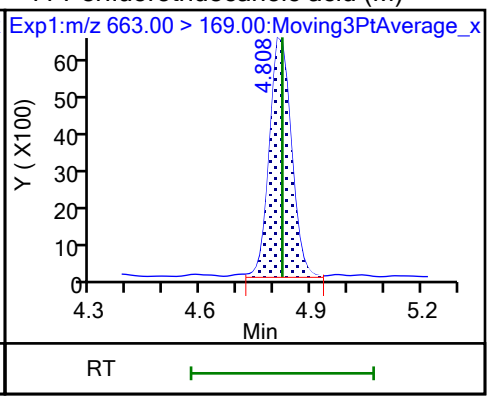
75 Perfluorododecanesulfonic acid (



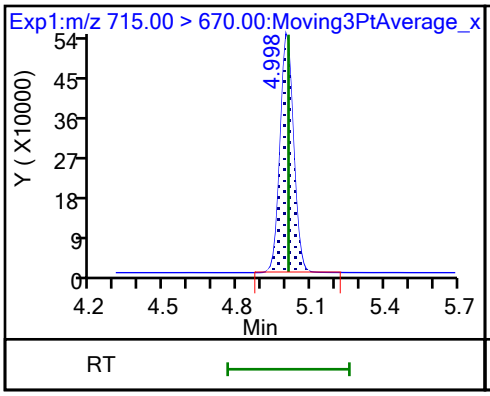
41 Perfluorotridecanoic acid (M)



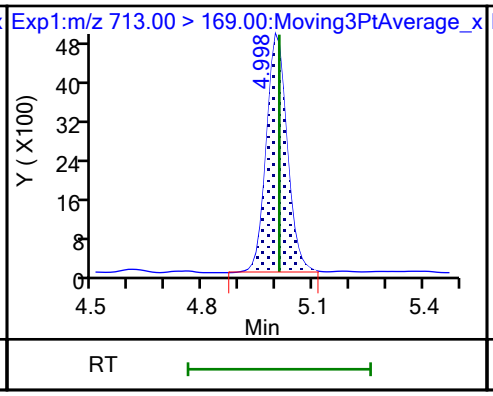
41 Perfluorotridecanoic acid (M)



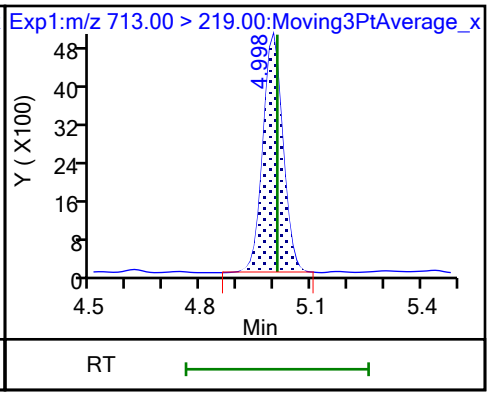
D 43 13C2 PFTeDA



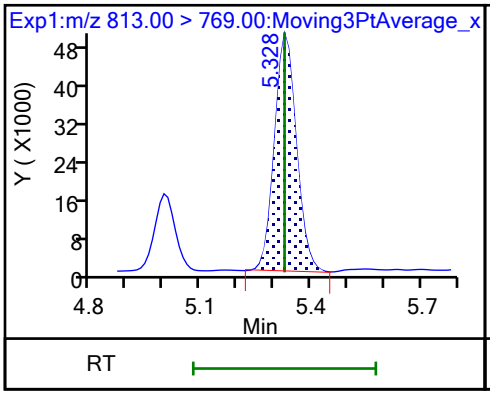
42 Perfluorotetradecanoic acid



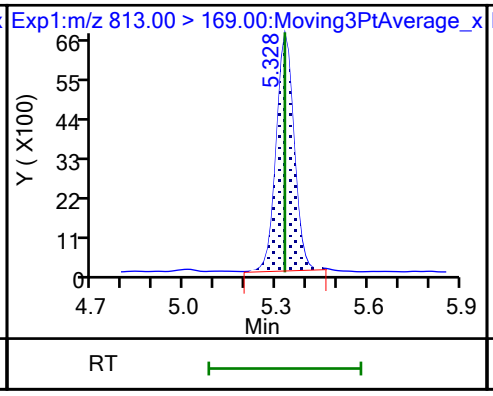
42 Perfluorotetradecanoic acid



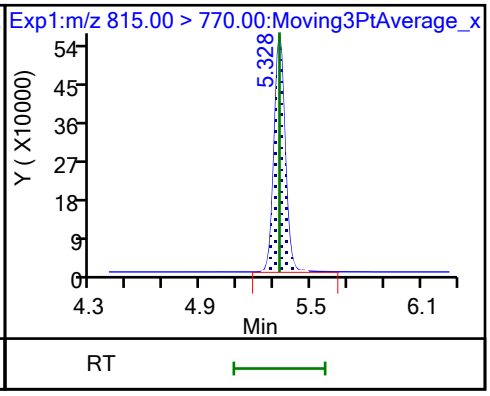
45 Perfluorohexadecanoic acid



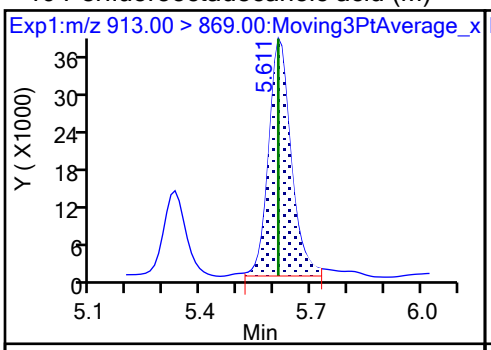
45 Perfluorohexadecanoic acid



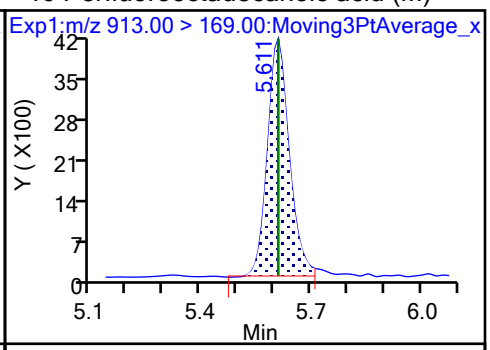
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Jul-2023 17:33:10 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 200-0056441-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:49 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:49:59
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.602	1916527	1.22		97.6	1037	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	774804	0.5180		104	49.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.693	1507442	1.24		98.9	854	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	651716	0.5008		100	28.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.697	1758991	1.07		91.7	56488	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	790713	0.4679	Target=2.07	105	143	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	376898		2.10(1.04-3.11)	105	75.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.781	215257	1.13		96.6	77.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	288946	0.4615		98.5	883	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.755	2.731	0.024	0.792	1472867	1.19		95.0	3850	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	672203	0.5184	Target=14.29	104	87.4	
313.00 > 119.00	2.755	2.731	0.024	1.000	43102		15.60(7.15-21.44)	104	30.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	694967	0.4648	Target=2.78	98.8	1051	
349.00 > 99.00	2.755	2.731	0.024	0.885	242262		2.87(1.39-4.17)	98.8	272	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.824	279126	1.16		93.0	2331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	0.996	115257	0.5155		103	712	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.895	1353967	1.14		96.8	3822	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	555092	0.4379	Target=3.23	95.8	787	M
399.00 > 99.00	3.114	3.092	0.022	1.000	169403		3.28(1.62-4.84)	95.8	113	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.126	3.104	0.022	1.004	705383	0.4702	Target=4.11	94.0	148	
363.00 > 169.00	3.114	3.104	0.010	1.000	172971		4.08(2.06-6.17)	94.0	135	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.895	1672833	1.23		98.3	4178	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	1973200	0.4642	Target=3.28	98.2	2579	
377.00 > 85.00	3.160	3.138	0.022	0.835	597494		3.30(1.64-4.92)	98.2	814	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.461	3.446	0.015	0.915	497245	0.4658	Target=4.71	97.7	1145	
449.00 > 99.00	3.461	3.446	0.015	0.915	101764		4.89(2.36-7.07)	97.7	193	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.995	274798	1.12		94.2	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	310157	0.4904		103	795	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.479	3.464	0.015	1.003	801060	0.4915	Target=2.90	98.3	61.0	
413.00 > 169.00	3.479	3.464	0.015	1.003	274444		2.92(1.45-4.35)	98.3	334	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	0.997	1912820	1.24		99.2	5100	
* 62 13C2 PFOA										
415.00 > 370.00	3.479	3.464	0.015		1980756	1.25			7103	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.087	882764	1.17		98.3	3627	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	384806	0.4466	Target=4.11	96.2	673	M
499.00 > 99.00	3.793	3.783	0.010	1.003	97181		3.96(2.05-6.16)	96.2	140	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.093	2008931	1.20		95.8	5719	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	802848	0.5097	Target=8.48	102	153	
463.00 > 169.00	3.803	3.803	0.0	1.000	92789		8.65(4.24-12.72)	102	535	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	1237458	0.4693		101	2329	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.080	312103	0.4761	Target=2.17	99.0	1622	
549.00 > 99.00	4.084	4.074	0.010	1.080	140337		2.22(1.08-3.25)	99.0	373	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.181	2062234	1.17		93.9	9314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	869526	0.5274	Target=10.55	105	223	
513.00 > 169.00	4.108	4.108	0.0	1.000	81818		10.63(5.27-15.82)	105	203	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.184	298552	1.08		90.2	633	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	270156	0.4922		103	2104	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.208	1790735	1.19		95.5	3553	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	680067	0.4977		99.5	1708	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.248	4.249	-0.001	1.221	486461	1.16		92.7	1692	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.248	4.260	-0.012	1.000	177278	0.5020		100	343	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	234996	0.4658	Target=2.28	96.5	994	
599.00 > 99.00	4.346	4.346	0.0	1.149	102960		2.28(1.14-3.42)	96.5	384	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.382	-0.001	1.259	1983358	1.20		95.7	15111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.382	-0.001	1.000	818335	0.5004	Target=11.30	100	237	
563.00 > 169.00	4.381	4.382	-0.001	1.000	76353		10.72(5.65-16.96)	100	564	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.381	4.393	-0.012	1.259	491633	1.22		97.3	1018	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.003	187350	0.4763		95.3	408	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	1894487	0.4685		99.4	2418	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.324	2022512	1.20		96.0	6242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	852163	0.5175	Target=8.15	103	86.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	100190		8.51(4.07-12.22)	103	964	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	158460	0.4830		100	1667	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	82920	0.4849	Target=0.50	100	1359	
699.00 > 99.00	4.779	4.779	0.0	1.263	159027		0.52(0.25-0.75)	100	1291	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	907955	0.5245	Target=6.61	105	105	
663.00 > 169.00	4.808	4.822	-0.014	1.044	136886		6.63(3.31-9.92)	105	771	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.994	5.008	-0.014	1.435	1996289	1.19		95.1	6980	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.994	5.008	-0.014	1.000	88102	0.4934	Target=0.96	98.7	1397	
713.00 > 219.00	4.994	5.008	-0.014	1.000	92762		0.95(0.48-1.44)	98.7	896	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.326	5.328	-0.002	1.000	900190	0.4873	Target=7.69	97.5	97.8	
813.00 > 169.00	5.326	5.328	-0.002	1.000	120909		7.45(3.85-11.54)	97.5	1116	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.326	5.328	-0.002	1.531	2309121	1.19		95.5	3874	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.609	5.611	-0.002	1.053	726427	0.5036	Target=9.13	101	95.3	M
913.00 > 169.00	5.600	5.611	-0.011	1.051	78986		9.20(4.56-13.69)	101	265	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

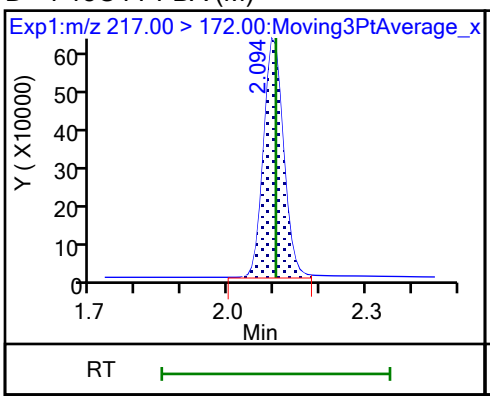
PFAS32NCIC3_00016 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:50 Chrom Revision: 2.3 19-Jul-2023 18:28:48

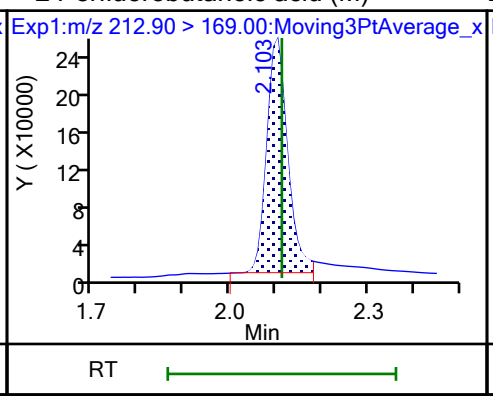
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Injection Date: 26-Jul-2023 17:33:10 Instrument ID: LC812
Lims ID: IC 3
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

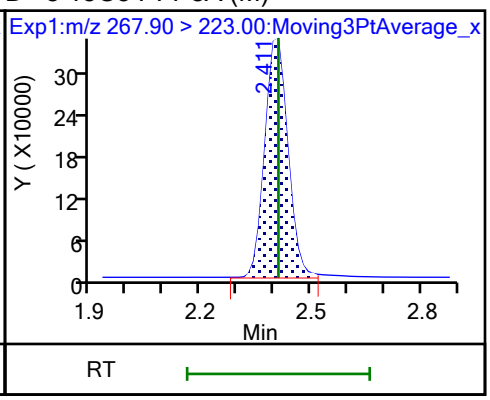
D 1 13C4 PFBA (M)



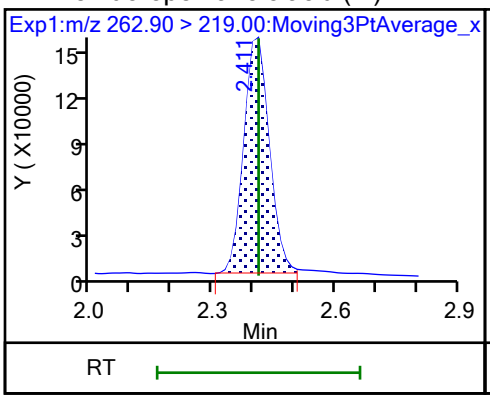
2 Perfluorobutanoic acid (M)



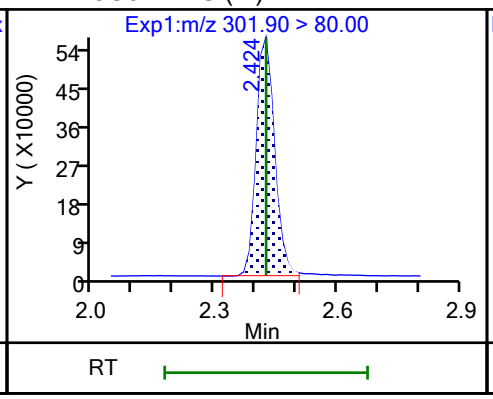
D 3 13C5 PFPeA (M)



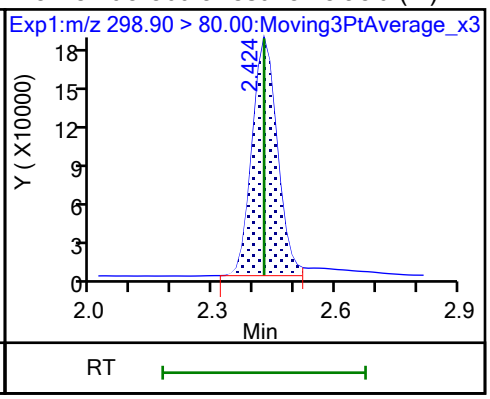
4 Perfluoropentanoic acid (M)



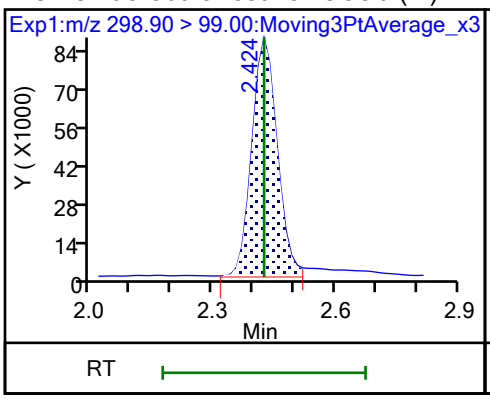
D 47 13C3 PFBS (M)



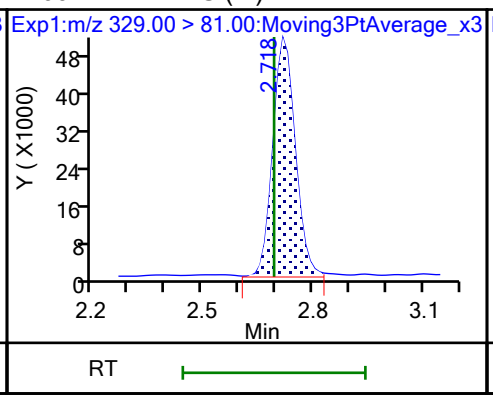
5 Perfluorobutanesulfonic acid (M)



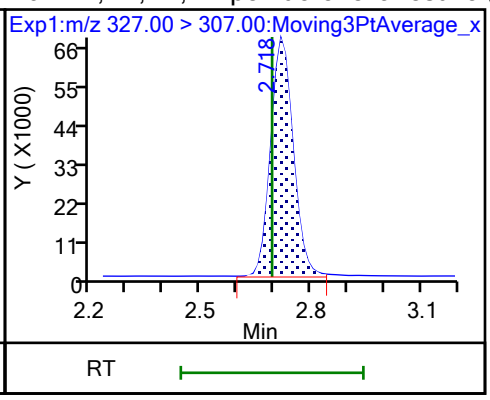
5 Perfluorobutanesulfonic acid (M)



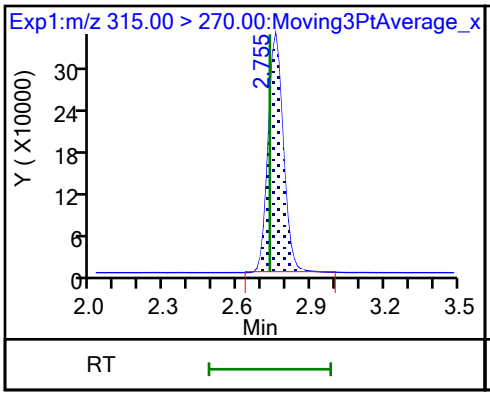
D 60 M2-4:2 FTS (M)



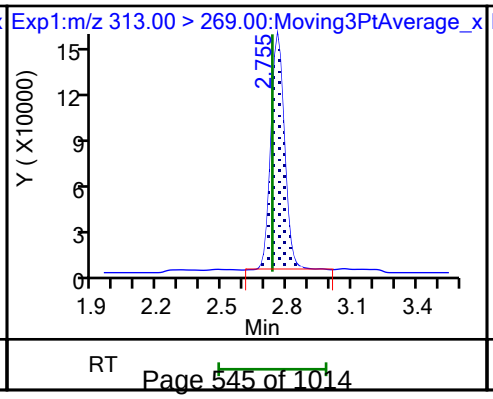
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



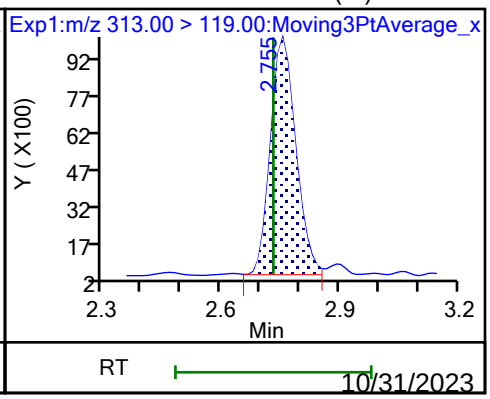
D 7 13C2 PFHxA



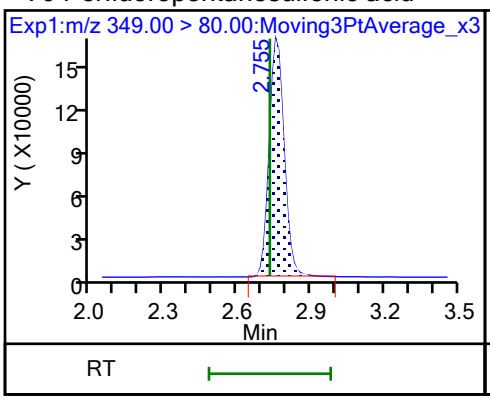
6 Perfluorohexanoic acid



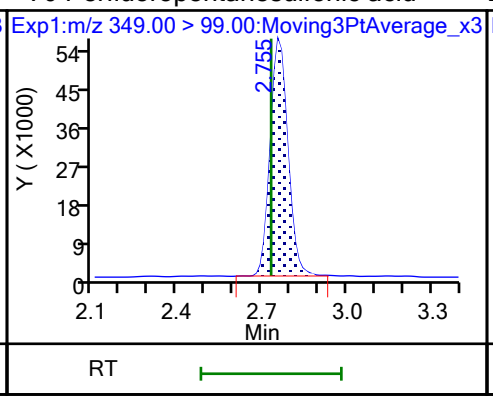
6 Perfluorohexanoic acid (M)



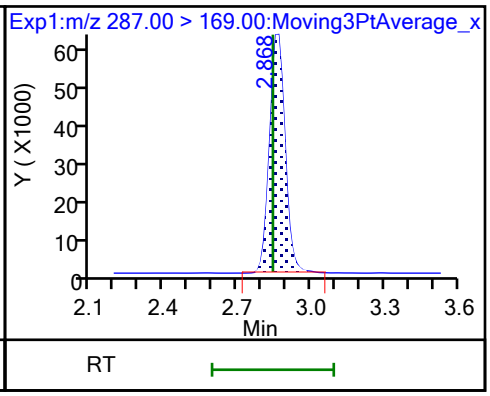
70 Perfluoropentanesulfonic acid



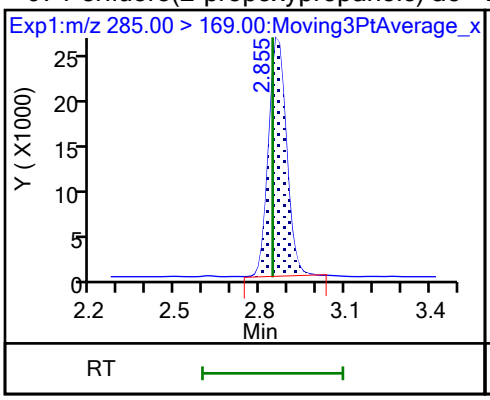
70 Perfluoropentanesulfonic acid



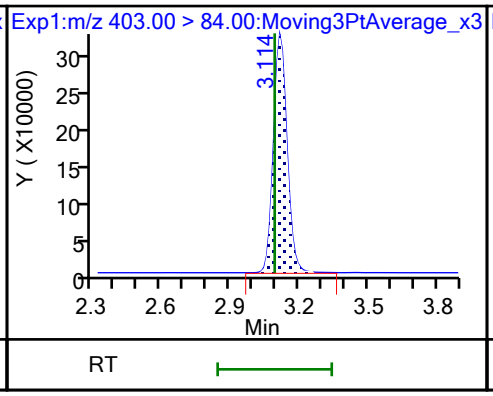
D 64 13C3 HFPO-DA



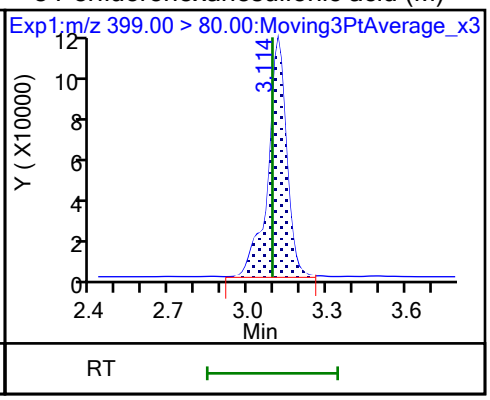
67 Perfluoro(2-propoxypropanoic) ac



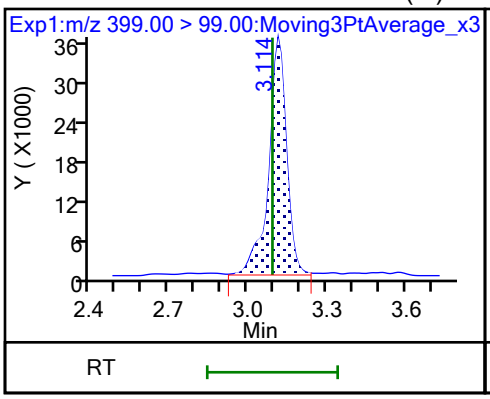
D 11 18O2 PFHxS



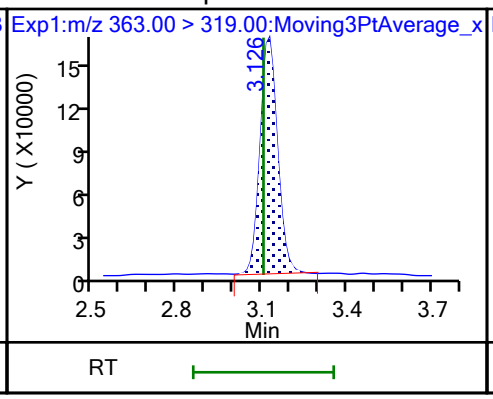
8 Perfluorohexanesulfonic acid (M)



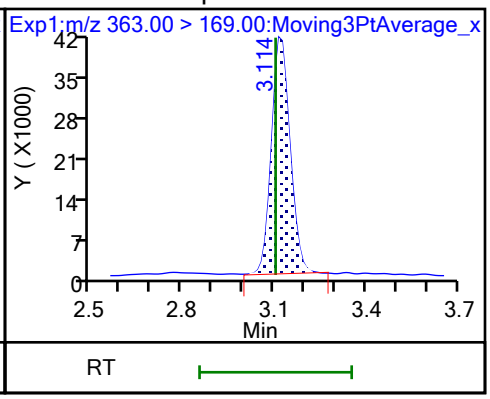
8 Perfluorohexanesulfonic acid (M)



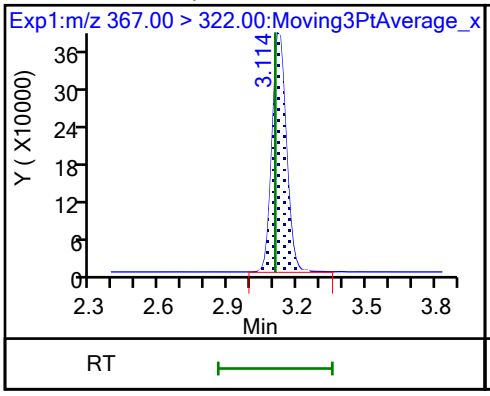
10 Perfluoroheptanoic acid



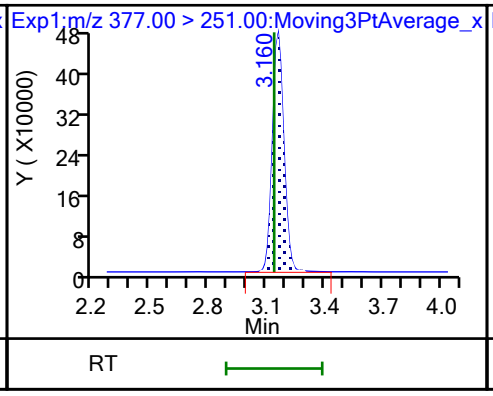
10 Perfluoroheptanoic acid



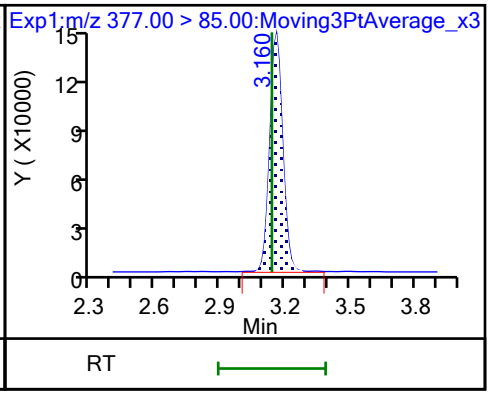
D 9 13C4 PFHpA



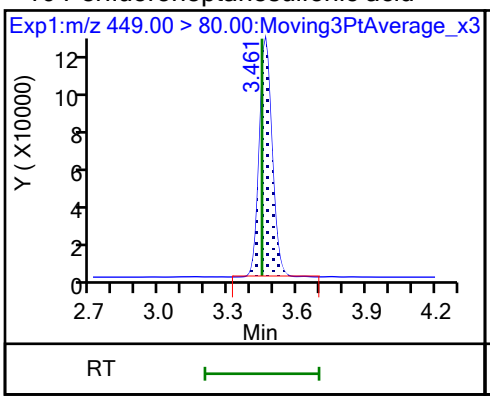
77 DONA



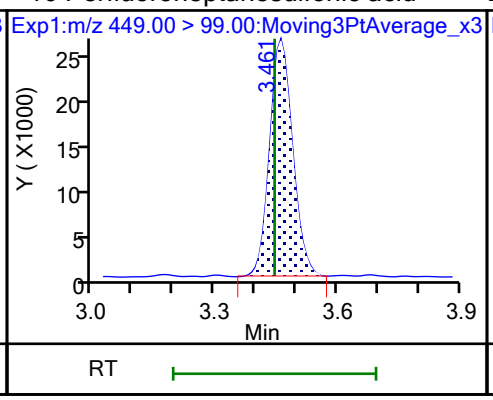
77 DONA



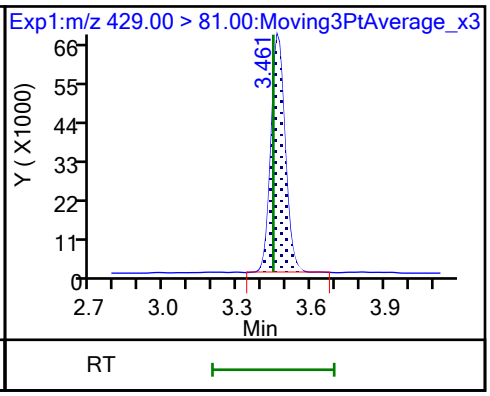
16 Perfluoroheptanesulfonic acid



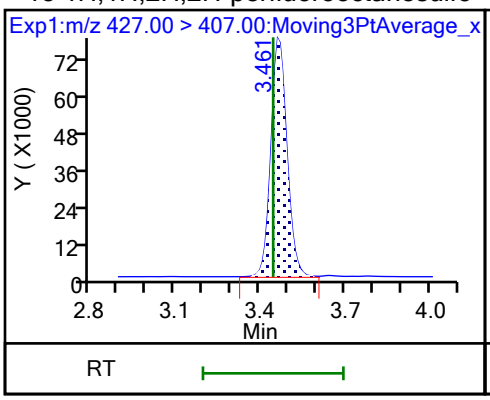
16 Perfluoroheptanesulfonic acid



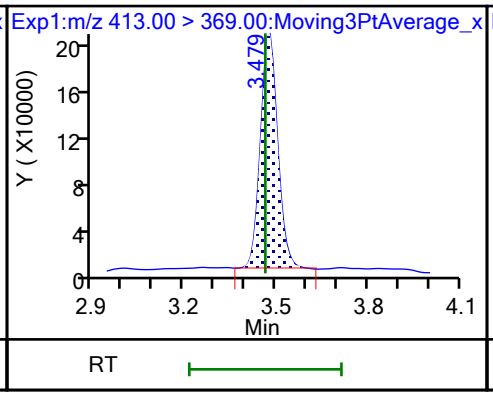
D 12 M2-6:2 FTS



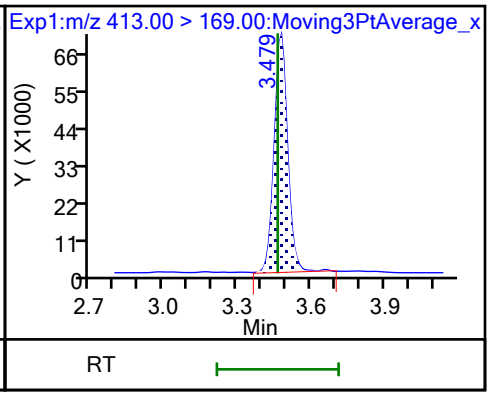
13 1H,1H,2H,2H-perfluorooctanesulfo



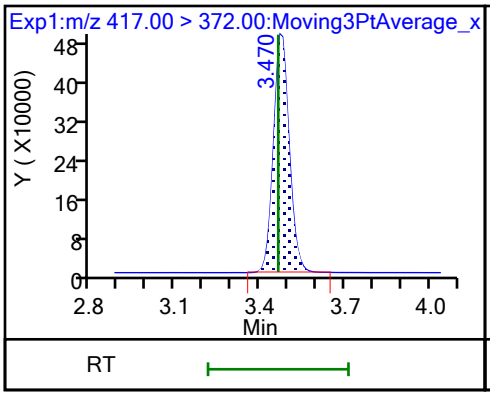
15 Perfluorooctanoic acid



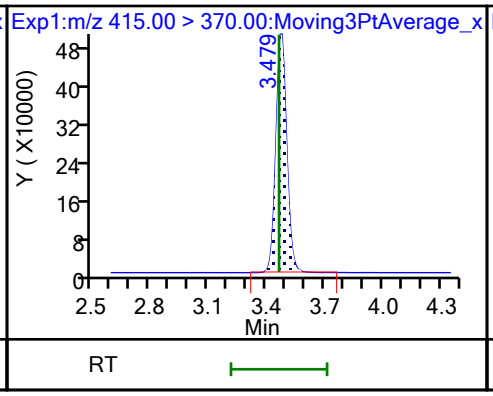
15 Perfluorooctanoic acid



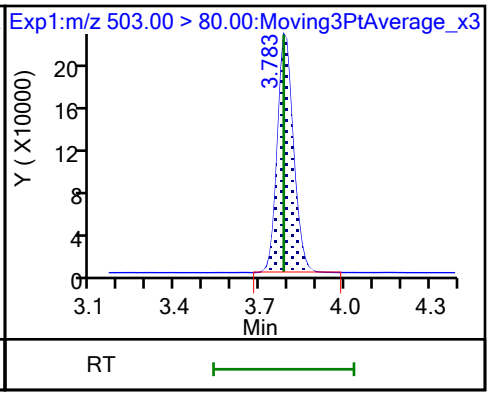
D 14 13C4 PFOA



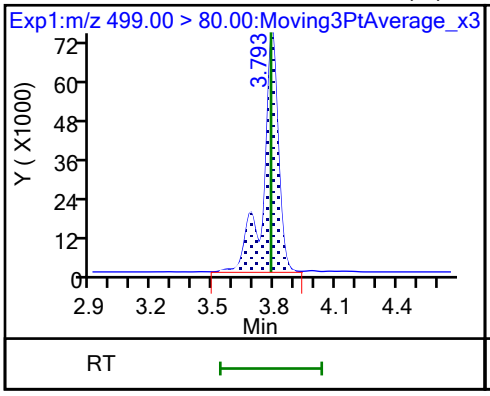
* 62 13C2 PFOA



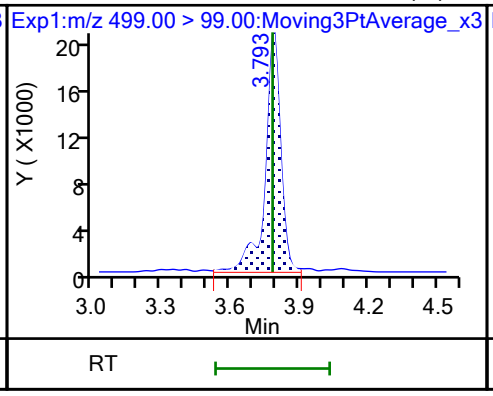
D 18 13C4 PFOS



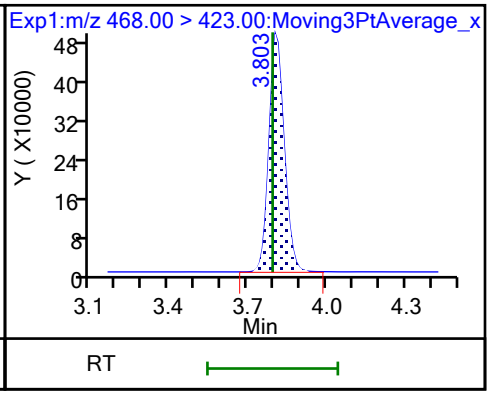
17 Perfluorooctanesulfonic acid (M)



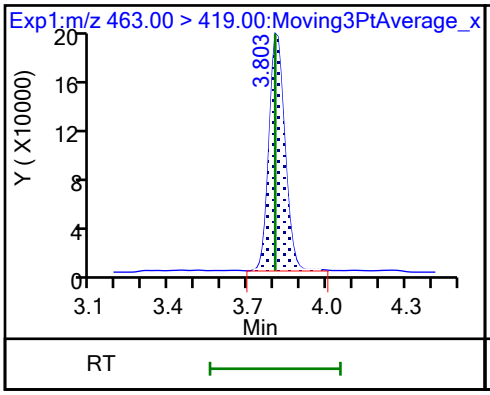
17 Perfluorooctanesulfonic acid (M)



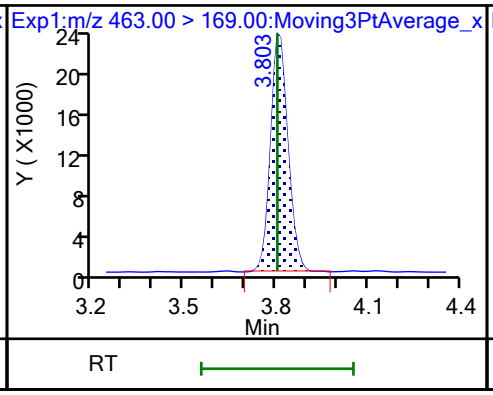
D 19 13C5 PFNA



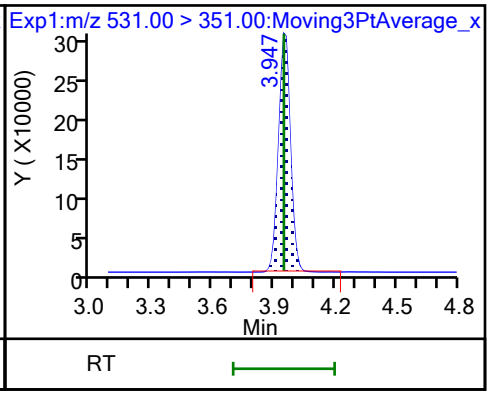
20 Perfluorononanoic acid



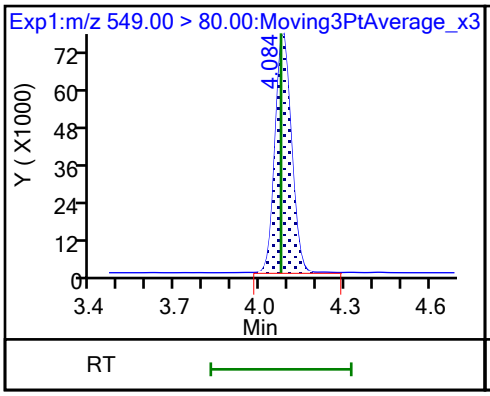
20 Perfluorononanoic acid



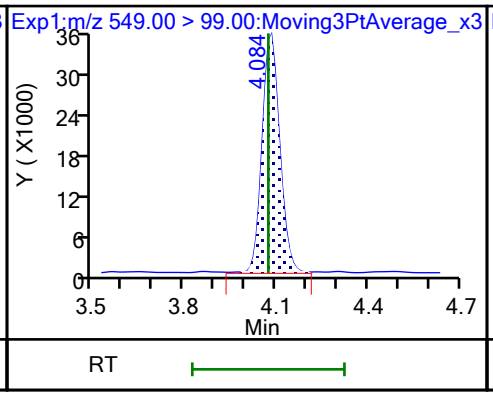
69 9-Chlorohexadecafluoro-3-oxanona



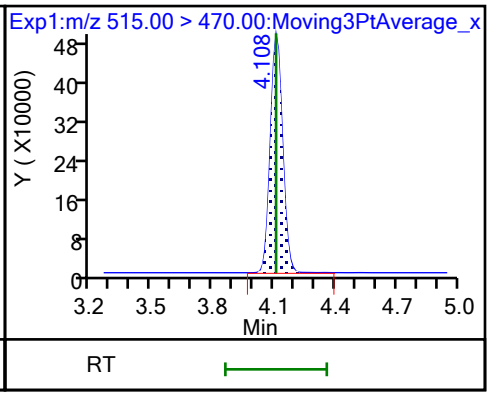
68 Perfluorononanesulfonic acid



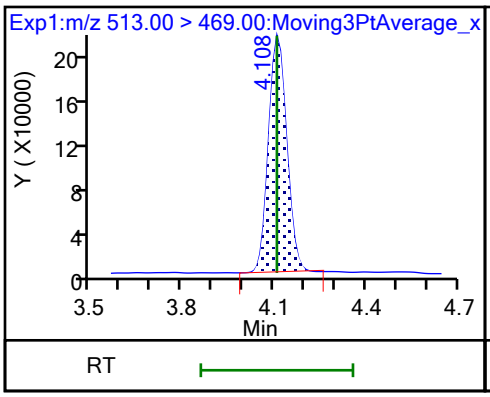
68 Perfluorononanesulfonic acid



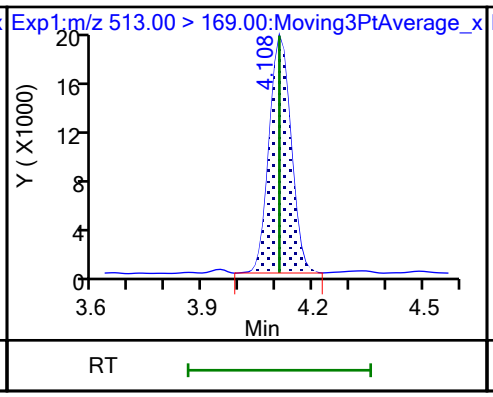
D 23 13C2 PFDA



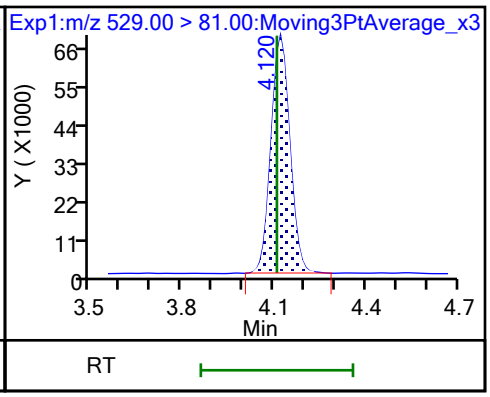
24 Perfluorodecanoic acid



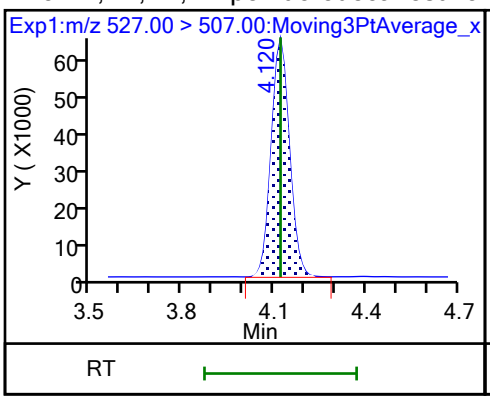
24 Perfluorodecanoic acid



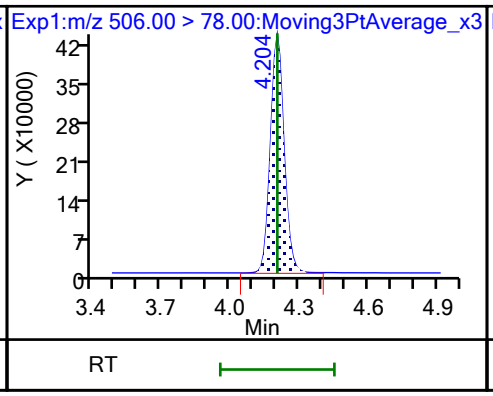
D 26 M2-8:2 FTS



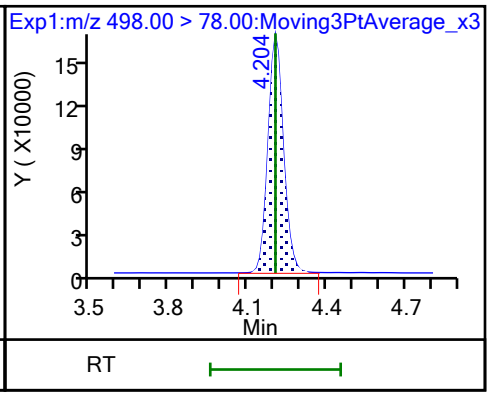
25 1H,1H,2H,2H-perfluorodecanesulfo



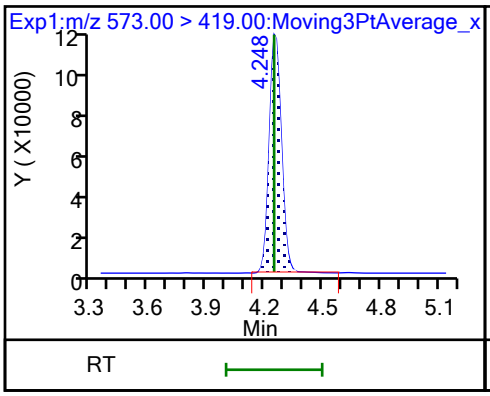
D 21 13C8 FOSA



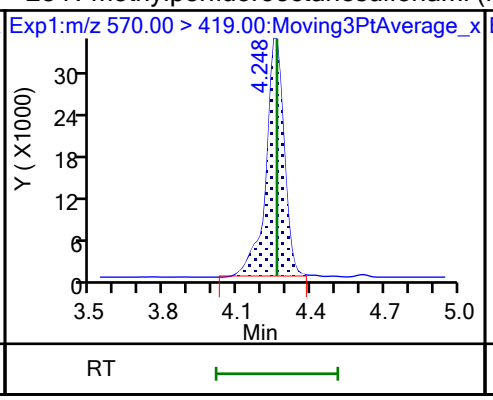
22 Perfluorooctanesulfonamide



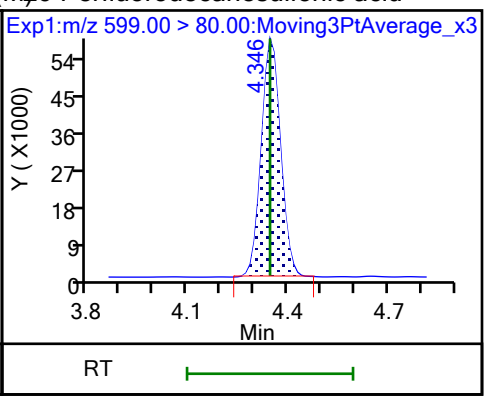
D 27 d3-NMeFOSAA



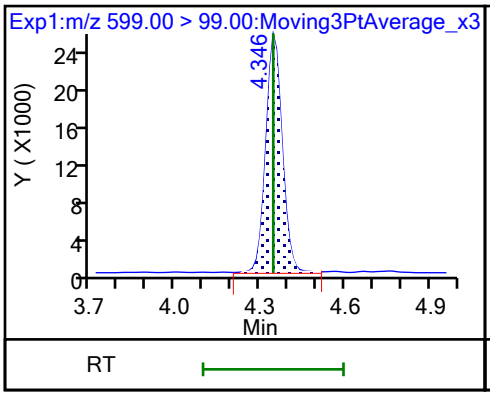
28 N-methylperfluorooctanesulfonami (M)



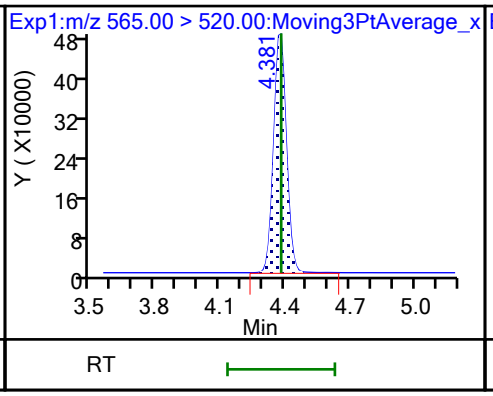
29 Perfluorodecanesulfonic acid



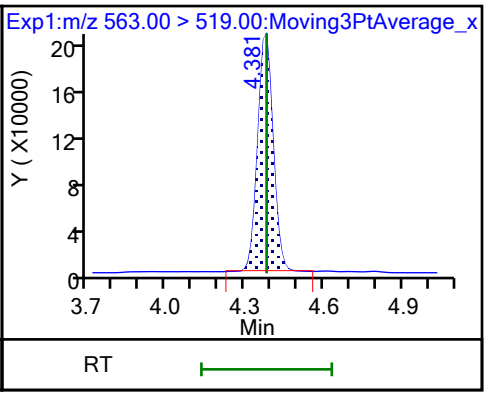
29 Perfluorodecanesulfonic acid



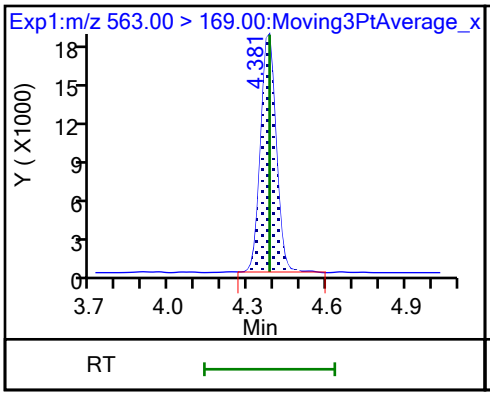
D 30 13C2 PFUnA



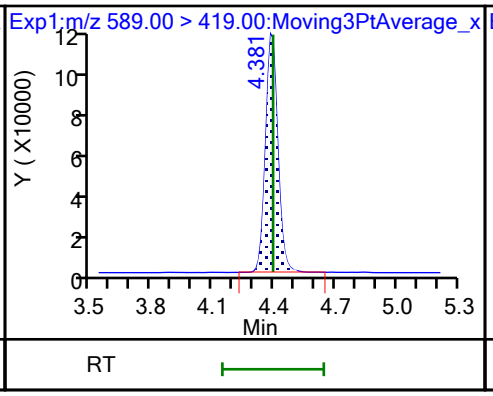
31 Perfluoroundecanoic acid



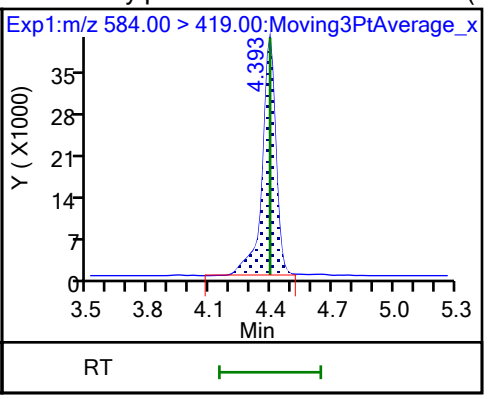
31 Perfluoroundecanoic acid



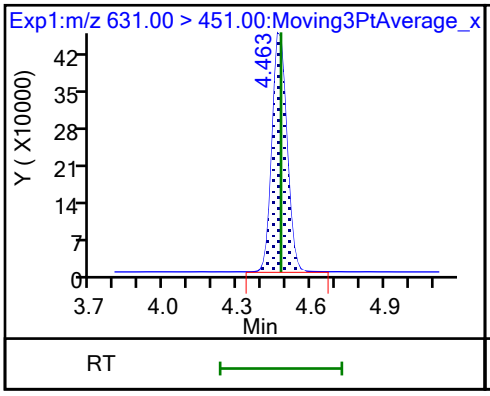
D 32 d5-NEtFOSAA



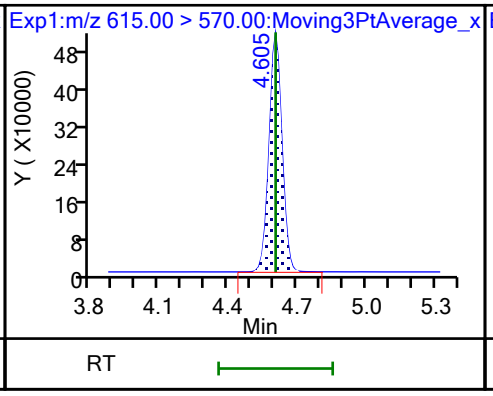
33 N-ethylperfluorooctanesulfonamid (M)



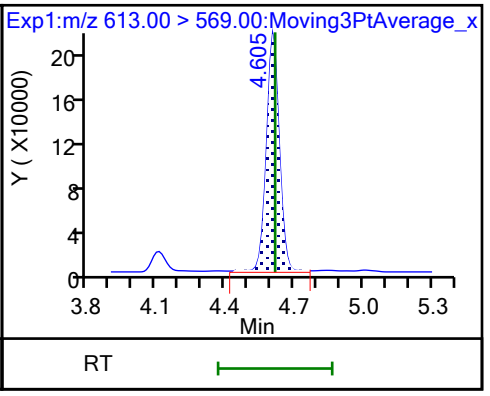
66 11-Chloroeicosafluoro-3-oxaundec



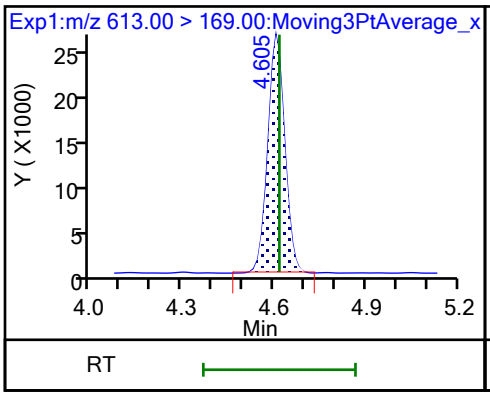
D 36 13C2 PFDoA



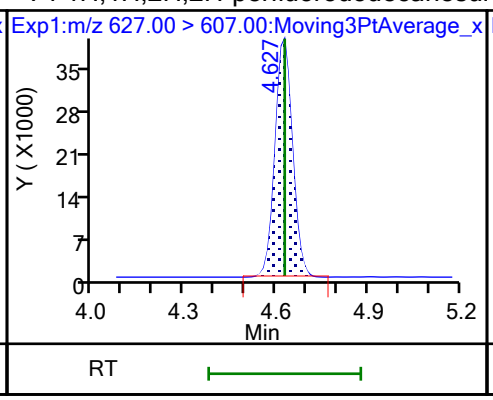
37 Perfluorododecanoic acid



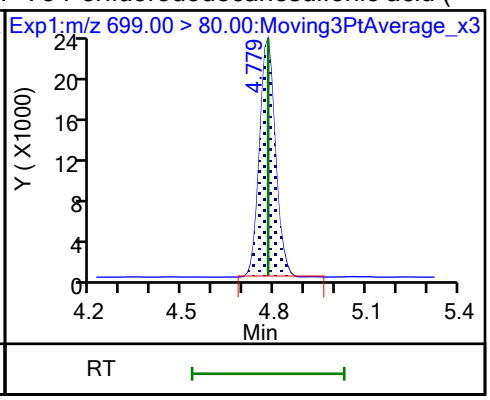
37 Perfluorododecanoic acid



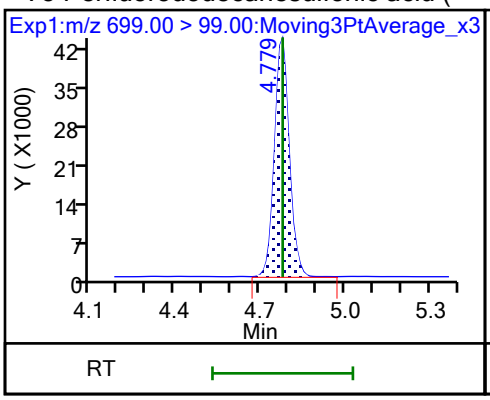
74 1H,1H,2H,2H-perfluorododecanesul



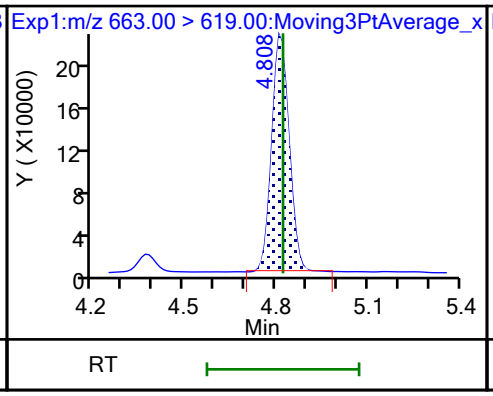
75 Perfluorododecanesulfonic acid (



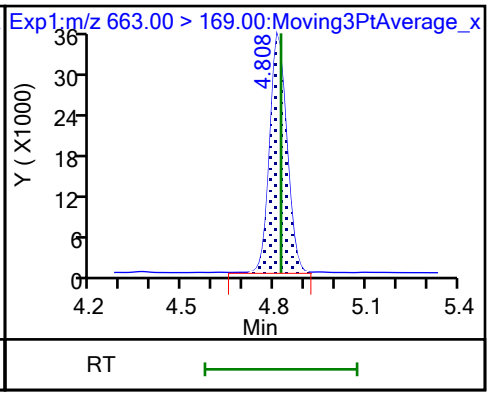
75 Perfluorododecanesulfonic acid (



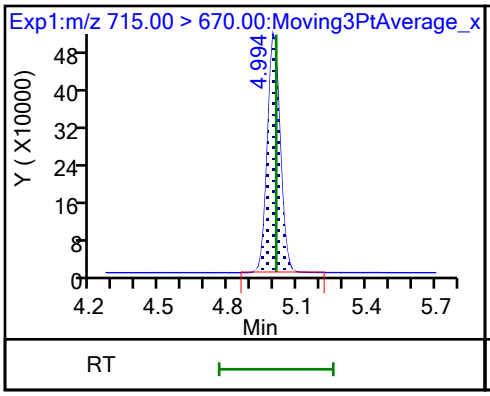
41 Perfluorotridecanoic acid



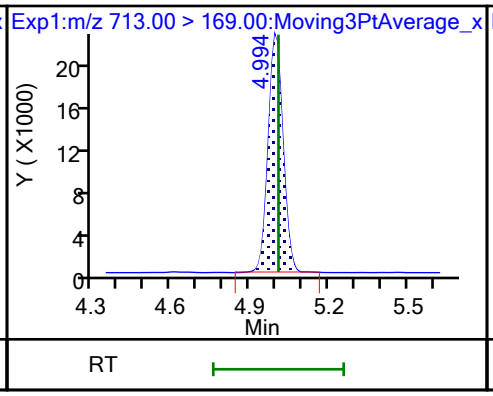
41 Perfluorotridecanoic acid



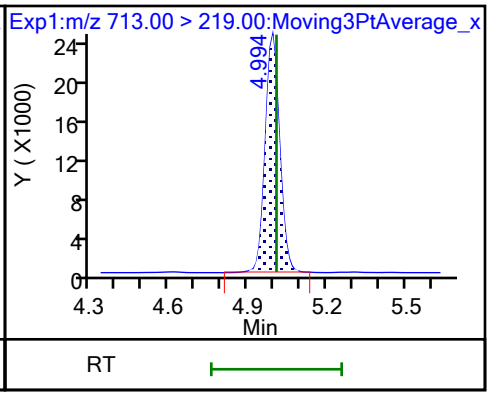
D 43 13C2 PFTeDA



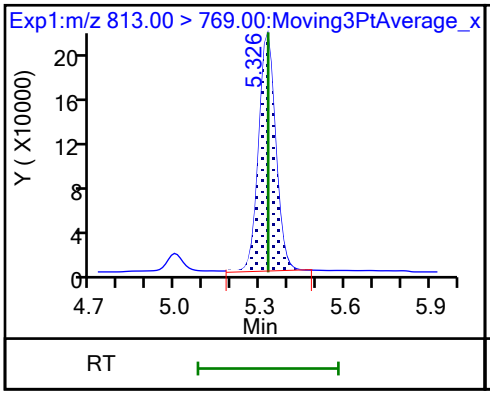
42 Perfluorotetradecanoic acid



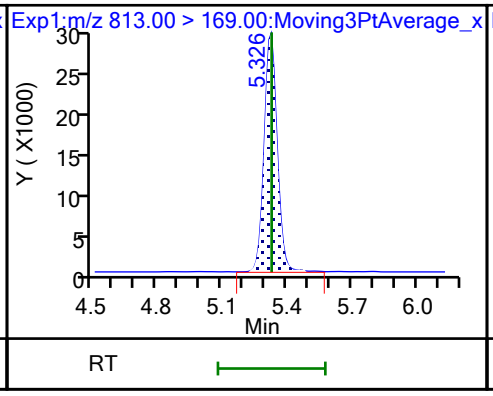
42 Perfluorotetradecanoic acid



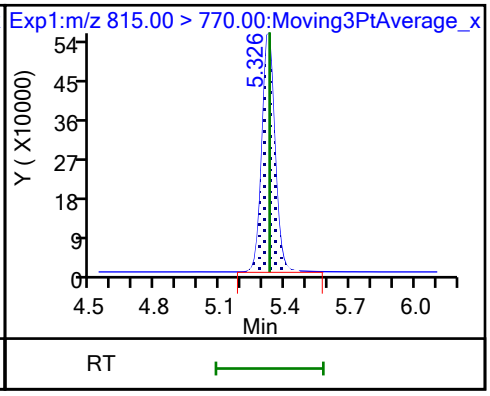
45 Perfluorohexadecanoic acid



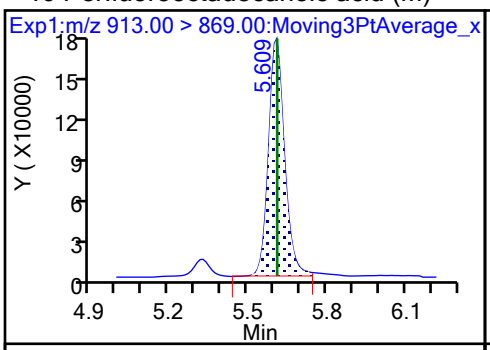
45 Perfluorohexadecanoic acid



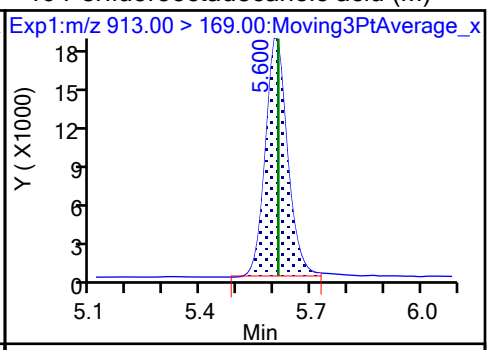
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Lims ID: ICISAV
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 26-Jul-2023 17:41:18 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICISAV
Misc. Info.: 200-0056441-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:28 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:44:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.607	1929850	1.25		100	852	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.112	2.112	0.0	1.004	1439078	0.9899		99.0	94.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.696	1529086	1.28		102	548	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1385943	1.05		105	60.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.425	2.425	0.0	0.700	1858340	1.15		98.8	53325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.425	2.425	0.0	1.000	1645342	0.9215	Target=2.07	104	208	M
298.90 > 99.00	2.425	2.425	0.0	1.000	798559		2.06(1.04-3.11)	104	141	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.694	2.694	0.0	0.778	220382	1.18		101	73.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.694	2.694	0.0	1.000	569311	0.8881		94.8	567	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.789	1544435	1.27		102	502	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	1301870	0.9575	Target=14.29	95.7	137	M
313.00 > 119.00	2.731	2.731	0.0	1.000	92229		14.12(7.15-21.44)	95.7	50.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.883	1426185	0.9245	Target=2.78	98.2	453	M
349.00 > 99.00	2.731	2.731	0.0	0.883	523421		2.72(1.39-4.17)	98.2	329	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.844	2.844	0.0	0.821	296521	1.26		101	448	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.844	2.844	0.0	1.000	235976	0.99		99.4	561	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.092	3.092	0.0	1.000	1123331	0.8590	Target=3.23	94.0	519	M
399.00 > 99.00	3.092	3.092	0.0	1.000	338365		3.32(1.62-4.84)	94.0	154	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.092	3.092	0.0	0.893	1396957	1.21		102	6682	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.104	3.104	0.0	1.000	1446925	0.9607	Target=4.11	96.1	215	M
363.00 > 169.00	3.104	3.104	0.0	1.000	346831		4.17(2.06-6.17)	96.1	225	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.104	3.104	0.0	0.896	1679653	1.26		101	737	M
77 DONA										
377.00 > 251.00	3.138	3.138	0.0	0.830	4190396	0.9622	Target=3.28	102	3717	
377.00 > 85.00	3.138	3.138	0.0	0.830	1260116		3.33(1.64-4.92)	102	1390	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.446	3.446	0.0	0.911	1008539	0.9221	Target=4.71	96.8	1714	
449.00 > 99.00	3.446	3.446	0.0	0.911	208912		4.83(2.36-7.07)	96.8	432	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.446	0.0	0.995	299923	1.25		105	422	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.446	3.446	0.0	1.000	618135	0.8954		94.2	1663	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.464	3.464	0.0	1.000	1597361	0.9691	Target=2.90	96.9	122	
413.00 > 169.00	3.464	3.464	0.0	1.000	554295		2.88(1.45-4.35)	96.9	502	M
D 14 13C4 PFOA										
417.00 > 372.00	3.464	3.464	0.0	1.000	1934463	1.28		102	3978	
* 62 13C2 PFOA										
415.00 > 370.00	3.464	3.464	0.0		1941206	1.25			4649	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.092	904398	1.23		103	2576	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	792430	0.8977	Target=4.11	96.7	1005	M
499.00 > 99.00	3.783	3.783	0.0	1.000	186696		4.24(2.05-6.16)	96.7	256	M
D 19 13C5 PFNA										
468.00 > 423.00	3.793	3.793	0.0	1.095	2143126	1.30		104	7977	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.003	1661649	0.9889	Target=8.48	98.9	305	
463.00 > 169.00	3.803	3.803	0.0	1.003	199241		8.34(4.24-12.72)	98.9	1189	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	2512476	0.9301		99.7	3906	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	638462	0.9507	Target=2.17	98.8	2935	
549.00 > 99.00	4.074	4.074	0.0	1.077	294408		2.17(1.08-3.25)	98.8	552	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.186	2125756	1.23		98.8	9272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	1775242	1.04	Target=10.55	104	474	
513.00 > 169.00	4.108	4.108	0.0	1.000	155159		11.44(5.27-15.82)	104	563	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.186	331913	1.23		102	577	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	556332	0.9117		95.0	3162	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.214	1887535	1.28		103	3920	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1437750	1.00		99.8	2735	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.227	518688	1.26		101	1367	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.260	0.0	1.003	370720	0.9846		98.5	480	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	499466	0.9663	Target=2.28	100	1659	
599.00 > 99.00	4.346	4.346	0.0	1.149	210609		2.37(1.14-3.42)	100	596	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	1729770	1.02	Target=11.30	102	492	
563.00 > 169.00	4.370	4.382	-0.012	0.997	141730		12.20(5.65-16.96)	102	888	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.265	2053330	1.26		101	9003	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.393	4.393	0.0	1.268	487913	1.23		98.5	834	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.000	364226	0.9329		93.3	589	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.477	0.0	1.183	3925775	0.9477		100	4259	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.330	2123640	1.29		103	8948	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.616	4.616	0.0	1.002	1656352	0.9579	Target=8.15	95.8	155	
613.00 > 169.00	4.616	4.616	0.0	1.002	195564		8.47(4.07-12.22)	95.8	1566	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.126	328276	0.9000		93.4	3601	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	163618	0.9340	Target=0.50	96.5	1669	
699.00 > 99.00	4.779	4.779	0.0	1.263	340004		0.48(0.25-0.75)	96.5	2126	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.822	4.822	0.0	1.047	1823052	1.00	Target=6.61	100	159	
663.00 > 169.00	4.822	4.822	0.0	1.047	284386		6.41(3.31-9.92)	100	1889	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.008	5.008	0.0	1.446	2077683	1.26		101	7096	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.000	174160	0.9371	Target=0.96	93.7	2069	
713.00 > 219.00	4.997	5.008	-0.011	0.998	200239		0.87(0.48-1.44)	93.7	2335	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.538	2422773	1.28		102	5274	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	1870661	0.9651	Target=7.69	96.5	189	
813.00 > 169.00	5.328	5.328	0.0	1.000	237159		7.89(3.85-11.54)	96.5	1188	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	1554372	1.03	Target=9.13	103	171	M
913.00 > 169.00	5.611	5.611	0.0	1.053	165585		9.39(4.56-13.69)	103	338	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

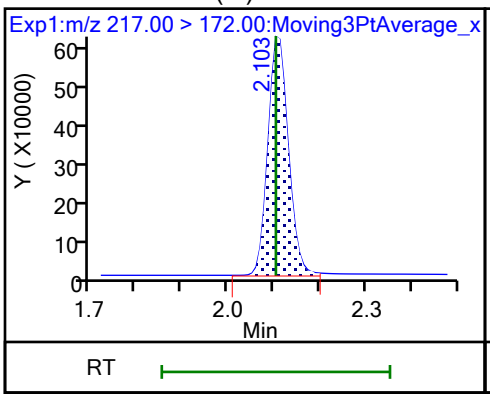
PFAS32NCIC4_00042 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48

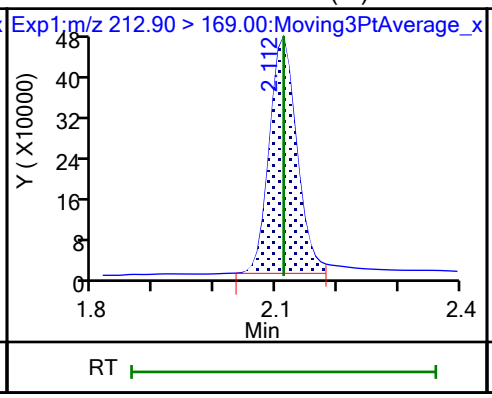
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Injection Date: 26-Jul-2023 17:41:18 Instrument ID: LC812
Lims ID: ICISAV
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

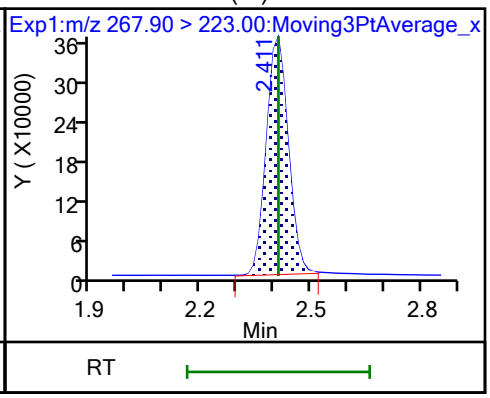
D 1 13C4 PFBA (M)



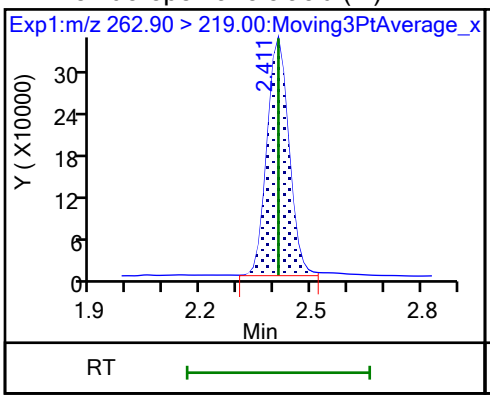
2 Perfluorobutanoic acid (M)



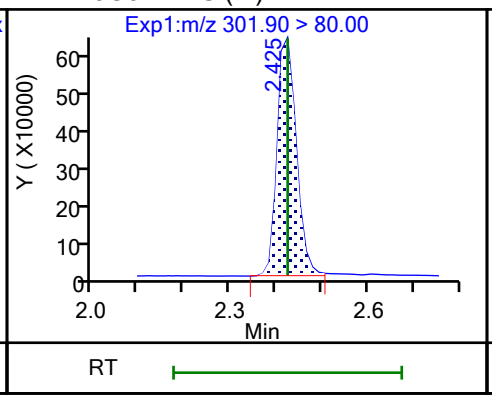
D 3 13C5 PFPeA (M)



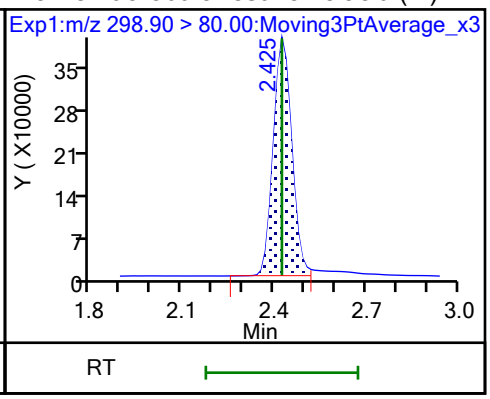
4 Perfluoropentanoic acid (M)



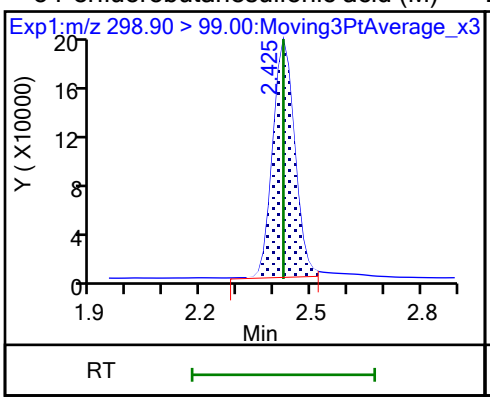
D 47 13C3 PFBS (M)



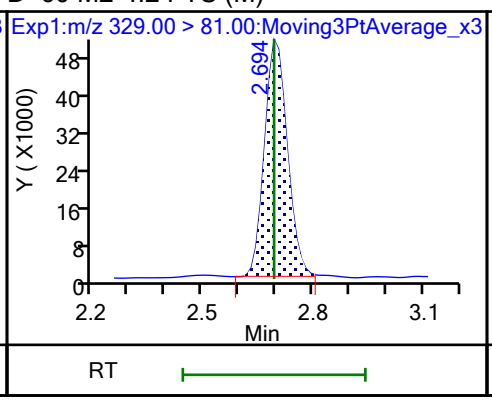
5 Perfluorobutanesulfonic acid (M)



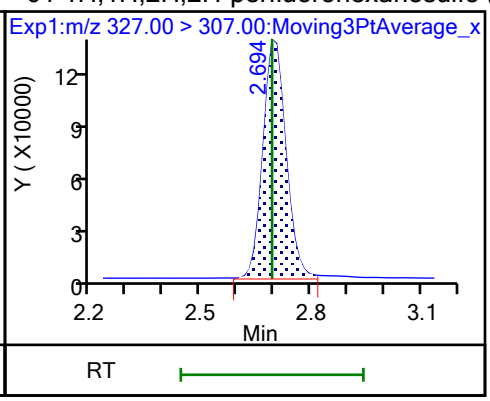
5 Perfluorobutanesulfonic acid (M)



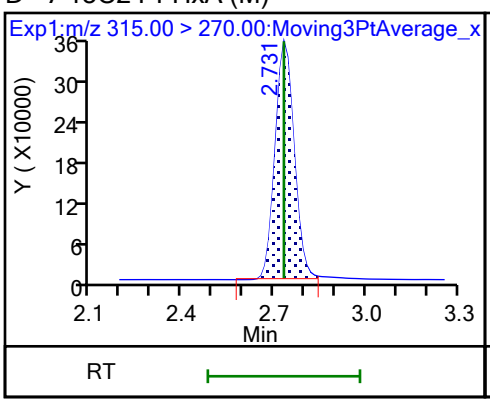
D 60 M2-4:2 FTS (M)



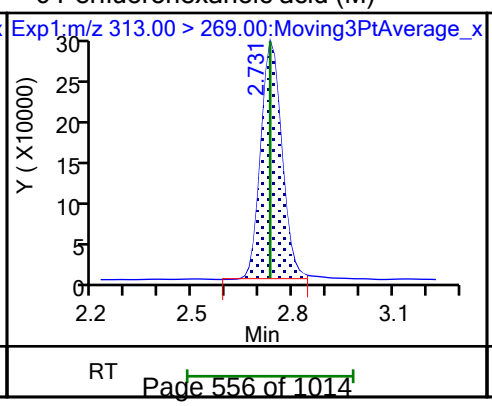
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



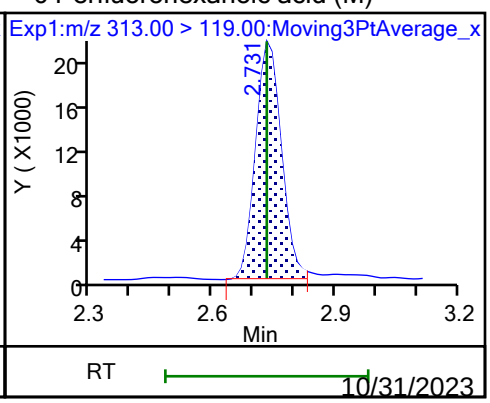
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

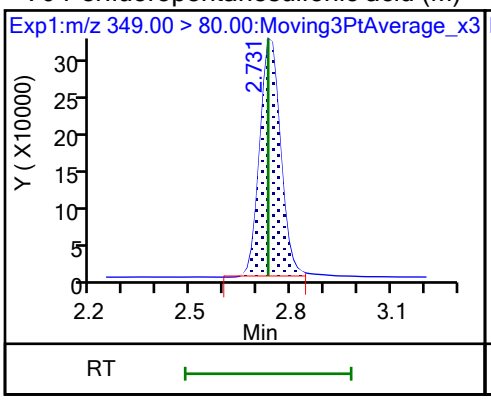


6 Perfluorohexanoic acid (M)

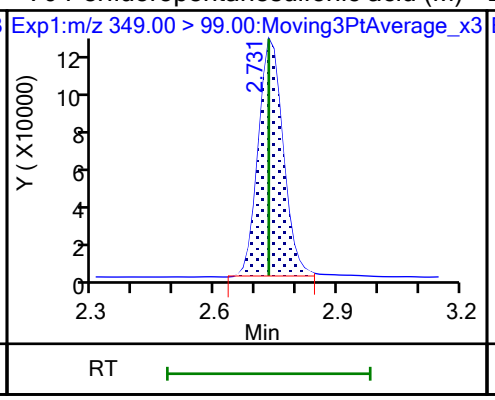


10/31/2023
4:00 PM

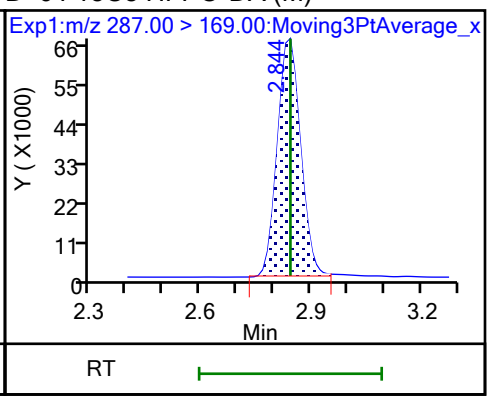
70 Perfluoropentanesulfonic acid (M)



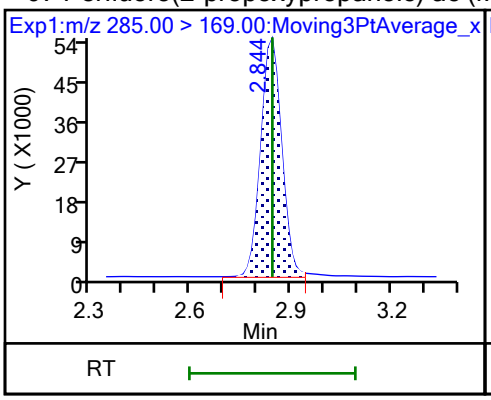
70 Perfluoropentanesulfonic acid (M)



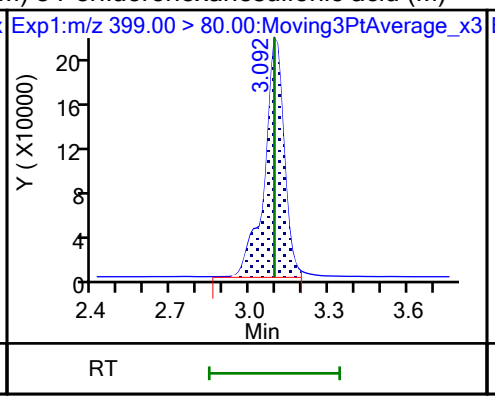
D 64 13C3 HFPO-DA (M)



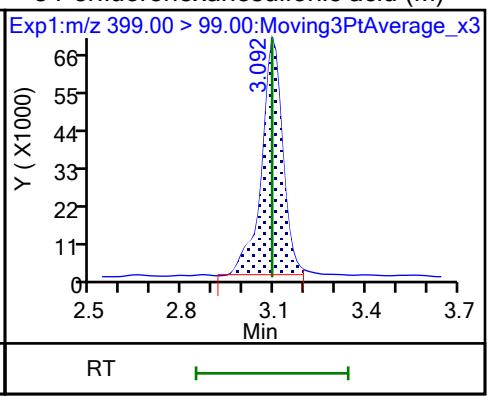
67 Perfluoro(2-propoxypropanoic) ac (M)



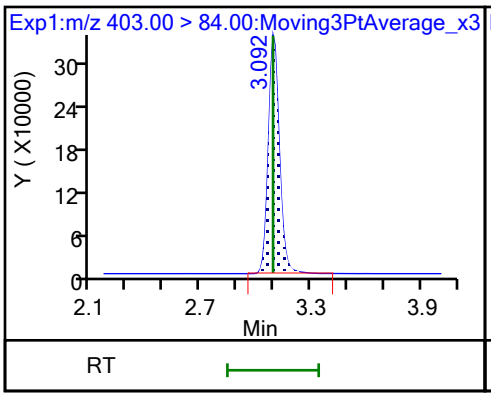
8 Perfluorohexanesulfonic acid (M)



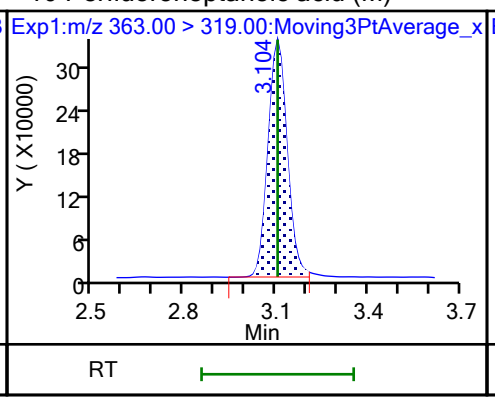
8 Perfluorohexanesulfonic acid (M)



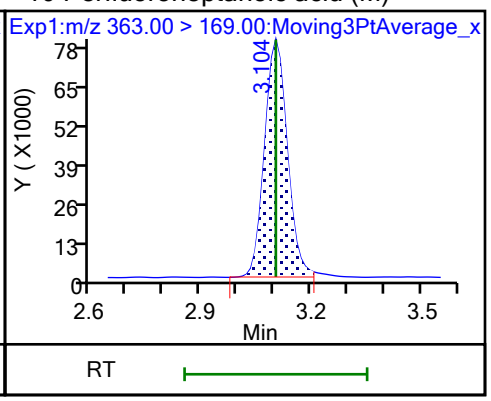
D 11 18O2 PFHxS



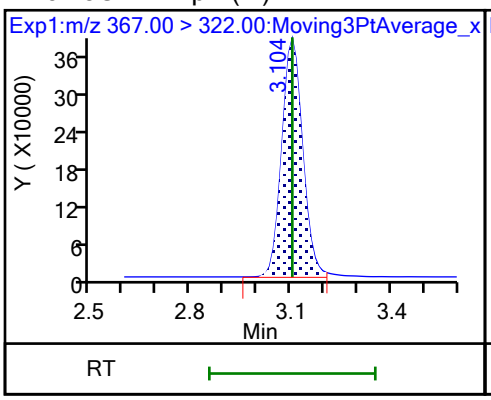
10 Perfluoroheptanoic acid (M)



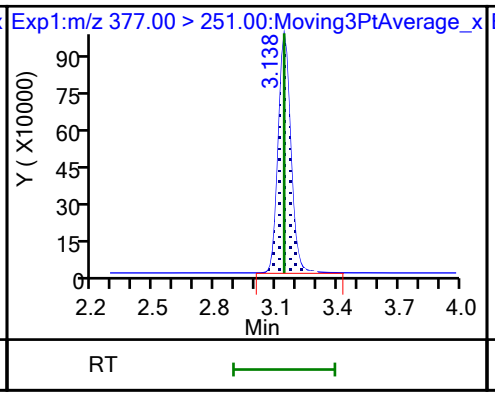
10 Perfluoroheptanoic acid (M)



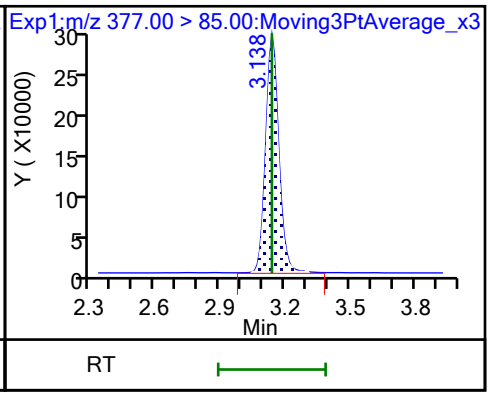
D 9 13C4 PFHpA (M)



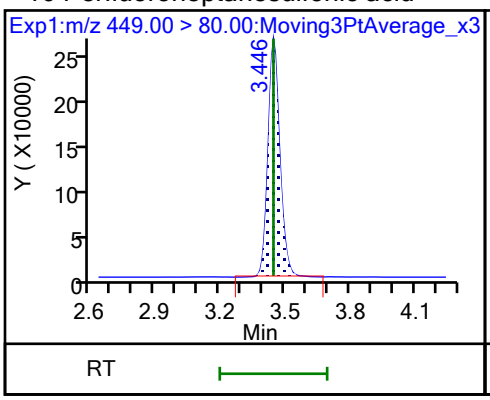
77 DONA



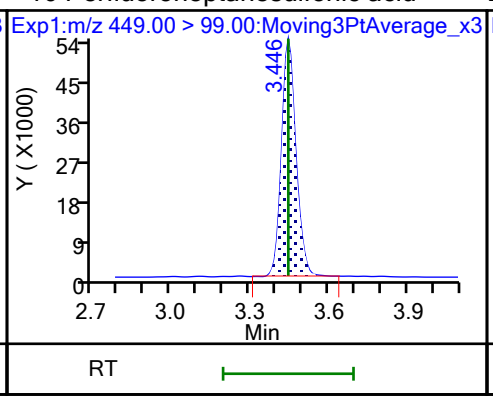
77 DONA



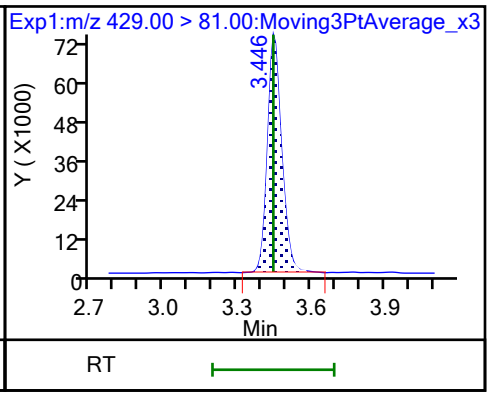
16 Perfluoroheptanesulfonic acid



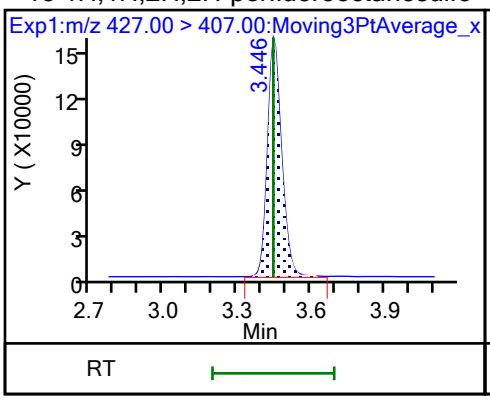
16 Perfluoroheptanesulfonic acid



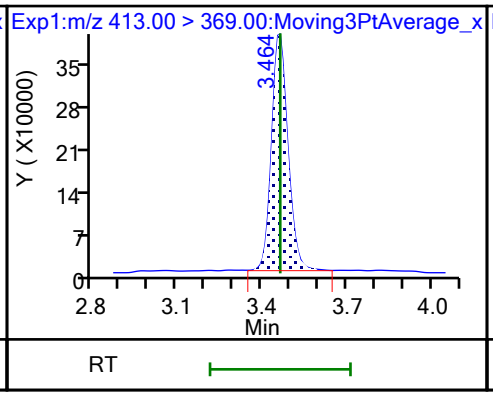
D 12 M2-6:2 FTS



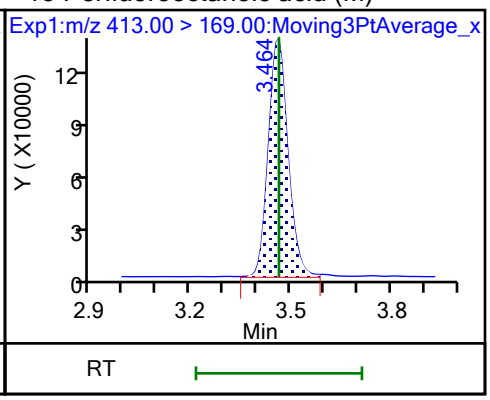
13 1H,1H,2H,2H-perfluorooctanesulfo



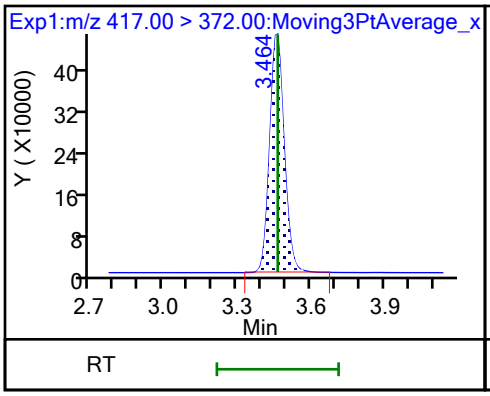
15 Perfluorooctanoic acid



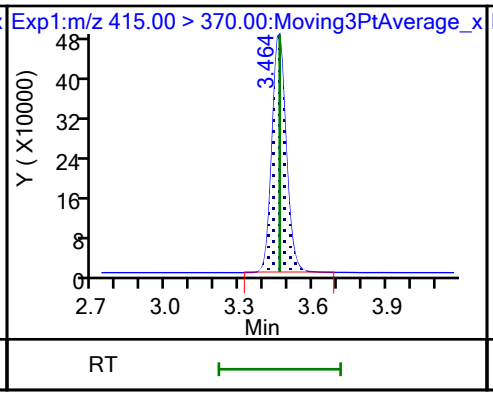
15 Perfluorooctanoic acid (M)



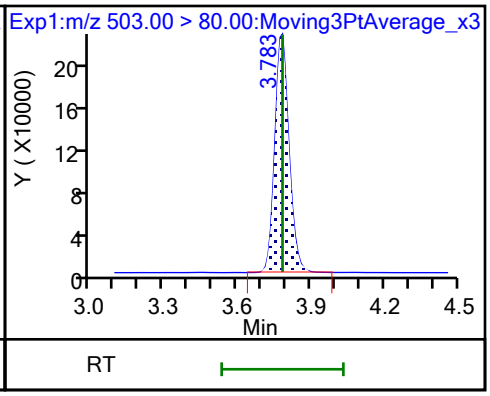
D 14 13C4 PFOA



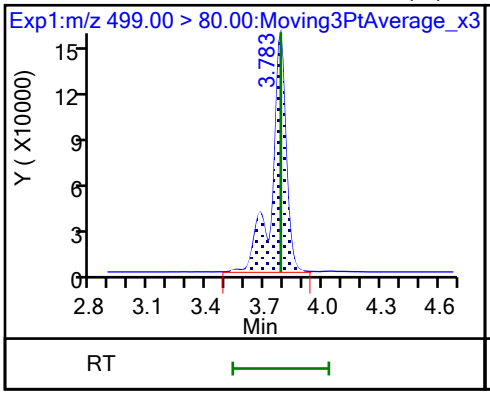
* 62 13C2 PFOA



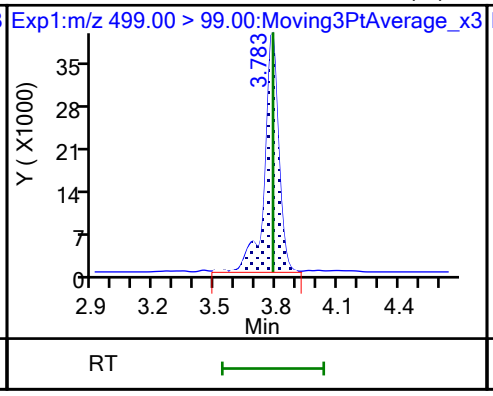
D 18 13C4 PFOS



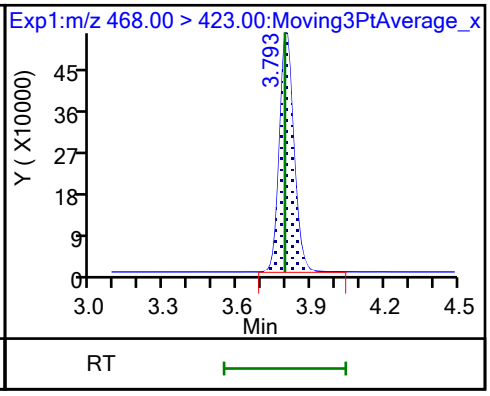
17 Perfluorooctanesulfonic acid (M)



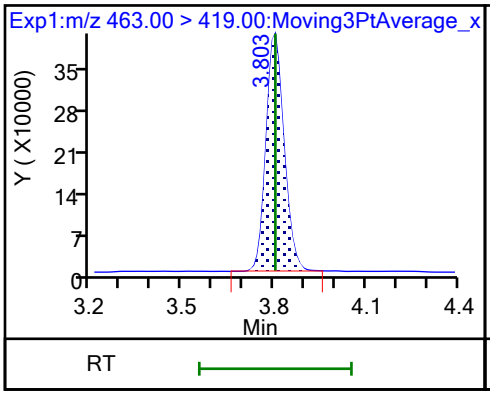
17 Perfluorooctanesulfonic acid (M)



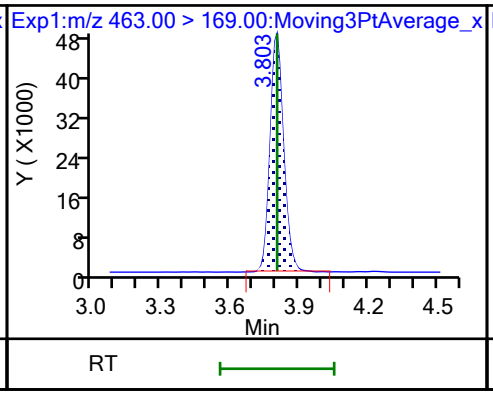
D 19 13C5 PFNA



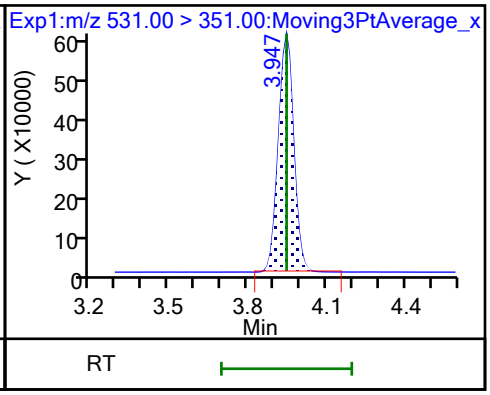
20 Perfluorononanoic acid



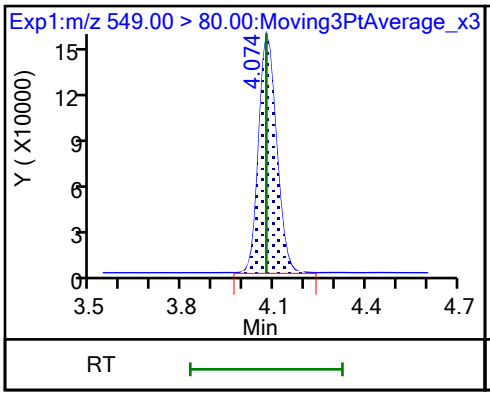
20 Perfluorononanoic acid



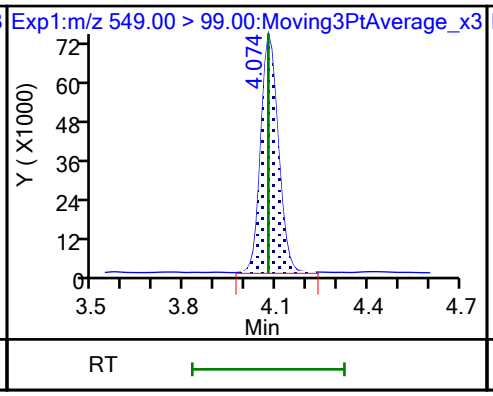
69 9-Chlorohexadecafluoro-3-oxanona



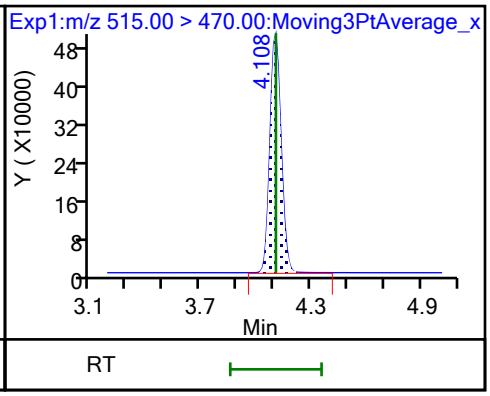
68 Perfluorononanesulfonic acid



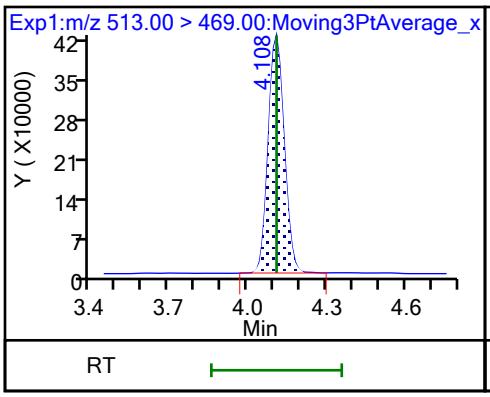
68 Perfluorononanesulfonic acid



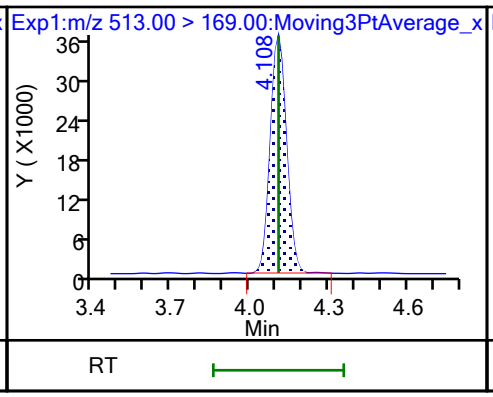
D 23 13C2 PFDA



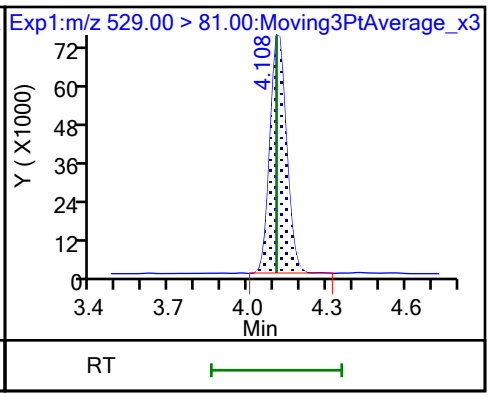
24 Perfluorodecanoic acid



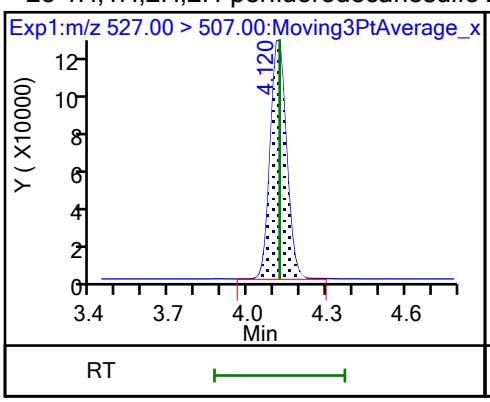
24 Perfluorodecanoic acid



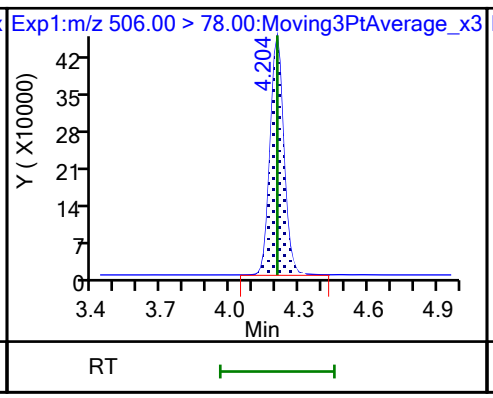
D 26 M2-8:2 FTS



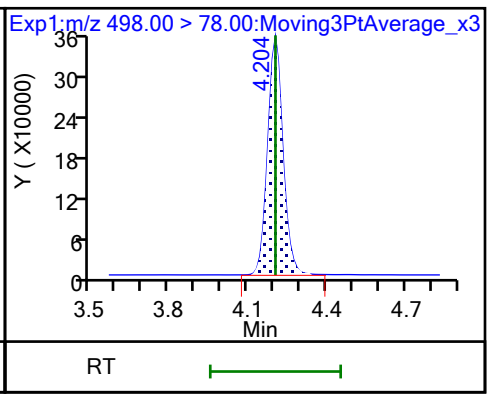
25 1H,1H,2H,2H-perfluorodecanesulfo



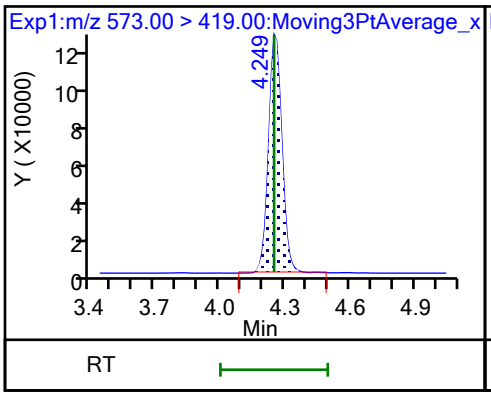
D 21 13C8 FOSA



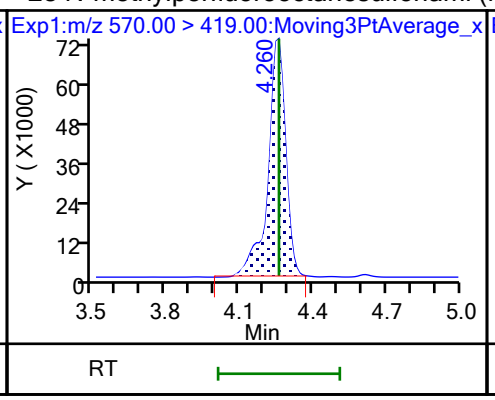
22 Perfluorooctanesulfonamide



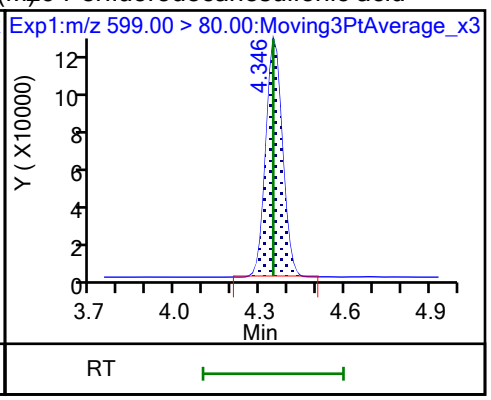
D 27 d3-NMeFOSAA



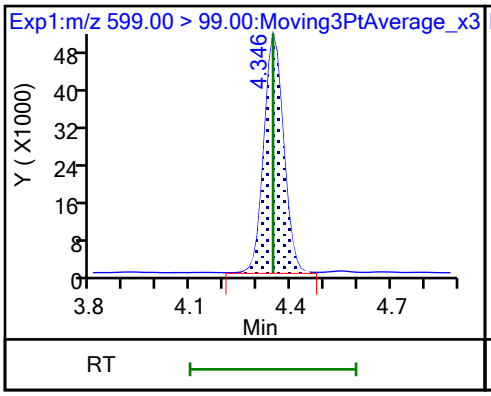
28 N-methylperfluorooctanesulfonami (M)



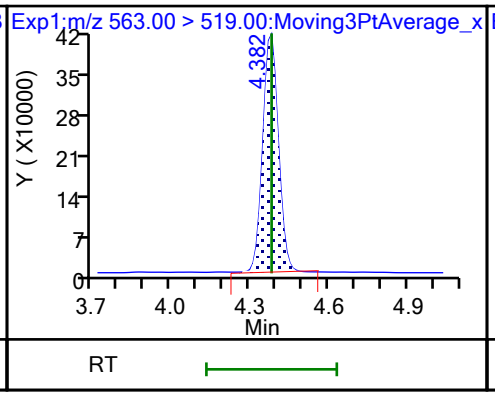
29 Perfluorodecanesulfonic acid



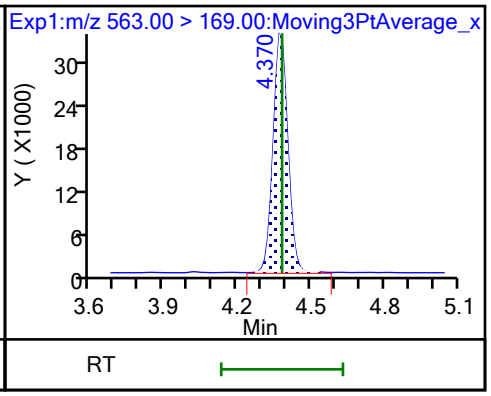
29 Perfluorodecanesulfonic acid



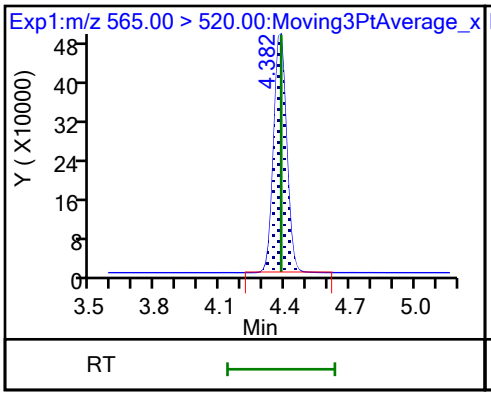
31 Perfluoroundecanoic acid



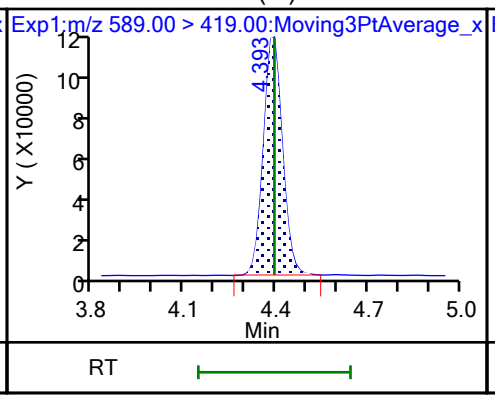
31 Perfluoroundecanoic acid



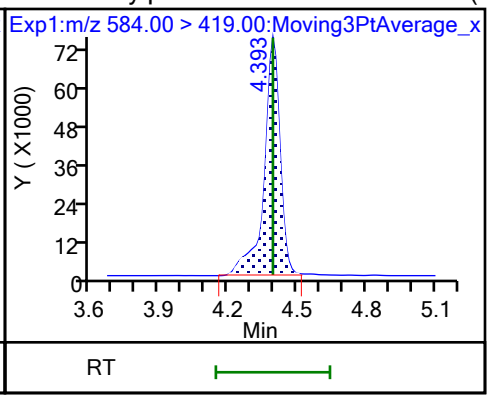
D 30 13C2 PFUnA



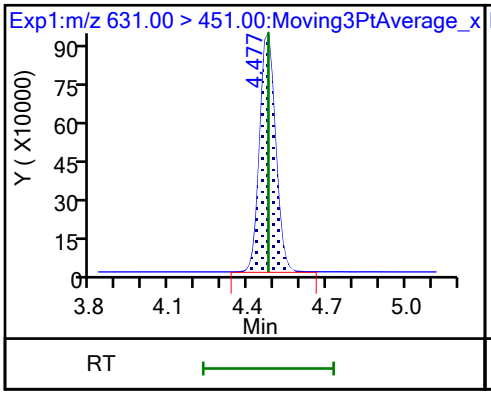
D 32 d5-NEtFOSAA (M)



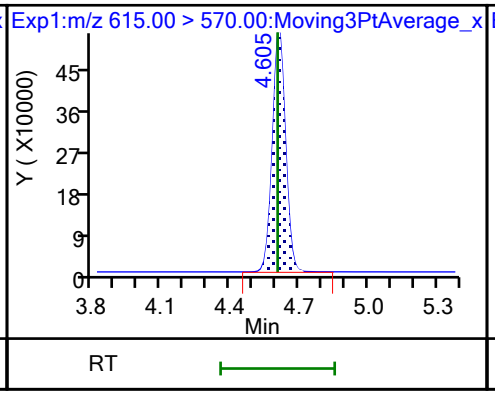
33 N-ethylperfluorooctanesulfonamid (M)



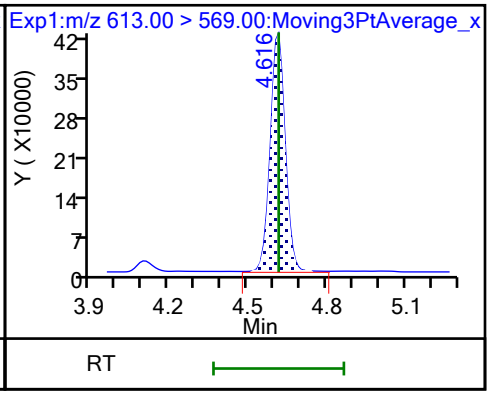
66 11-Chloroeicosafluoro-3-oxaundec



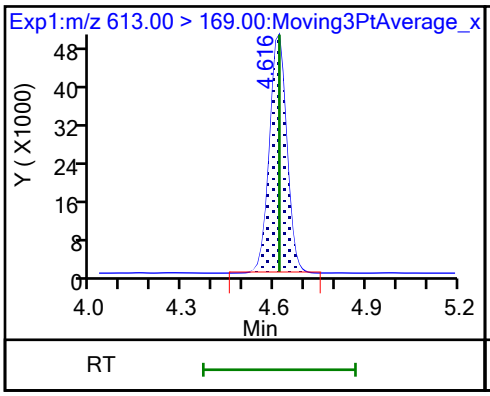
D 36 13C2 PFDoA



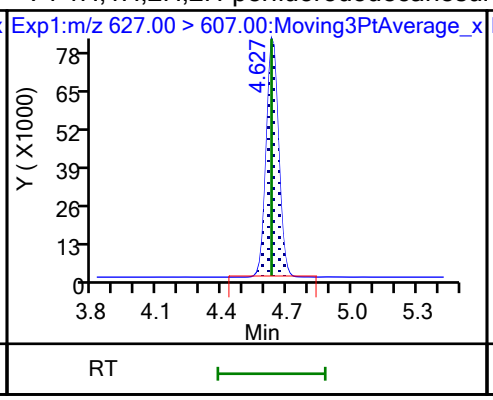
37 Perfluorododecanoic acid



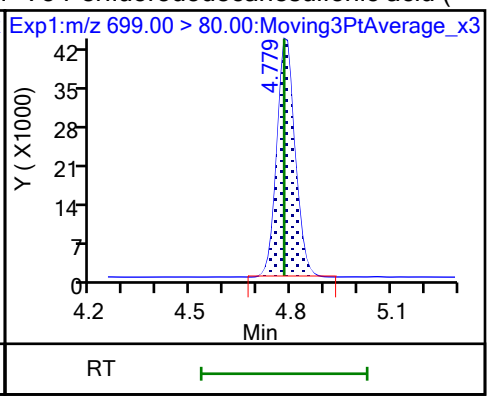
37 Perfluorododecanoic acid



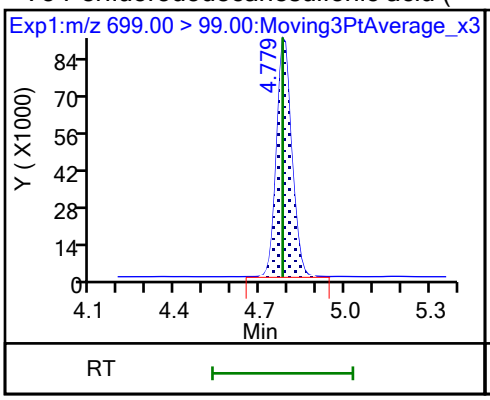
74 1H,1H,2H,2H-perfluorododecanesul



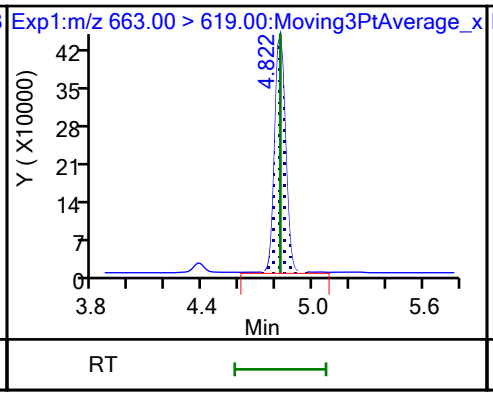
75 Perfluorododecanesulfonic acid (



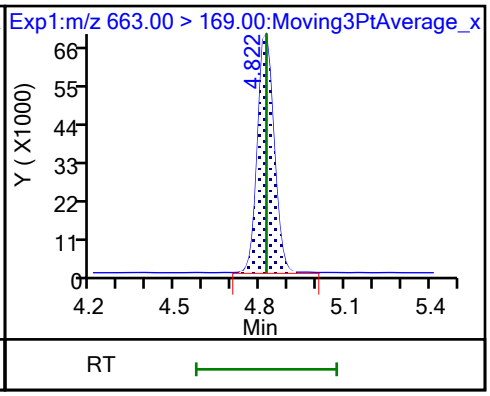
75 Perfluorododecanesulfonic acid (



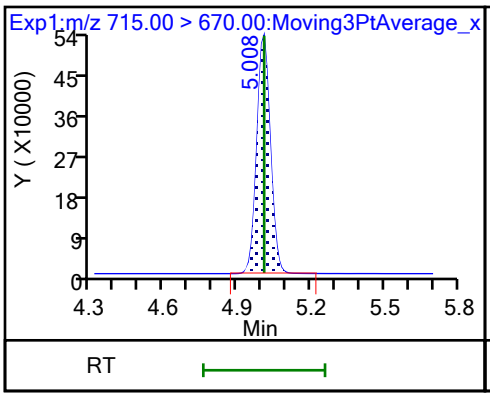
41 Perfluorotridecanoic acid



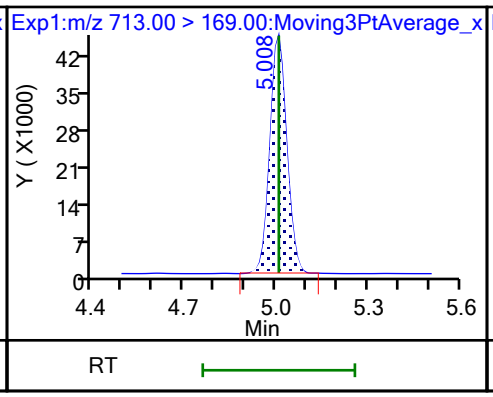
41 Perfluorotridecanoic acid



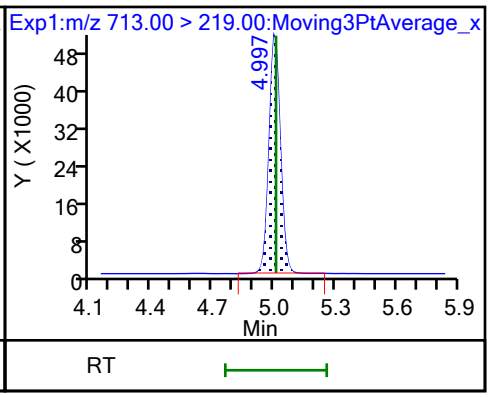
D 43 13C2 PFTeDA



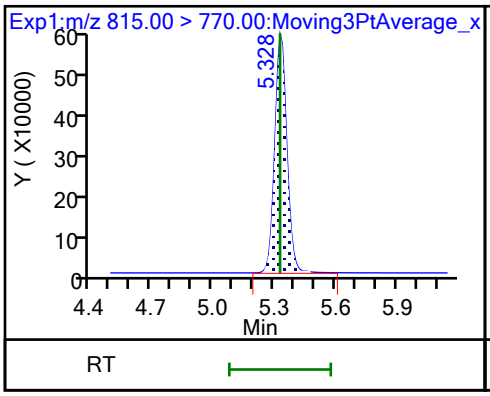
42 Perfluorotetradecanoic acid



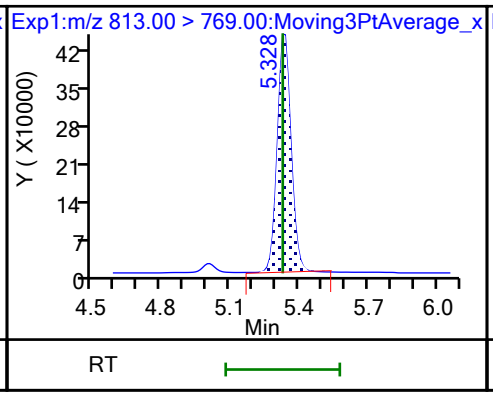
42 Perfluorotetradecanoic acid



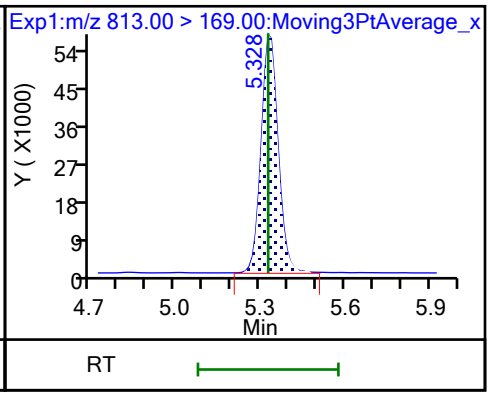
D 44 13C2 PFHxDA



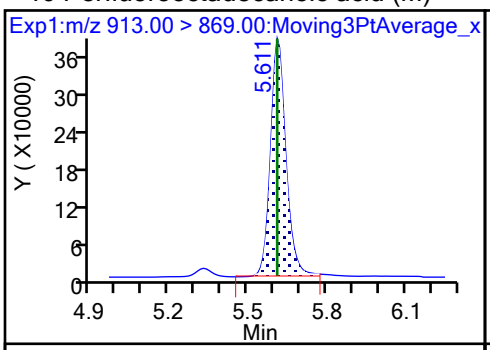
45 Perfluorohexadecanoic acid



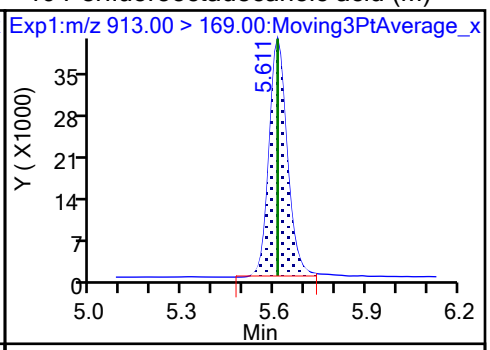
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Jul-2023 17:49:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 5
Misc. Info.: 200-0056441-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:56 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:04:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	2025338	1.28		102	885	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	3820872	2.57		103	264	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1531883	1.24		99.4	493	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	3191311	2.41		96.5	120	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1976378	1.19		102	60670	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	4220392	2.22	Target=2.07	100	362	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	1966405		2.15(1.04-3.11)	100	237	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.780	221658	1.15		98.4	76.5	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.719	2.694	0.025	1.005	1486720	2.31		98.4	503	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.790	1545081	1.23		98.6	491	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.756	2.731	0.025	1.005	3361171	2.47	Target=14.29	98.8	262	M
313.00 > 119.00	2.744	2.731	0.013	1.000	242572		13.86(7.15-21.44)	98.8	132	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	3383549	2.18	Target=2.78	92.6	480	M
349.00 > 99.00	2.756	2.731	0.025	0.885	1222931		2.77(1.39-4.17)	92.6	414	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.856	2.844	0.012	0.823	295164	1.22		97.3	301	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	568553	2.40		96.2	587	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.115	3.092	0.023	0.897	1406672	1.18		99.5	777	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.115	3.092	0.023	1.000	2901162	2.20	Target=3.23	96.4	1836	M
399.00 > 99.00	3.115	3.092	0.023	1.000	881531		3.29(1.62-4.84)	96.4	477	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	3843212	2.42	Target=4.11	96.7	693	
363.00 > 169.00	3.115	3.104	0.011	1.000	912116		4.21(2.06-6.17)	96.7	744	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.897	1773444	1.29		103	6393	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.832	9881253	2.23	Target=3.28	94.4	5501	
377.00 > 85.00	3.150	3.138	0.012	0.832	2882143		3.43(1.64-4.92)	94.4	2174	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.453	3.446	0.007	0.913	2618603	2.35	Target=4.71	98.8	7174	
449.00 > 99.00	3.453	3.446	0.007	0.913	550605		4.76(2.36-7.07)	98.8	949	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	305639	1.23		104	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	1652144	2.35		98.8	5134	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.471	3.464	0.007	1.000	4162515	2.39	Target=2.90	95.5	331	
413.00 > 169.00	3.471	3.464	0.007	1.000	1483061		2.81(1.45-4.35)	95.5	1671	
D 14 13C4 PFOA										
417.00 > 372.00	3.471	3.464	0.007	1.000	2045642	1.31		105	7037	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		2001977	1.25			5933	
D 18 13C4 PFOS										
503.00 > 80.00	3.784	3.783	0.001	1.090	919926	1.21		101	2583	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.784	3.783	0.001	1.000	1995347	2.22	Target=4.11	95.8	1944	M
499.00 > 99.00	3.784	3.783	0.001	1.000	459970		4.34(2.05-6.16)	95.8	606	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2116548	1.25		99.8	6446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	4090183	2.46	Target=8.48	98.6	745	
463.00 > 169.00	3.803	3.803	0.0	1.000	474097		8.63(4.24-12.72)	98.6	2866	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	6453976	2.35		101	11165	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	1582540	2.32	Target=2.17	96.3	4256	
549.00 > 99.00	4.074	4.074	0.0	1.077	738106		2.14(1.08-3.25)	96.3	2145	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2307904	1.30		104	5432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	4650088	2.52	Target=10.55	101	1254	
513.00 > 169.00	4.108	4.108	0.0	1.000	427287		10.88(5.27-15.82)	101	1132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	331708	1.19		99.2	445	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	1389051	2.28		94.9	12042	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1904586	1.26		101	11251	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	3587757	2.47		98.7	5778	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.249	4.249	0.0	1.224	518571	1.22		97.7	719	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	905881	2.41		96.3	1138	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	1302171	2.48	Target=2.28	103	3082	
599.00 > 99.00	4.346	4.346	0.0	1.149	526351		2.47(1.14-3.42)	103	2245	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2158999	1.29		103	6427	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.003	4518784	2.54	Target=11.30	102	1338	
563.00 > 169.00	4.370	4.382	-0.012	1.000	385480		11.72(5.65-16.96)	102	1987	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	544137	1.33		107	1362	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	985607	2.26		90.5	993	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	9347621	2.22		94.1	9361	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.605	0.001	1.327	2062631	1.21		96.8	7038	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.606	4.616	-0.010	1.000	4182445	2.49	Target=8.15	99.6	410	
613.00 > 169.00	4.606	4.616	-0.010	1.000	492816		8.49(4.07-12.22)	99.6	2697	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.628	4.627	0.001	1.123	829529	2.28		94.4	4461	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	395113	2.22	Target=0.50	91.6	5811	
699.00 > 99.00	4.770	4.779	-0.009	1.261	796739		0.50(0.25-0.75)	91.6	3768	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.044	4556433	2.58	Target=6.61	103	378	
663.00 > 169.00	4.809	4.822	-0.013	1.044	675409		6.75(3.31-9.92)	103	3752	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2135161	1.26		101	5547	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	452708	2.37	Target=0.96	94.8	4679	
713.00 > 219.00	4.987	5.008	-0.021	0.998	484354		0.93(0.48-1.44)	94.8	3347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.317	5.328	-0.011	1.000	4643411	2.44	Target=7.69	97.7	433	
813.00 > 169.00	5.317	5.328	-0.011	1.000	592603		7.84(3.85-11.54)	97.7	1734	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2376838	1.22		97.3	4400	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	3397685	2.29	Target=9.13	91.5	226	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	378101		8.99(4.56-13.69)	91.5	321	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

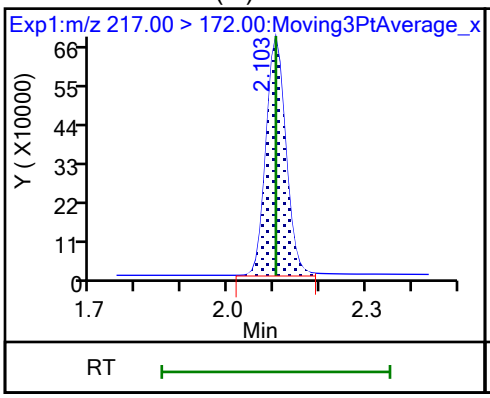
PFAS32NCIC5_00035 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:57 Chrom Revision: 2.3 19-Jul-2023 18:28:48

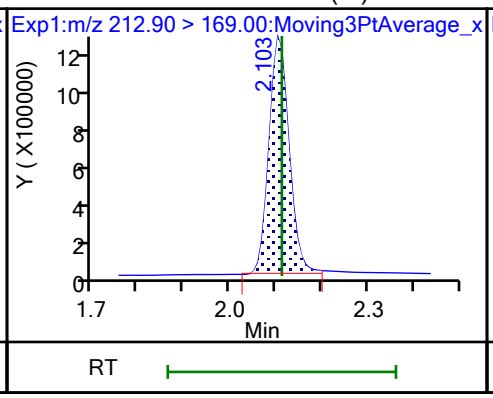
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Injection Date: 26-Jul-2023 17:49:28 Instrument ID: LC812
Lims ID: IC 5
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

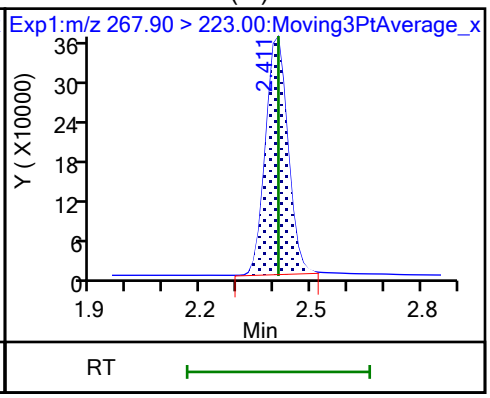
D 1 13C4 PFBA (M)



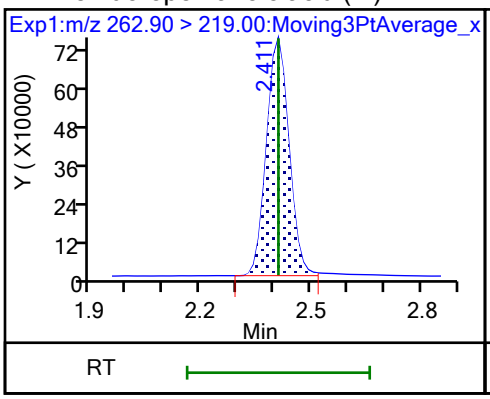
2 Perfluorobutanoic acid (M)



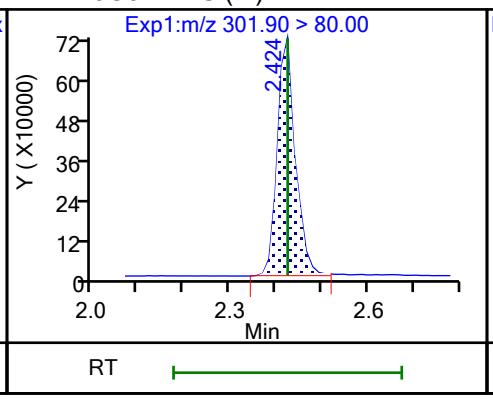
D 3 13C5 PFPeA (M)



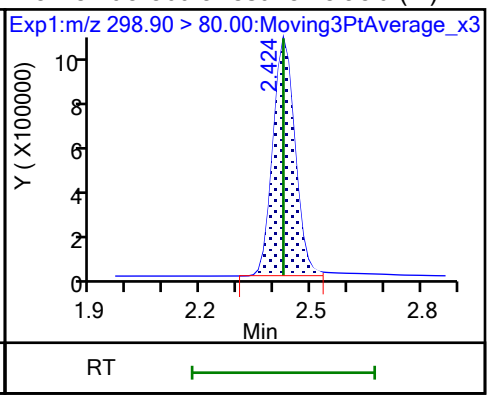
4 Perfluoropentanoic acid (M)



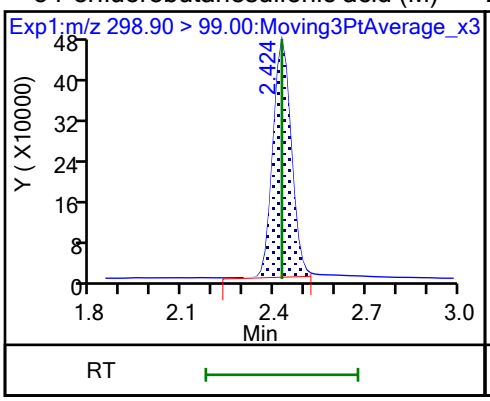
D 47 13C3 PFBS (M)



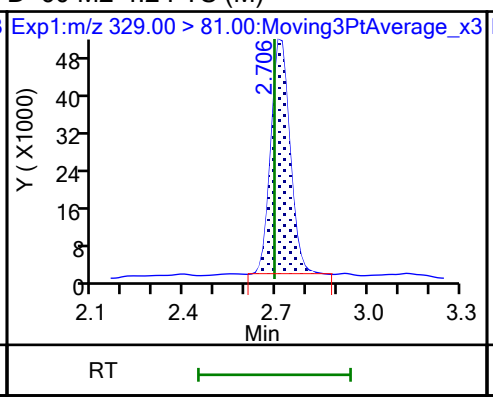
5 Perfluorobutanesulfonic acid (M)



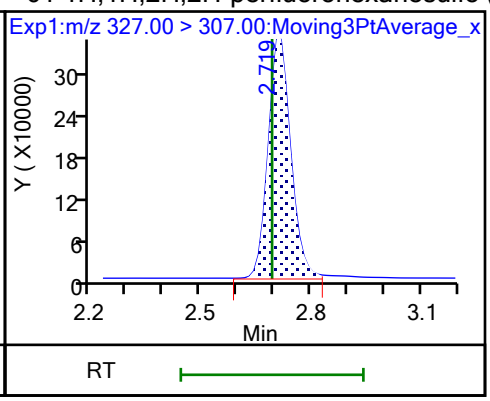
5 Perfluorobutanesulfonic acid (M)



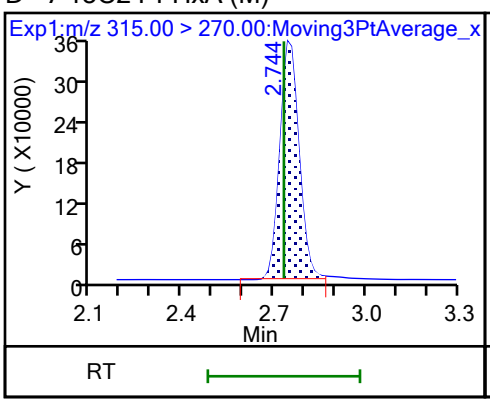
D 60 M2-4:2 FTS (M)



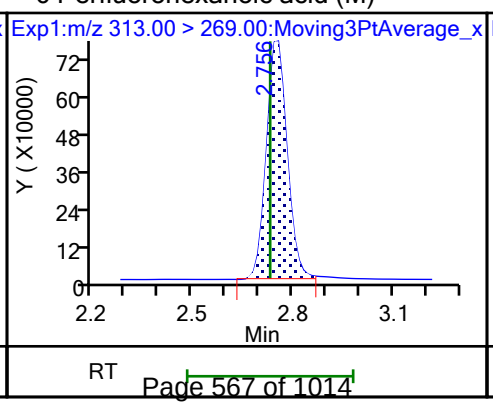
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



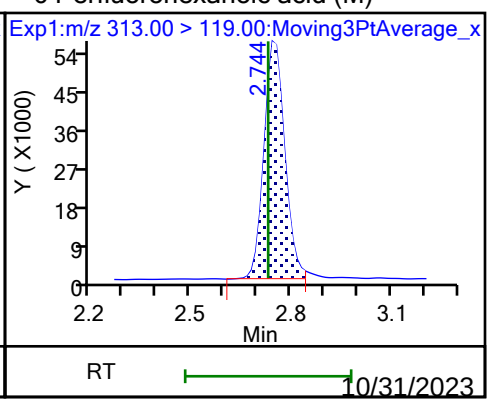
D 7 13C2 PFHxA (M)



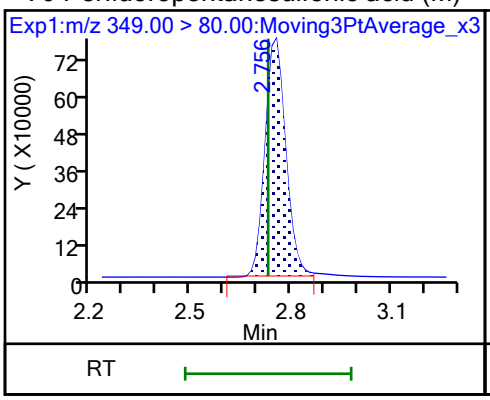
6 Perfluorohexanoic acid (M)



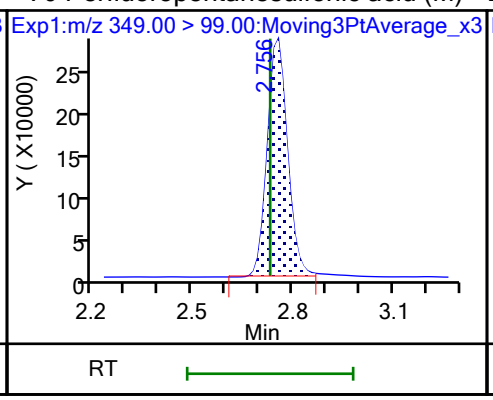
6 Perfluorohexanoic acid (M)



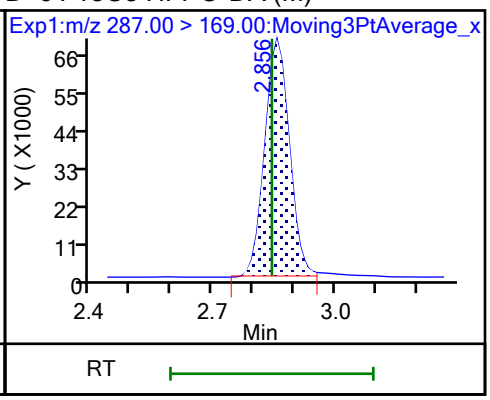
70 Perfluoropentanesulfonic acid (M)



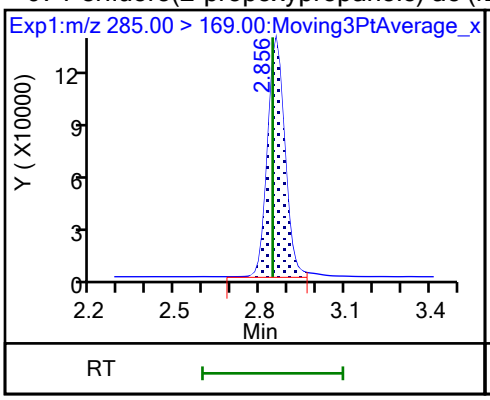
70 Perfluoropentanesulfonic acid (M)



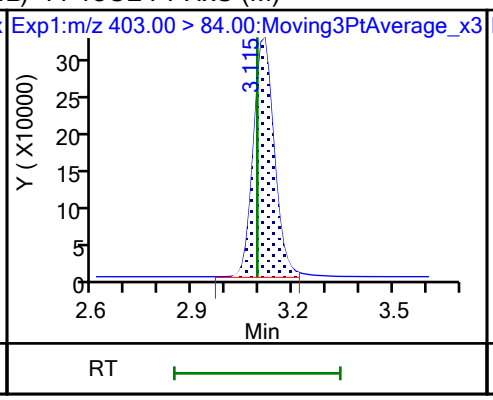
D 64 13C3 HFPO-DA (M)



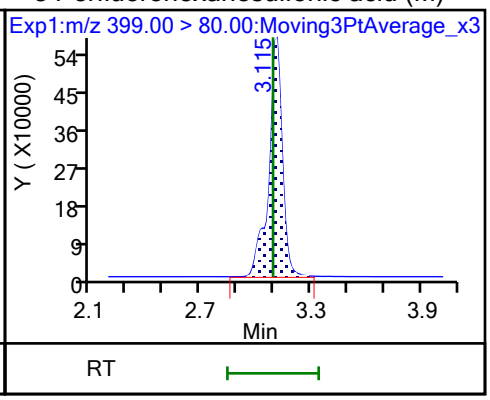
67 Perfluoro(2-propoxypropanoic) ac (M)



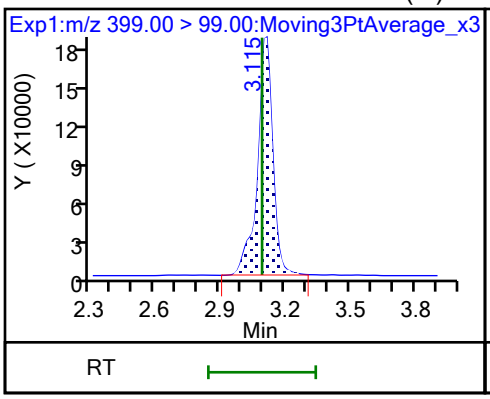
D 11 18O2 PFHxS (M)



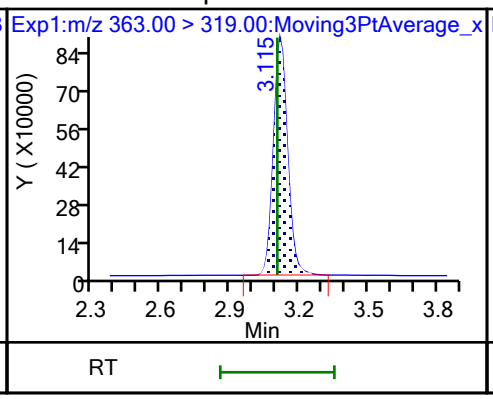
8 Perfluorohexanesulfonic acid (M)



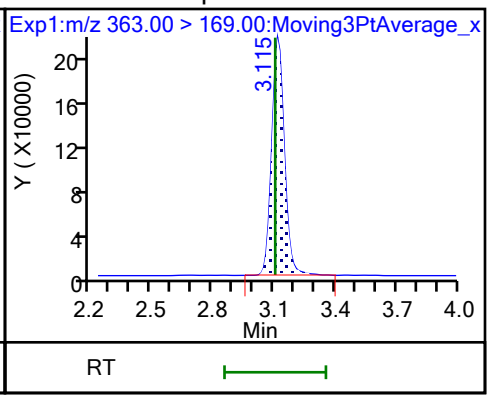
8 Perfluorohexanesulfonic acid (M)



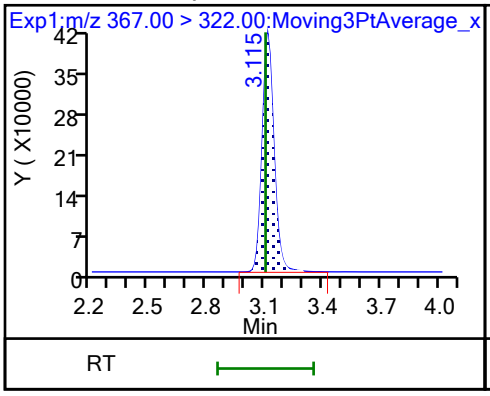
10 Perfluoroheptanoic acid



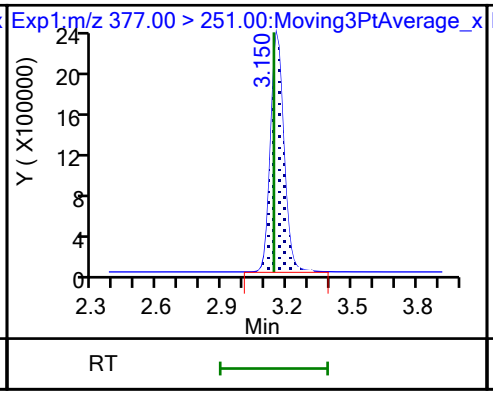
10 Perfluoroheptanoic acid



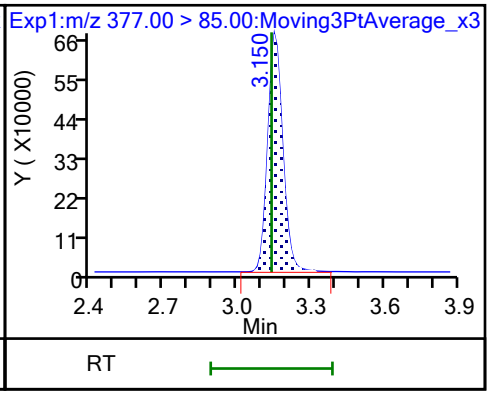
D 9 13C4 PFHpA



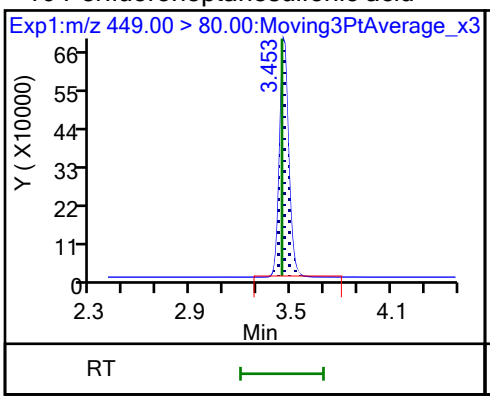
77 DONA



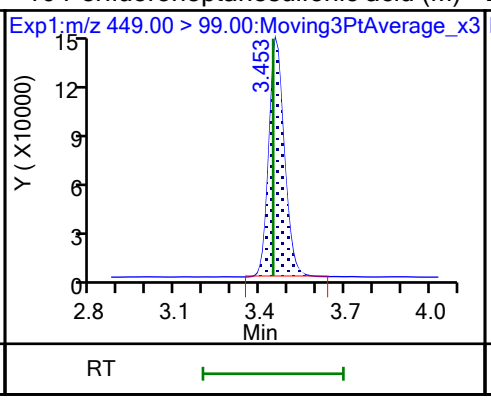
77 DONA



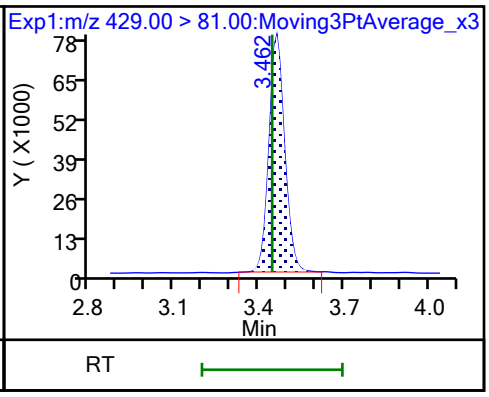
16 Perfluoroheptanesulfonic acid



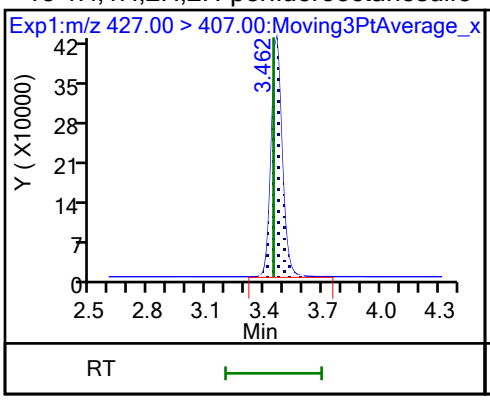
16 Perfluoroheptanesulfonic acid (M)



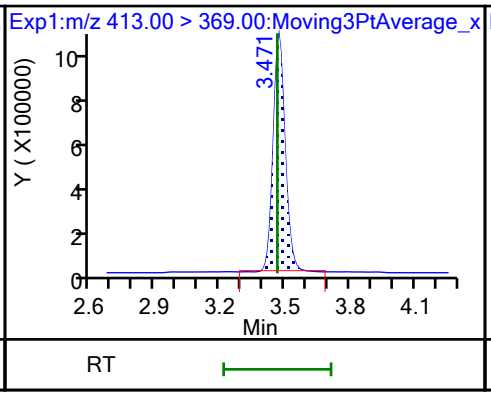
D 12 M2-6:2 FTS



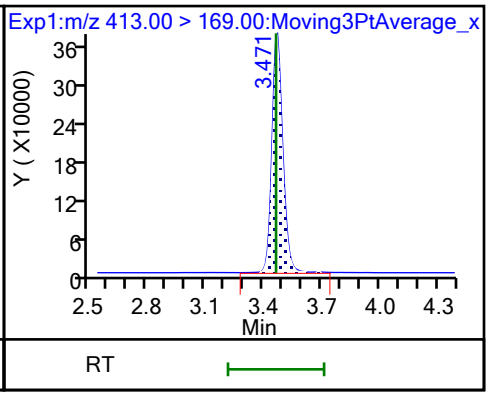
13 1H,1H,2H,2H-perfluorooctanesulfo



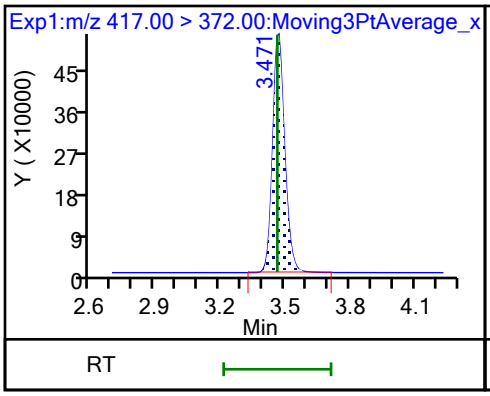
15 Perfluorooctanoic acid



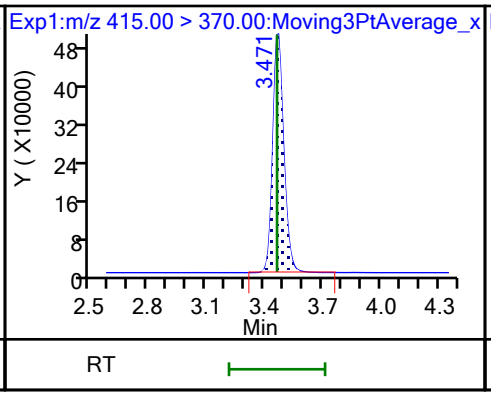
15 Perfluorooctanoic acid



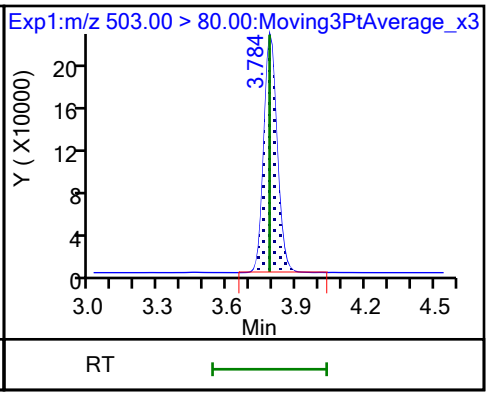
D 14 13C4 PFOA



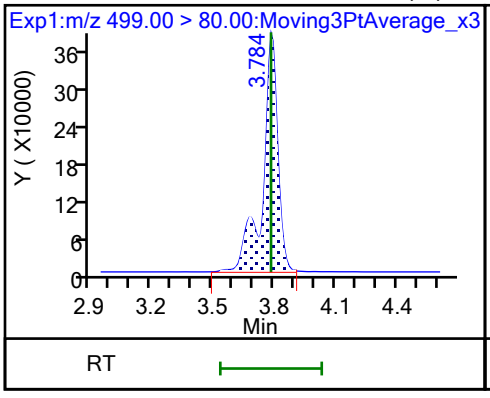
* 62 13C2 PFOA



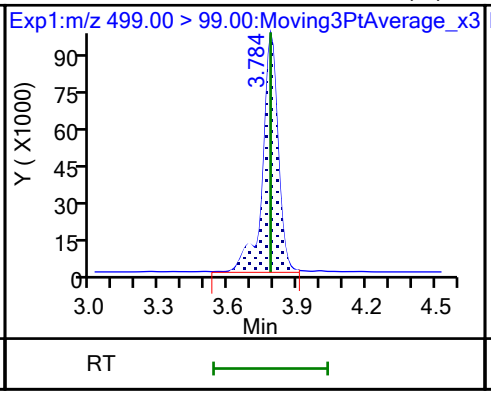
D 18 13C4 PFOS



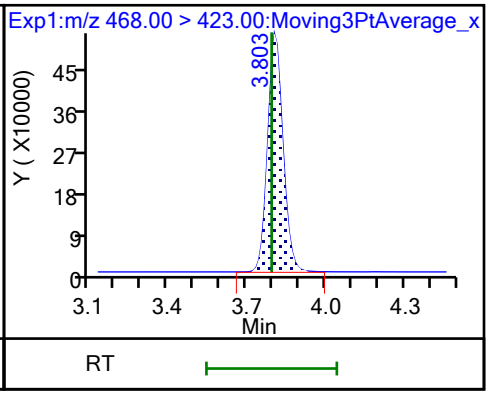
17 Perfluorooctanesulfonic acid (M)



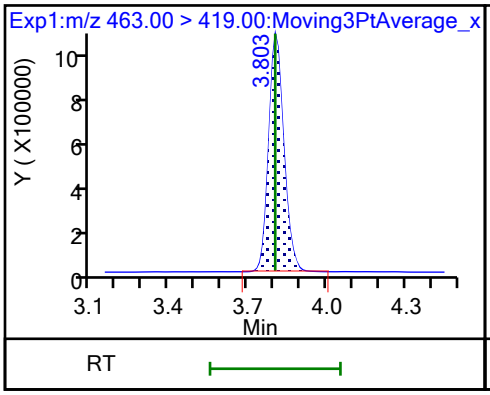
17 Perfluorooctanesulfonic acid (M)



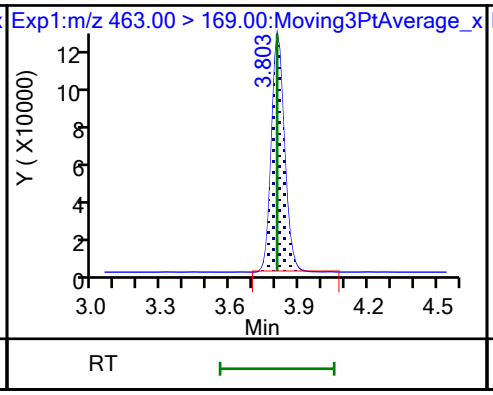
D 19 13C5 PFNA



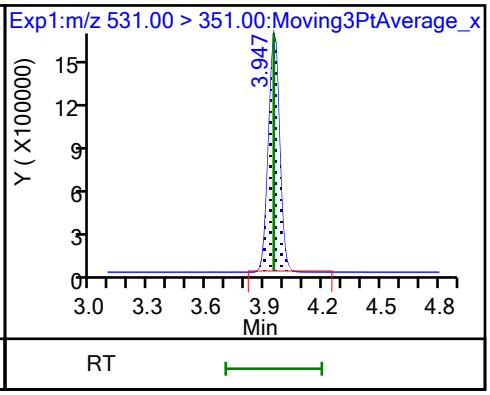
20 Perfluorononanoic acid



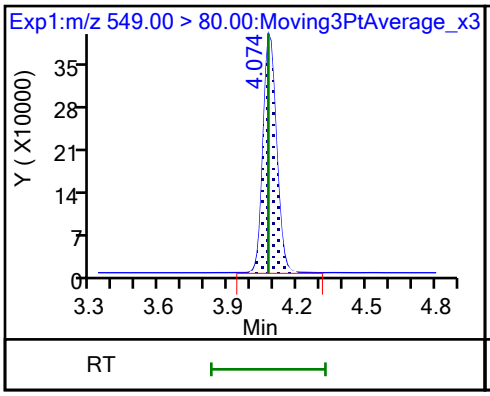
20 Perfluorononanoic acid



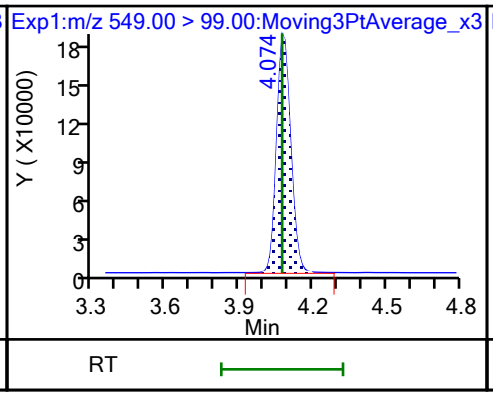
69 9-Chlorohexadecafluoro-3-oxanona



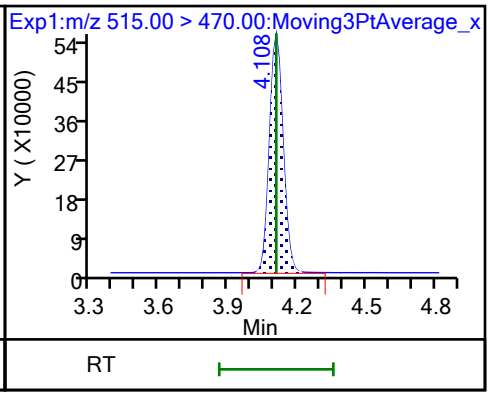
68 Perfluorononanesulfonic acid



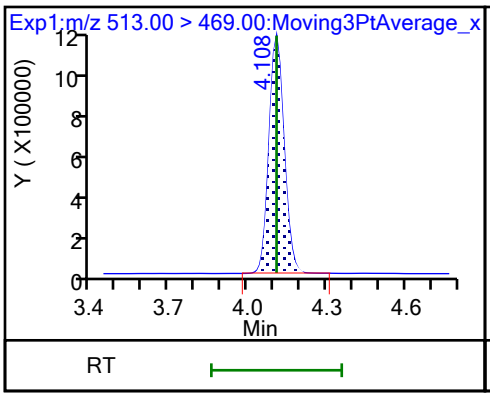
68 Perfluorononanesulfonic acid



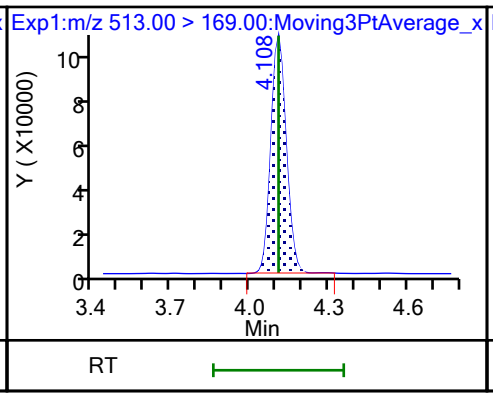
D 23 13C2 PFDA



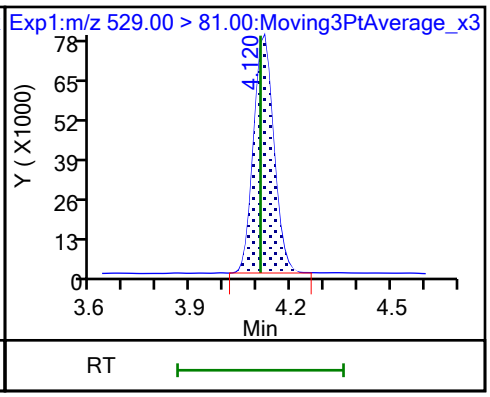
24 Perfluorodecanoic acid



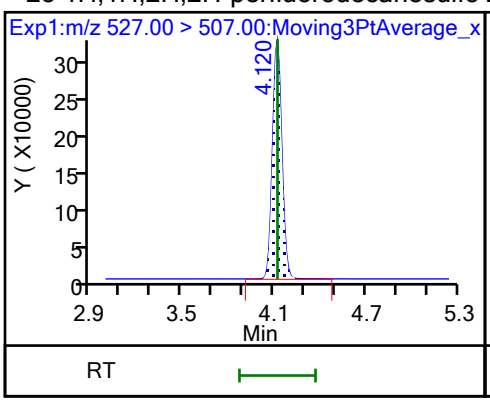
24 Perfluorodecanoic acid



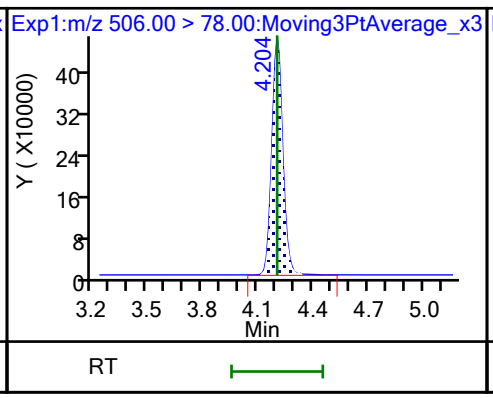
D 26 M2-8:2 FTS



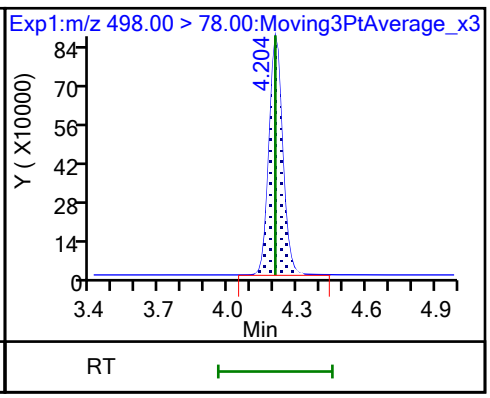
25 1H,1H,2H,2H-perfluorodecanesulfo



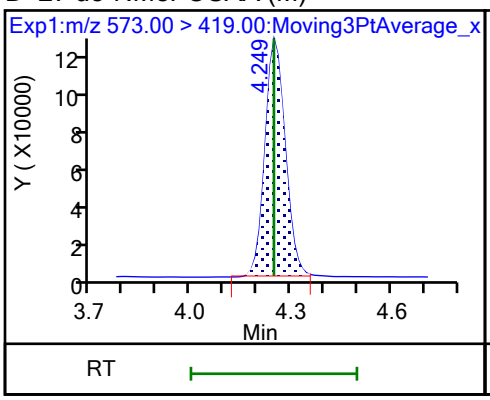
D 21 13C8 FOSA



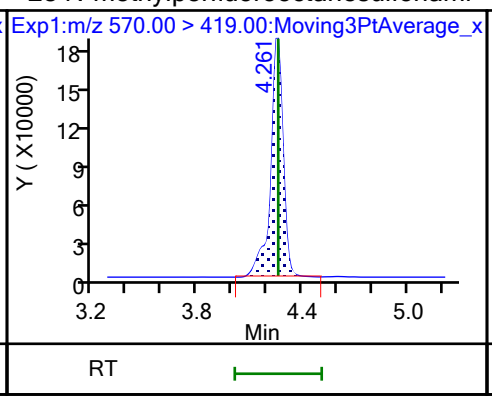
22 Perfluorooctanesulfonamide



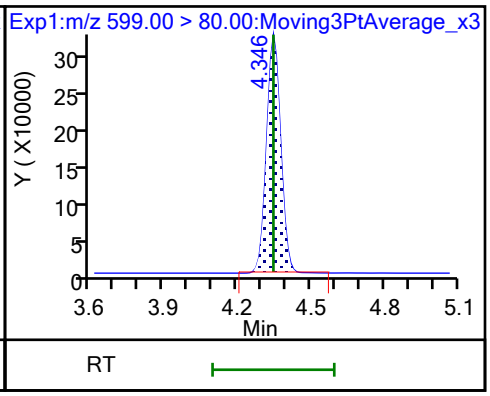
D 27 d3-NMeFOSAA (M)



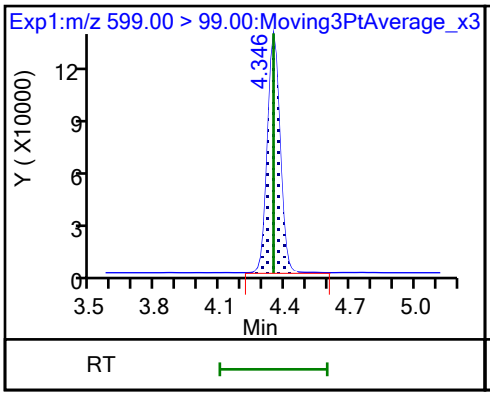
28 N-methylperfluorooctanesulfonami



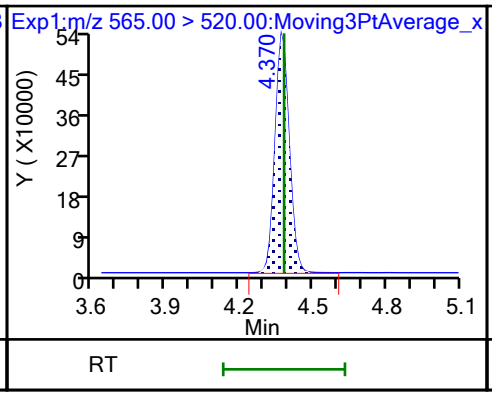
29 Perfluorodecanesulfonic acid



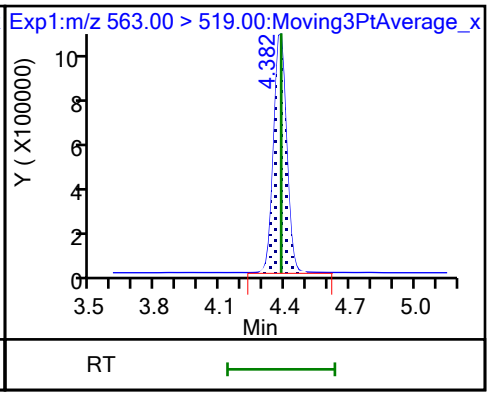
29 Perfluorodecanesulfonic acid



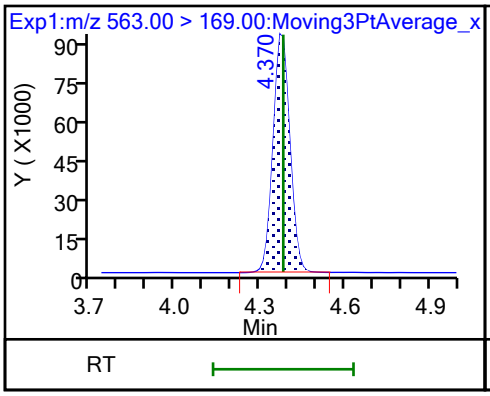
D 30 13C2 PFUnA



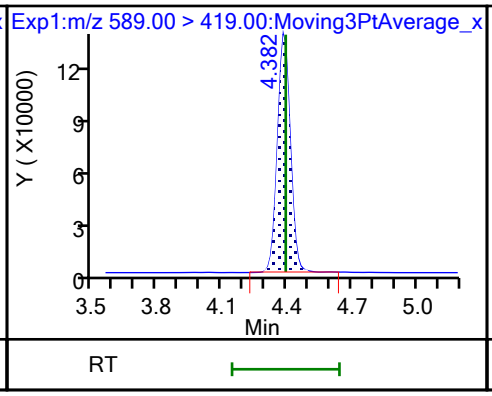
31 Perfluoroundecanoic acid



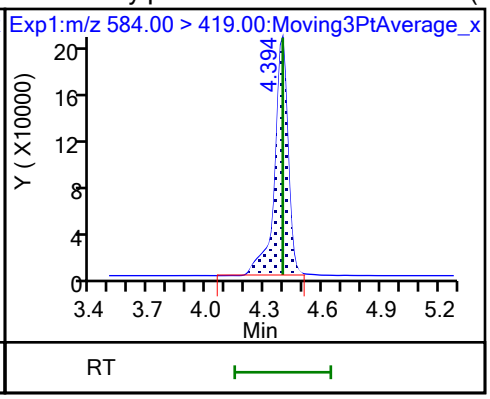
31 Perfluoroundecanoic acid



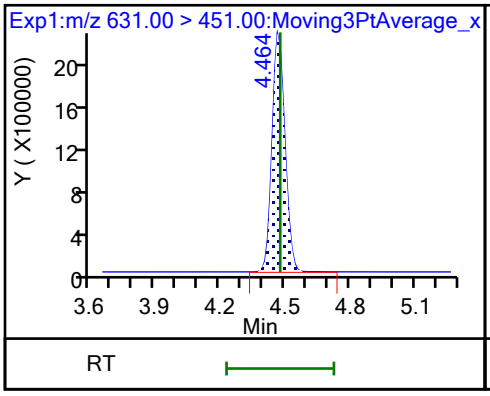
D 32 d5-NEtFOSAA



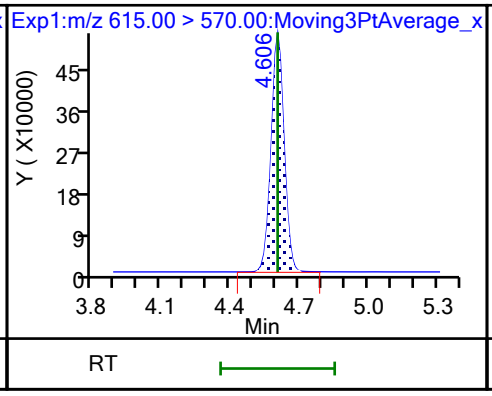
33 N-ethylperfluorooctanesulfonamid (M)



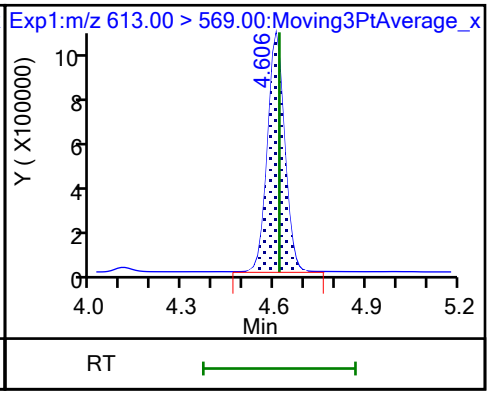
66 11-Chloroeicosafluoro-3-oxaundec



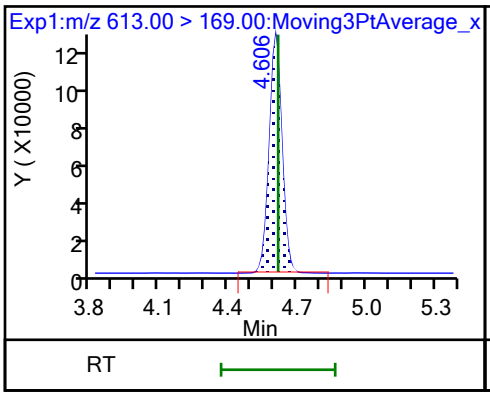
D 36 13C2 PFDoA



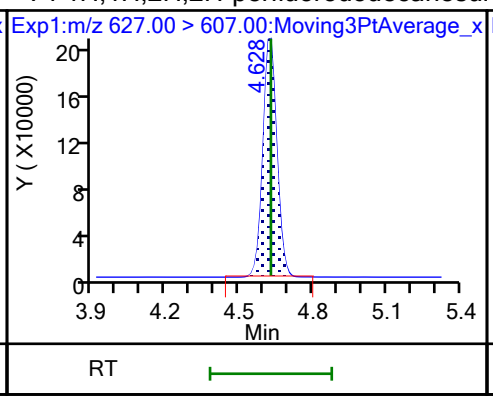
37 Perfluorododecanoic acid



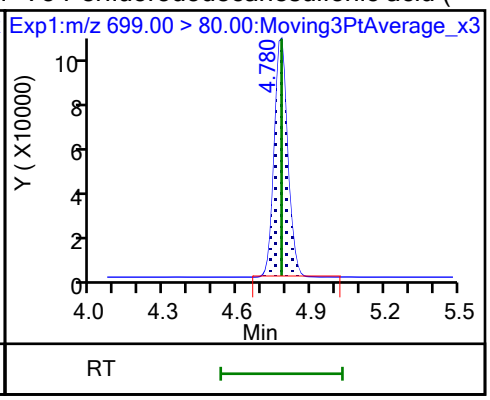
37 Perfluorododecanoic acid



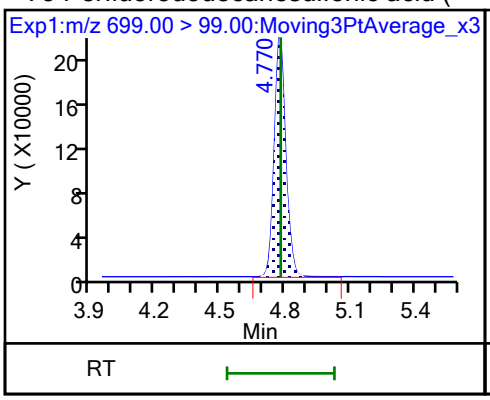
74 1H,1H,2H,2H-perfluorododecanesul



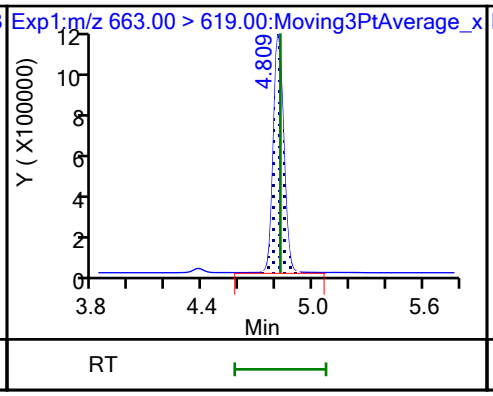
75 Perfluorododecanesulfonic acid (



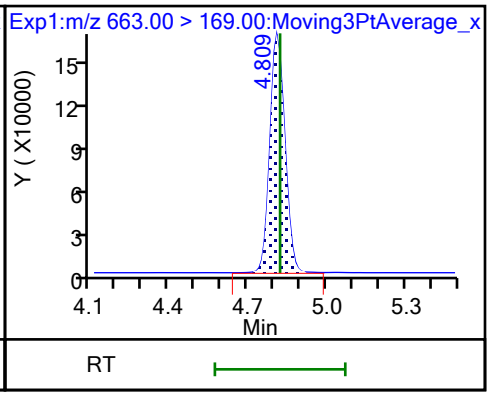
75 Perfluorododecanesulfonic acid (



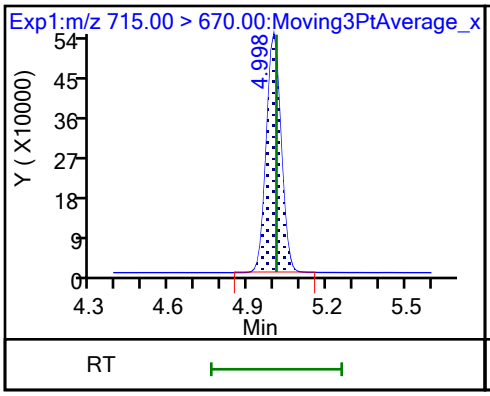
41 Perfluorotridecanoic acid



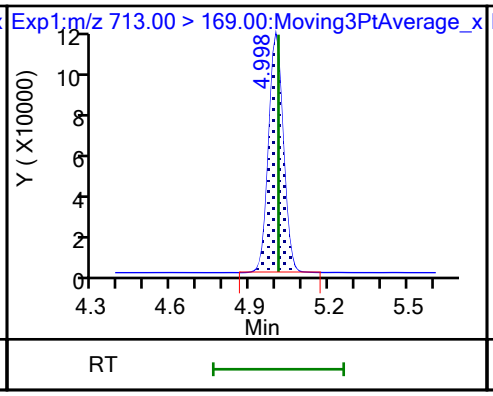
41 Perfluorotridecanoic acid



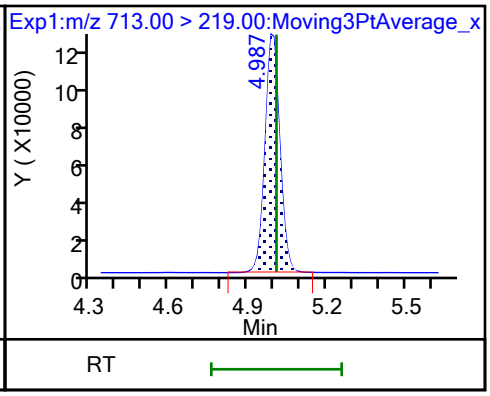
D 43 13C2 PFTeDA



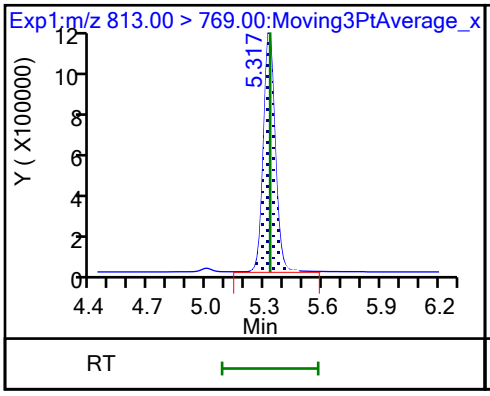
42 Perfluorotetradecanoic acid



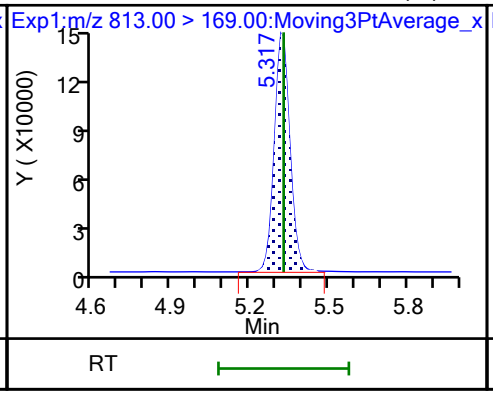
42 Perfluorotetradecanoic acid



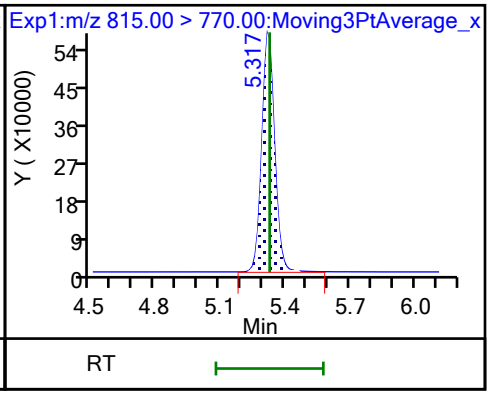
45 Perfluorohexadecanoic acid



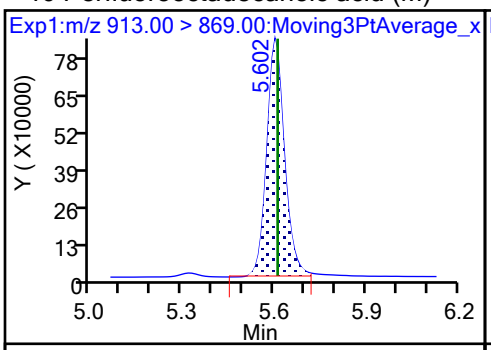
45 Perfluorohexadecanoic acid (M)



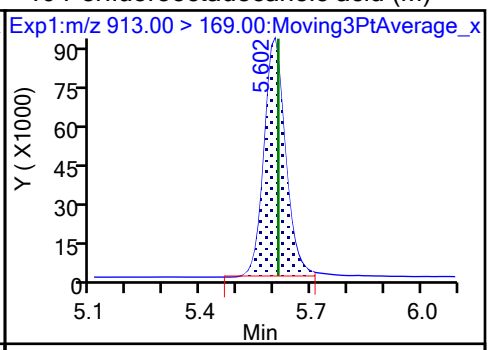
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Jul-2023 17:57:38 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 200-0056441-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:11:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	1663241	1.20		95.9	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	12675387	10.5		105	832	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1291692	1.20		96.0	717	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	11390973	10.2		102	344	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1657995	1.14		97.9	71060	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	13919716	8.74	Target=2.07	98.5	587	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	6698425		2.08(1.04-3.11)	98.5	540	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	194992	1.16		99.1	74.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	5267048	9.29		99.1	971	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.756	2.731	0.025	0.794	1345799	1.23		98.3	1043	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.756	2.731	0.025	1.000	11510430	9.72	Target=14.29	97.2	1512	
313.00 > 119.00	2.756	2.731	0.025	1.000	852173		13.51(7.15-21.44)	97.2	531	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.768	2.731	0.037	0.889	12787110	9.32	Target=2.78	99.1	25077	
349.00 > 99.00	2.756	2.731	0.025	0.885	4667101		2.74(1.39-4.17)	99.1	3572	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.869	2.844	0.025	0.826	265620	1.25		100	1509	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.869	2.844	0.025	1.000	2096317	9.85		98.5	8124	
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.897	1242233	1.19		101	4445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	10346652	8.90	Target=3.23	97.3	5752	
399.00 > 99.00	3.115	3.092	0.023	1.000	3264172		3.17(1.62-4.84)	97.3	1903	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.127	3.104	0.023	1.000	13183148	10.0	Target=4.11	100	2397	
363.00 > 169.00	3.127	3.104	0.023	1.000	3246220		4.06(2.06-6.17)	100	2137	
D 9 13C4 PFHpA										
367.00 > 322.00	3.127	3.104	0.023	0.901	1466571	1.22		97.6	3939	
77 DONA										
377.00 > 251.00	3.161	3.138	0.023	0.833	32898209	8.92	Target=3.28	94.4	23285	
377.00 > 85.00	3.161	3.138	0.023	0.833	10971378		3.00(1.64-4.92)	94.4	8094	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.462	3.446	0.016	0.913	9291673	10.0	Target=4.71	105	9326	
449.00 > 99.00	3.462	3.446	0.016	0.913	1923167		4.83(2.36-7.07)	105	2597	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	250039	1.15		97.0	319	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	5360896	9.32		98.0	3149	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.480	3.464	0.016	1.000	13504480	9.37	Target=2.90	93.7	1069	
413.00 > 169.00	3.480	3.464	0.016	1.000	4762707		2.84(1.45-4.35)	93.7	6332	
D 14 13C4 PFOA										
417.00 > 372.00	3.480	3.464	0.016	1.003	1691186	1.24		99.4	4091	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		1749133	1.25			3853	
D 18 13C4 PFOS										
503.00 > 80.00	3.793	3.783	0.010	1.093	765818	1.15		96.6	1062	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.000	6987392	9.35	Target=4.11	101	3645	M
499.00 > 99.00	3.783	3.783	0.0	0.997	1609293		4.34(2.05-6.16)	101	1686	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1889768	1.28		102	5845	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	14082035	9.50	Target=8.48	95.0	2121	
463.00 > 169.00	3.814	3.803	0.011	1.003	1663440		8.47(4.24-12.72)	95.0	6569	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.043	21405197	9.36		100	14512	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.077	5744699	10.1	Target=2.17	105	9927	
549.00 > 99.00	4.084	4.074	0.010	1.077	2540483		2.26(1.08-3.25)	105	4161	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	1979736	1.28		102	4717	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	15207258	9.61	Target=10.55	96.1	3130	
513.00 > 169.00	4.108	4.108	0.0	1.000	1435944		10.59(5.27-15.82)	96.1	3360	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	309678	1.27		106	551	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	4983035	8.75		91.2	118767	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1724931	1.30		104	4594	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	13020569	9.89		98.9	8748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	465286	1.25		100	354	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	3280076	9.71		97.1	1965	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.146	4450137	10.2	Target=2.28	105	9388	
599.00 > 99.00	4.346	4.346	0.0	1.146	1850008		2.41(1.14-3.42)	105	4976	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.262	1818926	1.24		99.3	12538	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	14323125	9.55	Target=11.30	95.5	3667	
563.00 > 169.00	4.382	4.382	0.0	1.000	1240618		11.55(5.65-16.96)	95.5	7177	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	456350	1.28		102	1074	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.394	4.393	0.001	1.003	3409503	9.34		93.4	39384	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.177	29976782	8.55		90.6	25762	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	1800020	1.21		96.7	6856	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	14693173	10.0	Target=8.15	100	1405	
613.00 > 169.00	4.605	4.616	-0.011	1.000	1710081		8.59(4.07-12.22)	100	10412	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	3151402	9.26		96.1	16125	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.260	1445002	9.74	Target=0.50	101	8185	
699.00 > 99.00	4.780	4.779	0.001	1.260	2914789		0.50(0.25-0.75)	101	8974	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	14866529	9.65	Target=6.61	96.5	1279	
663.00 > 169.00	4.808	4.822	-0.014	1.044	2252925		6.60(3.31-9.92)	96.5	4587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	1876594	1.27		101	6427	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.997	5.008	-0.011	1.000	1575221	9.38	Target=0.96	93.8	6626	
713.00 > 219.00	4.997	5.008	-0.011	1.000	1663605		0.95(0.48-1.44)	93.8	6338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.002	15997184	9.75	Target=7.69	97.5	1329	
813.00 > 169.00	5.317	5.328	-0.011	1.000	2021184		7.91(3.85-11.54)	97.5	3771	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2051028	1.20		96.1	4731	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	12548221	9.79	Target=9.13	97.9	379	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	1429786		8.78(4.56-13.69)	97.9	466	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

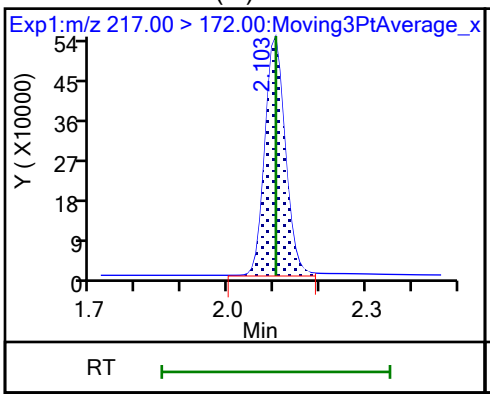
PFAS32NCIC6_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:03 Chrom Revision: 2.3 19-Jul-2023 18:28:48

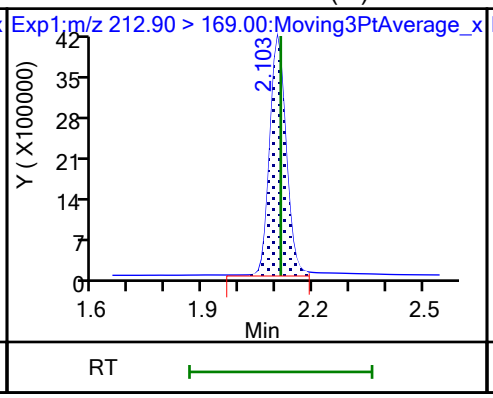
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Injection Date: 26-Jul-2023 17:57:38 Instrument ID: LC812
Lims ID: IC 6
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

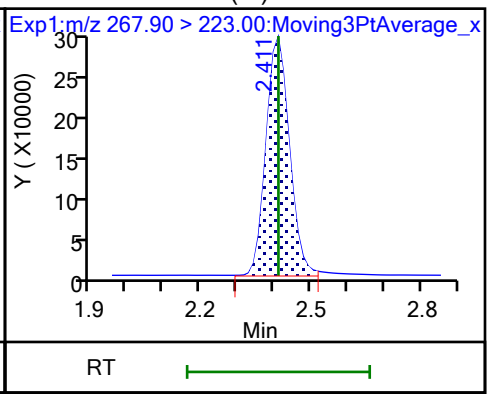
D 1 13C4 PFBA (M)



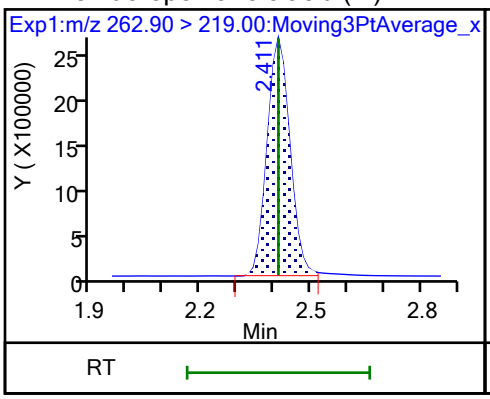
2 Perfluorobutanoic acid (M)



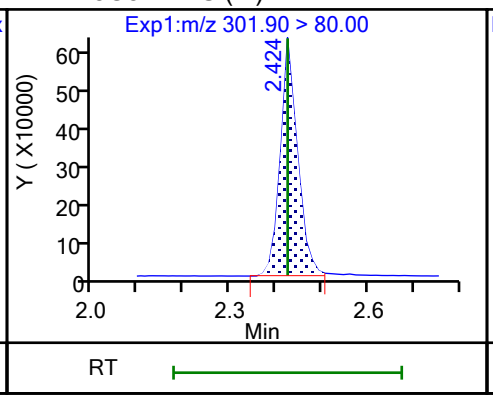
D 3 13C5 PFPeA (M)



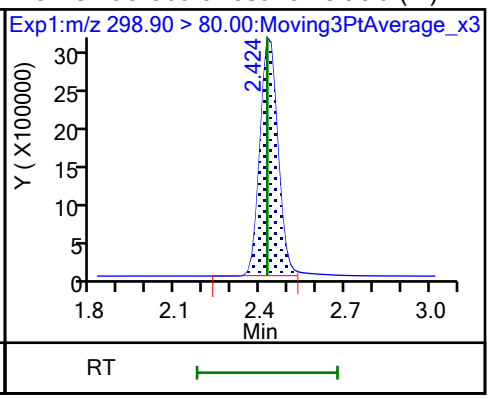
4 Perfluoropentanoic acid (M)



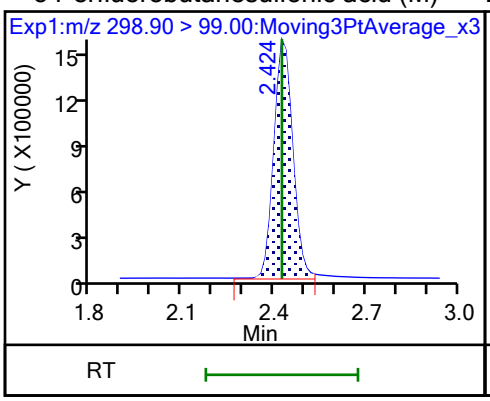
D 47 13C3 PFBS (M)



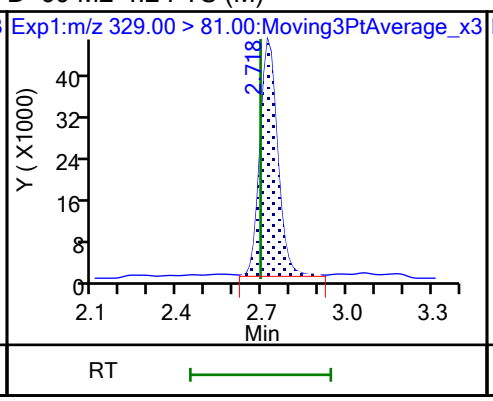
5 Perfluorobutanesulfonic acid (M)



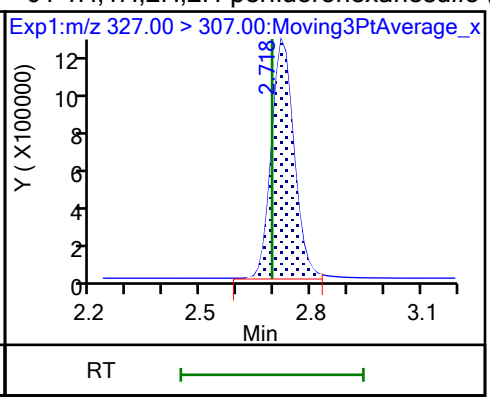
5 Perfluorobutanesulfonic acid (M)



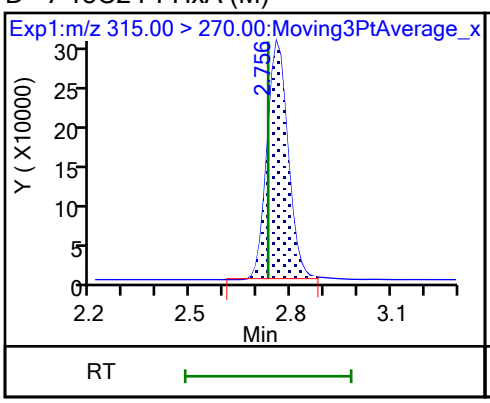
D 60 M2-4:2 FTS (M)



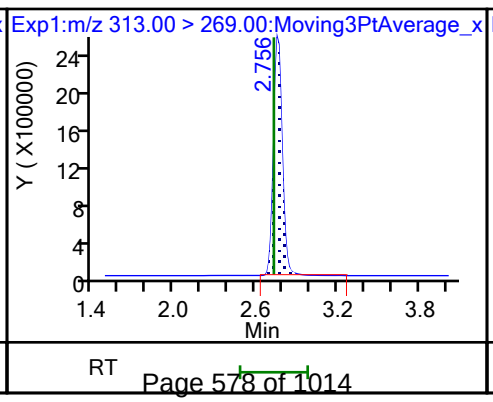
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



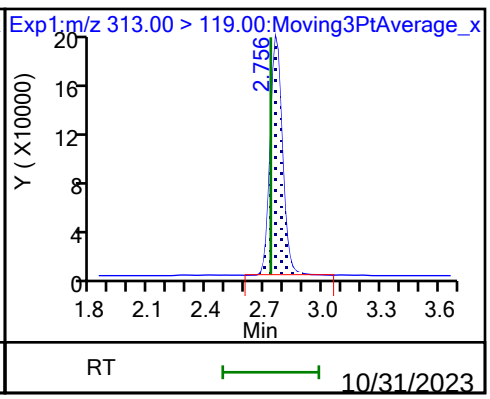
D 7 13C2 PFHxA (M)



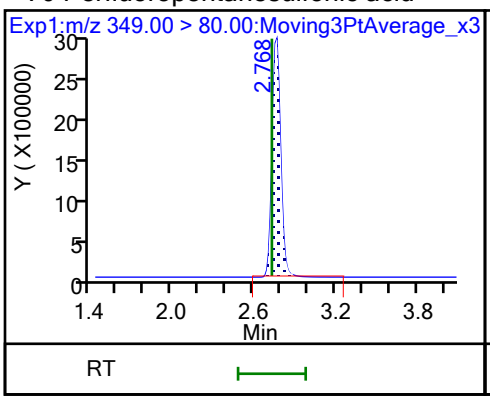
6 Perfluorohexanoic acid



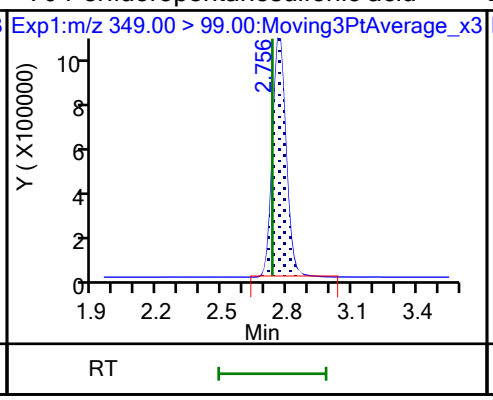
6 Perfluorohexanoic acid



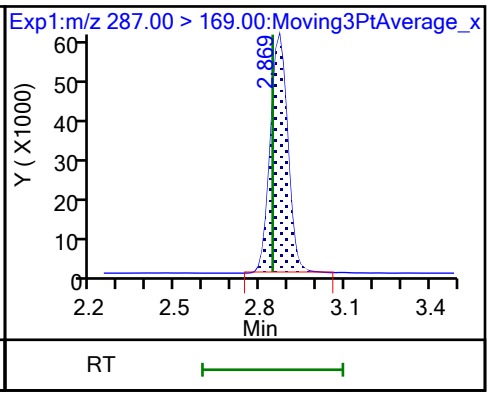
70 Perfluoropentanesulfonic acid



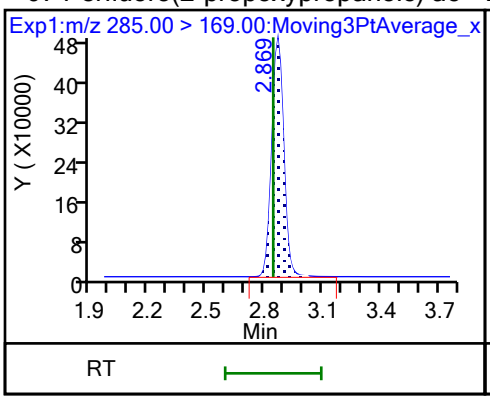
70 Perfluoropentanesulfonic acid



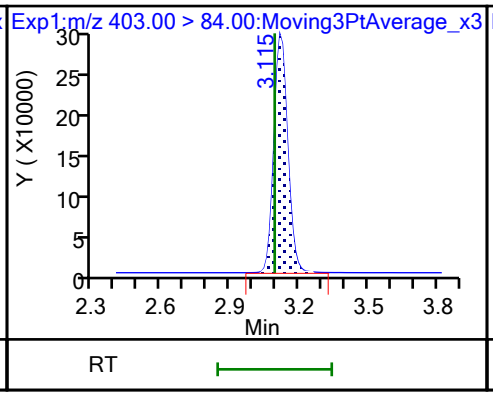
D 64 13C3 HFPO-DA



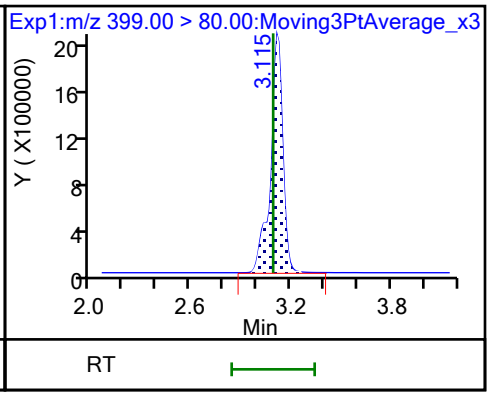
67 Perfluoro(2-propoxypropanoic) ac



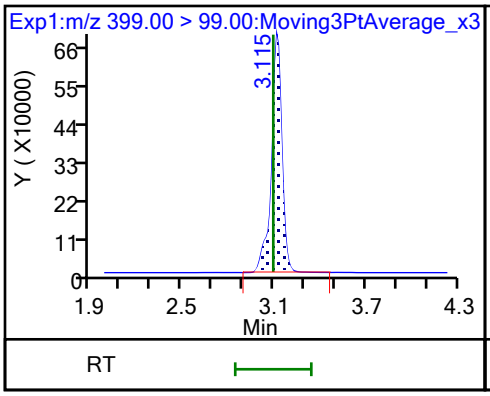
D 11 18O2 PFHxS



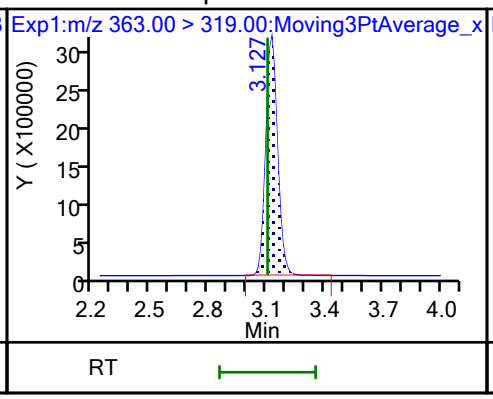
8 Perfluorohexanesulfonic acid



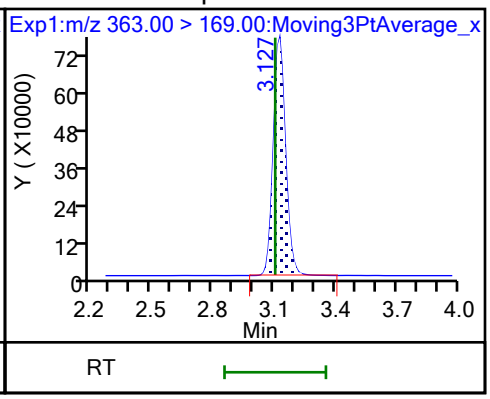
8 Perfluorohexanesulfonic acid



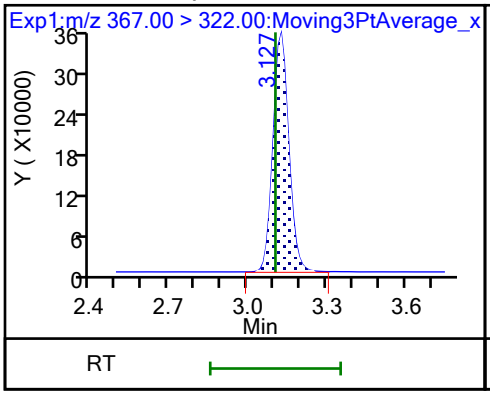
10 Perfluoroheptanoic acid



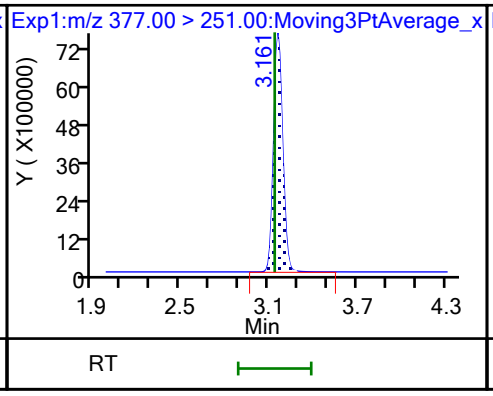
10 Perfluoroheptanoic acid



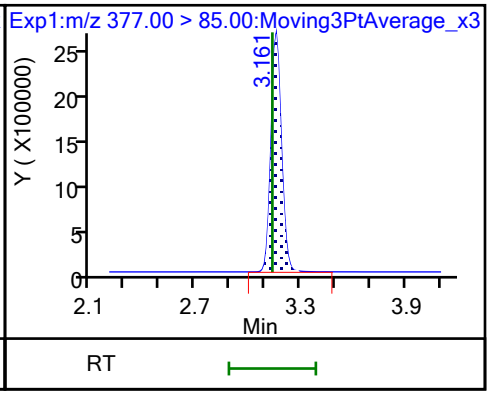
D 9 13C4 PFHpA



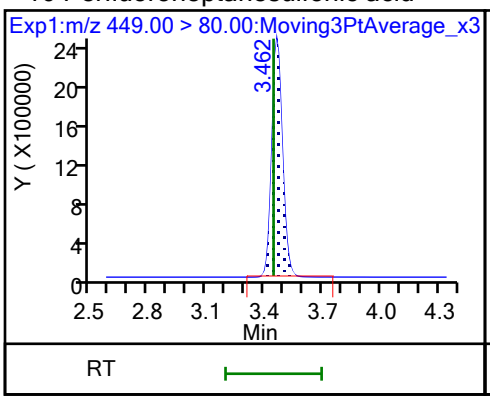
77 DONA



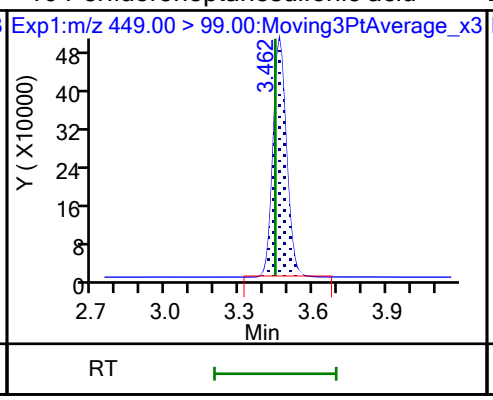
77 DONA



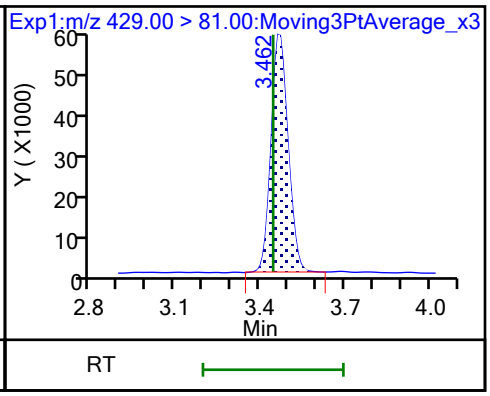
16 Perfluoroheptanesulfonic acid



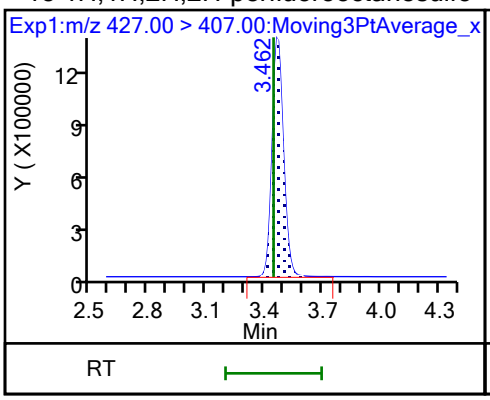
16 Perfluoroheptanesulfonic acid



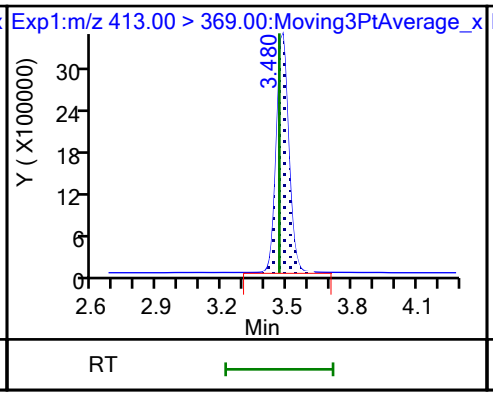
D 12 M2-6:2 FTS



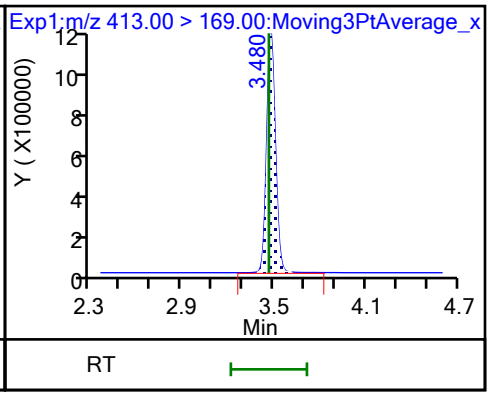
13 1H,1H,2H,2H-perfluorooctanesulfo



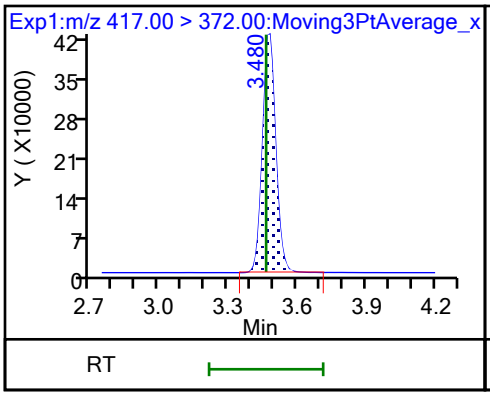
15 Perfluorooctanoic acid



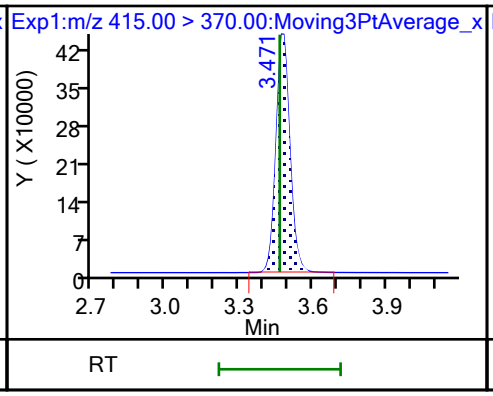
15 Perfluorooctanoic acid



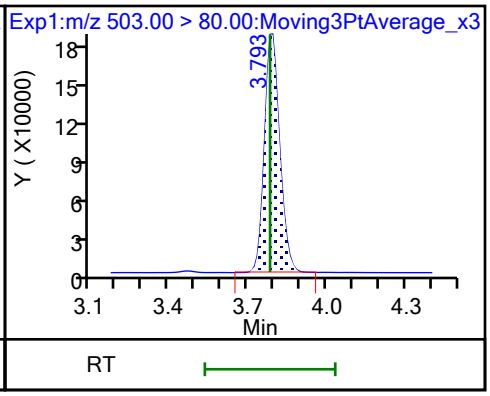
D 14 13C4 PFOA



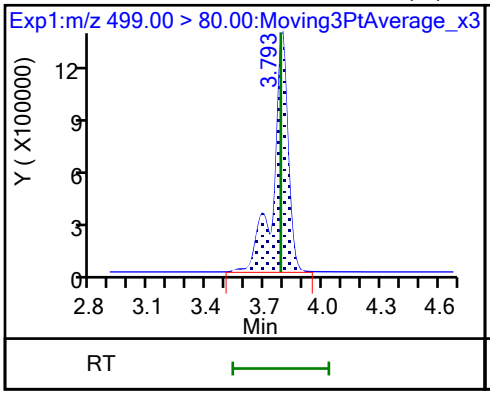
* 62 13C2 PFOA



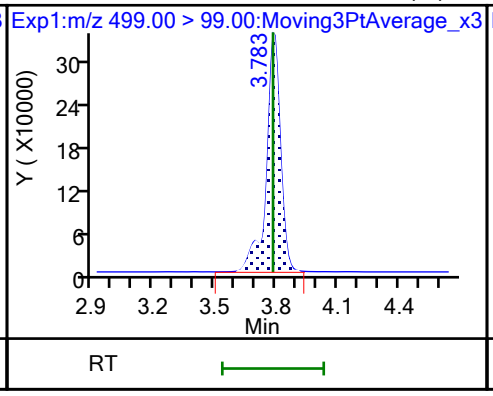
D 18 13C4 PFOS



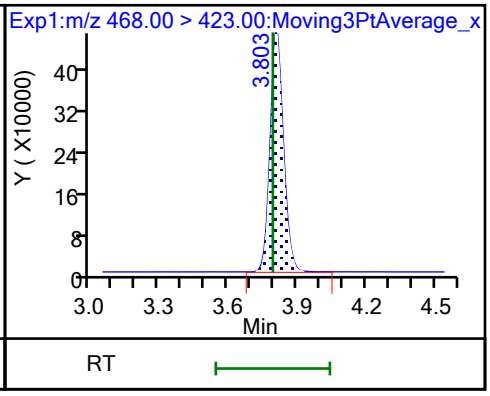
17 Perfluorooctanesulfonic acid (M)



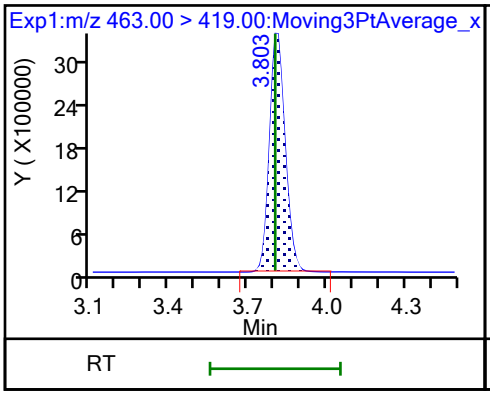
17 Perfluorooctanesulfonic acid (M)



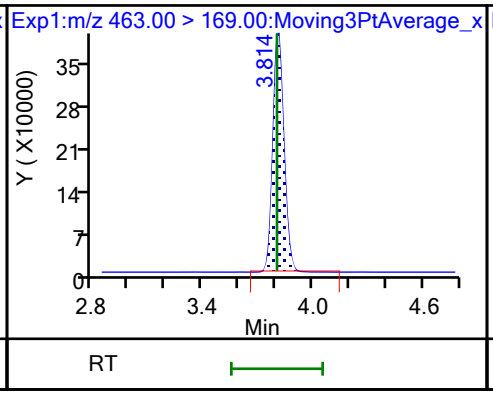
D 19 13C5 PFNA



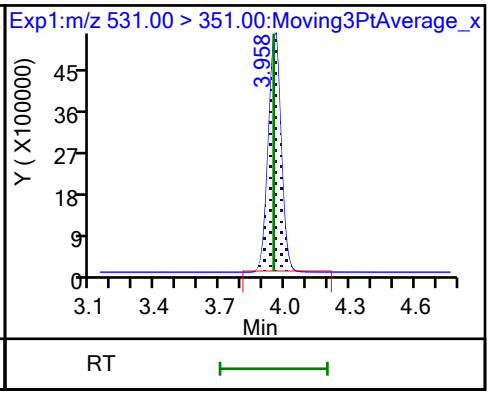
20 Perfluorononanoic acid



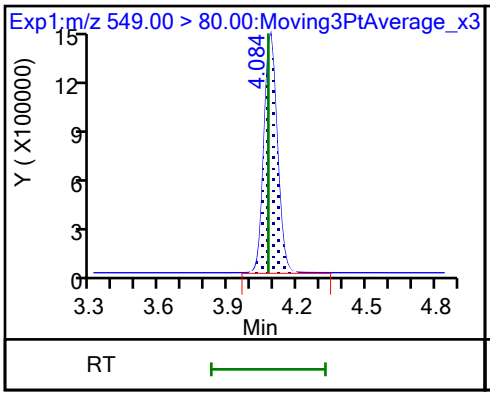
20 Perfluorononanoic acid



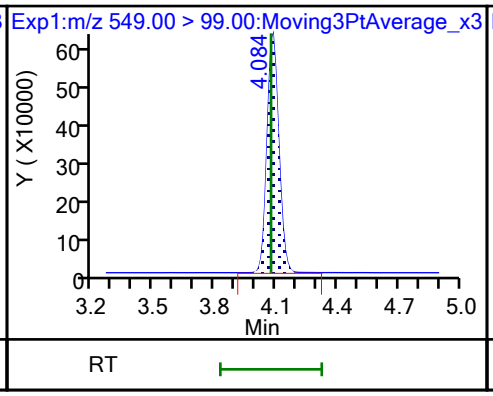
69 9-Chlorohexadecafluoro-3-oxanona



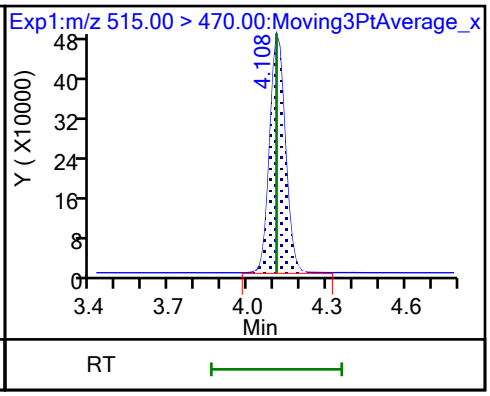
68 Perfluorononanesulfonic acid



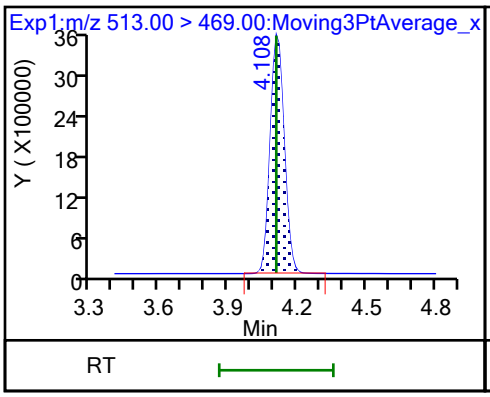
68 Perfluorononanesulfonic acid



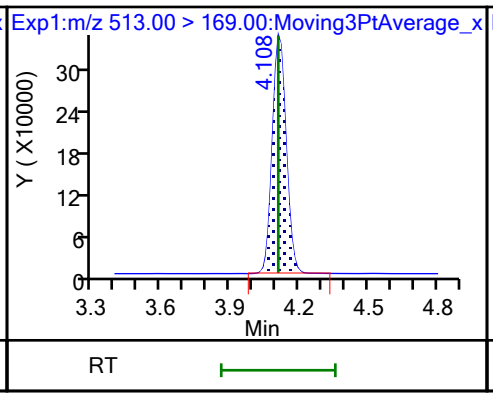
D 23 13C2 PFDA



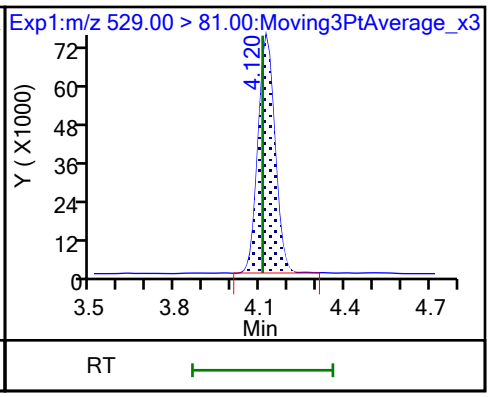
24 Perfluorodecanoic acid



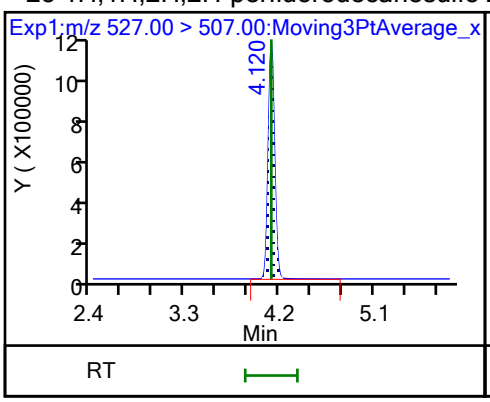
24 Perfluorodecanoic acid



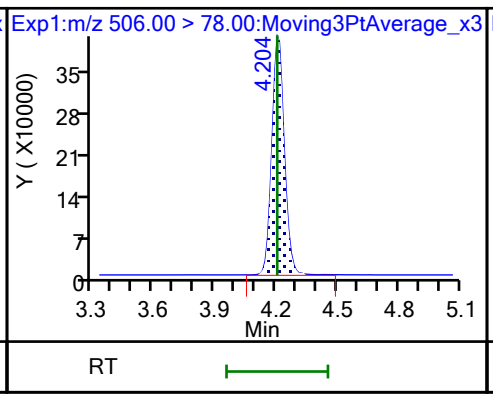
D 26 M2-8:2 FTS



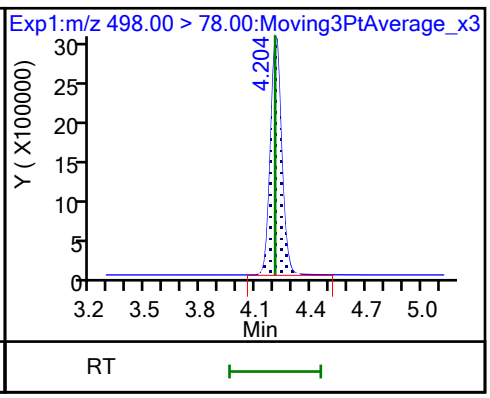
25 1H,1H,2H,2H-perfluorodecanesulfo



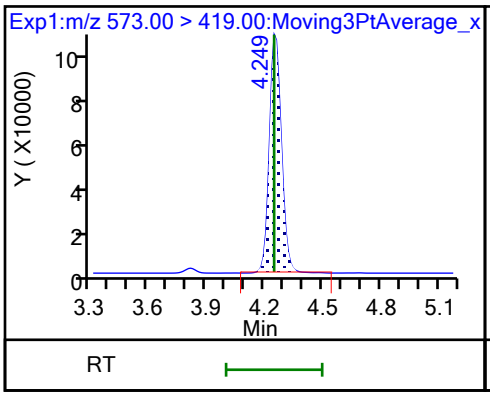
D 21 13C8 FOSA



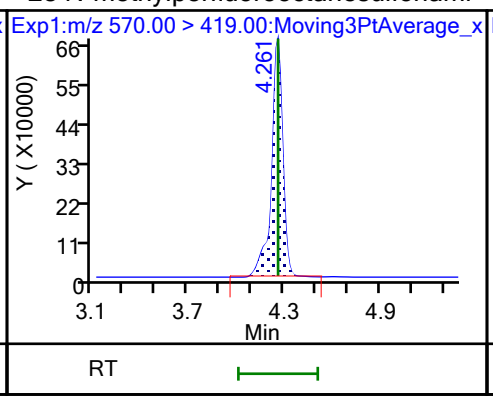
22 Perfluorooctanesulfonamide



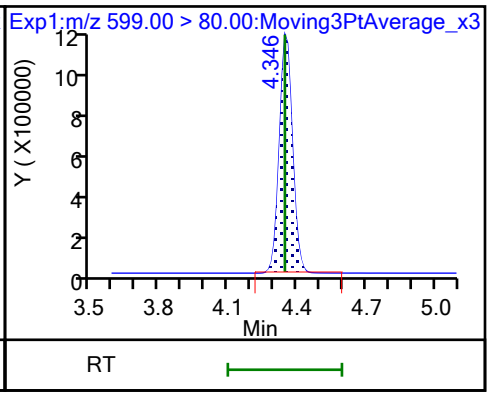
D 27 d3-NMeFOSAA



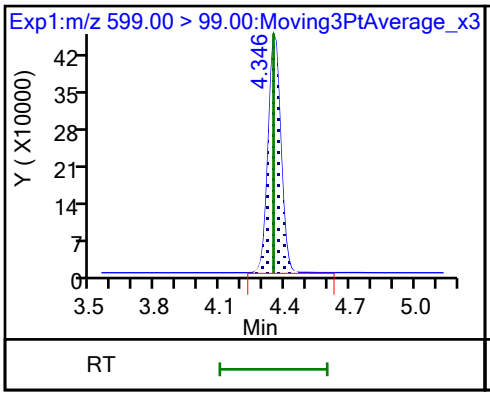
28 N-methylperfluorooctanesulfonami



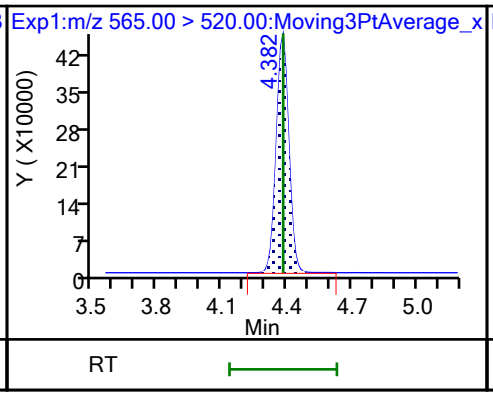
29 Perfluorodecanesulfonic acid



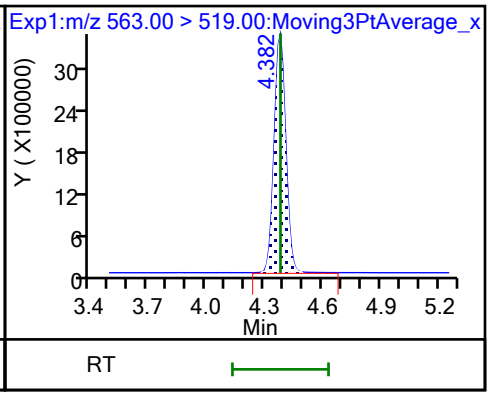
29 Perfluorodecanesulfonic acid



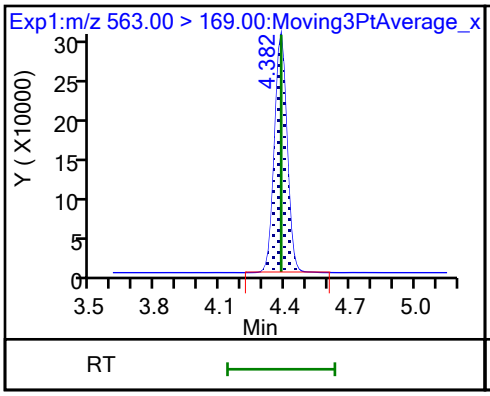
D 30 13C2 PFUnA



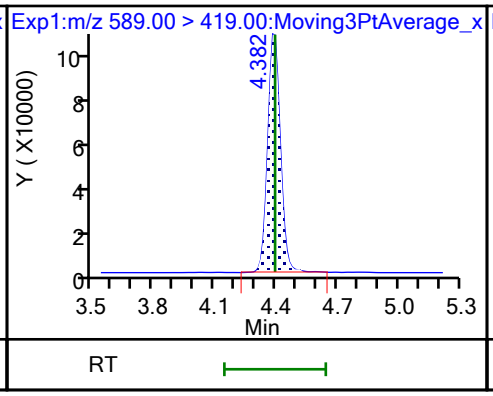
31 Perfluoroundecanoic acid



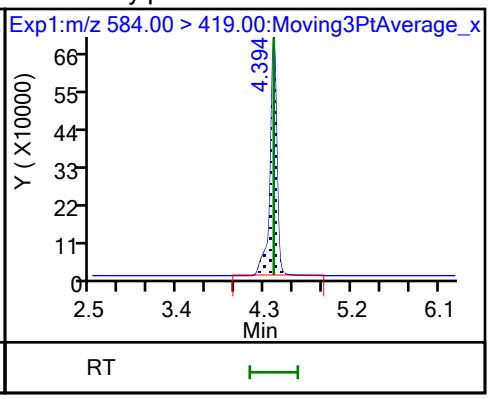
31 Perfluoroundecanoic acid



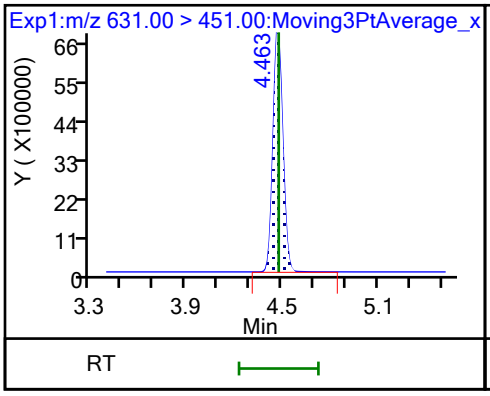
D 32 d5-NEtFOSAA



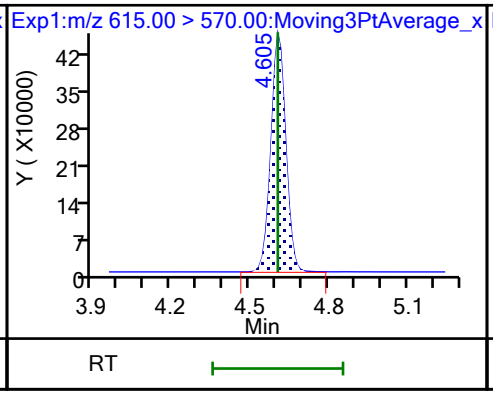
33 N-ethylperfluorooctanesulfonamid



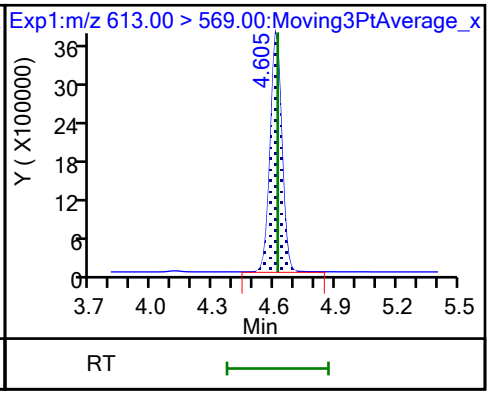
66 11-Chloroeicosafluoro-3-oxaundec



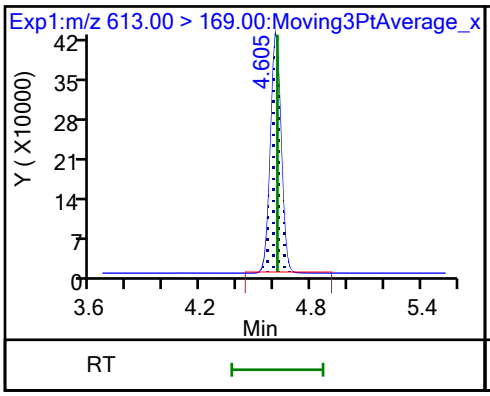
D 36 13C2 PFDoA



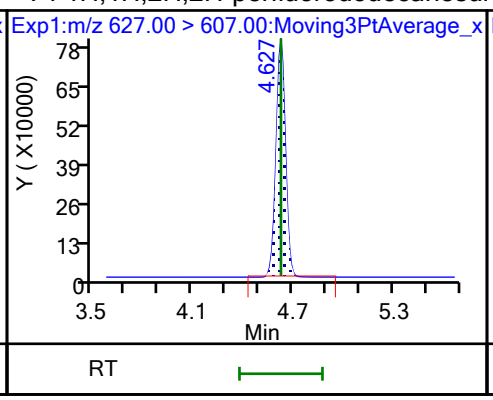
37 Perfluorododecanoic acid



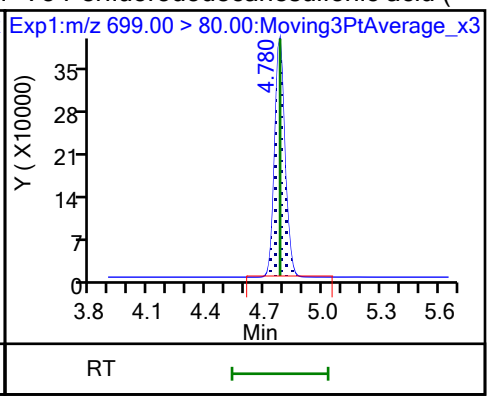
37 Perfluorododecanoic acid



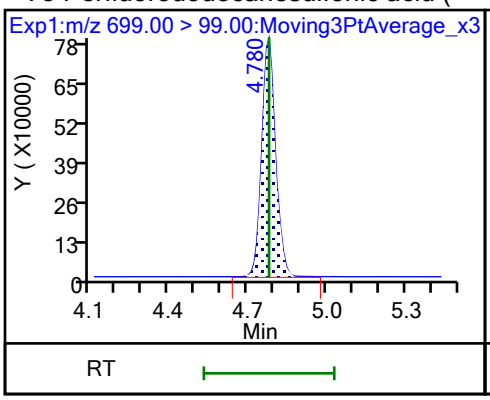
74 1H,1H,2H,2H-perfluorododecanesul



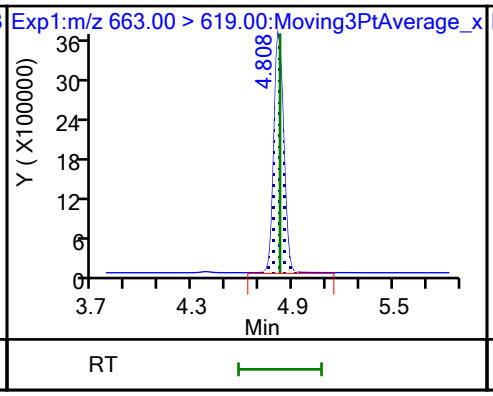
75 Perfluorododecanesulfonic acid (



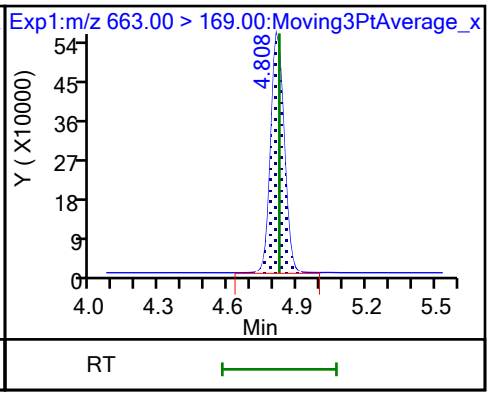
75 Perfluorododecanesulfonic acid (



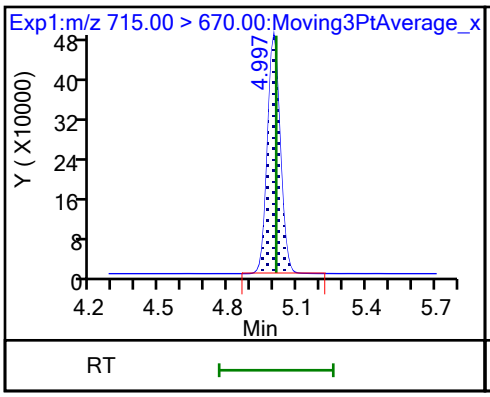
41 Perfluorotridecanoic acid



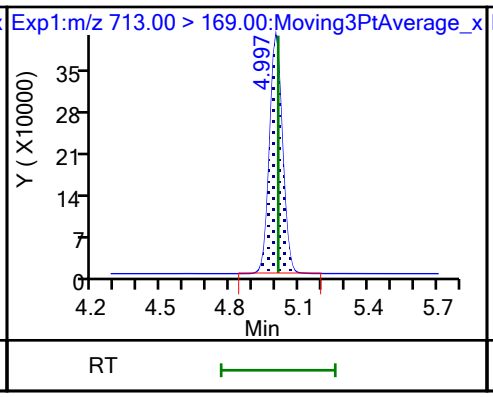
41 Perfluorotridecanoic acid



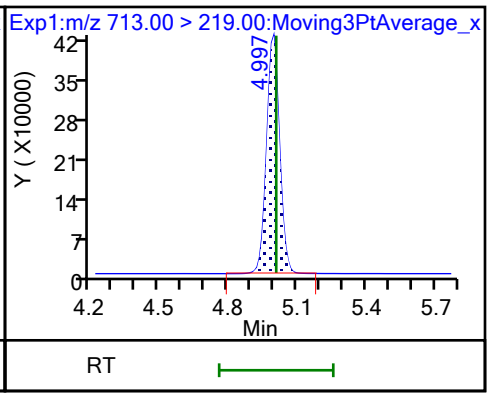
D 43 13C2 PFTeDA



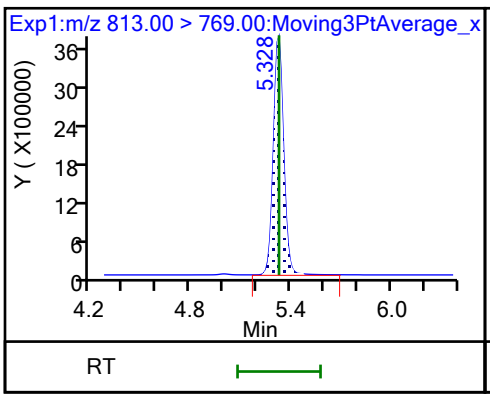
42 Perfluorotetradecanoic acid



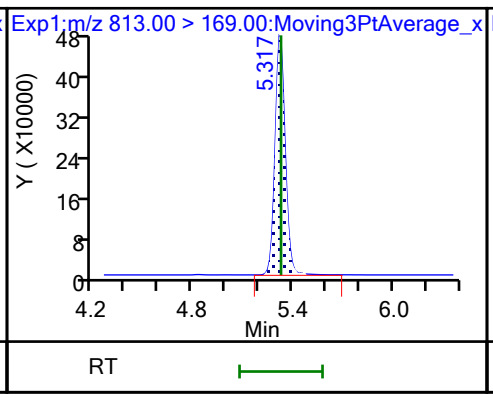
42 Perfluorotetradecanoic acid



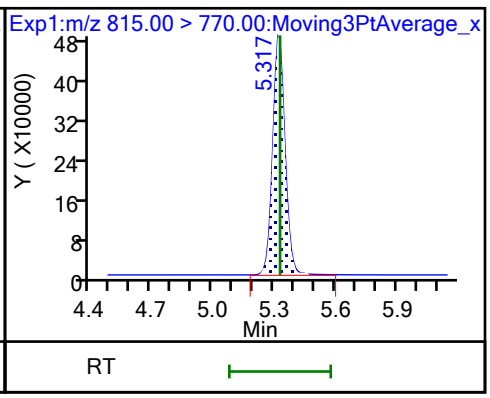
45 Perfluorohexadecanoic acid



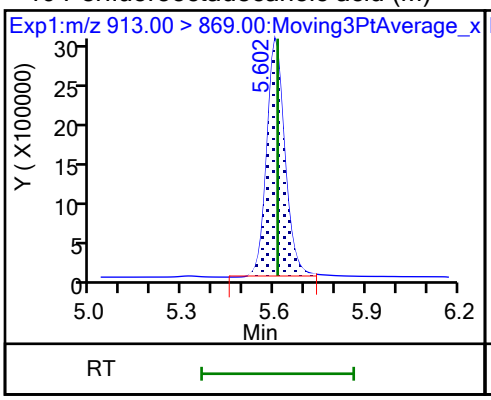
45 Perfluorohexadecanoic acid



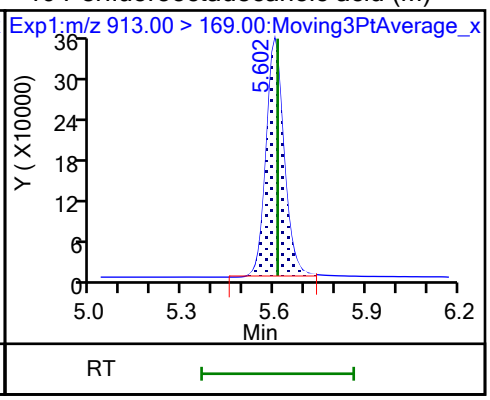
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Jul-2023 18:05:46 ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 200-0056441-011 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:07 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:17:02
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.606	1758198	1.24		99.4	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	29150051	22.9		91.5	1625	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.397	2.411	-0.014	0.694	1319141	1.20		96.1	720	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.397	2.411	-0.014	1.000	26331175	23.1		92.5	419	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.698	1925353	1.30		112	70151	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.411	2.425	-0.014	1.000	33432260	18.1	Target=2.07	81.5	580	M
298.90 > 99.00	2.411	2.425	-0.014	1.000	17197877		1.94(1.04-3.11)	81.5	556	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.784	207012	1.21		103	77.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.706	2.694	0.012	1.000	12889559	21.4		91.4	85591	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.794	1316912	1.18		94.3	776	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.744	2.731	0.013	1.000	26521589	22.9	Target=14.29	91.5	753	M
313.00 > 119.00	2.744	2.731	0.013	1.000	2031245		13.06(7.15-21.44)	91.5	678	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	30796216	20.3	Target=2.78	86.5	1048	M
349.00 > 99.00	2.756	2.731	0.025	0.885	12222657		2.52(1.39-4.17)	86.5	1012	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.856	2.844	0.012	0.827	273677	1.27		101	1285	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	5568235	25.4		102	6439	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.902	1370941	1.29		109	2166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	27349473	21.3	Target=3.23	93.3	7764	
399.00 > 99.00	3.115	3.092	0.023	1.000	8658987		3.16(1.62-4.84)	93.3	7018	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	30971904	22.1	Target=4.11	88.6	5231	
363.00 > 169.00	3.115	3.104	0.011	1.000	8208481		3.77(2.06-6.17)	88.6	4733	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.902	1559821	1.27		102	3648	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.837	68369017	16.4	Target=3.28	69.5	79642	
377.00 > 85.00	3.150	3.138	0.012	0.837	26772118		2.55(1.64-4.92)	69.5	10230	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.435	3.446	-0.011	0.913	23718890	22.7	Target=4.71	95.1	34545	
449.00 > 99.00	3.435	3.446	-0.011	0.913	5261248		4.51(2.36-7.07)	95.1	8032	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.444	3.446	-0.002	0.997	271643	1.23		103	338	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.444	3.446	-0.002	1.000	12827492	20.5		86.3	1734	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.453	3.464	-0.011	1.000	32974345	23.9	Target=2.90	95.5	2249	
413.00 > 169.00	3.453	3.464	-0.011	1.000	11969902		2.75(1.45-4.35)	95.5	9272	
D 14 13C4 PFOA										
417.00 > 372.00	3.453	3.464	-0.011	1.000	1620734	1.17		93.4	5069	
* 62 13C2 PFOA										
415.00 > 370.00	3.453	3.464	-0.011		1782839	1.25			3950	
D 18 13C4 PFOS										
503.00 > 80.00	3.764	3.783	-0.019	1.090	865311	1.28		107	633	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.764	3.783	-0.019	1.000	18816206	22.3	Target=4.11	96.0	9491	M
499.00 > 99.00	3.764	3.783	-0.019	1.000	4470828		4.21(2.05-6.16)	96.0	4135	M
D 19 13C5 PFNA										
468.00 > 423.00	3.794	3.793	0.001	1.098	1902682	1.26		101	3585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.784	3.803	-0.019	0.997	33868175	22.7	Target=8.48	90.8	4295	
463.00 > 169.00	3.794	3.803	-0.009	1.000	4166541		8.13(4.24-12.72)	90.8	5885	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.935	3.947	-0.012	1.045	49573864	19.2		82.2	122080	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.063	4.074	-0.011	1.080	15127922	23.5	Target=2.17	97.9	34897	
549.00 > 99.00	4.063	4.074	-0.011	1.080	7013195		2.16(1.08-3.25)	97.9	11531	
D 23 13C2 PFDA										
515.00 > 470.00	4.097	4.108	-0.011	1.186	1981566	1.25		100	6749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.097	4.108	-0.011	1.000	35125264	22.2	Target=10.55	88.7	8430	
513.00 > 169.00	4.097	4.108	-0.011	1.000	3557829		9.87(5.27-15.82)	88.7	7050	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.109	4.108	0.001	1.190	316911	1.27		106	810	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.109	4.120	-0.011	1.000	12048759	20.7		86.2	64543	
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.214	1759972	1.30		104	4229	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	31572610	23.5		94.0	87074	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.237	4.249	-0.012	1.227	505130	1.34		107	228	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.237	4.260	-0.023	1.000	8770277	23.9		95.7	2253	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.334	4.346	-0.012	1.152	11299421	22.8	Target=2.28	94.7	10546	
599.00 > 99.00	4.334	4.346	-0.012	1.152	4799204		2.35(1.14-3.42)	94.7	10362	
D 30 13C2 PFUnA										
565.00 > 520.00	4.358	4.382	-0.024	1.262	1790927	1.20		96.0	5216	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.003	32455800	22.0	Target=11.30	87.9	7502	
563.00 > 169.00	4.370	4.382	-0.012	1.003	3240672		10.02(5.65-16.96)	87.9	10679	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.370	4.393	-0.023	1.265	430319	1.18		94.6	987	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.003	8392085	24.4		97.5	27196	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.186	64636051	16.3		69.2	118442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.595	4.605	-0.010	1.330	1994604	1.31		105	5976	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.595	4.616	-0.021	1.000	34331936	21.1	Target=8.15	84.6	1991	
613.00 > 169.00	4.595	4.616	-0.021	1.000	4769328		7.20(4.07-12.22)	84.6	22673	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.627	-0.010	1.124	8134970	23.4		96.9	121535	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.267	3739893	22.3	Target=0.50	92.2	19469	
699.00 > 99.00	4.770	4.779	-0.009	1.267	7697869		0.49(0.25-0.75)	92.2	16871	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.047	35226779	20.6	Target=6.61	82.5	2165	
663.00 > 169.00	4.809	4.822	-0.013	1.047	5990766		5.88(3.31-9.92)	82.5	4583	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.447	1918275	1.27		102	5387	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	4171778	24.3	Target=0.96	97.2	14200	
713.00 > 219.00	4.987	5.008	-0.021	0.998	4312498		0.97(0.48-1.44)	97.2	10053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	37681202	20.5	Target=7.69	82.2	1953	
813.00 > 169.00	5.317	5.328	-0.011	1.000	5392503		6.99(3.85-11.54)	82.2	4998	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.540	2292454	1.32		105	5350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	30813591	21.5	Target=9.13	86.1	331	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	3700392		8.33(4.56-13.69)	86.1	382	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

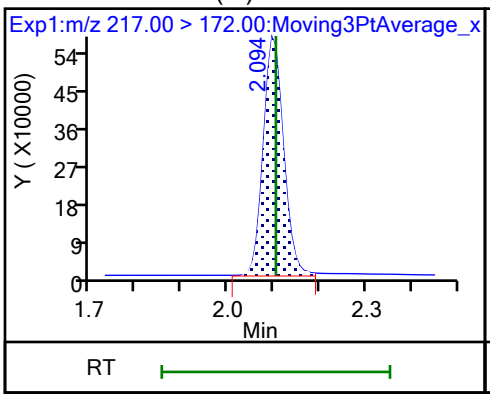
PFAS23NCIC7_00001 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:08 Chrom Revision: 2.3 19-Jul-2023 18:28:48

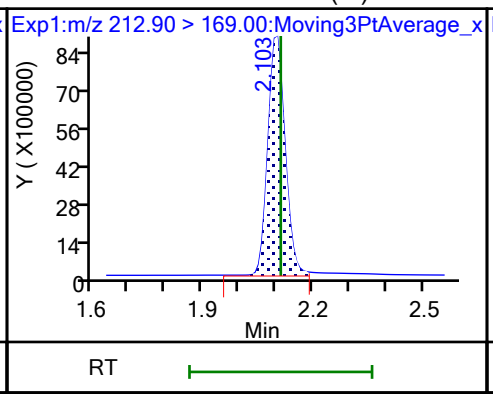
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Injection Date: 26-Jul-2023 18:05:46 Instrument ID: LC812
Lims ID: IC 7
Client ID:
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

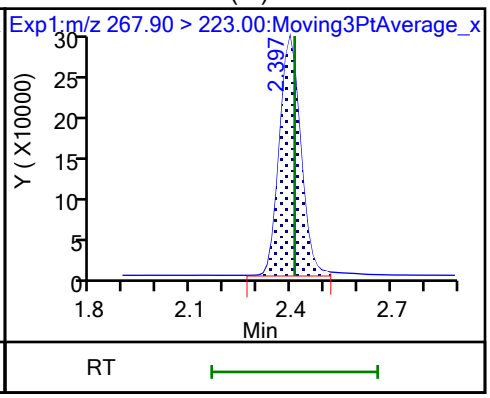
D 1 13C4 PFBA (M)



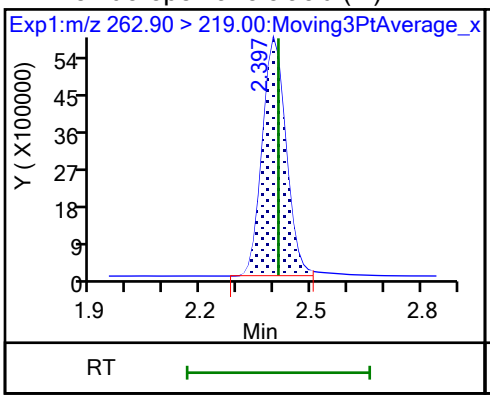
2 Perfluorobutanoic acid (M)



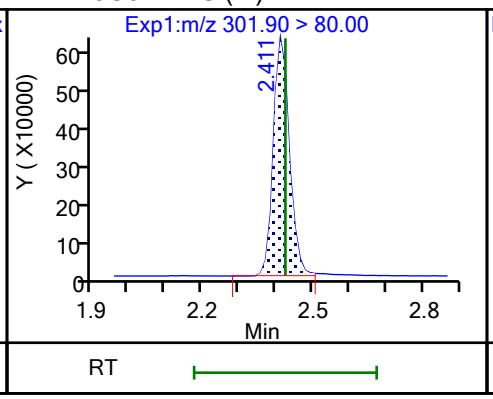
D 3 13C5 PFPeA (M)



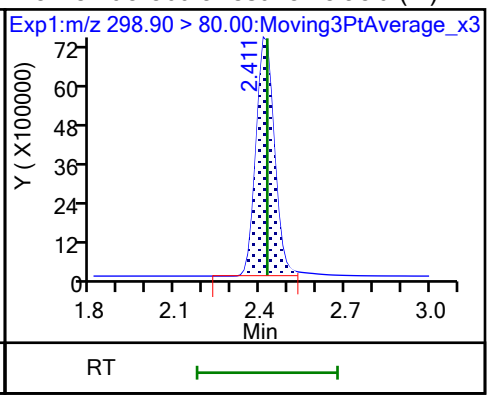
4 Perfluoropentanoic acid (M)



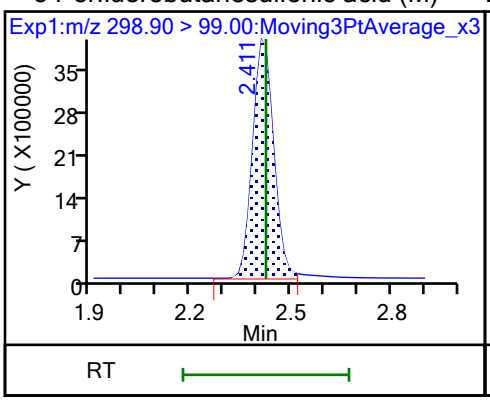
D 47 13C3 PFBS (M)



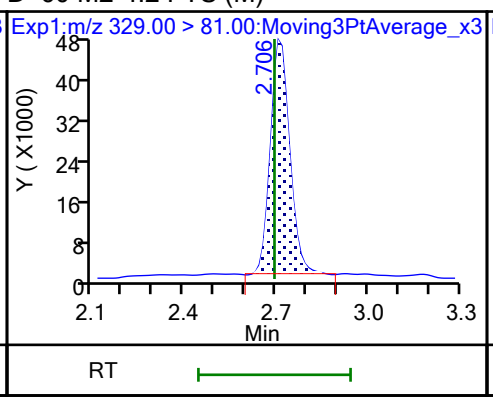
5 Perfluorobutanesulfonic acid (M)



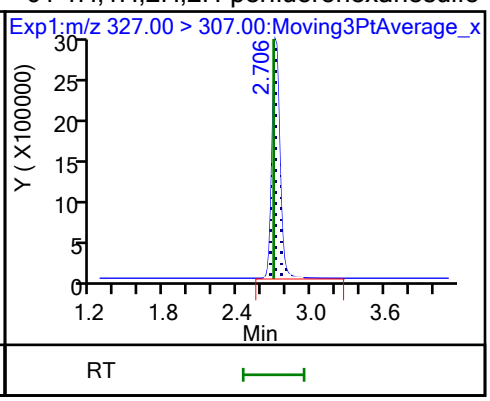
5 Perfluorobutanesulfonic acid (M)



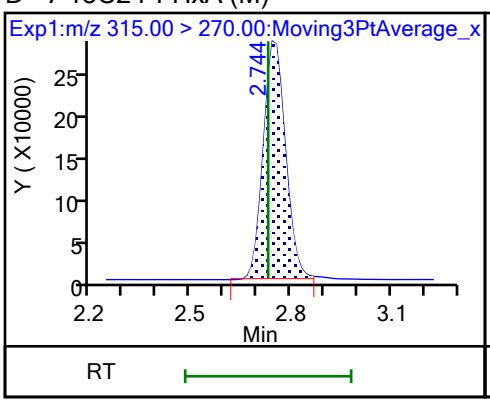
D 60 M2-4:2 FTS (M)



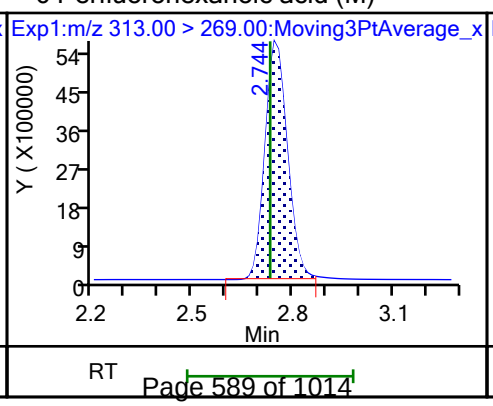
61 1H,1H,2H,2H-perfluorohexanesulfo



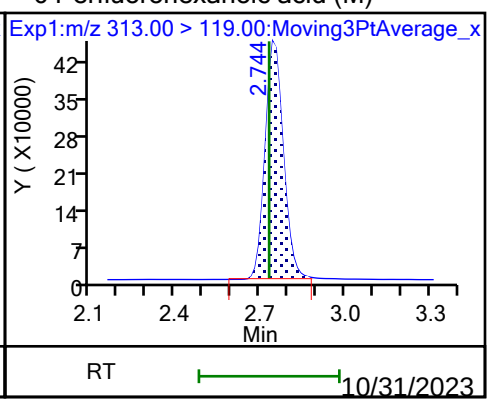
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

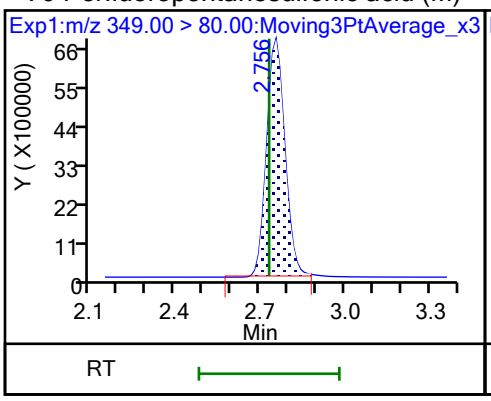


6 Perfluorohexanoic acid (M)

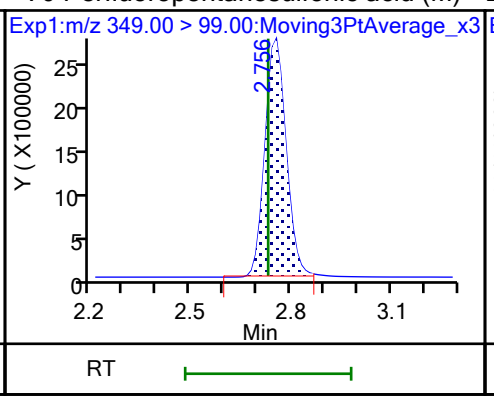


10/31/2023
4:00 PM

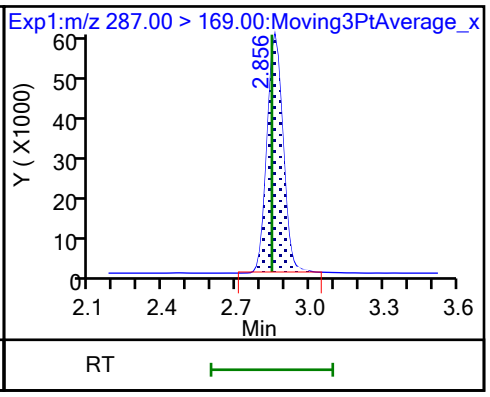
70 Perfluoropentanesulfonic acid (M)



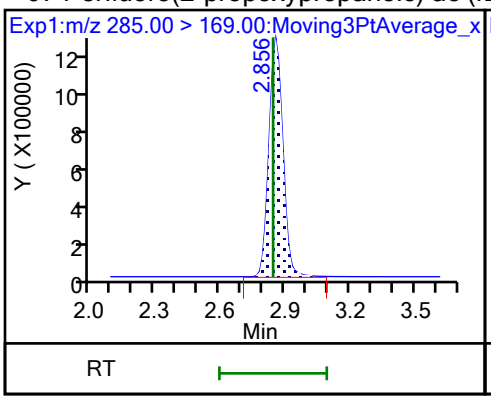
70 Perfluoropentanesulfonic acid (M)



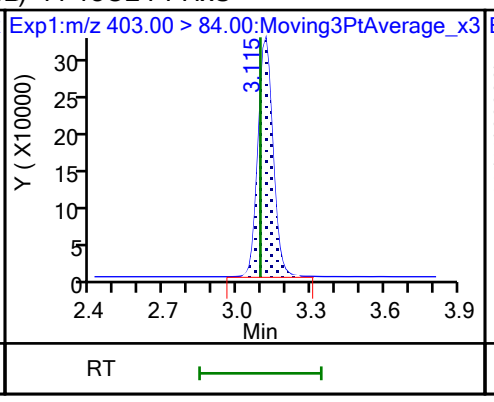
D 64 13C3 HFPO-DA



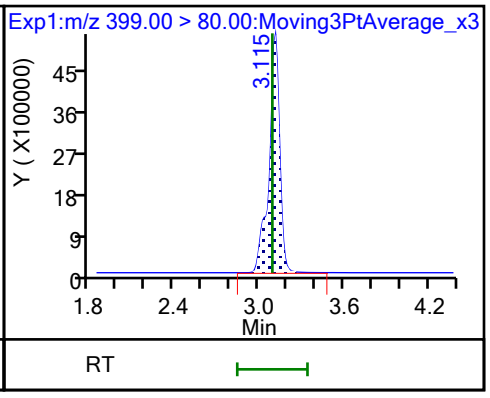
67 Perfluoro(2-propoxypropanoic) ac (M)



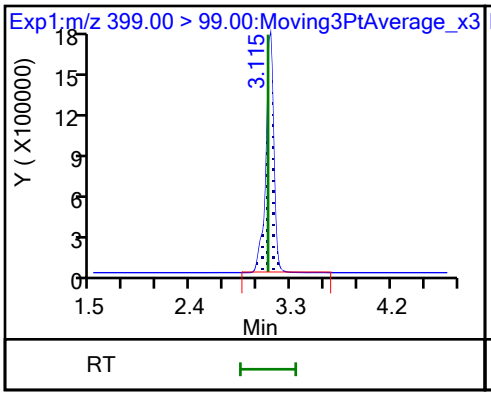
D 11 18O2 PFHxS



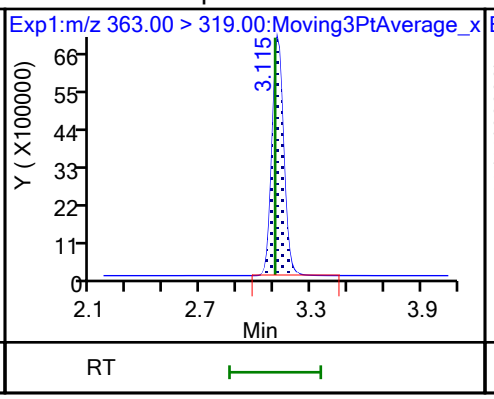
8 Perfluorohexanesulfonic acid



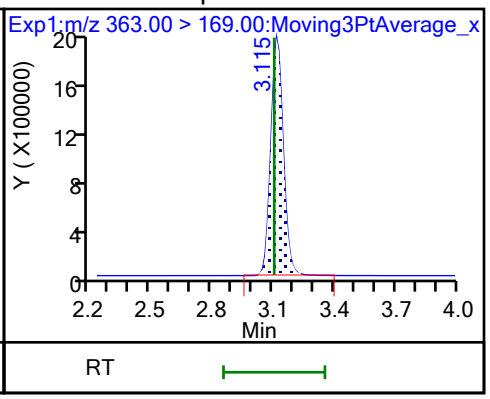
8 Perfluorohexanesulfonic acid



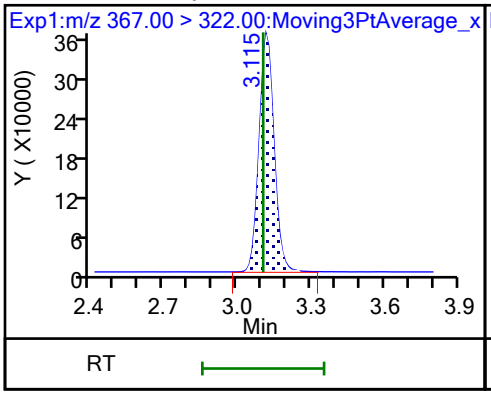
10 Perfluoroheptanoic acid



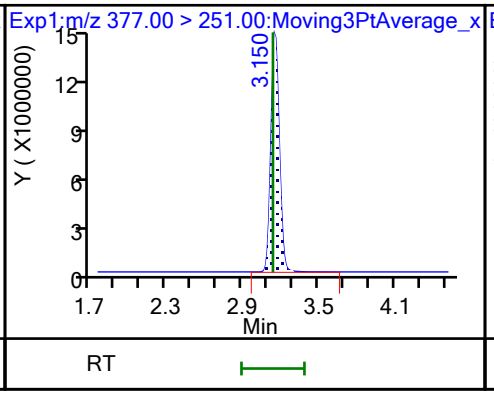
10 Perfluoroheptanoic acid



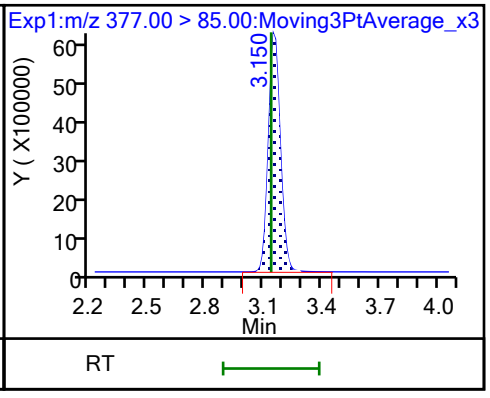
D 9 13C4 PFHpA



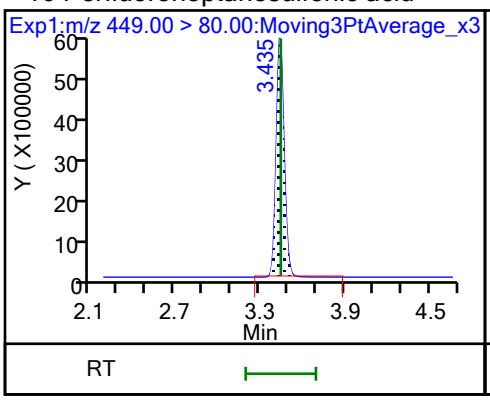
77 DONA



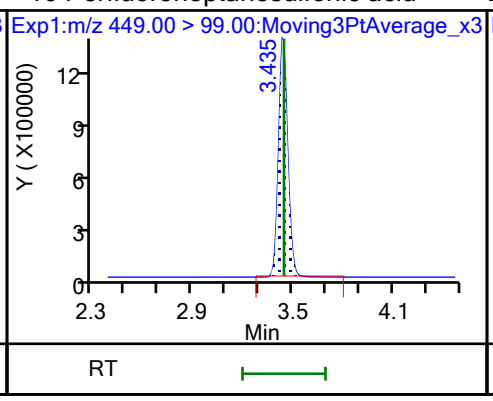
77 DONA



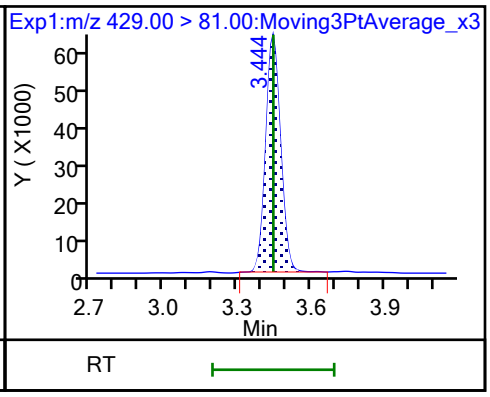
16 Perfluoroheptanesulfonic acid



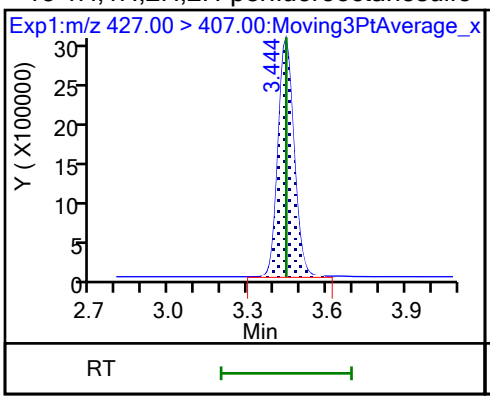
16 Perfluoroheptanesulfonic acid



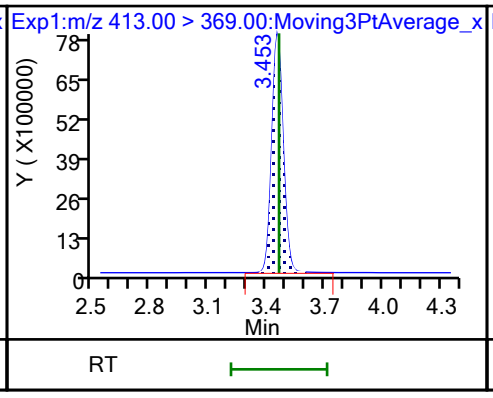
D 12 M2-6:2 FTS



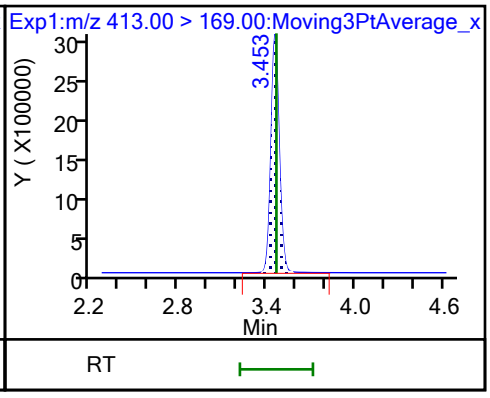
13 1H,1H,2H,2H-perfluorooctanesulfo



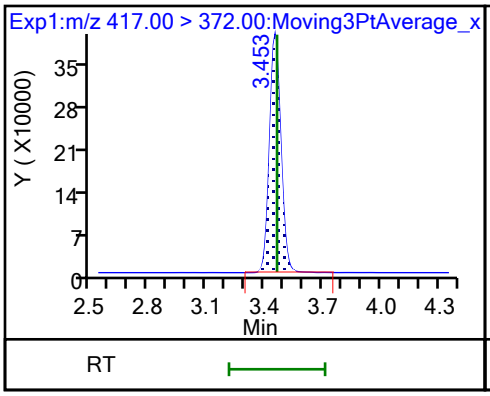
15 Perfluorooctanoic acid



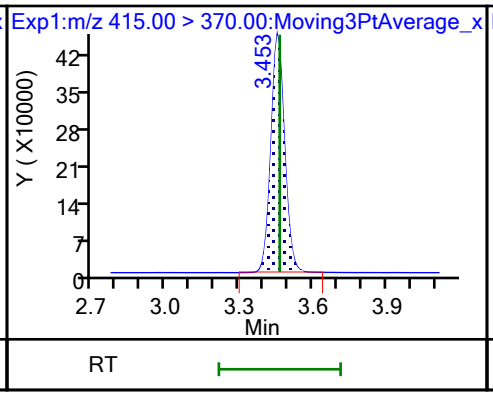
15 Perfluorooctanoic acid



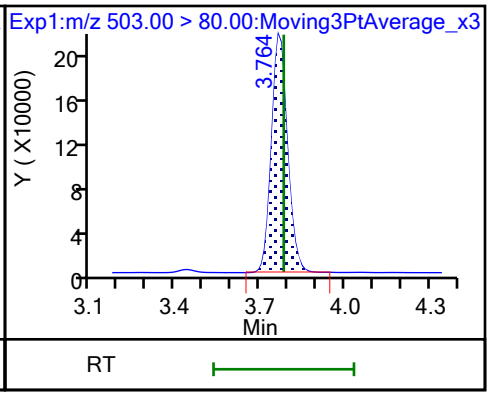
D 14 13C4 PFOA



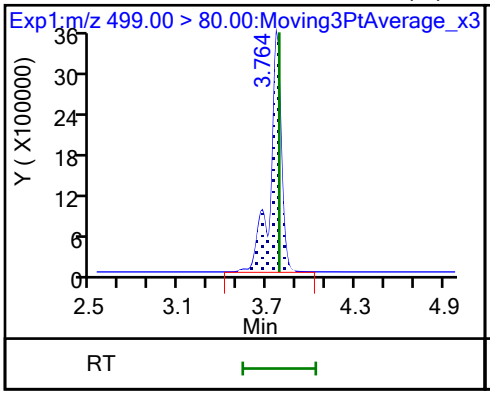
* 62 13C2 PFOA



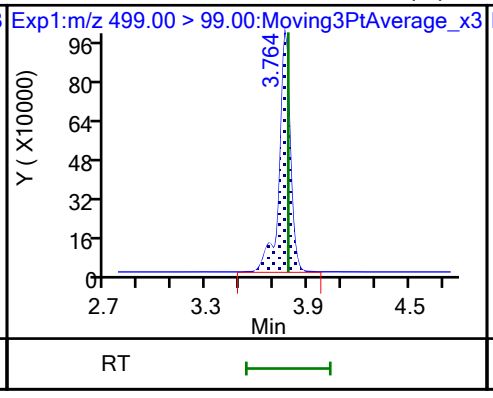
D 18 13C4 PFOS



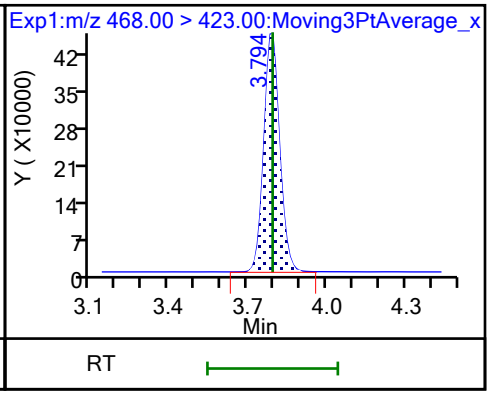
17 Perfluorooctanesulfonic acid (M)



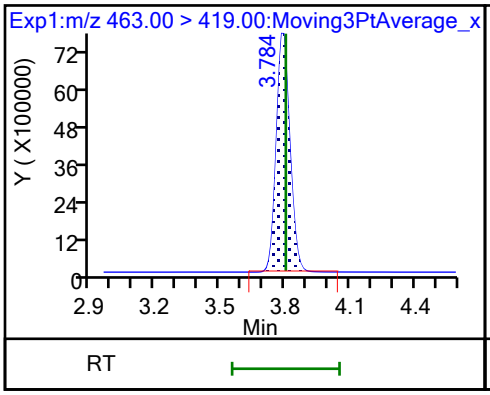
17 Perfluorooctanesulfonic acid (M)



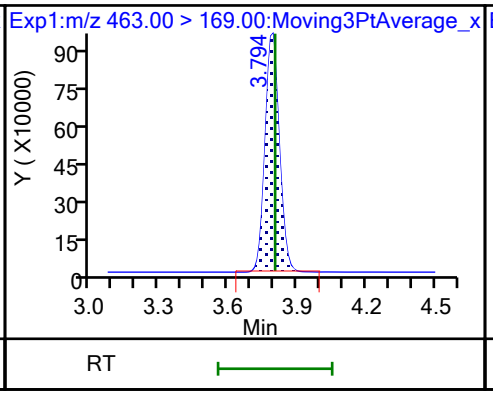
D 19 13C5 PFNA



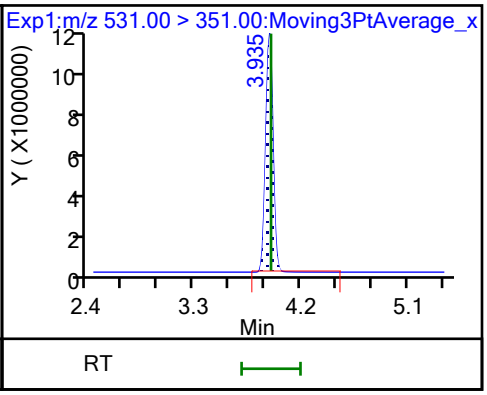
20 Perfluorononanoic acid



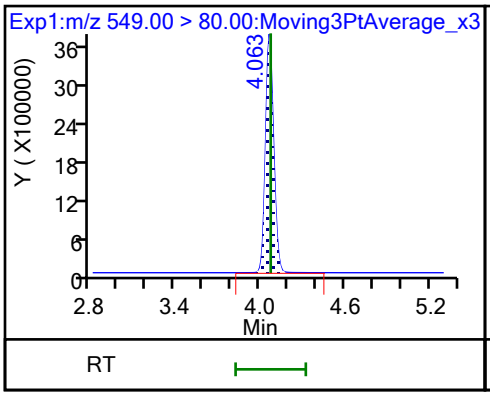
20 Perfluorononanoic acid



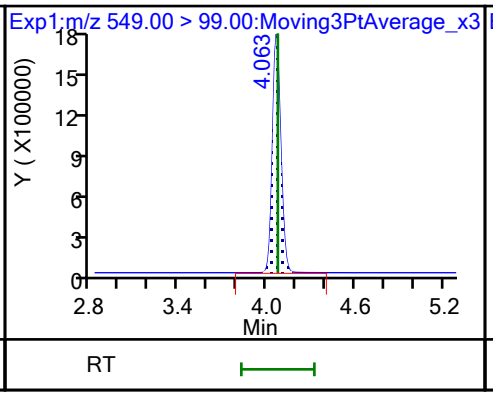
69 9-Chlorohexadecafluoro-3-oxanona



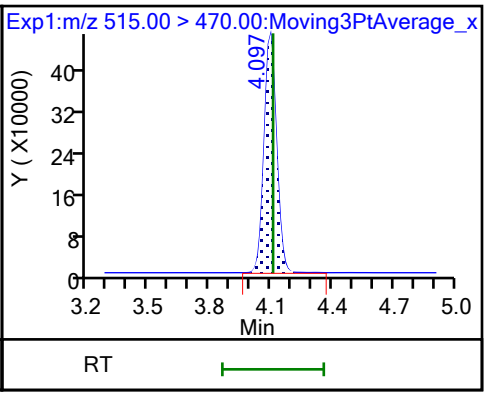
68 Perfluorononanesulfonic acid



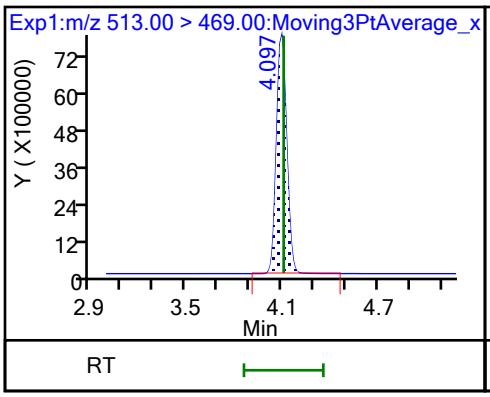
68 Perfluorononanesulfonic acid



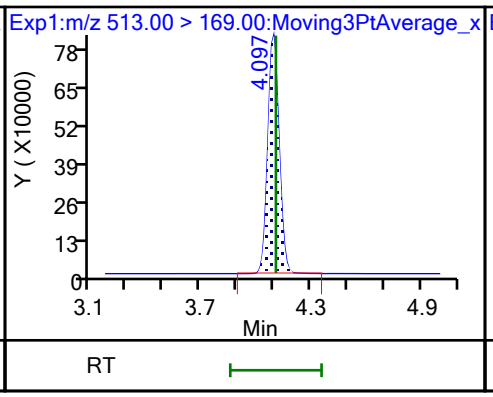
D 23 13C2 PFDA



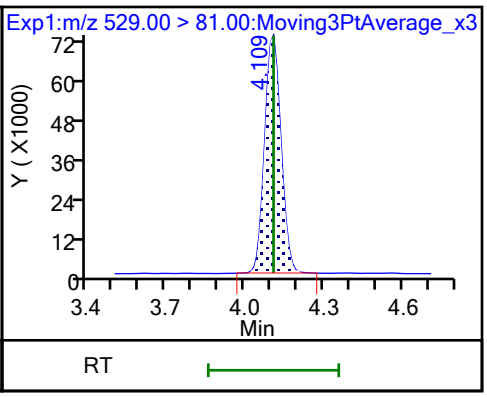
24 Perfluorodecanoic acid



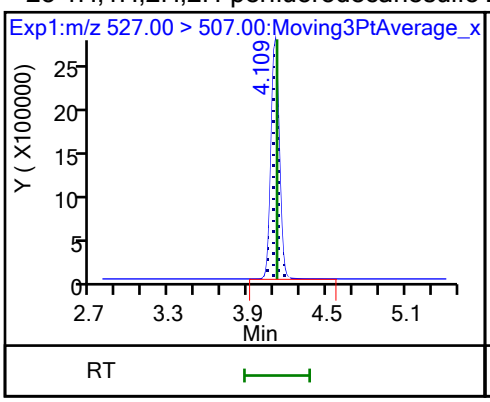
24 Perfluorodecanoic acid



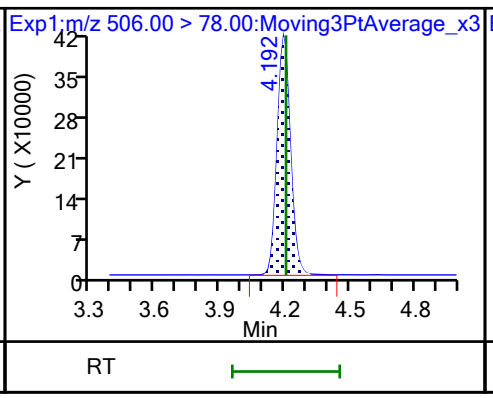
D 26 M2-8:2 FTS



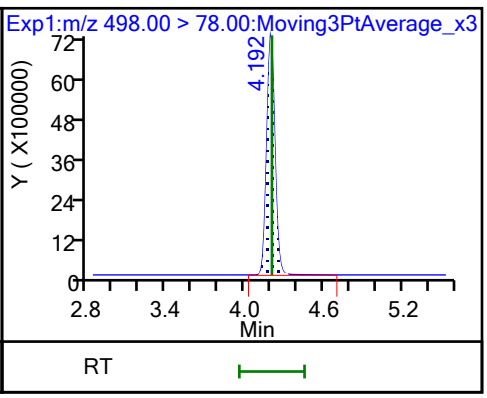
25 1H,1H,2H,2H-perfluorodecanesulfo



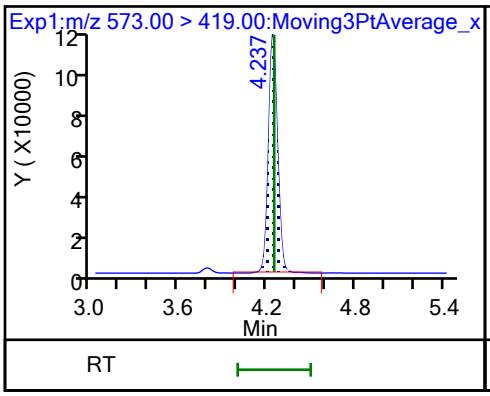
D 21 13C8 FOSA



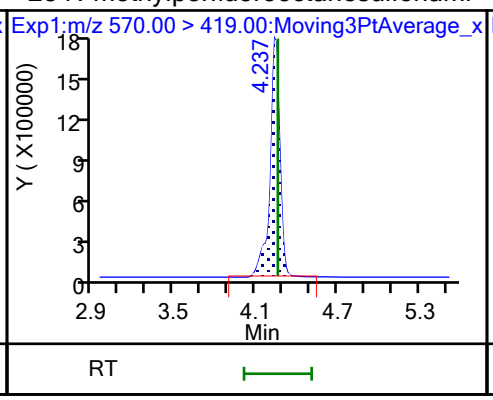
22 Perfluorooctanesulfonamide



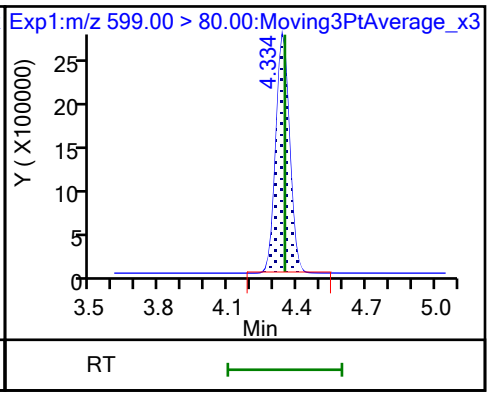
D 27 d3-NMeFOSAA



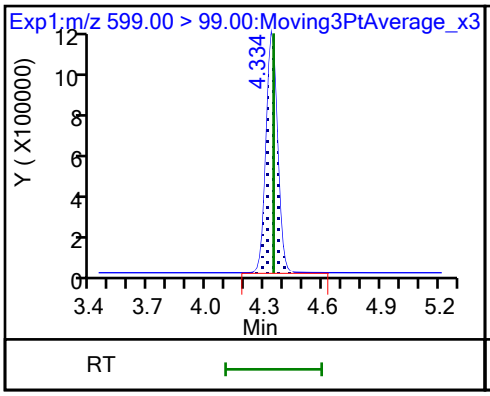
28 N-methylperfluorooctanesulfonami



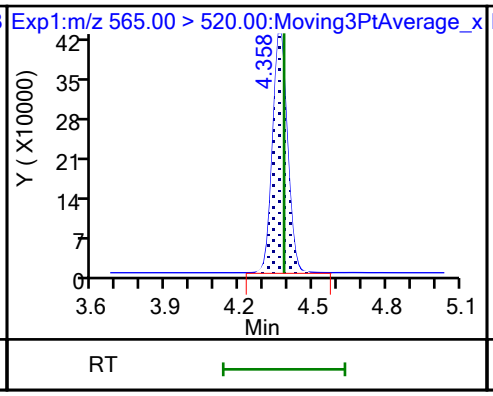
29 Perfluorodecanesulfonic acid



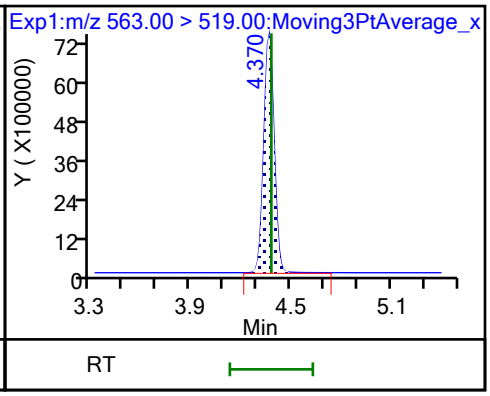
29 Perfluorodecanesulfonic acid



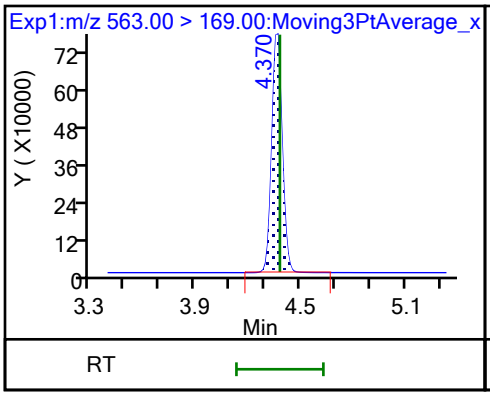
D 30 13C2 PFUnA



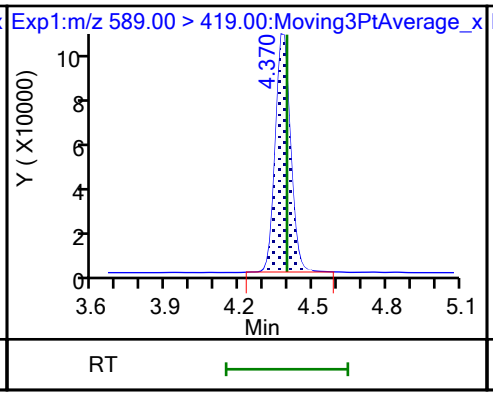
31 Perfluoroundecanoic acid



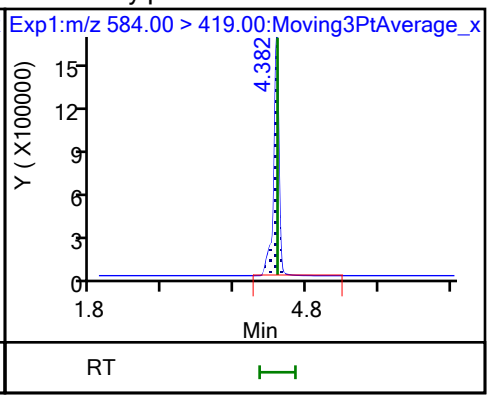
31 Perfluoroundecanoic acid



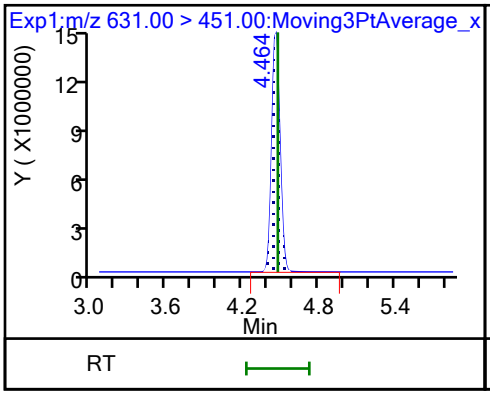
D 32 d5-NEtFOSAA



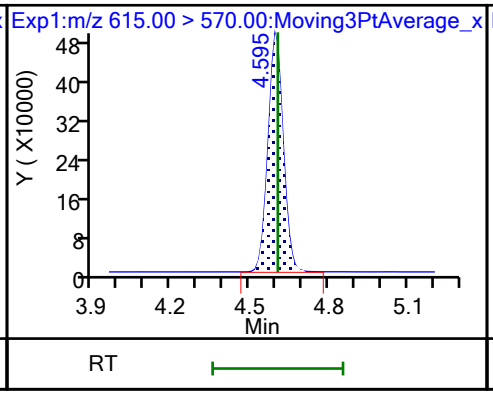
33 N-ethylperfluorooctanesulfonamid



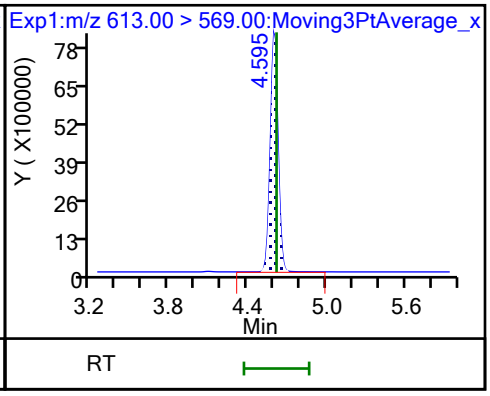
66 11-Chloroeicosafluoro-3-oxaundec



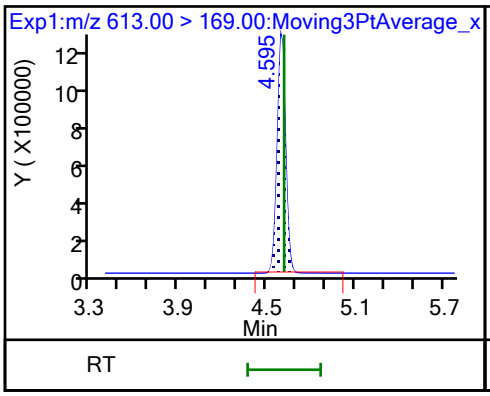
D 36 13C2 PFDoA



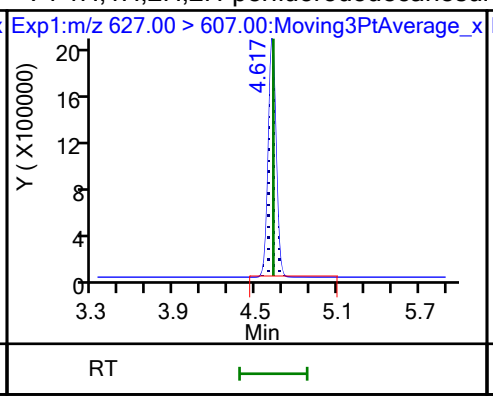
37 Perfluorododecanoic acid



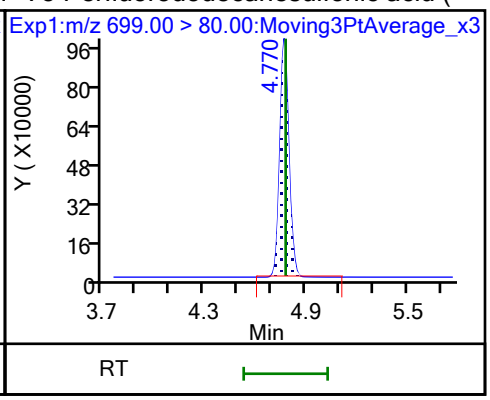
37 Perfluorododecanoic acid



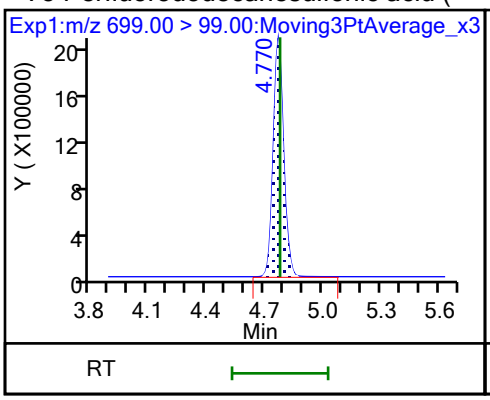
74 1H,1H,2H,2H-perfluorododecanesul



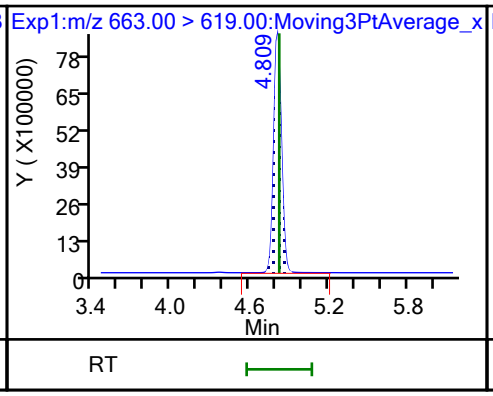
75 Perfluorododecanesulfonic acid (



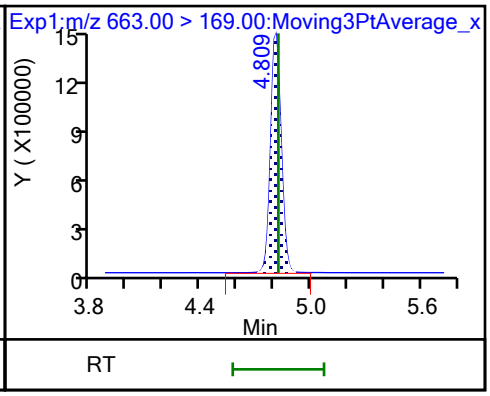
75 Perfluorododecanesulfonic acid (



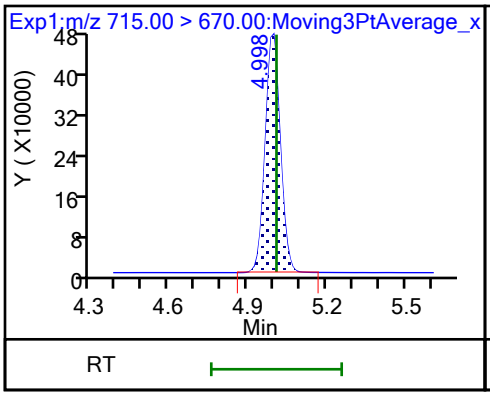
41 Perfluorotridecanoic acid



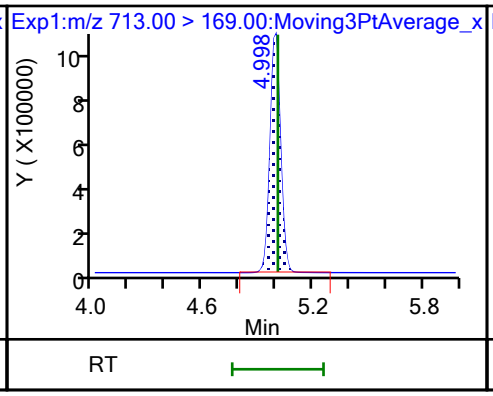
41 Perfluorotridecanoic acid



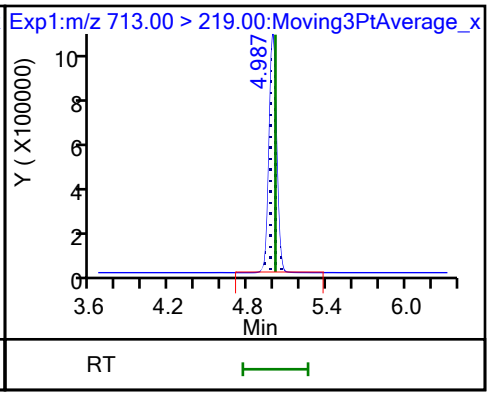
D 43 13C2 PFTeDA



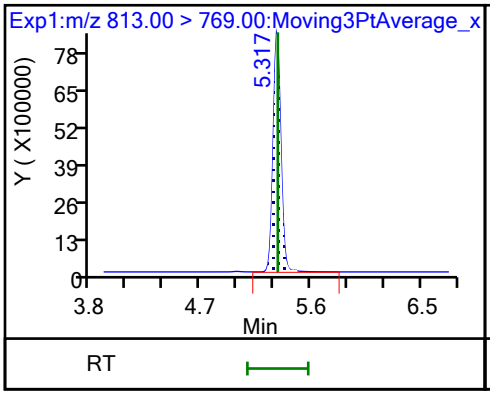
42 Perfluorotetradecanoic acid



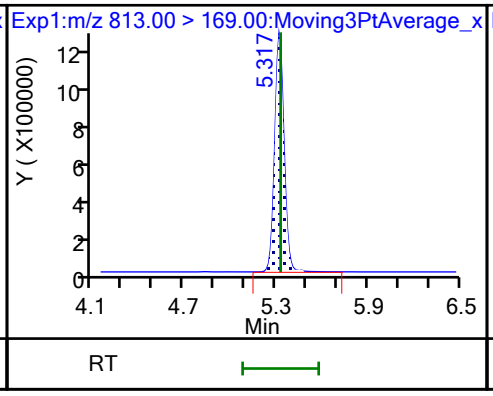
42 Perfluorotetradecanoic acid



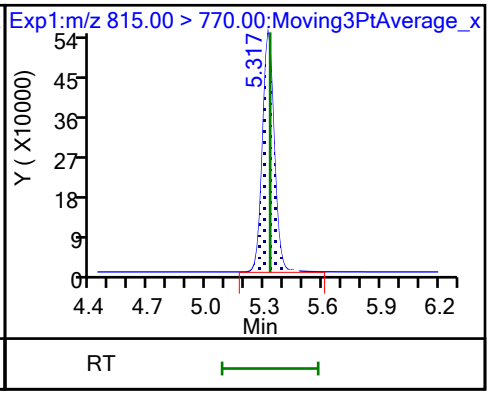
45 Perfluorohexadecanoic acid



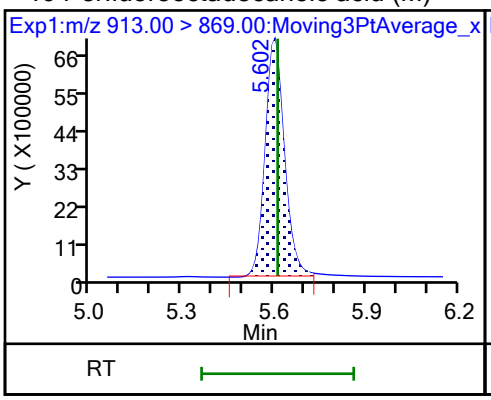
45 Perfluorohexadecanoic acid



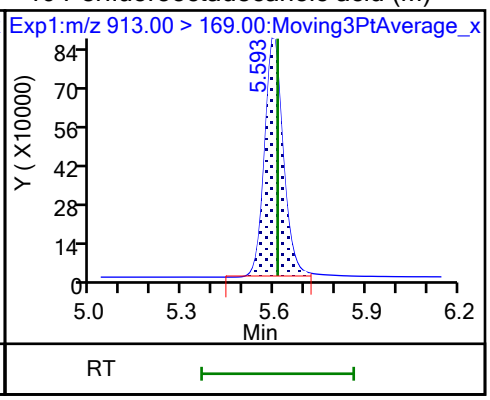
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Calibration / Perfluorobutanoic acid

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

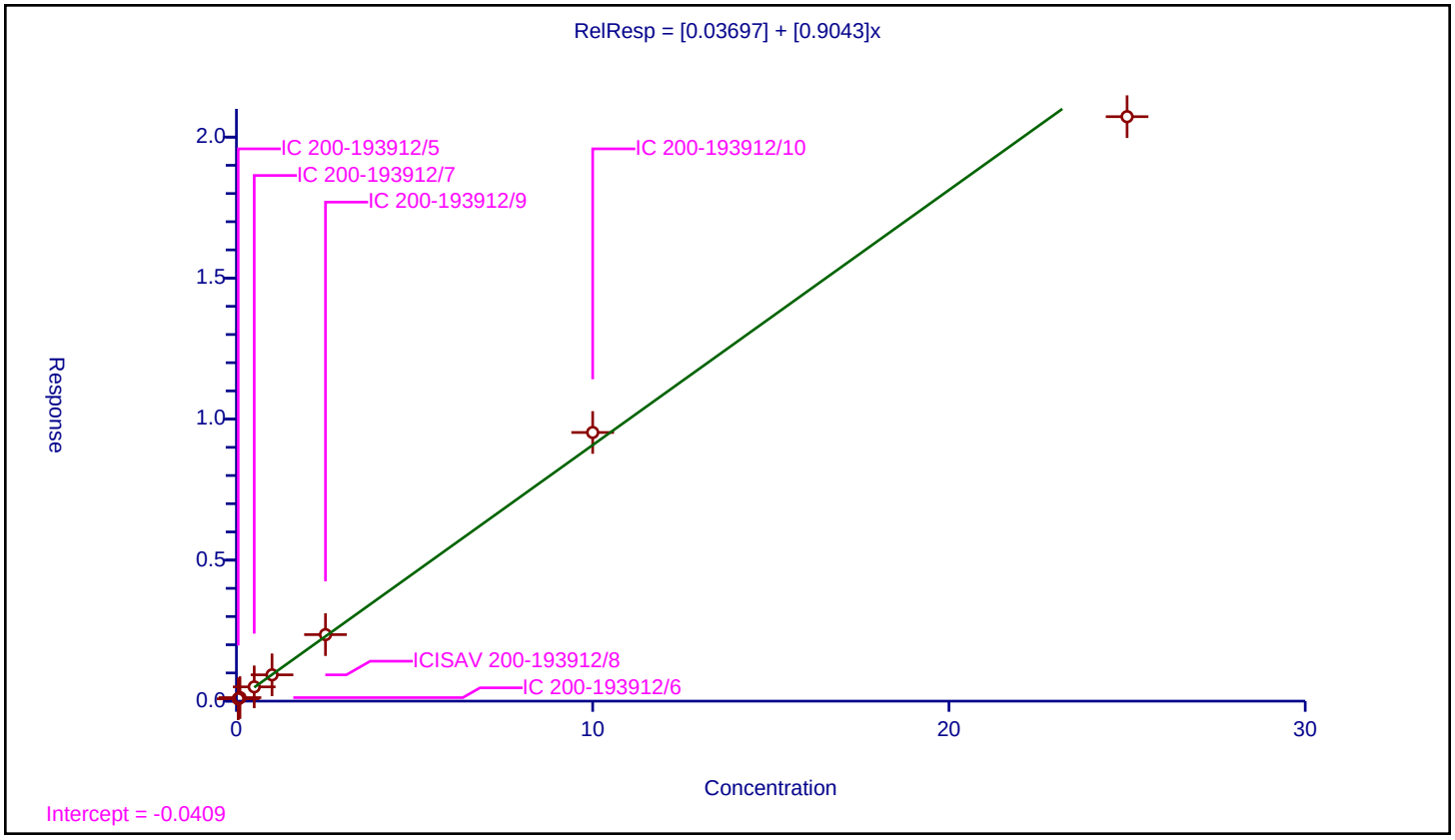
Curve Coefficients

Intercept:	0.03697
Slope:	0.9043

Error Coefficients

Standard Error:	14300000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.082621	1.25	2253572.0	1.652421	Y
2	IC 200-193912/6	0.1	0.124976	1.25	1926725.0	1.249757	Y
3	IC 200-193912/7	0.5	0.505344	1.25	1916527.0	1.010688	Y
4	ICISAV 200-193912/8	1.0	0.932118	1.25	1929850.0	0.932118	Y
5	IC 200-193912/9	2.5	2.358169	1.25	2025338.0	0.943268	Y
6	IC 200-193912/10	10.0	9.52612	1.25	1663241.0	0.952612	Y
7	IC 200-193912/11	25.0	20.72438	1.25	1758198.0	0.828975	Y



10/31/2023
4:00 PM

Calibration / Perfluoropentanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

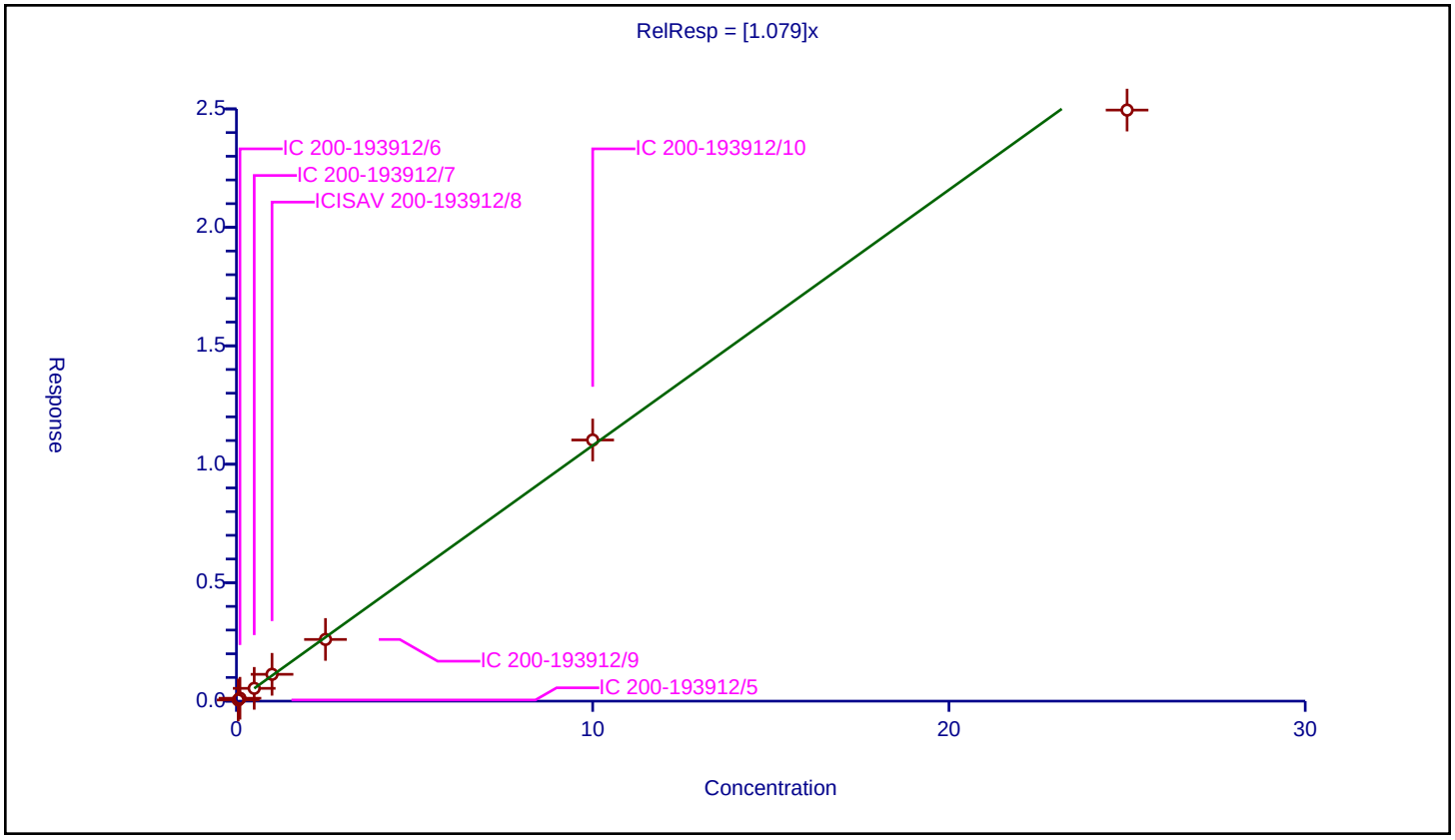
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.049068	1.25	1827623.0	0.981357	Y
2	IC 200-193912/6	0.1	0.121675	1.25	1458161.0	1.216747	Y
3	IC 200-193912/7	0.5	0.540415	1.25	1507442.0	1.080831	Y
4	ICISAV 200-193912/8	1.0	1.132983	1.25	1529086.0	1.132983	Y
5	IC 200-193912/9	2.5	2.604075	1.25	1531883.0	1.04163	Y
6	IC 200-193912/10	10.0	11.023306	1.25	1291692.0	1.102331	Y
7	IC 200-193912/11	25.0	24.951062	1.25	1319141.0	0.998042	Y



Calibration / Perfluorobutanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

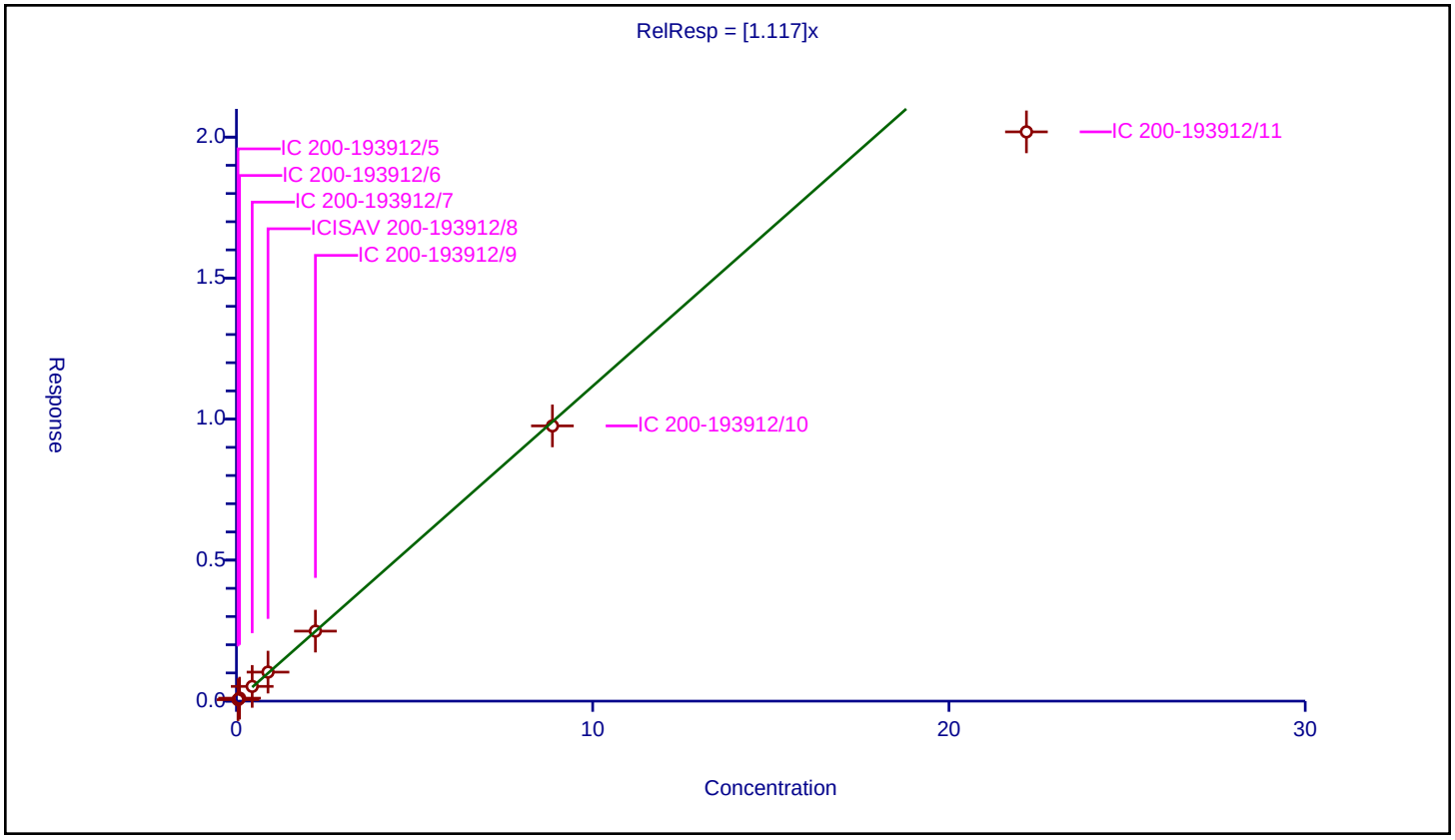
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	14900000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04435	0.0515	1.1625	2112456.0	1.161217	Y
2	IC 200-193912/6	0.0887	0.105408	1.1625	1835537.0	1.188361	Y
3	IC 200-193912/7	0.4435	0.522575	1.1625	1758991.0	1.178297	Y
4	ICISAV 200-193912/8	0.887	1.029257	1.1625	1858340.0	1.16038	Y
5	IC 200-193912/9	2.2175	2.482423	1.1625	1976378.0	1.119469	Y
6	IC 200-193912/10	8.87	9.759782	1.1625	1657995.0	1.100314	Y
7	IC 200-193912/11	22.175	20.18591	1.1625	1925353.0	0.9103	Y



10/31/2023
4:00 PM

Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

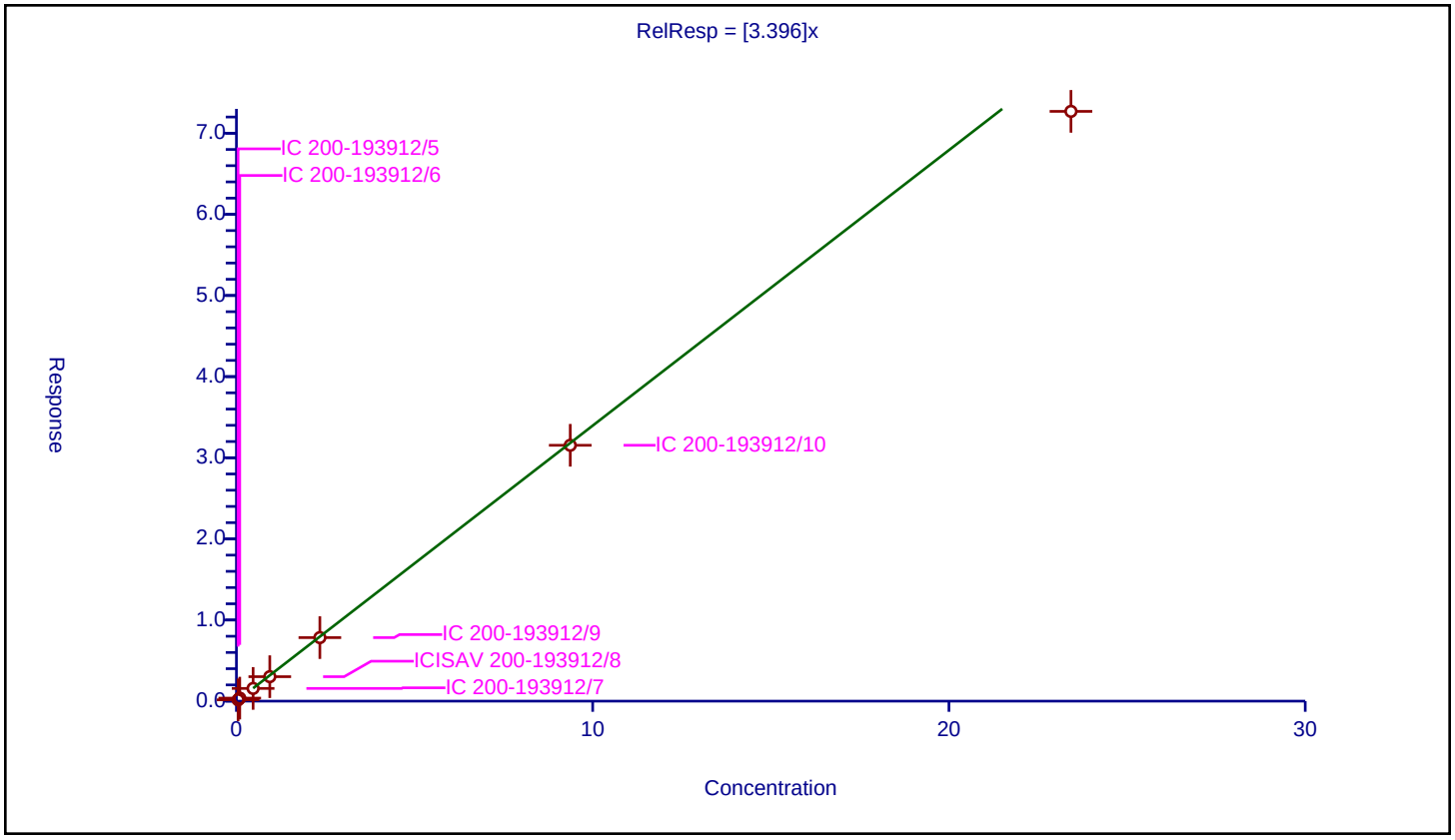
Curve Coefficients

Intercept:	0
Slope:	3.396

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04685	0.160153	1.1675	264843.0	3.41841	Y
2	IC 200-193912/6	0.0937	0.372622	1.1675	202715.0	3.976756	Y
3	IC 200-193912/7	0.4685	1.567171	1.1675	215257.0	3.345081	Y
4	ICISAV 200-193912/8	0.937	3.015993	1.1675	220382.0	3.218776	Y
5	IC 200-193912/9	2.3425	7.830737	1.1675	221658.0	3.342898	Y
6	IC 200-193912/10	9.37	31.536056	1.1675	194992.0	3.365641	Y
7	IC 200-193912/11	23.425	72.694144	1.1675	207012.0	3.103272	Y



10/31/2023
4:00 PM

Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

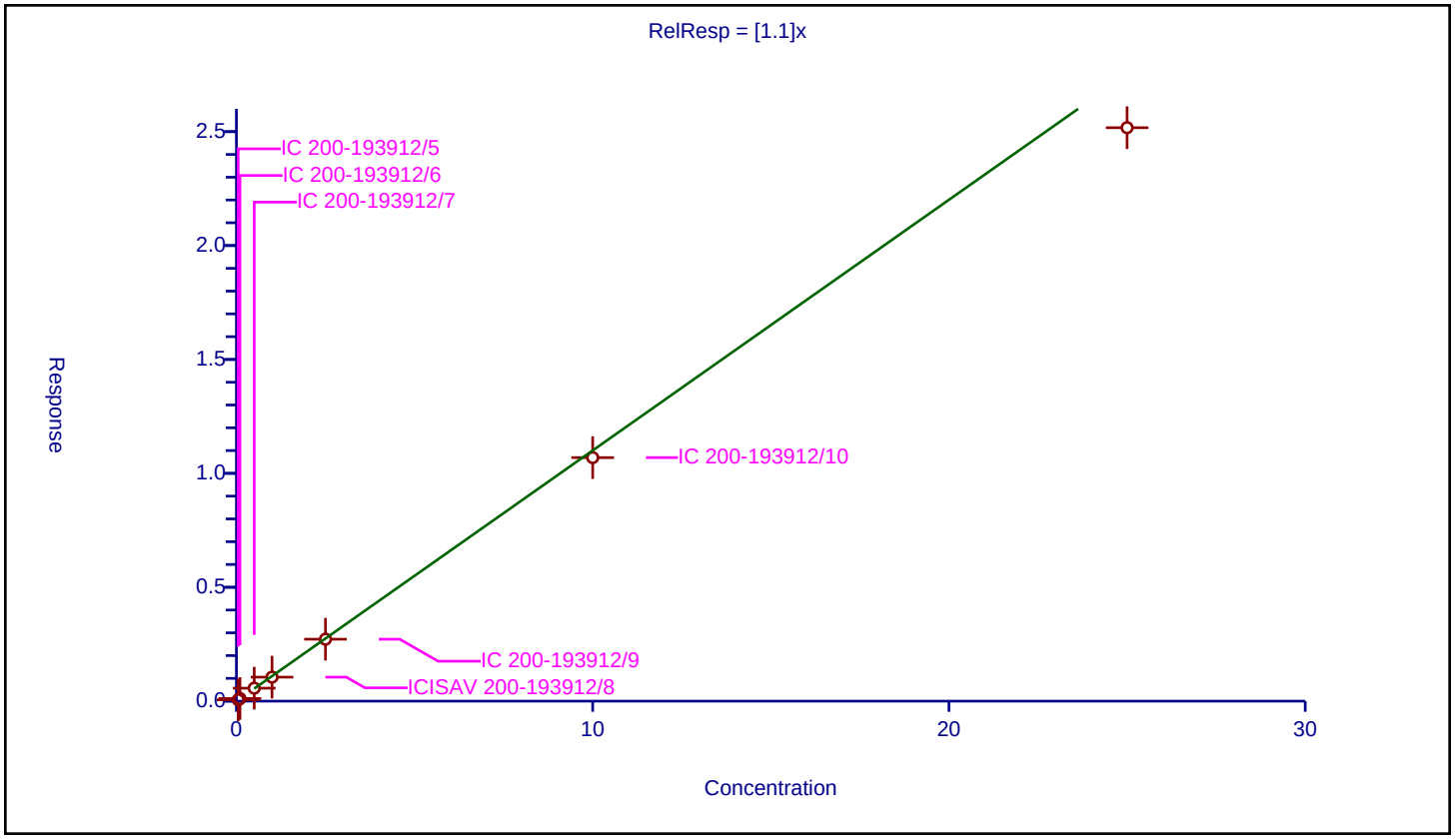
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059408	1.25	1853797.0	1.188169	Y
2	IC 200-193912/6	0.1	0.11566	1.25	1566461.0	1.156596	Y
3	IC 200-193912/7	0.5	0.570489	1.25	1472867.0	1.140977	Y
4	ICISAV 200-193912/8	1.0	1.053678	1.25	1544435.0	1.053678	Y
5	IC 200-193912/9	2.5	2.719251	1.25	1545081.0	1.087701	Y
6	IC 200-193912/10	10.0	10.691075	1.25	1345799.0	1.069107	Y
7	IC 200-193912/11	25.0	25.174033	1.25	1316912.0	1.006961	Y



Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

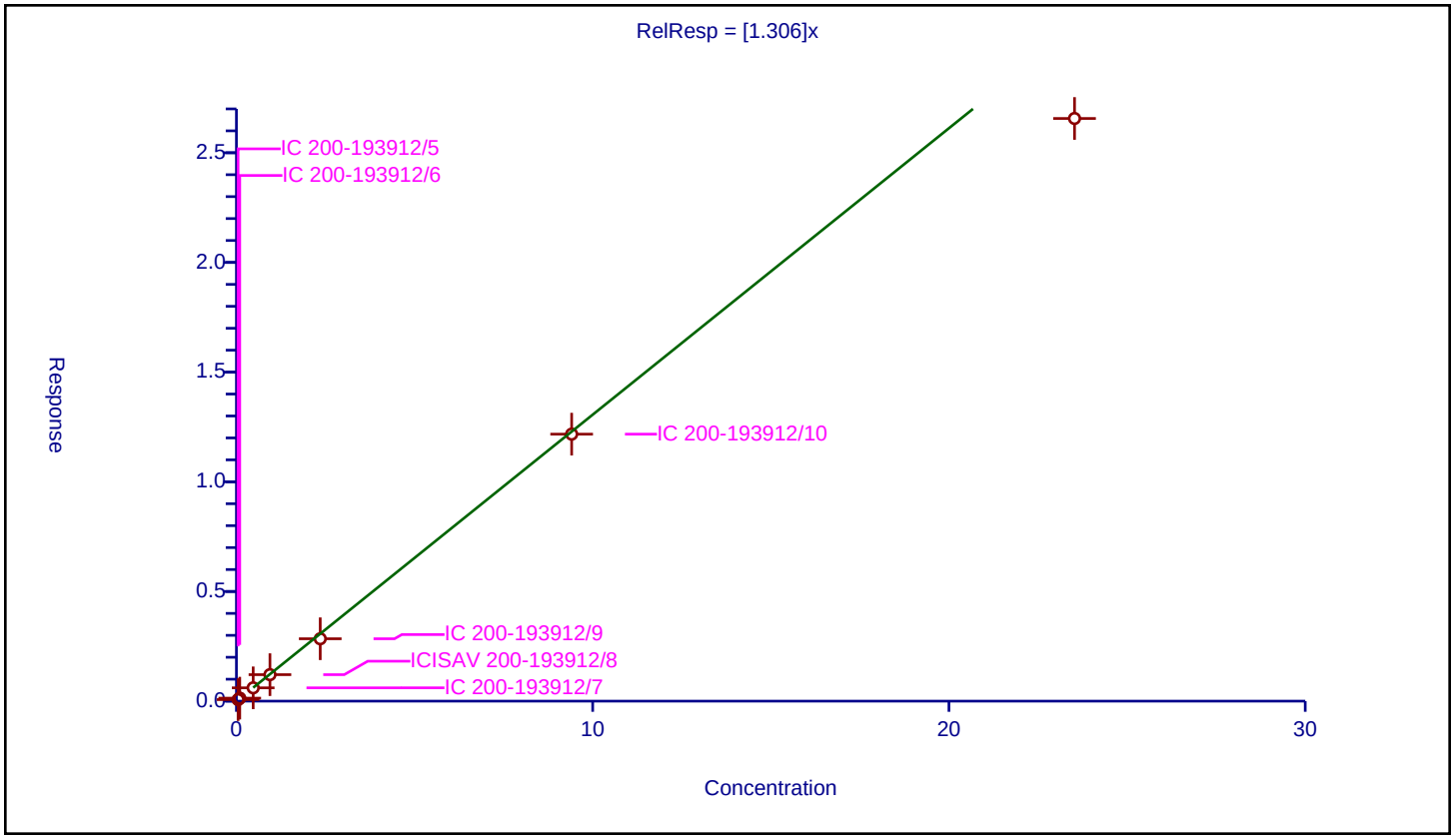
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04705	0.069845	1.1825	1487994.0	1.484482	Y
2	IC 200-193912/6	0.0941	0.136641	1.1825	1305238.0	1.452086	Y
3	IC 200-193912/7	0.4705	0.606956	1.1825	1353967.0	1.290024	Y
4	ICISAV 200-193912/8	0.941	1.207241	1.1825	1396957.0	1.282934	Y
5	IC 200-193912/9	2.3525	2.844335	1.1825	1406672.0	1.209069	Y
6	IC 200-193912/10	9.41	12.172239	1.1825	1242233.0	1.293543	Y
7	IC 200-193912/11	23.525	26.56316	1.1825	1370941.0	1.129146	Y



Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

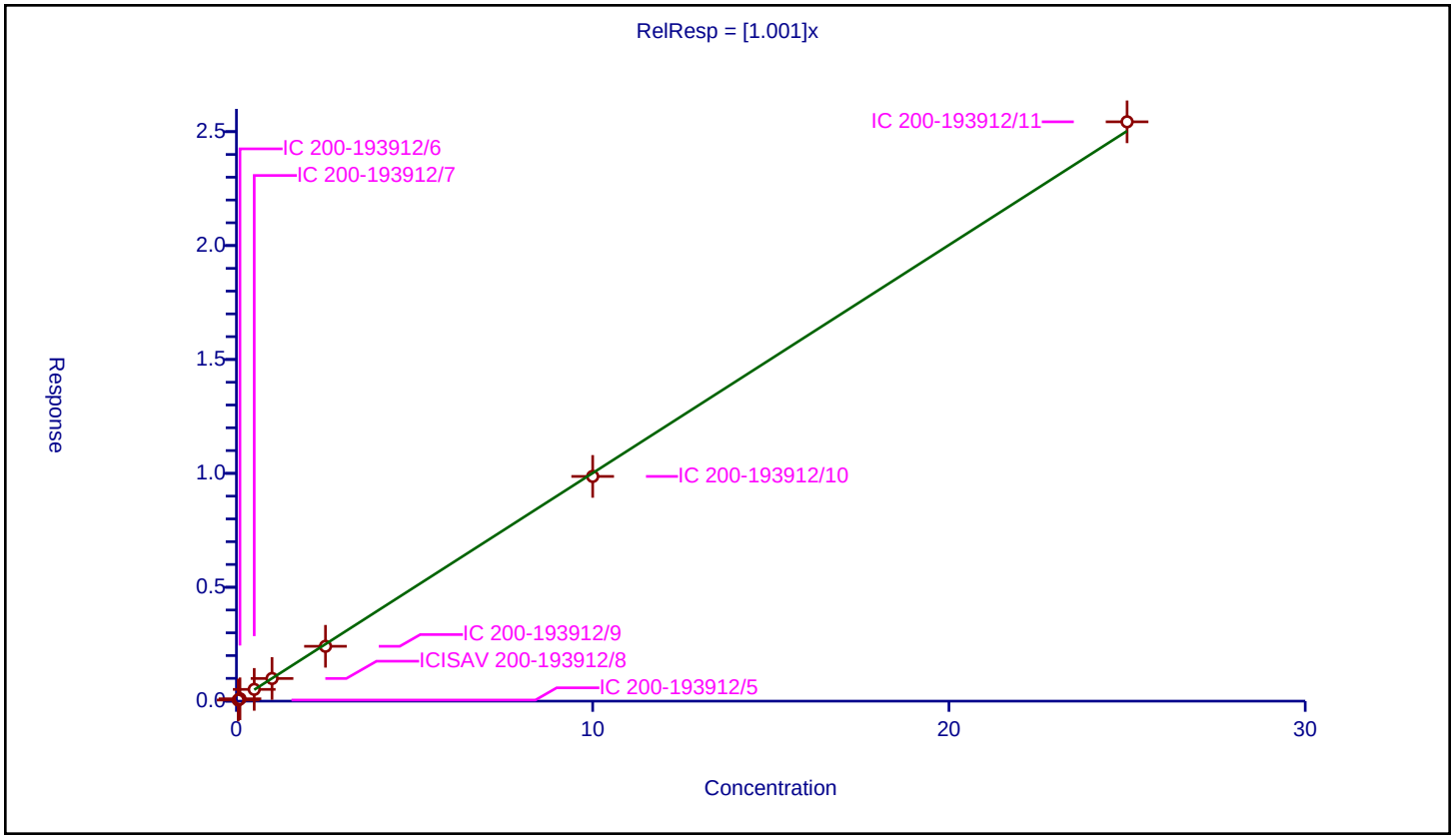
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.04907	1.25	346930.0	0.981394	Y
2	IC 200-193912/6	0.1	0.103291	1.25	299977.0	1.032913	Y
3	IC 200-193912/7	0.5	0.516151	1.25	279126.0	1.032303	Y
4	ICISAV 200-193912/8	1.0	0.994769	1.25	296521.0	0.994769	Y
5	IC 200-193912/9	2.5	2.407784	1.25	295164.0	0.963114	Y
6	IC 200-193912/10	10.0	9.865207	1.25	265620.0	0.986521	Y
7	IC 200-193912/11	25.0	25.432513	1.25	273677.0	1.017301	Y



10/31/2023
4:00 PM

Calibration / Perfluorohexanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

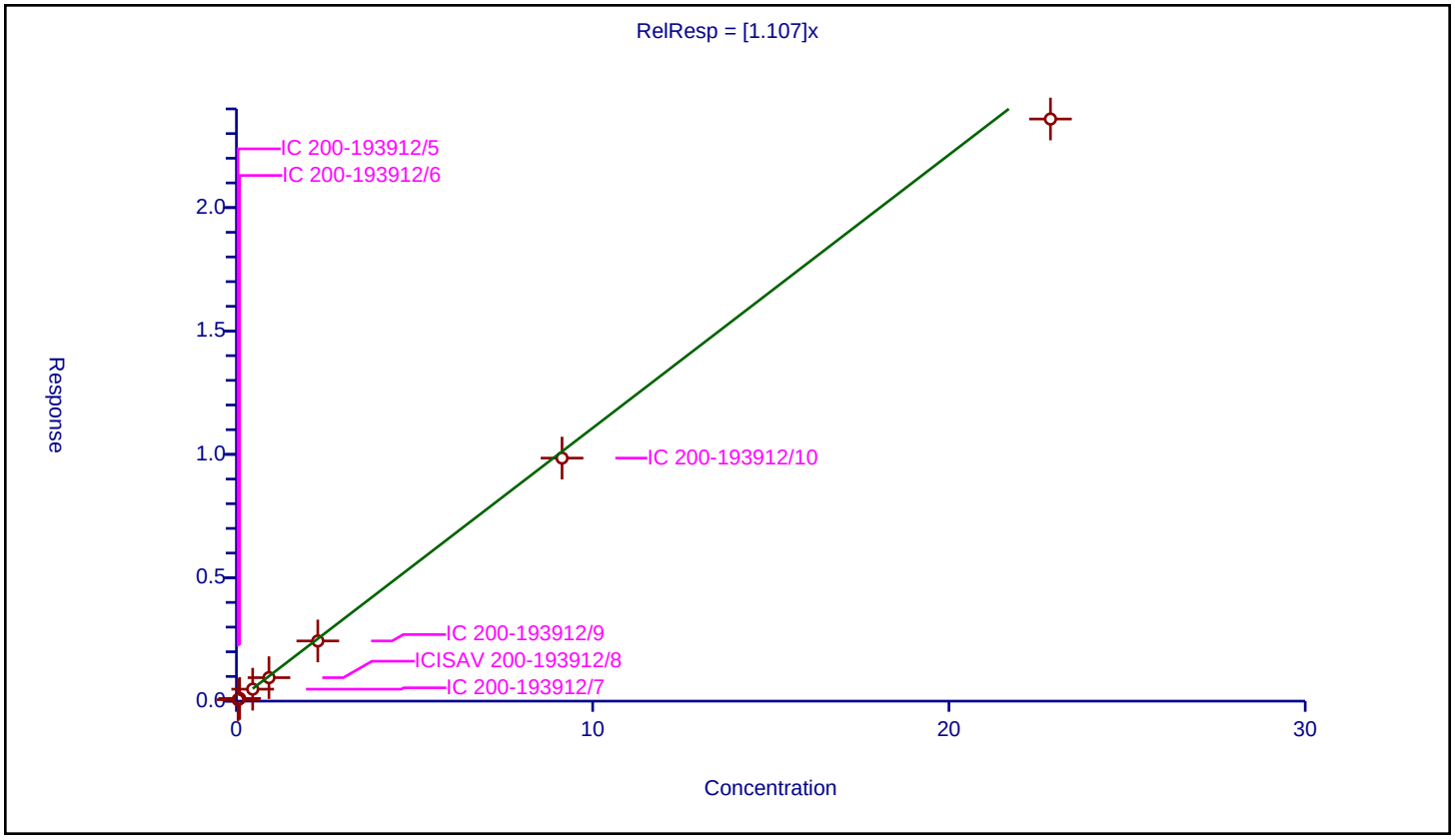
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0457	0.05908	1.1825	1487994.0	1.292778	Y
2	IC 200-193912/6	0.0914	0.107635	1.1825	1305238.0	1.177626	Y
3	IC 200-193912/7	0.457	0.484795	1.1825	1353967.0	1.06082	Y
4	ICISAV 200-193912/8	0.914	0.95088	1.1825	1396957.0	1.04035	Y
5	IC 200-193912/9	2.285	2.438823	1.1825	1406672.0	1.067319	Y
6	IC 200-193912/10	9.14	9.849131	1.1825	1242233.0	1.077585	Y
7	IC 200-193912/11	22.85	23.590185	1.1825	1370941.0	1.032393	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

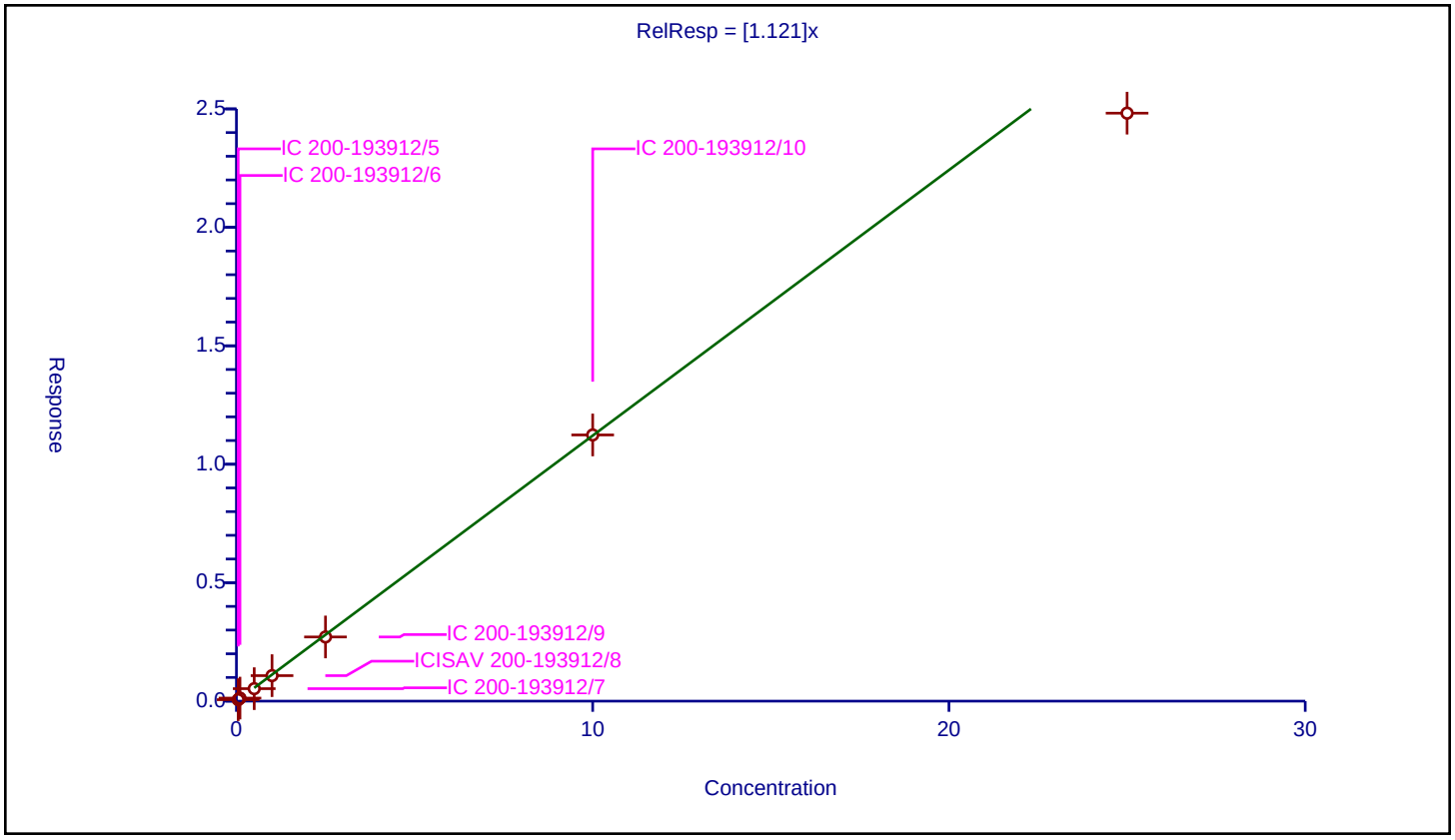
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.061632	1.25	1876608.0	1.23265	Y
2	IC 200-193912/6	0.1	0.128259	1.25	1628956.0	1.282585	Y
3	IC 200-193912/7	0.5	0.527087	1.25	1672833.0	1.054174	Y
4	ICISAV 200-193912/8	1.0	1.076804	1.25	1679653.0	1.076804	Y
5	IC 200-193912/9	2.5	2.708862	1.25	1773444.0	1.083545	Y
6	IC 200-193912/10	10.0	11.23637	1.25	1466571.0	1.123637	Y
7	IC 200-193912/11	25.0	24.820079	1.25	1559821.0	0.992803	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

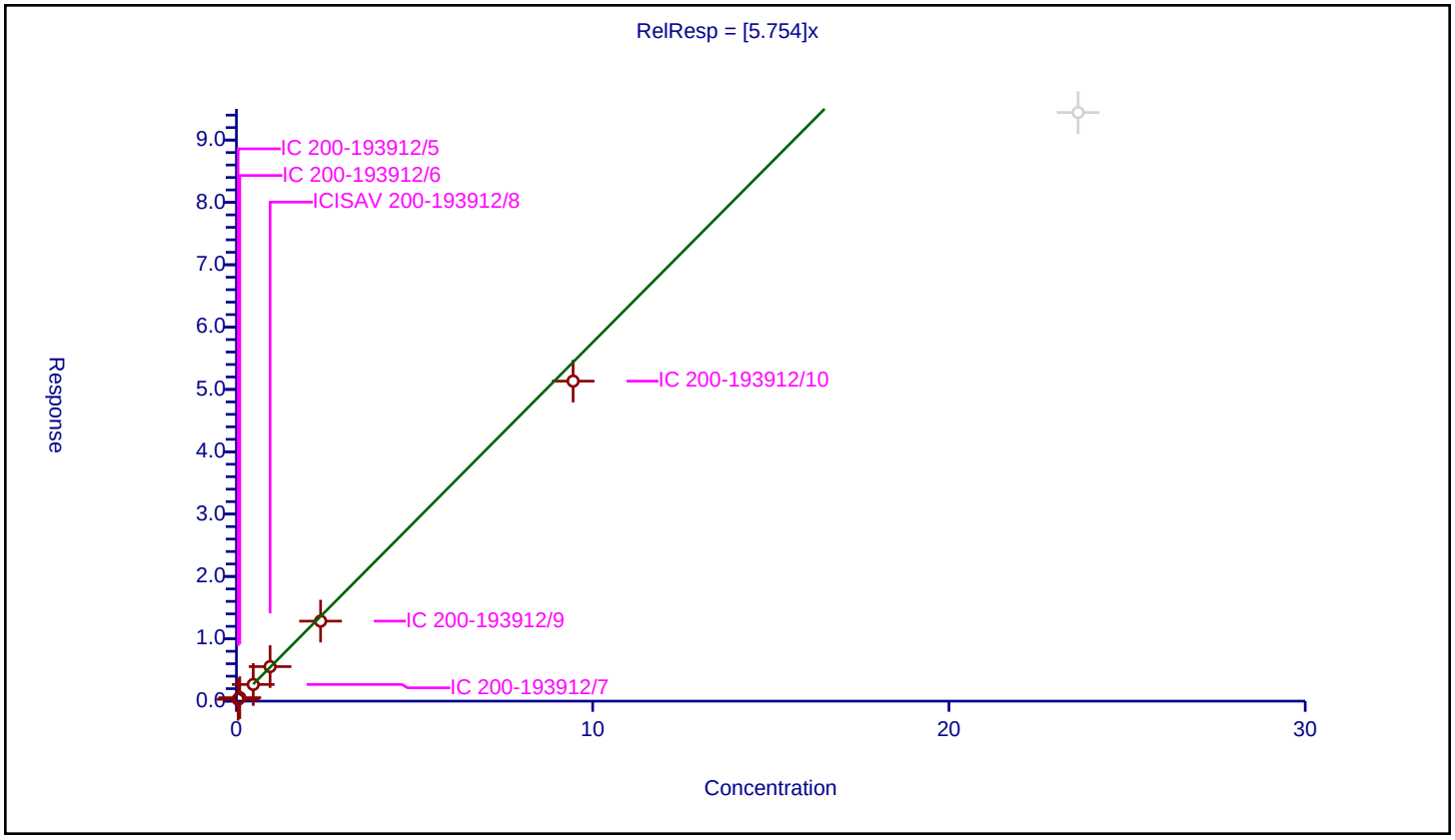
Curve Coefficients

Intercept:	0
Slope:	5.754

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04725	0.297259	1.195	943517.0	6.291195	Y
2	IC 200-193912/6	0.0945	0.553418	1.195	863764.0	5.856277	Y
3	IC 200-193912/7	0.4725	2.671126	1.195	882764.0	5.653177	Y
4	ICISAV 200-193912/8	0.945	5.536858	1.195	904398.0	5.859109	Y
5	IC 200-193912/9	2.3625	12.835921	1.195	919926.0	5.433194	Y
6	IC 200-193912/10	9.45	51.335121	1.195	765818.0	5.432288	Y
7	IC 200-193912/11	23.625	94.418048	1.195	865311.0	3.996531	N



Calibration / Perfluoroheptanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

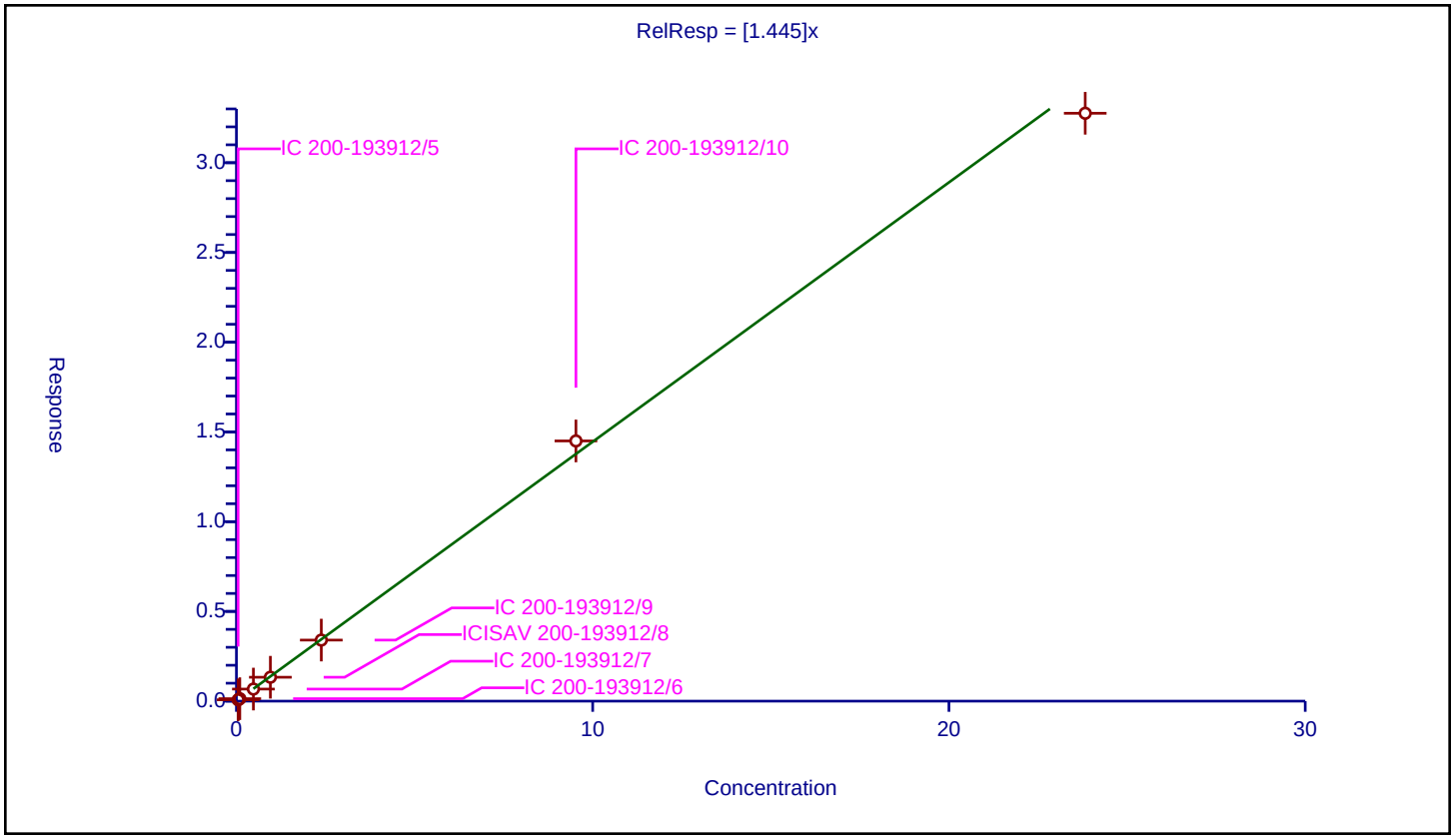
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04765	0.073316	1.195	943517.0	1.538638	Y
2	IC 200-193912/6	0.0953	0.13751	1.195	863764.0	1.442913	Y
3	IC 200-193912/7	0.4765	0.673122	1.195	882764.0	1.412638	Y
4	ICISAV 200-193912/8	0.953	1.332604	1.195	904398.0	1.398325	Y
5	IC 200-193912/9	2.3825	3.401611	1.195	919926.0	1.427749	Y
6	IC 200-193912/10	9.53	14.49894	1.195	765818.0	1.5214	Y
7	IC 200-193912/11	23.825	32.755938	1.195	865311.0	1.374856	Y



Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

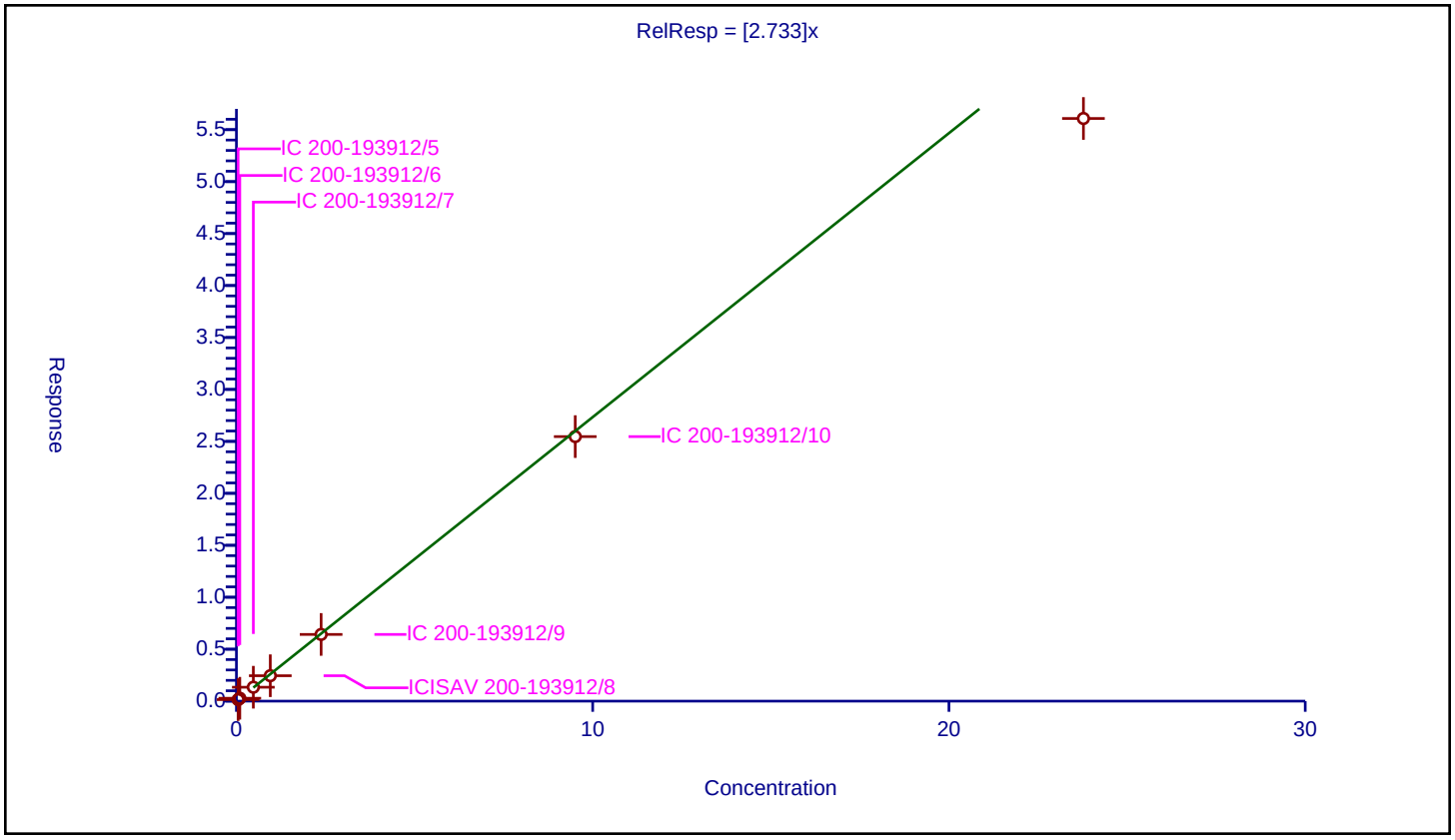
Curve Coefficients

Intercept:	0
Slope:	2.733

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04755	0.14644	1.1875	309808.0	3.079716	Y
2	IC 200-193912/6	0.0951	0.278153	1.1875	286854.0	2.924848	Y
3	IC 200-193912/7	0.4755	1.340299	1.1875	274798.0	2.818715	Y
4	ICISAV 200-193912/8	0.951	2.447413	1.1875	299923.0	2.573515	Y
5	IC 200-193912/9	2.3775	6.419079	1.1875	305639.0	2.699928	Y
6	IC 200-193912/10	9.51	25.460284	1.1875	250039.0	2.677212	Y
7	IC 200-193912/11	23.775	56.075977	1.1875	271643.0	2.358611	Y



10/31/2023
4:00 PM

Calibration / Perfluorooctanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

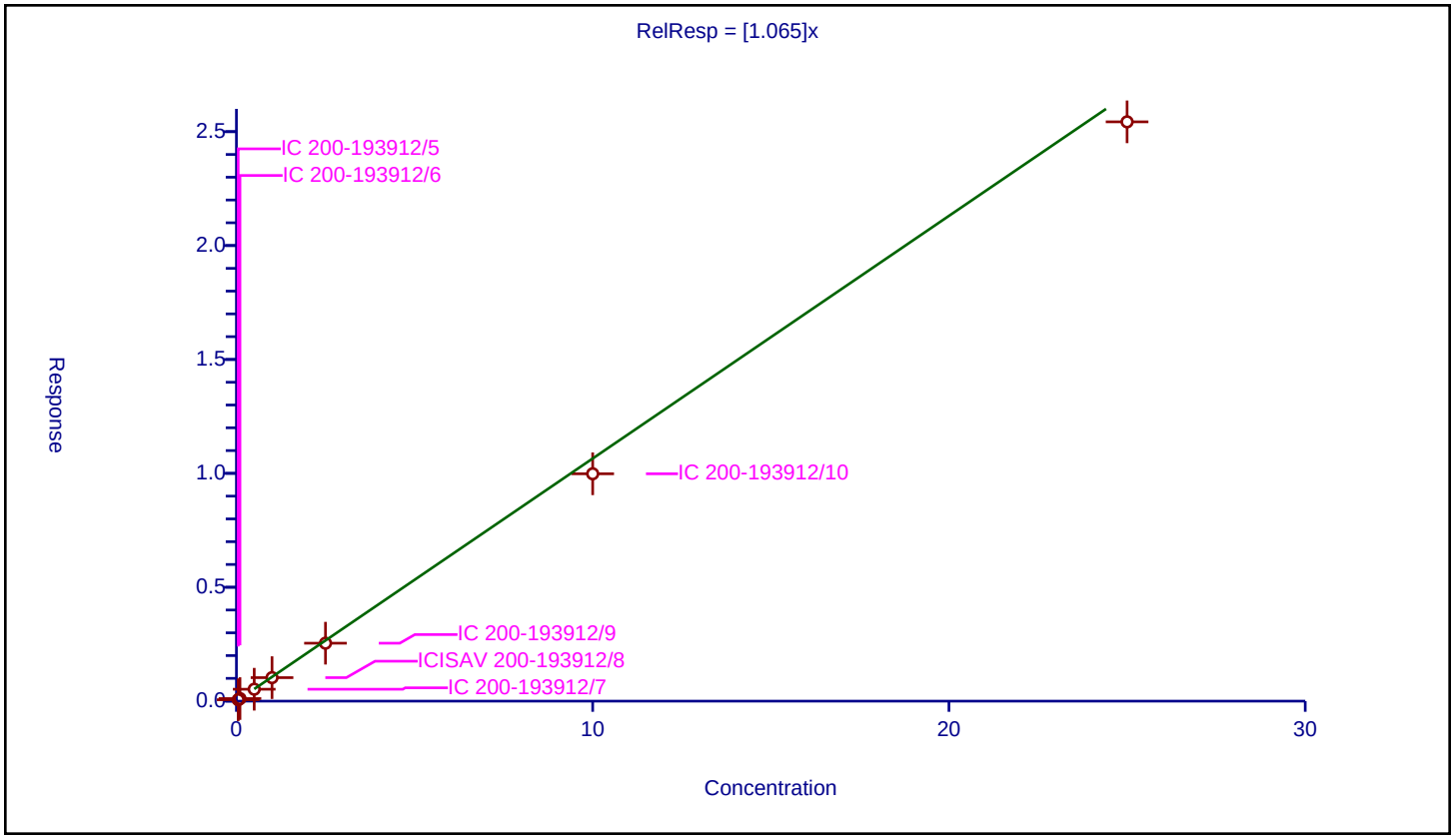
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	14700000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060812	1.25	2027588.0	1.216248	Y
2	IC 200-193912/6	0.1	0.112776	1.25	1982384.0	1.127765	Y
3	IC 200-193912/7	0.5	0.523481	1.25	1912820.0	1.046962	Y
4	ICISAV 200-193912/8	1.0	1.032173	1.25	1934463.0	1.032173	Y
5	IC 200-193912/9	2.5	2.543526	1.25	2045642.0	1.01741	Y
6	IC 200-193912/10	10.0	9.981516	1.25	1691186.0	0.998152	Y
7	IC 200-193912/11	25.0	25.431645	1.25	1620734.0	1.017266	Y



Calibration / Perfluorooctanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

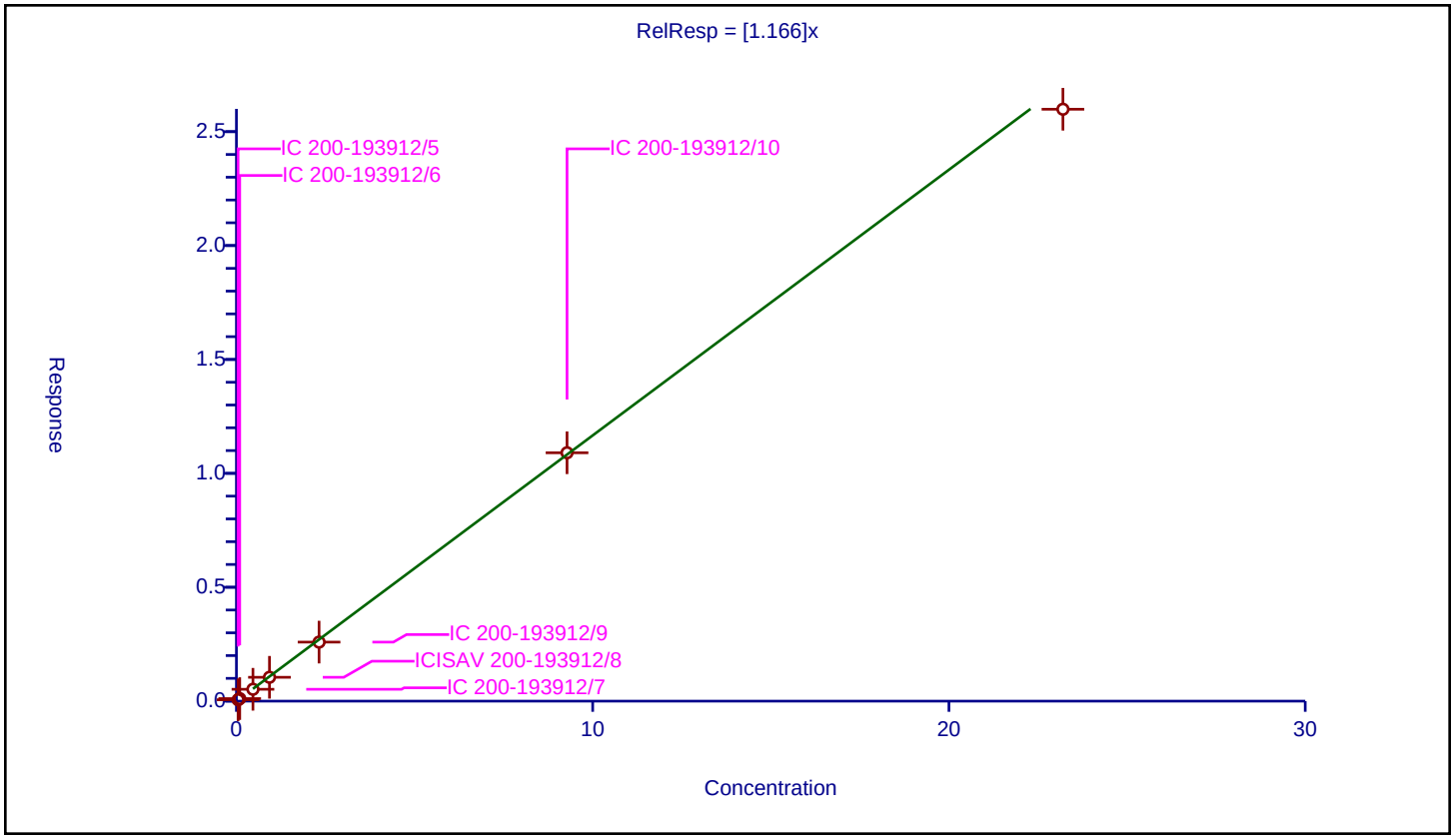
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	8240000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0464	0.060053	1.195	943517.0	1.294243	Y
2	IC 200-193912/6	0.0928	0.112059	1.195	863764.0	1.207533	Y
3	IC 200-193912/7	0.464	0.520913	1.195	882764.0	1.122657	Y
4	ICISAV 200-193912/8	0.928	1.047054	1.195	904398.0	1.128291	Y
5	IC 200-193912/9	2.32	2.591991	1.195	919926.0	1.117237	Y
6	IC 200-193912/10	9.28	10.903287	1.195	765818.0	1.174923	Y
7	IC 200-193912/11	23.2	25.9853	1.195	865311.0	1.120056	Y



Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

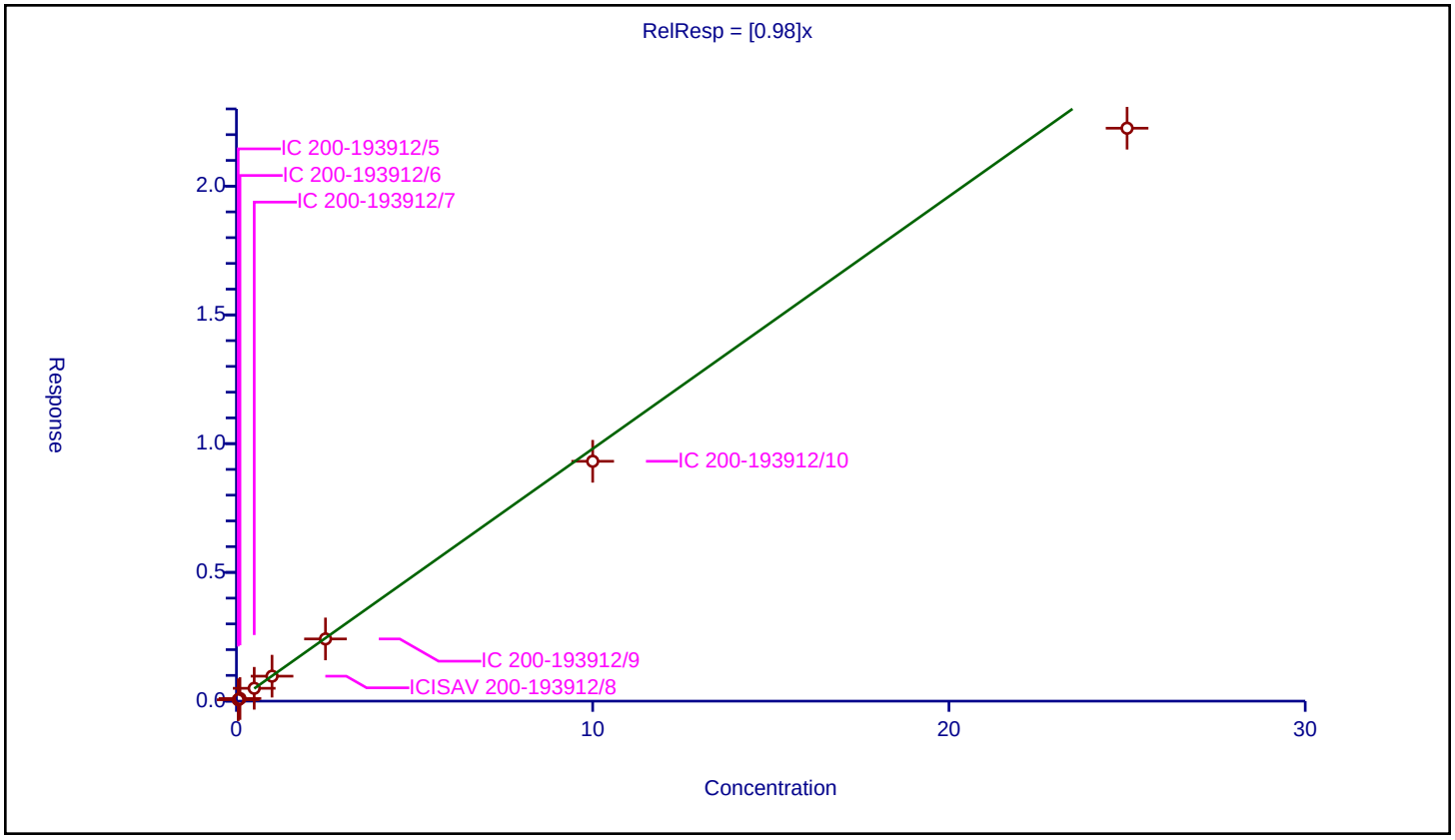
Curve Coefficients

Intercept:	0
Slope:	0.98

Error Coefficients

Standard Error:	15100000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.054544	1.25	2335475.0	1.090881	Y
2	IC 200-193912/6	0.1	0.101347	1.25	1965971.0	1.013469	Y
3	IC 200-193912/7	0.5	0.499549	1.25	2008931.0	0.999099	Y
4	ICISAV 200-193912/8	1.0	0.969174	1.25	2143126.0	0.969174	Y
5	IC 200-193912/9	2.5	2.415598	1.25	2116548.0	0.966239	Y
6	IC 200-193912/10	10.0	9.314659	1.25	1889768.0	0.931466	Y
7	IC 200-193912/11	25.0	22.250286	1.25	1902682.0	0.890011	Y



Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

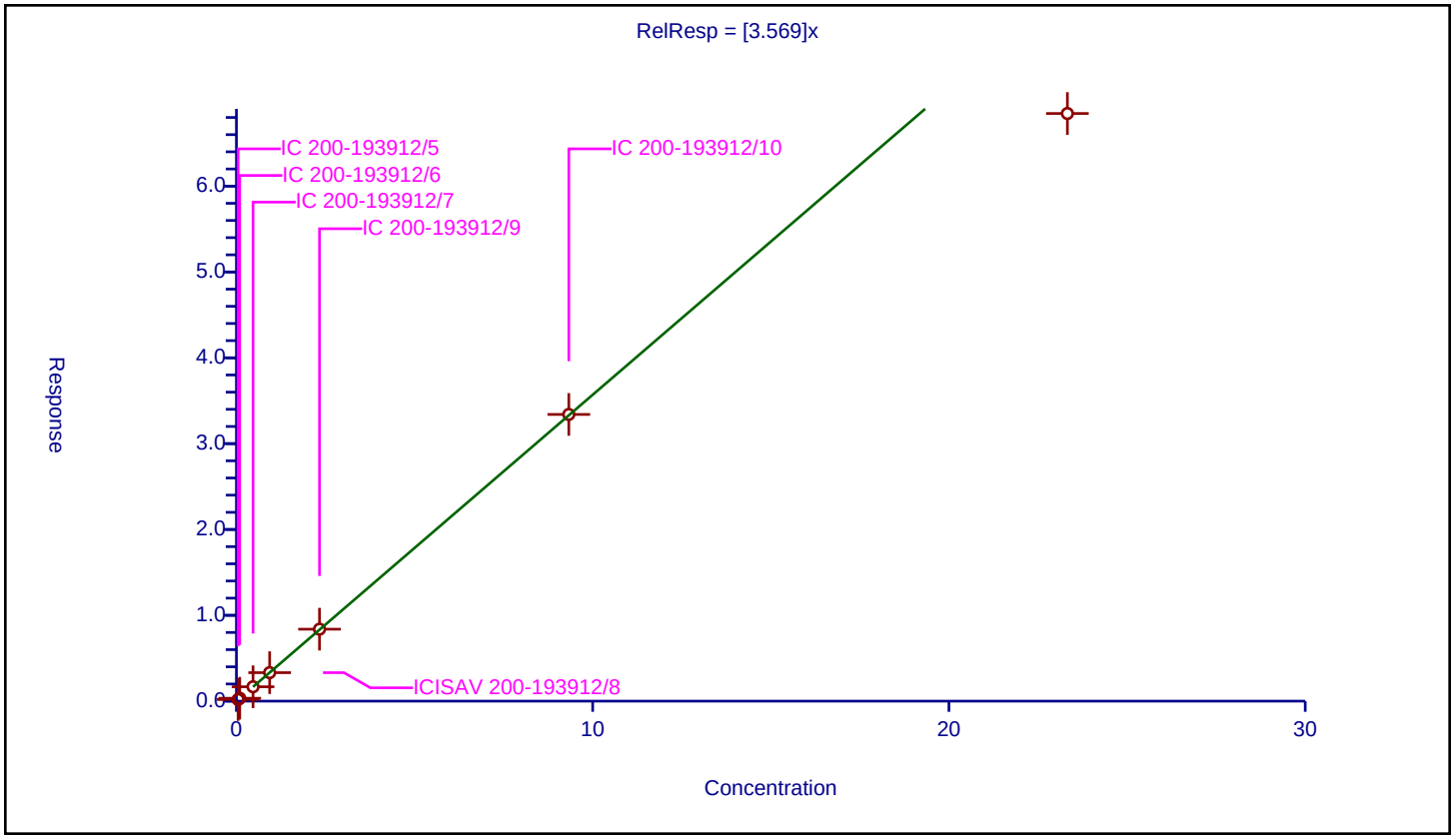
Curve Coefficients

Intercept:	0
Slope:	3.569

Error Coefficients

Standard Error:	22200000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04665	0.191359	1.195	943517.0	4.102008	Y
2	IC 200-193912/6	0.0933	0.338082	1.195	863764.0	3.623605	Y
3	IC 200-193912/7	0.4665	1.67515	1.195	882764.0	3.59089	Y
4	ICISAV 200-193912/8	0.933	3.319787	1.195	904398.0	3.558186	Y
5	IC 200-193912/9	2.3325	8.383828	1.195	919926.0	3.594353	Y
6	IC 200-193912/10	9.33	33.401161	1.195	765818.0	3.579974	Y
7	IC 200-193912/11	23.325	68.461822	1.195	865311.0	2.935126	Y



Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

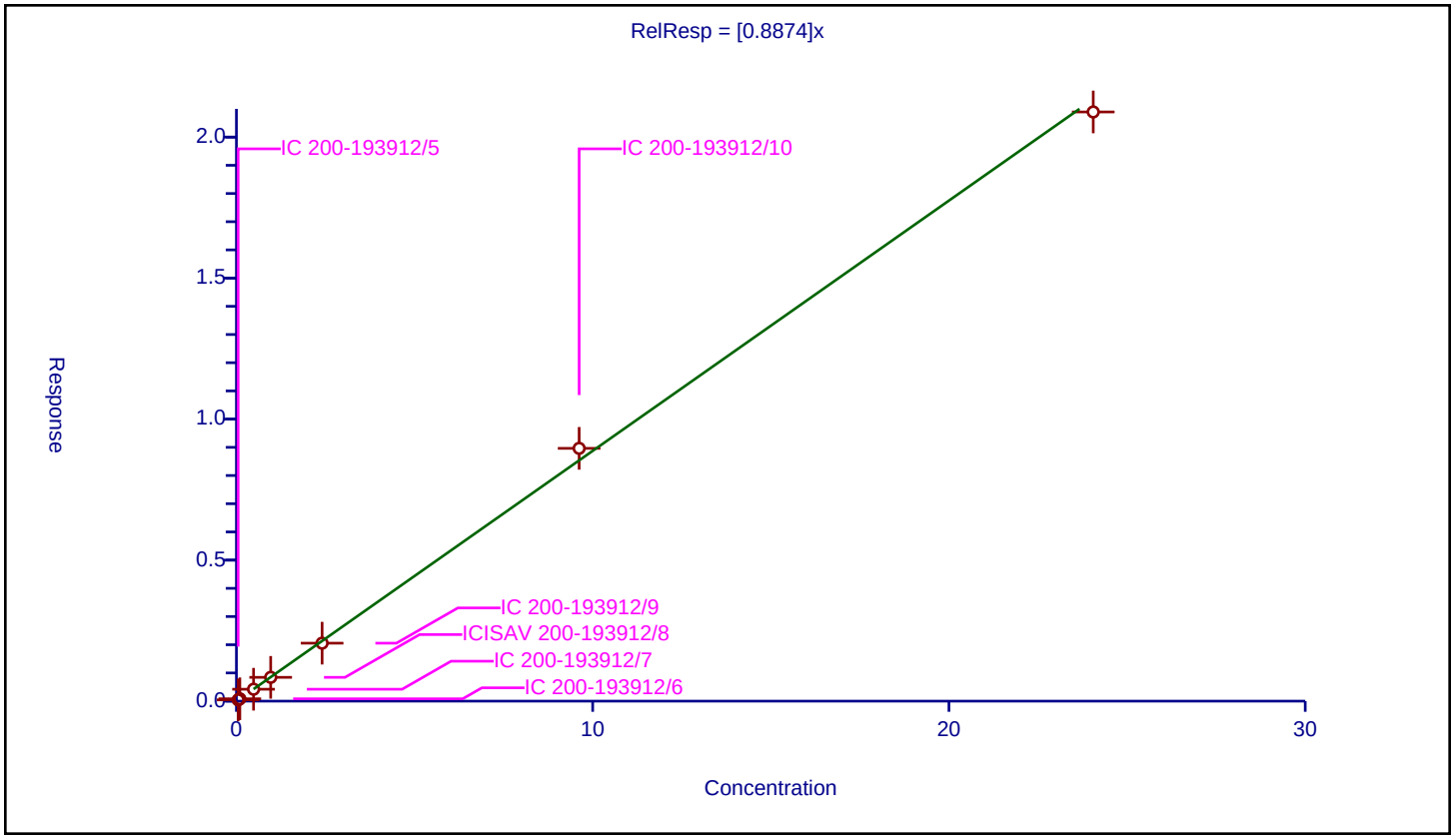
Curve Coefficients

Intercept:	0
Slope:	0.8874

Error Coefficients

Standard Error:	6640000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0481	0.044866	1.195	943517.0	0.932762	Y
2	IC 200-193912/6	0.0962	0.083528	1.195	863764.0	0.86827	Y
3	IC 200-193912/7	0.481	0.422495	1.195	882764.0	0.878367	Y
4	ICISAV 200-193912/8	0.962	0.843613	1.195	904398.0	0.876937	Y
5	IC 200-193912/9	2.405	2.055747	1.195	919926.0	0.854781	Y
6	IC 200-193912/10	9.62	8.96416	1.195	765818.0	0.931825	Y
7	IC 200-193912/11	24.05	20.891757	1.195	865311.0	0.86868	Y



Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

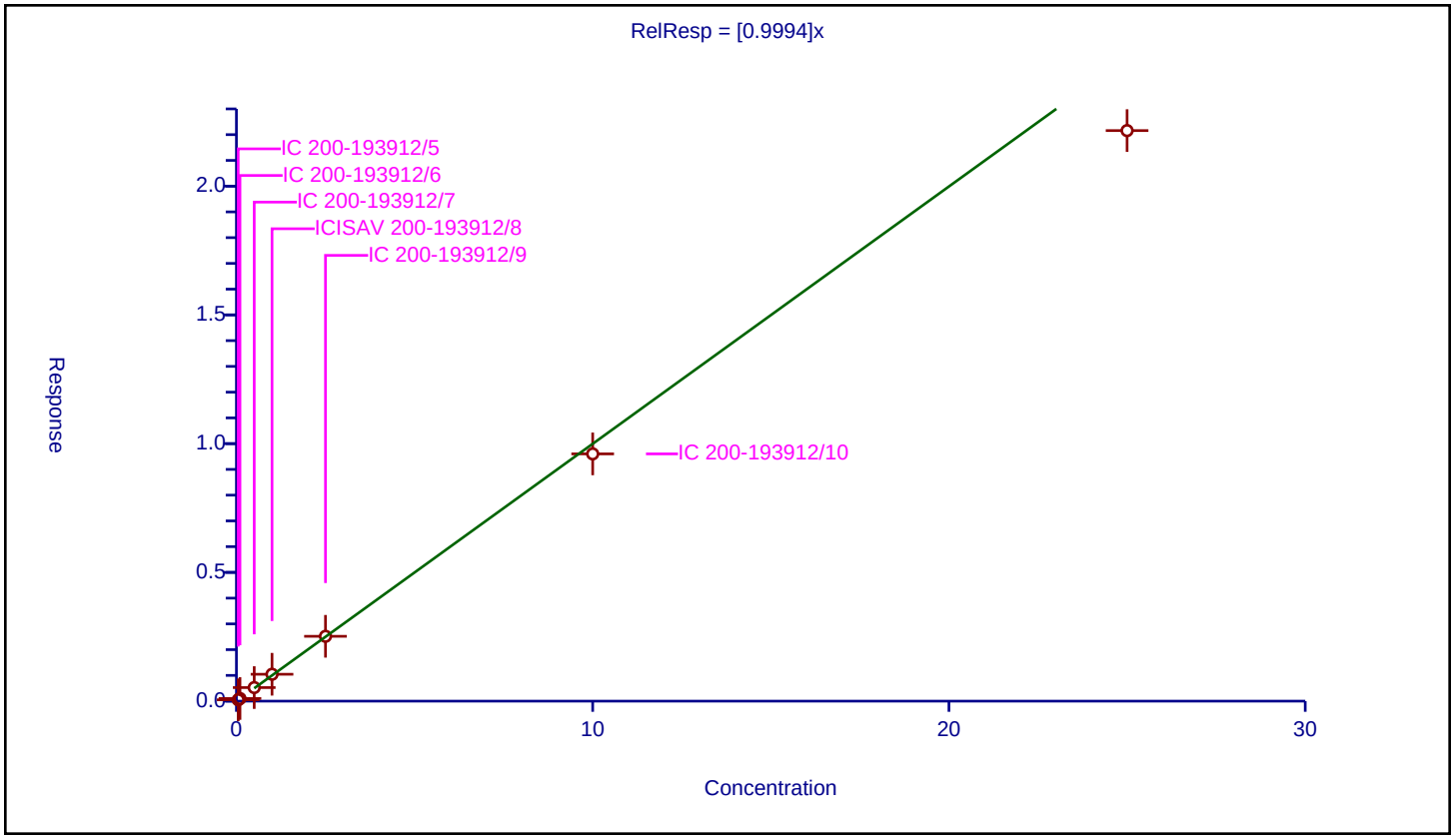
Curve Coefficients

Intercept:	0
Slope:	0.9994

Error Coefficients

Standard Error:	15800000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.051407	1.25	2492424.0	1.028136	Y
2	IC 200-193912/6	0.1	0.101543	1.25	2097344.0	1.015433	Y
3	IC 200-193912/7	0.5	0.527053	1.25	2062234.0	1.054107	Y
4	ICISAV 200-193912/8	1.0	1.043889	1.25	2125756.0	1.043889	Y
5	IC 200-193912/9	2.5	2.518567	1.25	2307904.0	1.007427	Y
6	IC 200-193912/10	10.0	9.601822	1.25	1979736.0	0.960182	Y
7	IC 200-193912/11	25.0	22.157516	1.25	1981566.0	0.886301	Y



Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

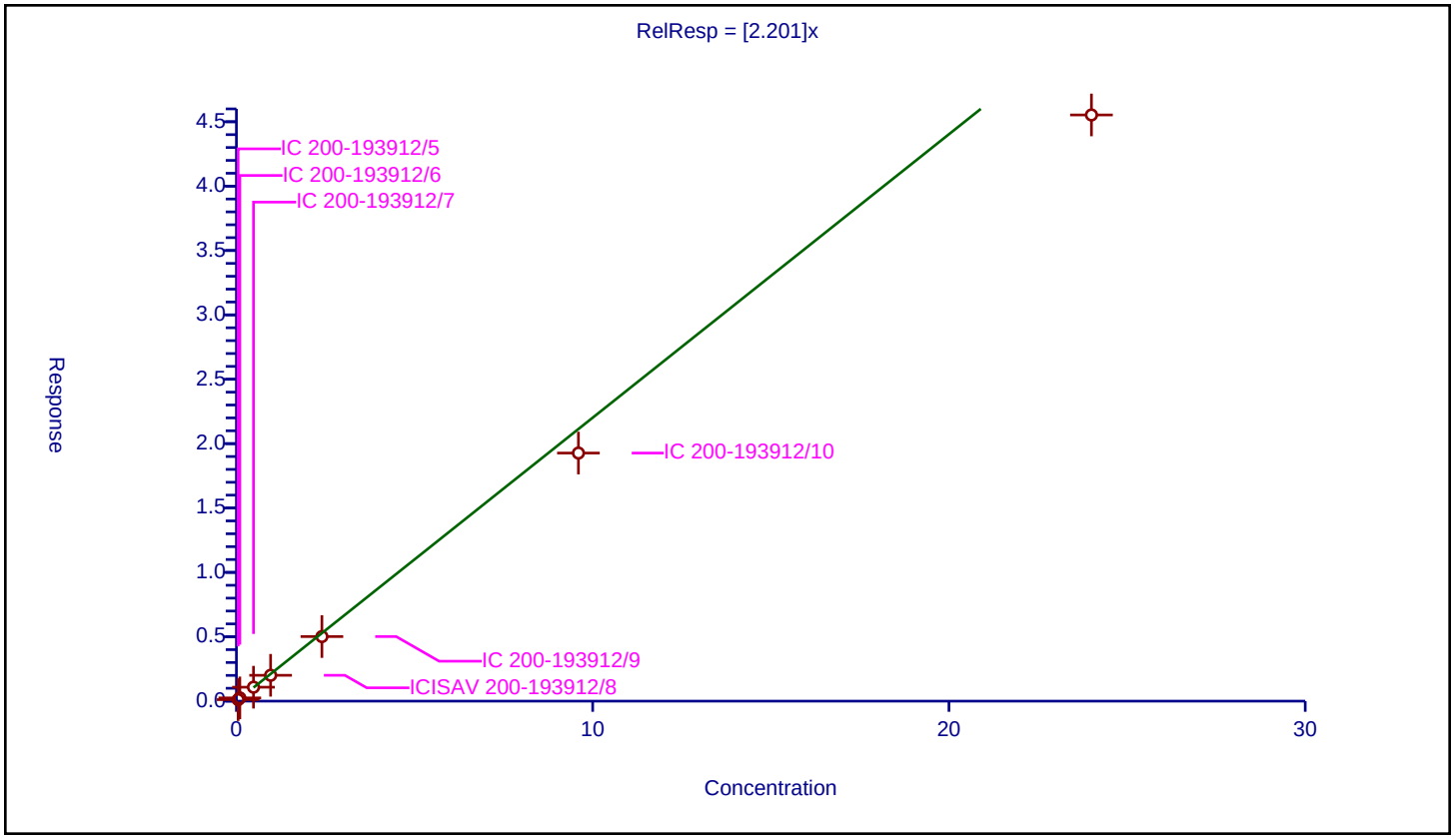
Curve Coefficients

Intercept:	0
Slope:	2.201

Error Coefficients

Standard Error:	5360000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.048	0.117827	1.1975	366485.0	2.45473	Y
2	IC 200-193912/6	0.096	0.250914	1.1975	307295.0	2.613688	Y
3	IC 200-193912/7	0.48	1.083603	1.1975	298552.0	2.257506	Y
4	ICISAV 200-193912/8	0.96	2.007175	1.1975	331913.0	2.090808	Y
5	IC 200-193912/9	2.4	5.014617	1.1975	331708.0	2.089424	Y
6	IC 200-193912/10	9.6	19.268997	1.1975	309678.0	2.007187	Y
7	IC 200-193912/11	24.0	45.528205	1.1975	316911.0	1.897009	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

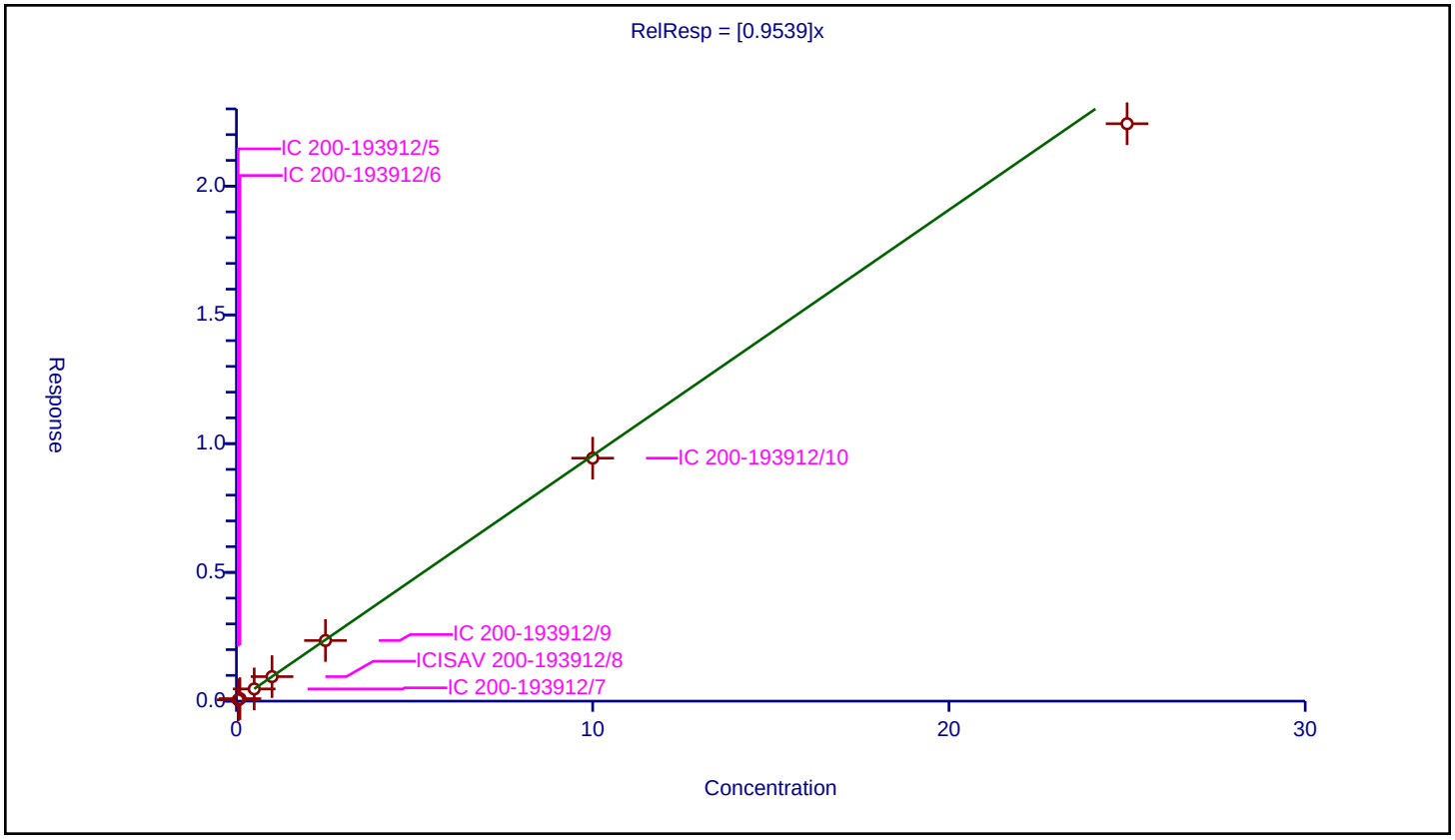
Curve Coefficients

Intercept:	0
Slope:	0.9539

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.05114	1.25	1884229.0	1.022792	Y
2	IC 200-193912/6	0.1	0.097032	1.25	1858847.0	0.970319	Y
3	IC 200-193912/7	0.5	0.474712	1.25	1790735.0	0.949424	Y
4	ICISAV 200-193912/8	1.0	0.952135	1.25	1887535.0	0.952135	Y
5	IC 200-193912/9	2.5	2.354683	1.25	1904586.0	0.941873	Y
6	IC 200-193912/10	10.0	9.435572	1.25	1724931.0	0.943557	Y
7	IC 200-193912/11	25.0	22.424085	1.25	1759972.0	0.896963	Y



Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

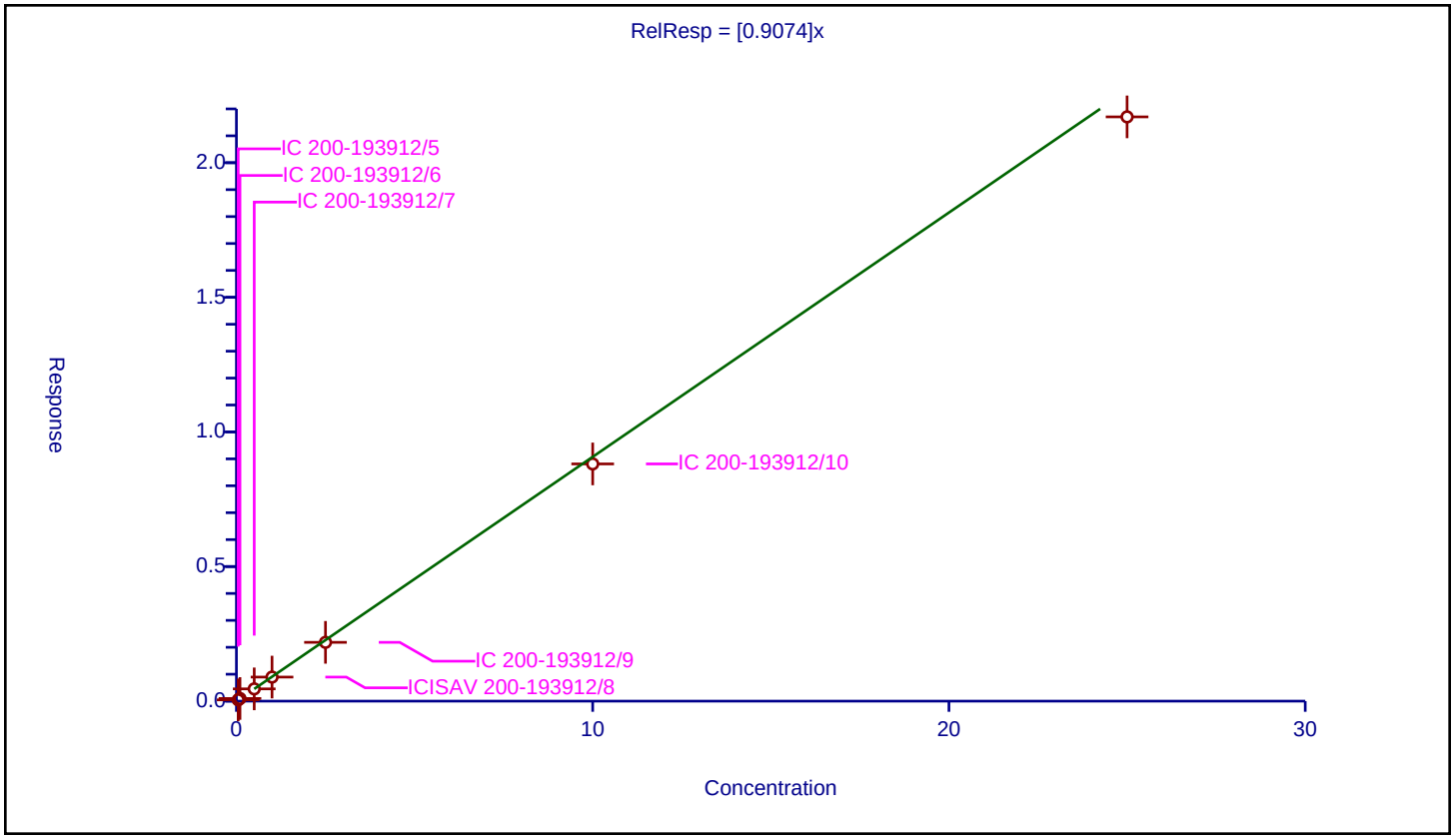
Curve Coefficients

Intercept:	0
Slope:	0.9074

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.047213	1.25	589245.0	0.944259	Y
2	IC 200-193912/6	0.1	0.098038	1.25	509447.0	0.980377	Y
3	IC 200-193912/7	0.5	0.45553	1.25	486461.0	0.91106	Y
4	ICISAV 200-193912/8	1.0	0.893408	1.25	518688.0	0.893408	Y
5	IC 200-193912/9	2.5	2.183599	1.25	518571.0	0.87344	Y
6	IC 200-193912/10	10.0	8.811989	1.25	465286.0	0.881199	Y
7	IC 200-193912/11	25.0	21.70302	1.25	505130.0	0.868121	Y



10/31/2023
4:00 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

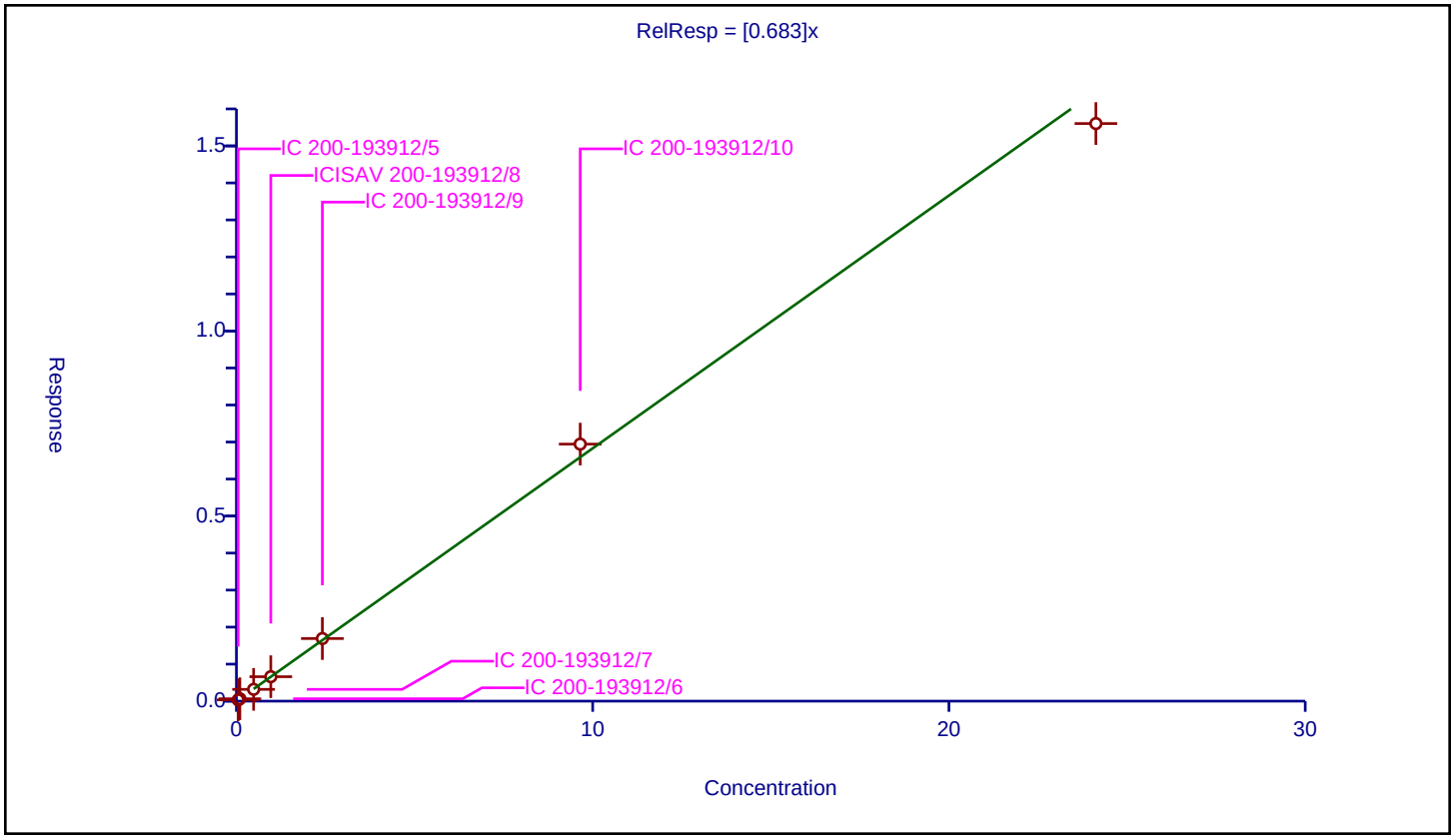
Curve Coefficients

Intercept:	0
Slope:	0.683

Error Coefficients

Standard Error:	4990000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04825	0.033974	1.195	943517.0	0.704116	Y
2	IC 200-193912/6	0.0965	0.064249	1.195	863764.0	0.665791	Y
3	IC 200-193912/7	0.4825	0.318115	1.195	882764.0	0.659305	Y
4	ICISAV 200-193912/8	0.965	0.659955	1.195	904398.0	0.683891	Y
5	IC 200-193912/9	2.4125	1.691543	1.195	919926.0	0.701158	Y
6	IC 200-193912/10	9.65	6.944096	1.195	765818.0	0.719595	Y
7	IC 200-193912/11	24.125	15.604572	1.195	865311.0	0.646822	Y



Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

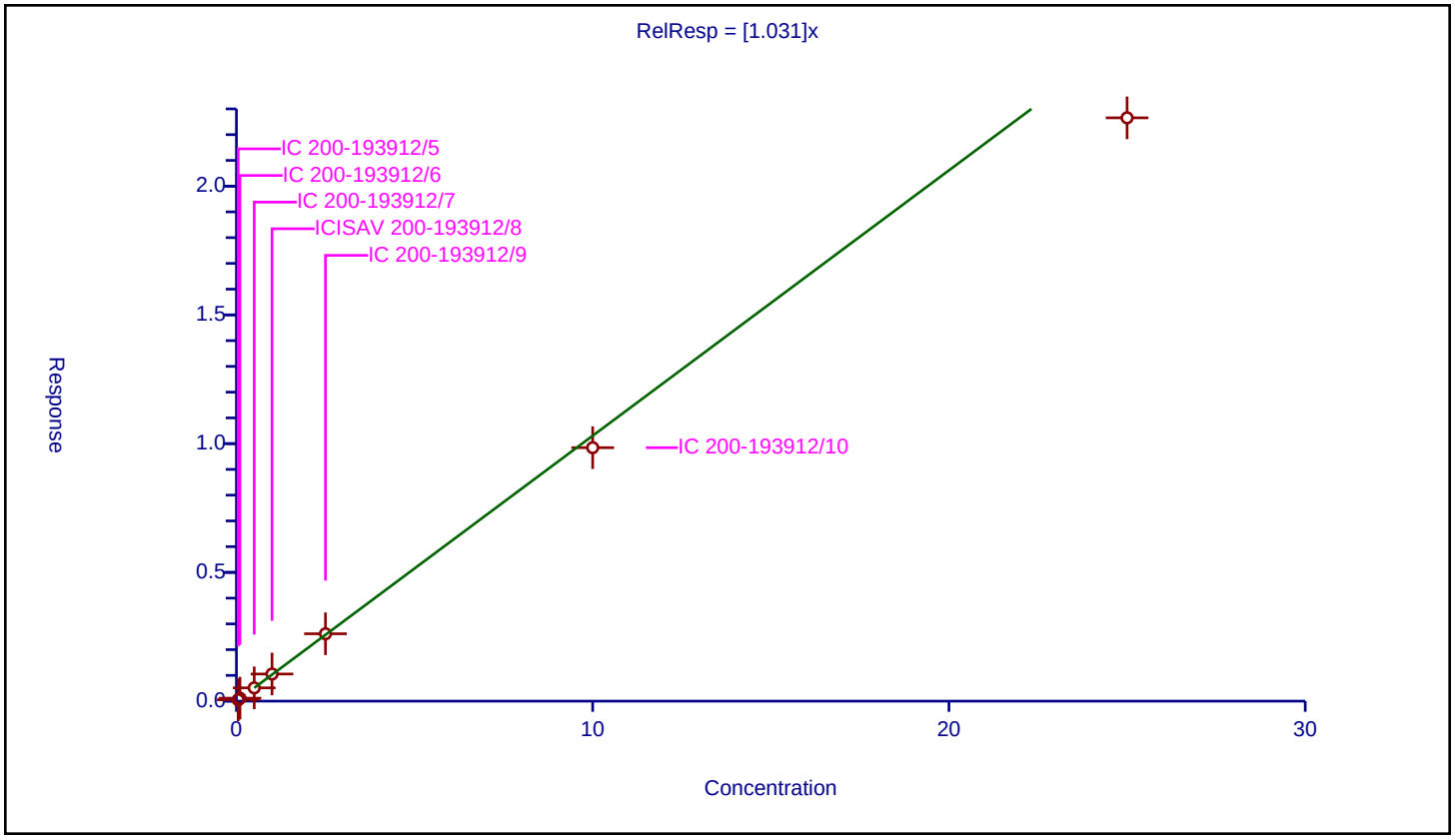
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	14600000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.052687	1.25	2441700.0	1.053743	Y
2	IC 200-193912/6	0.1	0.113929	1.25	1976379.0	1.139293	Y
3	IC 200-193912/7	0.5	0.515751	1.25	1983358.0	1.031502	Y
4	ICISAV 200-193912/8	1.0	1.053027	1.25	2053330.0	1.053027	Y
5	IC 200-193912/9	2.5	2.616249	1.25	2158999.0	1.0465	Y
6	IC 200-193912/10	10.0	9.84312	1.25	1818926.0	0.984312	Y
7	IC 200-193912/11	25.0	22.652933	1.25	1790927.0	0.906117	Y



Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

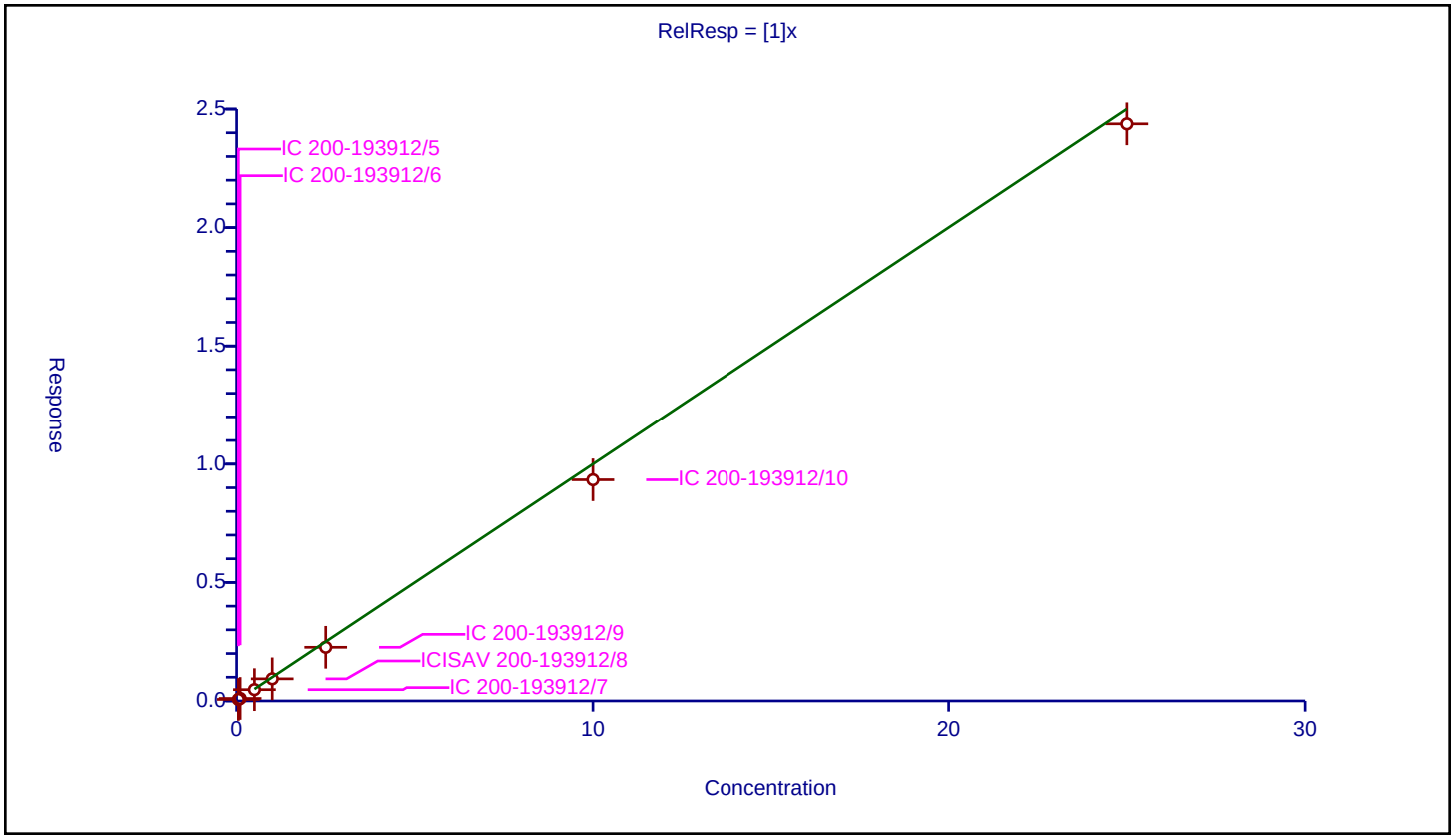
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.062984	1.25	566846.0	1.25969	Y
2	IC 200-193912/6	0.1	0.104122	1.25	488020.0	1.041223	Y
3	IC 200-193912/7	0.5	0.476346	1.25	491633.0	0.952692	Y
4	ICISAV 200-193912/8	1.0	0.933122	1.25	487913.0	0.933122	Y
5	IC 200-193912/9	2.5	2.264152	1.25	544137.0	0.905661	Y
6	IC 200-193912/10	10.0	9.339057	1.25	456350.0	0.933906	Y
7	IC 200-193912/11	25.0	24.377511	1.25	430319.0	0.9751	Y



Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

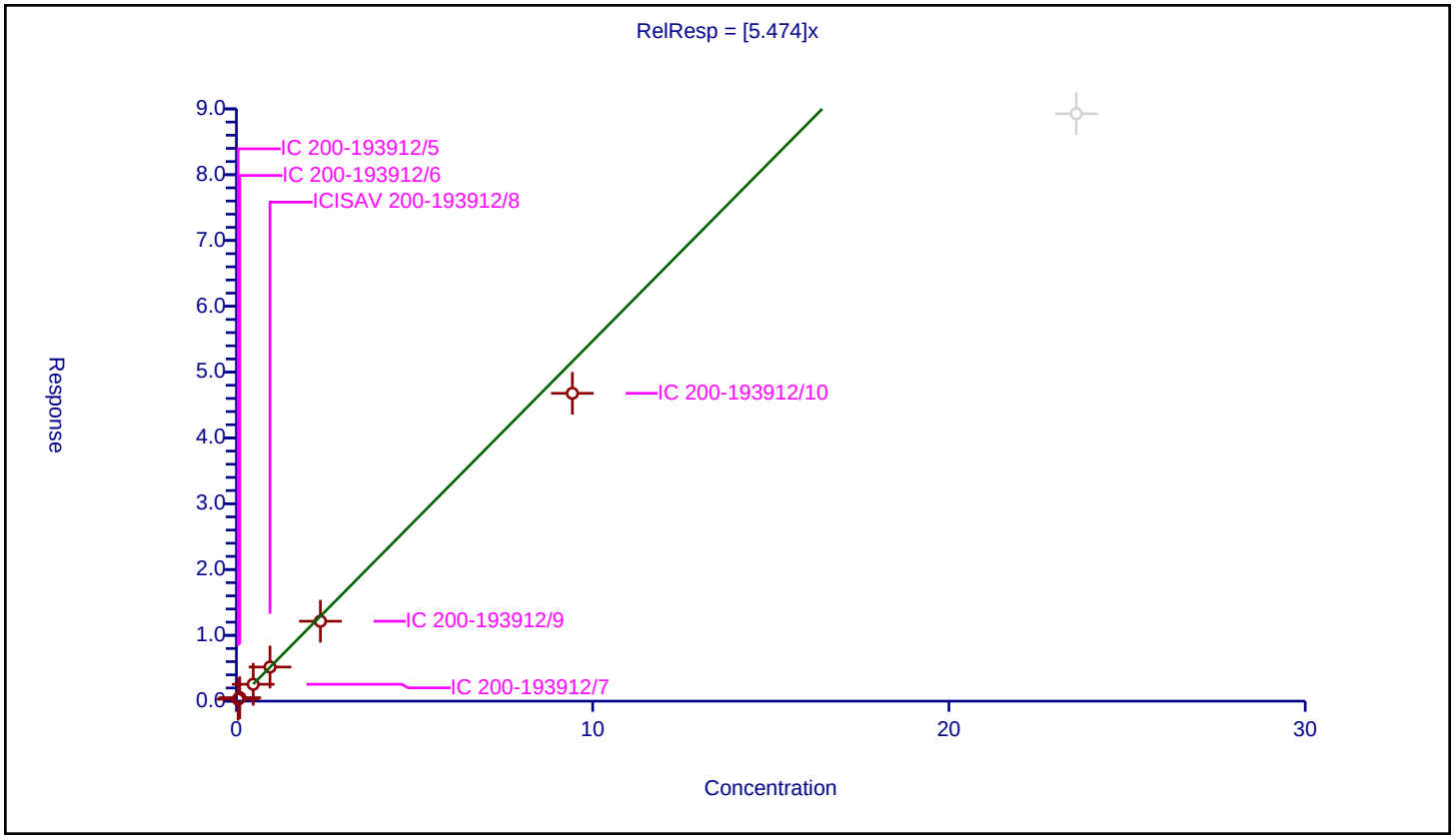
Curve Coefficients

Intercept:	0
Slope:	5.474

Error Coefficients

Standard Error:	14200000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04715	0.292105	1.195	943517.0	6.195237	Y
2	IC 200-193912/6	0.0943	0.527614	1.195	863764.0	5.595053	Y
3	IC 200-193912/7	0.4715	2.564572	1.195	882764.0	5.439177	Y
4	ICISAV 200-193912/8	0.943	5.187209	1.195	904398.0	5.500751	Y
5	IC 200-193912/9	2.3575	12.142724	1.195	919926.0	5.150678	Y
6	IC 200-193912/10	9.43	46.776459	1.195	765818.0	4.960388	Y
7	IC 200-193912/11	23.575	89.262798	1.195	865311.0	3.786333	N



Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

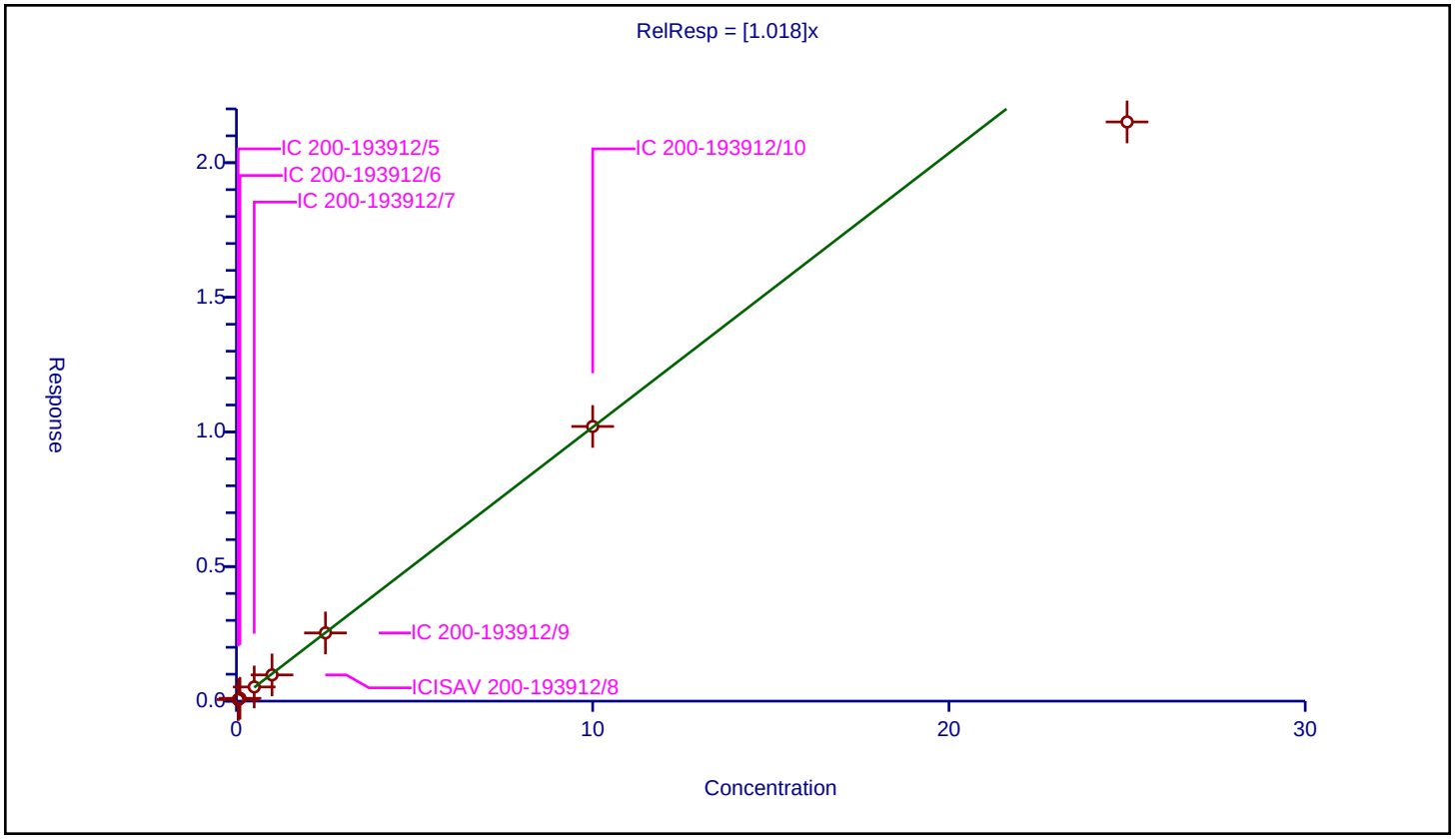
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	15400000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.057397	1.25	2296115.0	1.14795	Y
2	IC 200-193912/6	0.1	0.10537	1.25	2131572.0	1.0537	Y
3	IC 200-193912/7	0.5	0.526674	1.25	2022512.0	1.053347	Y
4	ICISAV 200-193912/8	1.0	0.974949	1.25	2123640.0	0.974949	Y
5	IC 200-193912/9	2.5	2.534654	1.25	2062631.0	1.013862	Y
6	IC 200-193912/10	10.0	10.203479	1.25	1800020.0	1.020348	Y
7	IC 200-193912/11	25.0	21.515509	1.25	1994604.0	0.86062	Y



10/31/2023
4:00 PM

Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

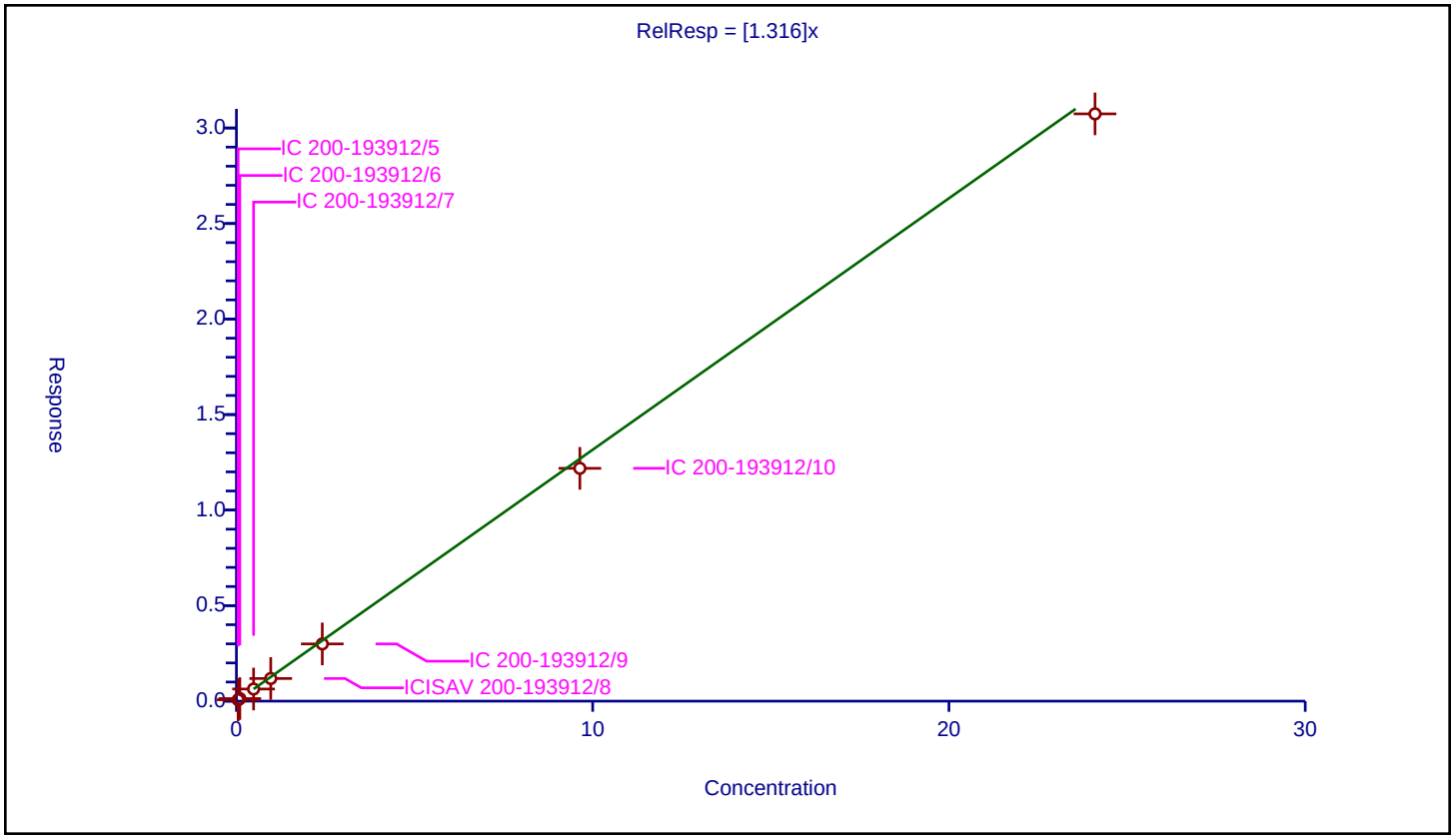
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	3580000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0482	0.071608	1.1975	366485.0	1.485641	Y
2	IC 200-193912/6	0.0964	0.134646	1.1975	307295.0	1.396742	Y
3	IC 200-193912/7	0.482	0.635587	1.1975	298552.0	1.318646	Y
4	ICISAV 200-193912/8	0.964	1.184378	1.1975	331913.0	1.228608	Y
5	IC 200-193912/9	2.41	2.994685	1.1975	331708.0	1.242608	Y
6	IC 200-193912/10	9.64	12.186219	1.1975	309678.0	1.264131	Y
7	IC 200-193912/11	24.1	30.739313	1.1975	316911.0	1.27549	Y



Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

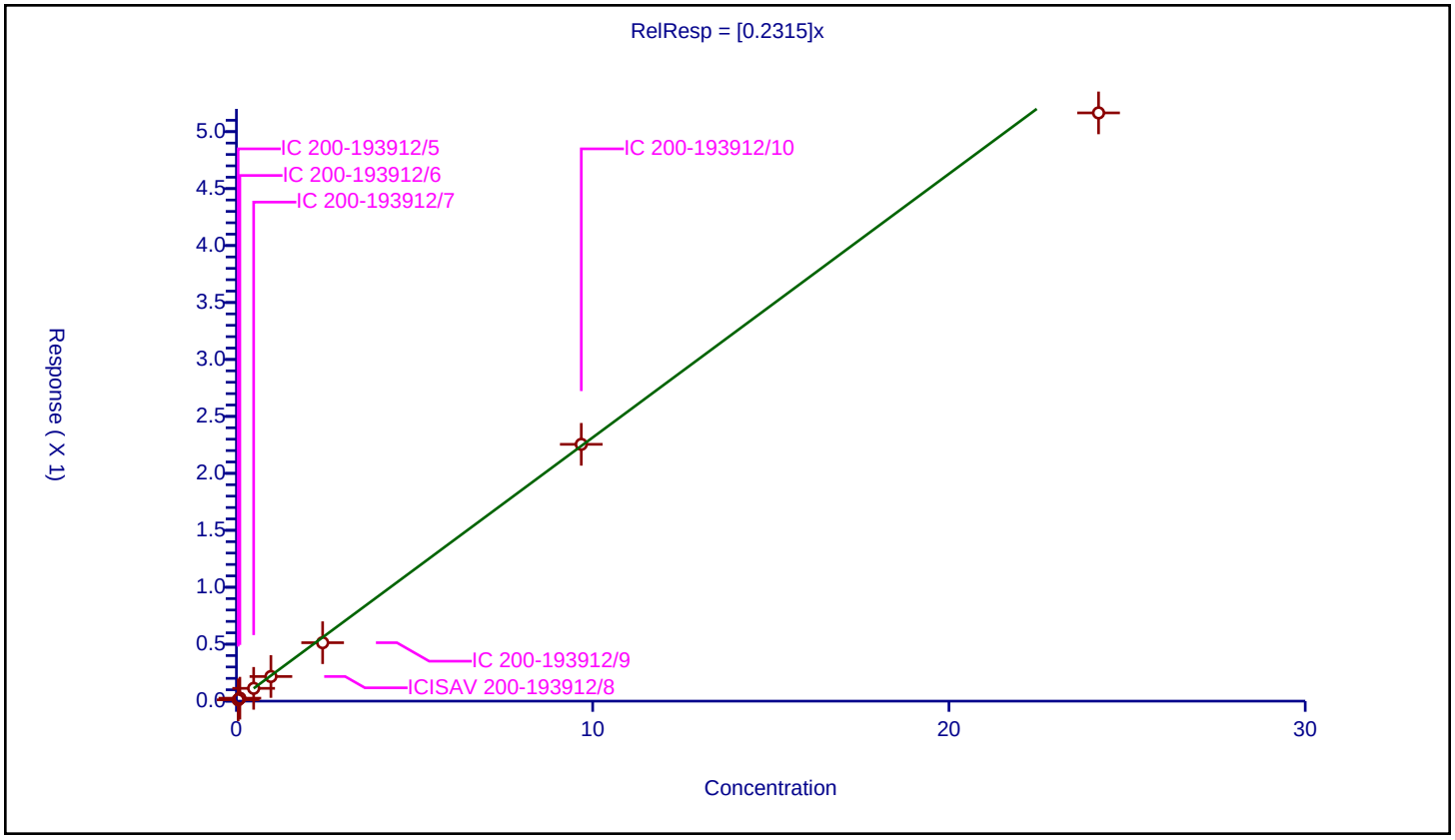
Curve Coefficients

Intercept:	0
Slope:	0.2315

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0484	0.011586	1.195	943517.0	0.239386	Y
2	IC 200-193912/6	0.0968	0.025868	1.195	863764.0	0.267235	Y
3	IC 200-193912/7	0.484	0.112249	1.195	882764.0	0.231919	Y
4	ICISAV 200-193912/8	0.968	0.216192	1.195	904398.0	0.223339	Y
5	IC 200-193912/9	2.42	0.513259	1.195	919926.0	0.21209	Y
6	IC 200-193912/10	9.68	2.254814	1.195	765818.0	0.232935	Y
7	IC 200-193912/11	24.2	5.164816	1.195	865311.0	0.213422	Y



Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

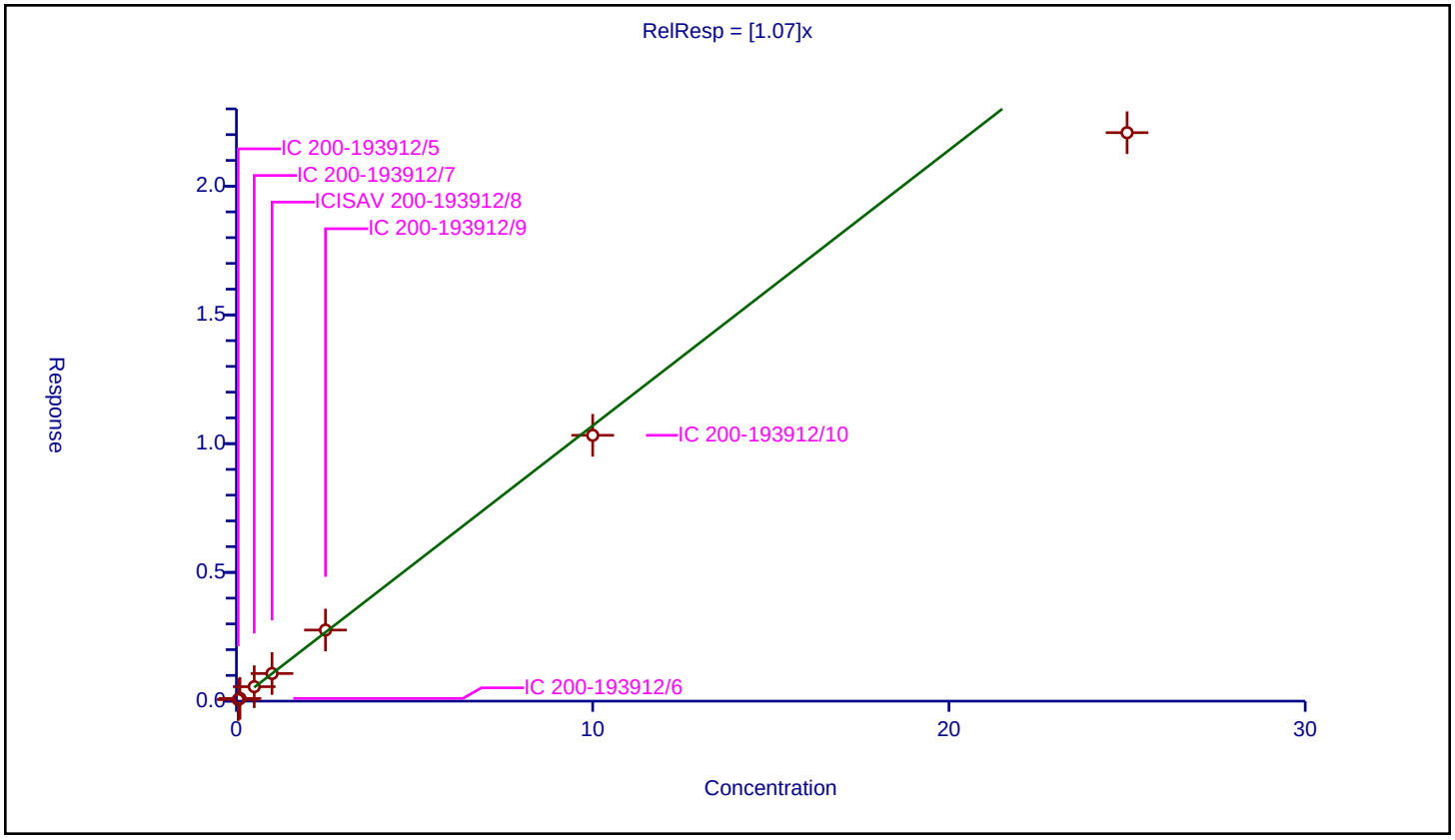
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	15700000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060572	1.25	2296115.0	1.211438	Y
2	IC 200-193912/6	0.1	0.106191	1.25	2131572.0	1.06191	Y
3	IC 200-193912/7	0.5	0.561156	1.25	2022512.0	1.122311	Y
4	ICISAV 200-193912/8	1.0	1.07307	1.25	2123640.0	1.07307	Y
5	IC 200-193912/9	2.5	2.761299	1.25	2062631.0	1.10452	Y
6	IC 200-193912/10	10.0	10.323864	1.25	1800020.0	1.032386	Y
7	IC 200-193912/11	25.0	22.076299	1.25	1994604.0	0.883052	Y



10/31/2023
4:00 PM

Calibration / Perfluorotetradecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

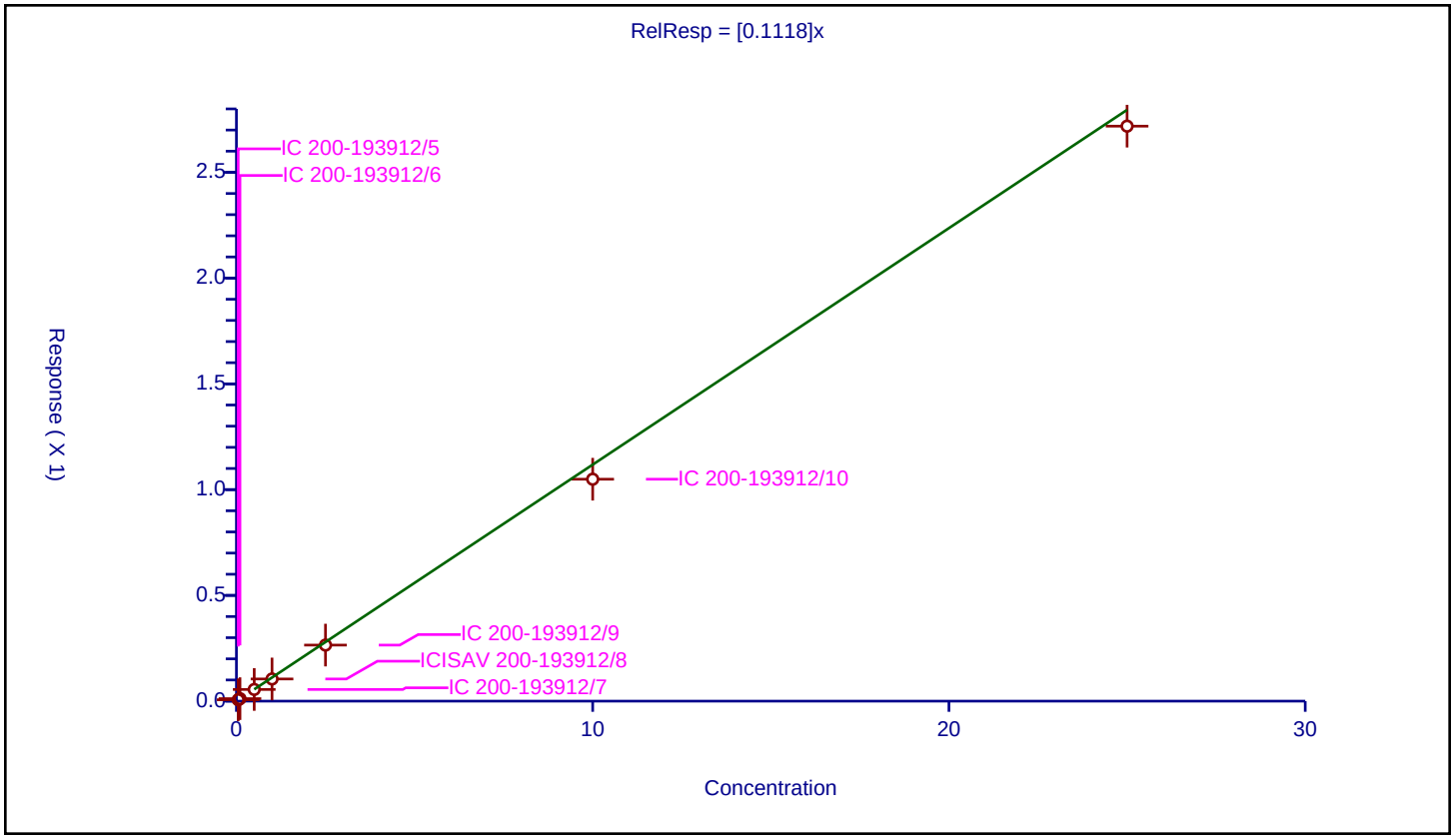
Curve Coefficients

Intercept:	0
Slope:	0.1118

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.006497	1.25	2302510.0	0.129934	Y
2	IC 200-193912/6	0.1	0.011797	1.25	2061289.0	0.117972	Y
3	IC 200-193912/7	0.5	0.055166	1.25	1996289.0	0.110332	Y
4	ICISAV 200-193912/8	1.0	0.10478	1.25	2077683.0	0.10478	Y
5	IC 200-193912/9	2.5	0.265032	1.25	2135161.0	0.106013	Y
6	IC 200-193912/10	10.0	1.049255	1.25	1876594.0	0.104926	Y
7	IC 200-193912/11	25.0	2.718444	1.25	1918275.0	0.108738	Y



Calibration / Perfluorohexadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

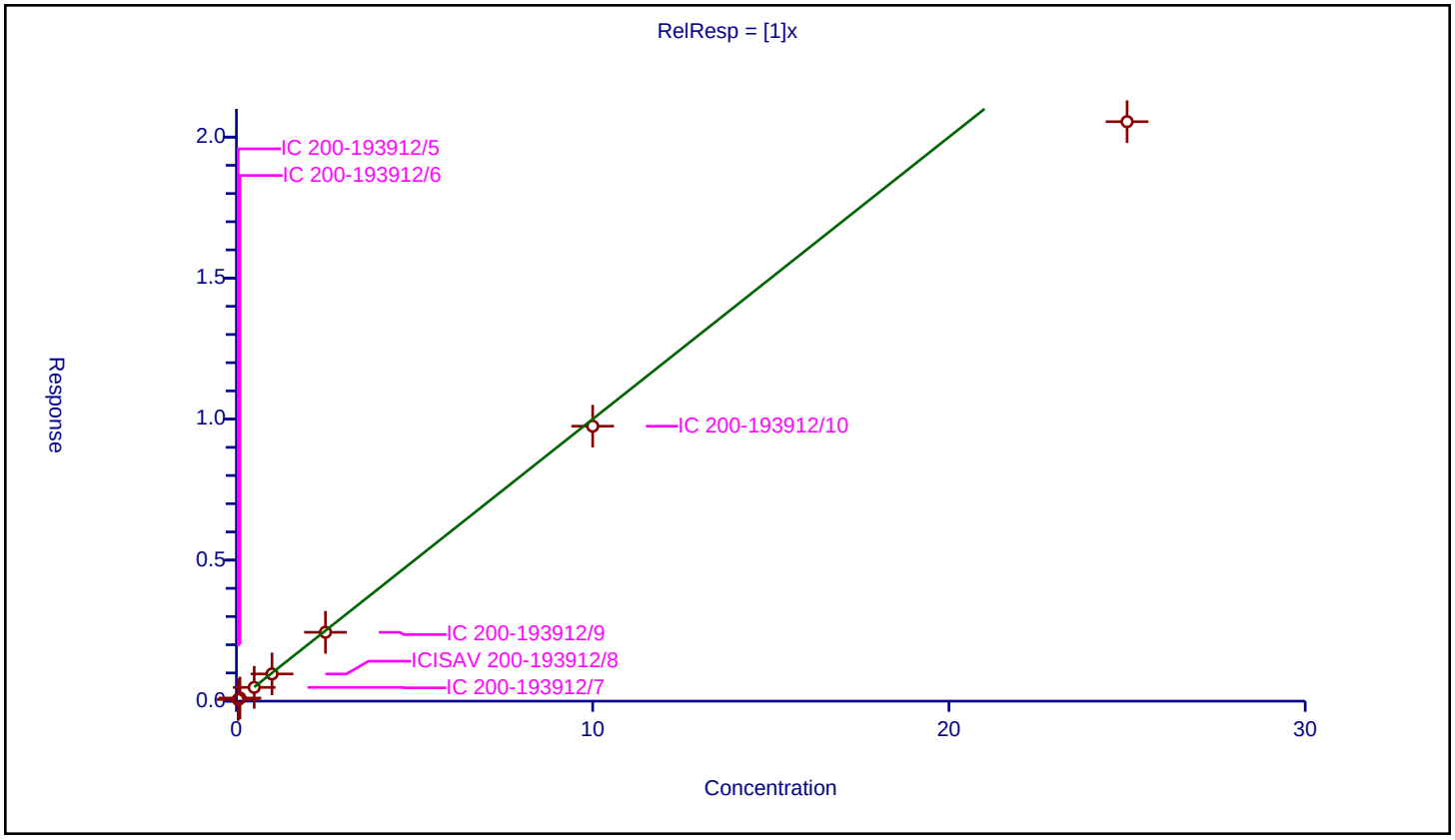
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	16800000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059148	1.25	2773326.0	1.182966	Y
2	IC 200-193912/6	0.1	0.110397	1.25	2341179.0	1.103968	Y
3	IC 200-193912/7	0.5	0.487301	1.25	2309121.0	0.974602	Y
4	ICISAV 200-193912/8	1.0	0.965145	1.25	2422773.0	0.965145	Y
5	IC 200-193912/9	2.5	2.442011	1.25	2376838.0	0.976804	Y
6	IC 200-193912/10	10.0	9.749491	1.25	2051028.0	0.974949	Y
7	IC 200-193912/11	25.0	20.546324	1.25	2292454.0	0.821853	Y



Calibration / Perfluorooctadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

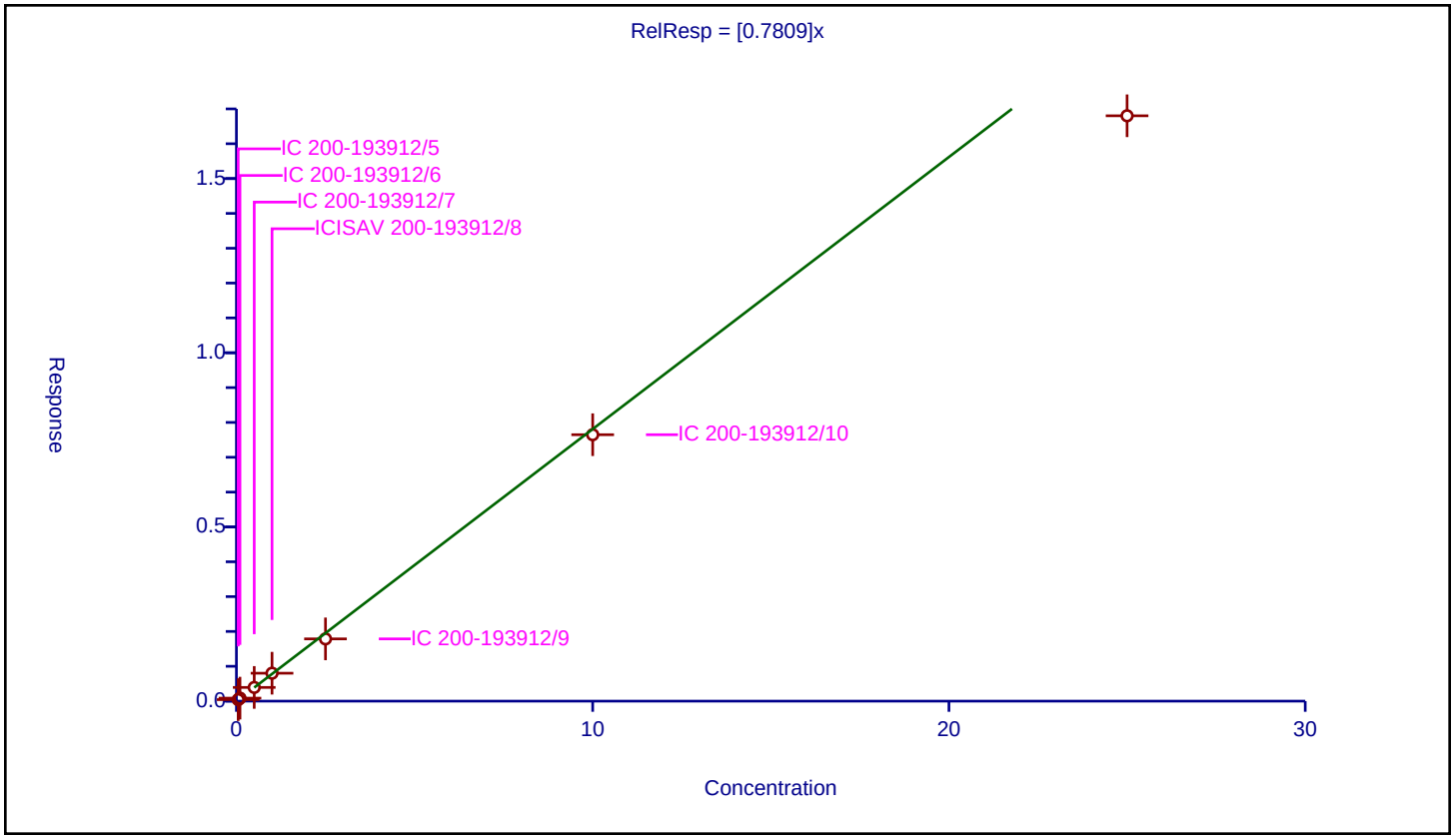
Curve Coefficients

Intercept:	0
Slope:	0.7809

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.043147	1.25	2773326.0	0.862944	Y
2	IC 200-193912/6	0.1	0.086341	1.25	2341179.0	0.863411	Y
3	IC 200-193912/7	0.5	0.393238	1.25	2309121.0	0.786476	Y
4	ICISAV 200-193912/8	1.0	0.801959	1.25	2422773.0	0.801959	Y
5	IC 200-193912/9	2.5	1.786872	1.25	2376838.0	0.714749	Y
6	IC 200-193912/10	10.0	7.647519	1.25	2051028.0	0.764752	Y
7	IC 200-193912/11	25.0	16.801641	1.25	2292454.0	0.672066	Y



10/31/2023
4:00 PM

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.091		1.17	1.00	16.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.233		1.15	1.01	14.2	30.0
Perfluorobutanesulfonic acid	AveID	1.117	1.273		1.14	1.00	14.0	30.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.749		1.10	1.00	10.4	30.0
Perfluorohexanoic acid	AveID	1.100	1.265		1.16	1.01	14.9	30.0
Perfluoropentanesulfonic acid	AveID	1.306	1.519		1.16	1.00	16.3	30.0
HFPODA	AveID	1.001	1.187		1.20	1.01	18.5	30.0
Perfluoroheptanoic acid	AveID	1.121	1.275		1.14	1.00	13.8	30.0
Perfluorohexanesulfonic acid	AveID	1.107	1.171		1.07	1.01	5.8	30.0
DONA	AveID	5.754	6.626		1.15	1.00	15.1	30.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.589		1.10	1.00	10.0	30.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.837		1.04	1.00	3.8	30.0
Perfluorooctanoic acid	AveID	1.065	1.147		1.08	1.00	7.6	30.0
Perfluorooctanesulfonic acid	AveID	1.166	1.129		0.977	1.01	-3.2	30.0
Perfluorononanoic acid	AveID	0.9800	1.173		1.20	1.00	19.7	30.0
9Cl-PF3ONS	AveID	3.569	3.916		1.10	1.00	9.7	30.0
Perfluorononanesulfonic acid	AveID	0.8874	0.9697		1.10	1.01	9.3	30.0
Perfluorodecanoic acid	AveID	0.999	1.132		1.13	1.00	13.3	30.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.648		1.22	1.01	20.3	30.0
Perfluorooctanesulfonamide	AveID	0.9539	1.010		1.06	1.00	5.9	30.0
NMeFOSAA	AveID	0.9074	1.065		1.17	1.00	17.3	30.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7209		1.07	1.01	5.6	30.0
Perfluoroundecanoic acid	AveID	1.031	1.105		1.07	1.00	7.2	30.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.079		1.08	1.00	7.9	30.0
11Cl-PF3OUdS	AveID	5.474	5.985		1.09	1.00	9.3	30.0
Perfluorododecanoic acid	AveID	1.018	1.033		1.02	1.00	1.5	30.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.421		1.04	0.964	7.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2219		0.928	0.968	-4.1	30.0
Perfluorotridecanoic acid	AveID	1.070	1.093		1.02	1.00	2.2	30.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1309		1.17	1.00	17.1	30.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9902		0.990	1.00	-1.0	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7992		1.02	1.00	2.3	30.0
13C4 PFBA	Ave	0.9917	0.9819		1.24	1.25	-1.0	50.0
13C3 PFBS	Ave	1.041	0.9897		1.11	1.16	-5.0	50.0
13C5 PFPeA	Ave	0.7696	0.7799		1.27	1.25	1.3	50.0
M2-4:2 FTS	Ave	0.1204	0.1244		1.21	1.17	3.3	50.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7614		1.22	1.25	-2.8	50.0
13C3 HFPO-DA	Ave	0.1516	0.1402		1.16	1.25	-7.5	50.0
13C4 PFHpA	Ave	0.8590	0.8570		1.25	1.25	-0.2	50.0
18O2 PFHxS	Ave	0.7464	0.7510		1.19	1.18	0.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1630		1.25	1.19	5.1	50.0
13C4 PFOA	Ave	0.9731	0.9893		1.27	1.25	1.7	50.0
13C4 PFOS	Ave	0.4742	0.4785		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.073		1.27	1.25	1.4	50.0
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	50.0
M2-8:2 FTS	Ave	0.1744	0.1644		1.13	1.20	-5.8	50.0
13C8 FOSA	Ave	0.9462	0.9298		1.23	1.25	-1.7	50.0
d3-NMeFOSAA	Ave	0.2650	0.2507		1.18	1.25	-5.4	50.0
13C2 PFUnA	Ave	1.047	1.065		1.27	1.25	1.7	50.0
d5-NEtFOSAA	Ave	0.2552	0.2498		1.22	1.25	-2.1	50.0
13C2 PFDoA	Ave	1.064	1.040		1.22	1.25	-2.3	50.0
13C2 PFTeDA	Ave	1.059	1.068		1.26	1.25	0.8	50.0
13C2 PFHxDA	Ave	1.221	1.213		1.24	1.25	-0.6	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Jul-2023 18:22:05 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0056441-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:46:57 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:36:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	2061390	1.24		99.0	1111	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	1799894	1.17			128	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1637273	1.27		101	855	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1630838	1.15			72.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.695	1932315	1.10		95.0	61660	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.006	2115731	1.14	Target=2.06		394	M
298.90 > 99.00	2.424	2.425	-0.001	1.006	951335		2.22(1.03-3.09)		205	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	243947	1.21		103	89.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	783361	1.10			1210	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1598439	1.22		97.2	1019	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	1633342	1.16	Target=14.12		201	M
313.00 > 119.00	2.755	2.731	0.024	1.000	119996		13.61(7.06-21.17)		87.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	1915826	1.16	Target=2.72		2515	
349.00 > 99.00	2.755	2.731	0.024	0.885	690197		2.78(1.36-4.09)		775	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.855	2.844	0.011	0.823	294290	1.16		92.5	1359	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	1.000	282227	1.20			1561	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1491459	1.19		101	3008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.114	3.092	0.022	1.000	1492005	1.07	Target=3.32		2002	
399.00 > 99.00	3.114	3.092	0.022	1.000	447913		3.33(1.66-4.98)		275	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.114	3.104	0.010	1.000	1835676	1.14	Target=4.17		375	
363.00 > 169.00	3.114	3.104	0.010	1.000	421780		4.35(2.09-6.26)		330	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1799170	1.25		99.8	4344	
77 DONA										
377.00 > 251.00	3.149	3.138	0.011	0.832	5325110	1.15	Target=3.33		4580	
377.00 > 85.00	3.149	3.138	0.011	0.832	1587786		3.35(1.66-4.99)		1564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.452	3.446	0.006	0.913	1277458	1.10	Target=4.83		2835	
449.00 > 99.00	3.452	3.446	0.006	0.913	271741		4.70(2.41-7.24)		608	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	325183	1.25		105	449	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	776988	1.04			1505	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.470	3.464	0.006	1.000	1905230	1.08	Target=2.88		155	
413.00 > 169.00	3.470	3.464	0.006	1.000	700454		2.72(1.44-4.32)		688	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	2077032	1.27		102	10779	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		2099437	1.25			5857	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	960411	1.21		101	3123	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	916205	0.9773	Target=4.24		1279	M
499.00 > 99.00	3.783	3.783	0.0	1.000	219275		4.18(2.12-6.37)		332	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2253485	1.27		101	8237	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	2114355	1.20	Target=8.34		396	
463.00 > 169.00	3.803	3.803	0.0	1.000	258068		8.19(4.17-12.51)		1687	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	3147105	1.10			4619	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	787129	1.10	Target=2.17		3635	
549.00 > 99.00	4.074	4.074	0.0	1.077	362945		2.17(1.08-3.25)		1106	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2306656	1.24		99.1	7364	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	2089059	1.13	Target=11.44		513	
513.00 > 169.00	4.108	4.108	0.0	1.000	187846		11.12(5.72-17.16)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.184	330559	1.13		94.2	534	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	738302	1.21			3324	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1951992	1.23		98.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1577862	1.06			1967	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	526368	1.18		94.6	1324	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.249	4.260	-0.011	1.000	448255	1.17			766	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	585144	1.07	Target=2.37		2036	
599.00 > 99.00	4.346	4.346	0.0	1.149	247580		2.36(1.19-3.56)		636	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2235945	1.27		102	10895	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.370	4.382	-0.012	1.000	1976512	1.07	Target=12.20		463	M
563.00 > 169.00	4.370	4.382	-0.012	1.000	173430		11.40(6.10-18.31)		356	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	524453	1.22		97.9	1054	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.000	452913	1.08			5512	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	4810172	1.09			5397	
D 36 13C2 PFDoA										
615.00 > 570.00	4.594	4.605	-0.011	1.324	2183255	1.22		97.7	5174	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.002	1804447	1.02	Target=8.47		152	
613.00 > 169.00	4.605	4.616	-0.011	1.002	231970		7.78(4.23-12.70)		1231	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.627	-0.011	1.124	378024	1.04			6028	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.261	172632	0.9280	Target=0.48		1502	
699.00 > 99.00	4.770	4.779	-0.009	1.261	341632		0.51(0.24-0.72)		2051	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.822	-0.023	1.044	1909411	1.02	Target=6.41		181	M
663.00 > 169.00	4.799	4.822	-0.023	1.044	273530		6.98(3.21-9.62)		474	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	2241989	1.26		101	6438	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.997	5.008	-0.011	1.000	234844	1.17	Target=0.87		1052	M
713.00 > 219.00	4.987	5.008	-0.021	0.998	248103		0.95(0.43-1.30)		673	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	2016874	0.99	Target=7.89		201	
813.00 > 169.00	5.317	5.328	-0.011	1.000	259711		7.77(3.94-11.83)		1503	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2546016	1.24		99.4	4909	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	1627913	1.02	Target=9.39		156	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	179766		9.06(4.69-14.08)		339	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

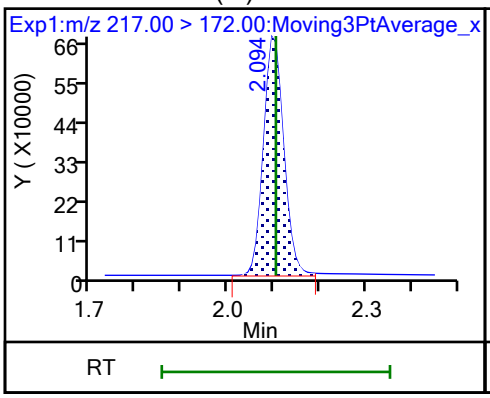
LCPFAS28NCICV_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:46:58 Chrom Revision: 2.3 19-Jul-2023 18:28:48

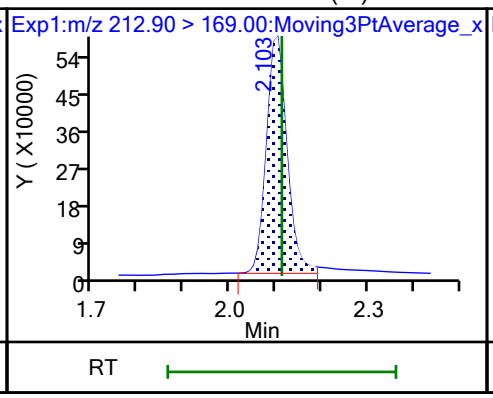
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Injection Date: 26-Jul-2023 18:22:05 Instrument ID: LC812
Lims ID: ICV
Client ID:
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

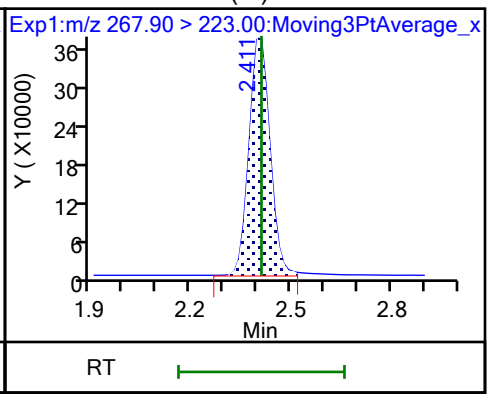
D 1 13C4 PFBA (M)



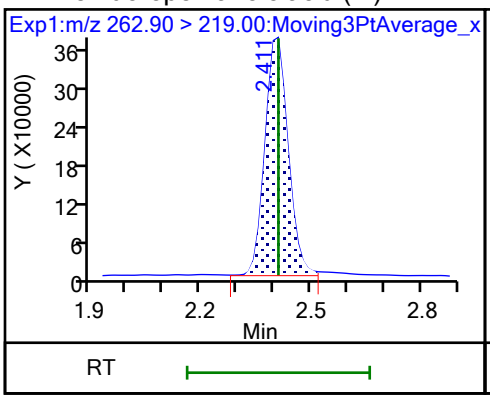
2 Perfluorobutanoic acid (M)



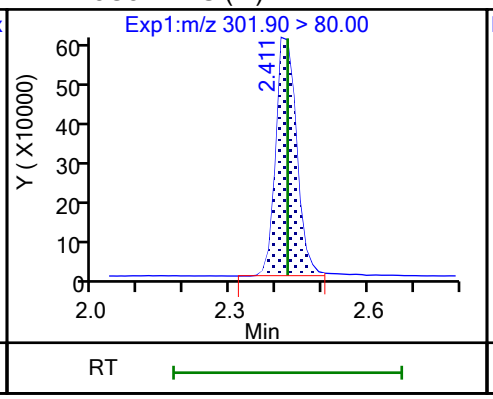
D 3 13C5 PFPeA (M)



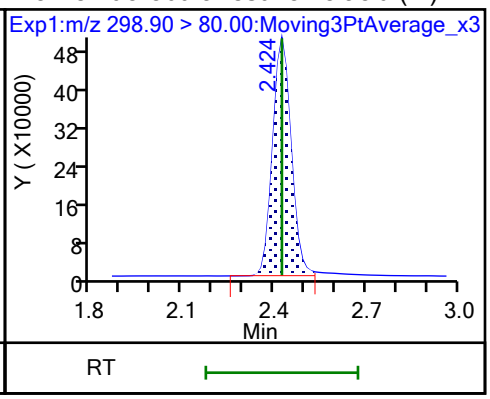
4 Perfluoropentanoic acid (M)



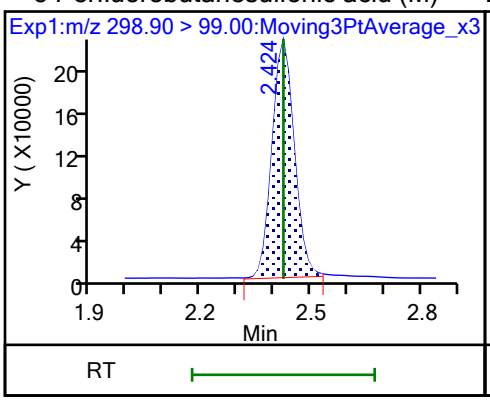
D 47 13C3 PFBS (M)



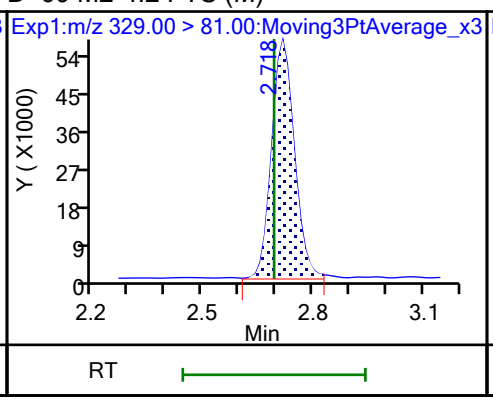
5 Perfluorobutanesulfonic acid (M)



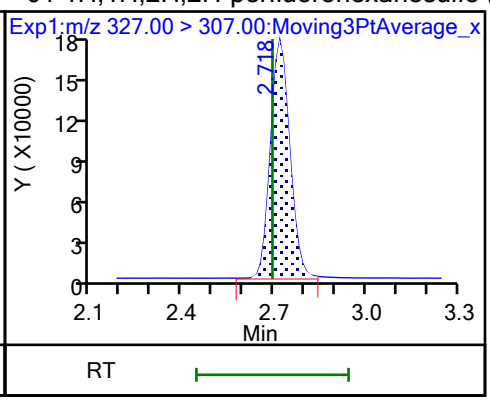
5 Perfluorobutanesulfonic acid (M)



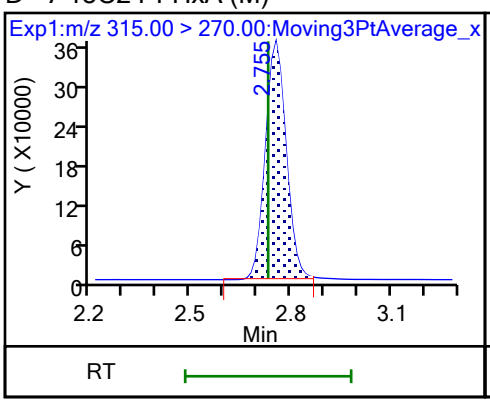
D 60 M2-4:2 FTS (M)



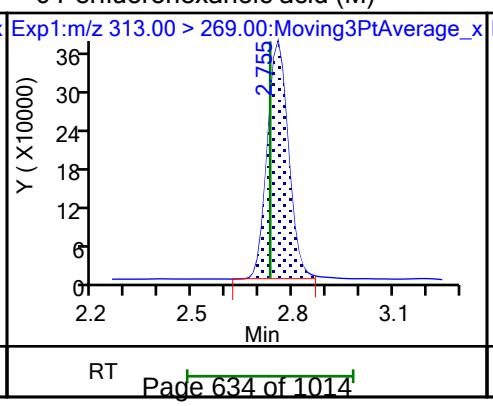
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



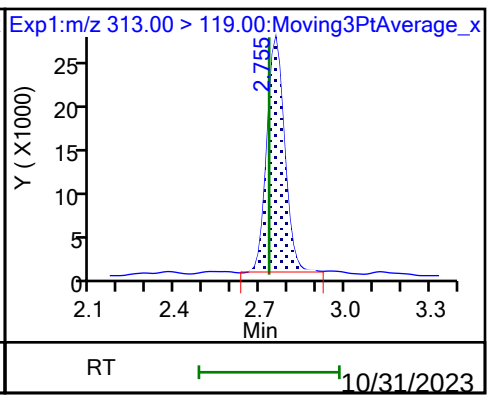
D 7 13C2 PFHxA (M)



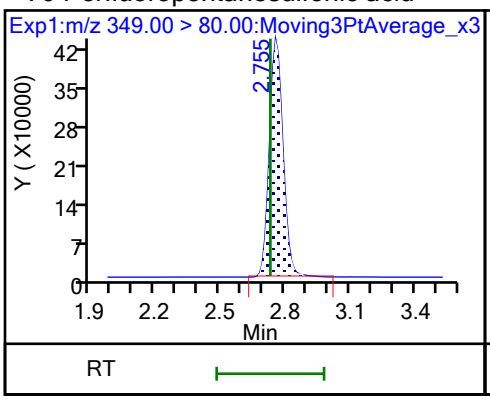
6 Perfluorohexanoic acid (M)



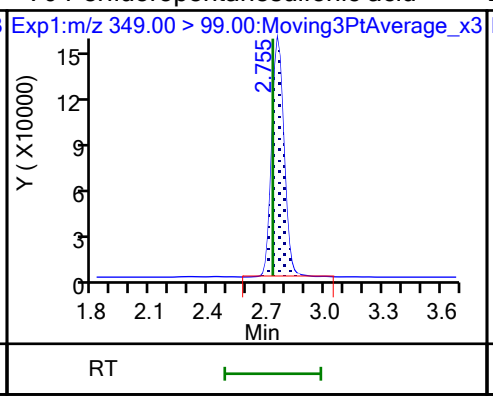
6 Perfluorohexanoic acid



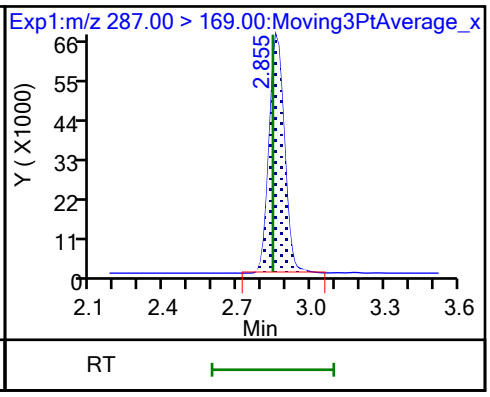
70 Perfluoropentanesulfonic acid



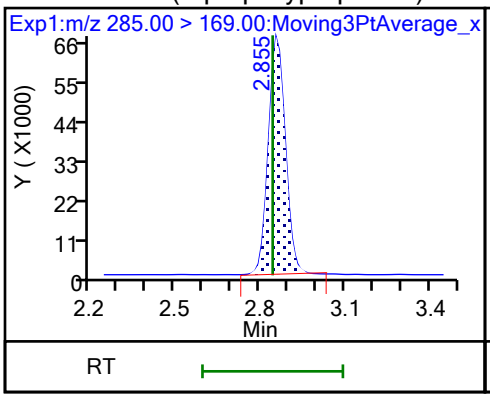
70 Perfluoropentanesulfonic acid



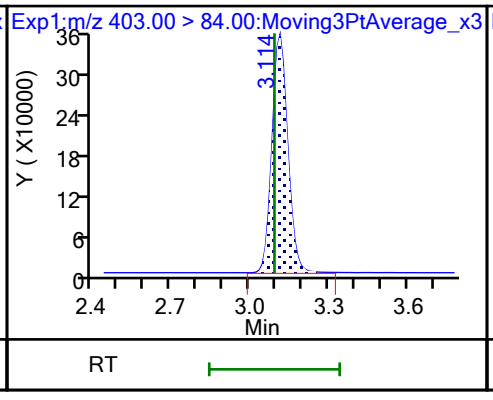
D 64 13C3 HFPO-DA



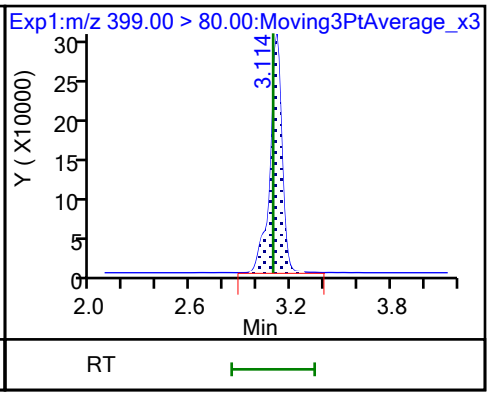
67 Perfluoro(2-propoxypropanoic) ac



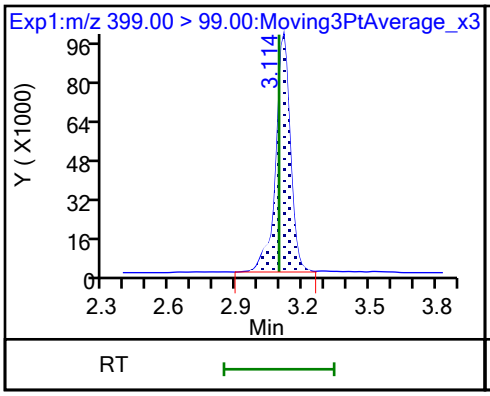
D 11 18O2 PFHxS



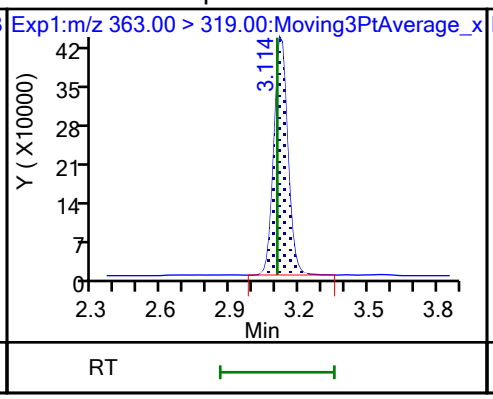
8 Perfluorohexanesulfonic acid



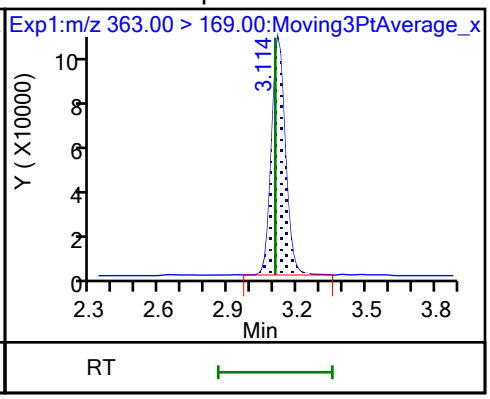
8 Perfluorohexanesulfonic acid



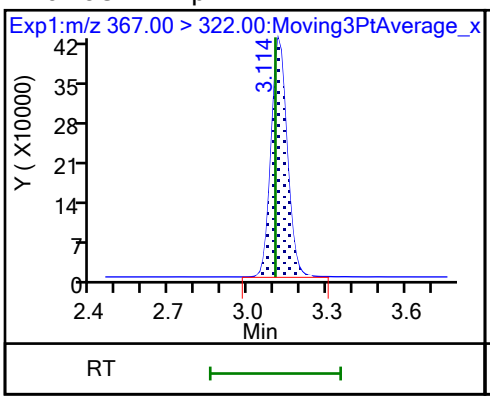
10 Perfluoroheptanoic acid



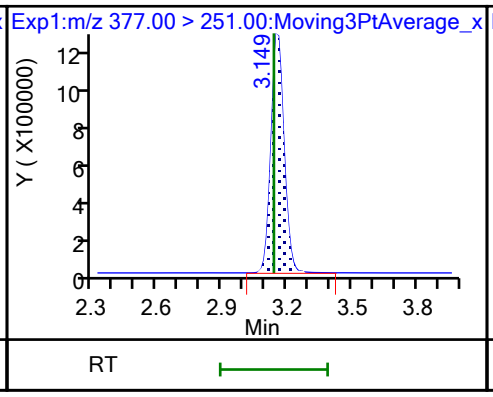
10 Perfluoroheptanoic acid



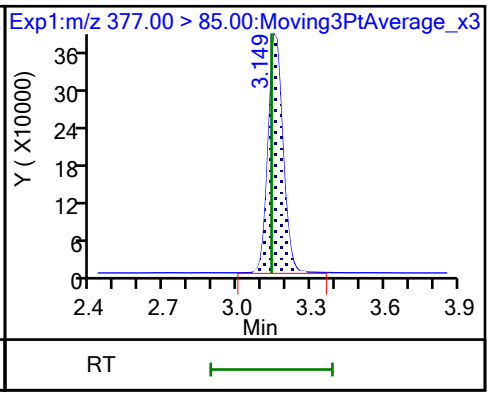
D 9 13C4 PFHpA



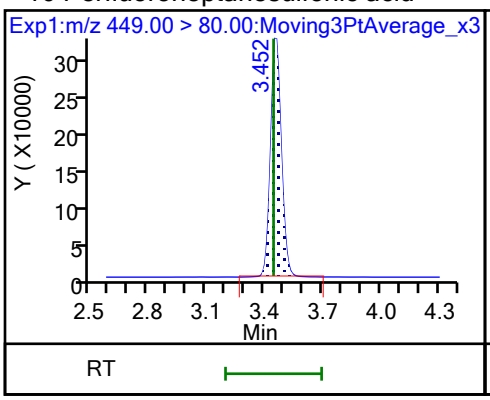
77 DONA



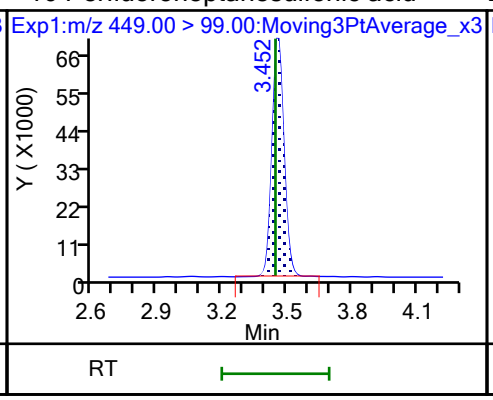
77 DONA



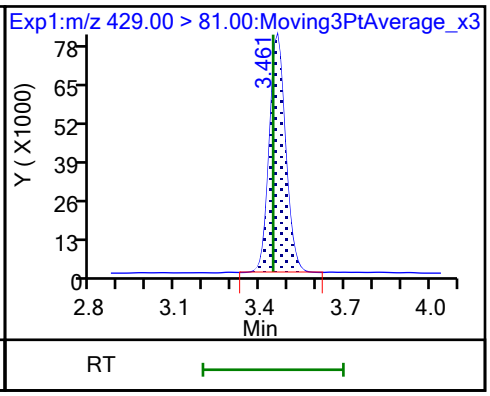
16 Perfluoroheptanesulfonic acid



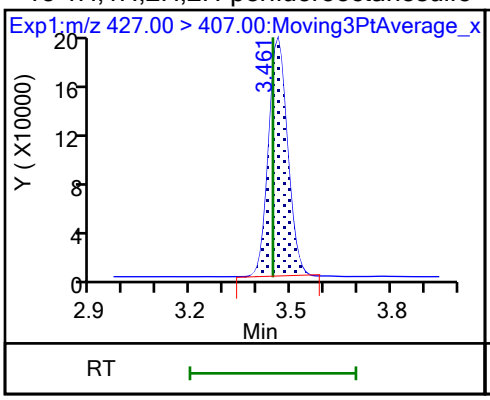
16 Perfluoroheptanesulfonic acid



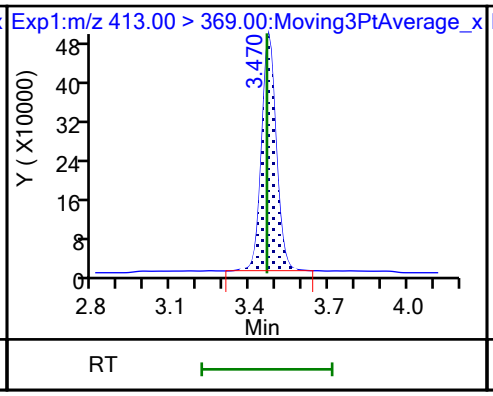
D 12 M2-6:2 FTS



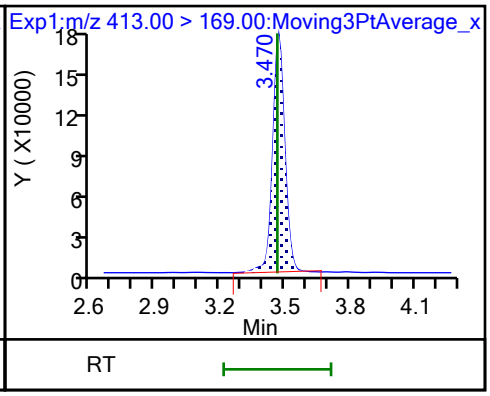
13 1H,1H,2H,2H-perfluorooctanesulfo



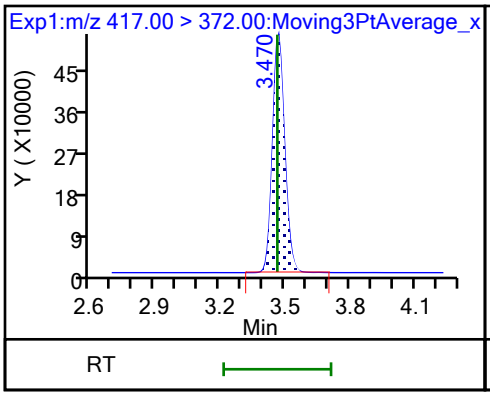
15 Perfluorooctanoic acid



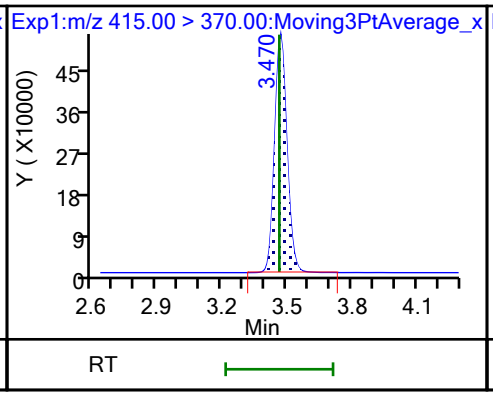
15 Perfluorooctanoic acid



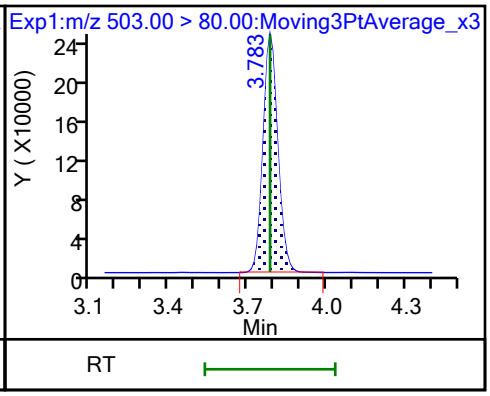
D 14 13C4 PFOA



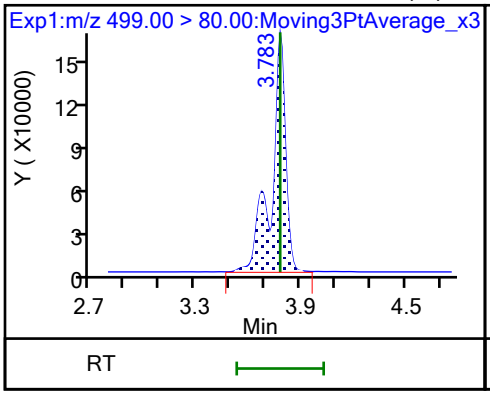
* 62 13C2 PFOA



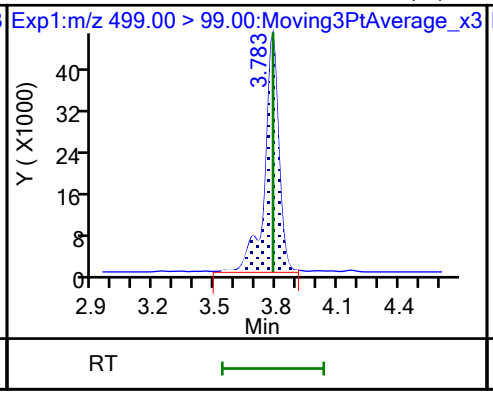
D 18 13C4 PFOS



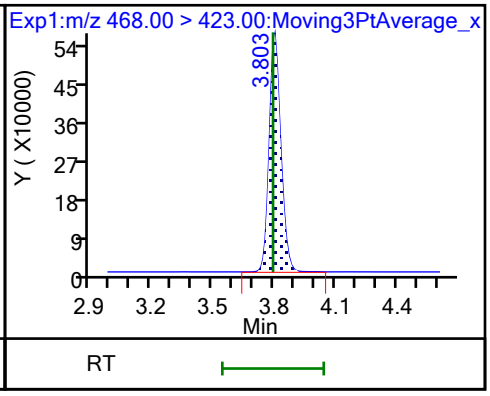
17 Perfluorooctanesulfonic acid (M)



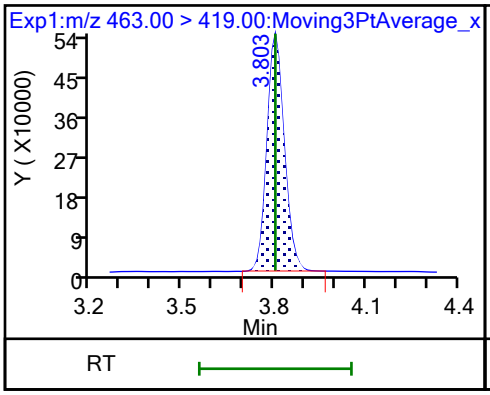
17 Perfluorooctanesulfonic acid (M)



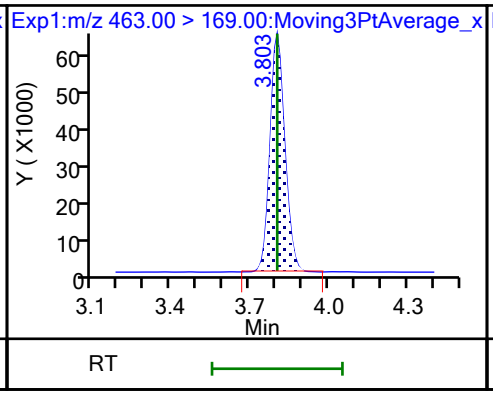
D 19 13C5 PFNA



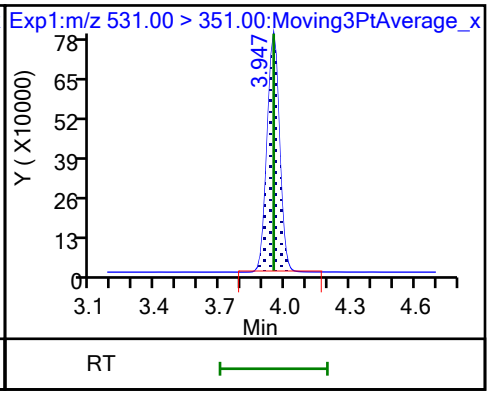
20 Perfluorononanoic acid



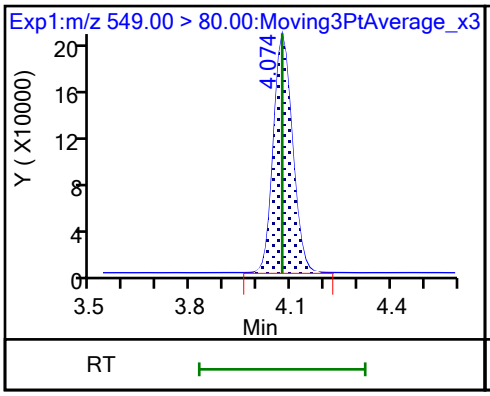
20 Perfluorononanoic acid



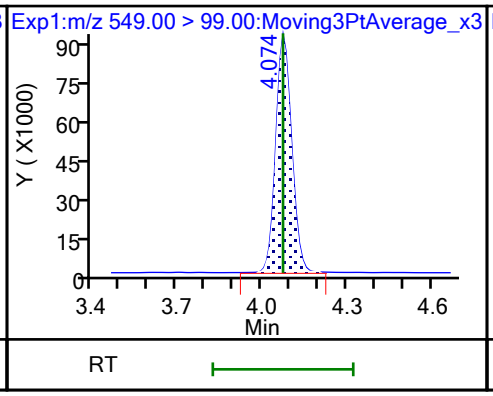
69 9-Chlorohexadecafluoro-3-oxanona



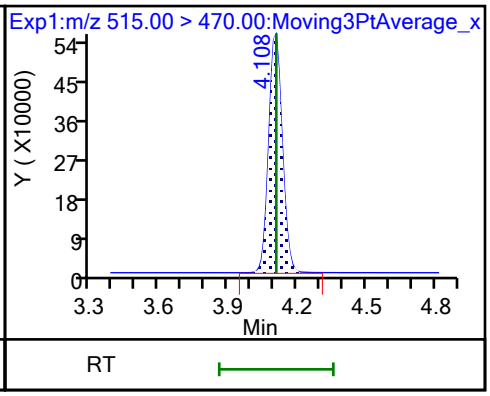
68 Perfluorononanesulfonic acid



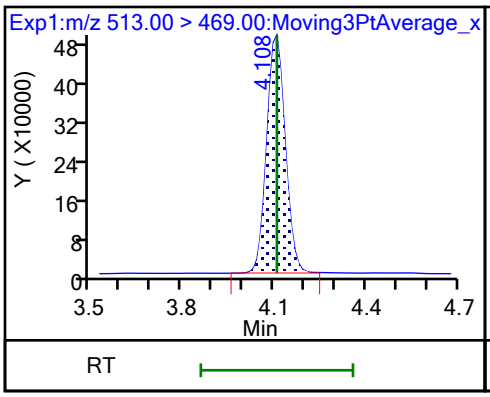
68 Perfluorononanesulfonic acid



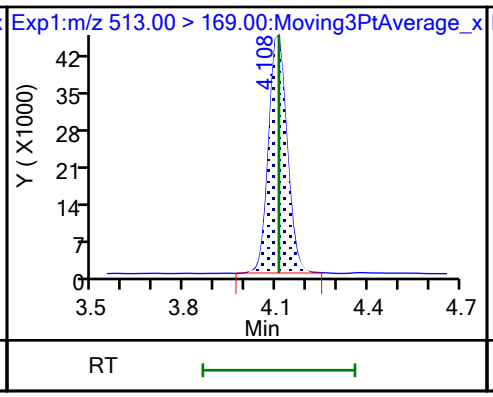
D 23 13C2 PFDA



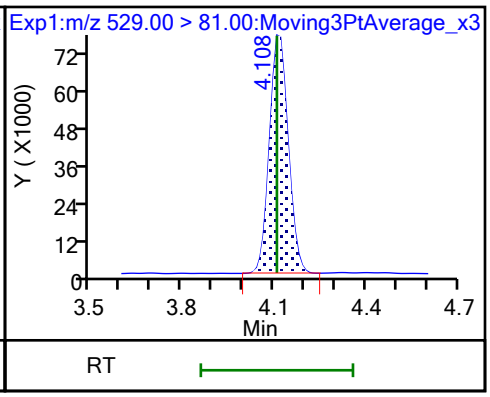
24 Perfluorodecanoic acid



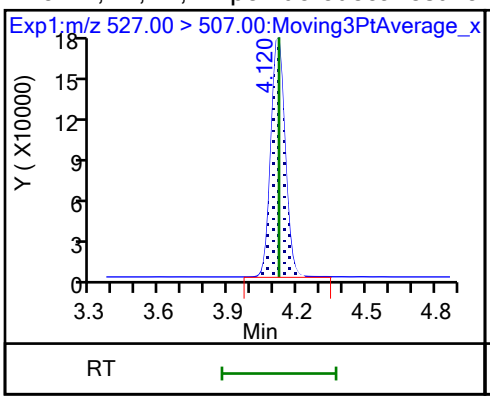
24 Perfluorodecanoic acid



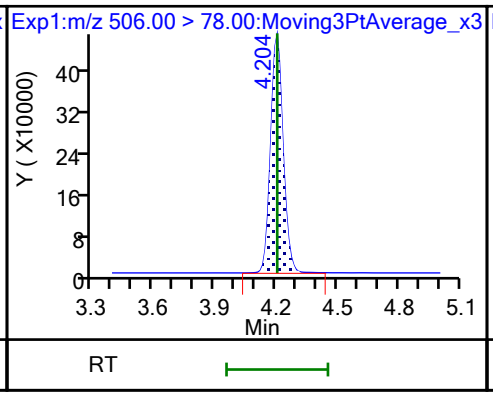
D 26 M2-8:2 FTS



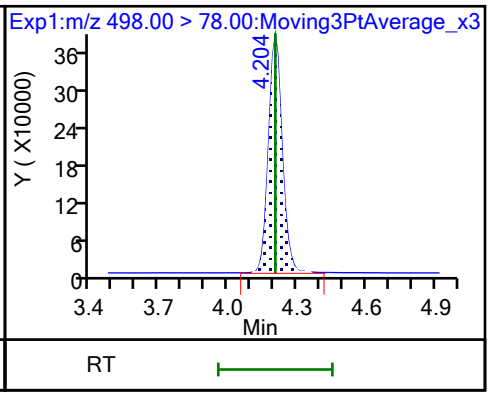
25 1H,1H,2H,2H-perfluorodecanesulfo



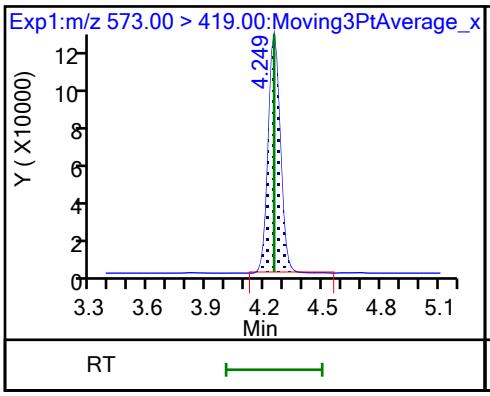
D 21 13C8 FOSA



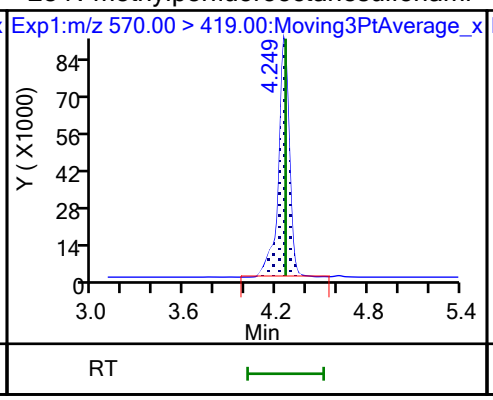
22 Perfluorooctanesulfonamide



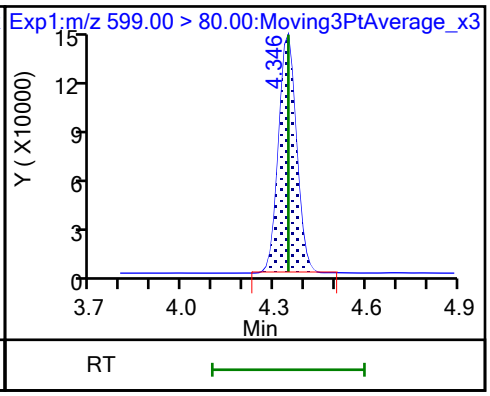
D 27 d3-NMeFOSAA



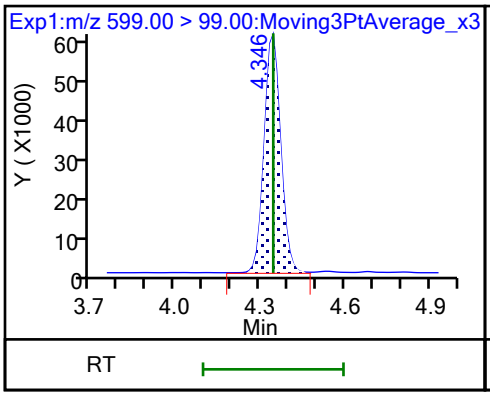
28 N-methylperfluorooctanesulfonami



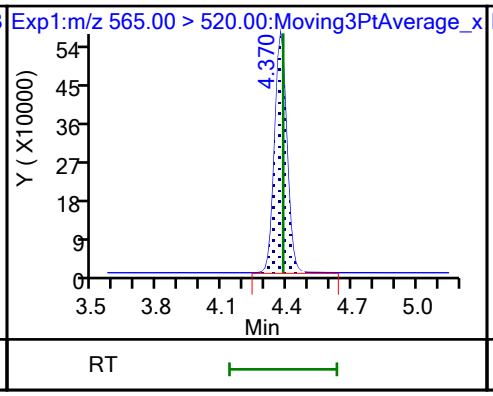
29 Perfluorodecanesulfonic acid



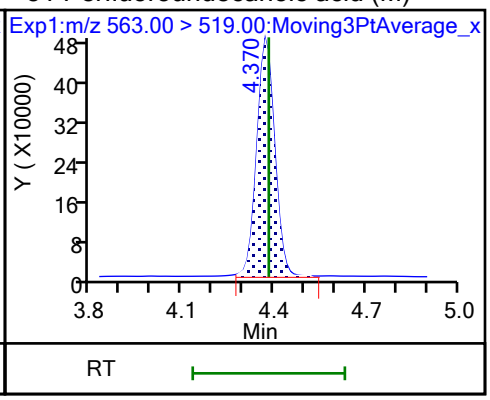
29 Perfluorodecanesulfonic acid



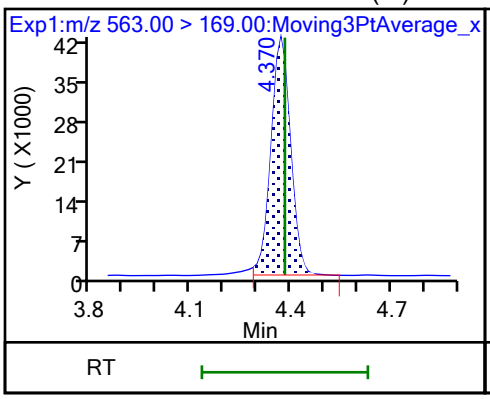
D 30 13C2 PFUnA



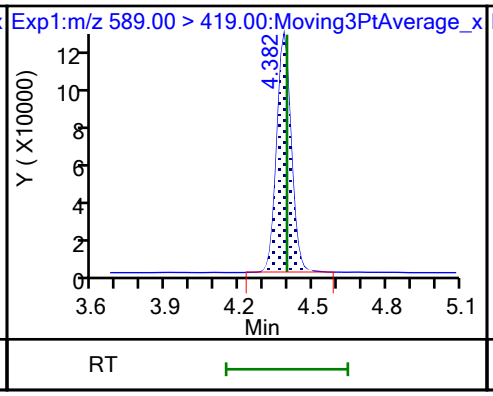
31 Perfluoroundecanoic acid (M)



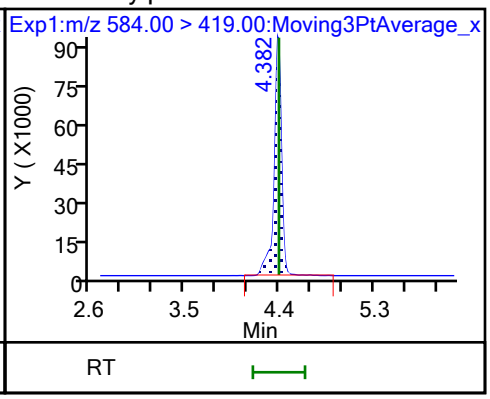
31 Perfluoroundecanoic acid (M)



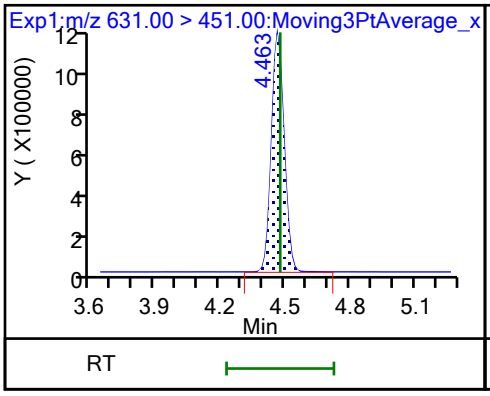
D 32 d5-NEtFOSAA



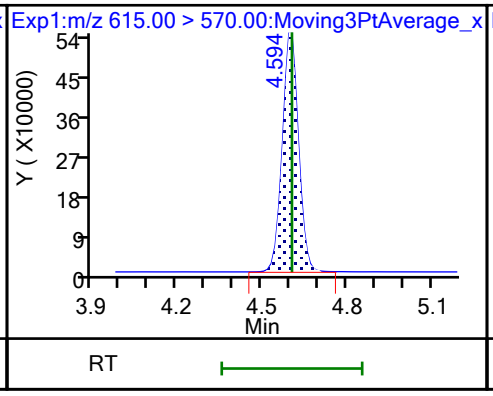
33 N-ethylperfluorooctanesulfonamid



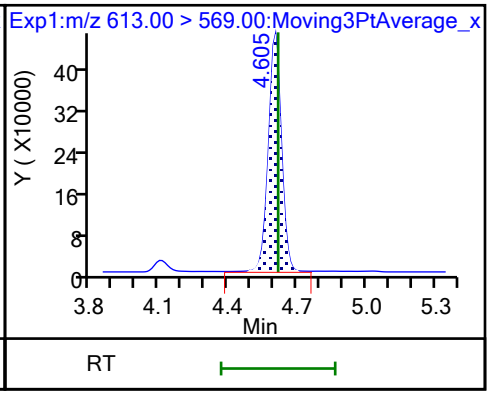
66 11-Chloroeicosafluoro-3-oxaundec



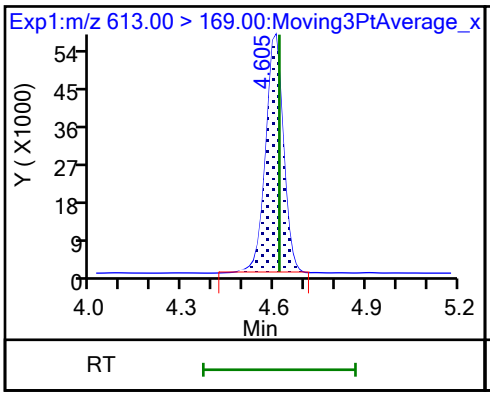
D 36 13C2 PFDoA



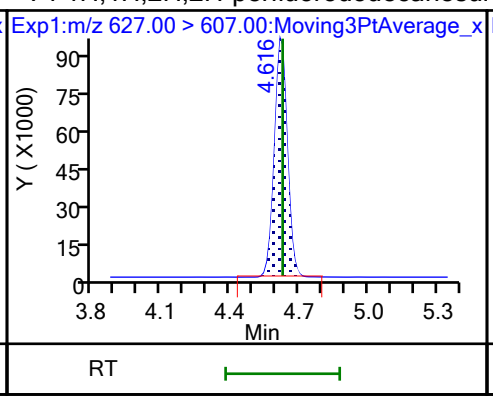
37 Perfluorododecanoic acid



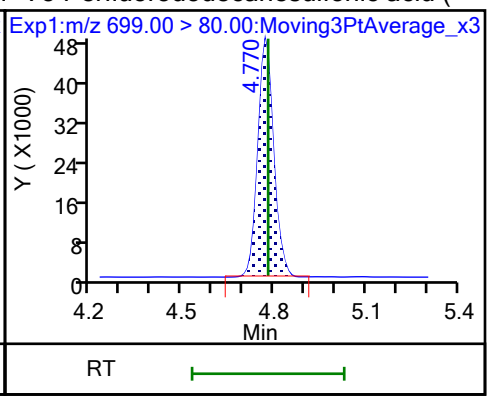
37 Perfluorododecanoic acid



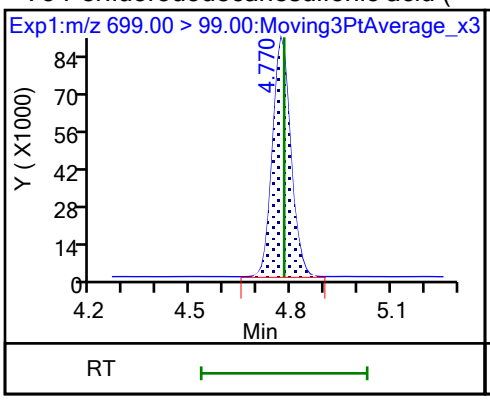
74 1H,1H,2H,2H-perfluorododecanesul



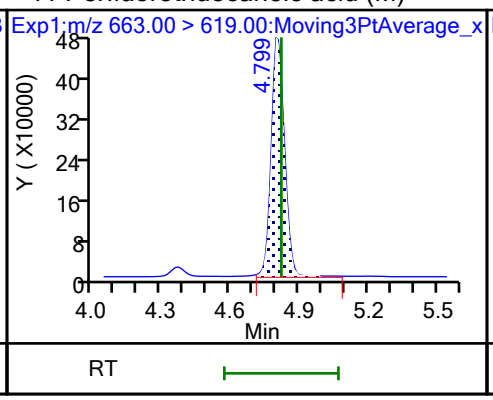
75 Perfluorododecanesulfonic acid (



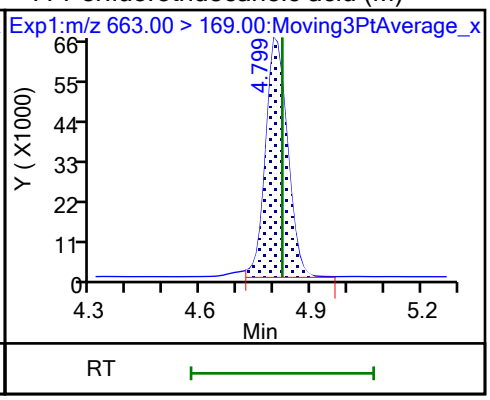
75 Perfluorododecanesulfonic acid (



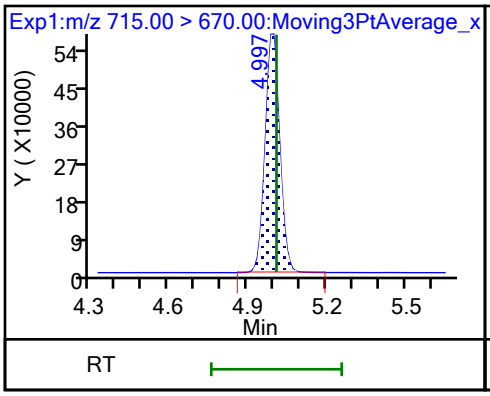
41 Perfluorotridecanoic acid (M)



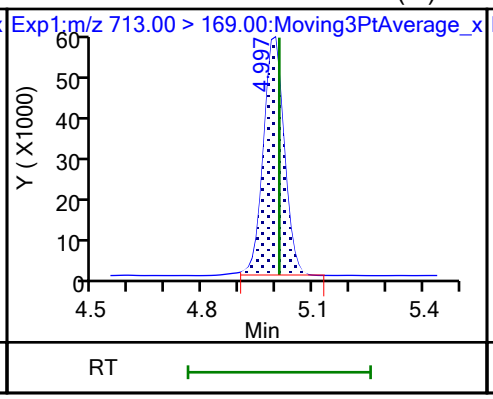
41 Perfluorotridecanoic acid (M)



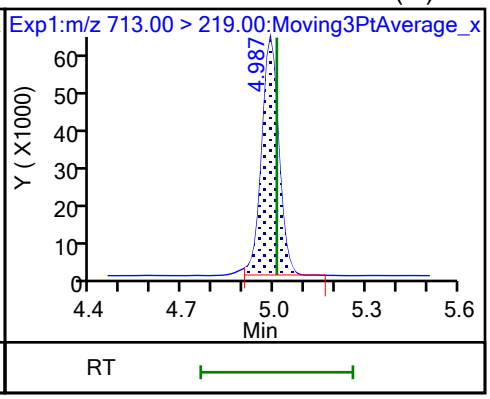
D 43 13C2 PFTeDA



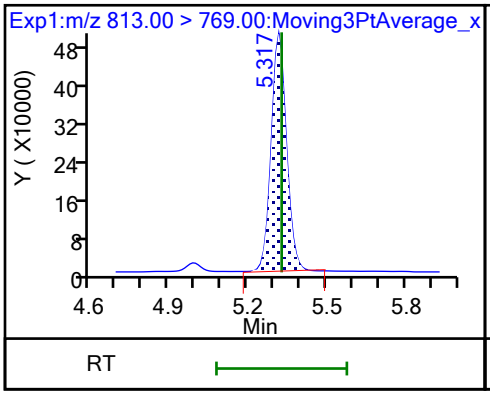
42 Perfluorotetradecanoic acid (M)



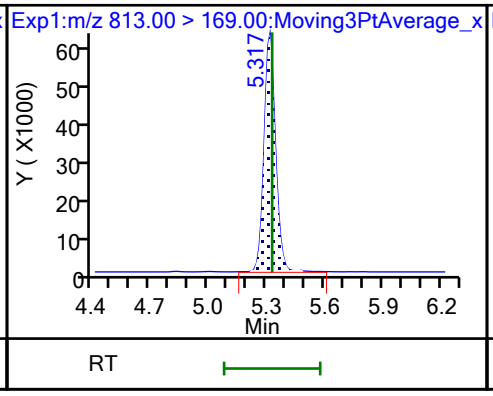
42 Perfluorotetradecanoic acid (M)



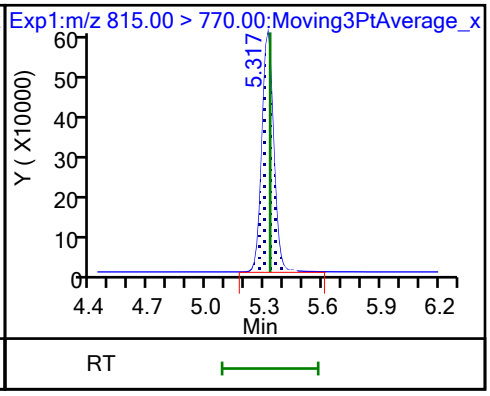
45 Perfluorohexadecanoic acid



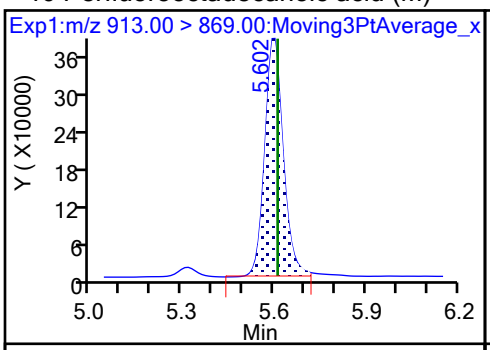
45 Perfluorohexadecanoic acid



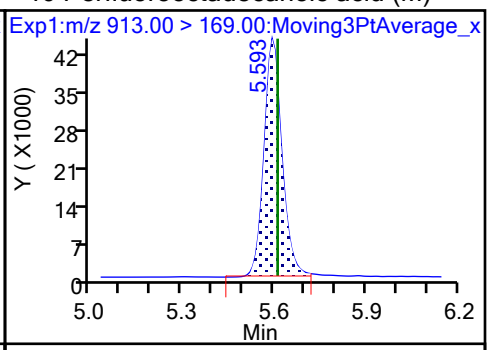
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.196		0.124	0.125	-0.4	50.0
Perfluoropentanoic acid	AveID	1.079	1.275		0.0591	0.0500	18.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.240		0.0492	0.0444	11.0	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.667		0.0506	0.0469	8.0	50.0
Perfluorohexanoic acid	AveID	1.100	1.099		0.0500	0.0500	-0.1	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.386		0.0499	0.0471	6.1	50.0
HFPODA	AveID	1.001	1.202		0.120	0.100	20.0	50.0
Perfluoroheptanoic acid	AveID	1.121	1.158		0.0516	0.0500	3.3	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.137		0.0469	0.0457	2.7	50.0
DONA	AveID	5.754	6.340		0.0521	0.0473	10.2	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.534		0.0506	0.0477	6.1	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.238		0.141	0.119	18.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.153		0.0541	0.0500	8.2	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.254		0.0499	0.0464	7.5	50.0
Perfluorononanoic acid	AveID	0.9800	0.9579		0.0489	0.0500	-2.3	50.0
9Cl-PF3ONS	AveID	3.569	4.158		0.0543	0.0467	16.5	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8228		0.0446	0.0481	-7.3	50.0
Perfluorodecanoic acid	AveID	0.999	1.005		0.0503	0.0500	0.6	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.579		0.0562	0.0480	17.1	50.0
Perfluorooctanesulfonamide	AveID	0.9539	1.006		0.0527	0.0500	5.4	50.0
NMeFOSAA	AveID	0.9074	1.018		0.140	0.125	12.2	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6403		0.0452	0.0483	-6.2	50.0
Perfluoroundecanoic acid	AveID	1.031	1.062		0.0515	0.0500	3.1	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.102		0.138	0.125	10.2	50.0
11Cl-PF3OUdS	AveID	5.474	6.185		0.0533	0.0472	13.0	50.0
Perfluorododecanoic acid	AveID	1.018	0.996		0.0489	0.0500	-2.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.758		0.0644	0.0482	33.6	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2146		0.0449	0.0484	-7.3	50.0
Perfluorotridecanoic acid	AveID	1.070	1.138		0.0532	0.0500	6.4	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1294		0.0579	0.0500	15.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.113		0.0557	0.0500	11.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7867		0.0504	0.0500	0.7	50.0
13C4 PFBA	Ave	0.9917	0.9573		1.21	1.25	-3.5	
13C5 PFPeA	Ave	0.7696	0.7248		1.18	1.25	-5.8	
13C3 PFBS	Ave	1.041	0.8566		0.956	1.16	-17.7	
M2-4:2 FTS	Ave	0.1204	0.0991		0.961	1.17	-17.7	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7870		1.26	1.25	0.5	
13C3 HFPO-DA	Ave	0.1516	0.1401		1.16	1.25	-7.5	
13C4 PFHpA	Ave	0.8590	0.8057		1.17	1.25	-6.2	
18O2 PFHxS	Ave	0.7464	0.6670		1.06	1.18	-10.6	
M2-6:2 FTS	Ave	0.1551	0.1371		1.05	1.19	-11.6	
13C4 PFOA	Ave	0.9731	0.9317		1.20	1.25	-4.3	
13C4 PFOS	Ave	0.4742	0.4296		1.08	1.20	-9.4	
13C5 PFNA	Ave	1.059	1.034		1.22	1.25	-2.4	
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	
M2-8:2 FTS	Ave	0.1744	0.1424		0.978	1.20	-18.3	
13C8 FOSA	Ave	0.9462	0.8471		1.12	1.25	-10.5	
d3-NMeFOSAA	Ave	0.2650	0.2316		1.09	1.25	-12.6	
13C2 PFUnA	Ave	1.047	1.010		1.21	1.25	-3.5	
d5-NEtFOSAA	Ave	0.2552	0.2406		1.18	1.25	-5.7	
13C2 PFDoA	Ave	1.064	1.081		1.27	1.25	1.7	
13C2 PFTeDA	Ave	1.059	1.041		1.23	1.25	-1.7	
13C2 PFHxDA	Ave	1.221	1.217		1.25	1.25	-0.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 23-Oct-2023 15:47:27 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057509-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 11:54:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.602	2165365	1.21		96.5	1549	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	258970	0.1244		99.6	28.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.692	1639412	1.18		94.2	2238	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	83586	0.0591		118	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.700	1802004	0.9563		82.3	88832	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	85221	0.0492	Target=2.06	111	77.3	M
298.90 > 99.00	2.467	2.467	0.0	1.000	41747		2.04(1.03-3.09)		15.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	30812	0.0506		108	208	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.783	209392	0.9609		82.3	158	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1780135	1.26		101	1668	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	78281	0.0500	Target=14.12	99.9	17.5	M
313.00 > 119.00	2.797	2.797	0.0	1.000	5833		13.42(7.06-21.17)		8.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.887	78694	0.0499	Target=2.72	106	125	
349.00 > 99.00	2.810	2.810	0.0	0.887	26871		2.93(1.36-4.09)		60.2	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	30475	0.1200		120	211	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.825	316943	1.16		92.5	3607	
D 11 18O2 PFHxS										
403.00 > 84.00	3.168	3.168	0.0	0.899	1427286	1.06		89.4	6130	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.168	3.168	0.0	1.000	62731	0.0469	Target=3.32	103	156	M
399.00 > 99.00	3.168	3.168	0.0	1.000	20807		3.01(1.66-4.98)		20.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.168	0.0	1.000	84395	0.0516	Target=4.17	103	18.3	M
363.00 > 169.00	3.168	3.168	0.0	1.000	19852		4.25(2.09-6.26)		43.5	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.168	3.168	0.0	0.899	1822385	1.17		93.8	10832	
77 DONA										M
377.00 > 251.00	3.203	3.203	0.0	0.838	232884	0.0521	Target=3.33	110	272	
377.00 > 85.00	3.203	3.203	0.0	0.838	61876		3.76(1.66-4.99)		109	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.505	3.505	0.0	0.917	56810	0.0506	Target=4.83	106	126	
449.00 > 99.00	3.514	3.505	0.009	0.919	12577		4.52(2.41-7.24)		41.6	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.505	3.505	0.0	0.995	294545	1.05		88.4	543	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.514	3.514	0.0	1.003	95292	0.1406		118	138	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.514	0.0	0.997	97192	0.0541	Target=2.88	108	4.7	M
413.00 > 169.00	3.514	3.514	0.0	0.997	39538		2.46(1.44-4.32)		71.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.523	3.523	0.0	1.000	2107370	1.20		95.7	6086	
* 62 13C2 PFOA										
415.00 > 370.00	3.523	3.523	0.0		2261885	1.25			8183	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.822	3.822	0.0	1.000	45243	0.0499	Target=4.24	108	88.9	M
499.00 > 99.00	3.822	3.822	0.0	1.000	11094		4.08(2.12-6.37)		27.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.822	0.0	1.085	928977	1.08		90.6	4921	
20 Perfluorononanoic acid										
463.00 > 419.00	3.845	3.845	0.0	1.000	89574	0.0489	Target=8.34	97.7	12.4	
463.00 > 169.00	3.845	3.845	0.0	1.000	11550		7.76(4.17-12.51)		121	
D 19 13C5 PFNA										
468.00 > 423.00	3.845	3.845	0.0	1.092	2337864	1.22		97.6	6498	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.983	3.983	0.0	1.042	150787	0.0543		116	608	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.105	4.105	0.0	1.074	30768	0.0446	Target=2.17	92.7	225	
549.00 > 99.00	4.105	4.105	0.0	1.074	13897		2.21(1.08-3.25)		53.0	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.129	4.129	0.0	1.000	99944	0.0503	Target=11.44	101	28.0	M
513.00 > 169.00	4.141	4.129	0.012	1.003	9567		10.45(5.72-17.16)		53.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.129	0.0	1.172	2486286	1.24		99.1	8282	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.141	4.141	0.0	1.176	308613	0.9779		81.7	576	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.141	4.141	0.0	1.000	31903	0.0562		117	299	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.234	4.234	0.0	1.202	1915989	1.12		89.5	2754	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.234	4.234	0.0	1.000	77077	0.0527		105	452	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.270	4.270	0.0	1.212	523930	1.09		87.4	1392	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.270	4.270	0.0	1.000	53350	0.1403		112	142	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.366	4.366	0.0	1.142	24017	0.0452	Target=2.37	93.8	186	M
599.00 > 99.00	4.354	4.366	-0.012	1.139	9428		2.55(1.19-3.56)		85.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.390	4.390	0.0	1.246	2285192	1.21		96.5	7490	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.390	4.390	0.0	1.000	97109	0.0515	Target=12.20	103	22.1	
563.00 > 169.00	4.390	4.390	0.0	1.000	10875		8.93(6.10-18.31)		203	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.401	4.401	0.0	1.249	544262	1.18		94.3	1595	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.401	4.401	0.0	1.000	59994	0.1378		110	240	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.473	4.473	0.0	1.170	226708	0.0533		113	413	
D 36 13C2 PFDoA										
615.00 > 570.00	4.613	4.613	0.0	1.310	2446106	1.27		102	10235	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.613	0.0	1.000	97419	0.0489	Target=8.47	97.8	6.6	
613.00 > 169.00	4.602	4.613	-0.011	0.998	12328		7.90(4.23-12.70)		101	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.624	4.624	0.0	1.117	21839	0.0644		134	295	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.777	4.777	0.0	1.250	8075	0.0449	Target=0.48	92.7	126	
699.00 > 99.00	4.777	4.777	0.0	1.250	18264		0.44(0.24-0.72)		360	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.806	4.806	0.0	1.042	111351	0.0532	Target=6.41	106	7.1	M
663.00 > 169.00	4.806	4.806	0.0	1.042	17275		6.45(3.21-9.62)		196	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.982	4.982	0.0	1.414	2355579	1.23		98.3	5019	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.982	4.982	0.0	1.000	12192	0.0579	Target=0.87	116	174	
713.00 > 219.00	4.982	4.982	0.0	1.000	12559		0.97(0.43-1.30)		160	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.292	5.292	0.0	1.502	2751956	1.25		99.7	6121	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.292	5.292	0.0	1.000	122528	0.0557	Target=7.89	111	8.5	M
813.00 > 169.00	5.292	5.292	0.0	1.000	14094		8.69(3.94-11.83)		156	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.563	0.0	1.051	86604	0.0504	Target=9.39	101	11.5	M
913.00 > 169.00	5.554	5.563	-0.009	1.049	8285		10.45(4.69-14.08)		139	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

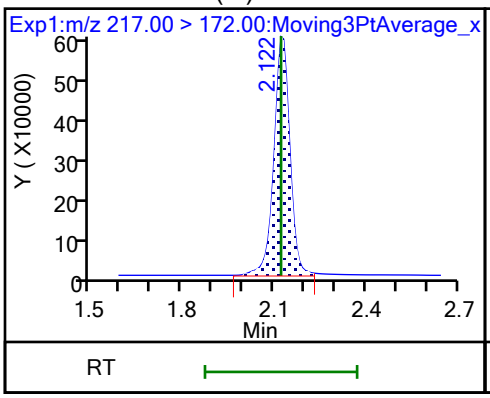
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:12:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

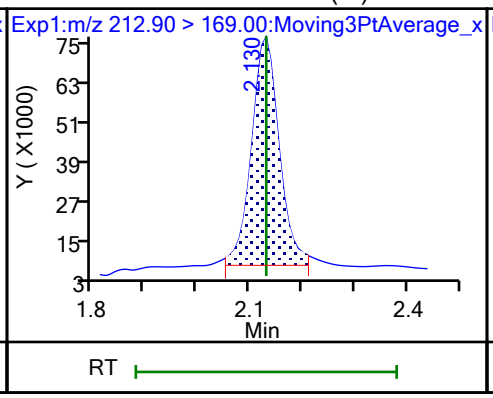
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Injection Date: 23-Oct-2023 15:47:27 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

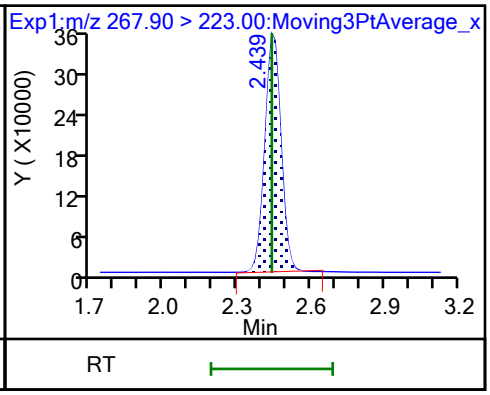
D 1 13C4 PFBA (M)



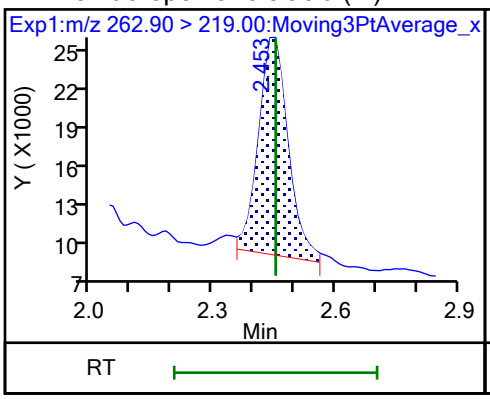
2 Perfluorobutanoic acid (M)



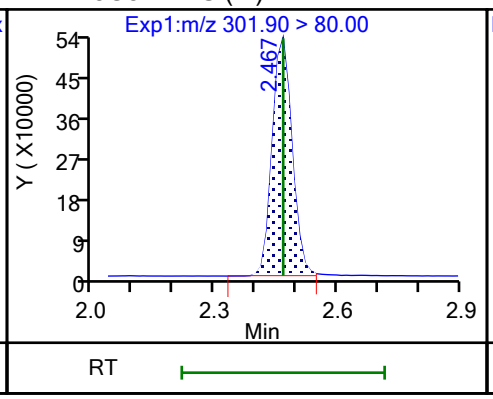
D 3 13C5 PFPeA



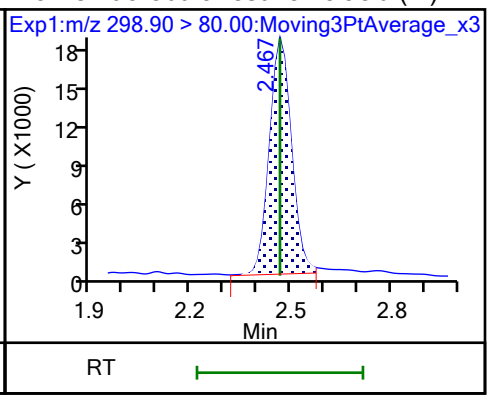
4 Perfluoropentanoic acid (M)



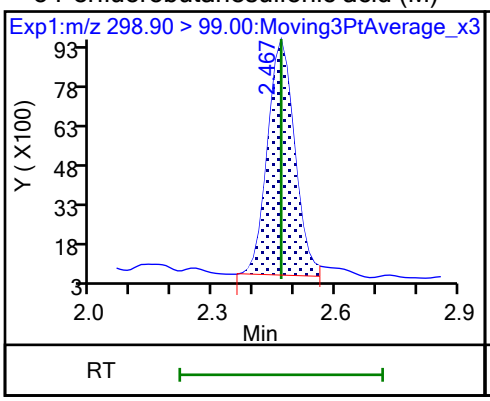
D 47 13C3 PFBS (M)



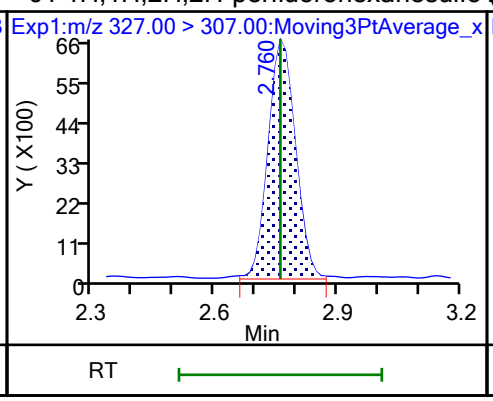
5 Perfluorobutanesulfonic acid (M)



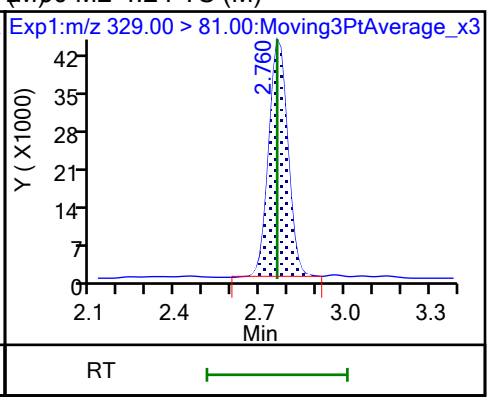
5 Perfluorobutanesulfonic acid (M)



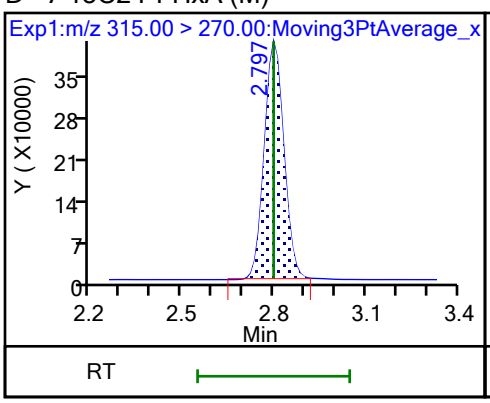
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



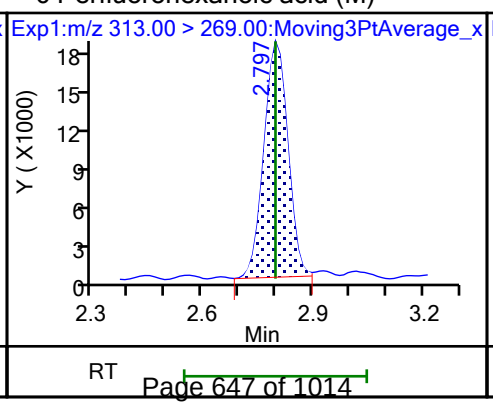
60 M2-4:2 FTS (M)



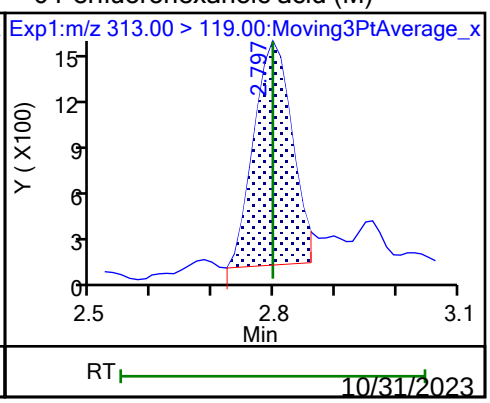
D 7 13C2 PFHxA (M)



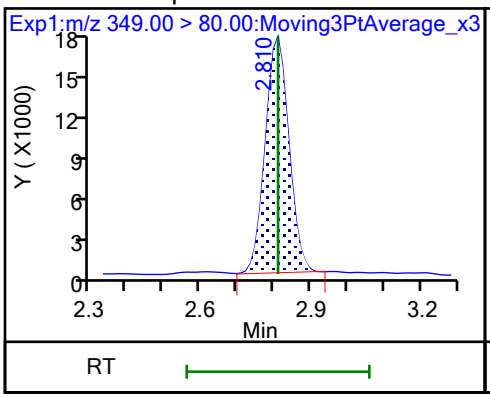
6 Perfluorohexanoic acid (M)



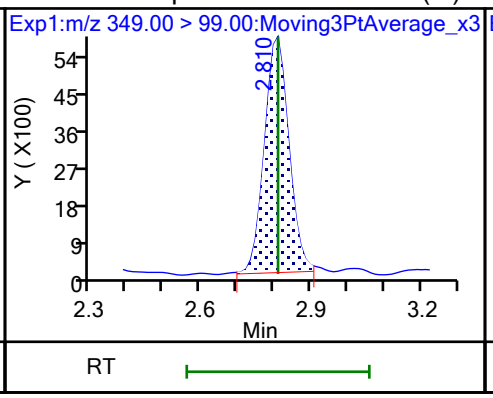
6 Perfluorohexanoic acid (M)



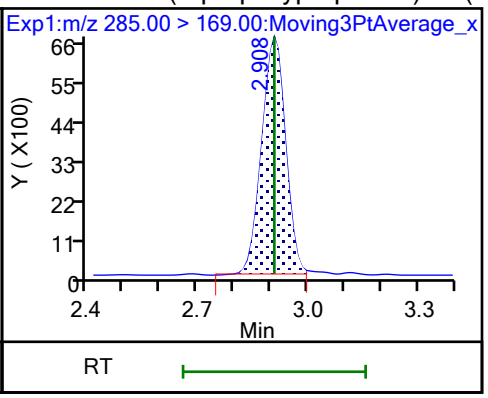
70 Perfluoropentanesulfonic acid



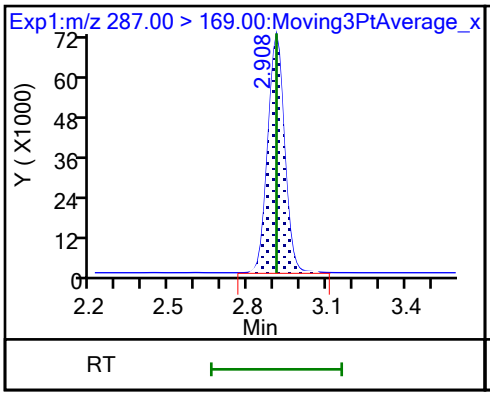
70 Perfluoropentanesulfonic acid (M)



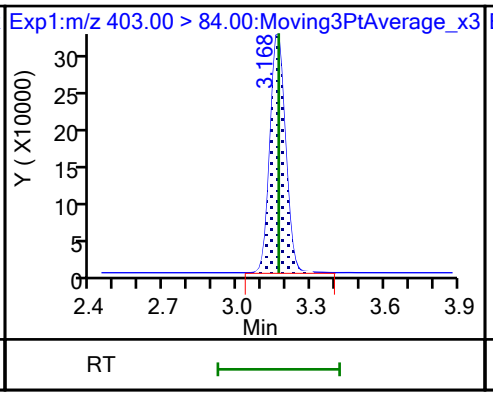
67 Perfluoro(2-propoxypropanoic) ac (M)



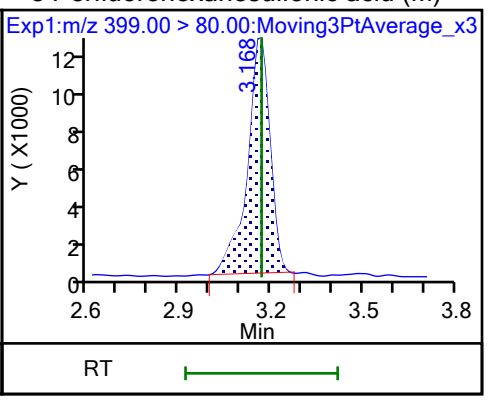
D 64 13C3 HFPO-DA



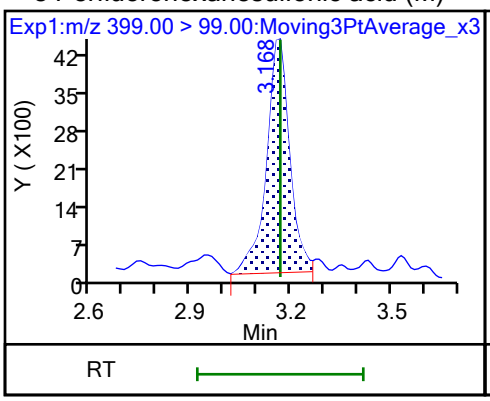
D 11 18O2 PFHxS



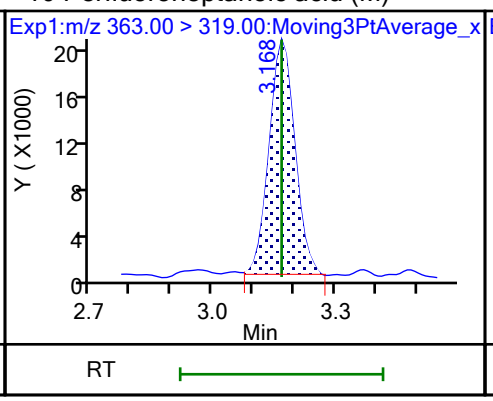
8 Perfluorohexanesulfonic acid (M)



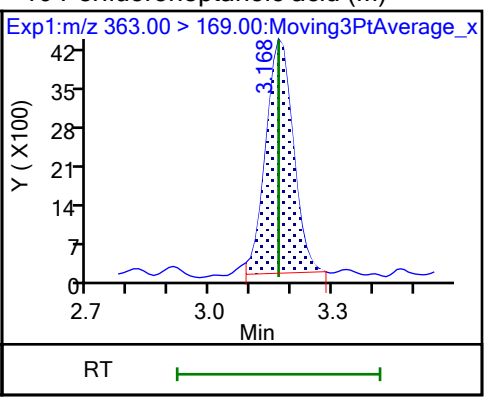
8 Perfluorohexanesulfonic acid (M)



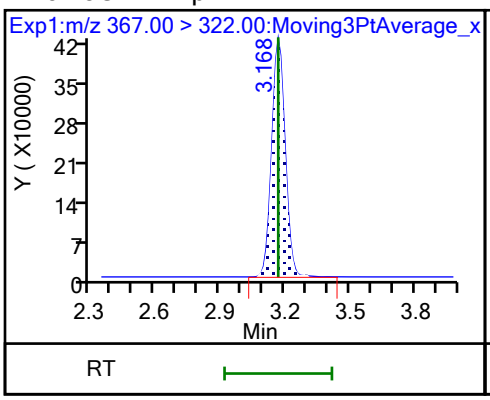
10 Perfluoroheptanoic acid (M)



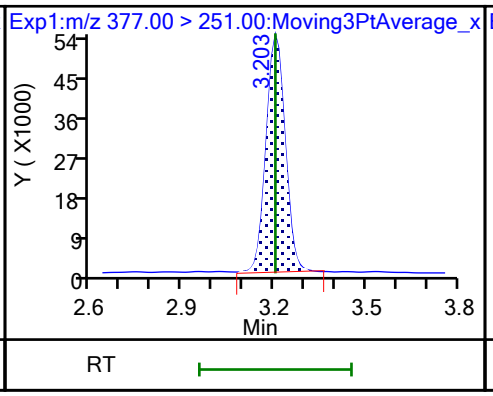
10 Perfluoroheptanoic acid (M)



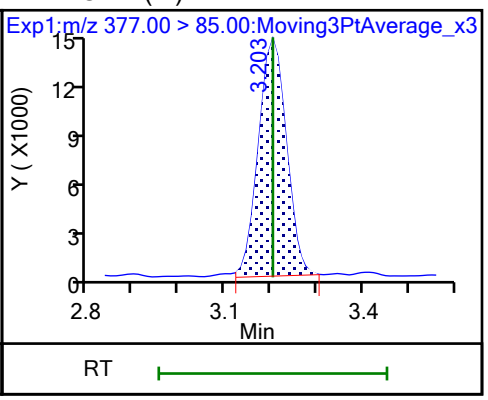
D 9 13C4 PFHpA



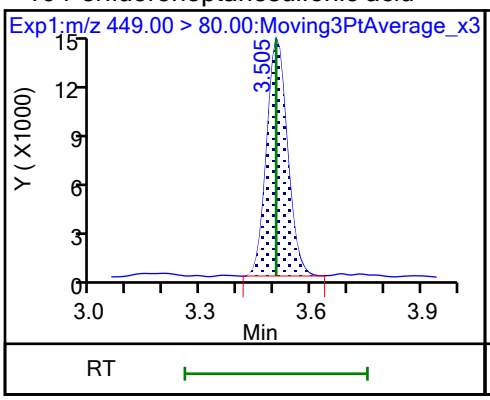
77 DONA



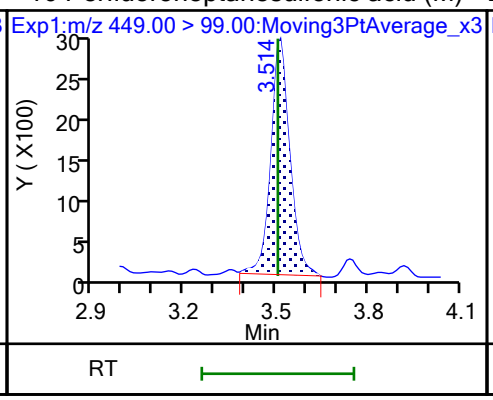
77 DONA (M)



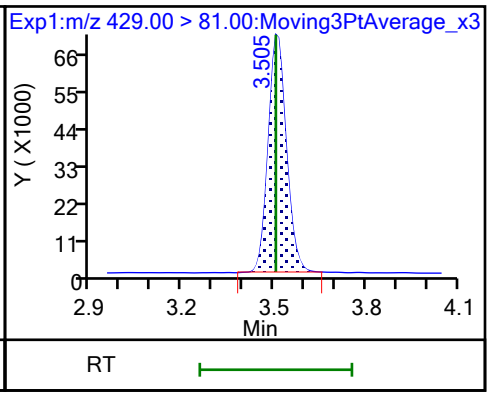
16 Perfluoroheptanesulfonic acid



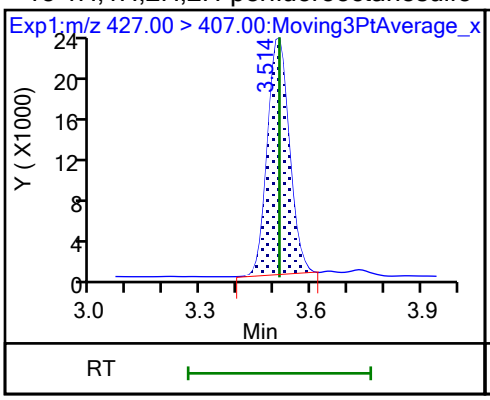
16 Perfluoroheptanesulfonic acid (M)



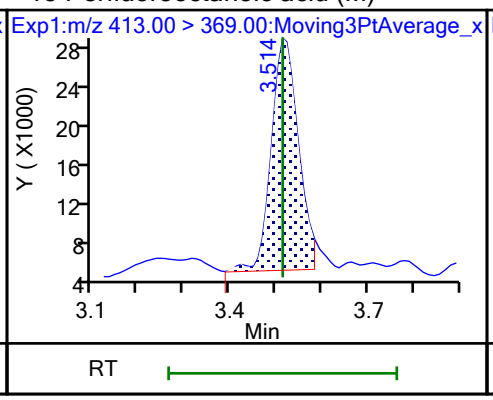
D 12 M2-6:2 FTS



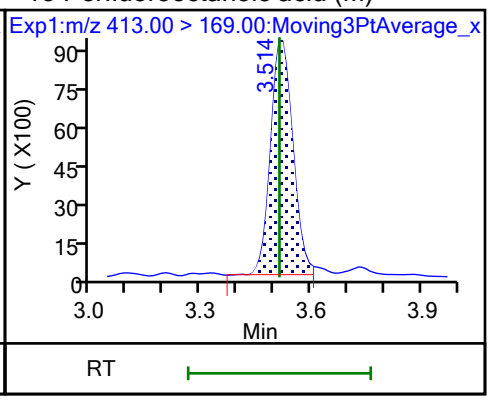
13 1H,1H,2H,2H-perfluorooctanesulfo



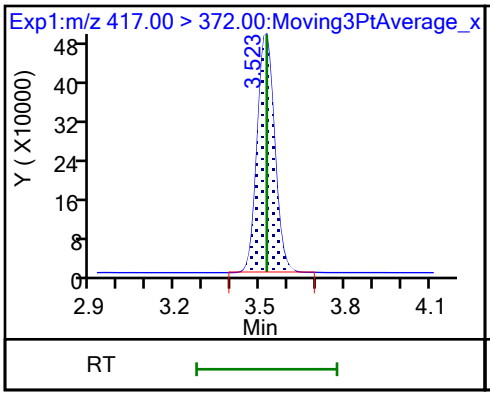
15 Perfluorooctanoic acid (M)



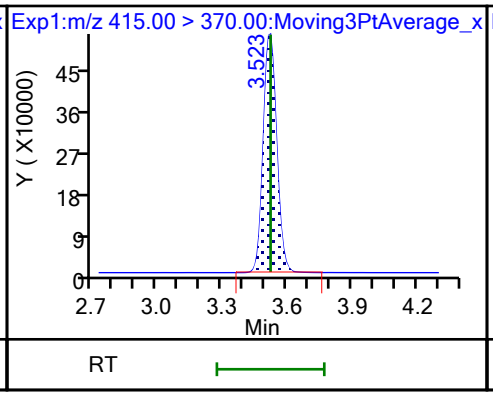
15 Perfluorooctanoic acid (M)



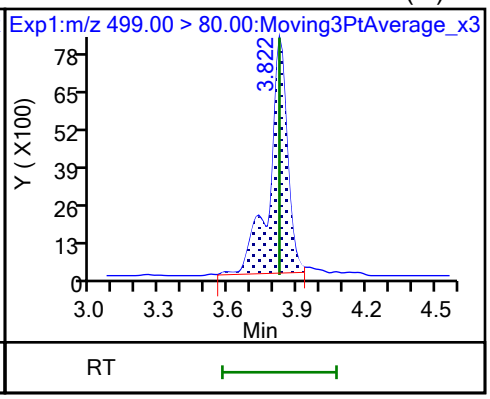
D 14 13C4 PFOA



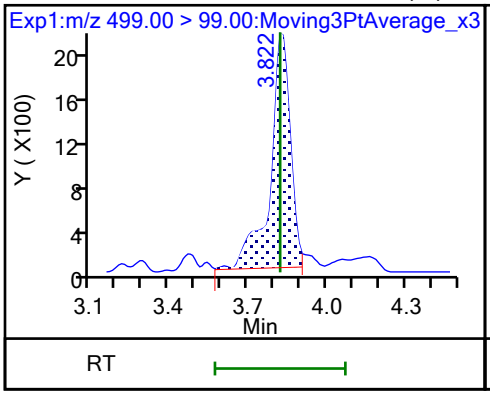
* 62 13C2 PFOA



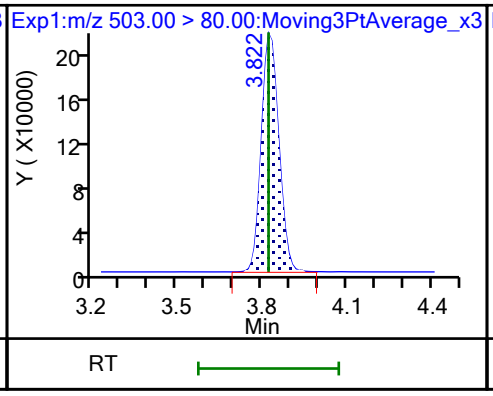
17 Perfluorooctanesulfonic acid (M)



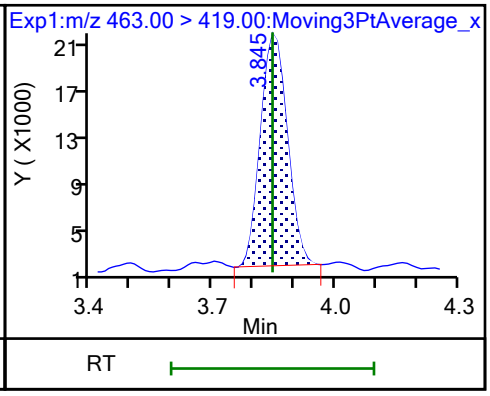
17 Perfluorooctanesulfonic acid (M)



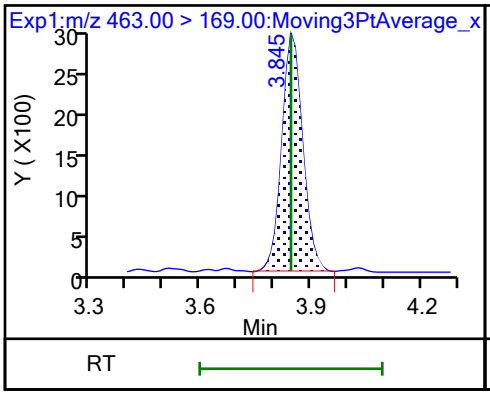
D 18 13C4 PFOS



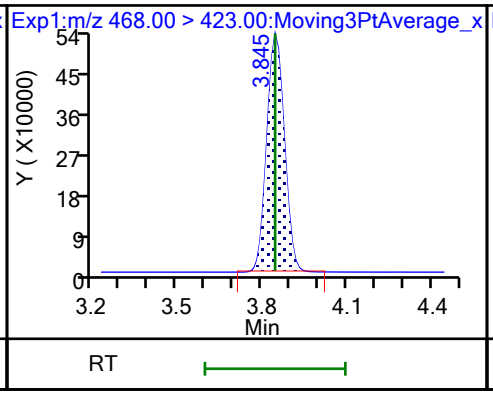
20 Perfluorononanoic acid



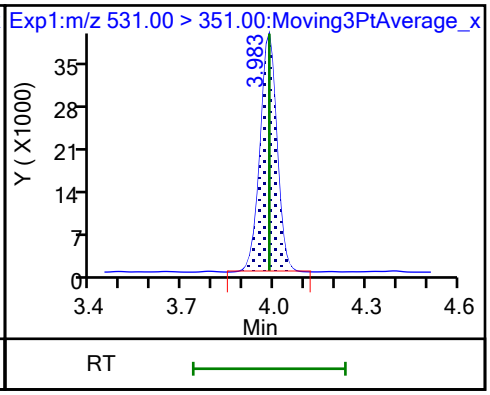
20 Perfluorononanoic acid



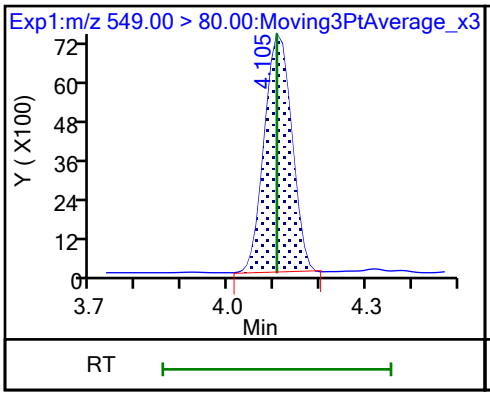
D 19 13C5 PFNA



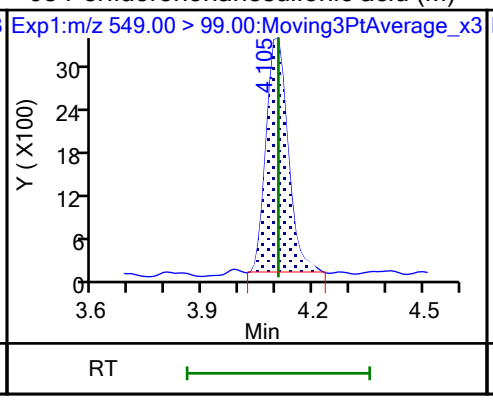
69 9-Chlorohexadecafluoro-3-oxanona



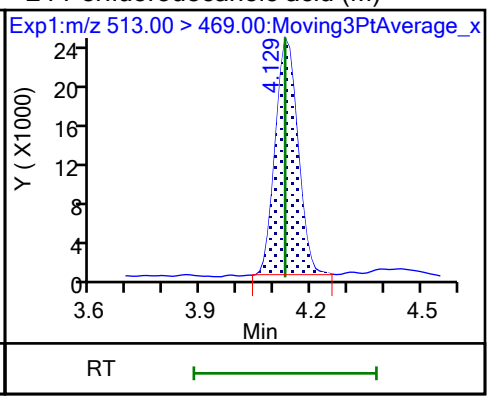
68 Perfluorononanesulfonic acid



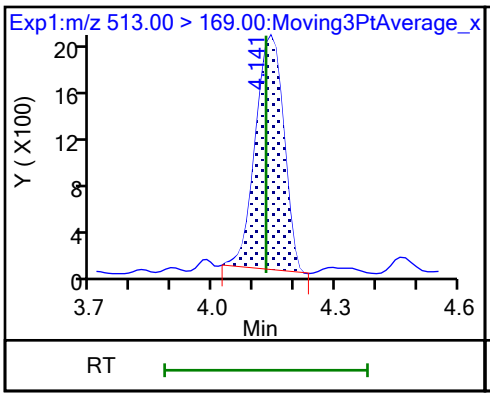
68 Perfluorononanesulfonic acid (M)



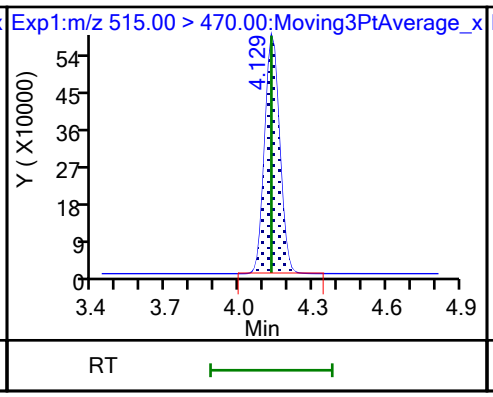
24 Perfluorodecanoic acid (M)



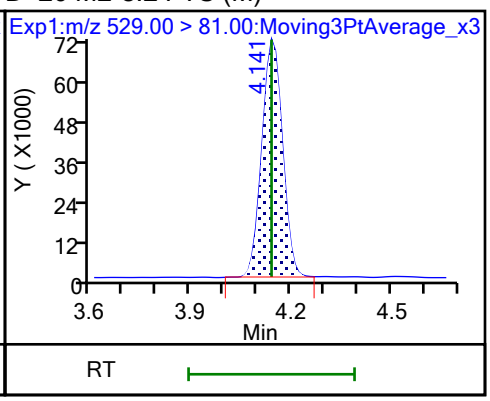
24 Perfluorodecanoic acid



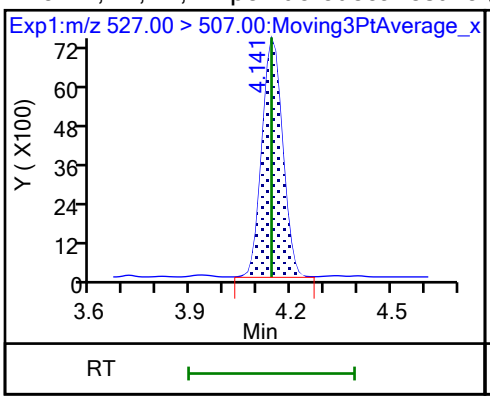
D 23 13C2 PFDA



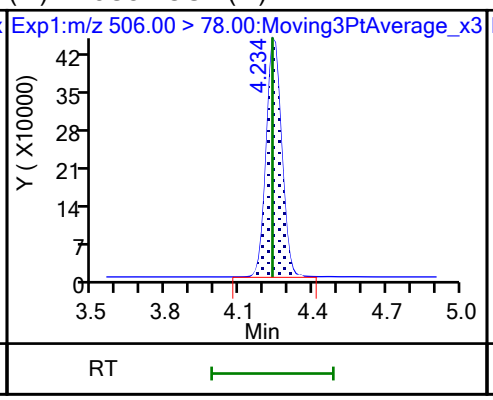
D 26 M2-8:2 FTS (M)



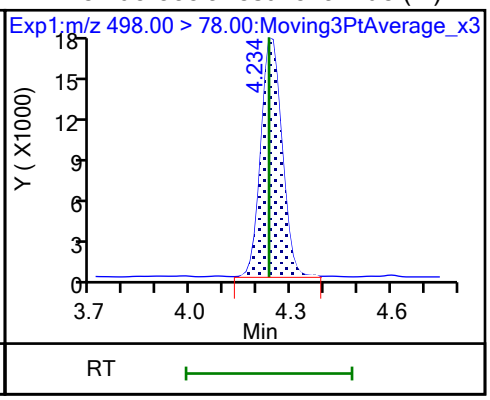
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



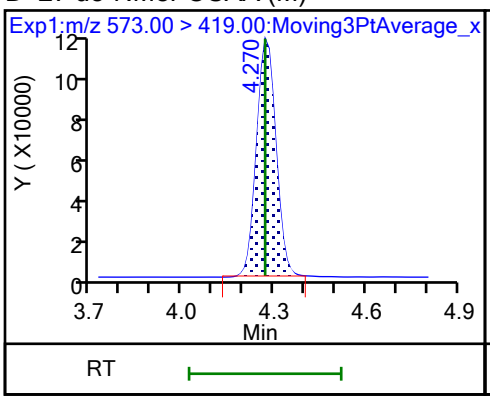
D 21 13C8 FOSA (M)



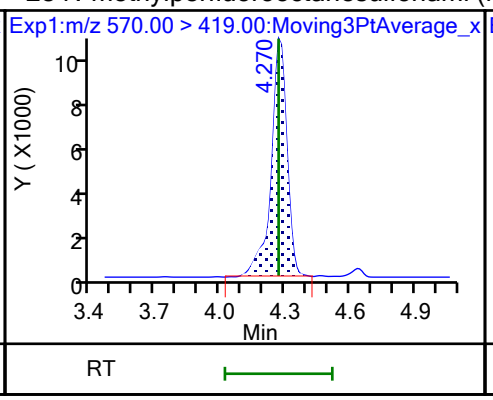
22 Perfluorooctanesulfonamide (M)



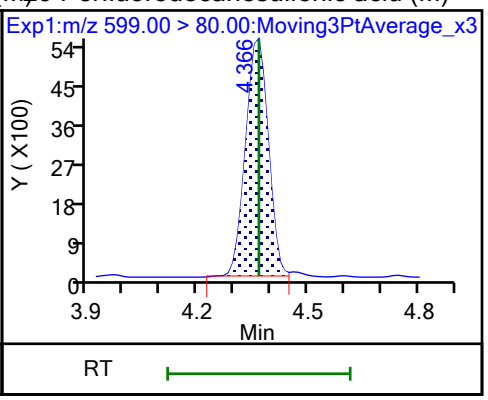
D 27 d3-NMeFOSAA (M)



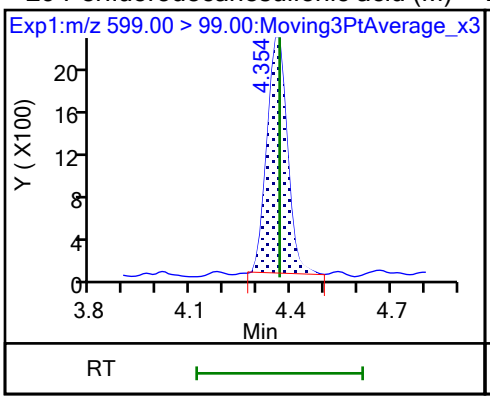
28 N-methylperfluorooctanesulfonami (M)



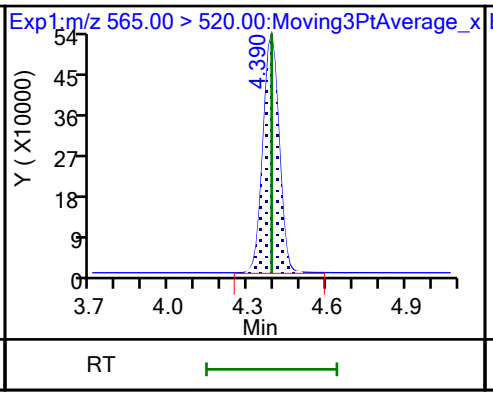
29 Perfluorodecanesulfonic acid (M)



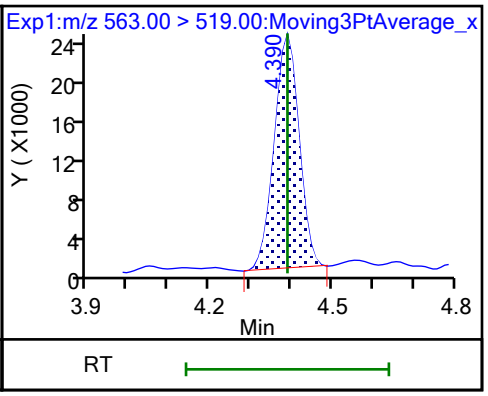
29 Perfluorodecanesulfonic acid (M)



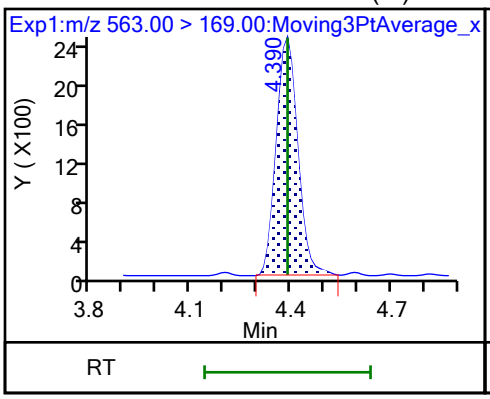
D 30 13C2 PFUnA



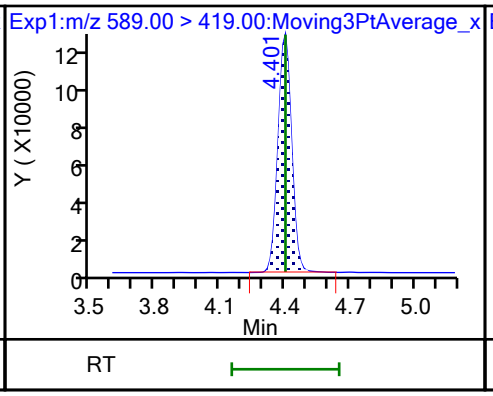
31 Perfluoroundecanoic acid



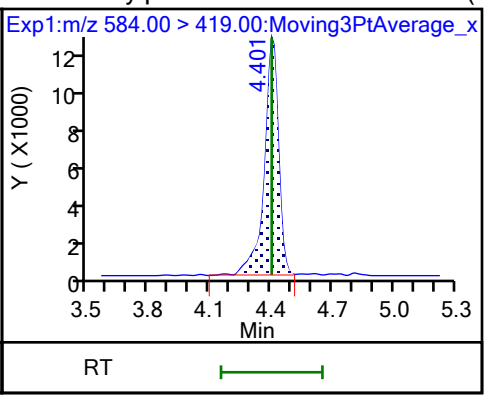
31 Perfluoroundecanoic acid (M)



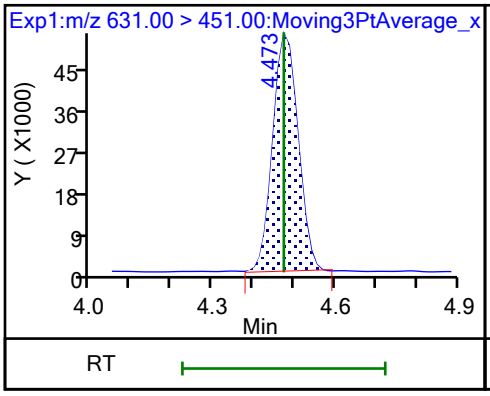
D 32 d5-NEtFOSAA



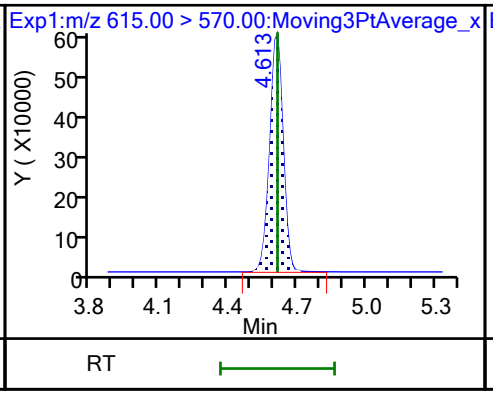
33 N-ethylperfluorooctanesulfonamid (M)



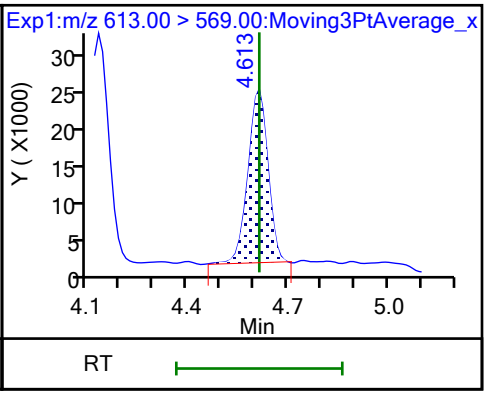
66 11-Chloroeicosafluoro-3-oxaundec



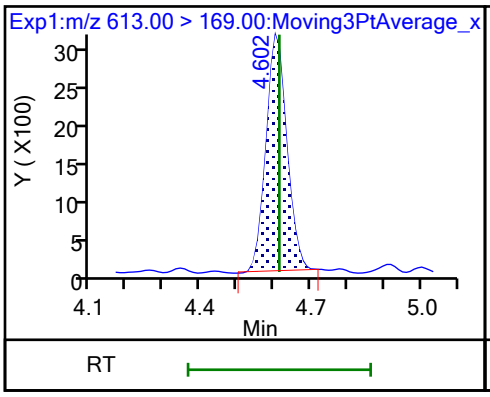
D 36 13C2 PFDoA



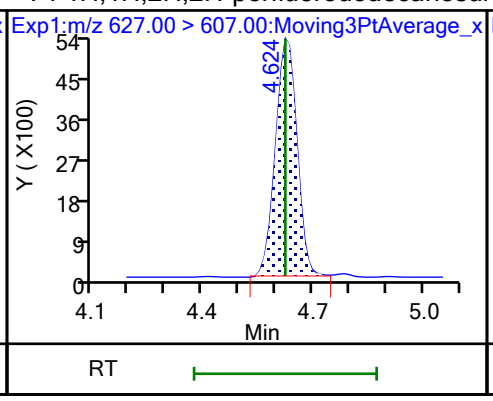
37 Perfluorododecanoic acid



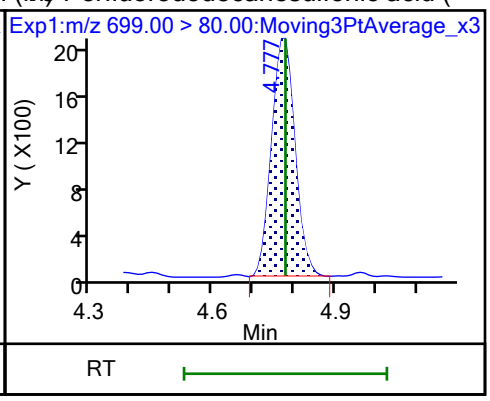
37 Perfluorododecanoic acid



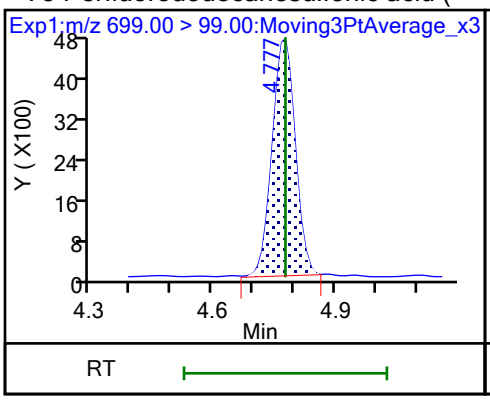
74 1H,1H,2H,2H-perfluorododecanesul (M)



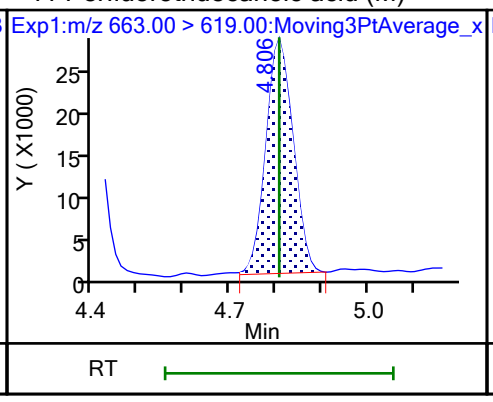
75 Perfluorododecanesulfonic acid (



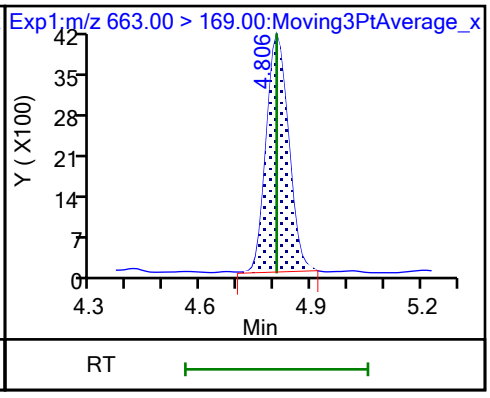
75 Perfluorododecanesulfonic acid (



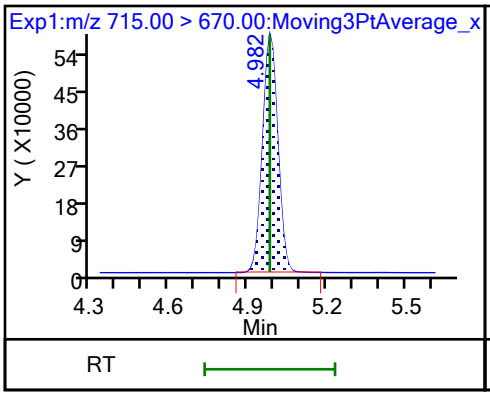
41 Perfluorotridecanoic acid (M)



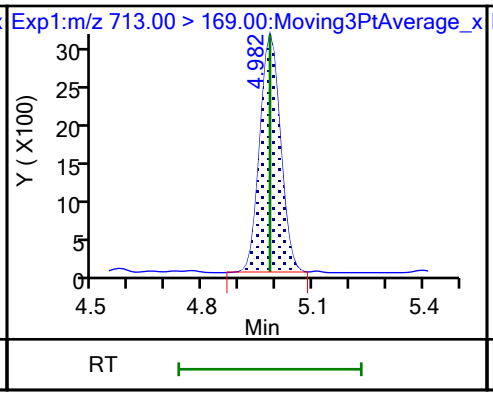
41 Perfluorotridecanoic acid



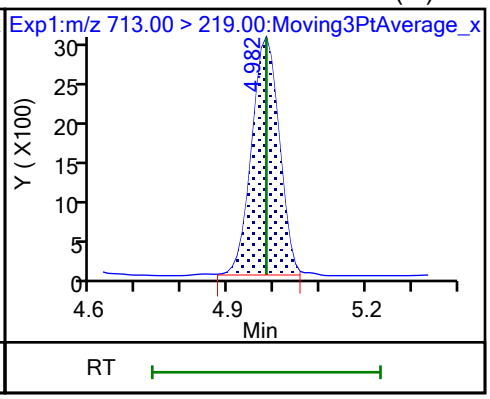
D 43 13C2 PFTeDA



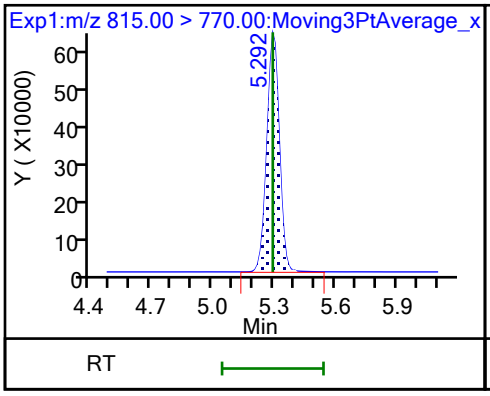
42 Perfluorotetradecanoic acid



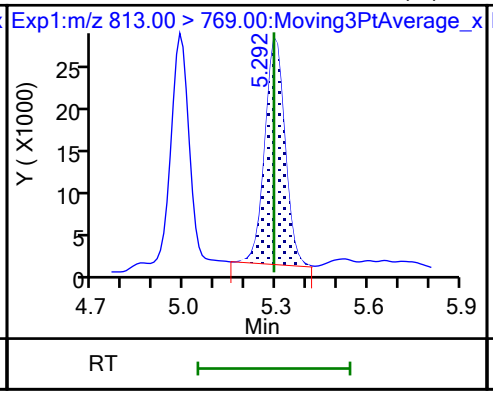
42 Perfluorotetradecanoic acid (M)



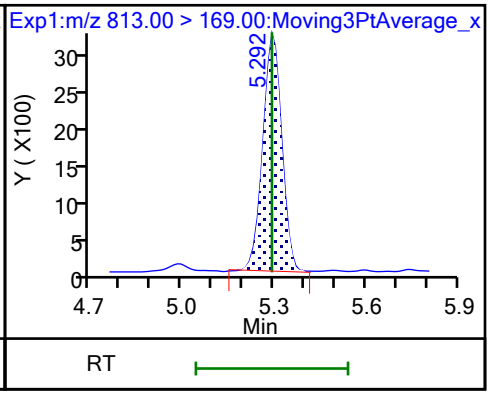
D 44 13C2 PFHxDA



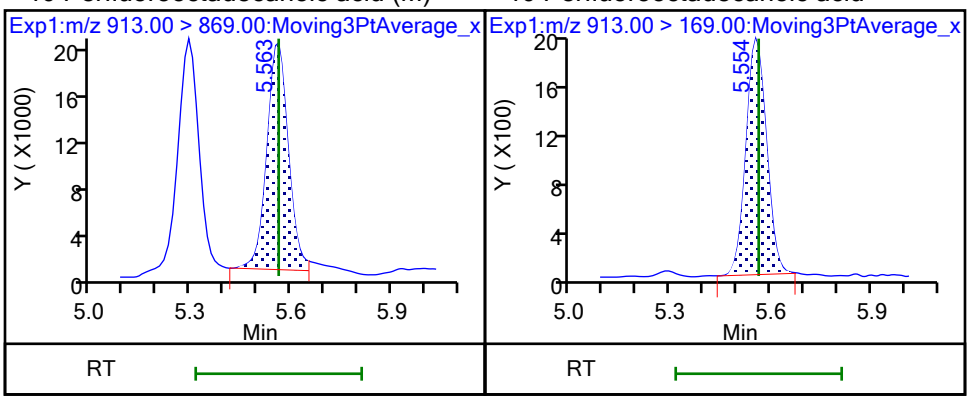
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/19 Calibration Date: 10/23/2023 17:41

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8882		0.941	1.00	-5.9	30.0
Perfluoropentanoic acid	AveID	1.079	1.065		0.987	1.00	-1.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.069		0.849	0.887	-4.3	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.511		0.969	0.937	3.4	
Perfluorohexanoic acid	AveID	1.100	0.9617		0.874	1.00	-12.6	
Perfluoropentanesulfonic acid	AveID	1.306	1.283		0.924	0.941	-1.8	
HFPODA	AveID	1.001	0.9923		0.991	1.00	-0.9	
Perfluoroheptanoic acid	AveID	1.121	1.110		0.990	1.00	-1.0	
Perfluorohexanesulfonic acid	AveID	1.107	1.012		0.836	0.914	-8.6	
DONA	AveID	5.754	5.433		0.892	0.945	-5.6	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.702		0.940	0.951	-1.2	
Perfluoroheptanesulfonic acid	AveID	1.445	1.352		0.891	0.953	-6.5	
Perfluorooctanoic acid	AveID	1.065	0.9862		0.926	1.00	-7.4	
Perfluorooctanesulfonic acid	AveID	1.166	1.040		0.827	0.928	-10.8	
Perfluorononanoic acid	AveID	0.9800	0.9380		0.957	1.00	-4.3	
9Cl-PF3ONS	AveID	3.569	3.664		0.958	0.933	2.7	
Perfluorononanesulfonic acid	AveID	0.8874	0.7561		0.820	0.962	-14.8	
Perfluorodecanoic acid	AveID	0.999	0.8932		0.894	1.00	-10.6	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.325		1.01	0.960	5.6	
Perfluorooctanesulfonamide	AveID	0.9539	0.9665		1.01	1.00	1.3	
NMeFOSAA	AveID	0.9074	0.8708		0.960	1.00	-4.0	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6024		0.851	0.965	-11.8	
Perfluoroundecanoic acid	AveID	1.031	0.9663		0.938	1.00	-6.2	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9390		0.939	1.00	-6.1	
11Cl-PF3OUdS	AveID	5.474	5.428		0.935	0.943	-0.8	
Perfluorododecanoic acid	AveID	1.018	0.8875		0.872	1.00	-12.8	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.448		1.06	0.964	10.0	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2183		0.913	0.968	-5.7	
Perfluorotridecanoic acid	AveID	1.070	0.9613		0.899	1.00	-10.1	
Perfluorotetradecanoic acid	AveID	0.1118	0.0960		0.859	1.00	-14.1	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.001		1.00	1.00	0.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7523		0.963	1.00	-3.7	
13C4 PFBA	Ave	0.9917	1.056		1.33	1.25	6.5	
13C5 PFPeA	Ave	0.7696	0.7475		1.21	1.25	-2.9	
13C3 PFBS	Ave	1.041	0.9578		1.07	1.16	-8.0	
M2-4:2 FTS	Ave	0.1204	0.1005		0.974	1.17	-16.6	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/19 Calibration Date: 10/23/2023 17:41

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7769		1.24	1.25	-0.8	
13C3 HFPO-DA	Ave	0.1516	0.1322		1.09	1.25	-12.8	
13C4 PFHpA	Ave	0.8590	0.8171		1.19	1.25	-4.9	50.0
18O2 PFHxS	Ave	0.7464	0.7113		1.13	1.18	-4.7	50.0
M2-6:2 FTS	Ave	0.1551	0.1396		1.07	1.19	-10.0	
13C4 PFOA	Ave	0.9731	0.9948		1.28	1.25	2.2	50.0
13C4 PFOS	Ave	0.4742	0.4684		1.18	1.20	-1.2	50.0
13C5 PFNA	Ave	1.059	1.006		1.19	1.25	-5.0	50.0
13C2 PFDA	Ave	1.109	1.086		1.22	1.25	-2.1	
M2-8:2 FTS	Ave	0.1744	0.1476		1.01	1.20	-15.4	
13C8 FOSA	Ave	0.9462	0.8502		1.12	1.25	-10.1	
d3-NMeFOSAA	Ave	0.2650	0.2472		1.17	1.25	-6.7	
13C2 PFUnA	Ave	1.047	1.019		1.22	1.25	-2.6	
d5-NEtFOSAA	Ave	0.2552	0.2354		1.15	1.25	-7.7	
13C2 PFDoA	Ave	1.064	1.115		1.31	1.25	4.8	
13C2 PFTeDA	Ave	1.059	1.010		1.19	1.25	-4.6	
13C2 PFHxDA	Ave	1.221	1.039		1.06	1.25	-14.9	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A19.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 23-Oct-2023 17:41:49 ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057509-019 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:08 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 13:39:05
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2274143	1.33		107	1739	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1615946	0.9414		94.1	172	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1609072	1.21		97.1	1998	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1371109	0.9870		98.7	34.9	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1917607	1.07		92.0	72990	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1564037	0.8489	Target=2.06	95.7	1242	M
298.90 > 99.00	2.467	2.467	0.0	1.000	773799		2.02(1.03-3.09)		365	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	569154	0.9688		103	2303	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	201975	0.9739		83.4	153	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1672450	1.24		99.2	1672	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1286722	0.8739	Target=14.12	87.4	245	M
313.00 > 119.00	2.797	2.797	0.0	1.000	95655		13.45(7.06-21.17)		91.0	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1478465	0.9243	Target=2.72	98.2	1650	M
349.00 > 99.00	2.810	2.810	0.0	0.888	502361		2.94(1.36-4.09)		1119	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	225848	0.99		99.1	735	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	284499	1.09		87.2	1132	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1448445	1.13		95.3	6345	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1132898	0.8355	Target=3.32	91.4	2265	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	340914		3.32(1.66-4.98)		353	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	1561350	0.9899	Target=4.17	99.0	382	
363.00 > 169.00	3.165	3.168	-0.003	1.000	372742		4.19(2.09-6.26)		787	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1759002	1.19		95.1	6481	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.835	4141579	0.8922	Target=3.33	94.4	4582	
377.00 > 85.00	3.199	3.203	-0.004	0.835	1146586		3.61(1.66-4.99)		1981	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	1039299	0.8915	Target=4.83	93.5	3213	M
449.00 > 99.00	3.511	3.505	0.006	0.917	212743		4.89(2.41-7.24)		543	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	285396	1.07		90.0	698	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	617510	0.9401		98.8	894	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1689676	0.9259	Target=2.88	92.6	83.9	
413.00 > 169.00	3.520	3.514	0.006	1.000	607536		2.78(1.44-4.32)		1120	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2141570	1.28		102	5405	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2152687	1.25			9449	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.822	0.009	1.000	778504	0.8274	Target=4.24	89.2	1230	M
499.00 > 99.00	3.819	3.822	-0.003	0.997	172527		4.51(2.12-6.37)		524	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	963989	1.18		98.8	5024	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1625447	0.9571	Target=8.34	95.7	262	
463.00 > 169.00	3.842	3.845	-0.003	1.000	185722		8.75(4.17-12.51)		1024	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2166133	1.19		95.0	3474	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.039	2757785	0.9578		103	9878	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.105	0.007	1.074	586748	0.8197	Target=2.17	85.2	4867	
549.00 > 99.00	4.101	4.105	-0.004	1.070	246395		2.38(1.08-3.25)		673	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.129	0.007	1.000	1669791	0.8938	Target=11.44	89.4	492	
513.00 > 169.00	4.136	4.129	0.007	1.000	172623		9.67(5.72-17.16)		1375	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2336813	1.22		97.9	6740	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.175	304398	1.01		84.6	788	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.141	0.007	1.003	567393	1.01		106	7600	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1830237	1.12		89.9	4435	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1415171	1.01		101	4861	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.270	-0.004	1.212	532240	1.17		93.3	1447	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.270	0.009	1.003	370760	0.9596		96.0	575	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	468963	0.8512	Target=2.37	88.2	3955	
599.00 > 99.00	4.363	4.366	-0.003	1.139	192249		2.44(1.19-3.56)		1516	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2194563	1.22		97.4	12520	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1696419	0.9375	Target=12.20	93.8	396	
563.00 > 169.00	4.387	4.390	-0.003	1.000	150225		11.29(6.10-18.31)		1044	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	506793	1.15		92.3	1236	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.401	-0.002	1.000	380712	0.9388		93.9	862	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.473	-0.005	1.166	4128779	0.9351		99.2	5442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2399372	1.31		105	7441	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.000	1703539	0.8719	Target=8.47	87.2	102	M
613.00 > 169.00	4.610	4.613	-0.003	1.000	209343		8.14(4.23-12.70)		3458	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.624	-0.003	1.117	354765	1.06		110	4026	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.777	-0.003	1.246	170428	0.9127	Target=0.48	94.3	1111	
699.00 > 99.00	4.774	4.777	-0.003	1.246	334709		0.51(0.24-0.72)		4859	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.806	-0.003	1.042	1845138	0.8985	Target=6.41	89.9	109	M
663.00 > 169.00	4.803	4.806	-0.003	1.042	274308		6.73(3.21-9.62)		1495	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	2174995	1.19		95.4	6995	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.982	-0.003	1.000	167121	0.8590	Target=0.87	85.9	1658	
713.00 > 219.00	4.979	4.982	-0.003	1.000	191594		0.87(0.43-1.30)		1501	M

Report Date: 25-Oct-2023 15:13:08 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A19.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.284	5.292	-0.008	1.501	2236280	1.06		85.1	5175	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.292	0.004	1.002	1791327	1.00	Target=7.89	100	110	M
813.00 > 169.00	5.296	5.292	0.004	1.002	223260		8.02(3.94-11.83)		1917	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.548	5.563	-0.015	1.050	1345810	0.9633	Target=9.39	96.3	146	M
913.00 > 169.00	5.548	5.563	-0.015	1.050	137467		9.79(4.69-14.08)		1069	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

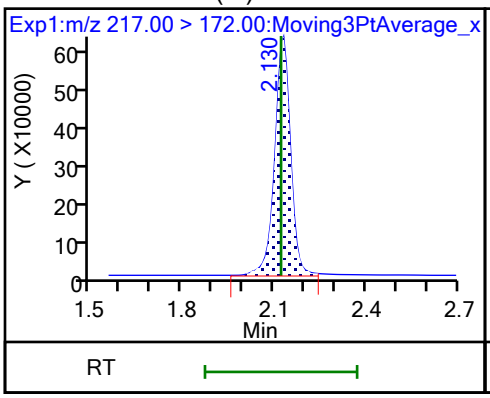
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:13:08 Chrom Revision: 2.3 18-Oct-2023 21:16:54

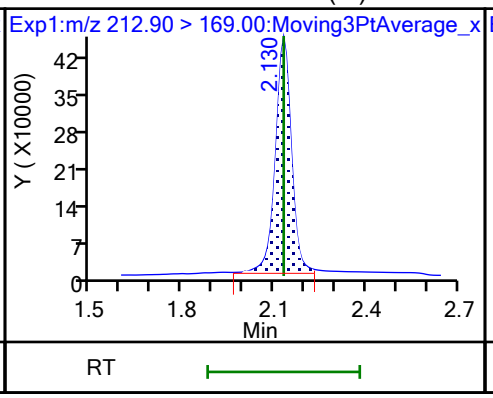
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A19.d
Injection Date: 23-Oct-2023 17:41:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

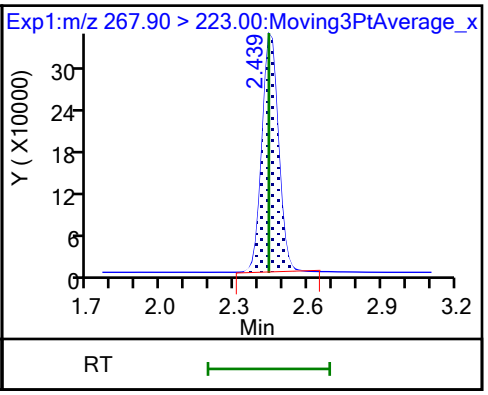
D 1 13C4 PFBA (M)



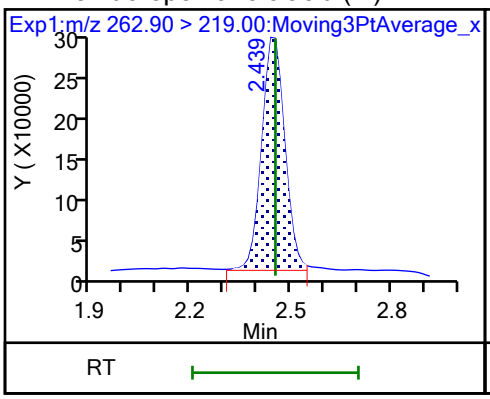
2 Perfluorobutanoic acid (M)



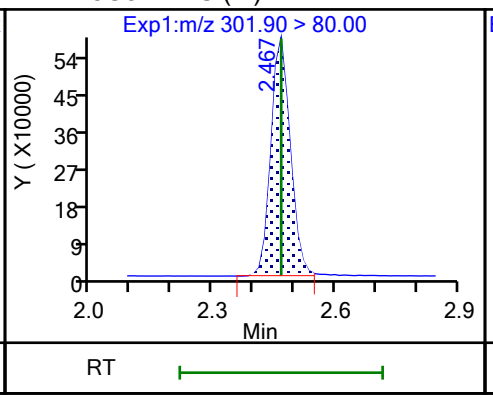
D 3 13C5 PFPeA



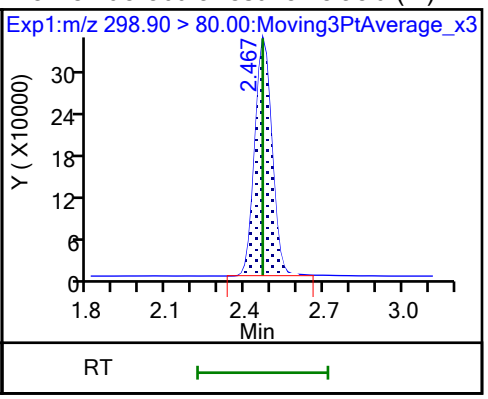
4 Perfluoropentanoic acid (M)



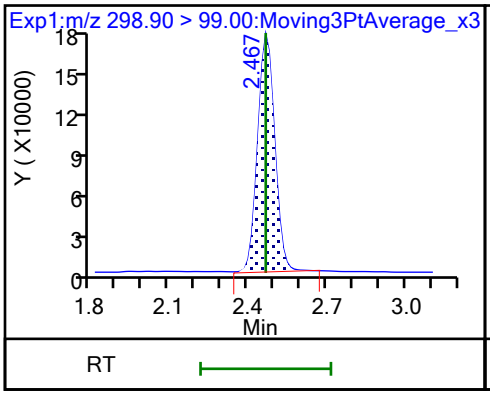
D 47 13C3 PFBS (M)



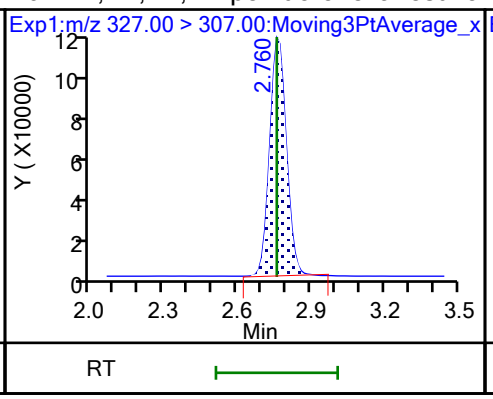
5 Perfluorobutanesulfonic acid (M)



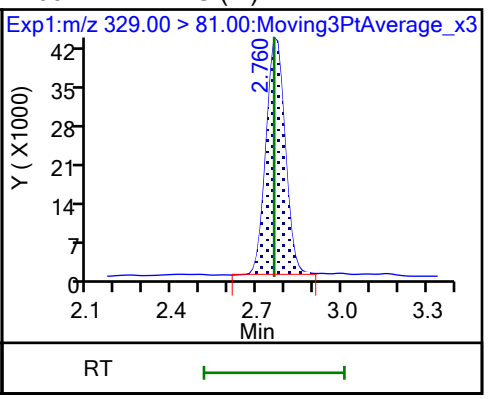
5 Perfluorobutanesulfonic acid



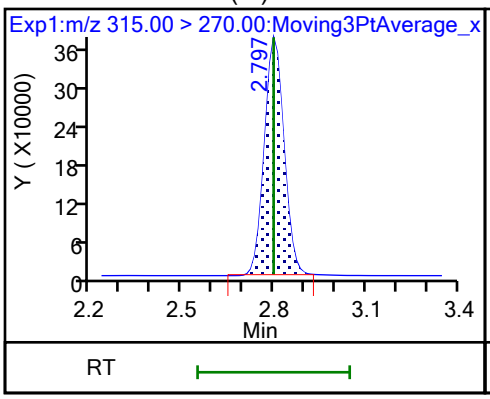
61 1H,1H,2H,2H-perfluorohexanesulfo



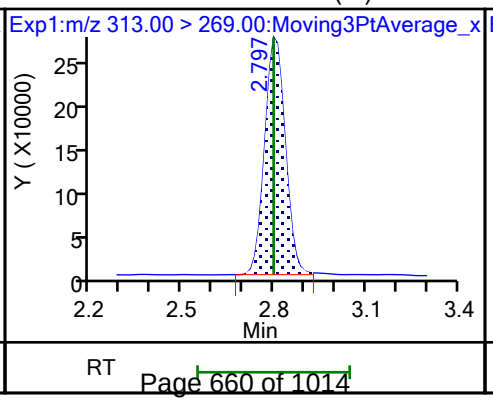
D 60 M2-4:2 FTS (M)



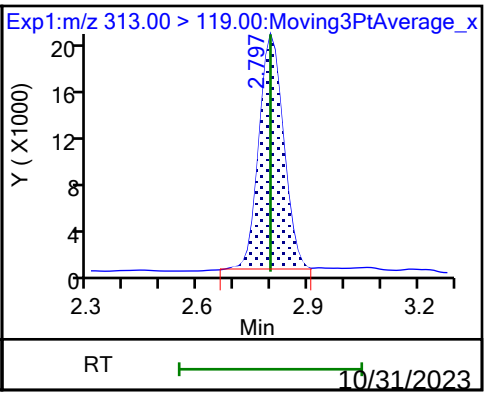
D 7 13C2 PFHxA (M)



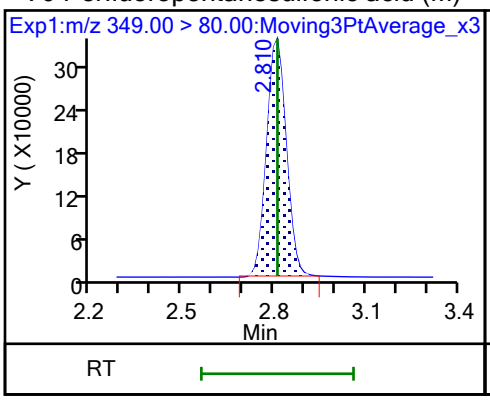
6 Perfluorohexanoic acid (M)



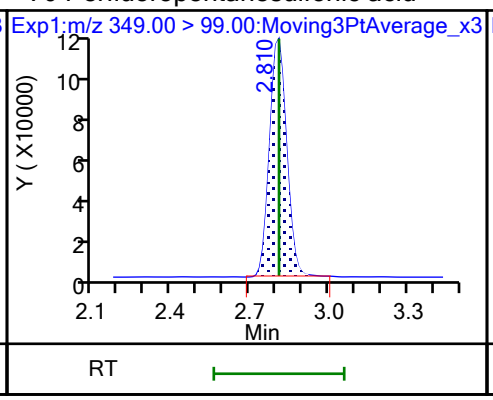
6 Perfluorohexanoic acid



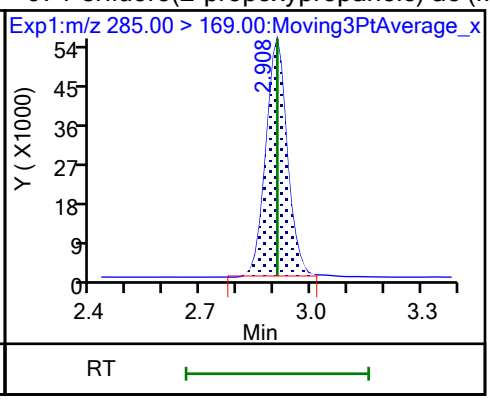
70 Perfluoropentanesulfonic acid (M)



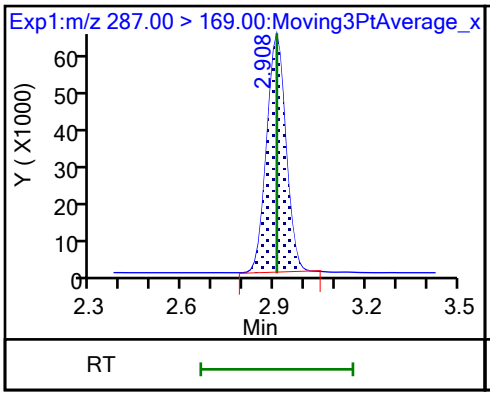
70 Perfluoropentanesulfonic acid



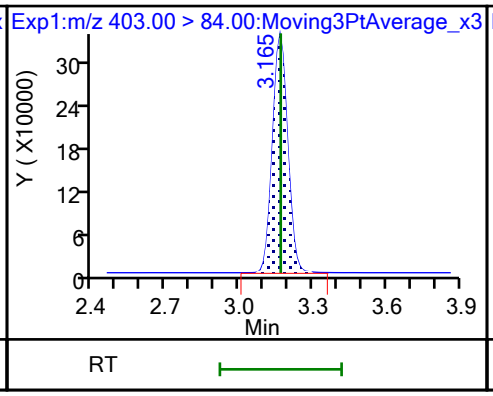
67 Perfluoro(2-propoxypropanoic) ac (M)



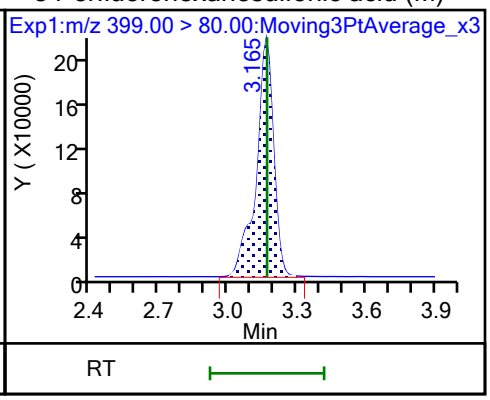
D 64 13C3 HFPO-DA



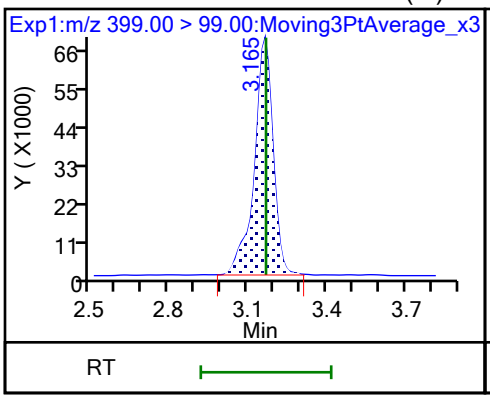
D 11 18O2 PFHxS



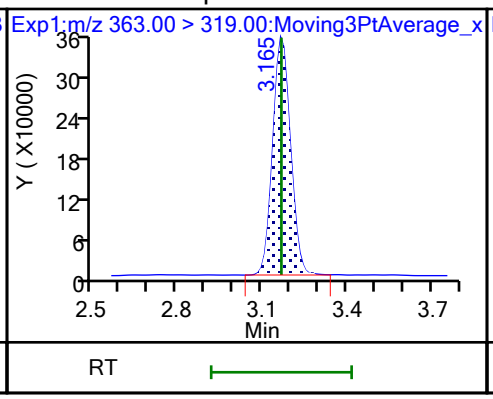
8 Perfluorohexanesulfonic acid (M)



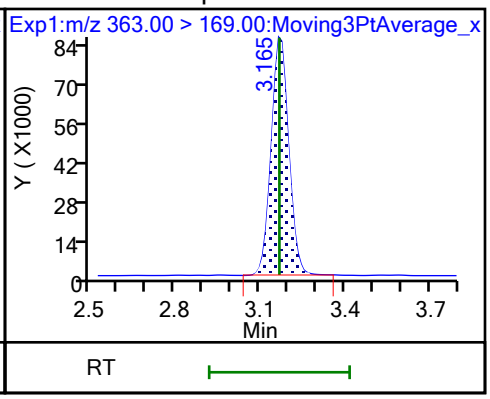
8 Perfluorohexanesulfonic acid (M)



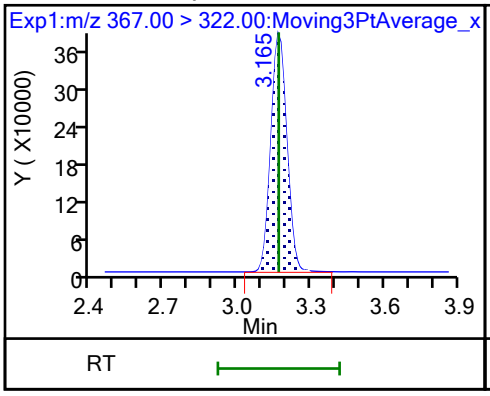
10 Perfluoroheptanoic acid



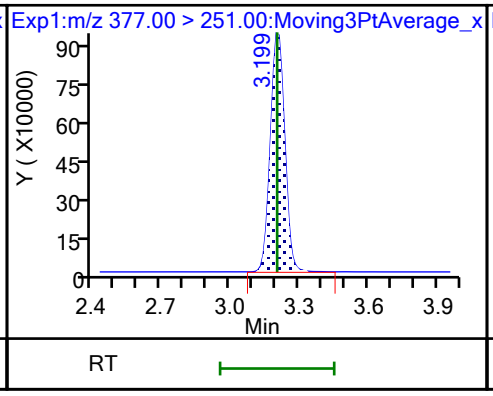
10 Perfluoroheptanoic acid



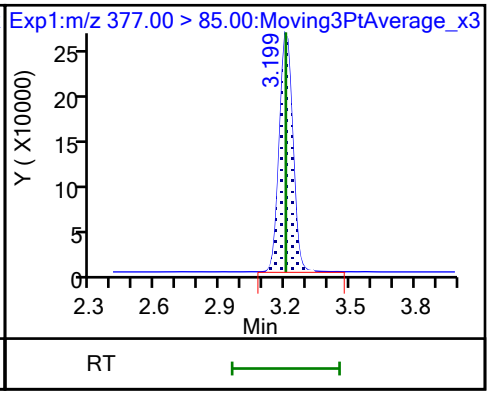
D 9 13C4 PFHpA



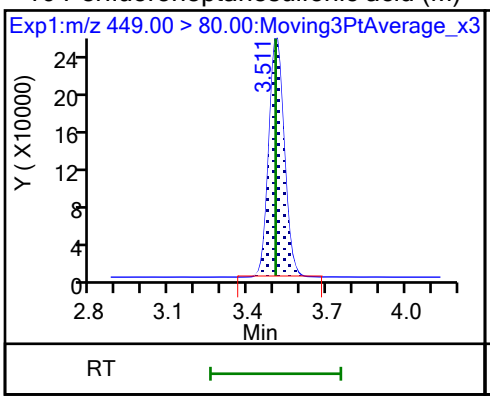
77 DONA



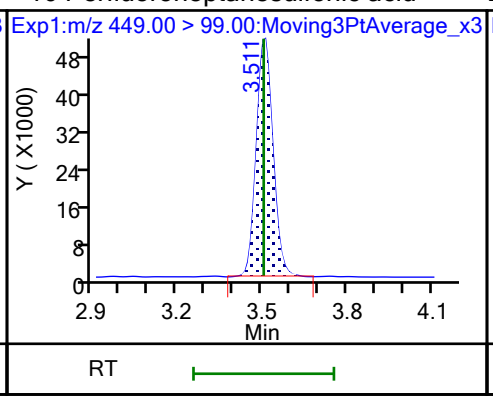
77 DONA



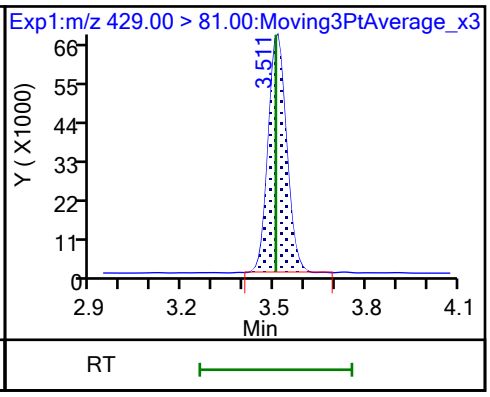
16 Perfluoroheptanesulfonic acid (M)



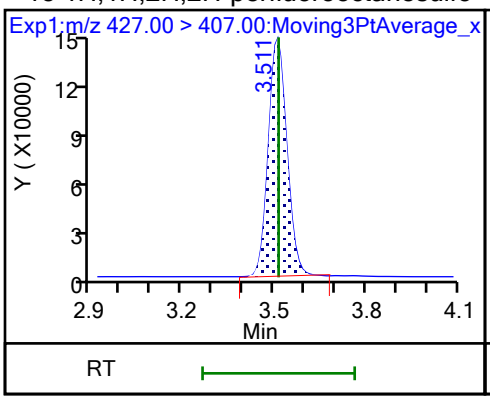
16 Perfluoroheptanesulfonic acid



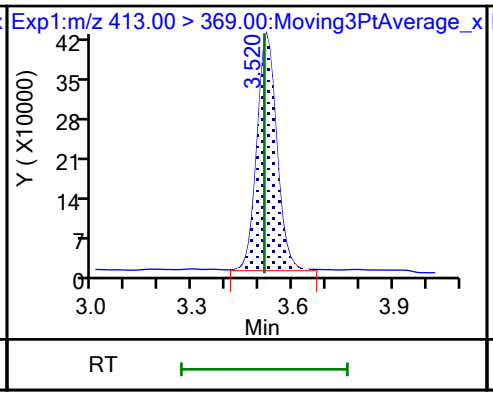
D 12 M2-6:2 FTS



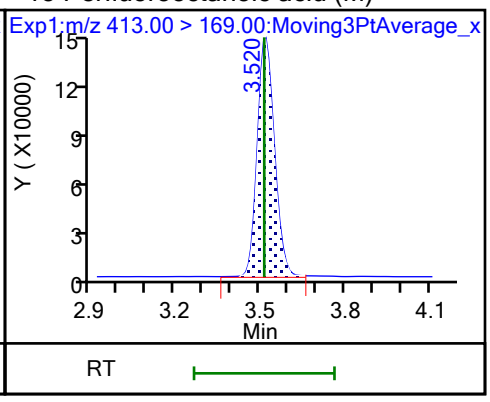
13 1H,1H,2H,2H-perfluorooctanesulfo



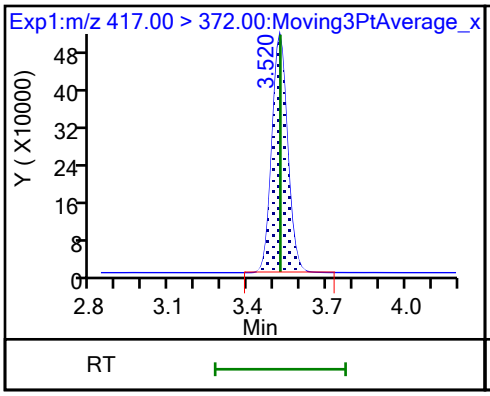
15 Perfluorooctanoic acid



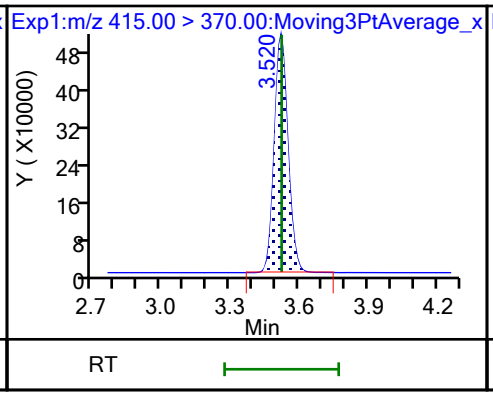
15 Perfluorooctanoic acid (M)



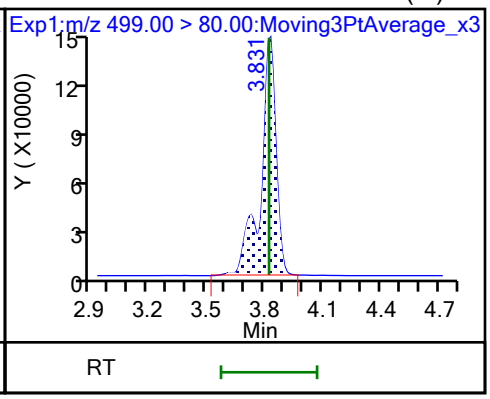
D 14 13C4 PFOA



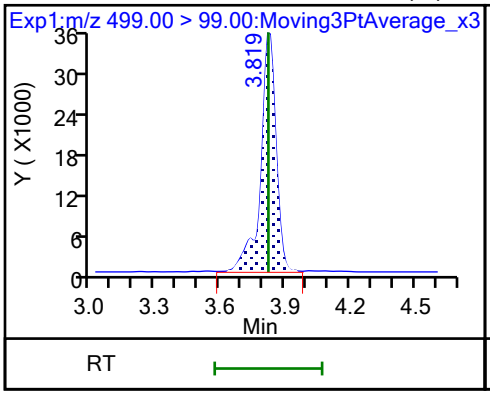
* 62 13C2 PFOA



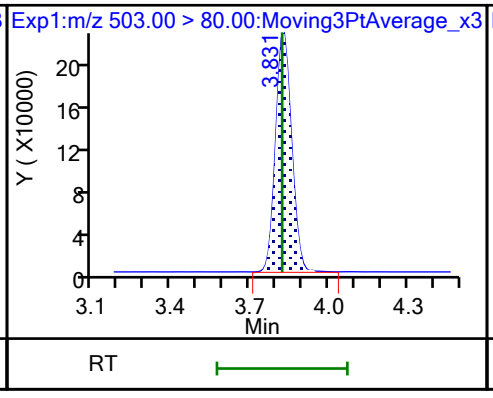
17 Perfluorooctanesulfonic acid (M)



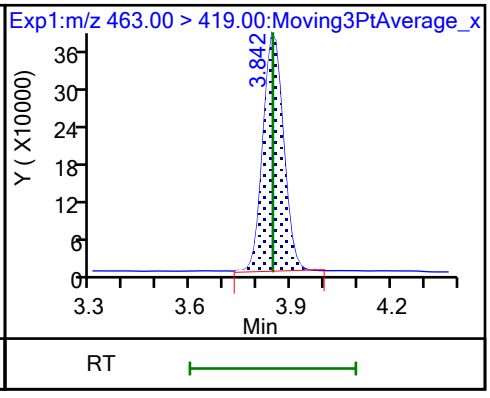
17 Perfluorooctanesulfonic acid (M)



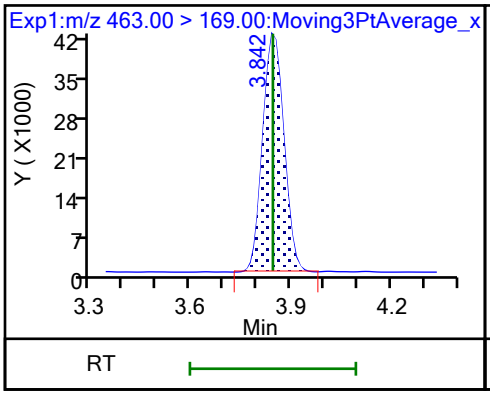
D 18 13C4 PFOS



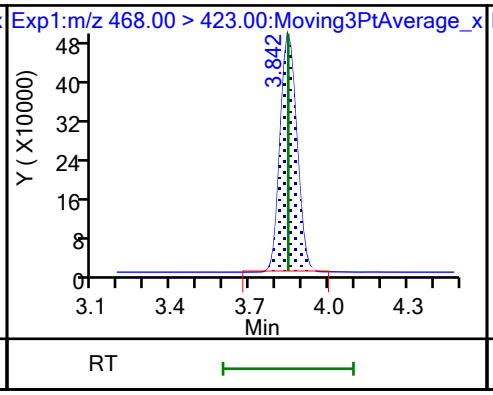
20 Perfluorononanoic acid



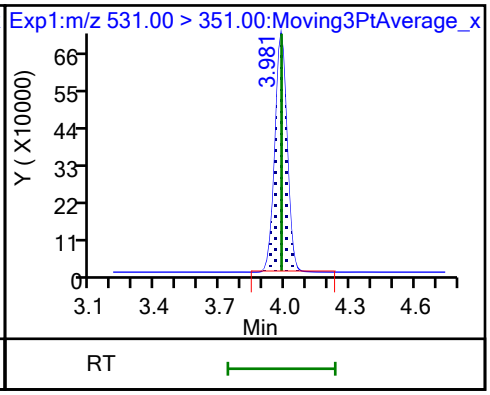
20 Perfluorononanoic acid



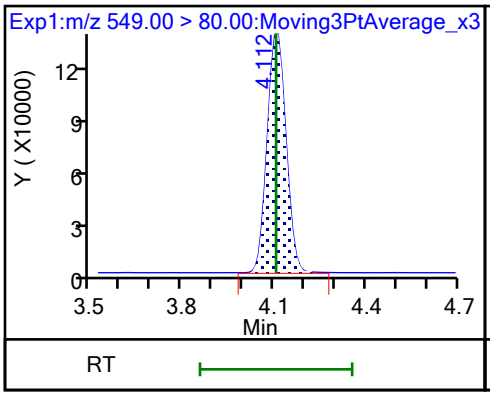
D 19 13C5 PFNA



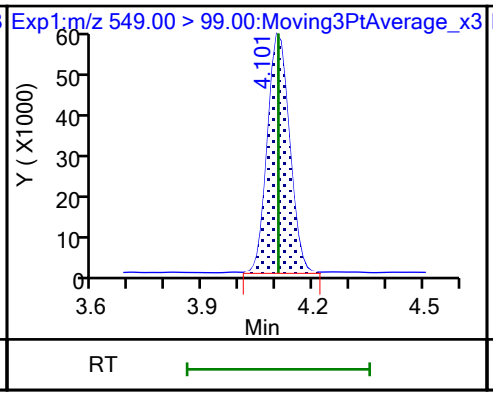
69 9-Chlorohexadecafluoro-3-oxanona



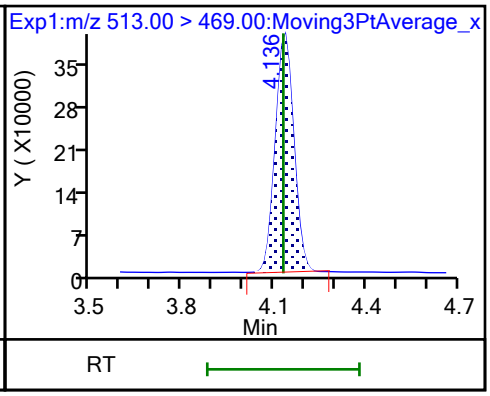
68 Perfluorononanesulfonic acid



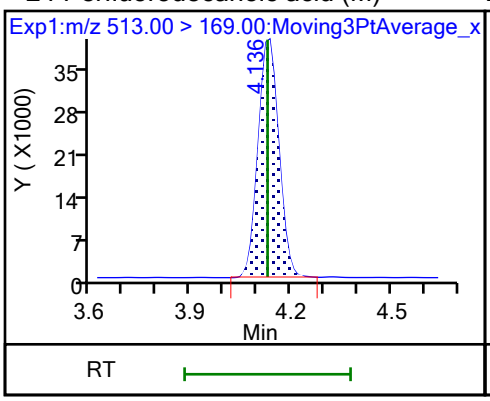
68 Perfluorononanesulfonic acid



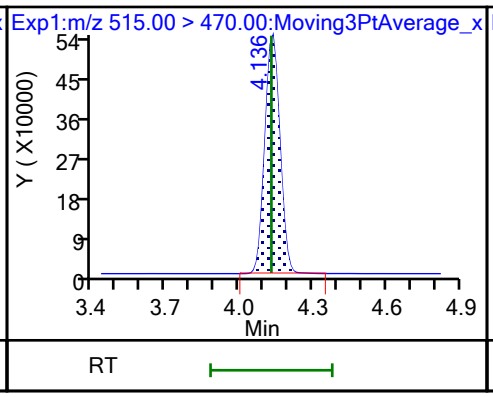
24 Perfluorodecanoic acid



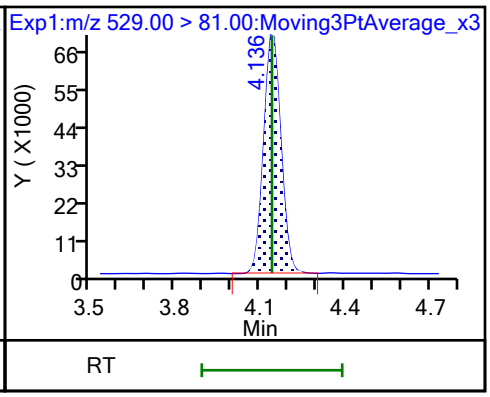
24 Perfluorodecanoic acid (M)



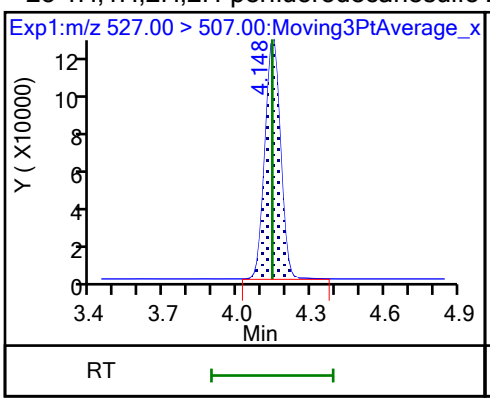
D 23 13C2 PFDA



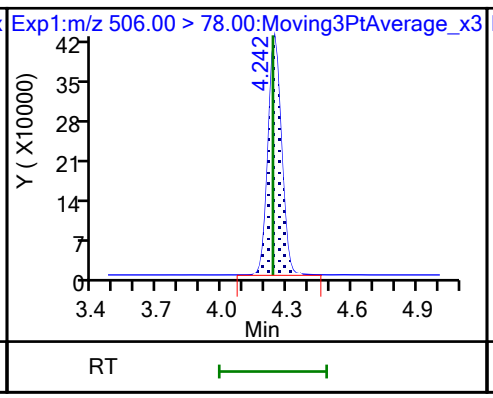
D 26 M2-8:2 FTS



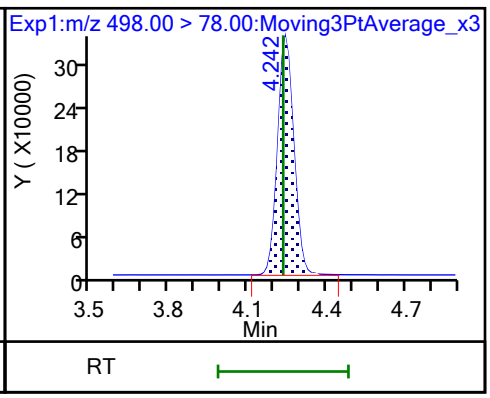
25 1H,1H,2H,2H-perfluorodecanesulfo



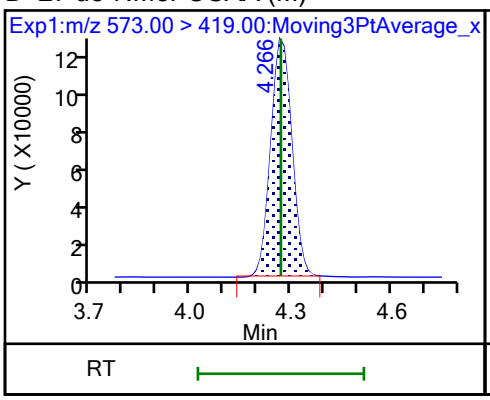
D 21 13C8 FOSA



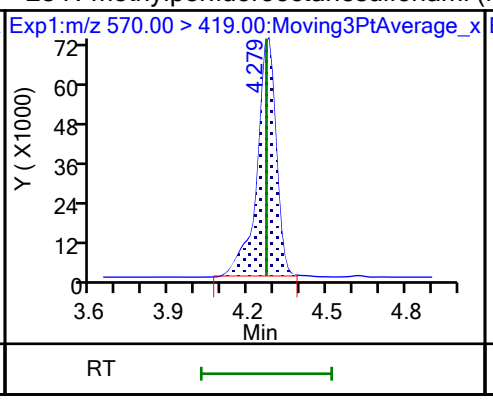
22 Perfluorooctanesulfonamide



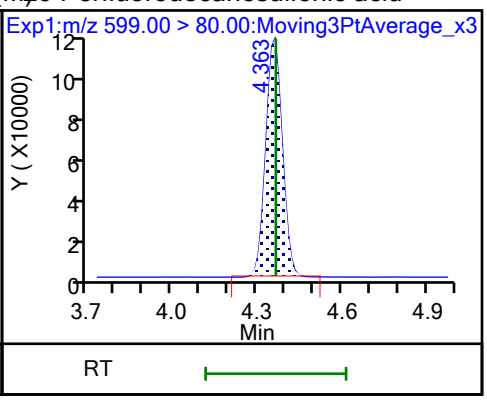
D 27 d3-NMeFOSAA (M)



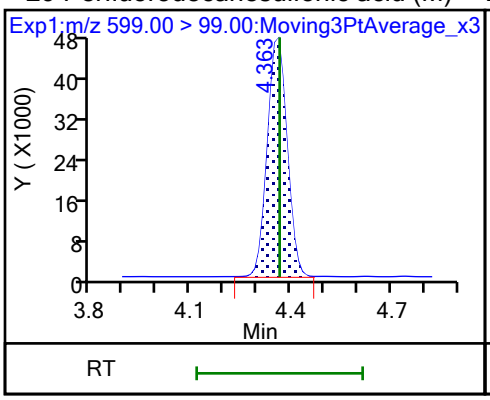
28 N-methylperfluorooctanesulfonami (M)



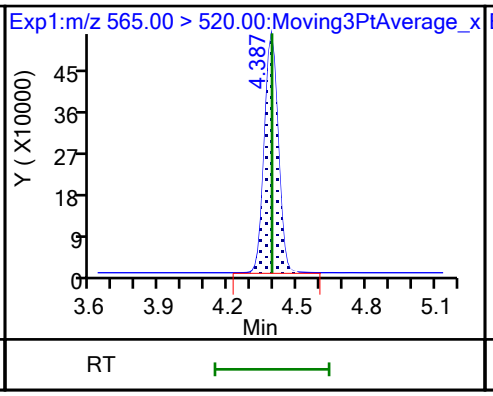
29 Perfluorodecanesulfonic acid



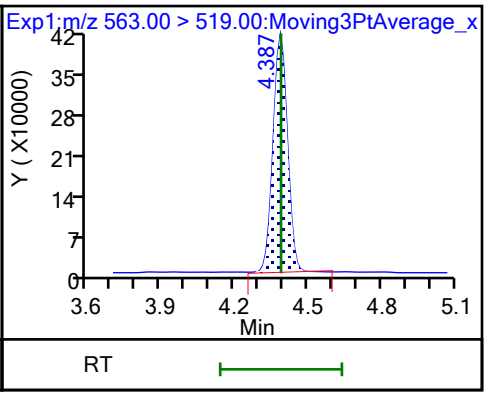
29 Perfluorodecanesulfonic acid (M)



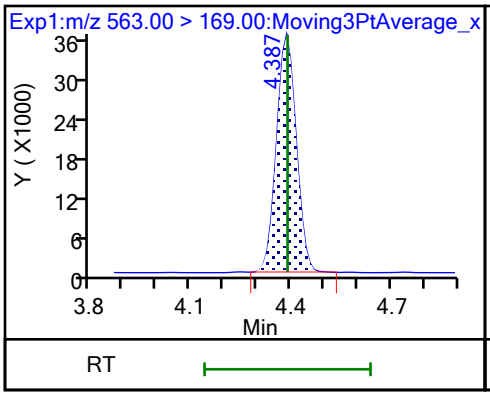
D 30 13C2 PFUnA



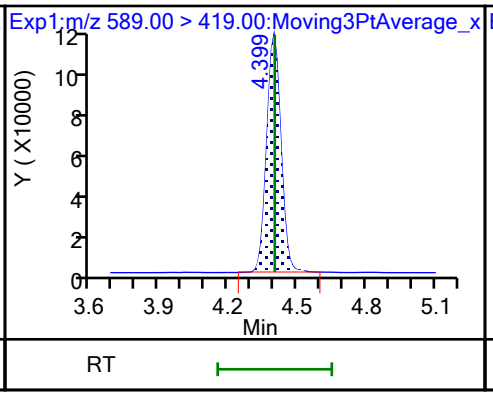
31 Perfluoroundecanoic acid



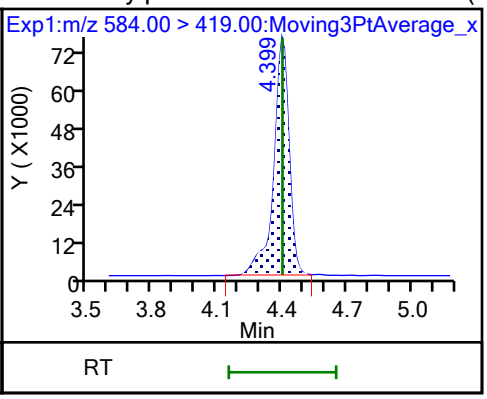
31 Perfluoroundecanoic acid



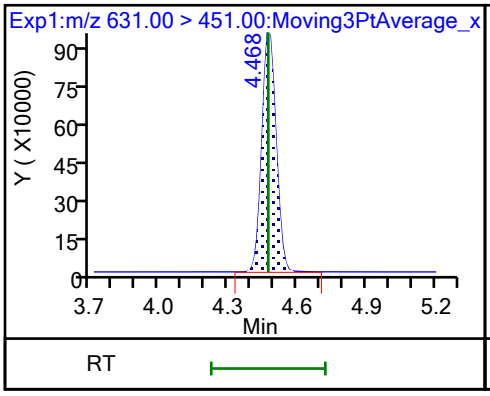
D 32 d5-NEtFOSAA



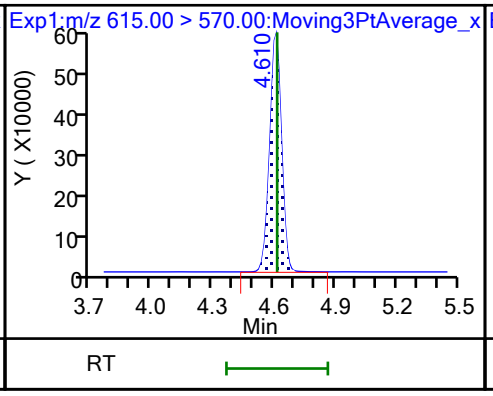
33 N-ethylperfluorooctanesulfonamid (M)



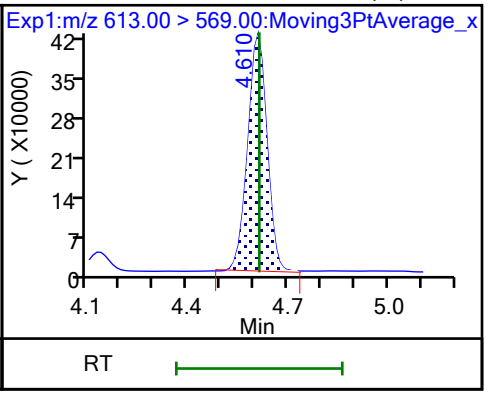
66 11-Chloroeicosafluoro-3-oxaundec



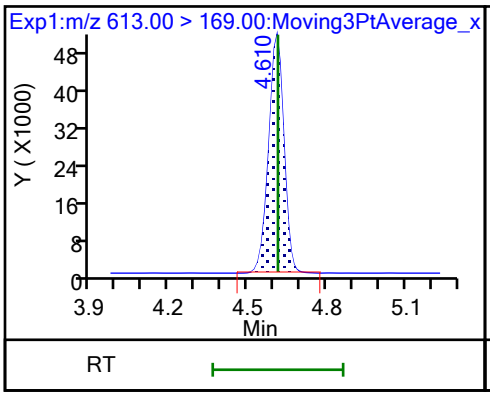
D 36 13C2 PFDoA



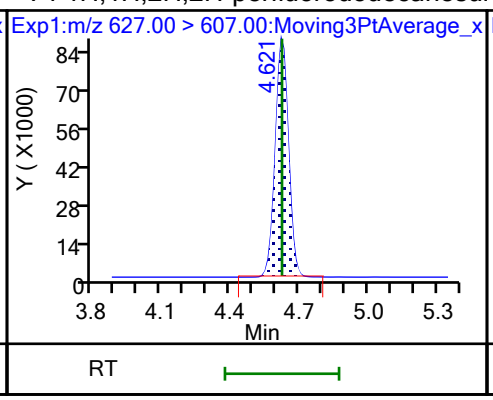
37 Perfluorododecanoic acid (M)



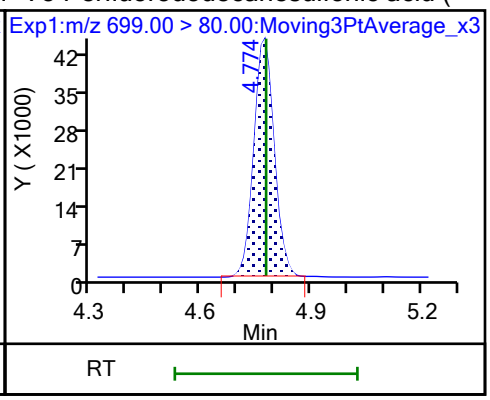
37 Perfluorododecanoic acid



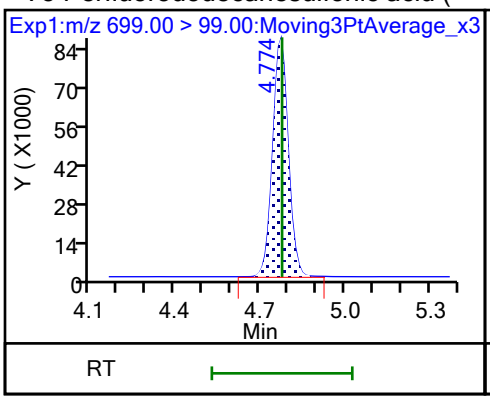
74 1H,1H,2H,2H-perfluorododecanesul



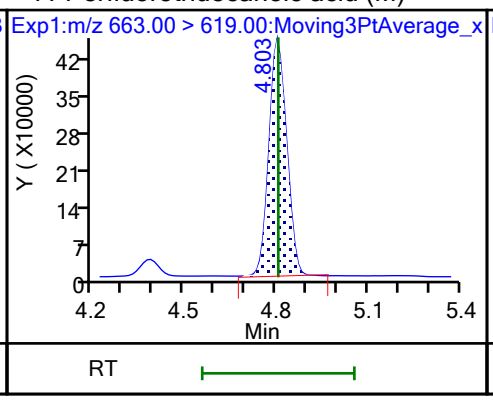
75 Perfluorododecanesulfonic acid (



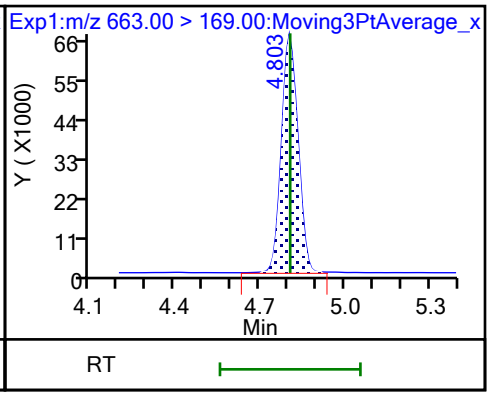
75 Perfluorododecanesulfonic acid (



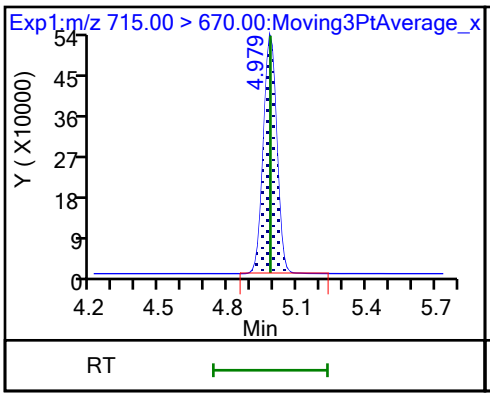
41 Perfluorotridecanoic acid (M)



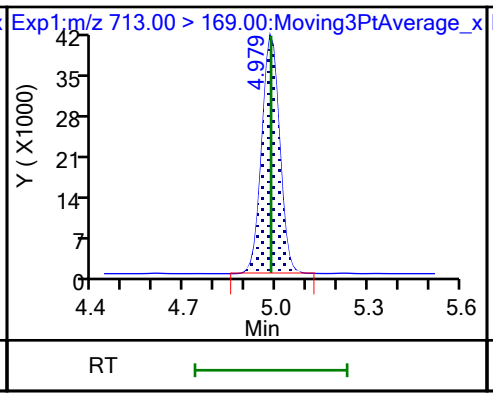
41 Perfluorotridecanoic acid



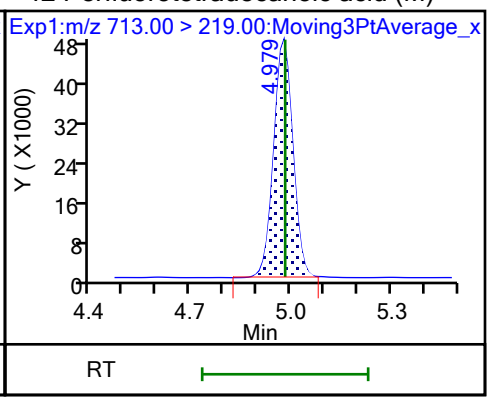
D 43 13C2 PFTeDA



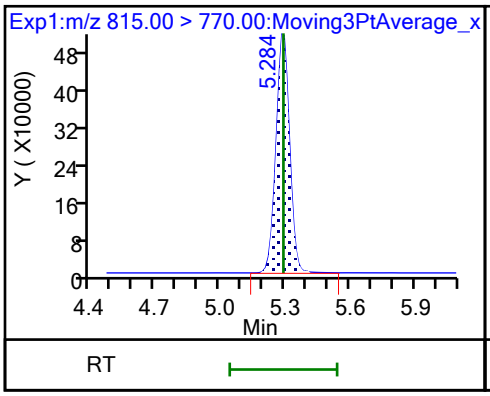
42 Perfluorotetradecanoic acid



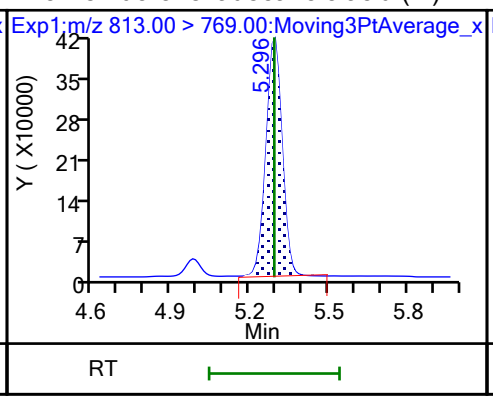
42 Perfluorotetradecanoic acid (M)



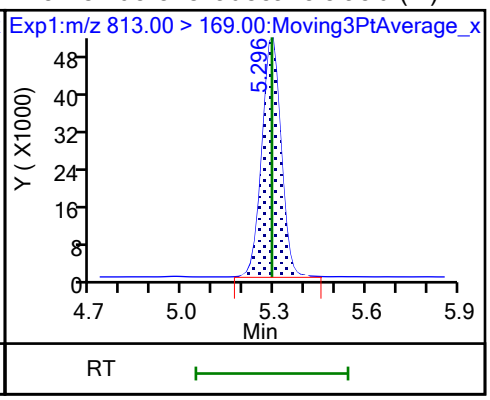
D 44 13C2 PFHxDA



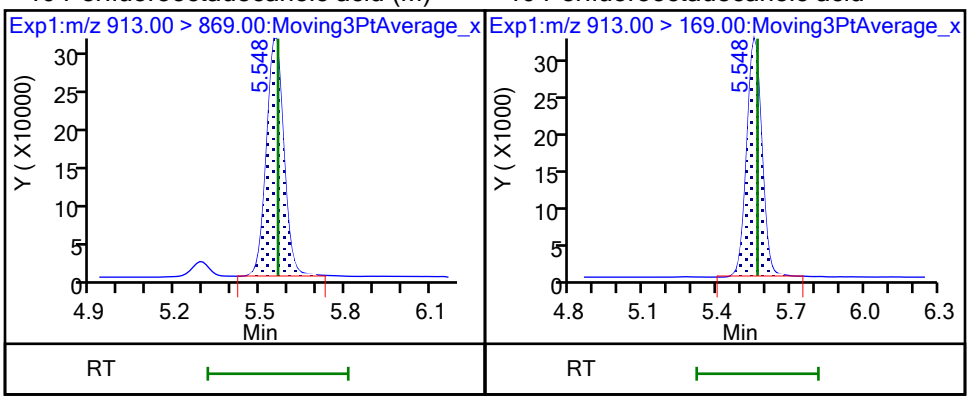
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/30 Calibration Date: 10/23/2023 19:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A30.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9116		2.48	2.50	-0.8	30.0
Perfluoropentanoic acid	AveID	1.079	1.075		2.49	2.50	-0.4	
Perfluorobutanesulfonic acid	AveID	1.117	1.094		2.17	2.22	-2.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.444		2.38	2.34	1.4	
Perfluorohexanoic acid	AveID	1.100	1.031		2.34	2.50	-6.3	
Perfluoropentanesulfonic acid	AveID	1.306	1.302		2.35	2.35	-0.3	
HFPODA	AveID	1.001	1.013		2.53	2.50	1.1	
Perfluoroheptanoic acid	AveID	1.121	1.093		2.44	2.50	-2.5	
Perfluorohexanesulfonic acid	AveID	1.107	1.033		2.13	2.29	-6.7	
DONA	AveID	5.754	5.340		2.19	2.36	-7.2	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.778		2.42	2.38	1.7	
Perfluoroheptanesulfonic acid	AveID	1.445	1.355		2.23	2.38	-6.2	
Perfluorooctanoic acid	AveID	1.065	1.025		2.41	2.50	-3.8	
Perfluorooctanesulfonic acid	AveID	1.166	1.066		2.12	2.32	-8.6	
Perfluorononanoic acid	AveID	0.9800	0.9537		2.43	2.50	-2.7	
9Cl-PF3ONS	AveID	3.569	3.639		2.38	2.33	2.0	
Perfluorononanesulfonic acid	AveID	0.8874	0.7903		2.14	2.41	-10.9	
Perfluorodecanoic acid	AveID	0.999	1.000		2.50	2.50	0.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.341		2.55	2.40	6.3	
Perfluorooctanesulfonamide	AveID	0.9539	1.018		2.67	2.50	6.7	
NMeFOSAA	AveID	0.9074	0.9023		2.49	2.50	-0.6	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6114		2.16	2.41	-10.5	
Perfluoroundecanoic acid	AveID	1.031	1.013		2.46	2.50	-1.7	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9697		2.42	2.50	-3.1	
11Cl-PF3OUdS	AveID	5.474	5.455		2.35	2.36	-0.3	
Perfluorododecanoic acid	AveID	1.018	0.9349		2.30	2.50	-8.1	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.458		2.67	2.41	10.8	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2232		2.33	2.42	-3.6	
Perfluorotridecanoic acid	AveID	1.070	1.032		2.41	2.50	-3.5	
Perfluorotetradecanoic acid	AveID	0.1118	0.1076		2.41	2.50	-3.8	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.996		2.49	2.50	-0.4	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7627		2.44	2.50	-2.3	
13C4 PFBA	Ave	0.9917	1.107		1.40	1.25	11.6	
13C5 PFPeA	Ave	0.7696	0.7714		1.25	1.25	0.2	
13C3 PFBS	Ave	1.041	1.068		1.19	1.16	2.5	
M2-4:2 FTS	Ave	0.1204	0.1127		1.09	1.17	-6.4	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/30 Calibration Date: 10/23/2023 19:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A30.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8068		1.29	1.25	3.0	
13C3 HFPO-DA	Ave	0.1516	0.1384		1.14	1.25	-8.7	
13C4 PFHpA	Ave	0.8590	0.9051		1.32	1.25	5.4	50.0
18O2 PFHxS	Ave	0.7464	0.7968		1.26	1.18	6.8	50.0
M2-6:2 FTS	Ave	0.1551	0.1493		1.14	1.19	-3.7	
13C4 PFOA	Ave	0.9731	1.018		1.31	1.25	4.7	50.0
13C4 PFOS	Ave	0.4742	0.5205		1.31	1.20	9.8	50.0
13C5 PFNA	Ave	1.059	1.174		1.39	1.25	10.9	50.0
13C2 PFDA	Ave	1.109	1.118		1.26	1.25	0.8	
M2-8:2 FTS	Ave	0.1744	0.1634		1.12	1.20	-6.3	
13C8 FOSA	Ave	0.9462	0.9359		1.24	1.25	-1.1	
d3-NMeFOSAA	Ave	0.2650	0.2780		1.31	1.25	4.9	
13C2 PFUnA	Ave	1.047	1.061		1.27	1.25	1.3	
d5-NEtFOSAA	Ave	0.2552	0.2668		1.31	1.25	4.5	
13C2 PFDoA	Ave	1.064	1.146		1.35	1.25	7.7	
13C2 PFTeDA	Ave	1.059	1.067		1.26	1.25	0.7	
13C2 PFHxDA	Ave	1.221	1.155		1.18	1.25	-5.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A30.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 23-Oct-2023 19:11:33 ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057509-030 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:40 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:12:58
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.129	2.122	0.007	0.606	2205631	1.39		112	1699	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.129	2.130	-0.001	1.000	4021362	2.48		99.2	414	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.438	2.439	-0.001	0.693	1537682	1.25		100	2070	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.451	2.453	-0.002	1.006	3306603	2.49		99.6	89.7	M
D 47 13C3 PFBS										
301.90 > 80.00	2.465	2.467	-0.002	0.701	1979475	1.19		103	143720	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.465	2.467	-0.002	1.000	4131940	2.17	Target=2.06	98.0	1486	M
298.90 > 99.00	2.465	2.467	-0.002	1.000	2047107		2.02(1.03-3.09)		598	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.755	2.760	-0.005	1.000	1450118	2.38		101	11970	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.755	2.760	-0.005	0.784	209860	1.09		93.6	145	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.792	2.797	-0.005	0.794	1608221	1.29		103	1975	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.792	2.797	-0.005	1.000	3317417	2.34	Target=14.12	93.7	589	M
313.00 > 119.00	2.792	2.797	-0.005	1.000	216613		15.31(7.06-21.17)		189	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.805	2.810	-0.005	0.888	3892983	2.35	Target=2.72	99.7	1393	M
349.00 > 99.00	2.805	2.810	-0.005	0.888	1390782		2.80(1.36-4.09)		1144	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.903	2.908	-0.005	1.000	558642	2.53		101	11788	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.903	2.908	-0.005	0.826	275822	1.14		91.3	1175	
D 11 18O2 PFHxS										
403.00 > 84.00	3.160	3.168	-0.008	0.899	1502541	1.26		107	5552	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.160	3.168	-0.008	1.000	2998797	2.13	Target=3.32	93.3	2817	M
399.00 > 99.00	3.160	3.168	-0.008	1.000	893912		3.35(1.66-4.98)		676	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.160	3.168	-0.008	1.000	3944718	2.44	Target=4.17	97.5	937	
363.00 > 169.00	3.160	3.168	-0.008	1.000	979410		4.03(2.09-6.26)		1798	
D 9 13C4 PFHpA										
367.00 > 322.00	3.160	3.168	-0.008	0.899	1804056	1.32		105	5858	
77 DONA										M
377.00 > 251.00	3.194	3.203	-0.009	0.835	10470426	2.19	Target=3.33	92.8	6506	M
377.00 > 85.00	3.194	3.203	-0.009	0.835	3003128		3.49(1.66-4.99)		4505	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.506	3.505	0.001	0.917	2680131	2.23	Target=4.83	93.8	5045	
449.00 > 99.00	3.506	3.505	0.001	0.917	550988		4.86(2.41-7.24)		1545	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.506	3.505	0.001	0.997	282714	1.14		96.3	601	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.506	3.514	-0.008	1.000	1572611	2.42		102	3734	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.515	3.514	0.001	1.000	4160999	2.41	Target=2.88	96.2	203	M
413.00 > 169.00	3.515	3.514	0.001	1.000	1536387		2.71(1.44-4.32)		1717	M
D 14 13C4 PFOA										
417.00 > 372.00	3.515	3.523	-0.008	1.000	2030041	1.31		105	6697	
* 62 13C2 PFOA										
415.00 > 370.00	3.515	3.523	-0.008		1993308	1.25			9269	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.822	0.002	1.000	2053163	2.12	Target=4.24	91.4	2199	M
499.00 > 99.00	3.824	3.822	0.002	1.000	461900		4.45(2.12-6.37)		1414	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.822	0.002	1.088	991817	1.31		110	2585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.847	3.845	0.002	1.003	4465264	2.43	Target=8.34	97.3	672	
463.00 > 169.00	3.836	3.845	-0.009	1.000	524553		8.51(4.17-12.51)		3394	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.845	-0.009	1.091	2341109	1.39		111	12723	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.976	3.983	-0.007	1.040	7045085	2.38		102	9374	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.108	4.105	0.003	1.074	1577485	2.14	Target=2.17	89.1	6179	
549.00 > 99.00	4.108	4.105	0.003	1.074	653065		2.42(1.08-3.25)		2434	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.132	4.129	0.003	1.000	4456929	2.50	Target=11.44	100	1363	M
513.00 > 169.00	4.132	4.129	0.003	1.000	391243		11.39(5.72-17.16)		2254	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.129	0.003	1.175	2227584	1.26		101	9080	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.141	0.003	1.179	311950	1.12		93.7	1126	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.141	0.003	1.000	1463358	2.55		106	3027	M
D 21 13C8 FOSA										
506.00 > 78.00	4.236	4.234	0.002	1.205	1865451	1.24		98.9	5046	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.236	4.234	0.002	1.000	3798718	2.67		107	4100	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.270	0.003	1.216	554086	1.31		105	2324	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.273	4.270	0.003	1.000	999925	2.49		99.4	1476	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.357	4.366	-0.009	1.139	1224113	2.16	Target=2.37	89.5	6922	
599.00 > 99.00	4.357	4.366	-0.009	1.139	476492		2.57(1.19-3.56)		3438	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.390	-0.009	1.246	2114235	1.27		101	11847	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.381	4.390	-0.009	1.000	4282420	2.46	Target=12.20	98.3	914	M
563.00 > 169.00	4.381	4.390	-0.009	1.000	378111		11.33(6.10-18.31)		2180	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.401	-0.008	1.250	531760	1.31		105	904	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.401	-0.008	1.000	1031265	2.42		96.9	1502	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.477	4.473	0.004	1.171	10672973	2.35		99.7	9873	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.310	2284140	1.35		108	8946	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.613	-0.008	1.000	4270928	2.30	Target=8.47	91.9	272	
613.00 > 169.00	4.605	4.613	-0.008	1.000	559768		7.63(4.23-12.70)		3288	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.616	4.624	-0.008	1.114	915163	2.67		111	6964	M
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.760	4.777	-0.017	1.245	448221	2.33	Target=0.48	96.4	5312	
699.00 > 99.00	4.760	4.777	-0.017	1.245	914126		0.49(0.24-0.72)		3341	M
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.798	4.806	-0.008	1.042	4714776	2.41	Target=6.41	96.5	263	
663.00 > 169.00	4.789	4.806	-0.017	1.040	730488		6.45(3.21-9.62)		4217	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.973	4.982	-0.009	1.415	2126308	1.26		101	5043	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.973	4.982	-0.009	1.000	457585	2.41	Target=0.87	96.2	3316	
713.00 > 219.00	4.962	4.982	-0.020	0.998	521275		0.88(0.43-1.30)		4382	

Report Date: 25-Oct-2023 15:13:41 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A30.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.269	5.292	-0.023	1.499	2303207	1.18		94.7	6970	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.269	5.292	-0.023	1.000	4589241	2.49	Target=7.89	99.6	284	M
813.00 > 169.00	5.269	5.292	-0.023	1.000	576580		7.96(3.94-11.83)		4638	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.527	5.563	-0.036	1.049	3513432	2.44	Target=9.39	97.7	352	M
913.00 > 169.00	5.518	5.563	-0.045	1.047	372204		9.44(4.69-14.08)		1489	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

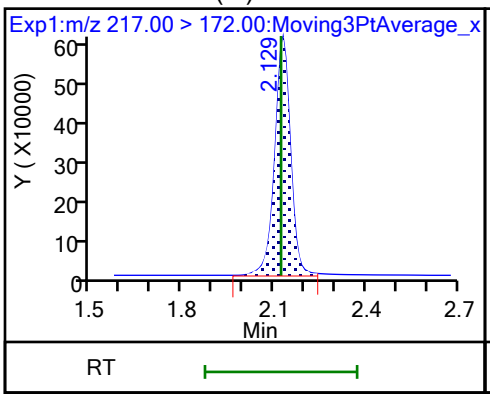
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:13:41 Chrom Revision: 2.3 18-Oct-2023 21:16:54

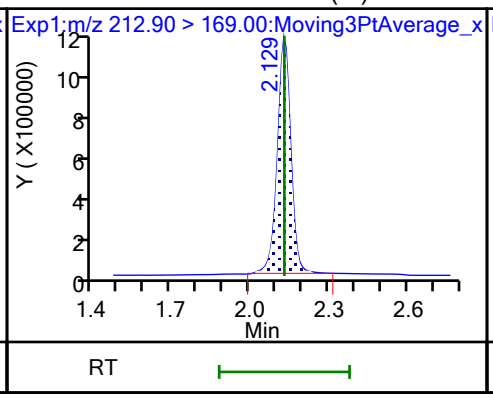
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A30.d
Injection Date: 23-Oct-2023 19:11:33 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

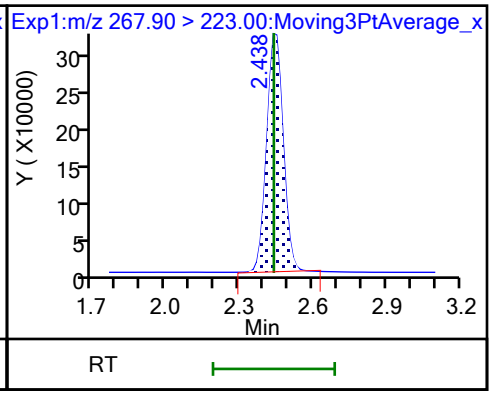
D 1 13C4 PFBA (M)



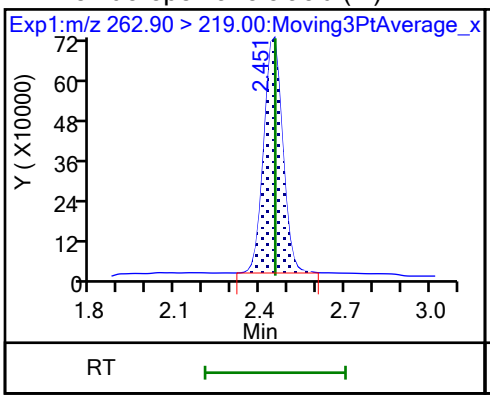
2 Perfluorobutanoic acid (M)



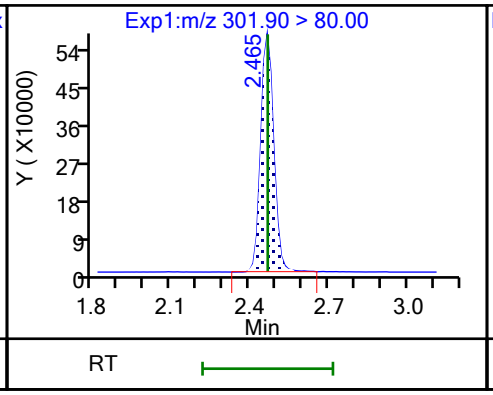
D 3 13C5 PFPeA



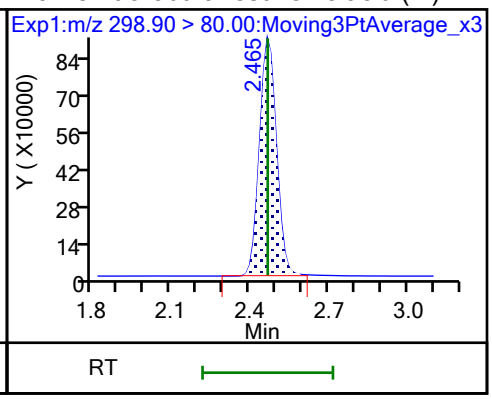
4 Perfluoropentanoic acid (M)



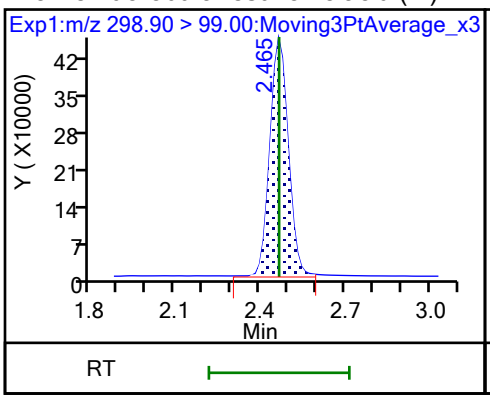
D 47 13C3 PFBS



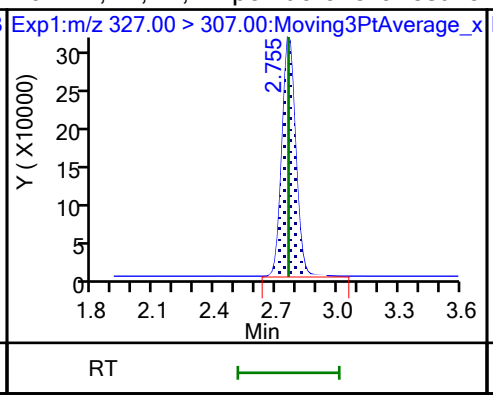
5 Perfluorobutanesulfonic acid (M)



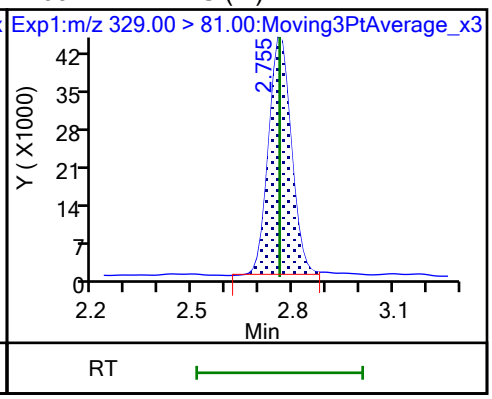
5 Perfluorobutanesulfonic acid (M)



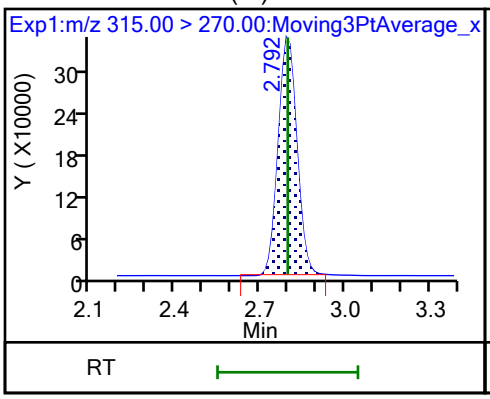
61 1H,1H,2H,2H-perfluorohexanesulfo



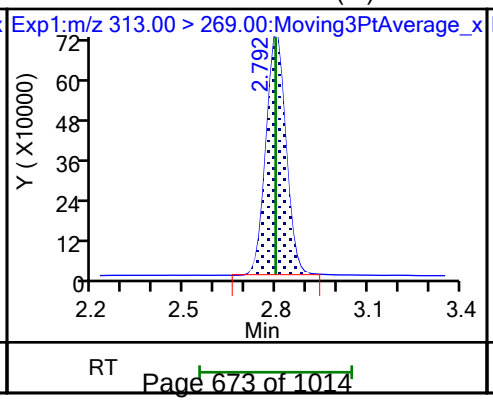
D 60 M2-4:2 FTS (M)



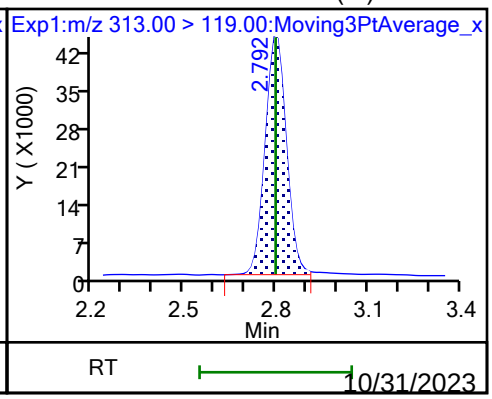
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

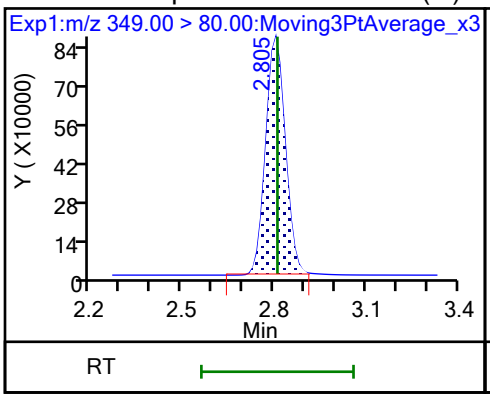


6 Perfluorohexanoic acid (M)

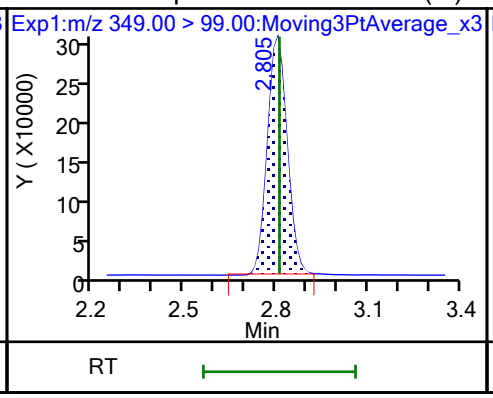


10/31/2023
4:00 PM

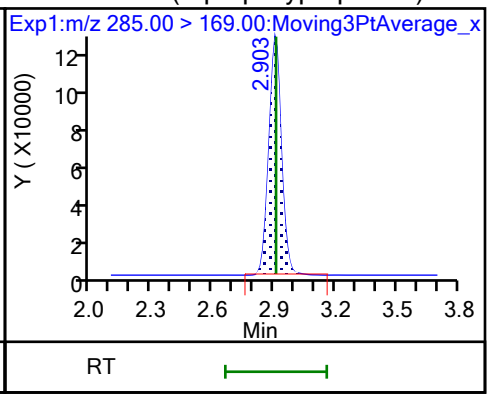
70 Perfluoropentanesulfonic acid (M)



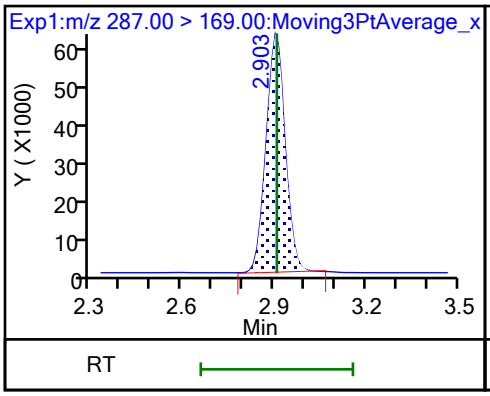
70 Perfluoropentanesulfonic acid (M)



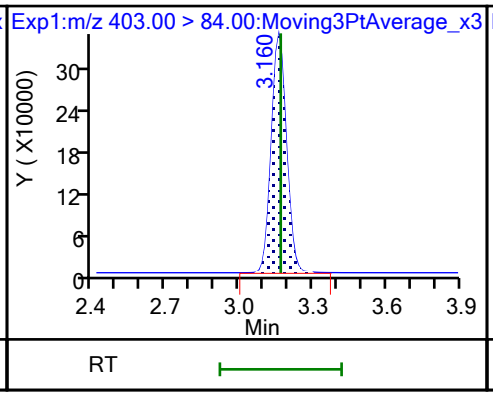
67 Perfluoro(2-propoxypropanoic) ac



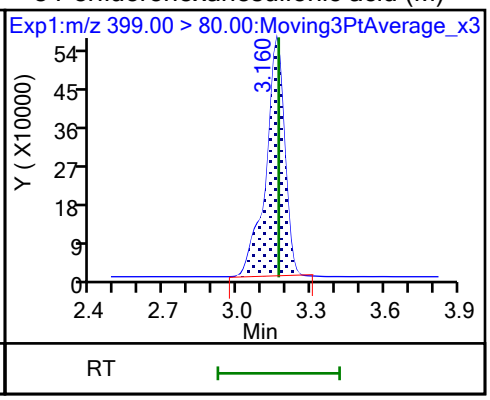
D 64 13C3 HFPO-DA



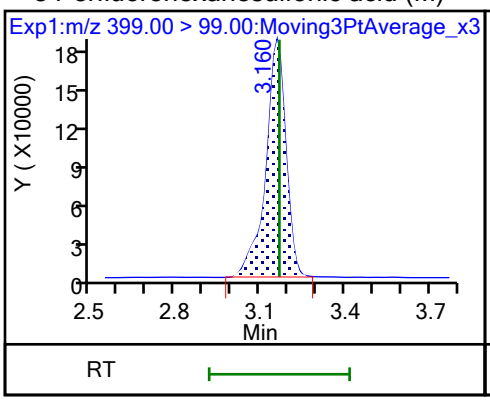
D 11 18O2 PFHxS



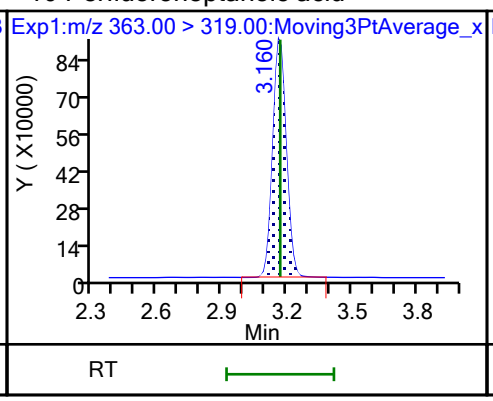
8 Perfluorohexanesulfonic acid (M)



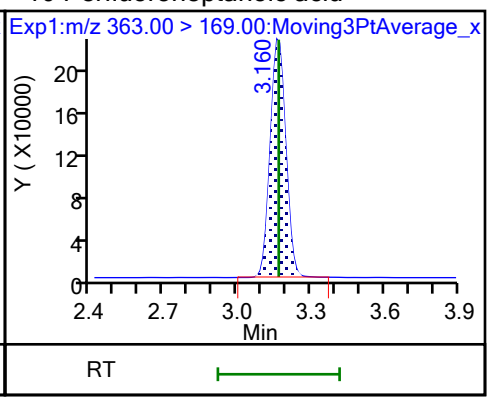
8 Perfluorohexanesulfonic acid (M)



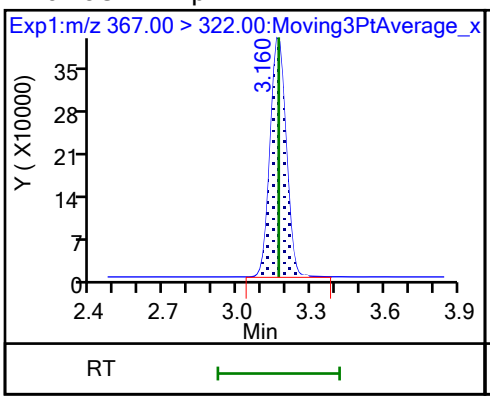
10 Perfluoroheptanoic acid



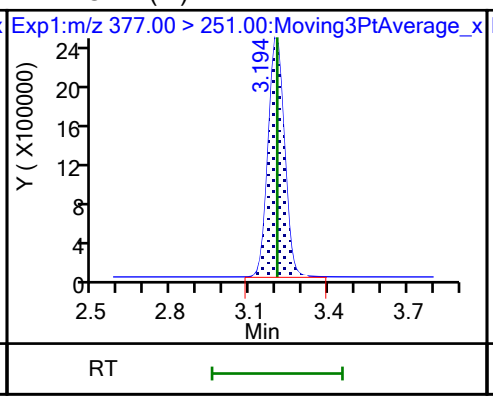
10 Perfluoroheptanoic acid



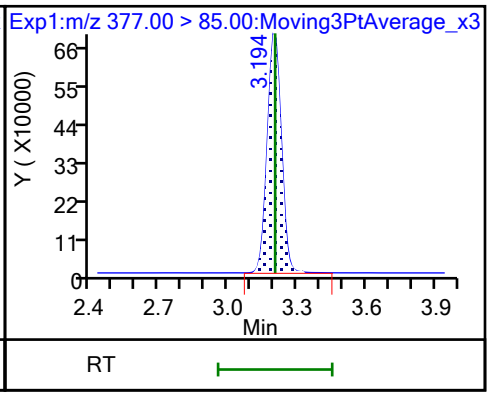
D 9 13C4 PFHpA



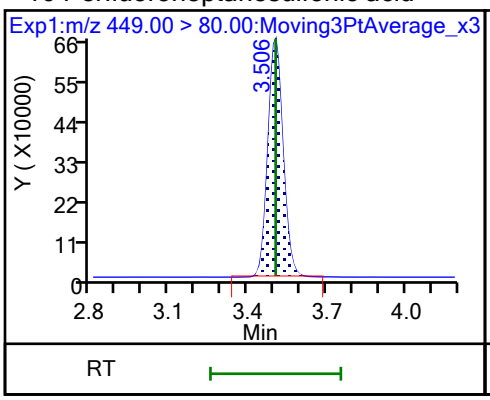
77 DONA (M)



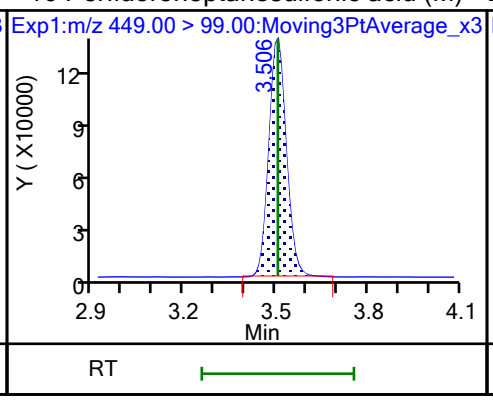
77 DONA



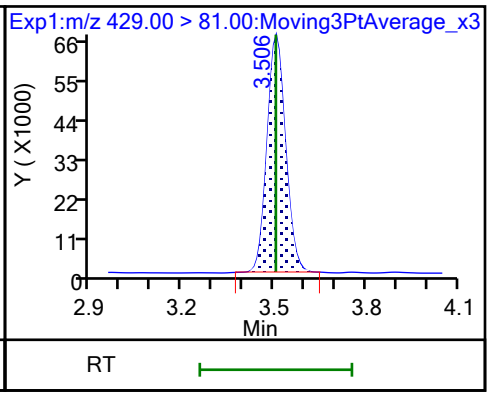
16 Perfluoroheptanesulfonic acid



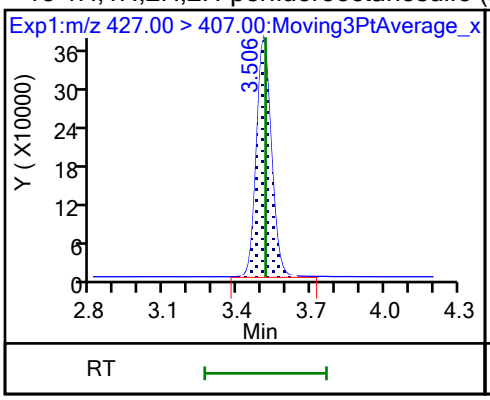
16 Perfluoroheptanesulfonic acid (M)



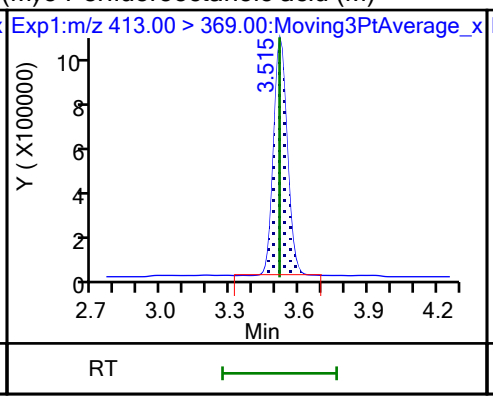
D 12 M2-6:2 FTS



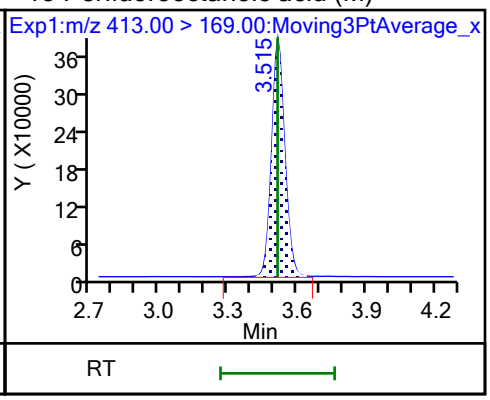
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



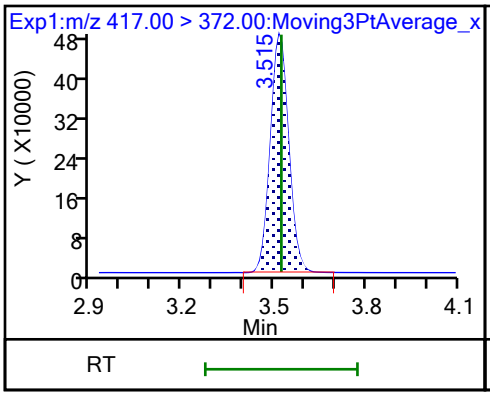
15 Perfluorooctanoic acid (M)



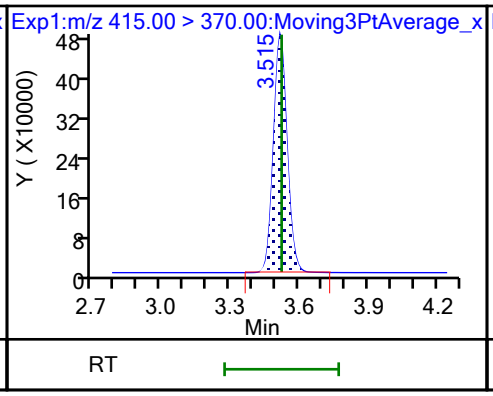
15 Perfluorooctanoic acid (M)



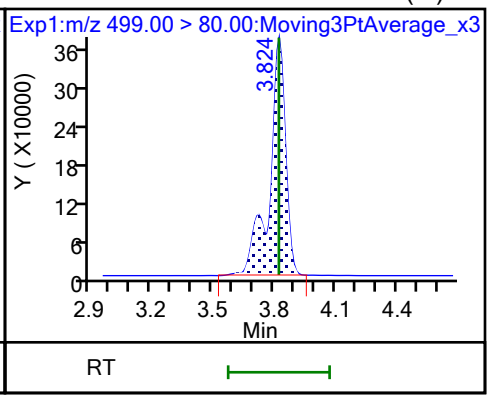
D 14 13C4 PFOA



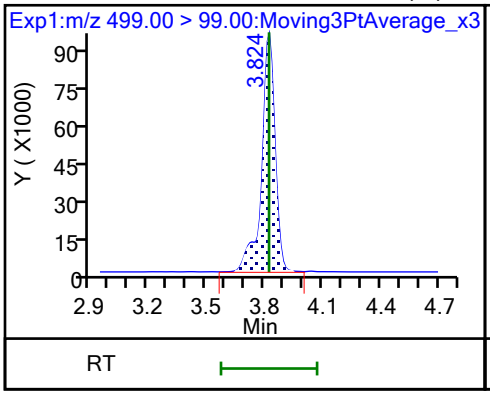
* 62 13C2 PFOA



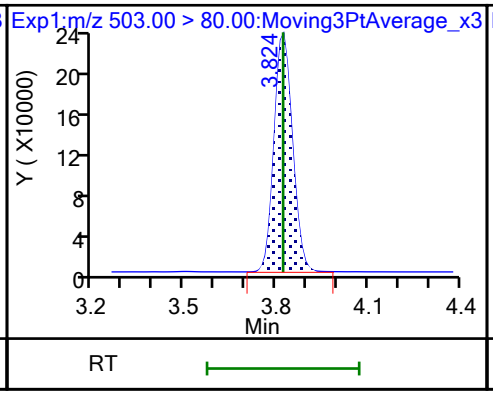
17 Perfluorooctanesulfonic acid (M)



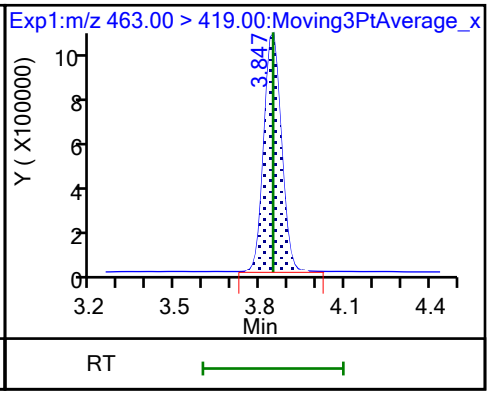
17 Perfluorooctanesulfonic acid (M)



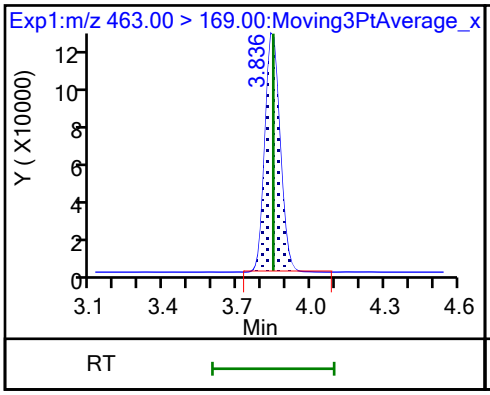
D 18 13C4 PFOS



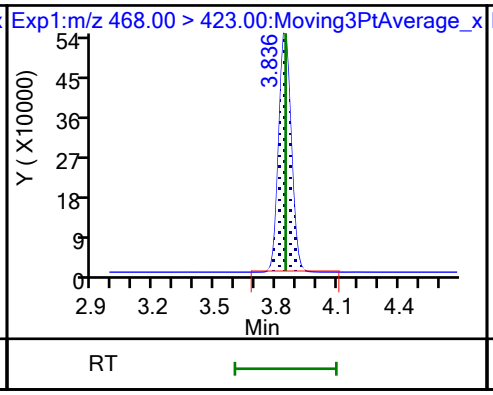
20 Perfluorononanoic acid



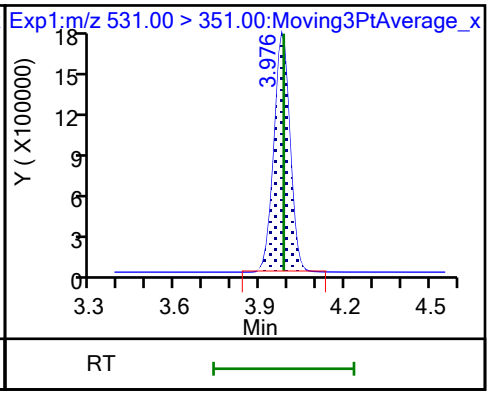
20 Perfluorononanoic acid



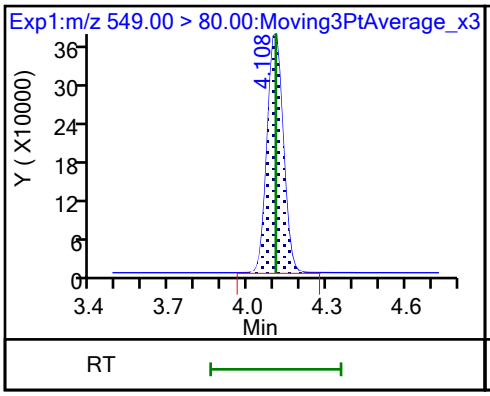
D 19 13C5 PFNA



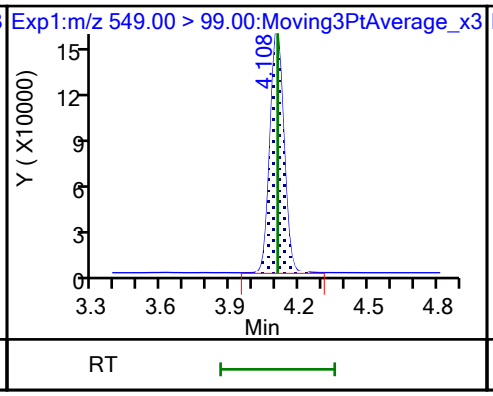
69 9-Chlorohexadecafluoro-3-oxanona (M)



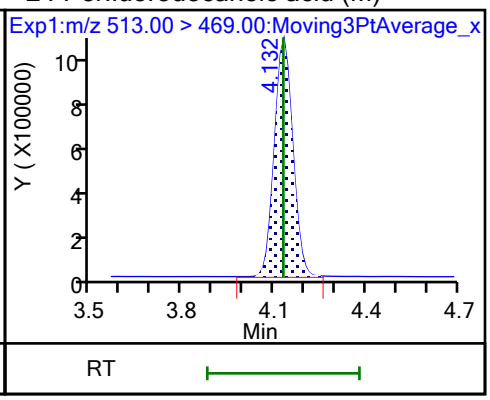
68 Perfluorononanesulfonic acid



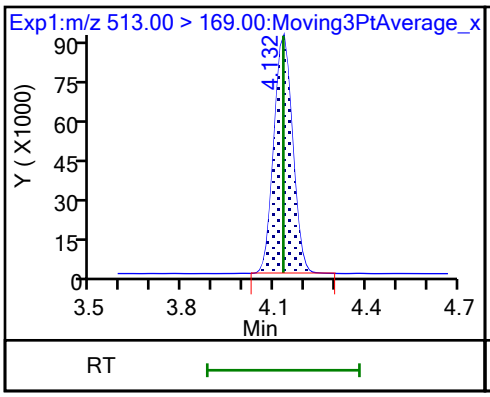
68 Perfluorononanesulfonic acid



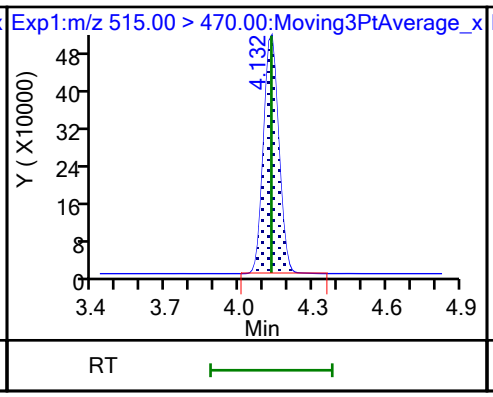
24 Perfluorodecanoic acid (M)



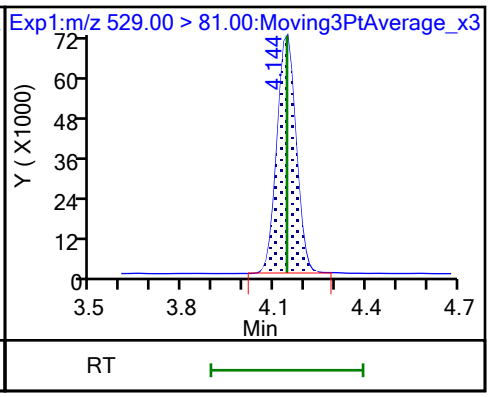
24 Perfluorodecanoic acid



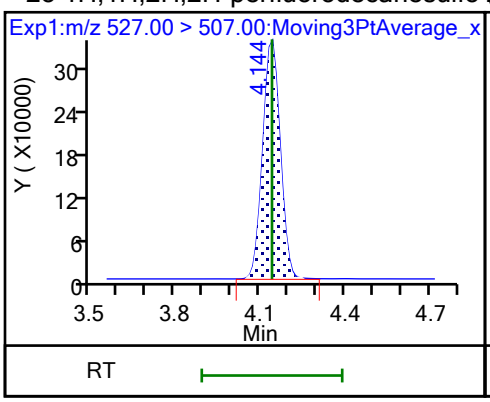
D 23 13C2 PFDA



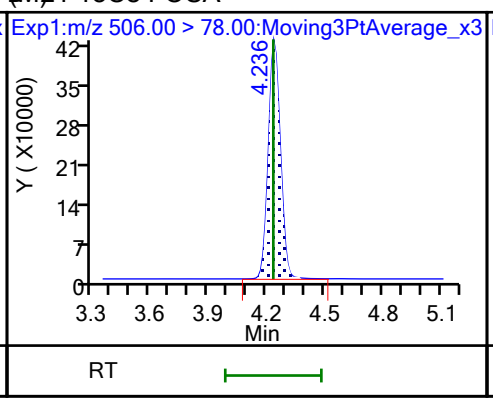
D 26 M2-8:2 FTS



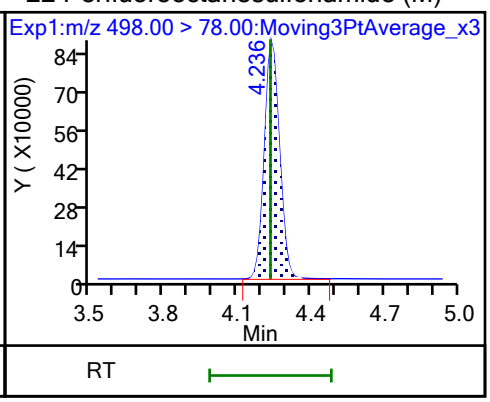
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



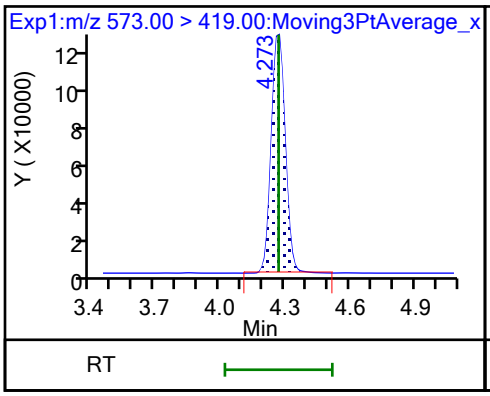
D 21 13C8 FOSA



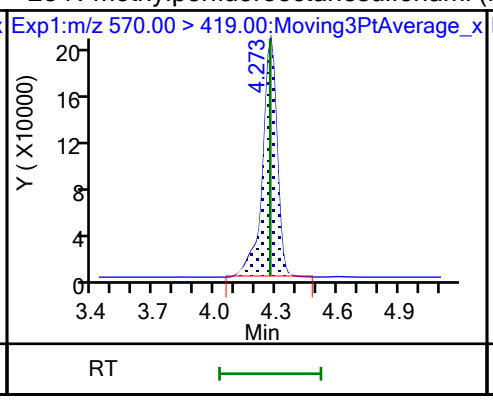
22 Perfluorooctanesulfonamide (M)



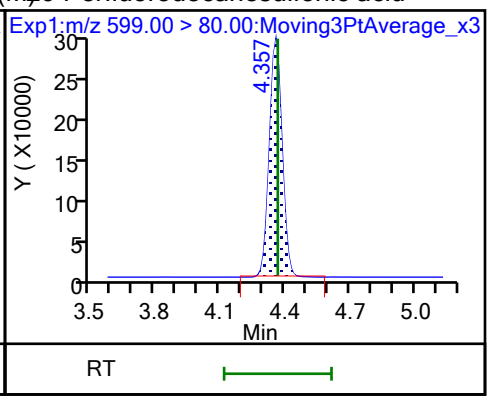
D 27 d3-NMeFOSAA



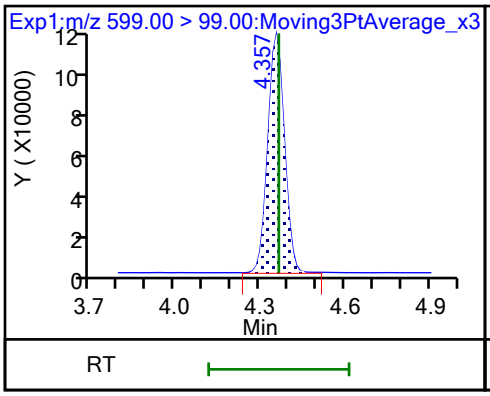
28 N-methylperfluorooctanesulfonami (M)



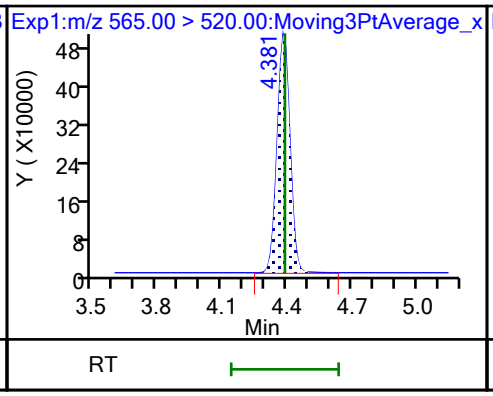
29 Perfluorodecanesulfonic acid



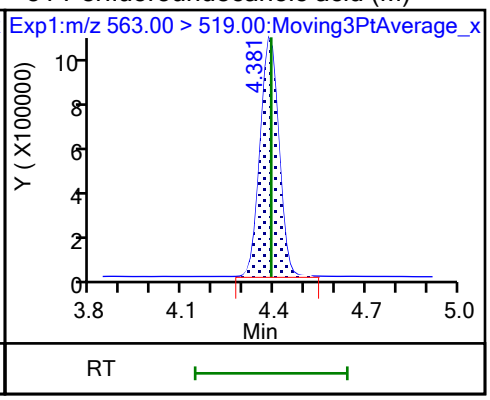
29 Perfluorodecanesulfonic acid



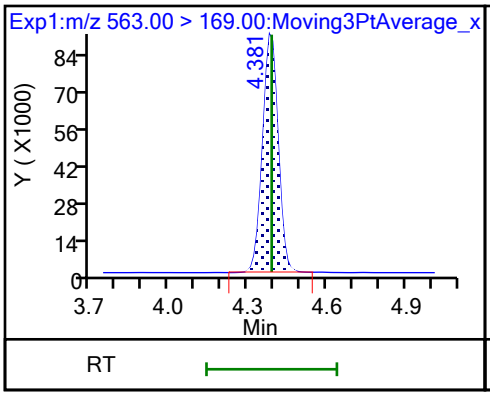
D 30 13C2 PFUnA



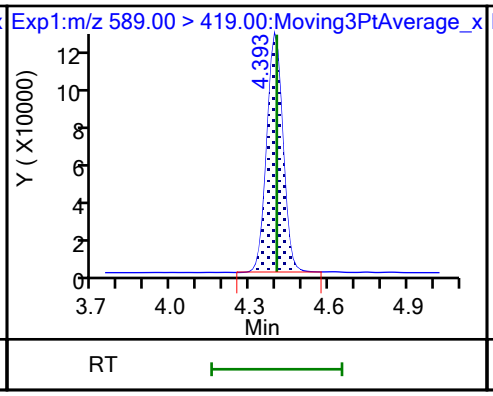
31 Perfluoroundecanoic acid (M)



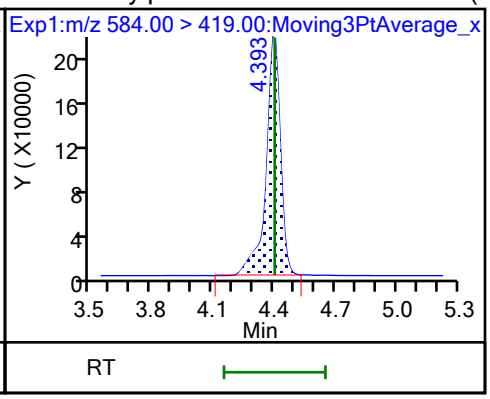
31 Perfluoroundecanoic acid



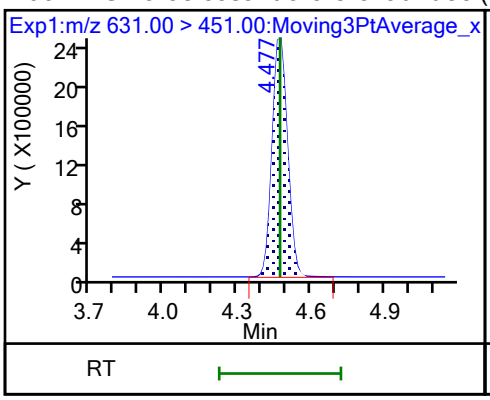
D 32 d5-NEtFOSAA



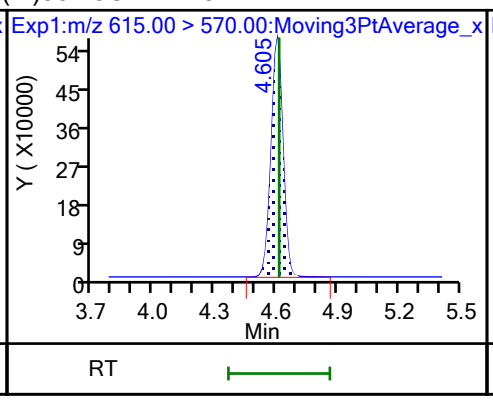
33 N-ethylperfluorooctanesulfonamid (M)



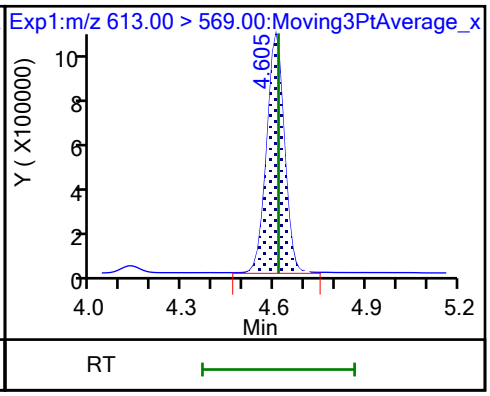
66 11-Chloroeicosafluoro-3-oxaundec (M)



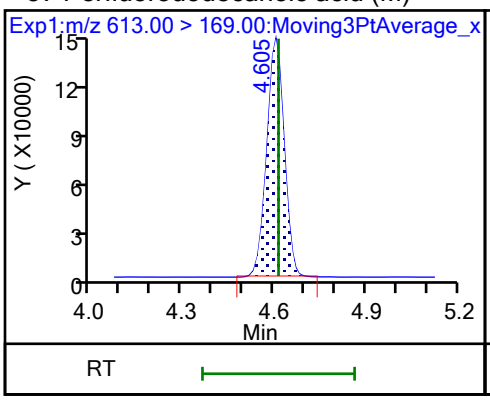
D 36 13C2 PFDoA



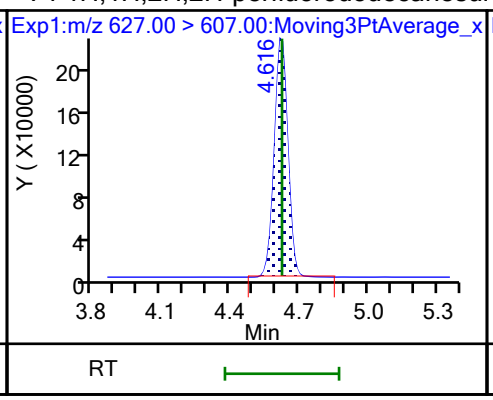
37 Perfluorododecanoic acid



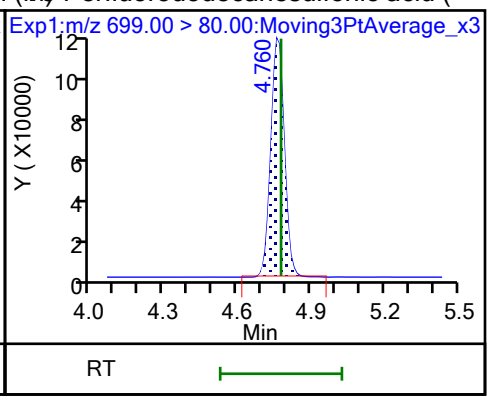
37 Perfluorododecanoic acid (M)



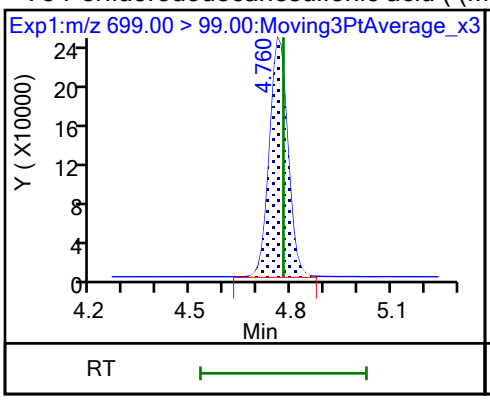
74 1H,1H,2H,2H-perfluorododecanesul (M)



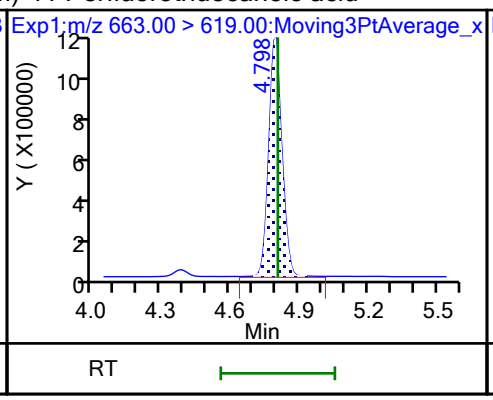
75 Perfluorododecanesulfonic acid (



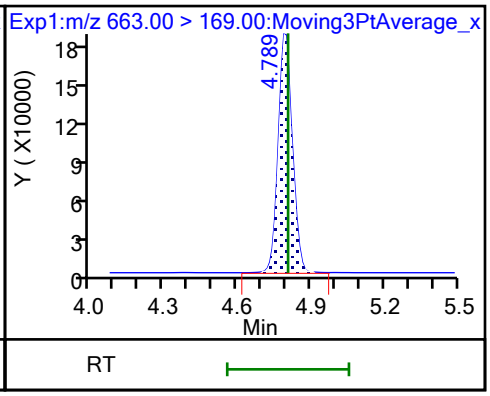
75 Perfluorododecanesulfonic acid ((M)



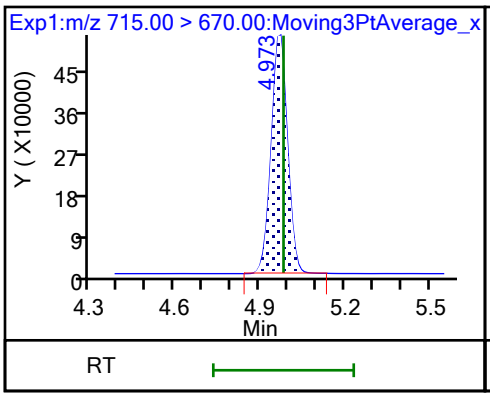
41 Perfluorotridecanoic acid



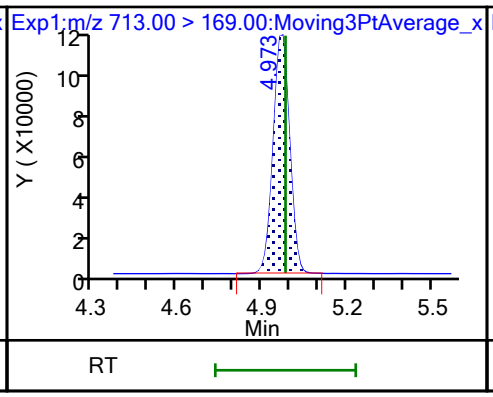
41 Perfluorotridecanoic acid



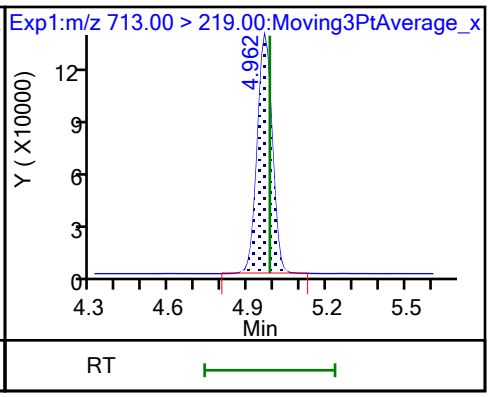
D 43 13C2 PFTeDA



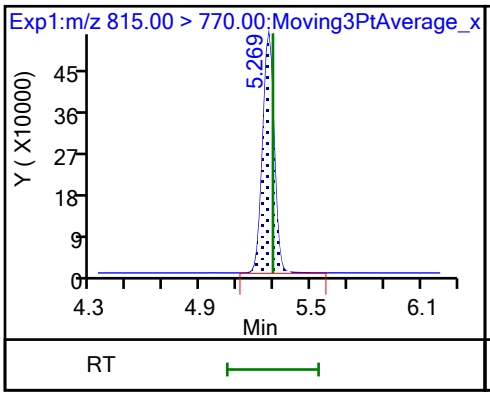
42 Perfluorotetradecanoic acid



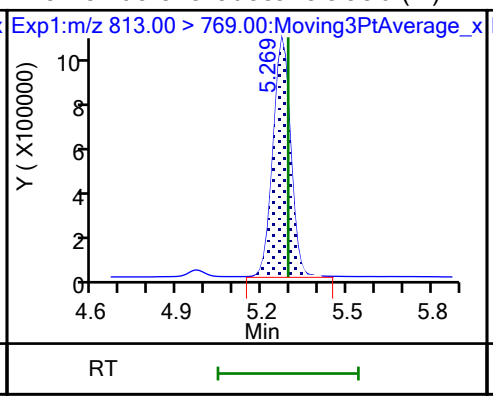
42 Perfluorotetradecanoic acid



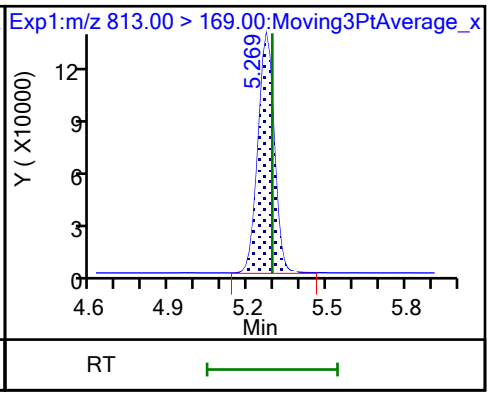
D 44 13C2 PFHxDA



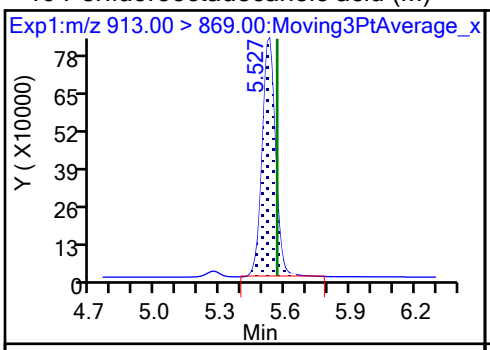
45 Perfluorohexadecanoic acid (M)



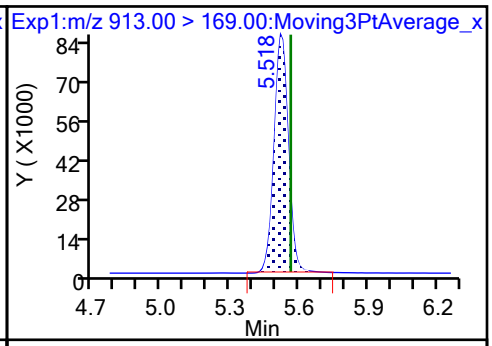
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/33 Calibration Date: 10/23/2023 19:36

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A33.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8828		0.935	1.00	-6.5	30.0
Perfluoropentanoic acid	AveID	1.079	1.017		0.943	1.00	-5.7	
Perfluorobutanesulfonic acid	AveID	1.117	1.046		0.831	0.887	-6.3	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.234		0.892	0.937	-4.8	
Perfluorohexanoic acid	AveID	1.100	0.9268		0.842	1.00	-15.8	
Perfluoropentanesulfonic acid	AveID	1.306	1.242		0.895	0.941	-4.9	
HFPODA	AveID	1.001	0.9598		0.959	1.00	-4.1	
Perfluoroheptanoic acid	AveID	1.121	1.010		0.901	1.00	-9.9	
Perfluorohexanesulfonic acid	AveID	1.107	1.002		0.828	0.914	-9.5	
DONA	AveID	5.754	5.440		0.893	0.945	-5.5	
Perfluoroheptanesulfonic acid	AveID	1.445	1.374		0.906	0.953	-4.9	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.748		0.956	0.951	0.6	
Perfluorooctanoic acid	AveID	1.065	0.9183		0.862	1.00	-13.8	
Perfluorooctanesulfonic acid	AveID	1.166	1.092		0.869	0.928	-6.3	
Perfluorononanoic acid	AveID	0.9800	1.087		1.11	1.00	10.9	
9Cl-PF3ONS	AveID	3.569	3.640		0.952	0.933	2.0	
Perfluorononanesulfonic acid	AveID	0.8874	0.7784		0.844	0.962	-12.3	
Perfluorodecanoic acid	AveID	0.999	1.000		1.00	1.00	0.0	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.362		1.03	0.960	7.3	
Perfluorooctanesulfonamide	AveID	0.9539	0.9427		0.988	1.00	-1.2	
NMeFOSAA	AveID	0.9074	0.8693		0.958	1.00	-4.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6305		0.891	0.965	-7.7	
Perfluoroundecanoic acid	AveID	1.031	0.9872		0.958	1.00	-4.2	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9807		0.980	1.00	-2.0	
11Cl-PF3OUdS	AveID	5.474	5.331		0.918	0.943	-2.6	
Perfluorododecanoic acid	AveID	1.018	0.9448		0.928	1.00	-7.2	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.444		1.06	0.964	9.7	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2248		0.940	0.968	-2.9	
Perfluorotridecanoic acid	AveID	1.070	1.035		0.968	1.00	-3.2	
Perfluorotetradecanoic acid	AveID	0.1118	0.1045		0.935	1.00	-6.5	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9946		0.995	1.00	-0.5	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7062		0.904	1.00	-9.6	
13C4 PFBA	Ave	0.9917	1.061		1.34	1.25	7.0	
13C5 PFPeA	Ave	0.7696	0.7372		1.20	1.25	-4.2	
13C3 PFBS	Ave	1.041	1.042		1.16	1.16	0.0	
M2-4:2 FTS	Ave	0.1204	0.1148		1.11	1.17	-4.7	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196686/33 Calibration Date: 10/23/2023 19:36

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A33.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8396		1.34	1.25	7.2	
13C3 HFPO-DA	Ave	0.1516	0.1310		1.08	1.25	-13.6	
13C4 PFHpA	Ave	0.8590	0.9060		1.32	1.25	5.5	50.0
18O2 PFHxS	Ave	0.7464	0.7877		1.25	1.18	5.5	50.0
M2-6:2 FTS	Ave	0.1551	0.1481		1.13	1.19	-4.5	
13C4 PFOA	Ave	0.9731	1.059		1.36	1.25	8.8	50.0
13C4 PFOS	Ave	0.4742	0.4936		1.24	1.20	4.1	50.0
13C5 PFNA	Ave	1.059	1.002		1.18	1.25	-5.4	50.0
13C2 PFDA	Ave	1.109	1.142		1.29	1.25	3.0	
M2-8:2 FTS	Ave	0.1744	0.1522		1.05	1.20	-12.7	
13C8 FOSA	Ave	0.9462	0.9474		1.25	1.25	0.1	
d3-NMeFOSAA	Ave	0.2650	0.2663		1.26	1.25	0.5	
13C2 PFUnA	Ave	1.047	1.073		1.28	1.25	2.6	
d5-NEtFOSAA	Ave	0.2552	0.2520		1.23	1.25	-1.2	
13C2 PFDoA	Ave	1.064	1.103		1.30	1.25	3.7	
13C2 PFTeDA	Ave	1.059	1.049		1.24	1.25	-1.0	
13C2 PFHxDA	Ave	1.221	1.117		1.14	1.25	-8.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A33.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 23-Oct-2023 19:36:04 ALS Bottle#: 30 Worklist Smp#: 33
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057509-033 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:13:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:28:04
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2131992	1.34		107	1657	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1505720	0.9354		93.5	154	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1481747	1.20		95.8	2290	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.453	-0.014	1.000	1205682	0.9425		94.3	31.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1948358	1.16		100	81902	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	1555533	0.8310	Target=2.06	93.7	728	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	791776		1.96(1.03-3.09)		280	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	559181	0.8923		95.2	1046	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	215443	1.11		95.3	145	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1687509	1.34		107	1757	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1251183	0.8422	Target=14.12	84.2	246	M
313.00 > 119.00	2.797	2.797	0.0	1.000	90166		13.88(7.06-21.17)		91.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1479971	0.8947	Target=2.72	95.1	1344	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	508403		2.91(1.36-4.09)		668	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	202115	0.9587		95.9	2140	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	263226	1.08		86.4	2416	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1497768	1.25		106	12129	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1160401	0.8276	Target=3.32	90.5	2210	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	348806		3.33(1.66-4.98)		299	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	1470854	0.9008	Target=4.17	90.1	312	
363.00 > 169.00	3.165	3.168	-0.003	1.000	350010		4.20(2.09-6.26)		611	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1820982	1.32		105	6082	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.838	4079931	0.8934	Target=3.33	94.5	5196	
377.00 > 85.00	3.199	3.203	-0.004	0.838	1116278		3.65(1.66-4.99)		1771	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.917	1039191	0.9060	Target=4.83	95.1	2531	
449.00 > 99.00	3.502	3.505	-0.003	0.917	208745		4.98(2.41-7.24)		689	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.995	282865	1.13		95.5	530	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.003	622585	0.9563		101	992	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.003	1563183	0.8621	Target=2.88	86.2	75.7	
413.00 > 169.00	3.520	3.514	0.006	1.003	565490		2.76(1.44-4.32)		1038	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	0.997	2127855	1.36		109	5879	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2009994	1.25			5460	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.822	-0.003	1.000	804618	0.8691	Target=4.24	93.7	1124	M
499.00 > 99.00	3.819	3.822	-0.003	1.000	172308		4.67(2.12-6.37)		548	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.822	-0.003	1.085	948439	1.24		104	2840	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	1751562	1.11	Target=8.34	111	307	
463.00 > 169.00	3.842	3.845	-0.003	1.000	184611		9.49(4.17-12.51)		1052	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2013945	1.18		94.6	6403	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.042	2695624	0.9516		102	9778	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.105	-0.005	1.074	594292	0.8438	Target=2.17	87.7	5143	
549.00 > 99.00	4.100	4.105	-0.005	1.074	248813		2.39(1.08-3.25)		864	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.124	4.129	-0.005	1.000	1836635	1.00	Target=11.44	100	545	
513.00 > 169.00	4.136	4.129	0.007	1.003	149541		12.28(5.72-17.16)		950	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.129	-0.005	1.172	2296298	1.29		103	6104	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.175	293019	1.04		87.3	952	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.136	4.141	-0.005	1.000	554948	1.03		107	6756	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1904197	1.25		100	5237	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1436042	0.9883		98.8	4190	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.266	4.270	-0.004	1.212	535178	1.26		100	1594	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.270	-0.004	1.000	372202	0.9580		95.8	545	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.366	-0.003	1.142	482899	0.8909	Target=2.37	92.3	2587	
599.00 > 99.00	4.351	4.366	-0.015	1.139	180028		2.68(1.19-3.56)		1238	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2157717	1.28		103	9153	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1704019	0.9578	Target=12.20	95.8	438	
563.00 > 169.00	4.387	4.390	-0.003	1.000	148414		11.48(6.10-18.31)		1347	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	506503	1.23		98.8	1164	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.401	-0.002	1.000	397374	0.9805		98.0	833	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.473	-0.005	1.170	3989690	0.9184		97.4	5301	
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.613	-0.014	1.307	2216917	1.30		104	7434	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.002	1675634	0.9283	Target=8.47	92.8	105	M
613.00 > 169.00	4.610	4.613	-0.003	1.002	204285		8.20(4.23-12.70)		1909	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.624	-0.003	1.117	340554	1.06		110	4129	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.764	4.777	-0.013	1.248	172708	0.9401	Target=0.48	97.1	1783	
699.00 > 99.00	4.764	4.777	-0.013	1.248	342969		0.50(0.24-0.72)		2527	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.806	-0.003	1.044	1836365	0.9679	Target=6.41	96.8	112	M
663.00 > 169.00	4.803	4.806	-0.003	1.044	275728		6.66(3.21-9.62)		1830	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	2107940	1.24		99.0	5497	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.982	-0.003	1.000	176209	0.9345	Target=0.87	93.5	2736	
713.00 > 219.00	4.969	4.982	-0.013	0.998	199472		0.88(0.43-1.30)		2596	

Report Date: 25-Oct-2023 15:13:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A33.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.284	5.292	-0.008	1.501	2244540	1.14		91.5	5672	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.284	5.292	-0.008	1.000	1786011	0.99	Target=7.89	99.5	113	M
813.00 > 169.00	5.284	5.292	-0.008	1.000	218180		8.19(3.94-11.83)		2056	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.548	5.563	-0.015	1.050	1267993	0.9043	Target=9.39	90.4	142	M
913.00 > 169.00	5.548	5.563	-0.015	1.050	133771		9.48(4.69-14.08)		934	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

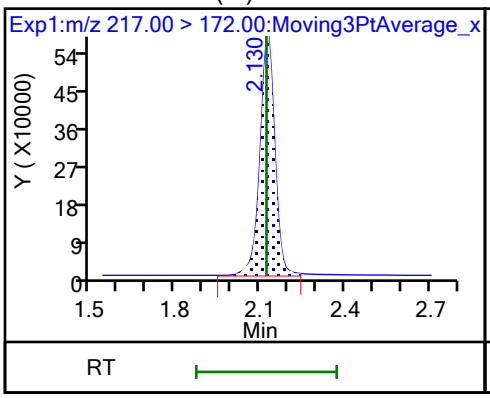
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:13:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

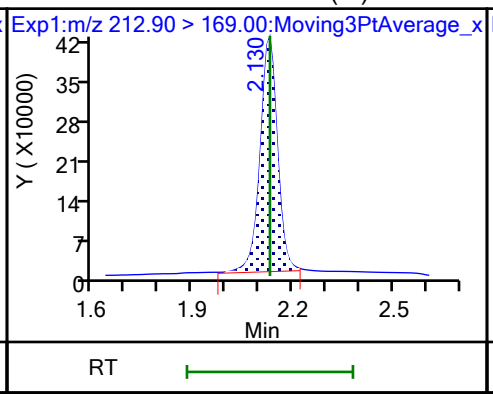
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A33.d
Injection Date: 23-Oct-2023 19:36:04 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 30 Worklist Smp#: 33
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

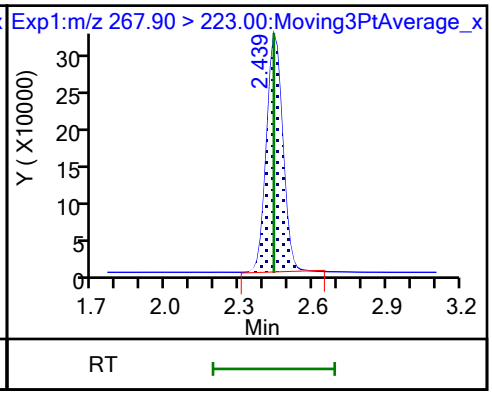
D 1 13C4 PFBA (M)



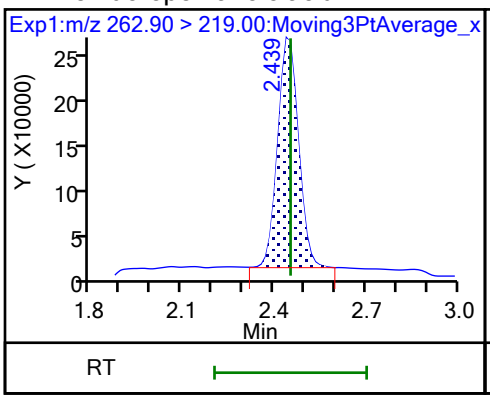
2 Perfluorobutanoic acid (M)



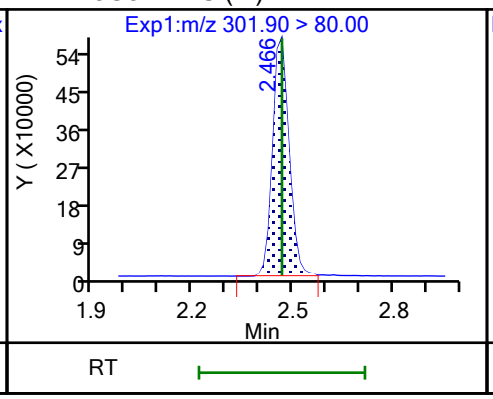
D 3 13C5 PFPeA



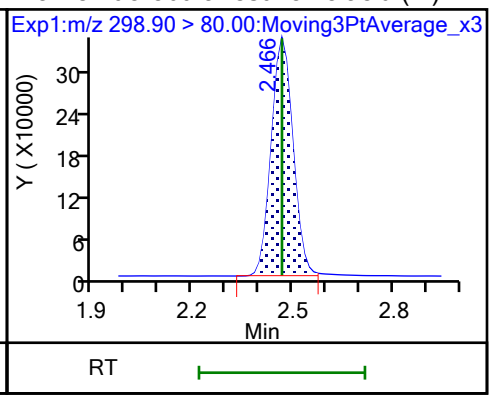
4 Perfluoropentanoic acid



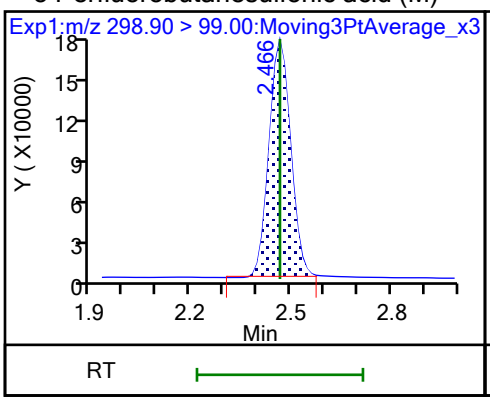
D 47 13C3 PFBS (M)



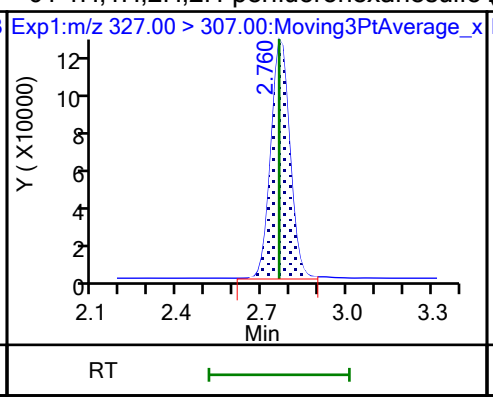
5 Perfluorobutanesulfonic acid (M)



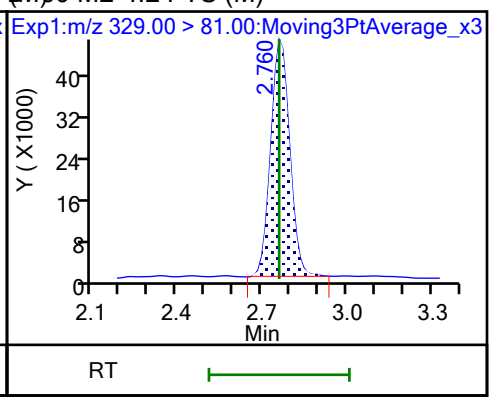
5 Perfluorobutanesulfonic acid (M)



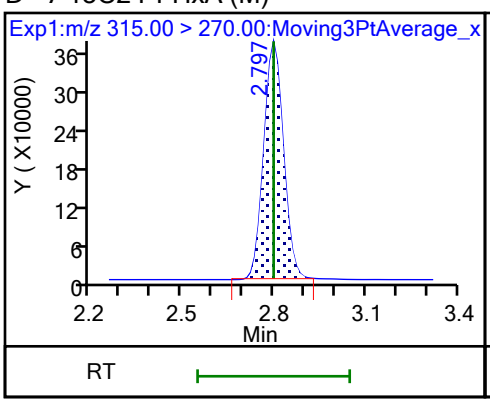
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



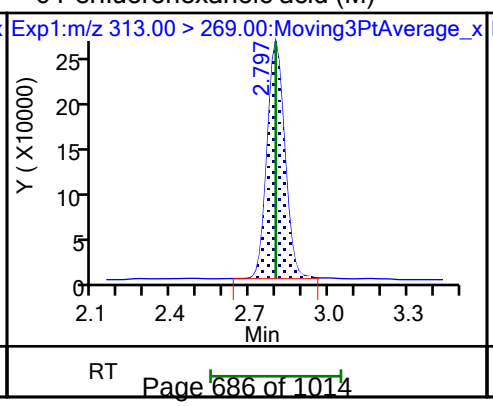
60 M2-4:2 FTS (M)



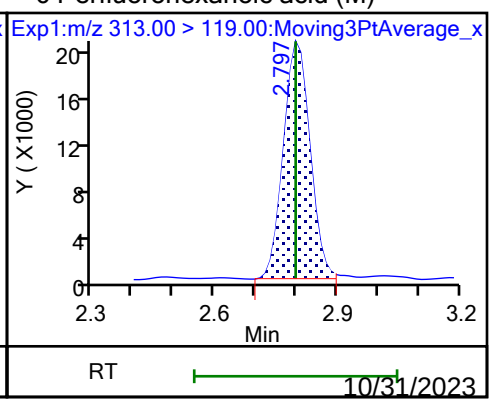
D 7 13C2 PFHxA (M)



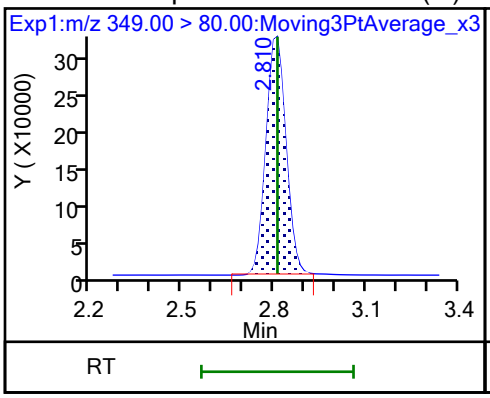
6 Perfluorohexanoic acid (M)



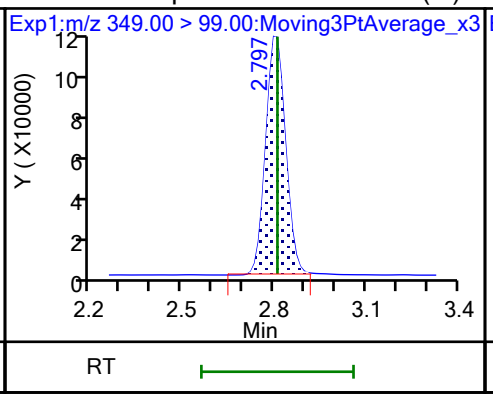
6 Perfluorohexanoic acid (M)



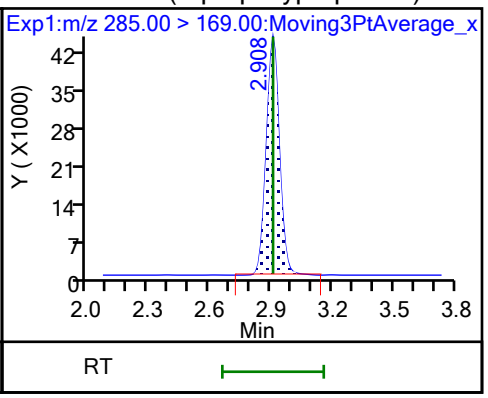
70 Perfluoropentanesulfonic acid (M)



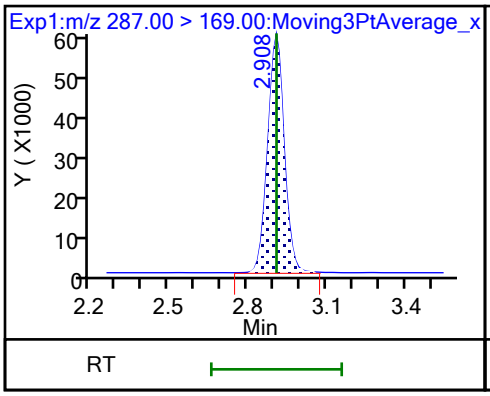
70 Perfluoropentanesulfonic acid (M)



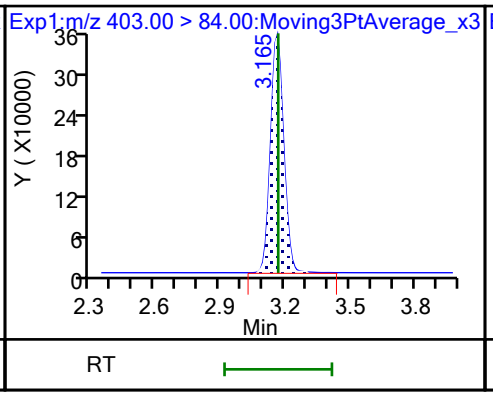
67 Perfluoro(2-propoxypropanoic) ac



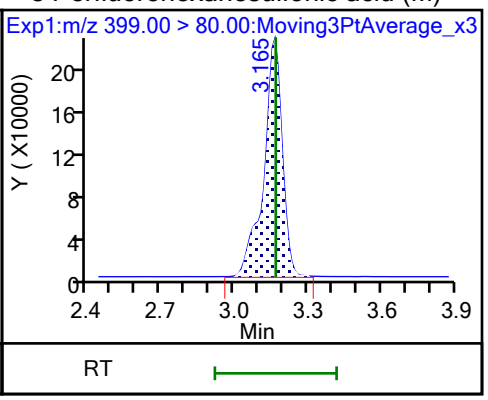
D 64 13C3 HFPO-DA



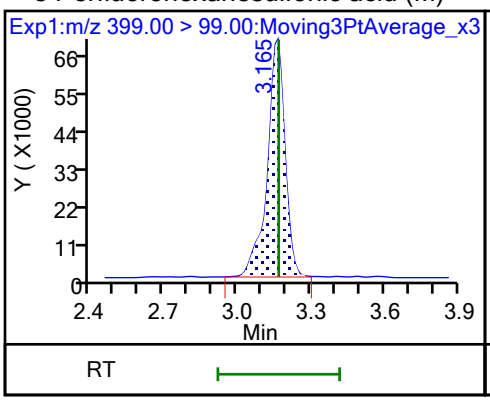
D 11 18O2 PFHxS



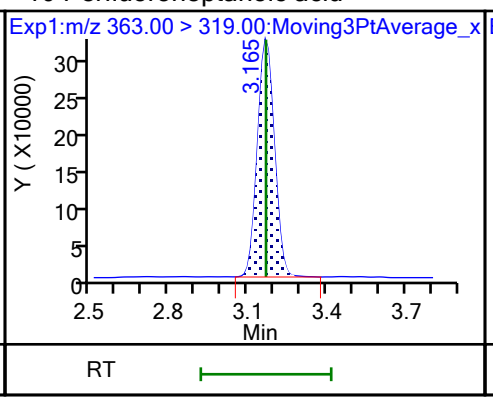
8 Perfluorohexanesulfonic acid (M)



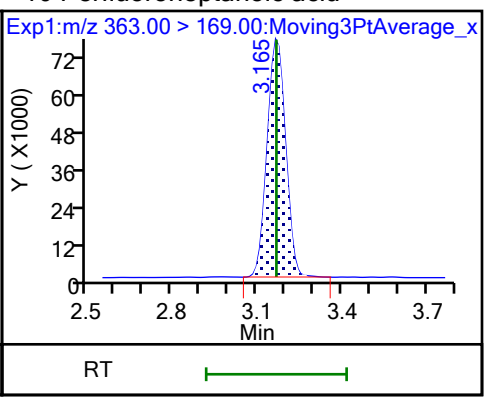
8 Perfluorohexanesulfonic acid (M)



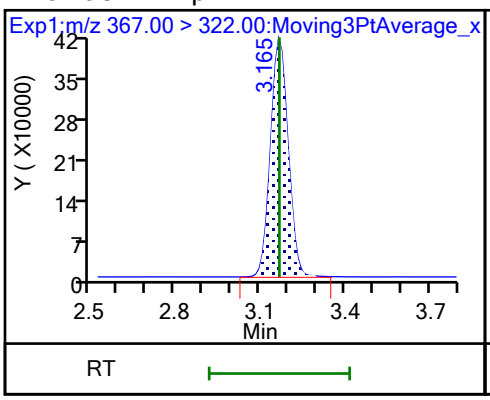
10 Perfluoroheptanoic acid



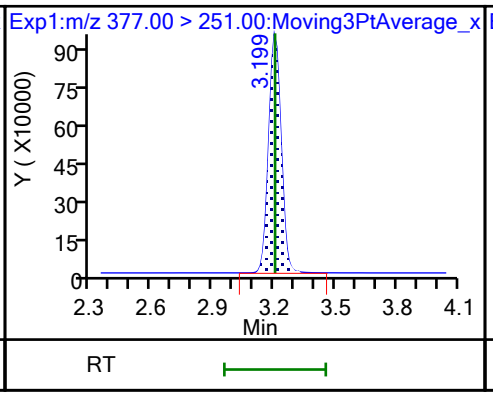
10 Perfluoroheptanoic acid



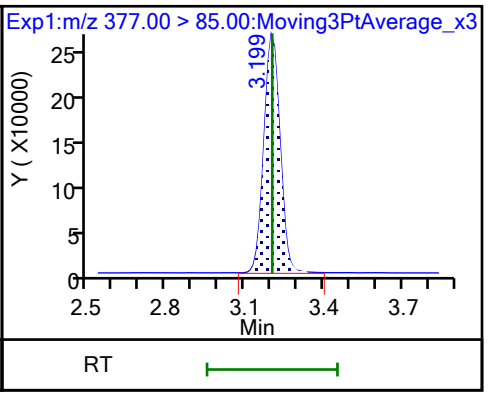
D 9 13C4 PFHpA



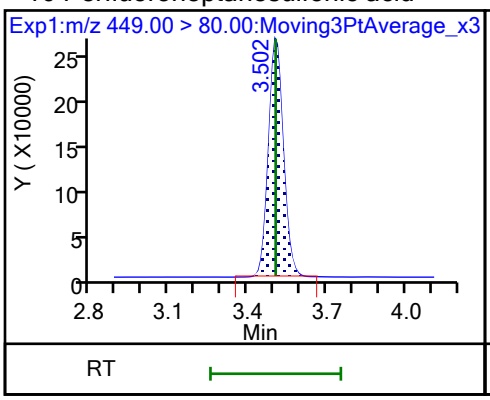
77 DONA



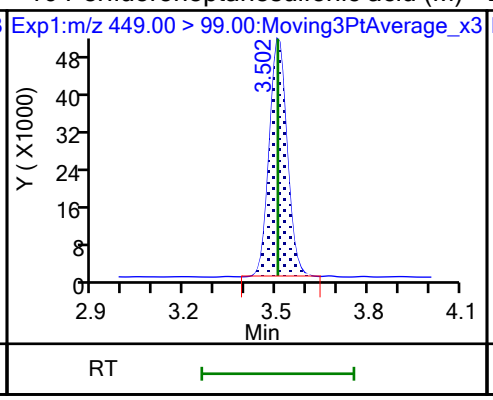
77 DONA



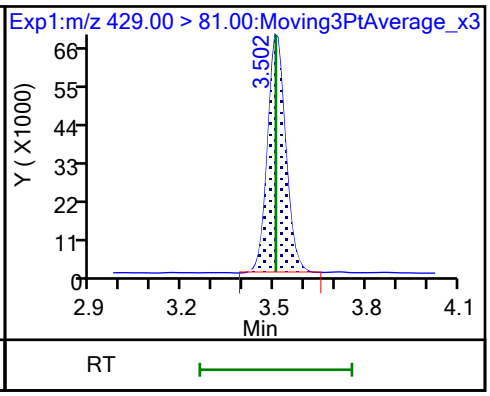
16 Perfluoroheptanesulfonic acid



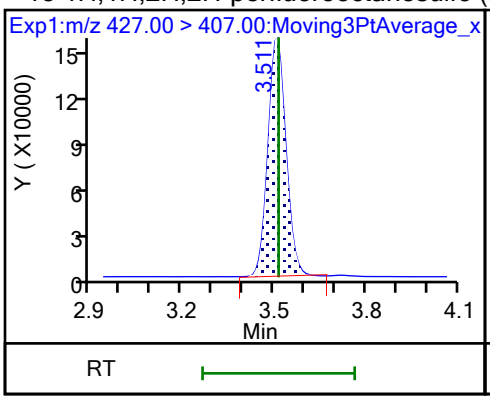
16 Perfluoroheptanesulfonic acid (M)



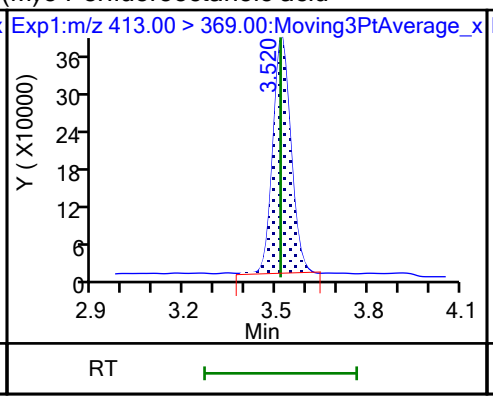
D 12 M2-6:2 FTS



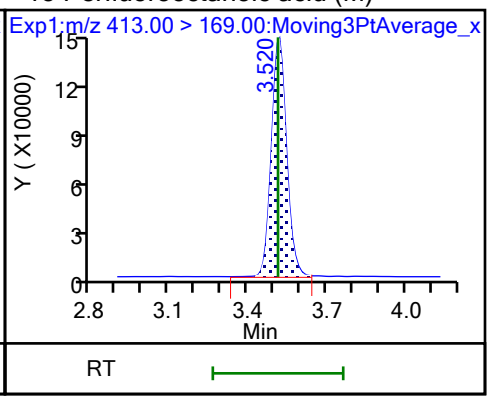
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



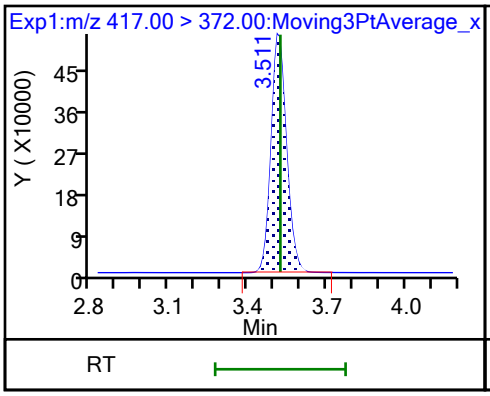
15 Perfluorooctanoic acid



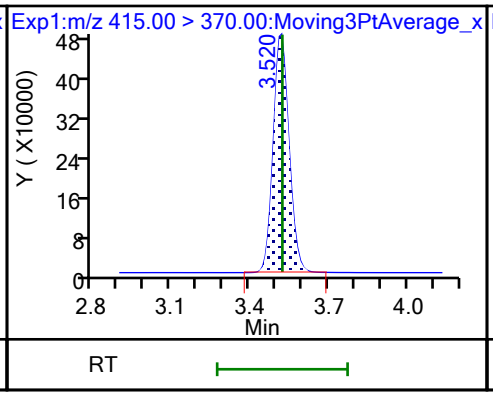
15 Perfluorooctanoic acid (M)



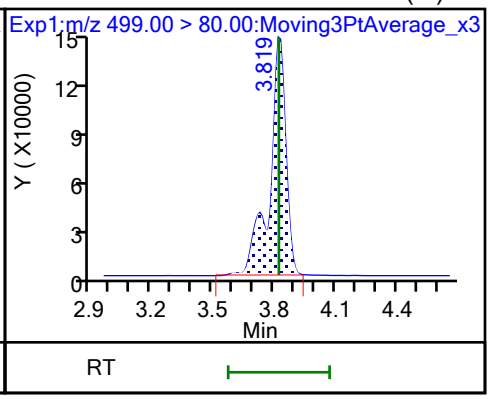
D 14 13C4 PFOA



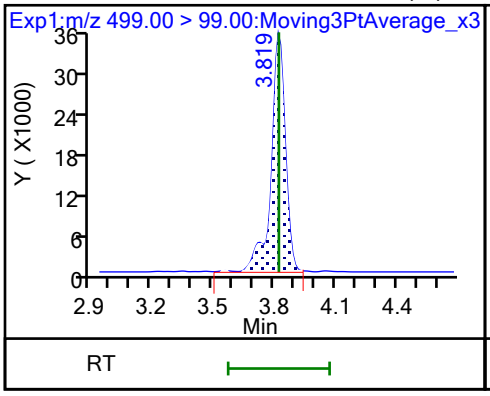
* 62 13C2 PFOA



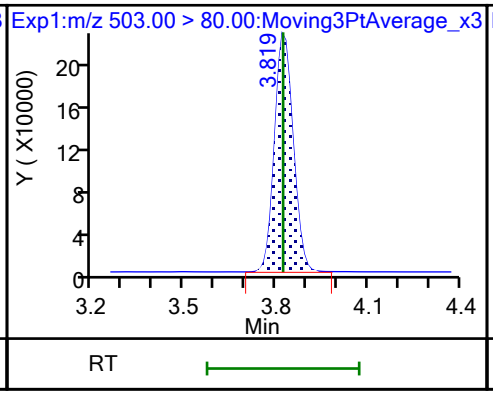
17 Perfluorooctanesulfonic acid (M)



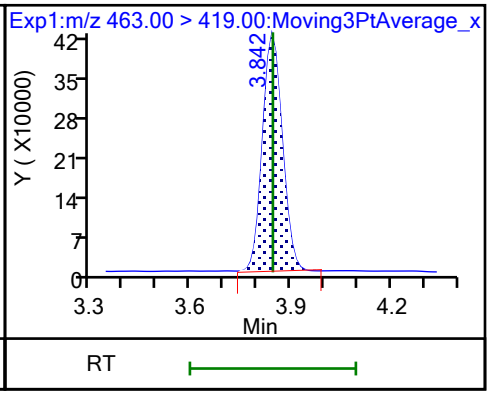
17 Perfluorooctanesulfonic acid (M)



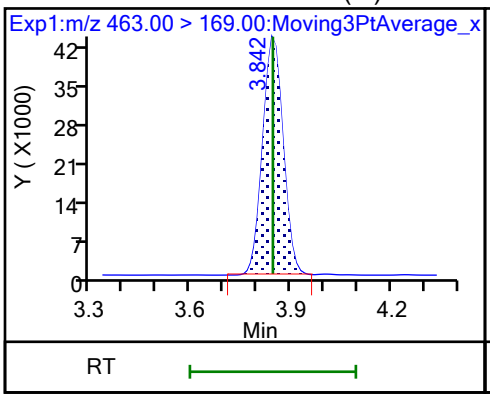
D 18 13C4 PFOS



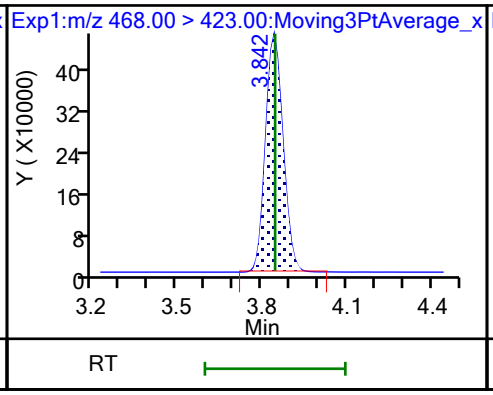
20 Perfluorononanoic acid



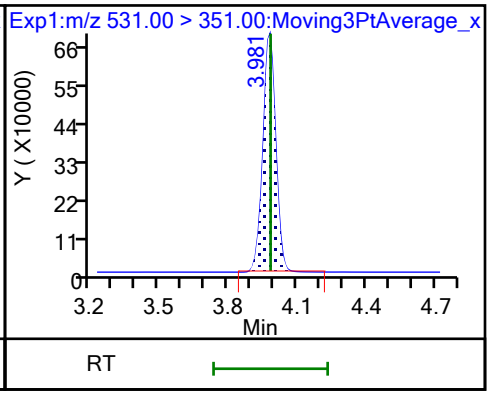
20 Perfluorononanoic acid (M)



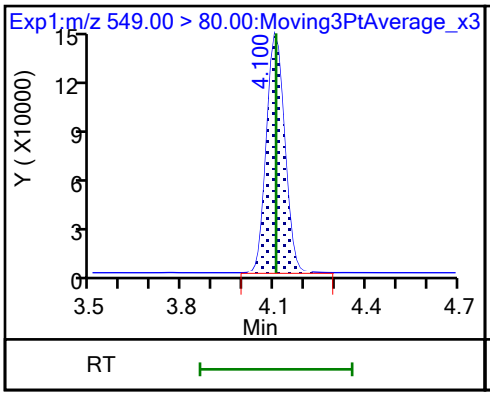
D 19 13C5 PFNA



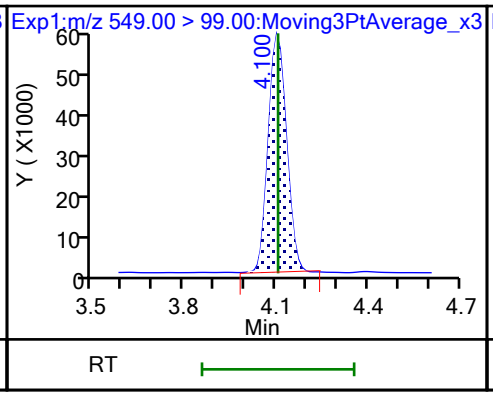
69 9-Chlorohexadecafluoro-3-oxanona



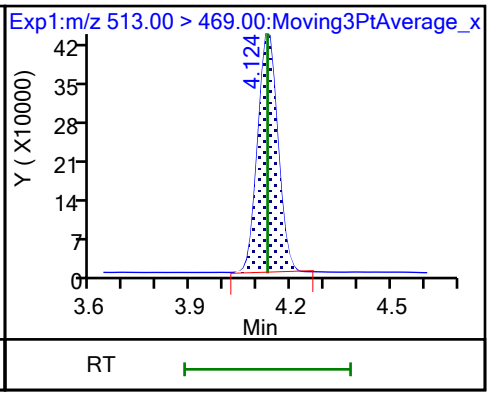
68 Perfluorononanesulfonic acid



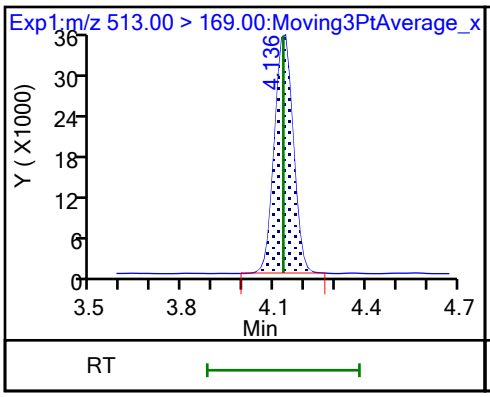
68 Perfluorononanesulfonic acid



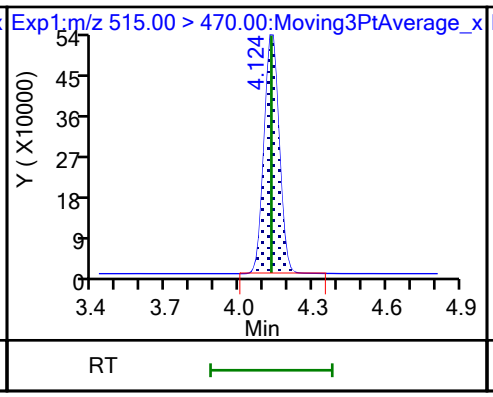
24 Perfluorodecanoic acid



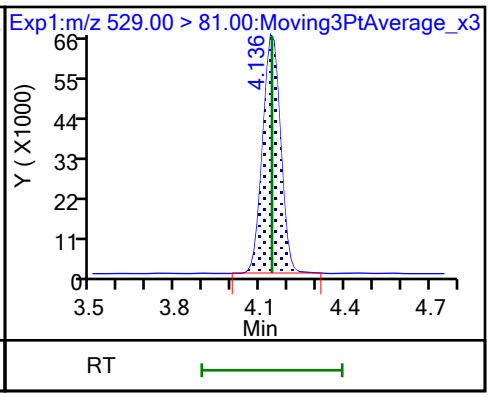
24 Perfluorodecanoic acid



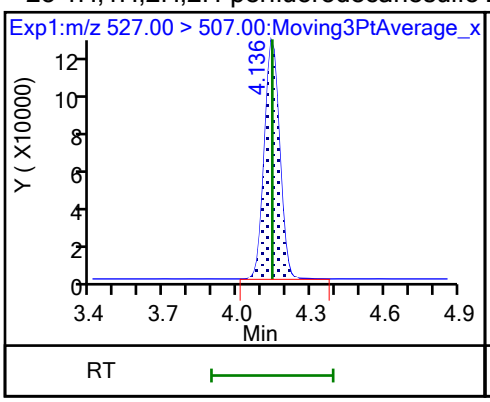
D 23 13C2 PFDA



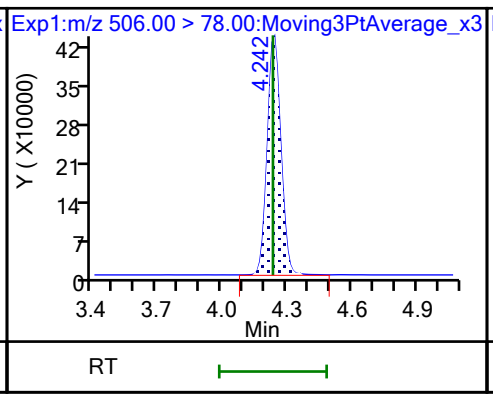
D 26 M2-8:2 FTS



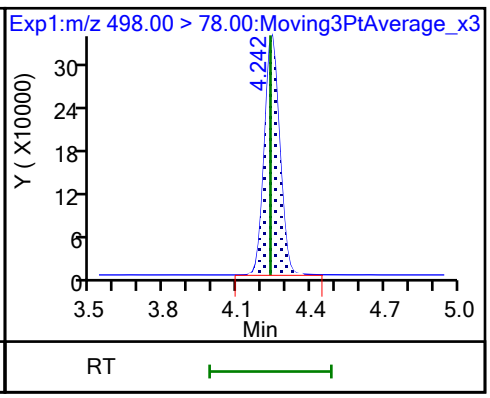
25 1H,1H,2H,2H-perfluorodecanesulfo



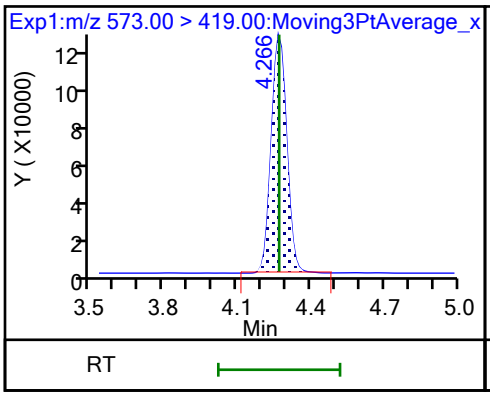
D 21 13C8 FOSA



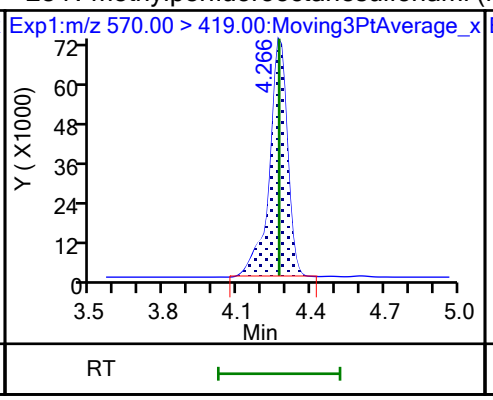
22 Perfluorooctanesulfonamide



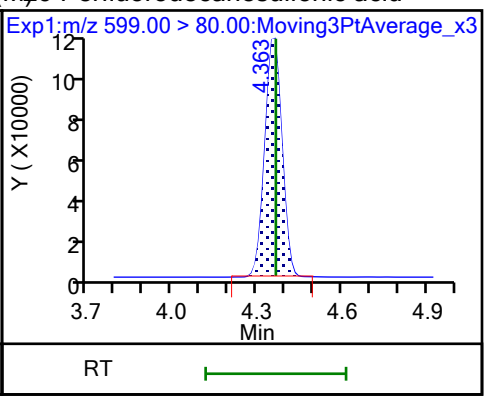
D 27 d3-NMeFOSAA



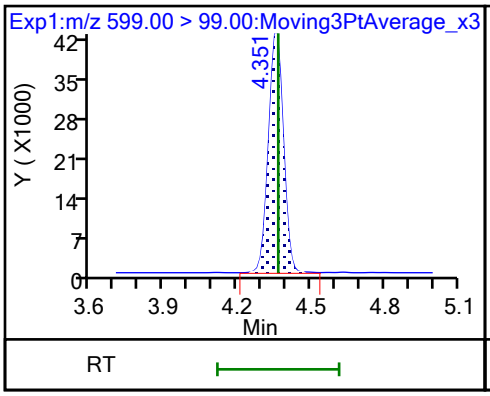
28 N-methylperfluorooctanesulfonami (M)



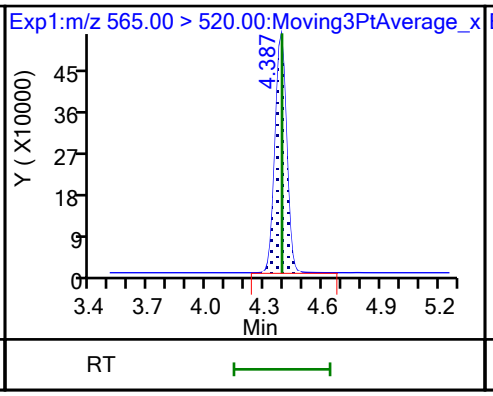
29 Perfluorodecanesulfonic acid



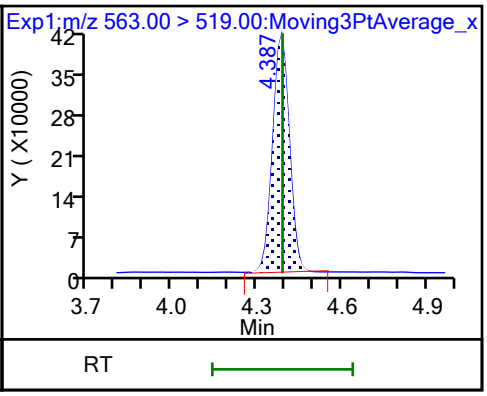
29 Perfluorodecanesulfonic acid



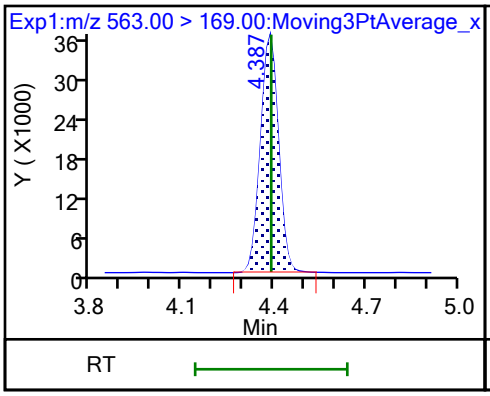
D 30 13C2 PFUnA



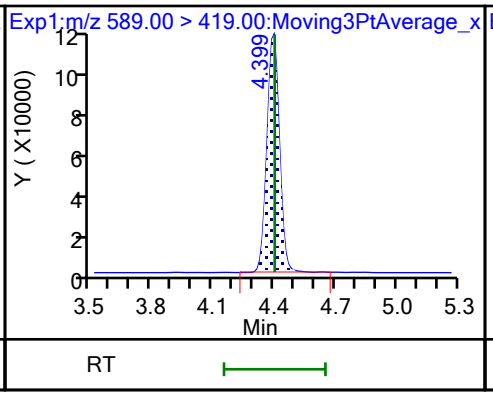
31 Perfluoroundecanoic acid



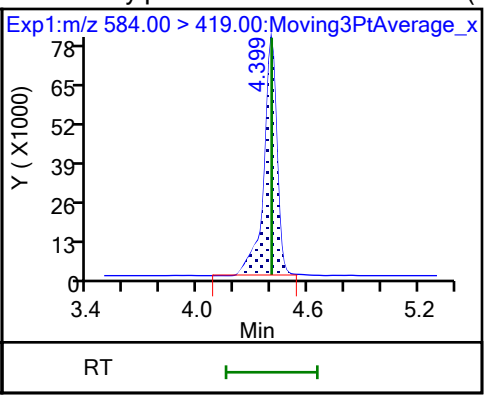
31 Perfluoroundecanoic acid



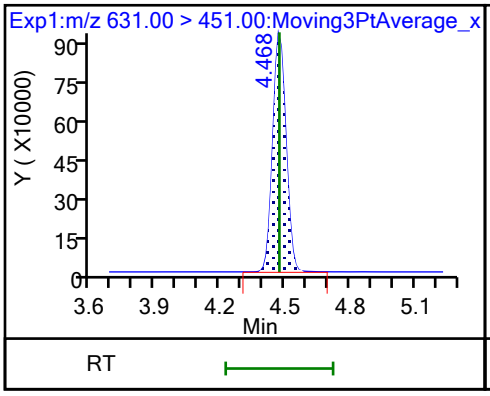
D 32 d5-NEtFOSAA



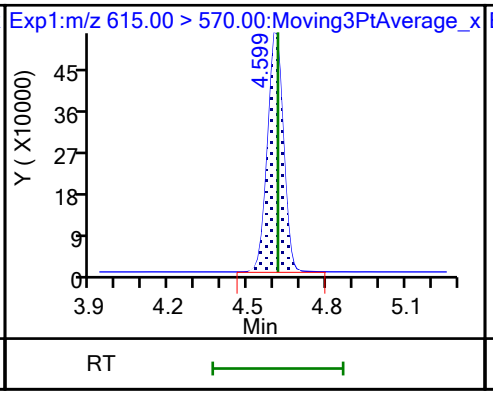
33 N-ethylperfluorooctanesulfonamid (M)



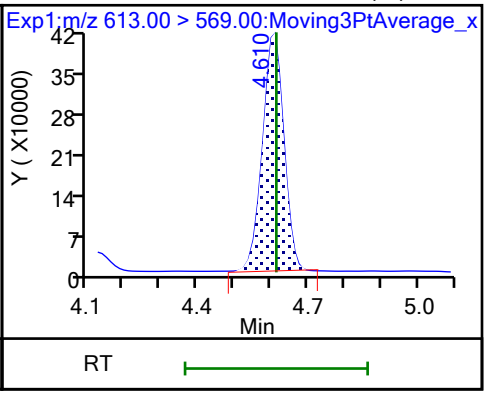
66 11-Chloroeicosafluoro-3-oxaundec



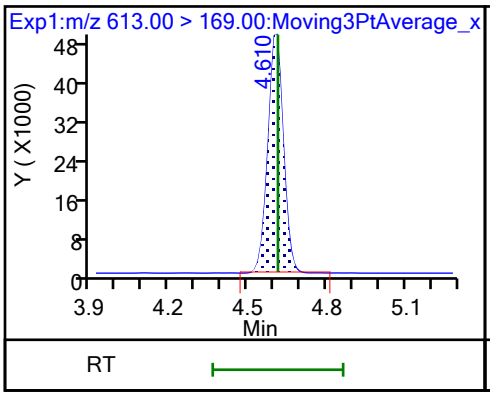
D 36 13C2 PFDoA



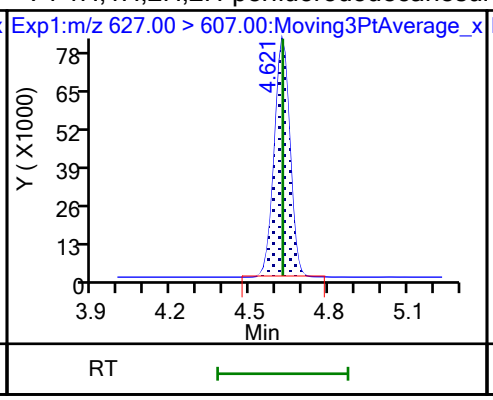
37 Perfluorododecanoic acid (M)



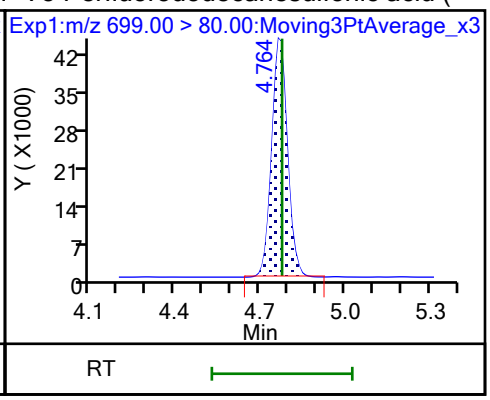
37 Perfluorododecanoic acid



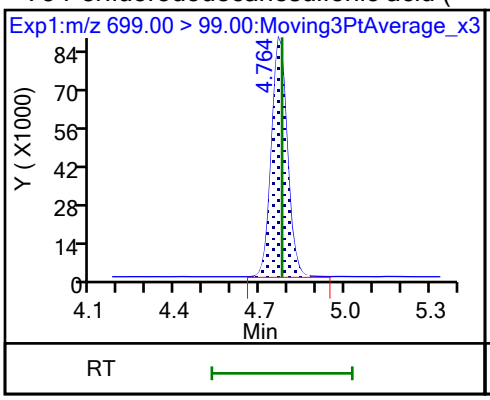
74 1H,1H,2H,2H-perfluorododecanesul



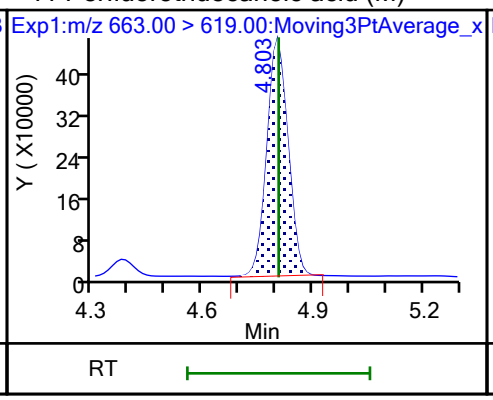
75 Perfluorododecanesulfonic acid (



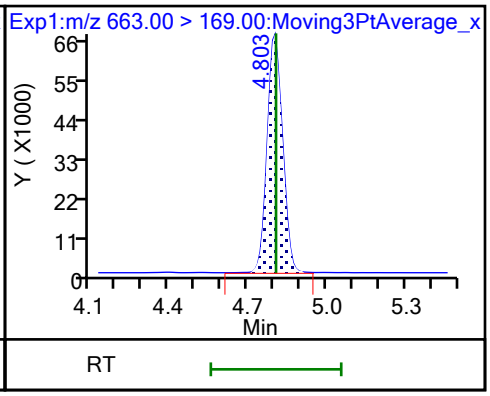
75 Perfluorododecanesulfonic acid (



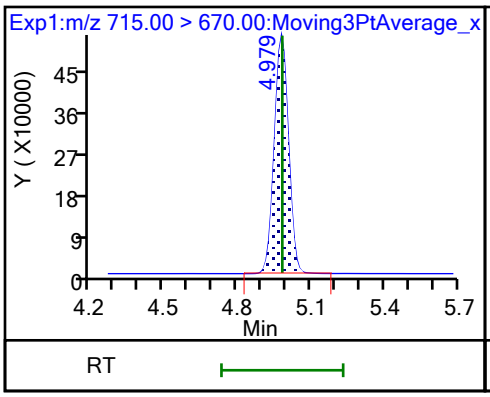
41 Perfluorotridecanoic acid (M)



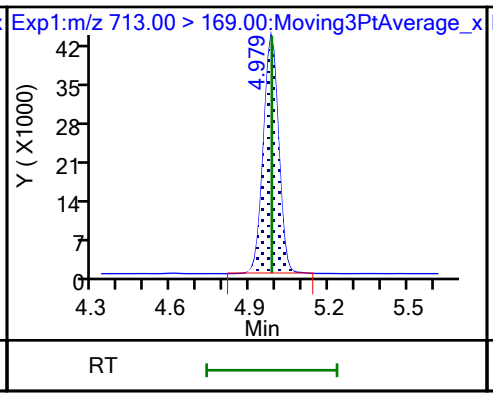
41 Perfluorotridecanoic acid



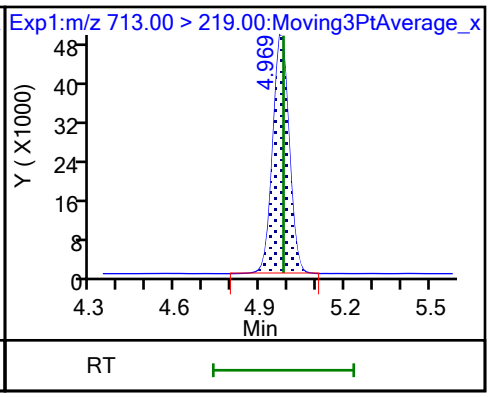
D 43 13C2 PFTeDA



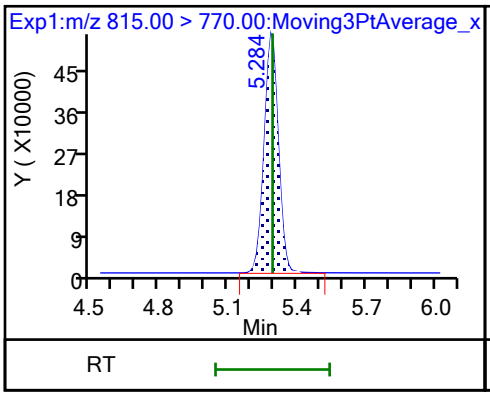
42 Perfluorotetradecanoic acid



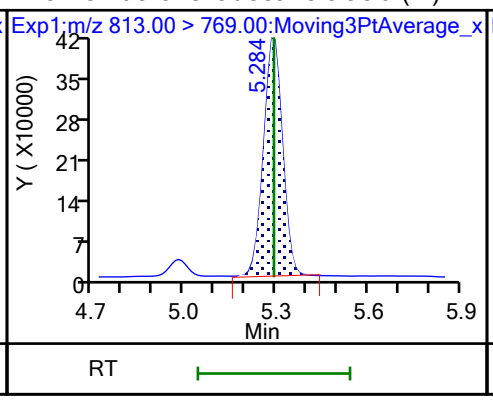
42 Perfluorotetradecanoic acid



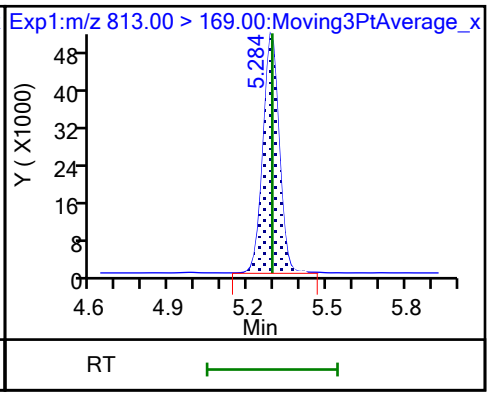
D 44 13C2 PFHxDA



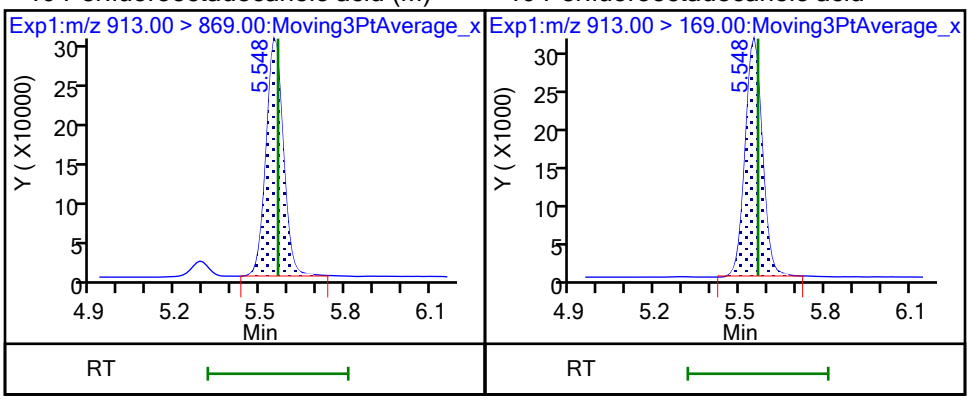
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196689/1 Calibration Date: 10/23/2023 23:16

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023C01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8712		0.923	1.00	-7.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.040		0.964	1.00	-3.6	
Perfluorobutanesulfonic acid	AveID	1.117	1.104		0.877	0.887	-1.1	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.547		0.979	0.937	4.5	
Perfluorohexanoic acid	AveID	1.100	1.014		0.922	1.00	-7.8	
Perfluoropentanesulfonic acid	AveID	1.306	1.230		0.887	0.941	-5.8	
HFPODA	AveID	1.001	0.9611		0.960	1.00	-4.0	
Perfluorohexanesulfonic acid	AveID	1.107	0.999		0.825	0.914	-9.7	
Perfluoroheptanoic acid	AveID	1.121	1.063		0.948	1.00	-5.2	
DONA	AveID	5.754	5.477		0.900	0.945	-4.8	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.705		0.941	0.951	-1.0	
Perfluoroheptanesulfonic acid	AveID	1.445	1.410		0.930	0.953	-2.5	
Perfluorooctanoic acid	AveID	1.065	0.9219		0.865	1.00	-13.5	
Perfluorooctanesulfonic acid	AveID	1.166	1.116		0.888	0.928	-4.3	
Perfluorononanoic acid	AveID	0.9800	0.8745		0.892	1.00	-10.8	
9Cl-PF3ONS	AveID	3.569	3.707		0.969	0.933	3.9	
Perfluorononanesulfonic acid	AveID	0.8874	0.7954		0.862	0.962	-10.4	
Perfluorodecanoic acid	AveID	0.999	0.9736		0.974	1.00	-2.6	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.329		1.02	0.960	5.8	
Perfluorooctanesulfonamide	AveID	0.9539	0.9601		1.01	1.00	0.7	
NMeFOSAA	AveID	0.9074	0.8782		0.968	1.00	-3.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6478		0.915	0.965	-5.2	
Perfluoroundecanoic acid	AveID	1.031	0.9223		0.895	1.00	-10.5	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9199		0.920	1.00	-8.0	
11Cl-PF3OUdS	AveID	5.474	5.547		0.956	0.943	1.4	
Perfluorododecanoic acid	AveID	1.018	0.9336		0.917	1.00	-8.3	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.390		1.02	0.964	5.6	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2288		0.957	0.968	-1.2	
Perfluorotridecanoic acid	AveID	1.070	1.038		0.970	1.00	-3.0	
Perfluorotetradecanoic acid	AveID	0.1118	0.1013		0.906	1.00	-9.4	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9611		0.961	1.00	-3.9	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7045		0.902	1.00	-9.8	
13C4 PFBA	Ave	0.9917	1.114		1.41	1.25	12.4	
13C5 PFPeA	Ave	0.7696	0.7634		1.24	1.25	-0.8	
13C3 PFBS	Ave	1.041	1.064		1.19	1.16	2.2	
M2-4:2 FTS	Ave	0.1204	0.1133		1.10	1.17	-5.9	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196689/1 Calibration Date: 10/23/2023 23:16

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023C01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8254		1.32	1.25	5.4	
13C3 HFPO-DA	Ave	0.1516	0.1391		1.15	1.25	-8.2	
18O2 PFHxS	Ave	0.7464	0.8183		1.30	1.18	9.6	50.0
13C4 PFHpA	Ave	0.8590	0.9245		1.35	1.25	7.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1584		1.21	1.19	2.1	
13C4 PFOA	Ave	0.9731	1.126		1.45	1.25	15.7	50.0
13C4 PFOS	Ave	0.4742	0.5113		1.29	1.20	7.8	50.0
13C5 PFNA	Ave	1.059	1.182		1.40	1.25	11.7	50.0
13C2 PFDA	Ave	1.109	1.112		1.25	1.25	0.2	
M2-8:2 FTS	Ave	0.1744	0.1711		1.18	1.20	-1.9	
13C8 FOSA	Ave	0.9462	0.9798		1.29	1.25	3.5	
d3-NMeFOSAA	Ave	0.2650	0.2872		1.36	1.25	8.4	
13C2 PFUnA	Ave	1.047	1.124		1.34	1.25	7.3	
d5-NEtFOSAA	Ave	0.2552	0.2828		1.39	1.25	10.8	
13C2 PFDoA	Ave	1.064	1.176		1.38	1.25	10.5	
13C2 PFTeDA	Ave	1.059	1.093		1.29	1.25	3.2	
13C2 PFHxDA	Ave	1.221	1.209		1.24	1.25	-1.0	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 23-Oct-2023 23:16:49 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057511-001 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:50:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.122	0.008	0.605	2188952	1.40		112	7955	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1525691	0.9226		92.3	154	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1499670	1.24		99.2	1891	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1248295	0.9642		96.4	35.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1944531	1.19		102	85569	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	1638303	0.8769	Target=2.06	98.9	924	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	783778		2.09(1.03-3.09)		317	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.772	2.760	0.012	1.000	591601	0.9787		104	1724	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	207814	1.10		94.1	131	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1621423	1.32		105	4374	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.797	0.013	1.004	1315651	0.9217	Target=14.12	92.2	295	M
313.00 > 119.00	2.797	2.797	0.0	1.000	95526		13.77(7.06-21.17)		106	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1488851	0.8866	Target=2.72	94.2	2198	M
349.00 > 99.00	2.810	2.810	0.0	0.888	527813		2.82(1.36-4.09)		976	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	210151	0.9600		96.0	766	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	273317	1.15		91.8	2210	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1520566	1.30		110	7172	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1174347	0.8250	Target=3.32	90.3	1762	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	350861		3.35(1.66-4.98)		327	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.168	0.008	1.000	1544148	0.9482	Target=4.17	94.8	382	
363.00 > 169.00	3.165	3.168	-0.003	0.996	372368		4.15(2.09-6.26)		918	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.168	0.008	0.902	1816036	1.35		108	11828	
77 DONA										
377.00 > 251.00	3.212	3.203	0.009	0.838	4158941	0.8995	Target=3.33	95.2	5301	
377.00 > 85.00	3.212	3.203	0.009	0.838	1138095		3.65(1.66-4.99)		1770	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	1079364	0.9295	Target=4.83	97.5	2285	M
449.00 > 99.00	3.511	3.505	0.006	0.917	214006		5.04(2.41-7.24)		918	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	295658	1.21		102	733	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	640439	0.9411		99.0	929	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1630944	0.8655	Target=2.88	86.5	84.7	
413.00 > 169.00	3.520	3.514	0.006	1.000	604116		2.70(1.44-4.32)		1050	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2211459	1.45		116	7914	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1964387	1.25			10507	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	832439	0.8882	Target=4.24	95.7	1358	M
499.00 > 99.00	3.830	3.822	0.008	1.000	188085		4.43(2.12-6.37)		586	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	960153	1.29		108	3423	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1625123	0.8923	Target=8.34	89.2	267	
463.00 > 169.00	3.854	3.845	0.009	1.003	192774		8.43(4.17-12.51)		2352	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2322847	1.40		112	11003	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.039	2778978	0.9690		104	10425	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.112	4.105	0.007	1.074	614768	0.8622	Target=2.17	89.6	5018	
549.00 > 99.00	4.112	4.105	0.007	1.074	257940		2.38(1.08-3.25)		1203	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1700639	0.9742	Target=11.44	97.4	530	
513.00 > 169.00	4.136	4.129	0.007	1.000	163627		10.39(5.72-17.16)		1036	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2183469	1.25		100	16694	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.179	321936	1.17		98.1	1003	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.141	0.007	1.000	601144	1.02		106	3460	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1924659	1.29		104	6282	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1478282	1.01		101	3721	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.270	-0.004	1.212	564249	1.35		108	984	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.270	0.009	1.003	396408	0.9678		96.8	857	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	502240	0.9153	Target=2.37	94.8	3850	
599.00 > 99.00	4.363	4.366	-0.003	1.139	194962		2.58(1.19-3.56)		1097	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2207054	1.34		107	8702	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1628398	0.8948	Target=12.20	89.5	404	
563.00 > 169.00	4.387	4.390	-0.003	1.000	150997		10.78(6.10-18.31)		977	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	555525	1.39		111	1028	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.401	-0.002	1.000	408841	0.9198		92.0	778	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.473	0.009	1.170	4203174	0.9557		101	5094	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2309211	1.38		110	6131	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.000	1724682	0.9172	Target=8.47	91.7	101	M
613.00 > 169.00	4.610	4.613	-0.003	1.000	225261		7.66(4.23-12.70)		2392	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.624	-0.003	1.114	360259	1.02		106	4328	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.777	-0.003	1.246	177917	0.9566	Target=0.48	98.8	3287	
699.00 > 99.00	4.774	4.777	-0.003	1.246	357108		0.50(0.24-0.72)		4150	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.806	-0.003	1.042	1917960	0.9705	Target=6.41	97.0	103	
663.00 > 169.00	4.803	4.806	-0.003	1.042	280725		6.83(3.21-9.62)		1914	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.415	2146812	1.29		103	5825	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.982	-0.003	1.000	174061	0.9064	Target=0.87	90.6	1973	
713.00 > 219.00	4.979	4.982	-0.003	1.000	197675		0.88(0.43-1.30)		2103	

Report Date: 25-Oct-2023 19:58:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.292	0.004	1.505	2374686	1.24		99.0	5822	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.292	0.004	1.000	1825915	0.9611	Target=7.89	96.1	107	M
813.00 > 169.00	5.296	5.292	0.004	1.000	233786		7.81(3.94-11.83)		2053	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.558	5.563	-0.005	1.049	1338381	0.9022	Target=9.39	90.2	136	M
913.00 > 169.00	5.558	5.563	-0.005	1.049	142121		9.42(4.69-14.08)		896	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

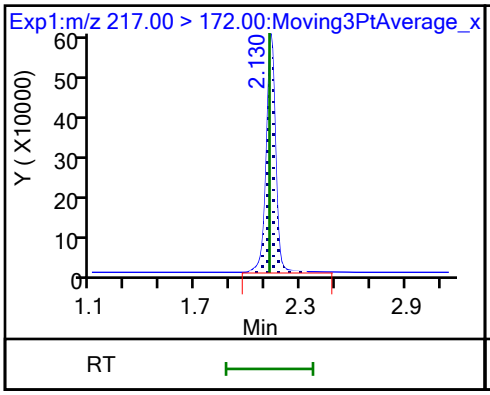
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 19:58:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

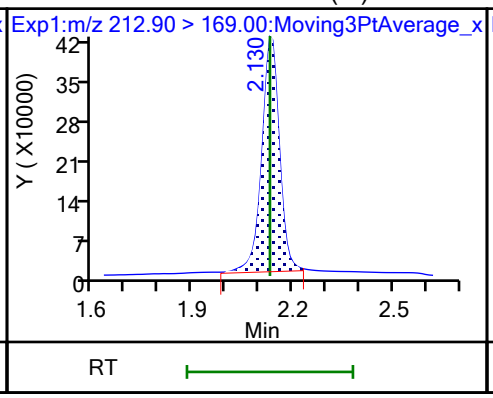
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C01.d
Injection Date: 23-Oct-2023 23:16:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

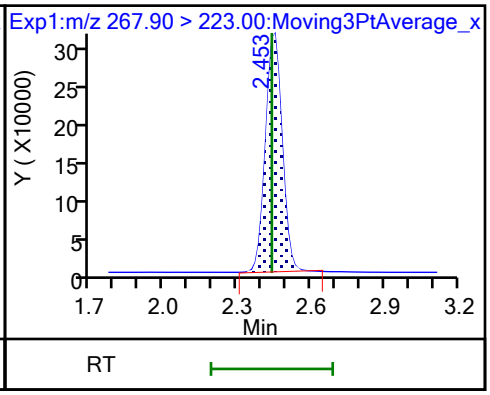
D 1 13C4 PFBA



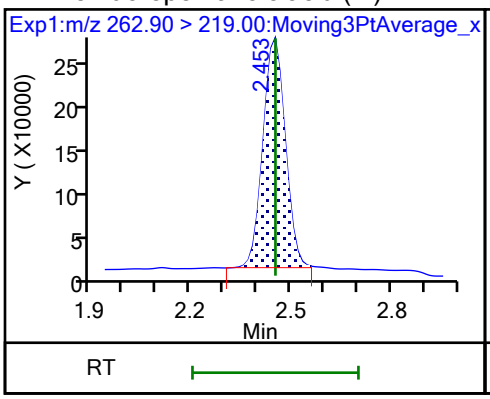
2 Perfluorobutanoic acid (M)



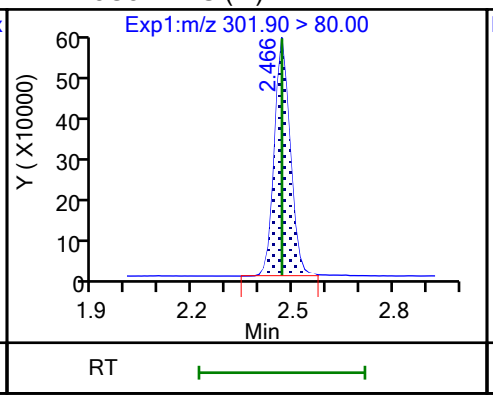
D 3 13C5 PFPeA



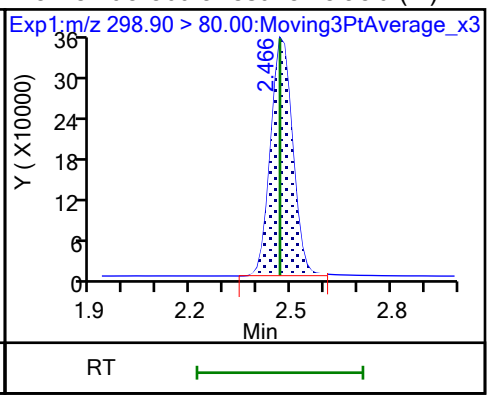
4 Perfluoropentanoic acid (M)



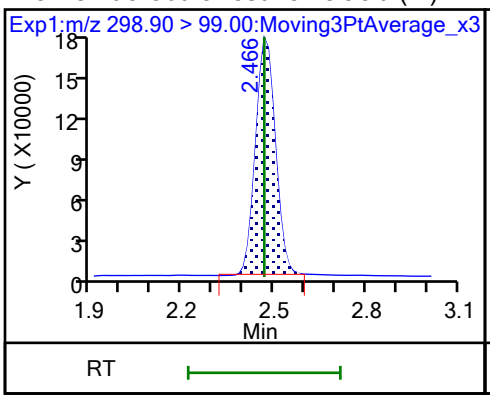
D 47 13C3 PFBS (M)



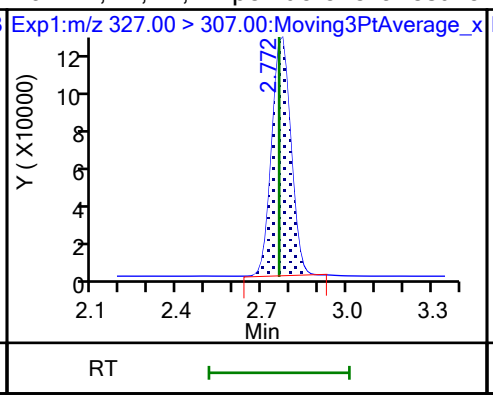
5 Perfluorobutanesulfonic acid (M)



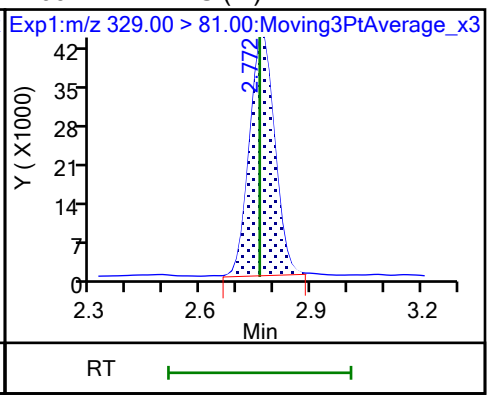
5 Perfluorobutanesulfonic acid (M)



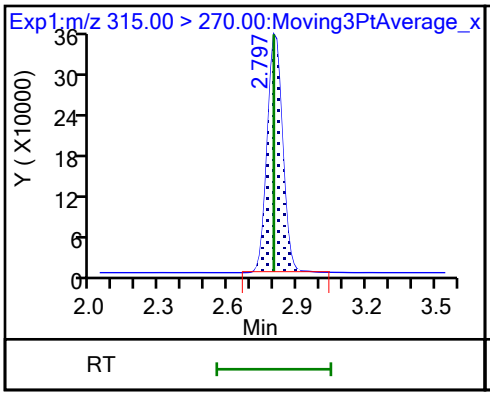
61 1H,1H,2H,2H-perfluorohexanesulfo



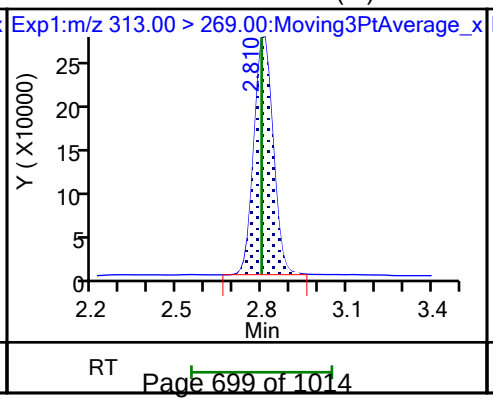
D 60 M2-4:2 FTS (M)



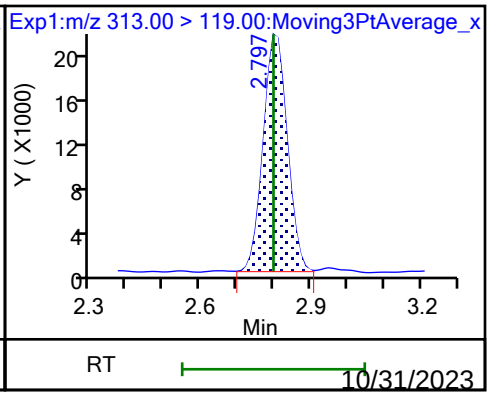
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

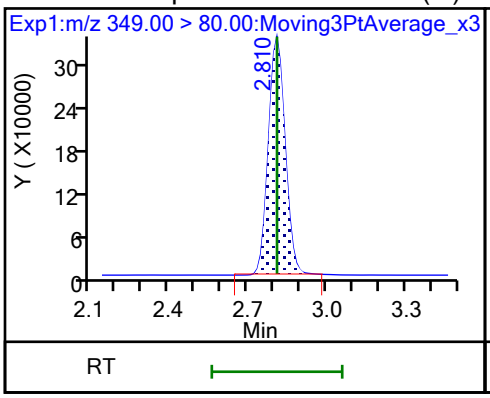


6 Perfluorohexanoic acid

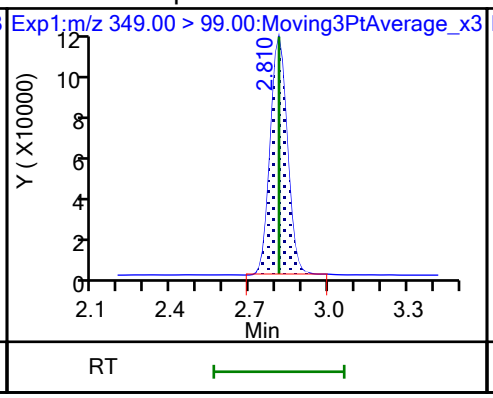


10/31/2023
4:00 PM

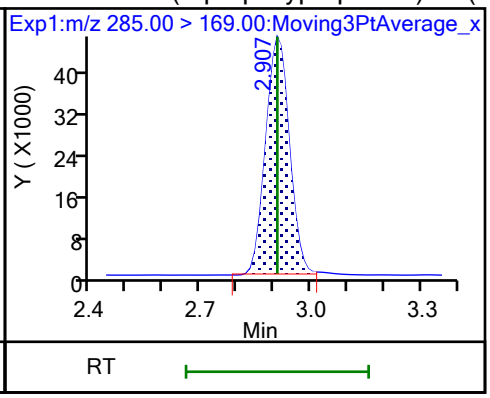
70 Perfluoropentanesulfonic acid (M)



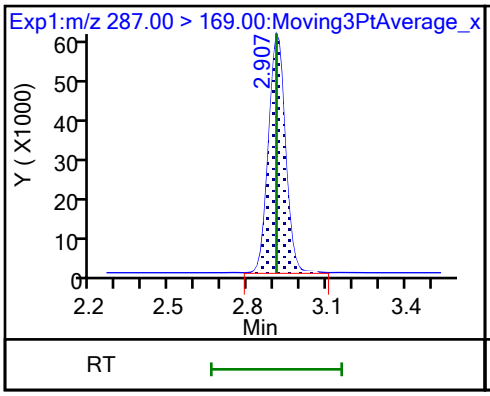
70 Perfluoropentanesulfonic acid



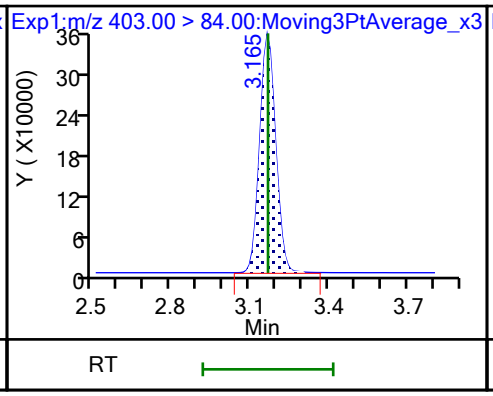
67 Perfluoro(2-propoxypropanoic) ac (M)



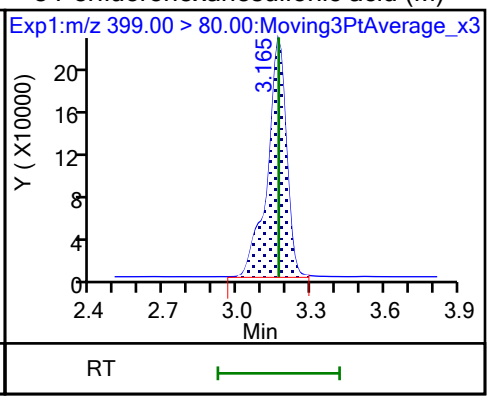
D 64 13C3 HFPO-DA



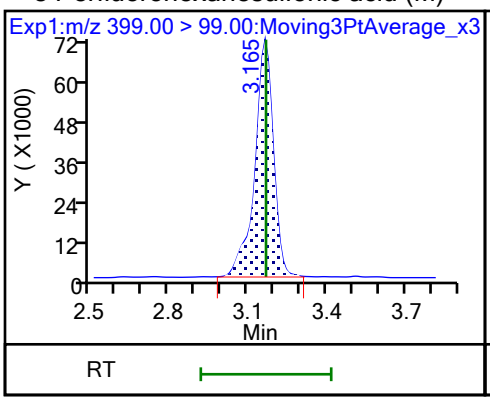
D 11 18O2 PFHxS



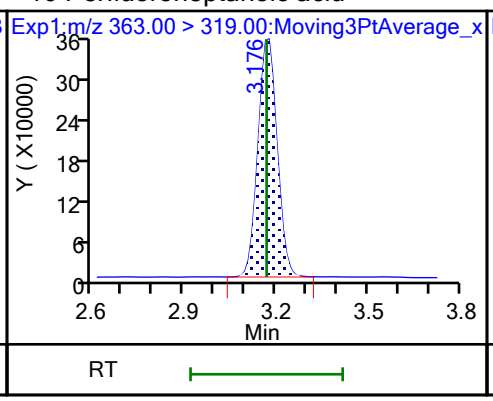
8 Perfluorohexanesulfonic acid (M)



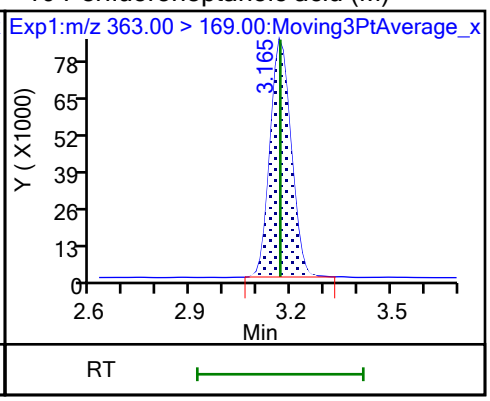
8 Perfluorohexanesulfonic acid (M)



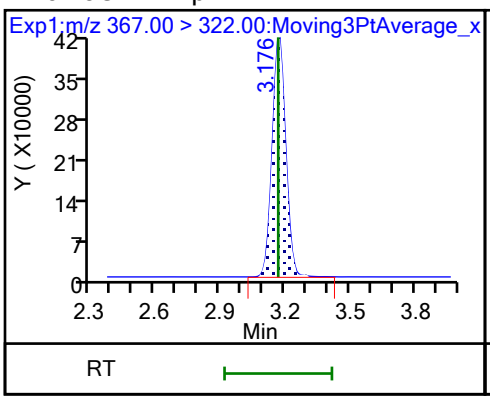
10 Perfluoroheptanoic acid



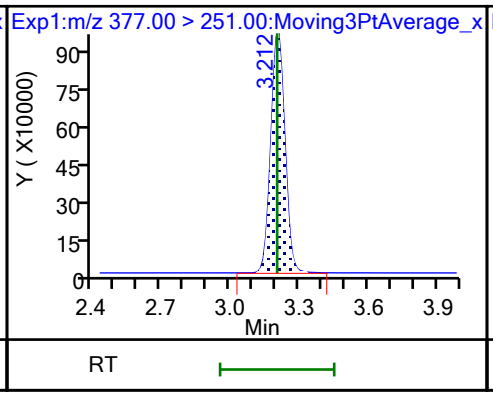
10 Perfluoroheptanoic acid (M)



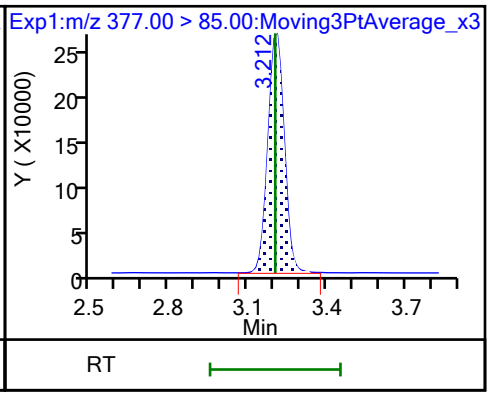
D 9 13C4 PFHpA



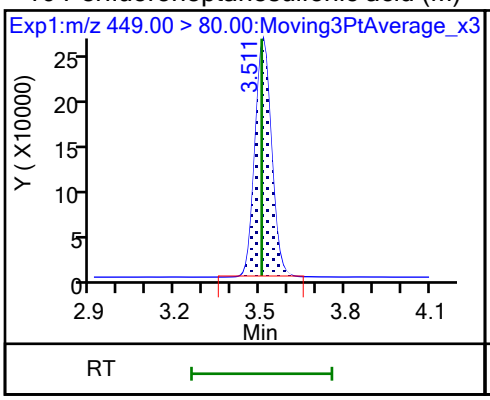
77 DONA



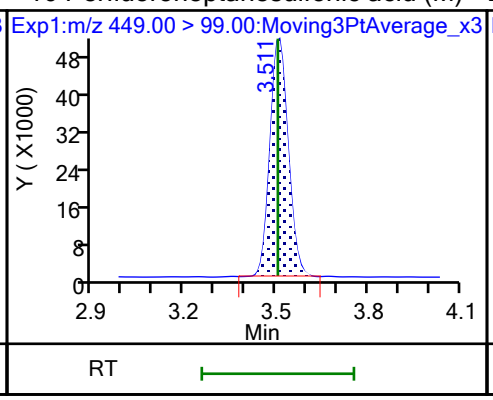
77 DONA



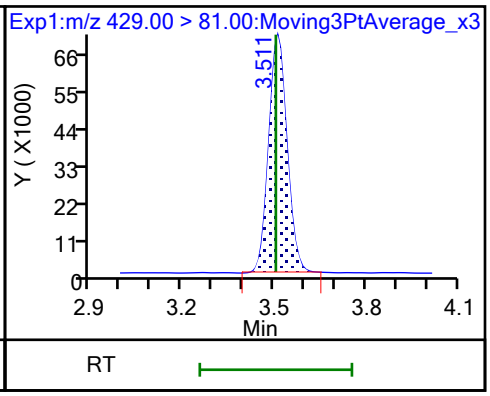
16 Perfluoroheptanesulfonic acid (M)



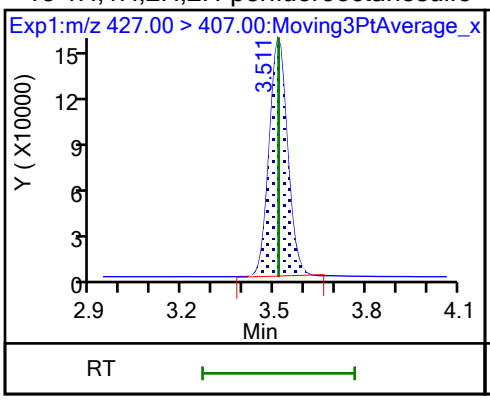
16 Perfluoroheptanesulfonic acid (M)



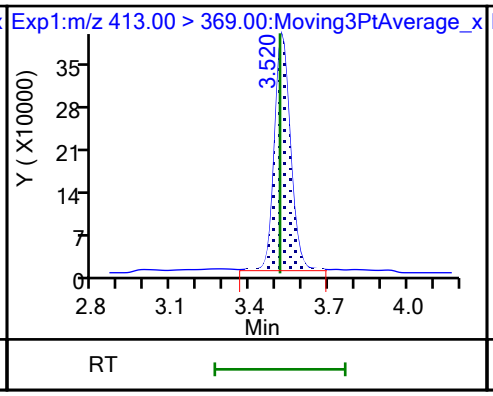
D 12 M2-6:2 FTS



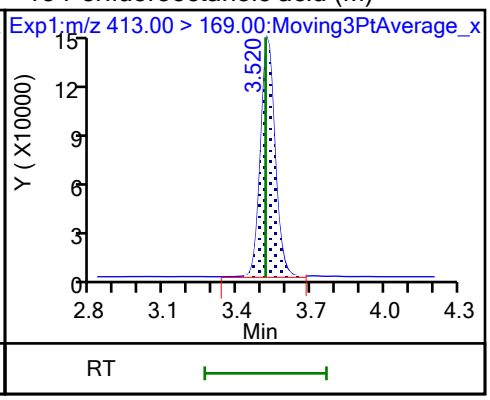
13 1H,1H,2H,2H-perfluorooctanesulfo



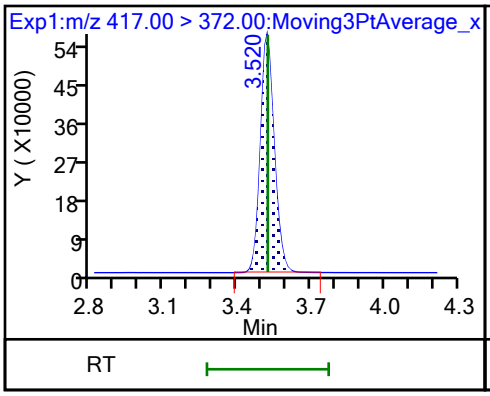
15 Perfluorooctanoic acid



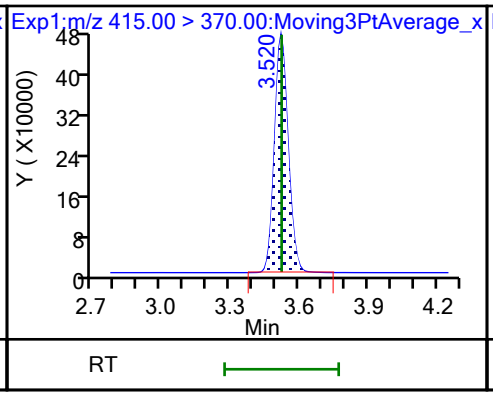
15 Perfluorooctanoic acid (M)



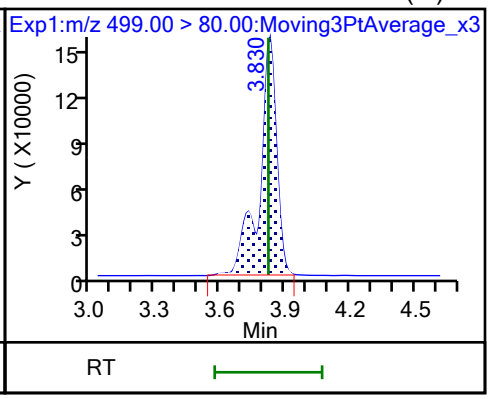
D 14 13C4 PFOA



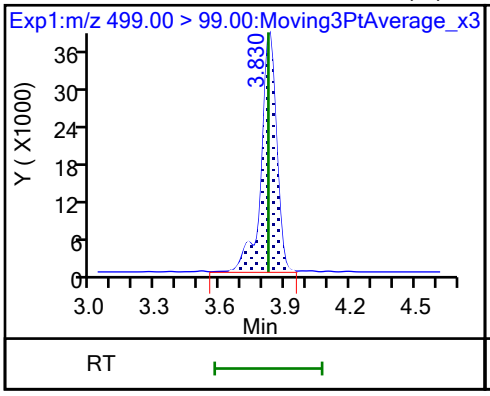
* 62 13C2 PFOA



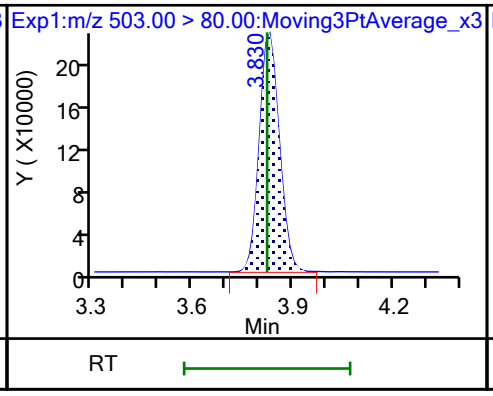
17 Perfluorooctanesulfonic acid (M)



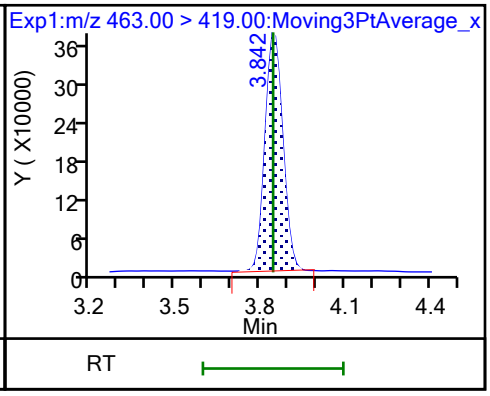
17 Perfluorooctanesulfonic acid (M)



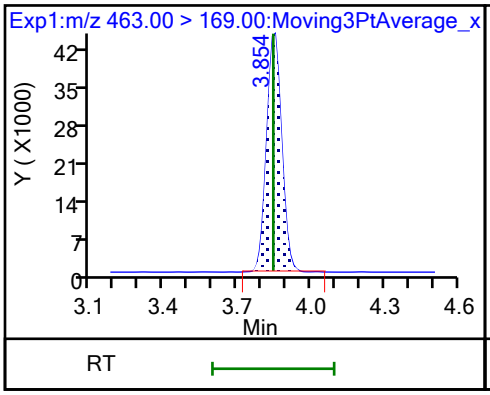
D 18 13C4 PFOS



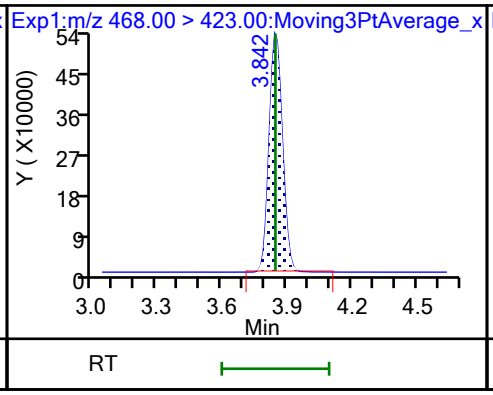
20 Perfluorononanoic acid



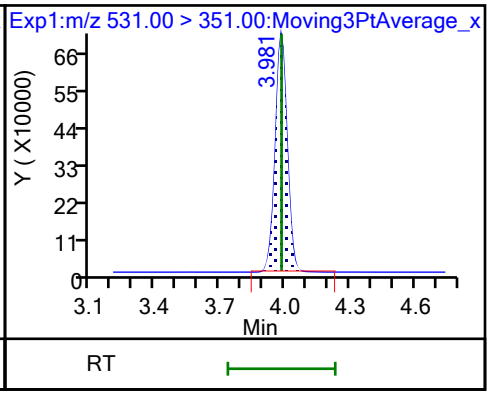
20 Perfluorononanoic acid



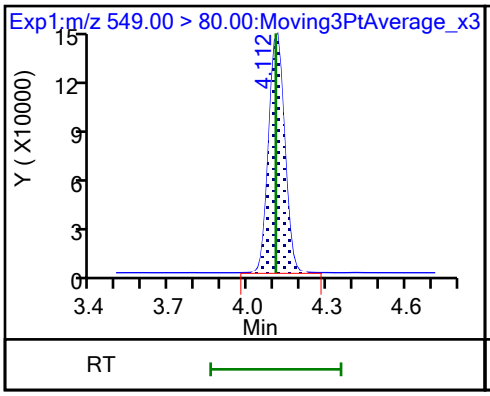
D 19 13C5 PFNA



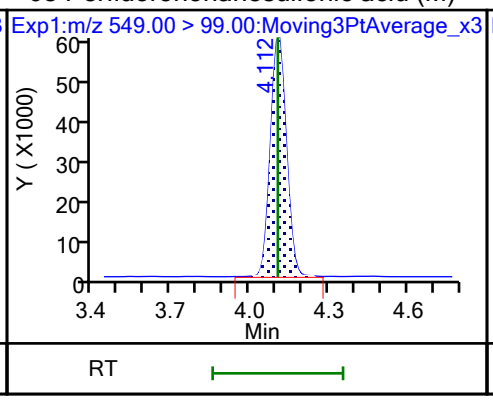
69 9-Chlorohexadecafluoro-3-oxanona



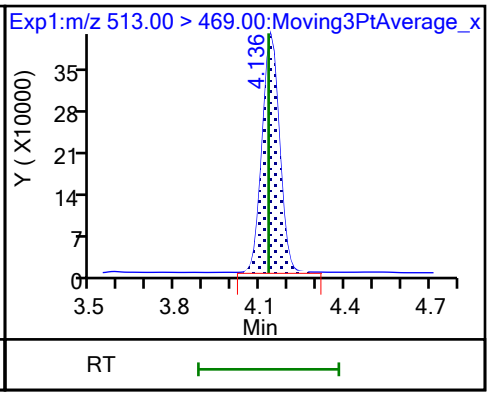
68 Perfluorononanesulfonic acid



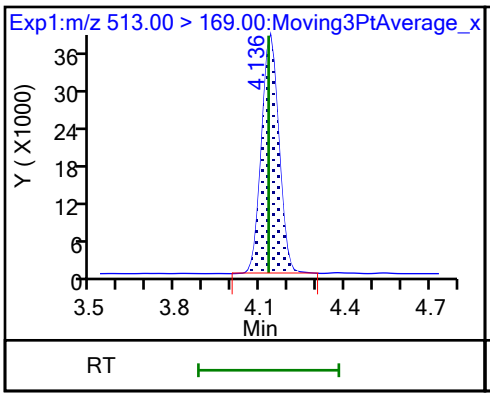
68 Perfluorononanesulfonic acid (M)



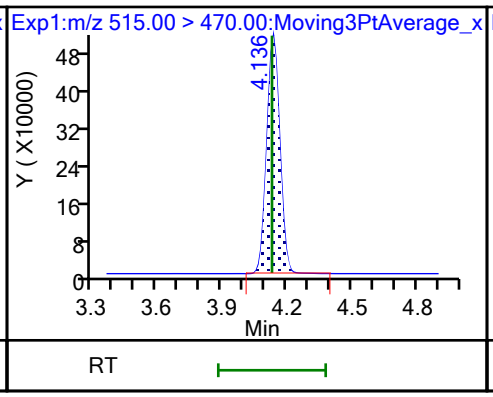
24 Perfluorodecanoic acid



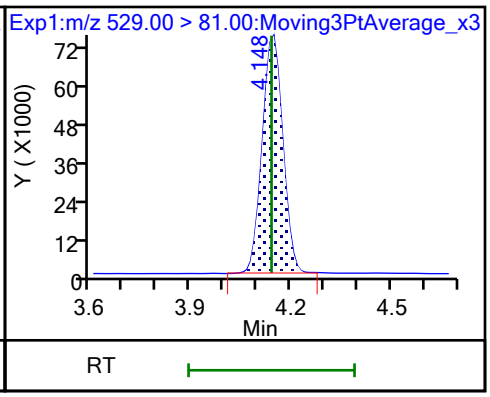
24 Perfluorodecanoic acid



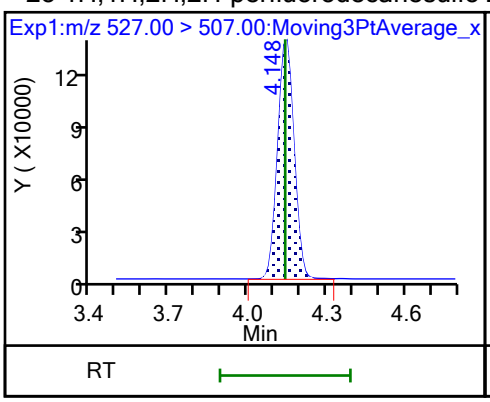
D 23 13C2 PFDA



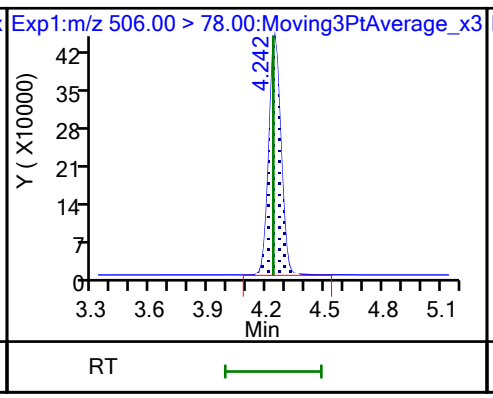
D 26 M2-8:2 FTS



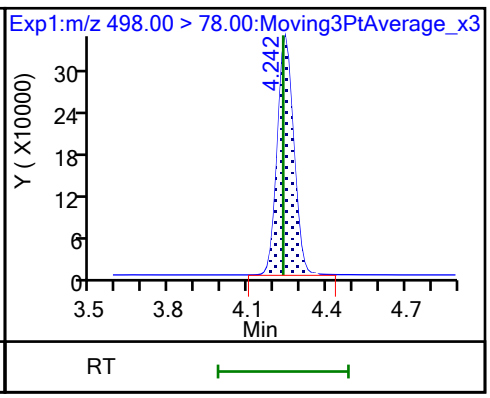
25 1H,1H,2H,2H-perfluorodecanesulfo



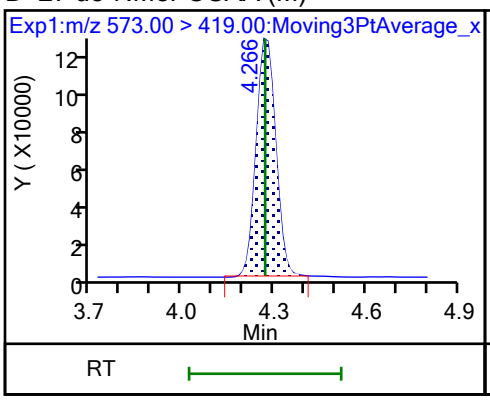
D 21 13C8 FOSA



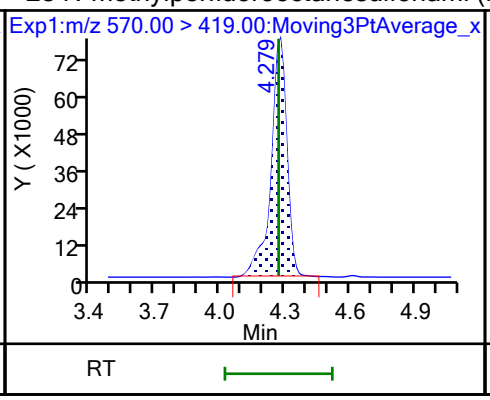
22 Perfluorooctanesulfonamide



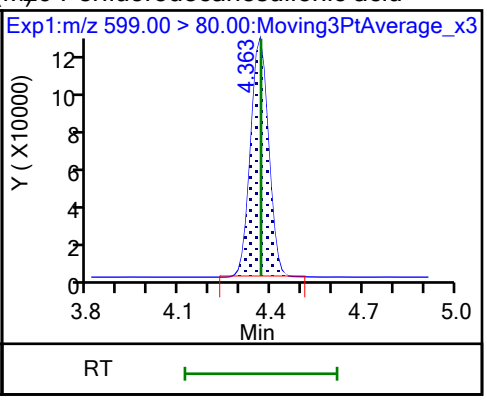
D 27 d3-NMeFOSAA (M)



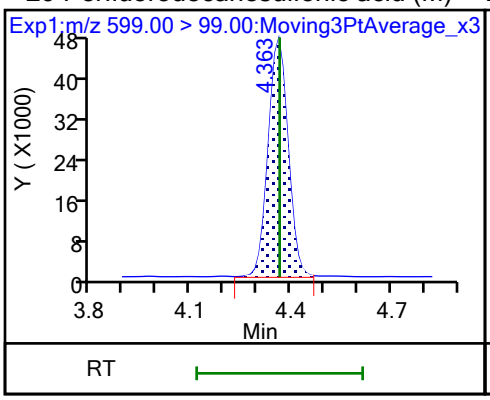
28 N-methylperfluorooctanesulfonami (M)



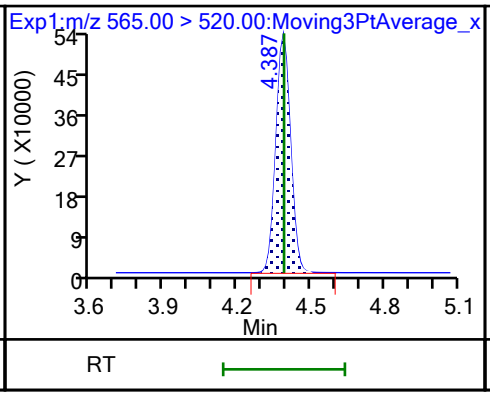
29 Perfluorodecanesulfonic acid



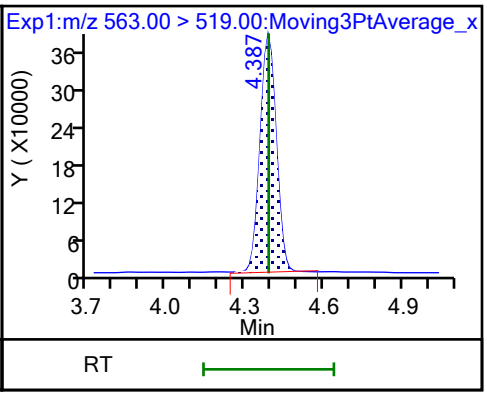
29 Perfluorodecanesulfonic acid (M)



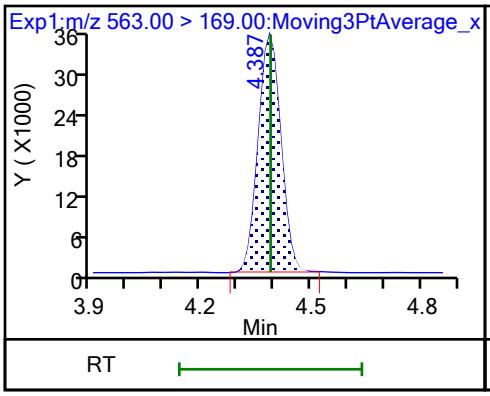
D 30 13C2 PFUnA



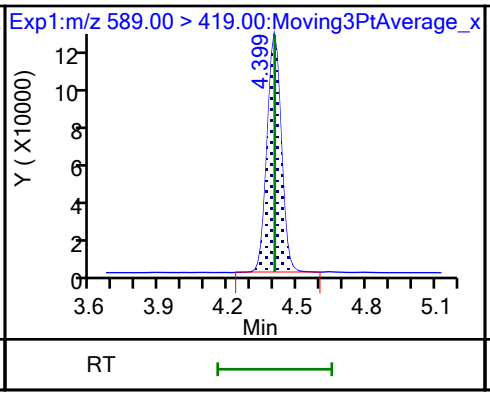
31 Perfluoroundecanoic acid



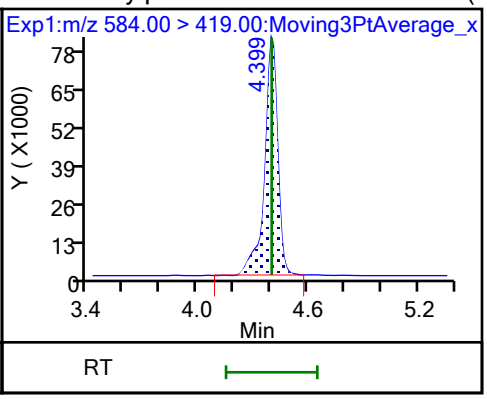
31 Perfluoroundecanoic acid



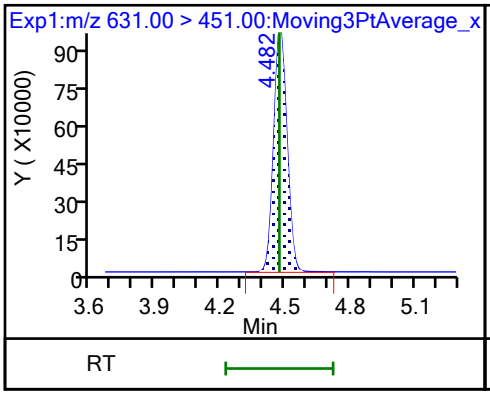
D 32 d5-NEtFOSAA



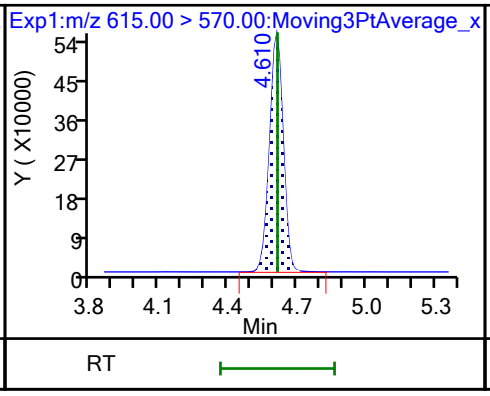
33 N-ethylperfluorooctanesulfonamid (M)



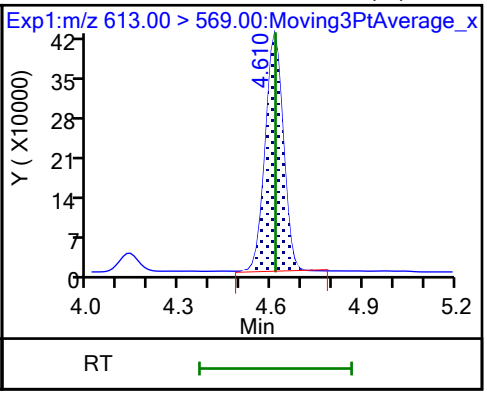
66 11-Chloroeicosafluoro-3-oxaundec



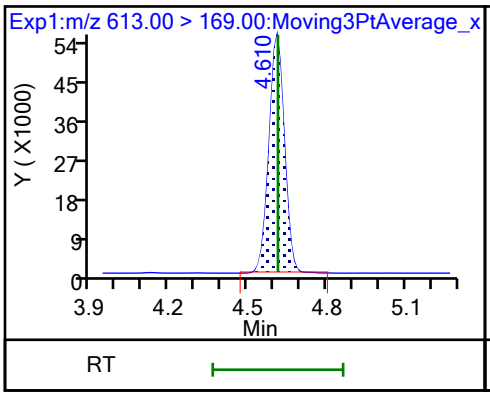
D 36 13C2 PFDoA



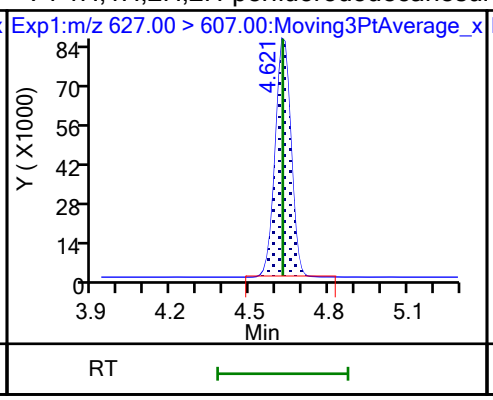
37 Perfluorododecanoic acid (M)



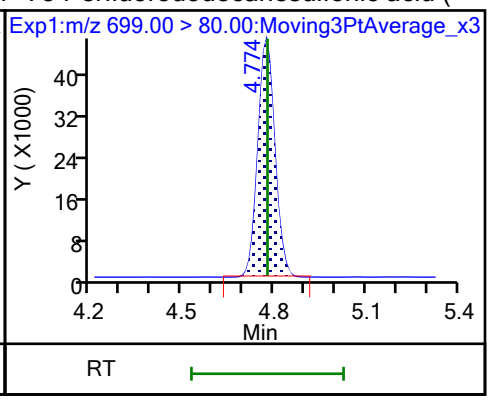
37 Perfluorododecanoic acid



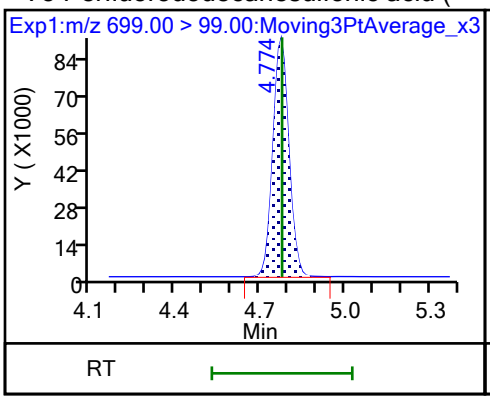
74 1H,1H,2H,2H-perfluorododecanesul



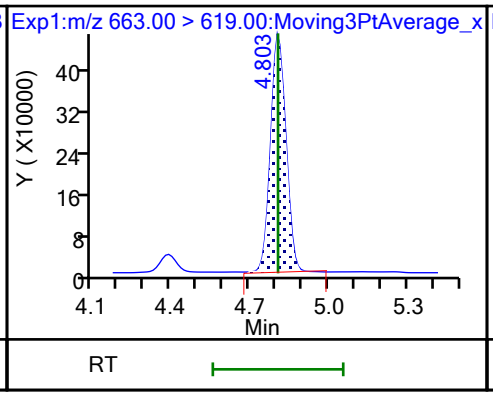
75 Perfluorododecanesulfonic acid (



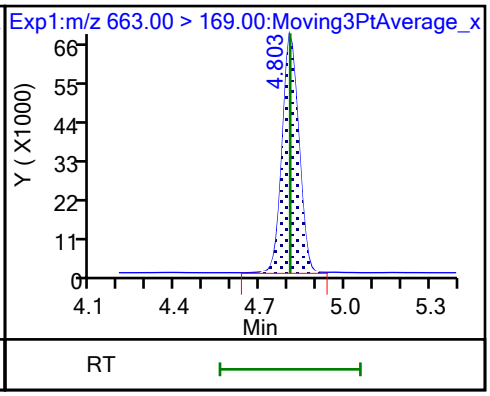
75 Perfluorododecanesulfonic acid (



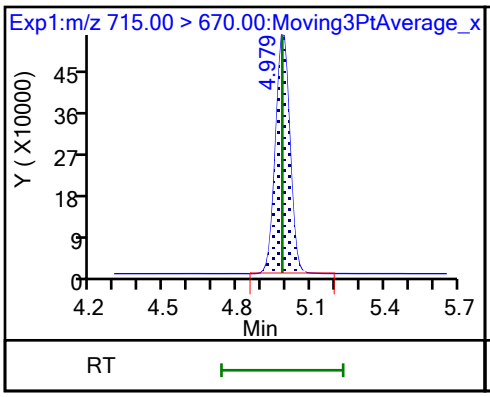
41 Perfluorotridecanoic acid



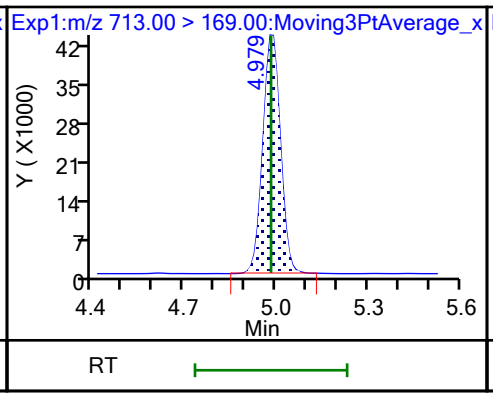
41 Perfluorotridecanoic acid



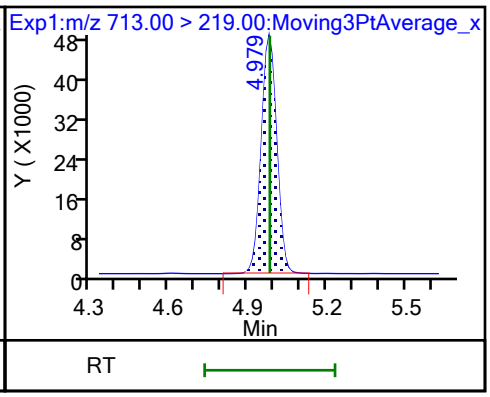
D 43 13C2 PFTeDA



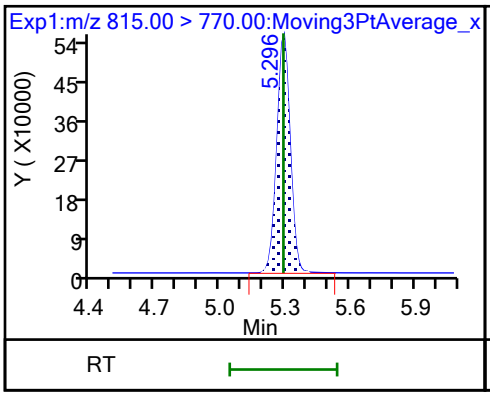
42 Perfluorotetradecanoic acid



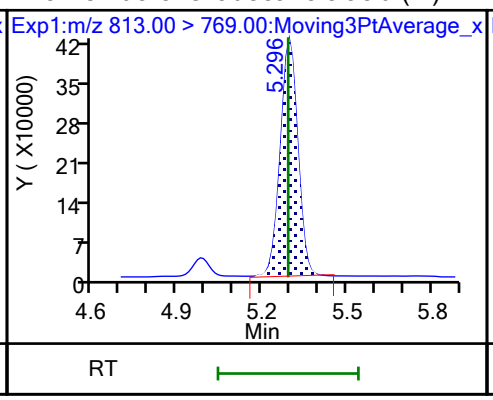
42 Perfluorotetradecanoic acid



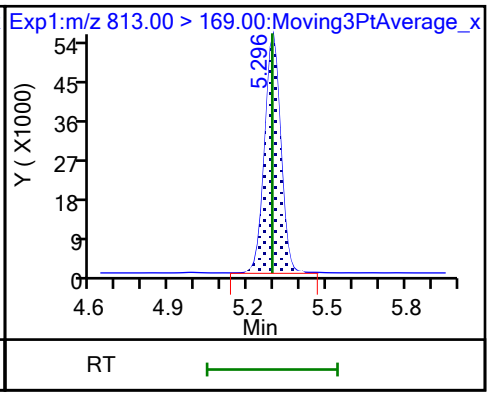
D 44 13C2 PFHxDA



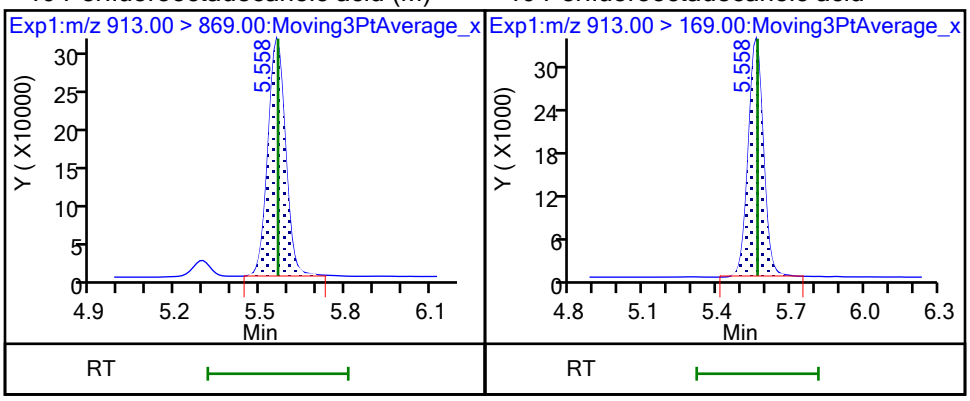
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196689/15 Calibration Date: 10/24/2023 01:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023C15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9281		2.53	2.50	1.0	30.0
Perfluoropentanoic acid	AveID	1.079	1.056		2.45	2.50	-2.2	
Perfluorobutanesulfonic acid	AveID	1.117	1.123		2.23	2.22	0.5	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.529		2.44	2.34	3.9	
Perfluorohexanoic acid	AveID	1.100	0.9511		2.16	2.50	-13.6	
Perfluoropentanesulfonic acid	AveID	1.306	1.228		2.21	2.35	-6.0	
HFPODA	AveID	1.001	0.9384		2.34	2.50	-6.3	
Perfluoroheptanoic acid	AveID	1.121	1.007		2.25	2.50	-10.1	
Perfluorohexanesulfonic acid	AveID	1.107	1.011		2.09	2.29	-8.7	
DONA	AveID	5.754	5.657		2.32	2.36	-1.7	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.800		2.44	2.38	2.4	
Perfluoroheptanesulfonic acid	AveID	1.445	1.441		2.38	2.38	-0.3	
Perfluorooctanoic acid	AveID	1.065	1.082		2.54	2.50	1.6	
Perfluorooctanesulfonic acid	AveID	1.166	1.124		2.24	2.32	-3.6	
Perfluorononanoic acid	AveID	0.9800	0.9421		2.40	2.50	-3.9	
9Cl-PF3ONS	AveID	3.569	3.947		2.58	2.33	10.6	
Perfluorononanesulfonic acid	AveID	0.8874	0.8076		2.19	2.41	-9.0	
Perfluorodecanoic acid	AveID	0.999	1.012		2.53	2.50	1.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.439		2.66	2.40	10.8	
Perfluorooctanesulfonamide	AveID	0.9539	0.999		2.62	2.50	4.7	
NMeFOSAA	AveID	0.9074	0.8905		2.45	2.50	-1.9	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6504		2.30	2.41	-4.8	
Perfluoroundecanoic acid	AveID	1.031	0.9435		2.29	2.50	-8.5	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9768		2.44	2.50	-2.3	
11Cl-PF3OUdS	AveID	5.474	5.719		2.46	2.36	4.5	
Perfluorododecanoic acid	AveID	1.018	0.9009		2.21	2.50	-11.5	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.486		2.72	2.41	12.9	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2298		2.40	2.42	-0.7	
Perfluorotridecanoic acid	AveID	1.070	0.9668		2.26	2.50	-9.6	
Perfluorotetradecanoic acid	AveID	0.1118	0.1031		2.31	2.50	-7.8	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.022		2.55	2.50	2.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7507		2.40	2.50	-3.9	
13C4 PFBA	Ave	0.9917	1.048		1.32	1.25	5.7	
13C5 PFPeA	Ave	0.7696	0.7669		1.25	1.25	-0.4	
13C3 PFBS	Ave	1.041	1.029		1.15	1.16	-1.2	
M2-4:2 FTS	Ave	0.1204	0.1107		1.07	1.17	-8.1	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196689/15 Calibration Date: 10/24/2023 01:11

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023C15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8114		1.30	1.25	3.6	
13C3 HFPO-DA	Ave	0.1516	0.1417		1.17	1.25	-6.5	
13C4 PFHpA	Ave	0.8590	0.9457		1.38	1.25	10.1	50.0
18O2 PFHxS	Ave	0.7464	0.7810		1.24	1.18	4.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1504		1.15	1.19	-3.1	
13C4 PFOA	Ave	0.9731	1.001		1.29	1.25	2.9	50.0
13C4 PFOS	Ave	0.4742	0.4770		1.20	1.20	0.6	50.0
13C5 PFNA	Ave	1.059	1.064		1.26	1.25	0.4	50.0
13C2 PFDA	Ave	1.109	1.104		1.24	1.25	-0.4	
M2-8:2 FTS	Ave	0.1744	0.1537		1.06	1.20	-11.9	
13C8 FOSA	Ave	0.9462	0.9068		1.20	1.25	-4.2	
d3-NMeFOSAA	Ave	0.2650	0.2755		1.30	1.25	3.9	
13C2 PFUnA	Ave	1.047	1.080		1.29	1.25	3.2	
d5-NEtFOSAA	Ave	0.2552	0.2555		1.25	1.25	0.1	
13C2 PFDoA	Ave	1.064	1.131		1.33	1.25	6.3	
13C2 PFTeDA	Ave	1.059	1.075		1.27	1.25	1.5	
13C2 PFHxDA	Ave	1.221	1.123		1.15	1.25	-8.0	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C15.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 01:11:14 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057511-015 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 14:55:36
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2116199	1.32		106	1612	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	3928038	2.52		101	400	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1548761	1.25		99.6	2089	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	3269879	2.45		97.8	85.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1931821	1.15		98.8	82651	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	4137241	2.23	Target=2.06	101	1165	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	2046894		2.02(1.03-3.09)		628	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.759	2.760	-0.001	1.000	1478593	2.43		104	1148	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.759	2.760	-0.001	0.784	208799	1.07		91.9	146	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1638799	1.30		104	1238	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	3117236	2.16	Target=14.12	86.4	424	M
313.00 > 119.00	2.797	2.797	0.0	1.000	233423		13.35(7.06-21.17)		216	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.809	2.810	-0.001	0.888	3644687	2.21	Target=2.72	94.0	1532	M
349.00 > 99.00	2.809	2.810	-0.001	0.888	1289307		2.83(1.36-4.09)		866	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	536946	2.34		93.7	2539	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	286108	1.17		93.5	2013	
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.168	-0.004	0.899	1492185	1.24		105	13672	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.168	-0.004	1.000	2915039	2.09	Target=3.32	91.3	3389	M
399.00 > 99.00	3.164	3.168	-0.004	1.000	883449		3.30(1.66-4.98)		700	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.164	3.168	-0.004	1.000	3847765	2.25	Target=4.17	89.9	748	M
363.00 > 169.00	3.164	3.168	-0.004	1.000	918647		4.19(2.09-6.26)		1616	
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.168	-0.004	0.899	1910006	1.38		110	9719	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.837	10299800	2.32	Target=3.33	98.3	8643	
377.00 > 85.00	3.199	3.203	-0.004	0.837	2801944		3.68(1.66-4.99)		3324	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.919	2645609	2.38	Target=4.83	99.7	7022	
449.00 > 99.00	3.511	3.505	0.006	0.919	539057		4.91(2.41-7.24)		1641	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	288499	1.15		96.9	511	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	1617312	2.44		102	1520	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	4377832	2.54	Target=2.88	102	203	M
413.00 > 169.00	3.520	3.514	0.006	1.000	1537851		2.85(1.44-4.32)		2254	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2022172	1.29		103	4722	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2019639	1.25			2841	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.822	0.009	1.003	2009711	2.24	Target=4.24	96.4	2432	M
499.00 > 99.00	3.820	3.822	-0.002	1.000	433811		4.63(2.12-6.37)		1419	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.822	-0.002	1.085	920912	1.20		101	2118	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.845	-0.002	1.000	4048005	2.40	Target=8.34	96.1	561	
463.00 > 169.00	3.843	3.845	-0.002	1.000	459071		8.82(4.17-12.51)		2389	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.845	-0.002	1.092	2148334	1.26		100	8432	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.982	3.983	-0.001	1.042	7094220	2.58		111	9982	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.102	4.105	-0.003	1.074	1496833	2.19	Target=2.17	91.0	5798	
549.00 > 99.00	4.102	4.105	-0.003	1.074	634468		2.36(1.08-3.25)		2022	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.126	4.129	-0.003	1.000	4511638	2.53	Target=11.44	101	1128	M
513.00 > 169.00	4.138	4.129	0.009	1.003	445795		10.12(5.72-17.16)		2926	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.129	-0.003	1.172	2229583	1.24		99.6	5894	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.176	297346	1.06		88.1	679	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.138	4.141	-0.003	1.000	1453464	2.66		111	3291	M
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.234	-0.002	1.202	1831327	1.20		95.8	5903	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.234	-0.002	1.000	3659035	2.62		105	8048	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.270	-0.002	1.212	556355	1.30		104	1323	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.270	-0.002	1.000	990861	2.45		98.1	1184	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.143	1209146	2.30	Target=2.37	95.2	10590	
599.00 > 99.00	4.352	4.366	-0.014	1.139	486873		2.48(1.19-3.56)		2962	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	2181076	1.29		103	8486	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	4115720	2.29	Target=12.20	91.5	990	
563.00 > 169.00	4.388	4.390	-0.002	1.000	375867		10.95(6.10-18.31)		3433	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.250	515966	1.25		100	1168	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	1007943	2.44		97.7	2700	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.473	-0.004	1.170	10389328	2.46		104	5799	M
D 36 13C2 PFDoA										M
615.00 > 570.00	4.611	4.613	-0.002	1.310	2283499	1.33		106	2857	M
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.613	-0.002	1.000	4114575	2.21	Target=8.47	88.5	226	M
613.00 > 169.00	4.611	4.613	-0.002	1.000	523692		7.86(4.23-12.70)		2581	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.624	-0.002	1.117	889113	2.72		113	4575	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.250	428636	2.40	Target=0.48	99.3	7336	
699.00 > 99.00	4.765	4.777	-0.012	1.248	880175		0.49(0.24-0.72)		7410	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.042	4415433	2.26	Target=6.41	90.4	246	M
663.00 > 169.00	4.804	4.806	-0.002	1.042	711305		6.21(3.21-9.62)		4711	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.415	2171106	1.27		101	8342	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.982	-0.002	1.000	447844	2.31	Target=0.87	92.2	4781	
713.00 > 219.00	4.980	4.982	-0.002	1.000	482769		0.93(0.43-1.30)		3583	M

Report Date: 25-Oct-2023 19:58:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C15.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.290	5.292	-0.002	1.503	2268245	1.15		92.0	5306	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.290	5.292	-0.002	1.000	4634044	2.55	Target=7.89	102	260	M
813.00 > 169.00	5.290	5.292	-0.002	1.000	570679		8.12(3.94-11.83)		4620	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.554	5.563	-0.009	1.050	3405581	2.40	Target=9.39	96.1	304	M
913.00 > 169.00	5.554	5.563	-0.009	1.050	352695		9.66(4.69-14.08)		1483	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

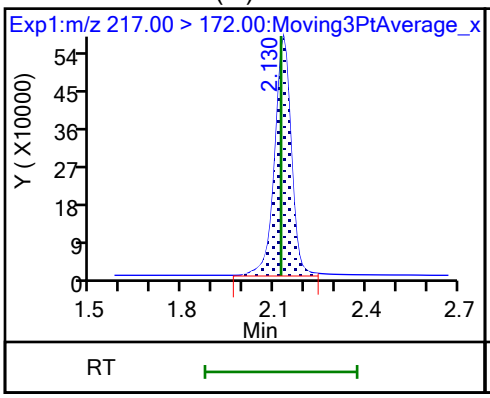
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 19:58:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

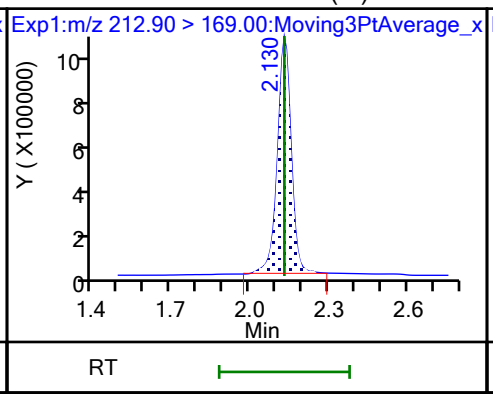
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C15.d
Injection Date: 24-Oct-2023 01:11:14 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

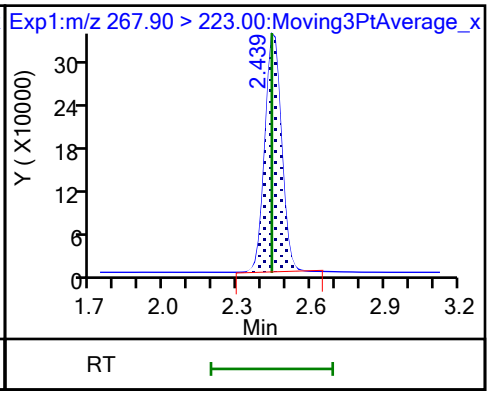
D 1 13C4 PFBA (M)



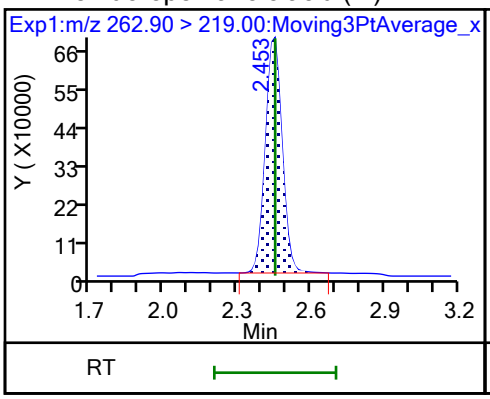
2 Perfluorobutanoic acid (M)



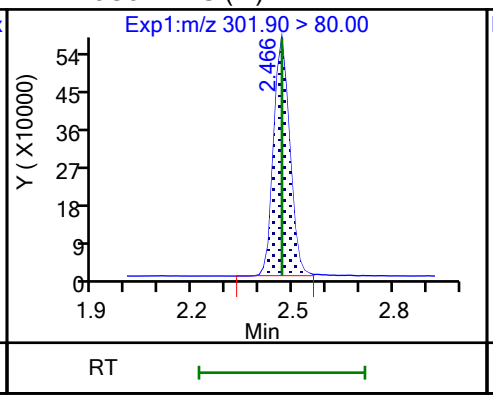
D 3 13C5 PFPeA



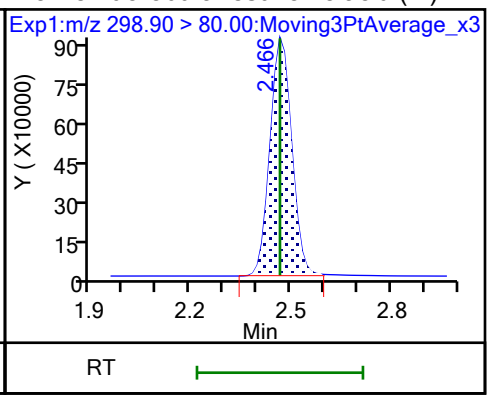
4 Perfluoropentanoic acid (M)



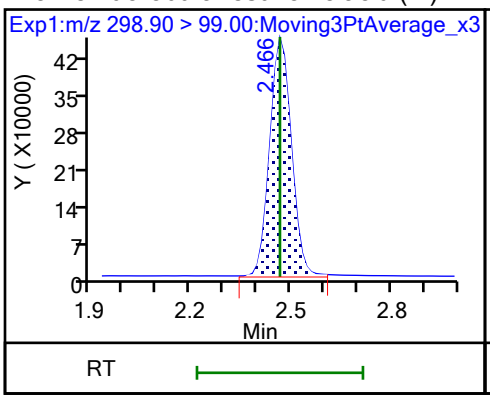
D 47 13C3 PFBS (M)



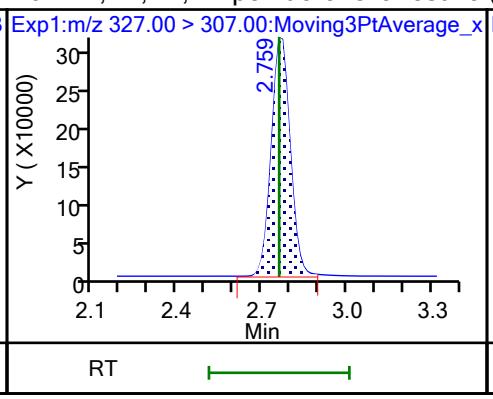
5 Perfluorobutanesulfonic acid (M)



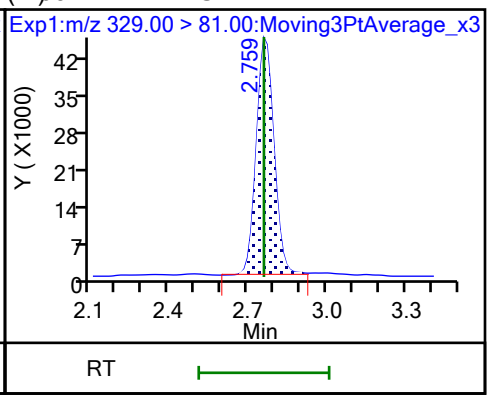
5 Perfluorobutanesulfonic acid (M)



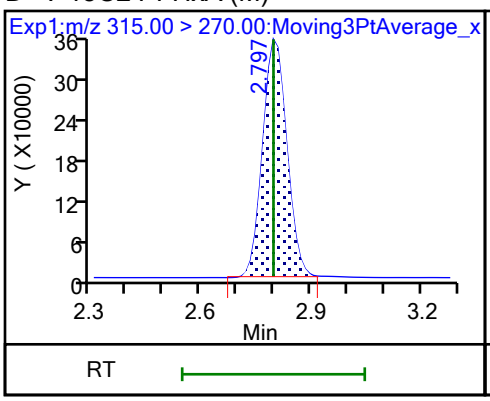
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



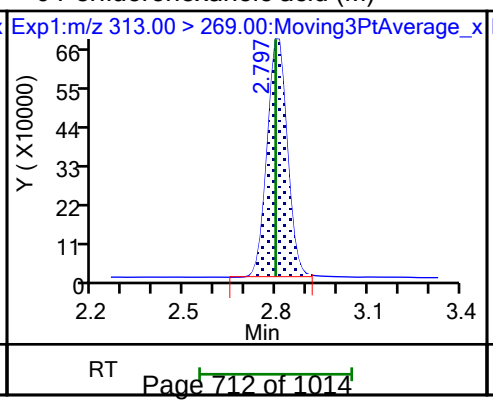
60 M2-4:2 FTS



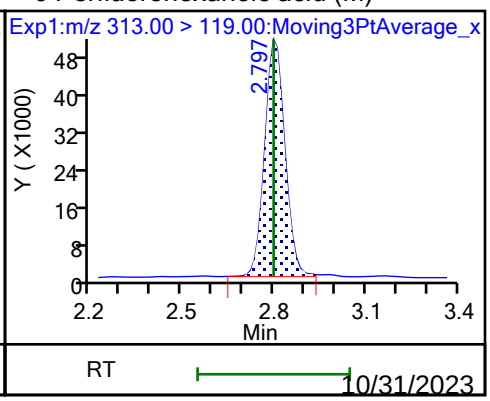
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

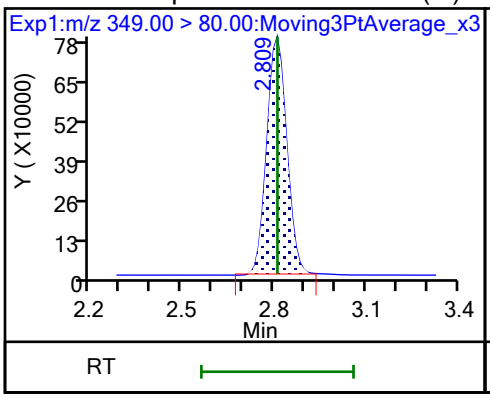


6 Perfluorohexanoic acid (M)

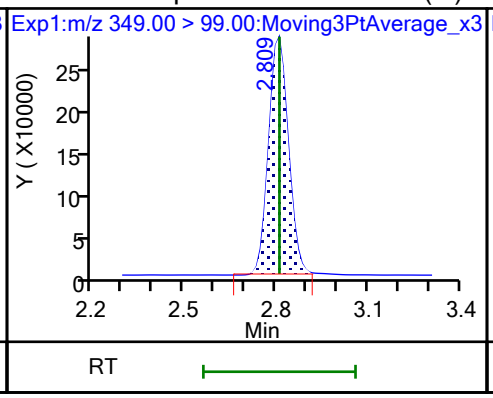


10/31/2023
4:00 PM

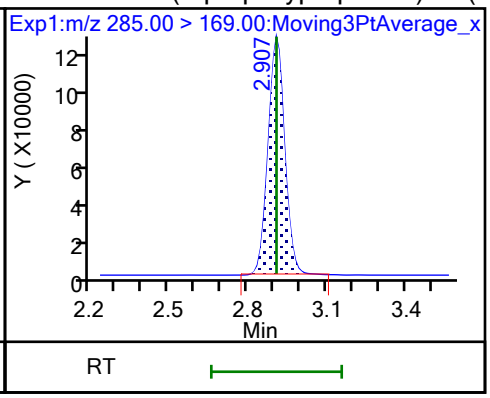
70 Perfluoropentanesulfonic acid (M)



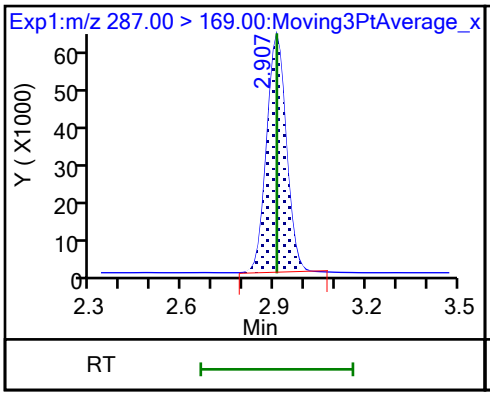
70 Perfluoropentanesulfonic acid (M)



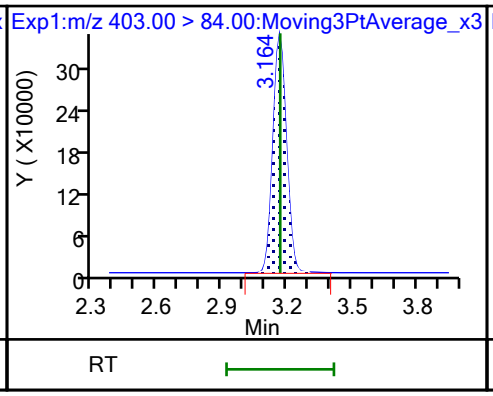
67 Perfluoro(2-propoxypropanoic) ac (M)



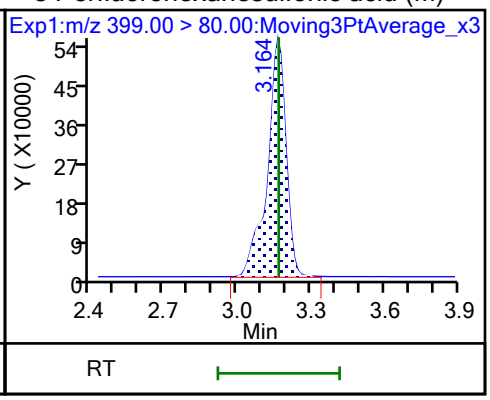
D 64 13C3 HFPO-DA



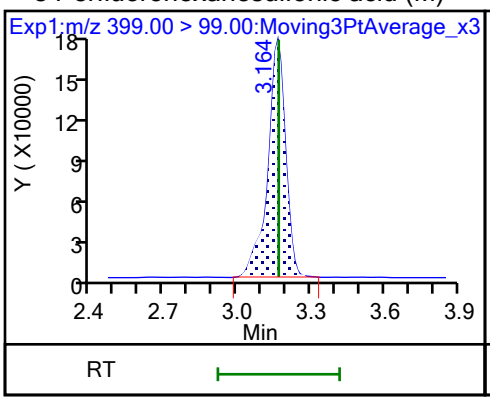
D 11 18O2 PFHxS



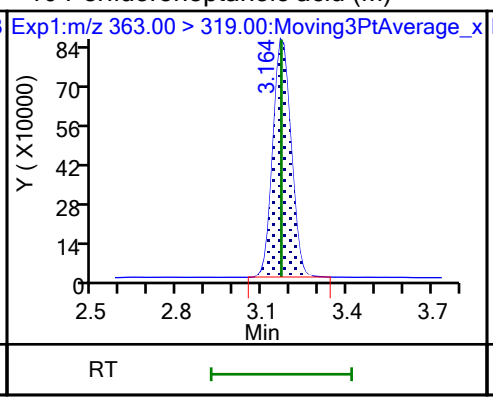
8 Perfluorohexanesulfonic acid (M)



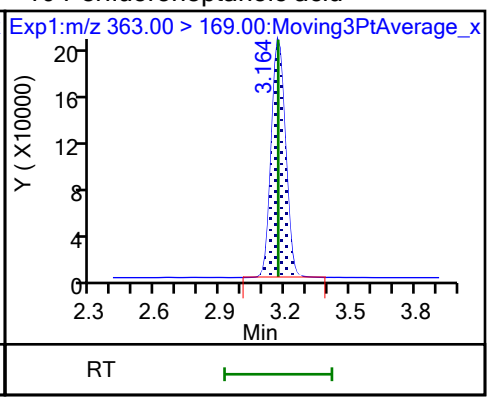
8 Perfluorohexanesulfonic acid (M)



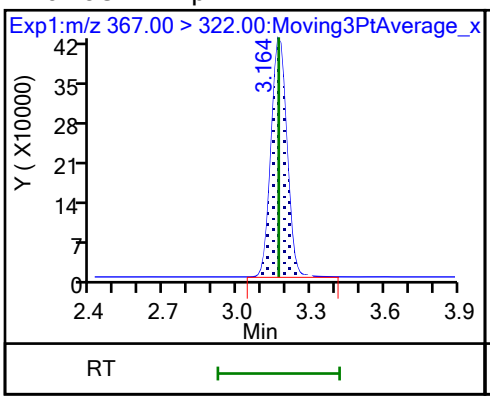
10 Perfluoroheptanoic acid (M)



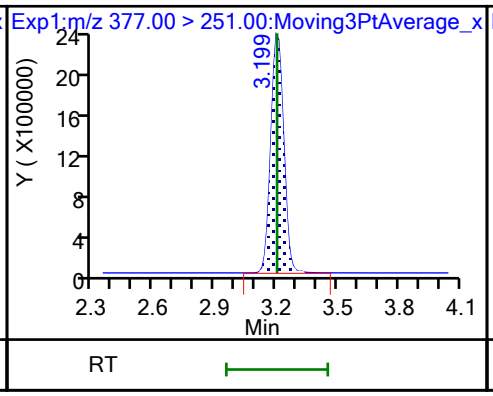
10 Perfluoroheptanoic acid



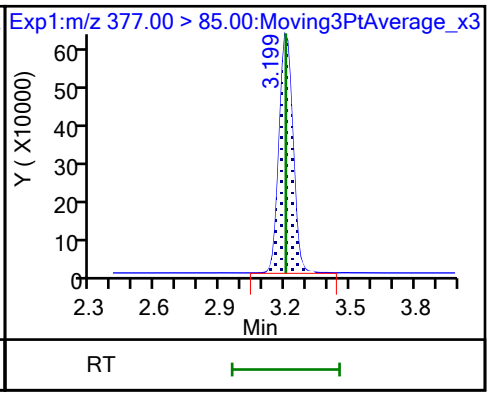
D 9 13C4 PFHpA



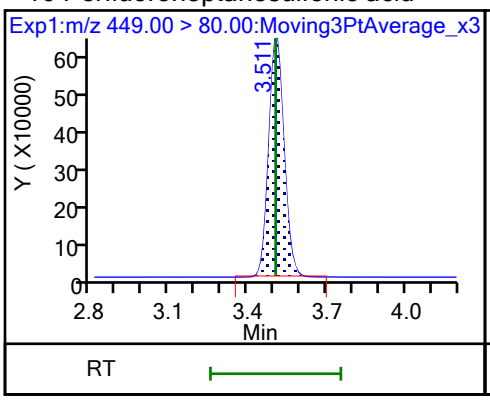
77 DONA



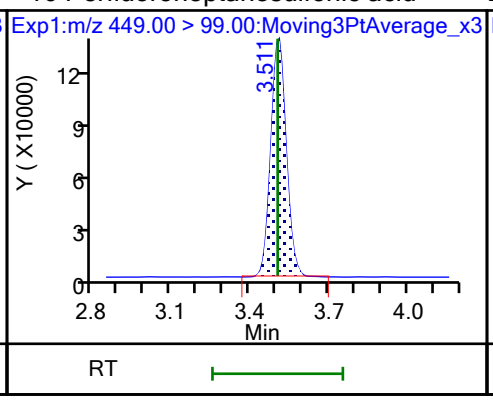
77 DONA



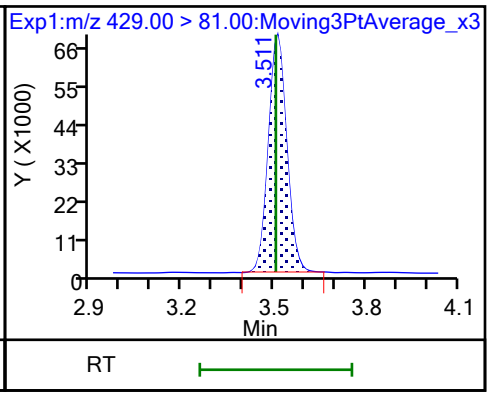
16 Perfluoroheptanesulfonic acid



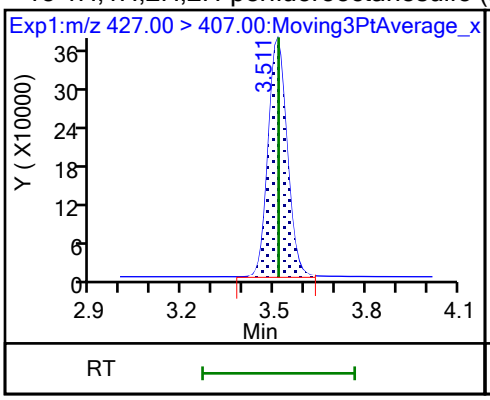
16 Perfluoroheptanesulfonic acid



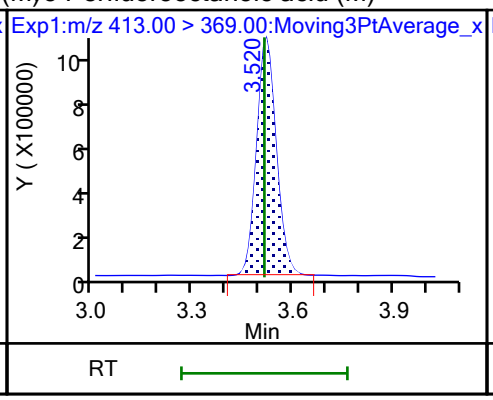
D 12 M2-6:2 FTS



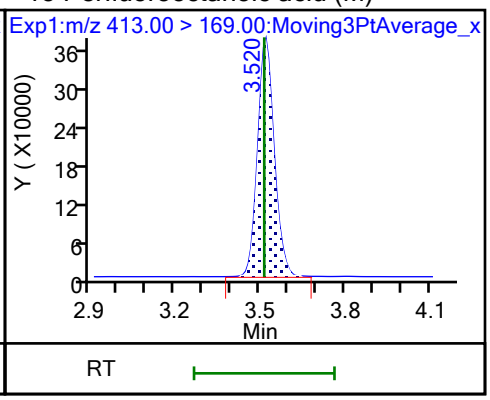
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



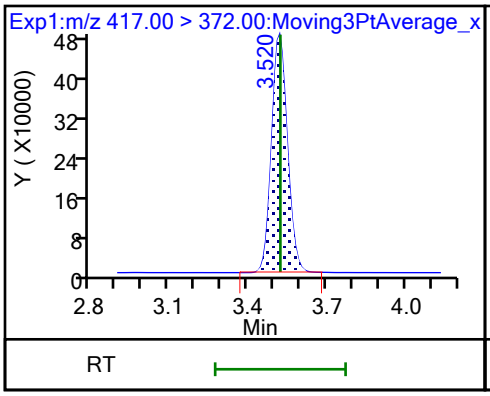
15 Perfluorooctanoic acid (M)



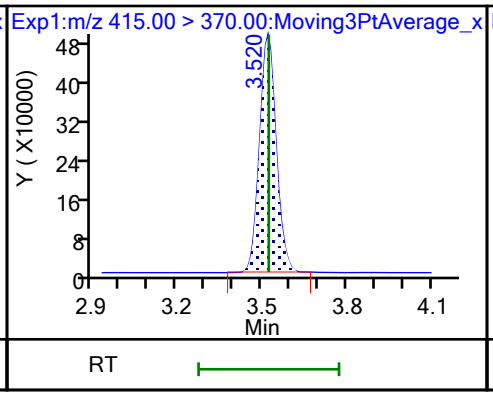
15 Perfluorooctanoic acid (M)



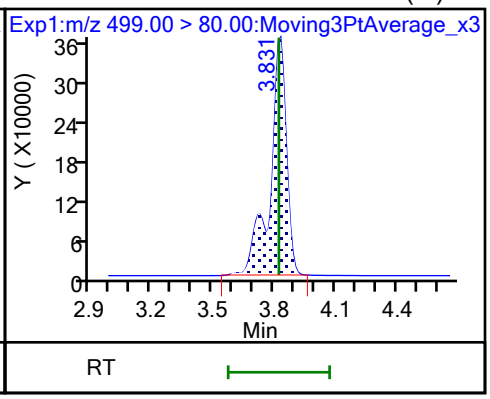
D 14 13C4 PFOA



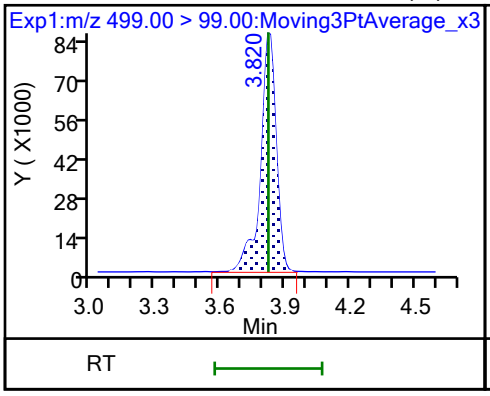
* 62 13C2 PFOA



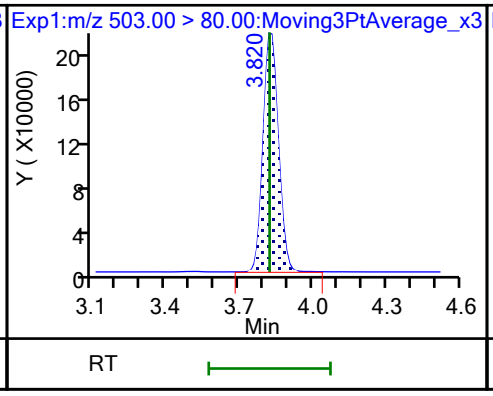
17 Perfluorooctanesulfonic acid (M)



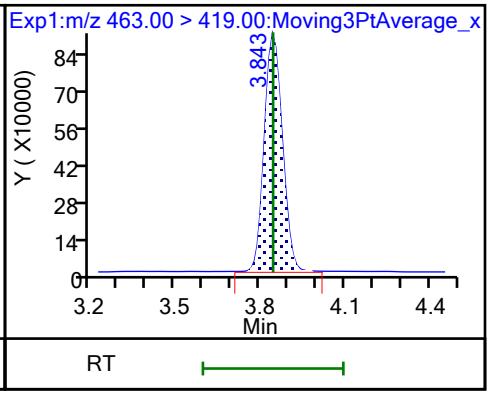
17 Perfluorooctanesulfonic acid (M)



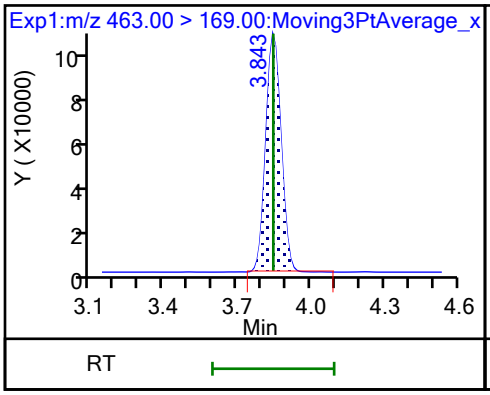
D 18 13C4 PFOS



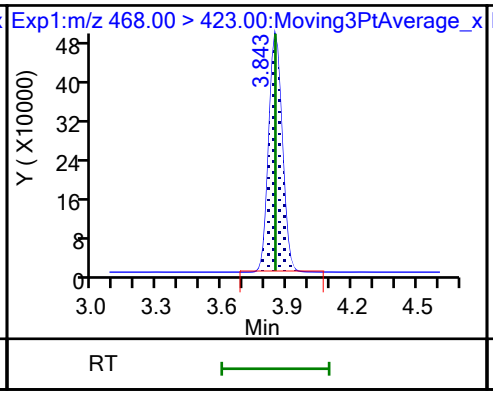
20 Perfluorononanoic acid



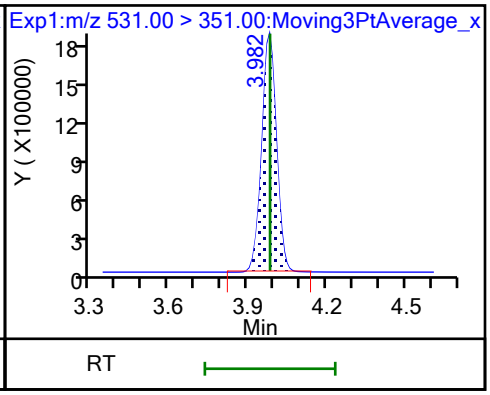
20 Perfluorononanoic acid



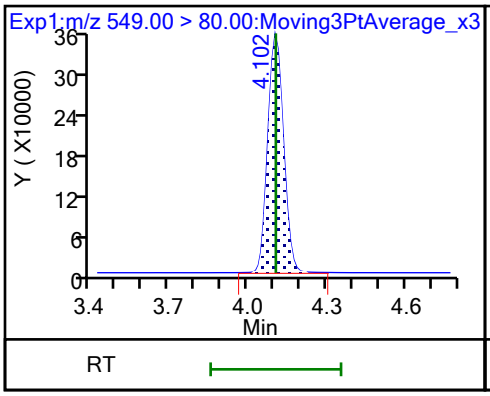
D 19 13C5 PFNA



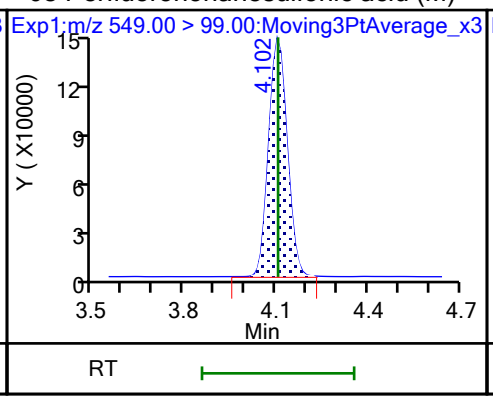
69 9-Chlorohexadecafluoro-3-oxanona (M)



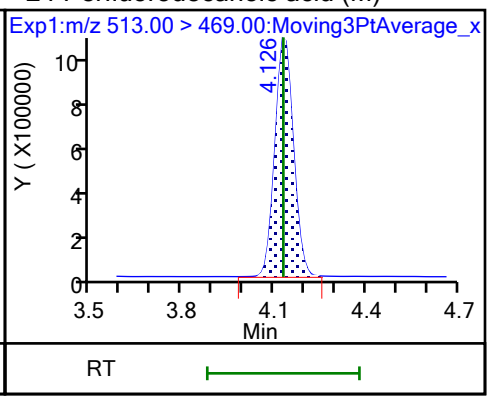
68 Perfluorononanesulfonic acid



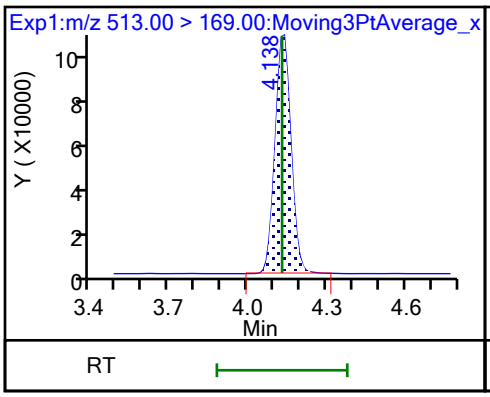
68 Perfluorononanesulfonic acid (M)



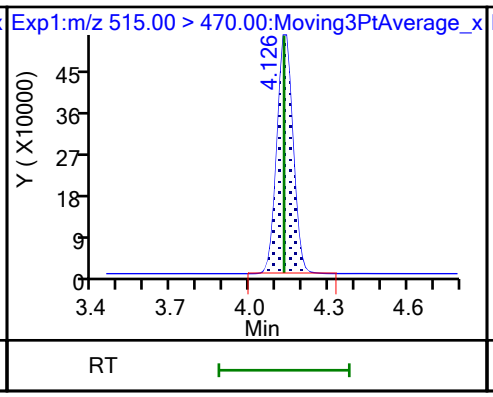
24 Perfluorodecanoic acid (M)



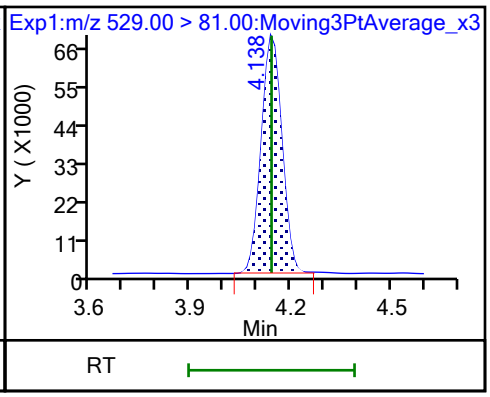
24 Perfluorodecanoic acid



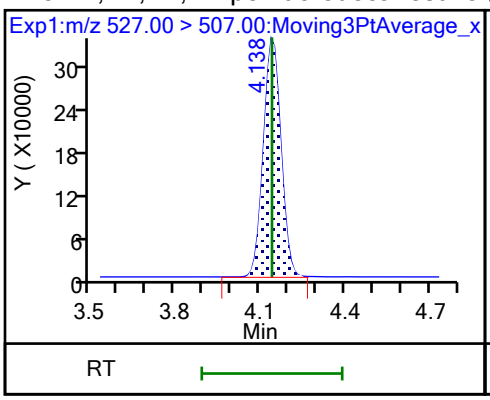
D 23 13C2 PFDA



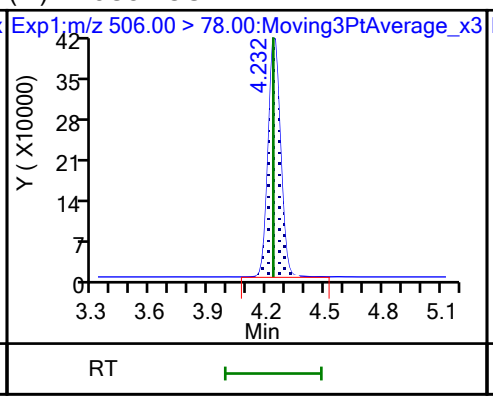
D 26 M2-8:2 FTS



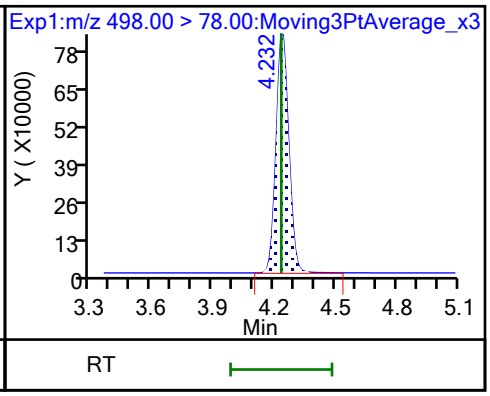
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



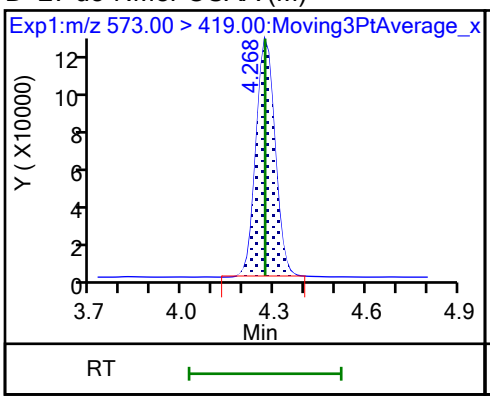
D 21 13C8 FOSA



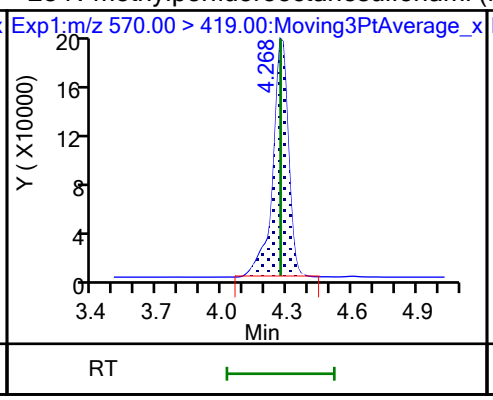
22 Perfluorooctanesulfonamide



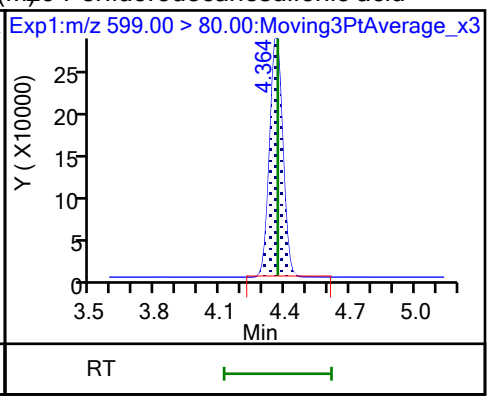
D 27 d3-NMeFOSAA (M)



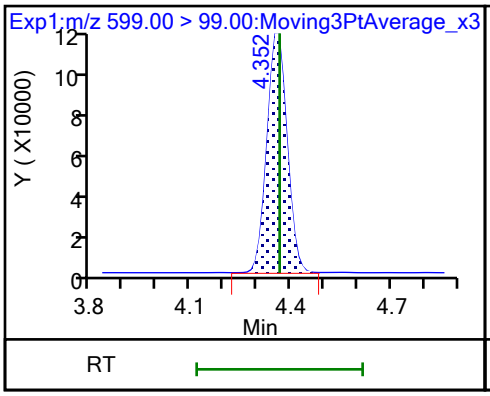
28 N-methylperfluorooctanesulfonami (M)



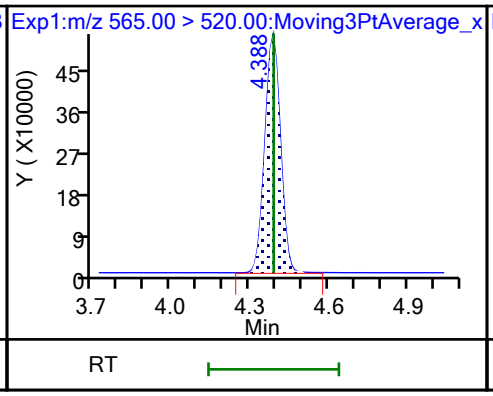
29 Perfluorodecanesulfonic acid



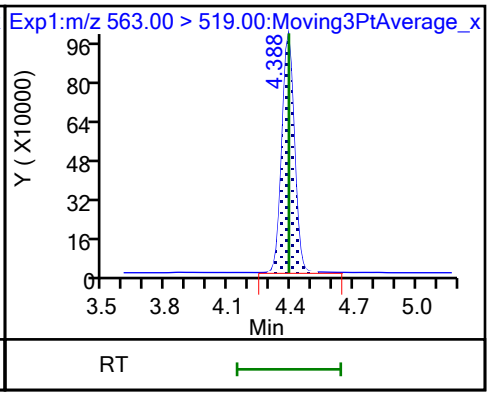
29 Perfluorodecanesulfonic acid



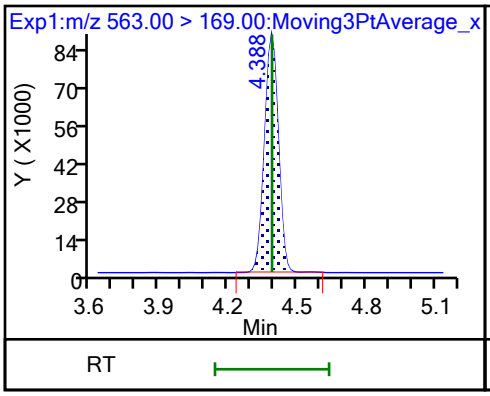
D 30 13C2 PFUnA



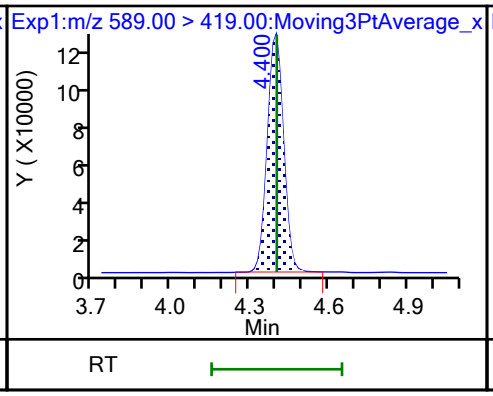
31 Perfluoroundecanoic acid



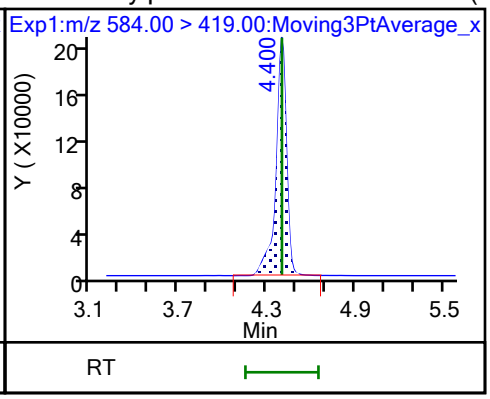
31 Perfluoroundecanoic acid



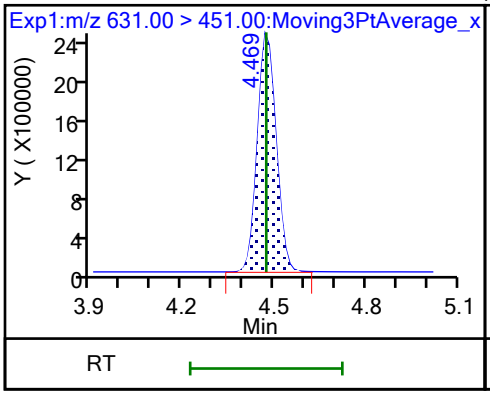
D 32 d5-NEtFOSAA



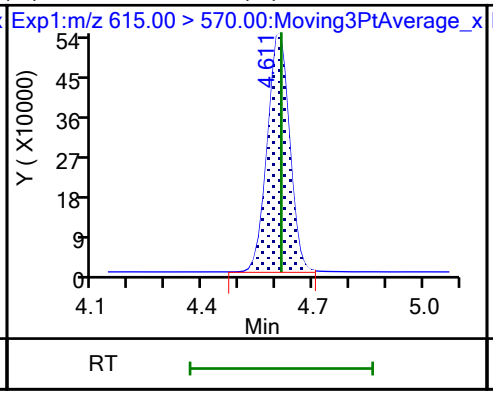
33 N-ethylperfluorooctanesulfonamid (M)



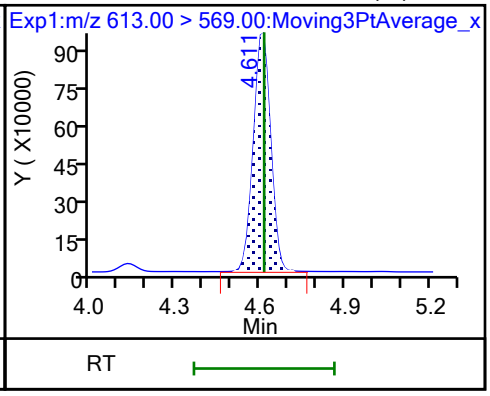
66 11-Chloroeicosafluoro-3-oxaundec (M)



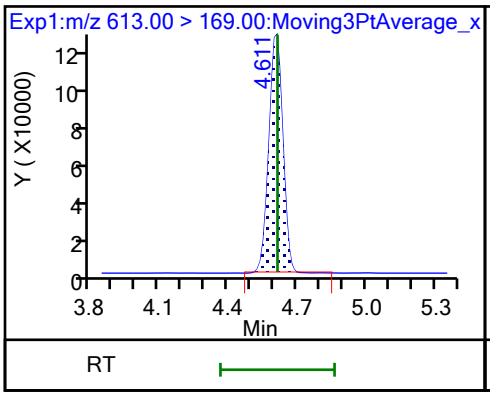
D 36 13C2 PFDoA (M)



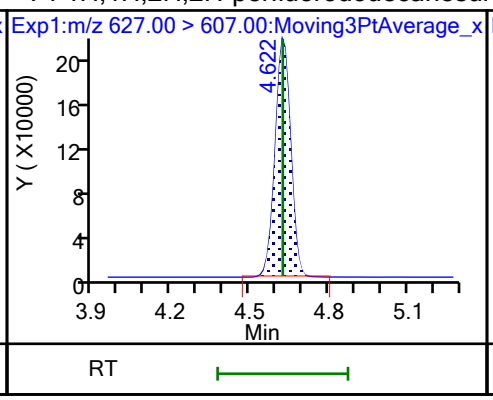
37 Perfluorododecanoic acid (M)



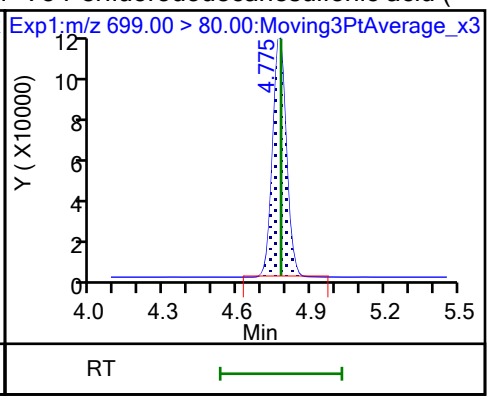
37 Perfluorododecanoic acid



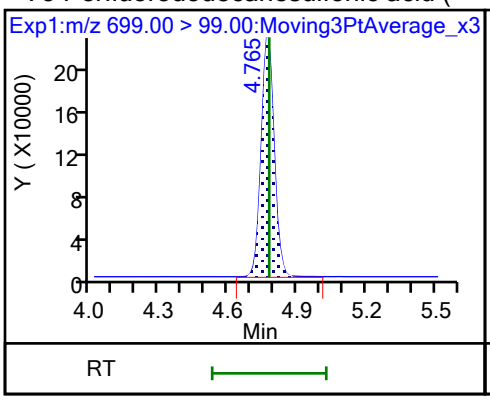
74 1H,1H,2H,2H-perfluorododecanesul



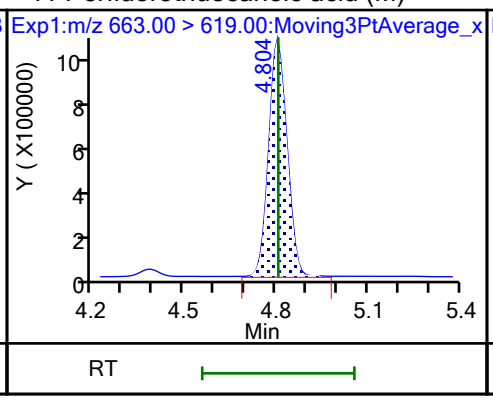
75 Perfluorododecanesulfonic acid (



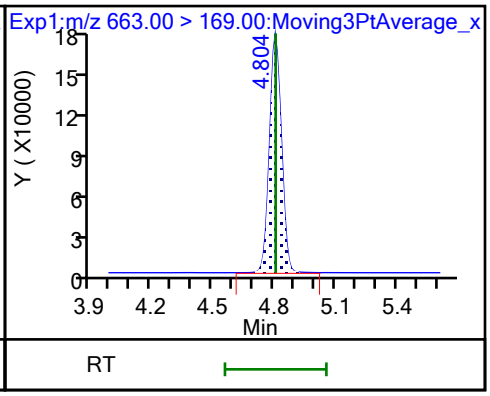
75 Perfluorododecanesulfonic acid (



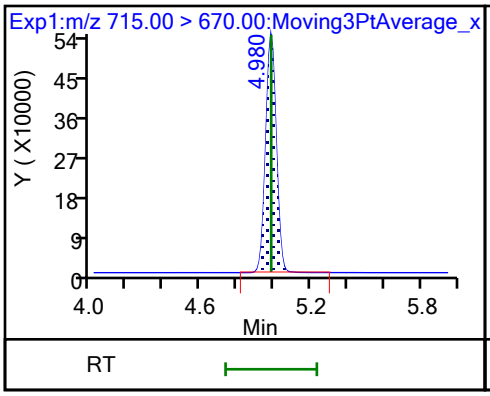
41 Perfluorotridecanoic acid (M)



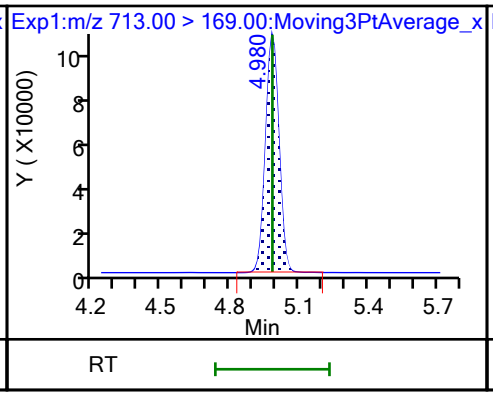
41 Perfluorotridecanoic acid



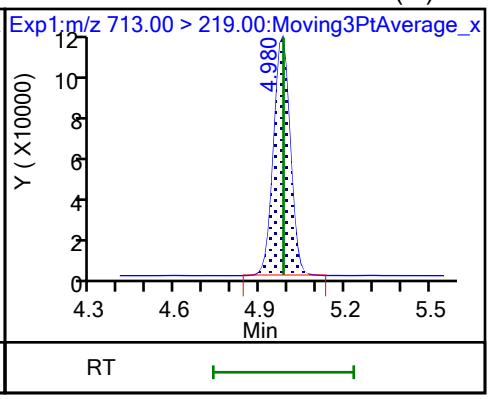
D 43 13C2 PFTeDA



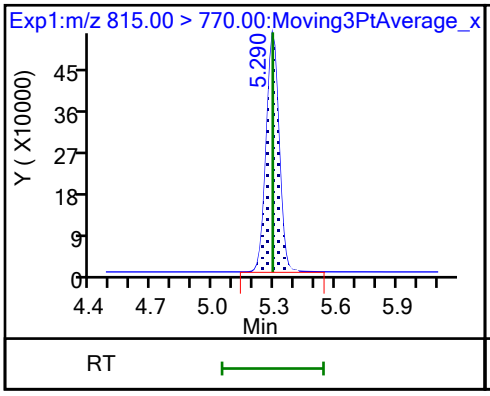
42 Perfluorotetradecanoic acid



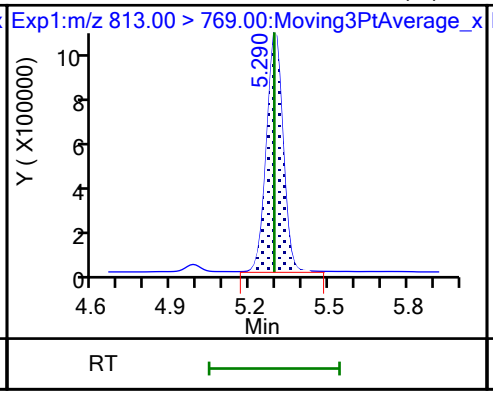
42 Perfluorotetradecanoic acid (M)



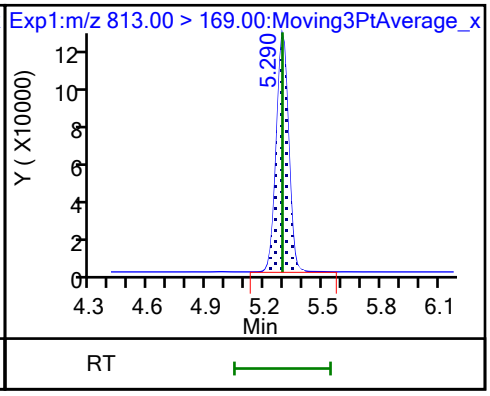
D 44 13C2 PFHxDA



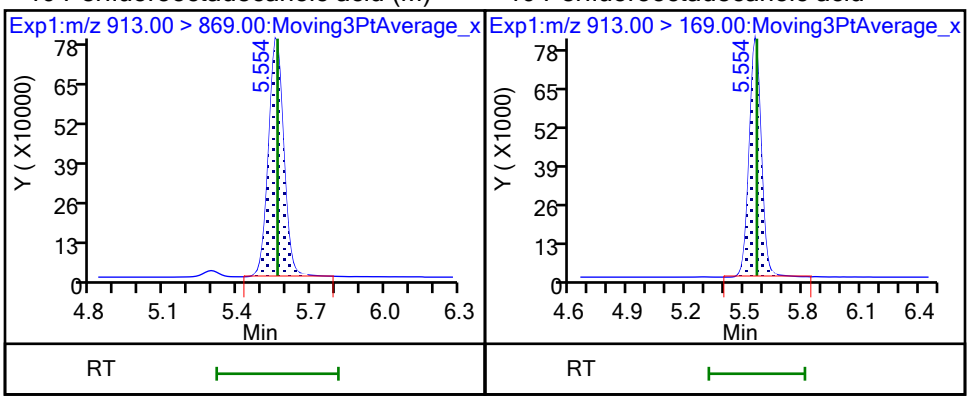
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.307		0.140	0.125	11.8	50.0
Perfluoropentanoic acid	AveID	1.079	1.232		0.0571	0.0500	14.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.213		0.0482	0.0444	8.6	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	4.068		0.0561	0.0469	19.8	50.0
Perfluorohexanoic acid	AveID	1.100	1.181		0.0537	0.0500	7.3	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.370		0.0494	0.0471	4.9	50.0
HFPODA	AveID	1.001	1.221		0.122	0.100	22.0	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.256		0.0518	0.0457	13.4	50.0
Perfluoroheptanoic acid	AveID	1.121	1.125		0.0502	0.0500	0.4	50.0
DONA	AveID	5.754	5.863		0.0481	0.0473	1.9	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.323		0.144	0.119	21.6	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.467		0.0484	0.0477	1.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.166		0.0548	0.0500	9.5	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.286		0.0512	0.0464	10.3	50.0
Perfluorononanoic acid	AveID	0.9800	1.016		0.0519	0.0500	3.7	50.0
9Cl-PF3ONS	AveID	3.569	3.899		0.0510	0.0467	9.2	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8088		0.0438	0.0481	-8.9	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.553		0.0557	0.0480	16.0	50.0
Perfluorodecanoic acid	AveID	0.999	1.000		0.0500	0.0500	0.0	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9624		0.0504	0.0500	0.9	50.0
NMeFOSAA	AveID	0.9074	1.102		0.152	0.125	21.5	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6279		0.0444	0.0483	-8.1	50.0
Perfluoroundecanoic acid	AveID	1.031	1.029		0.0499	0.0500	-0.2	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.125		0.141	0.125	12.5	50.0
11Cl-PF3OUdS	AveID	5.474	6.210		0.0535	0.0472	13.5	50.0
Perfluorododecanoic acid	AveID	1.018	1.030		0.0506	0.0500	1.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.609		0.0589	0.0482	22.2	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2184		0.0457	0.0484	-5.6	50.0
Perfluorotridecanoic acid	AveID	1.070	1.269		0.0593	0.0500	18.7	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1170		0.0523	0.0500	4.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.235		0.0617	0.0500	23.4	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7816		0.0500	0.0500	0.0	50.0
13C4 PFBA	Ave	0.9917	1.038		1.31	1.25	4.7	
13C5 PFPeA	Ave	0.7696	0.7780		1.26	1.25	1.1	
13C3 PFBS	Ave	1.041	0.996		1.11	1.16	-4.3	
M2-4:2 FTS	Ave	0.1204	0.1093		1.06	1.17	-9.3	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8006		1.28	1.25	2.3	
13C3 HFPO-DA	Ave	0.1516	0.1454		1.20	1.25	-4.0	
18O2 PFHxS	Ave	0.7464	0.7550		1.20	1.18	1.2	
13C4 PFHpA	Ave	0.8590	0.9204		1.34	1.25	7.1	
M2-6:2 FTS	Ave	0.1551	0.1545		1.18	1.19	-0.4	
13C4 PFOA	Ave	0.9731	0.9523		1.22	1.25	-2.1	
13C4 PFOS	Ave	0.4742	0.4939		1.25	1.20	4.2	
13C5 PFNA	Ave	1.059	1.048		1.24	1.25	-1.1	
13C2 PFDA	Ave	1.109	1.041		1.17	1.25	-6.1	
M2-8:2 FTS	Ave	0.1744	0.1534		1.05	1.20	-12.0	
13C8 FOSA	Ave	0.9462	0.9336		1.23	1.25	-1.3	
d3-NMeFOSAA	Ave	0.2650	0.2548		1.20	1.25	-3.9	
13C2 PFUnA	Ave	1.047	1.088		1.30	1.25	4.0	
d5-NEtFOSAA	Ave	0.2552	0.2515		1.23	1.25	-1.4	
13C2 PFDoA	Ave	1.064	1.035		1.22	1.25	-2.7	
13C2 PFTeDA	Ave	1.059	1.014		1.20	1.25	-4.2	
13C2 PFHxDA	Ave	1.221	1.113		1.14	1.25	-8.8	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 26-Oct-2023 21:03:32 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057574-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 13:24:45 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1667

First Level Reviewer: nampitakw Date: 27-Oct-2023 12:19:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.131	0.0	0.607	2054138	1.31		105	1366	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.131	2.131	0.0	1.000	268511	0.1398		112	19.0	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1539344	1.26		101	1509	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	75830	0.0571		114	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1833232	1.11		95.7	72941	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	84851	0.0482	Target=2.06	109	78.8	M
298.90 > 99.00	2.467	2.467	0.0	1.000	40718		2.08(1.03-3.09)		19.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	32965	0.0561		120	315	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	201925	1.06		90.7	139	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1584164	1.28		102	1284	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	74832	0.0537	Target=14.12	107	14.9	M
313.00 > 119.00	2.797	2.797	0.0	1.000	6397		11.70(7.06-21.17)		6.7	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	77028	0.0494	Target=2.72	105	128	
349.00 > 99.00	2.797	2.797	0.0	0.887	26651		2.89(1.36-4.09)		61.8	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.897	0.0	0.996	28108	0.1220		122	222	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	287765	1.20		96.0	1168	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1413192	1.20		101	5945	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.153	0.0	1.000	68587	0.0518	Target=3.32	113	169	M
399.00 > 99.00	3.153	3.153	0.0	1.000	21002		3.27(1.66-4.98)		18.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.165	0.0	1.000	81947	0.0502	Target=4.17	100	19.2	M
363.00 > 169.00	3.153	3.165	-0.012	0.996	19395		4.23(2.09-6.26)		31.4	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	1821068	1.34		107	9840	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	216549	0.0481	Target=3.33	102	253	
377.00 > 85.00	3.199	3.199	0.0	0.838	55649		3.89(1.66-4.99)		97.4	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.502	0.0	0.917	54643	0.0484	Target=4.83	102	123	
449.00 > 99.00	3.493	3.502	-0.009	0.915	10155		5.38(2.41-7.24)		31.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	290445	1.18		99.6	600	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	96429	0.1442		122	104	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.512	0.0	1.000	87916	0.0548	Target=2.88	110	3.6	M
413.00 > 169.00	3.512	3.512	0.0	1.000	27579		3.19(1.44-4.32)		49.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.512	0.0	1.000	1884337	1.22		97.9	8541	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.512	0.0		1978630	1.25			12318	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.819	0.0	1.000	46664	0.0512	Target=4.24	110	101	M
499.00 > 99.00	3.808	3.819	-0.011	0.997	10051		4.64(2.12-6.37)		26.4	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.819	0.0	1.088	934177	1.24		104	3103	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.842	0.0	1.000	84262	0.0519	Target=8.34	104	13.5	
463.00 > 169.00	3.842	3.842	0.0	1.000	8391		10.04(4.17-12.51)		61.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.094	2072676	1.24		98.9	5533	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.971	3.971	0.0	1.040	142187	0.0510		109	619	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.101	4.101	0.0	1.074	30412	0.0438	Target=2.17	91.1	379	M
549.00 > 99.00	4.101	4.101	0.0	1.074	12431		2.45(1.08-3.25)		55.8	
D 23 13C2 PFDA										
515.00 > 470.00	4.125	4.125	0.0	1.175	2060552	1.17		93.9	10196	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.136	0.0	1.003	82424	0.0500	Target=11.44	100	21.3	
513.00 > 169.00	4.125	4.136	-0.011	1.000	10789		7.64(5.72-17.16)		52.6	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.136	0.0	1.000	29767	0.0557		116	290	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.136	0.0	1.178	290857	1.05		88.0	737	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.205	1847283	1.23		98.7	6873	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.230	4.230	0.0	1.000	71115	0.0504		101	506	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.266	0.0	1.215	504175	1.20		96.1	1733	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.266	0.0	1.000	55582	0.1519		121	158	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.351	4.351	0.0	1.139	23685	0.0444	Target=2.37	91.9	208	
599.00 > 99.00	4.351	4.351	0.0	1.139	10917		2.17(1.19-3.56)		99.5	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.249	2153250	1.30		104	9920	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.387	0.0	1.000	88595	0.0499	Target=12.20	99.8	21.8	M
563.00 > 169.00	4.387	4.387	0.0	1.000	8100		10.94(6.10-18.31)		55.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.253	497581	1.23		98.6	898	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.399	0.0	1.000	55982	0.1406		112	210	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.468	0.0	1.170	228912	0.0535		113	446	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.313	2047635	1.22		97.3	4419	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.610	0.0	1.000	84345	0.0506	Target=8.47	101	5.7	M
613.00 > 169.00	4.599	4.610	-0.011	0.998	9299		9.07(4.23-12.70)		79.6	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.621	0.0	1.117	18834	0.0589		122	322	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.764	4.764	0.0	1.248	8265	0.0457	Target=0.48	94.4	107	
699.00 > 99.00	4.764	4.764	0.0	1.248	17651		0.47(0.24-0.72)		261	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.803	0.0	1.042	103978	0.0593	Target=6.41	119	7.0	
663.00 > 169.00	4.803	4.803	0.0	1.042	14615		7.11(3.21-9.62)		199	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.980	0.0	1.418	2007031	1.20		95.8	6419	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.980	0.0	1.000	9391	0.0523	Target=0.87	105	119	
713.00 > 219.00	4.980	4.980	0.0	1.000	9666		0.97(0.43-1.30)		214	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.508	2201944	1.14		91.2	5047	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.296	0.0	1.000	108735	0.0617	Target=7.89	123	7.9	M
813.00 > 169.00	5.296	5.296	0.0	1.000	12052		9.02(3.94-11.83)		140	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.567	5.567	0.0	1.051	68840	0.0500	Target=9.39	100	9.5	M
913.00 > 169.00	5.567	5.567	0.0	1.051	7125		9.66(4.69-14.08)		180	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

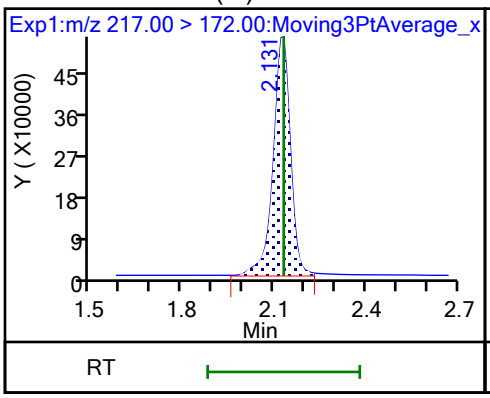
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 13:24:45 Chrom Revision: 2.3 18-Oct-2023 21:16:54

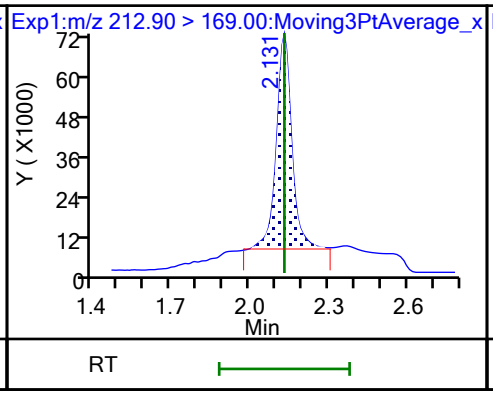
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Injection Date: 26-Oct-2023 21:03:32 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

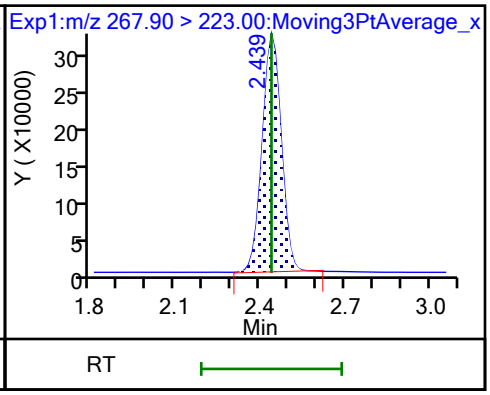
D 1 13C4 PFBA (M)



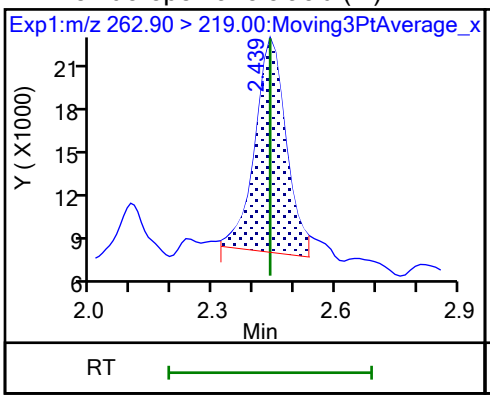
2 Perfluorobutanoic acid



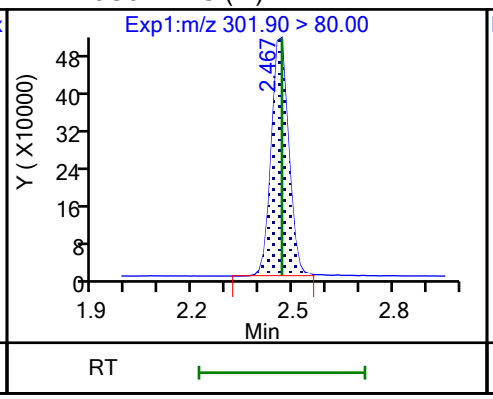
D 3 13C5 PFPeA



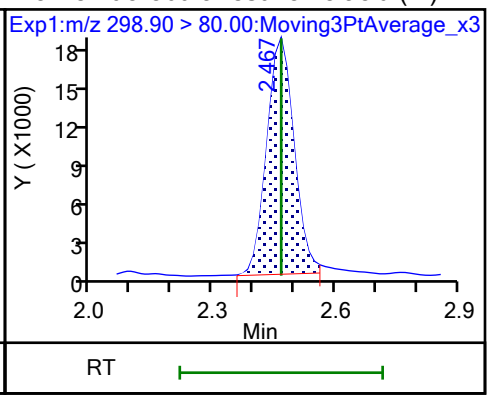
4 Perfluoropentanoic acid (M)



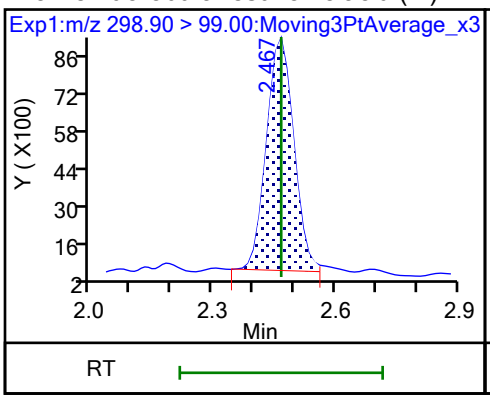
D 47 13C3 PFBS (M)



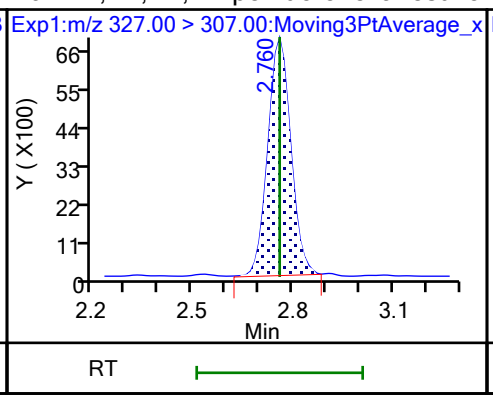
5 Perfluorobutanesulfonic acid (M)



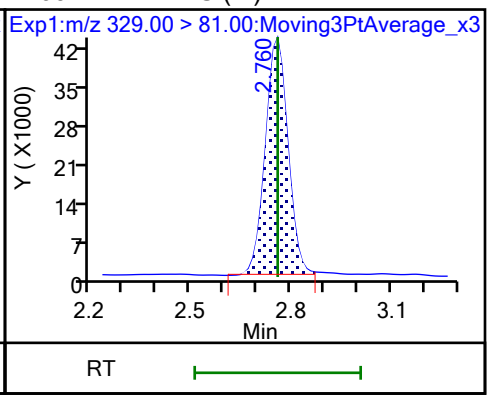
5 Perfluorobutanesulfonic acid (M)



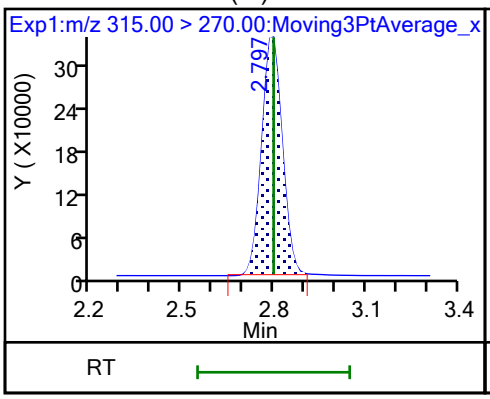
61 1H,1H,2H,2H-perfluorohexanesulfo



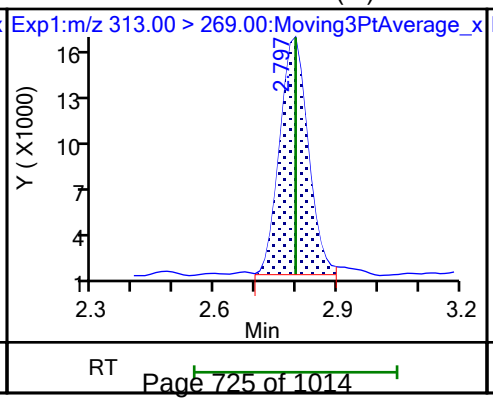
D 60 M2-4:2 FTS (M)



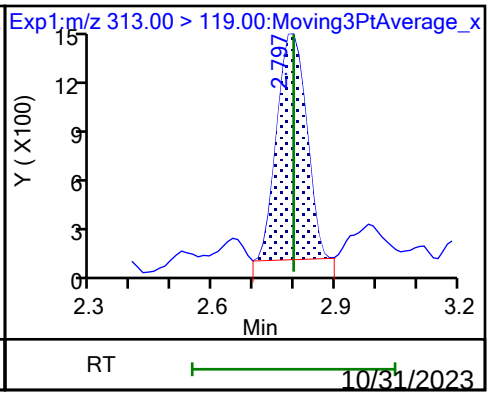
D 7 13C2 PFHxA (M)



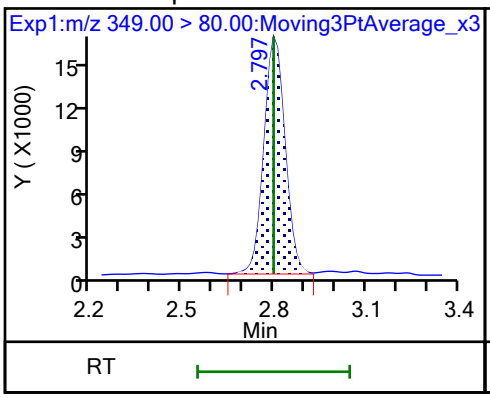
6 Perfluorohexanoic acid (M)



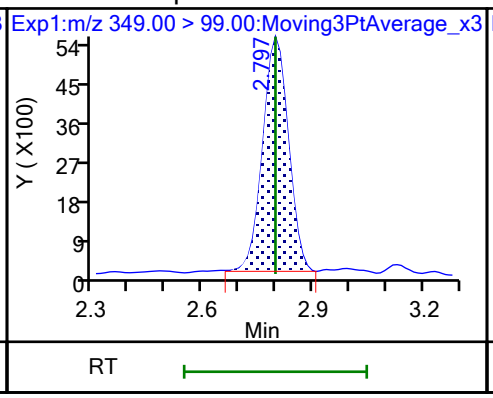
6 Perfluorohexanoic acid



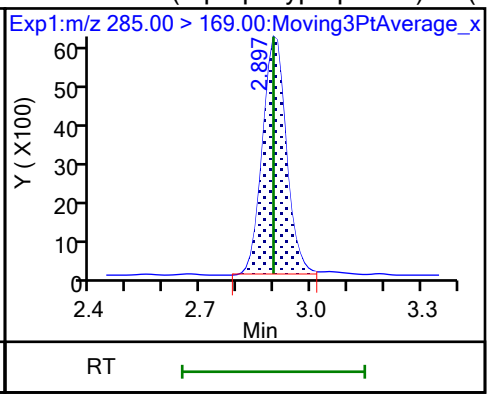
70 Perfluoropentanesulfonic acid



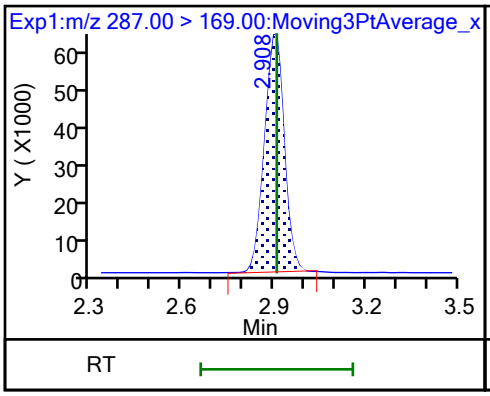
70 Perfluoropentanesulfonic acid



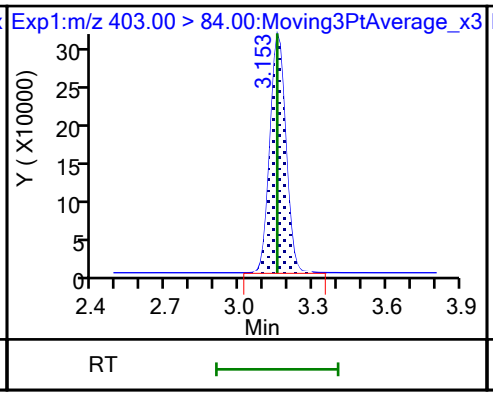
67 Perfluoro(2-propoxypropanoic) ac (M)



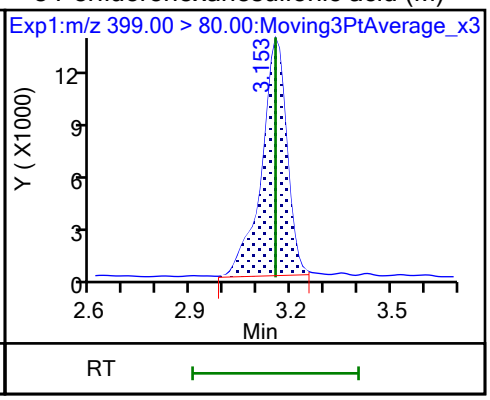
D 64 13C3 HFPO-DA



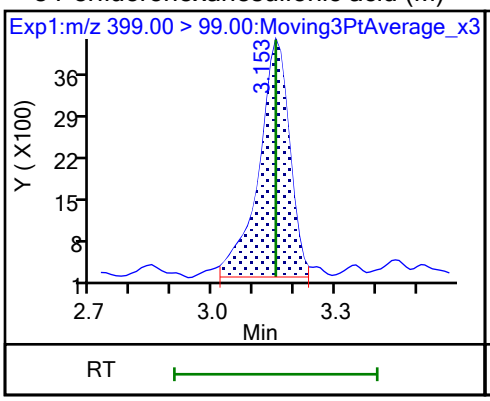
D 11 18O2 PFHxS



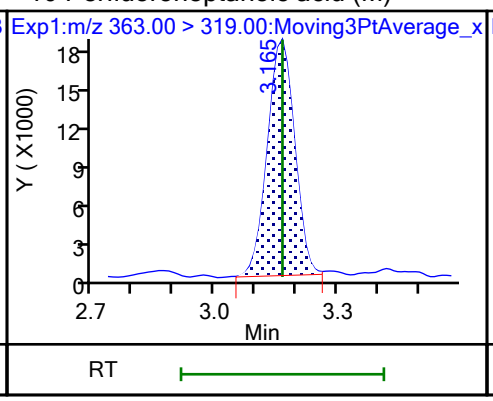
8 Perfluorohexanesulfonic acid (M)



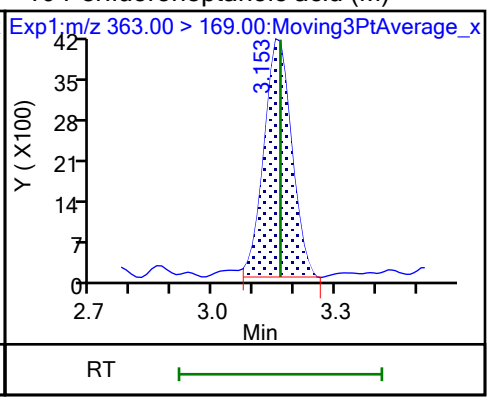
8 Perfluorohexanesulfonic acid (M)



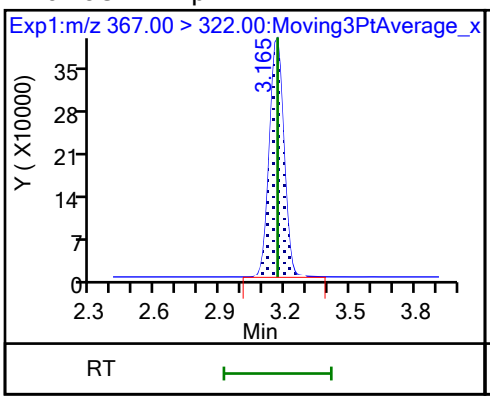
10 Perfluoroheptanoic acid (M)



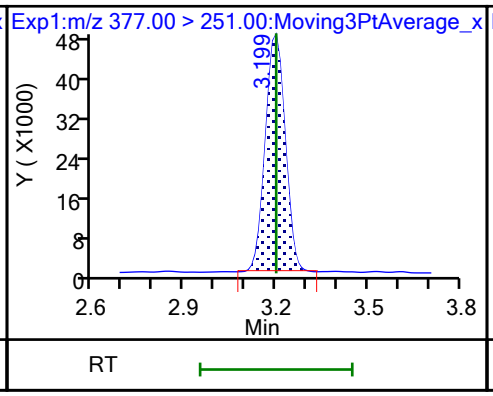
10 Perfluoroheptanoic acid (M)



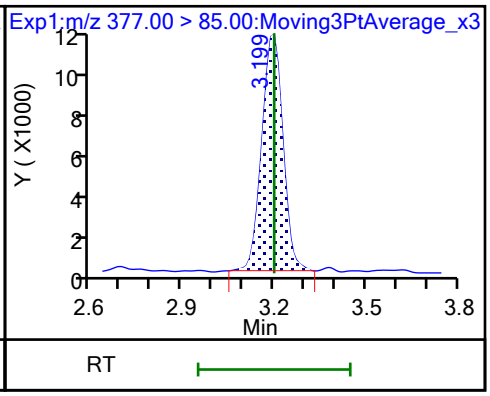
D 9 13C4 PFHpA



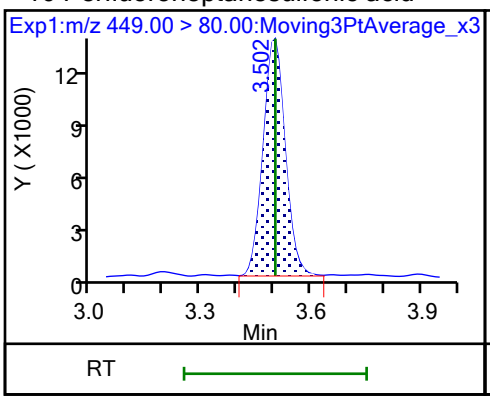
77 DONA



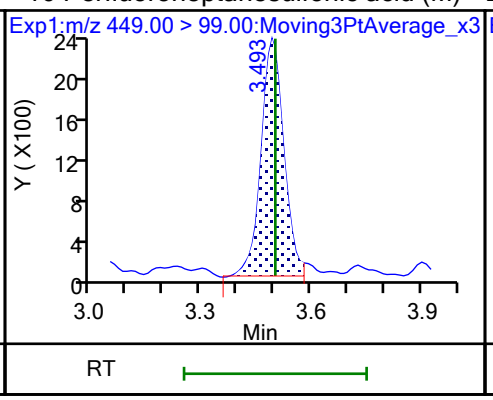
77 DONA



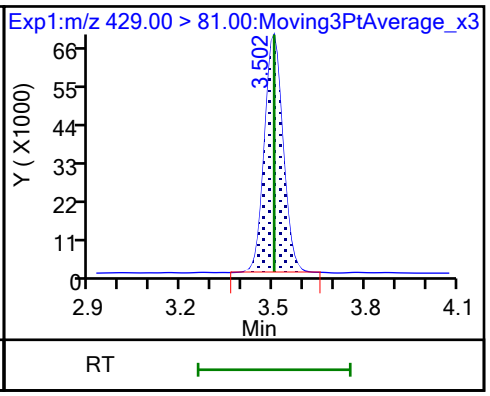
16 Perfluoroheptanesulfonic acid



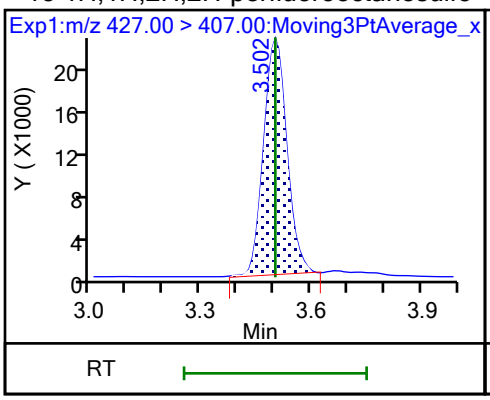
16 Perfluoroheptanesulfonic acid (M)



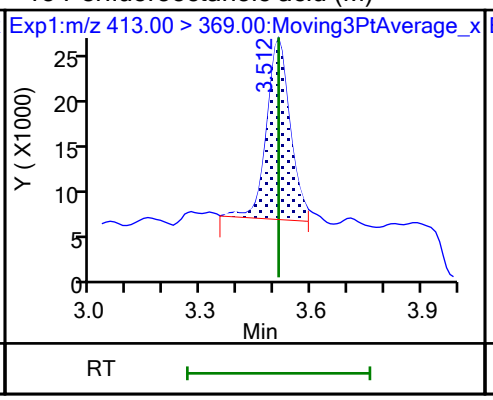
D 12 M2-6:2 FTS



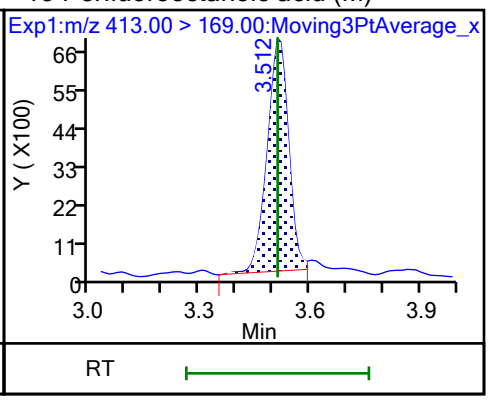
13 1H,1H,2H,2H-perfluorooctanesulfo



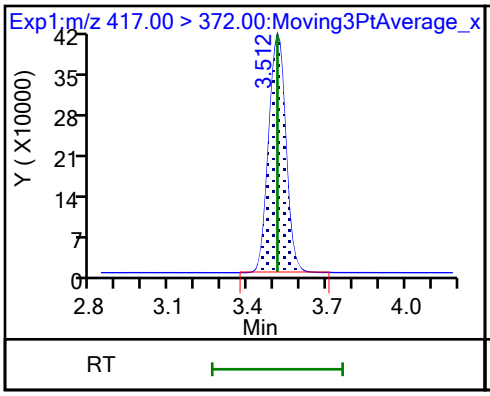
15 Perfluorooctanoic acid (M)



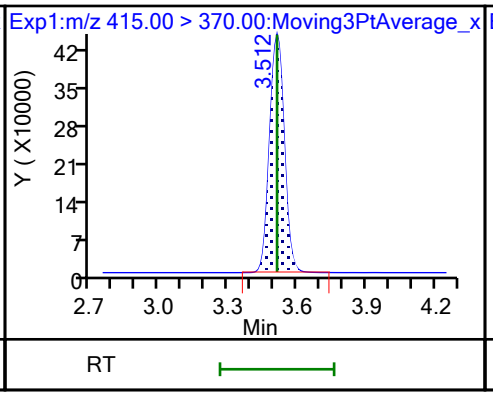
15 Perfluorooctanoic acid (M)



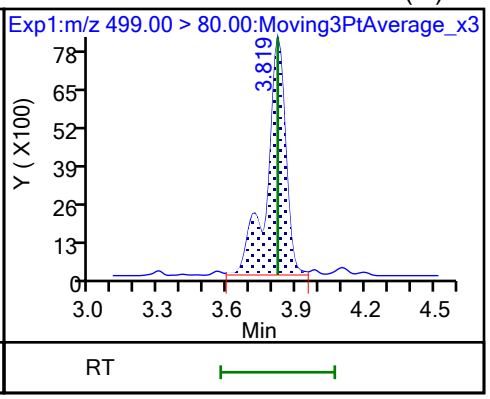
D 14 13C4 PFOA



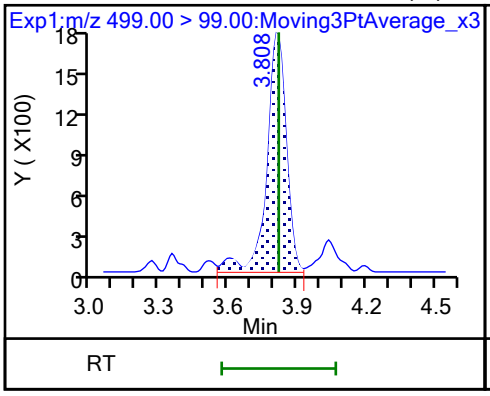
* 62 13C2 PFOA



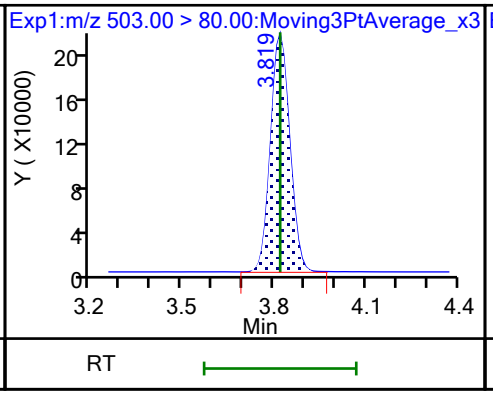
17 Perfluorooctanesulfonic acid (M)



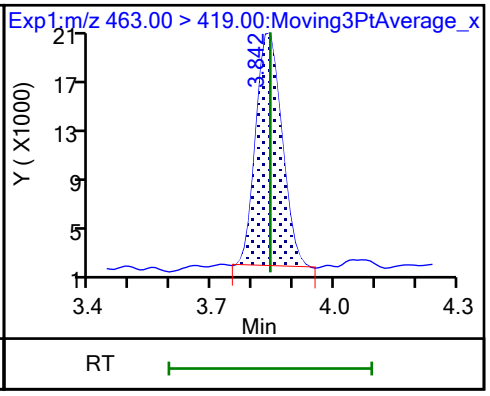
17 Perfluorooctanesulfonic acid (M)



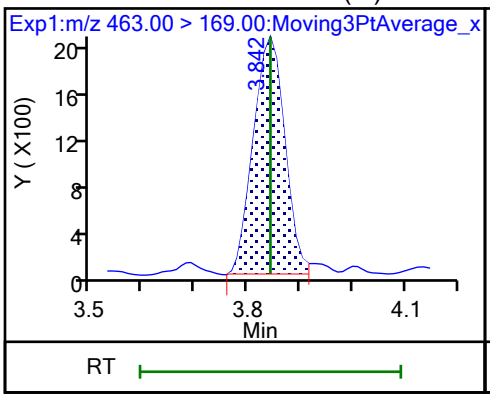
D 18 13C4 PFOS



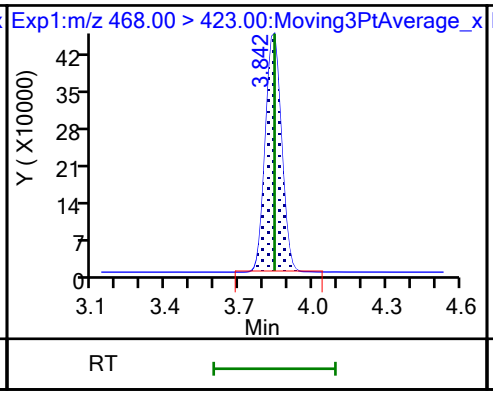
20 Perfluorononanoic acid



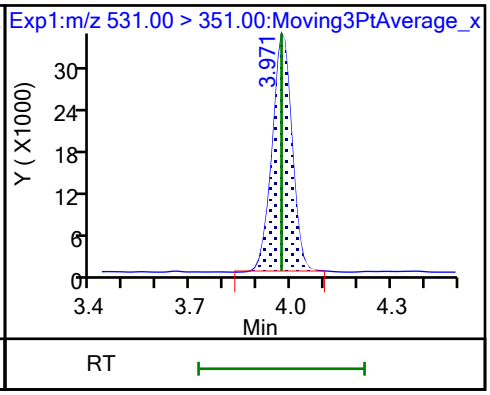
20 Perfluorononanoic acid (M)



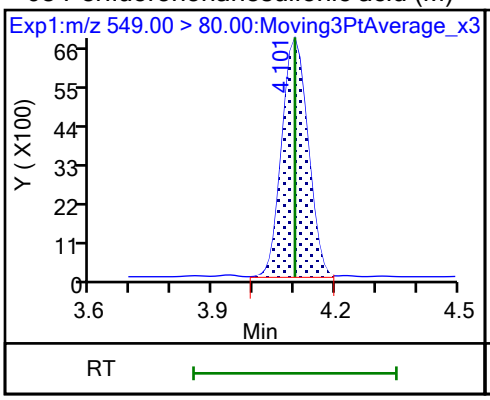
D 19 13C5 PFNA



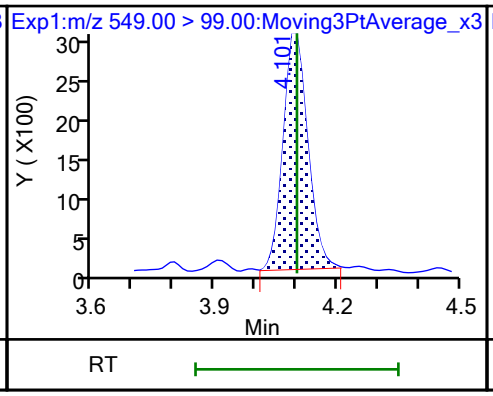
69 9-Chlorohexadecafluoro-3-oxanona



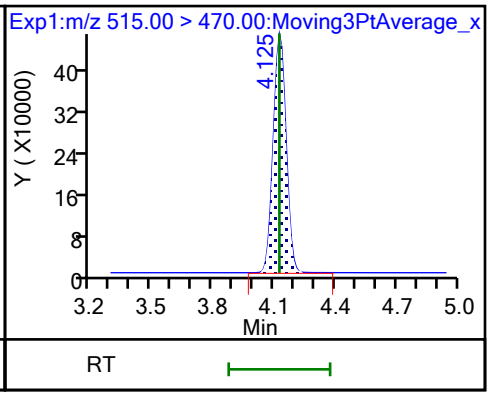
68 Perfluorononanesulfonic acid (M)



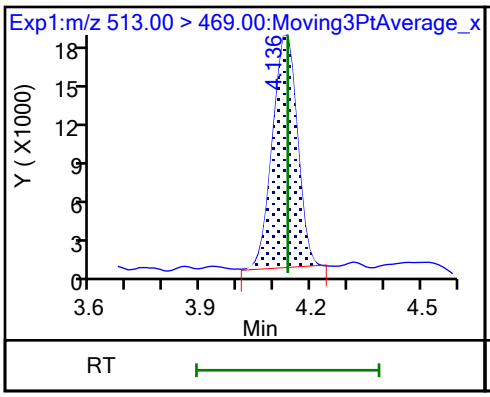
68 Perfluorononanesulfonic acid



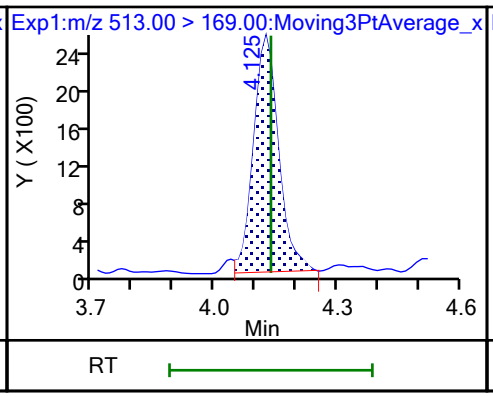
D 23 13C2 PFDA



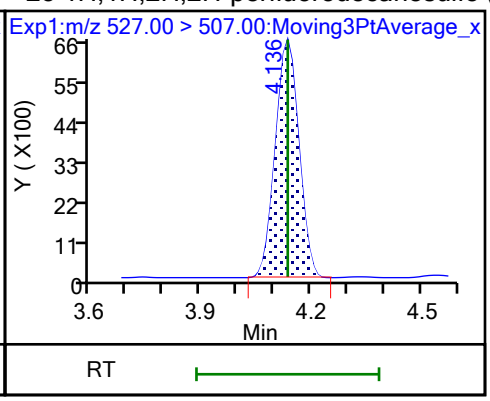
24 Perfluorodecanoic acid



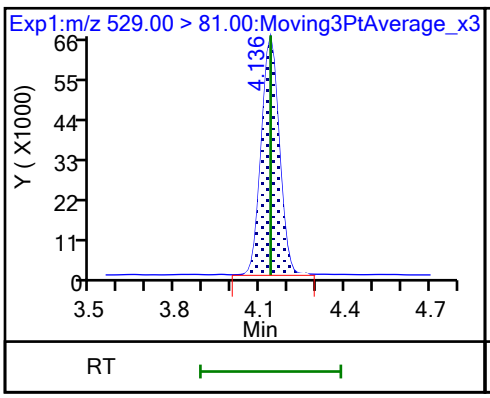
24 Perfluorodecanoic acid



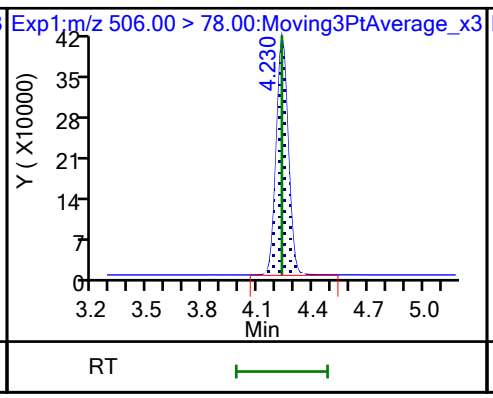
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



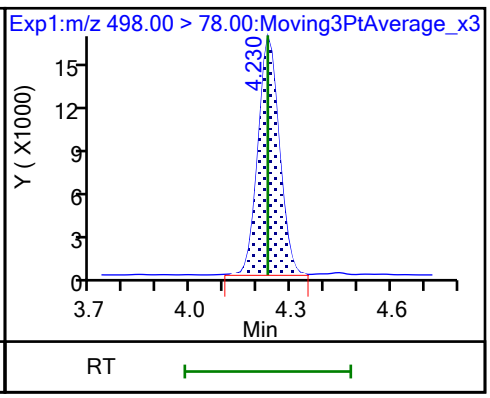
D 26 M2-8:2 FTS



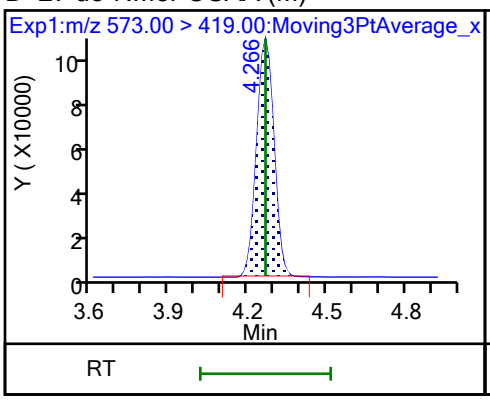
D 21 13C8 FOSA



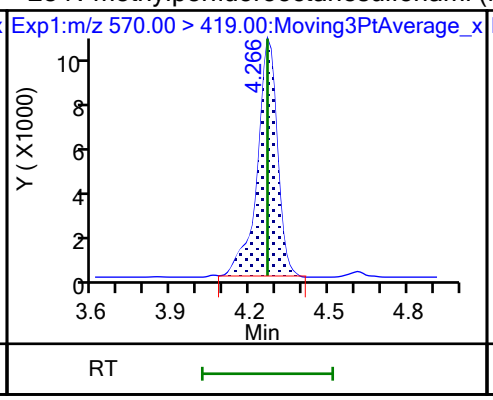
22 Perfluorooctanesulfonamide



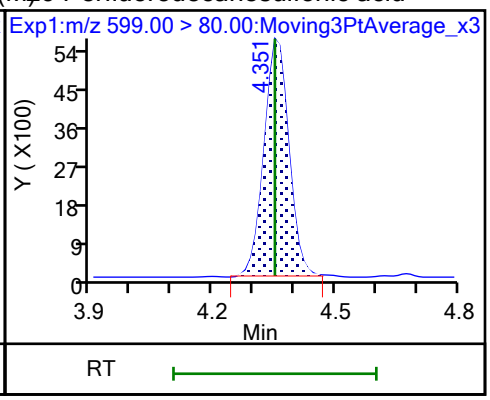
D 27 d3-NMeFOSAA (M)



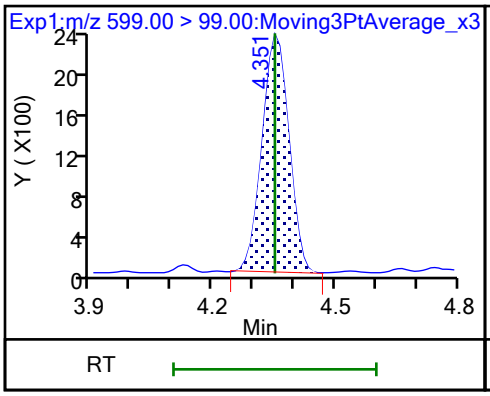
28 N-methylperfluorooctanesulfonami (M)



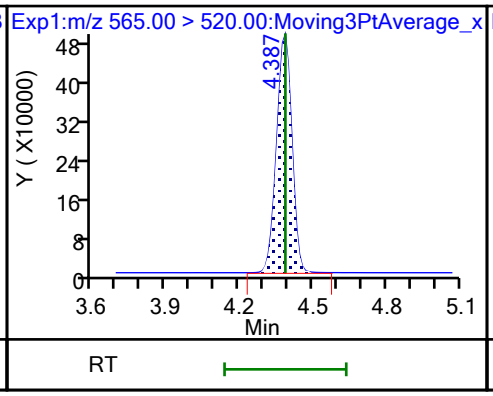
29 Perfluorodecanesulfonic acid



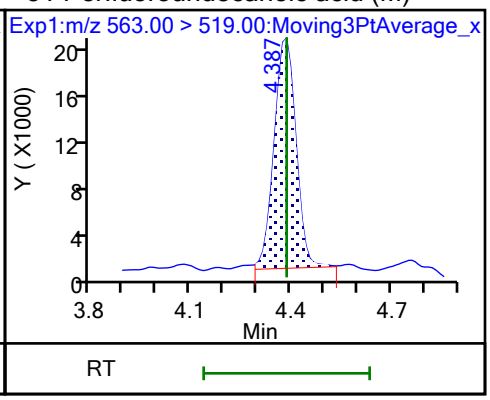
29 Perfluorodecanesulfonic acid



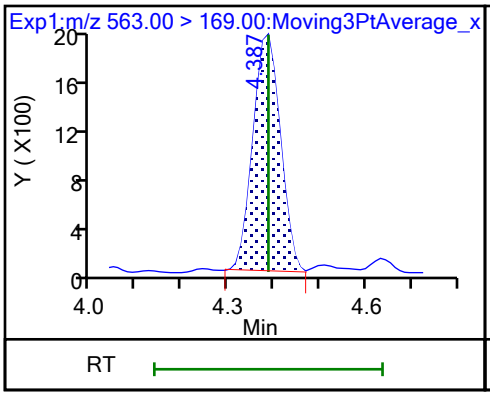
D 30 13C2 PFUnA



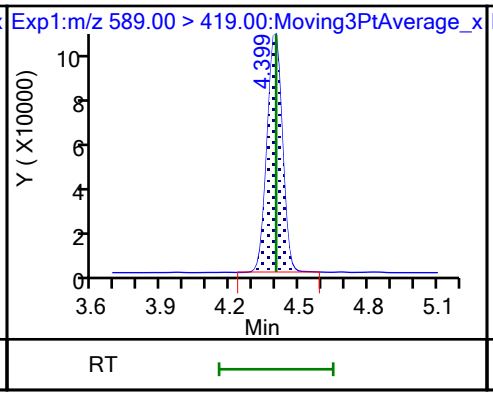
31 Perfluoroundecanoic acid (M)



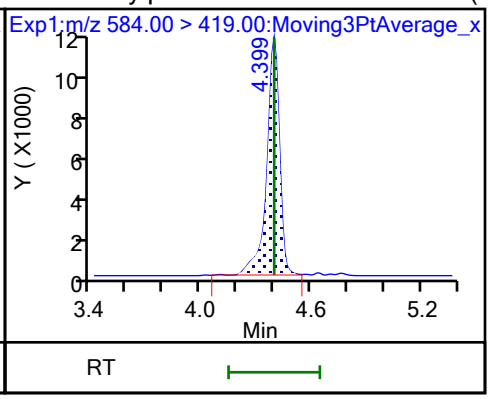
31 Perfluoroundecanoic acid



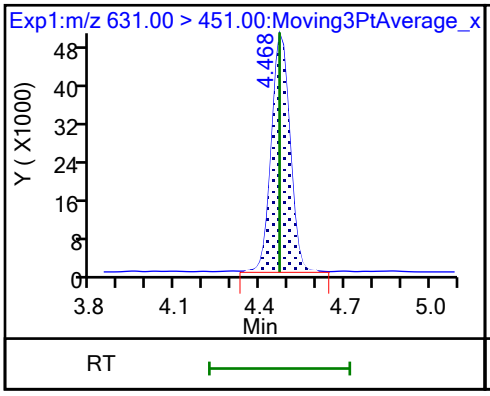
D 32 d5-NEtFOSAA



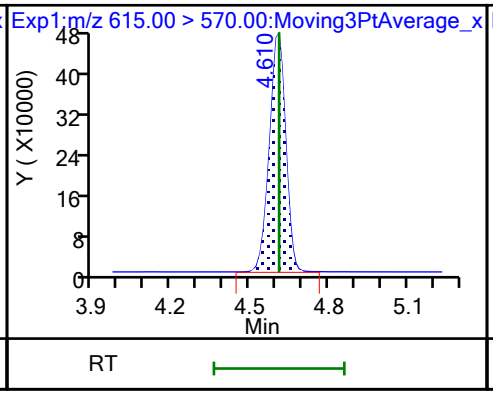
33 N-ethylperfluorooctanesulfonamid (M)



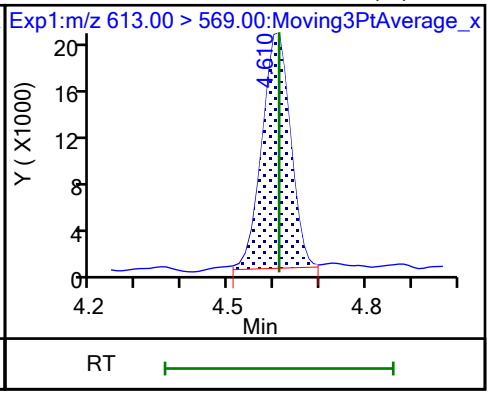
66 11-Chloroeicosafluoro-3-oxaundec



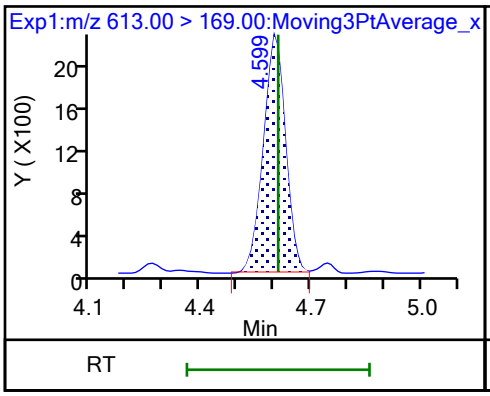
D 36 13C2 PFDoA



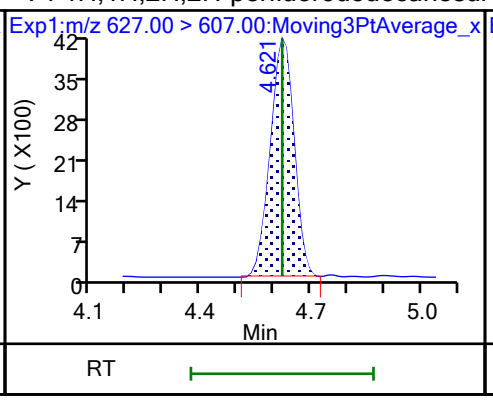
37 Perfluorododecanoic acid (M)



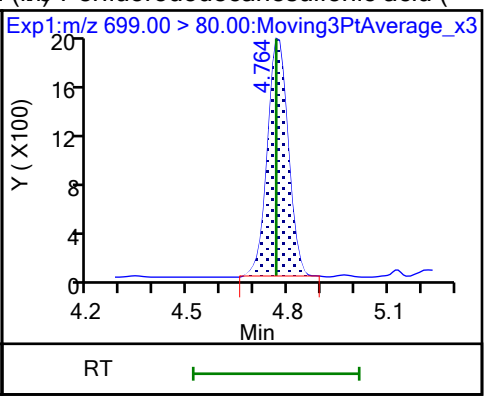
37 Perfluorododecanoic acid



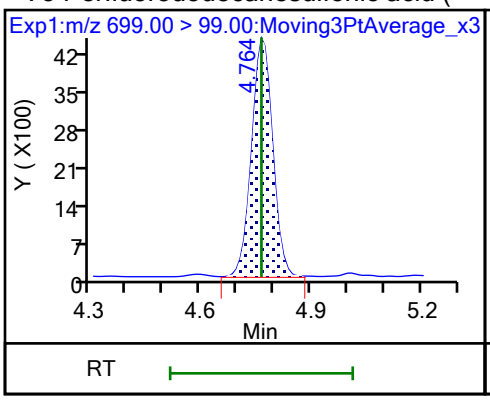
74 1H,1H,2H,2H-perfluorododecanesul (M)



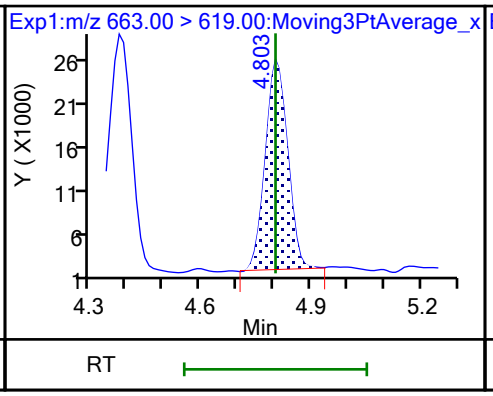
75 Perfluorododecanesulfonic acid (



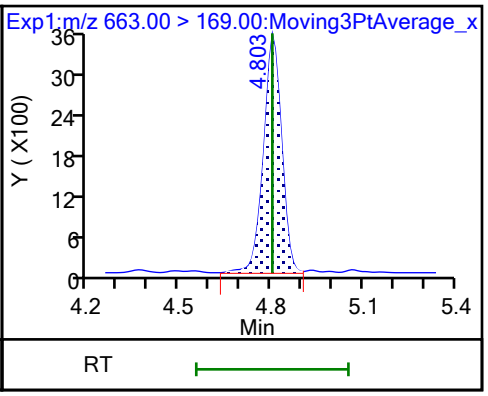
75 Perfluorododecanesulfonic acid (



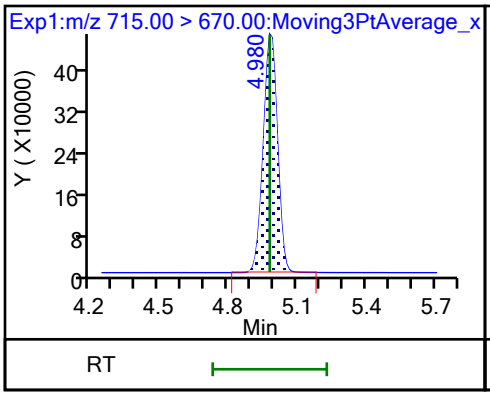
41 Perfluorotridecanoic acid



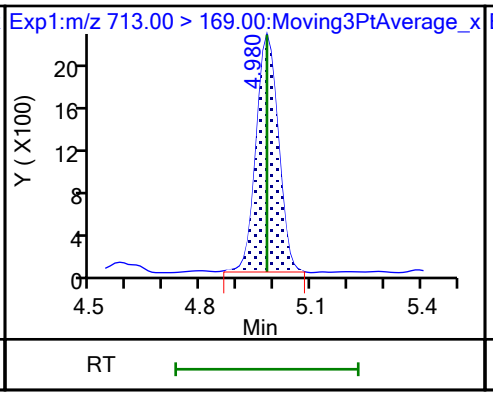
41 Perfluorotridecanoic acid



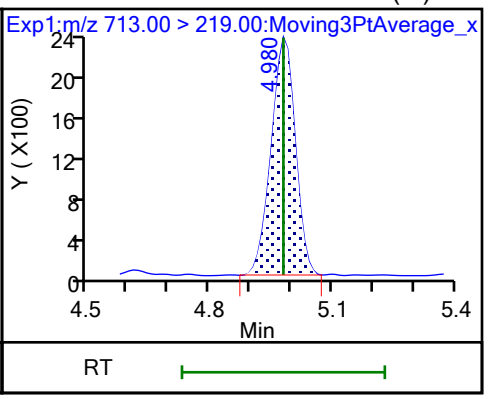
D 43 13C2 PFTeDA



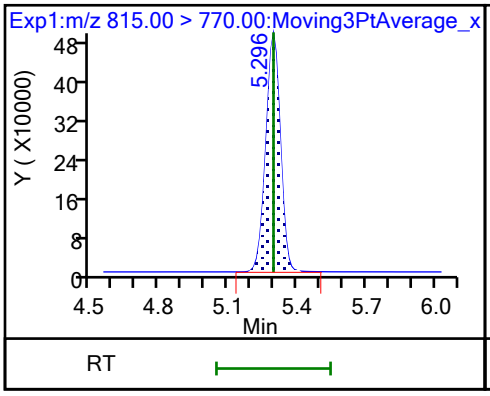
42 Perfluorotetradecanoic acid



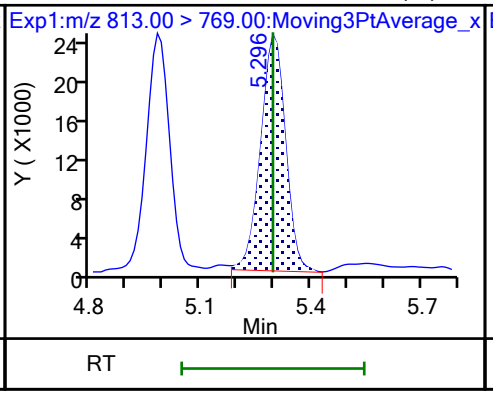
42 Perfluorotetradecanoic acid (M)



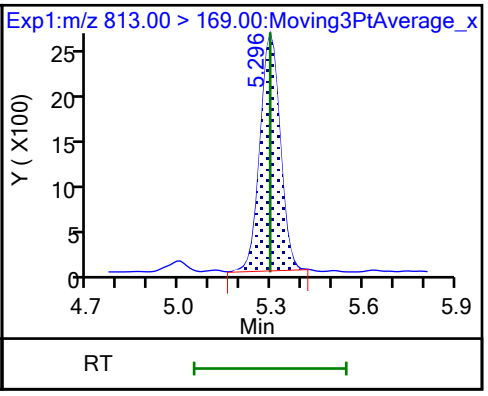
D 44 13C2 PFHxDA



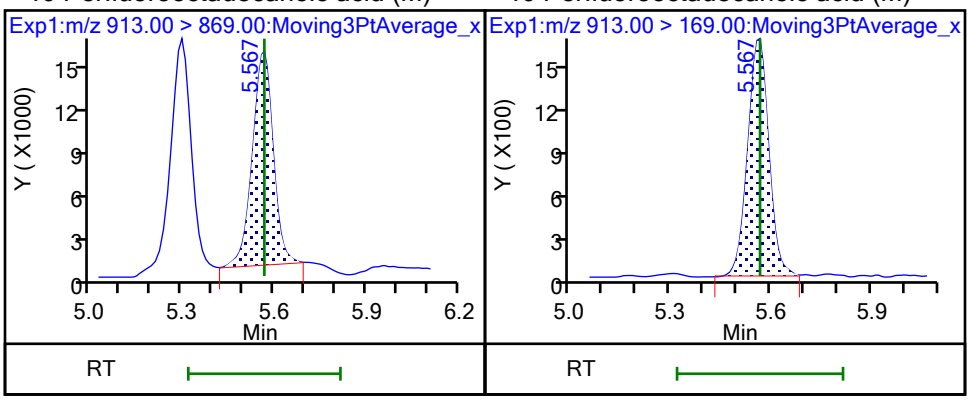
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8845		0.937	1.00	-6.3	30.0
Perfluoropentanoic acid	AveID	1.079	1.002		0.929	1.00	-7.1	
Perfluorobutanesulfonic acid	AveID	1.117	1.084		0.861	0.887	-3.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.411		0.941	0.937	0.4	
Perfluorohexanoic acid	AveID	1.100	0.9258		0.841	1.00	-15.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.302		0.938	0.941	-0.3	
HFPODA	AveID	1.001	1.007		1.01	1.00	0.6	
Perfluoroheptanoic acid	AveID	1.121	1.025		0.914	1.00	-8.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.028		0.849	0.914	-7.2	
DONA	AveID	5.754	5.442		0.894	0.945	-5.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.675		0.931	0.951	-2.1	
Perfluoroheptanesulfonic acid	AveID	1.445	1.337		0.882	0.953	-7.5	
Perfluorooctanoic acid	AveID	1.065	0.9783		0.918	1.00	-8.2	
Perfluorooctanesulfonic acid	AveID	1.166	1.066		0.848	0.928	-8.6	
Perfluorononanoic acid	AveID	0.9800	0.8904		0.908	1.00	-9.2	
9Cl-PF3ONS	AveID	3.569	3.655		0.955	0.933	2.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7591		0.823	0.962	-14.5	
Perfluorodecanoic acid	AveID	0.999	0.9170		0.918	1.00	-8.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.245		0.979	0.960	2.0	
Perfluorooctanesulfonamide	AveID	0.9539	0.9694		1.02	1.00	1.6	
NMeFOSAA	AveID	0.9074	0.9155		1.01	1.00	0.9	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5933		0.838	0.965	-13.1	
Perfluoroundecanoic acid	AveID	1.031	1.129		1.10	1.00	9.5	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9949		0.995	1.00	-0.5	
11Cl-PF3OUdS	AveID	5.474	5.626		0.969	0.943	2.8	
Perfluorododecanoic acid	AveID	1.018	0.9187		0.903	1.00	-9.7	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.314		0.963	0.964	-0.1	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2133		0.892	0.968	-7.8	
Perfluorotridecanoic acid	AveID	1.070	1.003		0.937	1.00	-6.3	
Perfluorotetradecanoic acid	AveID	0.1118	0.1057		0.946	1.00	-5.4	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9895		0.989	1.00	-1.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7205		0.923	1.00	-7.7	
13C4 PFBA	Ave	0.9917	1.084		1.37	1.25	9.3	
13C5 PFPeA	Ave	0.7696	0.7787		1.27	1.25	1.2	
13C3 PFBS	Ave	1.041	1.008		1.13	1.16	-3.2	
M2-4:2 FTS	Ave	0.1204	0.1105		1.07	1.17	-8.2	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8015		1.28	1.25	2.4	
13C3 HFPO-DA	Ave	0.1516	0.1441		1.19	1.25	-4.9	
13C4 PFHpA	Ave	0.8590	0.9113		1.33	1.25	6.1	50.0
18O2 PFHxS	Ave	0.7464	0.7317		1.16	1.18	-2.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1472		1.13	1.19	-5.1	
13C4 PFOA	Ave	0.9731	0.9842		1.26	1.25	1.1	50.0
13C4 PFOS	Ave	0.4742	0.4824		1.22	1.20	1.7	50.0
13C5 PFNA	Ave	1.059	1.102		1.30	1.25	4.1	50.0
13C2 PFDA	Ave	1.109	1.124		1.27	1.25	1.3	
M2-8:2 FTS	Ave	0.1744	0.1633		1.12	1.20	-6.3	
13C8 FOSA	Ave	0.9462	0.8662		1.14	1.25	-8.5	
d3-NMeFOSAA	Ave	0.2650	0.2633		1.24	1.25	-0.6	
13C2 PFUnA	Ave	1.047	0.9382		1.12	1.25	-10.4	
d5-NEtFOSAA	Ave	0.2552	0.2483		1.22	1.25	-2.7	
13C2 PFDoA	Ave	1.064	1.068		1.26	1.25	0.4	
13C2 PFTeDA	Ave	1.059	0.9784		1.15	1.25	-7.6	
13C2 PFHxDA	Ave	1.221	1.073		1.10	1.25	-12.1	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 10:08:01 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057578-001 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:39:49
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	2275064	1.37		109	14777	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	1609883	0.9373		93.7	123	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1634357	1.26		101	2148	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	1310252	0.9286		92.9	37.8	
D 47 13C3 PFBS										
301.90 > 80.00	2.453	2.467	-0.014	0.697	1967633	1.13		96.8	184829	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.006	1627370	0.8608	Target=2.06	97.0	2450	
298.90 > 99.00	2.466	2.467	-0.001	1.006	807201		2.02(1.03-3.09)		414	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.757	2.760	-0.003	1.000	592851	0.9411		100	3437	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.784	216590	1.07		91.8	161	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.797	-0.002	0.794	1682082	1.28		102	3385	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.795	2.797	-0.002	1.000	1245813	0.8413	Target=14.12	84.1	278	
313.00 > 119.00	2.795	2.797	-0.002	1.000	94484		13.19(7.06-21.17)		116	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.807	2.797	0.010	0.888	1505539	0.9384	Target=2.72	99.7	3515	
349.00 > 99.00	2.795	2.797	-0.002	0.884	524410		2.87(1.36-4.09)		1013	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.897	0.008	1.000	243662	1.01		101	2981	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.826	302365	1.19		95.1	1027	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.153	0.009	0.899	1452715	1.16		98.0	6427	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.162	3.153	0.009	1.000	1154067	0.8486	Target=3.32	92.8	2711	
399.00 > 99.00	3.162	3.153	0.009	1.000	349326		3.30(1.66-4.98)		346	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.162	3.165	-0.003	1.000	1568062	0.9143	Target=4.17	91.4	384	
363.00 > 169.00	3.162	3.165	-0.003	1.000	399811		3.92(2.09-6.26)		673	
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.165	-0.003	0.899	1912570	1.33		106	6299	
77 DONA										
377.00 > 251.00	3.196	3.199	-0.003	0.836	4164940	0.8937	Target=3.33	94.6	4632	
377.00 > 85.00	3.196	3.199	-0.003	0.836	1057463		3.94(1.66-4.99)		1726	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.501	3.502	-0.001	0.915	1032239	0.8819	Target=4.83	92.5	4894	
449.00 > 99.00	3.501	3.502	-0.001	0.915	201535		5.12(2.41-7.24)		892	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.502	-0.001	0.995	293481	1.13		94.9	631	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.501	3.502	-0.001	1.000	628674	0.9307		97.9	1525	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.510	3.512	-0.002	0.997	1616503	0.9185	Target=2.88	91.8	70.4	
413.00 > 169.00	3.519	3.512	0.007	1.000	595616		2.71(1.44-4.32)		1043	
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.512	0.007	1.000	2065460	1.26		101	3653	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.512	0.007		2098703	1.25			5518	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.819	0.005	1.000	801537	0.8485	Target=4.24	91.4	1743	M
499.00 > 99.00	3.824	3.819	0.005	1.000	175470		4.57(2.12-6.37)		555	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.819	0.005	1.087	967818	1.22		102	5141	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.842	-0.006	1.000	1647748	0.9085	Target=8.34	90.8	261	
463.00 > 169.00	3.836	3.842	-0.006	1.000	193445		8.52(4.17-12.51)		1043	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.842	-0.006	1.090	2313282	1.30		104	7815	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.971	0.006	1.040	2761509	0.9553		102	5779	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.108	4.101	0.007	1.074	591463	0.8230	Target=2.17	85.5	3361	
549.00 > 99.00	4.096	4.101	-0.005	1.071	246199		2.40(1.08-3.25)		975	
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.125	0.007	1.174	2357959	1.27		101	11804	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.136	-0.004	1.000	1729777	0.9176	Target=11.44	91.8	542	
513.00 > 169.00	4.132	4.136	-0.004	1.000	169079		10.23(5.72-17.16)		990	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.144	4.136	0.008	1.000	590917	0.9788		102	3088	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.136	0.008	1.178	328393	1.12		93.7	1040	
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.230	0.007	1.204	1817949	1.14		91.5	4046	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.230	0.007	1.000	1409809	1.02		102	2897	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.266	0.007	1.214	552638	1.24		99.4	2863	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.273	4.266	0.007	1.000	404763	1.01		101	550	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.358	4.351	0.007	1.139	463690	0.8383	Target=2.37	86.9	6020	
599.00 > 99.00	4.358	4.351	0.007	1.139	180684		2.57(1.19-3.56)		1820	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.387	-0.006	1.245	1968994	1.12		89.6	7624	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.387	-0.006	1.000	1778460	1.10	Target=12.20	110	456	
563.00 > 169.00	4.381	4.387	-0.006	1.000	139905		12.71(6.10-18.31)		1361	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.399	-0.006	1.249	521030	1.22		97.3	801	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.405	4.399	0.006	1.003	414687	0.99		99.5	3987	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.468	0.009	1.171	4297045	0.9693		103	3676	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.610	-0.005	1.309	2242309	1.26		100	8638	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.610	-0.005	1.000	1647921	0.9026	Target=8.47	90.3	99.1	
613.00 > 169.00	4.605	4.610	-0.005	1.000	206263		7.99(4.23-12.70)		3012	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.621	0.006	1.117	347422	0.9627		99.9	4533	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.764	0.006	1.247	167251	0.8922	Target=0.48	92.2	2743	
699.00 > 99.00	4.770	4.764	0.006	1.247	339439		0.49(0.24-0.72)		5849	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.803	0.005	1.044	1798382	0.9371	Target=6.41	93.7	81.6	
663.00 > 169.00	4.799	4.803	-0.004	1.042	273816		6.57(3.21-9.62)		1529	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.980	0.007	1.417	2053279	1.15		92.4	5747	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.987	4.980	0.007	1.000	173695	0.9457	Target=0.87	94.6	2394	
713.00 > 219.00	4.976	4.980	-0.004	0.998	187778		0.93(0.43-1.30)		2095	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.294	5.296	-0.002	1.505	2251339	1.10		87.9	5273	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.294	5.296	-0.002	1.000	1782230	0.9895	Target=7.89	98.9	109	
813.00 > 169.00	5.294	5.296	-0.002	1.000	223547		7.97(3.94-11.83)		1890	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.565	5.567	-0.002	1.051	1297759	0.9227	Target=9.39	92.3	133	
913.00 > 169.00	5.565	5.567	-0.002	1.051	135453		9.58(4.69-14.08)		1105	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

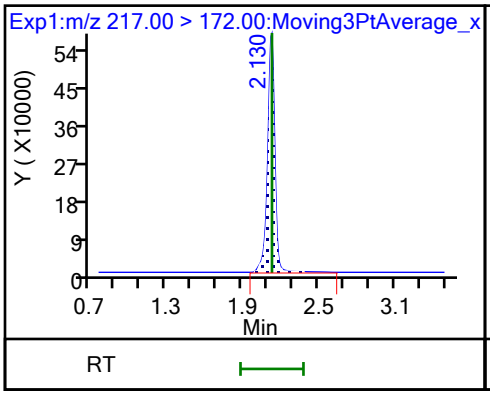
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:44:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54

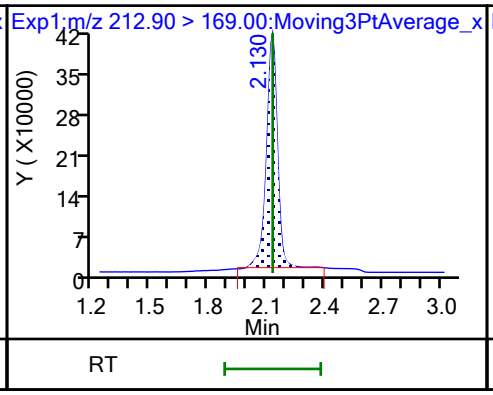
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Injection Date: 27-Oct-2023 10:08:01 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

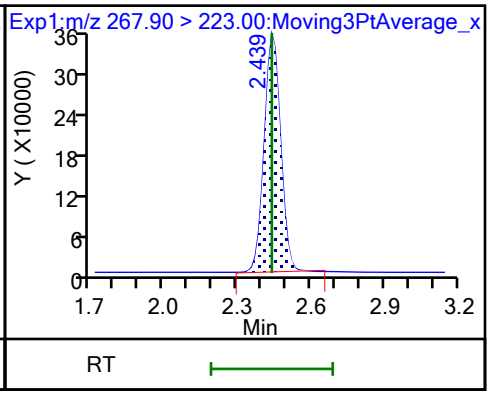
D 1 13C4 PFBA



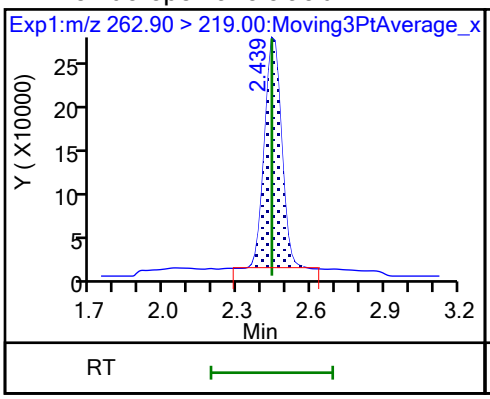
2 Perfluorobutanoic acid



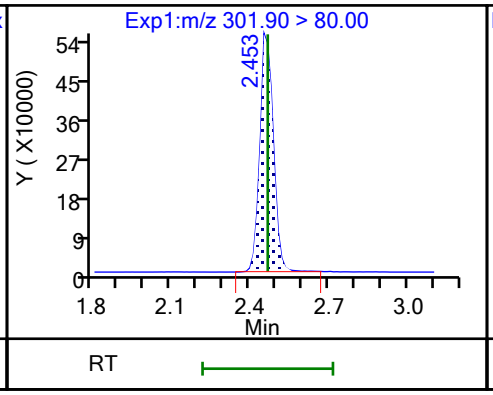
D 3 13C5 PFPeA



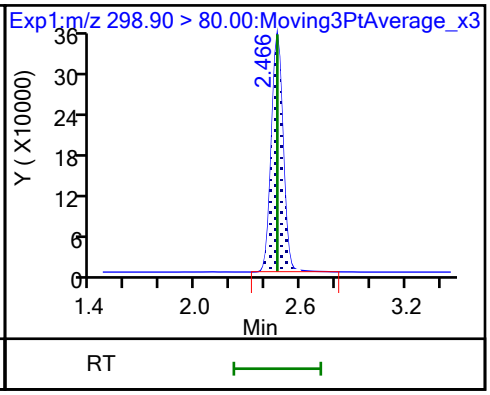
4 Perfluoropentanoic acid



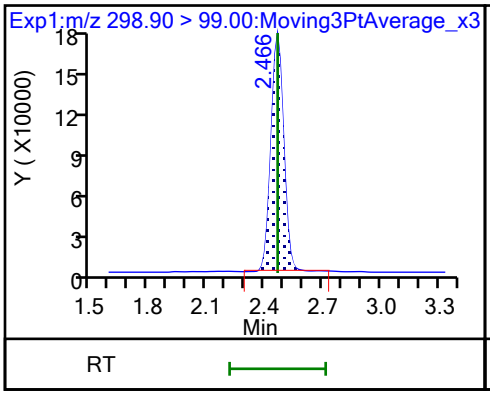
D 47 13C3 PFBS



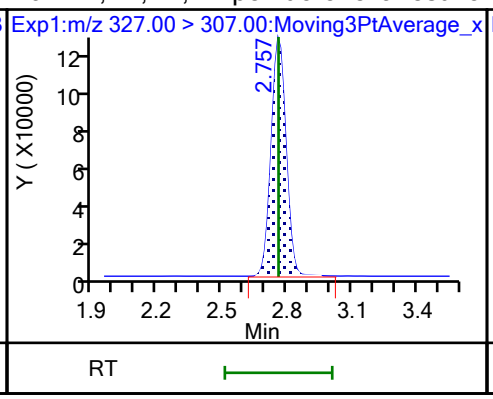
5 Perfluorobutanesulfonic acid



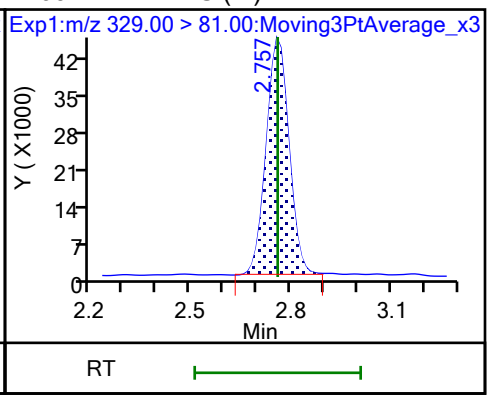
5 Perfluorobutanesulfonic acid



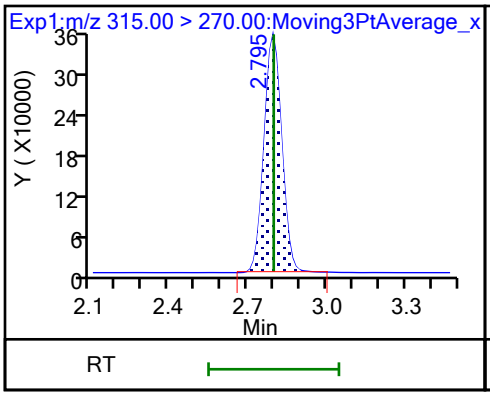
61 1H,1H,2H,2H-perfluorohexanesulfo



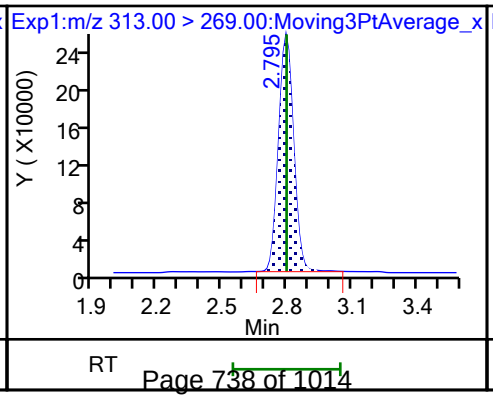
D 60 M2-4:2 FTS (M)



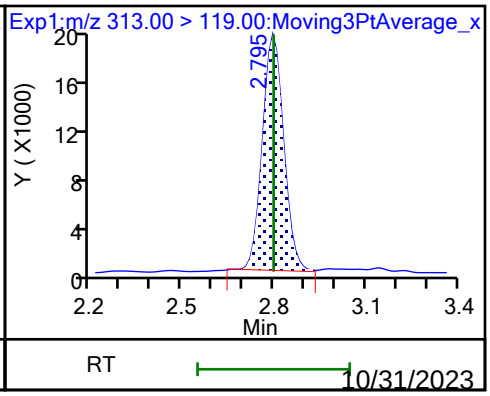
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

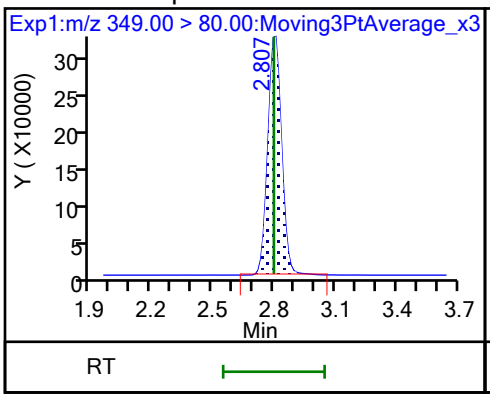


6 Perfluorohexanoic acid

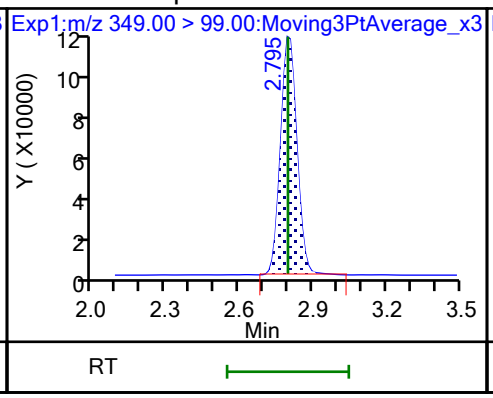


10/31/2023
4:00 PM

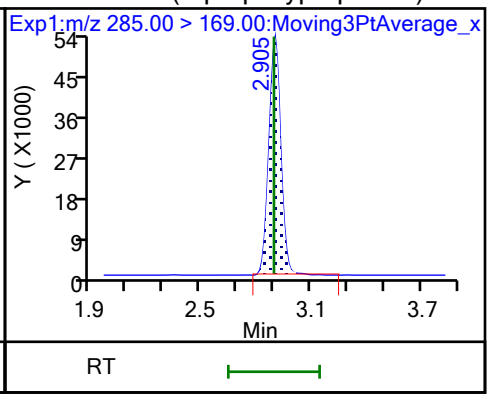
70 Perfluoropentanesulfonic acid



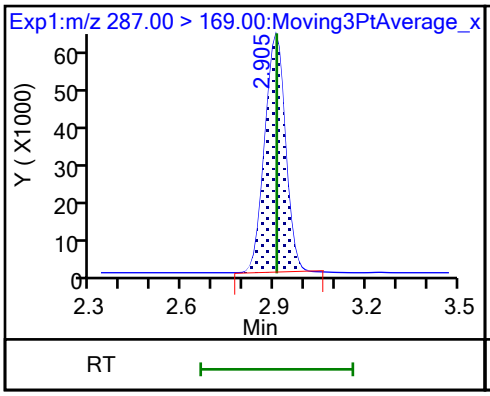
70 Perfluoropentanesulfonic acid



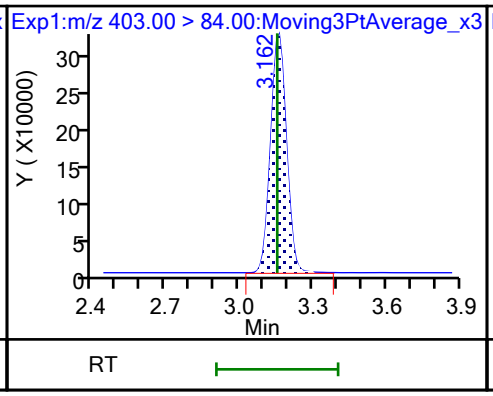
67 Perfluoro(2-propoxypropanoic) ac



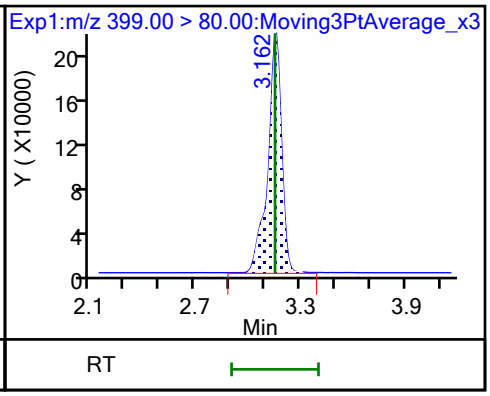
D 64 13C3 HFPO-DA



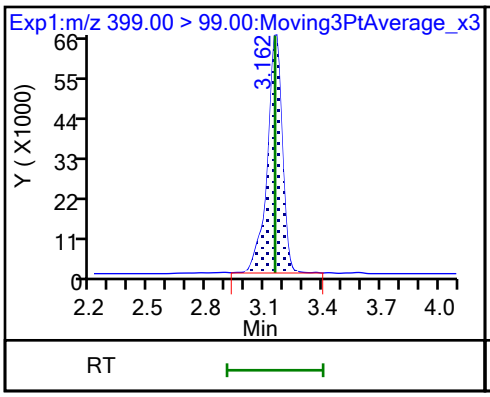
D 11 18O2 PFHxS



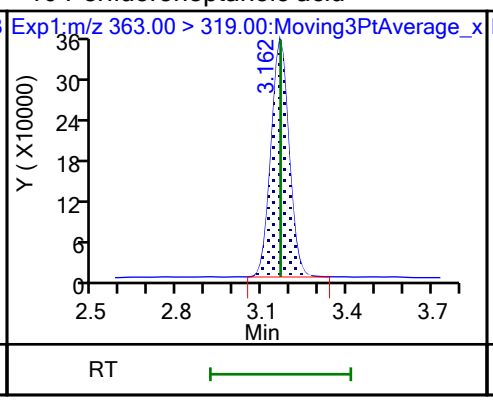
8 Perfluorohexanesulfonic acid



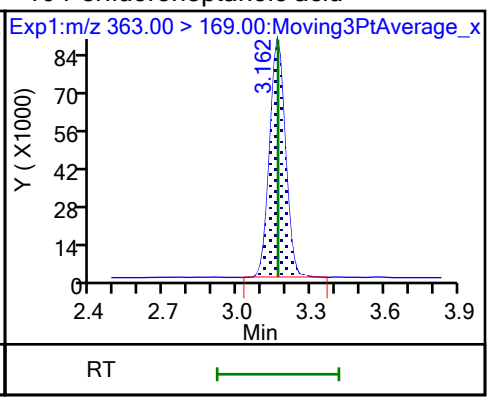
8 Perfluorohexanesulfonic acid



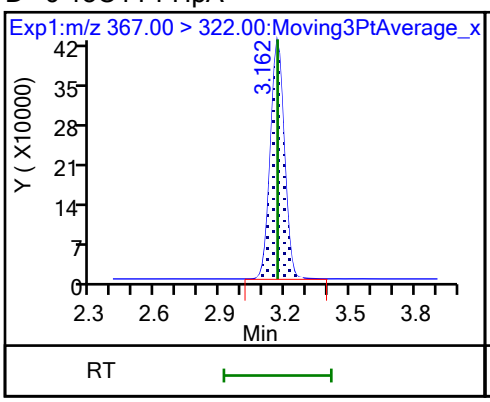
10 Perfluoroheptanoic acid



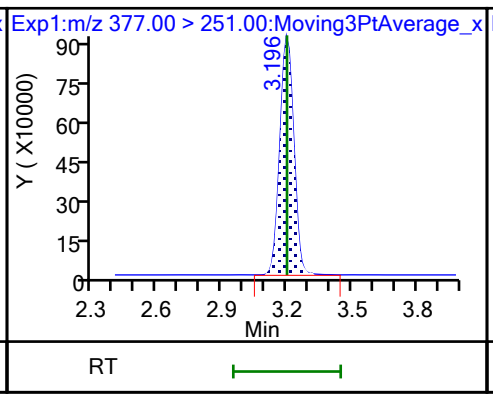
10 Perfluoroheptanoic acid



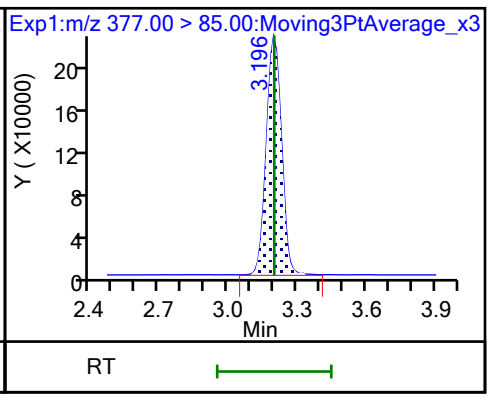
D 9 13C4 PFHpA



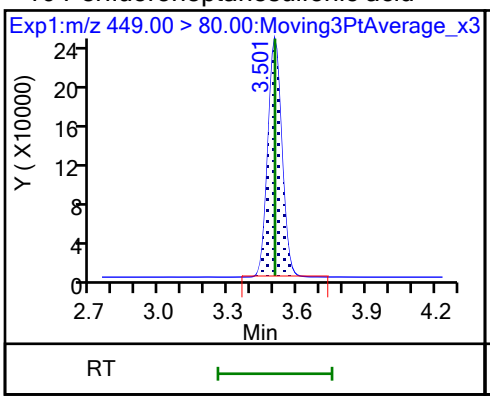
77 DONA



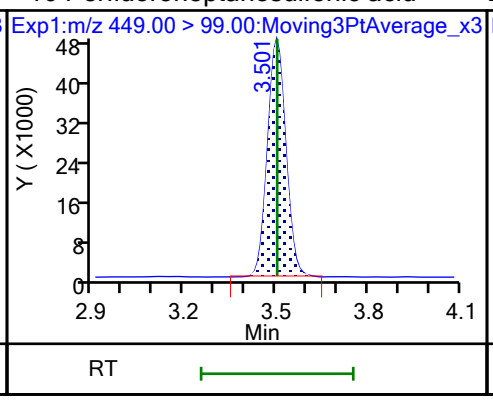
77 DONA



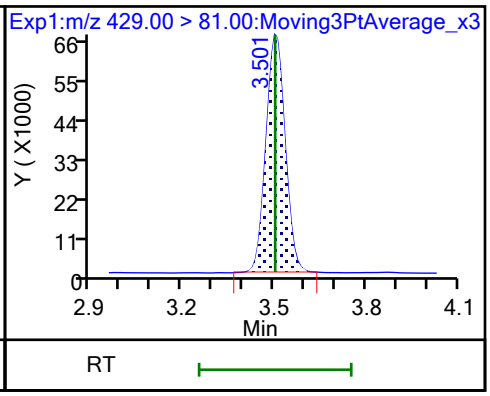
16 Perfluoroheptanesulfonic acid



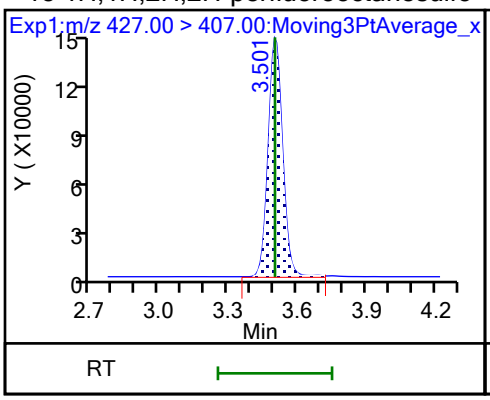
16 Perfluoroheptanesulfonic acid



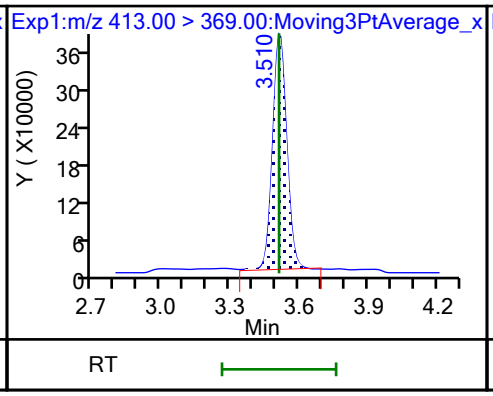
D 12 M2-6:2 FTS



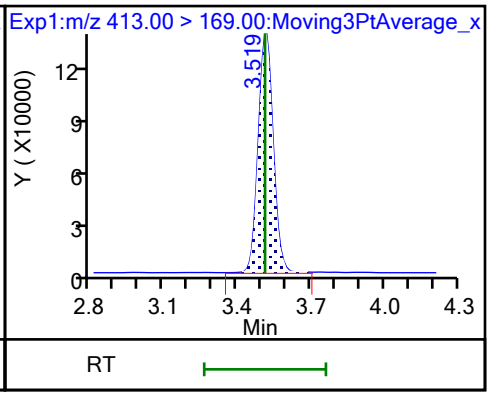
13 1H,1H,2H,2H-perfluorooctanesulfo



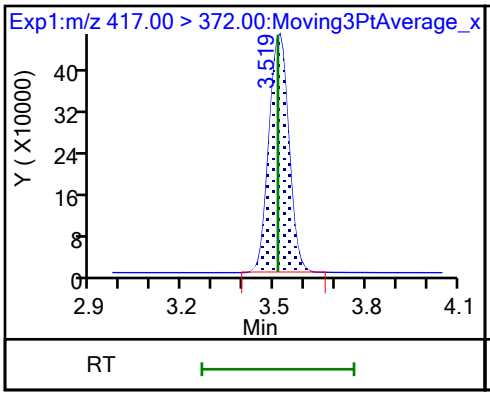
15 Perfluorooctanoic acid



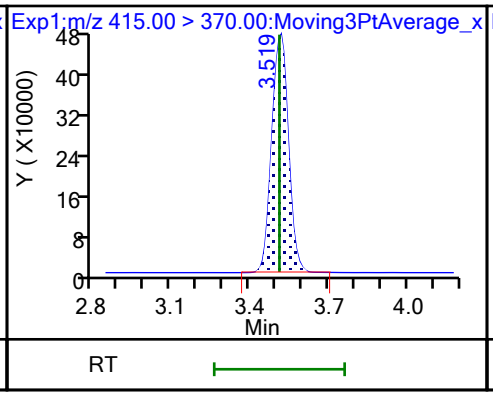
15 Perfluorooctanoic acid



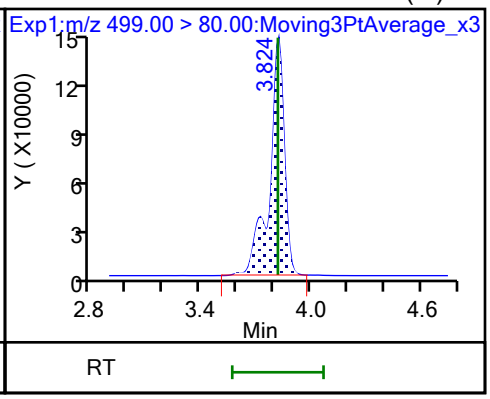
D 14 13C4 PFOA



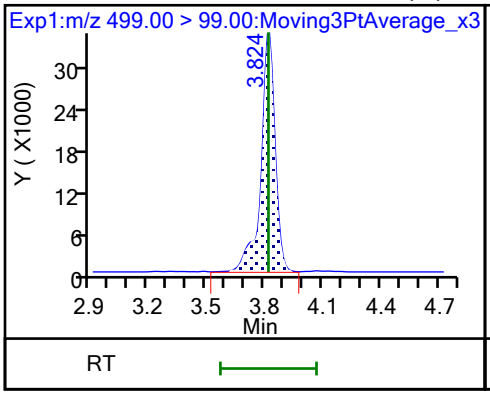
* 62 13C2 PFOA



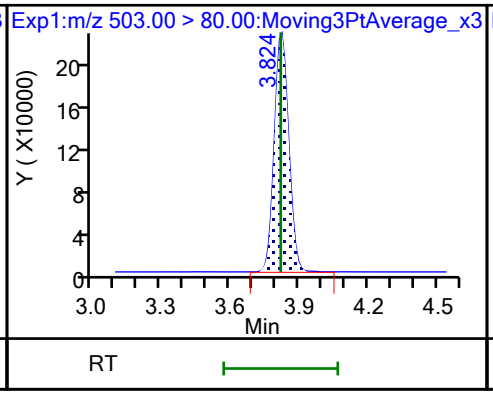
17 Perfluorooctanesulfonic acid (M)



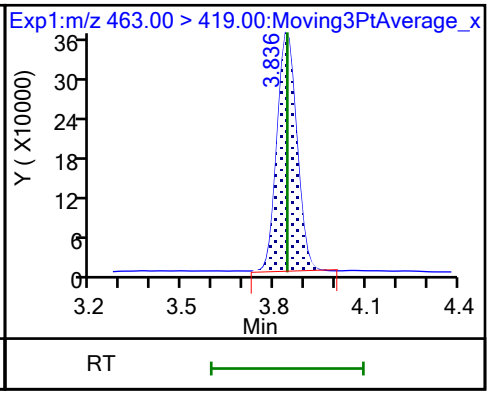
17 Perfluorooctanesulfonic acid (M)



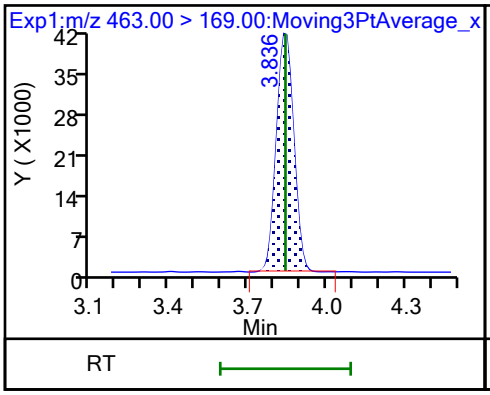
D 18 13C4 PFOS



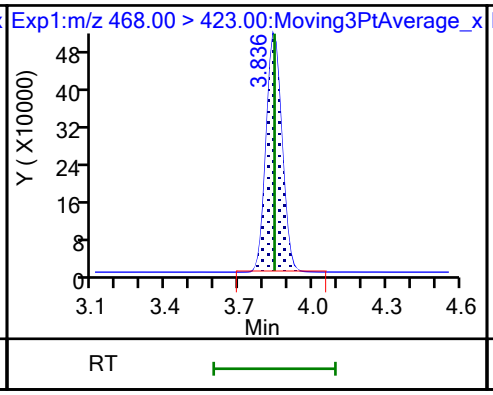
20 Perfluorononanoic acid



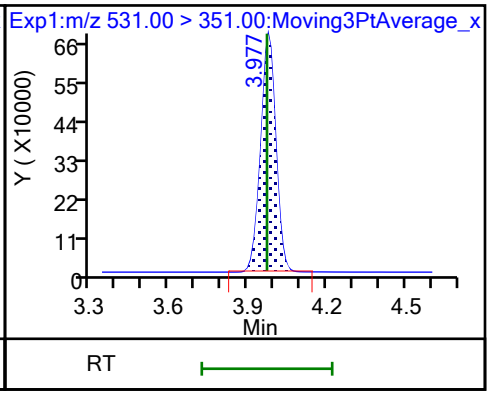
20 Perfluorononanoic acid



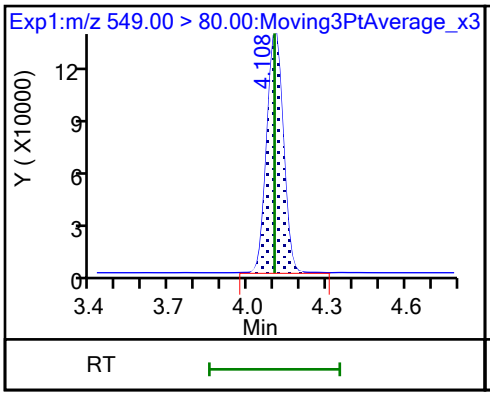
D 19 13C5 PFNA



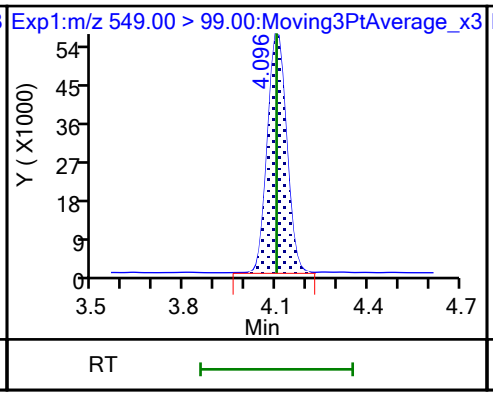
69 9-Chlorohexadecafluoro-3-oxanona



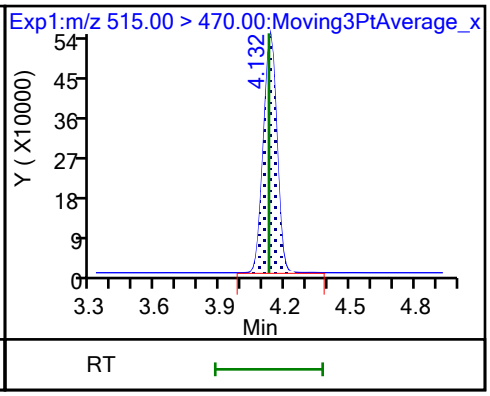
68 Perfluorononanesulfonic acid



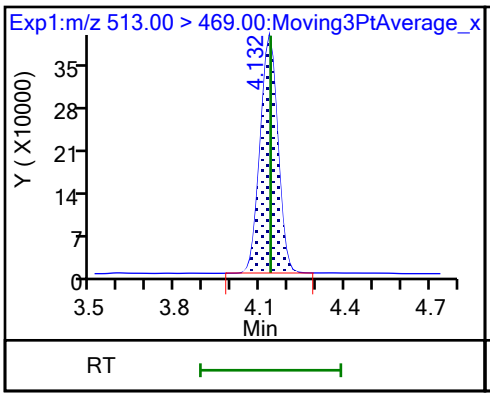
68 Perfluorononanesulfonic acid



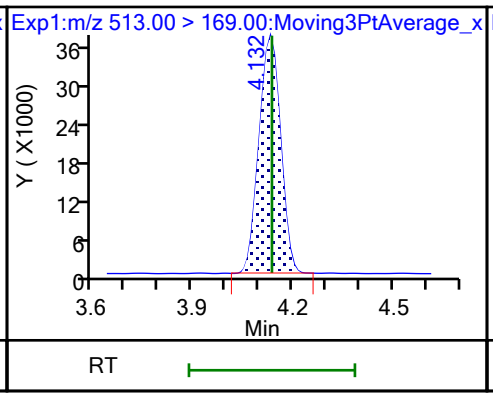
D 23 13C2 PFDA



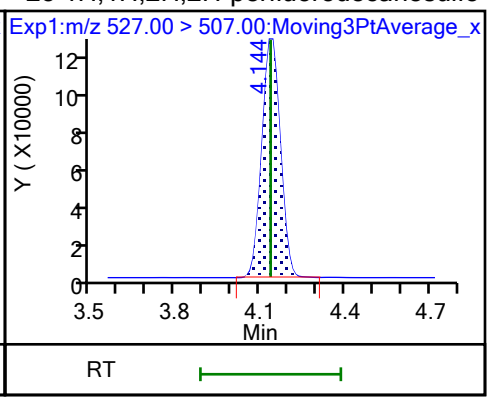
24 Perfluorodecanoic acid



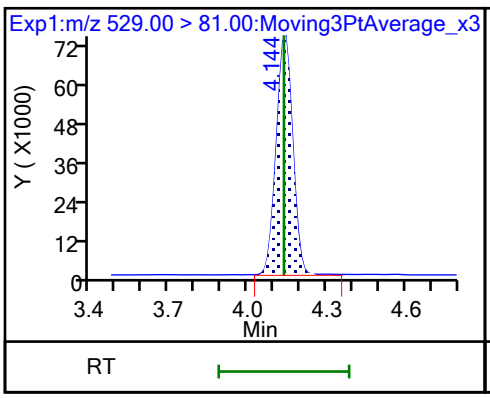
24 Perfluorodecanoic acid



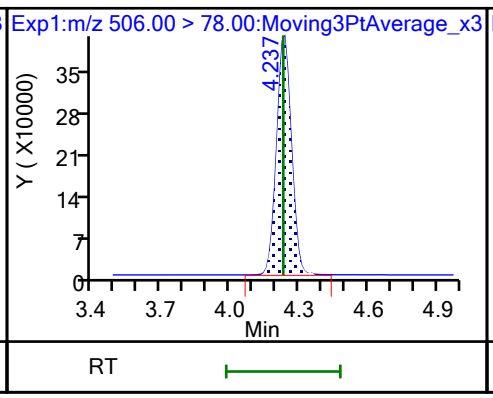
25 1H,1H,2H,2H-perfluorodecanesulfo



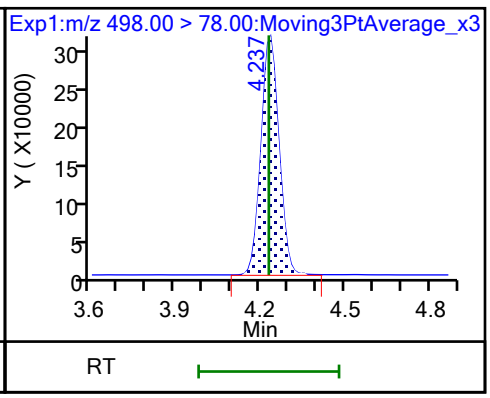
D 26 M2-8:2 FTS



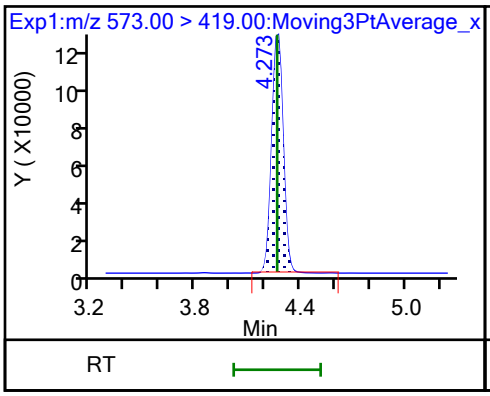
D 21 13C8 FOSA



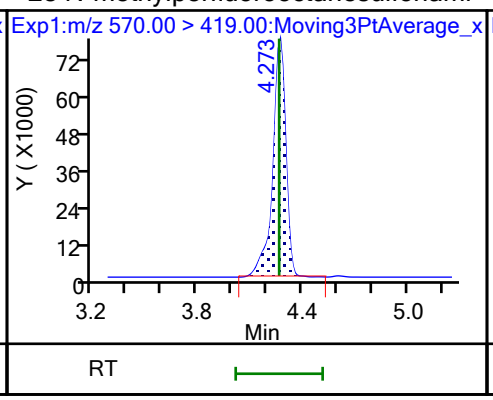
22 Perfluorooctanesulfonamide



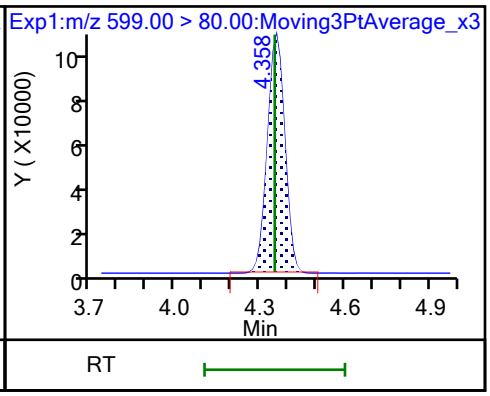
D 27 d3-NMeFOSAA



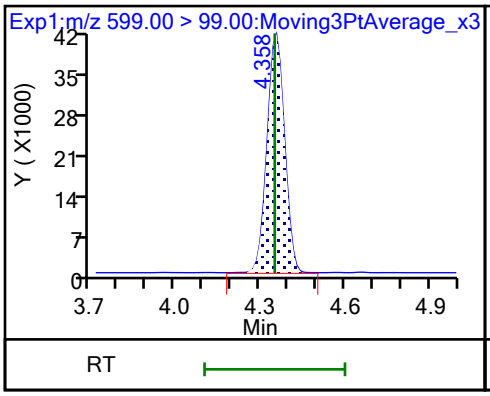
28 N-methylperfluorooctanesulfonami



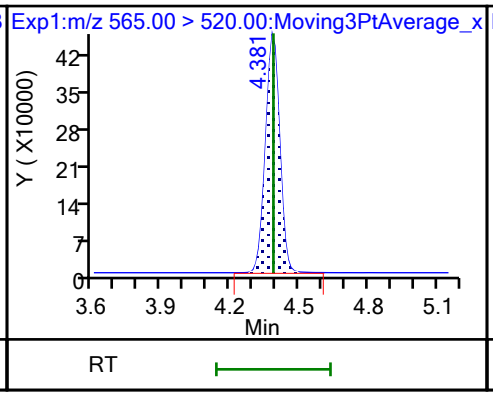
29 Perfluorodecanesulfonic acid



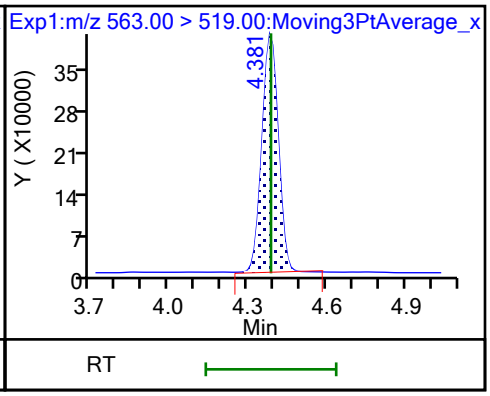
29 Perfluorodecanesulfonic acid



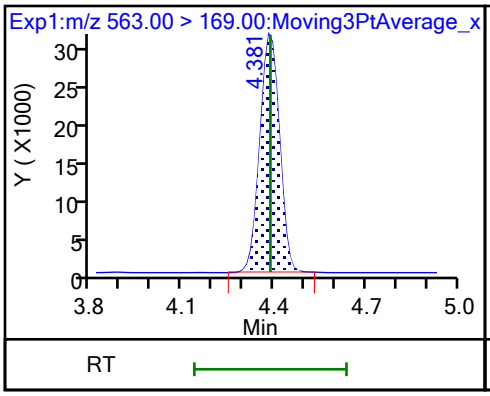
D 30 13C2 PFUnA



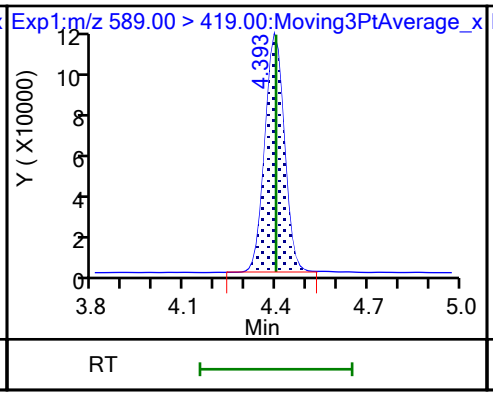
31 Perfluoroundecanoic acid



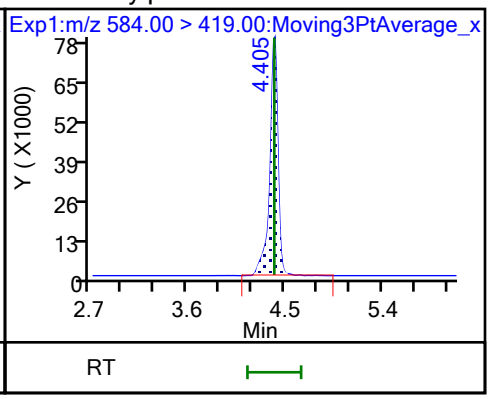
31 Perfluoroundecanoic acid



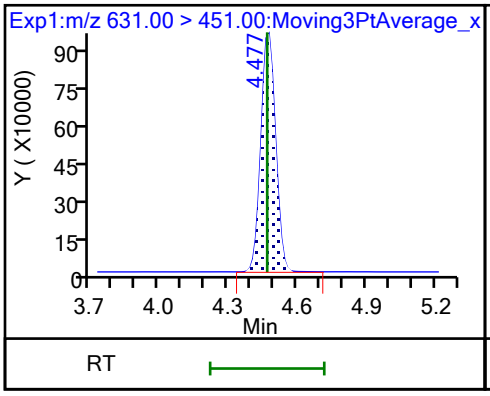
D 32 d5-NEtFOSAA



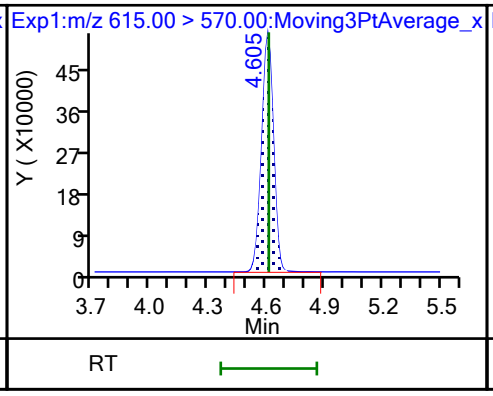
33 N-ethylperfluorooctanesulfonamid



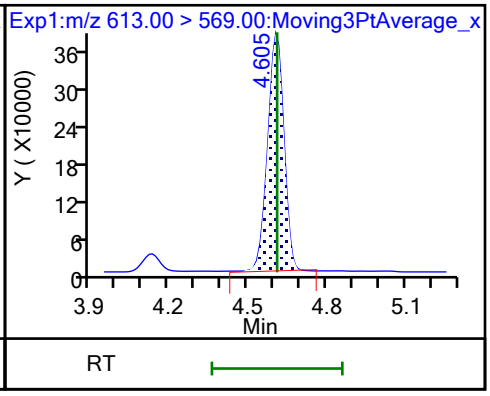
66 11-Chloroeicosafluoro-3-oxaundec



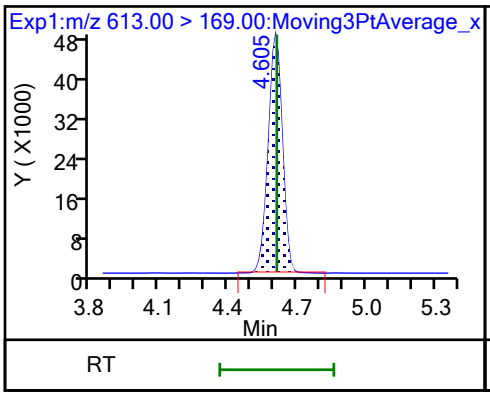
D 36 13C2 PFDoA



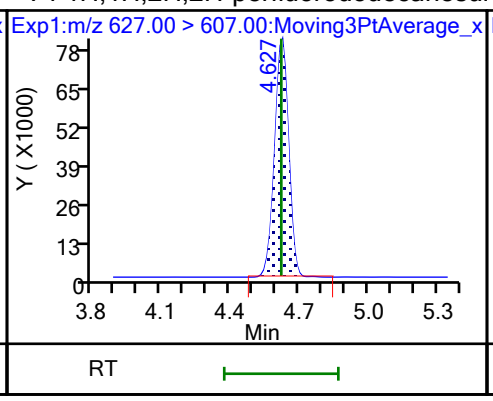
37 Perfluorododecanoic acid



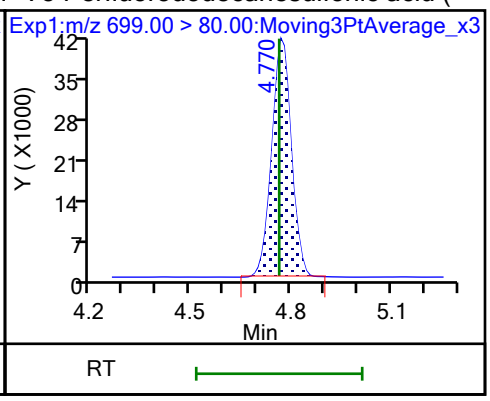
37 Perfluorododecanoic acid



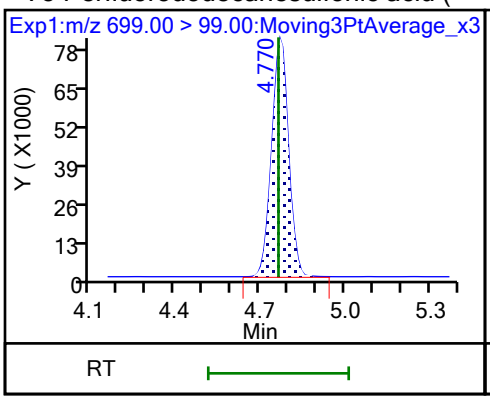
74 1H,1H,2H,2H-perfluorododecanesul



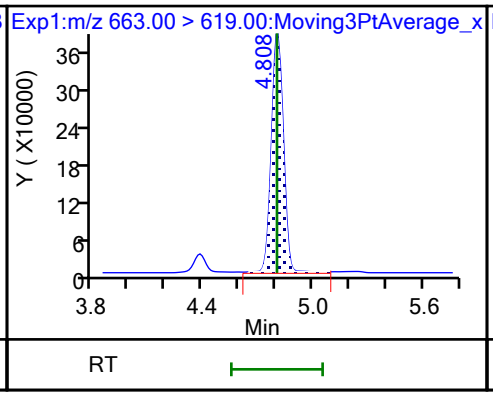
75 Perfluorododecanesulfonic acid (



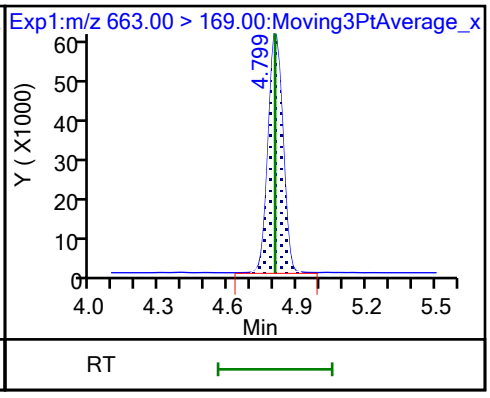
75 Perfluorododecanesulfonic acid (



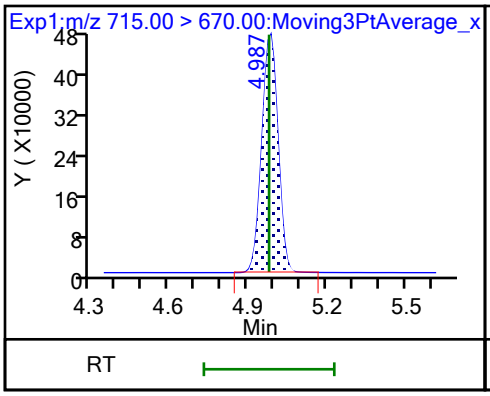
41 Perfluorotridecanoic acid



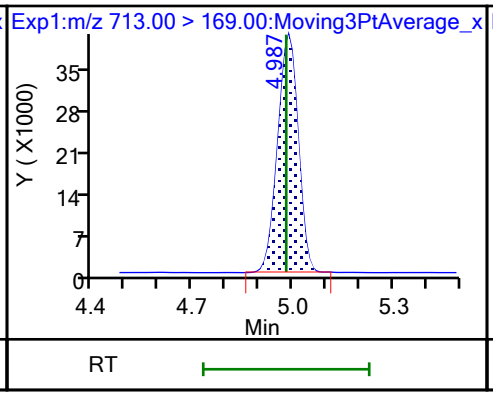
41 Perfluorotridecanoic acid



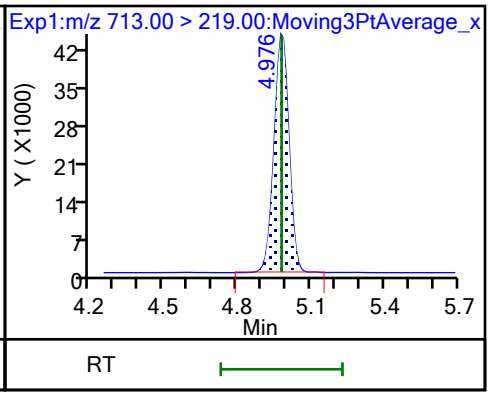
D 43 13C2 PFTeDA



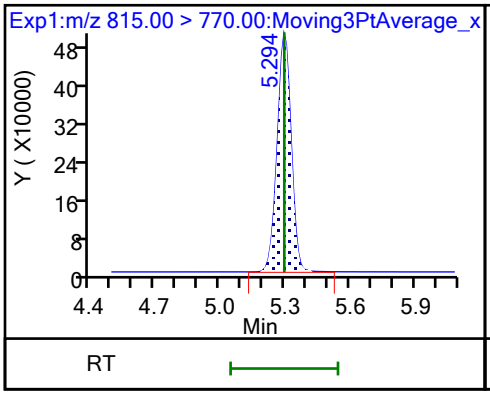
42 Perfluorotetradecanoic acid



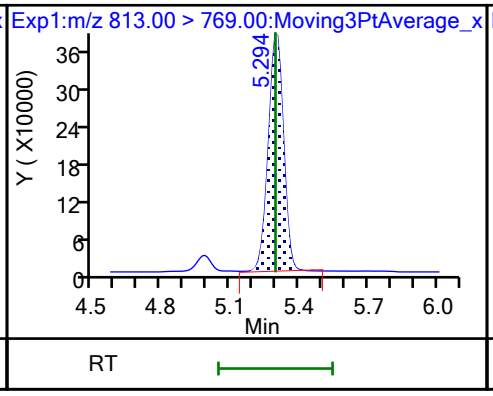
42 Perfluorotetradecanoic acid



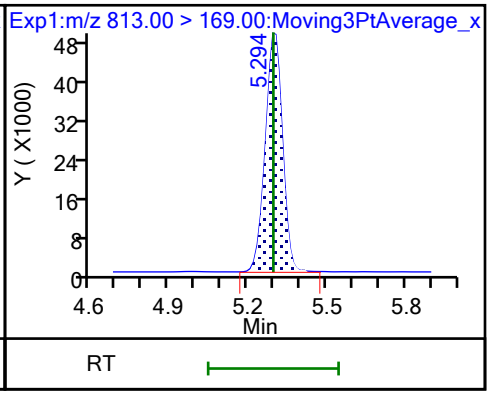
D 44 13C2 PFHxDA



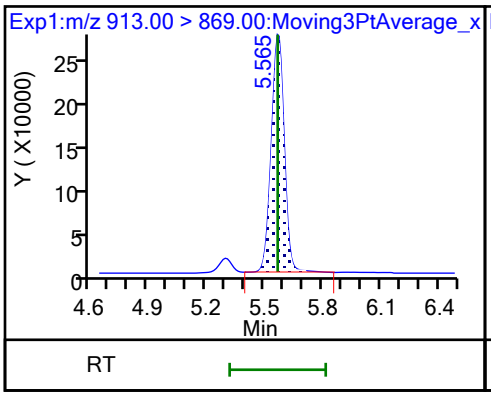
45 Perfluorohexadecanoic acid



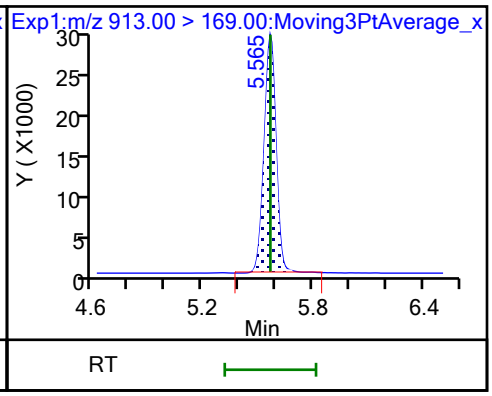
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9180		2.50	2.50	-0.1	30.0
Perfluoropentanoic acid	AveID	1.079	1.022		2.37	2.50	-5.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.115		2.21	2.22	-0.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.588		2.48	2.34	5.7	
Perfluorohexanoic acid	AveID	1.100	1.062		2.41	2.50	-3.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.373		2.47	2.35	5.2	
HFPODA	AveID	1.001	0.9607		2.40	2.50	-4.0	
Perfluoroheptanoic acid	AveID	1.121	1.152		2.57	2.50	2.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.066		2.20	2.29	-3.7	
DONA	AveID	5.754	5.627		2.31	2.36	-2.2	
Perfluoroheptanesulfonic acid	AveID	1.445	1.405		2.32	2.38	-2.8	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.771		2.41	2.38	1.4	
Perfluorooctanoic acid	AveID	1.065	1.066		2.50	2.50	0.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.087		2.16	2.32	-6.8	
Perfluorononanoic acid	AveID	0.9800	0.9588		2.45	2.50	-2.2	
9Cl-PF3ONS	AveID	3.569	3.904		2.55	2.33	9.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.8067		2.19	2.41	-9.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.361		2.57	2.40	7.3	
Perfluorodecanoic acid	AveID	0.999	0.9706		2.43	2.50	-2.9	
Perfluorooctanesulfonamide	AveID	0.9539	1.008		2.64	2.50	5.6	
NMeFOSAA	AveID	0.9074	0.9166		2.53	2.50	1.0	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6186		2.19	2.41	-9.4	
Perfluoroundecanoic acid	AveID	1.031	0.9238		2.24	2.50	-10.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9481		2.37	2.50	-5.2	
11Cl-PF3OUdS	AveID	5.474	5.645		2.43	2.36	3.1	
Perfluorododecanoic acid	AveID	1.018	0.9330		2.29	2.50	-8.3	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.544		2.83	2.41	17.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2174		2.27	2.42	-6.1	
Perfluorotridecanoic acid	AveID	1.070	1.012		2.37	2.50	-5.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1031		2.31	2.50	-7.8	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.001		2.50	2.50	0.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7527		2.41	2.50	-3.6	
13C4 PFBA	Ave	0.9917	1.058		1.33	1.25	6.7	
13C5 PFPeA	Ave	0.7696	0.7716		1.25	1.25	0.3	
13C3 PFBS	Ave	1.041	1.001		1.12	1.16	-3.9	
M2-4:2 FTS	Ave	0.1204	0.1055		1.02	1.17	-12.4	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7452		1.19	1.25	-4.8	
13C3 HFPO-DA	Ave	0.1516	0.1399		1.15	1.25	-7.7	
13C4 PFHpA	Ave	0.8590	0.8240		1.20	1.25	-4.1	50.0
18O2 PFHxS	Ave	0.7464	0.7087		1.12	1.18	-5.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1421		1.09	1.19	-8.4	
13C4 PFOA	Ave	0.9731	0.9798		1.26	1.25	0.7	50.0
13C4 PFOS	Ave	0.4742	0.4644		1.17	1.20	-2.1	50.0
13C5 PFNA	Ave	1.059	1.004		1.19	1.25	-5.2	50.0
13C2 PFDA	Ave	1.109	1.085		1.22	1.25	-2.1	
M2-8:2 FTS	Ave	0.1744	0.1477		1.01	1.20	-15.3	
13C8 FOSA	Ave	0.9462	0.8497		1.12	1.25	-10.2	
d3-NMeFOSAA	Ave	0.2650	0.2600		1.23	1.25	-1.9	
13C2 PFUnA	Ave	1.047	1.027		1.23	1.25	-1.9	
d5-NEtFOSAA	Ave	0.2552	0.2514		1.23	1.25	-1.5	
13C2 PFDoA	Ave	1.064	1.053		1.24	1.25	-1.0	
13C2 PFTeDA	Ave	1.059	1.007		1.19	1.25	-4.9	
13C2 PFHxDA	Ave	1.221	1.056		1.08	1.25	-13.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 11:46:16 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057578-013 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:43:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:48:18
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.131	-0.001	0.605	2189160	1.33		107	5990	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	4019437	2.50		99.9	301	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1596766	1.25		100	2032	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.006	3263790	2.37		94.7	90.0	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.701	1926203	1.12		96.1	190461	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	4097122	2.21	Target=2.06	99.8	5762	
298.90 > 99.00	2.466	2.467	-0.001	1.000	2023548		2.02(1.03-3.09)		953	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	1468199	2.47		106	5376	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	203959	1.02		87.6	141	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1542134	1.19		95.2	11380	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	3274160	2.41	Target=14.12	96.5	614	
313.00 > 119.00	2.797	2.797	0.0	1.000	237941		13.76(7.06-21.17)		342	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.887	3790920	2.47	Target=2.72	105	8468	
349.00 > 99.00	2.810	2.797	0.013	0.887	1268036		2.99(1.36-4.09)		1348	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.897	0.011	1.000	556302	2.40		96.0	2991	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	289539	1.15		92.3	2667	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.153	0.013	0.899	1387573	1.12		95.0	5155	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.166	3.153	0.013	1.000	2857763	2.20	Target=3.32	96.3	5666	
399.00 > 99.00	3.154	3.153	0.001	0.996	851433		3.36(1.66-4.98)		742	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.166	3.165	0.001	1.000	3929063	2.57	Target=4.17	103	817	
363.00 > 169.00	3.166	3.165	0.001	1.000	912458		4.31(2.09-6.26)		1680	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.165	0.001	0.899	1705244	1.20		95.9	6645	
77 DONA										
377.00 > 251.00	3.201	3.199	0.002	0.838	10220608	2.31	Target=3.33	97.8	8777	
377.00 > 85.00	3.201	3.199	0.002	0.838	2756017		3.71(1.66-4.99)		3834	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.503	3.502	0.001	0.917	2573479	2.32	Target=4.83	97.2	7904	
449.00 > 99.00	3.503	3.502	0.001	0.917	513213		5.01(2.41-7.24)		1555	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.502	0.010	0.997	279380	1.09		91.6	507	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.512	3.502	0.010	1.000	1550097	2.41		101	3226	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.521	3.512	0.009	1.000	4323734	2.50	Target=2.88	100	184	
413.00 > 169.00	3.521	3.512	0.009	1.000	1486274		2.91(1.44-4.32)		2633	
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.512	0.009	1.000	2027805	1.26		101	13444	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.512	0.009		2069548	1.25			13237	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.819	0.001	1.000	1939107	2.16	Target=4.24	93.2	3362	M
499.00 > 99.00	3.820	3.819	0.001	1.000	428452		4.53(2.12-6.37)		1318	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.819	0.001	1.085	918783	1.17		97.9	3099	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.842	0.001	1.000	3983291	2.45	Target=8.34	97.8	608	
463.00 > 169.00	3.843	3.842	0.001	1.000	476670		8.36(4.17-12.51)		3129	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.842	0.001	1.092	2077322	1.18		94.8	3566	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.971	0.010	1.042	7000977	2.55		109	22006	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.101	0.001	1.074	1491733	2.19	Target=2.17	90.9	8252	
549.00 > 99.00	4.102	4.101	0.001	1.074	604081		2.47(1.08-3.25)		2435	
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.125	0.013	1.175	2245976	1.22		97.9	7309	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.138	4.136	0.002	1.000	4359910	2.43	Target=11.44	97.1	1314	
513.00 > 169.00	4.138	4.136	0.002	1.000	400157		10.90(5.72-17.16)		1531	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.136	0.002	1.000	1385409	2.57		107	5715	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.136	0.002	1.175	292765	1.01		84.7	726	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.230	0.002	1.202	1758541	1.12		89.8	12188	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.230	0.002	1.000	3543658	2.64		106	8138	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.267	4.266	0.001	1.212	537988	1.23		98.1	2700	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.280	4.266	0.014	1.003	986205	2.53		101	1987	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.351	0.013	1.142	1147393	2.19	Target=2.37	90.6	5892	
599.00 > 99.00	4.364	4.351	0.013	1.142	444525		2.58(1.19-3.56)		3966	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.246	2124874	1.23		98.1	12021	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.387	0.0	1.000	3925723	2.24	Target=12.20	89.6	834	
563.00 > 169.00	4.387	4.387	0.0	1.000	343879		11.42(6.10-18.31)		3941	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.249	520343	1.23		98.5	1239	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.399	4.399	0.0	1.000	986631	2.37		94.8	5937	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.468	0.001	1.170	10232851	2.43		103	10191	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.610	0.001	1.310	2178851	1.24		99.0	8083	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.610	0.001	1.000	4065566	2.29	Target=8.47	91.7	218	
613.00 > 169.00	4.611	4.610	0.001	1.000	480695		8.46(4.23-12.70)		3052	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.621	0.001	1.117	909994	2.83		117	19016	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.764	0.011	1.250	404415	2.27	Target=0.48	93.9	4198	
699.00 > 99.00	4.775	4.764	0.011	1.250	841430		0.48(0.24-0.72)		7046	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.813	4.803	0.010	1.044	4410278	2.37	Target=6.41	94.6	249	
663.00 > 169.00	4.803	4.803	0.0	1.042	671283		6.57(3.21-9.62)		3204	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.417	2084655	1.19		95.1	6359	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.980	0.010	1.000	430026	2.31	Target=0.87	92.2	3778	
713.00 > 219.00	4.980	4.980	0.0	0.998	466930		0.92(0.43-1.30)		5724	

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.504	2185654	1.08		86.5	6373	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.307	5.296	0.011	1.002	4374410	2.50	Target=7.89	100	257	
813.00 > 169.00	5.296	5.296	0.0	1.000	549671		7.96(3.94-11.83)		4870	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.576	5.567	0.009	1.053	3290435	2.41	Target=9.39	96.4	293	
913.00 > 169.00	5.567	5.567	0.0	1.051	344054		9.56(4.69-14.08)		1486	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

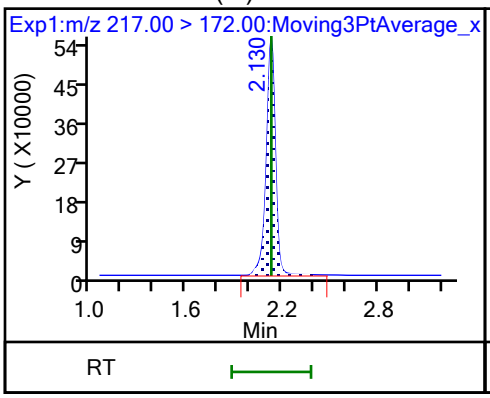
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54

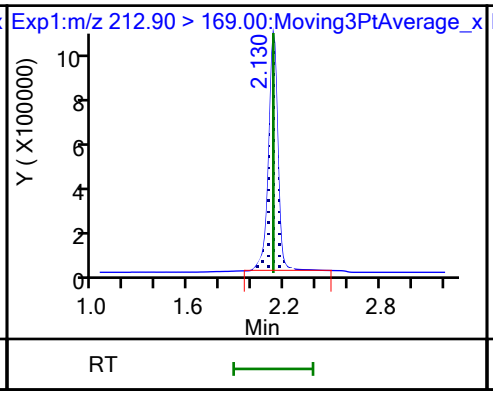
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Injection Date: 27-Oct-2023 11:46:16 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

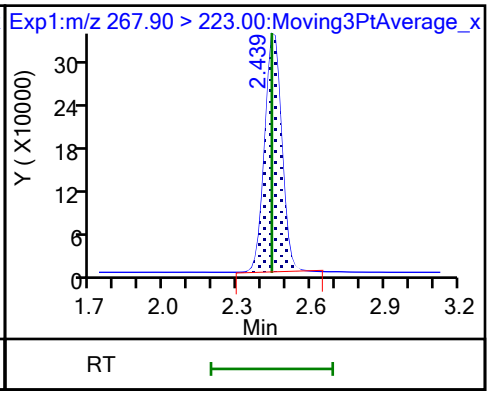
D 1 13C4 PFBA (M)



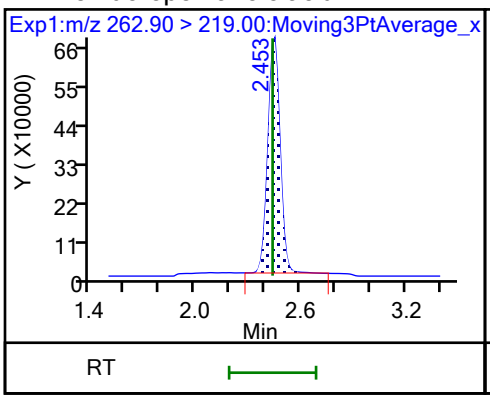
2 Perfluorobutanoic acid



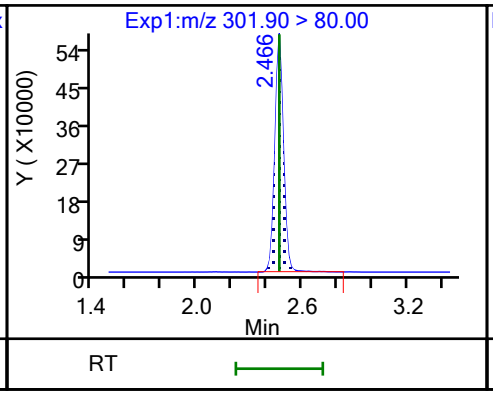
D 3 13C5 PFPeA



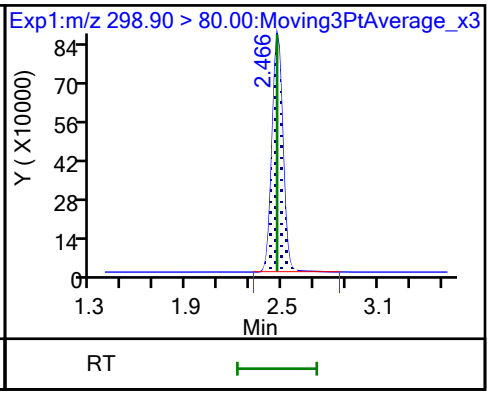
4 Perfluoropentanoic acid



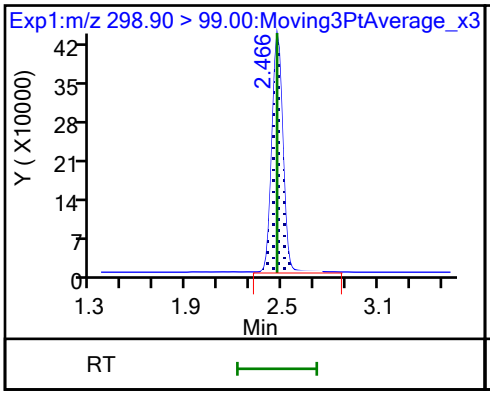
D 47 13C3 PFBS



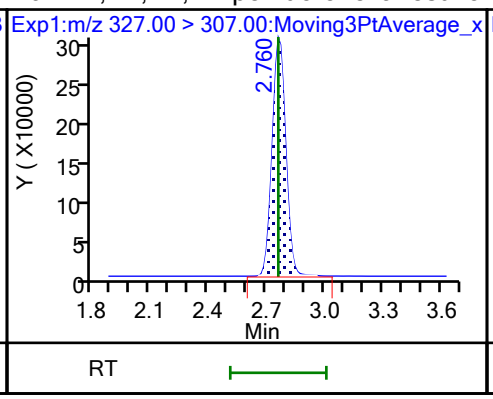
5 Perfluorobutanesulfonic acid



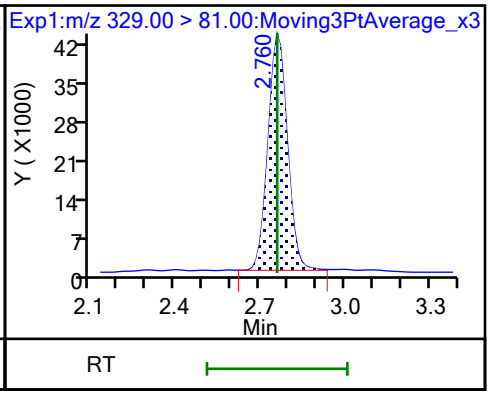
5 Perfluorobutanesulfonic acid



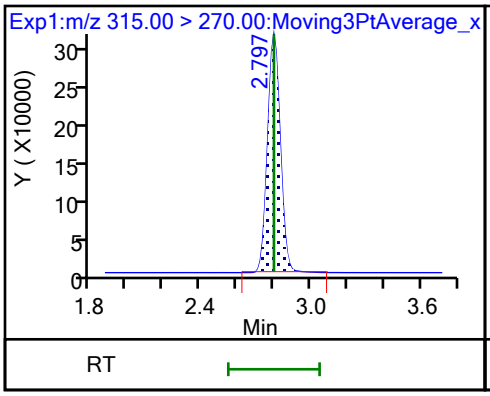
61 1H,1H,2H,2H-perfluorohexanesulfo



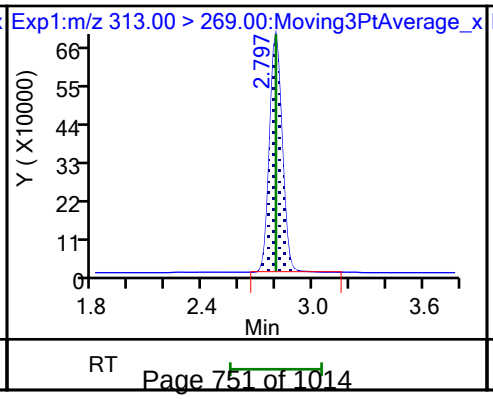
D 60 M2-4:2 FTS



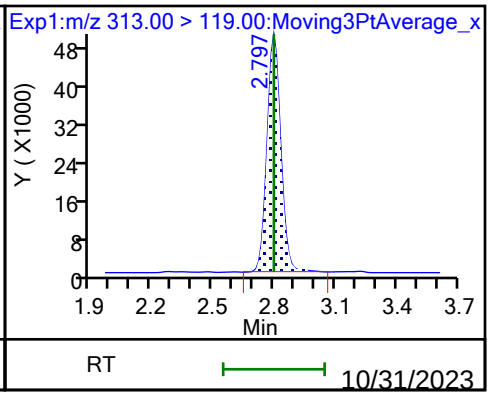
D 7 13C2 PFHxA



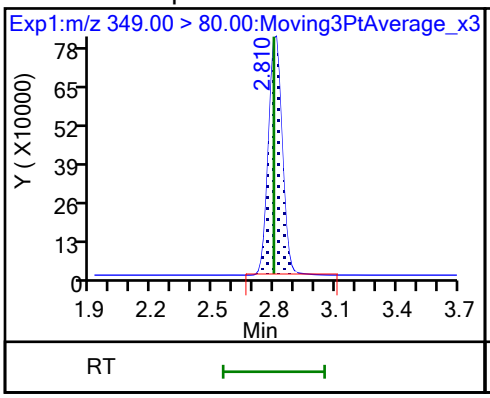
6 Perfluorohexanoic acid



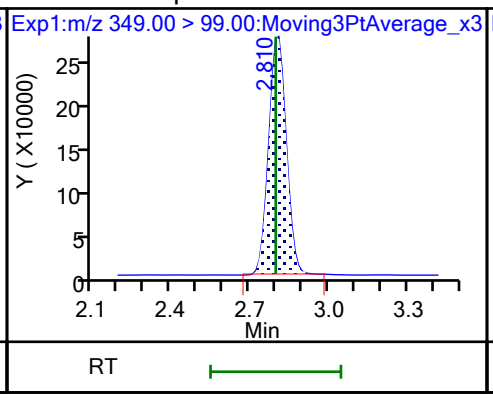
6 Perfluorohexanoic acid



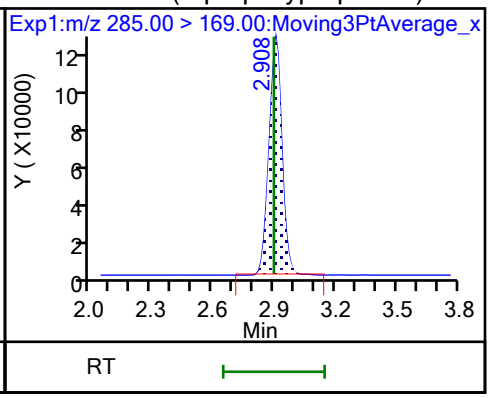
70 Perfluoropentanesulfonic acid



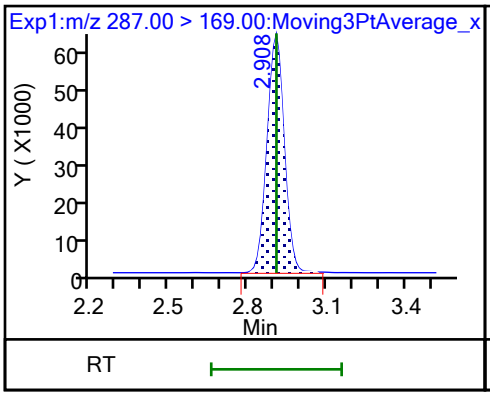
70 Perfluoropentanesulfonic acid



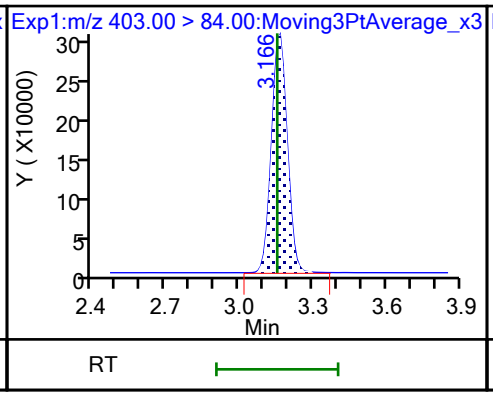
67 Perfluoro(2-propoxypropanoic) ac



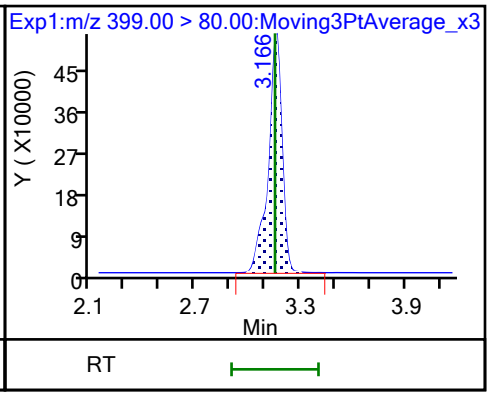
D 64 13C3 HFPO-DA



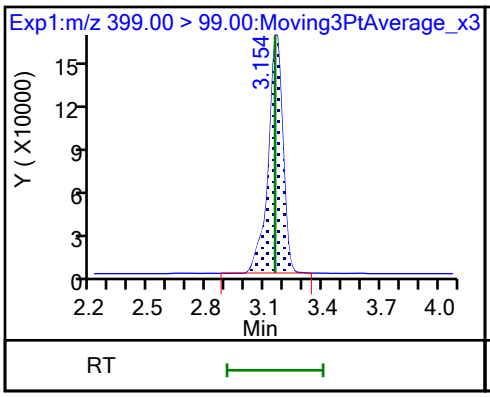
D 11 18O2 PFHxS



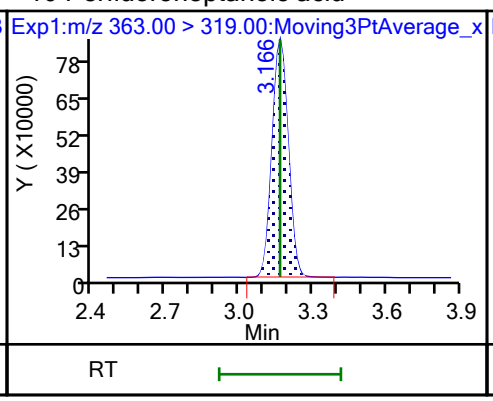
8 Perfluorohexanesulfonic acid



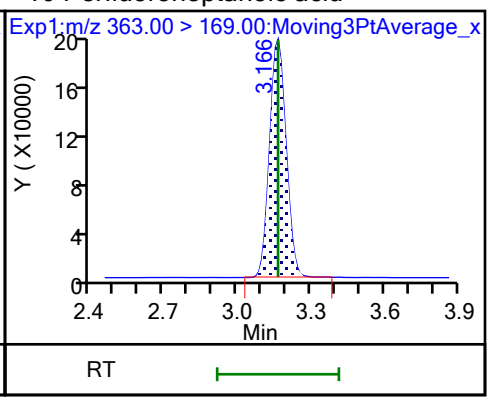
8 Perfluorohexanesulfonic acid



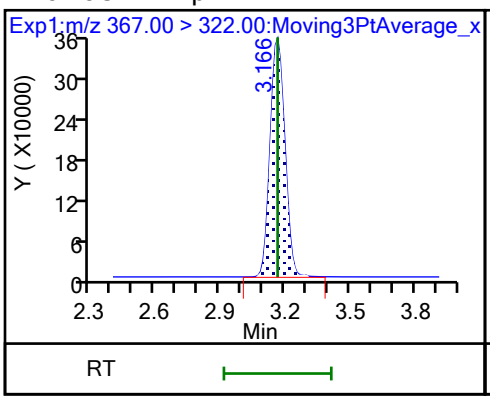
10 Perfluoroheptanoic acid



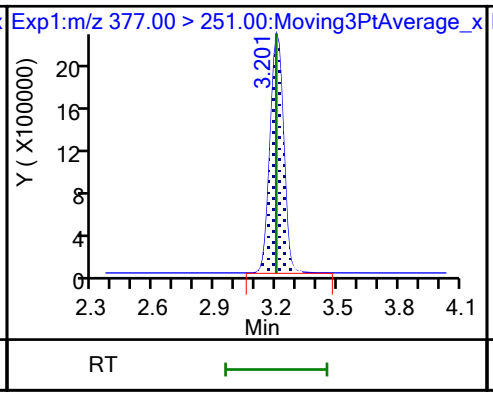
10 Perfluoroheptanoic acid



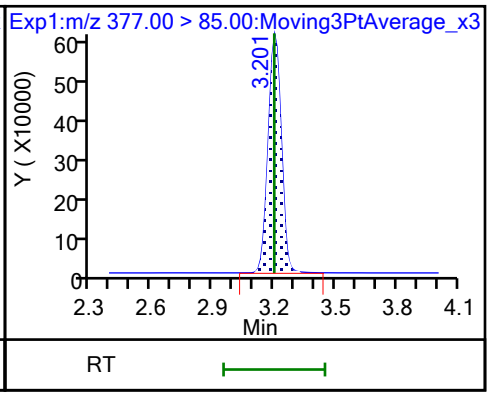
D 9 13C4 PFHpA



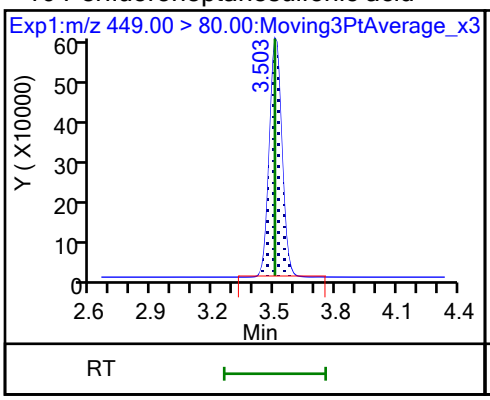
77 DONA



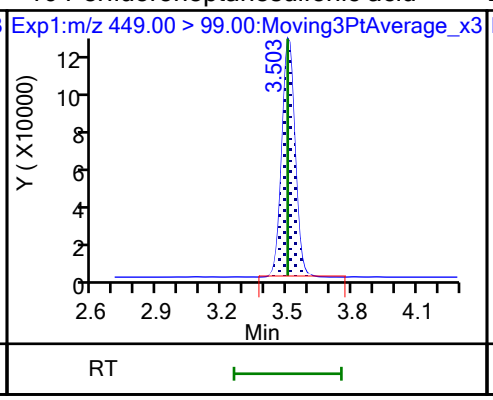
77 DONA



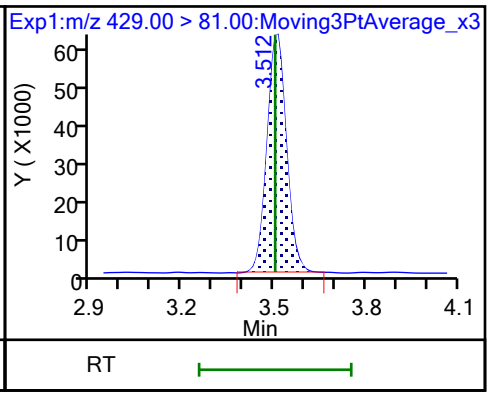
16 Perfluoroheptanesulfonic acid



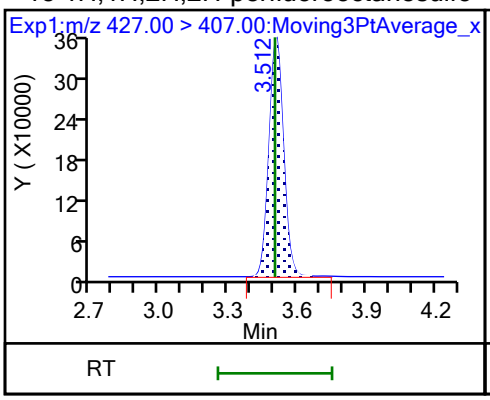
16 Perfluoroheptanesulfonic acid



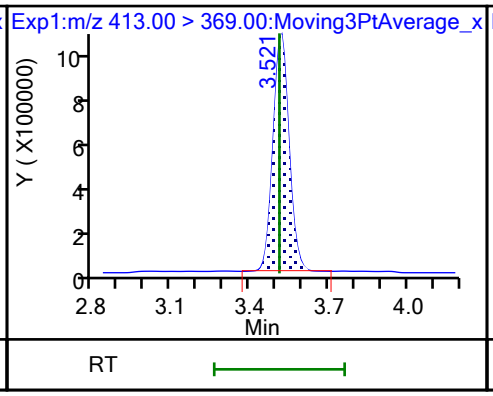
D 12 M2-6:2 FTS



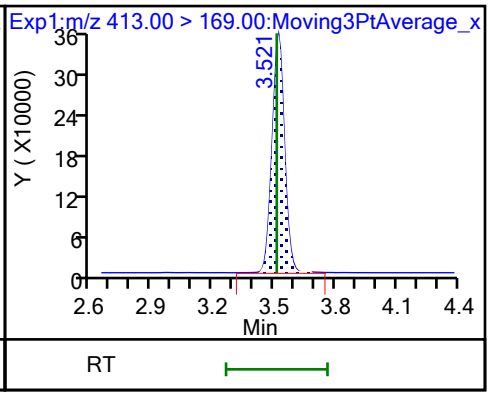
13 1H,1H,2H,2H-perfluorooctanesulfo



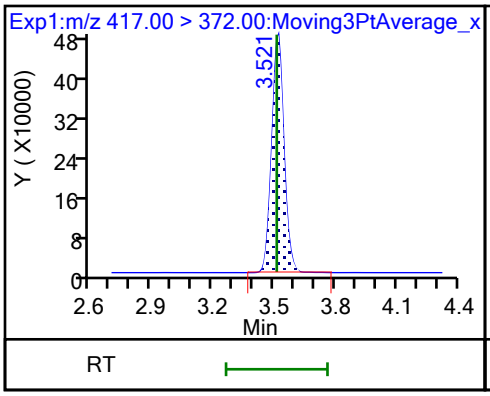
15 Perfluorooctanoic acid



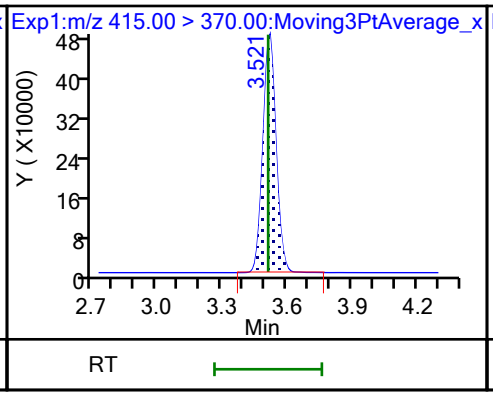
15 Perfluorooctanoic acid



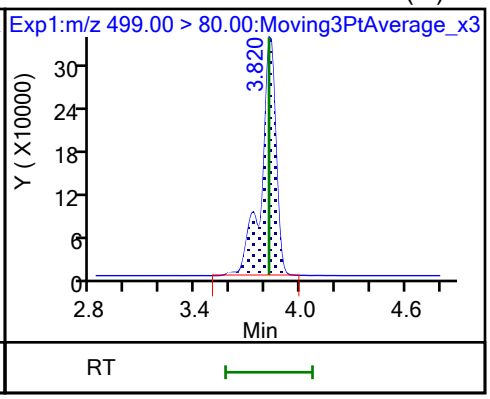
D 14 13C4 PFOA



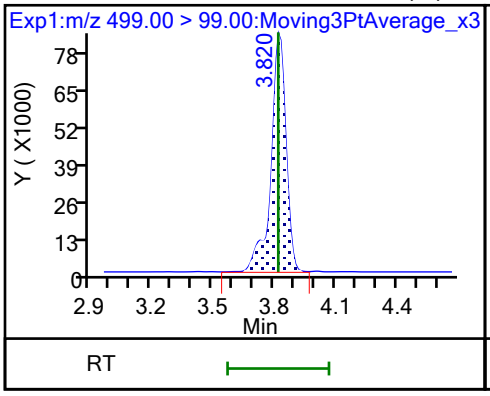
* 62 13C2 PFOA



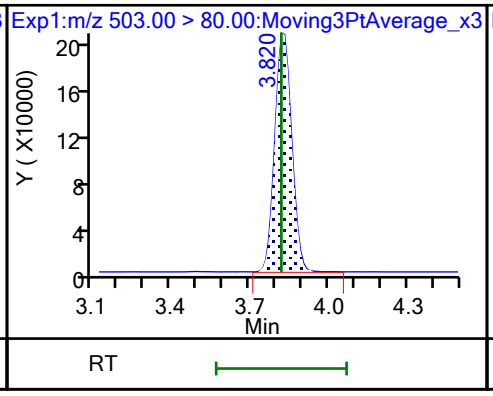
17 Perfluorooctanesulfonic acid (M)



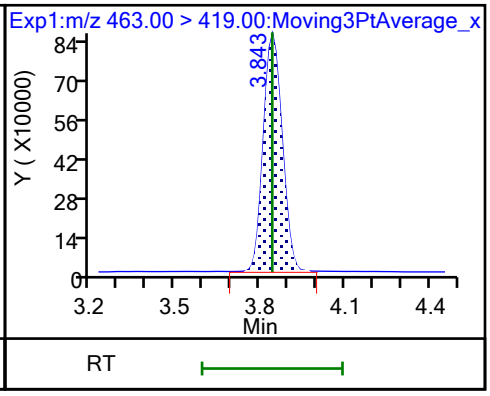
17 Perfluorooctanesulfonic acid (M)



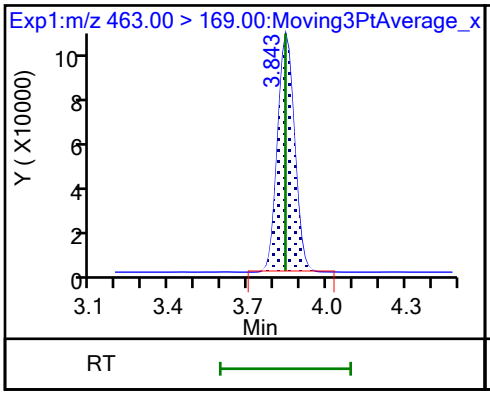
D 18 13C4 PFOS



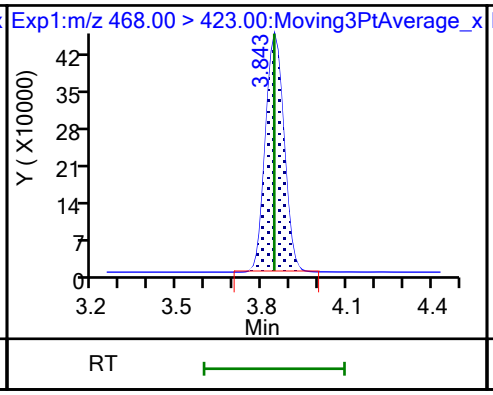
20 Perfluorononanoic acid



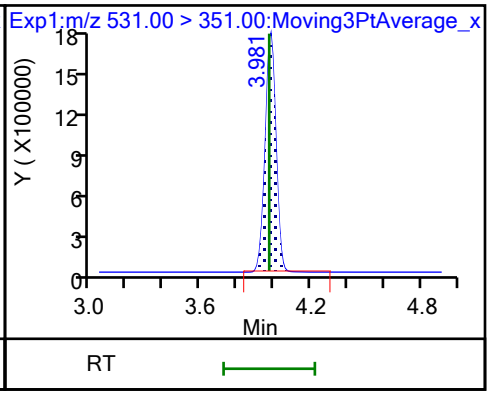
20 Perfluorononanoic acid



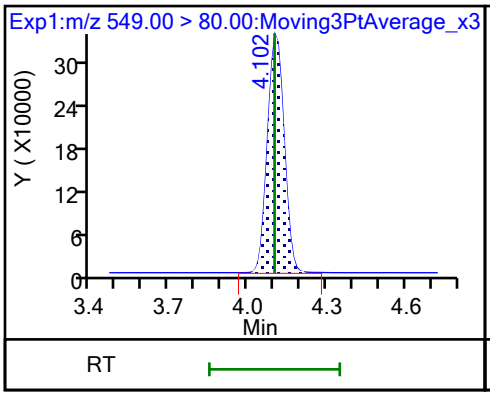
D 19 13C5 PFNA



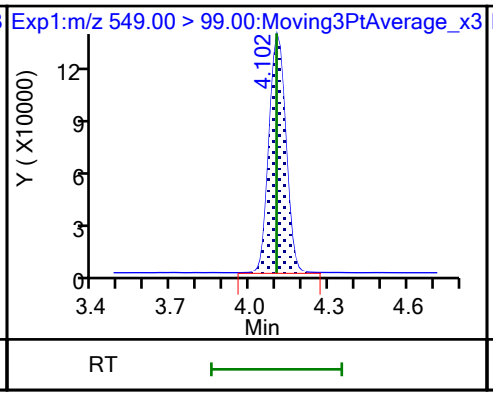
69 9-Chlorohexadecafluoro-3-oxanona



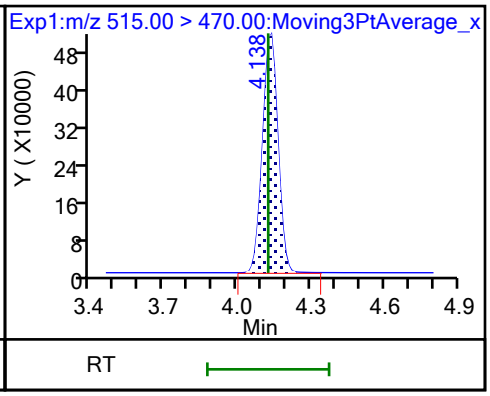
68 Perfluorononanesulfonic acid



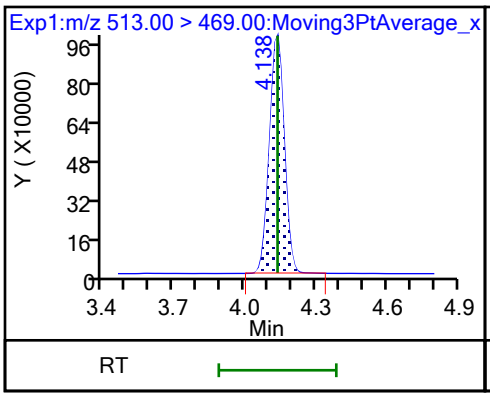
68 Perfluorononanesulfonic acid



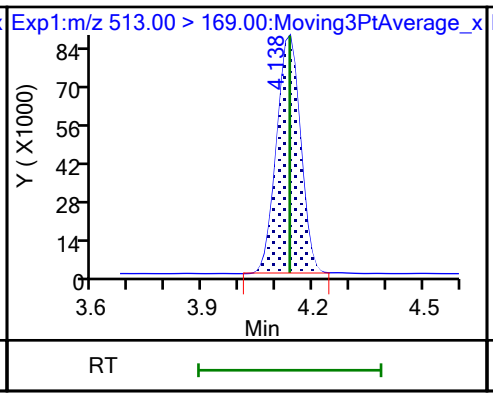
D 23 13C2 PFDA



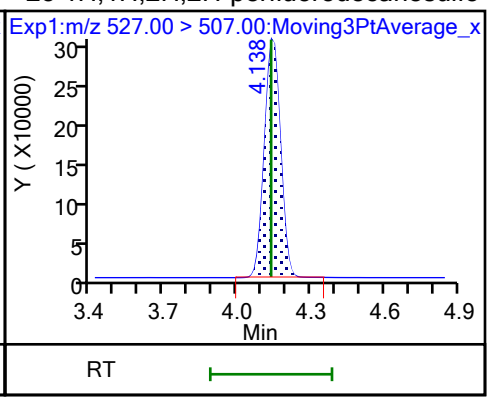
24 Perfluorodecanoic acid



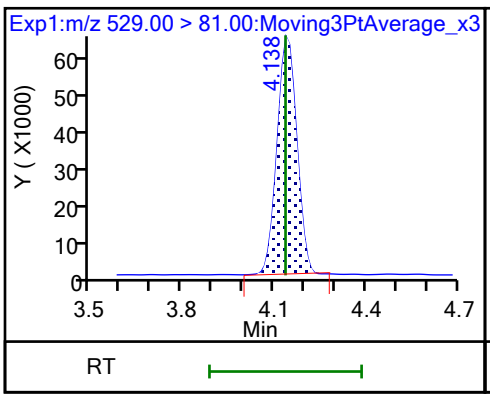
24 Perfluorodecanoic acid



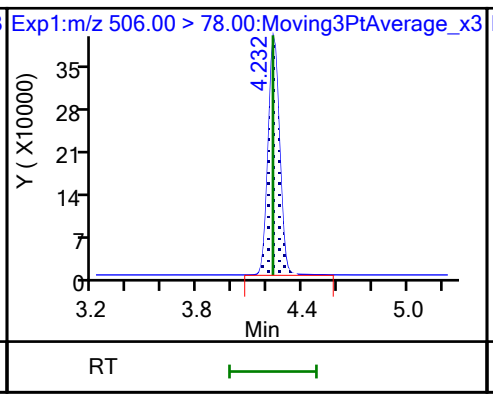
25 1H,1H,2H,2H-perfluorodecanesulfo



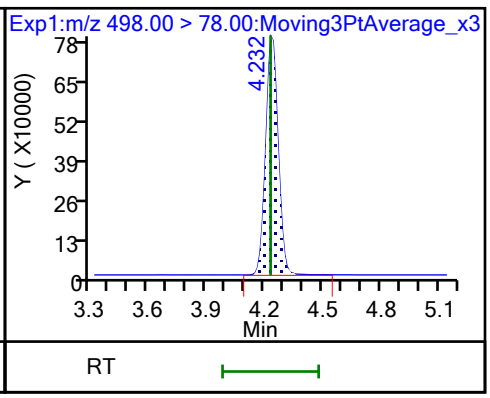
D 26 M2-8:2 FTS



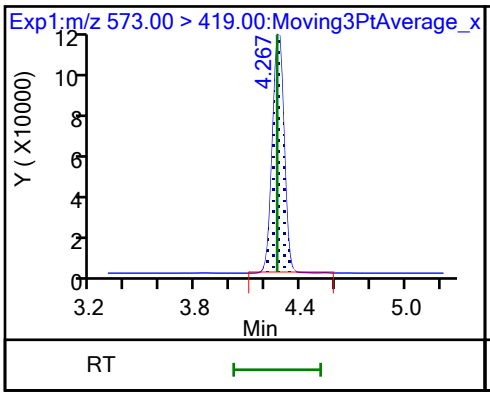
D 21 13C8 FOSA



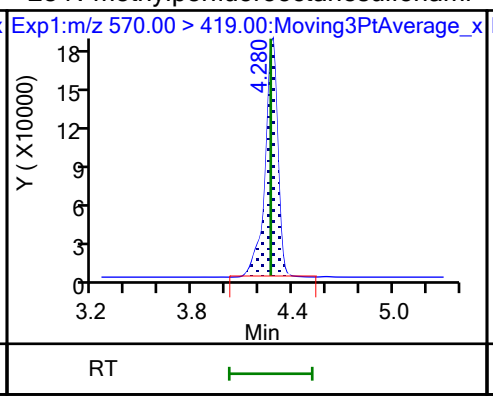
22 Perfluorooctanesulfonamide



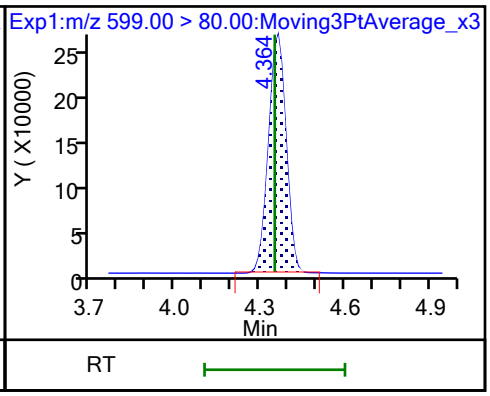
D 27 d3-NMeFOSAA



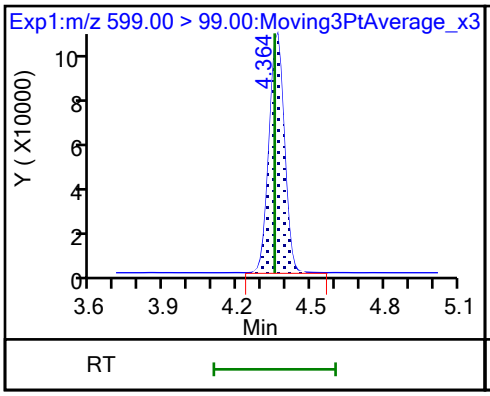
28 N-methylperfluorooctanesulfonami



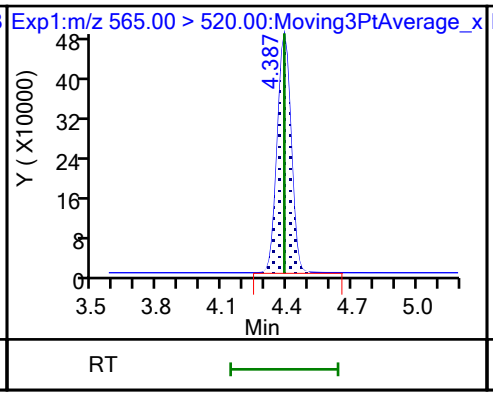
29 Perfluorodecanesulfonic acid



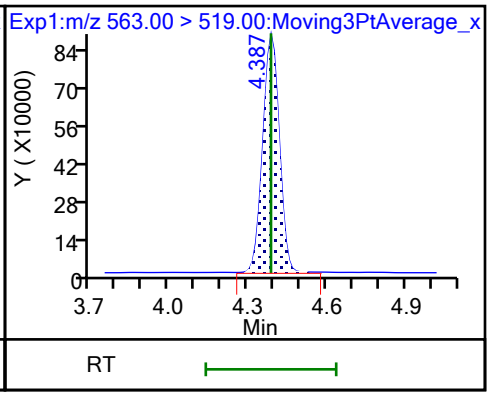
29 Perfluorodecanesulfonic acid



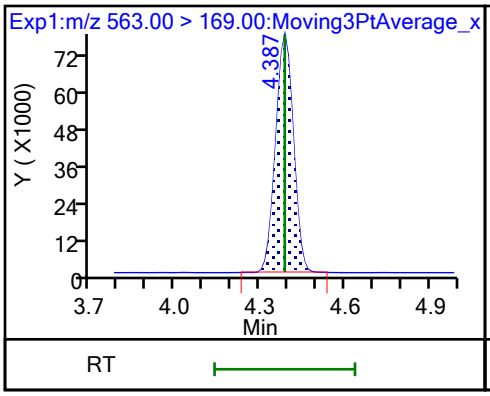
D 30 13C2 PFUnA



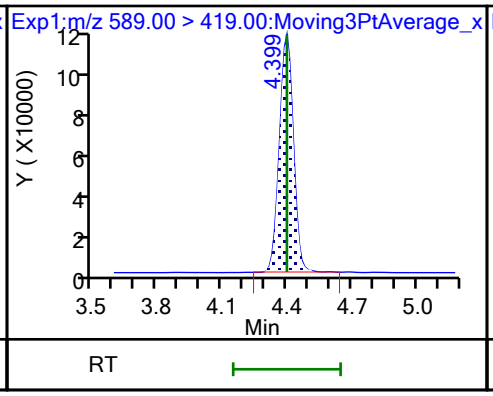
31 Perfluoroundecanoic acid



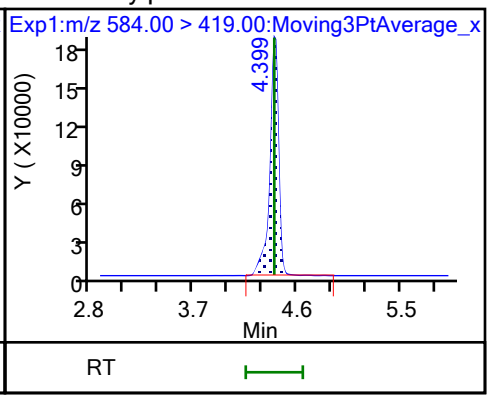
31 Perfluoroundecanoic acid



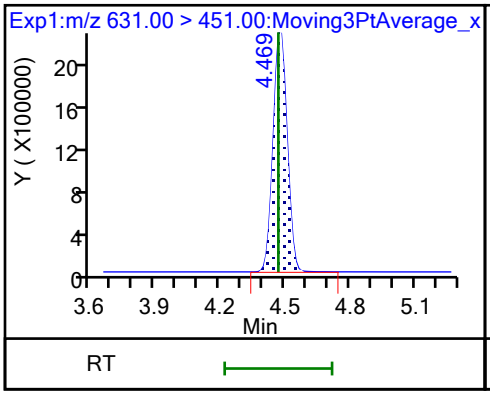
D 32 d5-NEtFOSAA



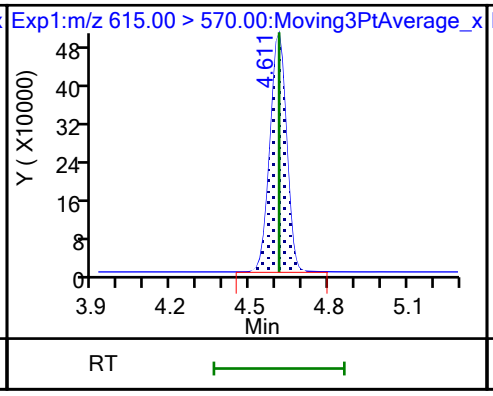
33 N-ethylperfluorooctanesulfonamid



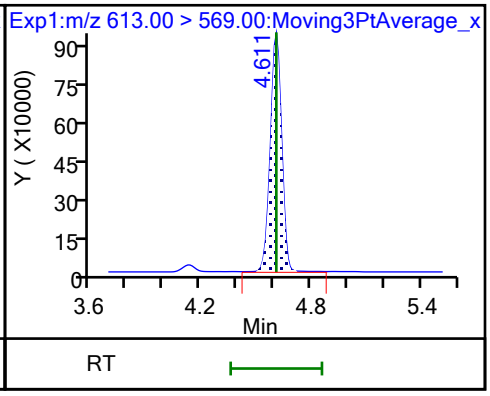
66 11-Chloroeicosafluoro-3-oxaundec



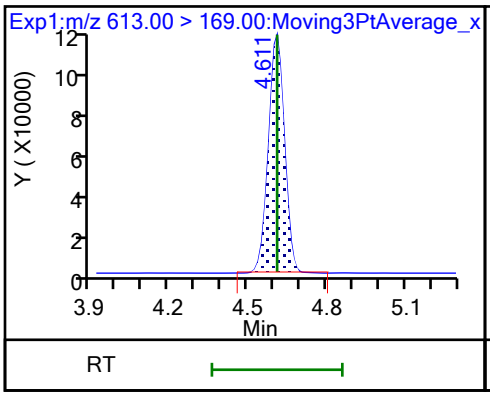
D 36 13C2 PFDoA



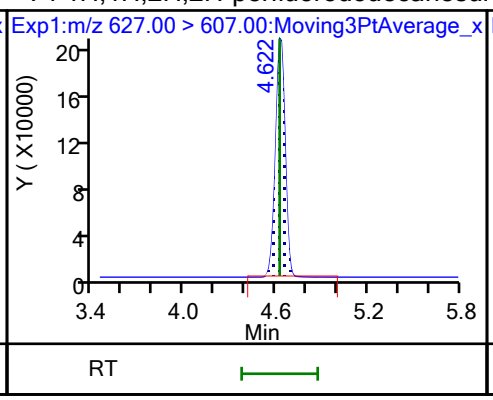
37 Perfluorododecanoic acid



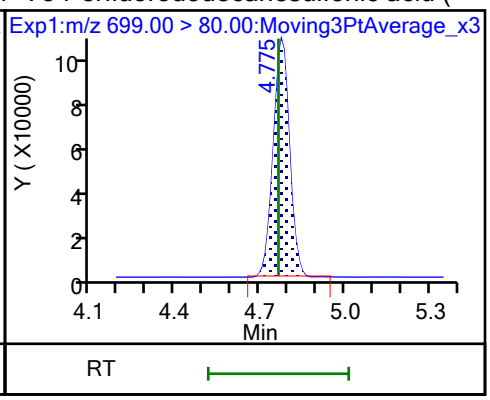
37 Perfluorododecanoic acid



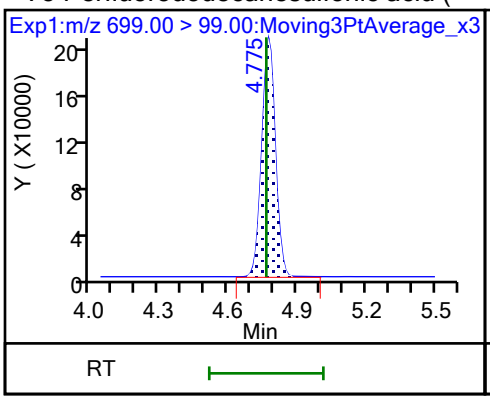
74 1H,1H,2H,2H-perfluorododecanesul



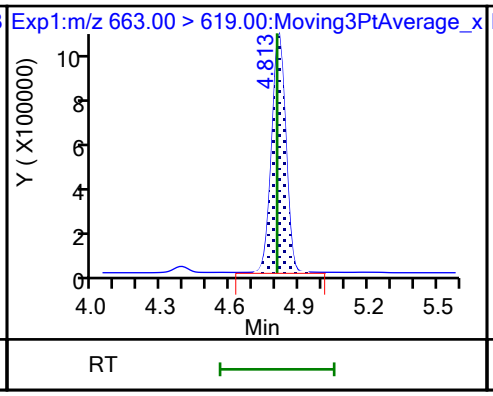
75 Perfluorododecanesulfonic acid (



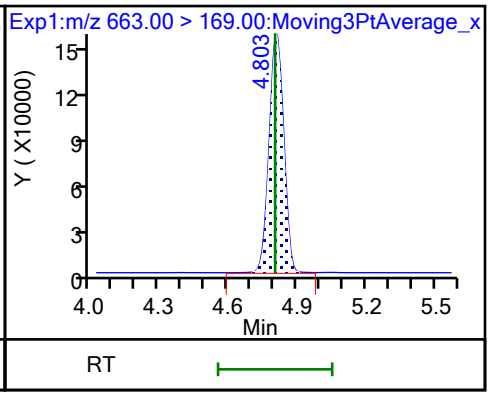
75 Perfluorododecanesulfonic acid (



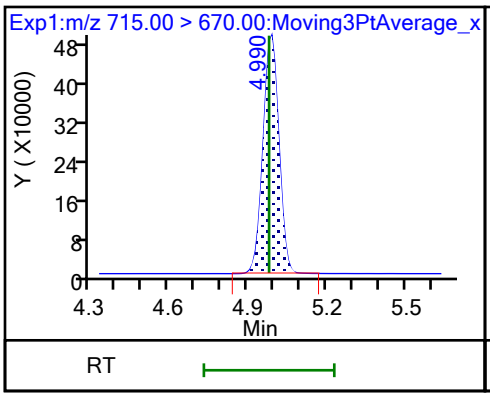
41 Perfluorotridecanoic acid



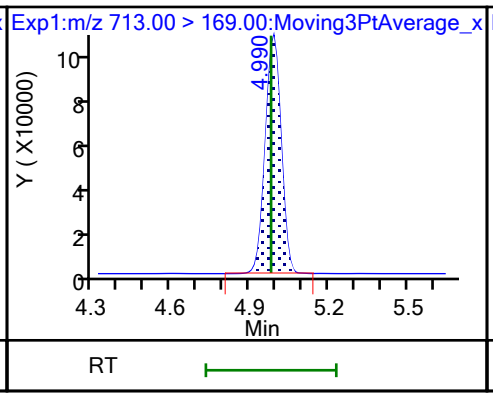
41 Perfluorotridecanoic acid



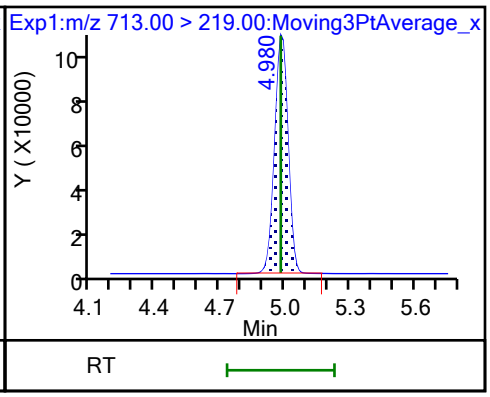
D 43 13C2 PFTeDA



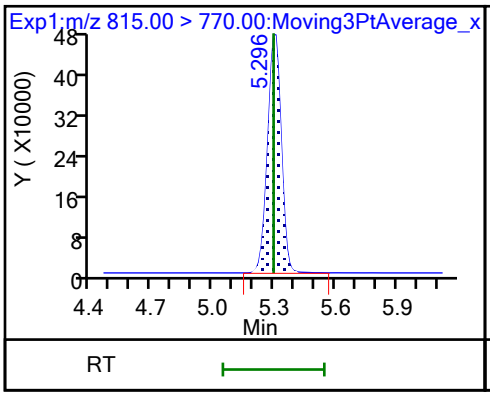
42 Perfluorotetradecanoic acid



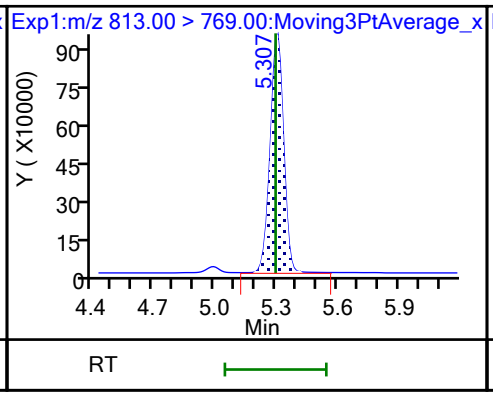
42 Perfluorotetradecanoic acid



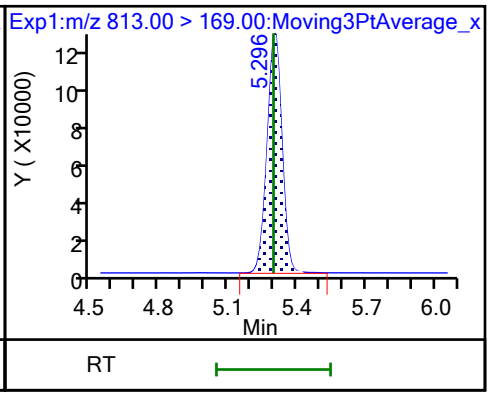
D 44 13C2 PFHxDA



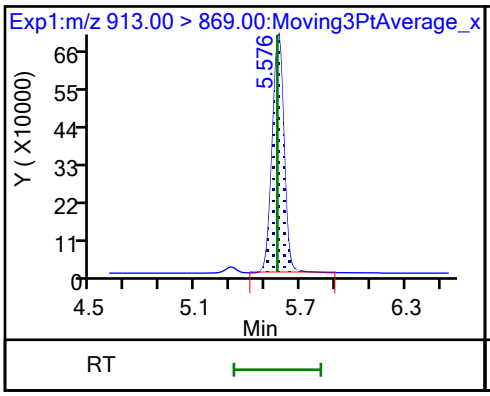
45 Perfluorohexadecanoic acid



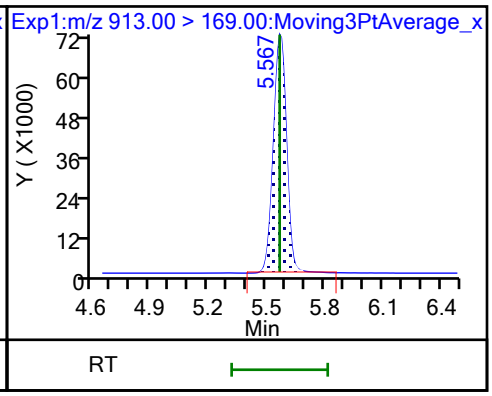
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196645/1-A

Matrix: Water Lab File ID: PA231023A08.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:11

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196645/1-A

Matrix: Water Lab File ID: PA231023A08.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:11

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	99		50-150
STL02116	13C2 PFTeDA	63		50-150
STL02337	13C3 PFBS	87		50-150
STL01056	13C8 FOSA	72		50-150
STL02118	d3-NMeFOSAA	82		50-150
STL02117	d5-NEtFOSAA	74		50-150
STL02395	M2-4:2 FTS	85		50-150
STL02279	M2-6:2 FTS	91		50-150
STL02280	M2-8:2 FTS	84		50-150
STL02255	13C3 HFPO-DA	81		50-150
STL00994	18O2 PFHxS	95		50-150
STL00993	13C2 PFHxA	100		50-150
STL00991	13C4 PFOS	96		50-150
STL00998	13C2 PFDoA	74		50-150
STL00995	13C5 PFNA	90		50-150
STL00996	13C2 PFDA	89		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	85		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Lims ID: MB 200-196645/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2023 16:11:58 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196645/1-A
Misc. Info.: 200-0057509-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 12:10:04
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2281932	1.27		102	1804	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	32621	-0.0211			2.5	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1607329	1.15		92.3	2193	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.466	2.453	0.013	1.011	14419	0.0104			0.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1905952	1.01		87.0	82983	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	3172	0.001732	Target=2.06		3.6	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	1123		2.82(1.03-3.09)		0.6	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.782	2.760	0.022	1.009	328	0.000520			5.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.785	216931	0.99		85.2	177	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.795	2.797	-0.002	0.796	1770501	1.25		99.9	2007	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.905	2.908	-0.003	1.000	182	0.000817			1.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.828	278195	1.01		81.1	2162	
D 11 18O2 PFHxS										
403.00 > 84.00	3.163	3.168	-0.005	0.901	1518780	1.12		95.0	6573	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.163	3.168	-0.005	1.000	6753	0.004750	Target=3.32		23.0	M
399.00 > 99.00	3.163	3.168	-0.005	1.000	2174		3.11(1.66-4.98)		1.7	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.163	3.168	-0.005	1.000	1761	0.001025	Target=4.17		0.5	M
363.00 > 169.00	3.163	3.168	-0.005	1.000	374		4.71(2.09-6.26)		1.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.163	3.168	-0.005	0.901	1915295	1.23		98.5	10225	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.505	-0.004	0.997	304793	1.09		91.4	647	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.510	3.514	-0.004	1.003	1208	0.001722			2.3	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.510	3.514	-0.004	1.000	9118	0.004735	Target=2.88		0.4	M
413.00 > 169.00	3.510	3.514	-0.004	1.000	2163		4.22(1.44-4.32)		3.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.510	3.523	-0.013	1.000	2259896	1.28		103	10671	
* 62 13C2 PFOA										M
415.00 > 370.00	3.510	3.523	-0.013		2263276	1.25			4040	M
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.837	3.822	0.015	1.006	1712	0.001790	Target=4.24		2.7	RM
499.00 > 99.00	3.649	3.822	-0.173	0.957	1395		1.23(2.12-6.37)		2.2	M
D 18 13C4 PFOS										
503.00 > 80.00	3.815	3.822	-0.007	1.087	979976	1.14		95.5	5283	
D 19 13C5 PFNA										
468.00 > 423.00	3.837	3.845	-0.008	1.093	2145073	1.12		89.5	5337	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.969	3.983	-0.014	1.040	1256	0.000429			6.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.122	4.129	-0.007	1.174	2238301	1.11		89.2	7005	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.134	4.141	-0.007	1.178	317320	1.00		83.9	983	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.134	4.141	-0.007	1.000	243	0.000417			1.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.238	4.234	0.004	1.207	1546734	0.9028		72.2	5407	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.238	4.234	0.004	1.000	1577	0.001336			13.0	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.262	4.270	-0.008	1.214	492343	1.03		82.1	3173	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.250	4.270	-0.020	0.997	940	0.002630			3.3	
D 30 13C2 PFUnA										
565.00 > 520.00	4.383	4.390	-0.007	1.249	2012049	1.06		84.9	7165	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.395	4.401	-0.006	1.252	428608	0.9277		74.2	973	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.395	4.401	-0.006	1.000	966	0.002817			8.2	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.478	4.473	0.005	1.174	5385	0.001200			8.9	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.607	4.613	-0.006	1.312	1773576	0.9207		73.7	6095	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.596	4.613	-0.017	0.998	4447	0.003079	Target=8.47		0.4	RM
613.00 > 169.00	4.607	4.613	-0.006	1.000	210		21.18(4.23-12.70)		5.1	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.640	4.624	0.016	1.122	809	0.002320			15.9	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.806	-0.007	1.042	7149	0.004710	Target=6.41		0.5	M
663.00 > 169.00	4.790	4.806	-0.016	1.040	978		7.31(3.21-9.62)		12.2	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.977	4.982	-0.005	1.418	1502817	0.7835		62.7	4018	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.977	4.982	-0.005	1.000	563	0.004188	Target=0.87		6.4	M
713.00 > 219.00	4.988	4.982	0.006	1.002	650		0.87(0.43-1.30)		14.4	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.284	5.292	-0.008	1.505	1612061	0.7294		58.4	5165	
45 Perfluorohexadecanoic acid										RM
813.00 > 769.00	5.284	5.292	-0.008	1.000	5040	0.003908	Target=7.89		0.5	RM
813.00 > 169.00	5.295	5.292	0.003	1.002	388		12.99(3.94-11.83)		10.9	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

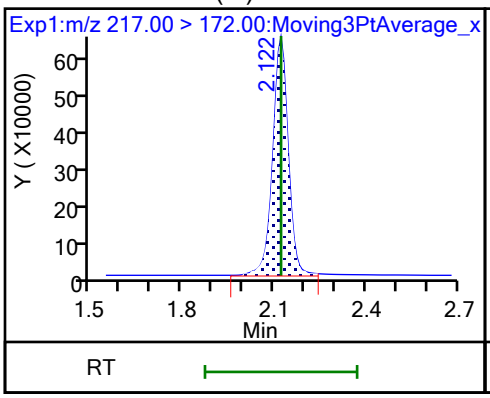
M - Manually Integrated

Report Date: 25-Oct-2023 15:12:28 Chrom Revision: 2.3 18-Oct-2023 21:16:54

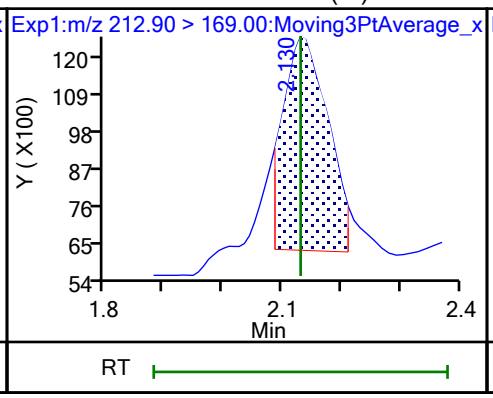
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

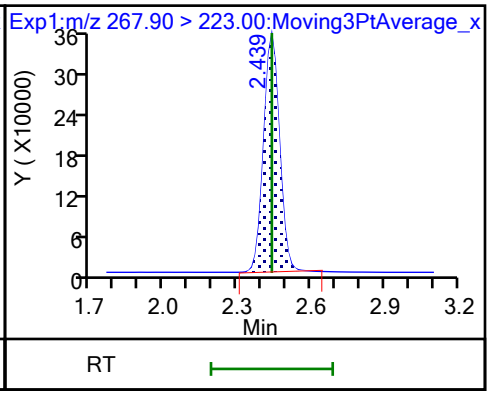
D 1 13C4 PFBA (M)



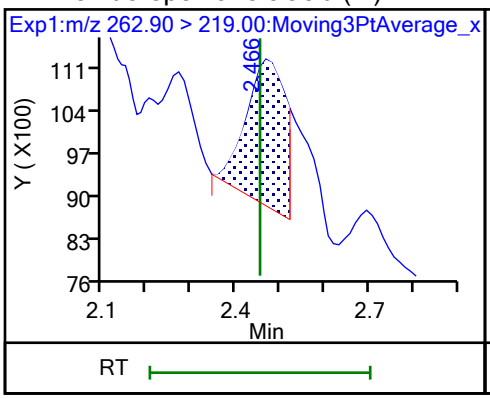
2 Perfluorobutanoic acid (M)



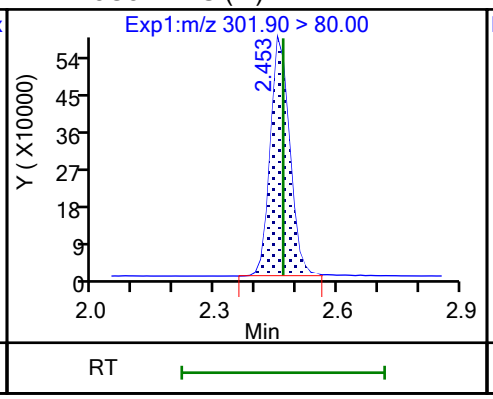
D 3 13C5 PFPeA



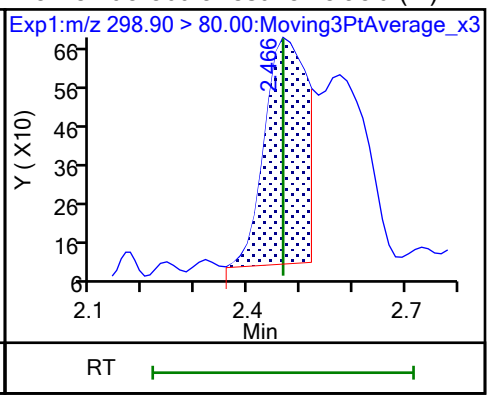
4 Perfluoropentanoic acid (M)



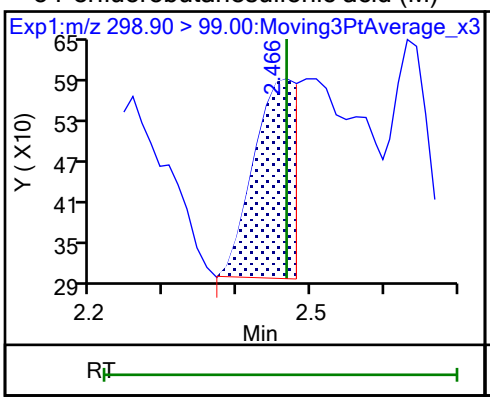
D 47 13C3 PFBS (M)



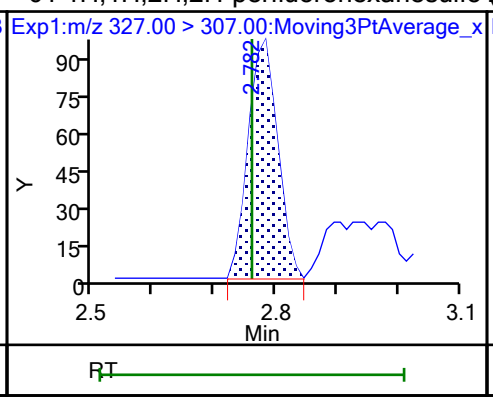
5 Perfluorobutanesulfonic acid (M)



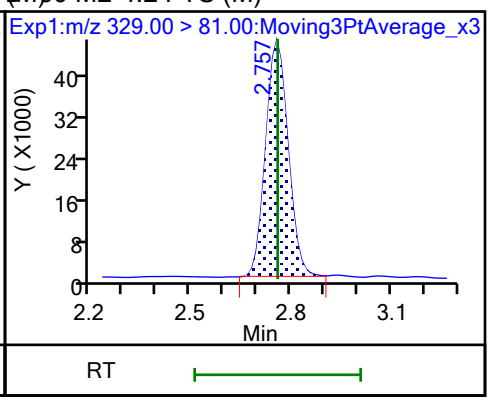
5 Perfluorobutanesulfonic acid (M)



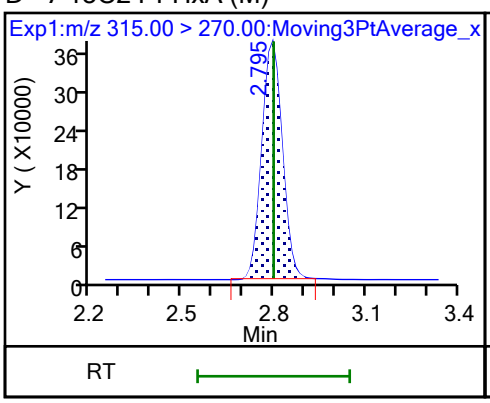
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



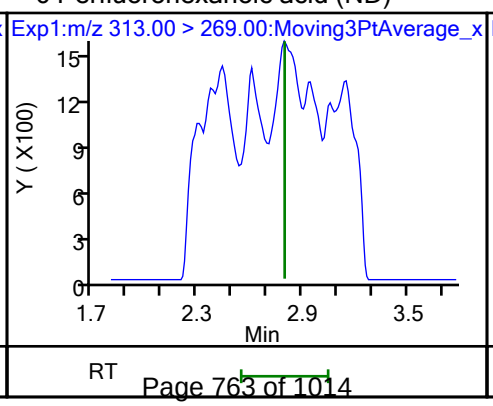
60 M2-4:2 FTS (M)



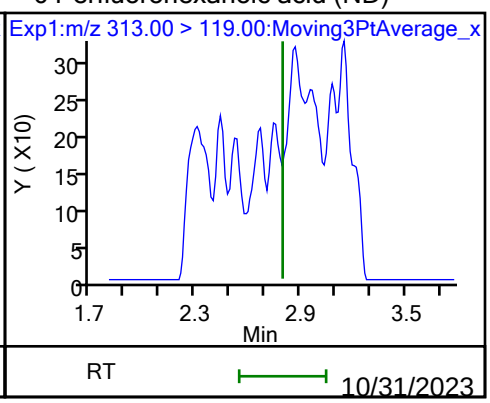
D 7 13C2 PFHxA (M)



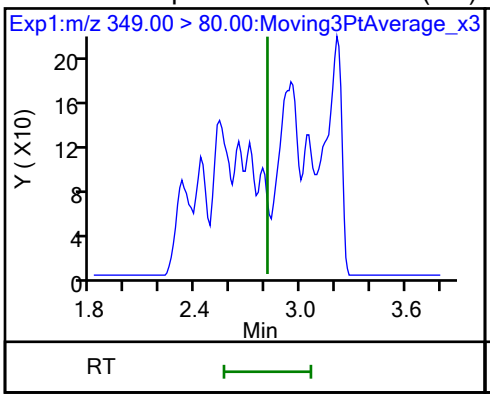
6 Perfluorohexanoic acid (ND)



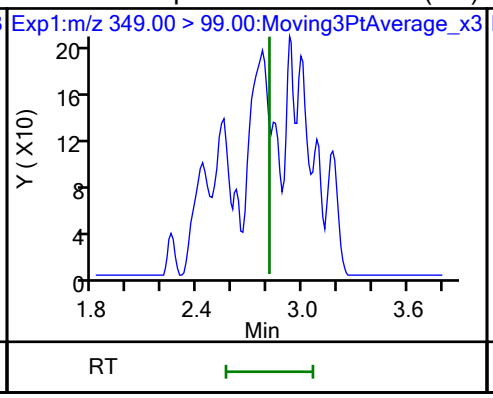
6 Perfluorohexanoic acid (ND)



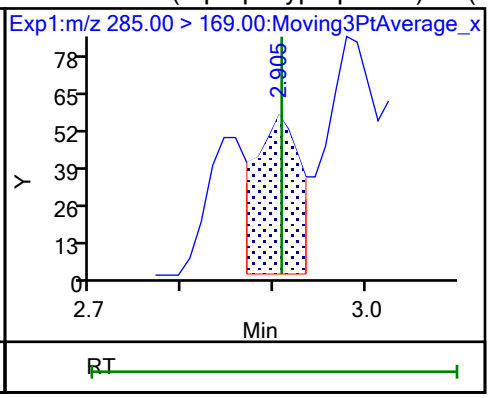
70 Perfluoropentanesulfonic acid (ND)



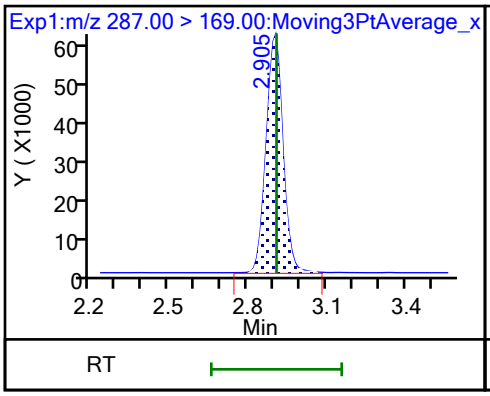
70 Perfluoropentanesulfonic acid (ND)



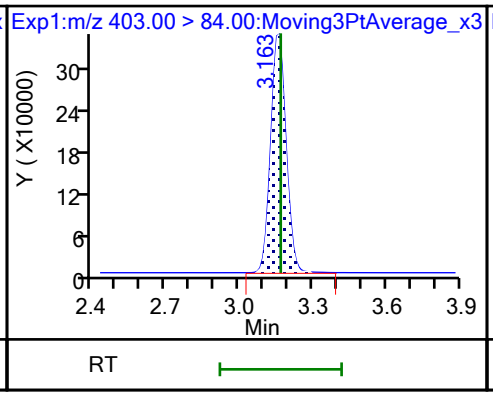
67 Perfluoro(2-propoxypropanoic) ac (M)



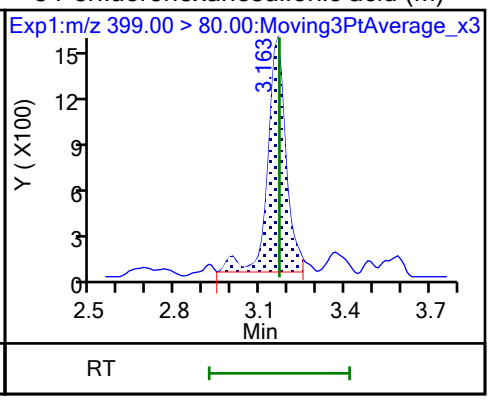
D 64 13C3 HFPO-DA



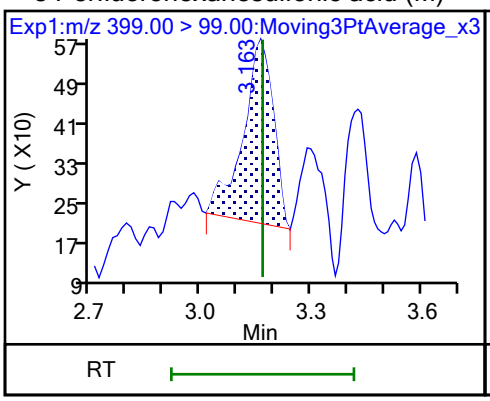
D 11 18O2 PFHxS



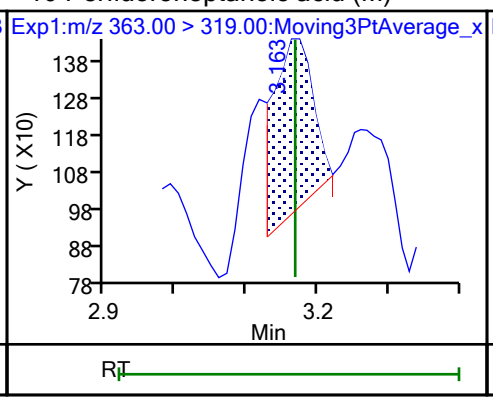
8 Perfluorohexanesulfonic acid (M)



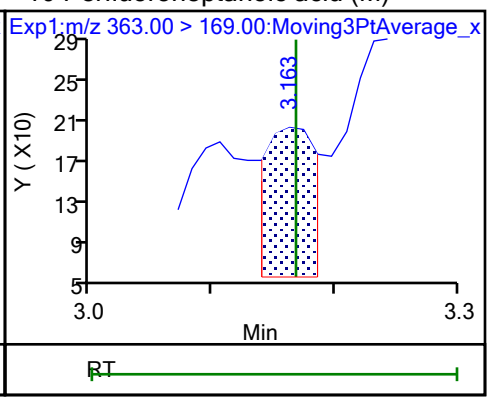
8 Perfluorohexanesulfonic acid (M)



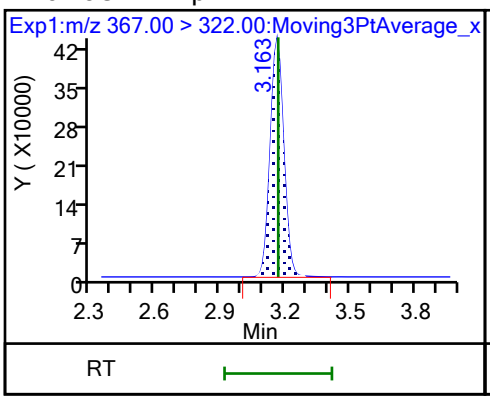
10 Perfluoroheptanoic acid (M)



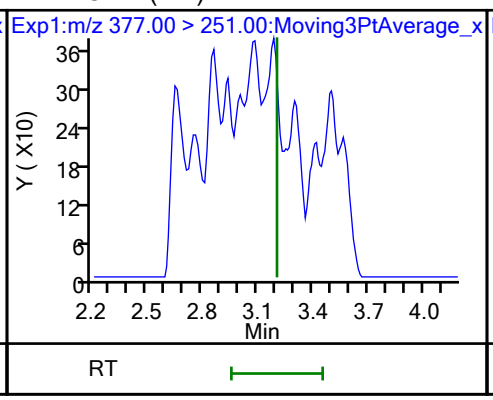
10 Perfluoroheptanoic acid (M)



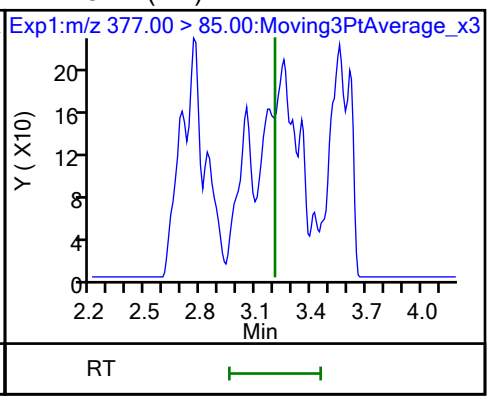
D 9 13C4 PFHpA



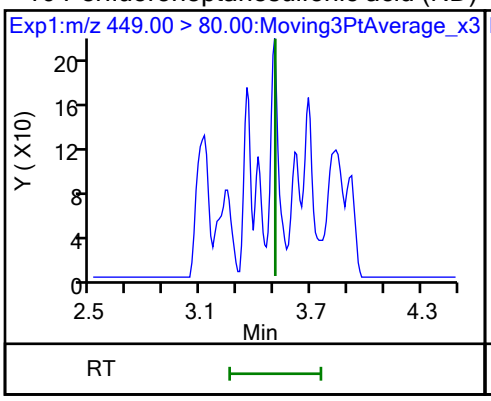
77 DONA (ND)



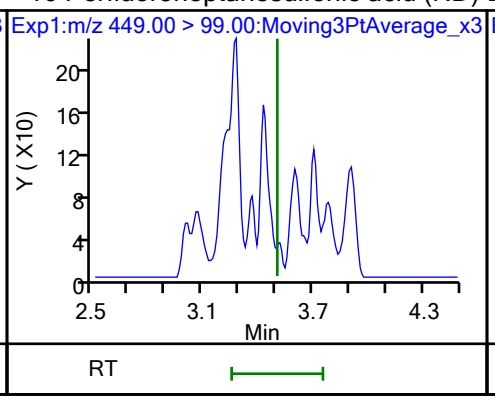
77 DONA (ND)



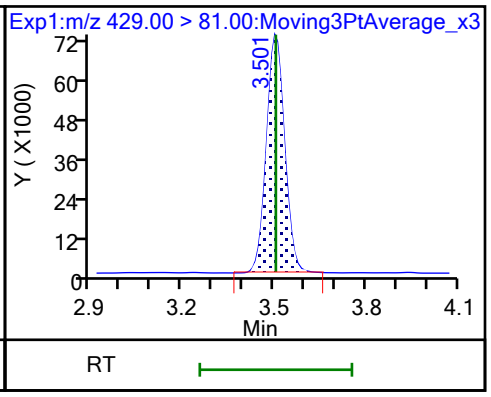
16 Perfluoroheptanesulfonic acid (ND)



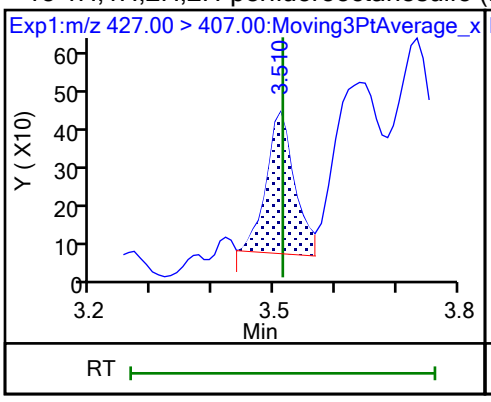
16 Perfluoroheptanesulfonic acid (ND)



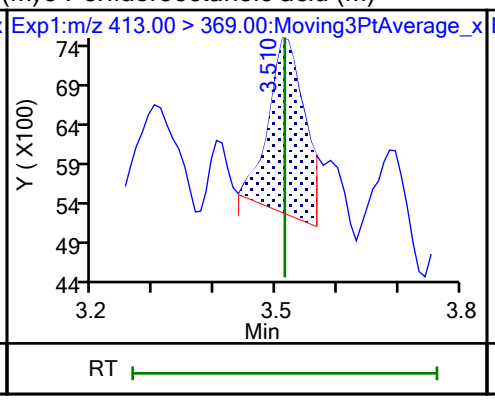
D 12 M2-6:2 FTS



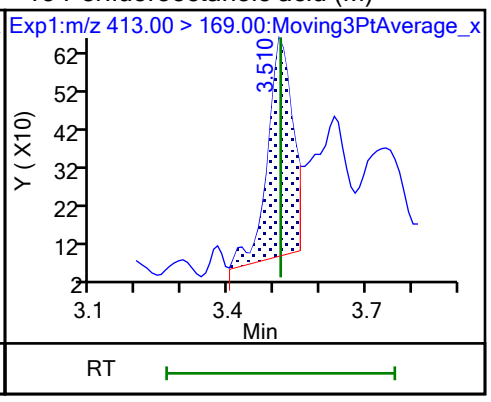
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



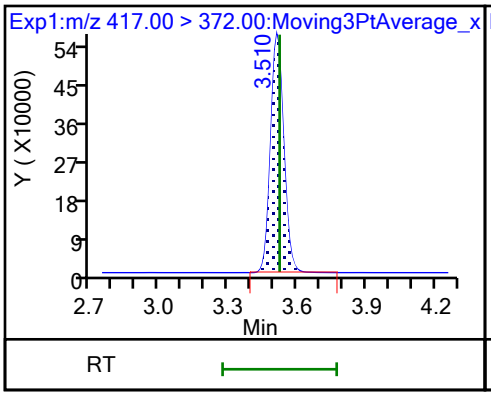
15 Perfluorooctanoic acid (M)



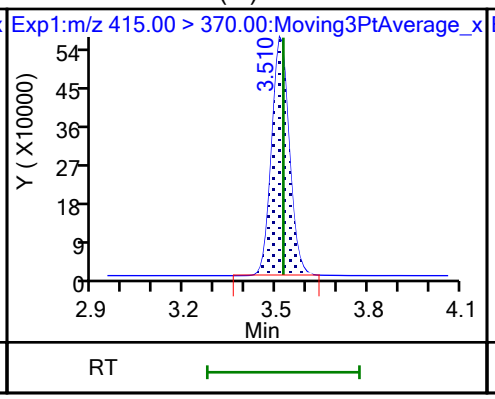
15 Perfluorooctanoic acid (M)



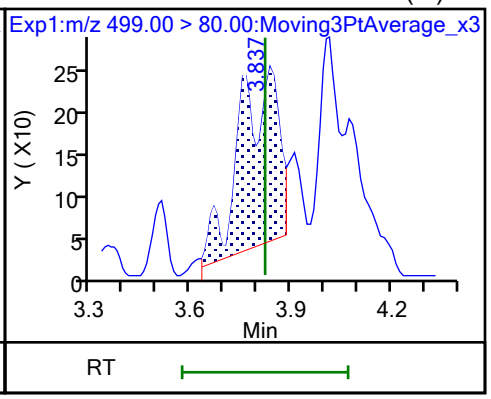
D 14 13C4 PFOA



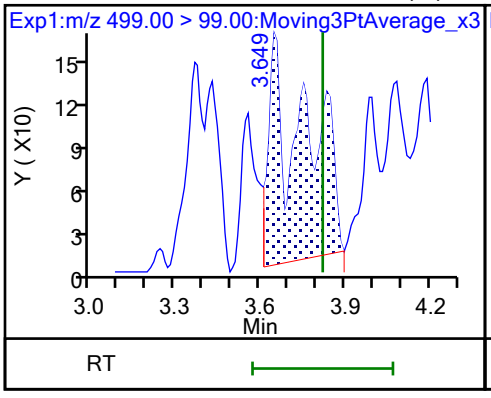
* 62 13C2 PFOA (M)



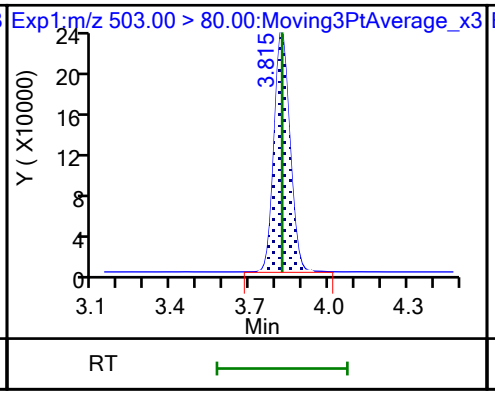
17 Perfluorooctanesulfonic acid (M)



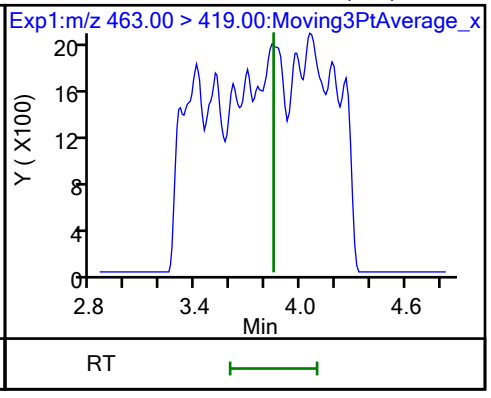
17 Perfluorooctanesulfonic acid (M)



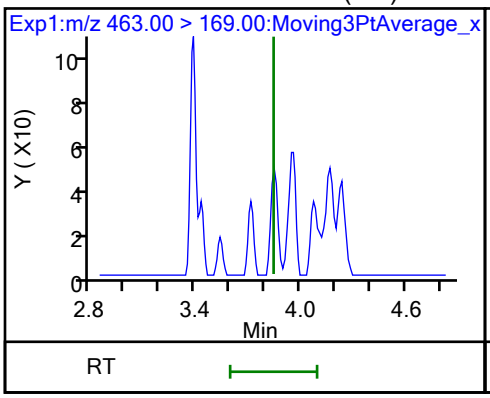
D 18 13C4 PFOS



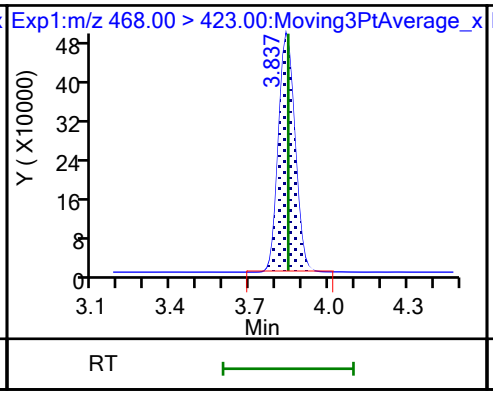
20 Perfluorononanoic acid (ND)



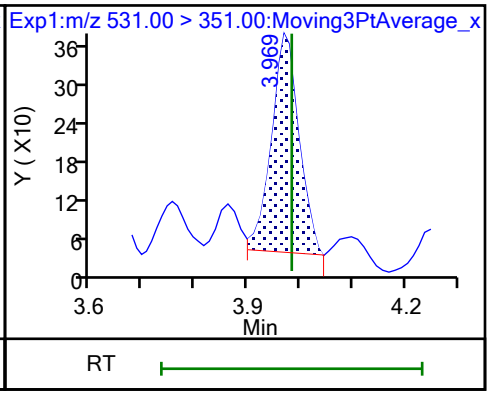
20 Perfluorononanoic acid (ND)



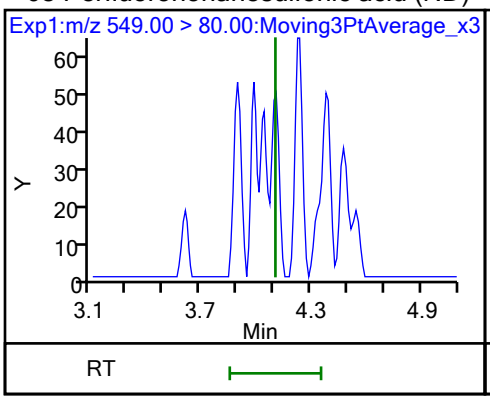
D 19 13C5 PFNA



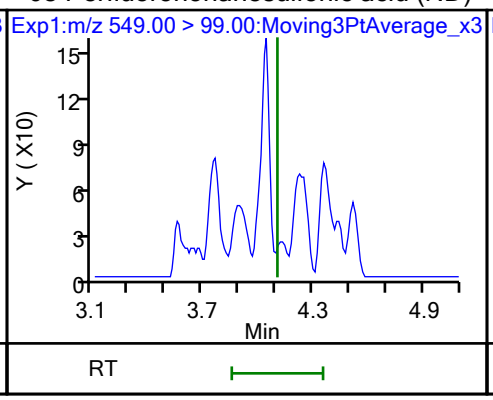
69 9-Chlorohexadecafluoro-3-oxanona (M)



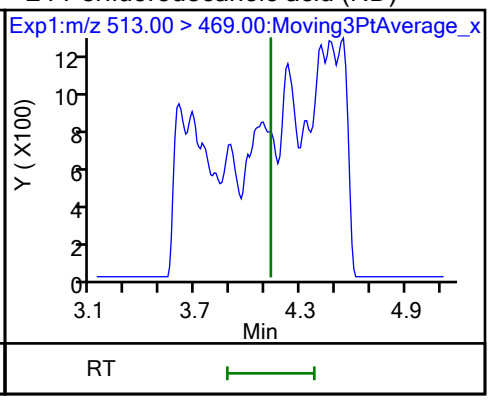
68 Perfluorononanesulfonic acid (ND)



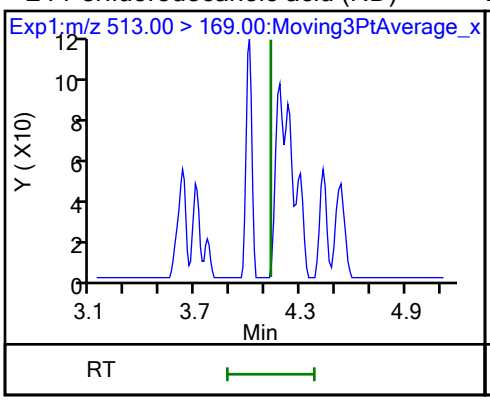
68 Perfluorononanesulfonic acid (ND)



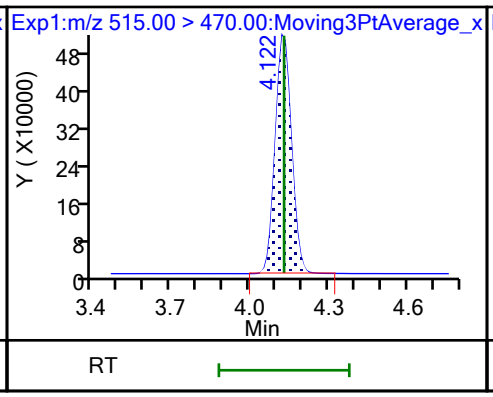
24 Perfluorodecanoic acid (ND)



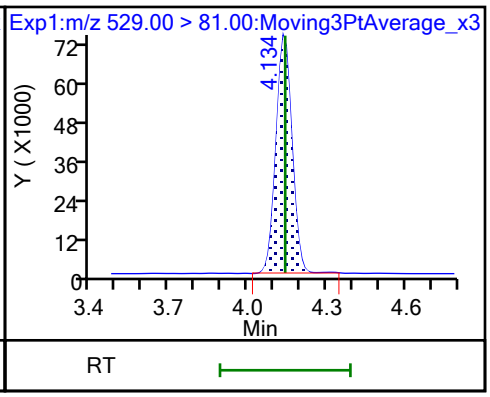
24 Perfluorodecanoic acid (ND)



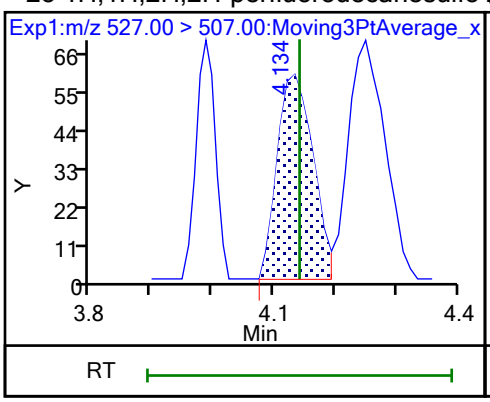
D 23 13C2 PFDA



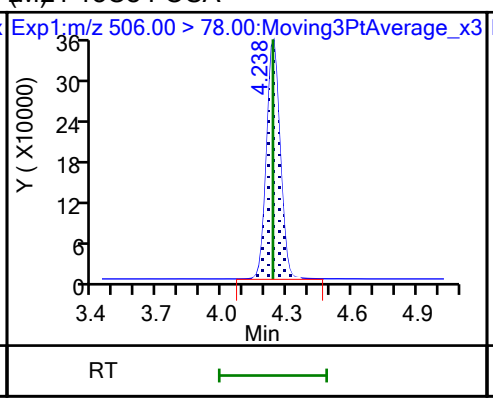
D 26 M2-8:2 FTS



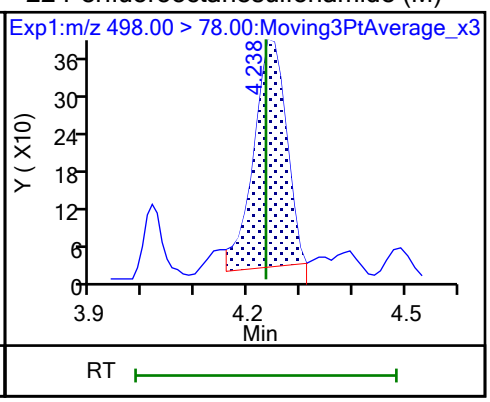
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



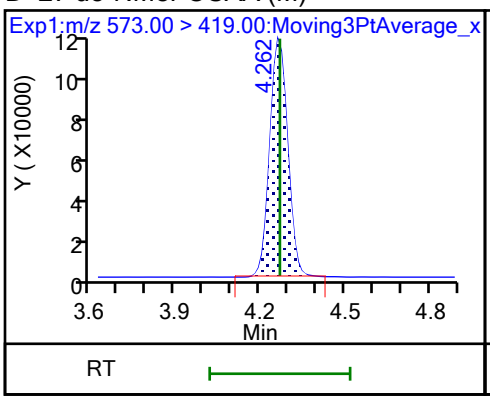
D 21 13C8 FOSA



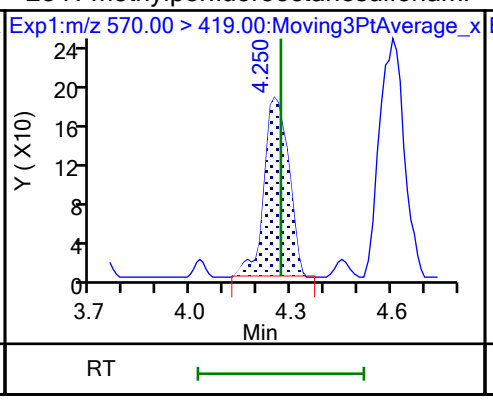
22 Perfluorooctanesulfonamide (M)



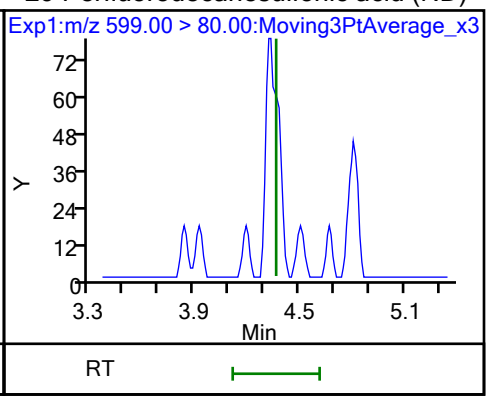
D 27 d3-NMeFOSAA (M)



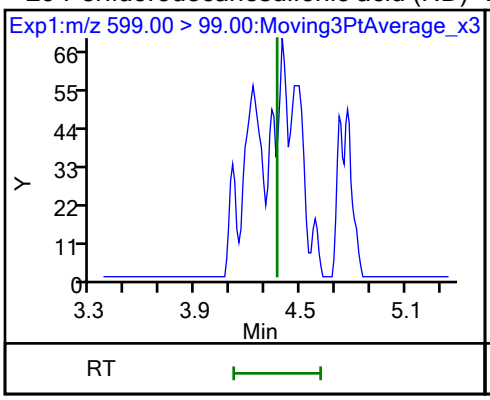
28 N-methylperfluorooctanesulfonami



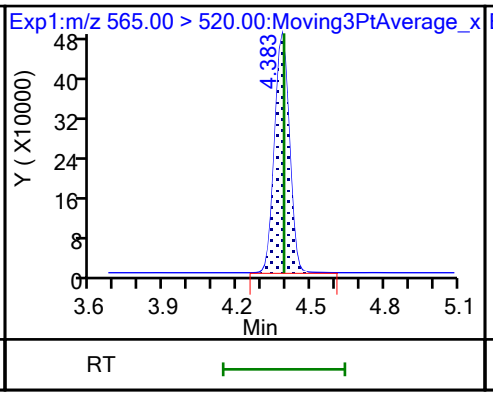
29 Perfluorodecanesulfonic acid (ND)



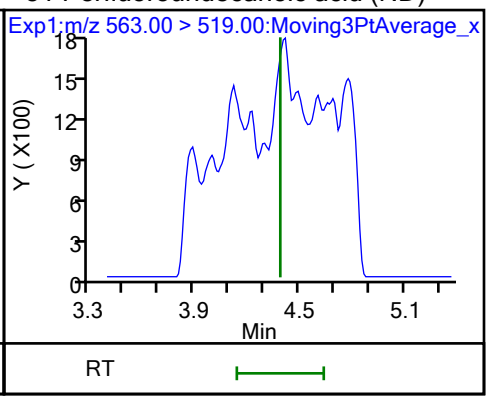
29 Perfluorodecanesulfonic acid (ND)



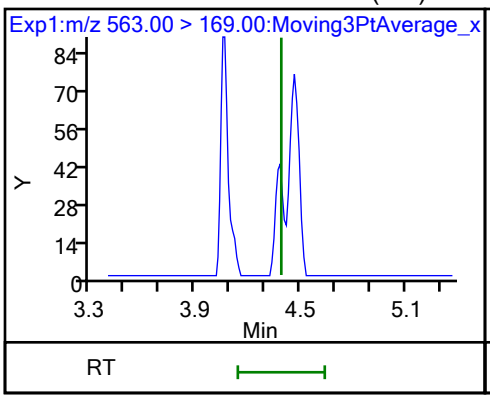
D 30 13C2 PFUnA



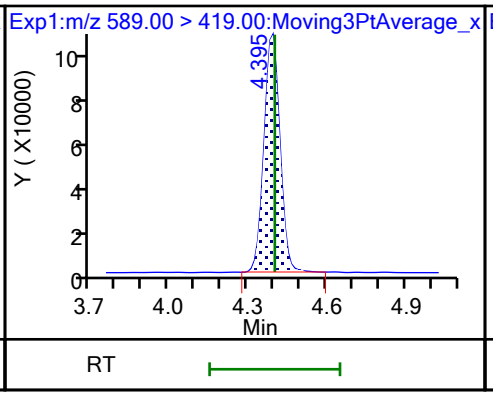
31 Perfluoroundecanoic acid (ND)



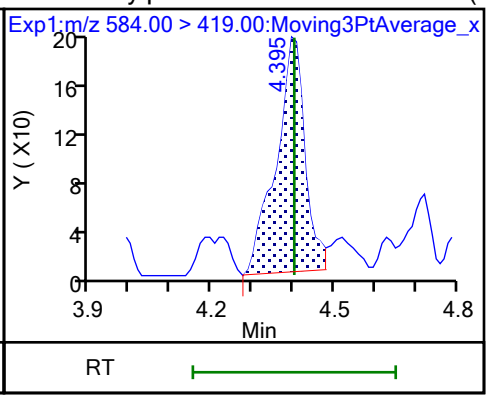
31 Perfluoroundecanoic acid (ND)



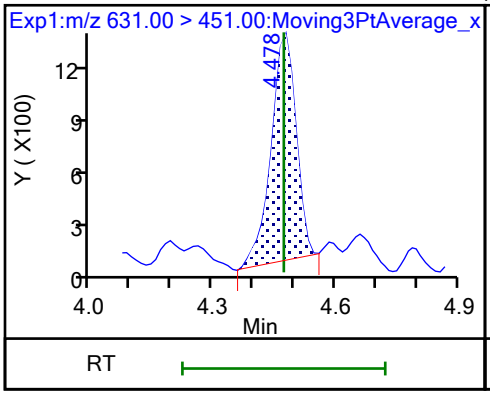
D 32 d5-NEtFOSAA



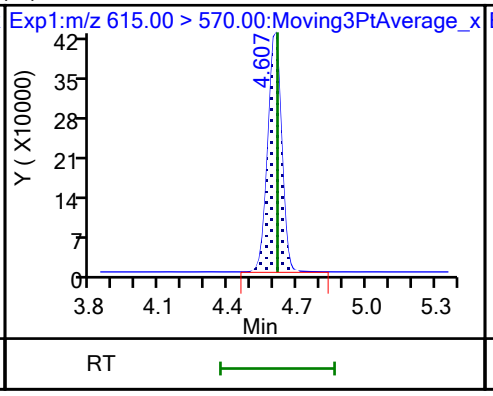
33 N-ethylperfluorooctanesulfonamid (M)



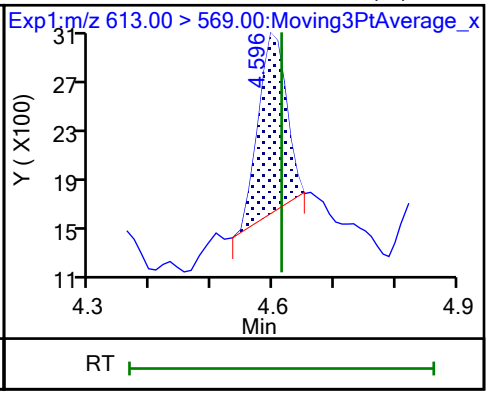
66 11-Chloroeicosafluoro-3-oxaundec (M)



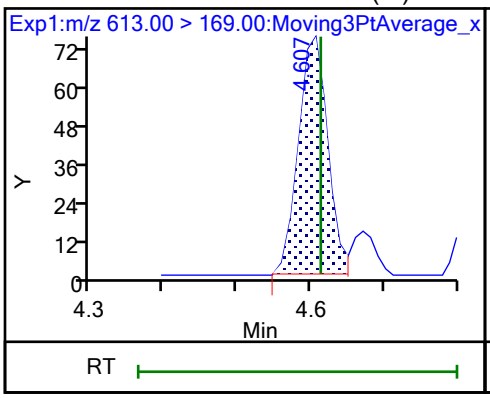
D 36 13C2 PFDoA



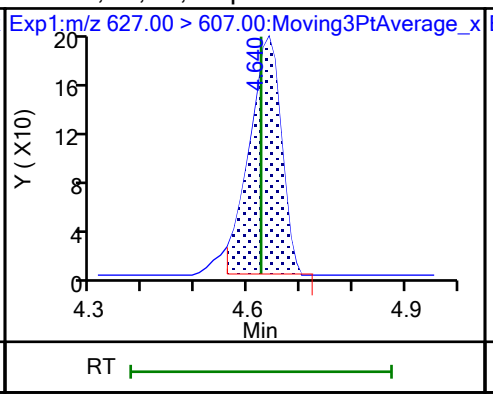
37 Perfluorododecanoic acid (M)



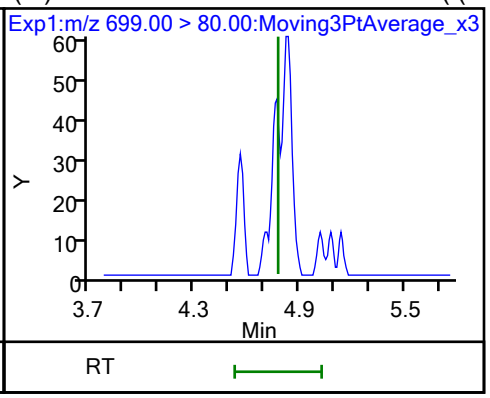
37 Perfluorododecanoic acid (M)



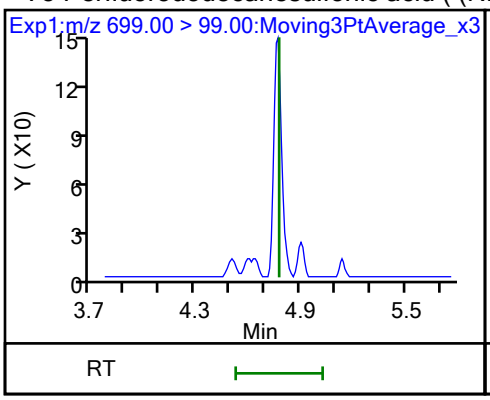
74 1H,1H,2H,2H-perfluorododecanesul (M)



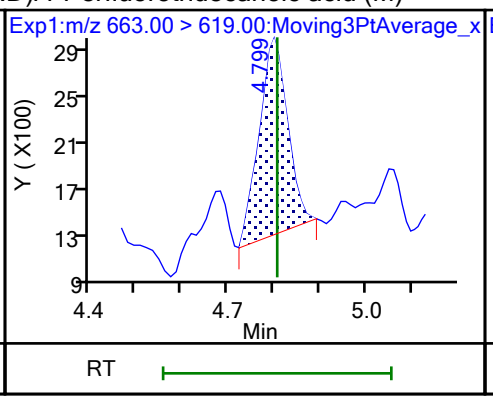
75 Perfluorododecanesulfonic acid ((ND)



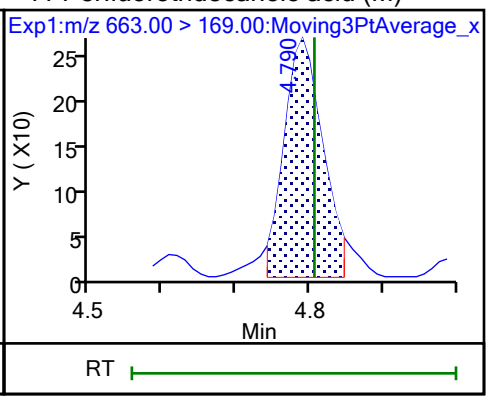
75 Perfluorododecanesulfonic acid ((ND)



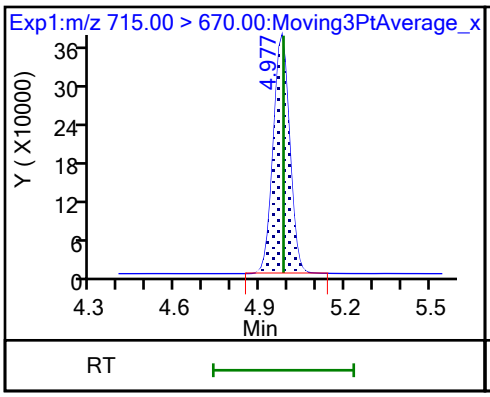
41 Perfluorotridecanoic acid (M)



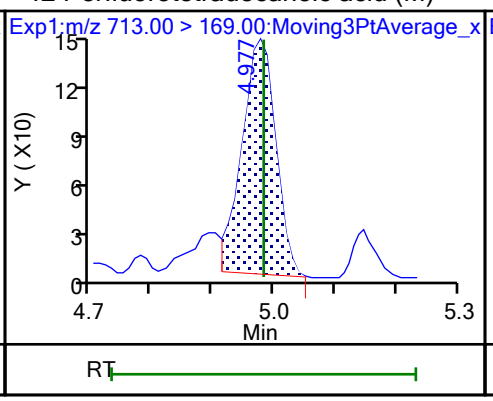
41 Perfluorotridecanoic acid (M)



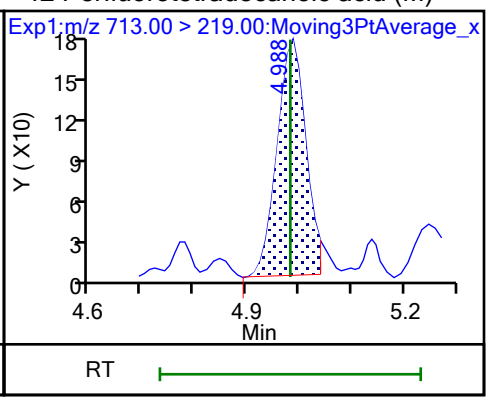
D 43 13C2 PFTeDA



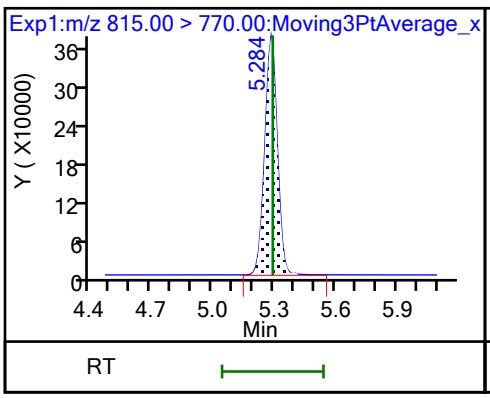
42 Perfluorotetradecanoic acid (M)



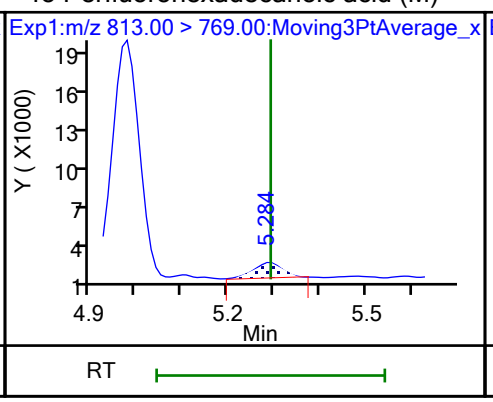
42 Perfluorotetradecanoic acid (M)



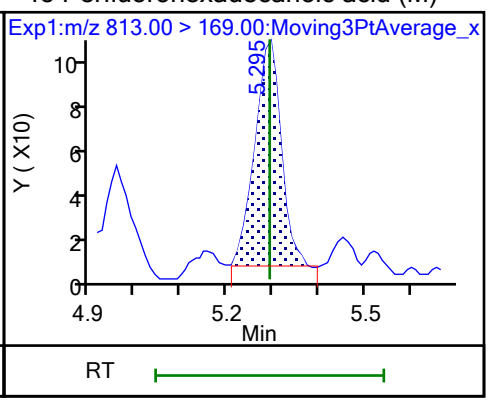
D 44 13C2 PFHxDA



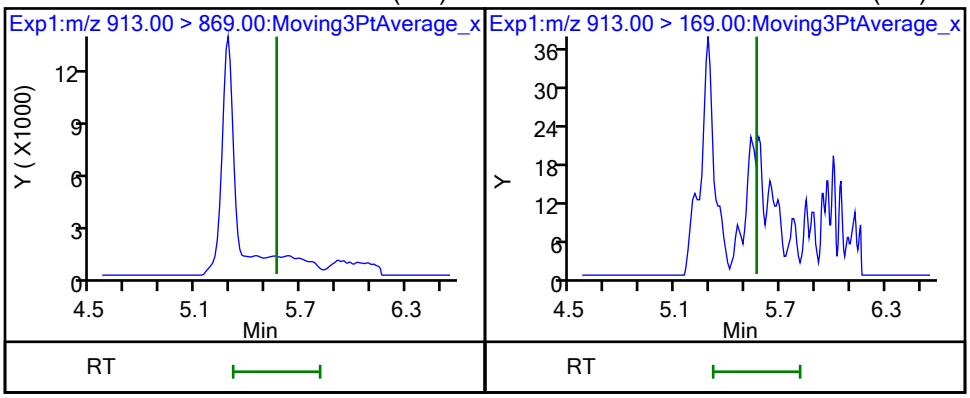
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

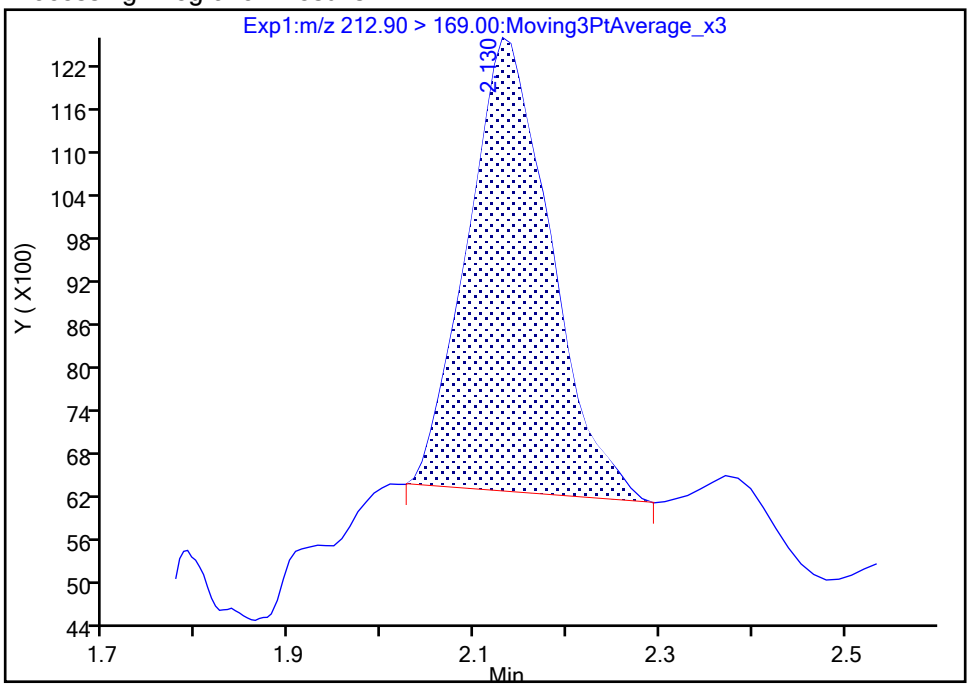
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

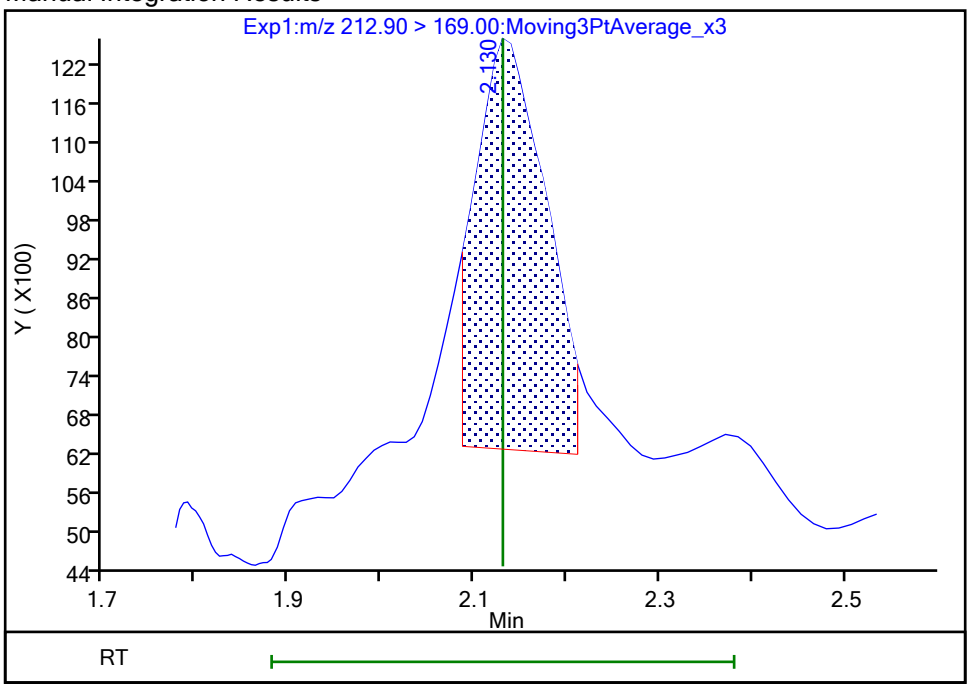
Processing Integration Results

RT: 2.13
Area: 39186
Amount: -0.017146
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 32621
Amount: -0.021123
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

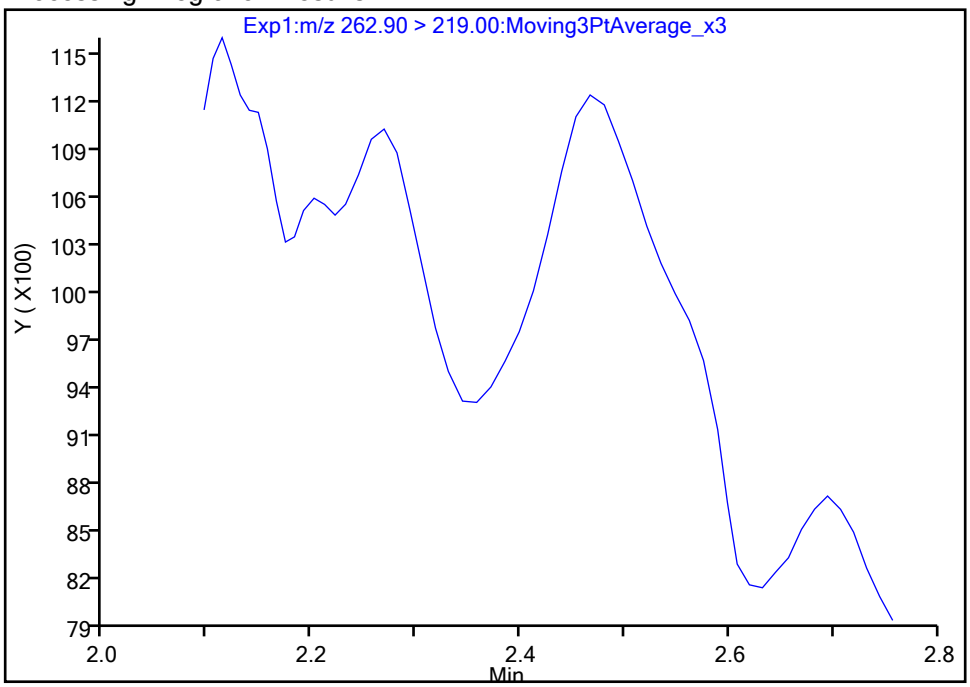
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

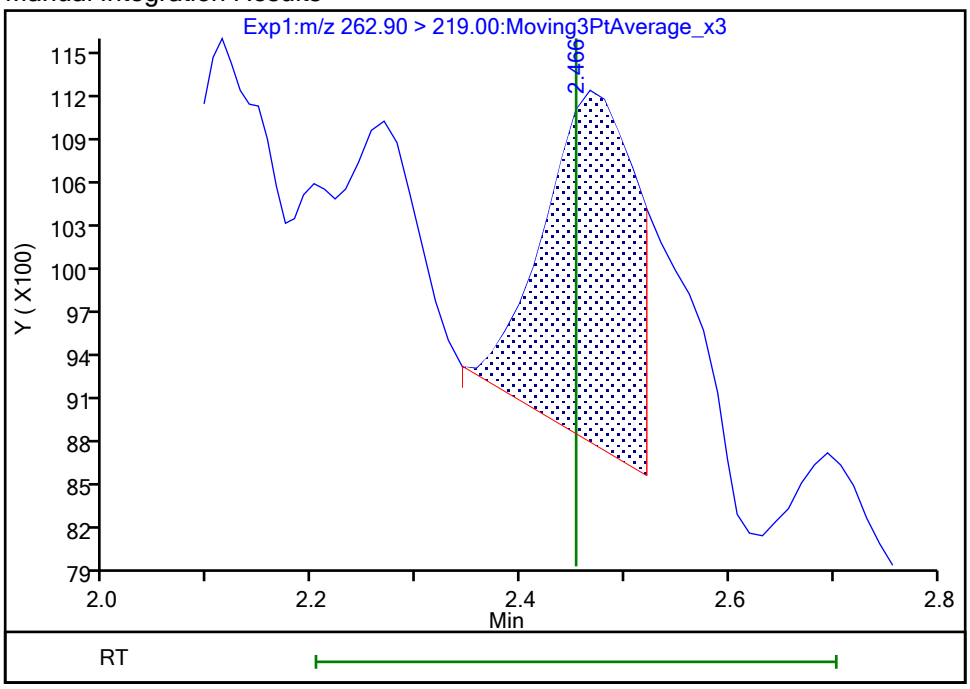
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 14419
Amount: 0.010391
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

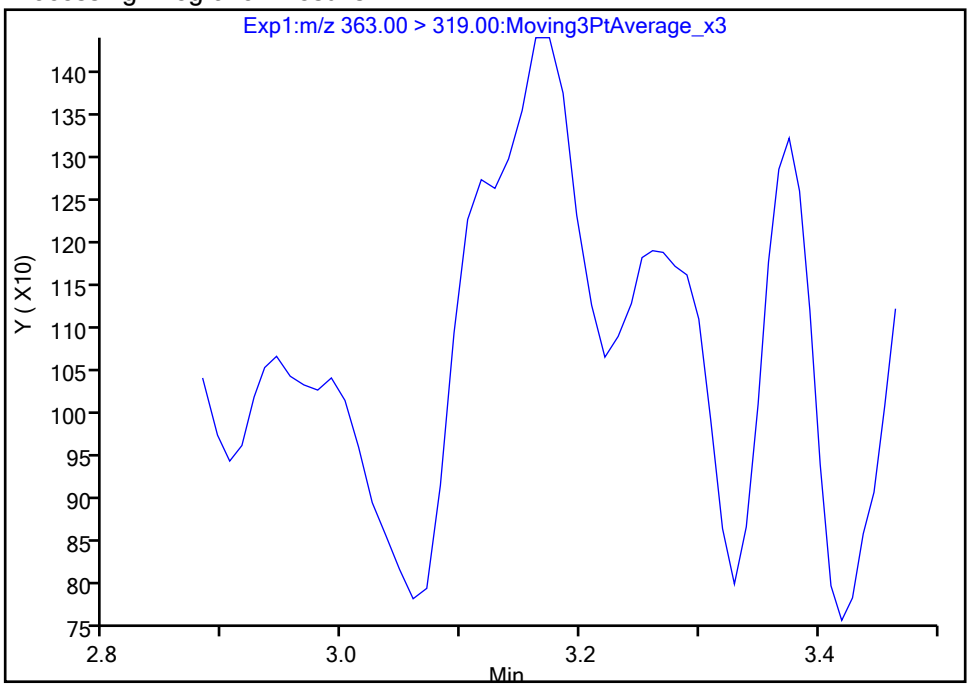
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

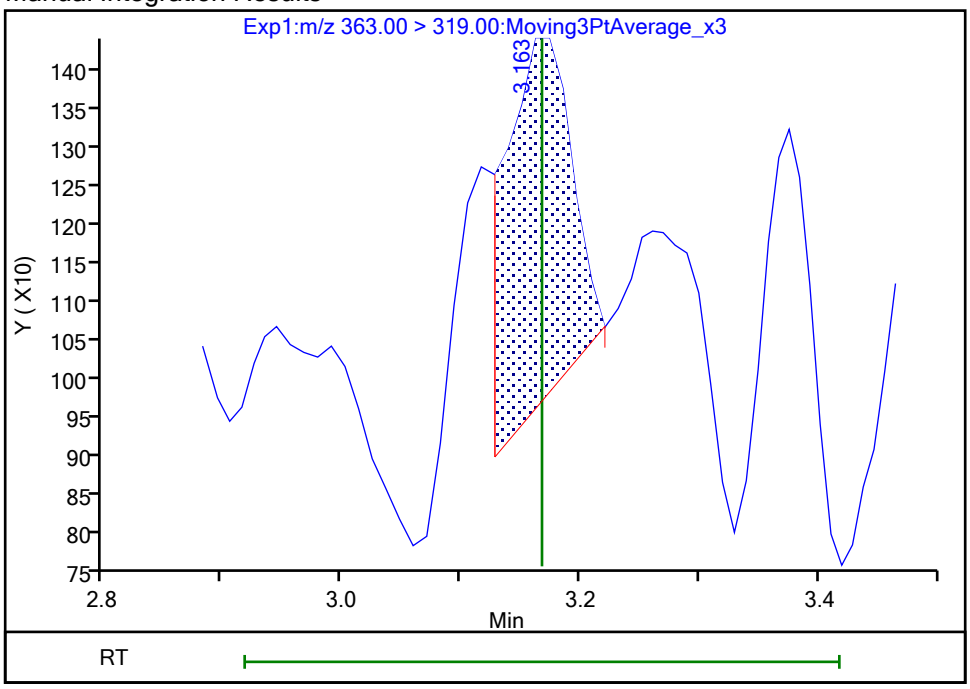
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 1761
Amount: 0.001025
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:07:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

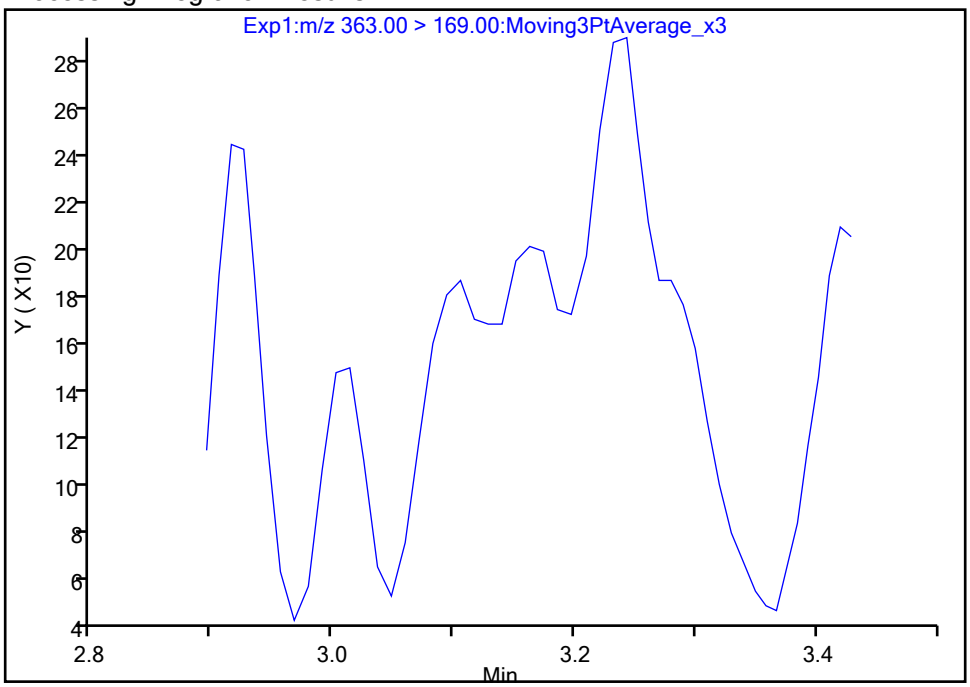
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

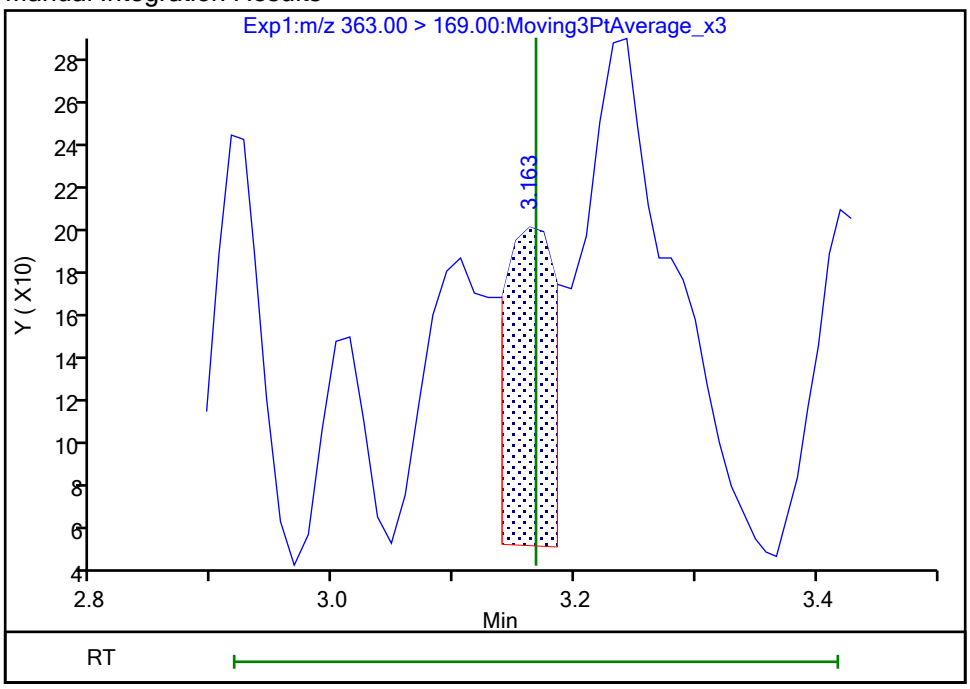
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 374
Amount: 0.001025
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:07:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

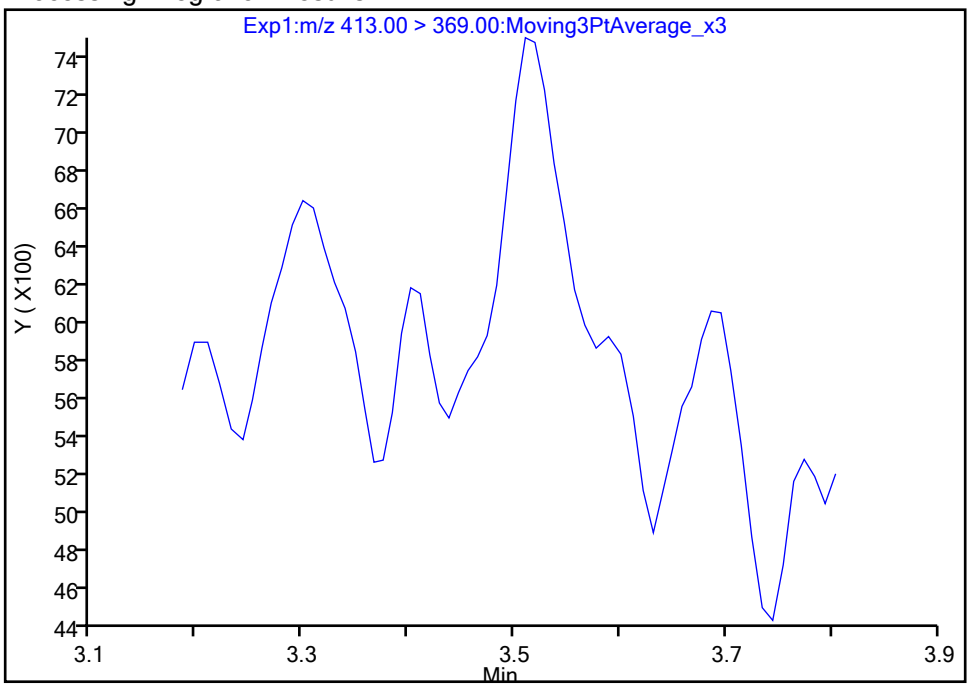
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

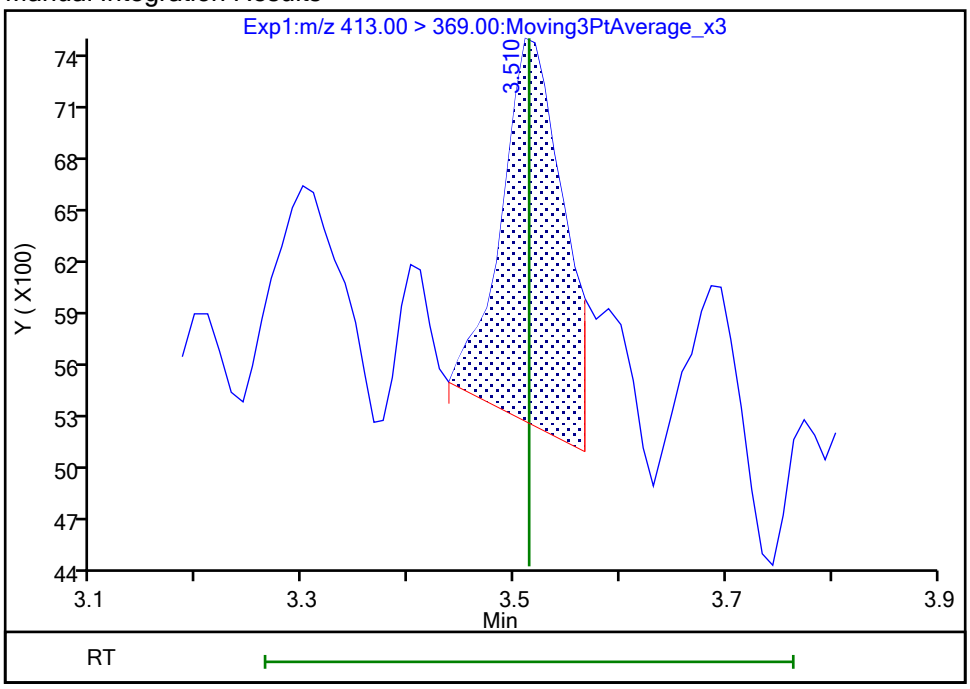
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.51
Area: 9118
Amount: 0.004735
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:07:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

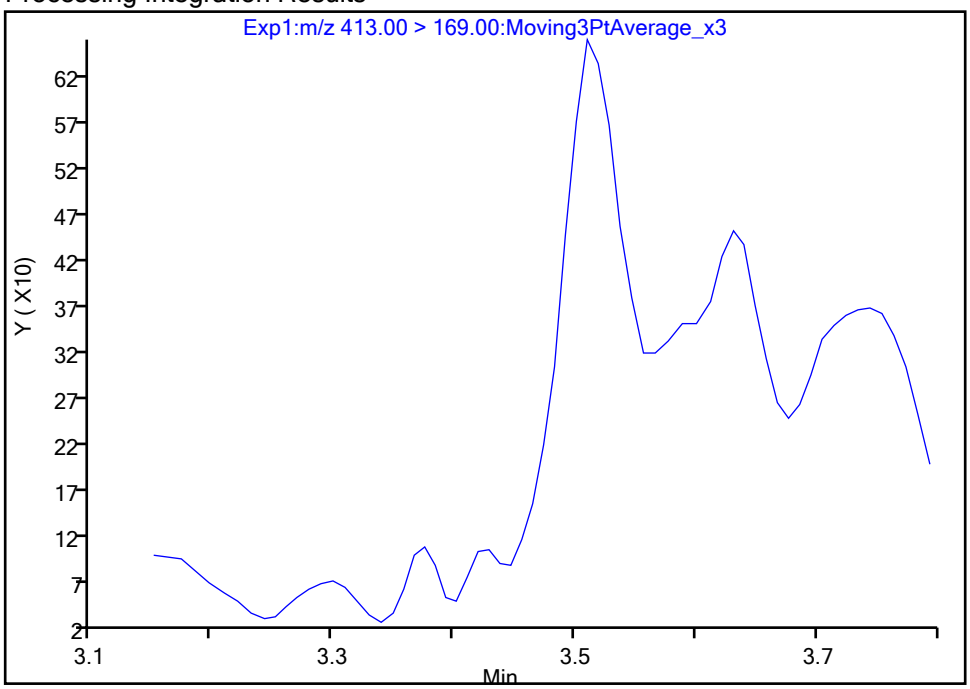
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

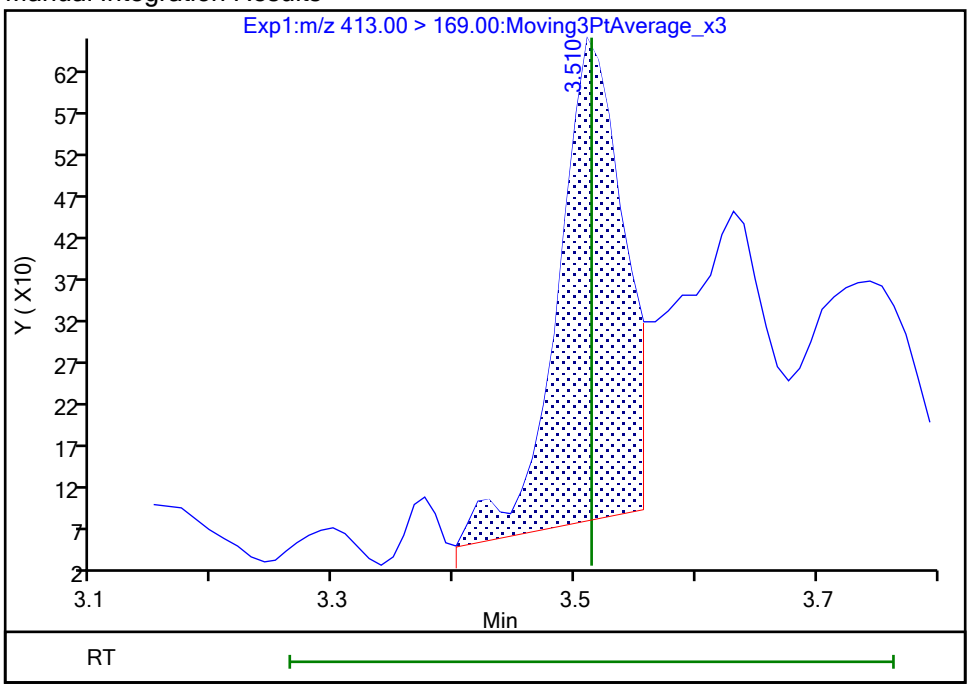
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.51
Area: 2163
Amount: 0.004735
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:07:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

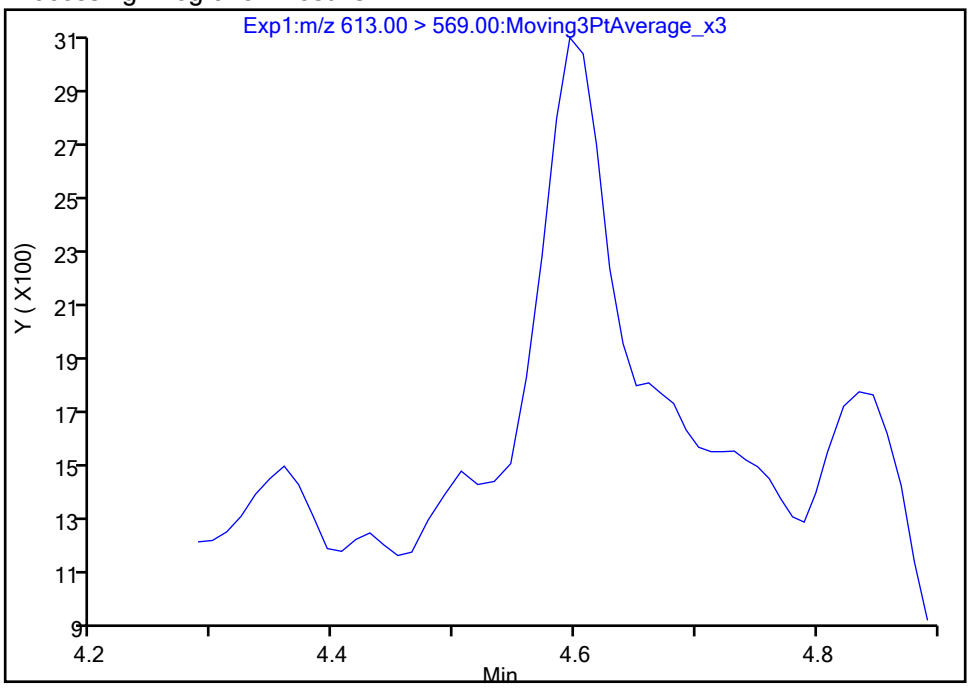
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

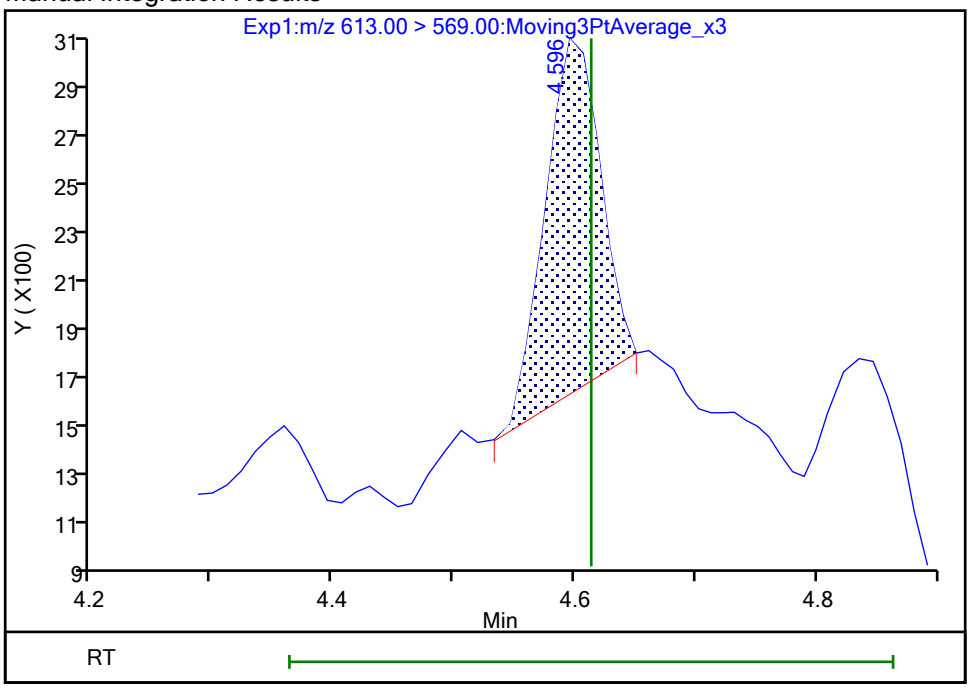
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 4447
Amount: 0.003079
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

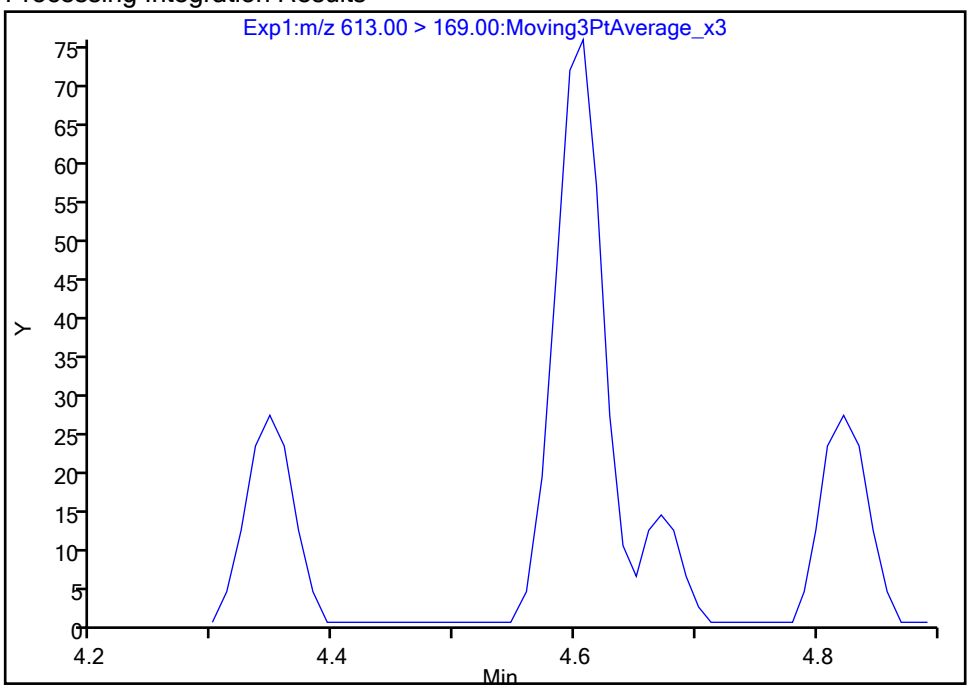
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

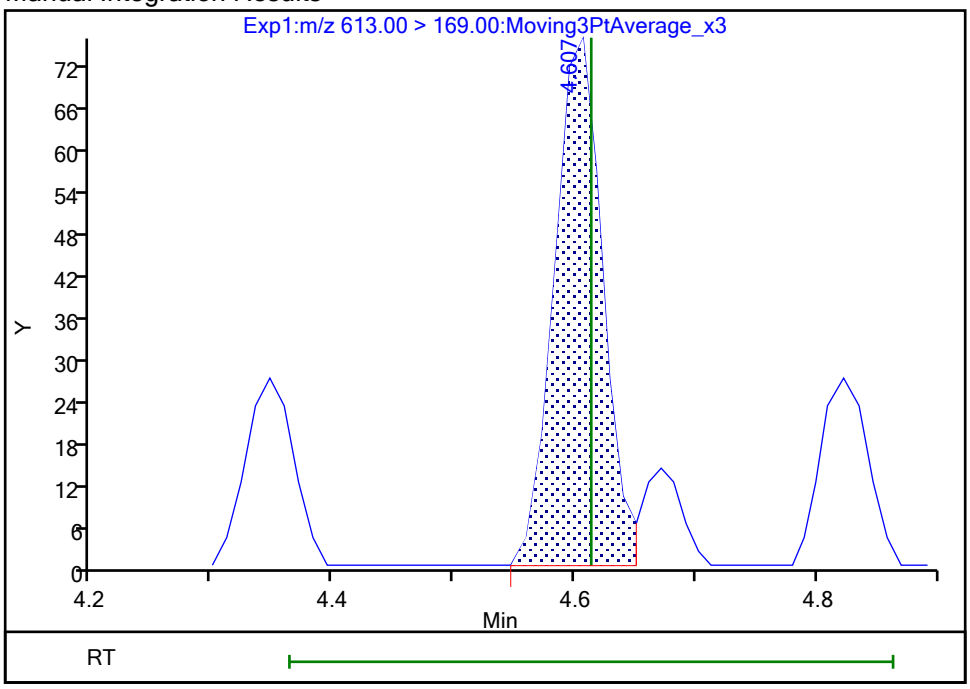
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 210
Amount: 0.003079
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

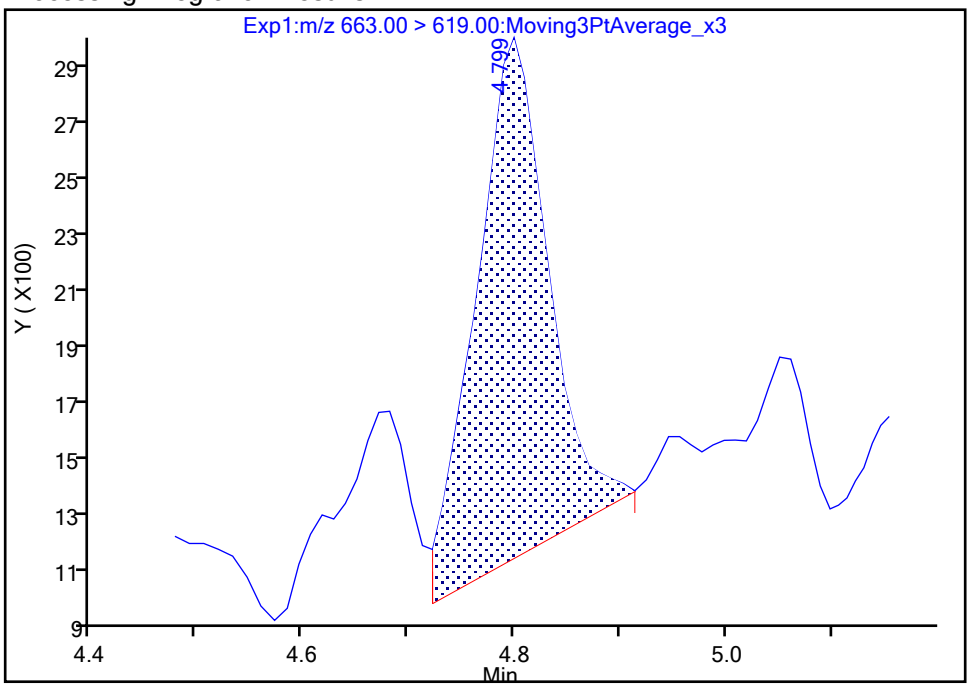
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

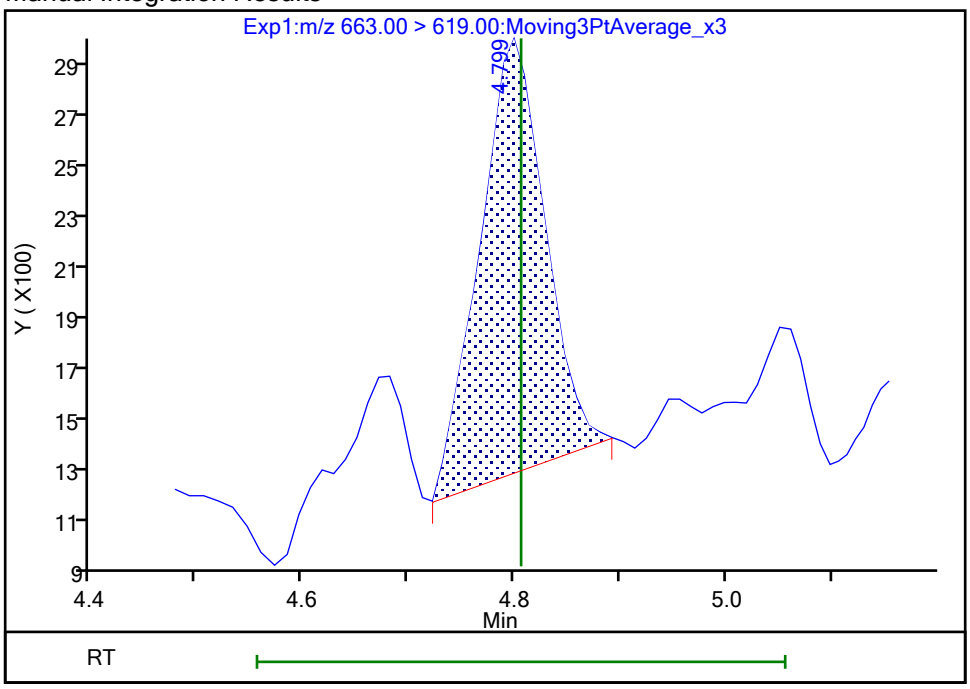
Processing Integration Results

RT: 4.80
Area: 8589
Amount: 0.005658
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 7149
Amount: 0.004710
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

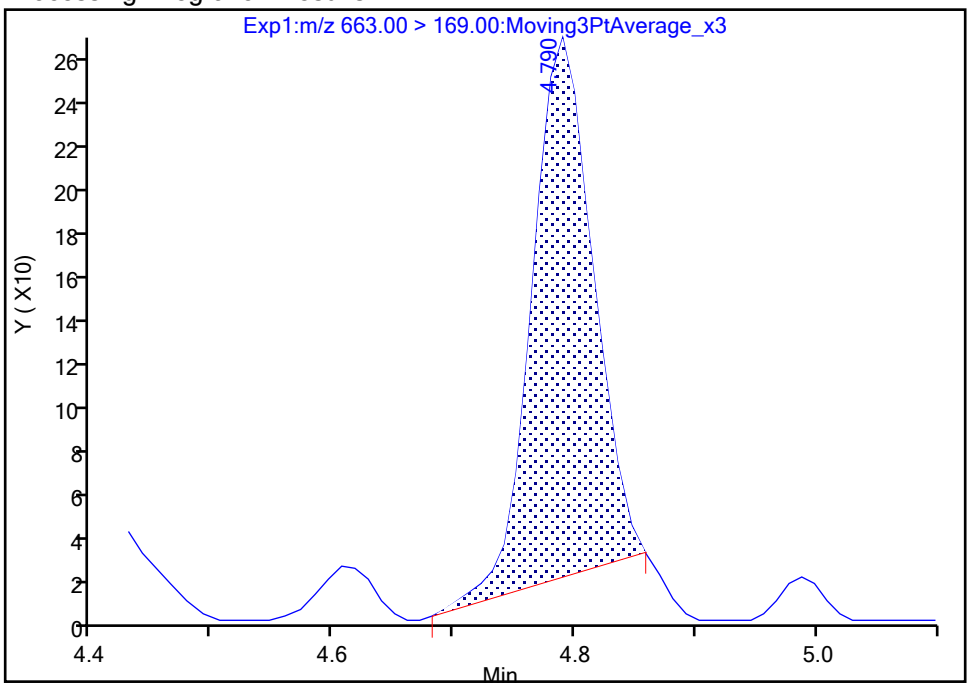
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

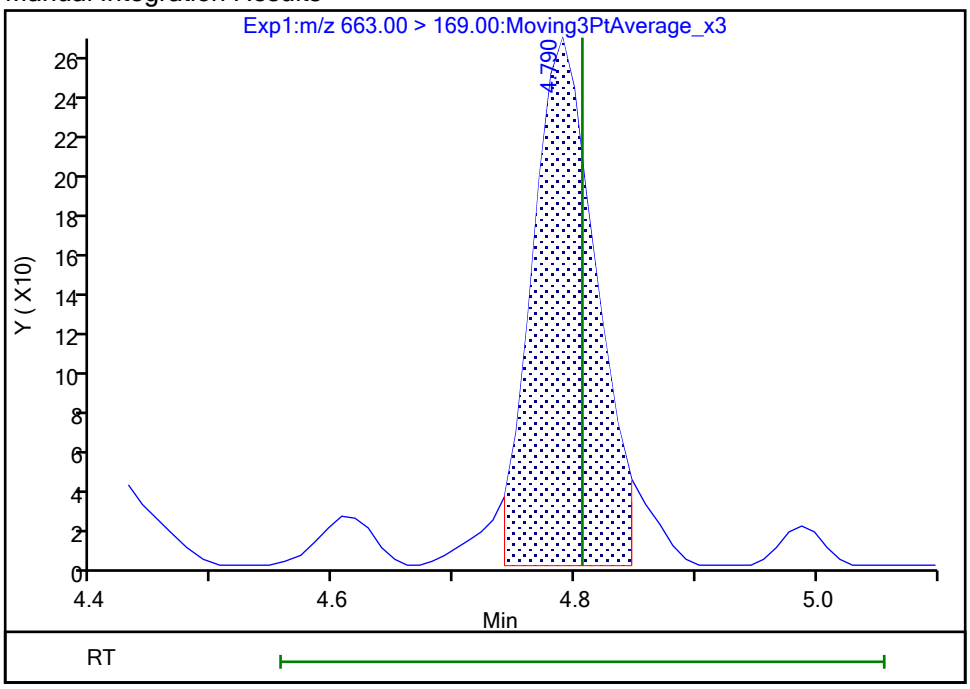
Processing Integration Results

RT: 4.79
Area: 880
Amount: 0.005658
Amount Units: ng/ml



Manual Integration Results

RT: 4.79
Area: 978
Amount: 0.004710
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

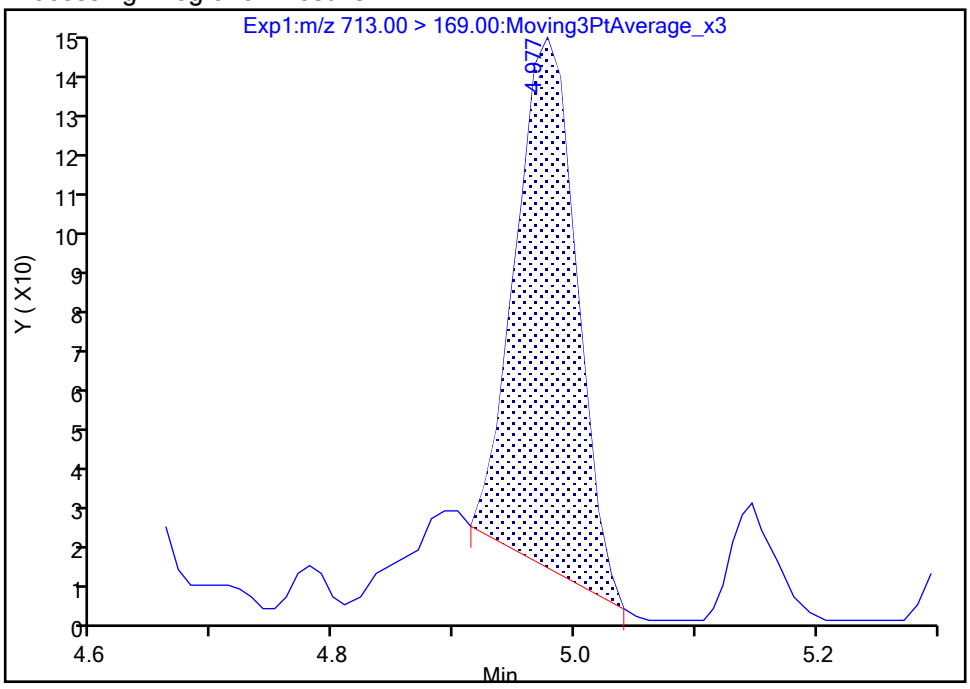
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

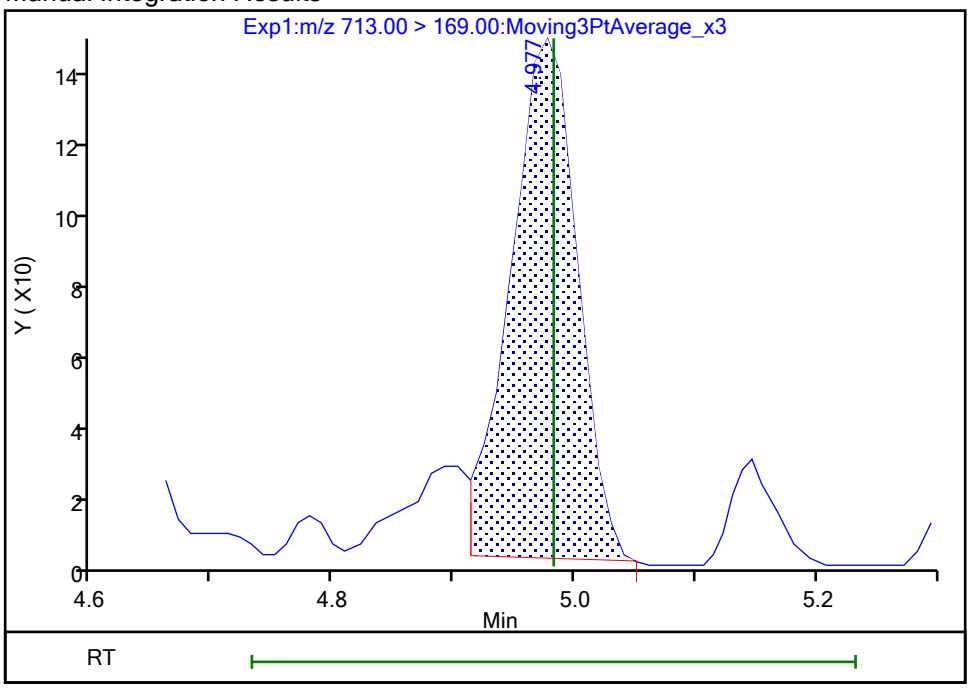
Processing Integration Results

RT: 4.98
Area: 475
Amount: 0.003533
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 563
Amount: 0.004188
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

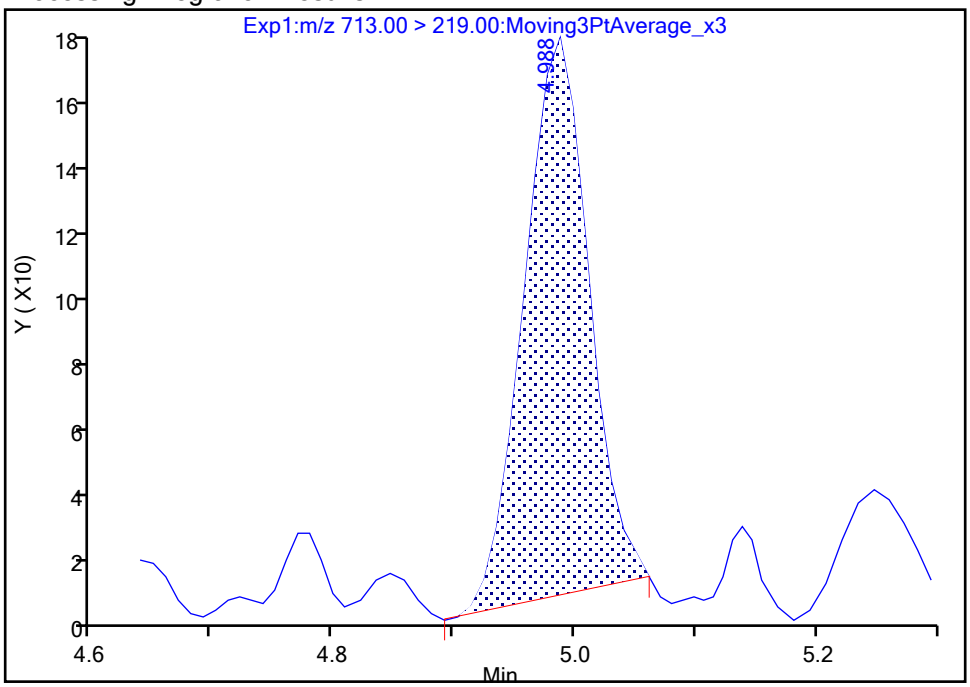
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

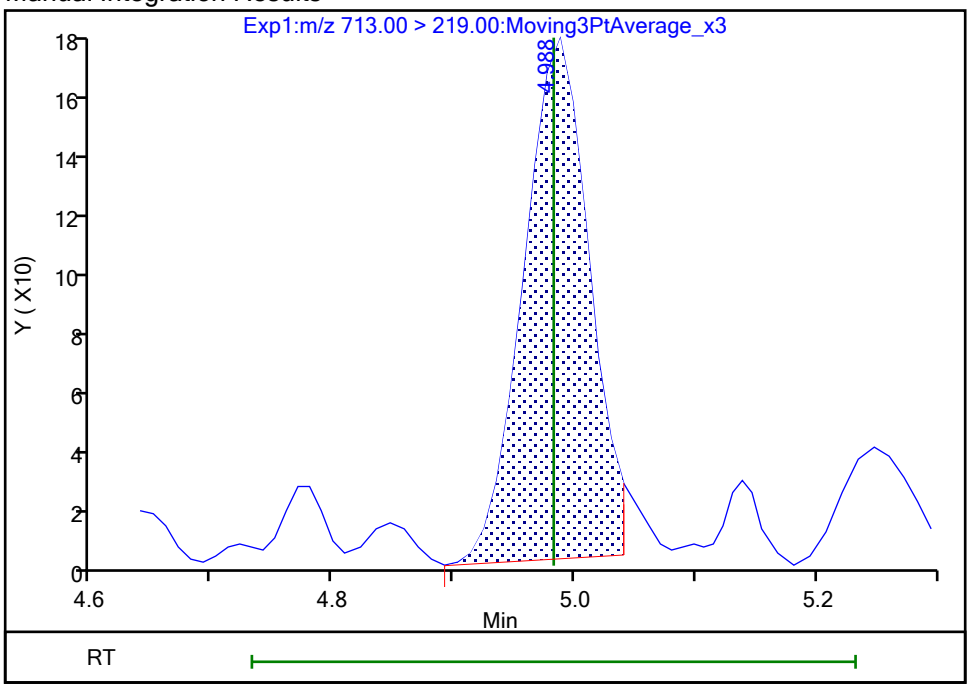
Processing Integration Results

RT: 4.99
Area: 623
Amount: 0.003533
Amount Units: ng/ml



Manual Integration Results

RT: 4.99
Area: 650
Amount: 0.004188
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

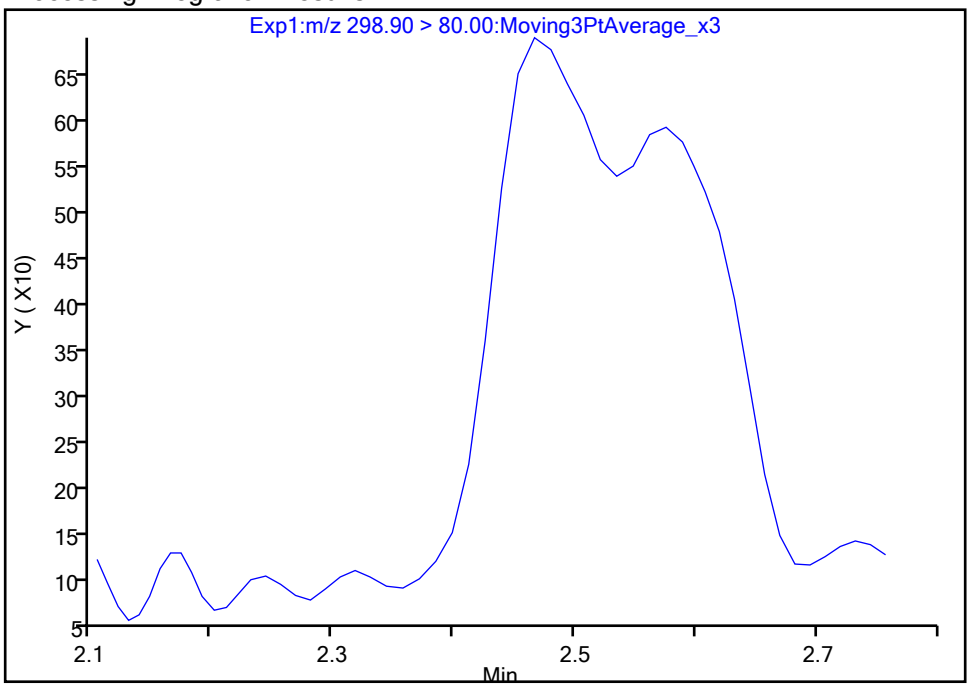
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

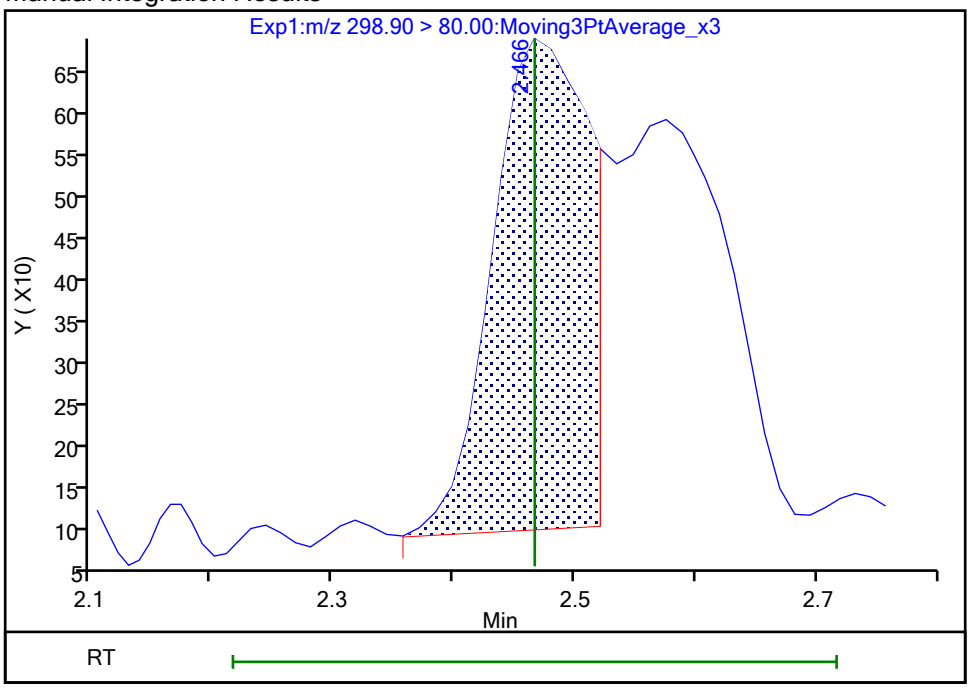
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 3172
Amount: 0.001732
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

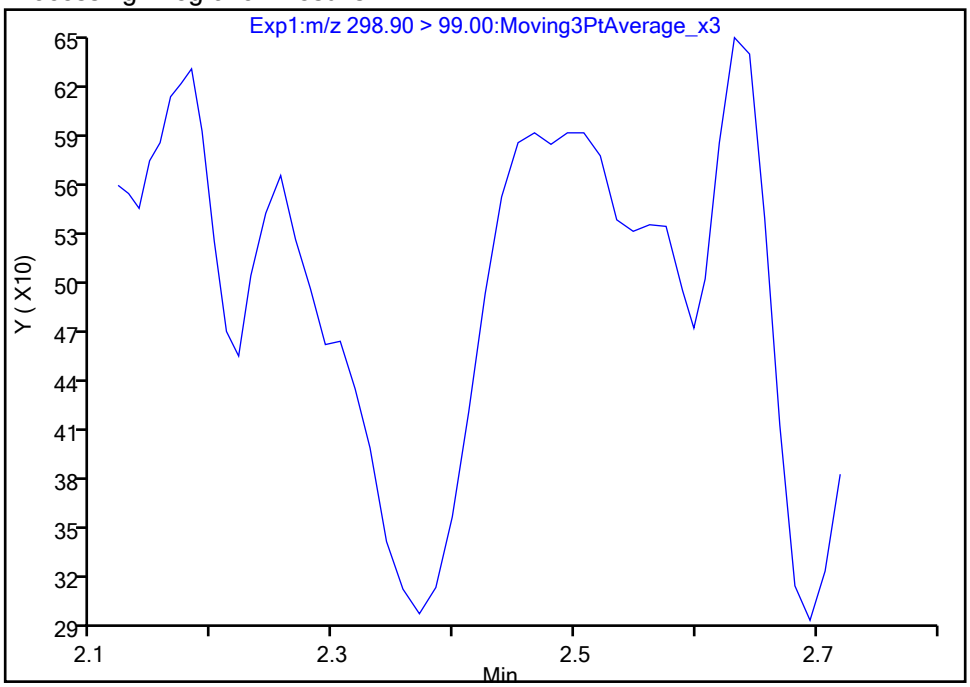
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

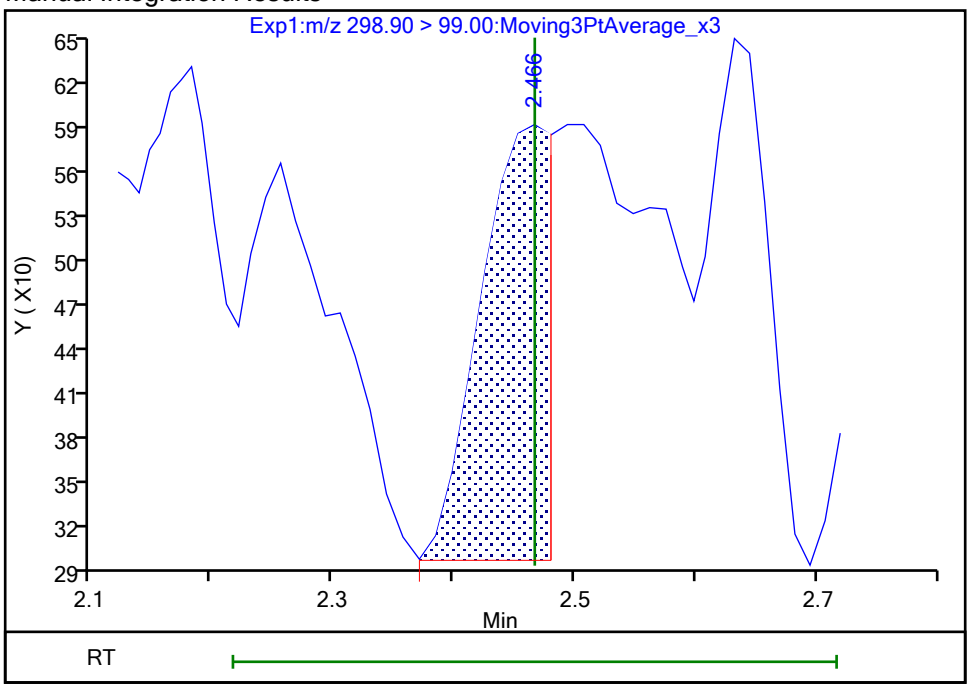
Not Detected
Expected RT: 2.47

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 1123
Amount: 0.001732
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

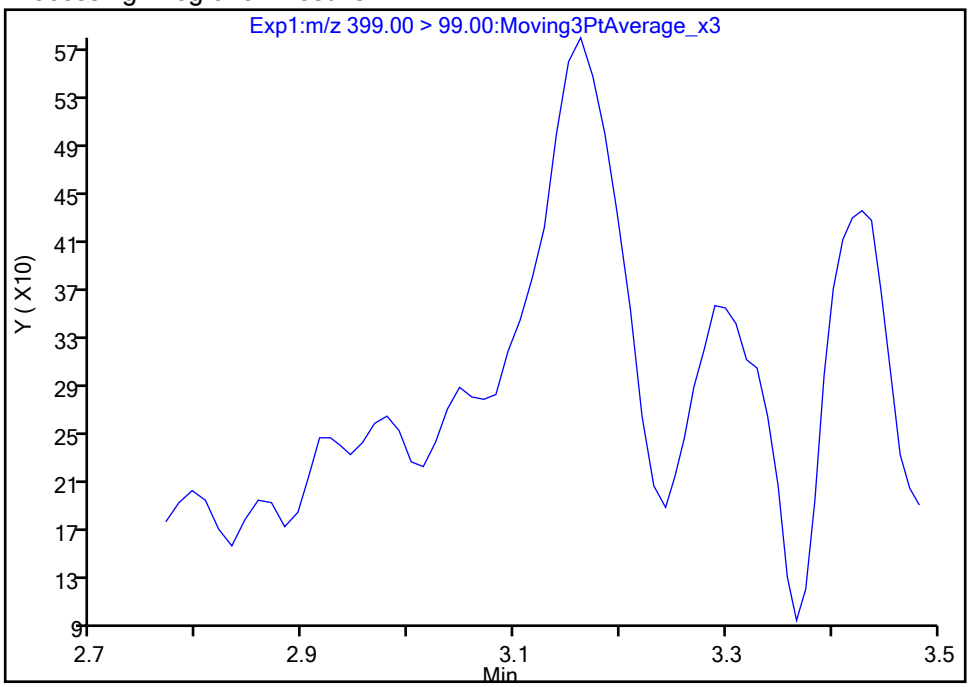
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

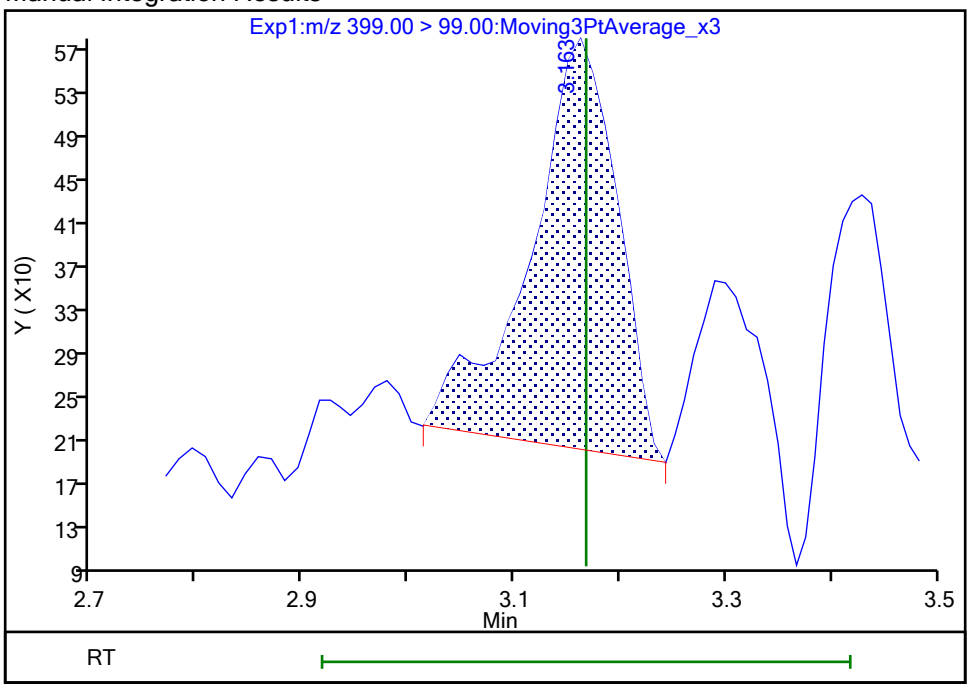
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 2174
Amount: 0.004750
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

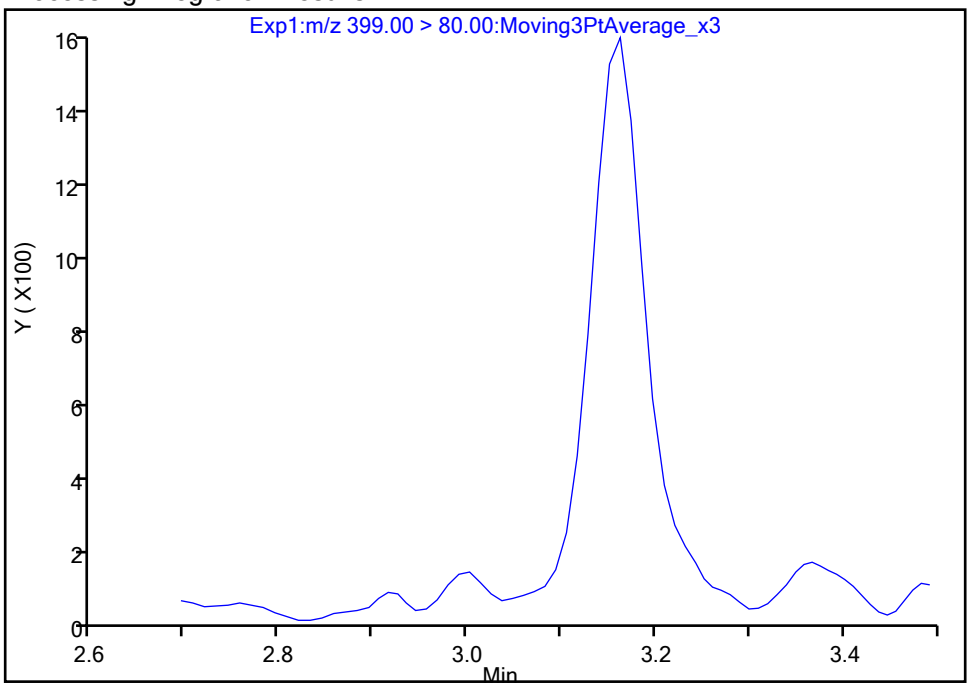
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

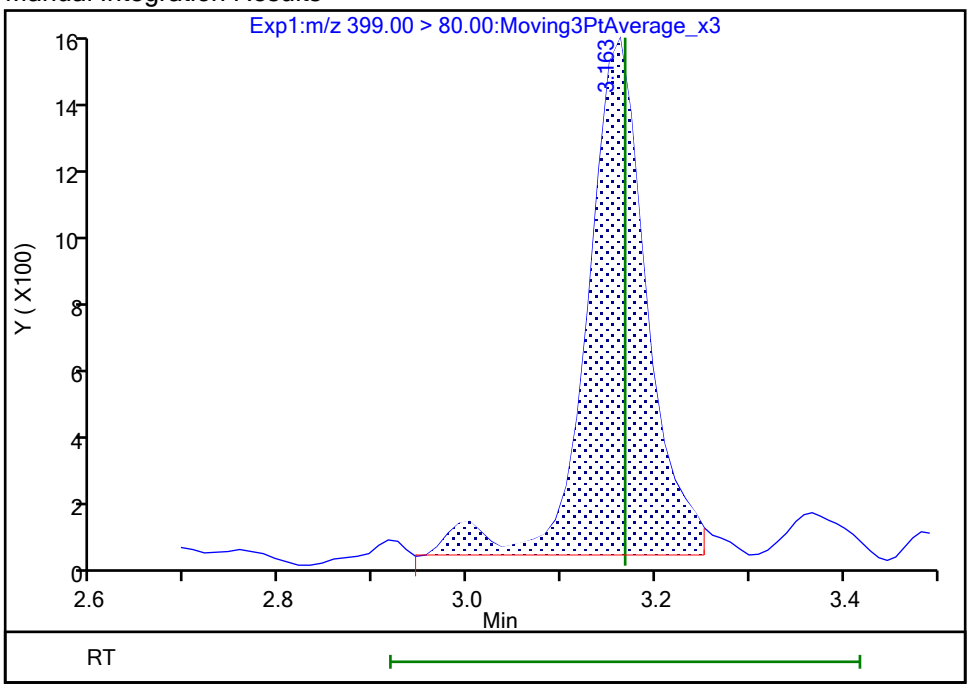
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 6753
Amount: 0.004750
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

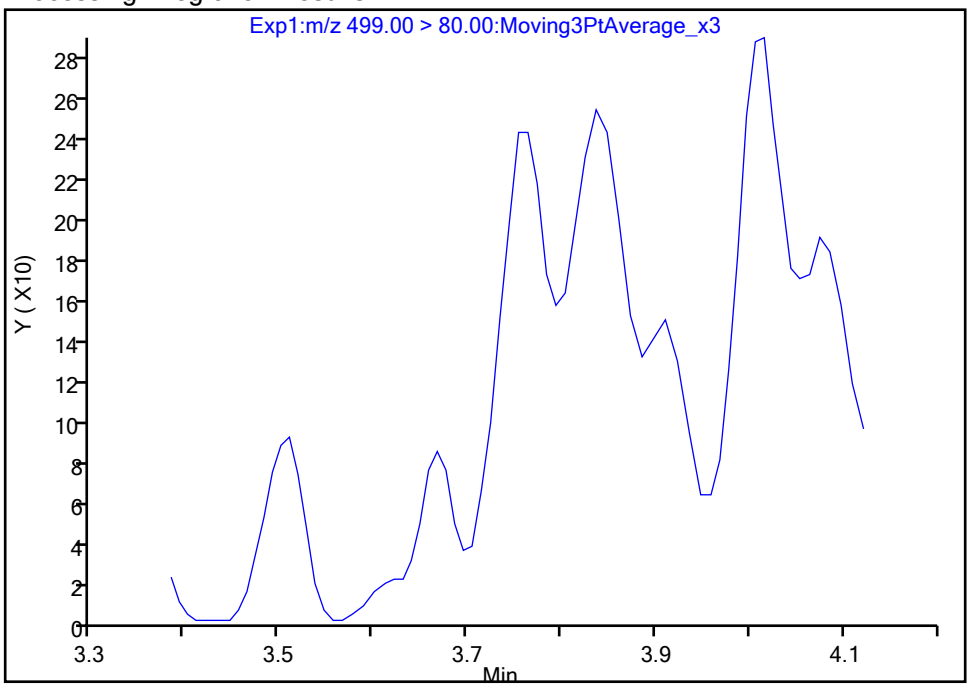
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

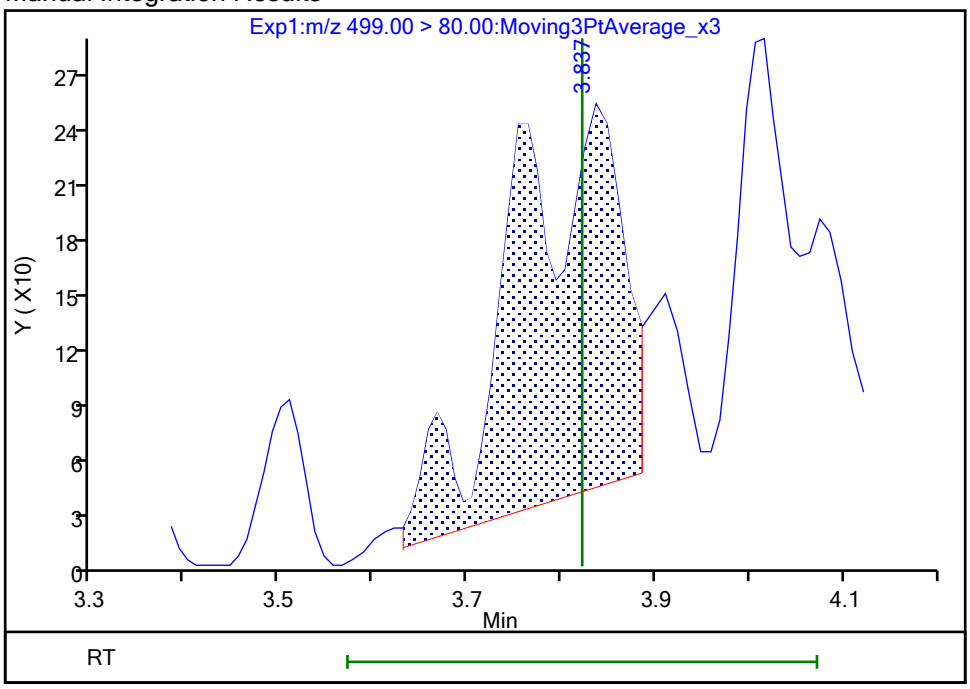
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 1712
Amount: 0.001790
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:08:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

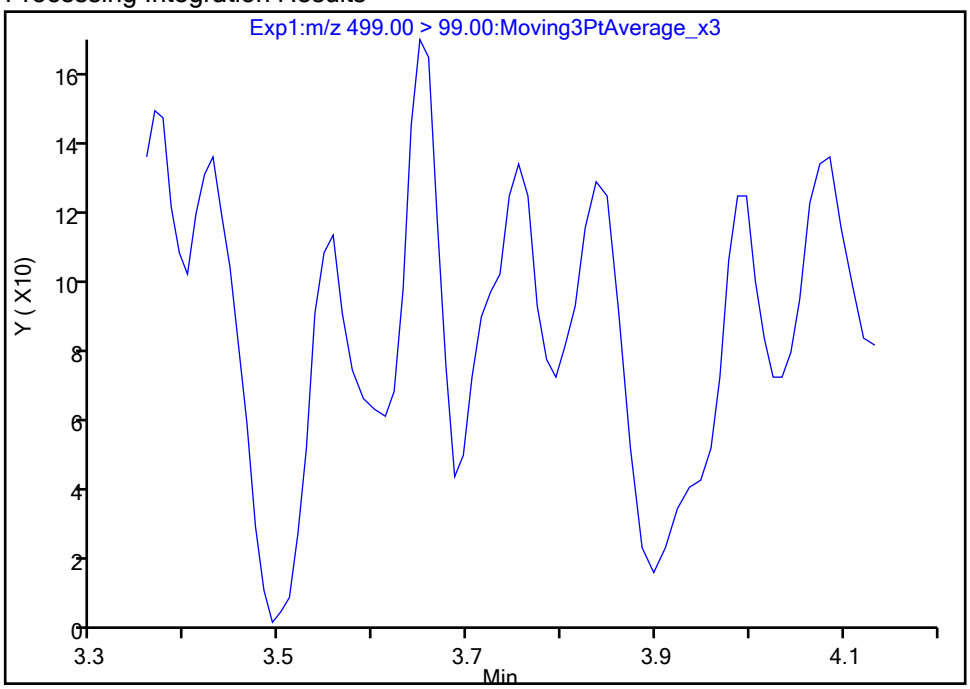
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

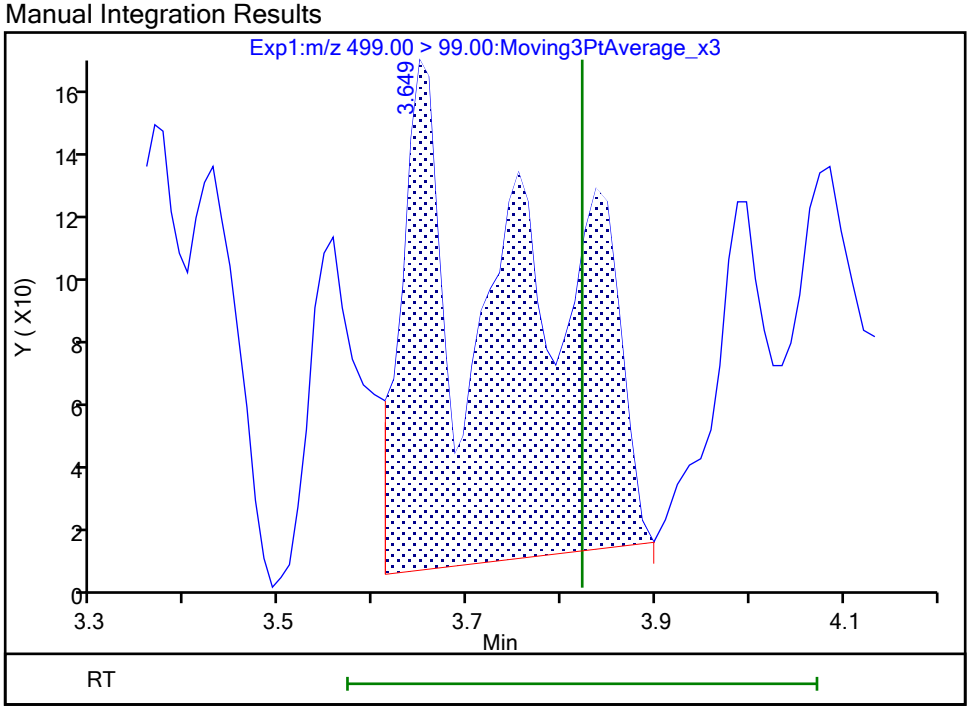
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.65
Area: 1395
Amount: 0.001790
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:08:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

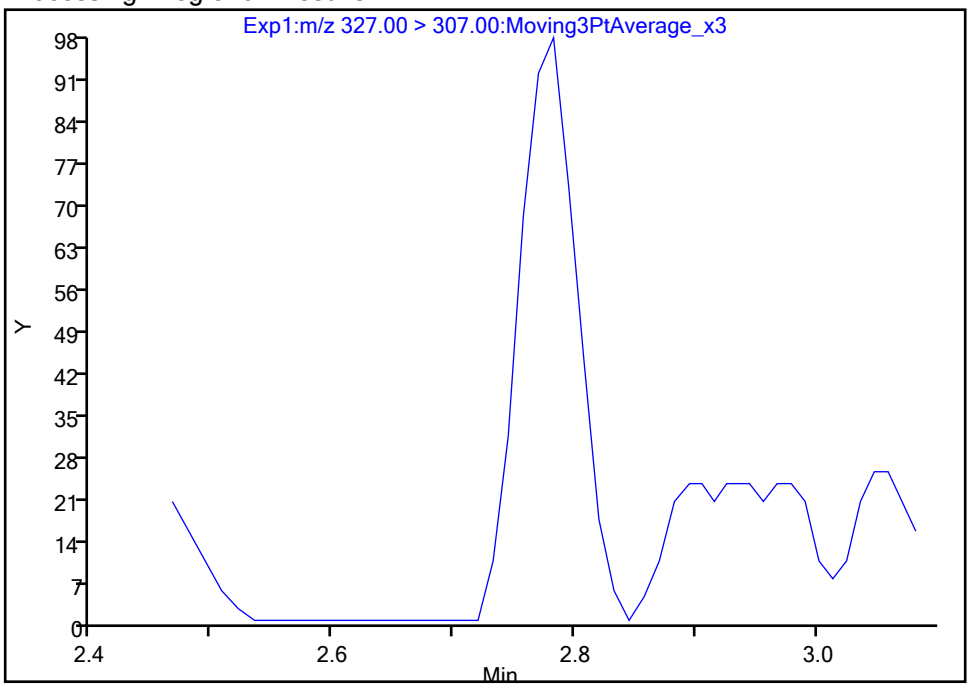
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

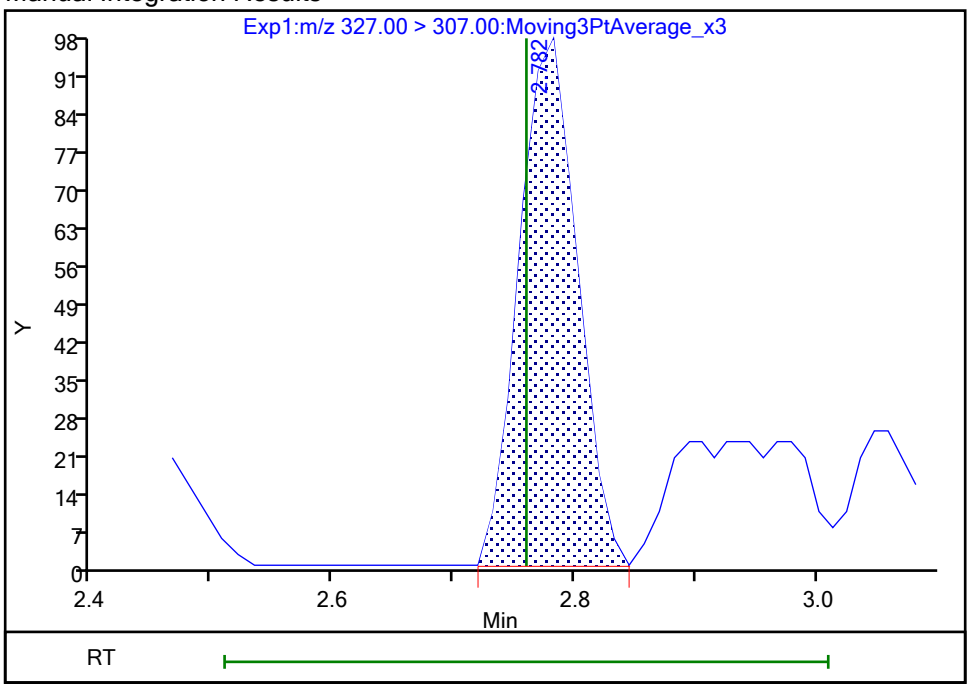
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.78
Area: 328
Amount: 0.000520
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

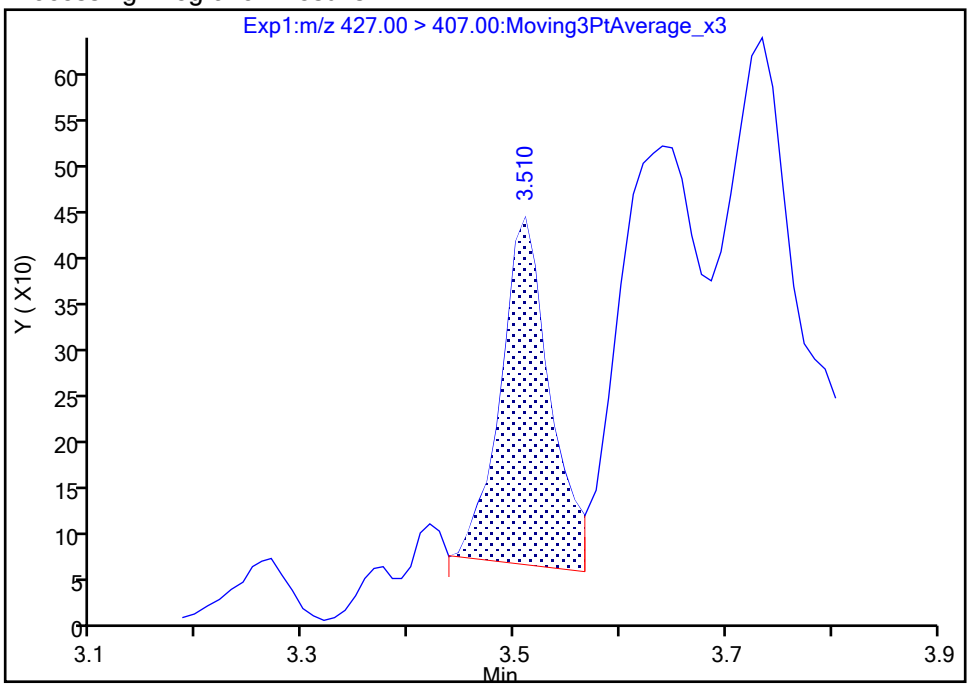
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

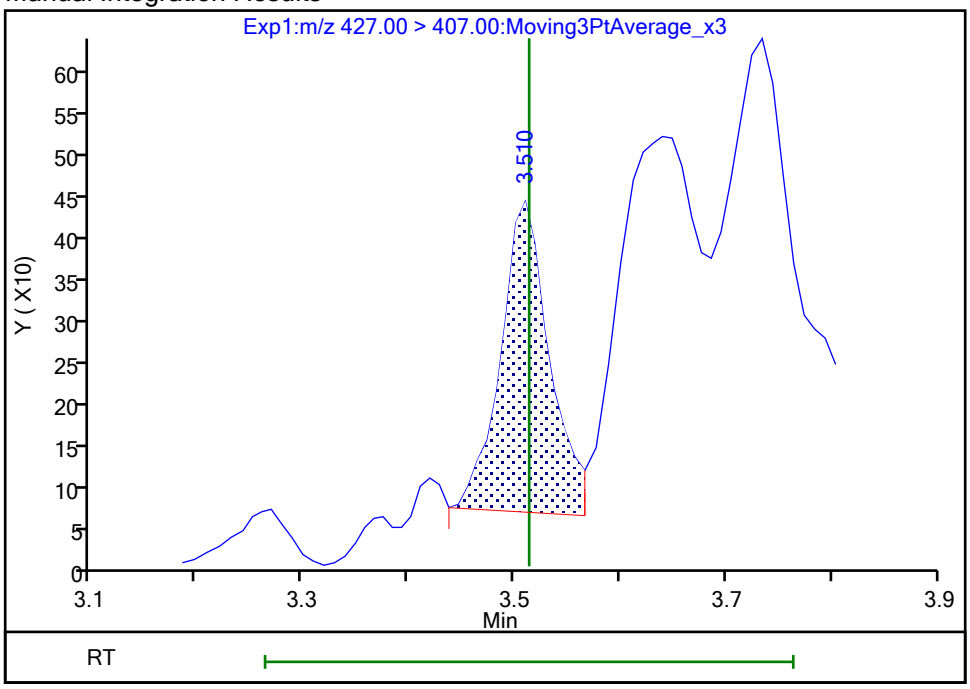
Processing Integration Results

RT: 3.51
Area: 1231
Amount: 0.001755
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1208
Amount: 0.001722
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:07:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

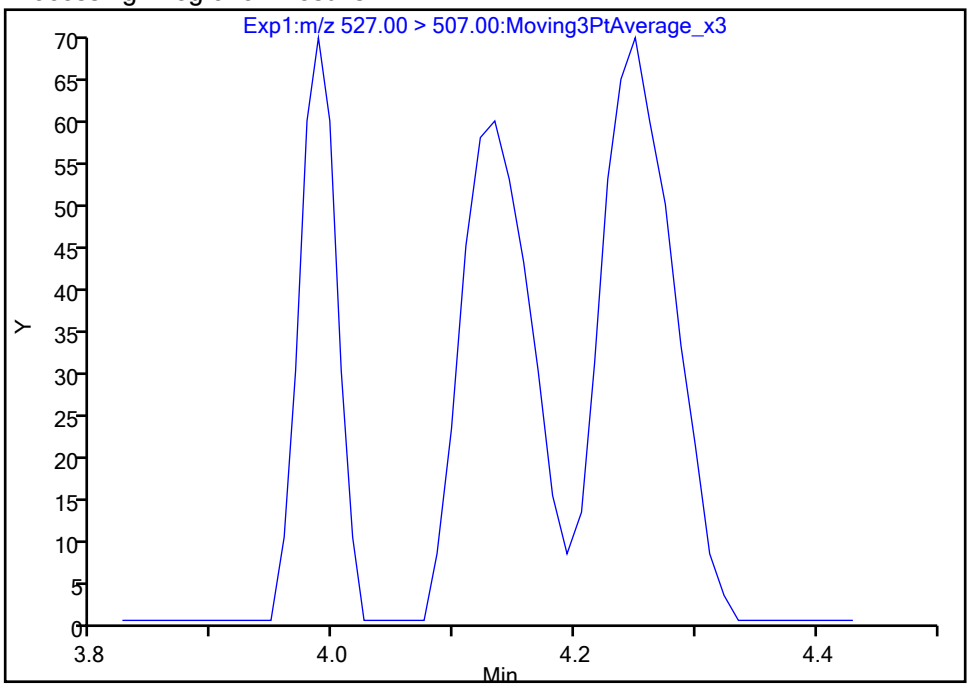
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

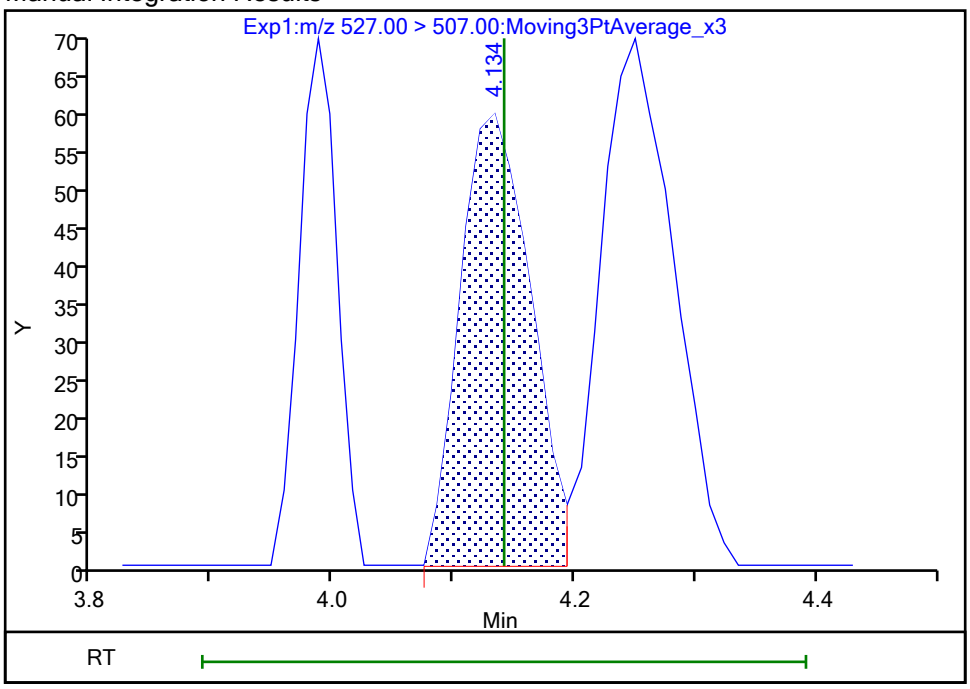
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.13
Area: 243
Amount: 0.000417
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:08:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

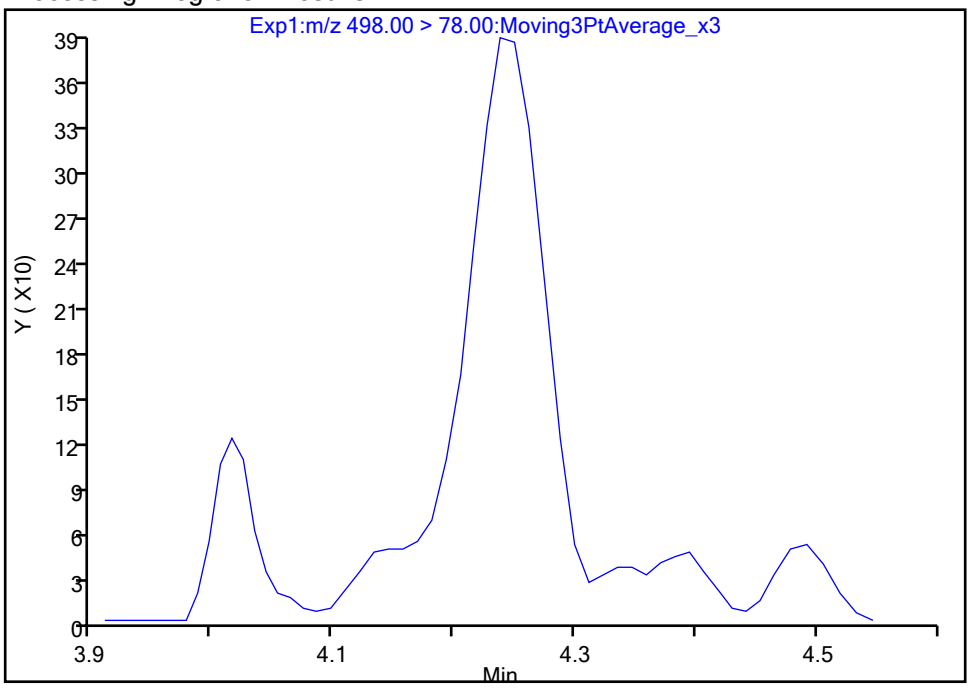
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

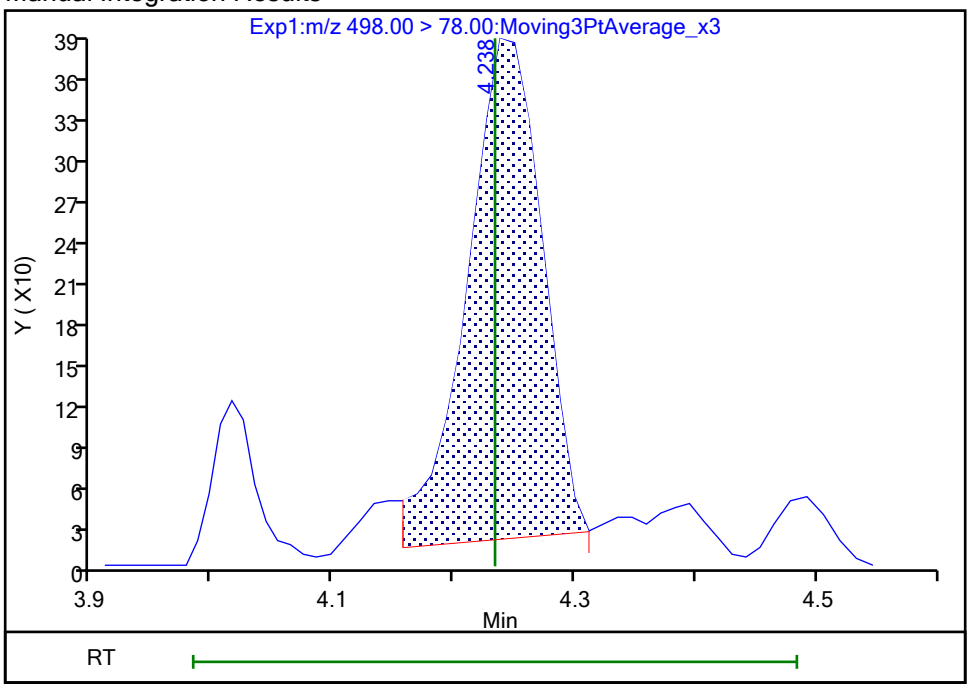
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1577
Amount: 0.001336
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:08:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

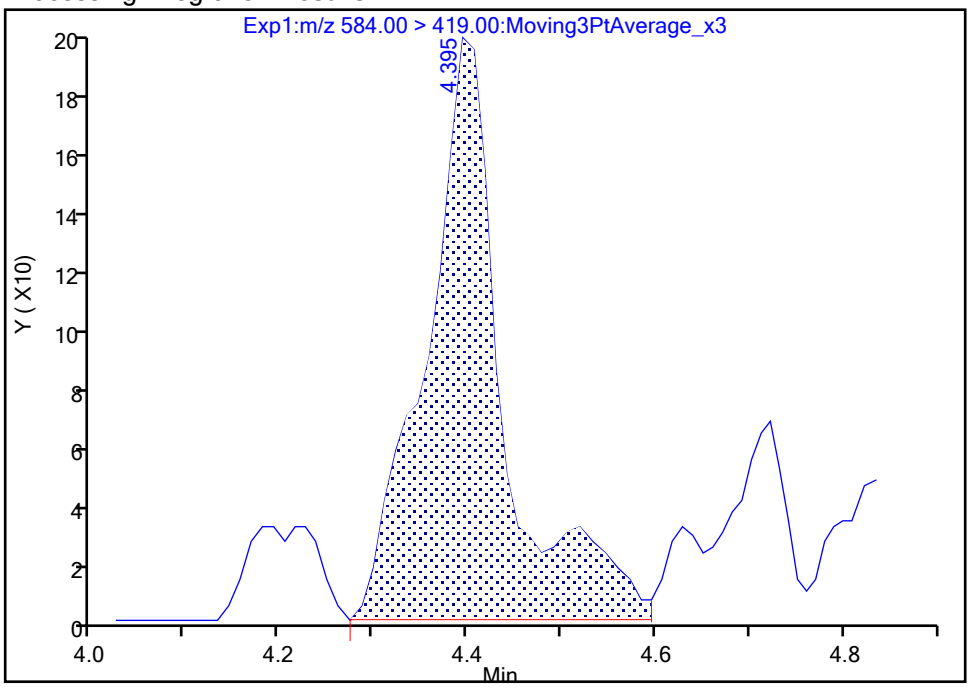
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

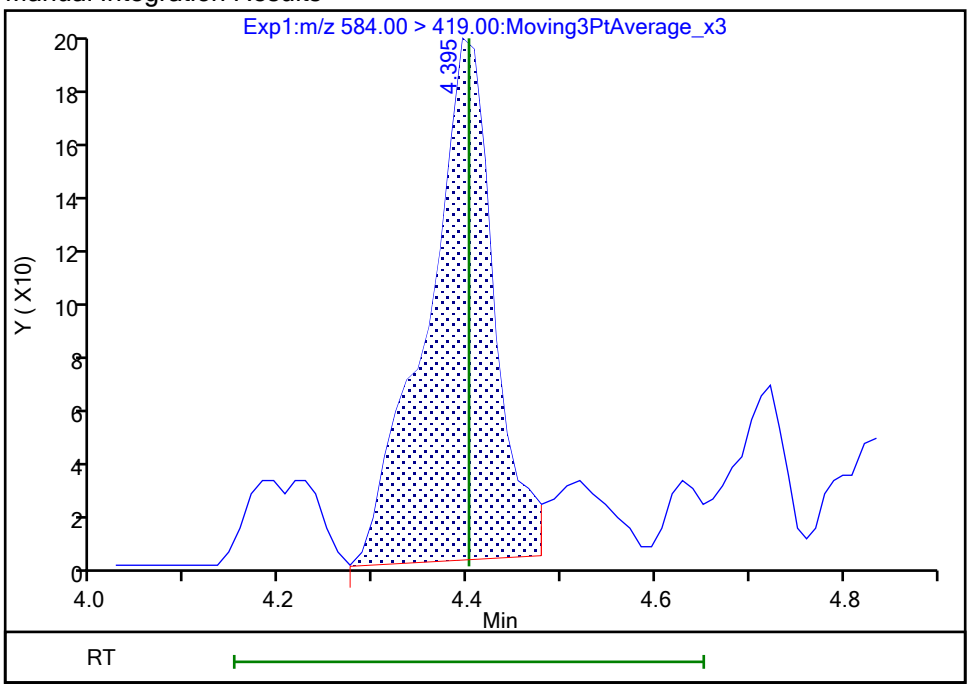
Processing Integration Results

RT: 4.39
Area: 1144
Amount: 0.003336
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 966
Amount: 0.002817
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

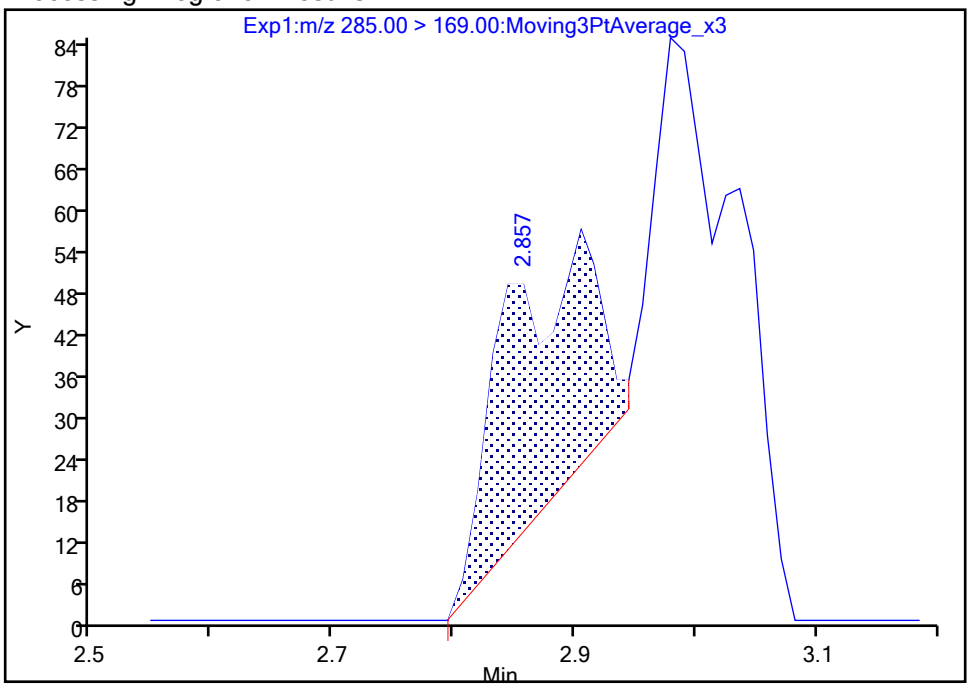
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

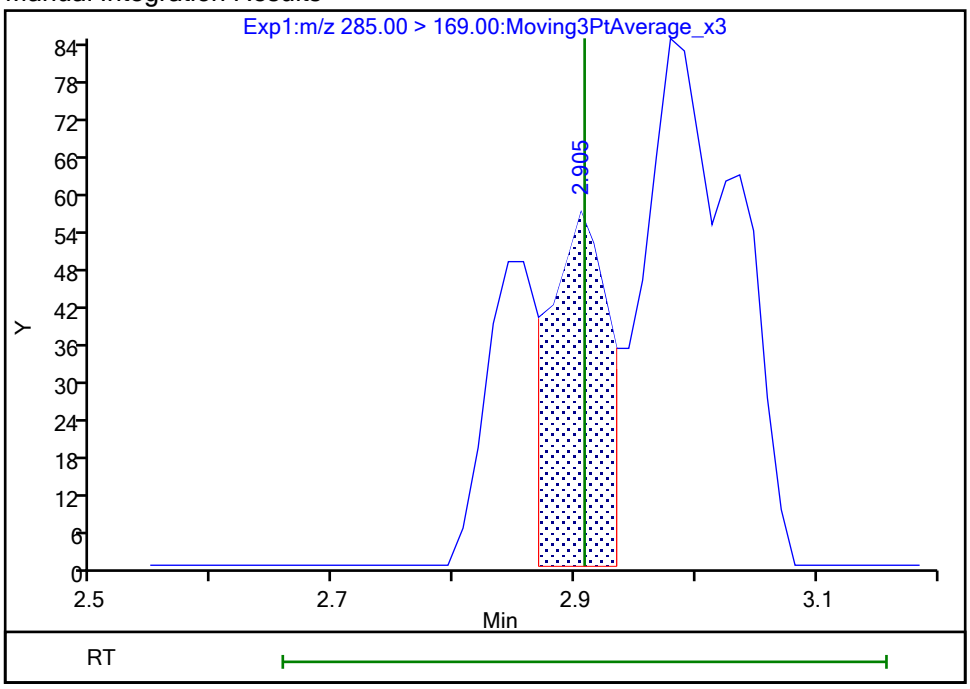
Processing Integration Results

RT: 2.86
Area: 200
Amount: 0.000898
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 182
Amount: 0.000817
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

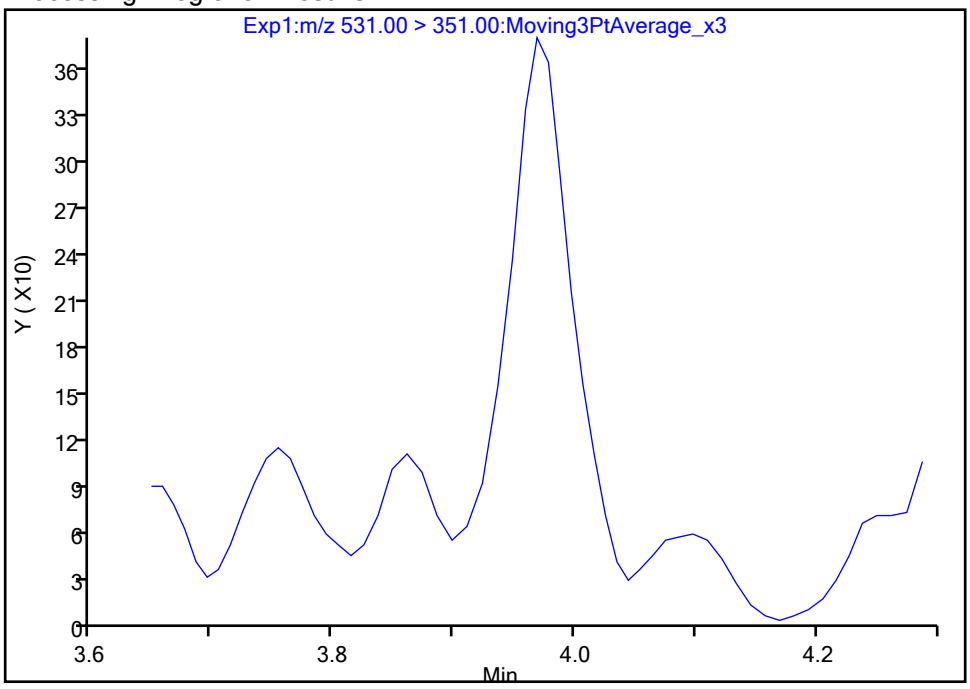
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

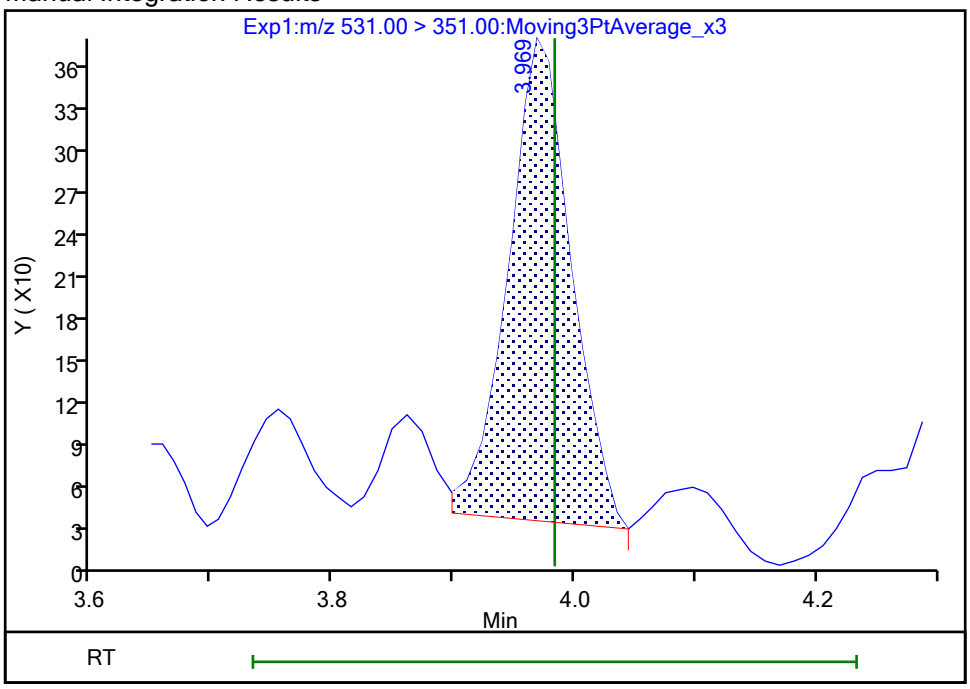
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 1256
Amount: 0.000429
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:08:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

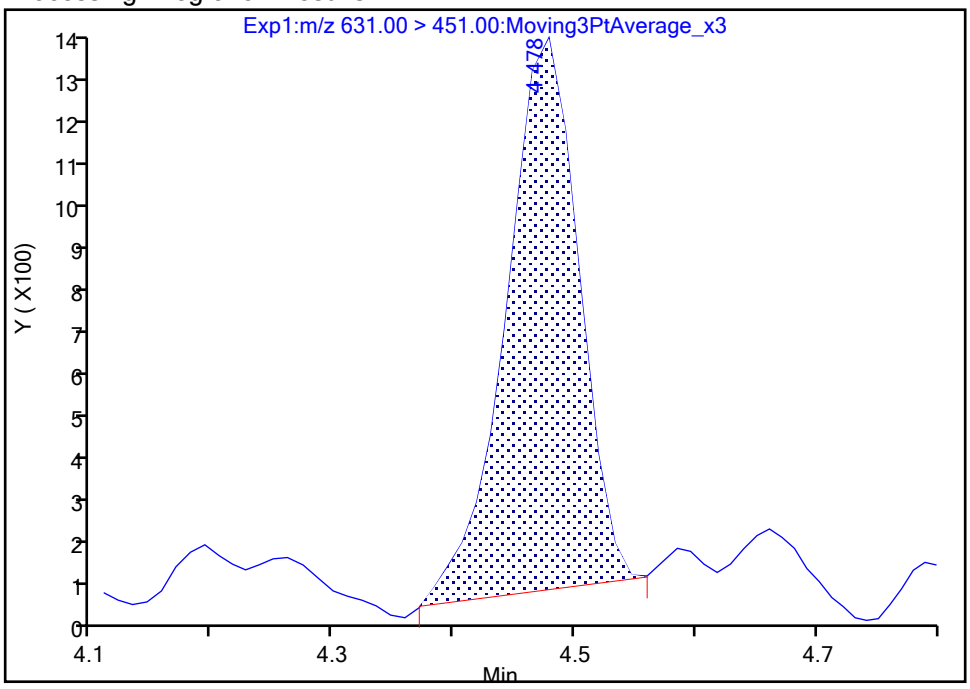
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

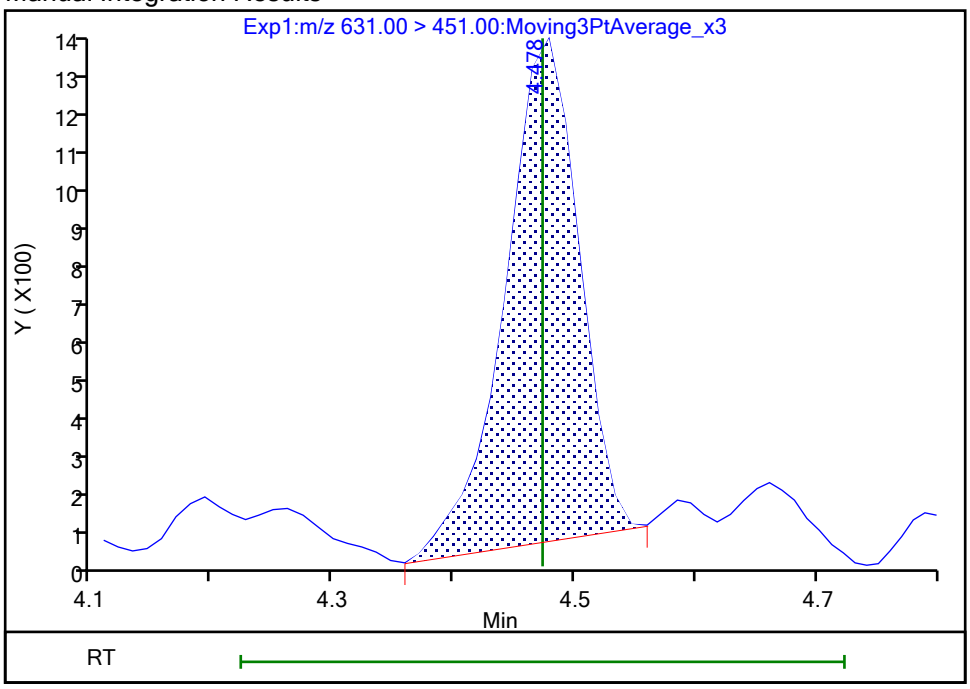
Processing Integration Results

RT: 4.48
Area: 5281
Amount: 0.001177
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 5385
Amount: 0.001200
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:09:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

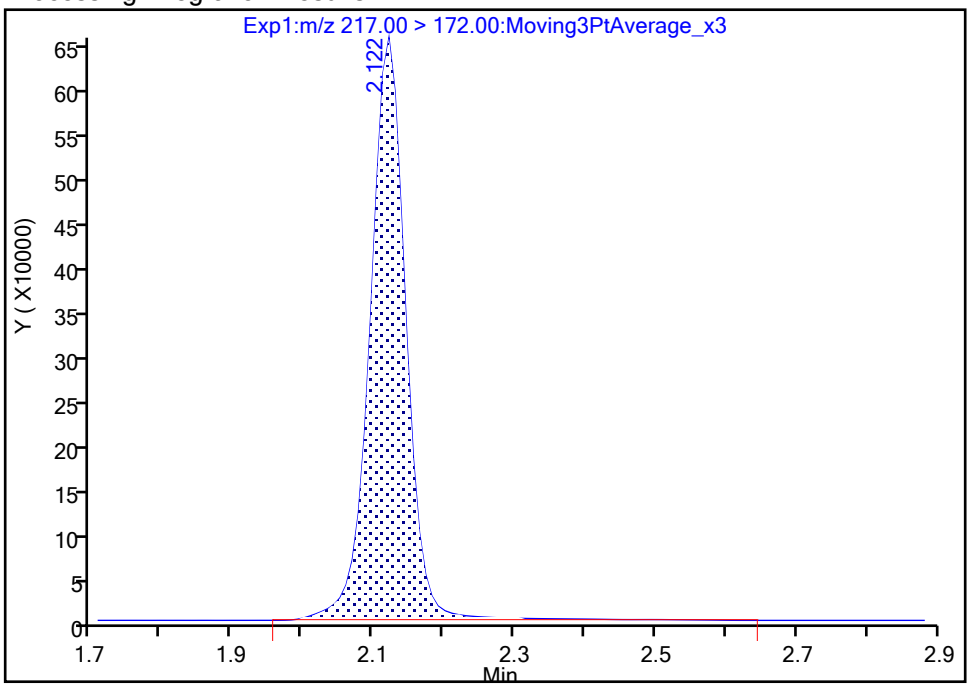
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

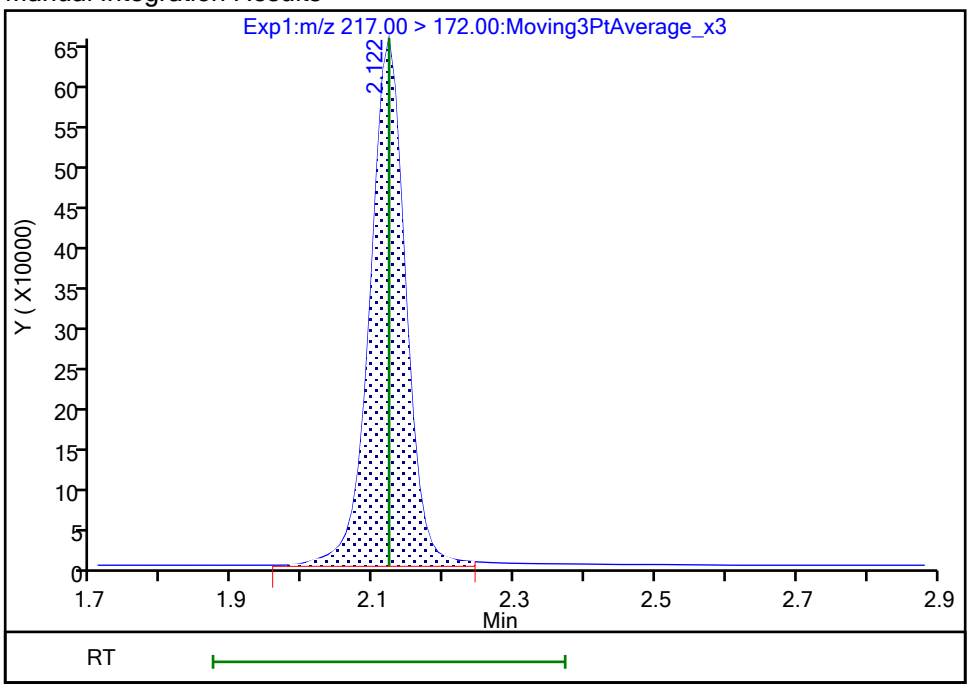
Processing Integration Results

RT: 2.12
Area: 2313170
Amount: 1.286074
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2281932
Amount: 1.270893
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:05:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

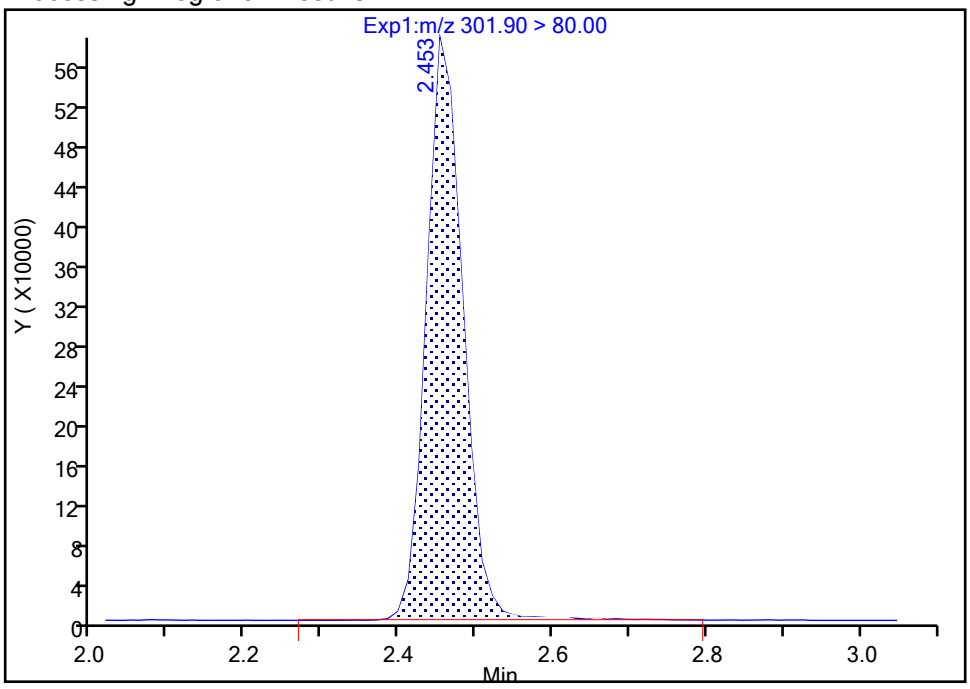
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

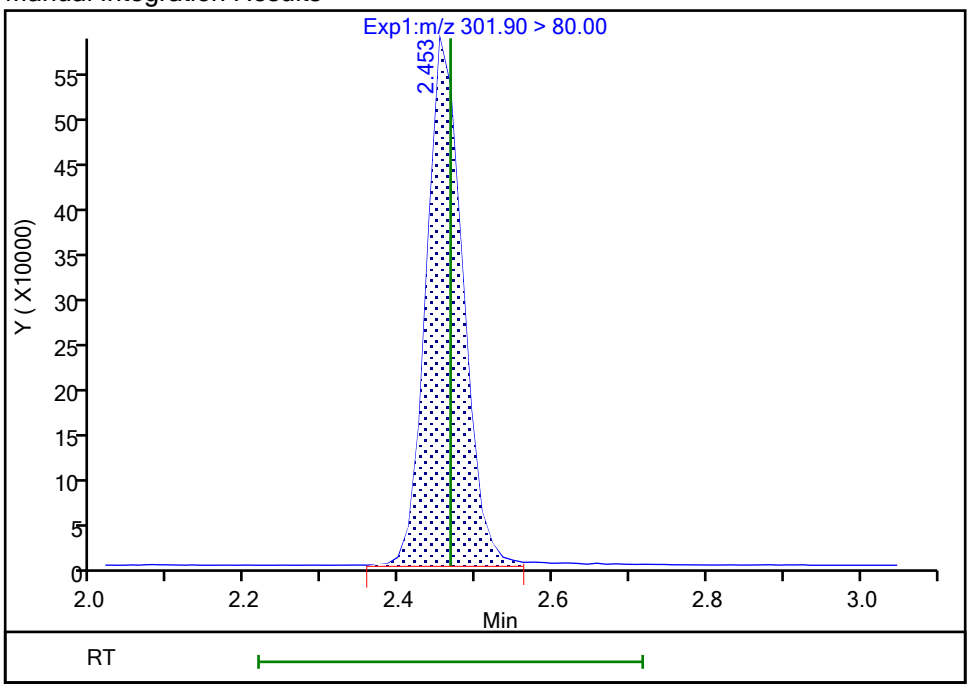
Processing Integration Results

RT: 2.45
Area: 1924317
Amount: 1.018841
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1905952
Amount: 1.010858
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:05:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

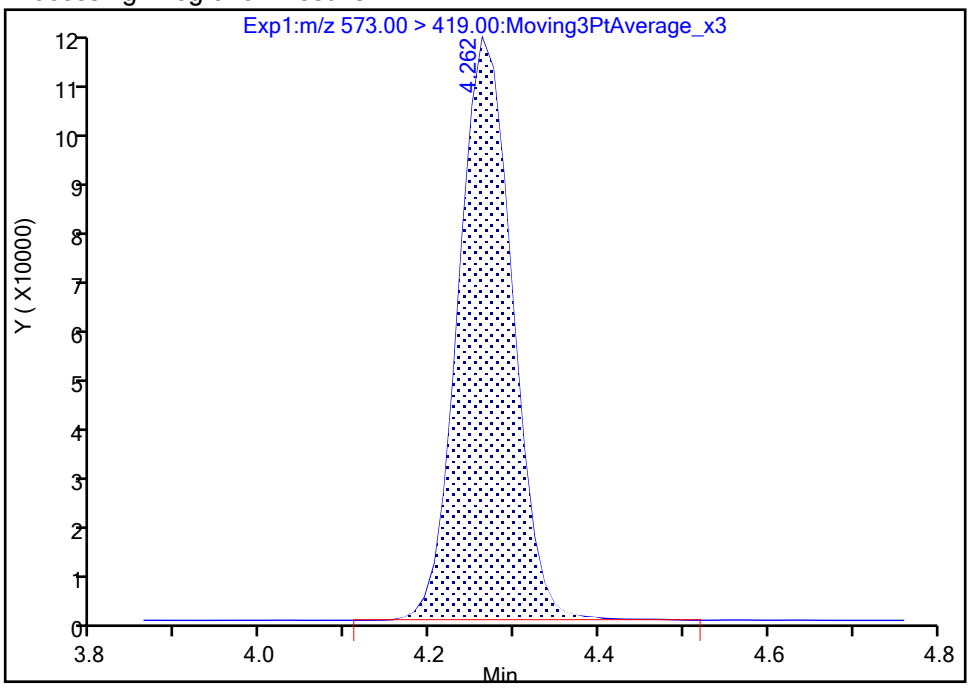
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

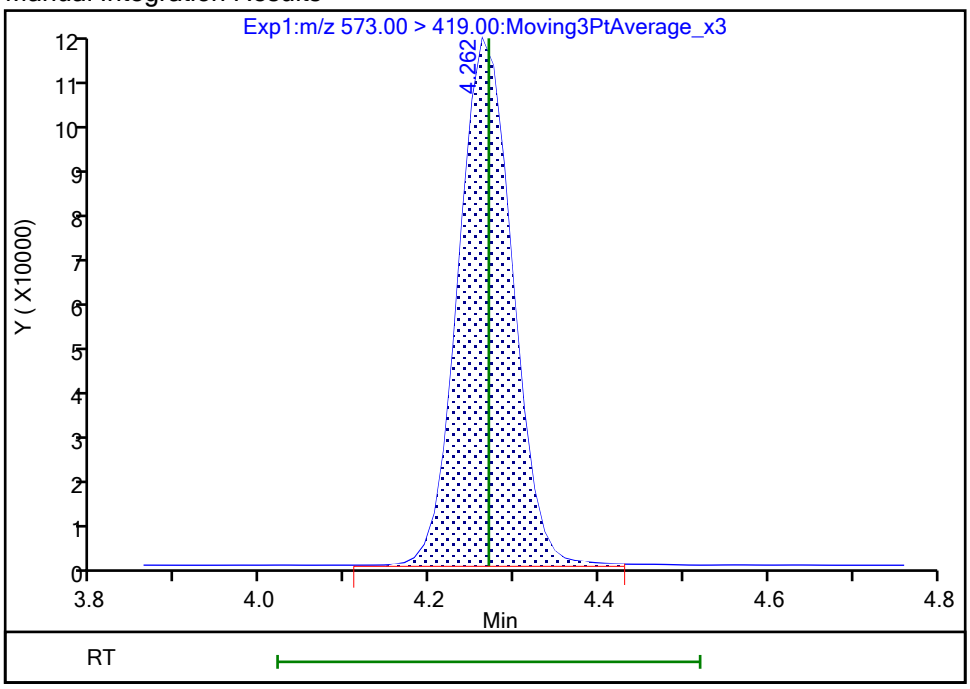
Processing Integration Results

RT: 4.26
Area: 493007
Amount: 1.025673
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 492343
Amount: 1.026058
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:05:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

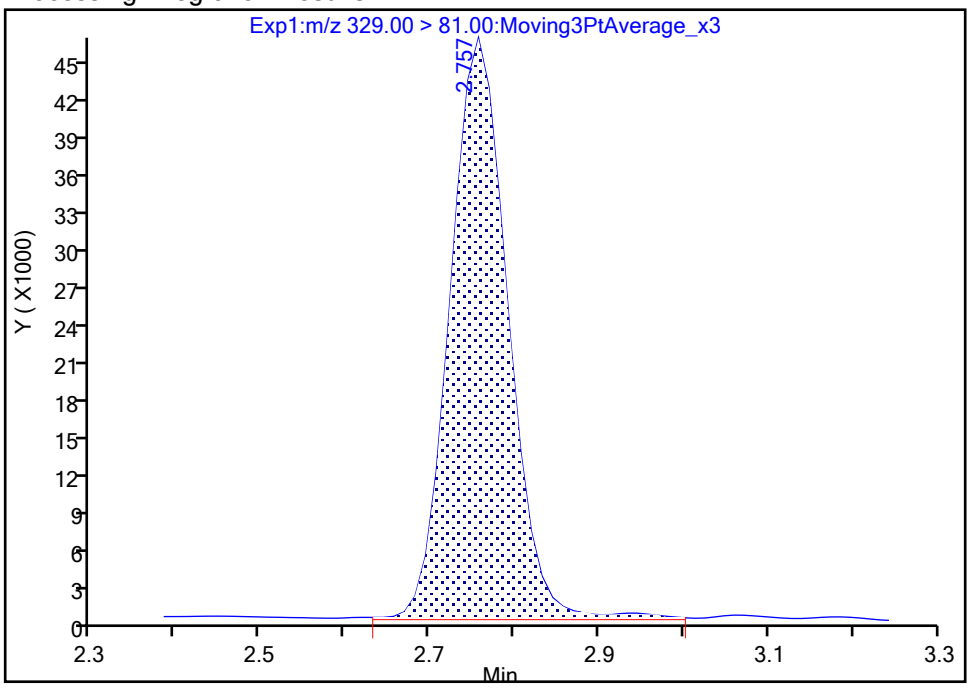
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

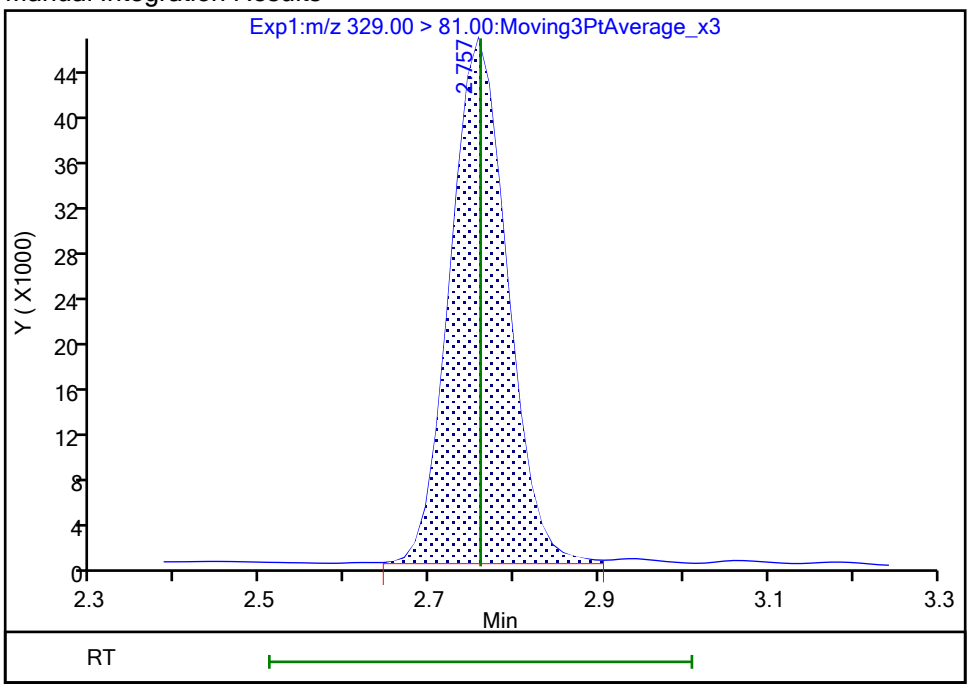
Processing Integration Results

RT: 2.76
Area: 220478
Amount: 1.009397
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 216931
Amount: 0.994870
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:05:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

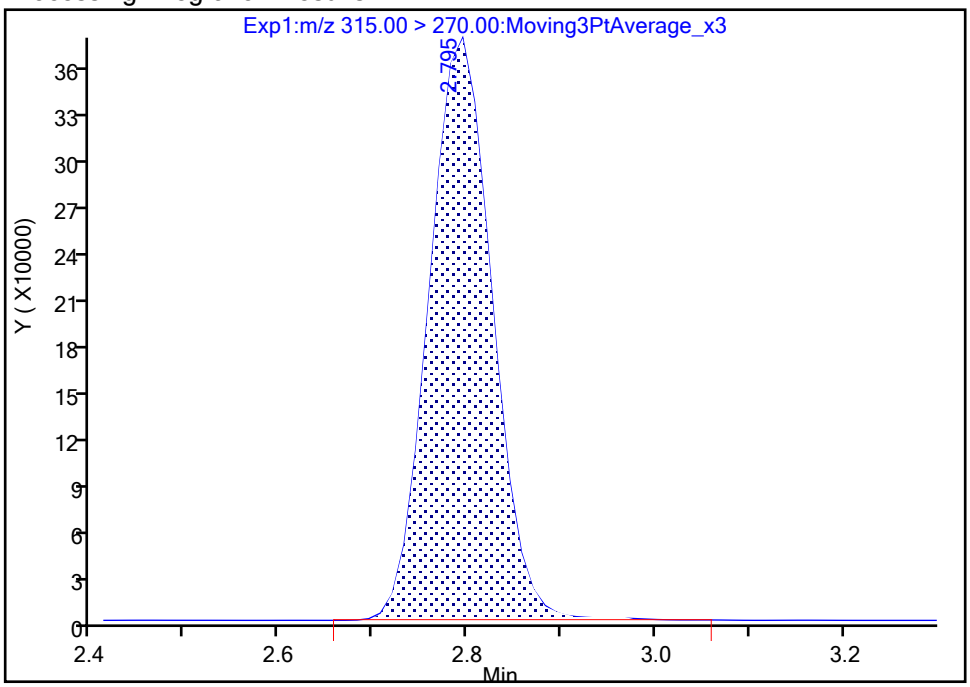
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d				
Injection Date:	23-Oct-2023 16:11:58	Instrument ID:	LC812		
Lims ID:	MB 200-196645/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

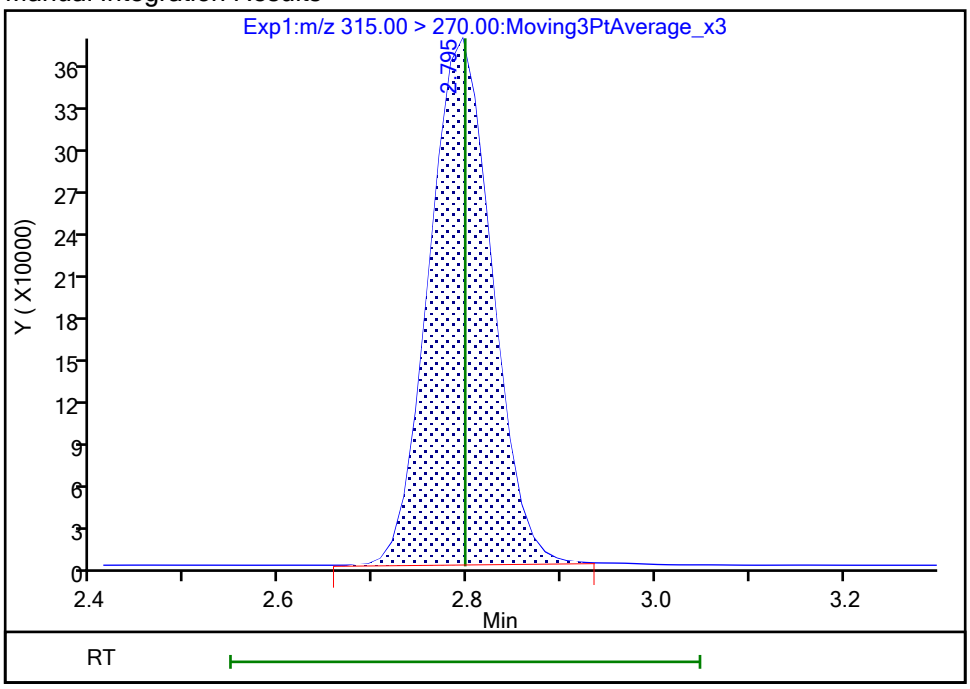
Processing Integration Results

RT: 2.79
Area: 1775090
Amount: 1.249996
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1770501
Amount: 1.248914
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:05:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

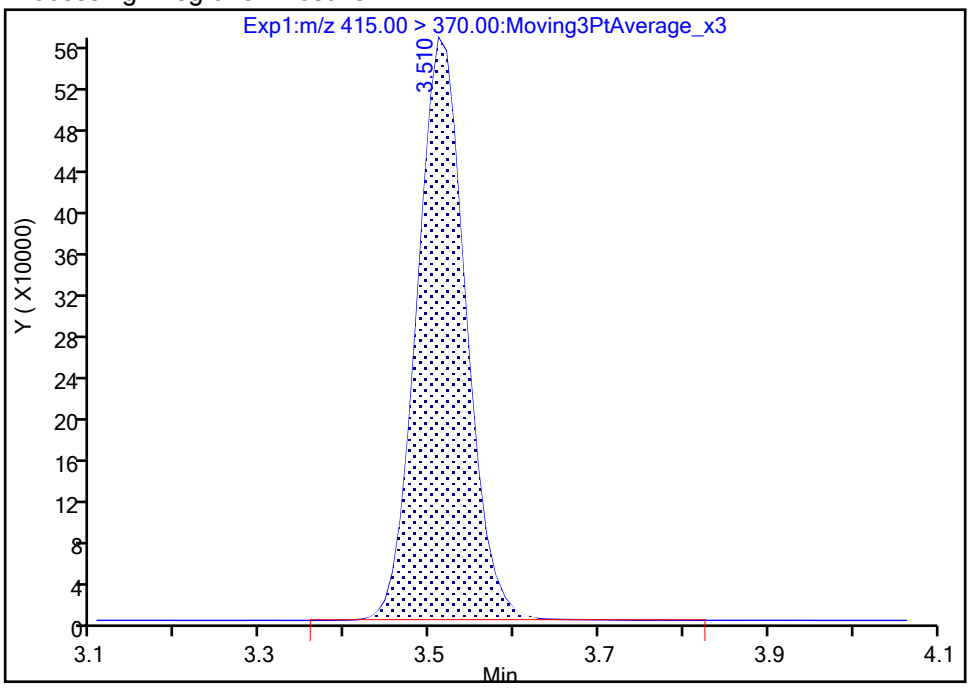
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A08.d
Injection Date: 23-Oct-2023 16:11:58 Instrument ID: LC812
Lims ID: MB 200-196645/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

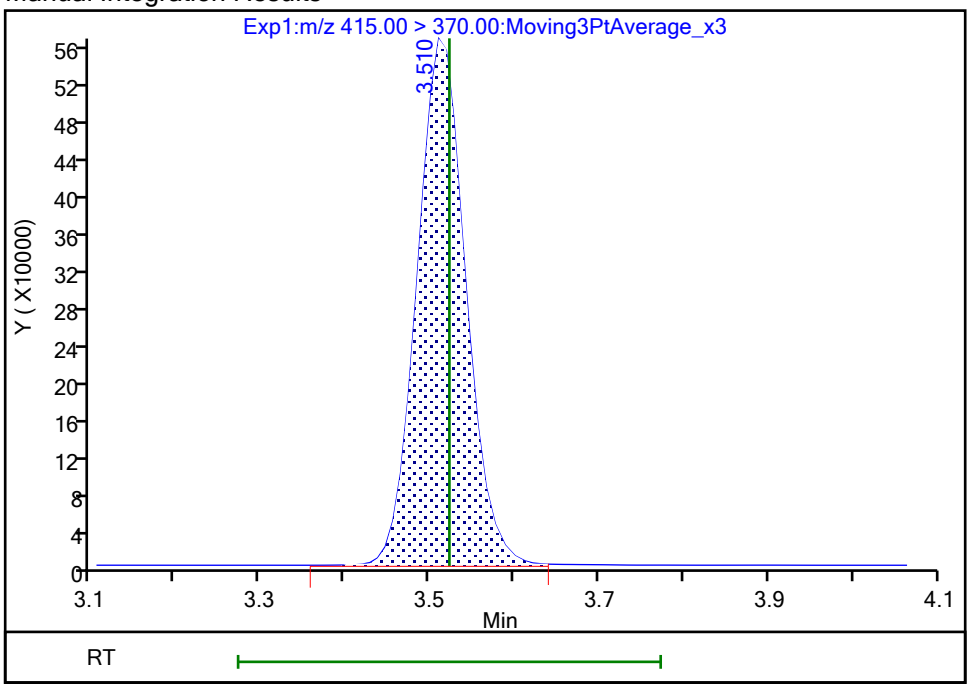
Processing Integration Results

RT: 3.51
Area: 2267178
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2263276
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:06:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196646/1-A

Matrix: Water Lab File ID: PA231023C02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 23:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196646/1-A

Matrix: Water Lab File ID: PA231023C02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 23:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		50-150
STL01893	13C5 PFPeA	99		50-150
STL01892	13C4 PFHpA	92		50-150
STL02116	13C2 PFTeDA	88		50-150
STL02337	13C3 PFBS	97		50-150
STL01056	13C8 FOSA	92		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	99		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	98		50-150
STL02280	M2-8:2 FTS	90		50-150
STL02255	13C3 HFPO-DA	85		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	102		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	100		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	98		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	104		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Lims ID: MB 200-196646/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2023 23:25:00 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196646/1-A
Misc. Info.: 200-0057511-002 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:05:56
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.122	-0.001	0.603	2208761	1.29		103	1650	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1648114	1.24		99.3	2464	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	2019584	1.12		96.7	125104	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	2369	0.001221	Target=2.06		2.9	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	1423		1.66(1.03-3.09)		0.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.005	351	0.000530			3.7	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.759	2.760	-0.001	0.784	227862	1.10		93.9	150	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1722810	1.28		102	1228	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	765	0.000449	Target=2.72		2.3	M
349.00 > 99.00	2.810	2.810	0.0	0.888	346		2.21(1.36-4.09)		0.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	278514	1.07		85.2	1390	
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.168	-0.004	0.899	1541098	1.20		101	5787	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.168	-0.004	1.000	5508	0.003818	Target=3.32		17.2	M
399.00 > 99.00	3.164	3.168	-0.004	1.000	1838		3.00(1.66-4.98)		1.9	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.168	-0.004	0.899	1712756	1.16		92.4	3240	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	310525	1.16		97.7	764	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	600	0.000839			1.4	M
15 Perfluorooctanoic acid										RM
413.00 > 369.00	3.502	3.514	-0.012	0.995	8385	0.004346	Target=2.88		0.5	RM
413.00 > 169.00	3.539	3.514	0.025	1.005	1053		7.96(1.44-4.32)		2.1	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2264148	1.35		108	6645	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2156900	1.25			9450	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.853	3.822	0.031	1.006	2045	0.002114	Target=4.24		4.1	RM
499.00 > 99.00	3.842	3.822	0.020	1.003	1189		1.72(2.12-6.37)		3.5	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	991054	1.21		101	6279	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2263058	1.24		99.1	10772	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.980	3.983	-0.003	1.039	1691	0.000571			6.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2335821	1.22		97.7	6615	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	323480	1.07		89.8	1014	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	0.997	467	0.000785			6.5	M
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.234	0.007	1.205	1876229	1.15		91.9	5514	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.229	4.234	-0.005	0.997	1697	0.001185			9.9	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.212	571771	1.25		100	1052	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.270	-0.005	1.000	1334	0.003214			5.2	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.362	4.366	-0.004	1.139	379	0.000669	Target=2.37		5.9	M
599.00 > 99.00	4.362	4.366	-0.004	1.139	204		1.86(1.19-3.56)		2.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.246	2353451	1.30		104	7321	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.250	546964	1.24		99.4	1014	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.401	0.009	1.003	1740	0.003976			9.2	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.481	4.473	0.008	1.170	4925	0.001085			7.4	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2292201	1.25		99.9	7612	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.624	-0.003	1.114	264	0.000743			4.8	M
75 Perfluorododecanesulfonic acid (										RM
699.00 > 80.00	4.783	4.777	0.006	1.249	135	0.000703	Target=0.48		5.3	RM
699.00 > 99.00	4.783	4.777	0.006	1.249	158		0.85(0.24-0.72)		5.2	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.802	4.806	-0.004	1.042	2496	0.001272	Target=6.41		0.1	M
663.00 > 169.00	4.802	4.806	-0.004	1.042	350		7.13(3.21-9.62)		3.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	2004268	1.10		87.7	4668	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.982	-0.003	1.000	417	0.002326	Target=0.87		5.5	M
713.00 > 219.00	4.979	4.982	-0.003	1.000	367		1.14(0.43-1.30)		6.5	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.292	0.003	1.504	2262090	1.07		85.9	5235	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.566	5.563	0.003	1.051	3128	0.002213	Target=9.39		0.4	M
913.00 > 169.00	5.557	5.563	-0.006	1.049	246		12.72(4.69-14.08)		7.6	M

QC Flag Legend

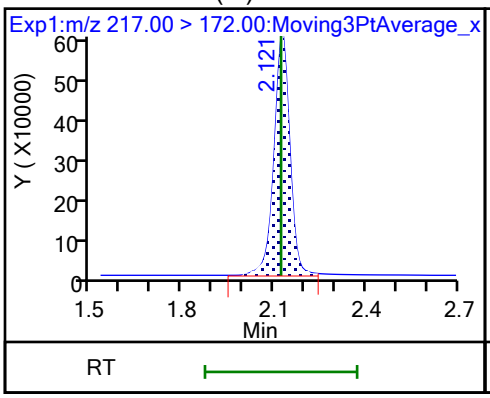
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:17 Chrom Revision: 2.3 18-Oct-2023 21:16:54

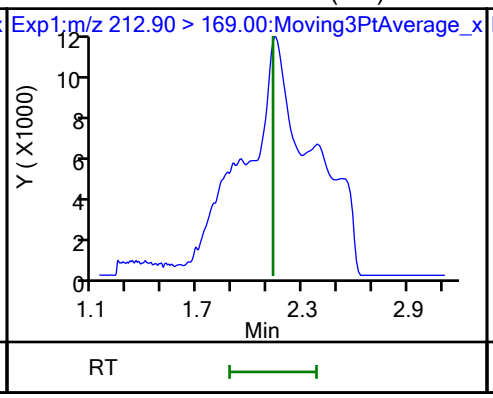
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

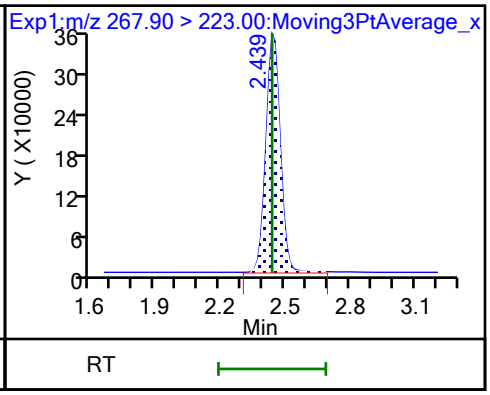
D 1 13C4 PFBA (M)



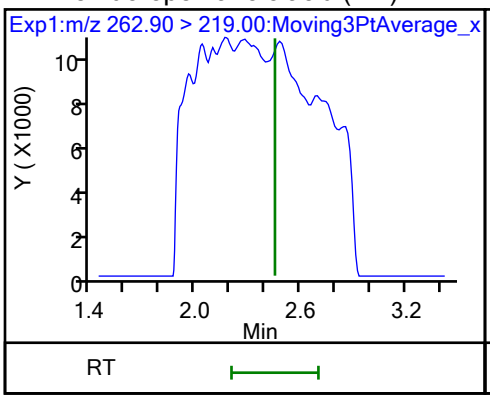
2 Perfluorobutanoic acid (ND)



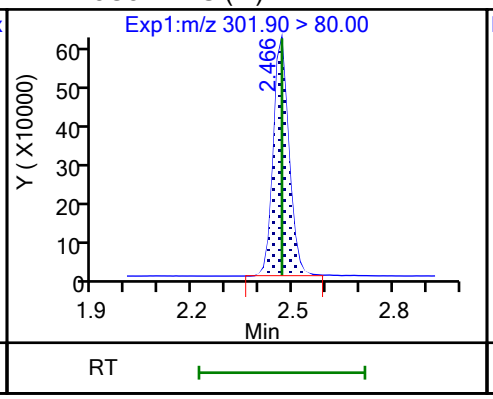
D 3 13C5 PFPeA



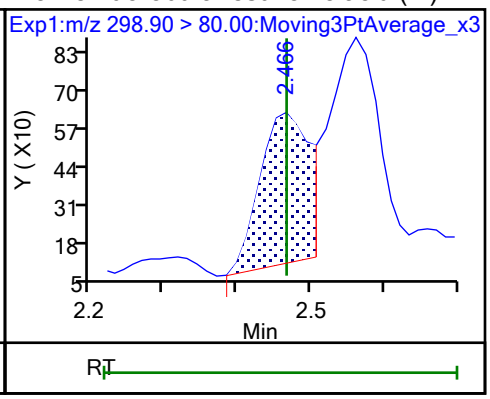
4 Perfluoropentanoic acid (ND)



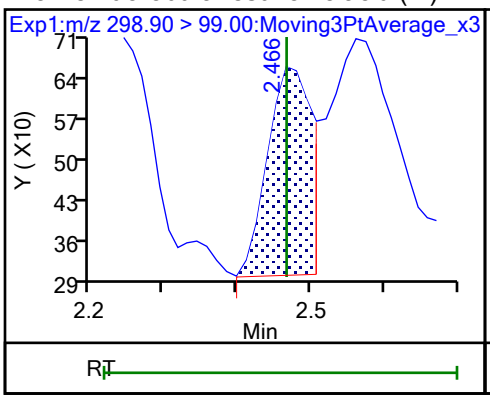
D 47 13C3 PFBS (M)



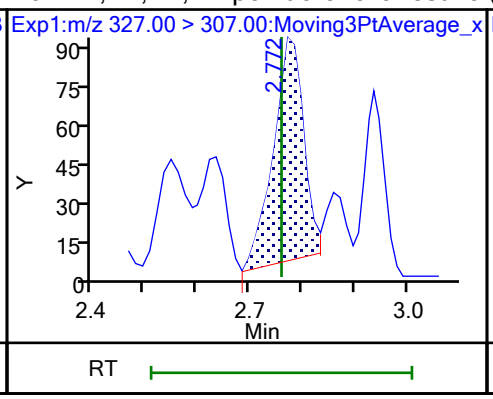
5 Perfluorobutanesulfonic acid (M)



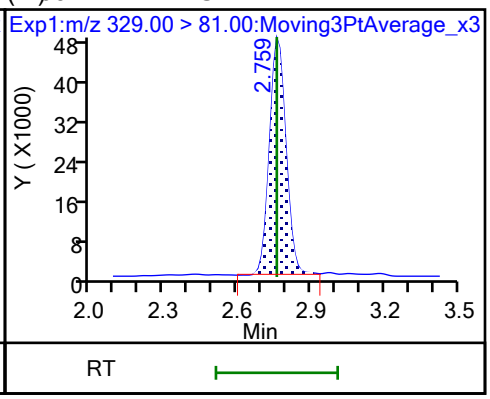
5 Perfluorobutanesulfonic acid (M)



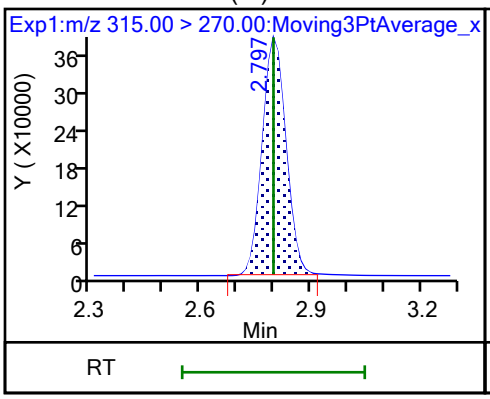
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



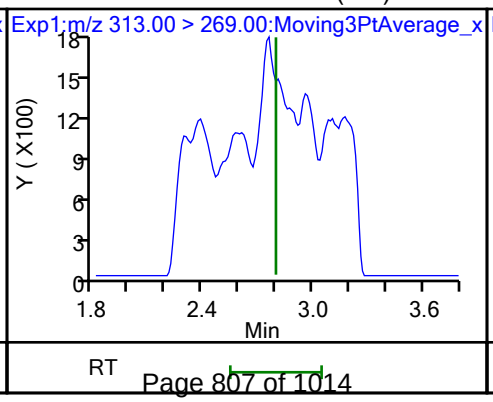
60 M2-4:2 FTS



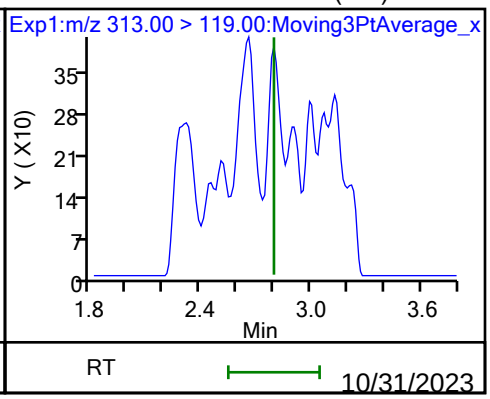
D 7 13C2 PFHxA (M)



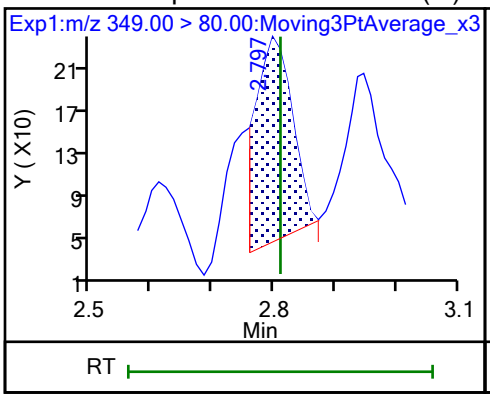
6 Perfluorohexanoic acid (ND)



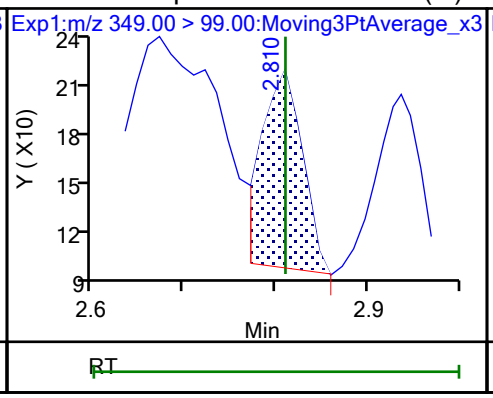
6 Perfluorohexanoic acid (ND)



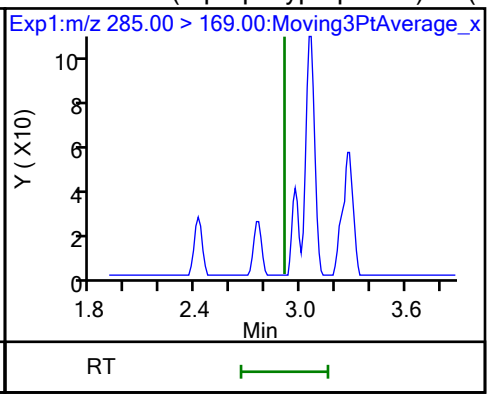
70 Perfluoropentanesulfonic acid (M)



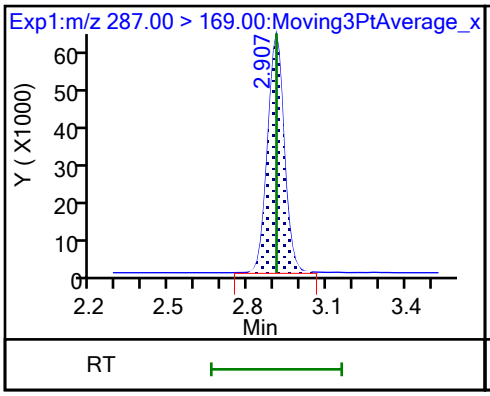
70 Perfluoropentanesulfonic acid (M)



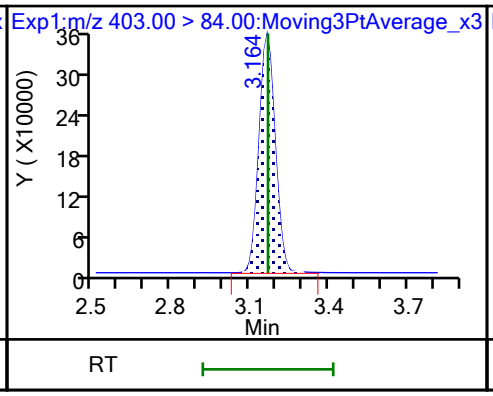
67 Perfluoro(2-propoxypropanoic) ac (ND)



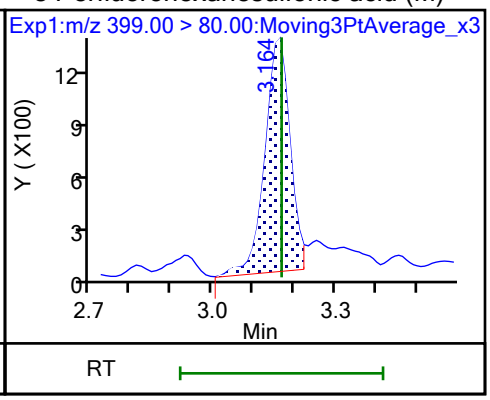
D 64 13C3 HFPO-DA



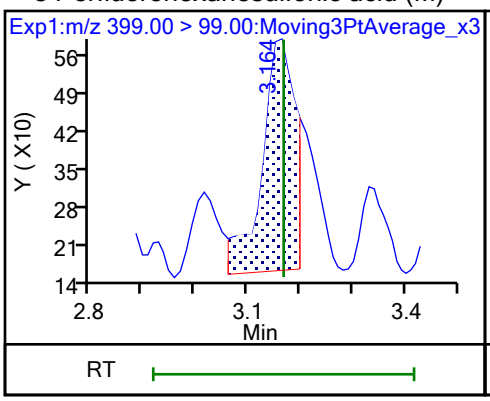
D 11 18O2 PFHxS



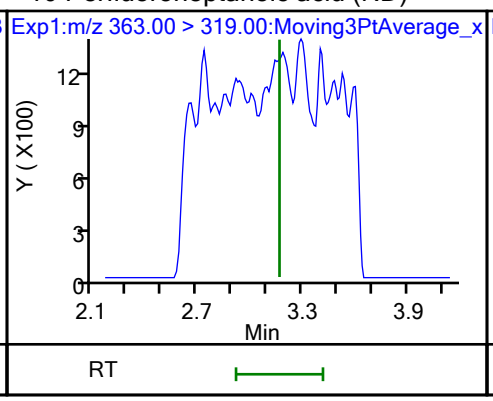
8 Perfluorohexanesulfonic acid (M)



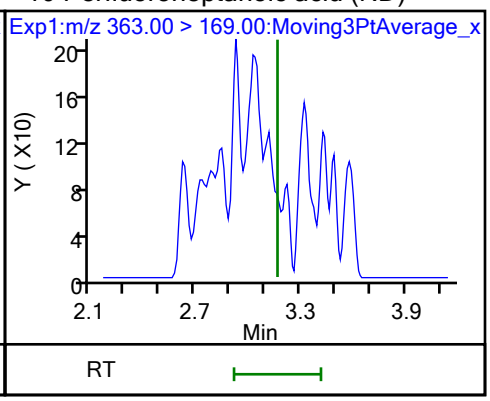
8 Perfluorohexanesulfonic acid (M)



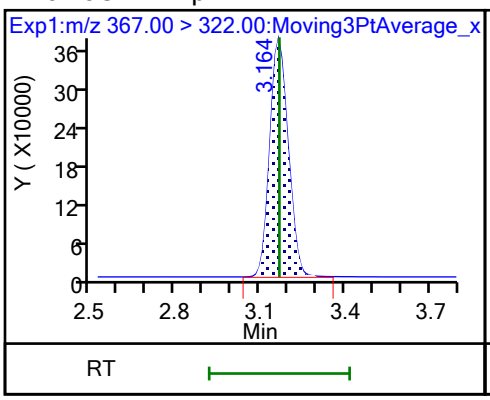
10 Perfluoroheptanoic acid (ND)



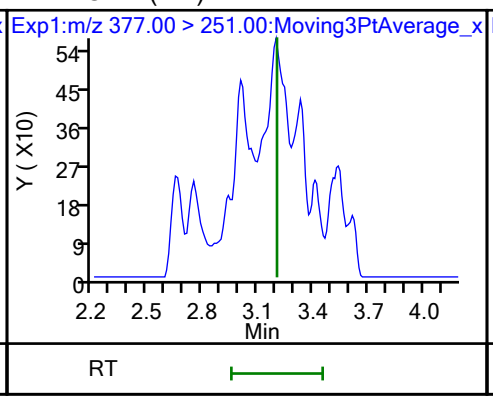
10 Perfluoroheptanoic acid (ND)



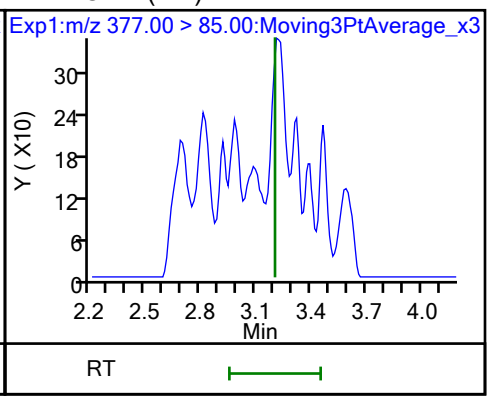
D 9 13C4 PFHpA



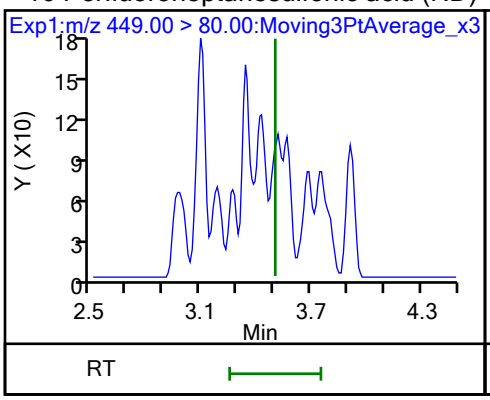
77 DONA (ND)



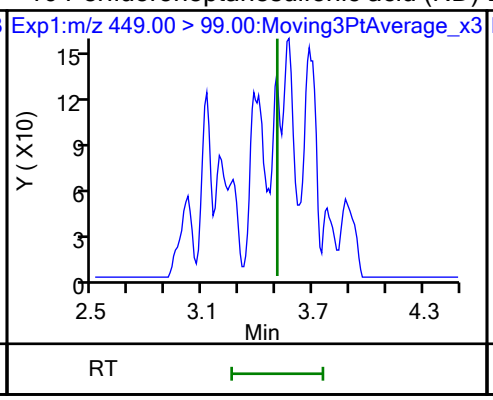
77 DONA (ND)



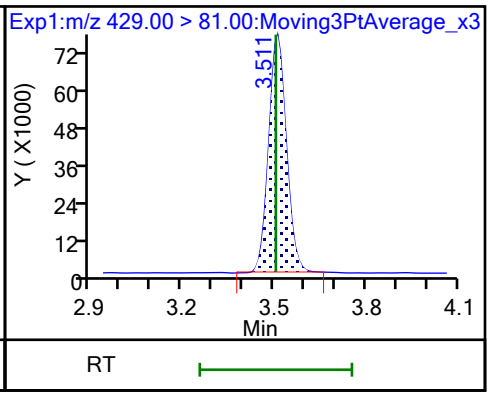
16 Perfluoroheptanesulfonic acid (ND)



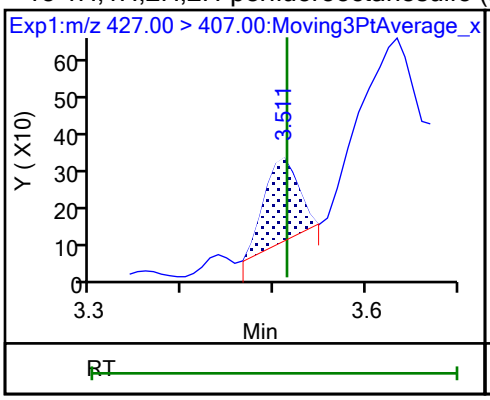
16 Perfluoroheptanesulfonic acid (ND)



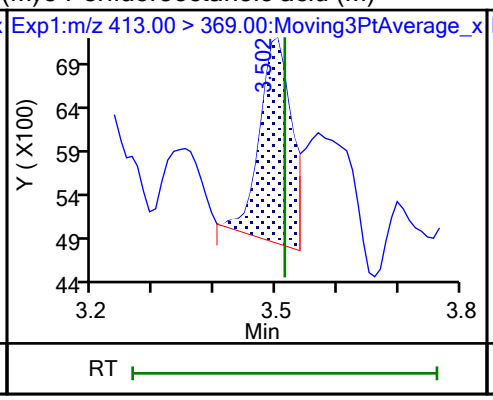
D 12 M2-6:2 FTS



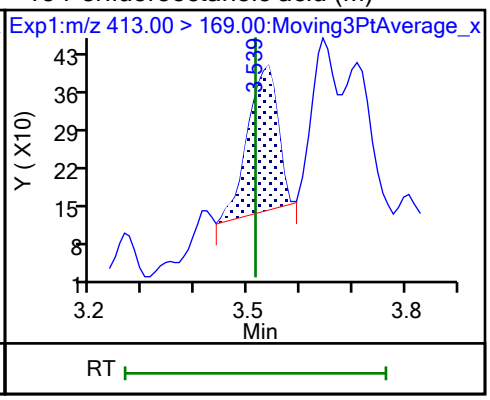
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



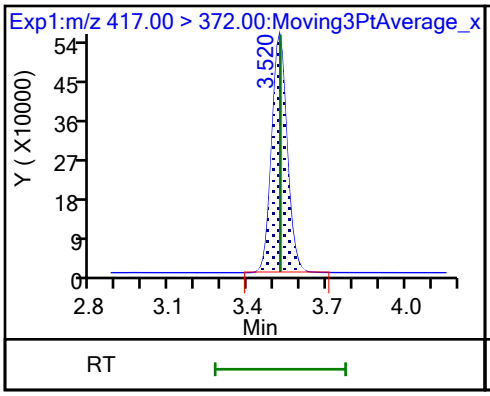
15 Perfluorooctanoic acid (M)



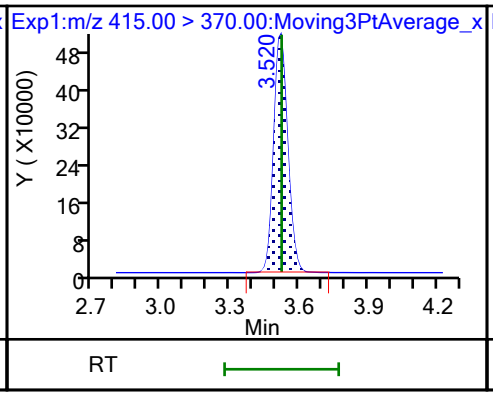
15 Perfluorooctanoic acid (M)



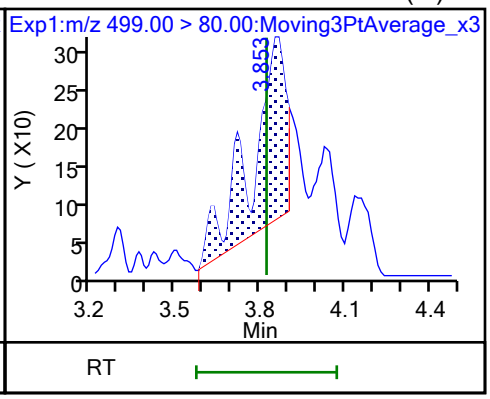
D 14 13C4 PFOA



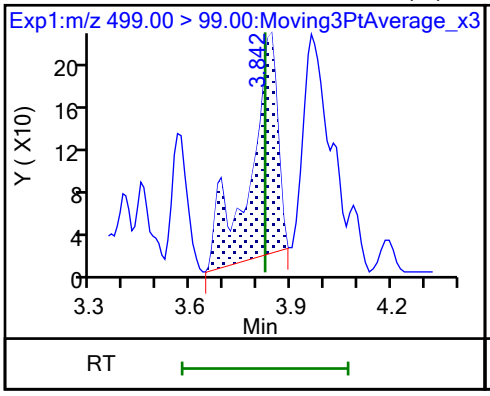
* 62 13C2 PFOA



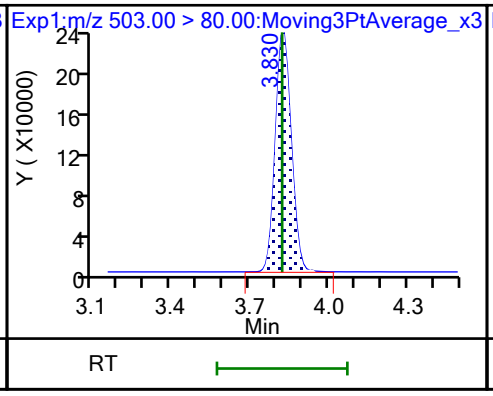
17 Perfluorooctanesulfonic acid (M)



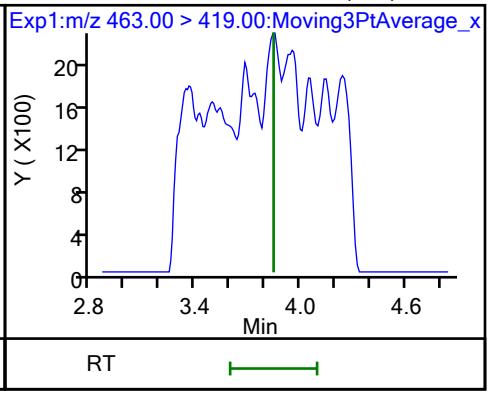
17 Perfluorooctanesulfonic acid (M)



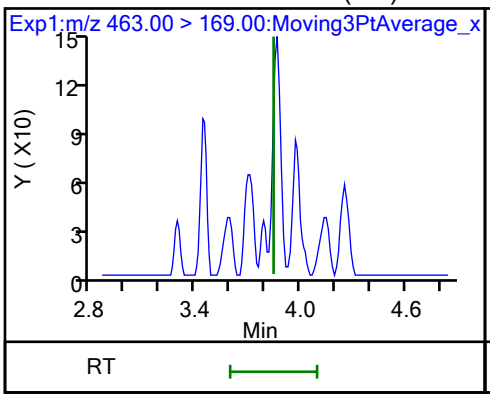
D 18 13C4 PFOS



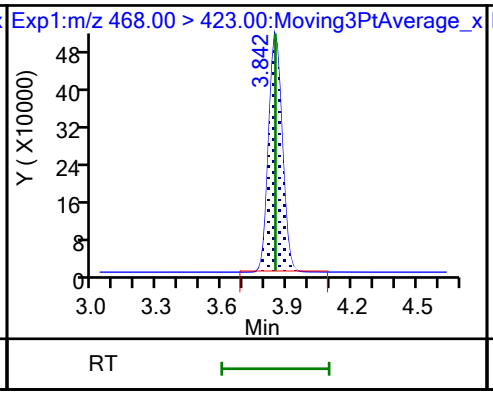
20 Perfluorononanoic acid (ND)



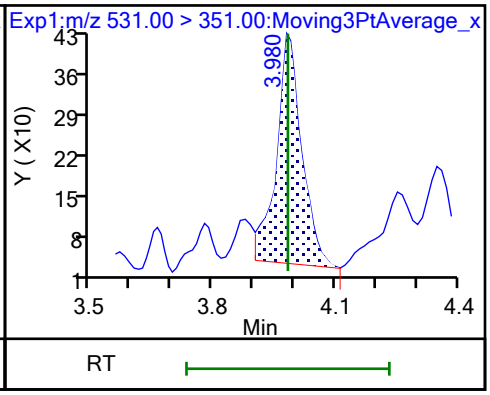
20 Perfluorononanoic acid (ND)



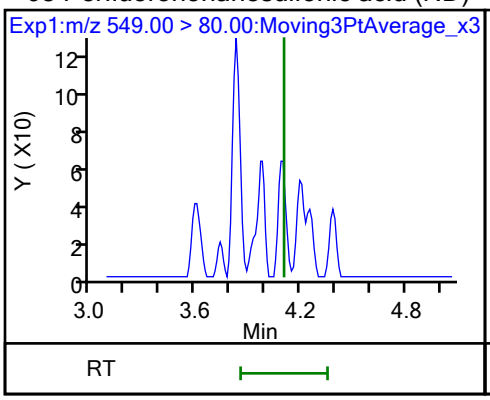
D 19 13C5 PFNA



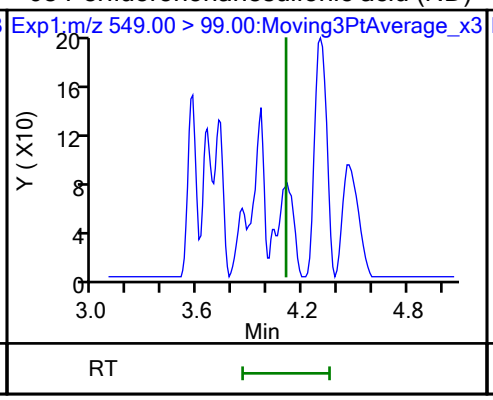
69 9-Chlorohexadecafluoro-3-oxanona (M)



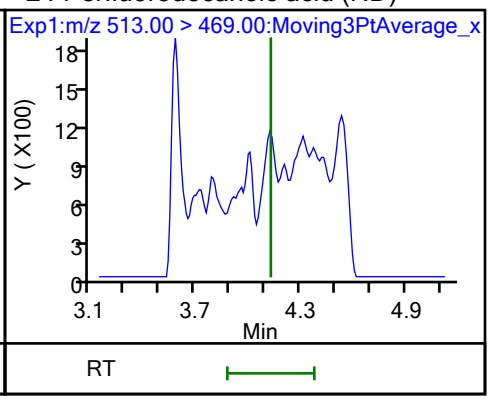
68 Perfluorononanesulfonic acid (ND)



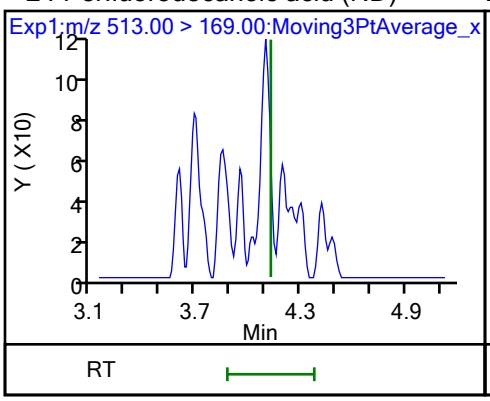
68 Perfluorononanesulfonic acid (ND)



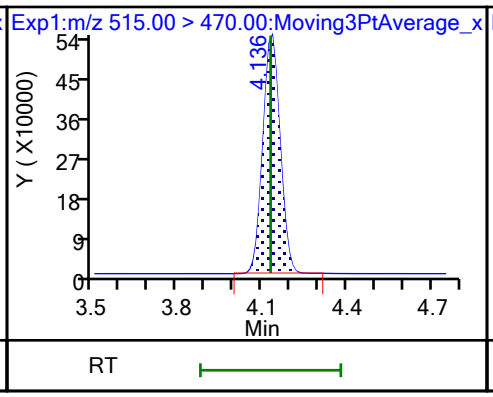
24 Perfluorodecanoic acid (ND)



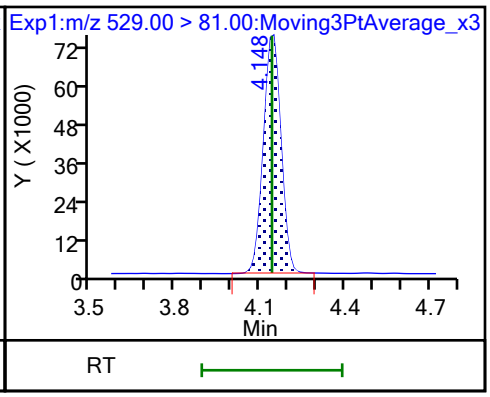
24 Perfluorodecanoic acid (ND)



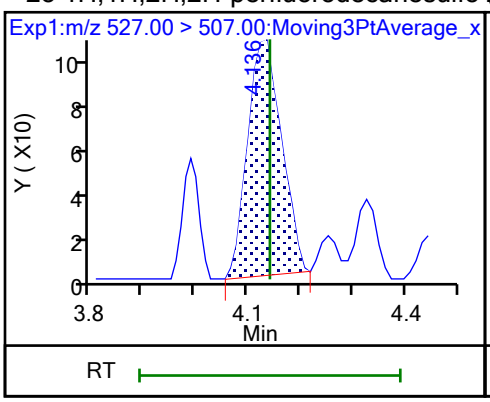
D 23 13C2 PFDA



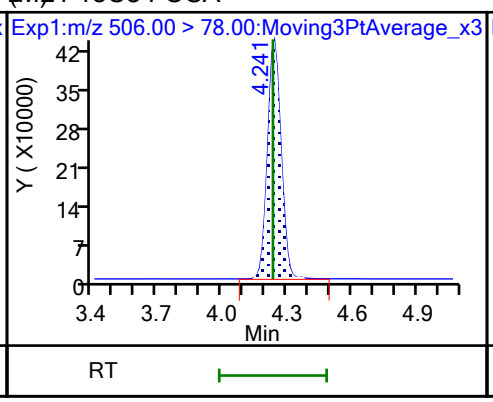
D 26 M2-8:2 FTS



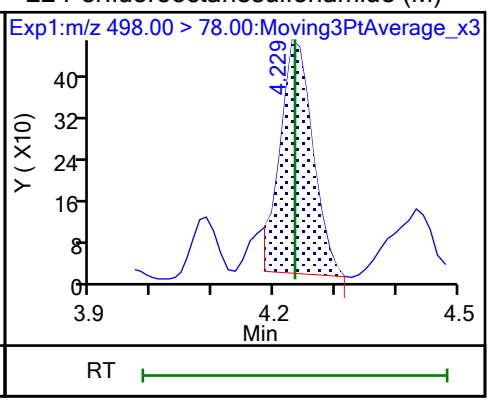
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



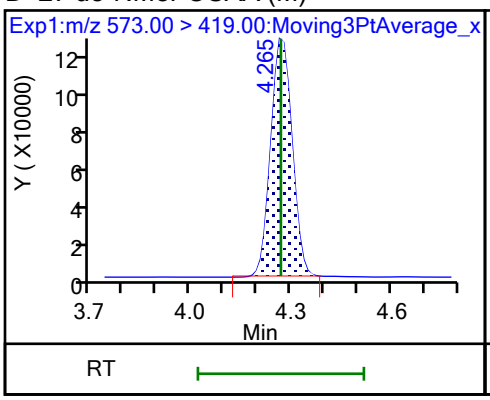
D 21 13C8 FOSA



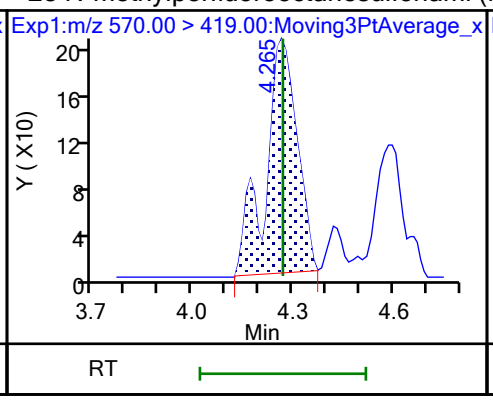
22 Perfluorooctanesulfonamide (M)



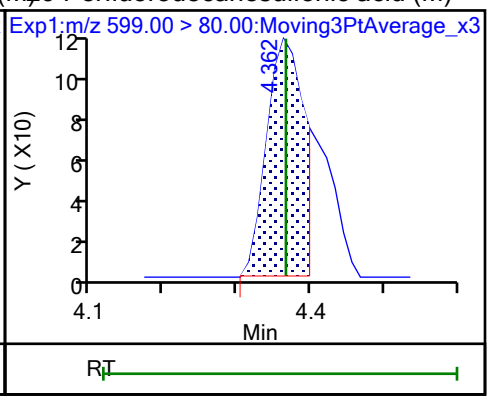
D 27 d3-NMeFOSAA (M)



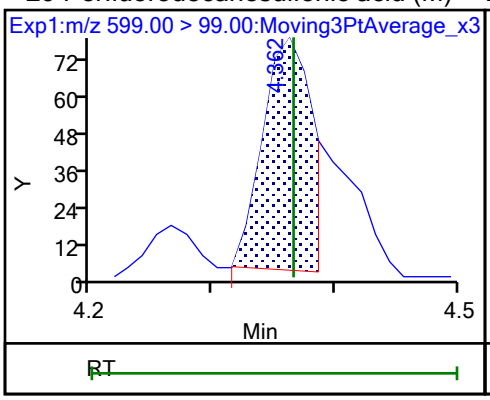
28 N-methylperfluorooctanesulfonami (M)



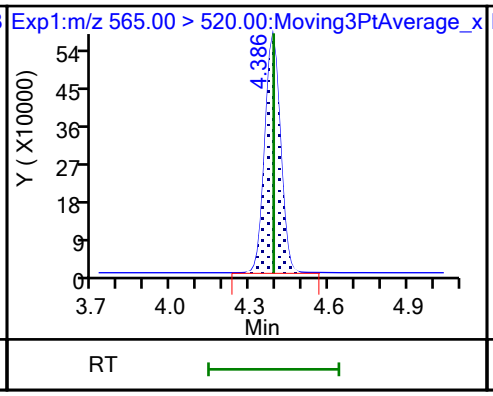
29 Perfluorodecanesulfonic acid (M)



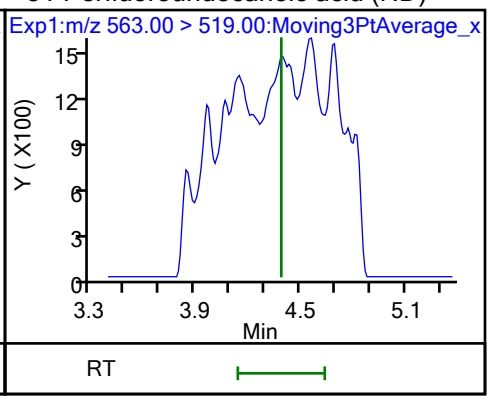
29 Perfluorodecanesulfonic acid (M)



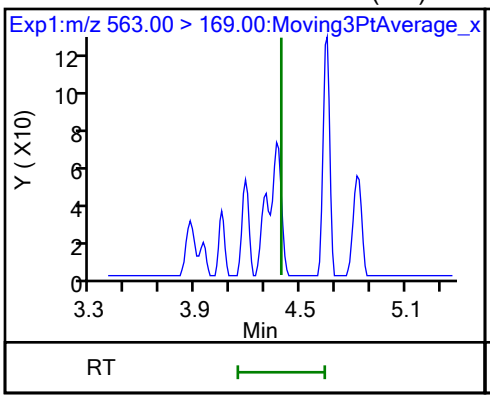
D 30 13C2 PFUnA



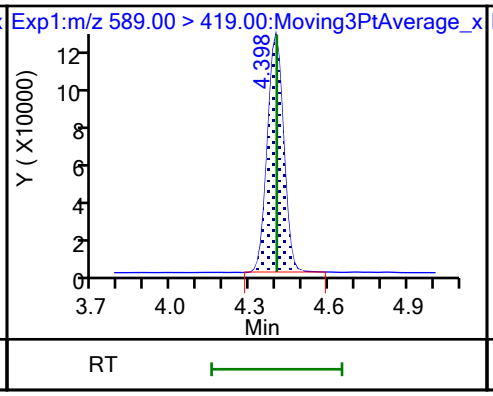
31 Perfluoroundecanoic acid (ND)



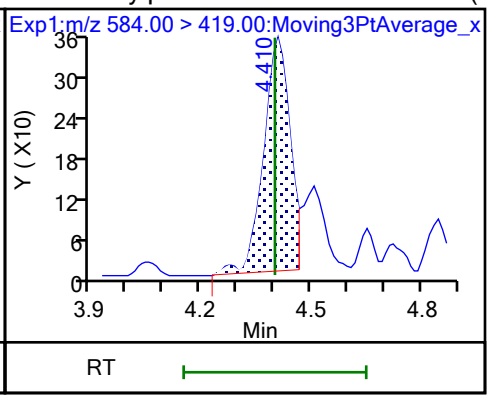
31 Perfluoroundecanoic acid (ND)



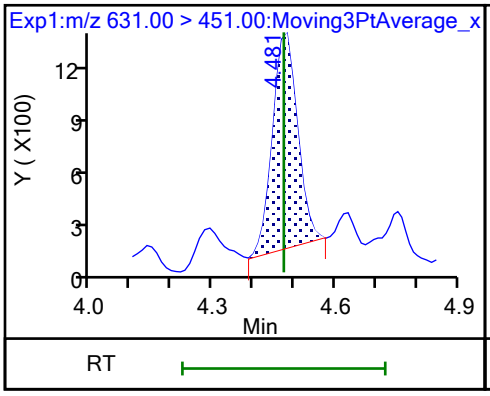
D 32 d5-NEtFOSAA



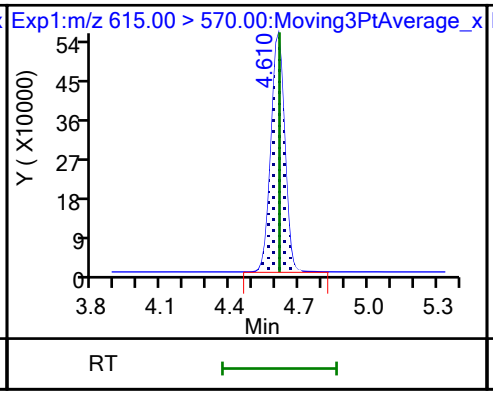
33 N-ethylperfluorooctanesulfonamid (M)



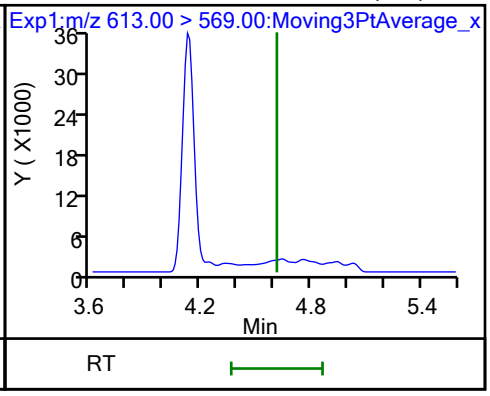
66 11-Chloroeicosafluoro-3-oxaundec



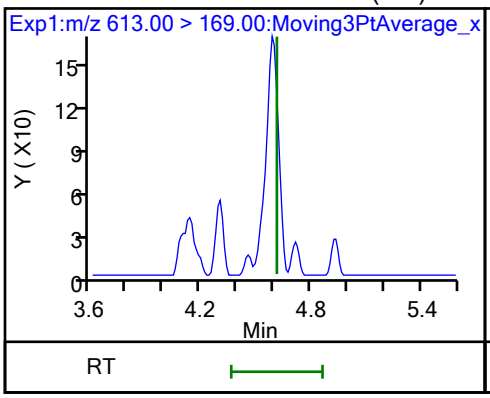
D 36 13C2 PFDoA



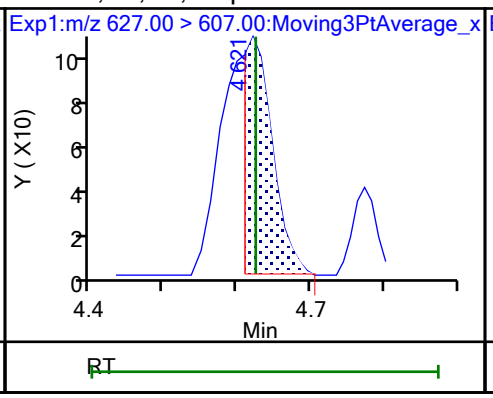
37 Perfluorododecanoic acid (ND)



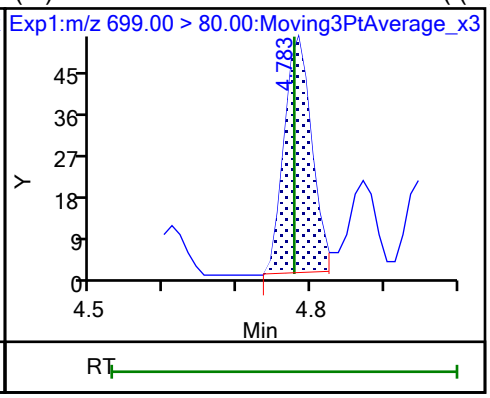
37 Perfluorododecanoic acid (ND)



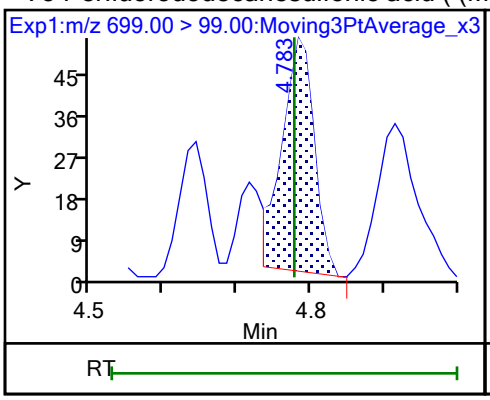
74 1H,1H,2H,2H-perfluorododecanesul (M)



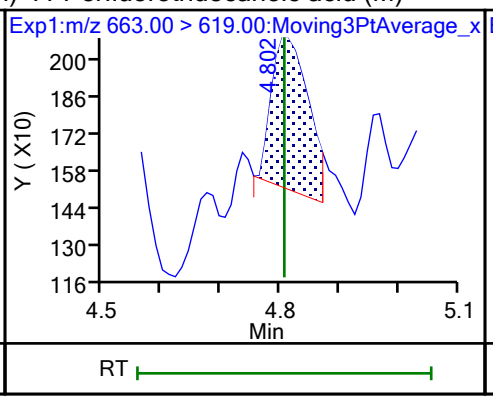
75 Perfluorododecanesulfonic acid ((M)



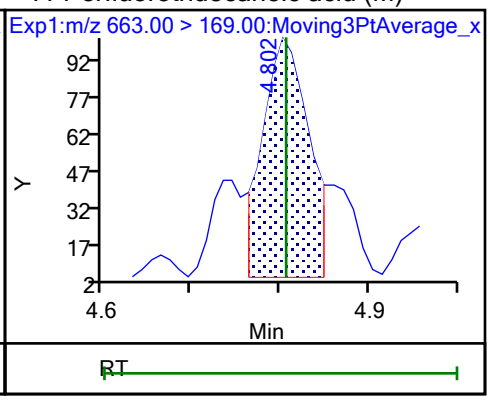
75 Perfluorododecanesulfonic acid ((M)



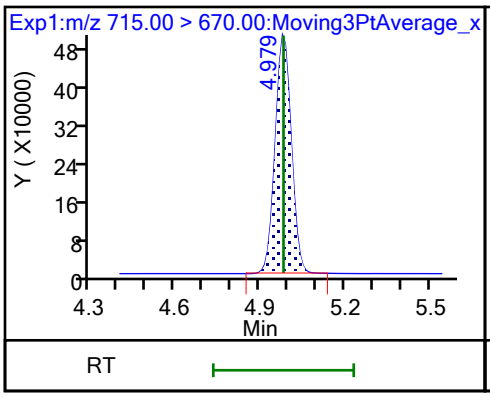
41 Perfluorotridecanoic acid (M)



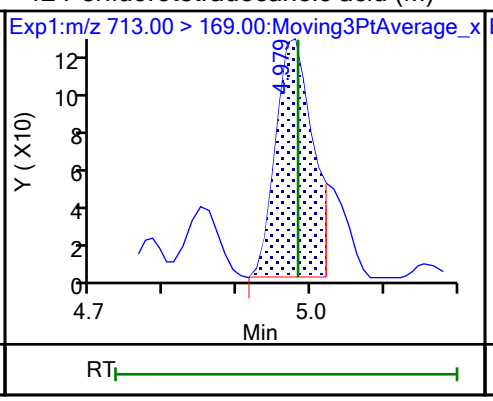
41 Perfluorotridecanoic acid (M)



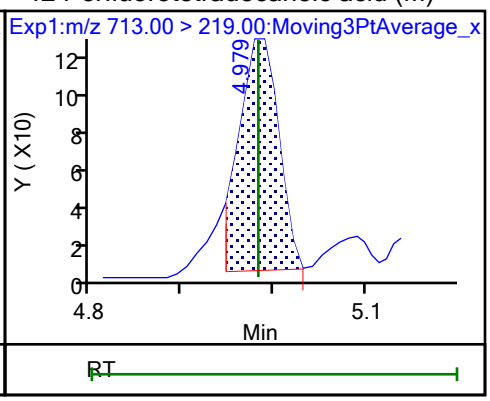
D 43 13C2 PFTeDA



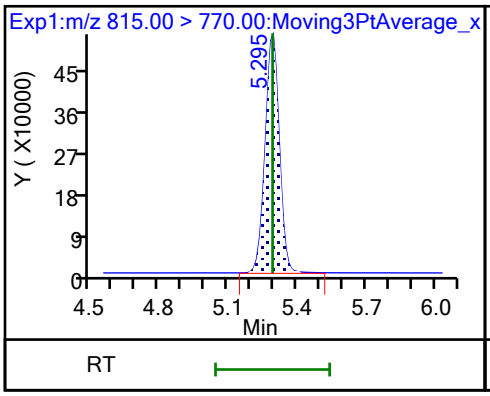
42 Perfluorotetradecanoic acid (M)



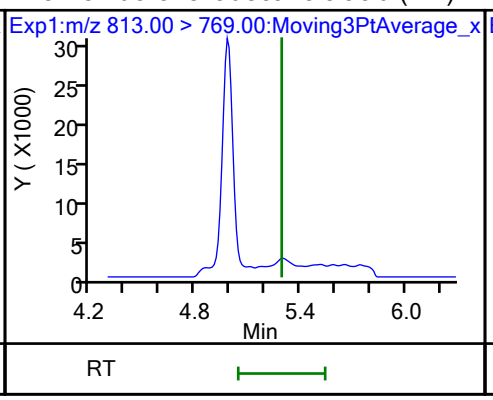
42 Perfluorotetradecanoic acid (M)



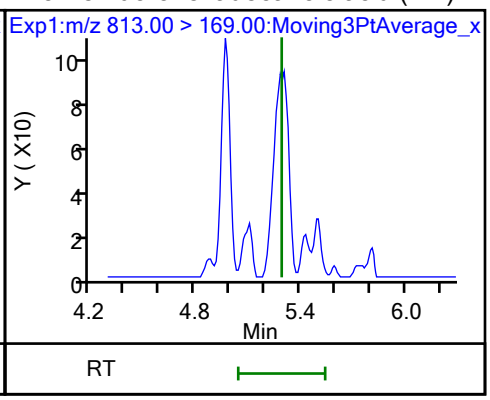
D 44 13C2 PFHxDA



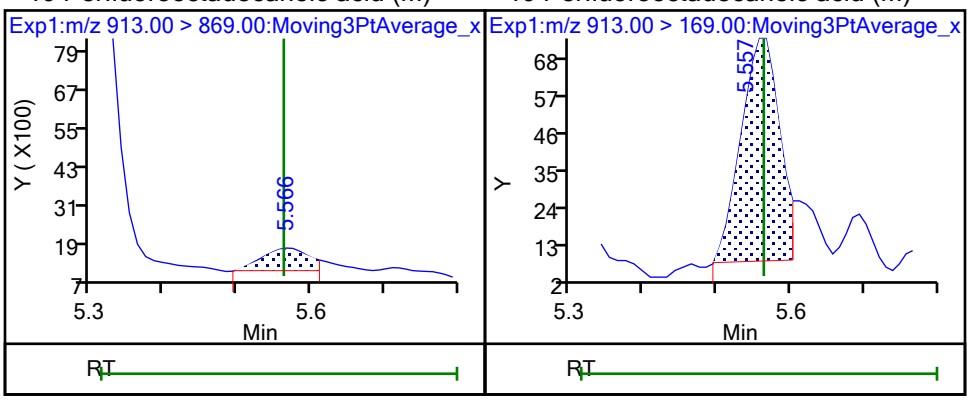
45 Perfluorohexadecanoic acid (ND)



45 Perfluorohexadecanoic acid (ND)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

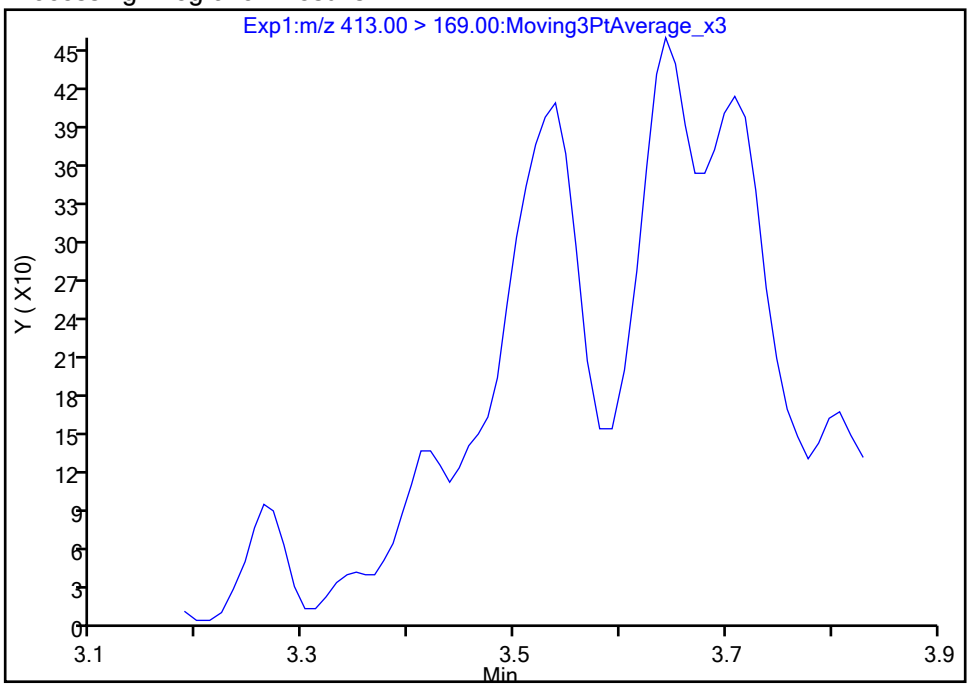
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

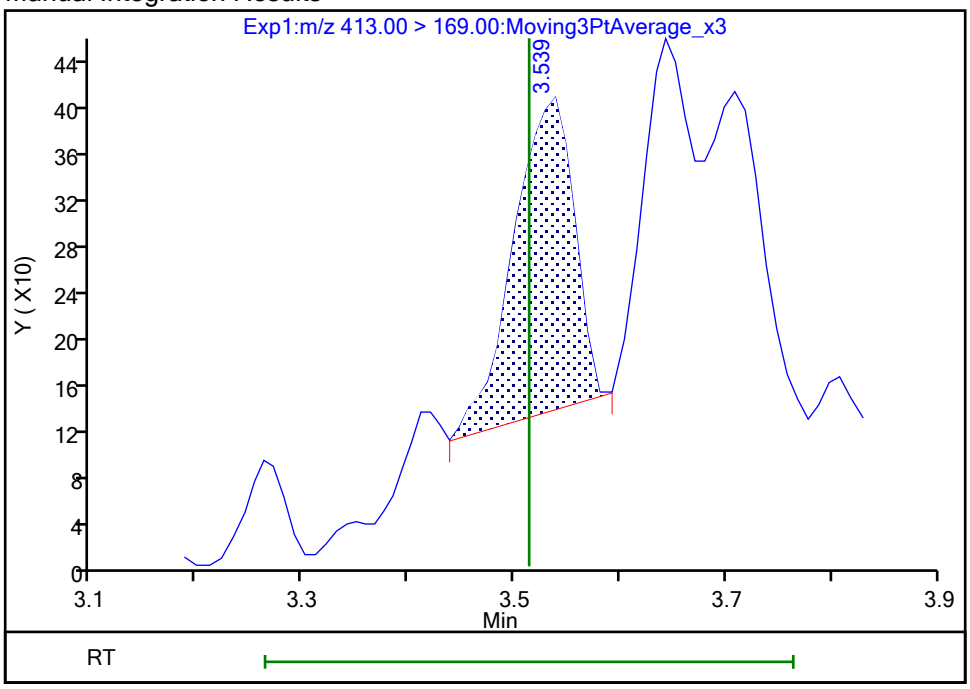
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.54
Area: 1053
Amount: 0.004346
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

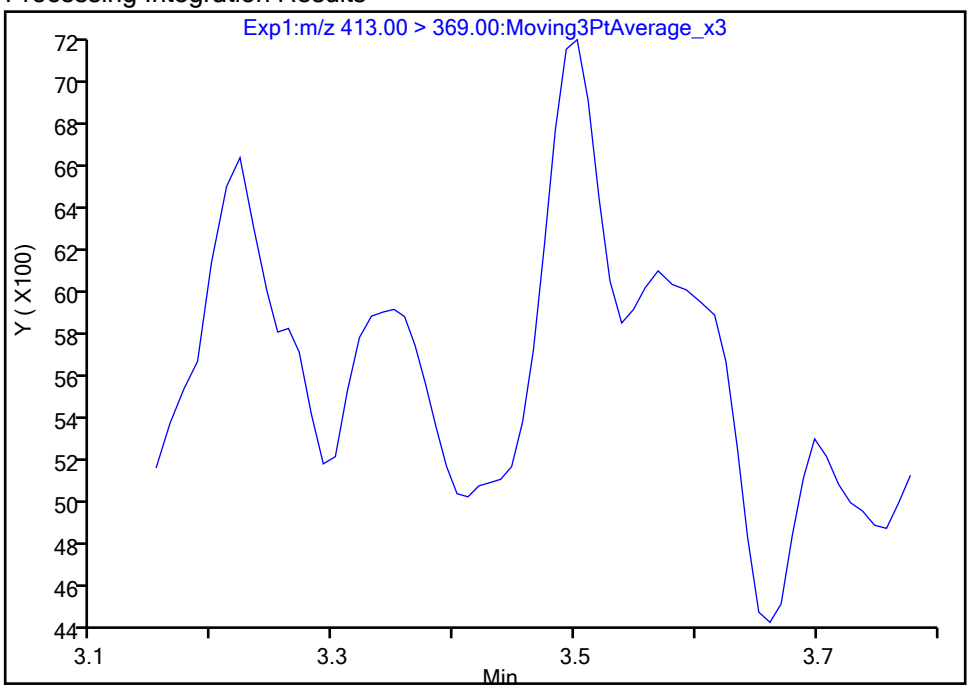
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

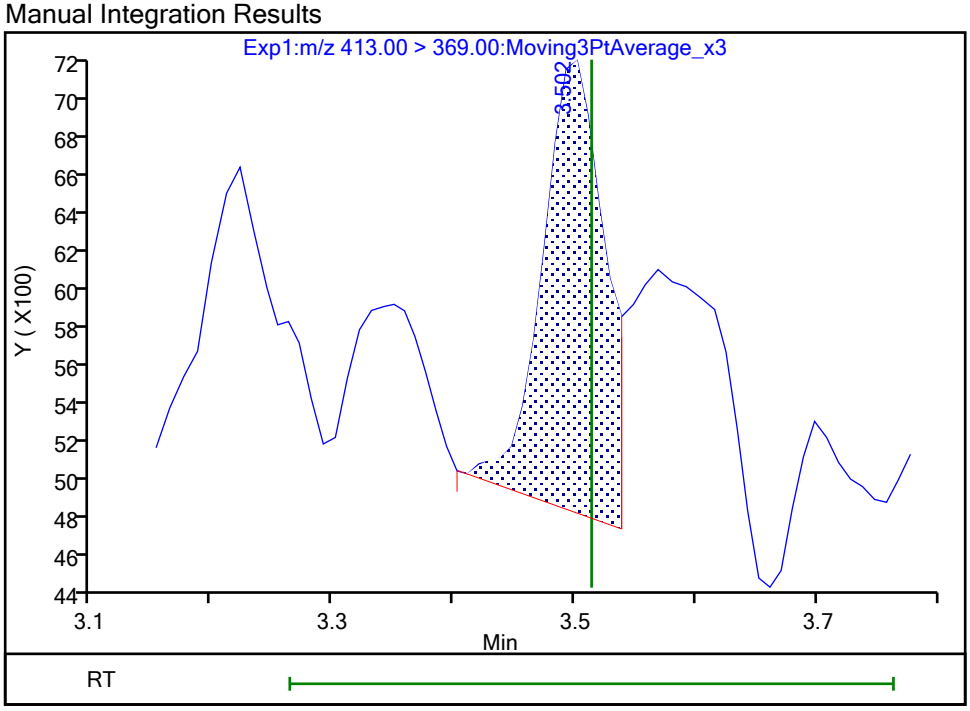
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.50
Area: 8385
Amount: 0.004346
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

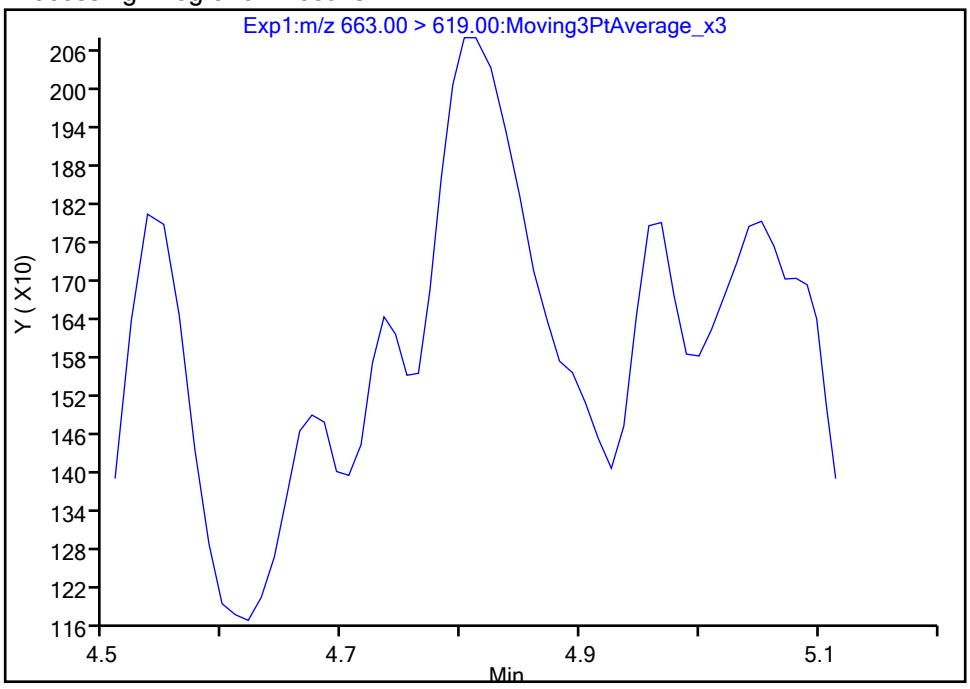
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

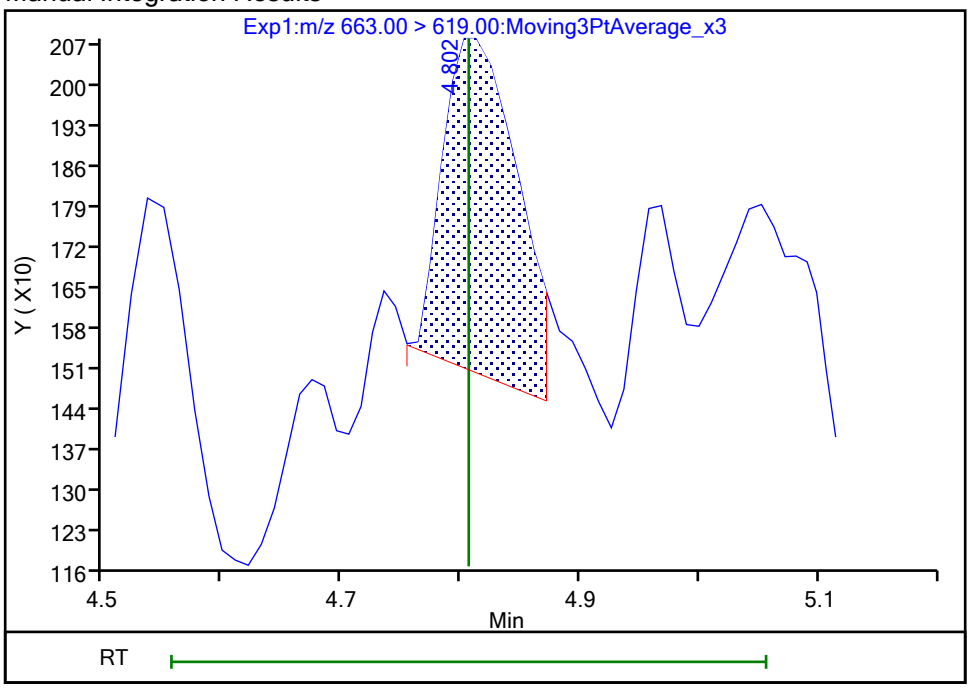
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.80
Area: 2496
Amount: 0.001272
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:05:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

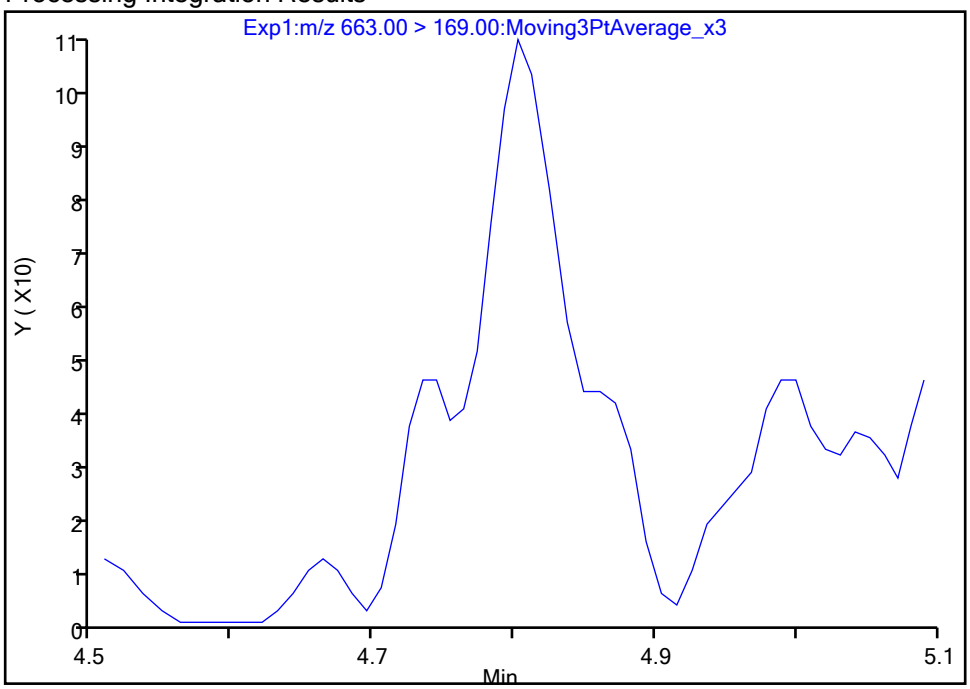
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

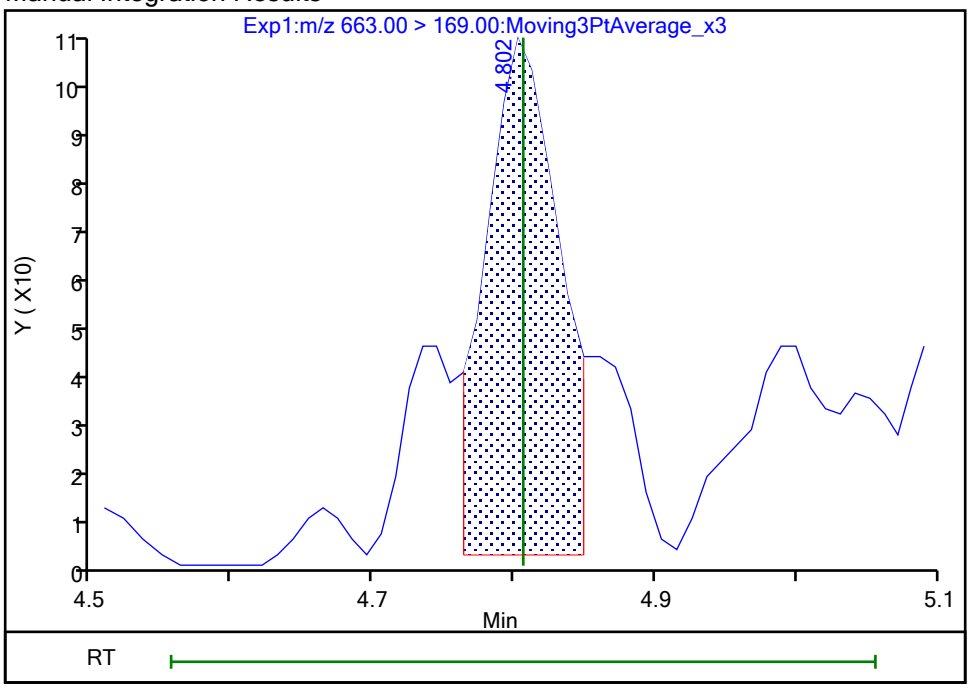
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.80
Area: 350
Amount: 0.001272
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:05:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

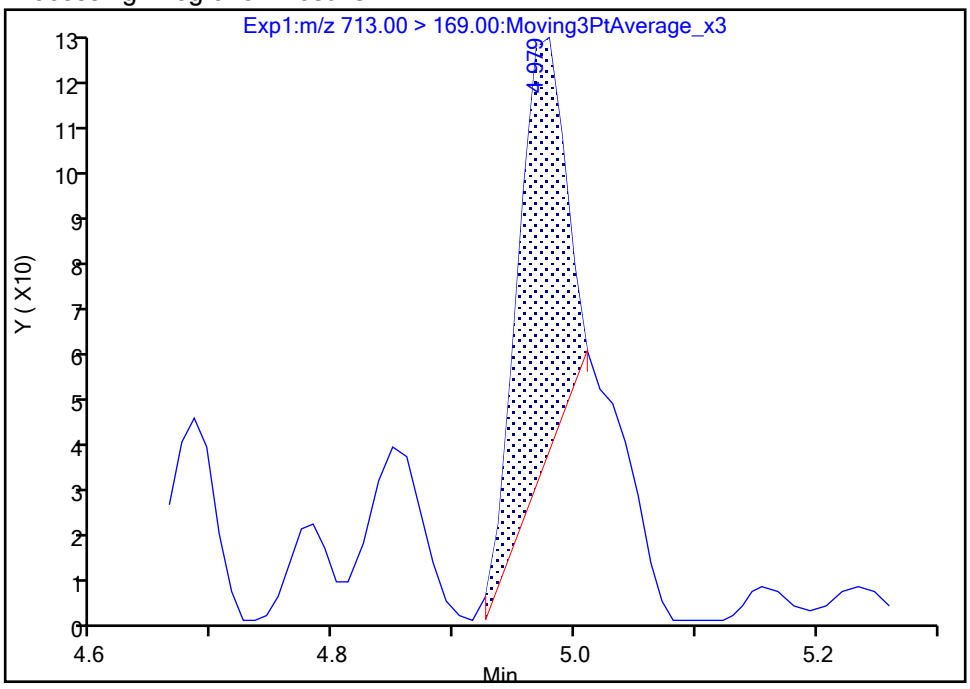
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

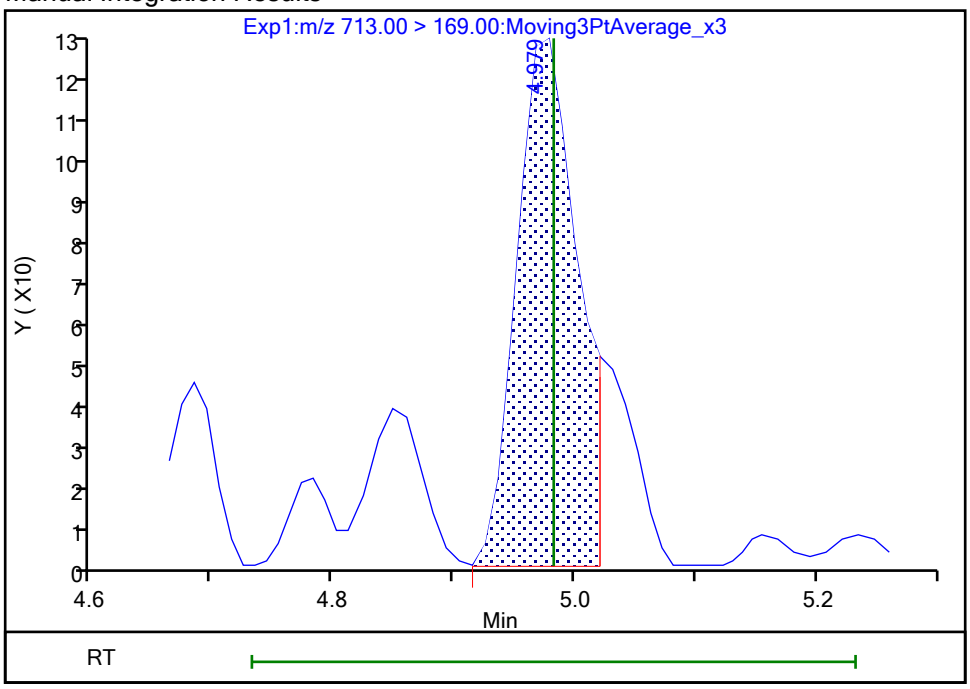
Processing Integration Results

RT: 4.98
Area: 242
Amount: 0.001350
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 417
Amount: 0.002326
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:05:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

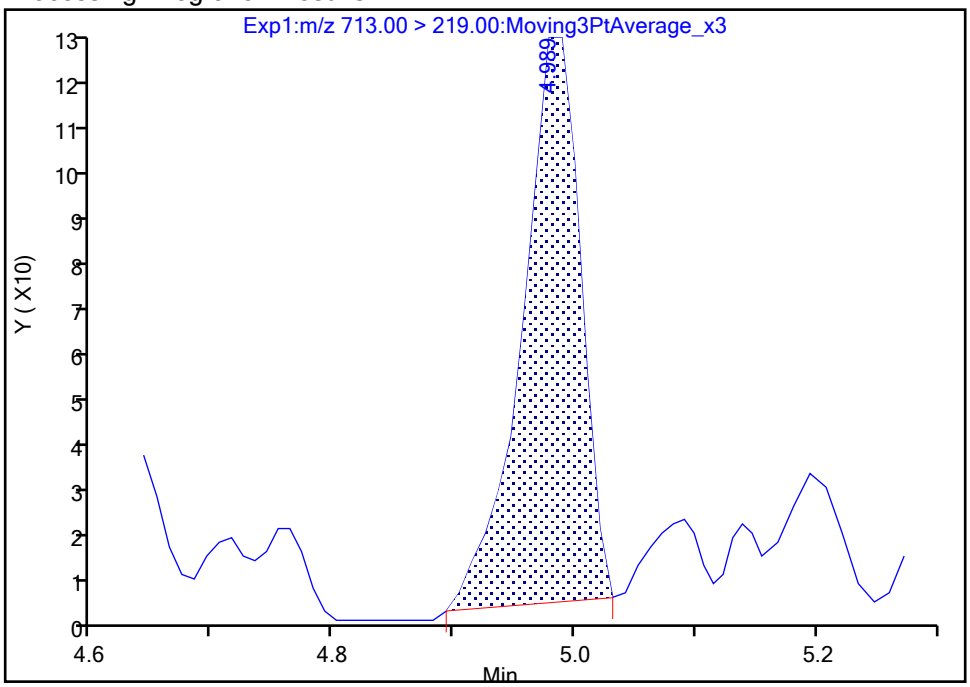
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

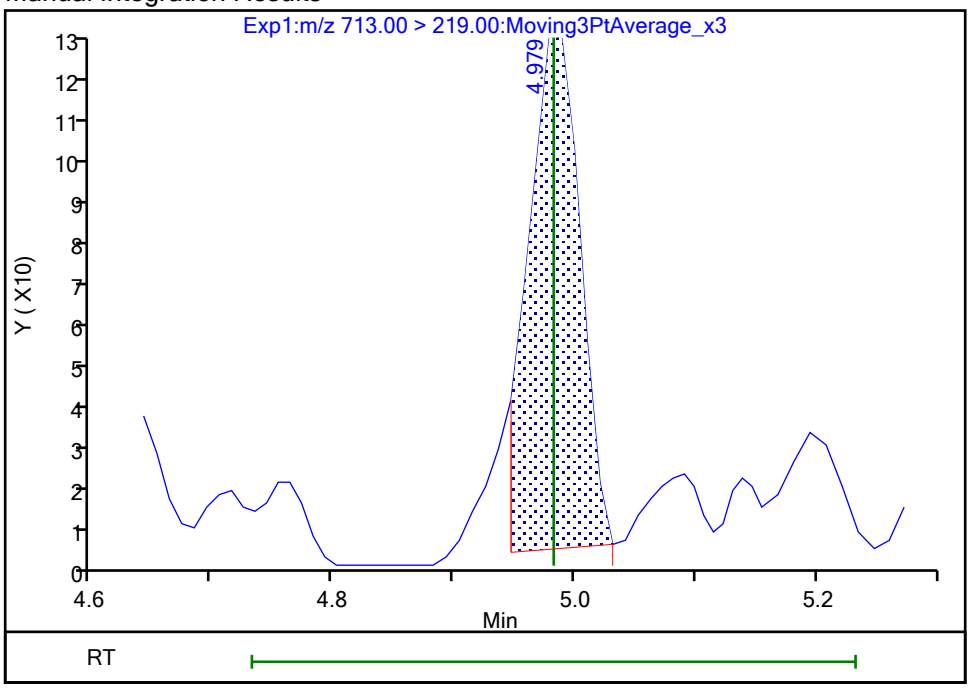
Processing Integration Results

RT: 4.99
Area: 413
Amount: 0.001350
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 367
Amount: 0.002326
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:05:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

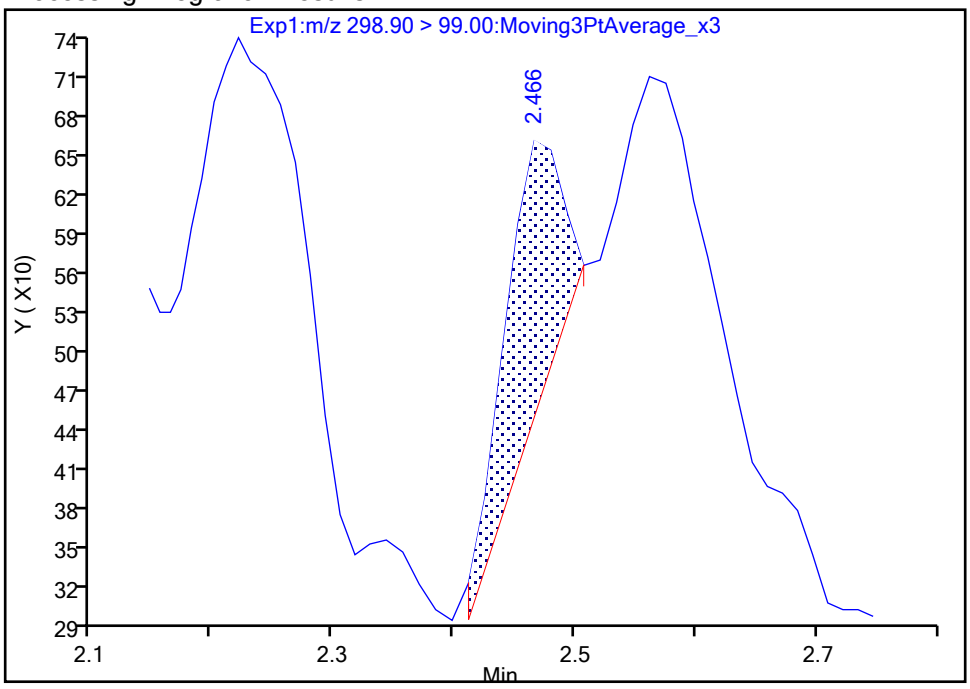
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

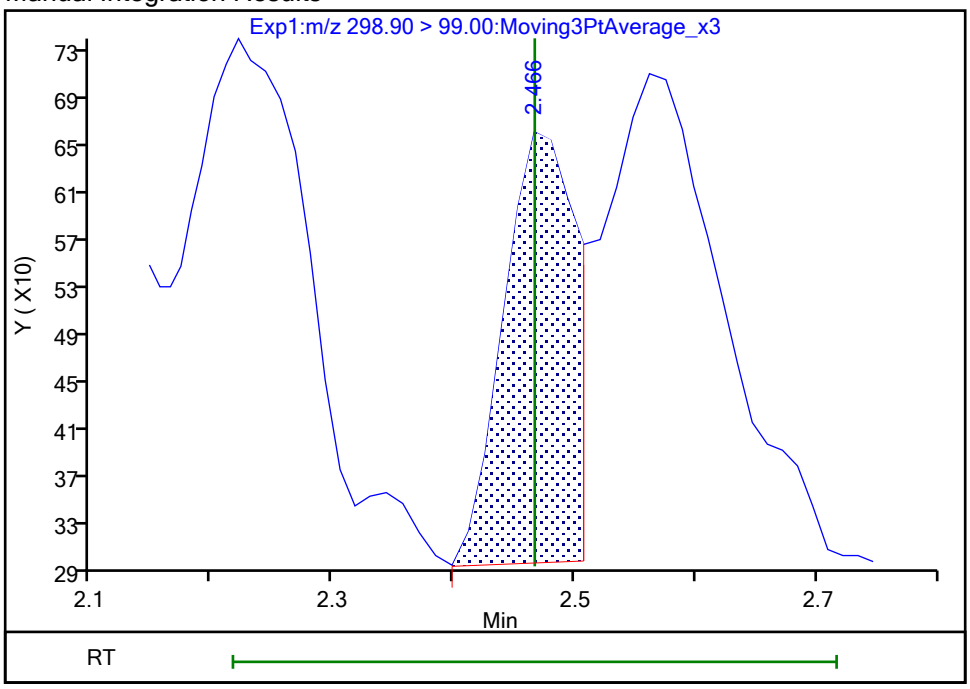
Processing Integration Results

RT: 2.47
Area: 666
Amount: 0.001817
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1423
Amount: 0.001221
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:02:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

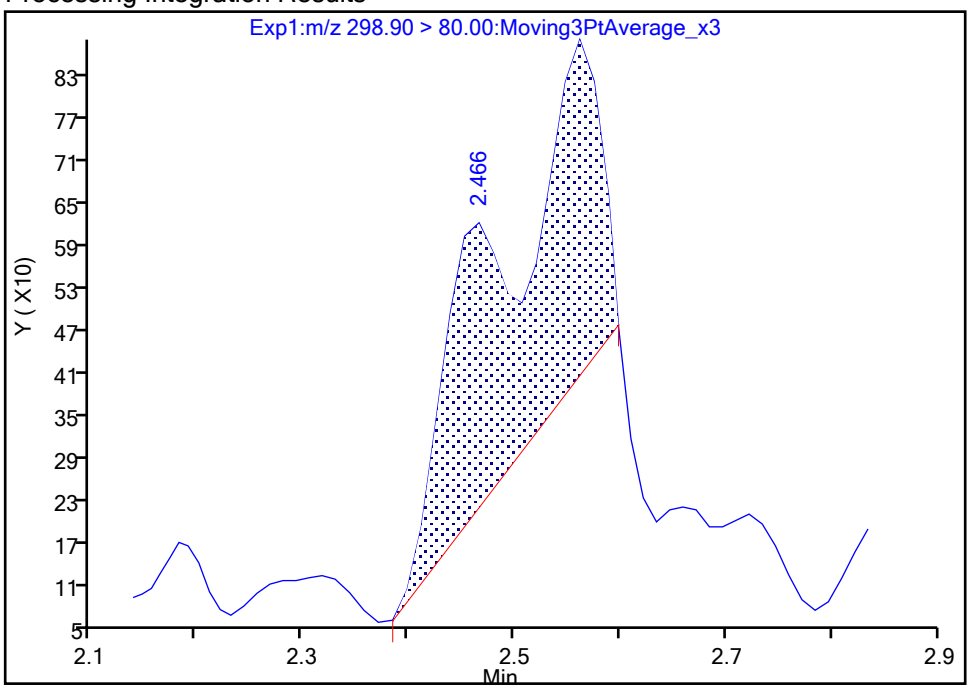
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

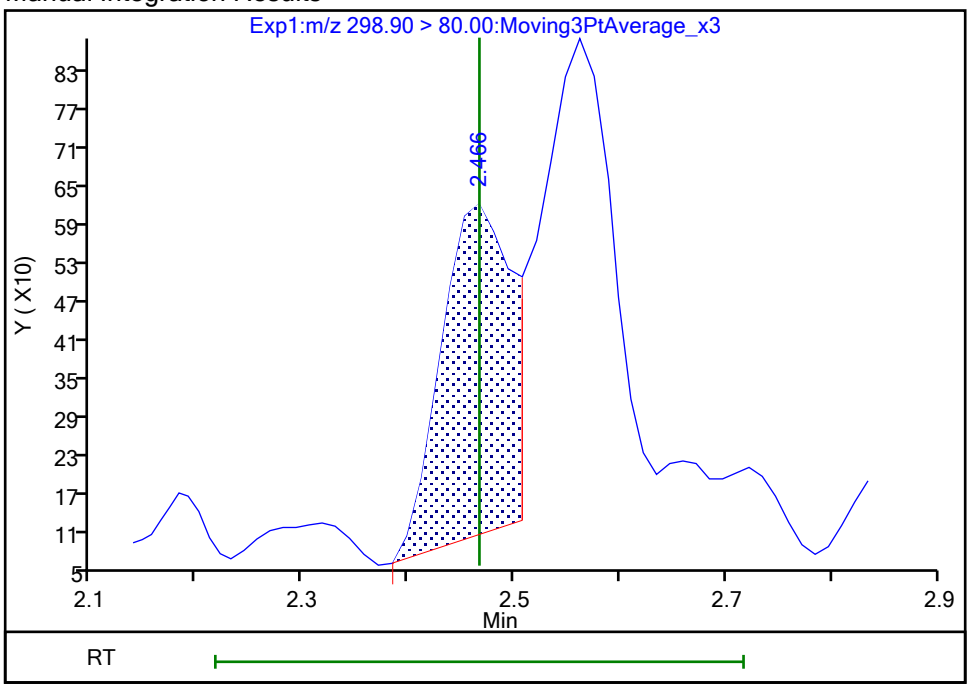
Processing Integration Results

RT: 2.47
Area: 3525
Amount: 0.001817
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2369
Amount: 0.001221
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:02:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

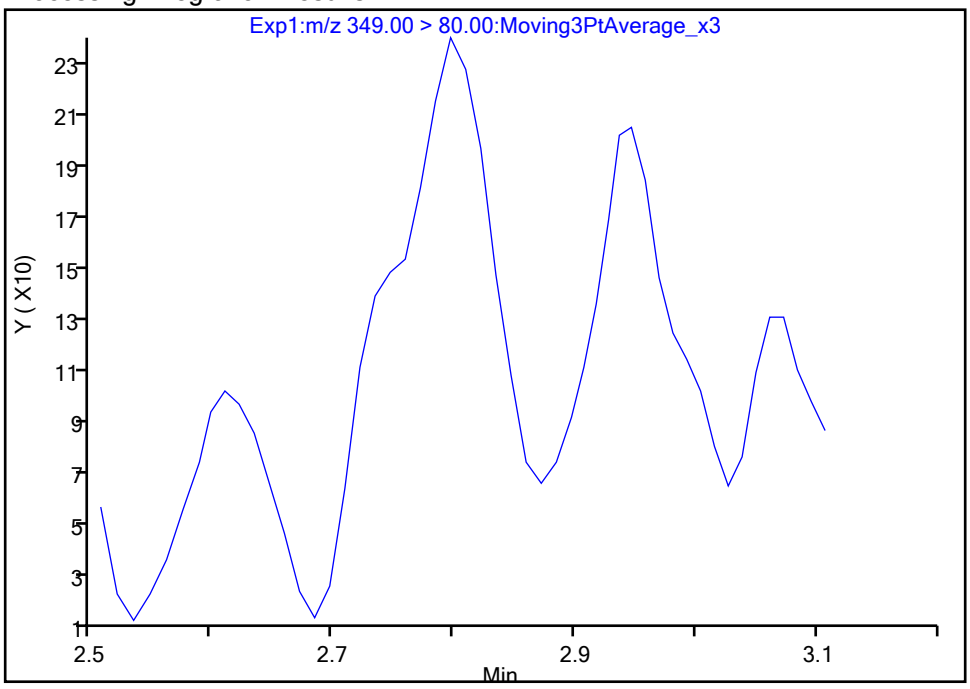
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

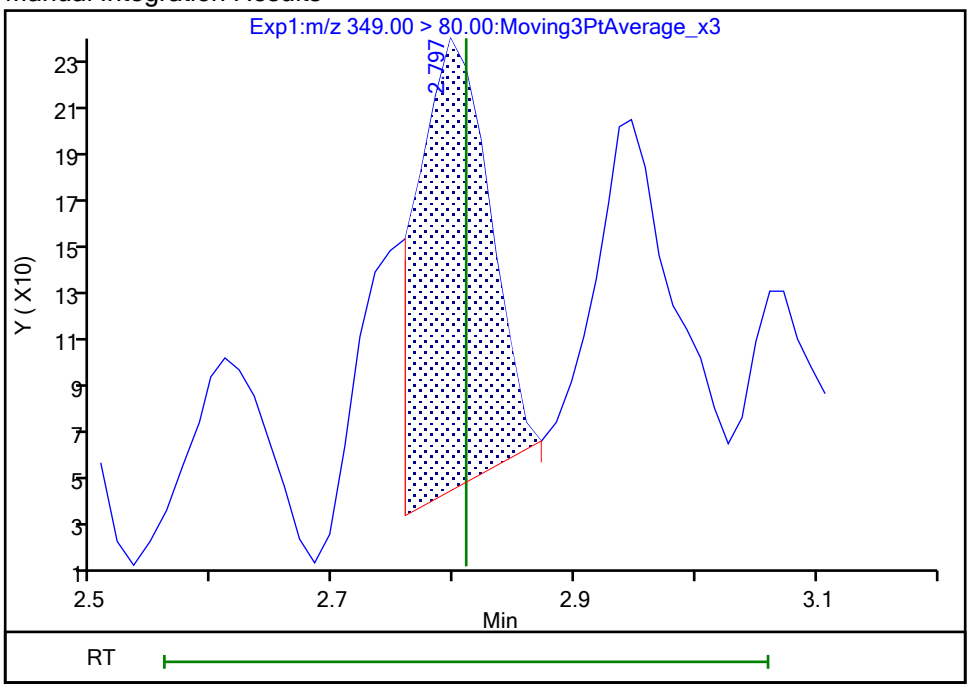
Not Detected
Expected RT: 2.81

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 765
Amount: 0.000449
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:02:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

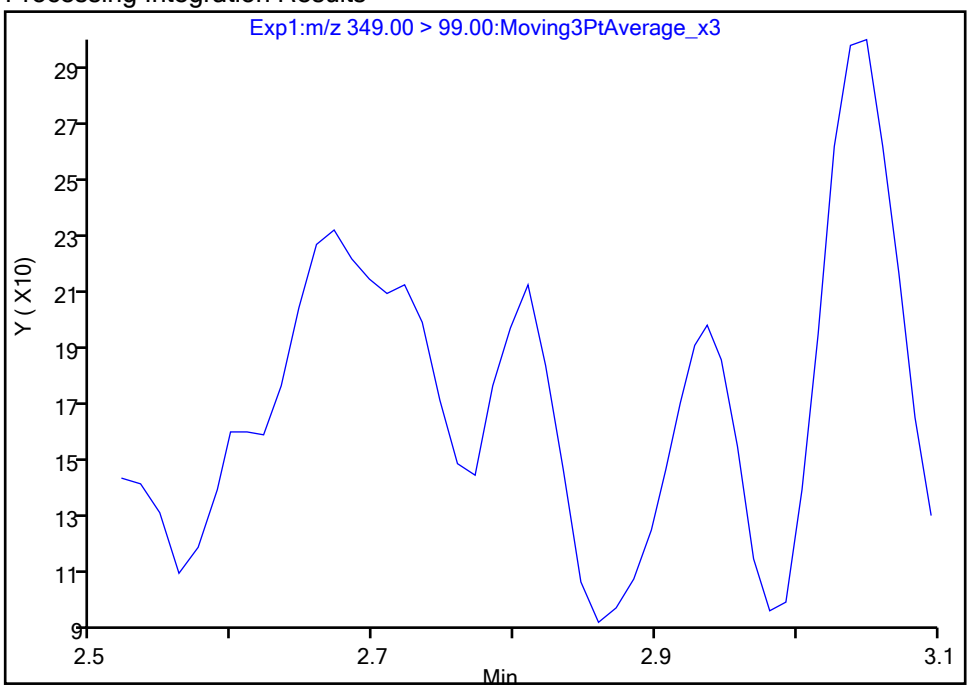
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

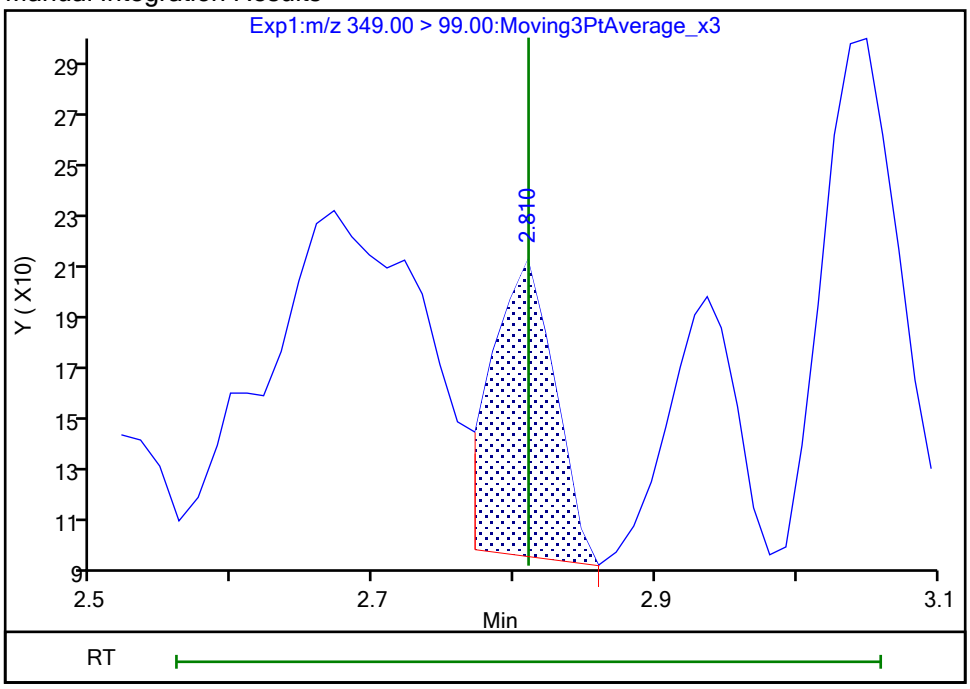
Not Detected
Expected RT: 2.81

Processing Integration Results



Manual Integration Results

RT: 2.81
Area: 346
Amount: 0.000449
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:02:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

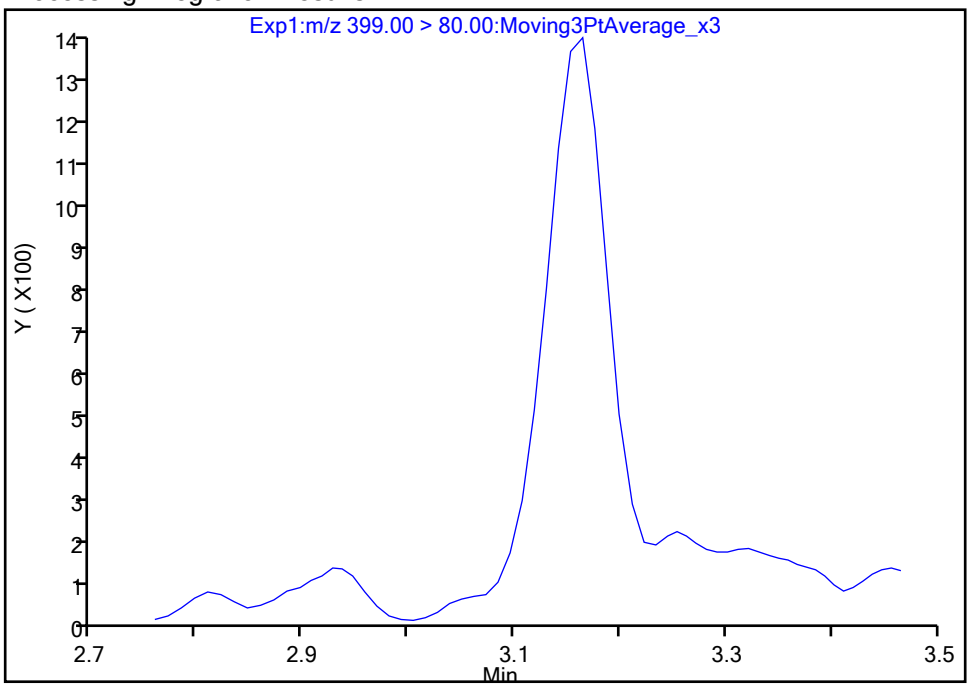
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

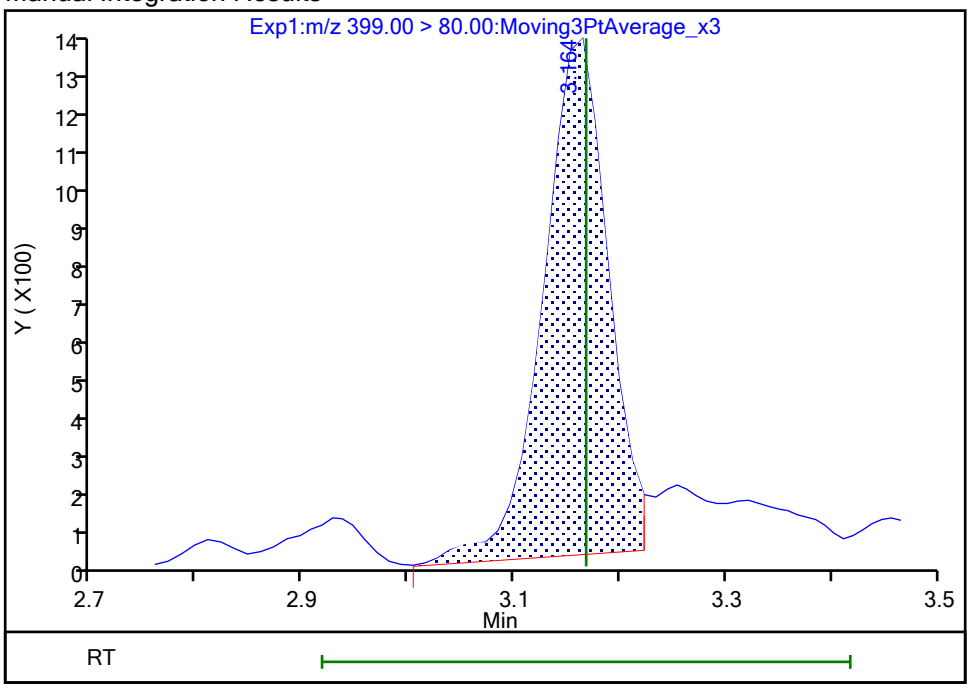
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 5508
Amount: 0.003818
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

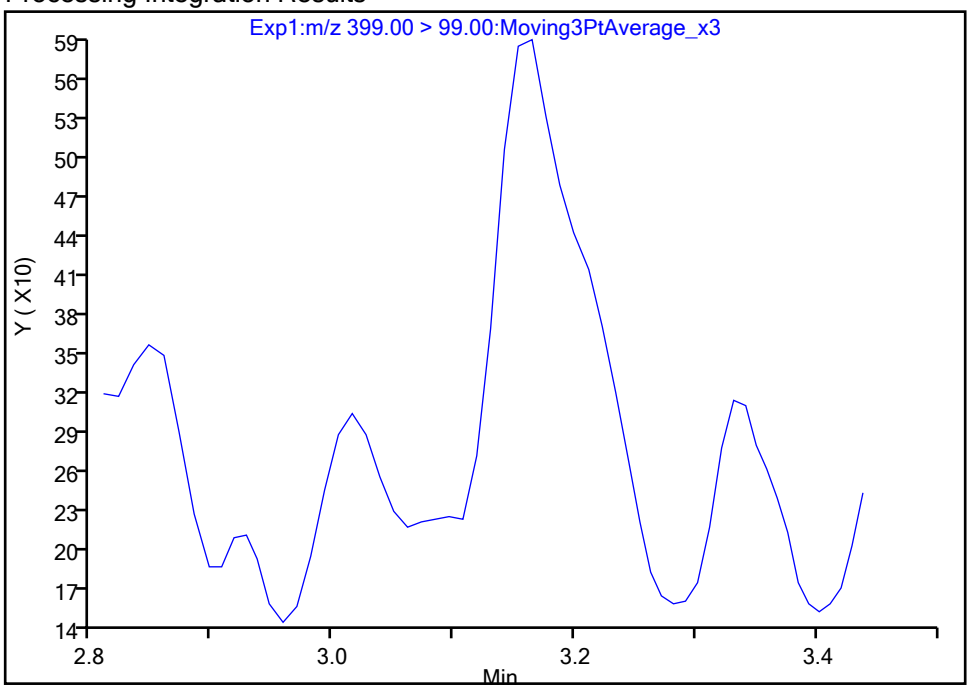
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

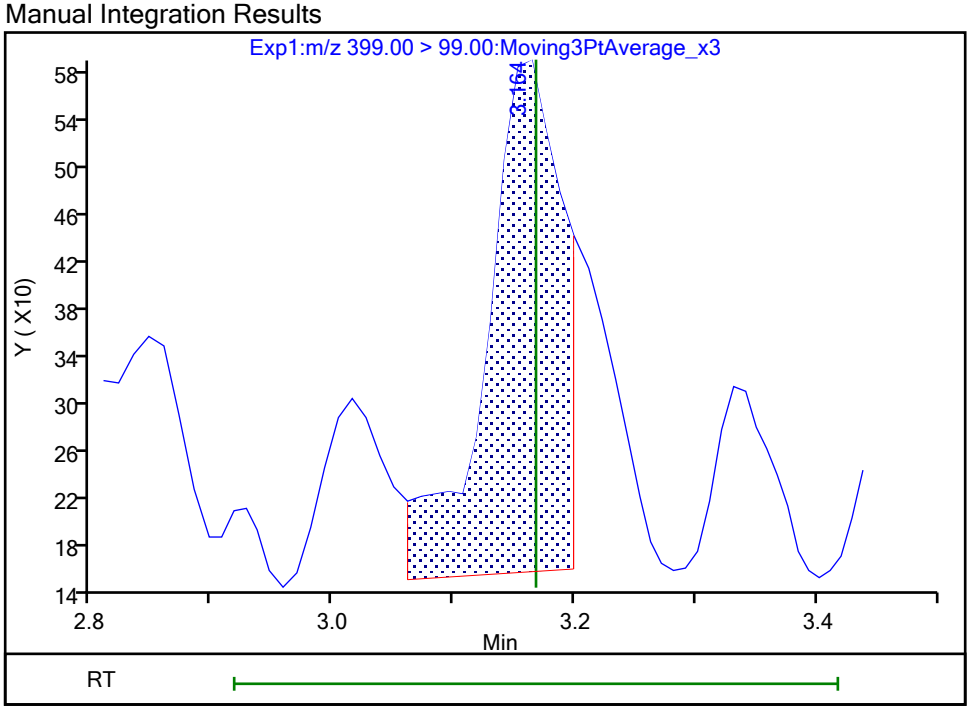
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 1838
Amount: 0.003818
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

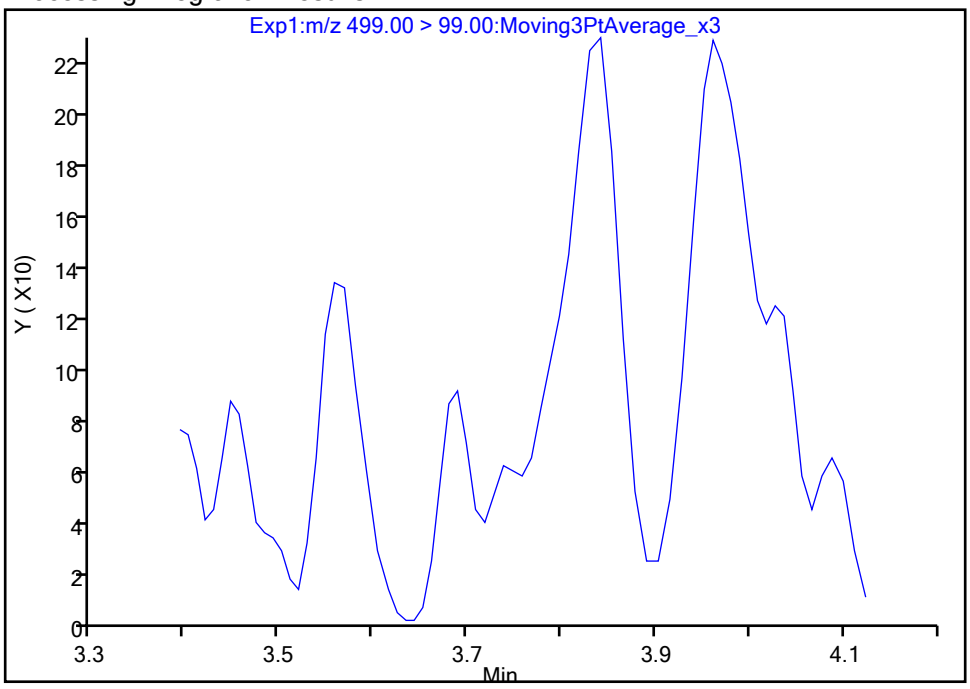
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

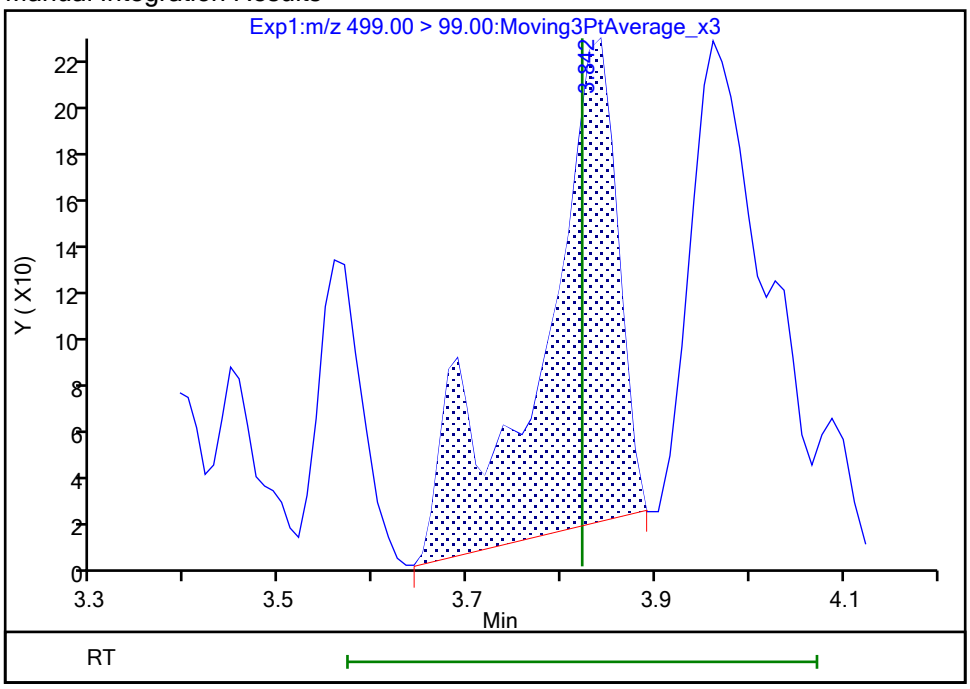
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 1189
Amount: 0.002114
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

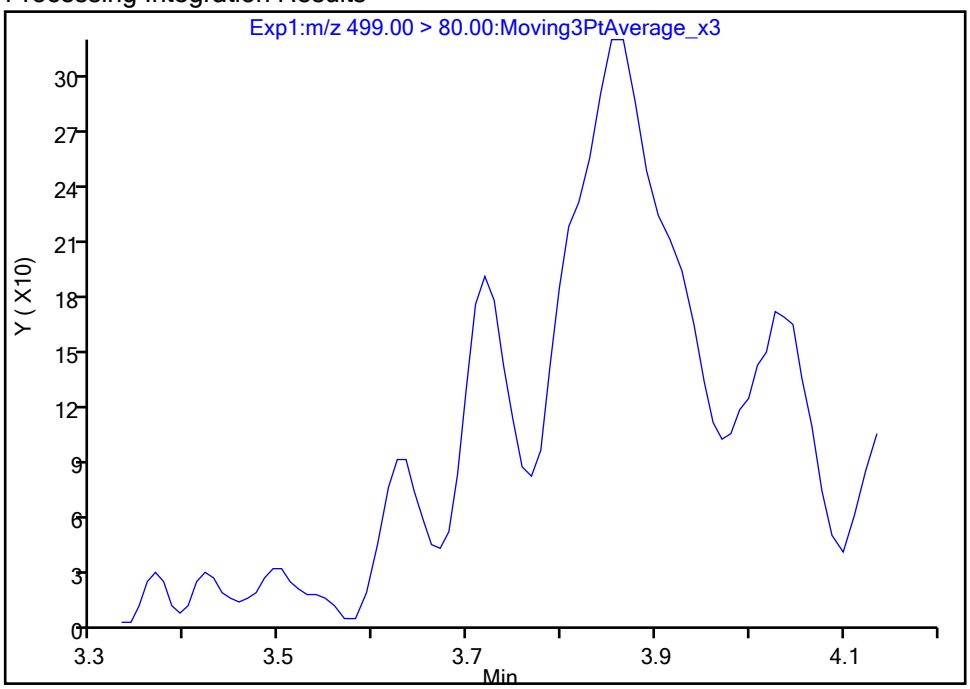
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

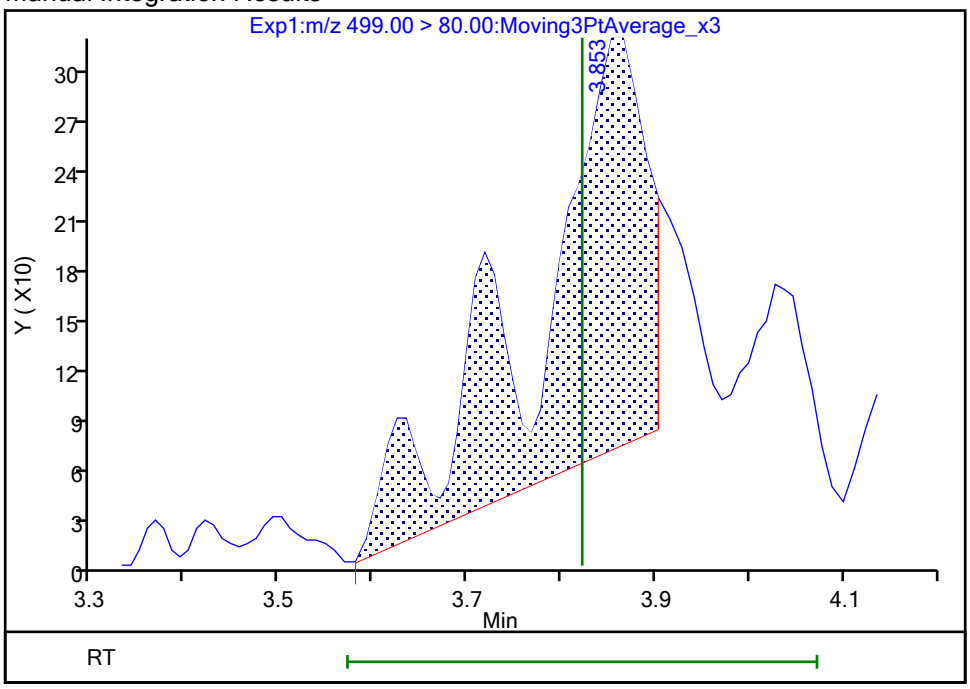
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.85
Area: 2045
Amount: 0.002114
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

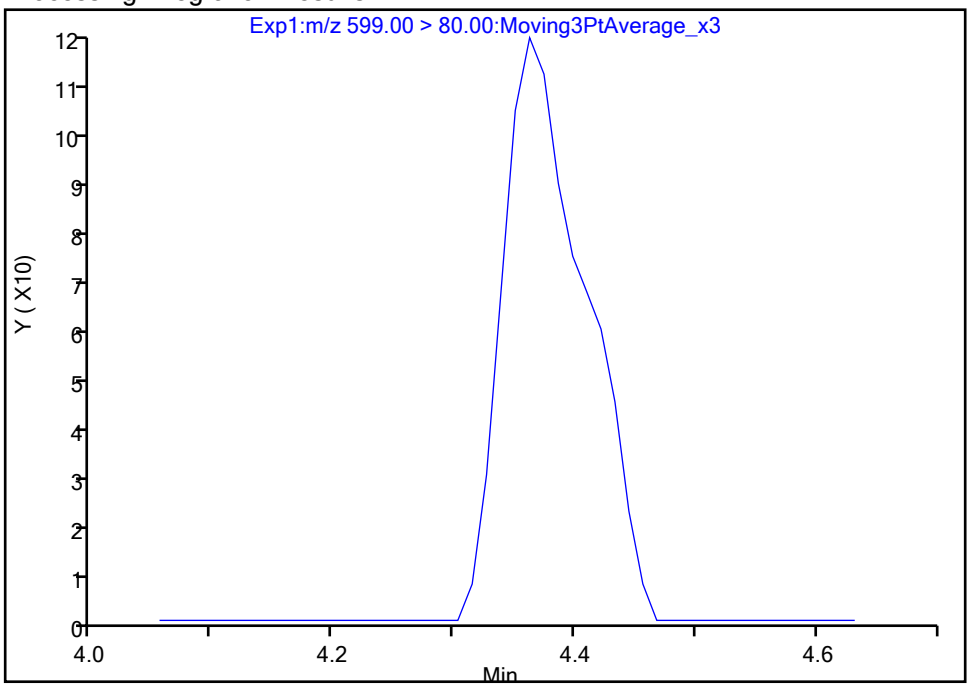
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

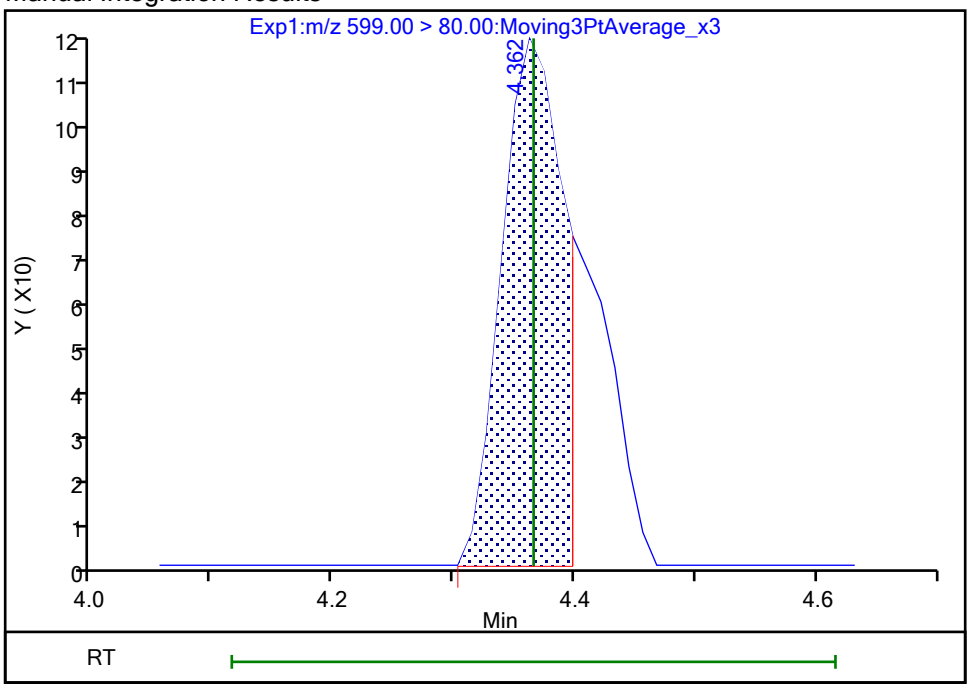
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 379
Amount: 0.000669
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

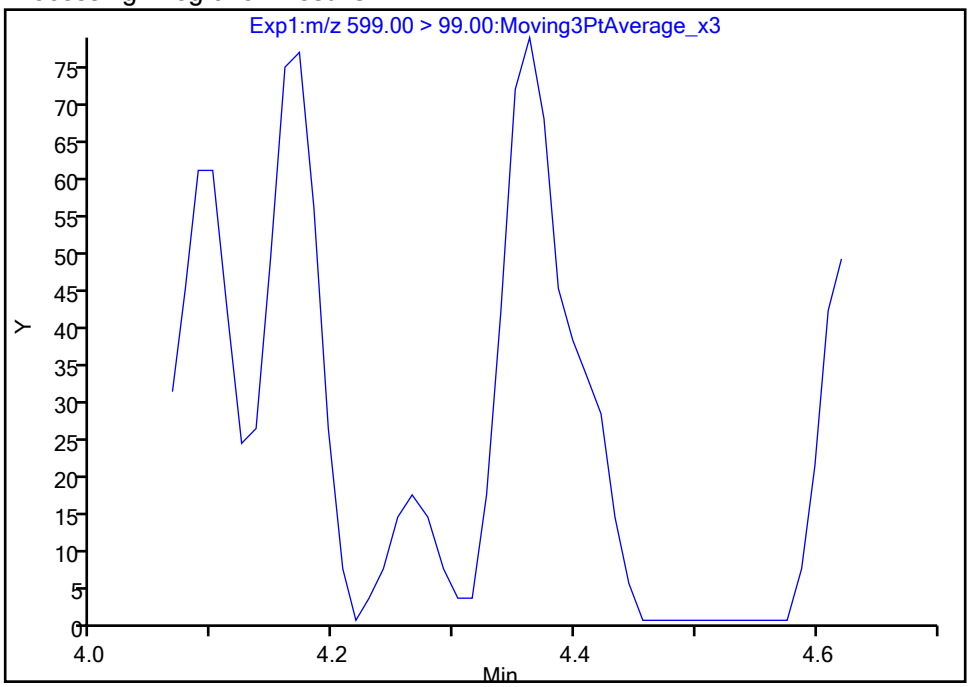
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

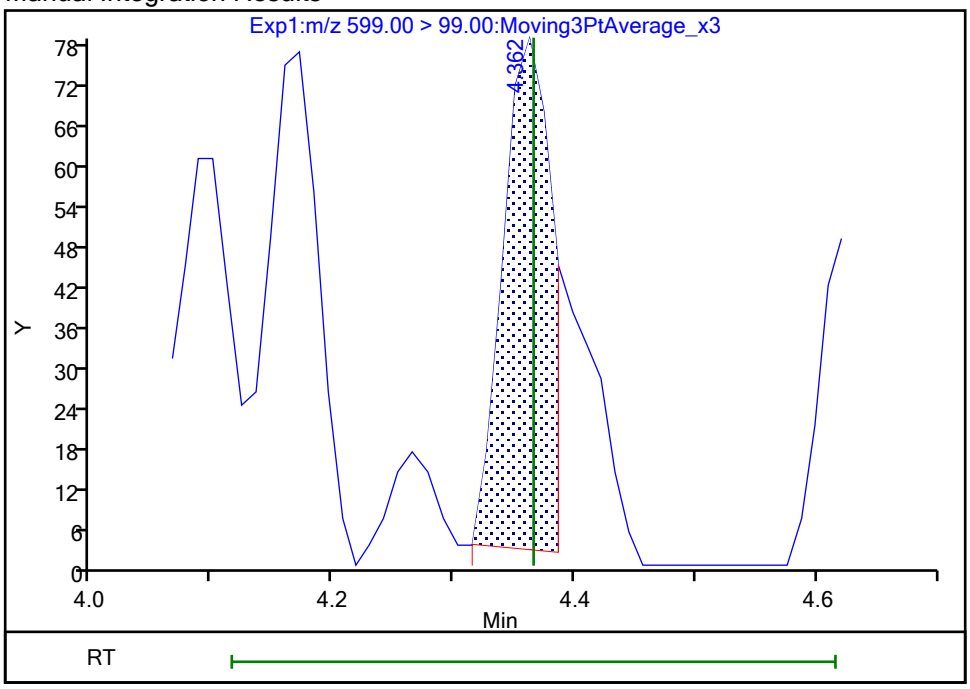
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 204
Amount: 0.000669
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

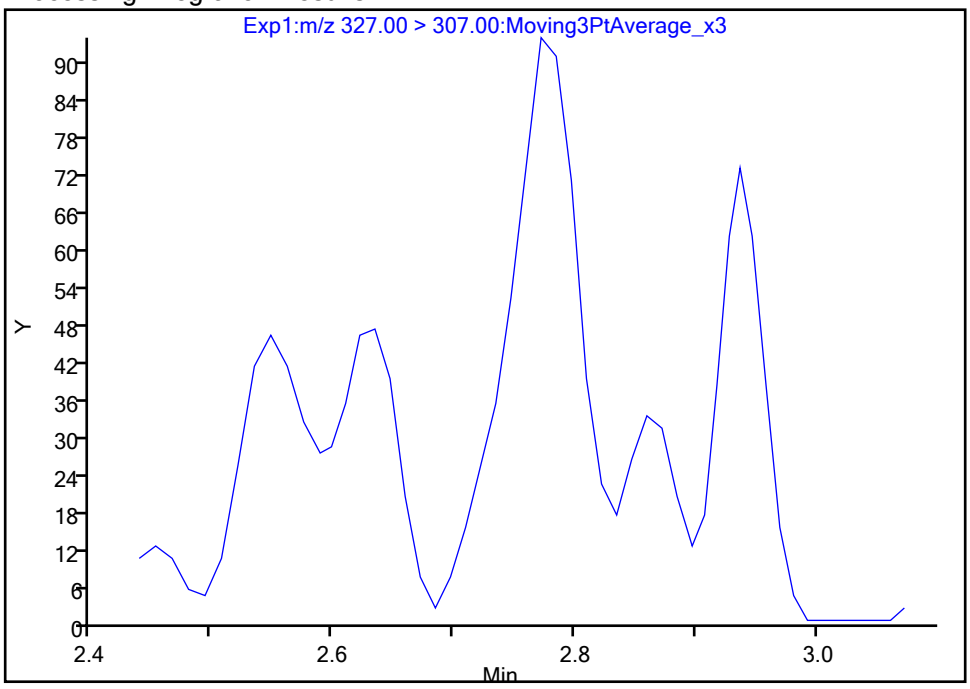
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

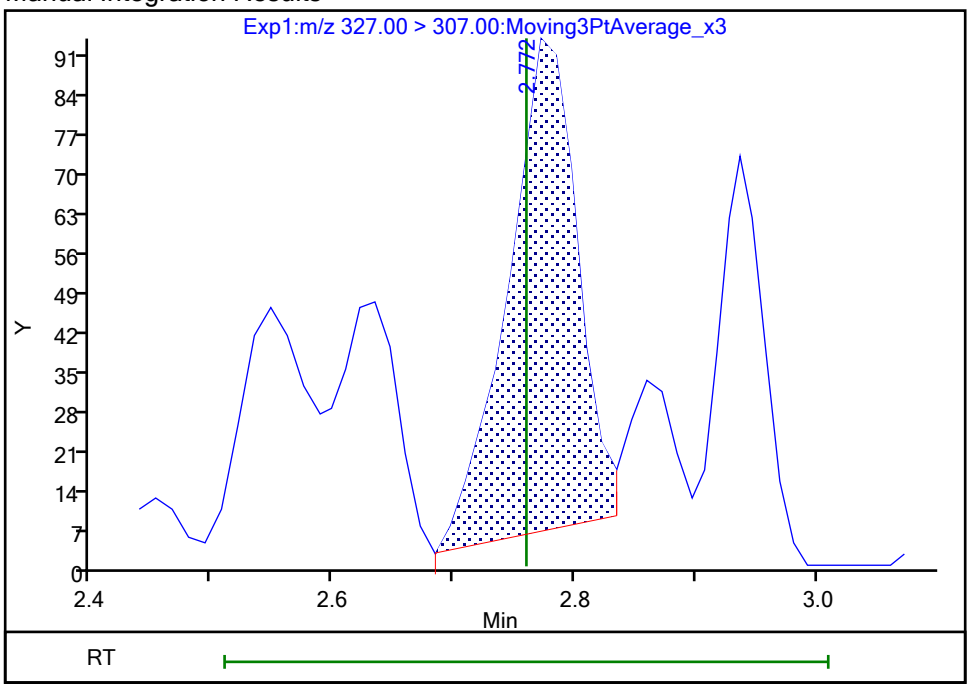
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 351
Amount: 0.000530
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:02:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

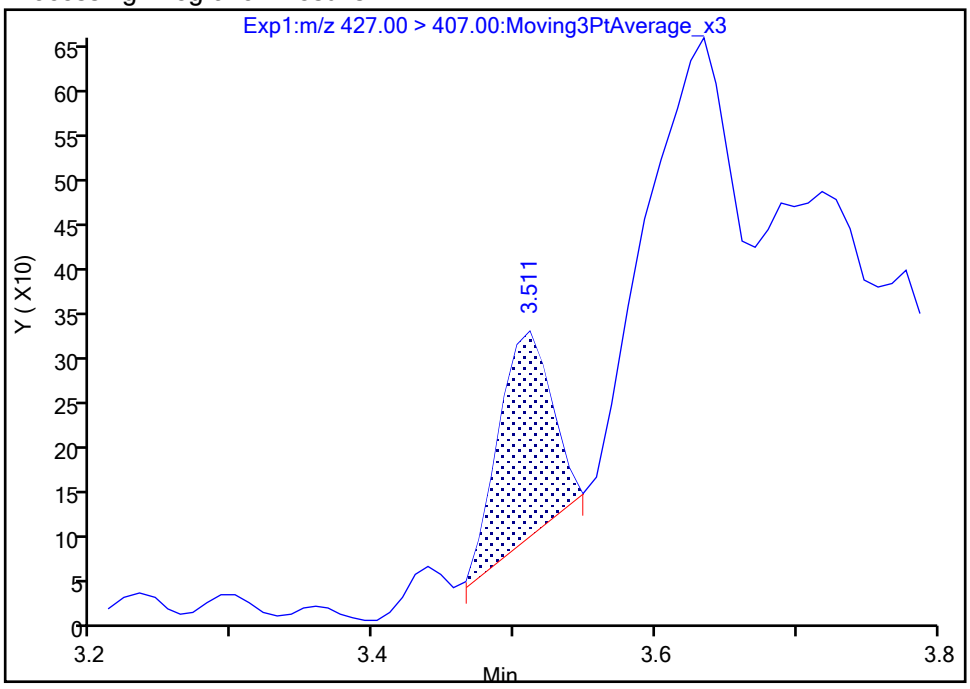
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

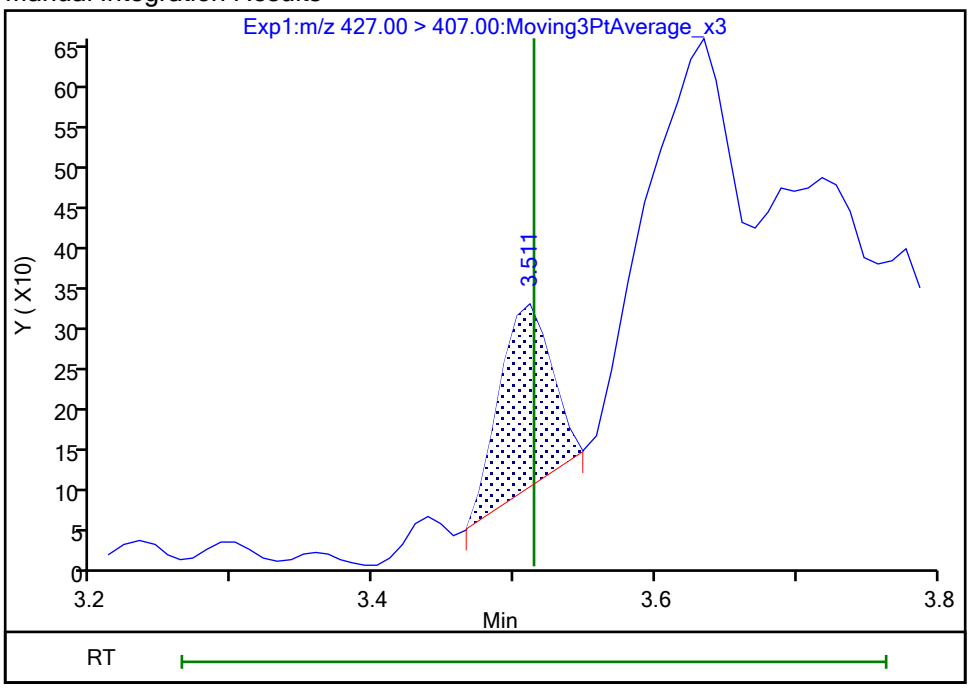
Processing Integration Results

RT: 3.51
Area: 617
Amount: 0.000863
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 600
Amount: 0.000839
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

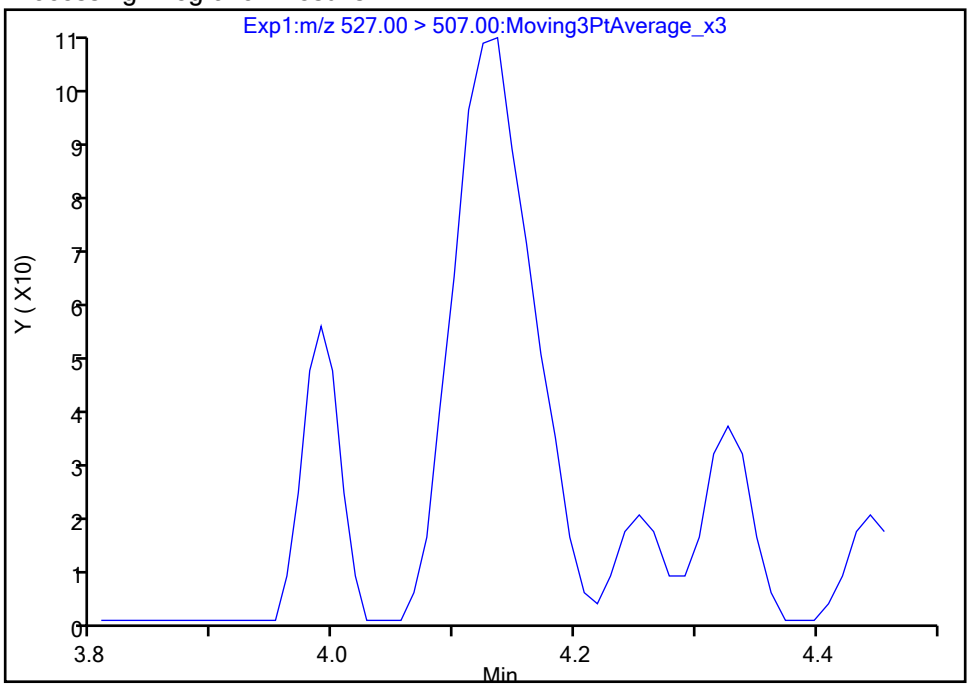
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

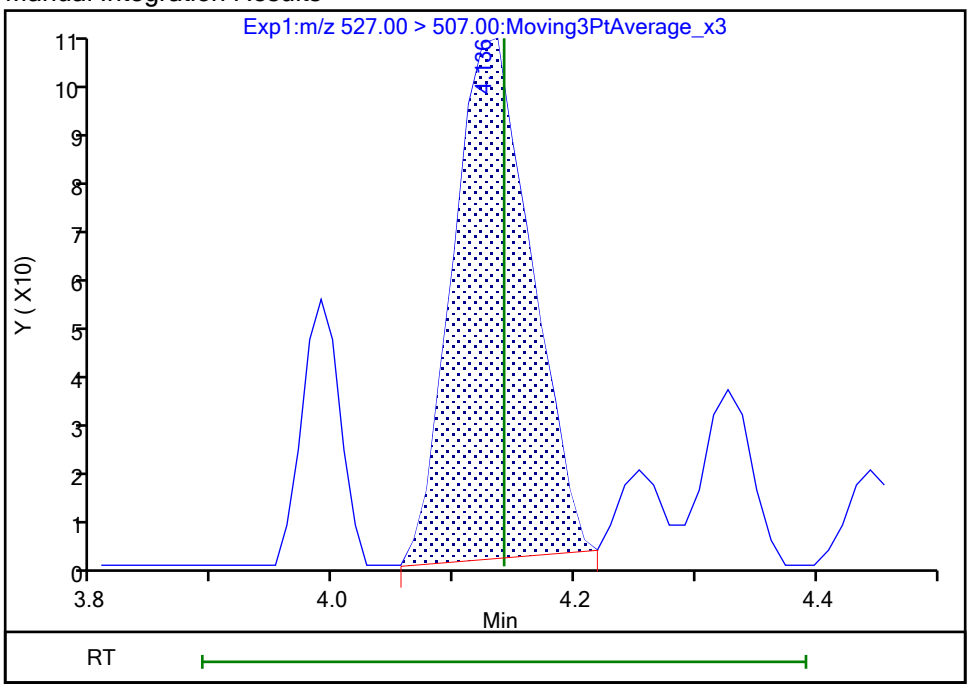
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 467
Amount: 0.000785
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

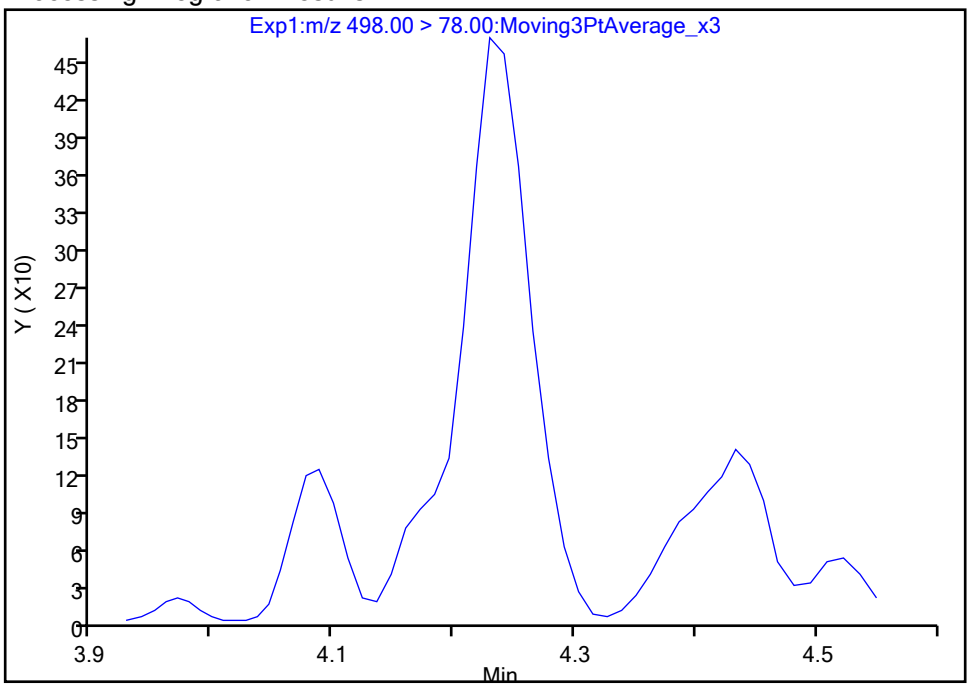
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

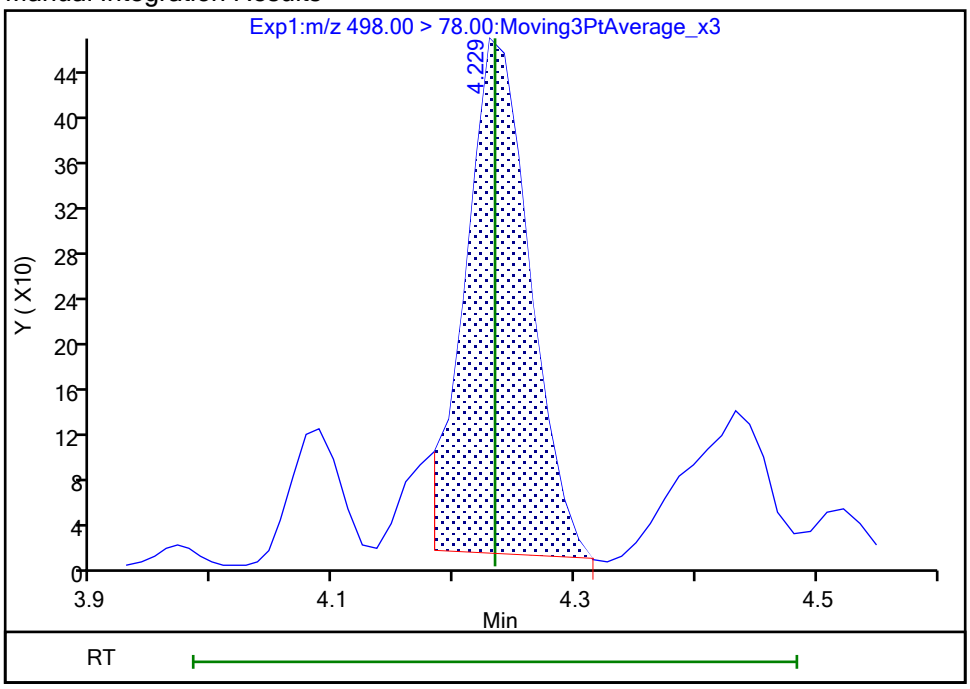
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 1697
Amount: 0.001185
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

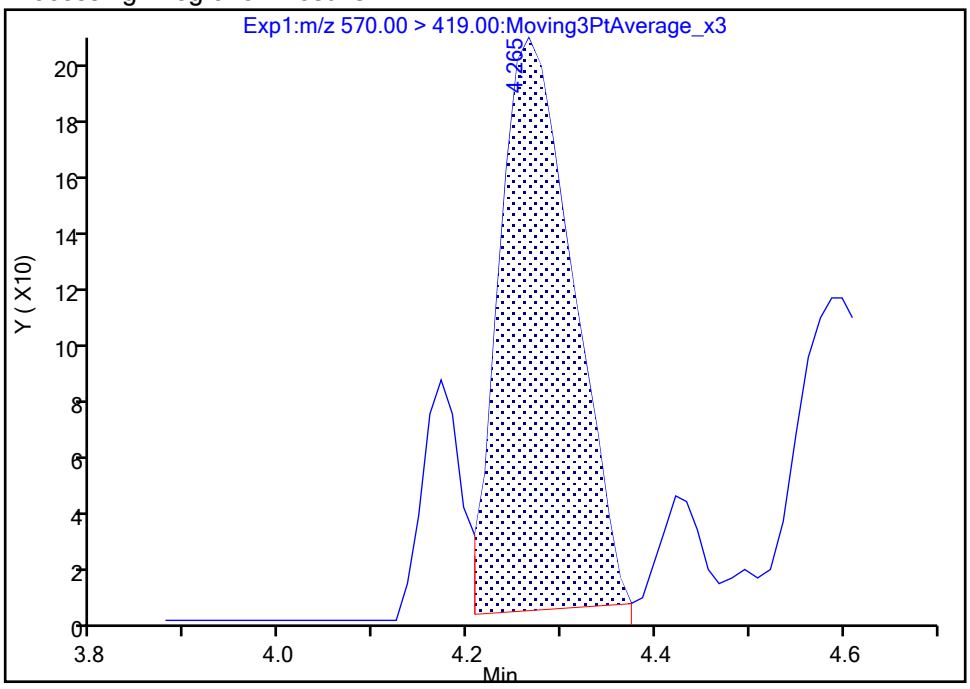
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

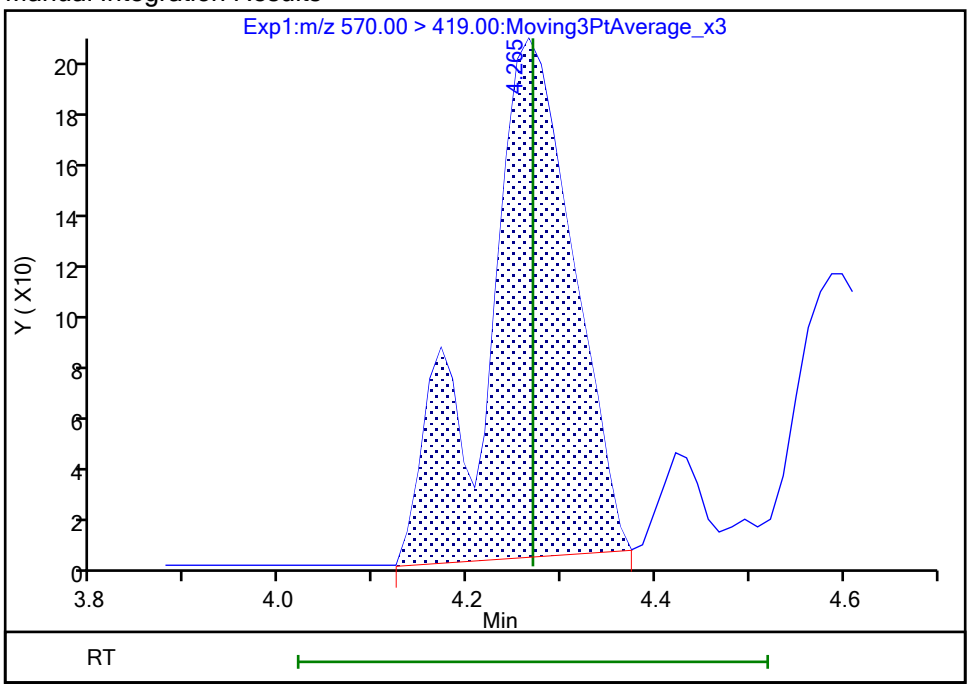
Processing Integration Results

RT: 4.27
Area: 1098
Amount: 0.002645
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 1334
Amount: 0.003214
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

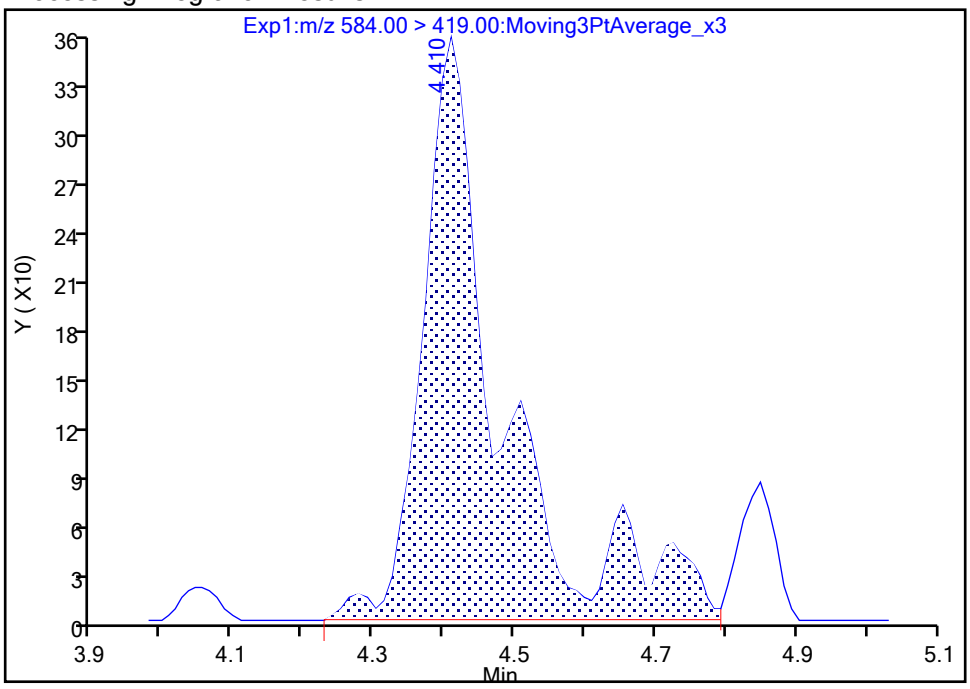
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

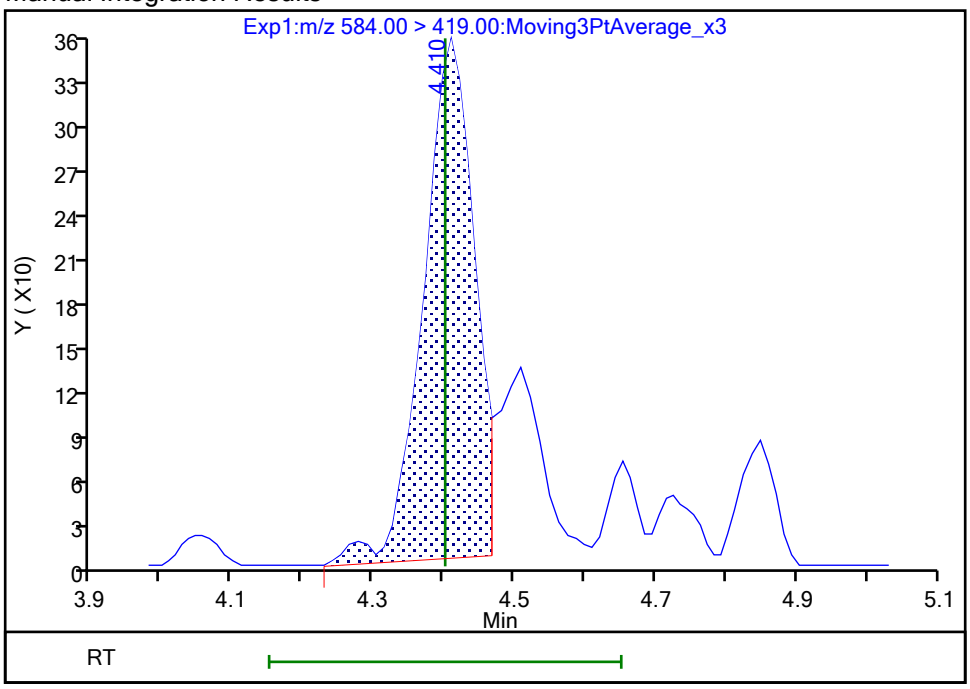
Processing Integration Results

RT: 4.41
Area: 2765
Amount: 0.006318
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1740
Amount: 0.003976
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:04:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

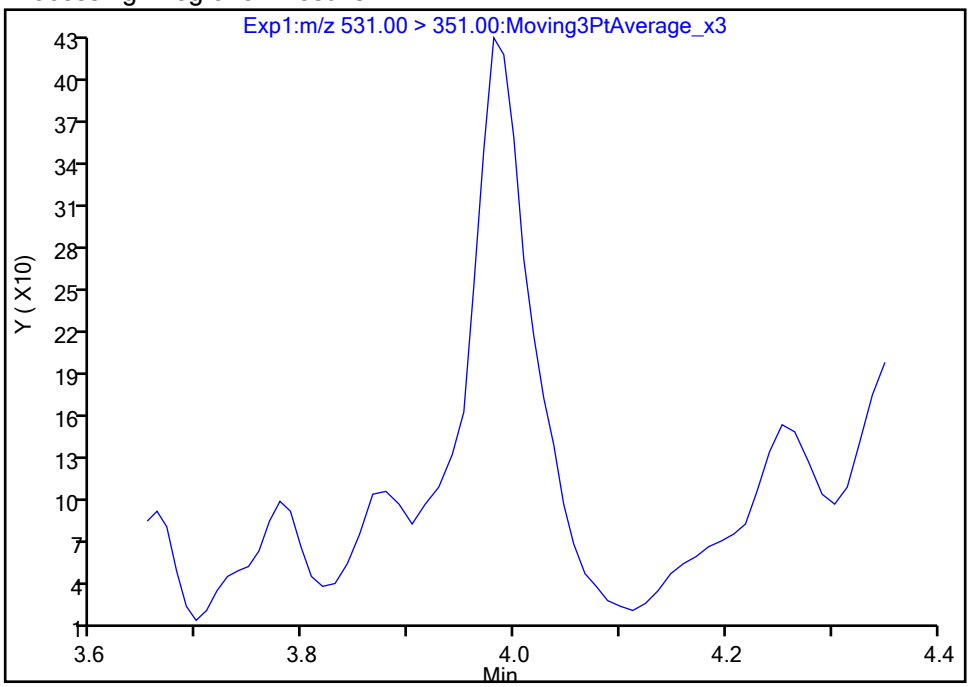
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

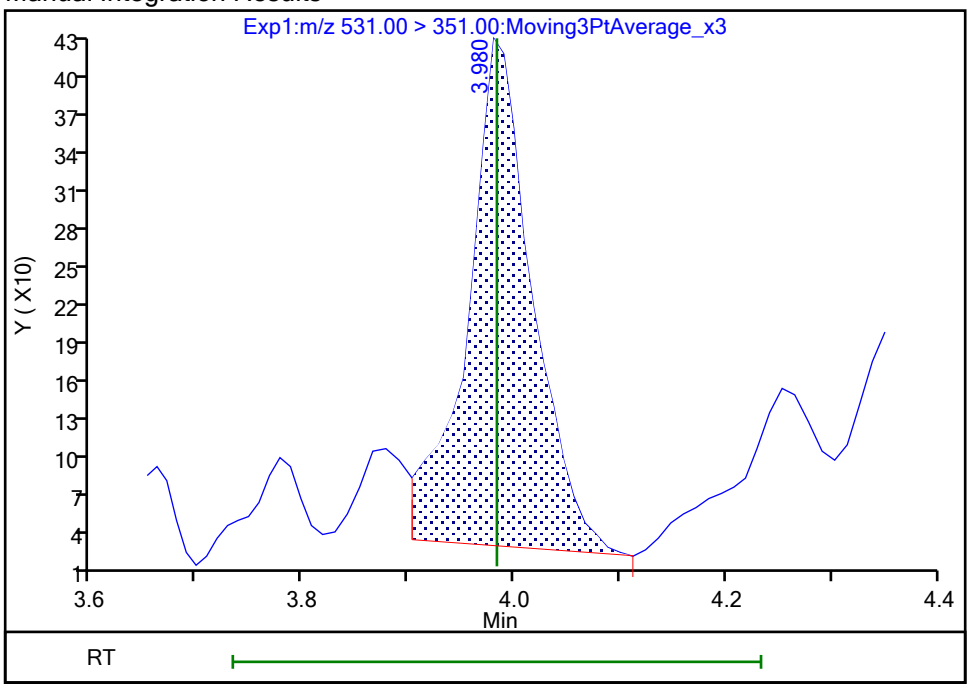
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 1691
Amount: 0.000571
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:03:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

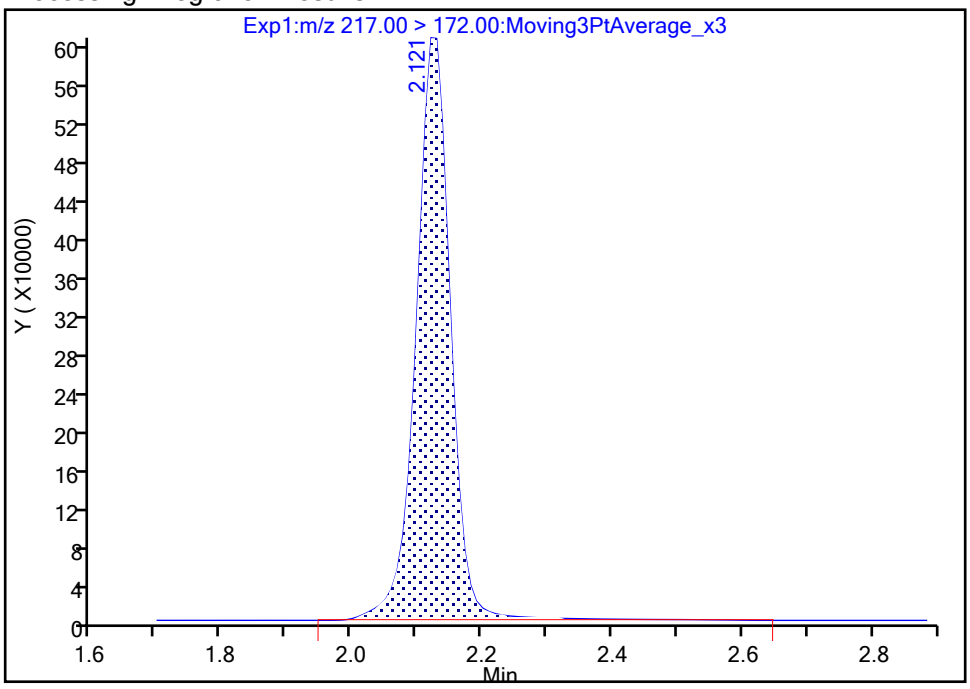
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

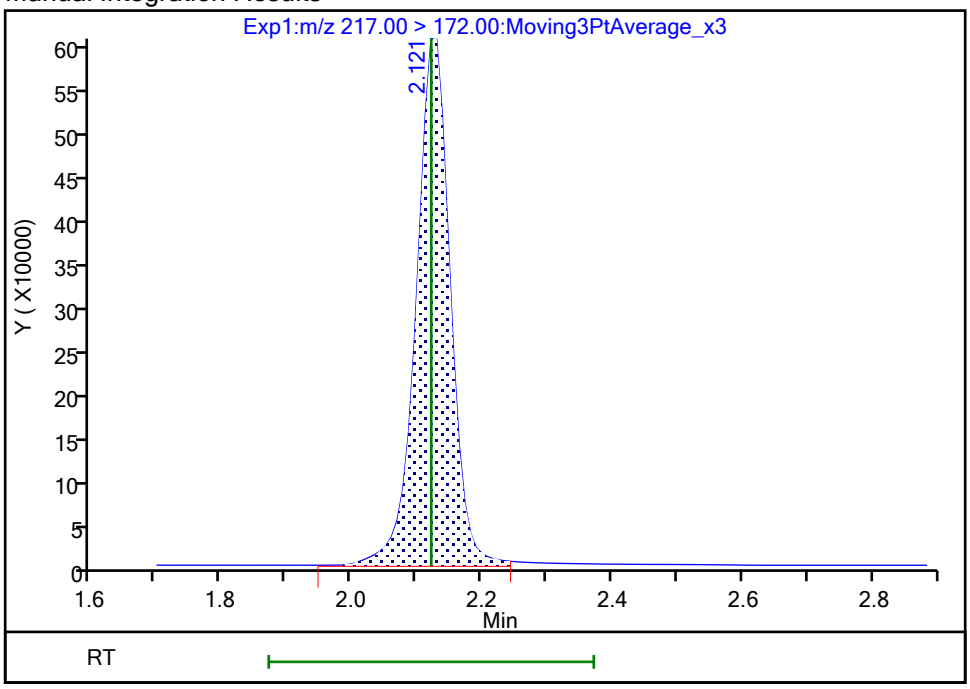
Processing Integration Results

RT: 2.12
Area: 2240064
Amount: 1.309105
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2208761
Amount: 1.290811
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:01:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

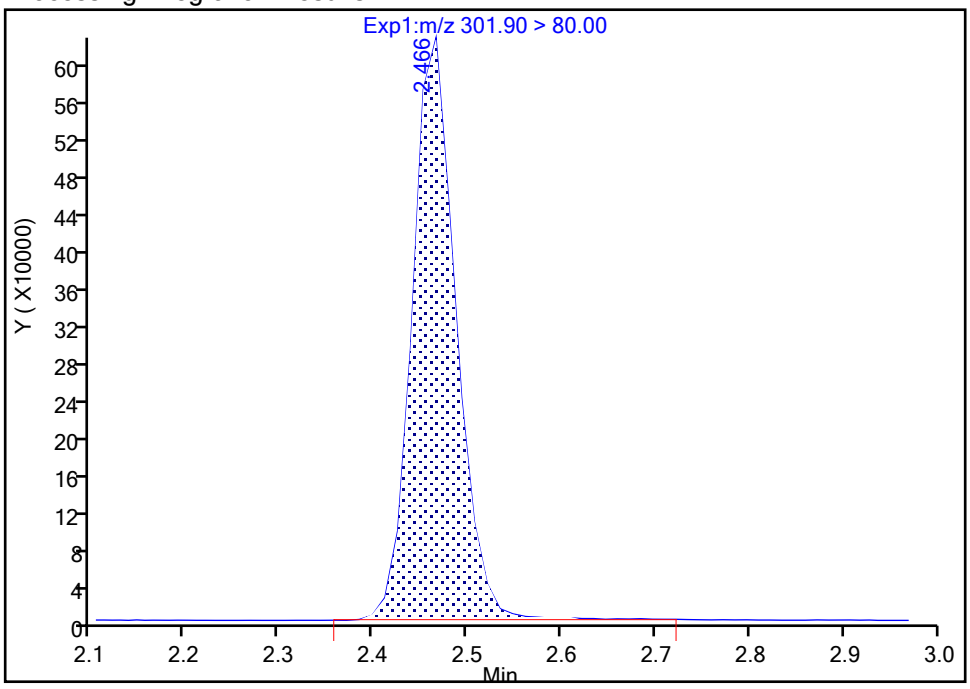
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

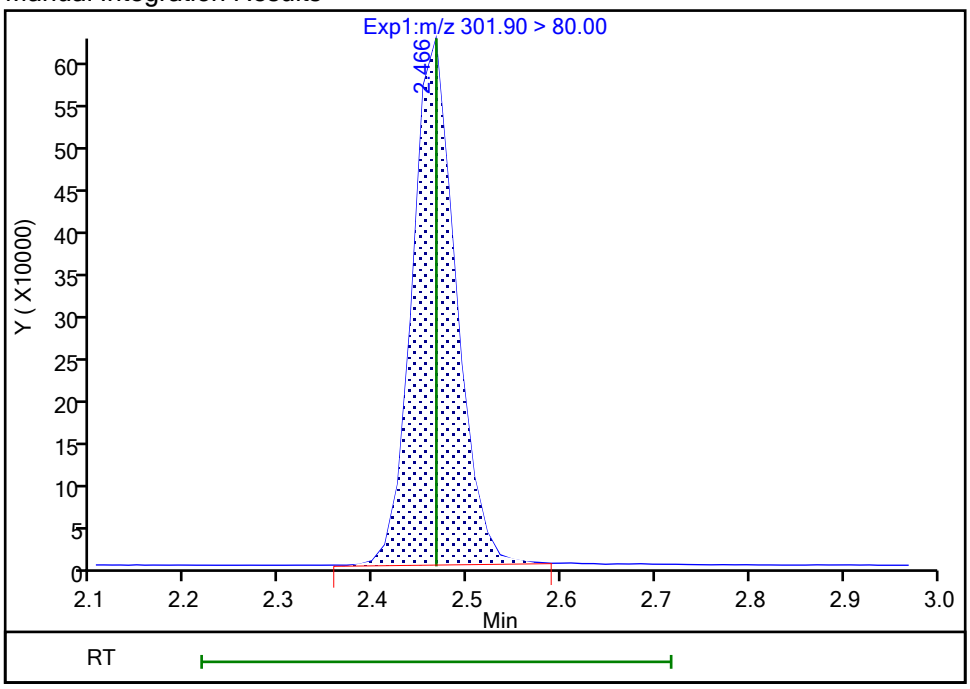
Processing Integration Results

RT: 2.47
Area: 2025926
Amount: 1.127481
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2019584
Amount: 1.123951
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:01:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

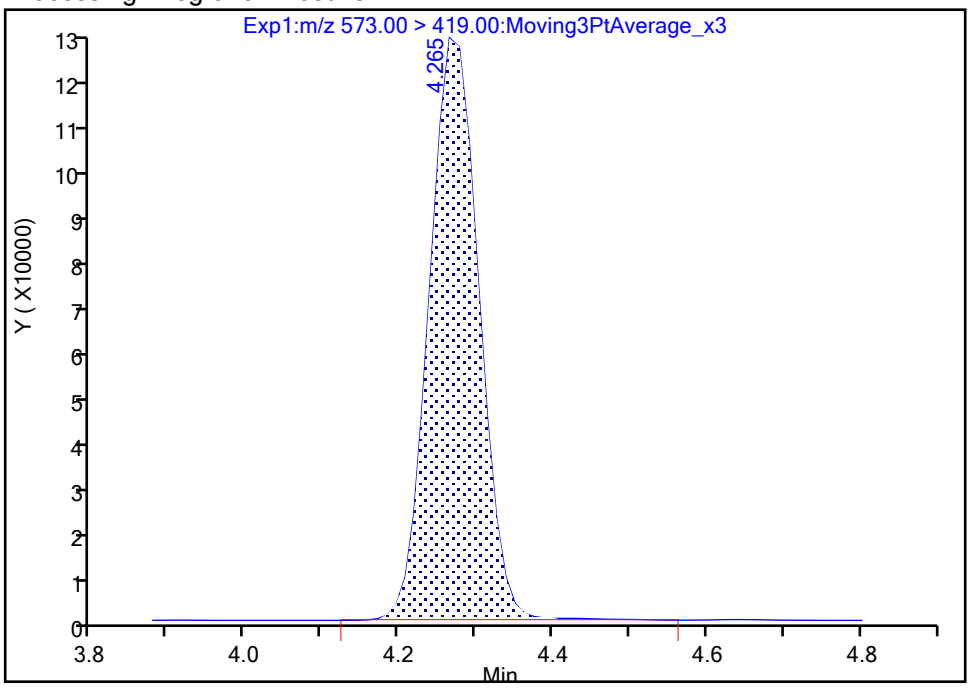
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d				
Injection Date:	23-Oct-2023 23:25:00	Instrument ID:	LC812		
Lims ID:	MB 200-196646/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

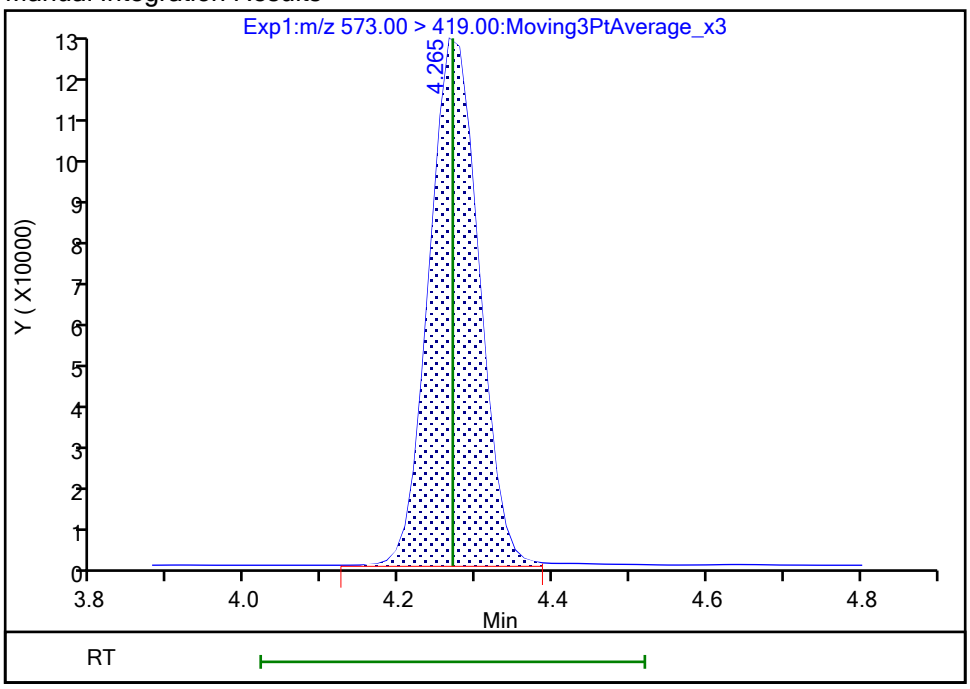
Processing Integration Results

RT: 4.27
Area: 574246
Amount: 1.255768
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 571771
Amount: 1.250356
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:01:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

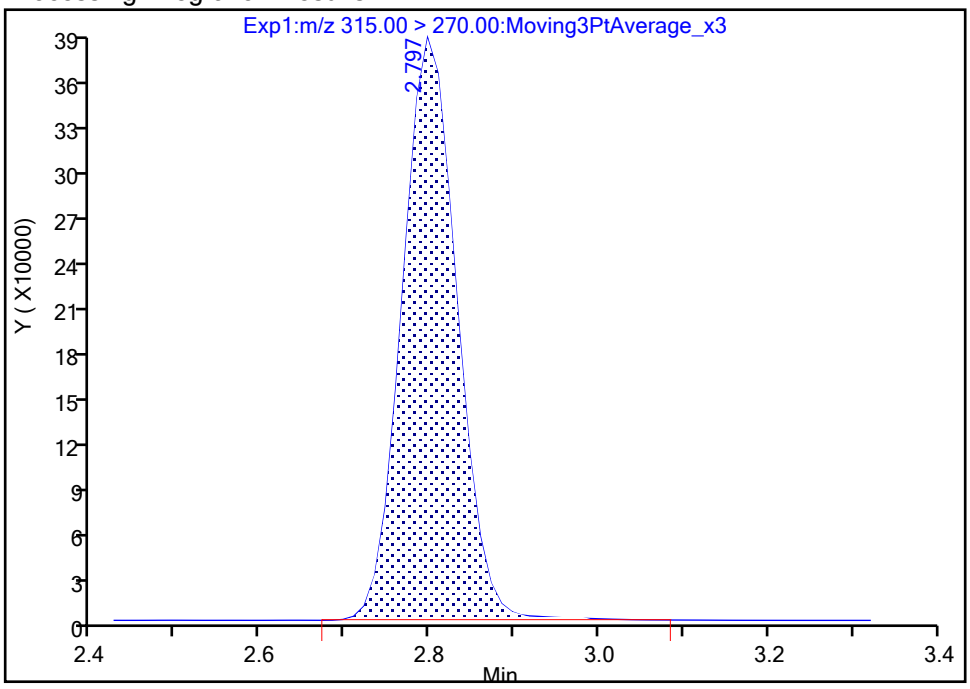
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C02.d
Injection Date: 23-Oct-2023 23:25:00 Instrument ID: LC812
Lims ID: MB 200-196646/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

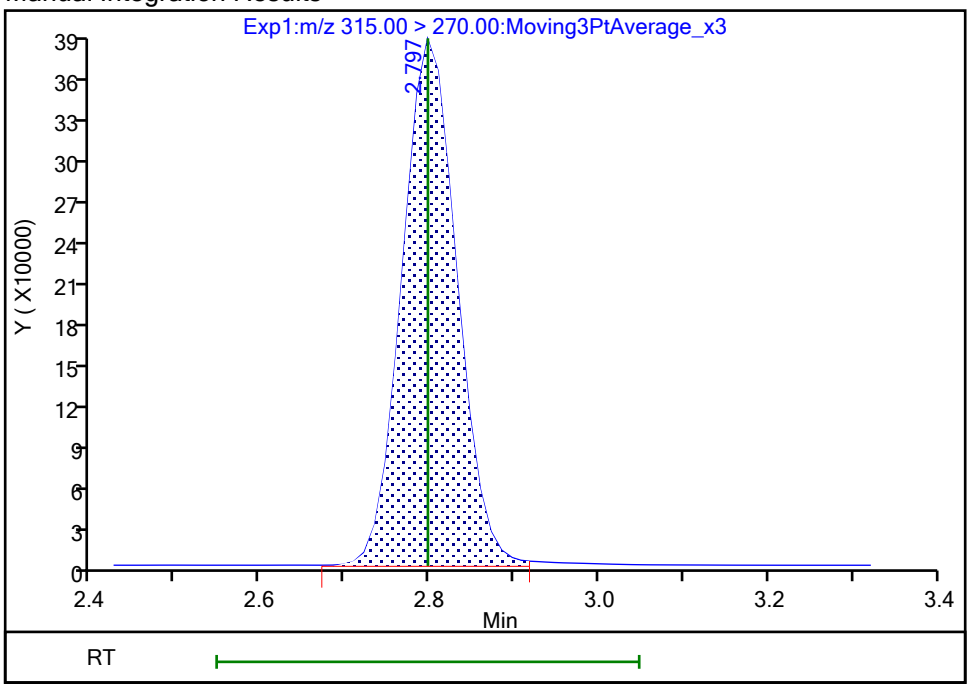
Processing Integration Results

RT: 2.80
Area: 1732542
Amount: 1.282412
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1722810
Amount: 1.275208
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:01:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196645/2-A

Matrix: Water Lab File ID: PA231023A09.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:20

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	79.14		5.00	1.20
2706-90-3	Perfluoropentanoic acid	76.49		2.00	0.68
307-24-4	Perfluorohexanoic acid	76.88		2.00	0.65
375-85-9	Perfluoroheptanoic acid	79.09		2.00	0.54
335-67-1	Perfluorooctanoic acid	80.94		2.00	0.76
375-95-1	Perfluorononanoic acid	74.11		2.00	0.49
335-76-2	Perfluorodecanoic acid	73.82		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	79.73		2.00	0.55
307-55-1	Perfluorododecanoic acid	81.57		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	76.69		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	72.62		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	71.91		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	75.32		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	68.09		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	73.12		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	67.57		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	66.88		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	65.64		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	75.04		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	76.66		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	82.17		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	83.78		2.00	0.92
2355-31-9	NMeFOSAA	79.92		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	73.50		5.00	1.60
13252-13-6	HFPODA	68.11		4.00	1.10
919005-14-4	DONA	73.95		2.00	0.42
756426-58-1	9Cl-PF3ONS	75.13		2.00	0.32
763051-92-9	11Cl-PF3OUdS	69.14		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196645/2-A

Matrix: Water Lab File ID: PA231023A09.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:20

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	111		50-150
STL01893	13C5 PFPeA	106		50-150
STL01892	13C4 PFHpA	108		50-150
STL02116	13C2 PFTeDA	92		50-150
STL02337	13C3 PFBS	100		50-150
STL01056	13C8 FOSA	90		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	97		50-150
STL02395	M2-4:2 FTS	99		50-150
STL02279	M2-6:2 FTS	100		50-150
STL02280	M2-8:2 FTS	97		50-150
STL02255	13C3 HFPO-DA	102		50-150
STL00994	18O2 PFHxS	108		50-150
STL00993	13C2 PFHxA	108		50-150
STL00991	13C4 PFOS	110		50-150
STL00998	13C2 PFDoA	95		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	108		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	99		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Lims ID: LCS 200-196645/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2023 16:20:09 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196645/2-A
Misc. Info.: 200-0057509-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 13:03:26
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2212450	1.39		111	1790	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	3232196	1.98		98.9	364	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.439	0.0	0.693	1640698	1.33		106	1265	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.453	-0.014	1.000	2708439	1.91		95.6	65.5	
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.701	1947351	1.16		100	143047	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	3363560	1.80	Target=2.06	101	1892	M
298.90 > 99.00	2.467	2.467	0.0	1.000	1606472		2.09(1.03-3.09)		426	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1225957	1.88		100	1470	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	224685	1.16		99.5	162	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1690984	1.34		108	1284	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	2861303	1.92	Target=14.12	96.1	487	M
313.00 > 119.00	2.797	2.797	0.0	1.000	204263		14.01(7.06-21.17)		214	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	3189907	1.88	Target=2.72	100	1145	M
349.00 > 99.00	2.810	2.810	0.0	0.888	1088028		2.93(1.36-4.09)		775	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	423972	1.70		85.1	2015	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	310868	1.28		102	1493	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1533932	1.28		108	7195	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	2444509	1.70	Target=3.32	93.1	3864	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	743197		3.29(1.66-4.98)		596	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	3300931	1.98	Target=4.17	98.9	804	
363.00 > 169.00	3.165	3.168	-0.003	1.000	742914		4.44(2.09-6.26)		1804	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1861804	1.35		108	3696	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.835	8913812	1.85	Target=3.33	97.8	9113	
377.00 > 85.00	3.199	3.203	-0.004	0.835	2416412		3.69(1.66-4.99)		4178	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.505	-0.002	0.914	2213808	1.83	Target=4.83	95.9	6879	M
449.00 > 99.00	3.503	3.505	-0.002	0.914	449307		4.93(2.41-7.24)		1841	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.505	0.007	0.997	296492	1.19		100	554	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.512	3.514	-0.002	1.000	1307905	1.92		101	1568	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.514	0.007	1.000	3585102	2.02	Target=2.88	101	168	
413.00 > 169.00	3.521	3.514	0.007	1.000	1236393		2.90(1.44-4.32)		1634	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.523	-0.002	1.000	2079315	1.33		106	8452	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.523	-0.002		2008343	1.25			7436	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.822	0.009	1.000	1651117	1.69	Target=4.24	91.0	2758	M
499.00 > 99.00	3.831	3.822	0.009	1.000	371293		4.45(2.12-6.37)		898	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	1001311	1.31		110	3493	
20 Perfluorononanoic acid										
463.00 > 419.00	3.855	3.845	0.010	1.003	3244086	1.85	Target=8.34	92.6	514	
463.00 > 169.00	3.843	3.845	-0.002	1.000	353172		9.19(4.17-12.51)		1774	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.845	-0.002	1.092	2233301	1.31		105	8890	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.982	3.983	-0.001	1.039	5617540	1.88		101	13974	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.103	4.105	-0.002	1.071	1243243	1.67	Target=2.17	86.9	7140	
549.00 > 99.00	4.103	4.105	-0.002	1.071	523028		2.38(1.08-3.25)		1574	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.139	4.129	0.010	1.000	3540537	1.85	Target=11.44	92.3	1036	
513.00 > 169.00	4.139	4.129	0.010	1.000	327128		10.82(5.72-17.16)		1392	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.139	4.129	0.010	1.176	2399703	1.35		108	4252	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.139	4.141	-0.002	1.176	326154	1.16		97.2	1014	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.141	0.009	1.003	1231662	2.05		107	3097	M
D 21 13C8 FOSA										
506.00 > 78.00	4.244	4.234	0.010	1.205	1716236	1.13		90.3	3168	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.234	0.010	1.000	2742988	2.09		105	6138	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.270	-0.002	1.212	531887	1.25		99.9	1515	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.270	0.011	1.003	771474	2.00		99.9	1053	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.139	939096	1.64	Target=2.37	85.0	6297	
599.00 > 99.00	4.364	4.366	-0.002	1.139	387601		2.42(1.19-3.56)		4869	
D 30 13C2 PFUnA										M
565.00 > 520.00	4.388	4.390	-0.002	1.246	2076149	1.23		98.8	2894	M
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	3411976	1.99	Target=12.20	99.7	768	
563.00 > 169.00	4.388	4.390	-0.002	1.000	313711		10.88(6.10-18.31)		3811	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.250	498938	1.22		97.4	971	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	733598	1.84		91.9	1849	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.473	-0.004	1.167	7927761	1.73		91.7	8566	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2025777	1.19		94.8	8135	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.613	-0.002	1.000	3363749	2.04	Target=8.47	102	207	M
613.00 > 169.00	4.611	4.613	-0.002	1.000	396682		8.48(4.23-12.70)		3123	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.624	-0.002	1.117	681174	1.90		98.6	6344	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.246	303637	1.57	Target=0.48	80.9	5343	
699.00 > 99.00	4.775	4.777	-0.002	1.246	622882		0.49(0.24-0.72)		7414	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.042	3324153	1.92	Target=6.41	95.9	184	M
663.00 > 169.00	4.804	4.806	-0.002	1.042	523911		6.34(3.21-9.62)		2792	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.415	1949059	1.15		91.6	6349	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.980	4.982	-0.002	1.000	316504	1.82	Target=0.87	90.8	4022	
713.00 > 219.00	4.980	4.982	-0.002	1.000	338405		0.94(0.43-1.30)		2788	

Report Date: 25-Oct-2023 15:12:32 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.290	5.292	-0.002	1.503	2099965	1.07		85.7	4410	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.290	5.292	-0.002	1.000	3342563	1.99	Target=7.89	99.5	237	M
813.00 > 169.00	5.290	5.292	-0.002	1.000	421578		7.93(3.94-11.83)		3222	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.554	5.563	-0.009	1.050	2633584	2.01	Target=9.39	100	299	M
913.00 > 169.00	5.554	5.563	-0.009	1.050	272955		9.65(4.69-14.08)		1346	M

QC Flag Legend

Processing Flags

Review Flags

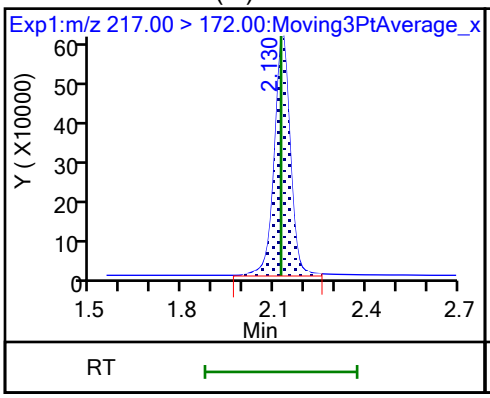
M - Manually Integrated

Report Date: 25-Oct-2023 15:12:32 Chrom Revision: 2.3 18-Oct-2023 21:16:54

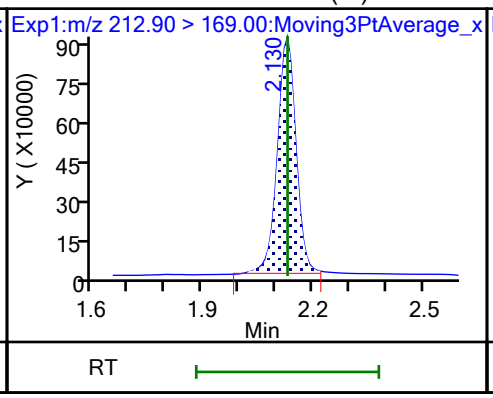
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

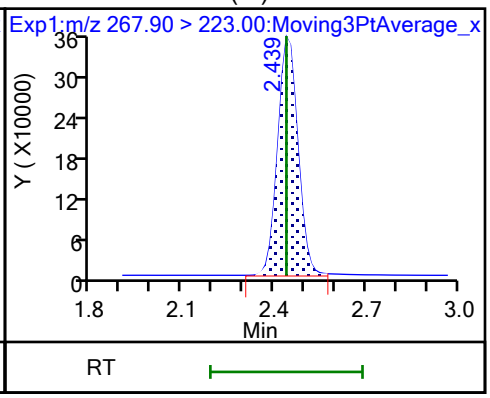
D 1 13C4 PFBA (M)



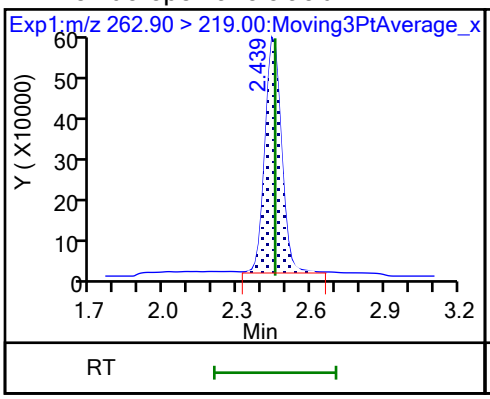
2 Perfluorobutanoic acid (M)



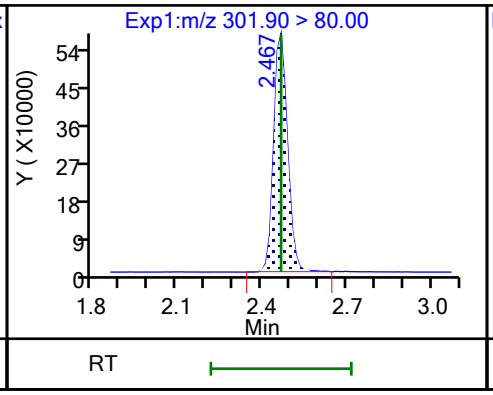
D 3 13C5 PFPeA (M)



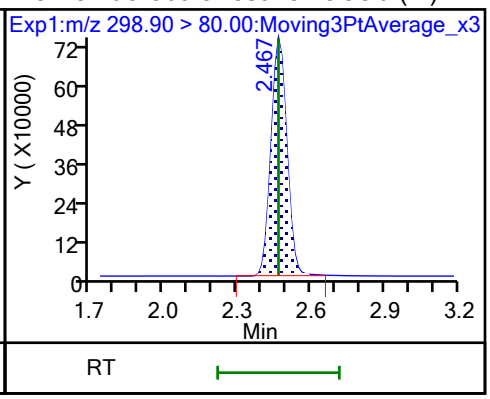
4 Perfluoropentanoic acid



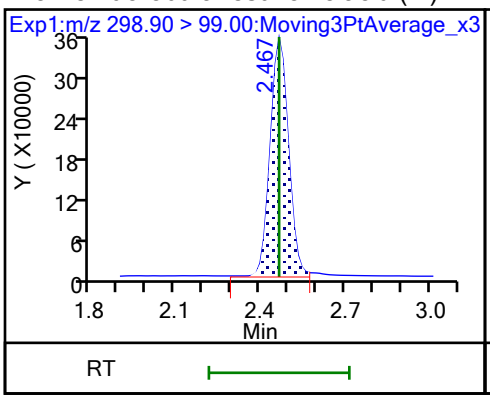
D 47 13C3 PFBS



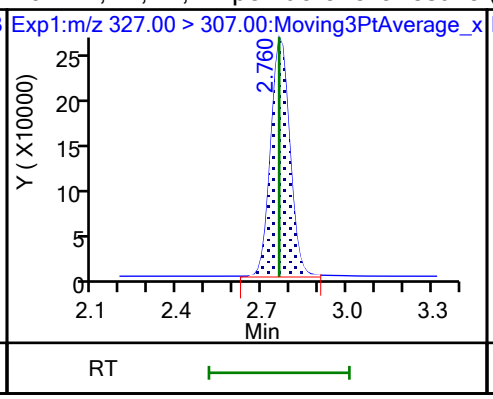
5 Perfluorobutanesulfonic acid (M)



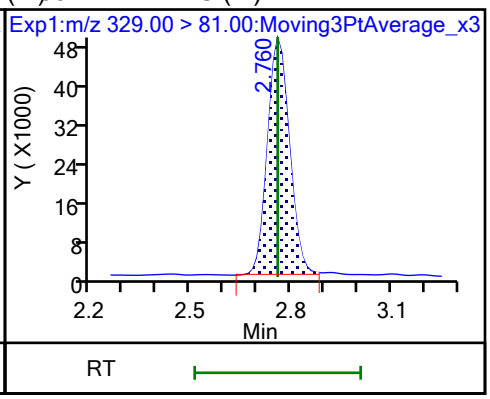
5 Perfluorobutanesulfonic acid (M)



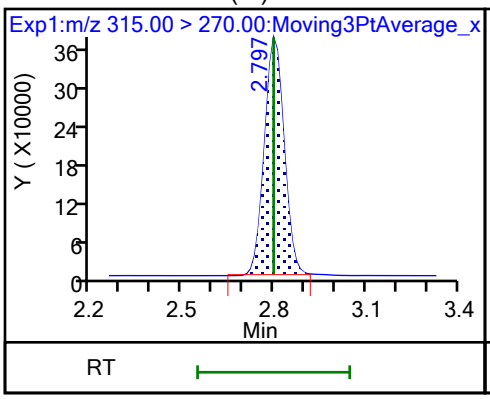
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



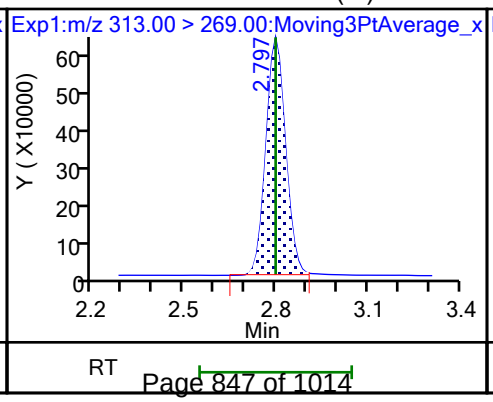
D 60 M2-4:2 FTS (M)



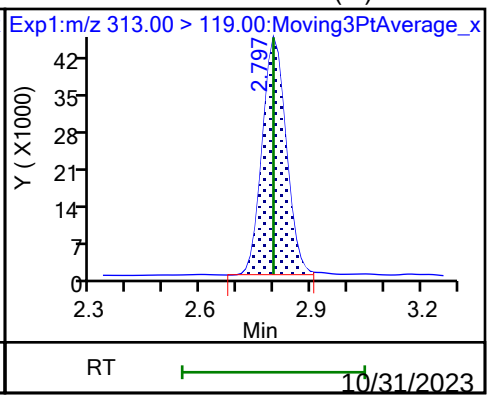
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

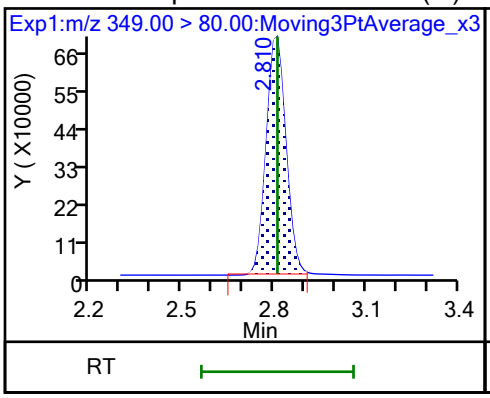


6 Perfluorohexanoic acid (M)

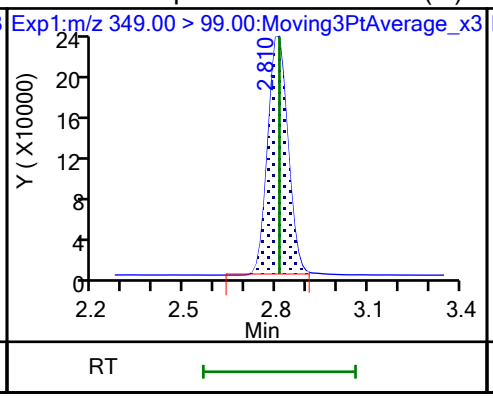


10/31/2023
4:00 PM

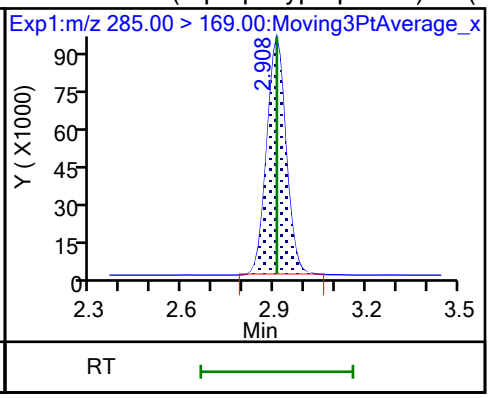
70 Perfluoropentanesulfonic acid (M)



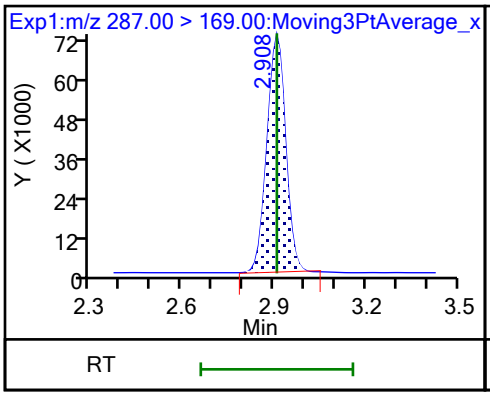
70 Perfluoropentanesulfonic acid (M)



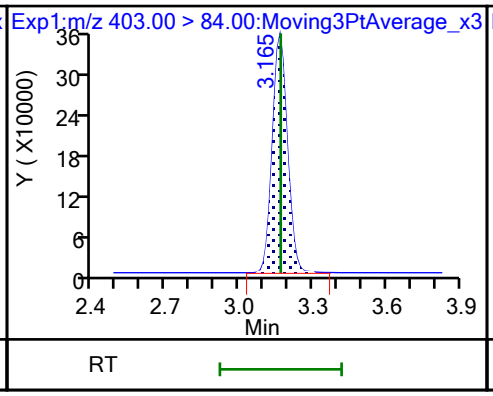
67 Perfluoro(2-propoxypropanoic) ac (M)



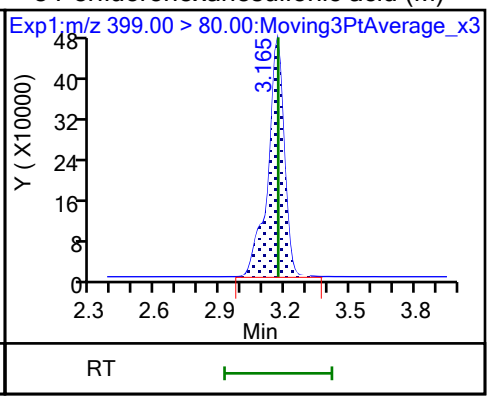
D 64 13C3 HFPO-DA



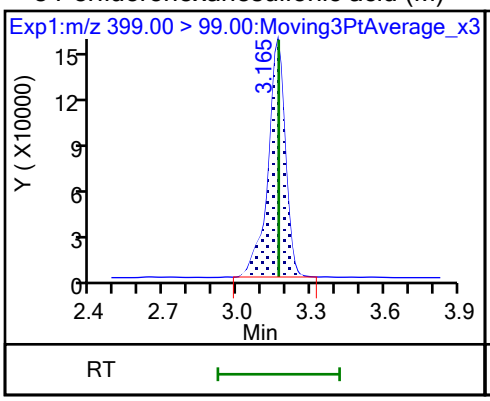
D 11 18O2 PFHxS



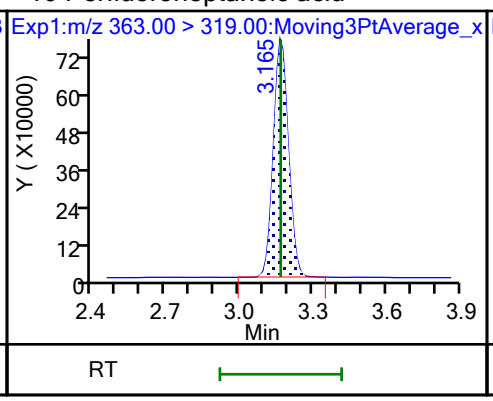
8 Perfluorohexanesulfonic acid (M)



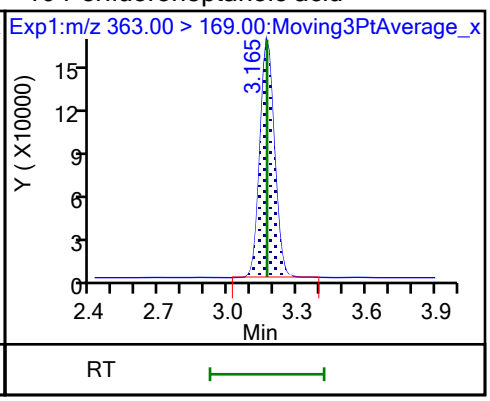
8 Perfluorohexanesulfonic acid (M)



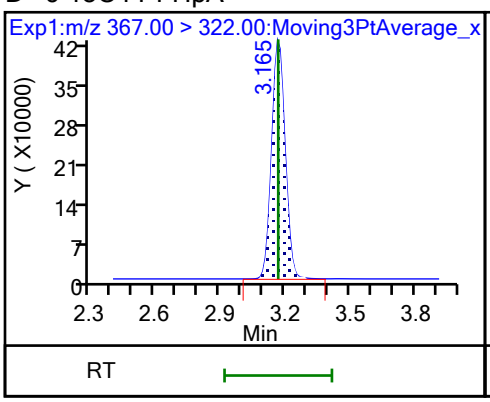
10 Perfluoroheptanoic acid



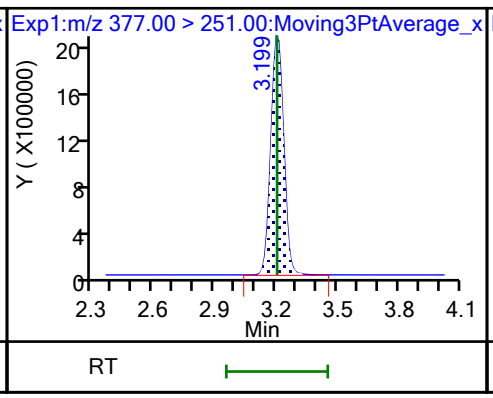
10 Perfluoroheptanoic acid



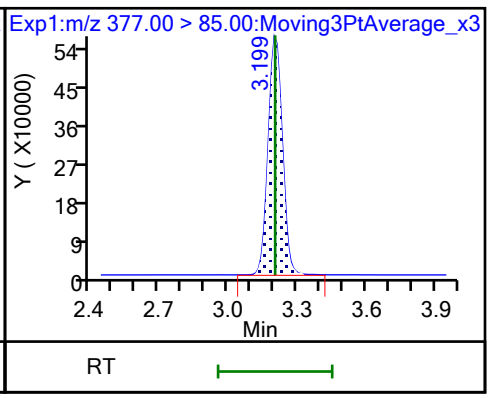
D 9 13C4 PFHpA



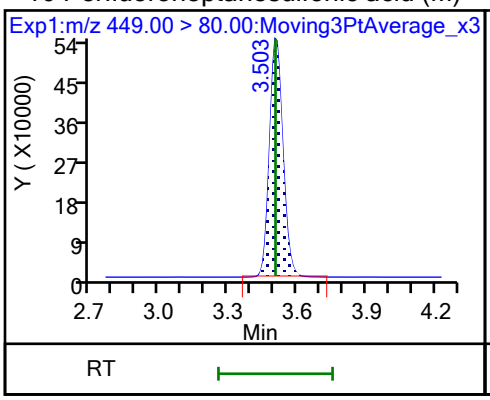
77 DONA



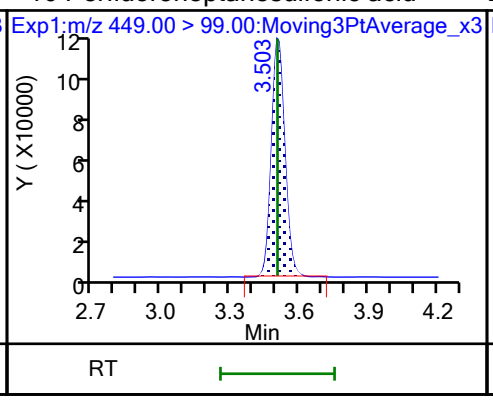
77 DONA



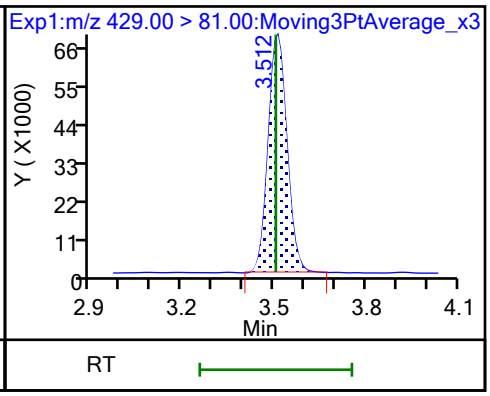
16 Perfluoroheptanesulfonic acid (M)



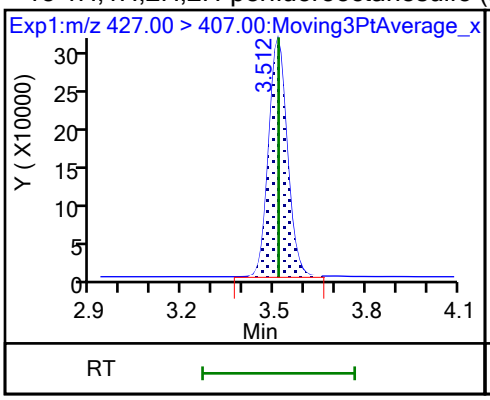
16 Perfluoroheptanesulfonic acid



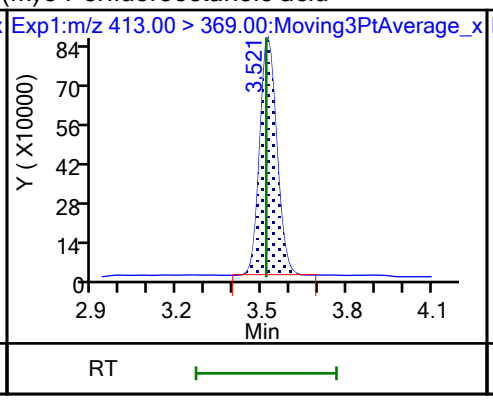
D 12 M2-6:2 FTS



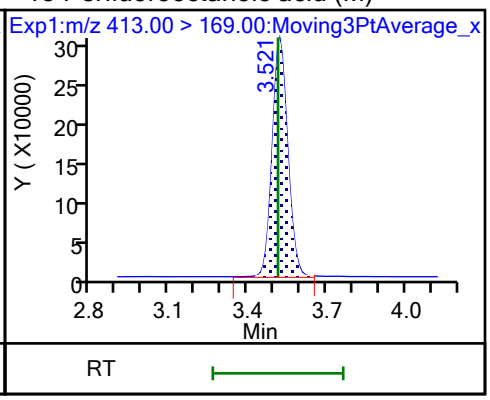
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



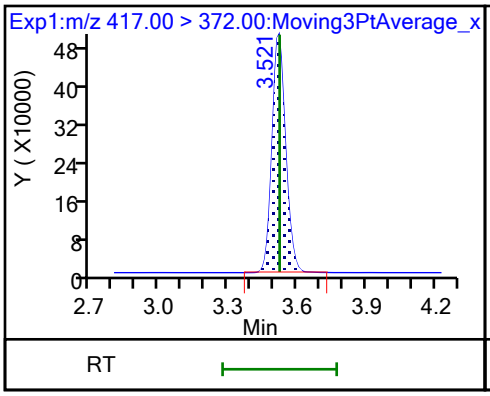
15 Perfluorooctanoic acid



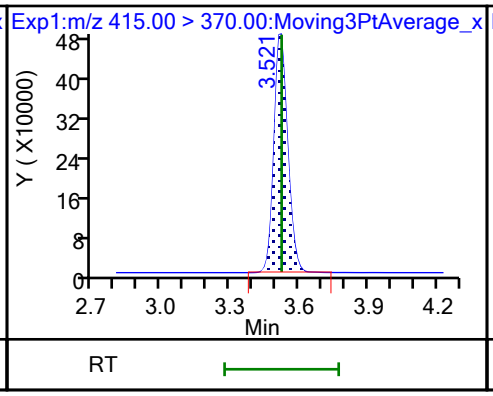
15 Perfluorooctanoic acid (M)



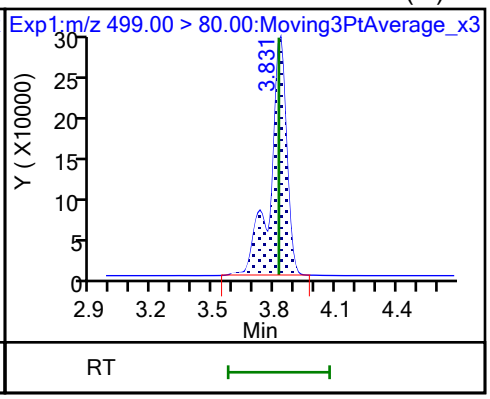
D 14 13C4 PFOA



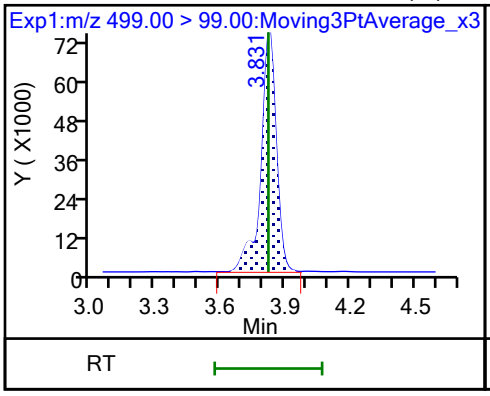
* 62 13C2 PFOA



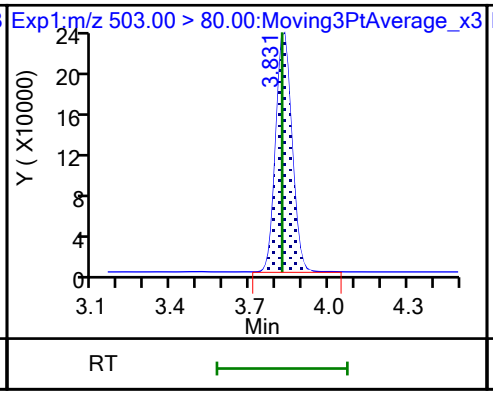
17 Perfluorooctanesulfonic acid (M)



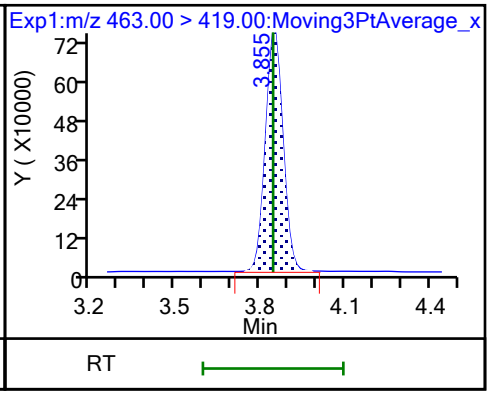
17 Perfluorooctanesulfonic acid (M)



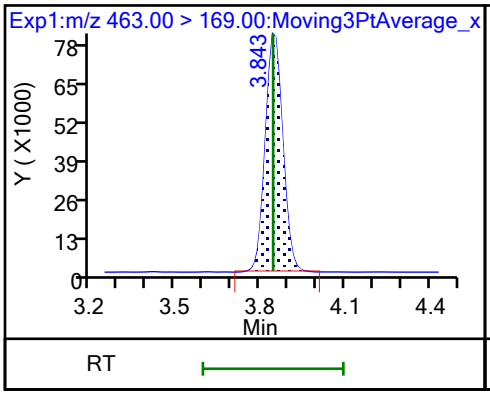
D 18 13C4 PFOS



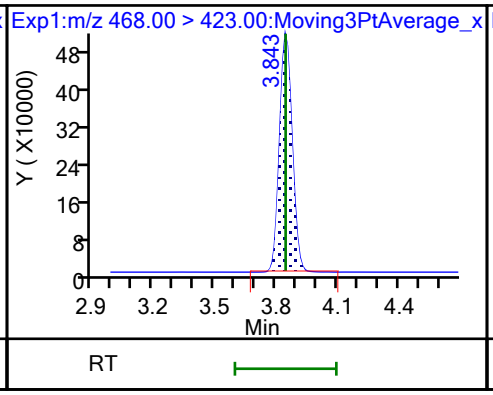
20 Perfluorononanoic acid



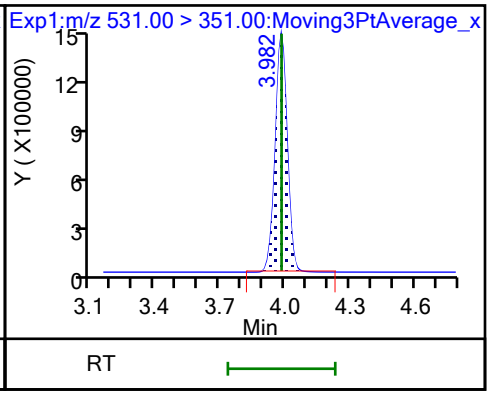
20 Perfluorononanoic acid



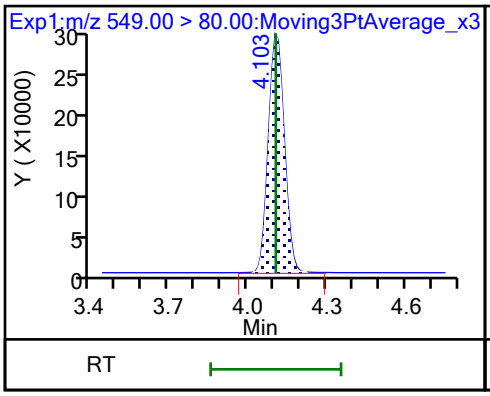
D 19 13C5 PFNA



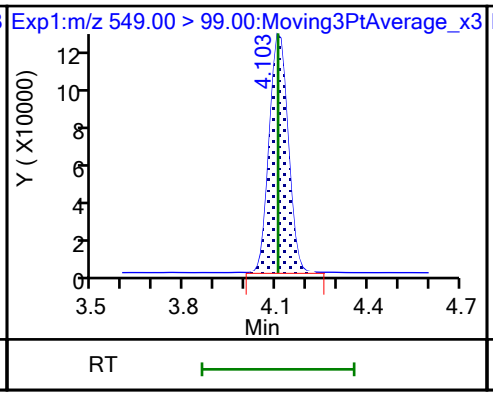
69 9-Chlorohexadecafluoro-3-oxanona



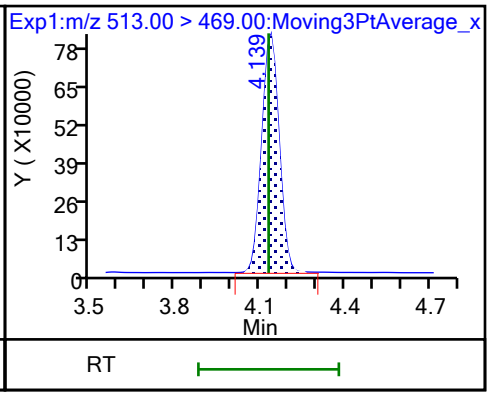
68 Perfluorononanesulfonic acid



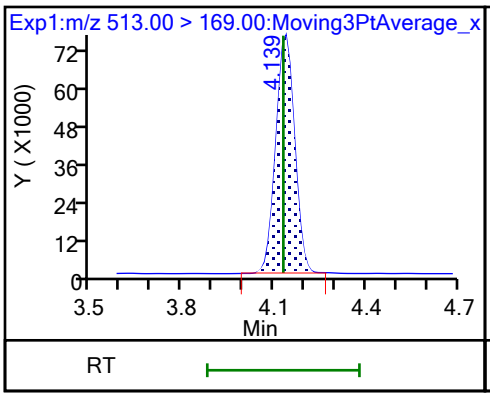
68 Perfluorononanesulfonic acid



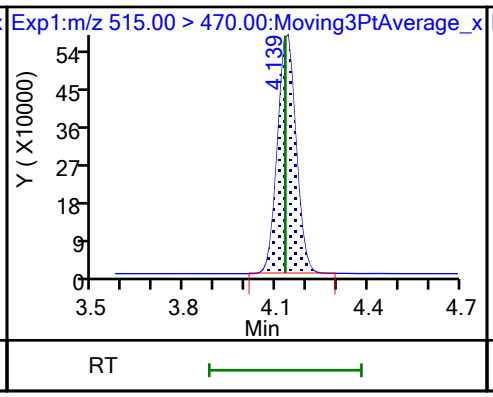
24 Perfluorodecanoic acid



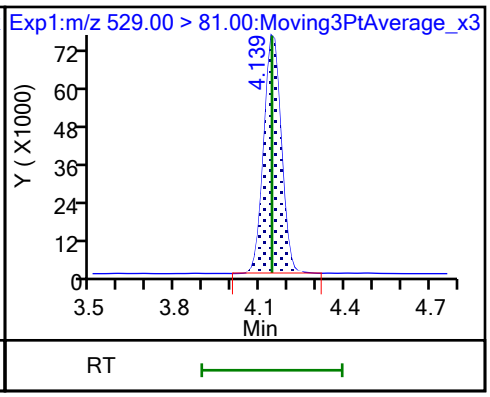
24 Perfluorodecanoic acid



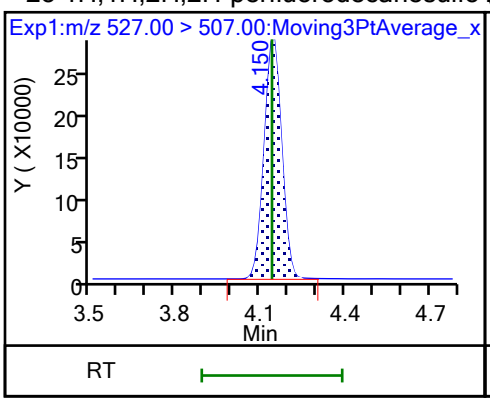
D 23 13C2 PFDA



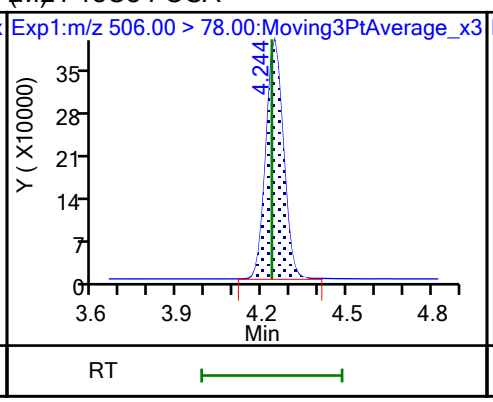
D 26 M2-8:2 FTS



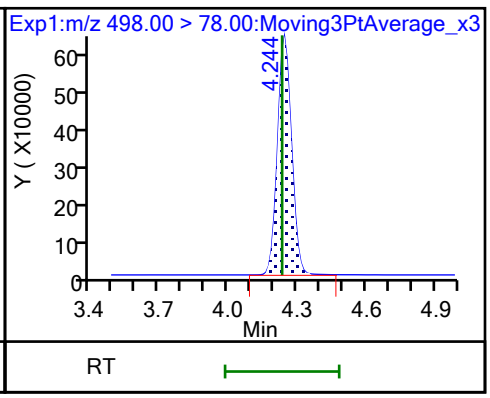
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



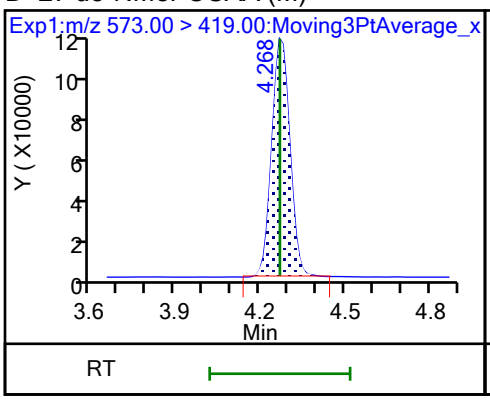
D 21 13C8 FOSA



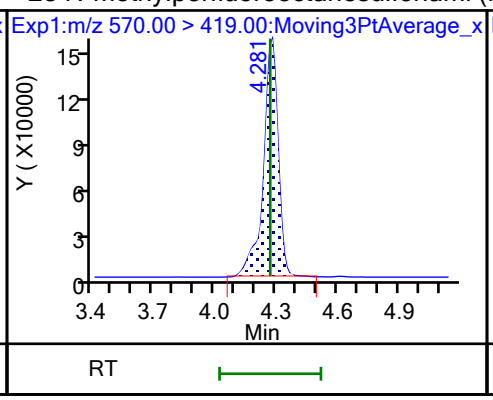
22 Perfluorooctanesulfonamide



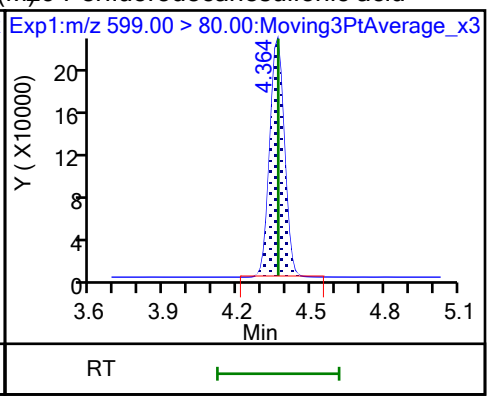
D 27 d3-NMeFOSAA (M)



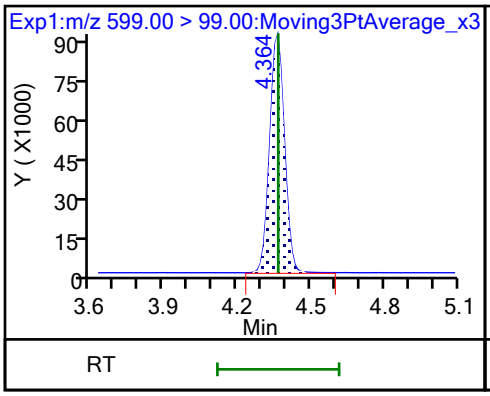
28 N-methylperfluorooctanesulfonami (M)



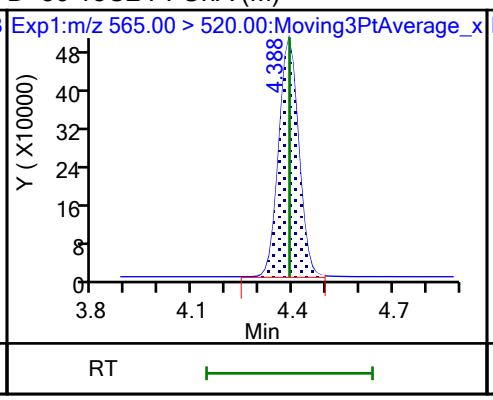
29 Perfluorodecanesulfonic acid



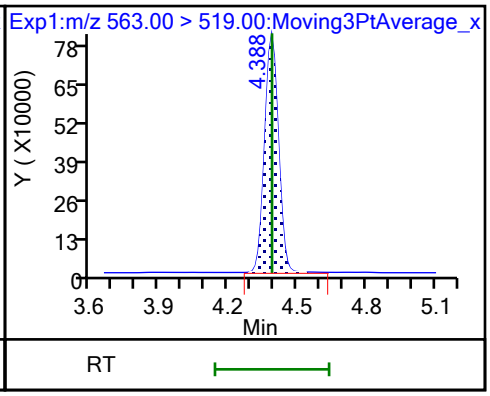
29 Perfluorodecanesulfonic acid



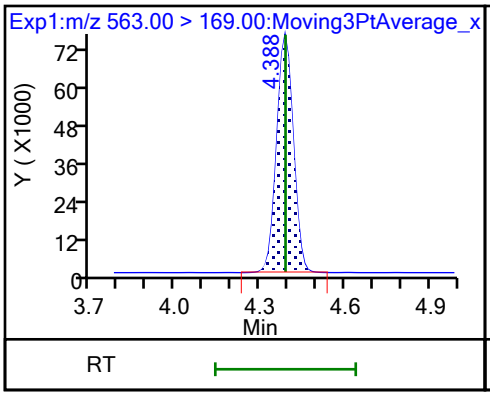
D 30 13C2 PFUnA (M)



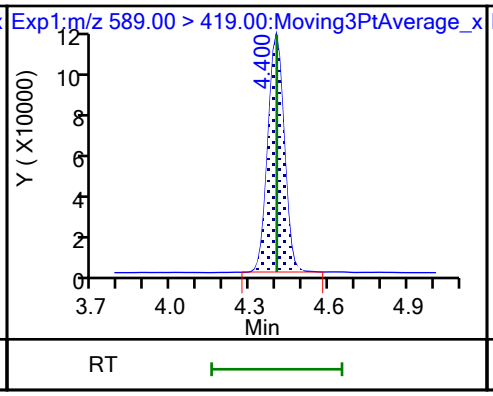
31 Perfluoroundecanoic acid



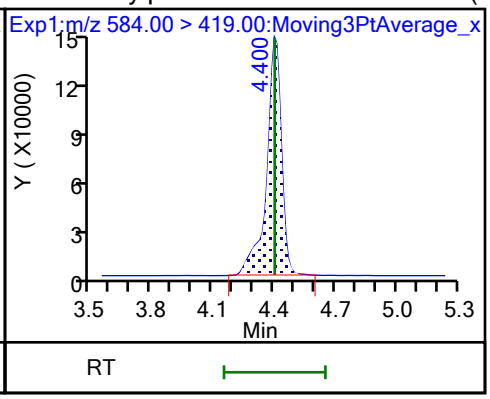
31 Perfluoroundecanoic acid



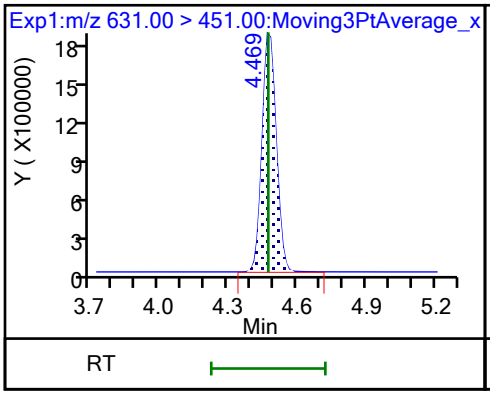
D 32 d5-NEtFOSAA



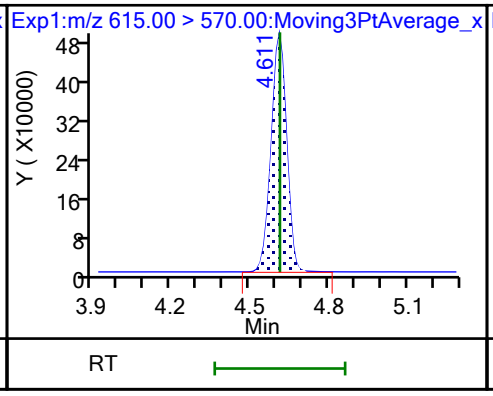
33 N-ethylperfluorooctanesulfonamid (M)



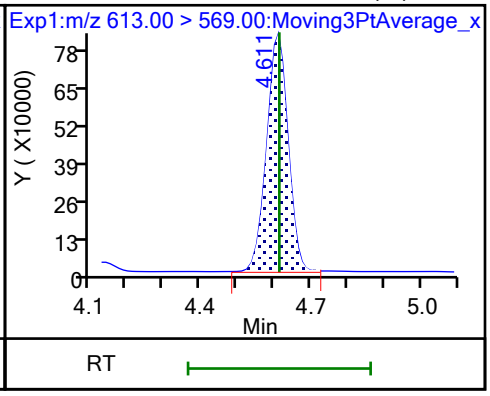
66 11-Chloroeicosafluoro-3-oxaundec



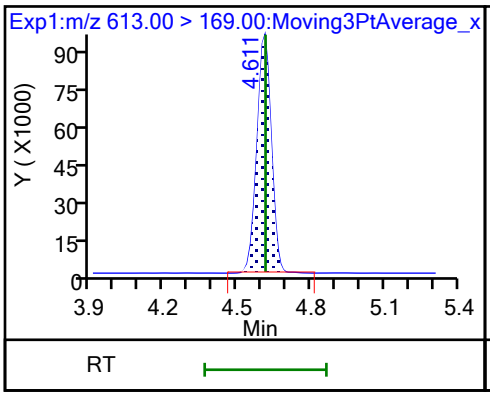
D 36 13C2 PFDoA



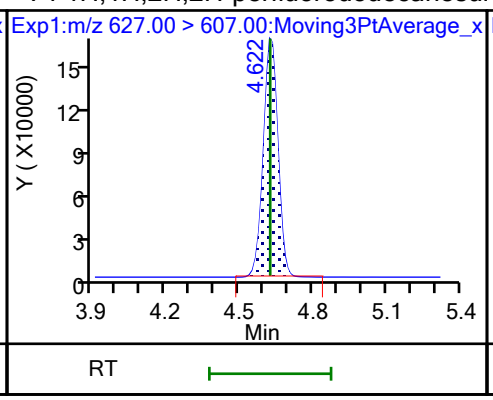
37 Perfluorododecanoic acid (M)



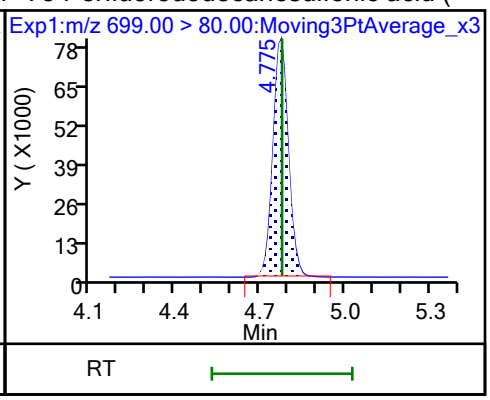
37 Perfluorododecanoic acid



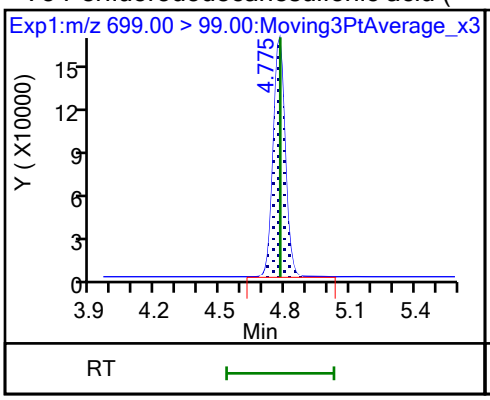
74 1H,1H,2H,2H-perfluorododecanesul



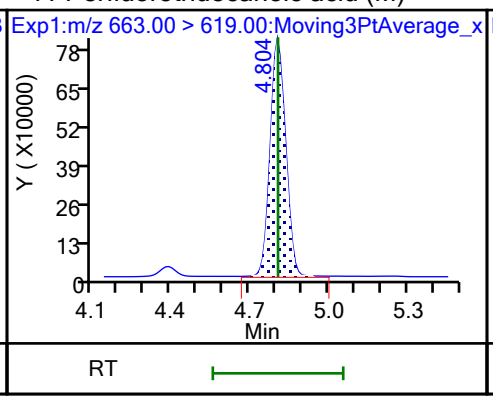
75 Perfluorododecanesulfonic acid (



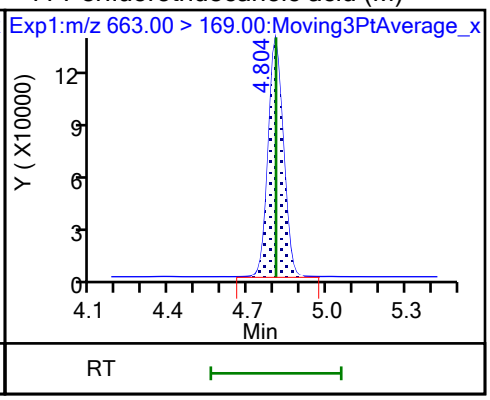
75 Perfluorododecanesulfonic acid (



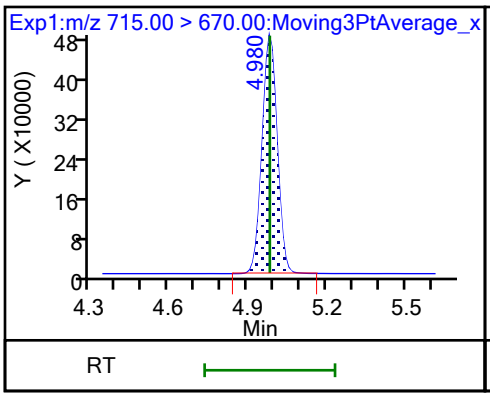
41 Perfluorotridecanoic acid (M)



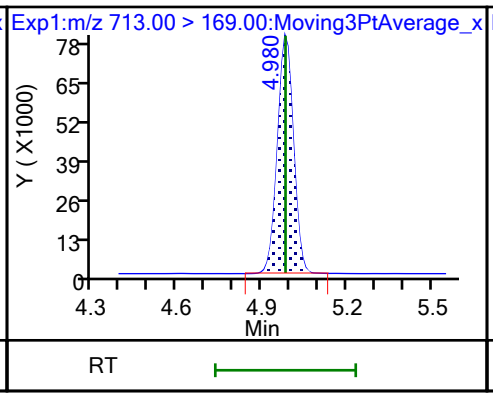
41 Perfluorotridecanoic acid (M)



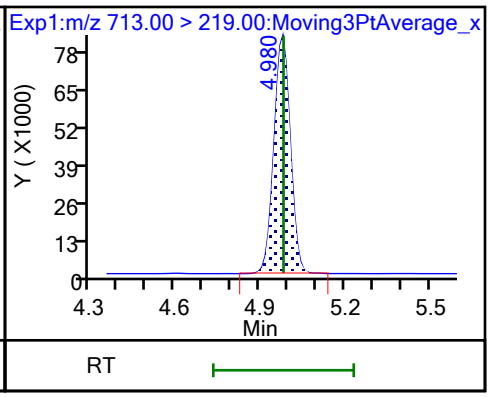
D 43 13C2 PFTeDA



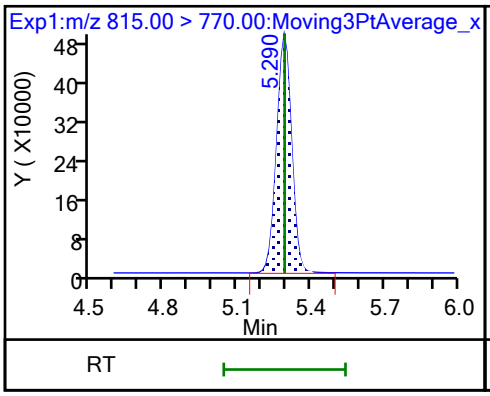
42 Perfluorotetradecanoic acid



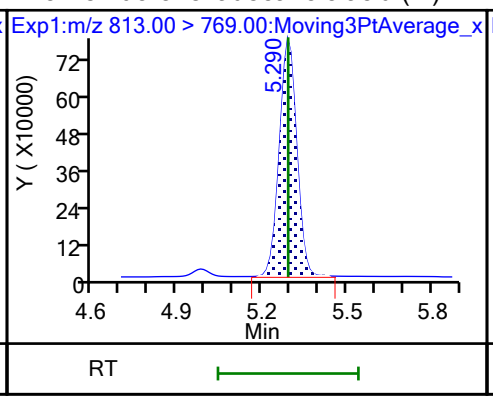
42 Perfluorotetradecanoic acid



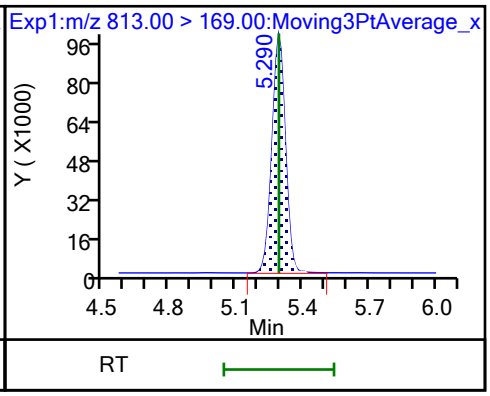
D 44 13C2 PFHxDA



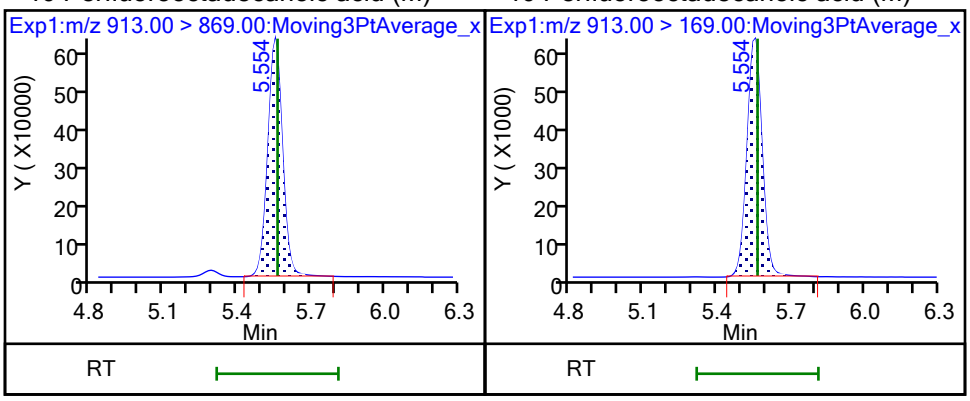
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

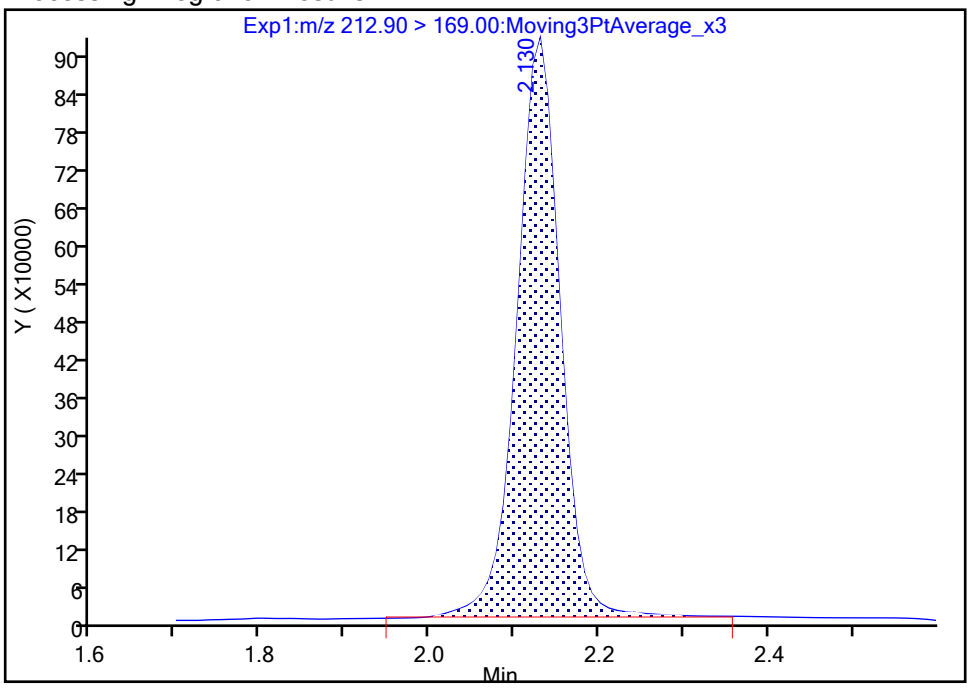
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

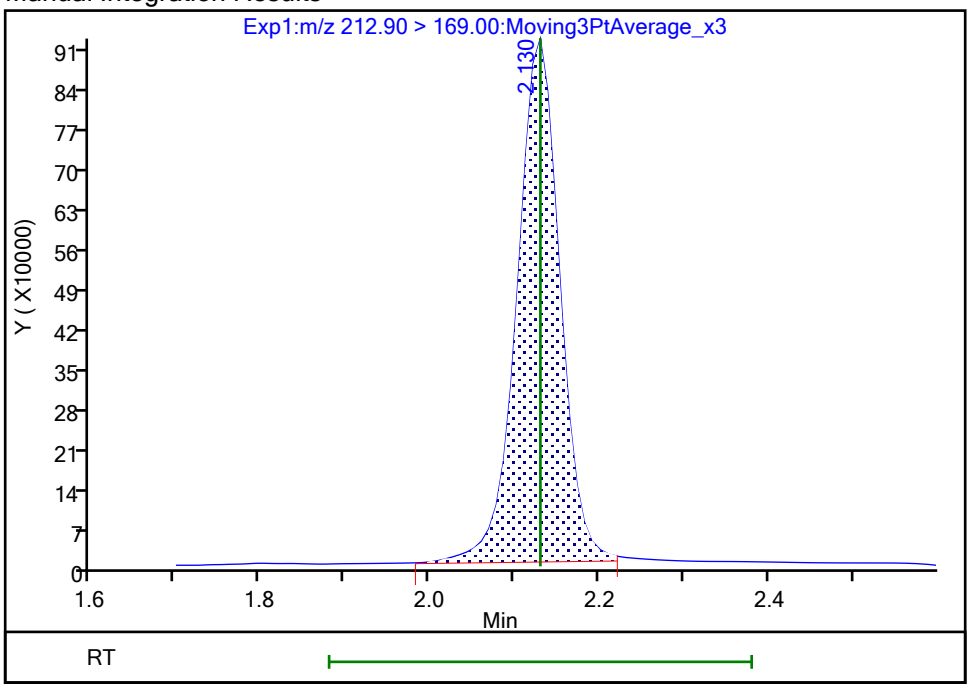
Processing Integration Results

RT: 2.13
Area: 3269218
Amount: 2.001717
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 3232196
Amount: 1.978586
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:12:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

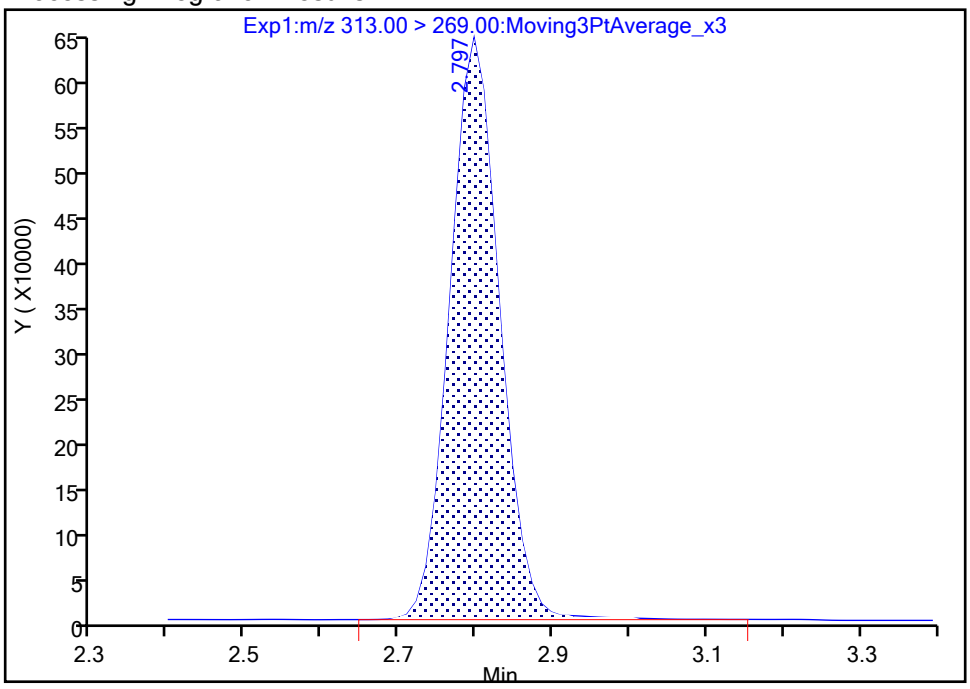
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

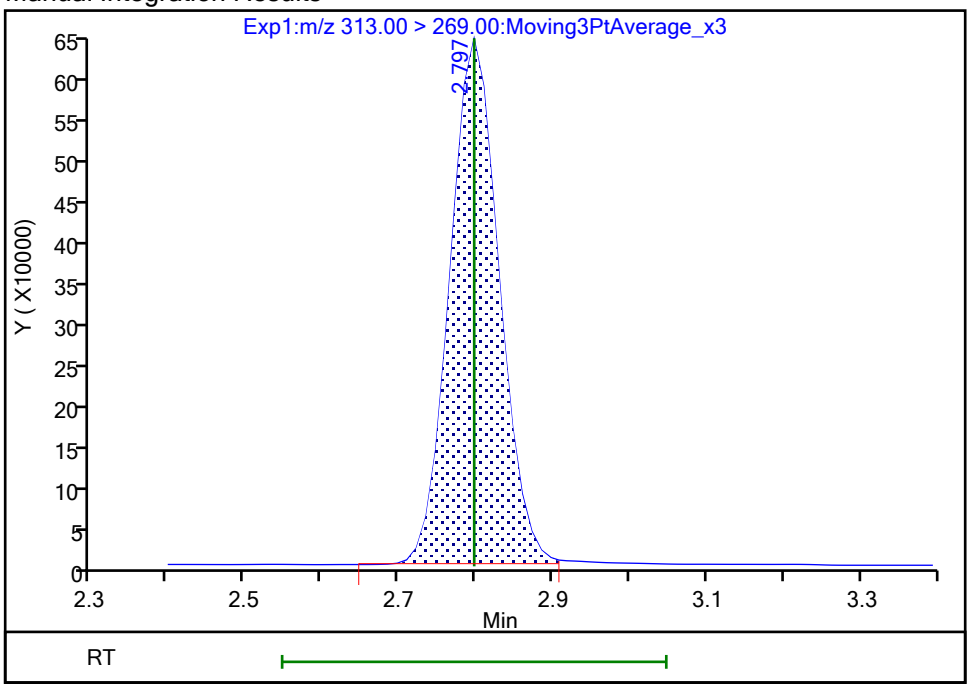
Processing Integration Results

RT: 2.80
Area: 2881670
Amount: 1.935718
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 2861303
Amount: 1.922037
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:00:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

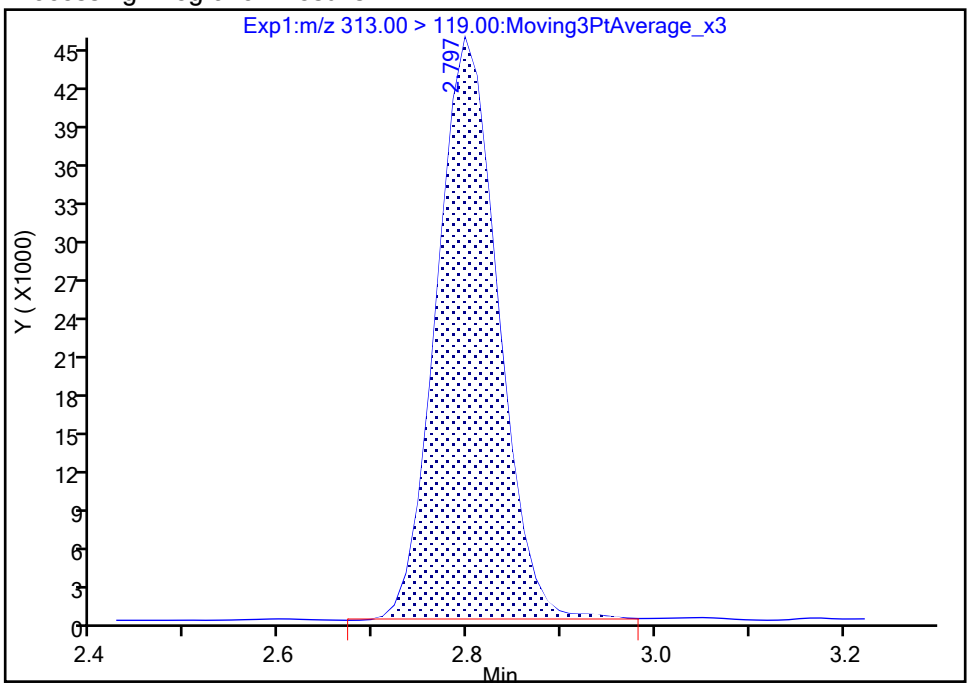
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

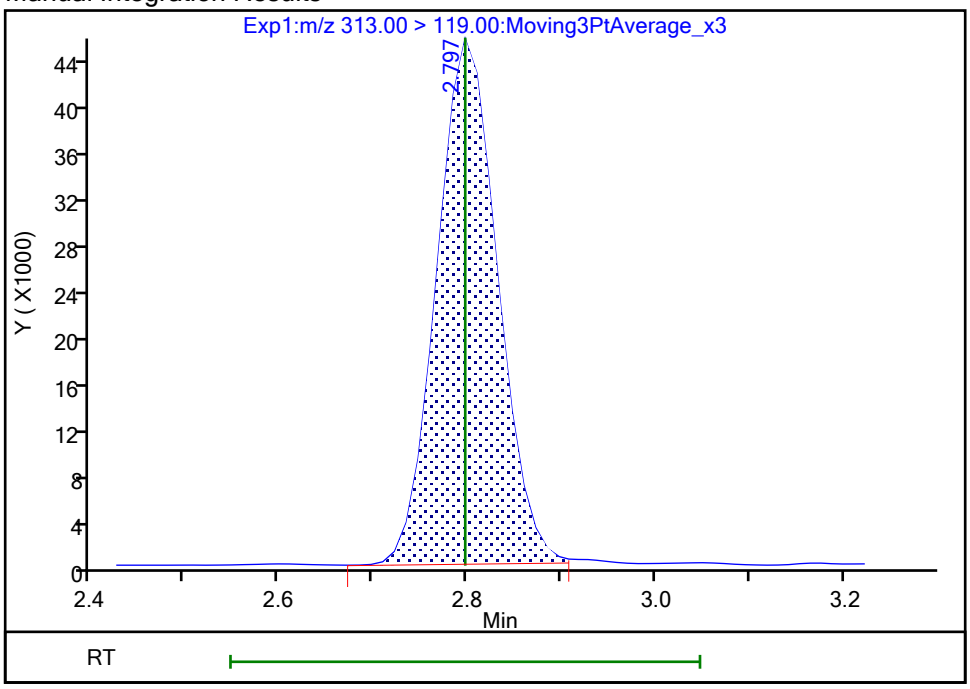
Processing Integration Results

RT: 2.80
Area: 205238
Amount: 1.935718
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 204263
Amount: 1.922037
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:00:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

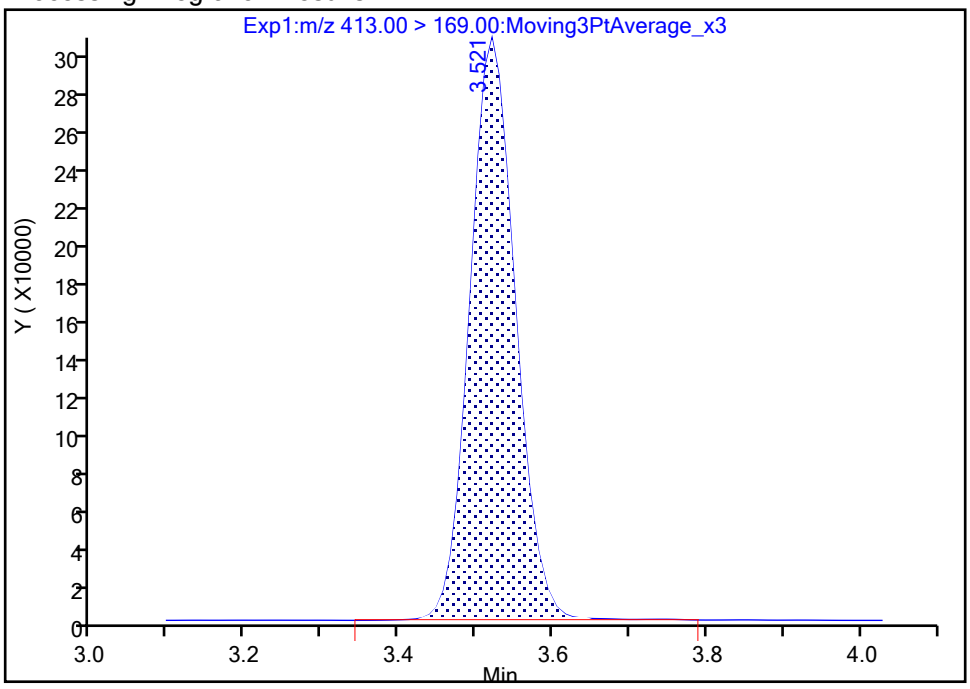
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

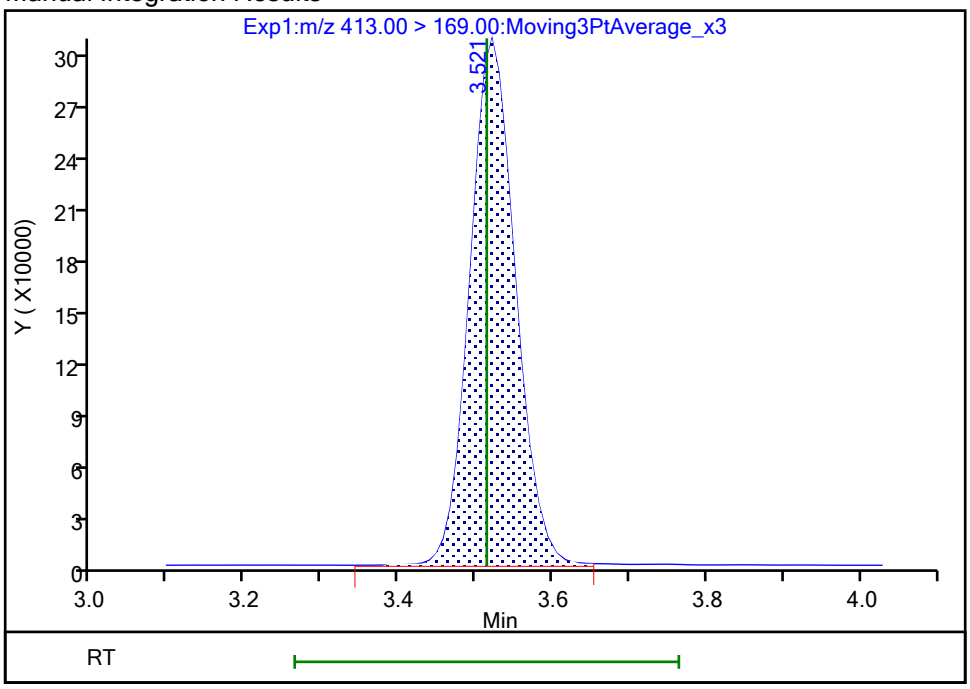
Processing Integration Results

RT: 3.52
Area: 1239576
Amount: 2.023414
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1236393
Amount: 2.023414
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

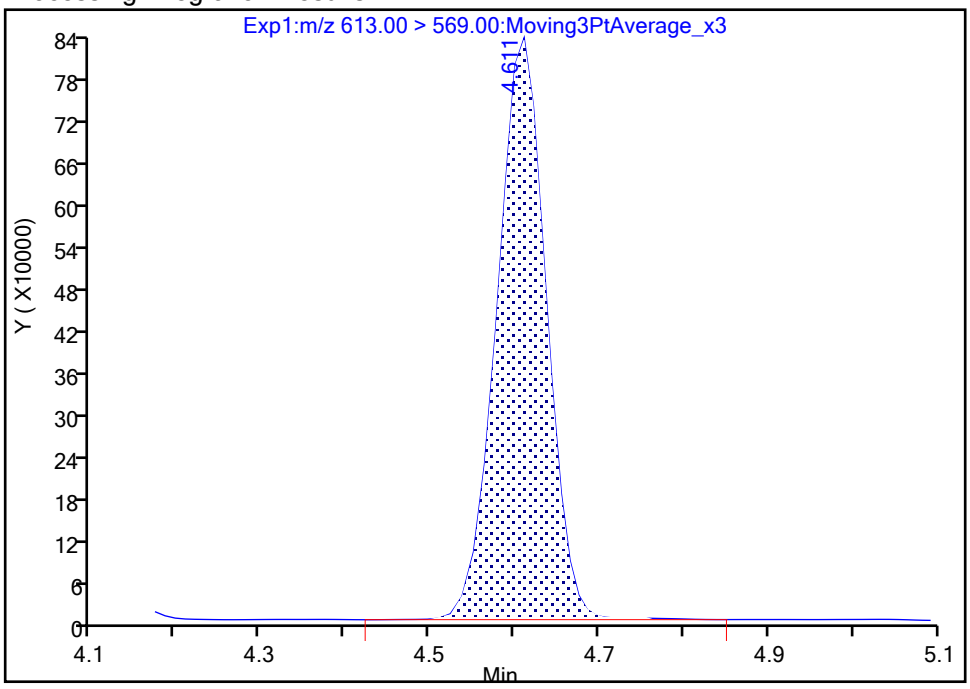
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

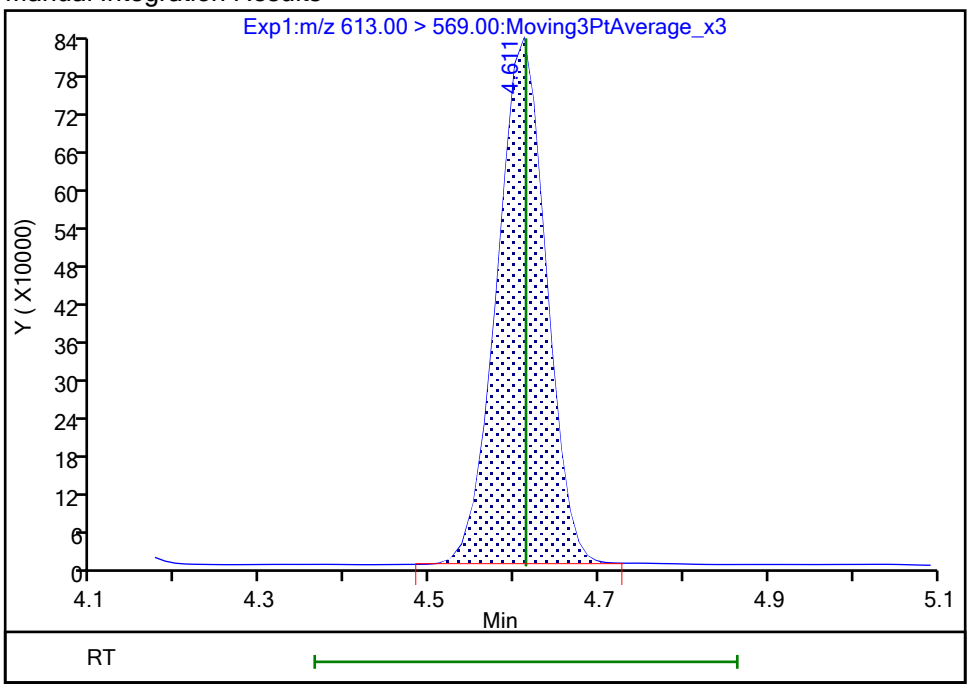
Processing Integration Results

RT: 4.61
Area: 3382894
Amount: 2.050849
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 3363749
Amount: 2.039242
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

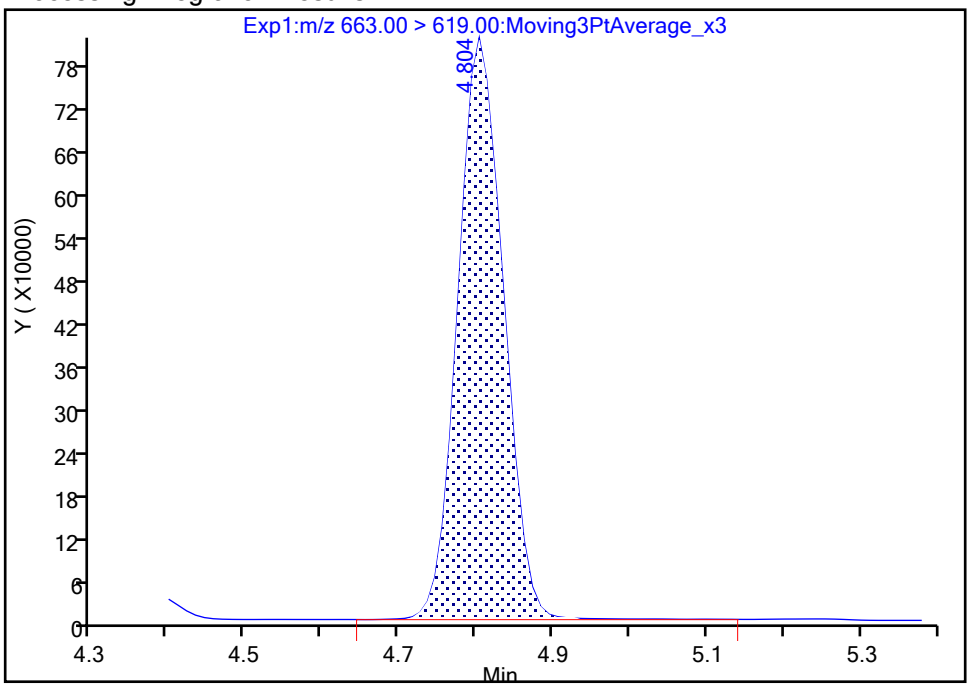
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

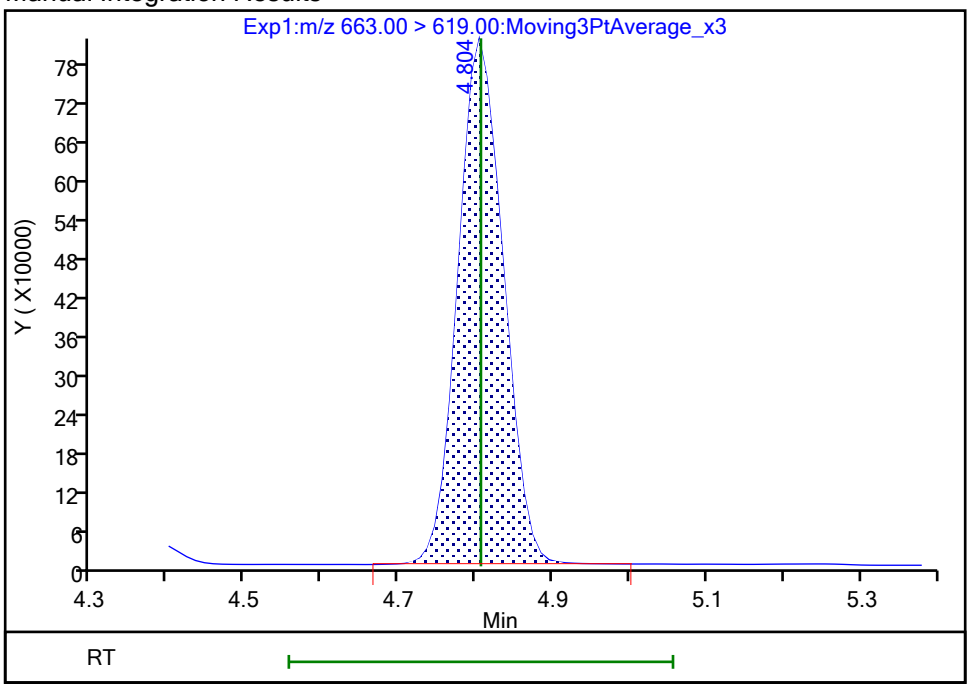
Processing Integration Results

RT: 4.80
Area: 3370669
Amount: 1.944137
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 3324153
Amount: 1.917307
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:03:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

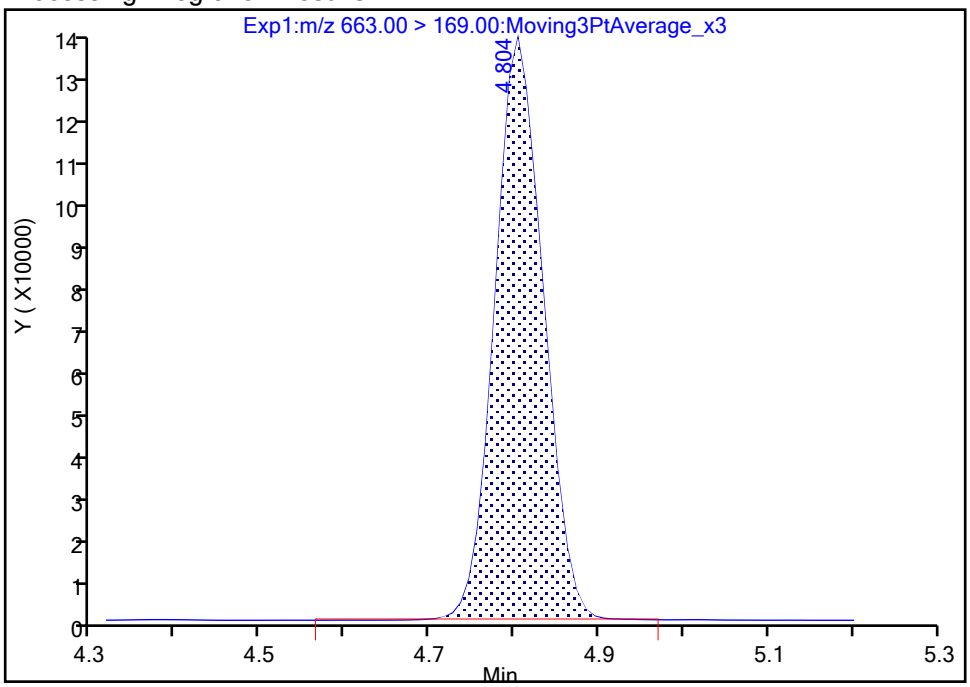
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

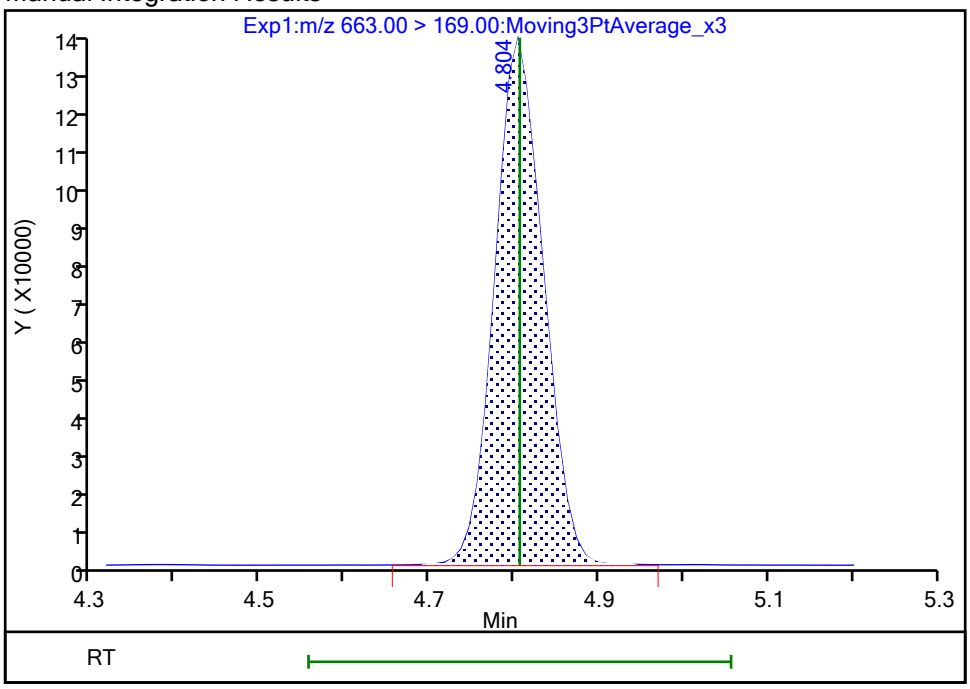
Processing Integration Results

RT: 4.80
Area: 524899
Amount: 1.944137
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 523911
Amount: 1.917307
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:03:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

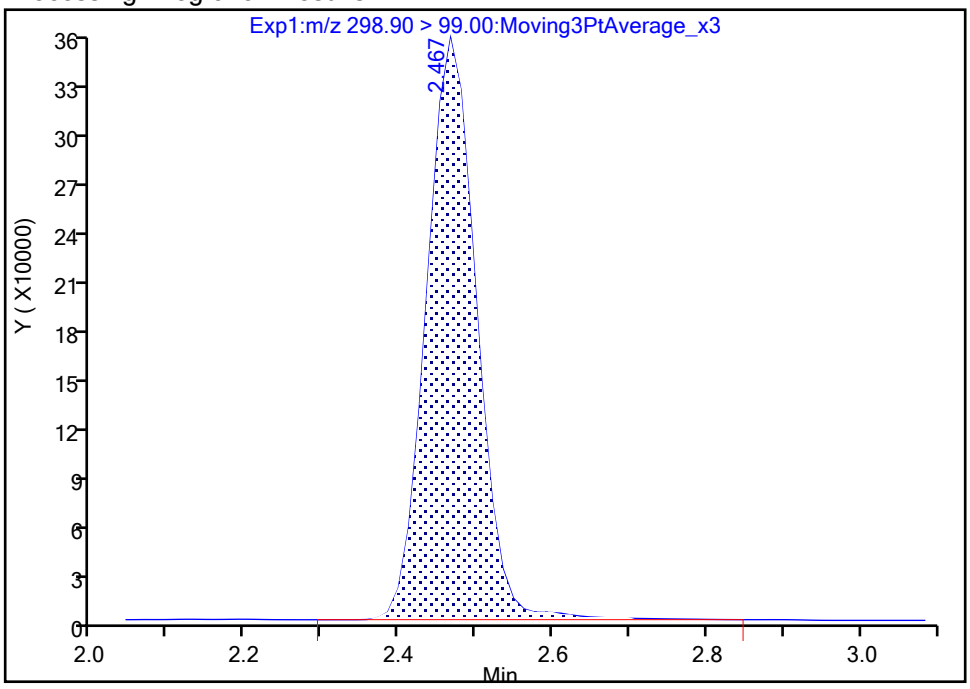
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

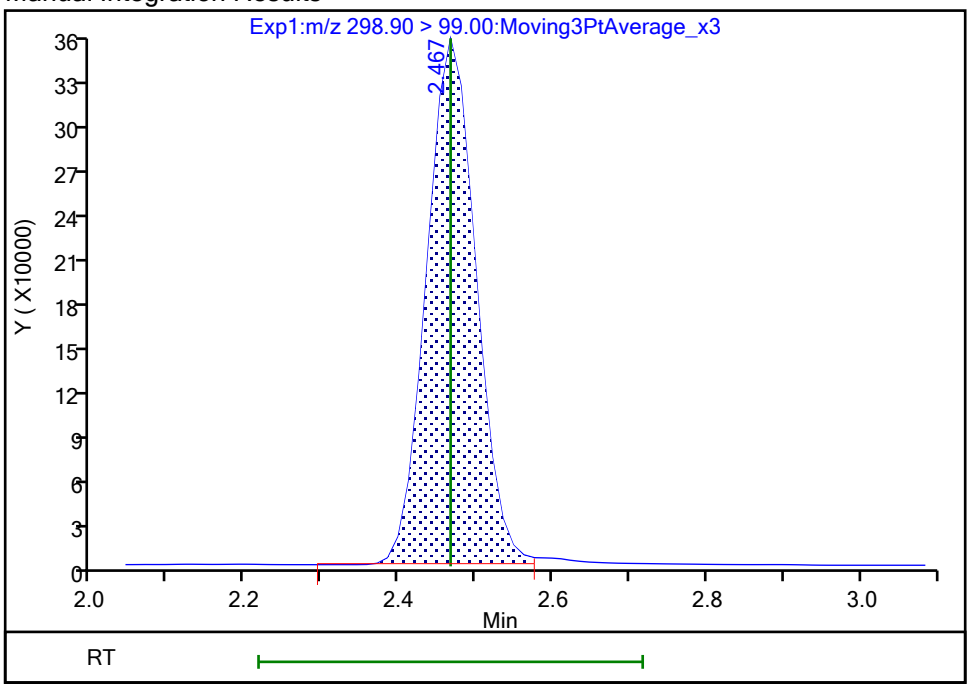
Processing Integration Results

RT: 2.47
Area: 1628830
Amount: 1.806429
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1606472
Amount: 1.797759
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:00:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

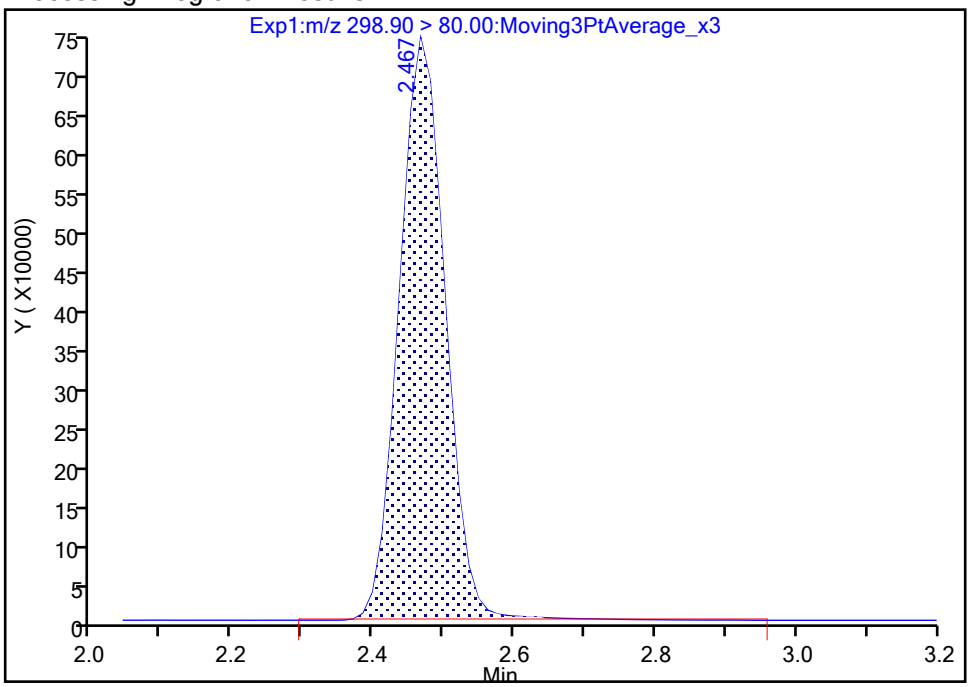
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

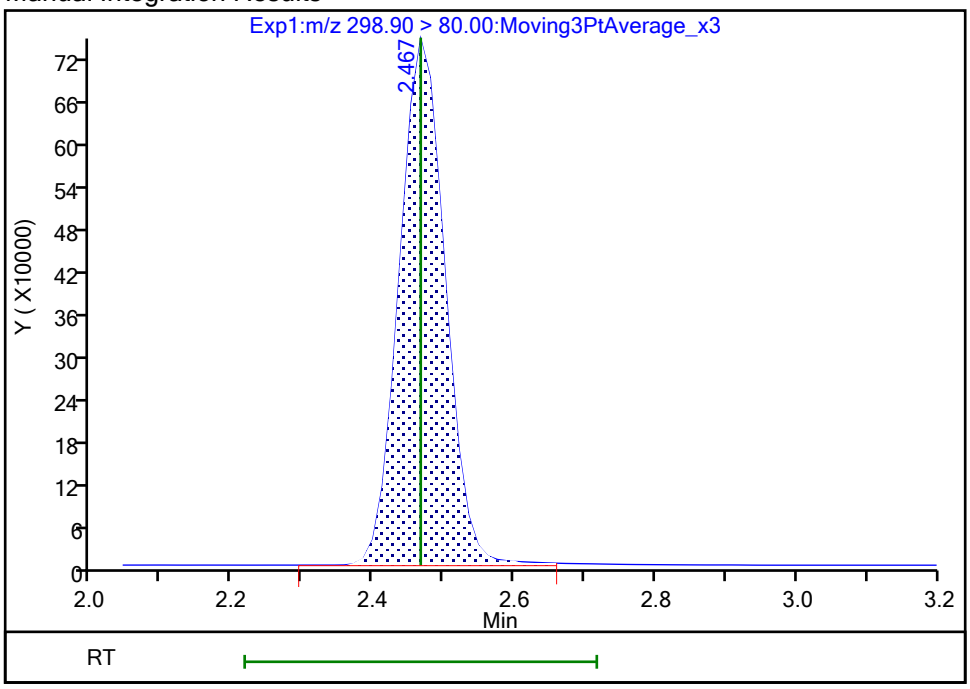
Processing Integration Results

RT: 2.47
Area: 3379781
Amount: 1.806429
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 3363560
Amount: 1.797759
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:00:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

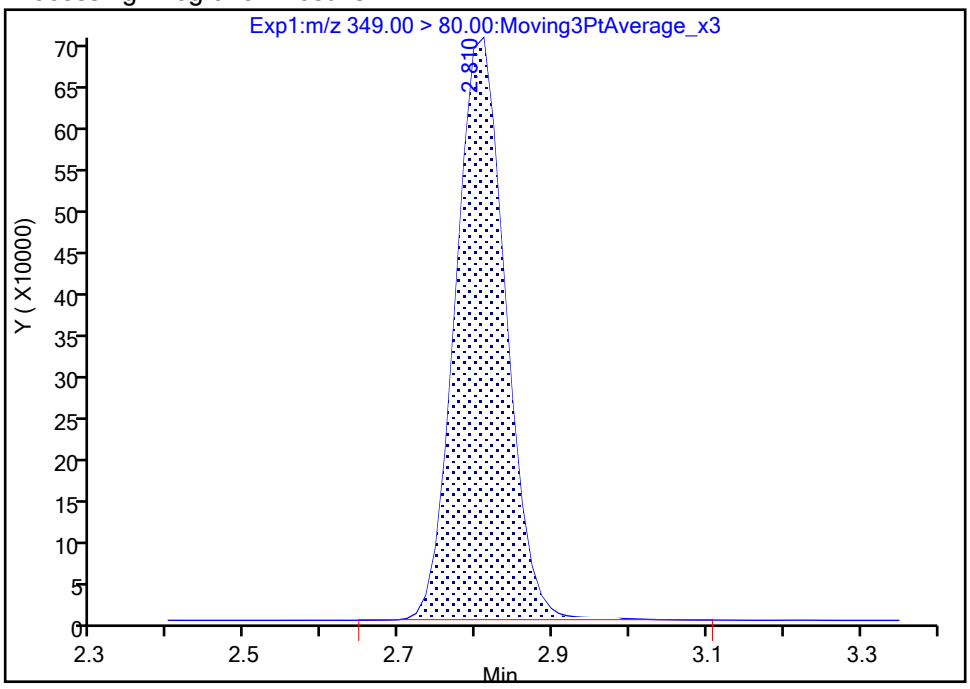
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

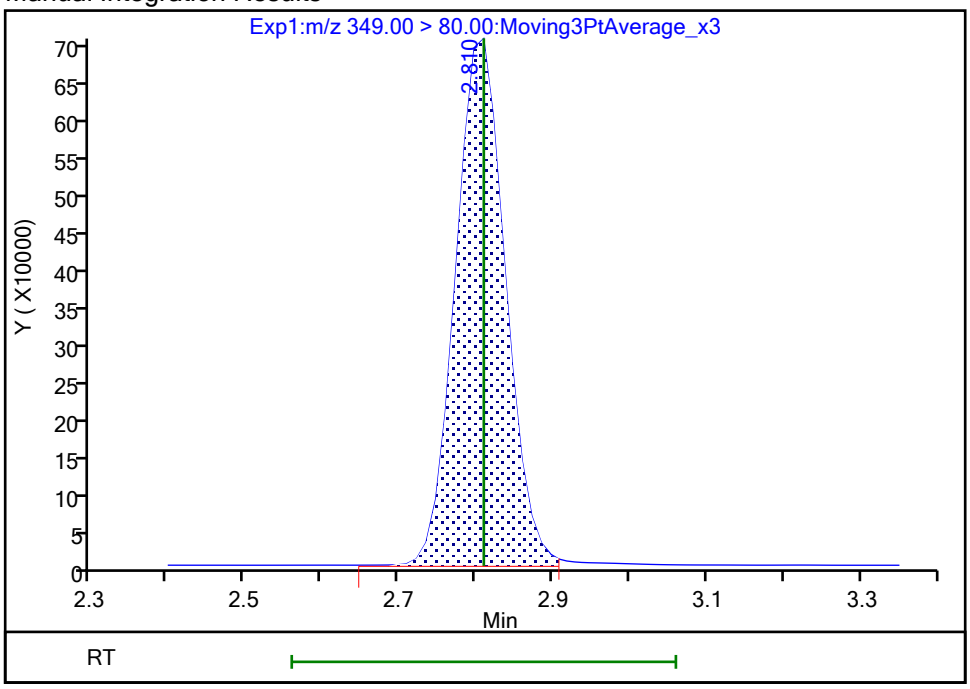
Processing Integration Results

RT: 2.81
Area: 3212223
Amount: 1.896233
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 3189907
Amount: 1.883059
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

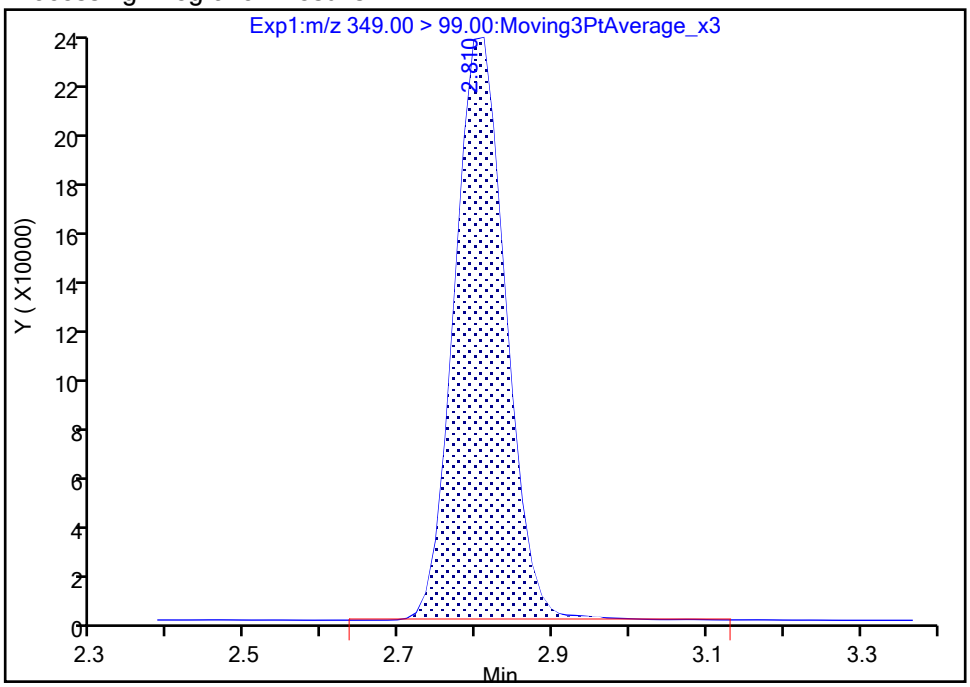
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

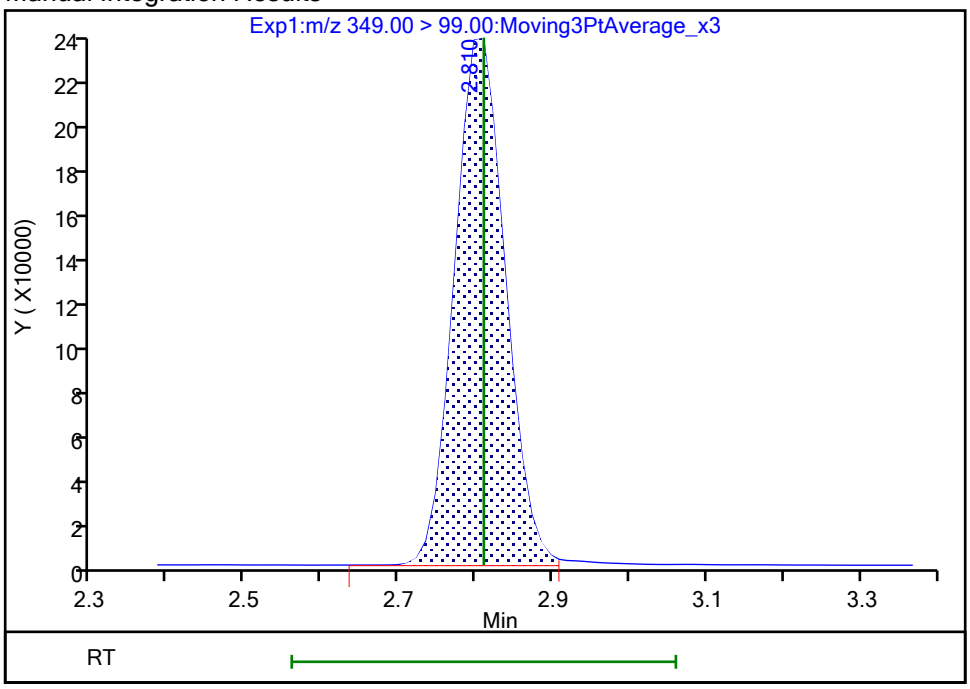
Processing Integration Results

RT: 2.81
Area: 1096611
Amount: 1.896233
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1088028
Amount: 1.883059
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

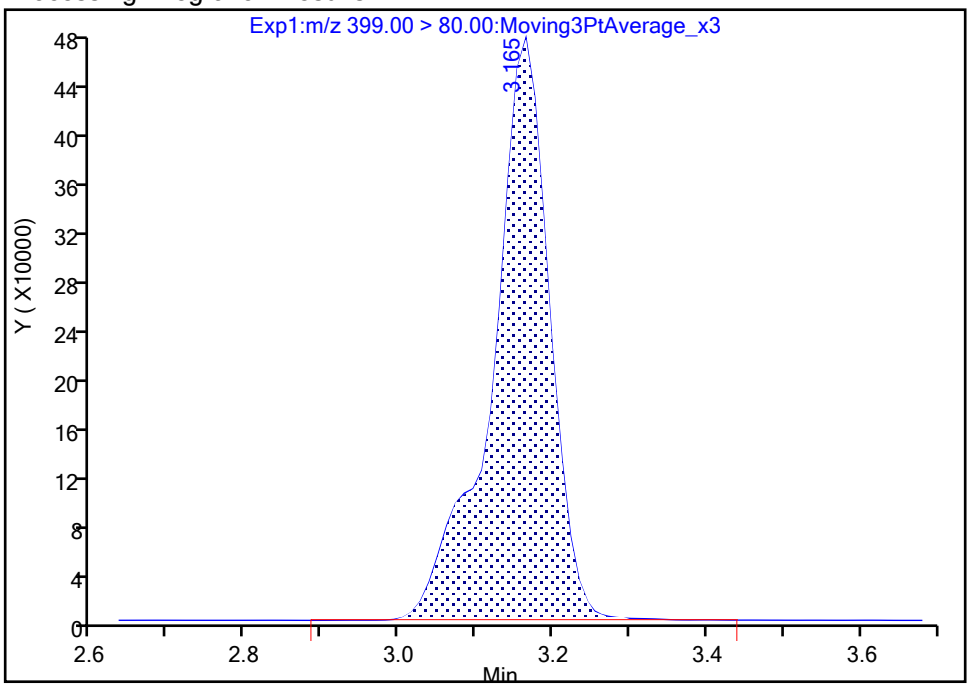
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

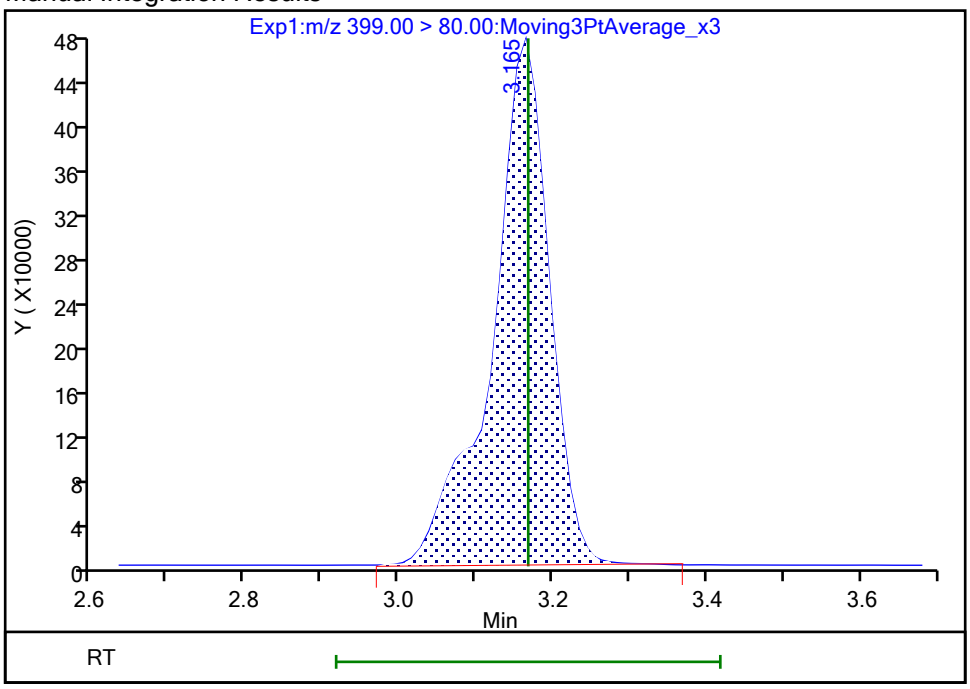
Processing Integration Results

RT: 3.16
Area: 2449072
Amount: 1.705517
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2444509
Amount: 1.702340
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

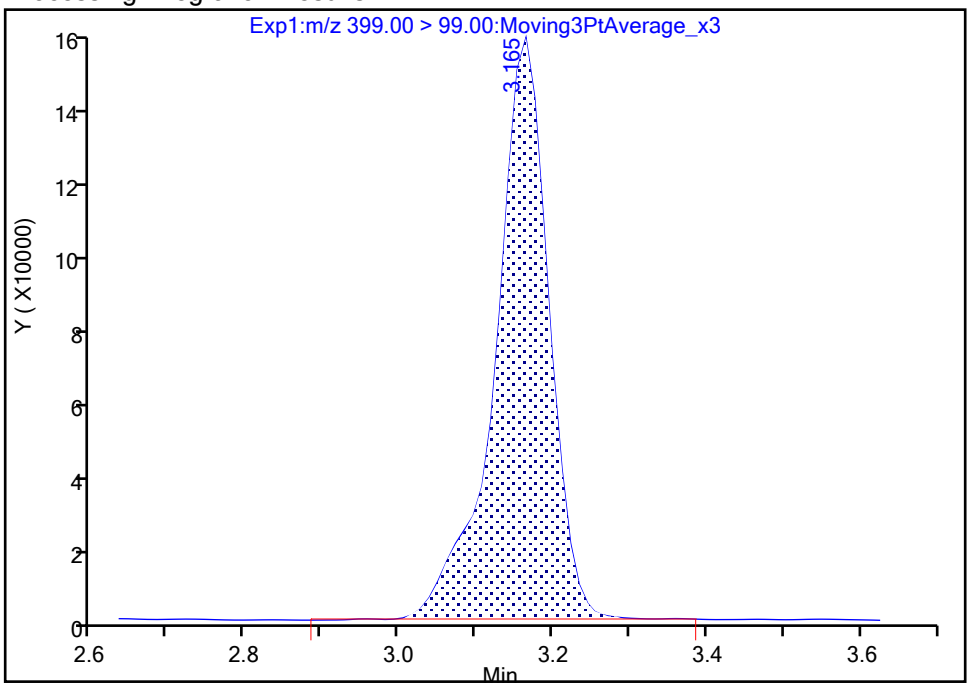
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

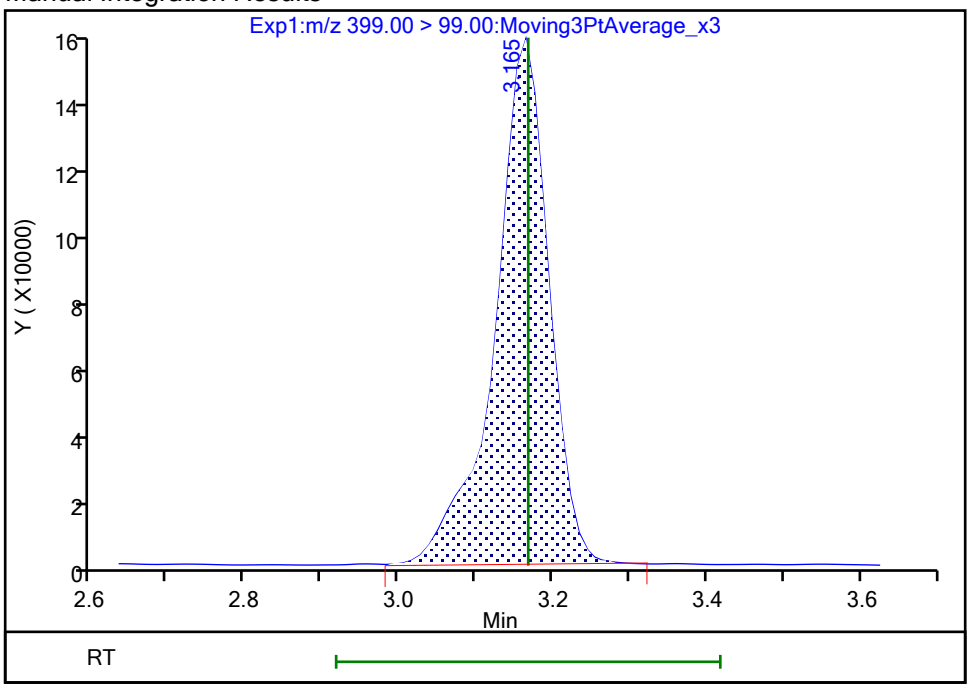
Processing Integration Results

RT: 3.16
Area: 746590
Amount: 1.705517
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 743197
Amount: 1.702340
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

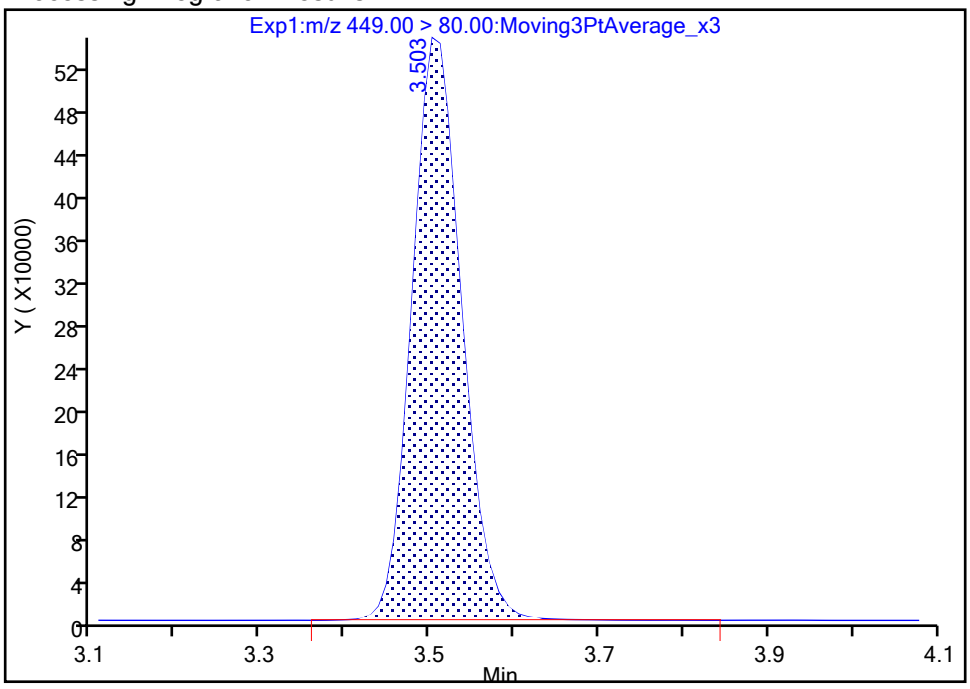
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

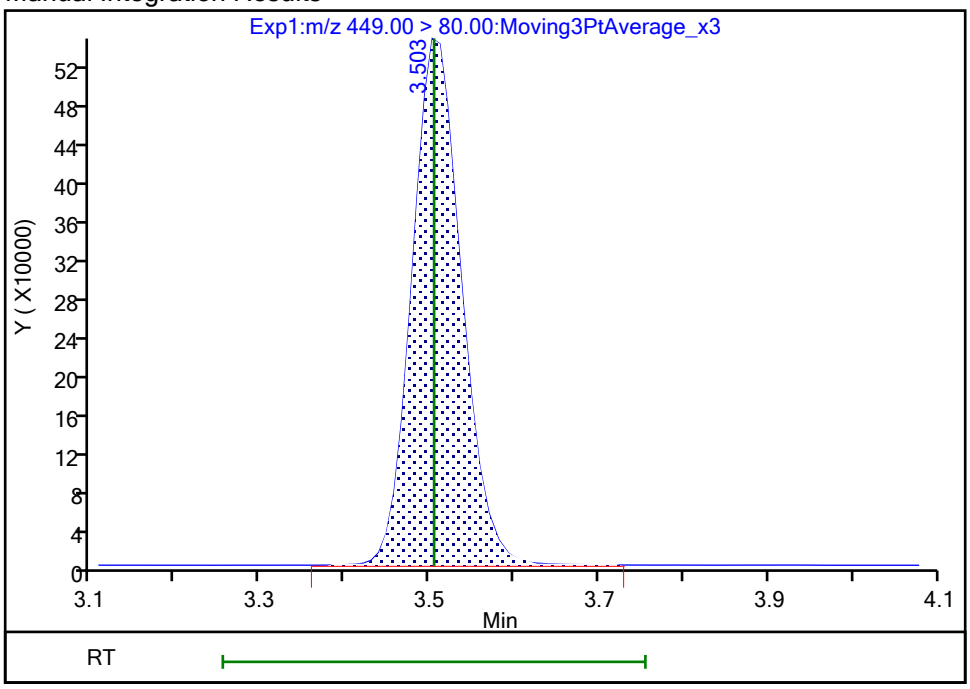
Processing Integration Results

RT: 3.50
Area: 2214296
Amount: 1.828528
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 2213808
Amount: 1.828125
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

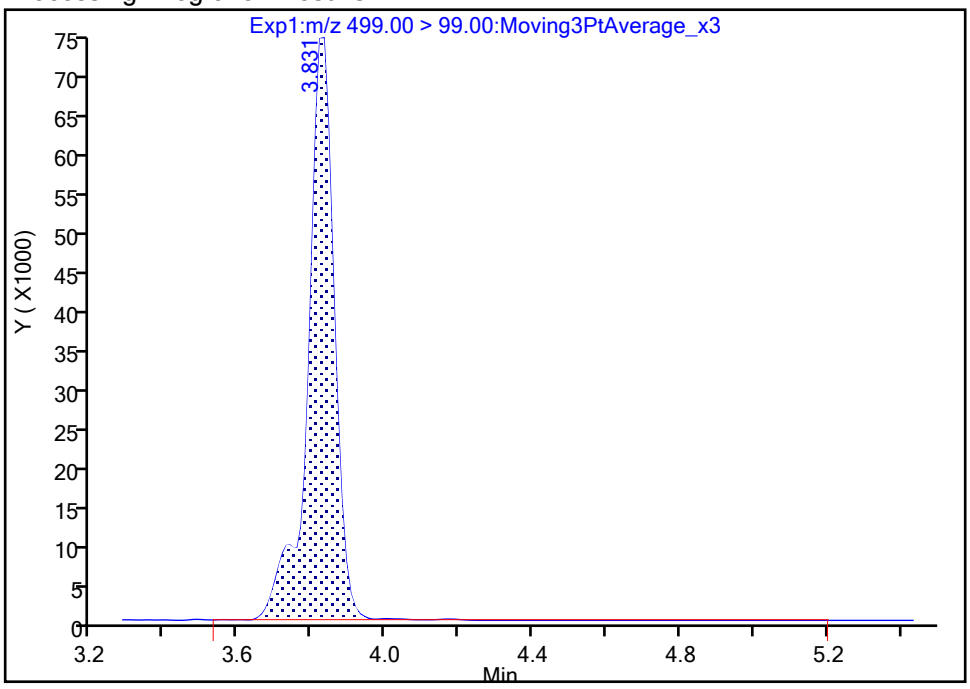
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

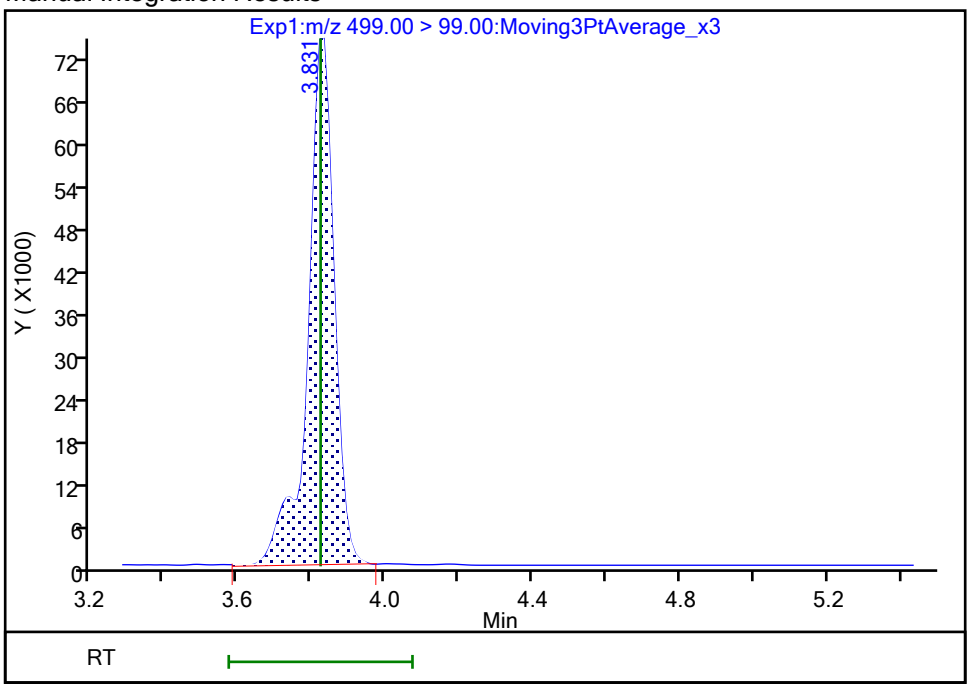
Processing Integration Results

RT: 3.83
Area: 374592
Amount: 1.694523
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 371293
Amount: 1.689358
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

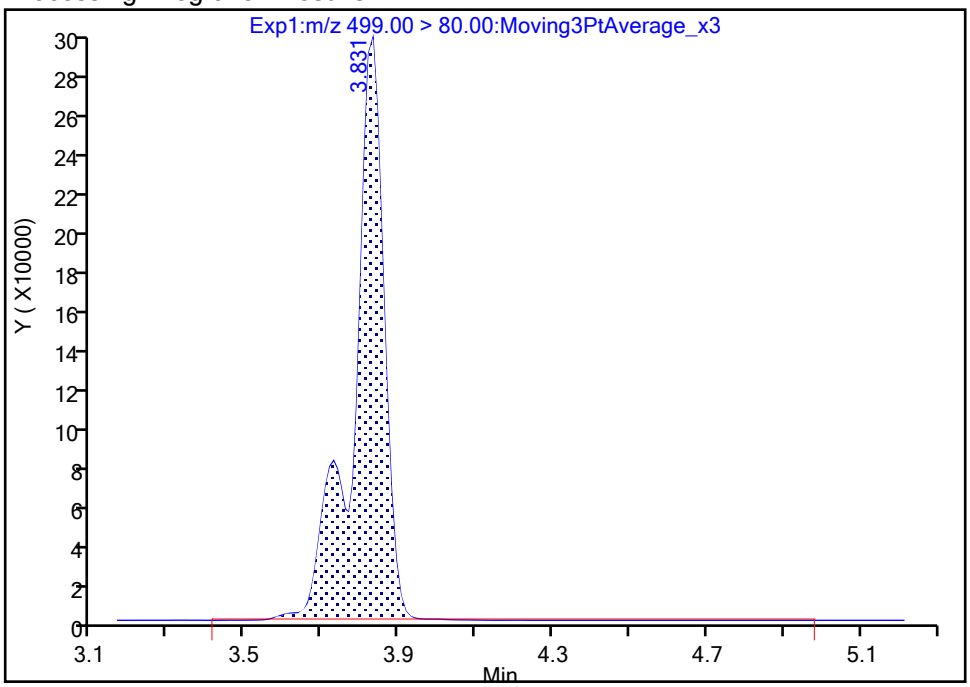
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

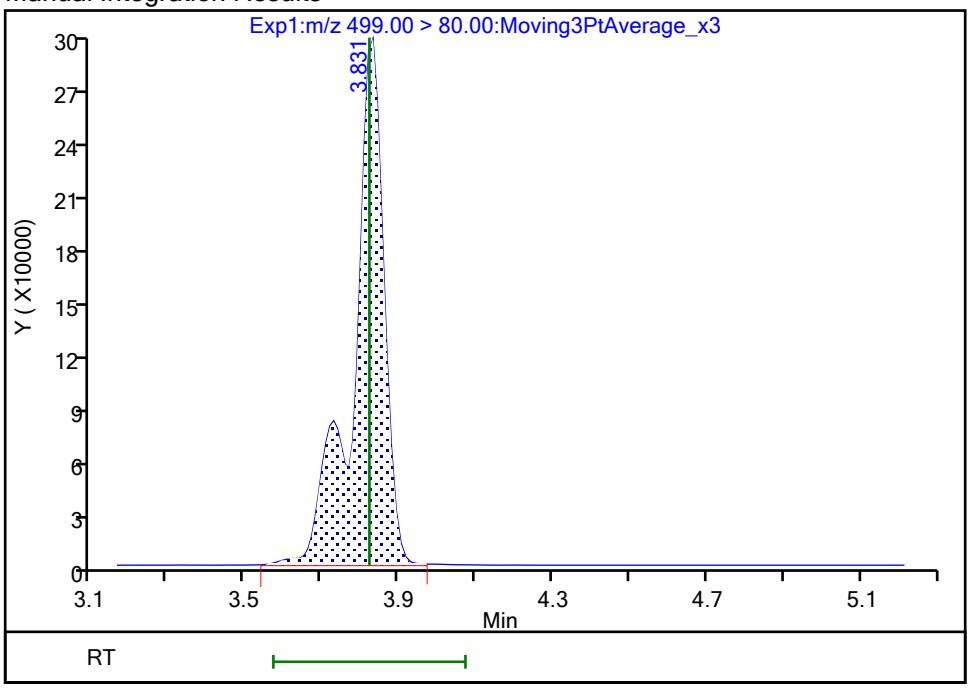
Processing Integration Results

RT: 3.83
Area: 1656165
Amount: 1.694523
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 1651117
Amount: 1.689358
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

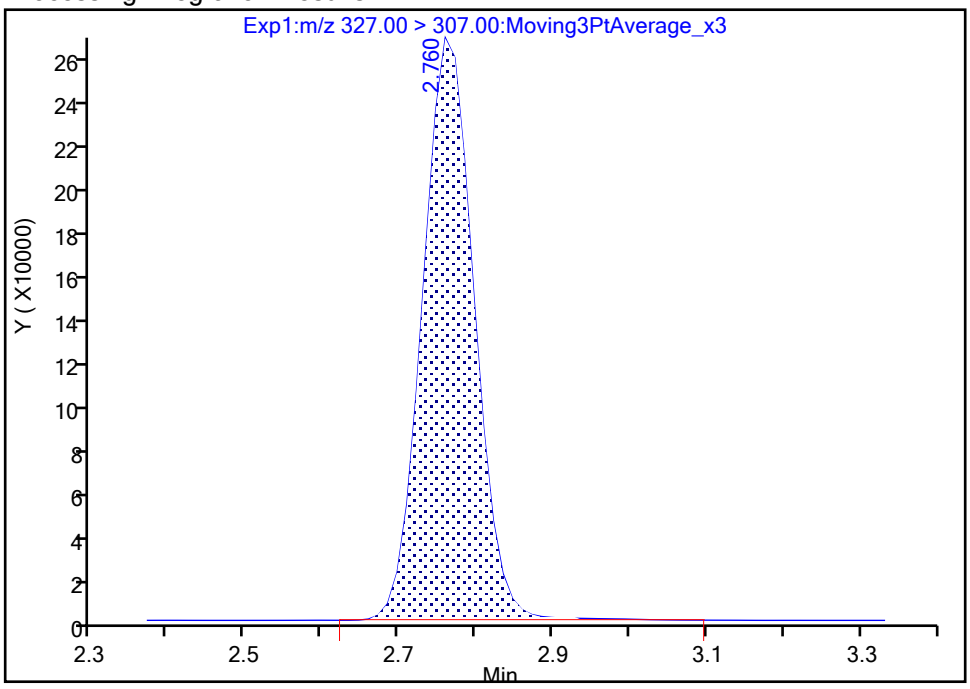
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

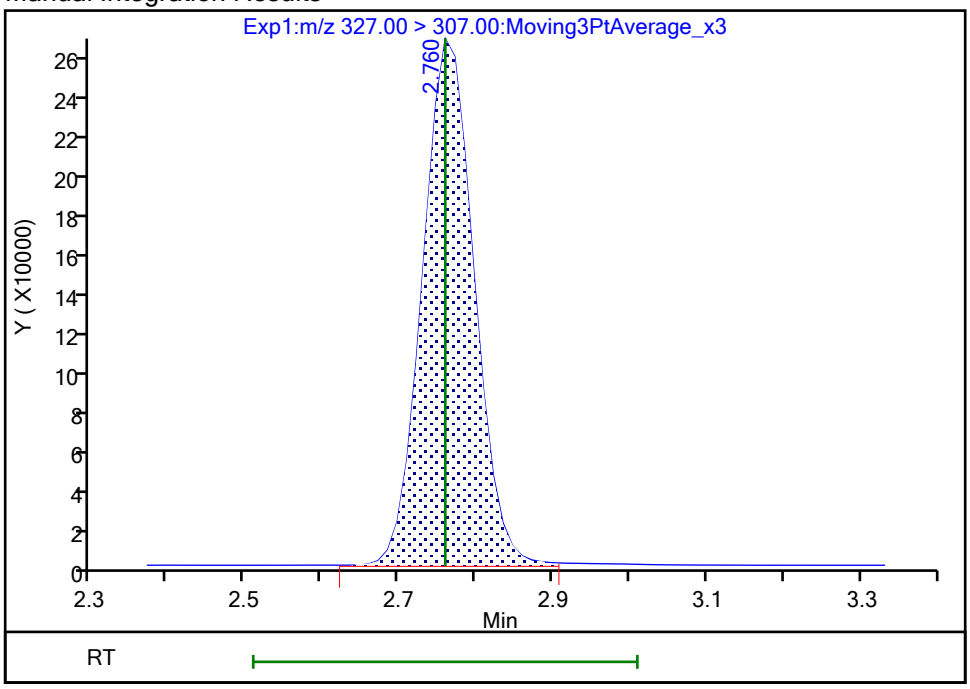
Processing Integration Results

RT: 2.76
Area: 1230933
Amount: 1.883523
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 1225957
Amount: 1.875909
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:00:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

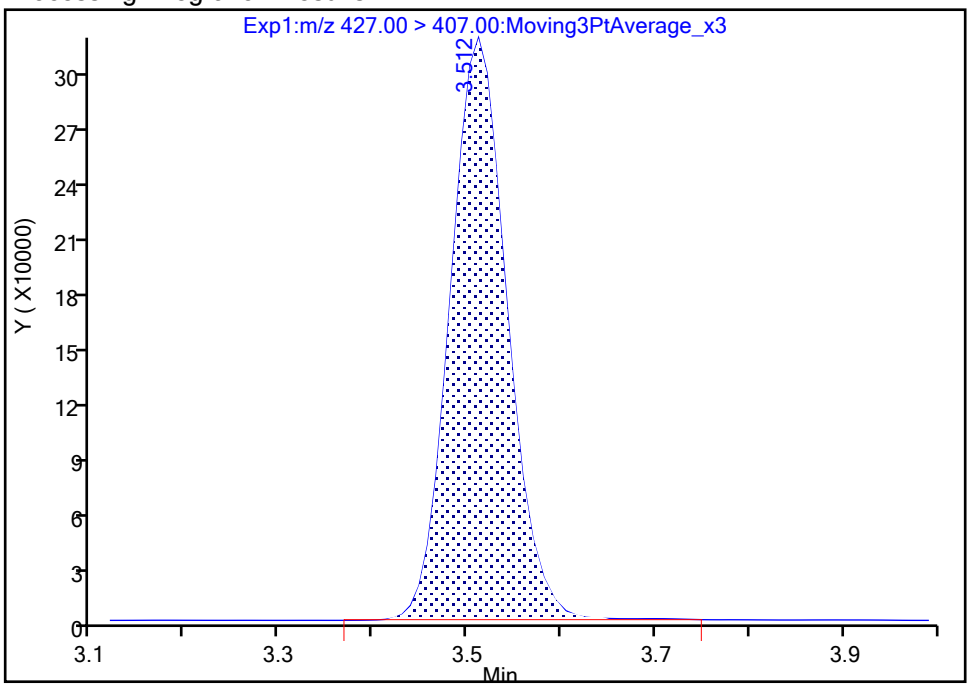
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

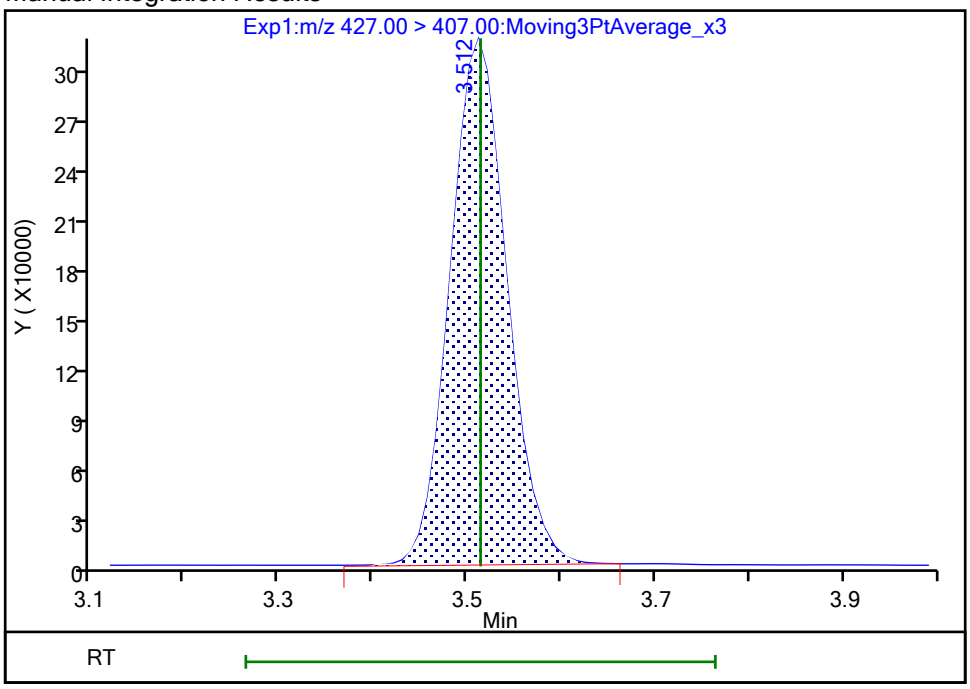
Processing Integration Results

RT: 3.51
Area: 1310131
Amount: 1.919821
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1307905
Amount: 1.916559
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

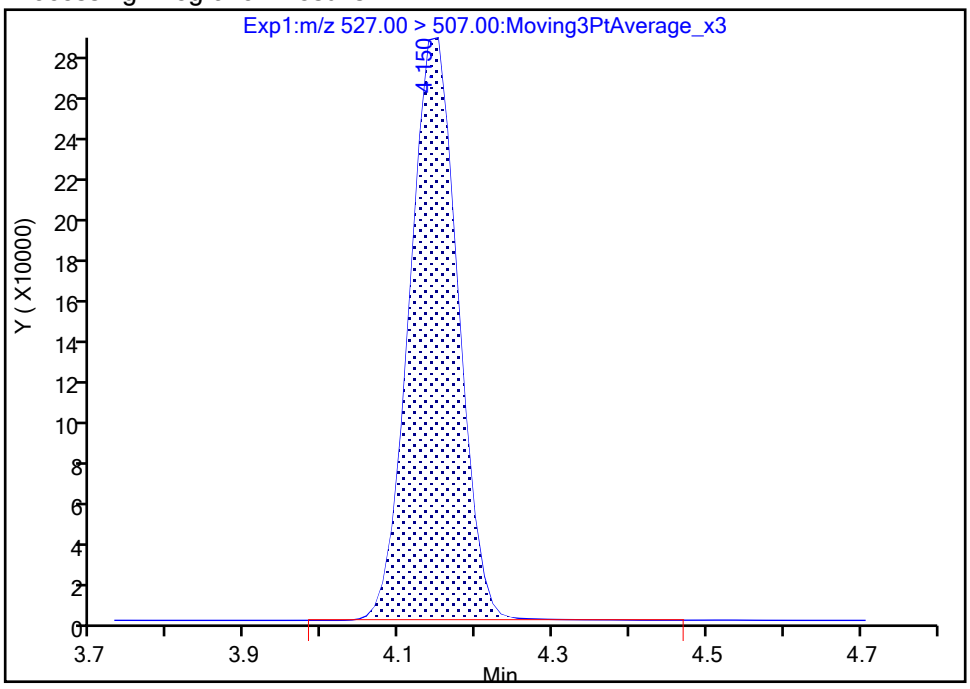
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

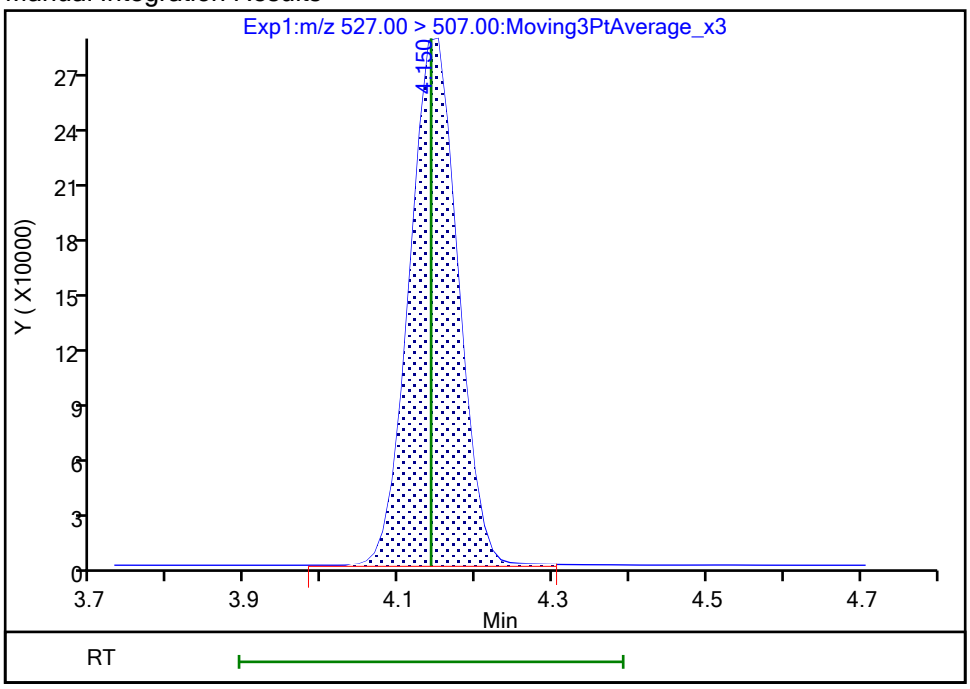
Processing Integration Results

RT: 4.15
Area: 1233032
Amount: 2.056424
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 1231662
Amount: 2.054139
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

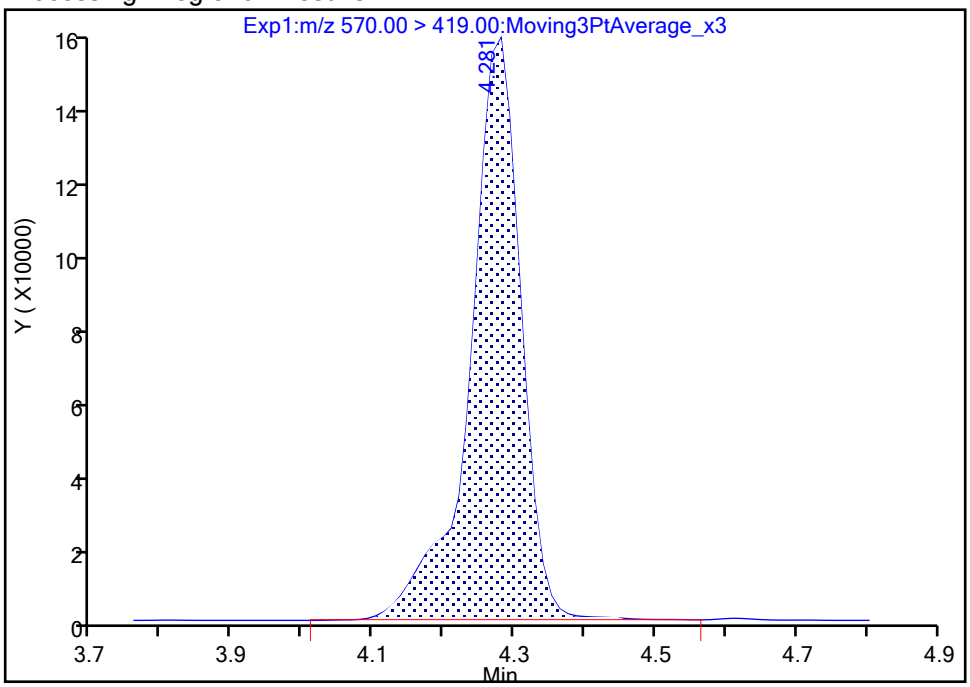
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

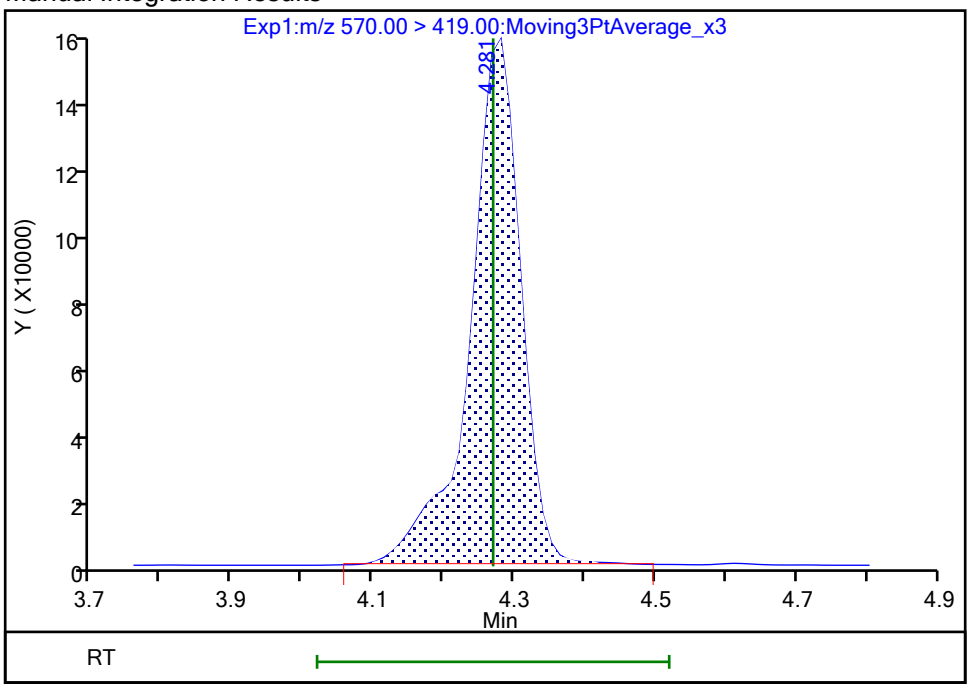
Processing Integration Results

RT: 4.28
Area: 776681
Amount: 2.011547
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 771474
Amount: 1.998062
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

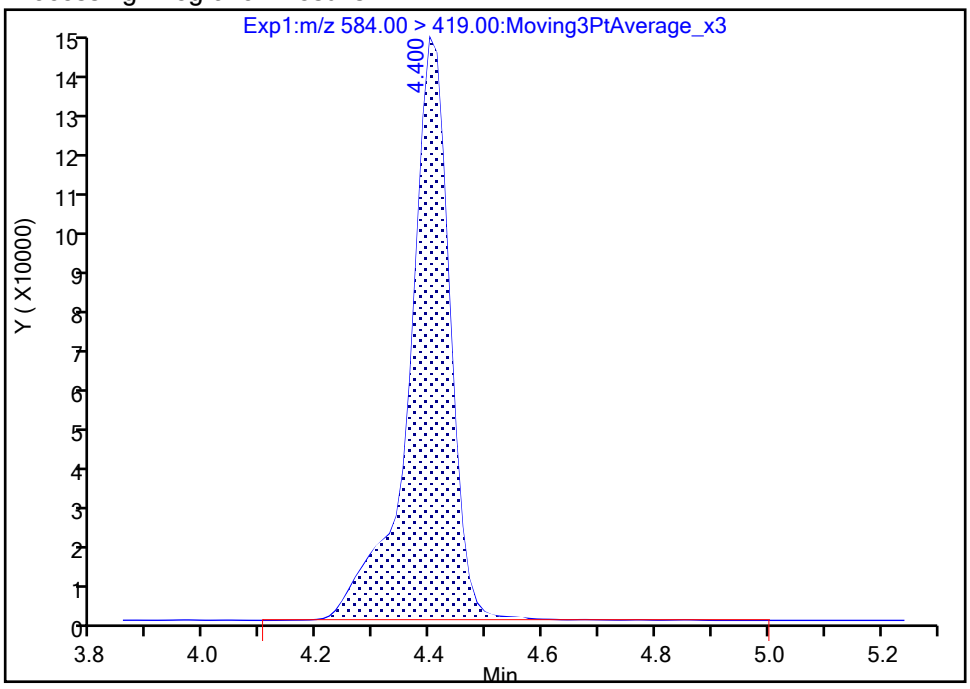
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

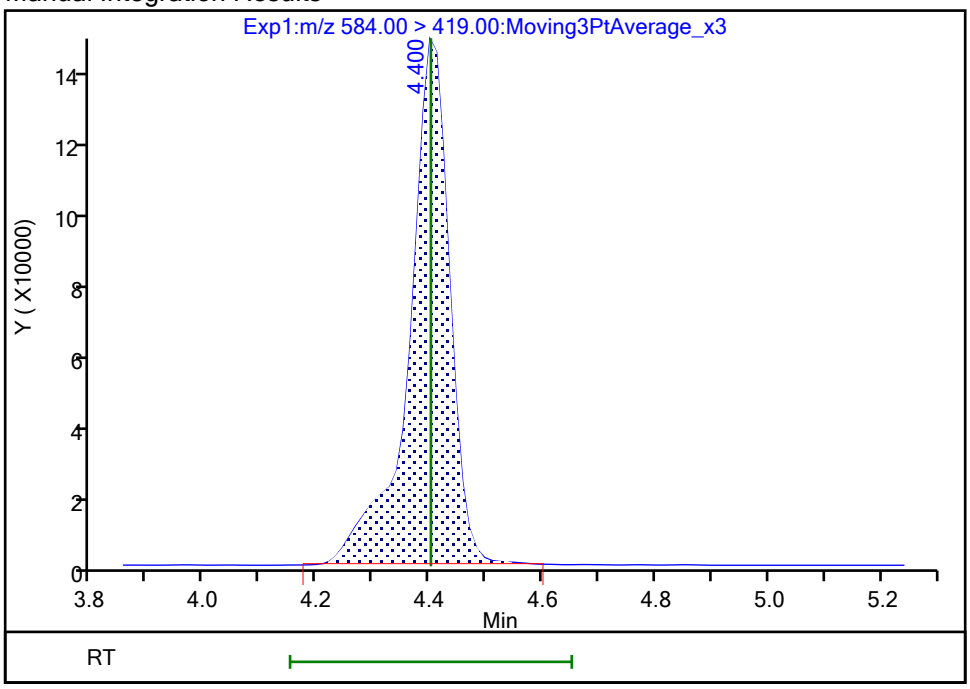
Processing Integration Results

RT: 4.40
Area: 740711
Amount: 1.855350
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 733598
Amount: 1.837533
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:02:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

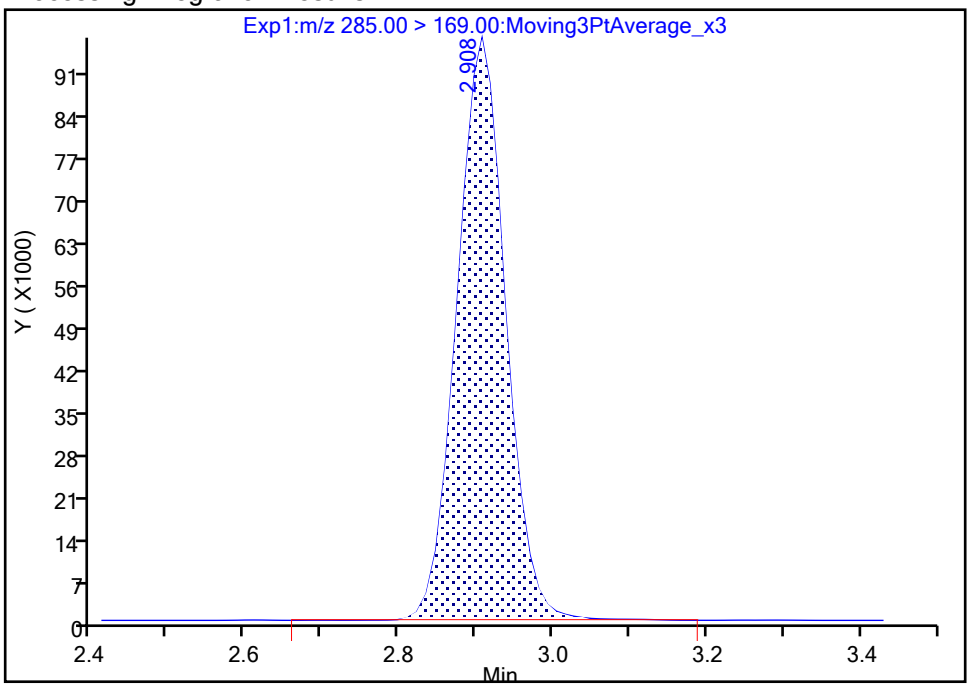
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

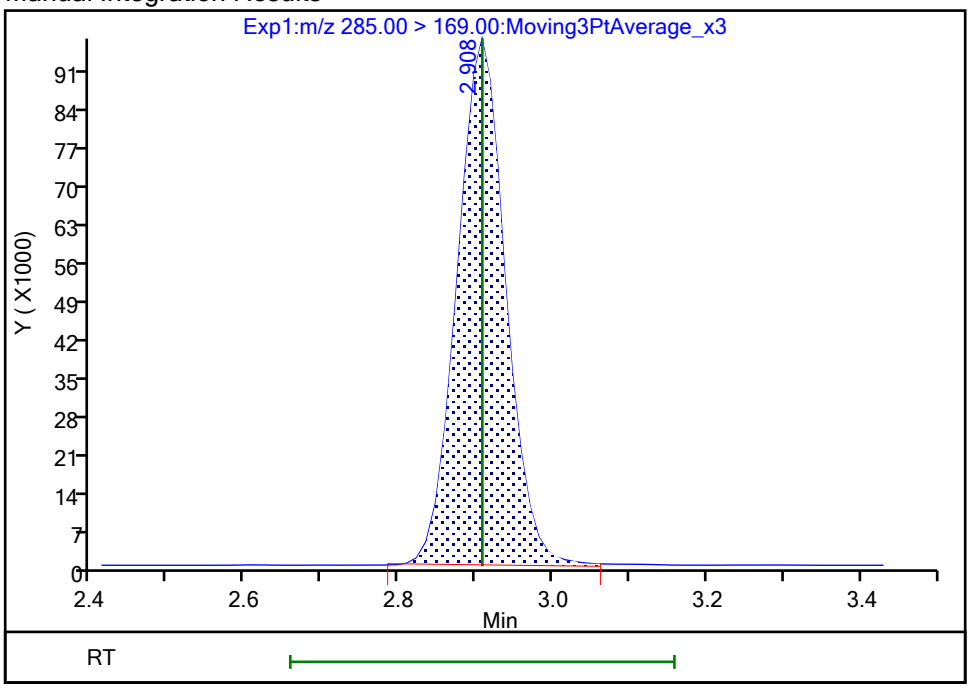
Processing Integration Results

RT: 2.91
Area: 425628
Amount: 1.709420
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 423972
Amount: 1.702769
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:01:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

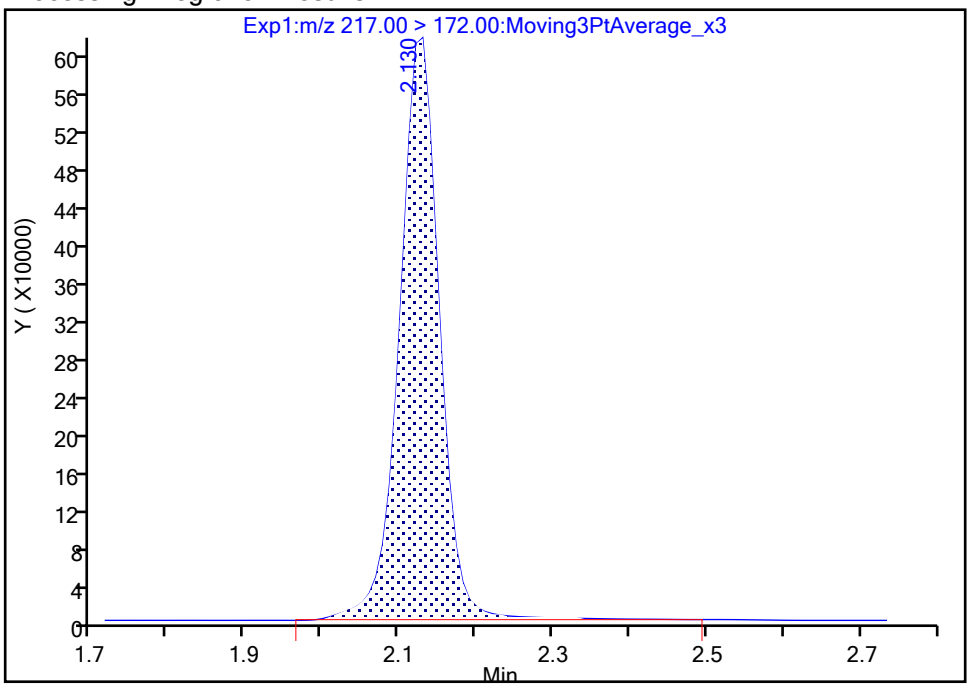
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

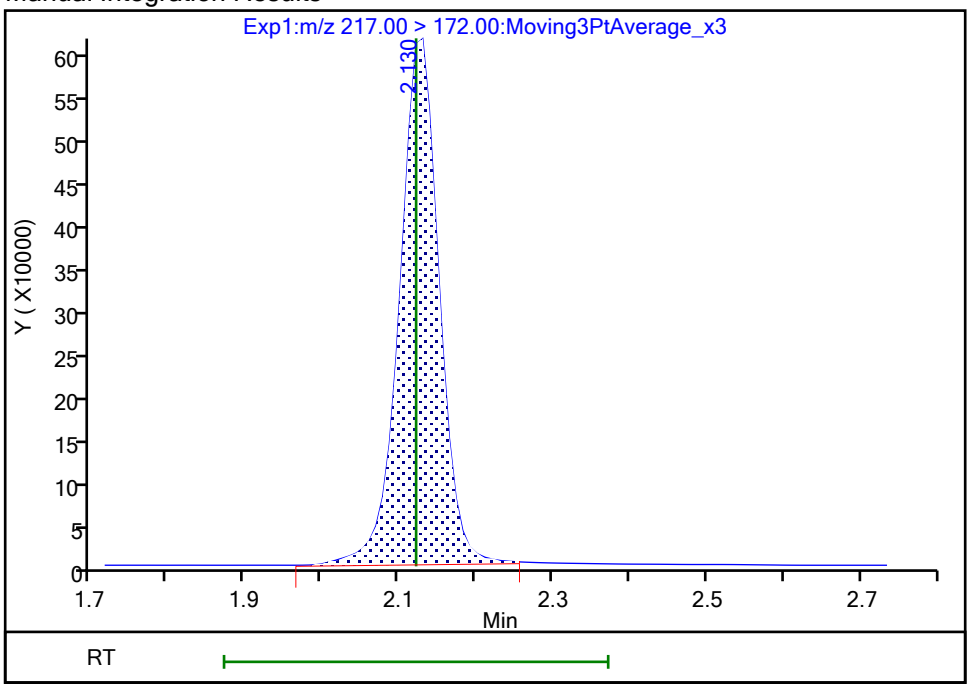
Processing Integration Results

RT: 2.13
Area: 2228767
Amount: 1.398849
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2212450
Amount: 1.388608
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:11:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

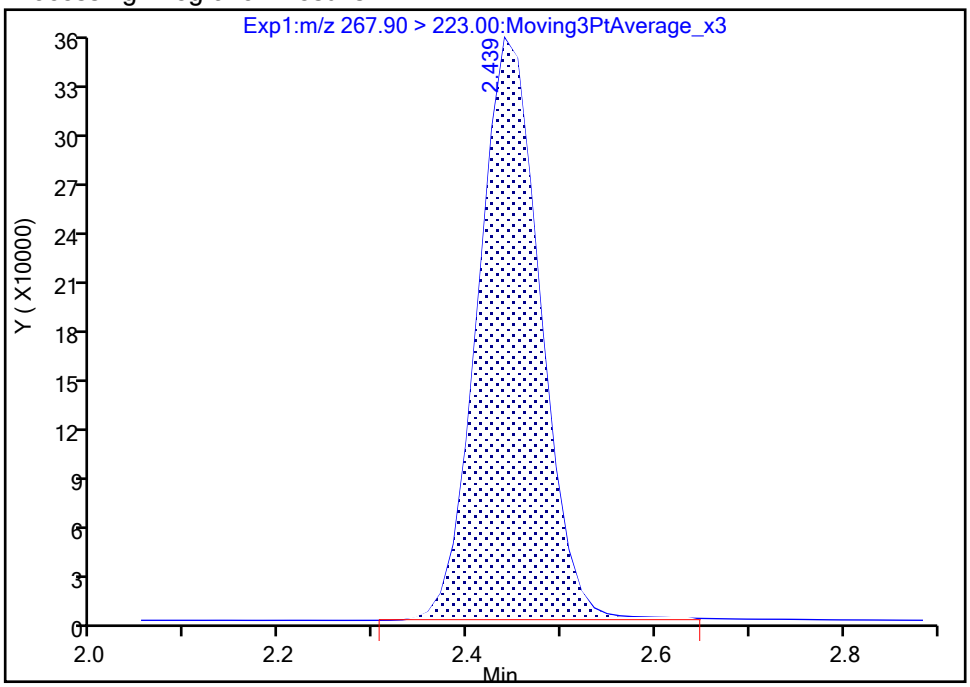
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

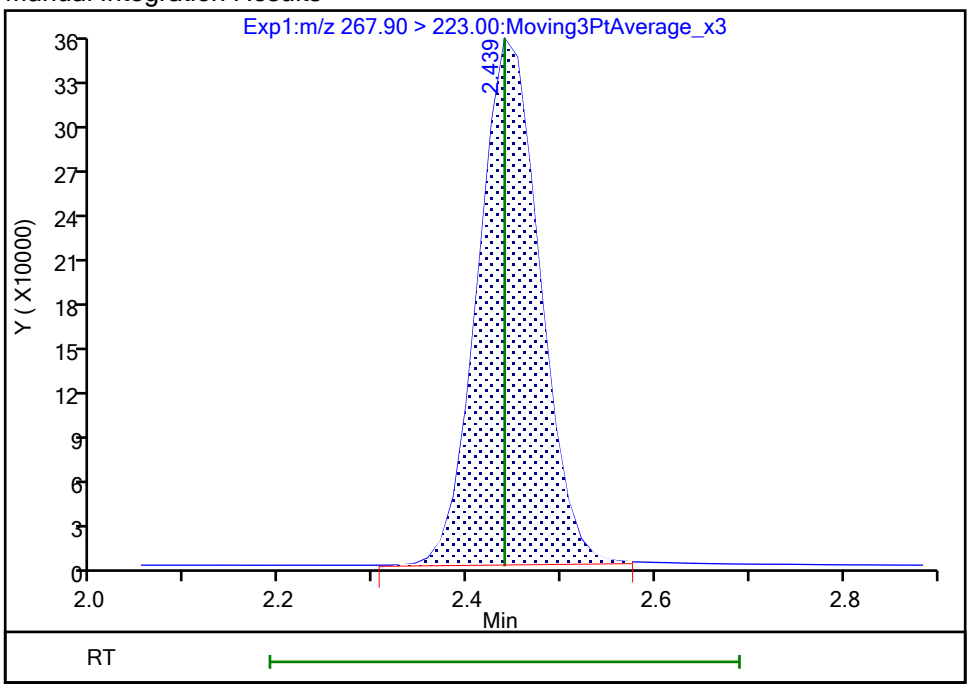
Processing Integration Results

RT: 2.44
Area: 1637652
Amount: 1.324388
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1640698
Amount: 1.326851
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:11:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

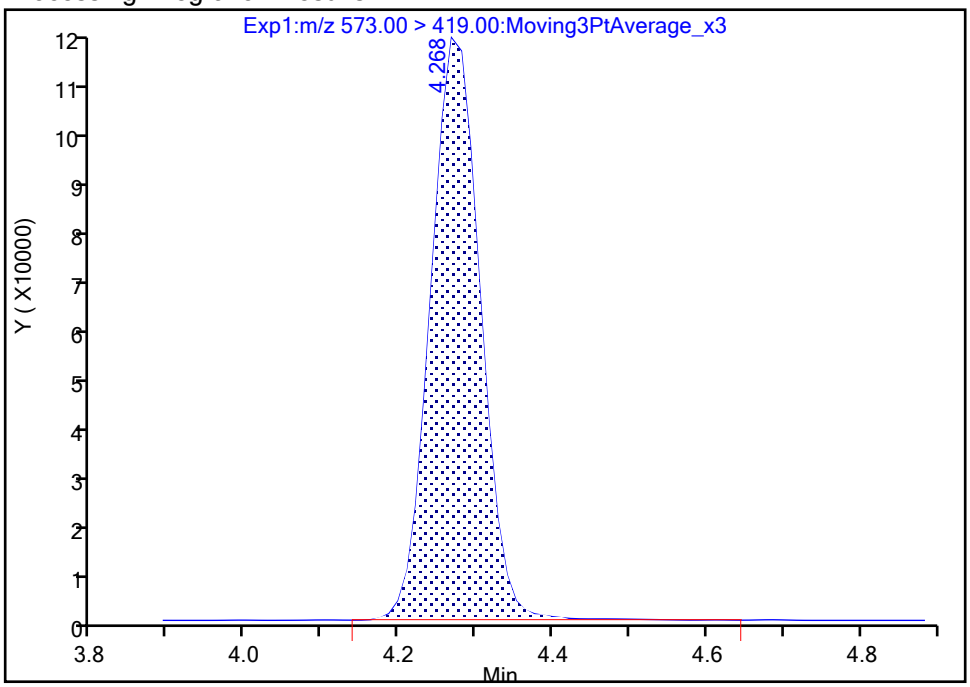
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

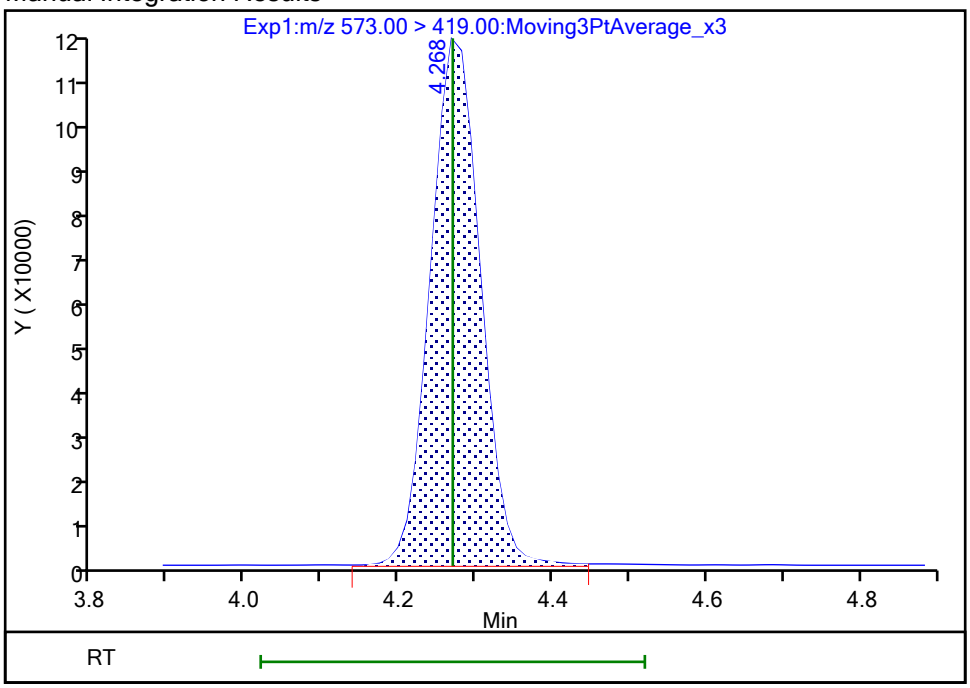
Processing Integration Results

RT: 4.27
Area: 533312
Amount: 1.252521
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 531887
Amount: 1.249174
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:12:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

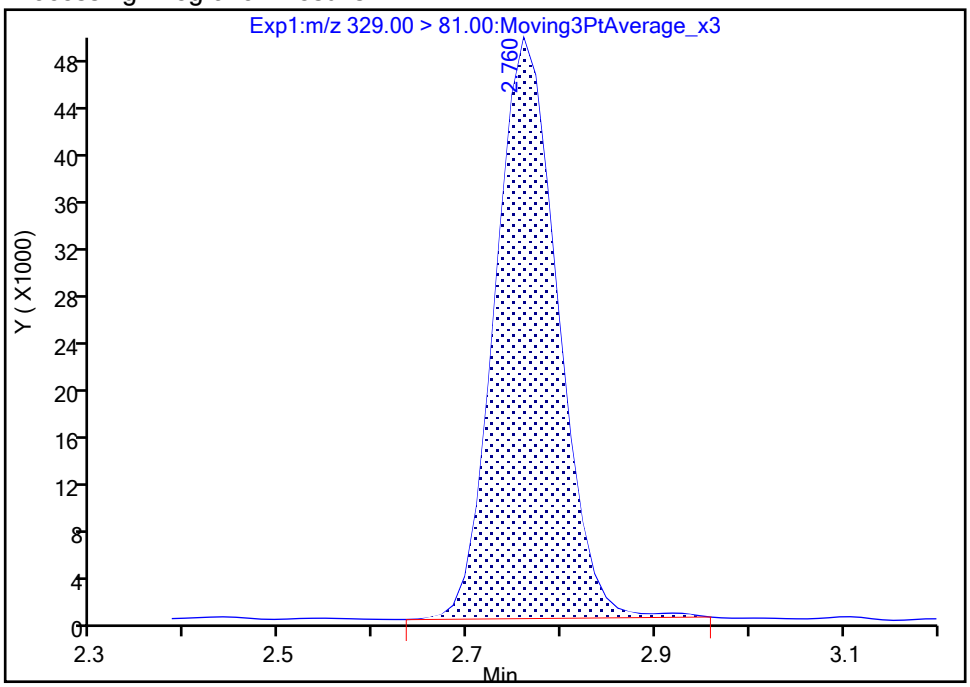
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

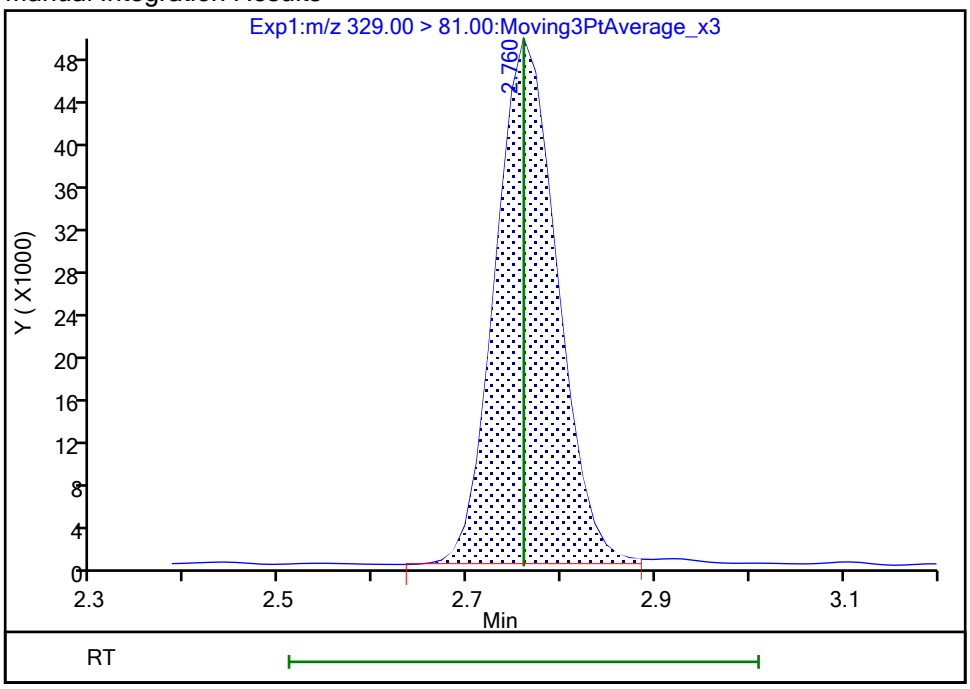
Processing Integration Results

RT: 2.76
Area: 225851
Amount: 1.167257
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 224685
Amount: 1.161231
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:11:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

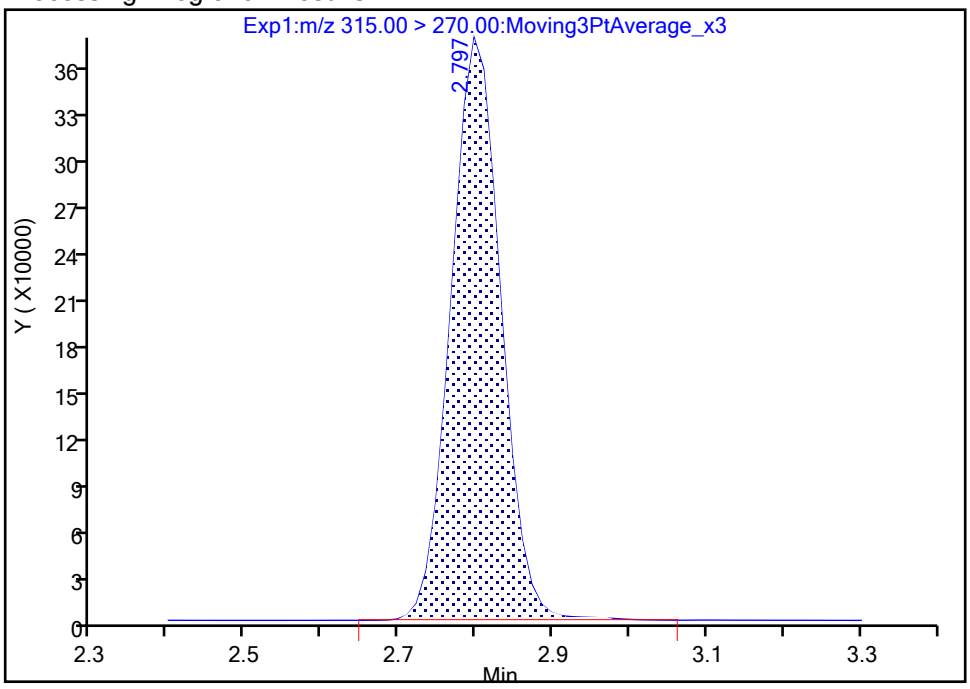
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d
Injection Date: 23-Oct-2023 16:20:09 Instrument ID: LC812
Lims ID: LCS 200-196645/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

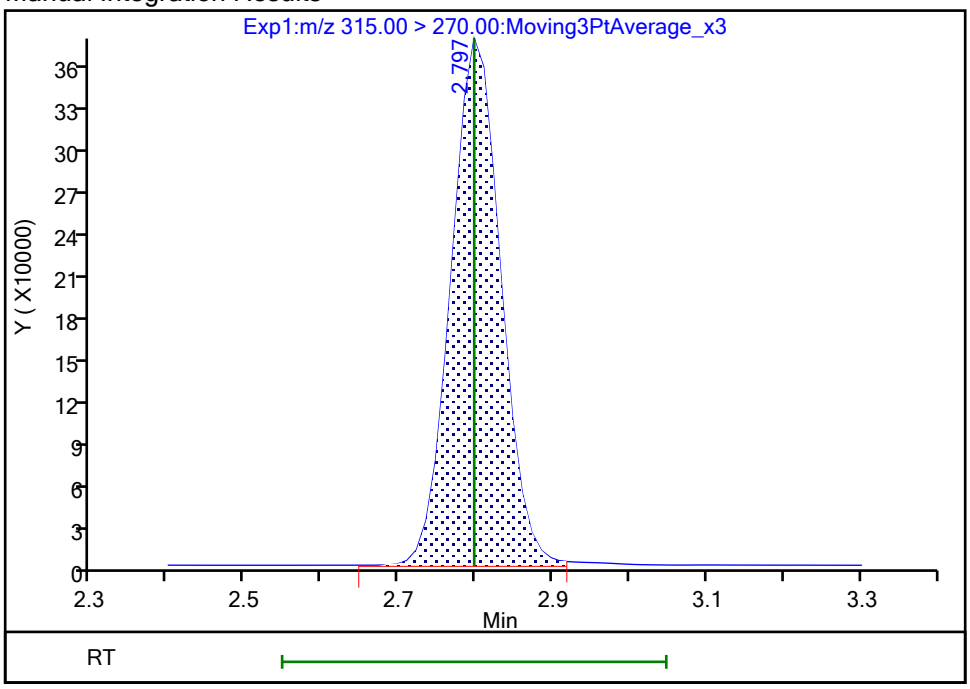
Processing Integration Results

RT: 2.80
Area: 1699591
Amount: 1.351078
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1690984
Amount: 1.344236
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:11:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

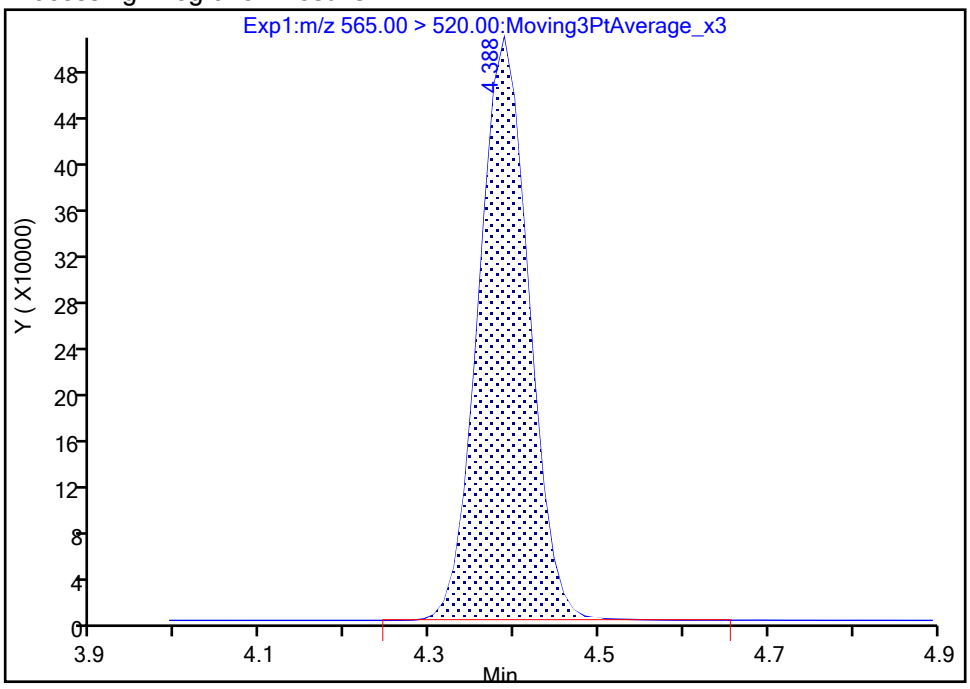
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A09.d				
Injection Date:	23-Oct-2023 16:20:09	Instrument ID:	LC812		
Lims ID:	LCS 200-196645/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

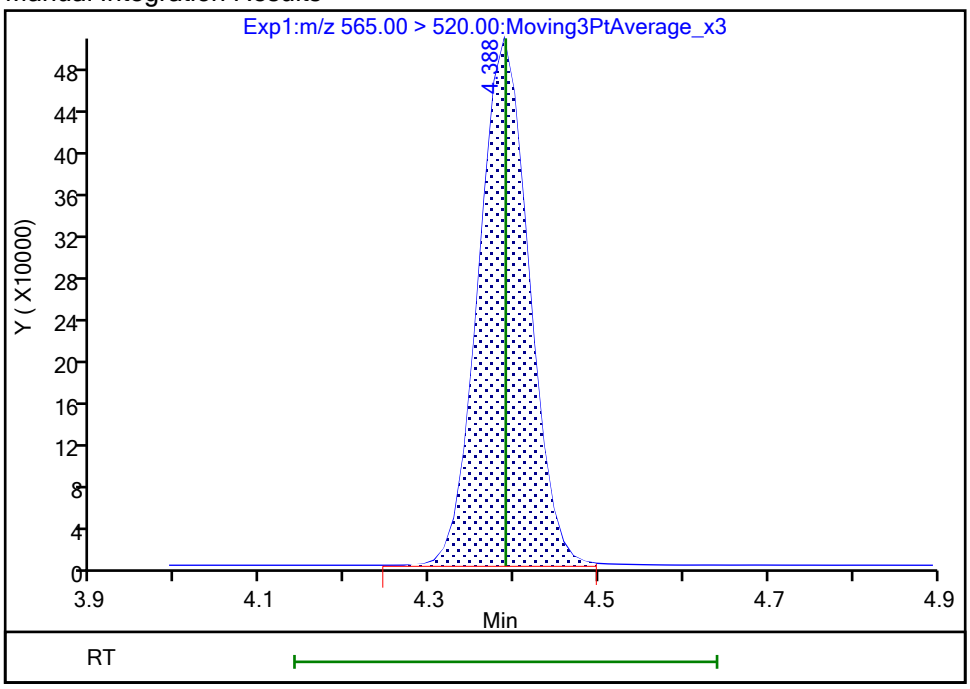
Processing Integration Results

RT: 4.39
Area: 2080180
Amount: 1.236915
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2076149
Amount: 1.234519
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 12:12:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196646/2-A

Matrix: Water Lab File ID: PA231023C03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 23:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.52		5.00	1.20
2706-90-3	Perfluoropentanoic acid	39.11		2.00	0.68
307-24-4	Perfluorohexanoic acid	34.59		2.00	0.65
375-85-9	Perfluoroheptanoic acid	38.88		2.00	0.54
335-67-1	Perfluorooctanoic acid	41.09		2.00	0.76
375-95-1	Perfluorononanoic acid	39.70		2.00	0.49
335-76-2	Perfluorodecanoic acid	39.69		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	40.70		2.00	0.55
307-55-1	Perfluorododecanoic acid	37.42		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	37.52		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	36.55		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.01		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	35.67		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.46		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	35.98		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	34.06		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	33.14		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	33.57		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	37.31		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	40.04		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	42.77		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	41.50		2.00	0.92
2355-31-9	NMeFOSAA	37.80		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	38.78		5.00	1.60
13252-13-6	HFPODA	37.79		4.00	1.10
919005-14-4	DONA	36.20		2.00	0.42
756426-58-1	9Cl-PF3ONS	37.24		2.00	0.32
763051-92-9	11Cl-PF3OUdS	34.72		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196646/2-A

Matrix: Water Lab File ID: PA231023C03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 23:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	110		50-150
STL01893	13C5 PFPeA	106		50-150
STL01892	13C4 PFHpA	111		50-150
STL02116	13C2 PFTeDA	95		50-150
STL02337	13C3 PFBS	101		50-150
STL01056	13C8 FOSA	93		50-150
STL02118	d3-NMeFOSAA	106		50-150
STL02117	d5-NEtFOSAA	102		50-150
STL02395	M2-4:2 FTS	100		50-150
STL02279	M2-6:2 FTS	100		50-150
STL02280	M2-8:2 FTS	93		50-150
STL02255	13C3 HFPO-DA	99		50-150
STL00994	18O2 PFHxS	110		50-150
STL00993	13C2 PFHxA	111		50-150
STL00991	13C4 PFOS	110		50-150
STL00998	13C2 PFDoA	101		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	107		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	105		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Lims ID: LCS 200-196646/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2023 23:33:11 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196646/2-A
Misc. Info.: 200-0057511-003 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:09:54
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2267059	1.38		110	1740	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.122	2.130	-0.008	1.000	1646192	0.9629		96.3	166	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1696947	1.33		106	2037	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.453	-0.014	1.000	1432437	0.9778		97.8	37.4	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.702	2022575	1.17		101	83747	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	1700973	0.8753	Target=2.06	98.7	1019	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	849158		2.00(1.03-3.09)		392	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	632795	0.9328		99.6	2004	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	233220	1.17		100	162	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1802622	1.39		111	1685	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1372420	0.8648	Target=14.12	86.5	293	M
313.00 > 119.00	2.797	2.797	0.0	1.000	104307		13.16(7.06-21.17)		109	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	1588591	0.8917	Target=2.72	94.8	1237	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	558065		2.85(1.36-4.09)		734	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	235337	0.9446		94.5	846	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	311046	1.24		99.0	1606	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.901	1613145	1.30		110	12252	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1263317	0.8366	Target=3.32	91.5	2450	M
399.00 > 99.00	3.153	3.168	-0.015	0.996	370057		3.41(1.66-4.98)		377	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	1723366	0.9720	Target=4.17	97.2	408	
363.00 > 169.00	3.165	3.168	-0.003	1.000	413085		4.17(2.09-6.26)		769	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.901	1977163	1.39		111	7167	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.838	4505338	0.9050	Target=3.33	95.8	4242	
377.00 > 85.00	3.199	3.203	-0.004	0.838	1211200		3.72(1.66-4.99)		1870	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.505	-0.003	0.917	1124694	0.8995	Target=4.83	94.4	3590	
449.00 > 99.00	3.502	3.505	-0.003	0.917	217525		5.17(2.41-7.24)		747	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.997	304920	1.19		99.8	699	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.502	3.514	-0.012	1.000	702595	1.00		105	1202	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1846445	1.03	Target=2.88	103	89.7	M
413.00 > 169.00	3.520	3.514	0.006	1.000	647803		2.85(1.44-4.32)		1361	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.003	2109235	1.31		105	8007	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.523	-0.012		2073642	1.25			9530	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.822	-0.003	1.000	859175	0.8514	Target=4.24	91.7	1636	M
499.00 > 99.00	3.819	3.822	-0.003	1.000	195574		4.39(2.12-6.37)		584	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.822	-0.003	1.088	1033876	1.31		110	3987	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1797044	0.99	Target=8.34	99.2	287	
463.00 > 169.00	3.842	3.845	-0.003	1.000	208514		8.62(4.17-12.51)		1256	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.094	2309375	1.31		105	7414	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.042	2875094	0.9311		99.8	7090	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.105	-0.005	1.074	636136	0.8286	Target=2.17	86.1	4432	
549.00 > 99.00	4.100	4.105	-0.005	1.074	267647		2.38(1.08-3.25)		1099	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1945378	0.99	Target=11.44	99.2	574	
513.00 > 169.00	4.136	4.129	0.007	1.000	179044		10.87(5.72-17.16)		1174	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.178	2452234	1.33		107	9340	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.178	322778	1.12		93.2	901	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	1.000	634553	1.07		111	2376	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.208	1822820	1.16		92.9	4955	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1443098	1.04		104	3384	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.215	580941	1.32		106	1315	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.270	-0.005	1.000	398494	0.9449		94.5	475	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.351	4.366	-0.015	1.139	495889	0.8393	Target=2.37	87.0	2173	
599.00 > 99.00	4.351	4.366	-0.015	1.139	207775		2.39(1.19-3.56)		1564	M
D 30 13C2 PFUnA										M
565.00 > 520.00	4.386	4.390	-0.004	1.249	2287727	1.32		105	4358	M
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.386	4.390	-0.004	1.000	1919084	1.02	Target=12.20	102	438	
563.00 > 169.00	4.386	4.390	-0.004	1.000	161644		11.87(6.10-18.31)		1831	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.253	538350	1.27		102	987	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.401	-0.003	1.000	417676	0.9696		97.0	1558	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.473	-0.005	1.170	4109936	0.8679		92.0	6154	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.313	2227033	1.26		101	4539	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.613	-0.003	1.000	1696411	0.9355	Target=8.47	93.5	95.6	
613.00 > 169.00	4.599	4.613	-0.014	0.998	230574		7.36(4.23-12.70)		2080	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.624	-0.003	1.117	369983	1.04		108	3660	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.764	4.777	-0.013	1.248	164556	0.8217	Target=0.48	84.9	3022	
699.00 > 99.00	4.764	4.777	-0.013	1.248	329978		0.50(0.24-0.72)		3369	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.806	-0.003	1.042	1787908	0.9380	Target=6.41	93.8	92.8	M
663.00 > 169.00	4.803	4.806	-0.003	1.042	269067		6.64(3.21-9.62)		1332	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.418	2085948	1.19		95.0	5620	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.982	-0.003	1.000	170509	0.9138	Target=0.87	91.4	1866	
713.00 > 219.00	4.969	4.982	-0.013	0.998	187580		0.91(0.43-1.30)		2401	

Report Date: 25-Oct-2023 19:58:20 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.284	5.292	-0.008	1.505	2340749	1.16		92.5	5209	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.284	5.292	-0.008	1.000	1877277	1.00	Target=7.89	100	112	
813.00 > 169.00	5.284	5.292	-0.008	1.000	227439		8.25(3.94-11.83)		2044	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.548	5.563	-0.015	1.050	1381874	0.9450	Target=9.39	94.5	142	M
913.00 > 169.00	5.548	5.563	-0.015	1.050	145427		9.50(4.69-14.08)		674	M

QC Flag Legend

Processing Flags

Review Flags

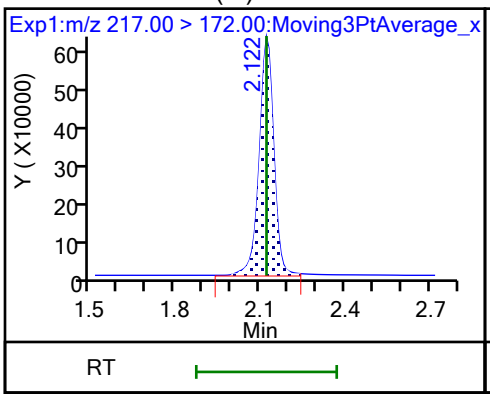
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:20 Chrom Revision: 2.3 18-Oct-2023 21:16:54

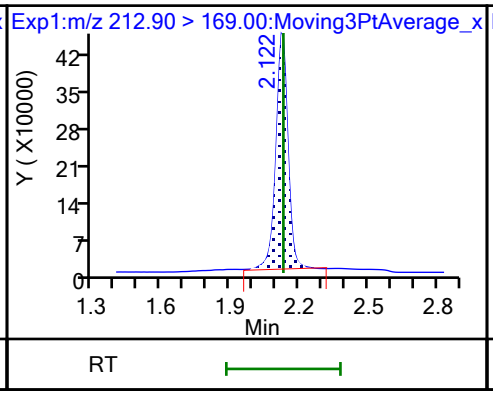
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

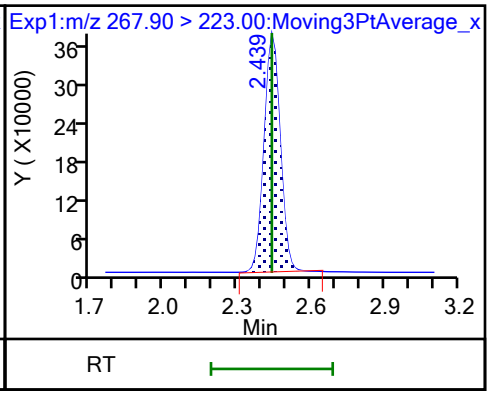
D 1 13C4 PFBA (M)



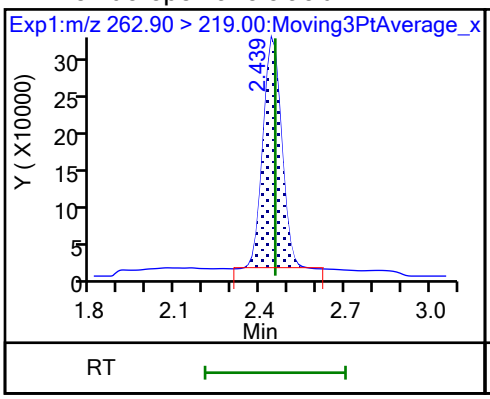
2 Perfluorobutanoic acid



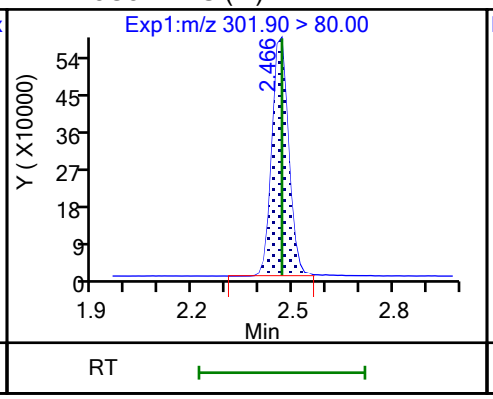
D 3 13C5 PFPeA



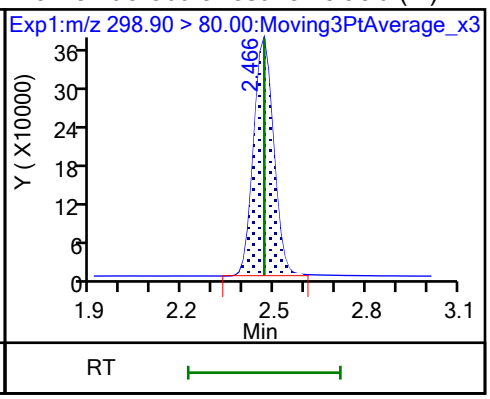
4 Perfluoropentanoic acid



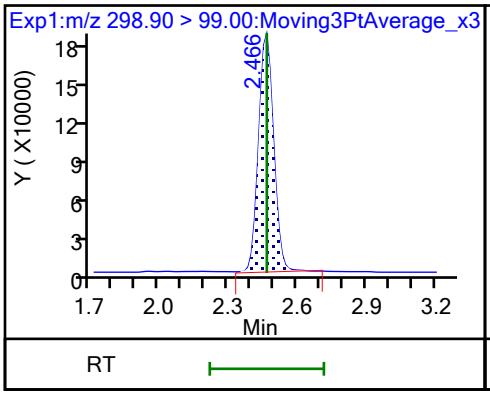
D 47 13C3 PFBS (M)



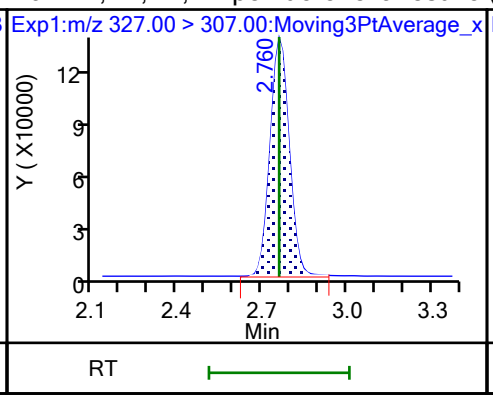
5 Perfluorobutanesulfonic acid (M)



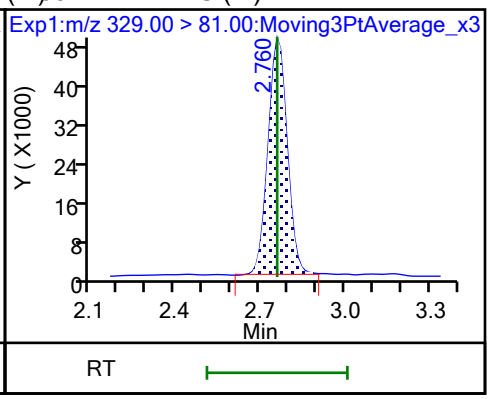
5 Perfluorobutanesulfonic acid



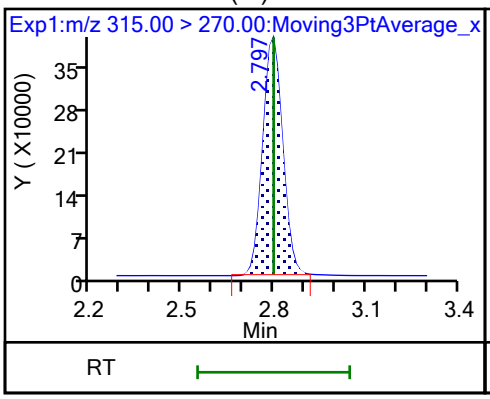
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



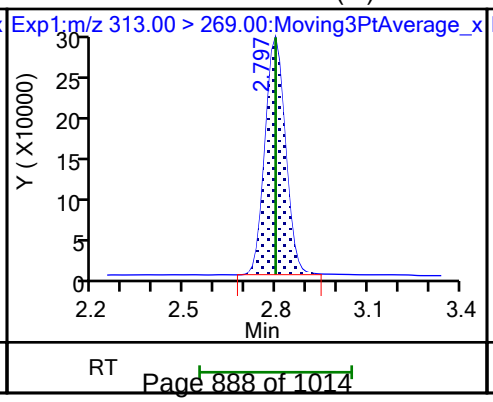
60 M2-4:2 FTS (M)



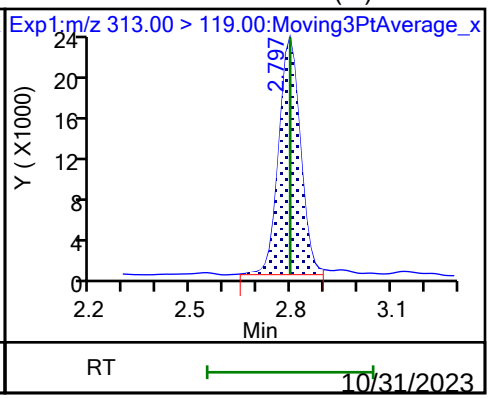
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

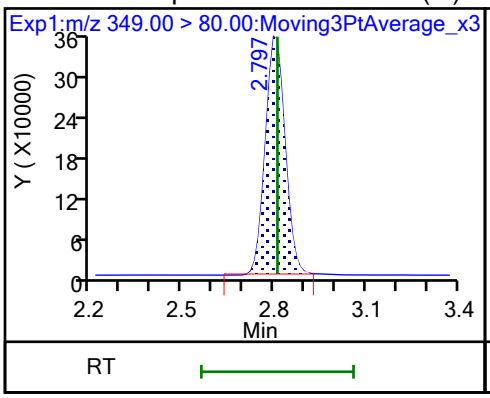


6 Perfluorohexanoic acid (M)

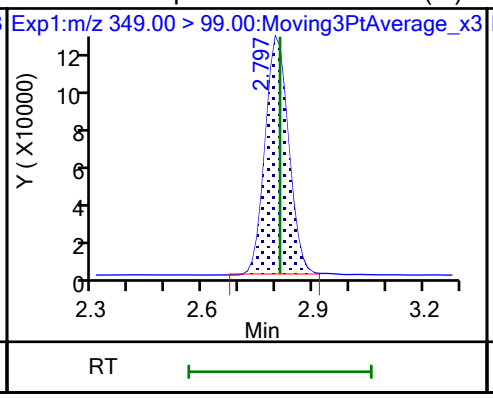


10/31/2023
4:00 PM

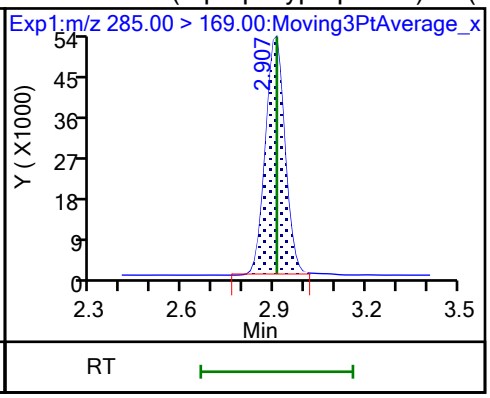
70 Perfluoropentanesulfonic acid (M)



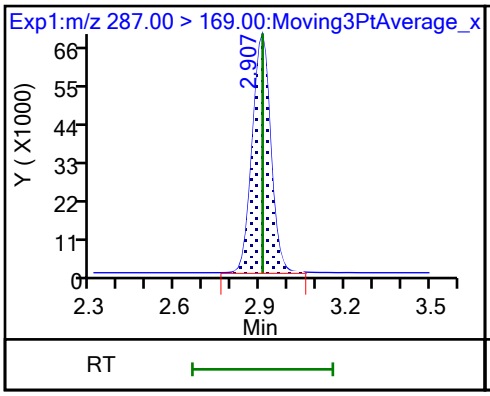
70 Perfluoropentanesulfonic acid (M)



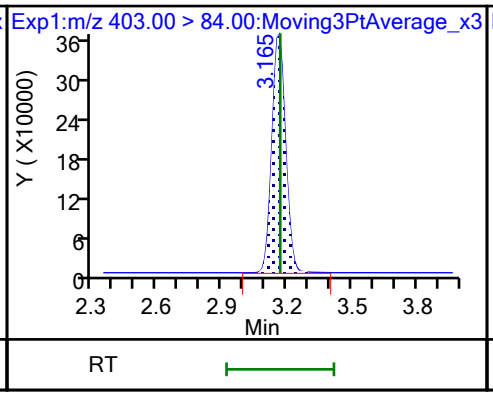
67 Perfluoro(2-propoxypropanoic) ac (M)



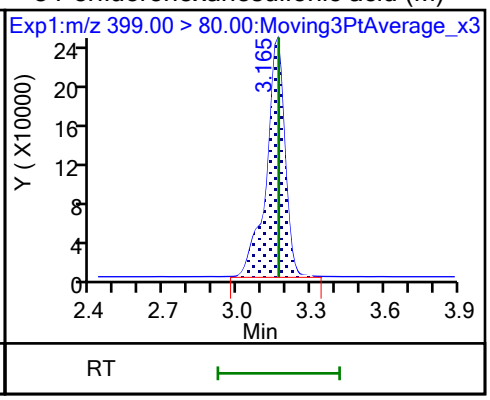
D 64 13C3 HFPO-DA



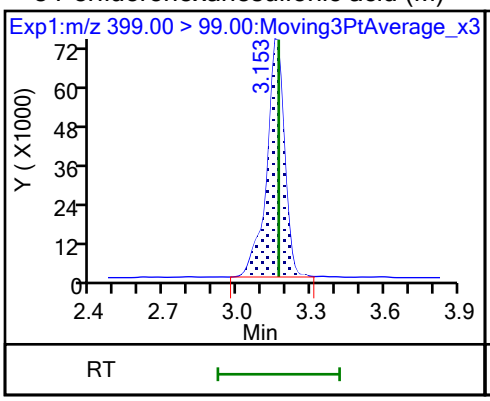
D 11 18O2 PFHxS



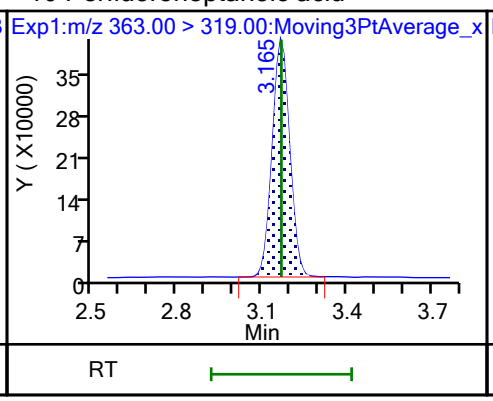
8 Perfluorohexanesulfonic acid (M)



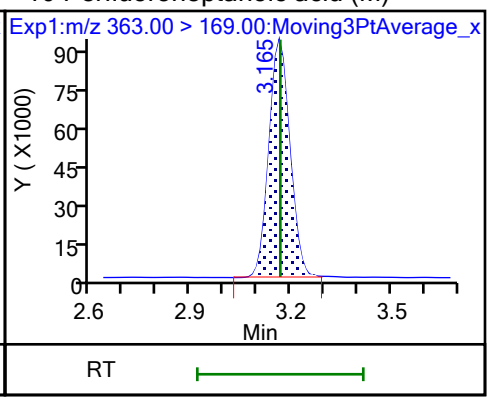
8 Perfluorohexanesulfonic acid (M)



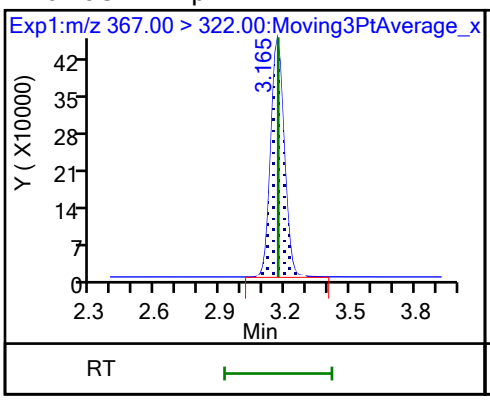
10 Perfluoroheptanoic acid



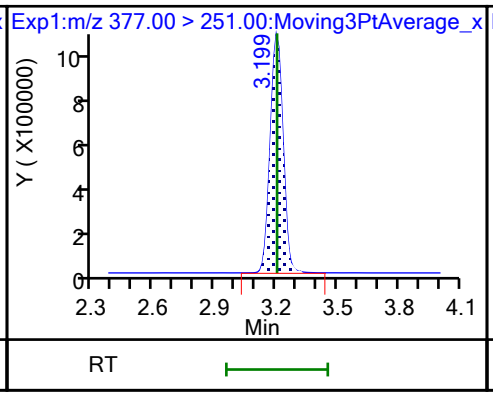
10 Perfluoroheptanoic acid (M)



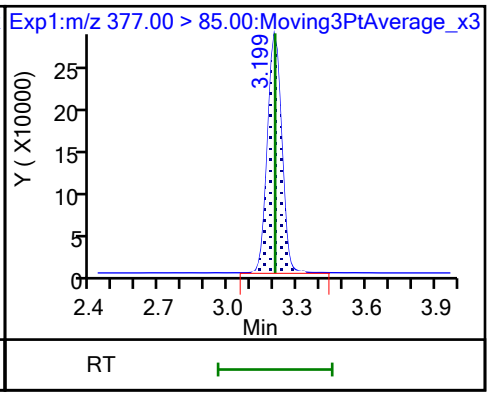
D 9 13C4 PFHpA



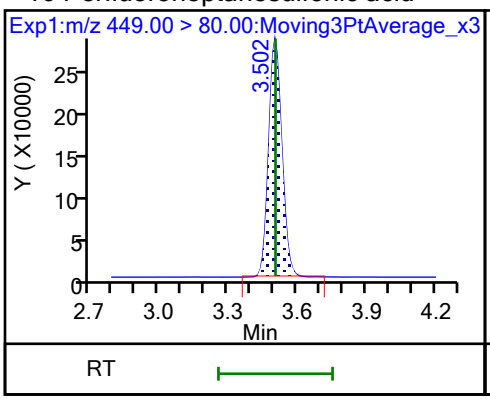
77 DONA



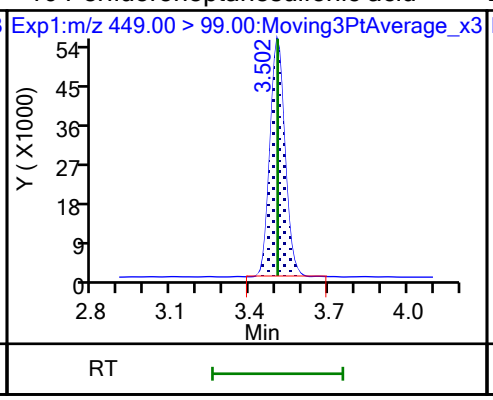
77 DONA



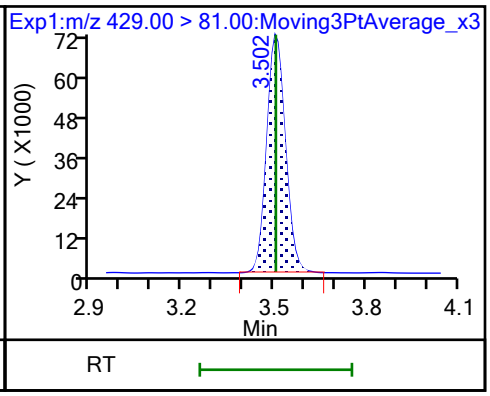
16 Perfluoroheptanesulfonic acid



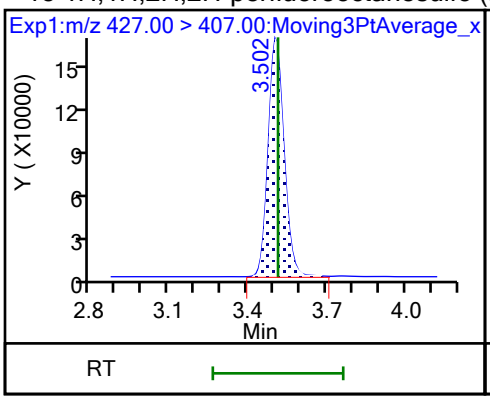
16 Perfluoroheptanesulfonic acid



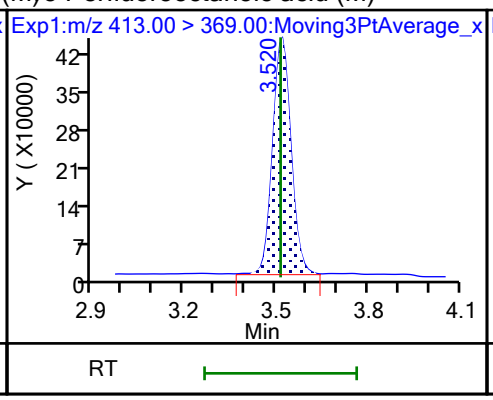
D 12 M2-6:2 FTS



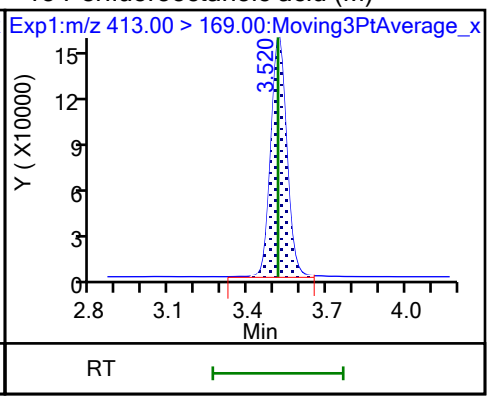
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



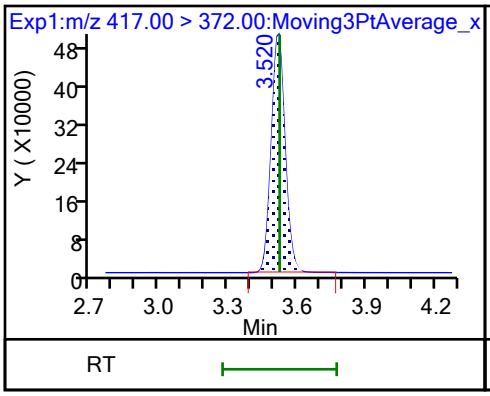
15 Perfluorooctanoic acid (M)



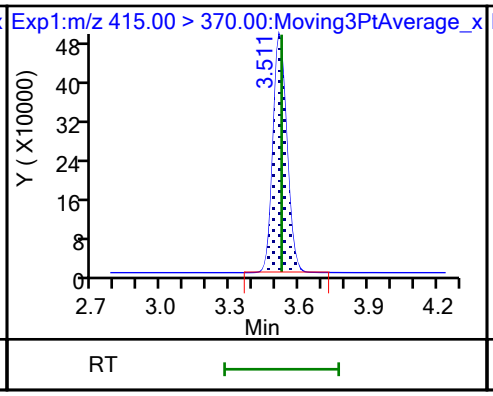
15 Perfluorooctanoic acid (M)



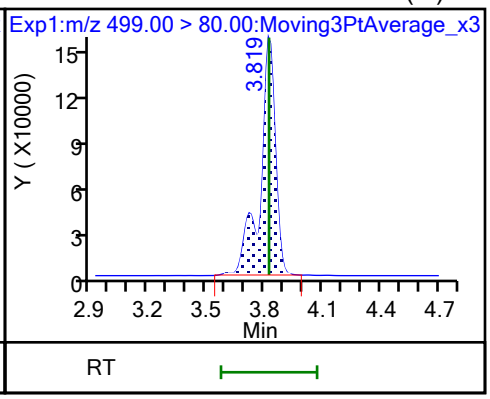
D 14 13C4 PFOA



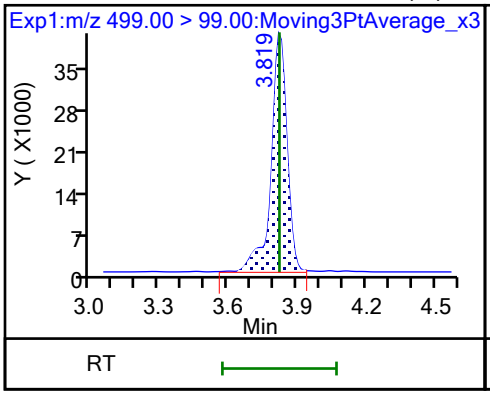
* 62 13C2 PFOA



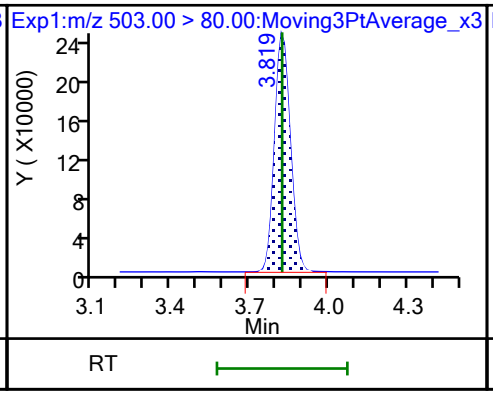
17 Perfluorooctanesulfonic acid (M)



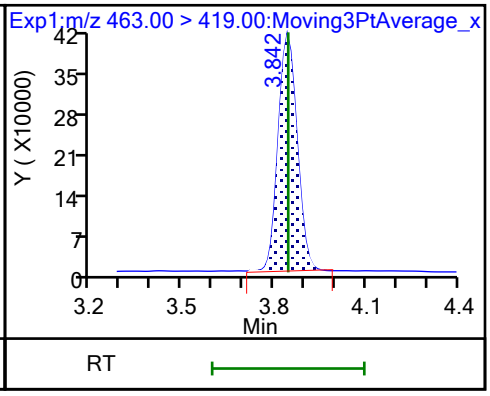
17 Perfluorooctanesulfonic acid (M)



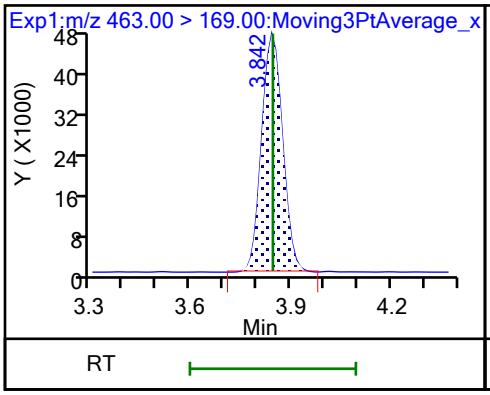
D 18 13C4 PFOS



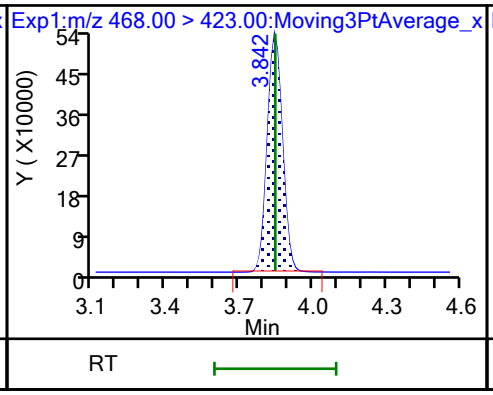
20 Perfluorononanoic acid



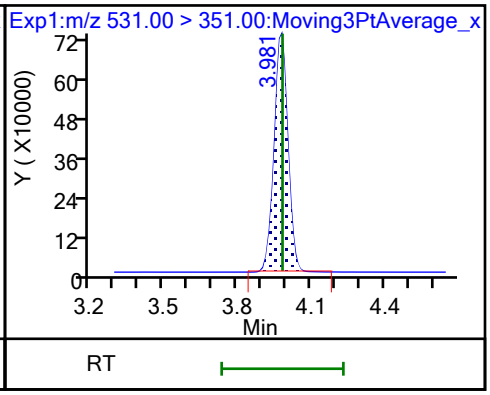
20 Perfluorononanoic acid



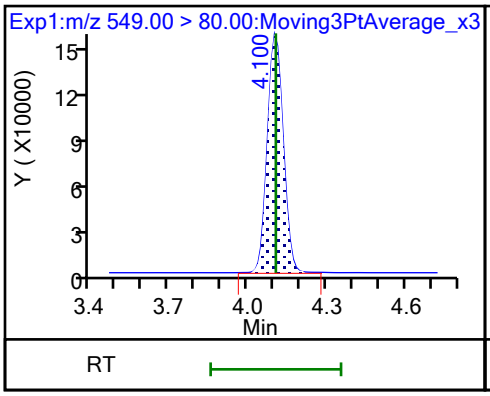
D 19 13C5 PFNA



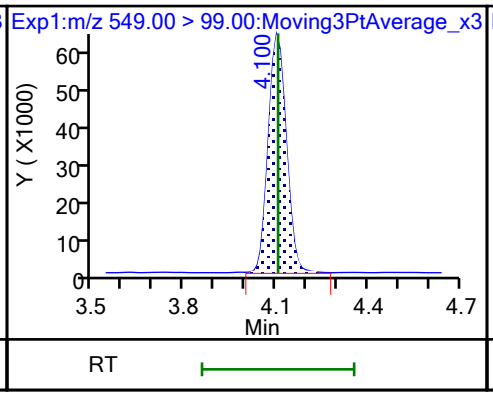
69 9-Chlorohexadecafluoro-3-oxanona



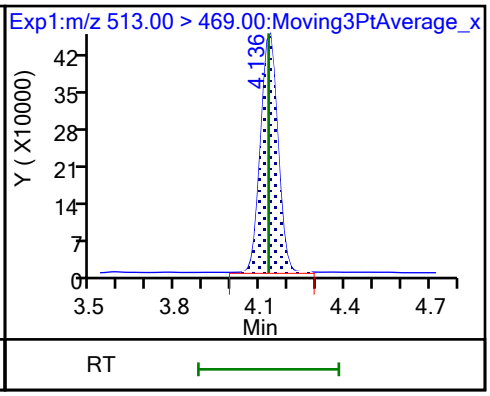
68 Perfluorononanesulfonic acid



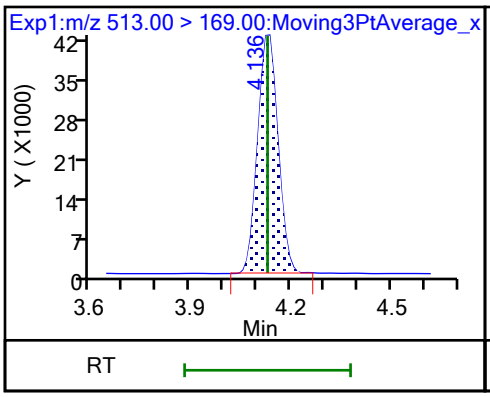
68 Perfluorononanesulfonic acid



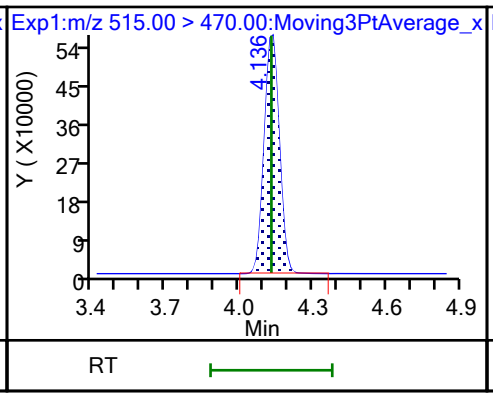
24 Perfluorodecanoic acid



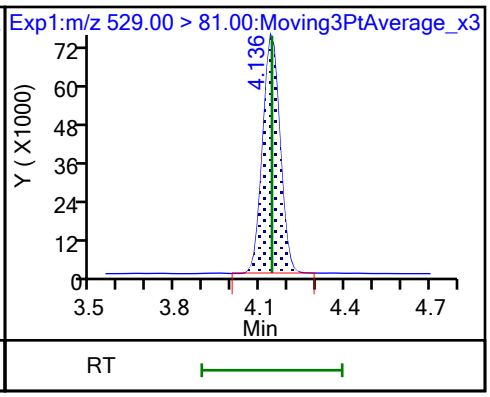
24 Perfluorodecanoic acid



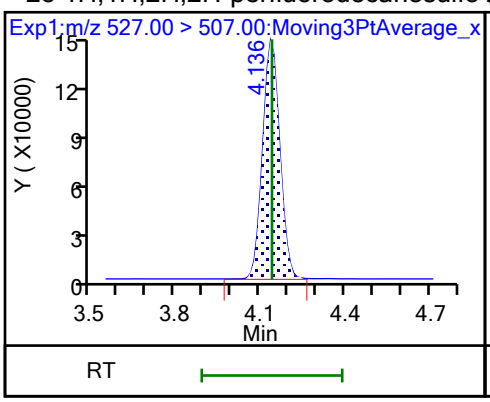
D 23 13C2 PFDA



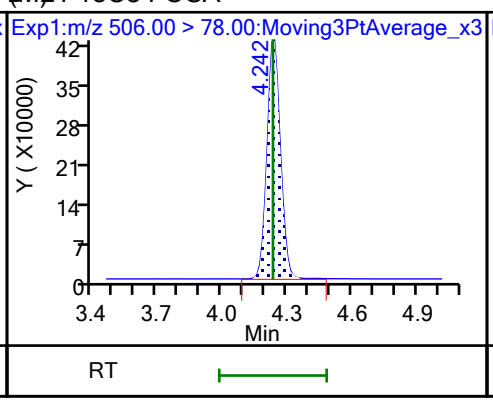
D 26 M2-8:2 FTS



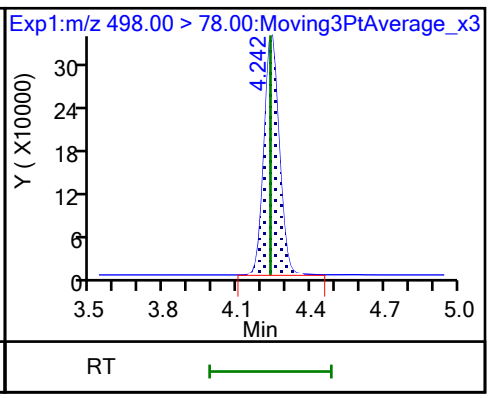
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



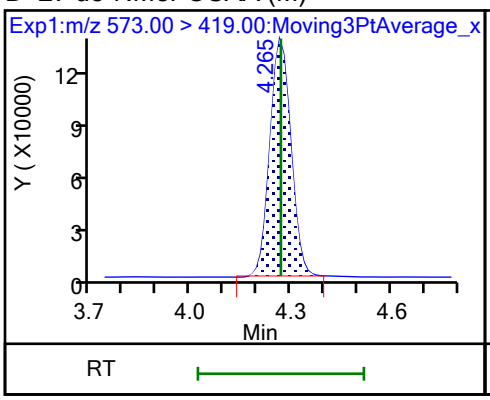
D 21 13C8 FOSA



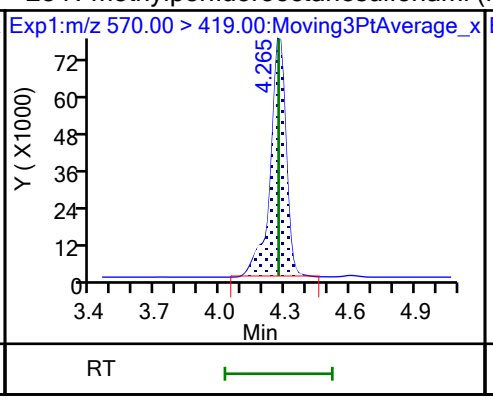
22 Perfluorooctanesulfonamide



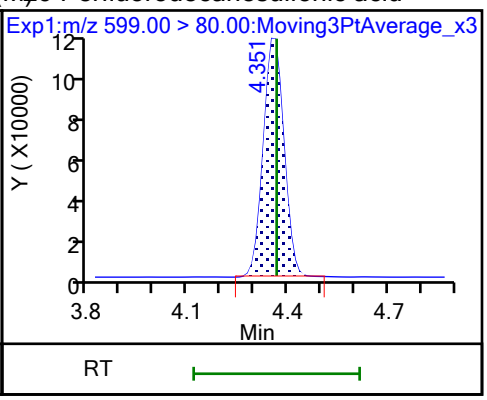
D 27 d3-NMeFOSAA (M)



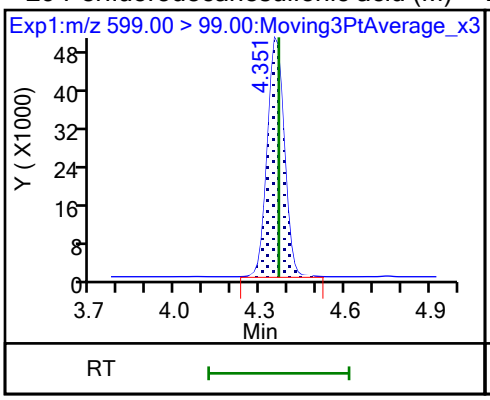
28 N-methylperfluorooctanesulfonami (M)



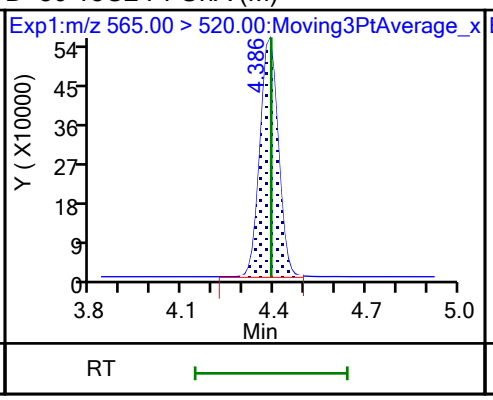
29 Perfluorodecanesulfonic acid



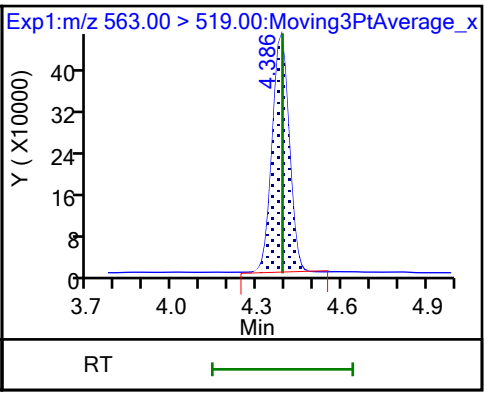
29 Perfluorodecanesulfonic acid (M)



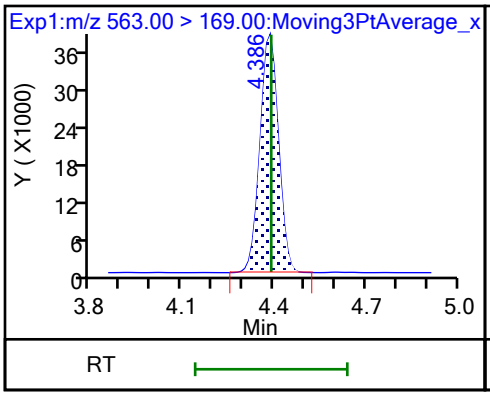
D 30 13C2 PFUnA (M)



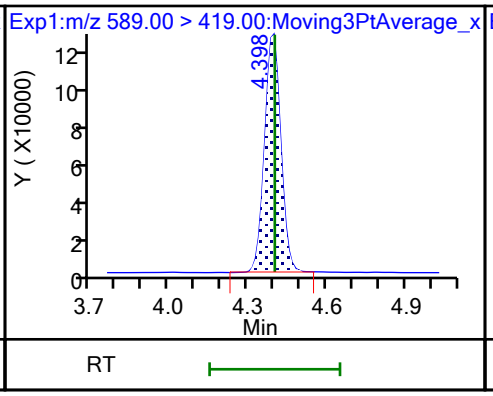
31 Perfluoroundecanoic acid



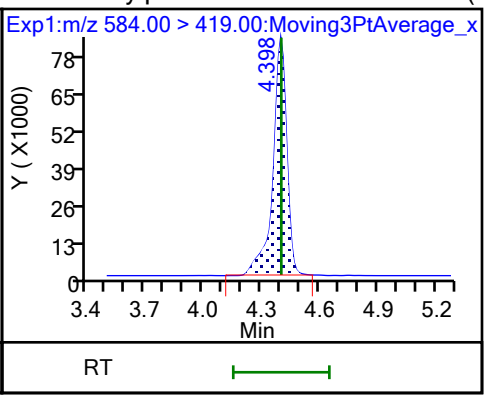
31 Perfluoroundecanoic acid



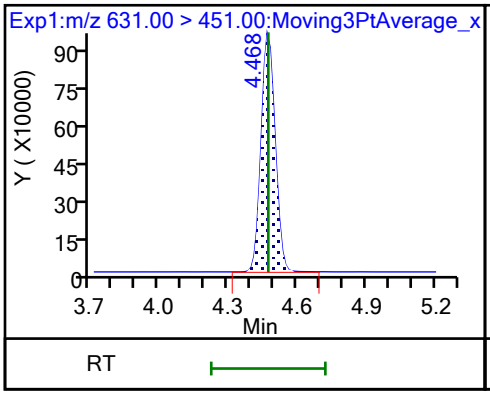
D 32 d5-NEtFOSAA



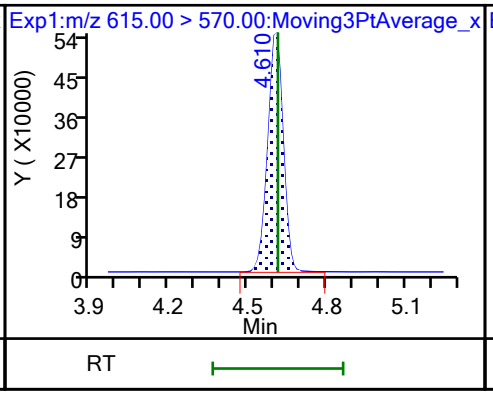
33 N-ethylperfluorooctanesulfonamid (M)



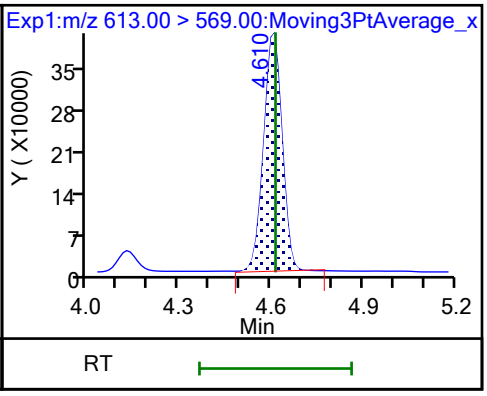
66 11-Chloroeicosafluoro-3-oxaundec



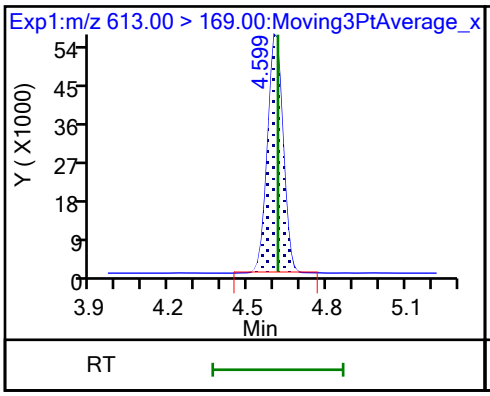
D 36 13C2 PFDoA



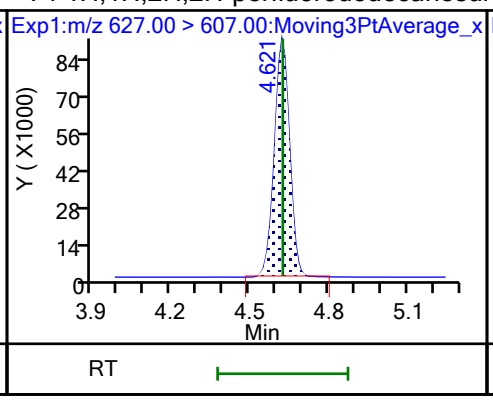
37 Perfluorododecanoic acid



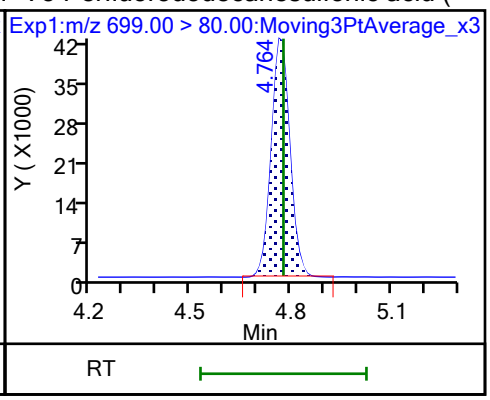
37 Perfluorododecanoic acid



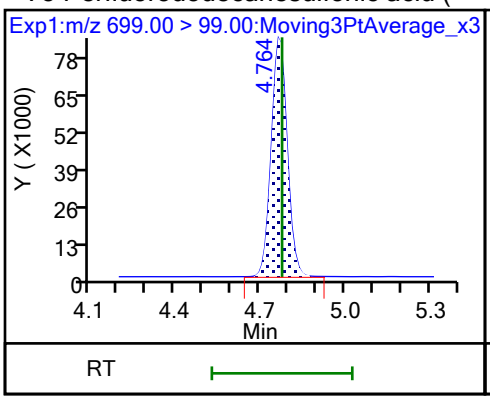
74 1H,1H,2H,2H-perfluorododecanesul



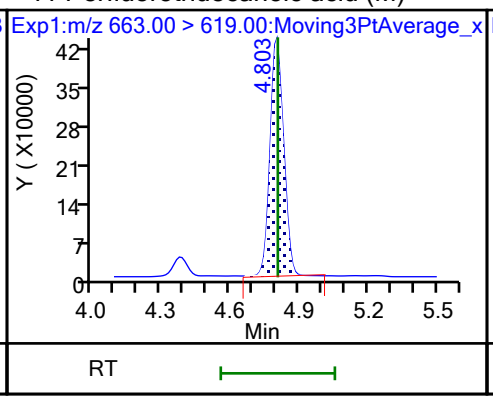
75 Perfluorododecanesulfonic acid (



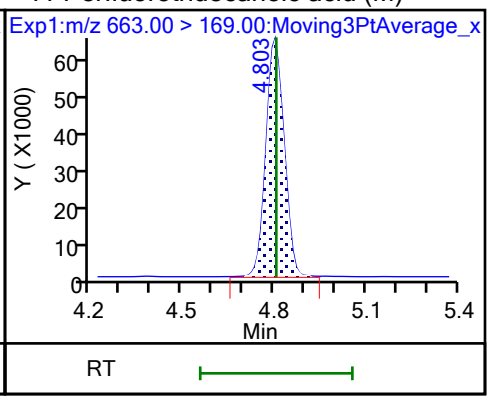
75 Perfluorododecanesulfonic acid (



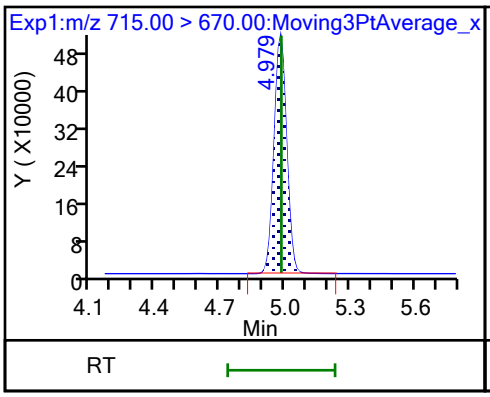
41 Perfluorotridecanoic acid (M)



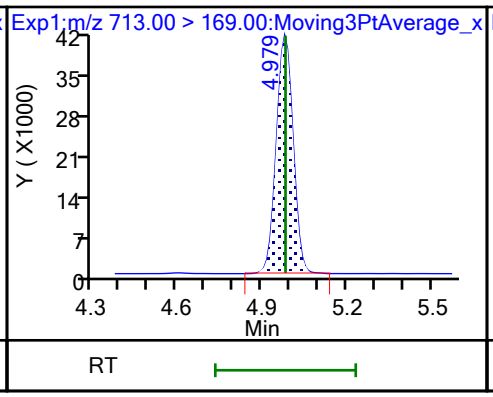
41 Perfluorotridecanoic acid (M)



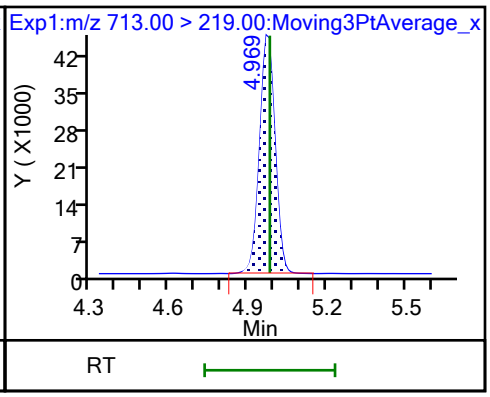
D 43 13C2 PFTeDA



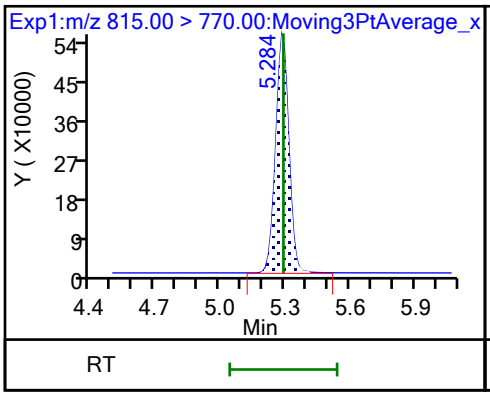
42 Perfluorotetradecanoic acid



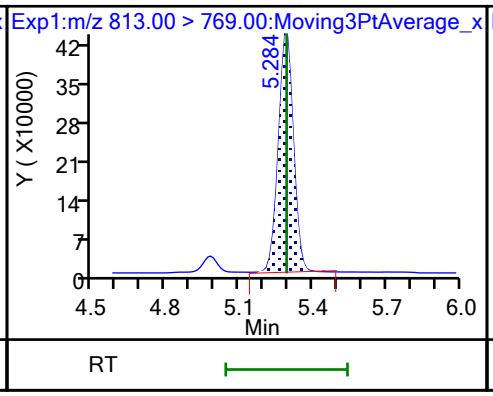
42 Perfluorotetradecanoic acid



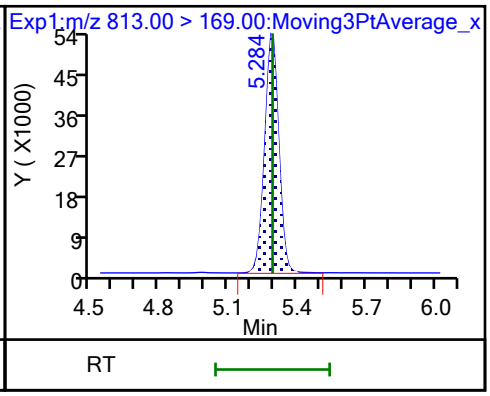
D 44 13C2 PFHxDA



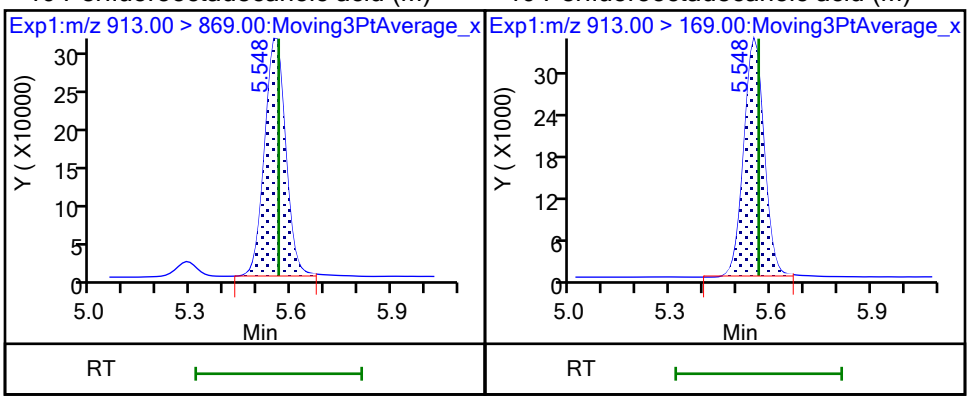
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

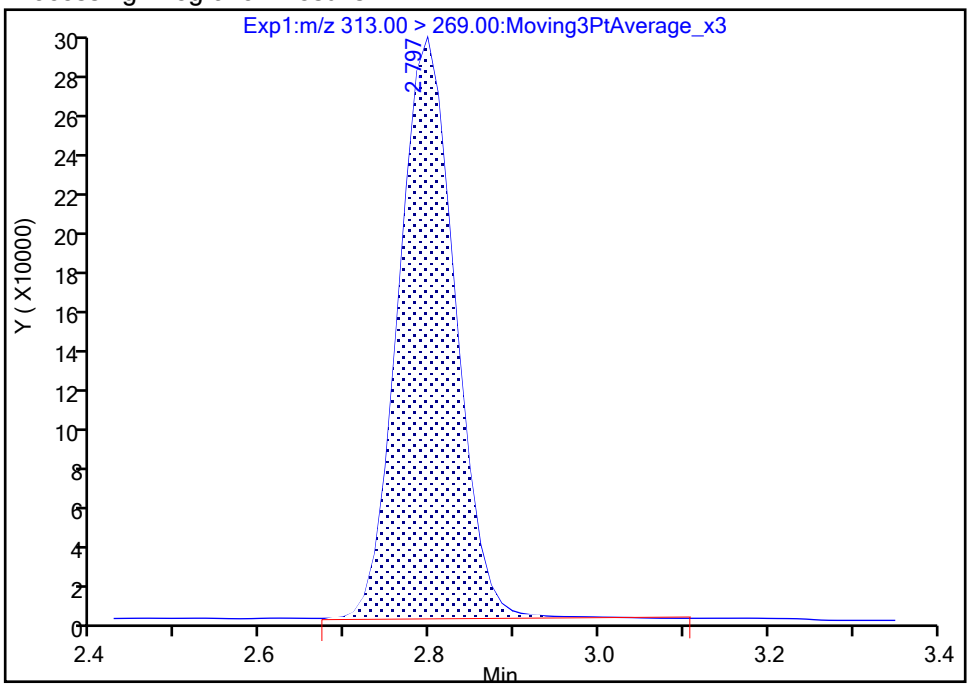
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

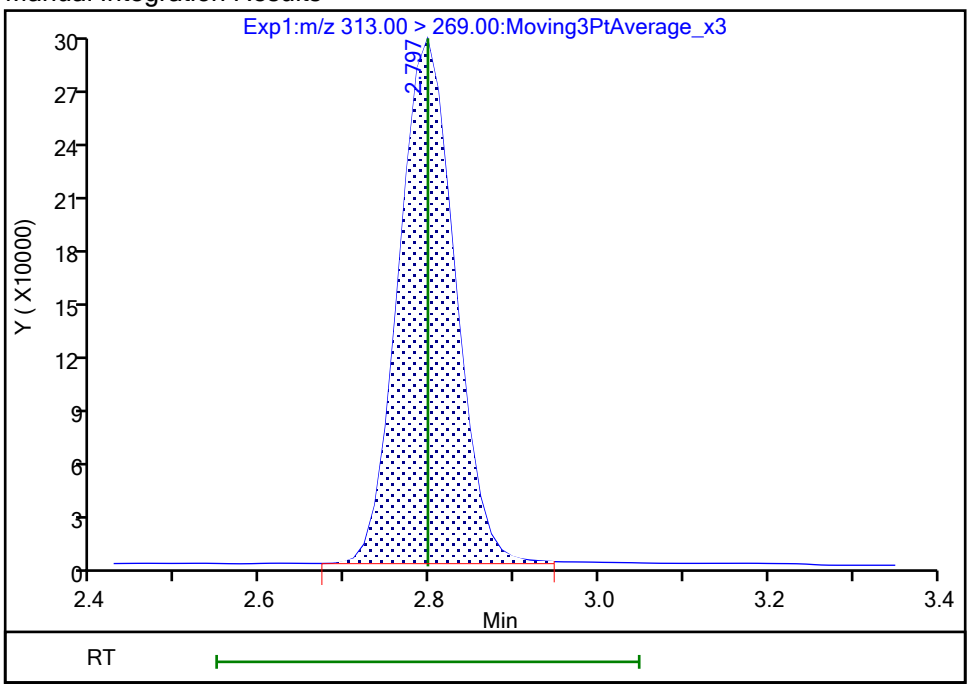
Processing Integration Results

RT: 2.80
Area: 1376598
Amount: 0.867441
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1372420
Amount: 0.864808
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

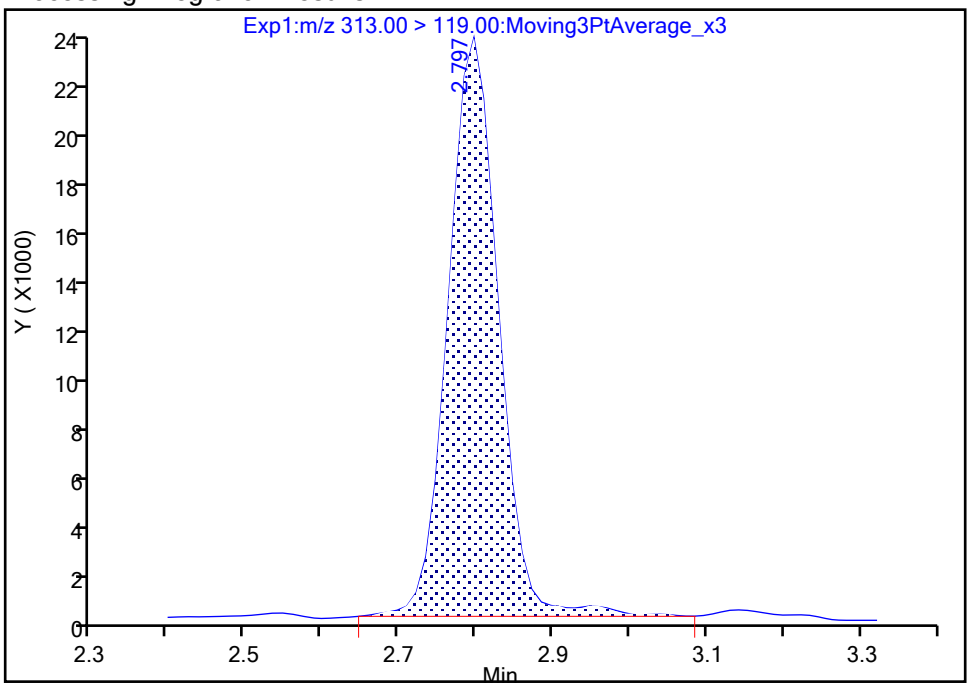
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

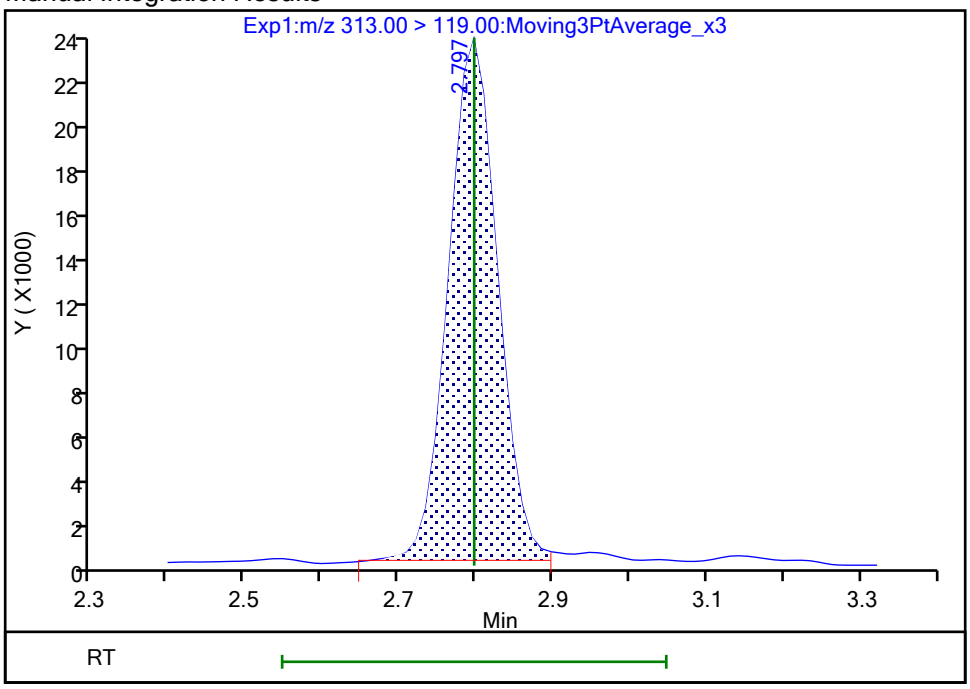
Processing Integration Results

RT: 2.80
Area: 106569
Amount: 0.867441
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 104307
Amount: 0.864808
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

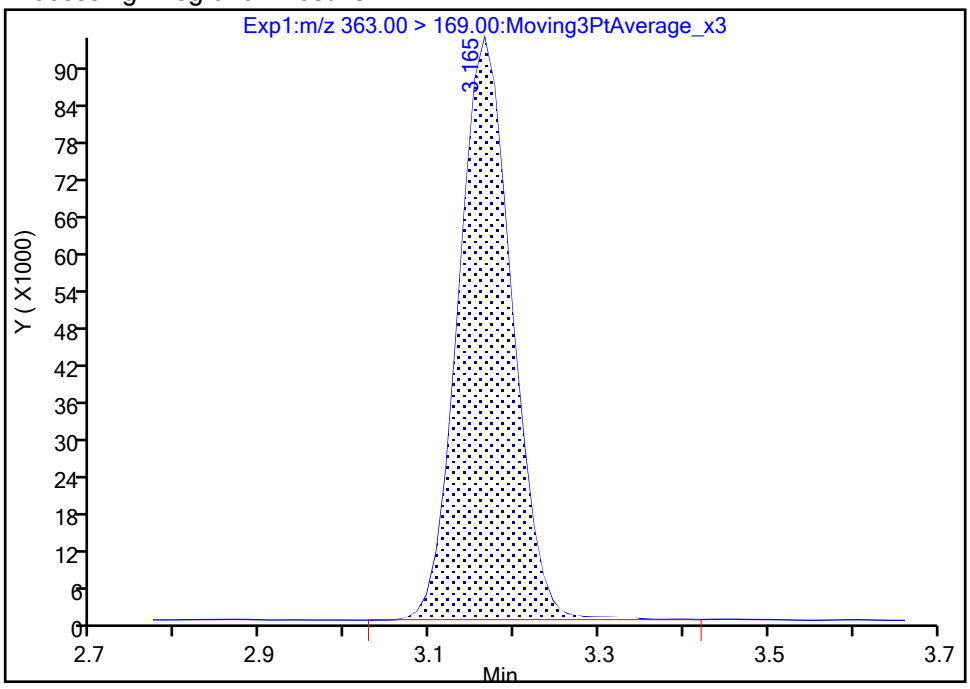
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

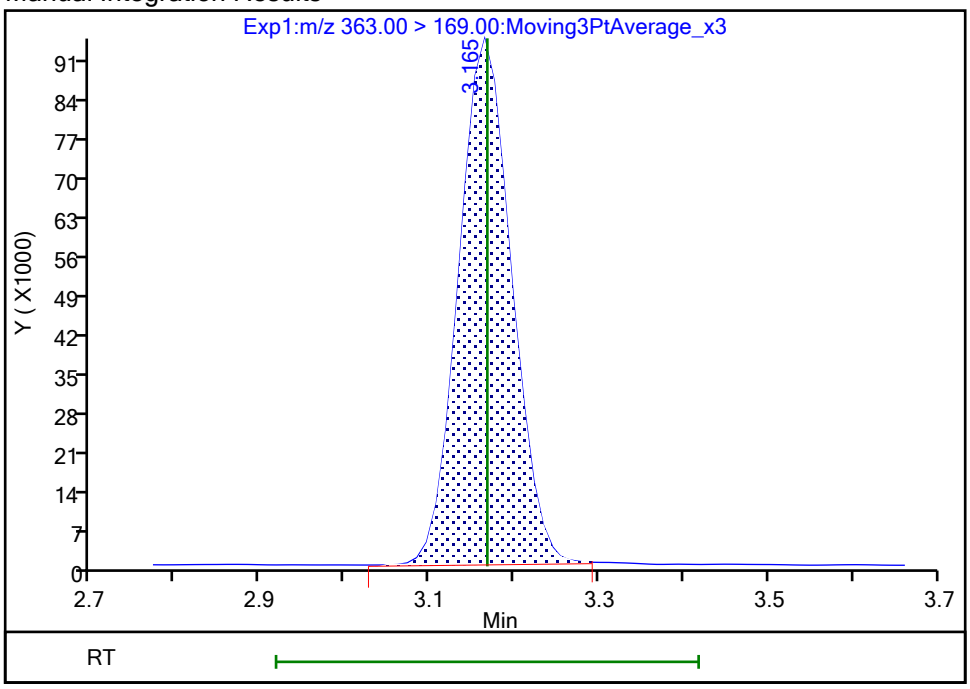
Processing Integration Results

RT: 3.16
Area: 414429
Amount: 0.972039
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 413085
Amount: 0.972039
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

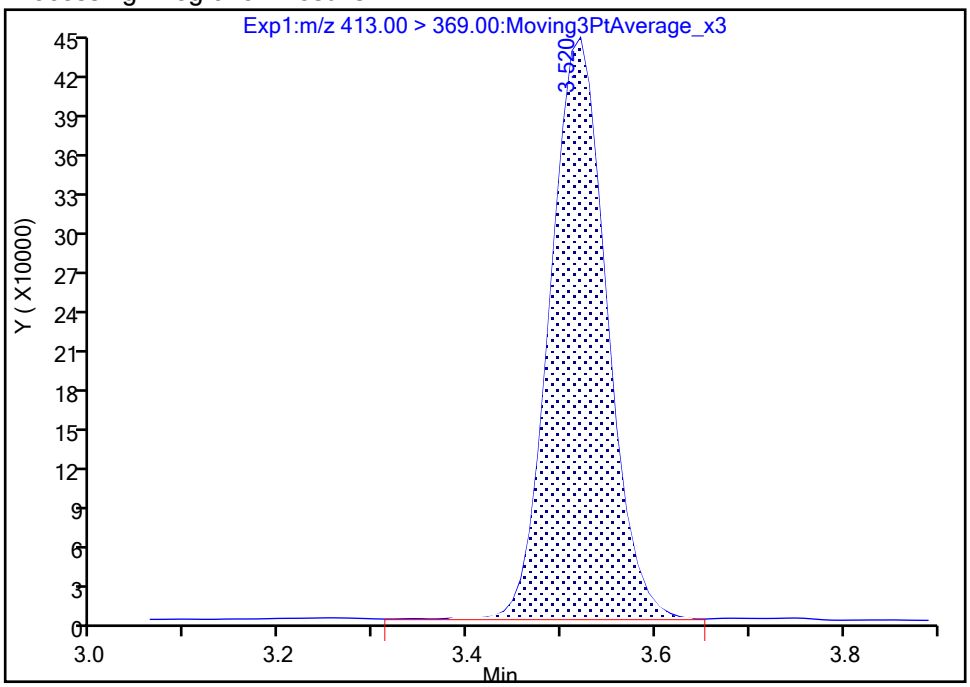
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

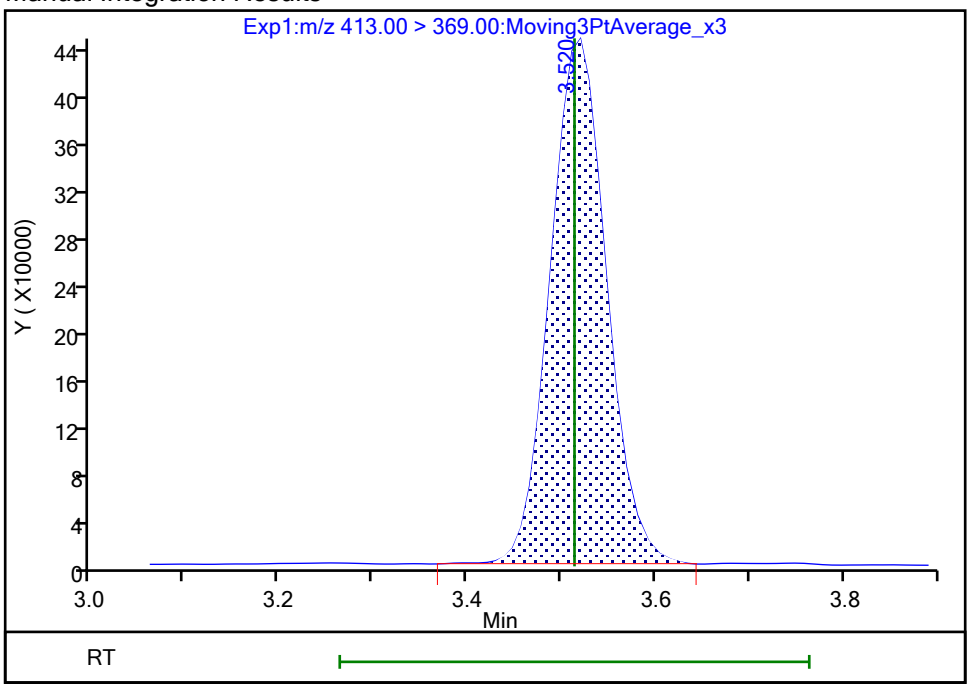
Processing Integration Results

RT: 3.52
Area: 1847952
Amount: 1.028180
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1846445
Amount: 1.027342
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

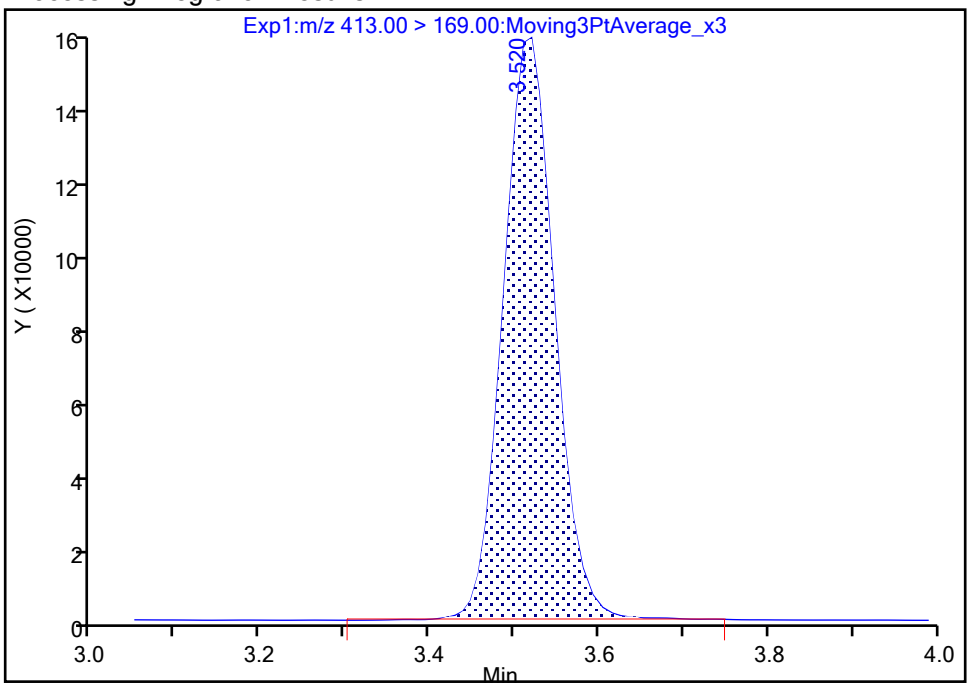
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

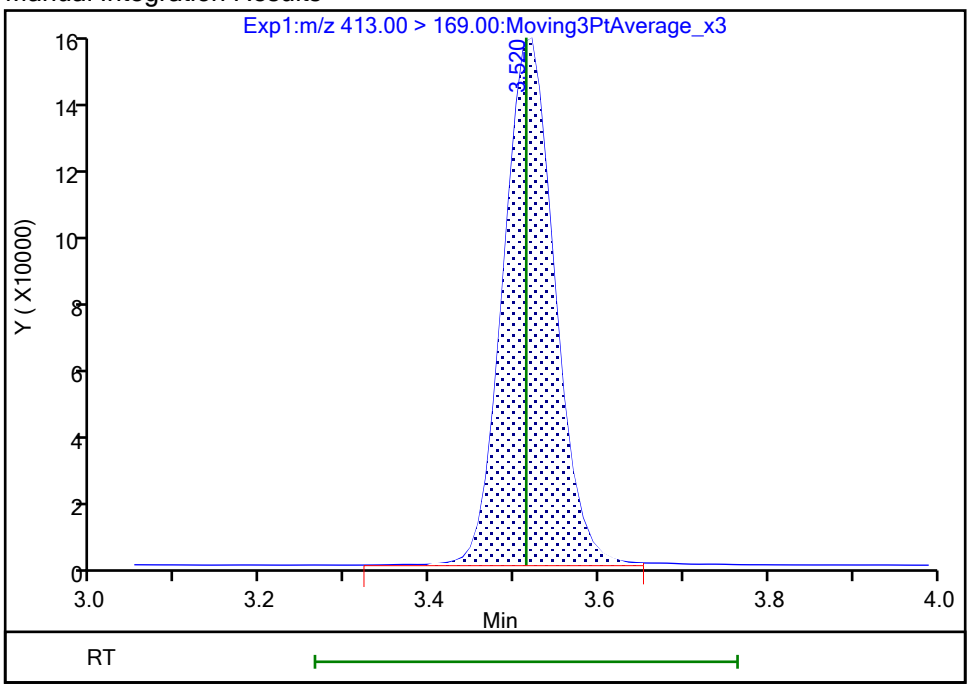
Processing Integration Results

RT: 3.52
Area: 649288
Amount: 1.028180
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 647803
Amount: 1.027342
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:08:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

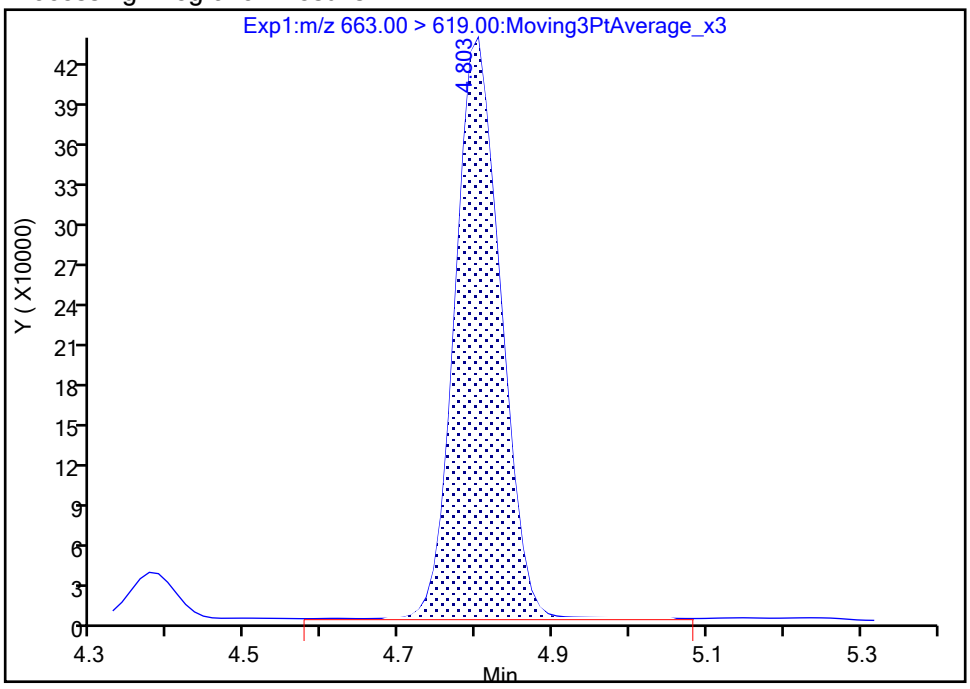
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

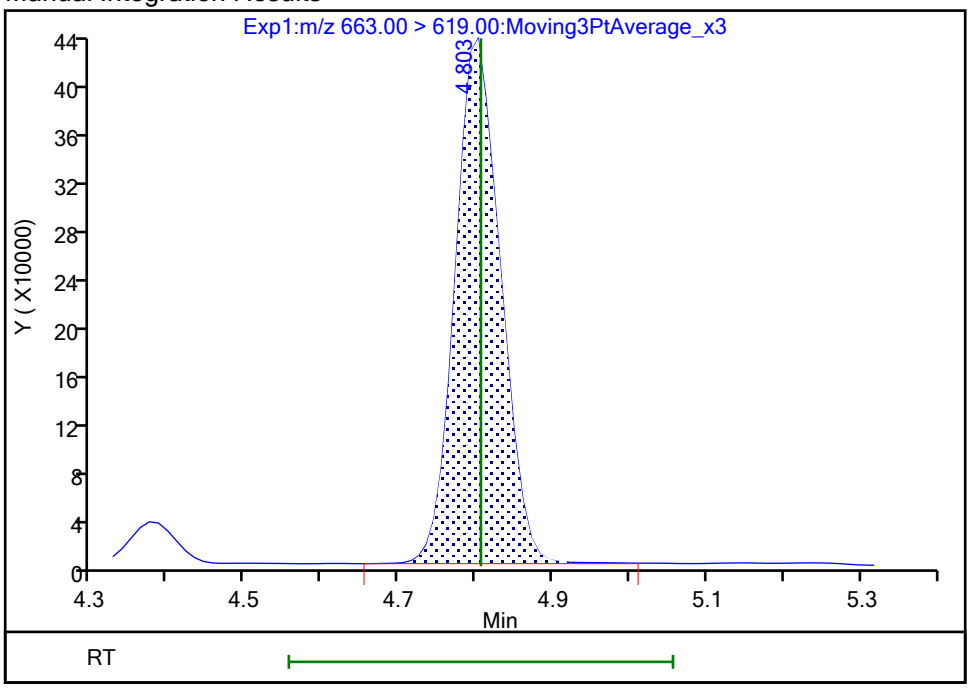
Processing Integration Results

RT: 4.80
Area: 1810137
Amount: 0.949702
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 1787908
Amount: 0.938039
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:09:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

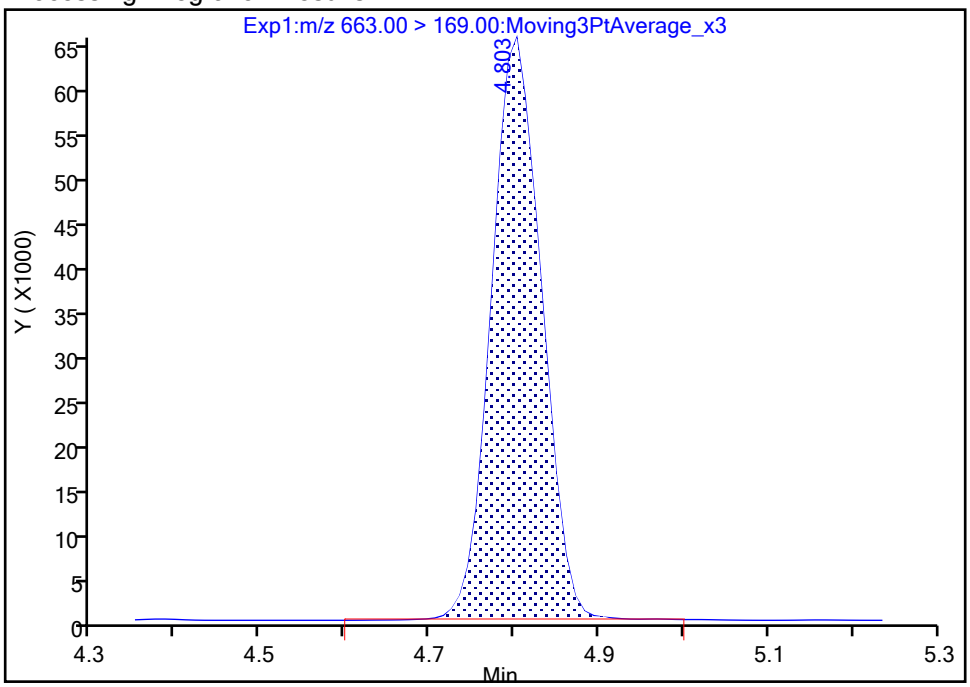
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

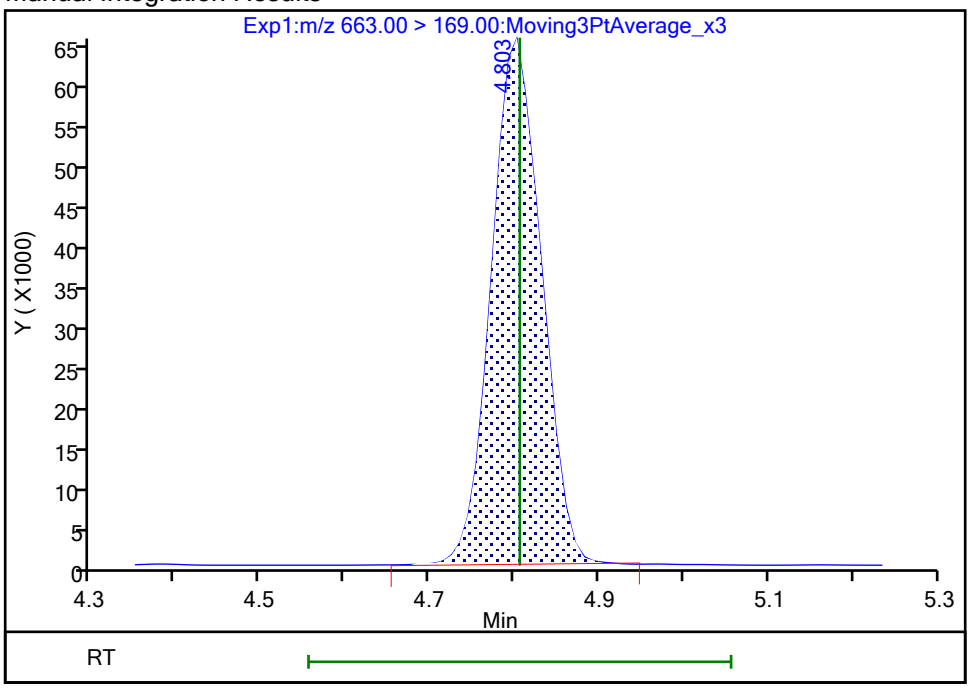
Processing Integration Results

RT: 4.80
Area: 269936
Amount: 0.949702
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 269067
Amount: 0.938039
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:09:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

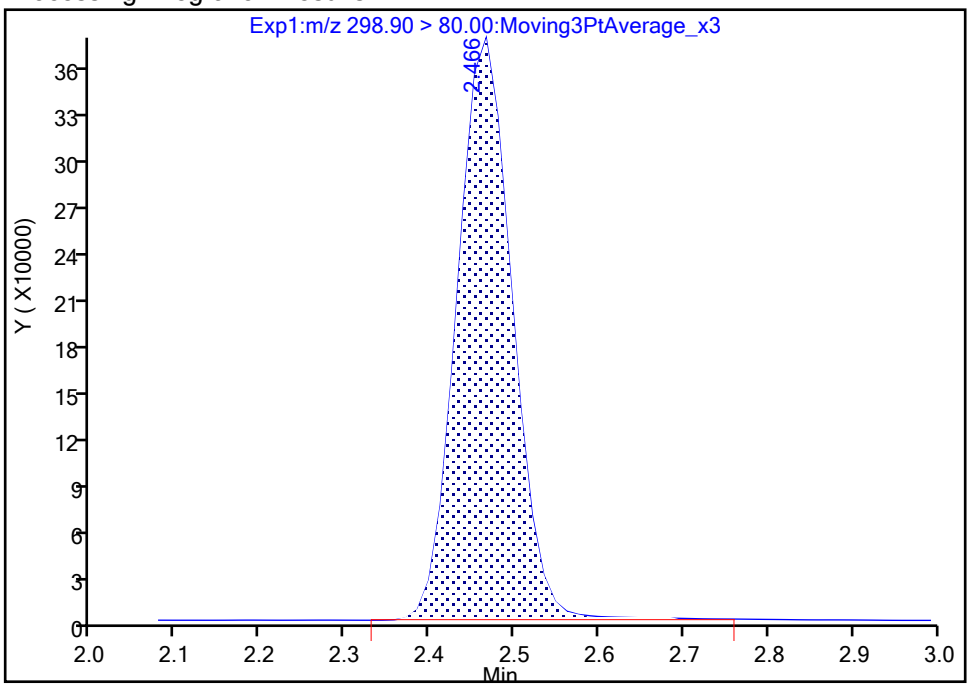
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

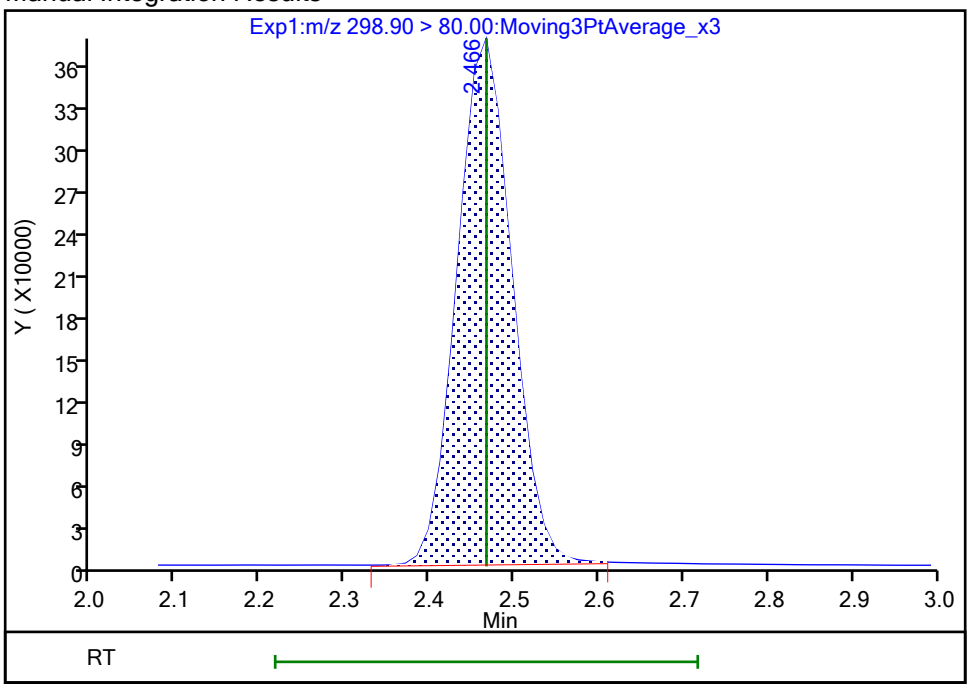
Processing Integration Results

RT: 2.47
Area: 1707107
Amount: 0.878482
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1700973
Amount: 0.875325
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

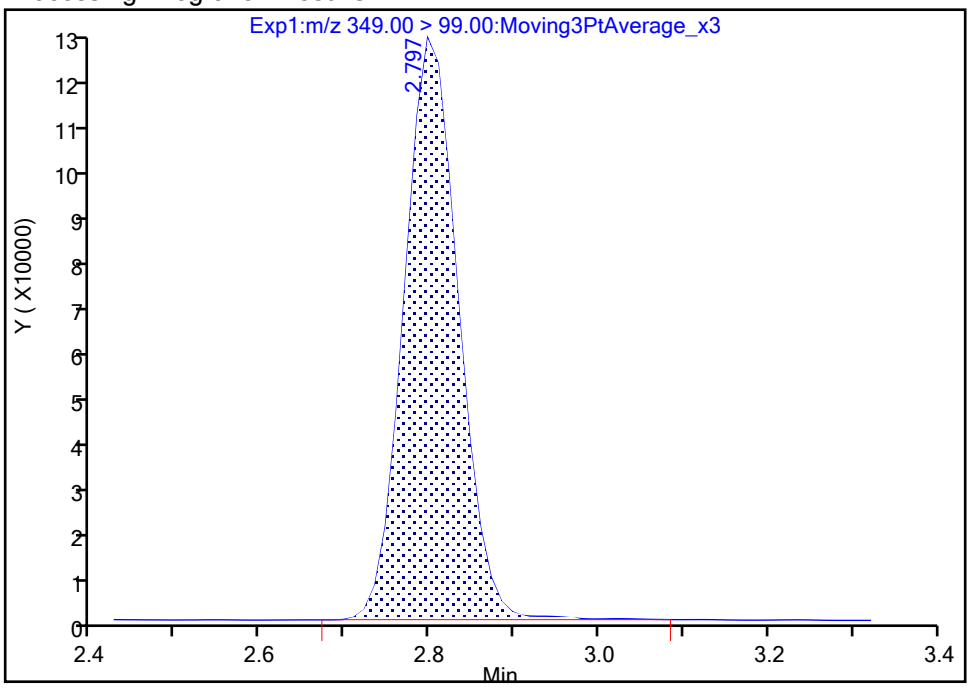
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

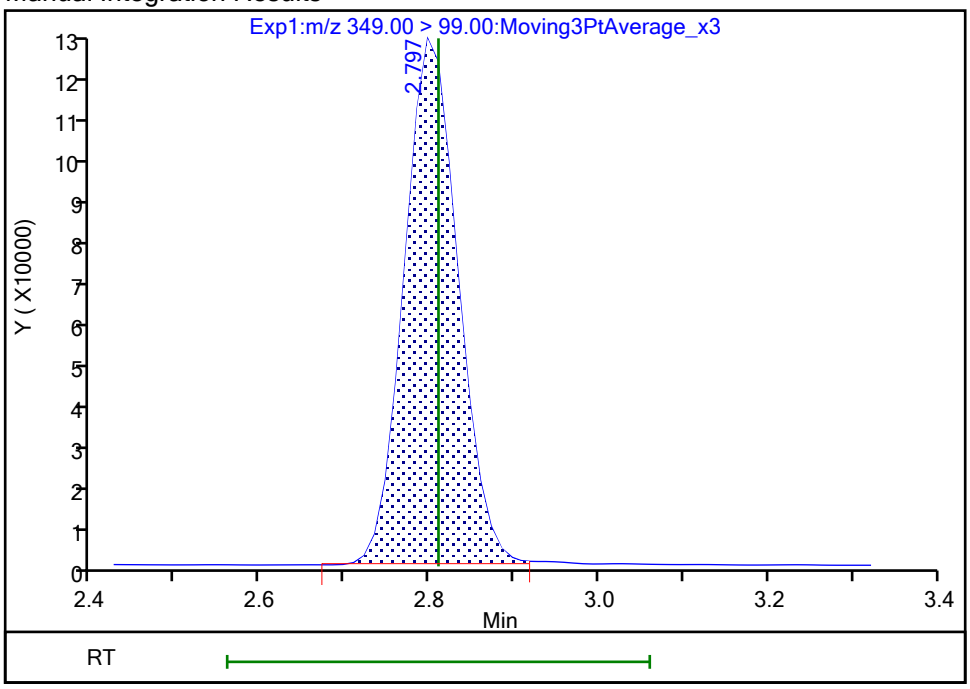
Processing Integration Results

RT: 2.80
Area: 561128
Amount: 0.895232
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 558065
Amount: 0.891725
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

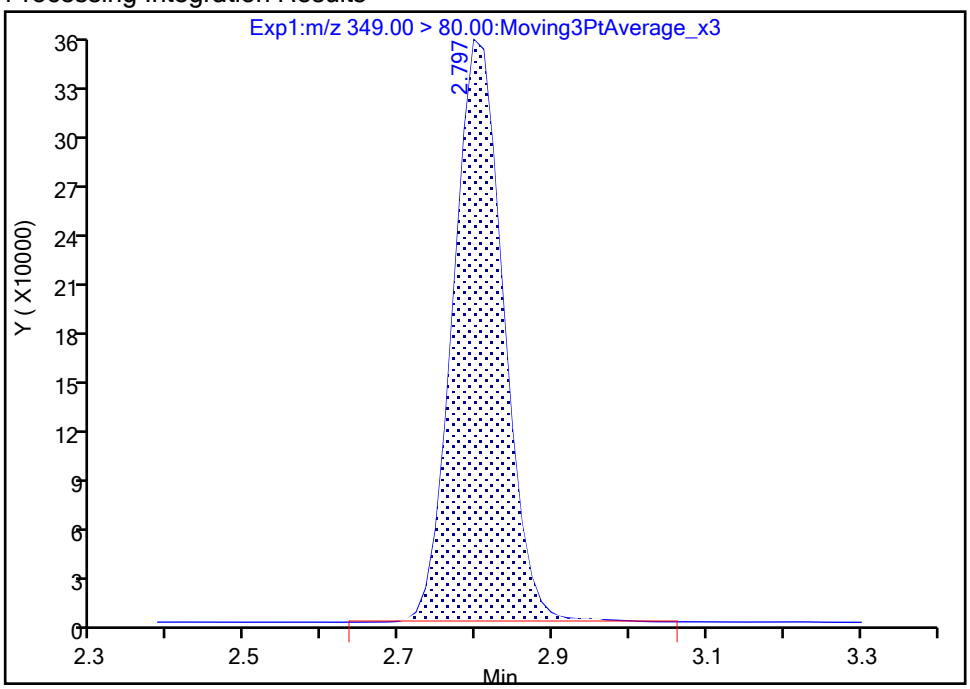
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

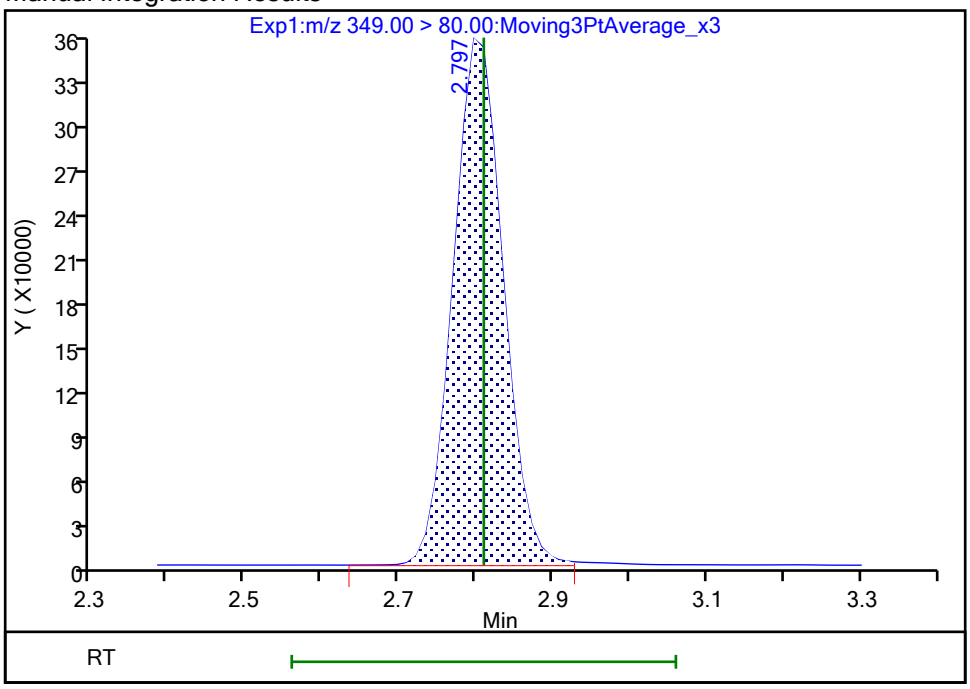
Processing Integration Results

RT: 2.80
Area: 1594840
Amount: 0.895232
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1588591
Amount: 0.891725
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

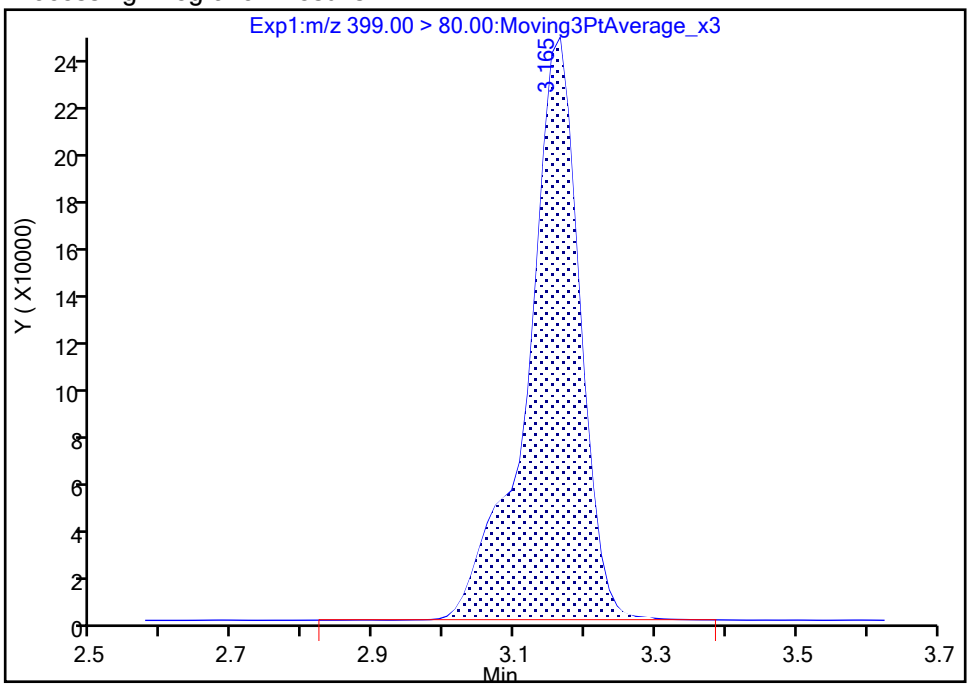
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

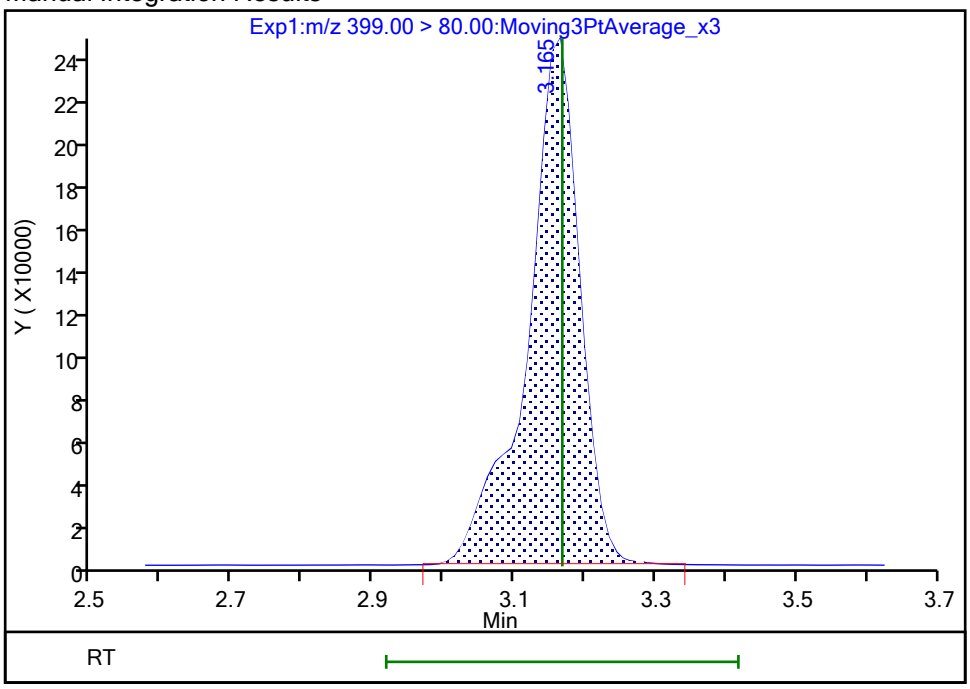
Processing Integration Results

RT: 3.16
Area: 1266995
Amount: 0.839001
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1263317
Amount: 0.836565
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

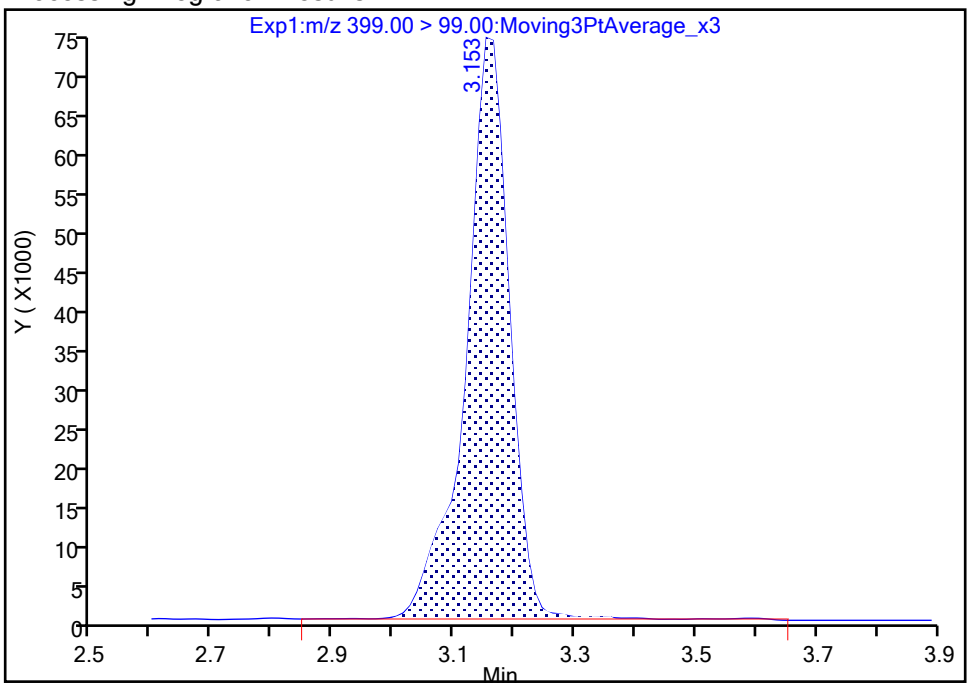
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

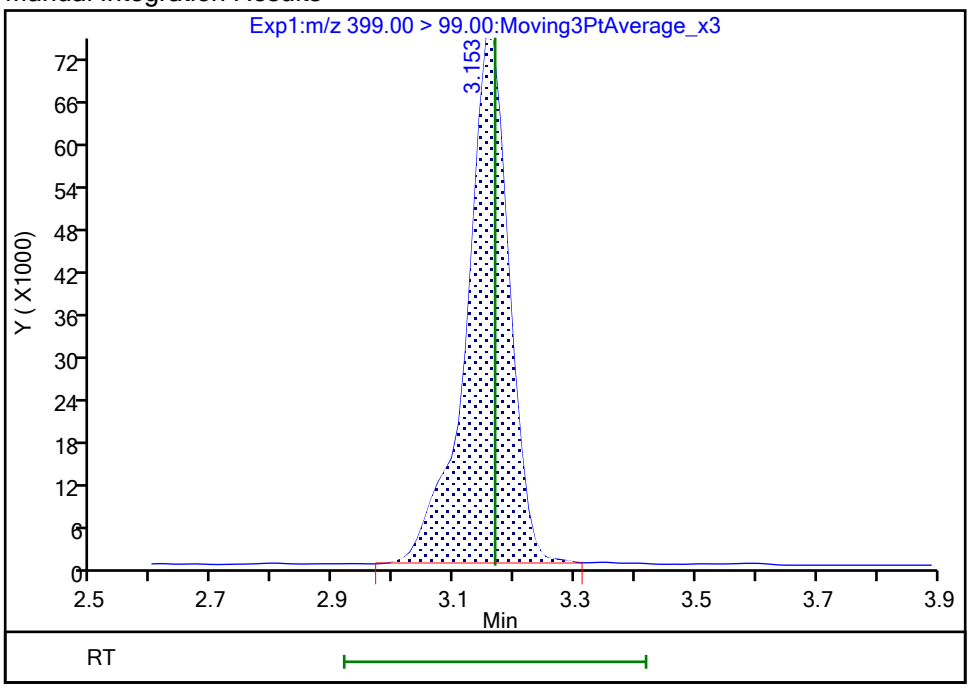
Processing Integration Results

RT: 3.15
Area: 377529
Amount: 0.839001
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 370057
Amount: 0.836565
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

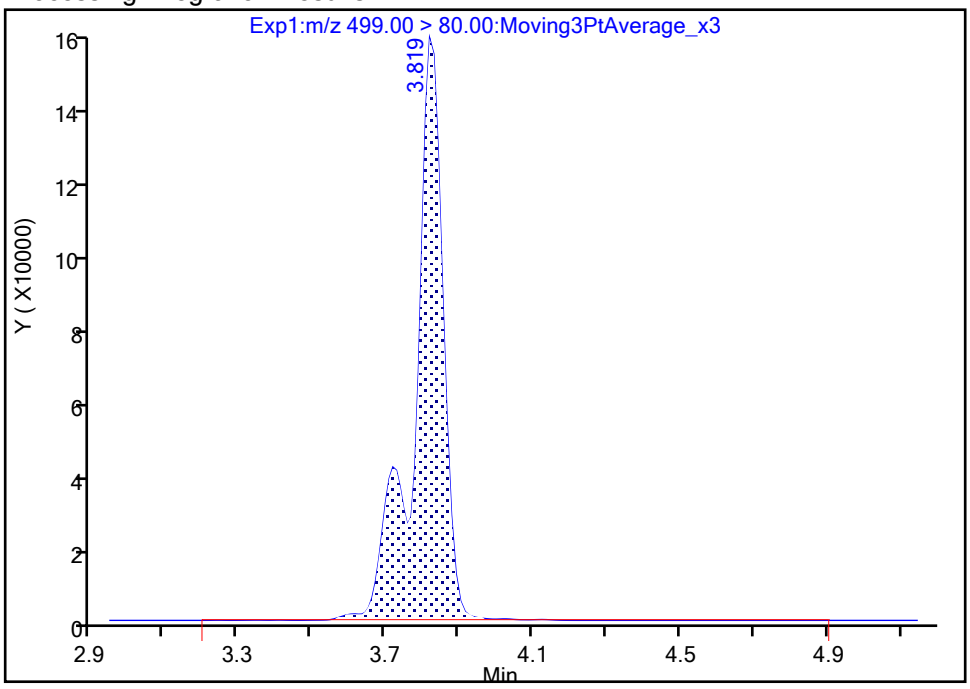
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

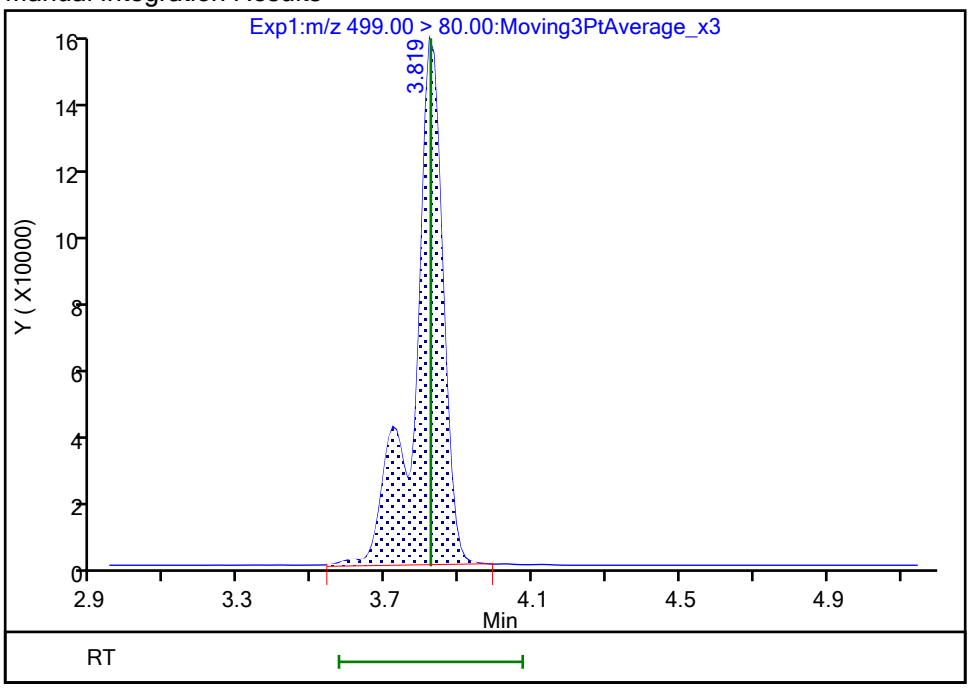
Processing Integration Results

RT: 3.82
Area: 865118
Amount: 0.857274
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 859175
Amount: 0.851385
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:08:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

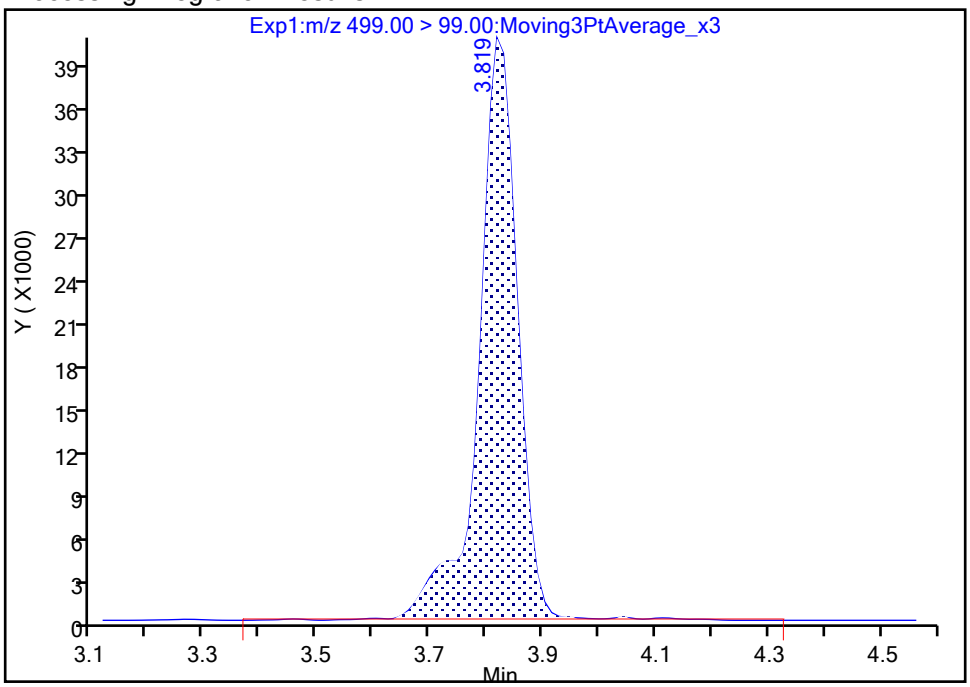
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

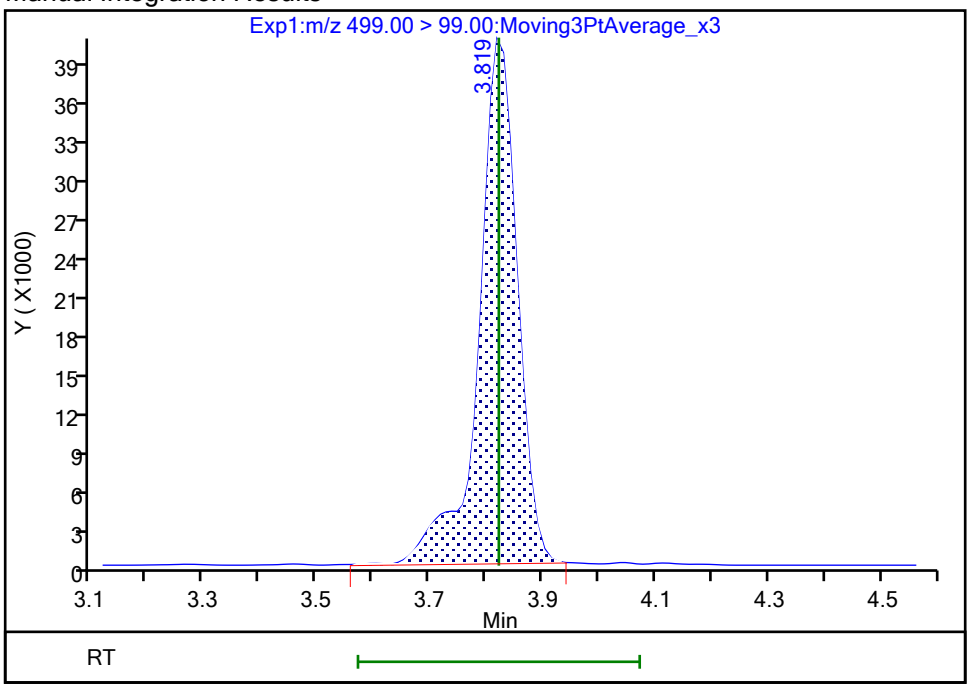
Processing Integration Results

RT: 3.82
Area: 199240
Amount: 0.857274
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 195574
Amount: 0.851385
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:08:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

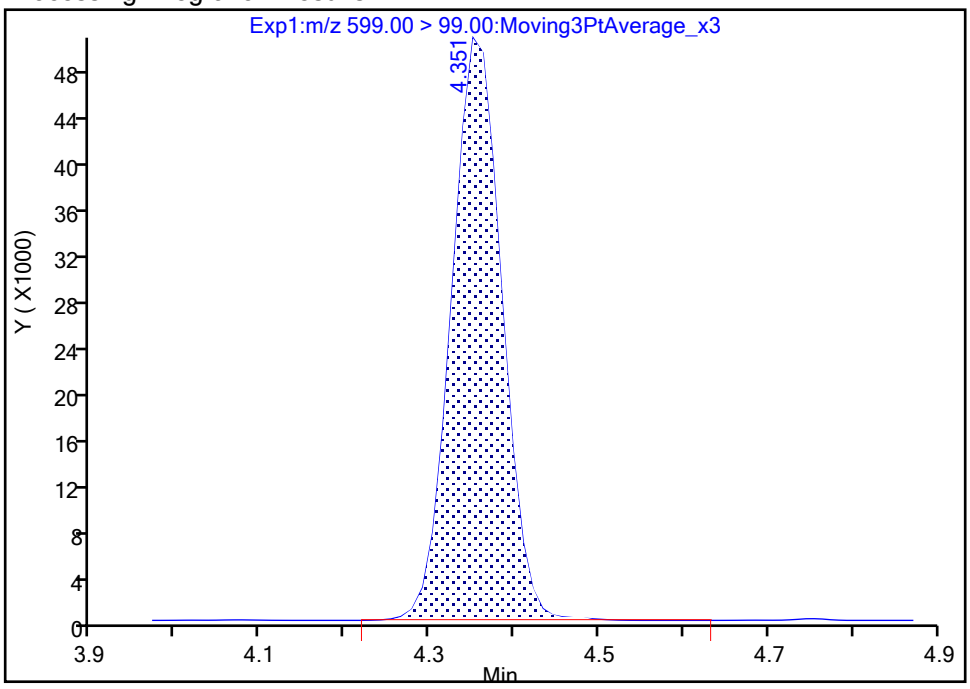
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

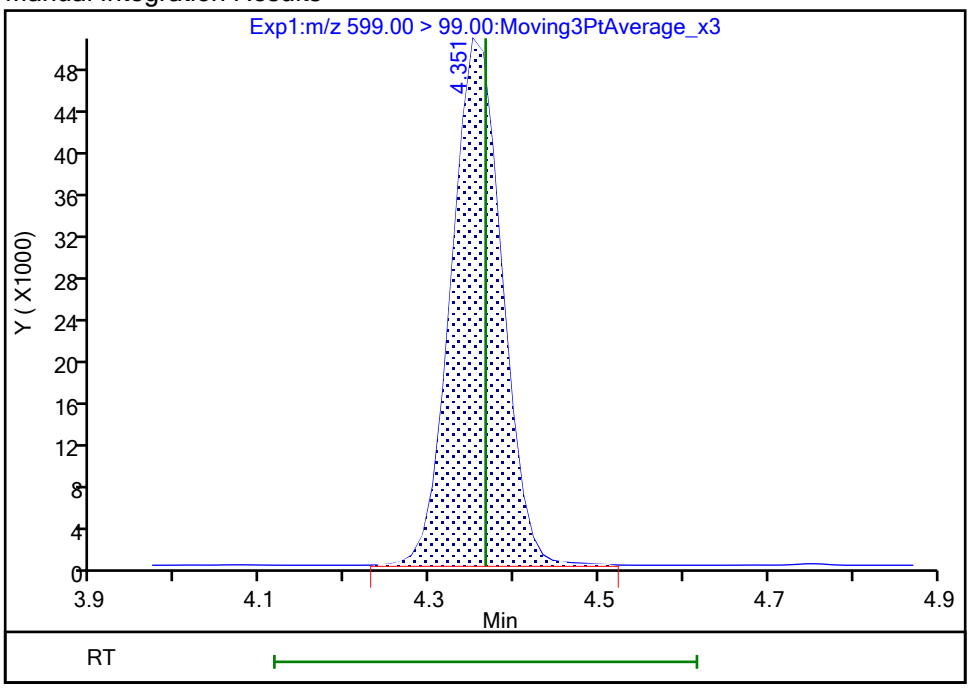
Processing Integration Results

RT: 4.35
Area: 208082
Amount: 0.839252
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 207775
Amount: 0.839252
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:09:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

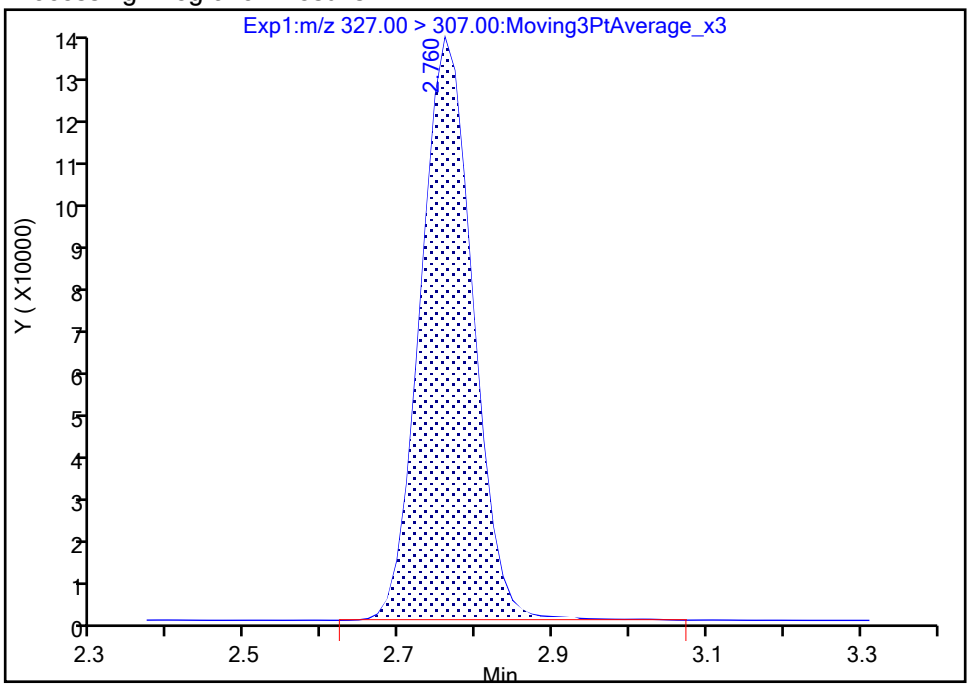
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

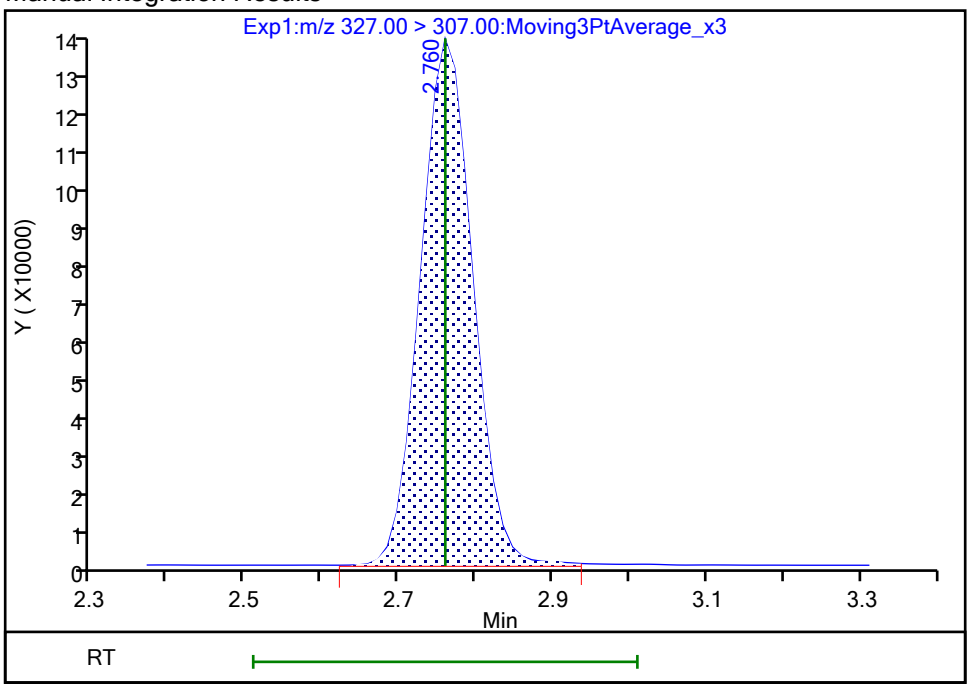
Processing Integration Results

RT: 2.76
Area: 634385
Amount: 0.935185
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 632795
Amount: 0.932841
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

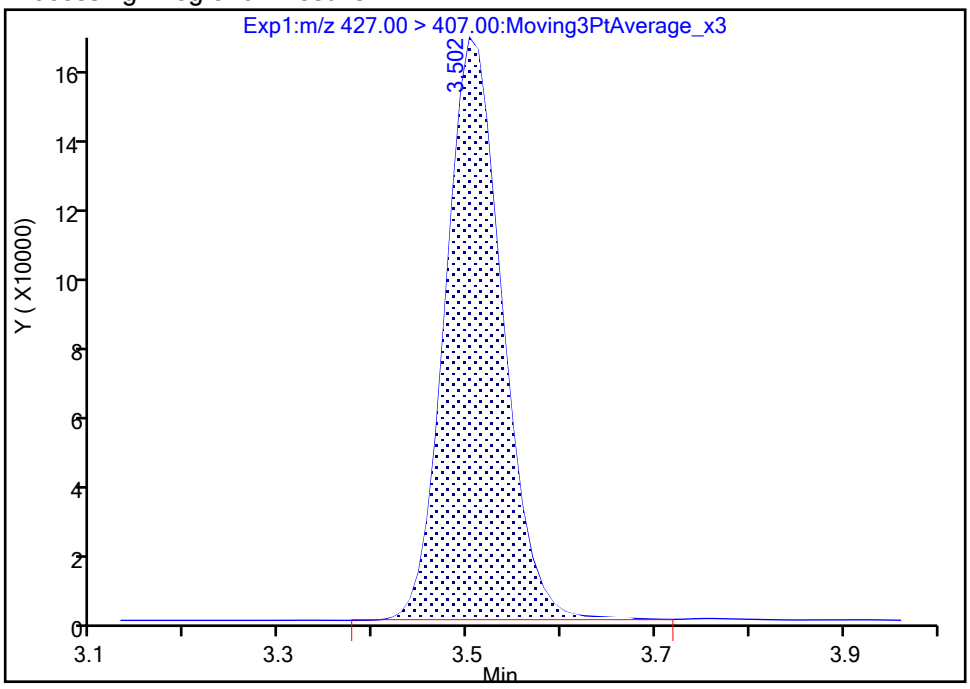
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

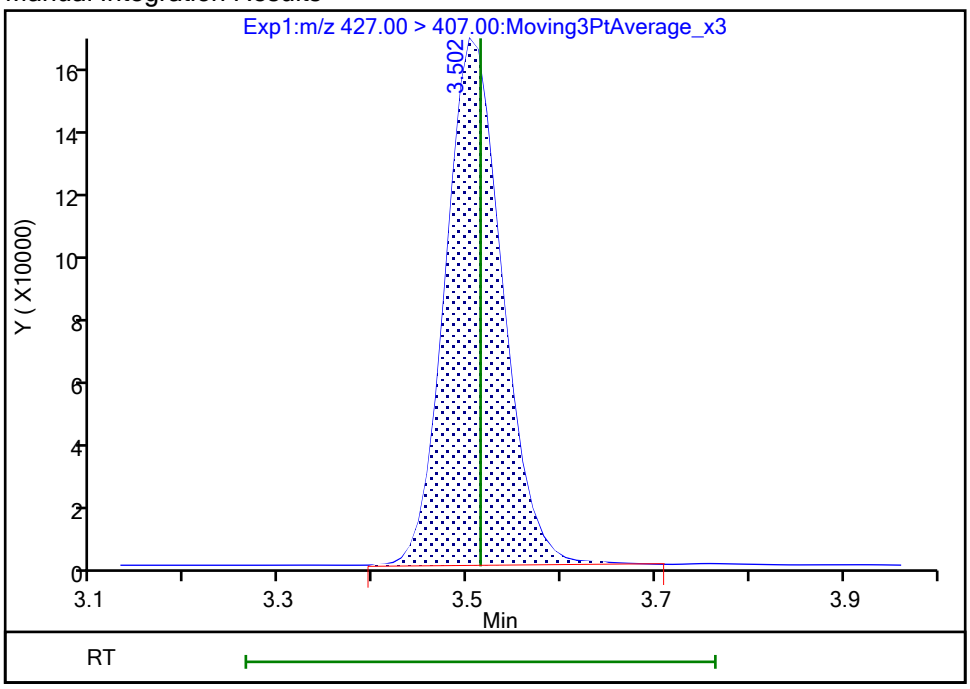
Processing Integration Results

RT: 3.50
Area: 705015
Amount: 1.004550
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 702595
Amount: 1.001101
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

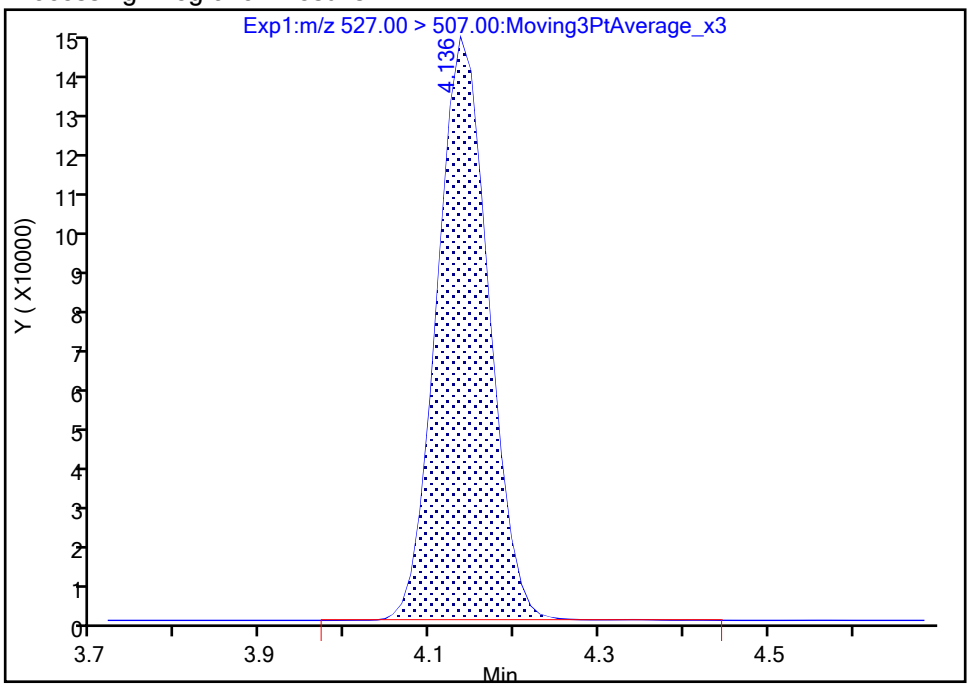
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

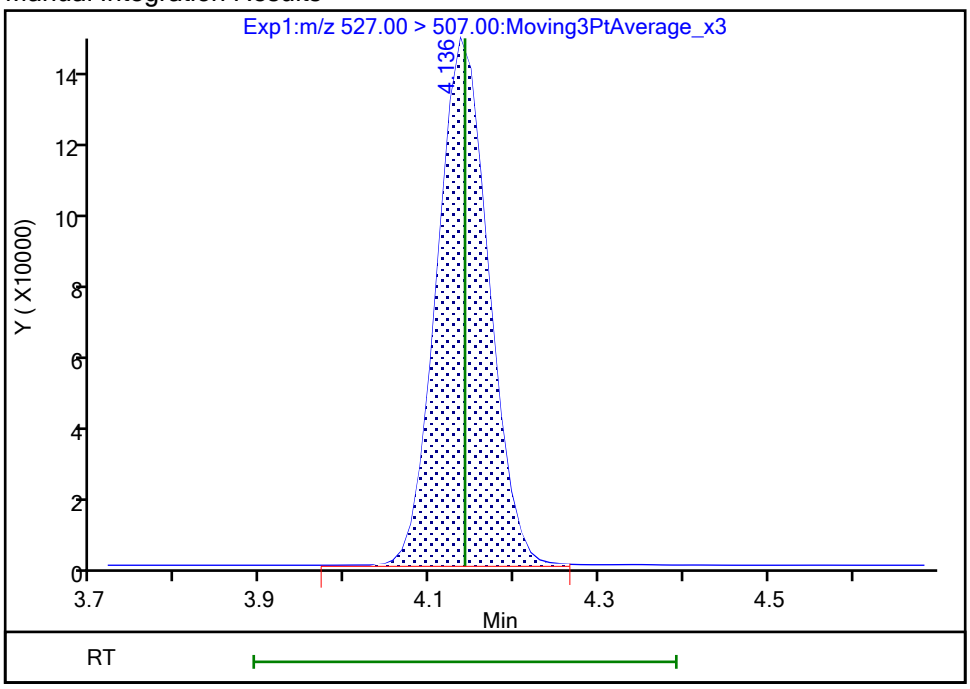
Processing Integration Results

RT: 4.14
Area: 635701
Amount: 1.071297
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 634553
Amount: 1.069363
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:08:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

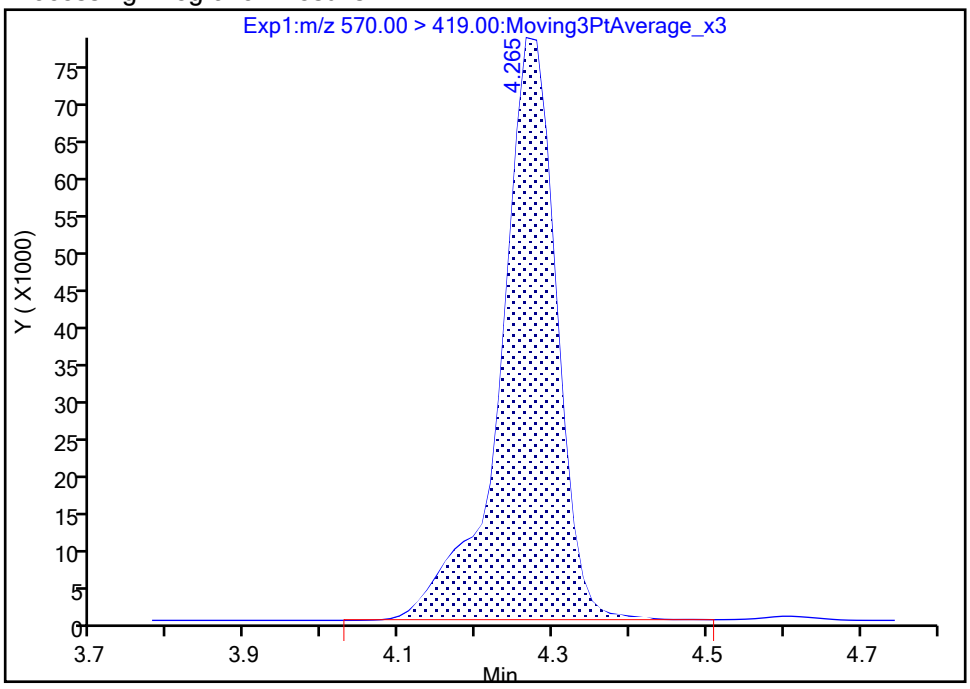
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

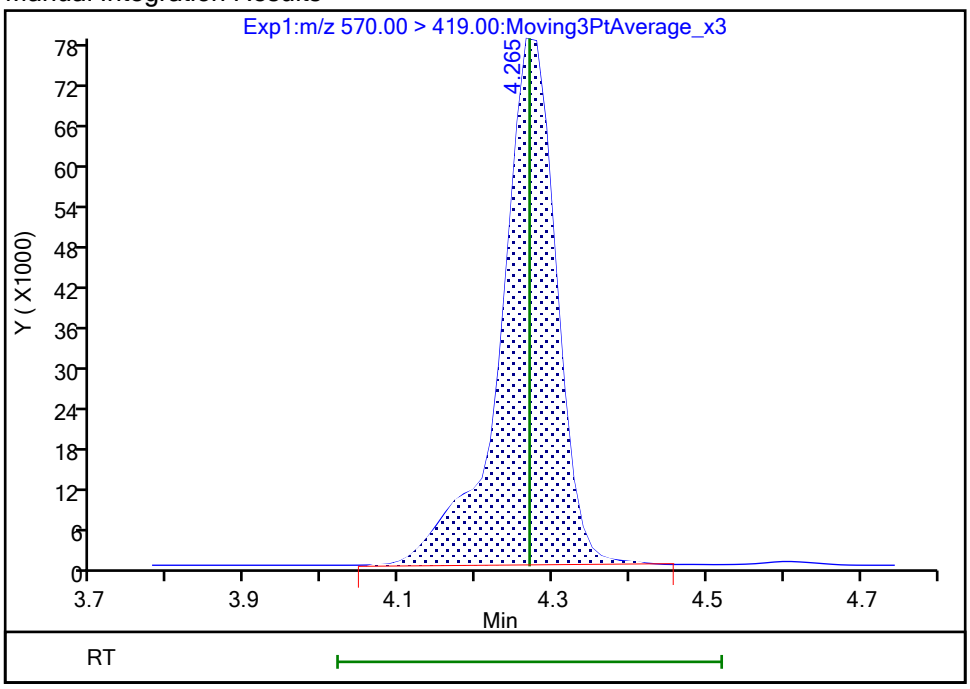
Processing Integration Results

RT: 4.27
Area: 400355
Amount: 0.949336
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 398494
Amount: 0.944924
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:09:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

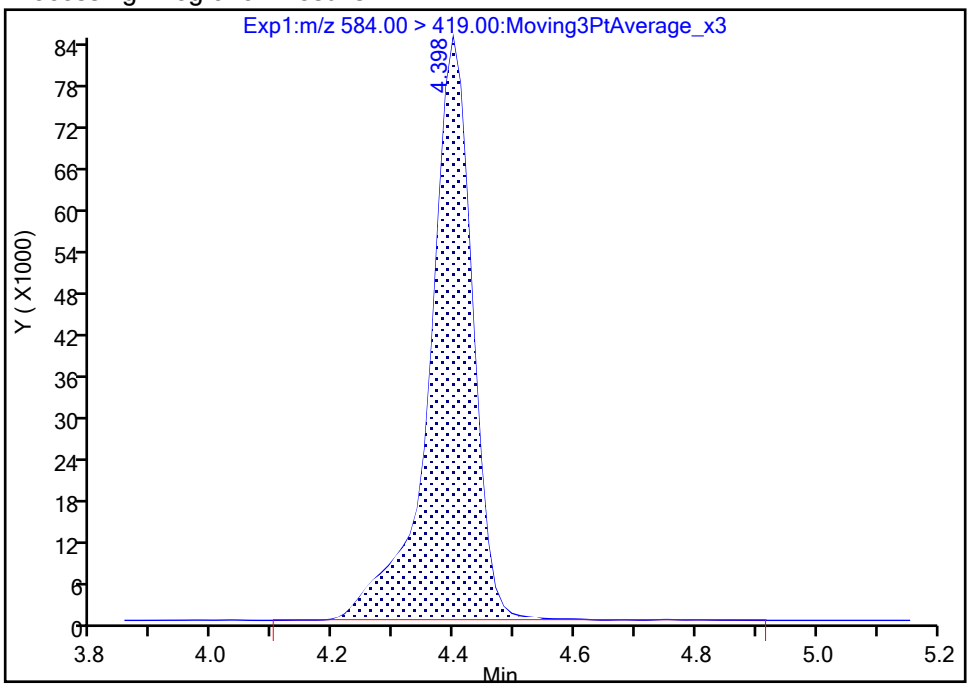
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

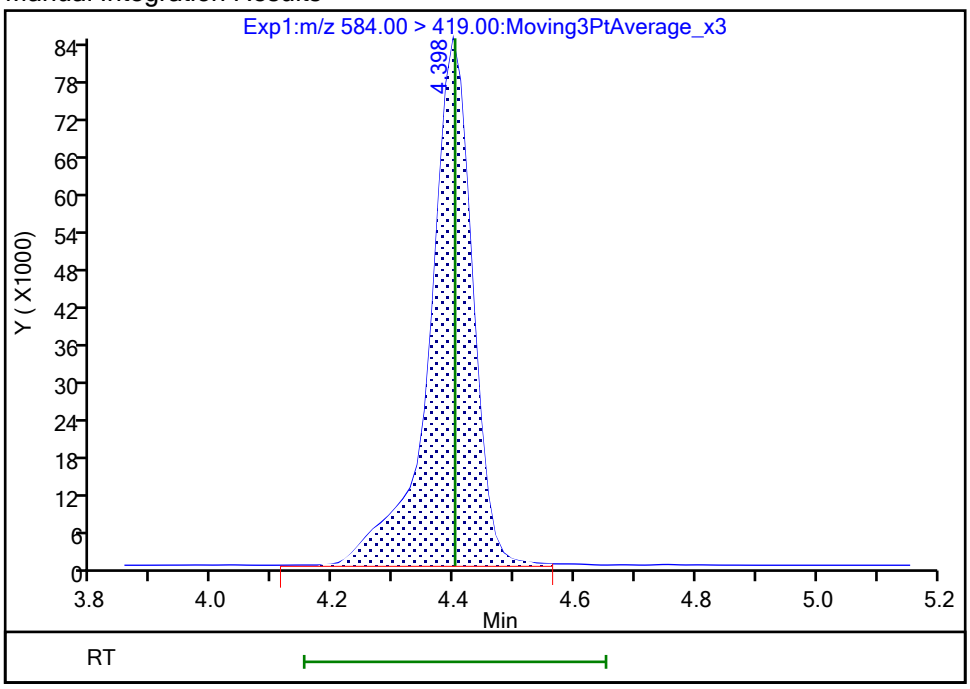
Processing Integration Results

RT: 4.40
Area: 419623
Amount: 0.974133
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 417676
Amount: 0.969613
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:09:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

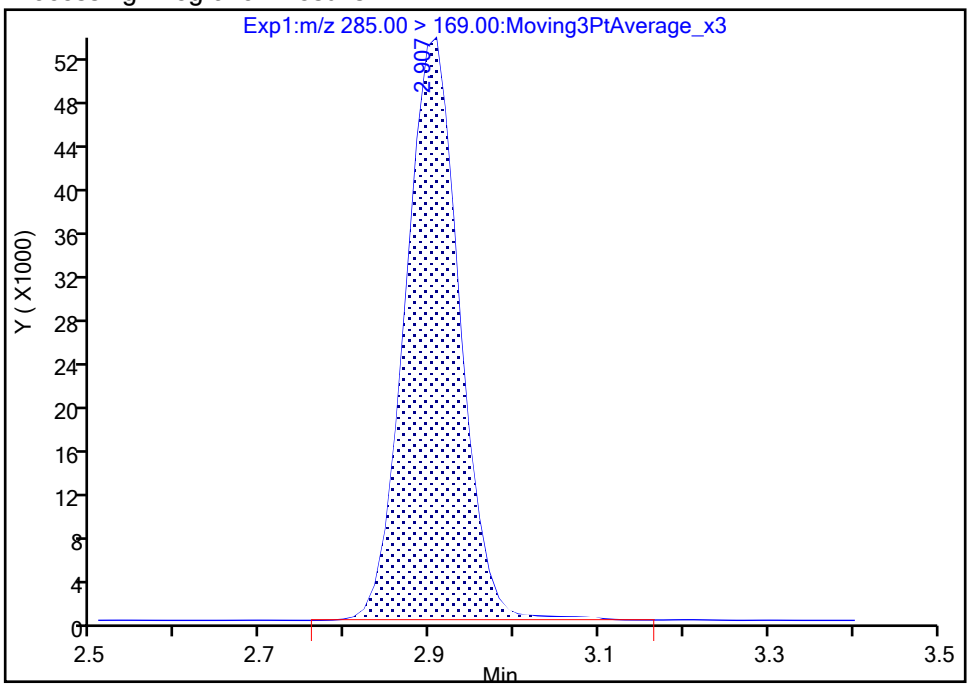
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

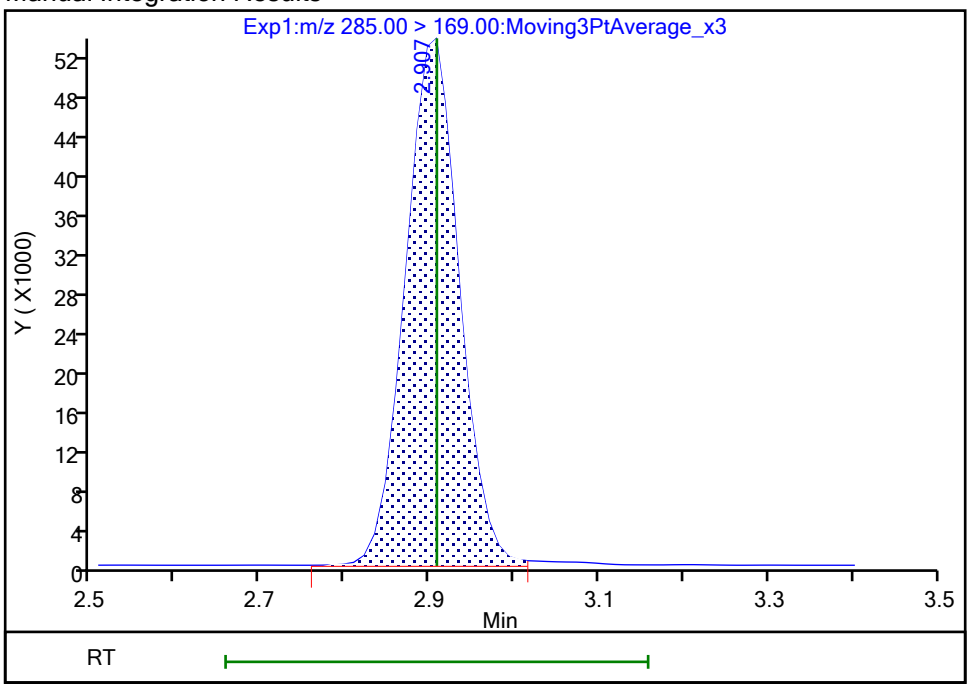
Processing Integration Results

RT: 2.91
Area: 237303
Amount: 0.952518
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 235337
Amount: 0.944627
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:07:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

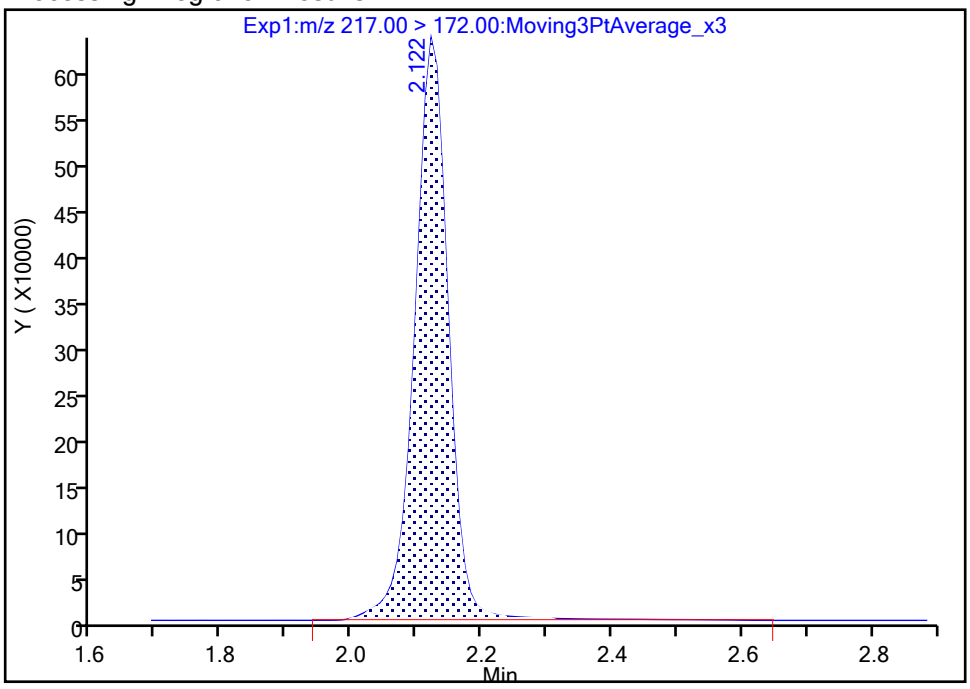
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d
Injection Date: 23-Oct-2023 23:33:11 Instrument ID: LC812
Lims ID: LCS 200-196646/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

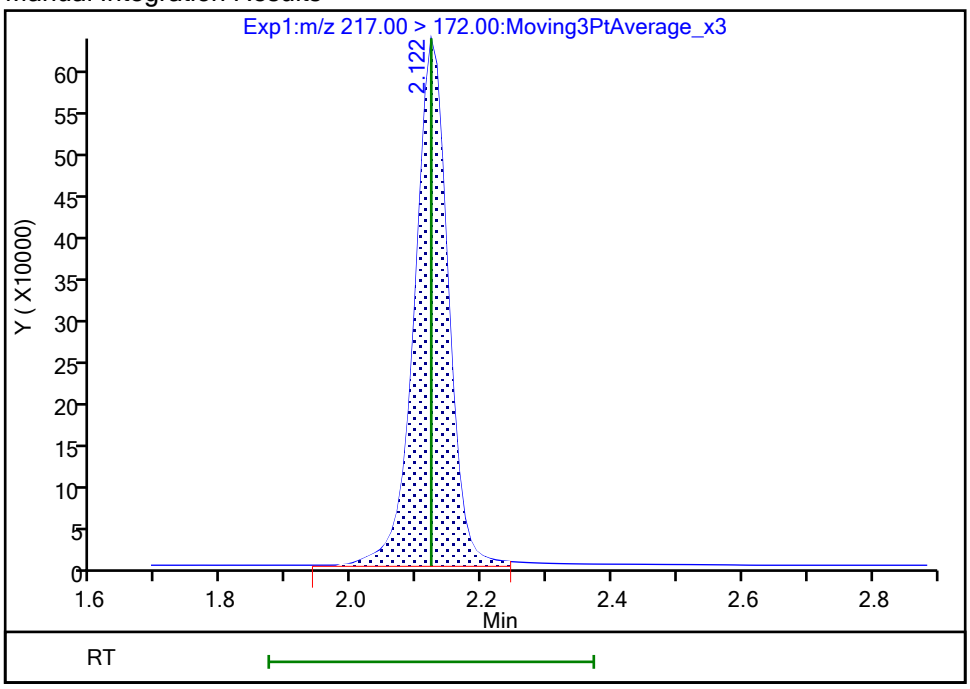
Processing Integration Results

RT: 2.12
Area: 2297939
Amount: 1.396846
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2267059
Amount: 1.378075
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

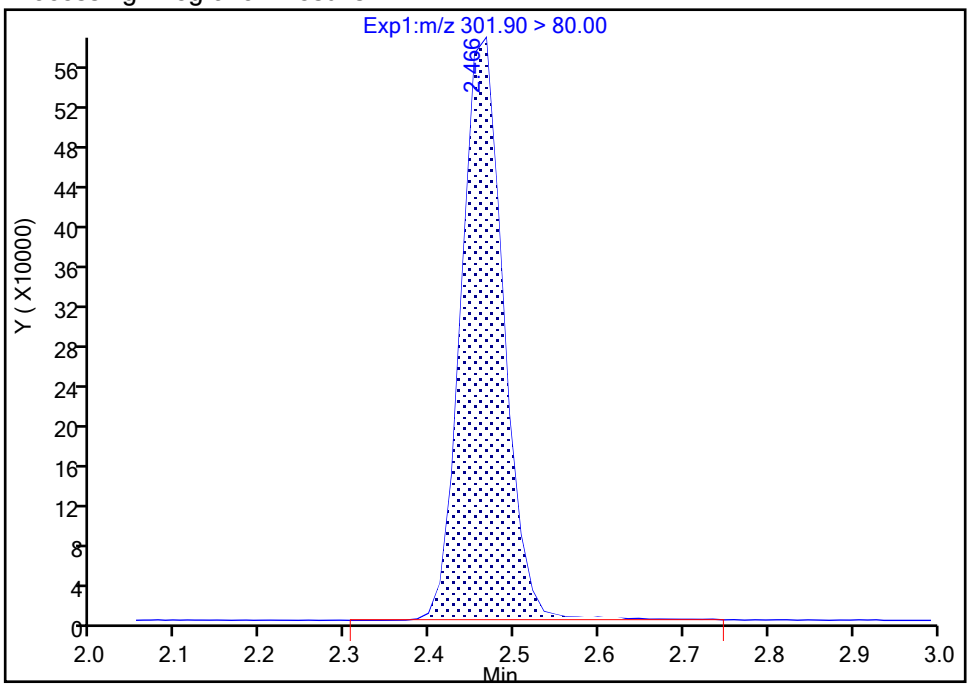
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

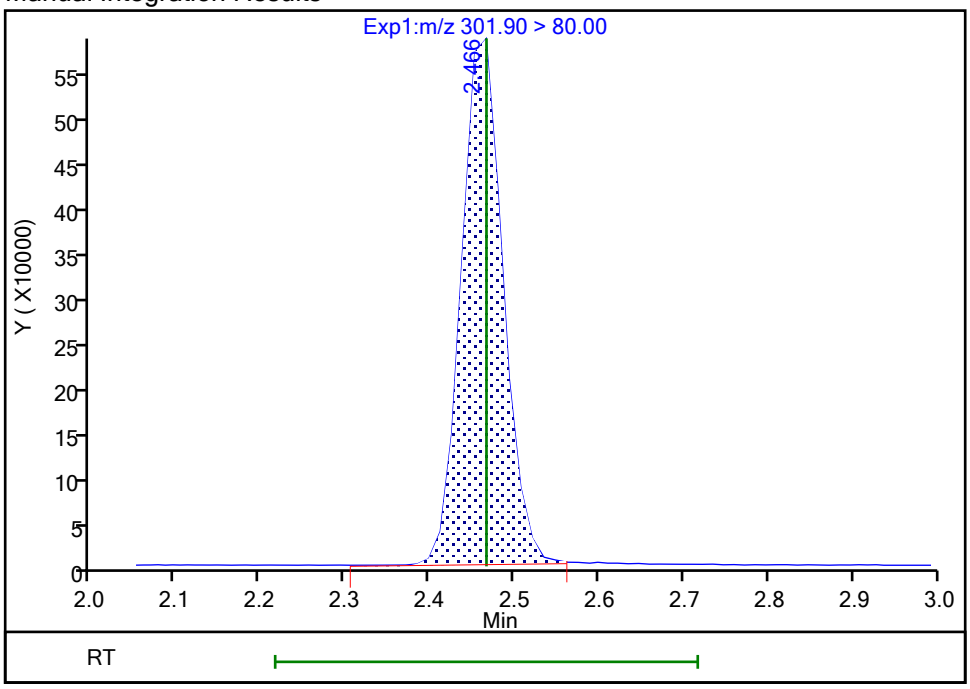
Processing Integration Results

RT: 2.47
Area: 2038137
Amount: 1.179818
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2022575
Amount: 1.170810
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

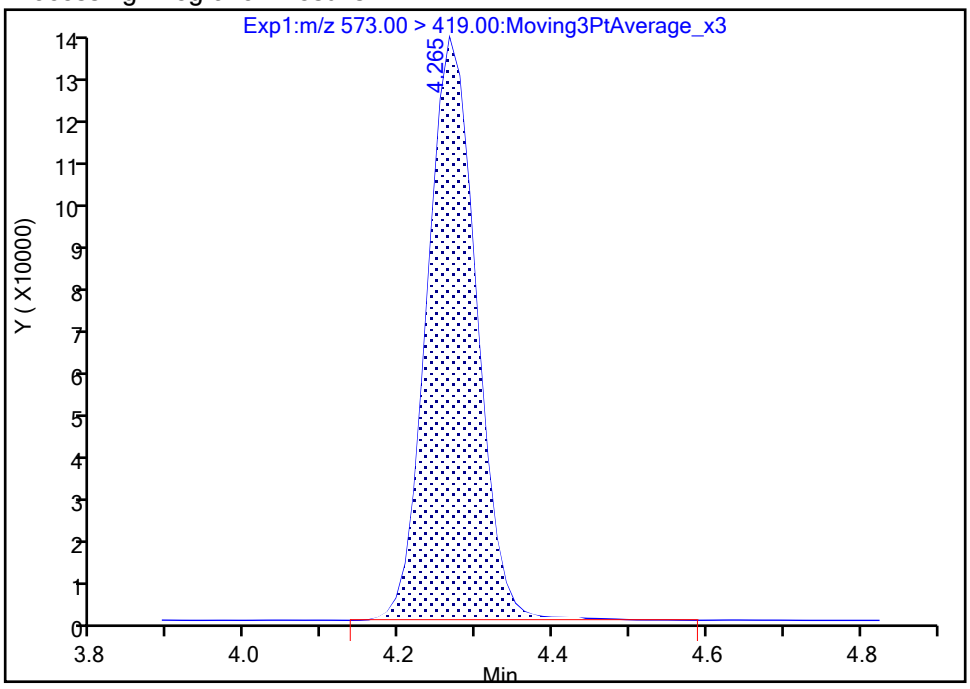
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

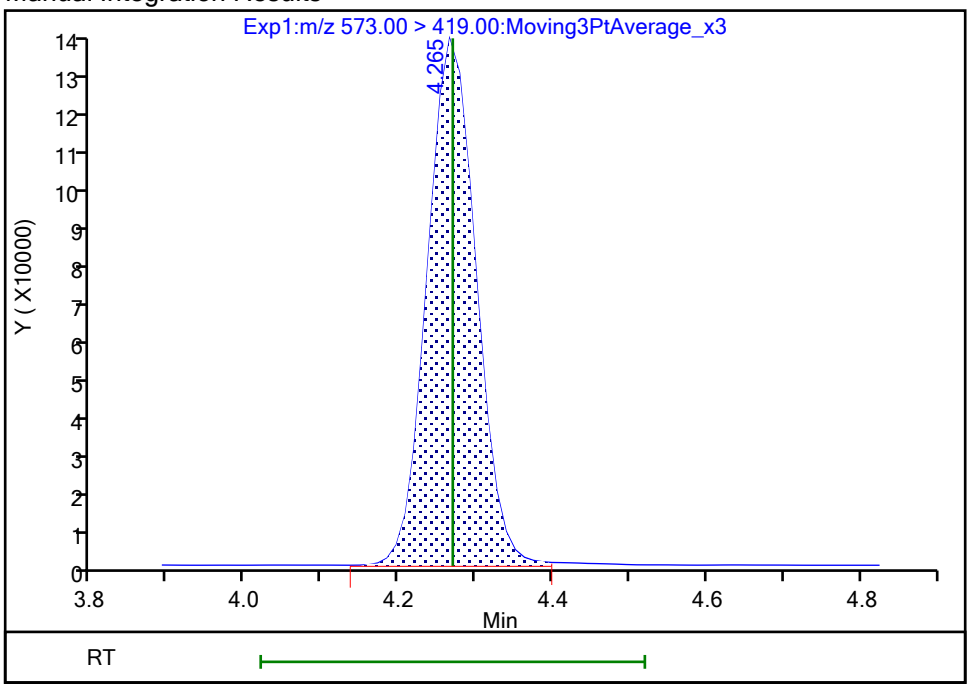
Processing Integration Results

RT: 4.27
Area: 583878
Amount: 1.328097
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 580941
Amount: 1.321416
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

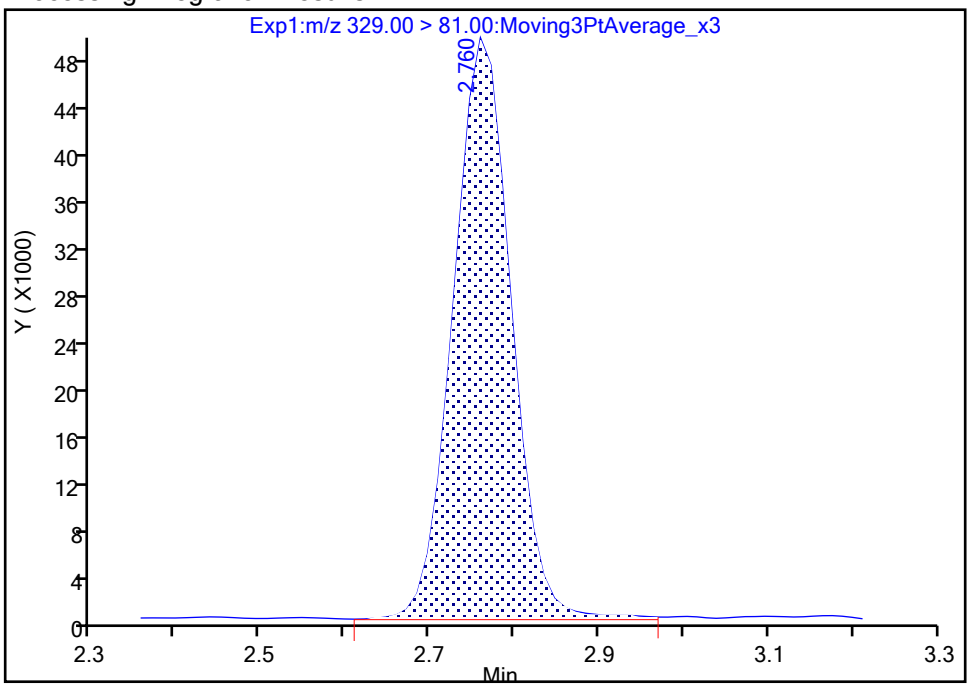
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

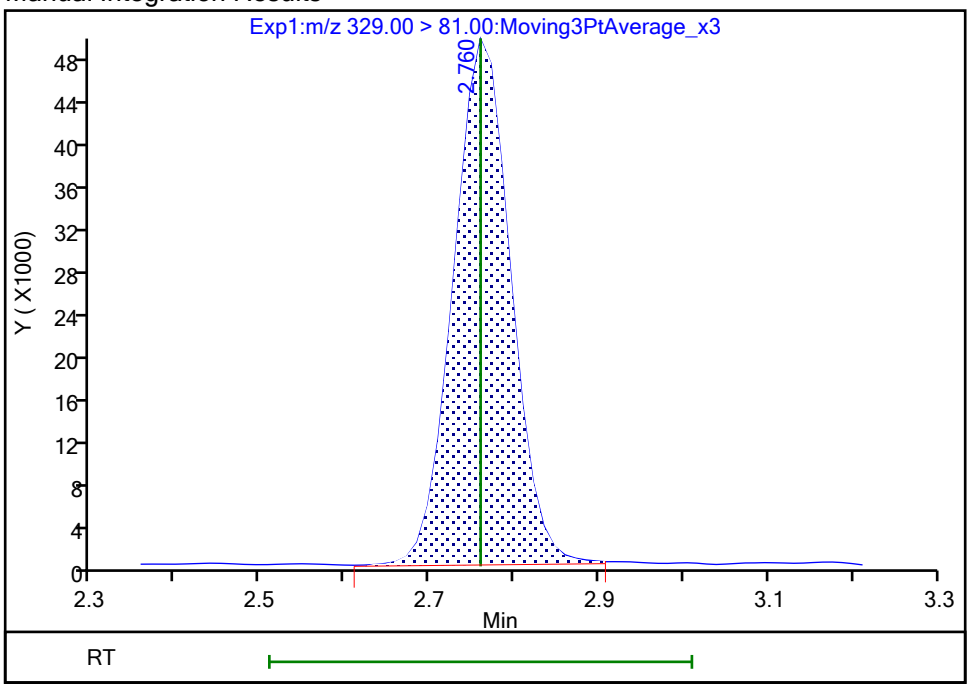
Processing Integration Results

RT: 2.76
Area: 236064
Amount: 1.181621
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 233220
Amount: 1.167386
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

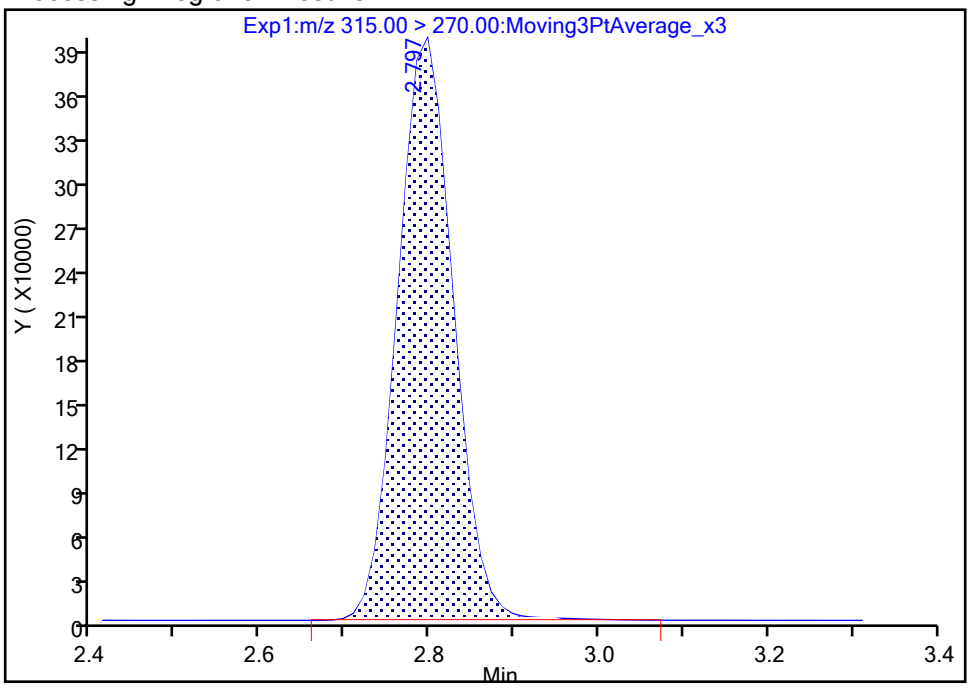
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

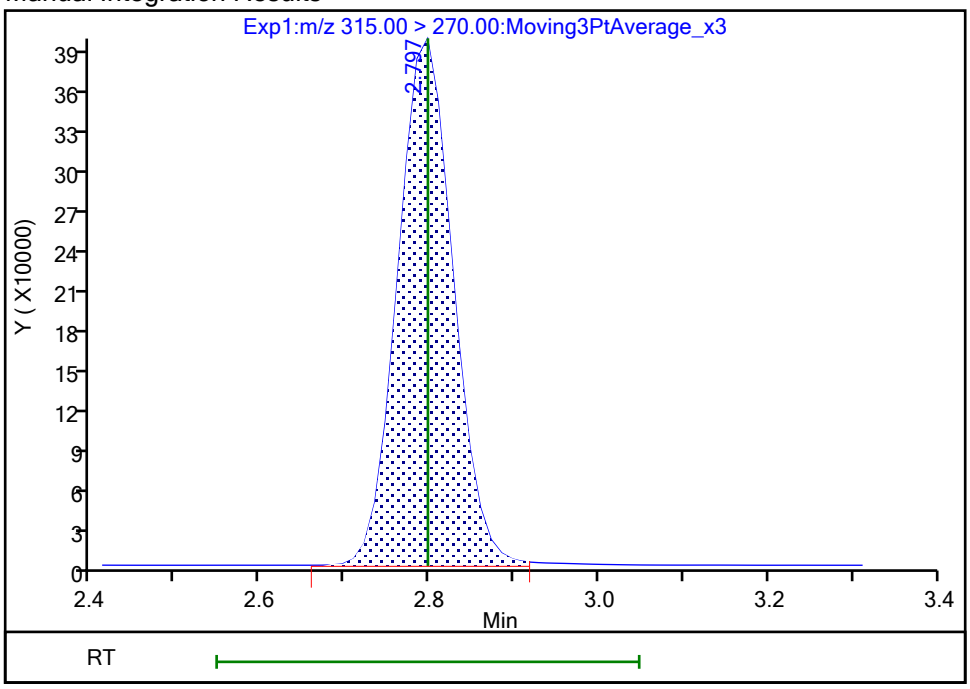
Processing Integration Results

RT: 2.80
Area: 1809919
Amount: 1.393475
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1802622
Amount: 1.387857
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

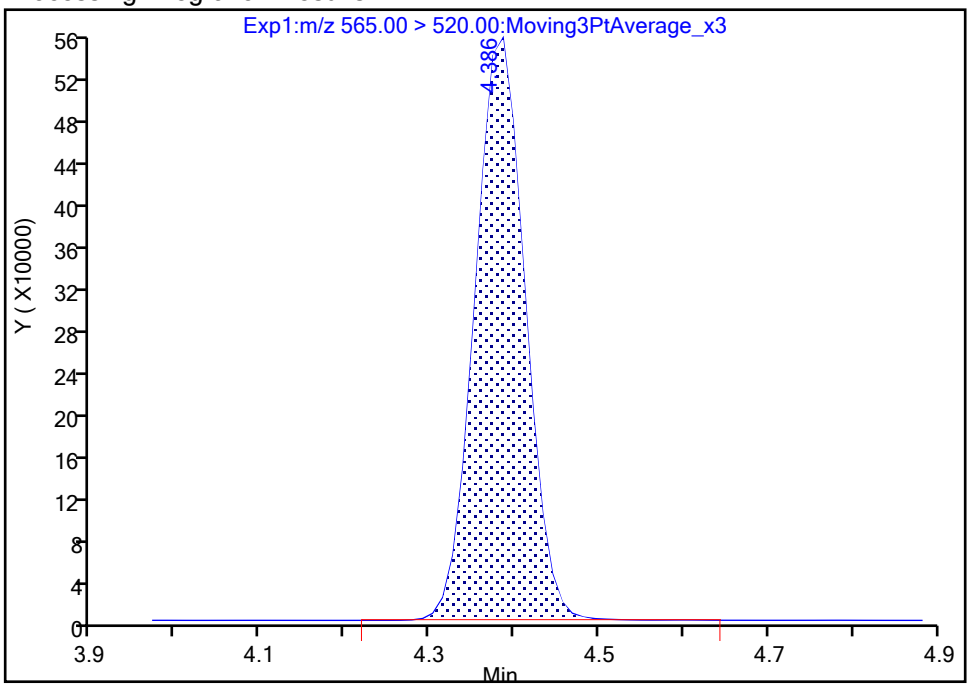
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C03.d				
Injection Date:	23-Oct-2023 23:33:11	Instrument ID:	LC812		
Lims ID:	LCS 200-196646/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

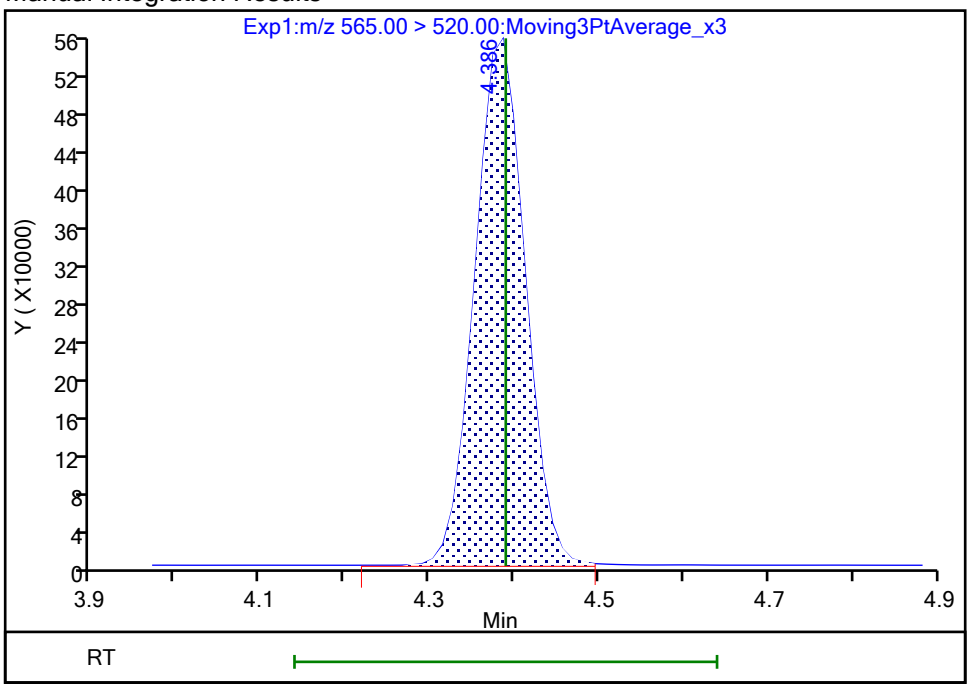
Processing Integration Results

RT: 4.39
Area: 2291179
Amount: 1.319478
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2287727
Amount: 1.317490
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:06:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196645/3-A

Matrix: Water Lab File ID: PA231023A10.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:28

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	78.86		5.00	1.20
2706-90-3	Perfluoropentanoic acid	83.62		2.00	0.68
307-24-4	Perfluorohexanoic acid	75.24		2.00	0.65
375-85-9	Perfluoroheptanoic acid	74.70		2.00	0.54
335-67-1	Perfluorooctanoic acid	79.82		2.00	0.76
375-95-1	Perfluorononanoic acid	81.17		2.00	0.49
335-76-2	Perfluorodecanoic acid	76.08		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	84.04		2.00	0.55
307-55-1	Perfluorododecanoic acid	71.90		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	73.27		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	76.23		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	71.60		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	74.32		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	66.85		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	74.22		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	68.27		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	66.88		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	69.68		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	76.79		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	77.33		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	84.56		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	85.71		2.00	0.92
2355-31-9	NMeFOSAA	75.94		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	76.98		5.00	1.60
13252-13-6	HFPODA	82.57		4.00	1.10
919005-14-4	DONA	71.91		2.00	0.42
756426-58-1	9Cl-PF3ONS	75.74		2.00	0.32
763051-92-9	11Cl-PF3OUdS	73.24		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196645/3-A

Matrix: Water Lab File ID: PA231023A10.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 19:55

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 16:28

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196686 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	113		50-150
STL01893	13C5 PFPeA	103		50-150
STL01892	13C4 PFHpA	107		50-150
STL02116	13C2 PFTeDA	89		50-150
STL02337	13C3 PFBS	99		50-150
STL01056	13C8 FOSA	95		50-150
STL02118	d3-NMeFOSAA	106		50-150
STL02117	d5-NEtFOSAA	106		50-150
STL02395	M2-4:2 FTS	99		50-150
STL02279	M2-6:2 FTS	101		50-150
STL02280	M2-8:2 FTS	93		50-150
STL02255	13C3 HFPO-DA	94		50-150
STL00994	18O2 PFHxS	109		50-150
STL00993	13C2 PFHxA	107		50-150
STL00991	13C4 PFOS	111		50-150
STL00998	13C2 PFDoA	109		50-150
STL00995	13C5 PFNA	110		50-150
STL00996	13C2 PFDA	111		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	101		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Lims ID: LCSD 200-196645/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 23-Oct-2023 16:28:20 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196645/3-A
Misc. Info.: 200-0057509-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 13:06:39
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2251178	1.42		113	1659	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	3277087	1.97		98.6	359	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.694	1580655	1.28		103	2096	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	2852621	2.09		105	69.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.698	1912719	1.15		98.7	95610	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.006	3289268	1.79	Target=2.06	101	1121	M
298.90 > 99.00	2.467	2.467	0.0	1.006	1626754		2.02(1.03-3.09)		536	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1250310	1.92		102	2178	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.785	223914	1.16		99.4	162	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.798	2.797	0.001	0.796	1679543	1.34		107	9050	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.798	2.797	0.001	1.000	2781217	1.88	Target=14.12	94.0	624	M
313.00 > 119.00	2.798	2.797	0.001	1.000	190280		14.62(7.06-21.17)		215	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.798	2.810	-0.012	0.886	3163736	1.86	Target=2.72	98.7	7282	
349.00 > 99.00	2.798	2.810	-0.012	0.886	1116468		2.83(1.36-4.09)		1679	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	472018	2.06		103	3338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.827	285488	1.18		94.1	2762	
D 11 18O2 PFHxS										
403.00 > 84.00	3.157	3.168	-0.011	0.898	1541866	1.29		109	9343	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.157	3.168	-0.011	1.000	2412433	1.67	Target=3.32	91.4	3240	M
399.00 > 99.00	3.157	3.168	-0.011	1.000	726437		3.32(1.66-4.98)		564	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.169	3.168	0.001	1.000	3078562	1.87	Target=4.17	93.4	743	
363.00 > 169.00	3.169	3.168	0.001	1.000	765822		4.02(2.09-6.26)		1047	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.169	3.168	0.001	0.902	1838466	1.34		107	9489	
77 DONA										M
377.00 > 251.00	3.204	3.203	0.001	0.838	8708358	1.80	Target=3.33	95.1	5640	M
377.00 > 85.00	3.204	3.203	0.001	0.838	2393369		3.64(1.66-4.99)		3149	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.506	3.505	0.001	0.917	2257447	1.86	Target=4.83	97.4	3695	M
449.00 > 99.00	3.506	3.505	0.001	0.917	446302		5.06(2.41-7.24)		1467	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.506	3.505	0.001	0.997	296469	1.19		101	582	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.506	3.514	-0.008	1.000	1319255	1.93		102	1823	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.515	3.514	0.001	1.000	3524274	2.00	Target=2.88	99.8	169	
413.00 > 169.00	3.515	3.514	0.001	1.000	1234517		2.85(1.44-4.32)		1693	M
D 14 13C4 PFOA										
417.00 > 372.00	3.515	3.523	-0.008	1.000	2072578	1.33		106	4912	
* 62 13C2 PFOA										
415.00 > 370.00	3.515	3.523	-0.008		2001840	1.25			8389	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.822	0.002	1.000	1675777	1.71	Target=4.24	92.0	3040	M
499.00 > 99.00	3.824	3.822	0.002	1.000	370884		4.52(2.12-6.37)		1479	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.822	0.002	1.088	1005947	1.32		111	3093	
20 Perfluorononanoic acid										
463.00 > 419.00	3.847	3.845	0.002	1.000	3719502	2.03	Target=8.34	101	561	
463.00 > 169.00	3.847	3.845	0.002	1.000	455982		8.16(4.17-12.51)		2772	
D 19 13C5 PFNA										
468.00 > 423.00	3.847	3.845	0.002	1.095	2337799	1.38		110	7023	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.976	3.983	-0.007	1.040	5689387	1.89		101	16138	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.107	4.105	0.002	1.074	1248954	1.67	Target=2.17	86.9	4445	
549.00 > 99.00	4.107	4.105	0.002	1.074	535230		2.33(1.08-3.25)		1960	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.131	4.129	0.002	1.000	3761646	1.90	Target=11.44	95.1	1146	
513.00 > 169.00	4.131	4.129	0.002	1.000	356743		10.54(5.72-17.16)		1697	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.131	4.129	0.002	1.175	2473706	1.39		111	14733	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.143	4.141	0.002	1.179	312403	1.12		93.4	671	M
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.143	4.141	0.002	1.000	1214078	2.11		110	4113	
D 21 13C8 FOSA										
506.00 > 78.00	4.236	4.234	0.002	1.205	1790286	1.18		94.5	5547	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.236	4.234	0.002	1.000	2927498	2.14		107	4771	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.273	4.270	0.003	1.216	564921	1.33		106	1247	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.273	4.270	0.003	1.000	778602	1.90		94.9	1069	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.357	4.366	-0.009	1.139	1001554	1.74	Target=2.37	90.3	9016	
599.00 > 99.00	4.357	4.366	-0.009	1.139	395606		2.53(1.19-3.56)		3670	
D 30 13C2 PFUnA										
565.00 > 520.00	4.393	4.390	0.003	1.250	2122608	1.27		101	16798	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.390	-0.009	0.997	3676851	2.10	Target=12.20	105	826	
563.00 > 169.00	4.381	4.390	-0.009	0.997	322881		11.39(6.10-18.31)		2968	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.401	-0.008	1.250	539951	1.32		106	1221	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.405	4.401	0.004	1.003	831513	1.92		96.2	1360	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.476	4.473	0.003	1.171	8437064	1.83		97.1	8784	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.310	2323286	1.36		109	5855	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.613	-0.008	1.000	3400594	1.80	Target=8.47	89.9	218	M
613.00 > 169.00	4.605	4.613	-0.008	1.000	455520		7.47(4.23-12.70)		5009	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.624	0.003	1.117	704343	2.05		106	6779	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.769	4.777	-0.008	1.247	311911	1.60	Target=0.48	82.7	6228	
699.00 > 99.00	4.769	4.777	-0.008	1.247	632819		0.49(0.24-0.72)		8211	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.798	4.806	-0.008	1.042	3642276	1.83	Target=6.41	91.6	205	M
663.00 > 169.00	4.808	4.806	0.002	1.044	530281		6.87(3.21-9.62)		2617	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.982	0.001	1.418	1882361	1.11		88.8	4725	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.983	4.982	0.001	1.000	320885	1.91	Target=0.87	95.3	3202	
713.00 > 219.00	4.972	4.982	-0.010	0.998	354452		0.91(0.43-1.30)		2763	

Report Date: 25-Oct-2023 15:12:37 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.293	5.292	0.001	1.506	2088166	1.07		85.5	5607	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.293	5.292	0.001	1.000	3458613	2.07	Target=7.89	104	238	M
813.00 > 169.00	5.293	5.292	0.001	1.000	433782		7.97(3.94-11.83)		4175	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.546	5.563	-0.017	1.048	2696028	2.07	Target=9.39	103	290	M
913.00 > 169.00	5.546	5.563	-0.017	1.048	284862		9.46(4.69-14.08)		1685	

QC Flag Legend

Processing Flags

Review Flags

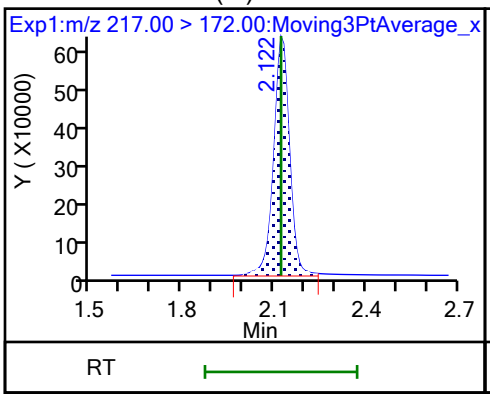
M - Manually Integrated

Report Date: 25-Oct-2023 15:12:37 Chrom Revision: 2.3 18-Oct-2023 21:16:54

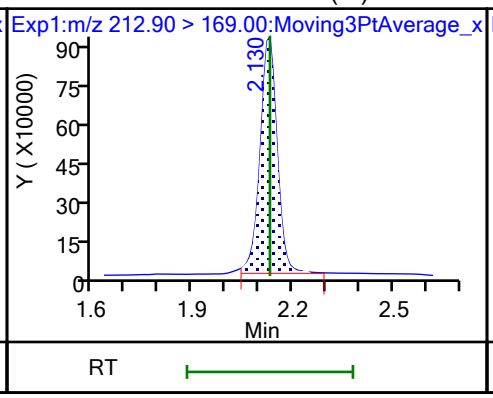
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

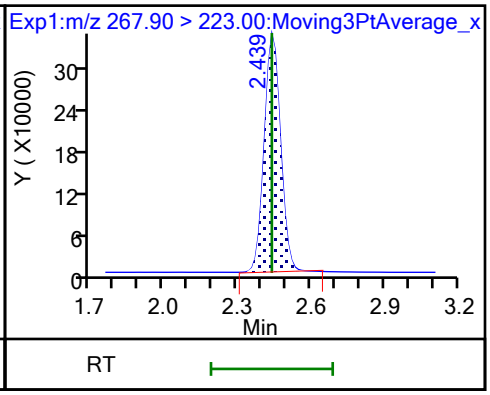
D 1 13C4 PFBA (M)



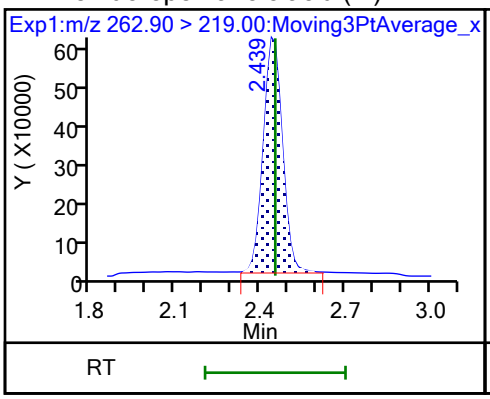
2 Perfluorobutanoic acid (M)



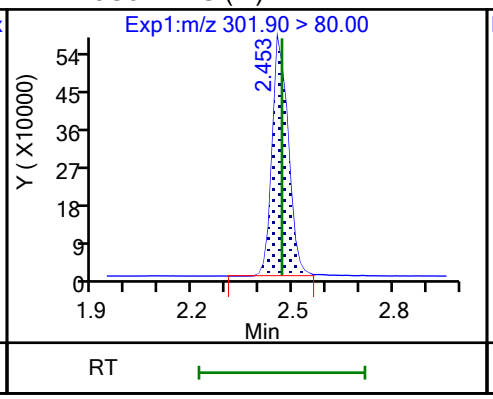
D 3 13C5 PFPeA



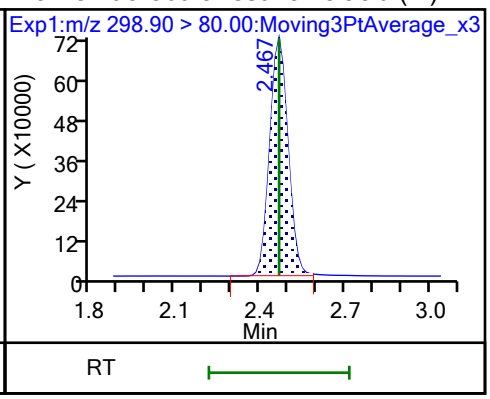
4 Perfluoropentanoic acid (M)



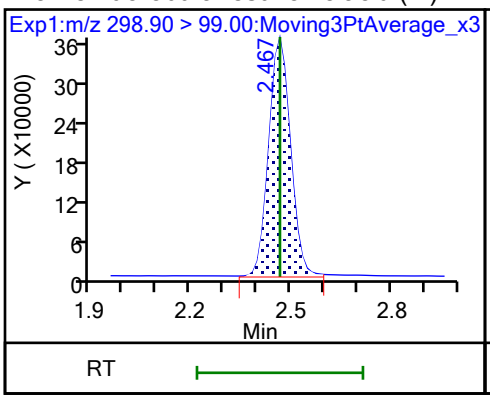
D 47 13C3 PFBS (M)



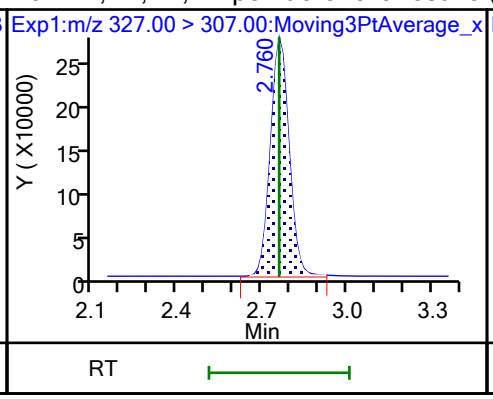
5 Perfluorobutanesulfonic acid (M)



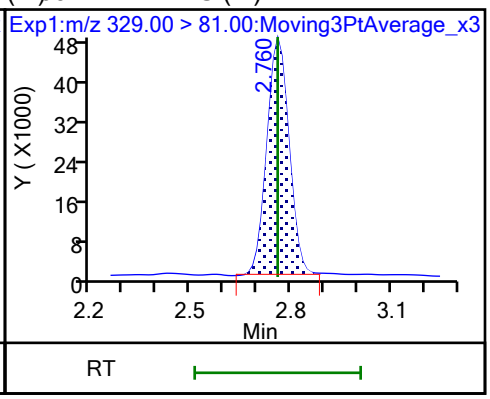
5 Perfluorobutanesulfonic acid (M)



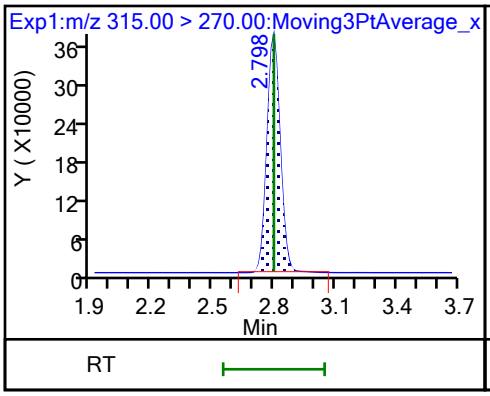
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



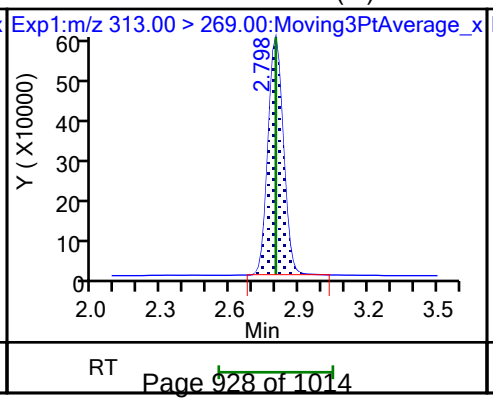
60 M2-4:2 FTS (M)



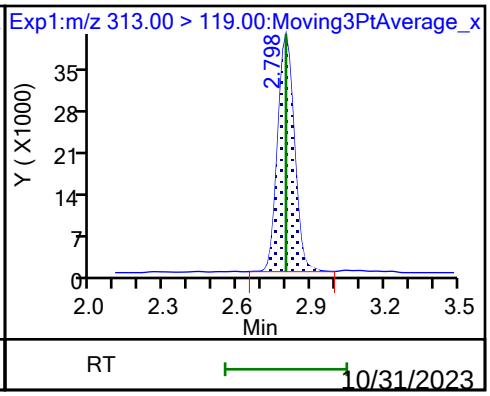
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

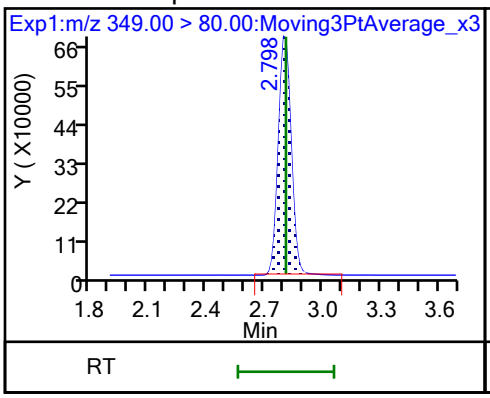


6 Perfluorohexanoic acid

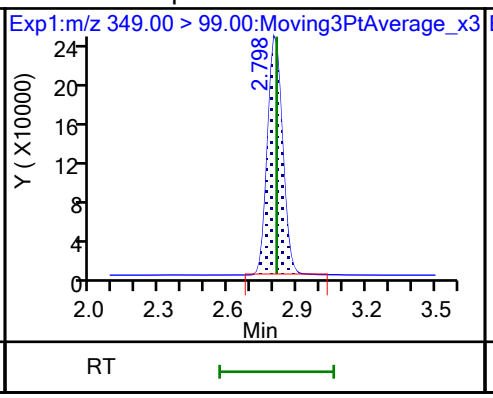


10/31/2023
4:00 PM

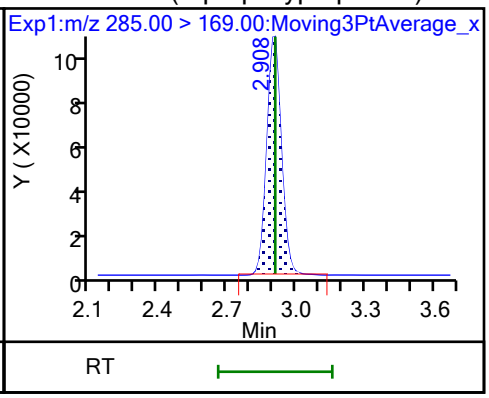
70 Perfluoropentanesulfonic acid



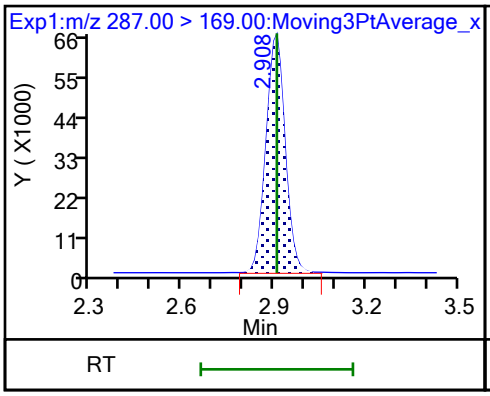
70 Perfluoropentanesulfonic acid



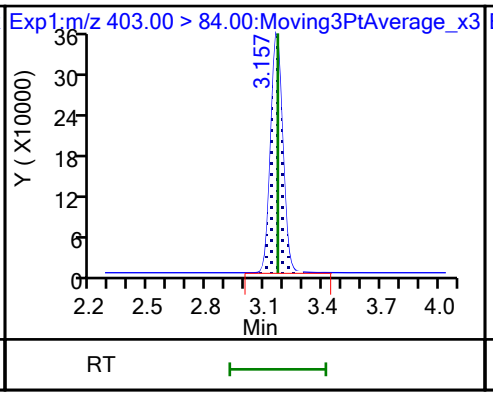
67 Perfluoro(2-propoxypropanoic) ac



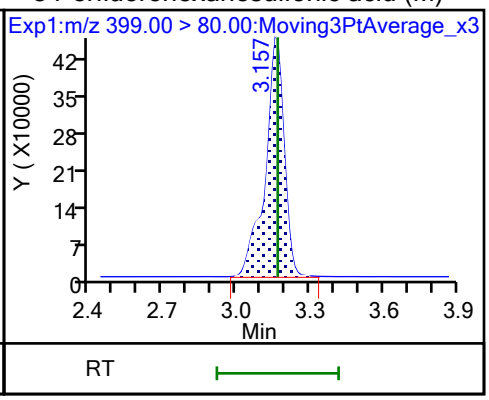
D 64 13C3 HFPO-DA



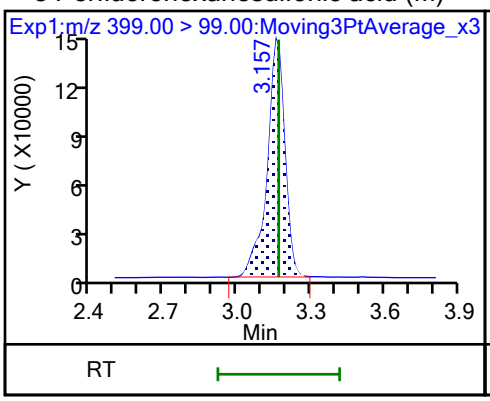
D 11 18O2 PFHxS



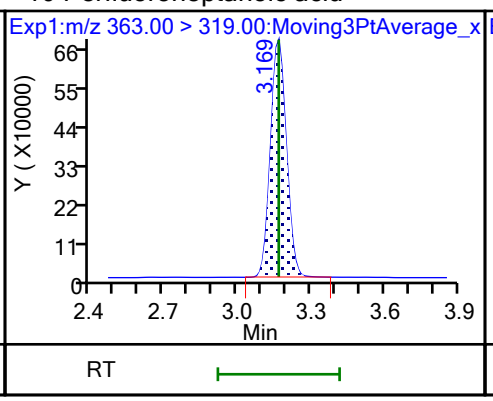
8 Perfluorohexanesulfonic acid (M)



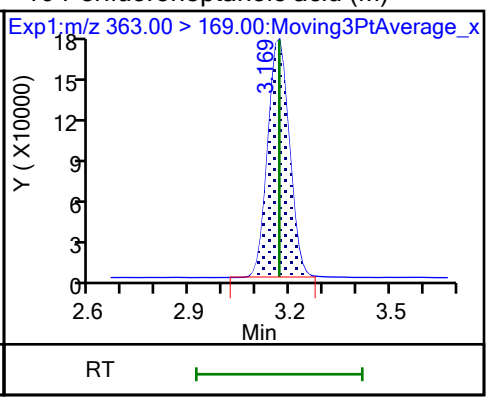
8 Perfluorohexanesulfonic acid (M)



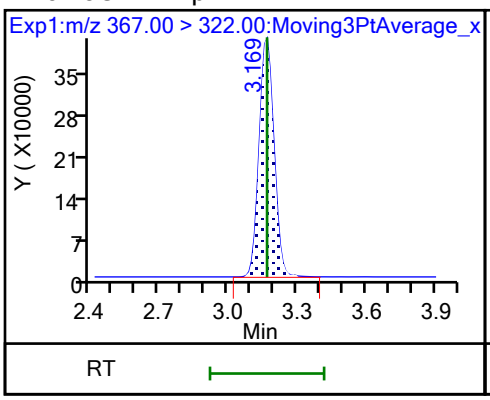
10 Perfluoroheptanoic acid



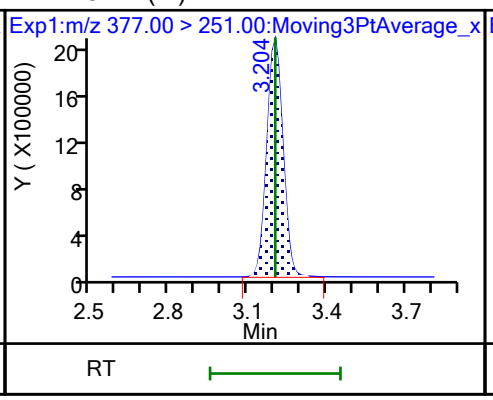
10 Perfluoroheptanoic acid (M)



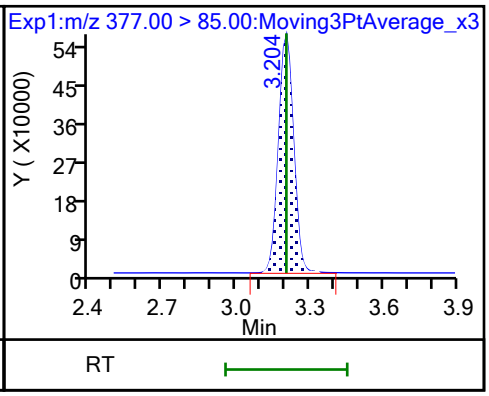
D 9 13C4 PFHpA



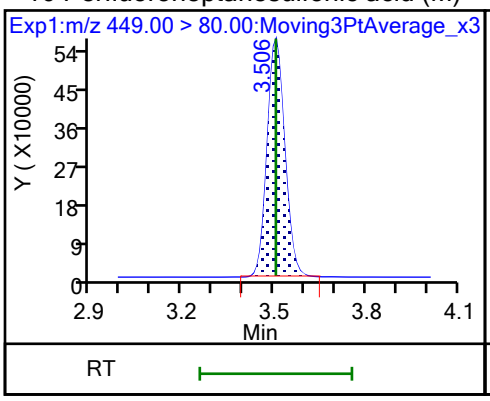
77 DONA (M)



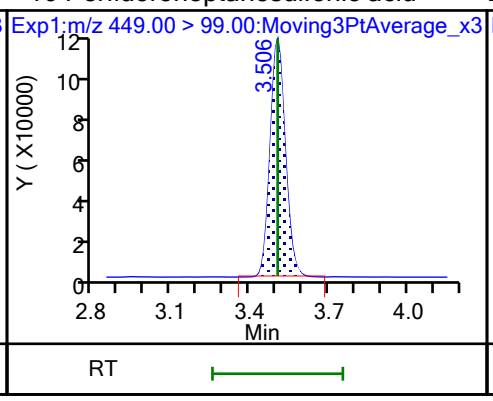
77 DONA



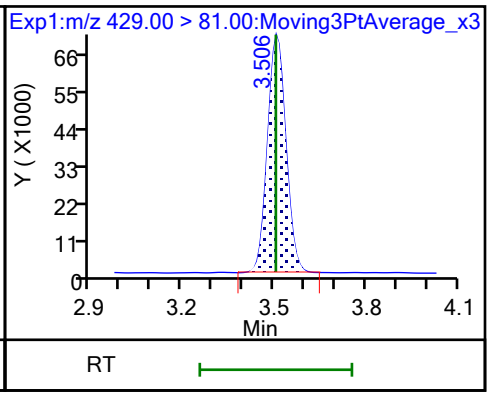
16 Perfluoroheptanesulfonic acid (M)



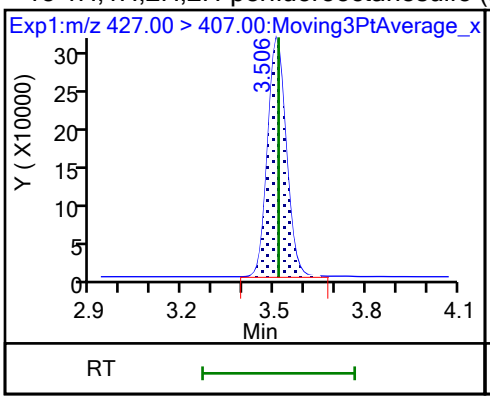
16 Perfluoroheptanesulfonic acid



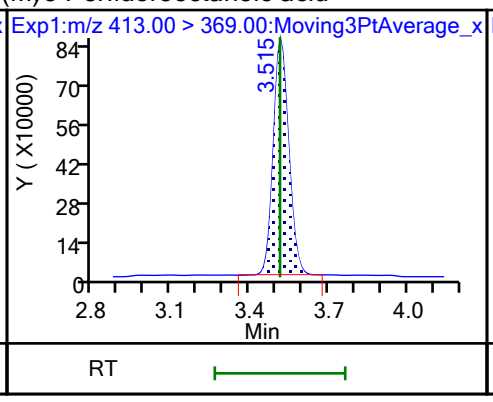
D 12 M2-6:2 FTS



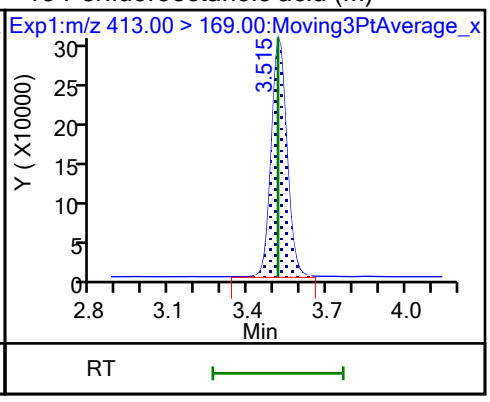
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



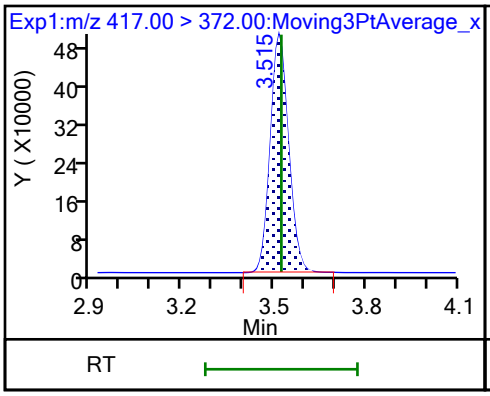
15 Perfluorooctanoic acid



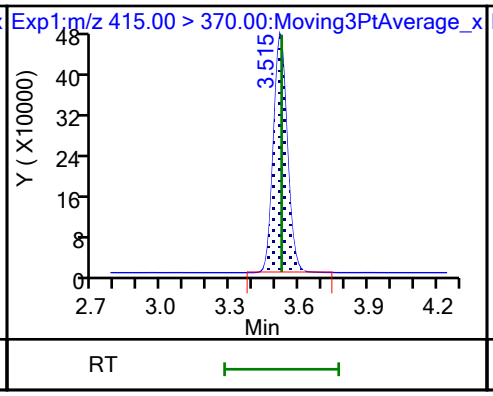
15 Perfluorooctanoic acid (M)



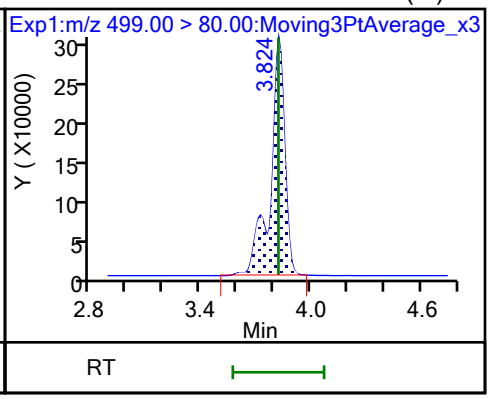
D 14 13C4 PFOA



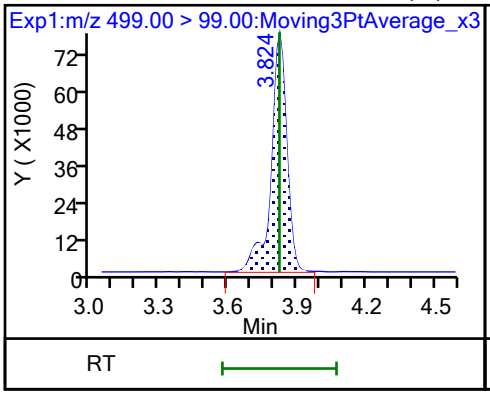
* 62 13C2 PFOA



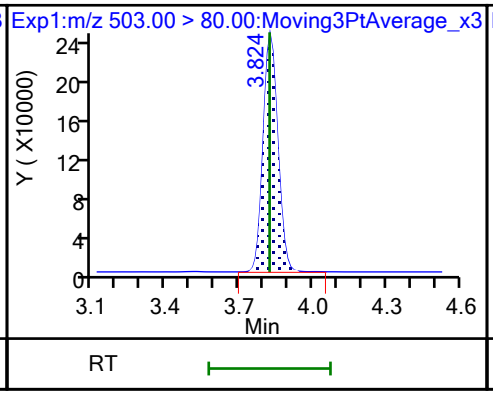
17 Perfluorooctanesulfonic acid (M)



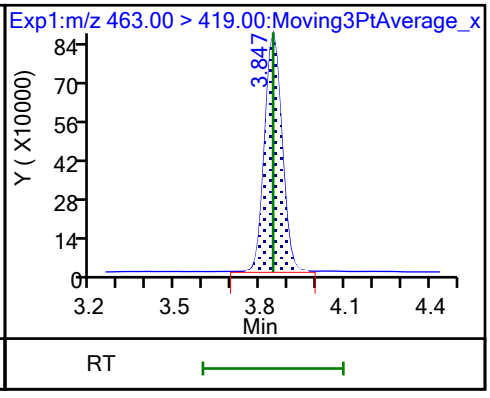
17 Perfluorooctanesulfonic acid (M)



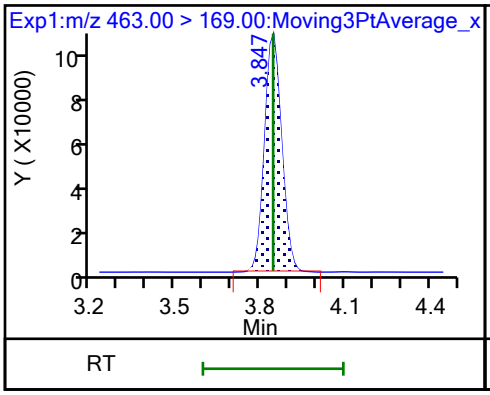
D 18 13C4 PFOS



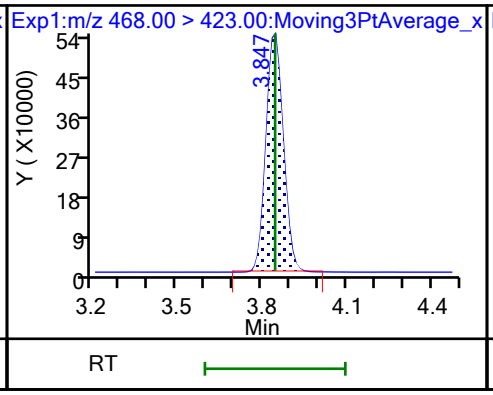
20 Perfluorononanoic acid



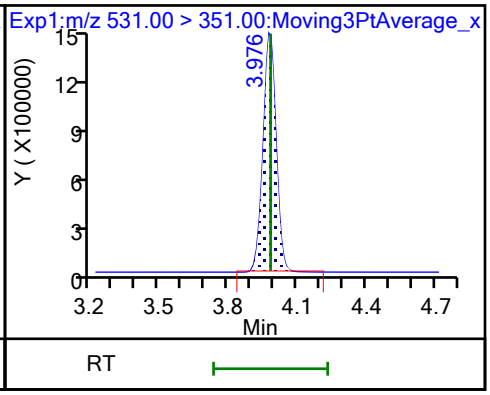
20 Perfluorononanoic acid



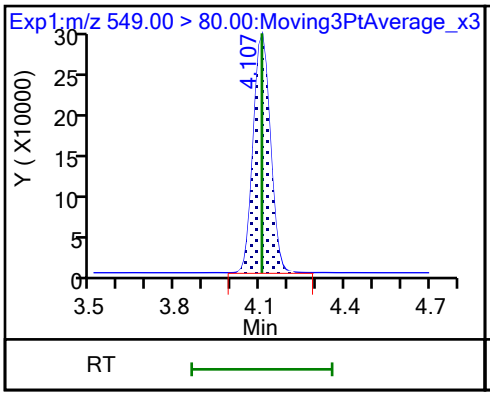
D 19 13C5 PFNA



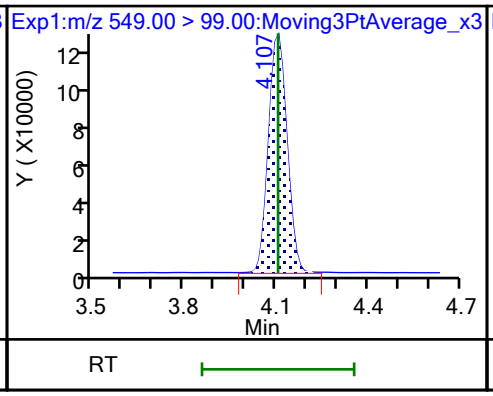
69 9-Chlorohexadecafluoro-3-oxanona



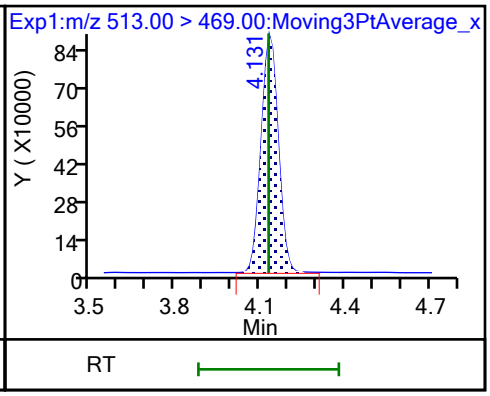
68 Perfluorononanesulfonic acid



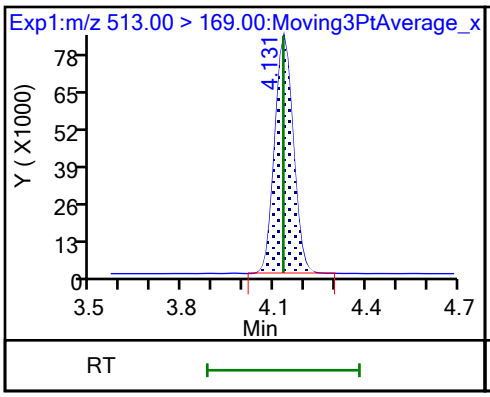
68 Perfluorononanesulfonic acid



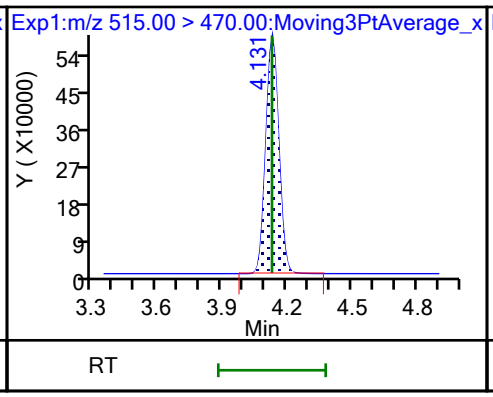
24 Perfluorodecanoic acid



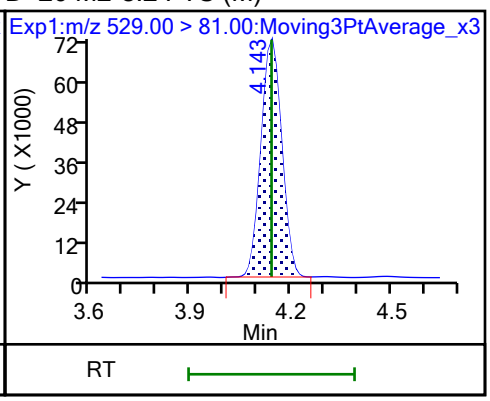
24 Perfluorodecanoic acid



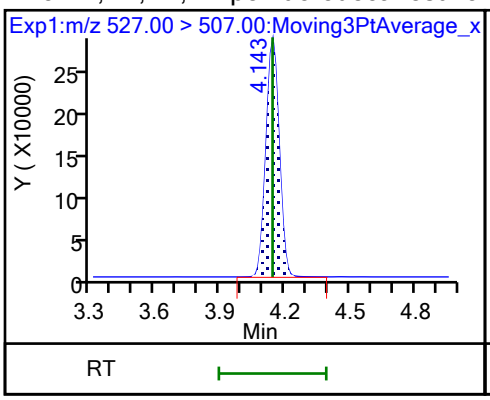
D 23 13C2 PFDA



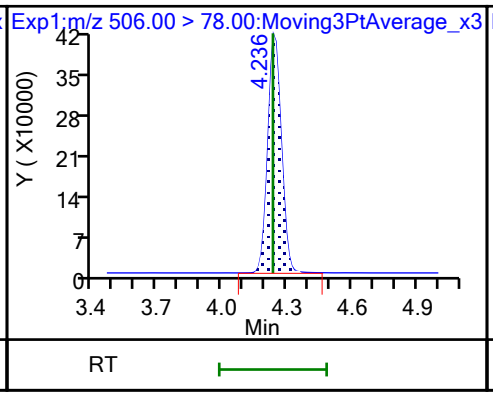
D 26 M2-8:2 FTS (M)



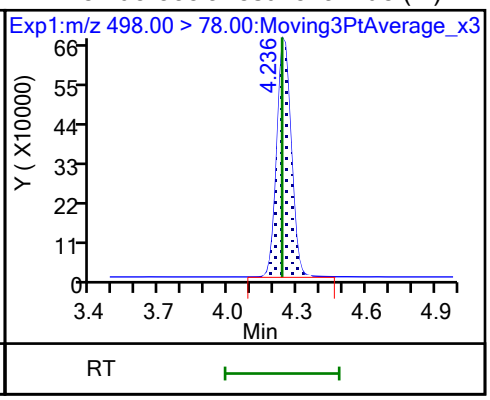
25 1H,1H,2H,2H-perfluorodecanesulfo



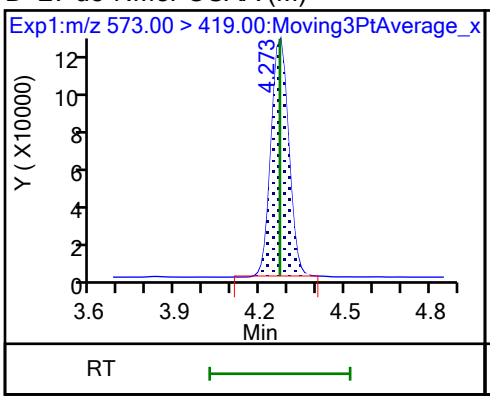
D 21 13C8 FOSA



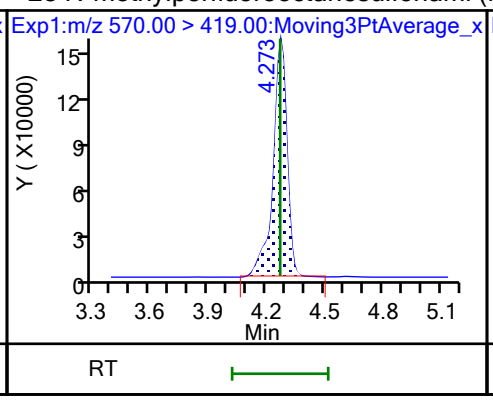
22 Perfluorooctanesulfonamide (M)



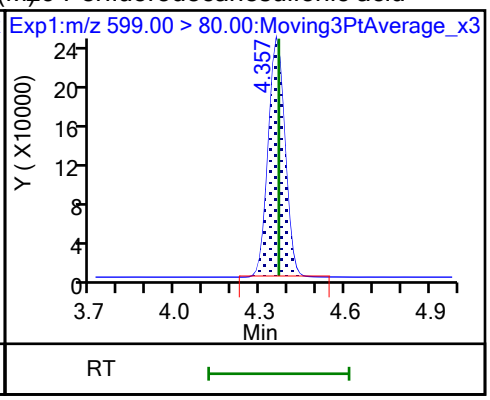
D 27 d3-NMeFOSAA (M)



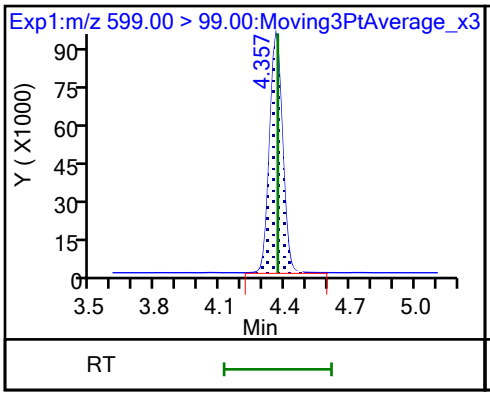
28 N-methylperfluorooctanesulfonami (M)



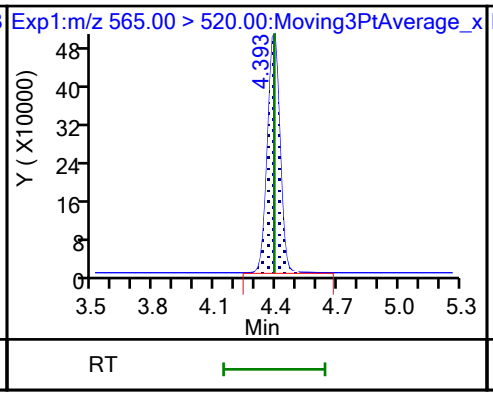
29 Perfluorodecanesulfonic acid



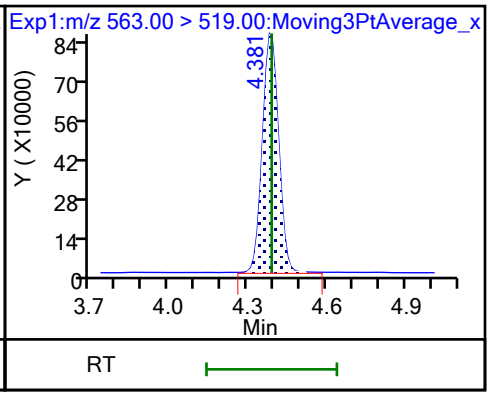
29 Perfluorodecanesulfonic acid



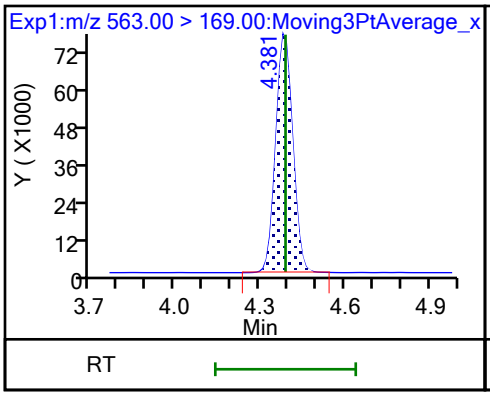
D 30 13C2 PFUnA



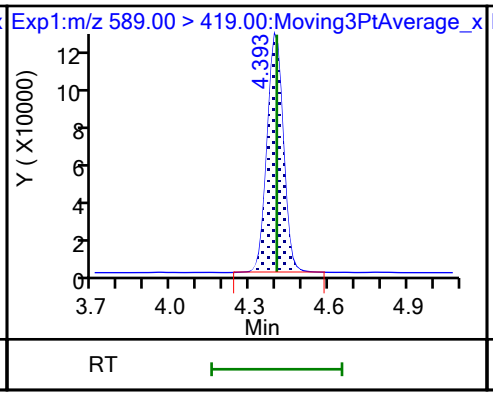
31 Perfluoroundecanoic acid



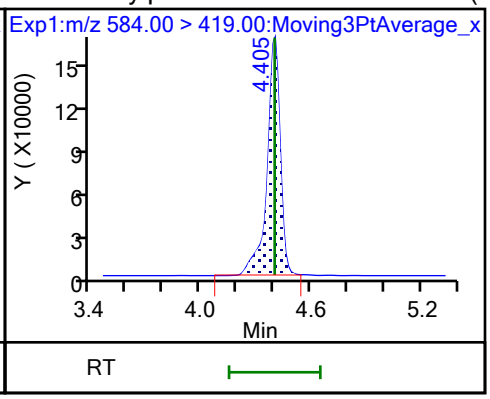
31 Perfluoroundecanoic acid



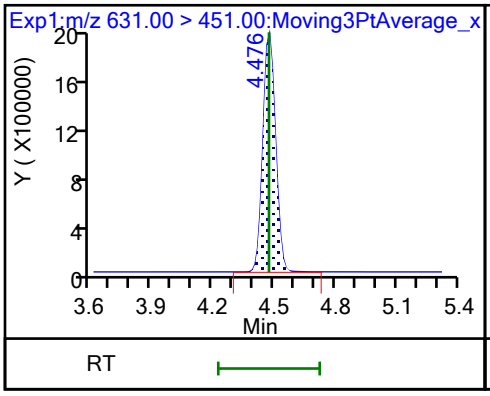
D 32 d5-NEtFOSAA



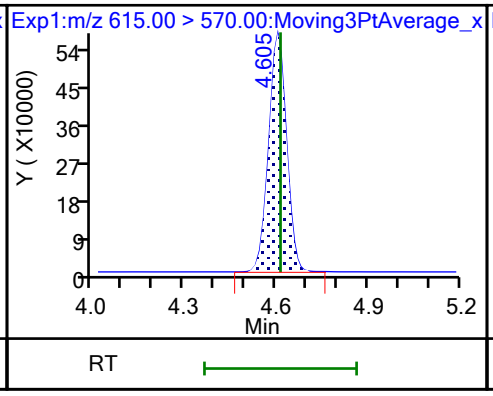
33 N-ethylperfluorooctanesulfonamid (M)



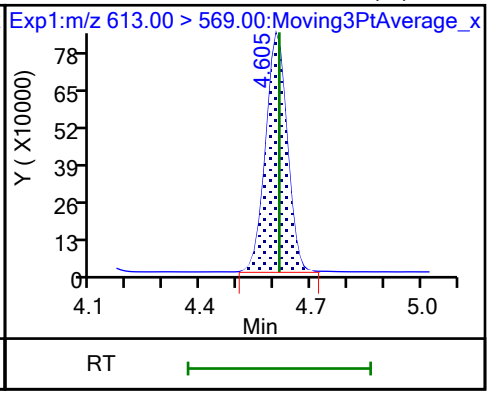
66 11-Chloroeicosafluoro-3-oxaundec



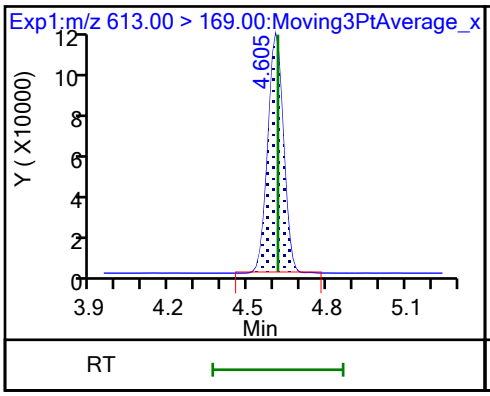
D 36 13C2 PFDoA



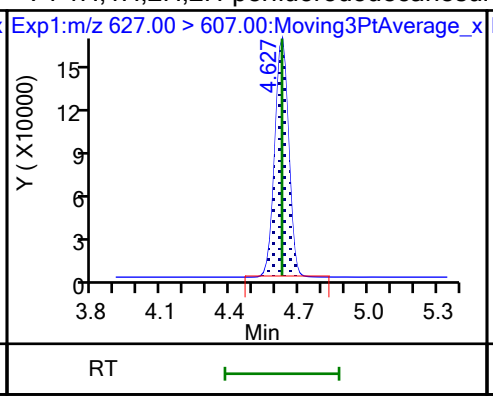
37 Perfluorododecanoic acid (M)



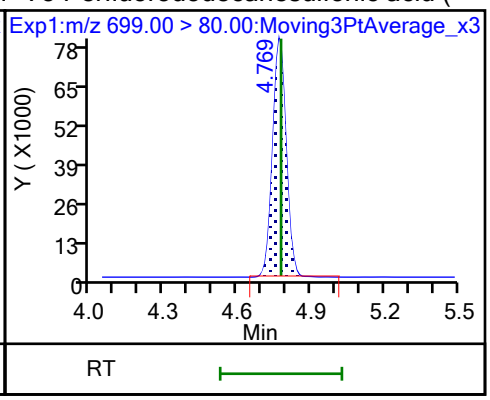
37 Perfluorododecanoic acid



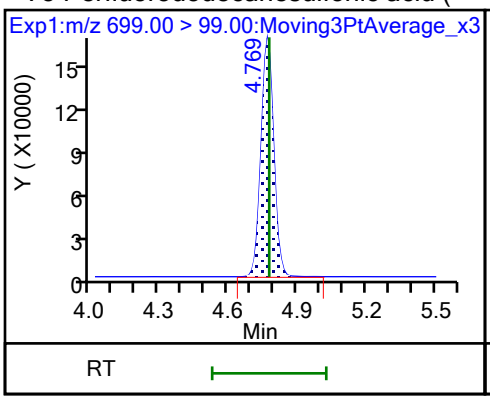
74 1H,1H,2H,2H-perfluorododecanesul



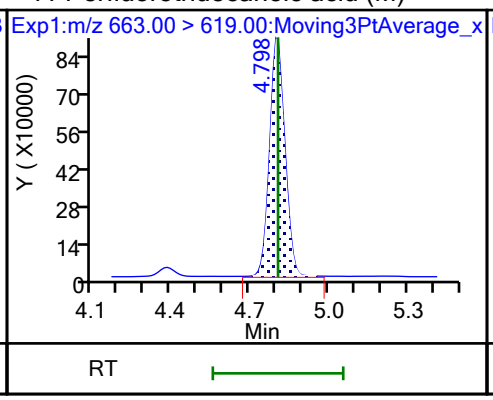
75 Perfluorododecanesulfonic acid (



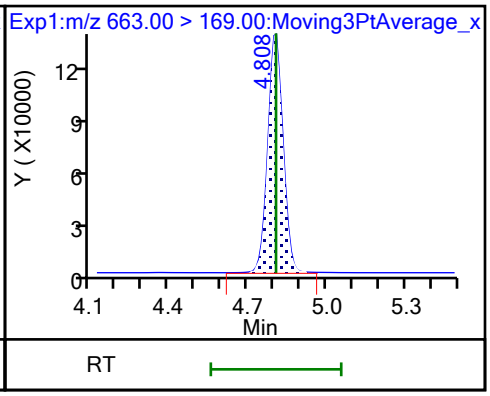
75 Perfluorododecanesulfonic acid (



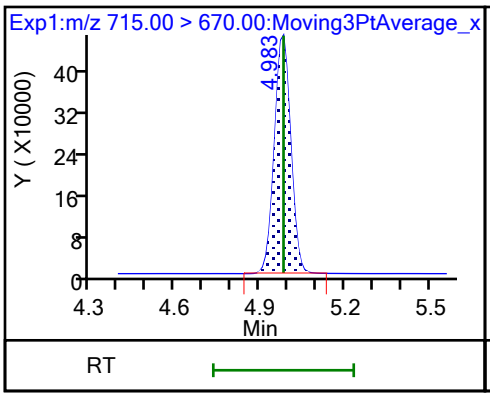
41 Perfluorotridecanoic acid (M)



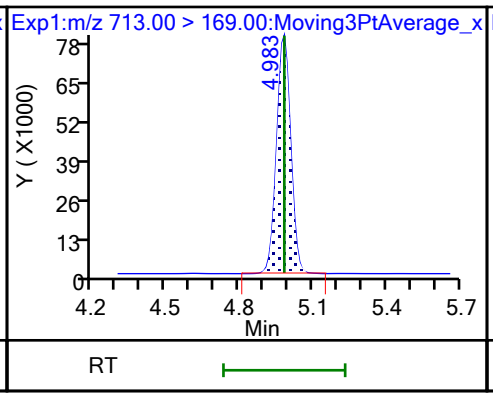
41 Perfluorotridecanoic acid



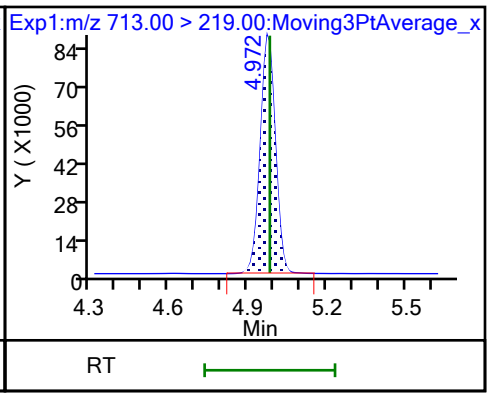
D 43 13C2 PFTeDA



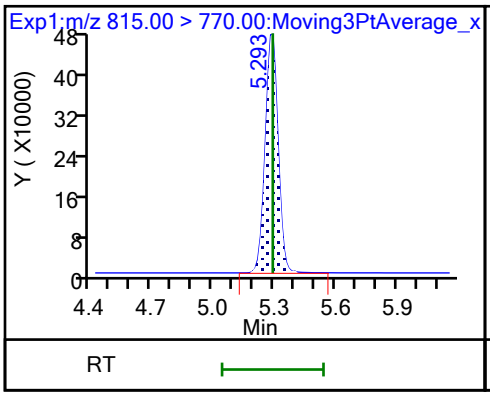
42 Perfluorotetradecanoic acid



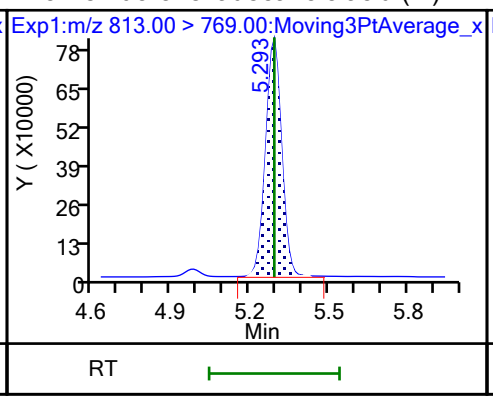
42 Perfluorotetradecanoic acid



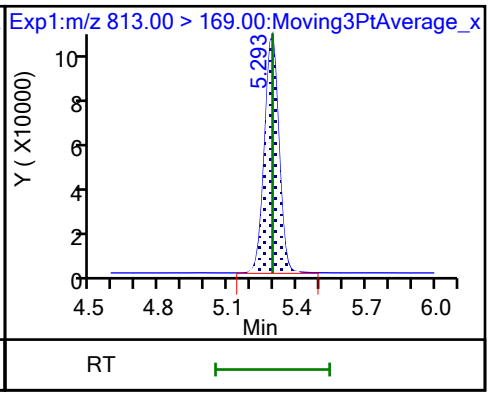
D 44 13C2 PFHxDA



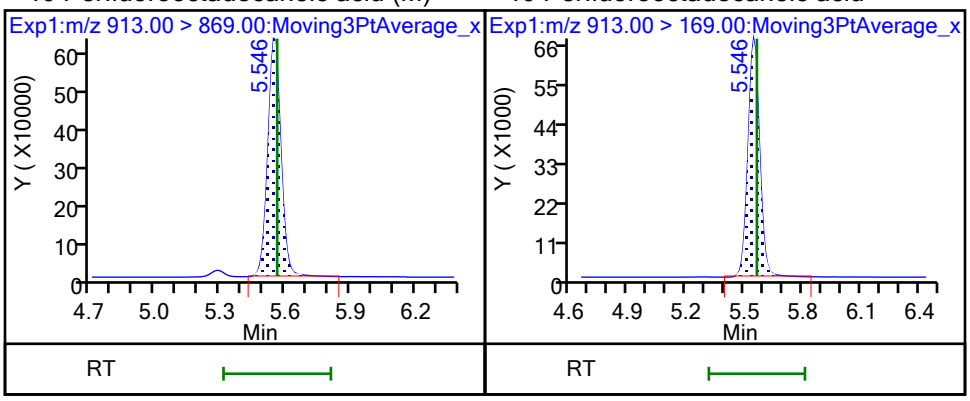
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

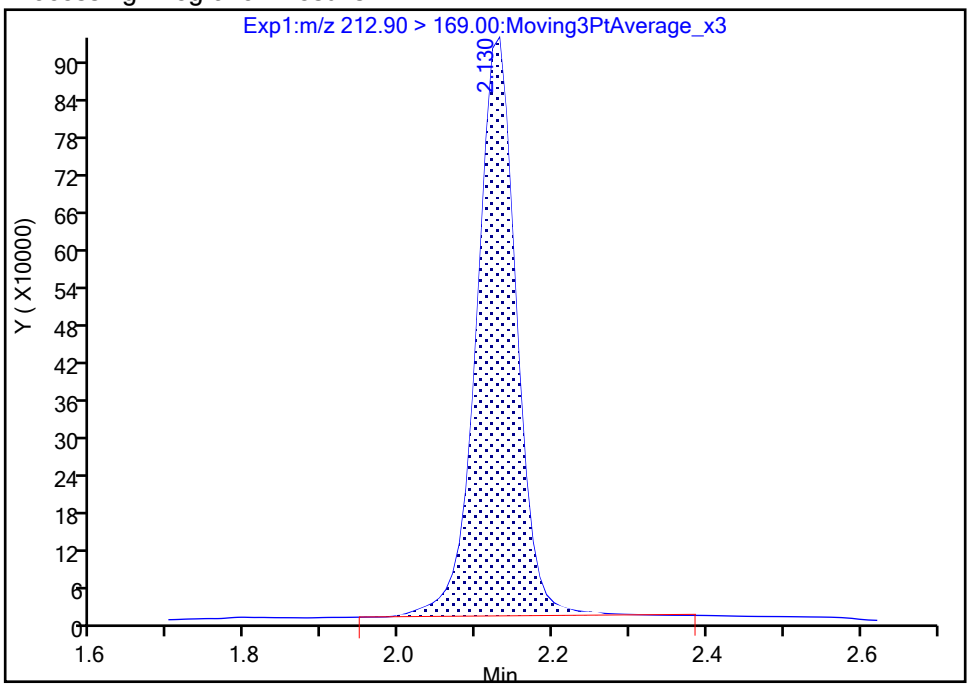
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

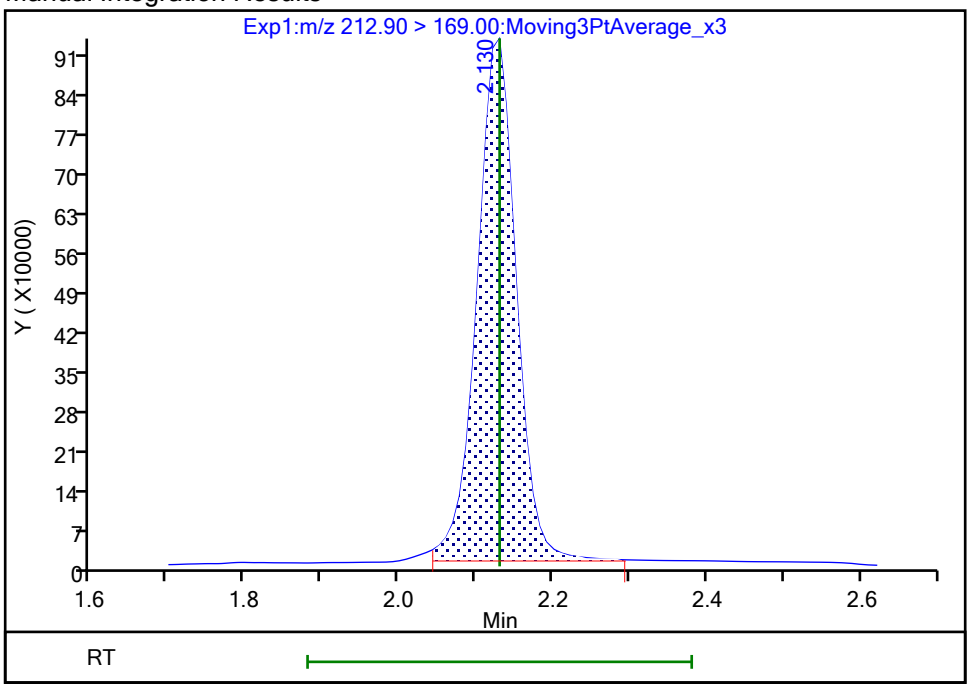
Processing Integration Results

RT: 2.13
Area: 3333869
Amount: 2.006277
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 3277087
Amount: 1.971410
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

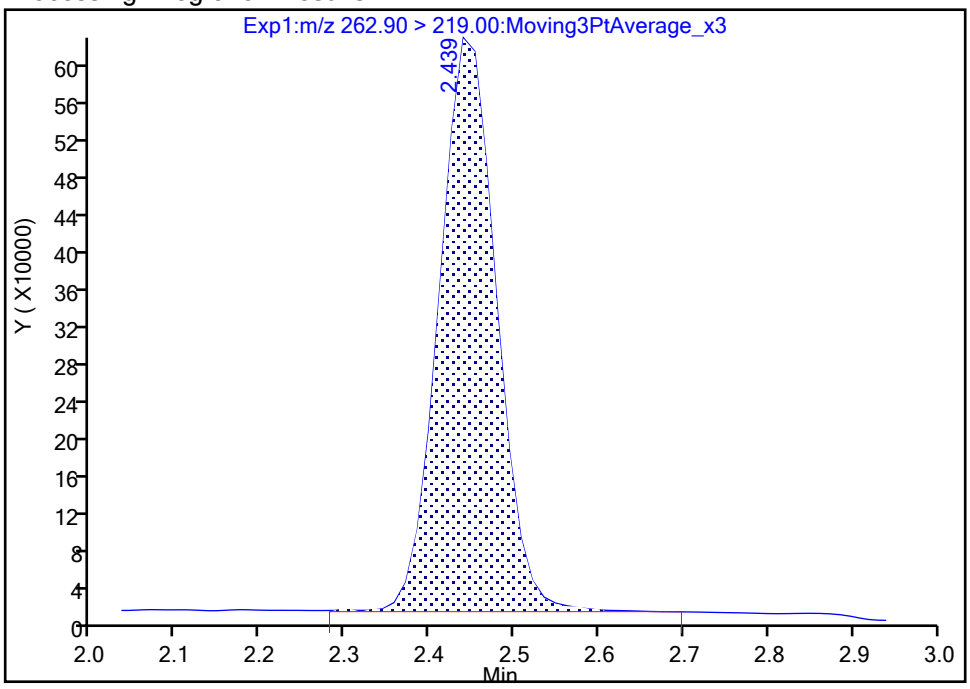
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

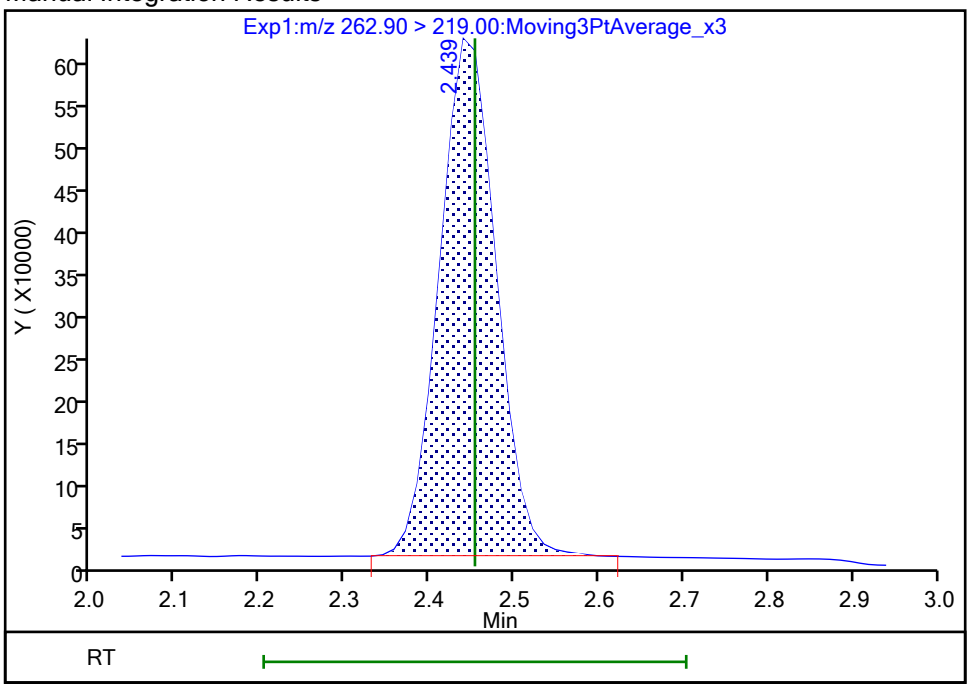
Processing Integration Results

RT: 2.44
Area: 2868581
Amount: 2.102159
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 2852621
Amount: 2.090464
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

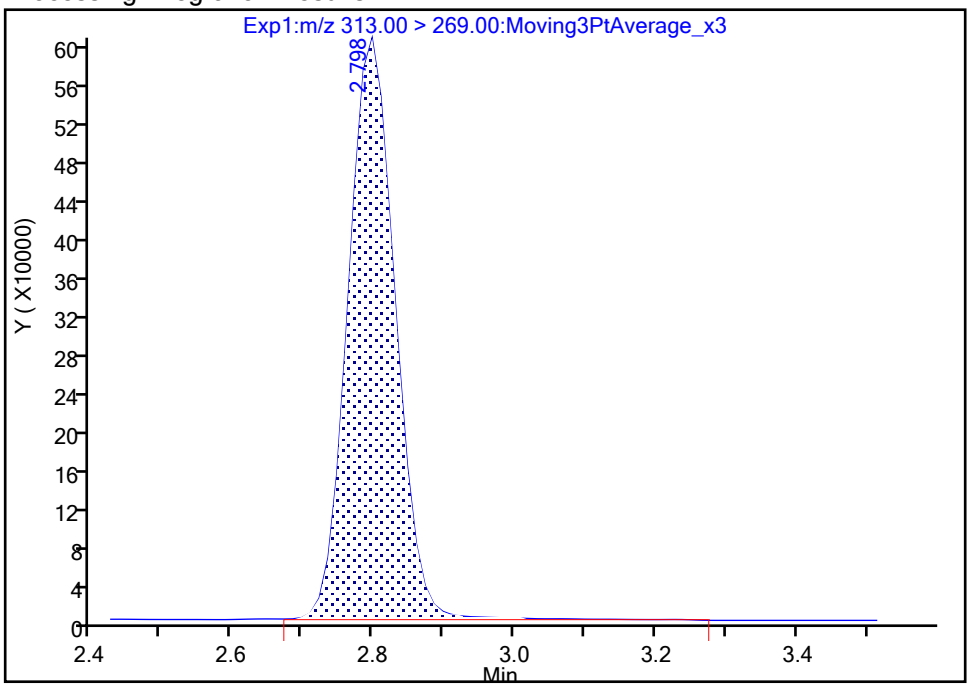
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

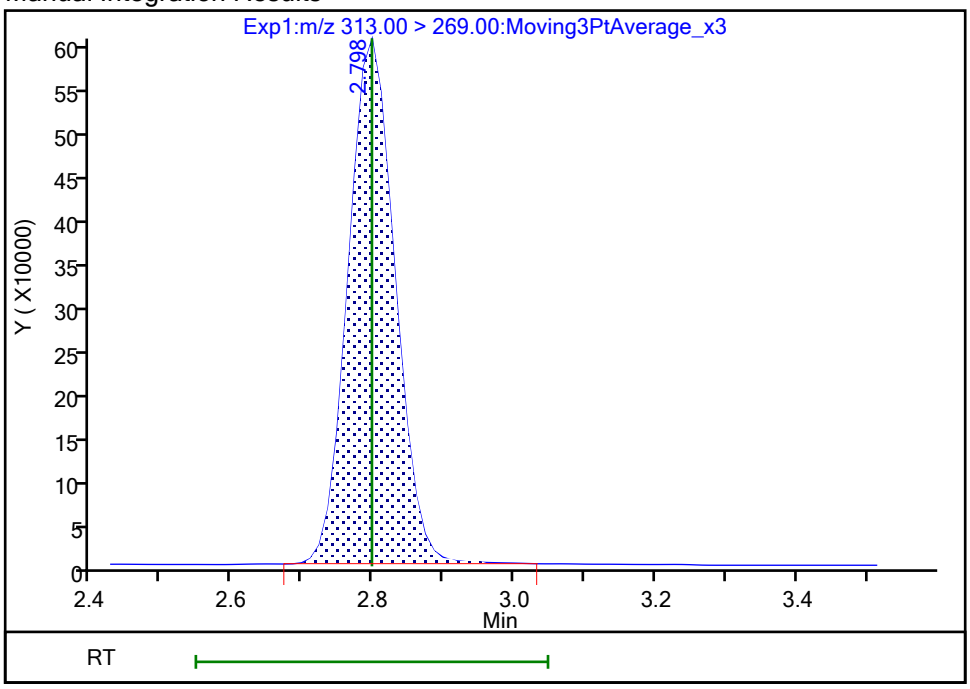
Processing Integration Results

RT: 2.80
Area: 2804494
Amount: 1.896710
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 2781217
Amount: 1.880967
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

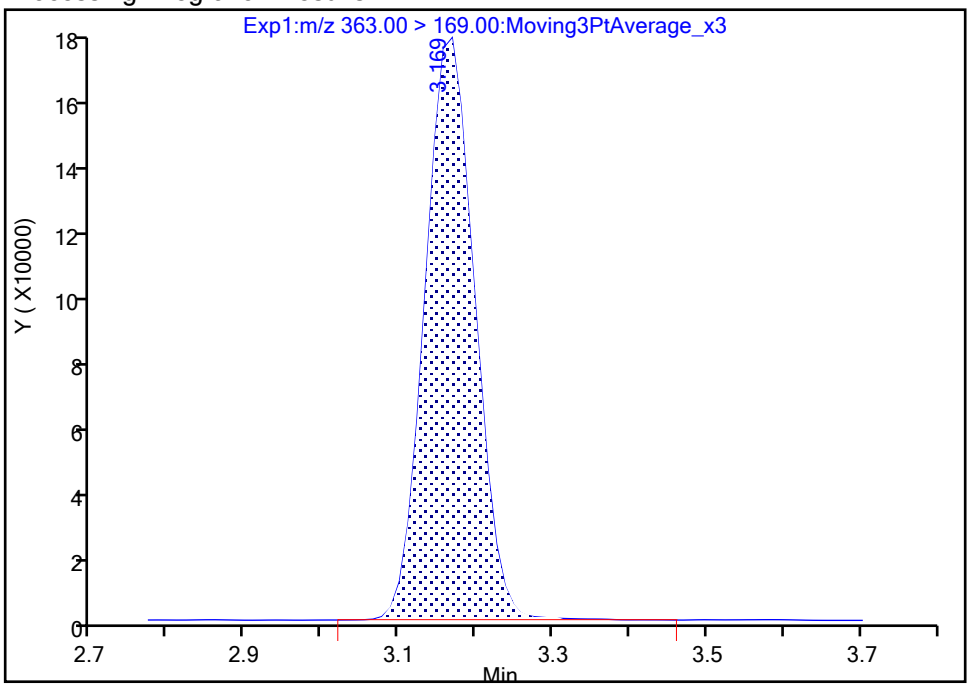
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

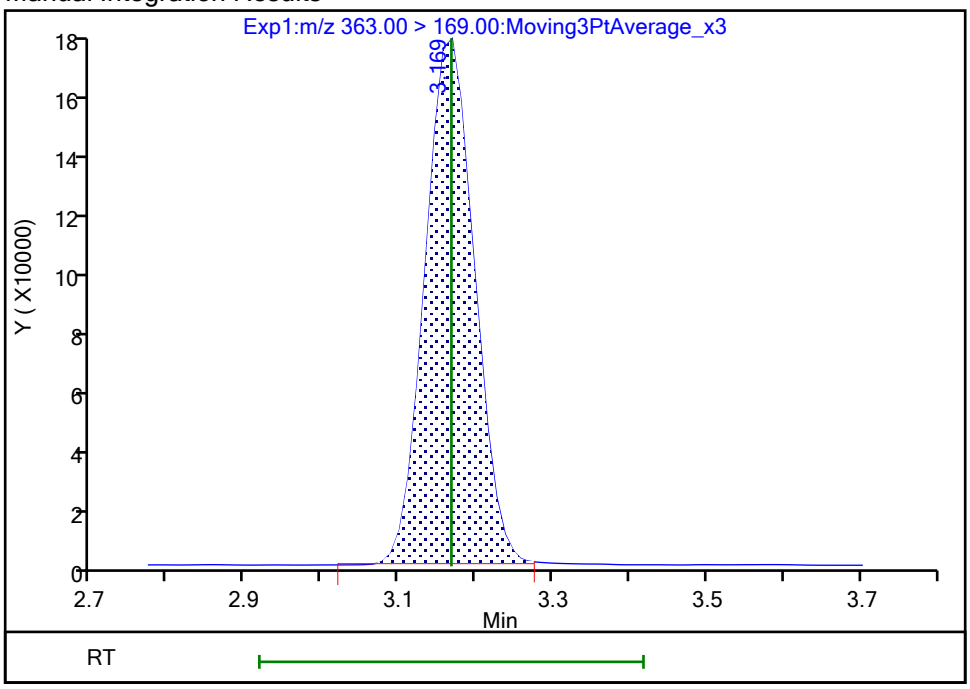
Processing Integration Results

RT: 3.17
Area: 768875
Amount: 1.867416
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 765822
Amount: 1.867416
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

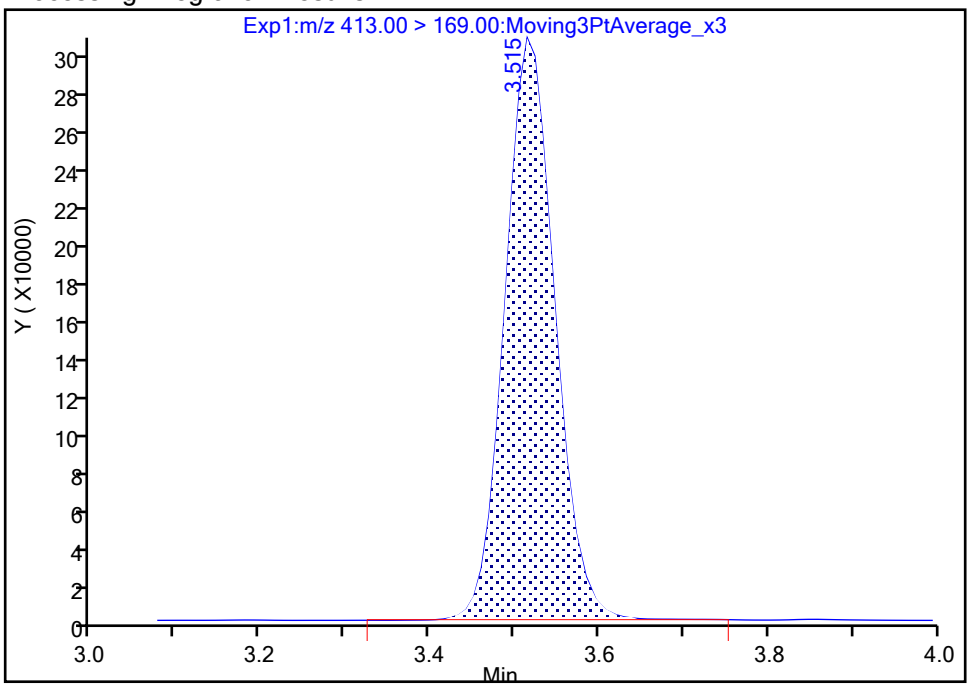
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

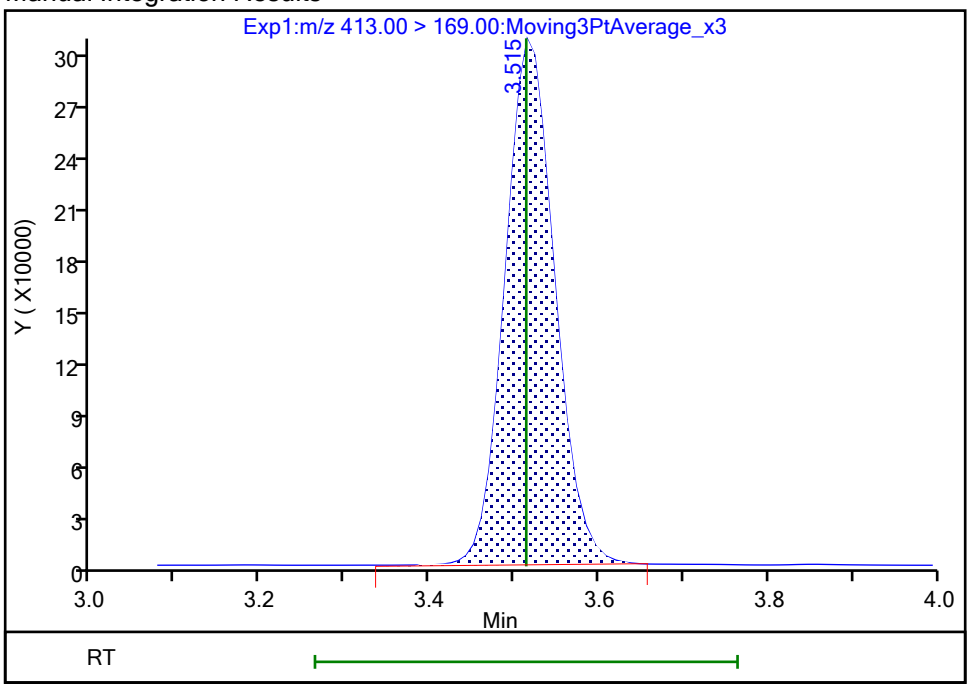
Processing Integration Results

RT: 3.51
Area: 1234833
Amount: 1.995549
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1234517
Amount: 1.995549
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

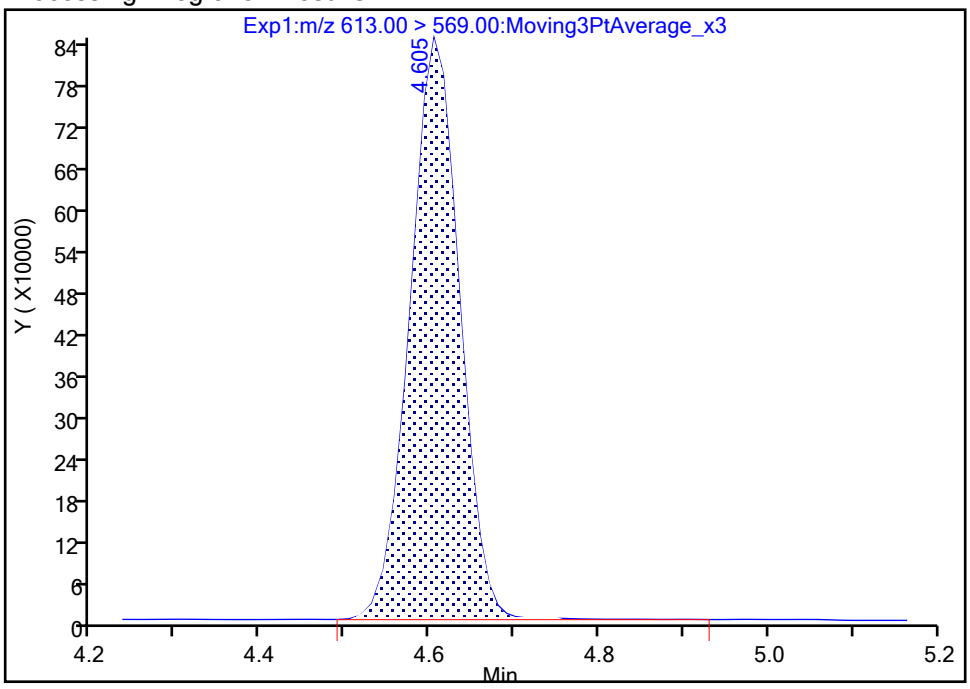
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

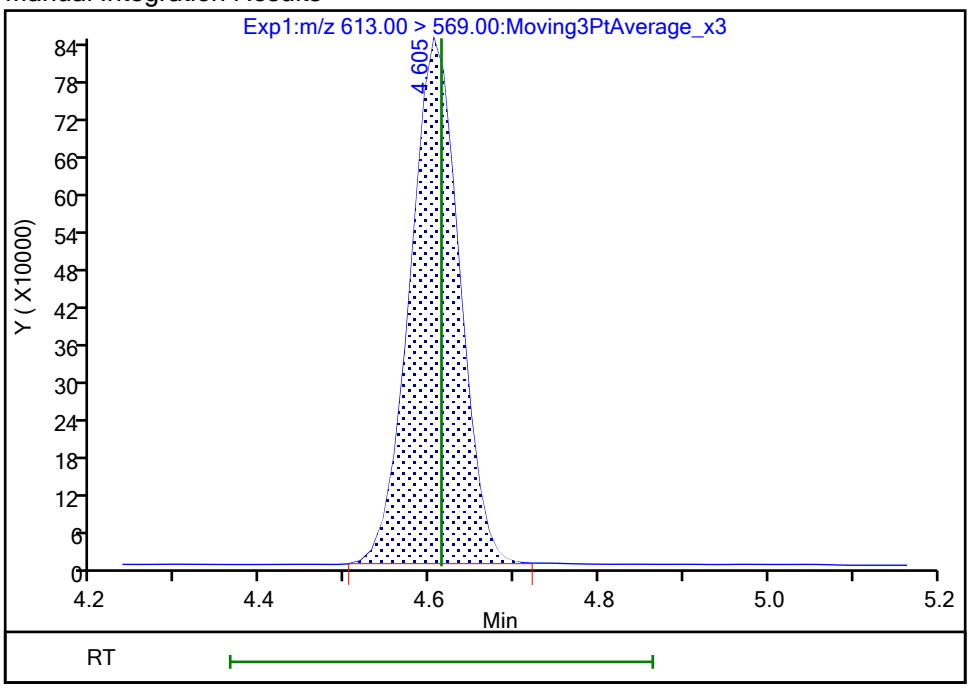
Processing Integration Results

RT: 4.60
Area: 3439057
Amount: 1.817915
Amount Units: ng/ml



Manual Integration Results

RT: 4.60
Area: 3400594
Amount: 1.797583
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:06:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

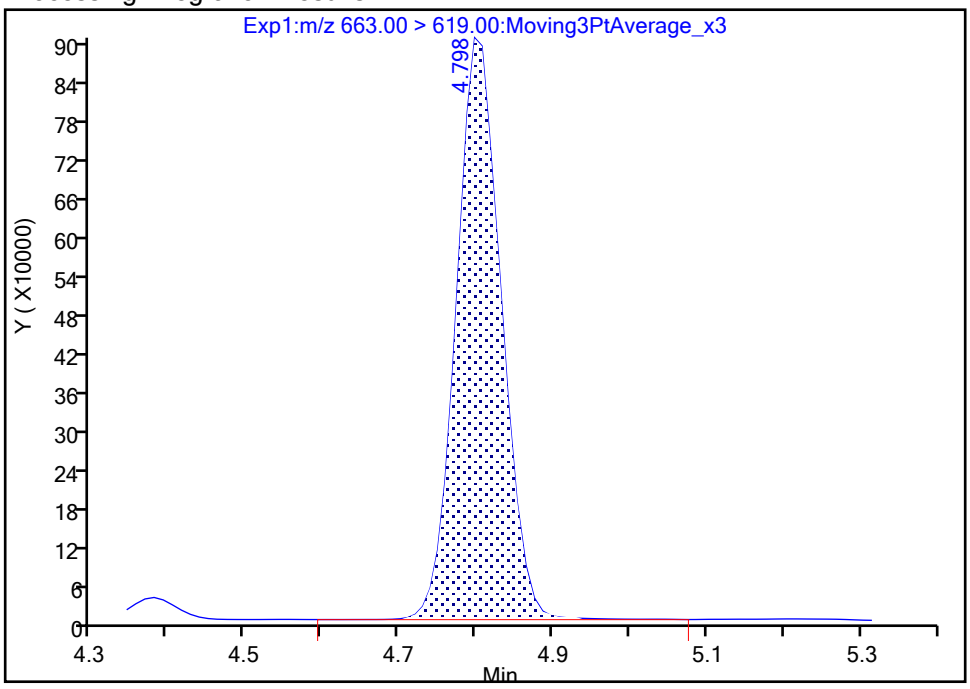
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

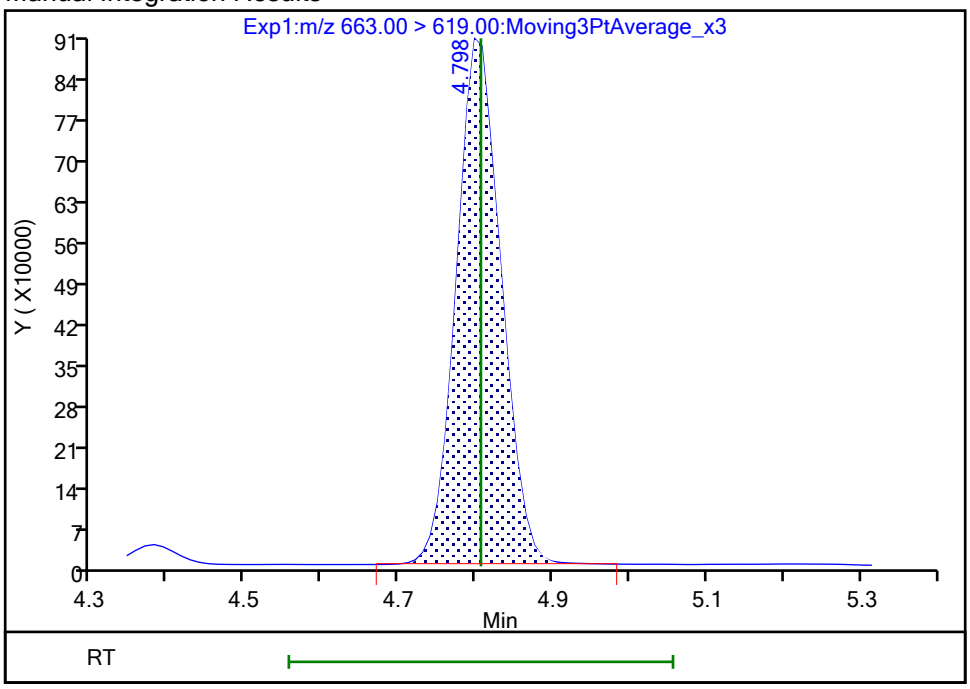
Processing Integration Results

RT: 4.80
Area: 3689709
Amount: 1.855632
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 3642276
Amount: 1.831777
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:06:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

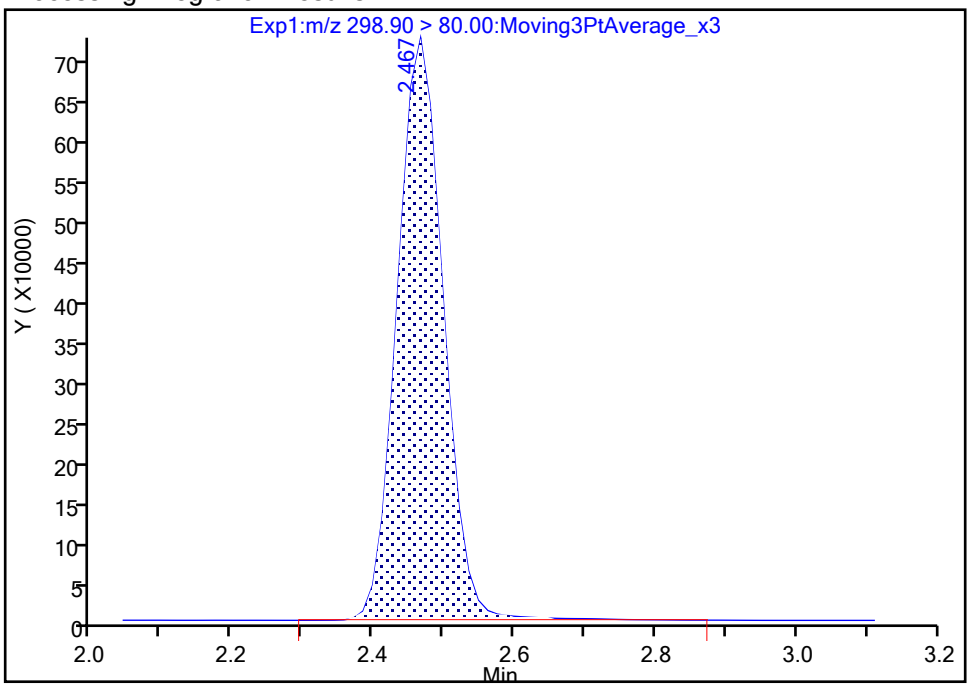
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

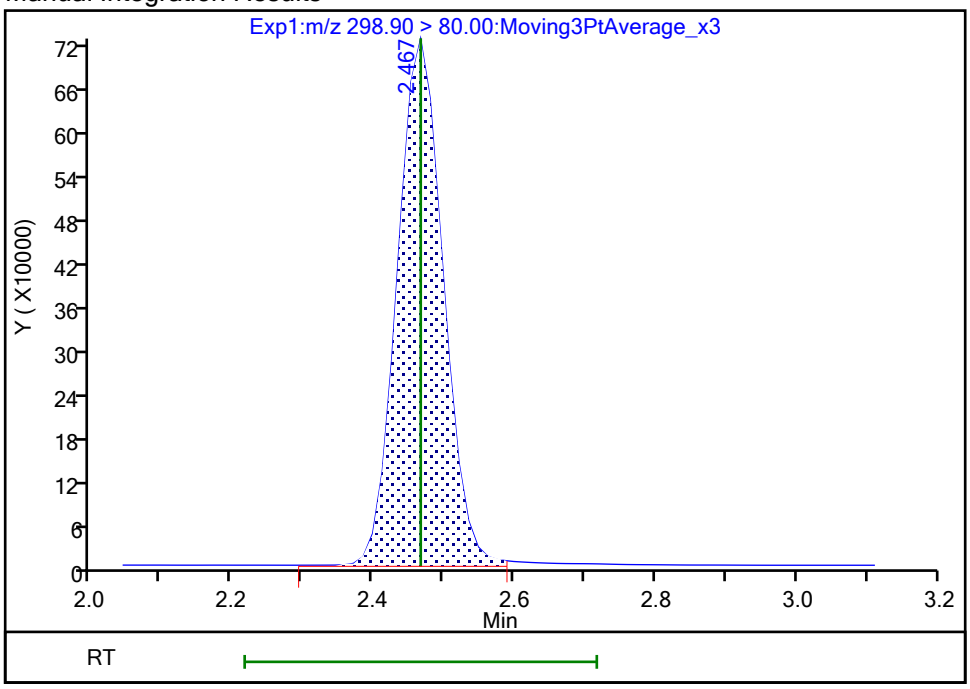
Processing Integration Results

RT: 2.47
Area: 3317671
Amount: 1.805339
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 3289268
Amount: 1.789883
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

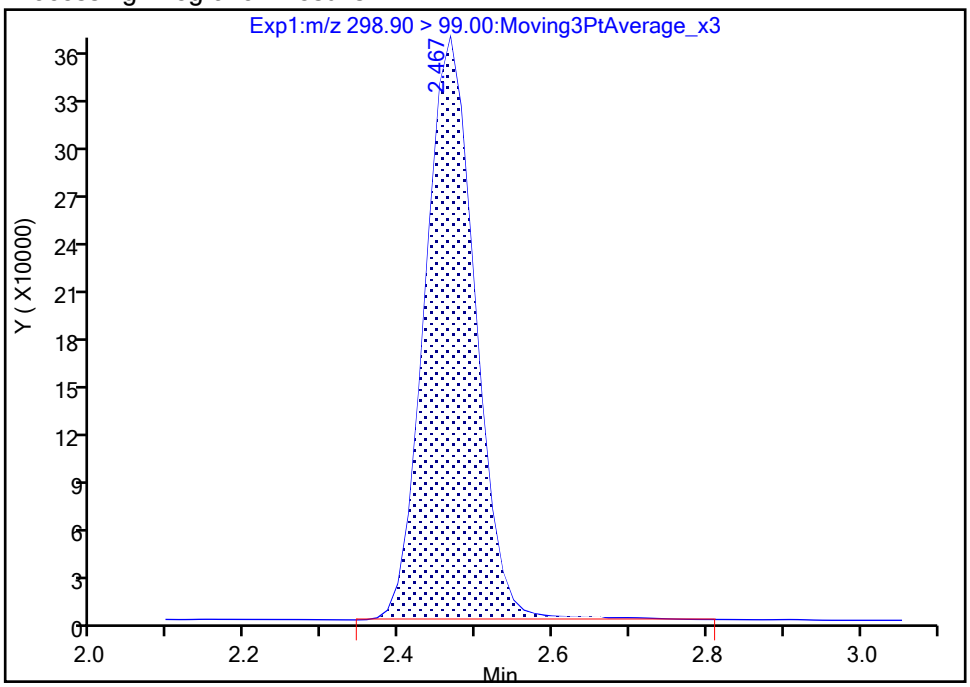
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

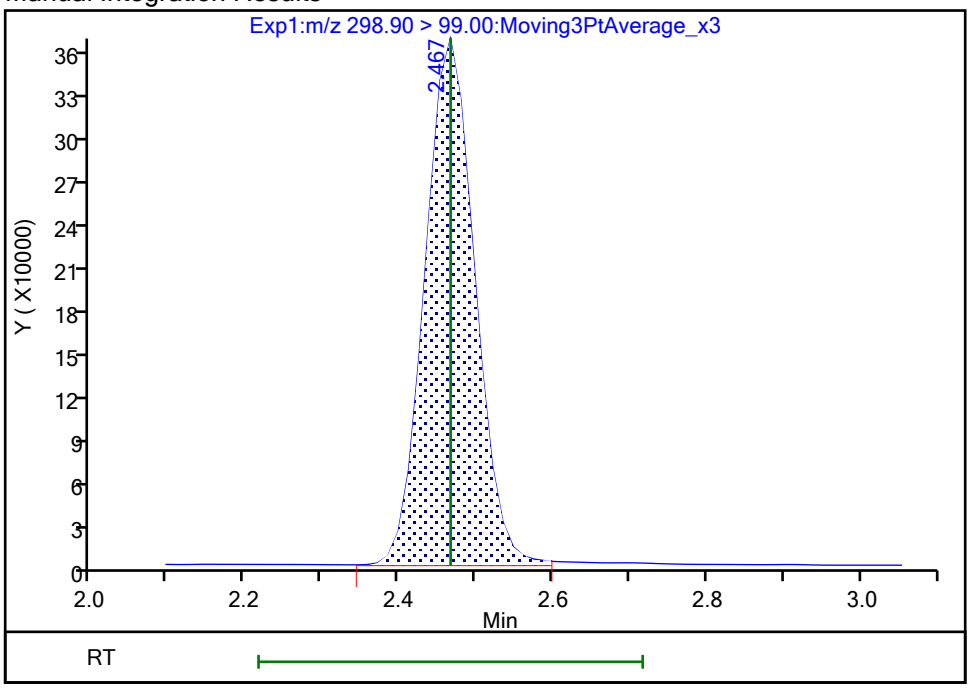
Processing Integration Results

RT: 2.47
Area: 1638597
Amount: 1.805339
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1626754
Amount: 1.789883
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

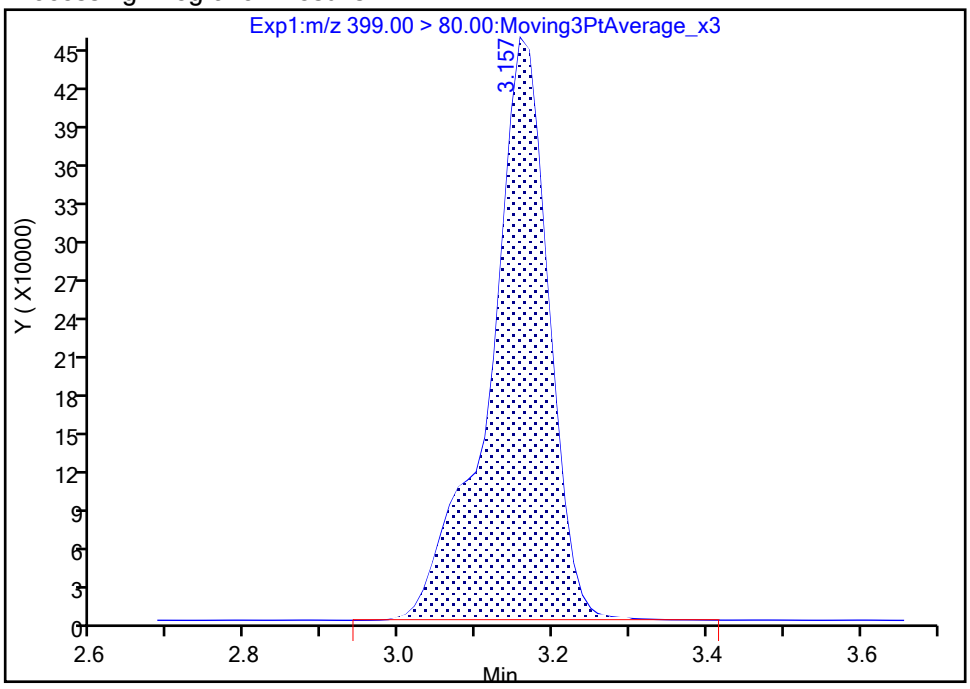
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

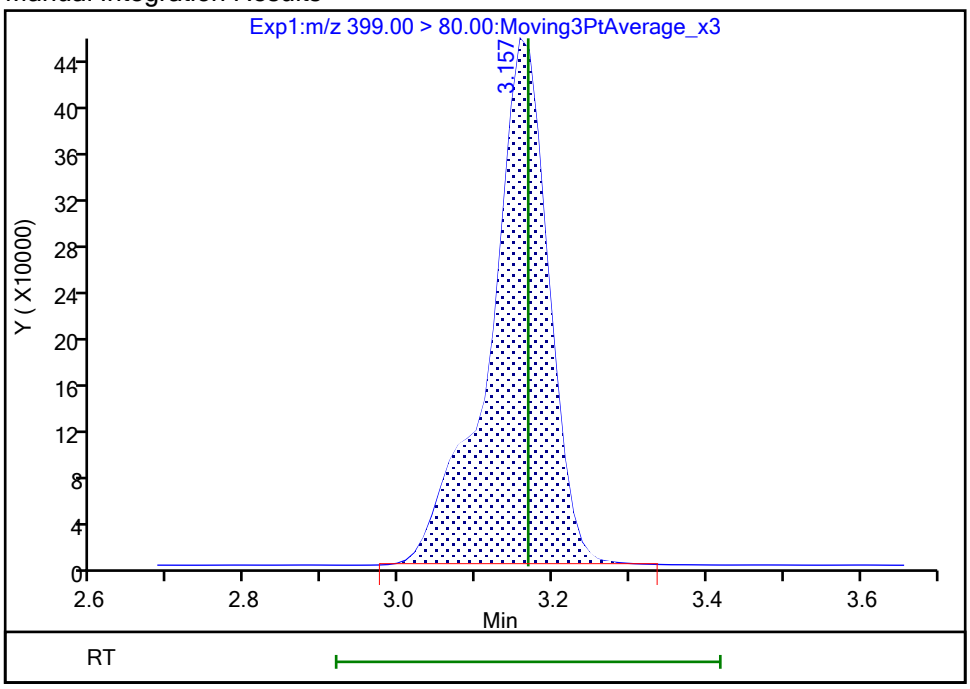
Processing Integration Results

RT: 3.16
Area: 2421658
Amount: 1.677749
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2412433
Amount: 1.671358
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

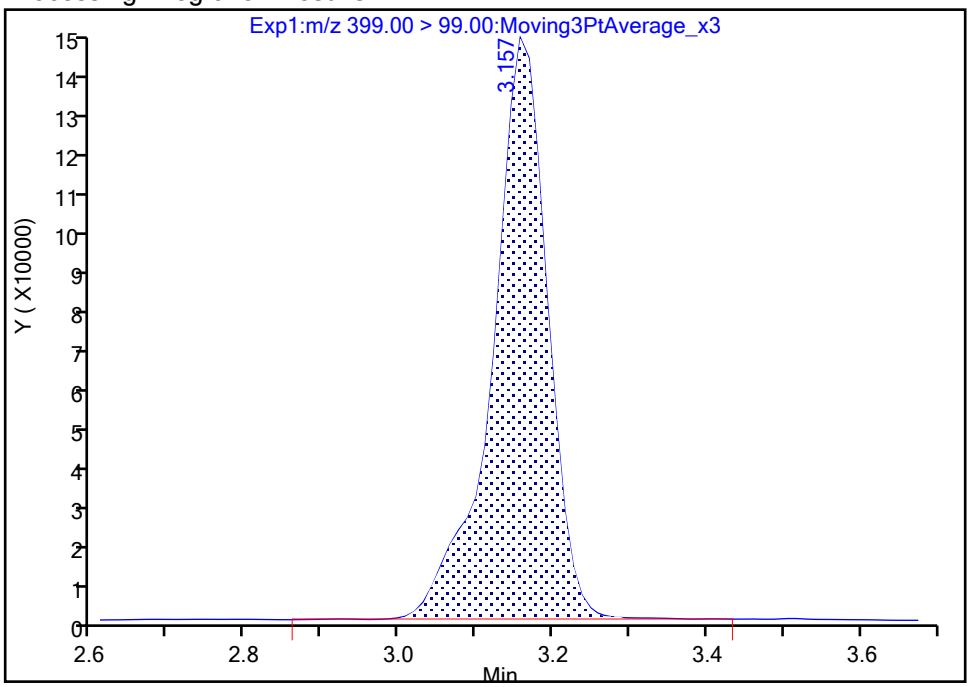
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

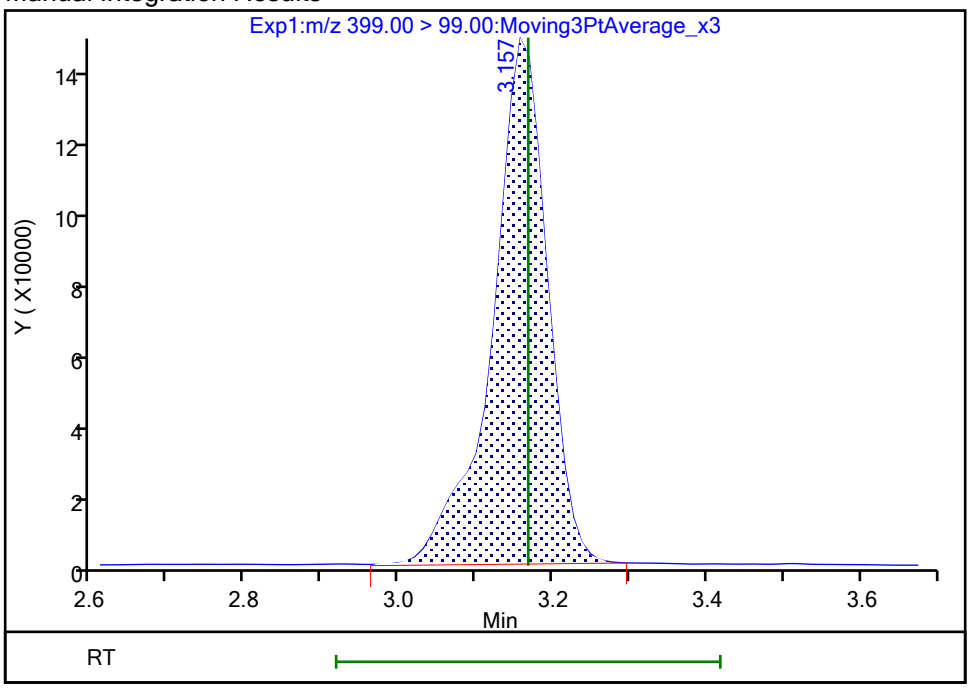
Processing Integration Results

RT: 3.16
Area: 732353
Amount: 1.677749
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 726437
Amount: 1.671358
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

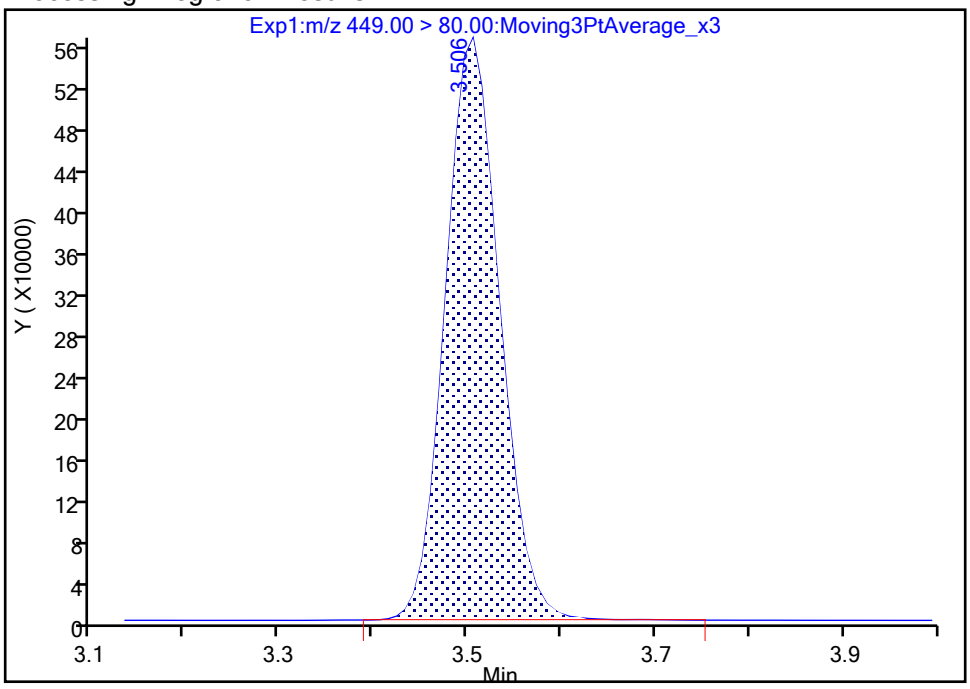
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

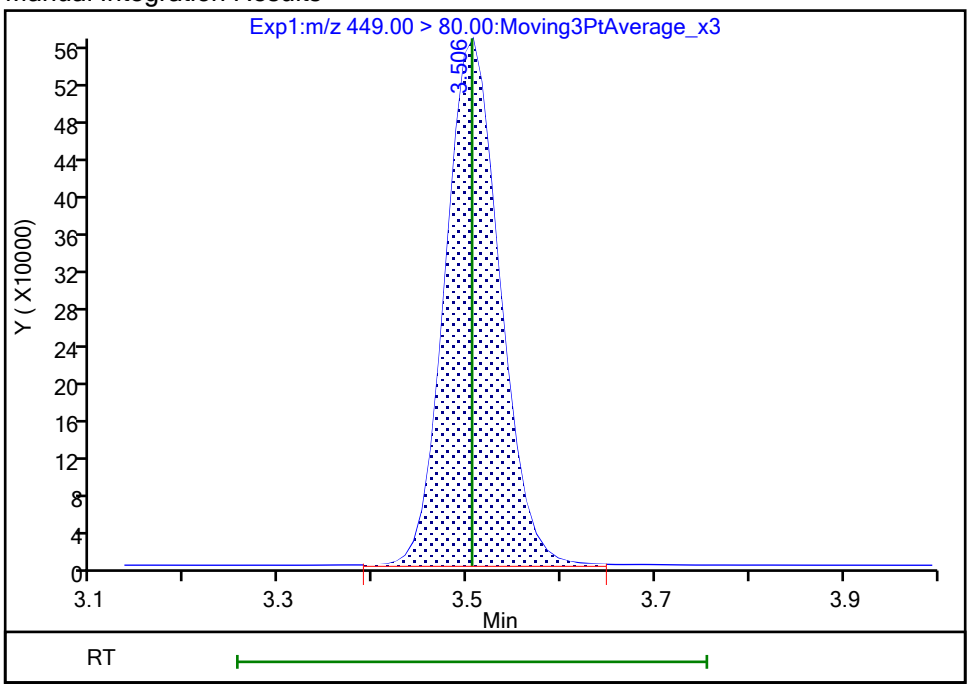
Processing Integration Results

RT: 3.51
Area: 2260132
Amount: 1.857777
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2257447
Amount: 1.855570
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

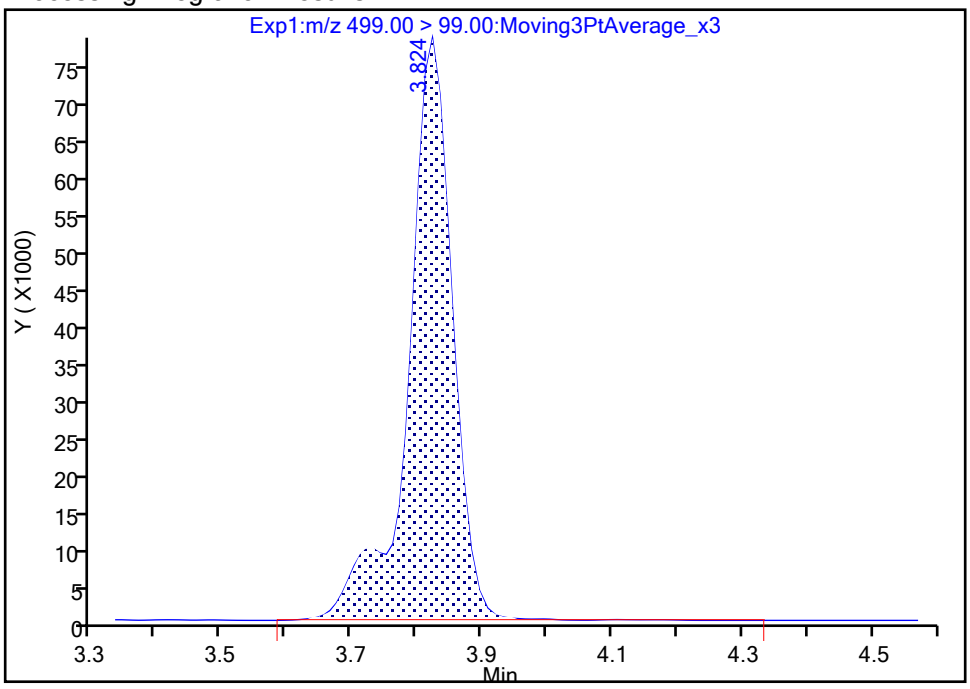
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

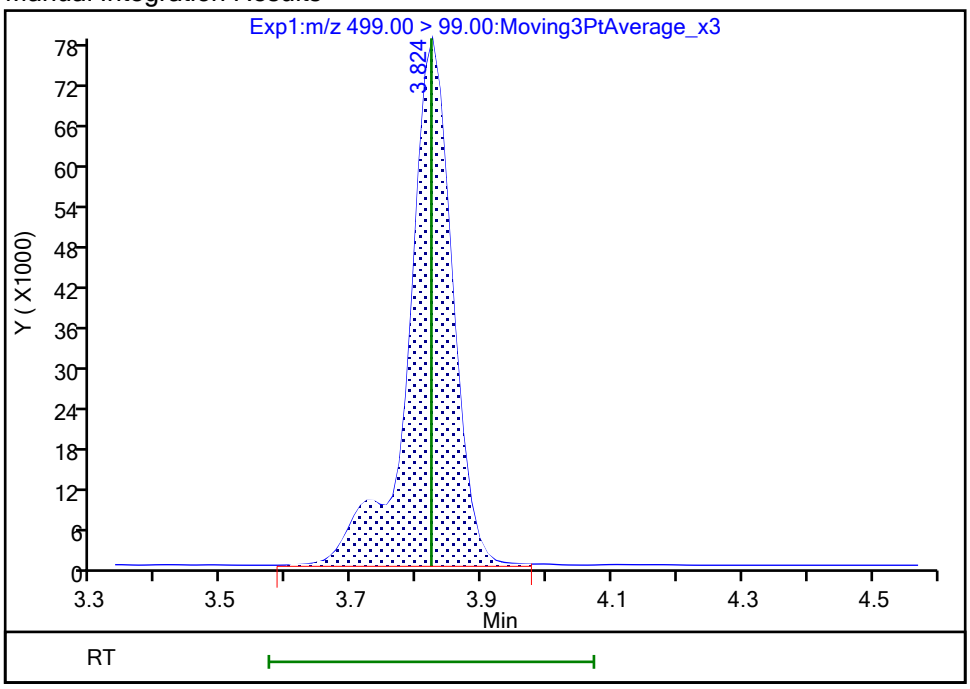
Processing Integration Results

RT: 3.82
Area: 372240
Amount: 1.712961
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 370884
Amount: 1.706687
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

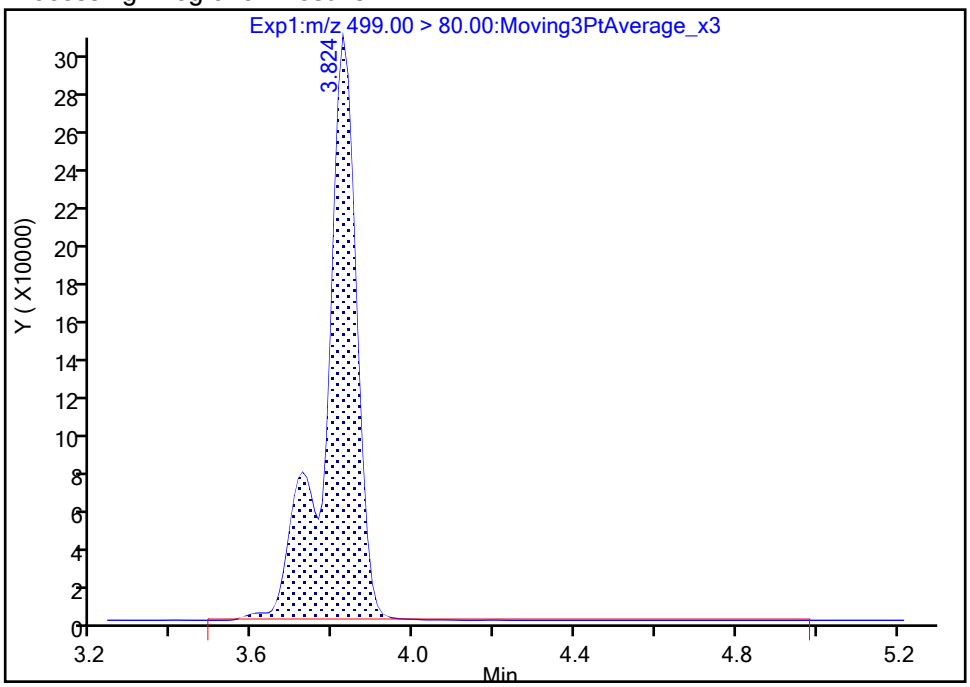
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

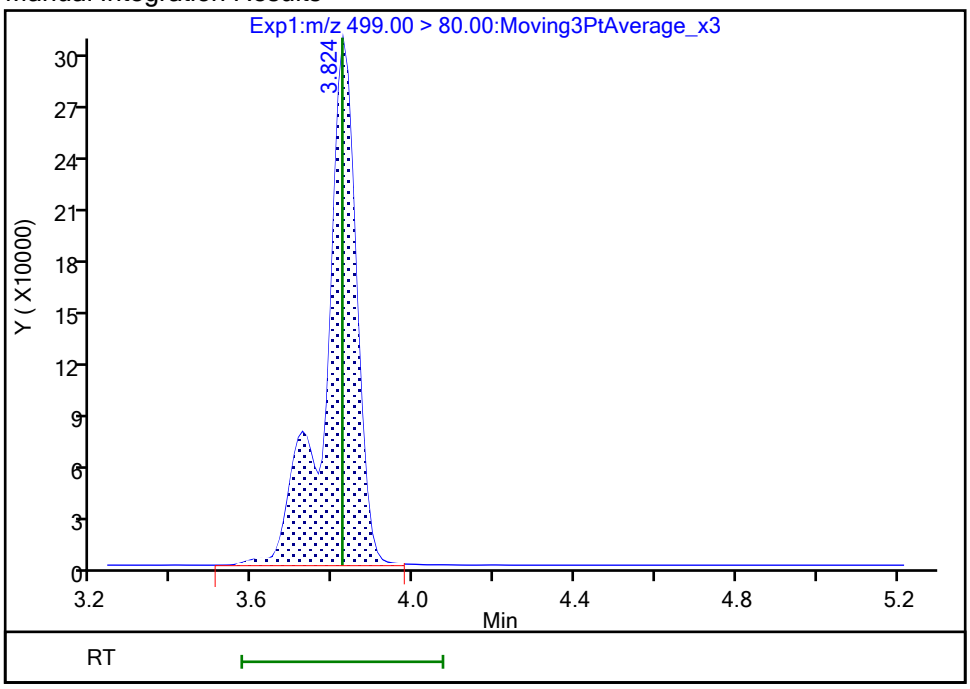
Processing Integration Results

RT: 3.82
Area: 1681937
Amount: 1.712961
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1675777
Amount: 1.706687
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

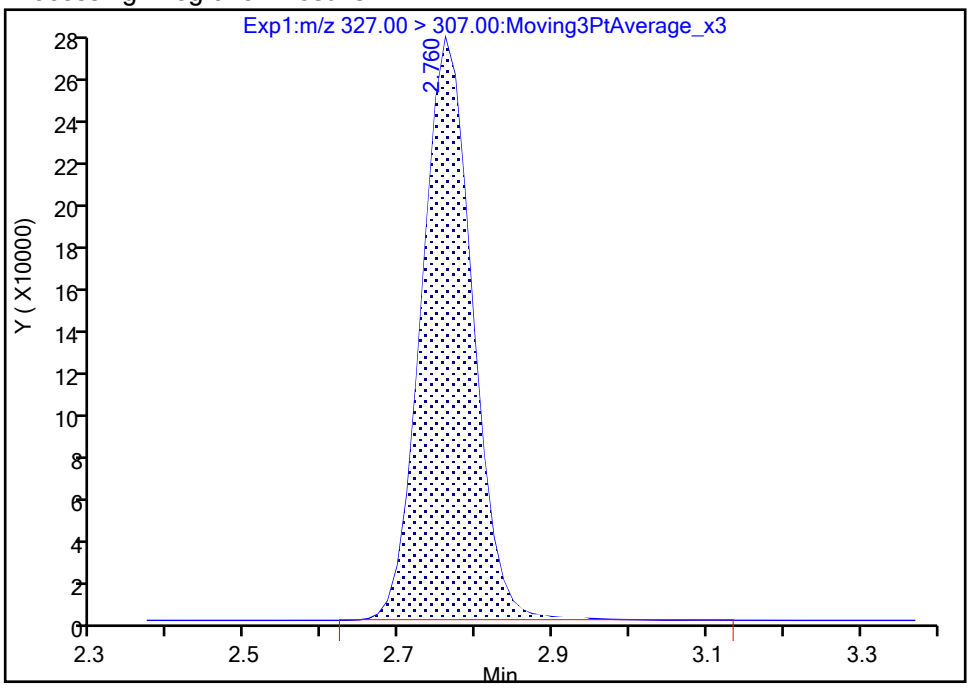
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

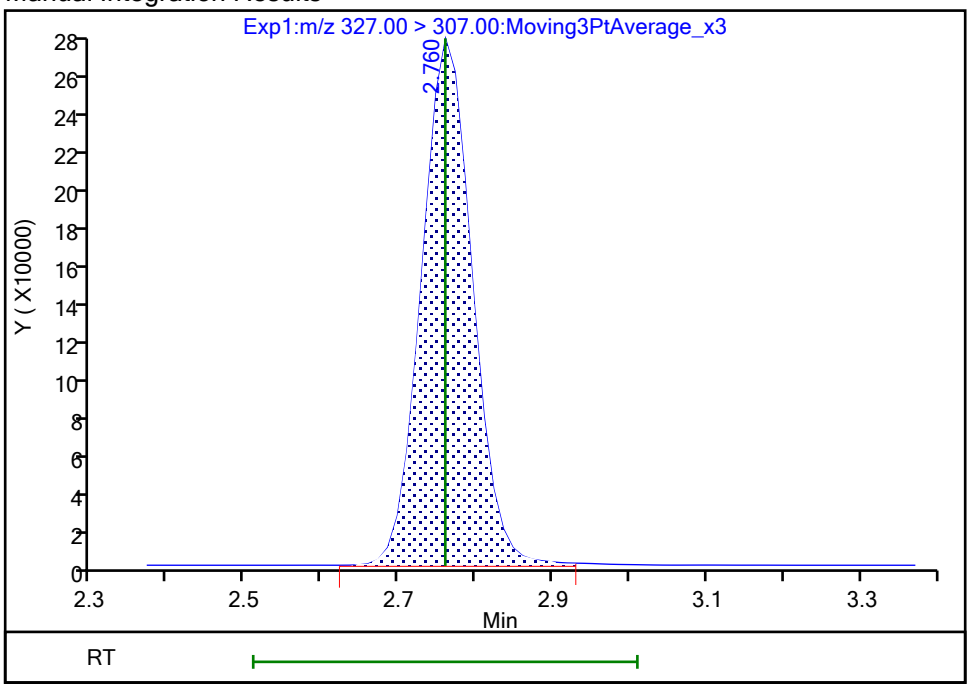
Processing Integration Results

RT: 2.76
Area: 1253621
Amount: 1.924844
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 1250310
Amount: 1.919760
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

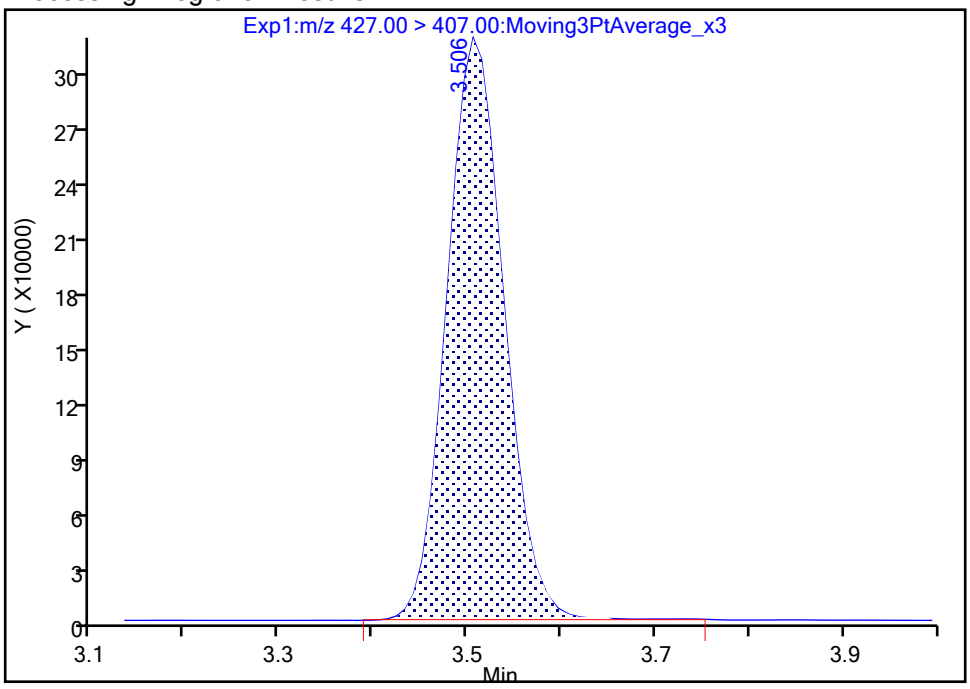
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

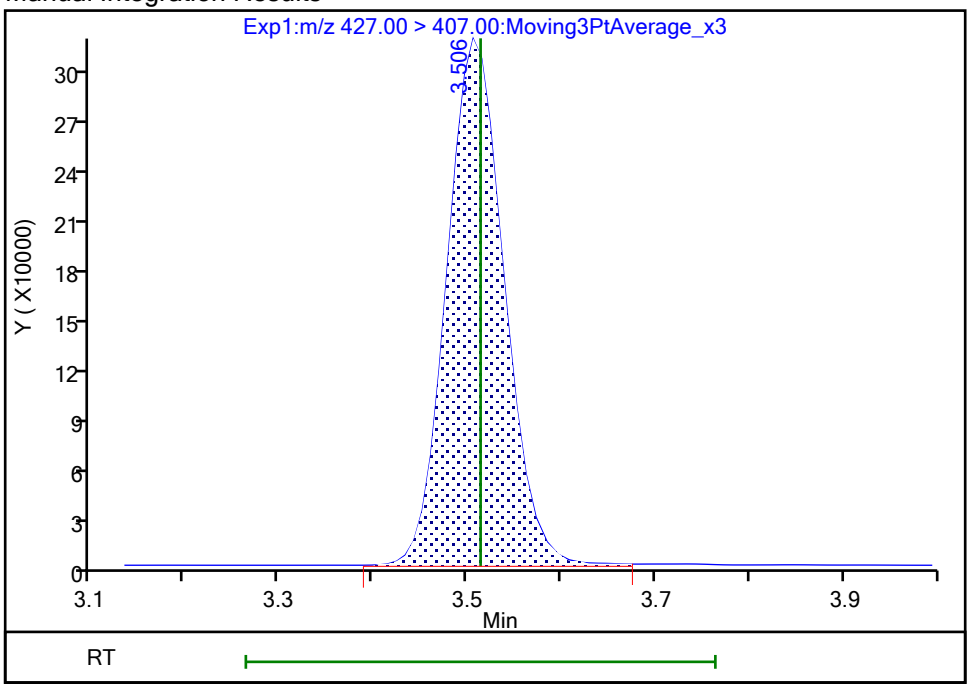
Processing Integration Results

RT: 3.51
Area: 1317271
Amount: 1.930433
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1319255
Amount: 1.933341
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

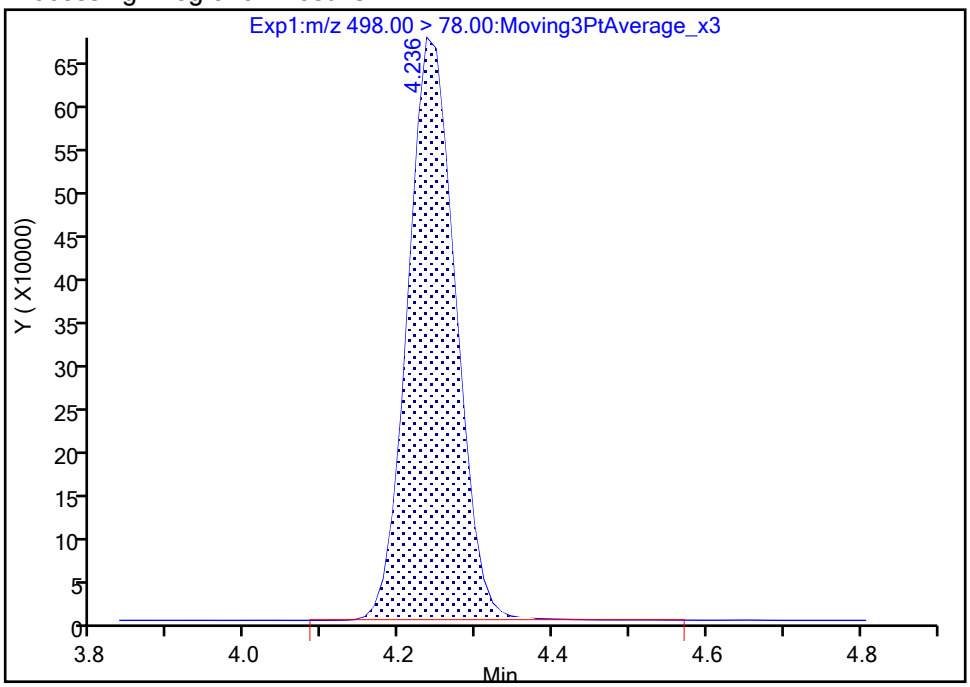
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d
Injection Date: 23-Oct-2023 16:28:20 Instrument ID: LC812
Lims ID: LCSD 200-196645/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

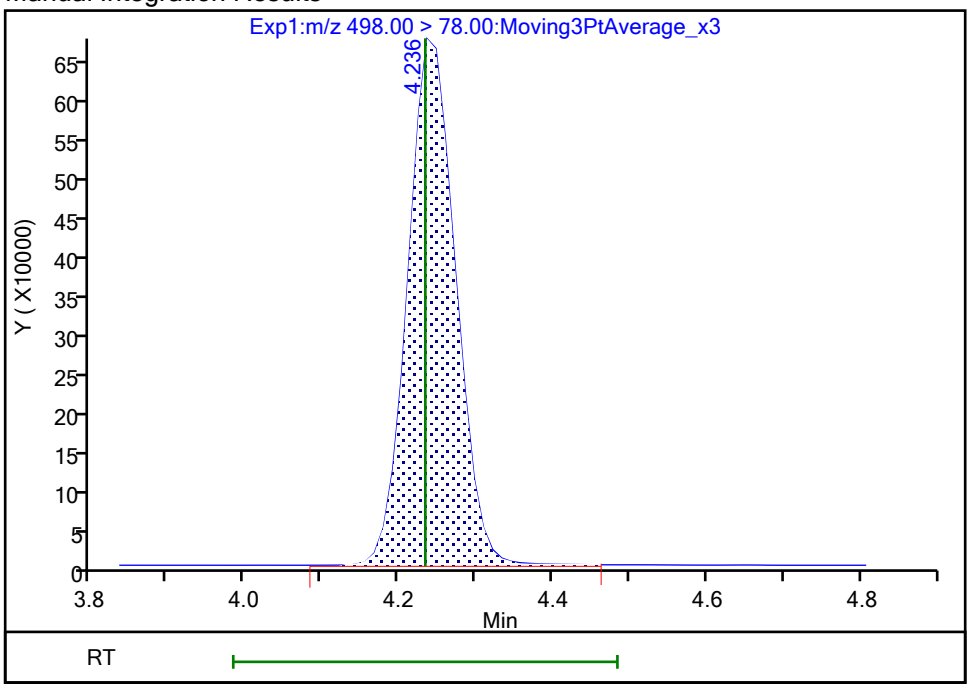
Processing Integration Results

RT: 4.24
Area: 2929284
Amount: 2.144182
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 2927498
Amount: 2.142874
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

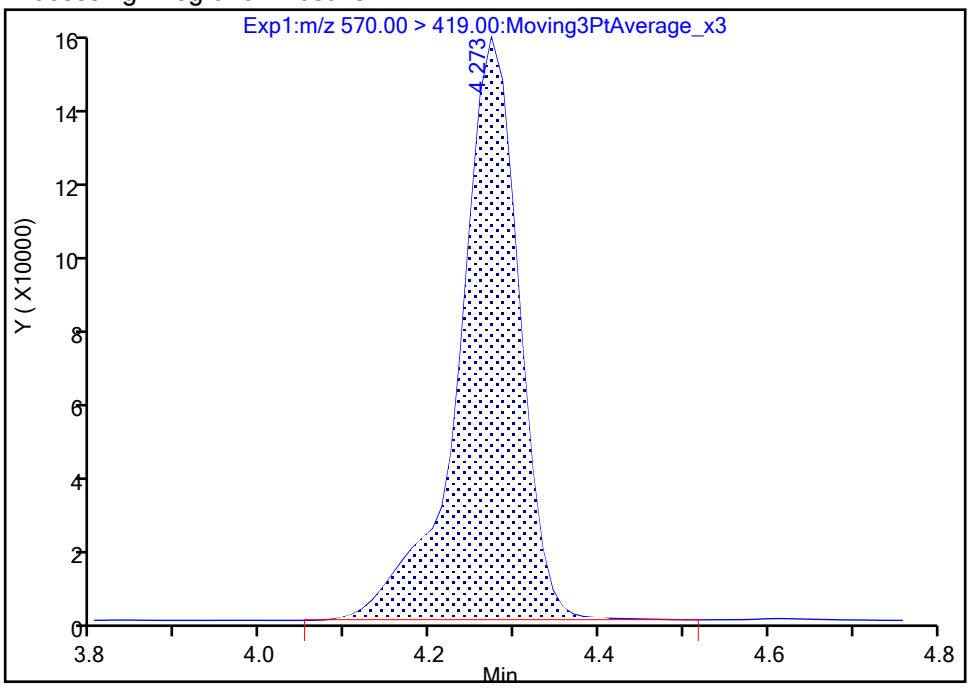
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

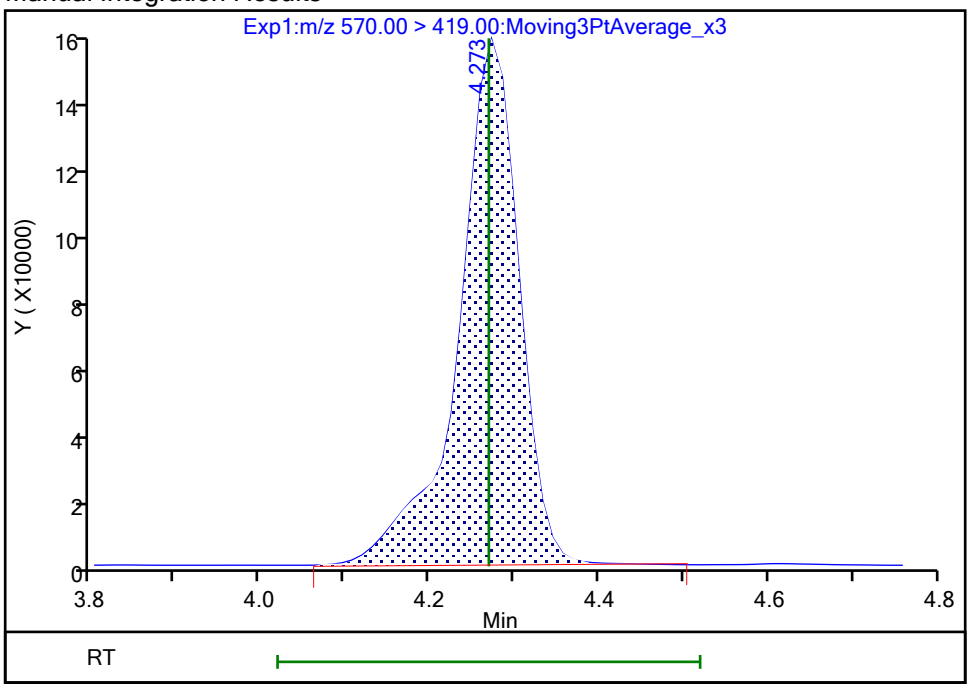
Processing Integration Results

RT: 4.27
Area: 781115
Amount: 1.904733
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 778602
Amount: 1.898605
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

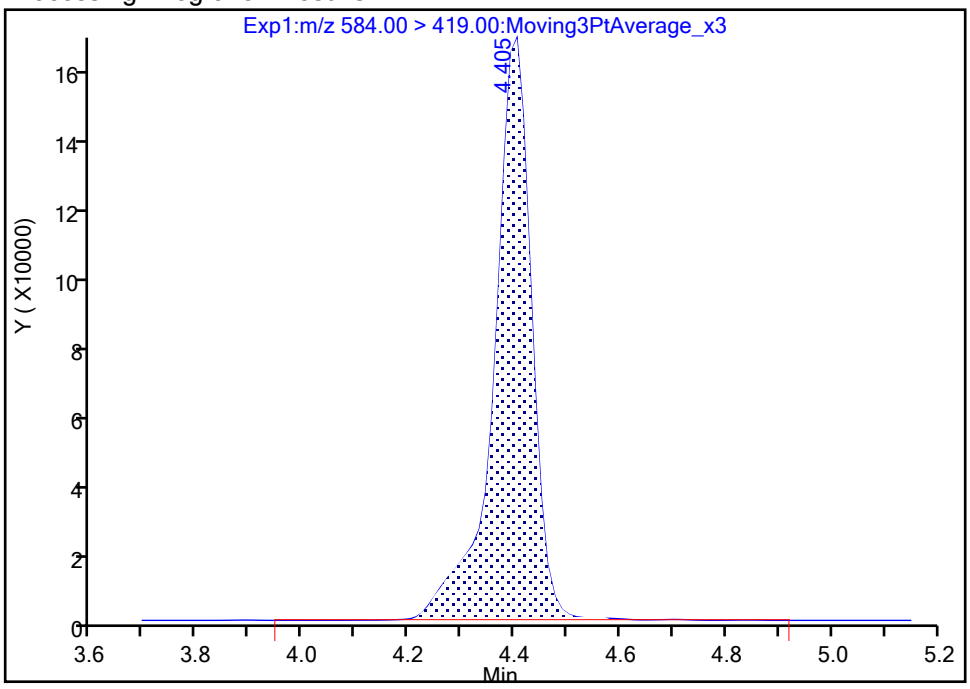
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

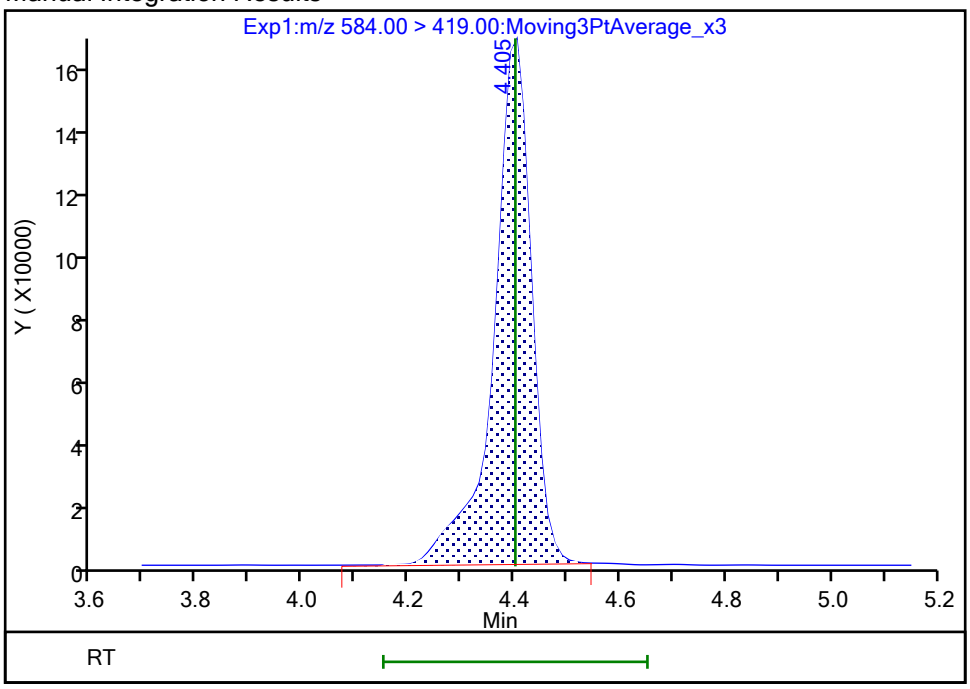
Processing Integration Results

RT: 4.40
Area: 837934
Amount: 1.939452
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 831513
Amount: 1.924590
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:06:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

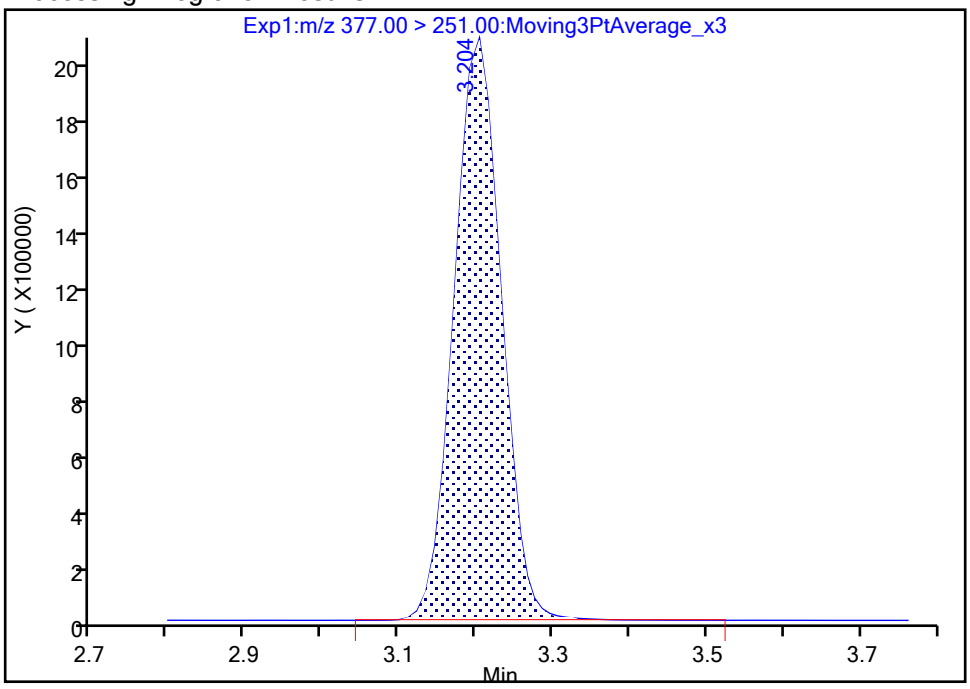
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

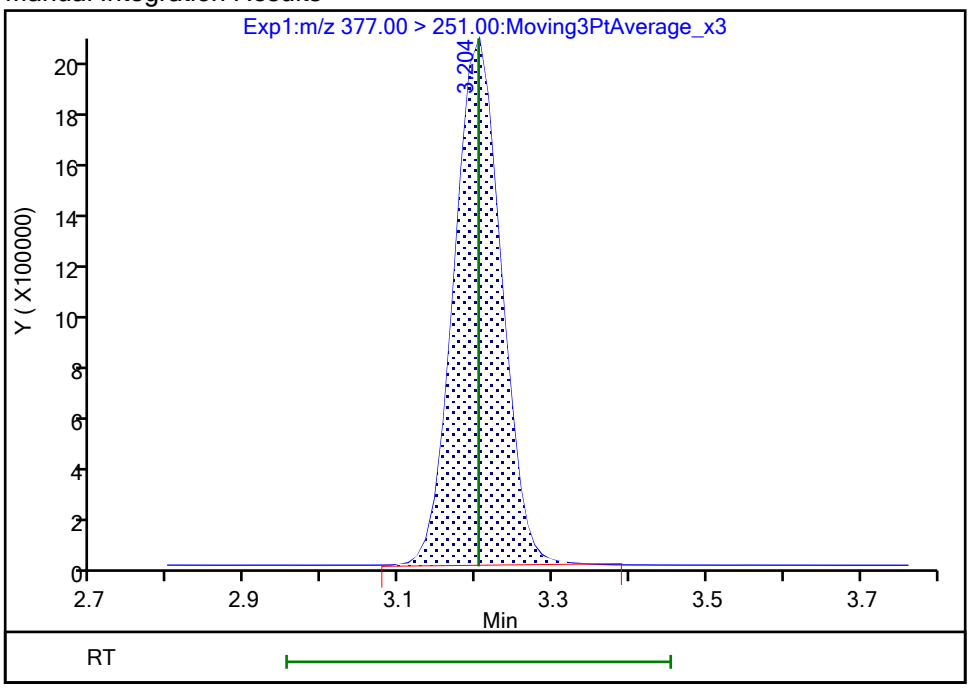
Processing Integration Results

RT: 3.20
Area: 8726025
Amount: 1.801457
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 8708358
Amount: 1.797809
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:05:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

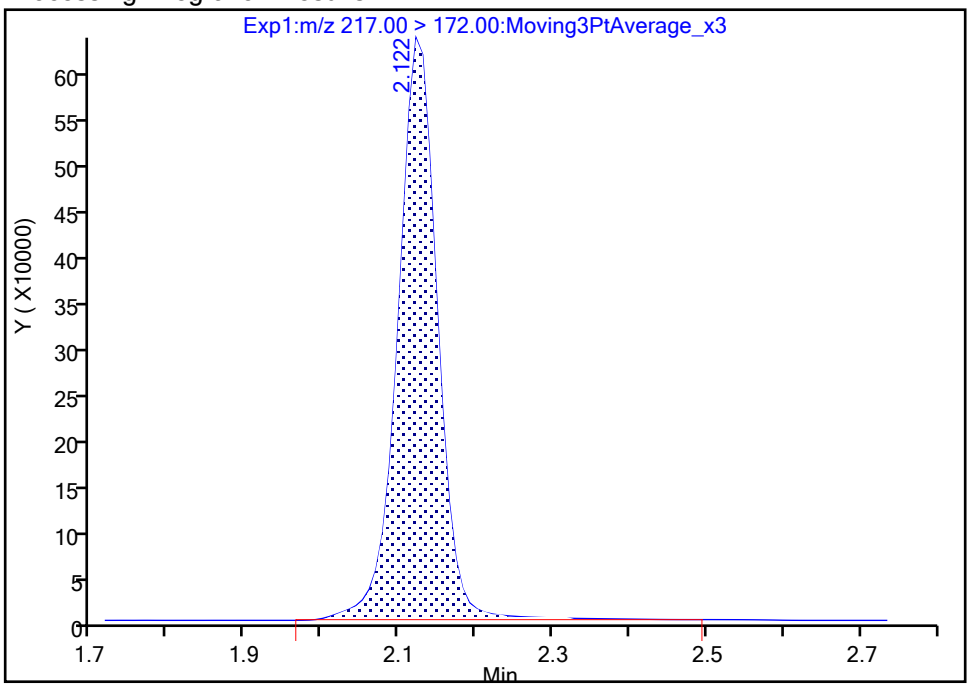
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

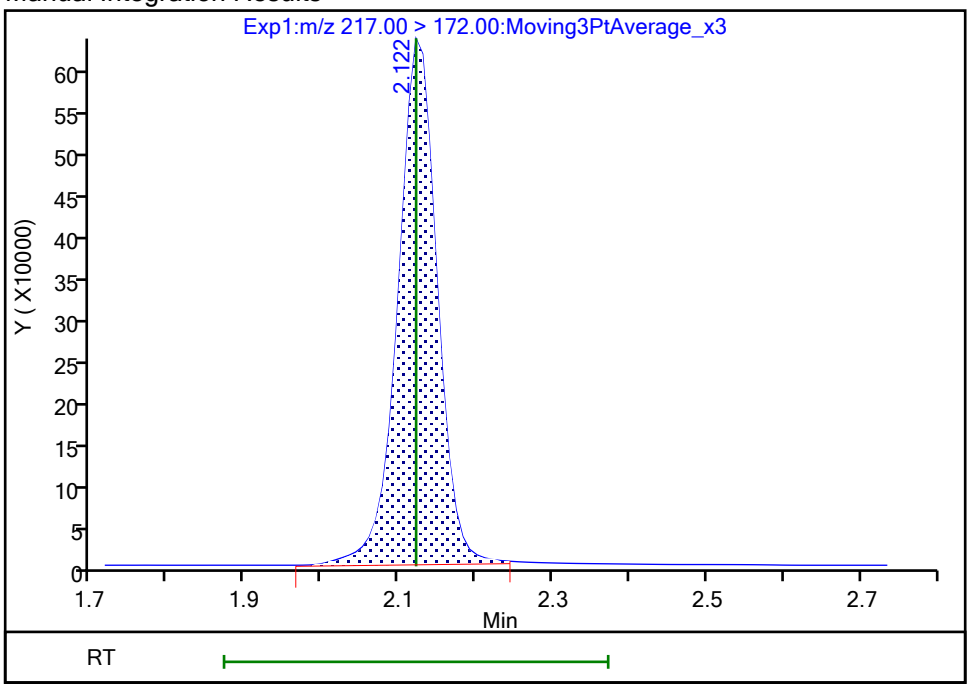
Processing Integration Results

RT: 2.12
Area: 2270955
Amount: 1.429957
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2251178
Amount: 1.417504
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:03:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

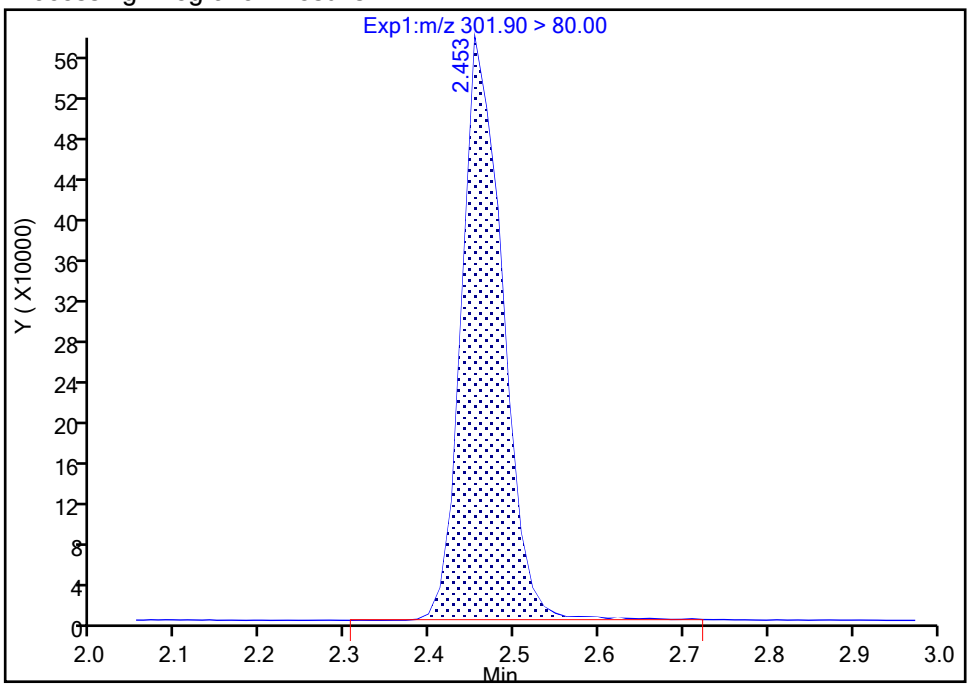
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

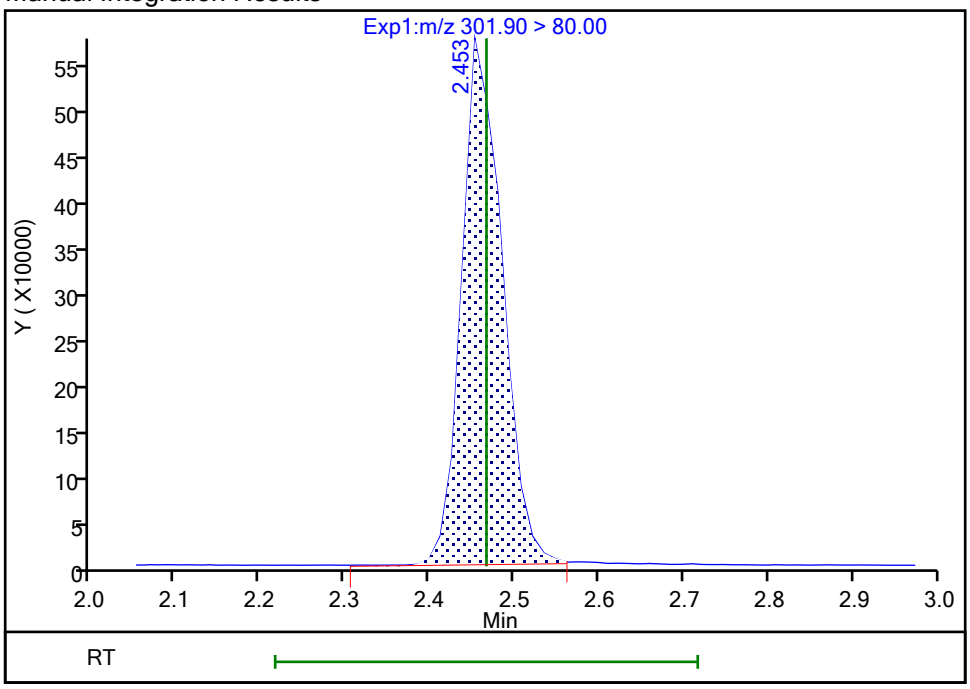
Processing Integration Results

RT: 2.45
Area: 1926074
Amount: 1.154939
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1912719
Amount: 1.146931
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:03:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

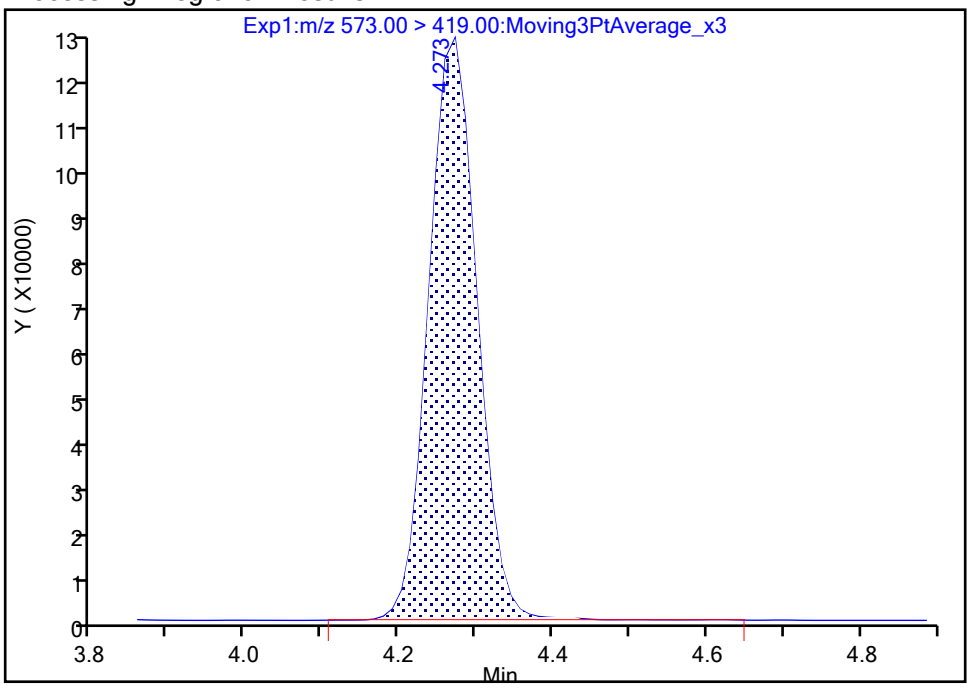
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

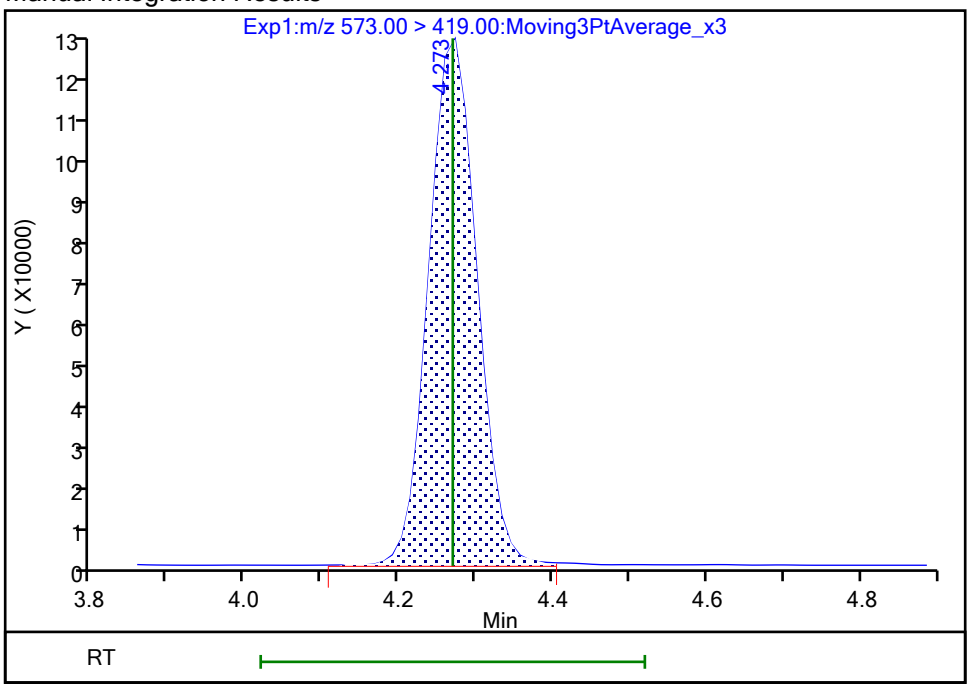
Processing Integration Results

RT: 4.27
Area: 566894
Amount: 1.335716
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 564921
Amount: 1.331067
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

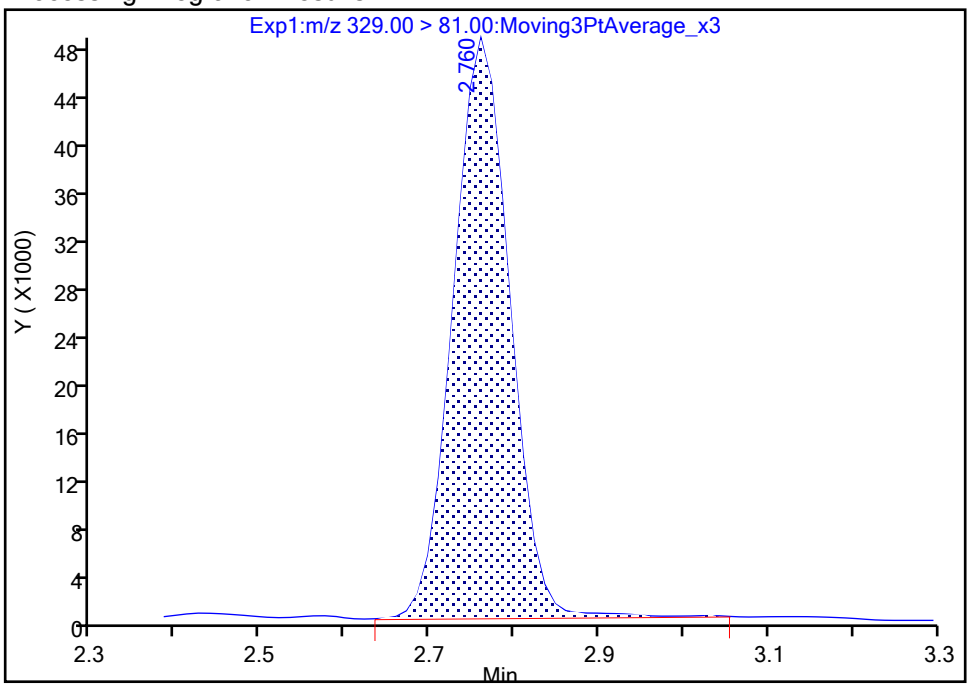
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

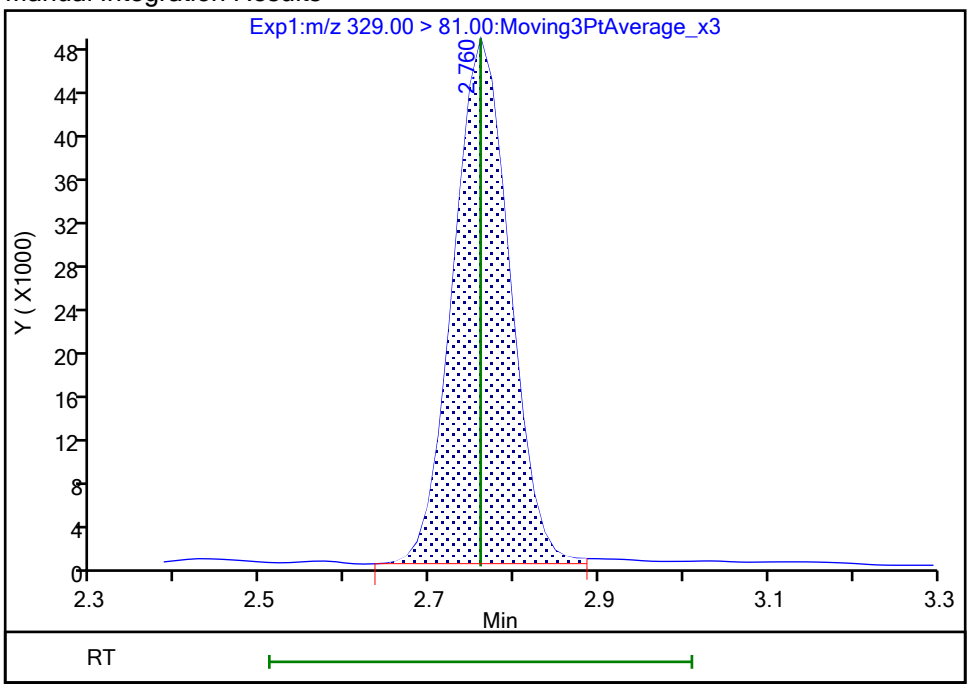
Processing Integration Results

RT: 2.76
Area: 225408
Amount: 1.168752
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 223914
Amount: 1.161005
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

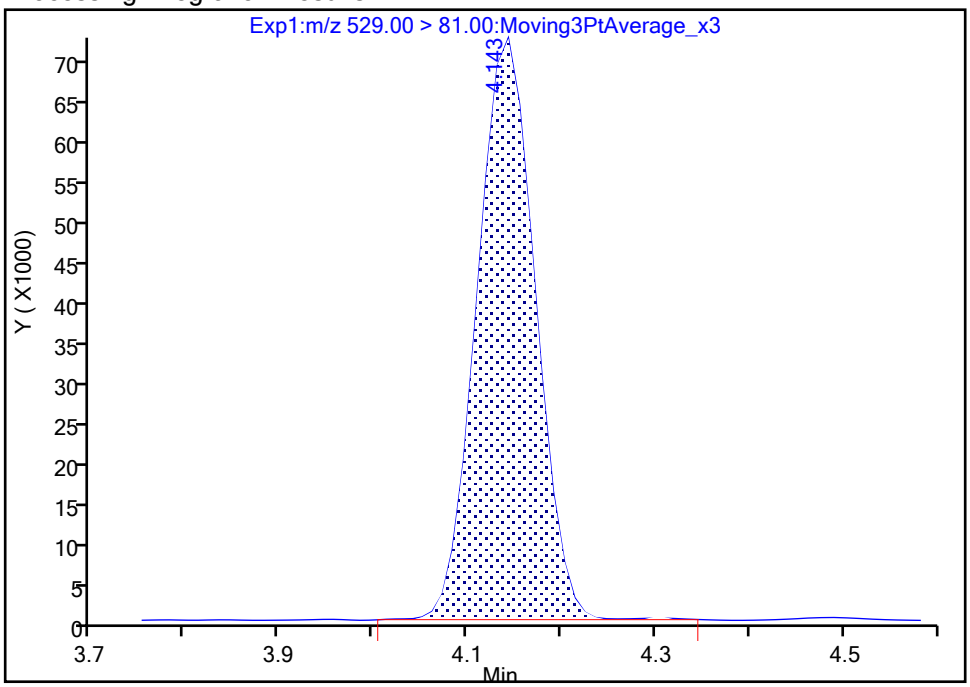
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A10.d				
Injection Date:	23-Oct-2023 16:28:20	Instrument ID:	LC812		
Lims ID:	LCSD 200-196645/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

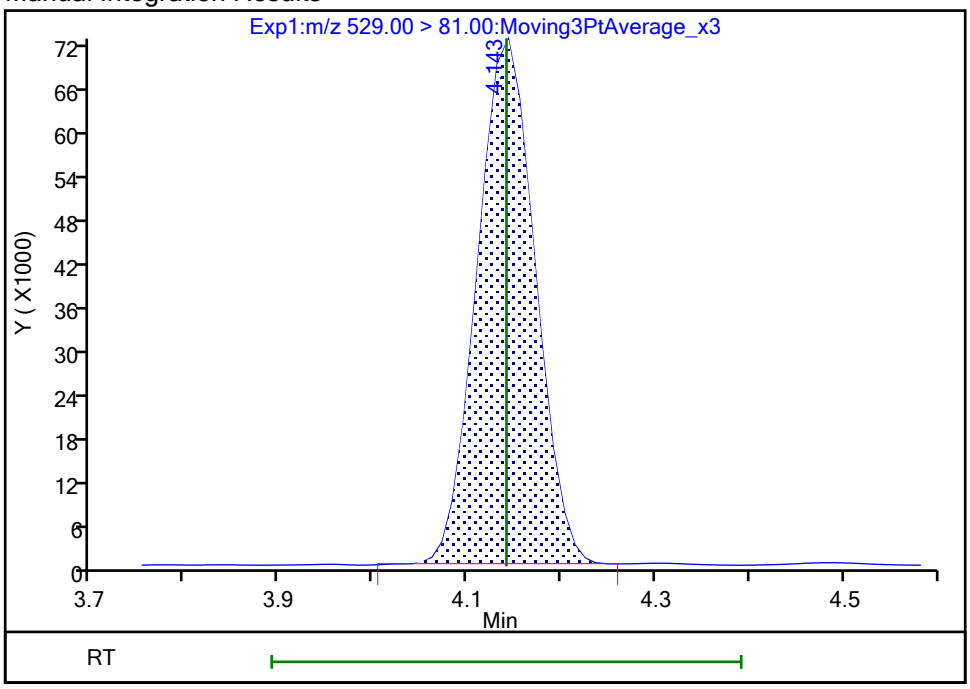
Processing Integration Results

RT: 4.14
Area: 312979
Amount: 1.120617
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 312403
Amount: 1.118555
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 13:04:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196646/3-A

Matrix: Water Lab File ID: PA231023C04.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) Date Analyzed: 10/23/2023 23:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	39.00		5.00	1.20
2706-90-3	Perfluoropentanoic acid	40.34		2.00	0.68
307-24-4	Perfluorohexanoic acid	38.61		2.00	0.65
375-85-9	Perfluoroheptanoic acid	40.98		2.00	0.54
335-67-1	Perfluorooctanoic acid	36.90		2.00	0.76
375-95-1	Perfluorononanoic acid	38.99		2.00	0.49
335-76-2	Perfluorodecanoic acid	35.53		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	37.23		2.00	0.55
307-55-1	Perfluorododecanoic acid	37.01		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	37.48		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	36.60		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.89		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	37.24		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	34.70		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	36.57		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	34.91		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	32.77		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	31.44		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	39.31		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	40.42		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	42.53		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	41.39		2.00	0.92
2355-31-9	NMeFOSAA	38.60		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	39.63		5.00	1.60
13252-13-6	HFPODA	38.34		4.00	1.10
919005-14-4	DONA	37.89		2.00	0.42
756426-58-1	9Cl-PF3ONS	38.34		2.00	0.32
763051-92-9	11Cl-PF3OUdS	32.77		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290375-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 200-196646/3-A

Matrix: Water | Lab File ID: PA231023C04.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/20/2023 20:02

Sample wt/vol: 250(mL) | Date Analyzed: 10/23/2023 23:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196689 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	97		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	78		50-150
STL02337	13C3 PFBS	93		50-150
STL01056	13C8 FOSA	82		50-150
STL02118	d3-NMeFOSAA	94		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	90		50-150
STL02279	M2-6:2 FTS	91		50-150
STL02280	M2-8:2 FTS	85		50-150
STL02255	13C3 HFPO-DA	96		50-150
STL00994	18O2 PFHxS	98		50-150
STL00993	13C2 PFHxA	95		50-150
STL00991	13C4 PFOS	99		50-150
STL00998	13C2 PFDoA	87		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	97		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	90		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Lims ID: LCSD 200-196646/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 23-Oct-2023 23:41:21 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196646/3-A
Misc. Info.: 200-0057511-004 Plate: 1 Rack: 3
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 19:58:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 15:13:21
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2170930	1.27		102	1447	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1595265	0.9749		97.5	159	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1600703	1.21		96.5	2296	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1393700	1.01		101	35.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1944558	1.08		93.2	100207	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	1676387	0.8973	Target=2.06	101	1075	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	820414		2.04(1.03-3.09)		370	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	626965	0.9828		105	868	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	219324	1.06		90.5	170	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1597489	1.18		94.7	6236	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1357332	0.9651	Target=14.12	96.5	282	M
313.00 > 119.00	2.797	2.797	0.0	1.000	91038		14.91(7.06-21.17)		102	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1526277	0.9311	Target=2.72	99.0	1251	M
349.00 > 99.00	2.810	2.810	0.0	0.888	516675		2.95(1.36-4.09)		643	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.907	2.908	-0.001	1.000	239499	0.9585		95.8	728	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	311971	1.19		95.5	1853	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1484292	1.15		97.6	7627	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1205285	0.8674	Target=3.32	94.9	3031	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	346152		3.48(1.66-4.98)		288	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	1576031	1.02	Target=4.17	102	369	
363.00 > 169.00	3.165	3.168	-0.003	1.000	379322		4.15(2.09-6.26)		806	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1715570	1.16		92.7	5102	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.835	4399062	0.9472	Target=3.33	100	6135	
377.00 > 85.00	3.199	3.203	-0.004	0.835	1183540		3.72(1.66-4.99)		1820	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.917	1066314	0.9142	Target=4.83	95.9	2836	
449.00 > 99.00	3.511	3.505	0.006	0.917	210416		5.07(2.41-7.24)		758	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	290001	1.08		91.3	538	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	674439	1.01		106	1564	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1669972	0.9224	Target=2.88	92.2	87.1	M
413.00 > 169.00	3.520	3.514	0.006	1.000	612003		2.73(1.44-4.32)		980	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2124723	1.27		101	5745	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2154821	1.25			9040	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	821707	0.8729	Target=4.24	94.1	1482	M
499.00 > 99.00	3.830	3.822	0.008	1.000	178350		4.61(2.12-6.37)		553	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	964453	1.18		98.7	3572	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1662913	0.9747	Target=8.34	97.5	262	
463.00 > 169.00	3.842	3.845	-0.003	1.000	200208		8.31(4.17-12.51)		1341	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2175922	1.19		95.4	8069	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.039	2760903	0.9585		103	8182	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.101	4.105	-0.004	1.071	586769	0.8193	Target=2.17	85.2	2889	
549.00 > 99.00	4.101	4.105	-0.004	1.071	256983		2.28(1.08-3.25)		901	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1648887	0.8882	Target=11.44	88.8	525	
513.00 > 169.00	4.136	4.129	0.007	1.000	171108		9.64(5.72-17.16)		1058	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2322002	1.21		97.2	9745	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	307020	1.02		85.3	786	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	600073	1.06		111	1992	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1669429	1.02		81.9	5986	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1318117	1.03		103	3859	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.270	-0.004	1.212	534184	1.17		93.5	1907	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.270	0.009	1.003	374159	0.9649		96.5	964	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.366	-0.003	1.139	433252	0.7860	Target=2.37	81.5	2686	
599.00 > 99.00	4.363	4.366	-0.003	1.139	167922		2.58(1.19-3.56)		1217	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2037495	1.13		90.3	6660	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1563456	0.9307	Target=12.20	93.1	397	
563.00 > 169.00	4.387	4.390	-0.003	1.000	144814		10.80(6.10-18.31)		1905	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	481794	1.10		87.6	913	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.401	-0.002	1.000	381919	0.99		99.1	1407	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.473	0.009	1.170	3619497	0.8193		86.9	3926	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2000902	1.09		87.3	8883	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.000	1507475	0.9253	Target=8.47	92.5	88.4	
613.00 > 169.00	4.610	4.613	-0.003	1.000	186043		8.10(4.23-12.70)		1342	M
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.624	-0.003	1.114	317727	0.9417		97.7	7595	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.777	-0.003	1.246	145039	0.7764	Target=0.48	80.2	1975	
699.00 > 99.00	4.774	4.777	-0.003	1.246	289986		0.50(0.24-0.72)		2720	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.806	-0.003	1.042	1604528	0.9370	Target=6.41	93.7	90.1	
663.00 > 169.00	4.803	4.806	-0.003	1.042	233176		6.88(3.21-9.62)		1239	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.415	1790917	0.9807		78.5	3883	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.982	-0.002	1.000	146567	0.9149	Target=0.87	91.5	1061	
713.00 > 219.00	4.980	4.982	-0.002	1.000	158039		0.93(0.43-1.30)		1860	M

Report Date: 25-Oct-2023 19:58:23 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.292	0.004	1.504	2020765	0.9604		76.8	4567	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.292	0.004	1.000	1650872	1.02	Target=7.89	102	114	M
813.00 > 169.00	5.296	5.292	0.004	1.000	203407		8.12(3.94-11.83)		2809	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.558	5.563	-0.005	1.049	1305301	1.03	Target=9.39	103	140	M
913.00 > 169.00	5.558	5.563	-0.005	1.049	139879		9.33(4.69-14.08)		964	

QC Flag Legend

Processing Flags

Review Flags

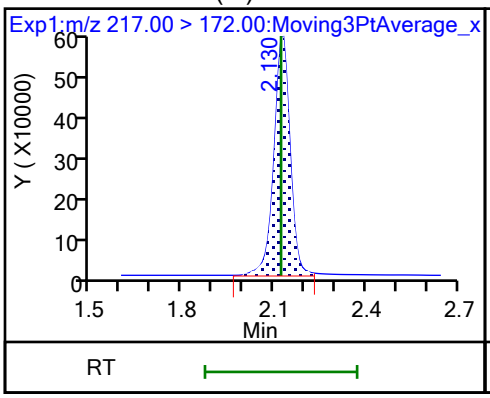
M - Manually Integrated

Report Date: 25-Oct-2023 19:58:23 Chrom Revision: 2.3 18-Oct-2023 21:16:54

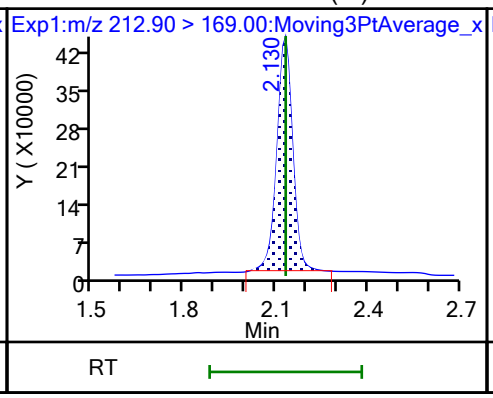
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Injection Date: 23-Oct-2023 23:41:21 Instrument ID: LC812
Lims ID: LCSD 200-196646/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

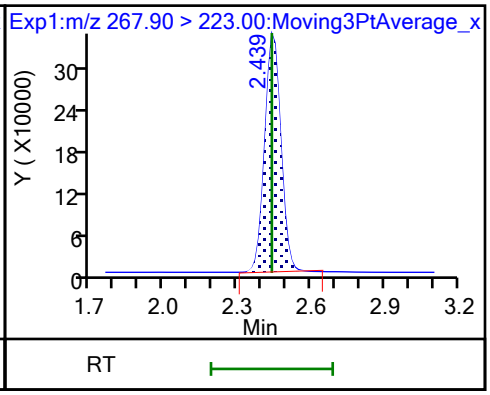
D 1 13C4 PFBA (M)



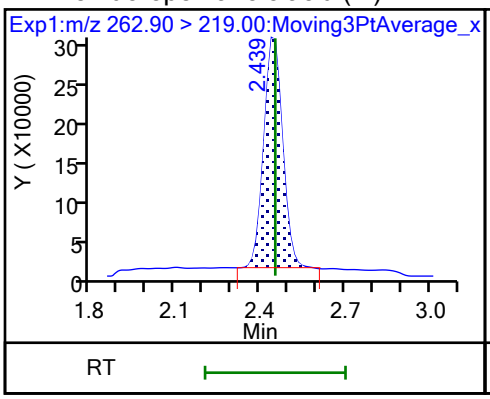
2 Perfluorobutanoic acid (M)



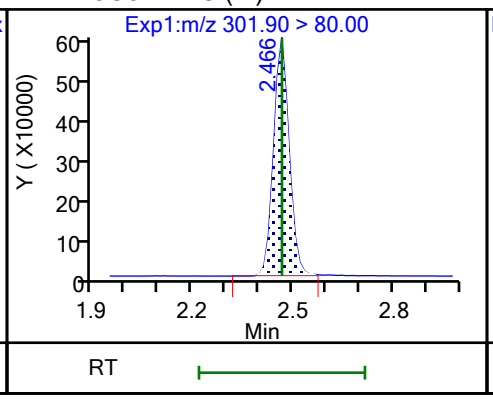
D 3 13C5 PFPeA



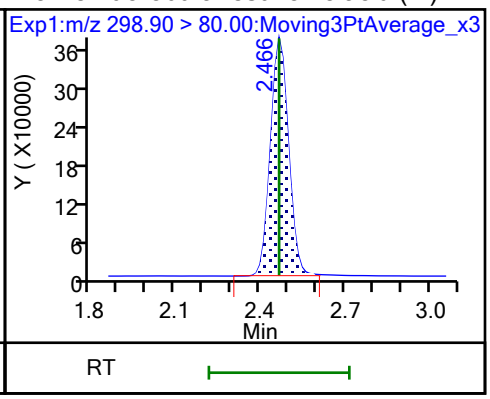
4 Perfluoropentanoic acid (M)



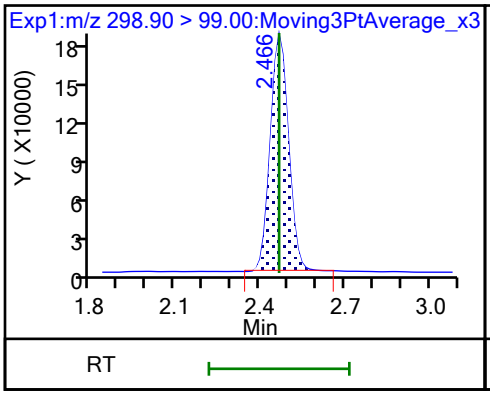
D 47 13C3 PFBS (M)



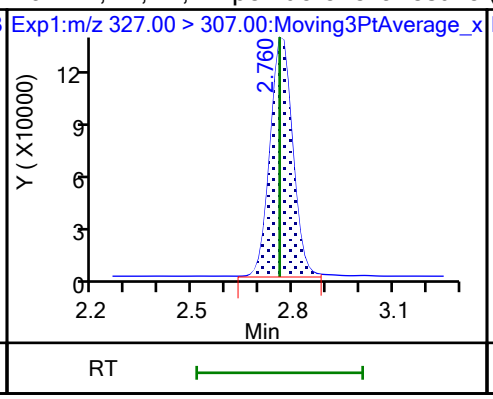
5 Perfluorobutanesulfonic acid (M)



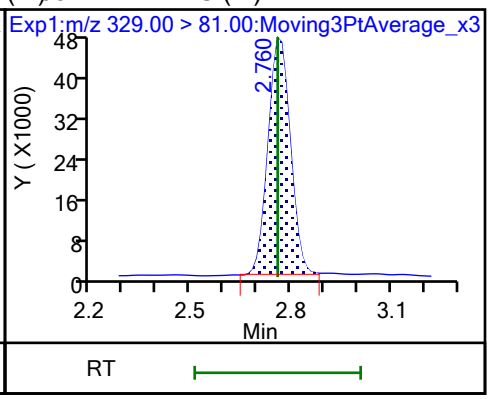
5 Perfluorobutanesulfonic acid



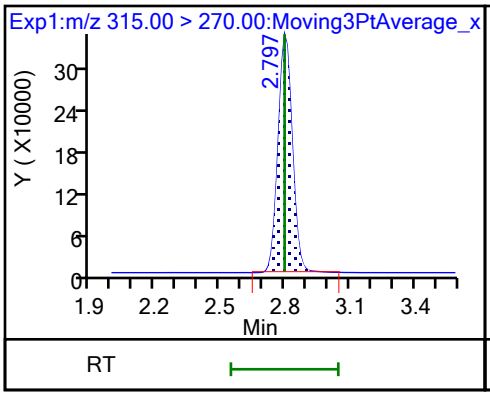
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



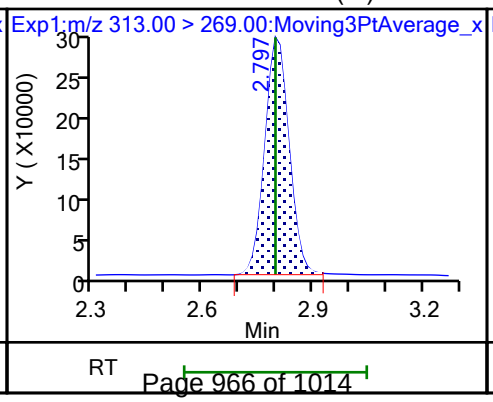
D 60 M2-4:2 FTS (M)



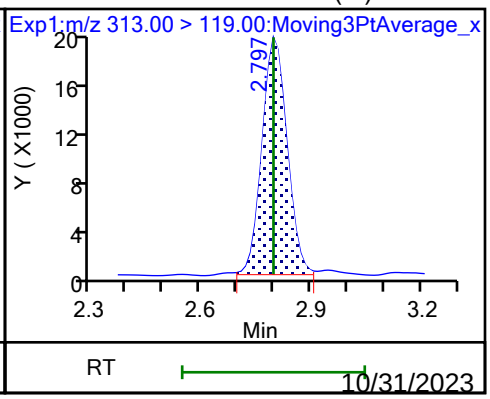
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

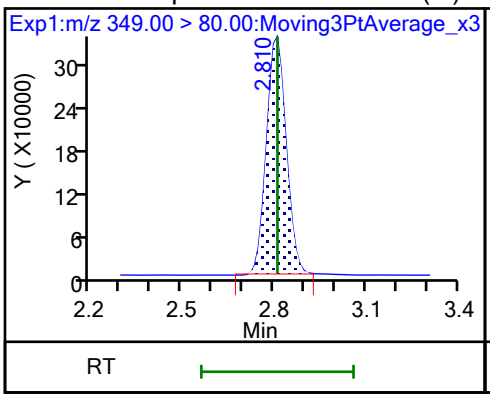


6 Perfluorohexanoic acid (M)

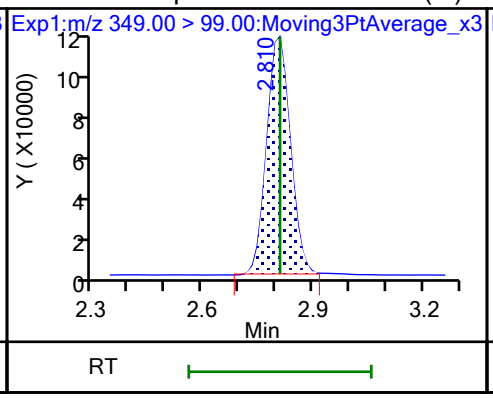


10/31/2023
4:00 PM

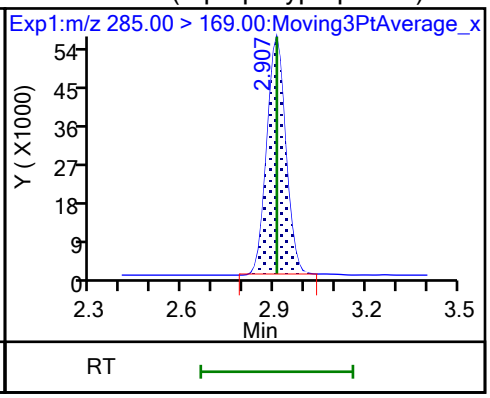
70 Perfluoropentanesulfonic acid (M)



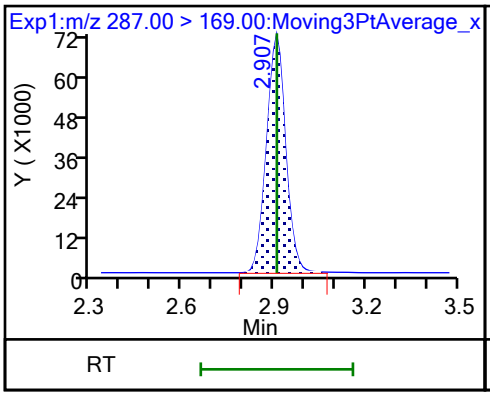
70 Perfluoropentanesulfonic acid (M)



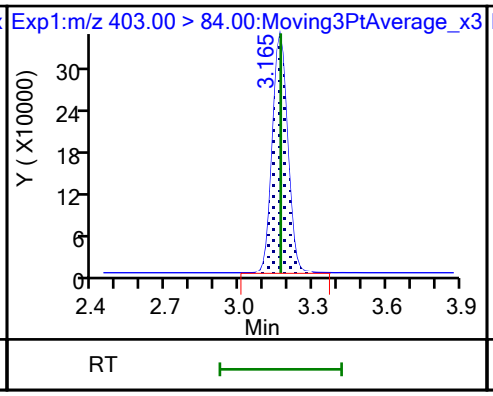
67 Perfluoro(2-propoxypropanoic) ac



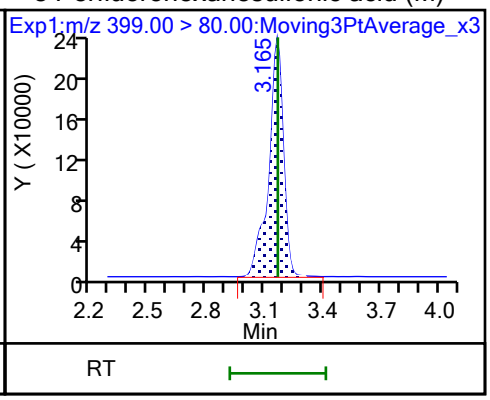
D 64 13C3 HFPO-DA



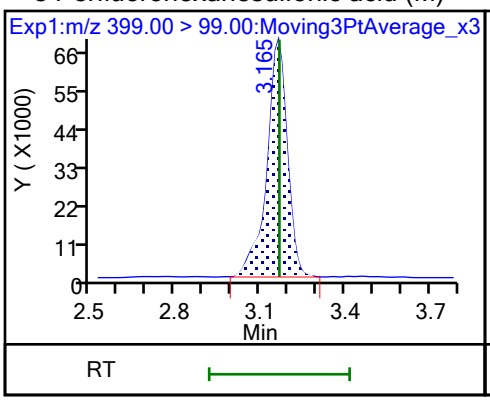
D 11 18O2 PFHxS



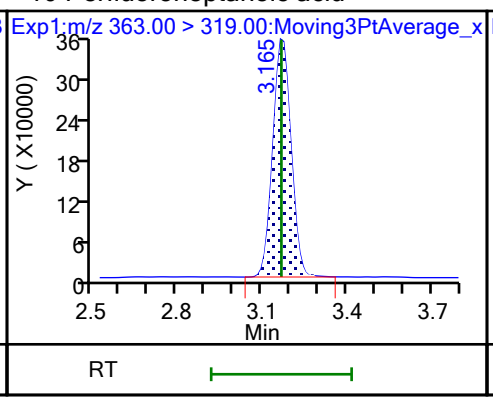
8 Perfluorohexanesulfonic acid (M)



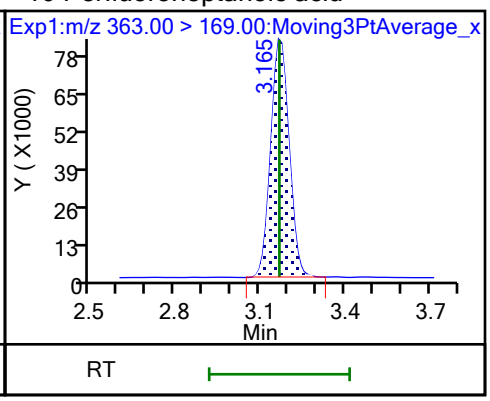
8 Perfluorohexanesulfonic acid (M)



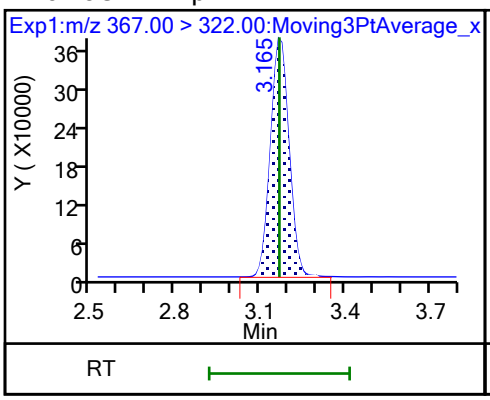
10 Perfluoroheptanoic acid



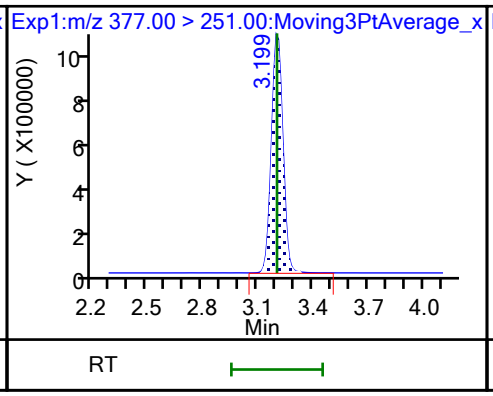
10 Perfluoroheptanoic acid



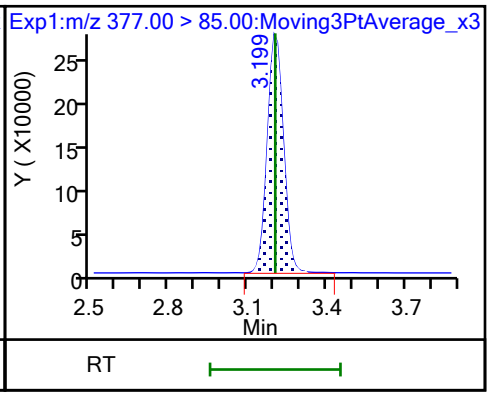
D 9 13C4 PFHpA



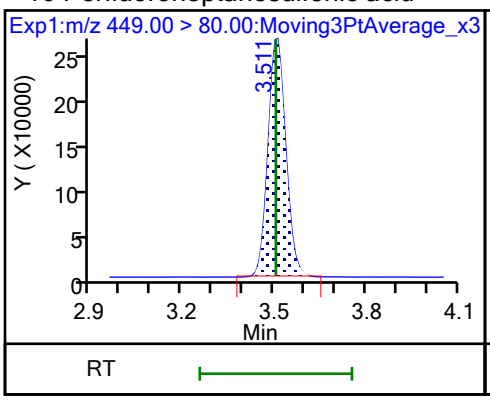
77 DONA



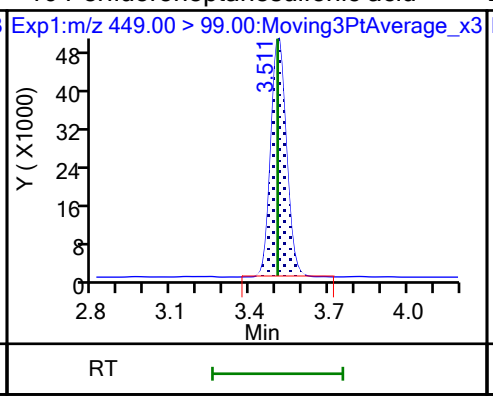
77 DONA



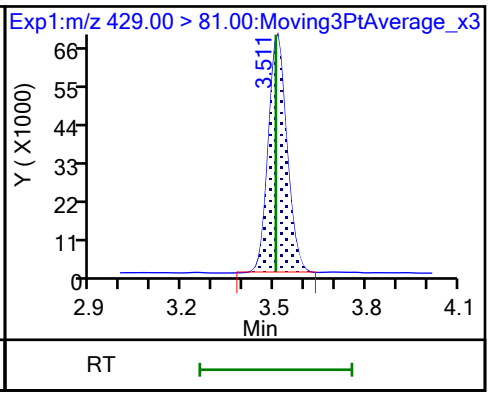
16 Perfluoroheptanesulfonic acid



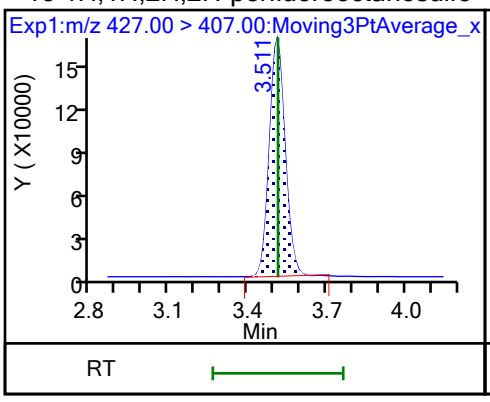
16 Perfluoroheptanesulfonic acid



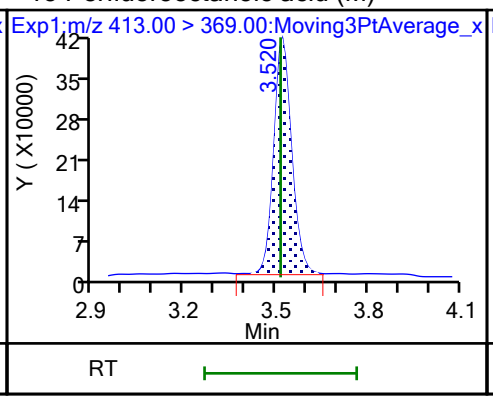
D 12 M2-6:2 FTS



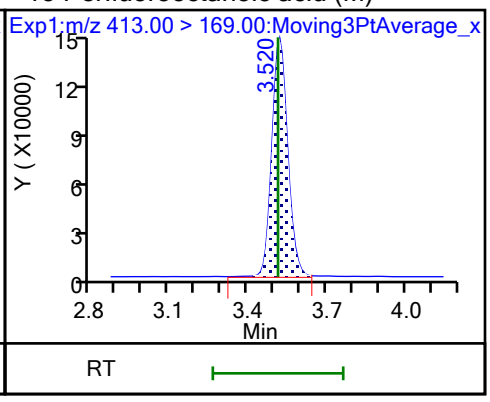
13 1H,1H,2H,2H-perfluorooctanesulfo



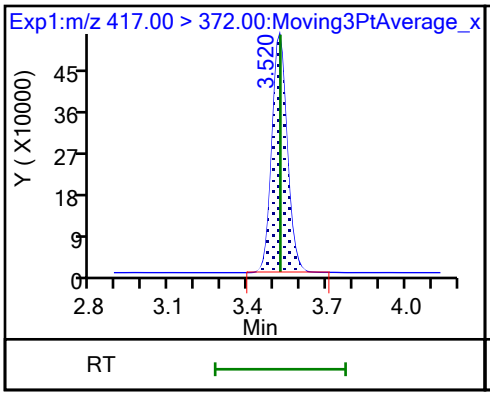
15 Perfluorooctanoic acid (M)



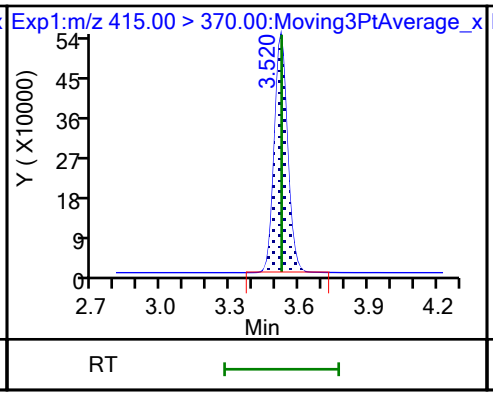
15 Perfluorooctanoic acid (M)



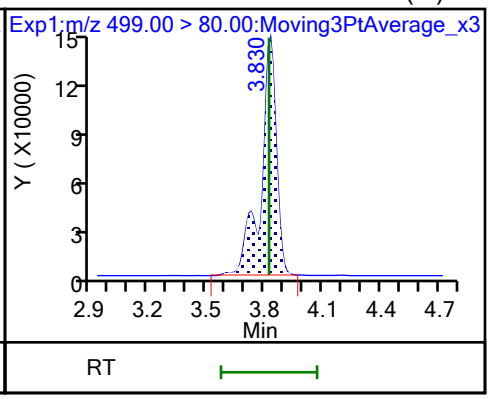
D 14 13C4 PFOA



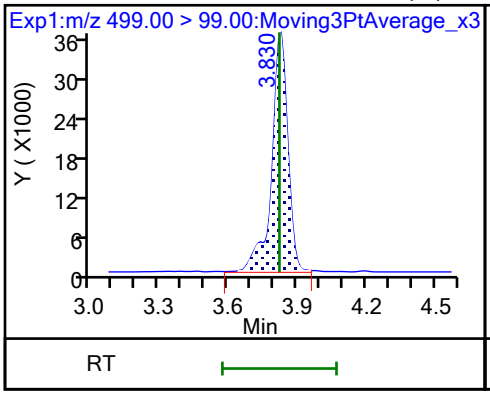
* 62 13C2 PFOA



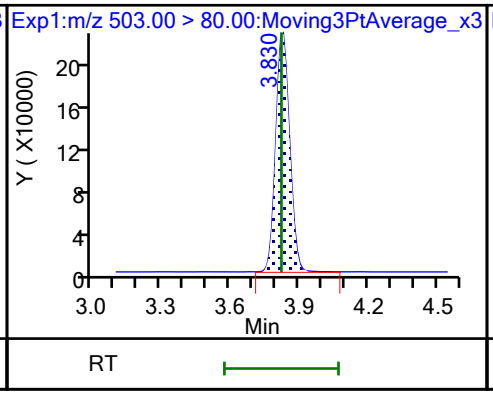
17 Perfluorooctanesulfonic acid (M)



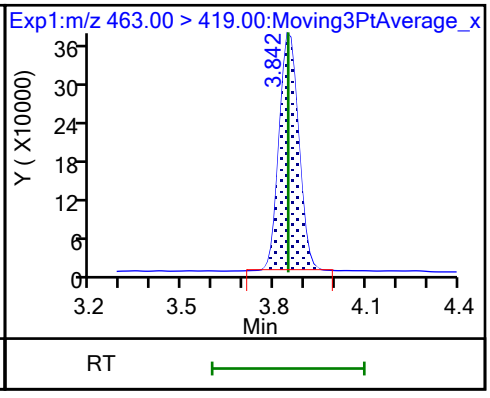
17 Perfluorooctanesulfonic acid (M)



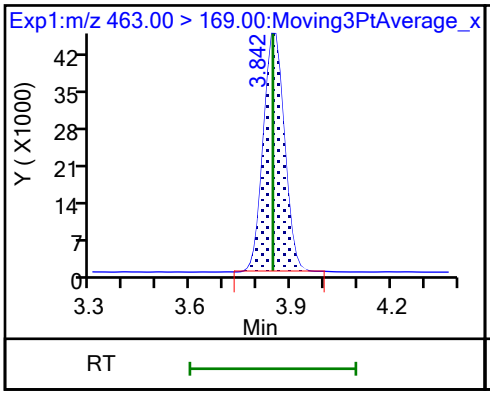
D 18 13C4 PFOS



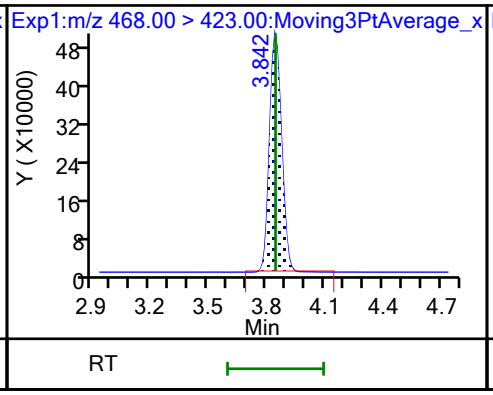
20 Perfluorononanoic acid



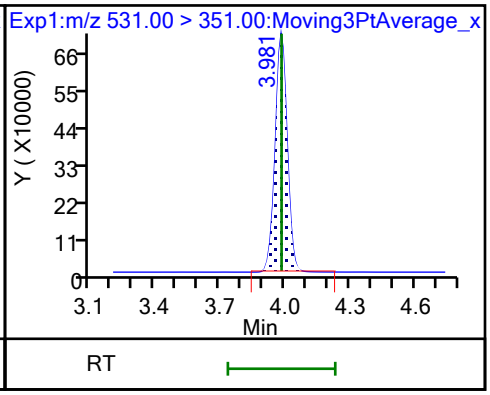
20 Perfluorononanoic acid



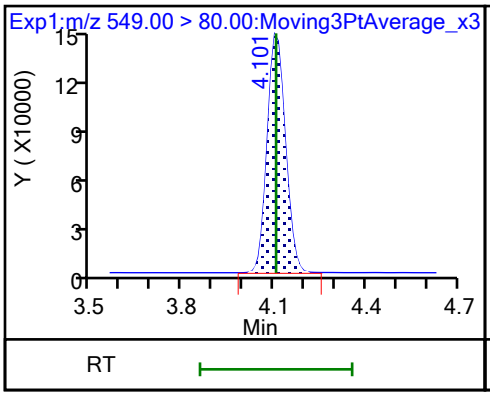
D 19 13C5 PFNA



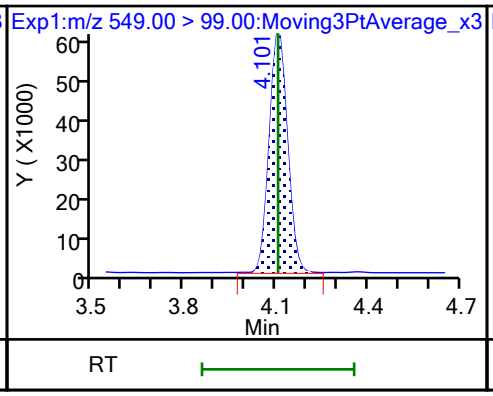
69 9-Chlorohexadecafluoro-3-oxanona



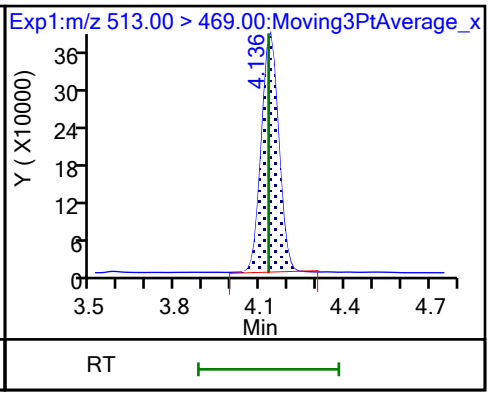
68 Perfluorononanesulfonic acid



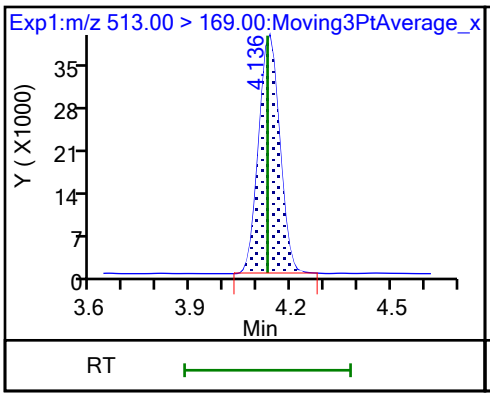
68 Perfluorononanesulfonic acid



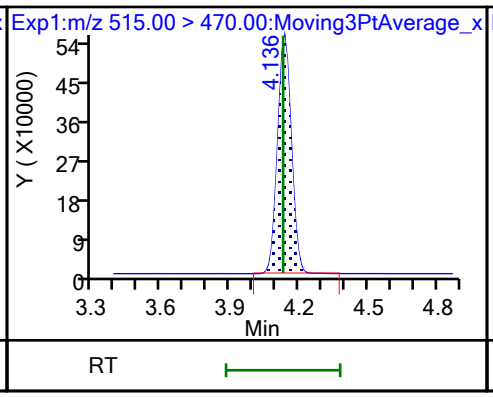
24 Perfluorodecanoic acid



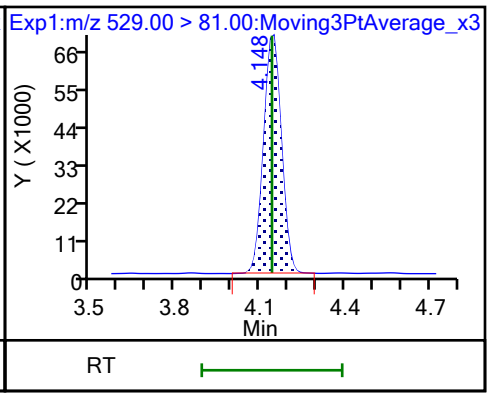
24 Perfluorodecanoic acid



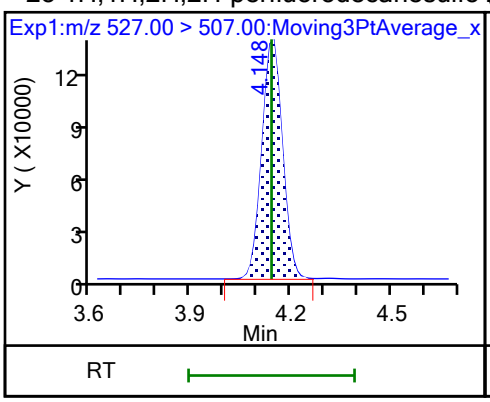
D 23 13C2 PFDA



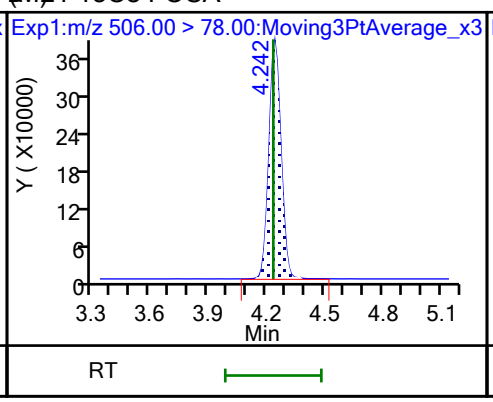
D 26 M2-8:2 FTS



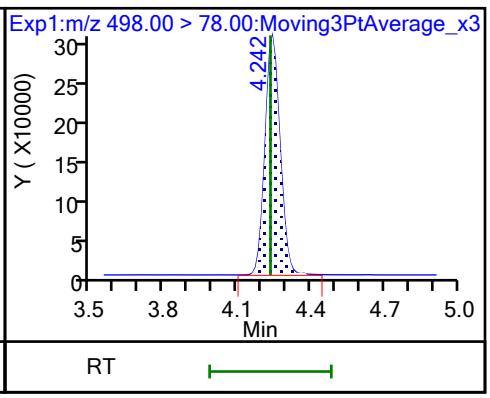
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



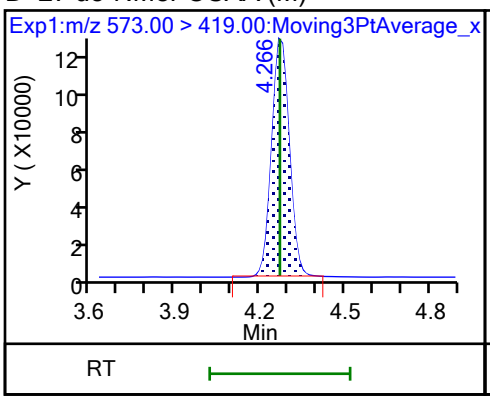
D 21 13C8 FOSA



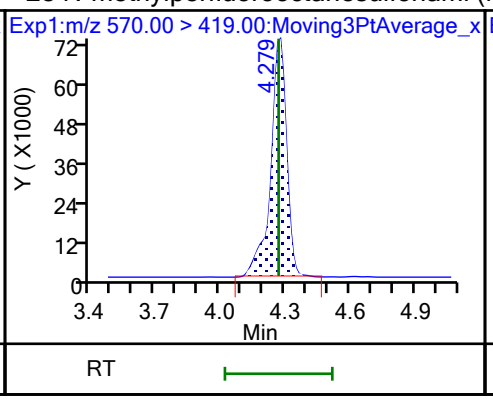
22 Perfluorooctanesulfonamide



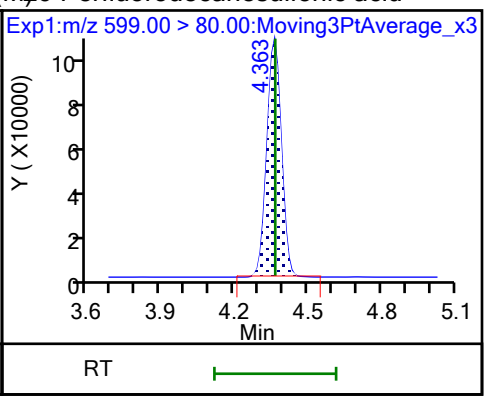
D 27 d3-NMeFOSAA (M)



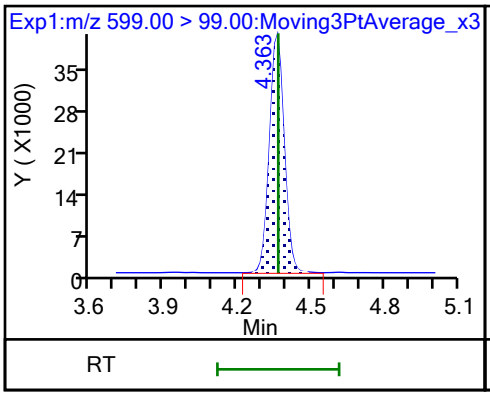
28 N-methylperfluorooctanesulfonami (M)



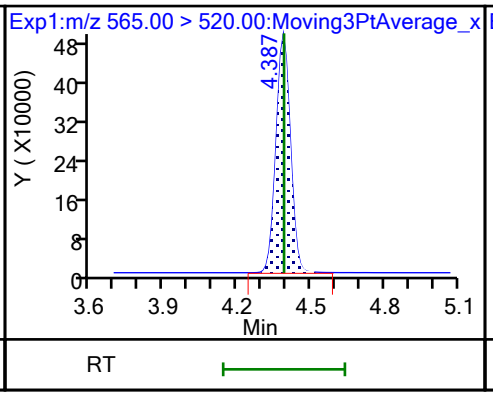
29 Perfluorodecanesulfonic acid



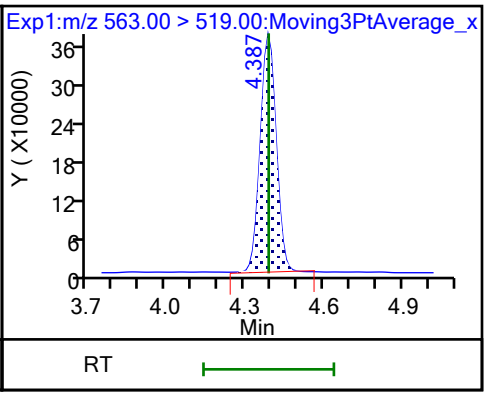
29 Perfluorodecanesulfonic acid



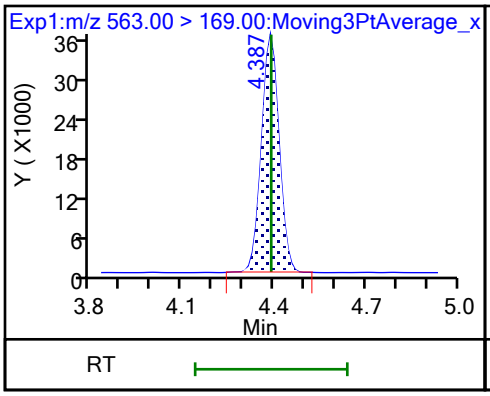
D 30 13C2 PFUnA



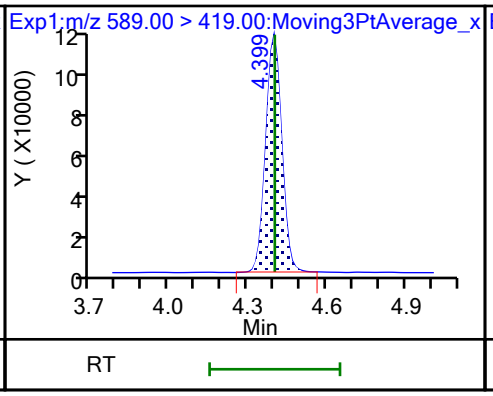
31 Perfluoroundecanoic acid



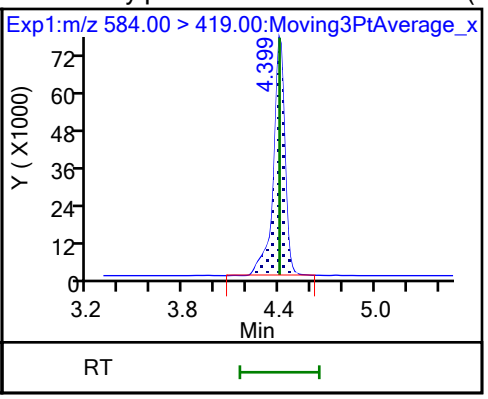
31 Perfluoroundecanoic acid



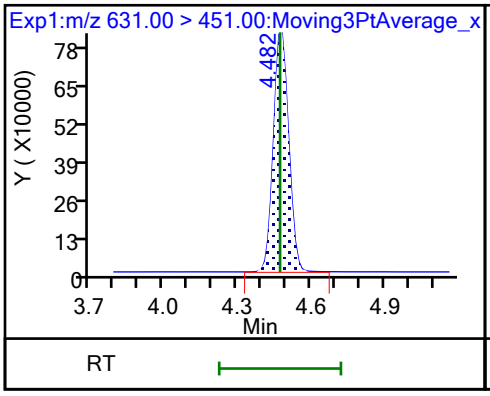
D 32 d5-NEtFOSAA



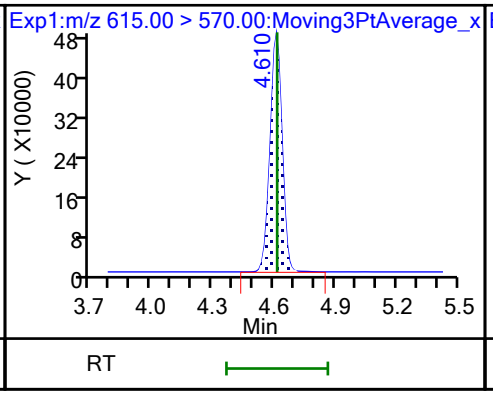
33 N-ethylperfluorooctanesulfonamid (M)



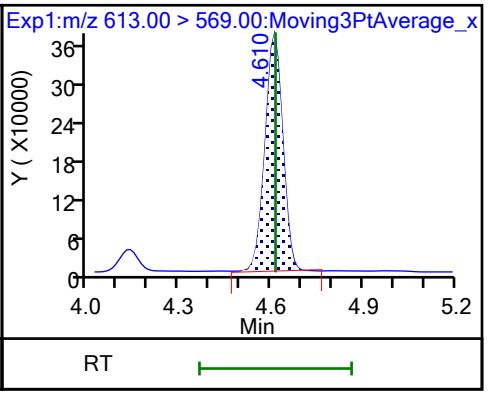
66 11-Chloroeicosafluoro-3-oxaundec



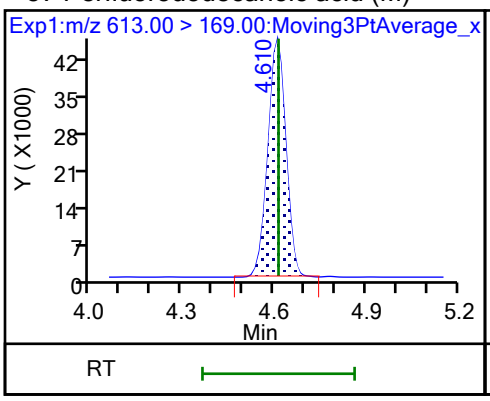
D 36 13C2 PFDoA



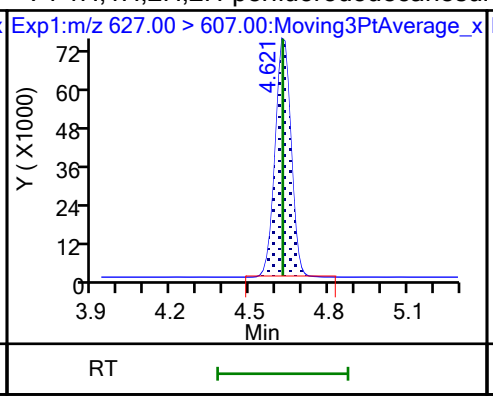
37 Perfluorododecanoic acid



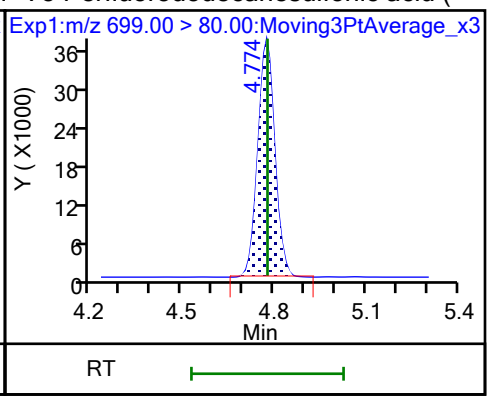
37 Perfluorododecanoic acid (M)



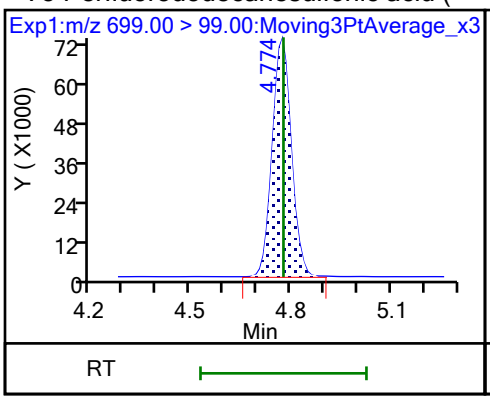
74 1H,1H,2H,2H-perfluorododecanesul



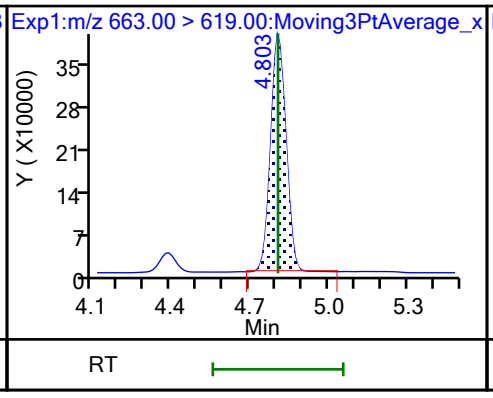
75 Perfluorododecanesulfonic acid (



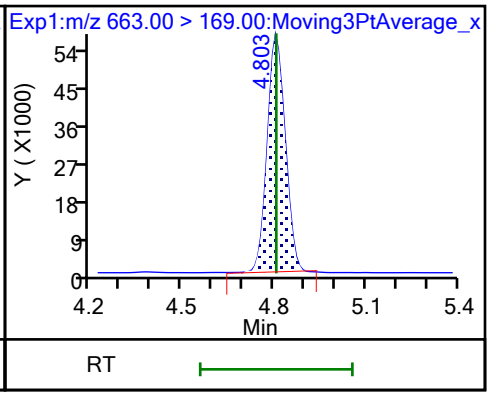
75 Perfluorododecanesulfonic acid (



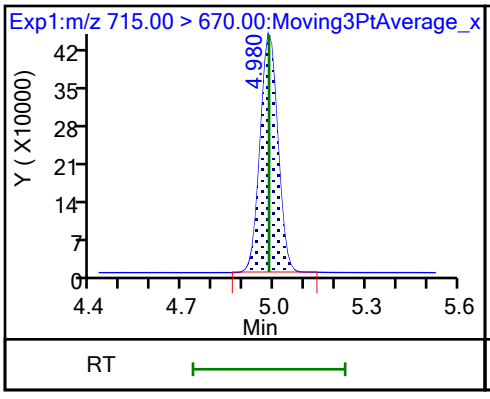
41 Perfluorotridecanoic acid



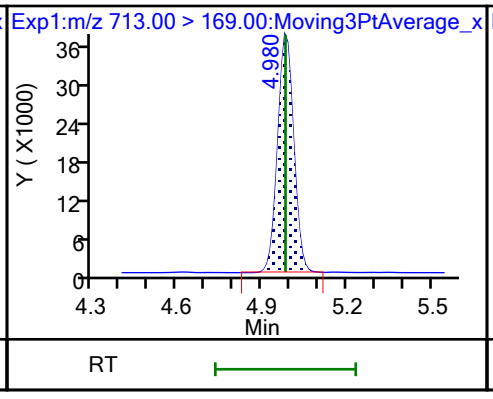
41 Perfluorotridecanoic acid



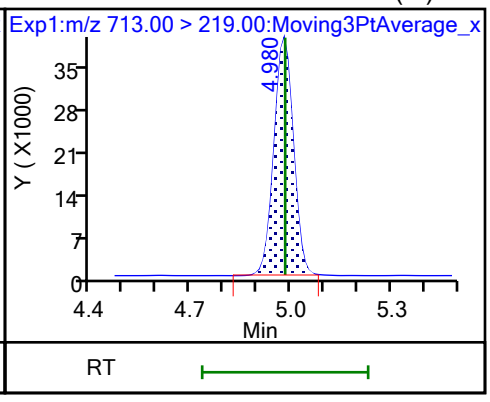
D 43 13C2 PFTeDA



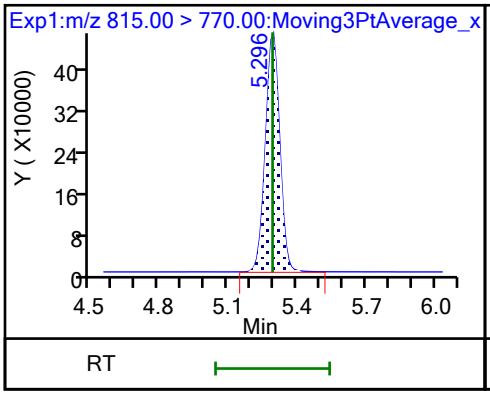
42 Perfluorotetradecanoic acid



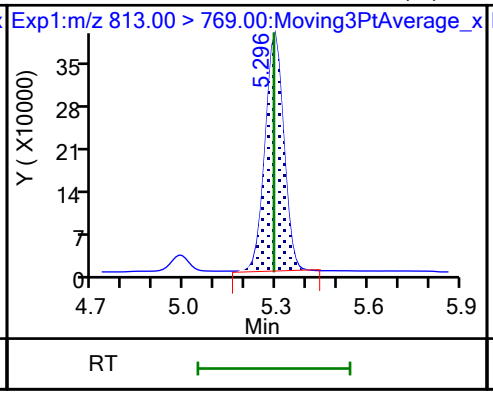
42 Perfluorotetradecanoic acid (M)



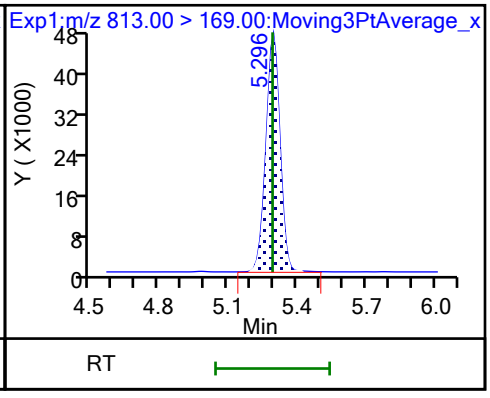
D 44 13C2 PFHxDA



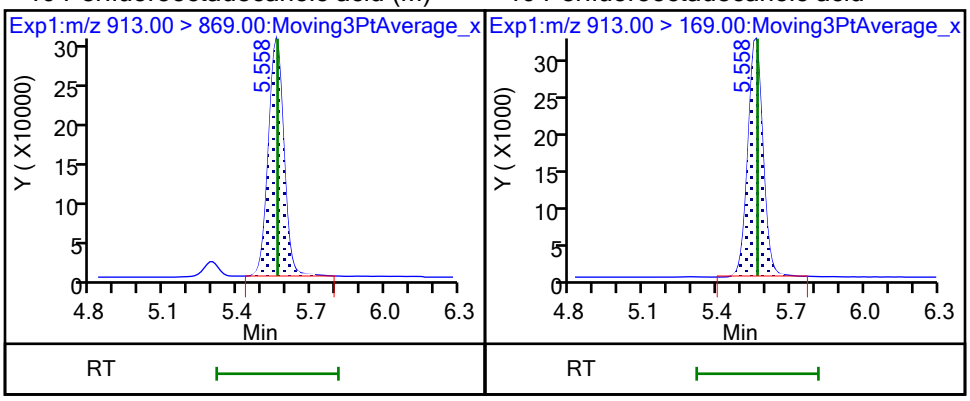
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

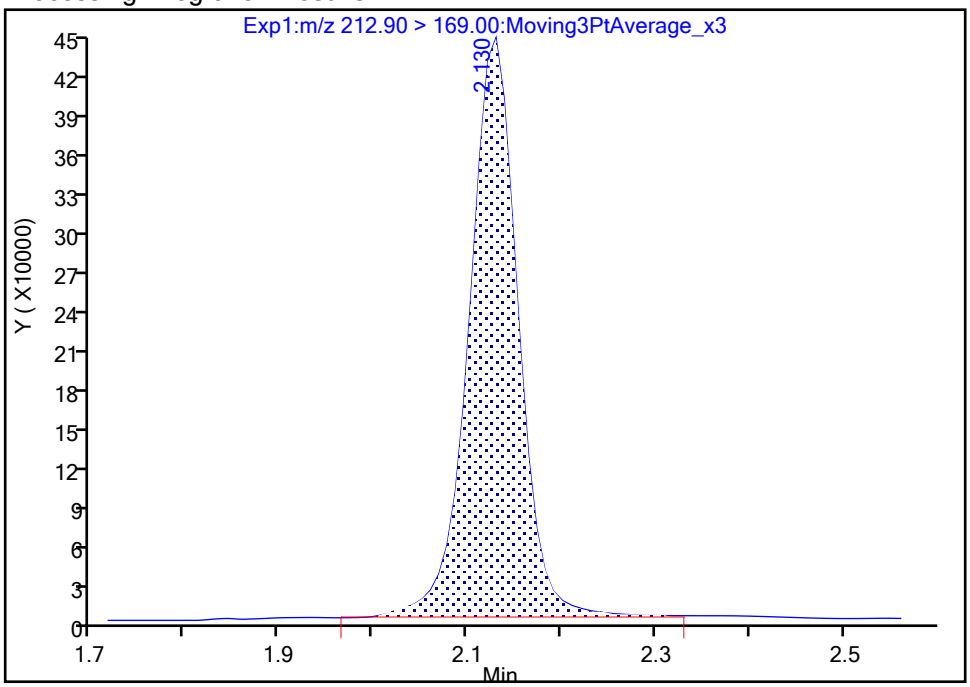
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Injection Date: 23-Oct-2023 23:41:21 Instrument ID: LC812
Lims ID: LCSD 200-196646/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

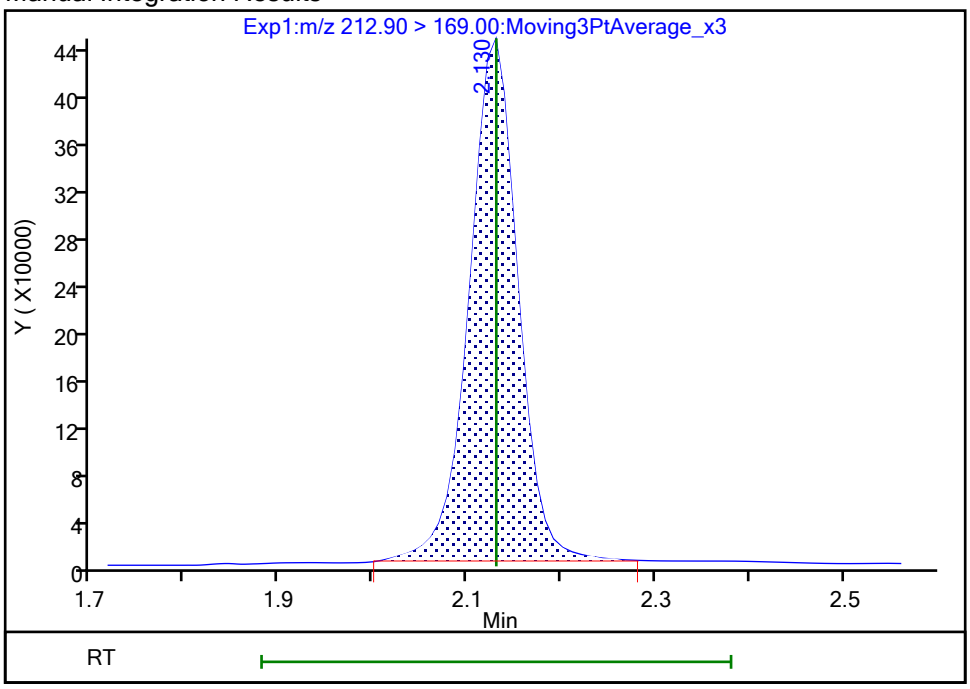
Processing Integration Results

RT: 2.13
Area: 1610125
Amount: 0.984360
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1595265
Amount: 0.974897
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

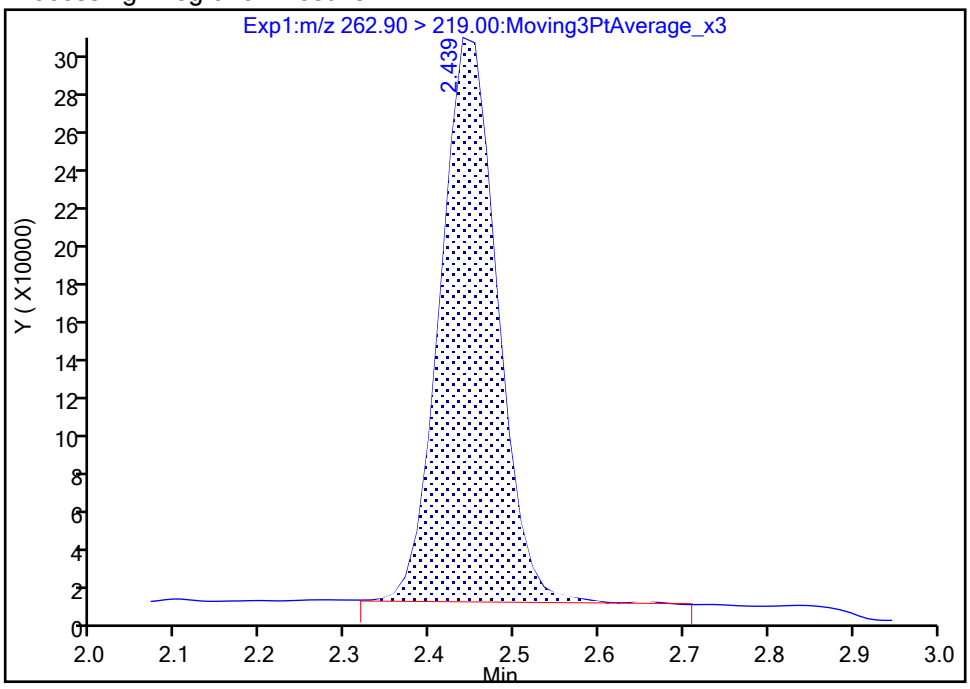
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

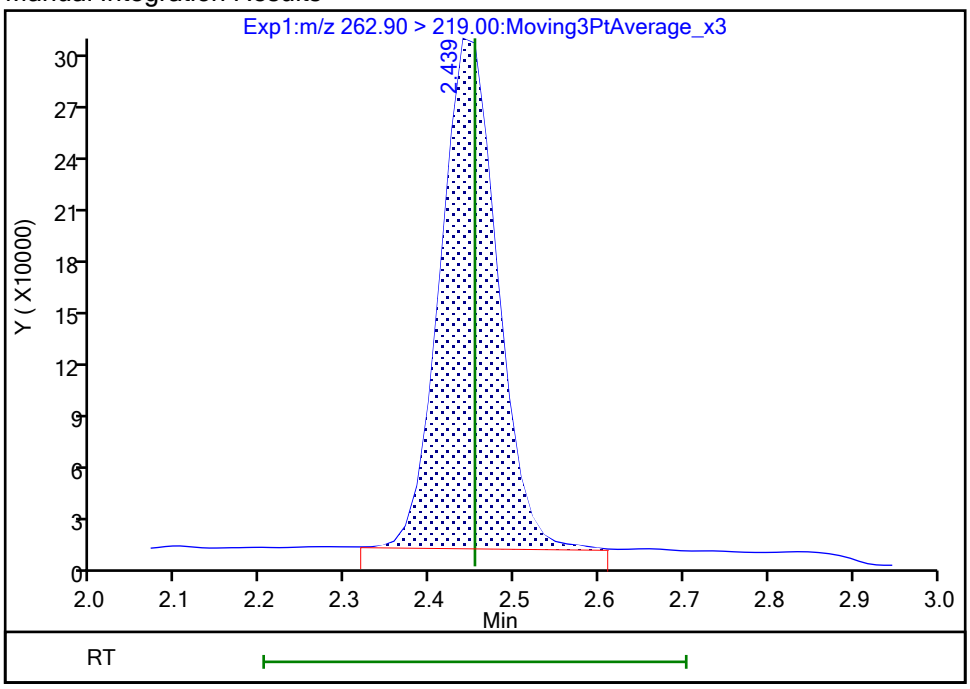
Processing Integration Results

RT: 2.44
Area: 1402036
Amount: 1.014575
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1393700
Amount: 1.008542
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

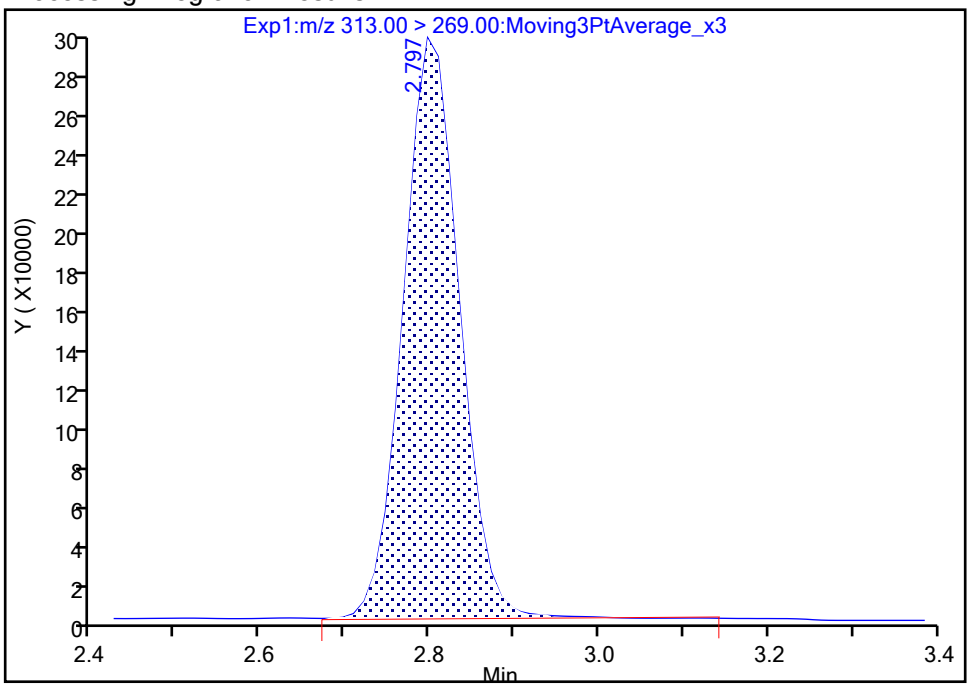
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Injection Date: 23-Oct-2023 23:41:21 Instrument ID: LC812
Lims ID: LCSD 200-196646/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

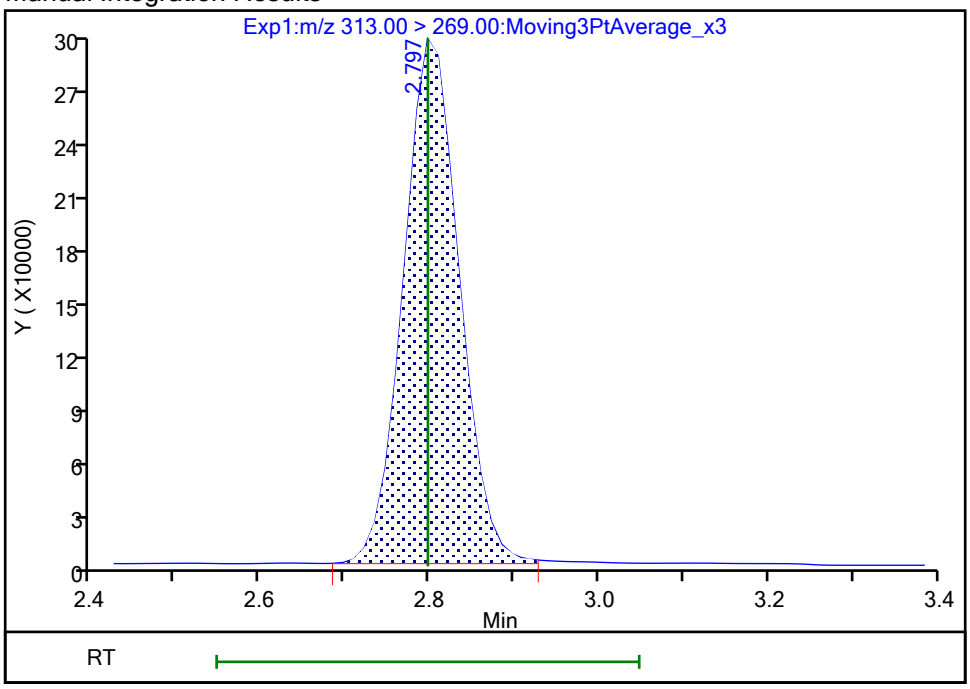
Processing Integration Results

RT: 2.80
Area: 1364631
Amount: 0.970320
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1357332
Amount: 0.965130
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

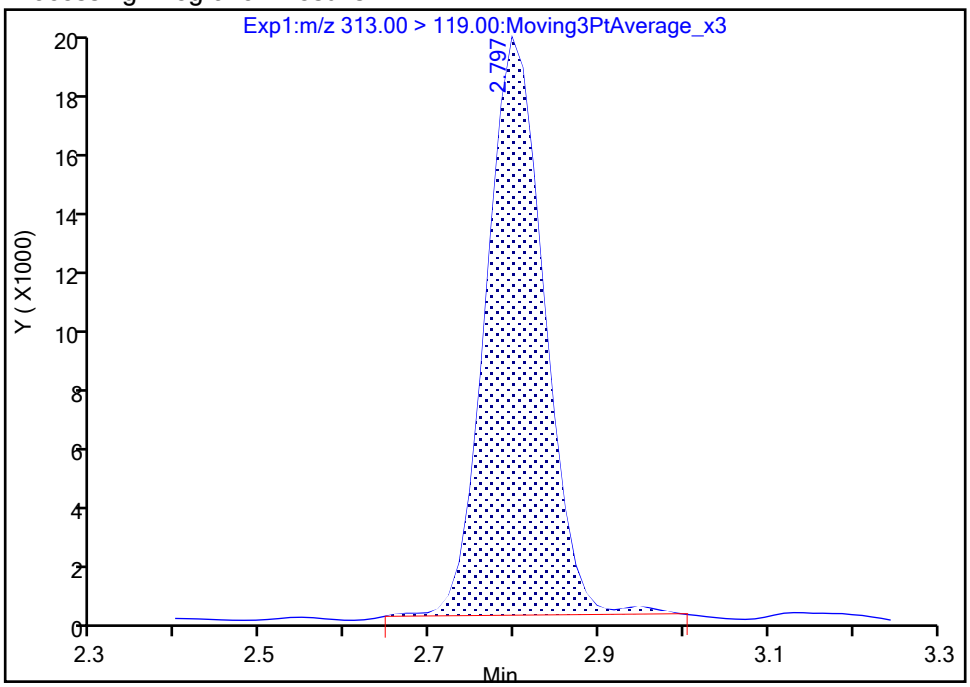
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

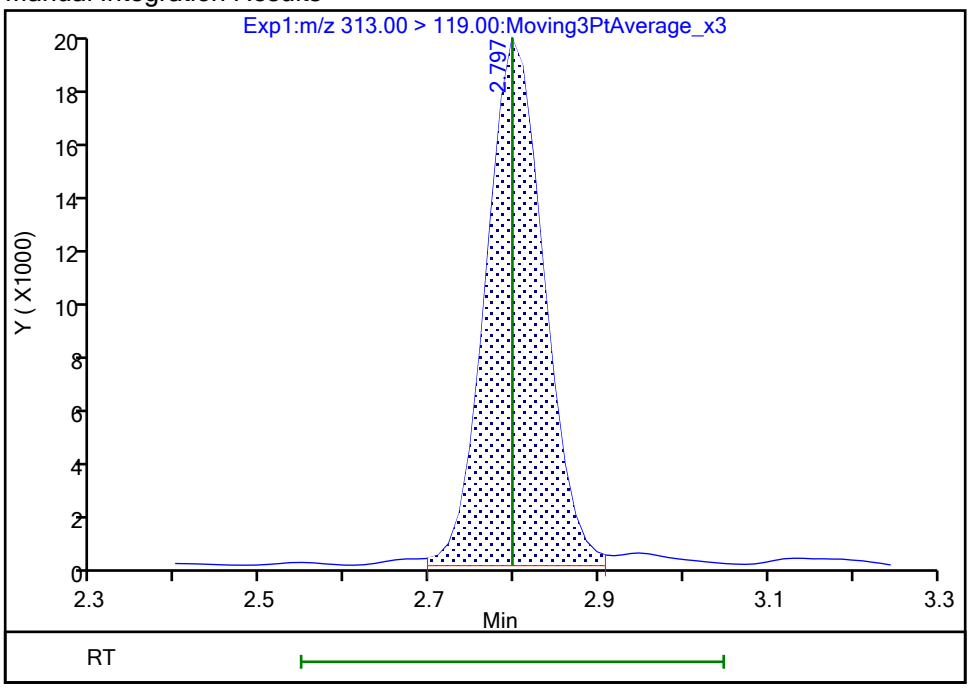
Processing Integration Results

RT: 2.80
Area: 90517
Amount: 0.970320
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 91038
Amount: 0.965130
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

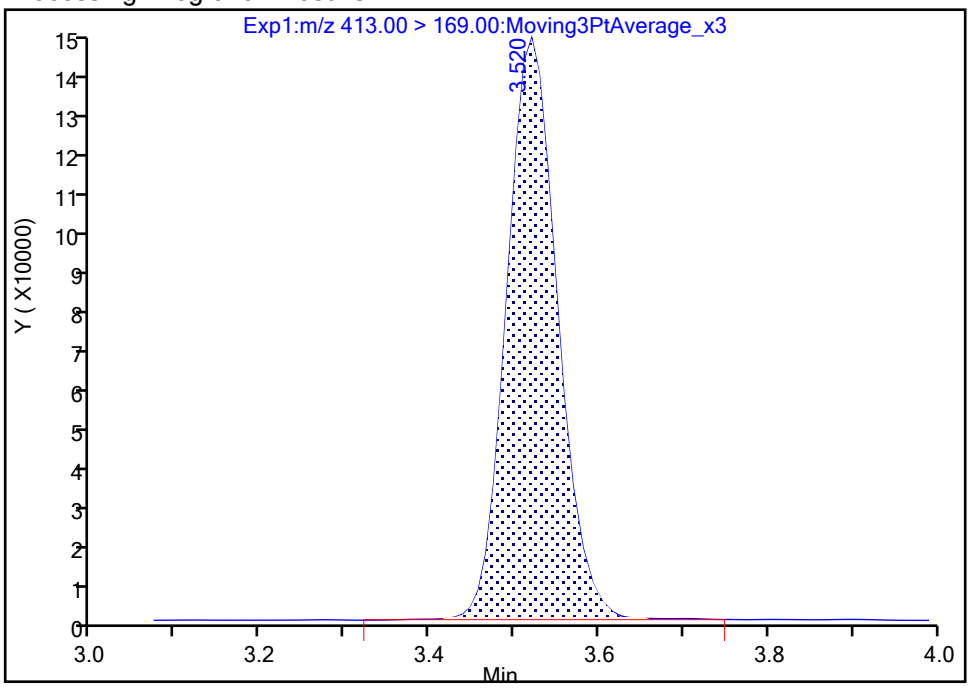
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

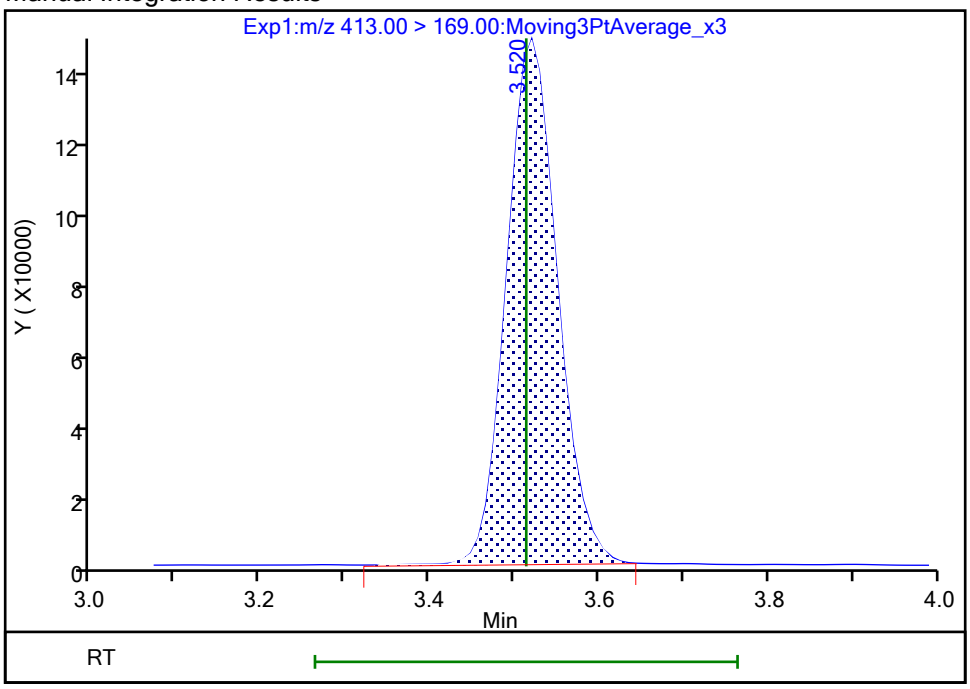
Processing Integration Results

RT: 3.52
Area: 613310
Amount: 0.924179
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 612003
Amount: 0.922381
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

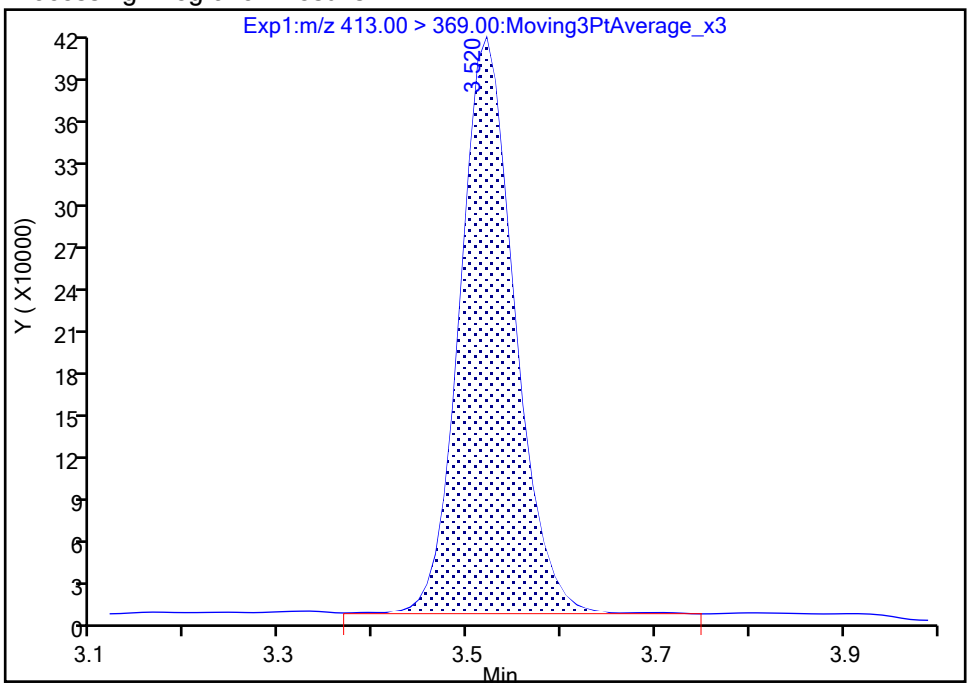
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

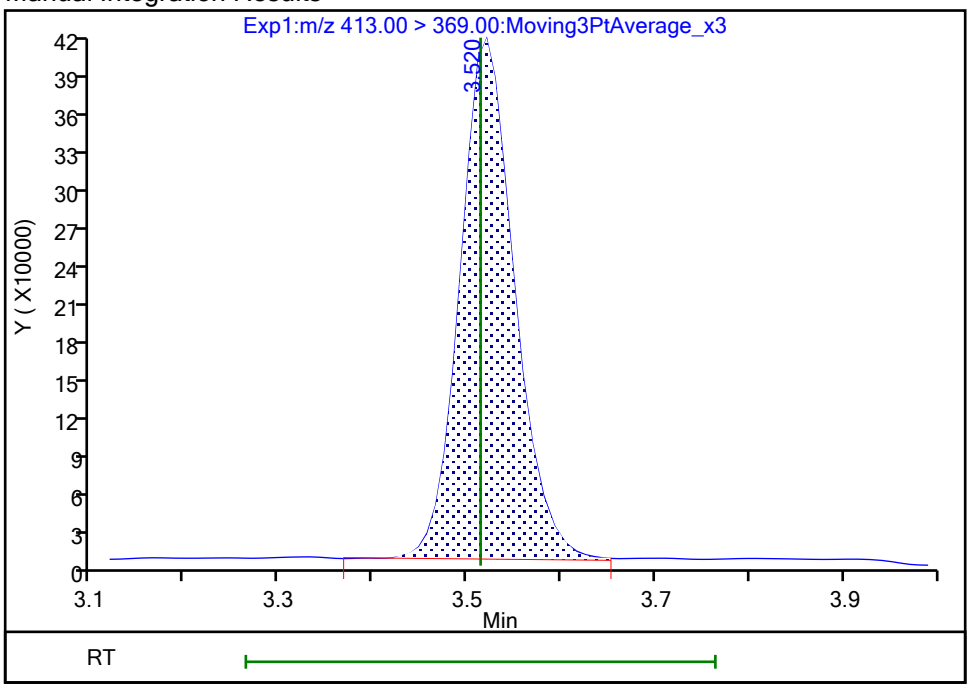
Processing Integration Results

RT: 3.52
Area: 1673227
Amount: 0.924179
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1669972
Amount: 0.922381
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

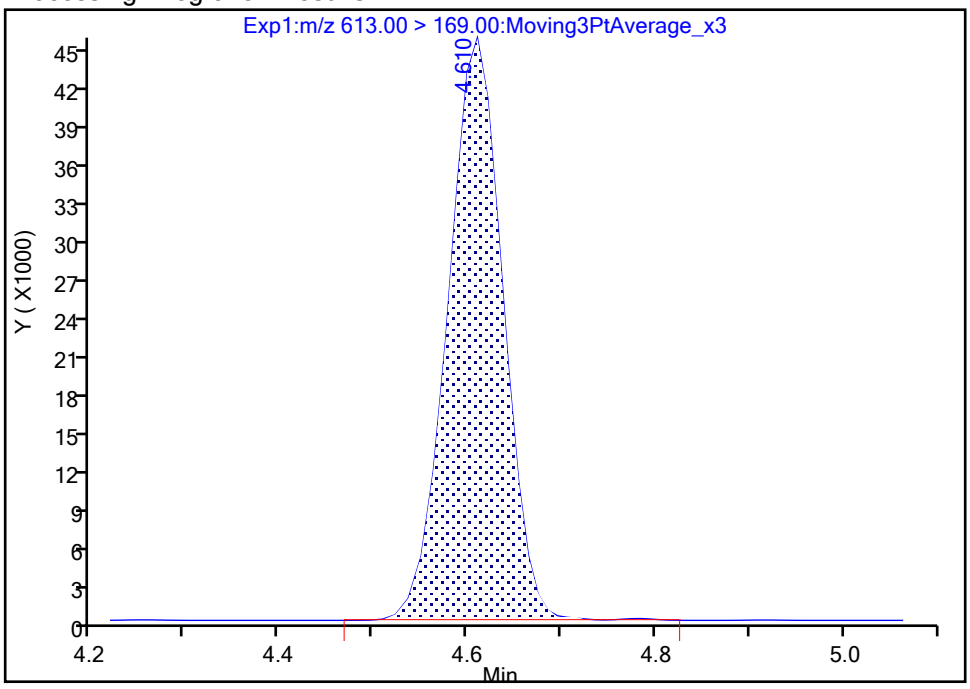
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

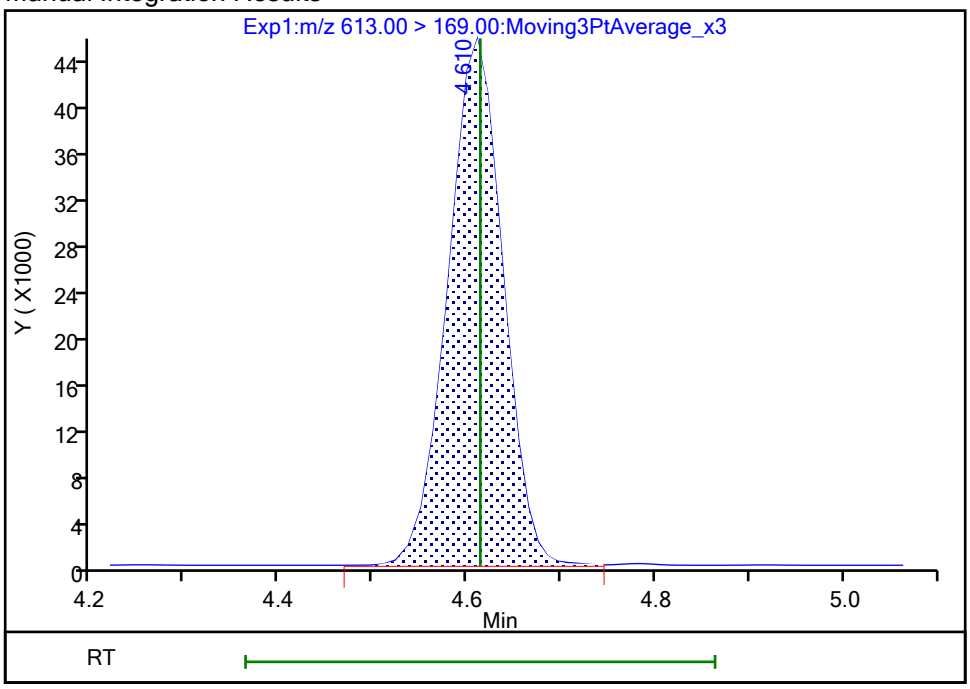
Processing Integration Results

RT: 4.61
Area: 186397
Amount: 0.925254
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 186043
Amount: 0.925254
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:13:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

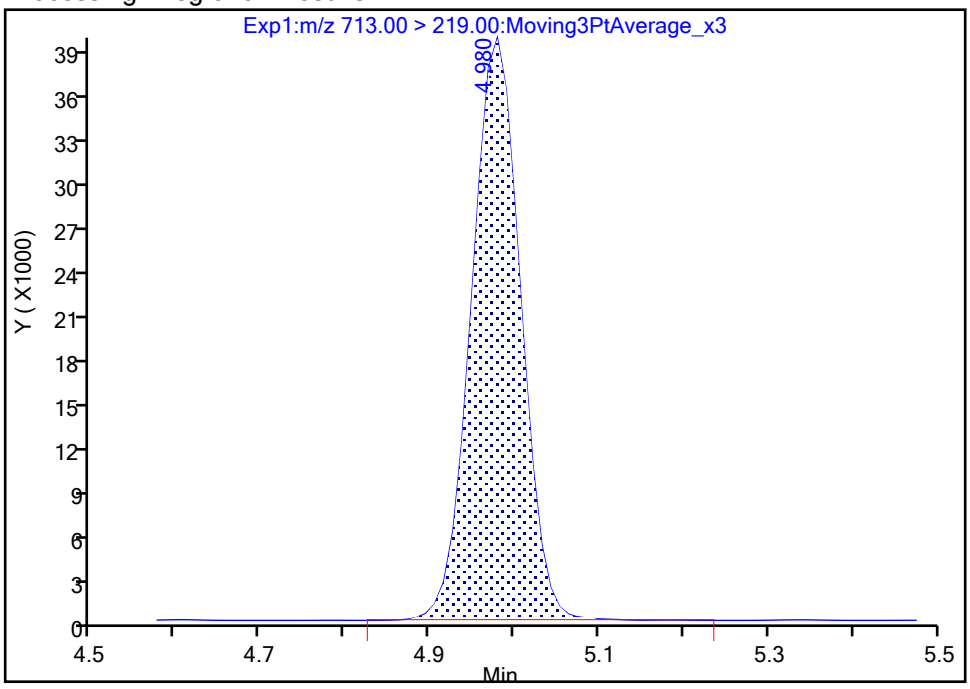
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

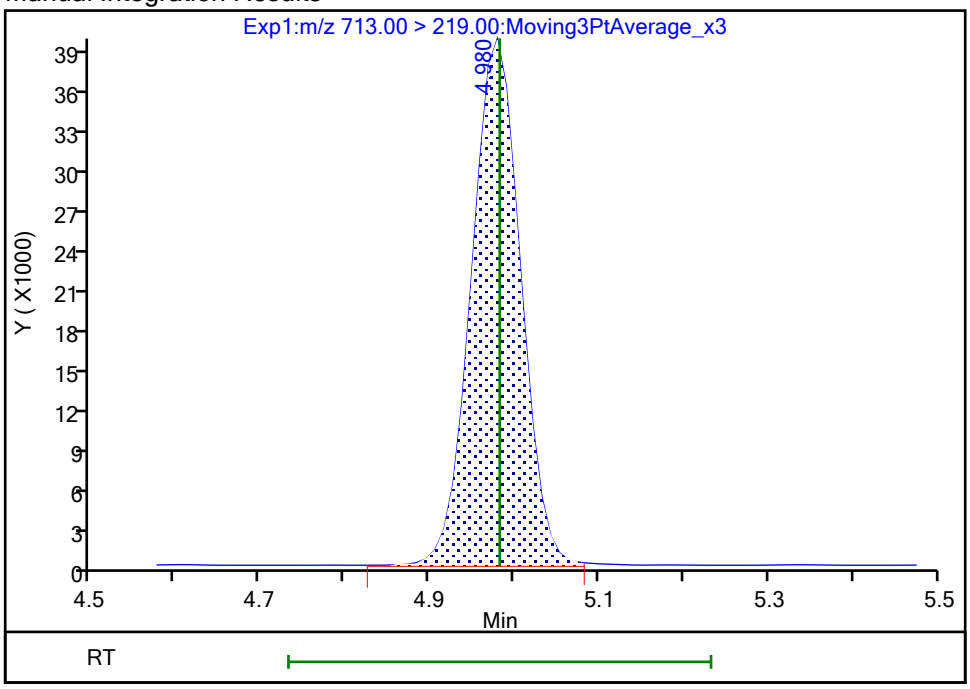
Processing Integration Results

RT: 4.98
Area: 158410
Amount: 0.914906
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 158039
Amount: 0.914906
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:13:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

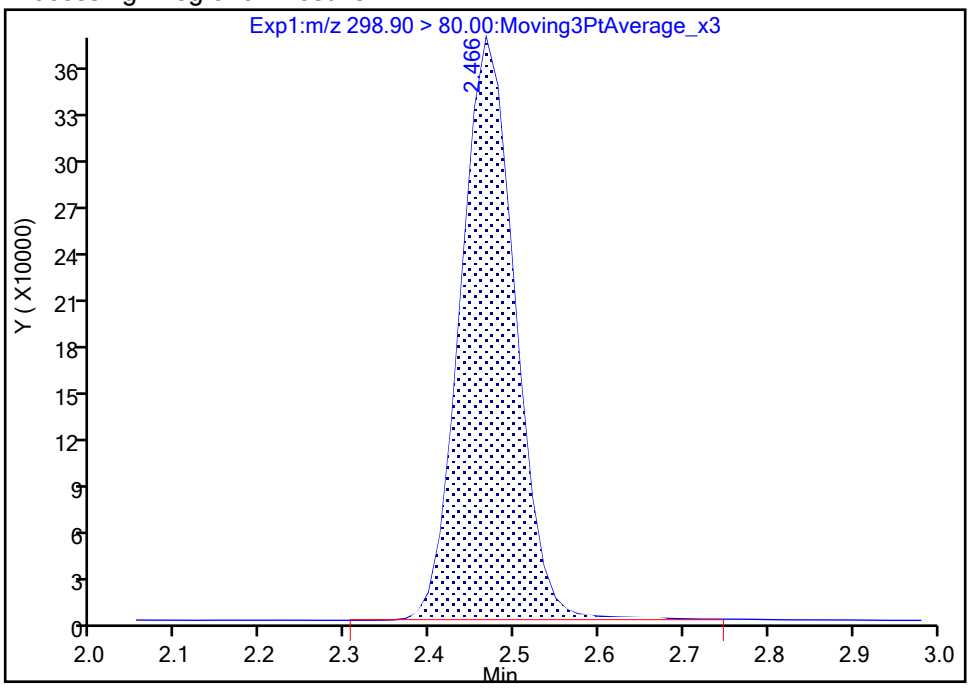
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d
Injection Date: 23-Oct-2023 23:41:21 Instrument ID: LC812
Lims ID: LCSD 200-196646/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

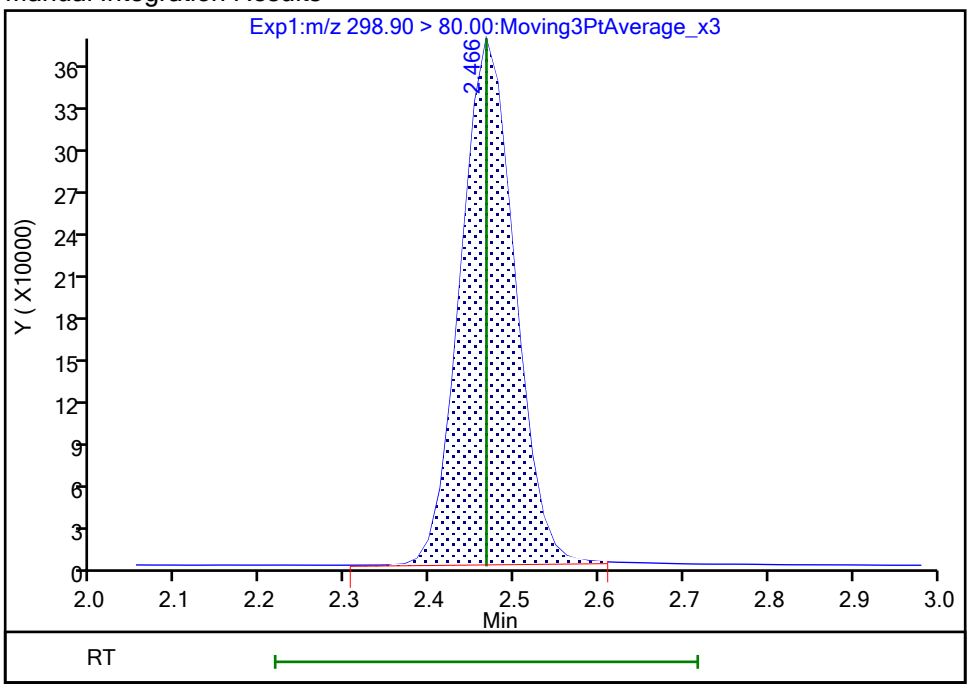
Processing Integration Results

RT: 2.47
Area: 1682461
Amount: 0.900535
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1676387
Amount: 0.897284
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

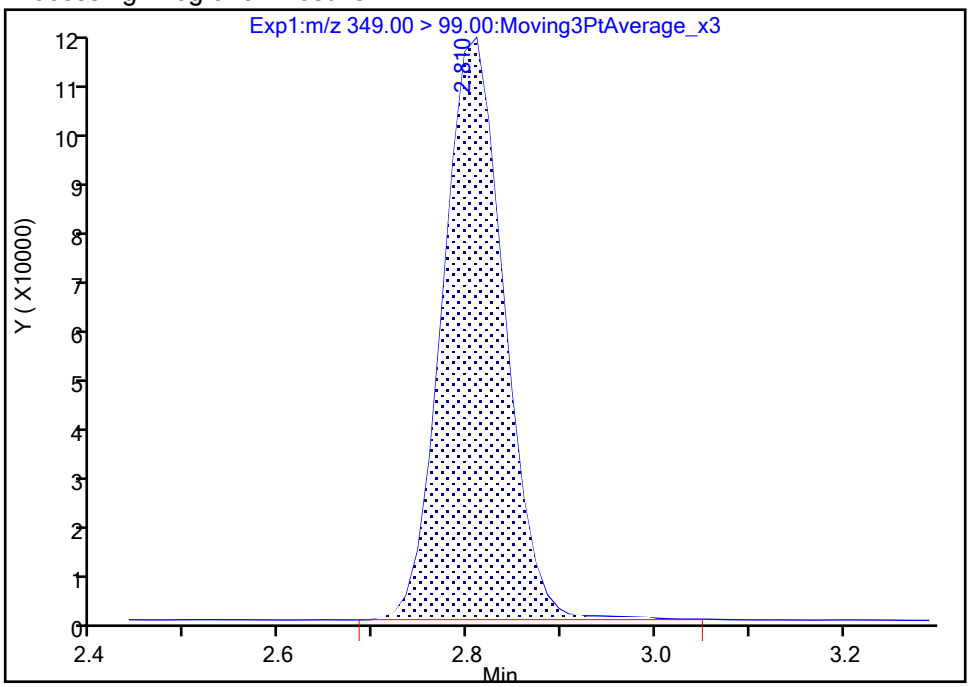
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

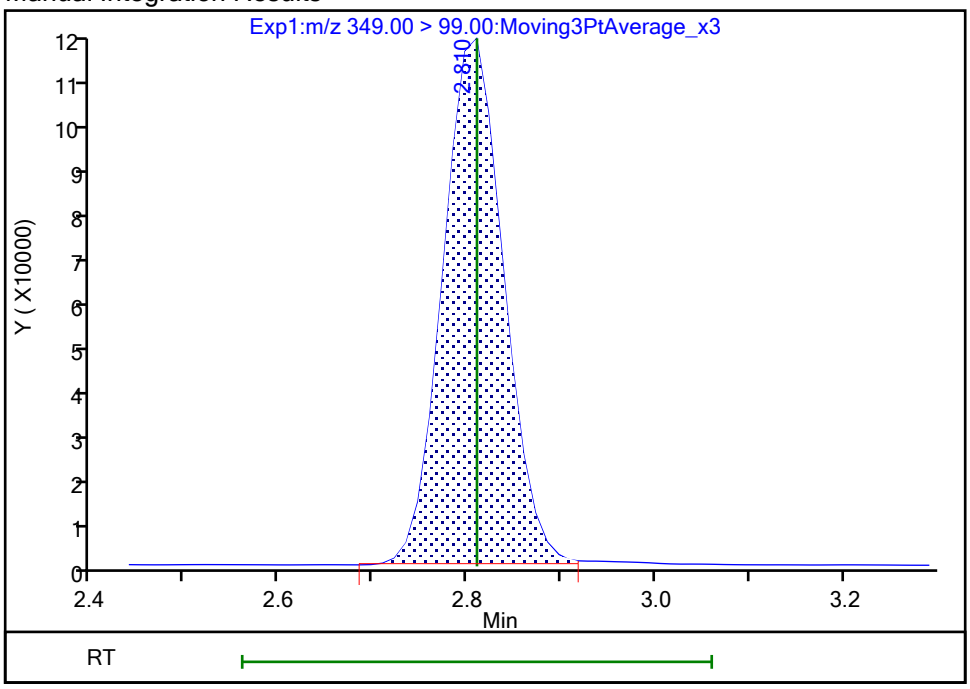
Processing Integration Results

RT: 2.81
Area: 519558
Amount: 0.936444
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 516675
Amount: 0.931121
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

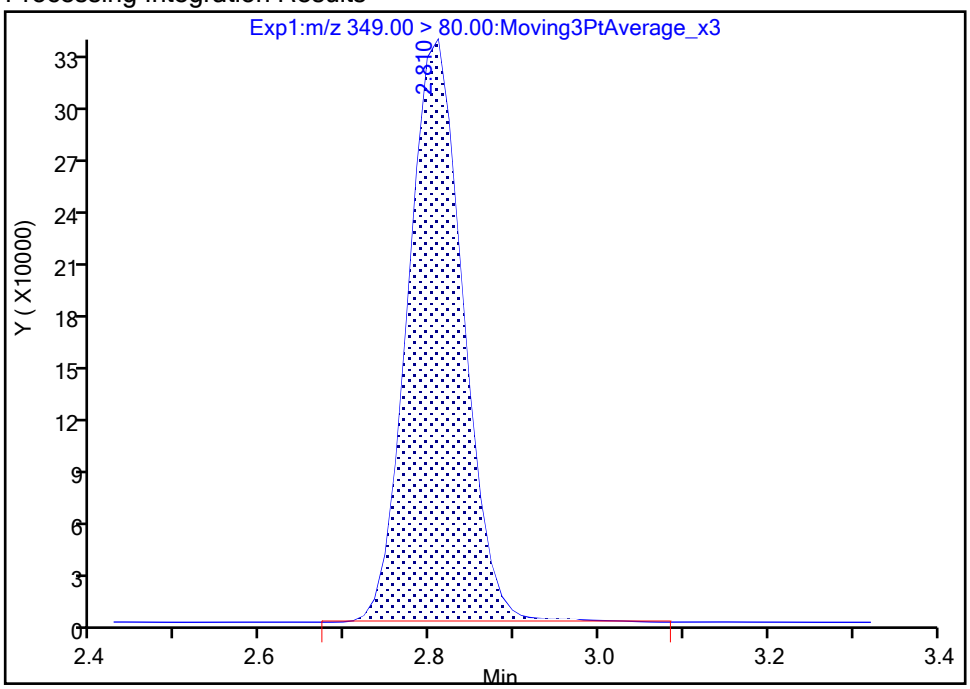
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

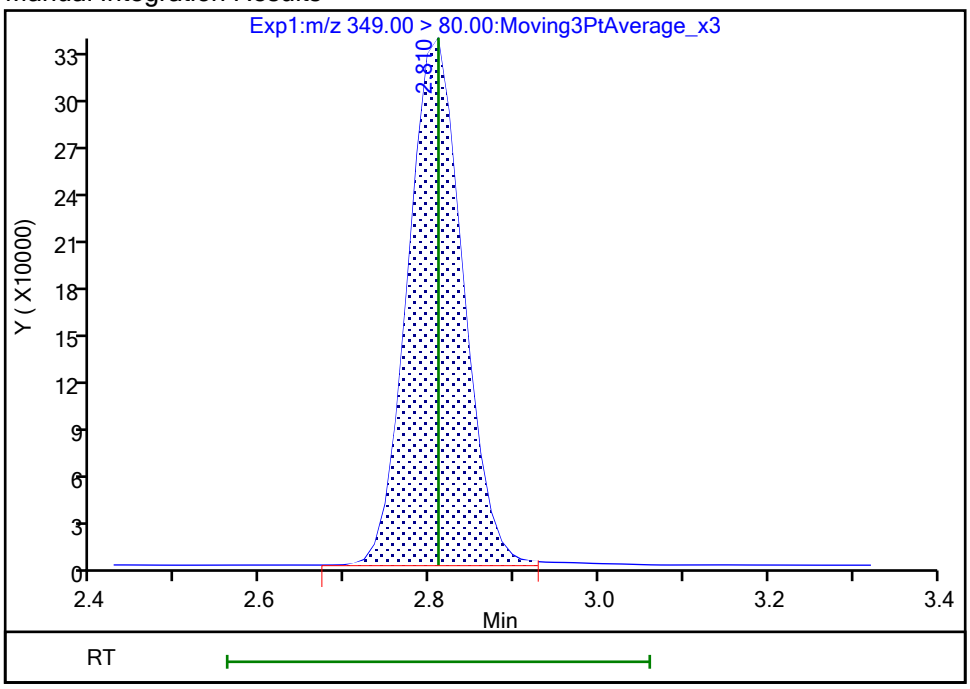
Processing Integration Results

RT: 2.81
Area: 1535002
Amount: 0.936444
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1526277
Amount: 0.931121
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

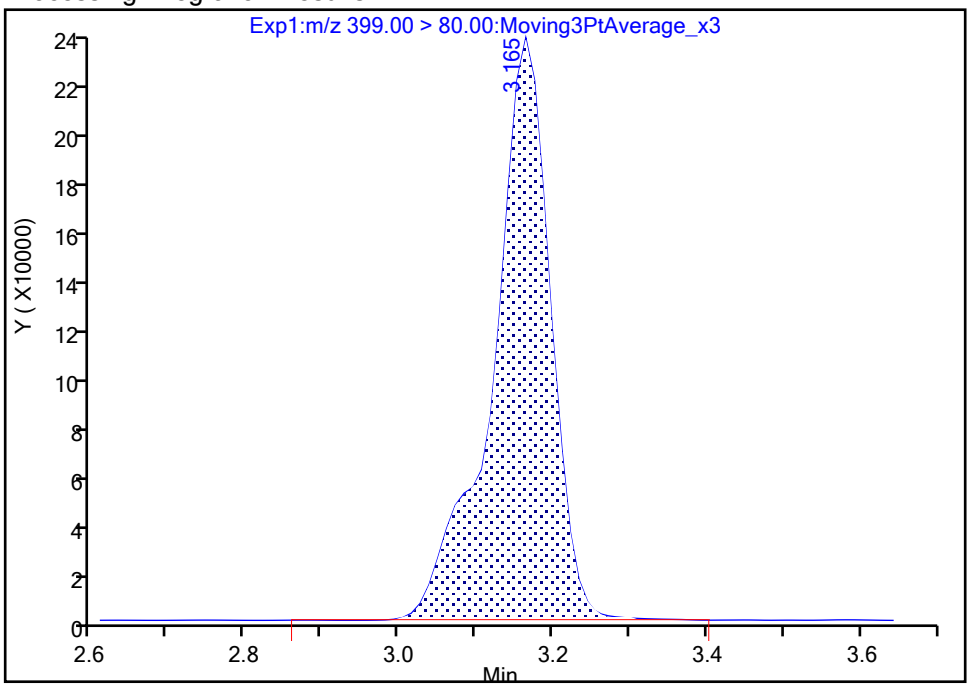
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

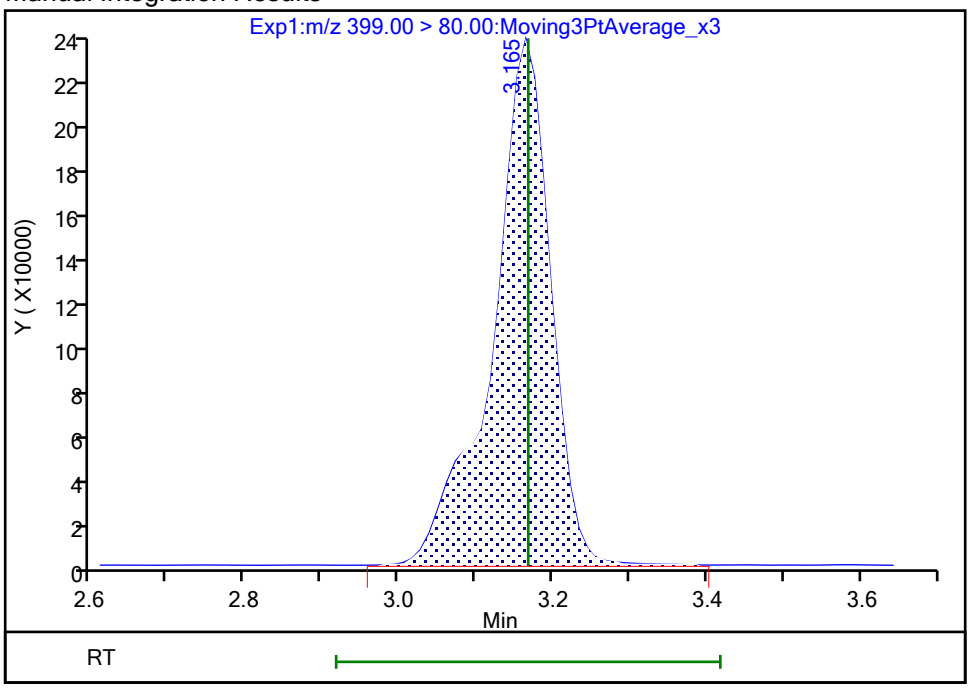
Processing Integration Results

RT: 3.16
Area: 1205742
Amount: 0.867752
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1205285
Amount: 0.867423
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

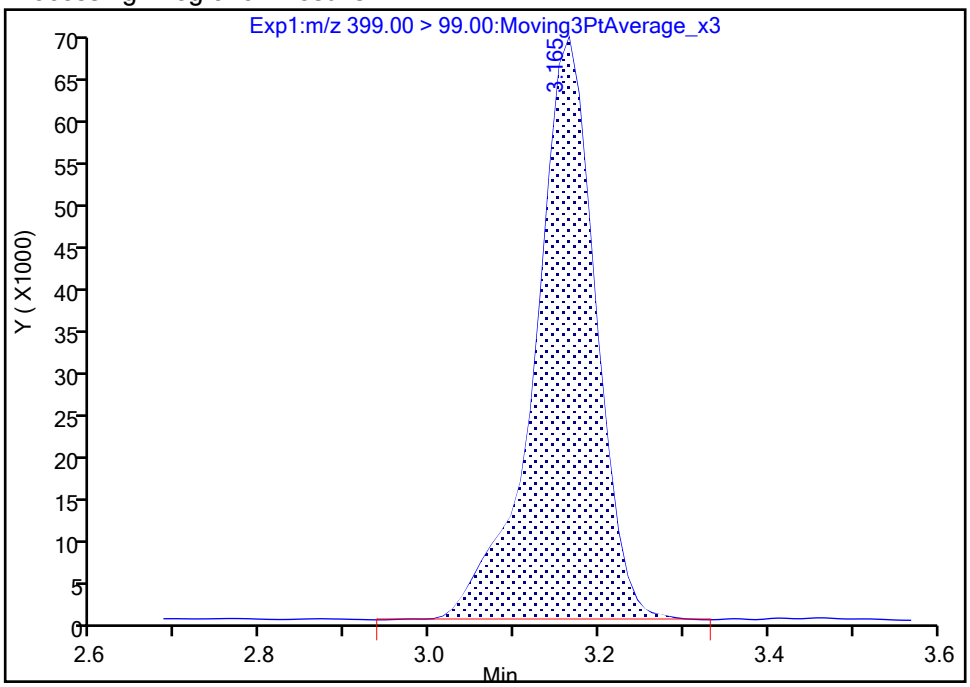
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

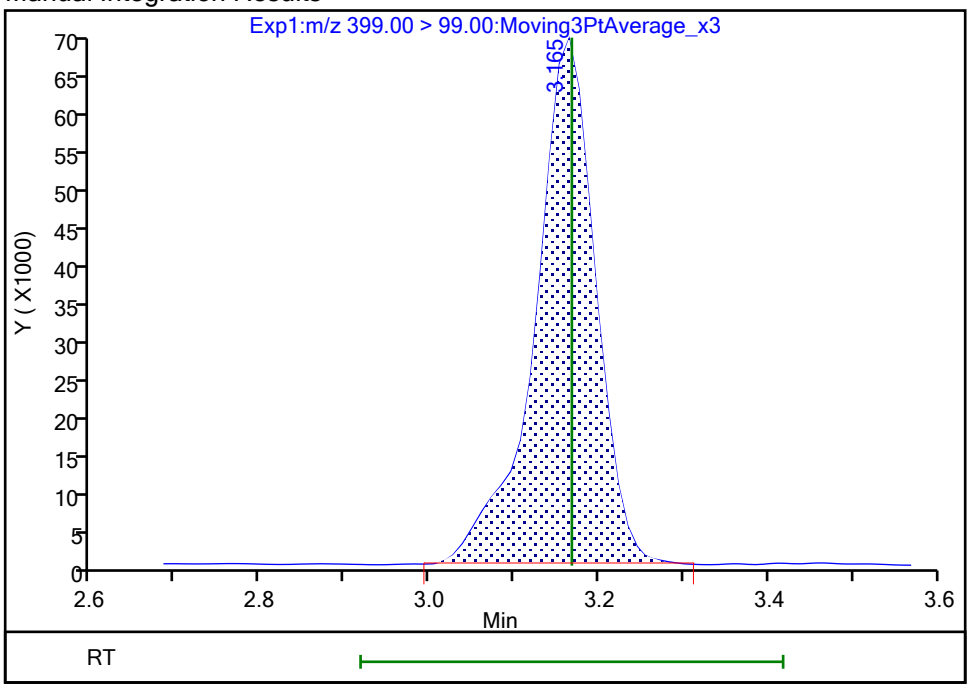
Processing Integration Results

RT: 3.16
Area: 347642
Amount: 0.867752
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 346152
Amount: 0.867423
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

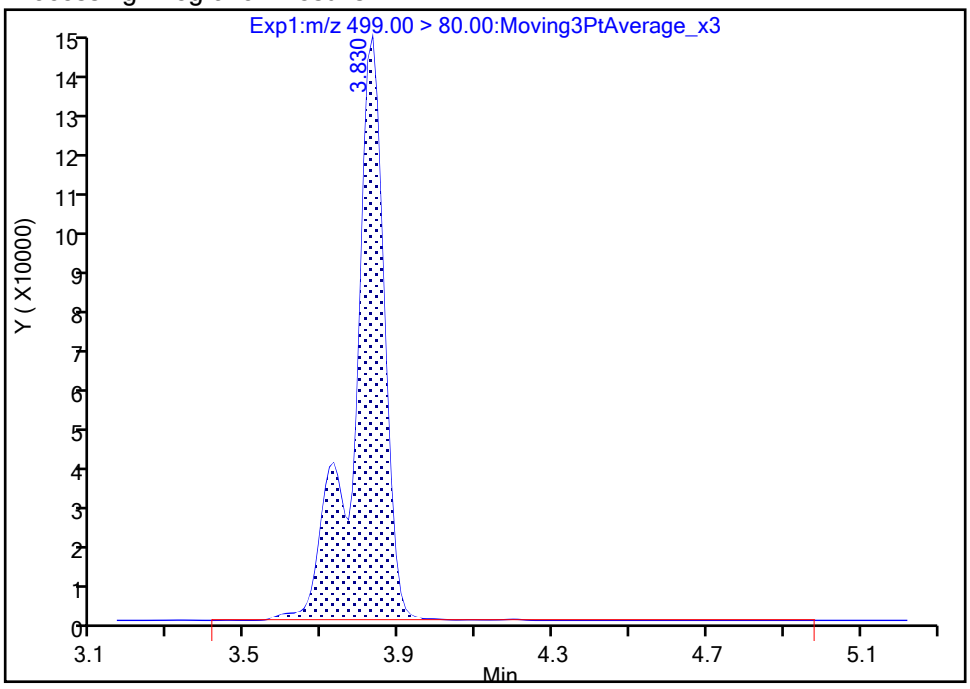
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

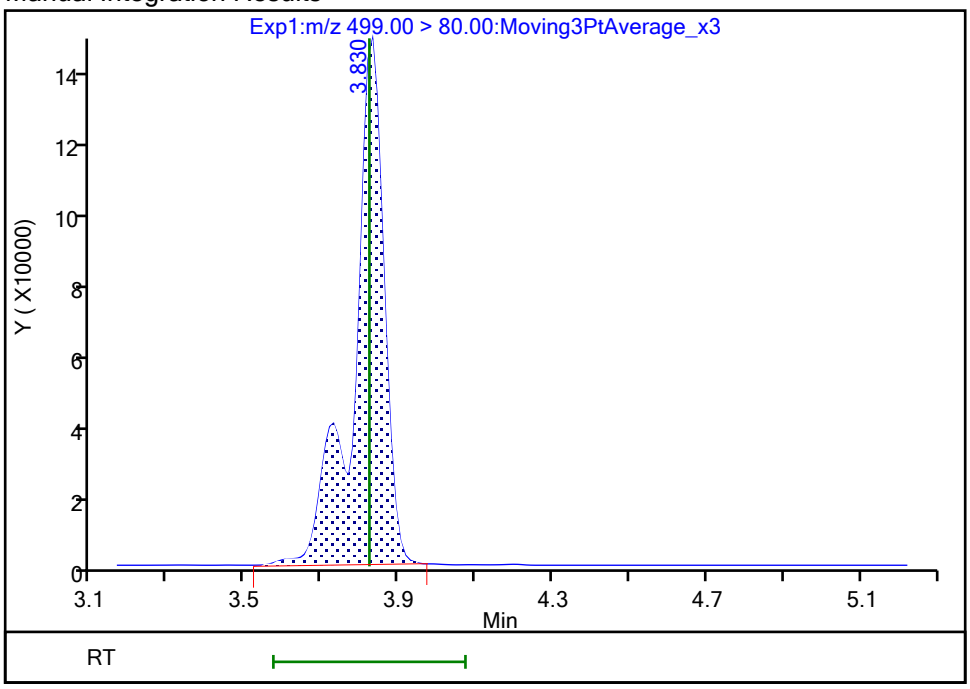
Processing Integration Results

RT: 3.83
Area: 826501
Amount: 0.877961
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 821707
Amount: 0.872868
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

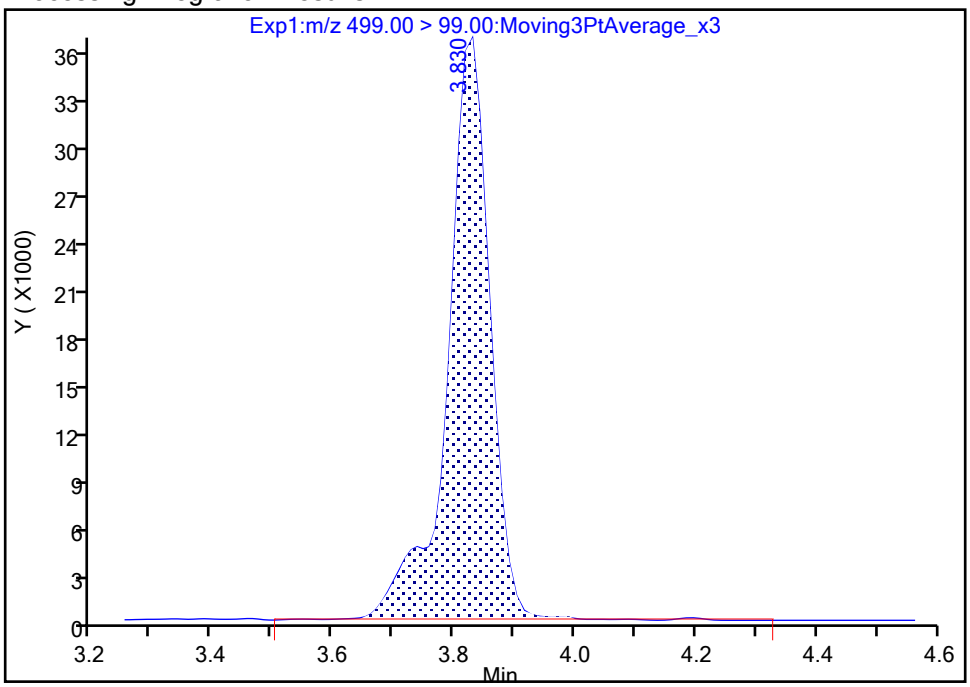
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

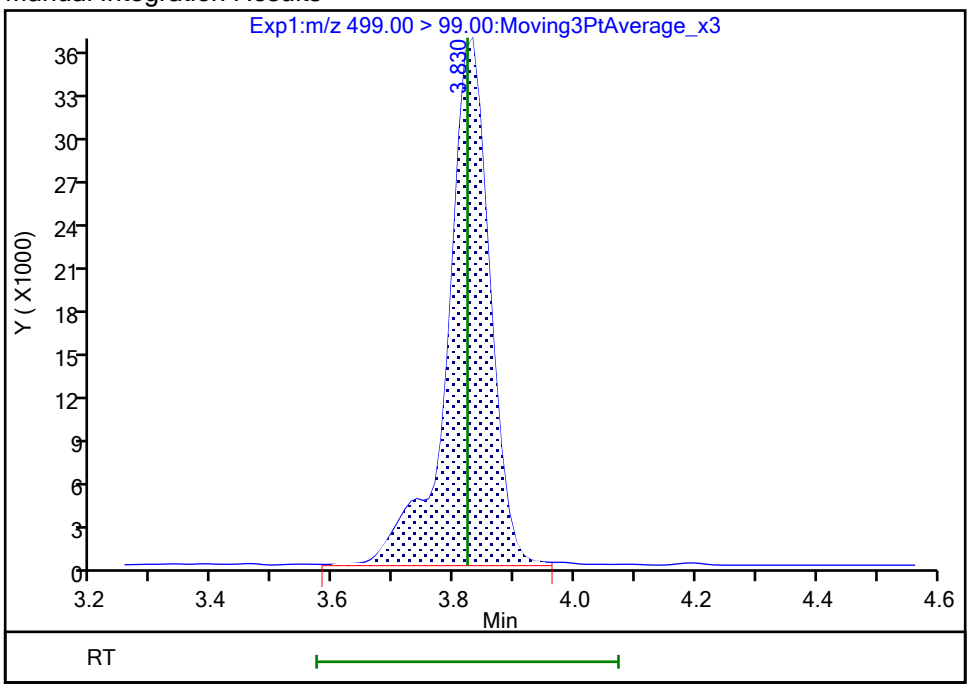
Processing Integration Results

RT: 3.83
Area: 180766
Amount: 0.877961
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 178350
Amount: 0.872868
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

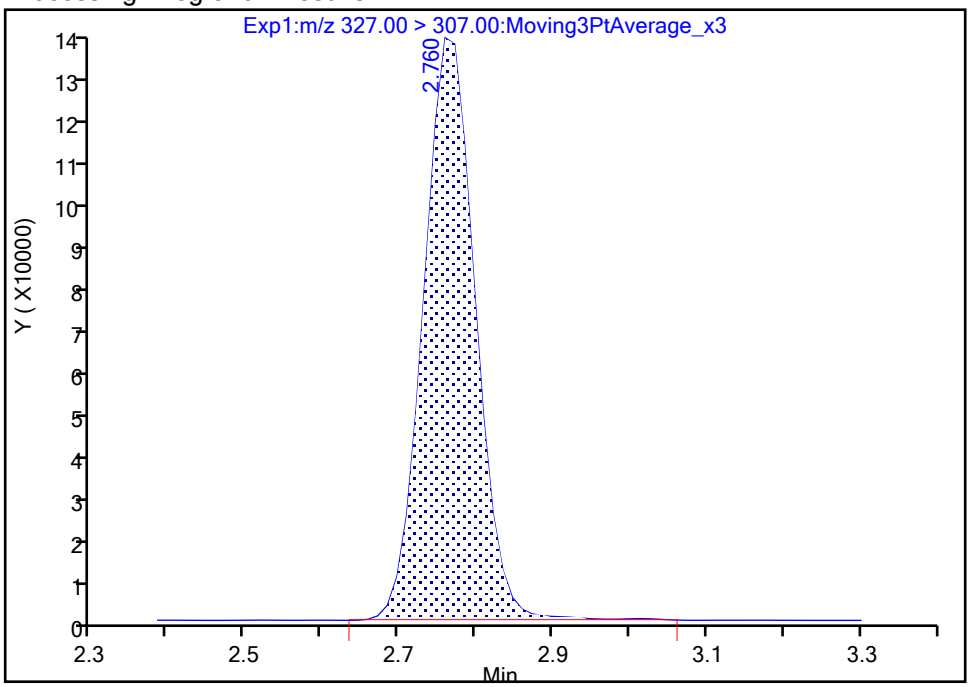
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

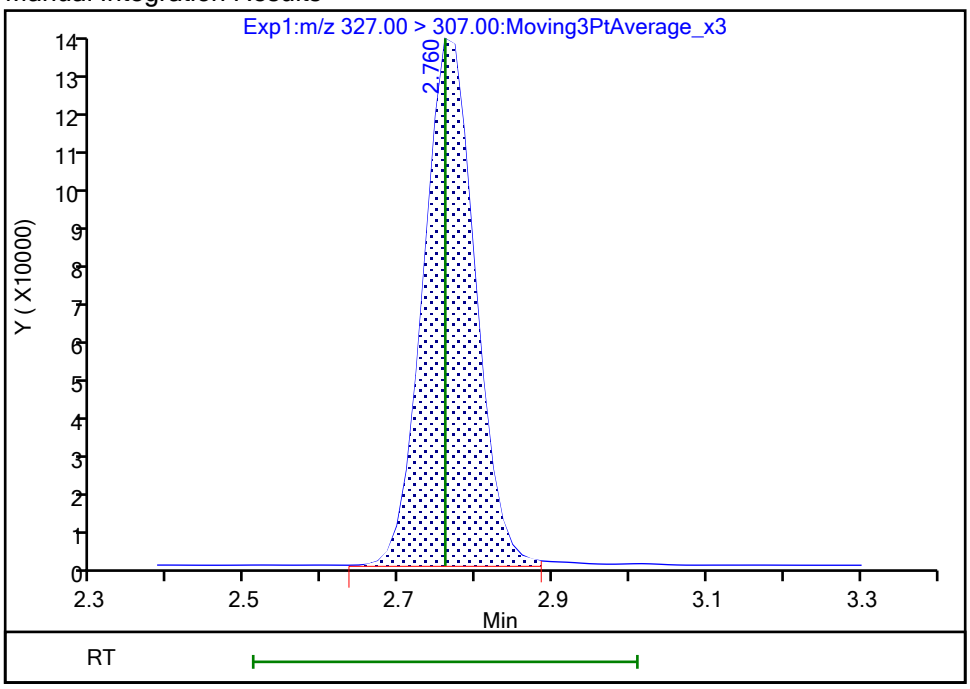
Processing Integration Results

RT: 2.76
Area: 631269
Amount: 0.989552
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 626965
Amount: 0.982806
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

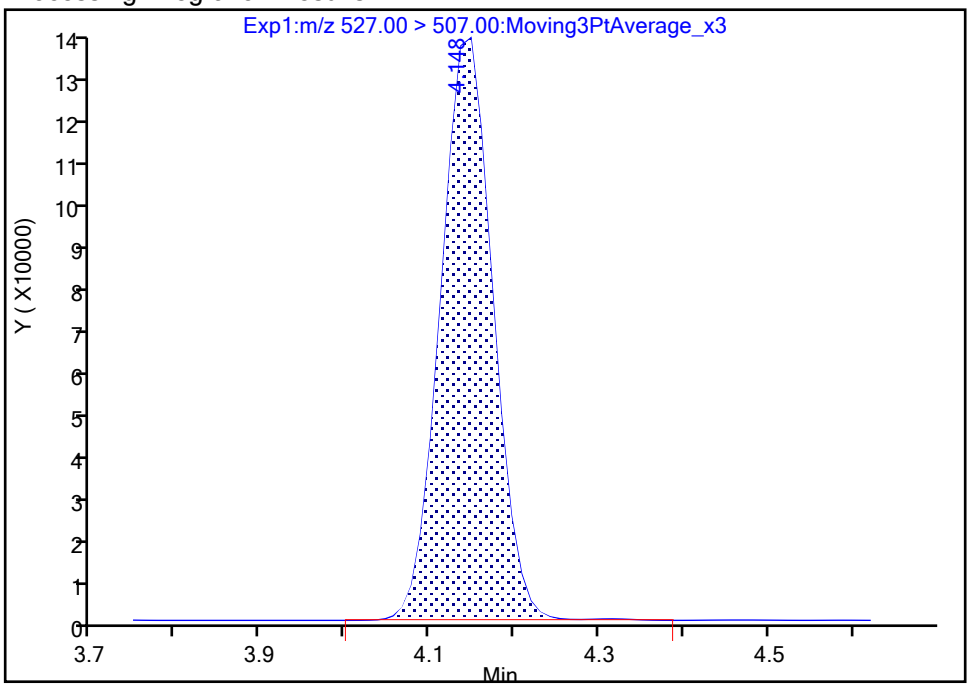
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

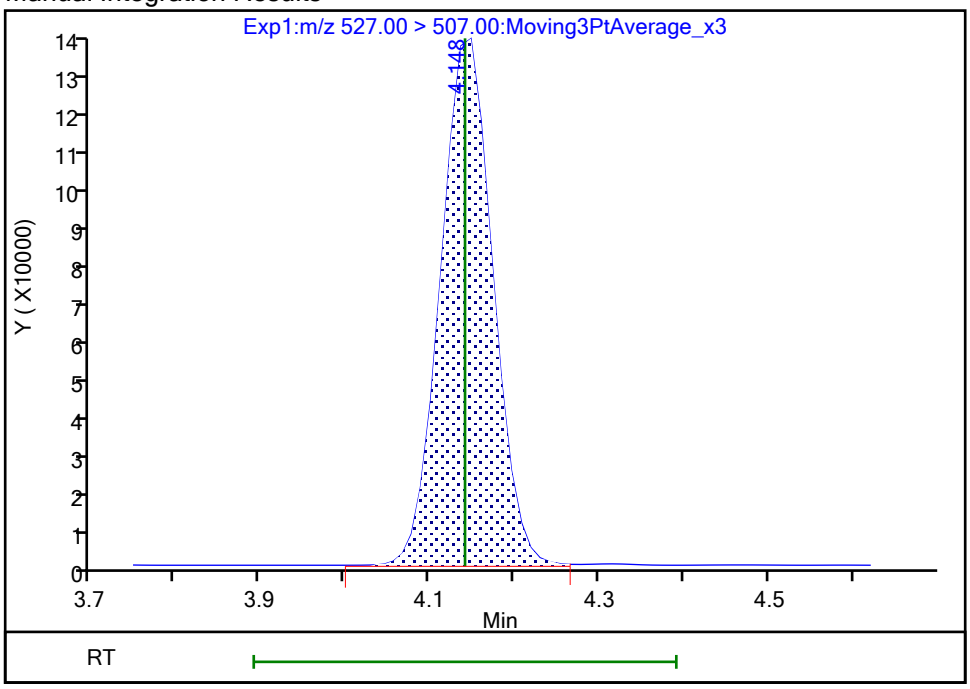
Processing Integration Results

RT: 4.15
Area: 601521
Amount: 1.065725
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 600073
Amount: 1.063160
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

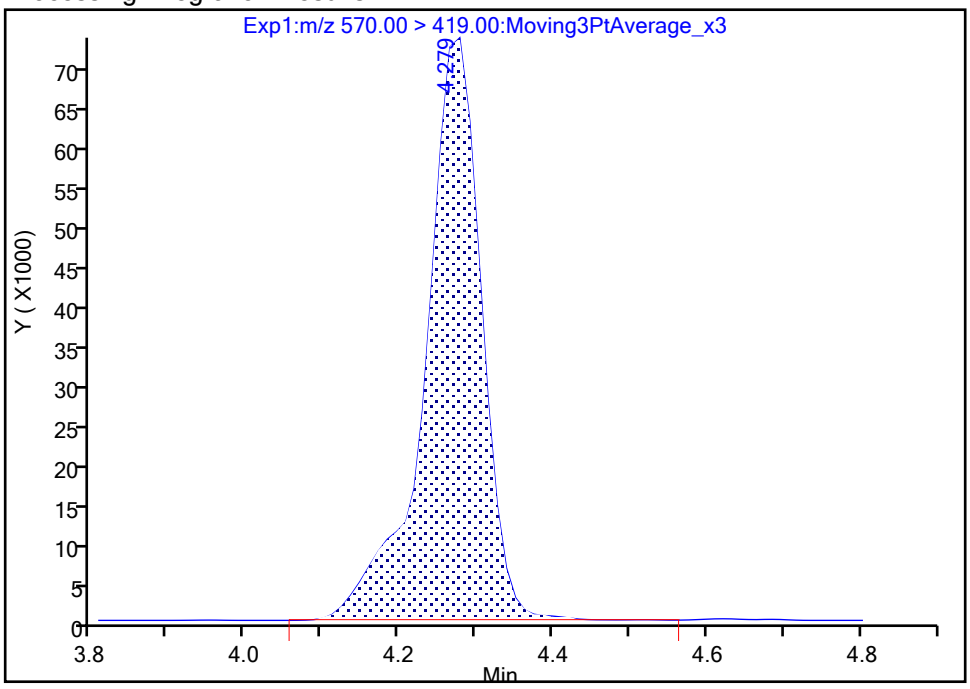
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

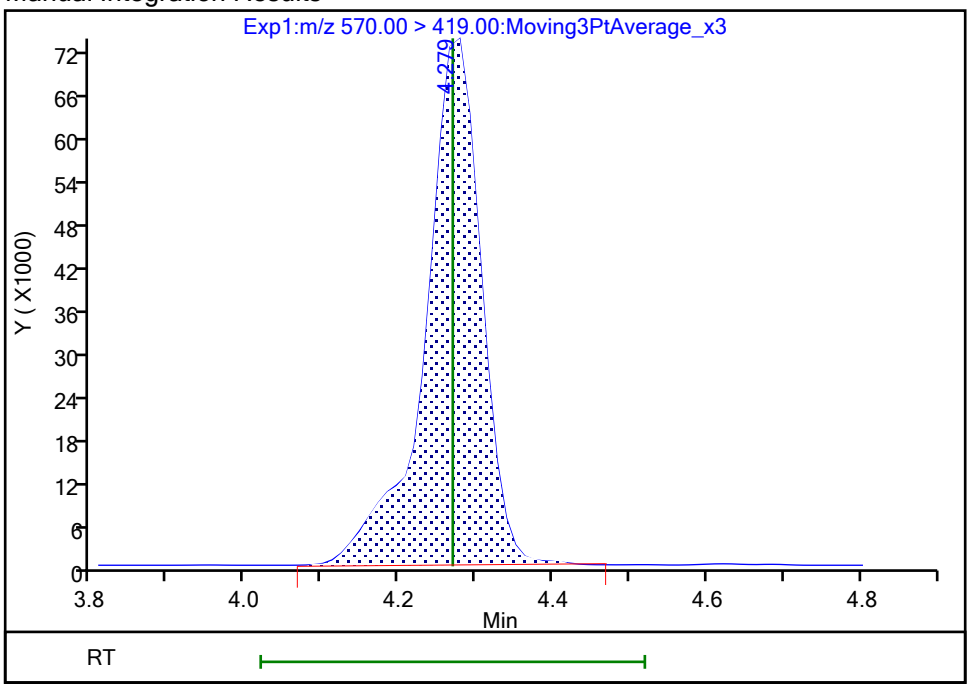
Processing Integration Results

RT: 4.28
Area: 375426
Amount: 0.968145
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 374159
Amount: 0.964878
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

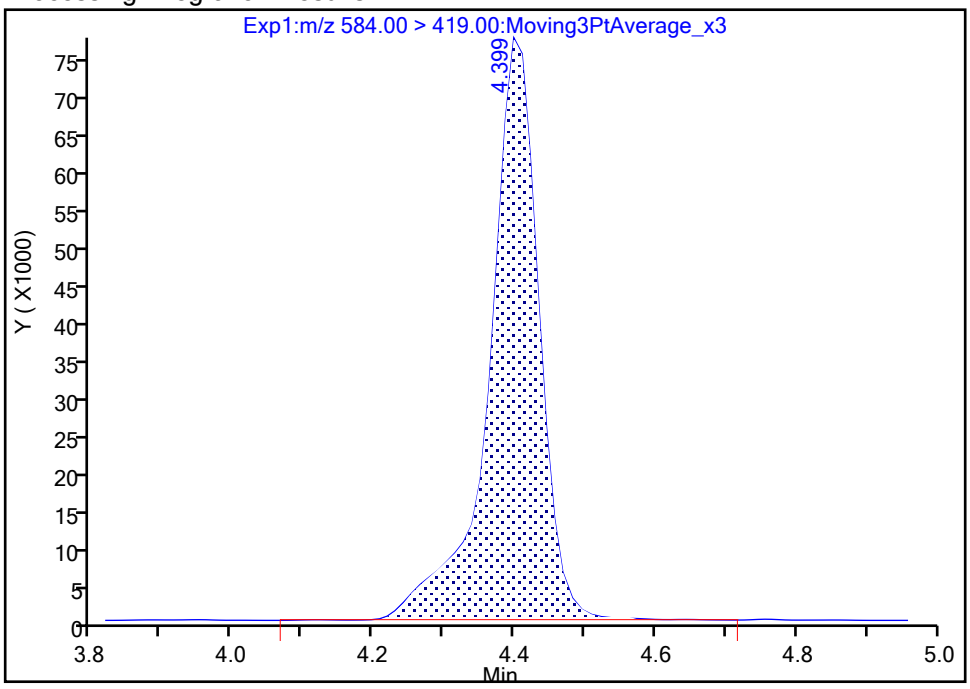
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

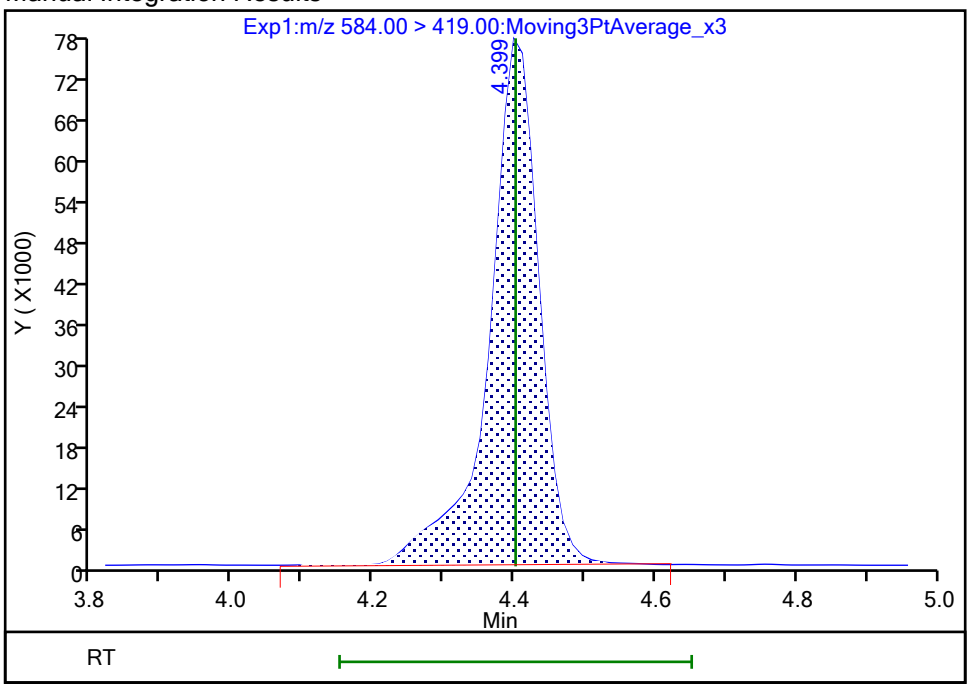
Processing Integration Results

RT: 4.40
Area: 384072
Amount: 0.996265
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 381919
Amount: 0.990680
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:12:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

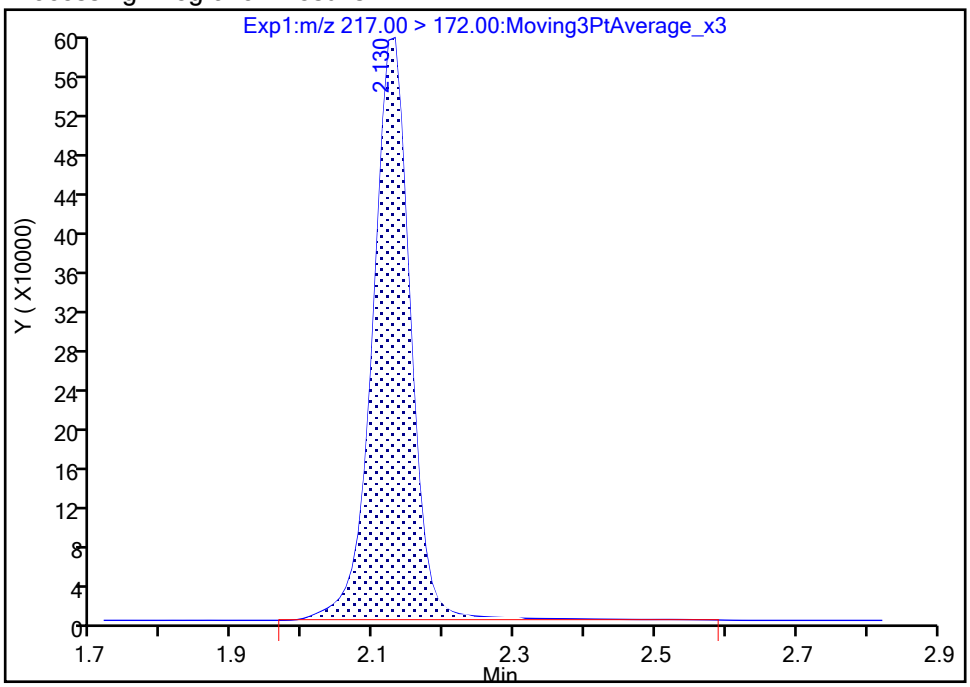
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

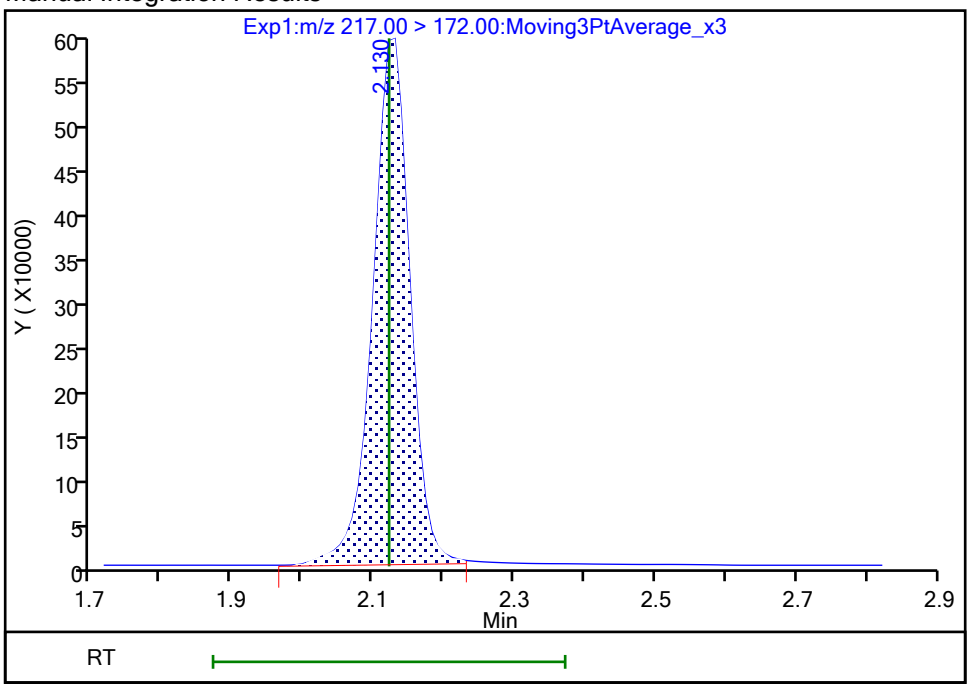
Processing Integration Results

RT: 2.13
Area: 2202847
Amount: 1.288597
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2170930
Amount: 1.269926
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:10:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

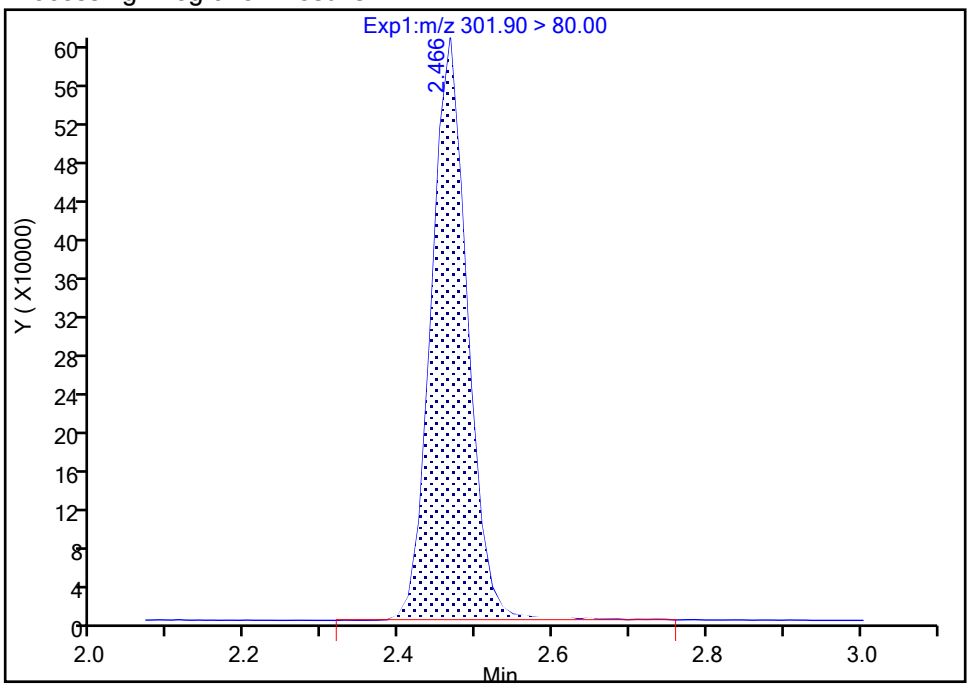
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

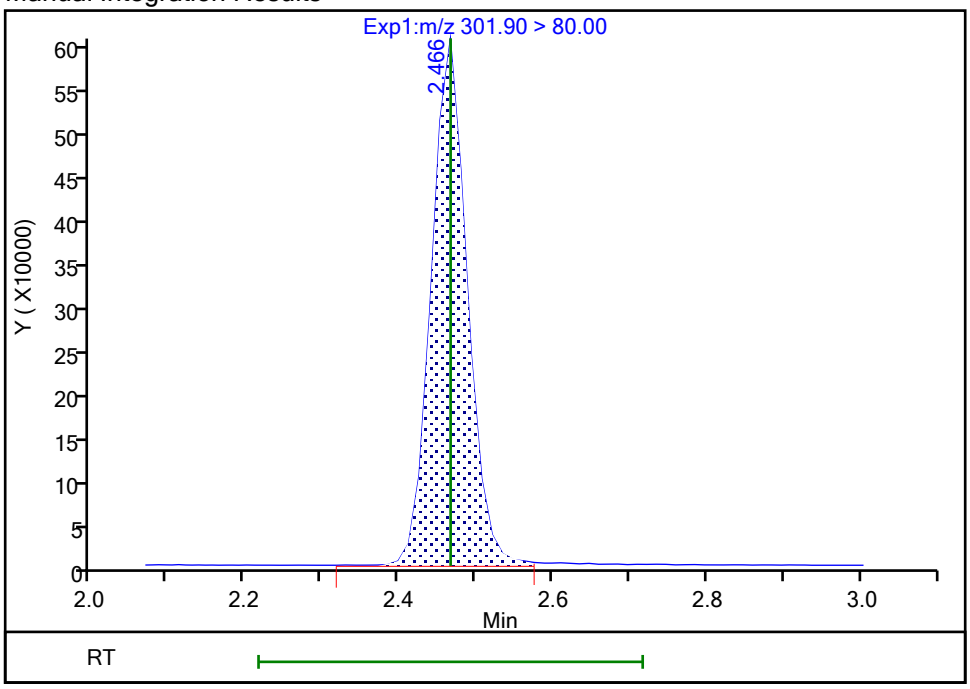
Processing Integration Results

RT: 2.47
Area: 1958522
Amount: 1.091020
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1944558
Amount: 1.083241
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:10:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

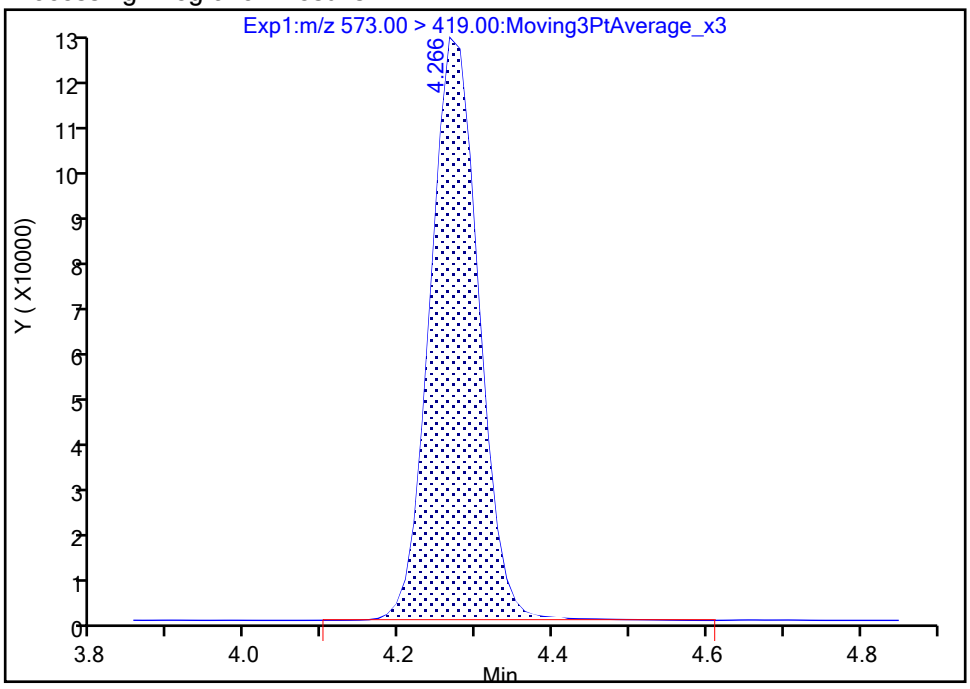
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

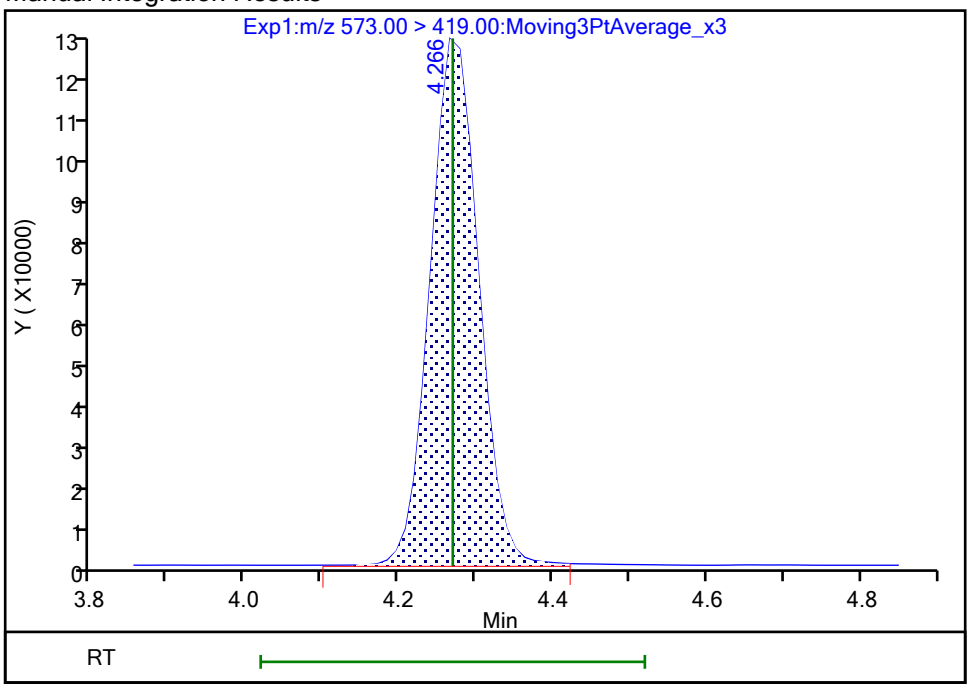
Processing Integration Results

RT: 4.27
Area: 535788
Amount: 1.172798
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 534184
Amount: 1.169287
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:11:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

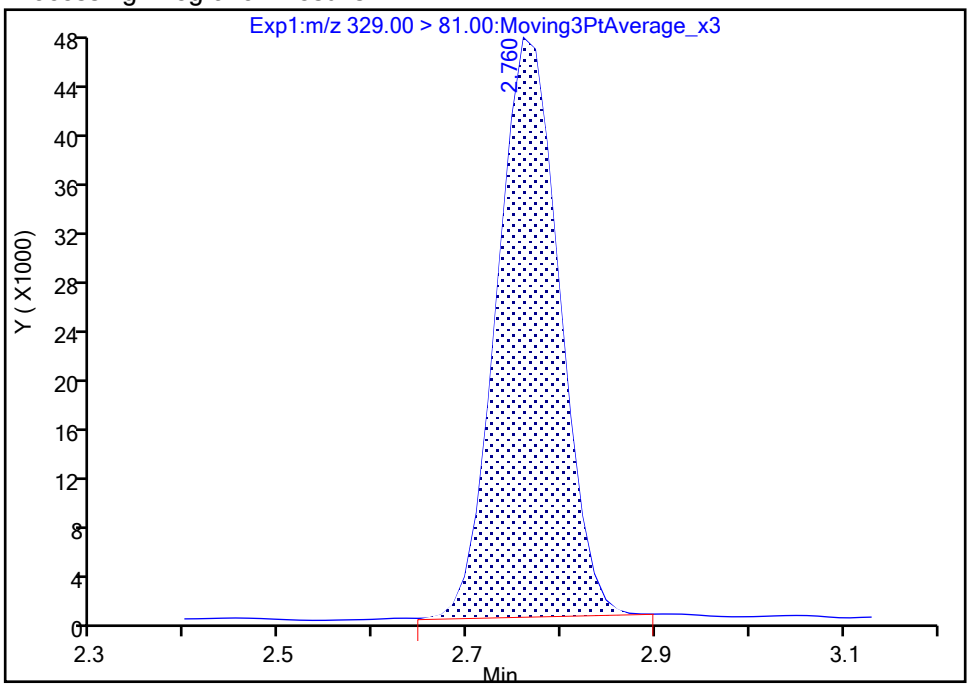
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57511.b\PA231023C04.d				
Injection Date:	23-Oct-2023 23:41:21	Instrument ID:	LC812		
Lims ID:	LCSD 200-196646/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

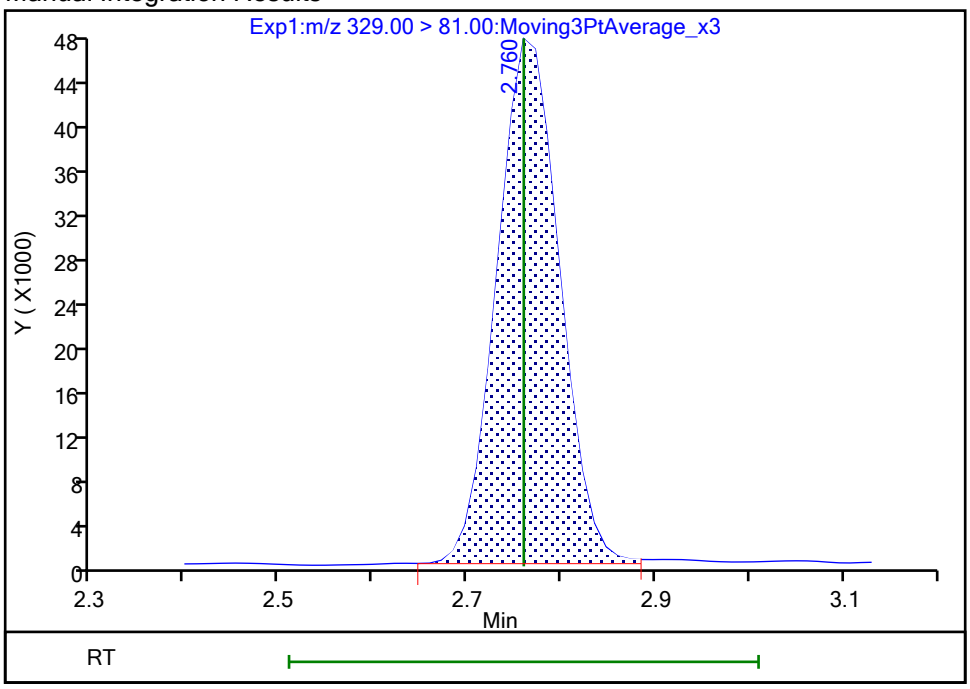
Processing Integration Results

RT: 2.76
Area: 217780
Amount: 1.049033
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 219324
Amount: 1.056470
Amount Units: ng/ml



Reviewer: nampitakw, 24-Oct-2023 15:10:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument ID: LC812 Start Date: 07/26/2023 16:44

Analysis Batch Number: 193912 End Date: 07/26/2023 18:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:08	1		C-18 4.6(mm)
IC 200-193912/5		07/26/2023 17:16	1	PA230726ICAL05.d	C-18 4.6(mm)
IC 200-193912/6		07/26/2023 17:25	1	PA230726ICAL06.d	C-18 4.6(mm)
IC 200-193912/7		07/26/2023 17:33	1	PA230726ICAL07.d	C-18 4.6(mm)
ICISAV 200-193912/8		07/26/2023 17:41	1	PA230726ICAL08.d	C-18 4.6(mm)
IC 200-193912/9		07/26/2023 17:49	1	PA230726ICAL09.d	C-18 4.6(mm)
IC 200-193912/10		07/26/2023 17:57	1	PA230726ICAL10.d	C-18 4.6(mm)
IC 200-193912/11		07/26/2023 18:05	1	PA230726ICAL11.d	C-18 4.6(mm)
ICB 200-193912/12		07/26/2023 18:13	1	PA230726ICAL12.d	C-18 4.6(mm)
ICV 200-193912/13		07/26/2023 18:22	1	PA230726ICAL13.d	C-18 4.6(mm)
ZZZZZ		07/26/2023 18:30	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument ID: LC812 Start Date: 10/23/2023 15:31

Analysis Batch Number: 196686 End Date: 10/23/2023 19:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/23/2023 15:31	1		C-18 4.6(mm)
CCB 200-196686/4		10/23/2023 15:39	1	PA231023A04.d	C-18 4.6(mm)
CCVLIS 200-196686/5		10/23/2023 15:47	1	PA231023A05.d	C-18 4.6(mm)
ZZZZZ		10/23/2023 15:55	10		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:03	1		C-18 4.6(mm)
MB 200-196645/1-A		10/23/2023 16:11	1	PA231023A08.d	C-18 4.6(mm)
LCS 200-196645/2-A		10/23/2023 16:20	1	PA231023A09.d	C-18 4.6(mm)
LCSD 200-196645/3-A		10/23/2023 16:28	1	PA231023A10.d	C-18 4.6(mm)
ZZZZZ		10/23/2023 16:36	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:09	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:17	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:25	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:33	1		C-18 4.6(mm)
CCV 200-196686/19		10/23/2023 17:41	1	PA231023A19.d	C-18 4.6(mm)
ZZZZZ		10/23/2023 17:49	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:58	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:06	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:14	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:22	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:30	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:38	1		C-18 4.6(mm)
460-290375-1	1000-101323-0002	10/23/2023 18:47	1	PA231023A27.d	C-18 4.6(mm)
460-290375-2	MW39A-101323-0826-70	10/23/2023 18:55	1	PA231023A28.d	C-18 4.6(mm)
460-290375-3	MW39-101323-0921-17	10/23/2023 19:03	1	PA231023A29.d	C-18 4.6(mm)
CCV 200-196686/30		10/23/2023 19:11	1	PA231023A30.d	C-18 4.6(mm)
460-290375-4	MW91-101323-1021-26	10/23/2023 19:19	1	PA231023A31.d	C-18 4.6(mm)
460-290375-5	MW91A-101323-1116-66	10/23/2023 19:27	1	PA231023A32.d	C-18 4.6(mm)
CCV 200-196686/33		10/23/2023 19:36	1	PA231023A33.d	C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument ID: LC812 Start Date: 10/23/2023 23:16

Analysis Batch Number: 196689 End Date: 10/24/2023 02:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196689/1		10/23/2023 23:16	1	PA231023C01.d	C-18 4.6(mm)
MB 200-196646/1-A		10/23/2023 23:25	1	PA231023C02.d	C-18 4.6(mm)
LCS 200-196646/2-A		10/23/2023 23:33	1	PA231023C03.d	C-18 4.6(mm)
LCSD 200-196646/3-A		10/23/2023 23:41	1	PA231023C04.d	C-18 4.6(mm)
460-290375-6	MW88-101323-0831-80.5	10/23/2023 23:49	1	PA231023C05.d	C-18 4.6(mm)
460-290375-7	MW92A-101323-1006-70	10/23/2023 23:57	1	PA231023C06.d	C-18 4.6(mm)
460-290375-8	MW92-101323-1056-36	10/24/2023 00:05	1	PA231023C07.d	C-18 4.6(mm)
460-290375-9	MW92B-101323-1156-92	10/24/2023 00:14	1	PA231023C08.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 00:22	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 00:30	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 00:38	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 00:46	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 00:54	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 01:03	1		C-18 4.6(mm)
CCV 200-196689/15		10/24/2023 01:11	1	PA231023C15.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 01:19	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 01:27	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 01:35	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 01:43	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 01:52	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 02:00	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 02:08	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 02:16	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 02:24	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 02:32	1		C-18 4.6(mm)
CCV 200-196689/26		10/24/2023 02:41	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument ID: LC812 Start Date: 10/26/2023 20:30

Analysis Batch Number: 196833 End Date: 10/27/2023 00:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/26/2023 20:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:39	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:47	1		C-18 4.6(mm)
CCB 200-196833/4		10/26/2023 20:55	1	PA231026A04.d	C-18 4.6(mm)
CCVLIS 200-196833/5		10/26/2023 21:03	1	PA231026A05.d	C-18 4.6(mm)
ZZZZZ		10/26/2023 21:11	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:19	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:28	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:36	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:44	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:52	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:00	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:08	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:17	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:25	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:33	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:41	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:49	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:57	1		C-18 4.6(mm)
CCV 200-196833/20		10/26/2023 23:05	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:14	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:22	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:38	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:46	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:54	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:03	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:11	1		C-18 4.6(mm)
CCV 200-196833/29		10/27/2023 00:19	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Instrument ID: LC812 Start Date: 10/27/2023 10:08

Analysis Batch Number: 196839 End Date: 10/27/2023 12:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196839/1		10/27/2023 10:08	1	PA231026E01.d	C-18 4.6(mm)
460-290375-7 DL	MW92A-101323-1006-70 DL	10/27/2023 10:16	5	PA231026E02.d	C-18 4.6(mm)
460-290375-8 DL	MW92-101323-1056-36 DL	10/27/2023 10:24	5	PA231026E03.d	C-18 4.6(mm)
460-290375-9 DL	MW92B-101323-1156-92 DL	10/27/2023 10:32	5	PA231026E04.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 10:40	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:49	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:57	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:05	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:13	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:21	10		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:29	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:38	2		C-18 4.6(mm)
CCV 200-196839/13		10/27/2023 11:46	1	PA231026E13.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 11:54	2		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:02	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:10	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:19	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:27	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:35	1		C-18 4.6(mm)
CCV 200-196839/20		10/27/2023 12:43	1		C-18 4.6(mm)

537 (modified)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LCPFAS28NCICV 00014	PFAS23NClC7 00001	PFAS32NCBLK20 00025	PFAS32NCIC1 00015	PFAS32NCIC2 00014
IC 200-193912/5		537 (modified)		1 mL				100 uL	
IC 200-193912/6		537 (modified)		1 mL					100 uL
IC 200-193912/7		537 (modified)		1 mL					
ICISAV 200-193912/8		537 (modified)		1 mL					
IC 200-193912/9		537 (modified)		1 mL					
IC 200-193912/10		537 (modified)		1 mL					
IC 200-193912/11		537 (modified)		1 mL		100 uL			
ICB 200-193912/12		537 (modified)		1 mL			100 uL		
ICV 200-193912/13		537 (modified)		1 mL	100 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS32NCIC3 00016	PFAS32NCIC4 00042	PFAS32NCIC5 00035	PFAS32NCIC6 00014		
IC 200-193912/5		537 (modified)							
IC 200-193912/6		537 (modified)							
IC 200-193912/7		537 (modified)		100 uL					
ICISAV 200-193912/8		537 (modified)			100 uL				
IC 200-193912/9		537 (modified)				100 uL			
IC 200-193912/10		537 (modified)					100 uL		
IC 200-193912/11		537 (modified)							
ICB 200-193912/12		537 (modified)							
ICV 200-193912/13		537 (modified)							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 196645 Batch Start Date: 10/20/23 19:55 Batch Analyst: Kane, Elizabeth

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196645/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196645/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
LCSD 200-196645/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
460-290375-A-1	1000-101323-0002	3535, 537 (modified)	T	320.81 g	27.72 g	293.1 mL	10 mL		100 uL
460-290375-A-2	MW39A-101323-0826-70	3535, 537 (modified)	T	342.61 g	27.66 g	315 mL	10 mL		100 uL
460-290375-A-3	MW39-101323-0921-17	3535, 537 (modified)	T	338.28 g	28.01 g	310.3 mL	10 mL		100 uL
460-290375-A-4	MW91-101323-1021-26	3535, 537 (modified)	T	342.25 g	27.93 g	314.3 mL	10 mL		100 uL
460-290375-A-5	MW91A-101323-1116-66	3535, 537 (modified)	T	341.87 g	28.02 g	313.9 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196645/1		3535, 537 (modified)		100 uL					
LCS 200-196645/2		3535, 537 (modified)		100 uL					
LCSD 200-196645/3		3535, 537 (modified)		100 uL					
460-290375-A-1	1000-101323-0002	3535, 537 (modified)	T	100 uL					
460-290375-A-2	MW39A-101323-0826-70	3535, 537 (modified)	T	100 uL					
460-290375-A-3	MW39-101323-0921-17	3535, 537 (modified)	T	100 uL					
460-290375-A-4	MW91-101323-1021-26	3535, 537 (modified)	T	100 uL					
460-290375-A-5	MW91A-101323-1116-66	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 196645 Batch Start Date: 10/20/23 19:55 Batch Analyst: Kane, Elizabeth

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	MLK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 196646 Batch Start Date: 10/20/23 20:02 Batch Analyst: Kane, Elizabeth

Batch Method: 3535 Batch End Date: 10/23/23 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196646/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196646/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
LCSD 200-196646/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
460-290375-A-6	MW88-101323-0831-80.5	3535, 537 (modified)	T	319.19 g	27.60 g	291.6 mL	10 mL		100 uL
460-290375-A-7	MW92A-101323-1006-70	3535, 537 (modified)	T	312.04 g	27.22 g	284.8 mL	10 mL		100 uL
460-290375-A-8	MW92-101323-1056-36	3535, 537 (modified)	T	314.30 g	27.60 g	286.7 mL	10 mL		100 uL
460-290375-A-9	MW92B-101323-1156-92	3535, 537 (modified)	T	314.10 g	27.45 g	286.7 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196646/1		3535, 537 (modified)		100 uL					
LCS 200-196646/2		3535, 537 (modified)		100 uL					
LCSD 200-196646/3		3535, 537 (modified)		100 uL					
460-290375-A-6	MW88-101323-0831-80.5	3535, 537 (modified)	T	100 uL					
460-290375-A-7	MW92A-101323-1006-70	3535, 537 (modified)	T	100 uL					
460-290375-A-8	MW92-101323-1056-36	3535, 537 (modified)	T	100 uL					
460-290375-A-9	MW92B-101323-1156-92	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 196646 Batch Start Date: 10/20/23 20:02 Batch Analyst: Kane, Elizabeth

Batch Method: 3535 Batch End Date: 10/23/23 15:30

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	EK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290375-1

SDG No.:

Batch Number: 196833 Batch Start Date: 10/26/23 20:30 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196833/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196833/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Eurofins TestAmerica, Edison
777 New Durham Road
Edison NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

Chain of Custody Record

eurofins | Environment Testing TestAmerica
TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: Dimitri Quafisi	Site Contact:	Date:	COC No:
Haley & Aldrich	Email: DQuafisi@haleyaldrich.com	Lab Contact:	Carrier:	1 of 1 COCs
65 Rockside Rd, Suite 200	Tel/Fax:			Sampler: EST Associates
Cleveland, OH 44131	Analysis Turnaround Time			For Lab Use Only:
216.706.1314	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
216.739.0560	TAT if different from Below _____			Lab Sampling
Job #: 70613-78	☐ 2 weeks			
Site: Racer Ewing	☑ 1 week			Job / SDG No. 290375
Lab Project # 46013839	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (537.1M)	Sample Specific Notes:
1000-101323-0002	10/13/23	1130		AQ	2			X	
mw39A-101323-0826-70	10/13/23	826		GW	2			X	
mw39-101323-0921-17	10/13/23	921		GW	2			X	
mw91-101323-1021-26	10/13/23	1021		GW	2			X	
mw91A-101323-1116-66	10/13/23	1116		GW	2			X	
mw88-101323-0831-80 5	10/13/23	831		GW	2			X	
mw92A-101323-1006-70	10/13/23	1006		GW	2			X	
mw92-101323-1056-36	10/13/23	1056		GW	2			X	
mw92B-101323-1156-92	10/13/23	1156		GW	2			X	

460-290375 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Dissolved Metals field filtered

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd. _____ Corr'd. _____ Therm ID No. _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EST	10/13/23	[signature]	ETA	10/13/23 1349
[signature]	ETA	10/13/23 1352	Received in Laboratory by: [signature]	ETA	10/13

HO ETA 10/13 1900 IR#10-2-8 [signature] EETG 10/13/23 1900

Form No. CA-C-WI-002, Rev 4.23, dated 4/16/2019

290375

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: _____

Number of Coolers: 1 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED
Cooler #1:	2.8 °C	2.7 °C
Cooler #2:	°C	°C
Cooler #3:	°C	°C
Cooler #4:	°C	°C
Cooler #5:	°C	°C
Cooler #6:	°C	°C
Cooler #7:	°C	°C
Cooler #8:	°C	°C
Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below

Sample No(s). adjusted: _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 10/13/23

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

460-290375 Chain of Custody

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Tempe, Kristyn L		COC No: 460-69535.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290375-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/25/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer, Ewing	Project #: 46010893			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
1000-101323-0002 (460-290375-1)	10/13/23	11.30 Eastern		Water			X	2	
MW39A-101323-0826-70 (460-290375-2)	10/13/23	08:26 Eastern		Water			X	2	
MW39-101323-0921-17 (460-290375-3)	10/13/23	09:21 Eastern		Water			X	2	
MW91-101323-1021-26 (460-290375-4)	10/13/23	10 21 Eastern		Water			X	2	
MW91A-101323-1116-66 (460-290375-5)	10/13/23	11:16 Eastern		Water			X	2	
MW88-101323-0831-80.5 (460-290375-6)	10/13/23	08.31 Eastern		Water			X	2	
MW92A-101323-1006-70 (460-290375-7)	10/13/23	10.06 Eastern		Water			X	2	
MW92-101323-1056-36 (460-290375-8)	10/13/23	10.56 Eastern		Water			X	2	
MW92B-101323-1156-92 (460-290375-9)	10/13/23	11.56 Eastern		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank. 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
[signature]	10/18/23 1900	FETEL	[signature]	10/19/23 0950	ETA Bo17
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

10/30/2023 4:00 PM

RT 916 1 10:30
FZ 915

Part # 159469-434 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 47.75 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO **SHIPPING/RECEIVING**
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660 – 1990 REF: S460-174268
PO: YES

FedEx Express

1 of 2
TRK# 0201 6553 1010 3254
MASTER

THU – 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT – US BTV

Part # 159469-434 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 40.85 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO **SHIPPING/RECEIVING**
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660 – 1990 REF 8460-174268
PO: YES

FedEx Express

2 of 2
MPS# 0263 6553 1010 3265
Mstr# 6553 1010 3254 0201

THU – 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT – US BTV

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290375-1

Login Number: 290375
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290375-1

Login Number: 290375
List Number: 2
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington
List Creation: 10/19/23 03:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1969961, 9962
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4ºC, 1.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 10/25/2023 1:26 PM

JOB DESCRIPTION

Racer, Ewing/Trenton

JOB NUMBER

460-290512-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/25/2023 1:26 PM

Authorized for release by
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 6

Report Narrative 6

Sample Summary 9

Detection Summary 10

Method Summary 11

Client Sample Results 12

Surrogate Summary 20

QC Sample Results 21

Definitions 29

QC Association 30

Chronicle 32

Certification Summary 34

Organic Sample Data 35

GC/MS VOA 35

8260D_DKQP 35

8260D_DKQP QC Summary 36

8260D_DKQP Sample Data 49

Standards Data 103

8260D_DKQP ICAL Data 103

8260D_DKQP CCAL Data 276

Raw QC Data 285

8260D_DKQP Tune Data 285

8260D_DKQP Blank Data 288

8260D_DKQP LCS/LCSD Data 299

8260D_DKQP MS/MSD Data 313

Table of Contents

8260D_DKQP Run Logs 317

8260D_DKQP Prep Data 318

GC/MS Semi VOA 322

522 322

522 QC Summary 323

522 Sample Data 330

Standards Data 346

522 ICAL Data 346

522 CCAL Data 366

Raw QC Data 375

522 Blank Data 375

522 LCS/LCSD Data 378

522 Run Logs 384

522 Prep Data 386

Inorganic Sample Data 389

Metals Data 389

Met Cover Page 390

Met Sample Data 391

Met QC Data 395

Met ICV/CCV 395

Met Blanks 397

Met ICSA/ICSAB 400

Met MS/MSD/PDS 402

Met Dup/Trip 404

Met LCS/LCSD 405

Met Serial Dilution 409

Table of Contents

Met Calibration 410

Met MDL 431

Met Linear Ranges 433

Met Preparation Log 434

Met Analysis Run Log 435

Met ICP/MS Int Stds 446

Met Prep Data 448

Shipping and Receiving Documents 449

Client Chain of Custody 450

Sample Receipt Checklist 452

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing/Trenton

Report Number: 460-290512-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 10/16/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.7 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)
Samples Trip Blank (460-290512-1), 1000-101623-0002 (460-290512-2), FDMH-1 (460-290512-3), FDMH-2 (460-290512-4) and FDMH-4 (460-290512-5) were analyzed for Volatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8260D (DKQP). The samples were analyzed on 10/20/2023.

Trichloroethene failed the recovery criteria low for the MSD of sample 460-290050-1 in batch 460-939407. 1,1-Dichloroethane and 1,1-Dichloroethene exceeded the RPD limit.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Volatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE (GC/MS SIM) SEMIVOLATILES
Samples 1000-101623-0002 (460-290512-2), FDMH-1 (460-290512-3), FDMH-2 (460-290512-4) and FDMH-4 (460-290512-5) were analyzed for 1,4 Dioxane (GC/MS SIM) Semivolatiles in accordance with EPA Method 522. The samples were prepared and analyzed on 10/19/2023.

No difficulties were encountered during the 1,4 Dioxane (GC/MS SIM) Semivolatiles analysis.

All quality control parameters were within the acceptance limits.

METALS DKQP (TOTAL)(ICP/MS)
Samples 1000-101623-0002 (460-290512-2), FDMH-1 (460-290512-3), FDMH-2 (460-290512-4) and FDMH-4 (460-290512-5) were analyzed for Metals DKQP (Total)(ICP/MS) in accordance with EPA SW-846 Method 6020B (DKQP). The samples were prepared on 10/18/2023 and analyzed on 10/20/2023.

Sodium failed the recovery criteria low for the MS of sample 460-290504-9 in batch 460-939564.

Refer to the QC report for details.

for the duplicate of sample 460-290504-9. Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP (Total)(ICP/MS) analysis.

All other quality control parameters were within the acceptance limits.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Edison

Client: Haley & Aldrich, Inc.

Project Location: Racer, Ewing/Trenton

Project Number: 460-290512-1

Laboratory Sample ID(s): 460-290512-1, 460-290512-2, 460-290512-3, 460-290512-4, 460-290512-5

Sampling Date(s): 10/13/2023, 10/16/2023

List DKQP Methods Used: 8260D, 6020B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑Yes ☐No
1A	Were the method specified handling, preservation, and holding time requirements met?	☐Yes ☐No ☑ See case narrative
1B	*EPH Method:* Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	☐Yes ☐No ☑N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	☐Yes ☐No ☑ See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	☐Yes ☑No ☐N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☑Yes ☐No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	☐Yes ☐No ☑ See case narrative
	b) Were these reporting limits met?	☐Yes ☐No ☐N/A ☑ See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑Yes ☐No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	☐Yes ☑No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290512-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290512-1	Trip Blank	Water	10/13/23 00:00	10/16/23 16:45
460-290512-2	1000-101623-0002	Water	10/16/23 11:00	10/16/23 16:45
460-290512-3	FDMH-1	Water	10/16/23 09:15	10/16/23 16:45
460-290512-4	FDMH-2	Water	10/16/23 09:30	10/16/23 16:45
460-290512-5	FDMH-4	Water	10/16/23 10:15	10/16/23 16:45

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290512-1

Client Sample ID: Trip Blank — Lab Sample ID: 460-290512-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		5.0	4.4	ug/L	1		8260D	Total/NA

Client Sample ID: 1000-101623-0002 — Lab Sample ID: 460-290512-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13		5.0	4.4	ug/L	1		8260D	Total/NA

Client Sample ID: FDMH-1 — Lab Sample ID: 460-290512-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.1	J	4.0	0.91	ug/L	1		6020B	Total/NA

Client Sample ID: FDMH-2 — Lab Sample ID: 460-290512-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.38	J	1.0	0.22	ug/L	1		8260D	Total/NA
Trichloroethene	0.37	J	1.0	0.31	ug/L	1		8260D	Total/NA

Client Sample ID: FDMH-4 — Lab Sample ID: 460-290512-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.83	J	1.0	0.22	ug/L	1		8260D	Total/NA
Trichloroethene	1.3		1.0	0.31	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.49		0.20	0.20	ug/L	1		522	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290512-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
522	1,4 Dioxane (GC/MS SIM)	EPA	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET EDI
5030C	Purge and Trap	SW846	EET EDI
522	Solid-Phase Extraction (SPE)	EPA	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: Trip Blank

Date Collected: 10/13/23 00:00
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 14:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 14:13	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 14:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 14:13	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 14:13	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 14:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 14:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 14:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 14:13	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 14:13	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 14:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 14:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 14:13	1
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 14:13	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 14:13	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 14:13	1
Acetone	**16**		5.0	4.4	ug/L			10/20/23 14:13	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 14:13	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 14:13	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 14:13	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 14:13	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 14:13	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 14:13	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 14:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 14:13	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 14:13	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 14:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/20/23 14:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 14:13	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 14:13	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 14:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 14:13	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 14:13	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 14:13	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 14:13	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 14:13	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 14:13	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 14:13	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 14:13	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 14:13	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 14:13	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 14:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 14:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 14:13	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/20/23 14:13	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 14:13	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 14:13	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 14:13	1

Client Sample ID: Trip Blank
Lab Sample ID: 460-290512-1
Date Collected: 10/13/23 00:00
Matrix: Water
Date Received: 10/16/23 16:45

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/20/23 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		10/20/23 14:13	1
Bromofluorobenzene	93		70 - 130		10/20/23 14:13	1
Dibromofluoromethane (Surr)	109		70 - 130		10/20/23 14:13	1
Toluene-d8 (Surr)	95		70 - 130		10/20/23 14:13	1

Client Sample ID: 1000-101623-0002
Lab Sample ID: 460-290512-2
Date Collected: 10/16/23 11:00
Matrix: Water
Date Received: 10/16/23 16:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 17:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 17:57	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 17:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 17:57	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 17:57	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 17:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 17:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 17:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 17:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 17:57	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 17:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 17:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 17:57	1
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 17:57	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 17:57	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 17:57	1
Acetone	**13**		5.0	4.4	ug/L			10/20/23 17:57	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 17:57	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 17:57	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 17:57	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 17:57	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 17:57	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 17:57	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 17:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 17:57	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 17:57	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 17:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/20/23 17:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 17:57	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 17:57	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 17:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 17:57	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 17:57	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 17:57	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 17:57	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 17:57	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 17:57	1

Client Sample ID: 1000-101623-0002
Lab Sample ID: 460-290512-2
Date Collected: 10/16/23 11:00
Matrix: Water
Date Received: 10/16/23 16:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 17:57	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 17:57	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 17:57	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 17:57	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 17:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 17:57	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/20/23 17:57	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 17:57	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 17:57	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 17:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*10/20/23 17:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*10/20/23 17:57*	*1*
Bromofluorobenzene	*93*		*70 - 130*		*10/20/23 17:57*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*10/20/23 17:57*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*10/20/23 17:57*	*1*

Method: EPA 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.20	ug/L		10/19/23 13:19	10/19/23 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*101*		*50 - 150*	*10/19/23 13:19*	*10/19/23 22:15*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0	U	4.0	2.5	ug/L		10/18/23 08:45	10/20/23 12:36	1
Nickel	4.0	U	4.0	0.91	ug/L		10/18/23 08:45	10/20/23 12:36	1

Client Sample ID: FDMH-1
Lab Sample ID: 460-290512-3
Date Collected: 10/16/23 09:15
Matrix: Water
Date Received: 10/16/23 16:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 18:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 18:22	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 18:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 18:22	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 18:22	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 18:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 18:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 18:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 18:22	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 18:22	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 18:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 18:22	1

Client Sample ID: FDMH-1

Date Collected: 10/16/23 09:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 18:22	1
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 18:22	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 18:22	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 18:22	1
Acetone	5.0	U	5.0	4.4	ug/L			10/20/23 18:22	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 18:22	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 18:22	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 18:22	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 18:22	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 18:22	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 18:22	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 18:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 18:22	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 18:22	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/20/23 18:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 18:22	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 18:22	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 18:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 18:22	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 18:22	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 18:22	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 18:22	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 18:22	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 18:22	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 18:22	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 18:22	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 18:22	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 18:22	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 18:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 18:22	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/20/23 18:22	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 18:22	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 18:22	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 18:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*10/20/23 18:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*10/20/23 18:22*	*1*
Bromofluorobenzene	*95*		*70 - 130*		*10/20/23 18:22*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*10/20/23 18:22*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*10/20/23 18:22*	*1*

Method: EPA 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.20	ug/L		10/19/23 13:19	10/19/23 22:31	1

Client Sample ID: FDMH-1
Lab Sample ID: 460-290512-3
Date Collected: 10/16/23 09:15
Matrix: Water
Date Received: 10/16/23 16:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*96*		*50 - 150*	*10/19/23 13:19*	*10/19/23 22:31*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0	U	4.0	2.5	ug/L		10/18/23 08:45	10/20/23 12:39	1
Nickel	**2.1**	**J**	4.0	0.91	ug/L		10/18/23 08:45	10/20/23 12:39	1

Client Sample ID: FDMH-2
Lab Sample ID: 460-290512-4
Date Collected: 10/16/23 09:30
Matrix: Water
Date Received: 10/16/23 16:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 18:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 18:47	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 18:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 18:47	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 18:47	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 18:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 18:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 18:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 18:47	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 18:47	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 18:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 18:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 18:47	1
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 18:47	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 18:47	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 18:47	1
Acetone	5.0	U	5.0	4.4	ug/L			10/20/23 18:47	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 18:47	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 18:47	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 18:47	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 18:47	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 18:47	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 18:47	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 18:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 18:47	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 18:47	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 18:47	1
cis-1,2-Dichloroethene	**0.38**	**J**	1.0	0.22	ug/L			10/20/23 18:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 18:47	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 18:47	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 18:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 18:47	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 18:47	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 18:47	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 18:47	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 18:47	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 18:47	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 18:47	1

Client Sample ID: FDMH-2

Date Collected: 10/16/23 09:30
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 18:47	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 18:47	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 18:47	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 18:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 18:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 18:47	1
Trichloroethene	**0.37**	**J**	1.0	0.31	ug/L			10/20/23 18:47	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 18:47	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 18:47	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 18:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*10/20/23 18:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*10/20/23 18:47*	*1*
Bromofluorobenzene	*94*		*70 - 130*		*10/20/23 18:47*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*10/20/23 18:47*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*10/20/23 18:47*	*1*

Method: EPA 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.20	ug/L		10/19/23 13:19	10/19/23 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*92*		*50 - 150*	*10/19/23 13:19*	*10/19/23 22:46*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0	U	4.0	2.5	ug/L		10/18/23 08:45	10/20/23 12:41	1
Nickel	4.0	U	4.0	0.91	ug/L		10/18/23 08:45	10/20/23 12:41	1

Client Sample ID: FDMH-4

Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 19:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 19:12	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 19:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 19:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 19:12	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 19:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 19:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 19:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 19:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 19:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 19:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 19:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 19:12	1

Client Sample ID: FDMH-4

Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 19:12	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 19:12	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 19:12	1
Acetone	5.0	U	5.0	4.4	ug/L			10/20/23 19:12	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 19:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 19:12	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 19:12	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 19:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 19:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 19:12	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 19:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 19:12	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 19:12	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 19:12	1
cis-1,2-Dichloroethene	**0.83**	**J**	1.0	0.22	ug/L			10/20/23 19:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 19:12	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 19:12	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 19:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 19:12	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 19:12	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 19:12	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 19:12	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 19:12	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 19:12	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 19:12	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 19:12	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 19:12	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 19:12	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 19:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 19:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 19:12	1
Trichloroethene	**1.3**		1.0	0.31	ug/L			10/20/23 19:12	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 19:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 19:12	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 19:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*10/20/23 19:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*10/20/23 19:12*	*1*
Bromofluorobenzene	*97*		*70 - 130*		*10/20/23 19:12*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*10/20/23 19:12*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*10/20/23 19:12*	*1*

Method: EPA 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.49**		0.20	0.20	ug/L		10/19/23 13:19	10/19/23 23:01	1

Client Sample ID: FDMH-4
Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*100*		*50 - 150*	*10/19/23 13:19*	*10/19/23 23:01*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0	U	4.0	2.5	ug/L		10/18/23 08:45	10/20/23 12:43	1
Nickel	4.0	U	4.0	0.91	ug/L		10/18/23 08:45	10/20/23 12:43	1

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290512-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-290050-A-1 MS	Matrix Spike	101	105	105	103
460-290050-A-1 MSD	Matrix Spike Duplicate	97	102	104	98
460-290512-1	Trip Blank	103	93	109	95
460-290512-2	1000-101623-0002	105	93	111	96
460-290512-3	FDMH-1	103	95	109	96
460-290512-4	FDMH-2	104	94	113	93
460-290512-5	FDMH-4	104	97	112	101
LCS 460-939407/18	Lab Control Sample	96	101	102	101
LCSD 460-939407/19	Lab Control Sample Dup	95	104	101	101
MB 460-939407/22	Method Blank	102	91	108	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(50-150)
460-290512-2	1000-101623-0002	101
460-290512-3	FDMH-1	96
460-290512-4	FDMH-2	92
460-290512-5	FDMH-4	100
LCS 460-939259/2-A	Lab Control Sample	96
LCSD 460-939259/3-A	Lab Control Sample Dup	100
MB 460-939259/1-A	Method Blank	100

Surrogate Legend

DXE = 1,4-Dioxane-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-939407/22
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/23 13:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/20/23 13:48	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/20/23 13:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/20/23 13:48	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/20/23 13:48	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/23 13:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/20/23 13:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/20/23 13:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/20/23 13:48	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/20/23 13:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/20/23 13:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/20/23 13:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/20/23 13:48	1
2-Butanone	5.0	U	5.0	1.9	ug/L			10/20/23 13:48	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/20/23 13:48	1
4-Methyl-2-pentanone	5.0	U	5.0	1.3	ug/L			10/20/23 13:48	1
Acetone	5.0	U	5.0	4.4	ug/L			10/20/23 13:48	1
Benzene	1.0	U	1.0	0.20	ug/L			10/20/23 13:48	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/20/23 13:48	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/20/23 13:48	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/20/23 13:48	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/20/23 13:48	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/20/23 13:48	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			10/20/23 13:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/23 13:48	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/20/23 13:48	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/20/23 13:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/20/23 13:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 13:48	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/20/23 13:48	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			10/20/23 13:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/20/23 13:48	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/20/23 13:48	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			10/20/23 13:48	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/20/23 13:48	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/20/23 13:48	1
MTBE	1.0	U	1.0	0.22	ug/L			10/20/23 13:48	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/20/23 13:48	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/20/23 13:48	1
Styrene	1.0	U	1.0	0.42	ug/L			10/20/23 13:48	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/20/23 13:48	1
Toluene	1.0	U	1.0	0.38	ug/L			10/20/23 13:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/20/23 13:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/20/23 13:48	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/20/23 13:48	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/20/23 13:48	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/20/23 13:48	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/20/23 13:48	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-939407/22
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Method Blank
Prep Type: Total/NA

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/20/23 13:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		10/20/23 13:48	1
Bromofluorobenzene	91		70 - 130		10/20/23 13:48	1
Dibromofluoromethane (Surr)	108		70 - 130		10/20/23 13:48	1
Toluene-d8 (Surr)	94		70 - 130		10/20/23 13:48	1

Lab Sample ID: LCS 460-939407/18
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	17.3		ug/L		87	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.4		ug/L		102	70 - 130
Freon TF	20.0	16.5		ug/L		83	70 - 130
1,1,2-Trichloroethane	20.0	16.6		ug/L		83	70 - 130
1,1-Dichloroethane	20.0	14.7		ug/L		73	70 - 130
1,1-Dichloroethene	20.0	15.3		ug/L		77	70 - 130
1,2,4-Trichlorobenzene	20.0	20.2		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	20.9		ug/L		105	40 - 160
1,2-Dichlorobenzene	20.0	20.3		ug/L		102	70 - 130
1,2-Dichloroethane	20.0	17.1		ug/L		85	70 - 130
1,2-Dichloropropane	20.0	18.0		ug/L		90	70 - 130
1,3-Dichlorobenzene	20.0	19.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	70 - 130
2-Butanone	100	89.8		ug/L		90	40 - 160
2-Hexanone	100	104		ug/L		104	40 - 160
4-Methyl-2-pentanone	100	105		ug/L		105	40 - 160
Acetone	100	92.4		ug/L		92	40 - 160
Benzene	20.0	16.8		ug/L		84	70 - 130
Bromoform	20.0	17.5		ug/L		88	70 - 130
Bromomethane	20.0	19.1		ug/L		95	40 - 160
Carbon disulfide	20.0	12.9		ug/L		65	40 - 160
Carbon tetrachloride	20.0	17.0		ug/L		85	70 - 130
Chlorobenzene	20.0	17.7		ug/L		89	70 - 130
Dibromochloromethane	20.0	16.7		ug/L		83	70 - 130
Chloroethane	20.0	20.9		ug/L		105	40 - 160
Chloroform	20.0	17.6		ug/L		88	70 - 130
Chloromethane	20.0	19.4		ug/L		97	40 - 160
cis-1,2-Dichloroethene	20.0	17.8		ug/L		89	70 - 130
cis-1,3-Dichloropropene	20.0	15.1		ug/L		76	70 - 130
Cyclohexane	20.0	15.2		ug/L		76	70 - 130
Bromodichloromethane	20.0	18.0		ug/L		90	70 - 130
Dichlorodifluoromethane	20.0	19.3		ug/L		96	40 - 160
Ethylbenzene	20.0	16.7		ug/L		84	70 - 130
1,2-Dibromoethane	20.0	17.0		ug/L		85	70 - 130
Isopropylbenzene	20.0	18.5		ug/L		92	70 - 130

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-939407/18
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methyl acetate			40.0	33.8		ug/L		85	70 - 130		
MTBE			20.0	15.8		ug/L		79	70 - 130		
Methylcyclohexane			20.0	14.5		ug/L		73	70 - 130		
Methylene Chloride			20.0	16.6		ug/L		83	70 - 130		
Styrene			20.0	18.7		ug/L		94	70 - 130		
Tetrachloroethene			20.0	16.2		ug/L		81	70 - 130		
Toluene			20.0	15.9		ug/L		80	70 - 130		
trans-1,2-Dichloroethene			20.0	14.9		ug/L		74	70 - 130		
trans-1,3-Dichloropropene			20.0	16.7		ug/L		84	70 - 130		
Trichloroethene			20.0	16.4		ug/L		82	70 - 130		
Trichlorofluoromethane			20.0	20.9		ug/L		105	40 - 160		
Vinyl chloride			20.0	17.9		ug/L		89	70 - 130		
Xylenes, Total			40.0	33.9		ug/L		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 460-939407/19
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	18.0		ug/L		90	70 - 130	4	20
1,1,2,2-Tetrachloroethane			20.0	18.9		ug/L		94	70 - 130	8	20
Freon TF			20.0	17.5		ug/L		88	70 - 130	6	20
1,1,2-Trichloroethane			20.0	17.2		ug/L		86	70 - 130	4	20
1,1-Dichloroethane			20.0	15.5		ug/L		77	70 - 130	5	20
1,1-Dichloroethene			20.0	16.1		ug/L		80	70 - 130	5	20
1,2,4-Trichlorobenzene			20.0	20.0		ug/L		100	70 - 130	1	20
1,2-Dibromo-3-Chloropropane			20.0	20.0		ug/L		100	40 - 160	4	20
1,2-Dichlorobenzene			20.0	19.6		ug/L		98	70 - 130	3	20
1,2-Dichloroethane			20.0	17.2		ug/L		86	70 - 130	1	20
1,2-Dichloropropane			20.0	17.3		ug/L		87	70 - 130	4	20
1,3-Dichlorobenzene			20.0	20.1		ug/L		101	70 - 130	5	20
1,4-Dichlorobenzene			20.0	18.2		ug/L		91	70 - 130	4	20
2-Butanone			100	94.0		ug/L		94	40 - 160	5	20
2-Hexanone			100	103		ug/L		103	40 - 160	0	20
4-Methyl-2-pentanone			100	102		ug/L		102	40 - 160	3	20
Acetone			100	90.9		ug/L		91	40 - 160	2	20
Benzene			20.0	18.2		ug/L		91	70 - 130	8	20
Bromoform			20.0	18.1		ug/L		90	70 - 130	3	20
Bromomethane			20.0	17.8		ug/L		89	40 - 160	7	20
Carbon disulfide			20.0	13.1		ug/L		66	40 - 160	1	20
Carbon tetrachloride			20.0	16.9		ug/L		84	70 - 130	1	20
Chlorobenzene			20.0	18.3		ug/L		92	70 - 130	3	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-939407/19
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibromochloromethane			20.0	17.4		ug/L		87	70 - 130	4	20
Chloroethane			20.0	21.6		ug/L		108	40 - 160	3	20
Chloroform			20.0	18.3		ug/L		91	70 - 130	4	20
Chloromethane			20.0	19.7		ug/L		99	40 - 160	2	20
cis-1,2-Dichloroethene			20.0	18.2		ug/L		91	70 - 130	2	20
cis-1,3-Dichloropropene			20.0	15.8		ug/L		79	70 - 130	4	20
Cyclohexane			20.0	15.8		ug/L		79	70 - 130	3	20
Bromodichloromethane			20.0	17.5		ug/L		87	70 - 130	3	20
Dichlorodifluoromethane			20.0	18.6		ug/L		93	40 - 160	3	20
Ethylbenzene			20.0	17.5		ug/L		88	70 - 130	4	20
1,2-Dibromoethane			20.0	17.1		ug/L		86	70 - 130	1	20
Isopropylbenzene			20.0	20.5		ug/L		103	70 - 130	10	20
Methyl acetate			40.0	32.1		ug/L		80	70 - 130	5	20
MTBE			20.0	15.0		ug/L		75	70 - 130	5	20
Methylcyclohexane			20.0	14.5		ug/L		72	70 - 130	1	20
Methylene Chloride			20.0	16.7		ug/L		84	70 - 130	1	20
Styrene			20.0	19.0		ug/L		95	70 - 130	2	20
Tetrachloroethene			20.0	16.4		ug/L		82	70 - 130	2	20
Toluene			20.0	16.8		ug/L		84	70 - 130	5	20
trans-1,2-Dichloroethene			20.0	14.5		ug/L		72	70 - 130	3	20
trans-1,3-Dichloropropene			20.0	17.4		ug/L		87	70 - 130	4	20
Trichloroethene			20.0	16.9		ug/L		85	70 - 130	3	20
Trichlorofluoromethane			20.0	18.9		ug/L		95	40 - 160	10	20
Vinyl chloride			20.0	19.7		ug/L		99	70 - 130	10	20
Xylenes, Total			40.0	36.2		ug/L		90	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Bromofluorobenzene	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 460-290050-A-1 MS
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1.0	U	20.0	21.3		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	1.0	U	20.0	20.8		ug/L		104	70 - 130
Freon TF	0.43	J	20.0	19.3		ug/L		94	70 - 130
1,1,2-Trichloroethane	1.0	U	20.0	17.9		ug/L		90	70 - 130
1,1-Dichloroethane	1.0	U F2	20.0	20.8		ug/L		104	70 - 130
1,1-Dichloroethene	0.55	J F2	20.0	20.4		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	1.0	U	20.0	17.7		ug/L		89	70 - 130
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	19.8		ug/L		99	40 - 160
1,2-Dichlorobenzene	1.0	U	20.0	21.9		ug/L		110	70 - 130
1,2-Dichloroethane	1.0	U	20.0	20.4		ug/L		102	70 - 130
1,2-Dichloropropane	1.0	U	20.0	19.7		ug/L		98	70 - 130

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-290050-A-1 MS
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichlorobenzene	1.0	U	20.0	19.7		ug/L		98	70 - 130
1,4-Dichlorobenzene	1.0	U	20.0	19.4		ug/L		97	70 - 130
2-Butanone	1.9	J	100	102		ug/L		100	40 - 160
2-Hexanone	5.0	U	100	102		ug/L		102	40 - 160
4-Methyl-2-pentanone	5.0	U	100	107		ug/L		107	40 - 160
Acetone	5.0	U	100	80.9		ug/L		81	40 - 160
Benzene	1.0	U	20.0	20.8		ug/L		104	70 - 130
Bromoform	1.0	U	20.0	20.6		ug/L		103	70 - 130
Bromomethane	1.0	U	20.0	17.7		ug/L		88	40 - 160
Carbon disulfide	1.0	U	20.0	26.7		ug/L		134	40 - 160
Carbon tetrachloride	1.0	U	20.0	22.1		ug/L		111	70 - 130
Chlorobenzene	1.0	U	20.0	20.5		ug/L		102	70 - 130
Dibromochloromethane	1.0	U	20.0	21.3		ug/L		106	70 - 130
Chloroethane	1.0	U	20.0	20.5		ug/L		103	40 - 160
Chloroform	1.0	U	20.0	20.8		ug/L		104	70 - 130
Chloromethane	0.97	J	20.0	20.1		ug/L		96	40 - 160
cis-1,2-Dichloroethene	6.6		20.0	27.1		ug/L		103	70 - 130
cis-1,3-Dichloropropene	1.0	U	20.0	19.2		ug/L		96	70 - 130
Cyclohexane	1.0	U	20.0	22.0		ug/L		110	70 - 130
Bromodichloromethane	1.0	U	20.0	20.8		ug/L		104	70 - 130
Dichlorodifluoromethane	1.0	U	20.0	19.9		ug/L		99	40 - 160
Ethylbenzene	1.0	U	20.0	19.5		ug/L		97	70 - 130
1,2-Dibromoethane	1.0	U	20.0	21.1		ug/L		105	70 - 130
Isopropylbenzene	1.0	U	20.0	20.1		ug/L		100	70 - 130
Methyl acetate	5.0	U	40.0	35.7		ug/L		89	70 - 130
MTBE	19		20.0	38.3		ug/L		98	70 - 130
Methylcyclohexane	1.0	U	20.0	20.3		ug/L		101	70 - 130
Methylene Chloride	1.0	U	20.0	20.4		ug/L		102	70 - 130
Styrene	1.0	U	20.0	18.7		ug/L		94	70 - 130
Tetrachloroethene	1.0	U	20.0	19.9		ug/L		100	70 - 130
Toluene	1.0	U	20.0	19.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	1.0	U	20.0	20.3		ug/L		101	70 - 130
trans-1,3-Dichloropropene	1.0	U	20.0	17.3		ug/L		87	70 - 130
Trichloroethene	55	F1	20.0	68.9		ug/L		71	70 - 130
Trichlorofluoromethane	1.0	U	20.0	20.2		ug/L		101	40 - 160
Vinyl chloride	0.33	J	20.0	19.3		ug/L		95	70 - 130
Xylenes, Total	2.0	U	40.0	39.7		ug/L		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-290050-A-1 MSD
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	20.7		ug/L		103	70 - 130	3	20
1,1,2,2-Tetrachloroethane	1.0	U	20.0	19.7		ug/L		99	70 - 130	6	20
Freon TF	0.43	J	20.0	17.2		ug/L		84	70 - 130	12	20
1,1,2-Trichloroethane	1.0	U	20.0	17.6		ug/L		88	70 - 130	2	20
1,1-Dichloroethane	1.0	U F2	20.0	16.8	F2	ug/L		84	70 - 130	21	20
1,1-Dichloroethene	0.55	J F2	20.0	15.7	F2	ug/L		75	70 - 130	26	20
1,2,4-Trichlorobenzene	1.0	U	20.0	19.8		ug/L		99	70 - 130	11	20
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	22.7		ug/L		113	40 - 160	13	20
1,2-Dichlorobenzene	1.0	U	20.0	20.9		ug/L		105	70 - 130	5	20
1,2-Dichloroethane	1.0	U	20.0	19.6		ug/L		98	70 - 130	4	20
1,2-Dichloropropane	1.0	U	20.0	18.6		ug/L		93	70 - 130	5	20
1,3-Dichlorobenzene	1.0	U	20.0	20.3		ug/L		101	70 - 130	3	20
1,4-Dichlorobenzene	1.0	U	20.0	18.8		ug/L		94	70 - 130	3	20
2-Butanone	1.9	J	100	104		ug/L		102	40 - 160	2	20
2-Hexanone	5.0	U	100	112		ug/L		112	40 - 160	9	20
4-Methyl-2-pentanone	5.0	U	100	111		ug/L		111	40 - 160	4	20
Acetone	5.0	U	100	71.3		ug/L		71	40 - 160	13	20
Benzene	1.0	U	20.0	18.7		ug/L		94	70 - 130	10	20
Bromoform	1.0	U	20.0	18.0		ug/L		90	70 - 130	14	20
Bromomethane	1.0	U	20.0	16.8		ug/L		84	40 - 160	5	20
Carbon disulfide	1.0	U	20.0	24.4		ug/L		122	40 - 160	9	20
Carbon tetrachloride	1.0	U	20.0	20.2		ug/L		101	70 - 130	9	20
Chlorobenzene	1.0	U	20.0	19.1		ug/L		96	70 - 130	7	20
Dibromochloromethane	1.0	U	20.0	17.5		ug/L		88	70 - 130	19	20
Chloroethane	1.0	U	20.0	19.0		ug/L		95	40 - 160	8	20
Chloroform	1.0	U	20.0	19.7		ug/L		99	70 - 130	5	20
Chloromethane	0.97	J	20.0	19.7		ug/L		94	40 - 160	2	20
cis-1,2-Dichloroethene	6.6		20.0	25.8		ug/L		96	70 - 130	5	20
cis-1,3-Dichloropropene	1.0	U	20.0	17.5		ug/L		87	70 - 130	9	20
Cyclohexane	1.0	U	20.0	21.5		ug/L		107	70 - 130	2	20
Bromodichloromethane	1.0	U	20.0	19.8		ug/L		99	70 - 130	5	20
Dichlorodifluoromethane	1.0	U	20.0	18.7		ug/L		94	40 - 160	6	20
Ethylbenzene	1.0	U	20.0	19.6		ug/L		98	70 - 130	1	20
1,2-Dibromoethane	1.0	U	20.0	18.0		ug/L		90	70 - 130	16	20
Isopropylbenzene	1.0	U	20.0	20.1		ug/L		100	70 - 130	0	20
Methyl acetate	5.0	U	40.0	30.5		ug/L		76	70 - 130	16	20
MTBE	19		20.0	34.0		ug/L		77	70 - 130	12	20
Methylcyclohexane	1.0	U	20.0	18.8		ug/L		94	70 - 130	8	20
Methylene Chloride	1.0	U	20.0	18.7		ug/L		94	70 - 130	8	20
Styrene	1.0	U	20.0	19.3		ug/L		97	70 - 130	3	20
Tetrachloroethene	1.0	U	20.0	18.4		ug/L		92	70 - 130	8	20
Toluene	1.0	U	20.0	18.1		ug/L		91	70 - 130	7	20
trans-1,2-Dichloroethene	1.0	U	20.0	18.4		ug/L		92	70 - 130	10	20
trans-1,3-Dichloropropene	1.0	U	20.0	16.7		ug/L		83	70 - 130	4	20
Trichloroethene	55	F1	20.0	66.6	F1	ug/L		59	70 - 130	3	20
Trichlorofluoromethane	1.0	U	20.0	18.1		ug/L		91	40 - 160	11	20
Vinyl chloride	0.33	J	20.0	18.6		ug/L		91	70 - 130	4	20
Xylenes, Total	2.0	U	40.0	38.4		ug/L		96	70 - 130	3	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-290050-A-1 MSD
Matrix: Water
Analysis Batch: 939407

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 460-939259/1-A
Matrix: Water
Analysis Batch: 939254

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 939259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.20	ug/L		10/19/23 13:19	10/19/23 21:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*100*		*50 - 150*	*10/19/23 13:19*	*10/19/23 21:29*	*1*

Lab Sample ID: LCS 460-939259/2-A
Matrix: Water
Analysis Batch: 939254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 939259

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			4.00	4.61		ug/L		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*96*		*50 - 150*

Lab Sample ID: LCSD 460-939259/3-A
Matrix: Water
Analysis Batch: 939254

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 939259

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane			4.00	4.76		ug/L		119	70 - 130	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*100*		*50 - 150*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-938950/1-A
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 938950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0	U	4.0	2.5	ug/L		10/18/23 08:45	10/20/23 12:09	1
Nickel	4.0	U	4.0	0.91	ug/L		10/18/23 08:45	10/20/23 12:09	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-938950/2-A
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 938950

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			2500	2809		ug/L		112	80 - 120		
Chromium			50.0	53.46		ug/L		107	80 - 120		
Nickel			50.0	53.25		ug/L		107	80 - 120		
Sodium			2500	2785		ug/L		111	80 - 120		

Lab Sample ID: 460-290504-P-9-C MS
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 938950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	1150		2500	3859		ug/L		108	75 - 125		
Chromium	3.3	J	50.0	57.74		ug/L		109	75 - 125		
Nickel	61.0		50.0	113.3		ug/L		104	75 - 125		
Sodium	283000		2500	276200	4	ug/L		-272	75 - 125		

Lab Sample ID: 460-290504-P-9-B DU
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 938950

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium	3.3	J		3.34	J	ug/L				1	20
Nickel	61.0			60.61		ug/L				0.7	20

Lab Sample ID: LRC 460-939564/12
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Fe			500000	490300		ug/L		98	90 - 110		
Na			500000	488100		ug/L		98	90 - 110		

Lab Sample ID: LRC 460-939564/14
Matrix: Water
Analysis Batch: 939564

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			20000	18560		ug/L		93	90 - 110		
Nickel			20000	20000		ug/L		100	90 - 110		

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

GC/MS VOA

Analysis Batch: 939407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290512-1	Trip Blank	Total/NA	Water	8260D	
460-290512-2	1000-101623-0002	Total/NA	Water	8260D	
460-290512-3	FDMH-1	Total/NA	Water	8260D	
460-290512-4	FDMH-2	Total/NA	Water	8260D	
460-290512-5	FDMH-4	Total/NA	Water	8260D	
MB 460-939407/22	Method Blank	Total/NA	Water	8260D	
LCS 460-939407/18	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-939407/19	Lab Control Sample Dup	Total/NA	Water	8260D	
460-290050-A-1 MS	Matrix Spike	Total/NA	Water	8260D	
460-290050-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS Semi VOA

Analysis Batch: 939254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290512-2	1000-101623-0002	Total/NA	Water	522	939259
460-290512-3	FDMH-1	Total/NA	Water	522	939259
460-290512-4	FDMH-2	Total/NA	Water	522	939259
460-290512-5	FDMH-4	Total/NA	Water	522	939259
MB 460-939259/1-A	Method Blank	Total/NA	Water	522	939259
LCS 460-939259/2-A	Lab Control Sample	Total/NA	Water	522	939259
LCSD 460-939259/3-A	Lab Control Sample Dup	Total/NA	Water	522	939259

Prep Batch: 939259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290512-2	1000-101623-0002	Total/NA	Water	522	
460-290512-3	FDMH-1	Total/NA	Water	522	
460-290512-4	FDMH-2	Total/NA	Water	522	
460-290512-5	FDMH-4	Total/NA	Water	522	
MB 460-939259/1-A	Method Blank	Total/NA	Water	522	
LCS 460-939259/2-A	Lab Control Sample	Total/NA	Water	522	
LCSD 460-939259/3-A	Lab Control Sample Dup	Total/NA	Water	522	

Metals

Prep Batch: 938950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290512-2	1000-101623-0002	Total/NA	Water	3010A	
460-290512-3	FDMH-1	Total/NA	Water	3010A	
460-290512-4	FDMH-2	Total/NA	Water	3010A	
460-290512-5	FDMH-4	Total/NA	Water	3010A	
MB 460-938950/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-938950/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-290504-P-9-C MS	Matrix Spike	Total/NA	Water	3010A	
460-290504-P-9-B DU	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 939564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290512-2	1000-101623-0002	Total/NA	Water	6020B	938950
460-290512-3	FDMH-1	Total/NA	Water	6020B	938950
460-290512-4	FDMH-2	Total/NA	Water	6020B	938950
460-290512-5	FDMH-4	Total/NA	Water	6020B	938950

Metals (Continued)

Analysis Batch: 939564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-938950/1-A	Method Blank	Total/NA	Water	6020B	938950
LCS 460-938950/2-A	Lab Control Sample	Total/NA	Water	6020B	938950
LRC 460-939564/12	Lab Control Sample		Water	6020B	
LRC 460-939564/13	Lab Control Sample		Water	6020B	
LRC 460-939564/14	Lab Control Sample		Water	6020B	
460-290504-P-9-C MS	Matrix Spike	Total/NA	Water	6020B	938950
460-290504-P-9-B DU	Duplicate	Total/NA	Water	6020B	938950

Client Sample ID: Trip Blank
Date Collected: 10/13/23 00:00
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	939407	KLB	EET EDI	10/20/23 14:13

Client Sample ID: 1000-101623-0002
Date Collected: 10/16/23 11:00
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	939407	KLB	EET EDI	10/20/23 17:57
Total/NA	Prep	522			939259	AXB	EET EDI	10/19/23 13:19
Total/NA	Analysis	522		1	939254	MDJ	EET EDI	10/19/23 22:15
Total/NA	Prep	3010A			938950	NNW	EET EDI	10/18/23 08:45
Total/NA	Analysis	6020B		1	939564	CDC	EET EDI	10/20/23 12:36

Client Sample ID: FDMH-1
Date Collected: 10/16/23 09:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	939407	KLB	EET EDI	10/20/23 18:22
Total/NA	Prep	522			939259	AXB	EET EDI	10/19/23 13:19
Total/NA	Analysis	522		1	939254	MDJ	EET EDI	10/19/23 22:31
Total/NA	Prep	3010A			938950	NNW	EET EDI	10/18/23 08:45
Total/NA	Analysis	6020B		1	939564	CDC	EET EDI	10/20/23 12:39

Client Sample ID: FDMH-2
Date Collected: 10/16/23 09:30
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	939407	KLB	EET EDI	10/20/23 18:47
Total/NA	Prep	522			939259	AXB	EET EDI	10/19/23 13:19
Total/NA	Analysis	522		1	939254	MDJ	EET EDI	10/19/23 22:46
Total/NA	Prep	3010A			938950	NNW	EET EDI	10/18/23 08:45
Total/NA	Analysis	6020B		1	939564	CDC	EET EDI	10/20/23 12:41

Client Sample ID: FDMH-4
Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290512-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	939407	KLB	EET EDI	10/20/23 19:12
Total/NA	Prep	522			939259	AXB	EET EDI	10/19/23 13:19
Total/NA	Analysis	522		1	939254	MDJ	EET EDI	10/19/23 23:01
Total/NA	Prep	3010A			938950	NNW	EET EDI	10/18/23 08:45
Total/NA	Analysis	6020B		1	939564	CDC	EET EDI	10/20/23 12:43

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290512-1

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc. Job ID: 460-290512-1
Project/Site: Racer, Ewing/Trenton

Laboratory: Eurofins Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
522	522	Water	1,4-Dioxane

8260D_DKQP

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
Trip Blank	460-290512-1	109	103	95	93
1000-101623-0002	460-290512-2	111	105	96	93
FDMH-1	460-290512-3	109	103	96	95
FDMH-2	460-290512-4	113	104	93	94
FDMH-4	460-290512-5	112	104	101	97
	MB 460-939407/22	108	102	94	91
	LCS 460-939407/18	102	96	101	101
	LCSD 460-939407/19	101	95	101	104
	460-290050-A-1 MS	105	101	103	105
	460-290050-A-1 MSD	104	97	98	102

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = Bromofluorobenzene	70-130

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971282.D

Lab ID: LCS 460-939407/18 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	17.3	87	70-130	
1,1,2,2-Tetrachloroethane	20.0	20.4	102	70-130	
Freon TF	20.0	16.5	83	70-130	
1,1,2-Trichloroethane	20.0	16.6	83	70-130	
1,1-Dichloroethane	20.0	14.7	73	70-130	
1,1-Dichloroethene	20.0	15.3	77	70-130	
1,2,4-Trichlorobenzene	20.0	20.2	101	70-130	
1,2-Dibromo-3-Chloropropane	20.0	20.9	105	40-160	
1,2-Dichlorobenzene	20.0	20.3	102	70-130	
1,2-Dichloroethane	20.0	17.1	85	70-130	
1,2-Dichloropropane	20.0	18.0	90	70-130	
1,3-Dichlorobenzene	20.0	19.1	96	70-130	
1,4-Dichlorobenzene	20.0	19.0	95	70-130	
2-Butanone	100	89.8	90	40-160	
2-Hexanone	100	104	104	40-160	
4-Methyl-2-pentanone	100	105	105	40-160	
Acetone	100	92.4	92	40-160	
Benzene	20.0	16.8	84	70-130	
Bromoform	20.0	17.5	88	70-130	
Bromomethane	20.0	19.1	95	40-160	
Carbon disulfide	20.0	12.9	65	40-160	
Carbon tetrachloride	20.0	17.0	85	70-130	
Chlorobenzene	20.0	17.7	89	70-130	
Dibromochloromethane	20.0	16.7	83	70-130	
Chloroethane	20.0	20.9	105	40-160	
Chloroform	20.0	17.6	88	70-130	
Chloromethane	20.0	19.4	97	40-160	
cis-1,2-Dichloroethene	20.0	17.8	89	70-130	
cis-1,3-Dichloropropene	20.0	15.1	76	70-130	
Cyclohexane	20.0	15.2	76	70-130	
Bromodichloromethane	20.0	18.0	90	70-130	
Dichlorodifluoromethane	20.0	19.3	96	40-160	
Ethylbenzene	20.0	16.7	84	70-130	
1,2-Dibromoethane	20.0	17.0	85	70-130	
Isopropylbenzene	20.0	18.5	92	70-130	
Methyl acetate	40.0	33.8	85	70-130	
MTBE	20.0	15.8	79	70-130	
Methylcyclohexane	20.0	14.5	73	70-130	
Methylene Chloride	20.0	16.6	83	70-130	
Styrene	20.0	18.7	94	70-130	
Tetrachloroethene	20.0	16.2	81	70-130	
Toluene	20.0	15.9	80	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971282.D

Lab ID: LCS 460-939407/18 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
trans-1,2-Dichloroethene	20.0	14.9	74	70-130	
trans-1,3-Dichloropropene	20.0	16.7	84	70-130	
Trichloroethene	20.0	16.4	82	70-130	
Trichlorofluoromethane	20.0	20.9	105	40-160	
Vinyl chloride	20.0	17.9	89	70-130	
Xylenes, Total	40.0	33.9	85	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971283.D

Lab ID: LCSD 460-939407/19 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	18.0	90	4	20	70-130	
1,1,2,2-Tetrachloroethane	20.0	18.9	94	8	20	70-130	
Freon TF	20.0	17.5	88	6	20	70-130	
1,1,2-Trichloroethane	20.0	17.2	86	4	20	70-130	
1,1-Dichloroethane	20.0	15.5	77	5	20	70-130	
1,1-Dichloroethene	20.0	16.1	80	5	20	70-130	
1,2,4-Trichlorobenzene	20.0	20.0	100	1	20	70-130	
1,2-Dibromo-3-Chloropropane	20.0	20.0	100	4	20	40-160	
1,2-Dichlorobenzene	20.0	19.6	98	3	20	70-130	
1,2-Dichloroethane	20.0	17.2	86	1	20	70-130	
1,2-Dichloropropane	20.0	17.3	87	4	20	70-130	
1,3-Dichlorobenzene	20.0	20.1	101	5	20	70-130	
1,4-Dichlorobenzene	20.0	18.2	91	4	20	70-130	
2-Butanone	100	94.0	94	5	20	40-160	
2-Hexanone	100	103	103	0	20	40-160	
4-Methyl-2-pentanone	100	102	102	3	20	40-160	
Acetone	100	90.9	91	2	20	40-160	
Benzene	20.0	18.2	91	8	20	70-130	
Bromoform	20.0	18.1	90	3	20	70-130	
Bromomethane	20.0	17.8	89	7	20	40-160	
Carbon disulfide	20.0	13.1	66	1	20	40-160	
Carbon tetrachloride	20.0	16.9	84	1	20	70-130	
Chlorobenzene	20.0	18.3	92	3	20	70-130	
Dibromochloromethane	20.0	17.4	87	4	20	70-130	
Chloroethane	20.0	21.6	108	3	20	40-160	
Chloroform	20.0	18.3	91	4	20	70-130	
Chloromethane	20.0	19.7	99	2	20	40-160	
cis-1,2-Dichloroethene	20.0	18.2	91	2	20	70-130	
cis-1,3-Dichloropropene	20.0	15.8	79	4	20	70-130	
Cyclohexane	20.0	15.8	79	3	20	70-130	
Bromodichloromethane	20.0	17.5	87	3	20	70-130	
Dichlorodifluoromethane	20.0	18.6	93	3	20	40-160	
Ethylbenzene	20.0	17.5	88	4	20	70-130	
1,2-Dibromoethane	20.0	17.1	86	1	20	70-130	
Isopropylbenzene	20.0	20.5	103	10	20	70-130	
Methyl acetate	40.0	32.1	80	5	20	70-130	
MTBE	20.0	15.0	75	5	20	70-130	
Methylcyclohexane	20.0	14.5	72	1	20	70-130	
Methylene Chloride	20.0	16.7	84	1	20	70-130	
Styrene	20.0	19.0	95	2	20	70-130	
Tetrachloroethene	20.0	16.4	82	2	20	70-130	
Toluene	20.0	16.8	84	5	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971283.D

Lab ID: LCSD 460-939407/19 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
trans-1,2-Dichloroethene	20.0	14.5	72	3	20	70-130	
trans-1,3-Dichloropropene	20.0	17.4	87	4	20	70-130	
Trichloroethene	20.0	16.9	85	3	20	70-130	
Trichlorofluoromethane	20.0	18.9	95	10	20	40-160	
Vinyl chloride	20.0	19.7	99	10	20	70-130	
Xylenes, Total	40.0	36.2	90	6	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971292.D

Lab ID: 460-290050-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	1.0 U	21.3	106	70-130	
1,1,2,2-Tetrachloroethane	20.0	1.0 U	20.8	104	70-130	
Freon TF	20.0	0.43 J	19.3	94	70-130	
1,1,2-Trichloroethane	20.0	1.0 U	17.9	90	70-130	
1,1-Dichloroethane	20.0	1.0 U	20.8	104	70-130	
1,1-Dichloroethene	20.0	0.55 J	20.4	99	70-130	
1,2,4-Trichlorobenzene	20.0	1.0 U	17.7	89	70-130	
1,2-Dibromo-3-Chloropropane	20.0	1.0 U	19.8	99	40-160	
1,2-Dichlorobenzene	20.0	1.0 U	21.9	110	70-130	
1,2-Dichloroethane	20.0	1.0 U	20.4	102	70-130	
1,2-Dichloropropane	20.0	1.0 U	19.7	98	70-130	
1,3-Dichlorobenzene	20.0	1.0 U	19.7	98	70-130	
1,4-Dichlorobenzene	20.0	1.0 U	19.4	97	70-130	
2-Butanone	100	1.9 J	102	100	40-160	
2-Hexanone	100	5.0 U	102	102	40-160	
4-Methyl-2-pentanone	100	5.0 U	107	107	40-160	
Acetone	100	5.0 U	80.9	81	40-160	
Benzene	20.0	1.0 U	20.8	104	70-130	
Bromoform	20.0	1.0 U	20.6	103	70-130	
Bromomethane	20.0	1.0 U	17.7	88	40-160	
Carbon disulfide	20.0	1.0 U	26.7	134	40-160	
Carbon tetrachloride	20.0	1.0 U	22.1	111	70-130	
Chlorobenzene	20.0	1.0 U	20.5	102	70-130	
Dibromochloromethane	20.0	1.0 U	21.3	106	70-130	
Chloroethane	20.0	1.0 U	20.5	103	40-160	
Chloroform	20.0	1.0 U	20.8	104	70-130	
Chloromethane	20.0	0.97 J	20.1	96	40-160	
cis-1,2-Dichloroethene	20.0	6.6	27.1	103	70-130	
cis-1,3-Dichloropropene	20.0	1.0 U	19.2	96	70-130	
Cyclohexane	20.0	1.0 U	22.0	110	70-130	
Bromodichloromethane	20.0	1.0 U	20.8	104	70-130	
Dichlorodifluoromethane	20.0	1.0 U	19.9	99	40-160	
Ethylbenzene	20.0	1.0 U	19.5	97	70-130	
1,2-Dibromoethane	20.0	1.0 U	21.1	105	70-130	
Isopropylbenzene	20.0	1.0 U	20.1	100	70-130	
Methyl acetate	40.0	5.0 U	35.7	89	70-130	
MTBE	20.0	19	38.3	98	70-130	
Methylcyclohexane	20.0	1.0 U	20.3	101	70-130	
Methylene Chloride	20.0	1.0 U	20.4	102	70-130	
Styrene	20.0	1.0 U	18.7	94	70-130	
Tetrachloroethene	20.0	1.0 U	19.9	100	70-130	
Toluene	20.0	1.0 U	19.4	97	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971292.D

Lab ID: 460-290050-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
trans-1,2-Dichloroethene	20.0	1.0 U	20.3	101	70-130	
trans-1,3-Dichloropropene	20.0	1.0 U	17.3	87	70-130	
Trichloroethene	20.0	55	68.9	71	70-130	
Trichlorofluoromethane	20.0	1.0 U	20.2	101	40-160	
Vinyl chloride	20.0	0.33 J	19.3	95	70-130	
Xylenes, Total	40.0	2.0 U	39.7	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971293.D

Lab ID: 460-290050-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	20.7	103	3	20	70-130	
1,1,2,2-Tetrachloroethane	20.0	19.7	99	6	20	70-130	
Freon TF	20.0	17.2	84	12	20	70-130	
1,1,2-Trichloroethane	20.0	17.6	88	2	20	70-130	
1,1-Dichloroethane	20.0	16.8	84	21	20	70-130	F2
1,1-Dichloroethene	20.0	15.7	75	26	20	70-130	F2
1,2,4-Trichlorobenzene	20.0	19.8	99	11	20	70-130	
1,2-Dibromo-3-Chloropropane	20.0	22.7	113	13	20	40-160	
1,2-Dichlorobenzene	20.0	20.9	105	5	20	70-130	
1,2-Dichloroethane	20.0	19.6	98	4	20	70-130	
1,2-Dichloropropane	20.0	18.6	93	5	20	70-130	
1,3-Dichlorobenzene	20.0	20.3	101	3	20	70-130	
1,4-Dichlorobenzene	20.0	18.8	94	3	20	70-130	
2-Butanone	100	104	102	2	20	40-160	
2-Hexanone	100	112	112	9	20	40-160	
4-Methyl-2-pentanone	100	111	111	4	20	40-160	
Acetone	100	71.3	71	13	20	40-160	
Benzene	20.0	18.7	94	10	20	70-130	
Bromoform	20.0	18.0	90	14	20	70-130	
Bromomethane	20.0	16.8	84	5	20	40-160	
Carbon disulfide	20.0	24.4	122	9	20	40-160	
Carbon tetrachloride	20.0	20.2	101	9	20	70-130	
Chlorobenzene	20.0	19.1	96	7	20	70-130	
Dibromochloromethane	20.0	17.5	88	19	20	70-130	
Chloroethane	20.0	19.0	95	8	20	40-160	
Chloroform	20.0	19.7	99	5	20	70-130	
Chloromethane	20.0	19.7	94	2	20	40-160	
cis-1,2-Dichloroethene	20.0	25.8	96	5	20	70-130	
cis-1,3-Dichloropropene	20.0	17.5	87	9	20	70-130	
Cyclohexane	20.0	21.5	107	2	20	70-130	
Bromodichloromethane	20.0	19.8	99	5	20	70-130	
Dichlorodifluoromethane	20.0	18.7	94	6	20	40-160	
Ethylbenzene	20.0	19.6	98	1	20	70-130	
1,2-Dibromoethane	20.0	18.0	90	16	20	70-130	
Isopropylbenzene	20.0	20.1	100	0	20	70-130	
Methyl acetate	40.0	30.5	76	16	20	70-130	
MTBE	20.0	34.0	77	12	20	70-130	
Methylcyclohexane	20.0	18.8	94	8	20	70-130	
Methylene Chloride	20.0	18.7	94	8	20	70-130	
Styrene	20.0	19.3	97	3	20	70-130	
Tetrachloroethene	20.0	18.4	92	8	20	70-130	
Toluene	20.0	18.1	91	7	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: J971293.D

Lab ID: 460-290050-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
trans-1,2-Dichloroethene	20.0	18.4	92	10	20	70-130	
trans-1,3-Dichloropropene	20.0	16.7	83	4	20	70-130	
Trichloroethene	20.0	66.6	59	3	20	70-130	F1
Trichlorofluoromethane	20.0	18.1	91	11	20	40-160	
Vinyl chloride	20.0	18.6	91	4	20	70-130	
Xylenes, Total	40.0	38.4	96	3	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab File ID: J971286.D Lab Sample ID: MB 460-939407/22

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS8 Date Analyzed: 10/20/2023 13:48

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-939407/18	J971282.D	10/20/2023 12:08
	LCSD 460-939407/19	J971283.D	10/20/2023 12:33
Trip Blank	460-290512-1	J971287.D	10/20/2023 14:13
	460-290050-A-1 MS	J971292.D	10/20/2023 16:18
	460-290050-A-1 MSD	J971293.D	10/20/2023 16:43
1000-101623-0002	460-290512-2	J971296.D	10/20/2023 17:57
FDMH-1	460-290512-3	J971297.D	10/20/2023 18:22
FDMH-2	460-290512-4	J971298.D	10/20/2023 18:47
FDMH-4	460-290512-5	J971299.D	10/20/2023 19:12

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab File ID: J971265.D BFB Injection Date: 10/20/2023

Instrument ID: CVOAMS8 BFB Injection Time: 02:42

Analysis Batch No.: 939407

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	50 - 200% of m/z 174	123.3
96	5 - 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0
174	50 - 200% of m/z 95	81.1
175	5 - 9% of m/z 174	9.0
176	95 -105% of m/z 174	95.3
177	5 - 10% of m/z 176	5.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD7 460-939407/3	J971267.D	10/20/2023	3:31
	STD1 460-939407/4	J971268.D	10/20/2023	3:56
	STD20 460-939407/6	J971270.D	10/20/2023	4:46
	STD50 460-939407/7	J971271.D	10/20/2023	5:11
	STD200 460-939407/8	J971272.D	10/20/2023	5:36
	STD500 460-939407/9	J971273.D	10/20/2023	6:01
	STD5 460-939407/16	J971280.D	10/20/2023	11:18
	ICV 460-939407/17	J971281.D	10/20/2023	11:43
	LCS 460-939407/18	J971282.D	10/20/2023	12:08
	LCSD 460-939407/19	J971283.D	10/20/2023	12:33
	MB 460-939407/22	J971286.D	10/20/2023	13:48
Trip Blank	460-290512-1	J971287.D	10/20/2023	14:13
	460-290050-A-1 MS	J971292.D	10/20/2023	16:18
	460-290050-A-1 MSD	J971293.D	10/20/2023	16:43
1000-101623-0002	460-290512-2	J971296.D	10/20/2023	17:57
FDMH-1	460-290512-3	J971297.D	10/20/2023	18:22
FDMH-2	460-290512-4	J971298.D	10/20/2023	18:47
FDMH-4	460-290512-5	J971299.D	10/20/2023	19:12

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Sample No.: STD20 460-939407/6 Date Analyzed: 10/20/2023 04:46

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): J971270.D Heated Purge: (Y/N) N

Calibration ID: 94808

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		168233	2.38	185828	3.29	515889	4.31
UPPER LIMIT		336466	2.88	371656	3.79	1031778	4.81
LOWER LIMIT		84117	1.88	92914	2.79	257945	3.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-939407/17		208057	2.39	226094	3.30	545827	4.31
LCS 460-939407/18		197347	2.39	209413	3.30	567932	4.31
LCSD 460-939407/19		185022	2.39	201323	3.30	563600	4.31
MB 460-939407/22		197433	2.39	195314	3.30	490740	4.32
460-290512-1	Trip Blank	189355	2.39	186794	3.30	471138	4.32
460-290050-A-1 MS		176526	2.39	187061	3.30	502032	4.32
460-290050-A-1 MSD		162500	2.39	182107	3.30	506931	4.32
460-290512-2	1000-101623-0002	149162	2.40	176982	3.30	443299	4.32
460-290512-3	FDMH-1	166028	2.39	189239	3.30	472481	4.32
460-290512-4	FDMH-2	135779	2.39	160596	3.30	426644	4.32
460-290512-5	FDMH-4	153672	2.40	174670	3.30	450347	4.32

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Sample No.: STD20 460-939407/6 Date Analyzed: 10/20/2023 04:46

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): J971270.D Heated Purge: (Y/N) N

Calibration ID: 94808

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		21272	5.01	379916	7.97	219440	10.35
UPPER LIMIT		42544	5.51	759832	8.47	438880	10.85
LOWER LIMIT		10636	4.51	189958	7.47	109720	9.85
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-939407/17		22826	5.02	390447	7.98	215863	10.36
LCS 460-939407/18		23916	5.02	420517	7.97	212030	10.36
LCSD 460-939407/19		24510	5.02	386908	7.97	220258	10.36
MB 460-939407/22		20801	5.02	381058	7.98	189235	10.36
460-290512-1	Trip Blank	19826	5.02	358812	7.98	179182	10.36
460-290050-A-1 MS		21732	5.02	368699	7.98	207955	10.36
460-290050-A-1 MSD		22804	5.03	376913	7.98	207099	10.36
460-290512-2	1000-101623-0002	18183	5.03	346685	7.99	172738	10.36
460-290512-3	FDMH-1	18369	5.03	350020	7.99	170183	10.37
460-290512-4	FDMH-2	17046	5.03	346056	7.99	171580	10.37
460-290512-5	FDMH-4	17325	5.03	331663	7.99	170145	10.37

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: Trip Blank | Lab Sample ID: 460-290512-1

Matrix: Water | Lab File ID: J971287.D

Analysis Method: 8260D | Date Collected: 10/13/2023 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 14:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	16		5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: Trip Blank | Lab Sample ID: 460-290512-1

Matrix: Water | Lab File ID: J971287.D

Analysis Method: 8260D | Date Collected: 10/13/2023 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 14:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-130
460-00-4	Bromofluorobenzene	93		70-130
1868-53-7	Dibromofluoromethane (Surr)	109		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: Trip Blank | Lab Sample ID: 460-290512-1

Matrix: Water | Lab File ID: J971287.D

Analysis Method: 8260D | Date Collected: 10/13/2023 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 14:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Lims ID:	460-290512-A-1				
Client ID:	Trip Blank				
Sample Type:	Client				
Inject. Date:	20-Oct-2023 14:13:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-290512-A-1				
Misc. Info.:	460-0167608-023				
Operator ID:		Instrument ID:	CVOAMS8		
Method:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	21-Oct-2023 03:27:54	Calib Date:	20-Oct-2023 11:18:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: K0HS		Date:	20-Oct-2023 14:32:59		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
22 Acetone	43	2.128	2.125	0.003	83	10907	16.0	
* 30 TBA-d9 (IS)	65	2.390	2.380	0.010	76	189355	1000.0	
* 43 2-Butanone-d5	46	3.296	3.292	0.004	87	186794	250.0	
$ 55 Dibromofluoromethane (Surr)	113	3.728	3.718	0.010	95	155750	54.3	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.056	4.046	0.010	0	160432	51.5	
* 66 Fluorobenzene	96	4.318	4.308	0.010	99	471138	50.0	
* 72 1,4-Dioxane-d8	96	5.023	5.007	0.016	0	19826	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.026	6.017	0.009	99	385601	47.7	
* 94 Chlorobenzene-d5	117	7.979	7.969	0.009	86	358812	50.0	
$ 105 4-Bromofluorobenzene	174	9.310	9.307	0.003	94	112377	46.6	
* 121 1,4-Dichlorobenzene-d4	152	10.362	10.353	0.009	96	179182	50.0	

QC Flag Legend

Processing Flags

Reagents:

8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

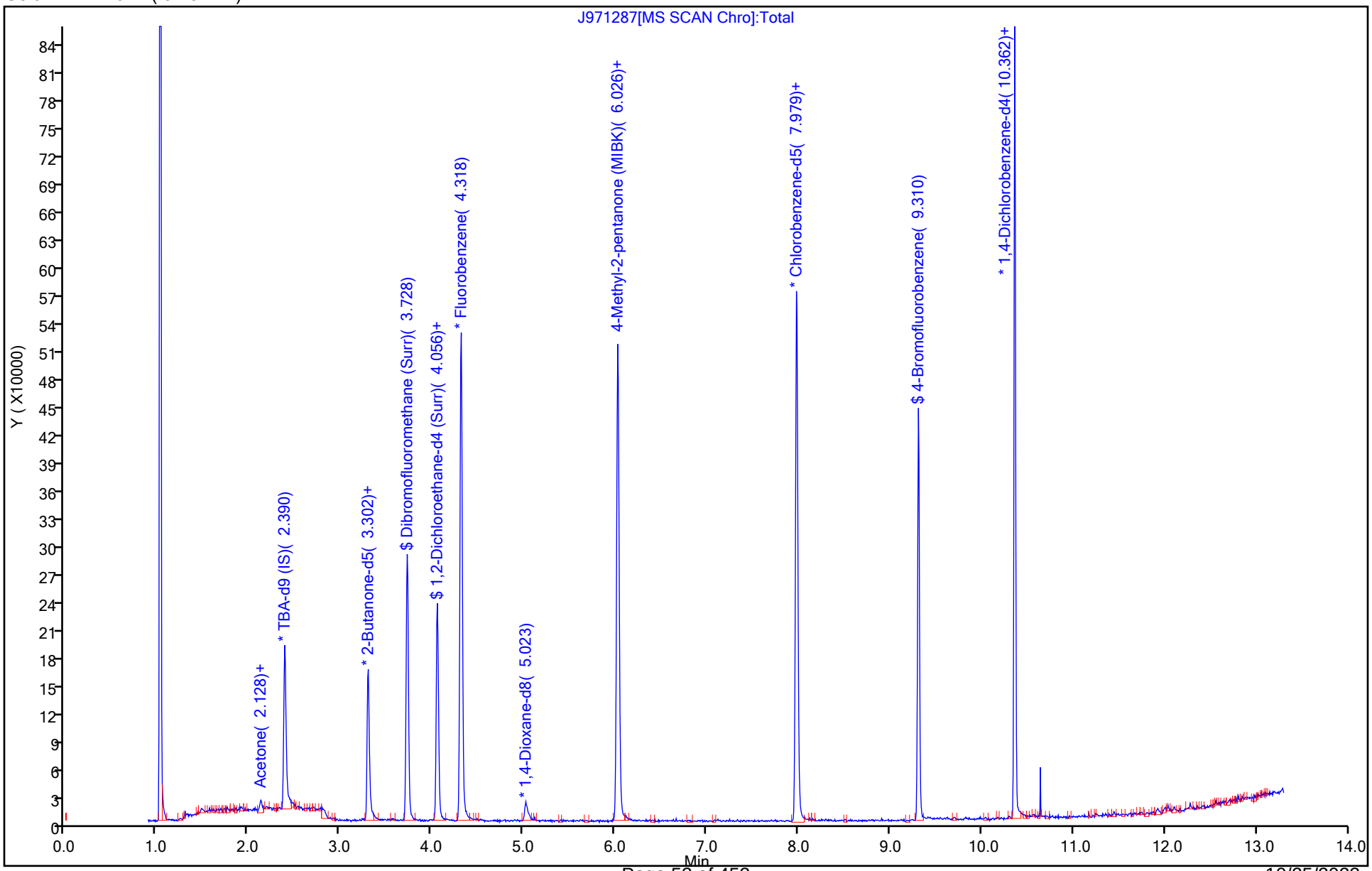
Report Date: 22-Oct-2023 14:52:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D

Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1	Worklist Smp#:	23
Client ID:	Trip Blank				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)

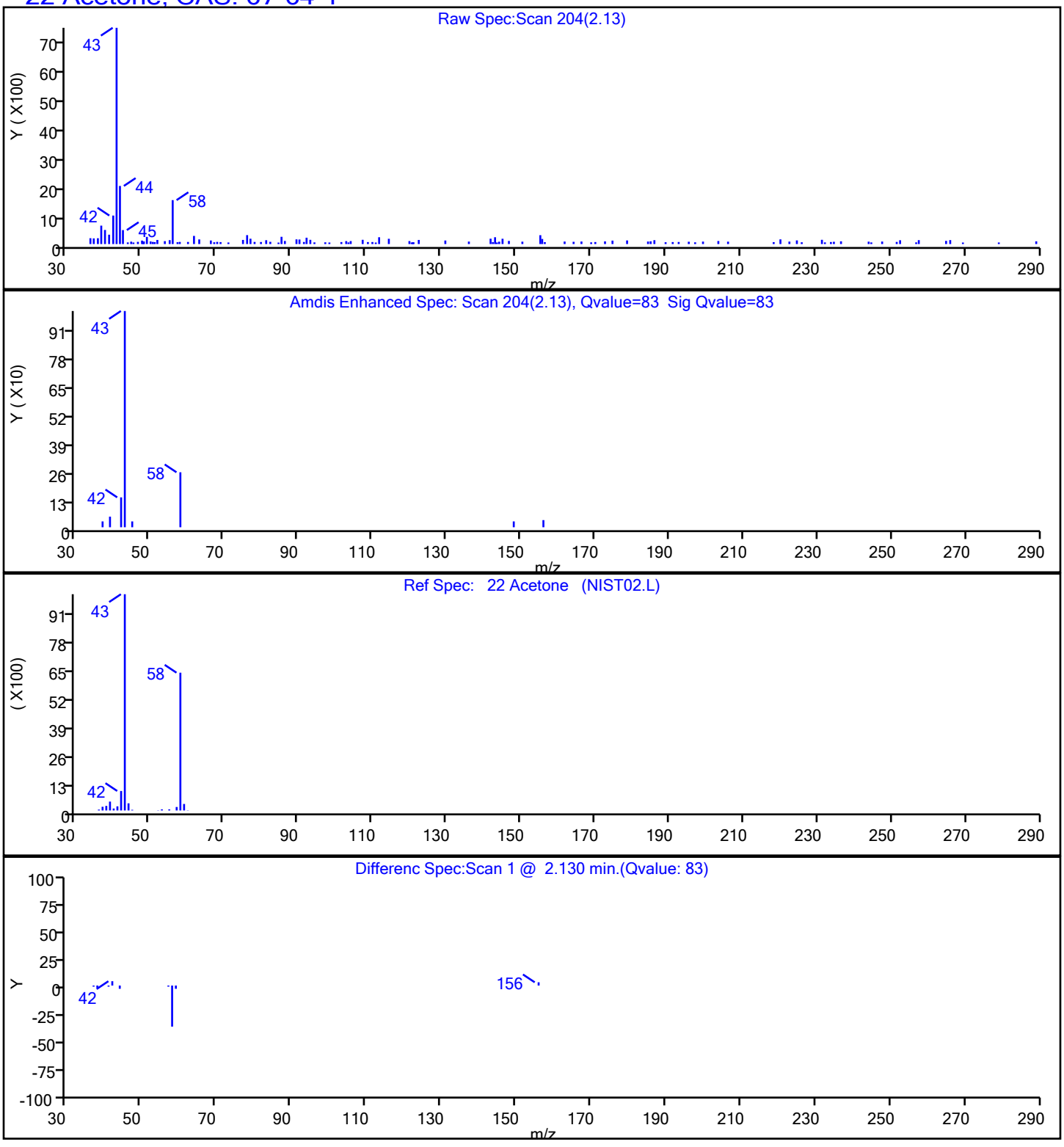


10/25/2023
1:26 PM

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D
Injection Date: 20-Oct-2023 14:13:30 Instrument ID: CVOAMS8
Lims ID: 460-290512-A-1 Lab Sample ID: 460-290512-1
Client ID: Trip Blank
Operator ID: ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1



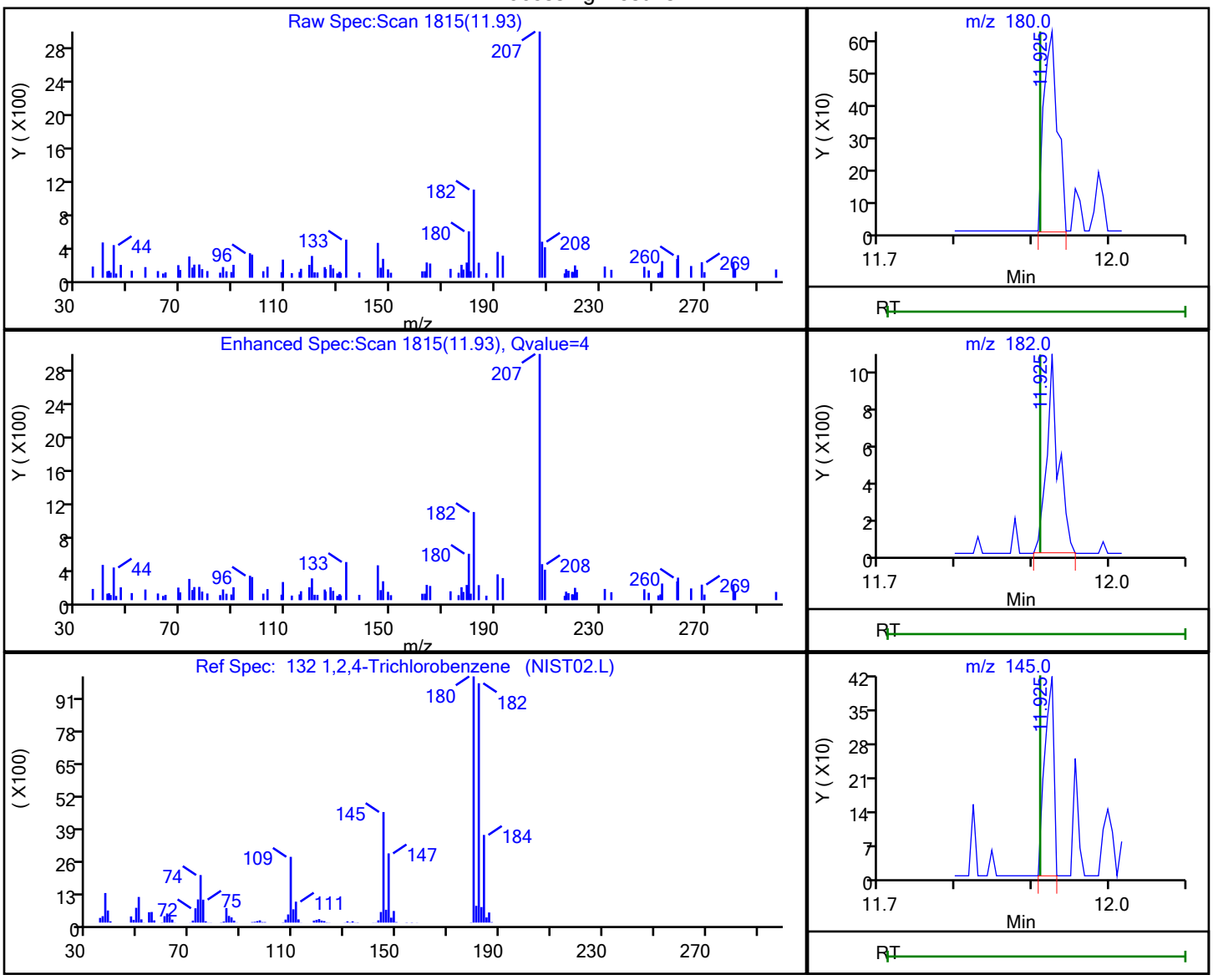
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

132 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
11.93	180.00	787	0.399051
11.93	182.00	1129	
11.93	145.00	343	

Reviewer: W9CM, 20-Oct-2023 18:16:37 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

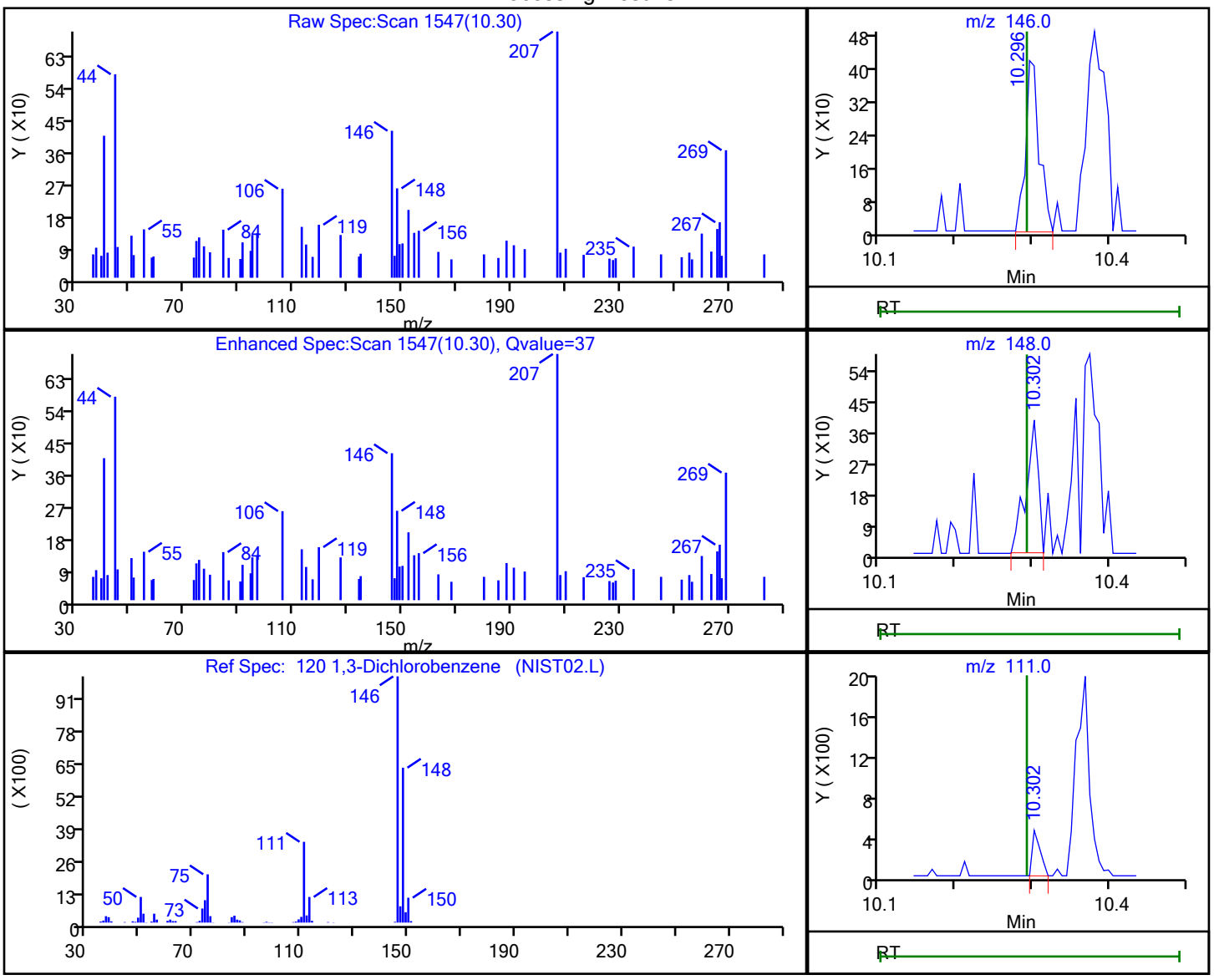
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

120 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
10.30	146.00	517	0.143322
10.30	148.00	443	
10.30	111.00	322	

Reviewer: K0HS, 20-Oct-2023 14:32:56 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

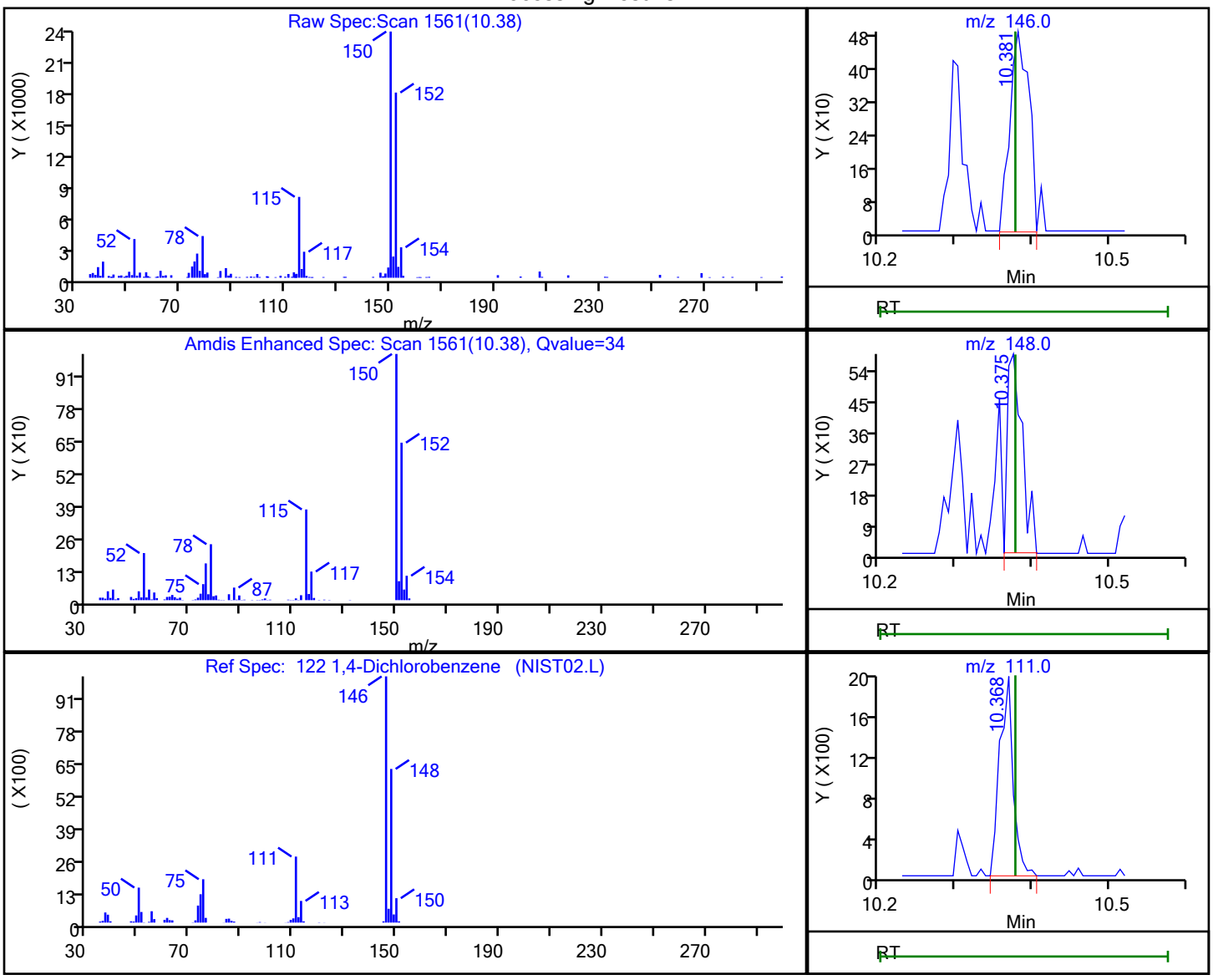
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

122 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
10.38	146.00	840	0.206707
10.37	148.00	790	
10.37	111.00	2411	

Reviewer: K0HS, 20-Oct-2023 14:32:55 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

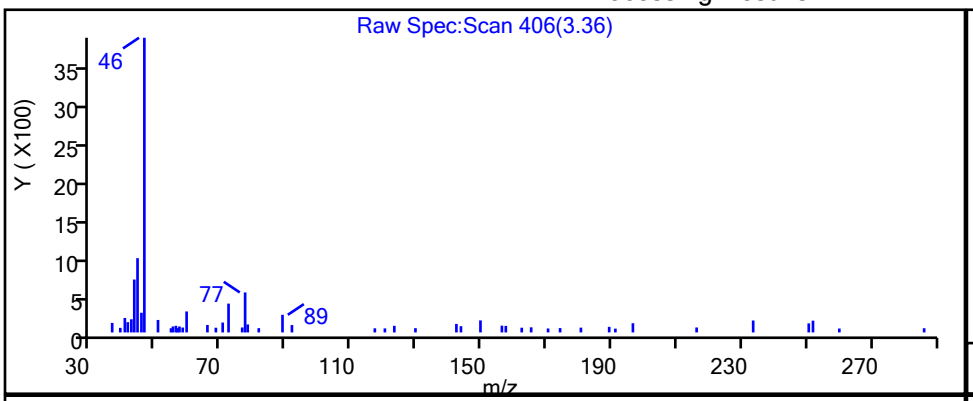
User Disabled Compound Report

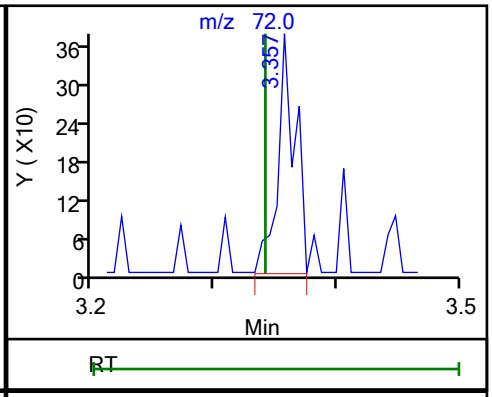
Eurofins Edison

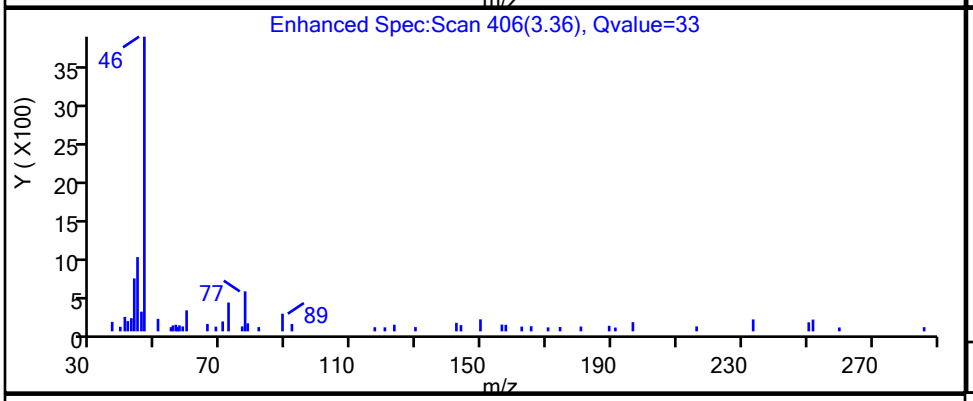
Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

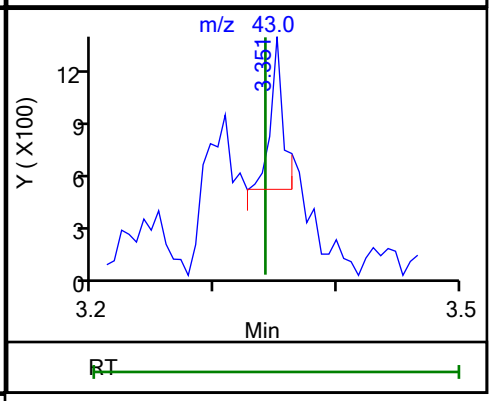
46 2-Butanone (MEK), CAS: 78-93-3

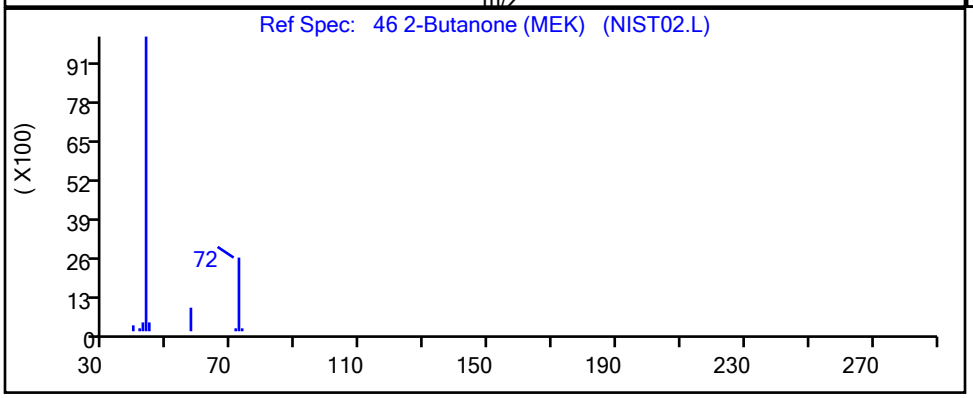
Processing Results











RT	Mass	Response	Amount
3.36	72.00	374	2.320622
3.35	43.00	622	

Reviewer: K0HS, 20-Oct-2023 14:32:44 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

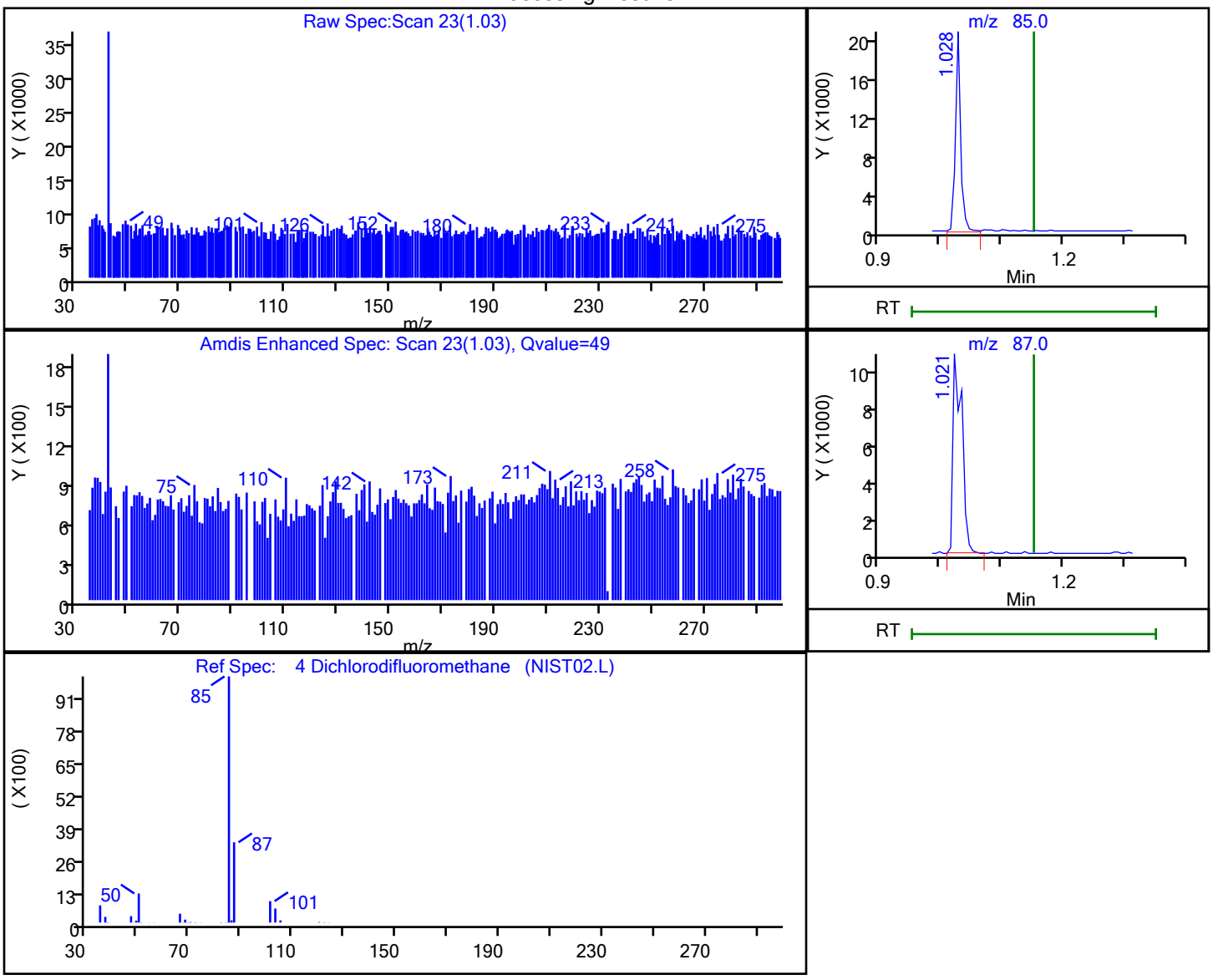
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

4 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.03	85.00	12129	4.942934
1.02	87.00	11145	

Reviewer: K0HS, 20-Oct-2023 14:32:37 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

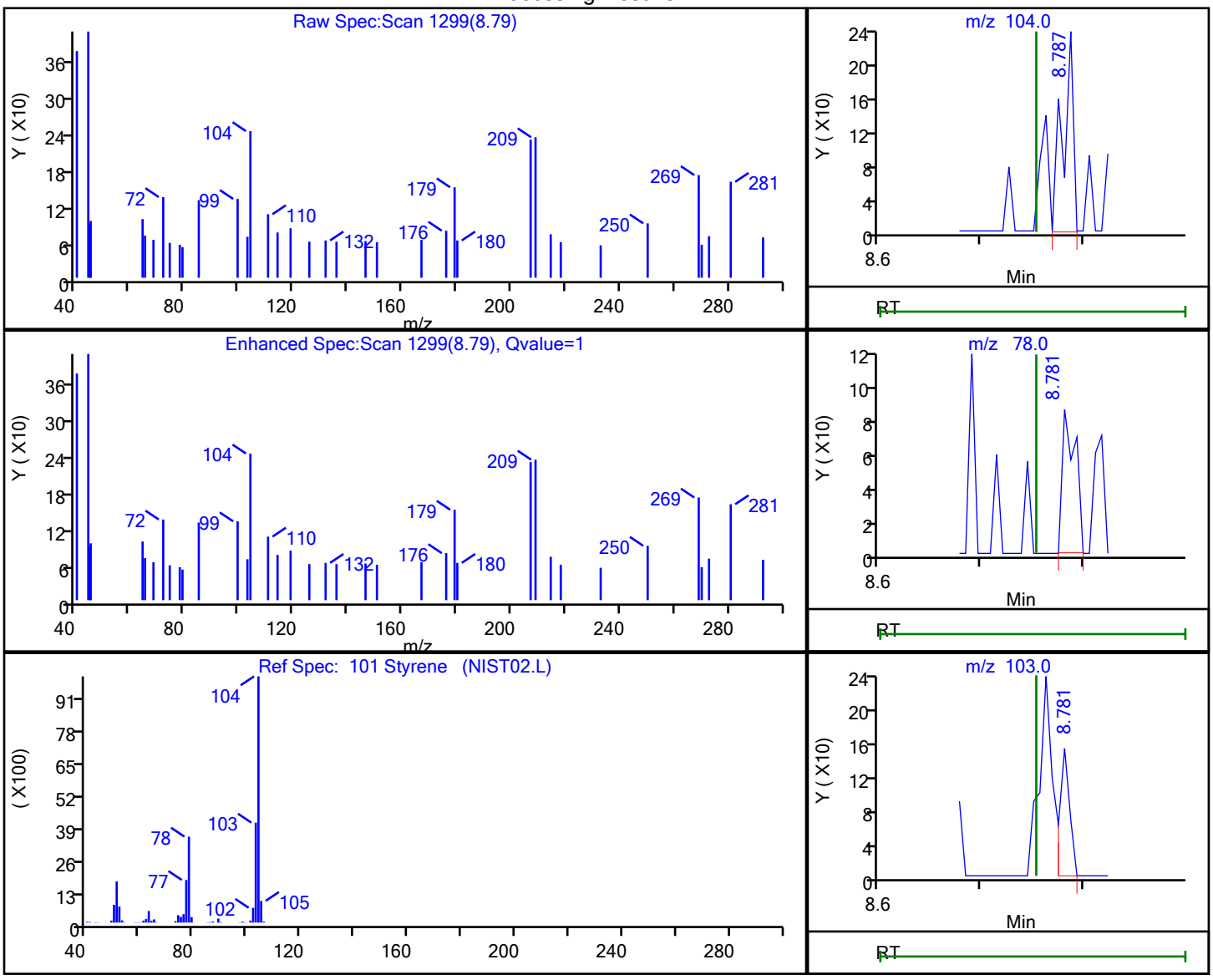
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971287.D				
Injection Date:	20-Oct-2023 14:13:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-1	Lab Sample ID:	460-290512-1		
Client ID:	Trip Blank				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

101 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.79	104.00	169	0.523645
8.78	78.00	74	
8.78	103.00	102	

Reviewer: W9CM, 20-Oct-2023 18:16:27 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290512-2

Matrix: Water | Lab File ID: J971296.D

Analysis Method: 8260D | Date Collected: 10/16/2023 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 17:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	13		5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290512-2

Matrix: Water | Lab File ID: J971296.D

Analysis Method: 8260D | Date Collected: 10/16/2023 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 17:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130
460-00-4	Bromofluorobenzene	93		70-130
1868-53-7	Dibromofluoromethane (Surr)	111		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290512-2

Matrix: Water | Lab File ID: J971296.D

Analysis Method: 8260D | Date Collected: 10/16/2023 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 17:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D
Lims ID: 460-290512-A-2
Client ID: 1000-101623-0002
Sample Type: Client
Inject. Date: 20-Oct-2023 17:57:30 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-290512-A-2
Misc. Info.: 460-0167608-031
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 21-Oct-2023 03:27:54 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: HVW2 Date: 21-Oct-2023 03:25:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
22 Acetone	43	2.134	2.125	0.009	84	8514	12.5	
* 30 TBA-d9 (IS)	65	2.396	2.380	0.016	76	149162	1000.0	
* 43 2-Butanone-d5	46	3.302	3.292	0.010	87	176982	250.0	
$ 55 Dibromofluoromethane (Surr)	113	3.734	3.718	0.016	95	149558	55.5	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.062	4.046	0.016	0	153616	52.5	
* 66 Fluorobenzene	96	4.318	4.308	0.010	99	443299	50.0	
* 72 1,4-Dioxane-d8	96	5.029	5.007	0.022	0	18183	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.032	6.017	0.015	98	374226	47.9	
* 94 Chlorobenzene-d5	117	7.985	7.969	0.016	86	346685	50.0	
$ 105 4-Bromofluorobenzene	174	9.316	9.307	0.009	95	108519	46.6	
* 121 1,4-Dichlorobenzene-d4	152	10.362	10.353	0.009	96	172738	50.0	

QC Flag Legend
Processing Flags

Reagents:
8260ISNEW_00171 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00241 Amount Added: 1.00 Units: uL Run Reagent

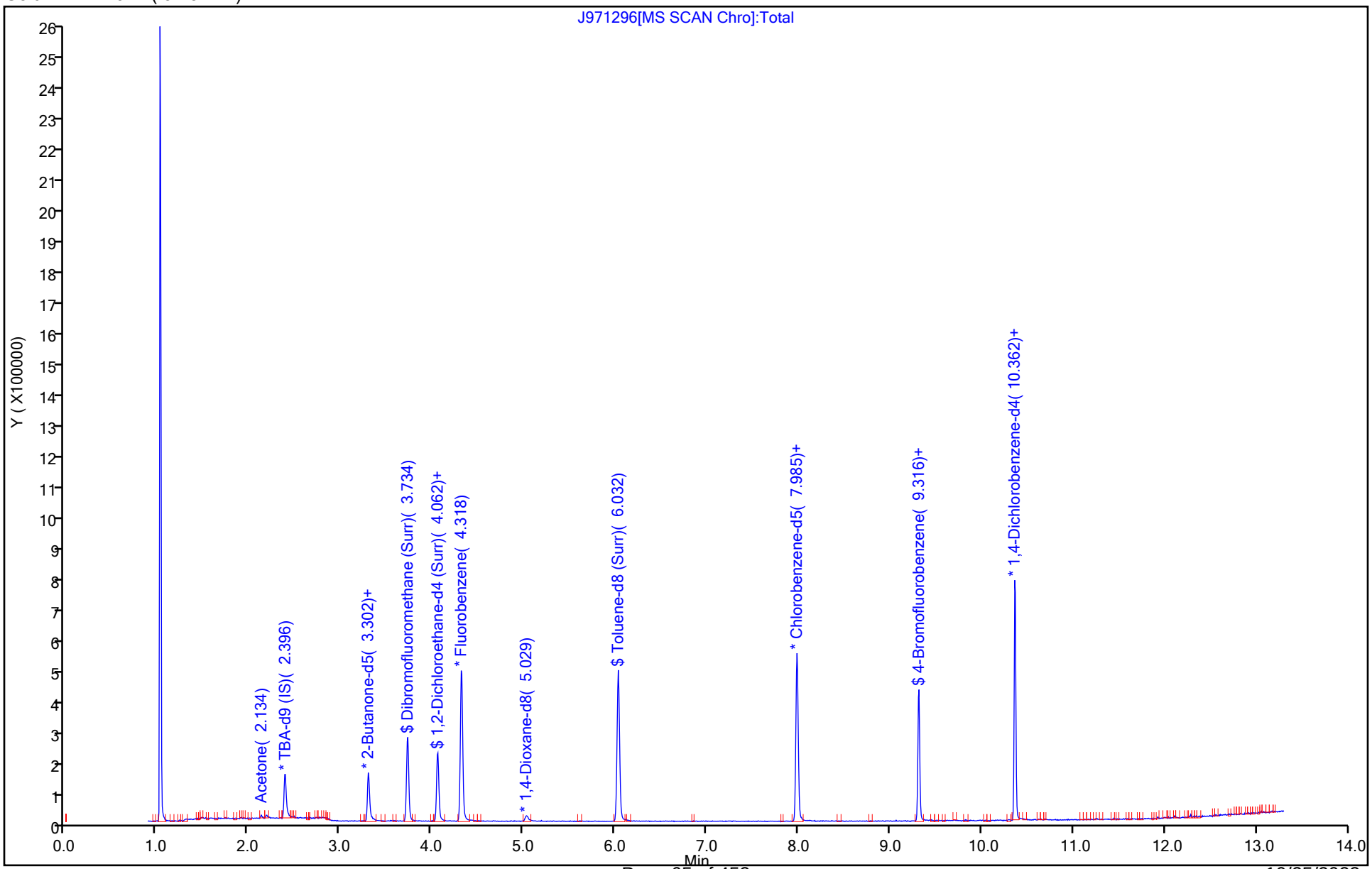
Report Date: 22-Oct-2023 14:53:10 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D

Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2	Worklist Smp#:	31
Client ID:	1000-101623-0002				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

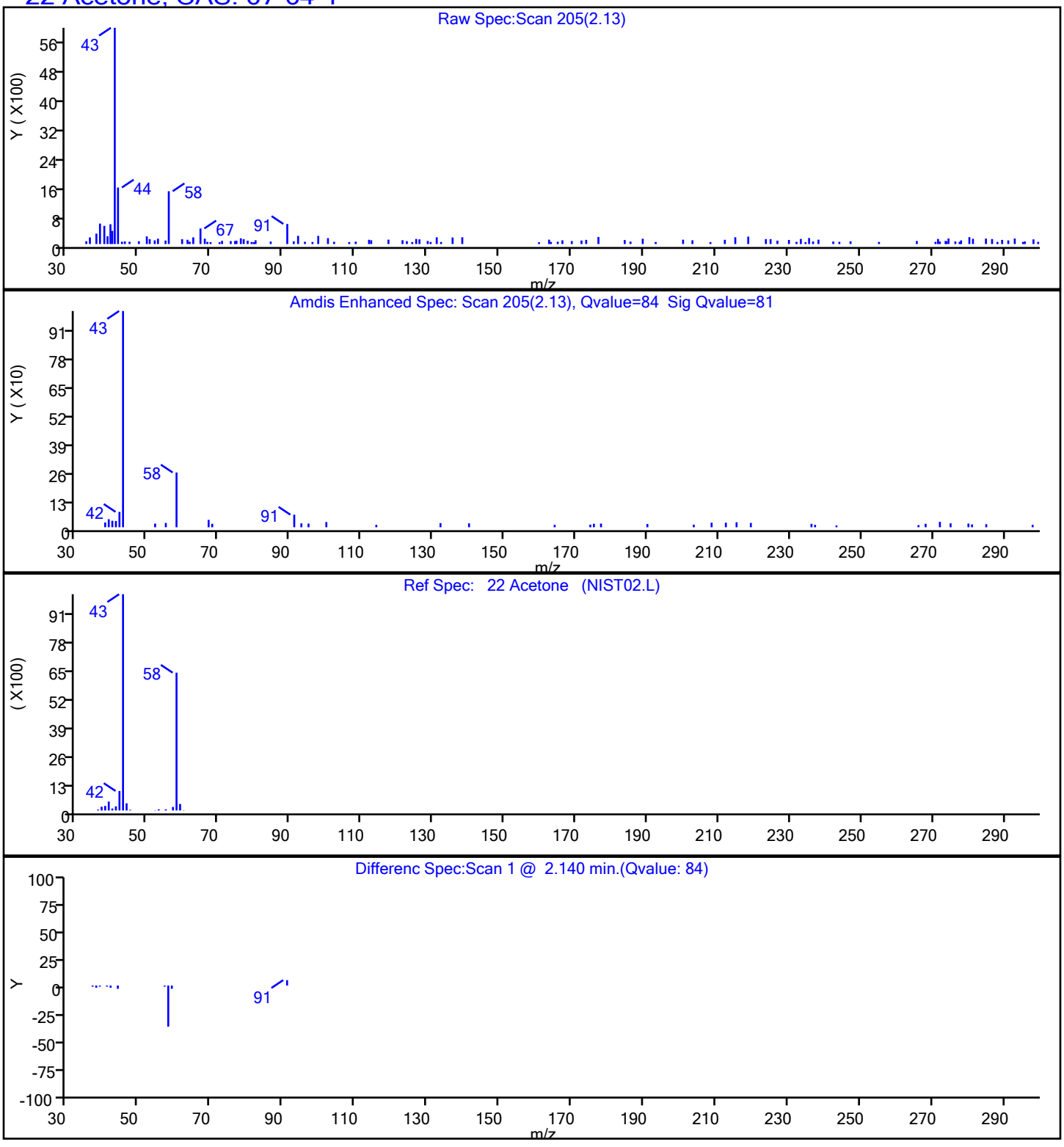
Report Date: 22-Oct-2023 14:53:10 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D

Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1



10/25/2023
1:26 PM

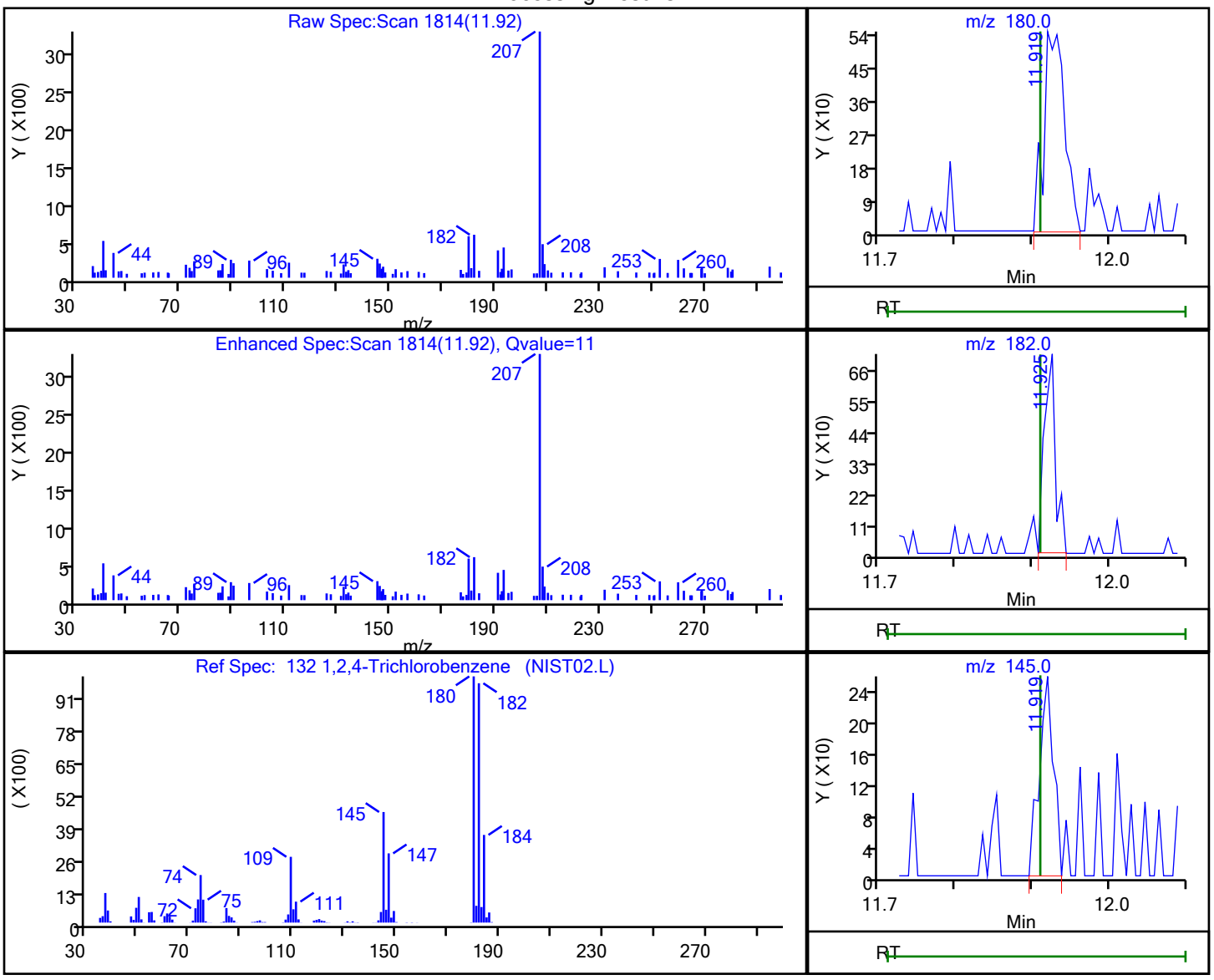
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D				
Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

132 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
11.92	180.00	1043	0.548585
11.93	182.00	741	
11.92	145.00	326	

Reviewer: HVW2, 21-Oct-2023 03:25:41 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

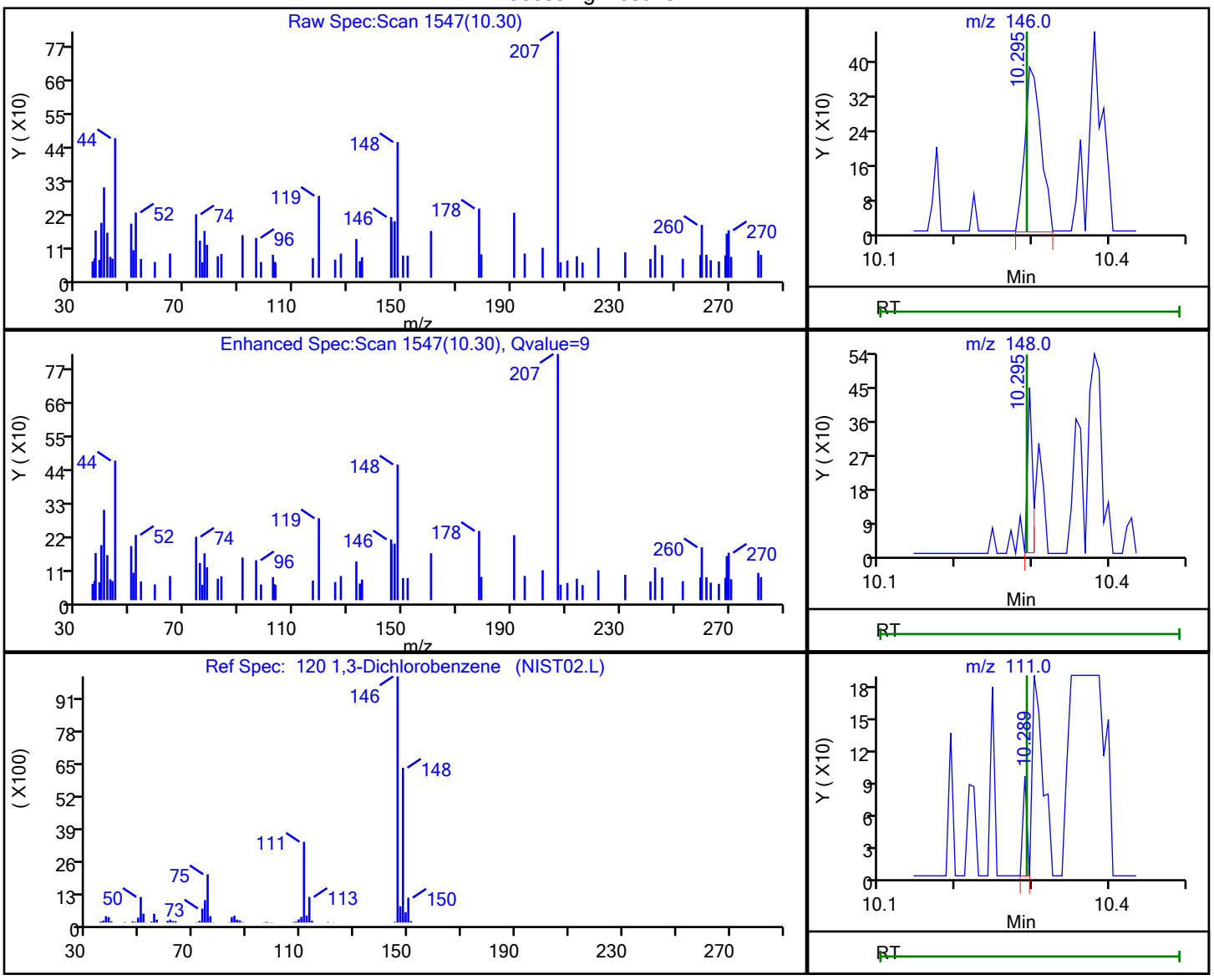
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D				
Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

120 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
10.30	146.00	565	0.162471
10.30	148.00	208	
10.29	111.00	35	

Reviewer: HVW2, 21-Oct-2023 03:25:43 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

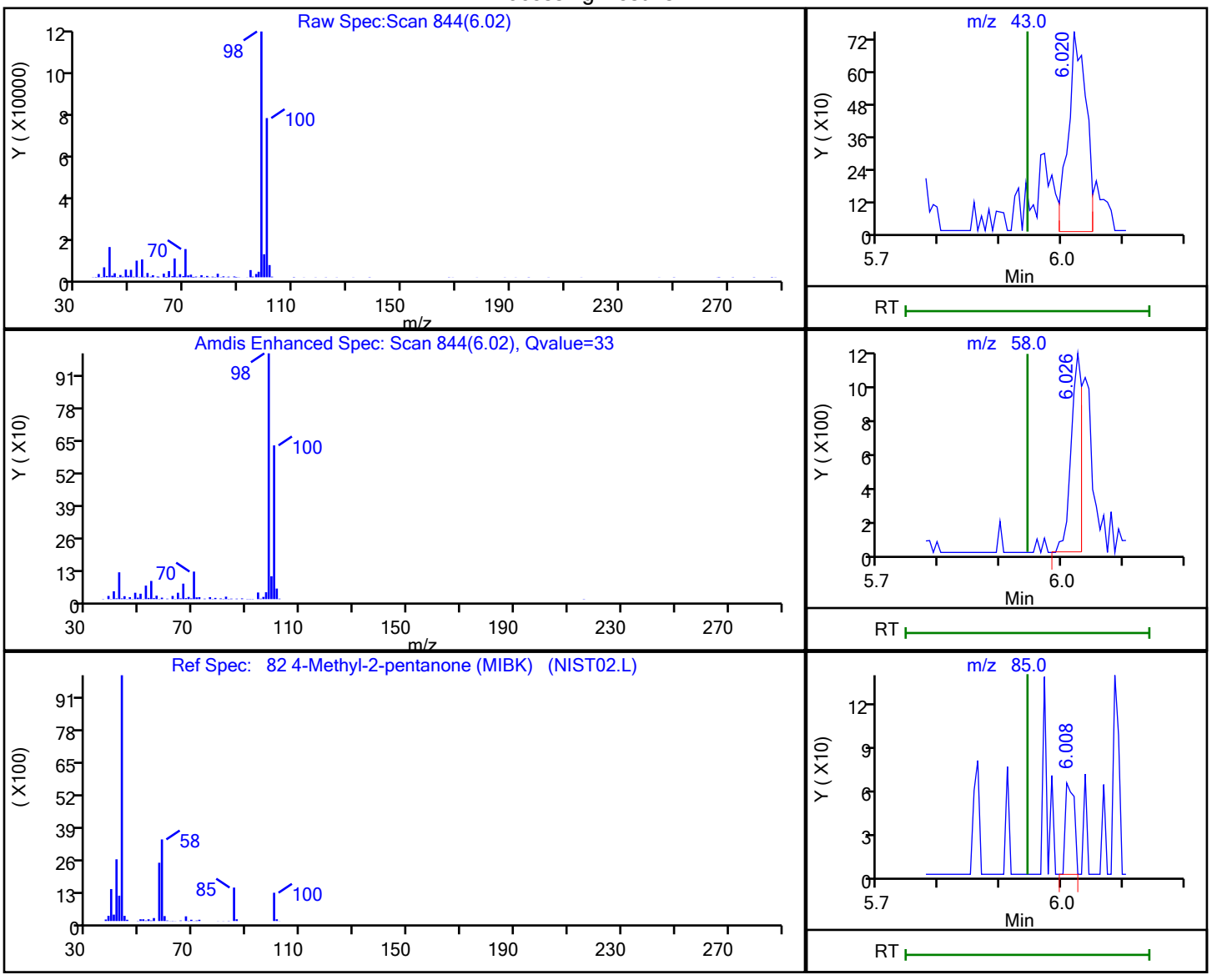
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D
Injection Date: 20-Oct-2023 17:57:30 Instrument ID: CVOAMS8
Lims ID: 460-290512-A-2 Lab Sample ID: 460-290512-2
Client ID: 1000-101623-0002
Operator ID: ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.02	43.00	1519	1.601337
6.03	58.00	1437	
6.01	85.00	61	
6.03	100.00	234281	

Reviewer: HVW2, 21-Oct-2023 03:25:22 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

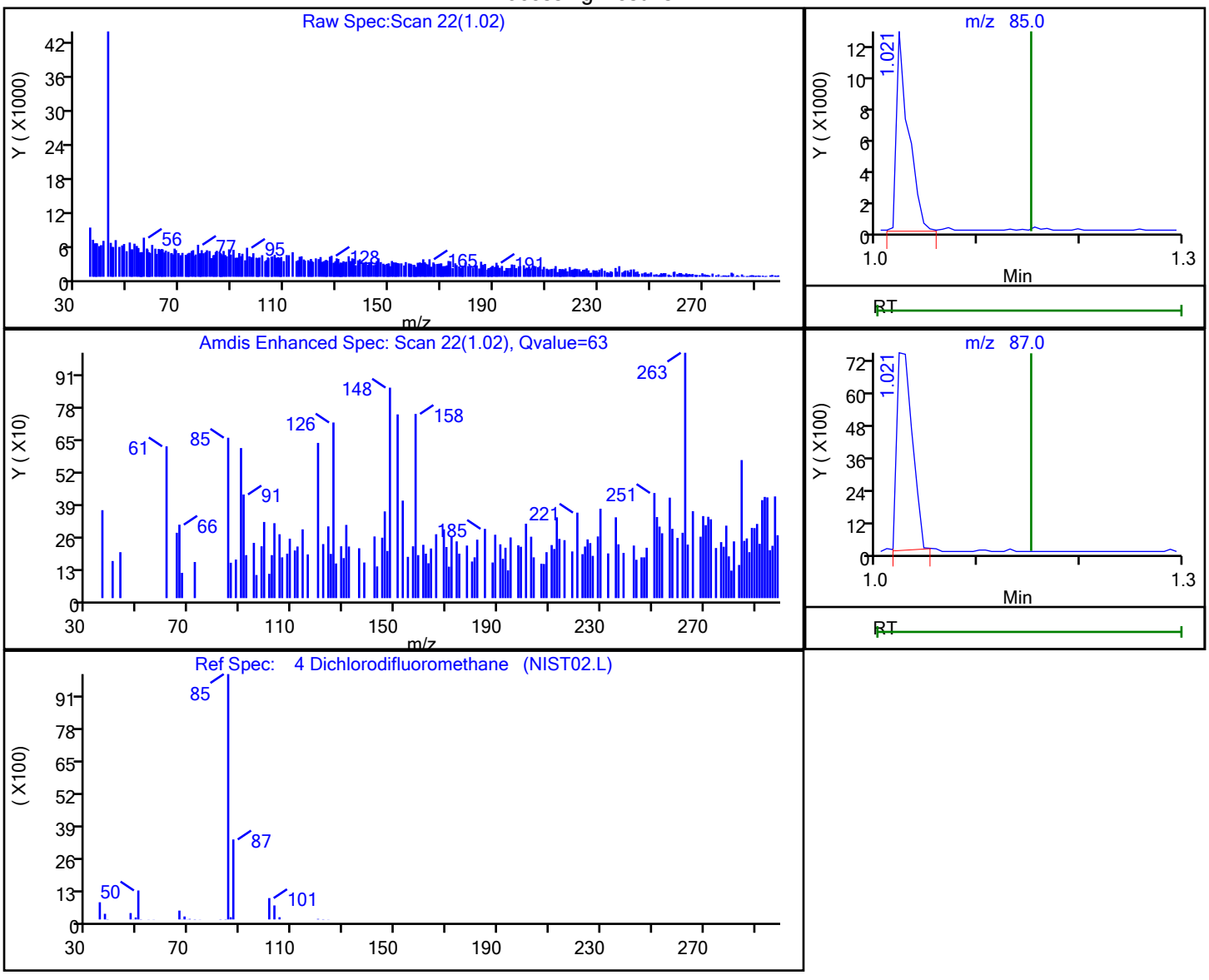
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D				
Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

4 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.02	85.00	10101	4.374975
1.02	87.00	7853	

Reviewer: HVW2, 21-Oct-2023 03:25:27 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

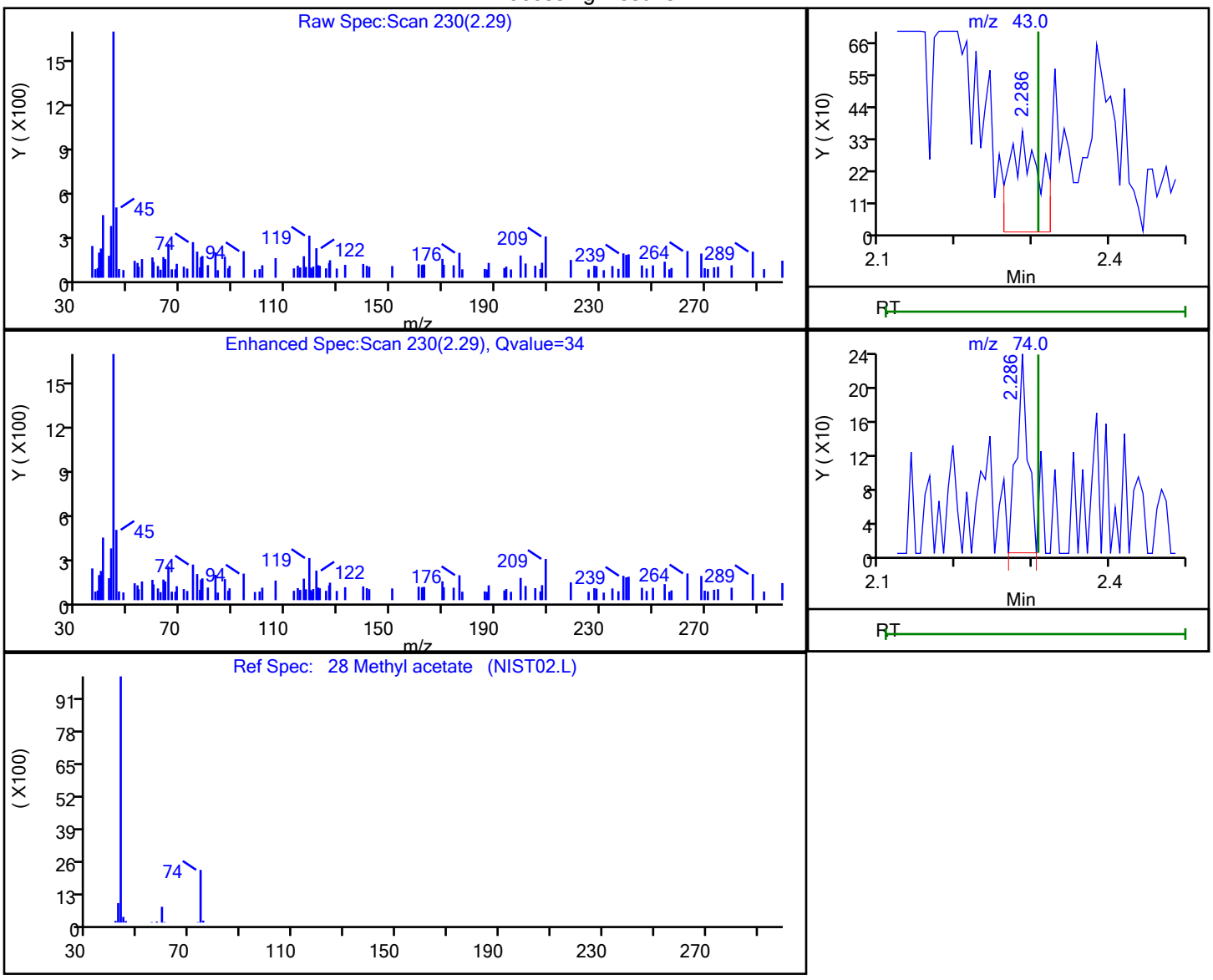
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D				
Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

28 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
2.29	43.00	918	0.761965
2.29	74.00	244	

Reviewer: HVW2, 21-Oct-2023 03:25:26 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

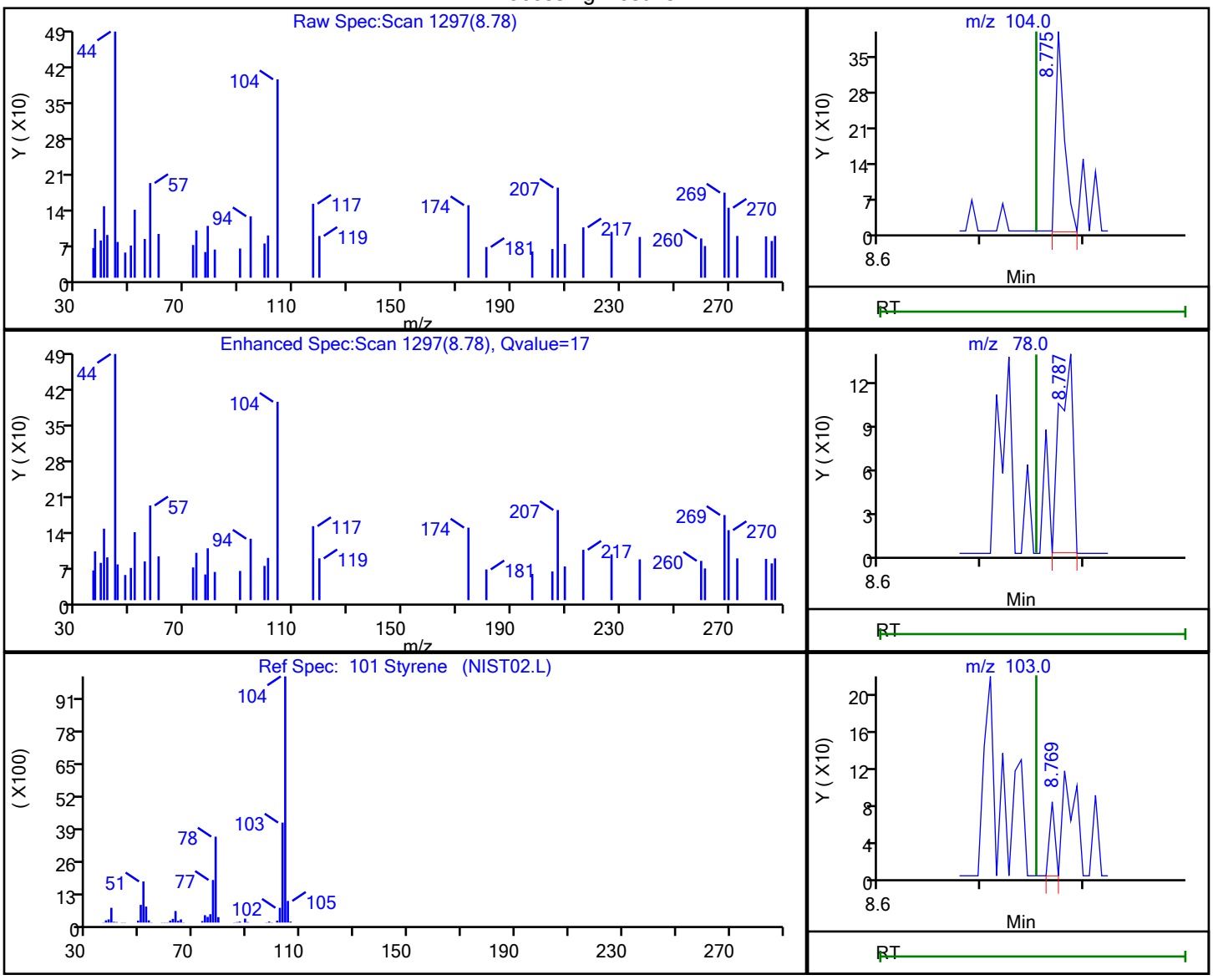
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971296.D				
Injection Date:	20-Oct-2023 17:57:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-A-2	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

101 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.78	104.00	228	0.536374
8.79	78.00	123	
8.77	103.00	29	

Reviewer: HVW2, 21-Oct-2023 03:25:32 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-1 | Lab Sample ID: 460-290512-3

Matrix: Water | Lab File ID: J971297.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-1 | Lab Sample ID: 460-290512-3

Matrix: Water | Lab File ID: J971297.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-130
460-00-4	Bromofluorobenzene	95		70-130
1868-53-7	Dibromofluoromethane (Surr)	109		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-1 | Lab Sample ID: 460-290512-3

Matrix: Water | Lab File ID: J971297.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971297.D
Lims ID: 460-290512-B-3
Client ID: FDMH-1
Sample Type: Client
Inject. Date: 20-Oct-2023 18:22:30 ALS Bottle#: 32 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-290512-B-3
Misc. Info.: 460-0167608-032
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 21-Oct-2023 03:27:54 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: HVW2 Date: 21-Oct-2023 03:26:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 30 TBA-d9 (IS)	65	2.390	2.380	0.010	76	166028	1000.0	
* 43 2-Butanone-d5	46	3.303	3.292	0.011	88	189239	250.0	
$ 55 Dibromofluoromethane (Surr)	113	3.734	3.718	0.016	95	156635	54.5	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.063	4.046	0.017	0	161088	51.6	
* 66 Fluorobenzene	96	4.324	4.308	0.016	99	472481	50.0	
* 72 1,4-Dioxane-d8	96	5.030	5.007	0.023	0	18369	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.033	6.017	0.016	99	379746	48.1	
* 94 Chlorobenzene-d5	117	7.985	7.969	0.016	85	350020	50.0	
$ 105 4-Bromofluorobenzene	174	9.317	9.307	0.010	95	111228	47.3	
* 121 1,4-Dichlorobenzene-d4	152	10.369	10.353	0.016	96	170183	50.0	

Reagents:

8260ISNEW_00171 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00241 Amount Added: 1.00 Units: uL Run Reagent

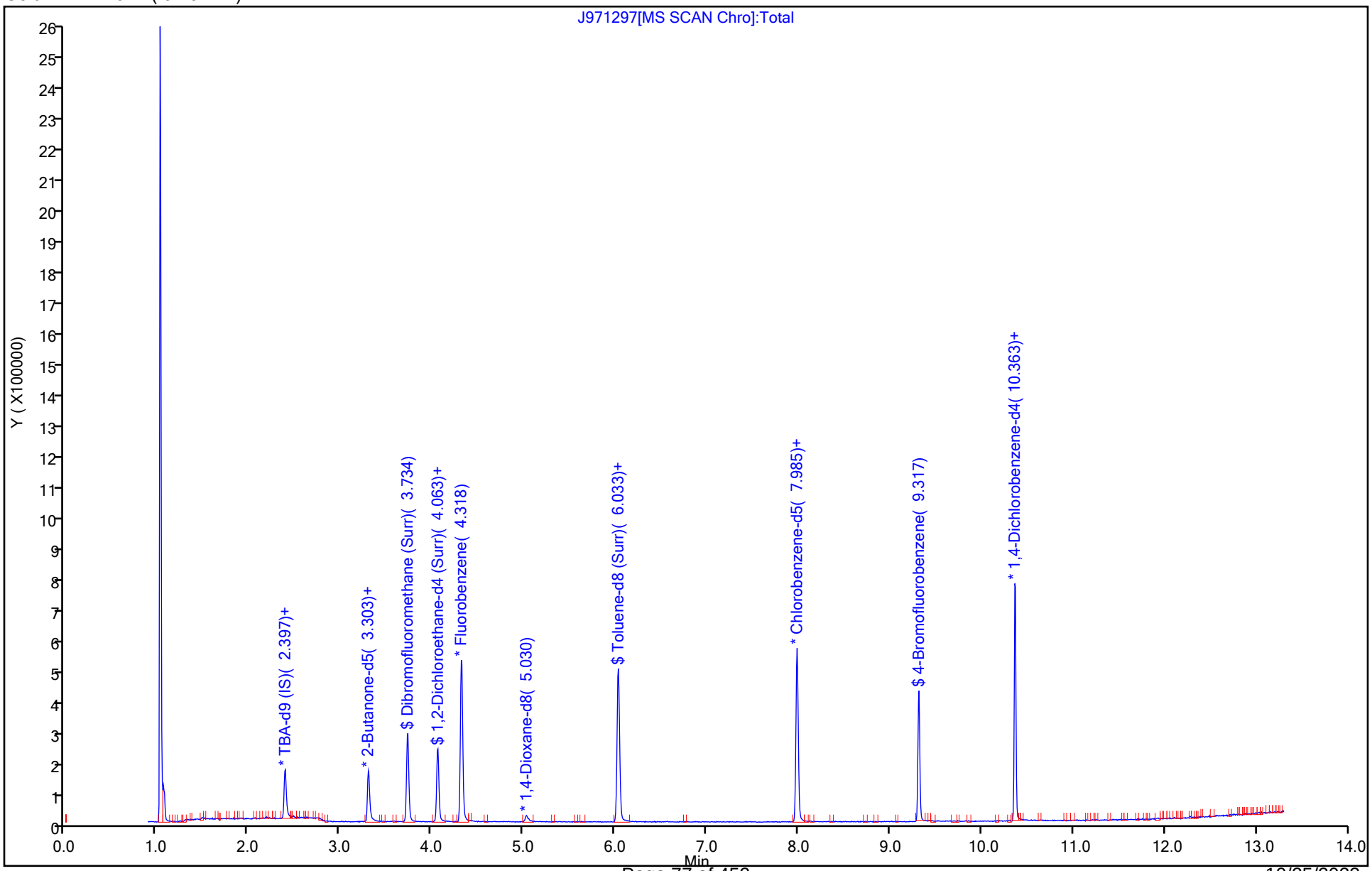
Report Date: 22-Oct-2023 14:53:32 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971297.D

Injection Date:	20-Oct-2023 18:22:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	460-290512-B-3	Lab Sample ID:	460-290512-3	Worklist Smp#:	32
Client ID:	FDMH-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

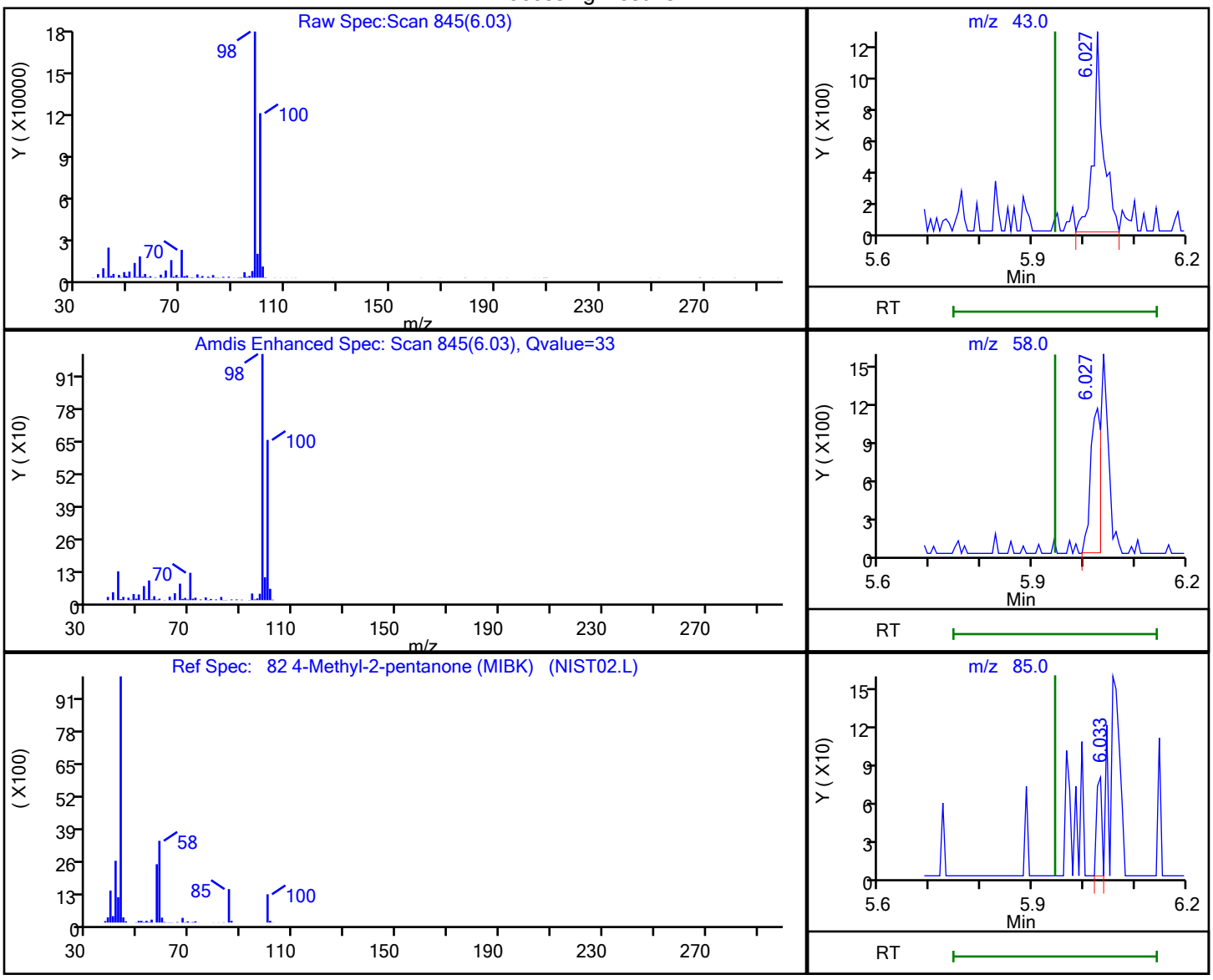
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971297.D				
Injection Date:	20-Oct-2023 18:22:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-3	Lab Sample ID:	460-290512-3		
Client ID:	FDMH-1				
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

82 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.03	43.00	1679	1.655367
6.03	58.00	1544	
6.03	85.00	54	
6.03	100.00	245882	

Reviewer: HVW2, 21-Oct-2023 03:25:55 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

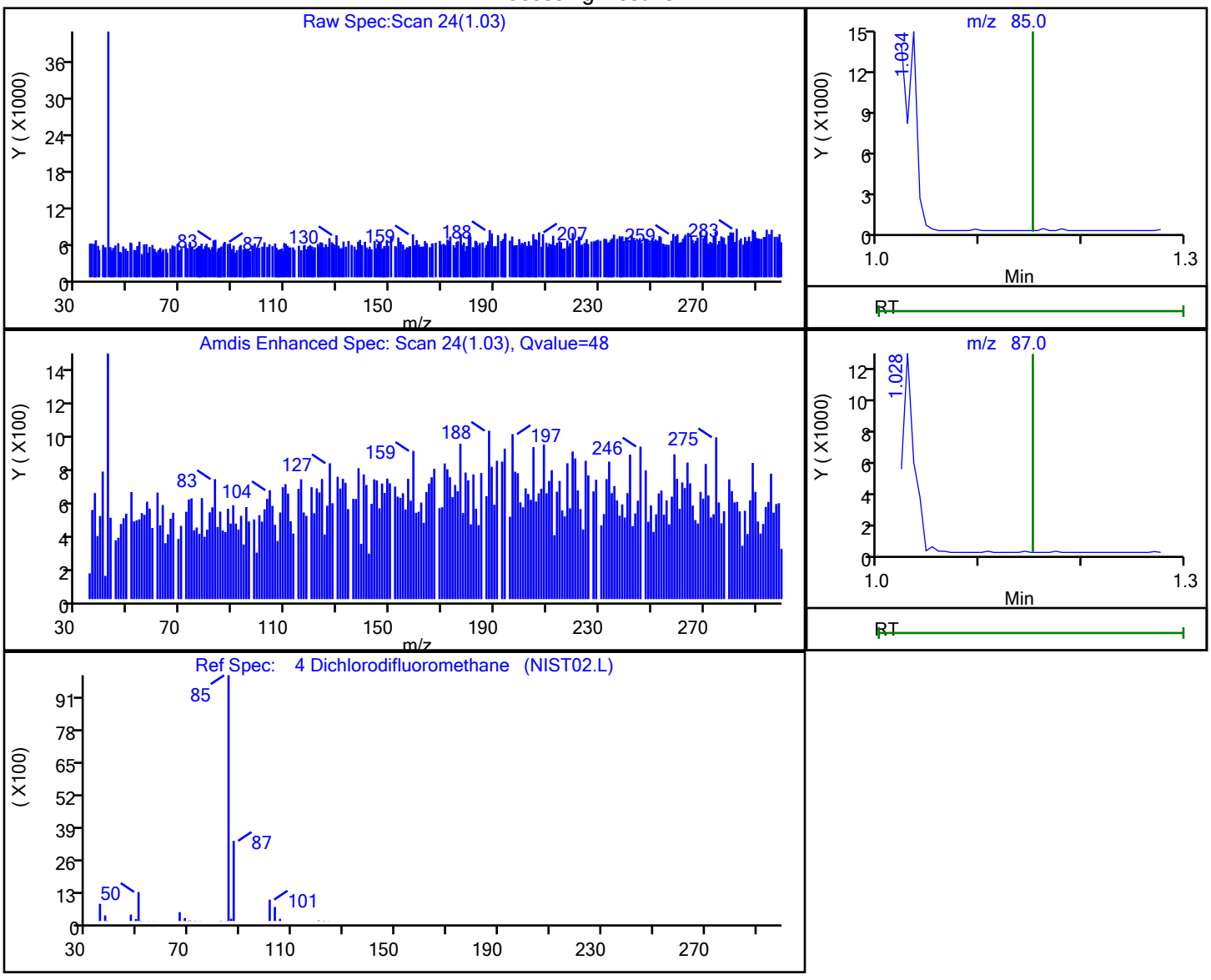
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971297.D				
Injection Date:	20-Oct-2023 18:22:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-3	Lab Sample ID:	460-290512-3		
Client ID:	FDMH-1				
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

4 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.03	85.00	14114	5.735532
1.03	87.00	10156	

Reviewer: HVW2, 21-Oct-2023 03:25:58 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

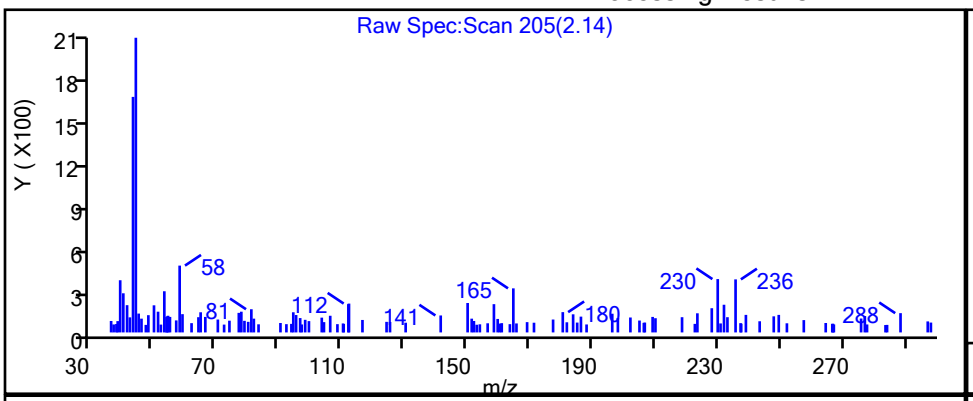
User Disabled Compound Report

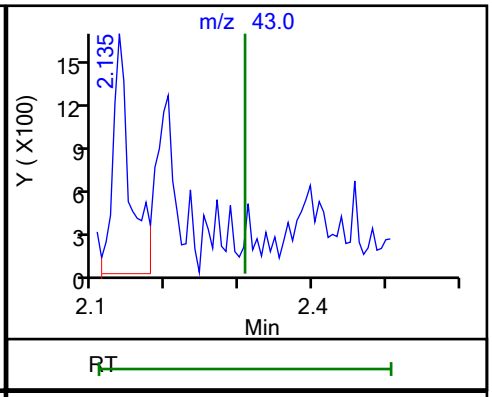
Eurofins Edison

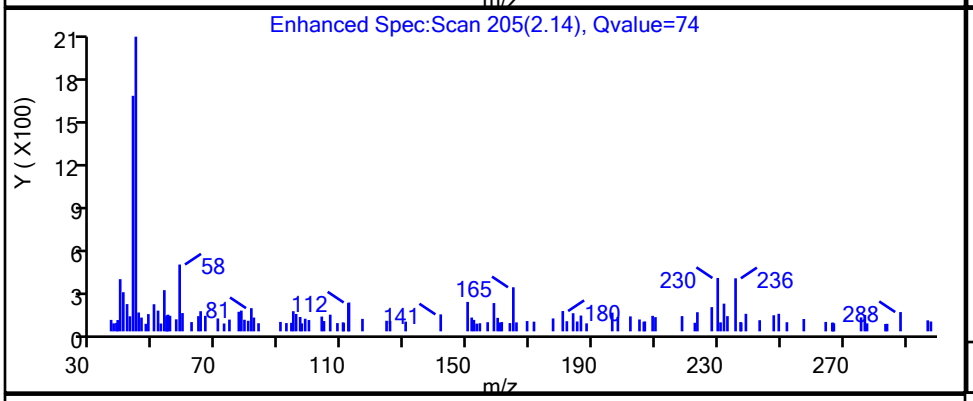
Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971297.D				
Injection Date:	20-Oct-2023 18:22:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-3	Lab Sample ID:	460-290512-3		
Client ID:	FDMH-1				
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

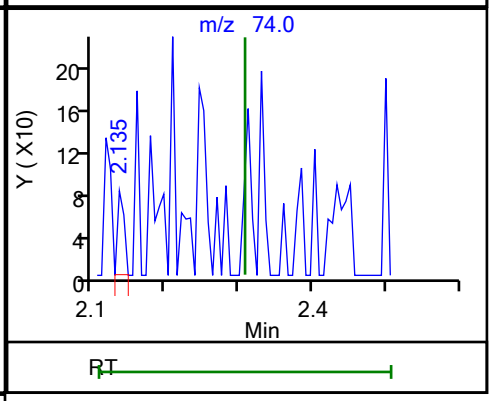
28 Methyl acetate, CAS: 79-20-9

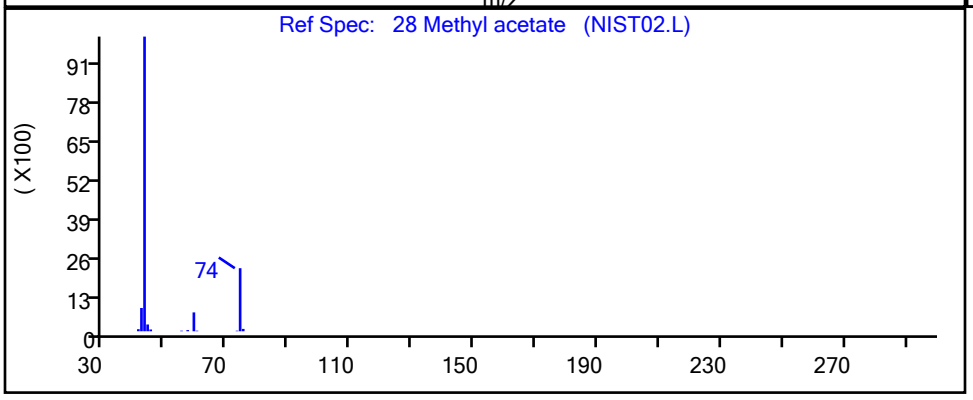
Processing Results











RT	Mass	Response	Amount
2.14	43.00	2622	1.955248
2.14	74.00	51	

Reviewer: HVW2, 21-Oct-2023 03:25:59 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-2 | Lab Sample ID: 460-290512-4

Matrix: Water | Lab File ID: J971298.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.38	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-2 | Lab Sample ID: 460-290512-4

Matrix: Water | Lab File ID: J971298.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.37	J	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-130
460-00-4	Bromofluorobenzene	94		70-130
1868-53-7	Dibromofluoromethane (Surr)	113		70-130
2037-26-5	Toluene-d8 (Surr)	93		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-2 | Lab Sample ID: 460-290512-4

Matrix: Water | Lab File ID: J971298.D

Analysis Method: 8260D | Date Collected: 10/16/2023 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 18:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D				
Lims ID:	460-290512-B-4				
Client ID:	FDMH-2				
Sample Type:	Client				
Inject. Date:	20-Oct-2023 18:47:30	ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-290512-B-4				
Misc. Info.:	460-0167608-033				
Operator ID:		Instrument ID:	CVOAMS8		
Method:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	21-Oct-2023 03:27:54	Calib Date:	20-Oct-2023 11:18:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: HVW2		Date:	21-Oct-2023 03:26:18		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 30 TBA-d9 (IS)	65	2.392	2.380	0.012	76	135779	1000.0	
* 43 2-Butanone-d5	46	3.304	3.292	0.012	87	160596	250.0	
44 cis-1,2-Dichloroethene	96	3.341	3.323	0.018	19	862	0.3808	
$ 55 Dibromofluoromethane (Surr)	113	3.730	3.718	0.012	95	146911	56.6	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.059	4.046	0.013	0	146411	51.9	
* 66 Fluorobenzene	96	4.320	4.308	0.012	99	426644	50.0	
68 Trichloroethene	95	4.673	4.655	0.018	24	721	0.3678	
* 72 1,4-Dioxane-d8	96	5.032	5.007	0.025	0	17046	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.035	6.017	0.018	99	364255	46.7	
* 94 Chlorobenzene-d5	117	7.987	7.969	0.018	85	346056	50.0	
$ 105 4-Bromofluorobenzene	174	9.313	9.307	0.006	94	109160	47.0	
* 121 1,4-Dichlorobenzene-d4	152	10.365	10.353	0.012	96	171580	50.0	

QC Flag Legend

Processing Flags

Reagents:

8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

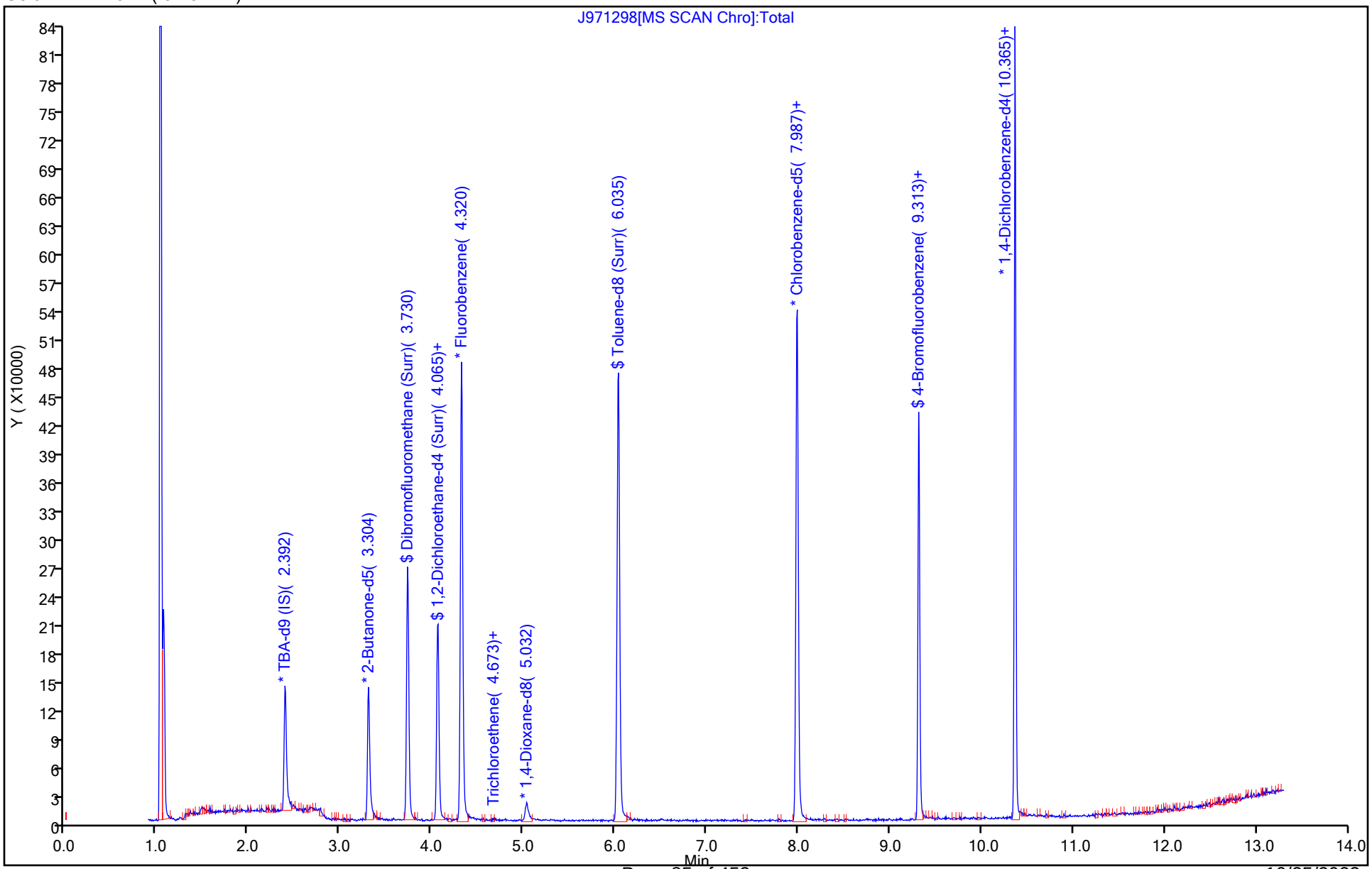
Report Date: 22-Oct-2023 14:54:16 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D

Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4	Worklist Smp#:	33
Client ID:	FDMH-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)

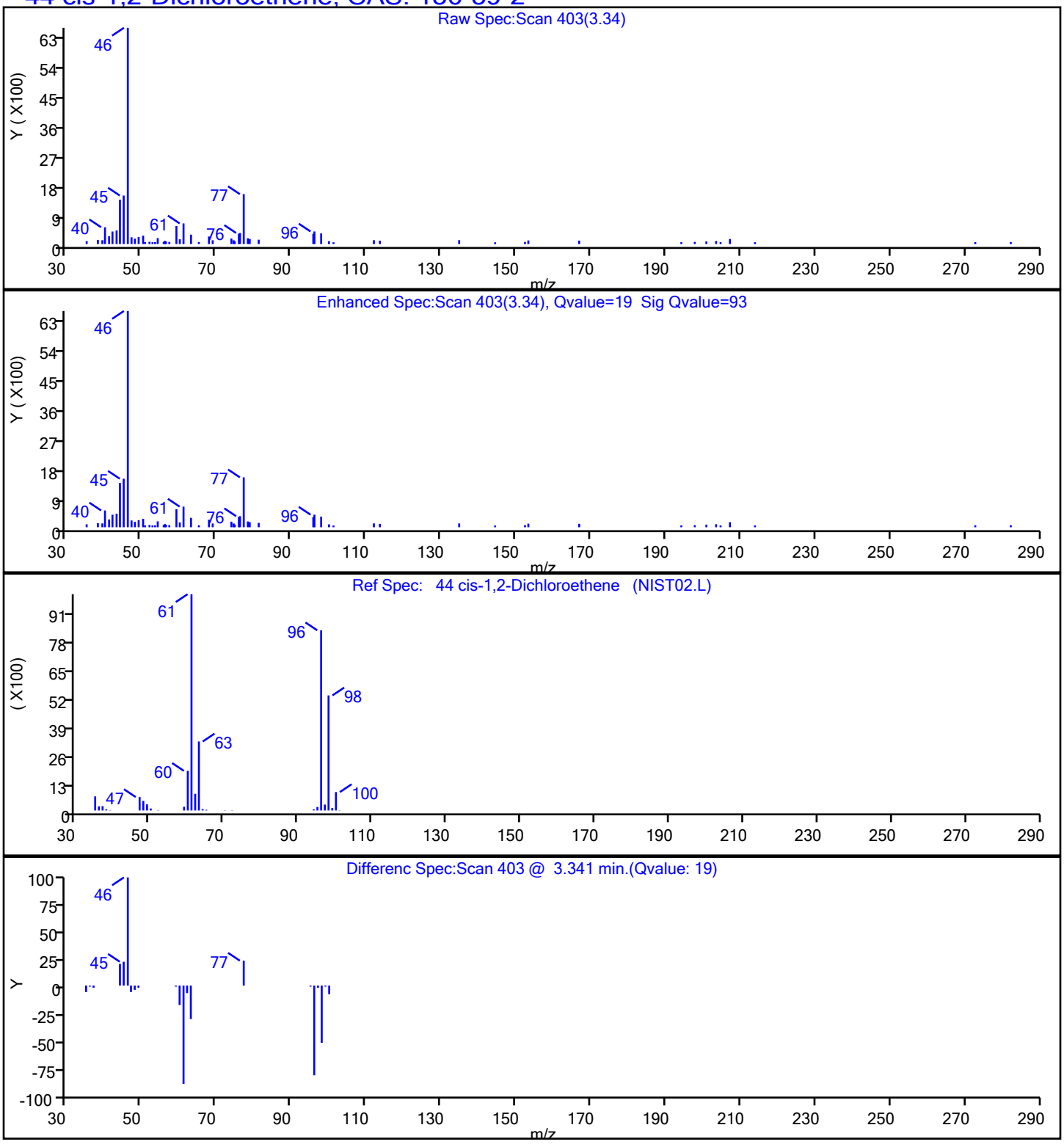


10/25/2023
1:26 PM

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D				
Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

44 cis-1,2-Dichloroethene, CAS: 156-59-2



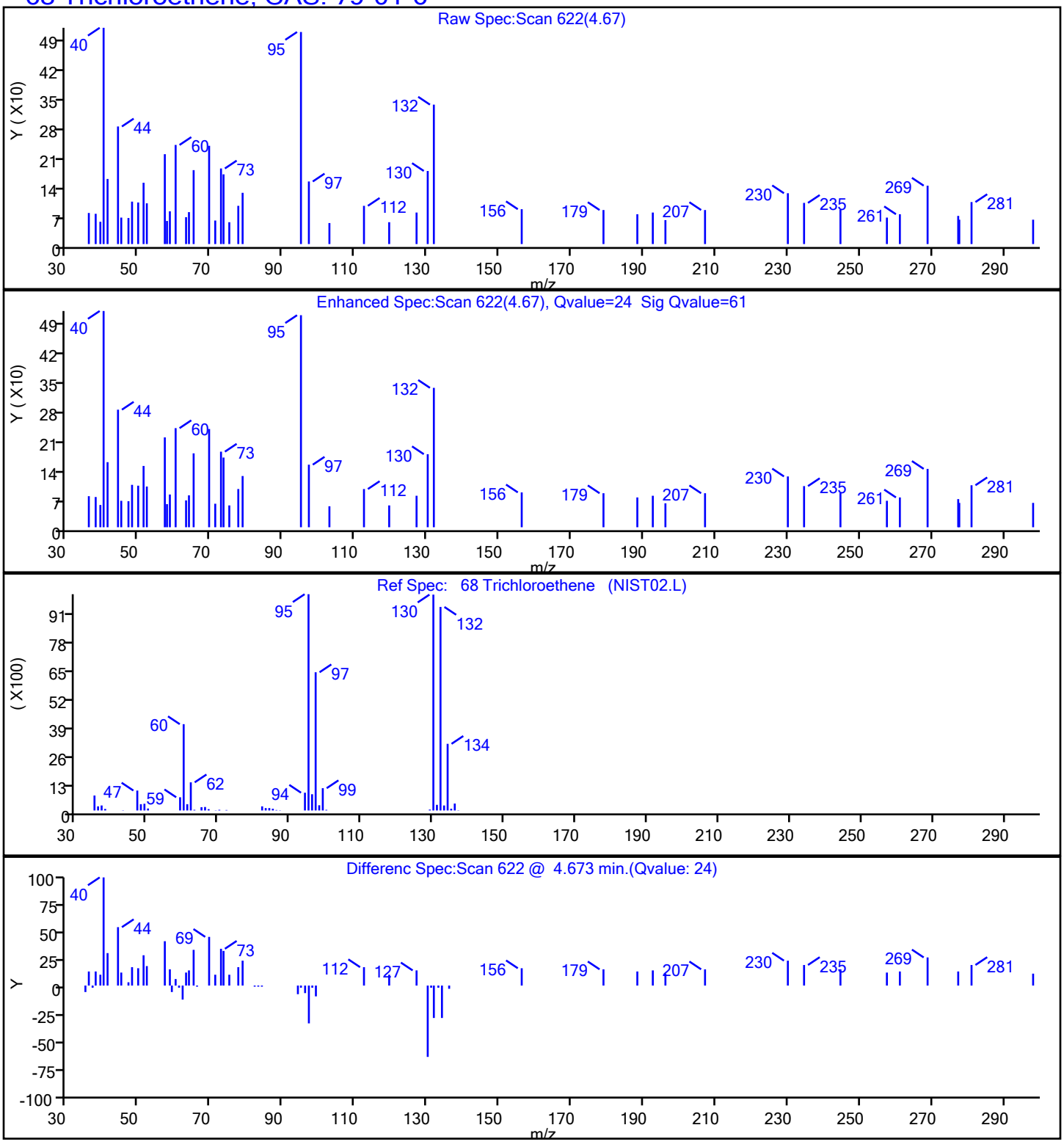
Report Date: 22-Oct-2023 14:54:16 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D

Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

68 Trichloroethene, CAS: 79-01-6



10/25/2023
1:26 PM

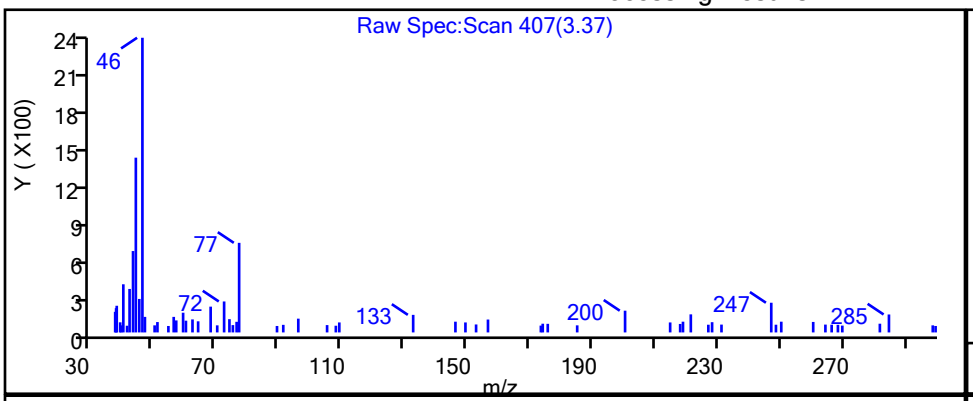
User Disabled Compound Report

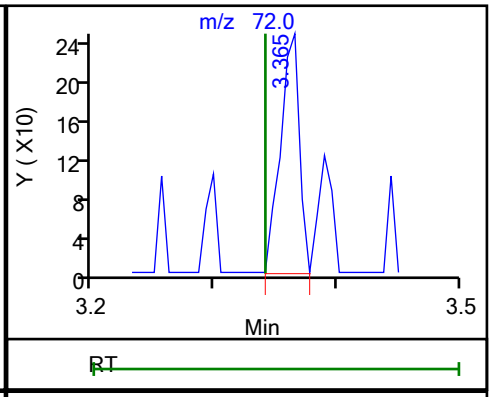
Eurofins Edison

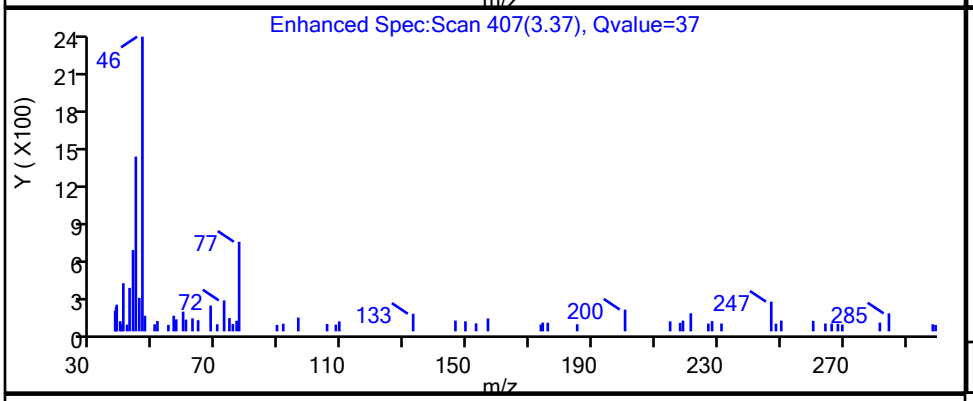
Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D				
Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

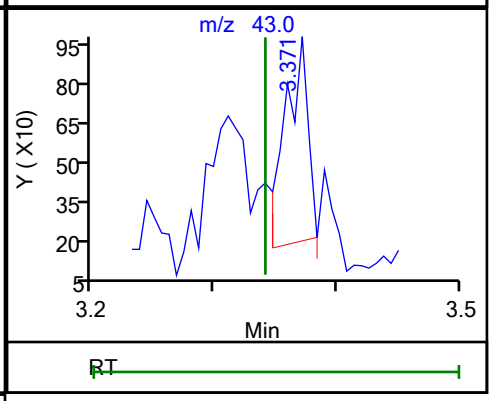
46 2-Butanone (MEK), CAS: 78-93-3

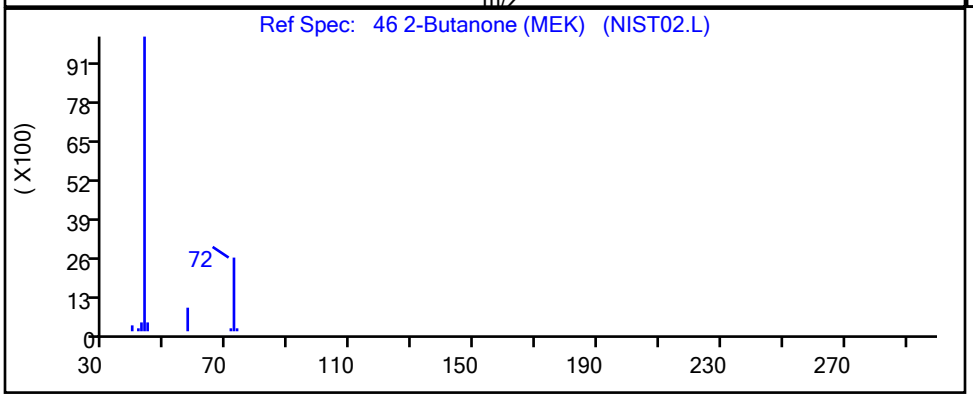
Processing Results











RT	Mass	Response	Amount
3.37	72.00	265	1.912524
3.37	43.00	1026	

Reviewer: HVW2, 21-Oct-2023 03:26:09 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

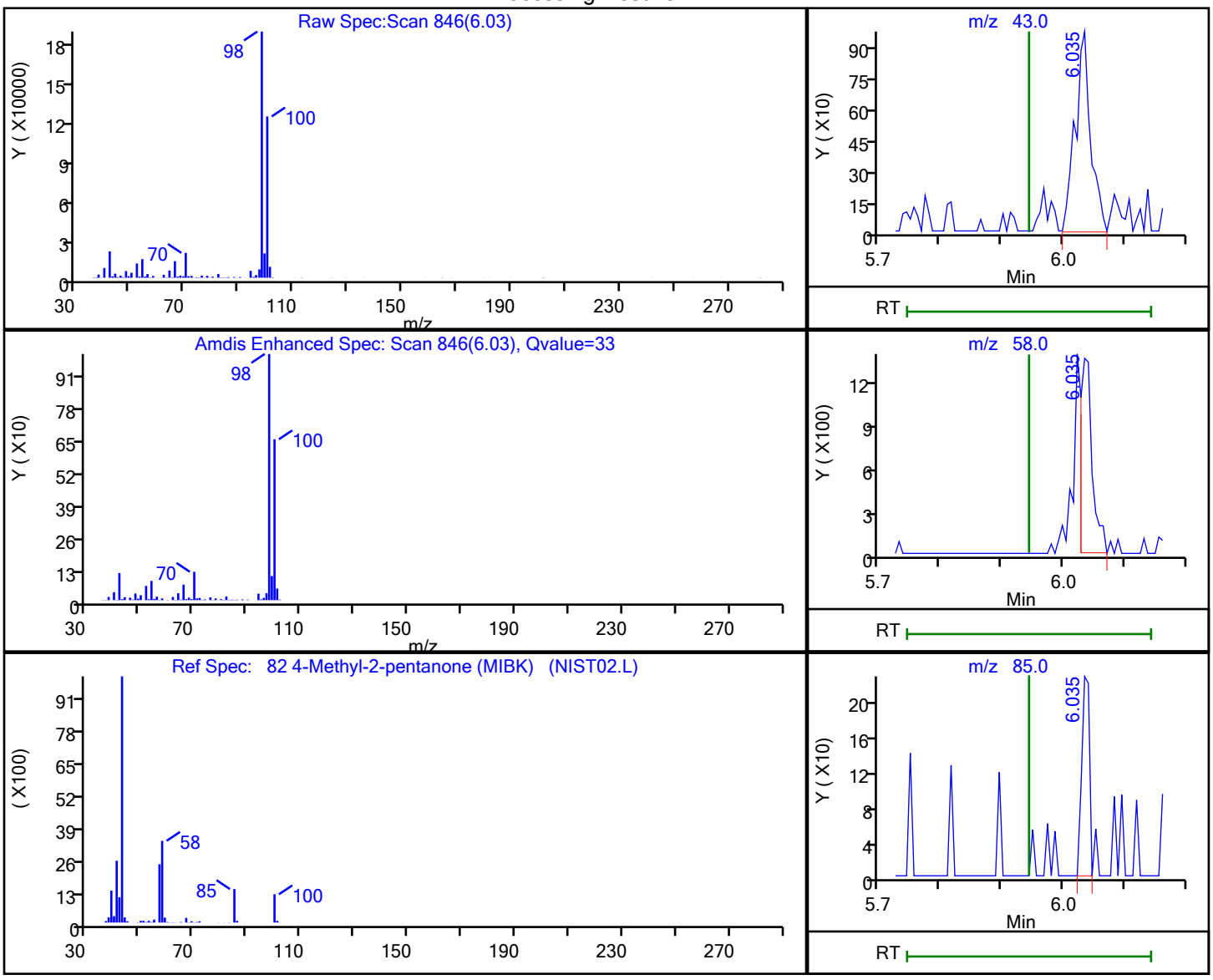
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D				
Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

82 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.03	43.00	1701	1.976167
6.03	58.00	1774	
6.03	85.00	201	
6.03	100.00	234415	

Reviewer: HVW2, 21-Oct-2023 03:26:12 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

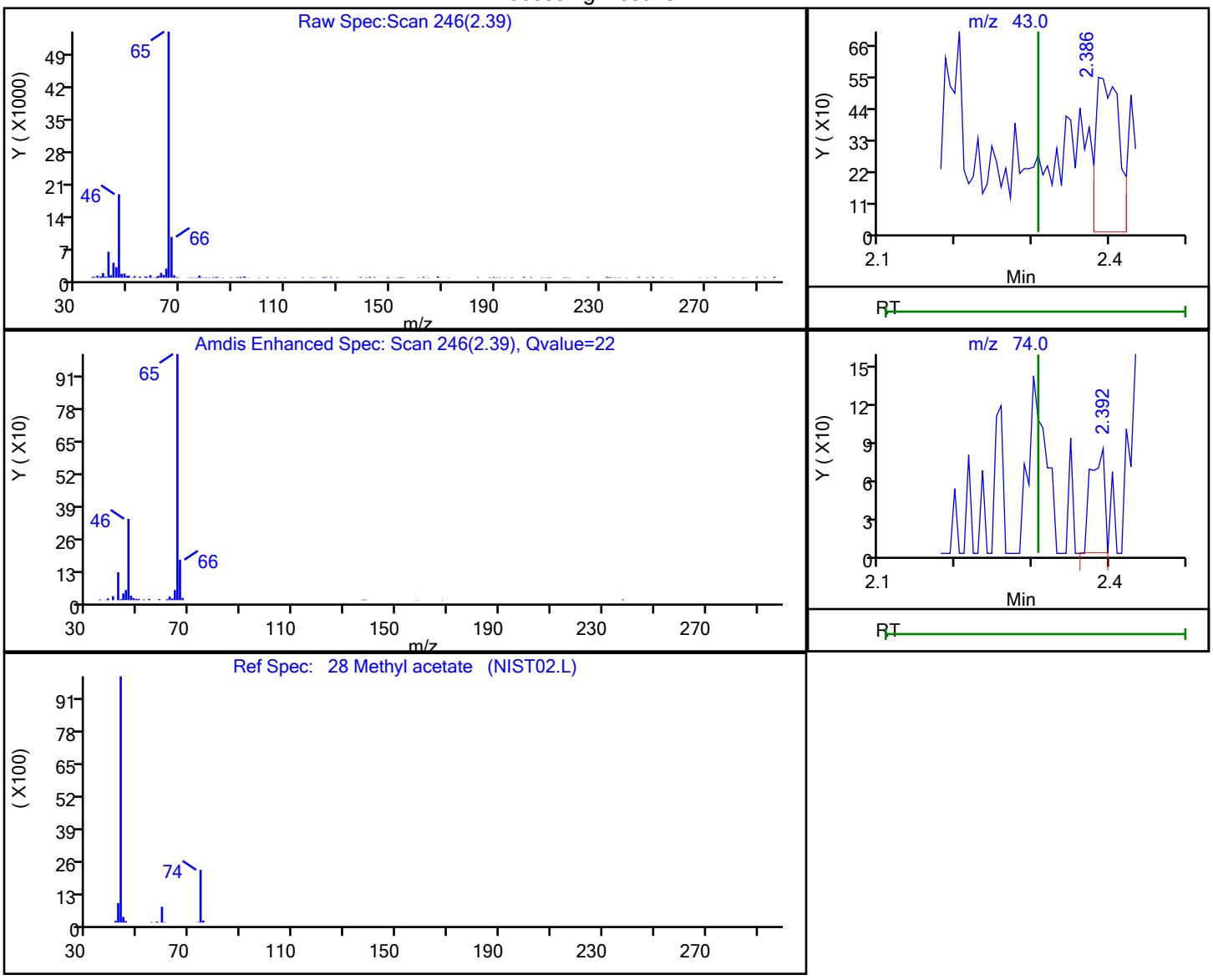
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971298.D				
Injection Date:	20-Oct-2023 18:47:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-4	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

28 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
2.39	43.00	1156	1.054085
2.39	74.00	101	

Reviewer: HVW2, 21-Oct-2023 03:26:07 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-4 | Lab Sample ID: 460-290512-5

Matrix: Water | Lab File ID: J971299.D

Analysis Method: 8260D | Date Collected: 10/16/2023 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 19:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.83	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-4 | Lab Sample ID: 460-290512-5

Matrix: Water | Lab File ID: J971299.D

Analysis Method: 8260D | Date Collected: 10/16/2023 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 19:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.3		1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-130
460-00-4	Bromofluorobenzene	97		70-130
1868-53-7	Dibromofluoromethane (Surr)	112		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-4 | Lab Sample ID: 460-290512-5

Matrix: Water | Lab File ID: J971299.D

Analysis Method: 8260D | Date Collected: 10/16/2023 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 19:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D
Lims ID: 460-290512-B-5
Client ID: FDMH-4
Sample Type: Client
Inject. Date: 20-Oct-2023 19:12:30 ALS Bottle#: 34 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-290512-B-5
Misc. Info.: 460-0167608-034
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 21-Oct-2023 03:27:54 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: HVW2 Date: 21-Oct-2023 03:26:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 30 TBA-d9 (IS)	65	2.397	2.380	0.017	76	153672	1000.0	
* 43 2-Butanone-d5	46	3.303	3.292	0.011	87	174670	250.0	
44 cis-1,2-Dichloroethene	96	3.340	3.323	0.017	97	1986	0.8312	
$ 55 Dibromofluoromethane (Surr)	113	3.735	3.718	0.017	95	152872	55.8	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.063	4.046	0.017	0	154058	51.8	
* 66 Fluorobenzene	96	4.319	4.308	0.011	99	450347	50.0	
68 Trichloroethene	95	4.671	4.655	0.016	87	2721	1.31	
* 72 1,4-Dioxane-d8	96	5.030	5.007	0.023	0	17325	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.034	6.017	0.017	98	376601	50.4	
* 94 Chlorobenzene-d5	117	7.986	7.969	0.017	86	331663	50.0	
$ 105 4-Bromofluorobenzene	174	9.318	9.307	0.011	93	107611	48.3	
* 121 1,4-Dichlorobenzene-d4	152	10.370	10.353	0.017	95	170145	50.0	

QC Flag Legend
Processing Flags

Reagents:
8260ISNEW_00171 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00241 Amount Added: 1.00 Units: uL Run Reagent

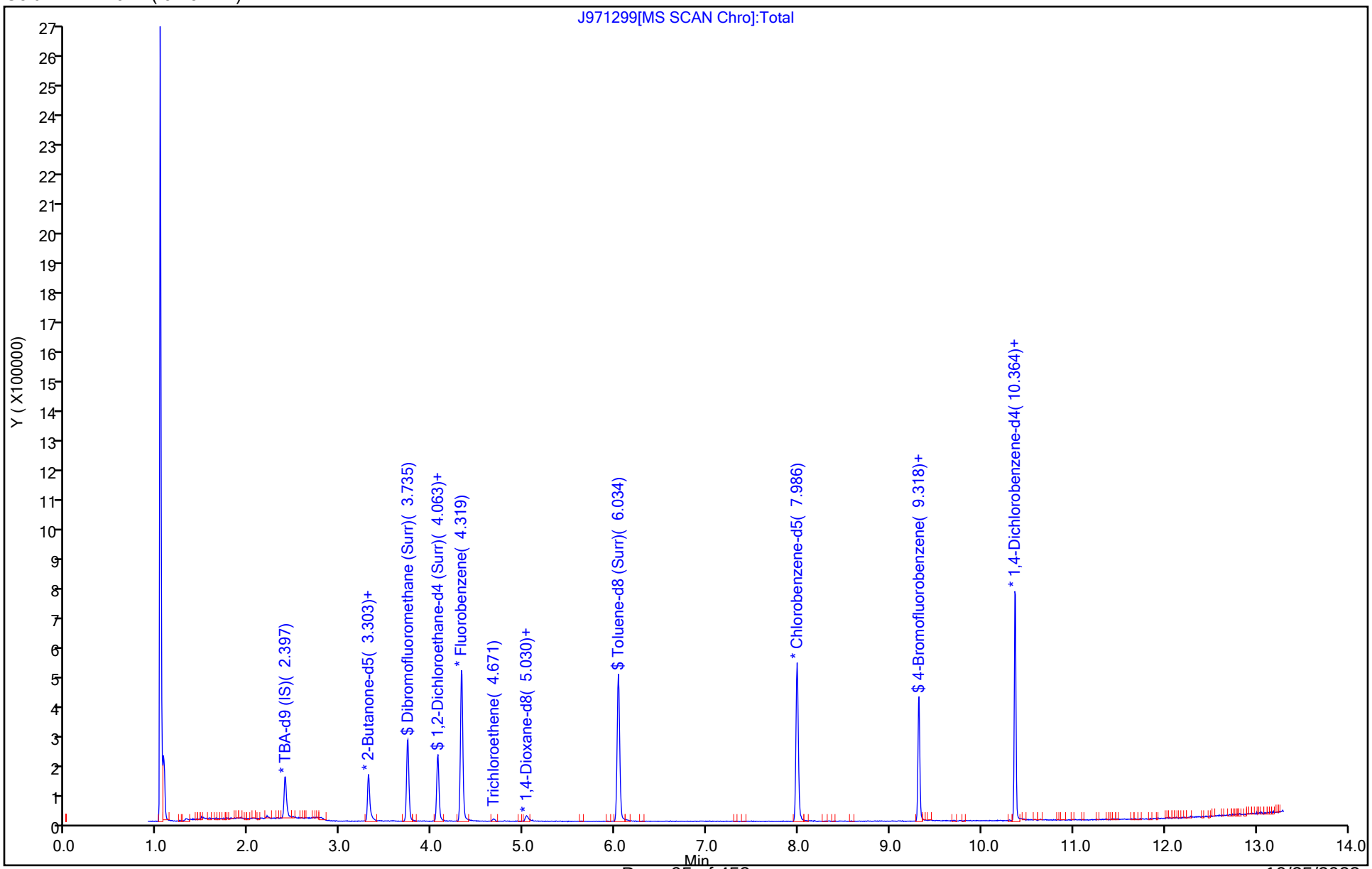
Report Date: 22-Oct-2023 14:55:02 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D

Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5	Worklist Smp#:	34
Client ID:	FDMH-4				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)

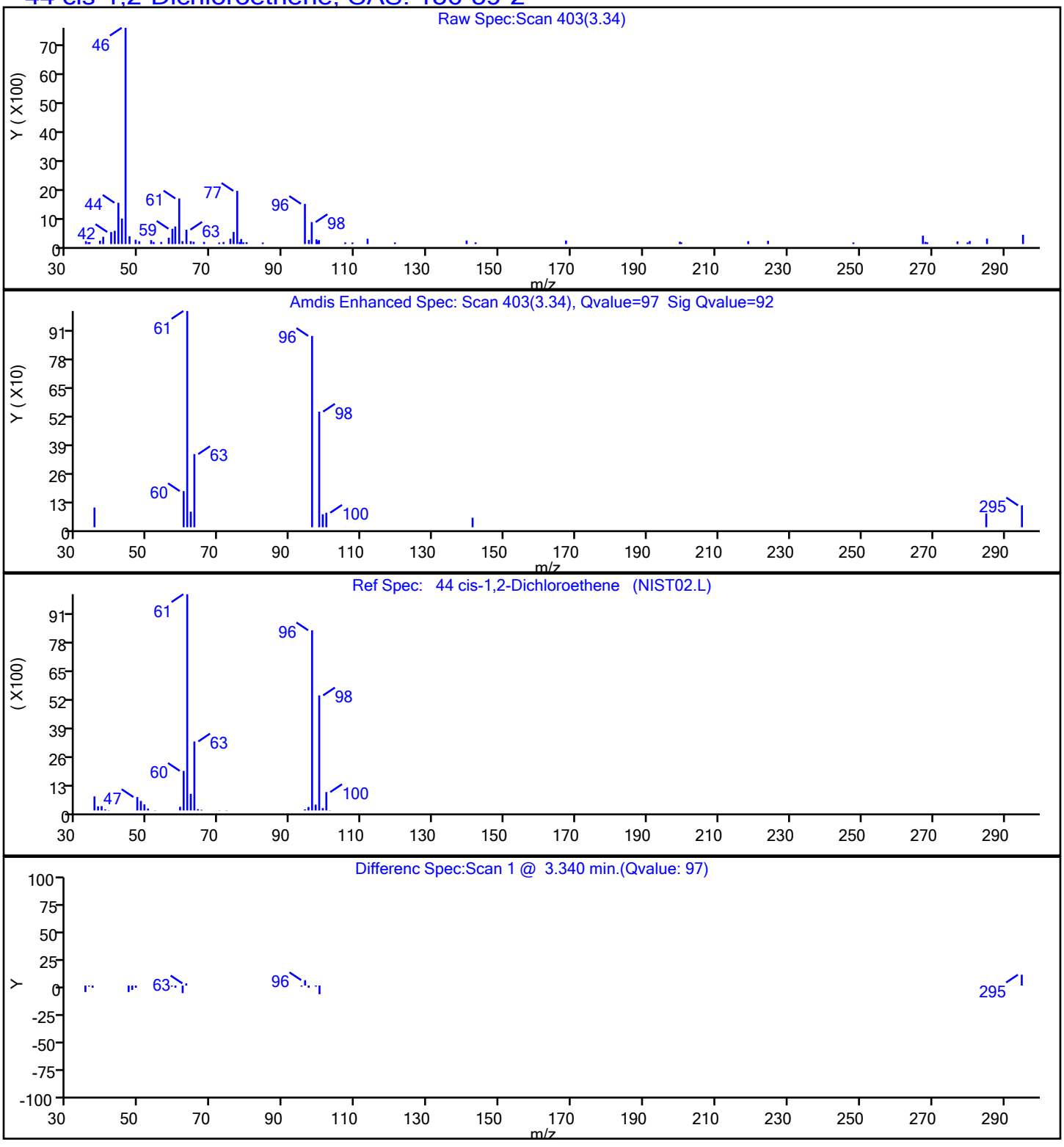


10/25/2023
1:26 PM

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

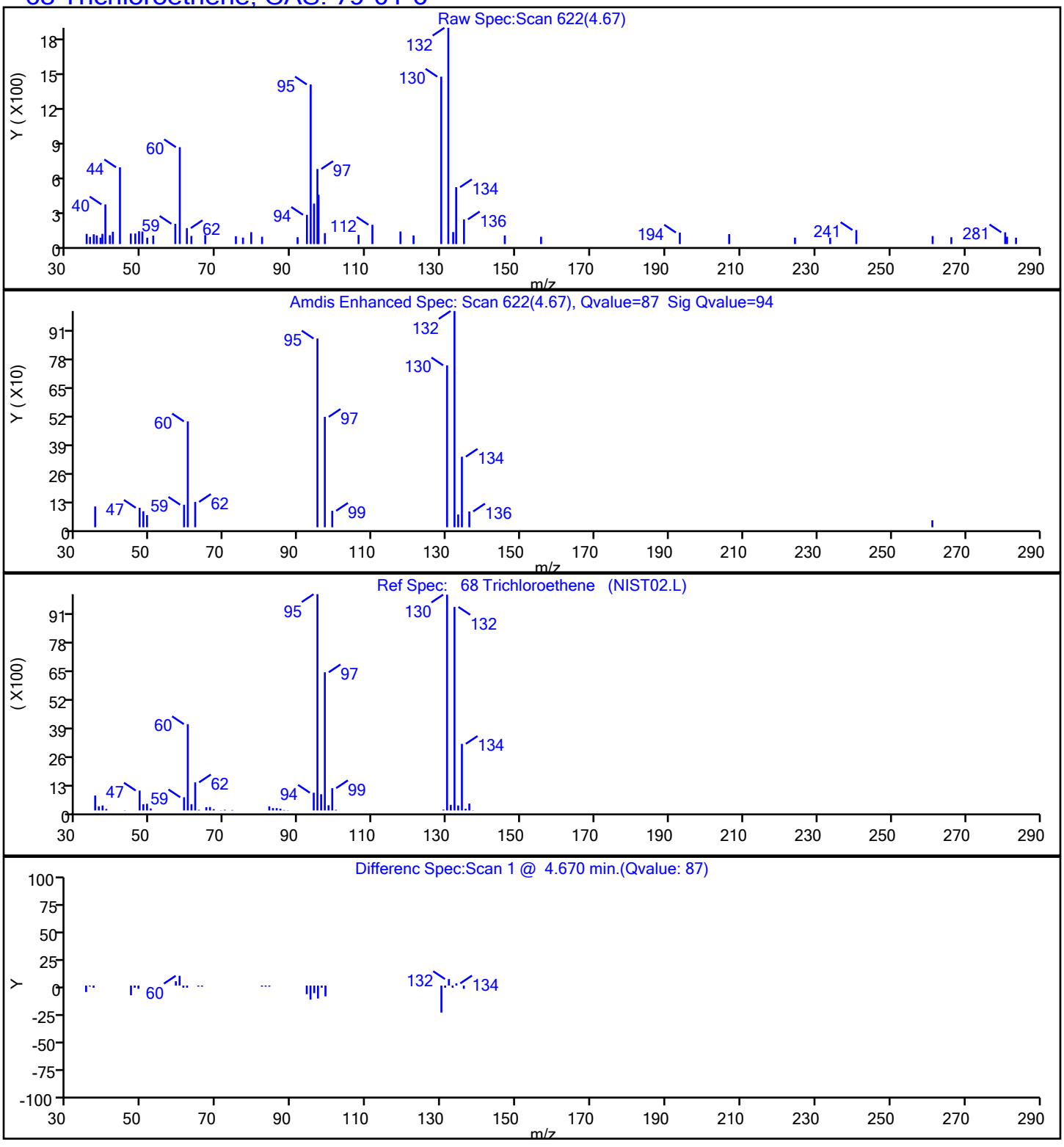
44 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D		
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5
Client ID:	FDMH-4		
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

68 Trichloroethene, CAS: 79-01-6



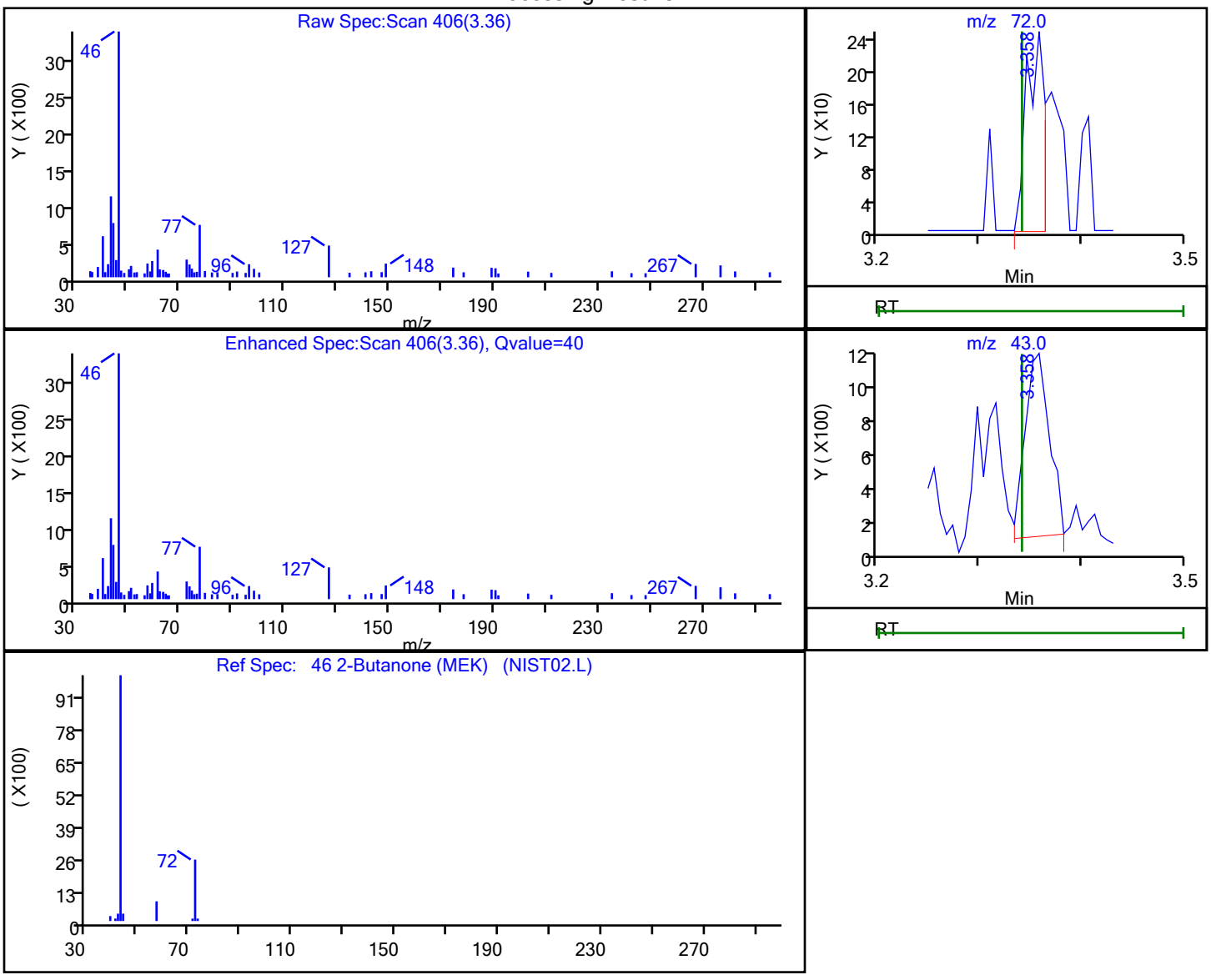
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.36	72.00	298	1.977396
3.36	43.00	1711	

Reviewer: HVW2, 21-Oct-2023 03:26:32 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

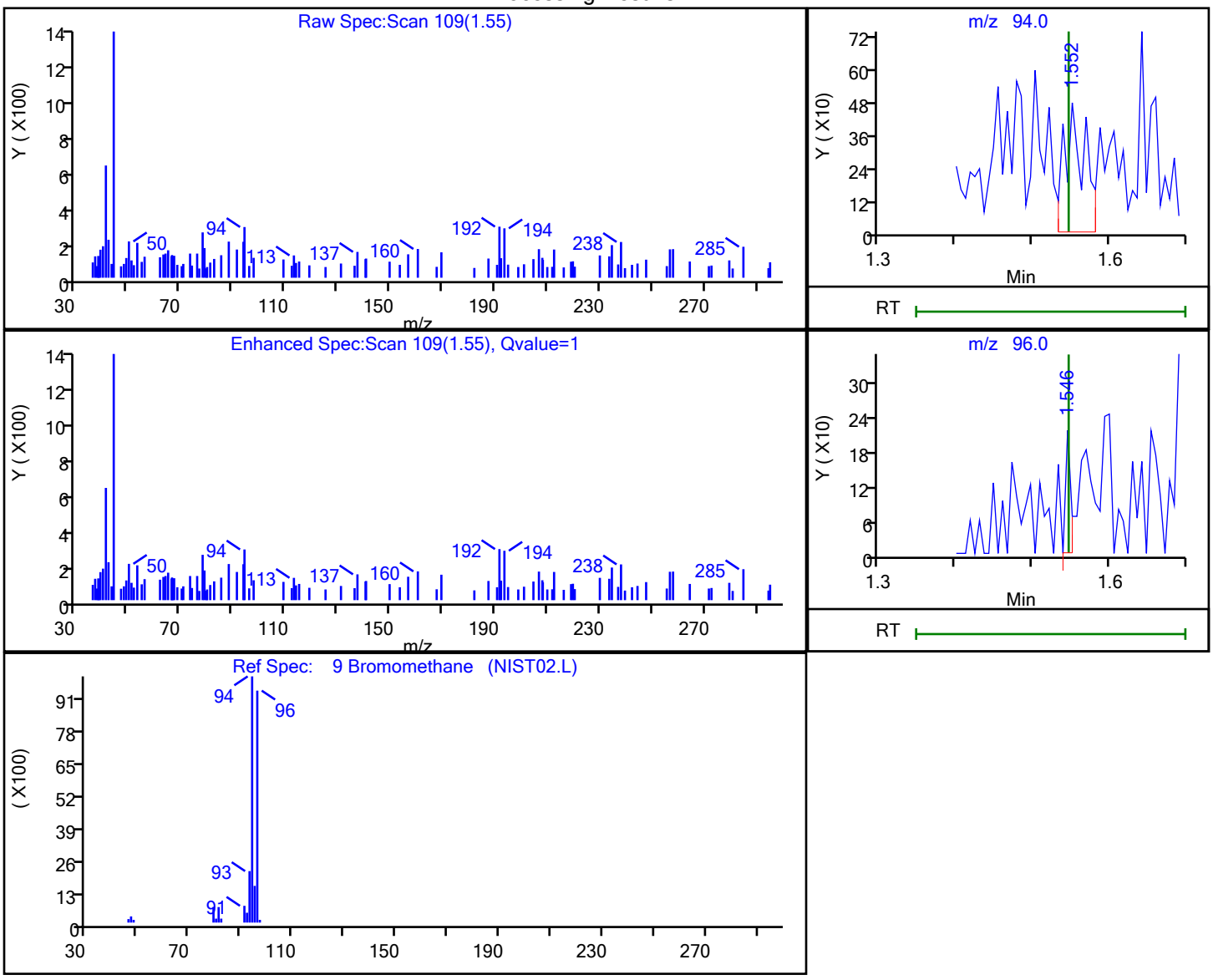
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

9 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
1.55	94.00	859	0.544383
1.55	96.00	101	

Reviewer: HVW2, 21-Oct-2023 03:26:35 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

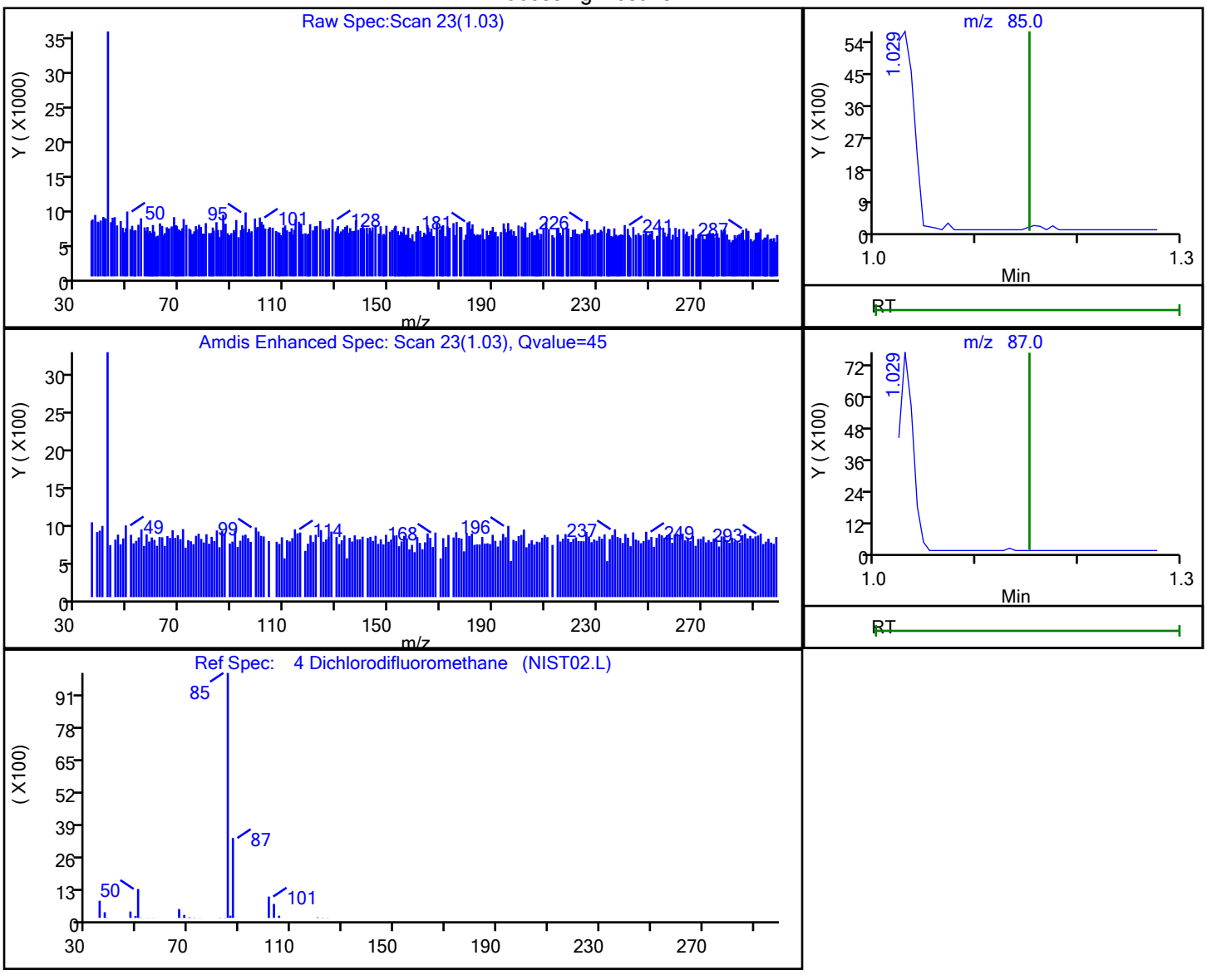
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

4 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.03	85.00	6592	2.810463
1.03	87.00	7242	

Reviewer: HVW2, 21-Oct-2023 03:26:36 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

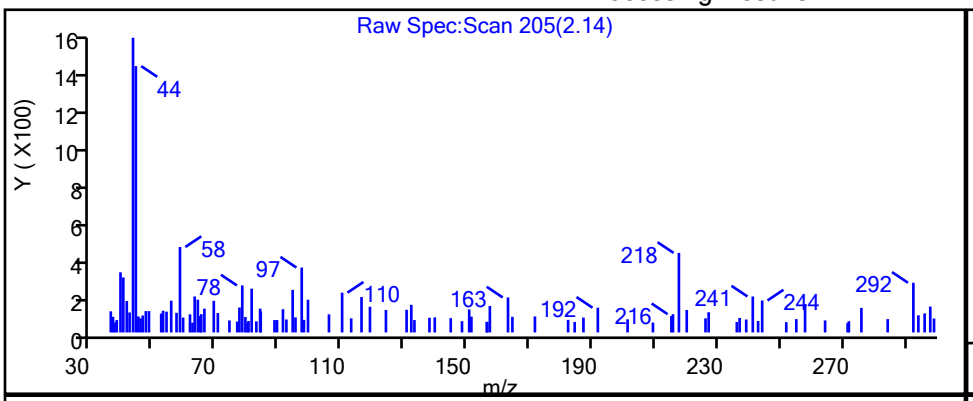
User Disabled Compound Report

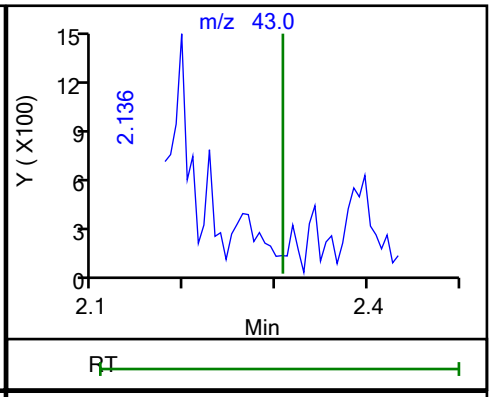
Eurofins Edison

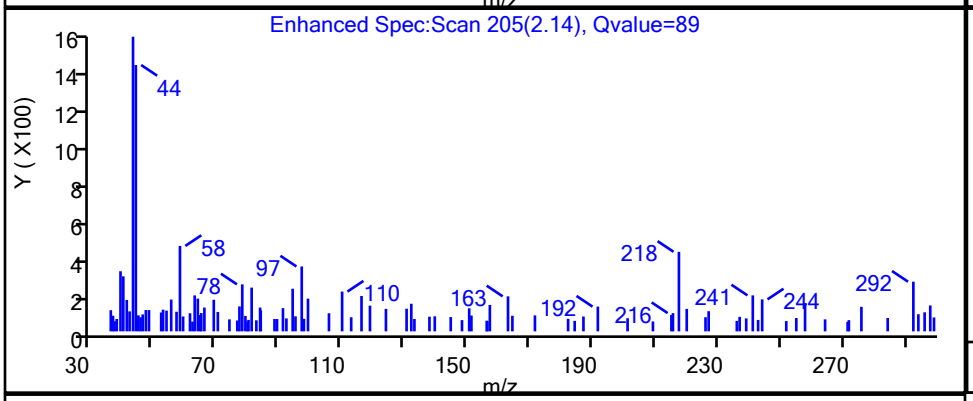
Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

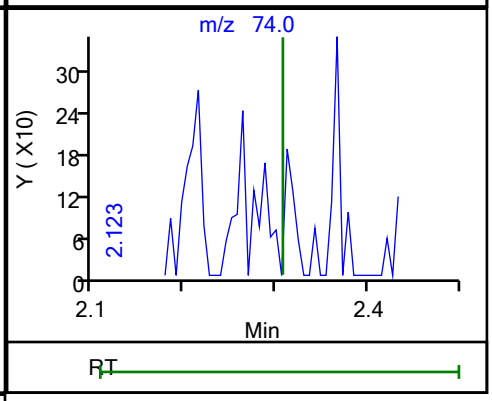
28 Methyl acetate, CAS: 79-20-9

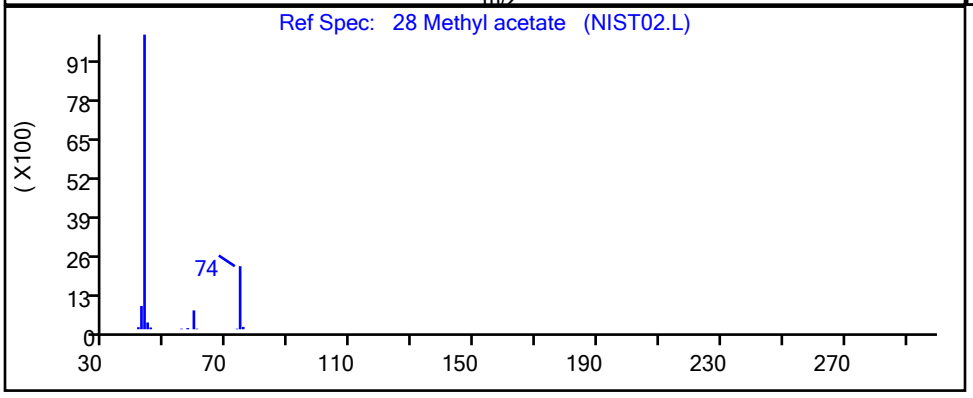
Processing Results











RT	Mass	Response	Amount
2.14	43.00	1782	1.435699
2.12	74.00	171	

Reviewer: HVW2, 21-Oct-2023 03:26:33 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

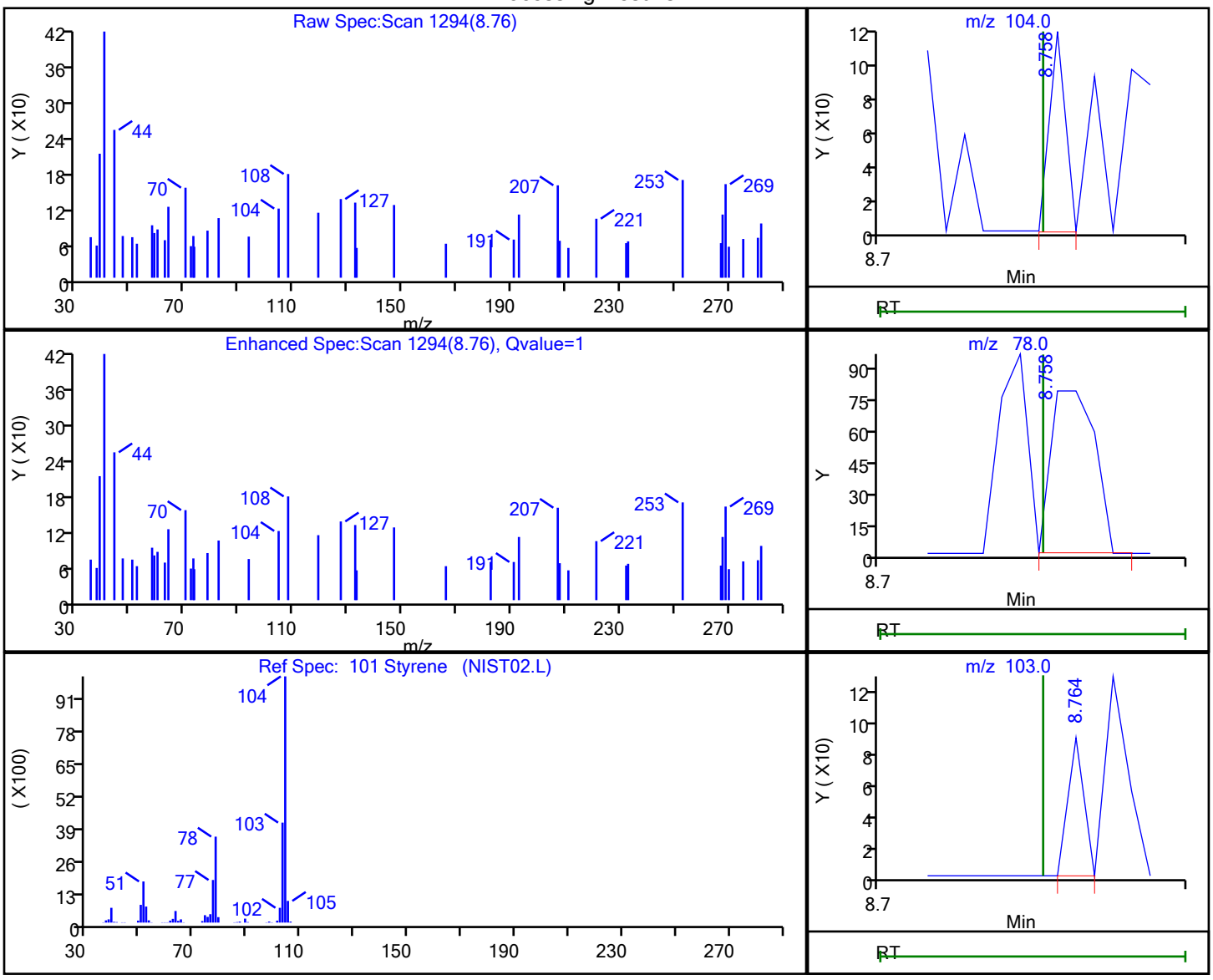
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971299.D				
Injection Date:	20-Oct-2023 19:12:30	Instrument ID:	CVOAMS8		
Lims ID:	460-290512-B-5	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

101 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.76	104.00	42	0.500161
8.76	78.00	79	
8.76	103.00	33	

Reviewer: HVW2, 21-Oct-2023 03:26:27 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-939407/3	J971267.D
Level 2	STD1 460-939407/4	J971268.D
Level 3	STD5 460-939407/16	J971280.D
Level 4	STD20 460-939407/6	J971270.D
Level 5	STD50 460-939407/7	J971271.D
Level 6	STD200 460-939407/8	J971272.D
Level 7	STD500 460-939407/9	J971273.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	+++++ 0.0113	0.0134 0.0119	0.0185	0.0144	0.0143	Ave		0.0140				18.3		20.0			
Dichlorodifluoromethane	+++++ 0.2703	0.2812 0.2538	0.2642	0.2359	0.2571	Ave		0.2604			0.1000	5.9		20.0			
Chlorodifluoromethane	+++++ 0.0374	+++++ 0.0356	0.0456	0.0459	0.0476	Ave		0.0424				13.0		20.0			
Chloromethane	+++++ 0.2519	0.3202 0.2259	0.2604	0.2504	0.2739	Ave		0.2638			0.1000	12.1		20.0			
Vinyl chloride	+++++ 0.2382	0.3506 0.2301	0.2754	0.2428	0.2668	Ave		0.2673			0.1000	16.6		20.0			
Butadiene	+++++ 0.2544	0.2673 0.2261	0.2990	0.2191	0.2769	Ave		0.2571				11.9		20.0			
Bromomethane	+++++ 0.1795	0.1627 0.1934	0.2066	0.1459	0.1630	Ave		0.1752			0.1000	12.8		20.0			
Chloroethane	+++++ 0.1328	0.2451 0.1168	0.1708	0.1398	0.1472	Lin2	0.1133	0.1346			0.1000				0.9920		0.9900
Dichlorofluoromethane	+++++ 0.4892	0.6492 0.4023	0.6647	0.5377	0.5679	Ave		0.5518				17.9		20.0			
Trichlorofluoromethane	+++++ 0.4635	0.5743 0.3767	0.6319	0.4613	0.5441	Ave		0.5086			0.1000	18.1		20.0			
Pentane	+++++ 0.2488	0.2427 0.2133	0.3595	0.2505	0.3333	QuaF		0.2812	-0.000068						0.9990		0.9900
Ethanol	+++++ 0.0462	+++++ 0.0408	0.0563	0.0522	0.0463	Ave		0.0484				12.4		20.0			
Ethyl ether	+++++ 0.1946	0.3537 0.1753	0.2068	0.1865	0.2132	Lin2	0.1646	0.1867							0.9940		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Methyl-1,3-butadiene	+++++ 0.2204	0.1799 0.2030	0.2615	0.2057	0.2604	Ave		0.2218				14.9		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.2239	0.3740 0.2118	0.3077	0.2542	0.2612	Qua2	0.1158	0.2623	-0.000114						0.9960		0.9900
1,1,1-Trifluoro-2,2-dichloroethane	+++++ 0.3948	0.5652 0.3812	0.5425	0.4552	0.4821	Ave		0.4702				16.0		20.0			
Freon TF	+++++ 0.2534	0.3142 0.2374	0.3172	0.2553	0.3089	Ave		0.2811			0.1000	12.8		20.0			
Acrolein	+++++ 2.0158	1.8530 1.9556	2.0459	1.7332	1.4181	Ave		1.8369				12.8		20.0			
1,1-Dichloroethene	+++++ 0.2454	0.2870 0.2109	0.3087	0.2724	0.2781	Ave		0.2671			0.1000	12.9		20.0			
Acetone	+++++ 0.7647	1.2941 0.7248	0.8362	0.7649	0.7581	Lin2	2.7588	0.7397			0.0500				1.0000		0.9900
Iodomethane	+++++ 0.2966	0.1851 0.2525	0.2414	0.2317	0.2727	Ave		0.2466				15.4		20.0			
Isopropyl alcohol	+++++ 0.5550	0.4594 0.5294	0.5024	0.5379	0.5189	Ave		0.5172				6.5		20.0			
Carbon disulfide	+++++ 0.7113	1.4465 0.6318	1.2810	1.1320	1.0738	QuaF		0.8178	-0.000375		0.1000				0.9960		0.9900
3-Chloro-1-propene	+++++ 0.1664	0.2326 0.1313	0.2116	0.1833	0.1851	Ave		0.1851				19.0		20.0			
Methyl acetate	+++++ 7.9282	10.431 7.5568	8.2319	7.2550	7.0589	Ave		8.0770			0.1000	15.2		20.0			
Cyclopentene	+++++ 0.4940	0.6169 0.4594	0.6661	0.5229	0.5919	Ave		0.5585				14.2		20.0			
Acetonitrile	+++++ 1.2734	1.0791 1.2096	1.2396	1.5410	1.5873	Ave		1.3217				15.1		20.0			
Methylene Chloride	+++++ 0.2473	0.4732 0.2146	0.3546	0.3118	0.3054	Qua2	0.1673	0.3087	-0.000205		0.1000				0.9980		0.9900
2-Methyl-2-propanol	+++++ 0.8314	0.9948 0.8305	0.8286	0.8059	0.8746	Ave		0.8610				8.0		20.0			
MTBE	+++++ 0.6778	0.4914 0.6788	0.6662	0.5301	0.6626	Ave		0.6178			0.1000	13.6		20.0			
trans-1,2-Dichloroethene	+++++ 0.2632	0.3748 0.2634	0.3871	0.3203	0.3393	Ave		0.3247			0.1000	16.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acrylonitrile	+++++ 3.7946	3.7756 3.5340	3.8948	4.0426	3.9867	Ave		3.8381				4.7		20.0			
Hexane	+++++ 0.1795	0.1526 0.1779	0.2095	0.1577	0.1955	Ave		0.1788				12.1		20.0			
Isopropyl ether	+++++ 0.7736	0.6737 0.7104	0.5395	0.5984	0.7206	Ave		0.6693				12.9		20.0			
1,1-Dichloroethane	+++++ 0.5350	0.7008 0.4786	0.5552	0.6219	0.6126	Ave		0.5840			0.2000	13.3		20.0			
Vinyl acetate	+++++ 0.4219	0.3550 0.3793	0.3153	0.3415	0.3843	Ave		0.3662				10.2		20.0			
2-Chloro-1,3-butadiene	+++++ 0.2374	0.2363 0.1999	0.1880	0.2294	0.2127	Ave		0.2173				9.4		20.0			
Tert-butyl ethyl ether	+++++ 0.5901	0.3174 0.5678	0.4647	0.3795	0.4918	QuaF		0.5846	-0.000032						0.9990		0.9900
2,2-Dichloropropane	+++++ 0.1154	0.1502 0.1125	0.1463	0.1379	0.1316	Ave		0.1323				11.8		20.0			
cis-1,2-Dichloroethene	+++++ 0.2377	0.2662 0.2419	0.2994	0.2738	0.2727	Ave		0.2653			0.1000	8.6		20.0			
2-Butanone	+++++ 0.2051	0.1954 0.2256	0.2402	0.2197	0.2082	Ave		0.2157			0.0500	7.5		20.0			
Ethyl acetate	+++++ 0.2072	0.3159 0.2255	0.1905	0.1954	0.2145	Qua2	0.2465	0.1884	0.0000396						0.9950		0.9900
Methyl acrylate	+++++ 0.1301	0.1122 0.1356	0.1344	0.0924	0.1224	Ave		0.1212				13.7		20.0			
Propionitrile	+++++ 1.1535	1.0502 1.1925	1.2512	1.3579	1.2021	Ave		1.2012				8.5		20.0			
Chlorobromomethane	+++++ 0.1164	0.1429 0.1054	0.1583	0.1432	0.1359	Ave		0.1337				14.5		20.0			
Tetrahydrofuran	+++++ 0.2198	0.1948 0.2534	0.2244	0.2545	0.2467	Ave		0.2323				10.1		20.0			
Methacrylonitrile	+++++ 0.0683	0.0534 0.0670	0.0705	0.0642	0.0710	Ave		0.0658				9.9		20.0			
Chloroform	+++++ 0.4333	0.5672 0.4241	0.5553	0.5206	0.4997	Ave		0.5000			0.2000	12.1		20.0			
Cyclohexane	+++++ 0.2137	0.1744 0.2314	0.2454	0.2107	0.2429	Ave		0.2198			0.1000	12.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	+++++ 0.3532	0.4363 0.3506	0.4529	0.4150	0.4041	Ave		0.4020			0.1000	10.5		20.0			
Carbon tetrachloride	+++++ 0.3069	0.3932 0.3062	0.3612	0.3685	0.3571	Ave		0.3488			0.1000	10.0		20.0			
1,1-Dichloropropene	+++++ 0.2845	0.1939 0.2928	0.2682	0.2696	0.3045	Ave		0.2689				14.6		20.0			
Isobutyl alcohol	+++++ 0.3604	0.2880 0.4012	0.2744	0.3188	0.3383	Ave		0.3302				14.2		20.0			
Isooctane	+++++ 0.2530	0.1475 0.2770	0.2587	0.2039	0.2529	Qua2	-0.090	0.2428	0.0000662						0.9910		0.9900
Benzene	+++++ 1.1322	0.9910 1.2797	1.1649	1.1496	1.2958	Ave		1.1689			0.5000	9.5		20.0			
Isopropyl acetate	+++++ 0.4523	0.2931 0.4462	0.3890	0.3440	0.4125	Ave		0.3895				15.8		20.0			
Tert-amyl methyl ether	+++++ 0.1302	0.1264 0.1302	0.1271	0.1136	0.1188	Ave		0.1244				5.4		20.0			
1,2-Dichloroethane	+++++ 0.3267	0.3862 0.3060	0.3715	0.3590	0.3630	Ave		0.3521			0.1000	8.5		20.0			
n-Heptane	+++++ 0.0507	0.0501 0.0529	0.0652	0.0495	0.0510	Ave		0.0532				11.2		20.0			
n-Butanol	+++++ 0.1509	0.0460 0.1736	0.0869	0.1198	0.1217	QuaF		0.1329	0.0000033						1.0000		0.9900
Trichloroethene	+++++ 0.2307	0.2298 0.2290	0.2135	0.2223	0.2533	Ave		0.2298			0.2000	5.8		20.0			
Methylcyclohexane	+++++ 0.1883	0.1521 0.1970	0.1564	0.1419	0.1767	Ave		0.1687			0.1000	13.0		20.0			
Ethyl acrylate	+++++ 0.3260	0.2663 0.3255	0.2761	0.2557	0.3072	Ave		0.2928				10.5		20.0			
1,2-Dichloropropane	+++++ 0.2131	0.1905 0.2062	0.2280	0.2179	0.2287	Ave		0.2141			0.1000	6.7		20.0			
Methyl methacrylate	+++++ 0.0371	0.0262 0.0361	0.0332	0.0320	0.0366	Ave		0.0335				12.3		20.0			
1,4-Dioxane	+++++ 0.6869	0.9621 0.8857	0.8031	0.8968	0.8323	Ave		0.8445				11.2		20.0			
Dibromomethane	+++++ 0.1490	0.1872 0.1426	0.1632	0.1725	0.1645	Ave		0.1632				9.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Propyl acetate	+++++ 0.2039	0.1573 0.1890	0.1896	0.1696	0.1879	Ave		0.1829				9.1		20.0			
Bromodichloromethane	+++++ 0.3301	0.3337 0.3051	0.3773	0.3471	0.3515	Ave		0.3408			0.2000	7.1		20.0			
2-Nitropropane	+++++ 3.1047	4.1100 2.8141	2.5126	2.5153	2.7585	QuaF		3.2126	-0.000396						1.0000		0.9900
2-Chloroethyl vinyl ether	+++++ 0.0796	0.0403 0.0814	0.0404	0.0468	0.0601	QuaF		0.0751	0.0000127						0.9990		0.9900
Epichlorohydrin	+++++ 0.1463	0.1244 0.1526	0.1296	0.1627	0.1572	Ave		0.1454				10.6		20.0			
cis-1,3-Dichloropropene	+++++ 0.5106	0.3558 0.5605	0.3912	0.4152	0.5261	Ave		0.4599			0.2000	18.1		20.0			
4-Methyl-2-pentanone	+++++ 1.4298	0.9929 1.3576	1.3246	1.4360	1.4989	Ave		1.3399			0.0500	13.5		20.0			
Toluene	+++++ 1.0703	1.2046 1.1644	1.1087	1.1141	1.1592	Ave		1.1369			0.4000	4.2		20.0			
trans-1,3-Dichloropropene	+++++ 0.4566	0.2940 0.4822	0.3924	0.3635	0.4439	Ave		0.4054			0.1000	17.2		20.0			
Ethyl methacrylate	+++++ 0.1727	0.1537 0.1564	0.1321	0.1367	0.1663	Ave		0.1530				10.5		20.0			
1,1,2-Trichloroethane	+++++ 0.2360	0.2208 0.2349	0.2298	0.2207	0.2381	Ave		0.2300			0.1000	3.3		20.0			
Tetrachloroethene	+++++ 0.2779	0.2959 0.2827	0.3070	0.2671	0.3014	Ave		0.2887			0.2000	5.3		20.0			
1,3-Dichloropropane	+++++ 0.4253	0.3248 0.4261	0.3653	0.3573	0.4135	Ave		0.3854				11.0		20.0			
2-Hexanone	+++++ 0.5527	0.4062 0.5042	0.4604	0.5228	0.5513	Ave		0.4996			0.0500	11.4		20.0			
n-Butyl acetate	+++++ 0.2736	0.2062 0.2657	0.2307	0.2365	0.2712	Ave		0.2473				11.0		20.0			
Dibromochloromethane	+++++ 0.3402	0.3653 0.3454	0.3193	0.3098	0.3515	Ave		0.3386			0.1000	6.1		20.0			
1,2-Dibromoethane	+++++ 0.2844	0.2995 0.2837	0.2567	0.2656	0.2894	Ave		0.2799			0.1000	5.6		20.0			
Chlorobenzene	+++++ 0.7442	0.7362 0.7382	0.8096	0.7848	0.7894	Ave		0.7671			0.5000	4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethylbenzene	+++++ 0.3601	0.3141 0.3640	0.3082	0.3448	0.3734	Ave		0.3441			0.1000	7.9		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3050	0.2739 0.3061	0.2519	0.2720	0.3025	Ave		0.2852				7.9		20.0			
m-Xylene & p-Xylene	+++++ 0.4270	0.3037 0.4292	0.3694	0.3832	0.4466	Ave		0.3932			0.1000	13.4		20.0			
o-Xylene	+++++ 0.4313	0.3090 0.4255	0.3579	0.3665	0.4737	Ave		0.3940			0.3000	15.2		20.0			
n-Butyl acrylate	+++++ 0.1742	0.0792 0.1714	0.1180	0.1447	0.1774	Qua2	-0.081	0.1559	0.0000427						0.9900		0.9900
Styrene	+++++ 0.7343	0.3933 0.7331	0.5533	0.6965	0.8286	Lin2	-0.360	0.7332			0.3000				0.9900		0.9900
Bromoform	+++++ 0.2076	0.2285 0.2084	0.2074	0.2057	0.2293	Ave		0.2145			0.1000	5.2		20.0			
Amyl acetate (mixed isomers)	+++++ 0.6032	0.3592 0.5803	0.4467	0.4402	0.5447	Ave		0.4957				19.2		20.0			
Isopropylbenzene	+++++ 0.9463	0.6345 0.9293	0.7455	0.8575	1.1037	Ave		0.8695			0.1000	18.9		20.0			
Bromobenzene	+++++ 0.5952	0.5514 0.5716	0.6600	0.5852	0.6116	Ave		0.5959				6.3		20.0			
1,1,2,2-Tetrachloroethane	+++++ 0.5522	0.5709 0.5309	0.6610	0.5627	0.5585	Ave		0.5727			0.3000	7.9		20.0			
N-Propylbenzene	+++++ 2.0948	1.6726 1.9738	1.8883	1.8019	2.1146	Ave		1.9243				8.9		20.0			
1,2,3-Trichloropropane	+++++ 0.1367	0.1902 0.1379	0.1563	0.1285	0.1423	Ave		0.1487				15.0		20.0			
2-Chlorotoluene	+++++ 1.6139	1.4199 1.5313	1.5630	1.5013	1.6826	Ave		1.5520				5.9		20.0			
4-Ethyltoluene	+++++ 1.8121	1.4089 1.7094	1.5128	1.6029	1.8685	Ave		1.6524				10.7		20.0			
1,3,5-Trimethylbenzene	+++++ 1.5155	1.1598 1.5057	1.2914	1.2820	1.4657	Ave		1.3700				10.7		20.0			
4-Chlorotoluene	+++++ 1.5367	1.0439 1.5768	1.4247	1.4177	1.6726	Ave		1.4454				15.1		20.0			
Butyl Methacrylate	+++++ 0.5428	0.3313 0.5962	0.3893	0.3881	0.4655	QuaF		0.4972	0.0001986						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butylbenzene	+++++ 1.1116	0.6638 1.0552	0.9684	0.9245	1.0778	Ave		0.9669				17.0		20.0			
1,2,4-Trimethylbenzene	+++++ 1.6300	1.0558 1.6202	1.2803	1.3423	1.5723	Ave		1.4168				16.3		20.0			
sec-Butylbenzene	+++++ 1.5414	1.0410 1.5082	1.2935	1.3206	1.5505	Ave		1.3759				14.4		20.0			
1,3-Dichlorobenzene	+++++ 1.0230	0.9254 1.0007	1.0471	0.9848	1.0586	Ave		1.0066			0.6000	4.8		20.0			
4-Isopropyltoluene	+++++ 1.3756	0.8894 1.3949	1.0325	1.1374	1.3442	Ave		1.1957				17.5		20.0			
1,4-Dichlorobenzene	+++++ 1.0762	1.2614 1.0578	1.2186	1.0754	1.1145	Ave		1.1340			0.5000	7.5		20.0			
Benzyl chloride	+++++ 1.1251	1.0056 1.1384	1.0575	0.9775	1.0663	Ave		1.0617				6.0		20.0			
Indan	+++++ 1.7713	1.4240 1.7538	1.5576	1.5907	1.7796	Ave		1.6462				8.8		20.0			
p-Diethylbenzene	+++++ 0.8161	0.6502 0.8773	0.7265	0.7203	0.8170	Ave		0.7679				10.8		20.0			
n-Butylbenzene	+++++ 0.7089	0.5340 0.7359	0.6351	0.6450	0.7026	Ave		0.6603				11.1		20.0			
1,2-Dichlorobenzene	+++++ 1.0012	0.9266 1.0324	1.0827	1.0260	1.0515	Ave		1.0201			0.4000	5.2		20.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.3424	0.8543 1.4656	0.9794	0.9399	1.2379	Qua2	-0.234	1.0733	0.0008747						0.9930		0.9900
1,2-Dibromo-3-Chloropropane	+++++ 0.1230	0.1077 0.1373	0.1135	0.1228	0.1232	Ave		0.1212			0.0500	8.3		20.0			
1,3,5-Trichlorobenzene	+++++ 0.6119	0.5378 0.6366	0.6856	0.5602	0.6297	Ave		0.6103				8.8		20.0			
1,2,4-Trichlorobenzene	+++++ 0.5616	0.5166 0.6095	0.5553	0.5020	0.5570	Ave		0.5503			0.2000	6.9		20.0			
Hexachlorobutadiene	+++++ 0.1823	0.1641 0.2060	0.2296	0.1927	0.1948	Ave		0.1949				11.3		20.0			
Naphthalene	+++++ 1.4800	0.9484 +++++	1.1351	1.1199	1.4482	Ave		1.2263				18.7		20.0			
1,2,3-Trichlorobenzene	+++++ 0.4960	0.4042 0.5408	0.5483	0.4325	0.5174	Ave		0.4898				12.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.3272 0.2708	0.3466 0.2660	0.3123	0.3144	0.2921	Ave		0.3042				9.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3510 0.3141	0.3599 0.2987	0.3349	0.3245	0.3291	Ave		0.3303				6.3		20.0			
Toluene-d8 (Surr)	1.0421 1.1136	1.0904 1.2174	1.1076	1.1725	1.1431	Ave		1.1267				5.1		20.0			
Bromofluorobenzene	0.3216 0.3299	0.3230 0.3180	0.3316	0.3507	0.3768	Ave		0.3359				6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-939407/3	J971267.D
Level 2	STD1 460-939407/4	J971268.D
Level 3	STD5 460-939407/16	J971280.D
Level 4	STD20 460-939407/6	J971270.D
Level 5	STD50 460-939407/7	J971271.D
Level 6	STD200 460-939407/8	J971272.D
Level 7	STD500 460-939407/9	J971273.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	+++++ 29525	112 90683	918	2973	7647	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorodifluoromethane	FB	Ave	+++++ 708770	2347 1940522	13134	48687	137342	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorodifluoromethane	FB	Ave	+++++ 97963	+++++ 272233	2269	9468	25449	+++++ 200	+++++ 500	5.00	20.0	50.0
Chloromethane	FB	Ave	+++++ 660501	2673 1727132	12948	51663	146302	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl chloride	FB	Ave	+++++ 624585	2927 1758952	13693	50096	142549	+++++ 200	1.00 500	5.00	20.0	50.0
Butadiene	FB	Ave	+++++ 666972	2231 1728371	14865	45213	147951	+++++ 200	1.00 500	5.00	20.0	50.0
Bromomethane	FB	Ave	+++++ 470571	1358 1478772	10273	30109	87103	+++++ 200	1.00 500	5.00	20.0	50.0
Chloroethane	FB	Lin2	+++++ 348168	2046 893036	8491	28855	78659	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorofluoromethane	FB	Ave	+++++ 1282749	5419 3075837	33046	110954	303372	+++++ 200	1.00 500	5.00	20.0	50.0
Trichlorofluoromethane	FB	Ave	+++++ 1215114	4794 2879913	31415	95201	290677	+++++ 200	1.00 500	5.00	20.0	50.0
Pentane	FB	QuaF	+++++ 1304491	4052 3261163	35746	103398	356151	+++++ 400	2.00 1000	10.0	40.0	100
Ethanol	TBAd9	Ave	+++++ 80653	+++++ 206534	2407	7027	17849	+++++ 8000	+++++ 20000	200	800	2000
Ethyl ether	FB	Lin2	+++++ 510288	2953 1340418	10280	38479	113885	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-1,3-butadiene	FB	Ave	+++++ 577848	1502 1552240	12999	42444	139093	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloro-1,1,2-trifluoroethane	FB	Qua2	+++++ 587020	3122 1619246	15298	52463	139538	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1-Trifluoro-2,2-dichloroethane	FB	Ave	+++++	4718	26973	93928	257554	+++++	1.00	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1035079	2914434				200	500			
Freon TF	FB	Ave	+++++ 664377	2623 1814932	15768	52682	165021	+++++ 200	1.00 500	5.00	20.0	50.0
Acrolein	TBAd9	Ave	+++++ 87937	1257 198003	8742	11663	27307	+++++ 200	4.00 400	20.0	40.0	100
1,1-Dichloroethene	FB	Ave	+++++ 643297	2396 1612833	15348	56218	148576	+++++ 200	1.00 500	5.00	20.0	50.0
Acetone	BUT	Lin2	+++++ 850368	4352 2203009	18425	56853	159370	+++++ 1000	5.00 2500	25.0	100	250
Iodomethane	FB	Ave	+++++ 777574	1545 1930863	11999	47806	145661	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl alcohol	TBAd9	Ave	+++++ 242121	779 669967	5367	18100	49961	+++++ 2000	10.0 5000	50.0	200	500
Carbon disulfide	FB	QuaF	+++++ 1864998	12075 4830840	63688	233603	573658	+++++ 200	1.00 500	5.00	20.0	50.0
3-Chloro-1-propene	FB	Ave	+++++ 436264	1942 1003586	10518	37829	98907	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl acetate	TBAd9	Ave	+++++ 691722	3538 1912802	17587	48821	135924	+++++ 400	2.00 1000	10.0	40.0	100
Cyclopentene	FB	Ave	+++++ 1295241	5150 3512246	33114	107909	316237	+++++ 200	1.00 500	5.00	20.0	50.0
Acetonitrile	TBAd9	Ave	+++++ 555513	1830 1530914	13242	51850	152828	+++++ 2000	10.0 5000	50.0	200	500
Methylene Chloride	FB	Qua2	+++++ 648287	3950 1640639	17629	64341	163145	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-2-propanol	TBAd9	Ave	+++++ 362697	1687 1051125	8851	27117	84207	+++++ 2000	10.0 5000	50.0	200	500
MTBE	FB	Ave	+++++ 1777009	4102 5189864	33121	109388	354008	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 690175	3129 2013971	19247	66095	181271	+++++ 200	1.00 500	5.00	20.0	50.0
Acrylonitrile	TBAd9	Ave	+++++ 1655385	6403 4472656	41605	136021	383839	+++++ 2000	10.0 5000	50.0	200	500
Hexane	FB	Ave	+++++ 470528	1274 1360450	10418	32538	104461	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl ether	FB	Ave	+++++ 2028193	5624 5431462	26821	123474	384967	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethane	FB	Ave	+++++ 1402698	5850 3659197	27604	128339	327251	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl acetate	FB	Ave	+++++ 2212543	5927 5800040	31350	140927	410663	+++++ 400	2.00 1000	10.0	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
2-Chloro-1,3-butadiene	FB	Ave	+++++ 622306	1973 1528420	9346	47345	113647	+++++ 200	1.00 500	5.00	20.0	50.0
Tert-butyl ethyl ether	FB	QuaF	+++++ 1547099	2650 4341479	23104	78302	262759	+++++ 200	1.00 500	5.00	20.0	50.0
2,2-Dichloropropane	FB	Ave	+++++ 302671	1254 860350	7273	28452	70302	+++++ 200	1.00 500	5.00	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 623277	2222 1849763	14885	56508	145673	+++++ 200	1.00 500	5.00	20.0	50.0
2-Butanone	BUT	Ave	+++++ 228115	657 685741	5292	16331	43769	+++++ 1000	5.00 2500	25.0	100	250
Ethyl acetate	BUT	Qua2	+++++ 92152	425 274190	1679	5810	18041	+++++ 400	2.00 1000	10.0	40.0	100
Methyl acrylate	FB	Ave	+++++ 341000	937 1036727	6684	19067	65367	+++++ 200	1.00 500	5.00	20.0	50.0
Propionitrile	TBAd9	Ave	+++++ 503188	1781 1509242	13366	45689	115734	+++++ 2000	10.0 5000	50.0	200	500
Chlorobromomethane	FB	Ave	+++++ 305192	1193 806183	7871	29549	72604	+++++ 200	1.00 500	5.00	20.0	50.0
Tetrahydrofuran	BUT	Ave	+++++ 97755	262 308059	1978	7567	20743	+++++ 400	2.00 1000	10.0	40.0	100
Methacrylonitrile	FB	Ave	+++++ 1791939	4461 5125770	35065	132506	379085	+++++ 2000	10.0 5000	50.0	200	500
Chloroform	FB	Ave	+++++ 1136002	4735 3242457	27609	107427	266937	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclohexane	FB	Ave	+++++ 560225	1456 1769575	12202	43469	129780	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1-Trichloroethane	FB	Ave	+++++ 925956	3642 2680805	22514	85635	215882	+++++ 200	1.00 500	5.00	20.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 804756	3282 2341237	17958	76042	190762	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloropropene	FB	Ave	+++++ 745884	1619 2238844	13333	55642	162661	+++++ 200	1.00 500	5.00	20.0	50.0
Isobutyl alcohol	TBAd9	Ave	+++++ 393091	1221 1269360	7327	26813	81418	+++++ 5000	25.0 12500	125	500	1250
Isooctane	FB	Qua2	+++++ 663243	1231 2118124	12863	42066	135115	+++++ 200	1.00 500	5.00	20.0	50.0
Benzene	CBNZd5	Ave	+++++ 2107491	6383 6088902	44516	174700	481266	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl acetate	FB	Ave	+++++ 1185875	2447 3411649	19338	70990	220369	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 Calibration End Date: 10/20/2023 11:18 Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Tert-amyl methyl ether	FB	Ave	+++++ 341402	1055 995135	6318	23440	63451	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloroethane	FB	Ave	+++++ 856608	3224 2339647	18470	74085	193908	+++++ 200	1.00 500	5.00	20.0	50.0
n-Heptane	FB	Ave	+++++ 133049	418 404656	3242	10218	27250	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butanol	TBAd9	QuaF	+++++ 164570	195 549210	2320	10075	29302	+++++ 5000	25.0 12500	125	500	1250
Trichloroethene	FB	Ave	+++++ 604799	1918 1751234	10613	45880	135330	+++++ 200	1.00 500	5.00	20.0	50.0
Methylcyclohexane	FB	Ave	+++++ 493594	1270 1506507	7778	29282	94394	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl acrylate	FB	Ave	+++++ 854673	2223 2488475	13725	52766	164144	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloropropane	FB	Ave	+++++ 558788	1590 1576636	11333	44961	122179	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl methacrylate	FB	Ave	+++++ 194632	438 552349	3297	13192	39147	+++++ 400	2.00 1000	10.0	40.0	100
1,4-Dioxane	DXE	Ave	+++++ 82938	734 268448	1628	7631	18645	+++++ 4000	50.0 10000	100	400	1000
Dibromomethane	FB	Ave	+++++ 390708	1563 1090172	8112	35597	87879	+++++ 200	1.00 500	5.00	20.0	50.0
n-Propyl acetate	FB	Ave	+++++ 534503	1313 1444734	9426	35007	100366	+++++ 200	1.00 500	5.00	20.0	50.0
Bromodichloromethane	FB	Ave	+++++ 865368	2786 2333120	18760	71620	187760	+++++ 200	1.00 500	5.00	20.0	50.0
2-Nitropropane	TBAd9	QuaF	+++++ 270882	1394 712309	5368	16926	53117	+++++ 400	2.00 1000	10.0	40.0	100
2-Chloroethyl vinyl ether	FB	QuaF	+++++ 209263	337 623756	2014	9682	32189	+++++ 200	1.00 501	5.01	20.0	50.1
Epichlorohydrin	BUT	Ave	+++++ 650539	1674 1855374	11419	48362	132159	+++++ 4000	20.0 10000	100	400	1000
cis-1,3-Dichloropropene	CBNZd 5	Ave	+++++ 950507	2292 2666974	14950	63090	195385	+++++ 200	1.00 500	5.00	20.0	50.0
4-Methyl-2-pentanone	BUT	Ave	+++++ 1589969	3339 4126396	29185	106736	315115	+++++ 1000	5.00 2500	25.0	100	250
Toluene	CBNZd 5	Ave	+++++ 1992343	7759 5540493	42368	169305	430543	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,3-Dichloropropene	CBNZd 5	Ave	+++++	1894	14994	55238	164857	+++++	1.00	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			849982	2294248				200	500			
Ethyl methacrylate	FB	Ave	+++++ 452922	1283 1195932	6569	28203	88834	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2-Trichloroethane	CBNZd5	Ave	+++++ 439265	1422 1117727	8781	33546	88423	+++++ 200	1.00 500	5.00	20.0	50.0
Tetrachloroethene	CBNZd5	Ave	+++++ 517218	1906 1345251	11730	40589	111944	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichloropropane	CBNZd5	Ave	+++++ 791733	2092 2027503	13958	54296	153583	+++++ 200	1.00 500	5.00	20.0	50.0
2-Hexanone	BUT	Ave	+++++ 614632	1366 1532654	10144	38857	115911	+++++ 1000	5.00 2500	25.0	100	250
n-Butyl acetate	CBNZd5	Ave	+++++ 509266	1328 1264095	8815	35937	100739	+++++ 200	1.00 500	5.00	20.0	50.0
Dibromochloromethane	CBNZd5	Ave	+++++ 633272	2353 1643314	12203	47079	130535	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dibromoethane	CBNZd5	Ave	+++++ 529356	1929 1349753	9811	40359	107496	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorobenzene	CBNZd5	Ave	+++++ 1385299	4742 3512250	30939	119270	293192	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylbenzene	CBNZd5	Ave	+++++ 670249	2023 1732003	11779	52401	138682	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1,2-Tetrachloroethane	CBNZd5	Ave	+++++ 567775	1764 1456313	9626	41329	112335	+++++ 200	1.00 500	5.00	20.0	50.0
m-Xylene & p-Xylene	CBNZd5	Ave	+++++ 794943	1956 2042122	14116	58230	165864	+++++ 200	1.00 500	5.00	20.0	50.0
o-Xylene	CBNZd5	Ave	+++++ 802852	1990 2024379	13678	55703	175950	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butyl acrylate	CBNZd5	Qua2	+++++ 324326	510 815744	4510	21991	65896	+++++ 200	1.00 500	5.00	20.0	50.0
Styrene	CBNZd5	Lin2	+++++	2533	21143	105838	307766	+++++	1.00	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1366908	3488017				200	500			
Bromoform	CBNZd5	Ave	+++++ 386377	1472 991618	7926	31258	85148	+++++ 200	1.00 500	5.00	20.0	50.0
Amyl acetate (mixed isomers)	DCBd4	Ave	+++++ 604154	1237 1519773	8874	38635	124954	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropylbenzene	CBNZd5	Ave	+++++ 1761497	4087 4421714	28488	130304	409911	+++++ 200	1.00 500	5.00	20.0	50.0
Bromobenzene	DCBd4	Ave	+++++ 596176	1899 1496980	13112	51364	140313	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2,2-Tetrachloroethane	DCBd4	Ave	+++++ 553070	1966 1390322	13131	49389	128112	+++++ 200	1.00 500	5.00	20.0	50.0
N-Propylbenzene	DCBd4	Ave	+++++ 2098053	5760 5168744	37515	158162	485088	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichloropropane	DCBd4	Ave	+++++ 136942	655 361043	3105	11283	32651	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chlorotoluene	DCBd4	Ave	+++++ 1616453	4890 4010173	31051	131774	385986	+++++ 200	1.00 500	5.00	20.0	50.0
4-Ethyltoluene	DCBd4	Ave	+++++ 1814893	4852 4476469	30055	140695	428642	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trimethylbenzene	DCBd4	Ave	+++++ 1517873	3994 3942992	25655	112529	336242	+++++ 200	1.00 500	5.00	20.0	50.0
4-Chlorotoluene	DCBd4	Ave	+++++ 1539104	3595 4129133	28304	124436	383708	+++++ 200	1.00 500	5.00	20.0	50.0
Butyl Methacrylate	DCBd4	QuaF	+++++ 543627	1141 1561266	7735	34066	106781	+++++ 200	1.00 500	5.00	20.0	50.0
tert-Butylbenzene	DCBd4	Ave	+++++ 1113361	2286 2763213	19238	81153	247247	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trimethylbenzene	DCBd4	Ave	+++++ 1632502	3636 4242908	25436	117822	360692	+++++ 200	1.00 500	5.00	20.0	50.0
sec-Butylbenzene	DCBd4	Ave	+++++ 1543767	3585 3949533	25698	115916	355686	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichlorobenzene	DCBd4	Ave	+++++ 1024623	3187 2620473	20802	86439	242844	+++++ 200	1.00 500	5.00	20.0	50.0
4-Isopropyltoluene	DCBd4	Ave	+++++ 1377703	3063 3652859	20512	99840	308365	+++++ 200	1.00 500	5.00	20.0	50.0
1,4-Dichlorobenzene	DCBd4	Ave	+++++ 1077912	4344 2769963	24209	94392	255661	+++++ 200	1.00 500	5.00	20.0	50.0
Benzyl chloride	DCBd4	Ave	+++++ 1126885	3463 2981099	21008	85803	244604	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 939407

SDG No.:

Instrument ID: CVOAMS8 | GC Column: Rtx-624 | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/20/2023 03:31 | Calibration End Date: 10/20/2023 11:18 | Calibration ID: 94808

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Indan	DCBd4	Ave	+++++ 1774046	4904 4592771	30944	139627	408244	+++++ 200	1.00 500	5.00	20.0	50.0
p-Diethylbenzene	DCBd4	Ave	+++++ 817406	2239 2297332	14433	63227	187426	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butylbenzene	DCBd4	Ave	+++++ 710043	1839 1927199	12618	56616	161176	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichlorobenzene	DCBd4	Ave	+++++ 1002778	3191 2703647	21510	90059	241215	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4,5-Tetramethylbenzene	DCBd4	Qua2	+++++ 1344484	2942 3837887	19457	82504	283967	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	+++++ 123155	371 359680	2255	10775	28257	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trichlorobenzene	DCBd4	Ave	+++++ 612886	1852 1667110	13621	49173	144447	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trichlorobenzene	DCBd4	Ave	+++++ 562463	1779 1596053	11032	44066	127777	+++++ 200	1.00 500	5.00	20.0	50.0
Hexachlorobutadiene	DCBd4	Ave	+++++ 182601	565 539492	4562	16913	44687	+++++ 200	1.00 500	5.00	20.0	50.0
Naphthalene	DCBd4	Ave	+++++ 1482359	3266 +++++	22550	98301	332226	+++++ 200	1.00 +++++	5.00	20.0	50.0
1,2,3-Trichlorobenzene	DCBd4	Ave	+++++ 496739	1392 1416140	10892	37959	118689	+++++ 200	1.00 500	5.00	20.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	134813 177491	144674 203351	155245	162180	156041	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	144610 205910	150198 228380	166518	167395	175812	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZd5	Ave	361123 518221	351177 579228	423248	445462	424576	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Bromofluorobenzene	CBNZd5	Ave	111429 153547	104014 151297	126731	133228	139935	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971267.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Oct-2023 03:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD7
Misc. Info.: 460-0167608-003
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:42:45 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 17:29:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 30 TBA-d9 (IS)	65	2.380	2.380	0.000	75	172495	1000.0	1000.0	
35 Acrylonitrile	53	2.605	2.605	0.000	77	1600		2.42	M
* 43 2-Butanone-d5	46	3.292	3.292	0.000	87	175021	250.0	250.0	
$ 55 Dibromofluoromethane (Surr)	113	3.718	3.718	0.000	95	134813	50.0	53.8	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.046	4.046	0.000	0	144610	50.0	53.1	
* 66 Fluorobenzene	96	4.308	4.308	0.000	99	412033	50.0	50.0	
* 72 1,4-Dioxane-d8	96	5.013	5.007	0.006	0	16634	1000.0	1000.0	
80 Epichlorohydrin	57	5.713	5.707	0.006	1	581		5.71	Ma
$ 83 Toluene-d8 (Surr)	98	6.017	6.017	0.000	99	361123	50.0	46.2	
* 94 Chlorobenzene-d5	117	7.969	7.969	0.000	86	346534	50.0	50.0	
$ 105 4-Bromofluorobenzene	174	9.307	9.307	0.000	97	111429	50.0	47.9	
* 121 1,4-Dichlorobenzene-d4	152	10.353	10.353	0.000	97	179209	50.0	50.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

ACROLEIN W_00160	Amount Added:	0.00	Units: uL	
524FREONS_00009	Amount Added:	0.00	Units: uL	
GASES Li_00553	Amount Added:	2.50	Units: uL	
8260MIX1COMB_00177	Amount Added:	0.00	Units: uL	
EthyhexAcr_Li_00005	Amount Added:	0.00	Units: uL	
14DIOXINTER_00161	Amount Added:	30.00	Units: uL	
ACRY/EPIH MIX_00117	Amount Added:	0.00	Units: uL	
Ethanol mix_00082	Amount Added:	0.00	Units: uL	
MIX 2 Hi_00141	Amount Added:	0.00	Units: uL	
MIX I Hi_00169	Amount Added:	0.00	Units: uL	
7 Freons Hi_00007	Amount Added:	0.00	Units: uL	
VMTBA500_00040	Amount Added:	2.00	Units: uL	
EthyhexAcr_Hi_00004	Amount Added:	0.00	Units: uL	
GAS Hi_00454	Amount Added:	0.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

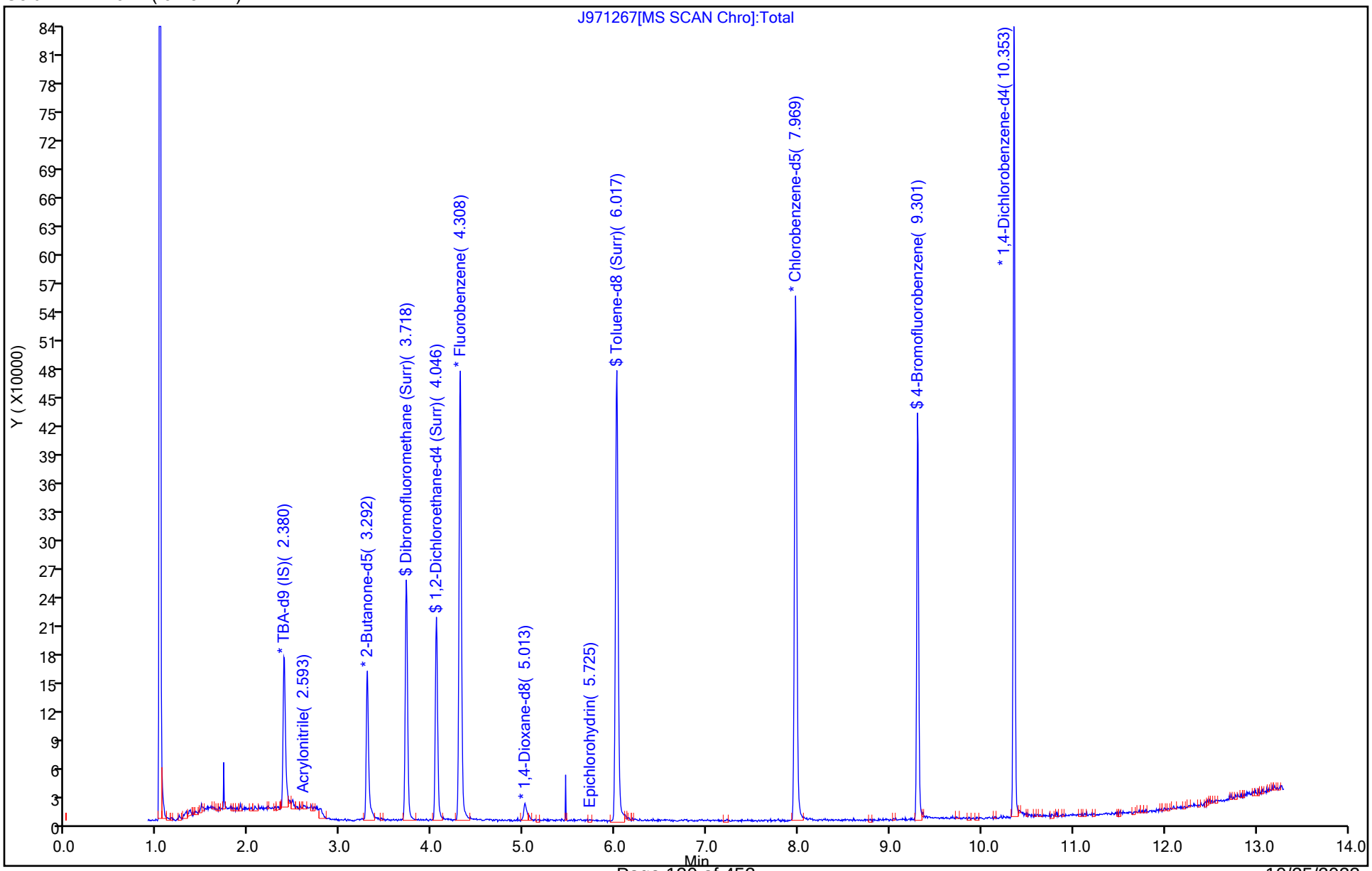
Report Date: 20-Oct-2023 18:42:46 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971267.D

Injection Date:	20-Oct-2023 03:31:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	STD7			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971268.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Oct-2023 03:56:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0167608-004
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:42:56 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: HVW2 Date: 20-Oct-2023 04:55:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.119	1.127	-0.008	1	112	1.00	0.9615	
4 Dichlorodifluoromethane	85	1.150	1.152	-0.002	95	2347	1.00	1.08	
5 Chlorodifluoromethane	67	1.174	1.170	0.004	83	656	1.00	1.85	Ma
6 Chloromethane	50	1.283	1.279	0.004	96	2673	1.00	1.21	
7 Vinyl chloride	62	1.338	1.340	-0.002	96	2927	1.00	1.31	
8 Butadiene	54	1.356	1.352	0.004	89	2231	1.00	1.04	
9 Bromomethane	94	1.551	1.547	0.004	88	1358	1.00	0.9286	M
10 Chloroethane	64	1.606	1.608	-0.002	91	2046	1.00	0.9790	M
12 Dichlorofluoromethane	67	1.727	1.729	-0.002	94	5419	1.00	1.18	
11 Trichlorofluoromethane	101	1.733	1.736	-0.003	97	4794	1.00	1.13	
13 Pentane	43	1.764	1.766	-0.002	83	4052	2.00	1.73	
15 Ethyl ether	59	1.904	1.906	-0.002	94	2953	1.00	1.01	
16 2-Methyl-1,3-butadiene	53	1.928	1.924	0.004	78	1502	1.00	0.8112	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.928	1.930	-0.002	91	3122	1.00	0.9848	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.977	1.973	0.004	92	4718	1.00	1.20	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.037	2.027	0.010	93	2623	1.00	1.12	
19 Acrolein	56	2.031	2.034	-0.003	65	1257	4.00	4.04	M
21 1,1-Dichloroethene	96	2.062	2.058	0.004	97	2396	1.00	1.07	
22 Acetone	43	2.129	2.125	0.004	88	4352	5.00	5.02	
23 Iodomethane	142	2.177	2.179	-0.002	65	1545	1.00	0.7504	
25 Isopropyl alcohol	45	2.183	2.179	0.004	42	779	10.0	8.88	
24 Carbon disulfide	76	2.208	2.210	-0.002	99	12075	1.00	1.77	
26 3-Chloro-1-propene	76	2.299	2.301	-0.002	87	1942	1.00	1.26	
28 Methyl acetate	43	2.311	2.307	0.004	91	3538	2.00	2.58	
27 Cyclopentene	67	2.323	2.319	0.004	93	5150	1.00	1.10	
29 Acetonitrile	41	2.354	2.350	0.004	84	1830	10.0	8.16	a
* 30 TBA-d9 (IS)	65	2.384	2.380	0.004	76	169587	1000.0	1000.0	
31 Methylene Chloride	84	2.402	2.404	-0.002	88	3950	1.00	0.99	
32 2-Methyl-2-propanol	59	2.433	2.441	-0.008	38	1687	10.0	11.6	
33 Methyl tert-butyl ether	73	2.530	2.526	0.004	90	4102	1.00	0.7954	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96	2.548	2.550	-0.002	89	3129	1.00	1.15	
35 Acrylonitrile	53	2.609	2.605	0.004	97	6403	10.0	9.84	
36 Hexane	57	2.670	2.672	-0.002	54	1274	1.00	0.8536	
37 Isopropyl ether	45	2.840	2.842	-0.002	93	5624	1.00	1.01	
38 1,1-Dichloroethane	63	2.877	2.873	0.004	95	5850	1.00	1.20	
39 Vinyl acetate	43	2.883	2.885	-0.002	99	5927	2.00	1.94	
40 2-Chloro-1,3-butadiene	88	2.919	2.915	0.004	89	1973	1.00	1.09	
41 Tert-butyl ethyl ether	59	3.108	3.116	-0.008	82	2650	1.00	0.5431	
* 43 2-Butanone-d5	46	3.290	3.292	-0.002	89	168147	250.0	250.0	
42 2,2-Dichloropropane	79	3.302	3.292	0.010	47	1254	1.00	1.14	
44 cis-1,2-Dichloroethene	96	3.321	3.323	-0.002	85	2222	1.00	1.00	
46 2-Butanone (MEK)	72	3.333	3.341	-0.008	47	657	5.00	4.53	
45 Ethyl acetate	70	3.333	3.347	-0.014	41	425	2.00	2.04	
47 Methyl acrylate	55	3.381	3.390	-0.009	10	937	1.00	0.9263	
48 Propionitrile	54	3.460	3.457	0.003	79	1781	10.0	8.74	a
50 Chlorobromomethane	128	3.527	3.530	-0.003	81	1193	1.00	1.07	
49 Tetrahydrofuran	72	3.546	3.530	0.016	25	262	2.00	1.68	
51 Methacrylonitrile	67	3.552	3.548	0.004	94	4461	10.0	8.13	
52 Chloroform	83	3.570	3.572	-0.002	96	4735	1.00	1.13	
53 Cyclohexane	84	3.692	3.688	0.004	38	1456	1.00	0.7937	
54 1,1,1-Trichloroethane	97	3.710	3.706	0.004	35	3642	1.00	1.09	
$ 55 Dibromofluoromethane (Surr)	113	3.716	3.718	-0.002	95	144674	50.0	57.0	
56 Carbon tetrachloride	117	3.813	3.815	-0.002	81	3282	1.00	1.13	
57 1,1-Dichloropropene	75	3.844	3.846	-0.002	66	1619	1.00	0.7212	
58 Isobutyl alcohol	43	3.977	3.973	0.004	52	1221	25.0	21.8	a
59 Isooctane	57	3.996	4.004	-0.008	64	1231	1.00	0.9790	
60 Benzene	78	4.026	4.028	-0.002	90	6383	1.00	0.8478	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.044	4.046	-0.002	0	150198	50.0	54.5	
62 Isopropyl acetate	43	4.093	4.089	0.004	50	2447	1.00	0.7525	
63 Tert-amyl methyl ether	55	4.087	4.089	-0.002	55	1055	1.00	1.02	
64 1,2-Dichloroethane	62	4.123	4.119	0.004	94	3224	1.00	1.10	a
65 n-Heptane	57	4.196	4.180	0.016	14	418	1.00	0.9404	a
* 66 Fluorobenzene	96	4.306	4.308	-0.002	99	417390	50.0	50.0	
67 n-Butanol	56	4.677	4.642	0.035	22	195	25.0	8.65	
68 Trichloroethene	95	4.652	4.655	-0.003	91	1918	1.00	1.00	
69 Methylcyclohexane	83	4.780	4.770	0.010	45	1270	1.00	0.9016	
70 Ethyl acrylate	55	4.780	4.782	-0.002	32	2223	1.00	0.9095	Ma
71 1,2-Dichloropropane	63	4.944	4.940	0.004	69	1590	1.00	0.8898	a
* 72 1,4-Dioxane-d8	96	5.011	5.007	0.004	0	15259	1000.0	1000.0	
73 Methyl methacrylate	100	5.035	5.032	0.003	38	438	2.00	1.56	
75 1,4-Dioxane	88	5.054	5.062	-0.008	29	734	50.0	57.0	a
74 Dibromomethane	93	5.084	5.074	0.010	76	1563	1.00	1.15	
76 n-Propyl acetate	43	5.108	5.092	0.016	86	1313	1.00	0.8601	a
77 Dichlorobromomethane	83	5.236	5.232	0.004	95	2786	1.00	0.9793	
78 2-Nitropropane	41	5.625	5.585	0.040	53	1394	2.00	2.56	a
79 2-Chloroethyl vinyl ether	63	5.619	5.603	0.016	7	337	1.00	0.5374	Ma
80 Epichlorohydrin	57	5.711	5.707	0.003	66	1674	20.0	17.1	
81 cis-1,3-Dichloropropene	75	5.765	5.761	0.004	69	2292	1.00	0.7737	
82 4-Methyl-2-pentanone (MIBK)	43	5.954	5.944	0.010	87	3339	5.00	3.70	M
$ 83 Toluene-d8 (Surr)	98	6.015	6.017	-0.002	98	351177	50.0	48.4	
84 Toluene	91	6.100	6.102	-0.002	90	7759	1.00	1.06	
85 trans-1,3-Dichloropropene	75	6.501	6.497	0.004	62	1894	1.00	0.7253	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Ethyl methacrylate	69	6.556	6.546	0.010	44	1283	1.00	1.00	
87 1,1,2-Trichloroethane	83	6.726	6.734	-0.008	42	1422	1.00	0.9597	
88 Tetrachloroethene	166	6.750	6.765	-0.015	87	1906	1.00	1.03	a
89 1,3-Dichloropropane	76	6.963	6.959	0.004	89	2092	1.00	0.8428	
90 2-Hexanone	58	7.079	7.057	0.022	46	1366	5.00	4.07	
91 n-Butyl acetate	43	7.213	7.197	0.016	32	1328	1.00	0.8337	a
92 Chlorodibromomethane	129	7.231	7.215	0.016	86	2353	1.00	1.08	a
93 Ethylene Dibromide	107	7.389	7.373	0.016	53	1929	1.00	1.07	
* 94 Chlorobenzene-d5	117	7.967	7.969	-0.002	85	322058	50.0	50.0	
95 Chlorobenzene	112	8.003	8.005	-0.002	80	4742	1.00	0.9598	
96 Ethylbenzene	106	8.113	8.115	-0.002	97	2023	1.00	0.9127	
97 1,1,1,2-Tetrachloroethane	131	8.137	8.127	0.010	65	1764	1.00	0.9602	
98 m-Xylene & p-Xylene	106	8.271	8.267	0.004	0	1956	1.00	0.7724	
99 o-Xylene	106	8.721	8.717	0.004	91	1990	1.00	0.7842	
100 n-Butyl acrylate	73	8.745	8.741	0.004	61	510	1.00	1.03	
101 Styrene	104	8.751	8.753	-0.002	76	2533	1.00	1.03	
103 Bromoform	173	8.976	8.966	0.010	55	1472	1.00	1.07	
102 Amyl acetate (mixed isomers)	43	8.988	8.991	-0.003	44	1237	1.00	0.7246	
104 Isopropylbenzene	105	9.098	9.100	-0.002	95	4087	1.00	0.7298	
$ 105 4-Bromofluorobenzene	174	9.305	9.307	-0.002	95	104014	50.0	48.1	
106 Bromobenzene	156	9.432	9.428	0.004	92	1899	1.00	0.9254	
107 1,1,2,2-Tetrachloroethane	83	9.499	9.495	0.004	90	1966	1.00	1.00	
108 N-Propylbenzene	91	9.517	9.514	0.003	98	5760	1.00	0.8692	
109 1,2,3-Trichloropropane	110	9.542	9.532	0.010	48	655	1.00	1.28	
110 trans-1,4-Dichloro-2-butene	53	9.566	9.562	0.004	35	602	1.00	1.08	
111 2-Chlorotoluene	91	9.609	9.611	-0.002	96	4890	1.00	0.9149	
112 4-Ethyltoluene	105	9.627	9.623	0.004	94	4852	1.00	0.8526	
113 1,3,5-Trimethylbenzene	105	9.694	9.690	0.004	92	3994	1.00	0.8465	
114 4-Chlorotoluene	91	9.724	9.720	0.004	93	3595	1.00	0.7222	
115 Butyl Methacrylate	87	9.809	9.805	0.004	57	1141	1.00	0.6662	
116 tert-Butylbenzene	119	9.967	9.970	-0.003	88	2286	1.00	0.6865	
117 1,2,4-Trimethylbenzene	105	10.028	10.030	-0.002	96	3636	1.00	0.7452	
118 sec-Butylbenzene	105	10.168	10.170	-0.002	97	3585	1.00	0.7566	
120 1,3-Dichlorobenzene	146	10.296	10.292	0.004	93	3187	1.00	0.9194	
119 4-Isopropyltoluene	119	10.296	10.298	-0.002	84	3063	1.00	0.7439	
* 121 1,4-Dichlorobenzene-d4	152	10.357	10.353	0.004	96	172190	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.375	10.377	-0.002	87	4344	1.00	1.11	
123 1,2,3-Trimethylbenzene	105	10.393	10.395	-0.002	93	4409	1.00	0.7841	
124 Benzyl chloride	91	10.509	10.505	0.004	95	3463	1.00	0.9471	
125 2,3-Dihydroindene	117	10.557	10.560	-0.003	90	4904	1.00	0.8650	
126 p-Diethylbenzene	119	10.618	10.620	-0.002	87	2239	1.00	0.8467	
127 n-Butylbenzene	92	10.636	10.639	-0.003	87	1839	1.00	0.8088	
128 1,2-Dichlorobenzene	146	10.685	10.687	-0.002	93	3191	1.00	0.9084	
129 1,2,4,5-Tetramethylbenzene	119	11.245	11.247	-0.002	96	2942	1.00	1.01	
130 1,2-Dibromo-3-Chloropropane	157	11.330	11.326	0.004	30	371	1.00	0.8885	
131 1,3,5-Trichlorobenzene	180	11.439	11.435	0.004	89	1852	1.00	0.8812	
132 1,2,4-Trichlorobenzene	180	11.913	11.910	0.003	88	1779	1.00	0.9387	
133 Hexachlorobutadiene	225	11.999	11.995	0.004	68	565	1.00	0.8417	
134 Naphthalene	128	12.096	12.098	-0.002	98	3266	1.00	0.7733	
135 1,2,3-Trichlorobenzene	180	12.278	12.274	0.004	24	1392	1.00	0.8252	a
S 136 1,2-Dichloroethene, Total	100				0		2.00	2.16	
S 137 Xylenes, Total	100				0		2.00	1.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 138 Total BTEX	1				0		5.00	4.38	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

ACROLEIN W_00160	Amount Added:	4.00	Units: uL	
524FREONS_00009	Amount Added:	10.00	Units: uL	
GASES Li_00553	Amount Added:	10.00	Units: uL	
8260MIX1COMB_00177	Amount Added:	10.00	Units: uL	
EthyhexAcr_Li_00005	Amount Added:	10.00	Units: uL	
14DIOXINTER_00161	Amount Added:	30.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 18:42:57 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971268.D

Injection Date: 20-Oct-2023 03:56:30 Instrument ID: CVOAMS8 Operator ID:

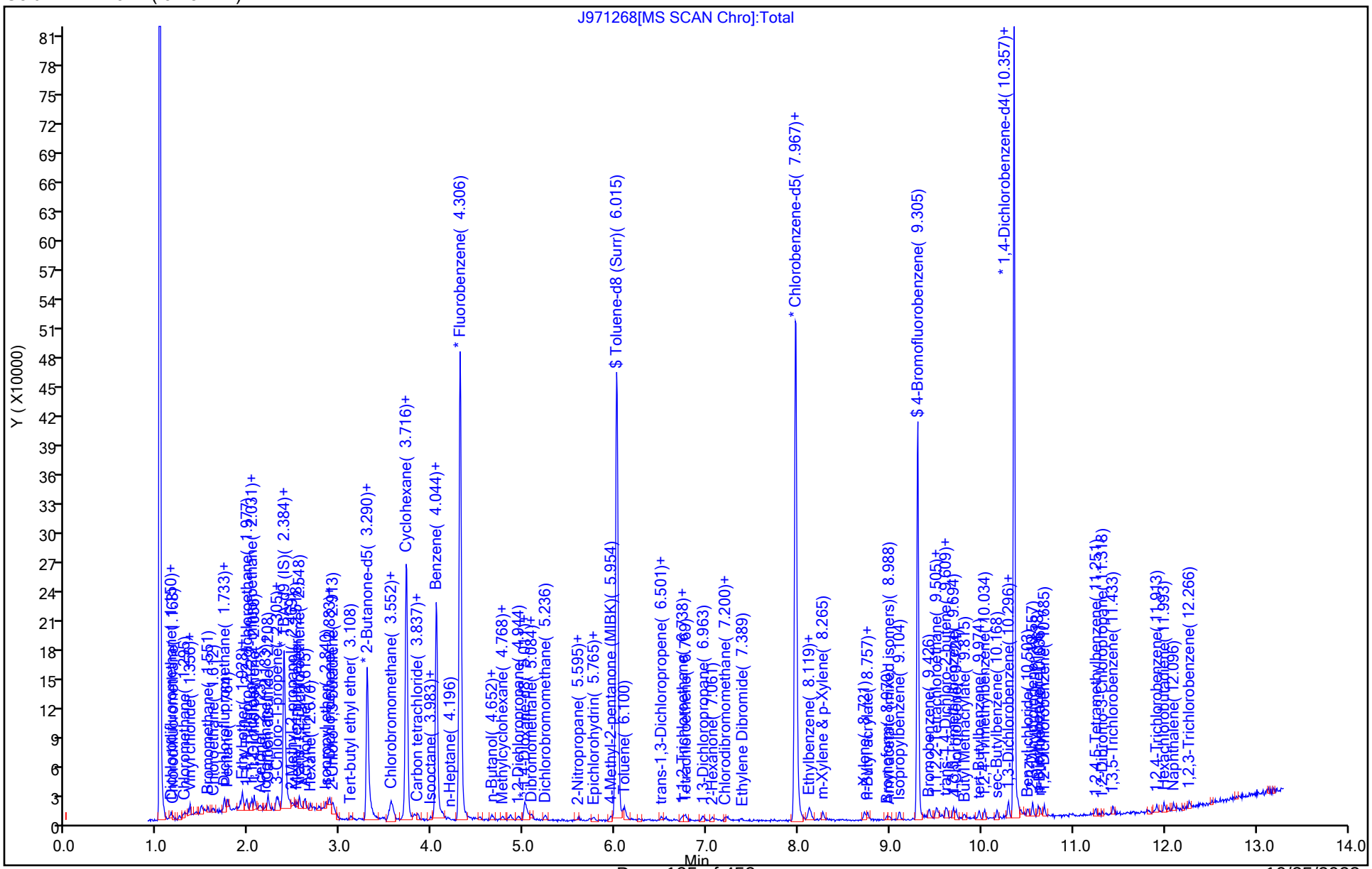
Lims ID: STD1 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971270.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 20-Oct-2023 04:46:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0167608-006
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:43:04 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: HVW2 Date: 20-Oct-2023 05:17:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.127	1.127	0.000	86	2973	20.0	20.6	
4 Dichlorodifluoromethane	85	1.152	1.152	0.000	99	48687	20.0	18.1	
5 Chlorodifluoromethane	67	1.170	1.170	0.000	98	9468	20.0	21.6	
6 Chloromethane	50	1.279	1.279	0.000	99	51663	20.0	19.0	
7 Vinyl chloride	62	1.340	1.340	0.000	98	50096	20.0	18.2	
8 Butadiene	54	1.352	1.352	0.000	98	45213	20.0	17.0	
9 Bromomethane	94	1.547	1.547	0.000	98	30109	20.0	16.7	
10 Chloroethane	64	1.608	1.608	0.000	99	28855	20.0	19.9	
12 Dichlorofluoromethane	67	1.729	1.729	0.000	98	110954	20.0	19.5	
11 Trichlorofluoromethane	101	1.736	1.736	0.000	98	95201	20.0	18.1	
13 Pentane	43	1.766	1.766	0.000	96	103398	40.0	35.9	
14 Ethanol	46	1.863	1.863	0.000	99	7027	800.0	863.3	
15 Ethyl ether	59	1.906	1.906	0.000	97	38479	20.0	19.1	
16 2-Methyl-1,3-butadiene	53	1.924	1.924	0.000	98	42444	20.0	18.5	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.930	1.930	0.000	93	52463	20.0	19.1	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.973	1.973	0.000	97	93928	20.0	19.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.027	2.027	0.000	96	52682	20.0	18.2	
19 Acrolein	56	2.034	2.034	0.000	50	11663	40.0	37.7	
21 1,1-Dichloroethene	96	2.058	2.058	0.000	98	56218	20.0	20.4	
22 Acetone	43	2.125	2.125	0.000	87	56853	100.0	99.7	
23 Iodomethane	142	2.179	2.179	0.000	99	47806	20.0	18.8	
25 Isopropyl alcohol	45	2.179	2.179	0.000	48	18100	200.0	208.0	
24 Carbon disulfide	76	2.210	2.210	0.000	99	233603	20.0	28.0	
26 3-Chloro-1-propene	76	2.301	2.301	0.000	93	37829	20.0	19.8	
28 Methyl acetate	43	2.307	2.307	0.000	98	48821	40.0	35.9	
27 Cyclopentene	67	2.319	2.319	0.000	95	107909	20.0	18.7	
29 Acetonitrile	41	2.350	2.350	0.000	95	51850	200.0	233.2	a
* 30 TBA-d9 (IS)	65	2.380	2.380	0.000	76	168233	1000.0	1000.0	
31 Methylene Chloride	84	2.404	2.404	0.000	94	64341	20.0	19.9	
32 2-Methyl-2-propanol	59	2.441	2.441	0.000	97	27117	200.0	187.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.526	2.526	0.000	97	109388	20.0	17.2	
34 trans-1,2-Dichloroethene	96	2.550	2.550	0.000	95	66095	20.0	19.7	
35 Acrylonitrile	53	2.605	2.605	0.000	95	136021	200.0	210.7	
36 Hexane	57	2.672	2.672	0.000	88	32538	20.0	17.6	
37 Isopropyl ether	45	2.842	2.842	0.000	97	123474	20.0	17.9	
38 1,1-Dichloroethane	63	2.873	2.873	0.000	99	128339	20.0	21.3	
39 Vinyl acetate	43	2.885	2.885	0.000	99	140927	40.0	37.3	
40 2-Chloro-1,3-butadiene	88	2.915	2.915	0.000	92	47345	20.0	21.1	
41 Tert-butyl ethyl ether	59	3.116	3.116	0.000	88	78302	20.0	13.0	
* 43 2-Butanone-d5	46	3.292	3.292	0.000	95	185828	250.0	250.0	
42 2,2-Dichloropropane	79	3.292	3.292	0.000	71	28452	20.0	20.8	
44 cis-1,2-Dichloroethene	96	3.323	3.323	0.000	97	56508	20.0	20.6	
46 2-Butanone (MEK)	72	3.341	3.341	0.000	96	16331	100.0	101.9	
45 Ethyl acetate	70	3.347	3.347	0.000	95	5810	40.0	39.9	
47 Methyl acrylate	55	3.390	3.390	0.000	99	19067	20.0	15.2	
48 Propionitrile	54	3.457	3.457	0.000	97	45689	200.0	226.1	
50 Chlorobromomethane	128	3.530	3.530	0.000	81	29549	20.0	21.4	
49 Tetrahydrofuran	72	3.530	3.530	0.000	48	7567	40.0	43.8	
51 Methacrylonitrile	67	3.548	3.548	0.000	92	132506	200.0	195.3	
52 Chloroform	83	3.572	3.572	0.000	98	107427	20.0	20.8	
53 Cyclohexane	84	3.688	3.688	0.000	91	43469	20.0	19.2	
54 1,1,1-Trichloroethane	97	3.706	3.706	0.000	98	85635	20.0	20.6	
$ 55 Dibromofluoromethane (Surr)	113	3.718	3.718	0.000	94	162180	50.0	51.7	
56 Carbon tetrachloride	117	3.815	3.815	0.000	98	76042	20.0	21.1	
57 1,1-Dichloropropene	75	3.846	3.846	0.000	95	55642	20.0	20.1	
58 Isobutyl alcohol	43	3.973	3.973	0.000	95	26813	500.0	482.7	
59 Isooctane	57	4.004	4.004	0.000	95	42066	20.0	17.1	a
60 Benzene	78	4.028	4.028	0.000	97	174700	20.0	19.7	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.046	4.046	0.000	0	167395	50.0	49.1	
62 Isopropyl acetate	43	4.089	4.089	0.000	90	70990	20.0	17.7	
63 Tert-amyl methyl ether	55	4.089	4.089	0.000	83	23440	20.0	18.3	
64 1,2-Dichloroethane	62	4.119	4.119	0.000	99	74085	20.0	20.4	
65 n-Heptane	57	4.180	4.180	0.000	95	10218	20.0	18.6	
* 66 Fluorobenzene	96	4.308	4.308	0.000	99	515889	50.0	50.0	
67 n-Butanol	56	4.642	4.642	0.000	38	10075	500.0	445.9	
68 Trichloroethene	95	4.655	4.655	0.000	97	45880	20.0	19.4	
69 Methylcyclohexane	83	4.770	4.770	0.000	92	29282	20.0	16.8	
70 Ethyl acrylate	55	4.782	4.782	0.000	96	52766	20.0	17.5	
71 1,2-Dichloropropane	63	4.940	4.940	0.000	86	44961	20.0	20.4	
* 72 1,4-Dioxane-d8	96	5.007	5.007	0.000	0	21272	1000.0	1000.0	
73 Methyl methacrylate	100	5.032	5.032	0.000	91	13192	40.0	38.1	
75 1,4-Dioxane	88	5.062	5.062	0.000	44	7631	400.0	424.8	
74 Dibromomethane	93	5.074	5.074	0.000	94	35597	20.0	21.1	
76 n-Propyl acetate	43	5.092	5.092	0.000	97	35007	20.0	18.6	
77 Dichlorobromomethane	83	5.232	5.232	0.000	99	71620	20.0	20.4	
78 2-Nitropropane	41	5.585	5.585	0.000	99	16926	40.0	31.4	
79 2-Chloroethyl vinyl ether	63	5.603	5.603	0.000	88	9682	20.0	12.5	
80 Epichlorohydrin	57	5.707	5.707	0.000	99	48362	400.0	447.3	
81 cis-1,3-Dichloropropene	75	5.761	5.761	0.000	93	63090	20.0	18.1	
82 4-Methyl-2-pentanone (MIBK)	43	5.944	5.944	0.000	98	106736	100.0	107.2	
$ 83 Toluene-d8 (Surr)	98	6.017	6.017	0.000	98	445462	50.0	52.0	
84 Toluene	91	6.102	6.102	0.000	93	169305	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.497	6.497	0.000	97	55238	20.0	17.9	
86 Ethyl methacrylate	69	6.546	6.546	0.000	90	28203	20.0	17.9	
87 1,1,2-Trichloroethane	83	6.734	6.734	0.000	95	33546	20.0	19.2	
88 Tetrachloroethene	166	6.765	6.765	0.000	95	40589	20.0	18.5	
89 1,3-Dichloropropane	76	6.959	6.959	0.000	94	54296	20.0	18.5	
90 2-Hexanone	58	7.057	7.057	0.000	97	38857	100.0	104.6	
91 n-Butyl acetate	43	7.197	7.197	0.000	95	35937	20.0	19.1	
92 Chlorodibromomethane	129	7.215	7.215	0.000	98	47079	20.0	18.3	
93 Ethylene Dibromide	107	7.373	7.373	0.000	98	40359	20.0	19.0	
* 94 Chlorobenzene-d5	117	7.969	7.969	0.000	86	379916	50.0	50.0	
95 Chlorobenzene	112	8.005	8.005	0.000	96	119270	20.0	20.5	
96 Ethylbenzene	106	8.115	8.115	0.000	98	52401	20.0	20.0	
97 1,1,1,2-Tetrachloroethane	131	8.127	8.127	0.000	94	41329	20.0	19.1	
98 m-Xylene & p-Xylene	106	8.267	8.267	0.000	0	58230	20.0	19.5	
99 o-Xylene	106	8.717	8.717	0.000	93	55703	20.0	18.6	
100 n-Butyl acrylate	73	8.741	8.741	0.000	97	21991	20.0	19.0	
101 Styrene	104	8.753	8.753	0.000	94	105838	20.0	19.5	
103 Bromoform	173	8.966	8.966	0.000	93	31258	20.0	19.2	
102 Amyl acetate (mixed isomers)	43	8.991	8.991	0.000	94	38635	20.0	17.8	
104 Isopropylbenzene	105	9.100	9.100	0.000	96	130304	20.0	19.7	
$ 105 4-Bromofluorobenzene	174	9.307	9.307	0.000	96	133228	50.0	52.2	
106 Bromobenzene	156	9.428	9.428	0.000	93	51364	20.0	19.6	
107 1,1,2,2-Tetrachloroethane	83	9.495	9.495	0.000	97	49389	20.0	19.7	
108 N-Propylbenzene	91	9.514	9.514	0.000	98	158162	20.0	18.7	
109 1,2,3-Trichloropropane	110	9.532	9.532	0.000	97	11283	20.0	17.3	
110 trans-1,4-Dichloro-2-butene	53	9.562	9.562	0.000	94	12361	20.0	17.5	
111 2-Chlorotoluene	91	9.611	9.611	0.000	97	131774	20.0	19.3	
112 4-Ethyltoluene	105	9.623	9.623	0.000	97	140695	20.0	19.4	
113 1,3,5-Trimethylbenzene	105	9.690	9.690	0.000	92	112529	20.0	18.7	
114 4-Chlorotoluene	91	9.720	9.720	0.000	98	124436	20.0	19.6	
115 Butyl Methacrylate	87	9.805	9.805	0.000	94	34066	20.0	15.5	
116 tert-Butylbenzene	119	9.970	9.970	0.000	92	81153	20.0	19.1	
117 1,2,4-Trimethylbenzene	105	10.030	10.030	0.000	98	117822	20.0	18.9	
118 sec-Butylbenzene	105	10.170	10.170	0.000	99	115916	20.0	19.2	
120 1,3-Dichlorobenzene	146	10.292	10.292	0.000	95	86439	20.0	19.6	
119 4-Isopropyltoluene	119	10.298	10.298	0.000	97	99840	20.0	19.0	
* 121 1,4-Dichlorobenzene-d4	152	10.353	10.353	0.000	97	219440	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.377	10.377	0.000	96	94392	20.0	19.0	
123 1,2,3-Trimethylbenzene	105	10.395	10.395	0.000	98	142025	20.0	19.8	
124 Benzyl chloride	91	10.505	10.505	0.000	99	85803	20.0	18.4	
125 2,3-Dihydroindene	117	10.560	10.560	0.000	93	139627	20.0	19.3	
126 p-Diethylbenzene	119	10.620	10.620	0.000	92	63227	20.0	18.8	
127 n-Butylbenzene	92	10.639	10.639	0.000	98	56616	20.0	19.5	
128 1,2-Dichlorobenzene	146	10.687	10.687	0.000	96	90059	20.0	20.1	
129 1,2,4,5-Tetramethylbenzene	119	11.247	11.247	0.000	97	82504	20.0	17.5	
130 1,2-Dibromo-3-Chloropropane	157	11.326	11.326	0.000	94	10775	20.0	20.2	
131 1,3,5-Trichlorobenzene	180	11.435	11.435	0.000	95	49173	20.0	18.4	
132 1,2,4-Trichlorobenzene	180	11.910	11.910	0.000	93	44066	20.0	18.2	
133 Hexachlorobutadiene	225	11.995	11.995	0.000	93	16913	20.0	19.8	
134 Naphthalene	128	12.098	12.098	0.000	99	98301	20.0	18.3	
135 1,2,3-Trichlorobenzene	180	12.274	12.274	0.000	95	37959	20.0	17.7	
S 136 1,2-Dichloroethene, Total	100				0		40.0	40.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		40.0	38.1	
S 138 Total BTEX	1				0		100.0	97.4	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00160	Amount Added: 4.00	Units: uL		
524FREONS_00009	Amount Added: 20.00	Units: uL		
GASES Li_00553	Amount Added: 20.00	Units: uL		
8260MIX1COMB_00177	Amount Added: 20.00	Units: uL		
EthyhexAcr_Li_00005	Amount Added: 20.00	Units: uL		
8260ISNEW_00171	Amount Added: 1.00	Units: uL	Run Reagent	
8260SURR250_00241	Amount Added: 1.00	Units: uL	Run Reagent	

Report Date: 20-Oct-2023 18:43:06 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971270.D

Injection Date: 20-Oct-2023 04:46:30 Instrument ID: CVOAMS8 Operator ID:

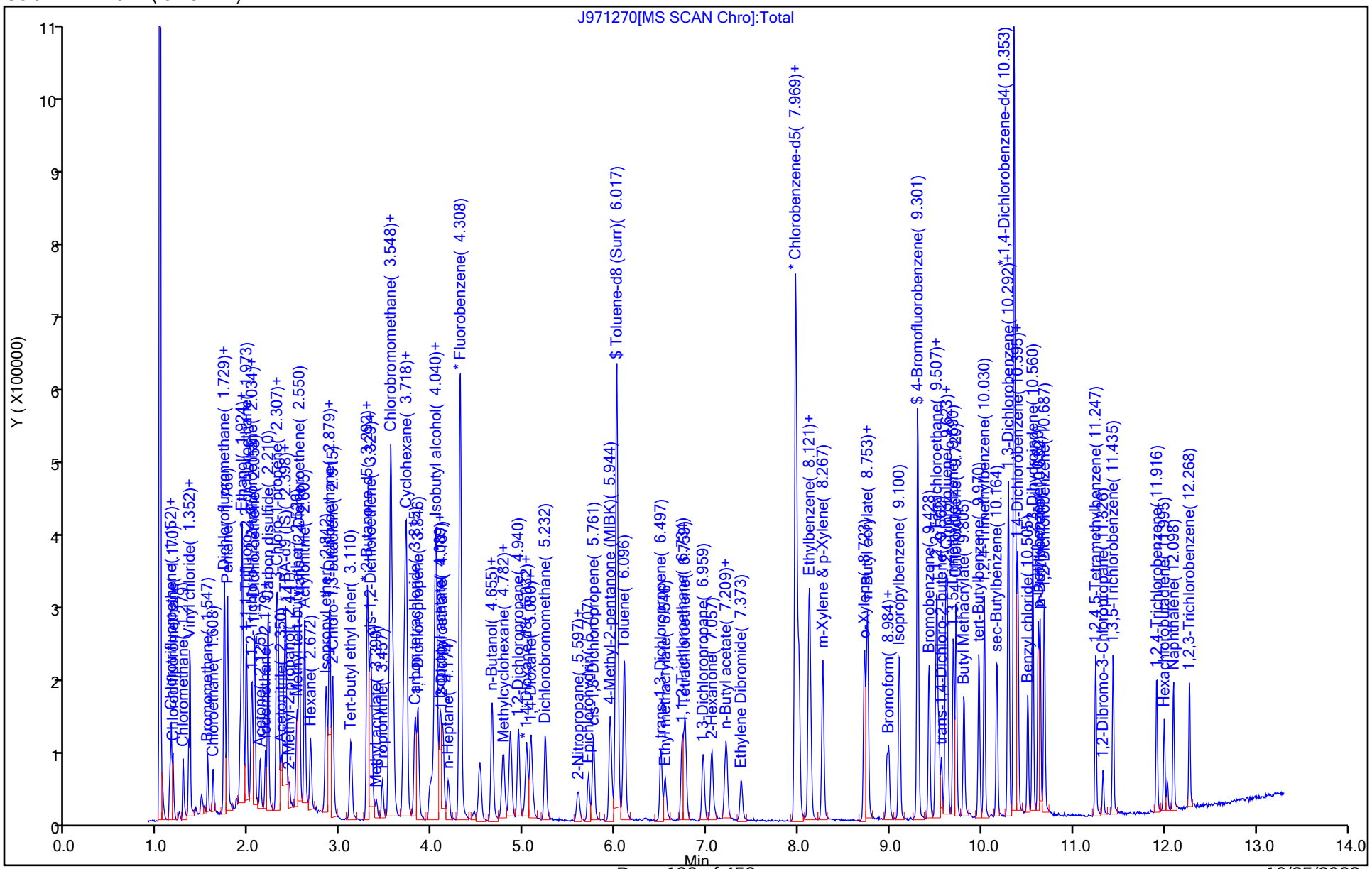
Lims ID: STD20 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971271.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 20-Oct-2023 05:11:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0167608-007
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:43:12 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: K0HS Date: 20-Oct-2023 07:31:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.131	1.127	0.004	90	7647	50.0	51.3	
4 Dichlorodifluoromethane	85	1.155	1.152	0.003	99	137342	50.0	49.4	
5 Chlorodifluoromethane	67	1.173	1.170	0.003	97	25449	50.0	56.1	
6 Chloromethane	50	1.283	1.279	0.004	99	146302	50.0	51.9	
7 Vinyl chloride	62	1.344	1.340	0.004	98	142549	50.0	49.9	
8 Butadiene	54	1.356	1.352	0.004	97	147951	50.0	53.9	
9 Bromomethane	94	1.544	1.547	-0.003	98	87103	50.0	46.5	
10 Chloroethane	64	1.605	1.608	-0.003	99	78659	50.0	53.8	
12 Dichlorofluoromethane	67	1.727	1.729	-0.002	98	303372	50.0	51.5	
11 Trichlorofluoromethane	101	1.733	1.736	-0.003	98	290677	50.0	53.5	
13 Pentane	43	1.763	1.766	-0.003	93	356151	100.0	122.1	
14 Ethanol	46	1.867	1.863	0.004	96	17849	2000.0	1915.9	
15 Ethyl ether	59	1.903	1.906	-0.003	96	113885	50.0	56.2	
16 2-Methyl-1,3-butadiene	53	1.921	1.924	-0.003	97	139093	50.0	58.7	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.934	1.930	0.004	96	139538	50.0	50.5	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.970	1.973	-0.003	98	257554	50.0	51.3	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.031	2.027	0.004	97	165021	50.0	55.0	
19 Acrolein	56	2.031	2.034	-0.003	94	27307	100.0	77.2	
21 1,1-Dichloroethene	96	2.061	2.058	0.003	98	148576	50.0	52.1	
22 Acetone	43	2.122	2.125	-0.003	85	159370	250.0	252.5	
23 Iodomethane	142	2.183	2.179	0.004	99	145661	50.0	55.3	
25 Isopropyl alcohol	45	2.183	2.179	0.004	50	49961	500.0	501.7	
24 Carbon disulfide	76	2.207	2.210	-0.003	100	573658	50.0	67.8	
26 3-Chloro-1-propene	76	2.298	2.301	-0.003	93	98907	50.0	50.0	
28 Methyl acetate	43	2.305	2.307	-0.002	99	135924	100.0	87.4	
27 Cyclopentene	67	2.317	2.319	-0.002	93	316237	50.0	53.0	
29 Acetonitrile	41	2.353	2.350	0.003	98	152828	500.0	600.5	a
* 30 TBA-d9 (IS)	65	2.384	2.380	0.004	81	192558	1000.0	1000.0	
31 Methylene Chloride	84	2.402	2.404	-0.002	94	163145	50.0	50.6	
32 2-Methyl-2-propanol	59	2.438	2.441	-0.003	99	84207	500.0	507.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.524	2.526	-0.002	96	354008	50.0	53.6	
34 trans-1,2-Dichloroethene	96	2.548	2.550	-0.002	97	181271	50.0	52.2	
35 Acrylonitrile	53	2.609	2.605	0.004	92	383839	500.0	519.4	
36 Hexane	57	2.676	2.672	0.004	91	104461	50.0	54.7	
37 Isopropyl ether	45	2.840	2.842	-0.002	98	384967	50.0	53.8	
38 1,1-Dichloroethane	63	2.876	2.873	0.003	100	327251	50.0	52.4	
39 Vinyl acetate	43	2.882	2.885	-0.003	100	410663	100.0	104.9	
40 2-Chloro-1,3-butadiene	88	2.913	2.915	-0.002	94	113647	50.0	48.9	
41 Tert-butyl ethyl ether	59	3.113	3.116	-0.003	88	262759	50.0	42.2	
* 43 2-Butanone-d5	46	3.290	3.292	-0.002	88	210233	250.0	250.0	
42 2,2-Dichloropropane	79	3.302	3.292	0.010	95	70302	50.0	49.7	
44 cis-1,2-Dichloroethene	96	3.326	3.323	0.003	97	145673	50.0	51.4	
46 2-Butanone (MEK)	72	3.338	3.341	-0.003	96	43769	250.0	241.3	
45 Ethyl acetate	70	3.338	3.347	-0.009	93	18041	100.0	110.0	
47 Methyl acrylate	55	3.387	3.390	-0.003	99	65367	50.0	50.5	
48 Propionitrile	54	3.454	3.457	-0.003	96	115734	500.0	500.4	
50 Chlorobromomethane	128	3.527	3.530	-0.003	87	72604	50.0	50.8	
49 Tetrahydrofuran	72	3.527	3.530	-0.003	52	20743	100.0	106.2	
51 Methacrylonitrile	67	3.551	3.548	0.003	93	379085	500.0	539.6	
52 Chloroform	83	3.576	3.572	0.004	98	266937	50.0	50.0	
53 Cyclohexane	84	3.691	3.688	0.003	92	129780	50.0	55.3	
54 1,1,1-Trichloroethane	97	3.703	3.706	-0.003	98	215882	50.0	50.3	
$ 55 Dibromofluoromethane (Surr)	113	3.722	3.718	0.004	95	156041	50.0	48.0	
56 Carbon tetrachloride	117	3.813	3.815	-0.002	98	190762	50.0	51.2	
57 1,1-Dichloropropene	75	3.843	3.846	-0.003	95	162661	50.0	56.6	
58 Isobutyl alcohol	43	3.971	3.973	-0.002	94	81418	1250.0	1280.6	
59 Isooctane	57	3.995	4.004	-0.009	96	135115	50.0	51.7	a
60 Benzene	78	4.032	4.028	0.004	97	481266	50.0	55.4	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.044	4.046	-0.002	0	175812	50.0	49.8	
62 Isopropyl acetate	43	4.086	4.089	-0.003	91	220369	50.0	52.9	
63 Tert-amyl methyl ether	55	4.092	4.089	0.003	85	63451	50.0	47.8	
64 1,2-Dichloroethane	62	4.117	4.119	-0.002	99	193908	50.0	51.5	
65 n-Heptane	57	4.178	4.180	-0.002	91	27250	50.0	47.9	
* 66 Fluorobenzene	96	4.305	4.308	-0.003	98	534240	50.0	50.0	
67 n-Butanol	56	4.634	4.642	-0.008	75	29302	1250.0	1114.8	
68 Trichloroethene	95	4.652	4.655	-0.003	98	135330	50.0	55.1	
69 Methylcyclohexane	83	4.768	4.770	-0.002	88	94394	50.0	52.4	
70 Ethyl acrylate	55	4.780	4.782	-0.002	97	164144	50.0	52.5	
71 1,2-Dichloropropane	63	4.944	4.940	0.004	86	122179	50.0	53.4	
* 72 1,4-Dioxane-d8	96	5.023	5.007	0.016	0	22403	1000.0	1000.0	
73 Methyl methacrylate	100	5.035	5.032	0.003	89	39147	100.0	109.2	
75 1,4-Dioxane	88	5.065	5.062	0.003	42	18645	1000.0	985.5	
74 Dibromomethane	93	5.078	5.074	0.004	96	87879	50.0	50.4	
76 n-Propyl acetate	43	5.096	5.092	0.004	98	100366	50.0	51.4	
77 Dichlorobromomethane	83	5.236	5.232	0.004	99	187760	50.0	51.6	
78 2-Nitropropane	41	5.588	5.585	0.003	91	53117	100.0	86.8	
79 2-Chloroethyl vinyl ether	63	5.601	5.603	-0.002	68	32189	50.1	39.8	
80 Epichlorohydrin	57	5.704	5.707	-0.003	99	132159	1000.0	1080.5	
81 cis-1,3-Dichloropropene	75	5.759	5.761	-0.002	96	195385	50.0	57.2	
82 4-Methyl-2-pentanone (MIBK)	43	5.941	5.944	-0.003	98	315115	250.0	279.7	
$ 83 Toluene-d8 (Surr)	98	6.014	6.017	-0.003	99	424576	50.0	50.7	
84 Toluene	91	6.099	6.102	-0.003	93	430543	50.0	51.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.495	6.497	-0.002	97	164857	50.0	54.7	
86 Ethyl methacrylate	69	6.543	6.546	-0.003	91	88834	50.0	54.3	
87 1,1,2-Trichloroethane	83	6.726	6.734	-0.008	94	88423	50.0	51.7	
88 Tetrachloroethene	166	6.762	6.765	-0.003	95	111944	50.0	52.2	
89 1,3-Dichloropropane	76	6.963	6.959	0.004	94	153583	50.0	53.6	
90 2-Hexanone	58	7.048	7.057	-0.009	98	115911	250.0	275.9	
91 n-Butyl acetate	43	7.200	7.197	0.003	98	100739	50.0	54.8	
92 Chlorodibromomethane	129	7.212	7.215	-0.003	98	130535	50.0	51.9	
93 Ethylene Dibromide	107	7.376	7.373	0.003	98	107496	50.0	51.7	
* 94 Chlorobenzene-d5	117	7.972	7.969	0.003	85	371412	50.0	50.0	
95 Chlorobenzene	112	8.003	8.005	-0.002	95	293192	50.0	51.5	
96 Ethylbenzene	106	8.118	8.115	0.003	98	138682	50.0	54.3	
97 1,1,1,2-Tetrachloroethane	131	8.130	8.127	0.003	94	112335	50.0	53.0	
98 m-Xylene & p-Xylene	106	8.270	8.267	0.003	0	165864	50.0	56.8	
99 o-Xylene	106	8.720	8.717	0.003	94	175950	50.0	60.1	
100 n-Butyl acrylate	73	8.739	8.741	-0.002	98	65896	50.0	56.5	
101 Styrene	104	8.757	8.753	0.004	93	307766	50.0	57.0	
103 Bromoform	173	8.970	8.966	0.004	94	85148	50.0	53.4	
102 Amyl acetate (mixed isomers)	43	8.988	8.991	-0.003	89	124954	50.0	54.9	
104 Isopropylbenzene	105	9.104	9.100	0.004	96	409911	50.0	63.5	
$ 105 4-Bromofluorobenzene	174	9.304	9.307	-0.003	93	139935	50.0	56.1	
106 Bromobenzene	156	9.426	9.428	-0.002	93	140313	50.0	51.3	
107 1,1,2,2-Tetrachloroethane	83	9.499	9.495	0.004	98	128112	50.0	48.8	
108 N-Propylbenzene	91	9.511	9.514	-0.003	99	485088	50.0	54.9	
109 1,2,3-Trichloropropane	110	9.535	9.532	0.003	97	32651	50.0	47.9	
110 trans-1,4-Dichloro-2-butene	53	9.560	9.562	-0.002	89	37634	50.0	50.9	
111 2-Chlorotoluene	91	9.608	9.611	-0.003	97	385986	50.0	54.2	
112 4-Ethyltoluene	105	9.626	9.623	0.003	97	428642	50.0	56.5	
113 1,3,5-Trimethylbenzene	105	9.693	9.690	0.003	92	336242	50.0	53.5	
114 4-Chlorotoluene	91	9.724	9.720	0.004	97	383708	50.0	57.9	
115 Butyl Methacrylate	87	9.809	9.805	0.004	94	106781	50.0	46.0	
116 tert-Butylbenzene	119	9.973	9.970	0.003	92	247247	50.0	55.7	
117 1,2,4-Trimethylbenzene	105	10.034	10.030	0.004	98	360692	50.0	55.5	
118 sec-Butylbenzene	105	10.168	10.170	-0.002	99	355686	50.0	56.3	
120 1,3-Dichlorobenzene	146	10.289	10.292	-0.003	95	242844	50.0	52.6	
119 4-Isopropyltoluene	119	10.295	10.298	-0.003	97	308365	50.0	56.2	
* 121 1,4-Dichlorobenzene-d4	152	10.356	10.353	0.003	96	229402	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.375	10.377	-0.003	94	255661	50.0	49.1	
123 1,2,3-Trimethylbenzene	105	10.399	10.395	0.004	98	400927	50.0	53.5	
124 Benzyl chloride	91	10.502	10.505	-0.003	99	244604	50.0	50.2	
125 2,3-Dihydroindene	117	10.557	10.560	-0.003	94	408244	50.0	54.1	
126 p-Diethylbenzene	119	10.618	10.620	-0.002	92	187426	50.0	53.2	
127 n-Butylbenzene	92	10.642	10.639	0.003	99	161176	50.0	53.2	
128 1,2-Dichlorobenzene	146	10.685	10.687	-0.002	96	241215	50.0	51.5	
129 1,2,4,5-Tetramethylbenzene	119	11.244	11.247	-0.003	97	283967	50.0	55.4	
130 1,2-Dibromo-3-Chloropropane	157	11.329	11.326	0.003	96	28257	50.0	50.8	
131 1,3,5-Trichlorobenzene	180	11.439	11.435	0.004	97	144447	50.0	51.6	
132 1,2,4-Trichlorobenzene	180	11.913	11.910	0.003	93	127777	50.0	50.6	
133 Hexachlorobutadiene	225	11.998	11.995	0.003	94	44687	50.0	50.0	
134 Naphthalene	128	12.096	12.098	-0.002	99	332226	50.0	59.0	
135 1,2,3-Trichlorobenzene	180	12.272	12.274	-0.002	96	118689	50.0	52.8	
S 136 1,2-Dichloroethene, Total	100				0		100.0	103.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		100.0	116.9	
S 138 Total BTEX	1				0		250.0	277.6	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

ACROLEIN W_00160	Amount Added:	10.00	Units: uL	
524FREONS_00009	Amount Added:	50.00	Units: uL	
GASES Li_00553	Amount Added:	50.00	Units: uL	
8260MIX1COMB_00177	Amount Added:	50.00	Units: uL	
EthyhexAcr_Li_00005	Amount Added:	50.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 18:43:13 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971271.D

Injection Date: 20-Oct-2023 05:11:30 Instrument ID: CVOAMS8 Operator ID:

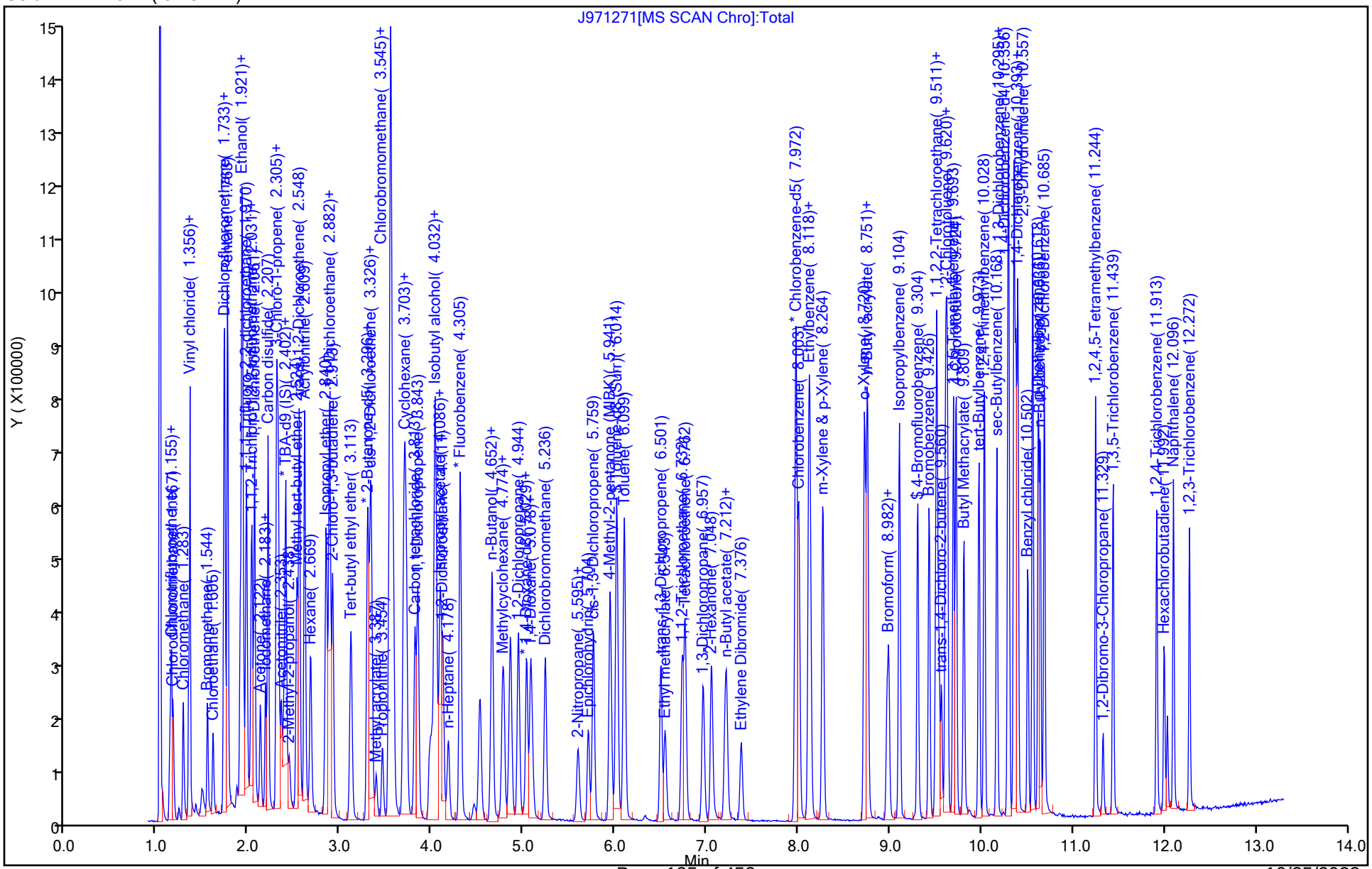
Lims ID: STD50 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971272.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Oct-2023 05:36:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0167608-008
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:43:20 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: K0HS Date: 20-Oct-2023 07:35:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.131	1.127	0.004	91	29525	200.0	161.4	
4 Dichlorodifluoromethane	85	1.156	1.152	0.004	100	708770	200.0	207.6	
5 Chlorodifluoromethane	67	1.174	1.170	0.004	98	97963	200.0	176.1	
6 Chloromethane	50	1.283	1.279	0.004	99	660501	200.0	191.0	
7 Vinyl chloride	62	1.338	1.340	-0.002	99	624585	200.0	178.2	
8 Butadiene	54	1.356	1.352	0.004	97	666972	200.0	197.9	
9 Bromomethane	94	1.551	1.547	0.004	99	470571	200.0	204.9	
10 Chloroethane	64	1.606	1.608	-0.002	98	348168	200.0	196.4	
12 Dichlorofluoromethane	67	1.727	1.729	-0.002	99	1282749	200.0	177.3	
11 Trichlorofluoromethane	101	1.733	1.736	-0.003	99	1215114	200.0	182.2	
13 Pentane	43	1.770	1.766	0.004	94	1304491	400.0	390.9	
14 Ethanol	46	1.861	1.863	-0.002	98	80653	8000.0	7642.6	
15 Ethyl ether	59	1.904	1.906	-0.002	95	510288	200.0	207.7	
16 2-Methyl-1,3-butadiene	53	1.922	1.924	-0.002	98	577848	200.0	198.7	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.934	1.930	0.004	96	587020	200.0	185.3	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.971	1.973	-0.002	97	1035079	200.0	167.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.031	2.027	0.004	96	664377	200.0	180.3	
19 Acrolein	56	2.037	2.034	0.003	92	87937	200.0	219.5	
21 1,1-Dichloroethene	96	2.062	2.058	0.004	98	643297	200.0	183.7	
22 Acetone	43	2.123	2.125	-0.002	86	850368	1000.0	1030.1	
23 Iodomethane	142	2.183	2.179	0.004	99	777574	200.0	240.5	
25 Isopropyl alcohol	45	2.183	2.179	0.004	97	242121	2000.0	2146.4	
24 Carbon disulfide	76	2.214	2.210	0.004	99	1864998	200.0	190.6	
26 3-Chloro-1-propene	76	2.299	2.301	-0.002	94	436264	200.0	179.8	
28 Methyl acetate	43	2.305	2.307	-0.002	99	691722	400.0	392.6	
27 Cyclopentene	67	2.317	2.319	-0.002	93	1295241	200.0	176.9	
29 Acetonitrile	41	2.354	2.350	0.004	98	555513	2000.0	1926.9	a
* 30 TBA-d9 (IS)	65	2.384	2.380	0.004	95	218121	1000.0	1000.0	
31 Methylene Chloride	84	2.402	2.404	-0.002	92	648287	200.0	181.5	
32 2-Methyl-2-propanol	59	2.439	2.441	-0.002	99	362697	2000.0	1931.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.524	2.526	-0.002	96	1777009	200.0	219.4	
34 trans-1,2-Dichloroethene	96	2.548	2.550	-0.002	98	690175	200.0	162.1	
35 Acrylonitrile	53	2.609	2.605	0.004	93	1655385	2000.0	1977.4	
36 Hexane	57	2.676	2.672	0.004	91	470528	200.0	200.7	
37 Isopropyl ether	45	2.840	2.842	-0.002	97	2028193	200.0	231.1	
38 1,1-Dichloroethane	63	2.877	2.873	0.004	99	1402698	200.0	183.2	
39 Vinyl acetate	43	2.883	2.885	-0.002	100	2212543	400.0	460.9	
40 2-Chloro-1,3-butadiene	88	2.913	2.915	-0.002	92	622306	200.0	218.5	
41 Tert-butyl ethyl ether	59	3.114	3.116	-0.002	88	1547099	200.0	204.2	
* 43 2-Butanone-d5	46	3.290	3.292	-0.002	82	278006	250.0	250.0	
42 2,2-Dichloropropane	79	3.296	3.292	0.004	97	302671	200.0	174.5	
44 cis-1,2-Dichloroethene	96	3.327	3.323	0.004	96	623277	200.0	179.2	
46 2-Butanone (MEK)	72	3.339	3.341	-0.002	96	228115	1000.0	951.0	
45 Ethyl acetate	70	3.339	3.347	-0.008	94	92152	400.0	404.3	
47 Methyl acrylate	55	3.388	3.390	-0.002	100	341000	200.0	214.7	
48 Propionitrile	54	3.454	3.457	-0.003	96	503188	2000.0	1920.5	
50 Chlorobromomethane	128	3.527	3.530	-0.003	84	305192	200.0	174.1	
49 Tetrahydrofuran	72	3.533	3.530	0.003	52	97755	400.0	378.5	
51 Methacrylonitrile	67	3.552	3.548	0.004	92	1791939	2000.0	2078.8	
52 Chloroform	83	3.576	3.572	0.004	98	1136002	200.0	173.3	
53 Cyclohexane	84	3.692	3.688	0.004	92	560225	200.0	194.5	
54 1,1,1-Trichloroethane	97	3.704	3.706	-0.002	99	925956	200.0	175.7	
$ 55 Dibromofluoromethane (Surr)	113	3.722	3.718	0.004	95	177491	50.0	44.5	
56 Carbon tetrachloride	117	3.813	3.815	-0.002	98	804756	200.0	176.0	
57 1,1-Dichloropropene	75	3.844	3.846	-0.002	96	745884	200.0	211.6	
58 Isobutyl alcohol	43	3.965	3.973	-0.008	97	393091	5000.0	5458.4	
59 Isooctane	57	3.996	4.004	-0.008	97	663243	200.0	198.0	a
60 Benzene	78	4.032	4.028	0.004	97	2107491	200.0	193.7	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.044	4.046	-0.002	0	205910	50.0	47.6	
62 Isopropyl acetate	43	4.087	4.089	-0.002	95	1185875	200.0	232.2	
63 Tert-amyl methyl ether	55	4.093	4.089	0.004	94	341402	200.0	209.4	
64 1,2-Dichloroethane	62	4.117	4.119	-0.002	98	856608	200.0	185.6	
65 n-Heptane	57	4.178	4.180	-0.002	93	133049	200.0	190.6	
* 66 Fluorobenzene	96	4.306	4.308	-0.002	99	655471	50.0	50.0	
67 n-Butanol	56	4.628	4.642	-0.014	92	164570	5000.0	5051.7	
68 Trichloroethene	95	4.652	4.655	-0.003	98	604799	200.0	200.8	
69 Methylcyclohexane	83	4.774	4.770	0.004	83	493594	200.0	223.1	
70 Ethyl acrylate	55	4.780	4.782	-0.002	97	854673	200.0	222.7	
71 1,2-Dichloropropane	63	4.944	4.940	0.004	87	558788	200.0	199.1	
* 72 1,4-Dioxane-d8	96	5.017	5.007	0.010	0	30187	1000.0	1000.0	
73 Methyl methacrylate	100	5.036	5.032	0.004	89	194632	400.0	442.7	
75 1,4-Dioxane	88	5.066	5.062	0.004	44	82938	4000.0	3253.5	
74 Dibromomethane	93	5.078	5.074	0.004	97	390708	200.0	182.7	
76 n-Propyl acetate	43	5.090	5.092	-0.002	99	534503	200.0	223.0	
77 Dichlorobromomethane	83	5.236	5.232	0.004	99	865368	200.0	193.7	
78 2-Nitropropane	41	5.583	5.585	-0.002	98	270882	400.0	407.0	
79 2-Chloroethyl vinyl ether	63	5.595	5.603	-0.008	83	209263	200.5	205.4	
80 Epichlorohydrin	57	5.705	5.707	-0.002	98	650539	4000.0	4022.1	
81 cis-1,3-Dichloropropene	75	5.759	5.761	-0.002	95	950507	200.0	222.1	
82 4-Methyl-2-pentanone (MIBK)	43	5.942	5.944	-0.002	97	1589969	1000.0	1067.1	
$ 83 Toluene-d8 (Surr)	98	6.015	6.017	-0.002	99	518221	50.0	49.4	
84 Toluene	91	6.100	6.102	-0.002	94	1992343	200.0	188.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.495	6.497	-0.002	97	849982	200.0	225.3	
86 Ethyl methacrylate	69	6.544	6.546	-0.002	91	452922	200.0	225.8	
87 1,1,2-Trichloroethane	83	6.732	6.734	-0.002	95	439265	200.0	205.2	
88 Tetrachloroethene	166	6.763	6.765	-0.002	96	517218	200.0	192.5	
89 1,3-Dichloropropane	76	6.957	6.959	-0.002	95	791733	200.0	220.7	
90 2-Hexanone	58	7.049	7.057	-0.009	96	614632	1000.0	1106.3	
91 n-Butyl acetate	43	7.194	7.197	-0.003	98	509266	200.0	221.3	
92 Chlorodibromomethane	129	7.219	7.215	0.004	97	633272	200.0	201.0	
93 Ethylene Dibromide	107	7.377	7.373	0.004	97	529356	200.0	203.2	
* 94 Chlorobenzene-d5	117	7.973	7.969	0.004	86	465371	50.0	50.0	
95 Chlorobenzene	112	8.003	8.005	-0.002	96	1385299	200.0	194.0	
96 Ethylbenzene	106	8.119	8.115	0.004	98	670249	200.0	209.3	
97 1,1,1,2-Tetrachloroethane	131	8.131	8.127	0.004	96	567775	200.0	213.9	
98 m-Xylene & p-Xylene	106	8.265	8.267	-0.002	0	794943	200.0	217.2	
99 o-Xylene	106	8.721	8.717	0.004	93	802852	200.0	218.9	
100 n-Butyl acrylate	73	8.739	8.741	-0.002	97	324326	200.0	211.8	
101 Styrene	104	8.757	8.753	0.004	94	1366908	200.0	200.8	
103 Bromoform	173	8.970	8.966	0.004	95	386377	200.0	193.6	
102 Amyl acetate (mixed isomers)	43	8.982	8.991	-0.009	90	604154	200.0	243.4	
104 Isopropylbenzene	105	9.104	9.100	0.004	96	1761497	200.0	217.7	
$ 105 4-Bromofluorobenzene	174	9.305	9.307	-0.002	93	153547	50.0	49.1	
106 Bromobenzene	156	9.426	9.428	-0.002	94	596176	200.0	199.8	
107 1,1,2,2-Tetrachloroethane	83	9.499	9.495	0.004	98	553070	200.0	192.8	
108 N-Propylbenzene	91	9.511	9.514	-0.003	99	2098053	200.0	217.7	
109 1,2,3-Trichloropropane	110	9.536	9.532	0.004	97	136942	200.0	183.9	
110 trans-1,4-Dichloro-2-butene	53	9.560	9.562	-0.002	93	165382	200.0	205.0	
111 2-Chlorotoluene	91	9.609	9.611	-0.002	98	1616453	200.0	208.0	
112 4-Ethyltoluene	105	9.627	9.623	0.004	98	1814893	200.0	219.3	
113 1,3,5-Trimethylbenzene	105	9.694	9.690	0.004	92	1517873	200.0	221.2	
114 4-Chlorotoluene	91	9.724	9.720	0.004	97	1539104	200.0	212.6	
115 Butyl Methacrylate	87	9.809	9.805	0.004	93	543627	200.0	202.0	
116 tert-Butylbenzene	119	9.974	9.970	0.004	92	1113361	200.0	229.9	
117 1,2,4-Trimethylbenzene	105	10.028	10.030	-0.002	98	1632502	200.0	230.1	
118 sec-Butylbenzene	105	10.168	10.170	-0.002	99	1543767	200.0	224.1	
120 1,3-Dichlorobenzene	146	10.290	10.292	-0.002	95	1024623	200.0	203.3	
119 4-Isopropyltoluene	119	10.296	10.298	-0.002	97	1377703	200.0	230.1	
* 121 1,4-Dichlorobenzene-d4	152	10.357	10.353	0.004	96	250391	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.375	10.377	-0.002	95	1077912	200.0	189.8	
123 1,2,3-Trimethylbenzene	105	10.399	10.395	0.004	99	1761113	200.0	215.4	
124 Benzyl chloride	91	10.503	10.505	-0.002	98	1126885	200.0	211.9	
125 2,3-Dihydroindene	117	10.557	10.560	-0.003	94	1774046	200.0	215.2	
126 p-Diethylbenzene	119	10.618	10.620	-0.002	92	817406	200.0	212.6	
127 n-Butylbenzene	92	10.643	10.639	0.004	98	710043	200.0	214.7	
128 1,2-Dichlorobenzene	146	10.685	10.687	-0.002	96	1002778	200.0	196.3	
129 1,2,4,5-Tetramethylbenzene	119	11.245	11.247	-0.002	97	1344484	200.0	213.3	
130 1,2-Dibromo-3-Chloropropane	157	11.330	11.326	0.004	97	123155	200.0	202.8	
131 1,3,5-Trichlorobenzene	180	11.439	11.435	0.004	97	612886	200.0	200.5	
132 1,2,4-Trichlorobenzene	180	11.914	11.910	0.004	94	562463	200.0	204.1	
133 Hexachlorobutadiene	225	11.999	11.995	0.004	95	182601	200.0	187.1	
134 Naphthalene	128	12.096	12.098	-0.002	99	1482359	200.0	241.4	
135 1,2,3-Trichlorobenzene	180	12.272	12.274	-0.002	95	496739	200.0	202.5	
S 136 1,2-Dichloroethene, Total	100				0		400.0	341.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		400.0	436.2	
S 138 Total BTEX	1				0		1000.0	1027.5	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

MIX I Hi_00169	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00141	Amount Added:	20.00	Units: uL	
Ethanol mix_00082	Amount Added:	20.00	Units: uL	
ACROLEIN W_00160	Amount Added:	20.00	Units: uL	
7 Freons Hi_00007	Amount Added:	20.00	Units: uL	
EthyhexAcr_Hi_00004	Amount Added:	20.00	Units: uL	
GAS Hi_00454	Amount Added:	20.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

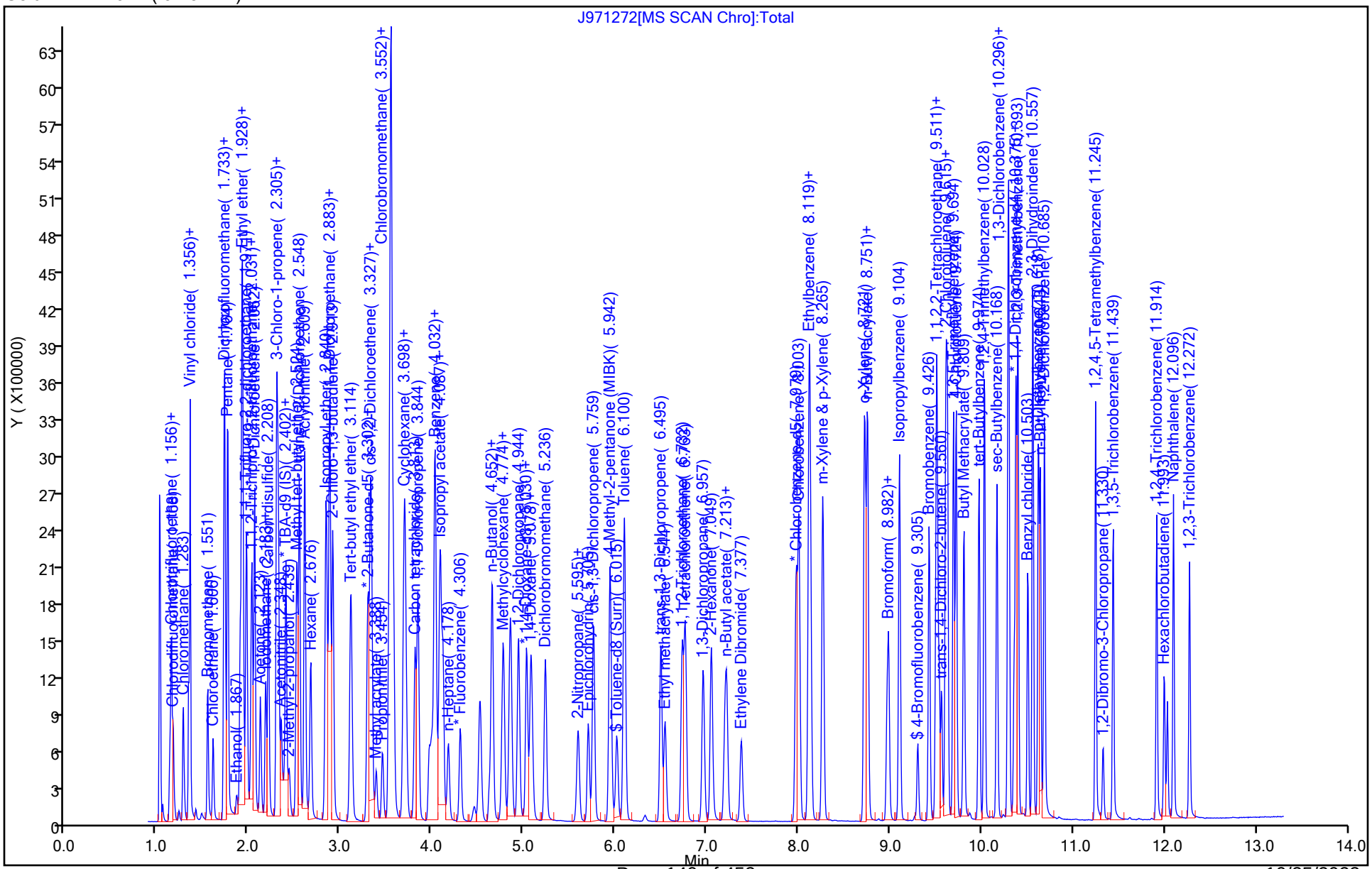
Report Date: 20-Oct-2023 18:43:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971272.D

Injection Date:	20-Oct-2023 05:36:30	Instrument ID:	CVOAMS8	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_W8	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971273.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Oct-2023 06:01:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0167608-009
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:43:27 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 18:41:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.132	1.127	0.005	96	90683	500.0	425.0	
4 Dichlorodifluoromethane	85	1.157	1.152	0.005	100	1940522	500.0	487.3	
5 Chlorodifluoromethane	67	1.169	1.170	-0.001	98	272233	500.0	419.6	
6 Chloromethane	50	1.284	1.279	0.005	99	1727132	500.0	428.2	
7 Vinyl chloride	62	1.339	1.340	-0.001	99	1758952	500.0	430.3	
8 Butadiene	54	1.357	1.352	0.005	97	1728371	500.0	439.6	
9 Bromomethane	94	1.546	1.547	-0.001	99	1478772	500.0	552.0	
10 Chloroethane	64	1.607	1.608	-0.001	99	893036	500.0	432.9	
12 Dichlorofluoromethane	67	1.728	1.729	-0.001	98	3075837	500.0	364.5	
11 Trichlorofluoromethane	101	1.734	1.736	-0.002	99	2879913	500.0	370.3	
13 Pentane	43	1.765	1.766	-0.001	94	3261163	1000.0	1001.9	
14 Ethanol	46	1.868	1.863	0.005	96	206534	20000	16865	a
15 Ethyl ether	59	1.905	1.906	-0.001	96	1340418	500.0	468.7	
16 2-Methyl-1,3-butadiene	53	1.923	1.924	-0.001	97	1552240	500.0	457.6	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.935	1.930	0.005	97	1619246	500.0	522.2	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.972	1.973	-0.001	97	2914434	500.0	405.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.026	2.027	-0.001	97	1814932	500.0	422.3	
19 Acrolein	56	2.038	2.034	0.004	94	198003	400.0	425.8	
21 1,1-Dichloroethene	96	2.063	2.058	0.005	99	1612833	500.0	394.9	
22 Acetone	43	2.124	2.125	-0.001	86	2203009	2500.0	2445.9	
23 Iodomethane	142	2.184	2.179	0.005	99	1930863	500.0	511.9	
25 Isopropyl alcohol	45	2.191	2.179	0.011	98	669967	5000.0	5117.9	
24 Carbon disulfide	76	2.209	2.210	-0.001	99	4830840	500.0	501.9	
26 3-Chloro-1-propene	76	2.306	2.301	0.005	96	1003586	500.0	354.7	
28 Methyl acetate	43	2.306	2.307	-0.001	99	1912802	1000.0	935.6	
27 Cyclopentene	67	2.318	2.319	-0.001	93	3512246	500.0	411.2	
29 Acetonitrile	41	2.355	2.350	0.005	98	1530914	5000.0	4576.1	a
* 30 TBA-d9 (IS)	65	2.385	2.380	0.005	76	253123	1000.0	1000.0	
31 Methylene Chloride	84	2.403	2.404	-0.001	90	1640639	500.0	542.5	
32 2-Methyl-2-propanol	59	2.440	2.441	-0.001	98	1051125	5000.0	4823.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.525	2.526	-0.001	96	5189864	500.0	549.3	
34 trans-1,2-Dichloroethene	96	2.549	2.550	-0.001	96	2013971	500.0	405.6	
35 Acrylonitrile	53	2.610	2.605	0.005	92	4472656	5000.0	4603.8	
36 Hexane	57	2.671	2.672	-0.001	91	1360450	500.0	497.6	
37 Isopropyl ether	45	2.841	2.842	-0.001	96	5431462	500.0	530.6	
38 1,1-Dichloroethane	63	2.878	2.873	0.005	99	3659197	500.0	409.7	
39 Vinyl acetate	43	2.884	2.885	-0.001	100	5800040	1000.0	1035.7	
40 2-Chloro-1,3-butadiene	88	2.914	2.915	-0.001	92	1528420	500.0	460.0	
41 Tert-butyl ethyl ether	59	3.115	3.116	-0.001	89	4341479	500.0	499.4	
* 43 2-Butanone-d5	46	3.291	3.292	-0.001	80	303954	250.0	250.0	
42 2,2-Dichloropropane	79	3.297	3.292	0.005	97	860350	500.0	425.2	
44 cis-1,2-Dichloroethene	96	3.328	3.323	0.005	97	1849763	500.0	456.0	
46 2-Butanone (MEK)	72	3.340	3.341	-0.001	96	685741	2500.0	2614.9	
45 Ethyl acetate	70	3.340	3.347	-0.007	96	274190	1000.0	990.0	
47 Methyl acrylate	55	3.389	3.390	-0.001	99	1036727	500.0	559.5	
48 Propionitrile	54	3.462	3.457	0.005	97	1509242	5000.0	4963.7	
50 Chlorobromomethane	128	3.534	3.530	0.004	89	806183	500.0	394.3	
49 Tetrahydrofuran	72	3.534	3.530	0.004	62	308059	1000.0	1091.0	
51 Methacrylonitrile	67	3.553	3.548	0.005	91	5125770	5000.0	5097.7	
52 Chloroform	83	3.577	3.572	0.005	98	3242457	500.0	424.1	
53 Cyclohexane	84	3.693	3.688	0.005	91	1769575	500.0	526.6	
54 1,1,1-Trichloroethane	97	3.705	3.706	-0.001	99	2680805	500.0	436.1	
$ 55 Dibromofluoromethane (Surr)	113	3.723	3.718	0.005	95	203351	50.0	43.7	
56 Carbon tetrachloride	117	3.814	3.815	-0.001	99	2341237	500.0	438.9	
57 1,1-Dichloropropene	75	3.845	3.846	-0.001	96	2238844	500.0	544.4	
58 Isobutyl alcohol	43	3.972	3.973	-0.001	97	1269360	12500	15189	
59 Isooctane	57	3.997	4.004	-0.007	94	2118124	500.0	502.1	a
60 Benzene	78	4.033	4.028	0.005	96	6088902	500.0	547.4	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.051	4.046	0.005	0	228380	50.0	45.2	
62 Isopropyl acetate	43	4.088	4.089	-0.001	96	3411649	500.0	572.8	
63 Tert-amyl methyl ether	55	4.088	4.089	-0.001	95	995135	500.0	523.3	
64 1,2-Dichloroethane	62	4.118	4.119	-0.001	98	2339647	500.0	434.6	
65 n-Heptane	57	4.179	4.180	-0.001	92	404656	500.0	497.0	
* 66 Fluorobenzene	96	4.307	4.308	-0.001	99	764591	50.0	50.0	
67 n-Butanol	56	4.629	4.642	-0.013	89	549210	12500	12495	
68 Trichloroethene	95	4.653	4.655	-0.002	98	1751234	500.0	498.4	
69 Methylcyclohexane	83	4.775	4.770	0.005	83	1506507	500.0	583.8	
70 Ethyl acrylate	55	4.781	4.782	-0.001	99	2488475	500.0	555.8	
71 1,2-Dichloropropane	63	4.945	4.940	0.005	88	1576636	500.0	481.7	
* 72 1,4-Dioxane-d8	96	5.018	5.007	0.011	0	30310	1000.0	1000.0	
73 Methyl methacrylate	100	5.037	5.032	0.005	88	552349	1000.0	1077.0	
75 1,4-Dioxane	88	5.067	5.062	0.005	80	268448	10000	10488	
74 Dibromomethane	93	5.079	5.074	0.005	97	1090172	500.0	436.9	
76 n-Propyl acetate	43	5.091	5.092	-0.001	98	1444734	500.0	516.6	
77 Dichlorobromomethane	83	5.237	5.232	0.005	99	2333120	500.0	447.7	
78 2-Nitropropane	41	5.590	5.585	0.005	99	712309	1000.0	998.9	
79 2-Chloroethyl vinyl ether	63	5.602	5.603	-0.001	83	623756	501.2	500.6	
80 Epichlorohydrin	57	5.706	5.707	-0.001	98	1855374	10000	10492	
81 cis-1,3-Dichloropropene	75	5.766	5.761	0.005	94	2666974	500.0	609.4	
82 4-Methyl-2-pentanone (MIBK)	43	5.943	5.944	-0.001	97	4126396	2500.0	2532.9	
$ 83 Toluene-d8 (Surr)	98	6.022	6.017	0.005	98	579228	50.0	54.0	
84 Toluene	91	6.101	6.102	-0.001	94	5540493	500.0	512.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.496	6.497	-0.001	98	2294248	500.0	594.7	
86 Ethyl methacrylate	69	6.545	6.546	-0.001	91	1195932	500.0	511.2	
87 1,1,2-Trichloroethane	83	6.733	6.734	-0.001	96	1117727	500.0	510.6	
88 Tetrachloroethene	166	6.764	6.765	-0.001	94	1345251	500.0	489.7	
89 1,3-Dichloropropane	76	6.964	6.959	0.005	94	2027503	500.0	552.8	
90 2-Hexanone	58	7.049	7.057	-0.008	95	1532654	2500.0	2523.2	
91 n-Butyl acetate	43	7.195	7.197	-0.002	99	1264095	500.0	537.1	
92 Chlorodibromomethane	129	7.220	7.215	0.005	98	1643314	500.0	510.0	
93 Ethylene Dibromide	107	7.378	7.373	0.005	99	1349753	500.0	506.8	
* 94 Chlorobenzene-d5	117	7.974	7.969	0.005	86	475810	50.0	50.0	
95 Chlorobenzene	112	8.004	8.005	-0.001	95	3512250	500.0	481.2	
96 Ethylbenzene	106	8.120	8.115	0.005	98	1732003	500.0	528.9	
97 1,1,1,2-Tetrachloroethane	131	8.132	8.127	0.005	96	1456313	500.0	536.6	
98 m-Xylene & p-Xylene	106	8.266	8.267	-0.001	0	2042122	500.0	545.8	
99 o-Xylene	106	8.722	8.717	0.005	94	2024379	500.0	539.9	
100 n-Butyl acrylate	73	8.740	8.741	-0.001	97	815744	500.0	485.7	
101 Styrene	104	8.758	8.753	0.005	94	3488017	500.0	500.4	
103 Bromoform	173	8.971	8.966	0.005	95	991618	500.0	485.8	
102 Amyl acetate (mixed isomers)	43	8.983	8.991	-0.008	90	1519773	500.0	585.4	
104 Isopropylbenzene	105	9.105	9.100	0.005	97	4421714	500.0	534.4	
$ 105 4-Bromofluorobenzene	174	9.306	9.307	-0.001	91	151297	50.0	47.3	
106 Bromobenzene	156	9.427	9.428	-0.001	94	1496980	500.0	479.7	
107 1,1,2,2-Tetrachloroethane	83	9.500	9.495	0.005	98	1390322	500.0	463.5	
108 N-Propylbenzene	91	9.512	9.514	-0.002	99	5168744	500.0	512.8	
109 1,2,3-Trichloropropane	110	9.537	9.532	0.005	99	361043	500.0	463.7	
110 trans-1,4-Dichloro-2-butene	53	9.567	9.562	0.005	96	407736	500.0	483.2	
111 2-Chlorotoluene	91	9.610	9.611	-0.001	98	4010173	500.0	493.3	
112 4-Ethyltoluene	105	9.628	9.623	0.005	98	4476469	500.0	517.2	
113 1,3,5-Trimethylbenzene	105	9.695	9.690	0.005	92	3942992	500.0	549.5	
114 4-Chlorotoluene	91	9.725	9.720	0.005	97	4129133	500.0	545.4	
115 Butyl Methacrylate	87	9.810	9.805	0.005	92	1561266	500.0	499.8	
116 tert-Butylbenzene	119	9.975	9.970	0.005	92	2763213	500.0	545.7	
117 1,2,4-Trimethylbenzene	105	10.029	10.030	-0.001	98	4242908	500.0	571.8	
118 sec-Butylbenzene	105	10.169	10.170	-0.001	99	3949533	500.0	548.1	
120 1,3-Dichlorobenzene	146	10.291	10.292	-0.001	94	2620473	500.0	497.1	
119 4-Isopropyltoluene	119	10.303	10.298	0.005	97	3652859	500.0	583.3	
* 121 1,4-Dichlorobenzene-d4	152	10.358	10.353	0.005	95	261873	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.376	10.377	-0.001	93	2769963	500.0	466.4	
123 1,2,3-Trimethylbenzene	105	10.400	10.395	0.005	98	4640291	500.0	542.6	
124 Benzyl chloride	91	10.510	10.505	0.005	99	2981099	500.0	536.1	
125 2,3-Dihydroindene	117	10.564	10.560	0.004	95	4592771	500.0	532.7	
126 p-Diethylbenzene	119	10.619	10.620	-0.001	93	2297332	500.0	571.2	
127 n-Butylbenzene	92	10.644	10.639	0.005	98	1927199	500.0	557.3	
128 1,2-Dichlorobenzene	146	10.686	10.687	-0.001	97	2703647	500.0	506.1	
129 1,2,4,5-Tetramethylbenzene	119	11.246	11.247	-0.001	97	3837887	500.0	488.5	
130 1,2-Dibromo-3-Chloropropane	157	11.331	11.326	0.005	97	359680	500.0	566.4	
131 1,3,5-Trichlorobenzene	180	11.440	11.435	0.005	98	1667110	500.0	521.6	
132 1,2,4-Trichlorobenzene	180	11.915	11.910	0.005	95	1596053	500.0	553.7	
133 Hexachlorobutadiene	225	12.000	11.995	0.005	93	539492	500.0	528.5	
134 Naphthalene	128	12.097	12.098	-0.001	99	4292593	500.0	668.3	
135 1,2,3-Trichlorobenzene	180	12.273	12.274	-0.001	96	1416140	500.0	552.0	
S 136 1,2-Dichloroethene, Total	100				0		1000.0	861.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		1000.0	1085.7	
S 138 Total BTEX	1				0		2500.0	2674.2	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

MIX I Hi_00169	Amount Added:	50.00	Units: uL	
MIX 2 Hi_00141	Amount Added:	50.00	Units: uL	
Ethanol mix_00082	Amount Added:	50.00	Units: uL	
ACROLEIN W_00160	Amount Added:	40.00	Units: uL	
7 Freons Hi_00007	Amount Added:	50.00	Units: uL	
EthyhexAcr_Hi_00004	Amount Added:	50.00	Units: uL	
GAS Hi_00454	Amount Added:	50.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 18:43:28 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971273.D

Injection Date: 20-Oct-2023 06:01:30 Instrument ID: CVOAMS8 Operator ID:

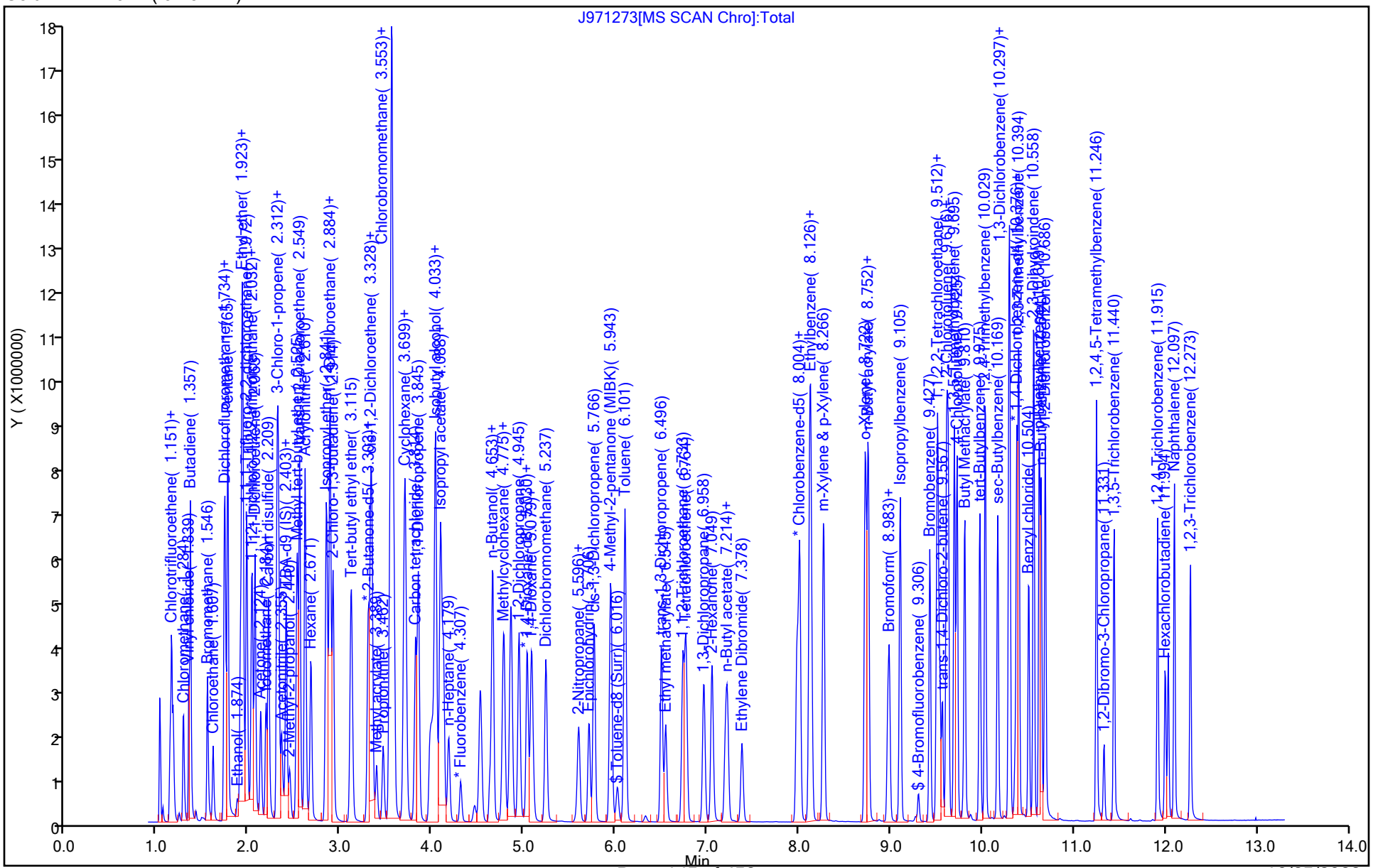
Lims ID: STD500 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Oct-2023 11:18:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0167608-016
Operator ID: Instrument ID: CVOAMS8
Sublist: chrom-8260_W8*sub75

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:43:36 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 11:38:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.131	1.127	0.004	84	918	5.00	6.62	
4 Dichlorodifluoromethane	85	1.155	1.152	0.003	97	13134	5.00	5.07	
5 Chlorodifluoromethane	67	1.179	1.170	0.009	97	2269	5.00	5.38	
6 Chloromethane	50	1.283	1.279	0.004	98	12948	5.00	4.94	
7 Vinyl chloride	62	1.343	1.340	0.003	98	13693	5.00	5.15	
8 Butadiene	54	1.356	1.352	0.004	96	14865	5.00	5.81	
9 Bromomethane	94	1.550	1.547	0.003	94	10273	5.00	5.90	
10 Chloroethane	64	1.611	1.608	0.003	97	8491	5.00	5.50	
12 Dichlorofluoromethane	67	1.727	1.729	-0.002	98	33046	5.00	6.02	
11 Trichlorofluoromethane	101	1.739	1.736	0.003	98	31415	5.00	6.21	
13 Pentane	43	1.769	1.766	0.003	93	35746	10.0	12.8	
14 Ethanol	46	1.873	1.863	0.010	95	2407	200.0	232.9	
15 Ethyl ether	59	1.903	1.906	-0.003	93	10280	5.00	4.66	
16 2-Methyl-1,3-butadiene	53	1.921	1.924	-0.003	94	12999	5.00	5.89	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.933	1.930	0.003	86	15298	5.00	5.44	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.976	1.973	0.003	97	26973	5.00	5.77	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.031	2.027	0.004	96	15768	5.00	5.64	
19 Acrolein	56	2.037	2.034	0.003	85	8742	20.0	22.3	
21 1,1-Dichloroethene	96	2.067	2.058	0.009	98	15348	5.00	5.78	
22 Acetone	43	2.128	2.125	0.003	86	18425	25.0	24.5	
23 Iodomethane	142	2.183	2.179	0.004	98	11999	5.00	4.89	
25 Isopropyl alcohol	45	2.189	2.179	0.010	57	5367	50.0	48.6	
24 Carbon disulfide	76	2.213	2.210	0.003	99	63688	5.00	7.86	
26 3-Chloro-1-propene	76	2.304	2.301	0.003	89	10518	5.00	5.72	
28 Methyl acetate	43	2.310	2.307	0.003	79	17587	10.0	10.2	
27 Cyclopentene	67	2.323	2.319	0.004	95	33114	5.00	5.96	
29 Acetonitrile	41	2.353	2.350	0.003	97	13242	50.0	46.9	
* 30 TBA-d9 (IS)	65	2.383	2.380	0.003	76	213645	1000.0	1000.0	
31 Methylene Chloride	84	2.408	2.404	0.004	93	17629	5.00	5.22	
32 2-Methyl-2-propanol	59	2.438	2.441	-0.003	97	8851	50.0	48.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.529	2.526	0.003	96	33121	5.00	5.39	
34 trans-1,2-Dichloroethene	96	2.554	2.550	0.004	95	19247	5.00	5.96	
35 Acrylonitrile	53	2.608	2.605	0.003	93	41605	50.0	50.7	
36 Hexane	57	2.681	2.672	0.009	89	10418	5.00	5.86	
37 Isopropyl ether	45	2.846	2.842	0.004	96	26821	5.00	4.03	
38 1,1-Dichloroethane	63	2.876	2.873	0.003	98	27604	5.00	4.75	
39 Vinyl acetate	43	2.888	2.885	0.003	99	31350	10.0	8.61	
40 2-Chloro-1,3-butadiene	88	2.919	2.915	0.004	95	9346	5.00	4.33	
41 Tert-butyl ethyl ether	59	3.113	3.116	-0.003	86	23104	5.00	3.98	
* 43 2-Butanone-d5	46	3.296	3.292	0.004	92	220337	250.0	250.0	
42 2,2-Dichloropropane	79	3.296	3.292	0.004	51	7273	5.00	5.53	a
44 cis-1,2-Dichloroethene	96	3.332	3.323	0.009	97	14885	5.00	5.64	
46 2-Butanone (MEK)	72	3.344	3.341	0.003	97	5292	25.0	27.8	
45 Ethyl acetate	70	3.344	3.347	-0.003	92	1679	10.0	8.79	
47 Methyl acrylate	55	3.393	3.390	0.003	98	6684	5.00	5.55	
48 Propionitrile	54	3.466	3.457	0.009	95	13366	50.0	52.1	
50 Chlorobromomethane	128	3.533	3.530	0.003	81	7871	5.00	5.92	
49 Tetrahydrofuran	72	3.539	3.530	0.009	35	1978	10.0	9.66	
51 Methacrylonitrile	67	3.557	3.548	0.009	92	35065	50.0	53.6	
52 Chloroform	83	3.581	3.572	0.009	98	27609	5.00	5.55	
53 Cyclohexane	84	3.691	3.688	0.003	89	12202	5.00	5.58	
54 1,1,1-Trichloroethane	97	3.709	3.706	0.003	98	22514	5.00	5.63	
$ 55 Dibromofluoromethane (Surr)	113	3.721	3.718	0.003	94	155245	50.0	51.3	
56 Carbon tetrachloride	117	3.819	3.815	0.004	96	17958	5.00	5.18	
57 1,1-Dichloropropene	75	3.849	3.846	0.003	95	13333	5.00	4.99	
58 Isobutyl alcohol	43	3.983	3.973	0.010	90	7327	125.0	103.9	
59 Isooctane	57	4.001	4.004	-0.003	95	12863	5.00	5.69	
60 Benzene	78	4.031	4.028	0.003	96	44516	5.00	4.98	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.050	4.046	0.004	0	166518	50.0	50.7	
62 Isopropyl acetate	43	4.092	4.089	0.003	89	19338	5.00	4.99	
63 Tert-amyl methyl ether	55	4.098	4.089	0.009	76	6318	5.00	5.11	
64 1,2-Dichloroethane	62	4.129	4.119	0.010	96	18470	5.00	5.28	
65 n-Heptane	57	4.177	4.180	-0.003	86	3242	5.00	6.12	
* 66 Fluorobenzene	96	4.311	4.308	0.003	98	497161	50.0	50.0	
67 n-Butanol	56	4.664	4.642	0.022	31	2320	125.0	81.6	
68 Trichloroethene	95	4.658	4.655	0.003	94	10613	5.00	4.65	
69 Methylcyclohexane	83	4.779	4.770	0.009	92	7778	5.00	4.64	
70 Ethyl acrylate	55	4.792	4.782	0.010	87	13725	5.00	4.71	a
71 1,2-Dichloropropane	63	4.950	4.940	0.010	89	11333	5.00	5.32	
* 72 1,4-Dioxane-d8	96	5.023	5.007	0.016	0	20271	1000.0	1000.0	
73 Methyl methacrylate	100	5.029	5.032	-0.003	91	3297	10.0	9.89	
75 1,4-Dioxane	88	5.083	5.062	0.021	41	1628	100.0	95.1	
74 Dibromomethane	93	5.083	5.074	0.009	94	8112	5.00	5.00	
76 n-Propyl acetate	43	5.108	5.092	0.016	98	9426	5.00	5.18	a
77 Dichlorobromomethane	83	5.242	5.232	0.010	98	18760	5.00	5.54	
78 2-Nitropropane	41	5.594	5.585	0.009	97	5368	10.0	7.83	
79 2-Chloroethyl vinyl ether	63	5.606	5.603	0.003	75	2014	5.01	2.70	
80 Epichlorohydrin	57	5.716	5.707	0.009	97	11419	100.0	89.1	
81 cis-1,3-Dichloropropene	75	5.777	5.761	0.016	93	14950	5.00	4.25	
82 4-Methyl-2-pentanone (MIBK)	43	5.953	5.944	0.009	97	29185	25.0	24.7	
$ 83 Toluene-d8 (Surr)	98	6.020	6.017	0.003	100	423248	50.0	49.2	
84 Toluene	91	6.105	6.102	0.003	94	42368	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.507	6.497	0.010	97	14994	5.00	4.84	
86 Ethyl methacrylate	69	6.549	6.546	0.003	91	6569	5.00	4.32	
87 1,1,2-Trichloroethane	83	6.738	6.734	0.004	90	8781	5.00	4.99	
88 Tetrachloroethene	166	6.768	6.765	0.003	94	11730	5.00	5.32	
89 1,3-Dichloropropane	76	6.969	6.959	0.010	96	13958	5.00	4.74	
90 2-Hexanone	58	7.066	7.057	0.009	98	10144	25.0	23.0	
91 n-Butyl acetate	43	7.206	7.197	0.009	91	8815	5.00	4.66	
92 Chlorodibromomethane	129	7.224	7.215	0.009	94	12203	5.00	4.72	
93 Ethylene Dibromide	107	7.382	7.373	0.009	98	9811	5.00	4.59	
* 94 Chlorobenzene-d5	117	7.972	7.969	0.003	86	382136	50.0	50.0	
95 Chlorobenzene	112	8.009	8.005	0.004	97	30939	5.00	5.28	
96 Ethylbenzene	106	8.112	8.115	-0.003	99	11779	5.00	4.48	
97 1,1,1,2-Tetrachloroethane	131	8.136	8.127	0.009	92	9626	5.00	4.42	
98 m-Xylene & p-Xylene	106	8.270	8.267	0.003	0	14116	5.00	4.70	
99 o-Xylene	106	8.726	8.717	0.009	93	13678	5.00	4.54	
100 n-Butyl acrylate	73	8.751	8.741	0.010	93	4510	5.00	4.30	
101 Styrene	104	8.763	8.753	0.010	96	21143	5.00	4.26	
103 Bromoform	173	8.976	8.966	0.010	95	7926	5.00	4.84	
102 Amyl acetate (mixed isomers)	43	8.994	8.991	0.003	88	8874	5.00	4.51	
104 Isopropylbenzene	105	9.103	9.100	0.003	96	28488	5.00	4.29	
$ 105 4-Bromofluorobenzene	174	9.310	9.307	0.003	95	126731	50.0	49.4	
106 Bromobenzene	156	9.432	9.428	0.004	91	13112	5.00	5.54	
107 1,1,2,2-Tetrachloroethane	83	9.505	9.495	0.010	97	13131	5.00	5.77	
108 N-Propylbenzene	91	9.517	9.514	0.003	99	37515	5.00	4.91	
109 1,2,3-Trichloropropane	110	9.535	9.532	0.003	94	3105	5.00	5.26	
110 trans-1,4-Dichloro-2-butene	53	9.572	9.562	0.010	84	3302	5.00	5.16	
111 2-Chlorotoluene	91	9.614	9.611	0.003	97	31051	5.00	5.04	
112 4-Ethyltoluene	105	9.632	9.623	0.009	97	30055	5.00	4.58	
113 1,3,5-Trimethylbenzene	105	9.693	9.690	0.003	91	25655	5.00	4.71	
114 4-Chlorotoluene	91	9.730	9.720	0.010	97	28304	5.00	4.93	
115 Butyl Methacrylate	87	9.809	9.805	0.004	95	7735	5.00	3.91	
116 tert-Butylbenzene	119	9.973	9.970	0.003	92	19238	5.00	5.01	
117 1,2,4-Trimethylbenzene	105	10.034	10.030	0.004	97	25436	5.00	4.52	
118 sec-Butylbenzene	105	10.174	10.170	0.004	99	25698	5.00	4.70	
120 1,3-Dichlorobenzene	146	10.295	10.292	0.003	95	20802	5.00	5.20	
119 4-Isopropyltoluene	119	10.301	10.298	0.003	93	20512	5.00	4.32	
* 121 1,4-Dichlorobenzene-d4	152	10.362	10.353	0.009	96	198666	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.380	10.377	0.003	96	24209	5.00	5.37	
123 1,2,3-Trimethylbenzene	105	10.399	10.395	0.004	98	32203	5.00	4.96	
124 Benzyl chloride	91	10.508	10.505	0.003	98	21008	5.00	4.98	
125 2,3-Dihydroindene	117	10.563	10.560	0.003	91	30944	5.00	4.73	
126 p-Diethylbenzene	119	10.624	10.620	0.004	92	14433	5.00	4.73	
127 n-Butylbenzene	92	10.642	10.639	0.003	98	12618	5.00	4.81	
128 1,2-Dichlorobenzene	146	10.690	10.687	0.003	95	21510	5.00	5.31	
129 1,2,4,5-Tetramethylbenzene	119	11.250	11.247	0.003	97	19457	5.00	4.76	
130 1,2-Dibromo-3-Chloropropane	157	11.335	11.326	0.009	85	2255	5.00	4.68	
131 1,3,5-Trichlorobenzene	180	11.445	11.435	0.010	96	13621	5.00	5.62	
132 1,2,4-Trichlorobenzene	180	11.919	11.910	0.009	91	11032	5.00	5.05	
133 Hexachlorobutadiene	225	11.998	11.995	0.003	91	4562	5.00	5.89	
134 Naphthalene	128	12.101	12.098	0.003	99	22550	5.00	4.63	
135 1,2,3-Trichlorobenzene	180	12.278	12.274	0.004	94	10892	5.00	5.60	
S 136 1,2-Dichloroethene, Total	100				0		10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		10.0	9.24	
S 138 Total BTEX	1				0		25.0	23.6	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

GASES Li_00553	Amount Added:	10.00	Units: uL	
8260MIX1COMB_00177	Amount Added:	10.00	Units: uL	
ACROLEIN W_00160	Amount Added:	4.00	Units: uL	
524FREONS_00009	Amount Added:	10.00	Units: uL	
EthyhexAcr_Li_00005	Amount Added:	10.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 18:43:36 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Injection Date: 20-Oct-2023 11:18:30 Instrument ID: CVOAMS8 Operator ID:

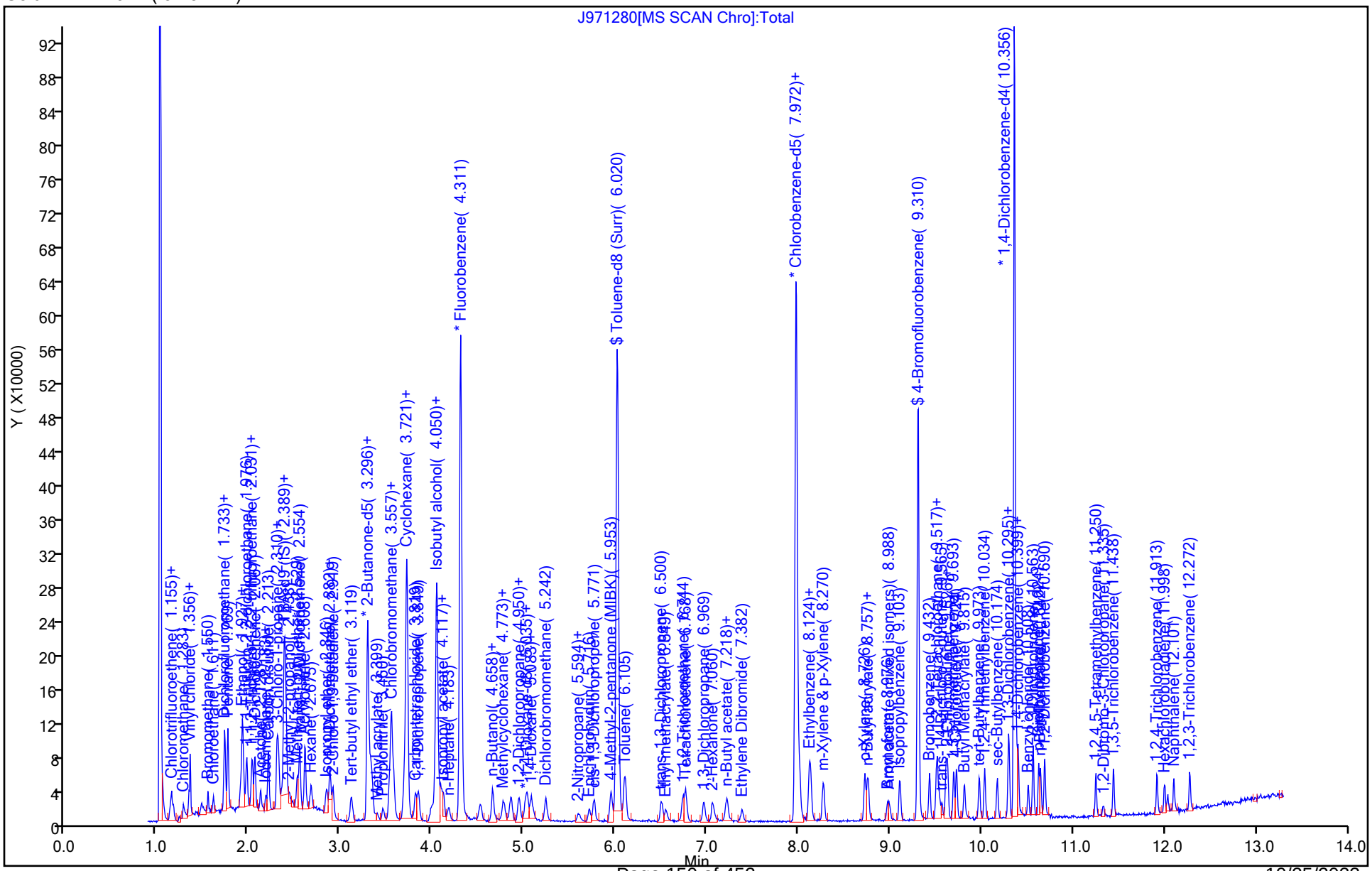
Lims ID: STD5 Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

Calibration / Chlorotrifluoroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

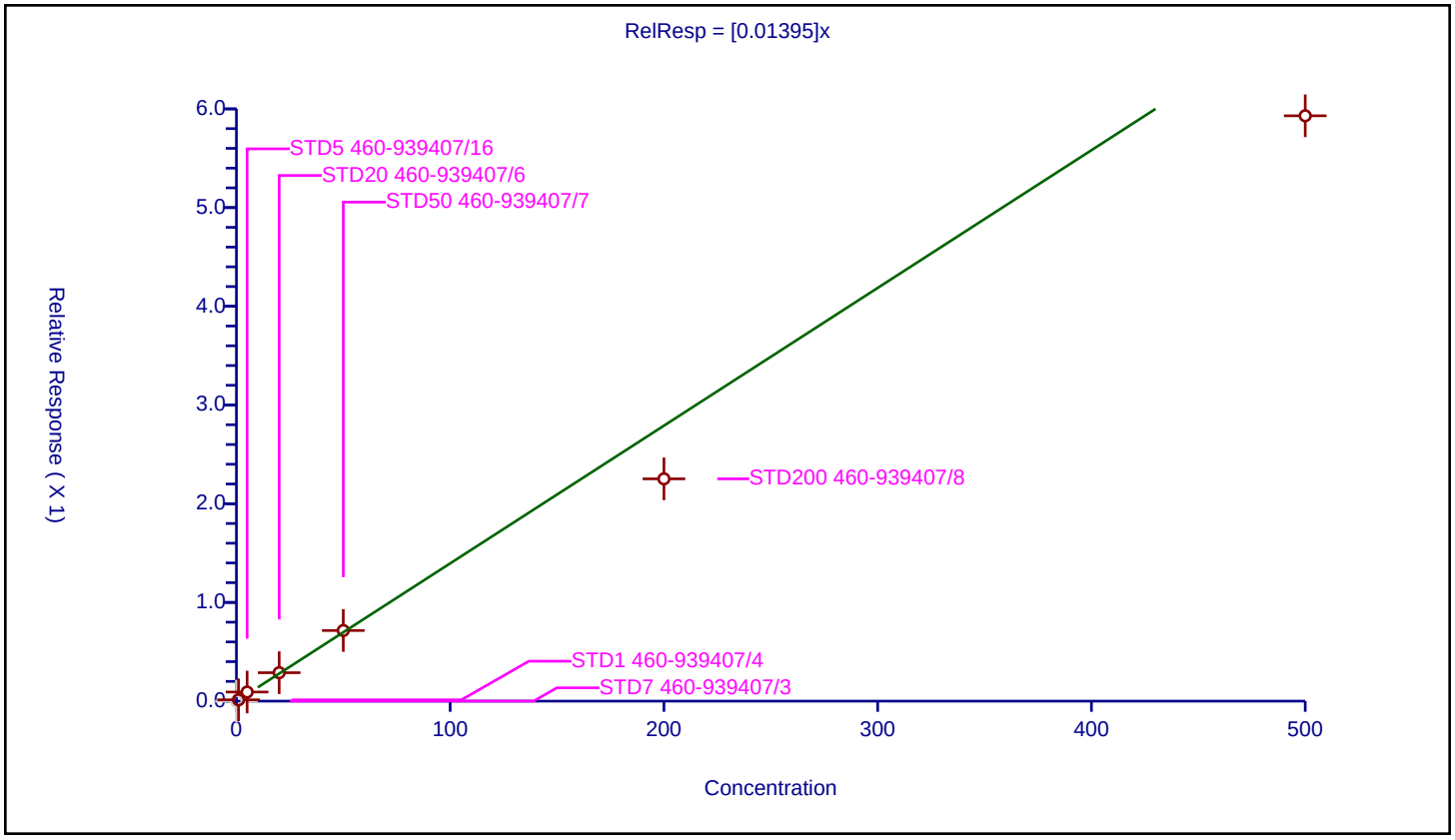
Curve Coefficients

Intercept:	0
Slope:	0.01395

Error Coefficients

Standard Error:	42800
Relative Standard Error:	18.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.013417	50.0	417390.0	0.013417	Y
3	STD5 460-939407/16	5.0	0.092324	50.0	497161.0	0.018465	Y
4	STD20 460-939407/6	20.0	0.288143	50.0	515889.0	0.014407	Y
5	STD50 460-939407/7	50.0	0.71569	50.0	534240.0	0.014314	Y
6	STD200 460-939407/8	200.0	2.252197	50.0	655471.0	0.011261	Y
7	STD500 460-939407/9	500.0	5.930164	50.0	764591.0	0.01186	Y



10/25/2023
1:26 PM

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

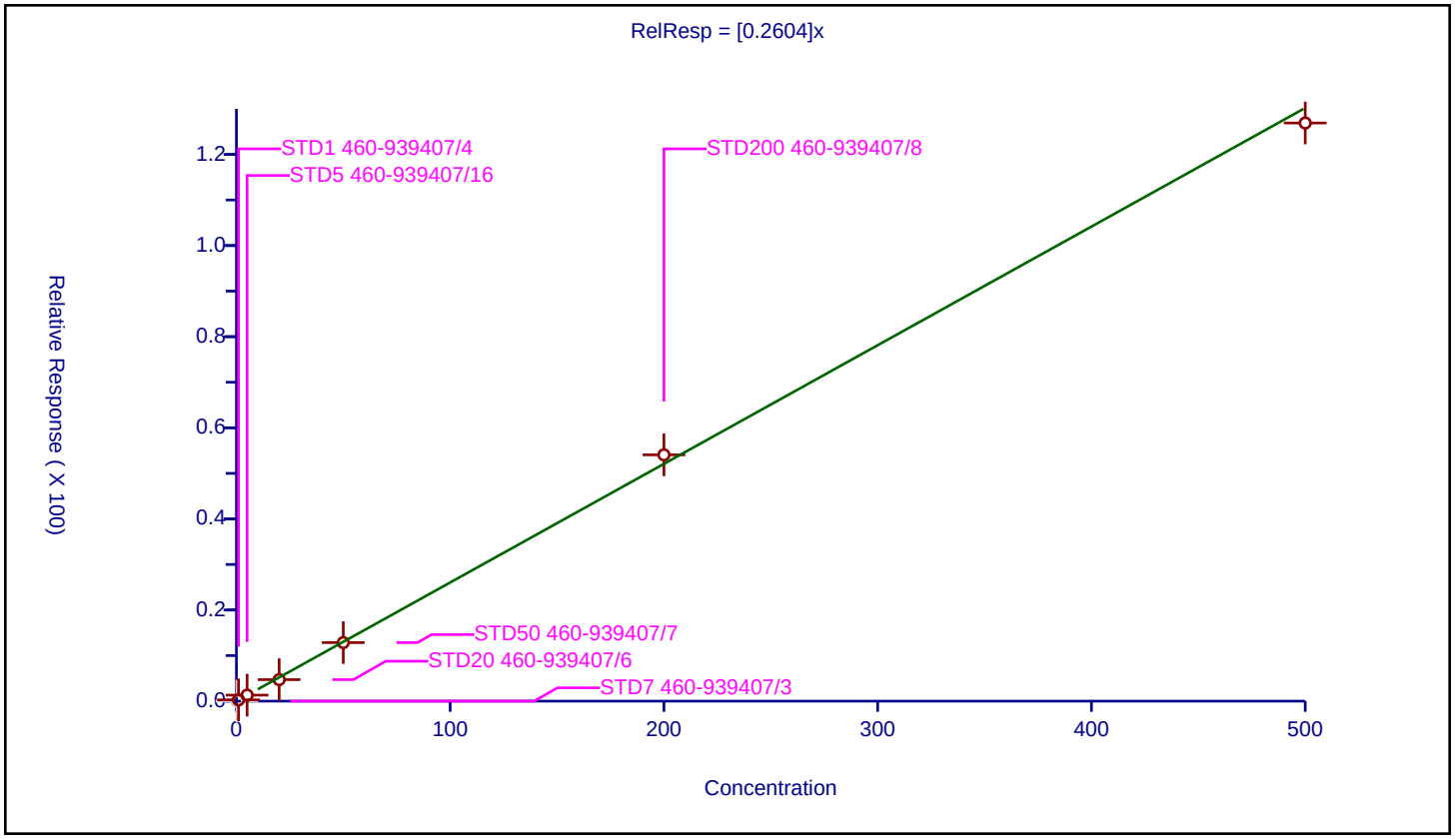
Curve Coefficients

Intercept:	0
Slope:	0.2604

Error Coefficients

Standard Error:	926000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.281152	50.0	417390.0	0.281152	Y
3	STD5 460-939407/16	5.0	1.3209	50.0	497161.0	0.26418	Y
4	STD20 460-939407/6	20.0	4.718748	50.0	515889.0	0.235937	Y
5	STD50 460-939407/7	50.0	12.853961	50.0	534240.0	0.257079	Y
6	STD200 460-939407/8	200.0	54.065702	50.0	655471.0	0.270329	Y
7	STD500 460-939407/9	500.0	126.899349	50.0	764591.0	0.253799	Y



10/25/2023
1:26 PM

Calibration / Chlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

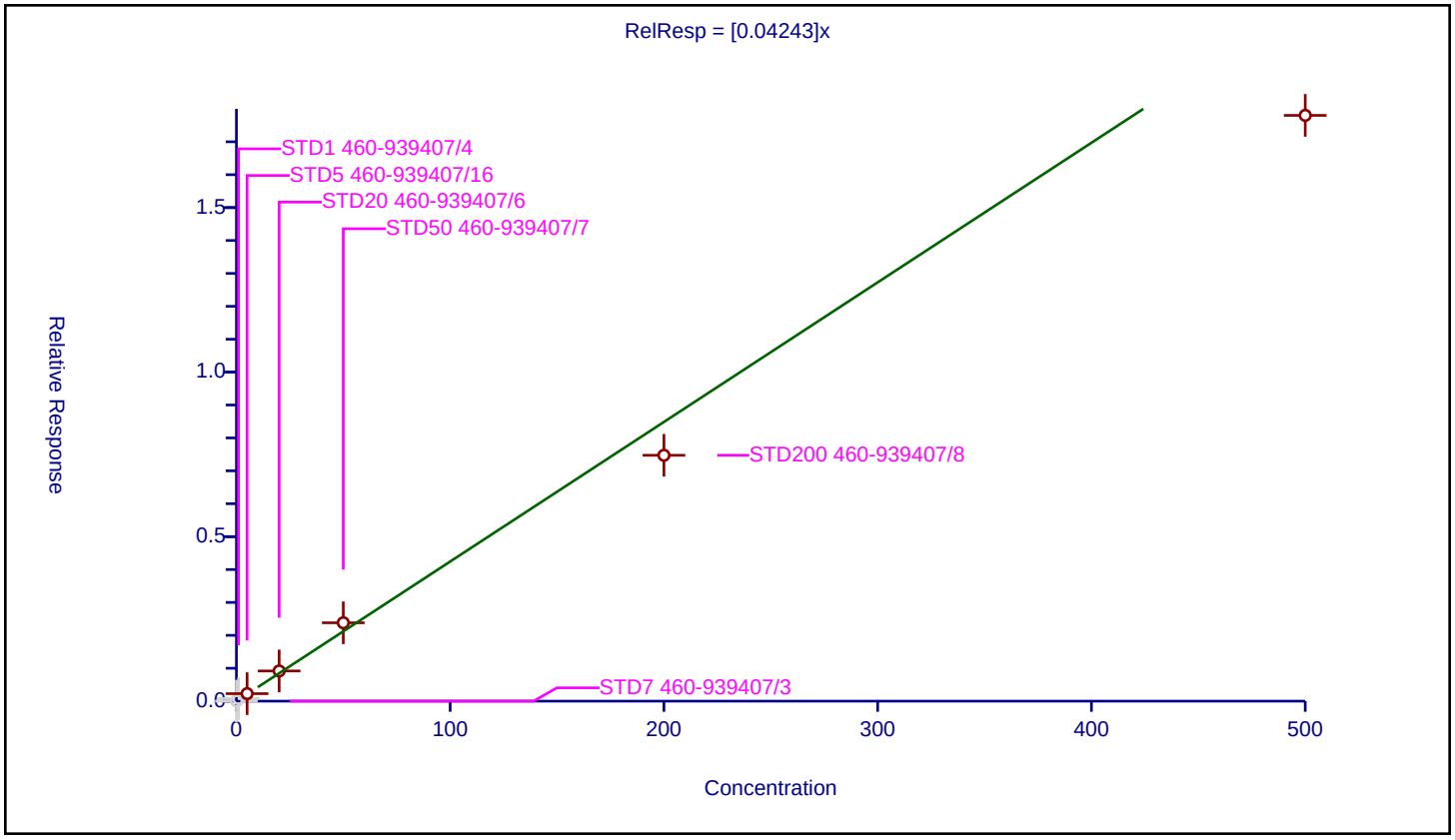
Curve Coefficients

Intercept:	0
Slope:	0.04243

Error Coefficients

Standard Error:	145000
Relative Standard Error:	13.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.078584	50.0	417390.0	0.078584	N
3	STD5 460-939407/16	5.0	0.228196	50.0	497161.0	0.045639	Y
4	STD20 460-939407/6	20.0	0.917639	50.0	515889.0	0.045882	Y
5	STD50 460-939407/7	50.0	2.381795	50.0	534240.0	0.047636	Y
6	STD200 460-939407/8	200.0	7.472718	50.0	655471.0	0.037364	Y
7	STD500 460-939407/9	500.0	17.802524	50.0	764591.0	0.035605	Y



10/25/2023
1:26 PM

Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

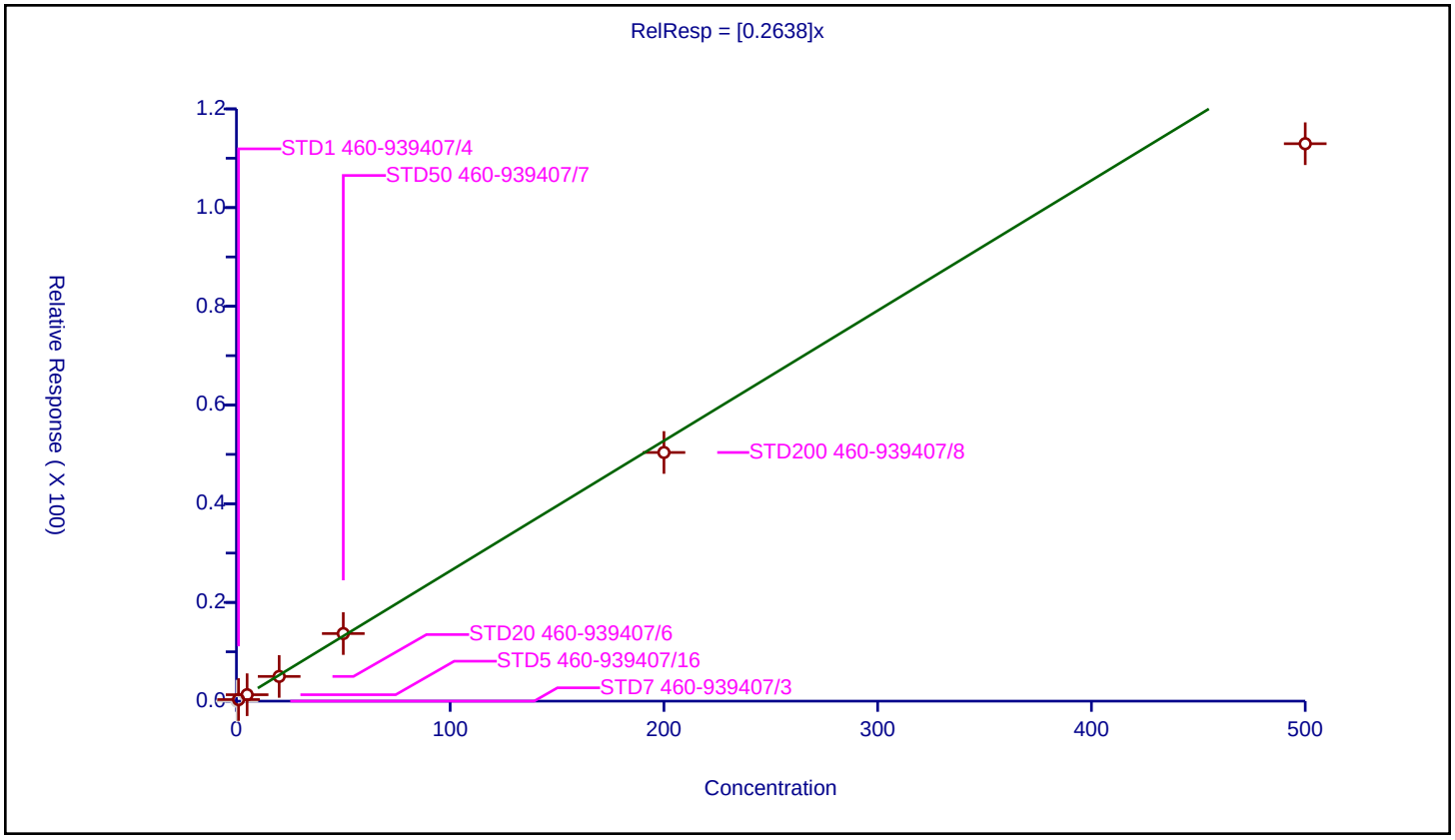
Curve Coefficients

Intercept:	0
Slope:	0.2638

Error Coefficients

Standard Error:	830000
Relative Standard Error:	12.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.320204	50.0	417390.0	0.320204	Y
3	STD5 460-939407/16	5.0	1.302194	50.0	497161.0	0.260439	Y
4	STD20 460-939407/6	20.0	5.007182	50.0	515889.0	0.250359	Y
5	STD50 460-939407/7	50.0	13.692535	50.0	534240.0	0.273851	Y
6	STD200 460-939407/8	200.0	50.383694	50.0	655471.0	0.251918	Y
7	STD500 460-939407/9	500.0	112.944829	50.0	764591.0	0.22589	Y



10/25/2023
1:26 PM

Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

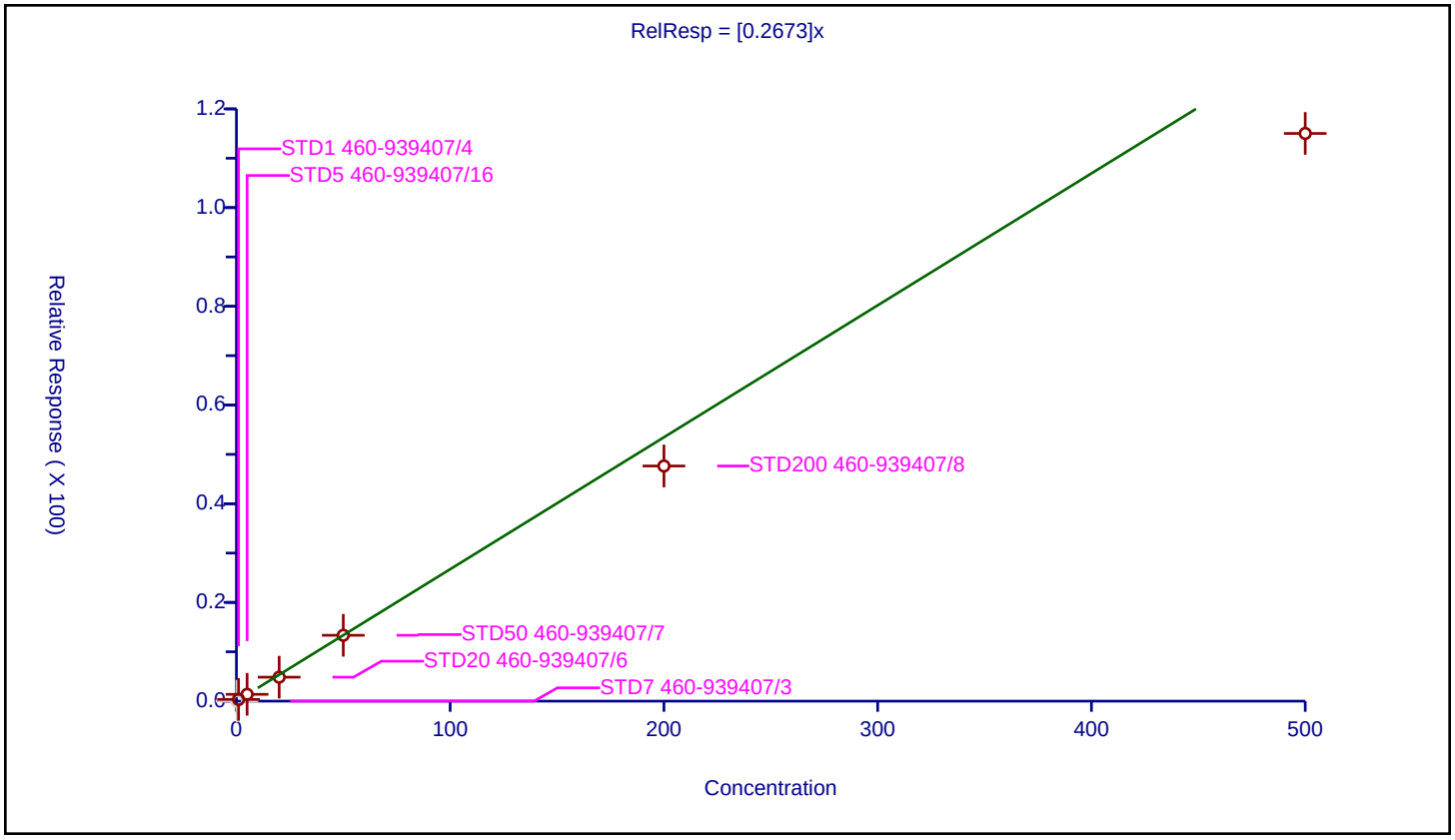
Curve Coefficients

Intercept:	0
Slope:	0.2673

Error Coefficients

Standard Error:	837000
Relative Standard Error:	16.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.350631	50.0	417390.0	0.350631	Y
3	STD5 460-939407/16	5.0	1.377119	50.0	497161.0	0.275424	Y
4	STD20 460-939407/6	20.0	4.855308	50.0	515889.0	0.242765	Y
5	STD50 460-939407/7	50.0	13.341289	50.0	534240.0	0.266826	Y
6	STD200 460-939407/8	200.0	47.643984	50.0	655471.0	0.23822	Y
7	STD500 460-939407/9	500.0	115.02568	50.0	764591.0	0.230051	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

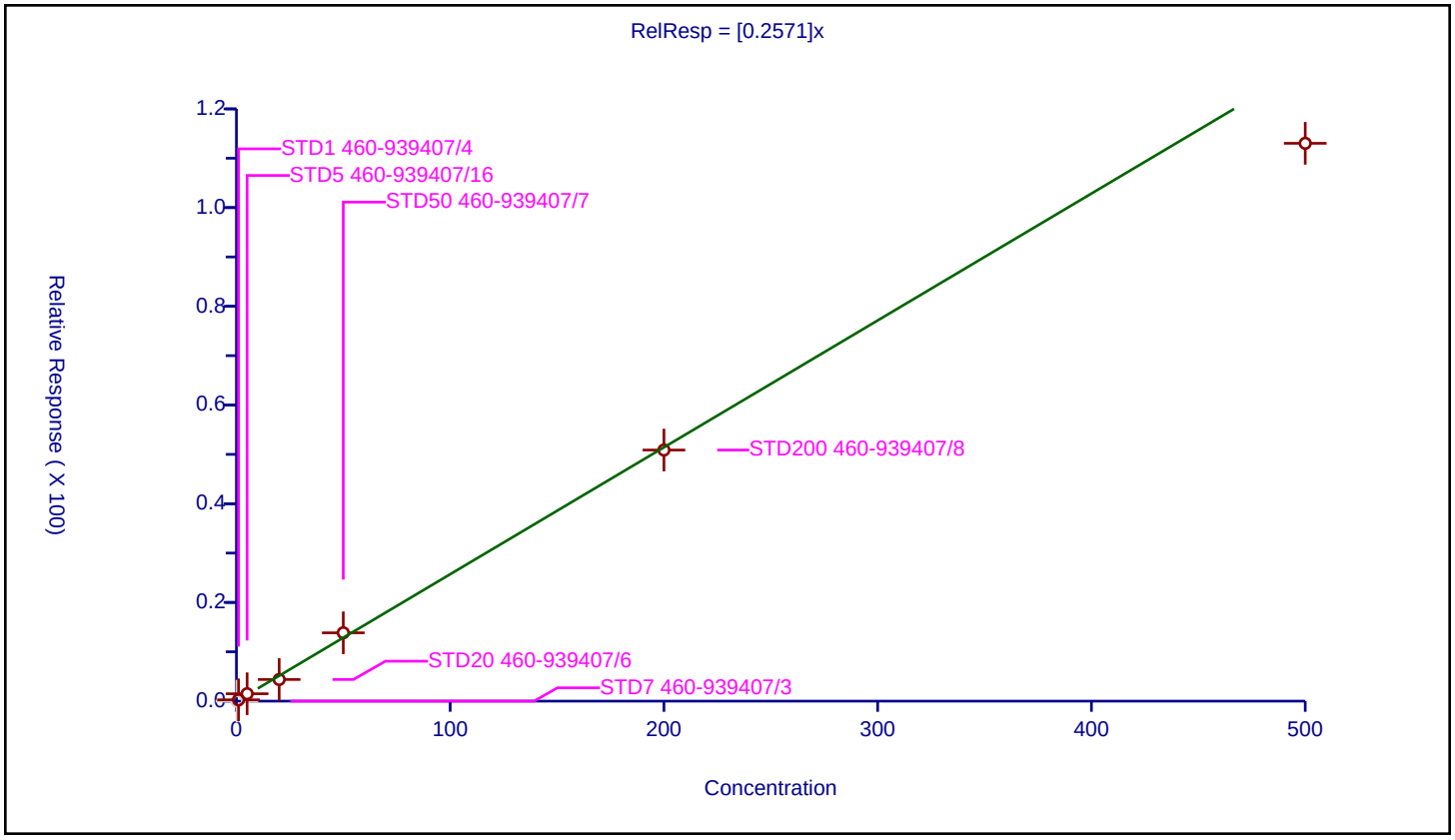
Curve Coefficients

Intercept:	0
Slope:	0.2571

Error Coefficients

Standard Error:	831000
Relative Standard Error:	11.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.267256	50.0	417390.0	0.267256	Y
3	STD5 460-939407/16	5.0	1.494989	50.0	497161.0	0.298998	Y
4	STD20 460-939407/6	20.0	4.382047	50.0	515889.0	0.219102	Y
5	STD50 460-939407/7	50.0	13.846867	50.0	534240.0	0.276937	Y
6	STD200 460-939407/8	200.0	50.877308	50.0	655471.0	0.254387	Y
7	STD500 460-939407/9	500.0	113.025853	50.0	764591.0	0.226052	Y



10/25/2023
1:26 PM

Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

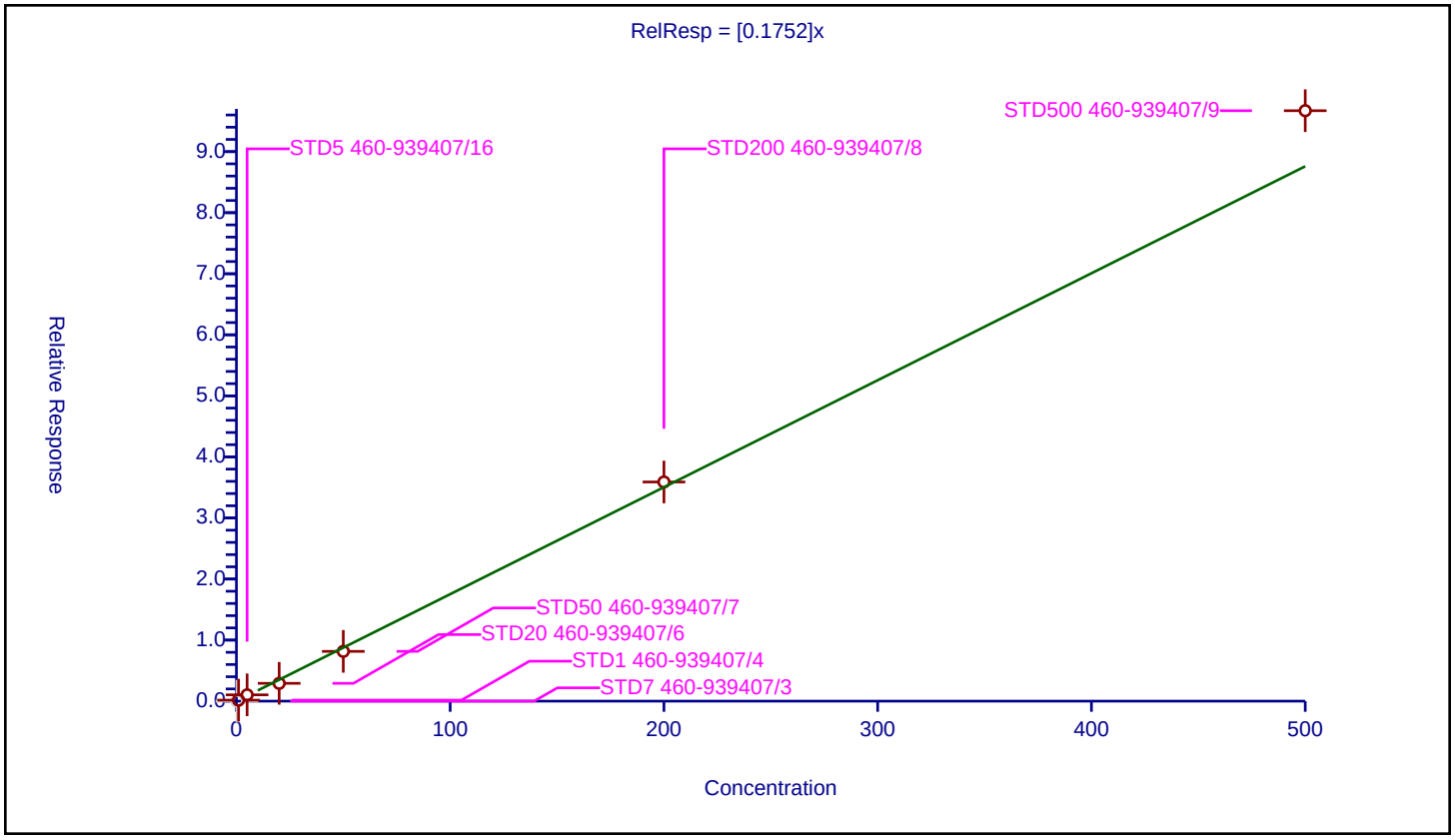
Curve Coefficients

Intercept:	0
Slope:	0.1752

Error Coefficients

Standard Error:	695000
Relative Standard Error:	12.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.162678	50.0	417390.0	0.162678	Y
3	STD5 460-939407/16	5.0	1.033166	50.0	497161.0	0.206633	Y
4	STD20 460-939407/6	20.0	2.918167	50.0	515889.0	0.145908	Y
5	STD50 460-939407/7	50.0	8.152048	50.0	534240.0	0.163041	Y
6	STD200 460-939407/8	200.0	35.895638	50.0	655471.0	0.179478	Y
7	STD500 460-939407/9	500.0	96.703466	50.0	764591.0	0.193407	Y



10/25/2023
1:26 PM

Calibration / Chloroethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

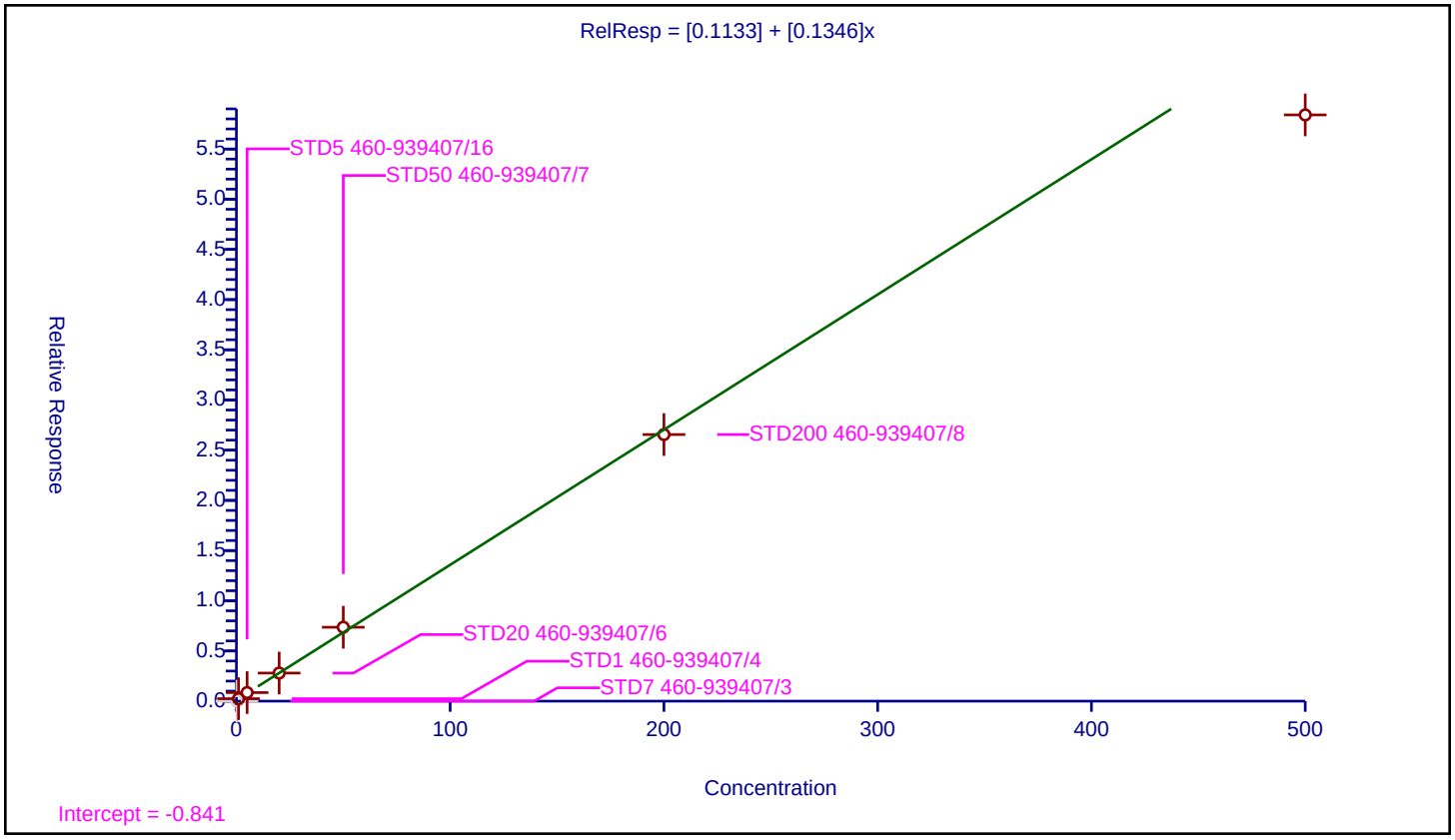
Curve Coefficients

Intercept:	0.1133
Slope:	0.1346

Error Coefficients

Standard Error:	481000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.245095	50.0	417390.0	0.245095	Y
3	STD5 460-939407/16	5.0	0.853949	50.0	497161.0	0.17079	Y
4	STD20 460-939407/6	20.0	2.796629	50.0	515889.0	0.139831	Y
5	STD50 460-939407/7	50.0	7.361766	50.0	534240.0	0.147235	Y
6	STD200 460-939407/8	200.0	26.558612	50.0	655471.0	0.132793	Y
7	STD500 460-939407/9	500.0	58.399589	50.0	764591.0	0.116799	Y



10/25/2023
1:26 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

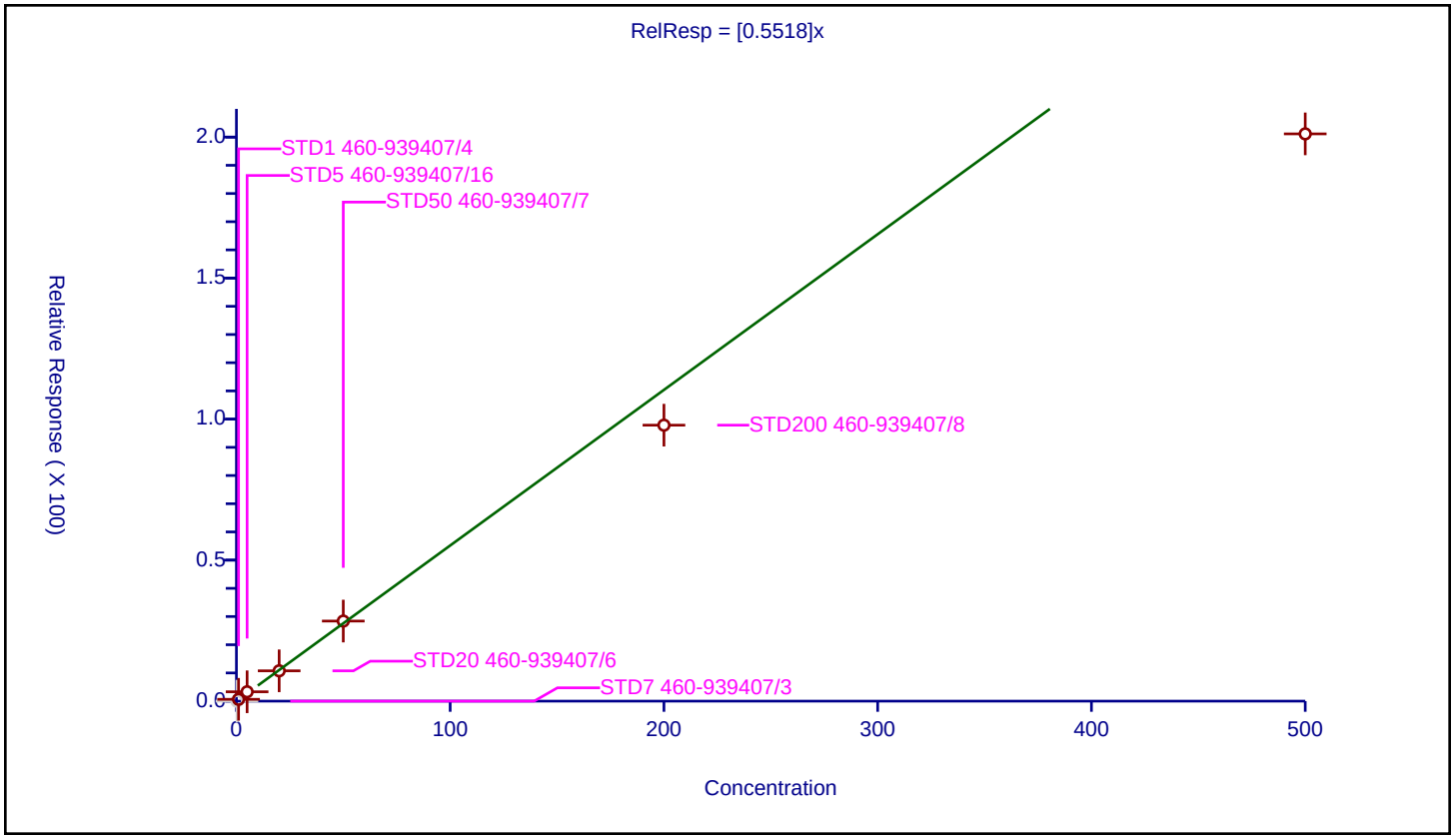
Curve Coefficients

Intercept:	0
Slope:	0.5518

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	17.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.649153	50.0	417390.0	0.649153	Y
3	STD5 460-939407/16	5.0	3.323471	50.0	497161.0	0.664694	Y
4	STD20 460-939407/6	20.0	10.75367	50.0	515889.0	0.537683	Y
5	STD50 460-939407/7	50.0	28.392857	50.0	534240.0	0.567857	Y
6	STD200 460-939407/8	200.0	97.849409	50.0	655471.0	0.489247	Y
7	STD500 460-939407/9	500.0	201.142637	50.0	764591.0	0.402285	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

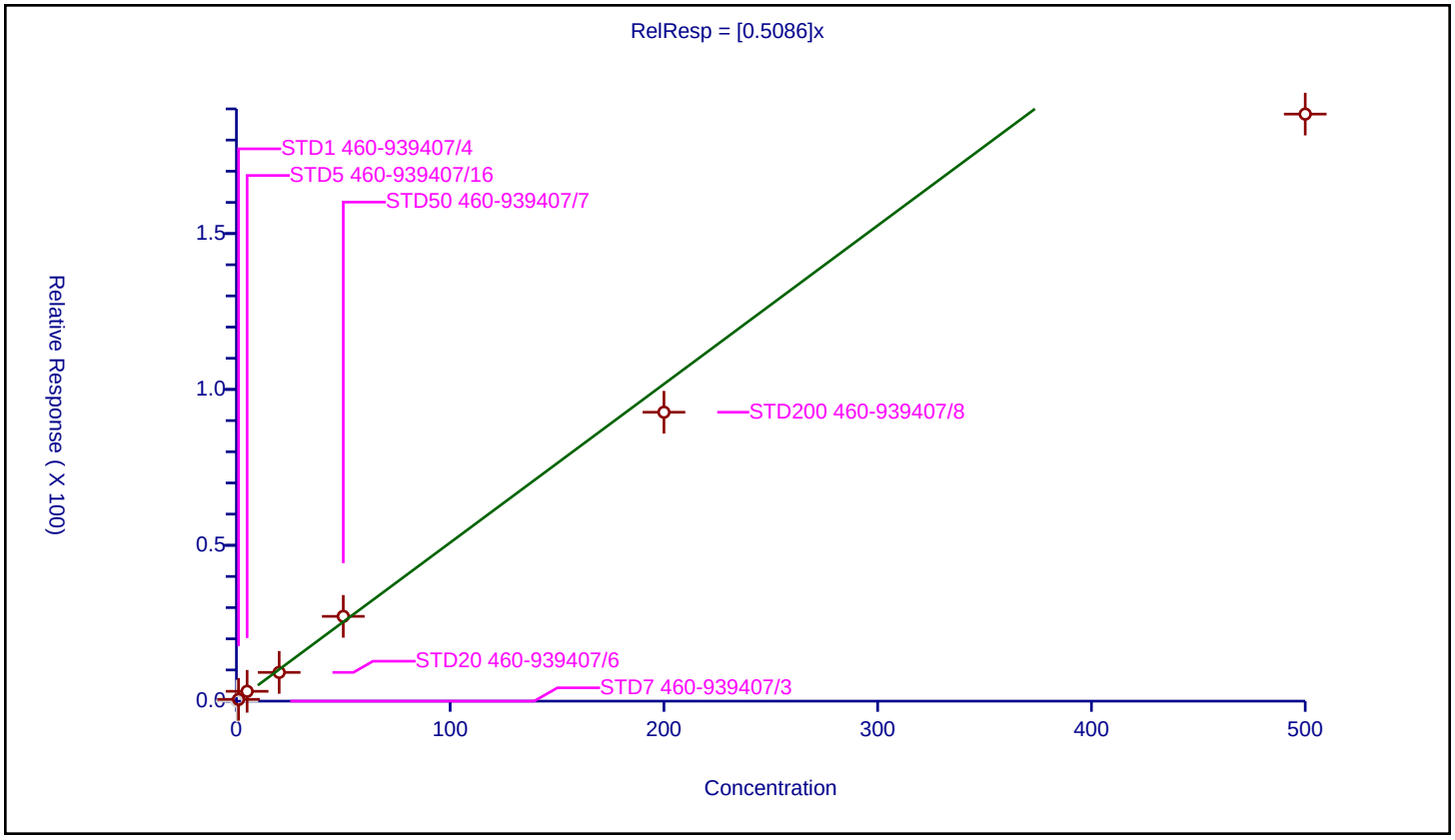
Curve Coefficients

Intercept:	0
Slope:	0.5086

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	18.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.25	0.0	50.0	412033.0	0.0	N
2	STD1 460-939407/4	1.0	0.574283	50.0	417390.0	0.574283	Y
3	STD5 460-939407/16	5.0	3.159439	50.0	497161.0	0.631888	Y
4	STD20 460-939407/6	20.0	9.226888	50.0	515889.0	0.461344	Y
5	STD50 460-939407/7	50.0	27.204721	50.0	534240.0	0.544094	Y
6	STD200 460-939407/8	200.0	92.690142	50.0	655471.0	0.463451	Y
7	STD500 460-939407/9	500.0	188.330297	50.0	764591.0	0.376661	Y



Calibration / Pentane

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

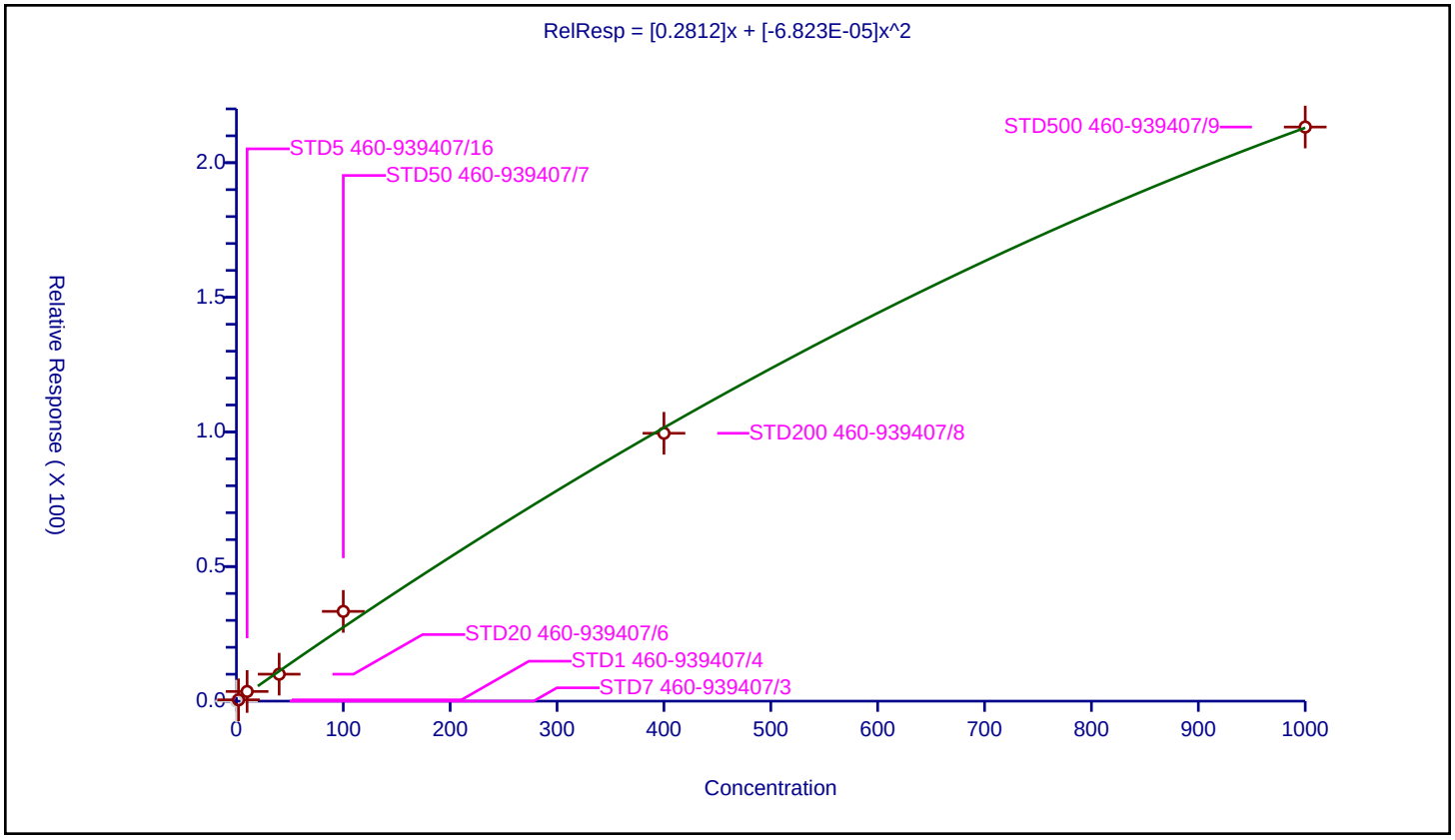
Curve Coefficients

Intercept:	0
Slope:	0.2812
Second Order:	-6.823E-05

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	19.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	2.0	0.485397	50.0	417390.0	0.242699	Y
3	STD5 460-939407/16	10.0	3.595012	50.0	497161.0	0.359501	Y
4	STD20 460-939407/6	40.0	10.021342	50.0	515889.0	0.250534	Y
5	STD50 460-939407/7	100.0	33.332491	50.0	534240.0	0.333325	Y
6	STD200 460-939407/8	400.0	99.507911	50.0	655471.0	0.24877	Y
7	STD500 460-939407/9	1000.0	213.261927	50.0	764591.0	0.213262	Y



10/25/2023
1:26 PM

Calibration / Ethanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

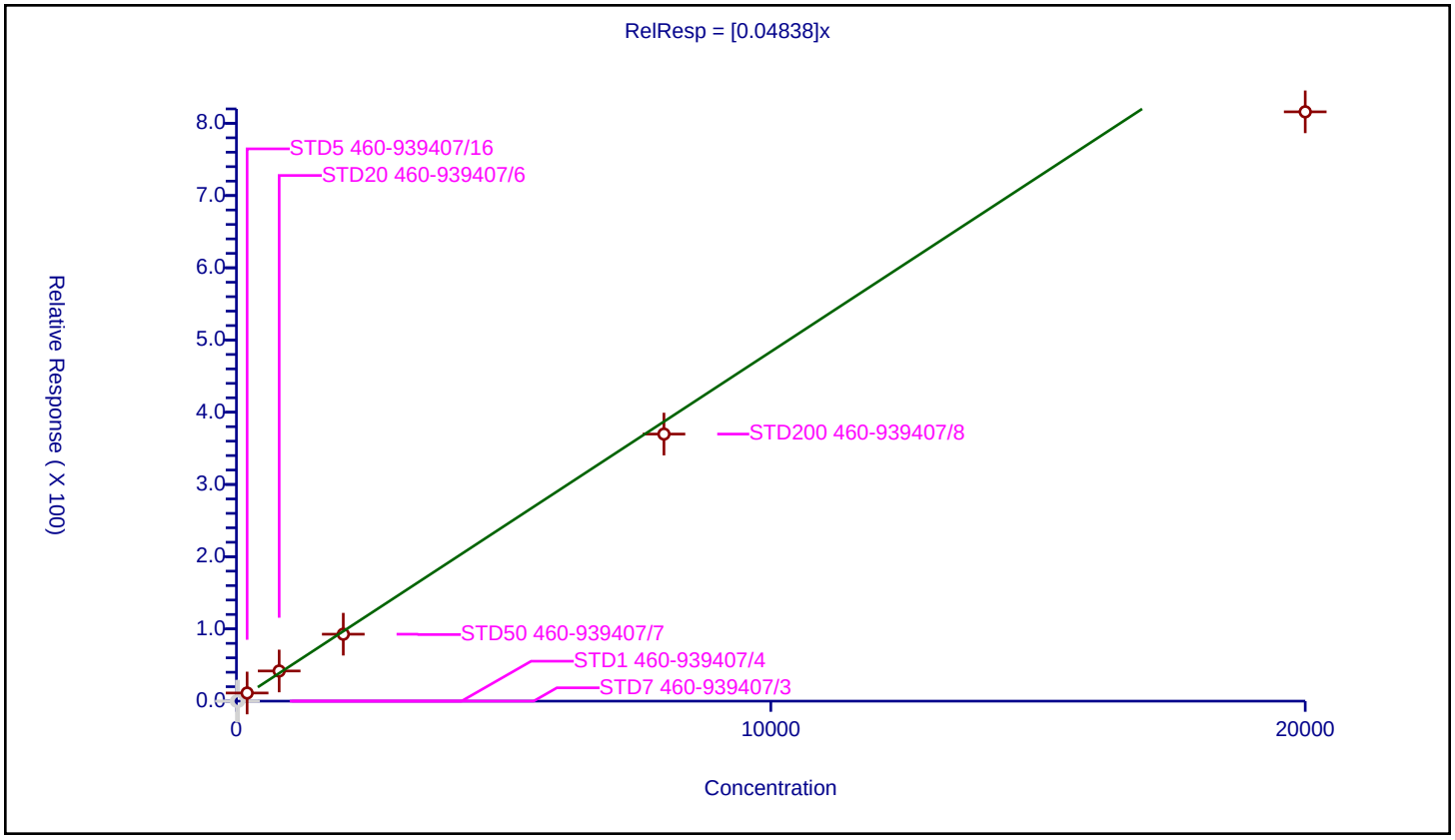
Curve Coefficients

Intercept:	0
Slope:	0.04838

Error Coefficients

Standard Error:	111000
Relative Standard Error:	12.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	40.0	0.0	1000.0	169587.0	0.0	N
3	STD5 460-939407/16	200.0	11.266353	1000.0	213645.0	0.056332	Y
4	STD20 460-939407/6	800.0	41.769451	1000.0	168233.0	0.052212	Y
5	STD50 460-939407/7	2000.0	92.694149	1000.0	192558.0	0.046347	Y
6	STD200 460-939407/8	8000.0	369.762655	1000.0	218121.0	0.04622	Y
7	STD500 460-939407/9	20000.0	815.943237	1000.0	253123.0	0.040797	Y



10/25/2023
1:26 PM

Calibration / Ethyl ether

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

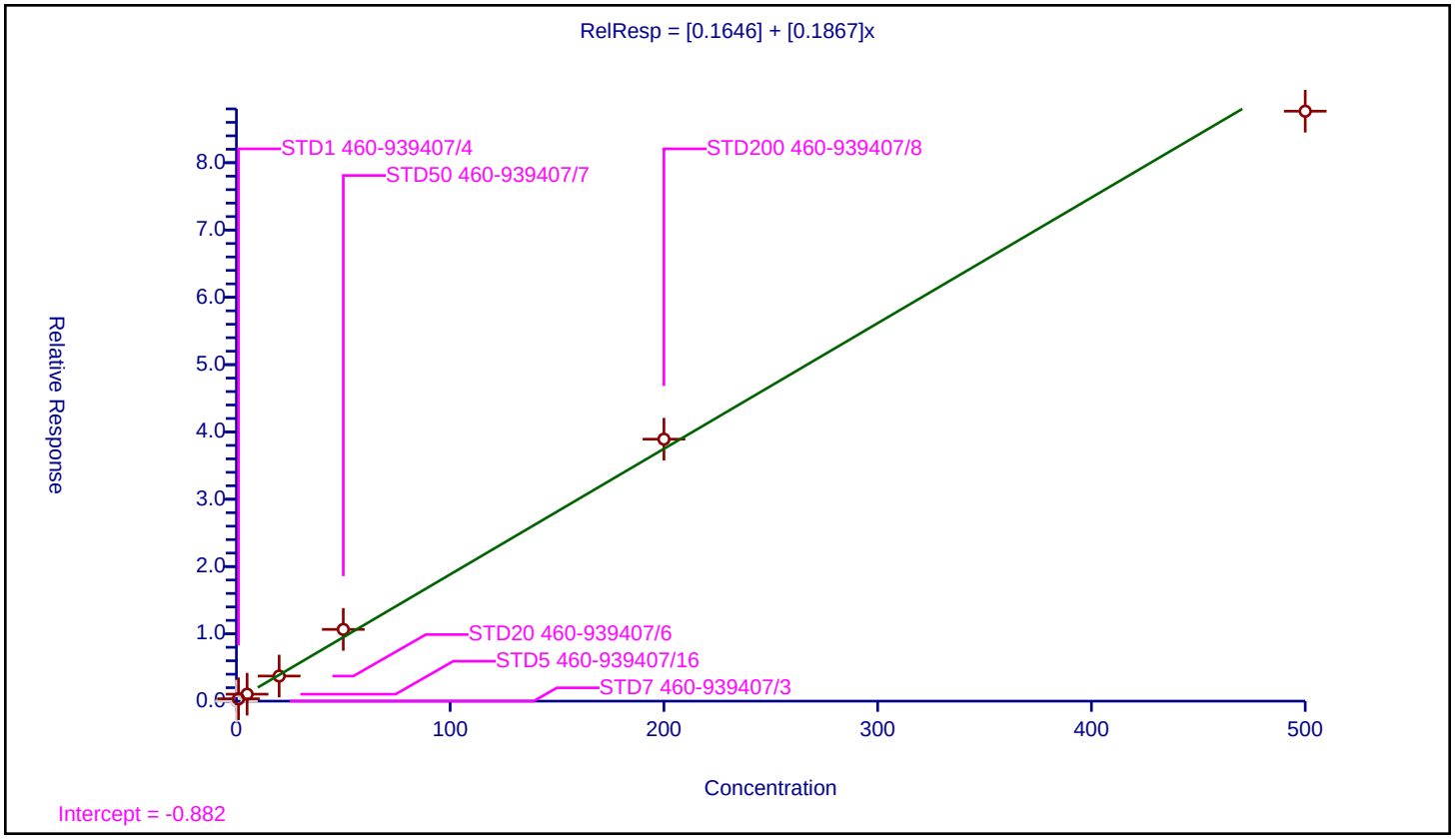
Curve Coefficients

Intercept:	0.1646
Slope:	0.1867

Error Coefficients

Standard Error:	720000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.353746	50.0	417390.0	0.353746	Y
3	STD5 460-939407/16	5.0	1.03387	50.0	497161.0	0.206774	Y
4	STD20 460-939407/6	20.0	3.729388	50.0	515889.0	0.186469	Y
5	STD50 460-939407/7	50.0	10.658599	50.0	534240.0	0.213172	Y
6	STD200 460-939407/8	200.0	38.925292	50.0	655471.0	0.194626	Y
7	STD500 460-939407/9	500.0	87.655884	50.0	764591.0	0.175312	Y



10/25/2023
1:26 PM

Calibration / 2-Methyl-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

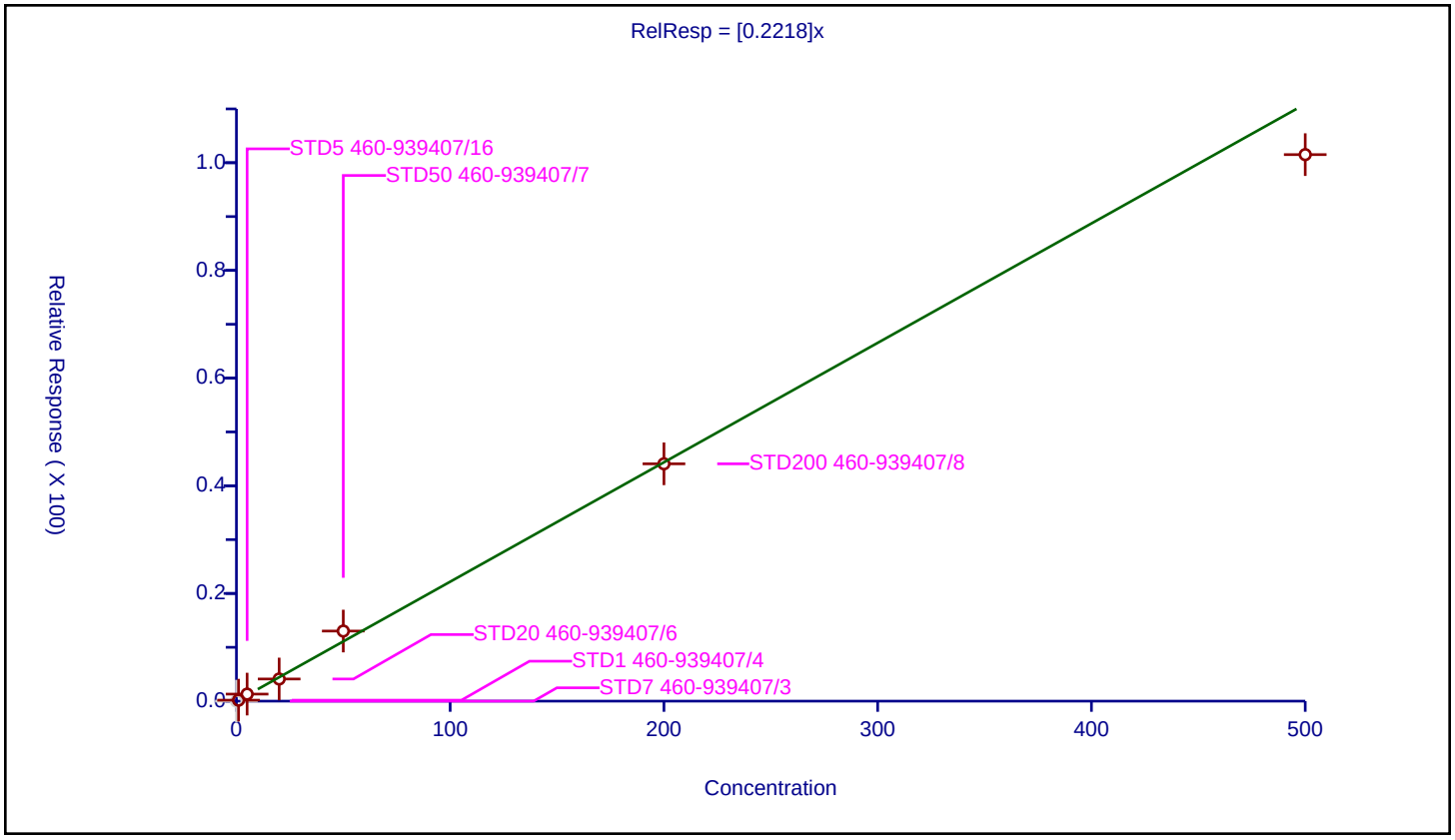
Curve Coefficients

Intercept:	0
Slope:	0.2218

Error Coefficients

Standard Error:	744000
Relative Standard Error:	14.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.179928	50.0	417390.0	0.179928	Y
3	STD5 460-939407/16	5.0	1.307323	50.0	497161.0	0.261465	Y
4	STD20 460-939407/6	20.0	4.113676	50.0	515889.0	0.205684	Y
5	STD50 460-939407/7	50.0	13.017838	50.0	534240.0	0.260357	Y
6	STD200 460-939407/8	200.0	44.078838	50.0	655471.0	0.220394	Y
7	STD500 460-939407/9	500.0	101.507865	50.0	764591.0	0.203016	Y



10/25/2023
1:26 PM

Calibration / 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

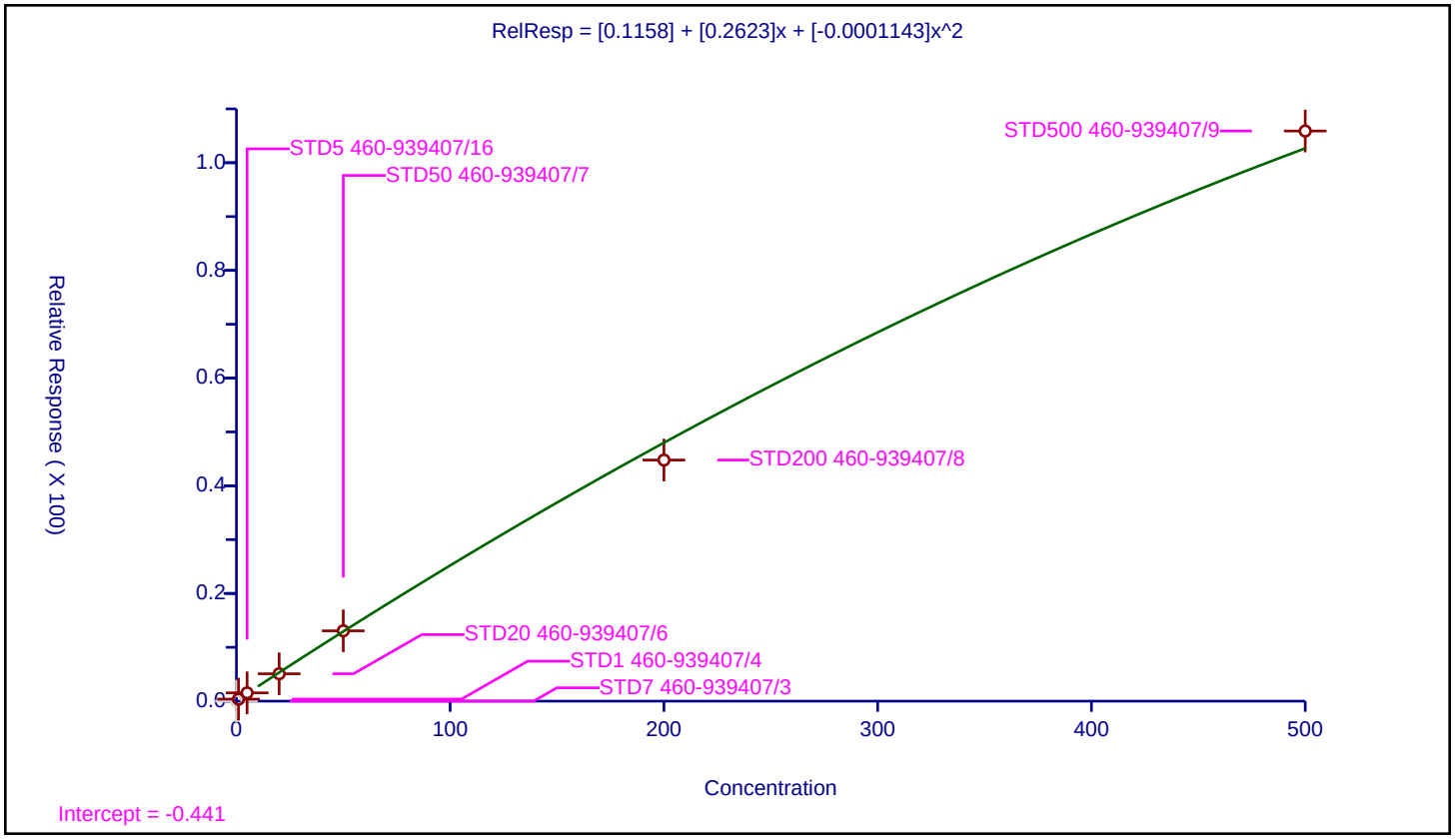
Curve Coefficients

Intercept:	0.1158
Slope:	0.2623
Second Order:	-0.0001143

Error Coefficients

Standard Error:	998000
Relative Standard Error:	7.6
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.373991	50.0	417390.0	0.373991	Y
3	STD5 460-939407/16	5.0	1.538536	50.0	497161.0	0.307707	Y
4	STD20 460-939407/6	20.0	5.084718	50.0	515889.0	0.254236	Y
5	STD50 460-939407/7	50.0	13.059486	50.0	534240.0	0.26119	Y
6	STD200 460-939407/8	200.0	44.778488	50.0	655471.0	0.223892	Y
7	STD500 460-939407/9	500.0	105.889685	50.0	764591.0	0.211779	Y



10/25/2023
1:26 PM

Calibration / 1,1,1-Trifluoro-2,2-dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

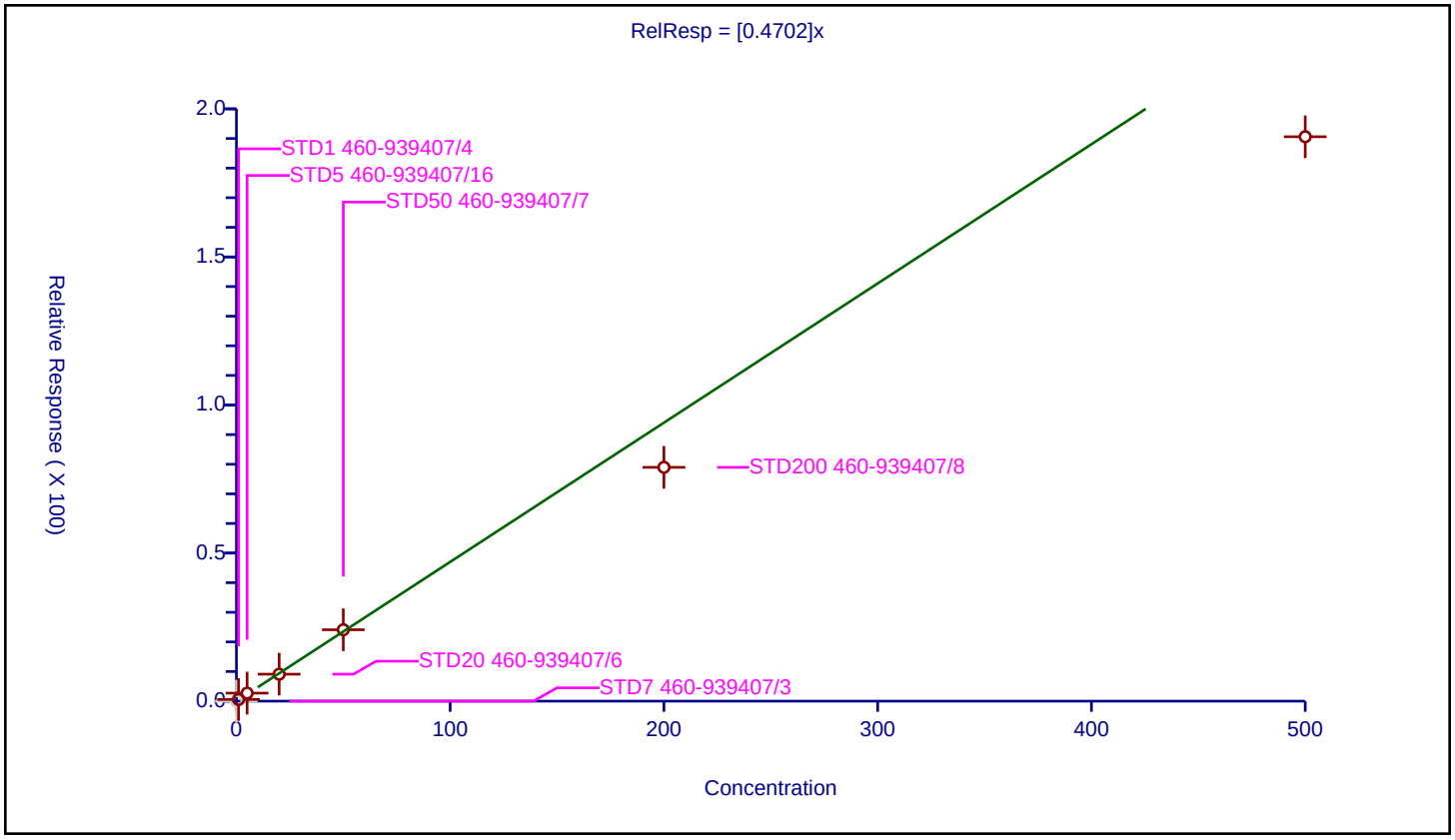
Curve Coefficients

Intercept:	0
Slope:	0.4702

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	16.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.565179	50.0	417390.0	0.565179	Y
3	STD5 460-939407/16	5.0	2.712703	50.0	497161.0	0.542541	Y
4	STD20 460-939407/6	20.0	9.103509	50.0	515889.0	0.455175	Y
5	STD50 460-939407/7	50.0	24.104709	50.0	534240.0	0.482094	Y
6	STD200 460-939407/8	200.0	78.956887	50.0	655471.0	0.394784	Y
7	STD500 460-939407/9	500.0	190.587778	50.0	764591.0	0.381176	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

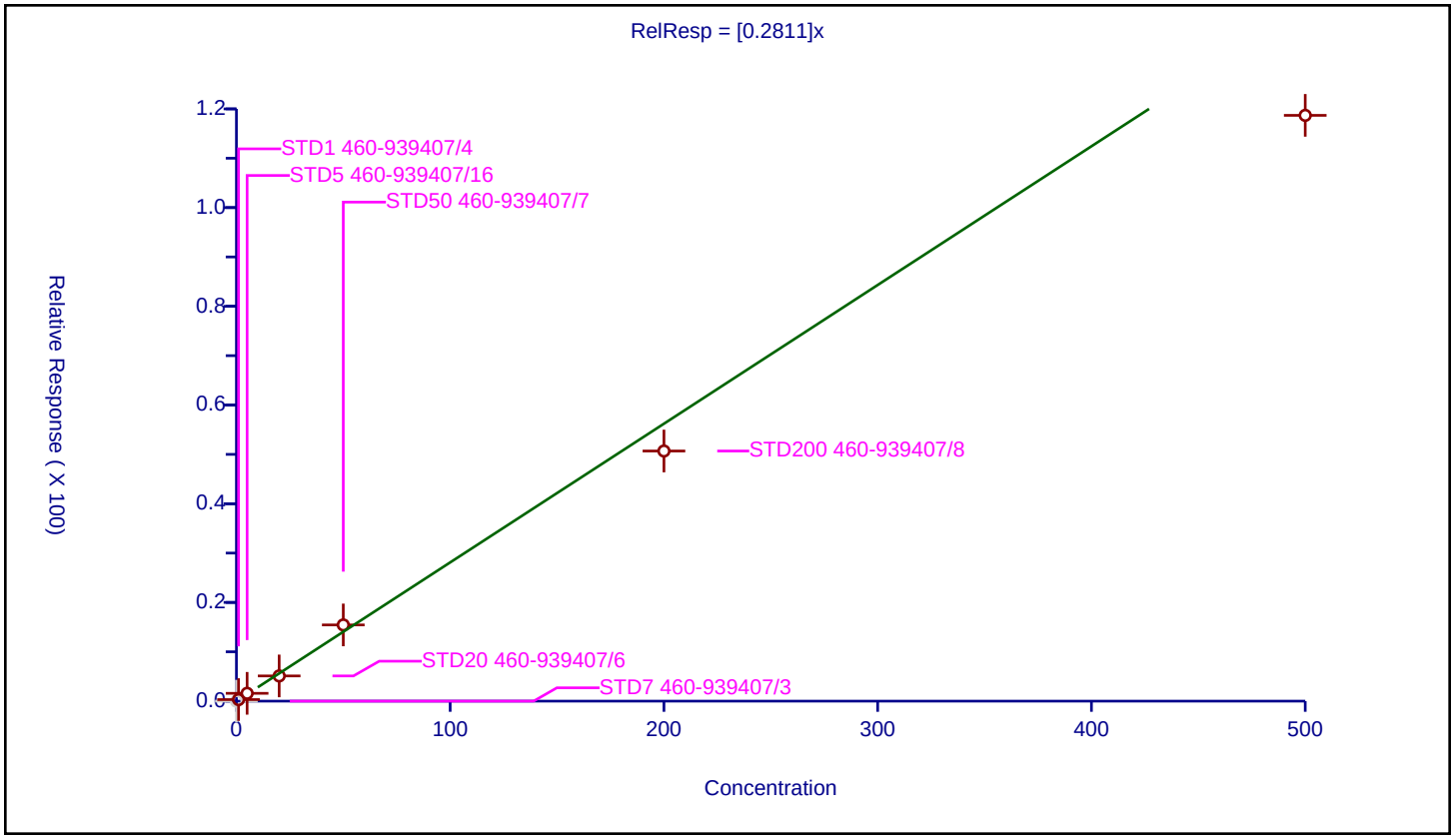
Curve Coefficients

Intercept:	0
Slope:	0.2811

Error Coefficients

Standard Error:	868000
Relative Standard Error:	12.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.314215	50.0	417390.0	0.314215	Y
3	STD5 460-939407/16	5.0	1.585804	50.0	497161.0	0.317161	Y
4	STD20 460-939407/6	20.0	5.105943	50.0	515889.0	0.255297	Y
5	STD50 460-939407/7	50.0	15.444463	50.0	534240.0	0.308889	Y
6	STD200 460-939407/8	200.0	50.679359	50.0	655471.0	0.253397	Y
7	STD500 460-939407/9	500.0	118.686461	50.0	764591.0	0.237373	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

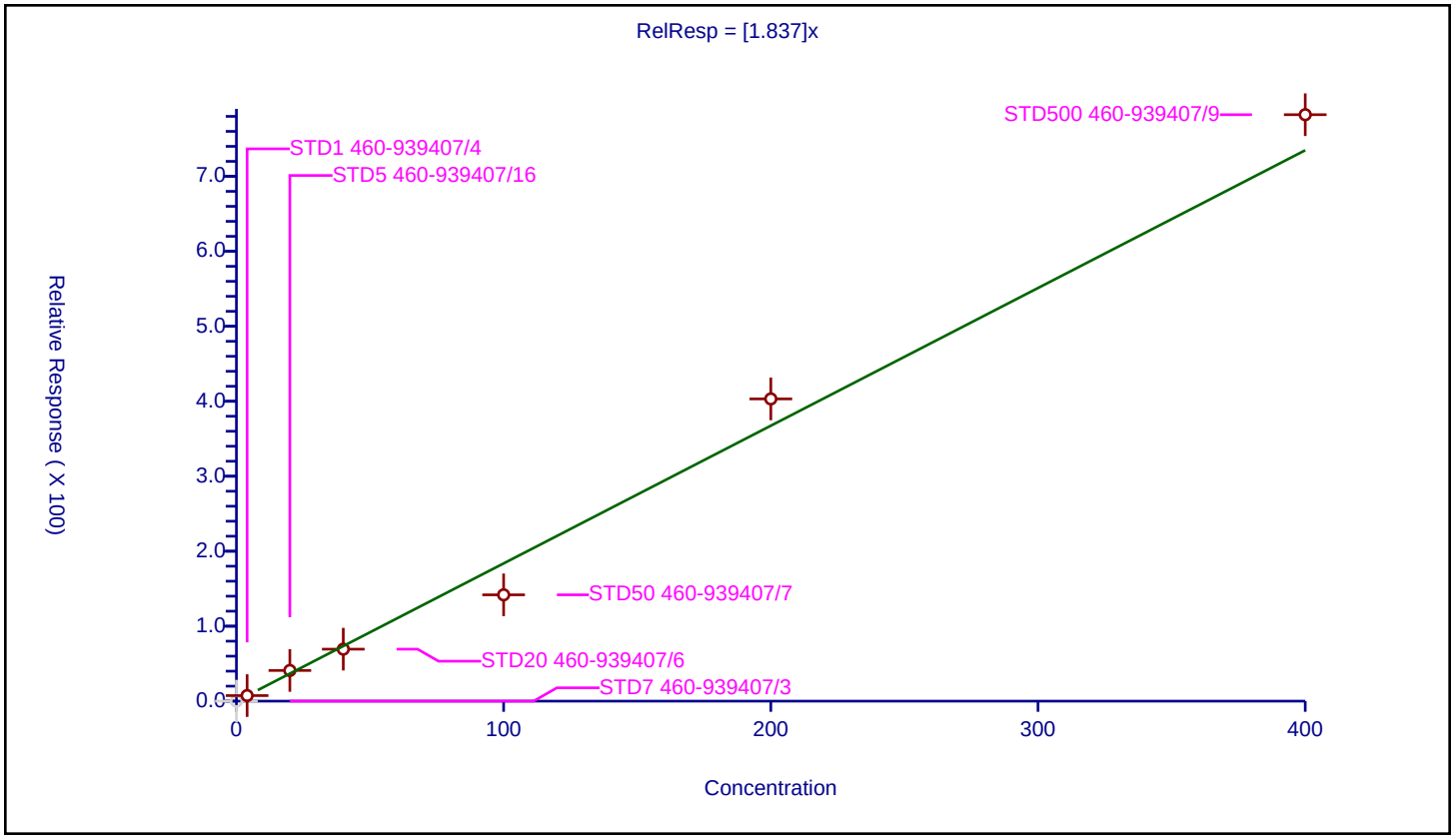
Curve Coefficients

Intercept:	0
Slope:	1.837

Error Coefficients

Standard Error:	97500
Relative Standard Error:	12.8
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	4.0	7.412125	1000.0	169587.0	1.853031	Y
3	STD5 460-939407/16	20.0	40.918346	1000.0	213645.0	2.045917	Y
4	STD20 460-939407/6	40.0	69.32647	1000.0	168233.0	1.733162	Y
5	STD50 460-939407/7	100.0	141.811818	1000.0	192558.0	1.418118	Y
6	STD200 460-939407/8	200.0	403.156963	1000.0	218121.0	2.015785	Y
7	STD500 460-939407/9	400.0	782.240255	1000.0	253123.0	1.955601	Y



10/25/2023
1:26 PM

Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

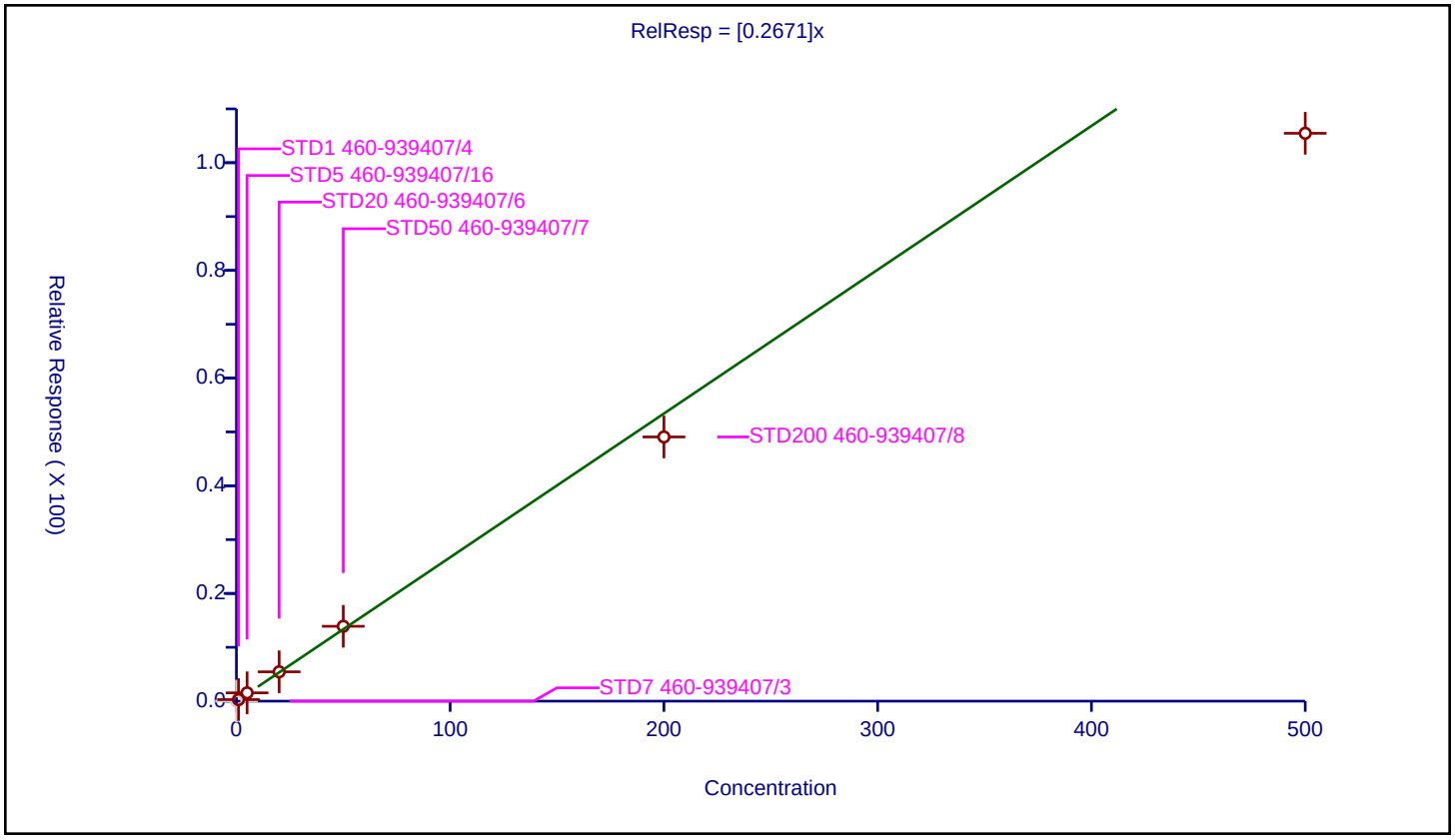
Curve Coefficients

Intercept:	0
Slope:	0.2671

Error Coefficients

Standard Error:	780000
Relative Standard Error:	12.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.287022	50.0	417390.0	0.287022	Y
3	STD5 460-939407/16	5.0	1.543564	50.0	497161.0	0.308713	Y
4	STD20 460-939407/6	20.0	5.448653	50.0	515889.0	0.272433	Y
5	STD50 460-939407/7	50.0	13.905361	50.0	534240.0	0.278107	Y
6	STD200 460-939407/8	200.0	49.071355	50.0	655471.0	0.245357	Y
7	STD500 460-939407/9	500.0	105.47031	50.0	764591.0	0.210941	Y



10/25/2023
1:26 PM

Calibration / Acetone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

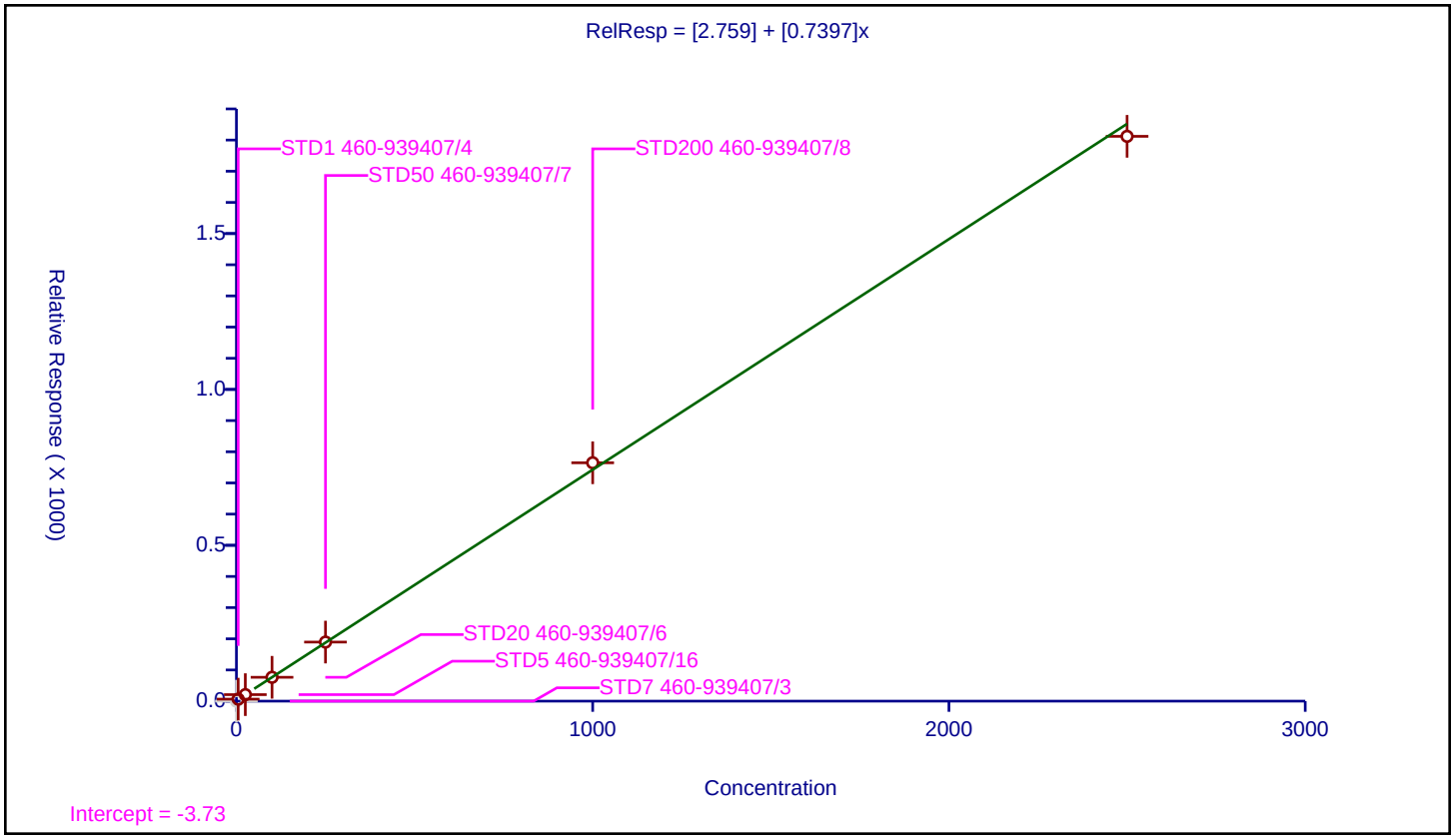
Curve Coefficients

Intercept:	2.759
Slope:	0.7397

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	2.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	5.0	6.470529	250.0	168147.0	1.294106	Y
3	STD5 460-939407/16	25.0	20.905477	250.0	220337.0	0.836219	Y
4	STD20 460-939407/6	100.0	76.486052	250.0	185828.0	0.764861	Y
5	STD50 460-939407/7	250.0	189.515918	250.0	210233.0	0.758064	Y
6	STD200 460-939407/8	1000.0	764.70292	250.0	278006.0	0.764703	Y
7	STD500 460-939407/9	2500.0	1811.959211	250.0	303954.0	0.724784	Y



10/25/2023
1:26 PM

Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

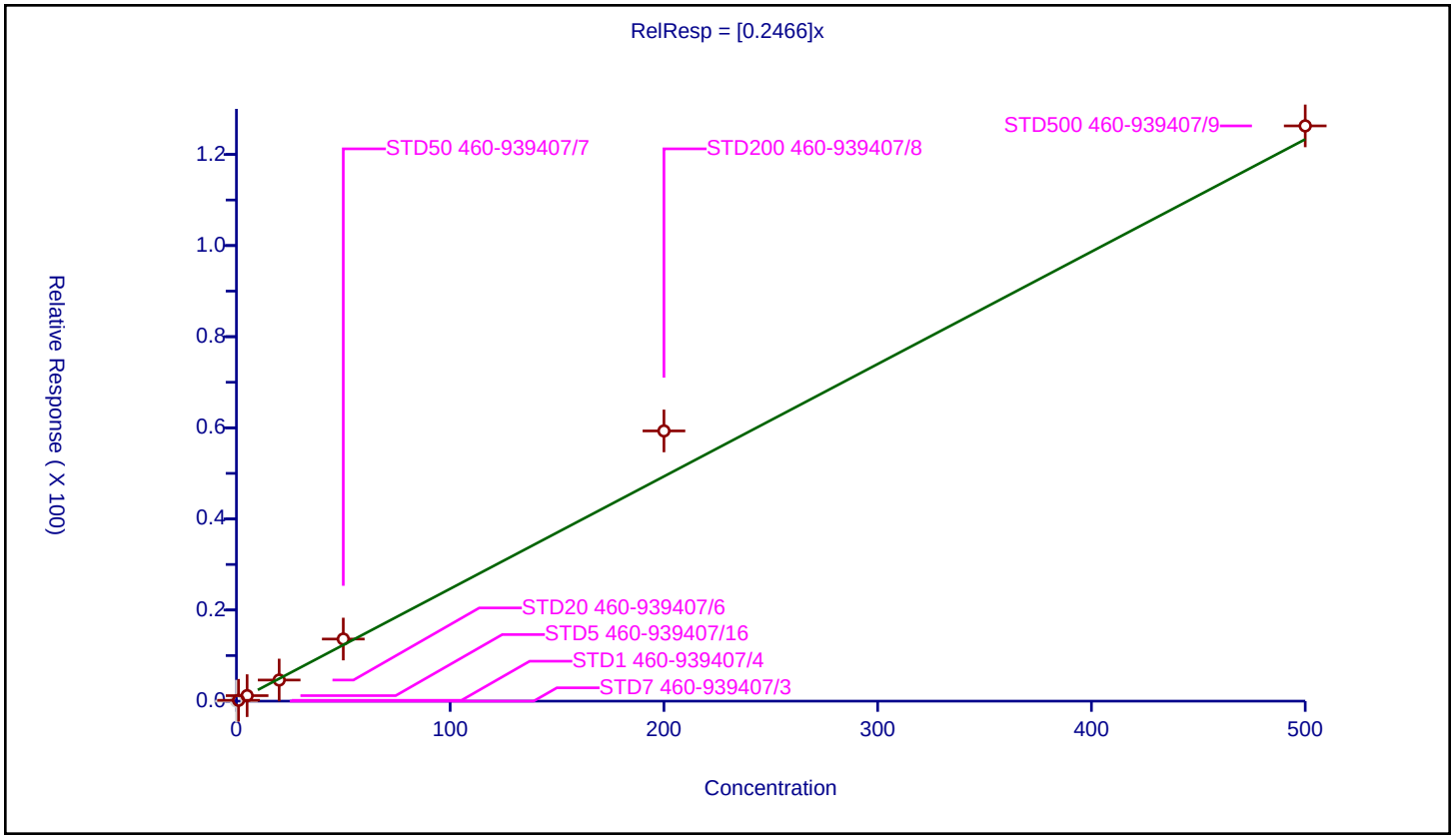
Curve Coefficients

Intercept:	0
Slope:	0.2466

Error Coefficients

Standard Error:	933000
Relative Standard Error:	15.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.185079	50.0	417390.0	0.185079	Y
3	STD5 460-939407/16	5.0	1.206752	50.0	497161.0	0.24135	Y
4	STD20 460-939407/6	20.0	4.633361	50.0	515889.0	0.231668	Y
5	STD50 460-939407/7	50.0	13.632543	50.0	534240.0	0.272651	Y
6	STD200 460-939407/8	200.0	59.314142	50.0	655471.0	0.296571	Y
7	STD500 460-939407/9	500.0	126.267704	50.0	764591.0	0.252535	Y



Calibration / Isopropyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

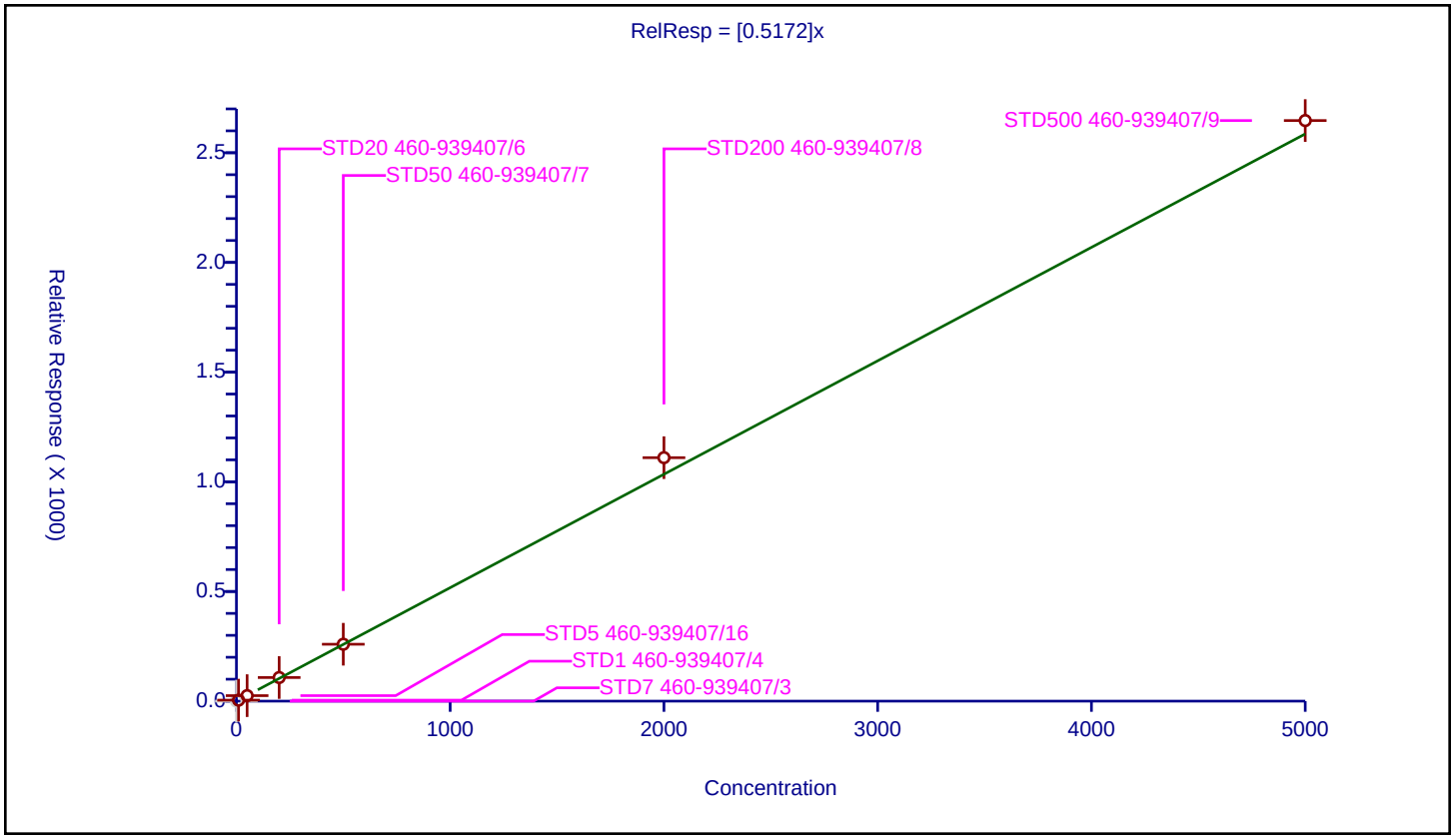
Curve Coefficients

Intercept:	0
Slope:	0.5172

Error Coefficients

Standard Error:	318000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	10.0	4.593512	1000.0	169587.0	0.459351	Y
3	STD5 460-939407/16	50.0	25.121112	1000.0	213645.0	0.502422	Y
4	STD20 460-939407/6	200.0	107.58888	1000.0	168233.0	0.537944	Y
5	STD50 460-939407/7	500.0	259.459488	1000.0	192558.0	0.518919	Y
6	STD200 460-939407/8	2000.0	1110.030671	1000.0	218121.0	0.555015	Y
7	STD500 460-939407/9	5000.0	2646.804123	1000.0	253123.0	0.529361	Y



Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

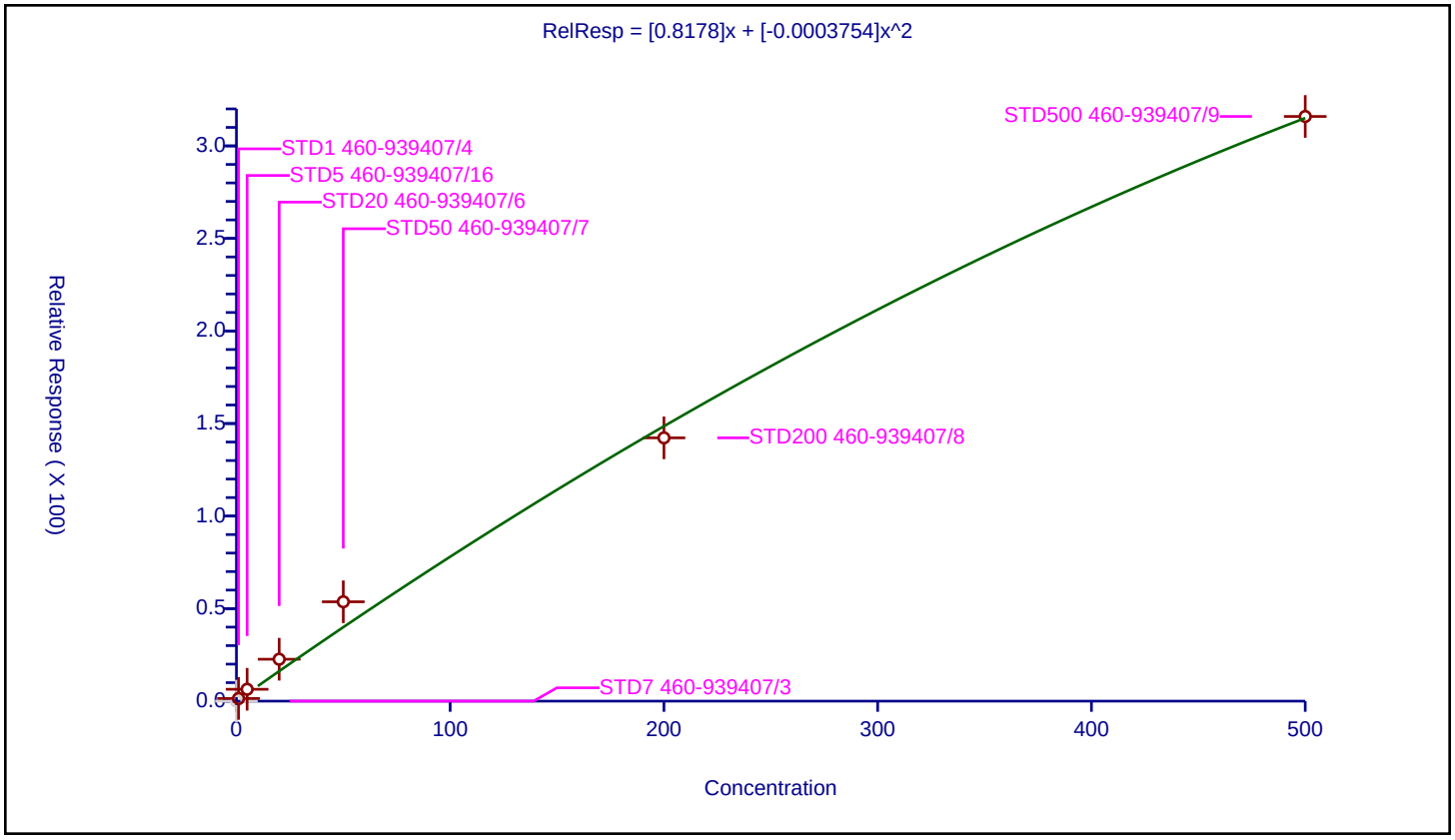
Curve Coefficients

Intercept:	0
Slope:	0.8178
Second Order:	-0.0003754

Error Coefficients

Standard Error:	2610000
Relative Standard Error:	55.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	1.446489	50.0	417390.0	1.446489	Y
3	STD5 460-939407/16	5.0	6.405169	50.0	497161.0	1.281034	Y
4	STD20 460-939407/6	20.0	22.64082	50.0	515889.0	1.132041	Y
5	STD50 460-939407/7	50.0	53.689166	50.0	534240.0	1.073783	Y
6	STD200 460-939407/8	200.0	142.26396	50.0	655471.0	0.71132	Y
7	STD500 460-939407/9	500.0	315.910075	50.0	764591.0	0.63182	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

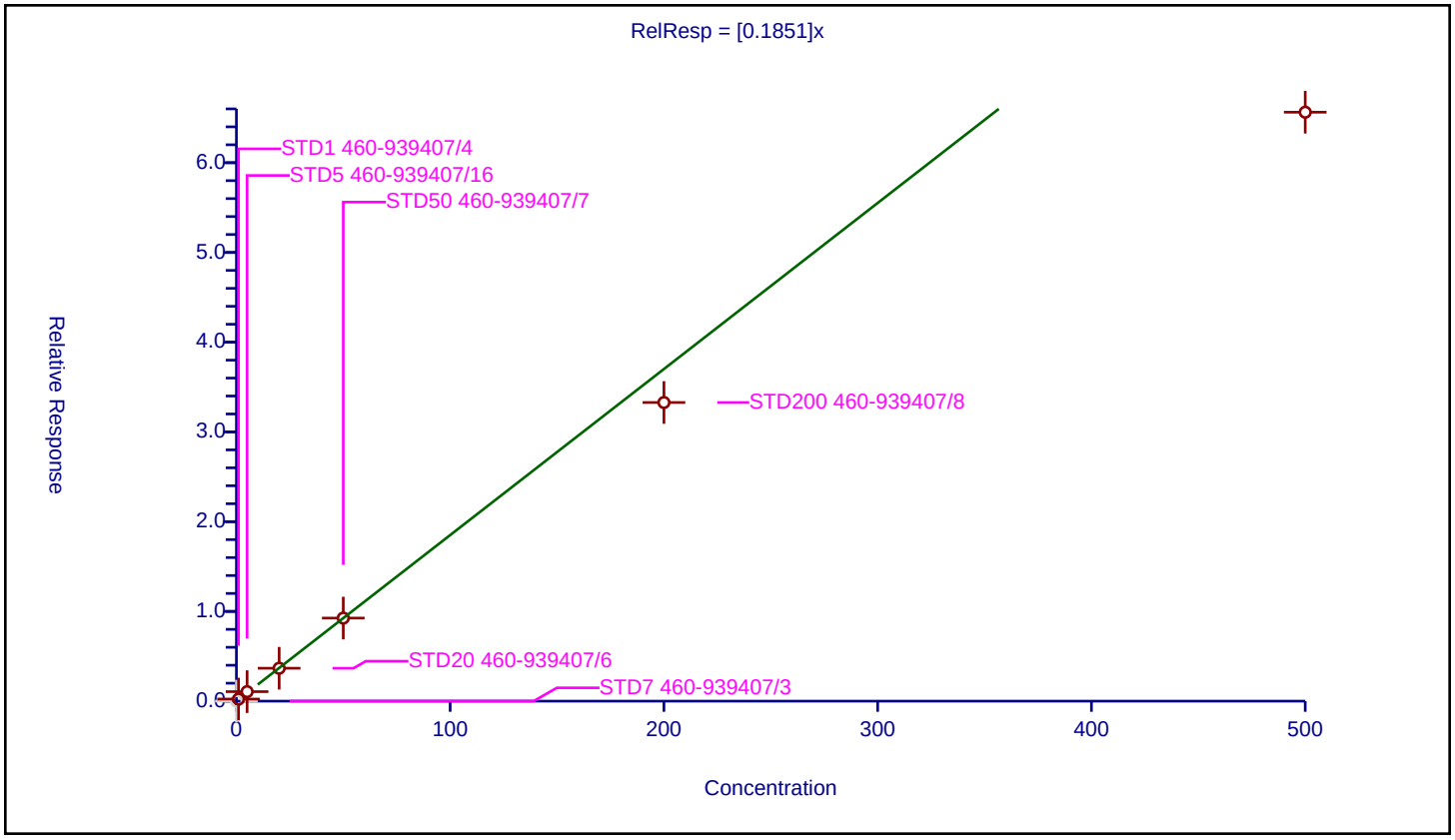
Curve Coefficients

Intercept:	0
Slope:	0.1851

Error Coefficients

Standard Error:	492000
Relative Standard Error:	19.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.953

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.232636	50.0	417390.0	0.232636	Y
3	STD5 460-939407/16	5.0	1.057806	50.0	497161.0	0.211561	Y
4	STD20 460-939407/6	20.0	3.666389	50.0	515889.0	0.183319	Y
5	STD50 460-939407/7	50.0	9.256795	50.0	534240.0	0.185136	Y
6	STD200 460-939407/8	200.0	33.278665	50.0	655471.0	0.166393	Y
7	STD500 460-939407/9	500.0	65.628944	50.0	764591.0	0.131258	Y



10/25/2023
1:26 PM

Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

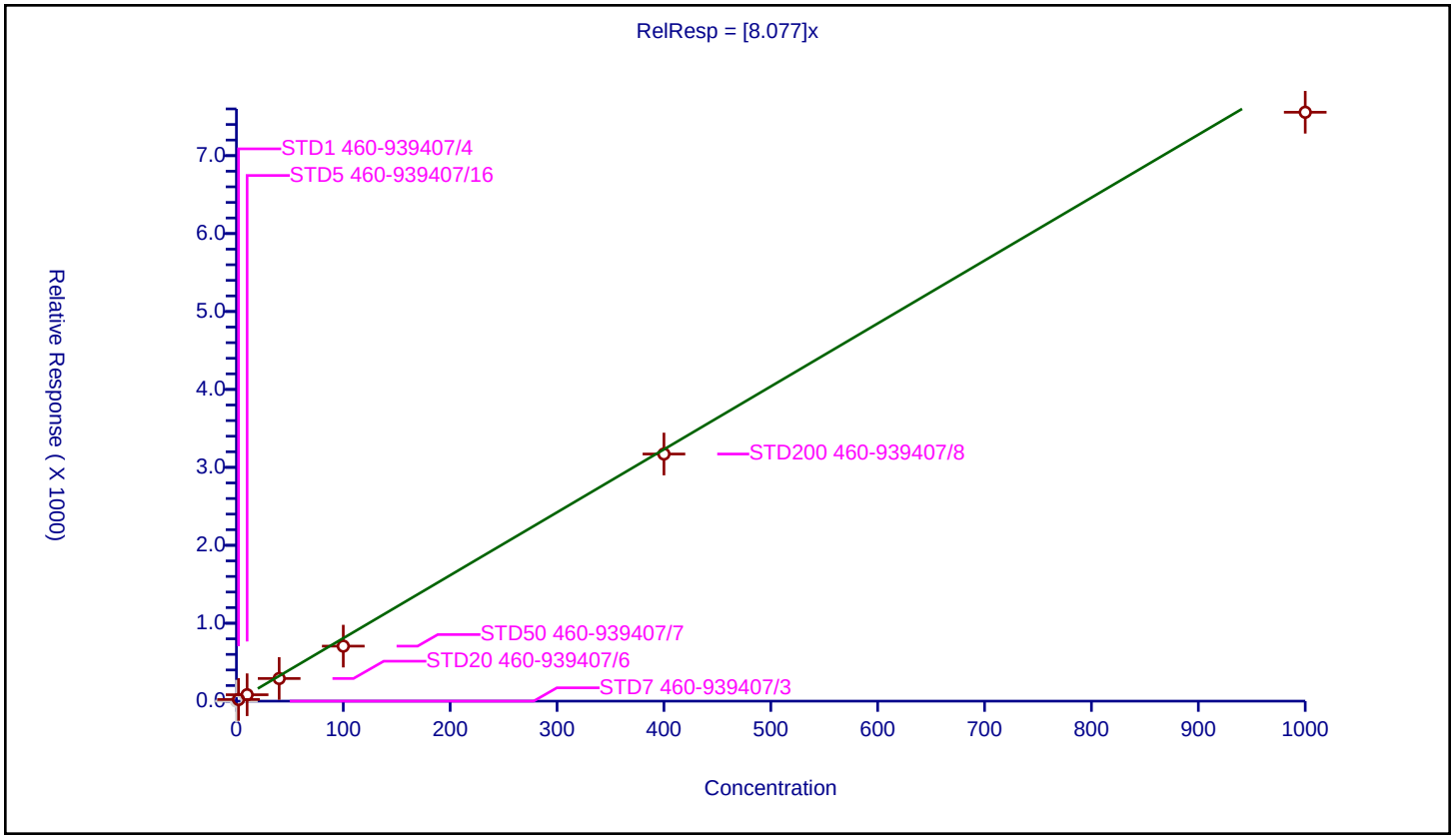
Curve Coefficients

Intercept:	0
Slope:	8.077

Error Coefficients

Standard Error:	908000
Relative Standard Error:	15.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	2.0	20.862448	1000.0	169587.0	10.431224	Y
3	STD5 460-939407/16	10.0	82.3188	1000.0	213645.0	8.23188	Y
4	STD20 460-939407/6	40.0	290.198712	1000.0	168233.0	7.254968	Y
5	STD50 460-939407/7	100.0	705.886019	1000.0	192558.0	7.05886	Y
6	STD200 460-939407/8	400.0	3171.276493	1000.0	218121.0	7.928191	Y
7	STD500 460-939407/9	1000.0	7556.80835	1000.0	253123.0	7.556808	Y



Calibration / Cyclopentene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

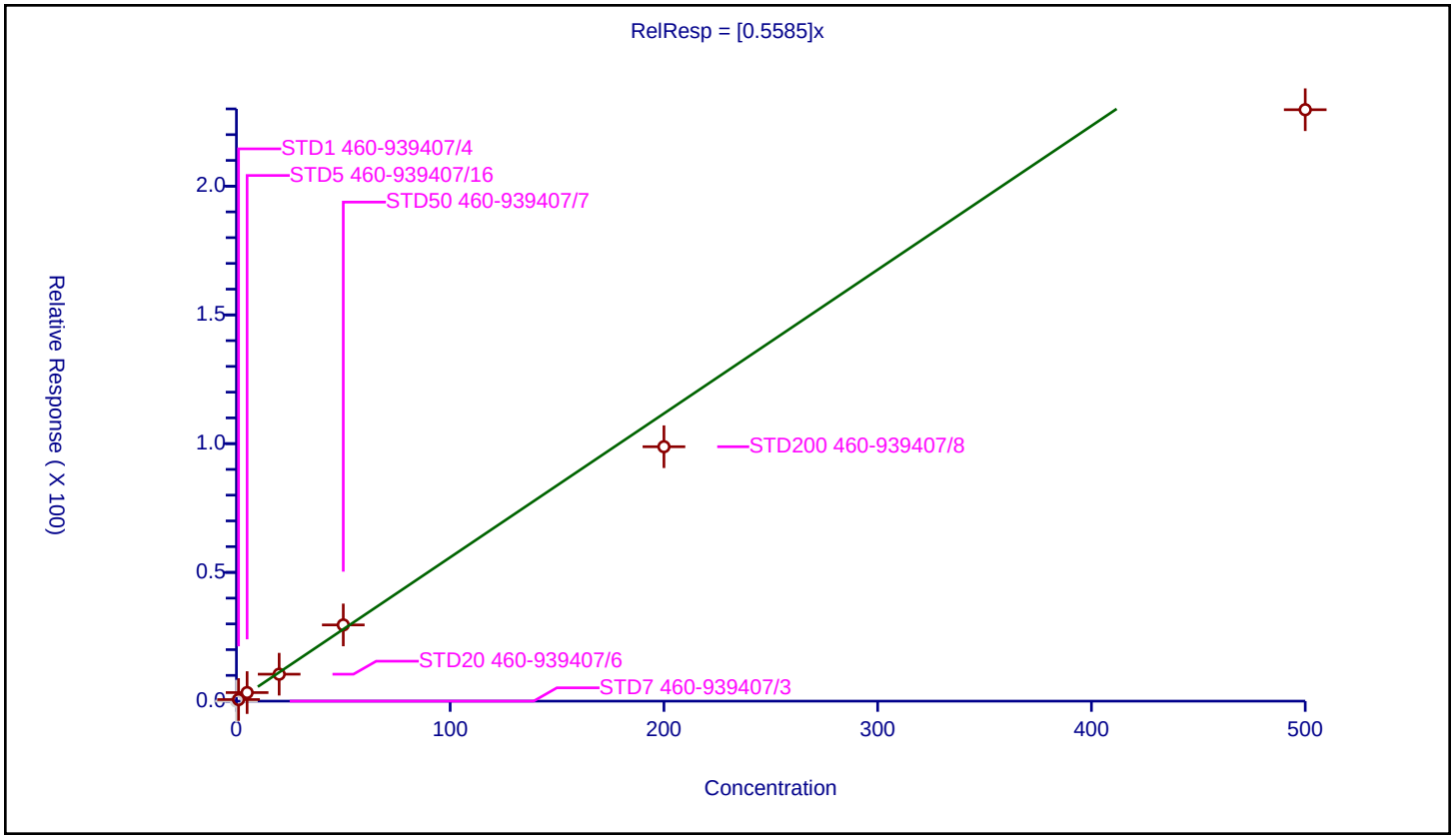
Curve Coefficients

Intercept:	0
Slope:	0.5585

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	14.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.616929	50.0	417390.0	0.616929	Y
3	STD5 460-939407/16	5.0	3.330309	50.0	497161.0	0.666062	Y
4	STD20 460-939407/6	20.0	10.458548	50.0	515889.0	0.522927	Y
5	STD50 460-939407/7	50.0	29.596904	50.0	534240.0	0.591938	Y
6	STD200 460-939407/8	200.0	98.802312	50.0	655471.0	0.494012	Y
7	STD500 460-939407/9	500.0	229.681359	50.0	764591.0	0.459363	Y



10/25/2023
1:26 PM

Calibration / Acetonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

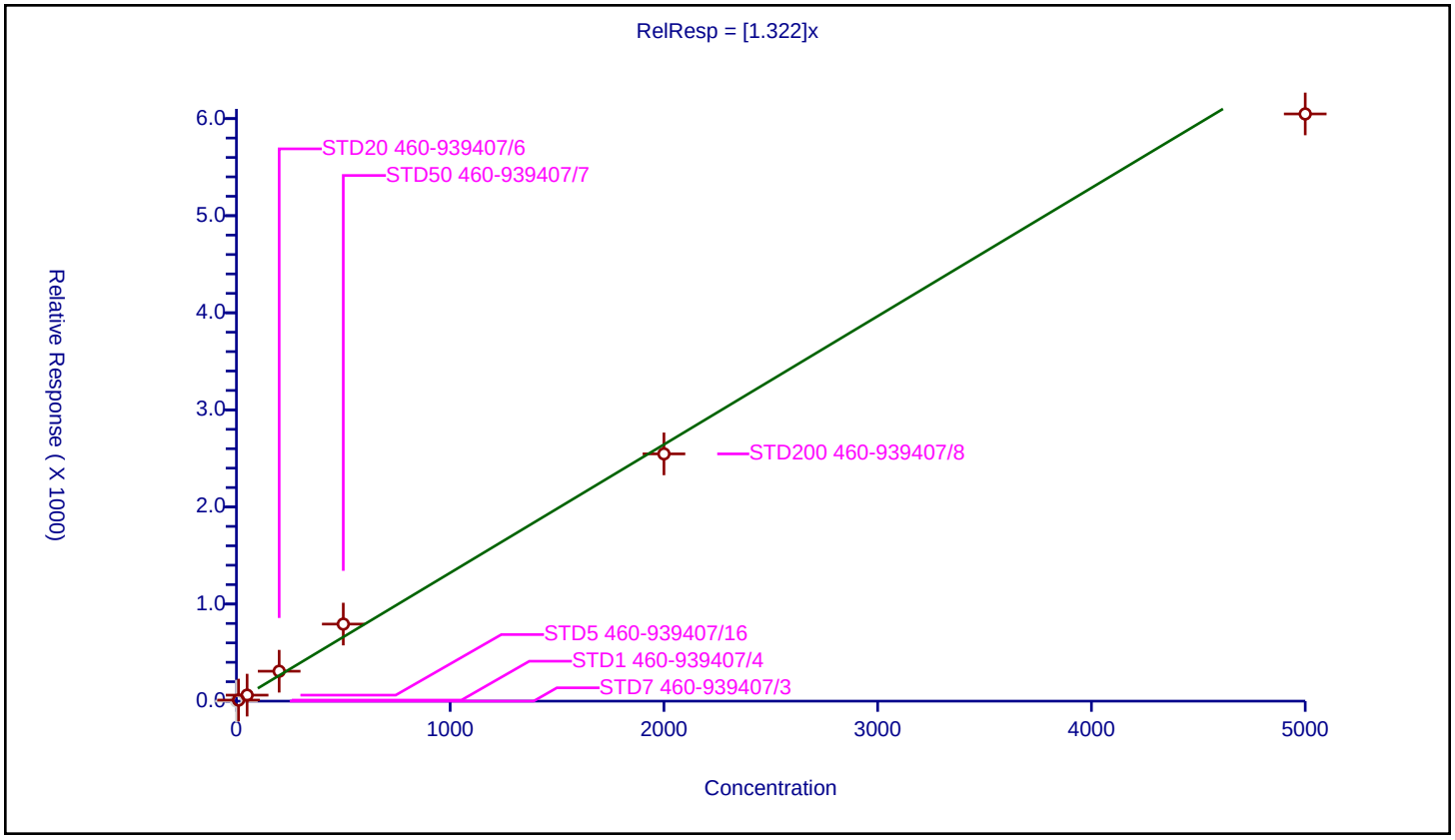
Curve Coefficients

Intercept:	0
Slope:	1.322

Error Coefficients

Standard Error:	729000
Relative Standard Error:	15.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	10.0	10.790921	1000.0	169587.0	1.079092	Y
3	STD5 460-939407/16	50.0	61.981324	1000.0	213645.0	1.239626	Y
4	STD20 460-939407/6	200.0	308.203503	1000.0	168233.0	1.541018	Y
5	STD50 460-939407/7	500.0	793.672556	1000.0	192558.0	1.587345	Y
6	STD200 460-939407/8	2000.0	2546.811174	1000.0	218121.0	1.273406	Y
7	STD500 460-939407/9	5000.0	6048.103096	1000.0	253123.0	1.209621	Y



10/25/2023
1:26 PM

Calibration / Methylene Chloride

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

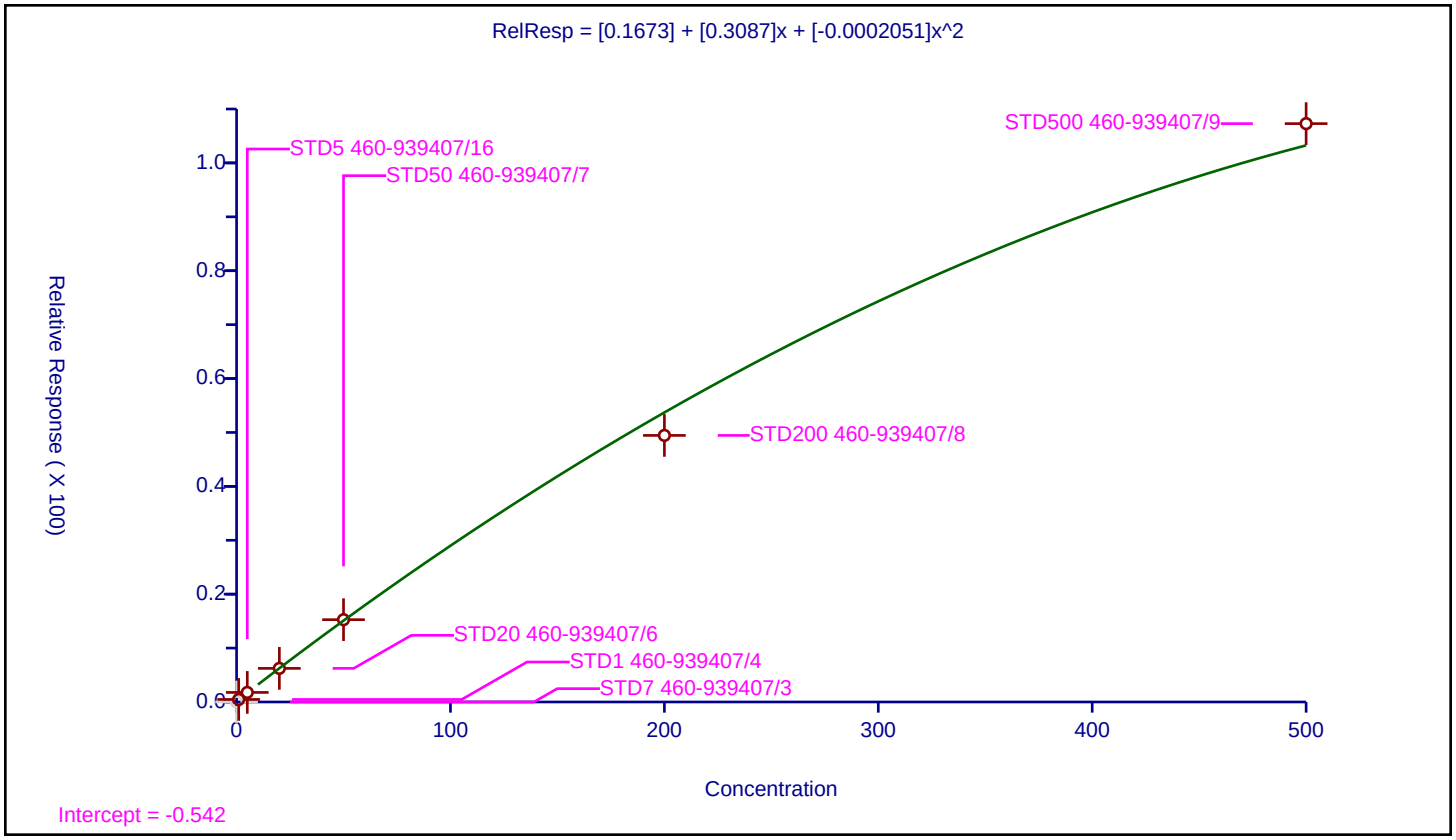
Curve Coefficients

Intercept:	0.1673
Slope:	0.3087
Second Order:	-0.0002051

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	7.7
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.473179	50.0	417390.0	0.473179	Y
3	STD5 460-939407/16	5.0	1.772967	50.0	497161.0	0.354593	Y
4	STD20 460-939407/6	20.0	6.235934	50.0	515889.0	0.311797	Y
5	STD50 460-939407/7	50.0	15.268887	50.0	534240.0	0.305378	Y
6	STD200 460-939407/8	200.0	49.451997	50.0	655471.0	0.24726	Y
7	STD500 460-939407/9	500.0	107.288668	50.0	764591.0	0.214577	Y



10/25/2023
1:26 PM

Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

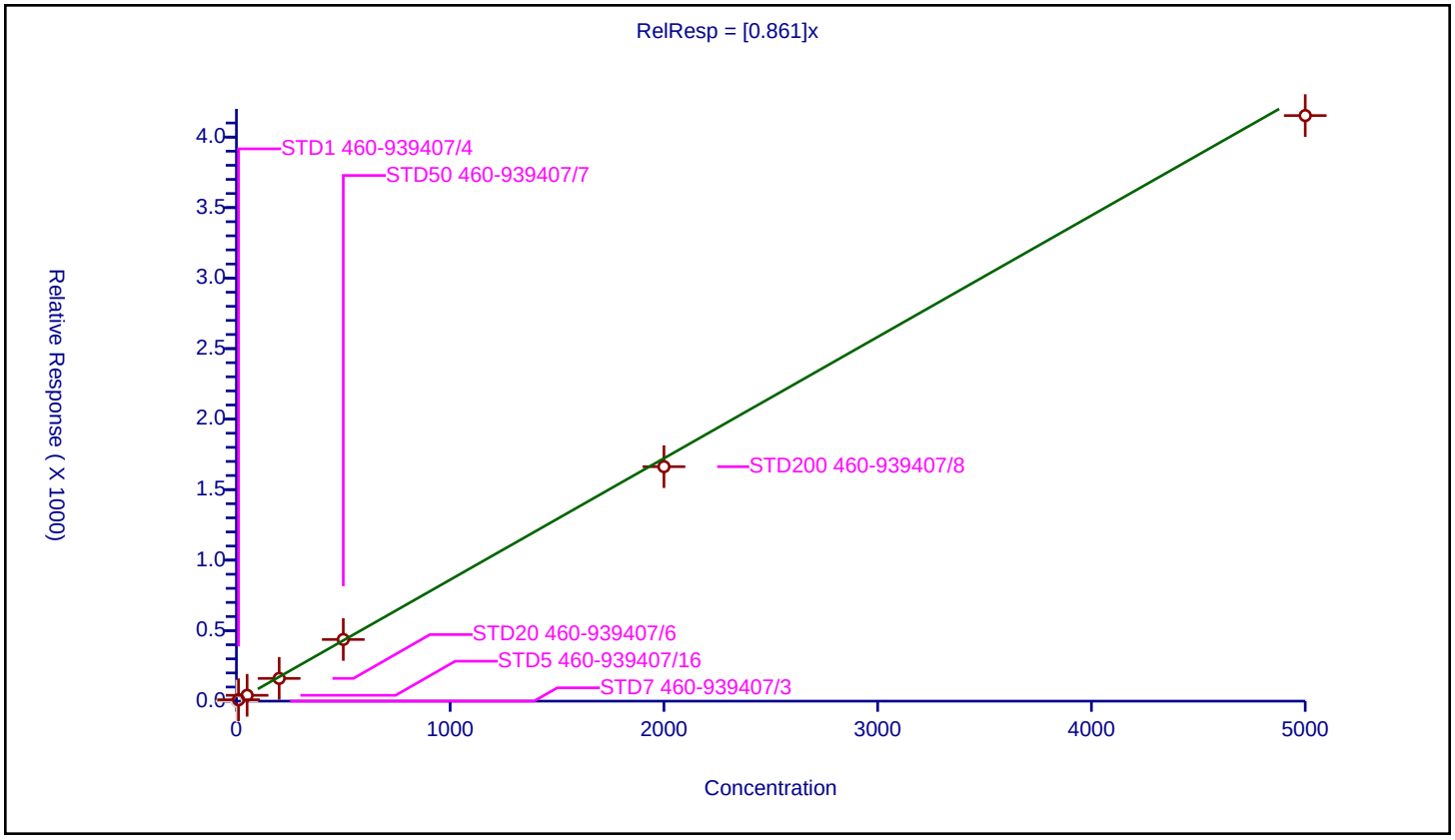
Curve Coefficients

Intercept:	0
Slope:	0.861

Error Coefficients

Standard Error:	497000
Relative Standard Error:	8.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	2.0	0.0	1000.0	172495.0	0.0	N
2	STD1 460-939407/4	10.0	9.947696	1000.0	169587.0	0.99477	Y
3	STD5 460-939407/16	50.0	41.428538	1000.0	213645.0	0.828571	Y
4	STD20 460-939407/6	200.0	161.187163	1000.0	168233.0	0.805936	Y
5	STD50 460-939407/7	500.0	437.307201	1000.0	192558.0	0.874614	Y
6	STD200 460-939407/8	2000.0	1662.824762	1000.0	218121.0	0.831412	Y
7	STD500 460-939407/9	5000.0	4152.625403	1000.0	253123.0	0.830525	Y



10/25/2023
1:26 PM

Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

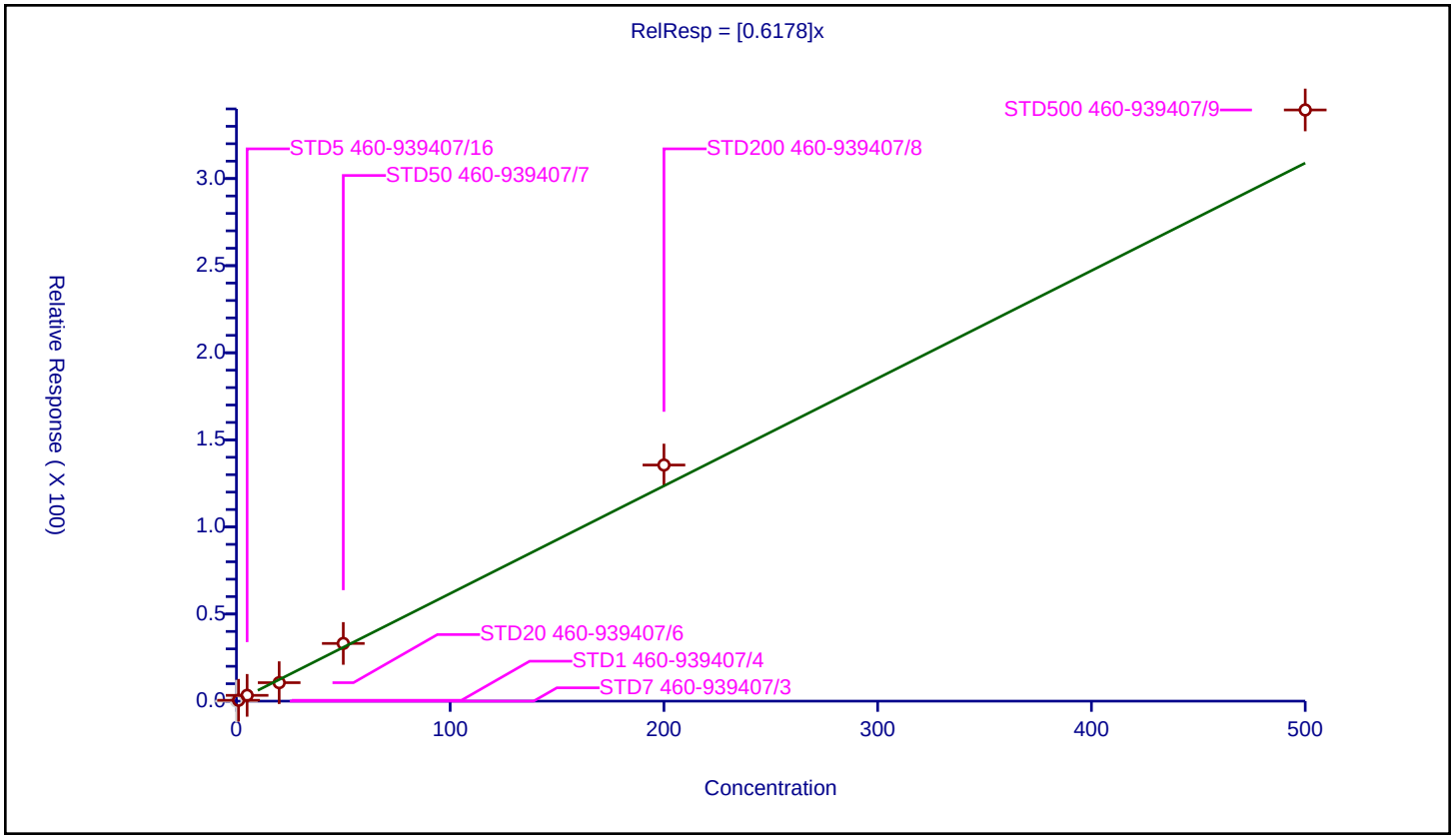
Curve Coefficients

Intercept:	0
Slope:	0.6178

Error Coefficients

Standard Error:	2460000
Relative Standard Error:	13.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.491387	50.0	417390.0	0.491387	Y
3	STD5 460-939407/16	5.0	3.331013	50.0	497161.0	0.666203	Y
4	STD20 460-939407/6	20.0	10.601893	50.0	515889.0	0.530095	Y
5	STD50 460-939407/7	50.0	33.131926	50.0	534240.0	0.662639	Y
6	STD200 460-939407/8	200.0	135.552069	50.0	655471.0	0.67776	Y
7	STD500 460-939407/9	500.0	339.388248	50.0	764591.0	0.678776	Y



10/25/2023
1:26 PM

Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

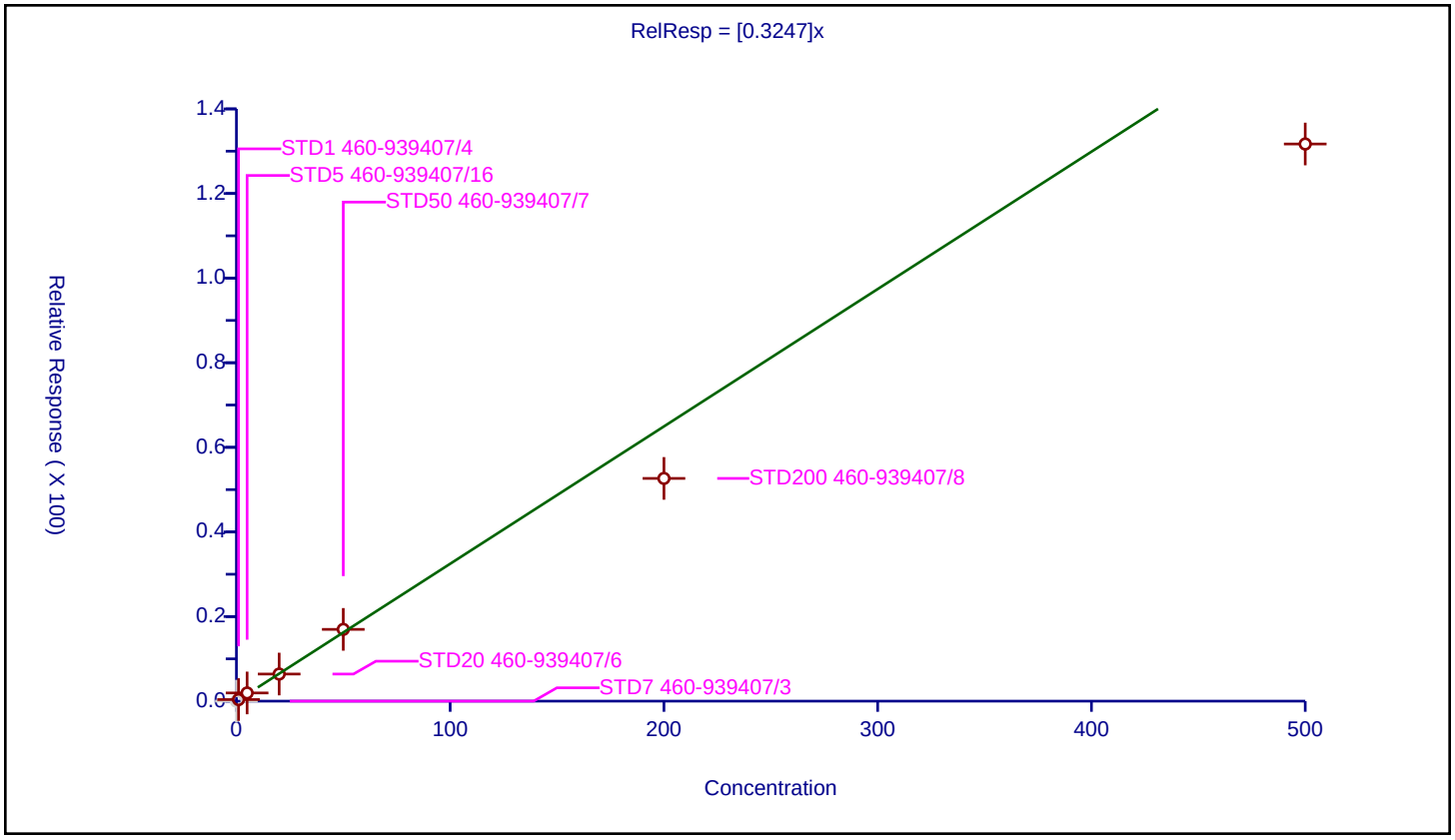
Curve Coefficients

Intercept:	0
Slope:	0.3247

Error Coefficients

Standard Error:	956000
Relative Standard Error:	16.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.374829	50.0	417390.0	0.374829	Y
3	STD5 460-939407/16	5.0	1.935691	50.0	497161.0	0.387138	Y
4	STD20 460-939407/6	20.0	6.405932	50.0	515889.0	0.320297	Y
5	STD50 460-939407/7	50.0	16.965315	50.0	534240.0	0.339306	Y
6	STD200 460-939407/8	200.0	52.647257	50.0	655471.0	0.263236	Y
7	STD500 460-939407/9	500.0	131.702505	50.0	764591.0	0.263405	Y



10/25/2023
1:26 PM

Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

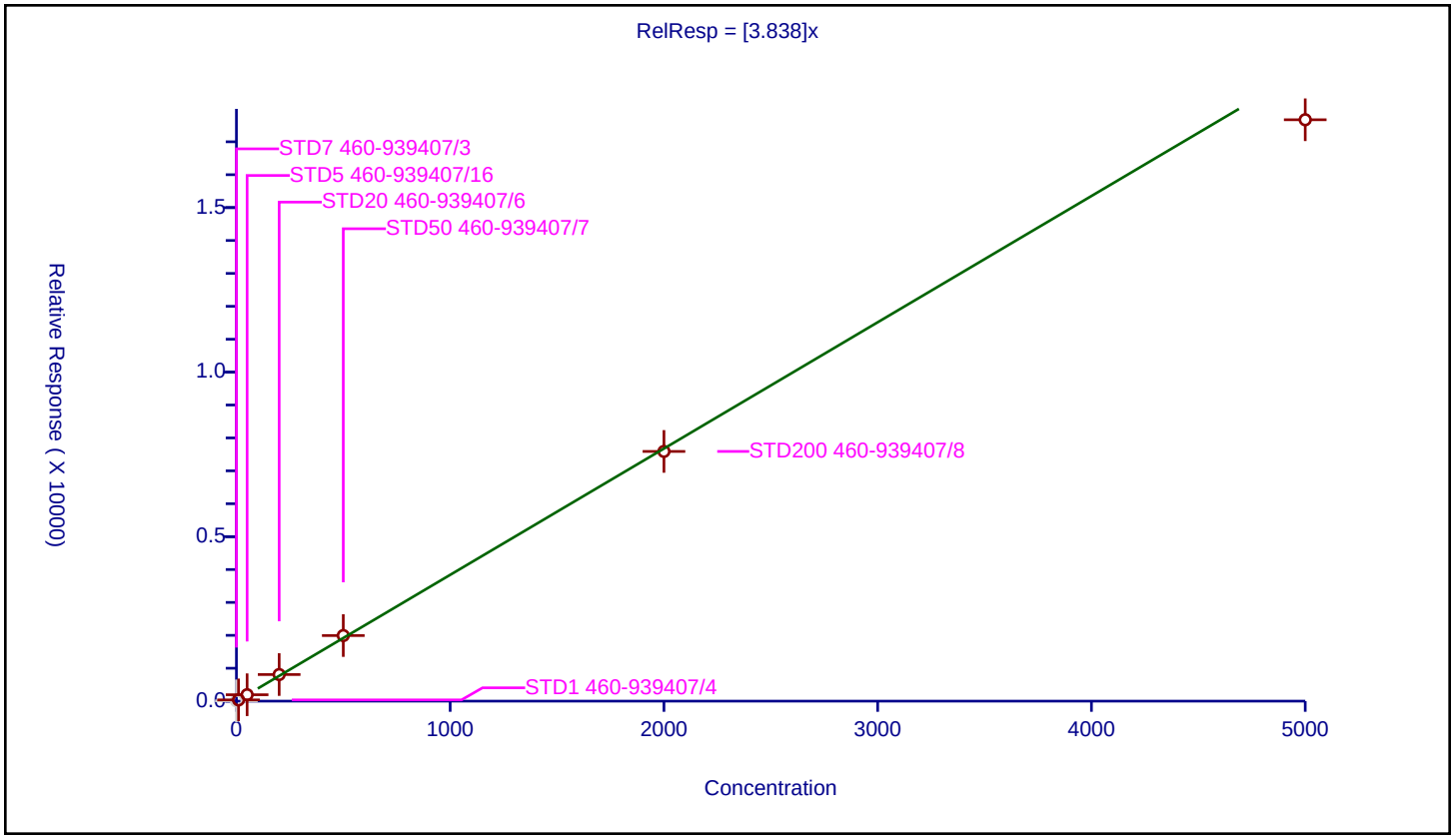
Curve Coefficients

Intercept:	0
Slope:	3.838

Error Coefficients

Standard Error:	2130000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	9.275631	1000.0	172495.0		N
2	STD1 460-939407/4	10.0	37.756432	1000.0	169587.0	3.775643	Y
3	STD5 460-939407/16	50.0	194.738936	1000.0	213645.0	3.894779	Y
4	STD20 460-939407/6	200.0	808.527459	1000.0	168233.0	4.042637	Y
5	STD50 460-939407/7	500.0	1993.368232	1000.0	192558.0	3.986736	Y
6	STD200 460-939407/8	2000.0	7589.296766	1000.0	218121.0	3.794648	Y
7	STD500 460-939407/9	5000.0	17669.891713	1000.0	253123.0	3.533978	Y



10/25/2023
1:26 PM

Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

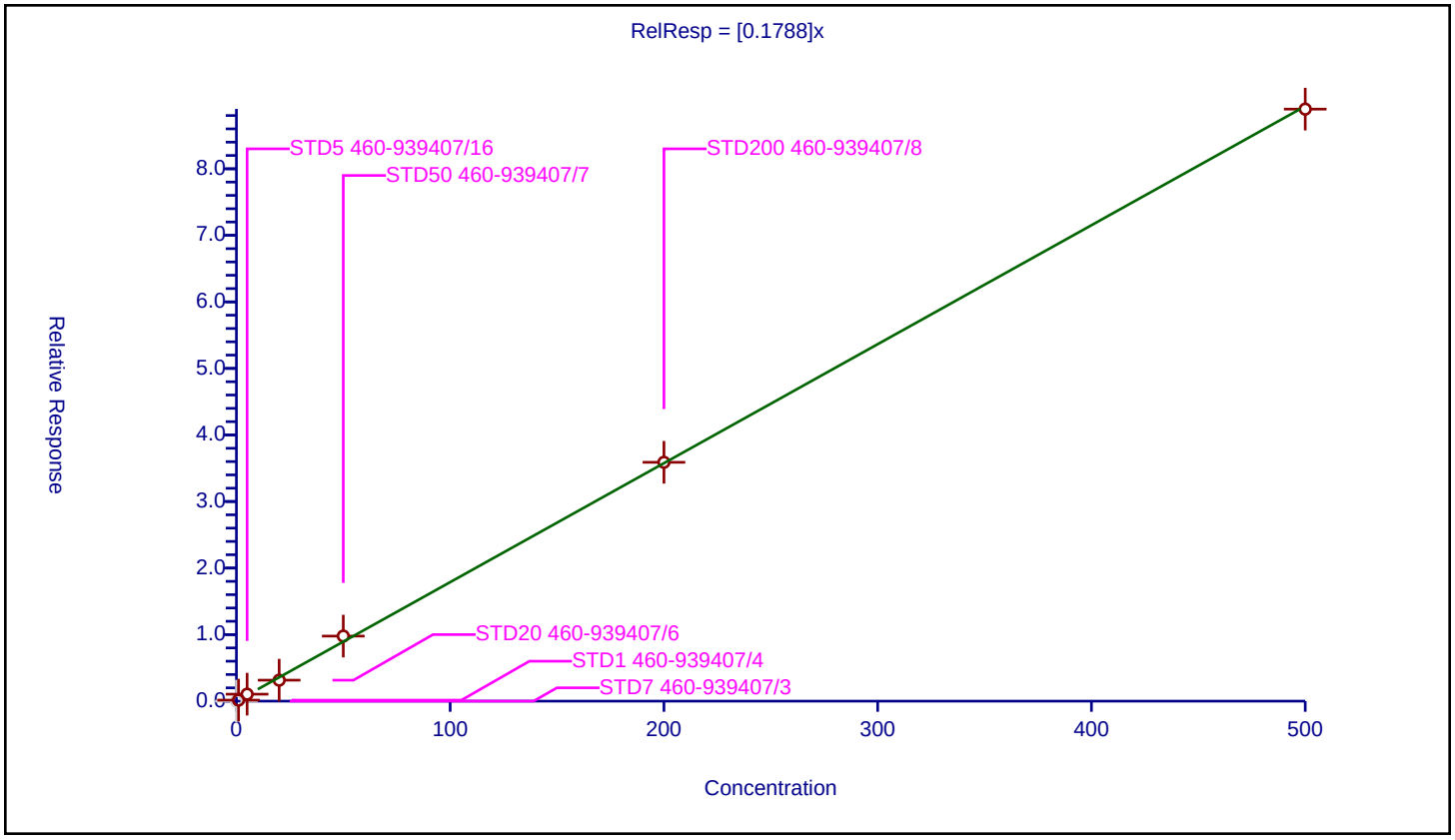
Curve Coefficients

Intercept:	0
Slope:	0.1788

Error Coefficients

Standard Error:	646000
Relative Standard Error:	12.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.152615	50.0	417390.0	0.152615	Y
3	STD5 460-939407/16	5.0	1.047749	50.0	497161.0	0.20955	Y
4	STD20 460-939407/6	20.0	3.153585	50.0	515889.0	0.157679	Y
5	STD50 460-939407/7	50.0	9.776599	50.0	534240.0	0.195532	Y
6	STD200 460-939407/8	200.0	35.892358	50.0	655471.0	0.179462	Y
7	STD500 460-939407/9	500.0	88.965865	50.0	764591.0	0.177932	Y



10/25/2023
1:26 PM

Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

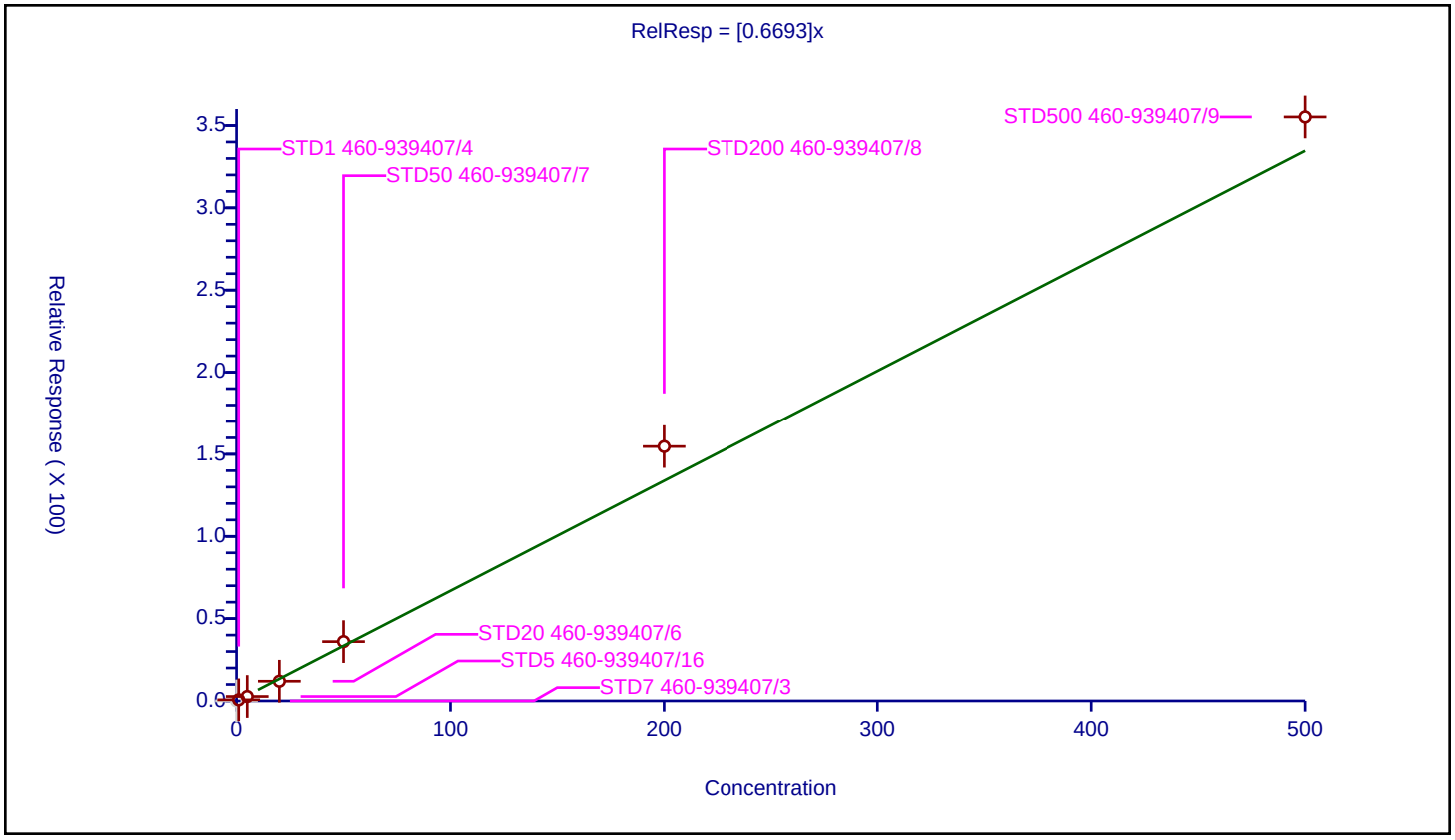
Curve Coefficients

Intercept:	0
Slope:	0.6693

Error Coefficients

Standard Error:	2600000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.67371	50.0	417390.0	0.67371	Y
3	STD5 460-939407/16	5.0	2.697416	50.0	497161.0	0.539483	Y
4	STD20 460-939407/6	20.0	11.967109	50.0	515889.0	0.598355	Y
5	STD50 460-939407/7	50.0	36.029406	50.0	534240.0	0.720588	Y
6	STD200 460-939407/8	200.0	154.712642	50.0	655471.0	0.773563	Y
7	STD500 460-939407/9	500.0	355.187414	50.0	764591.0	0.710375	Y



10/25/2023
1:26 PM

Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

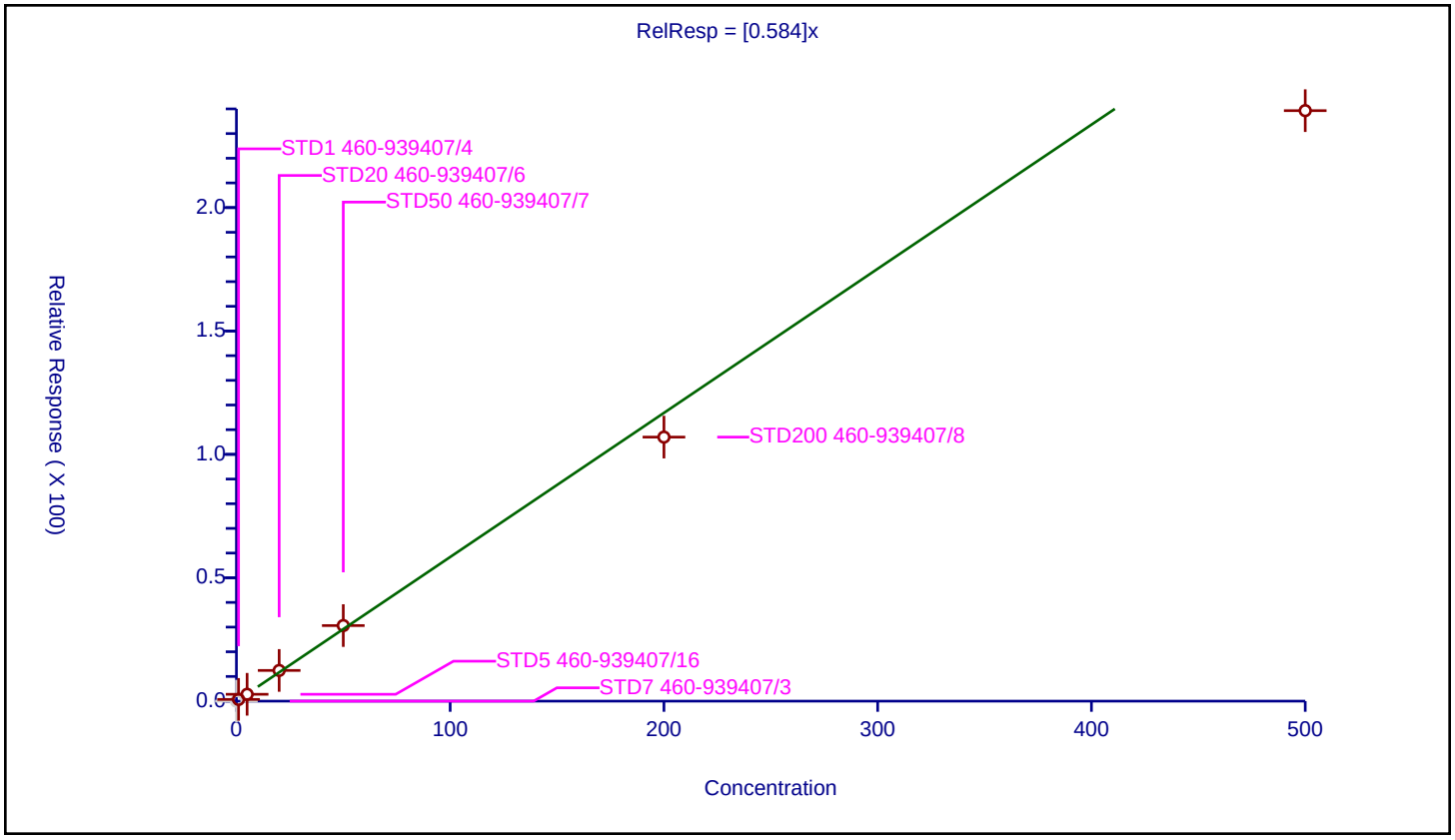
Curve Coefficients

Intercept:	0
Slope:	0.584

Error Coefficients

Standard Error:	1760000
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.700783	50.0	417390.0	0.700783	Y
3	STD5 460-939407/16	5.0	2.776163	50.0	497161.0	0.555233	Y
4	STD20 460-939407/6	20.0	12.438625	50.0	515889.0	0.621931	Y
5	STD50 460-939407/7	50.0	30.627714	50.0	534240.0	0.612554	Y
6	STD200 460-939407/8	200.0	106.999242	50.0	655471.0	0.534996	Y
7	STD500 460-939407/9	500.0	239.291137	50.0	764591.0	0.478582	Y



10/25/2023
1:26 PM

Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

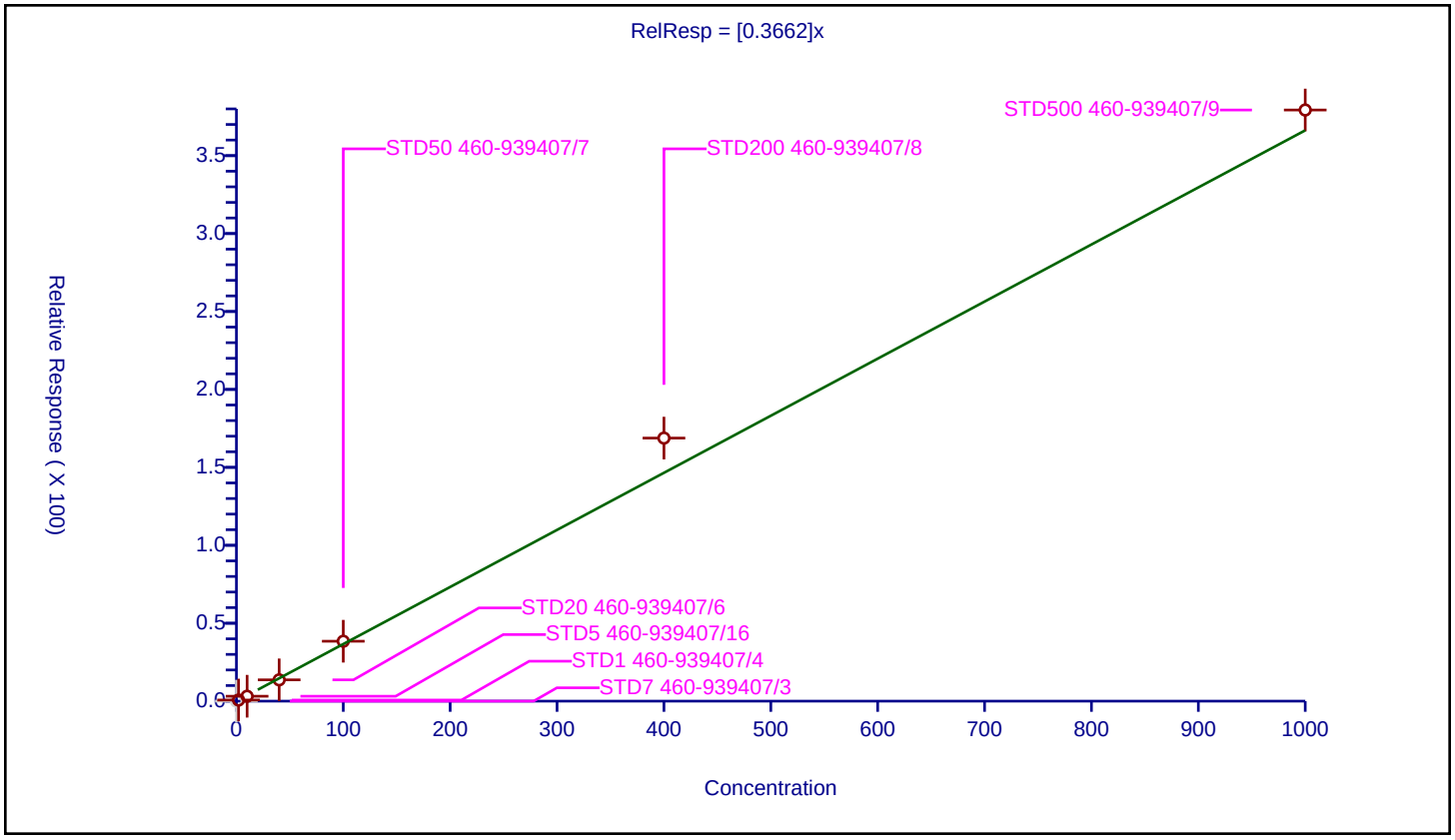
Curve Coefficients

Intercept:	0
Slope:	0.3662

Error Coefficients

Standard Error:	2780000
Relative Standard Error:	10.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	2.0	0.710007	50.0	417390.0	0.355004	Y
3	STD5 460-939407/16	10.0	3.152902	50.0	497161.0	0.31529	Y
4	STD20 460-939407/6	40.0	13.658655	50.0	515889.0	0.341466	Y
5	STD50 460-939407/7	100.0	38.434318	50.0	534240.0	0.384343	Y
6	STD200 460-939407/8	400.0	168.775049	50.0	655471.0	0.421938	Y
7	STD500 460-939407/9	1000.0	379.290366	50.0	764591.0	0.37929	Y



Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

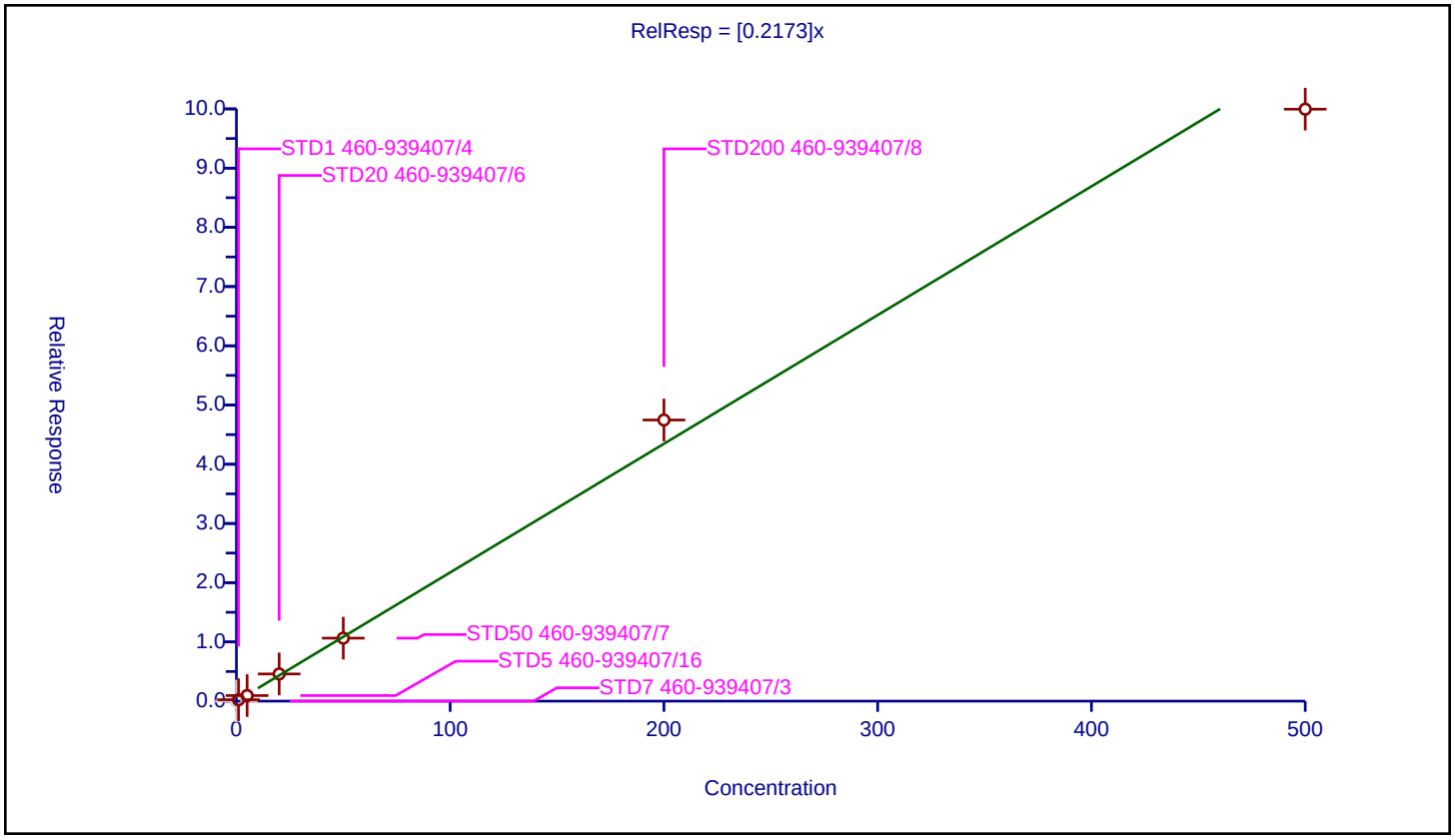
Curve Coefficients

Intercept:	0
Slope:	0.2173

Error Coefficients

Standard Error:	740000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.23635	50.0	417390.0	0.23635	Y
3	STD5 460-939407/16	5.0	0.939937	50.0	497161.0	0.187987	Y
4	STD20 460-939407/6	20.0	4.588681	50.0	515889.0	0.229434	Y
5	STD50 460-939407/7	50.0	10.636324	50.0	534240.0	0.212726	Y
6	STD200 460-939407/8	200.0	47.47014	50.0	655471.0	0.237351	Y
7	STD500 460-939407/9	500.0	99.950169	50.0	764591.0	0.1999	Y



Calibration / Tert-butyl ethyl ether

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

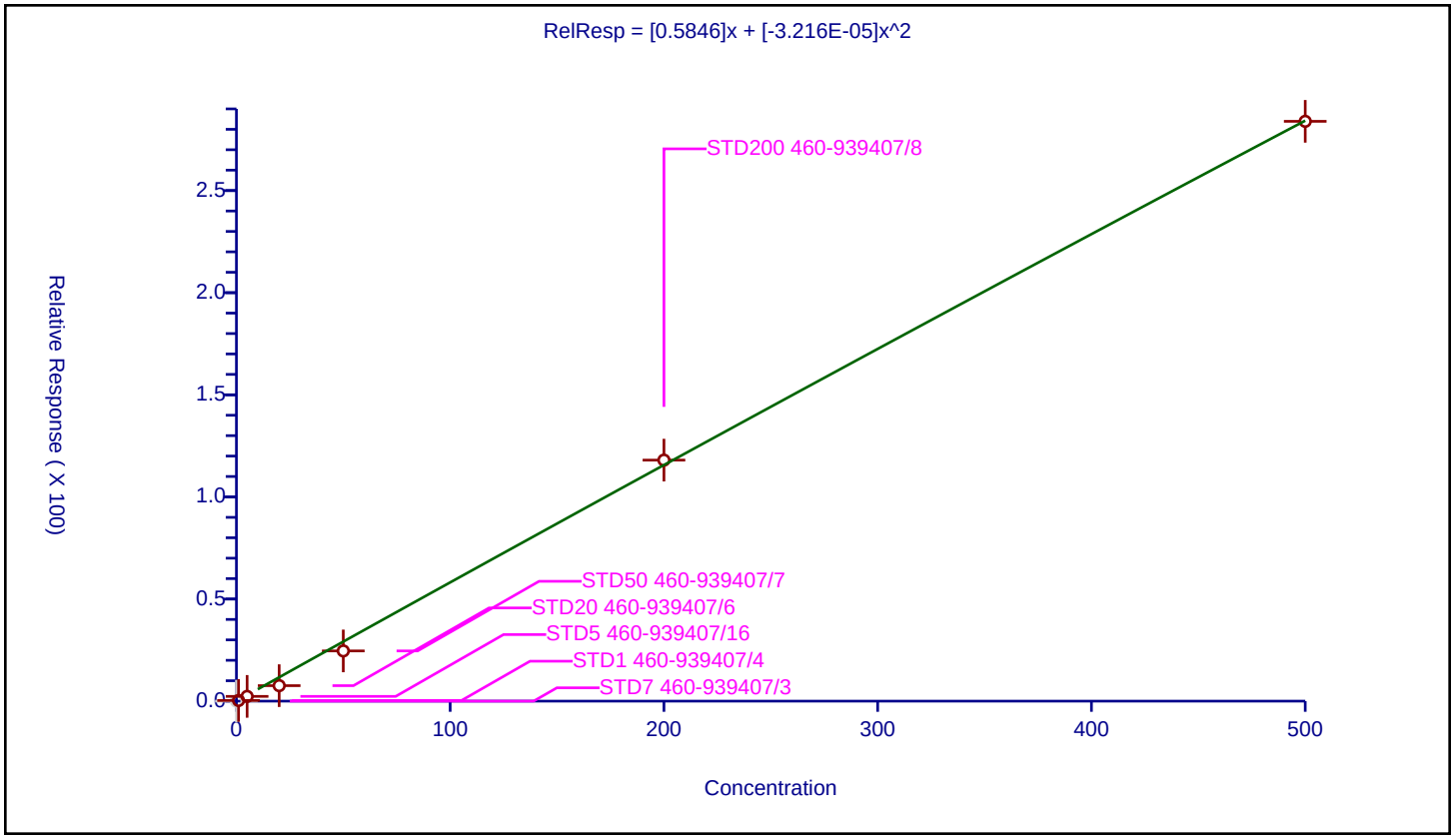
Curve Coefficients

Intercept:	0
Slope:	0.5846
Second Order:	-3.216E-05

Error Coefficients

Standard Error:	2310000
Relative Standard Error:	31.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.317449	50.0	417390.0	0.317449	Y
3	STD5 460-939407/16	5.0	2.323593	50.0	497161.0	0.464719	Y
4	STD20 460-939407/6	20.0	7.589036	50.0	515889.0	0.379452	Y
5	STD50 460-939407/7	50.0	24.59185	50.0	534240.0	0.491837	Y
6	STD200 460-939407/8	200.0	118.014298	50.0	655471.0	0.590071	Y
7	STD500 460-939407/9	500.0	283.908586	50.0	764591.0	0.567817	Y



10/25/2023
1:26 PM

Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

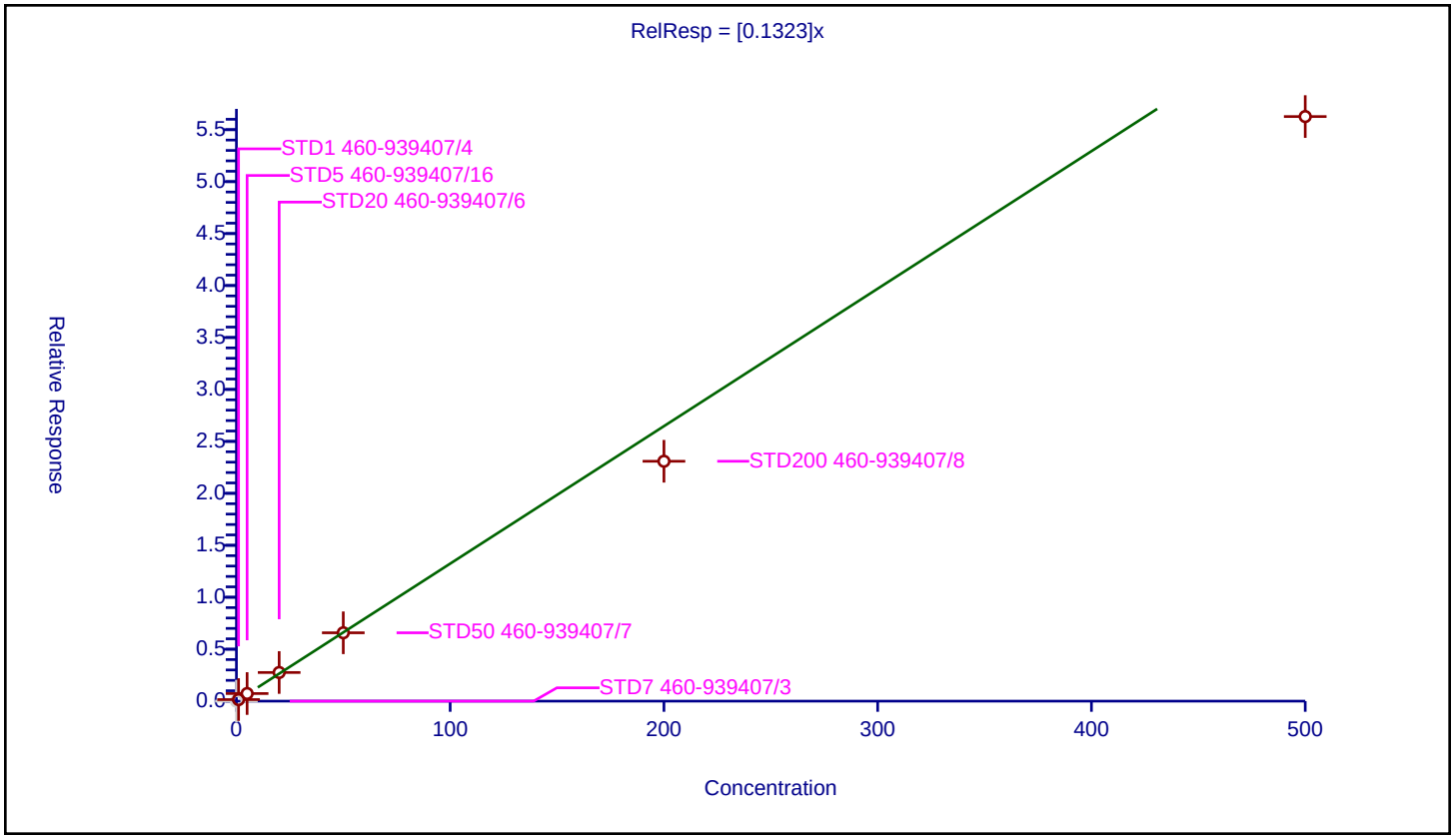
Curve Coefficients

Intercept:	0
Slope:	0.1323

Error Coefficients

Standard Error:	409000
Relative Standard Error:	11.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.150219	50.0	417390.0	0.150219	Y
3	STD5 460-939407/16	5.0	0.731453	50.0	497161.0	0.146291	Y
4	STD20 460-939407/6	20.0	2.75757	50.0	515889.0	0.137878	Y
5	STD50 460-939407/7	50.0	6.579627	50.0	534240.0	0.131593	Y
6	STD200 460-939407/8	200.0	23.088054	50.0	655471.0	0.11544	Y
7	STD500 460-939407/9	500.0	56.262106	50.0	764591.0	0.112524	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

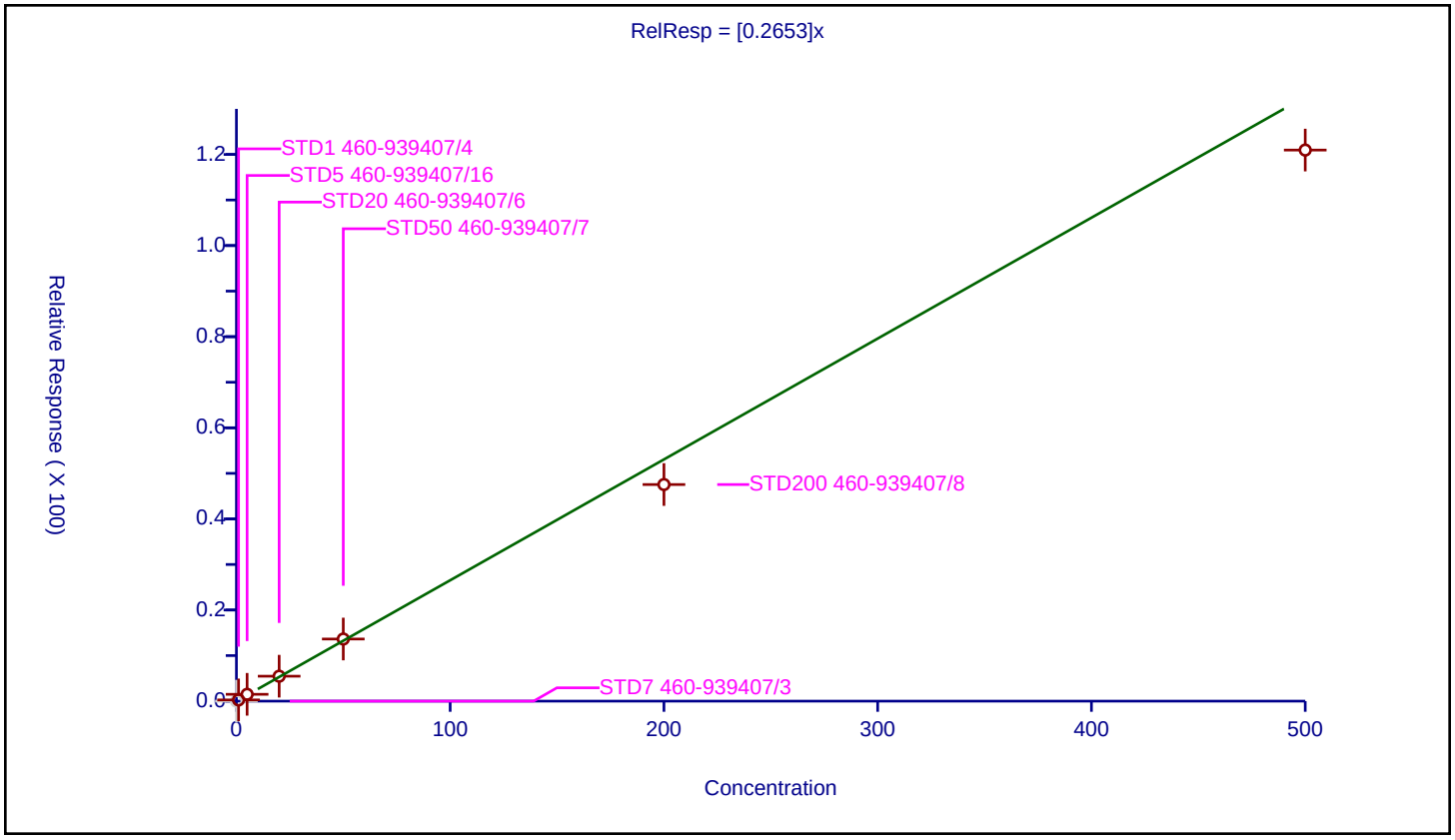
Curve Coefficients

Intercept:	0
Slope:	0.2653

Error Coefficients

Standard Error:	876000
Relative Standard Error:	8.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.266178	50.0	417390.0	0.266178	Y
3	STD5 460-939407/16	5.0	1.497	50.0	497161.0	0.2994	Y
4	STD20 460-939407/6	20.0	5.47676	50.0	515889.0	0.273838	Y
5	STD50 460-939407/7	50.0	13.633667	50.0	534240.0	0.272673	Y
6	STD200 460-939407/8	200.0	47.544209	50.0	655471.0	0.237721	Y
7	STD500 460-939407/9	500.0	120.964215	50.0	764591.0	0.241928	Y



10/25/2023
1:26 PM

Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

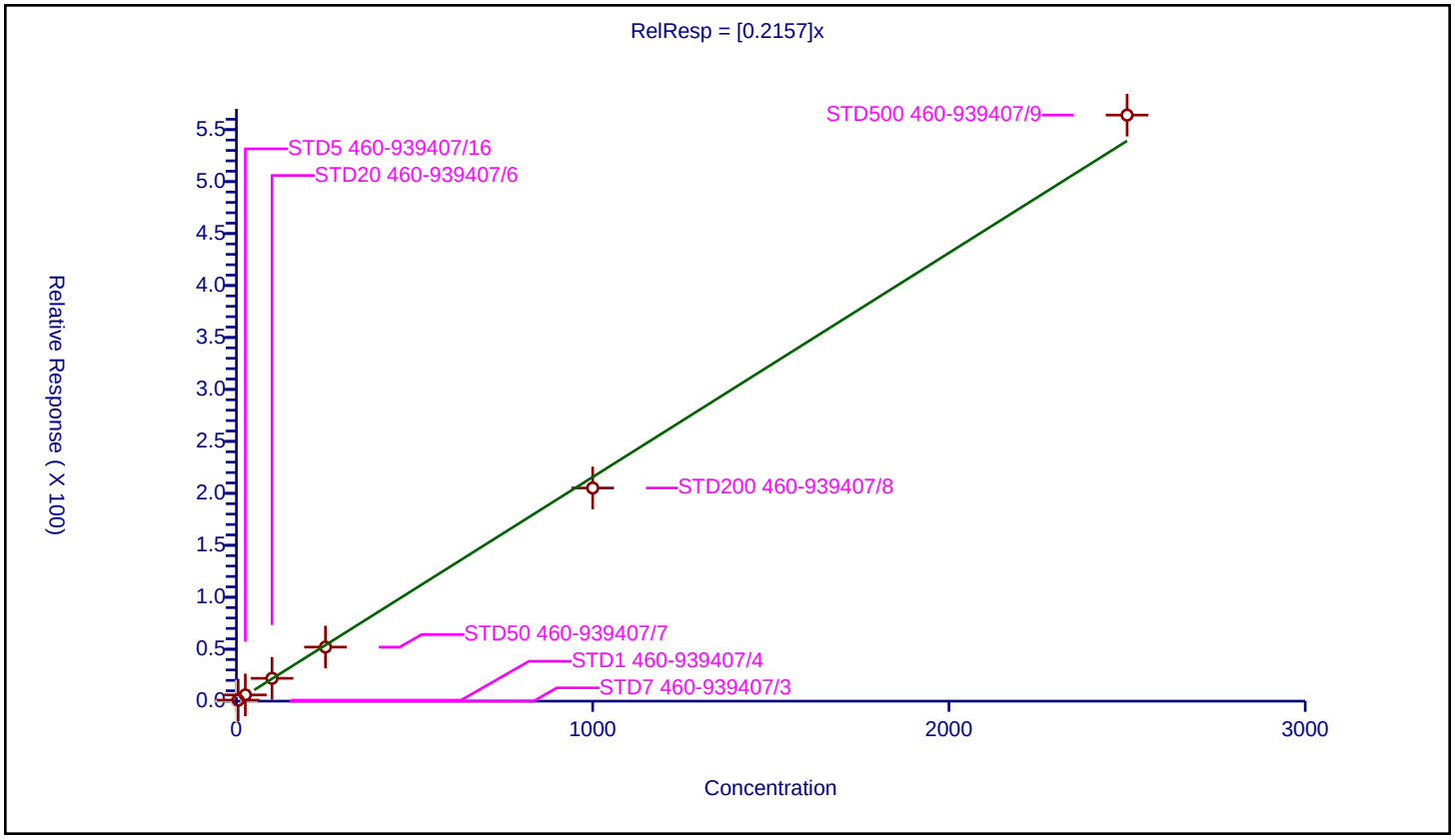
Curve Coefficients

Intercept:	0
Slope:	0.2157

Error Coefficients

Standard Error:	324000
Relative Standard Error:	7.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	5.0	0.976824	250.0	168147.0	0.195365	Y
3	STD5 460-939407/16	25.0	6.004439	250.0	220337.0	0.240178	Y
4	STD20 460-939407/6	100.0	21.970586	250.0	185828.0	0.219706	Y
5	STD50 460-939407/7	250.0	52.048204	250.0	210233.0	0.208193	Y
6	STD200 460-939407/8	1000.0	205.134961	250.0	278006.0	0.205135	Y
7	STD500 460-939407/9	2500.0	564.017088	250.0	303954.0	0.225607	Y



Calibration / Ethyl acetate

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

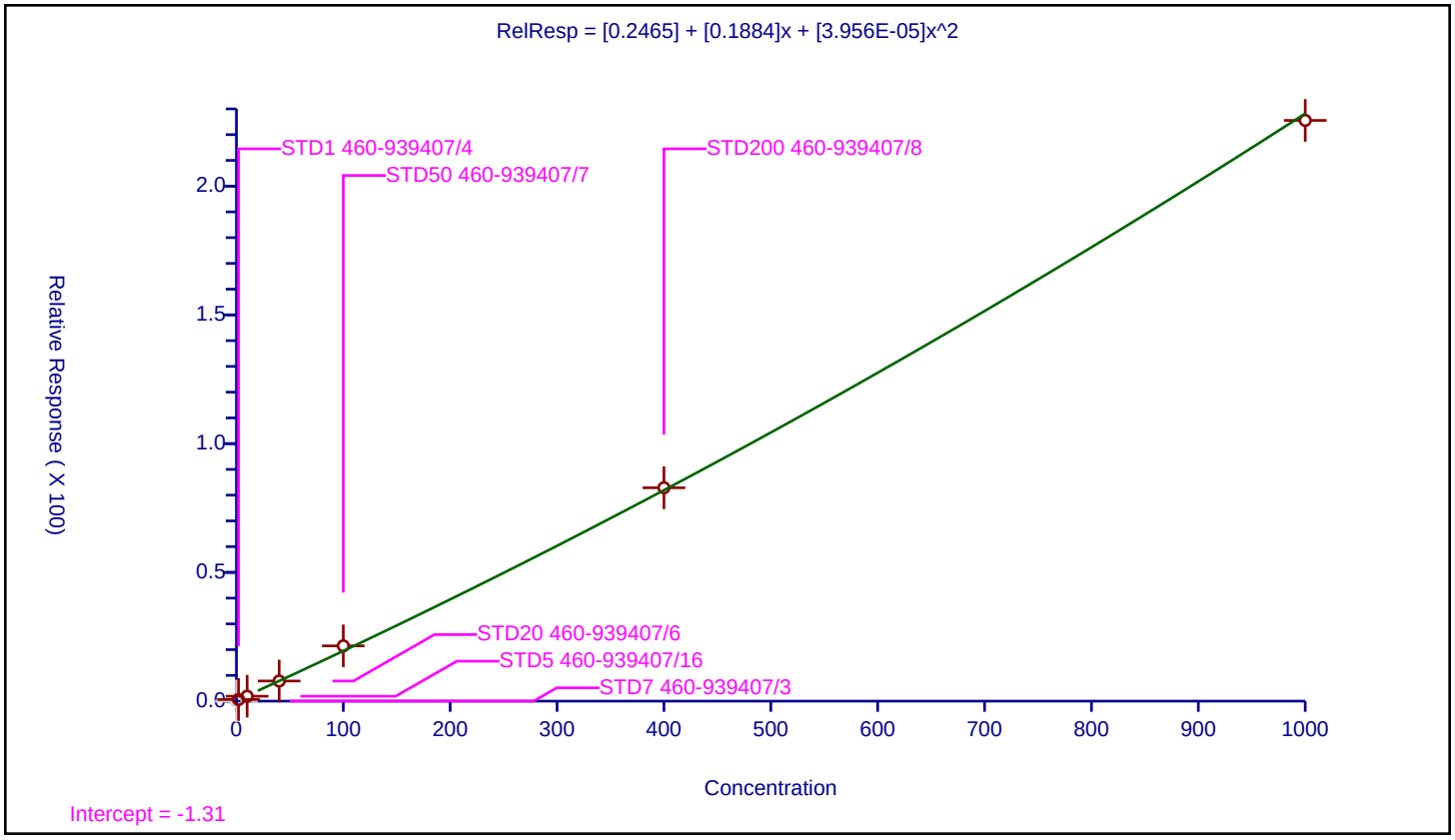
Curve Coefficients

Intercept:	0.2465
Slope:	0.1884
Second Order:	3.956E-05

Error Coefficients

Standard Error:	167000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	2.0	0.631888	250.0	168147.0	0.315944	Y
3	STD5 460-939407/16	10.0	1.905036	250.0	220337.0	0.190504	Y
4	STD20 460-939407/6	40.0	7.816368	250.0	185828.0	0.195409	Y
5	STD50 460-939407/7	100.0	21.453578	250.0	210233.0	0.214536	Y
6	STD200 460-939407/8	400.0	82.868715	250.0	278006.0	0.207172	Y
7	STD500 460-939407/9	1000.0	225.519322	250.0	303954.0	0.225519	Y



10/25/2023
1:26 PM

Calibration / Methyl acrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

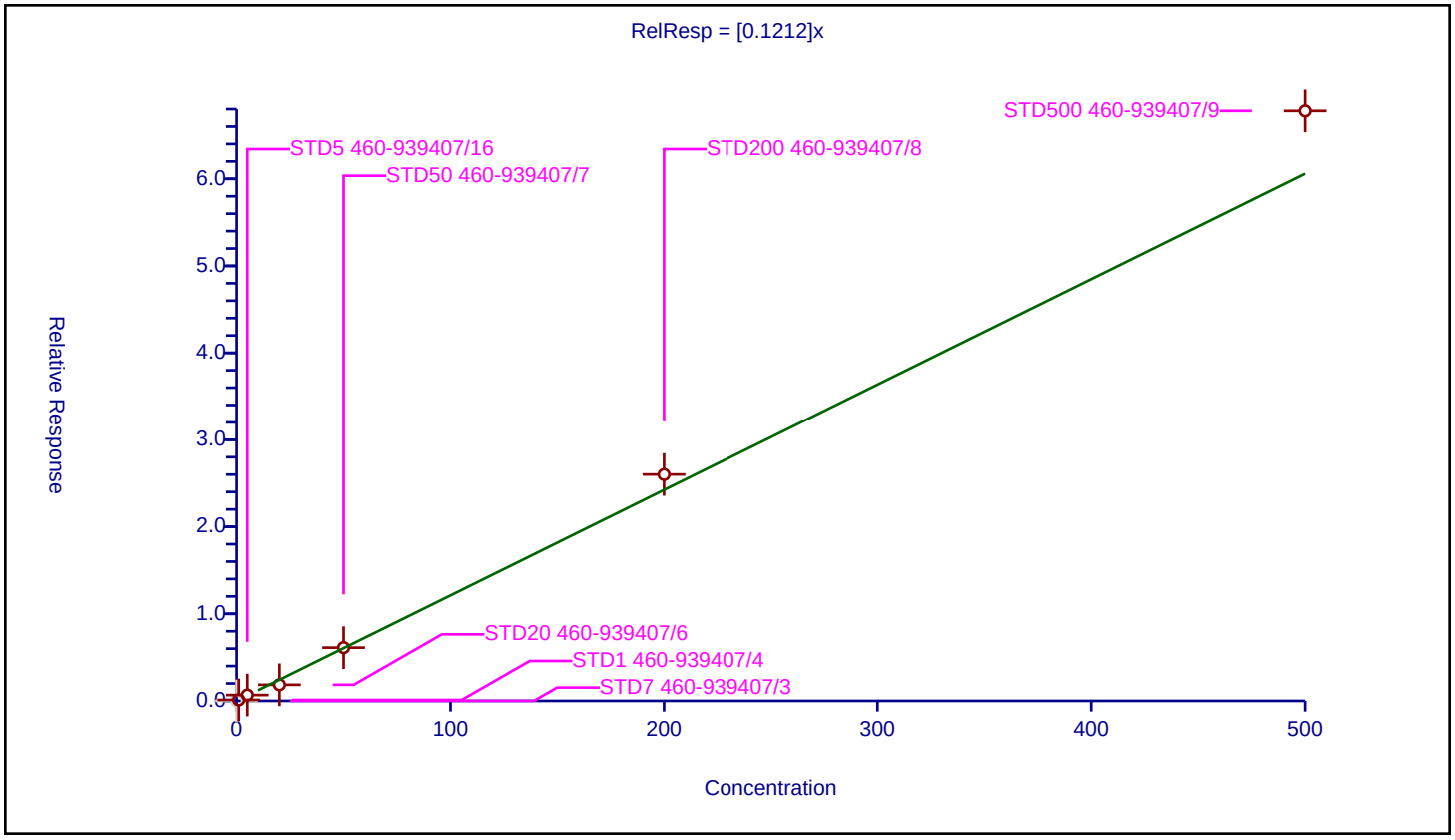
Curve Coefficients

Intercept:	0
Slope:	0.1212

Error Coefficients

Standard Error:	489000
Relative Standard Error:	13.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.112245	50.0	417390.0	0.112245	Y
3	STD5 460-939407/16	5.0	0.672217	50.0	497161.0	0.134443	Y
4	STD20 460-939407/6	20.0	1.847975	50.0	515889.0	0.092399	Y
5	STD50 460-939407/7	50.0	6.117756	50.0	534240.0	0.122355	Y
6	STD200 460-939407/8	200.0	26.01183	50.0	655471.0	0.130059	Y
7	STD500 460-939407/9	500.0	67.796181	50.0	764591.0	0.135592	Y



10/25/2023
1:26 PM

Calibration / Propionitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

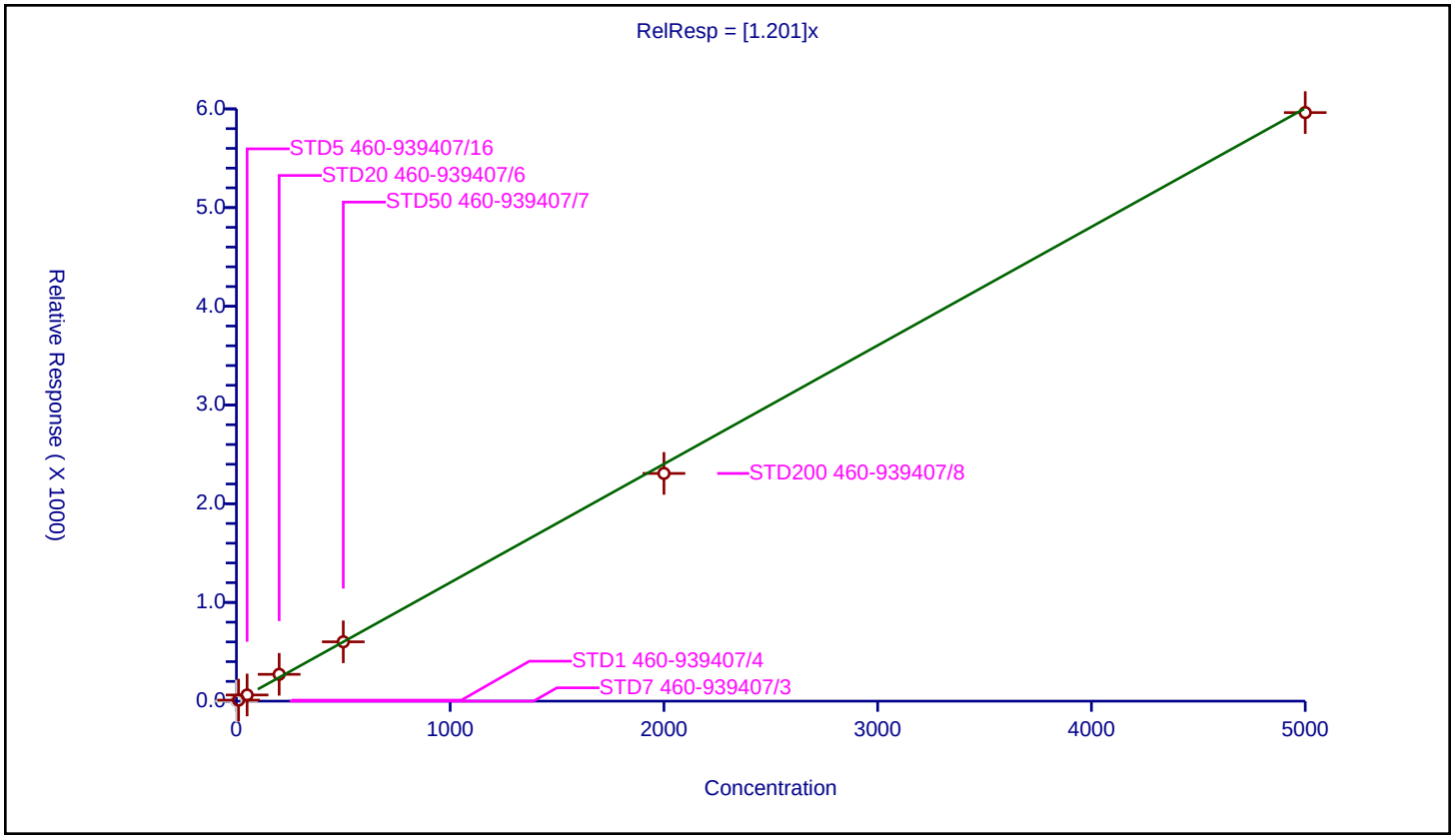
Curve Coefficients

Intercept:	0
Slope:	1.201

Error Coefficients

Standard Error:	711000
Relative Standard Error:	8.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	10.0	10.501984	1000.0	169587.0	1.050198	Y
3	STD5 460-939407/16	50.0	62.561726	1000.0	213645.0	1.251235	Y
4	STD20 460-939407/6	200.0	271.581675	1000.0	168233.0	1.357908	Y
5	STD50 460-939407/7	500.0	601.034494	1000.0	192558.0	1.202069	Y
6	STD200 460-939407/8	2000.0	2306.921388	1000.0	218121.0	1.153461	Y
7	STD500 460-939407/9	5000.0	5962.484642	1000.0	253123.0	1.192497	Y



10/25/2023
1:26 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

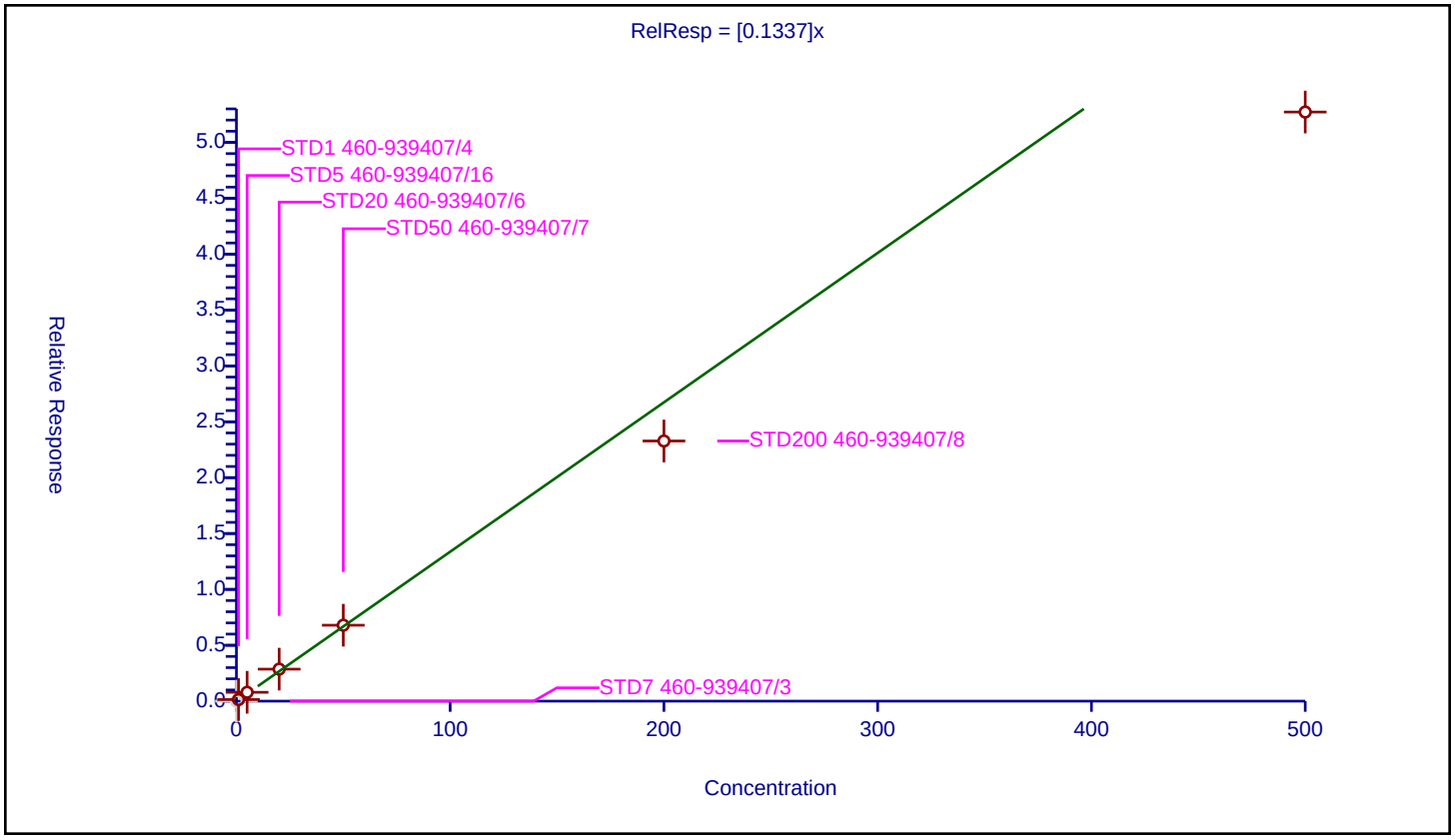
Curve Coefficients

Intercept:	0
Slope:	0.1337

Error Coefficients

Standard Error:	387000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.142912	50.0	417390.0	0.142912	Y
3	STD5 460-939407/16	5.0	0.791595	50.0	497161.0	0.158319	Y
4	STD20 460-939407/6	20.0	2.863891	50.0	515889.0	0.143195	Y
5	STD50 460-939407/7	50.0	6.795073	50.0	534240.0	0.135901	Y
6	STD200 460-939407/8	200.0	23.280359	50.0	655471.0	0.116402	Y
7	STD500 460-939407/9	500.0	52.719886	50.0	764591.0	0.10544	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

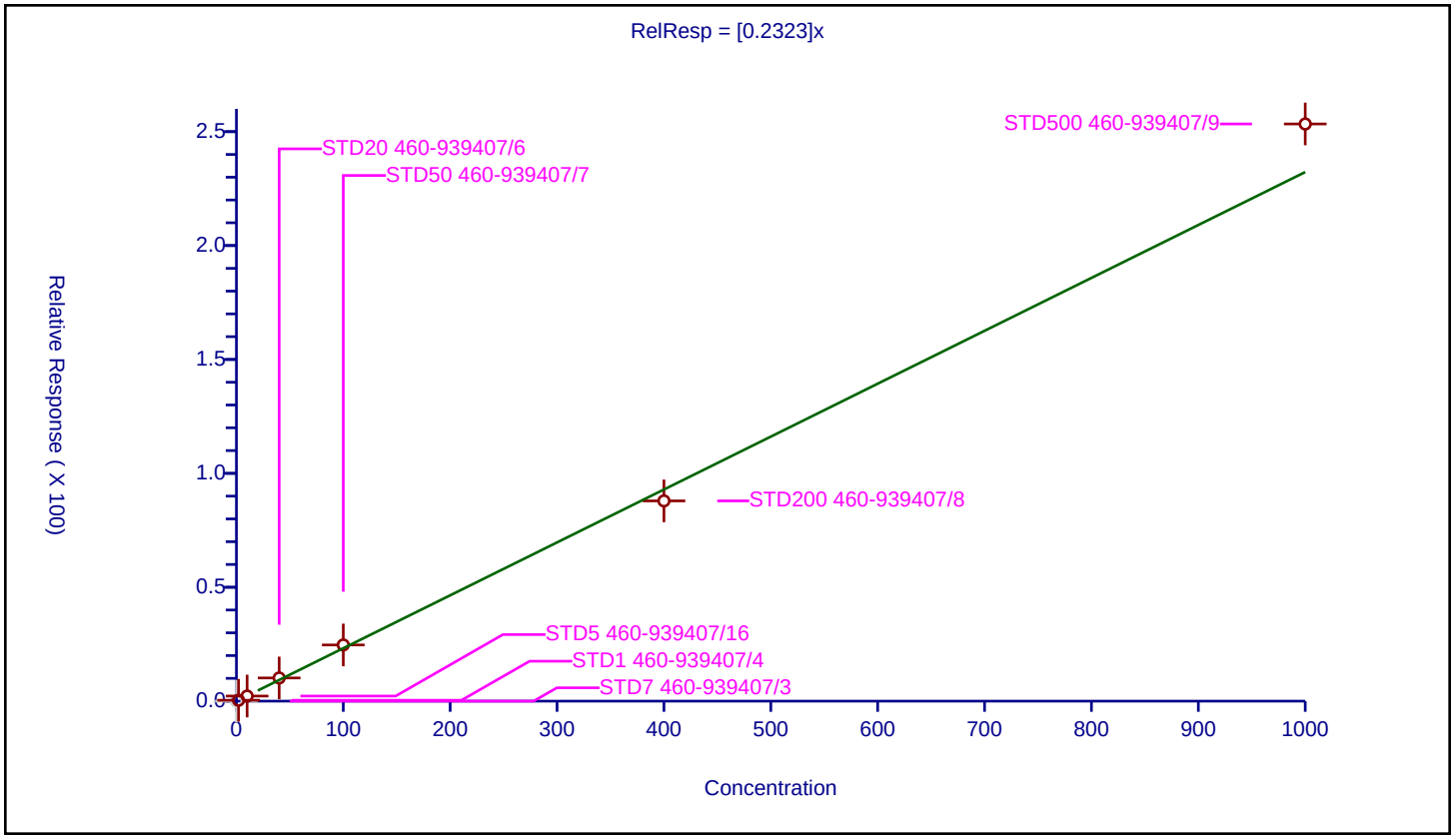
Curve Coefficients

Intercept:	0
Slope:	0.2323

Error Coefficients

Standard Error:	145000
Relative Standard Error:	10.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	2.0	0.38954	250.0	168147.0	0.19477	Y
3	STD5 460-939407/16	10.0	2.244289	250.0	220337.0	0.224429	Y
4	STD20 460-939407/6	40.0	10.180113	250.0	185828.0	0.254503	Y
5	STD50 460-939407/7	100.0	24.666679	250.0	210233.0	0.246667	Y
6	STD200 460-939407/8	400.0	87.907275	250.0	278006.0	0.219768	Y
7	STD500 460-939407/9	1000.0	253.376333	250.0	303954.0	0.253376	Y



10/25/2023
1:26 PM

Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

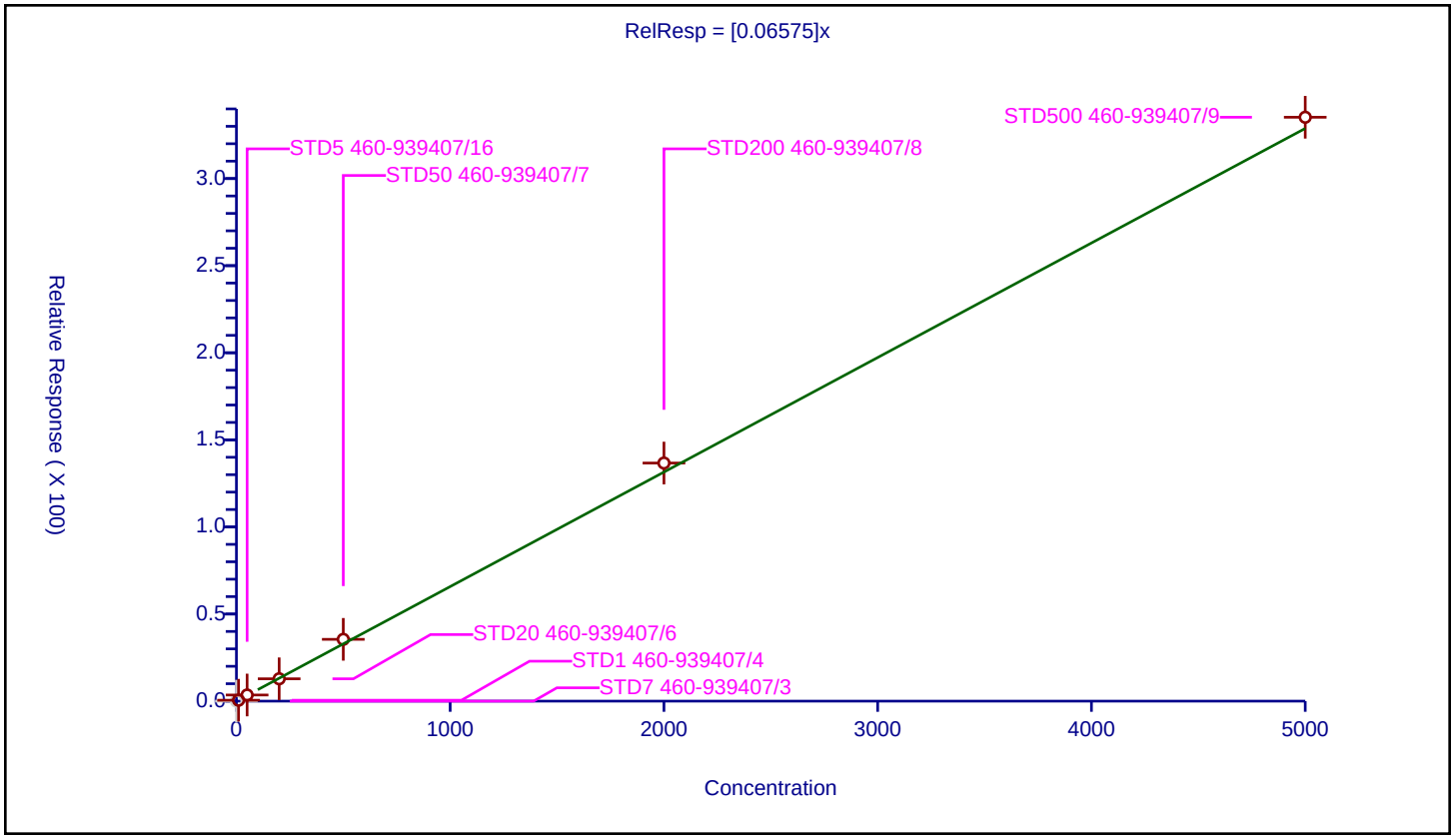
Curve Coefficients

Intercept:	0
Slope:	0.06575

Error Coefficients

Standard Error:	2430000
Relative Standard Error:	9.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	10.0	0.534392	50.0	417390.0	0.053439	Y
3	STD5 460-939407/16	50.0	3.526524	50.0	497161.0	0.07053	Y
4	STD20 460-939407/6	200.0	12.842491	50.0	515889.0	0.064212	Y
5	STD50 460-939407/7	500.0	35.478905	50.0	534240.0	0.070958	Y
6	STD200 460-939407/8	2000.0	136.690944	50.0	655471.0	0.068345	Y
7	STD500 460-939407/9	5000.0	335.196857	50.0	764591.0	0.067039	Y



10/25/2023
1:26 PM

Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

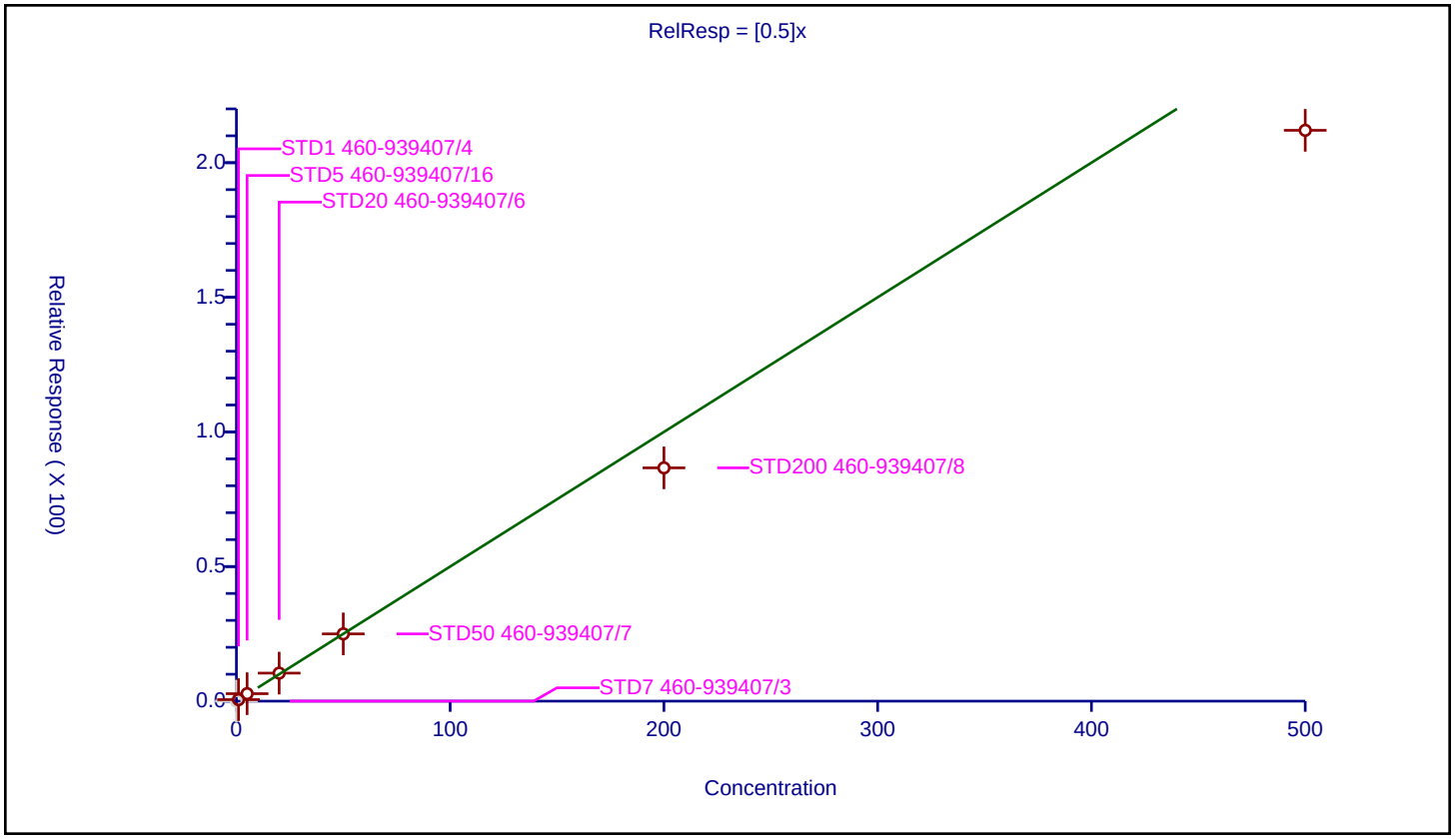
Curve Coefficients

Intercept:	0
Slope:	0.5

Error Coefficients

Standard Error:	1540000
Relative Standard Error:	12.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.567215	50.0	417390.0	0.567215	Y
3	STD5 460-939407/16	5.0	2.776666	50.0	497161.0	0.555333	Y
4	STD20 460-939407/6	20.0	10.411833	50.0	515889.0	0.520592	Y
5	STD50 460-939407/7	50.0	24.982873	50.0	534240.0	0.499657	Y
6	STD200 460-939407/8	200.0	86.655397	50.0	655471.0	0.433277	Y
7	STD500 460-939407/9	500.0	212.038659	50.0	764591.0	0.424077	Y



10/25/2023
1:26 PM

Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

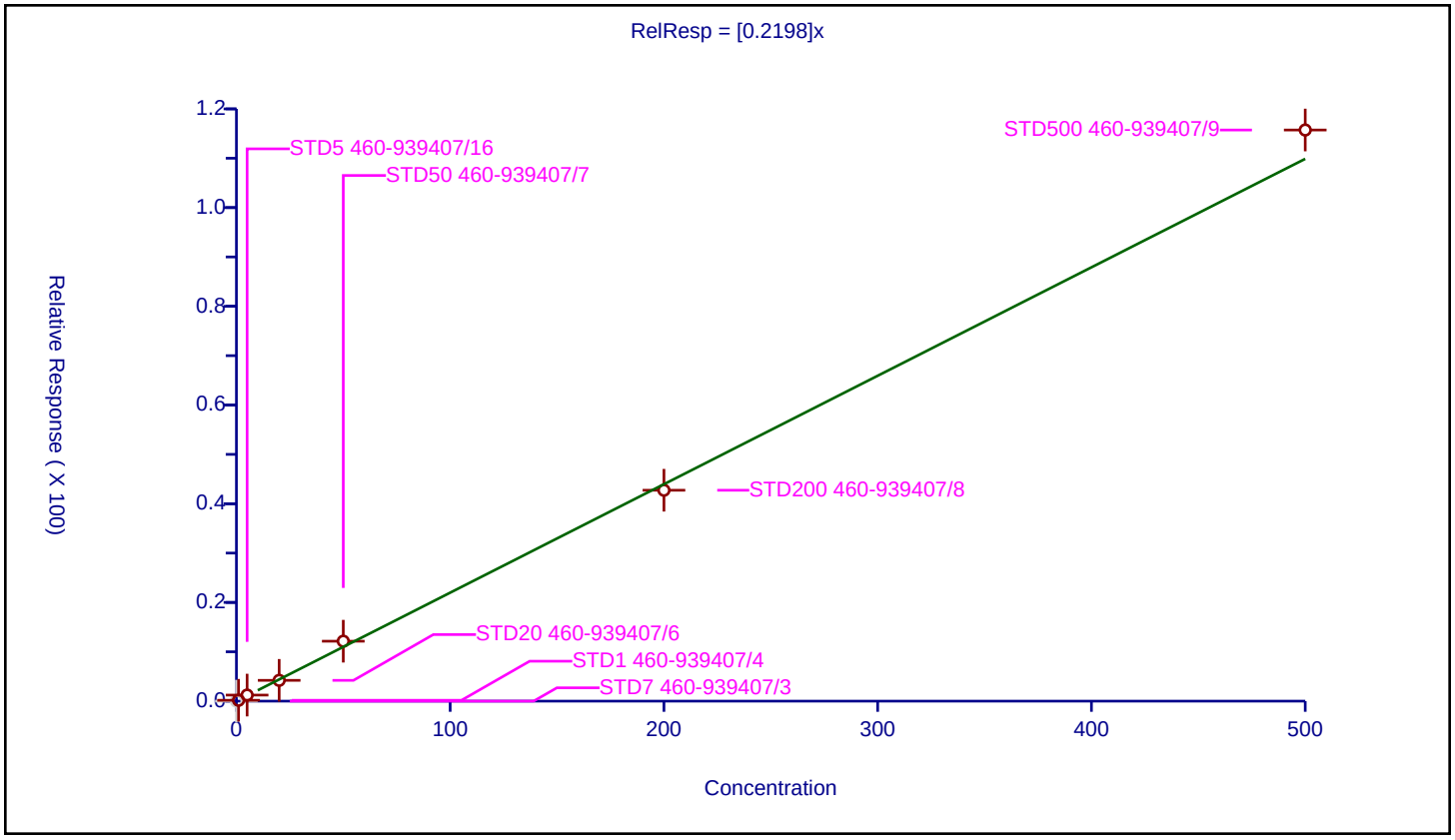
Curve Coefficients

Intercept:	0
Slope:	0.2198

Error Coefficients

Standard Error:	832000
Relative Standard Error:	12.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.174417	50.0	417390.0	0.174417	Y
3	STD5 460-939407/16	5.0	1.227168	50.0	497161.0	0.245434	Y
4	STD20 460-939407/6	20.0	4.213019	50.0	515889.0	0.210651	Y
5	STD50 460-939407/7	50.0	12.146226	50.0	534240.0	0.242925	Y
6	STD200 460-939407/8	200.0	42.734537	50.0	655471.0	0.213673	Y
7	STD500 460-939407/9	500.0	115.720366	50.0	764591.0	0.231441	Y



10/25/2023
1:26 PM

Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

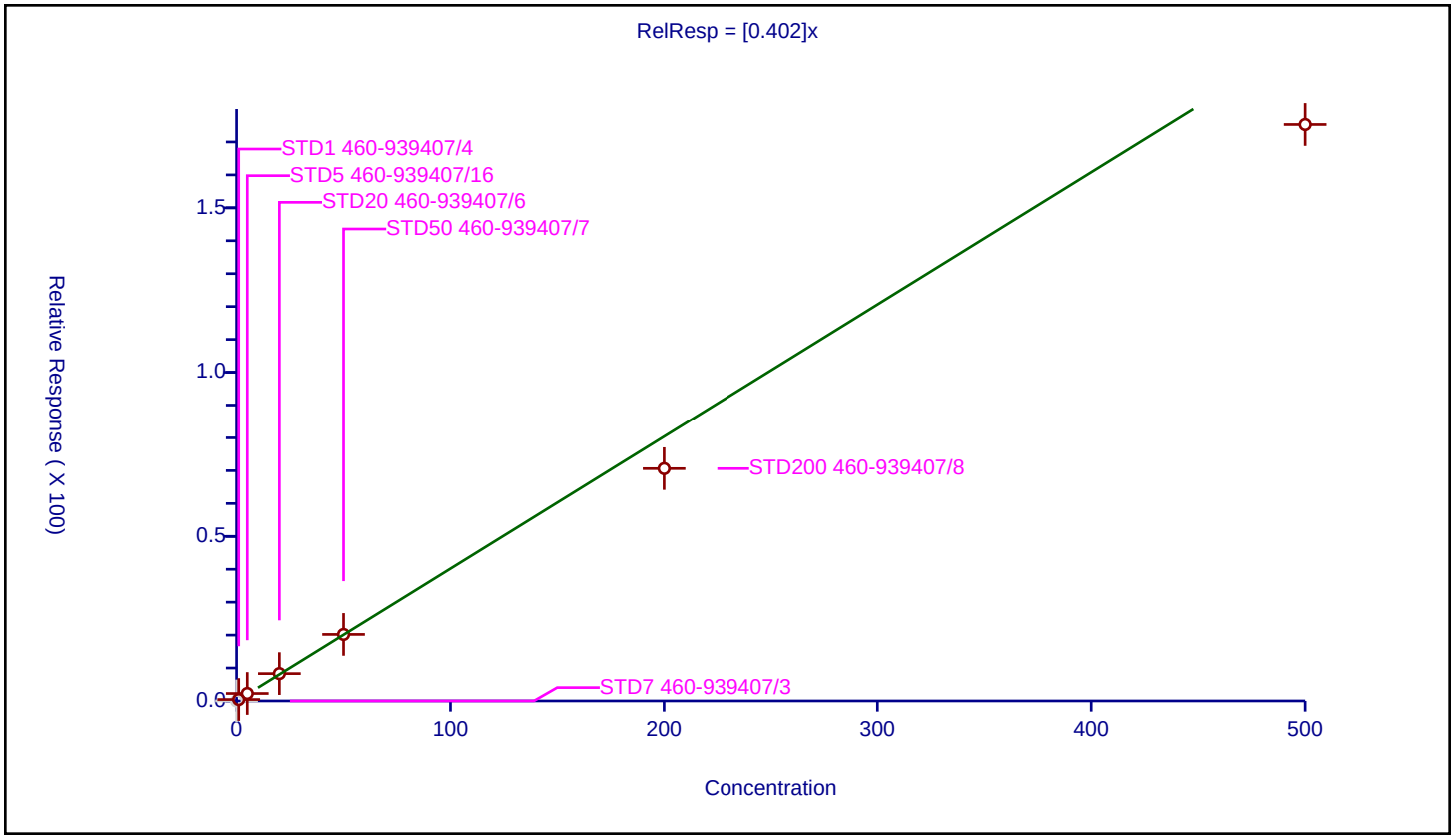
Curve Coefficients

Intercept:	0
Slope:	0.402

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.436283	50.0	417390.0	0.436283	Y
3	STD5 460-939407/16	5.0	2.264256	50.0	497161.0	0.452851	Y
4	STD20 460-939407/6	20.0	8.299751	50.0	515889.0	0.414988	Y
5	STD50 460-939407/7	50.0	20.20459	50.0	534240.0	0.404092	Y
6	STD200 460-939407/8	200.0	70.632873	50.0	655471.0	0.353164	Y
7	STD500 460-939407/9	500.0	175.309741	50.0	764591.0	0.350619	Y



10/25/2023
1:26 PM

Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

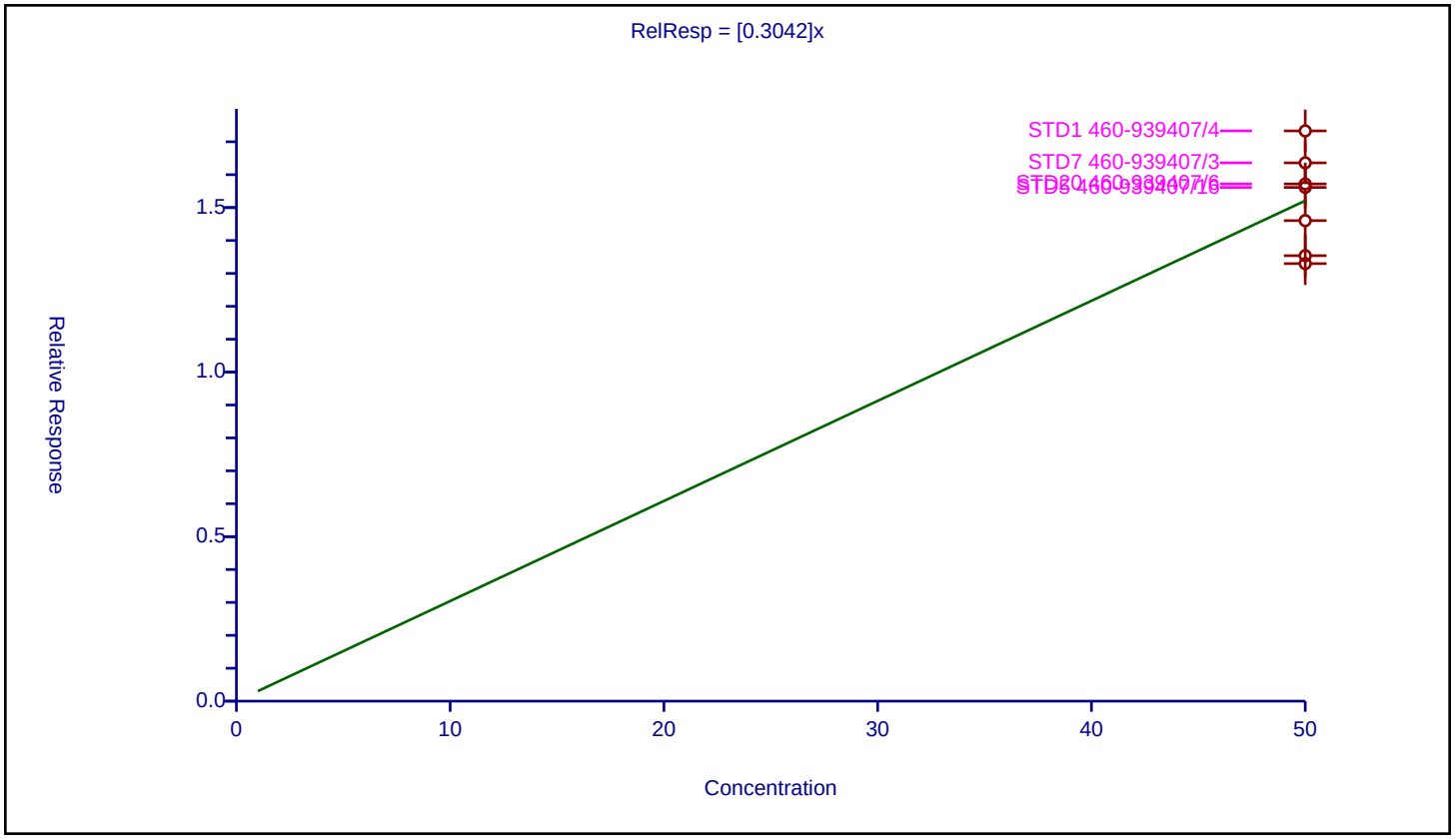
Curve Coefficients

Intercept:	0
Slope:	0.3042

Error Coefficients

Standard Error:	176000
Relative Standard Error:	9.7
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	50.0	16.359491	50.0	412033.0	0.32719	Y
2	STD1 460-939407/4	50.0	17.330794	50.0	417390.0	0.346616	Y
3	STD20 460-939407/6	50.0	15.718498	50.0	515889.0	0.31437	Y
4	STD50 460-939407/7	50.0	14.604017	50.0	534240.0	0.29208	Y
5	STD200 460-939407/8	50.0	13.539195	50.0	655471.0	0.270784	Y
6	STD500 460-939407/9	50.0	13.298025	50.0	764591.0	0.26596	Y
7	STD5 460-939407/16	50.0	15.613151	50.0	497161.0	0.312263	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

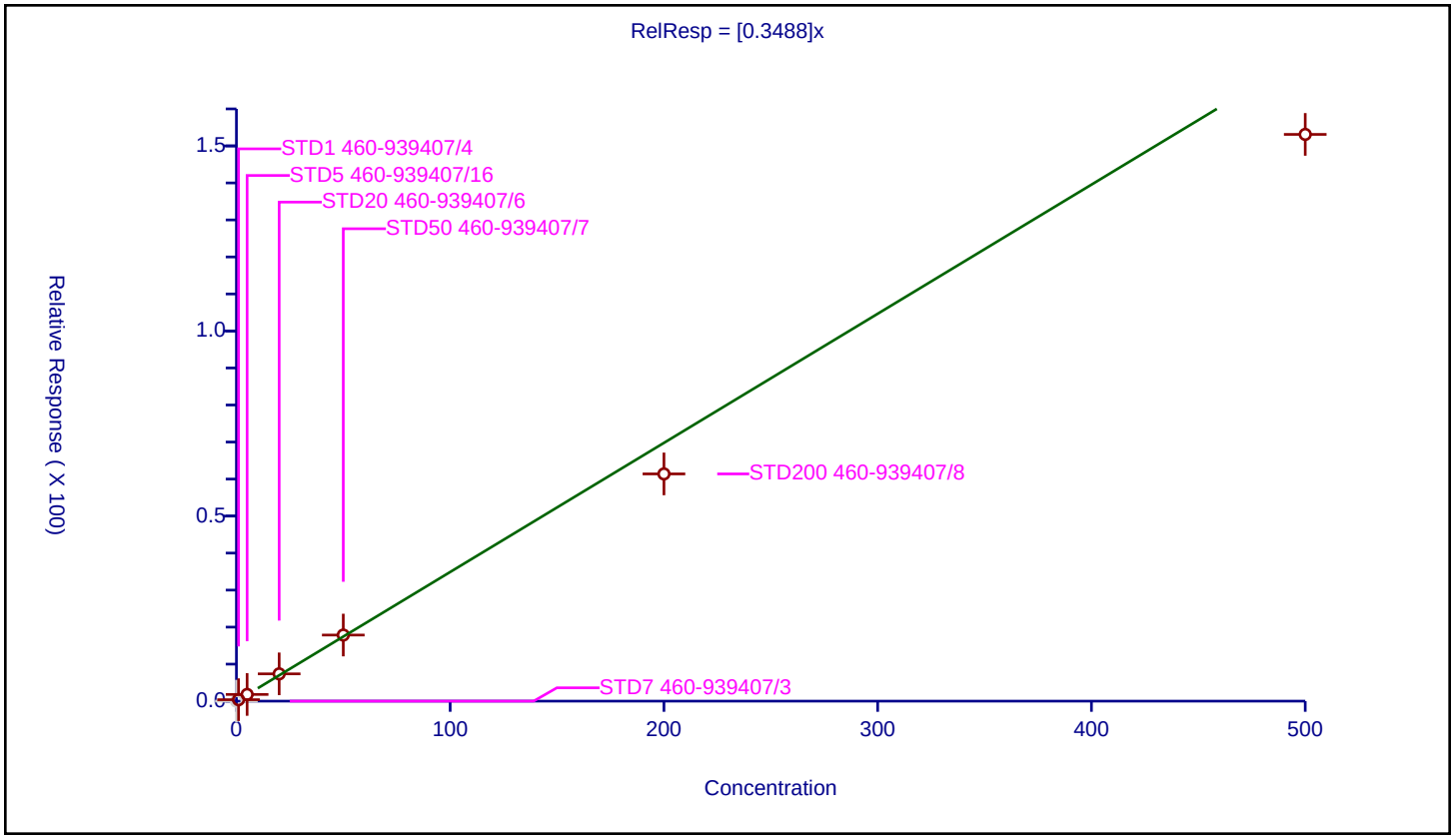
Curve Coefficients

Intercept:	0
Slope:	0.3488

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	10.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.393157	50.0	417390.0	0.393157	Y
3	STD5 460-939407/16	5.0	1.806055	50.0	497161.0	0.361211	Y
4	STD20 460-939407/6	20.0	7.369996	50.0	515889.0	0.3685	Y
5	STD50 460-939407/7	50.0	17.853586	50.0	534240.0	0.357072	Y
6	STD200 460-939407/8	200.0	61.387613	50.0	655471.0	0.306938	Y
7	STD500 460-939407/9	500.0	153.103882	50.0	764591.0	0.306208	Y



10/25/2023
1:26 PM

Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

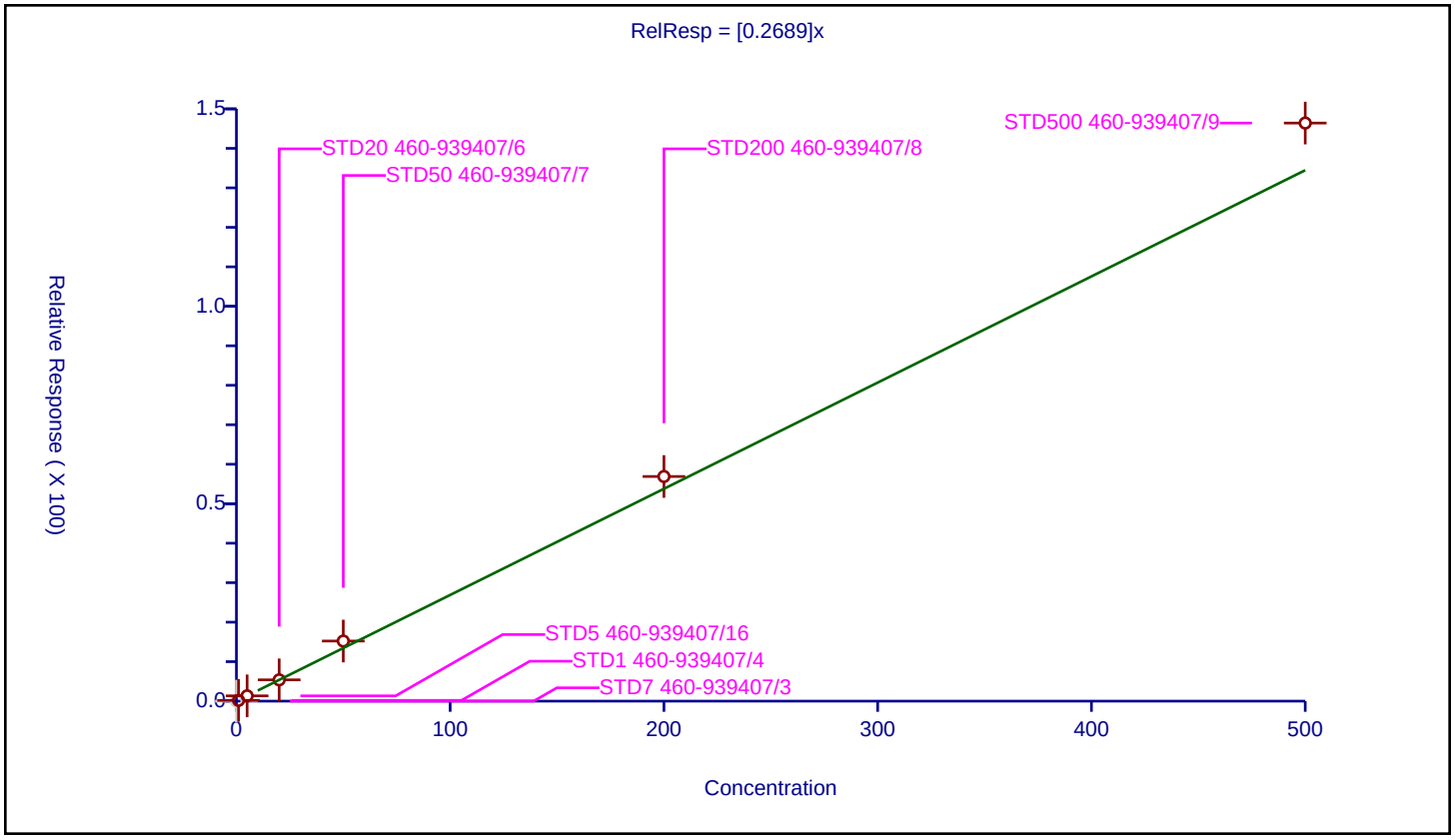
Curve Coefficients

Intercept:	0
Slope:	0.2689

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	14.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.193943	50.0	417390.0	0.193943	Y
3	STD5 460-939407/16	5.0	1.340914	50.0	497161.0	0.268183	Y
4	STD20 460-939407/6	20.0	5.392827	50.0	515889.0	0.269641	Y
5	STD50 460-939407/7	50.0	15.223589	50.0	534240.0	0.304472	Y
6	STD200 460-939407/8	200.0	56.896796	50.0	655471.0	0.284484	Y
7	STD500 460-939407/9	500.0	146.407949	50.0	764591.0	0.292816	Y



10/25/2023
1:26 PM

Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

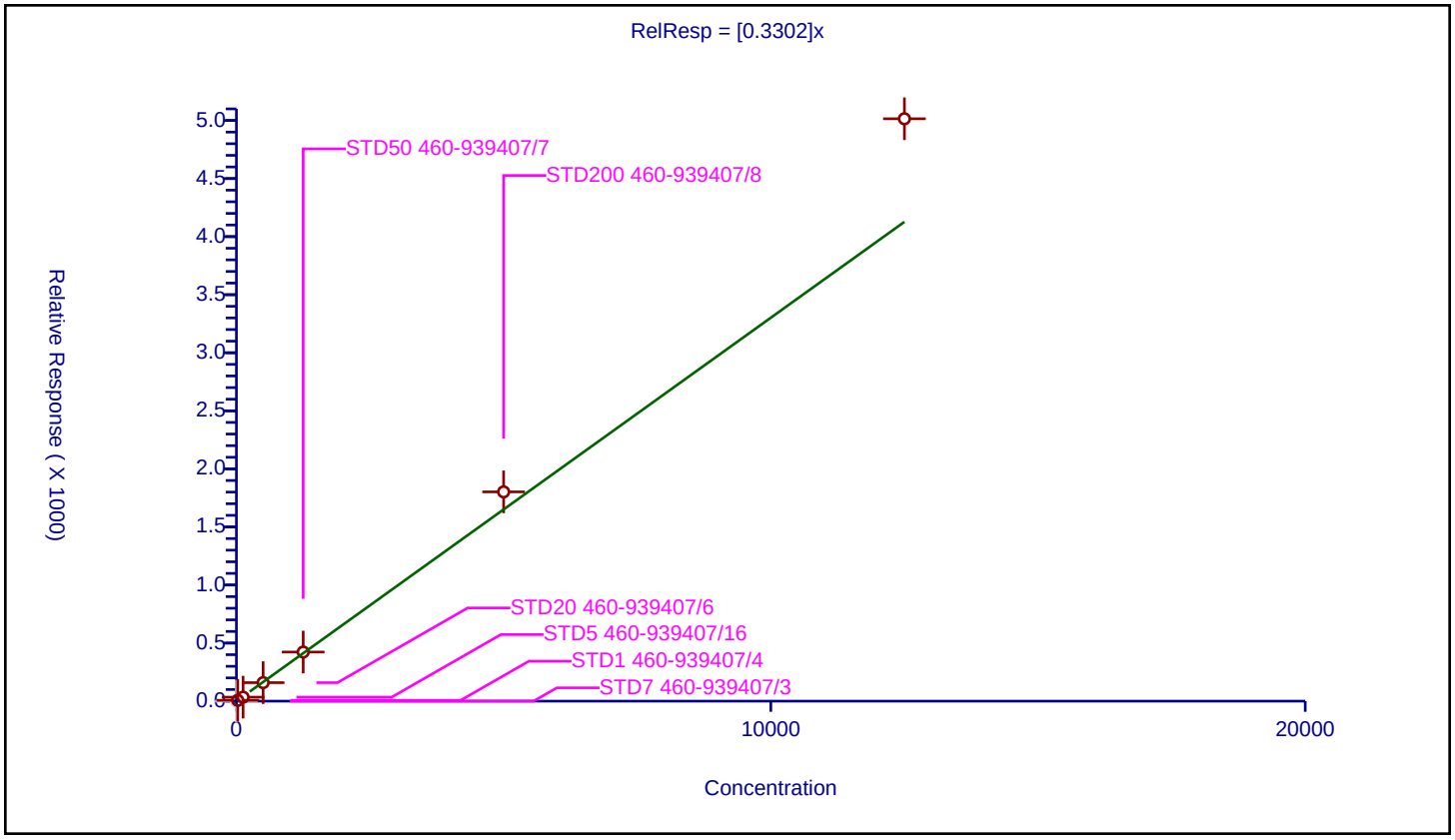
Curve Coefficients

Intercept:	0
Slope:	0.3302

Error Coefficients

Standard Error:	594000
Relative Standard Error:	14.2
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	25.0	7.199844	1000.0	169587.0	0.287994	Y
3	STD5 460-939407/16	125.0	34.295209	1000.0	213645.0	0.274362	Y
4	STD20 460-939407/6	500.0	159.380145	1000.0	168233.0	0.31876	Y
5	STD50 460-939407/7	1250.0	422.823253	1000.0	192558.0	0.338259	Y
6	STD200 460-939407/8	5000.0	1802.169438	1000.0	218121.0	0.360434	Y
7	STD500 460-939407/9	12500.0	5014.795179	1000.0	253123.0	0.401184	Y



Calibration / Isooctane

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

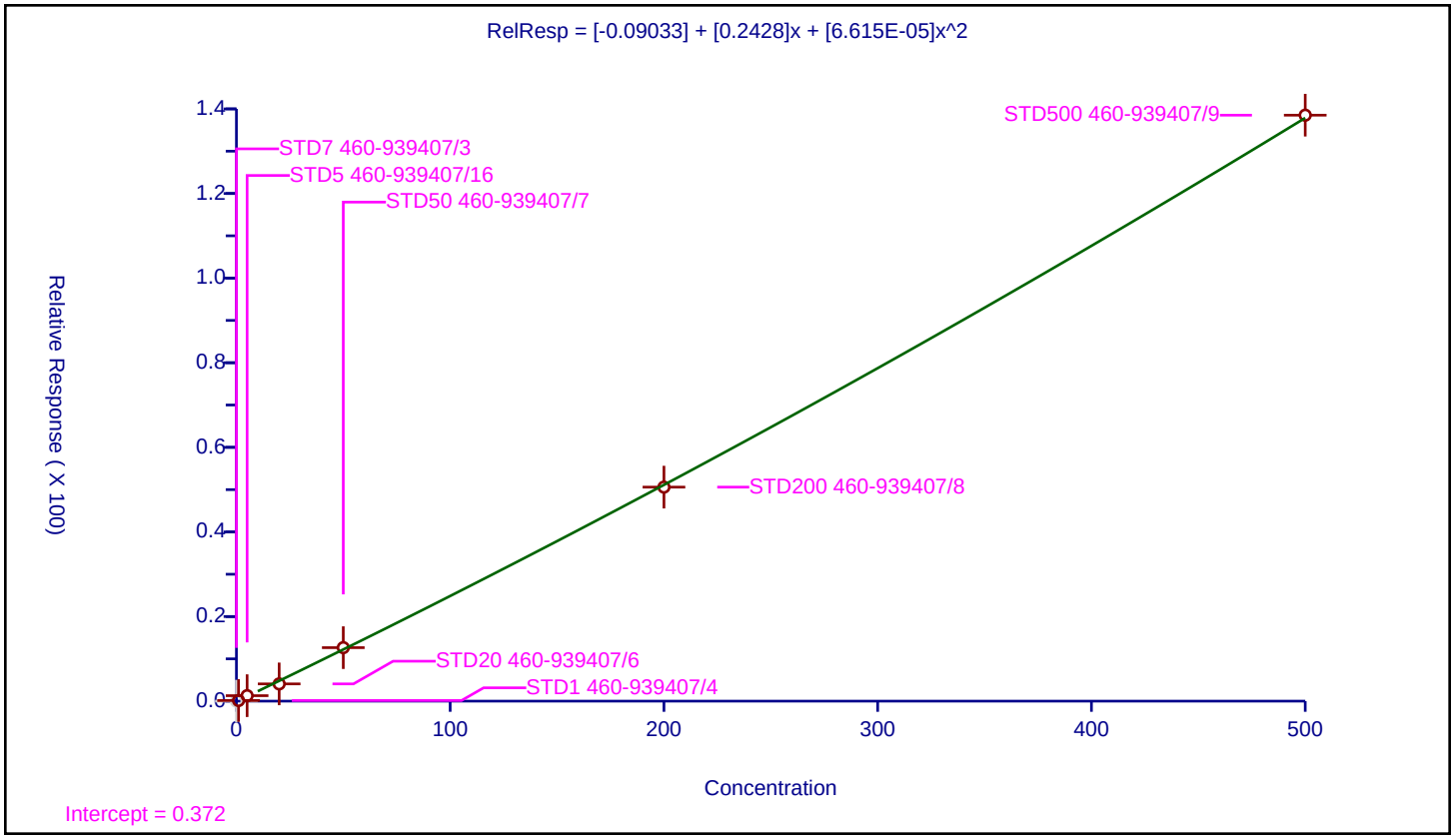
Curve Coefficients

Intercept:	-0.09033
Slope:	0.2428
Second Order:	6.615E-05

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	11.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.147464	50.0	417390.0	0.147464	Y
3	STD5 460-939407/16	5.0	1.293645	50.0	497161.0	0.258729	Y
4	STD20 460-939407/6	20.0	4.07704	50.0	515889.0	0.203852	Y
5	STD50 460-939407/7	50.0	12.645534	50.0	534240.0	0.252911	Y
6	STD200 460-939407/8	200.0	50.592856	50.0	655471.0	0.252964	Y
7	STD500 460-939407/9	500.0	138.513532	50.0	764591.0	0.277027	Y



10/25/2023
1:26 PM

Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

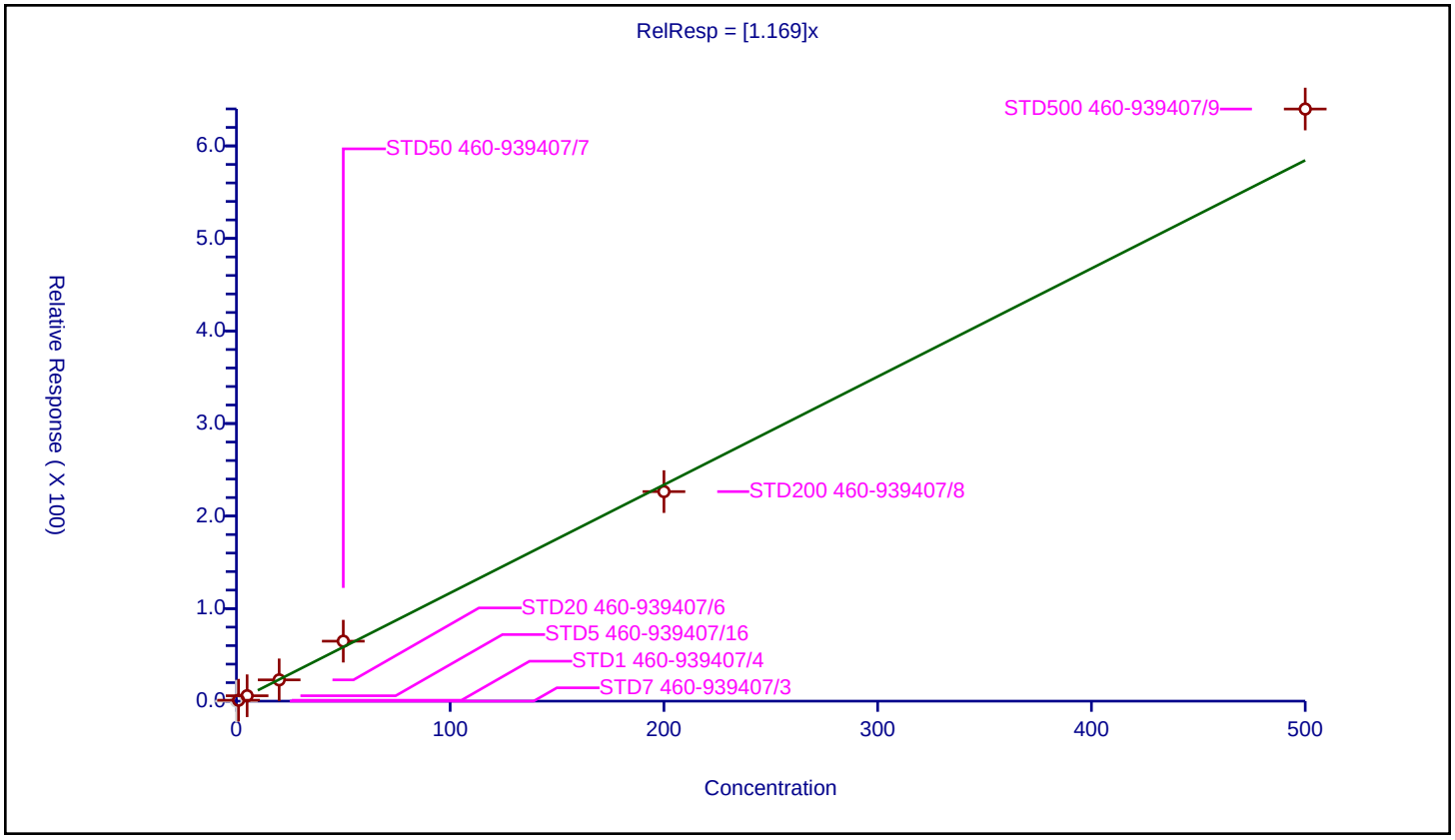
Curve Coefficients

Intercept:	0
Slope:	1.169

Error Coefficients

Standard Error:	2890000
Relative Standard Error:	9.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.990971	50.0	322058.0	0.990971	Y
3	STD5 460-939407/16	5.0	5.824628	50.0	382136.0	1.164926	Y
4	STD20 460-939407/6	20.0	22.991925	50.0	379916.0	1.149596	Y
5	STD50 460-939407/7	50.0	64.788698	50.0	371412.0	1.295774	Y
6	STD200 460-939407/8	200.0	226.431277	50.0	465371.0	1.132156	Y
7	STD500 460-939407/9	500.0	639.845947	50.0	475810.0	1.279692	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

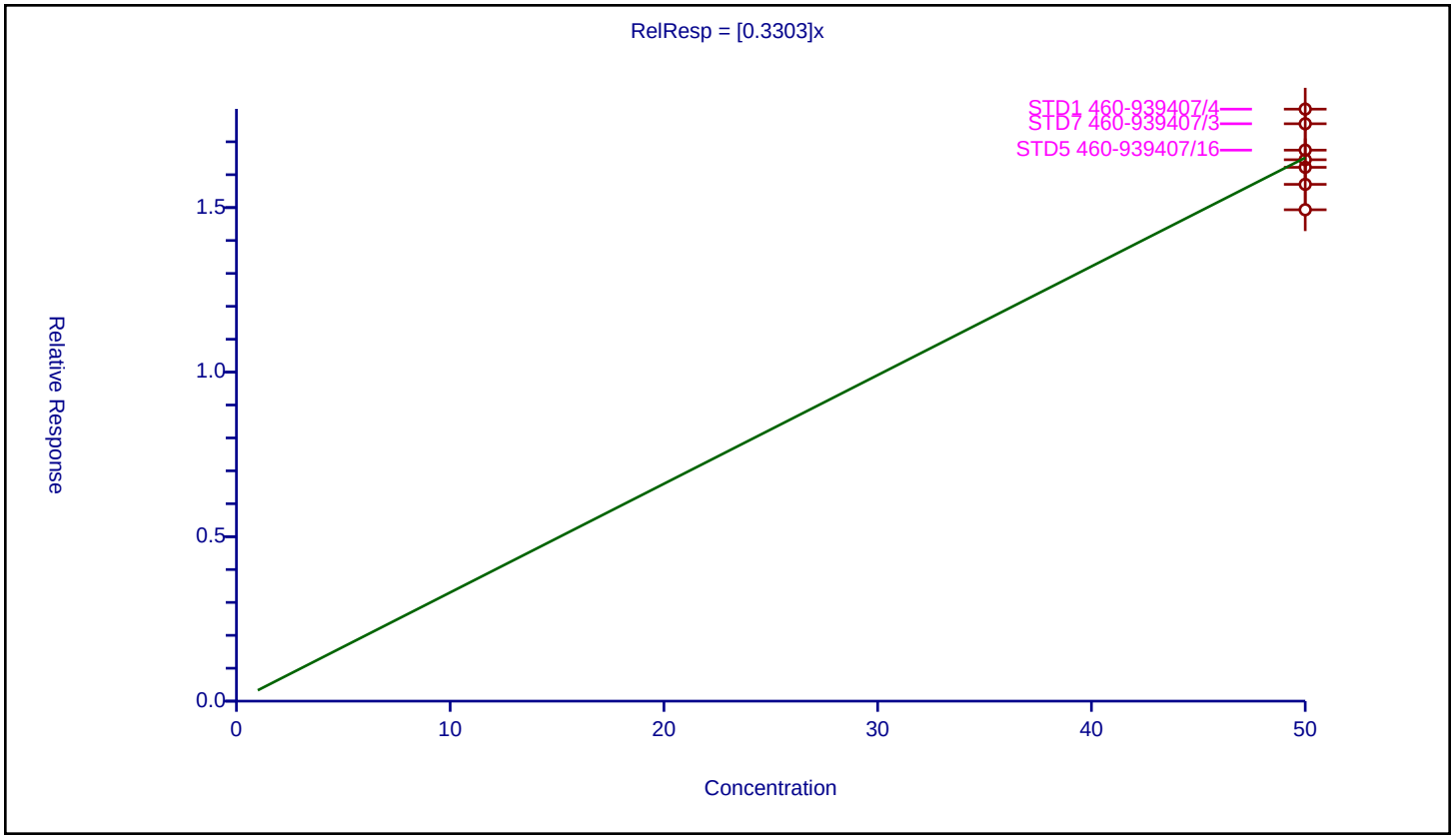
Curve Coefficients

Intercept:	0
Slope:	0.3303

Error Coefficients

Standard Error:	193000
Relative Standard Error:	6.3
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	50.0	17.548352	50.0	412033.0	0.350967	Y
2	STD1 460-939407/4	50.0	17.992525	50.0	417390.0	0.35985	Y
3	STD20 460-939407/6	50.0	16.223936	50.0	515889.0	0.324479	Y
4	STD50 460-939407/7	50.0	16.454403	50.0	534240.0	0.329088	Y
5	STD200 460-939407/8	50.0	15.707026	50.0	655471.0	0.314141	Y
6	STD500 460-939407/9	50.0	14.934782	50.0	764591.0	0.298696	Y
7	STD5 460-939407/16	50.0	16.746889	50.0	497161.0	0.334938	Y



Calibration / Isopropyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

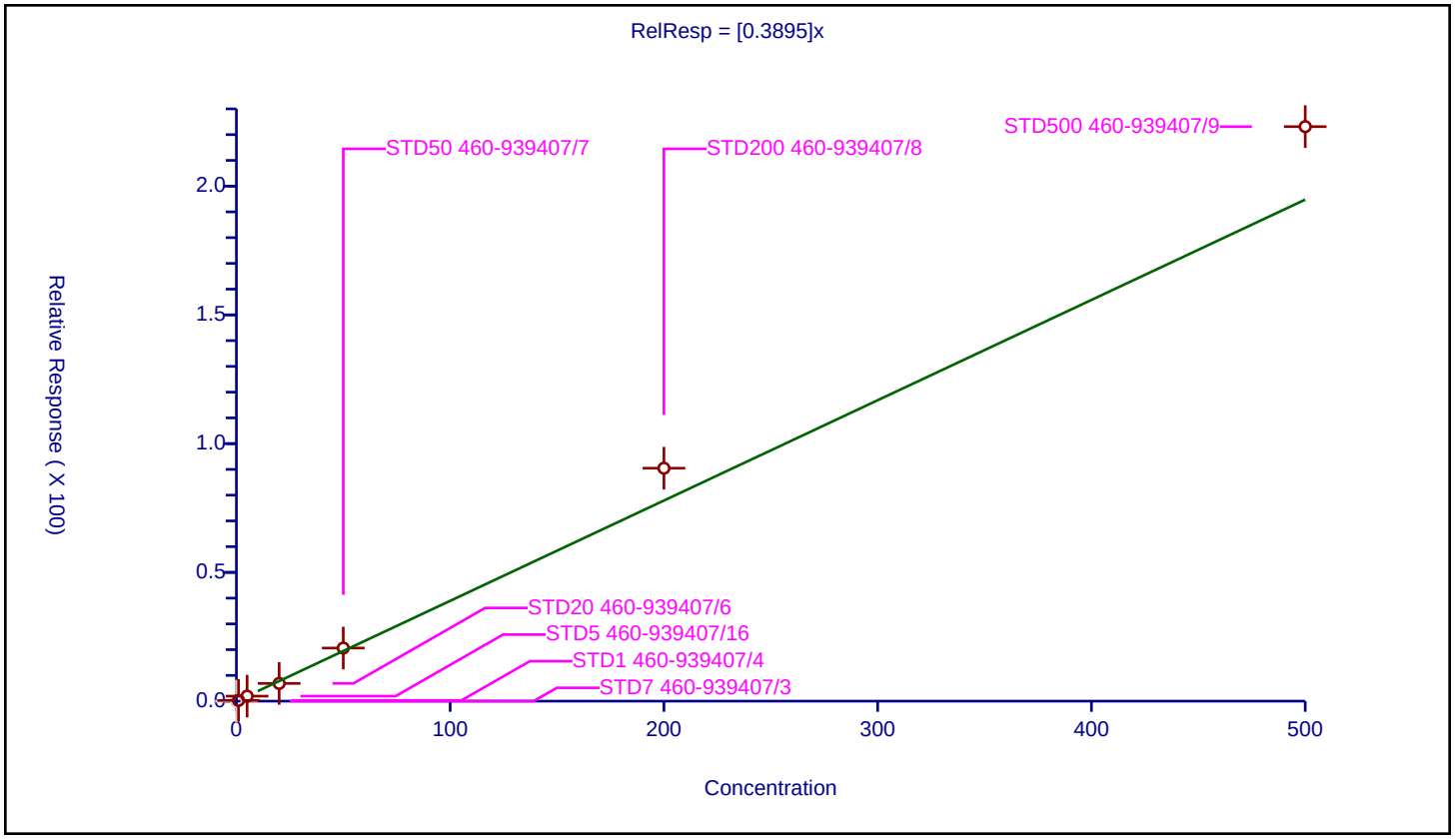
Curve Coefficients

Intercept:	0
Slope:	0.3895

Error Coefficients

Standard Error:	1620000
Relative Standard Error:	15.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.293131	50.0	417390.0	0.293131	Y
3	STD5 460-939407/16	5.0	1.944843	50.0	497161.0	0.388969	Y
4	STD20 460-939407/6	20.0	6.880356	50.0	515889.0	0.344018	Y
5	STD50 460-939407/7	50.0	20.624532	50.0	534240.0	0.412491	Y
6	STD200 460-939407/8	200.0	90.459761	50.0	655471.0	0.452299	Y
7	STD500 460-939407/9	500.0	223.102875	50.0	764591.0	0.446206	Y



Calibration / Tert-amyl methyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

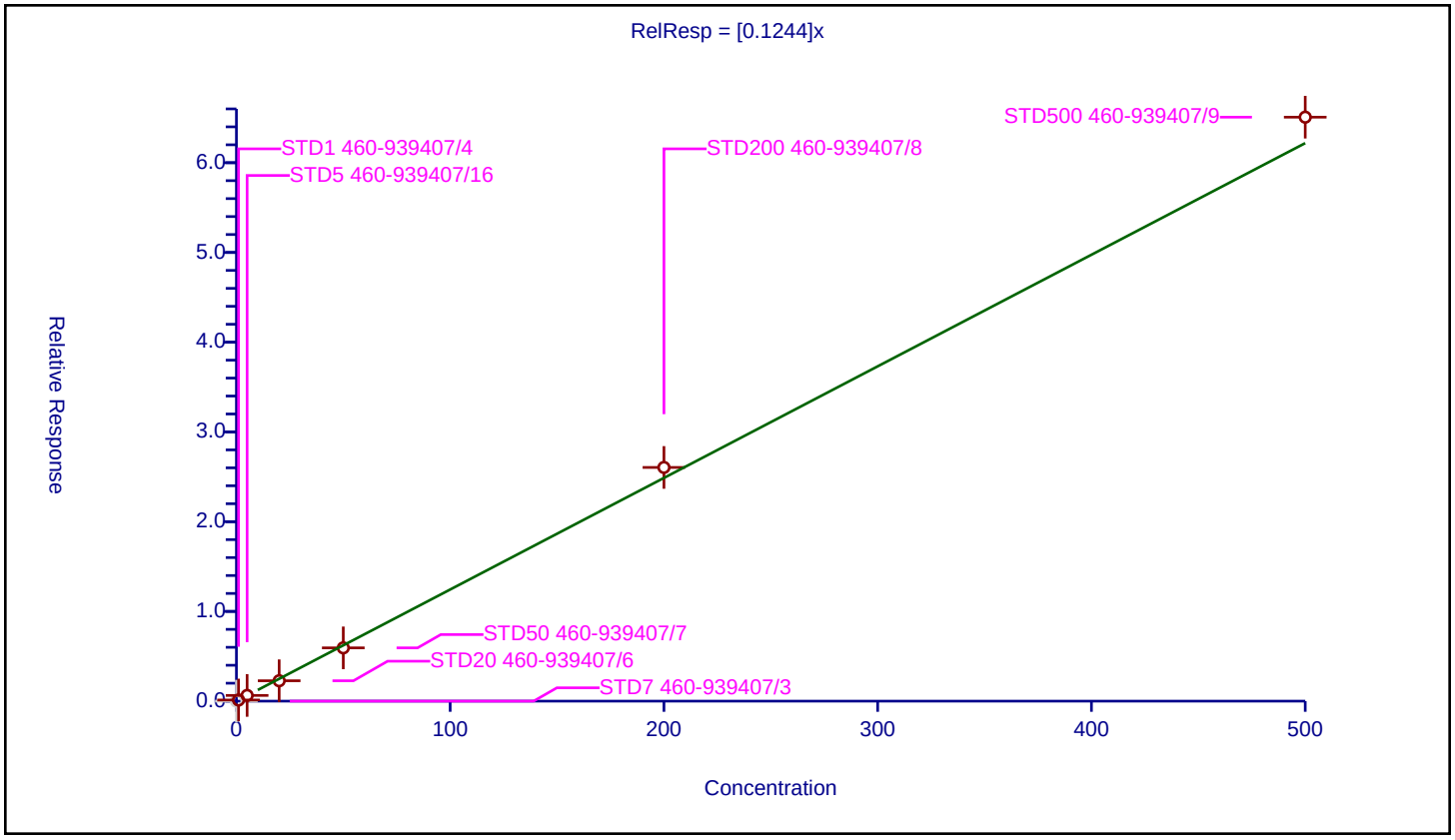
Curve Coefficients

Intercept:	0
Slope:	0.1244

Error Coefficients

Standard Error:	471000
Relative Standard Error:	5.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.126381	50.0	417390.0	0.126381	Y
3	STD5 460-939407/16	5.0	0.635408	50.0	497161.0	0.127082	Y
4	STD20 460-939407/6	20.0	2.271807	50.0	515889.0	0.11359	Y
5	STD50 460-939407/7	50.0	5.938436	50.0	534240.0	0.118769	Y
6	STD200 460-939407/8	200.0	26.042495	50.0	655471.0	0.130212	Y
7	STD500 460-939407/9	500.0	65.076296	50.0	764591.0	0.130153	Y



10/25/2023
1:26 PM

Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

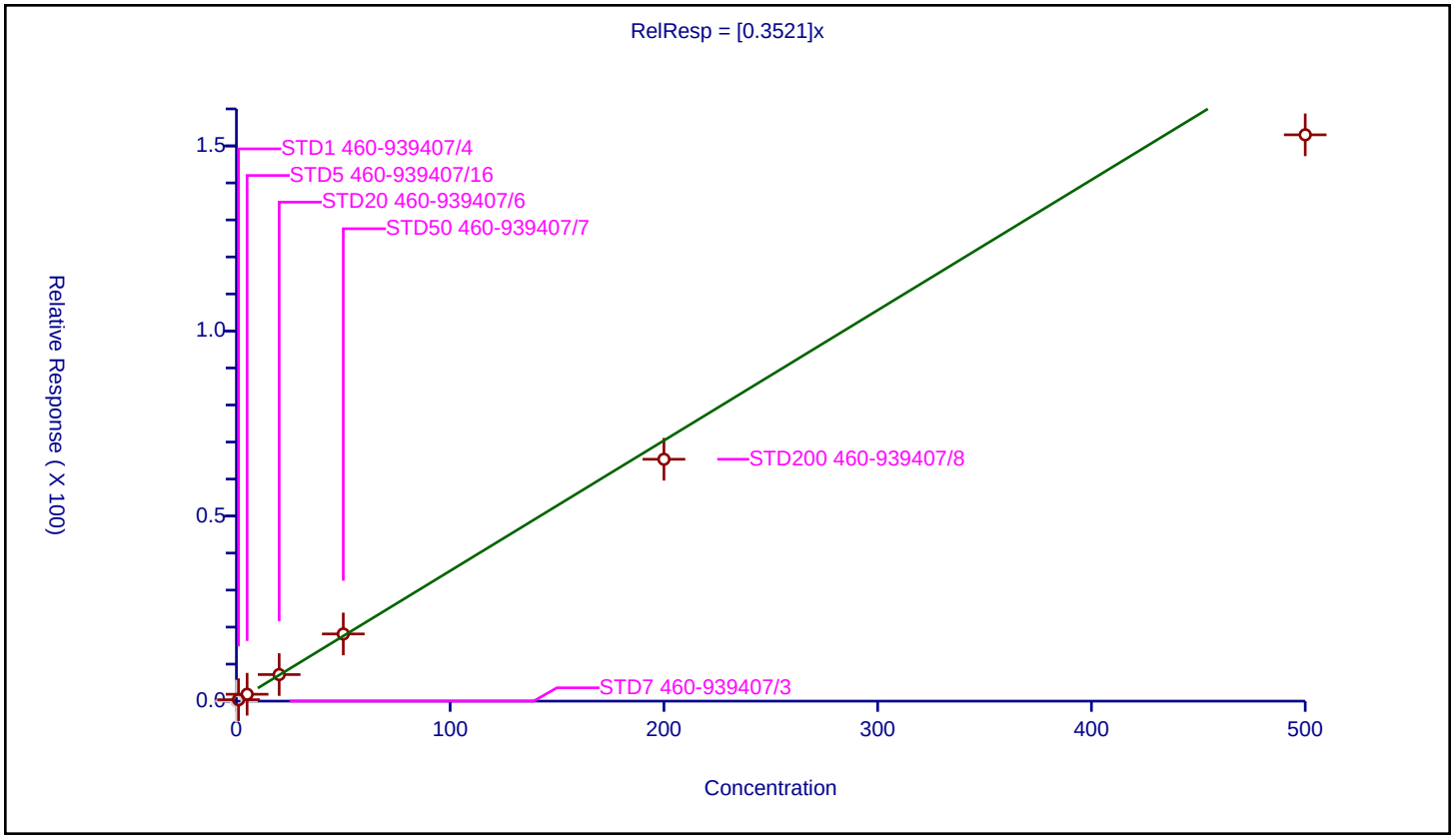
Curve Coefficients

Intercept:	0
Slope:	0.3521

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.38621	50.0	417390.0	0.38621	Y
3	STD5 460-939407/16	5.0	1.857547	50.0	497161.0	0.371509	Y
4	STD20 460-939407/6	20.0	7.180324	50.0	515889.0	0.359016	Y
5	STD50 460-939407/7	50.0	18.148023	50.0	534240.0	0.36296	Y
6	STD200 460-939407/8	200.0	65.342937	50.0	655471.0	0.326715	Y
7	STD500 460-939407/9	500.0	152.999905	50.0	764591.0	0.306	Y



10/25/2023
1:26 PM

Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

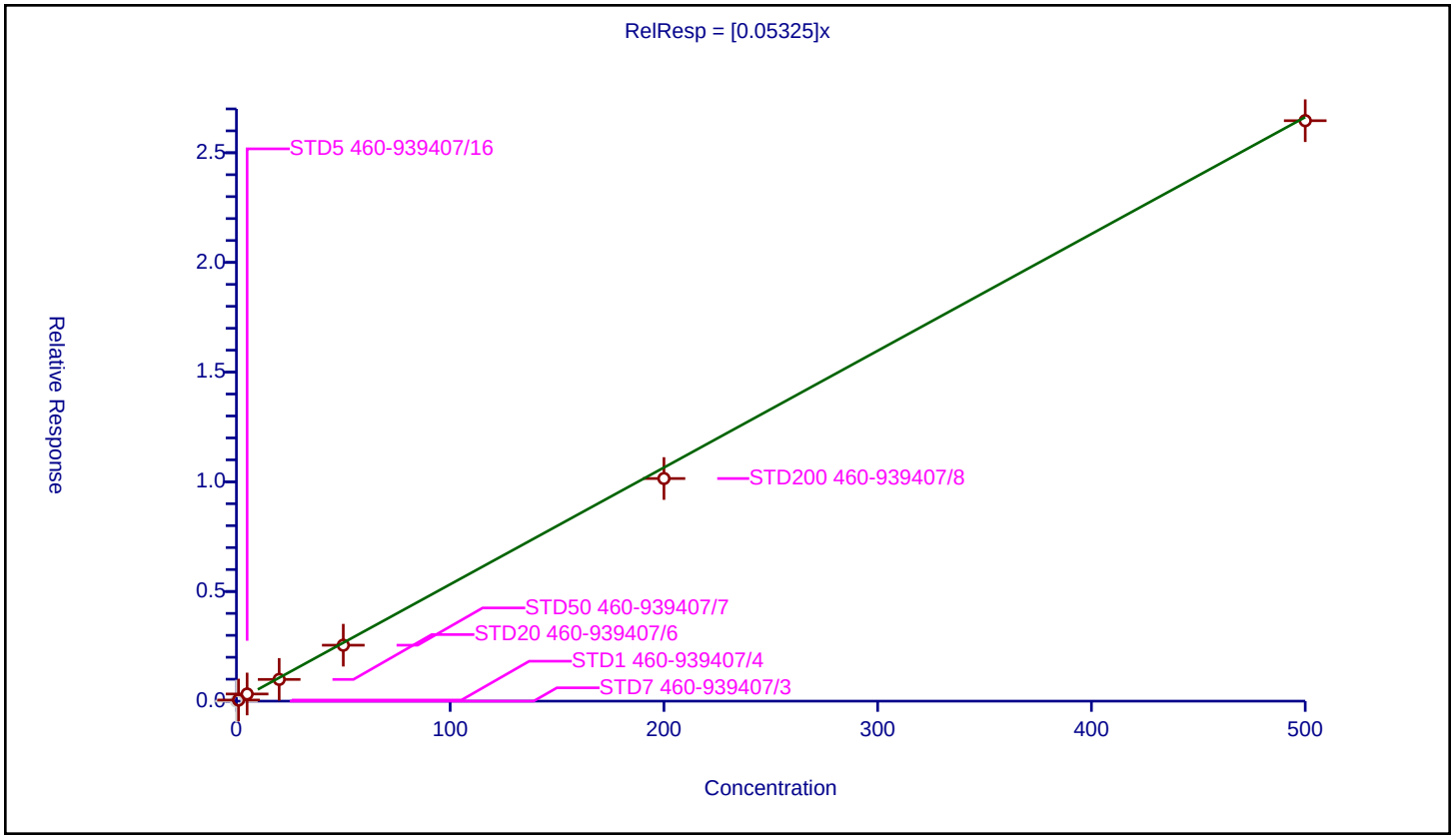
Curve Coefficients

Intercept:	0
Slope:	0.05325

Error Coefficients

Standard Error:	191000
Relative Standard Error:	11.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.050073	50.0	417390.0	0.050073	Y
3	STD5 460-939407/16	5.0	0.326051	50.0	497161.0	0.06521	Y
4	STD20 460-939407/6	20.0	0.990329	50.0	515889.0	0.049516	Y
5	STD50 460-939407/7	50.0	2.550352	50.0	534240.0	0.051007	Y
6	STD200 460-939407/8	200.0	10.149114	50.0	655471.0	0.050746	Y
7	STD500 460-939407/9	500.0	26.462252	50.0	764591.0	0.052925	Y



10/25/2023
1:26 PM

Calibration / n-Butanol

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

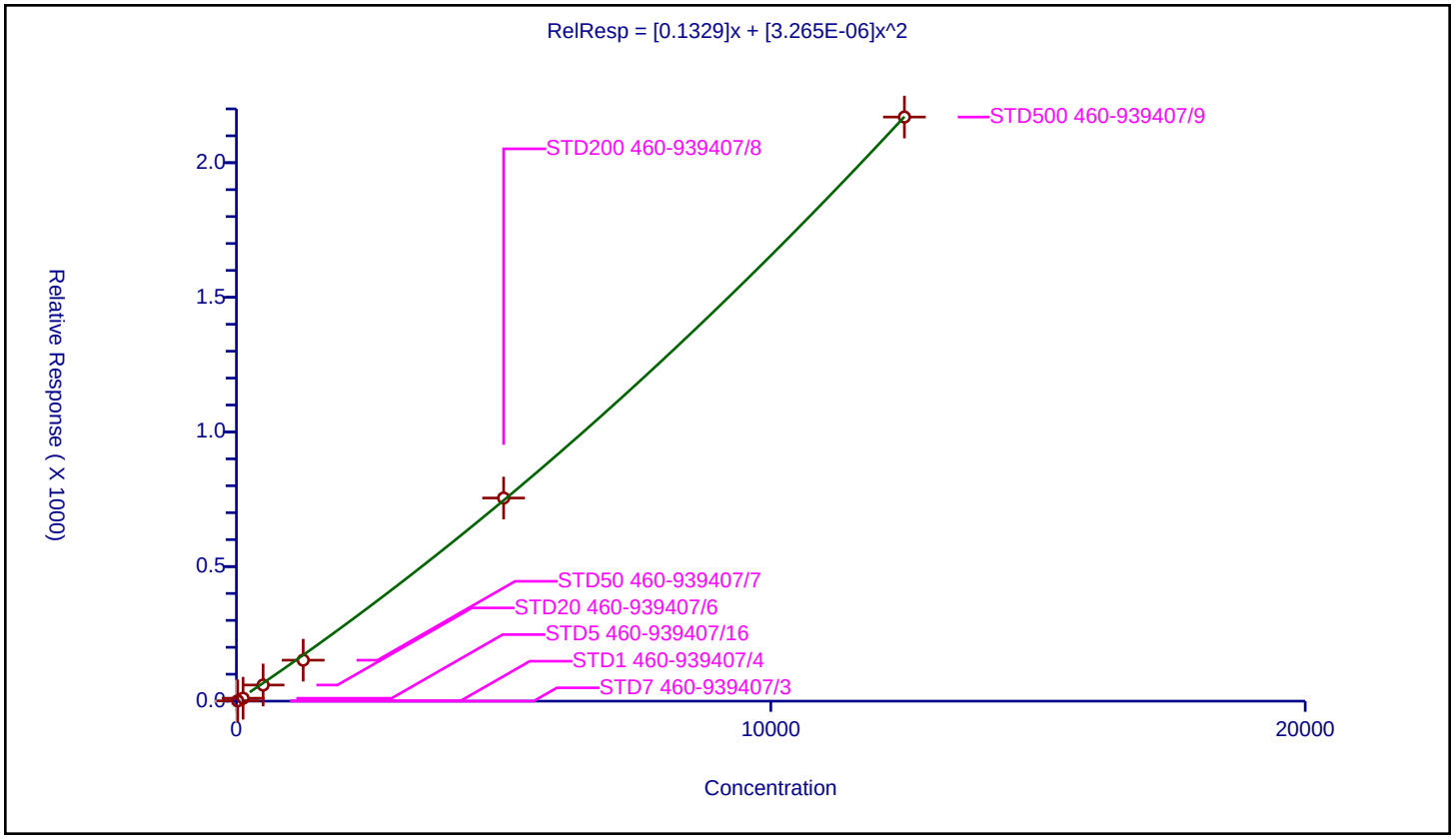
Curve Coefficients

Intercept:	0
Slope:	0.1329
Second Order:	3.265E-06

Error Coefficients

Standard Error:	286000
Relative Standard Error:	37.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	25.0	1.149852	1000.0	169587.0	0.045994	Y
3	STD5 460-939407/16	125.0	10.859135	1000.0	213645.0	0.086873	Y
4	STD20 460-939407/6	500.0	59.88718	1000.0	168233.0	0.119774	Y
5	STD50 460-939407/7	1250.0	152.172332	1000.0	192558.0	0.121738	Y
6	STD200 460-939407/8	5000.0	754.489481	1000.0	218121.0	0.150898	Y
7	STD500 460-939407/9	12500.0	2169.735662	1000.0	253123.0	0.173579	Y



10/25/2023
1:26 PM

Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

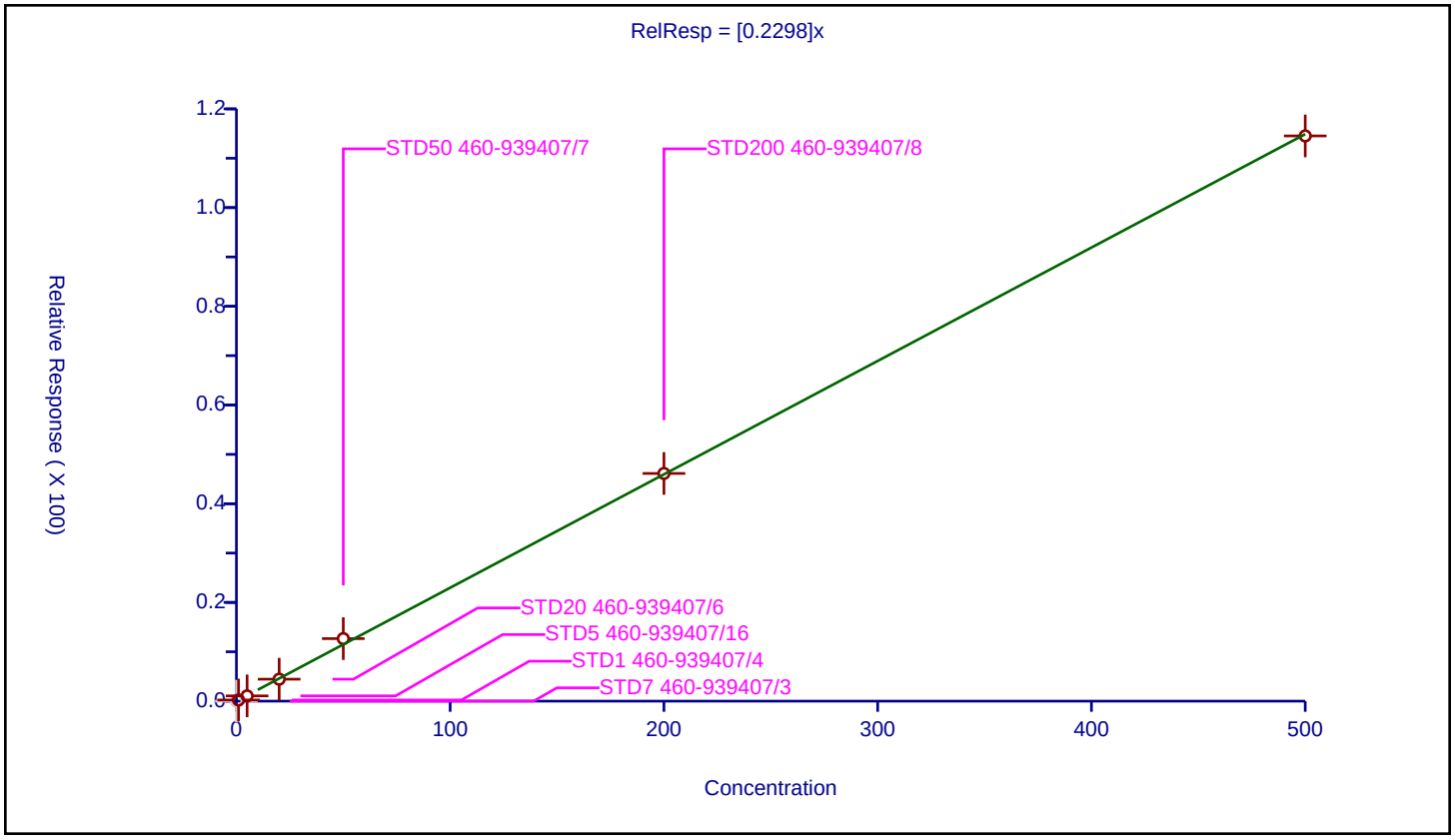
Curve Coefficients

Intercept:	0
Slope:	0.2298

Error Coefficients

Standard Error:	831000
Relative Standard Error:	5.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.229761	50.0	417390.0	0.229761	Y
3	STD5 460-939407/16	5.0	1.06736	50.0	497161.0	0.213472	Y
4	STD20 460-939407/6	20.0	4.446693	50.0	515889.0	0.222335	Y
5	STD50 460-939407/7	50.0	12.665656	50.0	534240.0	0.253313	Y
6	STD200 460-939407/8	200.0	46.134688	50.0	655471.0	0.230673	Y
7	STD500 460-939407/9	500.0	114.520966	50.0	764591.0	0.229042	Y



10/25/2023
1:26 PM

Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

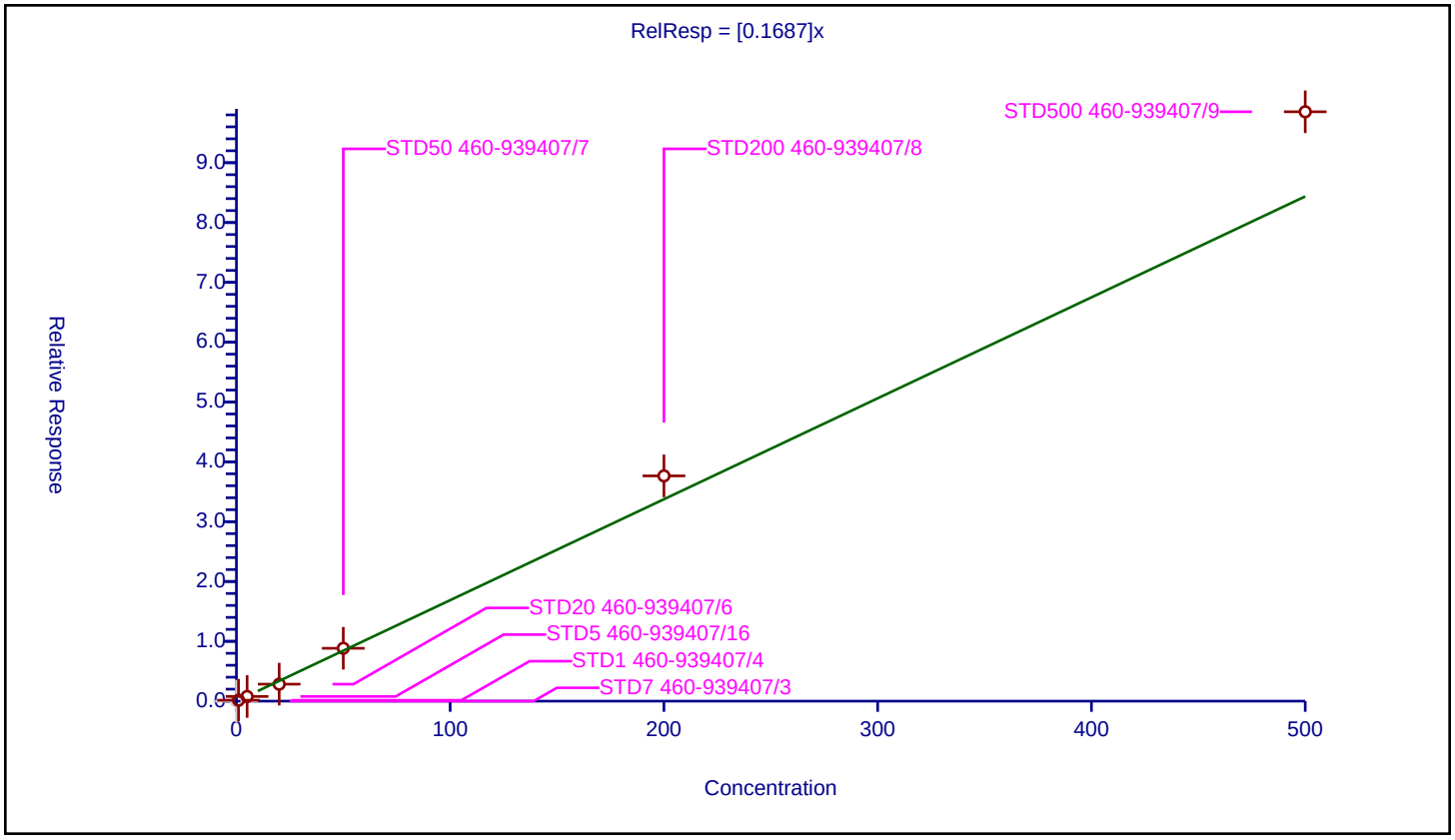
Curve Coefficients

Intercept:	0
Slope:	0.1687

Error Coefficients

Standard Error:	710000
Relative Standard Error:	13.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.152136	50.0	417390.0	0.152136	Y
3	STD5 460-939407/16	5.0	0.782242	50.0	497161.0	0.156448	Y
4	STD20 460-939407/6	20.0	2.838014	50.0	515889.0	0.141901	Y
5	STD50 460-939407/7	50.0	8.834419	50.0	534240.0	0.176688	Y
6	STD200 460-939407/8	200.0	37.651856	50.0	655471.0	0.188259	Y
7	STD500 460-939407/9	500.0	98.517181	50.0	764591.0	0.197034	Y



Calibration / Ethyl acrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

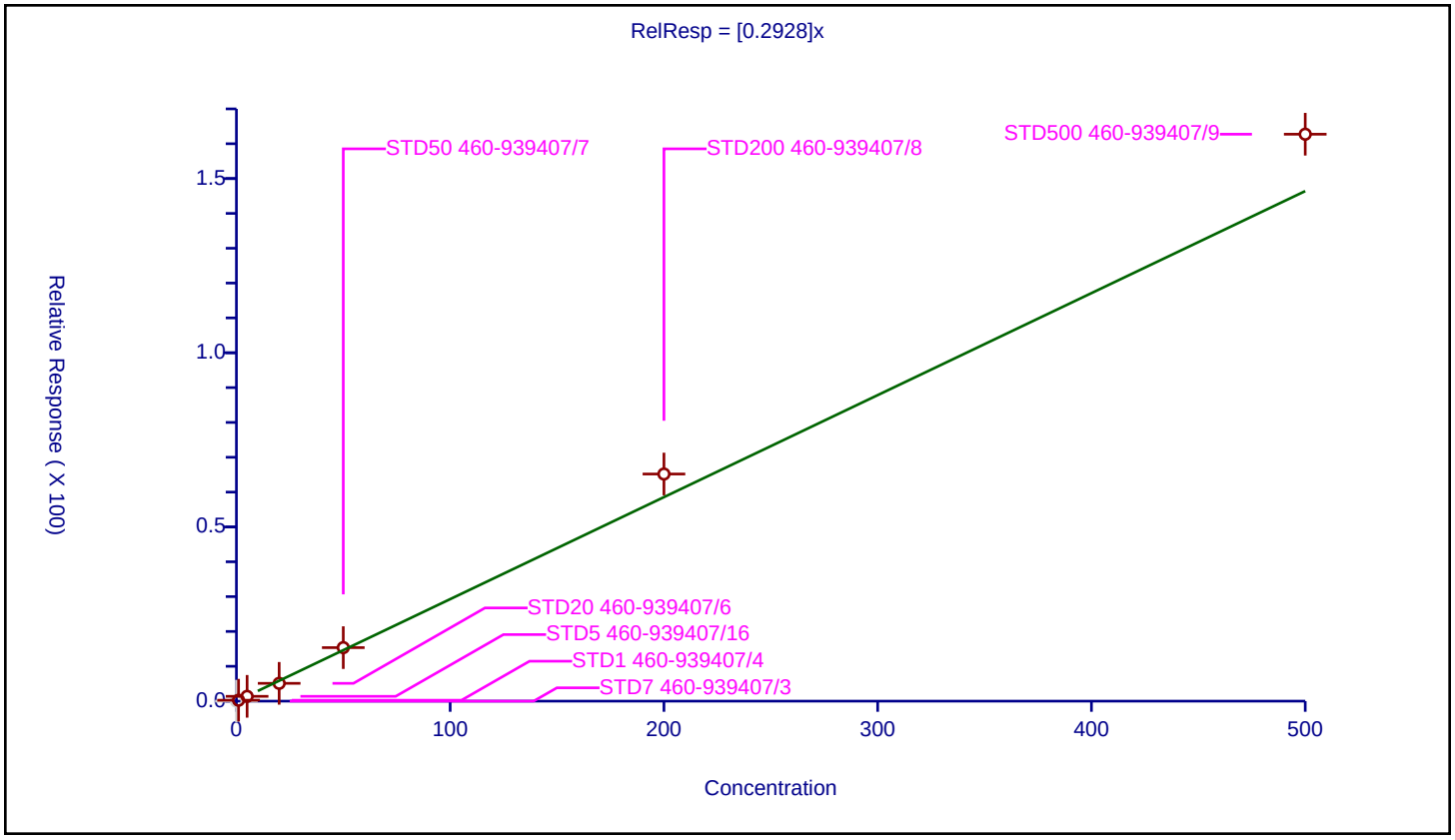
Curve Coefficients

Intercept:	0
Slope:	0.2928

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	10.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.266298	50.0	417390.0	0.266298	Y
3	STD5 460-939407/16	5.0	1.380338	50.0	497161.0	0.276068	Y
4	STD20 460-939407/6	20.0	5.114085	50.0	515889.0	0.255704	Y
5	STD50 460-939407/7	50.0	15.362384	50.0	534240.0	0.307248	Y
6	STD200 460-939407/8	200.0	65.195333	50.0	655471.0	0.325977	Y
7	STD500 460-939407/9	500.0	162.732428	50.0	764591.0	0.325465	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

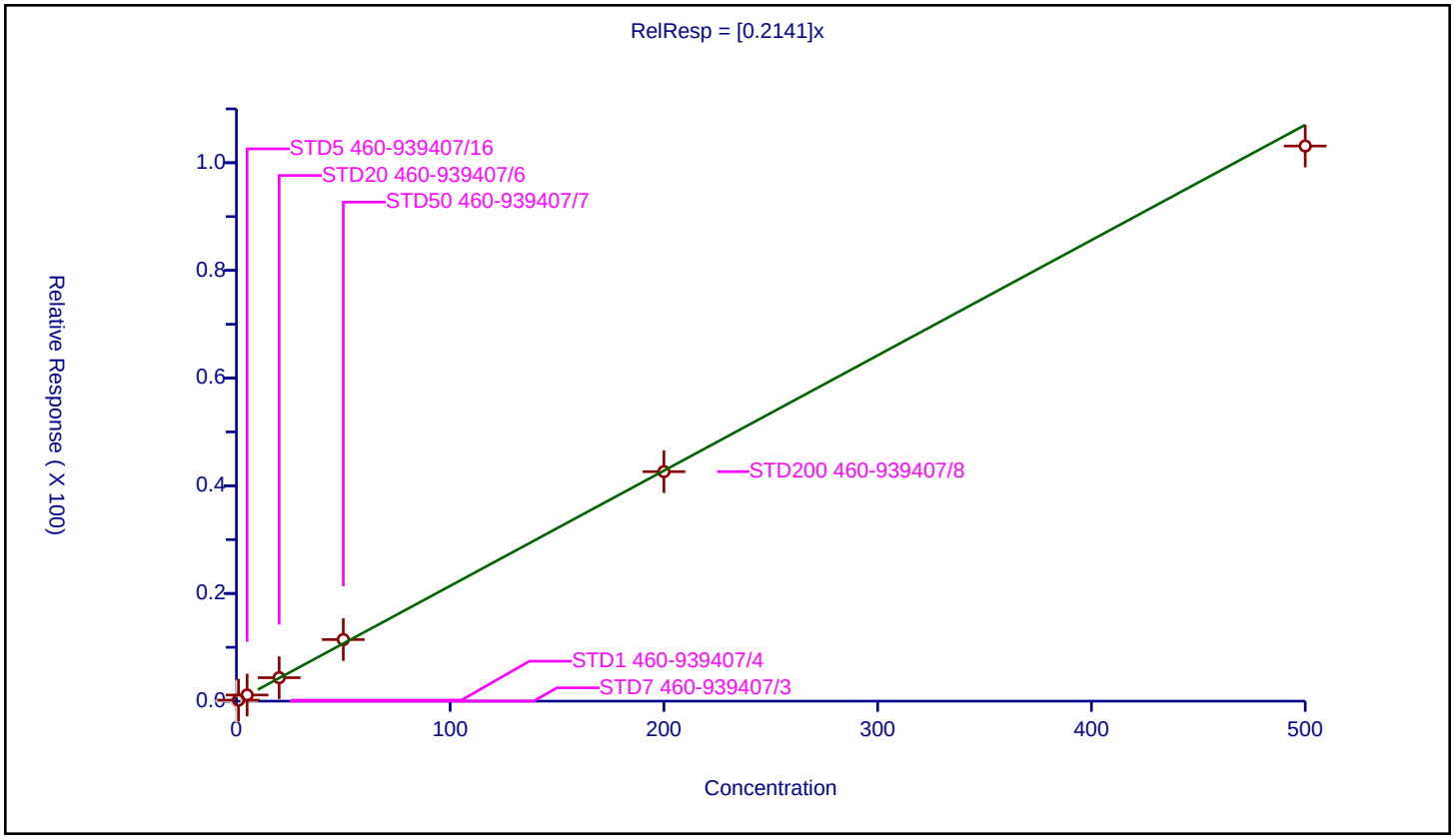
Curve Coefficients

Intercept:	0
Slope:	0.2141

Error Coefficients

Standard Error:	750000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.190469	50.0	417390.0	0.190469	Y
3	STD5 460-939407/16	5.0	1.139772	50.0	497161.0	0.227954	Y
4	STD20 460-939407/6	20.0	4.357623	50.0	515889.0	0.217881	Y
5	STD50 460-939407/7	50.0	11.434842	50.0	534240.0	0.228697	Y
6	STD200 460-939407/8	200.0	42.624922	50.0	655471.0	0.213125	Y
7	STD500 460-939407/9	500.0	103.103228	50.0	764591.0	0.206206	Y



10/25/2023
1:26 PM

Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

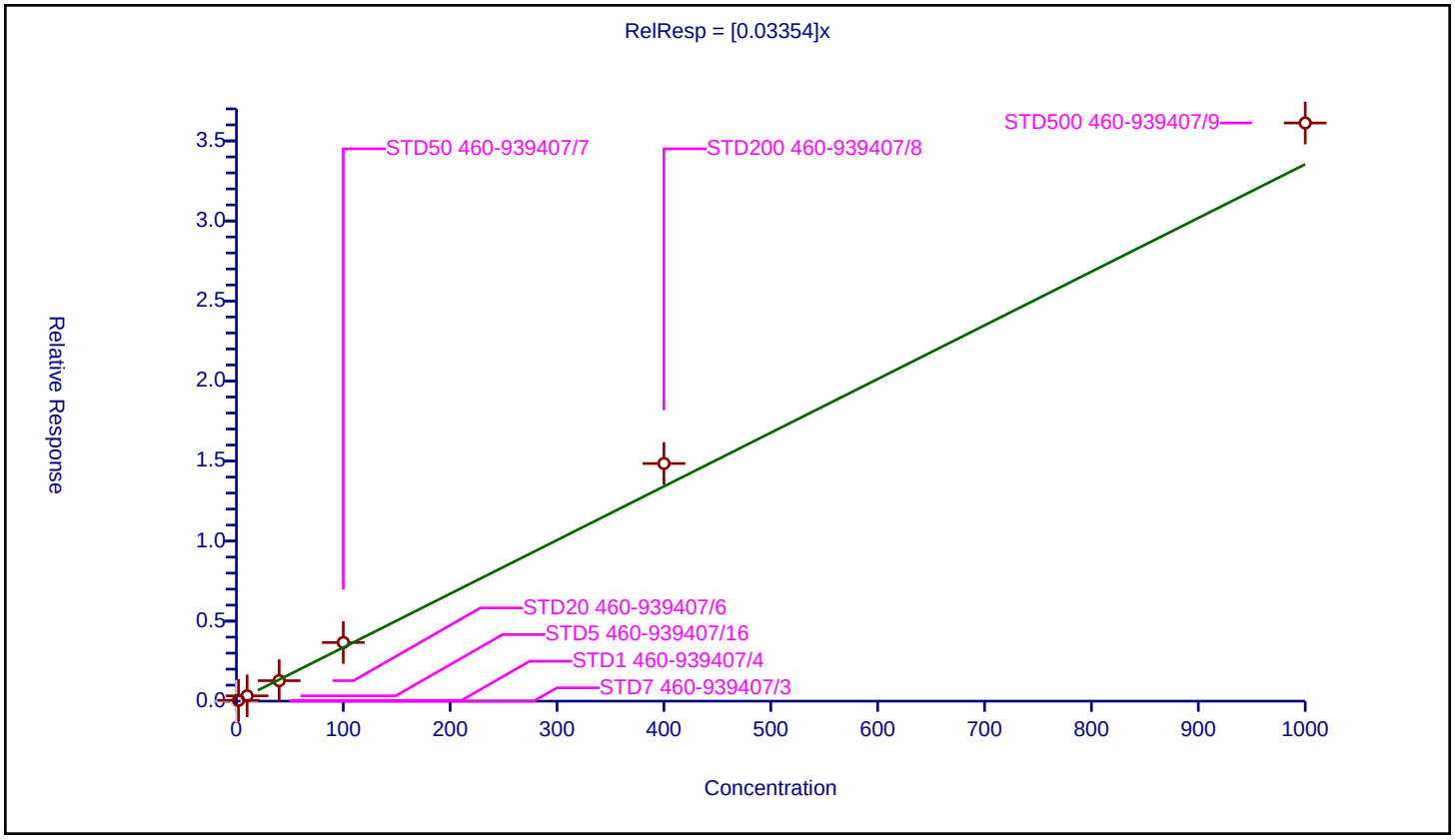
Curve Coefficients

Intercept:	0
Slope:	0.03354

Error Coefficients

Standard Error:	263000
Relative Standard Error:	12.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	2.0	0.052469	50.0	417390.0	0.026234	Y
3	STD5 460-939407/16	10.0	0.331583	50.0	497161.0	0.033158	Y
4	STD20 460-939407/6	40.0	1.27857	50.0	515889.0	0.031964	Y
5	STD50 460-939407/7	100.0	3.663803	50.0	534240.0	0.036638	Y
6	STD200 460-939407/8	400.0	14.846729	50.0	655471.0	0.037117	Y
7	STD500 460-939407/9	1000.0	36.120553	50.0	764591.0	0.036121	Y



10/25/2023
1:26 PM

Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

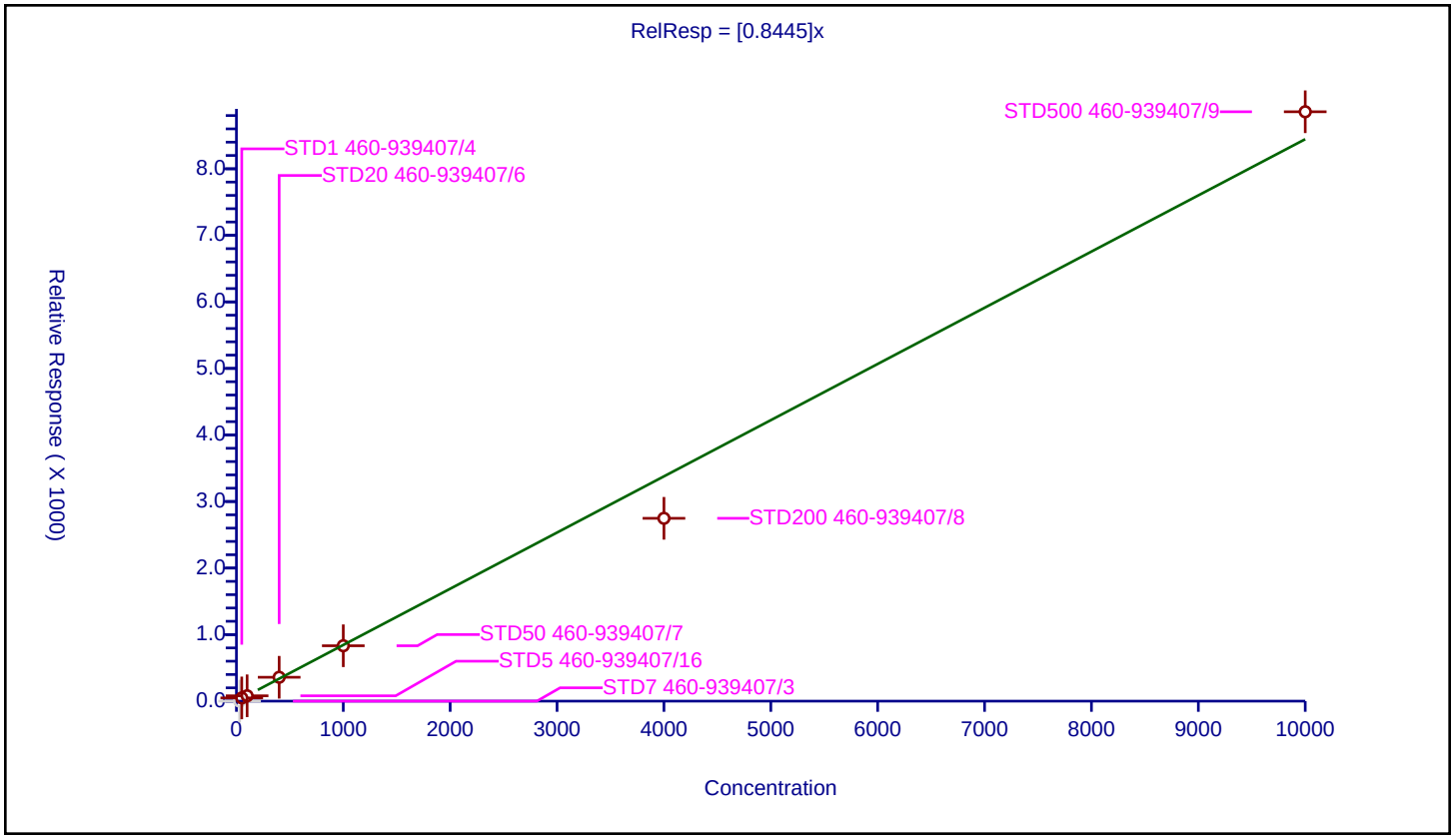
Curve Coefficients

Intercept:	0
Slope:	0.8445

Error Coefficients

Standard Error:	122000
Relative Standard Error:	11.2
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	30.000062	0.0	1000.0	16634.0	0.0	N
2	STD1 460-939407/4	50.000062	48.102759	1000.0	15259.0	0.962054	Y
3	STD5 460-939407/16	100.0	80.311775	1000.0	20271.0	0.803118	Y
4	STD20 460-939407/6	400.0	358.734487	1000.0	21272.0	0.896836	Y
5	STD50 460-939407/7	1000.0	832.254609	1000.0	22403.0	0.832255	Y
6	STD200 460-939407/8	4000.0	2747.474078	1000.0	30187.0	0.686869	Y
7	STD500 460-939407/9	10000.0	8856.746948	1000.0	30310.0	0.885675	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

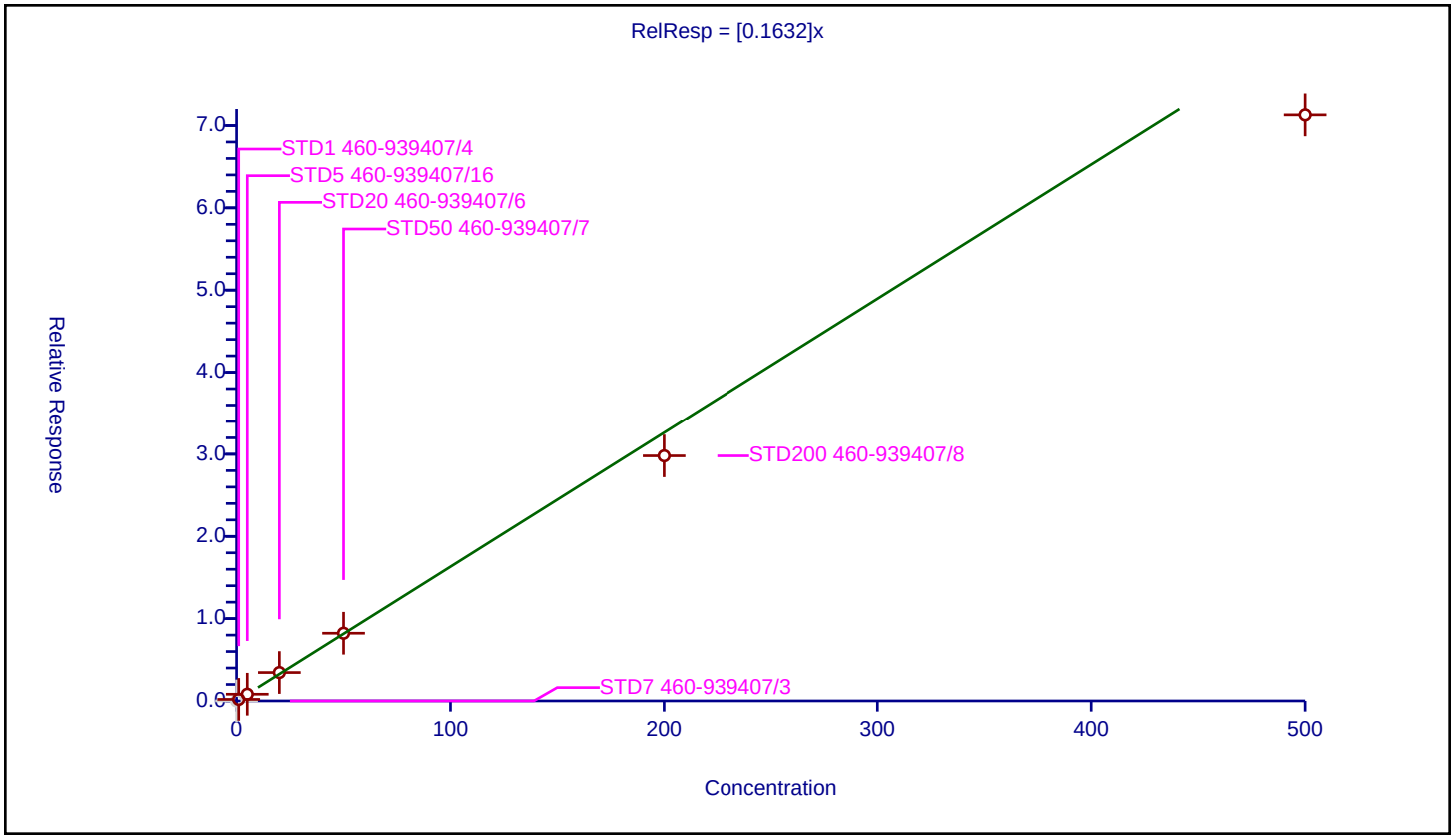
Curve Coefficients

Intercept:	0
Slope:	0.1632

Error Coefficients

Standard Error:	520000
Relative Standard Error:	9.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.187235	50.0	417390.0	0.187235	Y
3	STD5 460-939407/16	5.0	0.815832	50.0	497161.0	0.163166	Y
4	STD20 460-939407/6	20.0	3.450064	50.0	515889.0	0.172503	Y
5	STD50 460-939407/7	50.0	8.224674	50.0	534240.0	0.164493	Y
6	STD200 460-939407/8	200.0	29.803607	50.0	655471.0	0.149018	Y
7	STD500 460-939407/9	500.0	71.291187	50.0	764591.0	0.142582	Y



Calibration / n-Propyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

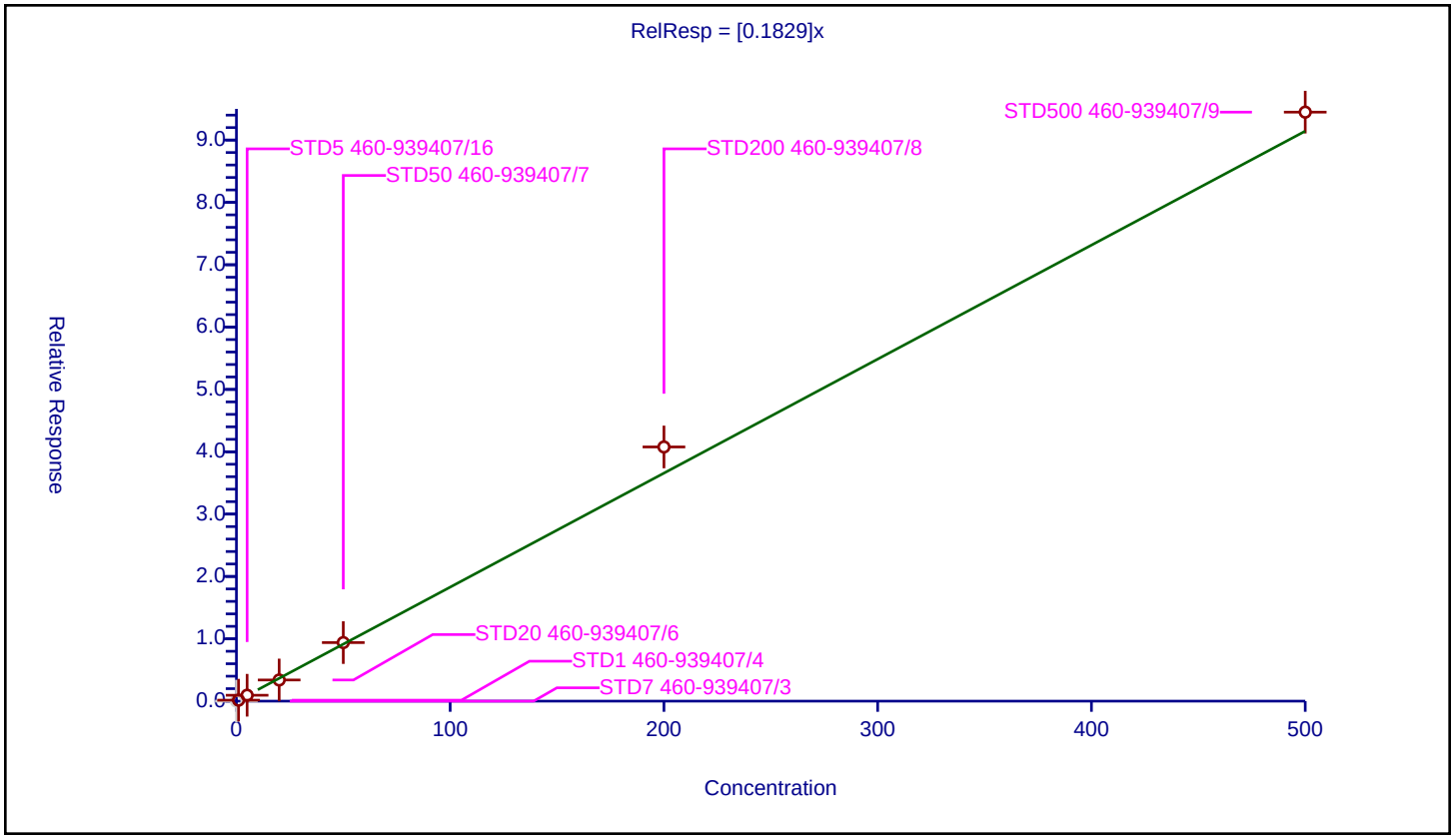
Curve Coefficients

Intercept:	0
Slope:	0.1829

Error Coefficients

Standard Error:	691000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.157287	50.0	417390.0	0.157287	Y
3	STD5 460-939407/16	5.0	0.947983	50.0	497161.0	0.189597	Y
4	STD20 460-939407/6	20.0	3.392881	50.0	515889.0	0.169644	Y
5	STD50 460-939407/7	50.0	9.393344	50.0	534240.0	0.187867	Y
6	STD200 460-939407/8	200.0	40.772437	50.0	655471.0	0.203862	Y
7	STD500 460-939407/9	500.0	94.47757	50.0	764591.0	0.188955	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

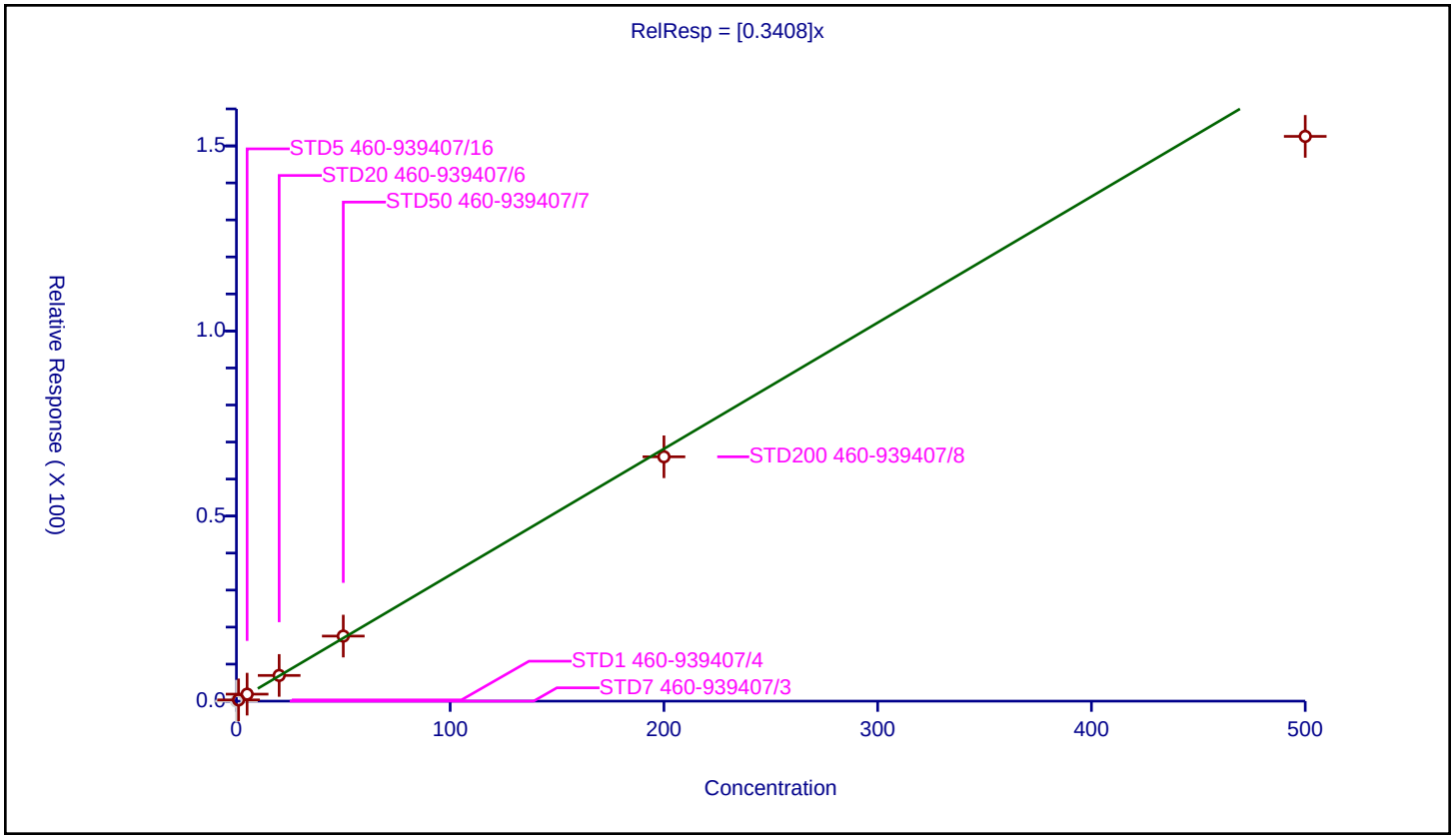
Curve Coefficients

Intercept:	0
Slope:	0.3408

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.333741	50.0	417390.0	0.333741	Y
3	STD5 460-939407/16	5.0	1.886713	50.0	497161.0	0.377343	Y
4	STD20 460-939407/6	20.0	6.941416	50.0	515889.0	0.347071	Y
5	STD50 460-939407/7	50.0	17.572627	50.0	534240.0	0.351453	Y
6	STD200 460-939407/8	200.0	66.011158	50.0	655471.0	0.330056	Y
7	STD500 460-939407/9	500.0	152.573075	50.0	764591.0	0.305146	Y



10/25/2023
1:26 PM

Calibration / 2-Nitropropane

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

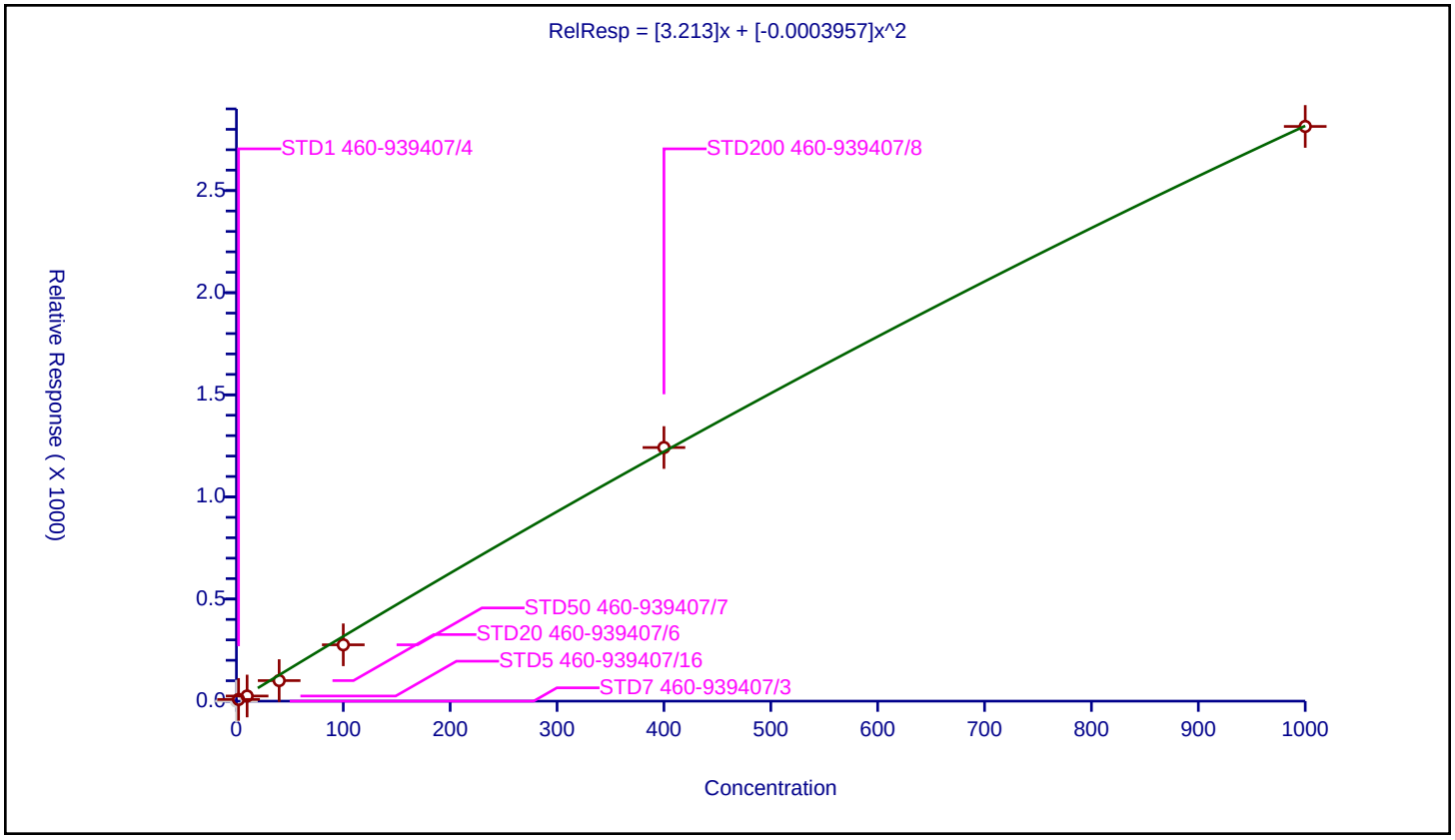
Curve Coefficients

Intercept:	0
Slope:	3.213
Second Order:	-0.0003957

Error Coefficients

Standard Error:	381000
Relative Standard Error:	21.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	1000.0	172495.0	NaN	N
2	STD1 460-939407/4	2.0	8.21997	1000.0	169587.0	4.109985	Y
3	STD5 460-939407/16	10.0	25.125793	1000.0	213645.0	2.512579	Y
4	STD20 460-939407/6	40.0	100.610463	1000.0	168233.0	2.515262	Y
5	STD50 460-939407/7	100.0	275.849354	1000.0	192558.0	2.758494	Y
6	STD200 460-939407/8	400.0	1241.888676	1000.0	218121.0	3.104722	Y
7	STD500 460-939407/9	1000.0	2814.082482	1000.0	253123.0	2.814082	Y



10/25/2023
1:26 PM

Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

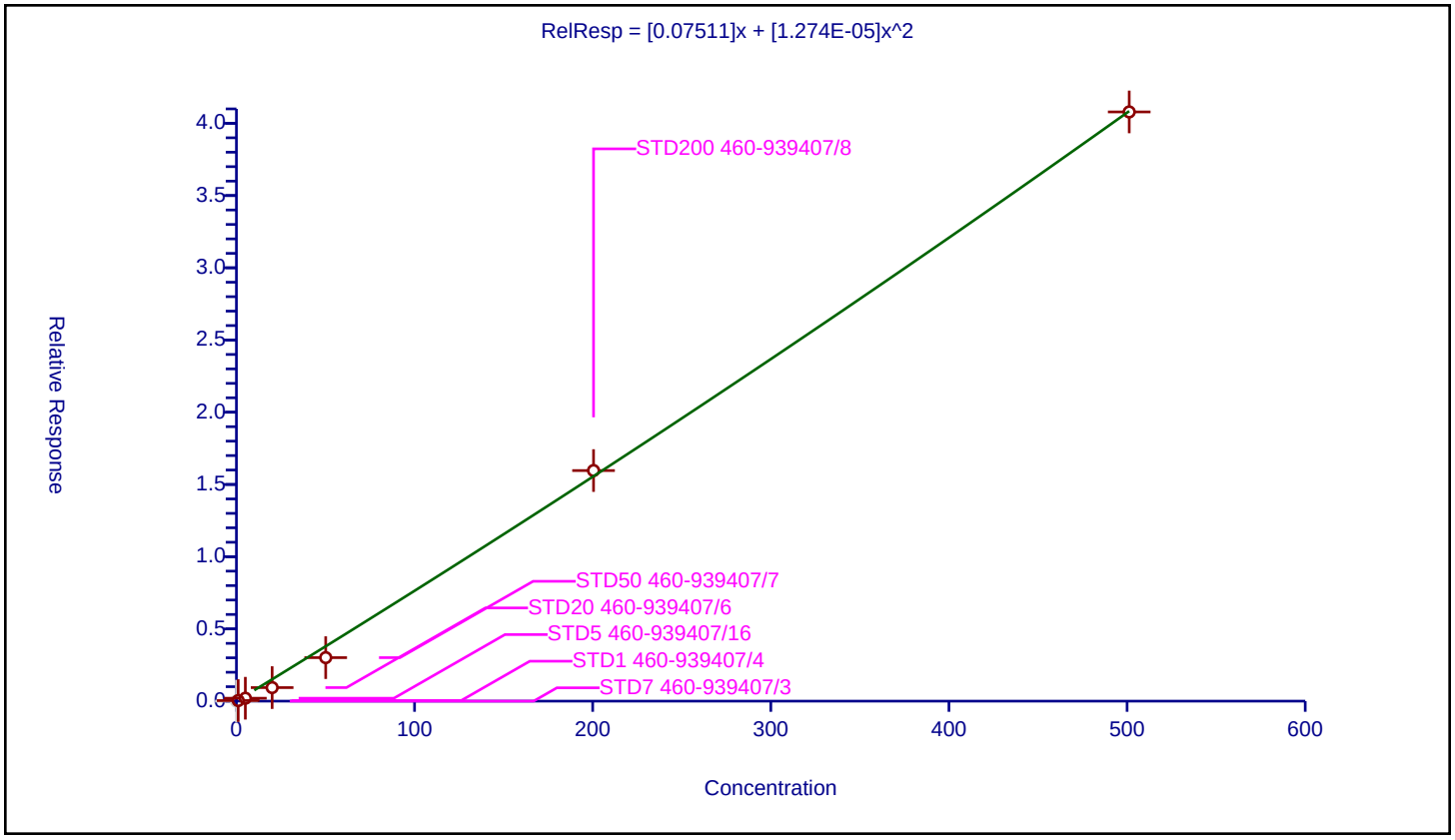
Curve Coefficients

Intercept:	0
Slope:	0.07511
Second Order:	1.274E-05

Error Coefficients

Standard Error:	329000
Relative Standard Error:	39.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0024	0.04037	50.0	417390.0	0.040273	Y
3	STD5 460-939407/16	5.012	0.20255	50.0	497161.0	0.040413	Y
4	STD20 460-939407/6	20.048	0.93838	50.0	515889.0	0.046807	Y
5	STD50 460-939407/7	50.12	3.012597	50.0	534240.0	0.060108	Y
6	STD200 460-939407/8	200.48	15.962796	50.0	655471.0	0.079623	Y
7	STD500 460-939407/9	501.2	40.790174	50.0	764591.0	0.081385	Y



10/25/2023
1:26 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

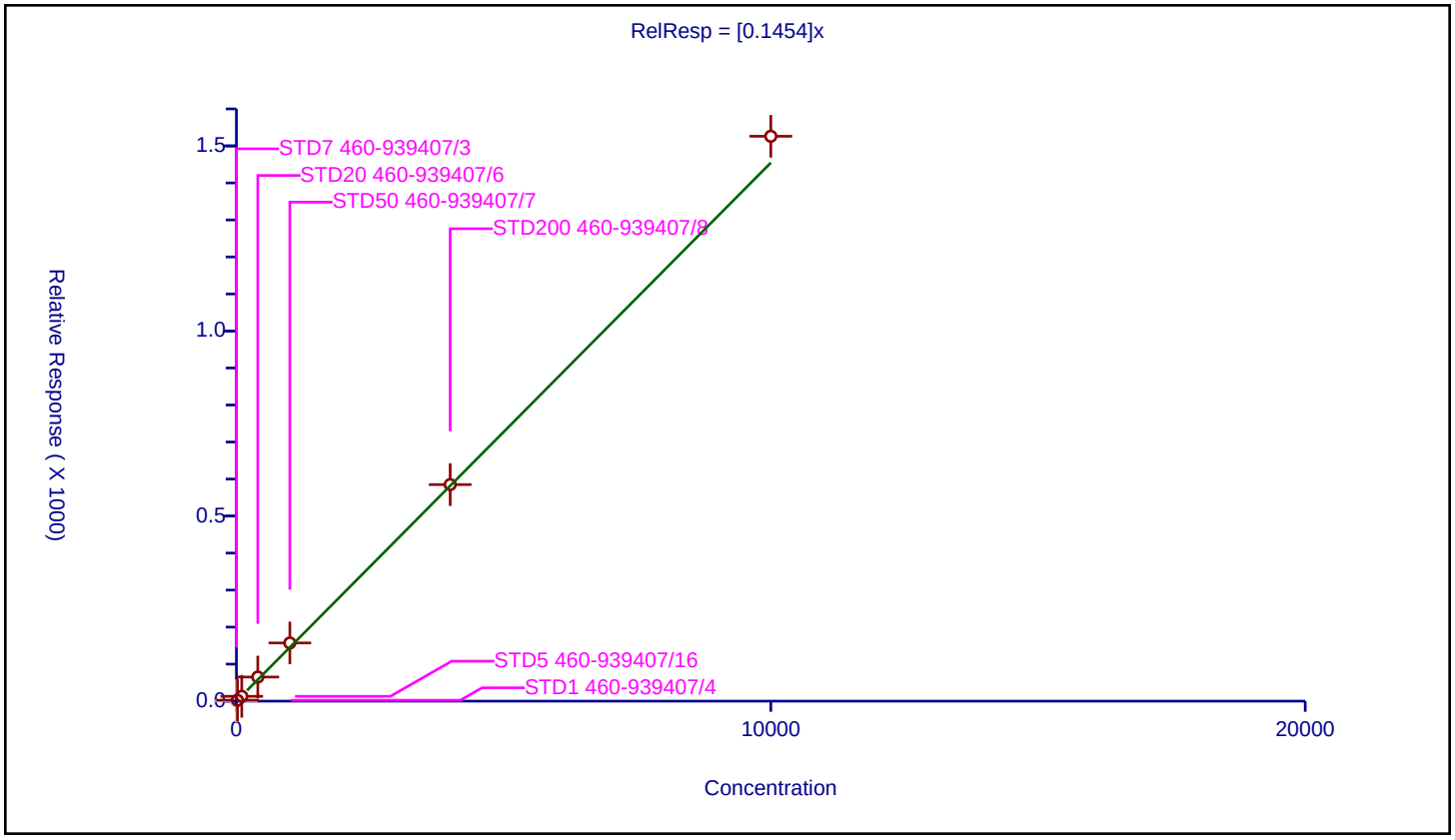
Curve Coefficients

Intercept:	0
Slope:	0.1454

Error Coefficients

Standard Error:	881000
Relative Standard Error:	10.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.8299	250.0	175021.0		N
2	STD1 460-939407/4	20.000035	2.488894	250.0	168147.0	0.124444	Y
3	STD5 460-939407/16	100.000173	12.95629	250.0	220337.0	0.129563	Y
4	STD20 460-939407/6	400.000692	65.062854	250.0	185828.0	0.162657	Y
5	STD50 460-939407/7	1000.00173	157.157773	250.0	210233.0	0.157158	Y
6	STD200 460-939407/8	4000.00692	585.00446	250.0	278006.0	0.146251	Y
7	STD500 460-939407/9	10000.0173	1526.0319	250.0	303954.0	0.152603	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

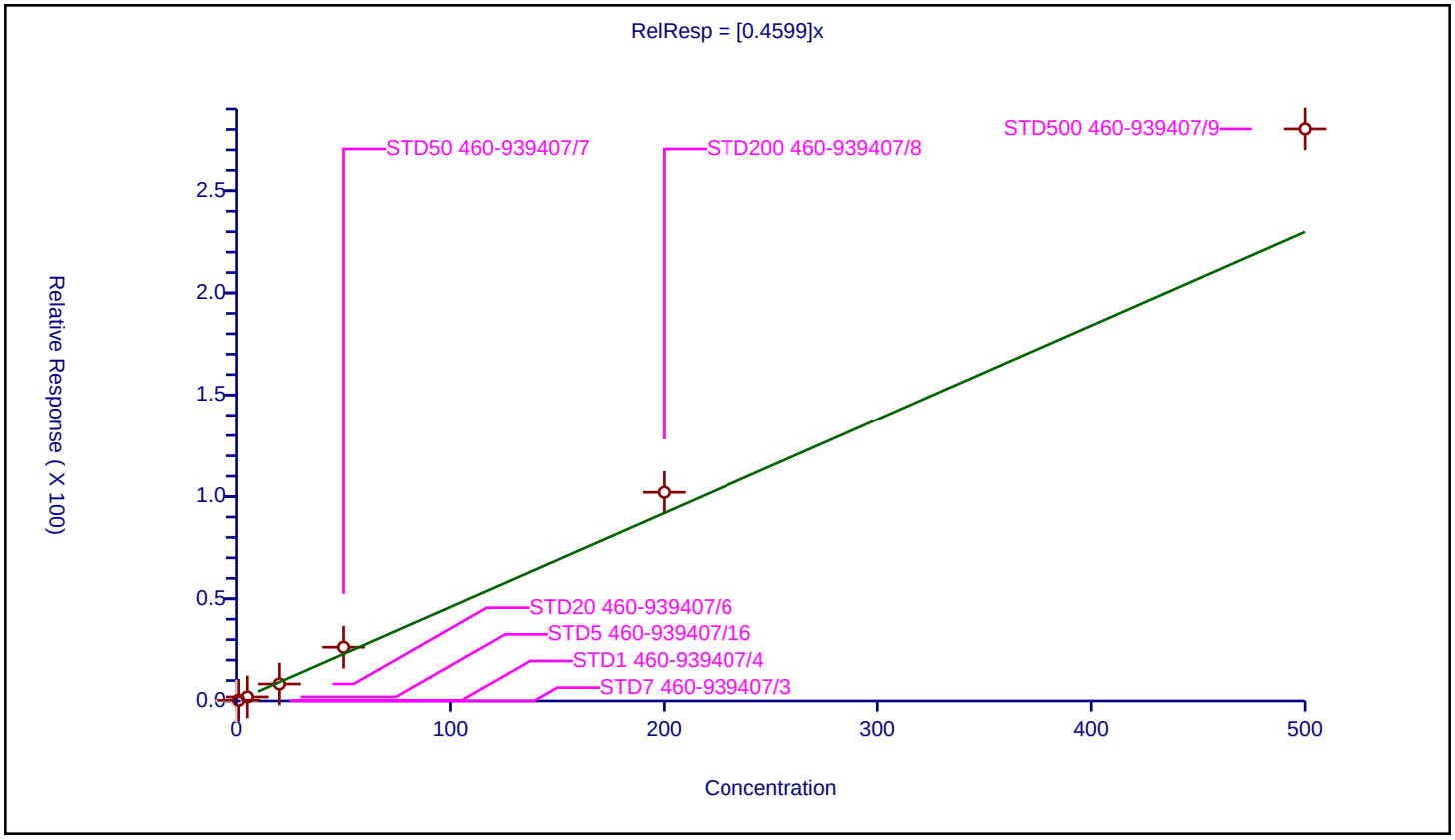
Curve Coefficients

Intercept:	0
Slope:	0.4599

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	18.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.355837	50.0	322058.0	0.355837	Y
3	STD5 460-939407/16	5.0	1.95611	50.0	382136.0	0.391222	Y
4	STD20 460-939407/6	20.0	8.303151	50.0	379916.0	0.415158	Y
5	STD50 460-939407/7	50.0	26.303	50.0	371412.0	0.52606	Y
6	STD200 460-939407/8	200.0	102.123575	50.0	465371.0	0.510618	Y
7	STD500 460-939407/9	500.0	280.256195	50.0	475810.0	0.560512	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

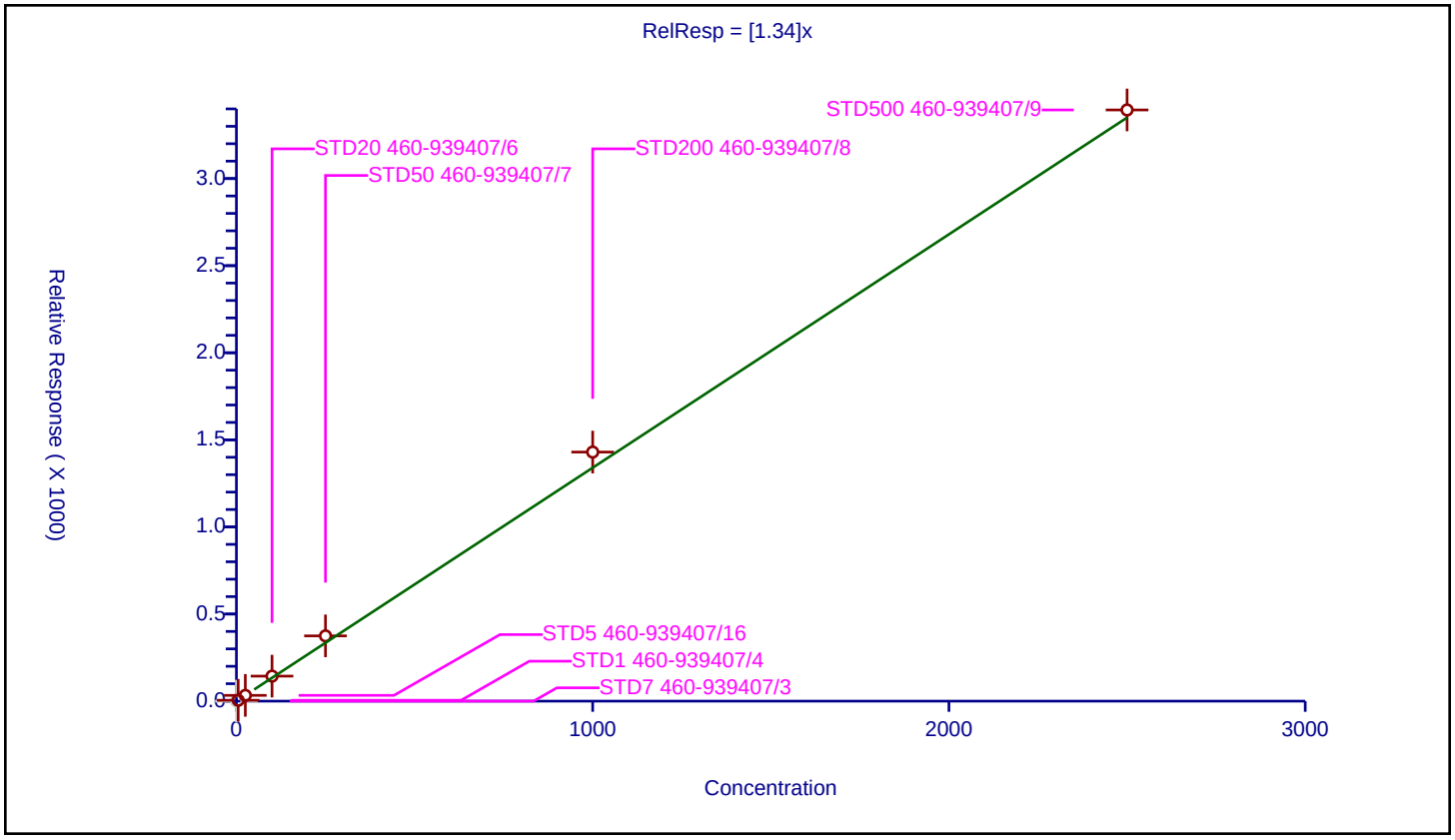
Curve Coefficients

Intercept:	0
Slope:	1.34

Error Coefficients

Standard Error:	1980000
Relative Standard Error:	13.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	5.0	4.964406	250.0	168147.0	0.992881	Y
3	STD5 460-939407/16	25.0	33.114048	250.0	220337.0	1.324562	Y
4	STD20 460-939407/6	100.0	143.595153	250.0	185828.0	1.435952	Y
5	STD50 460-939407/7	250.0	374.721143	250.0	210233.0	1.498885	Y
6	STD200 460-939407/8	1000.0	1429.797378	250.0	278006.0	1.429797	Y
7	STD500 460-939407/9	2500.0	3393.931319	250.0	303954.0	1.357573	Y



10/25/2023
1:26 PM

Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

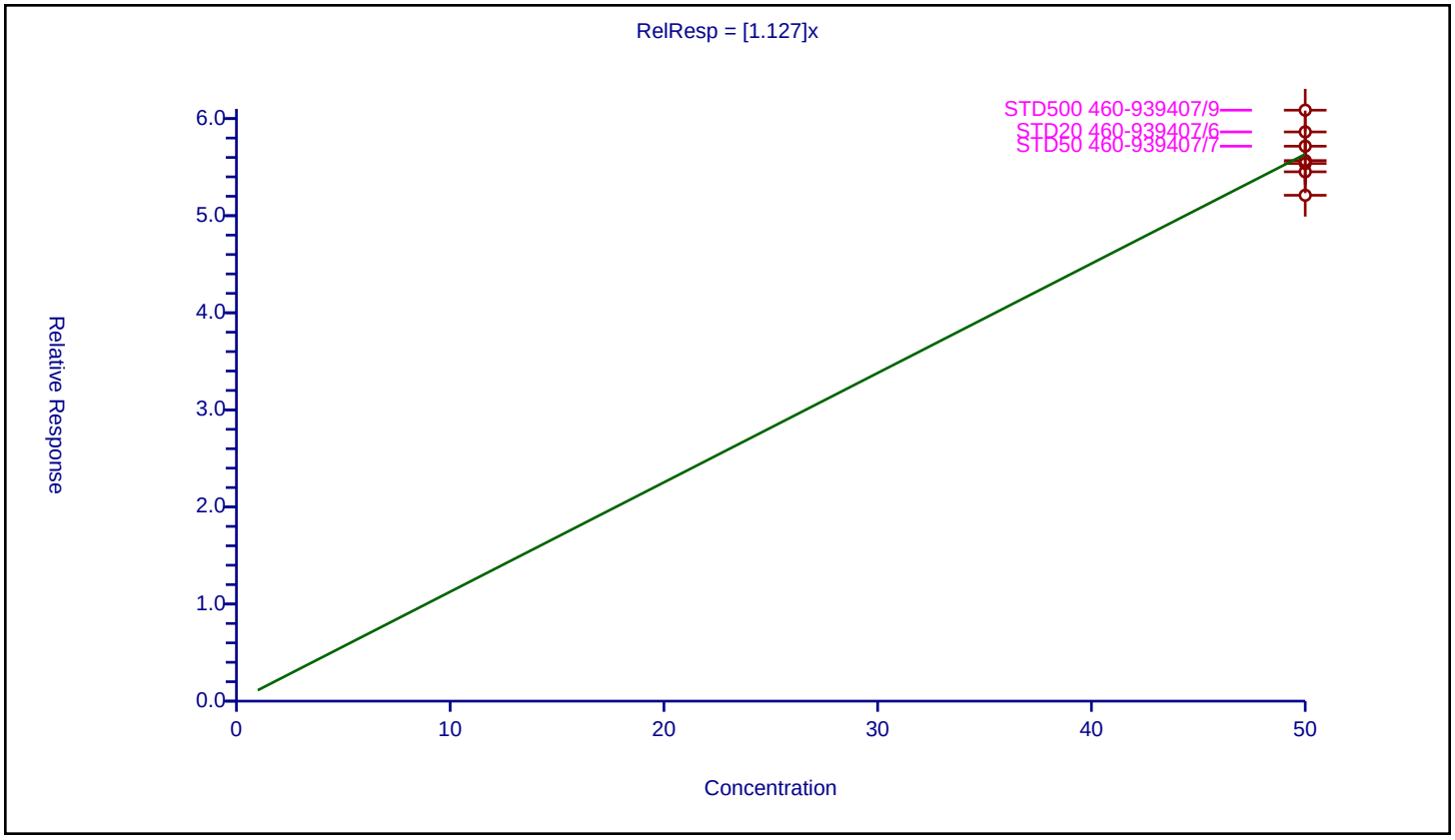
Curve Coefficients

Intercept:	0
Slope:	1.127

Error Coefficients

Standard Error:	486000
Relative Standard Error:	5.1
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	50.0	52.104988	50.0	346534.0	1.0421	Y
2	STD1 460-939407/4	50.0	54.52077	50.0	322058.0	1.090415	Y
3	STD20 460-939407/6	50.0	58.626381	50.0	379916.0	1.172528	Y
4	STD50 460-939407/7	50.0	57.157012	50.0	371412.0	1.14314	Y
5	STD200 460-939407/8	50.0	55.678265	50.0	465371.0	1.113565	Y
6	STD500 460-939407/9	50.0	60.867573	50.0	475810.0	1.217351	Y
7	STD5 460-939407/16	50.0	55.379237	50.0	382136.0	1.107585	Y



10/25/2023
1:26 PM

Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

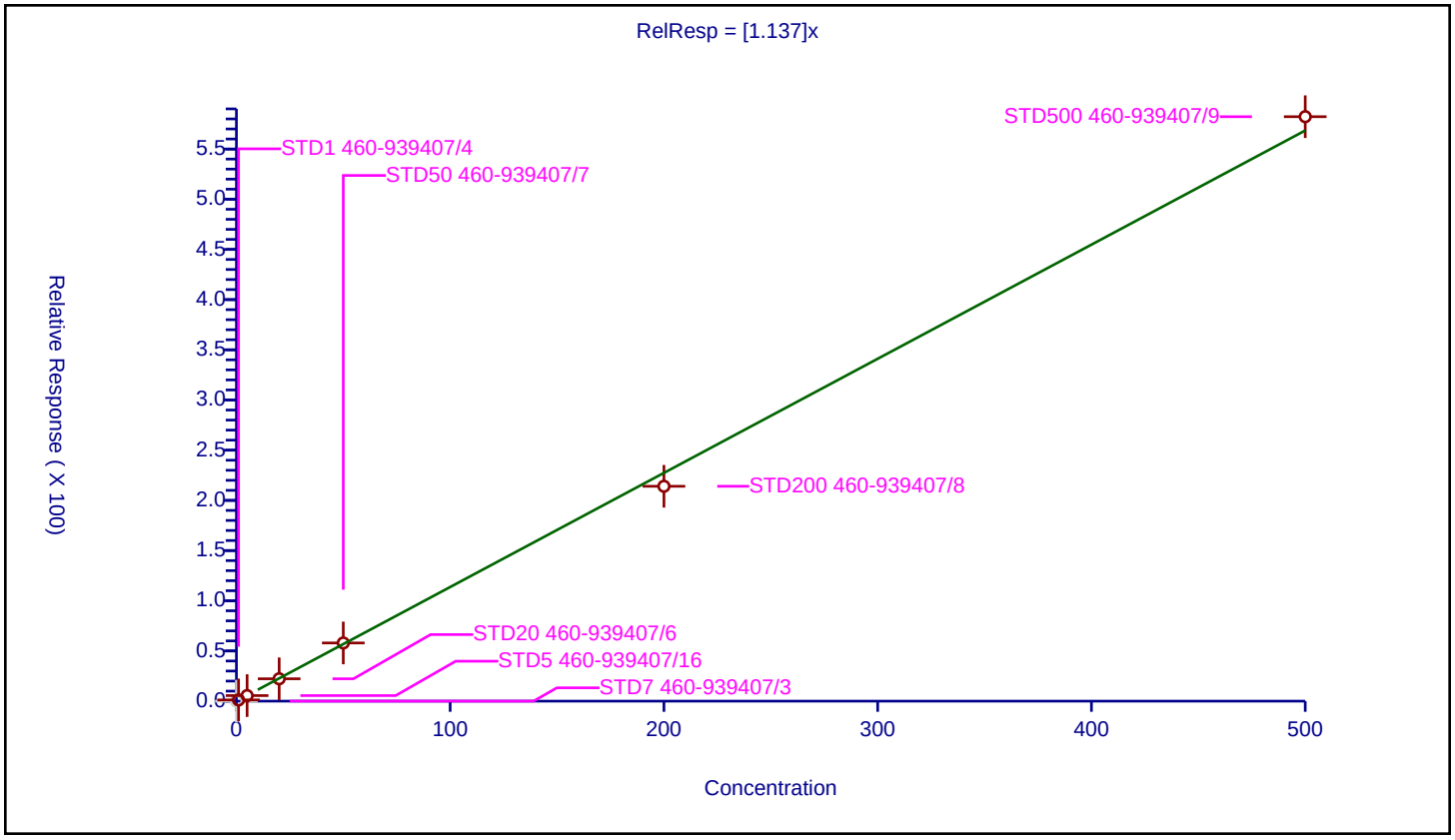
Curve Coefficients

Intercept:	0
Slope:	1.137

Error Coefficients

Standard Error:	2640000
Relative Standard Error:	4.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	1.204597	50.0	322058.0	1.204597	Y
3	STD5 460-939407/16	5.0	5.543576	50.0	382136.0	1.108715	Y
4	STD20 460-939407/6	20.0	22.281899	50.0	379916.0	1.114095	Y
5	STD50 460-939407/7	50.0	57.960297	50.0	371412.0	1.159206	Y
6	STD200 460-939407/8	200.0	214.059643	50.0	465371.0	1.070298	Y
7	STD500 460-939407/9	500.0	582.216956	50.0	475810.0	1.164434	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

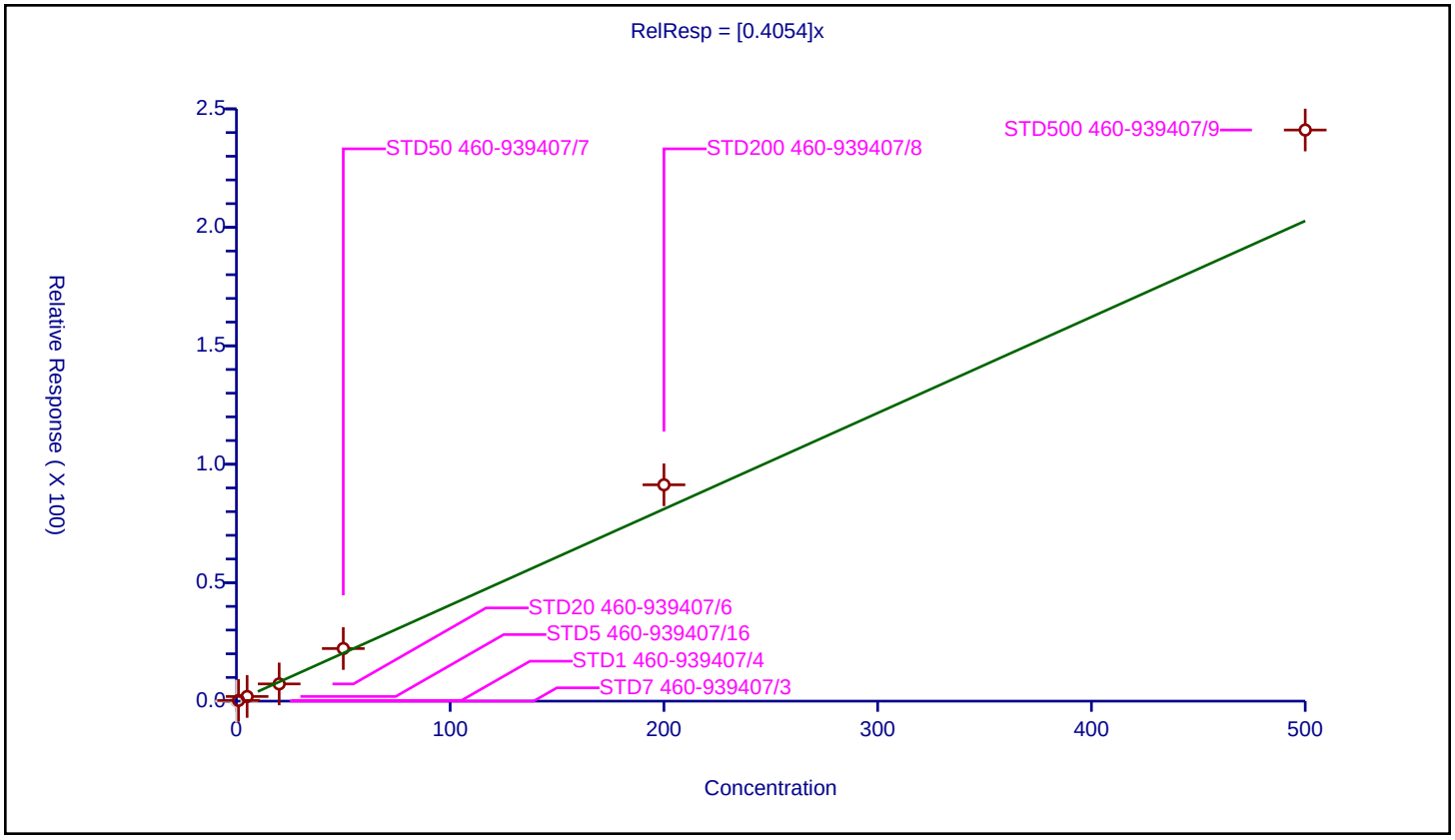
Curve Coefficients

Intercept:	0
Slope:	0.4054

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	17.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.294046	50.0	322058.0	0.294046	Y
3	STD5 460-939407/16	5.0	1.961867	50.0	382136.0	0.392373	Y
4	STD20 460-939407/6	20.0	7.269765	50.0	379916.0	0.363488	Y
5	STD50 460-939407/7	50.0	22.193279	50.0	371412.0	0.443866	Y
6	STD200 460-939407/8	200.0	91.323052	50.0	465371.0	0.456615	Y
7	STD500 460-939407/9	500.0	241.08867	50.0	475810.0	0.482177	Y



10/25/2023
1:26 PM

Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

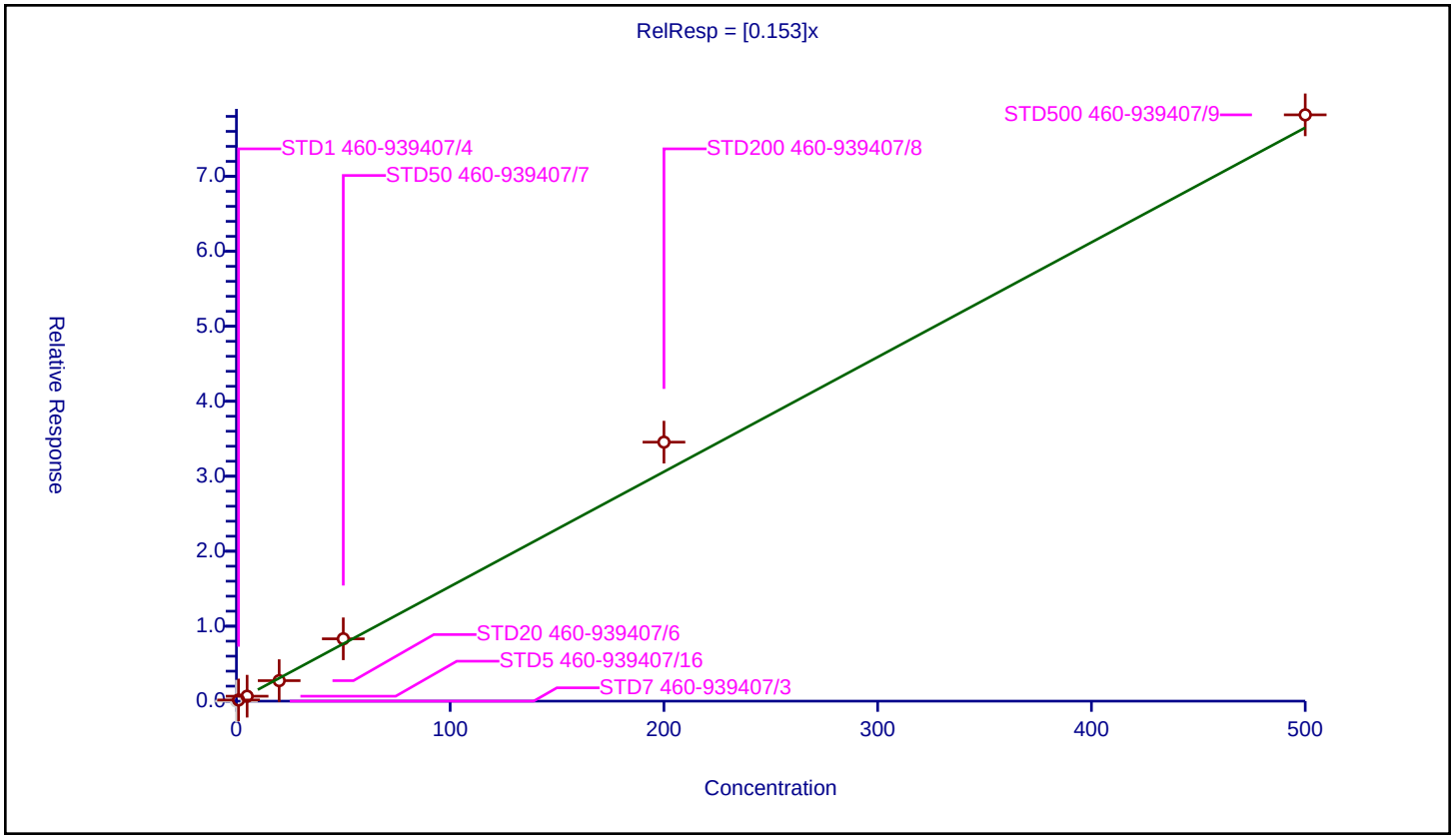
Curve Coefficients

Intercept:	0
Slope:	0.153

Error Coefficients

Standard Error:	573000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	412033.0	NaN	N
2	STD1 460-939407/4	1.0	0.153693	50.0	417390.0	0.153693	Y
3	STD5 460-939407/16	5.0	0.660651	50.0	497161.0	0.13213	Y
4	STD20 460-939407/6	20.0	2.733437	50.0	515889.0	0.136672	Y
5	STD50 460-939407/7	50.0	8.314054	50.0	534240.0	0.166281	Y
6	STD200 460-939407/8	200.0	34.549355	50.0	655471.0	0.172747	Y
7	STD500 460-939407/9	500.0	78.207303	50.0	764591.0	0.156415	Y



10/25/2023
1:26 PM

Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

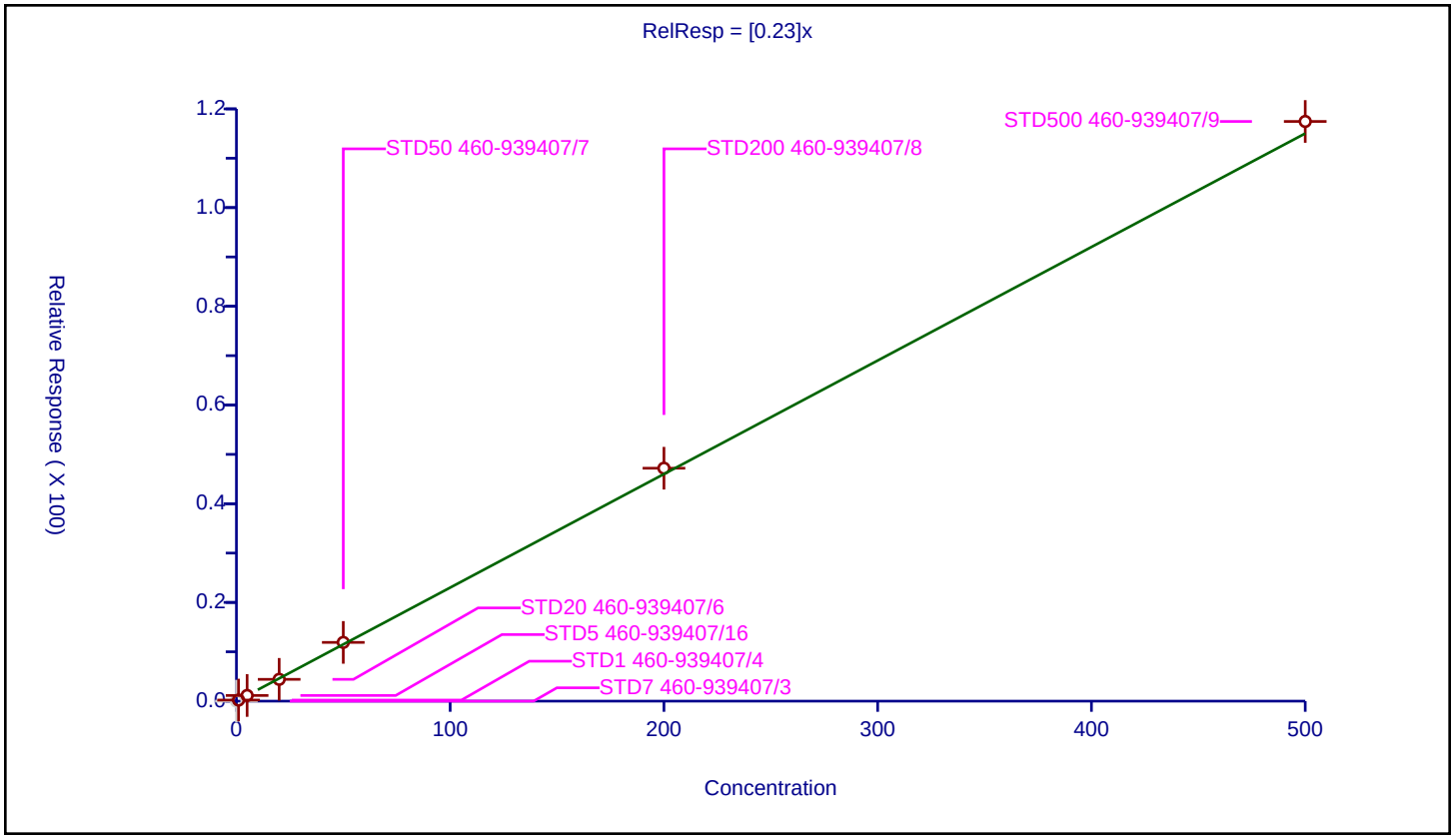
Curve Coefficients

Intercept:	0
Slope:	0.23

Error Coefficients

Standard Error:	539000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.220768	50.0	322058.0	0.220768	Y
3	STD5 460-939407/16	5.0	1.148937	50.0	382136.0	0.229787	Y
4	STD20 460-939407/6	20.0	4.414923	50.0	379916.0	0.220746	Y
5	STD50 460-939407/7	50.0	11.903627	50.0	371412.0	0.238073	Y
6	STD200 460-939407/8	200.0	47.195141	50.0	465371.0	0.235976	Y
7	STD500 460-939407/9	500.0	117.455182	50.0	475810.0	0.23491	Y



10/25/2023
1:26 PM

Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

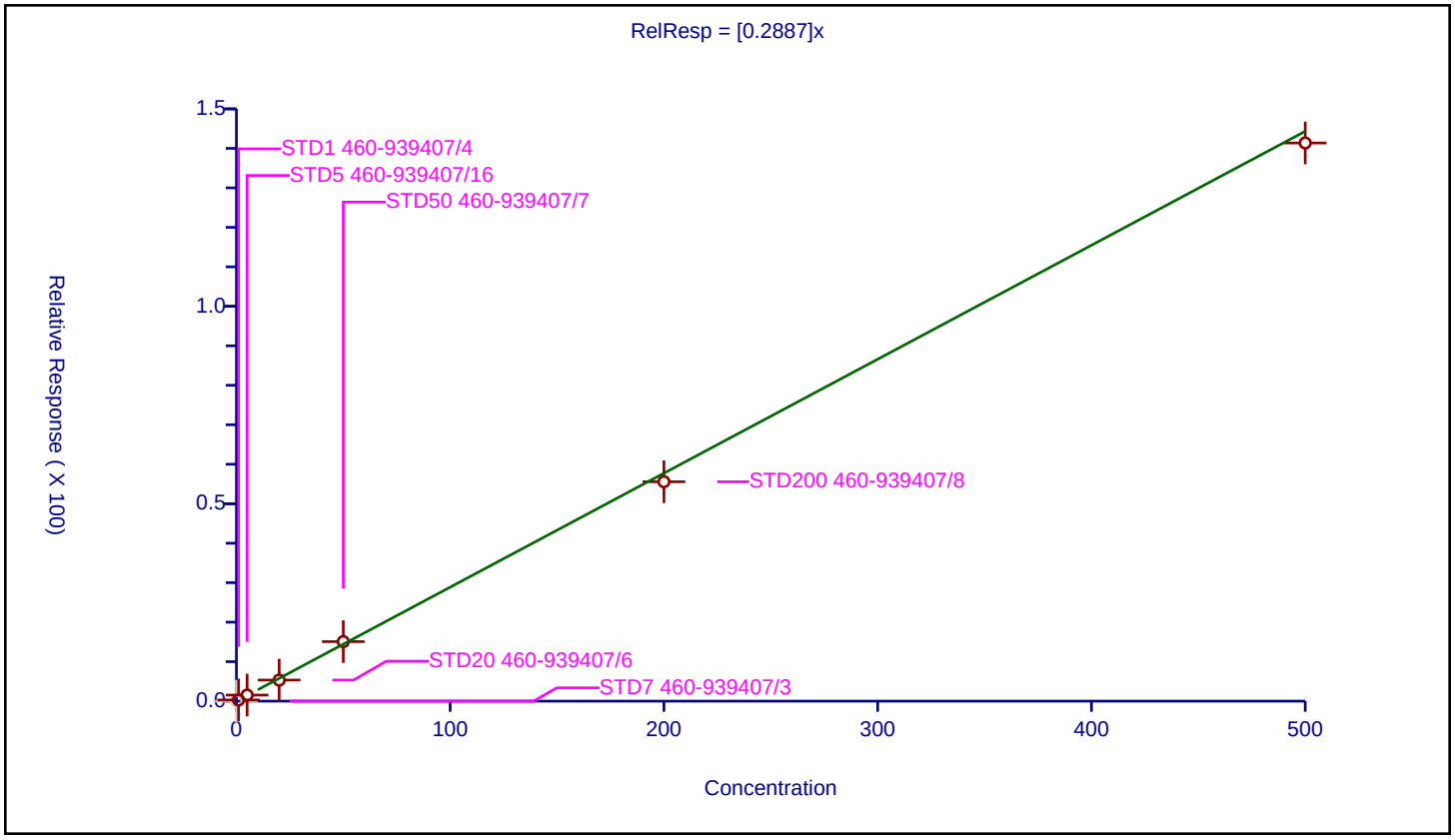
Curve Coefficients

Intercept:	0
Slope:	0.2887

Error Coefficients

Standard Error:	647000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.295909	50.0	322058.0	0.295909	Y
3	STD5 460-939407/16	5.0	1.534794	50.0	382136.0	0.306959	Y
4	STD20 460-939407/6	20.0	5.341839	50.0	379916.0	0.267092	Y
5	STD50 460-939407/7	50.0	15.070057	50.0	371412.0	0.301401	Y
6	STD200 460-939407/8	200.0	55.570502	50.0	465371.0	0.277853	Y
7	STD500 460-939407/9	500.0	141.364305	50.0	475810.0	0.282729	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

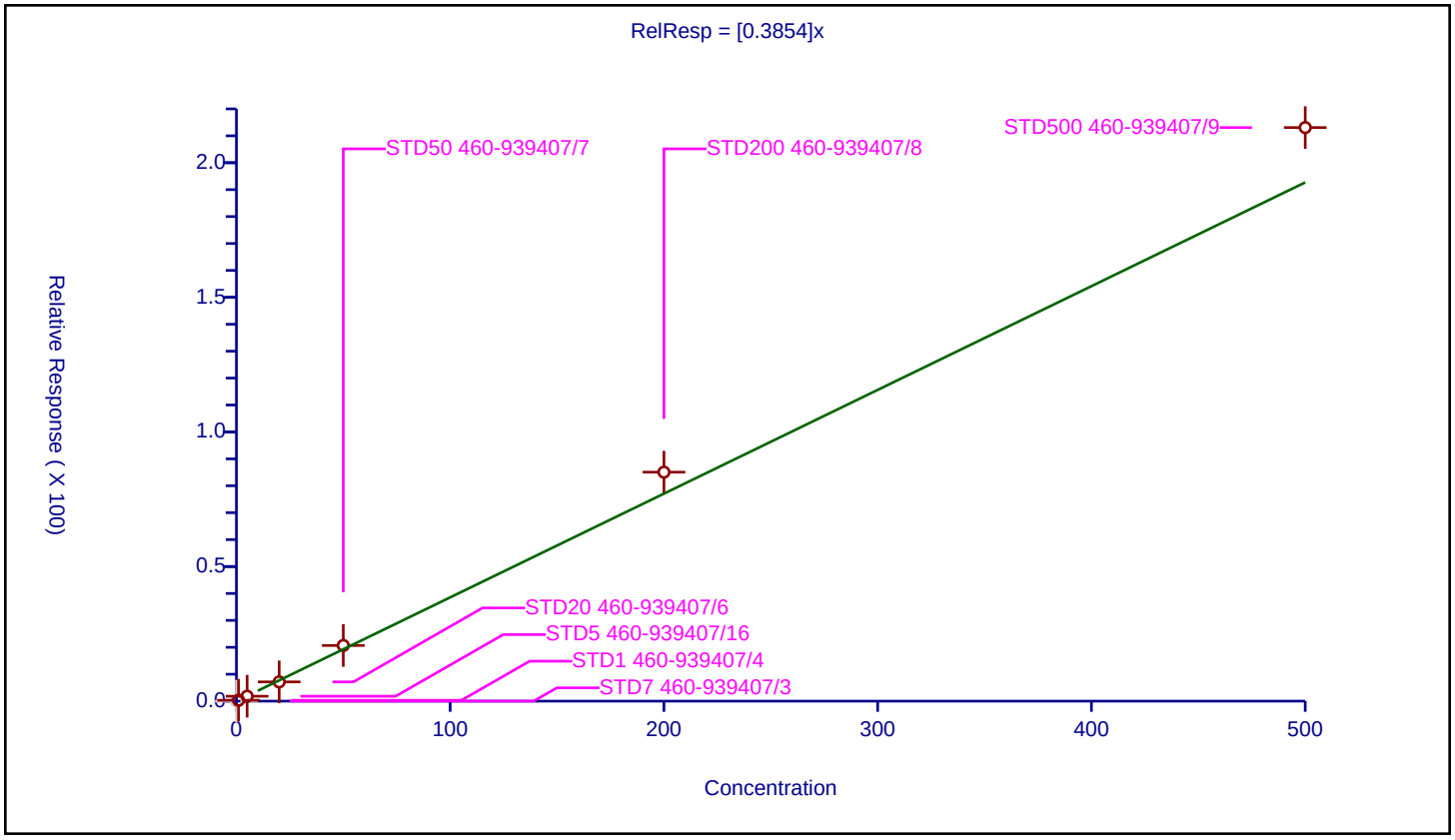
Curve Coefficients

Intercept:	0
Slope:	0.3854

Error Coefficients

Standard Error:	976000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.324786	50.0	322058.0	0.324786	Y
3	STD5 460-939407/16	5.0	1.826313	50.0	382136.0	0.365263	Y
4	STD20 460-939407/6	20.0	7.14579	50.0	379916.0	0.35729	Y
5	STD50 460-939407/7	50.0	20.675557	50.0	371412.0	0.413511	Y
6	STD200 460-939407/8	200.0	85.064712	50.0	465371.0	0.425324	Y
7	STD500 460-939407/9	500.0	213.058048	50.0	475810.0	0.426116	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

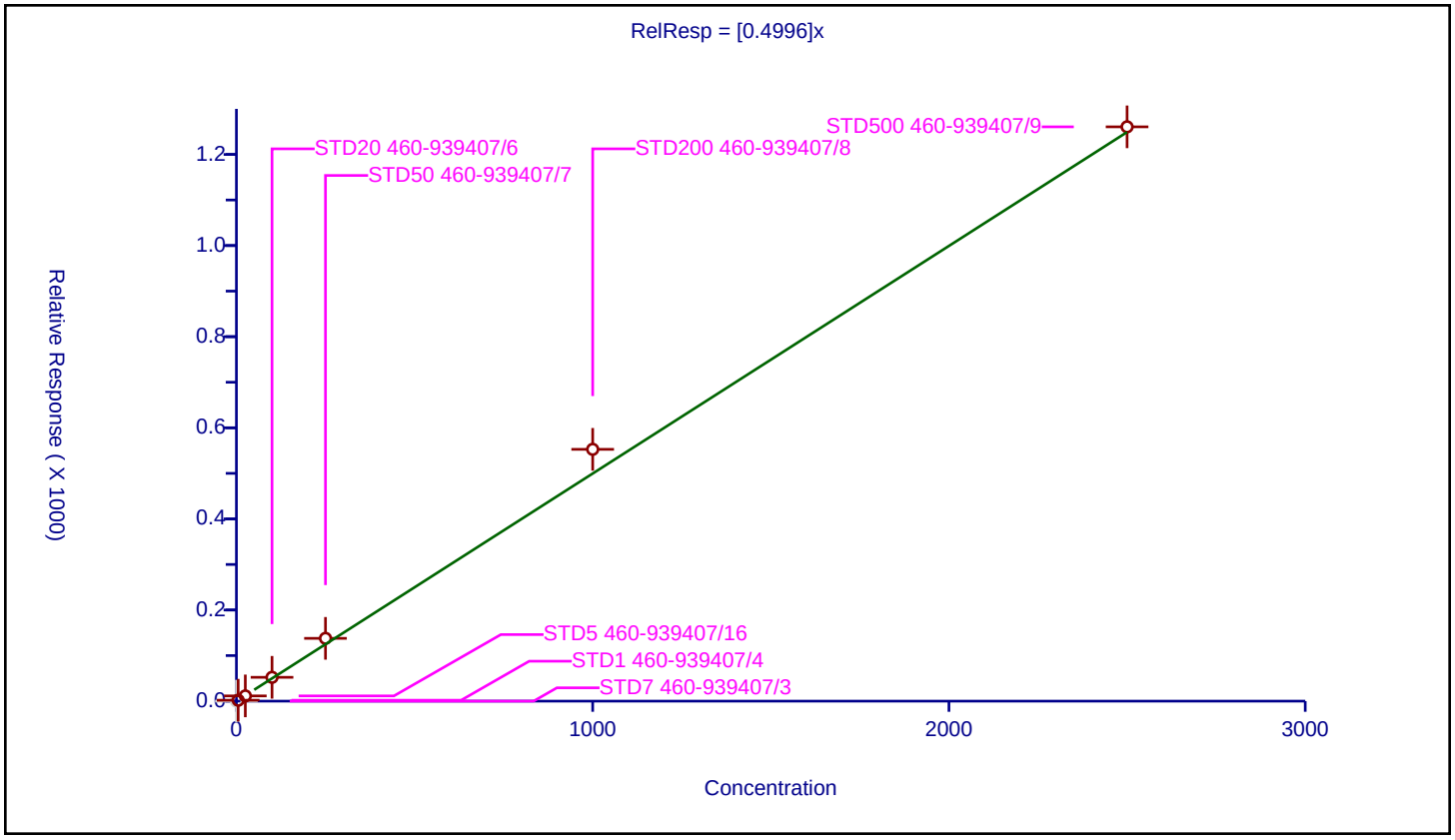
Curve Coefficients

Intercept:	0
Slope:	0.4996

Error Coefficients

Standard Error:	740000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	250.0	175021.0	NaN	N
2	STD1 460-939407/4	5.0	2.030961	250.0	168147.0	0.406192	Y
3	STD5 460-939407/16	25.0	11.509642	250.0	220337.0	0.460386	Y
4	STD20 460-939407/6	100.0	52.275491	250.0	185828.0	0.522755	Y
5	STD50 460-939407/7	250.0	137.836353	250.0	210233.0	0.551345	Y
6	STD200 460-939407/8	1000.0	552.71469	250.0	278006.0	0.552715	Y
7	STD500 460-939407/9	2500.0	1260.596998	250.0	303954.0	0.504239	Y



10/25/2023
1:26 PM

Calibration / n-Butyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

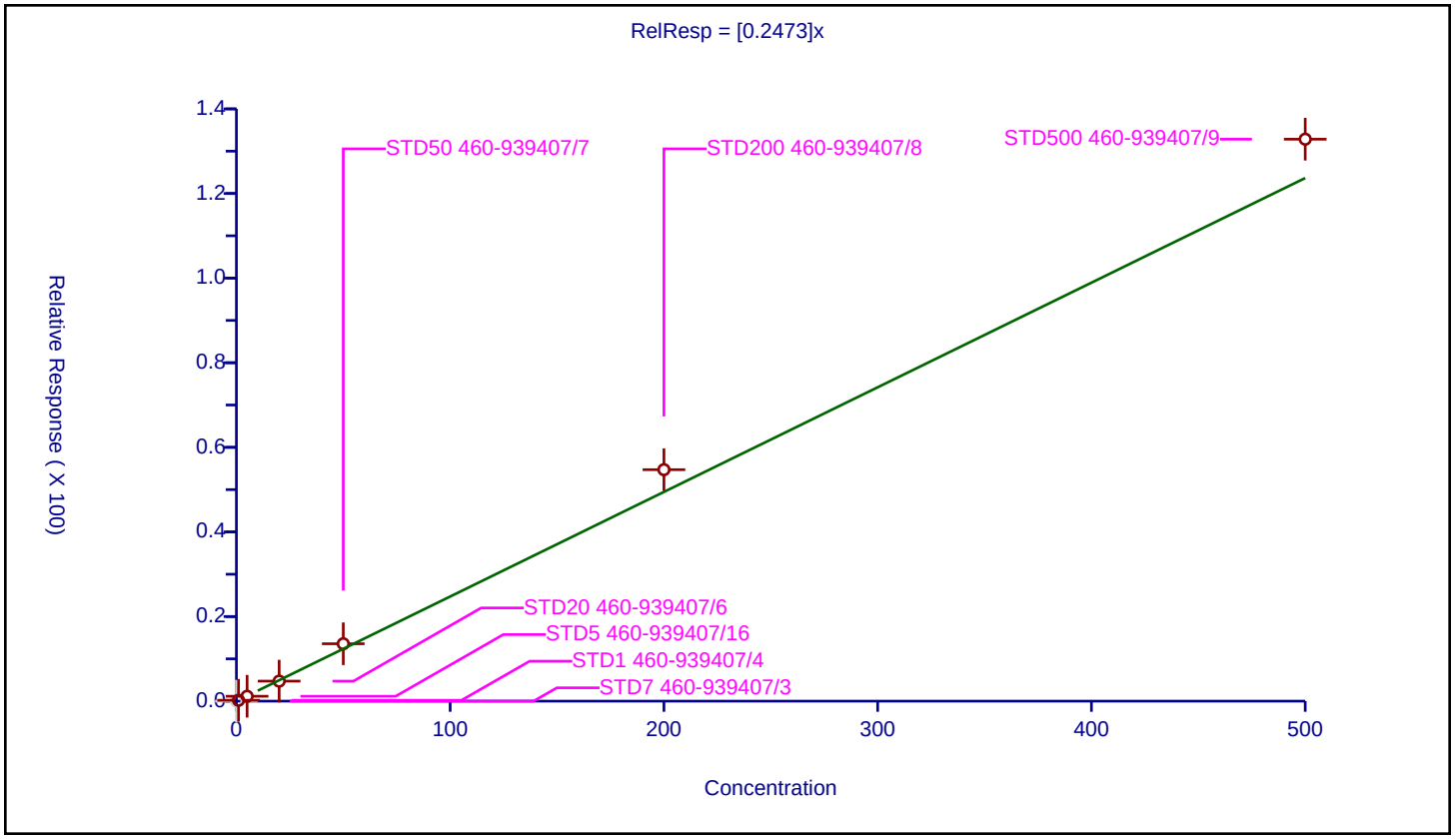
Curve Coefficients

Intercept:	0
Slope:	0.2473

Error Coefficients

Standard Error:	611000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.206174	50.0	322058.0	0.206174	Y
3	STD5 460-939407/16	5.0	1.153385	50.0	382136.0	0.230677	Y
4	STD20 460-939407/6	20.0	4.729598	50.0	379916.0	0.23648	Y
5	STD50 460-939407/7	50.0	13.561624	50.0	371412.0	0.271232	Y
6	STD200 460-939407/8	200.0	54.71613	50.0	465371.0	0.273581	Y
7	STD500 460-939407/9	500.0	132.836111	50.0	475810.0	0.265672	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

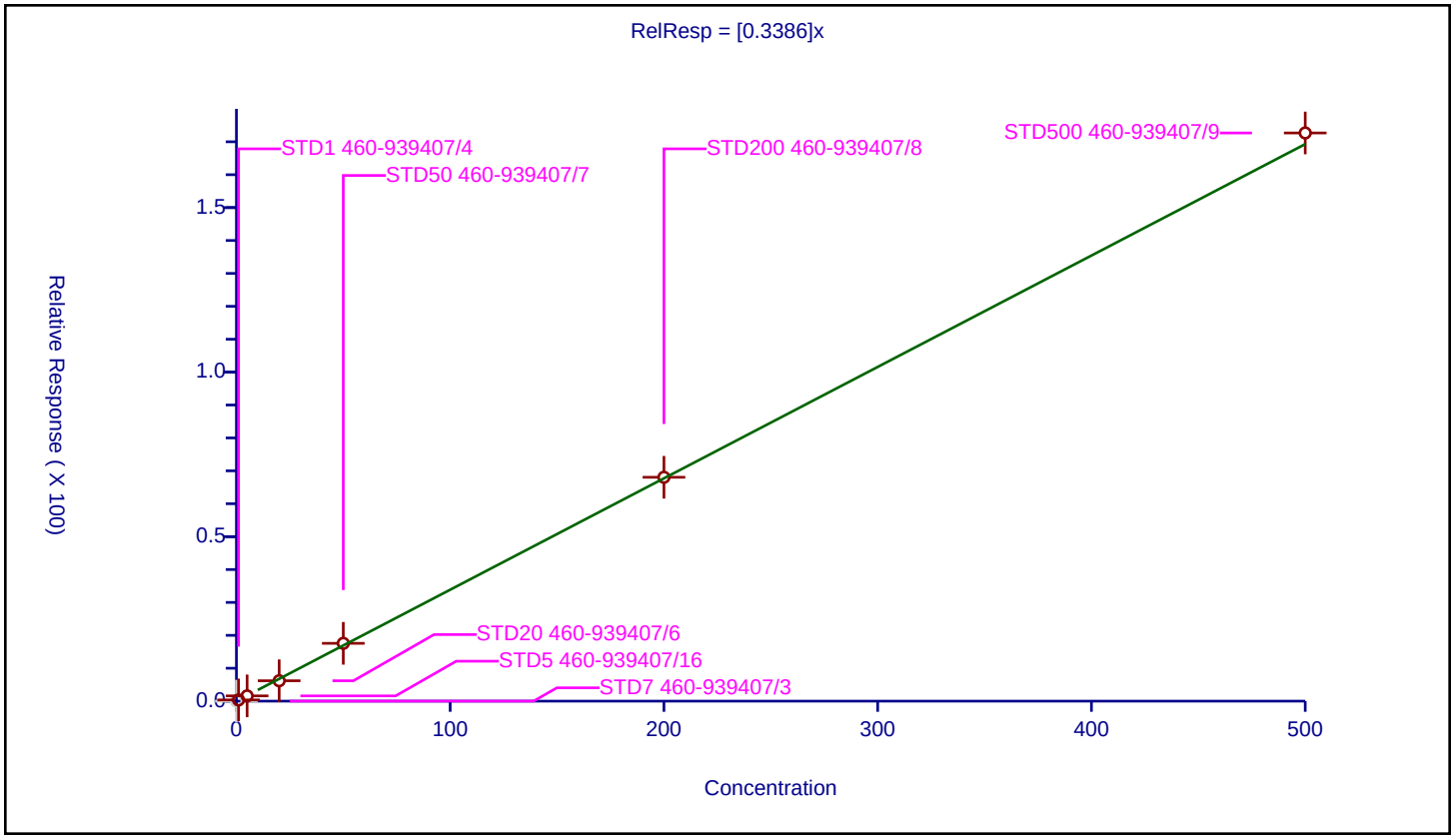
Curve Coefficients

Intercept:	0
Slope:	0.3386

Error Coefficients

Standard Error:	790000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.365307	50.0	322058.0	0.365307	Y
3	STD5 460-939407/16	5.0	1.596683	50.0	382136.0	0.319337	Y
4	STD20 460-939407/6	20.0	6.195975	50.0	379916.0	0.309799	Y
5	STD50 460-939407/7	50.0	17.572803	50.0	371412.0	0.351456	Y
6	STD200 460-939407/8	200.0	68.039478	50.0	465371.0	0.340197	Y
7	STD500 460-939407/9	500.0	172.685946	50.0	475810.0	0.345372	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

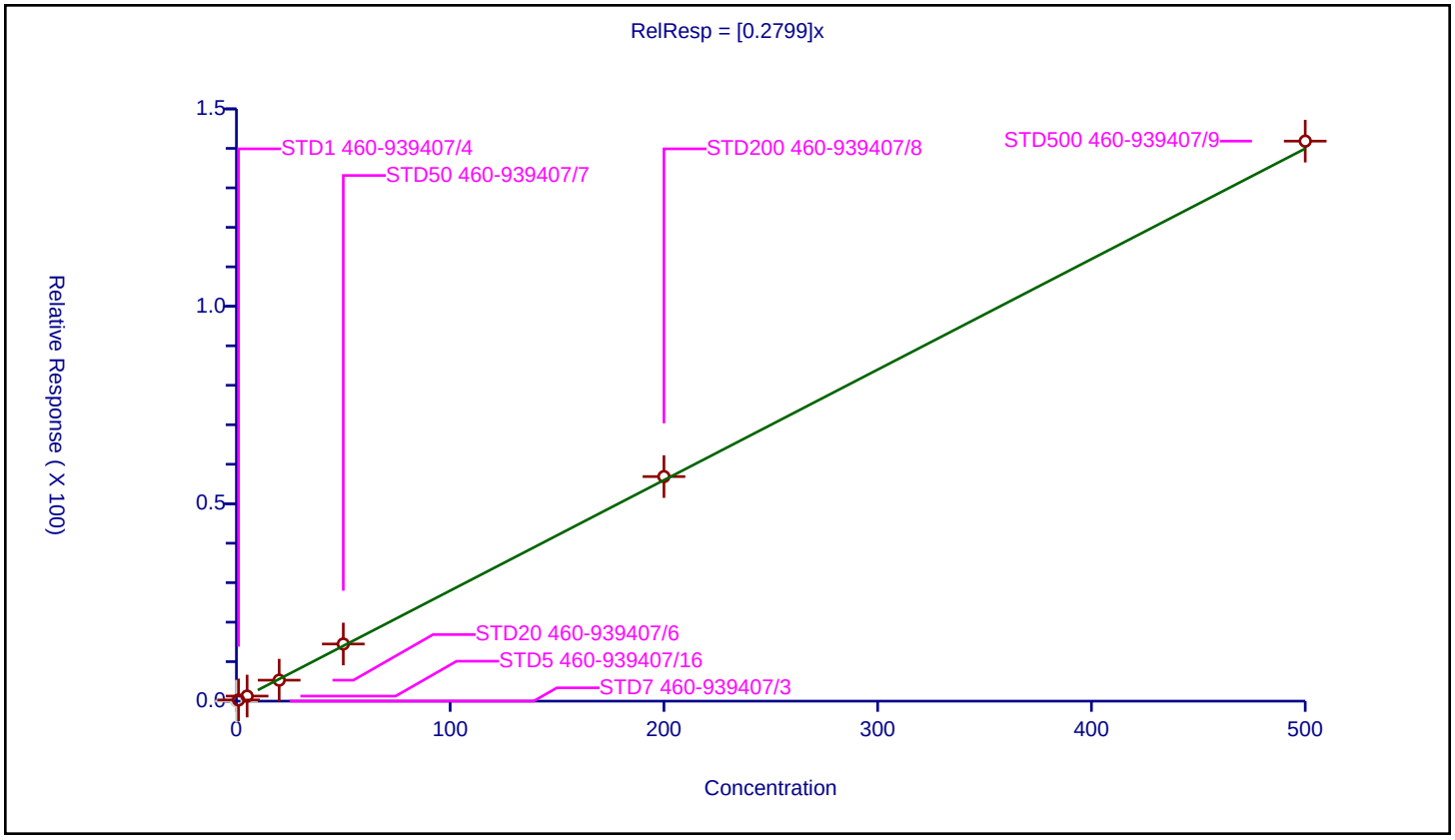
Curve Coefficients

Intercept:	0
Slope:	0.2799

Error Coefficients

Standard Error:	650000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.29948	50.0	322058.0	0.29948	Y
3	STD5 460-939407/16	5.0	1.283705	50.0	382136.0	0.256741	Y
4	STD20 460-939407/6	20.0	5.311569	50.0	379916.0	0.265578	Y
5	STD50 460-939407/7	50.0	14.471261	50.0	371412.0	0.289425	Y
6	STD200 460-939407/8	200.0	56.874623	50.0	465371.0	0.284373	Y
7	STD500 460-939407/9	500.0	141.837393	50.0	475810.0	0.283675	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

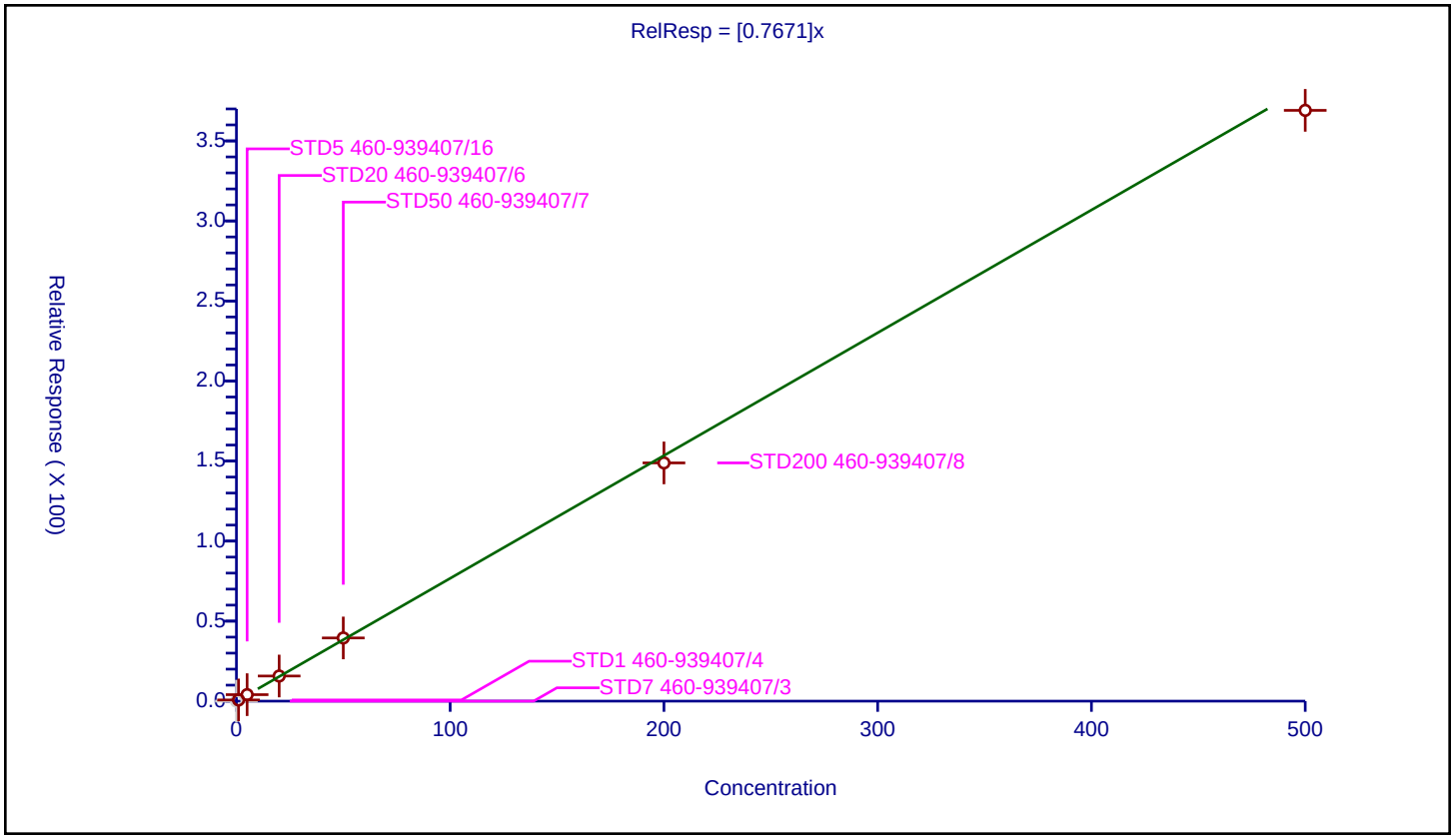
Curve Coefficients

Intercept:	0
Slope:	0.7671

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.736203	50.0	322058.0	0.736203	Y
3	STD5 460-939407/16	5.0	4.048166	50.0	382136.0	0.809633	Y
4	STD20 460-939407/6	20.0	15.696891	50.0	379916.0	0.784845	Y
5	STD50 460-939407/7	50.0	39.469915	50.0	371412.0	0.789398	Y
6	STD200 460-939407/8	200.0	148.838131	50.0	465371.0	0.744191	Y
7	STD500 460-939407/9	500.0	369.081146	50.0	475810.0	0.738162	Y



10/25/2023
1:26 PM

Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

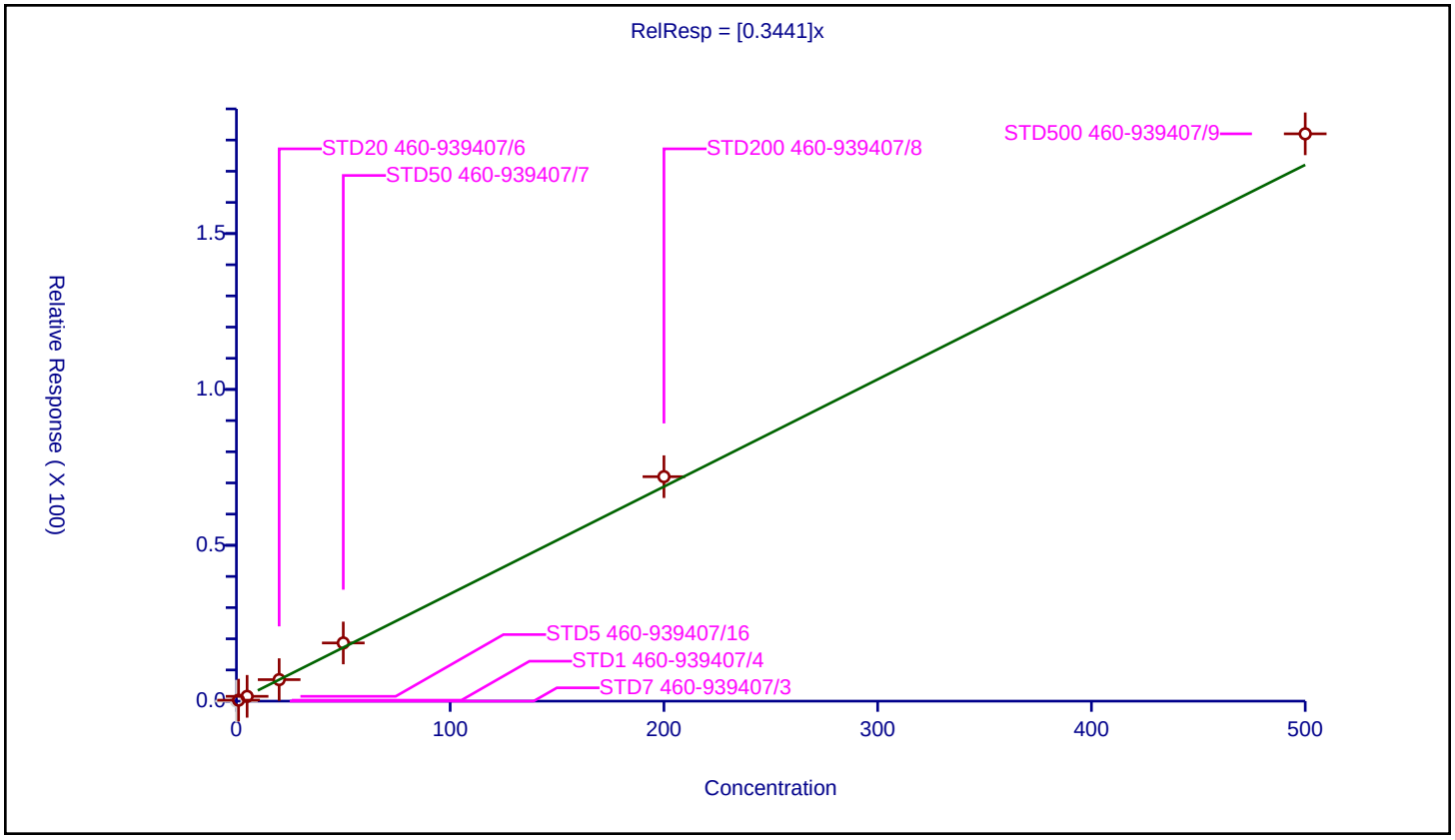
Curve Coefficients

Intercept:	0
Slope:	0.3441

Error Coefficients

Standard Error:	833000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.314074	50.0	322058.0	0.314074	Y
3	STD5 460-939407/16	5.0	1.541205	50.0	382136.0	0.308241	Y
4	STD20 460-939407/6	20.0	6.896393	50.0	379916.0	0.34482	Y
5	STD50 460-939407/7	50.0	18.669564	50.0	371412.0	0.373391	Y
6	STD200 460-939407/8	200.0	72.01233	50.0	465371.0	0.360062	Y
7	STD500 460-939407/9	500.0	182.005738	50.0	475810.0	0.364011	Y



10/25/2023
1:26 PM

Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

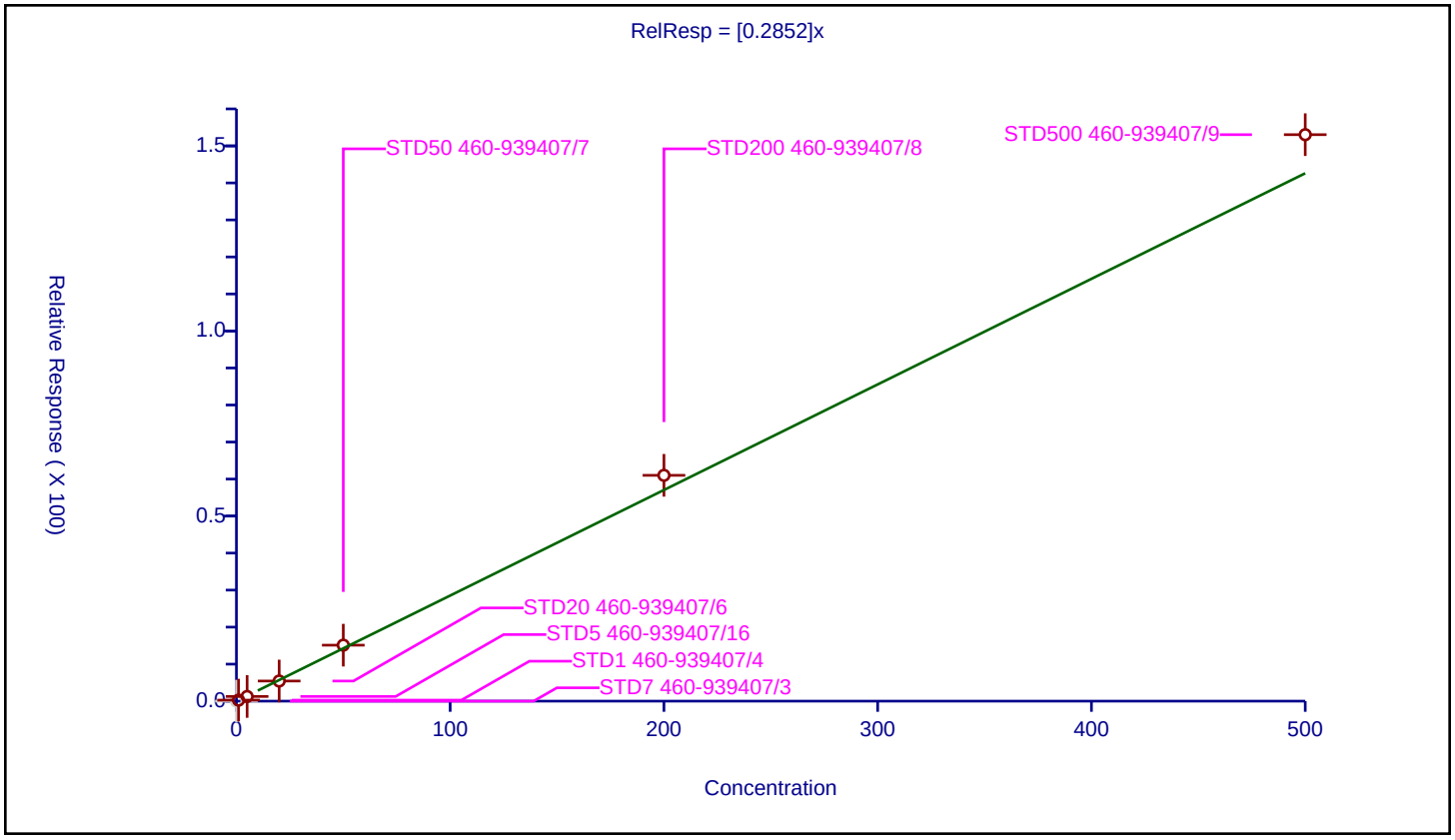
Curve Coefficients

Intercept:	0
Slope:	0.2852

Error Coefficients

Standard Error:	701000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.273864	50.0	322058.0	0.273864	Y
3	STD5 460-939407/16	5.0	1.259499	50.0	382136.0	0.2519	Y
4	STD20 460-939407/6	20.0	5.439229	50.0	379916.0	0.271961	Y
5	STD50 460-939407/7	50.0	15.122694	50.0	371412.0	0.302454	Y
6	STD200 460-939407/8	200.0	61.002405	50.0	465371.0	0.305012	Y
7	STD500 460-939407/9	500.0	153.03514	50.0	475810.0	0.30607	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

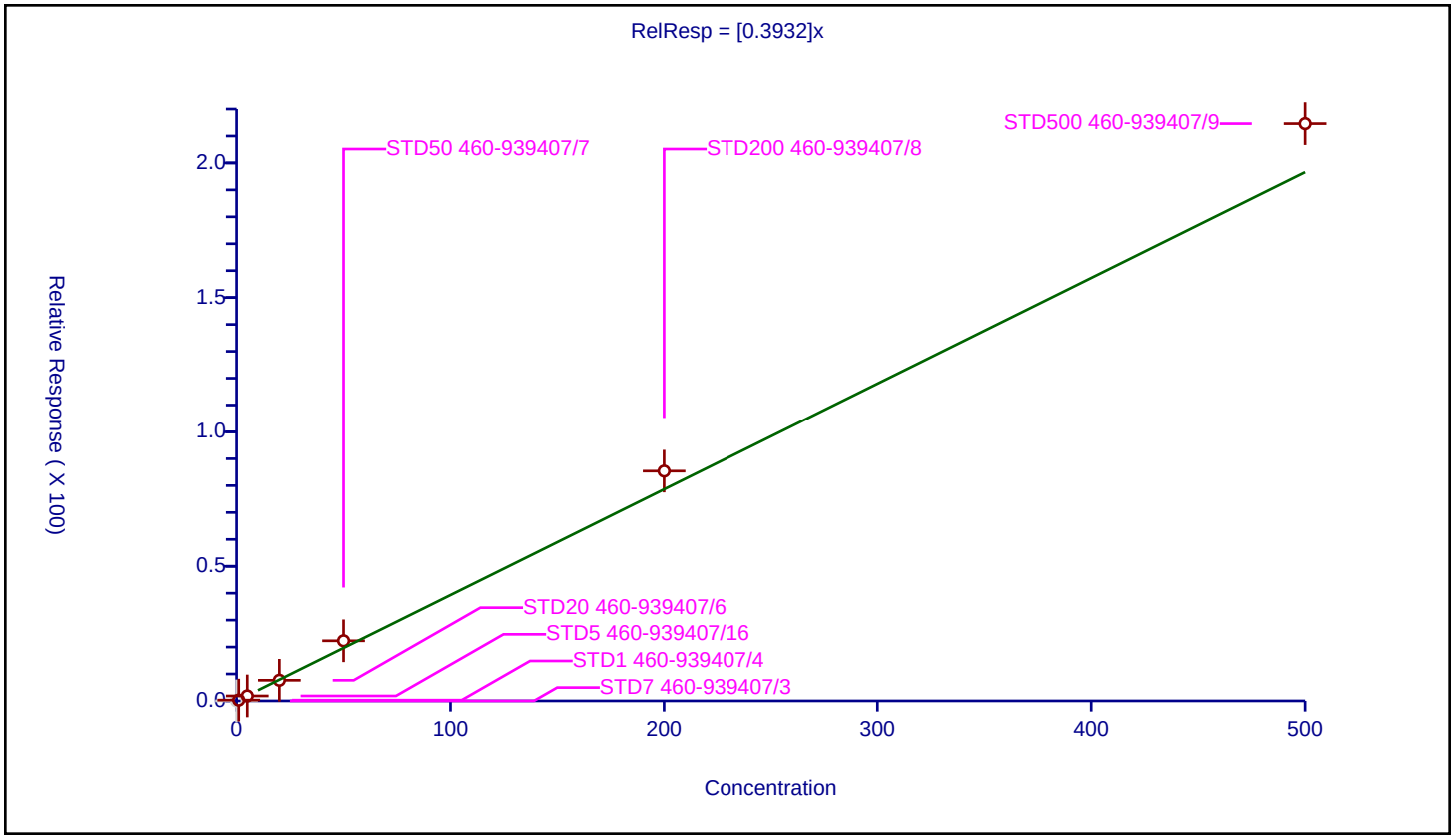
Curve Coefficients

Intercept:	0
Slope:	0.3932

Error Coefficients

Standard Error:	983000
Relative Standard Error:	13.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.303672	50.0	322058.0	0.303672	Y
3	STD5 460-939407/16	5.0	1.846986	50.0	382136.0	0.369397	Y
4	STD20 460-939407/6	20.0	7.663536	50.0	379916.0	0.383177	Y
5	STD50 460-939407/7	50.0	22.328842	50.0	371412.0	0.446577	Y
6	STD200 460-939407/8	200.0	85.409598	50.0	465371.0	0.427048	Y
7	STD500 460-939407/9	500.0	214.594271	50.0	475810.0	0.429189	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

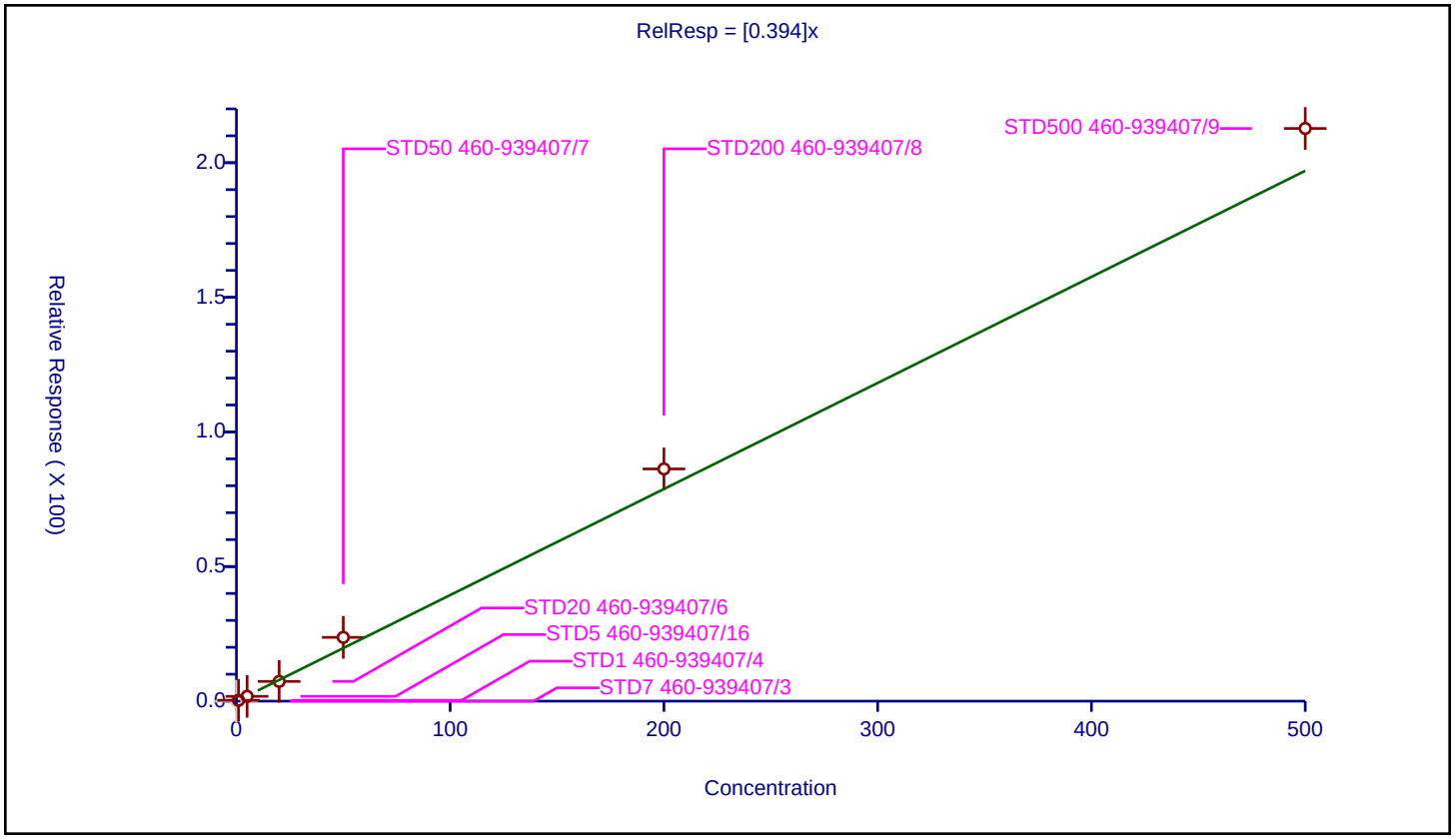
Curve Coefficients

Intercept:	0
Slope:	0.394

Error Coefficients

Standard Error:	977000
Relative Standard Error:	15.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.308951	50.0	322058.0	0.308951	Y
3	STD5 460-939407/16	5.0	1.789677	50.0	382136.0	0.357935	Y
4	STD20 460-939407/6	20.0	7.330963	50.0	379916.0	0.366548	Y
5	STD50 460-939407/7	50.0	23.686634	50.0	371412.0	0.473733	Y
6	STD200 460-939407/8	200.0	86.25935	50.0	465371.0	0.431297	Y
7	STD500 460-939407/9	500.0	212.729766	50.0	475810.0	0.42546	Y



Calibration / n-Butyl acrylate

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

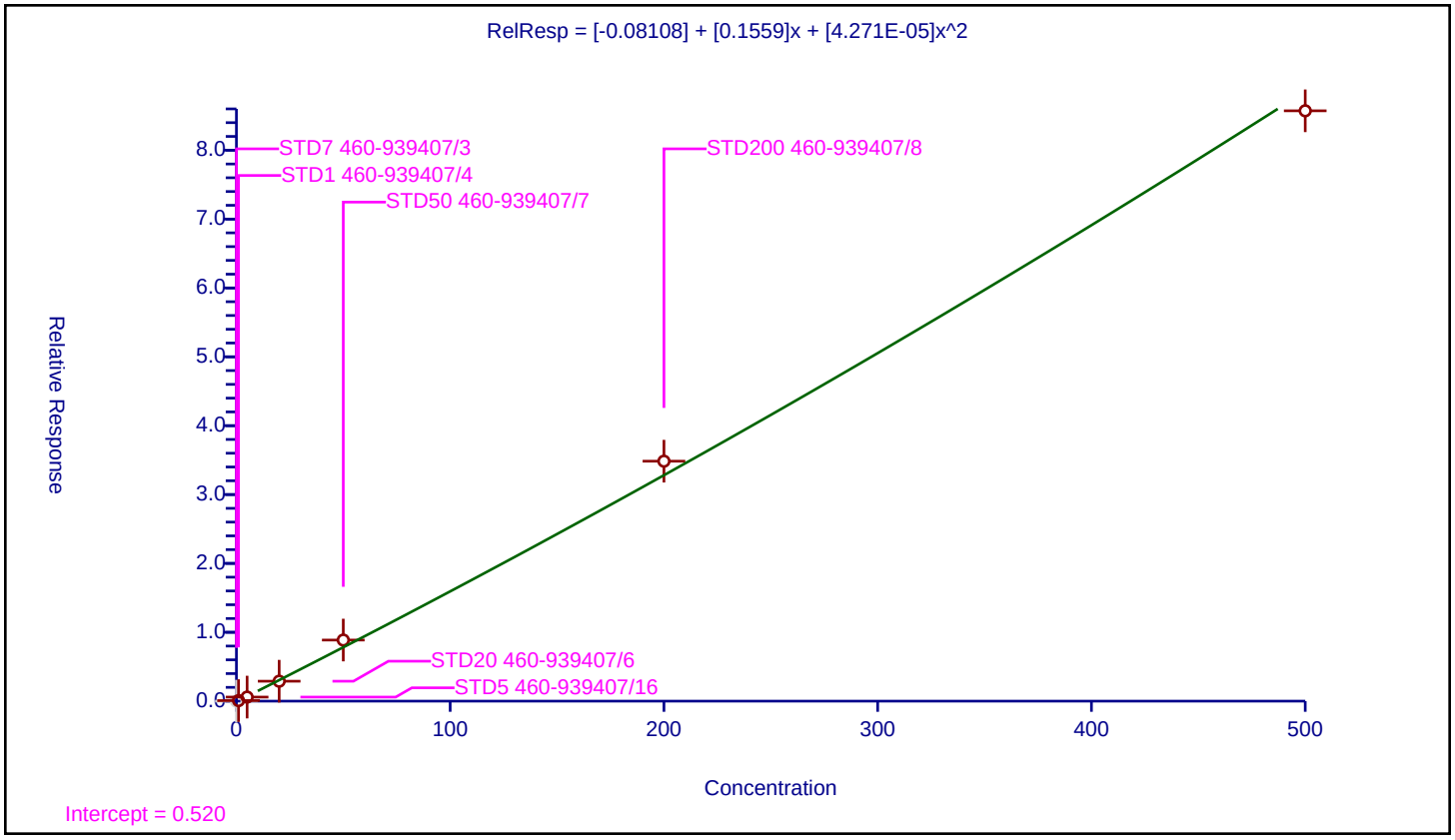
Curve Coefficients

Intercept:	-0.08108
Slope:	0.1559
Second Order:	4.271E-05

Error Coefficients

Standard Error:	508000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.079178	50.0	322058.0	0.079178	Y
3	STD5 460-939407/16	5.0	0.590104	50.0	382136.0	0.118021	Y
4	STD20 460-939407/6	20.0	2.894192	50.0	379916.0	0.14471	Y
5	STD50 460-939407/7	50.0	8.871011	50.0	371412.0	0.17742	Y
6	STD200 460-939407/8	200.0	34.845962	50.0	465371.0	0.17423	Y
7	STD500 460-939407/9	500.0	85.721612	50.0	475810.0	0.171443	Y



10/25/2023
1:26 PM

Calibration / Styrene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

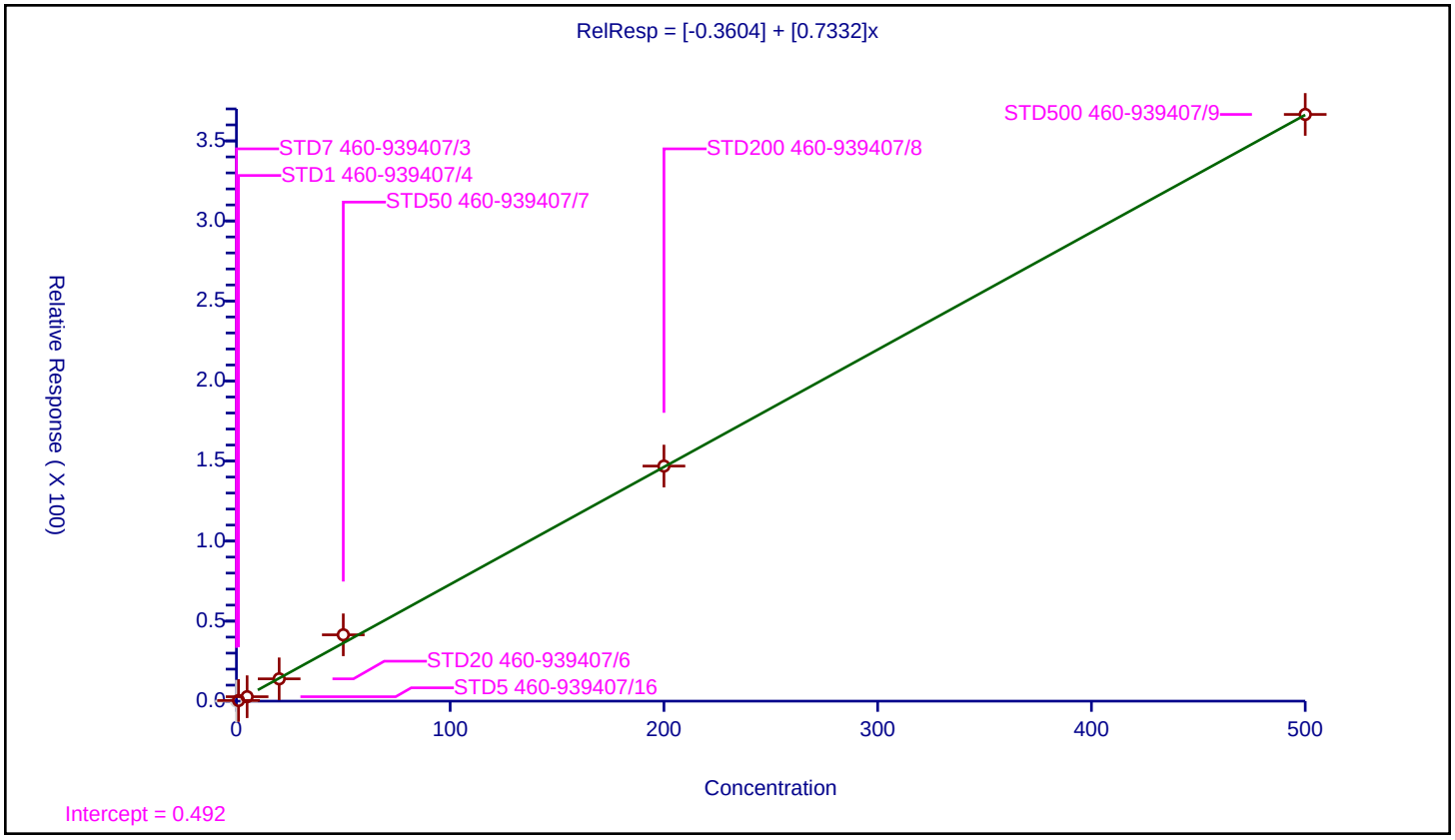
Curve Coefficients

Intercept:	-0.3604
Slope:	0.7332

Error Coefficients

Standard Error:	1880000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.393252	50.0	322058.0	0.393252	Y
3	STD5 460-939407/16	5.0	2.766423	50.0	382136.0	0.553285	Y
4	STD20 460-939407/6	20.0	13.929132	50.0	379916.0	0.696457	Y
5	STD50 460-939407/7	50.0	41.431887	50.0	371412.0	0.828638	Y
6	STD200 460-939407/8	200.0	146.862181	50.0	465371.0	0.734311	Y
7	STD500 460-939407/9	500.0	366.534646	50.0	475810.0	0.733069	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

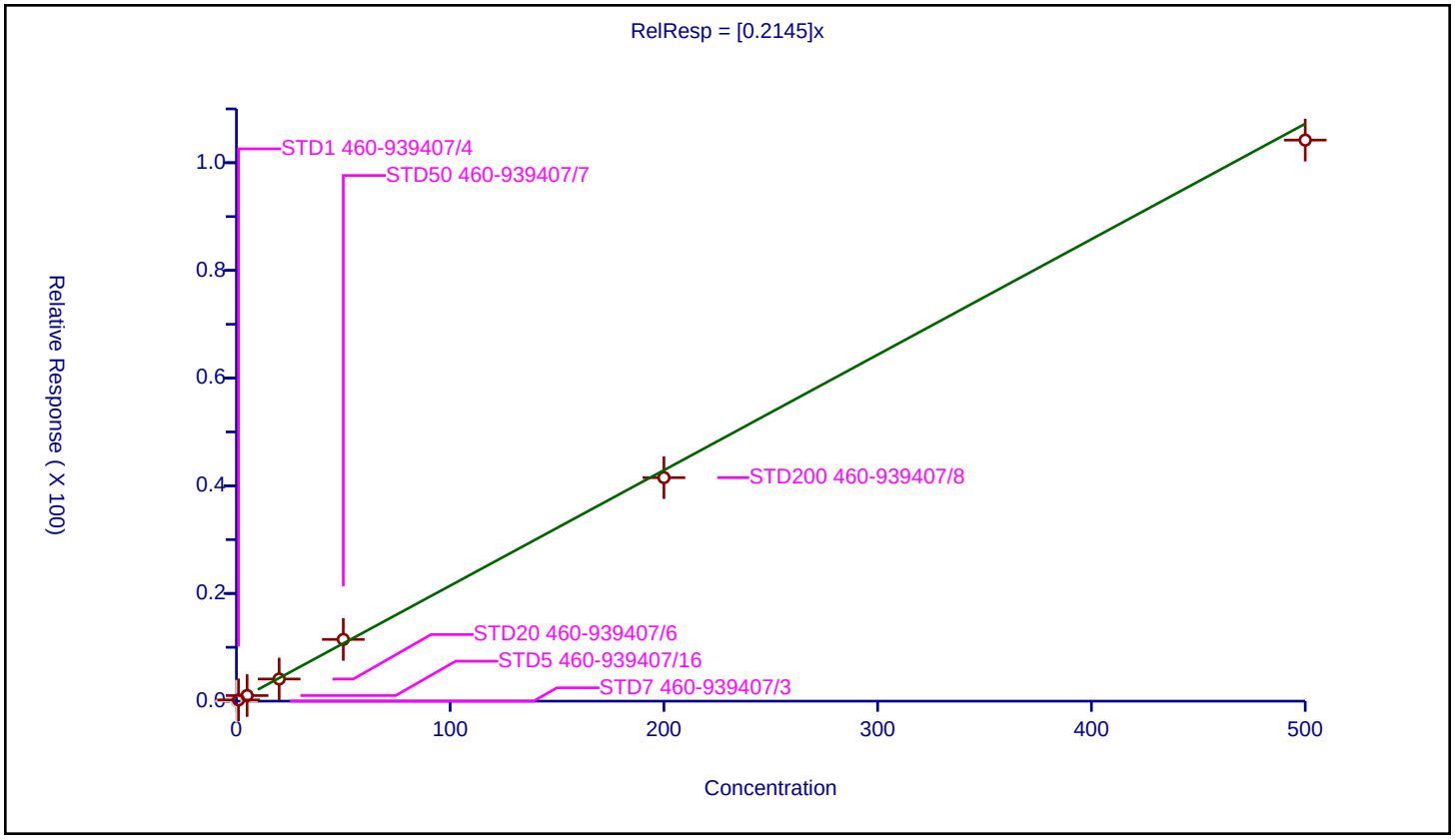
Curve Coefficients

Intercept:	0
Slope:	0.2145

Error Coefficients

Standard Error:	478000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.22853	50.0	322058.0	0.22853	Y
3	STD5 460-939407/16	5.0	1.037065	50.0	382136.0	0.207413	Y
4	STD20 460-939407/6	20.0	4.113804	50.0	379916.0	0.20569	Y
5	STD50 460-939407/7	50.0	11.462742	50.0	371412.0	0.229255	Y
6	STD200 460-939407/8	200.0	41.512793	50.0	465371.0	0.207564	Y
7	STD500 460-939407/9	500.0	104.203148	50.0	475810.0	0.208406	Y



10/25/2023
1:26 PM

Calibration / Amyl acetate (mixed isomers)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

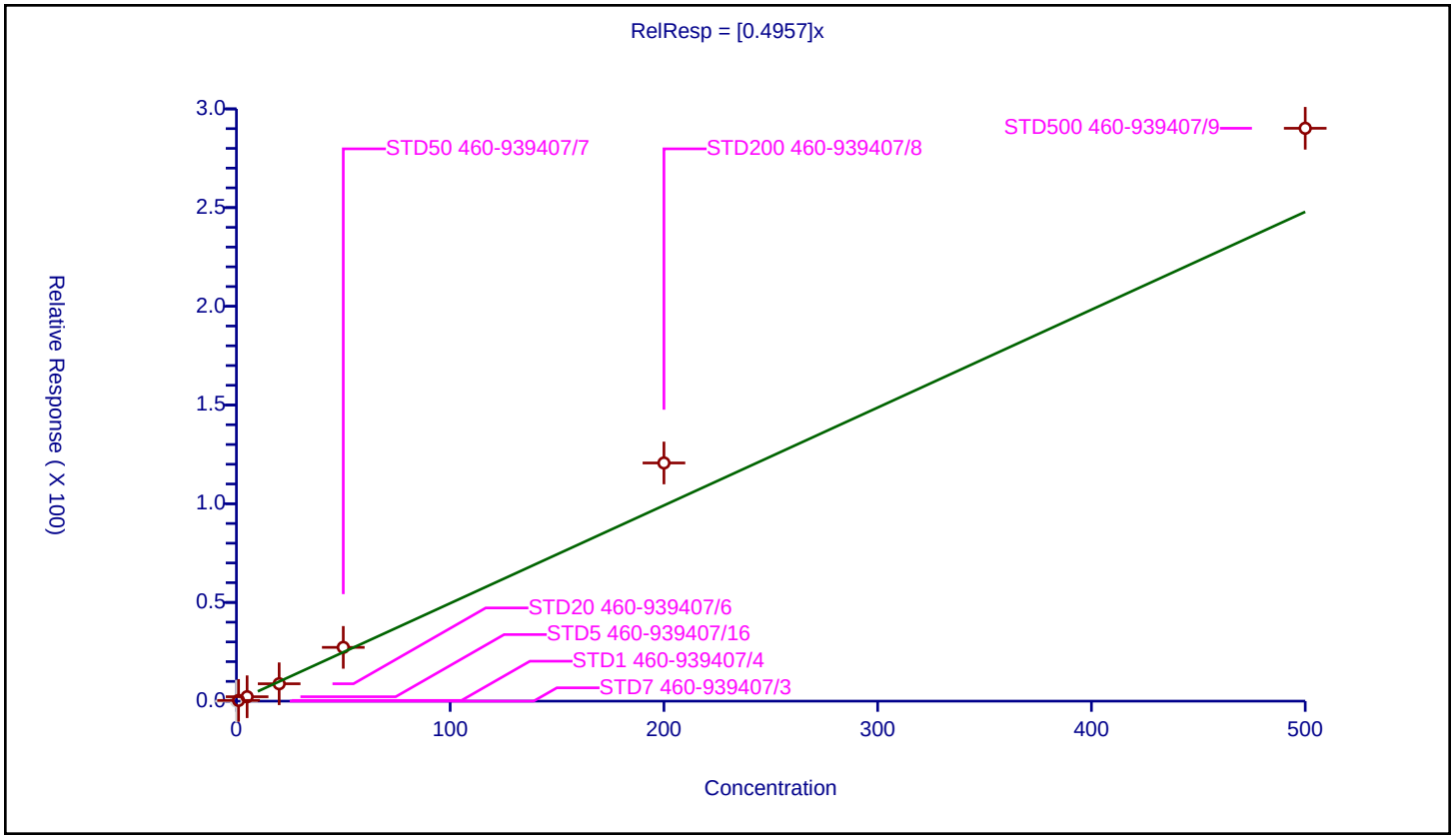
Curve Coefficients

Intercept:	0
Slope:	0.4957

Error Coefficients

Standard Error:	734000
Relative Standard Error:	19.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.359196	50.0	172190.0	0.359196	Y
3	STD5 460-939407/16	5.0	2.233397	50.0	198666.0	0.446679	Y
4	STD20 460-939407/6	20.0	8.80309	50.0	219440.0	0.440154	Y
5	STD50 460-939407/7	50.0	27.234723	50.0	229402.0	0.544694	Y
6	STD200 460-939407/8	200.0	120.642116	50.0	250391.0	0.603211	Y
7	STD500 460-939407/9	500.0	290.173672	50.0	261873.0	0.580347	Y



10/25/2023
1:26 PM

Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

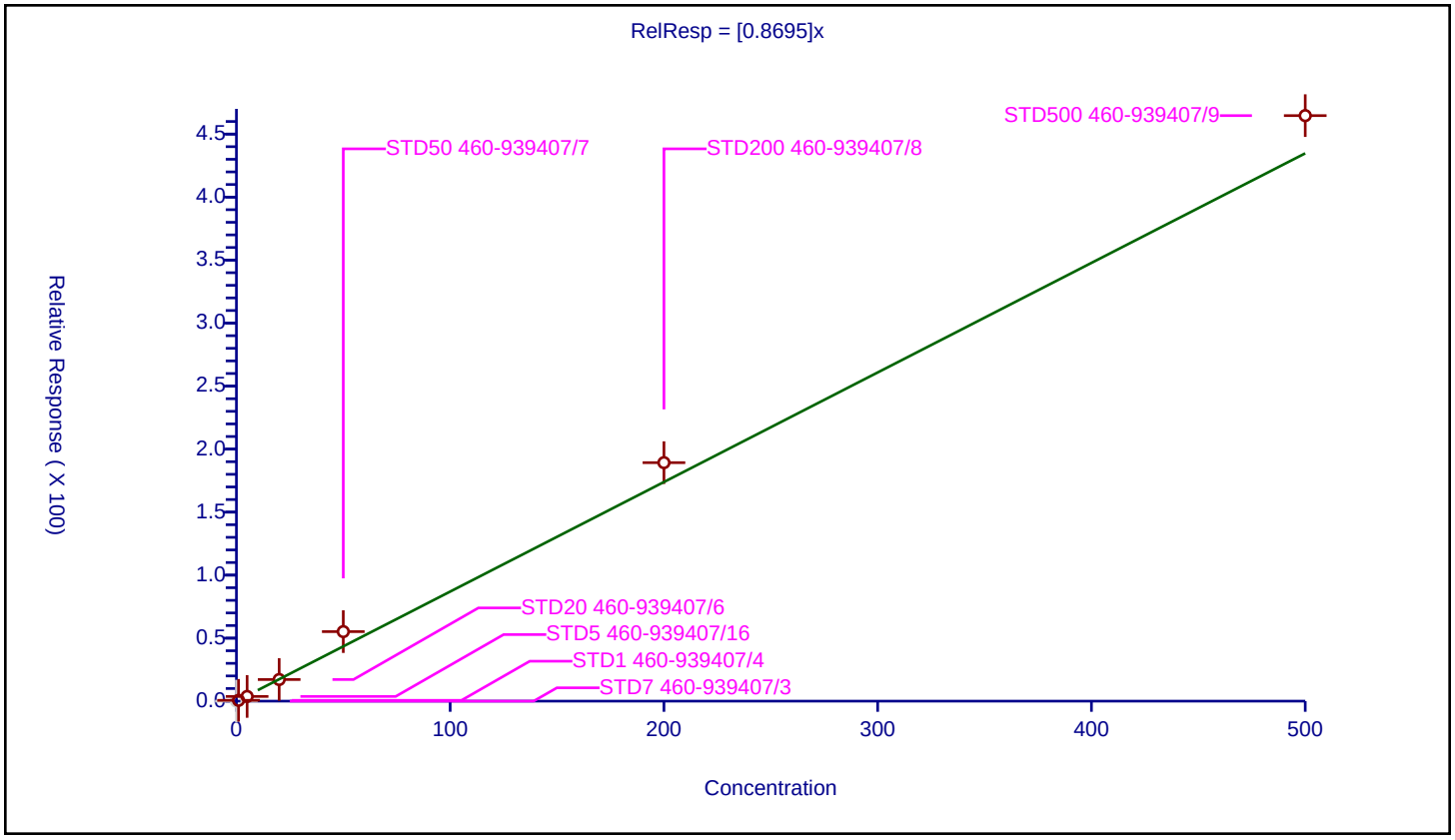
Curve Coefficients

Intercept:	0
Slope:	0.8695

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	18.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	346534.0	NaN	N
2	STD1 460-939407/4	1.0	0.634513	50.0	322058.0	0.634513	Y
3	STD5 460-939407/16	5.0	3.727469	50.0	382136.0	0.745494	Y
4	STD20 460-939407/6	20.0	17.149054	50.0	379916.0	0.857453	Y
5	STD50 460-939407/7	50.0	55.182789	50.0	371412.0	1.103656	Y
6	STD200 460-939407/8	200.0	189.257281	50.0	465371.0	0.946286	Y
7	STD500 460-939407/9	500.0	464.651226	50.0	475810.0	0.929302	Y



Calibration / 4-Bromofluorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

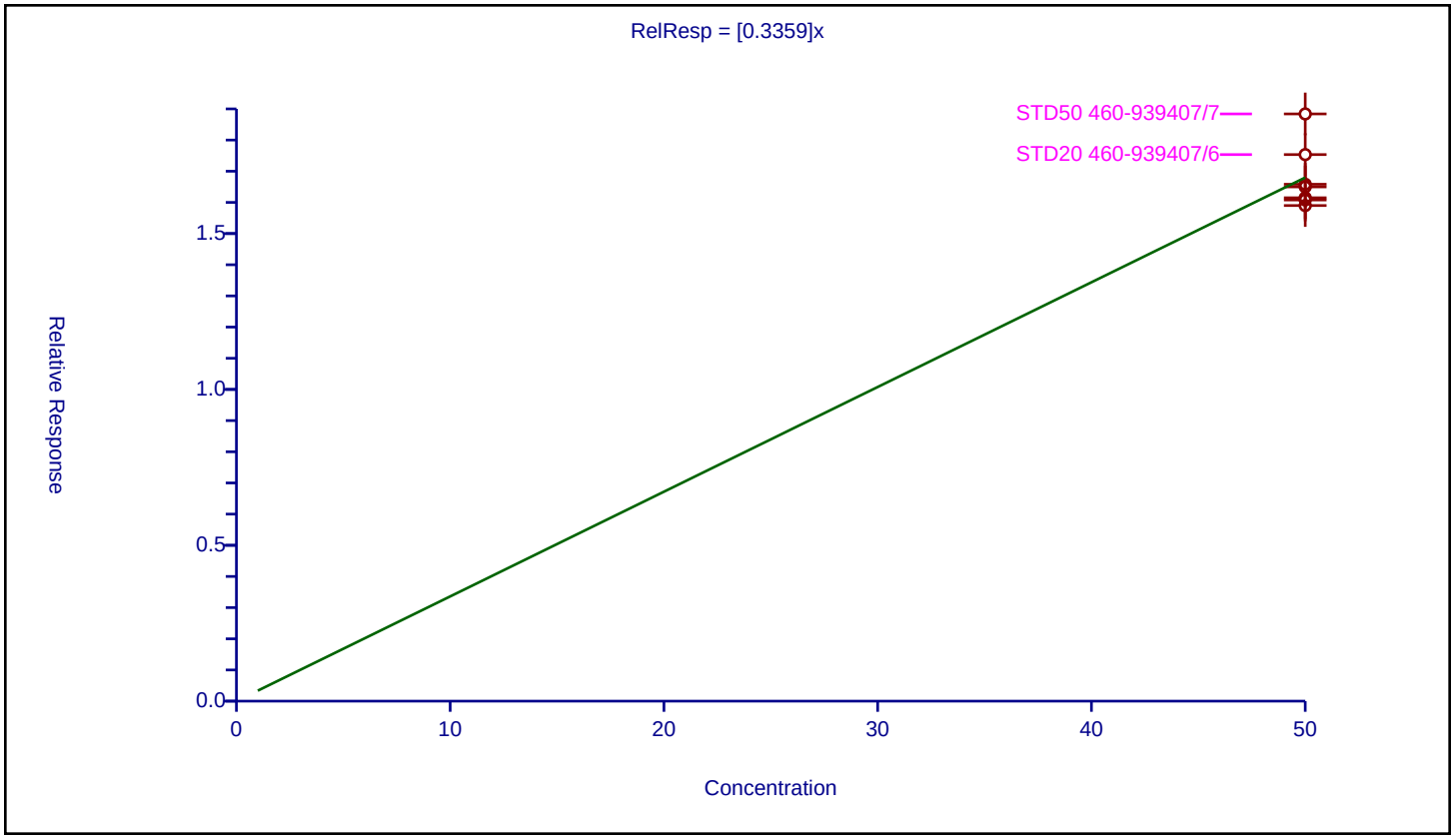
Curve Coefficients

Intercept:	0
Slope:	0.3359

Error Coefficients

Standard Error:	143000
Relative Standard Error:	6.2
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	50.0	16.077643	50.0	346534.0	0.321553	Y
2	STD1 460-939407/4	50.0	16.148334	50.0	322058.0	0.322967	Y
3	STD20 460-939407/6	50.0	17.533876	50.0	379916.0	0.350678	Y
4	STD50 460-939407/7	50.0	18.838244	50.0	371412.0	0.376765	Y
5	STD200 460-939407/8	50.0	16.497268	50.0	465371.0	0.329945	Y
6	STD500 460-939407/9	50.0	15.898888	50.0	475810.0	0.317978	Y
7	STD5 460-939407/16	50.0	16.581924	50.0	382136.0	0.331638	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

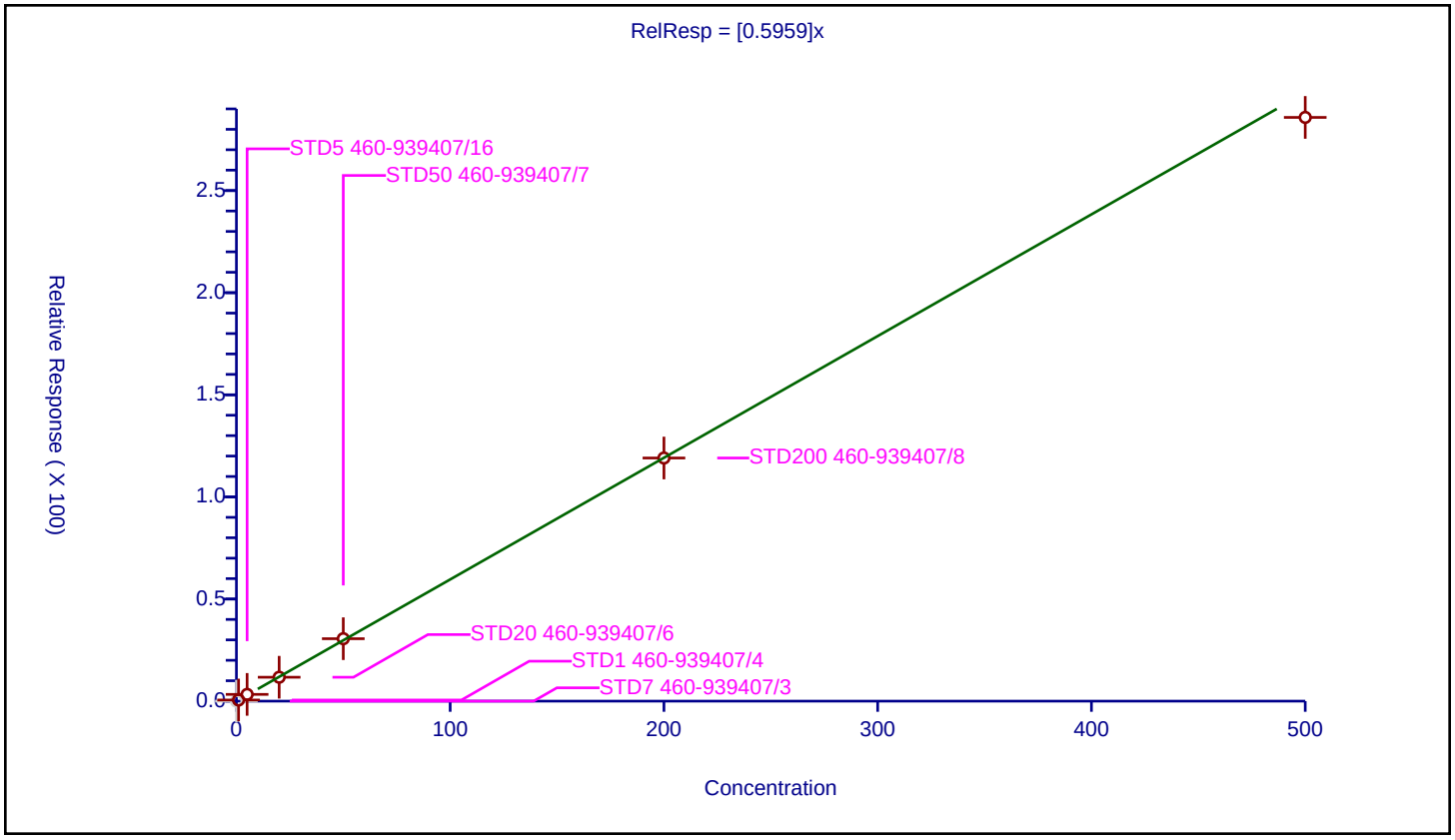
Curve Coefficients

Intercept:	0
Slope:	0.5959

Error Coefficients

Standard Error:	724000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.551426	50.0	172190.0	0.551426	Y
3	STD5 460-939407/16	5.0	3.300011	50.0	198666.0	0.660002	Y
4	STD20 460-939407/6	20.0	11.703427	50.0	219440.0	0.585171	Y
5	STD50 460-939407/7	50.0	30.58234	50.0	229402.0	0.611647	Y
6	STD200 460-939407/8	200.0	119.049007	50.0	250391.0	0.595245	Y
7	STD500 460-939407/9	500.0	285.821753	50.0	261873.0	0.571644	Y



10/25/2023
1:26 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

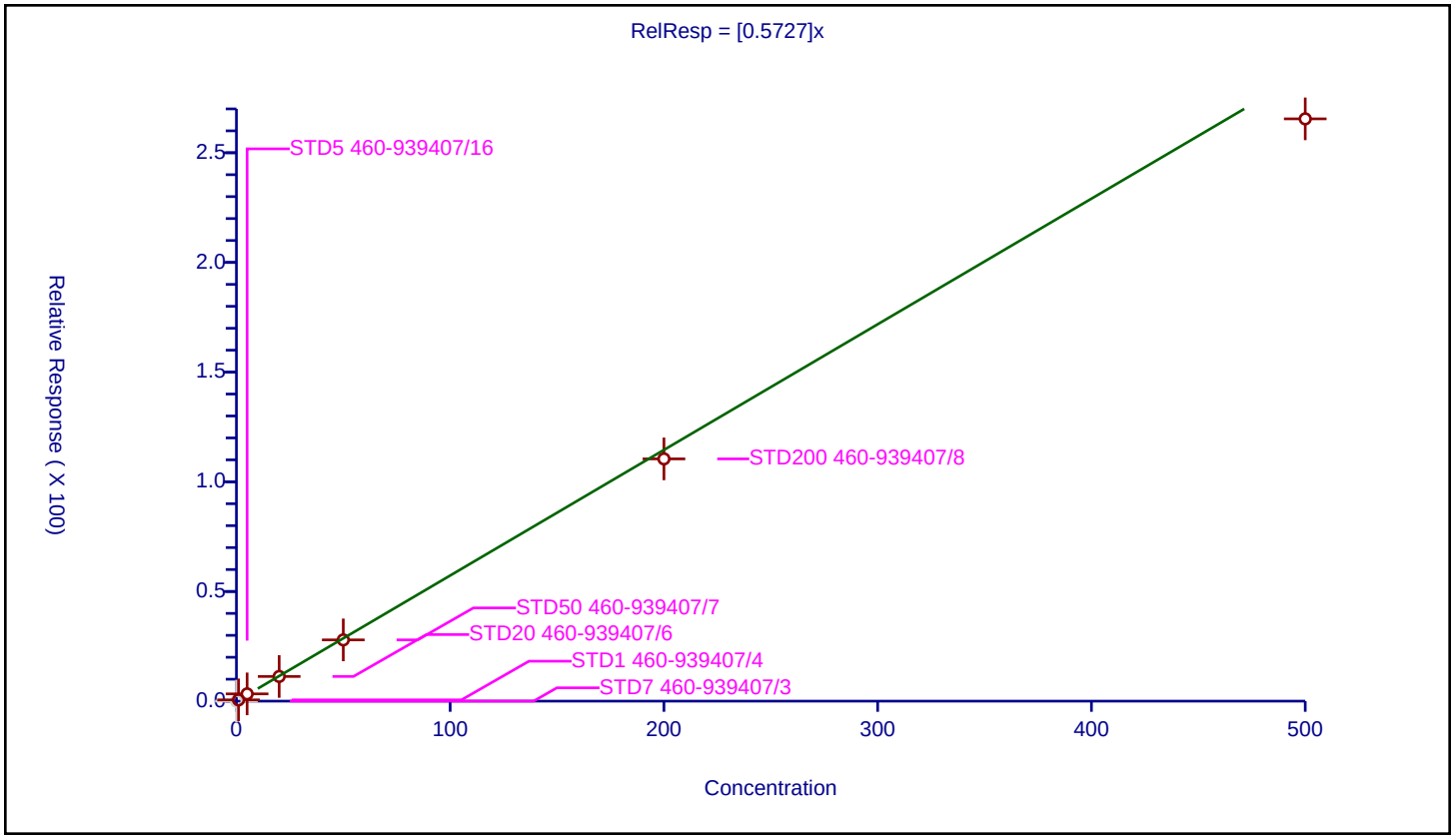
Curve Coefficients

Intercept:	0
Slope:	0.5727

Error Coefficients

Standard Error:	672000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.570881	50.0	172190.0	0.570881	Y
3	STD5 460-939407/16	5.0	3.304793	50.0	198666.0	0.660959	Y
4	STD20 460-939407/6	20.0	11.253418	50.0	219440.0	0.562671	Y
5	STD50 460-939407/7	50.0	27.923035	50.0	229402.0	0.558461	Y
6	STD200 460-939407/8	200.0	110.44127	50.0	250391.0	0.552206	Y
7	STD500 460-939407/9	500.0	265.457302	50.0	261873.0	0.530915	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

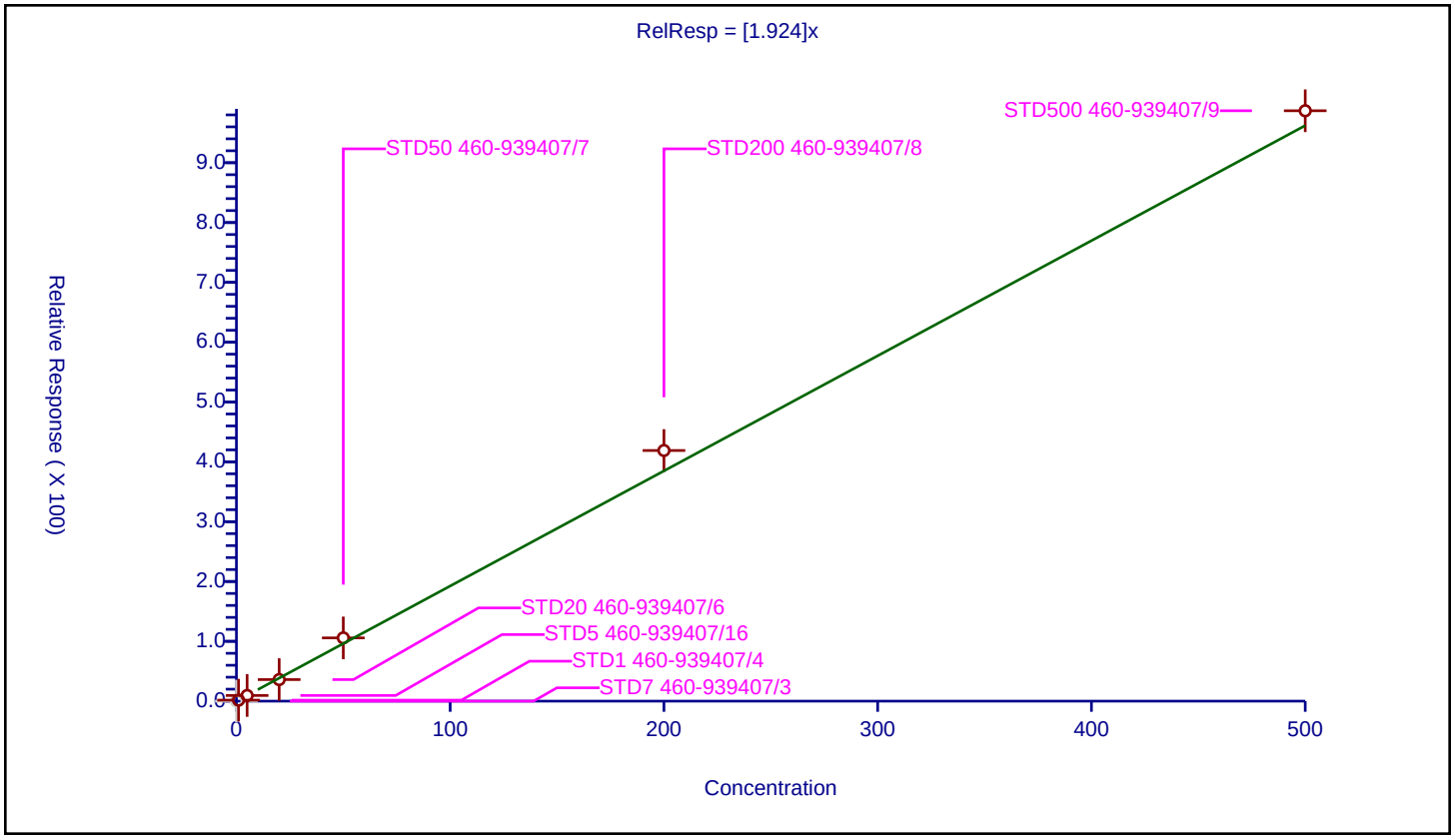
Curve Coefficients

Intercept:	0
Slope:	1.924

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.672571	50.0	172190.0	1.672571	Y
3	STD5 460-939407/16	5.0	9.441726	50.0	198666.0	1.888345	Y
4	STD20 460-939407/6	20.0	36.037641	50.0	219440.0	1.801882	Y
5	STD50 460-939407/7	50.0	105.728808	50.0	229402.0	2.114576	Y
6	STD200 460-939407/8	200.0	418.955354	50.0	250391.0	2.094777	Y
7	STD500 460-939407/9	500.0	986.8799	50.0	261873.0	1.97376	Y



10/25/2023
1:26 PM

Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

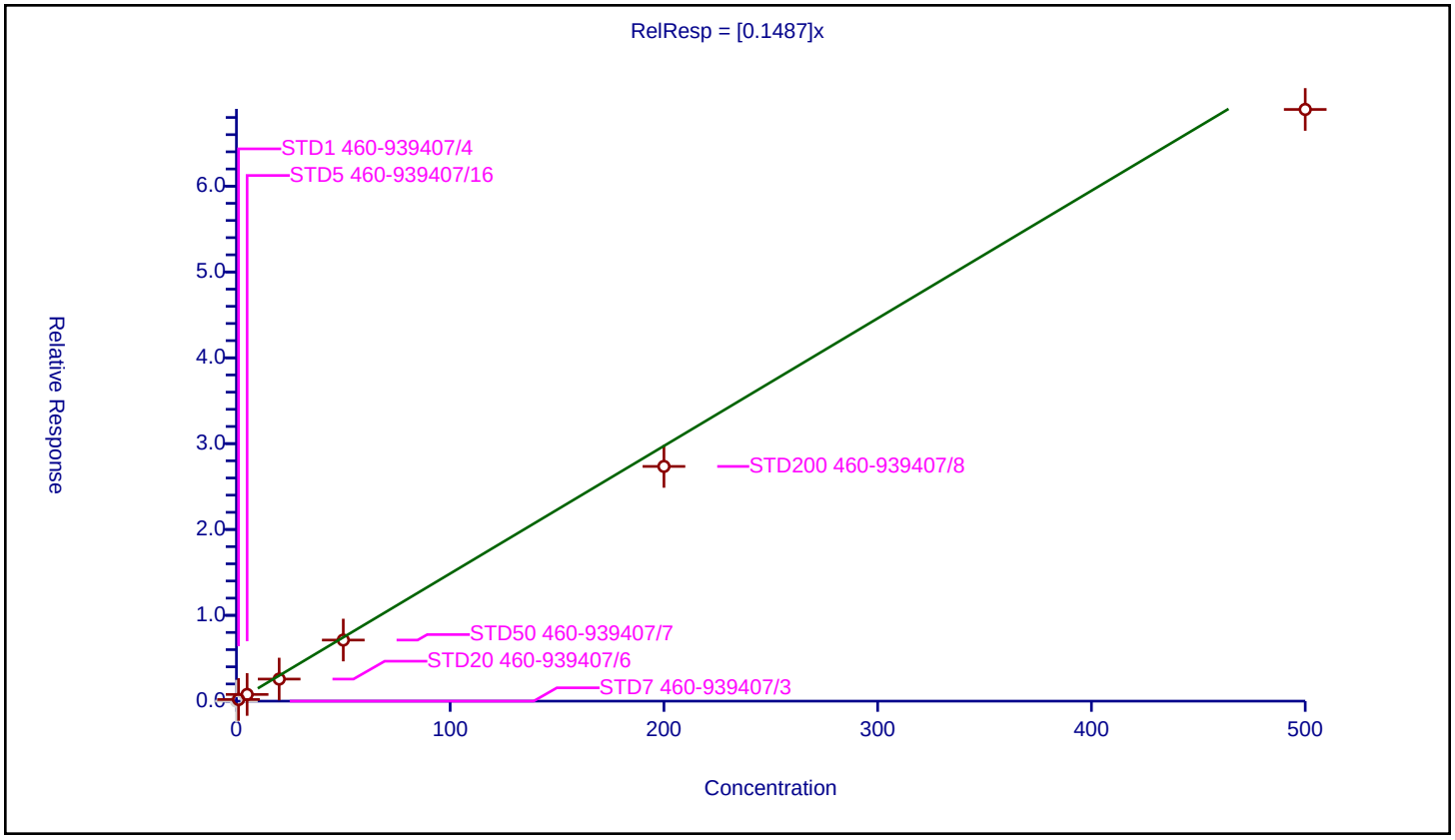
Curve Coefficients

Intercept:	0
Slope:	0.1487

Error Coefficients

Standard Error:	173000
Relative Standard Error:	15.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.190197	50.0	172190.0	0.190197	Y
3	STD5 460-939407/16	5.0	0.781462	50.0	198666.0	0.156292	Y
4	STD20 460-939407/6	20.0	2.570862	50.0	219440.0	0.128543	Y
5	STD50 460-939407/7	50.0	7.116546	50.0	229402.0	0.142331	Y
6	STD200 460-939407/8	200.0	27.345631	50.0	250391.0	0.136728	Y
7	STD500 460-939407/9	500.0	68.934751	50.0	261873.0	0.13787	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

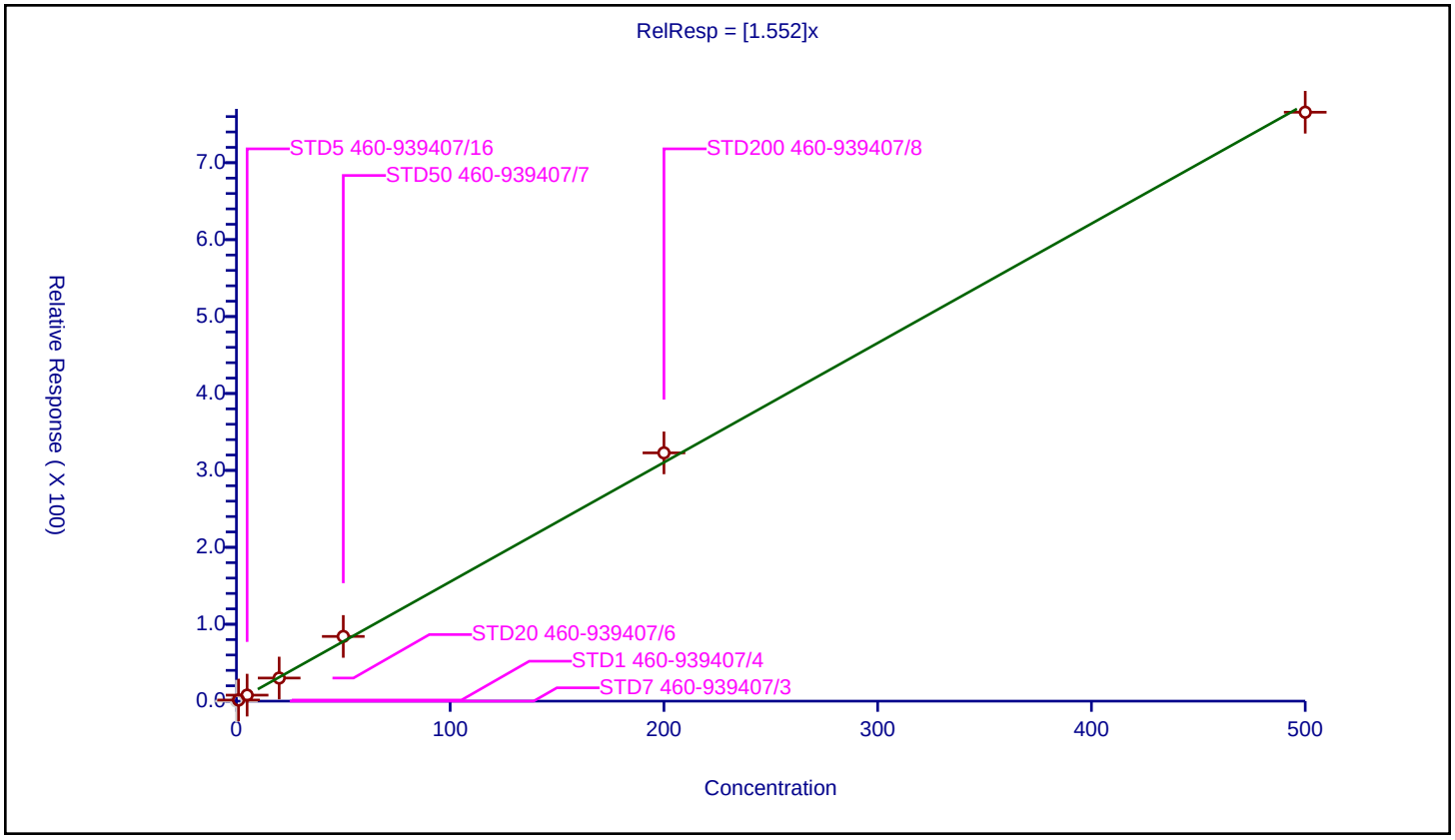
Curve Coefficients

Intercept:	0
Slope:	1.552

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.419943	50.0	172190.0	1.419943	Y
3	STD5 460-939407/16	5.0	7.814875	50.0	198666.0	1.562975	Y
4	STD20 460-939407/6	20.0	30.025064	50.0	219440.0	1.501253	Y
5	STD50 460-939407/7	50.0	84.128735	50.0	229402.0	1.682575	Y
6	STD200 460-939407/8	200.0	322.785763	50.0	250391.0	1.613929	Y
7	STD500 460-939407/9	500.0	765.671337	50.0	261873.0	1.531343	Y



10/25/2023
1:26 PM

Calibration / 4-Ethyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

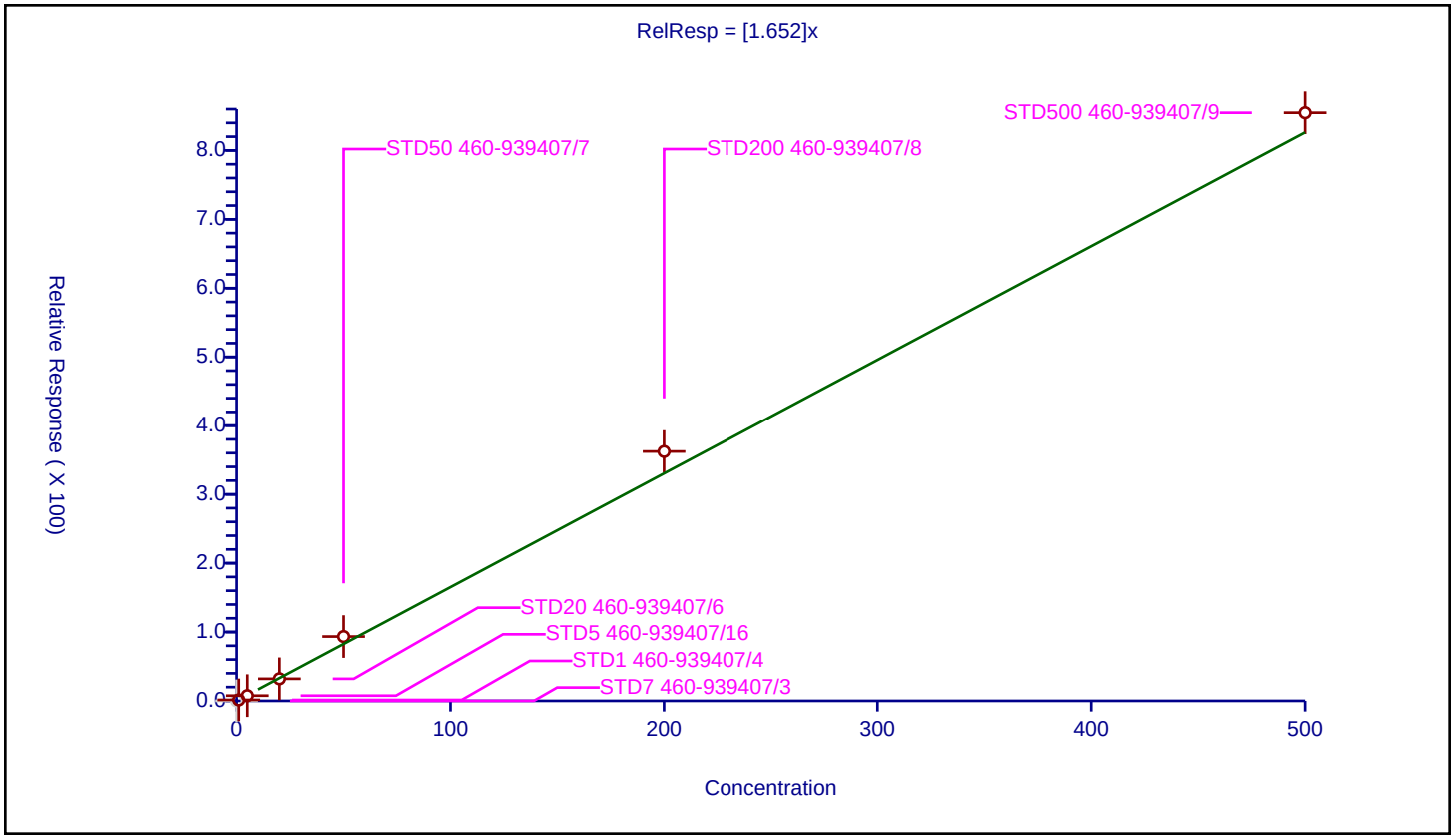
Curve Coefficients

Intercept:	0
Slope:	1.652

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.408909	50.0	172190.0	1.408909	Y
3	STD5 460-939407/16	5.0	7.564203	50.0	198666.0	1.512841	Y
4	STD20 460-939407/6	20.0	32.057738	50.0	219440.0	1.602887	Y
5	STD50 460-939407/7	50.0	93.425951	50.0	229402.0	1.868519	Y
6	STD200 460-939407/8	200.0	362.411788	50.0	250391.0	1.812059	Y
7	STD500 460-939407/9	500.0	854.702279	50.0	261873.0	1.709405	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

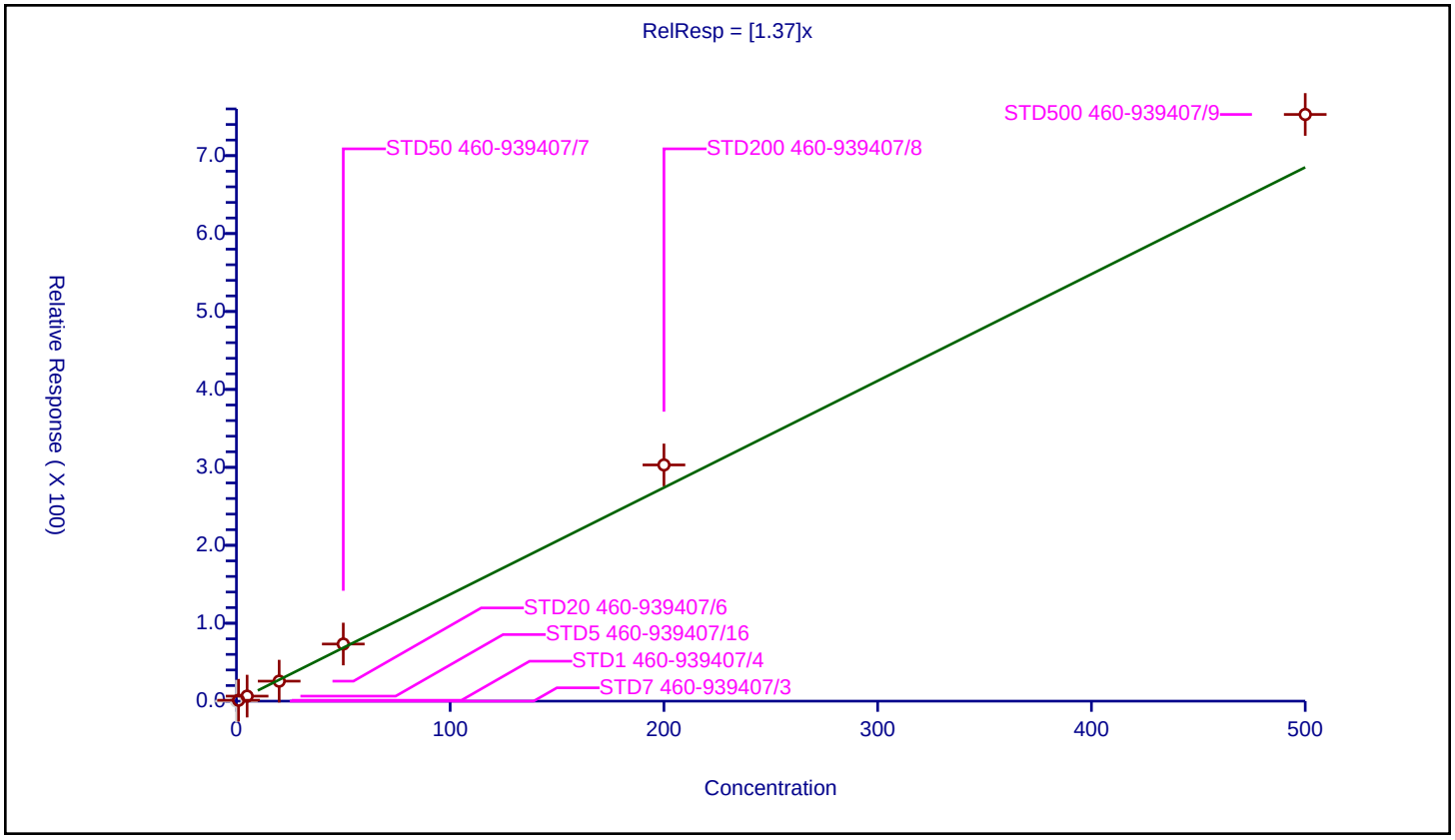
Curve Coefficients

Intercept:	0
Slope:	1.37

Error Coefficients

Standard Error:	1900000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.159765	50.0	172190.0	1.159765	Y
3	STD5 460-939407/16	5.0	6.456817	50.0	198666.0	1.291363	Y
4	STD20 460-939407/6	20.0	25.640038	50.0	219440.0	1.282002	Y
5	STD50 460-939407/7	50.0	73.286632	50.0	229402.0	1.465733	Y
6	STD200 460-939407/8	200.0	303.100551	50.0	250391.0	1.515503	Y
7	STD500 460-939407/9	500.0	752.844318	50.0	261873.0	1.505689	Y



10/25/2023
1:26 PM

Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

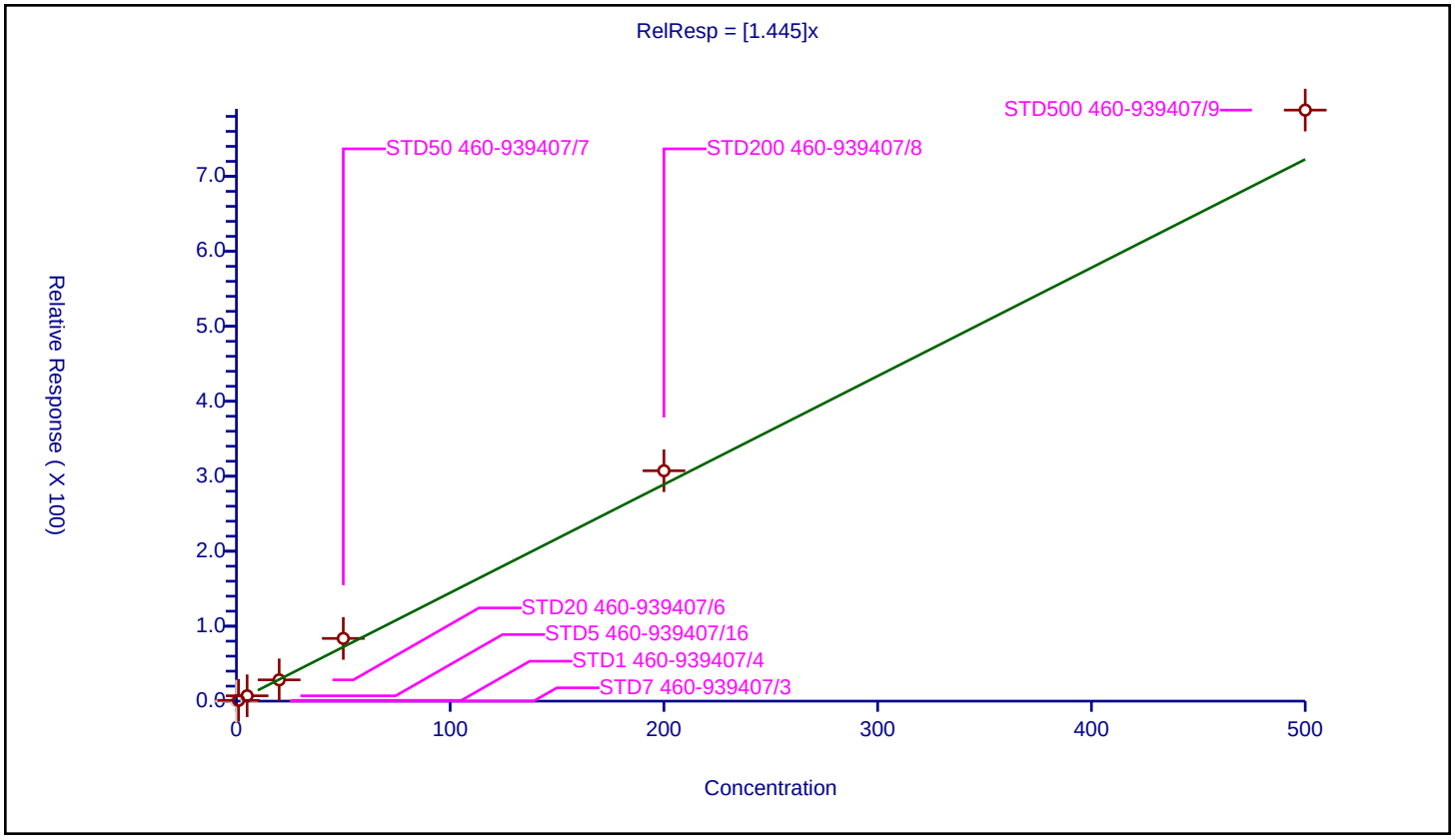
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	1980000
Relative Standard Error:	15.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.043905	50.0	172190.0	1.043905	Y
3	STD5 460-939407/16	5.0	7.123514	50.0	198666.0	1.424703	Y
4	STD20 460-939407/6	20.0	28.353081	50.0	219440.0	1.417654	Y
5	STD50 460-939407/7	50.0	83.632226	50.0	229402.0	1.672645	Y
6	STD200 460-939407/8	200.0	307.34012	50.0	250391.0	1.536701	Y
7	STD500 460-939407/9	500.0	788.384637	50.0	261873.0	1.576769	Y



10/25/2023
1:26 PM

Calibration / Butyl Methacrylate

Curve Type:	Quadratic
Weighting:	None
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

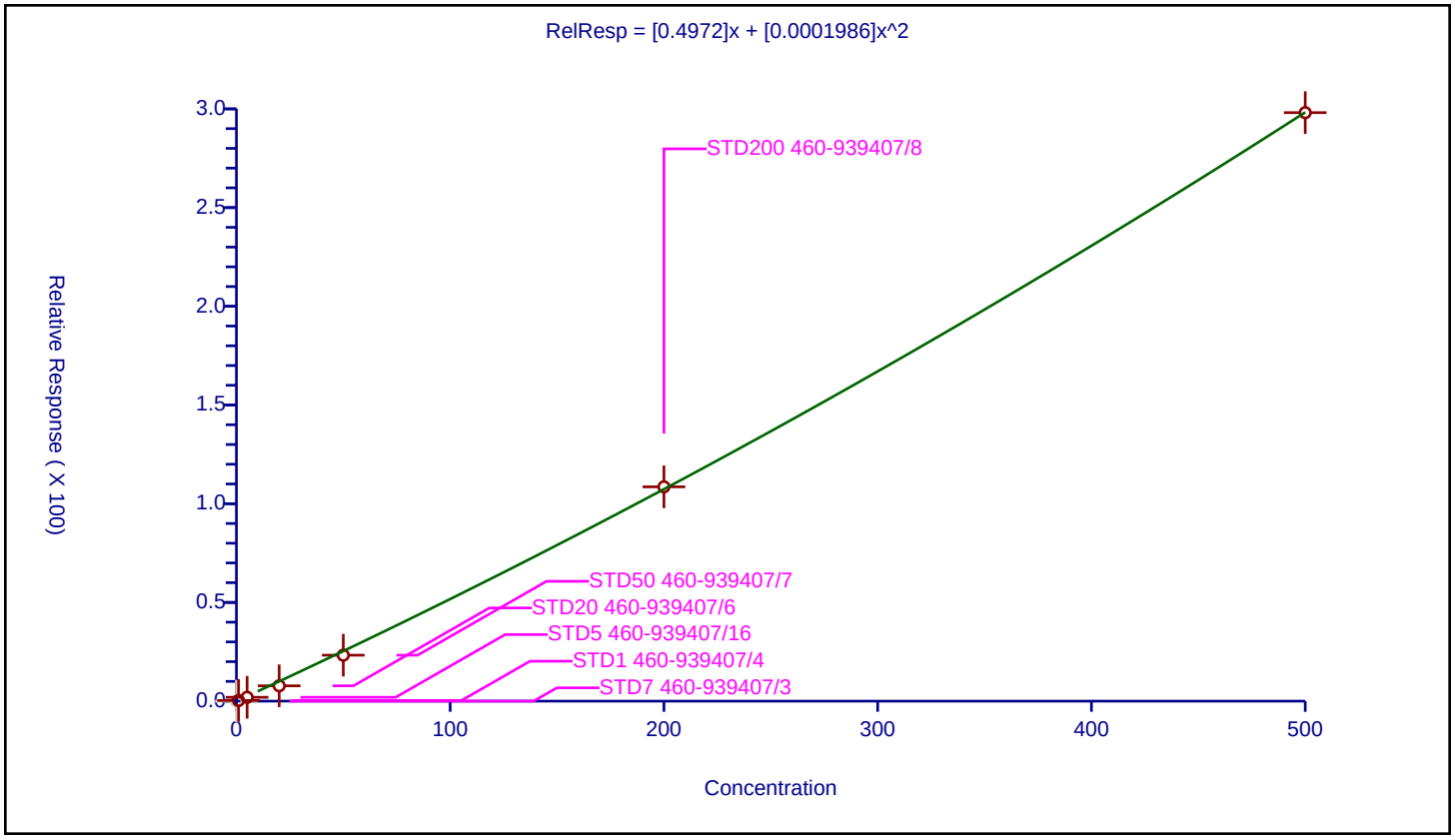
Curve Coefficients

Intercept:	0
Slope:	0.4972
Second Order:	0.0001986

Error Coefficients

Standard Error:	828000
Relative Standard Error:	23.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.33132	50.0	172190.0	0.33132	Y
3	STD5 460-939407/16	5.0	1.946735	50.0	198666.0	0.389347	Y
4	STD20 460-939407/6	20.0	7.762031	50.0	219440.0	0.388102	Y
5	STD50 460-939407/7	50.0	23.273773	50.0	229402.0	0.465475	Y
6	STD200 460-939407/8	200.0	108.555619	50.0	250391.0	0.542778	Y
7	STD500 460-939407/9	500.0	298.096024	50.0	261873.0	0.596192	Y



10/25/2023
1:26 PM

Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

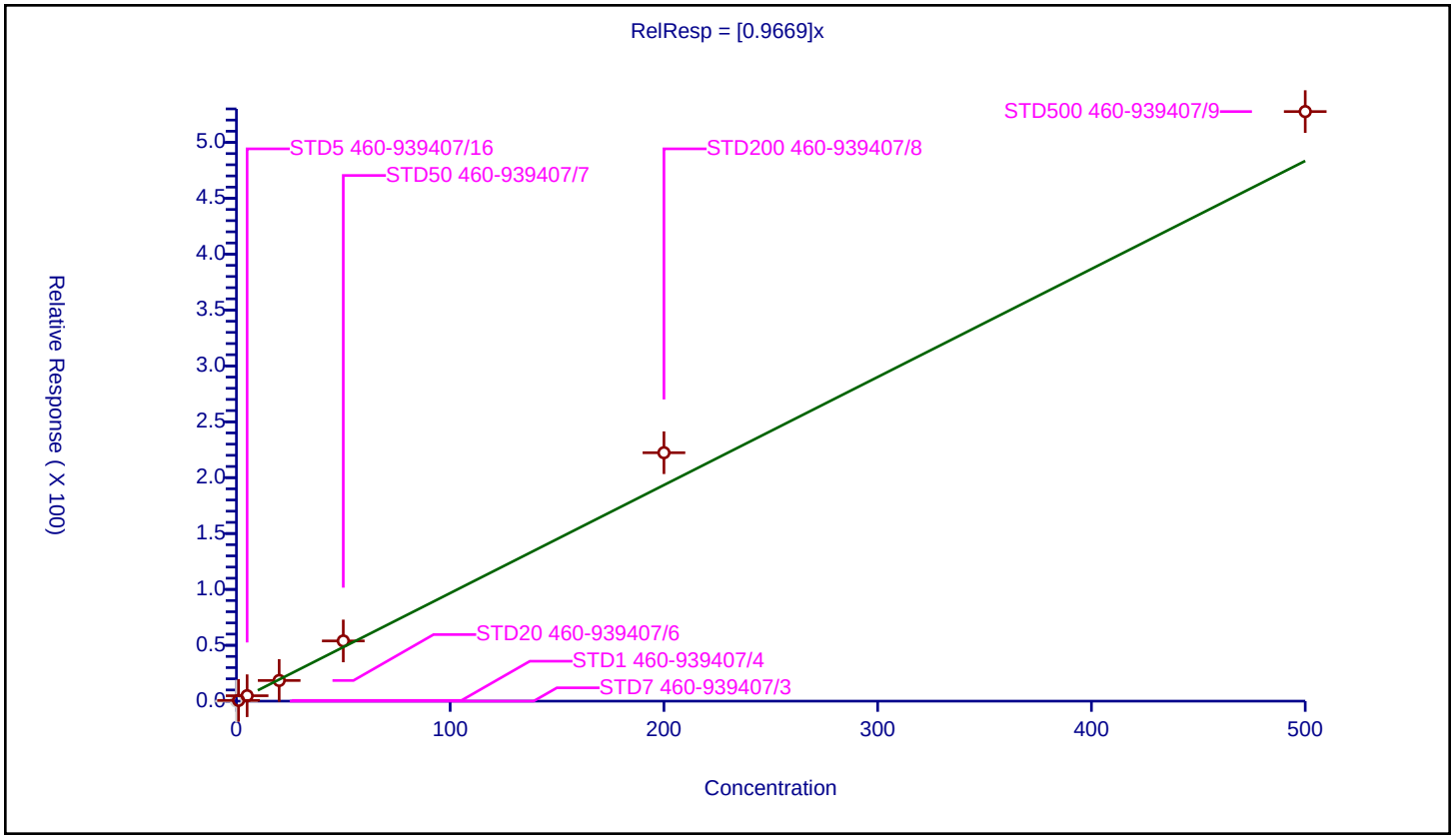
Curve Coefficients

Intercept:	0
Slope:	0.9669

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	17.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.663802	50.0	172190.0	0.663802	Y
3	STD5 460-939407/16	5.0	4.841795	50.0	198666.0	0.968359	Y
4	STD20 460-939407/6	20.0	18.490931	50.0	219440.0	0.924547	Y
5	STD50 460-939407/7	50.0	53.88946	50.0	229402.0	1.077789	Y
6	STD200 460-939407/8	200.0	222.324485	50.0	250391.0	1.111622	Y
7	STD500 460-939407/9	500.0	527.586464	50.0	261873.0	1.055173	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

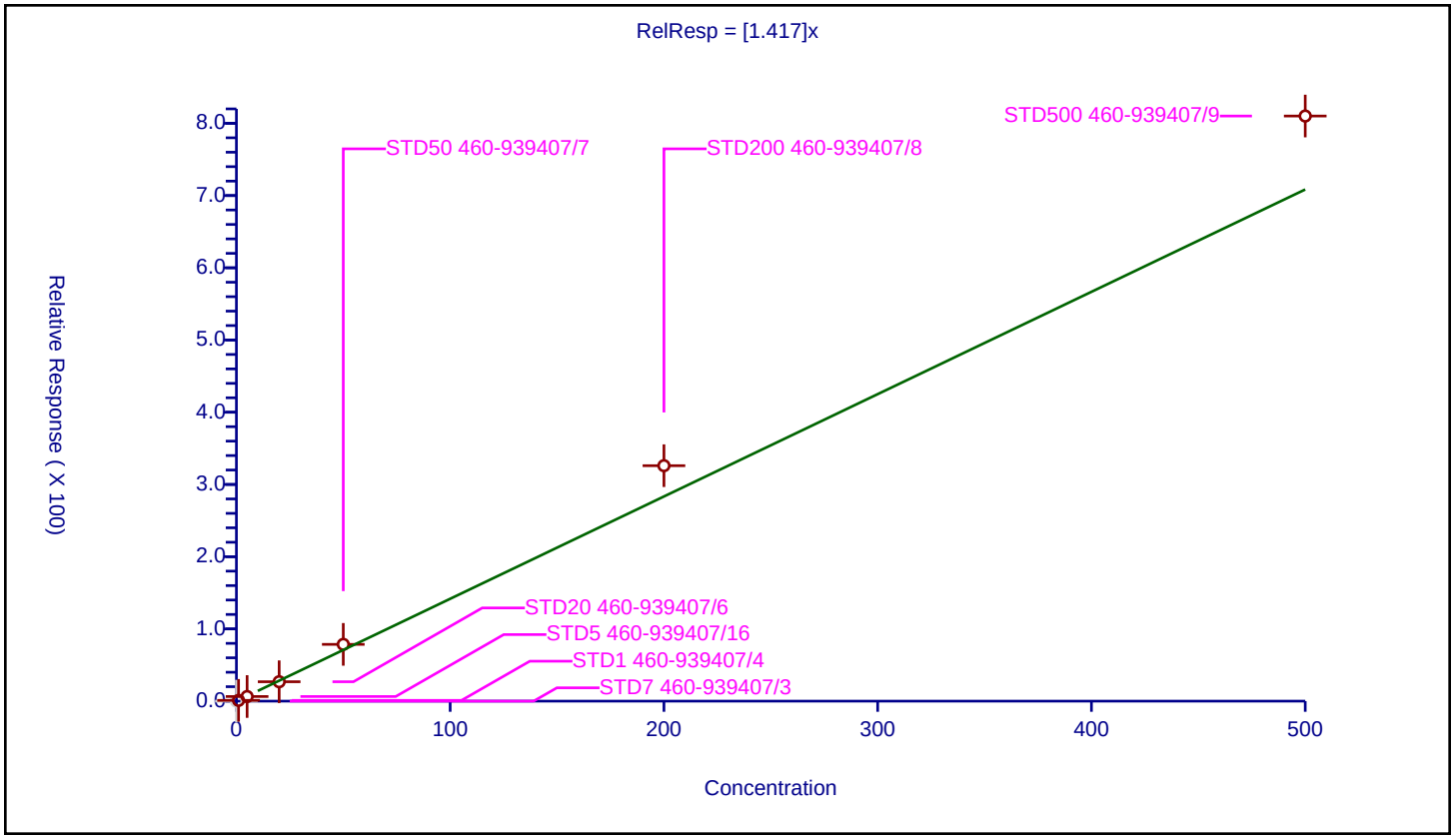
Curve Coefficients

Intercept:	0
Slope:	1.417

Error Coefficients

Standard Error:	2040000
Relative Standard Error:	16.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.05581	50.0	172190.0	1.05581	Y
3	STD5 460-939407/16	5.0	6.401699	50.0	198666.0	1.28034	Y
4	STD20 460-939407/6	20.0	26.846063	50.0	219440.0	1.342303	Y
5	STD50 460-939407/7	50.0	78.615705	50.0	229402.0	1.572314	Y
6	STD200 460-939407/8	200.0	325.990551	50.0	250391.0	1.629953	Y
7	STD500 460-939407/9	500.0	810.107953	50.0	261873.0	1.620216	Y



10/25/2023
1:26 PM

Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

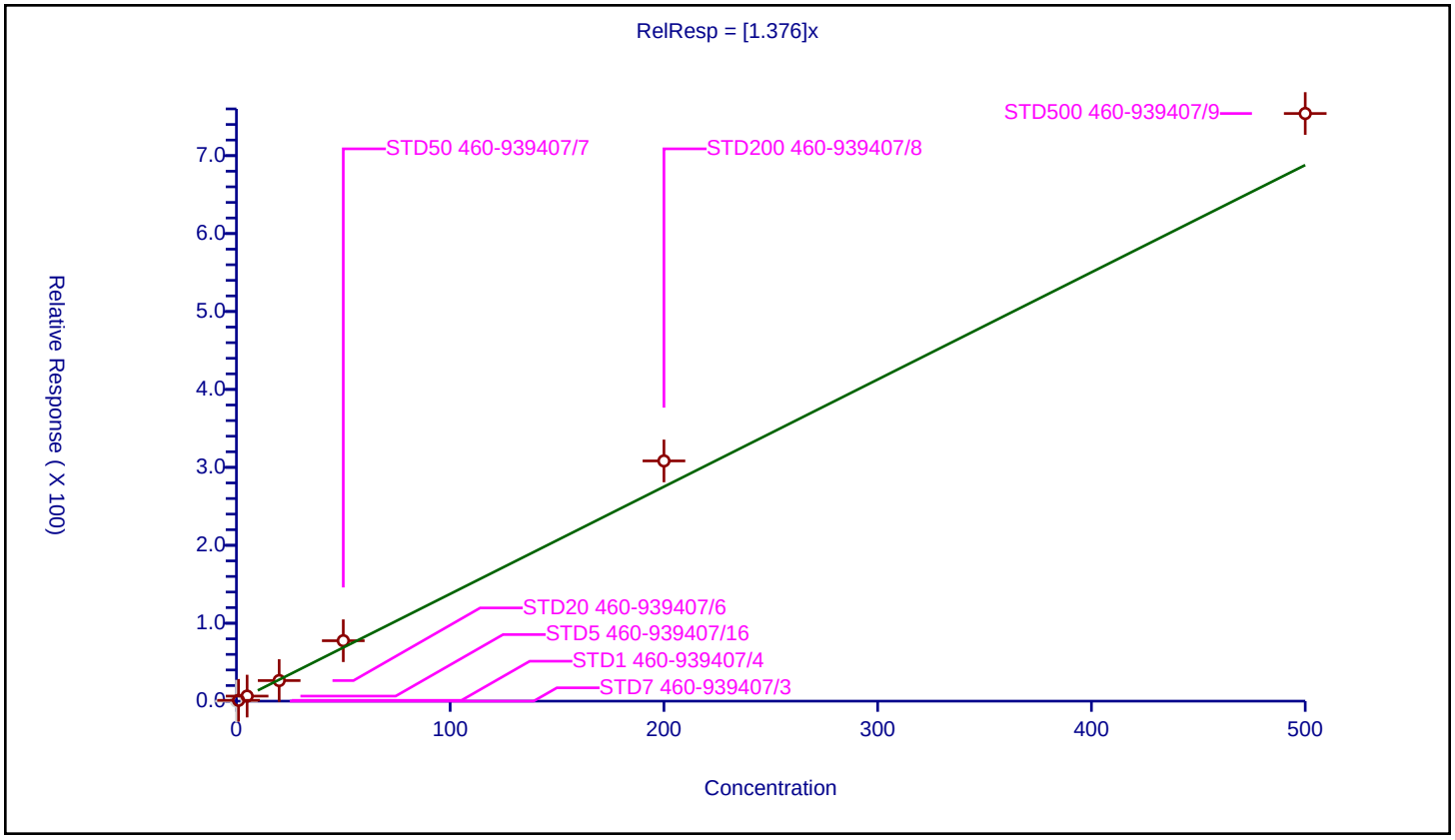
Curve Coefficients

Intercept:	0
Slope:	1.376

Error Coefficients

Standard Error:	1900000
Relative Standard Error:	14.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.041001	50.0	172190.0	1.041001	Y
3	STD5 460-939407/16	5.0	6.467639	50.0	198666.0	1.293528	Y
4	STD20 460-939407/6	20.0	26.411775	50.0	219440.0	1.320589	Y
5	STD50 460-939407/7	50.0	77.524607	50.0	229402.0	1.550492	Y
6	STD200 460-939407/8	200.0	308.271264	50.0	250391.0	1.541356	Y
7	STD500 460-939407/9	500.0	754.093205	50.0	261873.0	1.508186	Y



10/25/2023
1:26 PM

Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

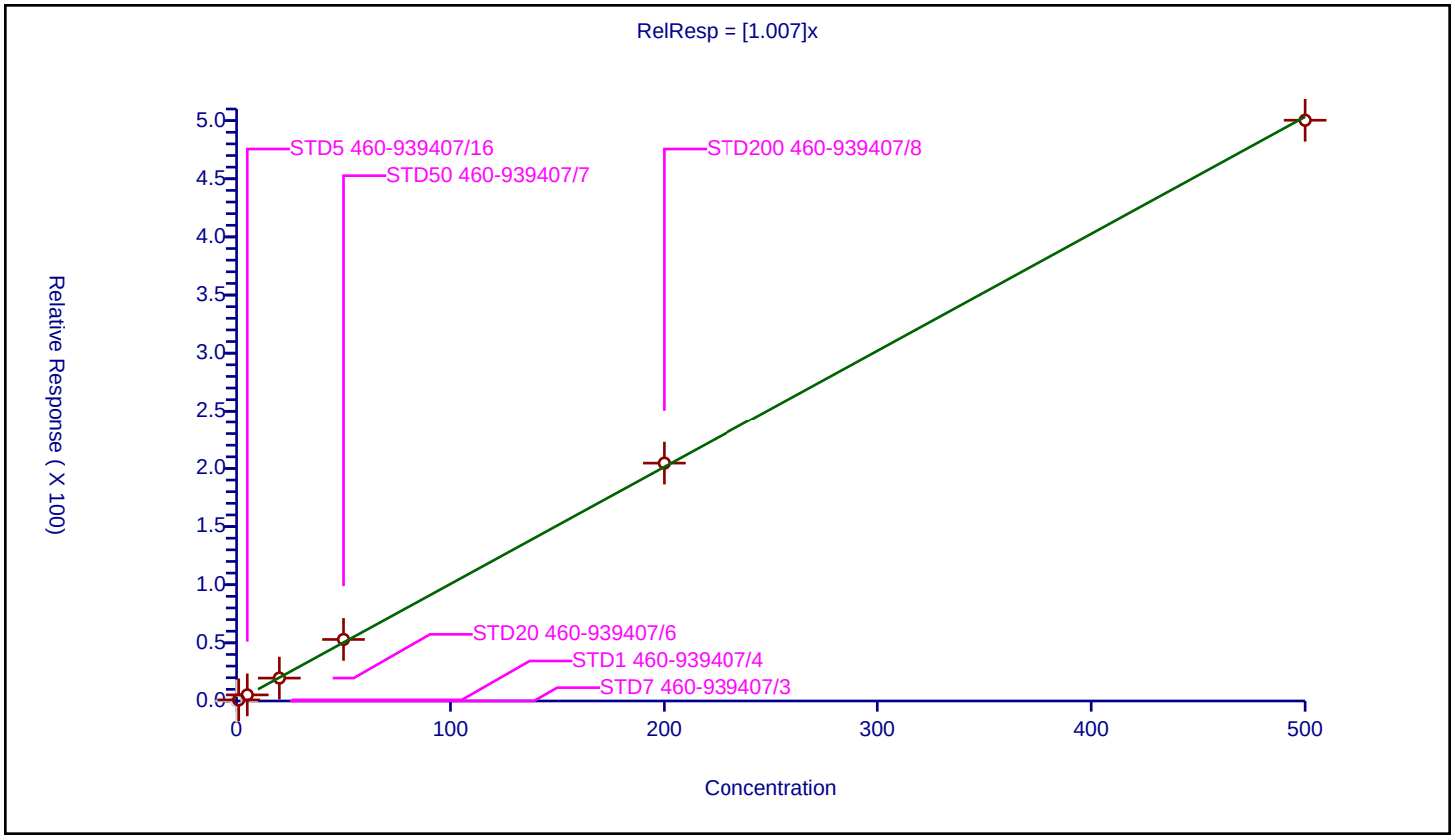
Curve Coefficients

Intercept:	0
Slope:	1.007

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.925431	50.0	172190.0	0.925431	Y
3	STD5 460-939407/16	5.0	5.23542	50.0	198666.0	1.047084	Y
4	STD20 460-939407/6	20.0	19.695361	50.0	219440.0	0.984768	Y
5	STD50 460-939407/7	50.0	52.929791	50.0	229402.0	1.058596	Y
6	STD200 460-939407/8	200.0	204.604598	50.0	250391.0	1.023023	Y
7	STD500 460-939407/9	500.0	500.332795	50.0	261873.0	1.000666	Y



10/25/2023
1:26 PM

Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

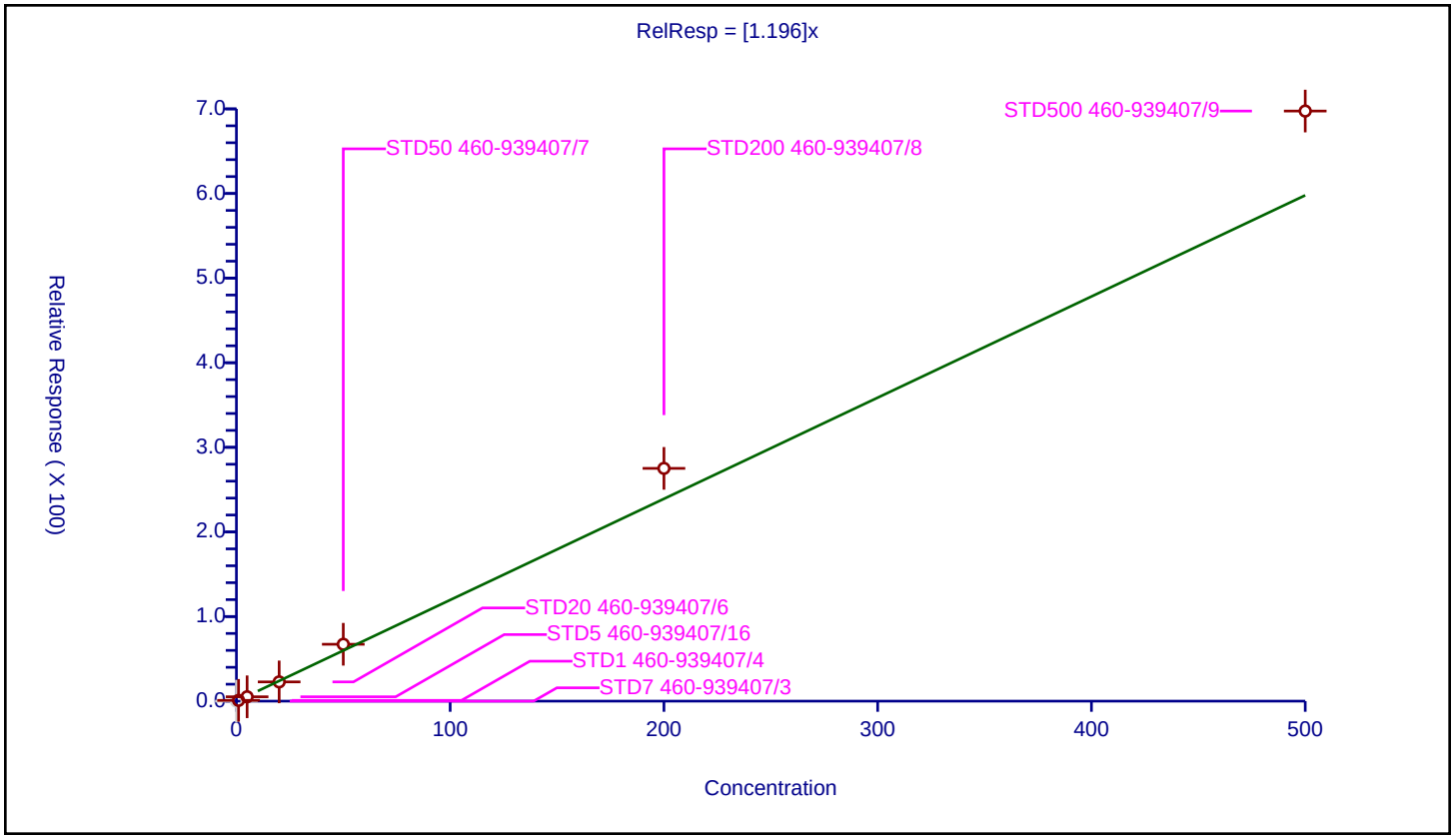
Curve Coefficients

Intercept:	0
Slope:	1.196

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	17.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.889424	50.0	172190.0	0.889424	Y
3	STD5 460-939407/16	5.0	5.162433	50.0	198666.0	1.032487	Y
4	STD20 460-939407/6	20.0	22.748815	50.0	219440.0	1.137441	Y
5	STD50 460-939407/7	50.0	67.210617	50.0	229402.0	1.344212	Y
6	STD200 460-939407/8	200.0	275.110327	50.0	250391.0	1.375552	Y
7	STD500 460-939407/9	500.0	697.448572	50.0	261873.0	1.394897	Y



10/25/2023
1:26 PM

Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

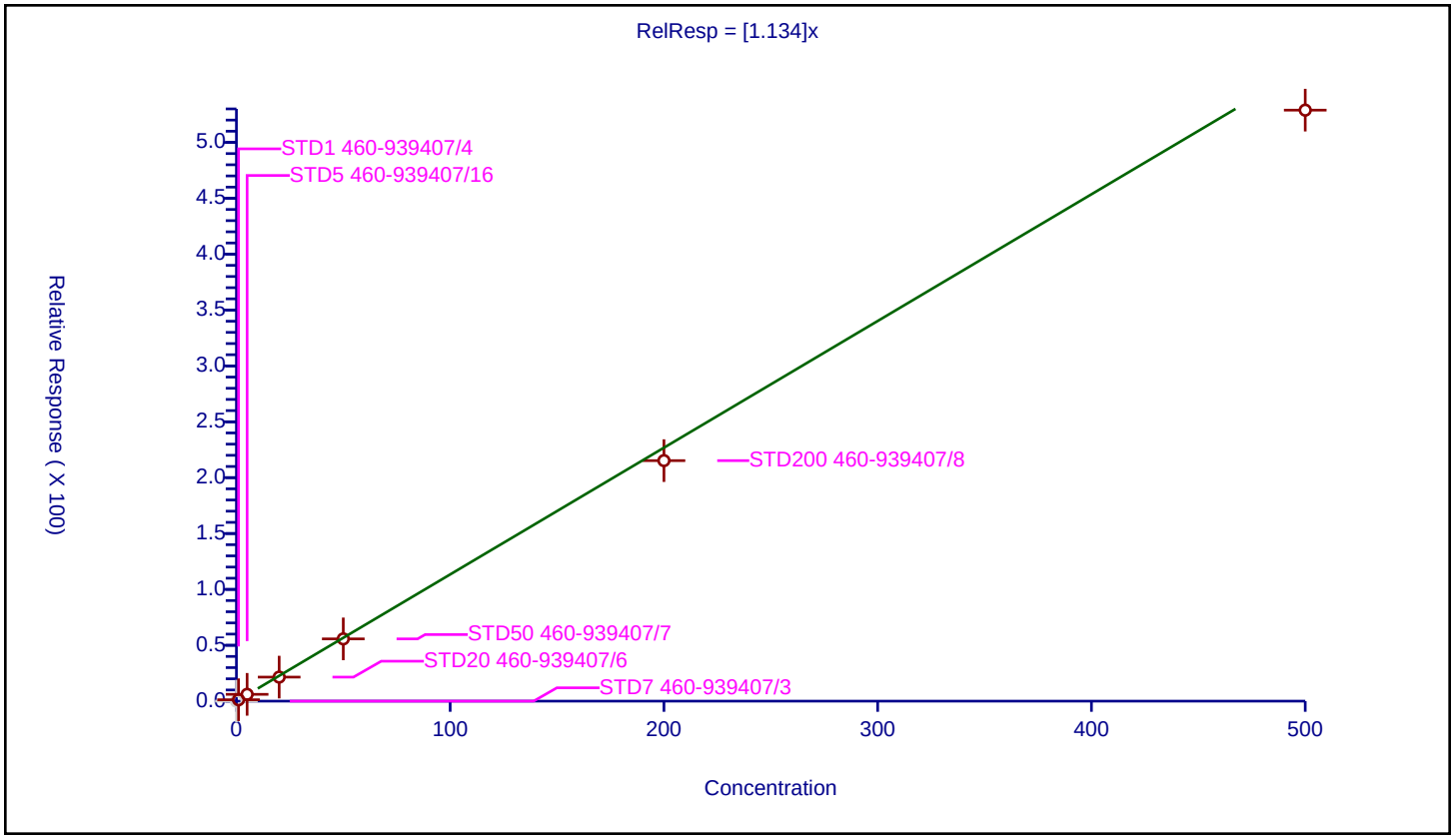
Curve Coefficients

Intercept:	0
Slope:	1.134

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.261397	50.0	172190.0	1.261397	Y
3	STD5 460-939407/16	5.0	6.09289	50.0	198666.0	1.218578	Y
4	STD20 460-939407/6	20.0	21.507474	50.0	219440.0	1.075374	Y
5	STD50 460-939407/7	50.0	55.723359	50.0	229402.0	1.114467	Y
6	STD200 460-939407/8	200.0	215.245756	50.0	250391.0	1.076229	Y
7	STD500 460-939407/9	500.0	528.875256	50.0	261873.0	1.057751	Y



10/25/2023
1:26 PM

Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

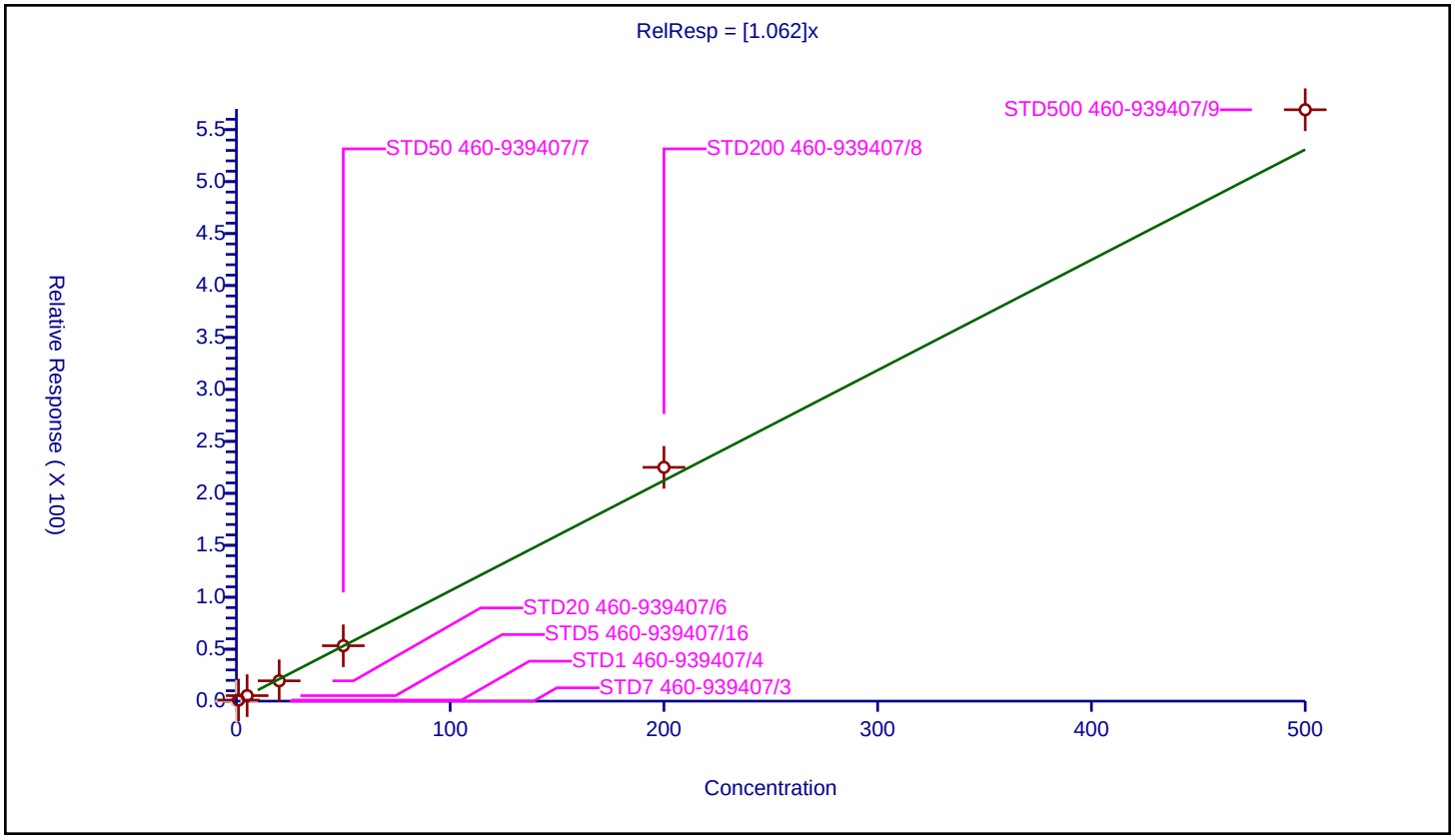
Curve Coefficients

Intercept:	0
Slope:	1.062

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.005575	50.0	172190.0	1.005575	Y
3	STD5 460-939407/16	5.0	5.287266	50.0	198666.0	1.057453	Y
4	STD20 460-939407/6	20.0	19.550447	50.0	219440.0	0.977522	Y
5	STD50 460-939407/7	50.0	53.313397	50.0	229402.0	1.066268	Y
6	STD200 460-939407/8	200.0	225.025061	50.0	250391.0	1.125125	Y
7	STD500 460-939407/9	500.0	569.187927	50.0	261873.0	1.138376	Y



Calibration / 2,3-Dihydroindene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

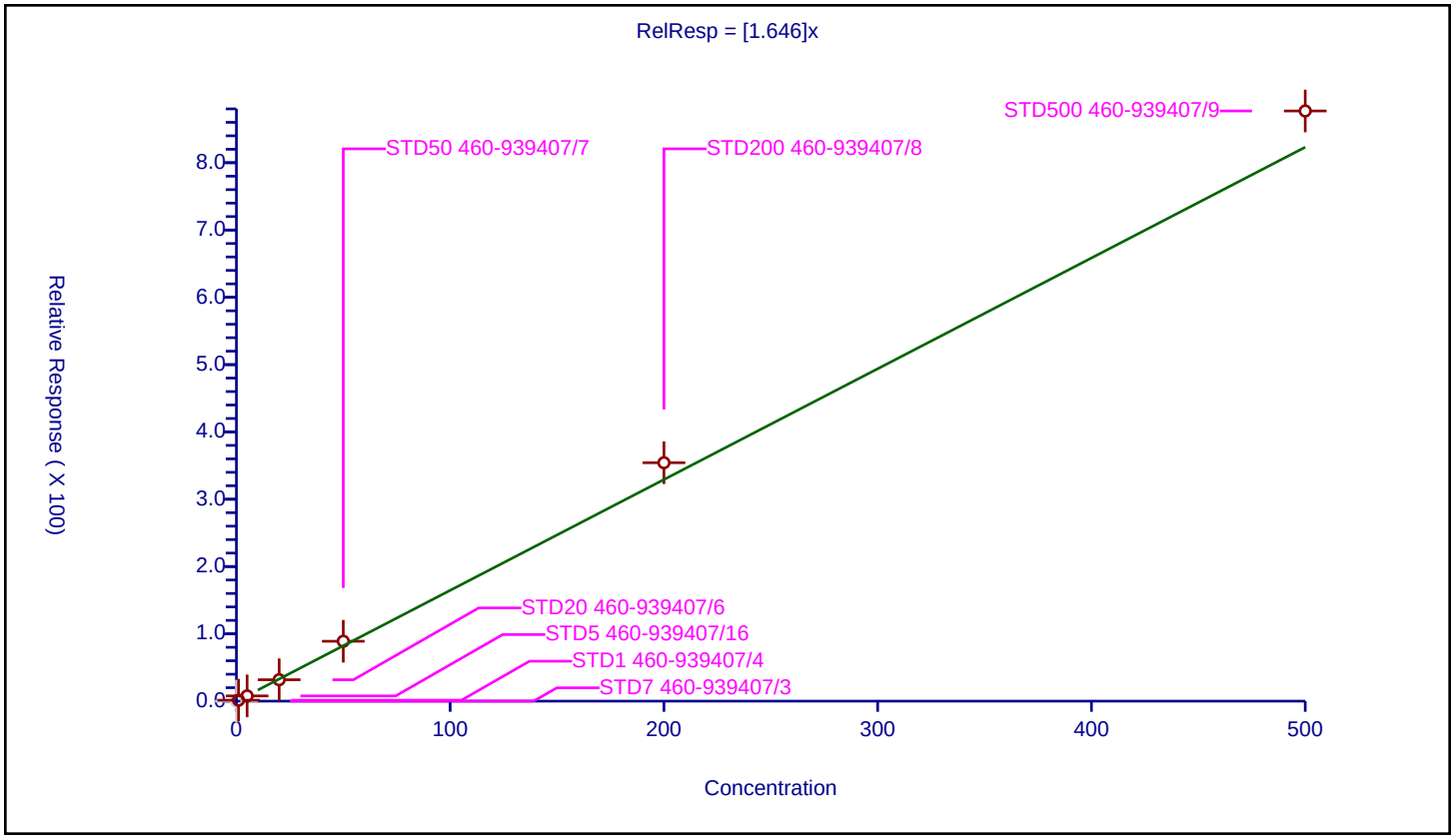
Curve Coefficients

Intercept:	0
Slope:	1.646

Error Coefficients

Standard Error:	2210000
Relative Standard Error:	8.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	1.424008	50.0	172190.0	1.424008	Y
3	STD5 460-939407/16	5.0	7.787946	50.0	198666.0	1.557589	Y
4	STD20 460-939407/6	20.0	31.814391	50.0	219440.0	1.59072	Y
5	STD50 460-939407/7	50.0	88.980044	50.0	229402.0	1.779601	Y
6	STD200 460-939407/8	200.0	354.255145	50.0	250391.0	1.771276	Y
7	STD500 460-939407/9	500.0	876.908081	50.0	261873.0	1.753816	Y



10/25/2023
1:26 PM

Calibration / p-Diethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

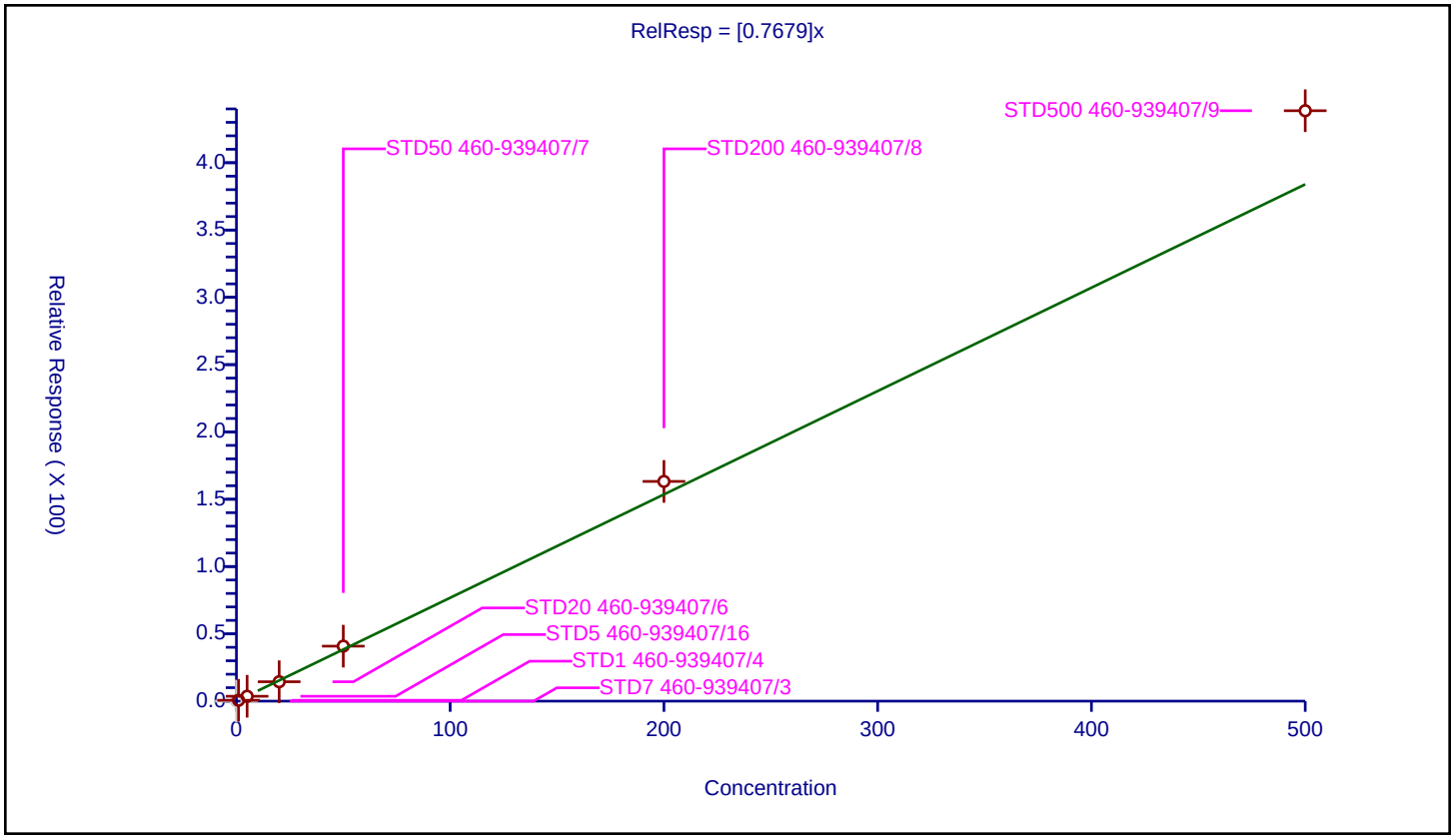
Curve Coefficients

Intercept:	0
Slope:	0.7679

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	10.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.650154	50.0	172190.0	0.650154	Y
3	STD5 460-939407/16	5.0	3.632479	50.0	198666.0	0.726496	Y
4	STD20 460-939407/6	20.0	14.406444	50.0	219440.0	0.720322	Y
5	STD50 460-939407/7	50.0	40.850995	50.0	229402.0	0.81702	Y
6	STD200 460-939407/8	200.0	163.225915	50.0	250391.0	0.81613	Y
7	STD500 460-939407/9	500.0	438.634758	50.0	261873.0	0.87727	Y



10/25/2023
1:26 PM

Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

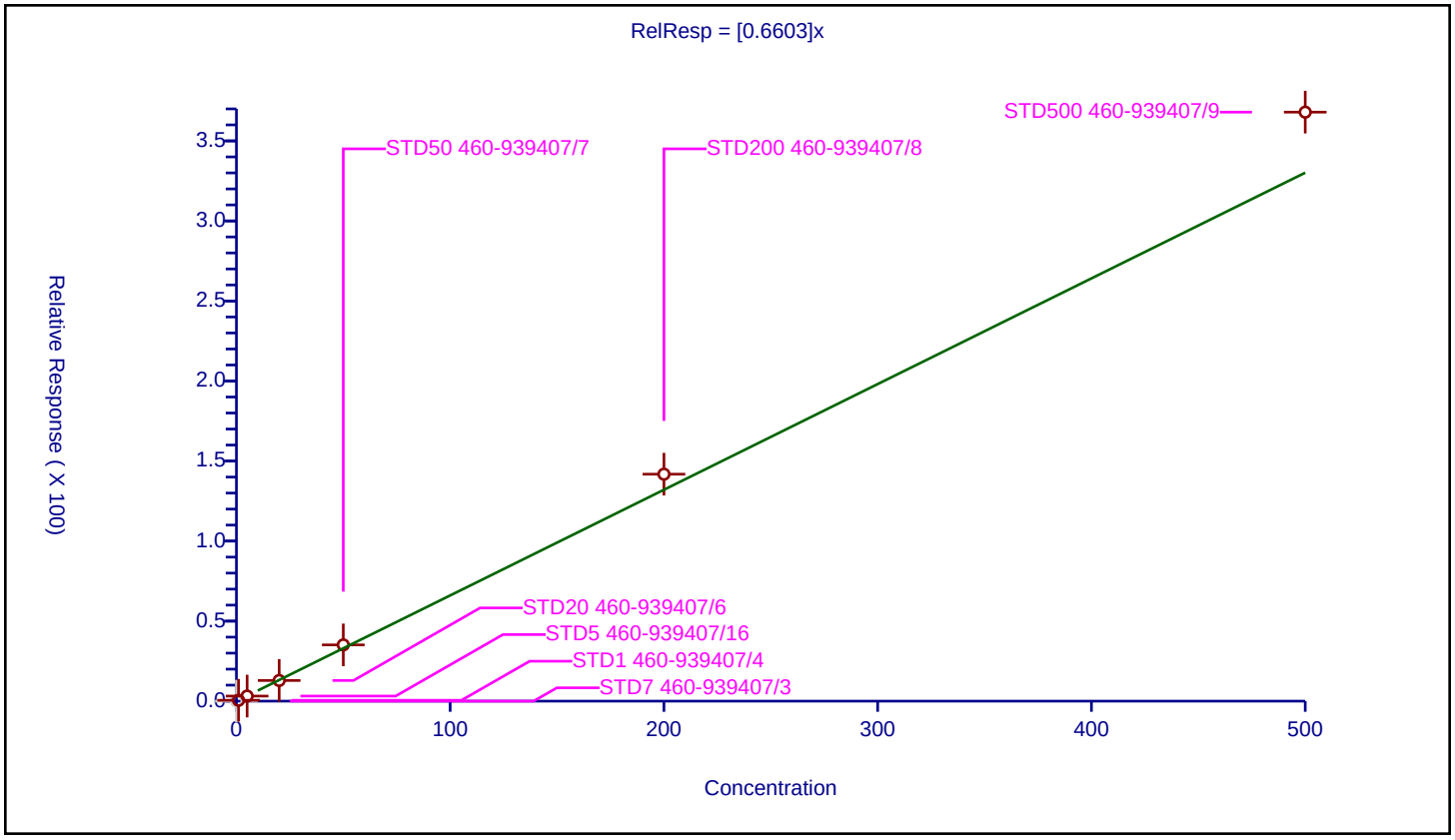
Curve Coefficients

Intercept:	0
Slope:	0.6603

Error Coefficients

Standard Error:	922000
Relative Standard Error:	11.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.534003	50.0	172190.0	0.534003	Y
3	STD5 460-939407/16	5.0	3.175682	50.0	198666.0	0.635136	Y
4	STD20 460-939407/6	20.0	12.900109	50.0	219440.0	0.645005	Y
5	STD50 460-939407/7	50.0	35.129598	50.0	229402.0	0.702592	Y
6	STD200 460-939407/8	200.0	141.786845	50.0	250391.0	0.708934	Y
7	STD500 460-939407/9	500.0	367.964433	50.0	261873.0	0.735929	Y



10/25/2023
1:26 PM

Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

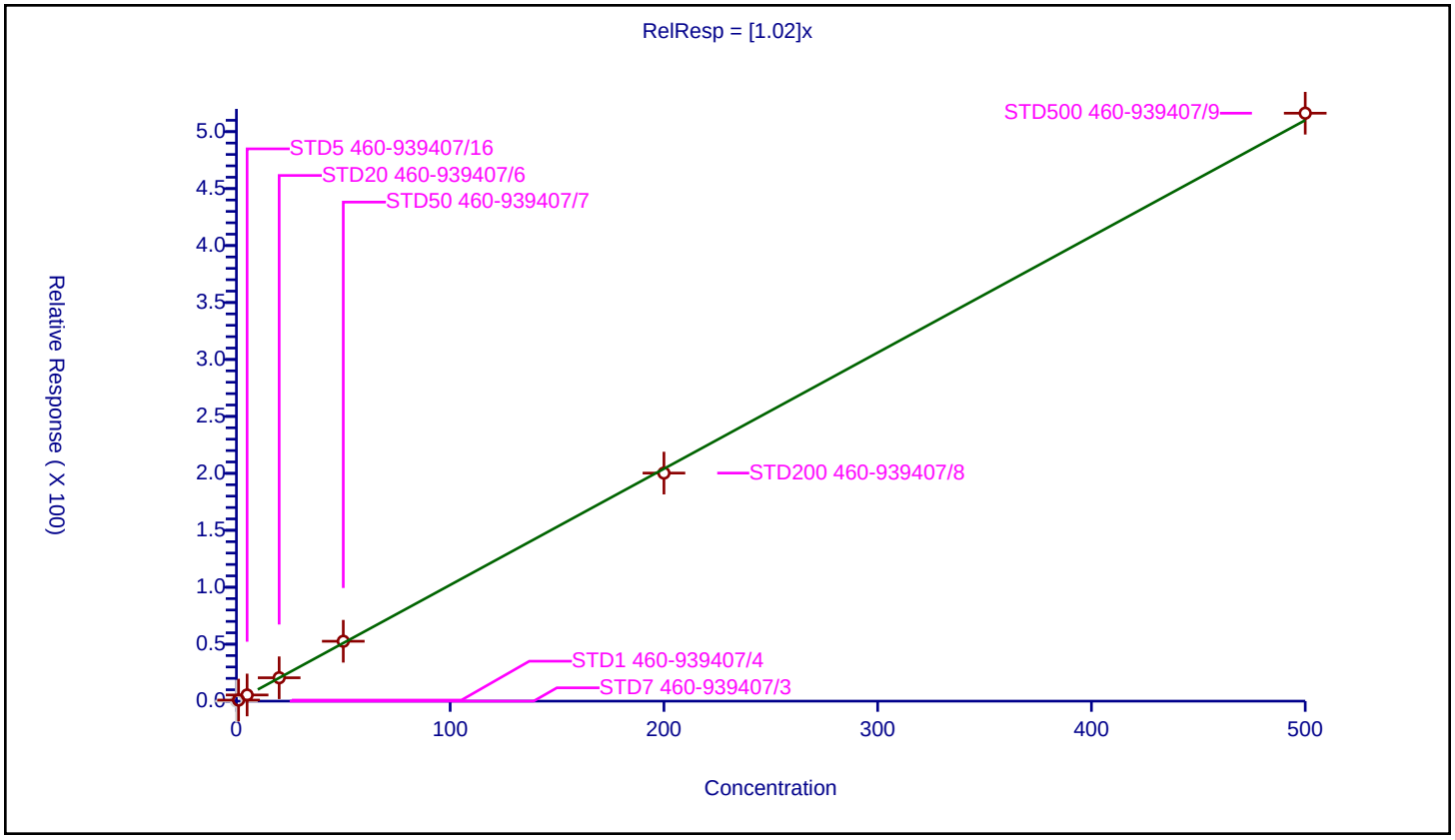
Curve Coefficients

Intercept:	0
Slope:	1.02

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.926593	50.0	172190.0	0.926593	Y
3	STD5 460-939407/16	5.0	5.413609	50.0	198666.0	1.082722	Y
4	STD20 460-939407/6	20.0	20.520188	50.0	219440.0	1.026009	Y
5	STD50 460-939407/7	50.0	52.574738	50.0	229402.0	1.051495	Y
6	STD200 460-939407/8	200.0	200.242421	50.0	250391.0	1.001212	Y
7	STD500 460-939407/9	500.0	516.213394	50.0	261873.0	1.032427	Y



Calibration / 1,2,4,5-Tetramethylbenzene

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

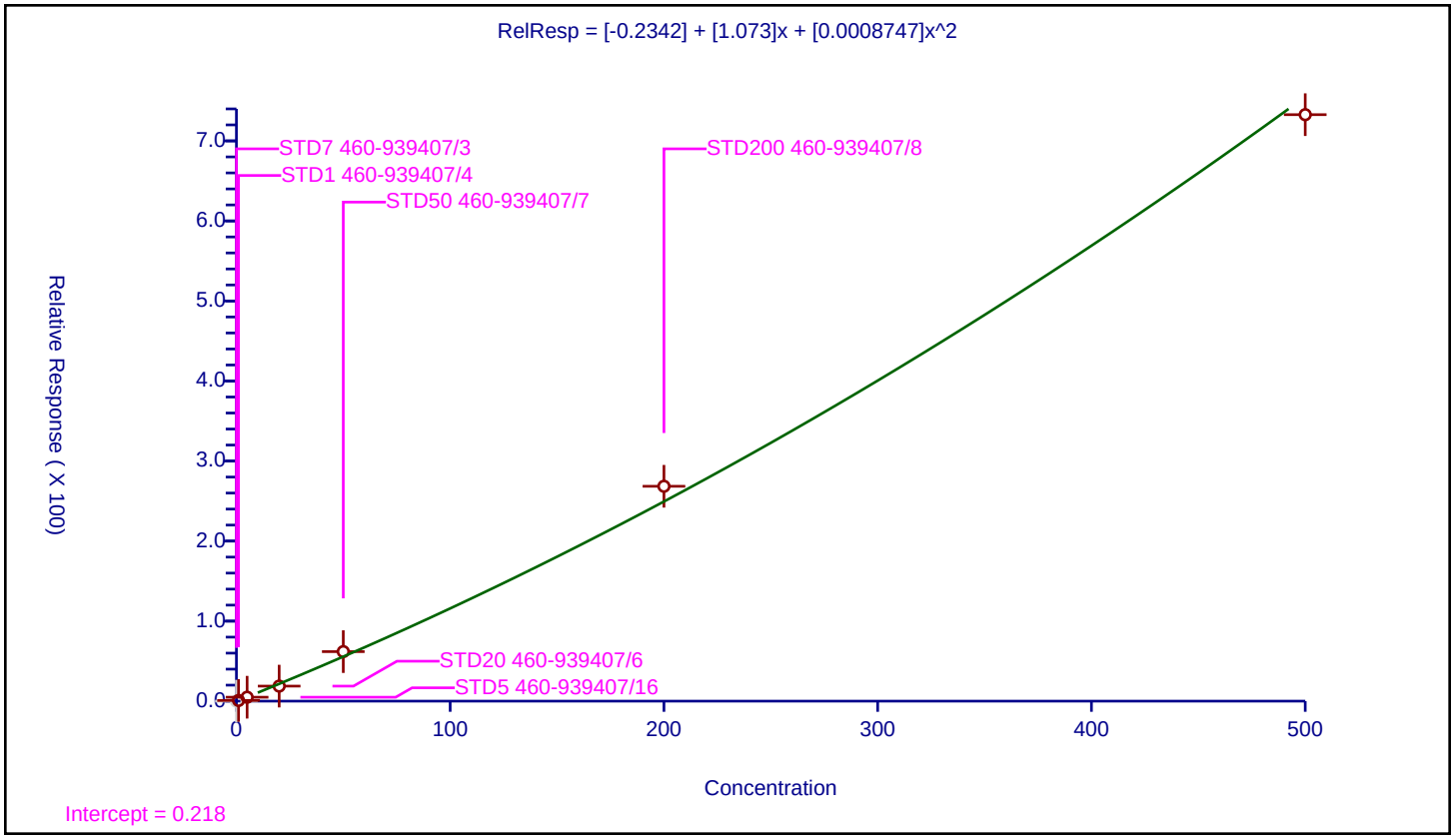
Curve Coefficients

Intercept:	-0.2342
Slope:	1.073
Second Order:	0.0008747

Error Coefficients

Standard Error:	2350000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.854289	50.0	172190.0	0.854289	Y
3	STD5 460-939407/16	5.0	4.896912	50.0	198666.0	0.979382	Y
4	STD20 460-939407/6	20.0	18.79876	50.0	219440.0	0.939938	Y
5	STD50 460-939407/7	50.0	61.892878	50.0	229402.0	1.237858	Y
6	STD200 460-939407/8	200.0	268.476902	50.0	250391.0	1.342385	Y
7	STD500 460-939407/9	500.0	732.776384	50.0	261873.0	1.465553	Y



10/25/2023
1:26 PM

Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

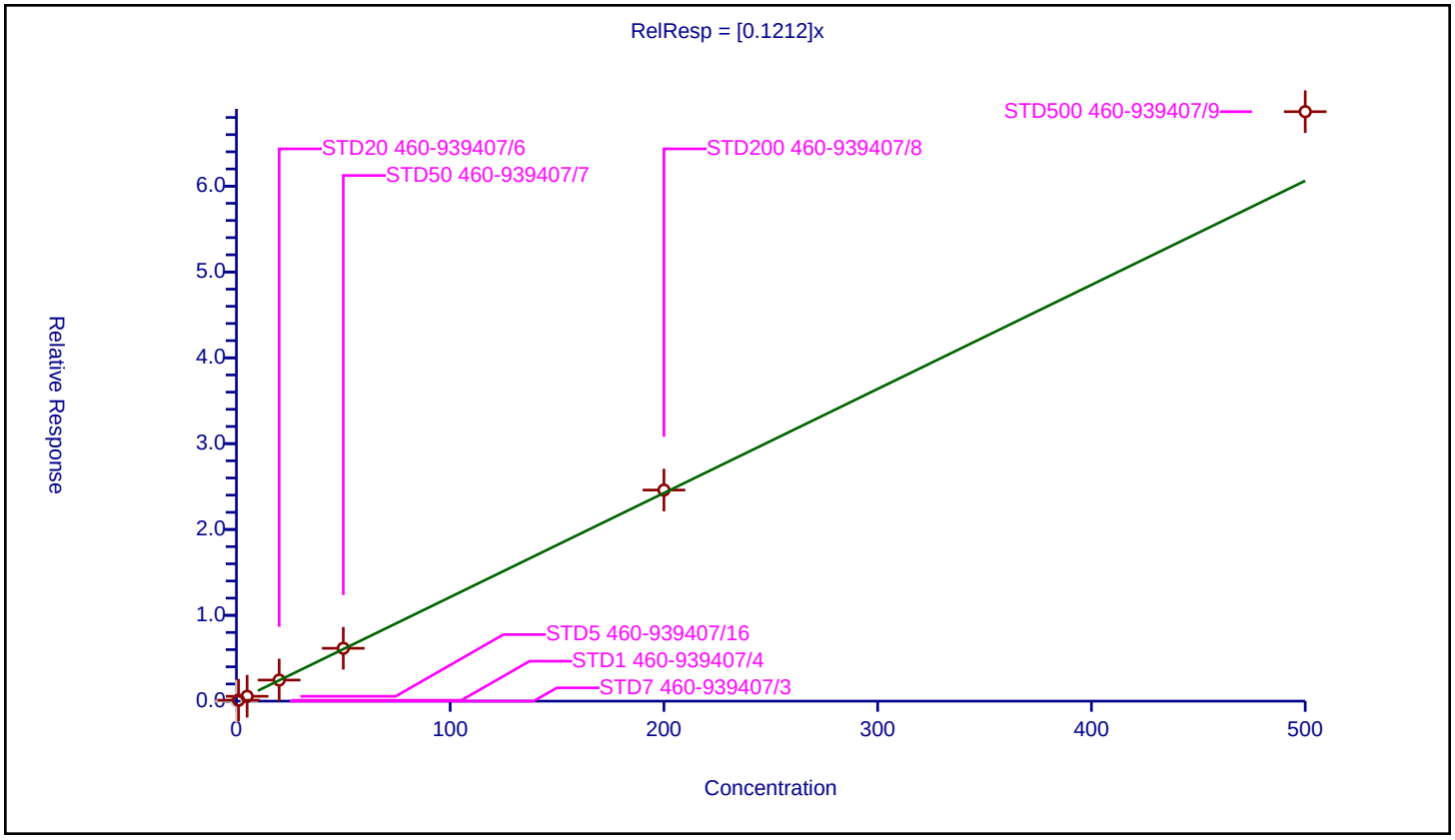
Curve Coefficients

Intercept:	0
Slope:	0.1212

Error Coefficients

Standard Error:	171000
Relative Standard Error:	8.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.10773	50.0	172190.0	0.10773	Y
3	STD5 460-939407/16	5.0	0.567535	50.0	198666.0	0.113507	Y
4	STD20 460-939407/6	20.0	2.455113	50.0	219440.0	0.122756	Y
5	STD50 460-939407/7	50.0	6.158839	50.0	229402.0	0.123177	Y
6	STD200 460-939407/8	200.0	24.592537	50.0	250391.0	0.122963	Y
7	STD500 460-939407/9	500.0	68.67451	50.0	261873.0	0.137349	Y



Calibration / 1,3,5-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

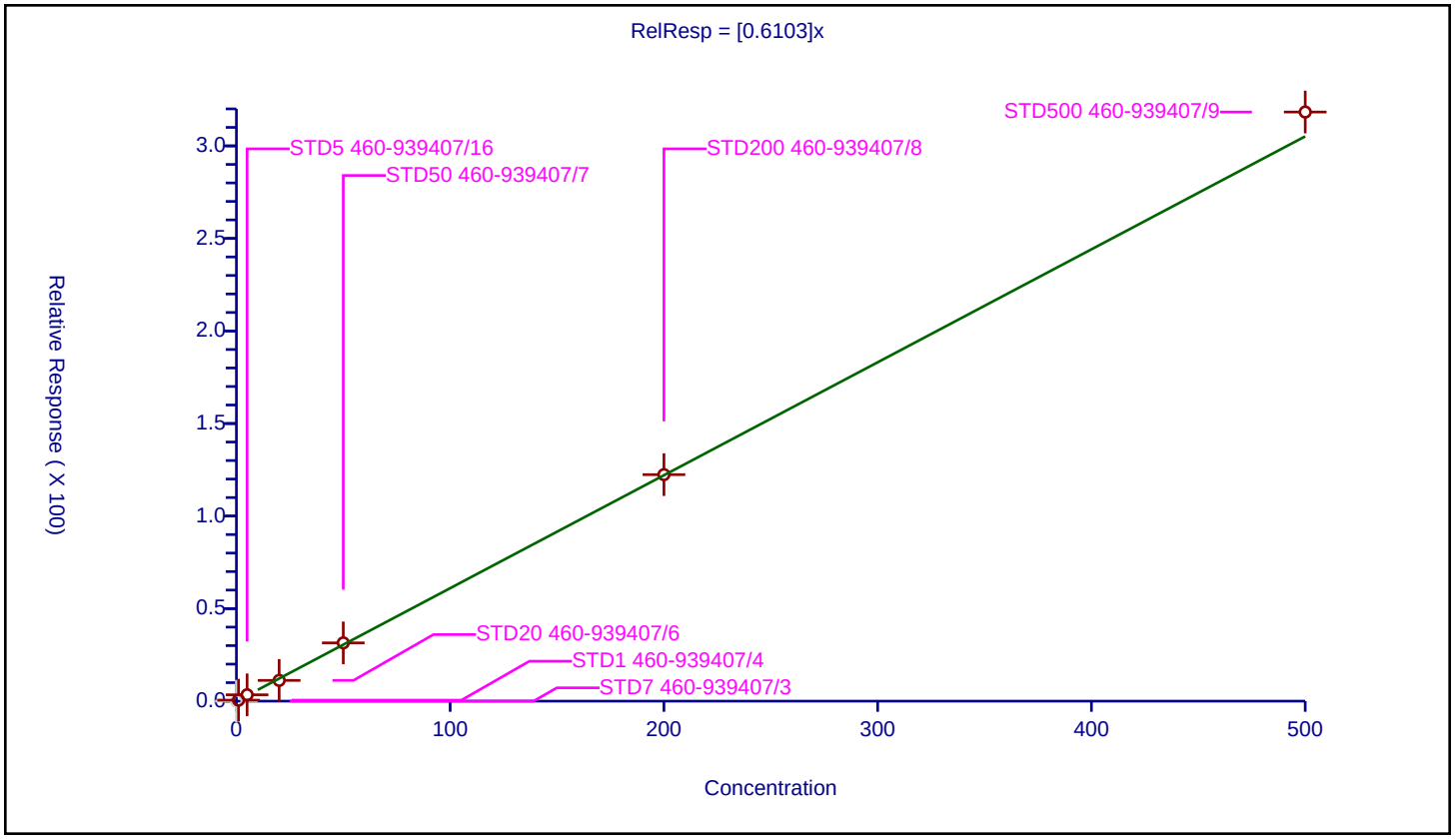
Curve Coefficients

Intercept:	0
Slope:	0.6103

Error Coefficients

Standard Error:	797000
Relative Standard Error:	8.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.537778	50.0	172190.0	0.537778	Y
3	STD5 460-939407/16	5.0	3.428116	50.0	198666.0	0.685623	Y
4	STD20 460-939407/6	20.0	11.204202	50.0	219440.0	0.56021	Y
5	STD50 460-939407/7	50.0	31.483379	50.0	229402.0	0.629668	Y
6	STD200 460-939407/8	200.0	122.385789	50.0	250391.0	0.611929	Y
7	STD500 460-939407/9	500.0	318.305056	50.0	261873.0	0.63661	Y



10/25/2023
1:26 PM

Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

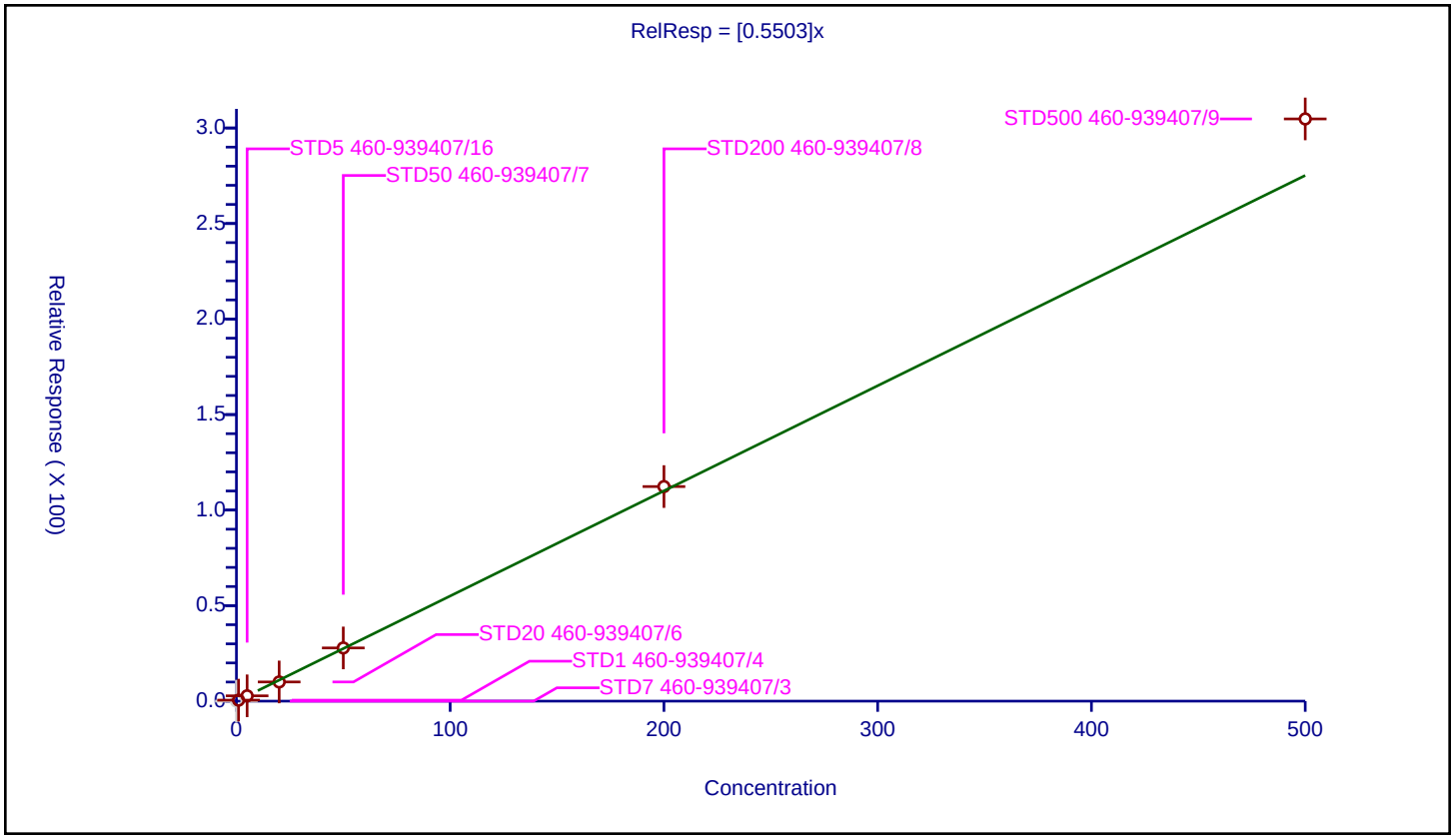
Curve Coefficients

Intercept:	0
Slope:	0.5503

Error Coefficients

Standard Error:	759000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.516581	50.0	172190.0	0.516581	Y
3	STD5 460-939407/16	5.0	2.776519	50.0	198666.0	0.555304	Y
4	STD20 460-939407/6	20.0	10.040558	50.0	219440.0	0.502028	Y
5	STD50 460-939407/7	50.0	27.850019	50.0	229402.0	0.557	Y
6	STD200 460-939407/8	200.0	112.316936	50.0	250391.0	0.561585	Y
7	STD500 460-939407/9	500.0	304.737984	50.0	261873.0	0.609476	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

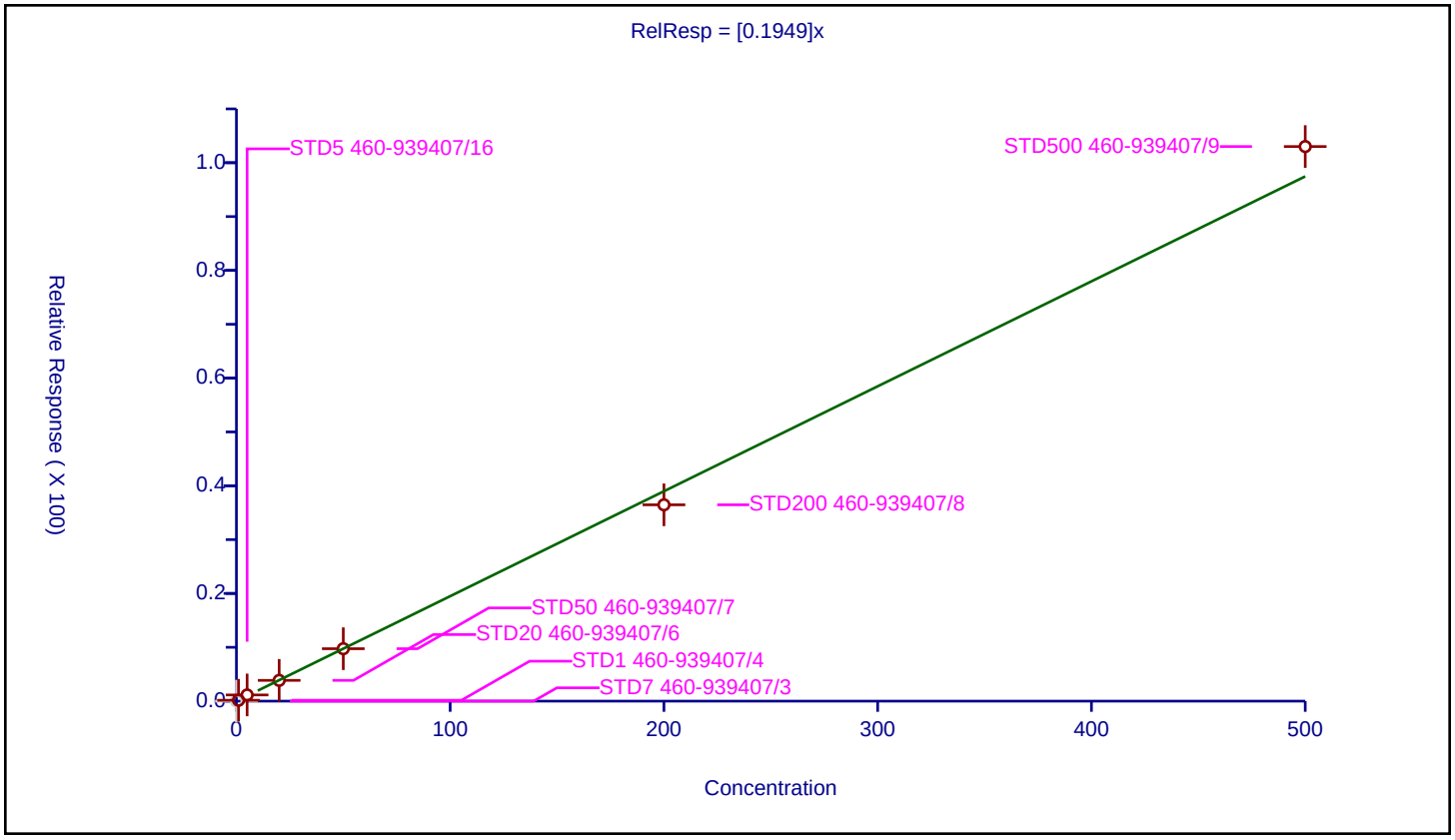
Curve Coefficients

Intercept:	0
Slope:	0.1949

Error Coefficients

Standard Error:	256000
Relative Standard Error:	11.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.164063	50.0	172190.0	0.164063	Y
3	STD5 460-939407/16	5.0	1.148158	50.0	198666.0	0.229632	Y
4	STD20 460-939407/6	20.0	3.853673	50.0	219440.0	0.192684	Y
5	STD50 460-939407/7	50.0	9.739889	50.0	229402.0	0.194798	Y
6	STD200 460-939407/8	200.0	36.463172	50.0	250391.0	0.182316	Y
7	STD500 460-939407/9	500.0	103.006419	50.0	261873.0	0.206013	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

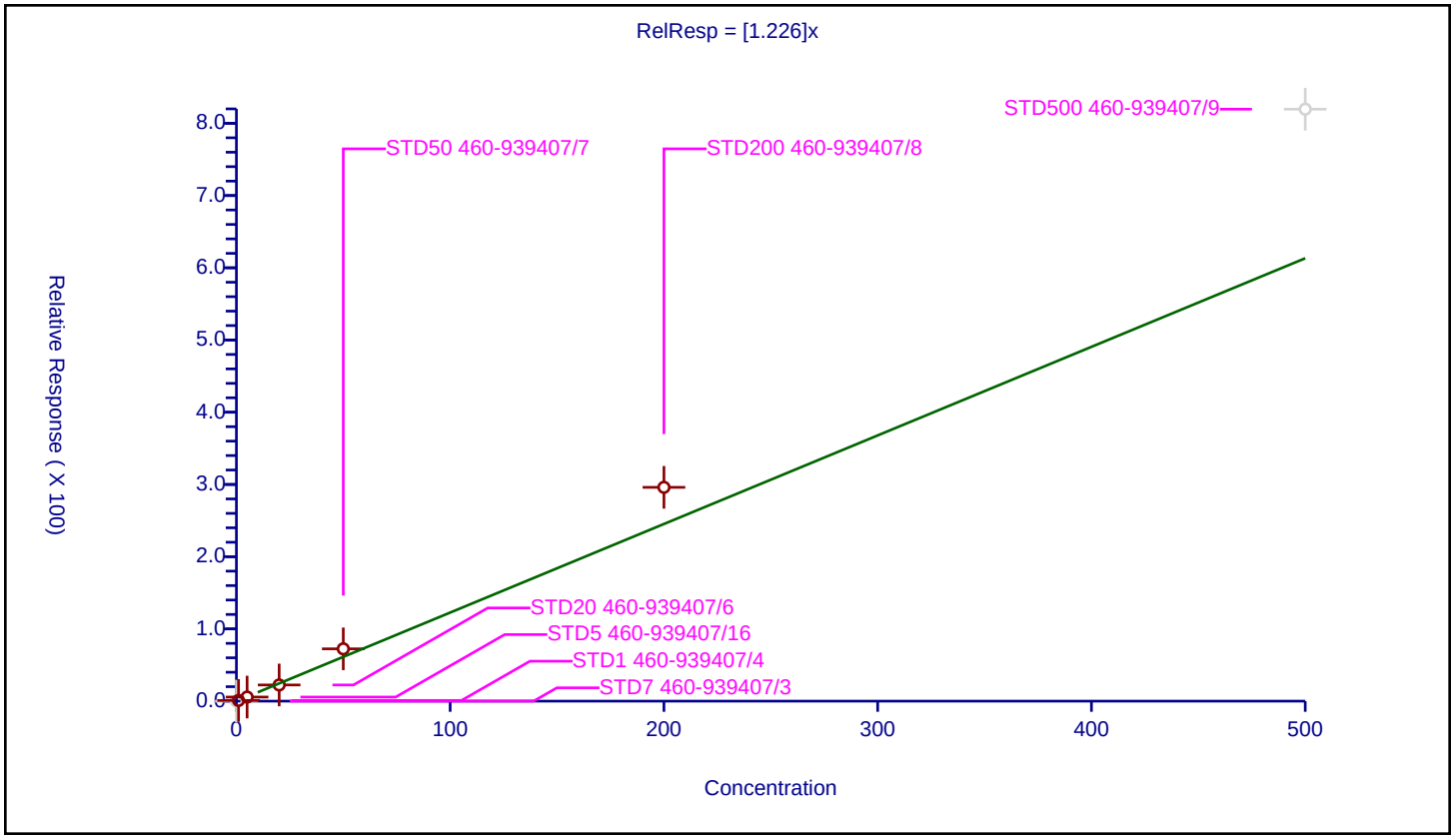
Curve Coefficients

Intercept:	0
Slope:	1.226

Error Coefficients

Standard Error:	761000
Relative Standard Error:	18.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.948371	50.0	172190.0	0.948371	Y
3	STD5 460-939407/16	5.0	5.675355	50.0	198666.0	1.135071	Y
4	STD20 460-939407/6	20.0	22.39815	50.0	219440.0	1.119907	Y
5	STD50 460-939407/7	50.0	72.411313	50.0	229402.0	1.448226	Y
6	STD200 460-939407/8	200.0	296.008842	50.0	250391.0	1.480044	Y
7	STD500 460-939407/9	500.0	819.594422	50.0	261873.0	1.639189	N



10/25/2023
1:26 PM

Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

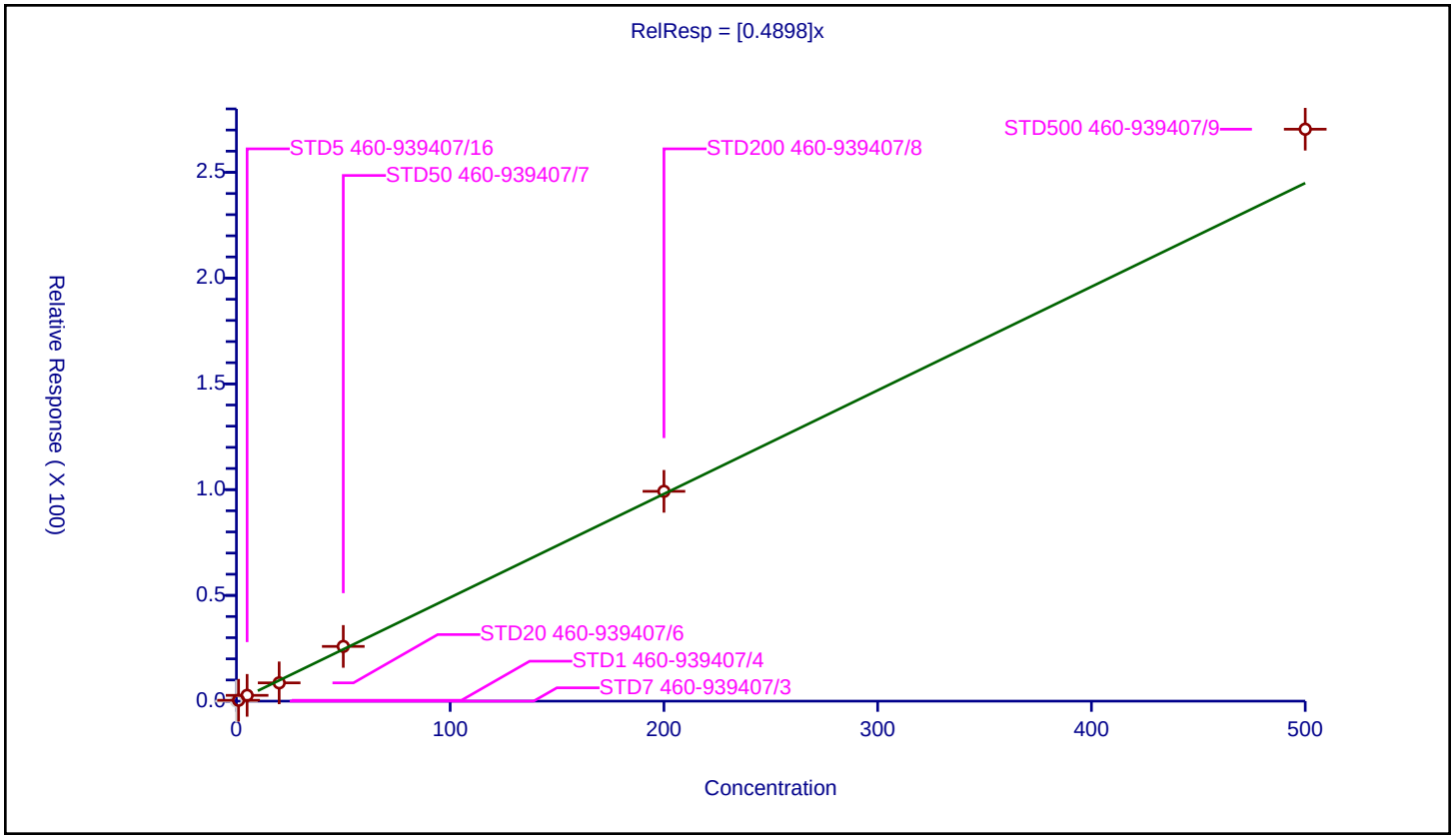
Curve Coefficients

Intercept:	0
Slope:	0.4898

Error Coefficients

Standard Error:	673000
Relative Standard Error:	12.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-939407/3	0.0	0.0	50.0	179209.0	NaN	N
2	STD1 460-939407/4	1.0	0.404205	50.0	172190.0	0.404205	Y
3	STD5 460-939407/16	5.0	2.741284	50.0	198666.0	0.548257	Y
4	STD20 460-939407/6	20.0	8.649061	50.0	219440.0	0.432453	Y
5	STD50 460-939407/7	50.0	25.869216	50.0	229402.0	0.517384	Y
6	STD200 460-939407/8	200.0	99.192663	50.0	250391.0	0.495963	Y
7	STD500 460-939407/9	500.0	270.386791	50.0	261873.0	0.540774	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICV 460-939407/17 Calibration Date: 10/20/2023 11:43

Instrument ID: CVOAMS8 Calib Start Date: 10/20/2023 03:31

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 10/20/2023 11:18

Lab File ID: J971281.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.0140	0.0276		39.6	20.0	97.8*	30.0
Dichlorodifluoromethane	Ave	0.2604	0.2369	0.1000	18.2	20.0	-9.0	30.0
Chlorodifluoromethane	Ave	0.0424	0.0415		19.5	20.0	-2.3	30.0
Chloromethane	Ave	0.2638	0.2469	0.1000	18.7	20.0	-6.4	30.0
Vinyl chloride	Ave	0.2673	0.2501	0.1000	18.7	20.0	-6.4	30.0
Butadiene	Ave	0.2571	0.2369		18.4	20.0	-7.9	30.0
Bromomethane	Ave	0.1752	0.1530	0.1000	17.5	20.0	-12.7	30.0
Chloroethane	Lin2		0.1574	0.1000	22.5	20.0	12.7	30.0
Dichlorofluoromethane	Ave	0.5518	0.5122		18.6	20.0	-7.2	30.0
Trichlorofluoromethane	Ave	0.5086	0.4984	0.1000	19.6	20.0	-2.0	30.0
Pentane	QuaF		0.1768		25.3	40.0	-36.7*	30.0
Ethanol	Ave	0.0484	0.0473		782	800	-2.3	30.0
Ethyl ether	Lin2		0.1684		17.2	20.0	-14.2	30.0
2-Methyl-1,3-butadiene	Ave	0.2218	0.1842		16.6	20.0	-16.9	30.0
1,2-Dichloro-1,1,2-trifluoro ethane	Qua2		0.2550		19.2	20.0	-4.2	30.0
1,1,1-Trifluoro-2,2-dichloro ethane	Ave	0.4702	0.4257		18.1	20.0	-9.4	30.0
Freon TF	Ave	0.2811	0.2393	0.1000	17.0	20.0	-14.9	30.0
Acrolein	Ave	1.837	1.739		37.4	39.5	-5.3	30.0
1,1-Dichloroethene	Ave	0.2671	0.2155	0.1000	16.1	20.0	-19.3	30.0
Acetone	Lin2		0.6752	0.0500	87.6	100	-12.4	30.0
Iodomethane	Ave	0.2466	0.1864		15.1	20.0	-24.4	30.0
Isopropyl alcohol	Ave	0.5172	0.5101		197	200	-1.4	30.0
Carbon disulfide	QuaF		0.5198	0.1000	12.8	20.0	-36.1*	30.0
3-Chloro-1-propene	Ave	0.1851	0.1481		16.0	20.0	-20.0	30.0
Methyl acetate	Ave	8.077	7.250	0.1000	35.9	40.0	-10.2	30.0
Cyclopentene	Ave	0.5585	0.4620		16.5	20.0	-17.3	30.0
Acetonitrile	Ave	1.322	1.456		220	200	10.1	30.0
Methylene Chloride	Qua2		0.2605	0.1000	16.5	20.0	-17.4	30.0
2-Methyl-2-propanol	Ave	0.8610	0.7892		183	200	-8.3	30.0
MTBE	Ave	0.6178	0.5414	0.1000	17.5	20.0	-12.4	30.0
trans-1,2-Dichloroethene	Ave	0.3247	0.2472	0.1000	15.2	20.0	-23.9	30.0
Acrylonitrile	Ave	3.838	3.576		186	200	-6.8	30.0
Hexane	Ave	0.1788	0.1069		12.0	20.0	-40.2*	30.0
Isopropyl ether	Ave	0.6693	0.4988		14.9	20.0	-25.5	30.0
1,1-Dichloroethane	Ave	0.5840	0.4125	0.2000	14.1	20.0	-29.4	30.0
Vinyl acetate	Ave	0.3662	0.2828		30.9	40.0	-22.8	30.0
2-Chloro-1,3-butadiene	Ave	0.2173	0.1630		15.0	20.0	-25.0	30.0
Tert-butyl ethyl ether	QuaF		0.4151		14.2	20.0	-28.9	30.0
2,2-Dichloropropane	Ave	0.1323	0.1151		17.4	20.0	-13.0	30.0
cis-1,2-Dichloroethene	Ave	0.2653	0.2263	0.1000	17.1	20.0	-14.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICV 460-939407/17 Calibration Date: 10/20/2023 11:43

Instrument ID: CVOAMS8 Calib Start Date: 10/20/2023 03:31

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 10/20/2023 11:18

Lab File ID: J971281.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Butanone	Ave	0.2157	0.1883	0.0500	87.3	100	-12.7	30.0
Ethyl acetate	Qua2		0.1950		39.8	40.0	-0.6	30.0
Methyl acrylate	Ave	0.1212	0.1108		18.3	20.0	-8.5	30.0
Propionitrile	Ave	1.201	1.101		183	200	-8.3	30.0
Chlorobromomethane	Ave	0.1337	0.1135		17.0	20.0	-15.1	30.0
Tetrahydrofuran	Ave	0.2323	0.2101		36.2	40.0	-9.5	30.0
Methacrylonitrile	Ave	0.0658	0.0650		198	200	-1.1	30.0
Chloroform	Ave	0.5000	0.4328	0.2000	17.3	20.0	-13.5	30.0
Cyclohexane	Ave	0.2198	0.1565	0.1000	14.2	20.0	-28.8	30.0
1,1,1-Trichloroethane	Ave	0.4020	0.3389	0.1000	16.9	20.0	-15.7	30.0
Carbon tetrachloride	Ave	0.3488	0.2829	0.1000	16.2	20.0	-18.9	30.0
1,1-Dichloropropene	Ave	0.2689	0.2083		15.5	20.0	-22.5	30.0
Isobutyl alcohol	Ave	0.3302	0.2977		451	500	-9.8	30.0
Isooctane	Qua2		0.2144		17.9	20.0	-10.3	30.0
Benzene	Ave	1.169	1.004	0.5000	17.2	20.0	-14.1	30.0
Isopropyl acetate	Ave	0.3895	0.3666		18.8	20.0	-5.9	30.0
Tert-amyl methyl ether	Ave	0.1244	0.1156		18.6	20.0	-7.0	30.0
1,2-Dichloroethane	Ave	0.3521	0.3137	0.1000	17.8	20.0	-10.9	30.0
n-Heptane	Ave	0.0532	0.0368		13.8	20.0	-30.9*	30.0
n-Butanol	QuaF		0.1073		400	500	-20.0	30.0
Trichloroethene	Ave	0.2298	0.1915*	0.2000	16.7	20.0	-16.7	30.0
Methylcyclohexane	Ave	0.1687	0.1155	0.1000	13.7	20.0	-31.5*	30.0
Ethyl acrylate	Ave	0.2928	0.2372		16.2	20.0	-19.0	30.0
1,2-Dichloropropane	Ave	0.2141	0.1922	0.1000	18.0	20.0	-10.2	30.0
Methyl methacrylate	Ave	0.0335	0.0356		42.4	40.0	6.1	30.0
1,4-Dioxane	Ave	0.8445	0.8254		391	400	-2.3	30.0
Dibromomethane	Ave	0.1632	0.1519		18.6	20.0	-6.9	30.0
n-Propyl acetate	Ave	0.1829	0.1762		19.3	20.0	-3.7	30.0
Bromodichloromethane	Ave	0.3408	0.3161	0.2000	18.6	20.0	-7.2	30.0
2-Nitropropane	QuaF		2.362		29.5	40.0	-26.2	30.0
2-Chloroethyl vinyl ether	QuaF		0.0504		13.4	20.0	-33.0*	30.0
Epichlorohydrin	Ave	0.1454	0.1451		20.0	20.0	-0.2	30.0
cis-1,3-Dichloropropene	Ave	0.4599	0.3607	0.2000	15.7	20.0	-21.6	30.0
4-Methyl-2-pentanone	Ave	1.340	1.296	0.0500	96.7	100	-3.3	30.0
Toluene	Ave	1.137	0.9034	0.4000	15.9	20.0	-20.5	30.0
trans-1,3-Dichloropropene	Ave	0.4054	0.3488	0.1000	17.2	20.0	-14.0	30.0
Ethyl methacrylate	Ave	0.1530	0.1349		17.6	20.0	-11.8	30.0
1,1,2-Trichloroethane	Ave	0.2300	0.2052	0.1000	17.8	20.0	-10.8	30.0
Tetrachloroethene	Ave	0.2887	0.2433	0.2000	16.9	20.0	-15.7	30.0
1,3-Dichloropropane	Ave	0.3854	0.3497		18.1	20.0	-9.3	30.0
2-Hexanone	Ave	0.4996	0.4836	0.0500	96.8	100	-3.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICV 460-939407/17 Calibration Date: 10/20/2023 11:43

Instrument ID: CVOAMS8 Calib Start Date: 10/20/2023 03:31

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 10/20/2023 11:18

Lab File ID: J971281.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butyl acetate	Ave	0.2473	0.2559		20.7	20.0	3.5	30.0
Dibromochloromethane	Ave	0.3386	0.3108	0.1000	18.4	20.0	-8.2	30.0
1,2-Dibromoethane	Ave	0.2799	0.2508	0.1000	17.9	20.0	-10.4	30.0
Chlorobenzene	Ave	0.7671	0.6764	0.5000	17.6	20.0	-11.8	30.0
Ethylbenzene	Ave	0.3441	0.2871	0.1000	16.7	20.0	-16.6	30.0
1,1,1,2-Tetrachloroethane	Ave	0.2852	0.2561		18.0	20.0	-10.2	30.0
m-Xylene & p-Xylene	Ave	0.3932	0.3333	0.1000	17.0	20.0	-15.2	30.0
o-Xylene	Ave	0.3940	0.3185	0.3000	16.2	20.0	-19.2	30.0
n-Butyl acrylate	Qua2		0.1363		17.9	20.0	-10.4	30.0
Styrene	Lin2		0.6143	0.3000	17.2	20.0	-13.8	30.0
Bromoform	Ave	0.2145	0.1907	0.1000	17.8	20.0	-11.1	30.0
Amyl acetate (mixed isomers)	Ave	0.4957	0.5028		20.3	20.0	1.4	30.0
Isopropylbenzene	Ave	0.8695	0.7587	0.1000	17.5	20.0	-12.7	30.0
Bromobenzene	Ave	0.5959	0.5340		17.9	20.0	-10.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5727	0.5560	0.3000	19.4	20.0	-2.9	30.0
N-Propylbenzene	Ave	1.924	1.634		17.0	20.0	-15.1	30.0
1,2,3-Trichloropropane	Ave	0.1487	0.1348		18.1	20.0	-9.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1611	0.1520		18.9	20.0	-5.7	30.0
2-Chlorotoluene	Ave	1.552	1.363		17.6	20.0	-12.2	30.0
4-Ethyltoluene	Ave	1.652	1.547		18.7	20.0	-6.4	30.0
1,3,5-Trimethylbenzene	Ave	1.370	1.204		17.6	20.0	-12.1	30.0
4-Chlorotoluene	Ave	1.445	1.302		18.0	20.0	-9.9	30.0
Butyl Methacrylate	QuaF		0.4142		16.6	20.0	-17.2	30.0
tert-Butylbenzene	Ave	0.9669	0.8751		18.1	20.0	-9.5	30.0
1,2,4-Trimethylbenzene	Ave	1.417	1.179		16.6	20.0	-16.8	30.0
sec-Butylbenzene	Ave	1.376	1.200		17.4	20.0	-12.8	30.0
1,3-Dichlorobenzene	Ave	1.007	0.9072	0.6000	18.0	20.0	-9.9	30.0
4-Isopropyltoluene	Ave	1.196	1.042		17.4	20.0	-12.8	30.0
1,4-Dichlorobenzene	Ave	1.134	0.9677	0.5000	17.1	20.0	-14.7	30.0
Benzyl chloride	Ave	1.062	1.032		19.4	20.0	-2.8	30.0
Indan	Ave	1.646	1.601		19.4	20.0	-2.8	30.0
p-Diethylbenzene	Ave	0.7679	0.7525		19.6	20.0	-2.0	30.0
n-Butylbenzene	Ave	0.6603	0.6058		18.4	20.0	-8.2	30.0
1,2-Dichlorobenzene	Ave	1.020	0.9378	0.4000	18.4	20.0	-8.1	30.0
1,2,4,5-Tetramethylbenzene	Qua2		0.9660		18.0	20.0	-10.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1212	0.1135	0.0500	18.7	20.0	-6.4	30.0
1,3,5-Trichlorobenzene	Ave	0.6103	0.6095		20.0	20.0	-0.1	30.0
1,2,4-Trichlorobenzene	Ave	0.5503	0.5023	0.2000	18.3	20.0	-8.7	30.0
Hexachlorobutadiene	Ave	0.1949	0.1878		19.3	20.0	-3.7	30.0
Naphthalene	Ave	1.226	1.150		18.8	20.0	-6.2	30.0
1,2,3-Trichlorobenzene	Ave	0.4898	0.4423		18.1	20.0	-9.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICV 460-939407/17 Calibration Date: 10/20/2023 11:43

Instrument ID: CVOAMS8 Calib Start Date: 10/20/2023 03:31

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 10/20/2023 11:18

Lab File ID: J971281.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.3042	0.3018		49.6	50.0	-0.8	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3303	0.3333		50.4	50.0	0.9	30.0
Toluene-d8 (Surr)	Ave	1.127	1.150		51.0	50.0	2.1	30.0
Bromofluorobenzene	Ave	0.3359	0.3436		51.1	50.0	2.3	30.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971281.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 20-Oct-2023 11:43:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 460-0167608-017
Operator ID: Instrument ID: CVOAMS8
Sublist:

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 17:03:04 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 18:10:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.130	1.127	0.003	95	6027	20.0	39.6	
4 Dichlorodifluoromethane	85	1.155	1.152	0.003	100	51714	20.0	18.2	
5 Chlorodifluoromethane	67	1.173	1.170	0.003	98	9052	20.0	19.5	
6 Chloromethane	50	1.282	1.279	0.003	99	53902	20.0	18.7	
7 Vinyl chloride	62	1.343	1.340	0.003	99	54614	20.0	18.7	
8 Butadiene	54	1.355	1.352	0.003	97	51725	20.0	18.4	
9 Bromomethane	94	1.550	1.547	0.003	99	33402	20.0	17.5	
10 Chloroethane	64	1.611	1.608	0.003	98	34369	20.0	22.5	
12 Dichlorofluoromethane	67	1.732	1.729	0.003	98	111835	20.0	18.6	
11 Trichlorofluoromethane	101	1.738	1.736	0.002	100	108818	20.0	19.6	
13 Pentane	43	1.769	1.766	0.003	92	77205	40.0	25.3	
14 Ethanol	46	1.866	1.863	0.003	97	7870	800.0	781.8	
15 Ethyl ether	59	1.909	1.906	0.003	97	36770	20.0	17.2	
16 2-Methyl-1,3-butadiene	53	1.927	1.924	0.003	96	40227	20.0	16.6	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.933	1.930	0.003	96	55670	20.0	19.2	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.976	1.973	0.003	98	92951	20.0	18.1	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.030	2.027	0.003	96	52238	20.0	17.0	
19 Acrolein	56	2.036	2.034	0.002	54	14293	39.5	37.4	
21 1,1-Dichloroethene	96	2.067	2.058	0.009	99	47058	20.0	16.1	
22 Acetone	43	2.128	2.125	0.003	87	61066	100.0	87.6	
23 Iodomethane	142	2.182	2.179	0.003	98	40706	20.0	15.1	
25 Isopropyl alcohol	45	2.188	2.179	0.009	64	21228	200.0	197.3	
24 Carbon disulfide	76	2.213	2.210	0.003	100	113487	20.0	12.8	
26 3-Chloro-1-propene	76	2.304	2.301	0.003	93	32334	20.0	16.0	
28 Methyl acetate	43	2.310	2.307	0.003	98	60334	40.0	35.9	
27 Cyclopentene	67	2.322	2.319	0.003	96	100871	20.0	16.5	
29 Acetonitrile	41	2.359	2.350	0.009	99	60579	200.0	220.3	
* 30 TBA-d9 (IS)	65	2.389	2.380	0.009	79	208057	1000.0	1000.0	
31 Methylene Chloride	84	2.407	2.404	0.003	91	56865	20.0	16.5	
32 2-Methyl-2-propanol	59	2.438	2.441	-0.003	98	32839	200.0	183.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	2.529	2.526	0.003	97	118196	20.0	17.5	
34 trans-1,2-Dichloroethene	96	2.553	2.550	0.003	97	53963	20.0	15.2	
35 Acrylonitrile	53	2.614	2.605	0.009	94	148810	200.0	186.4	
36 Hexane	57	2.675	2.672	0.003	90	23341	20.0	12.0	
37 Isopropyl ether	45	2.845	2.842	0.003	95	108911	20.0	14.9	
38 1,1-Dichloroethane	63	2.882	2.873	0.009	99	90064	20.0	14.1	
39 Vinyl acetate	43	2.888	2.885	0.003	100	123474	40.0	30.9	
40 2-Chloro-1,3-butadiene	88	2.918	2.915	0.003	92	35594	20.0	15.0	
41 Tert-butyl ethyl ether	59	3.119	3.116	0.003	87	90636	20.0	14.2	
* 43 2-Butanone-d5	46	3.295	3.292	0.003	99	226094	250.0	250.0	
42 2,2-Dichloropropane	79	3.301	3.292	0.009	95	25134	20.0	17.4	
44 cis-1,2-Dichloroethene	96	3.332	3.323	0.009	95	49404	20.0	17.1	
46 2-Butanone (MEK)	72	3.344	3.341	0.003	96	17031	100.0	87.3	
45 Ethyl acetate	70	3.344	3.347	-0.003	94	7053	40.0	39.8	
47 Methyl acrylate	55	3.399	3.390	0.009	99	24198	20.0	18.3	
48 Propionitrile	54	3.465	3.457	0.008	97	45818	200.0	183.3	
50 Chlorobromomethane	128	3.532	3.530	0.002	84	24790	20.0	17.0	
49 Tetrahydrofuran	72	3.538	3.530	0.008	49	7600	40.0	36.2	
51 Methacrylonitrile	67	3.557	3.548	0.009	93	141986	200.0	197.8	
52 Chloroform	83	3.581	3.572	0.009	98	94485	20.0	17.3	
53 Cyclohexane	84	3.697	3.688	0.009	87	34168	20.0	14.2	
54 1,1,1-Trichloroethane	97	3.709	3.706	0.003	98	73991	20.0	16.9	
$ 55 Dibromofluoromethane (Surr)	113	3.721	3.718	0.003	95	164728	50.0	49.6	
56 Carbon tetrachloride	117	3.818	3.815	0.003	98	61767	20.0	16.2	
57 1,1-Dichloropropene	75	3.855	3.846	0.009	95	45480	20.0	15.5	
58 Isobutyl alcohol	43	3.976	3.973	0.003	91	30971	500.0	450.9	
59 Isooctane	57	4.001	4.004	-0.003	96	46821	20.0	17.9	
60 Benzene	78	4.031	4.028	0.003	96	156742	20.0	17.2	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.049	4.046	0.003	0	181907	50.0	50.4	
62 Isopropyl acetate	43	4.092	4.089	0.003	90	80046	20.0	18.8	
63 Tert-amyl methyl ether	55	4.098	4.089	0.009	88	25249	20.0	18.6	
64 1,2-Dichloroethane	62	4.122	4.119	0.003	98	68500	20.0	17.8	
65 n-Heptane	57	4.177	4.180	-0.003	89	8034	20.0	13.8	
* 66 Fluorobenzene	96	4.311	4.308	0.003	99	545827	50.0	50.0	
67 n-Butanol	56	4.645	4.642	0.003	55	11164	500.0	399.9	
68 Trichloroethene	95	4.657	4.655	0.002	97	41800	20.0	16.7	
69 Methylcyclohexane	83	4.779	4.770	0.009	77	25224	20.0	13.7	
70 Ethyl acrylate	55	4.791	4.782	0.009	97	51796	20.0	16.2	
71 1,2-Dichloropropane	63	4.949	4.940	0.009	85	41955	20.0	18.0	
* 72 1,4-Dioxane-d8	96	5.022	5.007	0.015	0	22826	1000.0	1000.0	
73 Methyl methacrylate	100	5.041	5.032	0.009	90	15535	40.0	42.4	
75 1,4-Dioxane	88	5.071	5.062	0.009	45	7536	400.0	391.0	
74 Dibromomethane	93	5.083	5.074	0.009	94	33163	20.0	18.6	
76 n-Propyl acetate	43	5.101	5.092	0.009	98	38461	20.0	19.3	
77 Dichlorobromomethane	83	5.241	5.232	0.009	99	69024	20.0	18.6	
78 2-Nitropropane	41	5.594	5.585	0.009	98	19659	40.0	29.5	
79 2-Chloroethyl vinyl ether	63	5.612	5.603	0.009	85	11012	20.0	13.4	
80 Epichlorohydrin	57	5.722	5.707	0.015	81	2625	20.0	20.0	a
81 cis-1,3-Dichloropropene	75	5.764	5.761	0.003	94	56331	20.0	15.7	
82 4-Methyl-2-pentanone (MIBK)	43	5.953	5.944	0.009	98	117232	100.0	96.7	
$ 83 Toluene-d8 (Surr)	98	6.020	6.017	0.003	98	449033	50.0	51.0	
84 Toluene	91	6.105	6.102	0.003	95	141093	20.0	15.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75	6.506	6.497	0.009	96	54474	20.0	17.2	
86 Ethyl methacrylate	69	6.549	6.546	0.003	89	29463	20.0	17.6	
87 1,1,2-Trichloroethane	83	6.737	6.734	0.003	96	32055	20.0	17.8	
88 Tetrachloroethene	166	6.768	6.765	0.003	96	37998	20.0	16.9	
89 1,3-Dichloropropane	76	6.968	6.959	0.009	95	54613	20.0	18.1	
90 2-Hexanone	58	7.060	7.057	0.003	96	43732	100.0	96.8	
91 n-Butyl acetate	43	7.205	7.197	0.008	97	39965	20.0	20.7	
92 Chlorodibromomethane	129	7.224	7.215	0.009	97	48534	20.0	18.4	
93 Ethylene Dibromide	107	7.382	7.373	0.009	99	39167	20.0	17.9	
* 94 Chlorobenzene-d5	117	7.978	7.969	0.009	86	390447	50.0	50.0	
95 Chlorobenzene	112	8.014	8.005	0.009	97	105644	20.0	17.6	
96 Ethylbenzene	106	8.124	8.115	0.009	99	44846	20.0	16.7	
97 1,1,1,2-Tetrachloroethane	131	8.136	8.127	0.009	96	40005	20.0	18.0	
98 m-Xylene & p-Xylene	106	8.270	8.267	0.003	0	52057	20.0	17.0	
99 o-Xylene	106	8.726	8.717	0.009	93	49738	20.0	16.2	
100 n-Butyl acrylate	73	8.744	8.741	0.003	97	21284	20.0	17.9	
101 Styrene	104	8.762	8.753	0.009	96	95944	20.0	17.2	
103 Bromoform	173	8.975	8.966	0.009	94	29787	20.0	17.8	
102 Amyl acetate (mixed isomers)	43	8.993	8.991	0.002	90	43415	20.0	20.3	
104 Isopropylbenzene	105	9.109	9.100	0.009	97	118496	20.0	17.5	
$ 105 4-Bromofluorobenzene	174	9.310	9.307	0.003	96	134139	50.0	51.1	
106 Bromobenzene	156	9.431	9.428	0.003	92	46107	20.0	17.9	
107 1,1,2,2-Tetrachloroethane	83	9.504	9.495	0.009	97	48005	20.0	19.4	
108 N-Propylbenzene	91	9.516	9.514	0.002	98	141077	20.0	17.0	
109 1,2,3-Trichloropropane	110	9.535	9.532	0.003	96	11637	20.0	18.1	
110 trans-1,4-Dichloro-2-butene	53	9.565	9.562	0.003	90	13122	20.0	18.9	
111 2-Chlorotoluene	91	9.614	9.611	0.003	98	117692	20.0	17.6	
112 4-Ethyltoluene	105	9.632	9.623	0.009	97	133553	20.0	18.7	
113 1,3,5-Trimethylbenzene	105	9.699	9.690	0.009	93	103926	20.0	17.6	
114 4-Chlorotoluene	91	9.723	9.720	0.003	98	112452	20.0	18.0	
115 Butyl Methacrylate	87	9.814	9.805	0.009	95	35762	20.0	16.6	
116 tert-Butylbenzene	119	9.972	9.970	0.002	93	75565	20.0	18.1	
117 1,2,4-Trimethylbenzene	105	10.033	10.030	0.003	98	101785	20.0	16.6	
118 sec-Butylbenzene	105	10.173	10.170	0.003	99	103577	20.0	17.4	
120 1,3-Dichlorobenzene	146	10.295	10.292	0.003	94	78335	20.0	18.0	
119 4-Isopropyltoluene	119	10.301	10.298	0.003	97	89989	20.0	17.4	
* 121 1,4-Dichlorobenzene-d4	152	10.362	10.353	0.009	96	215863	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.380	10.377	0.003	95	83560	20.0	17.1	
123 1,2,3-Trimethylbenzene	105	10.398	10.395	0.003	99	136731	20.0	19.4	
124 Benzyl chloride	91	10.508	10.505	0.003	98	89103	20.0	19.4	
125 2,3-Dihydroindene	117	10.562	10.560	0.002	93	138213	20.0	19.4	
126 p-Diethylbenzene	119	10.623	10.620	0.003	93	64979	20.0	19.6	
127 n-Butylbenzene	92	10.641	10.639	0.002	98	52310	20.0	18.4	
128 1,2-Dichlorobenzene	146	10.690	10.687	0.003	95	80972	20.0	18.4	
129 1,2,4,5-Tetramethylbenzene	119	11.250	11.247	0.003	98	83406	20.0	18.0	
130 1,2-Dibromo-3-Chloropropane	157	11.335	11.326	0.009	94	9801	20.0	18.7	
131 1,3,5-Trichlorobenzene	180	11.438	11.435	0.003	97	52631	20.0	20.0	
132 1,2,4-Trichlorobenzene	180	11.919	11.910	0.008	93	43371	20.0	18.3	
133 Hexachlorobutadiene	225	11.998	11.995	0.003	92	16212	20.0	19.3	
134 Naphthalene	128	12.101	12.098	0.003	100	99297	20.0	18.8	
135 1,2,3-Trichlorobenzene	180	12.277	12.274	0.003	95	38187	20.0	18.1	
S 136 1,2-Dichloroethene, Total	100				0		40.0	32.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Xylenes, Total	100				0		40.0	33.1	
S 138 Total BTEX	1				0		100.0	82.9	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

GAS C SP_00537	Amount Added:	20.00	Units: uL	
8260 SP_00171	Amount Added:	20.00	Units: uL	
EthhexAcr_SS_00004	Amount Added:	20.00	Units: uL	
ACROLEIN SP_00157	Amount Added:	4.00	Units: uL	
7 Freons SS_00006	Amount Added:	20.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 19:09:07 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971281.D

Injection Date: 20-Oct-2023 11:43:30 Instrument ID: CVOAMS8 Operator ID:

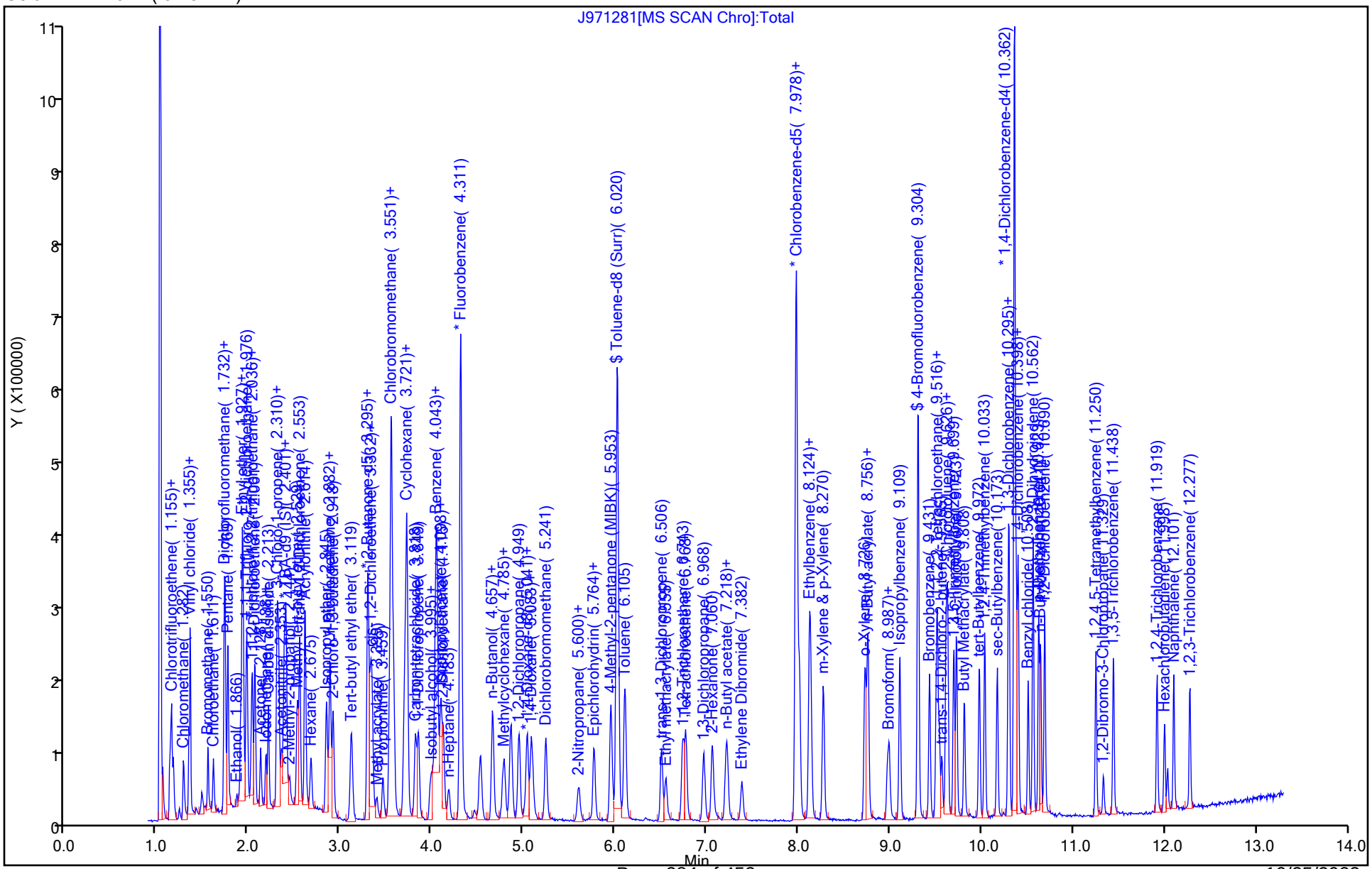
Lims ID: ICV Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971265.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Oct-2023 02:42:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0167608-001				
Operator ID:		Instrument ID:	CVOAMS8		
Method:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	20-Oct-2023 19:02:35	Calib Date:	20-Oct-2023 11:18:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1666				
First Level Reviewer: HVW2		Date:	20-Oct-2023 02:51:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 139 BFB

QC Flag Legend

Processing Flags

Reagents:

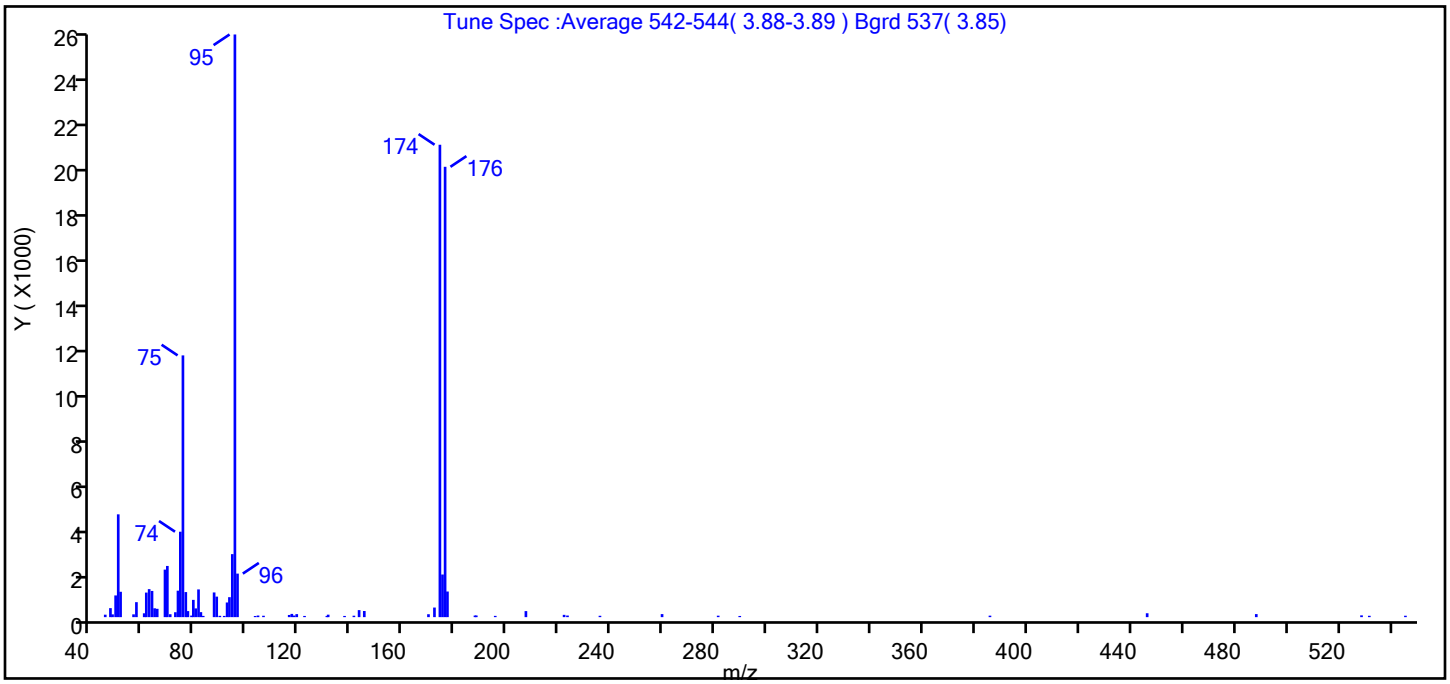
BFB_00034 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971265.D
Injection Date: 20-Oct-2023 02:42:30 Instrument ID: CVOAMS8
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Tune Method: BFB Method 8260D

$ 139 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	50 to 200% of m/z 174	100.0 (123.3)
96	5 to 9% of m/z 95	7.5
173	<2% of m/z 174	0.0 (0.0)
174	50 to 200% of m/z 95	81.1
175	5 to 9% of m/z 174	7.3 (9.0)
176	95 to 105% of m/z 174	77.3 (95.3)
177	5 to 10% of m/z 176	4.4 (5.7)

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971265.D\8260_W8.rslt\spectra.d
Injection Date: 20-Oct-2023 02:42:30
Spectrum: Tune Spec :Average 542-544(3.88-3.89) Bgrd 537(3.85)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	106	74.00	3688	103.00	50	177.00	1106
47.00	389	75.00	11299	104.00	69	187.00	69
48.00	120	76.00	1082	106.00	60	188.00	70
49.00	937	77.00	261	116.00	94	195.00	55
50.00	4438	78.00	67	117.00	140	207.00	261
51.00	1095	79.00	746	118.00	69	222.00	99
56.00	121	80.00	377	119.00	130	223.00	69
57.00	647	81.00	1197	122.00	52	236.00	59
60.00	166	82.00	216	130.00	53	259.00	132
61.00	1060	83.00	54	131.00	107	281.00	63
62.00	1209	87.00	1066	137.00	52	289.00	51
63.00	1131	88.00	886	141.00	62	386.00	64
64.00	382	89.00	57	143.00	303	446.00	168
65.00	360	91.00	53	145.00	265	488.00	132
68.00	2052	92.00	633	170.00	126	529.00	77
69.00	2210	93.00	862	172.00	414	532.00	59
70.00	126	94.00	2720	174.00	20392	546.00	61
72.00	212	95.00	25152	175.00	1840		
73.00	1142	96.00	1879	176.00	19440		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-939407/22

Matrix: Water | Lab File ID: J971286.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 13:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	Freon TF	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
78-93-3	2-Butanone	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	1.3
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	0.55
75-15-0	Carbon disulfide	1.0	U	1.0	0.82
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
124-48-1	Dibromochloromethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.22
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-939407/22

Matrix: Water | Lab File ID: J971286.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 13:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.79
1634-04-4	MTBE	1.0	U	1.0	0.22
108-87-2	Methylcyclohexane	1.0	U	1.0	0.71
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.32
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-130
460-00-4	Bromofluorobenzene	91		70-130
1868-53-7	Dibromofluoromethane (Surr)	108		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-939407/22

Matrix: Water | Lab File ID: J971286.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 13:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Oct-2023 13:48:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0167608-022
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:58:01 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: K0HS Date: 20-Oct-2023 14:31:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 30 TBA-d9 (IS)	65	2.390	2.380	0.010	75	197433	1000.0	1000.0	
* 43 2-Butanone-d5	46	3.303	3.292	0.011	88	195314	250.0	250.0	
$ 55 Dibromofluoromethane (Surr)	113	3.728	3.718	0.010	94	161343	50.0	54.0	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.057	4.046	0.011	0	165794	50.0	51.1	
* 66 Fluorobenzene	96	4.318	4.308	0.010	99	490740	50.0	50.0	
* 72 1,4-Dioxane-d8	96	5.024	5.007	0.017	0	20801	1000.0	1000.0	
$ 83 Toluene-d8 (Surr)	98	6.027	6.017	0.010	99	403965	50.0	47.0	
* 94 Chlorobenzene-d5	117	7.979	7.969	0.010	86	381058	50.0	50.0	
$ 105 4-Bromofluorobenzene	174	9.311	9.307	0.004	90	116346	50.0	45.4	
* 121 1,4-Dichlorobenzene-d4	152	10.363	10.353	0.010	96	189235	50.0	50.0	

QC Flag Legend
Processing Flags

Reagents:
8260ISNEW_00171 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00241 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 20-Oct-2023 18:59:01 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D

Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8 Operator ID:

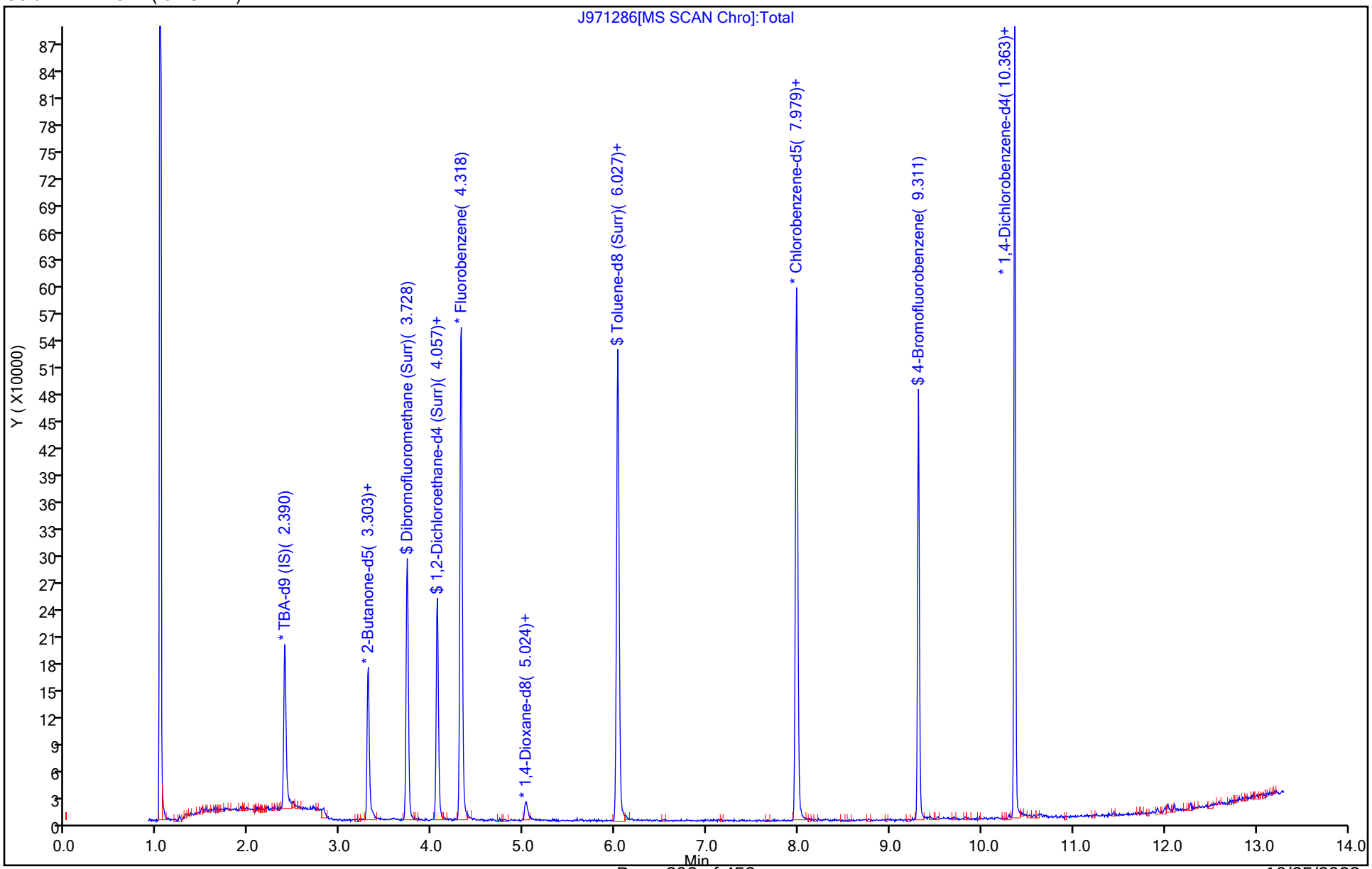
Lims ID: MB Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 21

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



10/25/2023
1:26 PM

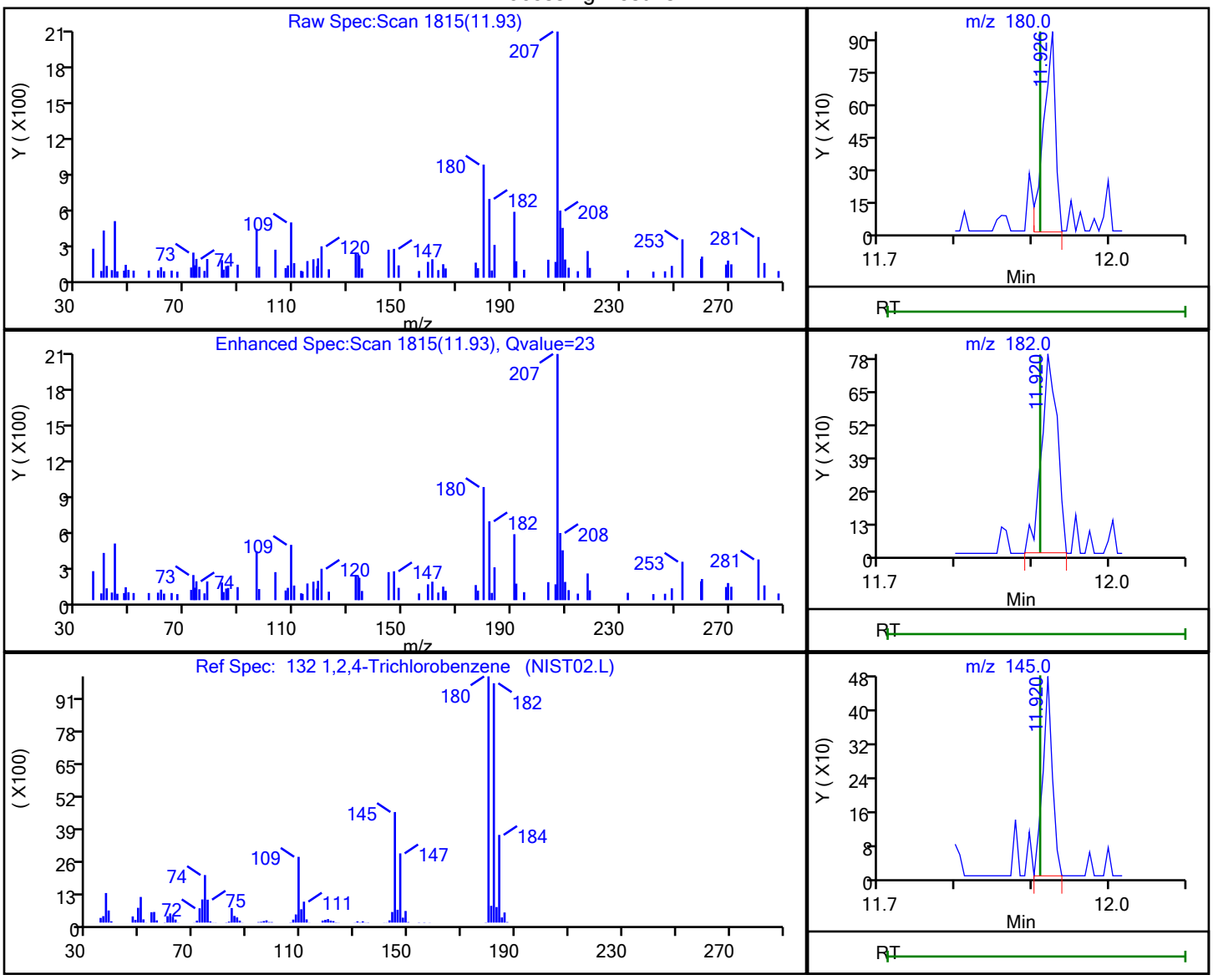
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

132 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
11.93	180.00	991	0.475795
11.92	182.00	1158	
11.92	145.00	410	

Reviewer: W9CM, 20-Oct-2023 18:16:00 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

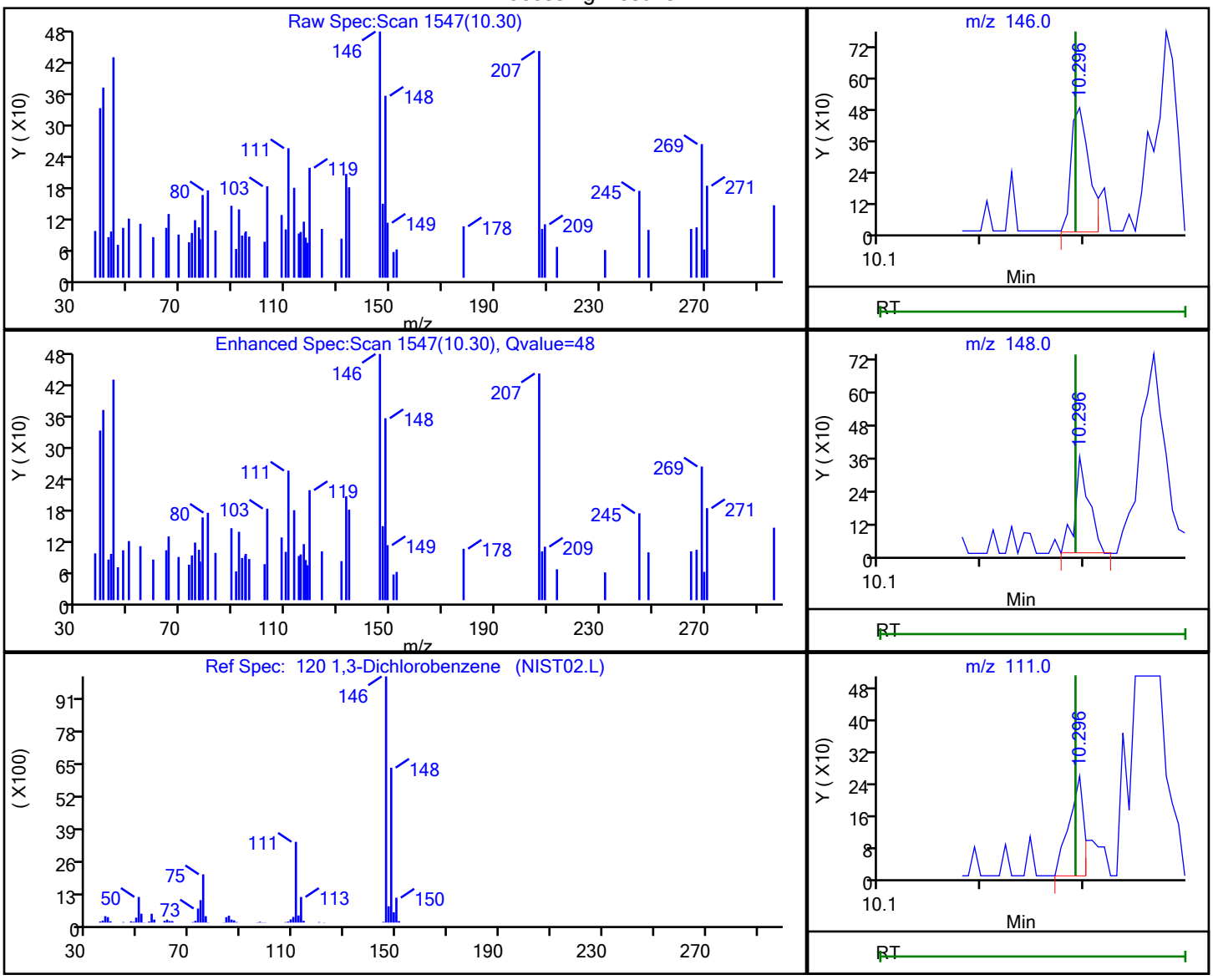
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
10.30	146.00	590	0.154870
10.30	148.00	348	
10.30	111.00	256	

Reviewer: W9CM, 20-Oct-2023 18:15:54 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

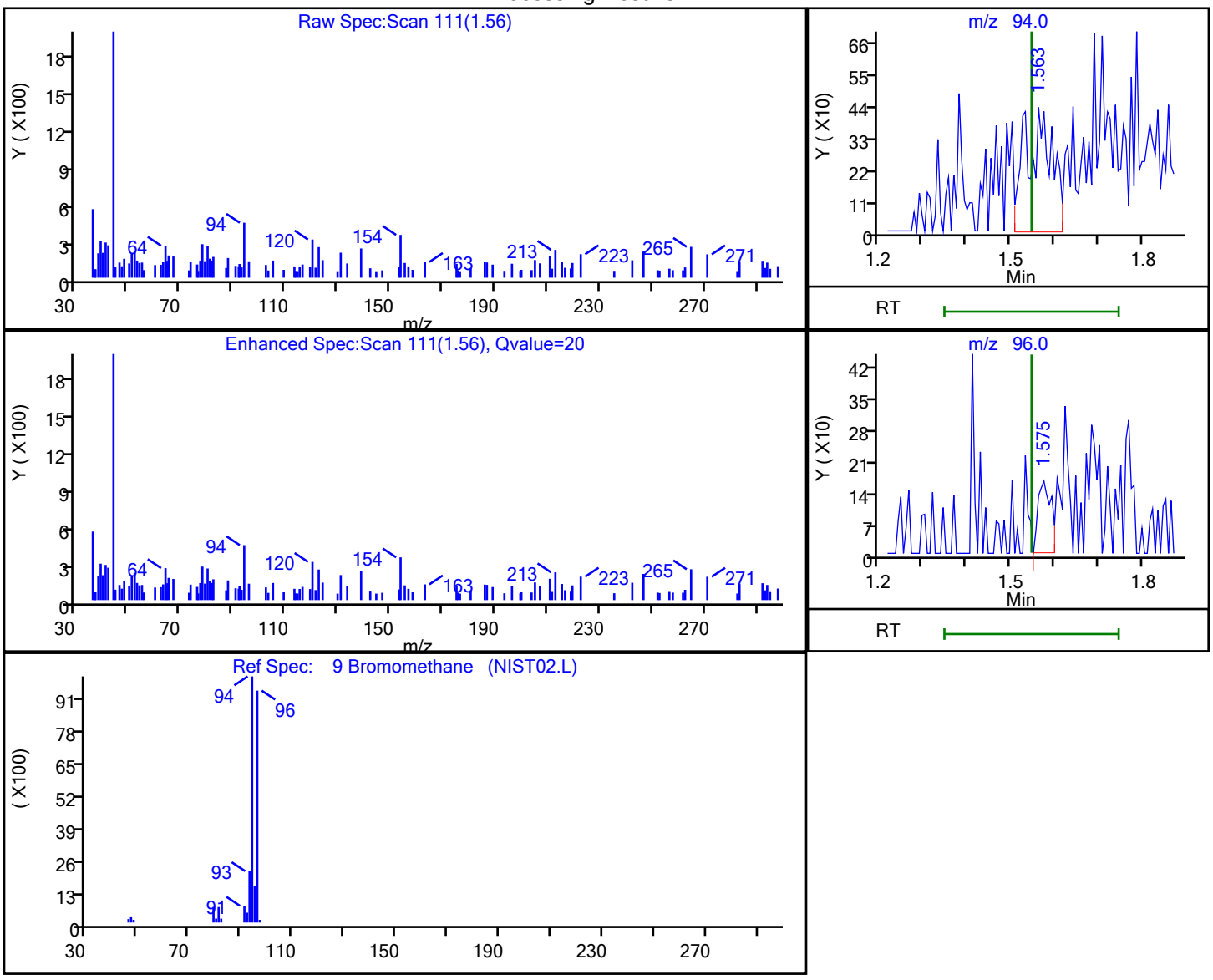
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
1.56	94.00	1771	1.029972
1.58	96.00	335	

Reviewer: K0HS, 20-Oct-2023 14:31:19 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

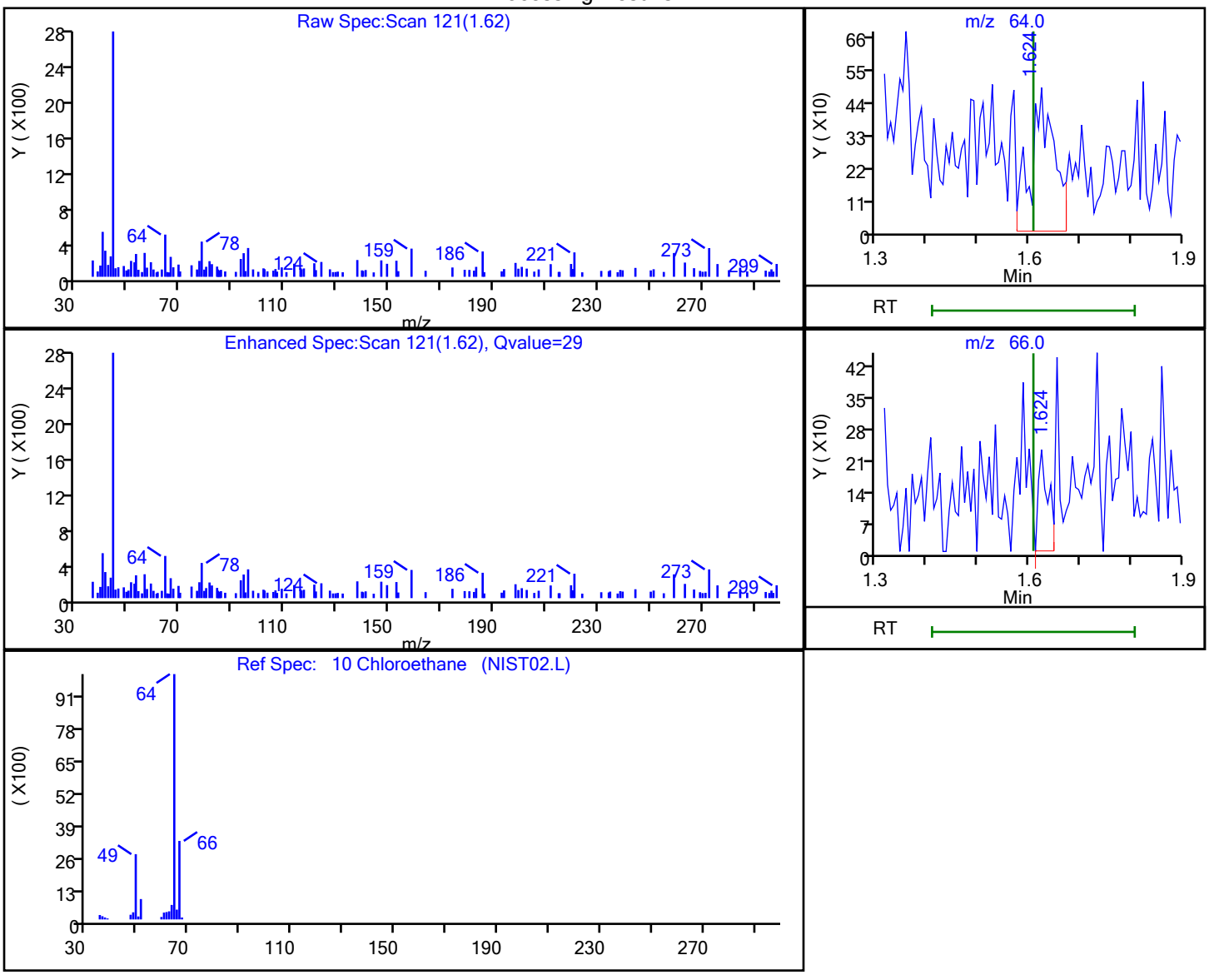
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.62	64.00	1522	1.074927
1.62	66.00	307	

Reviewer: K0HS, 20-Oct-2023 14:31:21 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

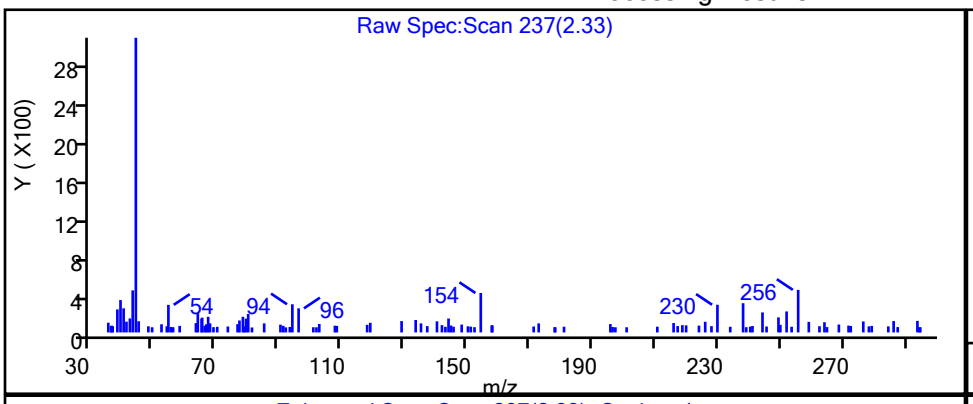
User Disabled Compound Report

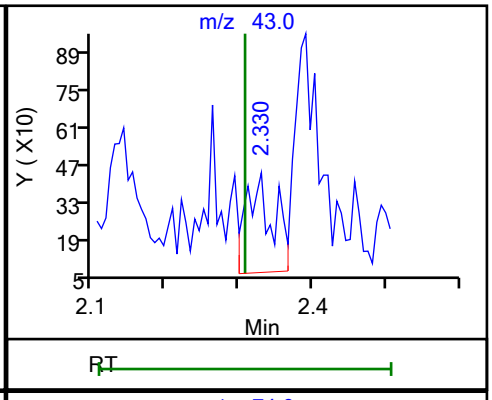
Eurofins Edison

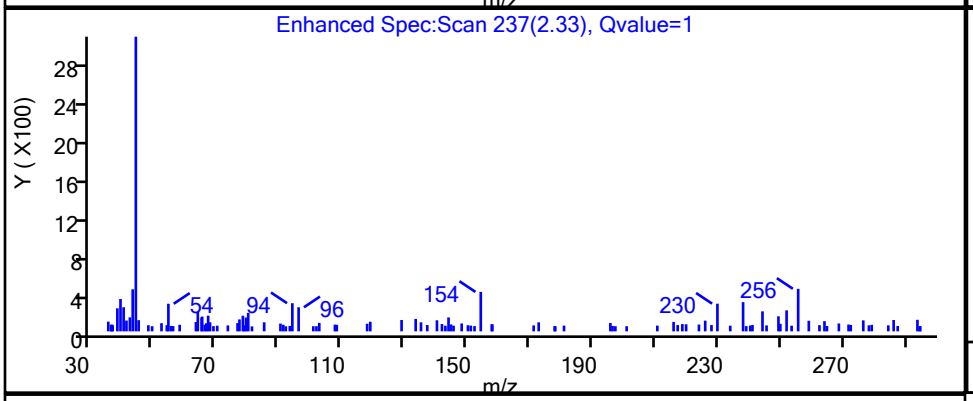
Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

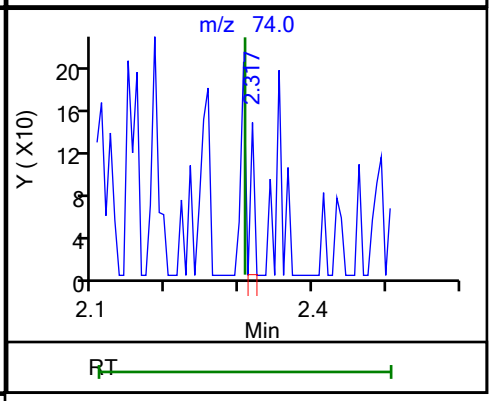
28 Methyl acetate, CAS: 79-20-9

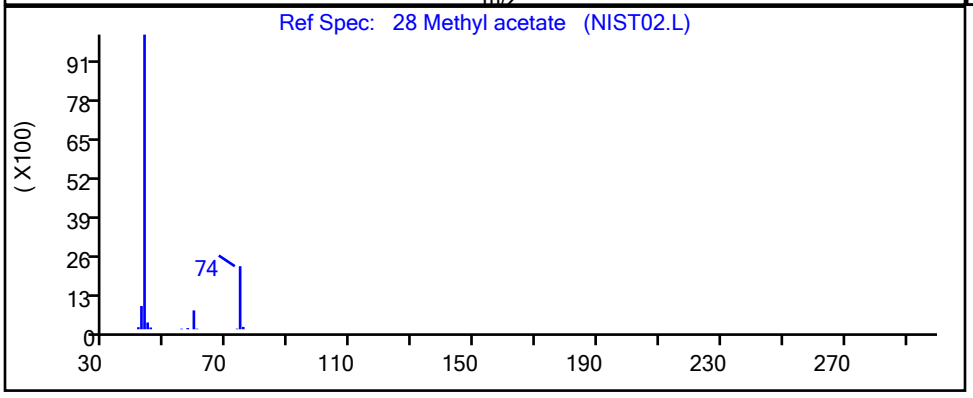
Processing Results











RT	Mass	Response	Amount
2.33	43.00	963	0.603889
2.32	74.00	53	

Reviewer: K0HS, 20-Oct-2023 14:31:22 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

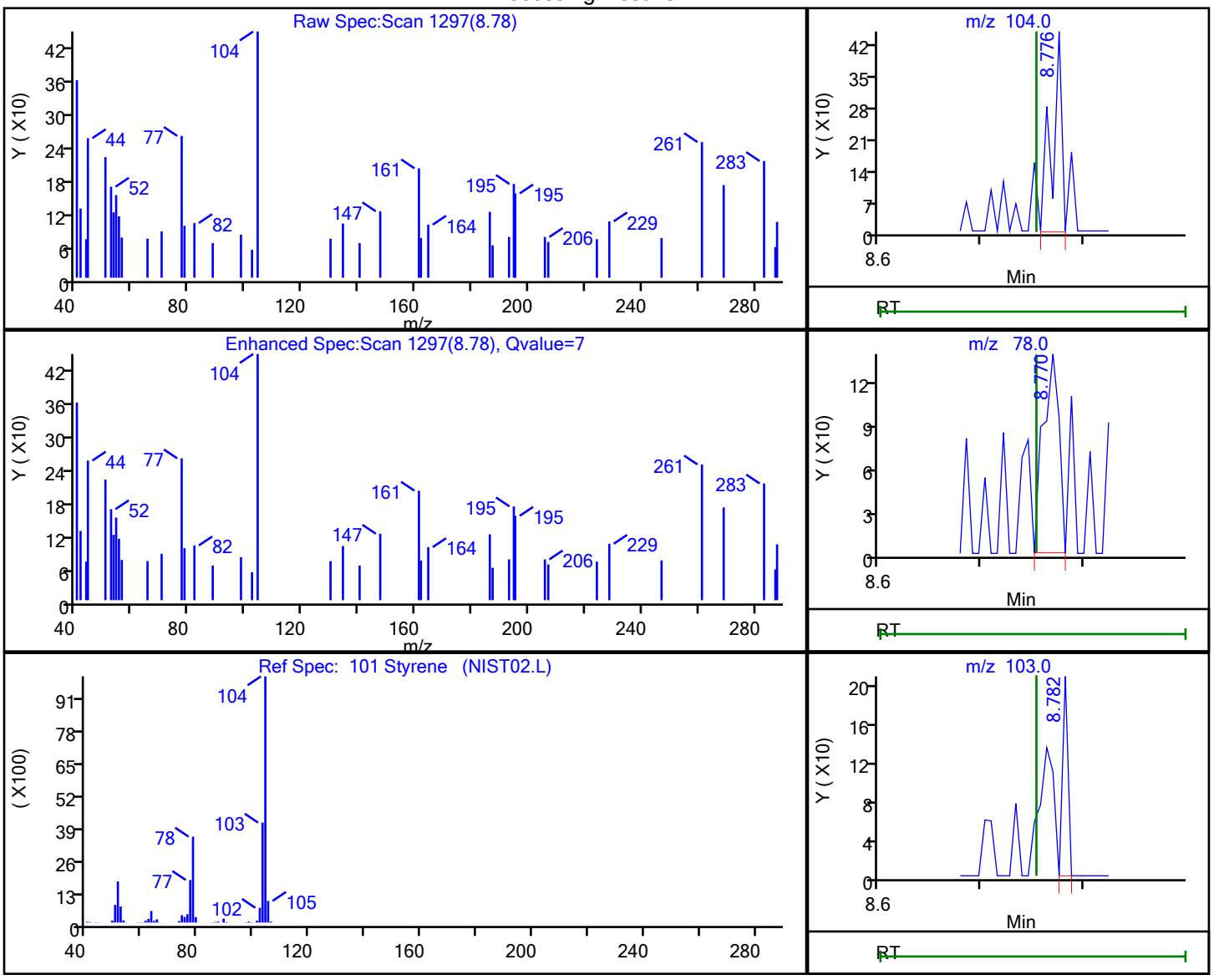
User Disabled Compound Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971286.D
Injection Date: 20-Oct-2023 13:48:30 Instrument ID: CVOAMS8
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

101 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.78	104.00	287	0.542887
8.77	78.00	149	
8.78	103.00	76	

Reviewer: W9CM, 20-Oct-2023 18:15:46 -04:00:00 (UTC)
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-939407/18

Matrix: Water | Lab File ID: J971282.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	17.3		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	20.4		1.0	0.37
76-13-1	Freon TF	16.5		1.0	0.31
79-00-5	1,1,2-Trichloroethane	16.6		1.0	0.20
75-34-3	1,1-Dichloroethane	14.7		1.0	0.26
75-35-4	1,1-Dichloroethene	15.3		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	20.2		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	20.9		1.0	0.38
95-50-1	1,2-Dichlorobenzene	20.3		1.0	0.21
107-06-2	1,2-Dichloroethane	17.1		1.0	0.43
78-87-5	1,2-Dichloropropane	18.0		1.0	0.35
541-73-1	1,3-Dichlorobenzene	19.1		1.0	0.34
106-46-7	1,4-Dichlorobenzene	19.0		1.0	0.33
78-93-3	2-Butanone	89.8		5.0	1.9
591-78-6	2-Hexanone	104		5.0	1.1
108-10-1	4-Methyl-2-pentanone	105		5.0	1.3
67-64-1	Acetone	92.4		5.0	4.4
71-43-2	Benzene	16.8		1.0	0.20
75-25-2	Bromoform	17.5		1.0	0.54
74-83-9	Bromomethane	19.1		1.0	0.55
75-15-0	Carbon disulfide	12.9		1.0	0.82
56-23-5	Carbon tetrachloride	17.0		1.0	0.21
108-90-7	Chlorobenzene	17.7		1.0	0.38
124-48-1	Dibromochloromethane	16.7		1.0	0.28
75-00-3	Chloroethane	20.9		1.0	0.32
67-66-3	Chloroform	17.6		1.0	0.33
74-87-3	Chloromethane	19.4		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	17.8		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	15.1		1.0	0.22
110-82-7	Cyclohexane	15.2		1.0	0.32
75-27-4	Bromodichloromethane	18.0		1.0	0.34
75-71-8	Dichlorodifluoromethane	19.3		1.0	0.31
100-41-4	Ethylbenzene	16.7		1.0	0.30
106-93-4	1,2-Dibromoethane	17.0		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-939407/18

Matrix: Water | Lab File ID: J971282.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	18.5		1.0	0.34
79-20-9	Methyl acetate	33.8		5.0	0.79
1634-04-4	MTBE	15.8		1.0	0.22
108-87-2	Methylcyclohexane	14.5		1.0	0.71
75-09-2	Methylene Chloride	16.6		1.0	0.32
100-42-5	Styrene	18.7		1.0	0.42
127-18-4	Tetrachloroethene	16.2		1.0	0.25
108-88-3	Toluene	15.9		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	14.9		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	16.7		1.0	0.22
79-01-6	Trichloroethene	16.4		1.0	0.31
75-69-4	Trichlorofluoromethane	20.9		1.0	0.32
75-01-4	Vinyl chloride	17.9		1.0	0.17
1330-20-7	Xylenes, Total	33.9		2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
460-00-4	Bromofluorobenzene	101		70-130
1868-53-7	Dibromofluoromethane (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971282.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Oct-2023 12:08:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0167608-018
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 17:03:04 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 18:14:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.133	1.127	0.006	91	6984	20.0	44.1	
4 Dichlorodifluoromethane	85	1.157	1.152	0.005	99	57031	20.0	19.3	
5 Chlorodifluoromethane	67	1.175	1.170	0.005	96	10516	20.0	21.8	
6 Chloromethane	50	1.285	1.279	0.006	99	57984	20.0	19.4	
7 Vinyl chloride	62	1.346	1.340	0.006	99	54311	20.0	17.9	
8 Butadiene	54	1.358	1.352	0.006	96	53614	20.0	18.4	
9 Bromomethane	94	1.552	1.547	0.005	98	37956	20.0	19.1	
10 Chloroethane	64	1.613	1.608	0.005	99	33270	20.0	20.9	
12 Dichlorofluoromethane	67	1.729	1.729	0.000	99	124079	20.0	19.8	
11 Trichlorofluoromethane	101	1.735	1.736	-0.001	98	121033	20.0	20.9	
13 Pentane	43	1.771	1.766	0.005	92	84809	40.0	26.7	
14 Ethanol	46	1.869	1.863	0.006	98	8273	800.0	866.5	
15 Ethyl ether	59	1.905	1.906	-0.001	96	34771	20.0	15.5	
16 2-Methyl-1,3-butadiene	53	1.923	1.924	-0.001	93	40485	20.0	16.1	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.936	1.930	0.006	94	58879	20.0	19.5	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.972	1.973	-0.001	97	105985	20.0	19.8	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.033	2.027	0.006	97	52778	20.0	16.5	
19 Acrolein	56	2.033	2.034	-0.001	44	11522	39.5	31.8	
21 1,1-Dichloroethene	96	2.063	2.058	0.005	99	46433	20.0	15.3	
22 Acetone	43	2.130	2.125	0.005	85	59554	100.0	92.4	
23 Iodomethane	142	2.185	2.179	0.006	100	42507	20.0	15.2	
25 Isopropyl alcohol	45	2.185	2.179	0.006	62	22178	200.0	217.3	
24 Carbon disulfide	76	2.209	2.210	-0.001	99	119444	20.0	12.9	
26 3-Chloro-1-propene	76	2.306	2.301	0.005	94	31872	20.0	15.2	
28 Methyl acetate	43	2.306	2.307	-0.001	99	53953	40.0	33.8	
27 Cyclopentene	67	2.325	2.319	0.006	95	106749	20.0	16.8	
29 Acetonitrile	41	2.355	2.350	0.005	98	55448	200.0	212.6	
* 30 TBA-d9 (IS)	65	2.386	2.380	0.006	77	197347	1000.0	1000.0	
31 Methylene Chloride	84	2.410	2.404	0.006	93	59350	20.0	16.6	
32 2-Methyl-2-propanol	59	2.440	2.441	-0.001	98	33640	200.0	198.0	
33 Methyl tert-butyl ether	73	2.531	2.526	0.005	97	111143	20.0	15.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96	2.556	2.550	0.006	96	54912	20.0	14.9	
35 Acrylonitrile	53	2.611	2.605	0.006	94	153932	200.0	203.2	
36 Hexane	57	2.677	2.672	0.005	91	22546	20.0	11.1	
37 Isopropyl ether	45	2.842	2.842	0.000	96	111617	20.0	14.7	
38 1,1-Dichloroethane	63	2.878	2.873	0.005	99	97431	20.0	14.7	
39 Vinyl acetate	43	2.890	2.885	0.005	99	115917	40.0	27.9	
40 2-Chloro-1,3-butadiene	88	2.921	2.915	0.006	92	37862	20.0	15.3	
41 Tert-butyl ethyl ether	59	3.115	3.116	-0.001	88	89127	20.0	13.4	
* 43 2-Butanone-d5	46	3.298	3.292	0.006	99	209413	250.0	250.0	
42 2,2-Dichloropropane	79	3.304	3.292	0.012	74	26607	20.0	17.7	
44 cis-1,2-Dichloroethene	96	3.334	3.323	0.011	97	53619	20.0	17.8	
46 2-Butanone (MEK)	72	3.346	3.341	0.005	96	16220	100.0	89.8	
45 Ethyl acetate	70	3.346	3.347	-0.001	94	6979	40.0	42.5	
47 Methyl acrylate	55	3.395	3.390	0.005	99	22785	20.0	16.6	
48 Propionitrile	54	3.462	3.457	0.005	96	51075	200.0	215.5	
50 Chlorobromomethane	128	3.535	3.530	0.005	84	27022	20.0	17.8	
49 Tetrahydrofuran	72	3.541	3.530	0.011	49	7679	40.0	39.5	
51 Methacrylonitrile	67	3.553	3.548	0.005	92	147783	200.0	197.9	
52 Chloroform	83	3.577	3.572	0.005	98	99978	20.0	17.6	
53 Cyclohexane	84	3.693	3.688	0.005	89	38051	20.0	15.2	
54 1,1,1-Trichloroethane	97	3.705	3.706	-0.001	98	79076	20.0	17.3	
$ 55 Dibromofluoromethane (Surr)	113	3.723	3.718	0.005	95	176500	50.0	51.1	
56 Carbon tetrachloride	117	3.821	3.815	0.006	98	67309	20.0	17.0	
57 1,1-Dichloropropene	75	3.851	3.846	0.005	98	50886	20.0	16.7	
58 Isobutyl alcohol	43	3.979	3.973	0.006	95	38656	500.0	593.3	
59 Isooctane	57	4.003	4.004	-0.001	95	58522	20.0	21.5	a
60 Benzene	78	4.034	4.028	0.006	97	165092	20.0	16.8	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.052	4.046	0.006	0	180657	50.0	48.2	
62 Isopropyl acetate	43	4.094	4.089	0.005	87	79684	20.0	18.0	
63 Tert-amyl methyl ether	55	4.088	4.089	-0.001	85	23580	20.0	16.7	
64 1,2-Dichloroethane	62	4.125	4.119	0.006	98	68354	20.0	17.1	
65 n-Heptane	57	4.180	4.180	0.000	89	8425	20.0	13.9	
* 66 Fluorobenzene	96	4.313	4.308	0.005	99	567932	50.0	50.0	
67 n-Butanol	56	4.648	4.642	0.006	46	12948	500.0	488.0	
68 Trichloroethene	95	4.660	4.655	0.005	99	42708	20.0	16.4	
69 Methylcyclohexane	83	4.775	4.770	0.005	89	27853	20.0	14.5	
70 Ethyl acrylate	55	4.788	4.782	0.006	96	51626	20.0	15.5	
71 1,2-Dichloropropane	63	4.946	4.940	0.006	90	43709	20.0	18.0	
* 72 1,4-Dioxane-d8	96	5.019	5.007	0.012	0	23916	1000.0	1000.0	
73 Methyl methacrylate	100	5.043	5.032	0.011	90	15168	40.0	39.8	
75 1,4-Dioxane	88	5.086	5.062	0.024	43	8224	400.0	407.2	
74 Dibromomethane	93	5.080	5.074	0.006	95	32778	20.0	17.7	
76 n-Propyl acetate	43	5.104	5.092	0.012	97	38159	20.0	18.4	
77 Dichlorobromomethane	83	5.244	5.232	0.012	99	69665	20.0	18.0	
78 2-Nitropropane	41	5.590	5.585	0.005	96	19016	40.0	30.1	
79 2-Chloroethyl vinyl ether	63	5.603	5.603	0.000	58	10368	20.0	12.1	
80 Epichlorohydrin	57	5.724	5.707	0.017	85	2895	20.0	23.8	
81 cis-1,3-Dichloropropene	75	5.773	5.761	0.012	94	58439	20.0	15.1	
82 4-Methyl-2-pentanone (MIBK)	43	5.955	5.944	0.011	97	118303	100.0	105.4	
$ 83 Toluene-d8 (Surr)	98	6.022	6.017	0.005	99	477451	50.0	50.4	
84 Toluene	91	6.107	6.102	0.005	93	152136	20.0	15.9	
85 trans-1,3-Dichloropropene	75	6.503	6.497	0.006	97	56966	20.0	16.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Ethyl methacrylate	69	6.551	6.546	0.005	89	32075	20.0	18.5	
87 1,1,2-Trichloroethane	83	6.734	6.734	0.000	94	32155	20.0	16.6	
88 Tetrachloroethene	166	6.770	6.765	0.005	96	39223	20.0	16.2	
89 1,3-Dichloropropane	76	6.965	6.959	0.006	94	53833	20.0	16.6	
90 2-Hexanone	58	7.062	7.057	0.005	98	43342	100.0	103.6	
91 n-Butyl acetate	43	7.208	7.197	0.011	97	42351	20.0	20.4	
92 Chlorodibromomethane	129	7.220	7.215	0.005	97	47475	20.0	16.7	
93 Ethylene Dibromide	107	7.384	7.373	0.011	98	40027	20.0	17.0	
* 94 Chlorobenzene-d5	117	7.974	7.969	0.005	86	420517	50.0	50.0	
95 Chlorobenzene	112	8.011	8.005	0.006	96	114446	20.0	17.7	
96 Ethylbenzene	106	8.120	8.115	0.005	99	48468	20.0	16.7	
97 1,1,1,2-Tetrachloroethane	131	8.138	8.127	0.011	95	41685	20.0	17.4	
98 m-Xylene & p-Xylene	106	8.272	8.267	0.005	0	57855	20.0	17.5	
99 o-Xylene	106	8.728	8.717	0.011	94	54350	20.0	16.4	
100 n-Butyl acrylate	73	8.747	8.741	0.006	97	23732	20.0	18.5	
101 Styrene	104	8.759	8.753	0.006	95	112334	20.0	18.7	
103 Bromoform	173	8.978	8.966	0.012	95	31641	20.0	17.5	
102 Amyl acetate (mixed isomers)	43	8.990	8.991	-0.001	90	45498	20.0	21.6	
104 Isopropylbenzene	105	9.105	9.100	0.005	97	135165	20.0	18.5	
$ 105 4-Bromofluorobenzene	174	9.306	9.307	-0.001	93	142156	50.0	50.3	
106 Bromobenzene	156	9.434	9.428	0.006	95	44729	20.0	17.7	
107 1,1,2,2-Tetrachloroethane	83	9.501	9.495	0.006	98	49531	20.0	20.4	
108 N-Propylbenzene	91	9.519	9.514	0.005	99	148617	20.0	18.2	
109 1,2,3-Trichloropropane	110	9.537	9.532	0.005	96	12447	20.0	19.7	
110 trans-1,4-Dichloro-2-butene	53	9.568	9.562	0.006	93	13641	20.0	20.0	
111 2-Chlorotoluene	91	9.616	9.611	0.005	97	125655	20.0	19.1	
112 4-Ethyltoluene	105	9.628	9.623	0.005	97	141022	20.0	20.1	
113 1,3,5-Trimethylbenzene	105	9.695	9.690	0.005	93	102418	20.0	17.6	
114 4-Chlorotoluene	91	9.726	9.720	0.006	98	117074	20.0	19.1	
115 Butyl Methacrylate	87	9.811	9.805	0.006	94	37012	20.0	17.4	
116 tert-Butylbenzene	119	9.975	9.970	0.005	93	80874	20.0	19.7	
117 1,2,4-Trimethylbenzene	105	10.036	10.030	0.006	98	108934	20.0	18.1	
118 sec-Butylbenzene	105	10.170	10.170	0.000	98	110866	20.0	19.0	
120 1,3-Dichlorobenzene	146	10.291	10.292	-0.001	96	81565	20.0	19.1	
119 4-Isopropyltoluene	119	10.303	10.298	0.005	97	91560	20.0	18.1	
* 121 1,4-Dichlorobenzene-d4	152	10.358	10.353	0.005	97	212030	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.382	10.377	0.005	97	91216	20.0	19.0	
123 1,2,3-Trimethylbenzene	105	10.401	10.395	0.006	99	143290	20.0	20.7	
124 Benzyl chloride	91	10.510	10.505	0.005	98	92172	20.0	20.5	
125 2,3-Dihydroindene	117	10.565	10.560	0.005	94	141559	20.0	20.3	
126 p-Diethylbenzene	119	10.626	10.620	0.006	91	67595	20.0	20.8	
127 n-Butylbenzene	92	10.644	10.639	0.005	99	58347	20.0	20.8	
128 1,2-Dichlorobenzene	146	10.693	10.687	0.006	96	87870	20.0	20.3	
129 1,2,4,5-Tetramethylbenzene	119	11.252	11.247	0.005	98	91312	20.0	20.0	
130 1,2-Dibromo-3-Chloropropane	157	11.331	11.326	0.005	95	10764	20.0	20.9	
131 1,3,5-Trichlorobenzene	180	11.441	11.435	0.006	97	53732	20.0	20.8	
132 1,2,4-Trichlorobenzene	180	11.915	11.910	0.005	94	47025	20.0	20.2	
133 Hexachlorobutadiene	225	12.000	11.995	0.005	94	17277	20.0	20.9	
134 Naphthalene	128	12.104	12.098	0.006	99	117916	20.0	22.7	
135 1,2,3-Trichlorobenzene	180	12.274	12.274	0.000	96	44131	20.0	21.2	
S 136 1,2-Dichloroethene, Total	100				0		40.0	32.7	
S 137 Xylenes, Total	100				0		40.0	33.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 138 Total BTEX	1				0		100.0	83.4	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

GAS C SP_00537	Amount Added:	20.00	Units: uL	
8260 SP_00171	Amount Added:	20.00	Units: uL	
EthhexAcr_SS_00004	Amount Added:	20.00	Units: uL	
ACROLEIN SP_00157	Amount Added:	4.00	Units: uL	
7 Freons SS_00006	Amount Added:	20.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 19:09:27 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971282.D

Injection Date: 20-Oct-2023 12:08:30 Instrument ID: CVOAMS8 Operator ID:

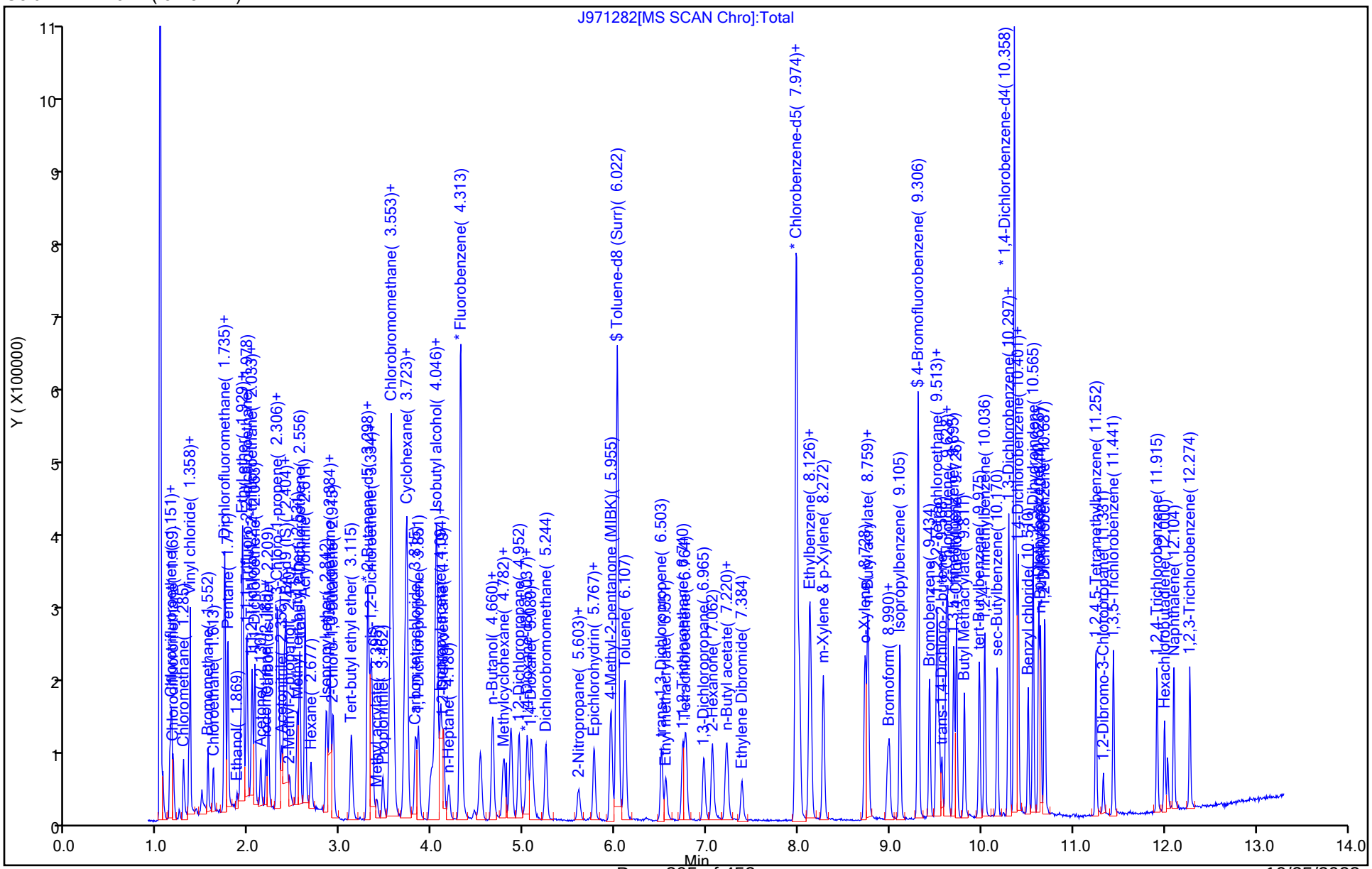
Lims ID: LCS Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-939407/19

Matrix: Water | Lab File ID: J971283.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 12:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	18.0		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	18.9		1.0	0.37
76-13-1	Freon TF	17.5		1.0	0.31
79-00-5	1,1,2-Trichloroethane	17.2		1.0	0.20
75-34-3	1,1-Dichloroethane	15.5		1.0	0.26
75-35-4	1,1-Dichloroethene	16.1		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	20.0		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	20.0		1.0	0.38
95-50-1	1,2-Dichlorobenzene	19.6		1.0	0.21
107-06-2	1,2-Dichloroethane	17.2		1.0	0.43
78-87-5	1,2-Dichloropropane	17.3		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.1		1.0	0.34
106-46-7	1,4-Dichlorobenzene	18.2		1.0	0.33
78-93-3	2-Butanone	94.0		5.0	1.9
591-78-6	2-Hexanone	103		5.0	1.1
108-10-1	4-Methyl-2-pentanone	102		5.0	1.3
67-64-1	Acetone	90.9		5.0	4.4
71-43-2	Benzene	18.2		1.0	0.20
75-25-2	Bromoform	18.1		1.0	0.54
74-83-9	Bromomethane	17.8		1.0	0.55
75-15-0	Carbon disulfide	13.1		1.0	0.82
56-23-5	Carbon tetrachloride	16.9		1.0	0.21
108-90-7	Chlorobenzene	18.3		1.0	0.38
124-48-1	Dibromochloromethane	17.4		1.0	0.28
75-00-3	Chloroethane	21.6		1.0	0.32
67-66-3	Chloroform	18.3		1.0	0.33
74-87-3	Chloromethane	19.7		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	18.2		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	15.8		1.0	0.22
110-82-7	Cyclohexane	15.8		1.0	0.32
75-27-4	Bromodichloromethane	17.5		1.0	0.34
75-71-8	Dichlorodifluoromethane	18.6		1.0	0.31
100-41-4	Ethylbenzene	17.5		1.0	0.30
106-93-4	1,2-Dibromoethane	17.1		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-939407/19

Matrix: Water | Lab File ID: J971283.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 12:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	20.5		1.0	0.34
79-20-9	Methyl acetate	32.1		5.0	0.79
1634-04-4	MTBE	15.0		1.0	0.22
108-87-2	Methylcyclohexane	14.5		1.0	0.71
75-09-2	Methylene Chloride	16.7		1.0	0.32
100-42-5	Styrene	19.0		1.0	0.42
127-18-4	Tetrachloroethene	16.4		1.0	0.25
108-88-3	Toluene	16.8		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	14.5		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	17.4		1.0	0.22
79-01-6	Trichloroethene	16.9		1.0	0.31
75-69-4	Trichlorofluoromethane	18.9		1.0	0.32
75-01-4	Vinyl chloride	19.7		1.0	0.17
1330-20-7	Xylenes, Total	36.2		2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
460-00-4	Bromofluorobenzene	104		70-130
1868-53-7	Dibromofluoromethane (Surr)	101		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971283.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Oct-2023 12:33:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0167608-019
Operator ID: Instrument ID: CVOAMS8

Method: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\8260_W8.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 20-Oct-2023 18:57:33 Calib Date: 20-Oct-2023 11:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971280.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1666

First Level Reviewer: W9CM Date: 20-Oct-2023 19:12:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorotrifluoroethene	118	1.133	1.127	0.006	95	6488	20.0	41.2	
4 Dichlorodifluoromethane	85	1.157	1.152	0.005	99	54669	20.0	18.6	
5 Chlorodifluoromethane	67	1.169	1.170	-0.001	97	10300	20.0	21.5	
6 Chloromethane	50	1.285	1.279	0.006	99	58642	20.0	19.7	
7 Vinyl chloride	62	1.346	1.340	0.006	99	59366	20.0	19.7	
8 Butadiene	54	1.358	1.352	0.006	97	55219	20.0	19.1	
9 Bromomethane	94	1.552	1.547	0.005	95	35179	20.0	17.8	
10 Chloroethane	64	1.613	1.608	0.005	99	34119	20.0	21.6	
12 Dichlorofluoromethane	67	1.729	1.729	0.000	98	111653	20.0	18.0	
11 Trichlorofluoromethane	101	1.741	1.736	0.005	99	108550	20.0	18.9	
13 Pentane	43	1.771	1.766	0.005	96	76366	40.0	24.2	
14 Ethanol	46	1.869	1.863	0.006	98	7267	800.0	811.8	
15 Ethyl ether	59	1.905	1.906	-0.001	97	32220	20.0	14.4	
16 2-Methyl-1,3-butadiene	53	1.929	1.924	0.005	97	39540	20.0	15.8	
17 1,2-Dichloro-1,1,2-trifluoroetha	117	1.935	1.930	0.005	95	56542	20.0	18.8	
18 1,1,1-Trifluoro-2,2-dichloroetha	83	1.978	1.973	0.005	96	107883	20.0	20.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.033	2.027	0.006	96	55574	20.0	17.5	
19 Acrolein	56	2.039	2.034	0.005	46	11015	39.5	32.4	
21 1,1-Dichloroethene	96	2.063	2.058	0.005	99	48421	20.0	16.1	
22 Acetone	43	2.124	2.125	-0.001	87	56338	100.0	90.9	
23 Iodomethane	142	2.185	2.179	0.006	99	46201	20.0	16.6	
25 Isopropyl alcohol	45	2.185	2.179	0.006	55	19964	200.0	208.6	
24 Carbon disulfide	76	2.215	2.210	0.005	100	120287	20.0	13.1	
26 3-Chloro-1-propene	76	2.306	2.301	0.005	92	34789	20.0	16.7	
28 Methyl acetate	43	2.312	2.307	0.005	98	47931	40.0	32.1	
27 Cyclopentene	67	2.325	2.319	0.006	95	101571	20.0	16.1	
29 Acetonitrile	41	2.355	2.350	0.005	97	59466	200.0	243.2	
* 30 TBA-d9 (IS)	65	2.385	2.380	0.005	77	185022	1000.0	1000.0	
31 Methylene Chloride	84	2.404	2.404	0.000	92	59444	20.0	16.7	
32 2-Methyl-2-propanol	59	2.446	2.441	0.005	98	34134	200.0	214.3	
33 Methyl tert-butyl ether	73	2.531	2.526	0.005	97	104645	20.0	15.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96	2.556	2.550	0.006	97	52978	20.0	14.5	
35 Acrylonitrile	53	2.610	2.605	0.005	95	142751	200.0	201.0	
36 Hexane	57	2.677	2.672	0.005	87	21597	20.0	10.7	
37 Isopropyl ether	45	2.848	2.842	0.006	97	114872	20.0	15.2	
38 1,1-Dichloroethane	63	2.884	2.873	0.011	99	101882	20.0	15.5	
39 Vinyl acetate	43	2.890	2.885	0.005	100	106894	40.0	25.9	
40 2-Chloro-1,3-butadiene	88	2.915	2.915	0.000	93	38212	20.0	15.6	
41 Tert-butyl ethyl ether	59	3.121	3.116	0.005	89	82552	20.0	12.5	
* 43 2-Butanone-d5	46	3.298	3.292	0.006	97	201323	250.0	250.0	
42 2,2-Dichloropropane	79	3.310	3.292	0.018	90	25772	20.0	17.3	
44 cis-1,2-Dichloroethene	96	3.328	3.323	0.005	97	54414	20.0	18.2	
46 2-Butanone (MEK)	72	3.346	3.341	0.005	96	16322	100.0	94.0	
45 Ethyl acetate	70	3.346	3.347	-0.001	93	5789	40.0	36.6	
47 Methyl acrylate	55	3.395	3.390	0.005	100	22710	20.0	16.6	
48 Propionitrile	54	3.462	3.457	0.005	97	46797	200.0	210.6	
50 Chlorobromomethane	128	3.535	3.530	0.005	87	25691	20.0	17.0	
49 Tetrahydrofuran	72	3.541	3.530	0.011	47	7946	40.0	42.5	
51 Methacrylonitrile	67	3.553	3.548	0.005	92	140408	200.0	189.4	
52 Chloroform	83	3.583	3.572	0.011	98	102985	20.0	18.3	
53 Cyclohexane	84	3.693	3.688	0.005	93	39062	20.0	15.8	
54 1,1,1-Trichloroethane	97	3.711	3.706	0.005	99	81367	20.0	18.0	
$ 55 Dibromofluoromethane (Surr)	113	3.723	3.718	0.005	95	173835	50.0	50.7	
56 Carbon tetrachloride	117	3.821	3.815	0.006	98	66409	20.0	16.9	
57 1,1-Dichloropropene	75	3.851	3.846	0.005	96	49994	20.0	16.5	
58 Isobutyl alcohol	43	3.979	3.973	0.006	96	36557	500.0	598.4	
59 Isooctane	57	4.003	4.004	-0.001	96	56842	20.0	21.0	
60 Benzene	78	4.033	4.028	0.005	98	165004	20.0	18.2	
$ 61 1,2-Dichloroethane-d4 (Surr)	65	4.052	4.046	0.006	0	177354	50.0	47.6	
62 Isopropyl acetate	43	4.094	4.089	0.005	87	73103	20.0	16.6	
63 Tert-amyl methyl ether	55	4.094	4.089	0.005	89	22801	20.0	16.3	
64 1,2-Dichloroethane	62	4.125	4.119	0.006	98	68274	20.0	17.2	
65 n-Heptane	57	4.179	4.180	-0.001	89	9492	20.0	15.8	
* 66 Fluorobenzene	96	4.313	4.308	0.005	99	563600	50.0	50.0	
67 n-Butanol	56	4.648	4.642	0.006	52	11301	500.0	454.6	
68 Trichloroethene	95	4.660	4.655	0.005	97	43850	20.0	16.9	
69 Methylcyclohexane	83	4.781	4.770	0.011	91	27501	20.0	14.5	
70 Ethyl acrylate	55	4.788	4.782	0.006	94	53405	20.0	16.2	a
71 1,2-Dichloropropane	63	4.946	4.940	0.006	87	41802	20.0	17.3	
* 72 1,4-Dioxane-d8	96	5.019	5.007	0.012	0	24510	1000.0	1000.0	
73 Methyl methacrylate	100	5.043	5.032	0.011	90	13415	40.0	35.5	
75 1,4-Dioxane	88	5.086	5.062	0.024	43	8452	400.0	408.4	
74 Dibromomethane	93	5.086	5.074	0.012	96	34117	20.0	18.5	
76 n-Propyl acetate	43	5.104	5.092	0.012	97	35832	20.0	17.4	
77 Dichlorobromomethane	83	5.244	5.232	0.012	98	67117	20.0	17.5	
78 2-Nitropropane	41	5.590	5.585	0.005	99	18993	40.0	32.1	
79 2-Chloroethyl vinyl ether	63	5.609	5.603	0.006	85	10748	20.0	12.7	
80 Epichlorohydrin	57	5.724	5.707	0.017	85	2473	20.0	21.1	
81 cis-1,3-Dichloropropene	75	5.767	5.761	0.006	94	56179	20.0	15.8	
82 4-Methyl-2-pentanone (MIBK)	43	5.955	5.944	0.011	99	110117	100.0	102.1	
$ 83 Toluene-d8 (Surr)	98	6.022	6.017	0.005	100	439540	50.0	50.4	
84 Toluene	91	6.107	6.102	0.005	93	147576	20.0	16.8	
85 trans-1,3-Dichloropropene	75	6.509	6.497	0.012	96	54725	20.0	17.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Ethyl methacrylate	69	6.551	6.546	0.005	91	30437	20.0	17.6	
87 1,1,2-Trichloroethane	83	6.740	6.734	0.006	95	30645	20.0	17.2	
88 Tetrachloroethene	166	6.770	6.765	0.005	93	36714	20.0	16.4	
89 1,3-Dichloropropane	76	6.965	6.959	0.006	92	50391	20.0	16.9	
90 2-Hexanone	58	7.062	7.057	0.005	97	41567	100.0	103.3	
91 n-Butyl acetate	43	7.202	7.197	0.005	98	38499	20.0	20.1	
92 Chlorodibromomethane	129	7.226	7.215	0.011	98	45528	20.0	17.4	
93 Ethylene Dibromide	107	7.384	7.373	0.011	96	37083	20.0	17.1	
* 94 Chlorobenzene-d5	117	7.974	7.969	0.005	86	386908	50.0	50.0	
95 Chlorobenzene	112	8.011	8.005	0.006	96	108810	20.0	18.3	
96 Ethylbenzene	106	8.120	8.115	0.005	99	46614	20.0	17.5	
97 1,1,1,2-Tetrachloroethane	131	8.132	8.127	0.005	95	36827	20.0	16.7	
98 m-Xylene & p-Xylene	106	8.272	8.267	0.005	0	54495	20.0	17.9	
99 o-Xylene	106	8.728	8.717	0.011	95	55607	20.0	18.2	
100 n-Butyl acrylate	73	8.747	8.741	0.006	95	22827	20.0	19.3	
101 Styrene	104	8.765	8.753	0.012	96	105090	20.0	19.0	
103 Bromoform	173	8.972	8.966	0.006	92	29980	20.0	18.1	
102 Amyl acetate (mixed isomers)	43	8.996	8.991	0.005	88	44951	20.0	20.6	
104 Isopropylbenzene	105	9.111	9.100	0.011	93	138128	20.0	20.5	
$ 105 4-Bromofluorobenzene	174	9.312	9.307	0.005	94	135695	50.0	52.2	
106 Bromobenzene	156	9.434	9.428	0.006	93	50007	20.0	19.1	
107 1,1,2,2-Tetrachloroethane	83	9.501	9.495	0.006	97	47603	20.0	18.9	
108 N-Propylbenzene	91	9.519	9.514	0.005	99	153597	20.0	18.1	
109 1,2,3-Trichloropropane	110	9.543	9.532	0.011	97	12892	20.0	19.7	
110 trans-1,4-Dichloro-2-butene	53	9.568	9.562	0.006	89	14662	20.0	20.7	
111 2-Chlorotoluene	91	9.616	9.611	0.005	98	123118	20.0	18.0	
112 4-Ethyltoluene	105	9.628	9.623	0.005	98	140329	20.0	19.3	
113 1,3,5-Trimethylbenzene	105	9.695	9.690	0.005	92	108694	20.0	18.0	
114 4-Chlorotoluene	91	9.726	9.720	0.006	97	124195	20.0	19.5	
115 Butyl Methacrylate	87	9.811	9.805	0.006	96	38290	20.0	17.4	
116 tert-Butylbenzene	119	9.975	9.970	0.005	91	81042	20.0	19.0	
117 1,2,4-Trimethylbenzene	105	10.036	10.030	0.006	98	109701	20.0	17.6	
118 sec-Butylbenzene	105	10.170	10.170	0.000	99	119592	20.0	19.7	
120 1,3-Dichlorobenzene	146	10.297	10.292	0.005	96	89142	20.0	20.1	
119 4-Isopropyltoluene	119	10.303	10.298	0.005	97	99463	20.0	18.9	
* 121 1,4-Dichlorobenzene-d4	152	10.358	10.353	0.005	97	220258	50.0	50.0	
122 1,4-Dichlorobenzene	146	10.382	10.377	0.005	95	91010	20.0	18.2	
123 1,2,3-Trimethylbenzene	105	10.401	10.395	0.006	99	141986	20.0	19.7	
124 Benzyl chloride	91	10.510	10.505	0.005	98	91400	20.0	19.5	
125 2,3-Dihydroindene	117	10.565	10.560	0.005	93	145553	20.0	20.1	
126 p-Diethylbenzene	119	10.626	10.620	0.006	92	68939	20.0	20.4	
127 n-Butylbenzene	92	10.644	10.639	0.005	97	57811	20.0	19.9	
128 1,2-Dichlorobenzene	146	10.693	10.687	0.006	97	88174	20.0	19.6	
129 1,2,4,5-Tetramethylbenzene	119	11.252	11.247	0.005	97	93744	20.0	19.7	
130 1,2-Dibromo-3-Chloropropane	157	11.331	11.326	0.005	96	10703	20.0	20.0	
131 1,3,5-Trichlorobenzene	180	11.441	11.435	0.006	97	56411	20.0	21.0	
132 1,2,4-Trichlorobenzene	180	11.921	11.910	0.011	94	48533	20.0	20.0	
133 Hexachlorobutadiene	225	12.000	11.995	0.005	93	18958	20.0	22.1	
134 Naphthalene	128	12.103	12.098	0.005	99	127748	20.0	23.6	
135 1,2,3-Trichlorobenzene	180	12.274	12.274	0.000	94	47216	20.0	21.9	
S 136 1,2-Dichloroethene, Total	100				0		40.0	32.7	
S 137 Xylenes, Total	100				0		40.0	36.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 138 Total BTEX	1				0		100.0	88.7	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

GAS C SP_00537	Amount Added:	20.00	Units: uL	
8260 SP_00171	Amount Added:	20.00	Units: uL	
EthhexAcr_SS_00004	Amount Added:	20.00	Units: uL	
ACROLEIN SP_00157	Amount Added:	4.00	Units: uL	
7 Freons SS_00006	Amount Added:	20.00	Units: uL	
8260ISNEW_00171	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00241	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Oct-2023 19:12:23 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS8\20231020-167608.b\J971283.D

Injection Date: 20-Oct-2023 12:33:30 Instrument ID: CVOAMS8 Operator ID:

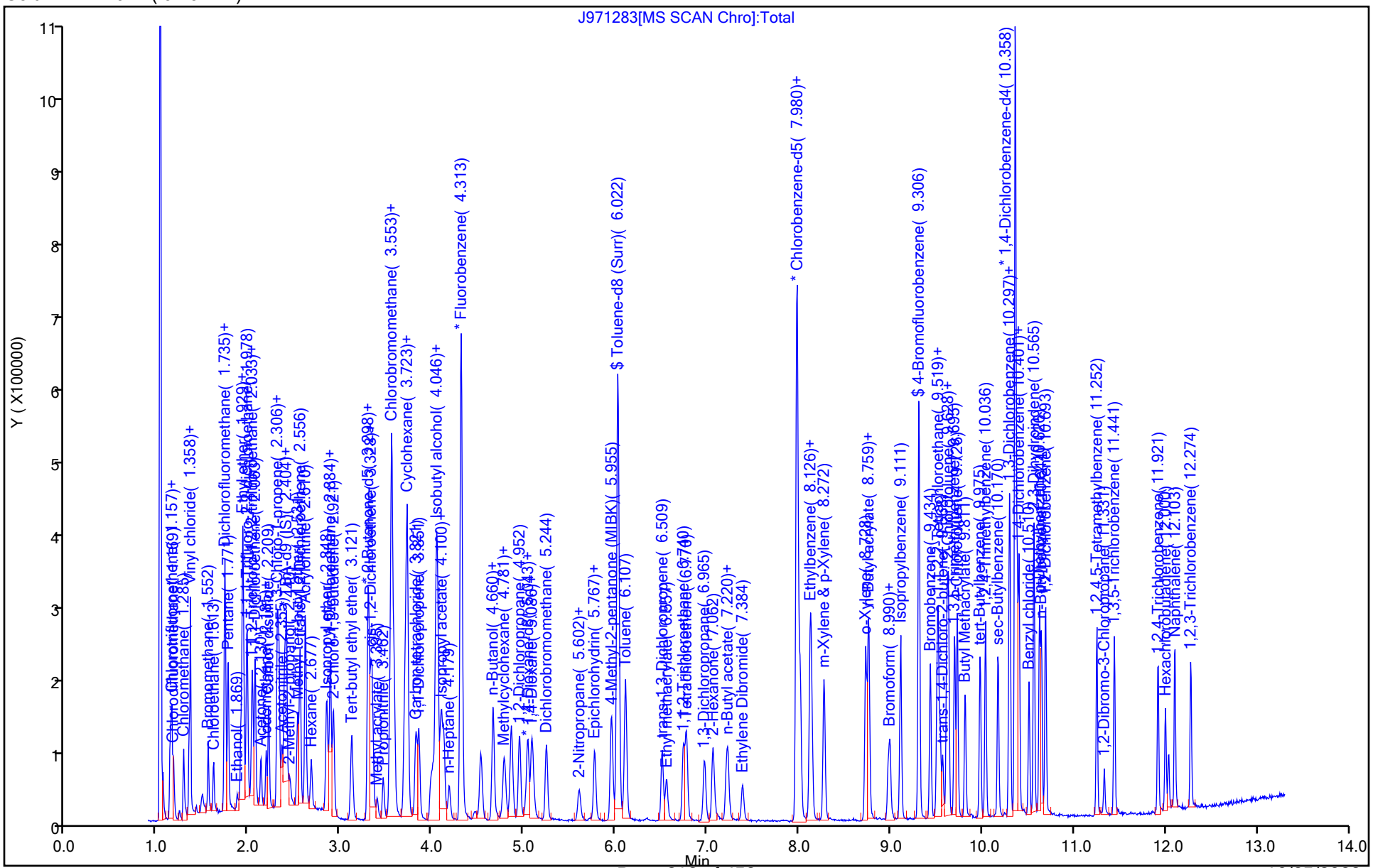
Lims ID: LCSD Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 18

Method: 8260_W8 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-290050-A-1 MS

Matrix: Water | Lab File ID: J971292.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 16:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.3		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	20.8		1.0	0.37
76-13-1	Freon TF	19.3		1.0	0.31
79-00-5	1,1,2-Trichloroethane	17.9		1.0	0.20
75-34-3	1,1-Dichloroethane	20.8		1.0	0.26
75-35-4	1,1-Dichloroethene	20.4		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	17.7		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	19.8		1.0	0.38
95-50-1	1,2-Dichlorobenzene	21.9		1.0	0.21
107-06-2	1,2-Dichloroethane	20.4		1.0	0.43
78-87-5	1,2-Dichloropropane	19.7		1.0	0.35
541-73-1	1,3-Dichlorobenzene	19.7		1.0	0.34
106-46-7	1,4-Dichlorobenzene	19.4		1.0	0.33
78-93-3	2-Butanone	102		5.0	1.9
591-78-6	2-Hexanone	102		5.0	1.1
108-10-1	4-Methyl-2-pentanone	107		5.0	1.3
67-64-1	Acetone	80.9		5.0	4.4
71-43-2	Benzene	20.8		1.0	0.20
75-25-2	Bromoform	20.6		1.0	0.54
74-83-9	Bromomethane	17.7		1.0	0.55
75-15-0	Carbon disulfide	26.7		1.0	0.82
56-23-5	Carbon tetrachloride	22.1		1.0	0.21
108-90-7	Chlorobenzene	20.5		1.0	0.38
124-48-1	Dibromochloromethane	21.3		1.0	0.28
75-00-3	Chloroethane	20.5		1.0	0.32
67-66-3	Chloroform	20.8		1.0	0.33
74-87-3	Chloromethane	20.1		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	27.1		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	19.2		1.0	0.22
110-82-7	Cyclohexane	22.0		1.0	0.32
75-27-4	Bromodichloromethane	20.8		1.0	0.34
75-71-8	Dichlorodifluoromethane	19.9		1.0	0.31
100-41-4	Ethylbenzene	19.5		1.0	0.30
106-93-4	1,2-Dibromoethane	21.1		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-290050-A-1 MS

Matrix: Water | Lab File ID: J971292.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 16:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	20.1		1.0	0.34
79-20-9	Methyl acetate	35.7		5.0	0.79
1634-04-4	MTBE	38.3		1.0	0.22
108-87-2	Methylcyclohexane	20.3		1.0	0.71
75-09-2	Methylene Chloride	20.4		1.0	0.32
100-42-5	Styrene	18.7		1.0	0.42
127-18-4	Tetrachloroethene	19.9		1.0	0.25
108-88-3	Toluene	19.4		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	20.3		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	17.3		1.0	0.22
79-01-6	Trichloroethene	68.9		1.0	0.31
75-69-4	Trichlorofluoromethane	20.2		1.0	0.32
75-01-4	Vinyl chloride	19.3		1.0	0.17
1330-20-7	Xylenes, Total	39.7		2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130
460-00-4	Bromofluorobenzene	105		70-130
1868-53-7	Dibromofluoromethane (Surr)	105		70-130
2037-26-5	Toluene-d8 (Surr)	103		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-290050-A-1 MSD

Matrix: Water | Lab File ID: J971293.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 16:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	20.7		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	19.7		1.0	0.37
76-13-1	Freon TF	17.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	17.6		1.0	0.20
75-34-3	1,1-Dichloroethane	16.8		1.0	0.26
75-35-4	1,1-Dichloroethene	15.7		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	19.8		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	22.7		1.0	0.38
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.21
107-06-2	1,2-Dichloroethane	19.6		1.0	0.43
78-87-5	1,2-Dichloropropane	18.6		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.3		1.0	0.34
106-46-7	1,4-Dichlorobenzene	18.8		1.0	0.33
78-93-3	2-Butanone	104		5.0	1.9
591-78-6	2-Hexanone	112		5.0	1.1
108-10-1	4-Methyl-2-pentanone	111		5.0	1.3
67-64-1	Acetone	71.3		5.0	4.4
71-43-2	Benzene	18.7		1.0	0.20
75-25-2	Bromoform	18.0		1.0	0.54
74-83-9	Bromomethane	16.8		1.0	0.55
75-15-0	Carbon disulfide	24.4		1.0	0.82
56-23-5	Carbon tetrachloride	20.2		1.0	0.21
108-90-7	Chlorobenzene	19.1		1.0	0.38
124-48-1	Dibromochloromethane	17.5		1.0	0.28
75-00-3	Chloroethane	19.0		1.0	0.32
67-66-3	Chloroform	19.7		1.0	0.33
74-87-3	Chloromethane	19.7		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	25.8		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	17.5		1.0	0.22
110-82-7	Cyclohexane	21.5		1.0	0.32
75-27-4	Bromodichloromethane	19.8		1.0	0.34
75-71-8	Dichlorodifluoromethane	18.7		1.0	0.31
100-41-4	Ethylbenzene	19.6		1.0	0.30
106-93-4	1,2-Dibromoethane	18.0		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-290050-A-1 MSD

Matrix: Water | Lab File ID: J971293.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2023 16:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 939407 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	20.1		1.0	0.34
79-20-9	Methyl acetate	30.5		5.0	0.79
1634-04-4	MTBE	34.0		1.0	0.22
108-87-2	Methylcyclohexane	18.8		1.0	0.71
75-09-2	Methylene Chloride	18.7		1.0	0.32
100-42-5	Styrene	19.3		1.0	0.42
127-18-4	Tetrachloroethene	18.4		1.0	0.25
108-88-3	Toluene	18.1		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	18.4		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	16.7		1.0	0.22
79-01-6	Trichloroethene	66.6		1.0	0.31
75-69-4	Trichlorofluoromethane	18.1		1.0	0.32
75-01-4	Vinyl chloride	18.6		1.0	0.17
1330-20-7	Xylenes, Total	38.4		2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
460-00-4	Bromofluorobenzene	102		70-130
1868-53-7	Dibromofluoromethane (Surr)	104		70-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: CVOAMS8 Start Date: 10/20/2023 02:42

Analysis Batch Number: 939407 End Date: 10/20/2023 19:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-939407/1		10/20/2023 02:42	1	J971265.D	Rtx-624 0.25(mm)
STD7 460-939407/3 IC		10/20/2023 03:31	1	J971267.D	Rtx-624 0.25(mm)
STD1 460-939407/4 IC		10/20/2023 03:56	1	J971268.D	Rtx-624 0.25(mm)
STD20 460-939407/6 ICIS		10/20/2023 04:46	1	J971270.D	Rtx-624 0.25(mm)
STD50 460-939407/7 IC		10/20/2023 05:11	1	J971271.D	Rtx-624 0.25(mm)
STD200 460-939407/8 IC		10/20/2023 05:36	1	J971272.D	Rtx-624 0.25(mm)
STD500 460-939407/9 IC		10/20/2023 06:01	1	J971273.D	Rtx-624 0.25(mm)
STD5 460-939407/16 IC		10/20/2023 11:18	1	J971280.D	Rtx-624 0.25(mm)
ICV 460-939407/17		10/20/2023 11:43	1	J971281.D	Rtx-624 0.25(mm)
LCS 460-939407/18		10/20/2023 12:08	1	J971282.D	Rtx-624 0.25(mm)
LCSD 460-939407/19		10/20/2023 12:33	1	J971283.D	Rtx-624 0.25(mm)
MB 460-939407/22		10/20/2023 13:48	1	J971286.D	Rtx-624 0.25(mm)
460-290512-1	Trip Blank	10/20/2023 14:13	1	J971287.D	Rtx-624 0.25(mm)
ZZZZZ		10/20/2023 14:38	1		Rtx-624 0.25(mm)
ZZZZZ		10/20/2023 15:03	1		Rtx-624 0.25(mm)
ZZZZZ		10/20/2023 15:28	1		Rtx-624 0.25(mm)
ZZZZZ		10/20/2023 15:53	10		Rtx-624 0.25(mm)
460-290050-A-1 MS		10/20/2023 16:18	1	J971292.D	Rtx-624 0.25(mm)
460-290050-A-1 MSD		10/20/2023 16:43	1	J971293.D	Rtx-624 0.25(mm)
460-290512-2	1000-101623-0002	10/20/2023 17:57	1	J971296.D	Rtx-624 0.25(mm)
460-290512-3	FDMH-1	10/20/2023 18:22	1	J971297.D	Rtx-624 0.25(mm)
460-290512-4	FDMH-2	10/20/2023 18:47	1	J971298.D	Rtx-624 0.25(mm)
460-290512-5	FDMH-4	10/20/2023 19:12	1	J971299.D	Rtx-624 0.25(mm)
ZZZZZ		10/20/2023 19:37	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 939407 Batch Start Date: 10/20/23 02:42 Batch Analyst: Boykin, Kenneth

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	14DIOXINTER 00161	524FREONS 00009	7 Freons Hi 00007
BFB 460-939407/1		8260D		5 mL	5 mL				
STD7 460-939407/3 IC		8260D		5 mL	5 mL		30 uL		
STD1 460-939407/4 IC		8260D		5 mL	5 mL		30 uL	10 uL	
STD20 460-939407/6 ICIS		8260D		5 mL	5 mL			20 uL	
STD50 460-939407/7 IC		8260D		5 mL	5 mL			50 uL	
STD200 460-939407/8 IC		8260D		5 mL	5 mL				20 uL
STD500 460-939407/9 IC		8260D		5 mL	5 mL				50 uL
STD5 460-939407/16 IC		8260D		5 mL	5 mL			10 uL	
ICV 460-939407/17		8260D		5 mL	5 mL				
LCS 460-939407/18		8260D		5 mL	5 mL				
LCSD 460-939407/19		8260D		5 mL	5 mL				
MB 460-939407/22		8260D		5 mL	5 mL				
460-290512-A-1	Trip Blank	8260D	T	5 mL	5 mL	<2 PH Units			
460-290050-A-1 MS	MW-15-24	8260D	T	5 mL	5 mL	<2 PH Units		20 uL	
460-290050-A-1 MSD	MW-15-24	8260D	T	5 mL	5 mL	<2 PH Units		20 uL	
460-290512-A-2	1000-101623-0002	8260D	T	5 mL	5 mL	<2 PH Units			
460-290512-B-3	FDMH-1	8260D	T	5 mL	5 mL	<2 PH Units			
460-290512-B-4	FDMH-2	8260D	T	5 mL	5 mL	<2 PH Units			
460-290512-B-5	FDMH-4	8260D	T	5 mL	5 mL	<2 PH Units			

Lab Sample ID	Client Sample ID	Method Chain	Basis	7 Freons SS 00006	8260 SP 00171	8260ISNEW 00171	8260MIX1COMB 00177	8260SURR250 00241	ACROLEIN SP 00157
BFB 460-939407/1		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 939407 Batch Start Date: 10/20/23 02:42 Batch Analyst: Boykin, Kenneth

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	7 Freons SS 00006	8260 SP 00171	8260ISNEW 00171	8260MIX1COMB 00177	8260SURR250 00241	ACROLEIN SP 00157
STD7 460-939407/3 IC		8260D				1 uL		1 uL	
STD1 460-939407/4 IC		8260D				1 uL	10 uL	1 uL	
STD20 460-939407/6 ICIS		8260D				1 uL	20 uL	1 uL	
STD50 460-939407/7 IC		8260D				1 uL	50 uL	1 uL	
STD200 460-939407/8 IC		8260D				1 uL		1 uL	
STD500 460-939407/9 IC		8260D				1 uL		1 uL	
STD5 460-939407/16 IC		8260D				1 uL	10 uL	1 uL	
ICV 460-939407/17		8260D		20 uL	20 uL	1 uL		1 uL	4 uL
LCS 460-939407/18		8260D		20 uL	20 uL	1 uL		1 uL	4 uL
LCSD 460-939407/19		8260D		20 uL	20 uL	1 uL		1 uL	4 uL
MB 460-939407/22		8260D				1 uL		1 uL	
460-290512-A-1	Trip Blank	8260D	T			1 uL		1 uL	
460-290050-A-1 MS	MW-15-24	8260D	T			1 uL	20 uL	1 uL	
460-290050-A-1 MSD	MW-15-24	8260D	T			1 uL	20 uL	1 uL	
460-290512-A-2	1000-101623-0002	8260D	T			1 uL		1 uL	
460-290512-B-3	FDMH-1	8260D	T			1 uL		1 uL	
460-290512-B-4	FDMH-2	8260D	T			1 uL		1 uL	
460-290512-B-5	FDMH-4	8260D	T			1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	ACROLEIN W 00160	BFB 00034	Ethanol mix 00082	EthhexAcr_SS 00004	EthyhexAcr_Hi 00004	EthyhexAcr_Li 00005
BFB 460-939407/1		8260D			1 uL				
STD7 460-939407/3 IC		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 939407 Batch Start Date: 10/20/23 02:42 Batch Analyst: Boykin, Kenneth

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ACROLEIN W 00160	BFB 00034	Ethanol mix 00082	EthhexAcr_SS 00004	EthyhexAcr_Hi 00004	EthyhexAcr_Li 00005
STD1 460-939407/4 IC		8260D		4 uL					10 uL
STD20 460-939407/6 ICIS		8260D		4 uL					20 uL
STD50 460-939407/7 IC		8260D		10 uL					50 uL
STD200 460-939407/8 IC		8260D		20 uL		20 uL		20 uL	
STD500 460-939407/9 IC		8260D		40 uL		50 uL		50 uL	
STD5 460-939407/16 IC		8260D		4 uL					10 uL
ICV 460-939407/17		8260D					20 uL		
LCS 460-939407/18		8260D					20 uL		
LCSD 460-939407/19		8260D					20 uL		
MB 460-939407/22		8260D							
460-290512-A-1	Trip Blank	8260D	T						
460-290050-A-1 MS	MW-15-24	8260D	T	4 uL					
460-290050-A-1 MSD	MW-15-24	8260D	T	4 uL					
460-290512-A-2	1000-101623-0002	8260D	T						
460-290512-B-3	FDMH-1	8260D	T						
460-290512-B-4	FDMH-2	8260D	T						
460-290512-B-5	FDMH-4	8260D	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	GAS C SP 00537	GAS Hi 00454	GASES Li 00553	MIX 2 Hi 00141	MIX I Hi 00169	VMTBA500 00040
BFB 460-939407/1		8260D							
STD7 460-939407/3 IC		8260D				2.5 uL			2 uL
STD1 460-939407/4 IC		8260D				10 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 939407 Batch Start Date: 10/20/23 02:42 Batch Analyst: Boykin, Kenneth

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	GAS C SP 00537	GAS Hi 00454	GASES Li 00553	MIX 2 Hi 00141	MIX I Hi 00169	VMTBA500 00040
STD20 460-939407/6 ICIS		8260D				20 uL			
STD50 460-939407/7 IC		8260D				50 uL			
STD200 460-939407/8 IC		8260D			20 uL		20 uL	20 uL	
STD500 460-939407/9 IC		8260D			50 uL		50 uL	50 uL	
STD5 460-939407/16 IC		8260D				10 uL			
ICV 460-939407/17		8260D		20 uL					
LCS 460-939407/18		8260D		20 uL					
LCSD 460-939407/19		8260D		20 uL					
MB 460-939407/22		8260D							
460-290512-A-1	Trip Blank	8260D	T						
460-290050-A-1 MS	MW-15-24	8260D	T			20 uL			
460-290050-A-1 MSD	MW-15-24	8260D	T			20 uL			
460-290512-A-2	1000-101623-0002	8260D	T						
460-290512-B-3	FDMH-1	8260D	T						
460-290512-B-4	FDMH-2	8260D	T						
460-290512-B-5	FDMH-4	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

522

1,4 Dioxane (GC/MS SIM)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DXE #
1000-101623-0002	460-290512-2	101
FDMH-1	460-290512-3	96
FDMH-2	460-290512-4	92
FDMH-4	460-290512-5	100
	MB 460-939259/1-A	100
	LCS 460-939259/2-A	96
	LCSD 460-939259/3-A	100

	QC LIMITS
DXE = 1,4-Dioxane-d8 (Surr)	50-150

Column to be used to flag recovery values

FORM II 522

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2C83859.D

Lab ID: LCS 460-939259/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	4.00	4.61	115	70-130	

Column to be used to flag recovery and RPD values

FORM III 522

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2C83860.D

Lab ID: LCSD 460-939259/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	4.00	4.76	119	3	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 522

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab File ID: 2C83858.D Lab Sample ID: MB 460-939259/1-A

Matrix: Water Date Extracted: 10/19/2023 13:19

Instrument ID: CBNAMS2 Date Analyzed: 10/19/2023 21:29

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-939259/2-A	2C83859.D	10/19/2023 21:45
	LCSD 460-939259/3-A	2C83860.D	10/19/2023 22:00
1000-101623-0002	460-290512-2	2C83861.D	10/19/2023 22:15
FDMH-1	460-290512-3	2C83862.D	10/19/2023 22:31
FDMH-2	460-290512-4	2C83863.D	10/19/2023 22:46
FDMH-4	460-290512-5	2C83864.D	10/19/2023 23:01

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

NOTE: All ion abundances shall be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95. Criteria based on EPA method 524.4.

NOTE: All ion abundances MUST be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may exceed that of m/z 198.

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 460-931466/2	2C83403.D	09/11/2023	12:16
	STD8 460-931466/3	2C83404.D	09/11/2023	12:31
	STD7 460-931466/4	2C83405.D	09/11/2023	12:47
	STD6 460-931466/5	2C83406.D	09/11/2023	13:02
	STD4 460-931466/6	2C83407.D	09/11/2023	13:17
	STD3 460-931466/7	2C83408.D	09/11/2023	13:33
	STD2 460-931466/8	2C83409.D	09/11/2023	13:48
	STD1 460-931466/9	2C83410.D	09/11/2023	14:04
	ICV 460-931466/11	2C83412.D	09/11/2023	14:44
	CCVLIS 460-939254/2	2C83857.D	10/19/2023	19:49
	MB 460-939259/1-A	2C83858.D	10/19/2023	21:29
	LCS 460-939259/2-A	2C83859.D	10/19/2023	21:45
	LCSD 460-939259/3-A	2C83860.D	10/19/2023	22:00
1000-101623-0002	460-290512-2	2C83861.D	10/19/2023	22:15
FDMH-1	460-290512-3	2C83862.D	10/19/2023	22:31
FDMH-2	460-290512-4	2C83863.D	10/19/2023	22:46
FDMH-4	460-290512-5	2C83864.D	10/19/2023	23:01
	CCV 460-939254/10	2C83865.D	10/19/2023	23:16

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Sample No.: ICIS 460-931466/2 Date Analyzed: 09/11/2023 12:16

Instrument ID: CBNAMS2 GC Column: Rtxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): 2C83403.D Heated Purge: (Y/N) N

Calibration ID: 94347

		THFd8					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		45681	2.21				
UPPER LIMIT		68522	2.71				
LOWER LIMIT		22841	1.71				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-931466/11		59169	2.22				

THFd8 = Tetrahydrofuran-d8

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Sample No.: CCVLIS 460-939254/2 Date Analyzed: 10/19/2023 19:49

Instrument ID: CBNAMS2 GC Column: Rtxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): 2C83857.D Heated Purge: (Y/N) N

Calibration ID: 94347

		THFd8					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		51964	2.19				
UPPER LIMIT		67553	2.69				
LOWER LIMIT		36375	1.69				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 460-939259/1-A		51301	2.19				
LCS 460-939259/2-A		54191	2.19				
LCSD 460-939259/3-A		55064	2.19				
460-290512-2	1000-101623-0002	55540	2.19				
460-290512-3	FDMH-1	53721	2.19				
460-290512-4	FDMH-2	56650	2.19				
460-290512-5	FDMH-4	56579	2.20				
CCV 460-939254/10		55918	2.20				

THFd8 = Tetrahydrofuran-d8

Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290512-2

Matrix: Water | Lab File ID: 2C83861.D

Analysis Method: 522 | Date Collected: 10/16/2023 11:00

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 22:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	101		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83861.D				
Lims ID:	460-290512-E-2-A				
Client ID:	1000-101623-0002				
Sample Type:	Client				
Inject. Date:	19-Oct-2023 22:15:30	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Sample Info:	460-0167583-006				
Operator ID:		Instrument ID:	CBNAMS2		
Method:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m				
Limit Group:	SV_522_ICAL				
Last Update:	20-Oct-2023 05:56:04	Calib Date:	11-Sep-2023 14:04:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D				
Column 1 :	Rtxi-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1613				
First Level Reviewer: DY9Z		Date:	20-Oct-2023 02:27:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.193	2.193	0.000	0	55540	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.825	2.825	-0.001	0	51097	0.5042	

QC Flag Legend

Processing Flags

Reagents:

SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

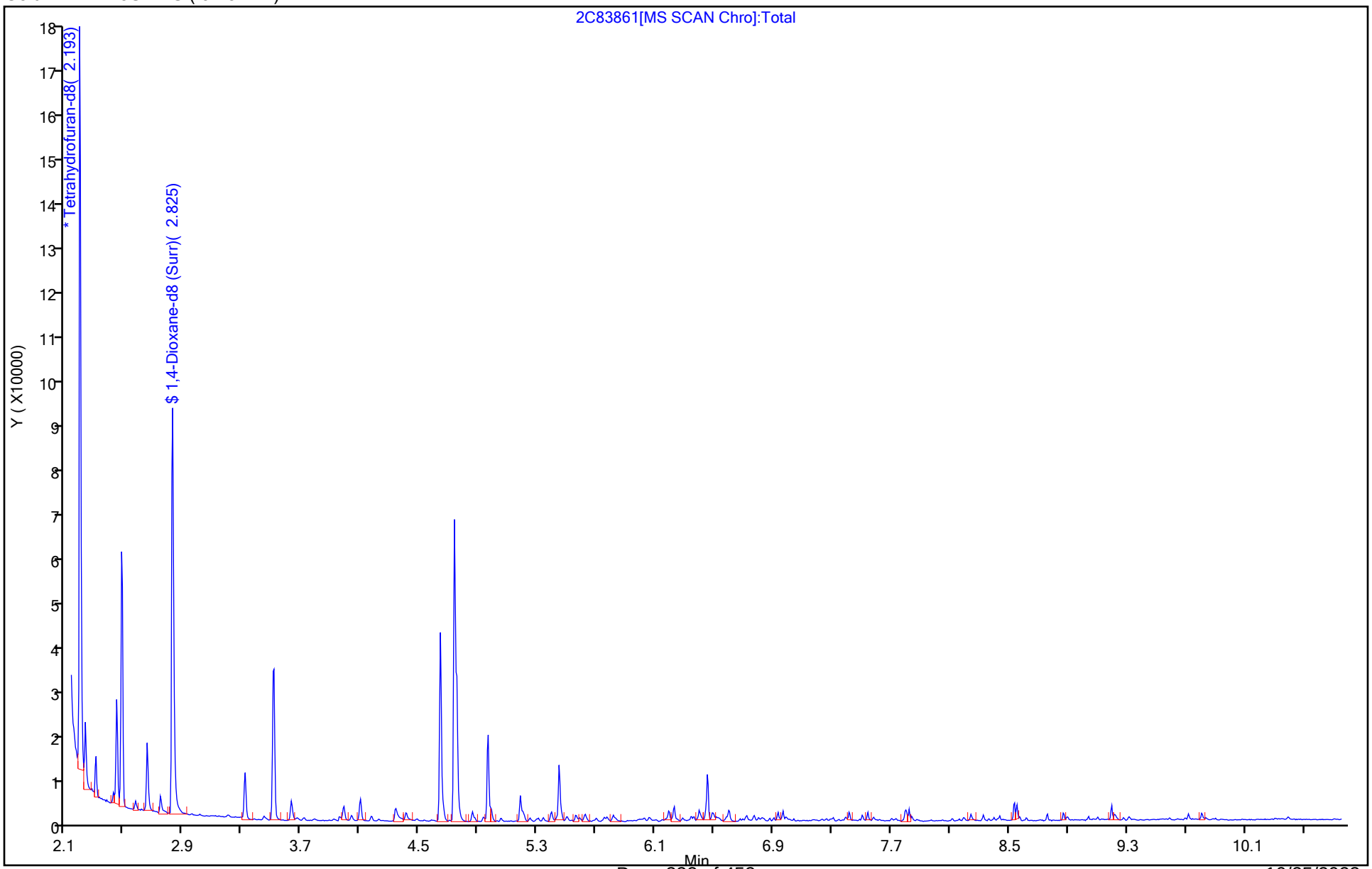
Report Date: 20-Oct-2023 05:56:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83861.D

Injection Date:	19-Oct-2023 22:15:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	460-290512-E-2-A	Lab Sample ID:	460-290512-2	Worklist Smp#:	6
Client ID:	1000-101623-0002				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

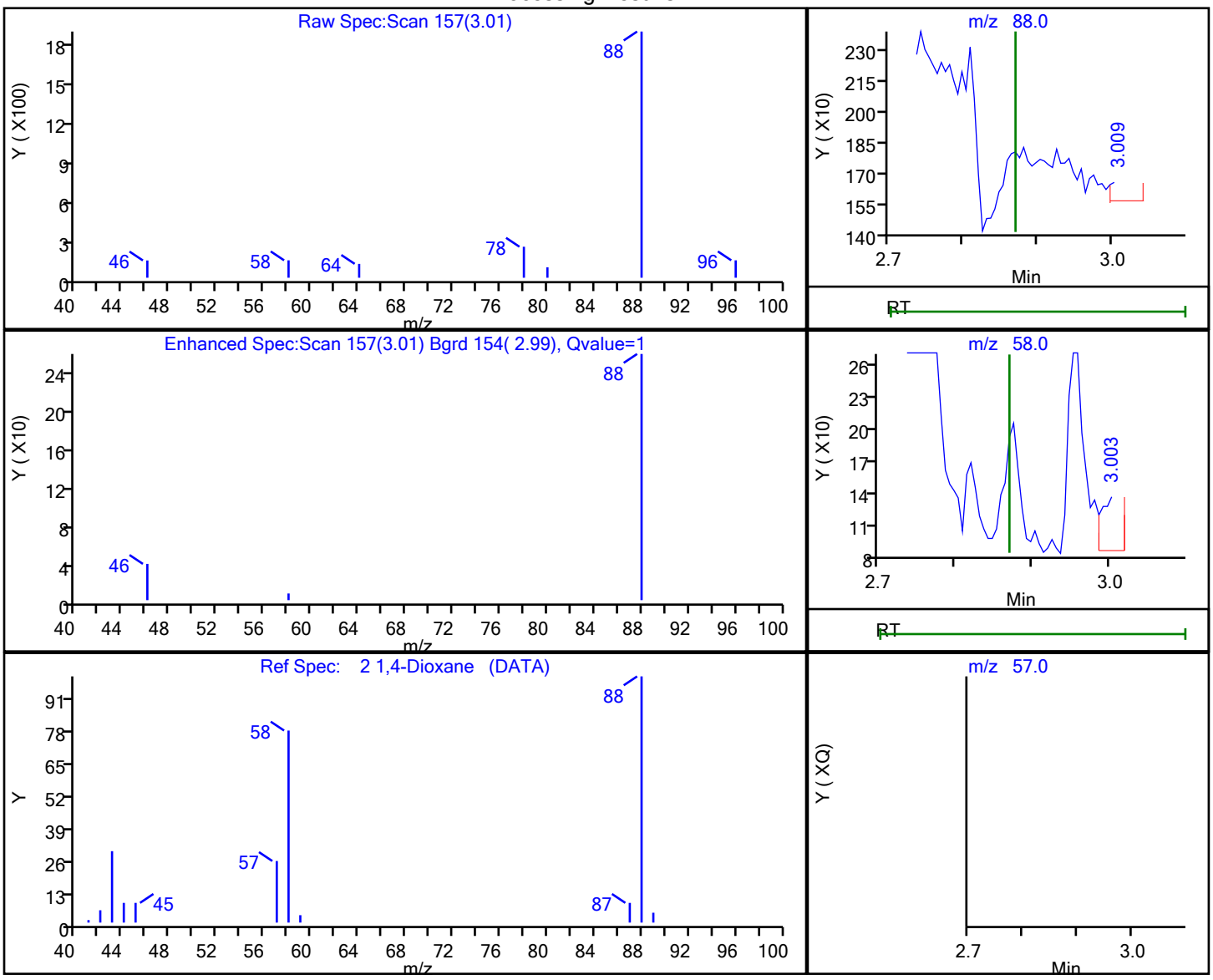
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83861.D				
Injection Date:	19-Oct-2023 22:15:30	Instrument ID:	CBNAMS2		
Lims ID:	460-290512-E-2-A	Lab Sample ID:	460-290512-2		
Client ID:	1000-101623-0002				
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	MS2_522	Limit Group:	SV_522_ICAL		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

2 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
3.01	88.00	319	0.002939
3.00	58.00	85	
2.87	57.00	0	

Reviewer: DY9Z, 20-Oct-2023 02:27:19 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-1 | Lab Sample ID: 460-290512-3

Matrix: Water | Lab File ID: 2C83862.D

Analysis Method: 522 | Date Collected: 10/16/2023 09:15

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 22:31

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	96		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83862.D				
Lims ID:	460-290512-E-3-A				
Client ID:	FDMH-1				
Sample Type:	Client				
Inject. Date:	19-Oct-2023 22:31:30	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Sample Info:	460-0167583-007				
Operator ID:		Instrument ID:	CBNAMS2		
Method:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m				
Limit Group:	SV_522_ICAL				
Last Update:	20-Oct-2023 05:56:26	Calib Date:	11-Sep-2023 14:04:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D				
Column 1 :	Rtxi-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1613				

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:27:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.192	2.193	-0.001	0	53721	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.824	2.825	-0.001	0	47290	0.4825	

QC Flag Legend

Processing Flags

Reagents:

SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

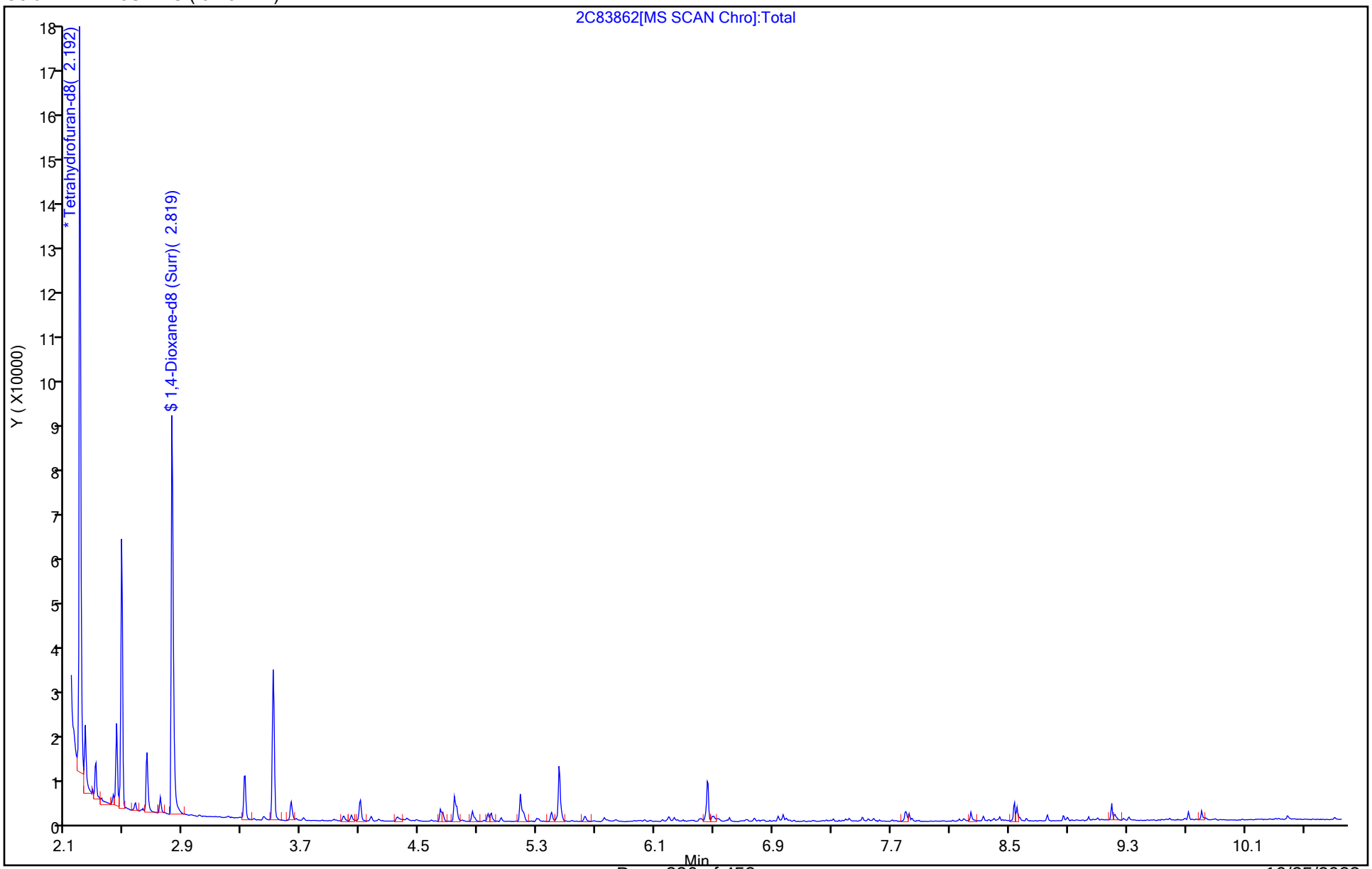
Report Date: 20-Oct-2023 05:56:26 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83862.D

Injection Date:	19-Oct-2023 22:31:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	460-290512-E-3-A	Lab Sample ID:	460-290512-3	Worklist Smp#:	7
Client ID:	FDMH-1				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

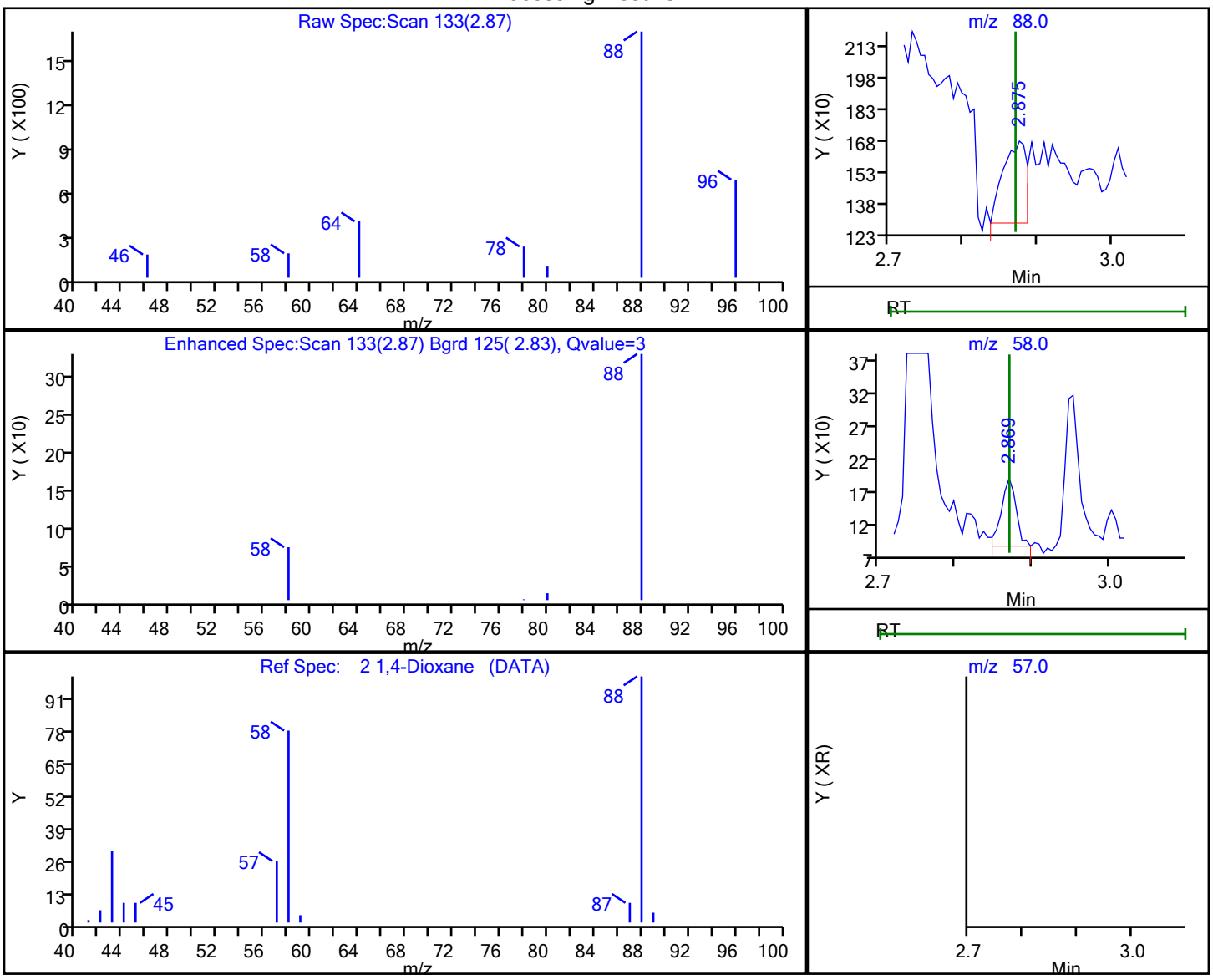
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83862.D				
Injection Date:	19-Oct-2023 22:31:30	Instrument ID:	CBNAMS2		
Lims ID:	460-290512-E-3-A	Lab Sample ID:	460-290512-3		
Client ID:	FDMH-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	MS2_522	Limit Group:	SV_522_ICAL		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

2 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.87	88.00	868	0.008269
2.87	58.00	137	
2.87	57.00	0	

Reviewer: G4KC, 20-Oct-2023 05:56:24 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-2 | Lab Sample ID: 460-290512-4

Matrix: Water | Lab File ID: 2C83863.D

Analysis Method: 522 | Date Collected: 10/16/2023 09:30

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 22:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	92		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83863.D				
Lims ID:	460-290512-D-4-A				
Client ID:	FDMH-2				
Sample Type:	Client				
Inject. Date:	19-Oct-2023 22:46:30	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Sample Info:	460-0167583-008				
Operator ID:		Instrument ID:	CBNAMS2		
Method:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m				
Limit Group:	SV_522_ICAL				
Last Update:	20-Oct-2023 05:59:30	Calib Date:	11-Sep-2023 14:04:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D				
Column 1 :	Rtxi-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1613				

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:29:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.193	2.193	0.000	0	56650	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.824	2.825	-0.001	0	47412	0.4587	

QC Flag Legend

Processing Flags

Reagents:

SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

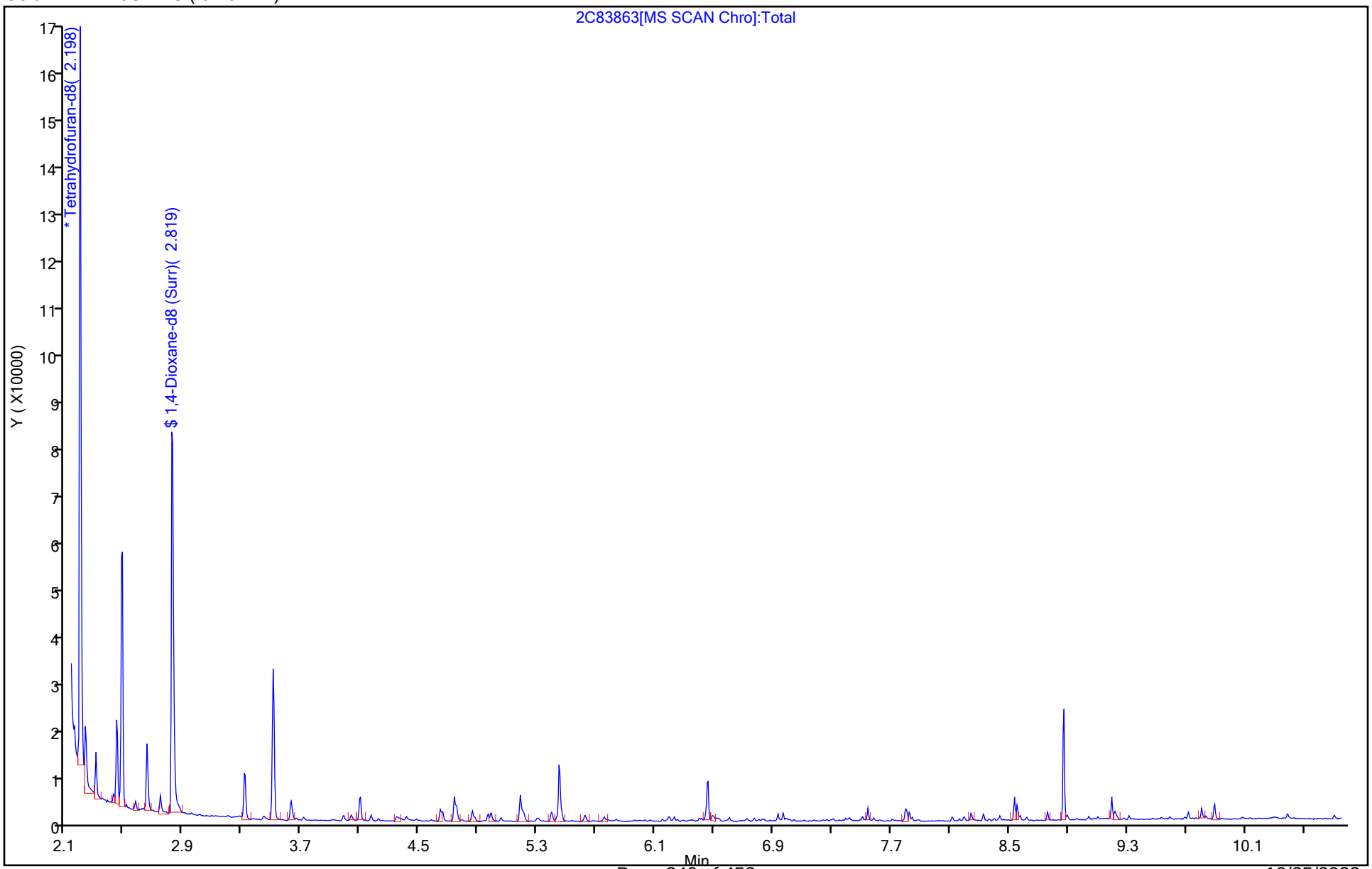
Report Date: 20-Oct-2023 05:59:30 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83863.D

Injection Date:	19-Oct-2023 22:46:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	460-290512-D-4-A	Lab Sample ID:	460-290512-4	Worklist Smp#:	8
Client ID:	FDMH-2				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

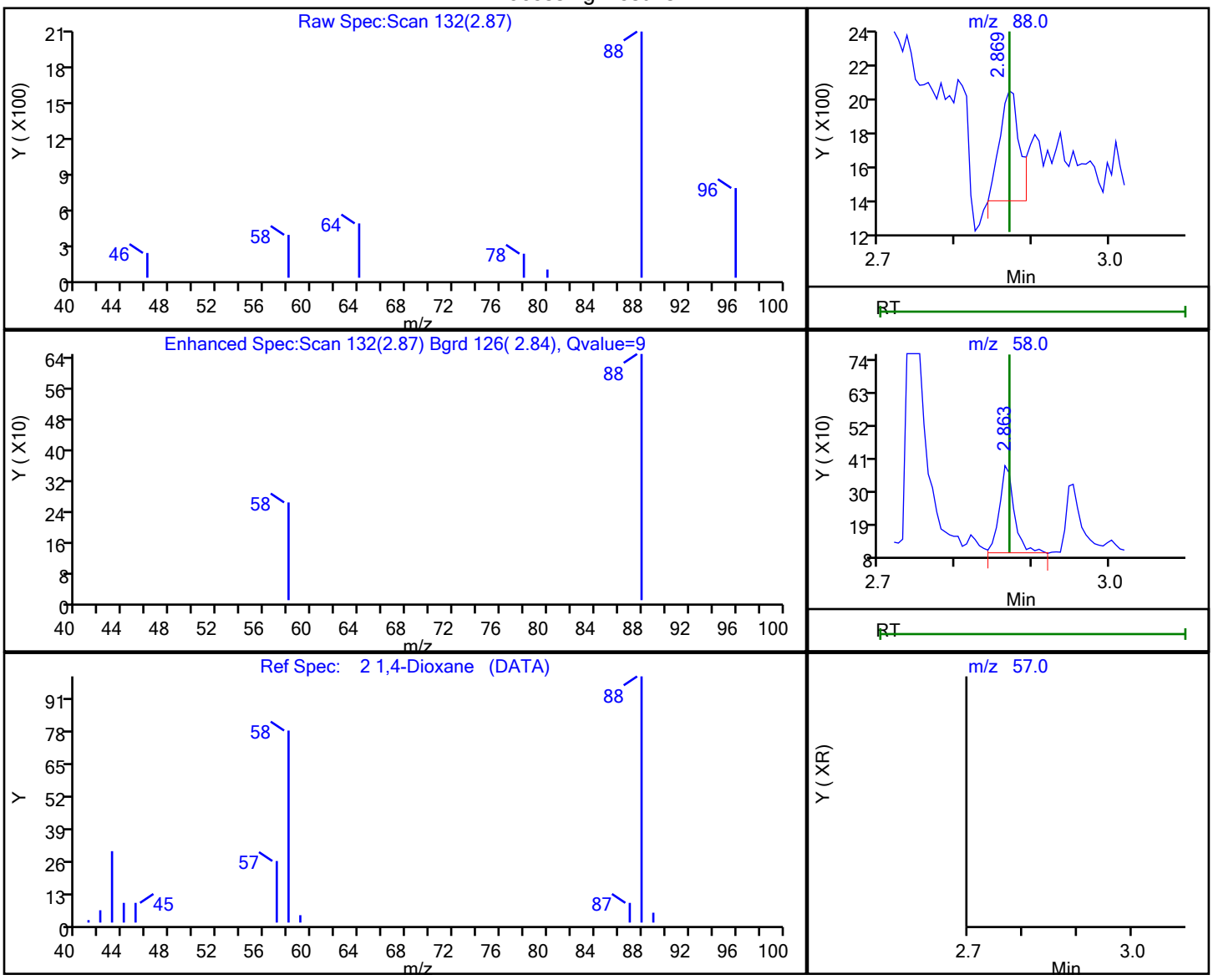
User Disabled Compound Report

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83863.D				
Injection Date:	19-Oct-2023 22:46:30	Instrument ID:	CBNAMS2		
Lims ID:	460-290512-D-4-A	Lab Sample ID:	460-290512-4		
Client ID:	FDMH-2				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	MS2_522	Limit Group:	SV_522_ICAL		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

2 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.87	88.00	1095	0.009892
2.86	58.00	407	
2.87	57.00	0	

Reviewer: G4KC, 20-Oct-2023 05:59:27 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: FDMH-4 | Lab Sample ID: 460-290512-5

Matrix: Water | Lab File ID: 2C83864.D

Analysis Method: 522 | Date Collected: 10/16/2023 10:15

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 23:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49		0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	100		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83864.D
Lims ID: 460-290512-E-5-A
Client ID: FDMH-4
Sample Type: Client
Inject. Date: 19-Oct-2023 23:01:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-009
Operator ID: Instrument ID: CBNAMS2

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:56:35 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:28:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.198	2.193	0.005	0	56579	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.824	2.825	-0.001	0	51485	0.4987	
2 1,4-Dioxane	88	2.869	2.869	0.000	10	2726	0.0247	

QC Flag Legend
Processing Flags

Reagents:
SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

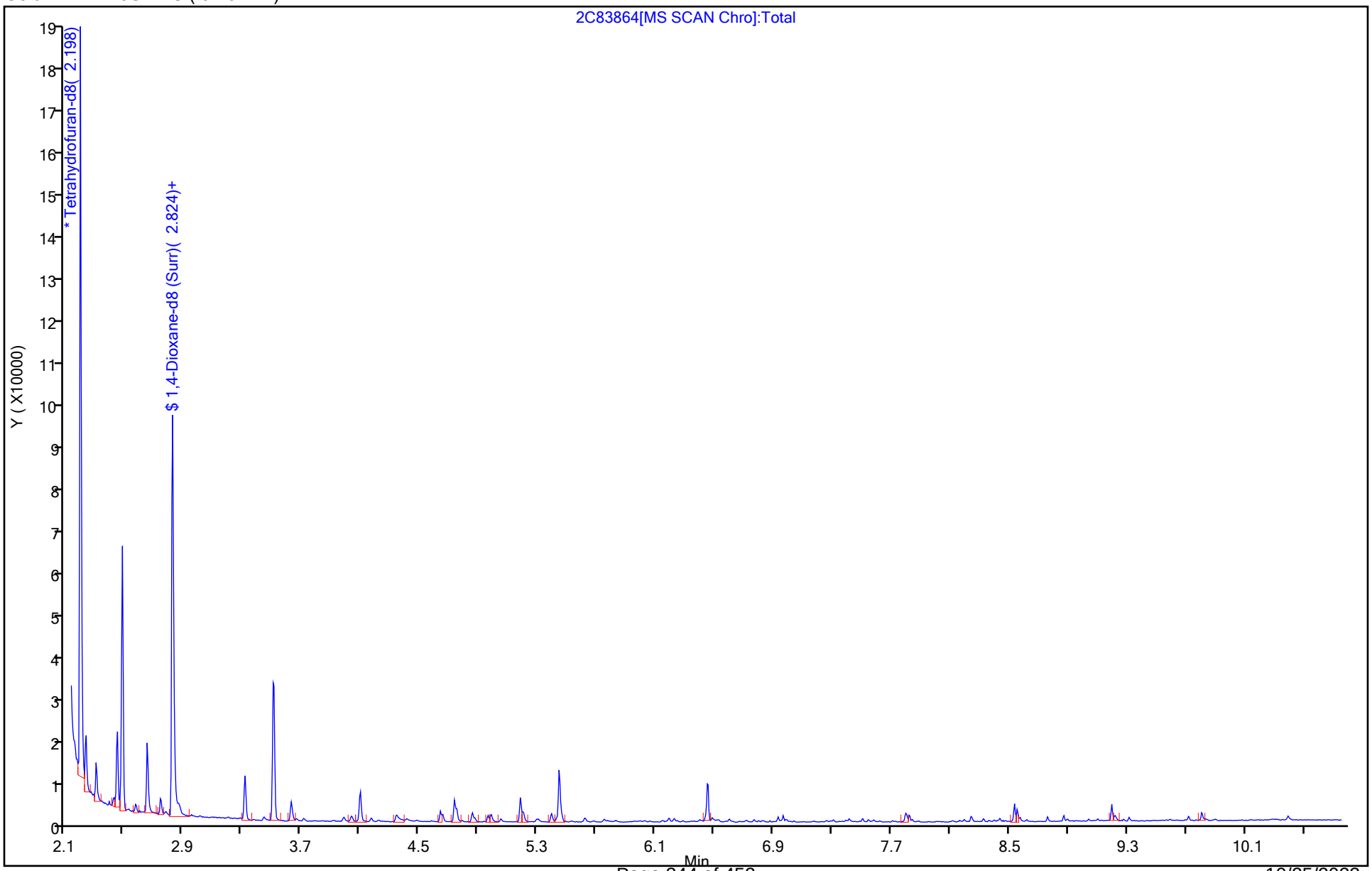
Report Date: 20-Oct-2023 05:56:56 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83864.D

Injection Date:	19-Oct-2023 23:01:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	460-290512-E-5-A	Lab Sample ID:	460-290512-5	Worklist Smp#:	9
Client ID:	FDMH-4				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)

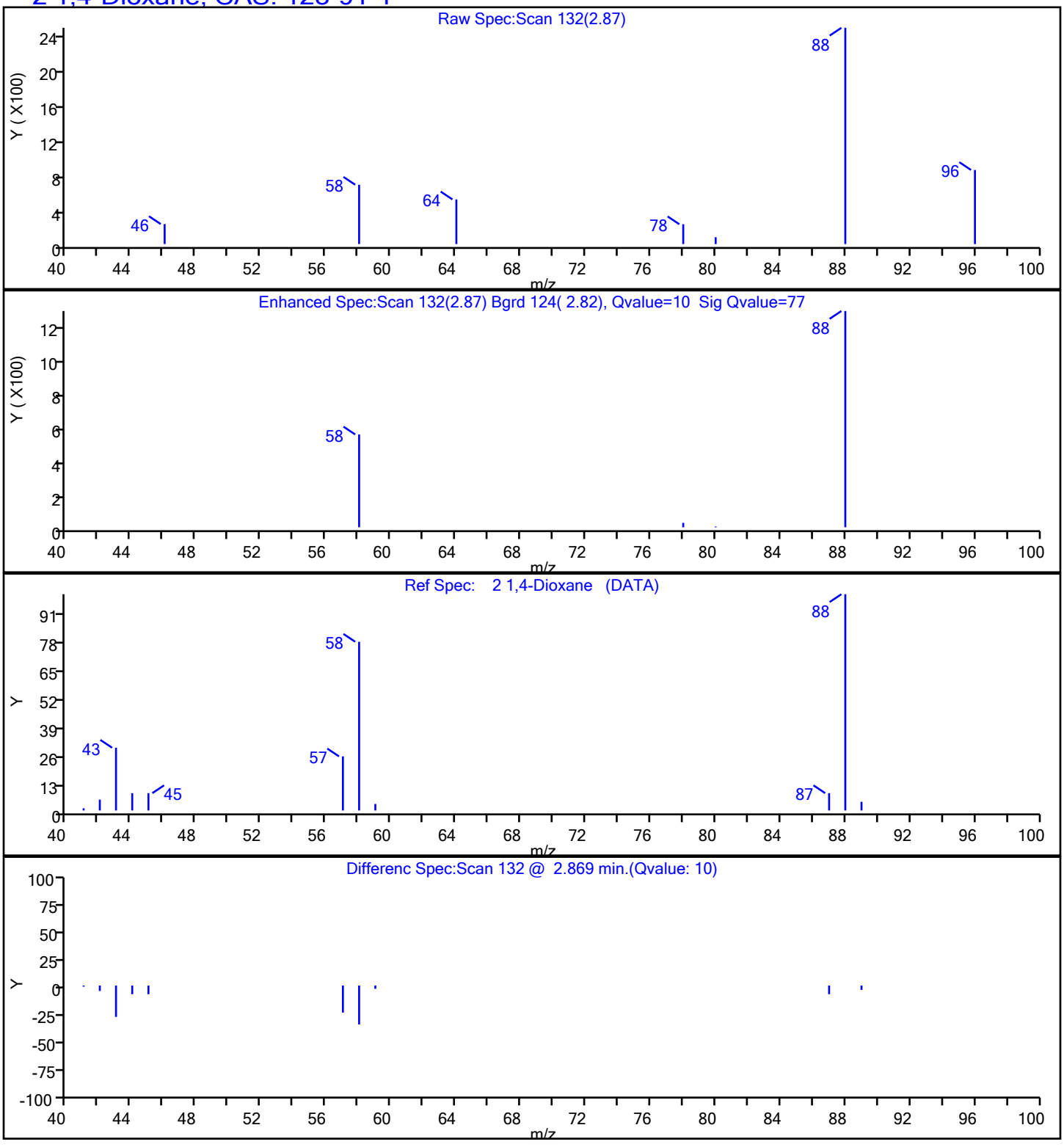


10/25/2023
1:26 PM

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83864.D				
Injection Date:	19-Oct-2023 23:01:30	Instrument ID:	CBNAMS2		
Lims ID:	460-290512-E-5-A	Lab Sample ID:	460-290512-5		
Client ID:	FDMH-4				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	MS2_522	Limit Group:	SV_522_ICAL		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

2 1,4-Dioxane, CAS: 123-91-1



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-290512-1 Analy Batch No.: 931466

SDG No.:

Instrument ID: CBNAMS2 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/11/2023 12:16 Calibration End Date: 09/11/2023 14:04 Calibration ID: 94347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-931466/9	2C83410.D
Level 2	STD2 460-931466/8	2C83409.D
Level 3	STD3 460-931466/7	2C83408.D
Level 4	STD4 460-931466/6	2C83407.D
Level 5	ICIS 460-931466/2	2C83403.D
Level 6	STD6 460-931466/5	2C83406.D
Level 7	STD7 460-931466/4	2C83405.D
Level 8	STD8 460-931466/3	2C83404.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.9937 0.9456	0.9170 0.9008	1.1625 0.8098	1.0552	1.0317	Ave		0.9770			0.0500	11.1		15.0			
1,4-Dioxane-d8 (Surr)	0.8504 0.9193	0.8813 0.9428	0.9582 0.8982	0.9296	0.9183	Ave		0.9123				3.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison | Job No.: 460-290512-1 | Analy Batch No.: 931466

SDG No.:

Instrument ID: CBNAMS2 | GC Column: Rtxi-5Sil | ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/11/2023 12:16 | Calibration End Date: 09/11/2023 14:04 | Calibration ID: 94347

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-931466/9	2C83410.D
Level 2	STD2 460-931466/8	2C83409.D
Level 3	STD3 460-931466/7	2C83408.D
Level 4	STD4 460-931466/6	2C83407.D
Level 5	ICIS 460-931466/2	2C83403.D
Level 6	STD6 460-931466/5	2C83406.D
Level 7	STD7 460-931466/4	2C83405.D
Level 8	STD8 460-931466/3	2C83404.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	THFd8	Ave	1103 49788	2015 91009	6093 163275	11291	18851	0.0100 0.500	0.0200 1.00	0.0500 2.00	0.100	0.200
1,4-Dioxane-d8 (Surr)	THFd8	Ave	47196 48406	48409 47626	50222 45272	49738	41951	0.500 0.500	0.500 0.500	0.500 0.500	0.500	0.500

Curve Type Legend:
Ave = Average ISTD

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83403.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 11-Sep-2023 12:16:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-002
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:50 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 12:30:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.209	2.209	0.000	0	45681	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	41951	0.5000	0.5033	
2 1,4-Dioxane	88	2.886	2.886	0.000	12	18851	0.2000	0.2112	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L5_00001 Amount Added: 1.00 Units: mL

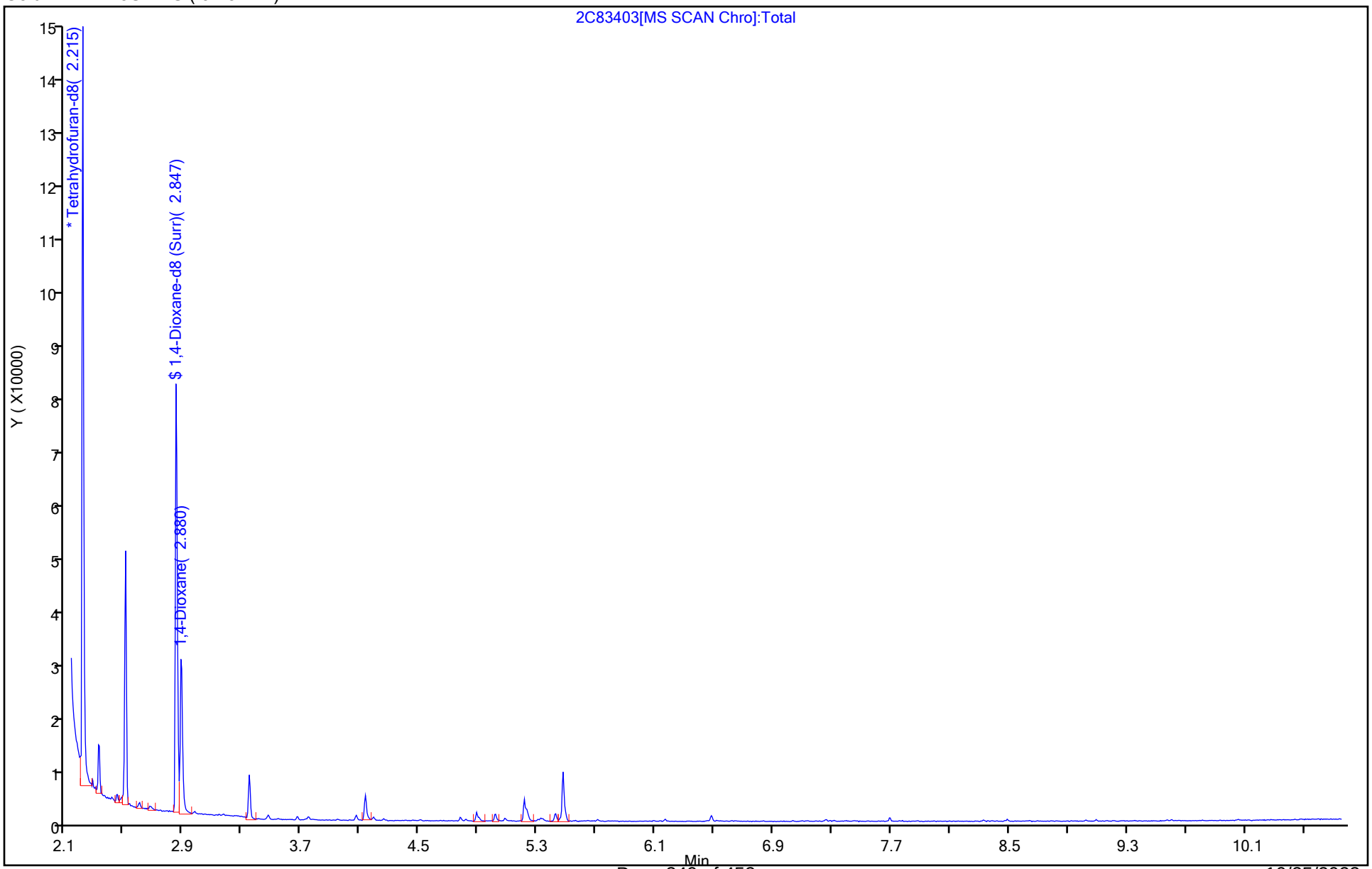
Report Date: 11-Sep-2023 14:20:50 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83403.D

Injection Date:	11-Sep-2023 12:16:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	ICIS			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83404.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 11-Sep-2023 12:31:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-003
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:50 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 13:44:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.215	2.209	0.006	0	50404	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	45272	0.5000	0.4923	
2 1,4-Dioxane	88	2.886	2.886	0.000	12	163275	2.00	1.66	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L8_00001 Amount Added: 1.00 Units: mL

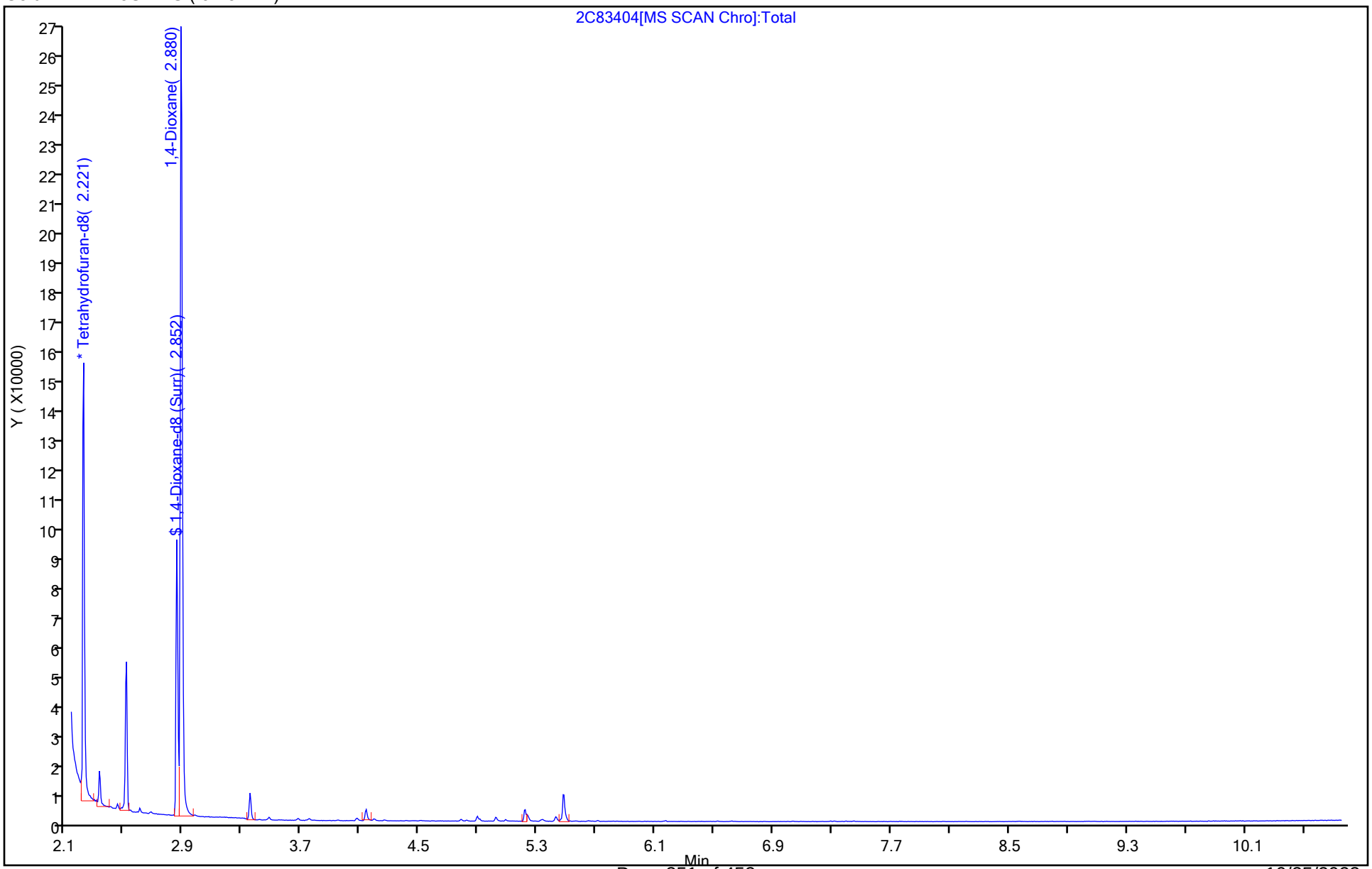
Report Date: 11-Sep-2023 14:20:50 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83404.D

Injection Date:	11-Sep-2023 12:31:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD8			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83405.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-Sep-2023 12:47:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-004
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:51 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 13:45:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.215	2.209	0.006	0	50518	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	47626	0.5000	0.5167	
2 1,4-Dioxane	88	2.880	2.886	-0.006	19	91009	1.00	0.9219	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L7_00001 Amount Added: 1.00 Units: mL

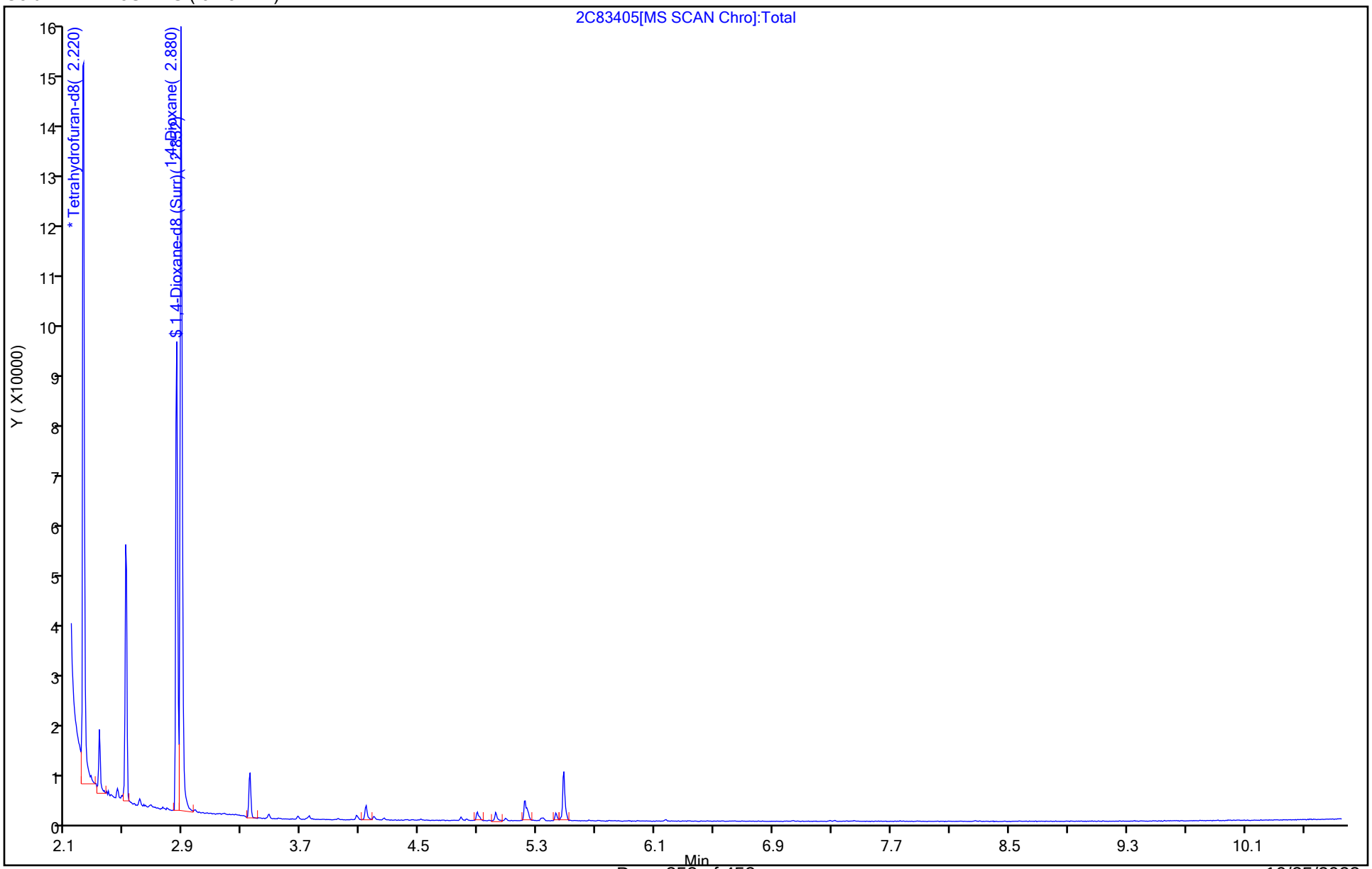
Report Date: 11-Sep-2023 14:20:51 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83405.D

Injection Date:	11-Sep-2023 12:47:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD7			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83406.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Sep-2023 13:02:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-005
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:51 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 13:45:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.215	2.209	0.006	0	52653	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	48406	0.5000	0.5039	
2 1,4-Dioxane	88	2.886	2.886	0.000	15	49788	0.5000	0.4839	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L6_00001 Amount Added: 1.00 Units: mL

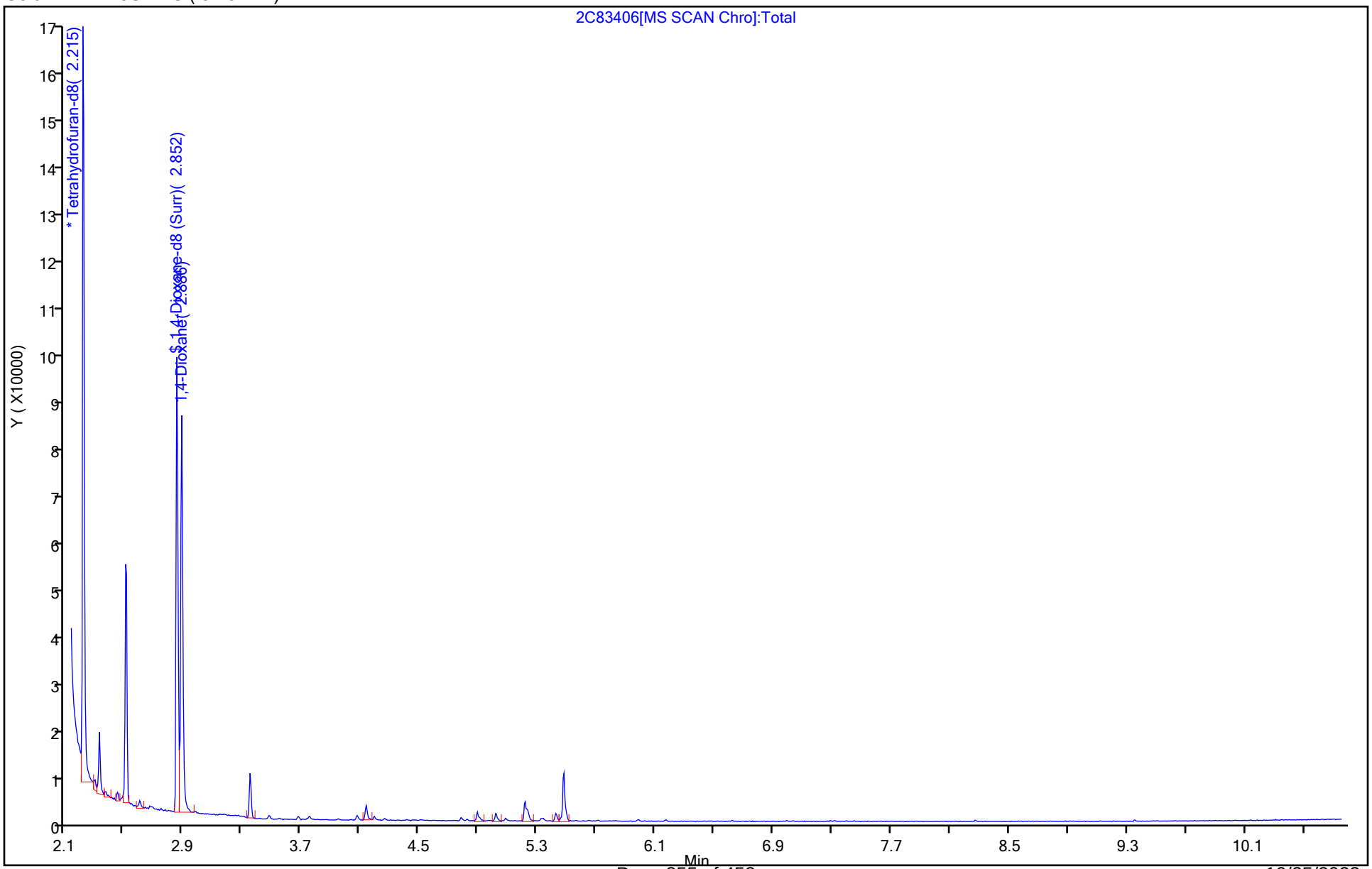
Report Date: 11-Sep-2023 14:20:52 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83406.D

Injection Date:	11-Sep-2023 13:02:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD6			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83407.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Sep-2023 13:17:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-006
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:52 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 13:45:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.220	2.209	0.011	0	53503	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.858	2.852	0.006	0	49738	0.5000	0.5095	
2 1,4-Dioxane	88	2.891	2.886	0.005	18	11291	0.1000	0.1080	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L4_00001 Amount Added: 1.00 Units: mL

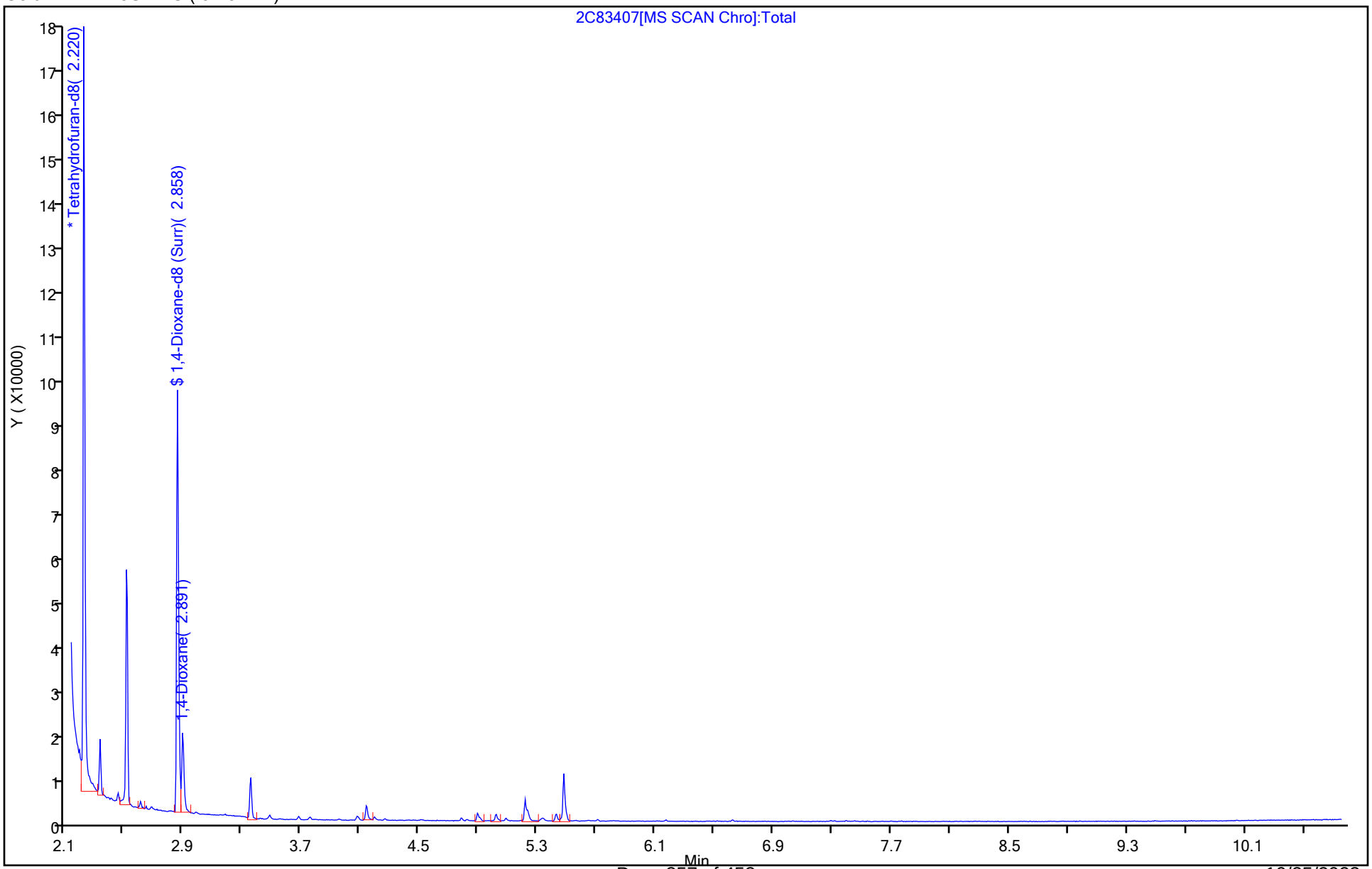
Report Date: 11-Sep-2023 14:20:52 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83407.D

Injection Date:	11-Sep-2023 13:17:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD4			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83408.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Sep-2023 13:33:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-007
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:53 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 14:11:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.220	2.209	0.011	0	52413	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.863	2.852	0.011	0	50222	0.5000	0.5252	
2 1,4-Dioxane	88	2.897	2.886	0.011	17	6093	0.0500	0.0595	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SM_522_L3_00001 Amount Added: 1.00 Units: mL

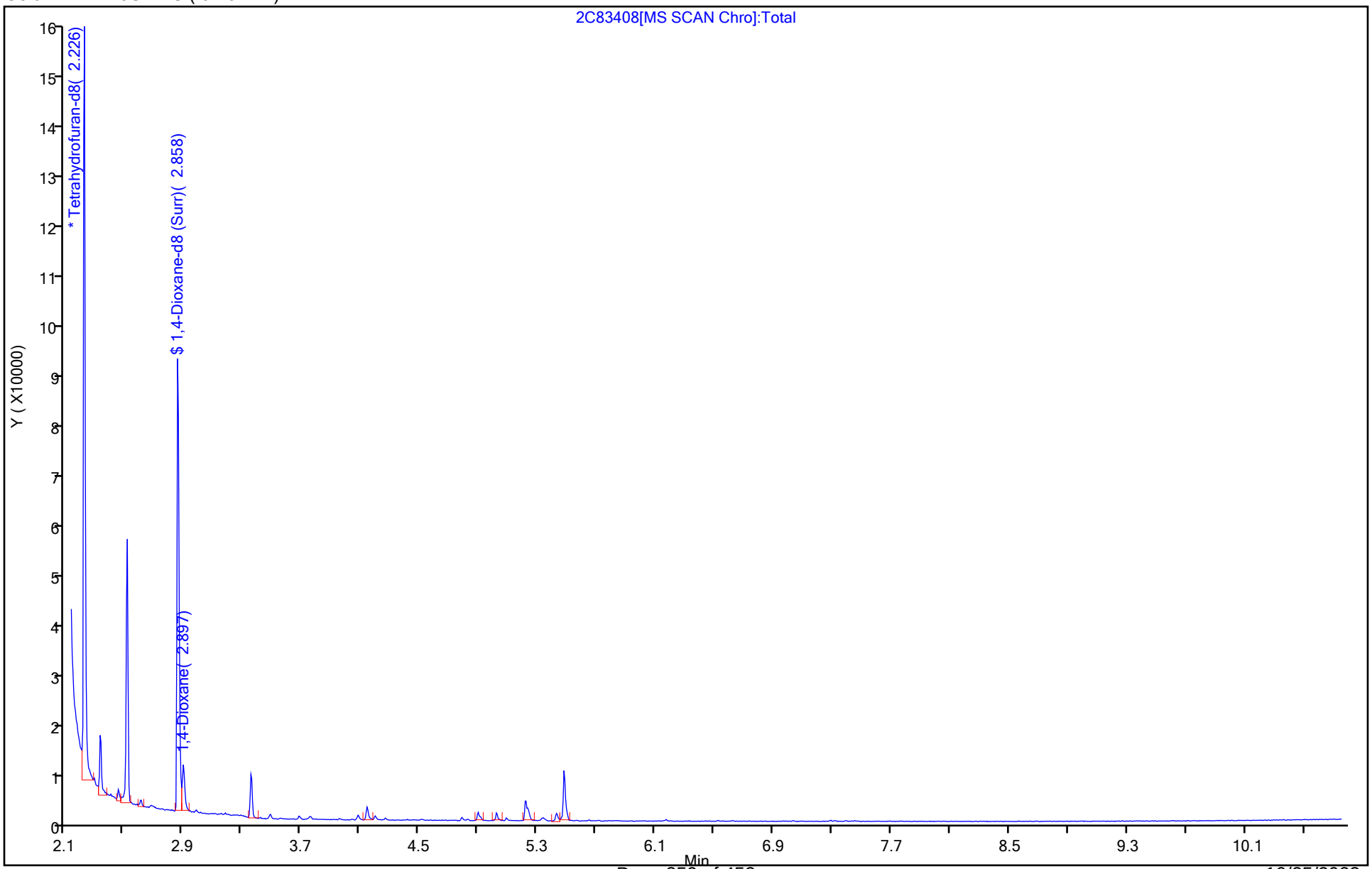
Report Date: 11-Sep-2023 14:20:53 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83408.D

Injection Date:	11-Sep-2023 13:33:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD3			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83409.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Sep-2023 13:48:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-008
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:53 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 14:11:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.209	2.209	0.000	0	54932	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	48409	0.5000	0.4830	
2 1,4-Dioxane	88	2.891	2.886	0.005	13	2015	0.0200	0.0188	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SM_522_L2_00001 Amount Added: 1.00 Units: mL

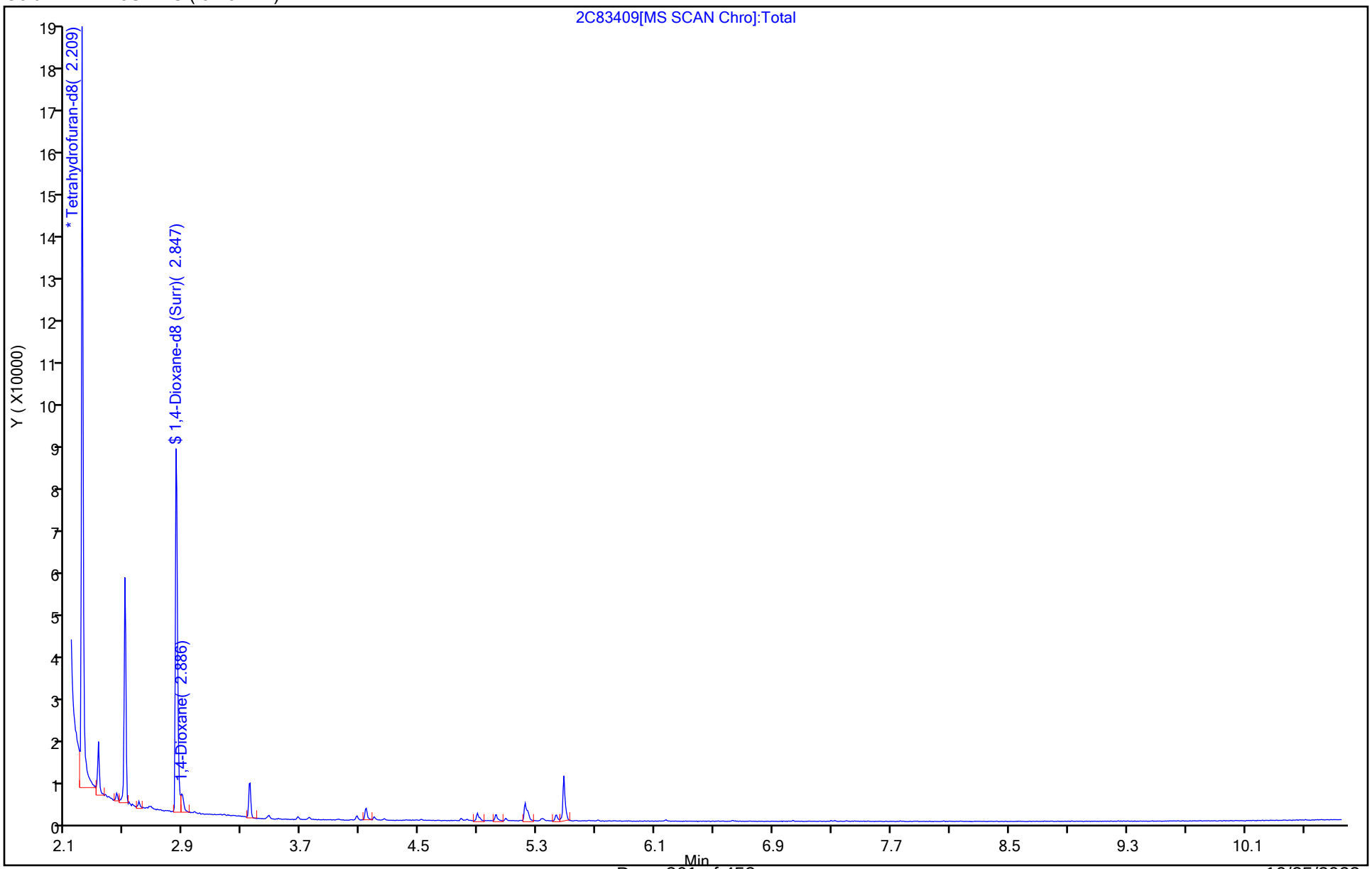
Report Date: 11-Sep-2023 14:20:53 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83409.D

Injection Date:	11-Sep-2023 13:48:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD2			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Sep-2023 14:04:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-009
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:20:54 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 14:18:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.220	2.209	0.011	0	55500	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.858	2.852	0.006	0	47196	0.5000	0.4661	
2 1,4-Dioxane	88	2.897	2.886	0.011	13	1103	0.0100	0.0102	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SM_522_L1_00001 Amount Added: 1.00 Units: mL

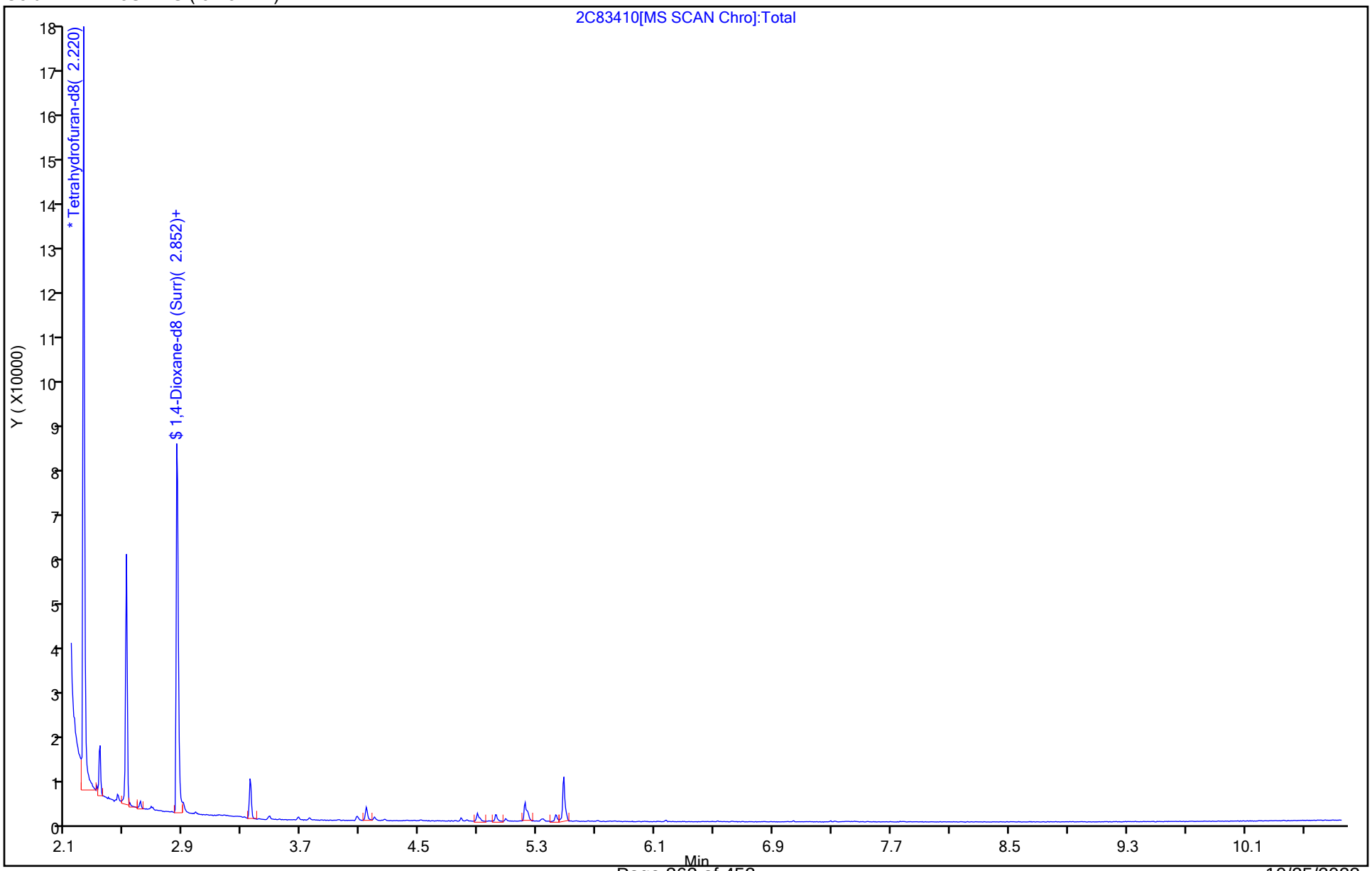
Report Date: 11-Sep-2023 14:20:54 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Injection Date:	11-Sep-2023 14:04:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

Calibration / 1,4-Dioxane-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

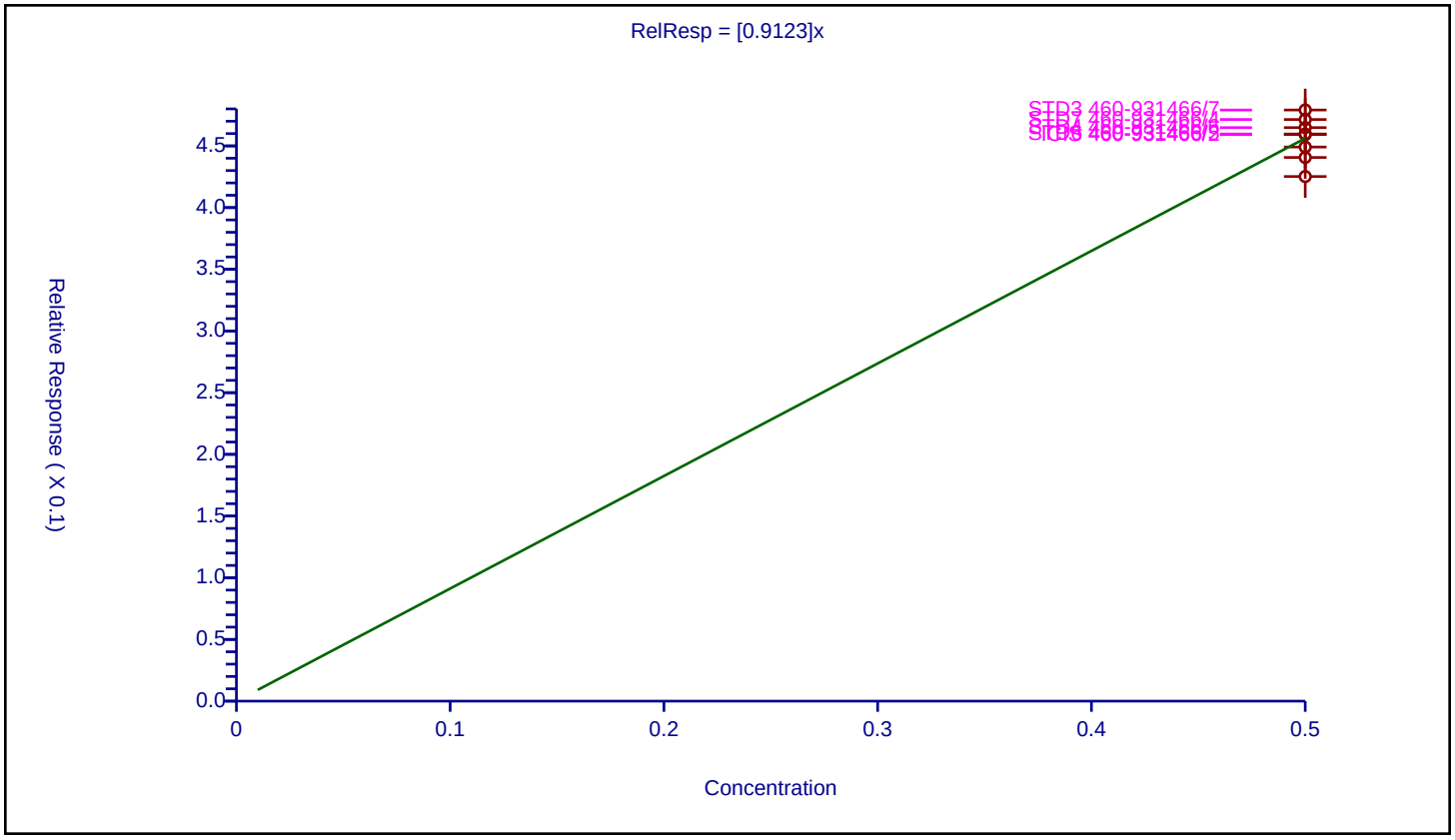
Curve Coefficients

Intercept:	0
Slope:	0.9123

Error Coefficients

Standard Error:	50700
Relative Standard Error:	3.8
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	ICIS 460-931466/2	0.5	0.459173	0.5	45681.0	0.918347	Y
2	STD8 460-931466/3	0.5	0.449091	0.5	50404.0	0.898183	Y
3	STD7 460-931466/4	0.5	0.471377	0.5	50518.0	0.942753	Y
4	STD6 460-931466/5	0.5	0.45967	0.5	52653.0	0.91934	Y
5	STD4 460-931466/6	0.5	0.464815	0.5	53503.0	0.92963	Y
6	STD3 460-931466/7	0.5	0.479099	0.5	52413.0	0.958197	Y
7	STD2 460-931466/8	0.5	0.440627	0.5	54932.0	0.881253	Y
8	STD1 460-931466/9	0.5	0.425189	0.5	55500.0	0.850378	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

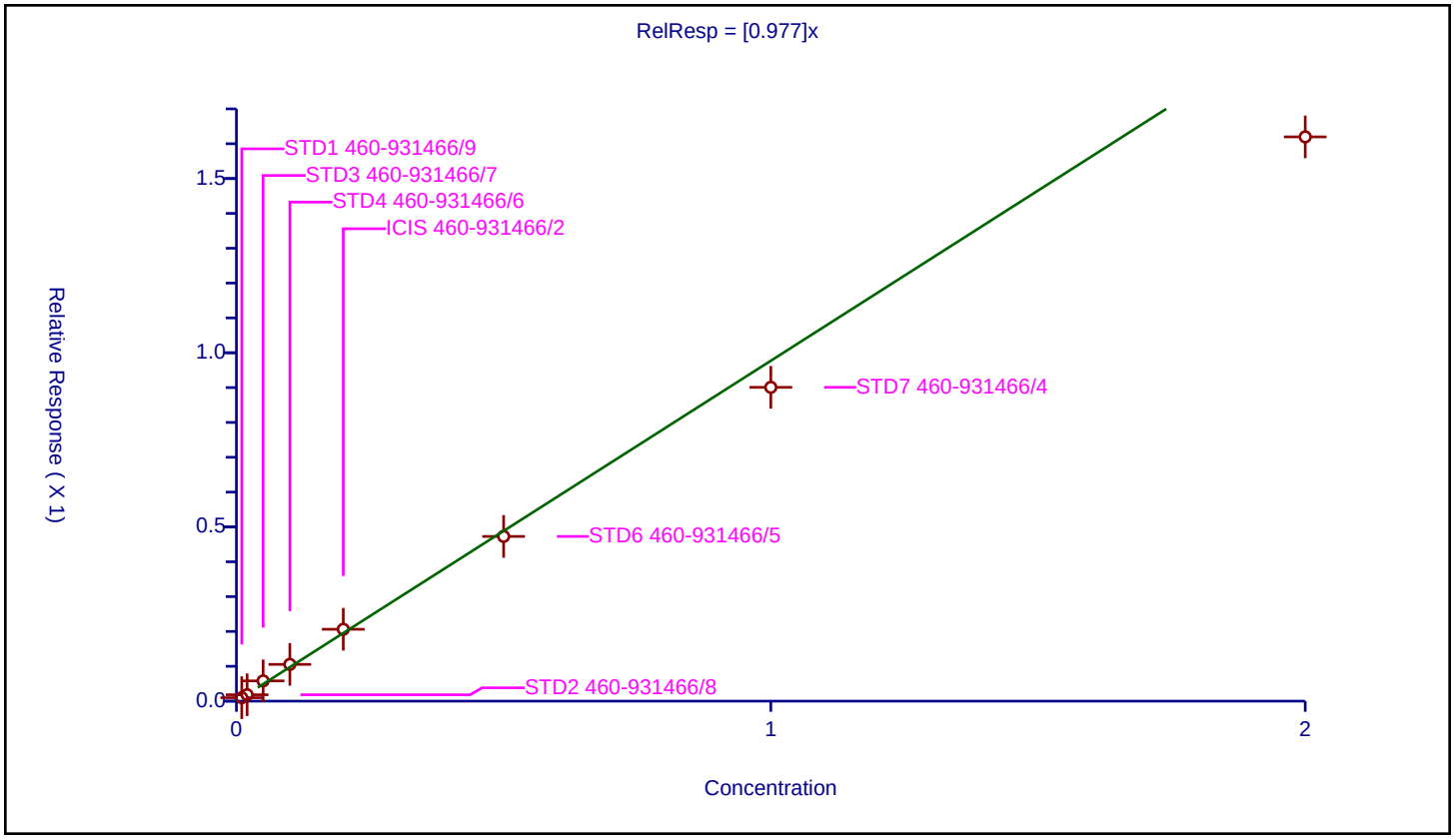
Curve Coefficients

Intercept:	0
Slope:	0.977

Error Coefficients

Standard Error:	73600
Relative Standard Error:	11.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD1 460-931466/9	0.01	0.009937	0.5	55500.0	0.993694	Y
2	STD2 460-931466/8	0.02	0.018341	0.5	54932.0	0.917043	Y
3	STD3 460-931466/7	0.05	0.058125	0.5	52413.0	1.162498	Y
4	STD4 460-931466/6	0.1	0.105517	0.5	53503.0	1.055174	Y
5	ICIS 460-931466/2	0.2	0.206333	0.5	45681.0	1.031665	Y
6	STD6 460-931466/5	0.5	0.472794	0.5	52653.0	0.945587	Y
7	STD7 460-931466/4	1.0	0.900758	0.5	50518.0	0.900758	Y
8	STD8 460-931466/3	2.0	1.619663	0.5	50404.0	0.809832	Y



10/25/2023
1:26 PM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICV 460-931466/11 Calibration Date: 09/11/2023 14:44

Instrument ID: CBNAMS2 Calib Start Date: 09/11/2023 12:16

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 09/11/2023 14:04

Lab File ID: 2C83412.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9770	0.9085	0.0500	186	200	-7.0	20.0
1,4-Dioxane-d8 (Surr)	Ave	0.9123	0.8622	0.0500	473	500	-5.5	20.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83412.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-Sep-2023 14:44:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0165812-011
Operator ID: Instrument ID: CBNAMS2
Sublist:

Method: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 11-Sep-2023 14:56:55 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1637

First Level Reviewer: G4KC Date: 11-Sep-2023 14:57:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.215	2.209	0.006	0	59169	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.852	2.852	0.000	0	51016	0.5000	0.4726	
2 1,4-Dioxane	88	2.886	2.886	0.000	17	21502	0.2000	0.1860	

QC Flag Legend
Processing Flags

Reagents:
SM_522_ICV_00001 Amount Added: 1.00 Units: mL

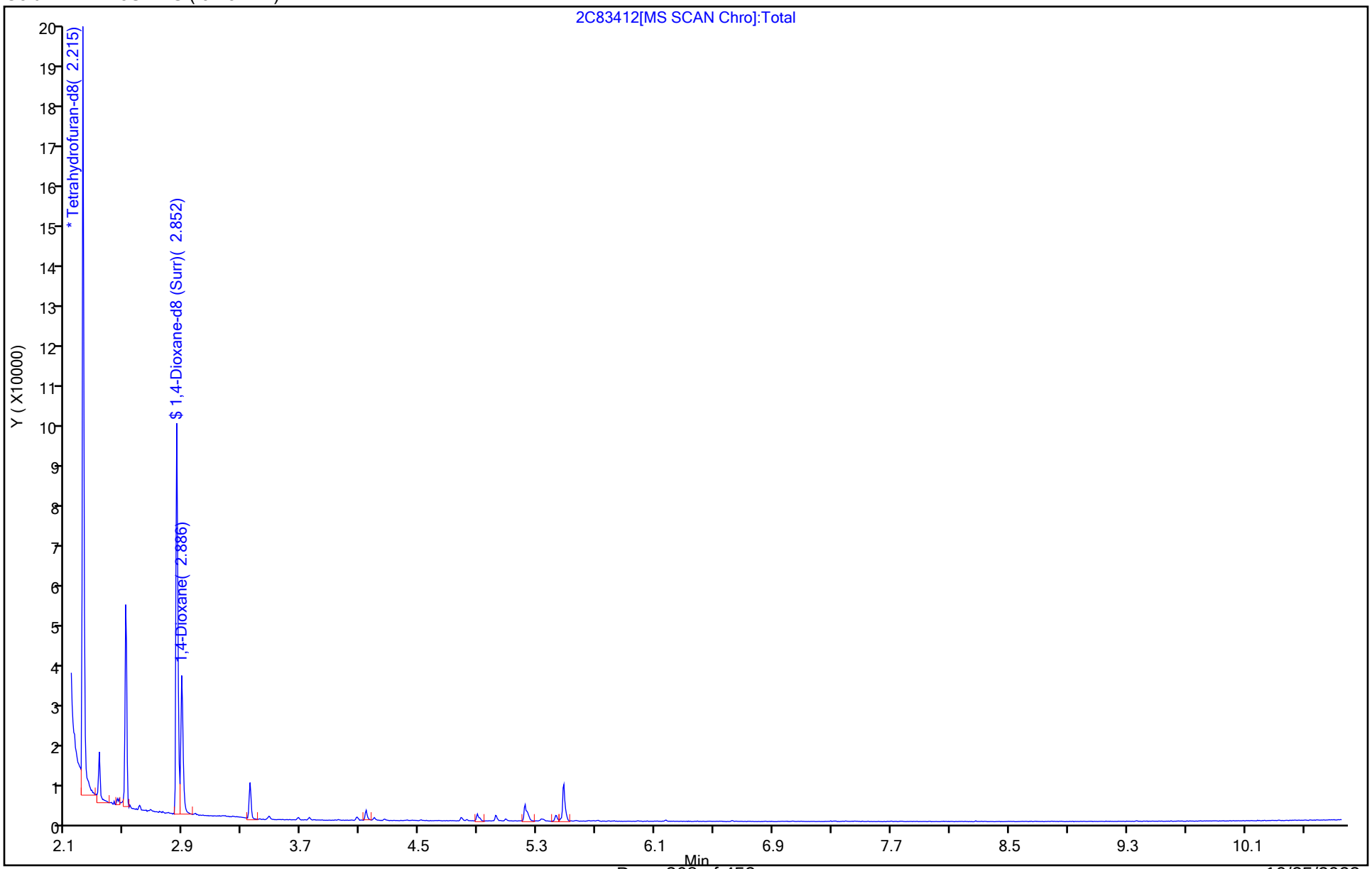
Report Date: 11-Sep-2023 14:57:19 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83412.D

Injection Date:	11-Sep-2023 14:44:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	11
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: CCVLIS 460-939254/2 Calibration Date: 10/19/2023 19:49

Instrument ID: CBNAMS2 Calib Start Date: 09/11/2023 12:16

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 09/11/2023 14:04

Lab File ID: 2C83857.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9770	1.464	0.0500	15.0	10.0	49.9	50.0
1,4-Dioxane-d8 (Surr)	Ave	0.9123	0.8952	0.0500	491	500	-1.9	50.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83857.D
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 19-Oct-2023 19:49:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-002
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:56:04 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: G4KC Date: 20-Oct-2023 05:56:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.193	2.193	0.000	0	51964	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.825	2.825	0.000	0	46519	0.5000	0.4907	
2 1,4-Dioxane	88	2.869	2.869	0.000	12	1522	0.0100	0.0150	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L1_00001 Amount Added: 1.00 Units: mL

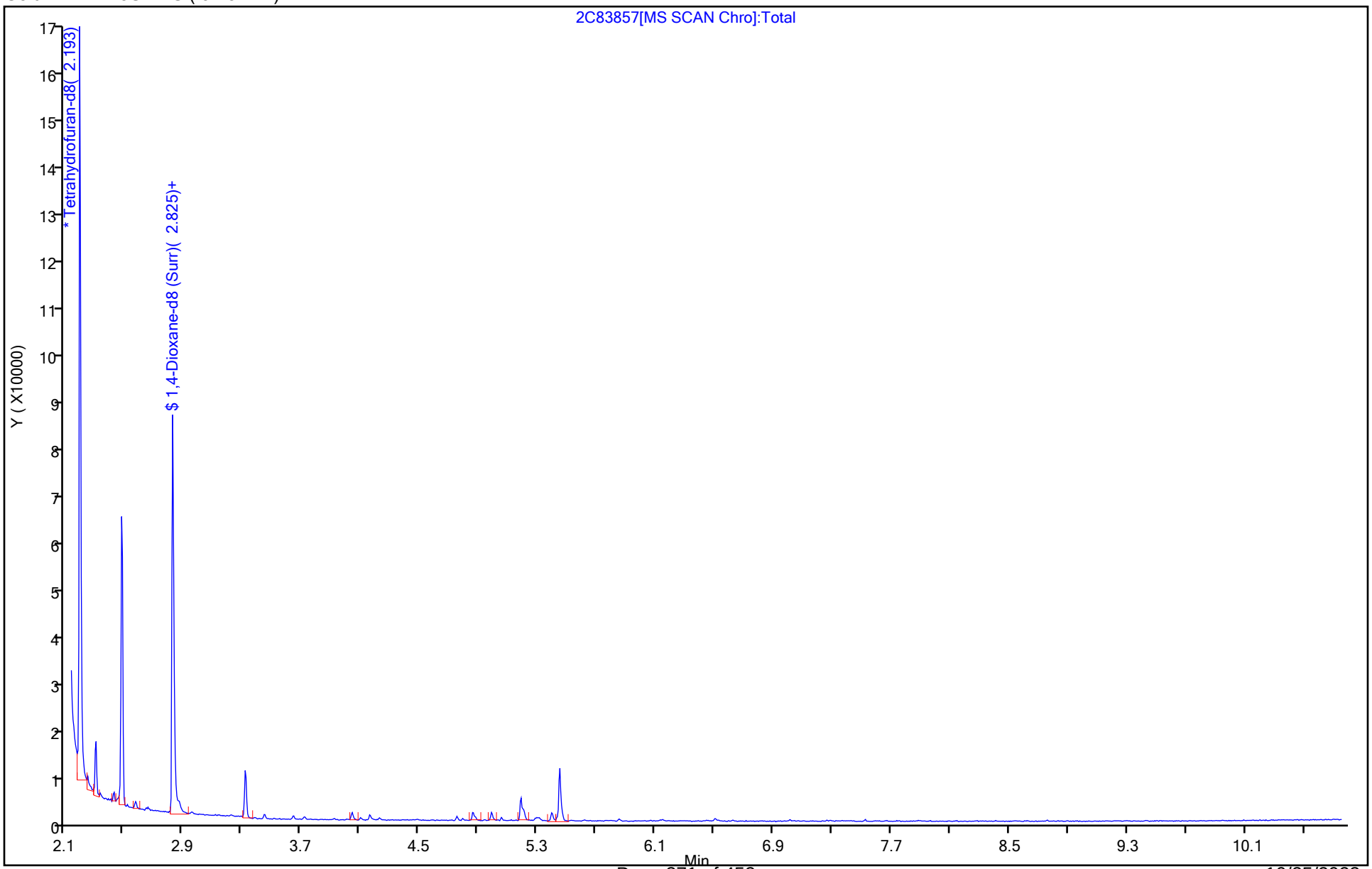
Report Date: 20-Oct-2023 05:56:05 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83857.D

Injection Date:	19-Oct-2023 19:49:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	CCVLIS			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: CCV 460-939254/10 Calibration Date: 10/19/2023 23:16

Instrument ID: CBNAMS2 Calib Start Date: 09/11/2023 12:16

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 09/11/2023 14:04

Lab File ID: 2C83865.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9770	0.9764	0.0500	200	200	-0.0	30.0
1,4-Dioxane-d8 (Surr)	Ave	0.9123	0.8703	0.0500	477	500	-4.6	30.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83865.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 19-Oct-2023 23:16:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-010
Operator ID: Instrument ID: CBNAMS2
Sublist: chrom-MS2_522*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:58:50 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:28:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.198	2.193	0.005	0	55918	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.824	2.825	-0.001	0	48666	0.5000	0.4770	
2 1,4-Dioxane	88	2.858	2.869	-0.011	16	21840	0.2000	0.1999	

QC Flag Legend
Processing Flags

Reagents:
SM_522_L5_00001 Amount Added: 1.00 Units: mL

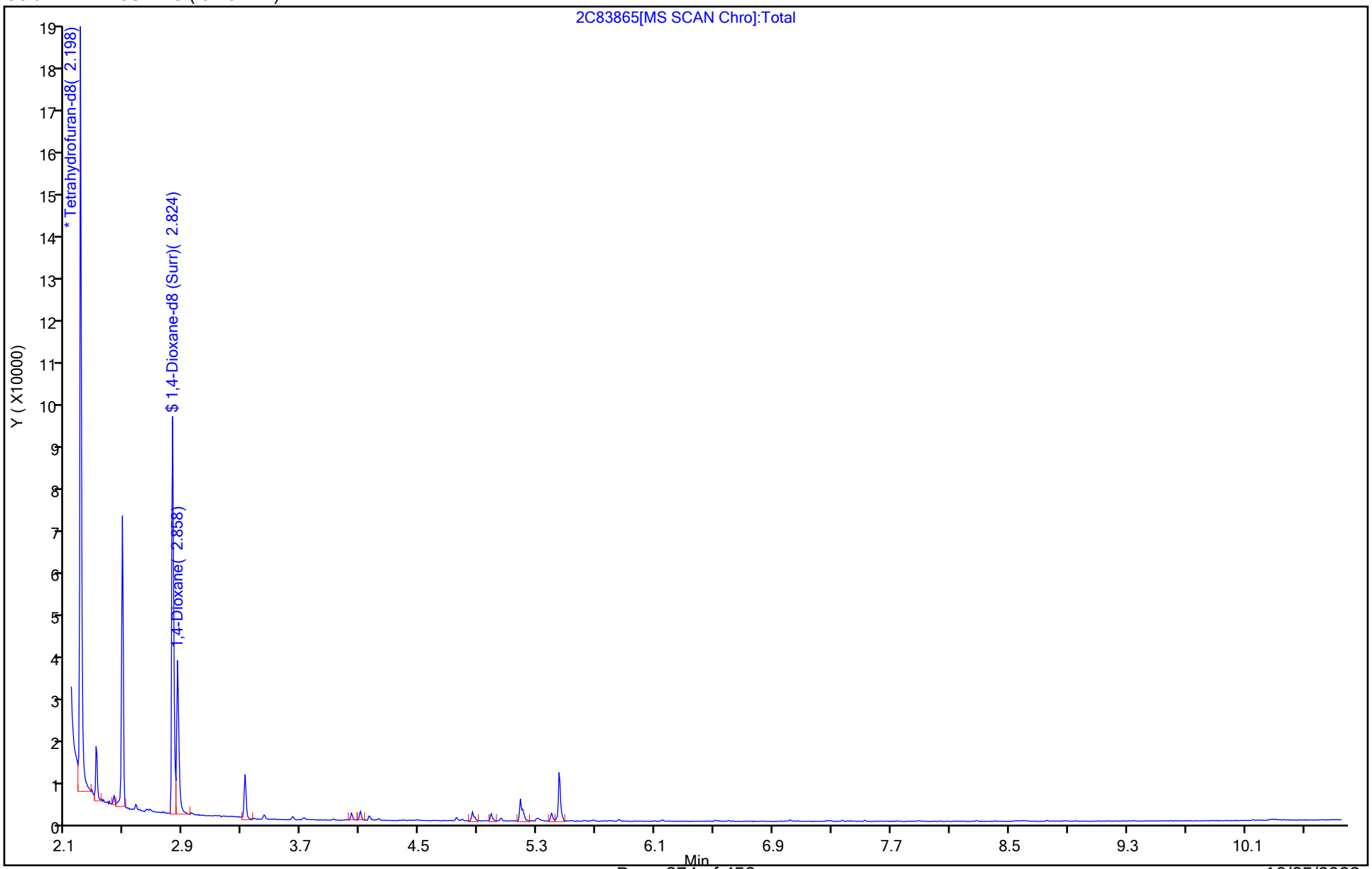
Report Date: 20-Oct-2023 05:58:50 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83865.D

Injection Date:	19-Oct-2023 23:16:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-939259/1-A

Matrix: Water | Lab File ID: 2C83858.D

Analysis Method: 522 | Date Collected:

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 21:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	100		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83858.D
Lims ID: MB 460-939259/1-A
Client ID:
Sample Type: MB
Inject. Date: 19-Oct-2023 21:29:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-003
Operator ID: Instrument ID: CBNAMS2

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:56:04 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:27:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.187	2.193	-0.006	0	51301	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.819	2.825	-0.006	0	46700	0.5000	0.4989	

QC Flag Legend
Processing Flags

Reagents:
SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

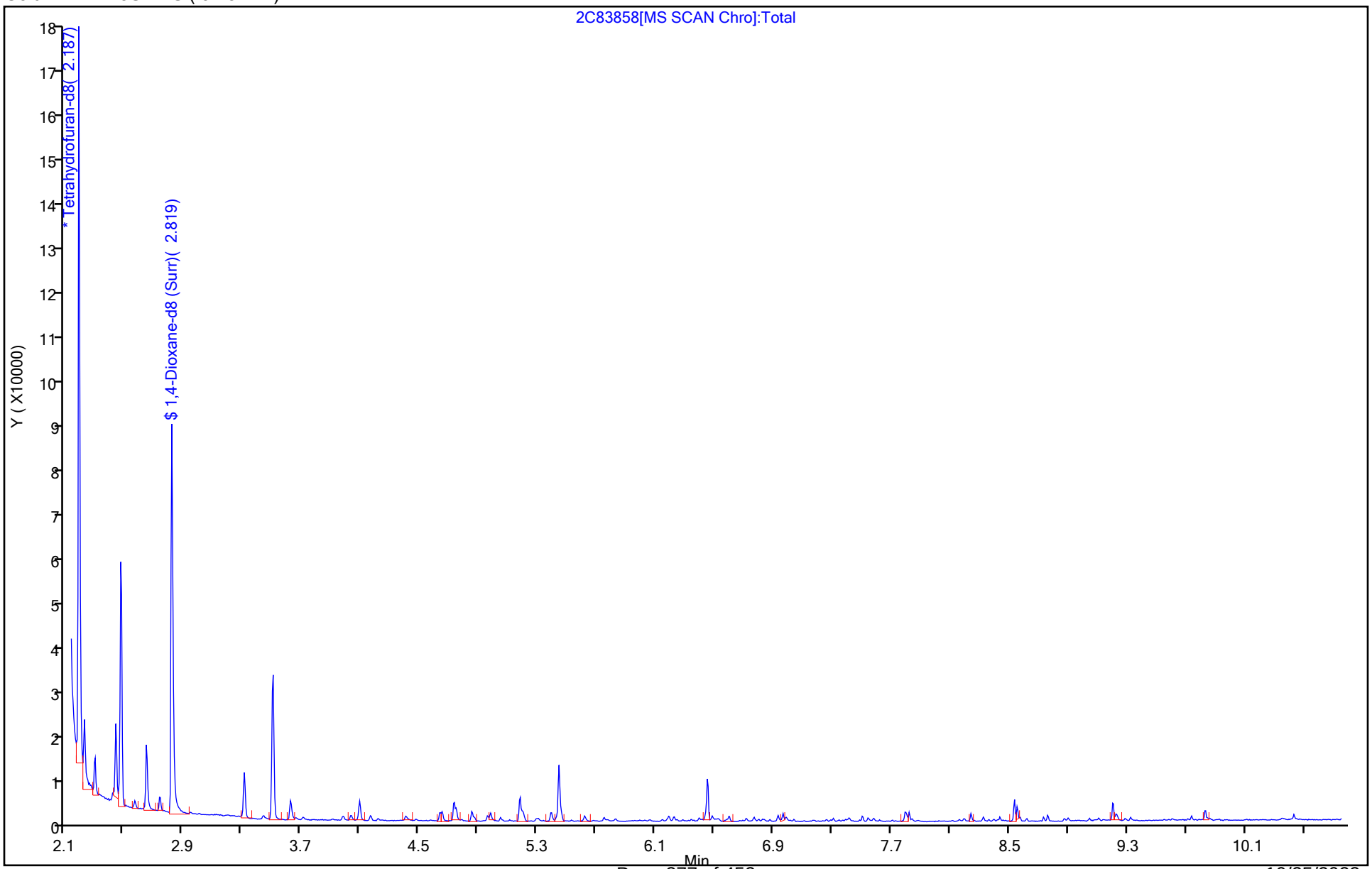
Report Date: 20-Oct-2023 05:56:09 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83858.D

Injection Date:	19-Oct-2023 21:29:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	MB 460-939259/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-939259/2-A

Matrix: Water | Lab File ID: 2C83859.D

Analysis Method: 522 | Date Collected:

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 21:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.61		0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	96		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83859.D
Lims ID: LCS 460-939259/2-A
Client ID:
Sample Type: LCS
Inject. Date: 19-Oct-2023 21:45:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-004
Operator ID: Instrument ID: CBNAMS2

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:56:04 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:26:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.187	2.193	-0.006	0	54191	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.819	2.825	-0.006	0	47677	0.5000	0.4822	
2 1,4-Dioxane	88	2.852	2.869	-0.017	13	24423	0.2000	0.2306	

QC Flag Legend
Processing Flags

Reagents:
SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

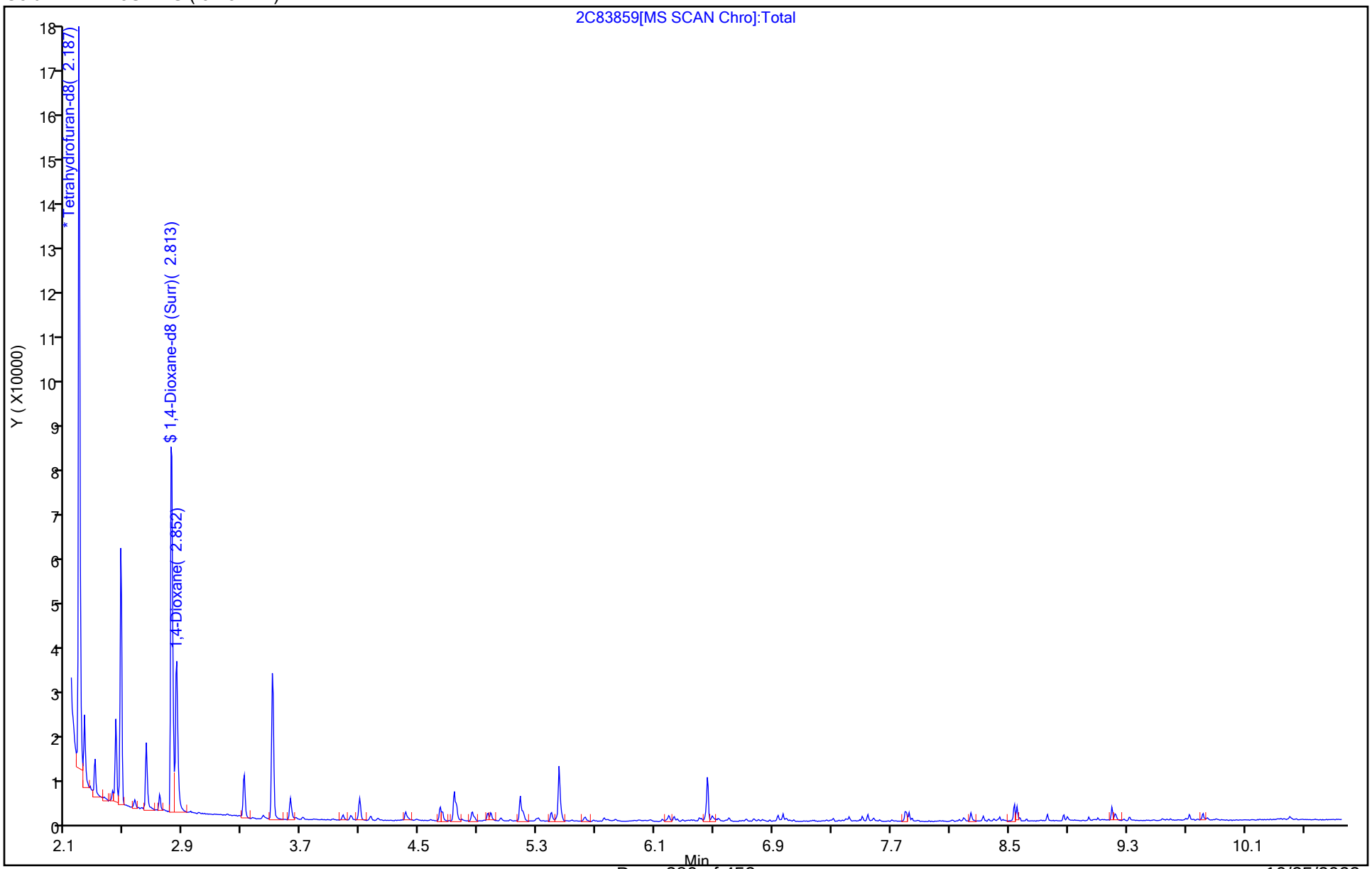
Report Date: 20-Oct-2023 05:56:13 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83859.D

Injection Date:	19-Oct-2023 21:45:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	LCS 460-939259/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-290512-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-939259/3-A

Matrix: Water | Lab File ID: 2C83860.D

Analysis Method: 522 | Date Collected:

Extract. Method: 522 | Date Extracted: 10/19/2023 13:19

Sample wt/vol: 100(mL) | Date Analyzed: 10/19/2023 22:00

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: Rtxi-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 939254 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.76		0.20	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	100		50-150

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83860.D
Lims ID: LCSD 460-939259/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 19-Oct-2023 22:00:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 460-0167583-005
Operator ID: Instrument ID: CBNAMS2

Method: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\MS2_522.m
Limit Group: SV_522_ICAL
Last Update: 20-Oct-2023 05:56:04 Calib Date: 11-Sep-2023 14:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS2\20230911-165812.b\2C83410.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1613

First Level Reviewer: DY9Z Date: 20-Oct-2023 02:27:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 53 Tetrahydrofuran-d8	46	2.193	2.193	-0.001	0	55064	0.5000	0.5000	
$ 54 1,4-Dioxane-d8 (Surr)	96	2.824	2.825	-0.001	0	50360	0.5000	0.5013	
2 1,4-Dioxane	88	2.858	2.869	-0.011	13	25612	0.2000	0.2380	

QC Flag Legend
Processing Flags

Reagents:
SM_522_ISTD_00001 Amount Added: 20.00 Units: uL Run Reagent

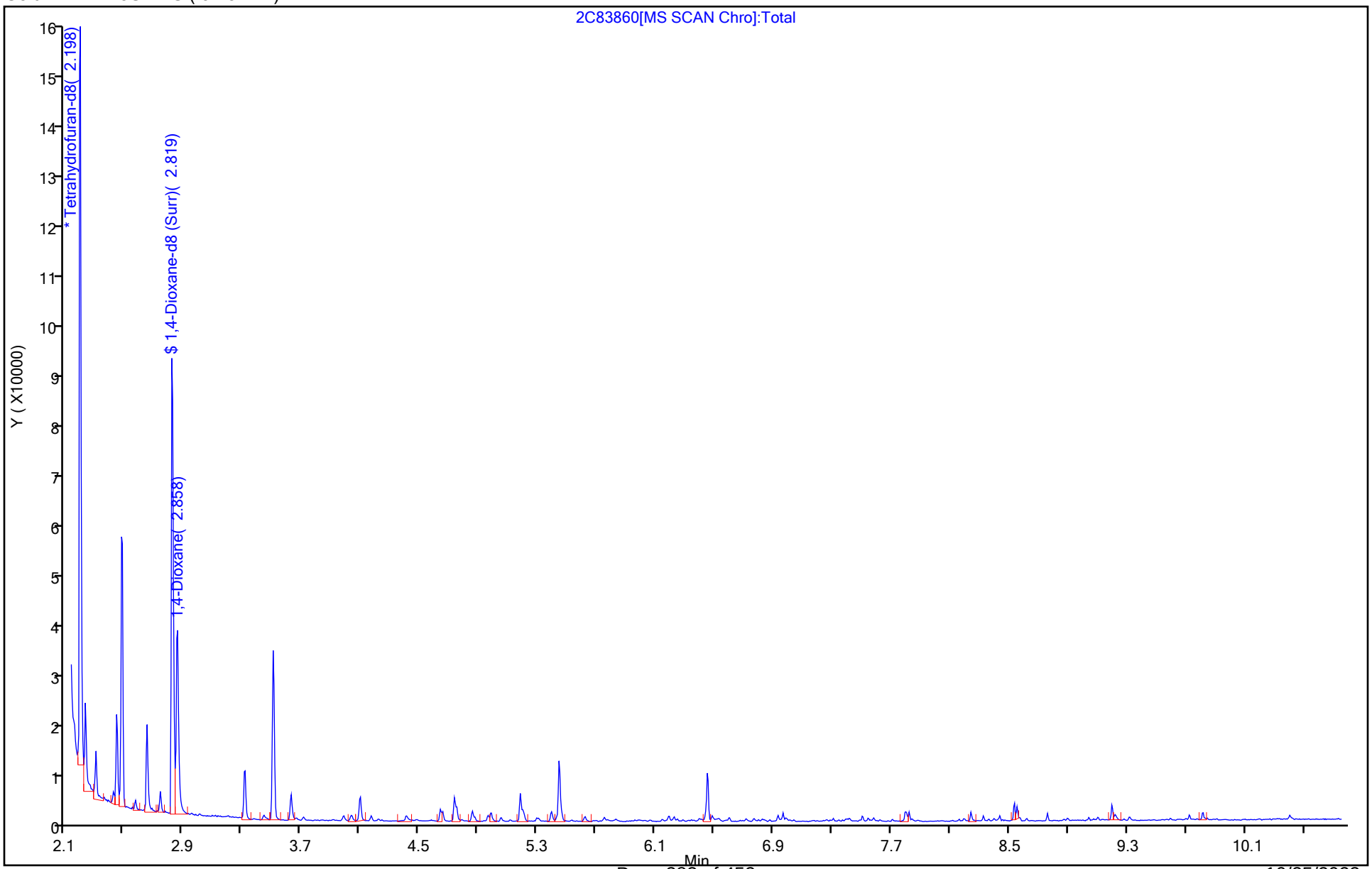
Report Date: 20-Oct-2023 05:56:17 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS2\20231019-167583.b\2C83860.D

Injection Date:	19-Oct-2023 22:00:30	Instrument ID:	CBNAMS2	Operator ID:	
Lims ID:	LCSD 460-939259/3-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MS2_522	Limit Group:	SV_522_ICAL		

Column: Rtxi-5Sil MS (0.25 mm)



10/25/2023
1:26 PM

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: CBNAMS2 Start Date: 09/11/2023 12:07

Analysis Batch Number: 931466 End Date: 09/11/2023 14:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-931466/1		09/11/2023 12:07	1	2C83402.D	Rtxi-5Sil MS 0.25(mm)
ICIS 460-931466/2		09/11/2023 12:16	1	2C83403.D	Rtxi-5Sil MS 0.25(mm)
STD8 460-931466/3 IC		09/11/2023 12:31	1	2C83404.D	Rtxi-5Sil MS 0.25(mm)
STD7 460-931466/4 IC		09/11/2023 12:47	1	2C83405.D	Rtxi-5Sil MS 0.25(mm)
STD6 460-931466/5 IC		09/11/2023 13:02	1	2C83406.D	Rtxi-5Sil MS 0.25(mm)
STD4 460-931466/6 IC		09/11/2023 13:17	1	2C83407.D	Rtxi-5Sil MS 0.25(mm)
STD3 460-931466/7 IC		09/11/2023 13:33	1	2C83408.D	Rtxi-5Sil MS 0.25(mm)
STD2 460-931466/8 IC		09/11/2023 13:48	1	2C83409.D	Rtxi-5Sil MS 0.25(mm)
STD1 460-931466/9 IC		09/11/2023 14:04	1	2C83410.D	Rtxi-5Sil MS 0.25(mm)
ICV 460-931466/11		09/11/2023 14:44	1	2C83412.D	Rtxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: CBNAMS2 Start Date: 10/19/2023 19:49

Analysis Batch Number: 939254 End Date: 10/19/2023 23:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVLIS 460-939254/2		10/19/2023 19:49	1	2C83857.D	Rtxi-5Sil MS 0.25(mm)
MB 460-939259/1-A		10/19/2023 21:29	1	2C83858.D	Rtxi-5Sil MS 0.25(mm)
LCS 460-939259/2-A		10/19/2023 21:45	1	2C83859.D	Rtxi-5Sil MS 0.25(mm)
LCSD 460-939259/3-A		10/19/2023 22:00	1	2C83860.D	Rtxi-5Sil MS 0.25(mm)
460-290512-2	1000-101623-0002	10/19/2023 22:15	1	2C83861.D	Rtxi-5Sil MS 0.25(mm)
460-290512-3	FDMH-1	10/19/2023 22:31	1	2C83862.D	Rtxi-5Sil MS 0.25(mm)
460-290512-4	FDMH-2	10/19/2023 22:46	1	2C83863.D	Rtxi-5Sil MS 0.25(mm)
460-290512-5	FDMH-4	10/19/2023 23:01	1	2C83864.D	Rtxi-5Sil MS 0.25(mm)
CCV 460-939254/10		10/19/2023 23:16	1	2C83865.D	Rtxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 931466 Batch Start Date: 09/11/23 12:07 Batch Analyst: Johnston, Mark D

Batch Method: 522 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	522_BFB 00001	SM_522_ICV 00001	SM_522_L1 00001	SM_522_L2 00001	SM_522_L3 00001
BFB 460-931466/1		522		1 mL	1 mL				
ICIS 460-931466/2		522		1 mL					
STD8 460-931466/3 IC		522		1 mL					
STD7 460-931466/4 IC		522		1 mL					
STD6 460-931466/5 IC		522		1 mL					
STD4 460-931466/6 IC		522		1 mL					
STD3 460-931466/7 IC		522		1 mL					1 mL
STD2 460-931466/8 IC		522		1 mL				1 mL	
STD1 460-931466/9 IC		522		1 mL			1 mL		
ICV 460-931466/11		522		1 mL		1 mL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	SM_522_L4 00001	SM_522_L5 00001	SM_522_L6 00001	SM_522_L7 00001	SM_522_L8 00001	
BFB 460-931466/1		522							
ICIS 460-931466/2		522			1 mL				
STD8 460-931466/3 IC		522						1 mL	
STD7 460-931466/4 IC		522					1 mL		
STD6 460-931466/5 IC		522				1 mL			
STD4 460-931466/6 IC		522		1 mL					
STD3 460-931466/7 IC		522							
STD2 460-931466/8 IC		522							
STD1 460-931466/9 IC		522							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 931466 Batch Start Date: 09/11/23 12:07 Batch Analyst: Johnston, Mark D

Batch Method: 522 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	SM_522_L4 00001	SM_522_L5 00001	SM_522_L6 00001	SM_522_L7 00001	SM_522_L8 00001	
ICV 460-931466/11		522							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 939259 Batch Start Date: 10/19/23 13:19 Batch Analyst: Belhadjel, Arezki X

Batch Method: 522 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	OP_522_SP 00001	OP_522_surr 00001	
MB 460-939259/1		522, 522		7 SU	100 mL	2 mL		100 uL	
LCS 460-939259/2		522, 522		7 SU	100 mL	2 mL	100 uL	100 uL	
LCSD 460-939259/3		522, 522		7 SU	100 mL	2 mL	100 uL	100 uL	
460-290512-E-2	1000-101623-0002	522, 522	T	1 SU	100 mL	2 mL		100 uL	
460-290512-E-3	FDMH-1	522, 522	T	1 SU	100 mL	2 mL		100 uL	
460-290512-D-4	FDMH-2	522, 522	T	1 SU	100 mL	2 mL		100 uL	
460-290512-E-5	FDMH-4	522, 522	T	1 SU	100 mL	2 mL		100 uL	

Batch Notes	
MeCL2 ID	362011
Methanol ID	258965
SPE Cartridge Lot ID	UCT enviroclean # 074739-EZ
pH Strip ID	HC-291590
Hydrochloric Acid ID	258360
Pipette/Syringe/Dispenser ID	2
Analyst ID - Spike Witness Analyst	AB
Batch Comment	522

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: Eurofins Edison Job Number: 460-290512-1

SDG No.:

Project: Racer, Ewing/Trenton

Client Sample ID	Lab Sample ID
1000-101623-0002	460-290512-2
FDMH-1	460-290512-3
FDMH-2	460-290512-4
FDMH-4	460-290512-5

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 1000-101623-0002 Lab Sample ID: 460-290512-2

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2023 11:00

Reporting Basis: WET Date Received: 10/16/2023 16:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	4.0	4.0	2.5	ug/L	U		1	6020B
7440-02-0	Nickel	4.0	4.0	0.91	ug/L	U		1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FDMH-1 Lab Sample ID: 460-290512-3

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2023 09:15

Reporting Basis: WET Date Received: 10/16/2023 16:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	4.0	4.0	2.5	ug/L	U		1	6020B
7440-02-0	Nickel	2.1	4.0	0.91	ug/L	J		1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FDMH-2 Lab Sample ID: 460-290512-4

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2023 09:30

Reporting Basis: WET Date Received: 10/16/2023 16:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	4.0	4.0	2.5	ug/L	U		1	6020B
7440-02-0	Nickel	4.0	4.0	0.91	ug/L	U		1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FDMH-4 Lab Sample ID: 460-290512-5

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2023 10:15

Reporting Basis: WET Date Received: 10/16/2023 16:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	4.0	4.0	2.5	ug/L	U		1	6020B
7440-02-0	Nickel	4.0	4.0	0.91	ug/L	U		1	6020B

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

ICV Source: Interm_ICV_00007 Concentration Units: ug/L

CCV Source: ME_Cal5_00119

Analyte	ICV 460-939564/7 10/20/2023 09:36				CCV 460-939564/18 10/20/2023 10:04				CCV 460-939564/54 10/20/2023 11:37			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Chromium	80.22		80.0	100	99.75		100	100	98.63		100	99
Fe	19920		20000	100	25140		25000	101	24790		25000	99
Na	20190		20000	101	25210		25000	101	25150		25000	101
Nickel	81.45		80.0	102	99.25		100	99	98.80		100	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

ICV Source: Interm_ICV_00007 Concentration Units: ug/L

CCV Source: ME_Cal5_00119

Analyte	CCV 460-939564/66 10/20/2023 12:04				CCV 460-939564/78 10/20/2023 12:32				CCV 460-939564/90 10/20/2023 12:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Chromium	99.13		100	99	97.84		100	98	98.85		100	99
Fe	24760		25000	99	25280		25000	101	25180		25000	101
Na	25310		25000	101	24900		25000	100	24770		25000	99
Nickel	97.93		100	98	98.25		100	98	99.84		100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 460-939564/8 10/20/2023 09:39		CCB 460-939564/19 10/20/2023 10:06		CCB 460-939564/55 10/20/2023 11:39		CCB 460-939564/67 10/20/2023 12:06	
		Found	C	Found	C	Found	C	Found	C
Chromium	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Fe	120	120	U	120	U	120	U	120	U
Na	500	500	U	500	U	500	U	500	U
Nickel	4.0	4.0	U	4.0	U	4.0	U	4.0	U

Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 460-939564/79 10/20/2023 12:34		CCB 460-939564/91 10/20/2023 13:02					
		Found	C	Found	C	Found	C	Found	C
Chromium	4.0	4.0	U	4.0	U				
Fe	120	120	U	120	U				
Na	500	500	U	500	U				
Nickel	4.0	4.0	U	4.0	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 460-938950/1-A

Instrument Code: ICPMS4 Batch No.: 939564

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	120	U		6020B_DKQP
7440-47-3	Chromium	4.0	U		6020B_DKQP
7440-02-0	Nickel	4.0	U		6020B_DKQP
7440-23-5	Sodium	500	U		6020B_DKQP

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICSA 460-939564/10 Instrument ID: ICPMS4

Lab File ID: 014ICSA.d ICS Source: ME_ICSA_00195

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Chromium		**0.472**	
Fe	**100000**	**101486**	**101**
Na	**100000**	**101229**	**101**
Nickel		**0.907**	
Ag		*0.0310*	
Al	*100000*	*102677*	*103*
As		*0.416*	
B		*3.95*	
Ba		*0.711*	
Be		*0.0010*	
Ca	*100000*	*102946*	*103*
Cd		*0.445*	
Co		*0.289*	
Cu		*0.686*	
K	*100000*	*101692*	*102*
Mg	*100000*	*103418*	*103*
Mn		*0.749*	
Mo	*2000*	*2063*	*103*
Pb		*0.224*	
Sb		*0.171*	
Se		*0.0970*	
Sn		*0.246*	
Sr		*0.632*	
Ti	*2000*	*2326*	*116*
Tl		*-0.0900*	
V		*-0.0120*	
Zn		*1.81*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Lab Sample ID: ICSAB 460-939564/11 Instrument ID: ICPMS4

Lab File ID: 015ICSB.d ICS Source: ME_ICSAB_00158

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Chromium	**200**	**198**	**99**
Fe	**100000**	**100044**	**100**
Na	**100000**	**100296**	**100**
Nickel	**200**	**196**	**98**
Ag	*200*	*195*	*98*
Al	*100000*	*101333*	*101*
As	*200*	*201*	*100*
B		*3.21*	
Ba	*200*	*215*	*108*
Be	*200*	*200*	*100*
Ca	*100000*	*100930*	*101*
Cd	*200*	*197*	*99*
Co	*200*	*198*	*99*
Cu	*200*	*197*	*98*
K	*100000*	*101195*	*101*
Mg	*100000*	*100998*	*101*
Mn	*200*	*201*	*101*
Mo	*2000*	*2052*	*103*
Pb	*200*	*207*	*104*
Sb	*100*	*106*	*106*
Se	*200*	*195*	*98*
Sn	*200*	*203*	*101*
Sr	*200*	*200*	*100*
Ti	*2000*	*2315*	*116*
Tl	*100*	*104*	*104*
V	*200*	*204*	*102*
Zn	*200*	*198*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 460-290504-P-9-C MS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Iron	3859		1150		2500	108	75-125		6020B
Chromium	57.74		3.3	J	50.0	109	75-125		6020B
Nickel	113.3		61.0		50.0	104	75-125		6020B
Sodium	276200		283000		2500	-272	75-125	4	6020B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 460-290504-P-9-A PDS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Fe	3553		1150		2500	96	75-125		6020B
Chromium	51.64		3.3	J	50.0	97	75-125		6020B
Nickel	109.4		61.0		50.0	97	75-125		6020B
Na	286800		283000		2500	NC	75-125		6020B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: _____ Lab ID: 460-290504-P-9-B DU

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Chromium	4.0	3.3	J	3.34	J	1		6020B
Nickel	4.0	61.0		60.61		0.7		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 460-939564/12

Lab Name: Eurofins Edison Job No.: 460-290512-1

Sample Matrix: LCS Source: me_LR-B_00019

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Fe	500000	490300		98	90	110		6020B
Chromium		5.76						6020B
Nickel		6.95						6020B
Na	500000	488100		98	90	110		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 460-939564/13

Lab Name: Eurofins Edison Job No.: 460-290512-1

Sample Matrix: LCS Source:

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Fe		61.11	J					6020B
Chromium		4.0	U					6020B
Nickel		2.27	J					6020B
Na		500	U					6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 460-939564/14

Lab Name: Eurofins Edison Job No.: 460-290512-1

Sample Matrix: LCS Source:

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Fe		120	U					6020B
Chromium	20000	18560		93	90	110		6020B
Nickel	20000	20000		100	90	110		6020B
Na		500	U					6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 460-938950/2-A

Lab Name: Eurofins Edison Job No.: 460-290512-1

Sample Matrix: Water LCS Source: ME_ipmsSPK_00051

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	2500	2809		112	80	120		6020B
Chromium	50.0	53.46		107	80	120		6020B
Nickel	50.0	53.25		107	80	120		6020B
Sodium	2500	2785		111	80	120		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 460-290504-P-9-A SD ^5

SDG No:

Lab Name: Eurofins Edison Job No: 460-290512-1

Matrix: Water Concentration Units: ug/L

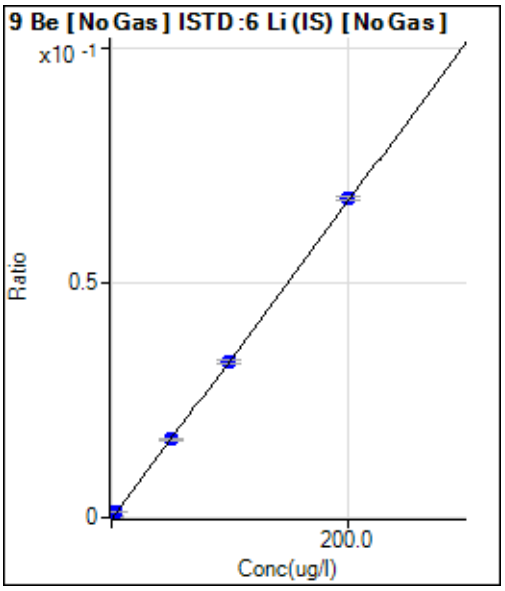
Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Fe	1150		1126		NC		6020B
Chromium	3.3	J	20.0	U	NC		6020B
Nickel	61.0		63.81		NC		6020B
Na	283000		295100		4.3		6020B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

Batch Folder: C:\Agilent\ICPMH\1\DATA\NM102023.b\
Analysis File: NM102023.batch.bin
DA Date-Time: 2023-10-20 09:47:09
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

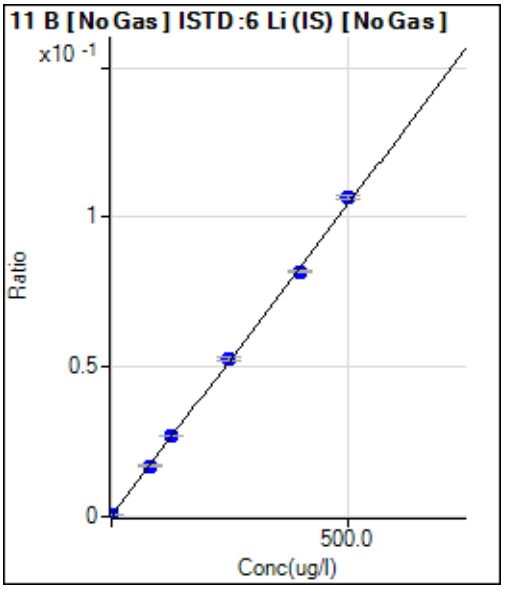
Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	IC CAL-Blk	2023-10-20 09:21:42
2	006CALS.d	IC CAL1	2023-10-20 09:24:25
3	007CALS.d	IC CAL2	2023-10-20 09:26:59
4	008CALS.d	IC CAL3	2023-10-20 09:29:30
5	009CALS.d	IC CAL4	2023-10-20 09:32:01
6	010CALS.d	IC CAL5	2023-10-20 09:34:30



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	118.89	0.0000	P	4.6	
2	☐	0.800	0.722	1464.53	0.0003	P	7.1	-9.8
3	☐	4.000	3.792	7343.06	0.0013	P	1.3	-5.2
4	☐	50.000	49.204	92550.05	0.0167	P	2.5	-1.6
5	☐	100.000	98.195	182018.61	0.0332	P	2.8	-1.8
6	☐	200.000	201.106	371911.96	0.0681	P	1.0	0.6

y = 3.3828E-004 * x + 2.1138E-005
R = 0.9999
DL = 0.008649 ug/l
BEC = 0.06249 ug/l

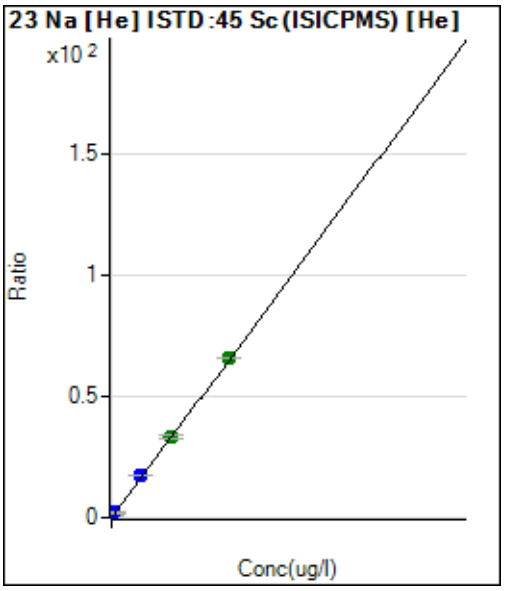
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4183.98	0.0007	P	1.6	
2	☐	80.000	78.065	93828.24	0.0170	P	1.9	-2.4
3	☐	400.000	389.498	461266.02	0.0819	P	1.3	-2.6
4	☐	125.000	126.588	150632.28	0.0271	P	1.3	1.3
5	☐	250.000	249.427	288709.66	0.0527	P	1.6	-0.2
6	☐	500.000	508.601	583256.36	0.1067	P	1.0	1.7

y = 2.0837E-004 * x + 7.4417E-004
R = 0.9995
DL = 0.1678 ug/l
BEC = 3.571 ug/l

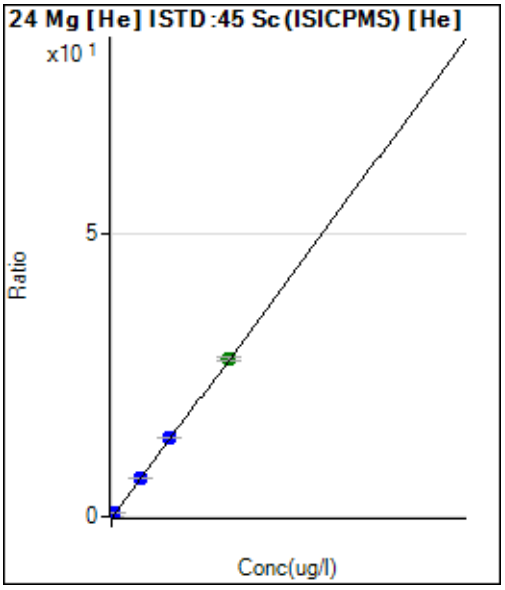
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20612.99	0.6072	P	1.0	
2	☐	200.000	208.664	29112.49	0.8798	P	1.4	4.3
3	☐	1000.000	1057.513	65742.36	1.9888	P	1.4	5.8
4	☐	12500.00	12630.61	560729.70	17.108	P	0.7	1.0
5	☐	25000.00	24908.76	1080703.75	33.149	A	3.4	-0.4
6	☐	50000.00	50011.77	2170256.36	65.946	A	0.8	0.0

y = 0.0013 * x + 0.6072
R = 1.0000
DL = 14.32 ug/l
BEC = 464.7 ug/l

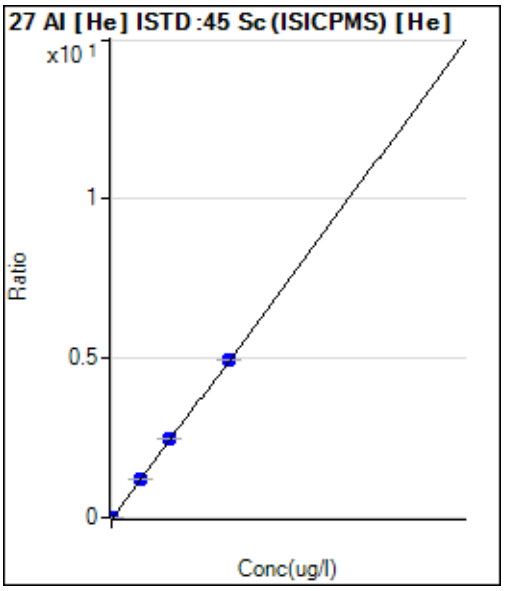
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42.22	0.0012	P	20.0	
2	☐	200.000	189.965	3543.81	0.1071	P	3.1	-5.0
3	☐	1000.000	985.211	18192.99	0.5503	P	1.2	-1.5
4	☐	12500.00	12420.56	226926.12	6.9238	P	0.7	-0.6
5	☐	25000.00	24838.19	451343.92	13.844	P	0.2	-0.6
6	☐	50000.00	50101.09	919006.63	27.924	A	2.2	0.2

y = 5.5735E-004 * x + 0.0012
R = 1.0000
DL = 1.339 ug/l
BEC = 2.232 ug/l

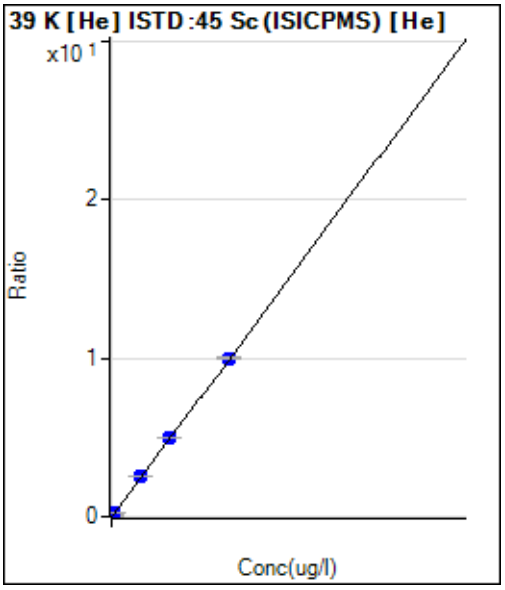
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28.89	0.0009	P	13.4	
2	☐	40.000	46.700	181.11	0.0055	P	4.8	16.8
3	☐	200.000	213.845	727.80	0.0220	P	5.1	6.9
4	☐	12500.00	12349.61	40074.11	1.2227	P	0.3	-1.2
5	☐	25000.00	25066.68	80875.24	2.4809	P	1.0	0.3
6	☐	50000.00	50004.19	162840.45	4.9481	P	0.8	0.0

y = 9.8938E-005 * x + 8.5099E-004
R = 1.0000
DL = 3.45 ug/l
BEC = 8.601 ug/l

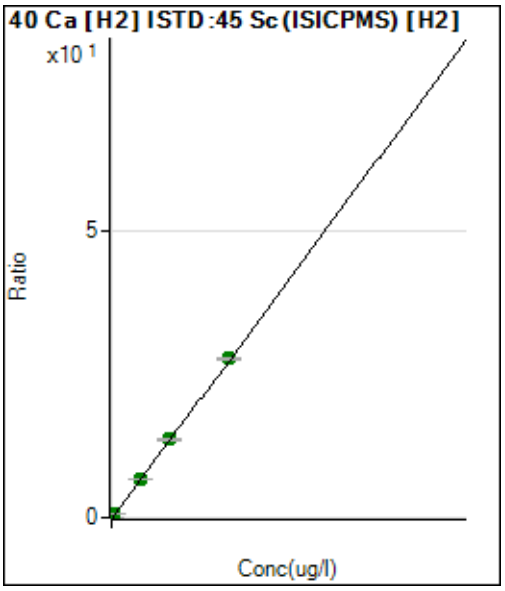
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1794.57	0.0529	P	4.7	
2	☐	200.000	190.365	3001.45	0.0907	P	2.8	-4.8
3	☐	1000.000	1010.735	8387.03	0.2537	P	1.6	1.1
4	☐	12500.00	12424.42	82655.08	2.5219	P	0.4	-0.6
5	☐	25000.00	24969.70	163489.41	5.0149	P	0.6	-0.1
6	☐	50000.00	50033.86	328954.36	9.9957	P	0.9	0.1

y = 1.9872E-004 * x + 0.0529
R = 1.0000
DL = 37.84 ug/l
BEC = 266 ug/l

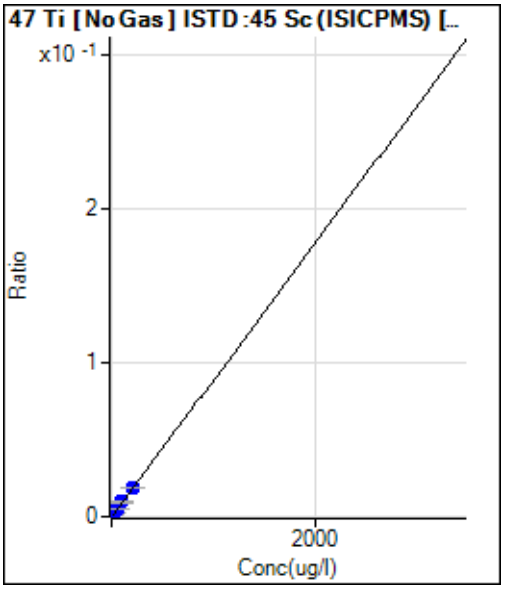
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35762.78	0.0223	P	0.9	
2	☐	200.000	199.256	208437.34	0.1321	P	2.4	-0.4
3	☐	1000.000	1011.265	914957.34	0.5794	A	0.6	1.1
4	☐	12500.00	12197.37	10673638.17	6.7411	A	0.8	-2.4
5	☐	25000.00	24656.73	21036561.77	13.604	A	1.9	-1.4
6	☐	50000.00	50247.06	43227166.86	27.700	A	0.8	0.5

y = 5.5084E-004 * x + 0.0223
R = 0.9999
DL = 1.077 ug/l
BEC = 40.51 ug/l

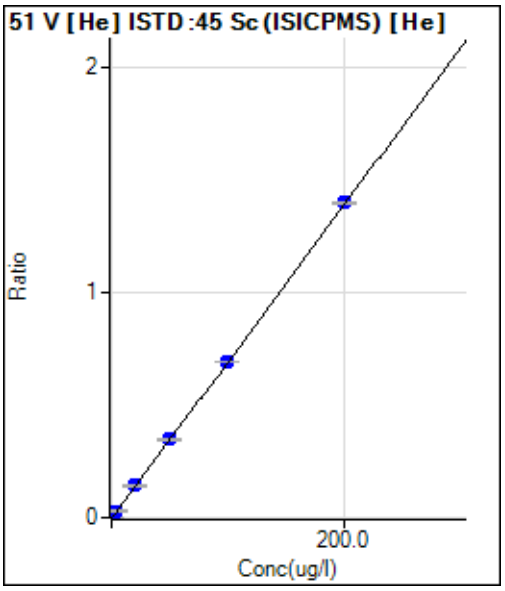
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4699.72	0.0006	P	4.7	
2	☐	4.000	4.080	7155.23	0.0010	P	1.2	2.0
3	☐	20.000	19.423	17305.40	0.0024	P	2.5	-2.9
4	☐	50.000	50.539	36798.15	0.0052	P	1.0	1.1
5	☐	100.000	97.995	67601.97	0.0094	P	2.4	-2.0
6	☐	200.000	200.924	133298.21	0.0186	P	1.0	0.5

y = 8.9535E-005 * x + 6.4243E-004
R = 0.9999
DL = 1.008 ug/l
BEC = 7.175 ug/l

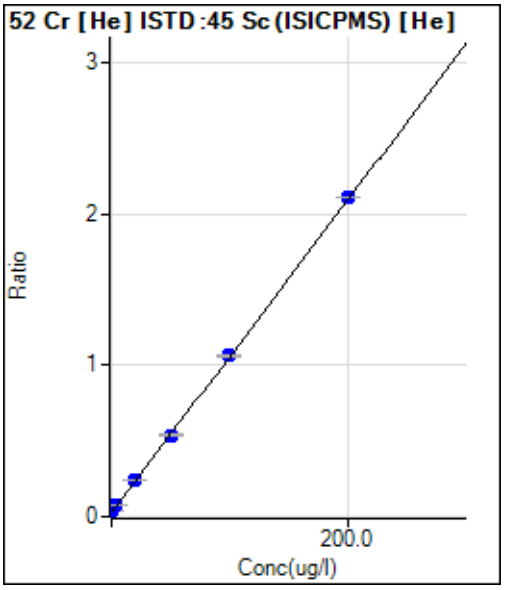
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	102.22	0.0030	P	8.4	
2	☐	4.000	3.848	986.71	0.0298	P	4.3	-3.8
3	☐	20.000	19.976	4698.61	0.1421	P	1.3	-0.1
4	☐	50.000	49.470	11390.32	0.3476	P	2.5	-1.1
5	☐	100.000	99.249	22633.14	0.6943	P	0.3	-0.8
6	☐	200.000	200.513	46058.05	1.3995	P	1.1	0.3

y = 0.0070 * x + 0.0030
R = 1.0000
DL = 0.1083 ug/l
BEC = 0.4323 ug/l

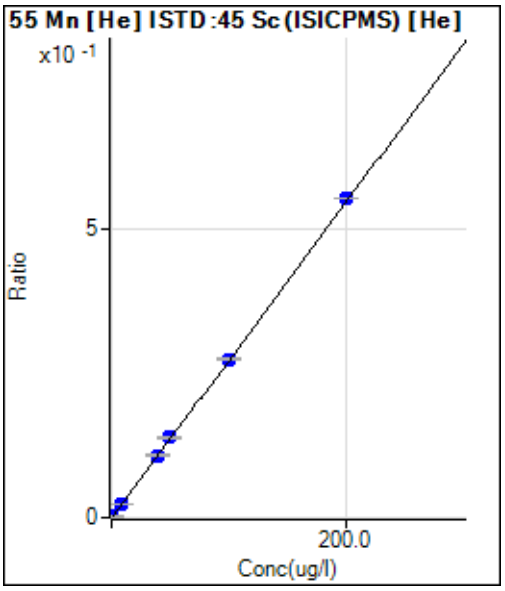
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1296.74	0.0382	P	6.1	
2	☐	4.000	3.999	2630.27	0.0795	P	4.0	0.0
3	☐	20.000	19.697	7991.26	0.2417	P	2.0	-1.5
4	☐	50.000	48.583	17705.94	0.5403	P	2.4	-2.8
5	☐	100.000	99.420	34741.67	1.0657	P	1.2	-0.6
6	☐	200.000	200.675	69507.17	2.1121	P	0.3	0.3

y = 0.0103 * x + 0.0382
R = 1.0000
DL = 0.6731 ug/l
BEC = 3.696 ug/l

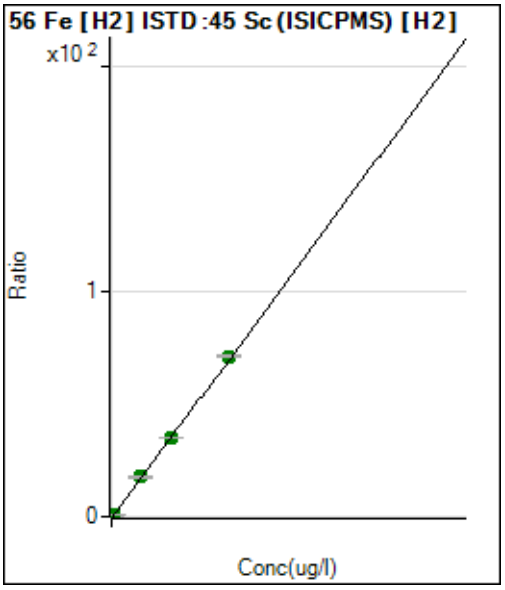
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	60.00	0.0018	P	44.2	
2	☐	8.000	7.703	757.80	0.0229	P	4.4	-3.7
3	☐	40.000	38.655	3562.71	0.1078	P	4.4	-3.4
4	☐	50.000	49.811	4535.22	0.1384	P	3.4	-0.4
5	☐	100.000	99.282	8934.08	0.2740	P	1.0	-0.7
6	☐	200.000	200.687	18170.99	0.5522	P	0.1	0.3

y = 0.0027 * x + 0.0018
R = 1.0000
DL = 0.8552 ug/l
BEC = 0.6446 ug/l

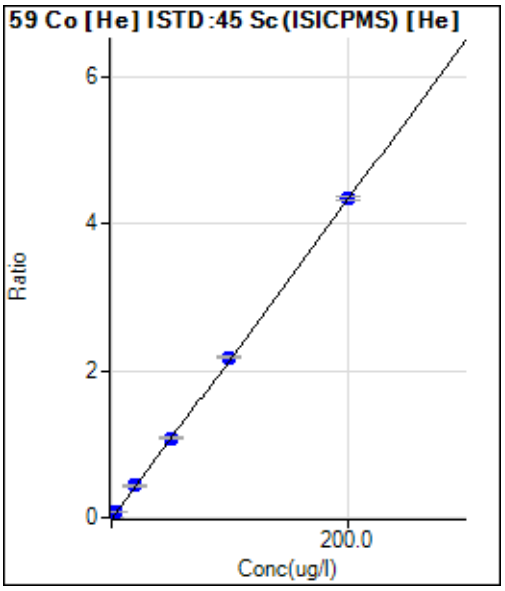
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37715.09	0.0235	P	1.3	
2	☐	120.000	118.618	302400.60	0.1916	P	2.7	-1.2
3	☐	600.000	595.742	1370243.44	0.8677	A	1.3	-0.7
4	☐	12500.00	12359.91	27768289.59	17.537	A	0.6	-1.1
5	☐	25000.00	24686.21	54125752.53	35.003	A	1.4	-1.3
6	☐	50000.00	50191.97	111022656.1	71.145	A	0.8	0.4

y = 0.0014 * x + 0.0235
R = 1.0000
DL = 0.6588 ug/l
BEC = 16.61 ug/l

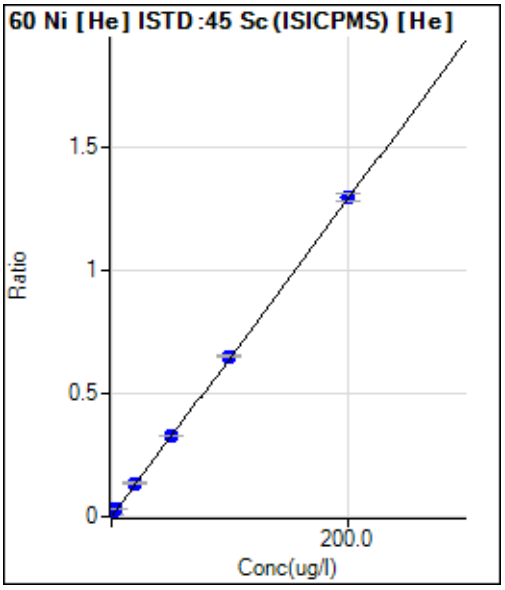
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	55.56	0.0016	P	3.6	
2	☐	4.000	3.908	2861.43	0.0865	P	9.1	-2.3
3	☐	20.000	19.854	14310.90	0.4329	P	0.9	-0.7
4	☐	50.000	49.870	35557.32	1.0849	P	0.5	-0.3
5	☐	100.000	100.383	71138.77	2.1821	P	0.7	0.4
6	☐	200.000	199.858	142917.52	4.3428	P	0.8	-0.1

y = 0.0217 * x + 0.0016
R = 1.0000
DL = 0.008247 ug/l
BEC = 0.07534 ug/l

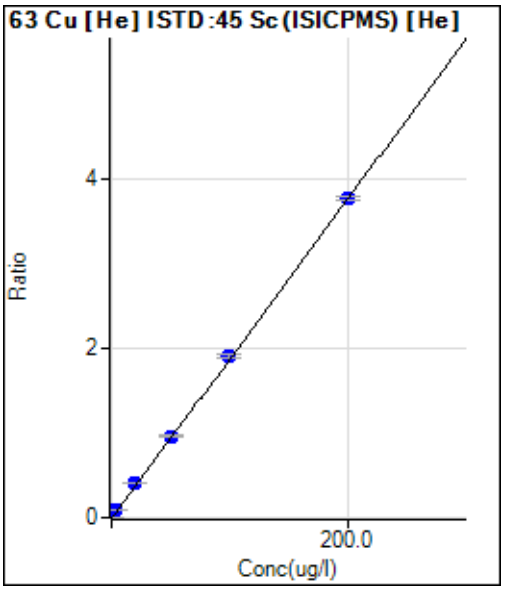
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	222.23	0.0065	P	7.3	
2	☐	4.000	3.711	1008.93	0.0305	P	5.3	-7.2
3	☐	20.000	19.820	4445.20	0.1345	P	5.4	-0.9
4	☐	50.000	49.798	10752.08	0.3280	P	0.8	-0.4
5	☐	100.000	99.756	21209.85	0.6506	P	1.1	-0.2
6	☐	200.000	200.196	42751.19	1.2990	P	1.8	0.1

y = 0.0065 * x + 0.0065
R = 1.0000
DL = 0.221 ug/l
BEC = 1.014 ug/l

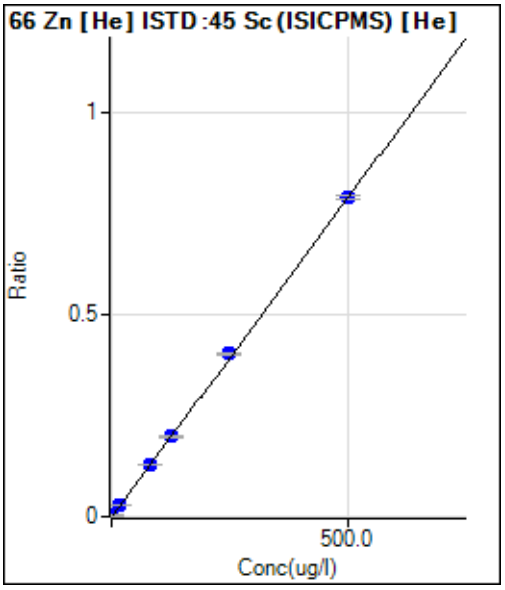
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	281.12	0.0083	P	11.8	
2	☐	4.000	4.147	2862.54	0.0865	P	1.2	3.7
3	☐	20.000	21.278	13543.46	0.4096	P	1.1	6.4
4	☐	50.000	50.431	31446.24	0.9596	P	2.5	0.9
5	☐	100.000	100.679	62179.07	1.9074	P	1.5	0.7
6	☐	200.000	199.422	124067.83	3.7700	P	0.7	-0.3

y = 0.0189 * x + 0.0083
R = 1.0000
DL = 0.1553 ug/l
BEC = 0.4389 ug/l

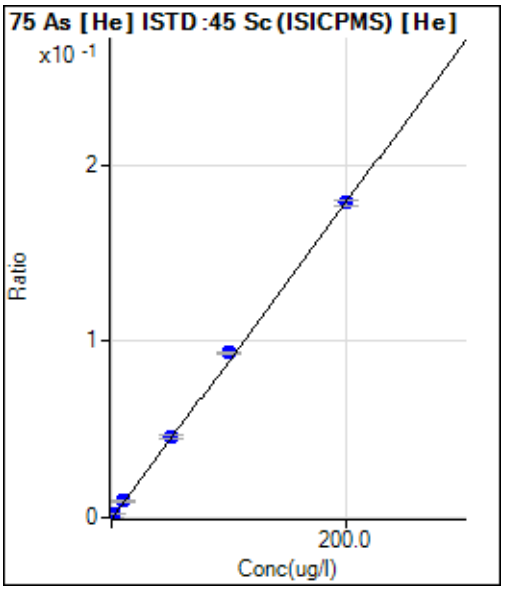
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	82.22	0.0024	P	14.1	
2	☐	16.000	16.609	950.04	0.0287	P	4.0	3.8
3	☐	80.000	79.985	4262.92	0.1289	P	2.6	0.0
4	☐	125.000	124.224	6519.38	0.1989	P	1.7	-0.6
5	☐	250.000	253.194	13135.30	0.4029	P	0.9	1.3
6	☐	500.000	498.580	26032.72	0.7910	P	0.7	-0.3

y = 0.0016 * x + 0.0024
R = 1.0000
DL = 0.6477 ug/l
BEC = 1.531 ug/l

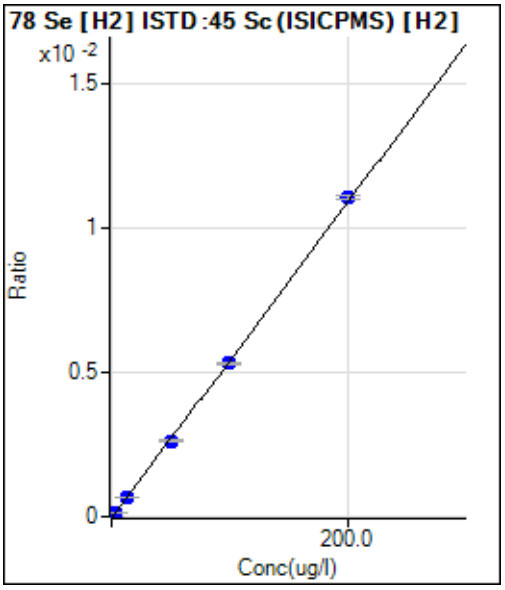
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1.11	0.0000	P	173.	
2	☐	2.000	2.047	62.22	0.0019	P	19.7	2.4
3	☐	10.000	10.382	311.12	0.0094	P	2.8	3.8
4	☐	50.000	50.876	1507.87	0.0460	P	5.3	1.8
5	☐	100.000	103.651	3053.70	0.0937	P	1.2	3.7
6	☐	200.000	197.936	5885.75	0.1789	P	1.9	-1.0

y = 9.0341E-004 * x + 3.2716E-005
R = 0.9997
DL = 0.1882 ug/l
BEC = 0.03621 ug/l

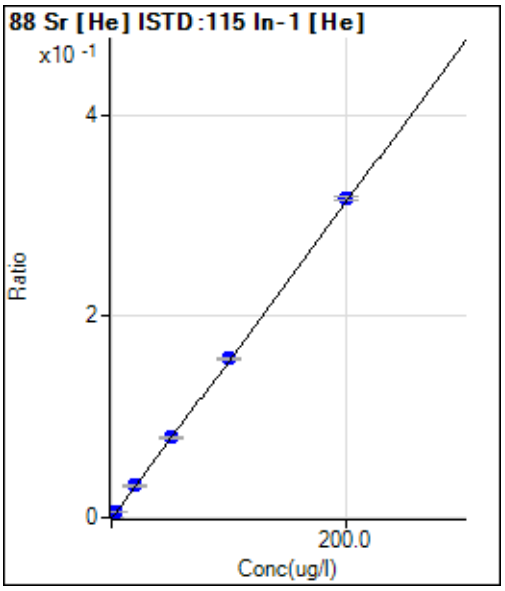
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	1.3	
2	☐	2.500	2.069	182.23	0.0001	P	10.7	-17.3
3	☐	12.500	12.231	1061.16	0.0007	P	0.8	-2.1
4	☐	50.000	47.524	4123.99	0.0026	P	2.5	-5.0
5	☐	100.000	97.041	8220.33	0.0053	P	1.0	-3.0
6	☐	200.000	202.121	17272.20	0.0111	P	1.7	1.1

y = 5.4762E-005 * x + 2.0783E-006
R = 0.9998
DL = 0.001493 ug/l
BEC = 0.03795 ug/l

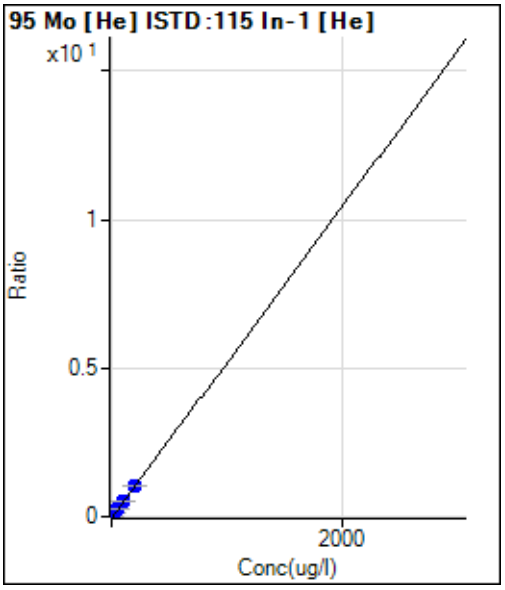
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0004	P	67.0	
2	☐	4.000	3.542	286.67	0.0060	P	15.4	-11.5
3	☐	20.000	19.799	1517.87	0.0317	P	8.1	-1.0
4	☐	50.000	50.039	3767.22	0.0796	P	1.9	0.1
5	☐	100.000	99.759	7454.33	0.1582	P	1.8	-0.2
6	☐	200.000	200.140	14886.11	0.3170	P	1.5	0.1

y = 0.0016 * x + 4.0553E-004
R = 1.0000
DL = 0.515 ug/l
BEC = 0.2563 ug/l

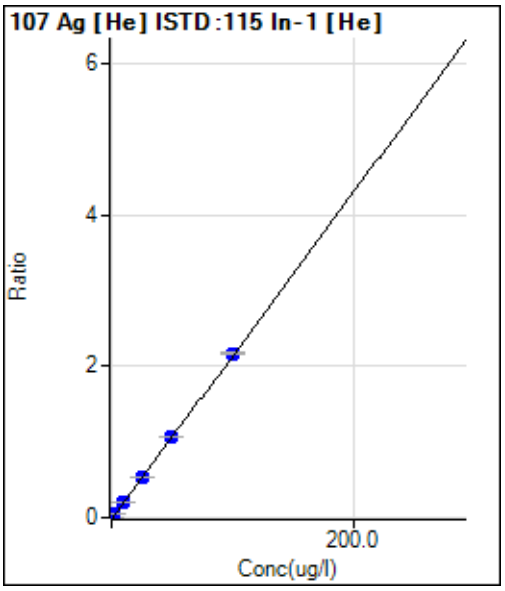
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17.78	0.0004	P	47.3	
2	☐	4.000	4.070	1034.49	0.0217	P	10.1	1.7
3	☐	20.000	19.997	5030.99	0.1052	P	1.7	0.0
4	☐	50.000	49.277	12244.56	0.2586	P	0.9	-1.4
5	☐	100.000	97.386	24061.75	0.5107	P	1.5	-2.6
6	☐	200.000	201.487	49604.00	1.0563	P	0.9	0.7

y = 0.0052 * x + 3.6034E-004
R = 0.9999
DL = 0.09764 ug/l
BEC = 0.06876 ug/l

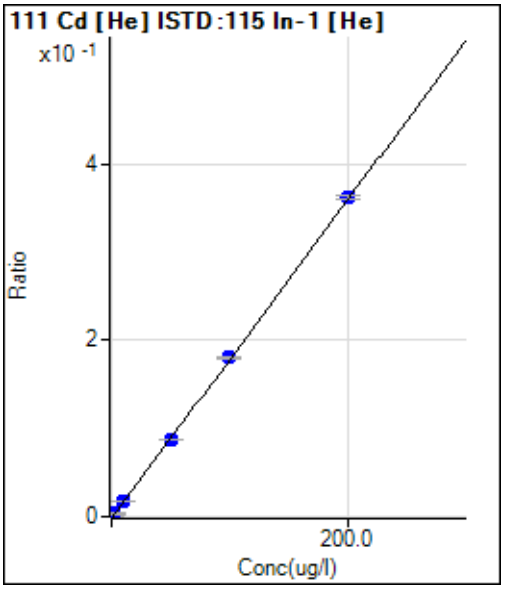
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7.78	0.0002	P	49.9	
2	☐	2.000	1.971	2043.51	0.0428	P	1.4	-1.4
3	☐	10.000	9.779	10135.04	0.2118	P	0.7	-2.2
4	☐	25.000	24.888	25514.64	0.5389	P	1.1	-0.4
5	☐	50.000	49.473	50460.43	1.0711	P	1.7	-1.1
6	☐	100.000	100.314	101965.51	2.1715	P	1.7	0.3

y = 0.0216 * x + 1.5795E-004
R = 1.0000
DL = 0.01092 ug/l
BEC = 0.007297 ug/l

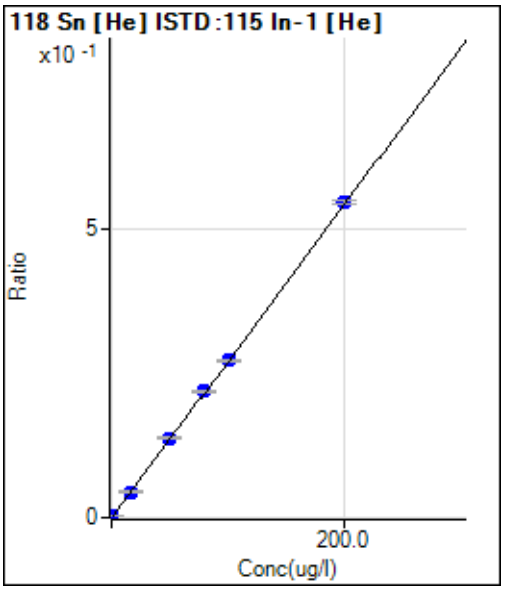
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1.11	0.0000	P	173.	
2	☐	2.000	1.923	166.67	0.0035	P	17.1	-3.8
3	☐	10.000	9.773	844.48	0.0177	P	5.9	-2.3
4	☐	50.000	48.293	4126.22	0.0871	P	1.4	-3.4
5	☐	100.000	99.706	8474.99	0.1799	P	1.1	-0.3
6	☐	200.000	200.586	16993.25	0.3619	P	1.0	0.3

y = 0.0018 * x + 2.2601E-005
R = 1.0000
DL = 0.0651 ug/l
BEC = 0.01253 ug/l

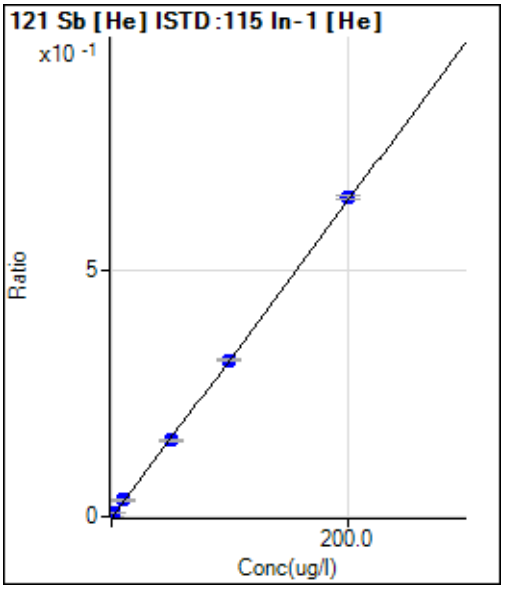
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117.78	0.0024	P	16.6	
2	☐	16.000	15.501	2124.63	0.0445	P	3.3	-3.1
3	☐	80.000	79.488	10452.00	0.2185	P	1.8	-0.6
4	☐	50.000	50.016	6550.55	0.1383	P	0.5	0.0
5	☐	100.000	99.255	12825.22	0.2722	P	1.2	-0.7
6	☐	200.000	200.613	25719.65	0.5477	P	1.0	0.3

y = 0.0027 * x + 0.0024
R = 1.0000
DL = 0.4368 ug/l
BEC = 0.8777 ug/l

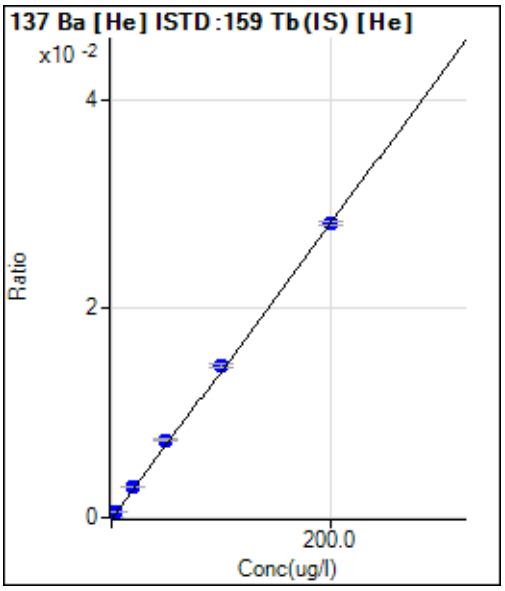
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8.89	0.0002	P	57.5	
2	☐	2.000	1.929	305.56	0.0064	P	10.0	-3.6
3	☐	10.000	10.303	1600.11	0.0334	P	2.8	3.0
4	☐	50.000	48.023	7349.88	0.1552	P	0.9	-4.0
5	☐	100.000	98.468	14986.39	0.3181	P	0.9	-1.5
6	☐	200.000	201.246	30517.66	0.6499	P	0.7	0.6

y = 0.0032 * x + 1.8010E-004
R = 0.9999
DL = 0.09617 ug/l
BEC = 0.05578 ug/l

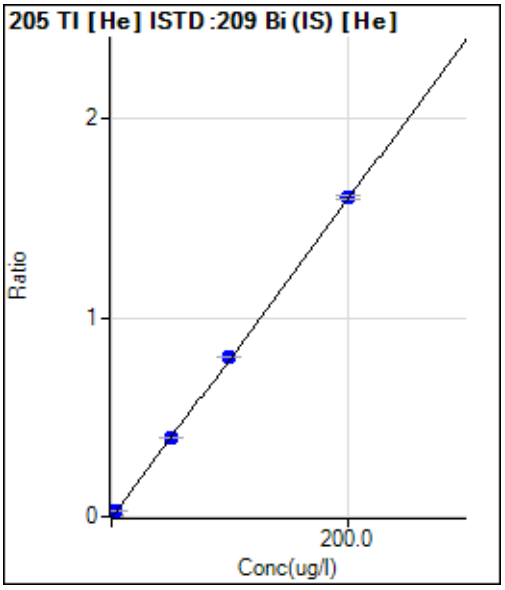
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	0.1	
2	☐	4.000	4.127	185.56	0.0006	P	5.3	3.2
3	☐	20.000	21.017	937.82	0.0030	P	0.8	5.1
4	☐	50.000	51.993	2302.44	0.0074	P	2.3	4.0
5	☐	100.000	102.339	4488.58	0.0145	P	2.1	2.3
6	☐	200.000	198.228	8741.88	0.0281	P	1.5	-0.9

y = 1.4190E-004 * x + 1.0435E-005
R = 0.9998
DL = 0.0002227 ug/l
BEC = 0.07354 ug/l

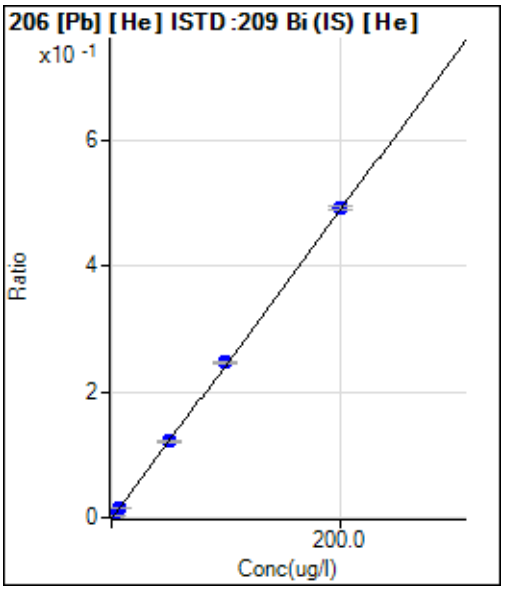
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	388.90	0.0015	P	3.4	
2	☐	0.800	0.778	1961.28	0.0077	P	6.6	-2.7
3	☐	4.000	3.933	8464.05	0.0330	P	2.7	-1.7
4	☐	50.000	49.338	99306.03	0.3962	P	0.5	-1.3
5	☐	100.000	99.722	196504.95	0.7993	P	0.3	-0.3
6	☐	200.000	200.306	396939.55	1.6040	P	1.3	0.2

y = 0.0080 * x + 0.0015
R = 1.0000
DL = 0.01878 ug/l
BEC = 0.1858 ug/l

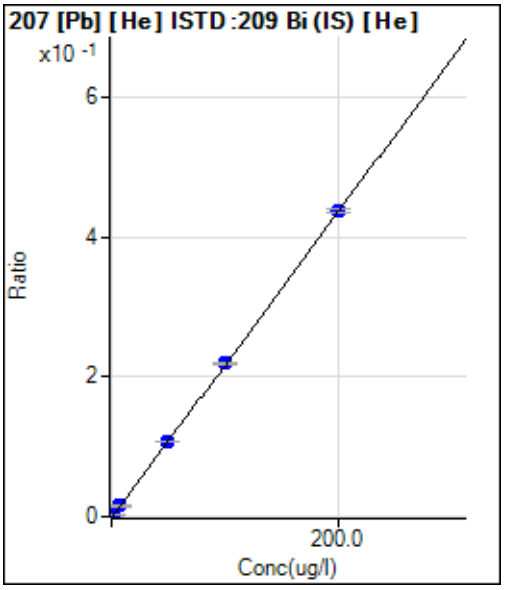
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	121.11	0.0005	P	2.4	
2	☐	1.200	1.155	838.93	0.0033	P	4.1	-3.8
3	☐	6.000	6.225	4047.35	0.0157	P	8.3	3.8
4	☐	50.000	49.260	30429.41	0.1214	P	1.9	-1.5
5	☐	100.000	100.034	60496.31	0.2461	P	0.6	0.0
6	☐	200.000	200.162	121738.51	0.4919	P	0.8	0.1

y = 0.0025 * x + 4.6299E-004
R = 1.0000
DL = 0.01356 ug/l
BEC = 0.1886 ug/l

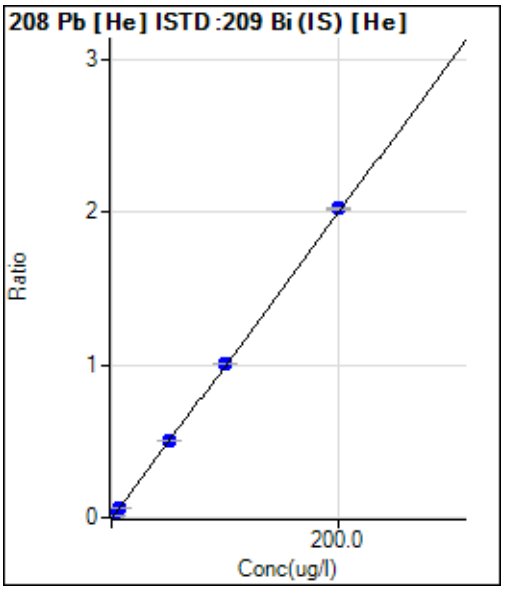
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	92.22	0.0004	P	33.5	
2	☐	1.200	1.281	803.37	0.0032	P	5.7	6.7
3	☐	6.000	6.850	3945.24	0.0154	P	8.2	14.2
4	☐	50.000	49.135	27062.66	0.1080	P	1.5	-1.7
5	☐	100.000	99.944	53898.30	0.2192	P	1.1	-0.1
6	☐	200.000	200.219	108606.86	0.4388	P	1.2	0.1

y = 0.0022 * x + 3.5305E-004
R = 1.0000
DL = 0.1618 ug/l
BEC = 0.1612 ug/l

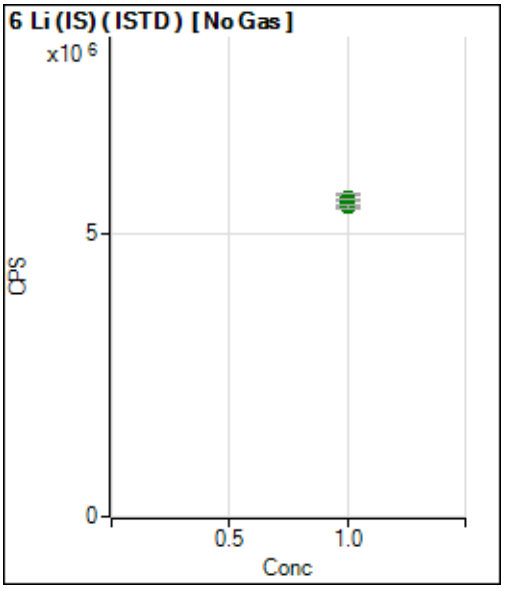
Weight: <None>
Min Conc: <None>



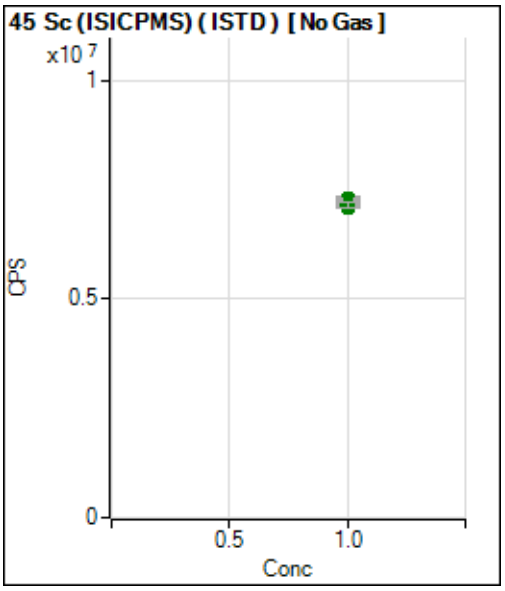
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	457.78	0.0018	P	8.2	
2	☐	1.200	1.259	3672.47	0.0144	P	1.8	4.9
3	☐	6.000	6.448	17146.02	0.0667	P	4.1	7.5
4	☐	50.000	49.242	124827.13	0.4980	P	0.1	-1.5
5	☐	100.000	99.597	247198.43	1.0055	P	0.1	-0.4
6	☐	200.000	200.377	500185.47	2.0211	P	0.9	0.2

y = 0.0101 * x + 0.0018
R = 1.0000
DL = 0.04278 ug/l
BEC = 0.1737 ug/l

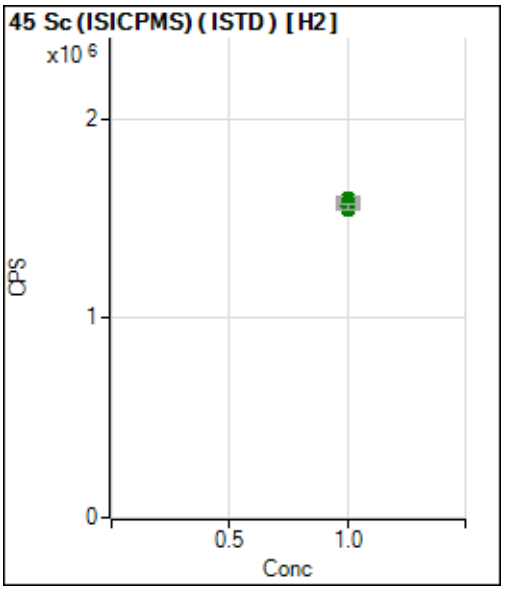
Weight: <None>
Min Conc: <None>



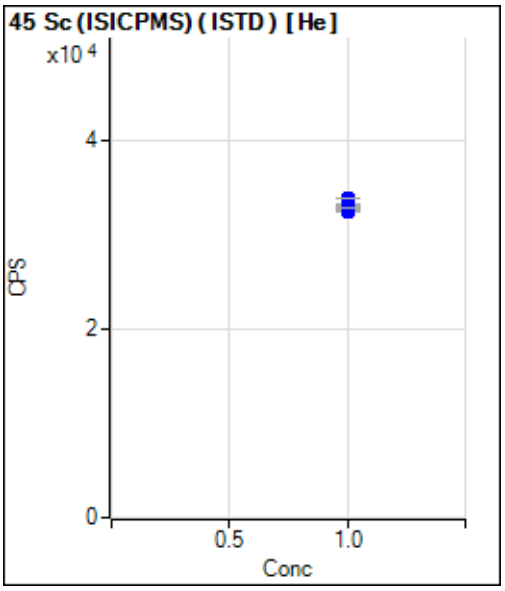
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		5622538.94		A	1.5	
2	☐	1.000		5517403.25		A	2.2	
3	☐	1.000		5632480.96		A	1.9	
4	☐	1.000		5554912.62		A	1.7	
5	☐	1.000		5477297.66		A	1.1	
6	☐	1.000		5465481.38		A	0.7	



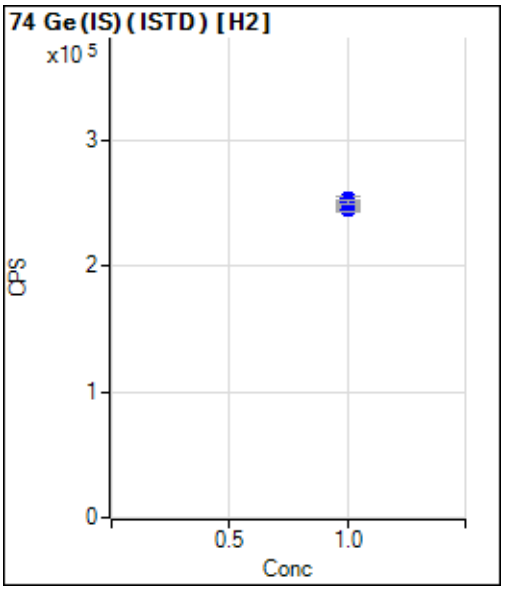
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		7312245.79		A	1.7	
2	☐	1.000		7100813.78		A	0.6	
3	☐	1.000		7266706.63		A	1.1	
4	☐	1.000		7121589.13		A	1.1	
5	☐	1.000		7181437.95		A	2.1	
6	☐	1.000		7154823.78		A	1.4	



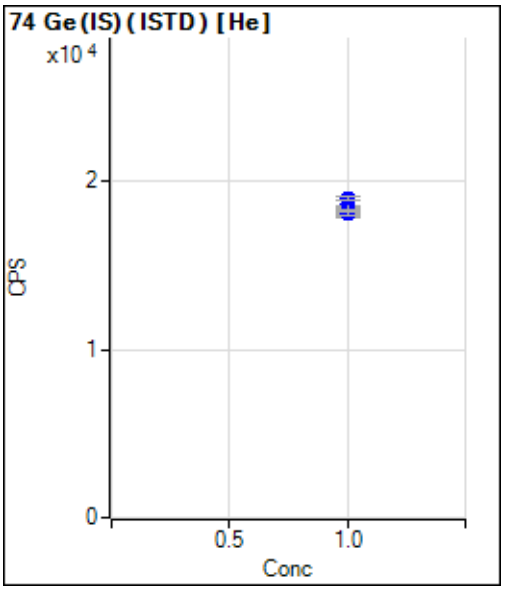
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1602442.41		A	1.3	
2	☐	1.000		1578497.61		A	1.3	
3	☐	1.000		1579353.55		A	2.5	
4	☐	1.000		1583377.29		A	0.4	
5	☐	1.000		1546293.24		A	0.7	
6	☐	1.000		1560390.86		A	1.6	



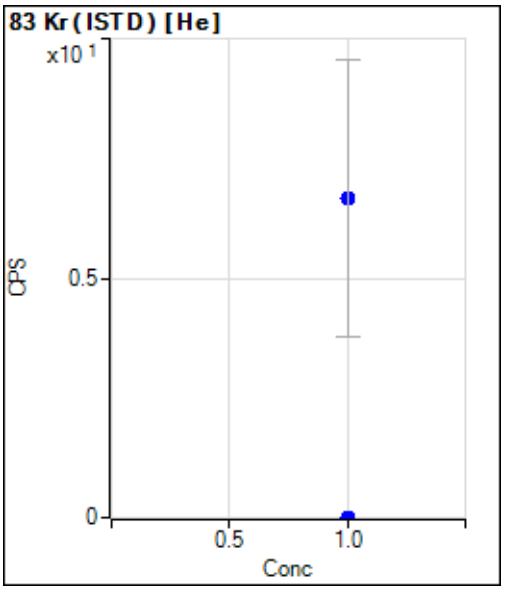
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		33950.67		P	0.2	
2	☐	1.000		33095.17		P	1.8	
3	☐	1.000		33059.63		P	0.9	
4	☐	1.000		32775.52		P	0.7	
5	☐	1.000		32600.69		P	0.6	
6	☐	1.000		32909.26		P	0.1	



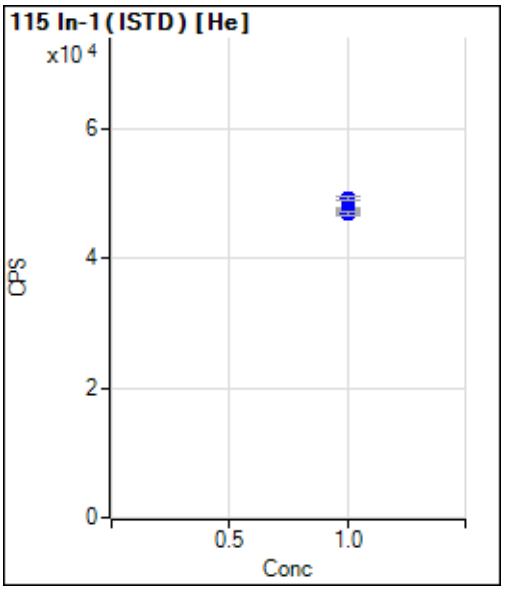
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		254366.22		P	1.7	
2	☐	1.000		244850.16		P	0.8	
3	☐	1.000		245236.80		P	1.8	
4	☐	1.000		251474.78		P	1.4	
5	☐	1.000		249047.67		P	1.2	
6	☐	1.000		251239.64		P	0.8	



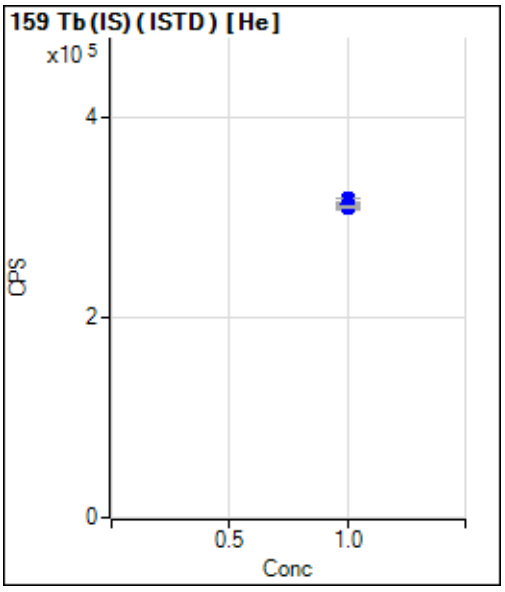
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		18671.87		P	1.7	
2	☐	1.000		18143.98		P	2.8	
3	☐	1.000		18270.87		P	2.5	
4	☐	1.000		18070.49		P	1.5	
5	☐	1.000		18624.99		P	3.2	
6	☐	1.000		18999.27		P	0.9	



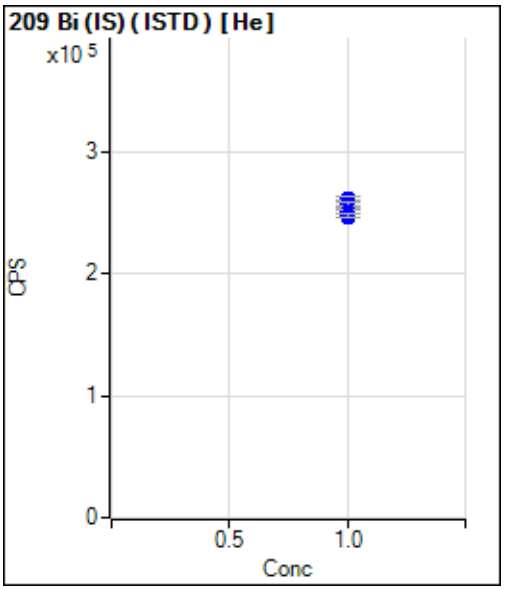
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		6.67		P	86.6	
2	☐	1.000		0.00		P		
3	☐	1.000		0.00		P		
4	☐	1.000		0.00		P		
5	☐	1.000		0.00		P		
6	☐	1.000		0.00		P		



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		49340.13		P	0.6	
2	☐	1.000		47713.41		P	0.6	
3	☐	1.000		47844.27		P	0.2	
4	☐	1.000		47349.28		P	1.0	
5	☐	1.000		47116.16		P	0.8	
6	☐	1.000		46958.95		P	0.7	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		319119.55		P	0.1	
2	☐	1.000		311247.73		P	0.8	
3	☐	1.000		313353.74		P	0.7	
4	☐	1.000		311630.25		P	0.3	
5	☐	1.000		308895.32		P	1.0	
6	☐	1.000		310672.21		P	0.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		261615.21		P	0.8	
2	☐	1.000		254396.47		P	0.5	
3	☐	1.000		256903.47		P	0.7	
4	☐	1.000		250654.58		P	0.8	
5	☐	1.000		245851.99		P	0.6	
6	☐	1.000		247492.12		P	1.0	

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Edison Job Number: 460-290512-1

SDG Number:

Matrix: Water Instrument ID: ICPMS4

Method: 6020B MDL Date: 03/17/2023 00:00

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Chromium		4	2.5
Nickel		4	0.905

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Edison Job Number: 460-290512-1

SDG Number:

Matrix: Water Instrument ID: ICPMS4

Method: 6020B XMDL Date: 03/17/2023 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Chromium		4	2.5
Nickel		4	0.905

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Edison Job No: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Date: 04/26/2023 00:00

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Chromium		20000	6020B
Nickel		20000	6020B

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 460-938950/1-A	10/18/2023 08:45	938950		50	50
LCS 460-938950/2-A	10/18/2023 08:45	938950		50	50
460-290504-P-9-B DU	10/18/2023 08:45	938950		50	50
460-290504-P-9-C MS	10/18/2023 08:45	938950		50	50
460-290512-2	10/18/2023 08:45	938950		50	50
460-290512-3	10/18/2023 08:45	938950		50	50
460-290512-4	10/18/2023 08:45	938950		50	50
460-290512-5	10/18/2023 08:45	938950		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
IC 460-939564/1	1		09:21	X	X	X	X																
IC 460-939564/2	1		09:24	X	X	X	X																
IC 460-939564/3	1		09:26	X	X	X	X																
IC 460-939564/4	1		09:29	X	X	X	X																
IC 460-939564/5	1		09:32	X	X	X	X																
IC 460-939564/6	1		09:34	X	X	X	X																
ICV 460-939564/7	1		09:36	X	X	X	X																
ICB 460-939564/8	1		09:39	X			X																
CRI 460-939564/9			09:41																				
ICSA 460-939564/10	1		09:43	X	X	X	X																
ICSAB 460-939564/11	1		09:46	X	X	X	X																
LRC 460-939564/12	1		09:50	X	X	X	X																
LRC 460-939564/13	1		09:53	X			X																
LRC 460-939564/14	1		09:55	X			X																
ZZZZZZ			09:57																				
ZZZZZZ			09:59																				
ZZZZZZ			10:02																				
CCV 460-939564/18	1		10:04	X	X	X	X																
CCB 460-939564/19	1		10:06	X			X																
ZZZZZZ			10:19																				
ZZZZZZ			10:21																				
ZZZZZZ			10:23																				
ZZZZZZ			10:25																				
ZZZZZZ			10:28																				
ZZZZZZ			10:30																				
ZZZZZZ			10:32																				
ZZZZZZ			10:35																				
ZZZZZZ			10:37																				
ZZZZZZ			10:39																				
CCV 460-939564/30			10:42																				
CCB 460-939564/31			10:44																				
ZZZZZZ			10:46																				
ZZZZZZ			10:48																				
ZZZZZZ			10:51																				
ZZZZZZ			10:53																				
ZZZZZZ			10:55																				
ZZZZZZ			10:58																				
ZZZZZZ			11:00																				
ZZZZZZ			11:02																				
ZZZZZZ			11:05																				
ZZZZZZ			11:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
CCV 460-939564/42			11:09																				
CCB 460-939564/43			11:11																				
ZZZZZZ			11:14																				
ZZZZZZ			11:16																				
ZZZZZZ			11:18																				
ZZZZZZ			11:21																				
ZZZZZZ			11:23																				
ZZZZZZ			11:25																				
ZZZZZZ			11:28																				
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
ZZZZZZ			11:34																				
CCV 460-939564/54	1		11:37	X	X	X	X																
CCB 460-939564/55	1		11:39	X			X																
ZZZZZZ			11:41																				
ZZZZZZ			11:44																				
ZZZZZZ			11:46																				
460-290504-P-9-A PDS	1	T	11:48	X	X	X	X																
460-290504-P-9-C MS	1	T	11:50	X	X	X	X																
460-290504-P-9-B DU	1	T	11:53	X			X																
ZZZZZZ			11:55																				
460-290504-P-9-A SD ^5	5	T	11:57	X			X																
ZZZZZZ			12:00																				
LCS 460-938950/2-A	1	T	12:02	X	X	X	X																
CCV 460-939564/66	1		12:04	X	X	X	X																
CCB 460-939564/67	1		12:06	X			X																
MB 460-938950/1-A	1	T	12:09	X			X																
ZZZZZZ			12:11																				
ZZZZZZ			12:13																				
ZZZZZZ			12:16																				
ZZZZZZ			12:18																				
ZZZZZZ			12:20																				
ZZZZZZ			12:23																				
ZZZZZZ			12:25																				
ZZZZZZ			12:27																				
ZZZZZZ			12:29																				
CCV 460-939564/78	1		12:32	X	X	X	X																
CCB 460-939564/79	1		12:34	X			X																
460-290512-2	1	T	12:36	X			X																
460-290512-3	1	T	12:39	X			X																
460-290512-4	1	T	12:41	X			X																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
460-290512-5	1	T	12:43	X			X																
ZZZZZZ			12:46																				
ZZZZZZ			12:48																				
ZZZZZZ			12:50																				
ZZZZZZ			12:52																				
ZZZZZZ			12:55																				
ZZZZZZ			12:57																				
CCV 460-939564/90	1		12:59	X	X	X	X																
CCB 460-939564/91	1		13:02	X			X																
ZZZZZZ			13:04																				
ZZZZZZ			13:06																				
ZZZZZZ			13:09																				
ZZZZZZ			13:11																				
ZZZZZZ			13:13																				
ZZZZZZ			13:15																				
ZZZZZZ			13:18																				
ZZZZZZ			13:20																				
ZZZZZZ			13:22																				
ZZZZZZ			13:25																				
CCV 460-939564/102			13:27																				
CCB 460-939564/103			13:29																				
ZZZZZZ			13:32																				
ZZZZZZ			13:34																				
ZZZZZZ			13:36																				
ZZZZZZ			13:39																				
ZZZZZZ			13:41																				
ZZZZZZ			13:43																				
ZZZZZZ			13:45																				
ZZZZZZ			13:48																				
ZZZZZZ			13:50																				
ZZZZZZ			13:52																				
CCV 460-939564/114			13:55																				
CCB 460-939564/115			13:57																				
ZZZZZZ			13:59																				
ZZZZZZ			14:02																				
ZZZZZZ			14:04																				
ZZZZZZ			14:06																				
ZZZZZZ			14:08																				
ZZZZZZ			14:11																				
ZZZZZZ			14:13																				
ZZZZZZ			14:15																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			14:18																				
ZZZZZZ			14:20																				
CCV 460-939564/126			14:22																				
CCB 460-939564/127			14:25																				
ZZZZZZ			14:33																				
ZZZZZZ			14:35																				
ZZZZZZ			14:38																				
ZZZZZZ			14:40																				
ZZZZZZ			14:42																				
ZZZZZZ			14:45																				
ZZZZZZ			14:47																				
ZZZZZZ			14:49																				
ZZZZZZ			14:51																				
ZZZZZZ			14:54																				
CCV 460-939564/138			14:56																				
CCB 460-939564/139			14:58																				
ZZZZZZ			15:01																				
ZZZZZZ			15:03																				
ZZZZZZ			15:05																				
ZZZZZZ			15:07																				
ZZZZZZ			15:10																				
ZZZZZZ			15:12																				
ZZZZZZ			15:14																				
ZZZZZZ			15:17																				
ZZZZZZ			15:19																				
ZZZZZZ			15:21																				
CCV 460-939564/150			15:24																				
CCB 460-939564/151			15:26																				
ZZZZZZ			15:29																				
ZZZZZZ			15:31																				
ZZZZZZ			15:33																				
ZZZZZZ			15:36																				
ZZZZZZ			15:38																				
ZZZZZZ			15:40																				
ZZZZZZ			15:43																				
ZZZZZZ			15:45																				
ZZZZZZ			15:47																				
CCV 460-939564/161			15:49																				
CCB 460-939564/162			15:52																				
ZZZZZZ			15:54																				
ZZZZZZ			15:56																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			15:59																				
ZZZZZZ			16:01																				
ZZZZZZ			16:03																				
ZZZZZZ			16:05																				
ZZZZZZ			16:08																				
ZZZZZZ			16:10																				
ZZZZZZ			16:12																				
ZZZZZZ			16:15																				
CCV 460-939564/173			16:17																				
CCB 460-939564/174			16:19																				
ZZZZZZ			16:21																				
ZZZZZZ			16:24																				
ZZZZZZ			16:26																				
ZZZZZZ			16:28																				
ZZZZZZ			16:31																				
ZZZZZZ			16:33																				
ZZZZZZ			16:35																				
ZZZZZZ			16:37																				
ZZZZZZ			16:40																				
ZZZZZZ			16:42																				
CCV 460-939564/185			16:44																				
CCB 460-939564/186			16:47																				
ZZZZZZ			16:49																				
ZZZZZZ			16:51																				
ZZZZZZ			16:53																				
ZZZZZZ			16:56																				
ZZZZZZ			16:58																				
ZZZZZZ			17:00																				
ZZZZZZ			17:03																				
ZZZZZZ			17:05																				
ZZZZZZ			17:07																				
ZZZZZZ			17:10																				
CCV 460-939564/197			17:12																				
CCB 460-939564/198			17:14																				
ZZZZZZ			17:16																				
ZZZZZZ			17:19																				
ZZZZZZ			17:21																				
ZZZZZZ			17:23																				
ZZZZZZ			17:26																				
ZZZZZZ			17:28																				
ZZZZZZ			17:30																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			17:32																				
ZZZZZZ			17:35																				
ZZZZZZ			17:37																				
CCV 460-939564/209			17:39																				
CCB 460-939564/210			17:42																				
ZZZZZZ			17:48																				
ZZZZZZ			17:50																				
ZZZZZZ			17:52																				
ZZZZZZ			17:55																				
ZZZZZZ			17:57																				
ZZZZZZ			17:59																				
ZZZZZZ			18:02																				
ZZZZZZ			18:04																				
ZZZZZZ			18:06																				
ZZZZZZ			18:08																				
CCV 460-939564/221			18:11																				
CCB 460-939564/222			18:13																				
ZZZZZZ			18:15																				
ZZZZZZ			18:18																				
ZZZZZZ			18:20																				
ZZZZZZ			18:22																				
ZZZZZZ			18:25																				
ZZZZZZ			18:27																				
ZZZZZZ			18:29																				
ZZZZZZ			18:32																				
ZZZZZZ			18:34																				
ZZZZZZ			18:36																				
CCV 460-939564/233			18:39																				
CCB 460-939564/234			18:41																				
ZZZZZZ			18:43																				
ZZZZZZ			18:45																				
ZZZZZZ			18:48																				
ZZZZZZ			18:50																				
ZZZZZZ			18:52																				
ZZZZZZ			18:55																				
ZZZZZZ			18:57																				
ZZZZZZ			18:59																				
ZZZZZZ			19:02																				
CCV 460-939564/244			19:04																				
CCB 460-939564/245			19:06																				
ZZZZZZ			19:40																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			19:42																				
ZZZZZZ			19:44																				
ZZZZZZ			19:47																				
ZZZZZZ			19:49																				
ZZZZZZ			19:51																				
ZZZZZZ			19:54																				
ZZZZZZ			19:56																				
CCV 460-939564/254			19:58																				
CCB 460-939564/255			20:01																				
ZZZZZZ			20:03																				
ZZZZZZ			20:05																				
ZZZZZZ			20:08																				
ZZZZZZ			20:10																				
ZZZZZZ			20:12																				
ZZZZZZ			20:14																				
ZZZZZZ			20:17																				
ZZZZZZ			20:19																				
ZZZZZZ			20:21																				
ZZZZZZ			20:24																				
CCV 460-939564/266			20:26																				
CCB 460-939564/267			20:28																				
ZZZZZZ			20:31																				
ZZZZZZ			20:33																				
ZZZZZZ			20:35																				
ZZZZZZ			20:37																				
ZZZZZZ			20:40																				
ZZZZZZ			20:42																				
ZZZZZZ			20:44																				
ZZZZZZ			20:47																				
ZZZZZZ			20:49																				
ZZZZZZ			20:51																				
CCV 460-939564/278			20:53																				
CCB 460-939564/279			20:56																				
ZZZZZZ			20:58																				
ZZZZZZ			21:00																				
ZZZZZZ			21:03																				
ZZZZZZ			21:05																				
ZZZZZZ			21:07																				
ZZZZZZ			21:10																				
ZZZZZZ			21:12																				
ZZZZZZ			21:14																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			21:16																				
ZZZZZZ			21:19																				
CCV 460-939564/290			21:21																				
CCB 460-939564/291			21:23																				
ZZZZZZ			21:26																				
ZZZZZZ			21:28																				
ZZZZZZ			21:30																				
ZZZZZZ			21:33																				
ZZZZZZ			21:35																				
ZZZZZZ			21:37																				
ZZZZZZ			21:40																				
ZZZZZZ			21:42																				
ZZZZZZ			21:44																				
ZZZZZZ			21:46																				
CCV 460-939564/302			21:49																				
CCB 460-939564/303			21:51																				
ICSA 460-939564/304			21:53																				
ICSAB 460-939564/305			21:56																				
ZZZZZZ			21:58																				
ZZZZZZ			22:00																				
ZZZZZZ			22:03																				
CCV 460-939564/309			22:05																				
CCB 460-939564/310			22:07																				
ZZZZZZ			22:10																				
ZZZZZZ			22:12																				
ZZZZZZ			22:16																				
ZZZZZZ			22:18																				
ZZZZZZ			22:20																				
ZZZZZZ			22:23																				
CCV 460-939564/317			22:25																				
CCB 460-939564/318			22:27																				
ZZZZZZ			22:30																				
ZZZZZZ			22:32																				
ZZZZZZ			22:34																				
ZZZZZZ			22:37																				
ZZZZZZ			22:39																				
ZZZZZZ			22:41																				
ZZZZZZ			22:43																				
ZZZZZZ			22:46																				
ZZZZZZ			22:48																				
ZZZZZZ			22:50																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D/F	Type	Time	Analytes																				
				Cr	Fe	Na	Ni																	
CCV 460-939564/329			22:53																					
CCB 460-939564/330			22:55																					
ZZZZZZ			22:57																					
ZZZZZZ			23:00																					
ZZZZZZ			23:02																					
ZZZZZZ			23:04																					
ZZZZZZ			23:07																					
ZZZZZZ			23:09																					
ZZZZZZ			23:11																					
ZZZZZZ			23:13																					
ZZZZZZ			23:16																					
ZZZZZZ			23:18																					
CCV 460-939564/341			23:20																					
CCB 460-939564/342			23:23																					
ZZZZZZ			23:25																					
ZZZZZZ			23:27																					
ZZZZZZ			23:30																					
ZZZZZZ			23:32																					
ZZZZZZ			23:34																					
CCV 460-939564/348			23:37																					
CCB 460-939564/349			23:39																					
ZZZZZZ			00:32																					
ZZZZZZ			00:35																					
ZZZZZZ			00:37																					
ZZZZZZ			00:39																					
ZZZZZZ			00:42																					
ZZZZZZ			00:44																					
ZZZZZZ			00:46																					
ZZZZZZ			00:49																					
ZZZZZZ			00:51																					
ZZZZZZ			00:53																					
CCV 460-939564/360			00:56																					
CCB 460-939564/361			00:58																					
ZZZZZZ			01:08																					
ZZZZZZ			01:10																					
ZZZZZZ			01:13																					
ZZZZZZ			01:15																					
ZZZZZZ			01:17																					
ZZZZZZ			01:20																					
ZZZZZZ			01:22																					
ZZZZZZ			01:24																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			01:27																				
ZZZZZZ			01:29																				
CCV 460-939564/372			01:31																				
CCB 460-939564/373			01:34																				
ZZZZZZ			01:59																				
ZZZZZZ			02:01																				
ZZZZZZ			02:03																				
ZZZZZZ			02:06																				
ZZZZZZ			02:08																				
ZZZZZZ			02:10																				
ZZZZZZ			02:13																				
ZZZZZZ			02:15																				
ZZZZZZ			02:17																				
ZZZZZZ			02:20																				
CCV 460-939564/384			02:22																				
CCB 460-939564/385			02:24																				
ZZZZZZ			02:32																				
ZZZZZZ			02:34																				
ZZZZZZ			02:37																				
ZZZZZZ			02:39																				
ZZZZZZ			02:41																				
ZZZZZZ			02:44																				
ZZZZZZ			02:46																				
ZZZZZZ			02:48																				
ZZZZZZ			02:51																				
ZZZZZZ			02:53																				
CCV 460-939564/396			02:55																				
CCB 460-939564/397			02:57																				
ZZZZZZ			03:00																				
ZZZZZZ			03:02																				
ZZZZZZ			03:04																				
ZZZZZZ			03:07																				
ZZZZZZ			03:09																				
ZZZZZZ			03:11																				
ZZZZZZ			03:14																				
ZZZZZZ			03:16																				
ZZZZZZ			03:18																				
ZZZZZZ			03:21																				
CCV 460-939564/408			03:23																				
CCB 460-939564/409			03:25																				
ZZZZZZ			03:28																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Instrument ID: ICPMS4 Method: 6020B

Start Date: 10/20/2023 09:21 End Date: 10/21/2023 03:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Cr	Fe	Na	Ni																
ZZZZZZ			03:30																				
ZZZZZZ			03:32																				
ZZZZZZ			03:35																				
ZZZZZZ			03:37																				
ZZZZZZ			03:39																				
ZZZZZZ			03:42																				
ZZZZZZ			03:44																				
ZZZZZZ			03:46																				
ZZZZZZ			03:49																				
CCV 460-939564/420			03:51																				
CCB 460-939564/421			03:53																				

Prep Types

R = Total Recoverable

T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.: Analysis Batch No.: 939564

ICP-MS Instrument ID: ICPMS4 Start Date: 10/20/2023 End Date: 10/20/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Sc/3	Q	Element Ge/2	Q
IC 460-939564/1	09:21	100		100		100		100		100	
IC 460-939564/2	09:24	98		97		99		98		96	
IC 460-939564/3	09:26	100		99		99		97		96	
IC 460-939564/4	09:29	99		97		99		97		99	
IC 460-939564/5	09:32	97		98		97		96		98	
IC 460-939564/6	09:34	97		98		97		97		99	
ICV 460-939564/7	09:36	97		98		97		96		98	
ICB 460-939564/8	09:39	97		98		97		96		95	
ICSA 460-939564/10	09:43	94		97		95		96		97	
ICSAB 460-939564/11	09:46	96		95		97		96		98	
LRC 460-939564/12	09:50	92		95		97		104		97	
LRC 460-939564/13	09:53	91		90		89		94		93	
LRC 460-939564/14	09:55	98		94		92		94		92	
CCV 460-939564/18	10:04	92		91		88		90		90	
CCB 460-939564/19	10:06	95		94		91		93		89	
CCV 460-939564/54	11:37	93		92		90		91		90	
CCB 460-939564/55	11:39	96		93		91		93		88	
460-290504-P-9-A	11:48	92		90		87		90		90	
PDS 460-290504-P-9-C MS	11:50	90		90		87		89		91	
460-290504-P-9-B DU	11:53	90		89		85		89		91	
460-290504-P-9-A SD	11:57	92		91		87		90		91	
^5 LCS 460-938950/2-A	12:02	93		92		87		91		87	
CCV 460-939564/66	12:04	93		89		87		88		88	
CCB 460-939564/67	12:06	93		91		89		90		87	
MB 460-938950/1-A	12:09	95		92		89		91		87	
CCV 460-939564/78	12:32	89		86		82		87		85	
CCB 460-939564/79	12:34	92		90		85		88		86	
460-290512-2	12:36	93		89		86		90		86	
460-290512-3	12:39	91		90		87		88		90	
460-290512-4	12:41	92		91		87		89		91	
460-290512-5	12:43	91		91		87		89		91	
CCV 460-939564/90	12:59	93		90		85		88		89	
CCB 460-939564/91	13:02	94		91		87		91		88	
IS Name on Instrument											

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.: Analysis Batch No.: 939564

ICP-MS Instrument ID: ICPMS4 Start Date: 10/20/2023 End Date: 10/20/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In	Q	Element Tb	Q	Element Bi	Q	Element	Q
IC 460-939564/1	09:21	100		100		100		100			
IC 460-939564/2	09:24	97		97		98		97			
IC 460-939564/3	09:26	98		97		98		98			
IC 460-939564/4	09:29	97		96		98		96			
IC 460-939564/5	09:32	100		96		97		94			
IC 460-939564/6	09:34	102		95		97		95			
ICV 460-939564/7	09:36	99		94		96		93			
ICB 460-939564/8	09:39	99		95		94		93			
ICSA 460-939564/10	09:43	100		93		94		88			
ICSAB 460-939564/11	09:46	101		94		94		88			
LRC 460-939564/12	09:50	105		97		96		87			
LRC 460-939564/13	09:53	96		90		91		86			
LRC 460-939564/14	09:55	99		93		93		93			
CCV 460-939564/18	10:04	94		88		89		87			
CCB 460-939564/19	10:06	93		91		91		90			
CCV 460-939564/54	11:37	97		92		94		92			
CCB 460-939564/55	11:39	94		94		94		96			
460-290504-P-9-A	11:48	97		90		93		89			
PDS 460-290504-P-9-C MS	11:50	95		90		94		89			
460-290504-P-9-B DU	11:53	96		90		94		90			
460-290504-P-9-A SD	11:57	98		93		95		93			
^5 LCS 460-938950/2-A	12:02	94		92		95		94			
CCV 460-939564/66	12:04	94		90		93		92			
CCB 460-939564/67	12:06	94		93		94		95			
MB 460-938950/1-A	12:09	92		91		93		94			
CCV 460-939564/78	12:32	92		90		94		92			
CCB 460-939564/79	12:34	92		93		94		95			
460-290512-2	12:36	93		92		95		95			
460-290512-3	12:39	96		91		94		93			
460-290512-4	12:41	97		91		94		93			
460-290512-5	12:43	95		92		94		93			
CCV 460-939564/90	12:59	95		94		98		97			
CCB 460-939564/91	13:02	94		98		99		100			
IS Name on Instrument											

METALS BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-290512-1

SDG No.:

Batch Number: 938950 Batch Start Date: 10/18/23 09:50 Batch Analyst: Wilson, Nidir N

Batch Method: 3010A Batch End Date: 10/18/23 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME_ipmsSPK 00051			
MB 460-938950/1		3010A, 6020B		50 mL	50 mL				
LCS 460-938950/2		3010A, 6020B		50 mL	50 mL	0.25 mL			
460-290504-P-9 DU		3010A, 6020B	T	50 mL	50 mL				
460-290504-P-9 MS		3010A, 6020B	T	50 mL	50 mL	0.25 mL			
460-290512-F-2	1000-101623-0002	3010A, 6020B	T	50 mL	50 mL				
460-290512-F-3	FDMH-1	3010A, 6020B	T	50 mL	50 mL				
460-290512-F-4	FDMH-2	3010A, 6020B	T	50 mL	50 mL				
460-290512-F-5	FDMH-4	3010A, 6020B	T	50 mL	50 mL				

Batch Notes	
Digestion Tube/Cup ID	Lot # 2211204-3240-MM (Env. Exp. 100 ml Dg Tubes)
Pipette/Syringe/Dispenser ID	#4
Analyst ID - Spike Analyst	NW
Nitric Acid ID	Lot # 231514 (Fisher Chemical Brand)
Digestion Unit ID	#5
Thermometer ID	Metals 9(CF +2)
Temperature - Uncorrected - Start	90 uncorr Degrees C
Temperature - Corrected - Start	92 corr Degrees C
Digestion Start Time	10/18/2023 09:50
Digestion End Time	10/18/2023 11:50
Temperature - Uncorrected - End	88 uncorr Degrees C
Temperature - Corrected - End	90 corr Degrees C
Filter ID	09-790F
Batch Comment	1:1 HCL MPR 400

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record

660513

eurofins | Environment Testing America

Address: _____

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager	Site Contact: Dmitri Quafis	Date: 10-16-23	COC No.
Company Name: Haley & Aldrich	Tel/Email	Lab Contact: D.Quafis@haley-aldrich.com	Carrier:	1 of 1 COCs
Address: 65 Rockside Rd, Suite 200	Analysis Turnaround Time			Sampler
City/State/Zip: Cleveland, OH, 44131	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: 70613 78	☑ 1 week			
Site: Racer Ewing	☐ 2 days			Job / SDG No.
P O #	☐ 1 day			

290512

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs (via 8260)	metals (Ni, Cr)	1,4 Dioxane	Sample Specific Notes:
Trip blank	10-3-23	—	G	Aq	2			X	X		1
1000 101623 0002	10-16-23	1100	G	Aq	6			X	X	X	2
FDMH-1	↓	0915	G	Sw				X	X	X	3
FDMH 2	↓	0930	G	Sw				X	X	X	4
FDMH 4	↓	1015	G	Sw				X	X	X	5

460-290512 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? *Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.*

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp (°C): Obs'd: _____ Corr'd. _____ Therm ID No. _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
[signature]	Haley and Aldrich	10-16-23 1645	[signature]	EETM	10/16/23 @ 1645
			Received in Laboratory by		

RI ID - 9 (1.6°C / 1.7°C)

10/25/2023 1:26 PM

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 290512

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.6 ℃	1.7 ℃	Cooler #4:	℃	℃	Cooler #7:	℃	℃
Cooler #2:	℃	℃	Cooler #5:	℃	℃	Cooler #8:	℃	℃
Cooler #3:	℃	℃	Cooler #6:	℃	℃	Cooler #9:	℃	℃

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	*Nitrate* Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	*EPH or* QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	*Total* Cyanide (pH>12)	*Total* Phos (pH<2)	Other	Other
2				2											
3				<2											
4				<2											
5				<2											

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: VP Date: 10/16/23

10/25/2023
1:26 PM

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290512-1

Login Number: 290512
List Number: 1
Creator: Scully, Ryan J

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 10/31/2023 10:17 AM

JOB DESCRIPTION

Racer, Ewing/Trenton

JOB NUMBER

460-290517-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Eurofins Edison

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/31/2023 10:17 AM

Authorized for release by
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 5

- Report Narrative 5
- Sample Summary 7
- Detection Summary 8
- Method Summary 12
- Client Sample Results 13
- Isotope Dilution Summary 27
- QC Sample Results 29
- Definitions 37
- QC Association 38
- Chronicle 40
- Certification Summary 42

Organic Sample Data 43

- LCMS 43
  - Method PFC IDA 43
    - Method PFC IDA QC Summary 44
    - Method PFC IDA Sample Data 66
    - Standards Data 656
      - Method PFC IDA ICAL Data 656
      - Method PFC IDA CCAL Data 773
    - Raw QC Data 916
      - Method PFC IDA Blank Data 916
      - Method PFC IDA LCS/LCSD Data 999
      - Method PFC IDA MS/MSD Data 1117
    - Method PFC IDA Run Logs 1121

Table of Contents

Method PFC IDA Prep Data 1127

Shipping and Receiving Documents 1135

Client Chain of Custody 1136

Sample Receipt Checklist 1141

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing/Trenton

Report Number: 460-290517-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/16/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.5 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Samples 1000-101623-0002 (460-290517-1), 1000-101623-0003 (460-290517-2), 1000-101623-0004 (460-290517-3), MW2-101623-0951-10 (460-290517-4), MW3-101623-1046-9 (460-290517-5), MW4-101623-1156-11.5 (460-290517-6), MW15-101623-1325-7 (460-290517-7), MW34R-101623-1421-12 (460-290517-8), MW16A-101623-0926-20 (460-290517-9), MW16C-101623-1026-120 (460-290517-10), MW93-101623-1206-30 (460-290517-11) and MW93A-101623-1311-65 (460-290517-12) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC-IDA - 537 (modified). The samples were prepared on 10/23/2023 and 10/24/2023 and analyzed on 10/24/2023 and 10/27/2023.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196662.

M2-8:2 FTS Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW4-101623-1156-11.5 (460-290517-6). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The “I” qualifier associated with sample MW4-101623-1156-11.5 (460-290517-6) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

Results for sample MW2-101623-0951-10 (460-290517-4) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Samples MW2-101623-0951-10 (460-290517-4)[5X] and MW16C-101623-1026-120 (460-290517-10)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the PFAS analysis.

All quality control parameters were within the acceptance limits.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Edison

Client: Haley & Aldrich, Inc.

Project Location: Racer, Ewing/Trenton

Project Number: 460-290517-1

Laboratory Sample ID(s):

Sampling Date(s):

List DKQP Methods Used:

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑Yes ☐No
1A	Were the method specified handling, preservation, and holding time requirements met?	☐Yes ☐No ☑ See case narrative
1B	*EPH Method:* Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	☐Yes ☐No ☑N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	☐Yes ☐No ☑ See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	☑Yes ☐No ☐N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☑Yes ☐No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	☐Yes ☐No ☑ See case narrative
	b) Were these reporting limits met?	☐Yes ☐No ☐N/A ☑ See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑Yes ☐No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	☐Yes ☑No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290517-1	1000-101623-0002	Water	10/16/23 11:05	10/16/23 19:00
460-290517-2	1000-101623-0003	Water	10/16/23 00:00	10/16/23 19:00
460-290517-3	1000-101623-0004	Water	10/16/23 14:30	10/16/23 19:00
460-290517-4	MW2-101623-0951-10	Water	10/16/23 09:51	10/16/23 19:00
460-290517-5	MW3-101623-1046-9	Water	10/16/23 10:46	10/16/23 19:00
460-290517-6	MW4-101623-1156-11.5	Water	10/16/23 11:56	10/16/23 19:00
460-290517-7	MW15-101623-1325-7	Water	10/16/23 13:25	10/16/23 19:00
460-290517-8	MW34R-101623-1421-12	Water	10/16/23 14:21	10/16/23 19:00
460-290517-9	MW16A-101623-0926-20	Water	10/16/23 09:26	10/16/23 19:00
460-290517-10	MW16C-101623-1026-120	Water	10/16/23 10:26	10/16/23 19:00
460-290517-11	MW93-101623-1206-30	Water	10/16/23 12:06	10/16/23 19:00
460-290517-12	MW93A-101623-1311-65	Water	10/16/23 13:11	10/16/23 19:00

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290517-1

Client Sample ID: 1000-101623-0002 — Lab Sample ID: 460-290517-1

No Detections.

Client Sample ID: 1000-101623-0003 — Lab Sample ID: 460-290517-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	32.3		4.29	1.03	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	46.3		1.72	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	51.8		1.72	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	19.8		1.72	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	43.7		1.72	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	6.01		1.72	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	7.11		1.72	0.39	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid	0.94	J	1.72	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.39		1.72	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.19		1.72	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	16.9		1.72	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	1.35	J	1.72	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	89.8		1.72	0.73	ng/L	1		537 (modified)	Total/NA
HFPODA	1.07	J	3.43	0.94	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 1000-101623-0004 — Lab Sample ID: 460-290517-3

No Detections.

Client Sample ID: MW2-101623-0951-10 — Lab Sample ID: 460-290517-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	14.5		4.19	1.01	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	9.71		1.68	0.57	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	11.3		1.68	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	7.58		1.68	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	23.0		1.68	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.60		1.68	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.53	J	1.68	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.07		1.68	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.10		1.68	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	14.1		1.68	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	7.05		1.68	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.34	J	1.68	0.34	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	4.17	J	4.19	1.09	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	2.39		1.68	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	814	D	8.38	3.56	ng/L	5		537 (modified)	Total/NA

Client Sample ID: MW3-101623-1046-9 — Lab Sample ID: 460-290517-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	14.3		4.18	1.00	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	12.6		1.67	0.57	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	11.3		1.67	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	8.87		1.67	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	23.4		1.67	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	3.45		1.67	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.72	J	1.67	0.38	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.67		1.67	0.52	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW3-101623-1046-9 (Continued)

Lab Sample ID: 460-290517-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanesulfonic acid	3.40		1.67	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	14.4		1.67	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	6.60		1.67	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	757		1.67	0.71	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	8.56		4.18	1.09	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	6.99		1.67	0.64	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW4-101623-1156-11.5

Lab Sample ID: 460-290517-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	37.1		4.26	1.02	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	35.0		1.70	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	39.5		1.70	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	13.6		1.70	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	55.9		1.70	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	7.12		1.70	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.55	J	1.70	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	11.7		1.70	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	11.6		1.70	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	32.9	I	1.70	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	7.22		1.70	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	748		1.70	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.43	J	1.70	0.34	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	7.35		4.26	1.11	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW15-101623-1325-7

Lab Sample ID: 460-290517-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	17.8		4.30	1.03	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	29.8		1.72	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	22.6		1.72	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	11.0		1.72	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	17.5		1.72	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	4.08		1.72	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.03	J	1.72	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	9.69		1.72	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	9.45		1.72	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	45.7		1.72	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	1.48	J	1.72	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	77.3		1.72	0.73	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW34R-101623-1421-12

Lab Sample ID: 460-290517-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	29.8		4.11	0.99	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	31.5		1.64	0.56	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	26.4		1.64	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	15.7		1.64	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	42.2		1.64	0.62	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	6.97		1.64	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.93	J	1.64	0.38	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	8.33		1.64	0.51	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW34R-101623-1421-12 (Continued) — Lab Sample ID: 460-290517-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanesulfonic acid	5.03		1.64	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	26.6		1.64	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	1.31	J	1.64	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	60.3		1.64	0.70	ng/L	1		537 (modified)	Total/NA
HFPODA	1.26	J	3.29	0.90	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW16A-101623-0926-20 — Lab Sample ID: 460-290517-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	10.3		4.36	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	7.86		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	6.45		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	3.60		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	10.4		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.55	J	1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.54	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	5.51		1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.57		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	14.4		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	2.42		1.74	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	400		1.74	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanesulfonic acid	0.35	J	1.74	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW16C-101623-1026-120 — Lab Sample ID: 460-290517-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	13.1		4.35	1.04	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	61.4		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	55.2		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	19.5		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	29.5		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.44		1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.67	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	7.34		1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	9.79		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	33.9		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	13.3		1.74	0.36	ng/L	1		537 (modified)	Total/NA
4:2 Fluorotelomer sulfonic acid	0.64	J	1.74	0.47	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	64.3		4.35	1.13	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	1010	D	3.48	1.48	ng/L	2		537 (modified)	Total/NA

Client Sample ID: MW93-101623-1206-30 — Lab Sample ID: 460-290517-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	33.3		4.37	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	50.7		1.75	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	51.3		1.75	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	21.9		1.75	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	45.8		1.75	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	6.01		1.75	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	7.92		1.75	0.40	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid	0.90	J	1.75	0.48	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW93-101623-1206-30 (Continued) — Lab Sample ID: 460-290517-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid	3.39		1.75	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.33		1.75	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	17.6		1.75	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	1.50	J	1.75	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	95.6		1.75	0.74	ng/L	1		537 (modified)	Total/NA
HFPODA	1.07	J	3.49	0.96	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW93A-101623-1311-65 — Lab Sample ID: 460-290517-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	16.8		4.37	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	6.75		1.75	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	6.90		1.75	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	2.18		1.75	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	18.9		1.75	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.87		1.75	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.77	J	1.75	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	2.31		1.75	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.55		1.75	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	13.3		1.75	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	5.50		1.75	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	377		1.75	0.74	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290517-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET BUR
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: 1000-101623-0002

Date Collected: 10/16/23 11:05
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.44	U	4.44	1.07	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluoropentanoic acid	1.78	U	1.78	0.60	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorohexanoic acid	1.78	U	1.78	0.58	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluoroheptanoic acid	1.78	U	1.78	0.48	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorooctanoic acid	1.78	U	1.78	0.67	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorononanoic acid	1.78	U	1.78	0.44	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorodecanoic acid	1.78	U	1.78	0.41	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluoroundecanoic acid	1.78	U	1.78	0.49	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorododecanoic acid	1.78	U	1.78	0.44	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorotridecanoic acid	1.78	U	1.78	0.43	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorotetradecanoic acid	1.78	U	1.78	0.57	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorobutanesulfonic acid	1.78	U	1.78	0.55	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluoropentanesulfonic acid	1.78	U	1.78	0.44	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorohexanesulfonic acid	1.78	U	1.78	0.49	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluoroheptanesulfonic acid	1.78	U	1.78	0.36	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorooctanesulfonic acid	1.78	U	1.78	0.75	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorononanesulfonic acid	1.78	U	1.78	0.36	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorodecanesulfonic acid	1.78	U	1.78	0.36	ng/L		10/23/23 07:42	10/24/23 08:41	1
4:2 Fluorotelomer sulfonic acid	1.78	U	1.78	0.48	ng/L		10/23/23 07:42	10/24/23 08:41	1
6:2 Fluorotelomer sulfonic acid	4.44	U	4.44	1.15	ng/L		10/23/23 07:42	10/24/23 08:41	1
8:2 Fluorotelomer sulfonic acid	1.78	U	1.78	0.68	ng/L		10/23/23 07:42	10/24/23 08:41	1
Perfluorooctanesulfonamide	1.78	U	1.78	0.82	ng/L		10/23/23 07:42	10/24/23 08:41	1
NMeFOSAA	4.44	U	4.44	1.69	ng/L		10/23/23 07:42	10/24/23 08:41	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.44	U	4.44	1.42	ng/L		10/23/23 07:42	10/24/23 08:41	1
HFPODA	3.55	U	3.55	0.98	ng/L		10/23/23 07:42	10/24/23 08:41	1
DONA	1.78	U	1.78	0.37	ng/L		10/23/23 07:42	10/24/23 08:41	1
9Cl-PF3ONS	1.78	U	1.78	0.28	ng/L		10/23/23 07:42	10/24/23 08:41	1
11Cl-PF3OUdS	1.78	U	1.78	0.77	ng/L		10/23/23 07:42	10/24/23 08:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C4 PFHpA	*88*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C2 PFTeDA	*78*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C8 FOSA	*78*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
d3-NMeFOSAA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
M2-4:2 FTS	*88*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
M2-6:2 FTS	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
M2-8:2 FTS	*86*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C3 HFPO-DA	*83*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
18O2 PFHxS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C2 PFHxA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C4 PFOS	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C2 PFDoA	*86*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C5 PFNA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C2 PFDA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*
13C4 PFOA	*106*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*

Client Sample ID: 1000-101623-0002

Date Collected: 10/16/23 11:05
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFUnA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:41*	*1*

Client Sample ID: 1000-101623-0003

Date Collected: 10/16/23 00:00
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-2

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**32.3**		4.29	1.03	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluoropentanoic acid	**46.3**		1.72	0.58	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorohexanoic acid	**51.8**		1.72	0.56	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluoroheptanoic acid	**19.8**		1.72	0.46	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorooctanoic acid	**43.7**		1.72	0.65	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorononanoic acid	**6.01**		1.72	0.42	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorodecanoic acid	**7.11**		1.72	0.39	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluoroundecanoic acid	**0.94**	**J**	1.72	0.47	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorododecanoic acid	1.72	U	1.72	0.42	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorotridecanoic acid	1.72	U	1.72	0.41	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorotetradecanoic acid	1.72	U	1.72	0.55	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorobutanesulfonic acid	**3.39**		1.72	0.53	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluoropentanesulfonic acid	**3.19**		1.72	0.43	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorohexanesulfonic acid	**16.9**		1.72	0.47	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluoroheptanesulfonic acid	**1.35**	**J**	1.72	0.35	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorooctanesulfonic acid	**89.8**		1.72	0.73	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorononanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorodecanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/23/23 07:42	10/24/23 08:49	1
4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46	ng/L		10/23/23 07:42	10/24/23 08:49	1
6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11	ng/L		10/23/23 07:42	10/24/23 08:49	1
8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66	ng/L		10/23/23 07:42	10/24/23 08:49	1
Perfluorooctanesulfonamide	1.72	U	1.72	0.79	ng/L		10/23/23 07:42	10/24/23 08:49	1
NMeFOSAA	4.29	U	4.29	1.63	ng/L		10/23/23 07:42	10/24/23 08:49	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37	ng/L		10/23/23 07:42	10/24/23 08:49	1
HFPODA	**1.07**	**J**	3.43	0.94	ng/L		10/23/23 07:42	10/24/23 08:49	1
DONA	1.72	U	1.72	0.36	ng/L		10/23/23 07:42	10/24/23 08:49	1
9Cl-PF3ONS	1.72	U	1.72	0.27	ng/L		10/23/23 07:42	10/24/23 08:49	1
11Cl-PF3OUdS	1.72	U	1.72	0.75	ng/L		10/23/23 07:42	10/24/23 08:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*66*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C5 PFPeA	*84*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C4 PFHpA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C2 PFTeDA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C3 PFBS	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C8 FOSA	*84*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
d3-NMeFOSAA	*124*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
d5-NEtFOSAA	*138*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
M2-4:2 FTS	*124*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
M2-6:2 FTS	*130*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
M2-8:2 FTS	*126*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C3 HFPO-DA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*

Client Sample ID: 1000-101623-0003
Lab Sample ID: 460-290517-2
Date Collected: 10/16/23 00:00
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C2 PFHxA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C4 PFOS	*110*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C2 PFDoA	*109*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C5 PFNA	*110*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C2 PFDA	*107*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C4 PFOA	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*
13C2 PFUnA	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:49*	*1*

Client Sample ID: 1000-101623-0004
Lab Sample ID: 460-290517-3
Date Collected: 10/16/23 14:30
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.43	U	4.43	1.06	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluoropentanoic acid	1.77	U	1.77	0.60	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorohexanoic acid	1.77	U	1.77	0.58	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluoroheptanoic acid	1.77	U	1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorooctanoic acid	1.77	U	1.77	0.67	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorononanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorodecanoic acid	1.77	U	1.77	0.41	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluoroundecanoic acid	1.77	U	1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorododecanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorotridecanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorotetradecanoic acid	1.77	U	1.77	0.57	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorobutanesulfonic acid	1.77	U	1.77	0.55	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluoropentanesulfonic acid	1.77	U	1.77	0.44	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorohexanesulfonic acid	1.77	U	1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorooctanesulfonic acid	1.77	U	1.77	0.75	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorononanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorodecanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:57	1
4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:57	1
6:2 Fluorotelomer sulfonic acid	4.43	U	4.43	1.15	ng/L		10/23/23 07:42	10/24/23 08:57	1
8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68	ng/L		10/23/23 07:42	10/24/23 08:57	1
Perfluorooctanesulfonamide	1.77	U	1.77	0.82	ng/L		10/23/23 07:42	10/24/23 08:57	1
NMeFOSAA	4.43	U	4.43	1.68	ng/L		10/23/23 07:42	10/24/23 08:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.43	U	4.43	1.42	ng/L		10/23/23 07:42	10/24/23 08:57	1
HFPODA	3.55	U	3.55	0.98	ng/L		10/23/23 07:42	10/24/23 08:57	1
DONA	1.77	U	1.77	0.37	ng/L		10/23/23 07:42	10/24/23 08:57	1
9Cl-PF3ONS	1.77	U	1.77	0.28	ng/L		10/23/23 07:42	10/24/23 08:57	1
11Cl-PF3OUdS	1.77	U	1.77	0.77	ng/L		10/23/23 07:42	10/24/23 08:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C5 PFPeA	*96*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C4 PFHpA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C3 PFBS	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*

Client Sample ID: 1000-101623-0004

Date Collected: 10/16/23 14:30
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-3

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
d3-NMeFOSAA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
d5-NEtFOSAA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
M2-4:2 FTS	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
M2-6:2 FTS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
M2-8:2 FTS	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C3 HFPO-DA	*85*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
18O2 PFHxS	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C2 PFHxA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C4 PFOS	*107*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C2 PFDoA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C5 PFNA	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C2 PFDA	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C4 PFOA	*108*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*
13C2 PFUnA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:57*	*1*

Client Sample ID: MW2-101623-0951-10

Date Collected: 10/16/23 09:51
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-4

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**14.5**		4.19	1.01	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluoropentanoic acid	**9.71**		1.68	0.57	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorohexanoic acid	**11.3**		1.68	0.54	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluoroheptanoic acid	**7.58**		1.68	0.45	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorooctanoic acid	**23.0**		1.68	0.64	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorononanoic acid	**2.60**		1.68	0.41	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorodecanoic acid	**0.53**	**J**	1.68	0.39	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluoroundecanoic acid	1.68	U	1.68	0.46	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorododecanoic acid	1.68	U	1.68	0.41	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorotridecanoic acid	1.68	U	1.68	0.40	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorotetradecanoic acid	1.68	U	1.68	0.54	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorobutanesulfonic acid	**3.07**		1.68	0.52	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluoropentanesulfonic acid	**3.10**		1.68	0.42	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorohexanesulfonic acid	**14.1**		1.68	0.46	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluoroheptanesulfonic acid	**7.05**		1.68	0.34	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorononanesulfonic acid	**0.34**	**J**	1.68	0.34	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorodecanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/23/23 07:42	10/24/23 09:05	1
4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45	ng/L		10/23/23 07:42	10/24/23 09:05	1
6:2 Fluorotelomer sulfonic acid	**4.17**	**J**	4.19	1.09	ng/L		10/23/23 07:42	10/24/23 09:05	1
8:2 Fluorotelomer sulfonic acid	**2.39**		1.68	0.65	ng/L		10/23/23 07:42	10/24/23 09:05	1
Perfluorooctanesulfonamide	1.68	U	1.68	0.77	ng/L		10/23/23 07:42	10/24/23 09:05	1
NMeFOSAA	4.19	U	4.19	1.59	ng/L		10/23/23 07:42	10/24/23 09:05	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.19	U	4.19	1.34	ng/L		10/23/23 07:42	10/24/23 09:05	1
HFPODA	3.35	U	3.35	0.92	ng/L		10/23/23 07:42	10/24/23 09:05	1
DONA	1.68	U	1.68	0.35	ng/L		10/23/23 07:42	10/24/23 09:05	1
9Cl-PF3ONS	1.68	U	1.68	0.27	ng/L		10/23/23 07:42	10/24/23 09:05	1
11Cl-PF3OUdS	1.68	U	1.68	0.73	ng/L		10/23/23 07:42	10/24/23 09:05	1

Client Sample ID: MW2-101623-0951-10
Lab Sample ID: 460-290517-4

Date Collected: 10/16/23 09:51
Matrix: Water
Date Received: 10/16/23 19:00

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*79*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C5 PFPeA	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C4 PFHpA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C2 PFTeDA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C3 PFBS	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C8 FOSA	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
d3-NMeFOSAA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
d5-NEtFOSAA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
M2-4:2 FTS	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
M2-6:2 FTS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
M2-8:2 FTS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C3 HFPO-DA	*86*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
18O2 PFHxS	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C2 PFHxA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C4 PFOS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C2 PFDoA	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C5 PFNA	*96*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C2 PFDA	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C4 PFOA	*106*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*
13C2 PFUnA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:05*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**814**	**D**	8.38	3.56	ng/L		10/23/23 07:42	10/27/23 10:40	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*84*		*50 - 150*	*10/23/23 07:42*	*10/27/23 10:40*	*5*

Client Sample ID: MW3-101623-1046-9
Lab Sample ID: 460-290517-5

Date Collected: 10/16/23 10:46
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**14.3**		4.18	1.00	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluoropentanoic acid	**12.6**		1.67	0.57	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorohexanoic acid	**11.3**		1.67	0.54	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluoroheptanoic acid	**8.87**		1.67	0.45	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorooctanoic acid	**23.4**		1.67	0.64	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorononanoic acid	**3.45**		1.67	0.41	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorodecanoic acid	**0.72**	**J**	1.67	0.38	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluoroundecanoic acid	1.67	U	1.67	0.46	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorododecanoic acid	1.67	U	1.67	0.41	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorotridecanoic acid	1.67	U	1.67	0.40	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorotetradecanoic acid	1.67	U	1.67	0.54	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorobutanesulfonic acid	**3.67**		1.67	0.52	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluoropentanesulfonic acid	**3.40**		1.67	0.42	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorohexanesulfonic acid	**14.4**		1.67	0.46	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluoroheptanesulfonic acid	**6.60**		1.67	0.34	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorooctanesulfonic acid	**757**		1.67	0.71	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorononanesulfonic acid	1.67	U	1.67	0.33	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorodecanesulfonic acid	1.67	U	1.67	0.33	ng/L		10/23/23 07:42	10/24/23 09:13	1

Client Sample ID: MW3-101623-1046-9

Lab Sample ID: 460-290517-5

Date Collected: 10/16/23 10:46
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45	ng/L		10/23/23 07:42	10/24/23 09:13	1
6:2 Fluorotelomer sulfonic acid	**8.56**		4.18	1.09	ng/L		10/23/23 07:42	10/24/23 09:13	1
8:2 Fluorotelomer sulfonic acid	**6.99**		1.67	0.64	ng/L		10/23/23 07:42	10/24/23 09:13	1
Perfluorooctanesulfonamide	1.67	U	1.67	0.77	ng/L		10/23/23 07:42	10/24/23 09:13	1
NMeFOSAA	4.18	U	4.18	1.59	ng/L		10/23/23 07:42	10/24/23 09:13	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.18	U	4.18	1.34	ng/L		10/23/23 07:42	10/24/23 09:13	1
HFPODA	3.35	U	3.35	0.92	ng/L		10/23/23 07:42	10/24/23 09:13	1
DONA	1.67	U	1.67	0.35	ng/L		10/23/23 07:42	10/24/23 09:13	1
9Cl-PF3ONS	1.67	U	1.67	0.27	ng/L		10/23/23 07:42	10/24/23 09:13	1
11Cl-PF3OUdS	1.67	U	1.67	0.73	ng/L		10/23/23 07:42	10/24/23 09:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C5 PFPeA	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C4 PFHpA	*96*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C2 PFTeDA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C3 PFBS	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C8 FOSA	*83*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
d3-NMeFOSAA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
d5-NEtFOSAA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
M2-4:2 FTS	*108*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
M2-6:2 FTS	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
M2-8:2 FTS	*96*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C3 HFPO-DA	*93*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
18O2 PFHxS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C2 PFHxA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C4 PFOS	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C2 PFDoA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C5 PFNA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C2 PFDA	*106*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C4 PFOA	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*
13C2 PFUnA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:13*	*1*

Client Sample ID: MW4-101623-1156-11.5

Lab Sample ID: 460-290517-6

Date Collected: 10/16/23 11:56
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**37.1**		4.26	1.02	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluoropentanoic acid	**35.0**		1.70	0.58	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorohexanoic acid	**39.5**		1.70	0.55	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluoroheptanoic acid	**13.6**		1.70	0.46	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorooctanoic acid	**55.9**		1.70	0.65	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorononanoic acid	**7.12**		1.70	0.42	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorodecanoic acid	**1.55**	**J**	1.70	0.39	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluoroundecanoic acid	1.70	U	1.70	0.47	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorododecanoic acid	1.70	U	1.70	0.42	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorotridecanoic acid	1.70	U	1.70	0.41	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorotetradecanoic acid	1.70	U	1.70	0.55	ng/L		10/23/23 07:42	10/24/23 09:22	1

Client Sample ID: MW4-101623-1156-11.5
Lab Sample ID: 460-290517-6

Date Collected: 10/16/23 11:56
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid	**11.7**		1.70	0.53	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluoropentanesulfonic acid	**11.6**		1.70	0.43	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorohexanesulfonic acid	**32.9**	**I**	1.70	0.47	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluoroheptanesulfonic acid	**7.22**		1.70	0.35	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorooctanesulfonic acid	**748**		1.70	0.72	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorononanesulfonic acid	**0.43**	**J**	1.70	0.34	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorodecanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/23/23 07:42	10/24/23 09:22	1
4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46	ng/L		10/23/23 07:42	10/24/23 09:22	1
6:2 Fluorotelomer sulfonic acid	**7.35**		4.26	1.11	ng/L		10/23/23 07:42	10/24/23 09:22	1
8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.66	ng/L		10/23/23 07:42	10/24/23 09:22	1
Perfluorooctanesulfonamide	1.70	U	1.70	0.78	ng/L		10/23/23 07:42	10/24/23 09:22	1
NMeFOSAA	4.26	U	4.26	1.62	ng/L		10/23/23 07:42	10/24/23 09:22	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.26	U	4.26	1.36	ng/L		10/23/23 07:42	10/24/23 09:22	1
HFPODA	3.41	U	3.41	0.94	ng/L		10/23/23 07:42	10/24/23 09:22	1
DONA	1.70	U	1.70	0.36	ng/L		10/23/23 07:42	10/24/23 09:22	1
9Cl-PF3ONS	1.70	U	1.70	0.27	ng/L		10/23/23 07:42	10/24/23 09:22	1
11Cl-PF3OUdS	1.70	U	1.70	0.74	ng/L		10/23/23 07:42	10/24/23 09:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*51*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C5 PFPeA	*77*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C4 PFHpA	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C2 PFTeDA	*104*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C3 PFBS	*111*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C8 FOSA	*79*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
d3-NMeFOSAA	*127*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
d5-NEtFOSAA	*134*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
M2-4:2 FTS	*146*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
M2-6:2 FTS	*145*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
M2-8:2 FTS	*157*	**5+*	*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C3 HFPO-DA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
18O2 PFHxS	*108*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C2 PFHxA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C4 PFOS	*111*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C2 PFDoA	*109*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C5 PFNA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C2 PFDA	*116*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C4 PFOA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*
13C2 PFUnA	*126*		*50 - 150*	*10/23/23 07:42*	*10/24/23 09:22*	*1*

Client Sample ID: MW15-101623-1325-7
Lab Sample ID: 460-290517-7

Date Collected: 10/16/23 13:25
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**17.8**		4.30	1.03	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluoropentanoic acid	**29.8**		1.72	0.58	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorohexanoic acid	**22.6**		1.72	0.56	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluoroheptanoic acid	**11.0**		1.72	0.46	ng/L		10/24/23 09:04	10/24/23 18:57	1

Client Sample ID: MW15-101623-1325-7

Date Collected: 10/16/23 13:25
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-7

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid	**17.5**		1.72	0.65	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorononanoic acid	**4.08**		1.72	0.42	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorodecanoic acid	**1.03**	**J**	1.72	0.40	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluoroundecanoic acid	1.72	U	1.72	0.47	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorododecanoic acid	1.72	U	1.72	0.42	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorotridecanoic acid	1.72	U	1.72	0.41	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorotetradecanoic acid	1.72	U	1.72	0.55	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorobutanesulfonic acid	**9.69**		1.72	0.53	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluoropentanesulfonic acid	**9.45**		1.72	0.43	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorohexanesulfonic acid	**45.7**		1.72	0.47	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluoroheptanesulfonic acid	**1.48**	**J**	1.72	0.35	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorooctanesulfonic acid	**77.3**		1.72	0.73	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorononanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorodecanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/24/23 09:04	10/24/23 18:57	1
4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46	ng/L		10/24/23 09:04	10/24/23 18:57	1
6:2 Fluorotelomer sulfonic acid	4.30	U	4.30	1.12	ng/L		10/24/23 09:04	10/24/23 18:57	1
8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66	ng/L		10/24/23 09:04	10/24/23 18:57	1
Perfluorooctanesulfonamide	1.72	U	1.72	0.79	ng/L		10/24/23 09:04	10/24/23 18:57	1
NMeFOSAA	4.30	U	4.30	1.63	ng/L		10/24/23 09:04	10/24/23 18:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.30	U	4.30	1.38	ng/L		10/24/23 09:04	10/24/23 18:57	1
HFPODA	3.44	U	3.44	0.95	ng/L		10/24/23 09:04	10/24/23 18:57	1
DONA	1.72	U	1.72	0.36	ng/L		10/24/23 09:04	10/24/23 18:57	1
9Cl-PF3ONS	1.72	U	1.72	0.28	ng/L		10/24/23 09:04	10/24/23 18:57	1
11Cl-PF3OUdS	1.72	U	1.72	0.75	ng/L		10/24/23 09:04	10/24/23 18:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C5 PFPeA	*85*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C4 PFHpA	*99*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C2 PFTeDA	*83*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C3 PFBS	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C8 FOSA	*84*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
d3-NMeFOSAA	*86*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
M2-4:2 FTS	*91*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
M2-6:2 FTS	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
M2-8:2 FTS	*89*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C3 HFPO-DA	*82*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
18O2 PFHxS	*99*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C2 PFHxA	*92*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C4 PFOS	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C2 PFDoA	*91*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C5 PFNA	*92*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C2 PFDA	*92*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C4 PFOA	*102*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*
13C2 PFUnA	*92*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:57*	*1*

Client Sample ID: MW34R-101623-1421-12

Date Collected: 10/16/23 14:21
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-8

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**29.8**		4.11	0.99	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluoropentanoic acid	**31.5**		1.64	0.56	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorohexanoic acid	**26.4**		1.64	0.53	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluoroheptanoic acid	**15.7**		1.64	0.44	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorooctanoic acid	**42.2**		1.64	0.62	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorononanoic acid	**6.97**		1.64	0.40	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorodecanoic acid	**0.93**	**J**	1.64	0.38	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluoroundecanoic acid	1.64	U	1.64	0.45	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorododecanoic acid	1.64	U	1.64	0.40	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorotridecanoic acid	1.64	U	1.64	0.39	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorotetradecanoic acid	1.64	U	1.64	0.53	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorobutanesulfonic acid	**8.33**		1.64	0.51	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluoropentanesulfonic acid	**5.03**		1.64	0.41	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorohexanesulfonic acid	**26.6**		1.64	0.45	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluoroheptanesulfonic acid	**1.31**	**J**	1.64	0.34	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorooctanesulfonic acid	**60.3**		1.64	0.70	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorononanesulfonic acid	1.64	U	1.64	0.33	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorodecanesulfonic acid	1.64	U	1.64	0.33	ng/L		10/24/23 09:04	10/24/23 19:05	1
4:2 Fluorotelomer sulfonic acid	1.64	U	1.64	0.44	ng/L		10/24/23 09:04	10/24/23 19:05	1
6:2 Fluorotelomer sulfonic acid	4.11	U	4.11	1.07	ng/L		10/24/23 09:04	10/24/23 19:05	1
8:2 Fluorotelomer sulfonic acid	1.64	U	1.64	0.63	ng/L		10/24/23 09:04	10/24/23 19:05	1
Perfluorooctanesulfonamide	1.64	U	1.64	0.76	ng/L		10/24/23 09:04	10/24/23 19:05	1
NMeFOSAA	4.11	U	4.11	1.56	ng/L		10/24/23 09:04	10/24/23 19:05	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.11	U	4.11	1.31	ng/L		10/24/23 09:04	10/24/23 19:05	1
HFPODA	**1.26**	**J**	3.29	0.90	ng/L		10/24/23 09:04	10/24/23 19:05	1
DONA	1.64	U	1.64	0.34	ng/L		10/24/23 09:04	10/24/23 19:05	1
9Cl-PF3ONS	1.64	U	1.64	0.26	ng/L		10/24/23 09:04	10/24/23 19:05	1
11Cl-PF3OUdS	1.64	U	1.64	0.71	ng/L		10/24/23 09:04	10/24/23 19:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C5 PFPeA	*83*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C4 PFHpA	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C2 PFTeDA	*91*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C8 FOSA	*77*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
d3-NMeFOSAA	*96*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
d5-NEtFOSAA	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
M2-4:2 FTS	*88*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
M2-6:2 FTS	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
M2-8:2 FTS	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C3 HFPO-DA	*82*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
18O2 PFHxS	*100*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C2 PFHxA	*83*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C4 PFOS	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C2 PFDoA	*95*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C5 PFNA	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*
13C4 PFOA	*96*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*

Client Sample ID: MW34R-101623-1421-12
Lab Sample ID: 460-290517-8
Date Collected: 10/16/23 14:21
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFUnA	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:05*	*1*

Client Sample ID: MW16A-101623-0926-20
Lab Sample ID: 460-290517-9
Date Collected: 10/16/23 09:26
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**10.3**		4.36	1.05	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluoropentanoic acid	**7.86**		1.74	0.59	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorohexanoic acid	**6.45**		1.74	0.57	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluoroheptanoic acid	**3.60**		1.74	0.47	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorooctanoic acid	**10.4**		1.74	0.66	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorononanoic acid	**1.55**	**J**	1.74	0.43	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorodecanoic acid	**0.54**	**J**	1.74	0.40	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorobutanesulfonic acid	**5.51**		1.74	0.54	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluoropentanesulfonic acid	**3.57**		1.74	0.44	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorohexanesulfonic acid	**14.4**		1.74	0.48	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluoroheptanesulfonic acid	**2.42**		1.74	0.36	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorooctanesulfonic acid	**400**		1.74	0.74	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorononanesulfonic acid	**0.35**	**J**	1.74	0.35	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/24/23 09:04	10/24/23 19:29	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/24/23 09:04	10/24/23 19:29	1
6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13	ng/L		10/24/23 09:04	10/24/23 19:29	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/24/23 09:04	10/24/23 19:29	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/24/23 09:04	10/24/23 19:29	1
NMeFOSAA	4.36	U	4.36	1.66	ng/L		10/24/23 09:04	10/24/23 19:29	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40	ng/L		10/24/23 09:04	10/24/23 19:29	1
HFPODA	3.49	U	3.49	0.96	ng/L		10/24/23 09:04	10/24/23 19:29	1
DONA	1.74	U	1.74	0.37	ng/L		10/24/23 09:04	10/24/23 19:29	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/24/23 09:04	10/24/23 19:29	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/24/23 09:04	10/24/23 19:29	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C5 PFPeA	*89*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C4 PFHpA	*95*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C2 PFTeDA	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C3 PFBS	*95*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C8 FOSA	*88*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
d3-NMeFOSAA	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
M2-4:2 FTS	*89*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
M2-6:2 FTS	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
M2-8:2 FTS	*89*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*
13C3 HFPO-DA	*90*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:29*	*1*

Client Sample ID: MW16A-101623-0926-20
Lab Sample ID: 460-290517-9
Date Collected: 10/16/23 09:26
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C2 PFHxA	94		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C4 PFOS	98		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C2 PFDoA	98		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C5 PFNA	84		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C2 PFDA	95		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C4 PFOA	101		50 - 150	10/24/23 09:04	10/24/23 19:29	1
13C2 PFUnA	92		50 - 150	10/24/23 09:04	10/24/23 19:29	1

Client Sample ID: MW16C-101623-1026-120
Lab Sample ID: 460-290517-10
Date Collected: 10/16/23 10:26
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**13.1**		4.35	1.04	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluoropentanoic acid	**61.4**		1.74	0.59	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorohexanoic acid	**55.2**		1.74	0.57	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluoroheptanoic acid	**19.5**		1.74	0.47	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorooctanoic acid	**29.5**		1.74	0.66	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorononanoic acid	**2.44**		1.74	0.43	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorodecanoic acid	**0.67**	**J**	1.74	0.40	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorobutanesulfonic acid	**7.34**		1.74	0.54	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluoropentanesulfonic acid	**9.79**		1.74	0.44	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorohexanesulfonic acid	**33.9**		1.74	0.48	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluoroheptanesulfonic acid	**13.3**		1.74	0.36	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorononanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/24/23 09:04	10/24/23 19:38	1
4:2 Fluorotelomer sulfonic acid	**0.64**	**J**	1.74	0.47	ng/L		10/24/23 09:04	10/24/23 19:38	1
6:2 Fluorotelomer sulfonic acid	**64.3**		4.35	1.13	ng/L		10/24/23 09:04	10/24/23 19:38	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/24/23 09:04	10/24/23 19:38	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/24/23 09:04	10/24/23 19:38	1
NMeFOSAA	4.35	U	4.35	1.65	ng/L		10/24/23 09:04	10/24/23 19:38	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.35	U	4.35	1.39	ng/L		10/24/23 09:04	10/24/23 19:38	1
HFPODA	3.48	U	3.48	0.96	ng/L		10/24/23 09:04	10/24/23 19:38	1
DONA	1.74	U	1.74	0.37	ng/L		10/24/23 09:04	10/24/23 19:38	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/24/23 09:04	10/24/23 19:38	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/24/23 09:04	10/24/23 19:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	95		50 - 150	10/24/23 09:04	10/24/23 19:38	1
13C5 PFPeA	97		50 - 150	10/24/23 09:04	10/24/23 19:38	1
13C4 PFHpA	98		50 - 150	10/24/23 09:04	10/24/23 19:38	1
13C2 PFTeDA	96		50 - 150	10/24/23 09:04	10/24/23 19:38	1
13C3 PFBS	101		50 - 150	10/24/23 09:04	10/24/23 19:38	1
13C8 FOSA	95		50 - 150	10/24/23 09:04	10/24/23 19:38	1

Client Sample ID: MW16C-101623-1026-120
Lab Sample ID: 460-290517-10

Date Collected: 10/16/23 10:26
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d3-NMeFOSAA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
d5-NEtFOSAA	*99*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
M2-4:2 FTS	*100*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
M2-6:2 FTS	*96*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
M2-8:2 FTS	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C3 HFPO-DA	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
18O2 PFHxS	*104*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C4 PFOS	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C2 PFDoA	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C5 PFNA	*95*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C2 PFDA	*105*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C4 PFOA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*
13C2 PFUnA	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:38*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**1010**	**D**	3.48	1.48	ng/L		10/24/23 09:04	10/27/23 11:54	2

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*87*		*50 - 150*	*10/24/23 09:04*	*10/27/23 11:54*	*2*

Client Sample ID: MW93-101623-1206-30
Lab Sample ID: 460-290517-11

Date Collected: 10/16/23 12:06
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**33.3**		4.37	1.05	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluoropentanoic acid	**50.7**		1.75	0.59	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorohexanoic acid	**51.3**		1.75	0.57	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluoroheptanoic acid	**21.9**		1.75	0.47	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorooctanoic acid	**45.8**		1.75	0.66	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorononanoic acid	**6.01**		1.75	0.43	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorodecanoic acid	**7.92**		1.75	0.40	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluoroundecanoic acid	**0.90**	**J**	1.75	0.48	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorododecanoic acid	1.75	U	1.75	0.43	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorotridecanoic acid	1.75	U	1.75	0.42	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorotetradecanoic acid	1.75	U	1.75	0.56	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorobutanesulfonic acid	**3.39**		1.75	0.54	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluoropentanesulfonic acid	**3.33**		1.75	0.44	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorohexanesulfonic acid	**17.6**		1.75	0.48	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluoroheptanesulfonic acid	**1.50**	**J**	1.75	0.36	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorooctanesulfonic acid	**95.6**		1.75	0.74	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorononanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorodecanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/24/23 09:04	10/24/23 19:46	1
4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47	ng/L		10/24/23 09:04	10/24/23 19:46	1
6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14	ng/L		10/24/23 09:04	10/24/23 19:46	1
8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67	ng/L		10/24/23 09:04	10/24/23 19:46	1
Perfluorooctanesulfonamide	1.75	U	1.75	0.80	ng/L		10/24/23 09:04	10/24/23 19:46	1
NMeFOSAA	4.37	U	4.37	1.66	ng/L		10/24/23 09:04	10/24/23 19:46	1

Client Sample ID: MW93-101623-1206-30

Lab Sample ID: 460-290517-11

Date Collected: 10/16/23 12:06
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40	ng/L		10/24/23 09:04	10/24/23 19:46	1
HFPODA	**1.07**	**J**	3.49	0.96	ng/L		10/24/23 09:04	10/24/23 19:46	1
DONA	1.75	U	1.75	0.37	ng/L		10/24/23 09:04	10/24/23 19:46	1
9Cl-PF3ONS	1.75	U	1.75	0.28	ng/L		10/24/23 09:04	10/24/23 19:46	1
11Cl-PF3OUdS	1.75	U	1.75	0.76	ng/L		10/24/23 09:04	10/24/23 19:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C5 PFPeA	*91*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C4 PFHpA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C2 PFTeDA	*108*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C3 PFBS	*106*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C8 FOSA	*87*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
d3-NMeFOSAA	*127*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
d5-NEtFOSAA	*144*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
M2-4:2 FTS	*125*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
M2-6:2 FTS	*134*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
M2-8:2 FTS	*134*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C3 HFPO-DA	*90*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
18O2 PFHxS	*106*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C2 PFHxA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C4 PFOS	*111*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C2 PFDoA	*111*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C5 PFNA	*111*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C2 PFDA	*116*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C4 PFOA	*110*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*
13C2 PFUnA	*121*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:46*	*1*

Client Sample ID: MW93A-101623-1311-65

Lab Sample ID: 460-290517-12

Date Collected: 10/16/23 13:11
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**16.8**		4.37	1.05	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluoropentanoic acid	**6.75**		1.75	0.59	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorohexanoic acid	**6.90**		1.75	0.57	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluoroheptanoic acid	**2.18**		1.75	0.47	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorooctanoic acid	**18.9**		1.75	0.66	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorononanoic acid	**1.87**		1.75	0.43	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorodecanoic acid	**0.77**	**J**	1.75	0.40	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluoroundecanoic acid	1.75	U	1.75	0.48	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorododecanoic acid	1.75	U	1.75	0.43	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorotridecanoic acid	1.75	U	1.75	0.42	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorotetradecanoic acid	1.75	U	1.75	0.56	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorobutanesulfonic acid	**2.31**		1.75	0.54	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluoropentanesulfonic acid	**3.55**		1.75	0.44	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorohexanesulfonic acid	**13.3**		1.75	0.48	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluoroheptanesulfonic acid	**5.50**		1.75	0.36	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorooctanesulfonic acid	**377**		1.75	0.74	ng/L		10/24/23 09:04	10/24/23 19:54	1

Client Sample ID: MW93A-101623-1311-65
Lab Sample ID: 460-290517-12

Date Collected: 10/16/23 13:11
Matrix: Water
Date Received: 10/16/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorodecanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/24/23 09:04	10/24/23 19:54	1
4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47	ng/L		10/24/23 09:04	10/24/23 19:54	1
6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14	ng/L		10/24/23 09:04	10/24/23 19:54	1
8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67	ng/L		10/24/23 09:04	10/24/23 19:54	1
Perfluorooctanesulfonamide	1.75	U	1.75	0.80	ng/L		10/24/23 09:04	10/24/23 19:54	1
NMeFOSAA	4.37	U	4.37	1.66	ng/L		10/24/23 09:04	10/24/23 19:54	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40	ng/L		10/24/23 09:04	10/24/23 19:54	1
HFPODA	3.50	U	3.50	0.96	ng/L		10/24/23 09:04	10/24/23 19:54	1
DONA	1.75	U	1.75	0.37	ng/L		10/24/23 09:04	10/24/23 19:54	1
9Cl-PF3ONS	1.75	U	1.75	0.28	ng/L		10/24/23 09:04	10/24/23 19:54	1
11Cl-PF3OUdS	1.75	U	1.75	0.76	ng/L		10/24/23 09:04	10/24/23 19:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C5 PFPeA	*84*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C4 PFHpA	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C2 PFTeDA	*102*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C3 PFBS	*98*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C8 FOSA	*84*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
d3-NMeFOSAA	*109*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
d5-NEtFOSAA	*122*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
M2-4:2 FTS	*106*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
M2-8:2 FTS	*104*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C3 HFPO-DA	*88*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
18O2 PFHxS	*97*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C2 PFHxA	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C4 PFOS	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C2 PFDoA	*105*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C5 PFNA	*102*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C2 PFDA	*102*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C4 PFOA	*101*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*
13C2 PFUnA	*108*		*50 - 150*	*10/24/23 09:04*	*10/24/23 19:54*	*1*

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290517-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	C4PFHA	PFTDA	C3PFBS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290517-1	1000-101623-0002	98	92	88	78	90	78	91	91
460-290517-2	1000-101623-0003	66	84	97	103	103	84	124	138
460-290517-3	1000-101623-0004	100	96	103	88	95	87	103	99
460-290517-4	MW2-101623-0951-10	79	90	97	91	97	90	98	103
460-290517-4 - DL	MW2-101623-0951-10								
460-290517-5	MW3-101623-1046-9	74	87	96	91	92	83	97	101
460-290517-6	MW4-101623-1156-11.5	51	77	102	104	111	79	127	134
460-290517-7	MW15-101623-1325-7	87	85	99	83	94	84	86	88
460-290517-8	MW34R-101623-1421-12	73	83	93	91	90	77	96	94
460-290517-8 MS	MW34R-101623-1421-12	79	92	95	96	97	83	99	104
460-290517-8 MSD	MW34R-101623-1421-12	79	91	101	100	98	84	98	104
460-290517-9	MW16A-101623-0926-20	90	89	95	93	95	88	93	97
460-290517-10	MW16C-101623-1026-120	95	97	98	96	101	95	97	99
460-290517-10 - DL	MW16C-101623-1026-120								
460-290517-11	MW93-101623-1206-30	69	91	97	108	106	87	127	144
460-290517-12	MW93A-101623-1311-65	74	84	97	102	98	84	109	122
LCS 200-196662/2-A	Lab Control Sample	106	99	104	89	101	91	104	105
LCS 200-196715/2-A	Lab Control Sample	98	92	96	84	96	80	96	95
LCSD 200-196662/3-A	Lab Control Sample Dup	96	88	93	75	90	78	90	88
MB 200-196662/1-A	Method Blank	98	87	98	76	90	75	90	86
MB 200-196715/1-A	Method Blank	104	93	104	82	103	84	93	90

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	PFHxS	PFHxA	PFOS	PFDoA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290517-1	1000-101623-0002	88	92	86	83	99	95	97	86
460-290517-2	1000-101623-0003	124	130	126	98	104	91	110	109
460-290517-3	1000-101623-0004	94	99	94	85	100	103	107	101
460-290517-4	MW2-101623-0951-10	102	99	99	86	104	89	99	104
460-290517-4 - DL	MW2-101623-0951-10							84	
460-290517-5	MW3-101623-1046-9	108	104	96	93	99	92	98	94
460-290517-6	MW4-101623-1156-11.5	146	145	157 *5+	95	108	94	111	109
460-290517-7	MW15-101623-1325-7	91	93	89	82	99	92	98	91
460-290517-8	MW34R-101623-1421-12	88	98	94	82	100	83	101	95
460-290517-8 MS	MW34R-101623-1421-12	92	102	97	95				
460-290517-8 MSD	MW34R-101623-1421-12	94	107	98	86				
460-290517-9	MW16A-101623-0926-20	89	93	89	90	100	94	98	98
460-290517-10	MW16C-101623-1026-120	100	96	97	98	104	98	101	101
460-290517-10 - DL	MW16C-101623-1026-120							87	
460-290517-11	MW93-101623-1206-30	125	134	134	90	106	97	111	111
460-290517-12	MW93A-101623-1311-65	106	108	104	88	97	94	101	105
LCS 200-196662/2-A	Lab Control Sample	95	98	95	92	101	100	101	103
LCS 200-196715/2-A	Lab Control Sample	92	97	93	82	101	96	104	93
LCSD 200-196662/3-A	Lab Control Sample Dup	89	90	87	84	96	91	97	81
MB 200-196662/1-A	Method Blank	89	91	84	84	96	94	96	81
MB 200-196715/1-A	Method Blank	95	105	92	91	107	102	105	87

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFNA	PFDA	PFOA	PFUnA				
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)				
460-290517-1	1000-101623-0002	92	99	106	89				

Isotope Dilution Summary

Client: Haley & Aldrich, Inc. Job ID: 460-290517-1
Project/Site: Racer, Ewing/Trenton

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFNA (50-150)	PFDA (50-150)	PFOA (50-150)	PFUnA (50-150)				
460-290517-2	1000-101623-0003	110	107	104	104				
460-290517-3	1000-101623-0004	104	102	108	97				
460-290517-4	MW2-101623-0951-10	96	102	106	101				
460-290517-4 - DL	MW2-101623-0951-10								
460-290517-5	MW3-101623-1046-9	94	106	100	101				
460-290517-6	MW4-101623-1156-11.5	95	116	97	126				
460-290517-7	MW15-101623-1325-7	92	92	102	92				
460-290517-8	MW34R-101623-1421-12	94	100	96	101				
460-290517-8 MS	MW34R-101623-1421-12								
460-290517-8 MSD	MW34R-101623-1421-12								
460-290517-9	MW16A-101623-0926-20	84	95	101	92				
460-290517-10	MW16C-101623-1026-120	95	105	97	98				
460-290517-10 - DL	MW16C-101623-1026-120								
460-290517-11	MW93-101623-1206-30	111	116	110	121				
460-290517-12	MW93A-101623-1311-65	102	102	101	108				
LCS 200-196662/2-A	Lab Control Sample	100	96	105	98				
LCS 200-196715/2-A	Lab Control Sample	98	92	102	95				
LCSD 200-196662/3-A	Lab Control Sample Dup	95	92	100	89				
MB 200-196662/1-A	Method Blank	94	94	99	96				
MB 200-196715/1-A	Method Blank	105	94	110	87				

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
PFHxS = 18O2 PFHxS
PFHxA = 13C2 PFHxA
PFOS = 13C4 PFOS
PFDoA = 13C2 PFDoA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFOA = 13C4 PFOA
PFUnA = 13C2 PFUnA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-196662/1-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/23/23 07:41	10/24/23 06:13	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/23/23 07:41	10/24/23 06:13	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/23/23 07:41	10/24/23 06:13	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/23/23 07:41	10/24/23 06:13	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/23/23 07:41	10/24/23 06:13	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/23/23 07:41	10/24/23 06:13	1
HFPODA	4.00	U	4.00	1.10	ng/L		10/23/23 07:41	10/24/23 06:13	1
DONA	2.00	U	2.00	0.42	ng/L		10/23/23 07:41	10/24/23 06:13	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/23/23 07:41	10/24/23 06:13	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/23/23 07:41	10/24/23 06:13	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C5 PFPeA	*87*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C4 PFHpA	*98*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFTeDA	*76*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C8 FOSA	*75*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
d5-NEtFOSAA	*86*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-4:2 FTS	*89*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C3 HFPO-DA	*84*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
18O2 PFHxS	*96*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFHxA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C4 PFOS	*96*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFDoA	*81*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C5 PFNA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFDA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196662/1-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	99		50 - 150	10/23/23 07:41	10/24/23 06:13	1
13C2 PFUnA	96		50 - 150	10/23/23 07:41	10/24/23 06:13	1

Lab Sample ID: LCS 200-196662/2-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	40.0	38.92		ng/L		97	70 - 130
Perfluoropentanoic acid	40.0	38.61		ng/L		97	70 - 130
Perfluorohexanoic acid	40.0	38.82		ng/L		97	70 - 130
Perfluoroheptanoic acid	40.0	38.08		ng/L		95	70 - 130
Perfluorooctanoic acid	40.0	38.29		ng/L		96	70 - 130
Perfluorononanoic acid	40.0	39.45		ng/L		99	70 - 130
Perfluorodecanoic acid	40.0	40.74		ng/L		102	70 - 130
Perfluoroundecanoic acid	40.0	41.23		ng/L		103	70 - 130
Perfluorododecanoic acid	40.0	34.71		ng/L		87	70 - 130
Perfluorotridecanoic acid	40.0	36.45		ng/L		91	70 - 130
Perfluorotetradecanoic acid	40.0	37.66		ng/L		94	70 - 130
Perfluorobutanesulfonic acid	35.5	34.30		ng/L		97	70 - 130
Perfluoropentanesulfonic acid	37.6	36.85		ng/L		98	70 - 130
Perfluorohexanesulfonic acid	36.6	33.99		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid	38.1	38.15		ng/L		100	70 - 130
Perfluorooctanesulfonic acid	37.1	35.07		ng/L		94	70 - 130
Perfluorononanesulfonic acid	38.5	34.32		ng/L		89	70 - 130
Perfluorodecanesulfonic acid	38.6	35.69		ng/L		92	70 - 130
4:2 Fluorotelomer sulfonic acid	37.5	37.98		ng/L		101	70 - 130
6:2 Fluorotelomer sulfonic acid	38.0	38.54		ng/L		101	60 - 140
8:2 Fluorotelomer sulfonic acid	38.4	41.65		ng/L		108	70 - 130
Perfluorooctanesulfonamide	40.0	40.08		ng/L		100	70 - 130
NMeFOSAA	40.0	39.24		ng/L		98	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.52		ng/L		94	70 - 130
HFPODA	40.0	37.94		ng/L		95	60 - 140
DONA	37.8	37.16		ng/L		98	70 - 130
9Cl-PF3ONS	37.3	39.95		ng/L		107	70 - 130
11Cl-PF3OUdS	37.7	36.16		ng/L		96	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	106		50 - 150
13C5 PFPeA	99		50 - 150
13C4 PFHpA	104		50 - 150
13C2 PFTeDA	89		50 - 150
13C3 PFBS	101		50 - 150
13C8 FOSA	91		50 - 150
d3-NMeFOSAA	104		50 - 150
d5-NEtFOSAA	105		50 - 150
M2-4:2 FTS	95		50 - 150
M2-6:2 FTS	98		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196662/2-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-8:2 FTS	95		50 - 150
13C3 HFPO-DA	92		50 - 150
18O2 PFHxS	101		50 - 150
13C2 PFHxA	100		50 - 150
13C4 PFOS	101		50 - 150
13C2 PFDoA	103		50 - 150
13C5 PFNA	100		50 - 150
13C2 PFDA	96		50 - 150
13C4 PFOA	105		50 - 150
13C2 PFUnA	98		50 - 150

Lab Sample ID: LCSD 200-196662/3-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			40.0	38.50		ng/L		96	70 - 130	1	30
Perfluoropentanoic acid			40.0	41.85		ng/L		105	70 - 130	8	30
Perfluorohexanoic acid			40.0	38.27		ng/L		96	70 - 130	1	30
Perfluoroheptanoic acid			40.0	41.74		ng/L		104	70 - 130	9	30
Perfluorooctanoic acid			40.0	38.60		ng/L		96	70 - 130	1	30
Perfluorononanoic acid			40.0	37.70		ng/L		94	70 - 130	5	30
Perfluorodecanoic acid			40.0	39.12		ng/L		98	70 - 130	4	30
Perfluoroundecanoic acid			40.0	37.31		ng/L		93	70 - 130	10	30
Perfluorododecanoic acid			40.0	36.54		ng/L		91	70 - 130	5	30
Perfluorotridecanoic acid			40.0	38.38		ng/L		96	70 - 130	5	30
Perfluorotetradecanoic acid			40.0	36.00		ng/L		90	70 - 130	5	30
Perfluorobutanesulfonic acid			35.5	35.80		ng/L		101	70 - 130	4	30
Perfluoropentanesulfonic acid			37.6	37.61		ng/L		100	70 - 130	2	30
Perfluorohexanesulfonic acid			36.6	33.58		ng/L		92	70 - 130	1	30
Perfluoroheptanesulfonic acid			38.1	36.16		ng/L		95	70 - 130	5	30
Perfluorooctanesulfonic acid			37.1	34.58		ng/L		93	70 - 130	1	30
Perfluorononanesulfonic acid			38.5	33.84		ng/L		88	70 - 130	1	30
Perfluorodecanesulfonic acid			38.6	29.91		ng/L		77	70 - 130	18	30
4:2 Fluorotelomer sulfonic acid			37.5	37.18		ng/L		99	70 - 130	2	30
6:2 Fluorotelomer sulfonic acid			38.0	38.79		ng/L		102	60 - 140	1	30
8:2 Fluorotelomer sulfonic acid			38.4	40.14		ng/L		105	70 - 130	4	30
Perfluorooctanesulfonamide			40.0	41.50		ng/L		104	70 - 130	3	30
NMeFOSAA			40.0	38.55		ng/L		96	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid			40.0	38.11		ng/L		95	70 - 130	2	30
HFPODA			40.0	39.70		ng/L		99	60 - 140	5	30
DONA			37.8	36.02		ng/L		95	70 - 130	3	30
9Cl-PF3ONS			37.3	37.73		ng/L		101	70 - 130	6	30
11Cl-PF3OUdS			37.7	31.91		ng/L		85	60 - 140	12	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	96		50 - 150
13C5 PFPeA	88		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196662/3-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	93		50 - 150
13C2 PFTeDA	75		50 - 150
13C3 PFBS	90		50 - 150
13C8 FOSA	78		50 - 150
d3-NMeFOSAA	90		50 - 150
d5-NEtFOSAA	88		50 - 150
M2-4:2 FTS	89		50 - 150
M2-6:2 FTS	90		50 - 150
M2-8:2 FTS	87		50 - 150
13C3 HFPO-DA	84		50 - 150
18O2 PFHxS	96		50 - 150
13C2 PFHxA	91		50 - 150
13C4 PFOS	97		50 - 150
13C2 PFDoA	81		50 - 150
13C5 PFNA	95		50 - 150
13C2 PFDA	92		50 - 150
13C4 PFOA	100		50 - 150
13C2 PFUnA	89		50 - 150

Lab Sample ID: MB 200-196715/1-A
Matrix: Water
Analysis Batch: 196739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/24/23 09:04	10/24/23 18:40	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/24/23 09:04	10/24/23 18:40	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/24/23 09:04	10/24/23 18:40	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/24/23 09:04	10/24/23 18:40	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/24/23 09:04	10/24/23 18:40	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/24/23 09:04	10/24/23 18:40	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/24/23 09:04	10/24/23 18:40	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196715/1-A
Matrix: Water
Analysis Batch: 196739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPODA	4.00	U	4.00	1.10	ng/L		10/24/23 09:04	10/24/23 18:40	1
DONA	2.00	U	2.00	0.42	ng/L		10/24/23 09:04	10/24/23 18:40	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/24/23 09:04	10/24/23 18:40	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/24/23 09:04	10/24/23 18:40	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*104*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C5 PFPeA	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C4 PFHpA	*104*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C2 PFTeDA	*82*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C3 PFBS	*103*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C8 FOSA	*84*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
d3-NMeFOSAA	*93*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
d5-NEtFOSAA	*90*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
M2-4:2 FTS	*95*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
M2-6:2 FTS	*105*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
M2-8:2 FTS	*92*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C3 HFPO-DA	*91*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
18O2 PFHxS	*107*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C2 PFHxA	*102*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C4 PFOS	*105*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C2 PFDoA	*87*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C5 PFNA	*105*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C2 PFDA	*94*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C4 PFOA	*110*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*
13C2 PFUnA	*87*		*50 - 150*	*10/24/23 09:04*	*10/24/23 18:40*	*1*

Lab Sample ID: LCS 200-196715/2-A
Matrix: Water
Analysis Batch: 196739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	40.0	38.95		ng/L		97	70 - 130
Perfluoropentanoic acid	40.0	41.84		ng/L		105	70 - 130
Perfluorohexanoic acid	40.0	37.09		ng/L		93	70 - 130
Perfluoroheptanoic acid	40.0	37.88		ng/L		95	70 - 130
Perfluorooctanoic acid	40.0	39.15		ng/L		98	70 - 130
Perfluorononanoic acid	40.0	36.82		ng/L		92	70 - 130
Perfluorodecanoic acid	40.0	39.22		ng/L		98	70 - 130
Perfluoroundecanoic acid	40.0	38.29		ng/L		96	70 - 130
Perfluorododecanoic acid	40.0	36.04		ng/L		90	70 - 130
Perfluorotridecanoic acid	40.0	36.04		ng/L		90	70 - 130
Perfluorotetradecanoic acid	40.0	35.93		ng/L		90	70 - 130
Perfluorobutanesulfonic acid	35.5	35.09		ng/L		99	70 - 130
Perfluoropentanesulfonic acid	37.6	36.71		ng/L		98	70 - 130
Perfluorohexanesulfonic acid	36.6	33.99		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid	38.1	36.59		ng/L		96	70 - 130
Perfluorooctanesulfonic acid	37.1	33.91		ng/L		91	70 - 130
Perfluorononanesulfonic acid	38.5	34.18		ng/L		89	70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196715/2-A
Matrix: Water
Analysis Batch: 196739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanesulfonic acid	38.6	31.18		ng/L		81	70 - 130
4:2 Fluorotelomer sulfonic acid	37.5	39.17		ng/L		104	70 - 130
6:2 Fluorotelomer sulfonic acid	38.0	37.95		ng/L		100	60 - 140
8:2 Fluorotelomer sulfonic acid	38.4	40.47		ng/L		105	70 - 130
Perfluorooctanesulfonamide	40.0	36.21		ng/L		91	70 - 130
NMeFOSAA	40.0	37.49		ng/L		94	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	36.29		ng/L		91	70 - 130
HFPODA	40.0	39.55		ng/L		99	60 - 140
DONA	37.8	34.93		ng/L		92	70 - 130
9Cl-PF3ONS	37.3	38.14		ng/L		102	70 - 130
11Cl-PF3OUdS	37.7	32.53		ng/L		86	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*98*		*50 - 150*
13C5 PFPeA	*92*		*50 - 150*
13C4 PFHpA	*96*		*50 - 150*
13C2 PFTeDA	*84*		*50 - 150*
13C3 PFBS	*96*		*50 - 150*
13C8 FOSA	*80*		*50 - 150*
d3-NMeFOSAA	*96*		*50 - 150*
d5-NEtFOSAA	*95*		*50 - 150*
M2-4:2 FTS	*92*		*50 - 150*
M2-6:2 FTS	*97*		*50 - 150*
M2-8:2 FTS	*93*		*50 - 150*
13C3 HFPO-DA	*82*		*50 - 150*
18O2 PFHxS	*101*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C4 PFOS	*104*		*50 - 150*
13C2 PFDoA	*93*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C2 PFDA	*92*		*50 - 150*
13C4 PFOA	*102*		*50 - 150*
13C2 PFUnA	*95*		*50 - 150*

Lab Sample ID: 460-290517-8 MS
Matrix: Water
Analysis Batch: 196739

Client Sample ID: MW34R-101623-1421-12
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	29.8		32.6	60.97		ng/L		96	60 - 140
Perfluoropentanoic acid	31.5		32.6	64.09		ng/L		100	60 - 140
Perfluorohexanoic acid	26.4		32.6	57.13		ng/L		94	60 - 140
Perfluoroheptanoic acid	15.7		32.6	47.71		ng/L		98	60 - 140
Perfluorooctanoic acid	42.2		32.6	79.21		ng/L		114	60 - 140
Perfluorononanoic acid	6.97		32.6	41.80		ng/L		107	60 - 140
Perfluorodecanoic acid	0.93	J	32.6	30.34		ng/L		90	60 - 140
Perfluoroundecanoic acid	1.64	U	32.6	29.37		ng/L		90	60 - 140
Perfluorododecanoic acid	1.64	U	32.6	29.23		ng/L		90	60 - 140

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 460-290517-8 MS
Matrix: Water
Analysis Batch: 196739

Client Sample ID: MW34R-101623-1421-12
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotridecanoic acid	1.64	U	32.6	29.50		ng/L		91	60 - 140
Perfluorotetradecanoic acid	1.64	U	32.6	32.01		ng/L		98	60 - 140
Perfluorobutanesulfonic acid	8.33		28.9	37.02		ng/L		99	60 - 140
Perfluoropentanesulfonic acid	5.03		30.7	36.55		ng/L		103	60 - 140
Perfluorohexanesulfonic acid	26.6		29.8	54.82		ng/L		95	60 - 140
Perfluoroheptanesulfonic acid	1.31	J	31.0	31.28		ng/L		97	60 - 140
Perfluorooctanesulfonic acid	60.3		30.2	87.90		ng/L		91	60 - 140
Perfluorononanesulfonic acid	1.64	U	31.3	26.62		ng/L		85	60 - 140
Perfluorodecanesulfonic acid	1.64	U	31.4	27.59		ng/L		88	60 - 140
4:2 Fluorotelomer sulfonic acid	1.64	U	30.5	32.57		ng/L		107	60 - 140
6:2 Fluorotelomer sulfonic acid	4.11	U	31.0	32.24		ng/L		104	50 - 150
8:2 Fluorotelomer sulfonic acid	1.64	U	31.3	33.71		ng/L		108	60 - 140
Perfluorooctanesulfonamide	1.64	U	32.6	30.50		ng/L		94	60 - 140
NMeFOSAA	4.11	U	32.6	31.21		ng/L		96	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid	4.11	U	32.6	30.30		ng/L		93	60 - 140
HFPODA	1.26	J	32.6	33.33		ng/L		98	50 - 150
DONA	1.64	U	30.8	26.91		ng/L		87	60 - 140
9Cl-PF3ONS	1.64	U	30.4	30.23		ng/L		99	60 - 140
11Cl-PF3OUdS	1.64	U	30.7	30.05		ng/L		98	50 - 150

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*79*		*50 - 150*
13C5 PFPeA	*92*		*50 - 150*
13C4 PFHpA	*95*		*50 - 150*
13C2 PFTeDA	*96*		*50 - 150*
13C3 PFBS	*97*		*50 - 150*
13C8 FOSA	*83*		*50 - 150*
d3-NMeFOSAA	*99*		*50 - 150*
d5-NEtFOSAA	*104*		*50 - 150*
M2-4:2 FTS	*92*		*50 - 150*
M2-6:2 FTS	*102*		*50 - 150*
M2-8:2 FTS	*97*		*50 - 150*
13C3 HFPO-DA	*95*		*50 - 150*

Lab Sample ID: 460-290517-8 MSD
Matrix: Water
Analysis Batch: 196739

Client Sample ID: MW34R-101623-1421-12
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid	29.8		32.4	63.17		ng/L		103	60 - 140	4	30
Perfluoropentanoic acid	31.5		32.4	62.69		ng/L		96	60 - 140	2	30
Perfluorohexanoic acid	26.4		32.4	61.20		ng/L		107	60 - 140	7	30
Perfluoroheptanoic acid	15.7		32.4	49.55		ng/L		105	60 - 140	4	30
Perfluorooctanoic acid	42.2		32.4	75.97		ng/L		104	60 - 140	4	30
Perfluorononanoic acid	6.97		32.4	38.90		ng/L		99	60 - 140	7	30
Perfluorodecanoic acid	0.93	J	32.4	32.21		ng/L		97	60 - 140	6	30
Perfluoroundecanoic acid	1.64	U	32.4	32.97		ng/L		102	60 - 140	12	30
Perfluorododecanoic acid	1.64	U	32.4	31.63		ng/L		98	60 - 140	8	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 460-290517-8 MSD
Matrix: Water
Analysis Batch: 196739

Client Sample ID: MW34R-101623-1421-12
Prep Type: Total/NA
Prep Batch: 196715

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorotridecanoic acid	1.64	U	32.4	29.45		ng/L		91	60 - 140	0	30
Perfluorotetradecanoic acid	1.64	U	32.4	29.13		ng/L		90	60 - 140	9	30
Perfluorobutanesulfonic acid	8.33		28.7	37.74		ng/L		102	60 - 140	2	30
Perfluoropentanesulfonic acid	5.03		30.5	36.88		ng/L		105	60 - 140	1	30
Perfluorohexanesulfonic acid	26.6		29.6	55.57		ng/L		98	60 - 140	1	30
Perfluoroheptanesulfonic acid	1.31	J	30.9	32.41		ng/L		101	60 - 140	4	30
Perfluorooctanesulfonic acid	60.3		30.1	91.28		ng/L		103	60 - 140	4	30
Perfluorononanesulfonic acid	1.64	U	31.2	28.08		ng/L		90	60 - 140	5	30
Perfluorodecanesulfonic acid	1.64	U	31.3	28.12		ng/L		90	60 - 140	2	30
4:2 Fluorotelomer sulfonic acid	1.64	U	30.3	33.15		ng/L		109	60 - 140	2	30
6:2 Fluorotelomer sulfonic acid	4.11	U	30.8	32.82		ng/L		107	50 - 150	2	30
8:2 Fluorotelomer sulfonic acid	1.64	U	31.1	33.87		ng/L		109	60 - 140	0	30
Perfluorooctanesulfonamide	1.64	U	32.4	32.38		ng/L		100	60 - 140	6	30
NMeFOSAA	4.11	U	32.4	34.70		ng/L		107	60 - 140	11	30
N-ethylperfluorooctanesulfonamidoacetic acid	4.11	U	32.4	32.01		ng/L		99	60 - 140	5	30
HFPODA	1.26	J	32.4	39.00		ng/L		117	50 - 150	16	30
DONA	1.64	U	30.6	27.45		ng/L		90	60 - 140	2	30
9Cl-PF3ONS	1.64	U	30.2	31.94		ng/L		106	60 - 140	5	30
11Cl-PF3OUdS	1.64	U	30.5	29.89		ng/L		98	50 - 150	1	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*79*		*50 - 150*
13C5 PFPeA	*91*		*50 - 150*
13C4 PFHpA	*101*		*50 - 150*
13C2 PFTeDA	*100*		*50 - 150*
13C3 PFBS	*98*		*50 - 150*
13C8 FOSA	*84*		*50 - 150*
d3-NMeFOSAA	*98*		*50 - 150*
d5-NEtFOSAA	*104*		*50 - 150*
M2-4:2 FTS	*94*		*50 - 150*
M2-6:2 FTS	*107*		*50 - 150*
M2-8:2 FTS	*98*		*50 - 150*
13C3 HFPO-DA	*86*		*50 - 150*

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 196662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290517-1	1000-101623-0002	Total/NA	Water	3535	
460-290517-2	1000-101623-0003	Total/NA	Water	3535	
460-290517-3	1000-101623-0004	Total/NA	Water	3535	
460-290517-4	MW2-101623-0951-10	Total/NA	Water	3535	
460-290517-4 - DL	MW2-101623-0951-10	Total/NA	Water	3535	
460-290517-5	MW3-101623-1046-9	Total/NA	Water	3535	
460-290517-6	MW4-101623-1156-11.5	Total/NA	Water	3535	
MB 200-196662/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196662/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196662/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 196692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290517-1	1000-101623-0002	Total/NA	Water	537 (modified)	196662
460-290517-2	1000-101623-0003	Total/NA	Water	537 (modified)	196662
460-290517-3	1000-101623-0004	Total/NA	Water	537 (modified)	196662
460-290517-4	MW2-101623-0951-10	Total/NA	Water	537 (modified)	196662
460-290517-5	MW3-101623-1046-9	Total/NA	Water	537 (modified)	196662
460-290517-6	MW4-101623-1156-11.5	Total/NA	Water	537 (modified)	196662
MB 200-196662/1-A	Method Blank	Total/NA	Water	537 (modified)	196662
LCS 200-196662/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196662
LCSD 200-196662/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196662

Prep Batch: 196715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290517-7	MW15-101623-1325-7	Total/NA	Water	3535	
460-290517-8	MW34R-101623-1421-12	Total/NA	Water	3535	
460-290517-9	MW16A-101623-0926-20	Total/NA	Water	3535	
460-290517-10	MW16C-101623-1026-120	Total/NA	Water	3535	
460-290517-10 - DL	MW16C-101623-1026-120	Total/NA	Water	3535	
460-290517-11	MW93-101623-1206-30	Total/NA	Water	3535	
460-290517-12	MW93A-101623-1311-65	Total/NA	Water	3535	
MB 200-196715/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196715/2-A	Lab Control Sample	Total/NA	Water	3535	
460-290517-8 MS	MW34R-101623-1421-12	Total/NA	Water	3535	
460-290517-8 MSD	MW34R-101623-1421-12	Total/NA	Water	3535	

Analysis Batch: 196739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290517-7	MW15-101623-1325-7	Total/NA	Water	537 (modified)	196715
460-290517-8	MW34R-101623-1421-12	Total/NA	Water	537 (modified)	196715
460-290517-9	MW16A-101623-0926-20	Total/NA	Water	537 (modified)	196715
460-290517-10	MW16C-101623-1026-120	Total/NA	Water	537 (modified)	196715
460-290517-11	MW93-101623-1206-30	Total/NA	Water	537 (modified)	196715
460-290517-12	MW93A-101623-1311-65	Total/NA	Water	537 (modified)	196715
MB 200-196715/1-A	Method Blank	Total/NA	Water	537 (modified)	196715
LCS 200-196715/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196715
460-290517-8 MS	MW34R-101623-1421-12	Total/NA	Water	537 (modified)	196715
460-290517-8 MSD	MW34R-101623-1421-12	Total/NA	Water	537 (modified)	196715

LCMS

Analysis Batch: 196839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290517-4 - DL	MW2-101623-0951-10	Total/NA	Water	537 (modified)	196662
460-290517-10 - DL	MW16C-101623-1026-120	Total/NA	Water	537 (modified)	196715

Client Sample ID: 1000-101623-0002
Date Collected: 10/16/23 11:05
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:41

Client Sample ID: 1000-101623-0003
Date Collected: 10/16/23 00:00
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:49

Client Sample ID: 1000-101623-0004
Date Collected: 10/16/23 14:30
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:57

Client Sample ID: MW2-101623-0951-10
Date Collected: 10/16/23 09:51
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 09:05
Total/NA	Prep	3535	DL		196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)	DL	5	196839	BWC	EET BUR	10/27/23 10:40

Client Sample ID: MW3-101623-1046-9
Date Collected: 10/16/23 10:46
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 09:13

Client Sample ID: MW4-101623-1156-11.5
Date Collected: 10/16/23 11:56
Date Received: 10/16/23 19:00

Lab Sample ID: 460-290517-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 09:22

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290517-1

Client Sample ID: MW15-101623-1325-7
Lab Sample ID: 460-290517-7
Date Collected: 10/16/23 13:25
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 18:57

Client Sample ID: MW34R-101623-1421-12
Lab Sample ID: 460-290517-8
Date Collected: 10/16/23 14:21
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 19:05

Client Sample ID: MW16A-101623-0926-20
Lab Sample ID: 460-290517-9
Date Collected: 10/16/23 09:26
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 19:29

Client Sample ID: MW16C-101623-1026-120
Lab Sample ID: 460-290517-10
Date Collected: 10/16/23 10:26
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 19:38
Total/NA	Prep	3535	DL		196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)	DL	2	196839	BWC	EET BUR	10/27/23 11:54

Client Sample ID: MW93-101623-1206-30
Lab Sample ID: 460-290517-11
Date Collected: 10/16/23 12:06
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 19:46

Client Sample ID: MW93A-101623-1311-65
Lab Sample ID: 460-290517-12
Date Collected: 10/16/23 13:11
Matrix: Water
Date Received: 10/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196715	KFW	EET BUR	10/24/23 09:04
Total/NA	Analysis	537 (modified)		1	196739	BWC	EET BUR	10/24/23 19:54

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Job ID: 460-290517-1
Project/Site: Racer, Ewing/Trenton

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-23
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-24
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399140830	08-31-24

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	HFPODA #	C4PFHA #	M262FTS #	M282FTS #
MW34R-101623-1421-12 MS	460-290517-8 MS	79	92	97	92	95	95	102	97
MW34R-101623-1421-12 MSD	460-290517-8 MSD	79	91	98	94	86	101	107	98

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
M262FTS = M2-6:2 FTS	50-150
M282FTS = M2-8:2 FTS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFOSA #	d3NMFOS #	d5NEFOS #	PFTDA #
MW34R-101623-1421-12 MS	460-290517-8 MS	83	99	104	96
MW34R-101623-1421-12 MSD	460-290517-8 MSD	84	98	104	100

	QC LIMITS
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
1000-101623-0002	460-290517-1	98	92	90	88	95	83	88	99
1000-101623-0003	460-290517-2	66	84	103	124	91	98	97	104
1000-101623-0004	460-290517-3	100	96	95	94	103	85	103	100
MW2-101623-0951-10	460-290517-4	79	90	97	102	89	86	97	104
MW3-101623-1046-9	460-290517-5	74	87	92	108	92	93	96	99
MW4-101623-1156-11.5	460-290517-6	51	77	111	146	94	95	102	108
MW15-101623-1325-7	460-290517-7	87	85	94	91	92	82	99	99
MW34R-101623-1421-12	460-290517-8	73	83	90	88	83	82	93	100
MW16A-101623-0926-20	460-290517-9	90	89	95	89	94	90	95	100
MW16C-101623-1026-120	460-290517-10	95	97	101	100	98	98	98	104
MW93-101623-1206-30	460-290517-11	69	91	106	125	97	90	97	106
MW93A-101623-1311-65	460-290517-12	74	84	98	106	94	88	97	97
	MB 200-196662/1-A	98	87	90	89	94	84	98	96
	MB 200-196715/1-A	104	93	103	95	102	91	104	107
	LCS 200-196662/2-A	106	99	101	95	100	92	104	101
	LCS 200-196715/2-A	98	92	96	92	96	82	96	101
	LCSD 200-196662/3-A	96	88	90	89	91	84	93	96

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #
1000-101623-0002	460-290517-1	92	106	97	92	99	86	78	91
1000-101623-0003	460-290517-2	130	104	110	110	107	126	84	124
1000-101623-0004	460-290517-3	99	108	107	104	102	94	87	103
MW2-101623-0951-10	460-290517-4	99	106	99	96	102	99	90	98
MW3-101623-1046-9	460-290517-5	104	100	98	94	106	96	83	97
MW4-101623-1156-11.5	460-290517-6	145	97	111	95	116	157 *5+	79	127
MW15-101623-1325-7	460-290517-7	93	102	98	92	92	89	84	86
MW34R-101623-1421-12	460-290517-8	98	96	101	94	100	94	77	96
MW16A-101623-0926-20	460-290517-9	93	101	98	84	95	89	88	93
MW16C-101623-1026-120	460-290517-10	96	97	101	95	105	97	95	97
MW93-101623-1206-30	460-290517-11	134	110	111	111	116	134	87	127
MW93A-101623-1311-65	460-290517-12	108	101	101	102	102	104	84	109
	MB 200-196662/1-A	91	99	96	94	94	84	75	90
	MB 200-196715/1-A	105	110	105	105	94	92	84	93
	LCS 200-196662/2-A	98	105	101	100	96	95	91	104
	LCS 200-196715/2-A	97	102	104	98	92	93	80	96
	LCSD 200-196662/3-A	90	100	97	95	92	87	78	90

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
1000-101623-0002	460-290517-1	89	91	86	78
1000-101623-0003	460-290517-2	104	138	109	103
1000-101623-0004	460-290517-3	97	99	101	88
MW2-101623-0951-10	460-290517-4	101	103	104	91
MW3-101623-1046-9	460-290517-5	101	101	94	91
MW4-101623-1156-11.5	460-290517-6	126	134	109	104
MW15-101623-1325-7	460-290517-7	92	88	91	83
MW34R-101623-1421-12	460-290517-8	101	94	95	91
MW16A-101623-0926-20	460-290517-9	92	97	98	93
MW16C-101623-1026-120	460-290517-10	98	99	101	96
MW93-101623-1206-30	460-290517-11	121	144	111	108
MW93A-101623-1311-65	460-290517-12	108	122	105	102
	MB 200-196662/1-A	96	86	81	76
	MB 200-196715/1-A	87	90	87	82
	LCS 200-196662/2-A	98	105	103	89
	LCS 200-196715/2-A	95	95	93	84
	LCSD 200-196662/3-A	89	88	81	75

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFOS #
MW2-101623-0951-10 DL	460-290517-4 DL	84
MW16C-101623-1026-120 DL	460-290517-10 DL	87

	QC LIMITS
PFOS = 13C4 PFOS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E03.d

Lab ID: LCS 200-196662/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.92	97	70-130	
Perfluoropentanoic acid	40.0	38.61	97	70-130	
Perfluorohexanoic acid	40.0	38.82	97	70-130	
Perfluoroheptanoic acid	40.0	38.08	95	70-130	
Perfluorooctanoic acid	40.0	38.29	96	70-130	
Perfluorononanoic acid	40.0	39.45	99	70-130	
Perfluorodecanoic acid	40.0	40.74	102	70-130	
Perfluoroundecanoic acid	40.0	41.23	103	70-130	
Perfluorododecanoic acid	40.0	34.71	87	70-130	
Perfluorotridecanoic acid	40.0	36.45	91	70-130	
Perfluorotetradecanoic acid	40.0	37.66	94	70-130	
Perfluorobutanesulfonic acid	35.5	34.30	97	70-130	
Perfluoropentanesulfonic acid	37.6	36.85	98	70-130	
Perfluorohexanesulfonic acid	36.6	33.99	93	70-130	
Perfluoroheptanesulfonic acid	38.1	38.15	100	70-130	
Perfluorooctanesulfonic acid	37.1	35.07	94	70-130	
Perfluorononanesulfonic acid	38.5	34.32	89	70-130	
Perfluorodecanesulfonic acid	38.6	35.69	92	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	37.98	101	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	38.54	101	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	41.65	108	70-130	
Perfluorooctanesulfonamide	40.0	40.08	100	70-130	
NMeFOSAA	40.0	39.24	98	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.52	94	70-130	
HFPODA	40.0	37.94	95	60-140	
DONA	37.8	37.16	98	70-130	
9Cl-PF3ONS	37.3	39.95	107	70-130	
11Cl-PF3OUdS	37.7	36.16	96	60-140	
13C4 PFBA	50.0	52.87	106	50-150	
13C5 PFPeA	50.0	49.46	99	50-150	
13C4 PFHpA	50.0	52.13	104	50-150	
13C2 PFTeDA	50.0	44.54	89	50-150	
13C3 PFBS	46.5	46.75	101	50-150	
13C8 FOSA	50.0	45.50	91	50-150	
d3-NMeFOSAA	50.0	51.77	104	50-150	
d5-NEtFOSAA	50.0	52.48	105	50-150	
M2-4:2 FTS	46.7	44.27	95	50-150	
M2-6:2 FTS	47.5	46.76	98	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E03.d

Lab ID: LCS 200-196662/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	45.46	95	50-150	
13C3 HFPO-DA	50.0	45.96	92	50-150	
18O2 PFHxS	47.3	47.97	101	50-150	
13C2 PFHxA	50.0	49.94	100	50-150	
13C4 PFOS	47.8	48.36	101	50-150	
13C2 PFDoA	50.0	51.37	103	50-150	
13C5 PFNA	50.0	50.20	100	50-150	
13C2 PFDA	50.0	48.13	96	50-150	
13C4 PFOA	50.0	52.53	105	50-150	
13C2 PFUnA	50.0	49.22	98	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A07.d

Lab ID: LCS 200-196715/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.95	97	70-130	
Perfluoropentanoic acid	40.0	41.84	105	70-130	
Perfluorohexanoic acid	40.0	37.09	93	70-130	
Perfluoroheptanoic acid	40.0	37.88	95	70-130	
Perfluorooctanoic acid	40.0	39.15	98	70-130	
Perfluorononanoic acid	40.0	36.82	92	70-130	
Perfluorodecanoic acid	40.0	39.22	98	70-130	
Perfluoroundecanoic acid	40.0	38.29	96	70-130	
Perfluorododecanoic acid	40.0	36.04	90	70-130	
Perfluorotridecanoic acid	40.0	36.04	90	70-130	
Perfluorotetradecanoic acid	40.0	35.93	90	70-130	
Perfluorobutanesulfonic acid	35.5	35.09	99	70-130	
Perfluoropentanesulfonic acid	37.6	36.71	98	70-130	
Perfluorohexanesulfonic acid	36.6	33.99	93	70-130	
Perfluoroheptanesulfonic acid	38.1	36.59	96	70-130	
Perfluorooctanesulfonic acid	37.1	33.91	91	70-130	
Perfluorononanesulfonic acid	38.5	34.18	89	70-130	
Perfluorodecanesulfonic acid	38.6	31.18	81	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	39.17	104	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	37.95	100	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	40.47	105	70-130	
Perfluorooctanesulfonamide	40.0	36.21	91	70-130	
NMeFOSAA	40.0	37.49	94	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	36.29	91	70-130	
HFPODA	40.0	39.55	99	60-140	
DONA	37.8	34.93	92	70-130	
9Cl-PF3ONS	37.3	38.14	102	70-130	
11Cl-PF3OUdS	37.7	32.53	86	60-140	
13C4 PFBA	50.0	48.97	98	50-150	
13C5 PFPeA	50.0	45.77	92	50-150	
13C4 PFHpA	50.0	48.10	96	50-150	
13C2 PFTeDA	50.0	41.90	84	50-150	
13C3 PFBS	46.5	44.72	96	50-150	
13C8 FOSA	50.0	39.94	80	50-150	
d3-NMeFOSAA	50.0	47.95	96	50-150	
d5-NEtFOSAA	50.0	47.70	95	50-150	
M2-4:2 FTS	46.7	43.10	92	50-150	
M2-6:2 FTS	47.5	46.14	97	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A07.d

Lab ID: LCS 200-196715/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	44.48	93	50-150	
13C3 HFPO-DA	50.0	40.81	82	50-150	
18O2 PFHxS	47.3	47.73	101	50-150	
13C2 PFHxA	50.0	47.81	96	50-150	
13C4 PFOS	47.8	49.88	104	50-150	
13C2 PFDoA	50.0	46.39	93	50-150	
13C5 PFNA	50.0	48.99	98	50-150	
13C2 PFDA	50.0	45.85	92	50-150	
13C4 PFOA	50.0	50.90	102	50-150	
13C2 PFUnA	50.0	47.28	95	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E04.d

Lab ID: LCSD 200-196662/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.50	96	1	30	70-130	
Perfluoropentanoic acid	40.0	41.85	105	8	30	70-130	
Perfluorohexanoic acid	40.0	38.27	96	1	30	70-130	
Perfluoroheptanoic acid	40.0	41.74	104	9	30	70-130	
Perfluorooctanoic acid	40.0	38.60	96	1	30	70-130	
Perfluorononanoic acid	40.0	37.70	94	5	30	70-130	
Perfluorodecanoic acid	40.0	39.12	98	4	30	70-130	
Perfluoroundecanoic acid	40.0	37.31	93	10	30	70-130	
Perfluorododecanoic acid	40.0	36.54	91	5	30	70-130	
Perfluorotridecanoic acid	40.0	38.38	96	5	30	70-130	
Perfluorotetradecanoic acid	40.0	36.00	90	5	30	70-130	
Perfluorobutanesulfonic acid	35.5	35.80	101	4	30	70-130	
Perfluoropentanesulfonic acid	37.6	37.61	100	2	30	70-130	
Perfluorohexanesulfonic acid	36.6	33.58	92	1	30	70-130	
Perfluoroheptanesulfonic acid	38.1	36.16	95	5	30	70-130	
Perfluorooctanesulfonic acid	37.1	34.58	93	1	30	70-130	
Perfluorononanesulfonic acid	38.5	33.84	88	1	30	70-130	
Perfluorodecanesulfonic acid	38.6	29.91	77	18	30	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	37.18	99	2	30	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	38.79	102	1	30	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	40.14	105	4	30	70-130	
Perfluorooctanesulfonamide	40.0	41.50	104	3	30	70-130	
NMeFOSAA	40.0	38.55	96	2	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	38.11	95	2	30	70-130	
HFPODA	40.0	39.70	99	5	30	60-140	
DONA	37.8	36.02	95	3	30	70-130	
9Cl-PF3ONS	37.3	37.73	101	6	30	70-130	
11Cl-PF3OUdS	37.7	31.91	85	12	30	60-140	
13C4 PFBA	50.0	48.11	96			50-150	
13C5 PFPeA	50.0	44.09	88			50-150	
13C4 PFHpA	50.0	46.53	93			50-150	
13C2 PFTeDA	50.0	37.49	75			50-150	
13C3 PFBS	46.5	41.78	90			50-150	
13C8 FOSA	50.0	38.84	78			50-150	
d3-NMeFOSAA	50.0	44.88	90			50-150	
d5-NEtFOSAA	50.0	44.06	88			50-150	
M2-4:2 FTS	46.7	41.73	89			50-150	
M2-6:2 FTS	47.5	42.54	90			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E04.d

Lab ID: LCSD 200-196662/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	41.73	87			50-150	
13C3 HFPO-DA	50.0	41.86	84			50-150	
18O2 PFHxS	47.3	45.18	96			50-150	
13C2 PFHxA	50.0	45.49	91			50-150	
13C4 PFOS	47.8	46.26	97			50-150	
13C2 PFDoA	50.0	40.51	81			50-150	
13C5 PFNA	50.0	47.59	95			50-150	
13C2 PFDA	50.0	46.12	92			50-150	
13C4 PFOA	50.0	50.15	100			50-150	
13C2 PFUnA	50.0	44.30	89			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A10.d

Lab ID: 460-290517-8 MS Client ID: MW34R-101623-1421-12 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	32.6	29.8	60.97	96	60-140	
Perfluoropentanoic acid	32.6	31.5	64.09	100	60-140	
Perfluorohexanoic acid	32.6	26.4	57.13	94	60-140	
Perfluoroheptanoic acid	32.6	15.7	47.71	98	60-140	
Perfluorooctanoic acid	32.6	42.2	79.21	114	60-140	
Perfluorononanoic acid	32.6	6.97	41.80	107	60-140	
Perfluorodecanoic acid	32.6	0.93 J	30.34	90	60-140	
Perfluoroundecanoic acid	32.6	1.64 U	29.37	90	60-140	
Perfluorododecanoic acid	32.6	1.64 U	29.23	90	60-140	
Perfluorotridecanoic acid	32.6	1.64 U	29.50	91	60-140	
Perfluorotetradecanoic acid	32.6	1.64 U	32.01	98	60-140	
Perfluorobutanesulfonic acid	28.9	8.33	37.02	99	60-140	
Perfluoropentanesulfonic acid	30.7	5.03	36.55	103	60-140	
Perfluorohexanesulfonic acid	29.8	26.6	54.82	95	60-140	
Perfluoroheptanesulfonic acid	31.0	1.31 J	31.28	97	60-140	
Perfluorooctanesulfonic acid	30.2	60.3	87.90	91	60-140	
Perfluorononanesulfonic acid	31.3	1.64 U	26.62	85	60-140	
Perfluorodecanesulfonic acid	31.4	1.64 U	27.59	88	60-140	
4:2 Fluorotelomer sulfonic acid	30.5	1.64 U	32.57	107	60-140	
6:2 Fluorotelomer sulfonic acid	31.0	4.11 U	32.24	104	50-150	
8:2 Fluorotelomer sulfonic acid	31.3	1.64 U	33.71	108	60-140	
Perfluorooctanesulfonamide	32.6	1.64 U	30.50	94	60-140	
NMeFOSAA	32.6	4.11 U	31.21	96	60-140	
N-ethylperfluorooctanesulfonamidoacetic acid	32.6	4.11 U	30.30	93	60-140	
HFPODA	32.6	1.26 J	33.33	98	50-150	
DONA	30.8	1.64 U	26.91	87	60-140	
9Cl-PF3ONS	30.4	1.64 U	30.23	99	60-140	
11Cl-PF3OUdS	30.7	1.64 U	30.05	98	50-150	
13C4 PFBA	40.7	29.9	32.04	79	50-150	
13C5 PFPeA	40.7	34.0	37.34	92	50-150	
13C4 PFHpA	40.7	38.2	38.62	95	50-150	
13C2 PFTeDA	40.7	37.5	38.96	96	50-150	
13C3 PFBS	37.9	34.4	36.55	97	50-150	
13C8 FOSA	40.7	31.8	33.77	83	50-150	
d3-NMeFOSAA	40.7	39.3	40.28	99	50-150	
d5-NEtFOSAA	40.7	38.7	42.27	104	50-150	
M2-4:2 FTS	38.0	33.6	35.08	92	50-150	
M2-6:2 FTS	38.7	38.3	39.45	102	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A10.d

Lab ID: 460-290517-8 MS Client ID: MW34R-101623-1421-12 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
M2-8:2 FTS	39.0	37.0	37.76	97	50-150	
13C3 HFPO-DA	40.7	33.5	38.76	95	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A11.d

Lab ID: 460-290517-8 MSD Client ID: MW34R-101623-1421-12 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	32.4	63.17	103	4	30	60-140	
Perfluoropentanoic acid	32.4	62.69	96	2	30	60-140	
Perfluorohexanoic acid	32.4	61.20	107	7	30	60-140	
Perfluoroheptanoic acid	32.4	49.55	105	4	30	60-140	
Perfluorooctanoic acid	32.4	75.97	104	4	30	60-140	
Perfluorononanoic acid	32.4	38.90	99	7	30	60-140	
Perfluorodecanoic acid	32.4	32.21	97	6	30	60-140	
Perfluoroundecanoic acid	32.4	32.97	102	12	30	60-140	
Perfluorododecanoic acid	32.4	31.63	98	8	30	60-140	
Perfluorotridecanoic acid	32.4	29.45	91	0	30	60-140	
Perfluorotetradecanoic acid	32.4	29.13	90	9	30	60-140	
Perfluorobutanesulfonic acid	28.7	37.74	102	2	30	60-140	
Perfluoropentanesulfonic acid	30.5	36.88	105	1	30	60-140	
Perfluorohexanesulfonic acid	29.6	55.57	98	1	30	60-140	
Perfluoroheptanesulfonic acid	30.9	32.41	101	4	30	60-140	
Perfluorooctanesulfonic acid	30.1	91.28	103	4	30	60-140	
Perfluorononanesulfonic acid	31.2	28.08	90	5	30	60-140	
Perfluorodecanesulfonic acid	31.3	28.12	90	2	30	60-140	
4:2 Fluorotelomer sulfonic acid	30.3	33.15	109	2	30	60-140	
6:2 Fluorotelomer sulfonic acid	30.8	32.82	107	2	30	50-150	
8:2 Fluorotelomer sulfonic acid	31.1	33.87	109	0	30	60-140	
Perfluorooctanesulfonamide	32.4	32.38	100	6	30	60-140	
NMeFOSAA	32.4	34.70	107	11	30	60-140	
N-ethylperfluorooctanesulfonamidoacetic acid	32.4	32.01	99	5	30	60-140	
HFPODA	32.4	39.00	117	16	30	50-150	
DONA	30.6	27.45	90	2	30	60-140	
9Cl-PF3ONS	30.2	31.94	106	5	30	60-140	
11Cl-PF3OUdS	30.5	29.89	98	1	30	50-150	
13C4 PFBA	40.5	32.11	79			50-150	
13C5 PFPeA	40.5	37.01	91			50-150	
13C4 PFHpA	40.5	40.80	101			50-150	
13C2 PFTeDA	40.5	40.38	100			50-150	
13C3 PFBS	37.6	36.84	98			50-150	
13C8 FOSA	40.5	33.96	84			50-150	
d3-NMeFOSAA	40.5	39.86	98			50-150	
d5-NEtFOSAA	40.5	42.18	104			50-150	
M2-4:2 FTS	37.8	35.41	94			50-150	
M2-6:2 FTS	38.5	41.17	107			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231024A11.d

Lab ID: 460-290517-8 MSD Client ID: MW34R-101623-1421-12 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	38.8	38.00	98			50-150	
13C3 HFPO-DA	40.5	34.70	86			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab File ID: PA231023E02.d Lab Sample ID: MB 200-196662/1-A

Matrix: Water Date Extracted: 10/23/2023 07:41

Instrument ID: LC812 Date Analyzed: 10/24/2023 06:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196662/2-A	PA231023E03.d	10/24/2023 06:22
	LCSD 200-196662/3-A	PA231023E04.d	10/24/2023 06:30
1000-101623-0002	460-290517-1	PA231023E20.d	10/24/2023 08:41
1000-101623-0003	460-290517-2	PA231023E21.d	10/24/2023 08:49
1000-101623-0004	460-290517-3	PA231023E22.d	10/24/2023 08:57
MW2-101623-0951-10	460-290517-4	PA231023E23.d	10/24/2023 09:05
MW3-101623-1046-9	460-290517-5	PA231023E24.d	10/24/2023 09:13
MW4-101623-1156-11.5	460-290517-6	PA231023E25.d	10/24/2023 09:22
MW2-101623-0951-10 DL	460-290517-4 DL	PA231026E05.d	10/27/2023 10:40

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab File ID: PA231024A06.d Lab Sample ID: MB 200-196715/1-A

Matrix: Water Date Extracted: 10/24/2023 09:04

Instrument ID: LC812 Date Analyzed: 10/24/2023 18:40

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196715/2-A	PA231024A07.d	10/24/2023 18:49
MW15-101623-1325-7	460-290517-7	PA231024A08.d	10/24/2023 18:57
MW34R-101623-1421-12	460-290517-8	PA231024A09.d	10/24/2023 19:05
MW34R-101623-1421-12 MS	460-290517-8 MS	PA231024A10.d	10/24/2023 19:13
MW34R-101623-1421-12 MSD	460-290517-8 MSD	PA231024A11.d	10/24/2023 19:21
MW16A-101623-0926-20	460-290517-9	PA231024A12.d	10/24/2023 19:29
MW16C-101623-1026-120	460-290517-10	PA231024A13.d	10/24/2023 19:38
MW93-101623-1206-30	460-290517-11	PA231024A14.d	10/24/2023 19:46
MW93A-101623-1311-65	460-290517-12	PA231024A15.d	10/24/2023 19:54
MW16C-101623-1026-120 DL	460-290517-10 DL	PA231026E14.d	10/27/2023 11:54

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument I LC812 Calibration Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.6(mm) Calibration End Date: 07/26/2023 18:05

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		1938034	3.46				
UPPER LIMIT		2907051	3.66				
LOWER LIMIT		969017	3.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-193912/12		2117259	3.46				
ICV 200-193912/13		2099437	3.47				
CCB 200-196686/4		2210905	3.52				
CCVLIS 200-196686/5		2261885	3.52				
CCB 200-196739/4		2103168	3.52				
CCVLIS 200-196739/5		1942156	3.52				
CCB 200-196833/4		2022263	3.50				
CCVLIS 200-196833/5		1978630	3.51				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Sample No.: CCVLIS 200-196686/5 Date Analyzed: 10/23/2023 15:47

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231023A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2261885	3.52				
UPPER LIMIT		3392828	3.72				
LOWER LIMIT		1130943	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196692/1		2062208	3.52				
MB 200-196662/1-A		2274471	3.52				
LCS 200-196662/2-A		2108118	3.52				
LCSD 200-196662/3-A		2340056	3.52				
CCV 200-196692/15		2105481	3.51				
460-290517-1	1000-101623-0002	2218405	3.51				
460-290517-2	1000-101623-0003	1724765	3.52				
460-290517-3	1000-101623-0004	2082221	3.52				
460-290517-4	MW2-101623-0951-10	1936675	3.52				
460-290517-5	MW3-101623-1046-9	2010743	3.52				
460-290517-6	MW4-101623-1156-11.5	1548685	3.51				
CCV 200-196692/26		2053093	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Sample No.: CCVLIS 200-196739/5 Date Analyzed: 10/24/2023 18:32

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231024A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		1942156	3.52				
UPPER LIMIT		2913234	3.72				
LOWER LIMIT		971078	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-196715/1-A		2004946	3.52				
LCS 200-196715/2-A		2148845	3.52				
460-290517-7	MW15-101623-1325-7	2050252	3.52				
460-290517-8	MW34R-101623-1421-12	1988854	3.52				
460-290517-8 MS	MW34R-101623-1421-12 MS	1823512	3.52				
460-290517-8 MSD	MW34R-101623-1421-12 MSD	1724885	3.52				
460-290517-9	MW16A-101623-0926-20	1948471	3.53				
460-290517-10	MW16C-101623-1026-120	1859545	3.52				
460-290517-11	MW93-101623-1206-30	1595121	3.51				
460-290517-12	MW93A-101623-1311-65	1760039	3.52				
CCV 200-196739/20		2095793	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Sample No.: CCVLIS 200-196833/5 Date Analyzed: 10/26/2023 21:03

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231026A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		1978630	3.51				
UPPER LIMIT		2967945	3.71				
LOWER LIMIT		989315	3.31				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196839/1		2098703	3.52				
460-290517-4 DL	MW2-101623-0951-10 DL	441179*3	3.51				
CCV 200-196839/13		2069548	3.52				
460-290517-10 DL	MW16C-101623-1026-120 DL	995252	3.52				
CCV 200-196839/20		2053835	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290517-1

Matrix: Water | Lab File ID: PA231023E20.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 11:05

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 281.5(mL) | Date Analyzed: 10/24/2023 08:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.44	U	4.44	1.07
2706-90-3	Perfluoropentanoic acid	1.78	U	1.78	0.60
307-24-4	Perfluorohexanoic acid	1.78	U	1.78	0.58
375-85-9	Perfluoroheptanoic acid	1.78	U	1.78	0.48
335-67-1	Perfluorooctanoic acid	1.78	U	1.78	0.67
375-95-1	Perfluorononanoic acid	1.78	U	1.78	0.44
335-76-2	Perfluorodecanoic acid	1.78	U	1.78	0.41
2058-94-8	Perfluoroundecanoic acid	1.78	U	1.78	0.49
307-55-1	Perfluorododecanoic acid	1.78	U	1.78	0.44
72629-94-8	Perfluorotridecanoic acid	1.78	U	1.78	0.43
376-06-7	Perfluorotetradecanoic acid	1.78	U	1.78	0.57
375-73-5	Perfluorobutanesulfonic acid	1.78	U	1.78	0.55
2706-91-4	Perfluoropentanesulfonic acid	1.78	U	1.78	0.44
355-46-4	Perfluorohexanesulfonic acid	1.78	U	1.78	0.49
375-92-8	Perfluoroheptanesulfonic acid	1.78	U	1.78	0.36
1763-23-1	Perfluorooctanesulfonic acid	1.78	U	1.78	0.75
68259-12-1	Perfluorononanesulfonic acid	1.78	U	1.78	0.36
335-77-3	Perfluorodecanesulfonic acid	1.78	U	1.78	0.36
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.78	U	1.78	0.48
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.44	U	4.44	1.15
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.78	U	1.78	0.68
754-91-6	Perfluorooctanesulfonamide	1.78	U	1.78	0.82
2355-31-9	NMeFOSAA	4.44	U	4.44	1.69
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.44	U	4.44	1.42
13252-13-6	HFPODA	3.55	U	3.55	0.98
919005-14-4	DONA	1.78	U	1.78	0.37
756426-58-1	9Cl-PF3ONS	1.78	U	1.78	0.28
763051-92-9	11Cl-PF3OUdS	1.78	U	1.78	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0002 Lab Sample ID: 460-290517-1

Matrix: Water Lab File ID: PA231023E20.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 11:05

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 281.5(mL) Date Analyzed: 10/24/2023 08:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	88		50-150
STL02116	13C2 PFTeDA	78		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	78		50-150
STL02118	d3-NMeFOSAA	91		50-150
STL02117	d5-NEtFOSAA	91		50-150
STL02395	M2-4:2 FTS	88		50-150
STL02279	M2-6:2 FTS	92		50-150
STL02280	M2-8:2 FTS	86		50-150
STL02255	13C3 HFPO-DA	83		50-150
STL00994	18O2 PFHxS	99		50-150
STL00993	13C2 PFHxA	95		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	86		50-150
STL00995	13C5 PFNA	92		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	89		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d
Lims ID: 460-290517-A-1-A
Client ID: 1000-101623-0002
Sample Type: Client
Inject. Date: 24-Oct-2023 08:41:09 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-A-1-A
Misc. Info.: 200-0057513-020 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:35:56
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2145203	1.22		97.5	1633	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.008	28430	-0.0226			2.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1568904	1.15		91.9	1219	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	2642	0.001951			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1933188	1.05		90.0	76202	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	235	0.000369			2.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	218748	1.02		87.7	135	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1648746	1.19		94.9	7731	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	5733	0.003950	Target=14.12		1.2	M
313.00 > 119.00	2.785	2.797	-0.012	0.996	367		15.62(7.06-21.17)		0.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	279370	1.04		83.1	1235	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.901	1554540	1.17		99.2	6903	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	6976	0.004794	Target=3.32		19.4	M
399.00 > 99.00	3.153	3.168	-0.015	0.996	2634		2.65(1.66-4.98)		2.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.901	1676078	1.10		88.0	6237	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.997	300834	1.09		92.0	593	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.003	178	0.000257			0.4	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.514	-0.003	1.000	13993	0.007183	Target=2.88		0.6	M
413.00 > 169.00	3.520	3.514	0.006	1.003	4764		2.94(1.44-4.32)		7.4	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	1.000	2286165	1.32		106	6392	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.523	-0.012		2218405	1.25			11781	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.788	3.822	-0.034	0.992	1942	0.002030	Target=4.24		4.0	RM
499.00 > 99.00	3.830	3.822	0.008	1.003	188		10.33(2.12-6.37)		1.3	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.822	-0.003	1.088	980141	1.16		97.5	5450	
20 Perfluorononanoic acid										RM
463.00 > 419.00	3.830	3.845	-0.015	0.997	2260	0.001341	Target=8.34		0.4	RM
463.00 > 169.00	3.842	3.845	-0.003	1.000	589		3.84(4.17-12.51)		4.5	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.094	2149847	1.14		91.5	10554	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.983	-0.012	1.040	426	0.000146			1.9	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.124	4.129	-0.005	0.997	3918	0.002011	Target=11.44		1.4	
513.00 > 169.00	4.148	4.129	0.019	1.003	250		15.67(5.72-17.16)		1.5	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.178	2436475	1.24		99.0	8500	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.178	318607	1.03		86.0	779	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.234	-0.004	1.205	1628447	0.9697		77.6	5142	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.215	537804	1.14		91.5	1204	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.219	4.270	-0.051	0.989	196	0.000502			0.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.249	2056388	1.11		88.6	8971	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.398	4.401	-0.003	1.253	514480	1.14		90.9	865	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.291	4.401	-0.110	0.976	750	0.001822			2.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.613	-0.014	1.310	2039310	1.08		86.4	6166	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.418	1827485	0.9721		77.8	5702	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.982	-0.003	1.000	194	0.001187	Target=0.87		3.1	M
713.00 > 219.00	4.989	4.982	0.007	1.002	201		0.97(0.43-1.30)		3.8	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

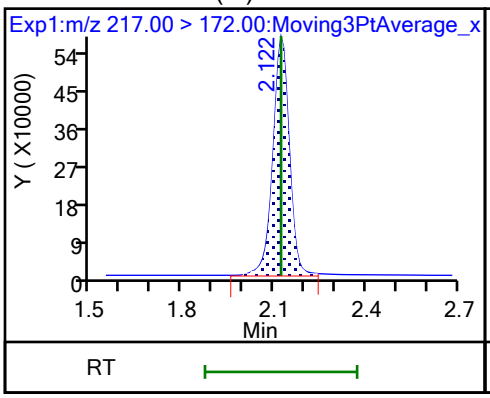
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:45 Chrom Revision: 2.3 18-Oct-2023 21:16:54

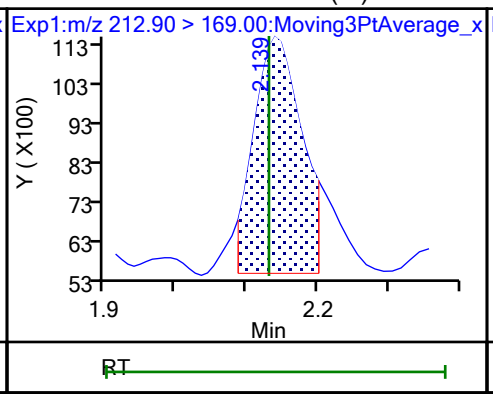
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d
Injection Date: 24-Oct-2023 08:41:09 Instrument ID: LC812
Lims ID: 460-290517-A-1-A Lab Sample ID: 200-290517-1
Client ID: 1000-101623-0002
Operator ID: LC812user ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

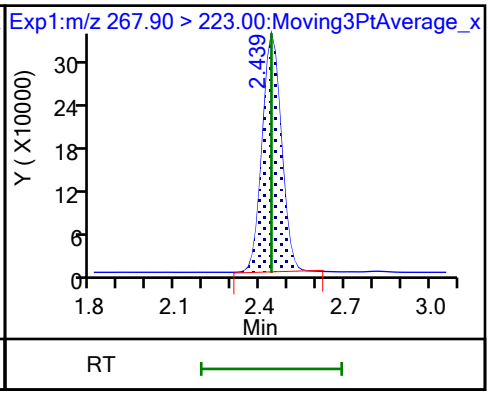
D 1 13C4 PFBA (M)



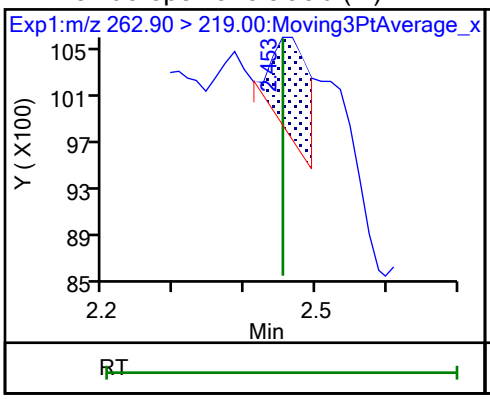
2 Perfluorobutanoic acid (M)



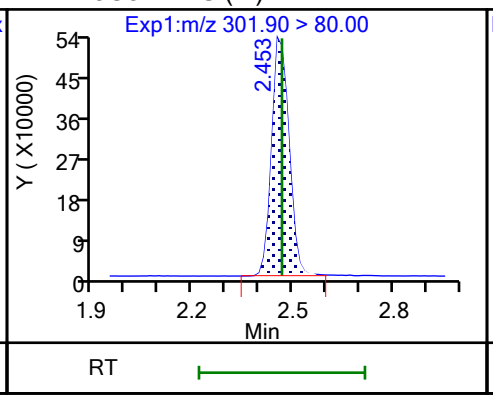
D 3 13C5 PFPeA



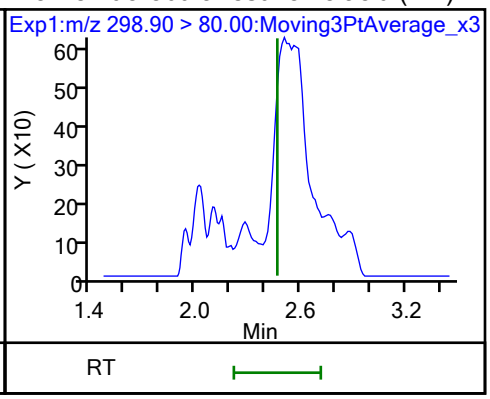
4 Perfluoropentanoic acid (M)



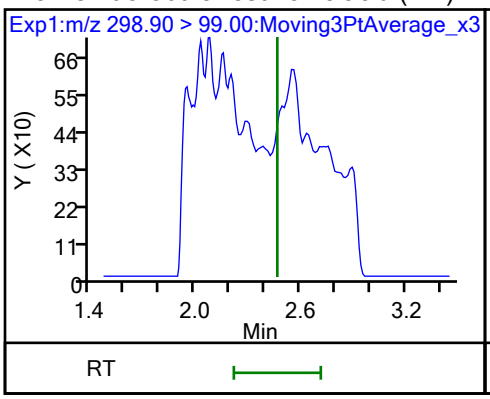
D 47 13C3 PFBS (M)



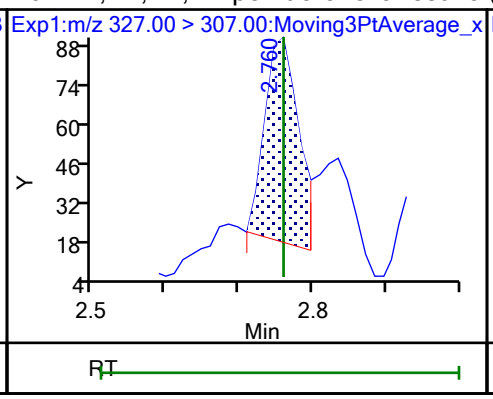
5 Perfluorobutanesulfonic acid (ND)



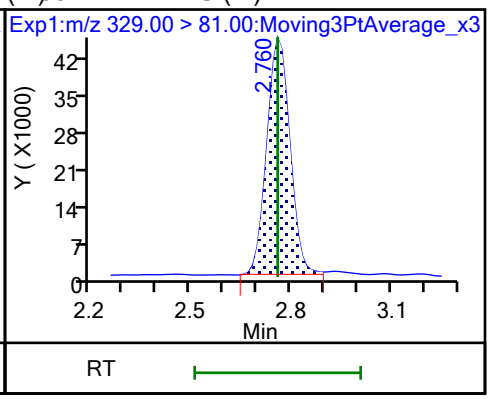
5 Perfluorobutanesulfonic acid (ND)



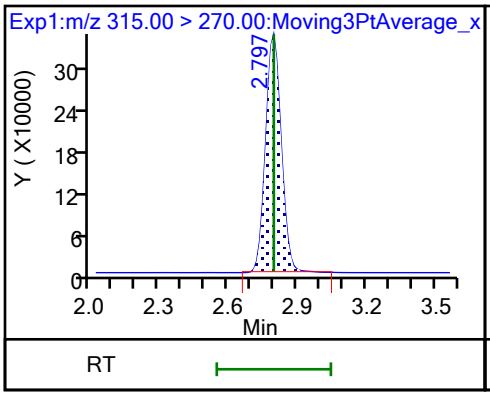
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



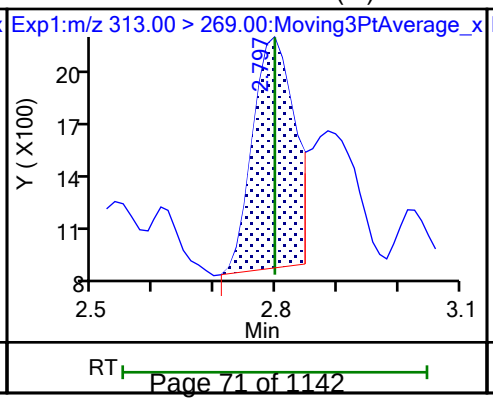
60 M2-4:2 FTS (M)



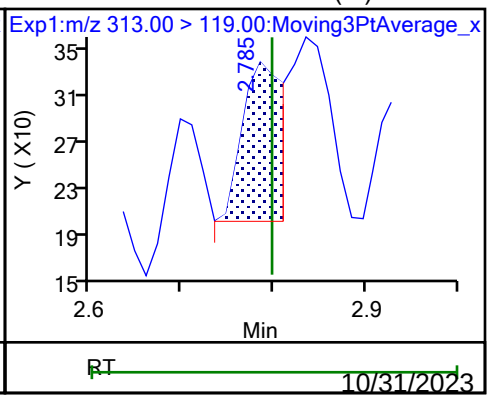
D 7 13C2 PFHxA



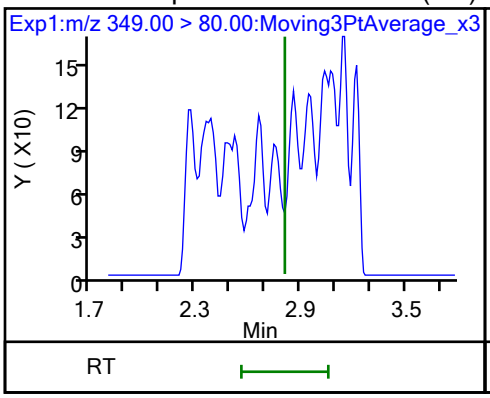
6 Perfluorohexanoic acid (M)



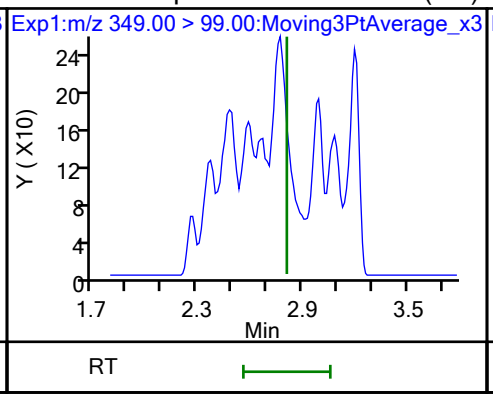
6 Perfluorohexanoic acid (M)



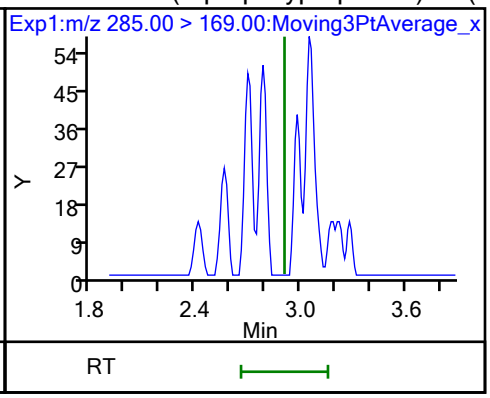
70 Perfluoropentanesulfonic acid (ND)



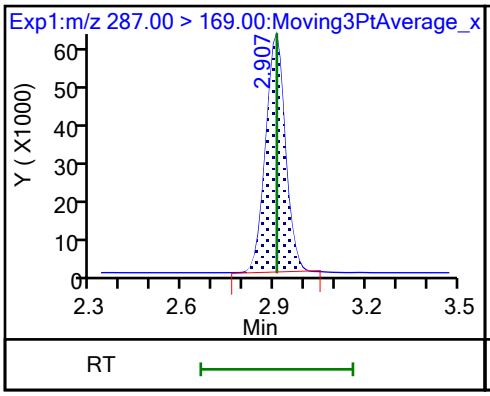
70 Perfluoropentanesulfonic acid (ND)



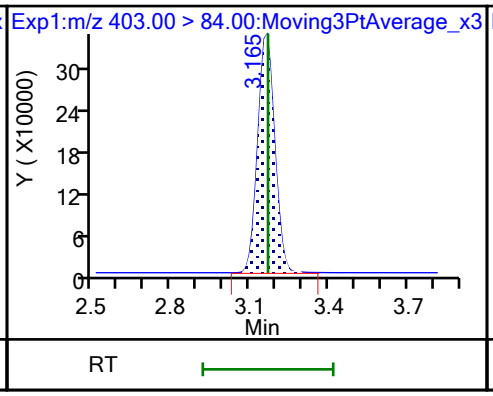
67 Perfluoro(2-propoxypropanoic) ac (ND)



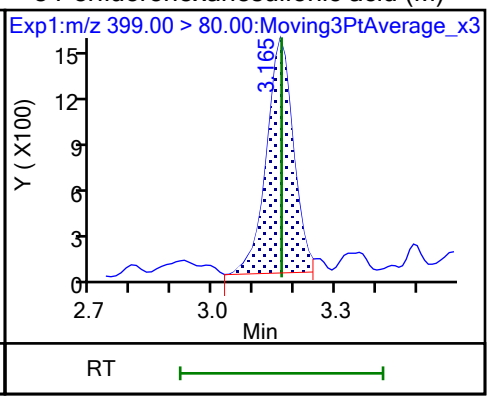
D 64 13C3 HFPO-DA



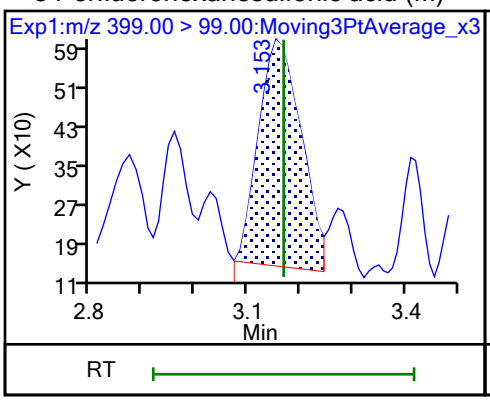
D 11 18O2 PFHxS



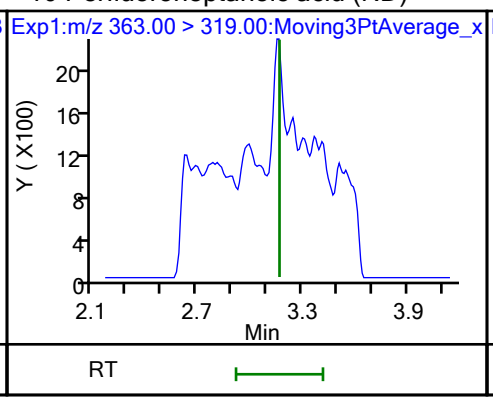
8 Perfluorohexanesulfonic acid (M)



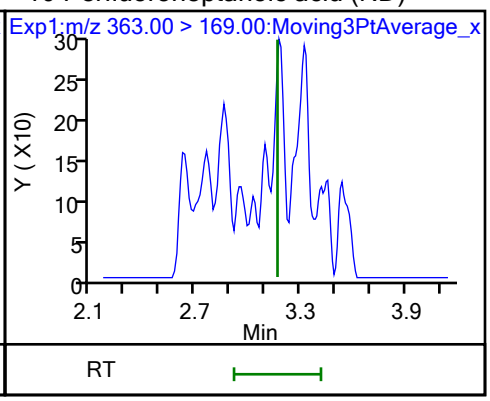
8 Perfluorohexanesulfonic acid (M)



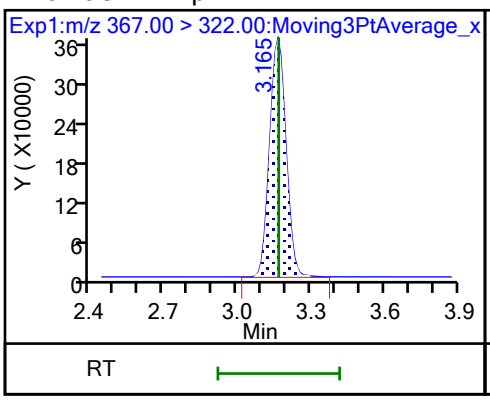
10 Perfluoroheptanoic acid (ND)



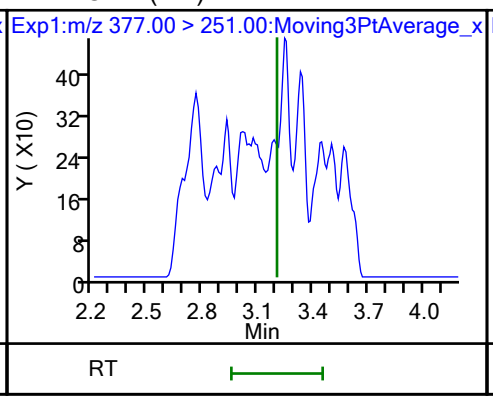
10 Perfluoroheptanoic acid (ND)



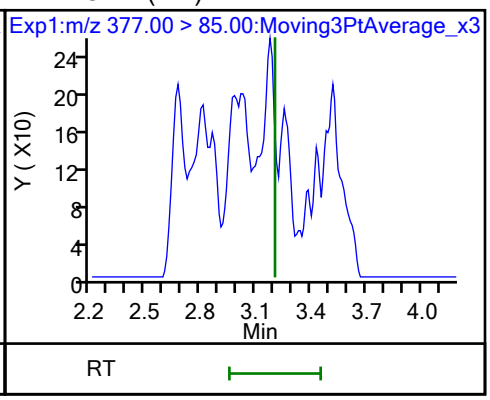
D 9 13C4 PFHpA



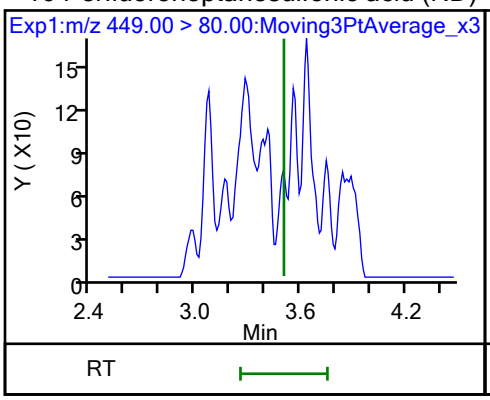
77 DONA (ND)



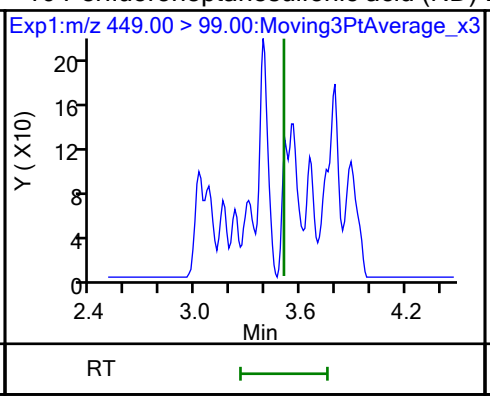
77 DONA (ND)



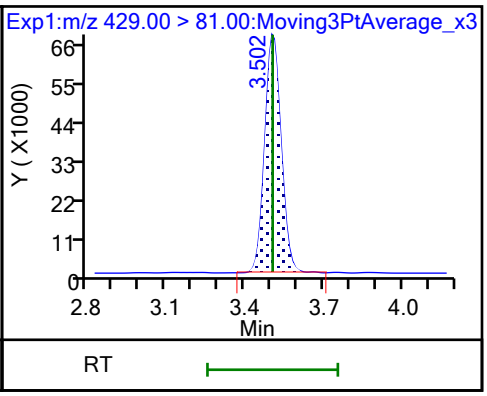
16 Perfluoroheptanesulfonic acid (ND)



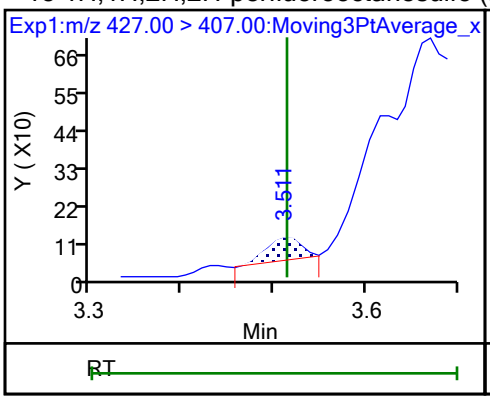
16 Perfluoroheptanesulfonic acid (ND)



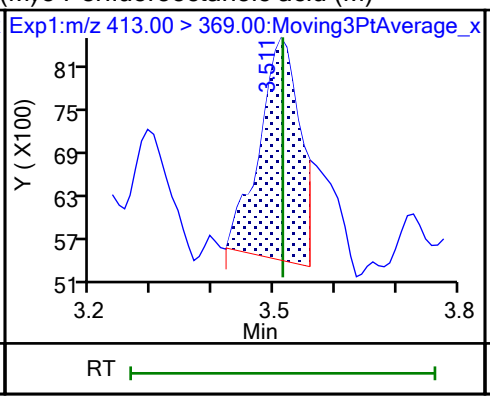
D 12 M2-6:2 FTS



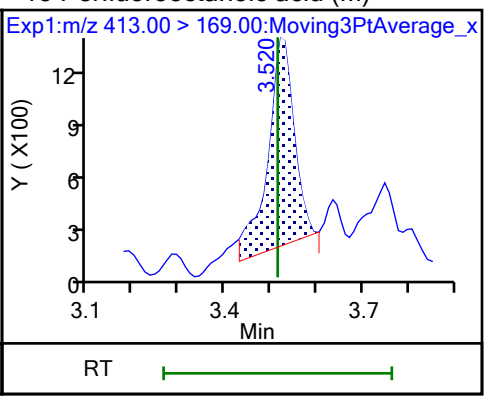
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



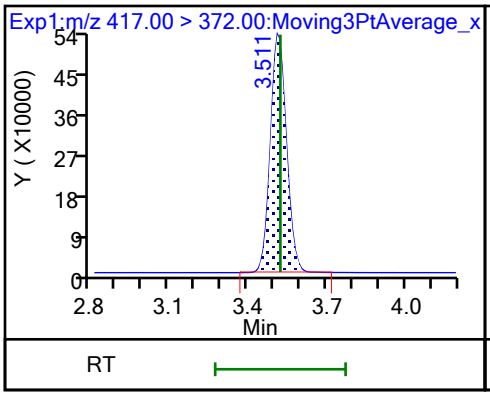
15 Perfluorooctanoic acid (M)



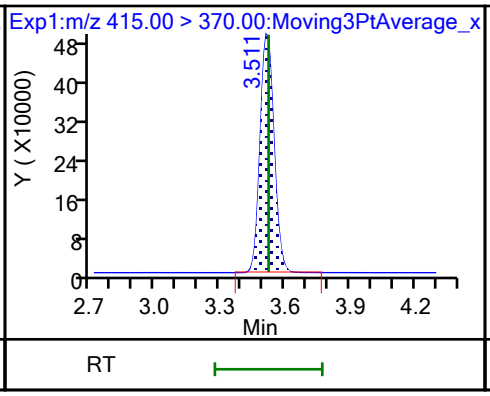
15 Perfluorooctanoic acid (M)



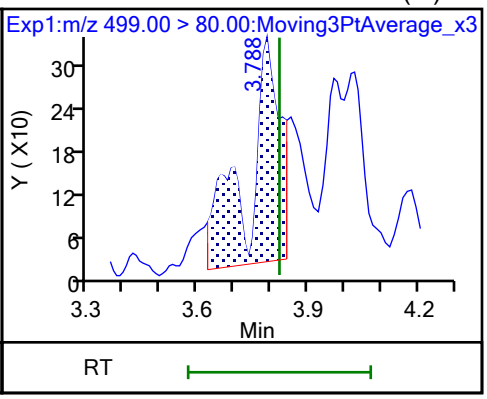
D 14 13C4 PFOA



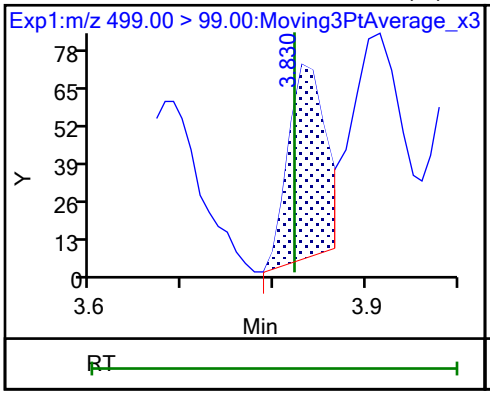
* 62 13C2 PFOA



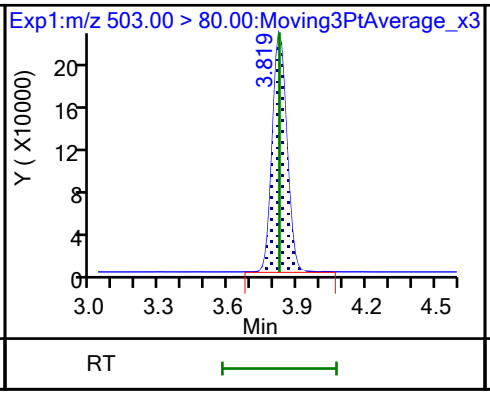
17 Perfluorooctanesulfonic acid (M)



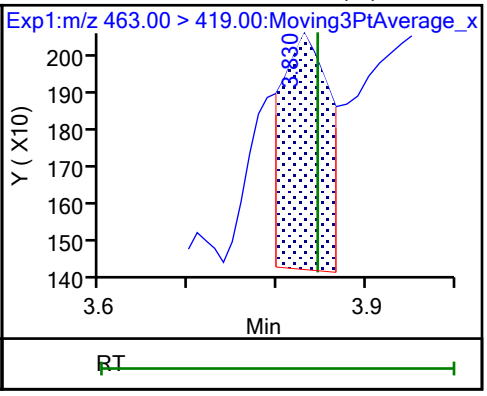
17 Perfluorooctanesulfonic acid (M)



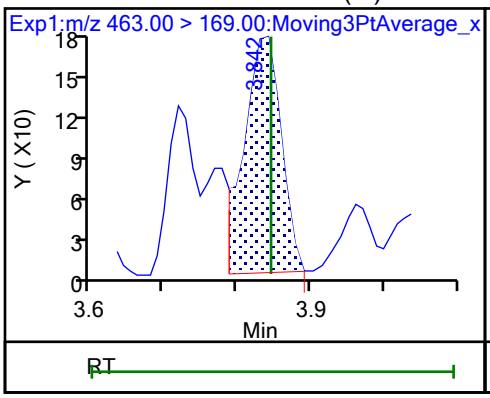
D 18 13C4 PFOS



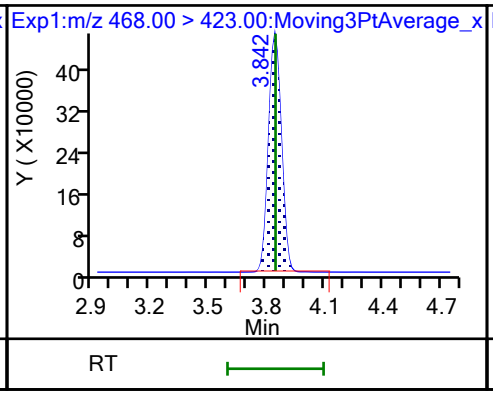
20 Perfluorononanoic acid (M)



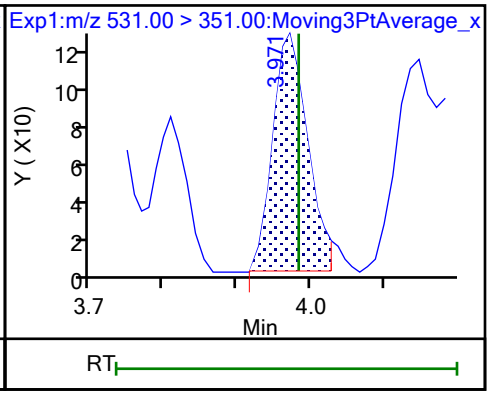
20 Perfluorononanoic acid (M)



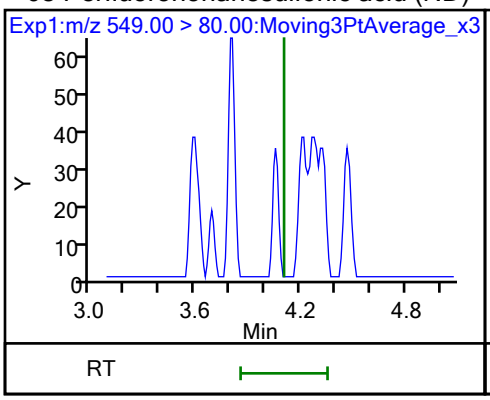
D 19 13C5 PFNA



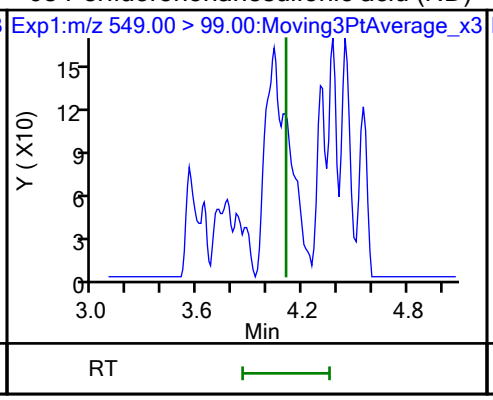
69 9-Chlorohexadecafluoro-3-oxanona (M)



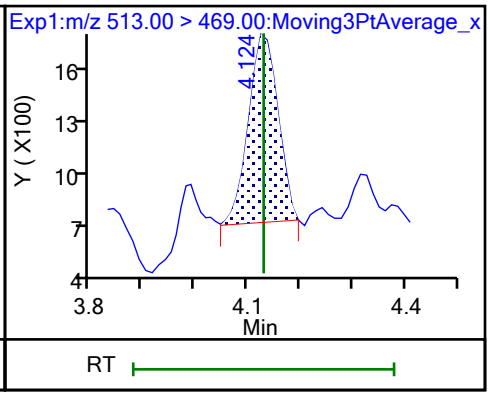
68 Perfluorononanesulfonic acid (ND)



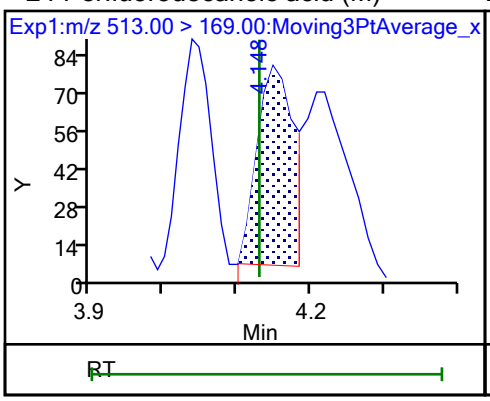
68 Perfluorononanesulfonic acid (ND)



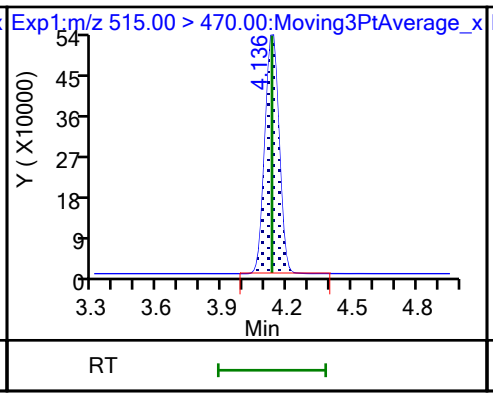
24 Perfluorodecanoic acid



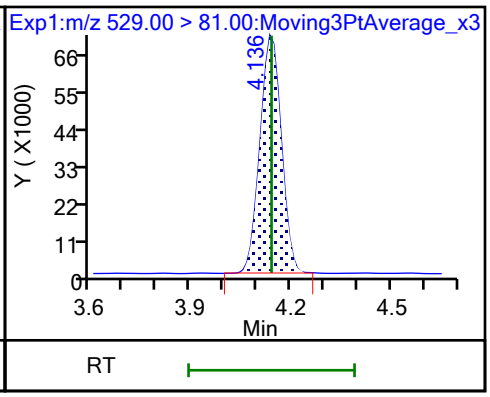
24 Perfluorodecanoic acid (M)



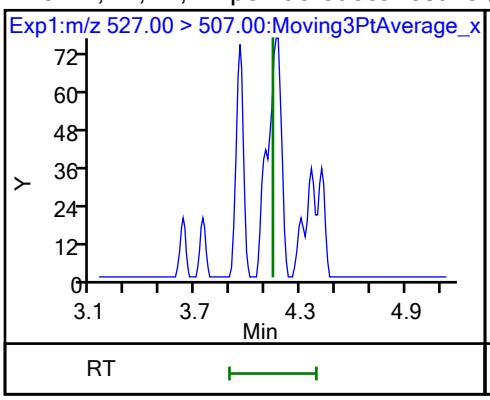
D 23 13C2 PFDA



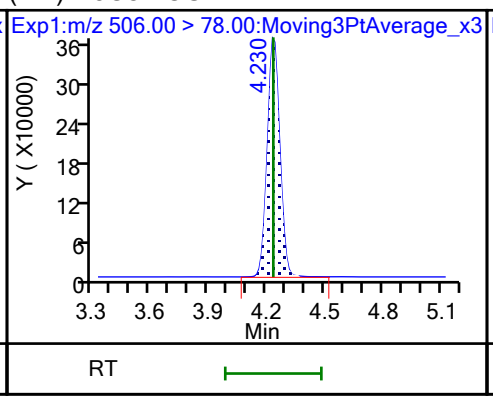
D 26 M2-8:2 FTS



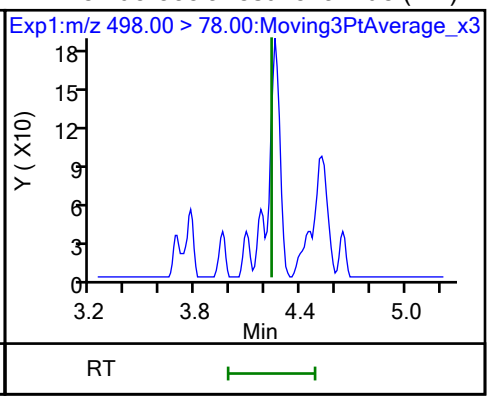
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



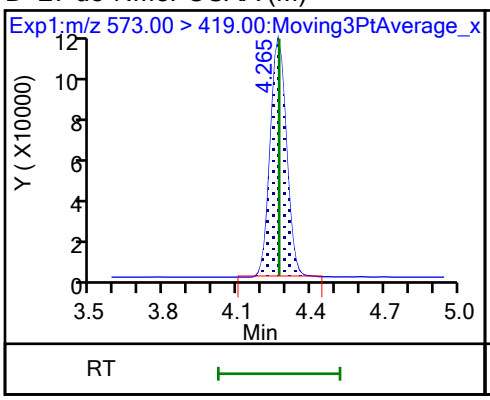
D 21 13C8 FOSA



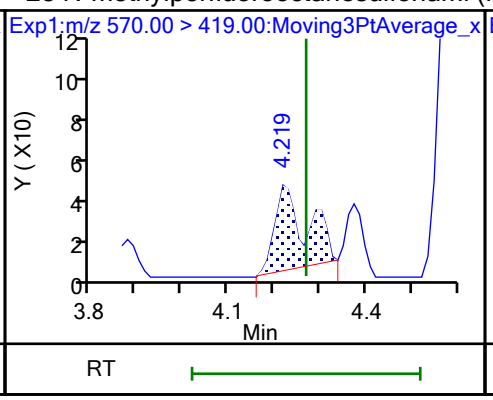
22 Perfluorooctanesulfonamide (ND)



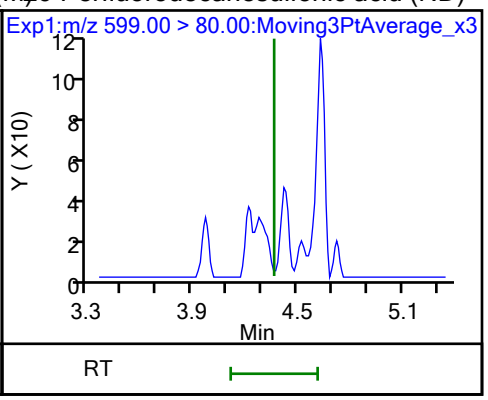
D 27 d3-NMeFOSAA (M)



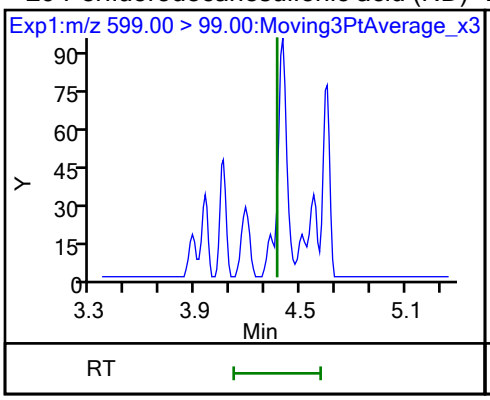
28 N-methylperfluorooctanesulfonami (M)



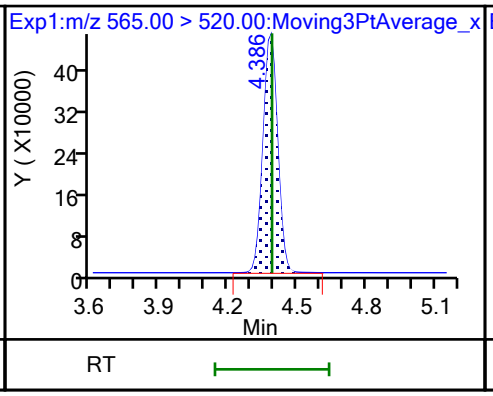
29 Perfluorodecanesulfonic acid (ND)



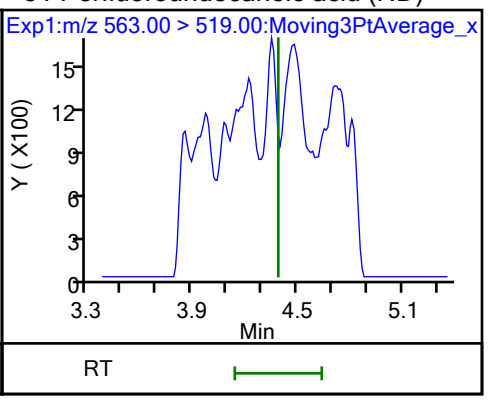
29 Perfluorodecanesulfonic acid (ND)



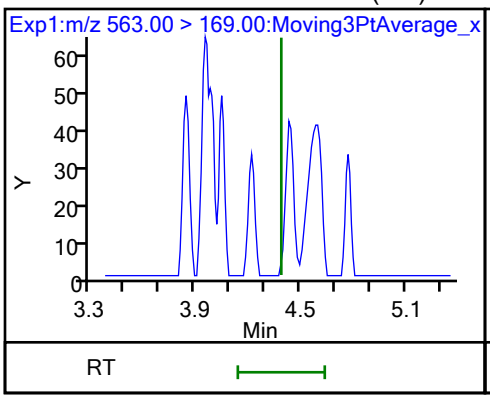
D 30 13C2 PFUnA



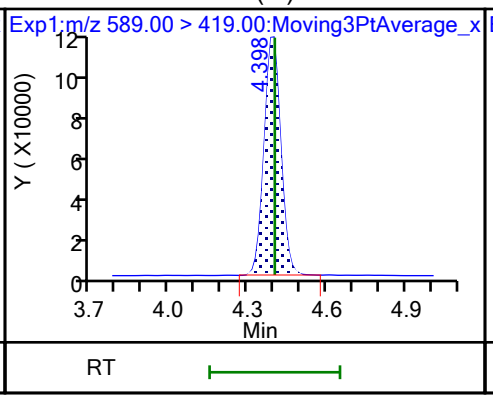
31 Perfluoroundecanoic acid (ND)



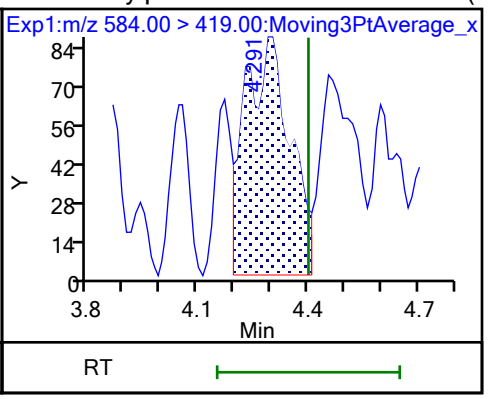
31 Perfluoroundecanoic acid (ND)



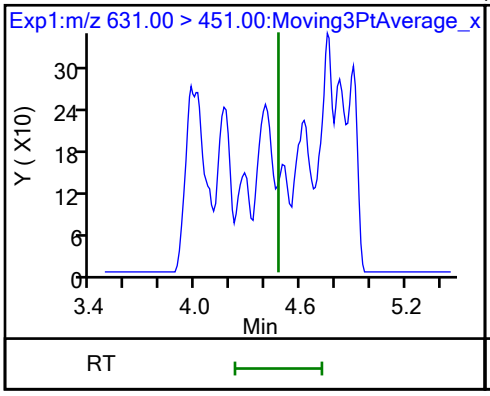
D 32 d5-NEtFOSAA (M)



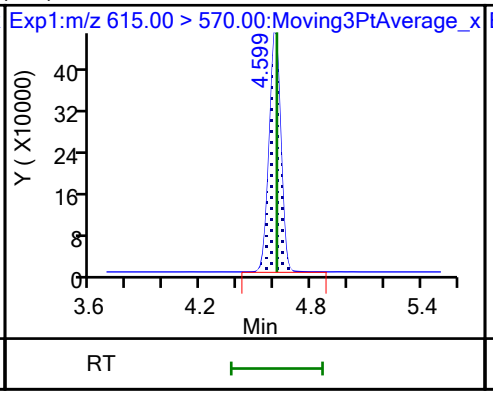
33 N-ethylperfluorooctanesulfonamid (M)



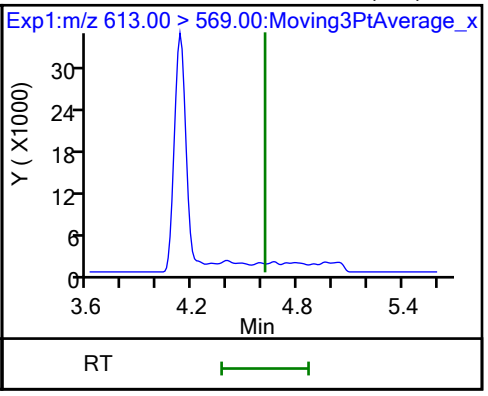
66 11-Chloroeicosafluoro-3-oxaundec (ND)



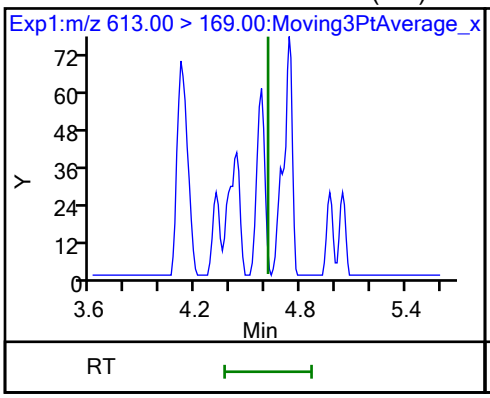
D 36 13C2 PFDoA



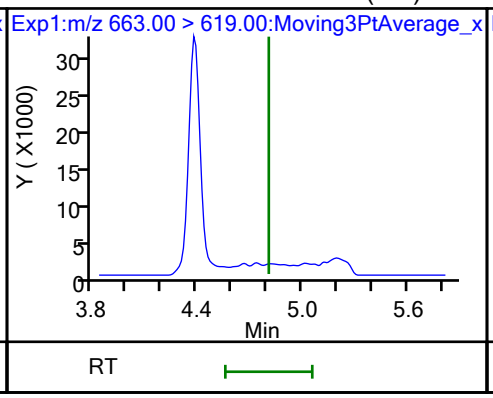
37 Perfluorododecanoic acid (ND)



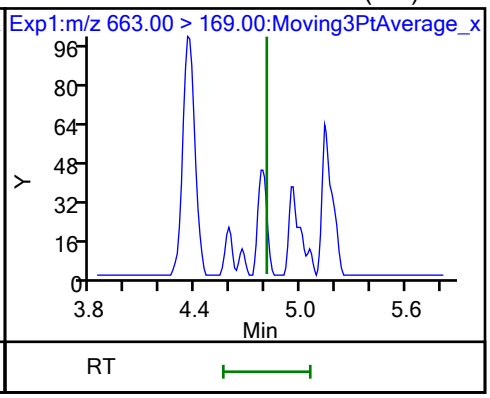
37 Perfluorododecanoic acid (ND)



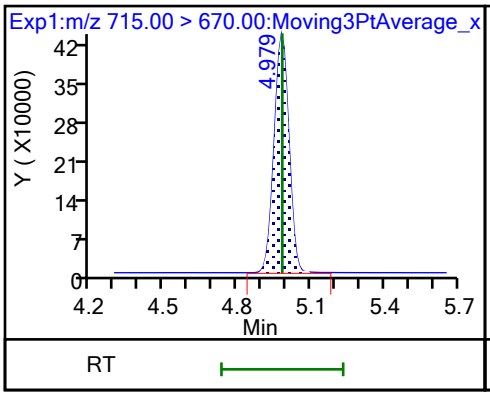
41 Perfluorotridecanoic acid (ND)



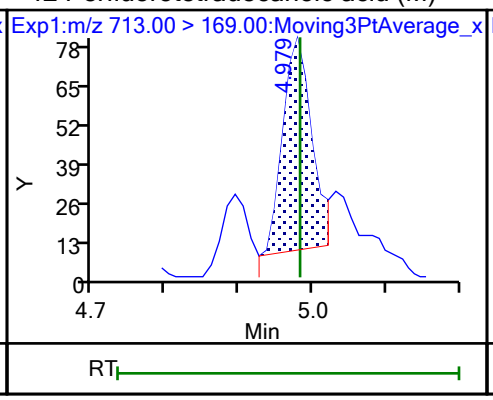
41 Perfluorotridecanoic acid (ND)



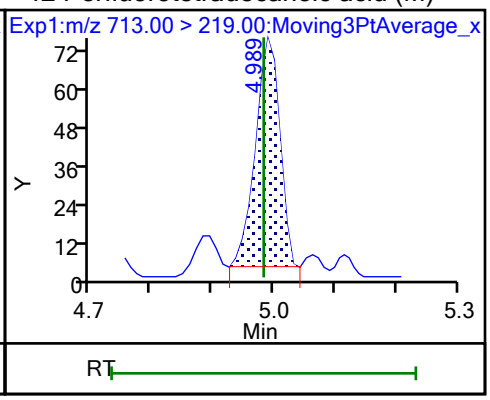
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

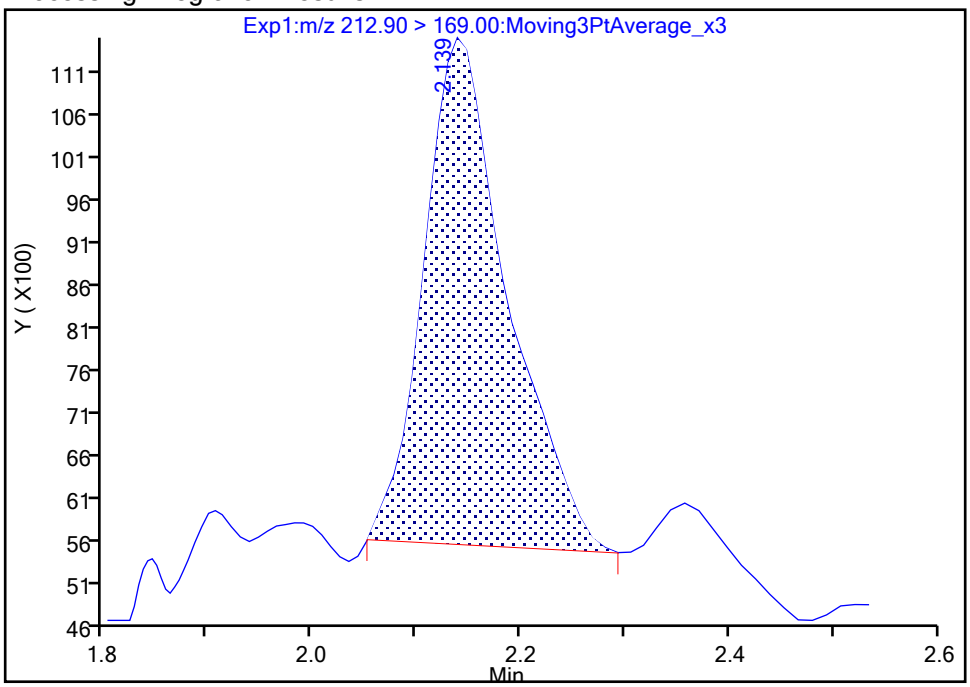
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

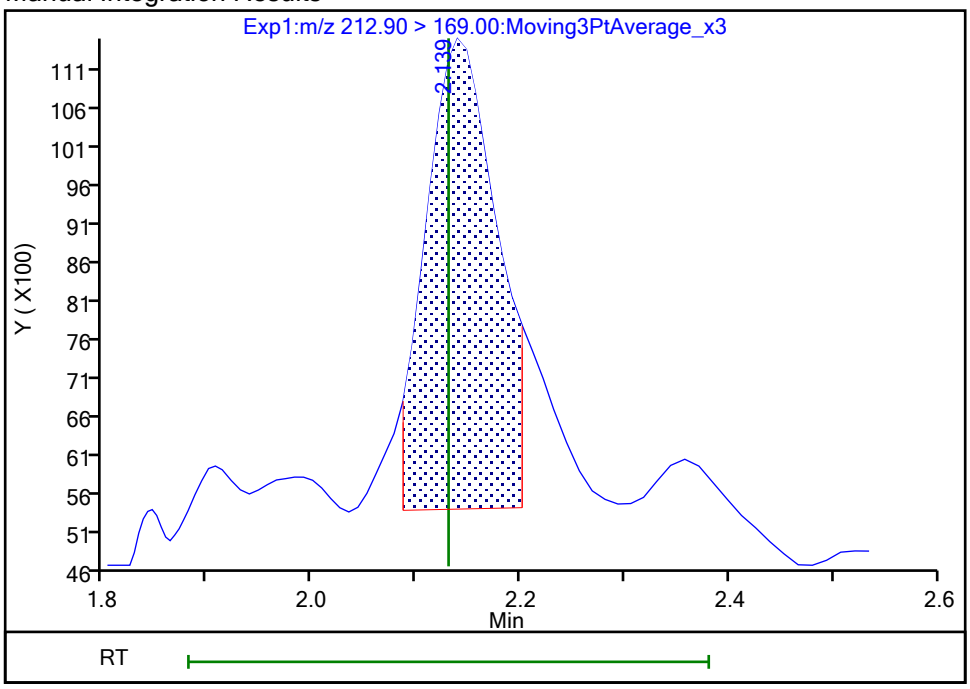
Processing Integration Results

RT: 2.14
Area: 33189
Amount: -0.019497
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 28430
Amount: -0.022564
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:31:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

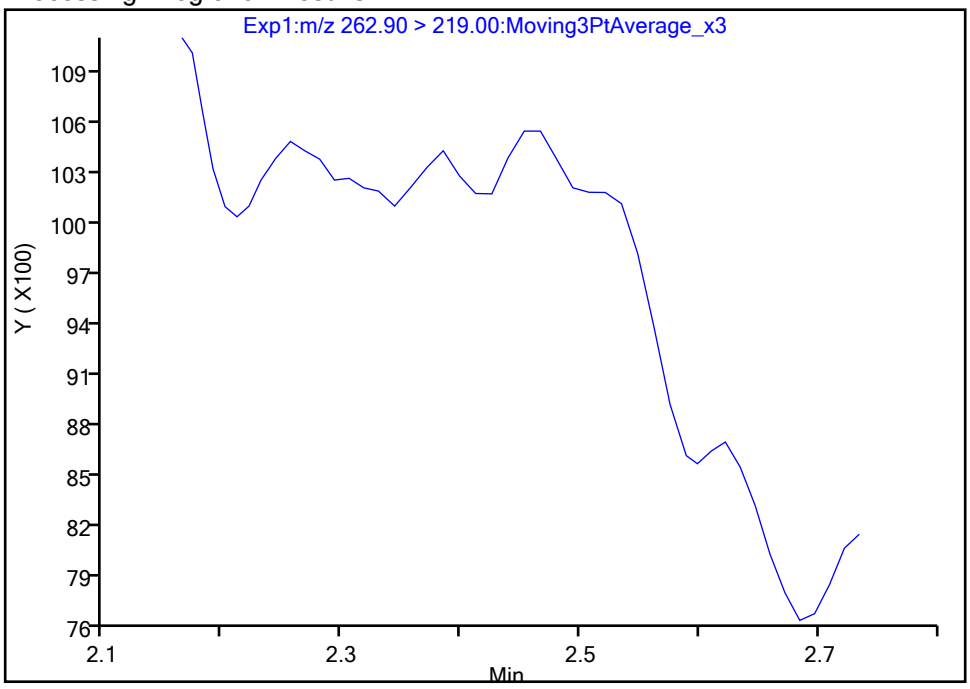
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

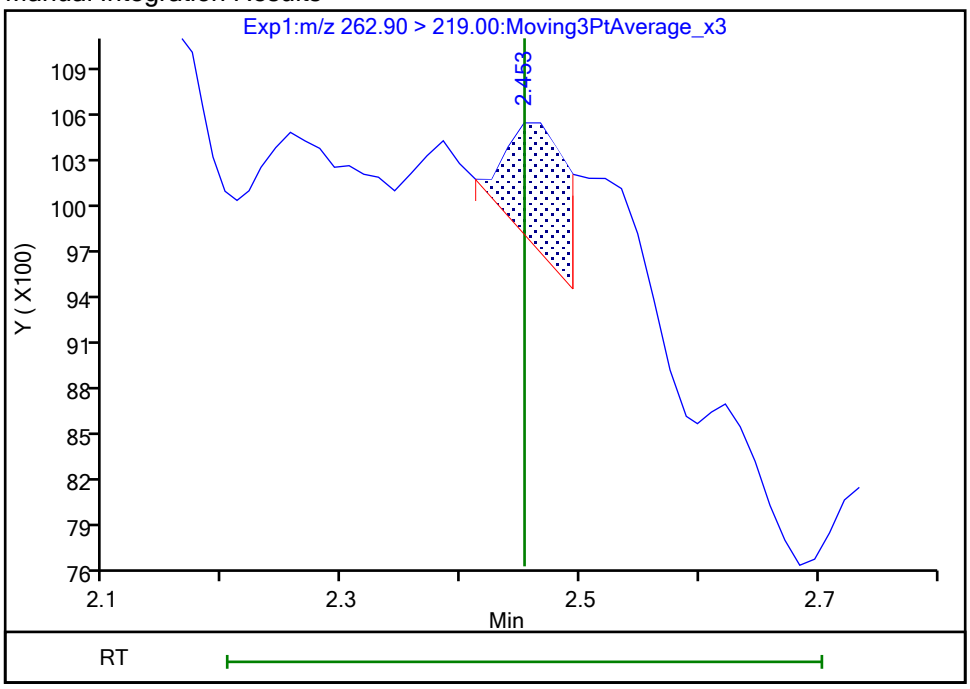
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.45
Area: 2642
Amount: 0.001951
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:32:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

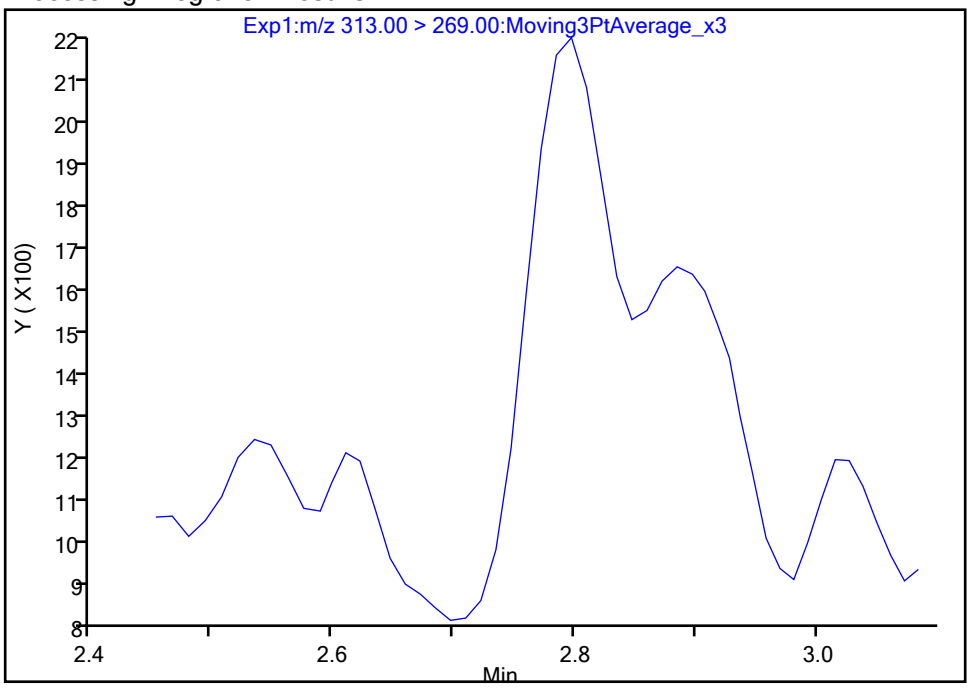
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

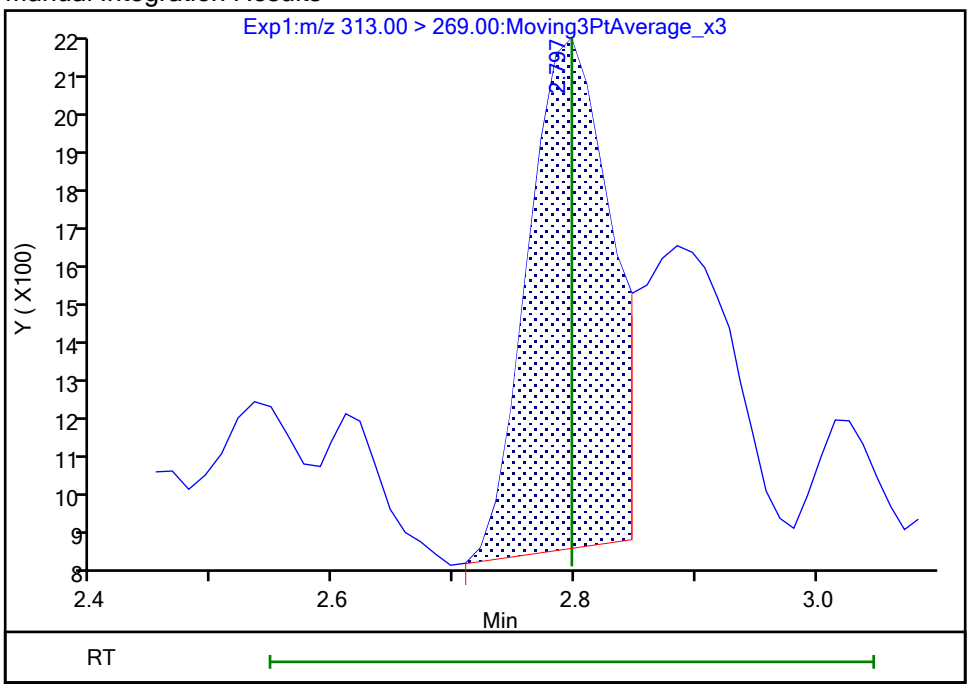
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 5733
Amount: 0.003950
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:32:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

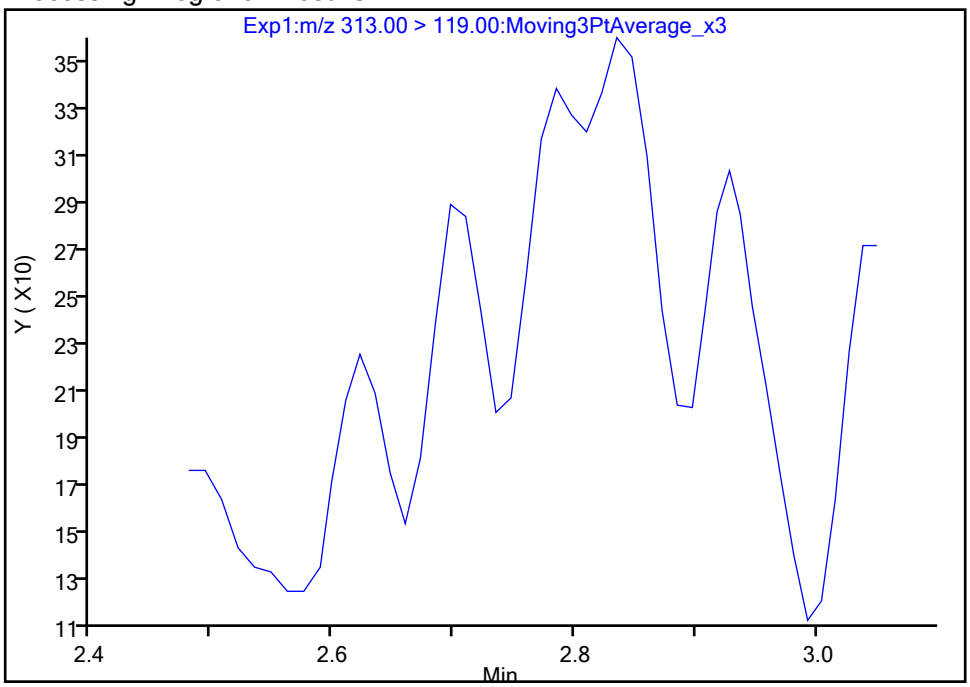
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

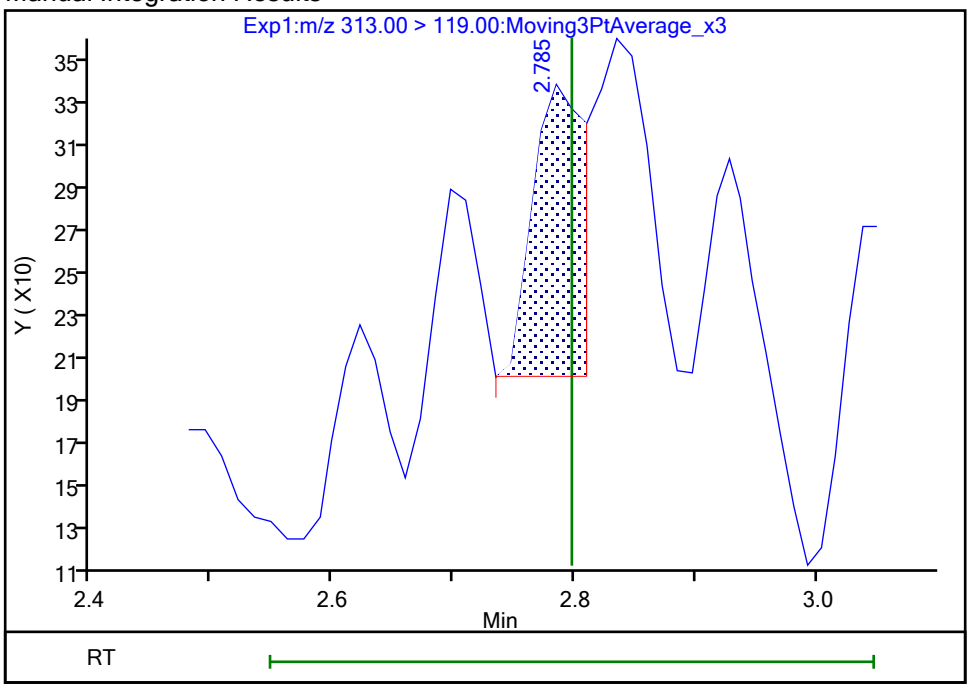
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.78
Area: 367
Amount: 0.003950
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:32:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

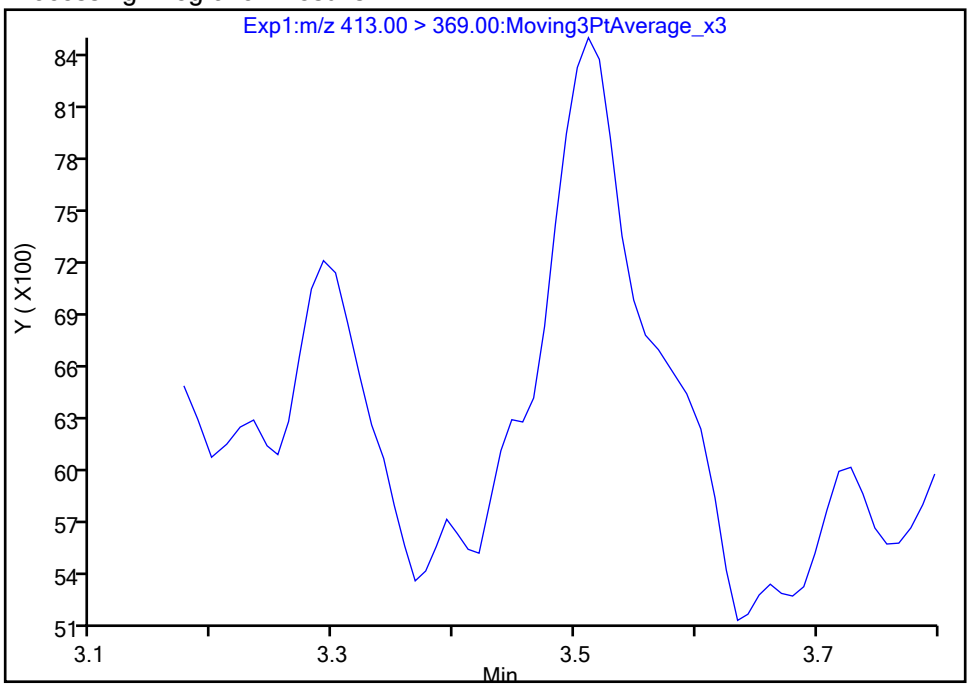
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

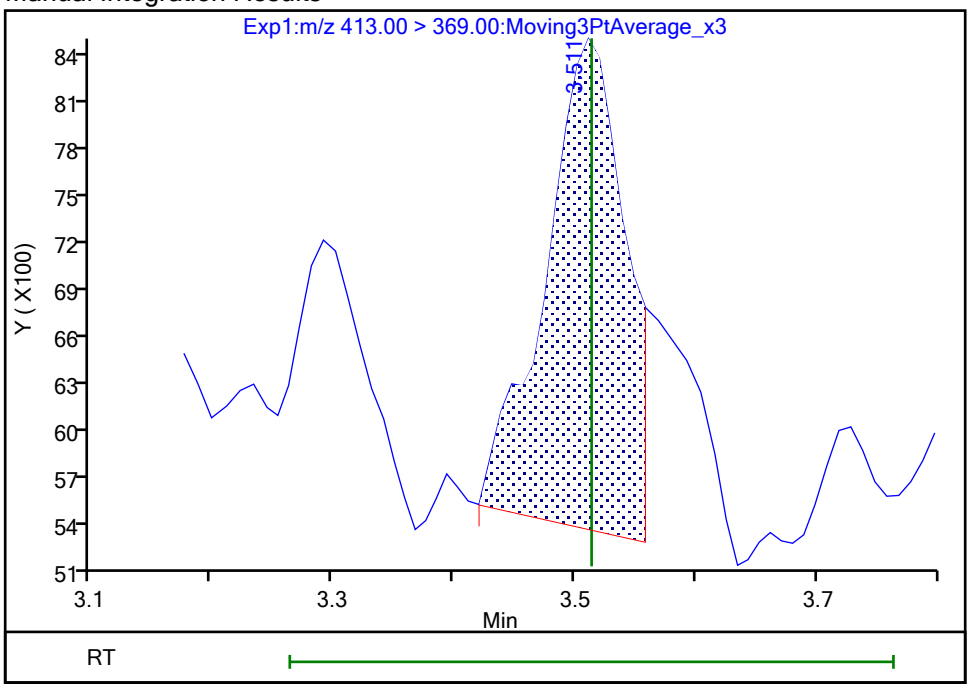
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.51
Area: 13993
Amount: 0.007183
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:33:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

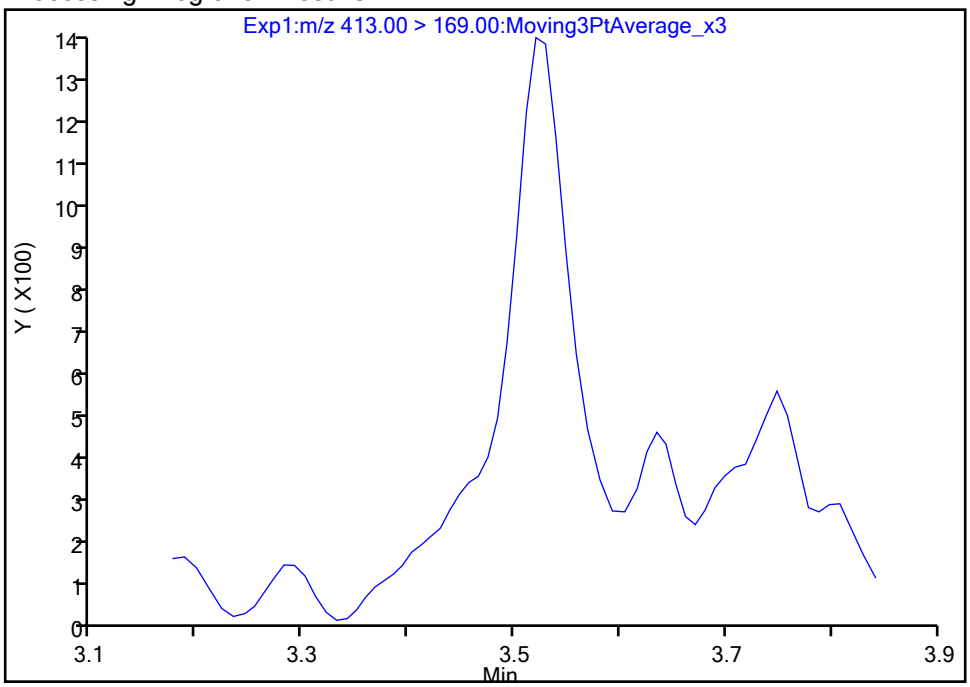
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

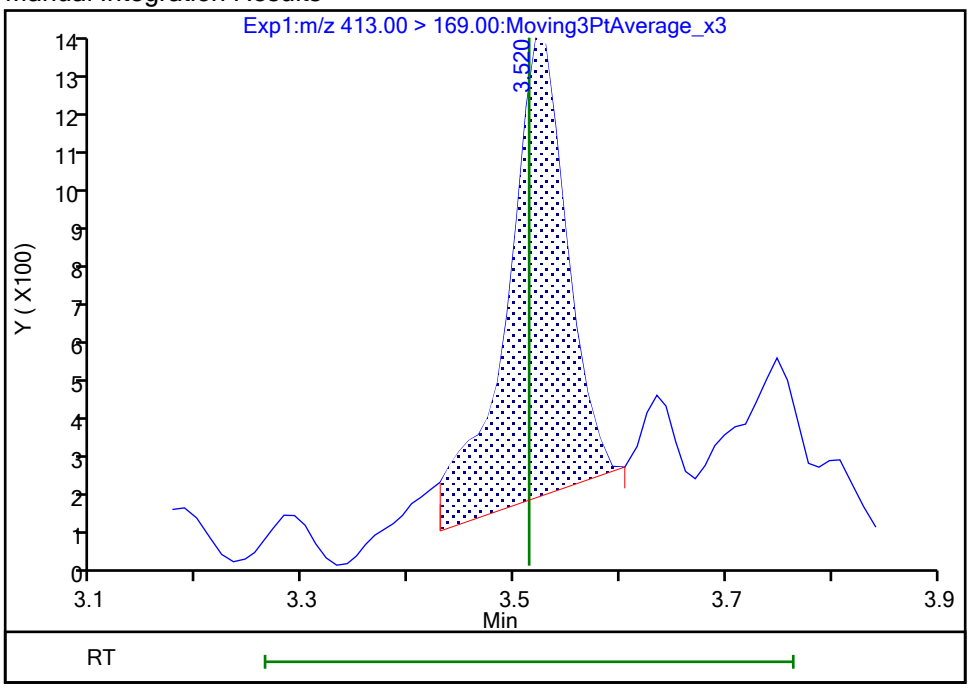
Processing Integration Results

Not Detected
Expected RT: 3.51



Manual Integration Results

RT: 3.52
Area: 4764
Amount: 0.007183
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:33:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

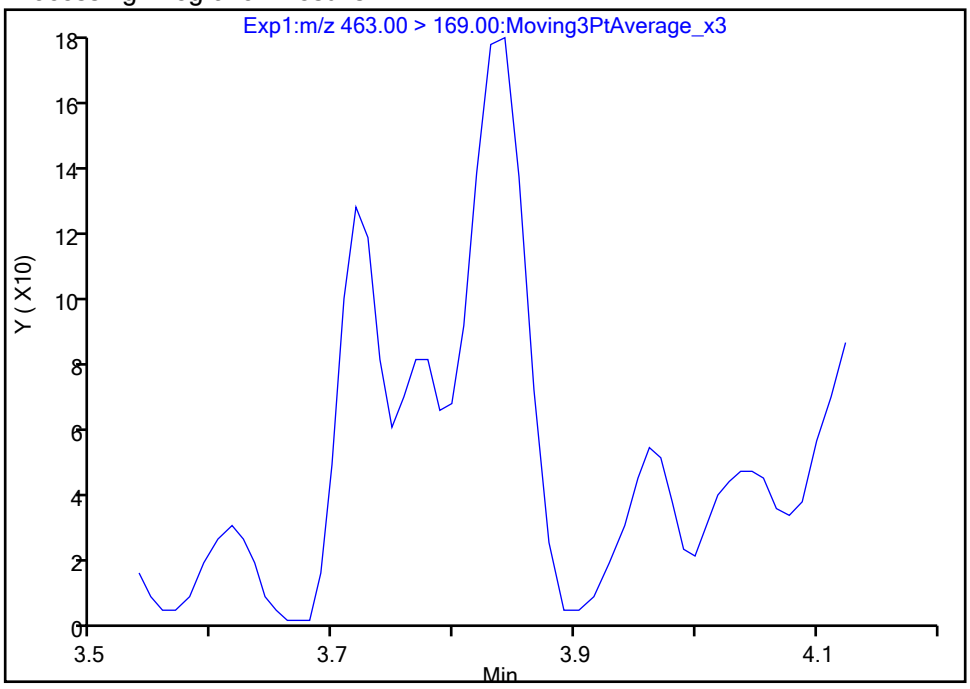
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

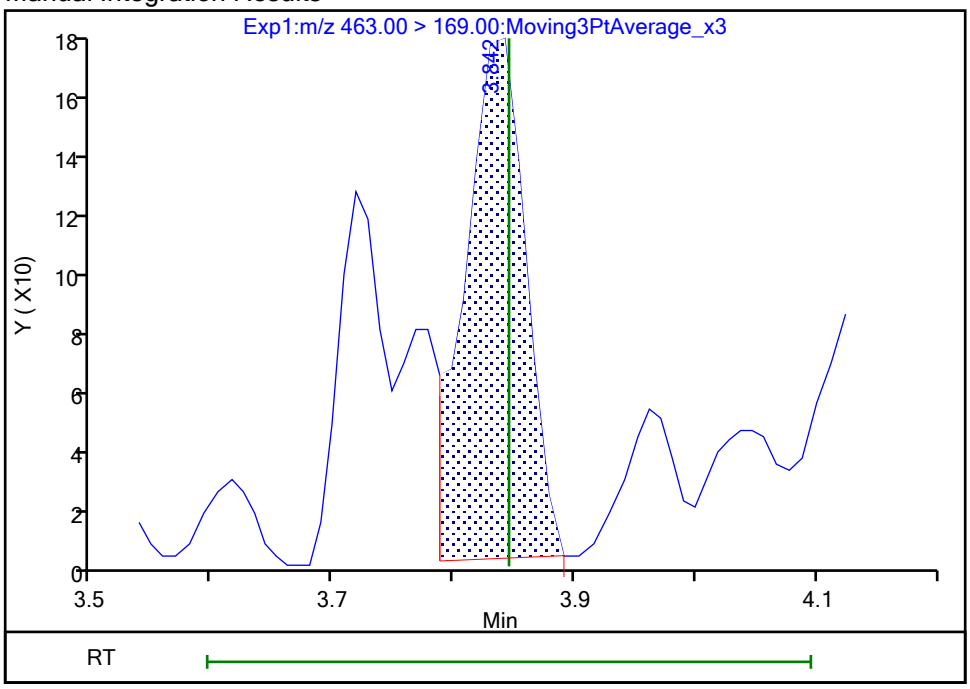
Not Detected
Expected RT: 3.85

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 589
Amount: 0.001341
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:34:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

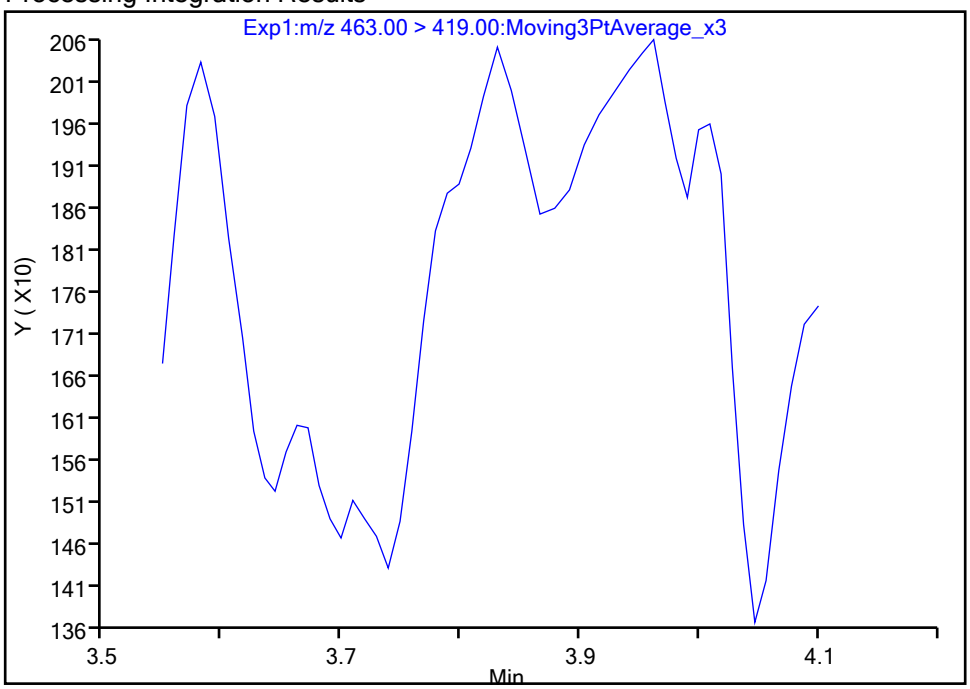
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

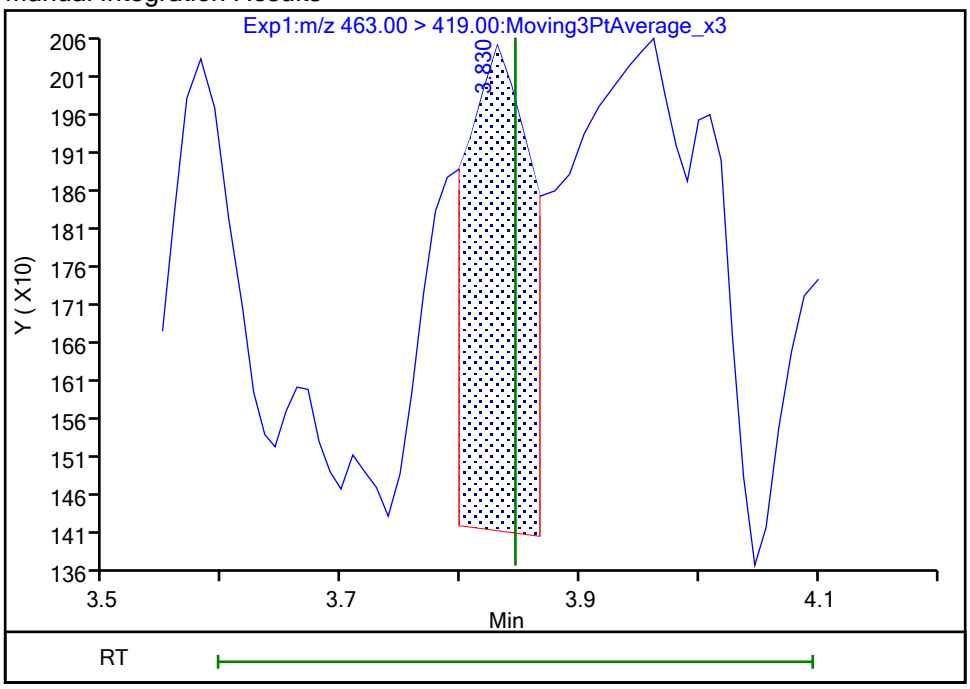
Not Detected
Expected RT: 3.85

Processing Integration Results



Manual Integration Results

RT: 3.83
Area: 2260
Amount: 0.001341
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:34:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

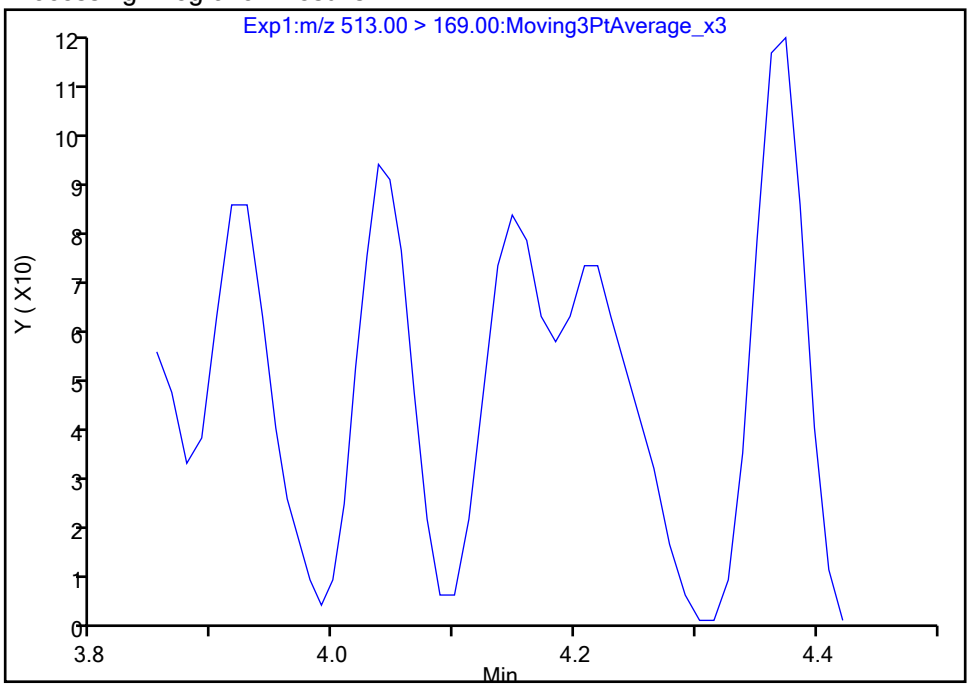
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

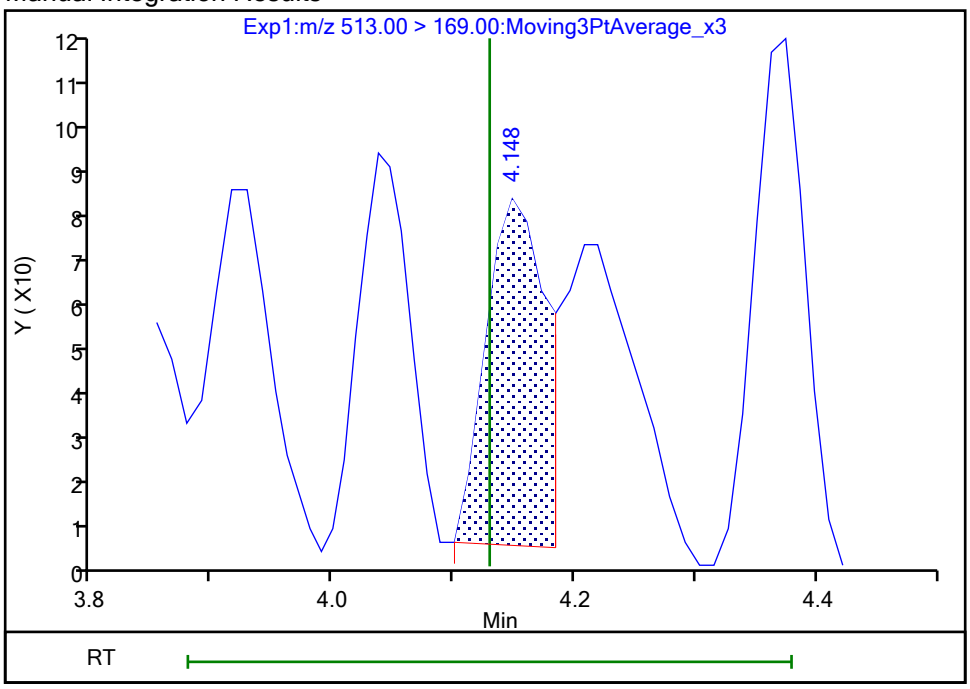
Not Detected
Expected RT: 4.13

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 250
Amount: 0.002011
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

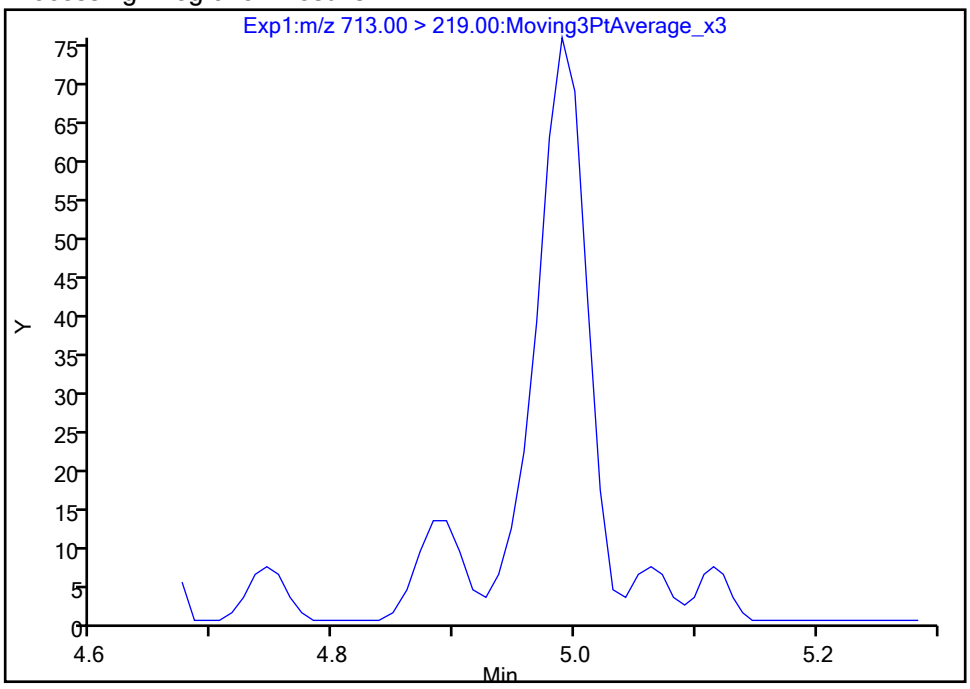
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

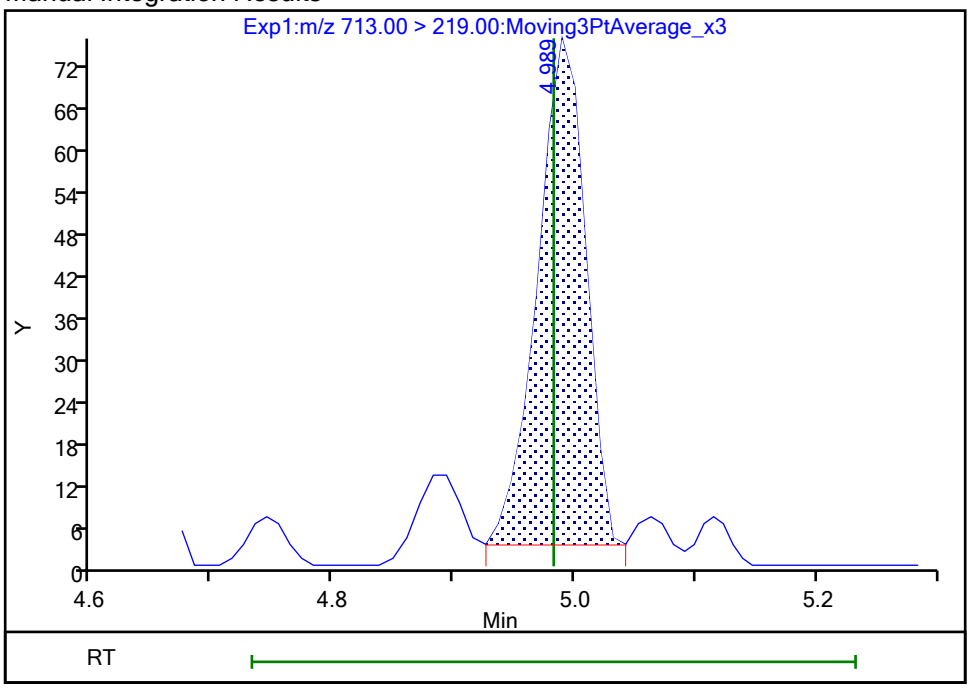
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 201
Amount: 0.001187
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

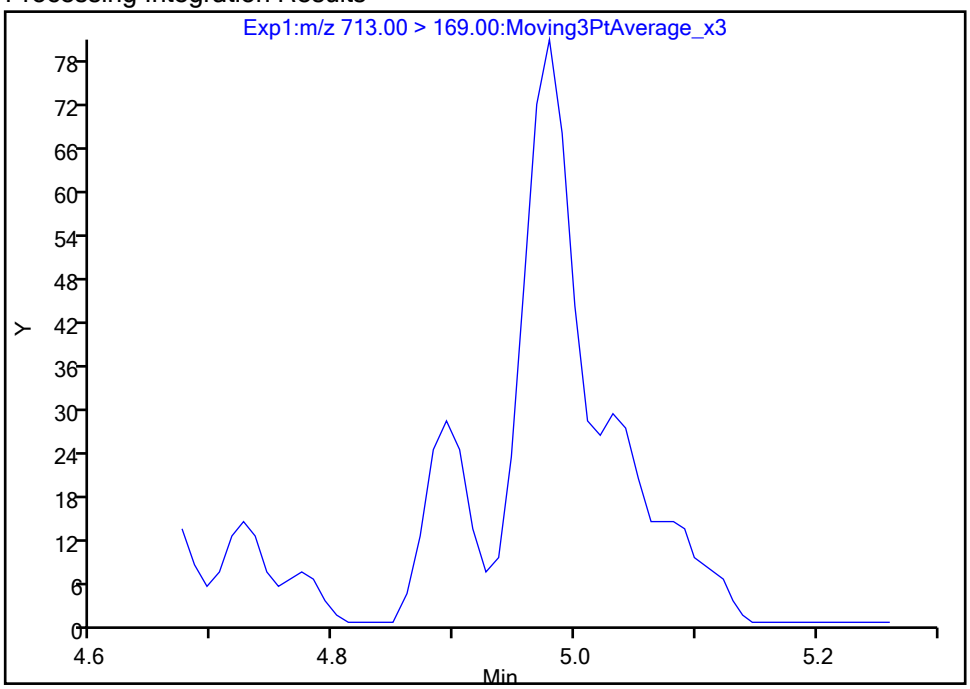
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

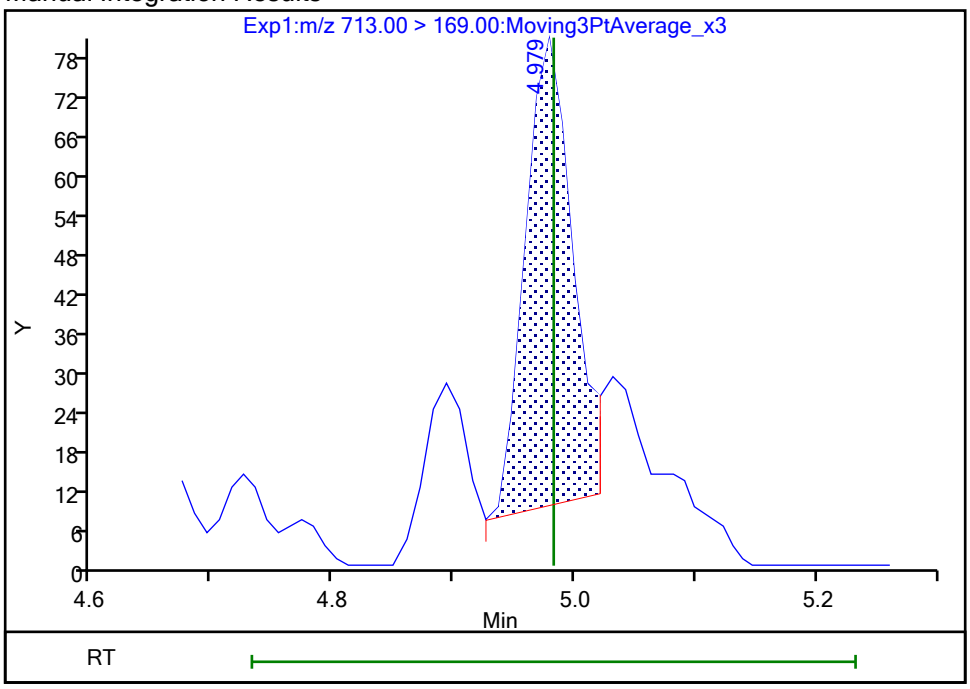
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 194
Amount: 0.001187
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

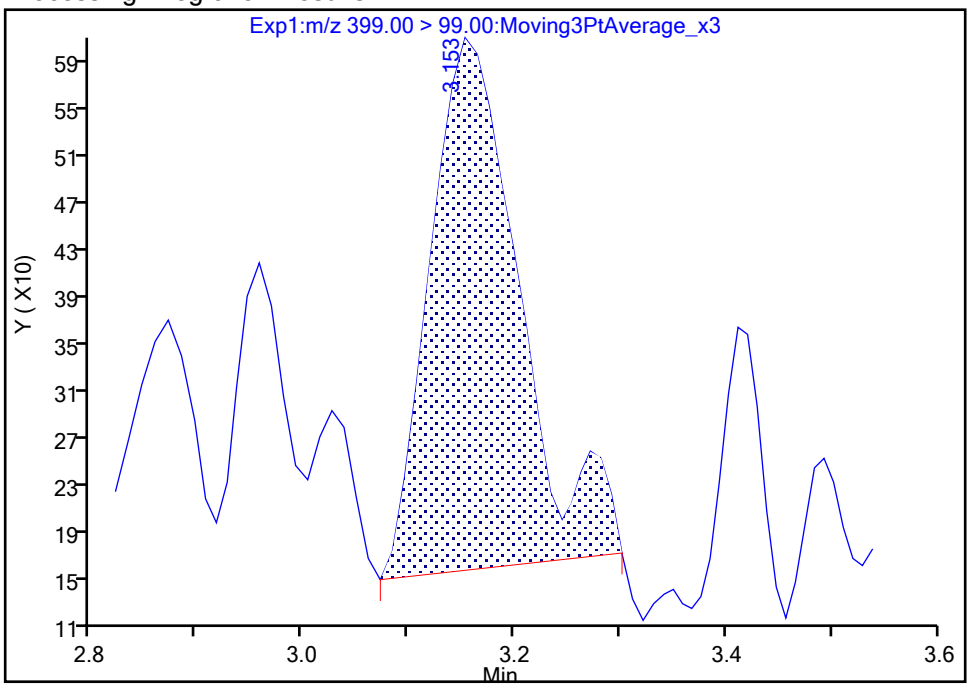
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

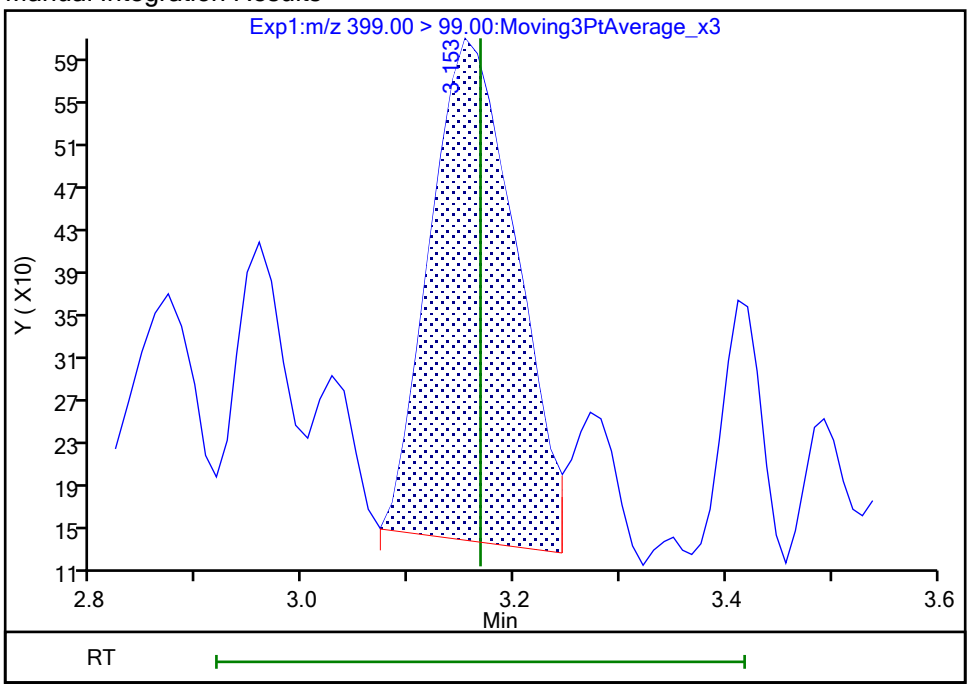
Processing Integration Results

RT: 3.15
Area: 2635
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 2634
Amount: 0.004794
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:33:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

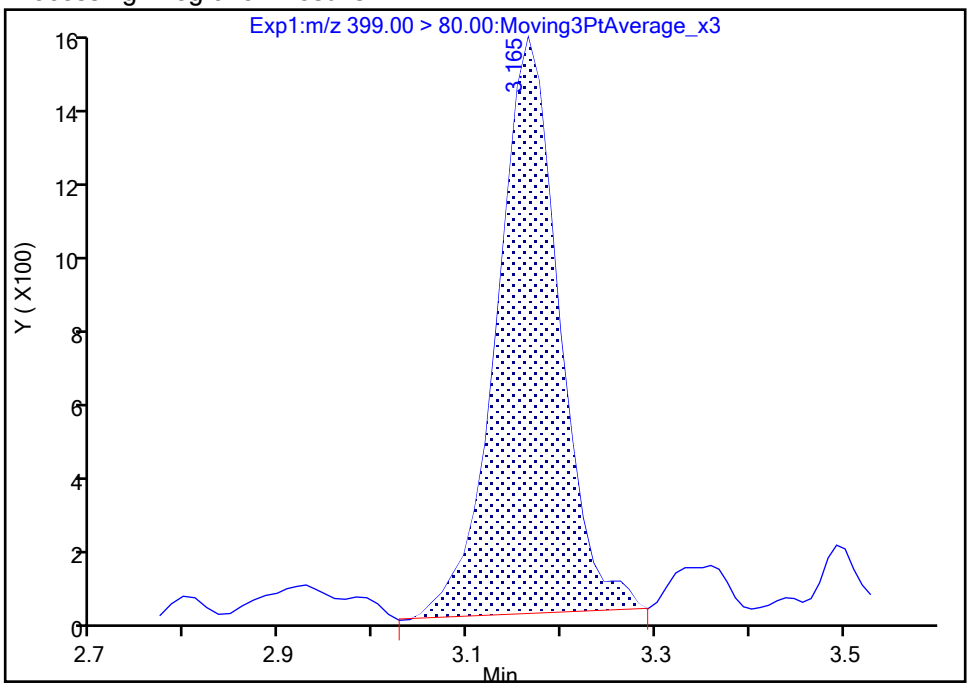
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

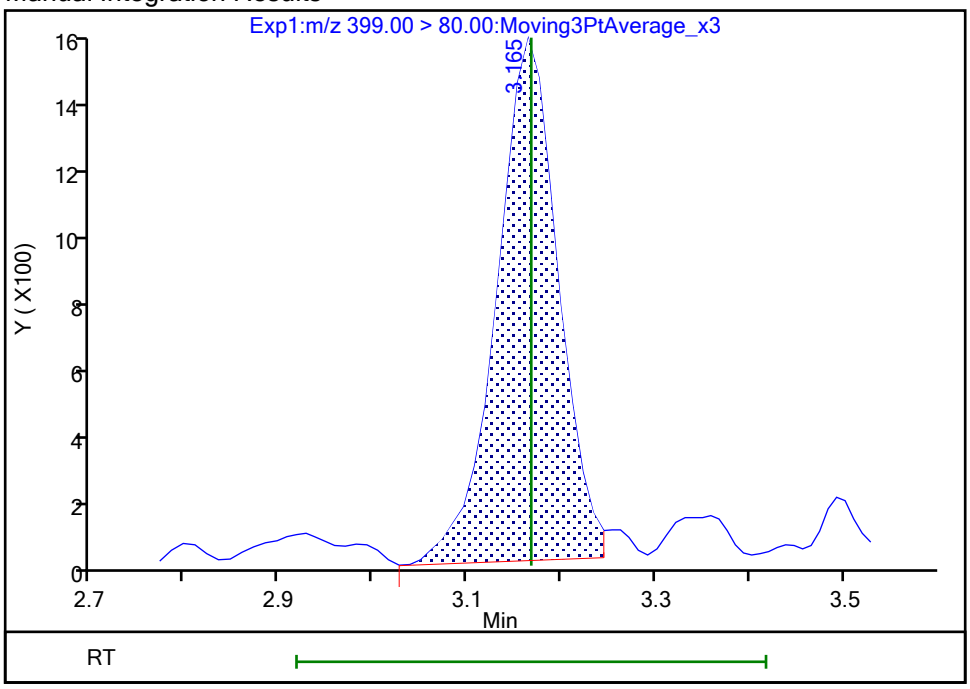
Processing Integration Results

RT: 3.16
Area: 7117
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 6976
Amount: 0.004794
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:33:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

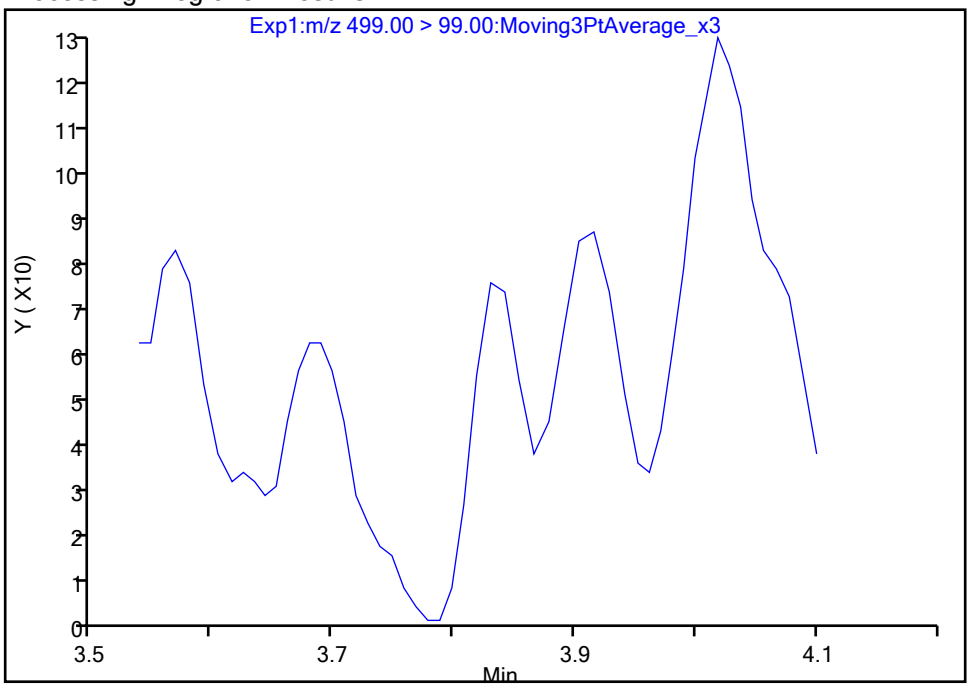
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

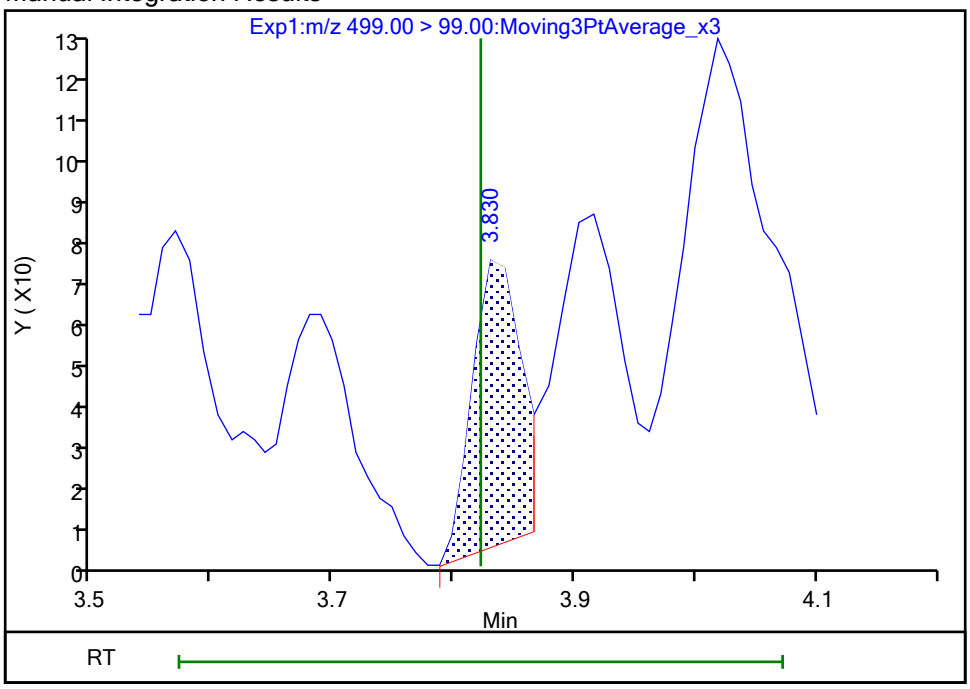
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.83
Area: 188
Amount: 0.002030
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:34:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

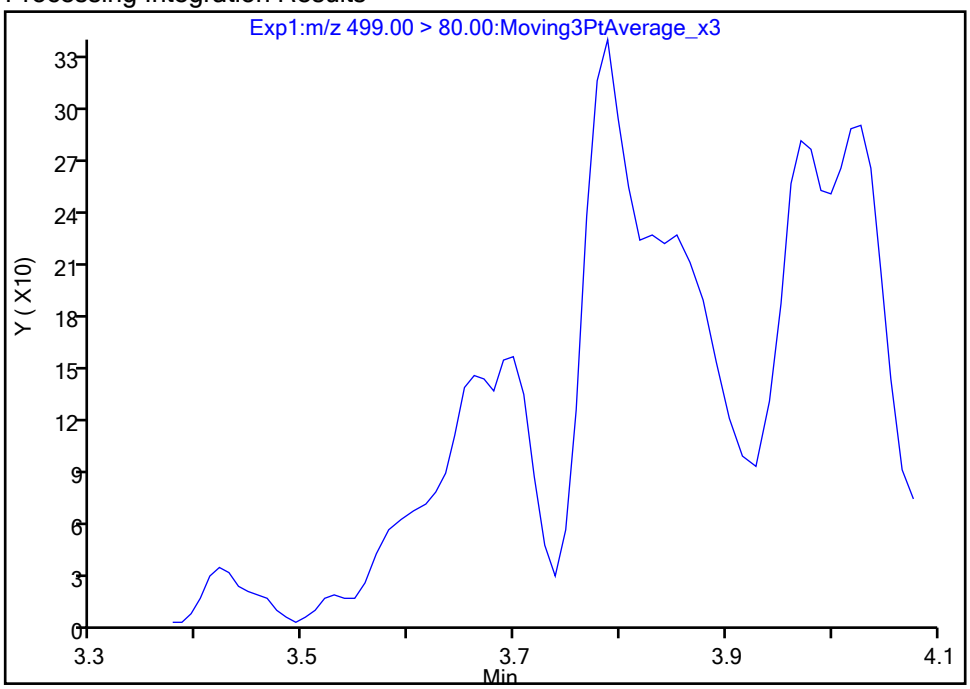
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

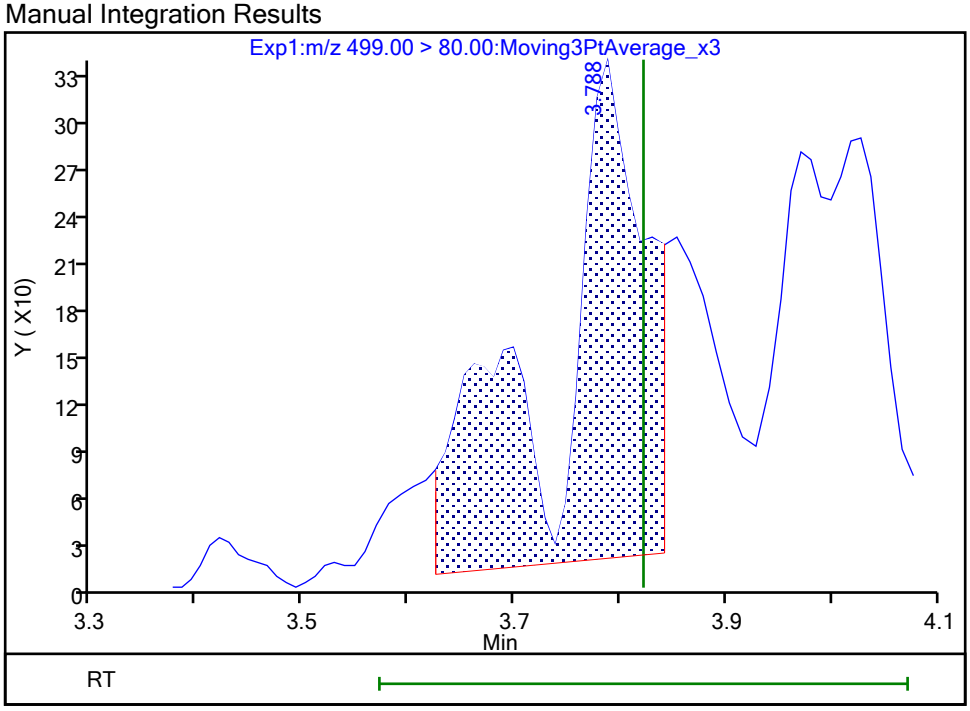
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.79
Area: 1942
Amount: 0.002030
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:34:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

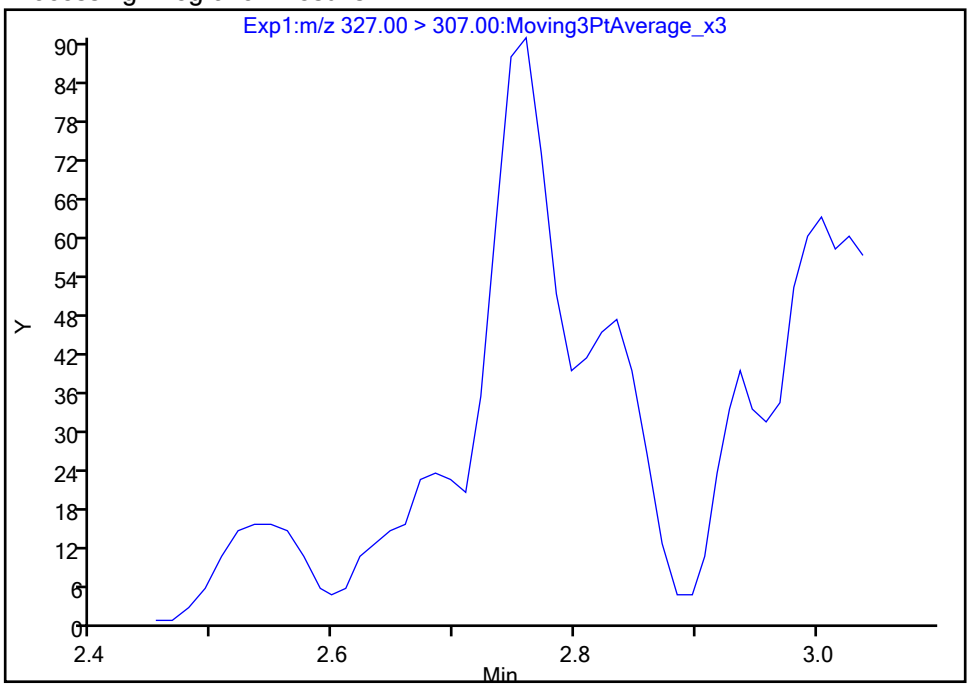
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

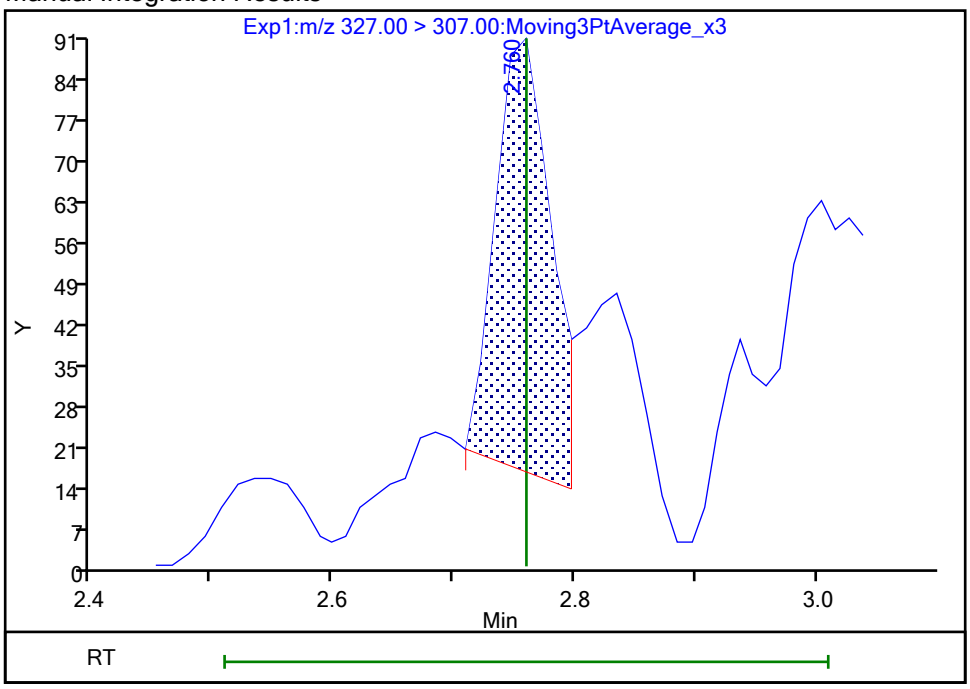
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 235
Amount: 0.000369
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:32:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

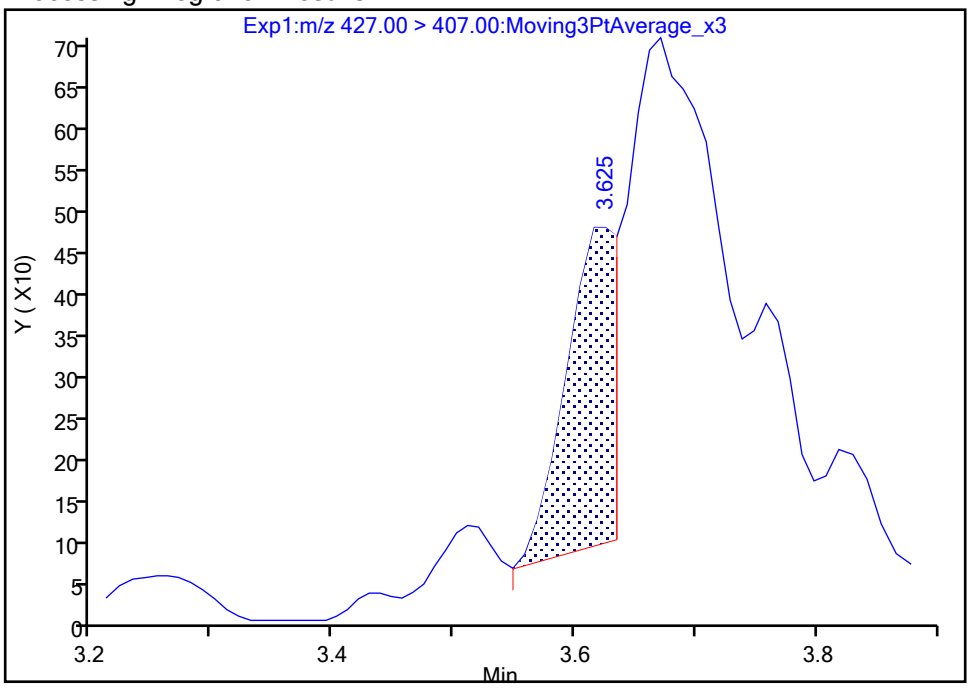
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

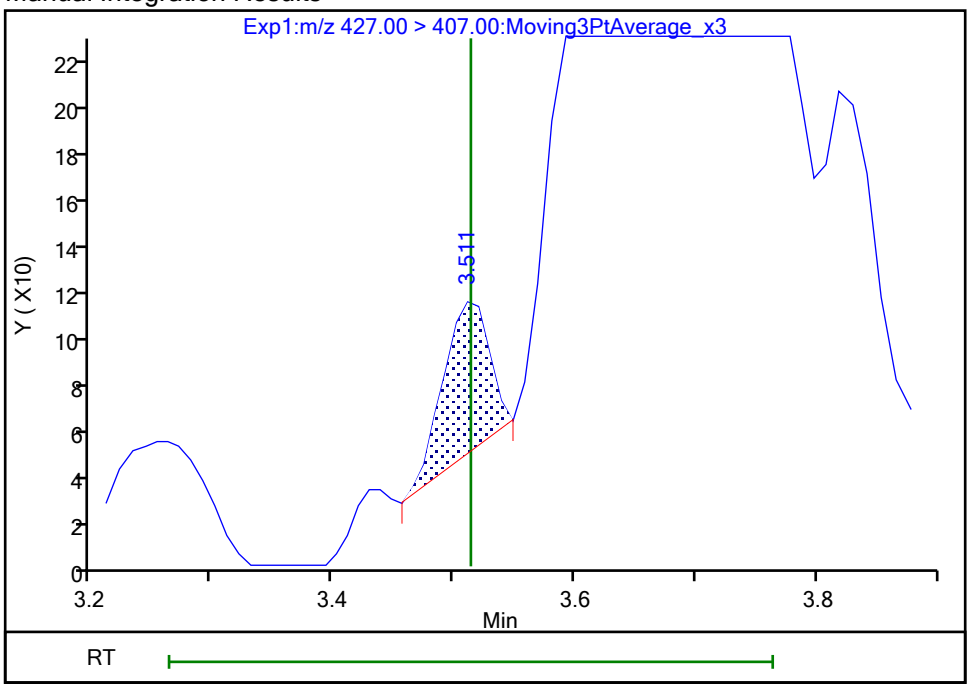
Processing Integration Results

RT: 3.63
Area: 1055
Amount: 0.001524
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 178
Amount: 0.000257
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:33:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

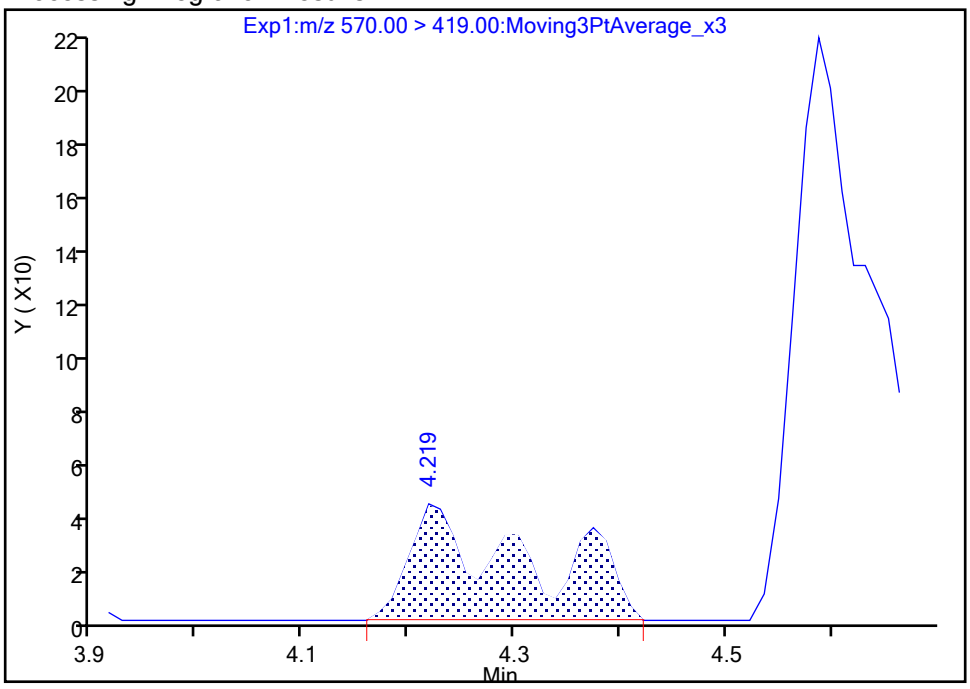
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

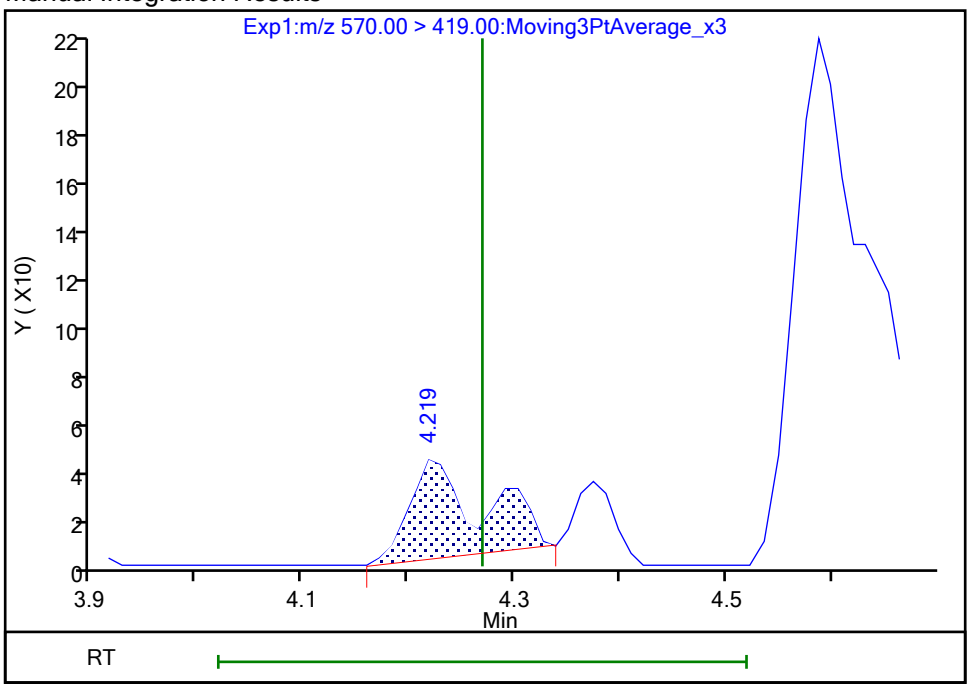
Processing Integration Results

RT: 4.22
Area: 335
Amount: 0.000858
Amount Units: ng/ml



Manual Integration Results

RT: 4.22
Area: 196
Amount: 0.000502
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

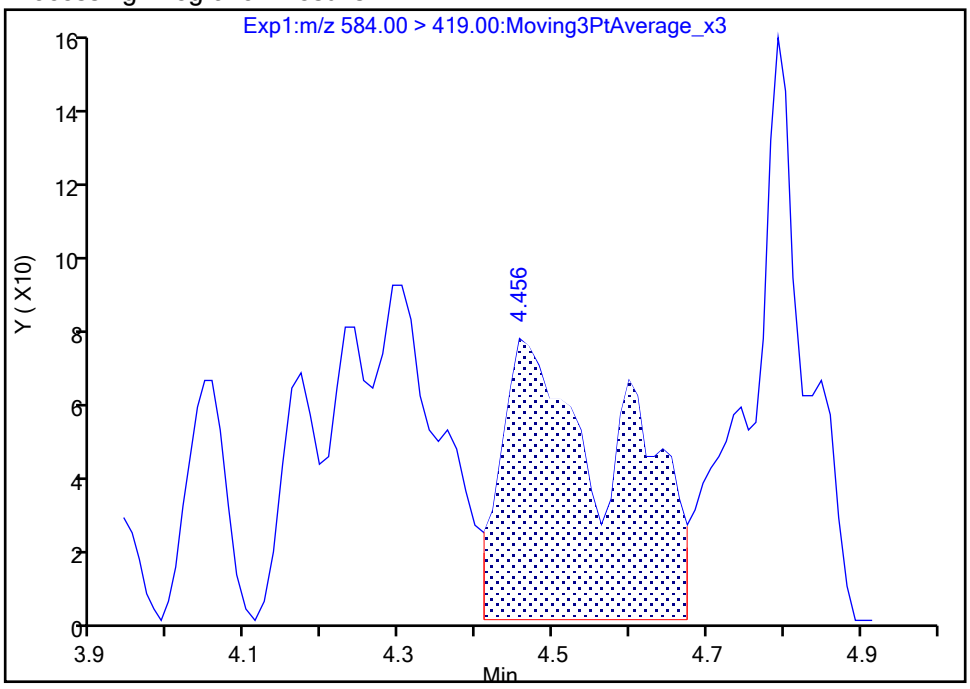
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

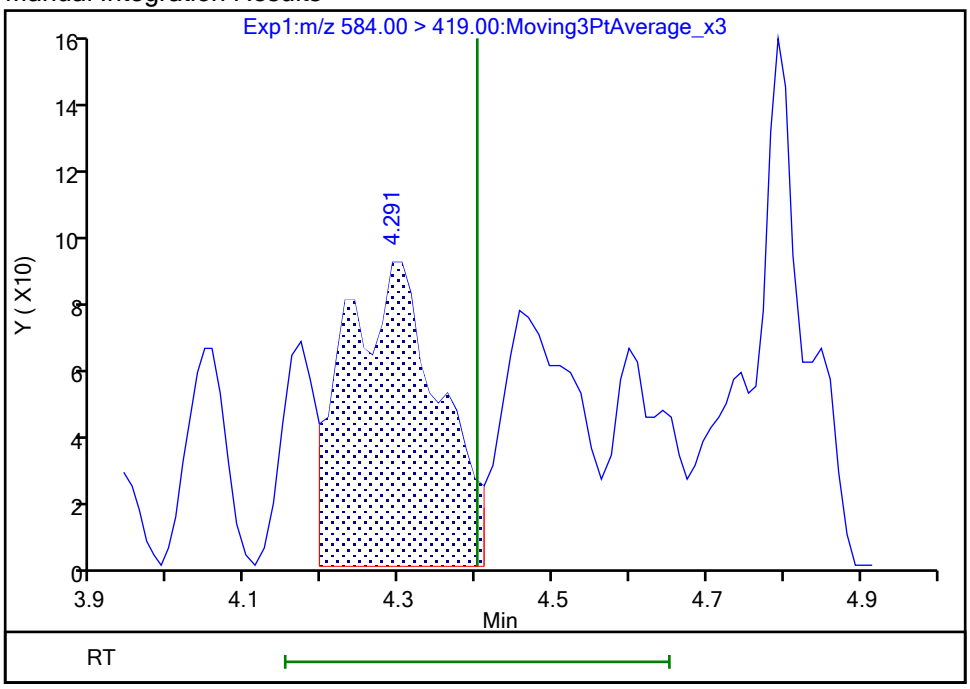
Processing Integration Results

RT: 4.46
Area: 774
Amount: 0.001880
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 750
Amount: 0.001822
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

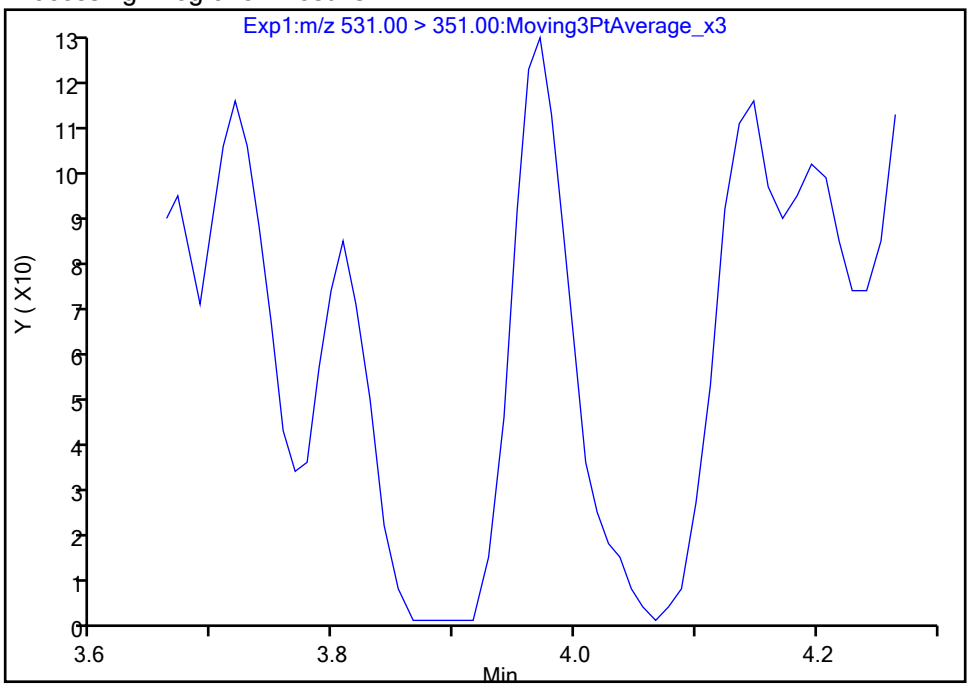
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

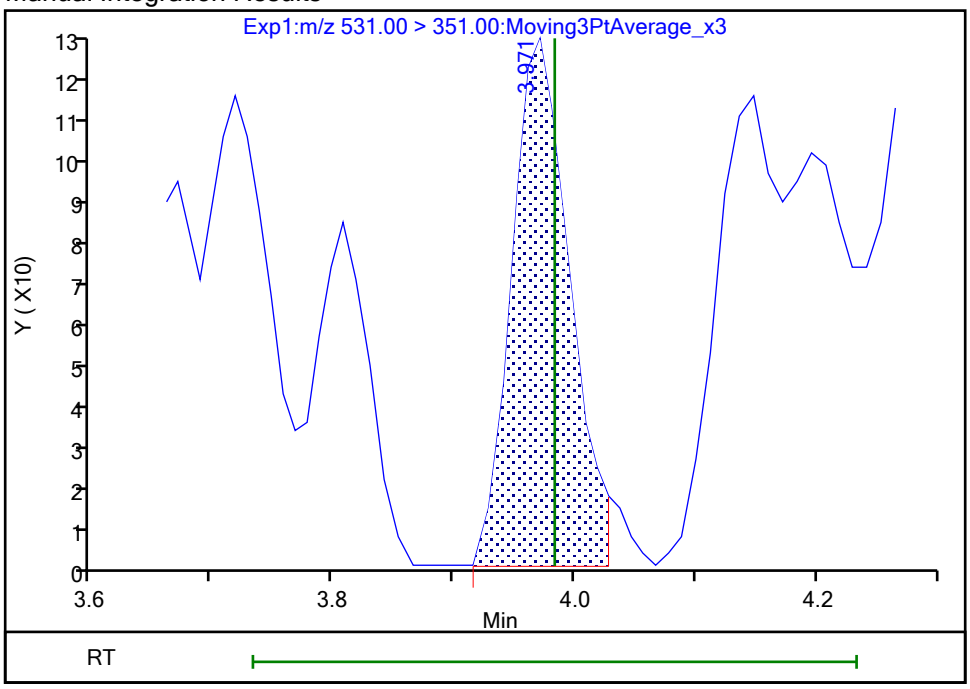
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 426
Amount: 0.000146
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:35:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

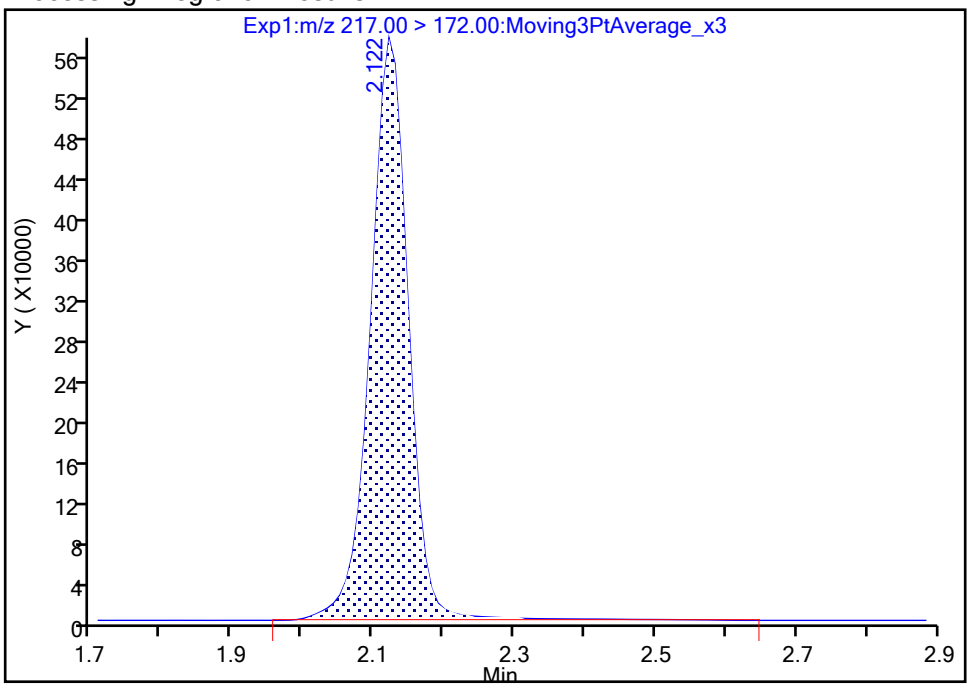
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

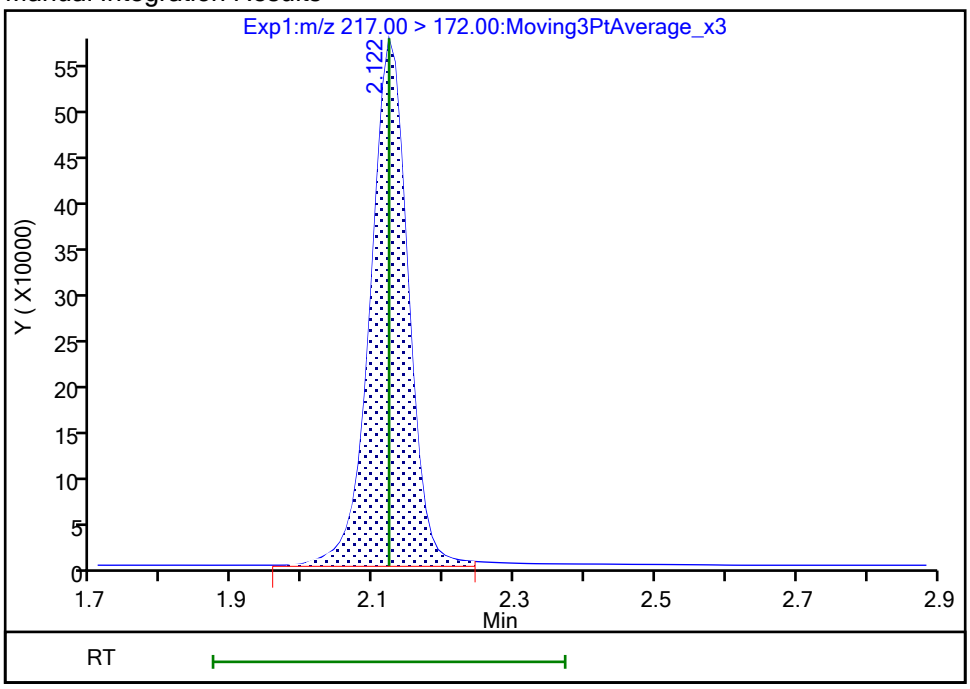
Processing Integration Results

RT: 2.12
Area: 2175257
Amount: 1.235986
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2145203
Amount: 1.218910
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:30:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

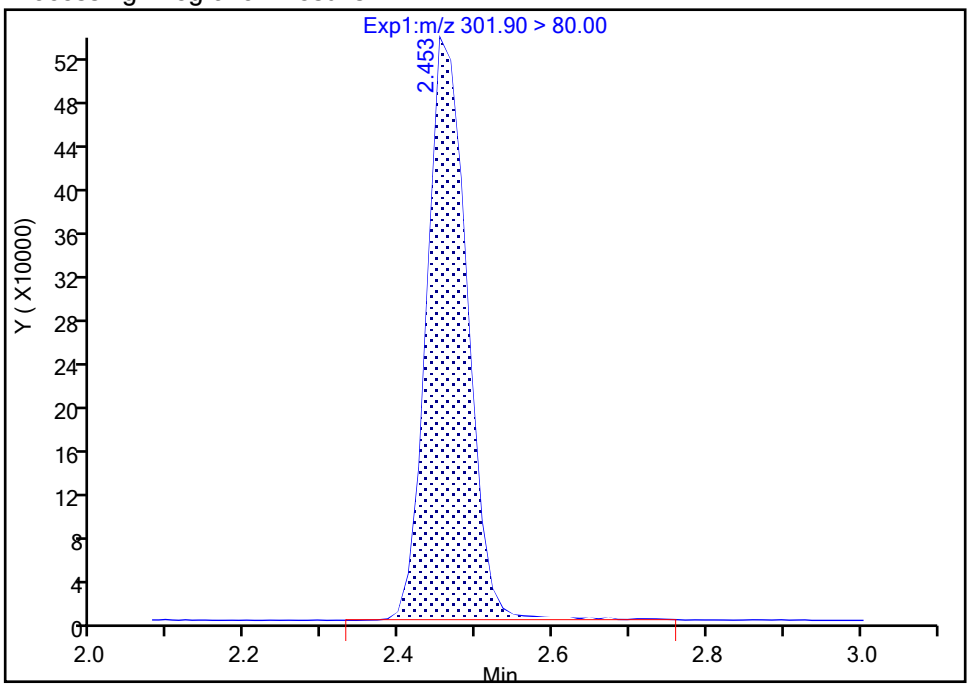
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

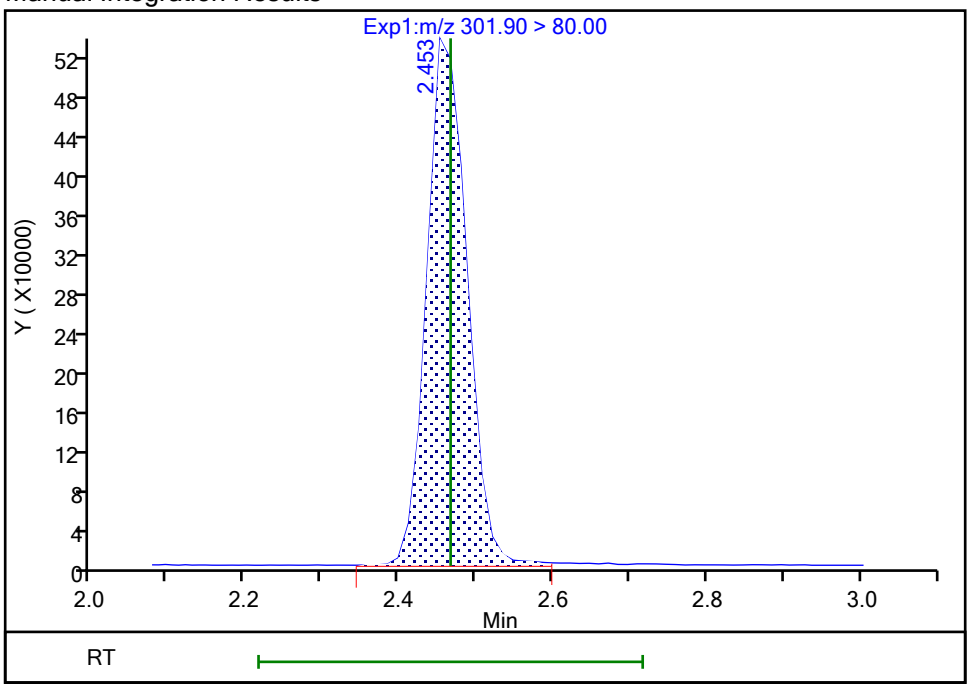
Processing Integration Results

RT: 2.45
Area: 1940340
Amount: 1.049911
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1933188
Amount: 1.046041
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:30:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

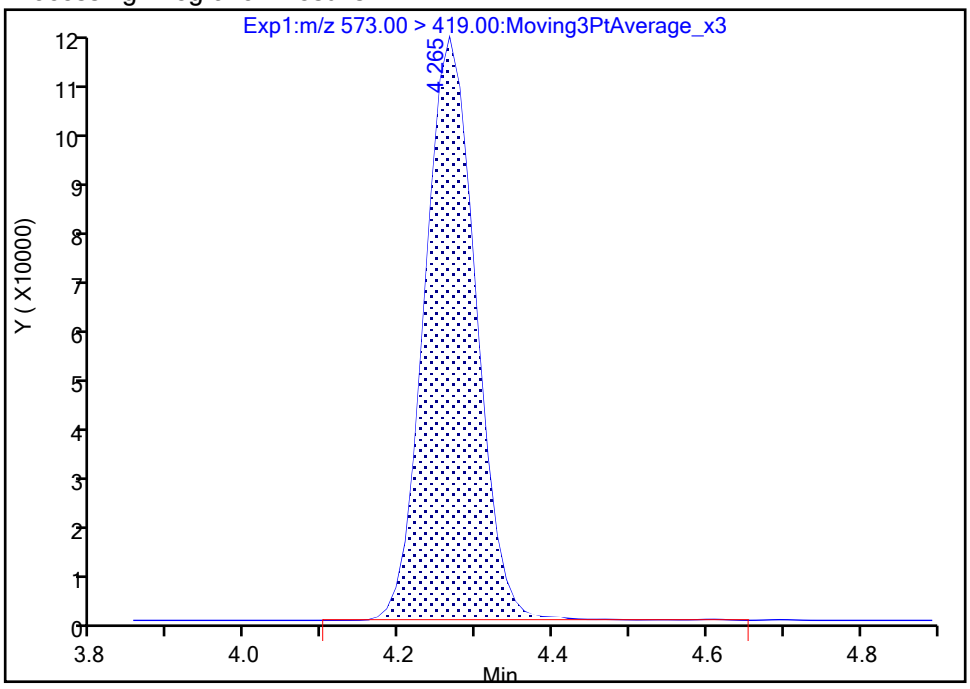
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

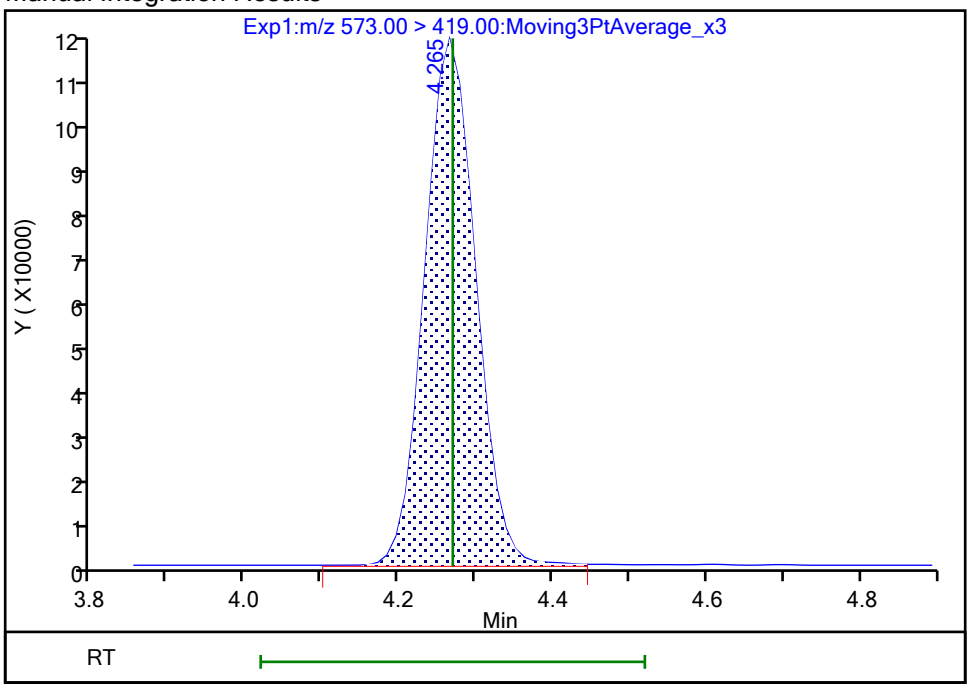
Processing Integration Results

RT: 4.27
Area: 539443
Amount: 1.146955
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 537804
Amount: 1.143470
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:31:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

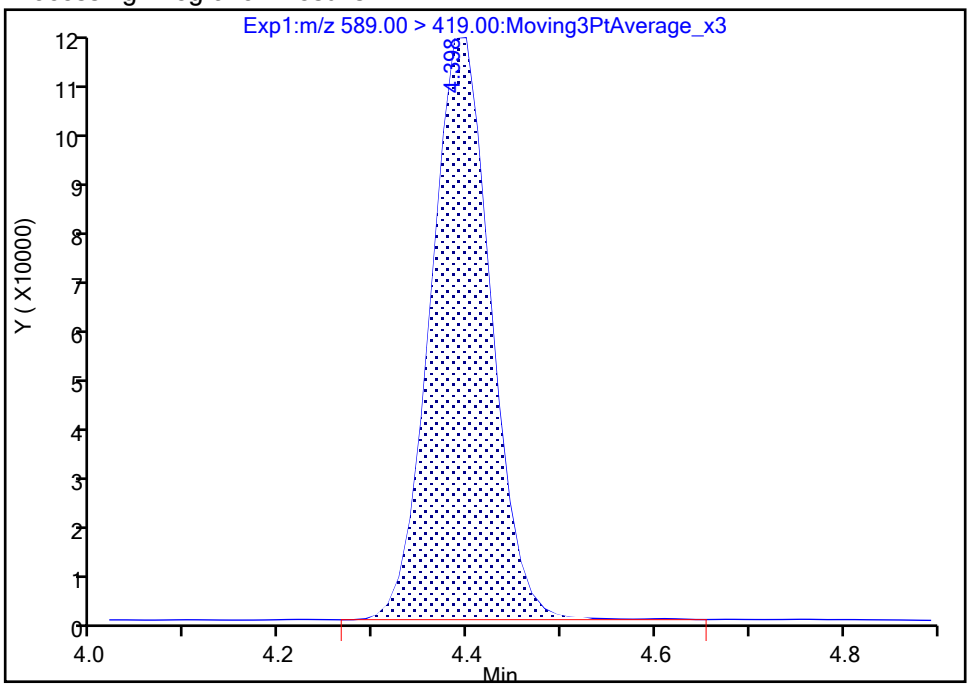
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

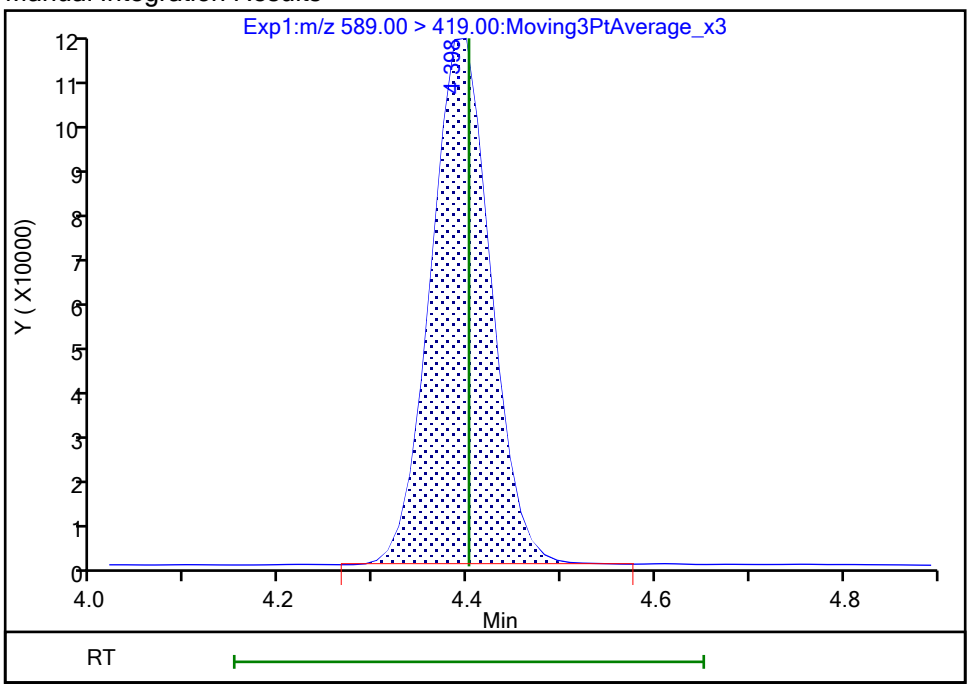
Processing Integration Results

RT: 4.40
Area: 514966
Amount: 1.137128
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 514480
Amount: 1.136055
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:31:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

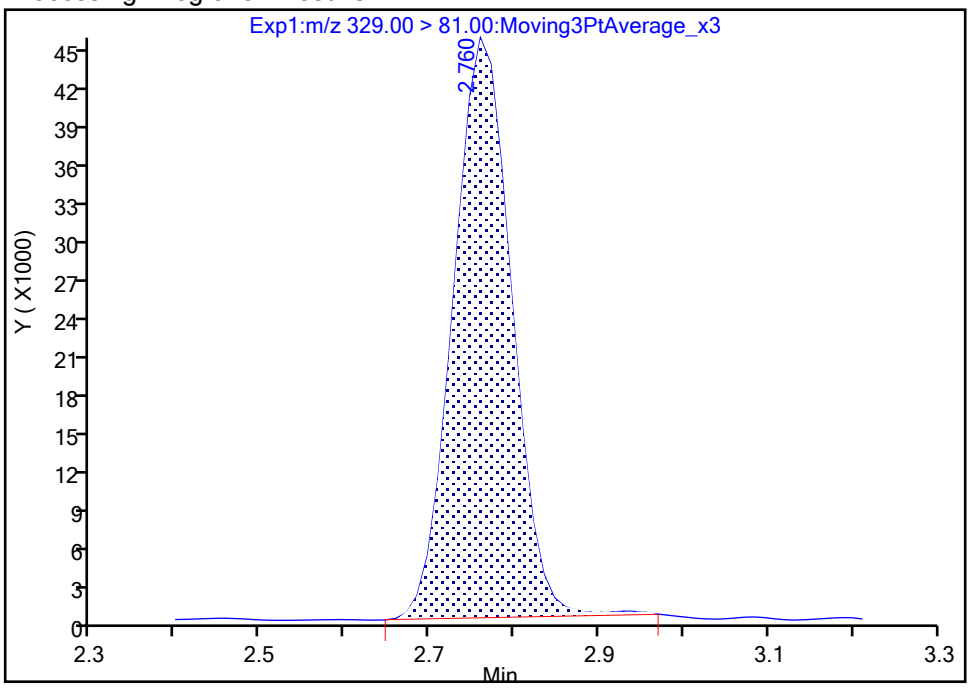
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E20.d				
Injection Date:	24-Oct-2023 08:41:09	Instrument ID:	LC812		
Lims ID:	460-290517-A-1-A	Lab Sample ID:	200-290517-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

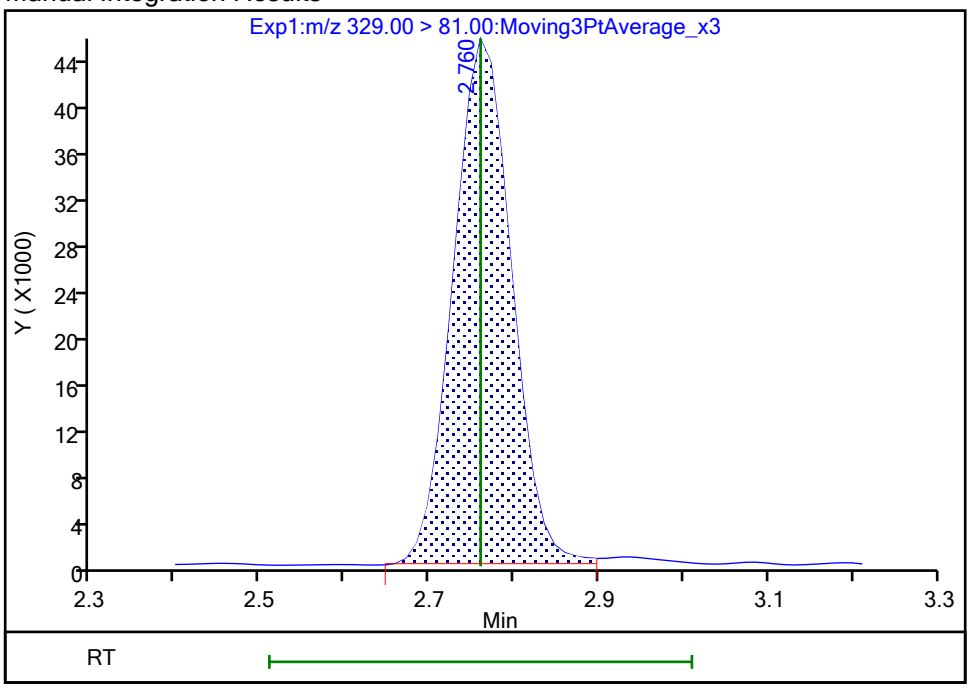
Processing Integration Results

RT: 2.76
Area: 217529
Amount: 1.017791
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 218748
Amount: 1.023495
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:31:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0003 Lab Sample ID: 460-290517-2

Matrix: Water Lab File ID: PA231023E21.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 00:00

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 291.5(mL) Date Analyzed: 10/24/2023 08:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	32.3		4.29	1.03
2706-90-3	Perfluoropentanoic acid	46.3		1.72	0.58
307-24-4	Perfluorohexanoic acid	51.8		1.72	0.56
375-85-9	Perfluoroheptanoic acid	19.8		1.72	0.46
335-67-1	Perfluorooctanoic acid	43.7		1.72	0.65
375-95-1	Perfluorononanoic acid	6.01		1.72	0.42
335-76-2	Perfluorodecanoic acid	7.11		1.72	0.39
2058-94-8	Perfluoroundecanoic acid	0.94	J	1.72	0.47
307-55-1	Perfluorododecanoic acid	1.72	U	1.72	0.42
72629-94-8	Perfluorotridecanoic acid	1.72	U	1.72	0.41
376-06-7	Perfluorotetradecanoic acid	1.72	U	1.72	0.55
375-73-5	Perfluorobutanesulfonic acid	3.39		1.72	0.53
2706-91-4	Perfluoropentanesulfonic acid	3.19		1.72	0.43
355-46-4	Perfluorohexanesulfonic acid	16.9		1.72	0.47
375-92-8	Perfluoroheptanesulfonic acid	1.35	J	1.72	0.35
1763-23-1	Perfluorooctanesulfonic acid	89.8		1.72	0.73
68259-12-1	Perfluorononanesulfonic acid	1.72	U	1.72	0.34
335-77-3	Perfluorodecanesulfonic acid	1.72	U	1.72	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66
754-91-6	Perfluorooctanesulfonamide	1.72	U	1.72	0.79
2355-31-9	NMeFOSAA	4.29	U	4.29	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37
13252-13-6	HFPODA	1.07	J	3.43	0.94
919005-14-4	DONA	1.72	U	1.72	0.36
756426-58-1	9Cl-PF3ONS	1.72	U	1.72	0.27
763051-92-9	11Cl-PF3OUdS	1.72	U	1.72	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0003 Lab Sample ID: 460-290517-2

Matrix: Water Lab File ID: PA231023E21.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 00:00

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 291.5(mL) Date Analyzed: 10/24/2023 08:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	66		50-150
STL01893	13C5 PFPeA	84		50-150
STL01892	13C4 PFHpA	97		50-150
STL02116	13C2 PFTeDA	103		50-150
STL02337	13C3 PFBS	103		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	124		50-150
STL02117	d5-NEtFOSAA	138		50-150
STL02395	M2-4:2 FTS	124		50-150
STL02279	M2-6:2 FTS	130		50-150
STL02280	M2-8:2 FTS	126		50-150
STL02255	13C3 HFPO-DA	98		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	91		50-150
STL00991	13C4 PFOS	110		50-150
STL00998	13C2 PFDoA	109		50-150
STL00995	13C5 PFNA	110		50-150
STL00996	13C2 PFDA	107		50-150
STL00990	13C4 PFOA	104		50-150
STL00997	13C2 PFUnA	104		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d
Lims ID: 460-290517-A-2-A
Client ID: 1000-101623-0003
Sample Type: Client
Inject. Date: 24-Oct-2023 08:49:20 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-A-2-A
Misc. Info.: 200-0057513-021 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:40:59
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	1122358	0.8202		65.6	810	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	797929	0.9419			12.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1108729	1.04		83.5	125	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1292629	1.35			1.9	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1717996	1.20		103	6755	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	162998	0.0987	Target=2.06		1.7	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	98660		1.65(1.03-3.09)		3.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.784	239969	1.44		124	6.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1222605	1.13		90.5	930	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1623959	1.51	Target=14.12		5.5	M
313.00 > 119.00	2.797	2.797	0.0	1.000	112848		14.39(7.06-21.17)		18.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.809	2.810	-0.001	0.888	130067	0.0929	Target=2.72		2.7	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	44954		2.89(1.36-4.09)		3.9	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.908	0.010	1.004	6373	0.0311			38.0	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	256073	1.22		98.0	2106	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.168	-0.004	0.899	1267779	1.23		104	4171	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.168	-0.004	1.000	586160	0.4939	Target=3.32		30.5	M
399.00 > 99.00	3.164	3.168	-0.004	1.000	173635		3.38(1.66-4.98)		35.9	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.164	3.168	-0.004	1.000	747339	0.5783	Target=4.17		7.2	M
363.00 > 169.00	3.164	3.168	-0.004	1.000	188543		3.96(2.09-6.26)		95.9	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.168	-0.004	0.899	1441234	1.22		97.3	3297	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	40837	0.0394	Target=4.83		3.5	M
449.00 > 99.00	3.493	3.505	-0.012	0.912	11148		3.66(2.41-7.24)		3.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	330493	1.54		130	37.3	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.529	3.514	0.015	1.005	2562	0.003368			2.8	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1892275	1.27	Target=2.88		22.9	M
413.00 > 169.00	3.520	3.514	0.006	1.000	698887		2.71(1.44-4.32)		450	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	1743163	1.30		104	2671	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1724765	1.25			2605	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	2192812	2.62	Target=4.24		308	M
499.00 > 99.00	3.818	3.822	-0.004	0.997	557719		3.93(2.12-6.37)		300	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	857871	1.31		110	169	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	275452	0.1752	Target=8.34		8.0	M
463.00 > 169.00	3.853	3.845	0.008	1.003	33444		8.24(4.17-12.51)		48.2	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2004806	1.37		110	1849	
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.100	4.105	-0.005	1.071	793	0.001245	Target=2.17		0.5	RM
549.00 > 99.00	4.112	4.105	0.007	1.074	896		0.89(1.08-3.25)		1.0	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	337465	0.2071	Target=11.44		20.1	
513.00 > 169.00	4.136	4.129	0.007	1.000	33834		9.97(5.72-17.16)		65.7	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2038042	1.33		107	5127	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	362901	1.51		126	151	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	0.997	1929	0.002891			15.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.234	0.007	1.205	1366247	1.05		83.7	5280	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.234	-0.004	0.997	20278	0.0194			5.0	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.270	0.008	1.215	566500	1.55		124	702	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.270	0.008	1.000	7088	0.0172			17.2	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.363	4.366	-0.003	1.139	2023	0.004126	Target=2.37		2.5	RM
599.00 > 99.00	4.363	4.366	-0.003	1.139	2005		1.01(1.19-3.56)		4.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.246	1872339	1.30		104	5161	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.386	4.390	-0.004	1.000	42271	0.0274	Target=12.20		4.3	M
563.00 > 169.00	4.374	4.390	-0.016	0.997	3011		14.04(6.10-18.31)		9.0	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.250	605984	1.72		138	1147	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.401	0.009	1.003	13352	0.0275			18.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2005131	1.37		109	6483	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.000	9849	0.006032	Target=8.47		1.0	M
613.00 > 169.00	4.599	4.613	-0.014	0.998	1218		8.09(4.23-12.70)		8.4	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.982	0.007	1.417	1882893	1.29		103	5759	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.979	4.982	-0.003	0.998	403	0.002393	Target=0.87		4.5	RM
713.00 > 219.00	4.979	4.982	-0.003	0.998	280		1.44(0.43-1.30)		5.8	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

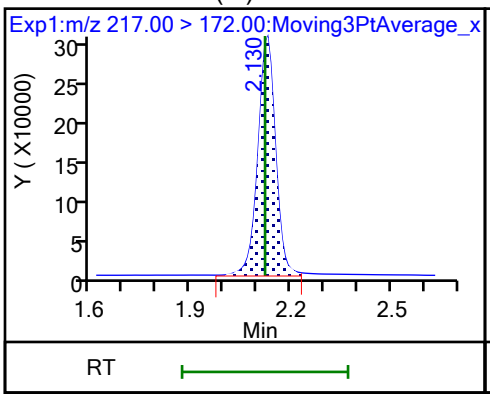
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:47 Chrom Revision: 2.3 18-Oct-2023 21:16:54

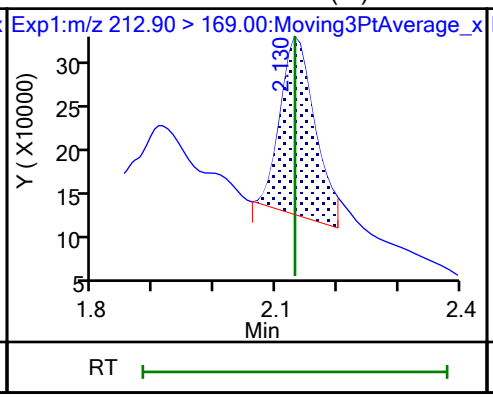
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d
Injection Date: 24-Oct-2023 08:49:20 Instrument ID: LC812
Lims ID: 460-290517-A-2-A Lab Sample ID: 200-290517-2
Client ID: 1000-101623-0003
Operator ID: LC812user ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

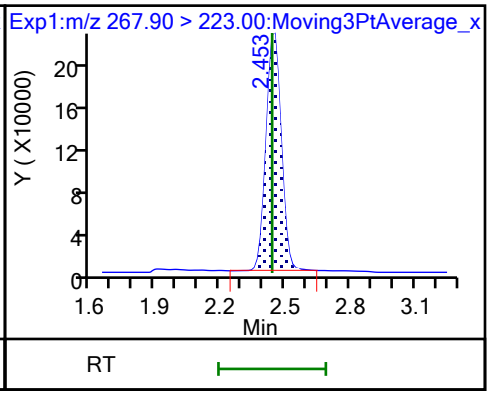
D 1 13C4 PFBA (M)



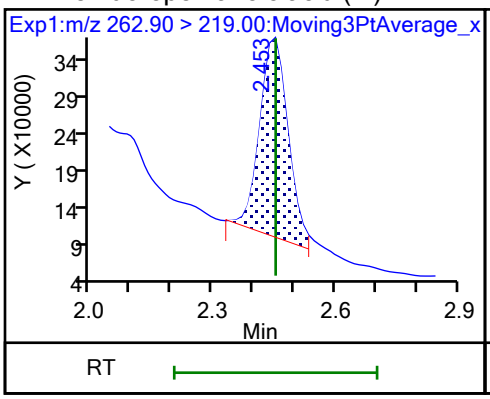
2 Perfluorobutanoic acid (M)



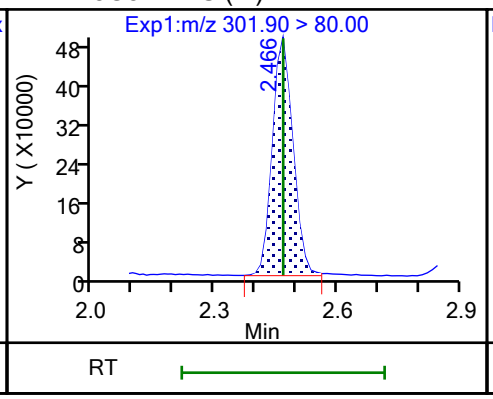
D 3 13C5 PFPeA



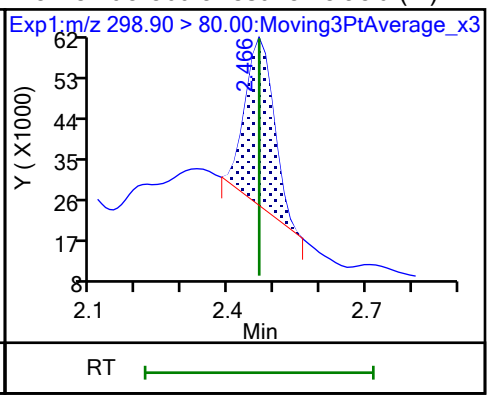
4 Perfluoropentanoic acid (M)



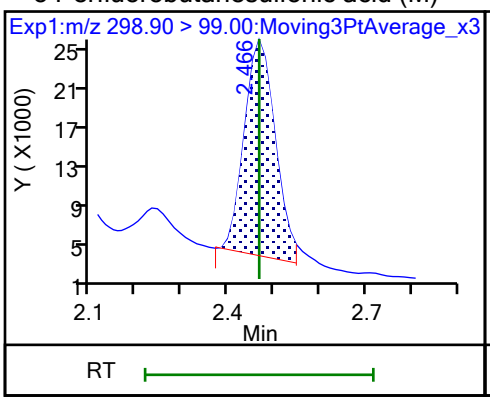
D 47 13C3 PFBS (M)



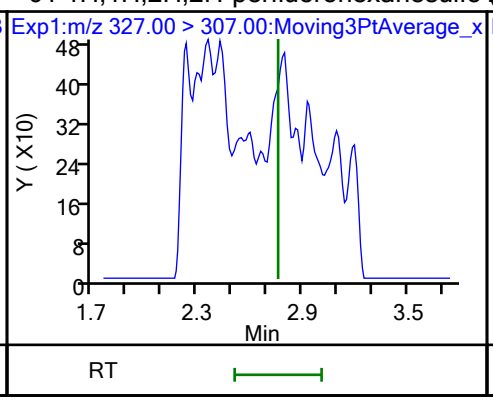
5 Perfluorobutanesulfonic acid (M)



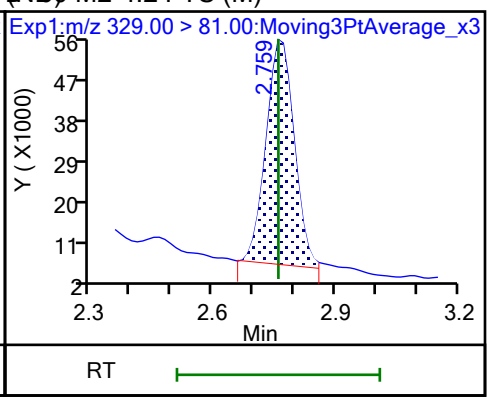
5 Perfluorobutanesulfonic acid (M)



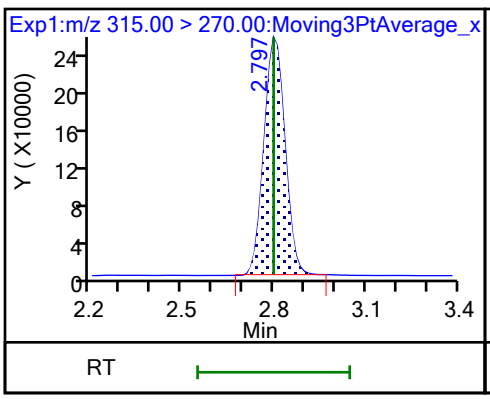
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



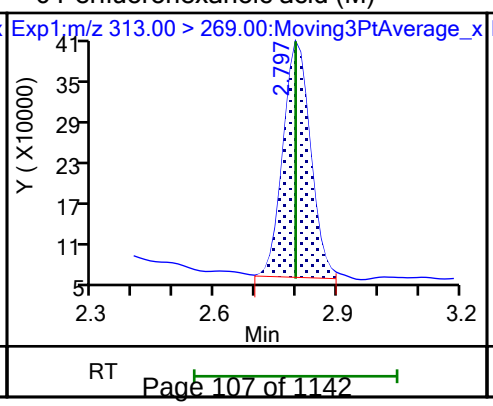
D 50 M2-4:2 FTS (M)



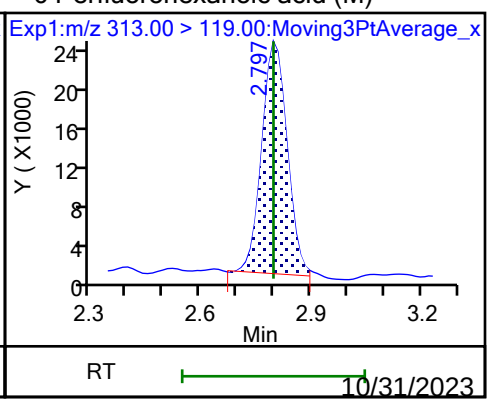
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

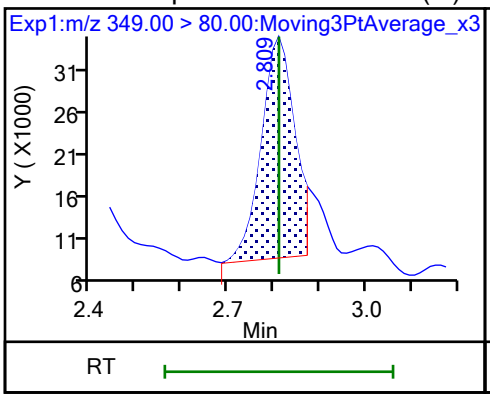


6 Perfluorohexanoic acid (M)

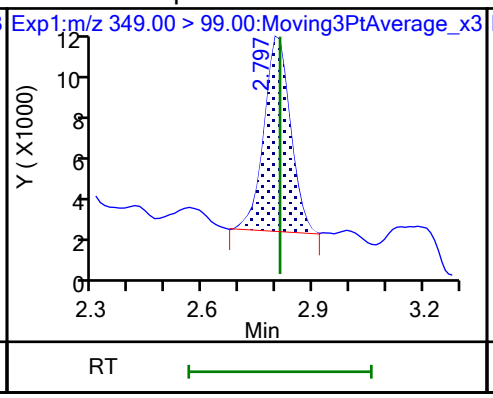


10/31/2023
10:17 AM

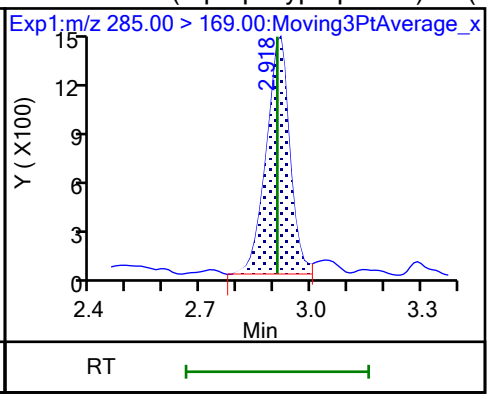
70 Perfluoropentanesulfonic acid (M)



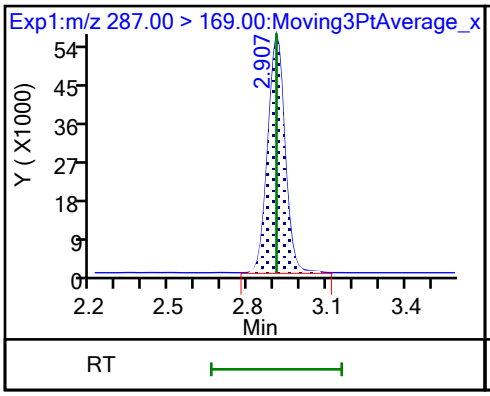
70 Perfluoropentanesulfonic acid



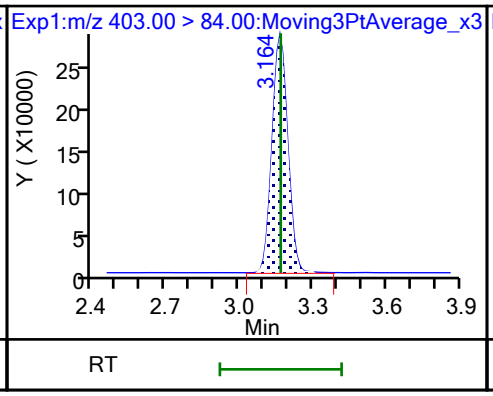
67 Perfluoro(2-propoxypropanoic) ac (M)



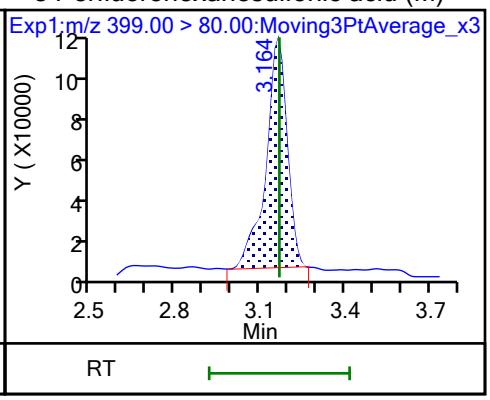
D 64 13C3 HFPO-DA



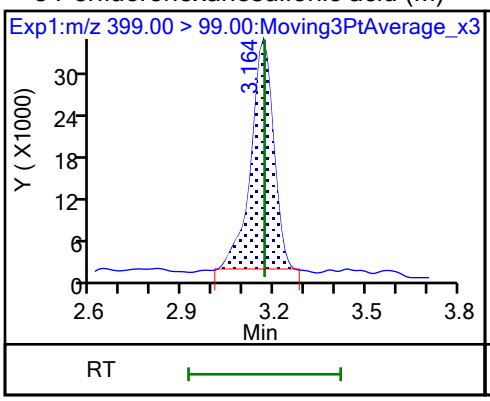
D 11 18O2 PFHxS



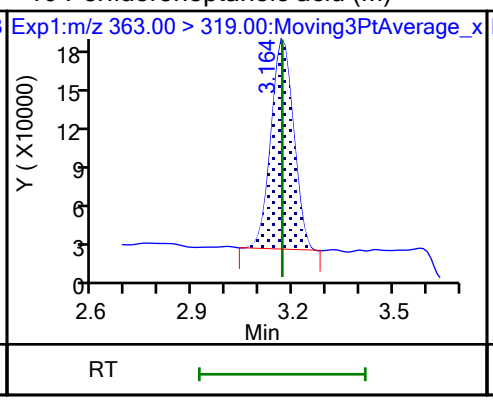
8 Perfluorohexanesulfonic acid (M)



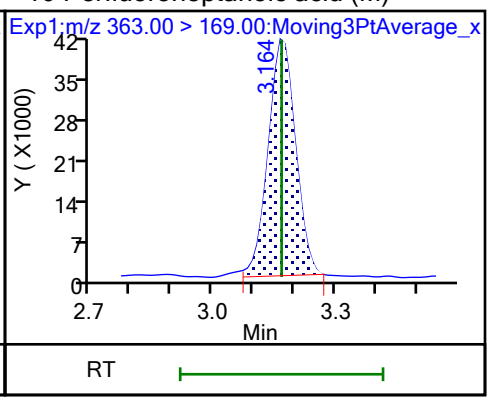
8 Perfluorohexanesulfonic acid (M)



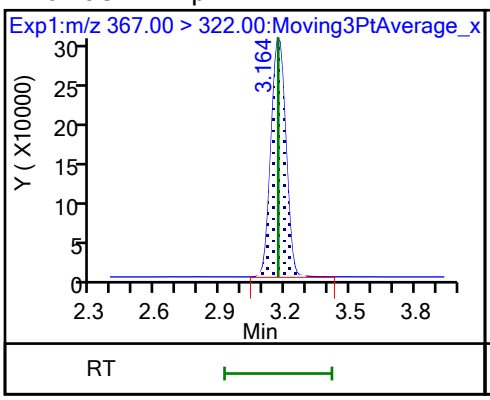
10 Perfluoroheptanoic acid (M)



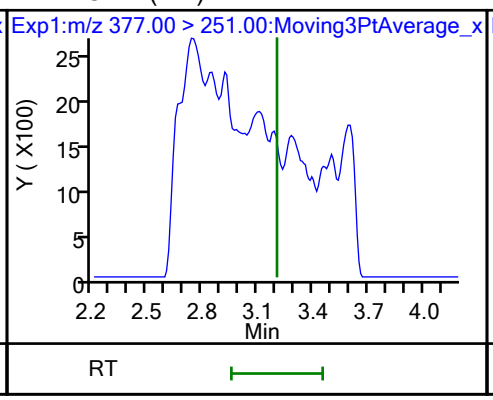
10 Perfluoroheptanoic acid (M)



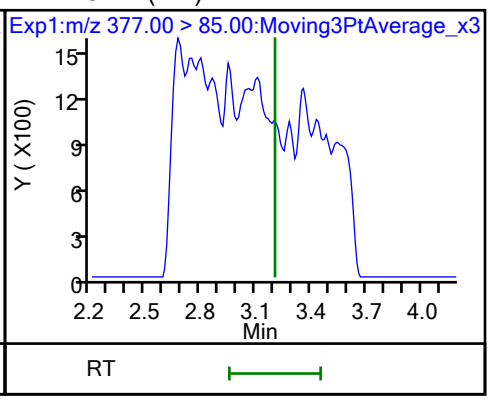
D 9 13C4 PFHpA



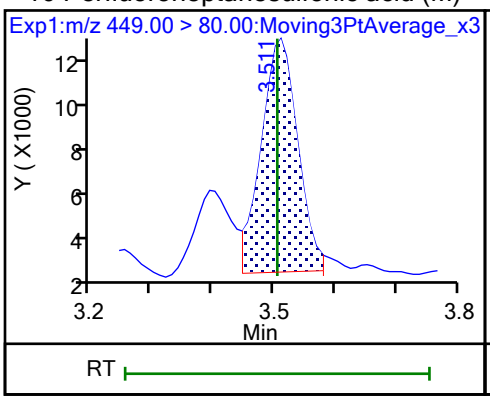
77 DONA (ND)



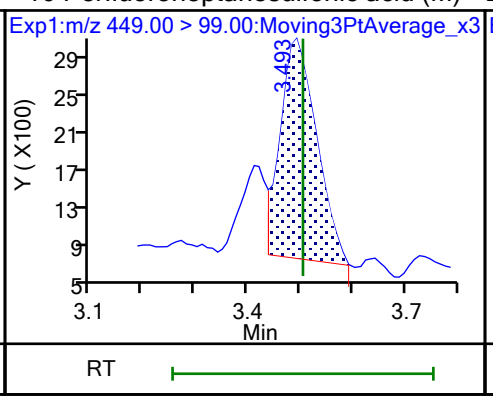
77 DONA (ND)



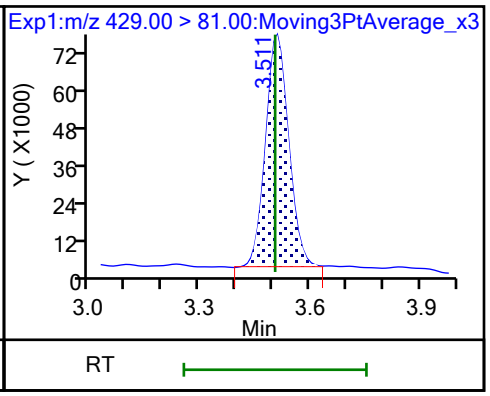
16 Perfluoroheptanesulfonic acid (M)



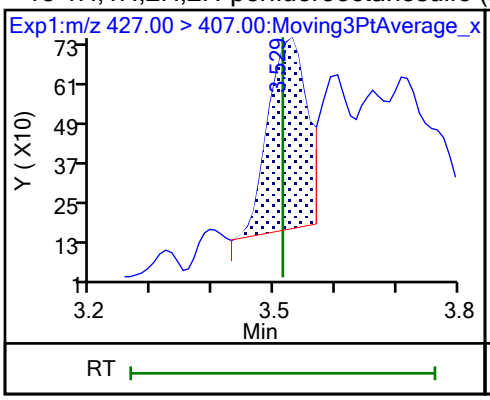
16 Perfluoroheptanesulfonic acid (M)



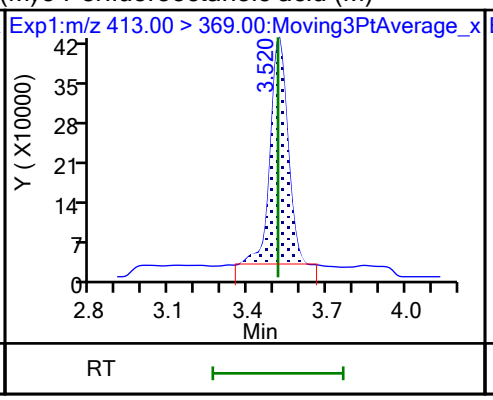
D 12 M2-6:2 FTS



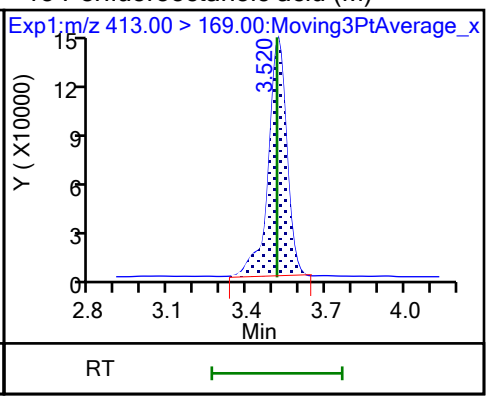
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



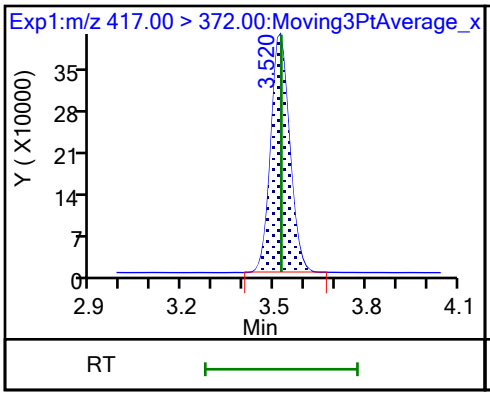
15 Perfluorooctanoic acid (M)



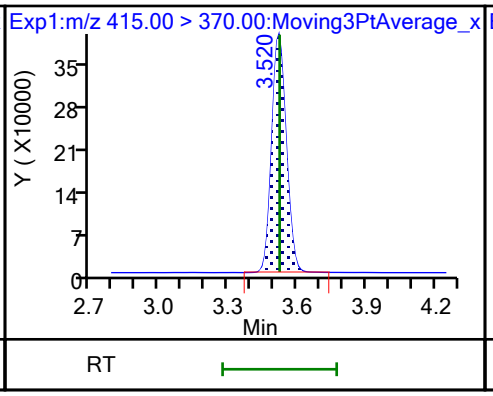
15 Perfluorooctanoic acid (M)



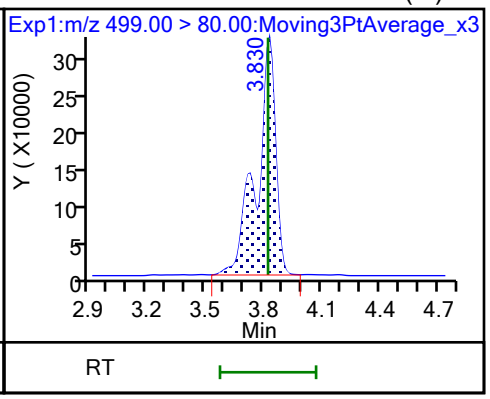
D 14 13C4 PFOA



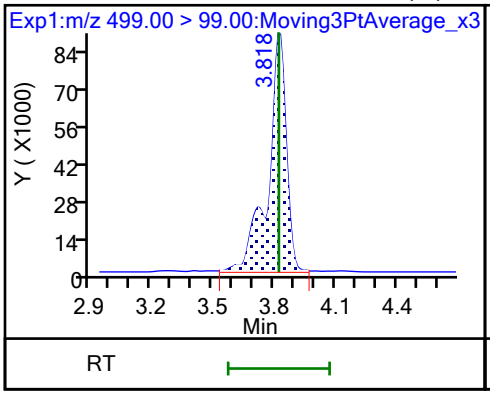
* 62 13C2 PFOA



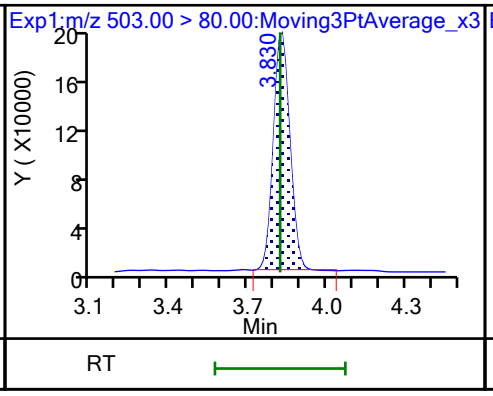
17 Perfluorooctanesulfonic acid (M)



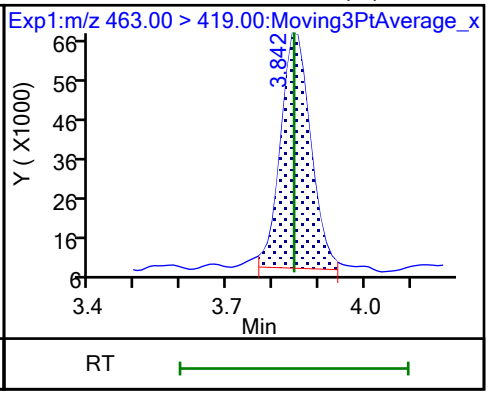
17 Perfluorooctanesulfonic acid (M)



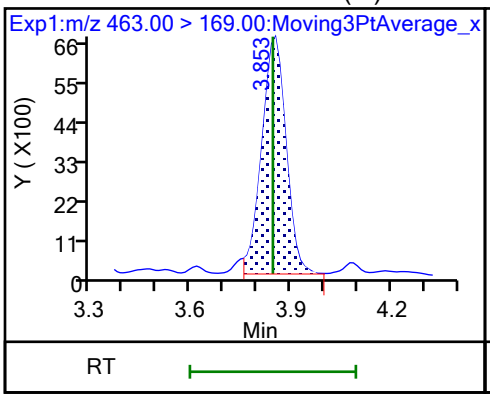
D 18 13C4 PFOS



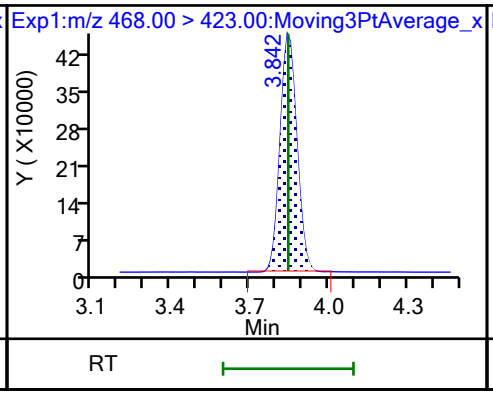
20 Perfluorononanoic acid (M)



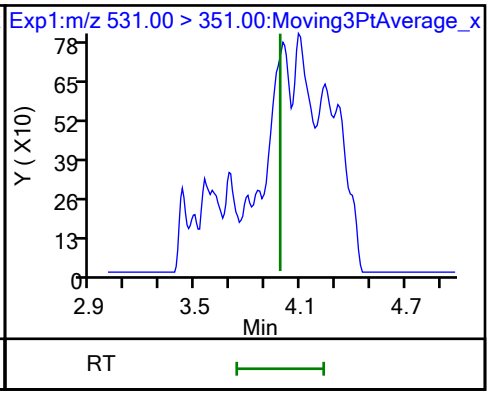
20 Perfluorononanoic acid (M)



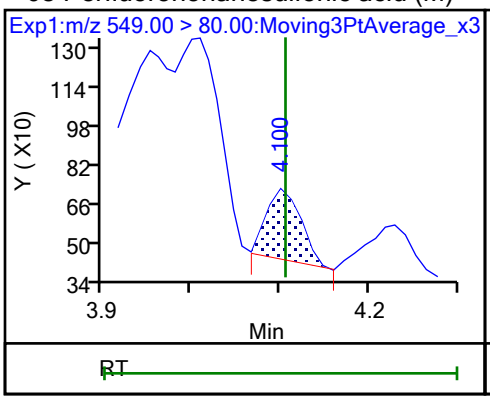
D 19 13C5 PFNA



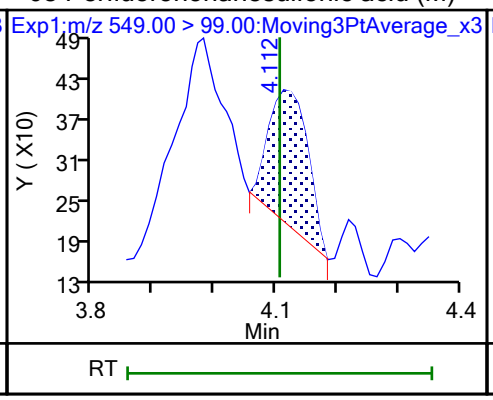
69 9-Chlorohexadecafluoro-3-oxanona (ND)



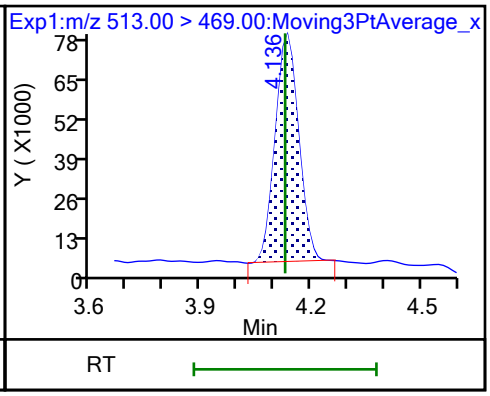
68 Perfluorononanesulfonic acid (M)



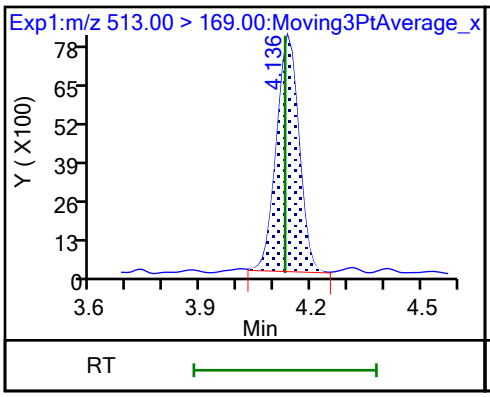
68 Perfluorononanesulfonic acid (M)



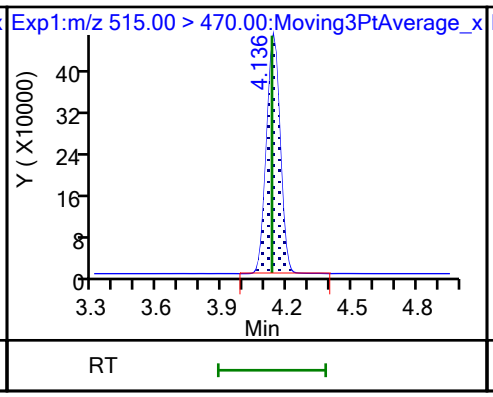
24 Perfluorodecanoic acid



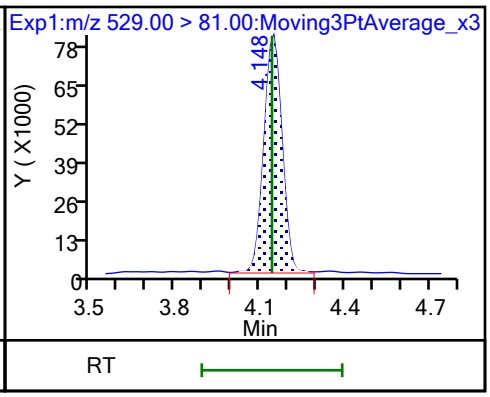
24 Perfluorodecanoic acid



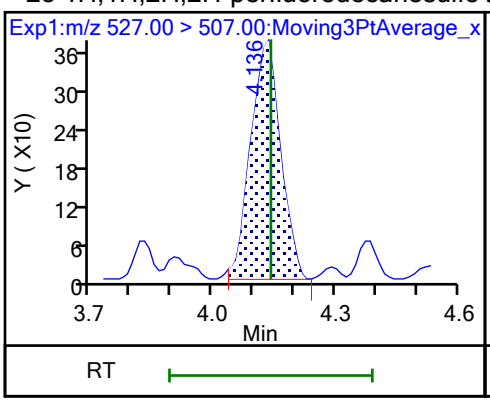
D 23 13C2 PFDA



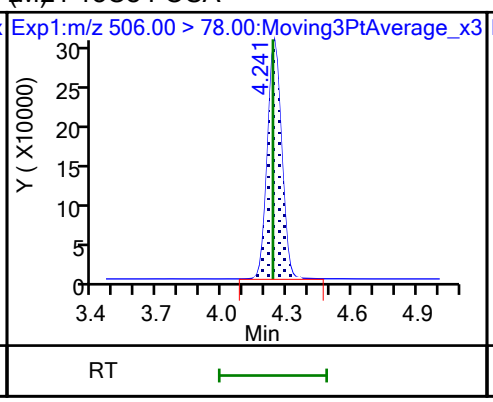
D 26 M2-8:2 FTS



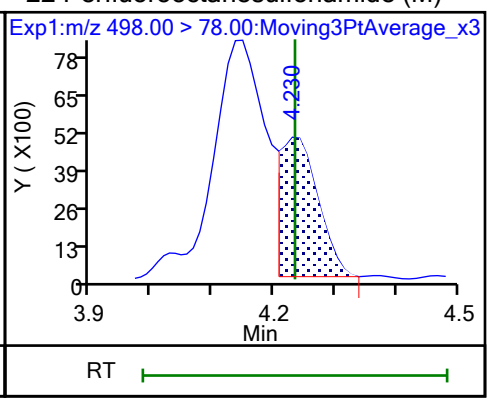
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



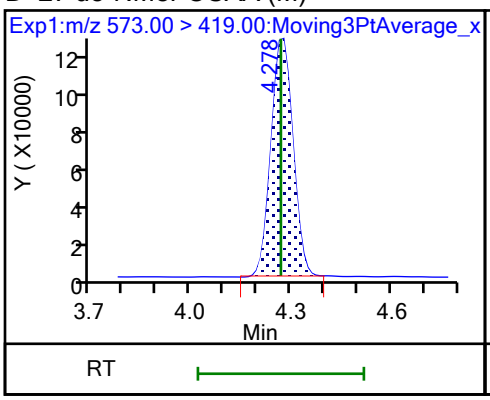
D 21 13C8 FOSA



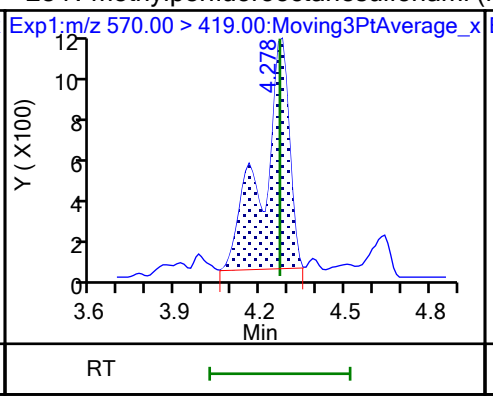
22 Perfluorooctanesulfonamide (M)



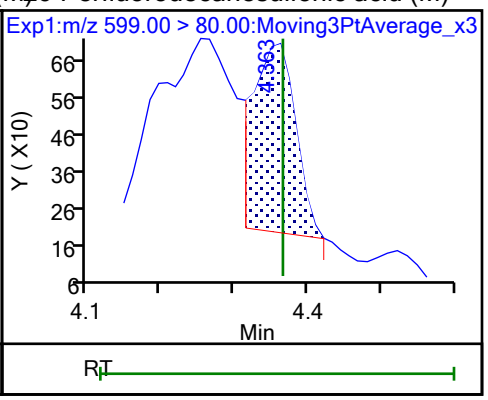
D 27 d3-NMeFOSAA (M)



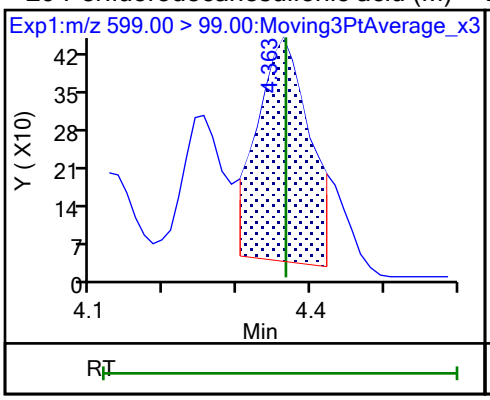
28 N-methylperfluorooctanesulfonami (M)



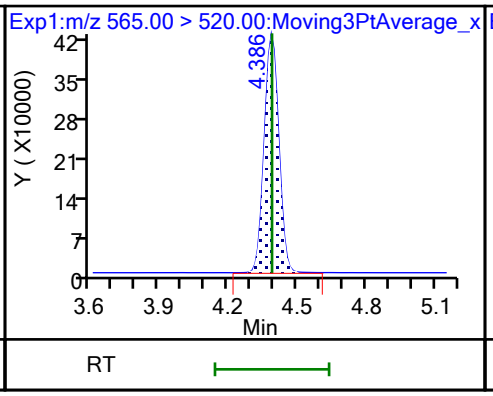
29 Perfluorodecanesulfonic acid (M)



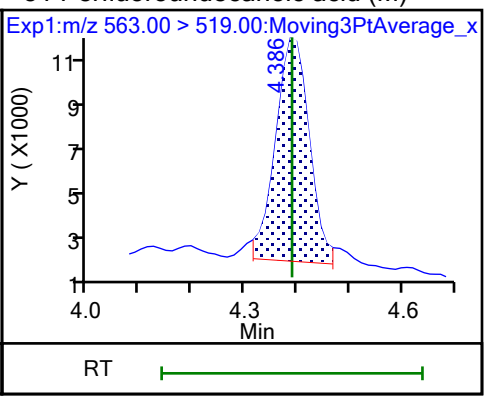
29 Perfluorodecanesulfonic acid (M)



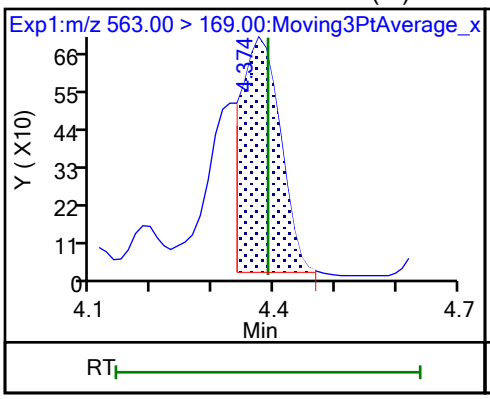
D 30 13C2 PFUnA



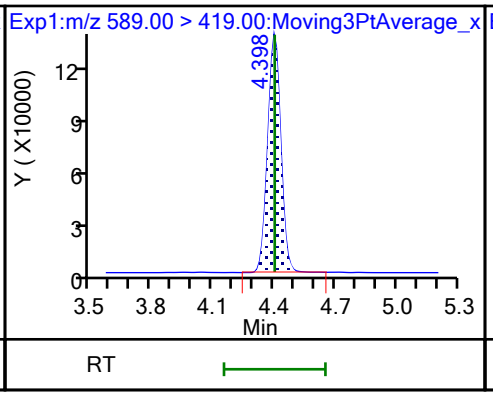
31 Perfluoroundecanoic acid (M)



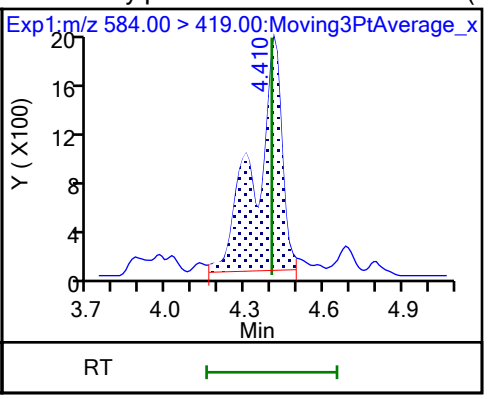
31 Perfluoroundecanoic acid (M)



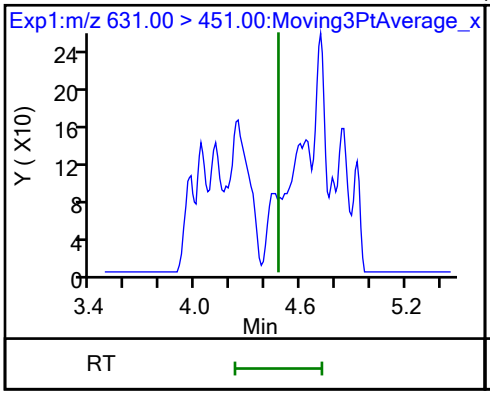
D 32 d5-NEtFOSAA



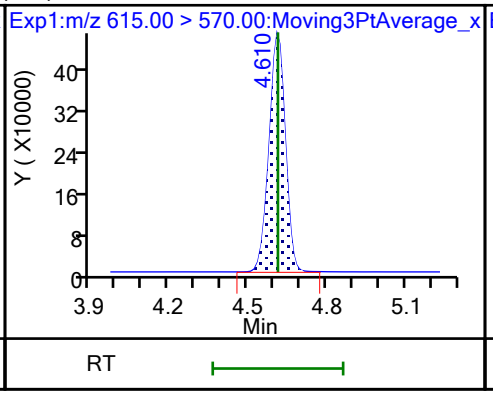
33 N-ethylperfluorooctanesulfonamid (M)



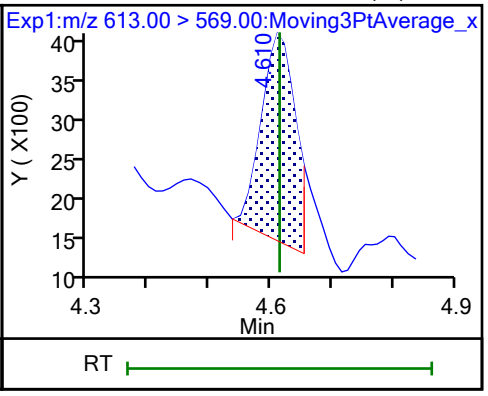
66 11-Chloroeicosafluoro-3-oxaundec (ND)



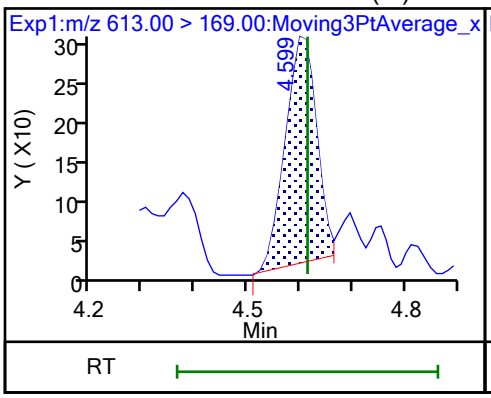
36 13C2 PFDoA



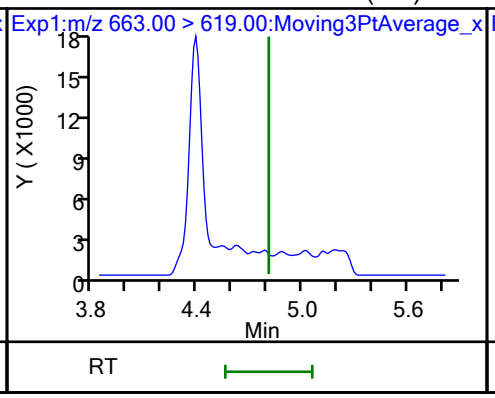
37 Perfluorododecanoic acid (M)



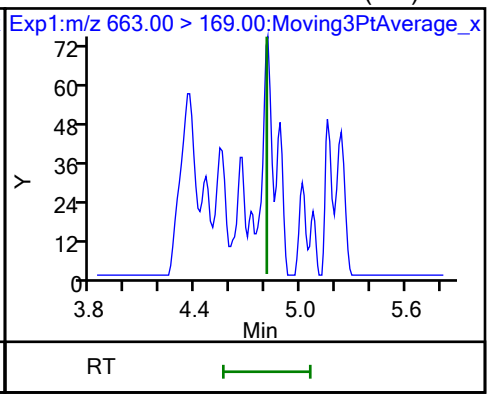
37 Perfluorododecanoic acid (M)



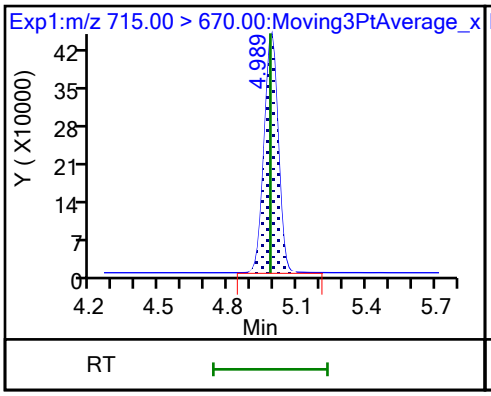
41 Perfluorotridecanoic acid (ND)



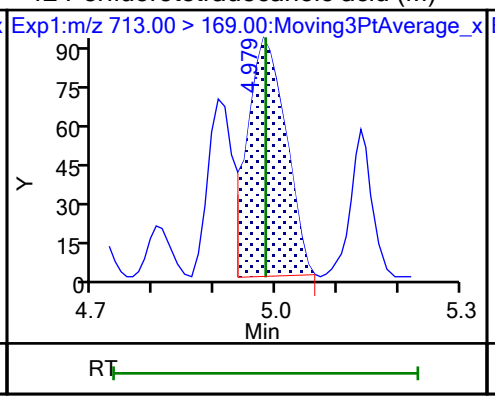
41 Perfluorotridecanoic acid (ND)



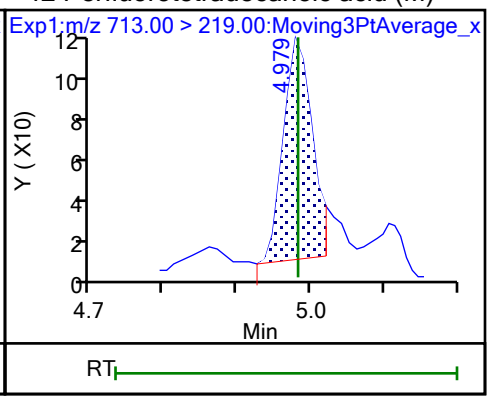
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

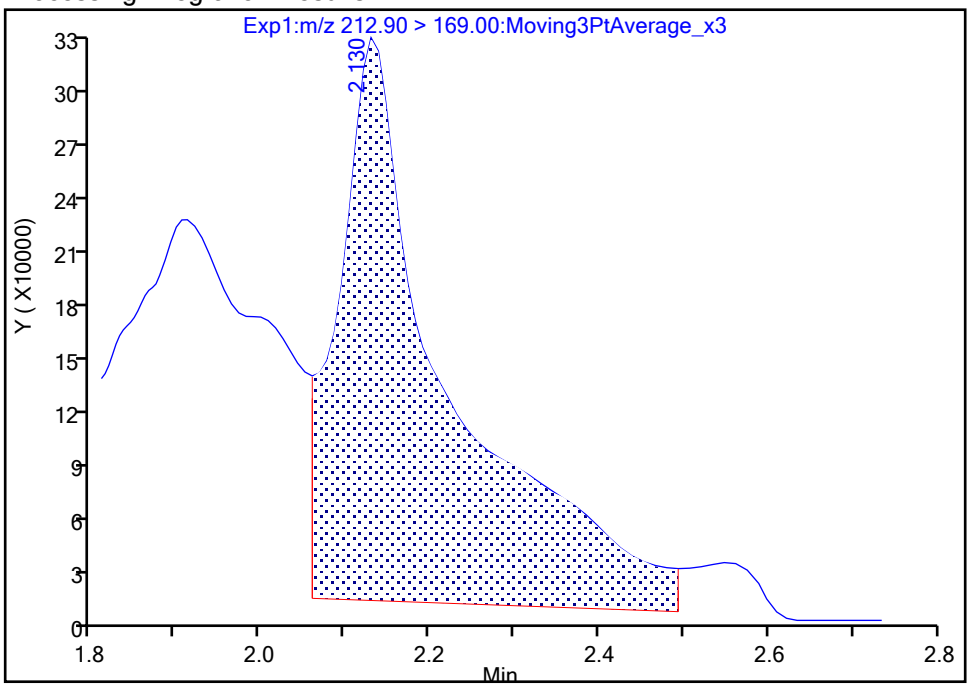
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

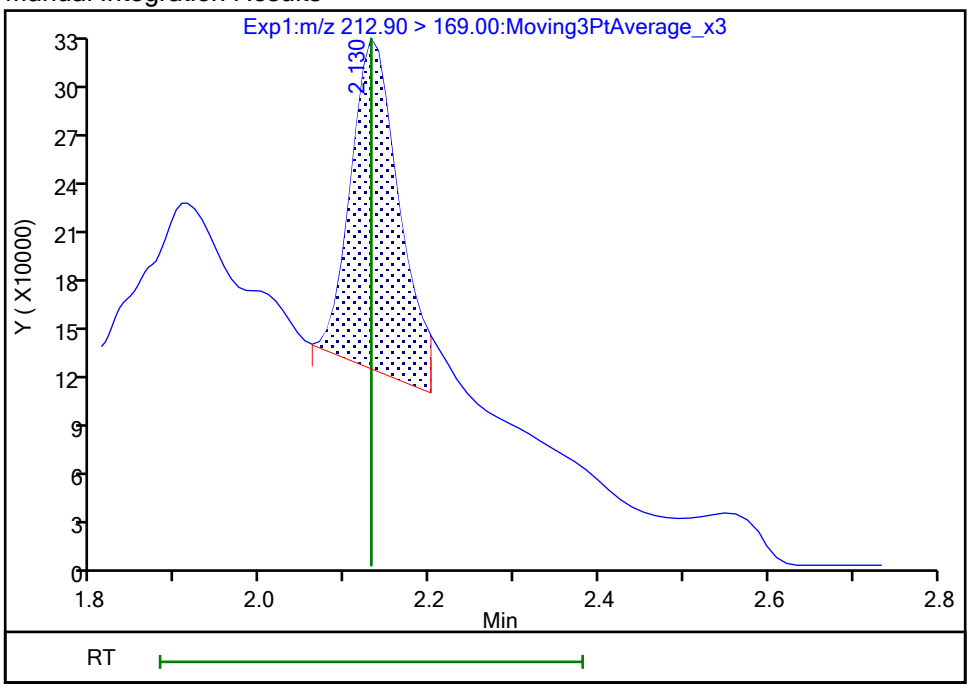
Processing Integration Results

RT: 2.13
Area: 2841341
Amount: 3.458609
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 797929
Amount: 0.941873
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

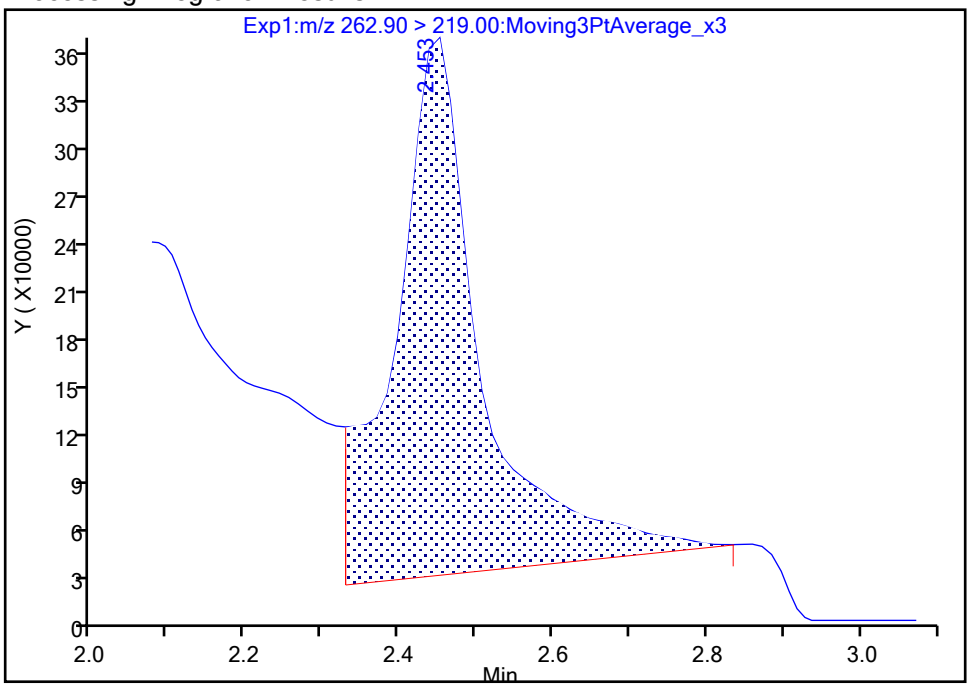
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

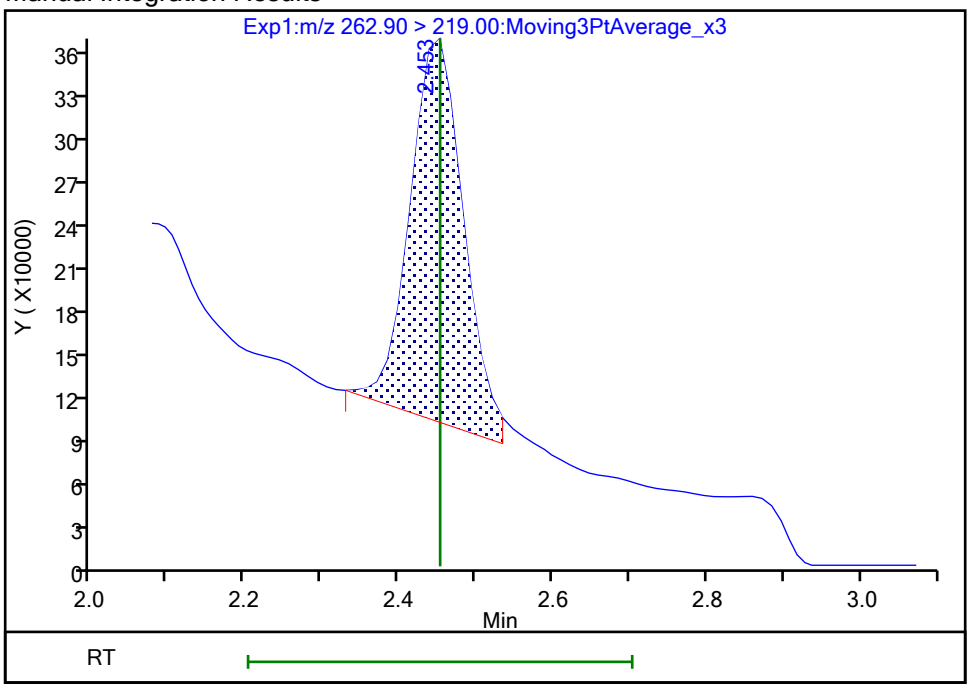
Processing Integration Results

RT: 2.45
Area: 2654690
Amount: 2.773474
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1292629
Amount: 1.350467
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

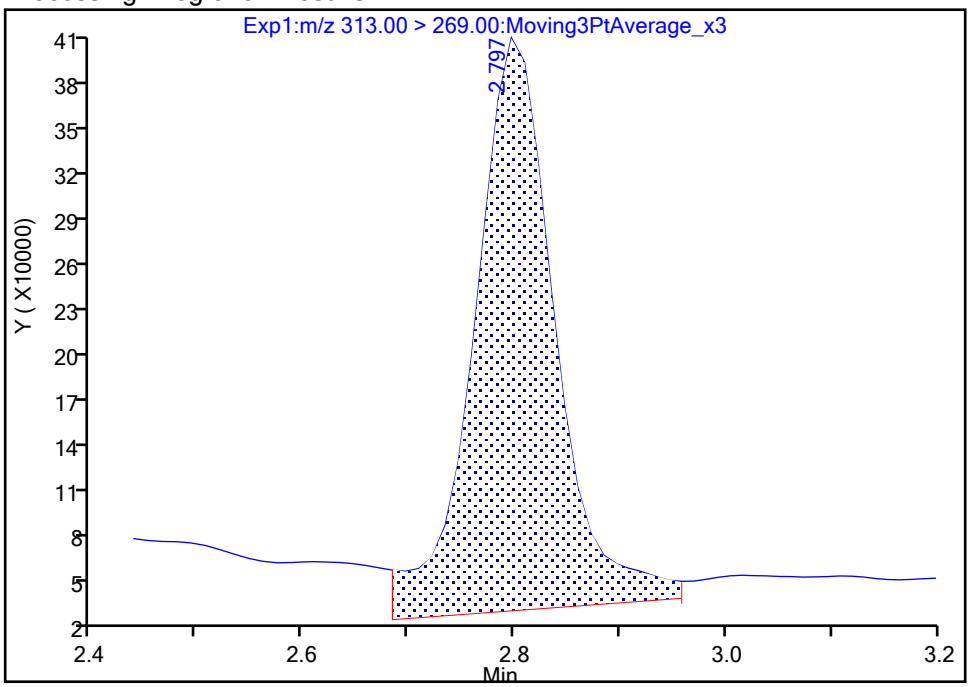
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

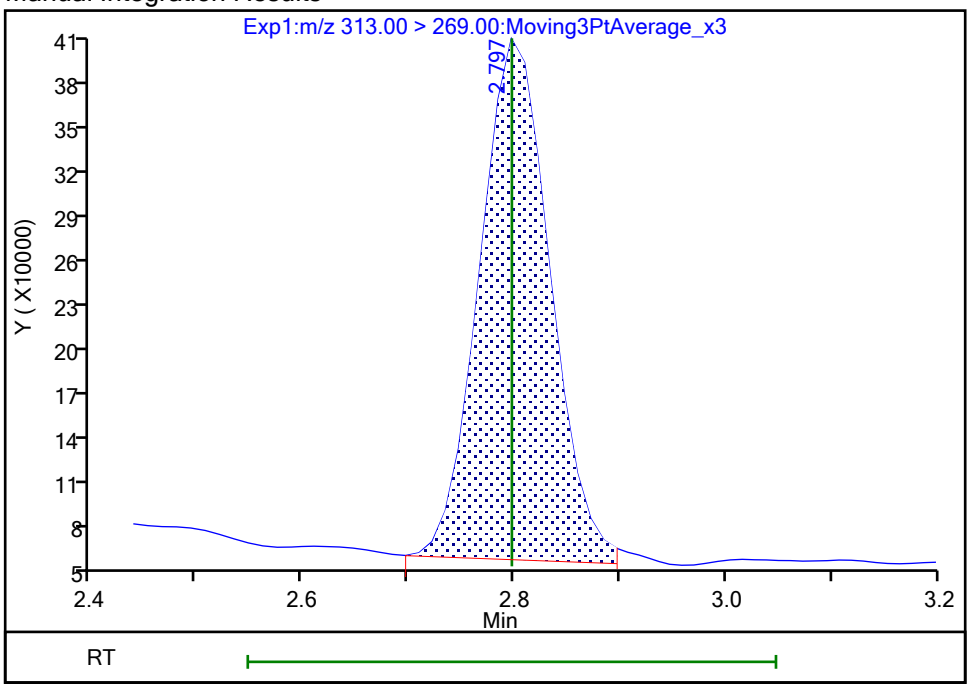
Processing Integration Results

RT: 2.80
Area: 1990849
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1623959
Amount: 1.508781
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:10:31 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

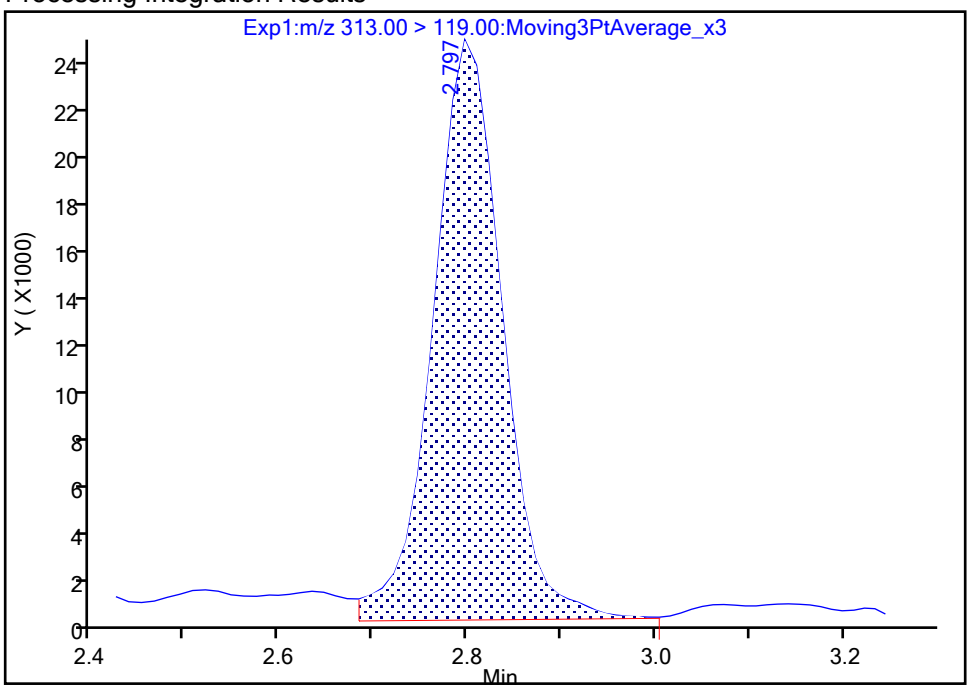
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

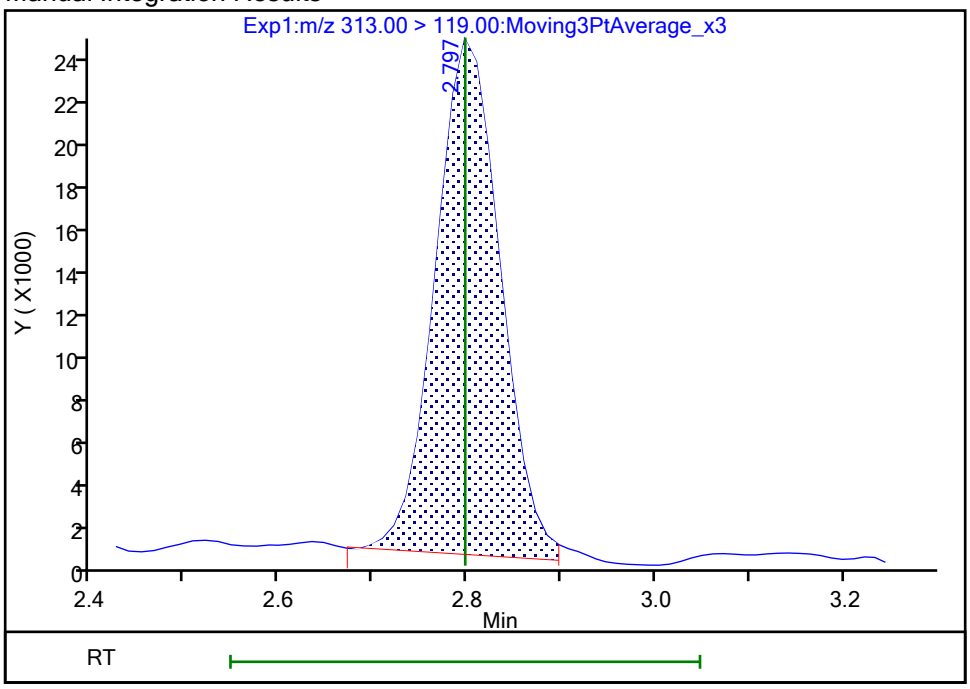
Processing Integration Results

RT: 2.80
Area: 122908
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 112848
Amount: 1.508781
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:10:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

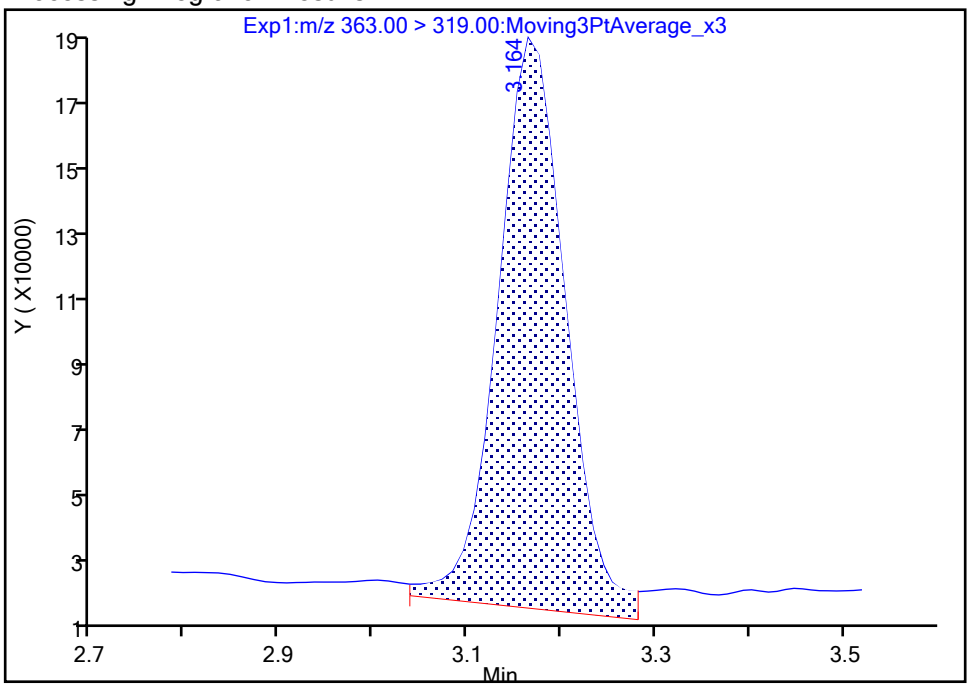
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

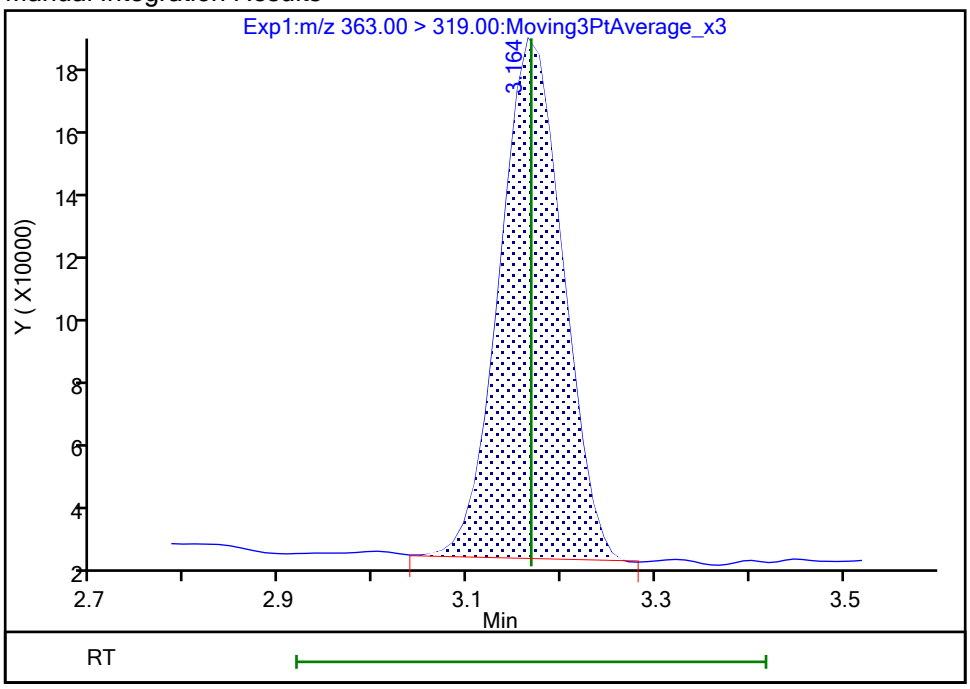
Processing Integration Results

RT: 3.16
Area: 833103
Amount: 0.644634
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 747339
Amount: 0.578272
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

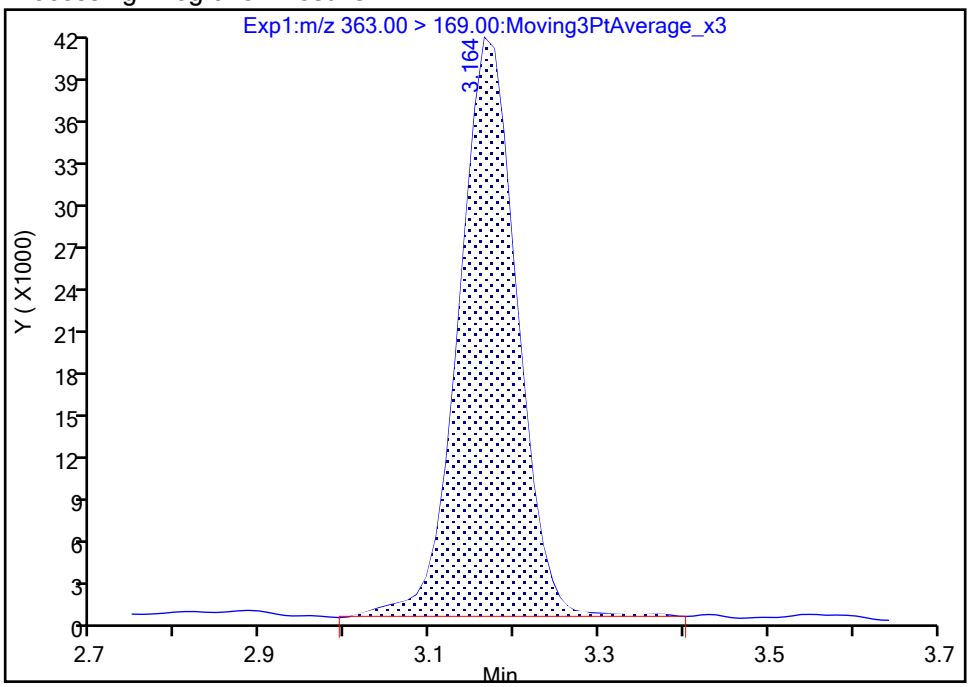
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

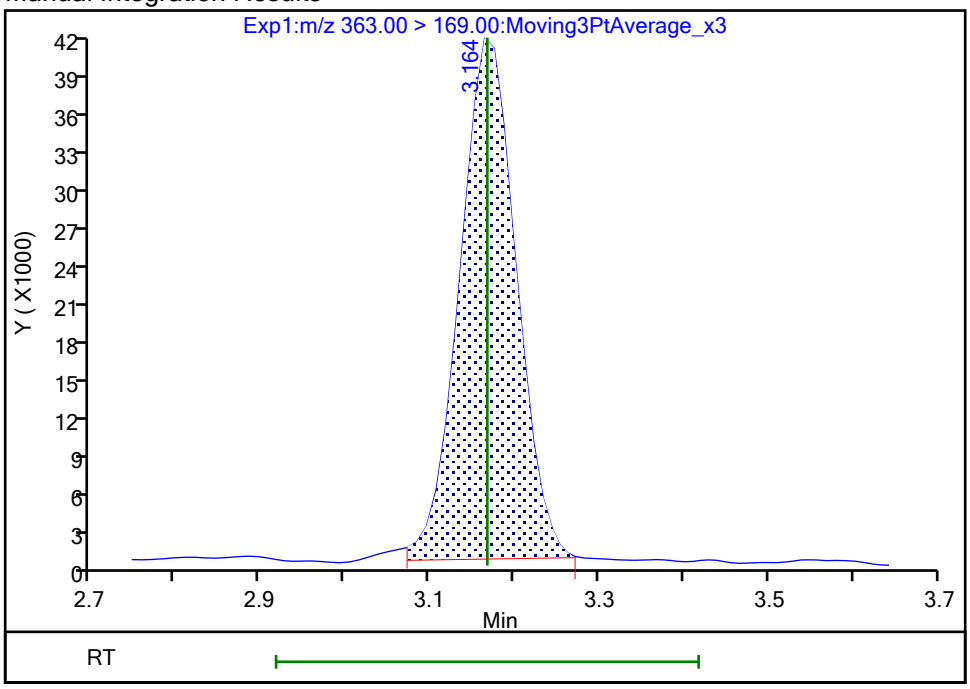
Processing Integration Results

RT: 3.16
Area: 195932
Amount: 0.644634
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 188543
Amount: 0.578272
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

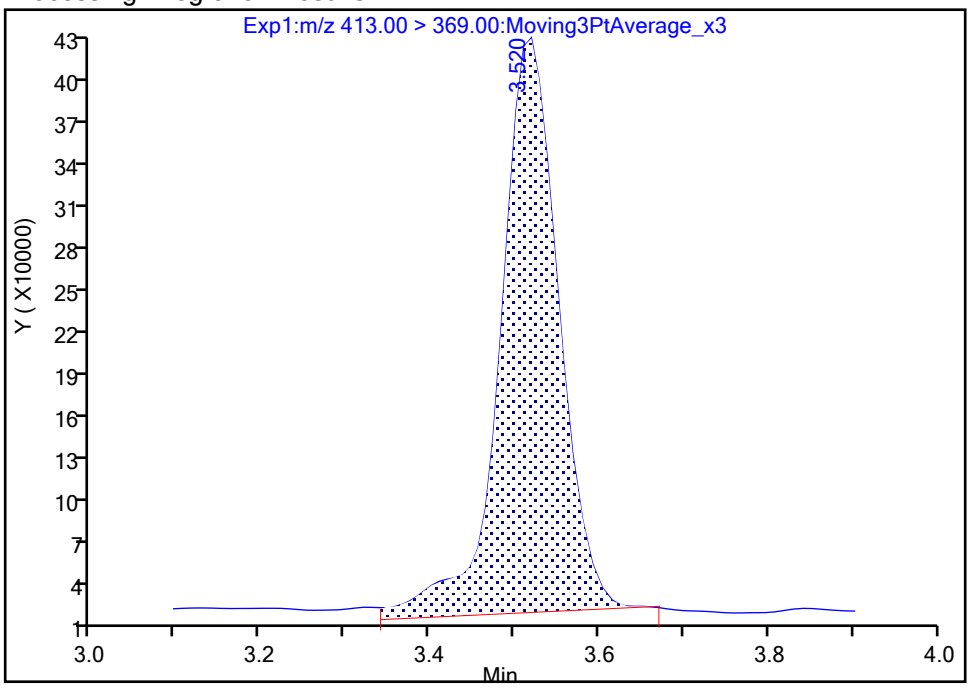
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

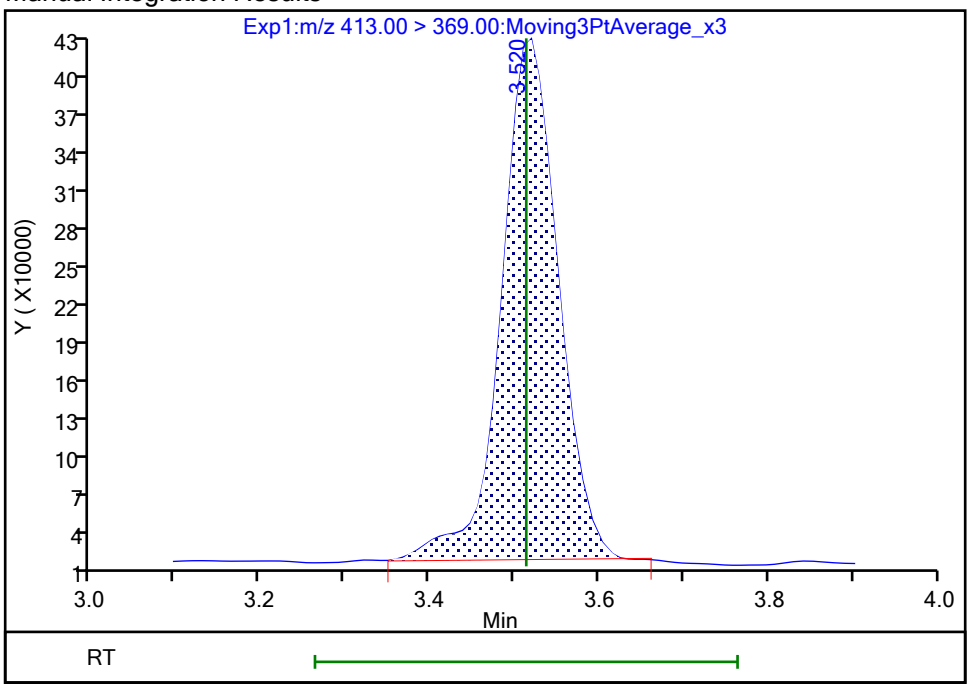
Processing Integration Results

RT: 3.52
Area: 1986755
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1892275
Amount: 1.273942
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

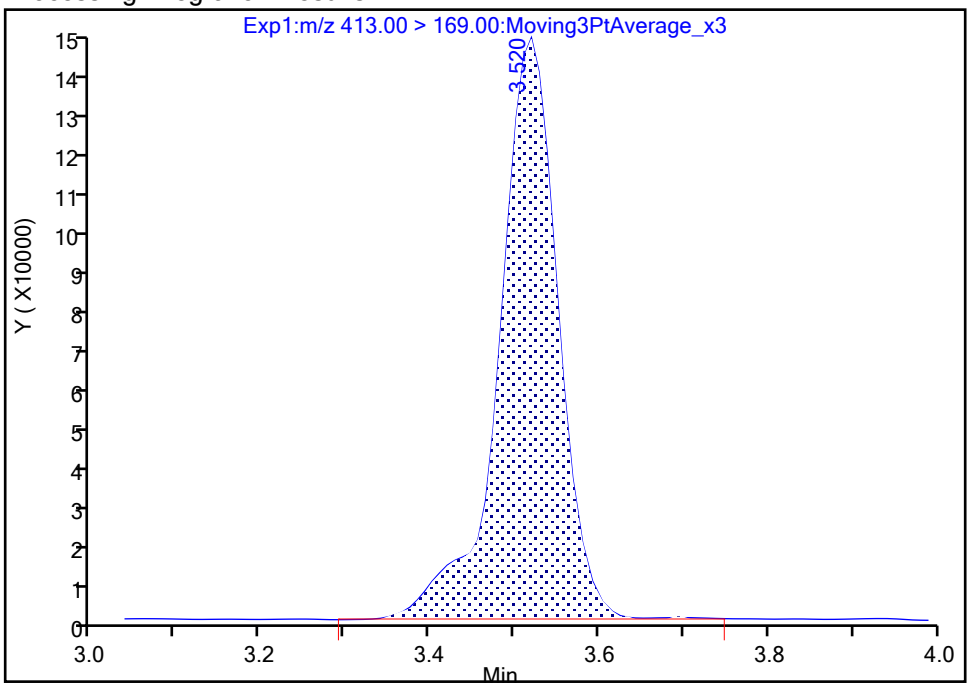
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

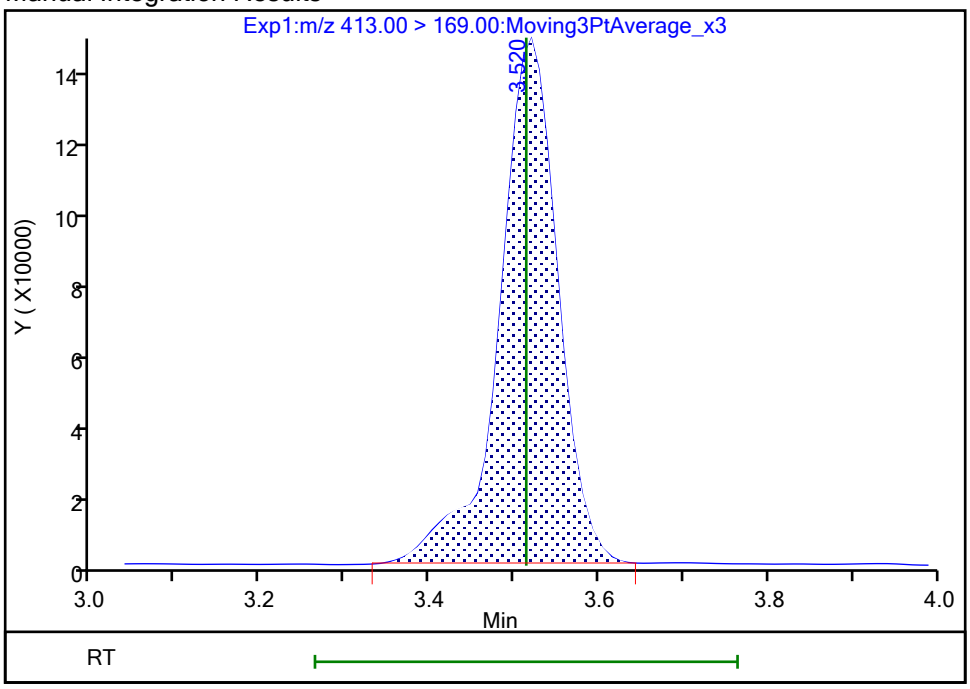
Processing Integration Results

RT: 3.52
Area: 703656
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 698887
Amount: 1.273942
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

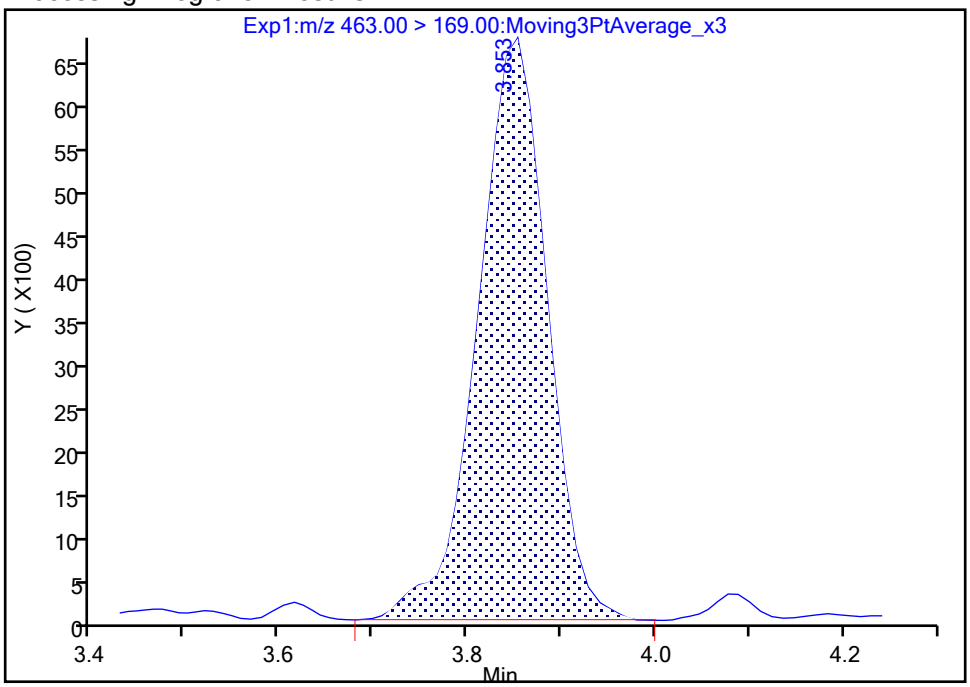
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

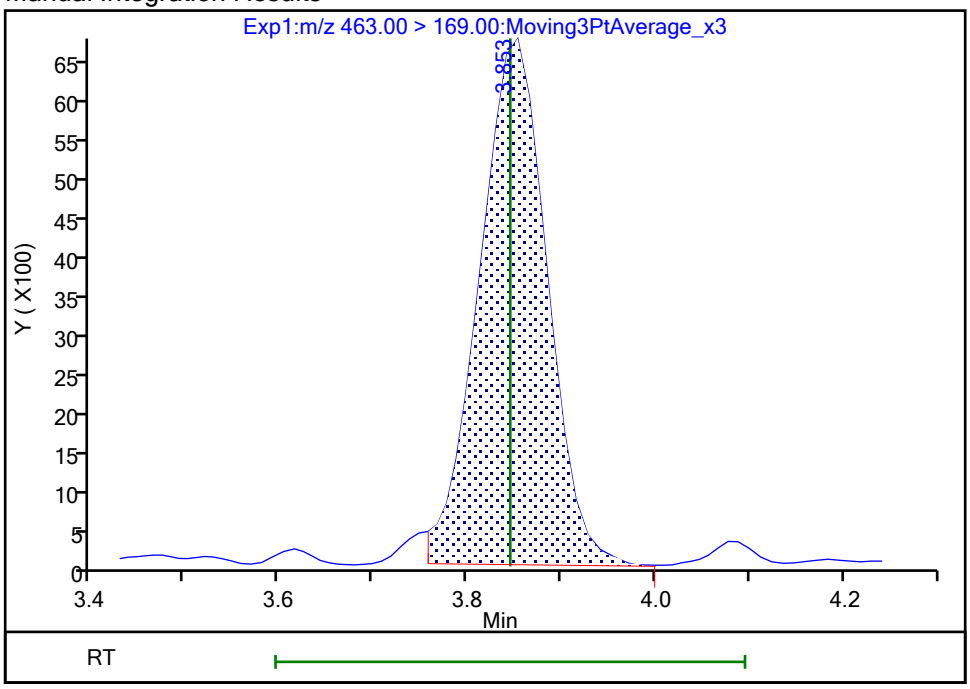
Processing Integration Results

RT: 3.85
Area: 34246
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 33444
Amount: 0.175241
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

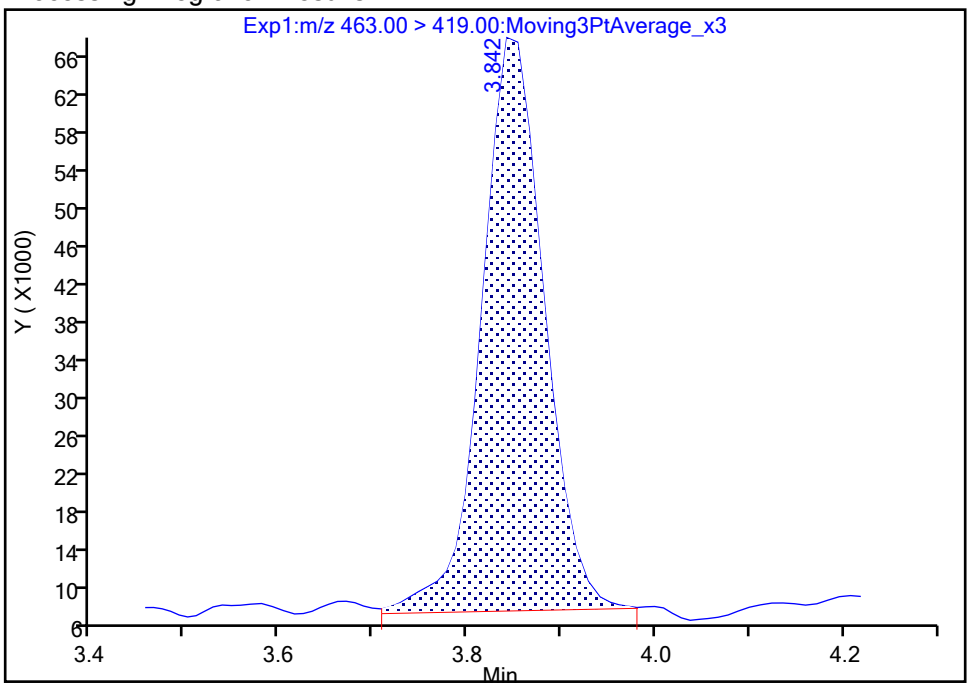
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

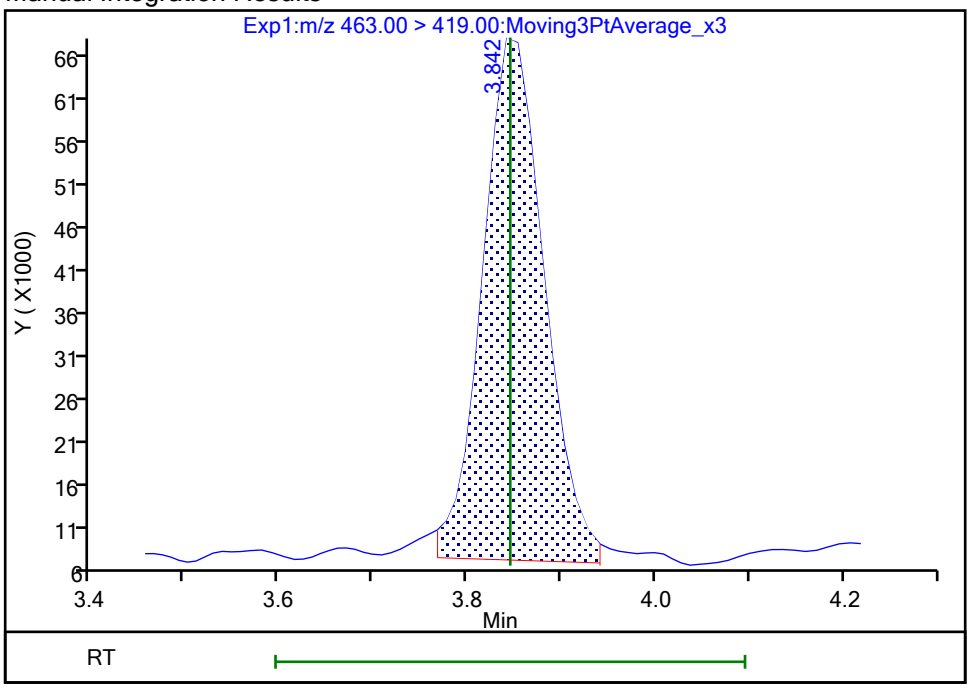
Processing Integration Results

RT: 3.84
Area: 278021
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 275452
Amount: 0.175241
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

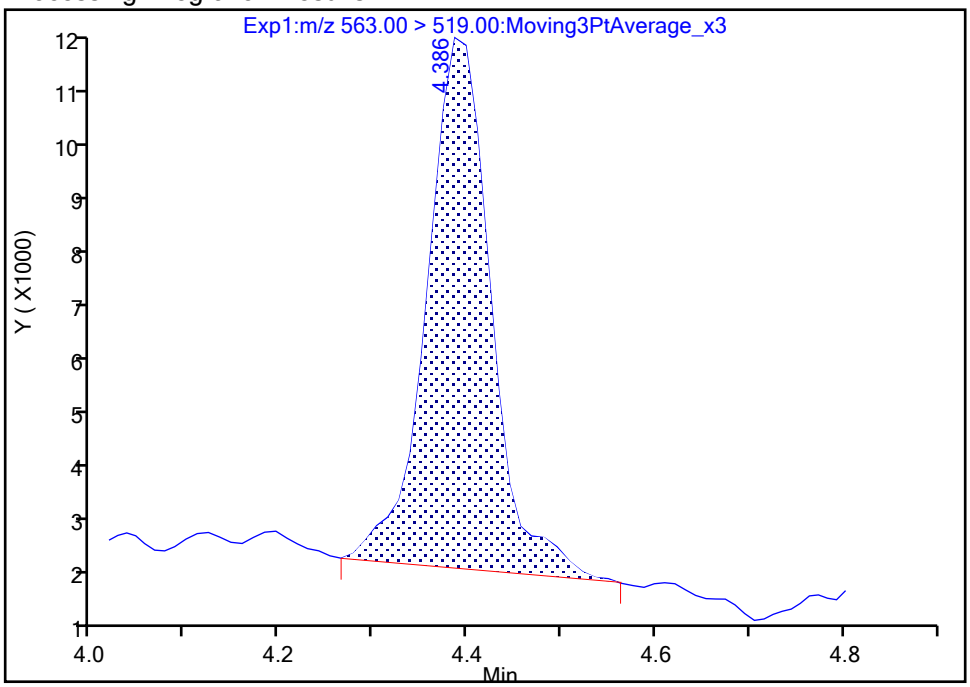
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

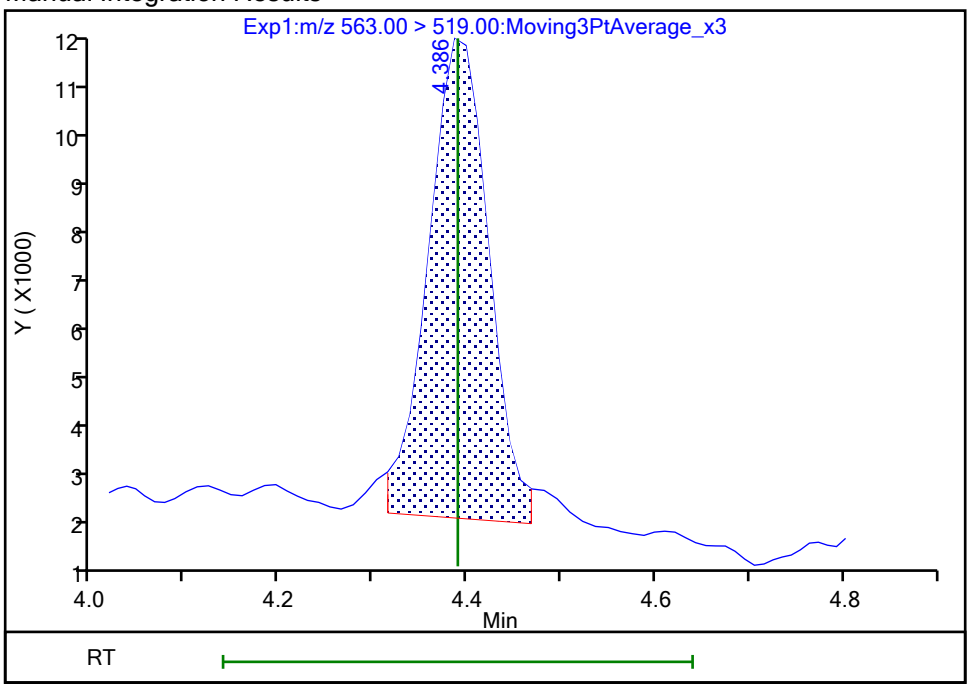
Processing Integration Results

RT: 4.39
Area: 45105
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 42271
Amount: 0.027382
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

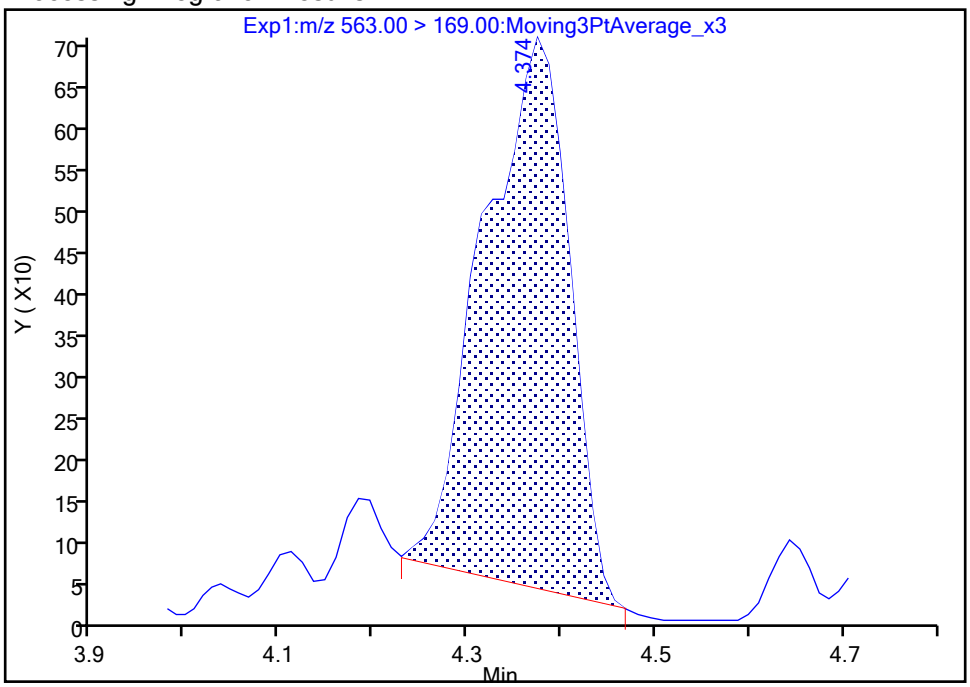
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

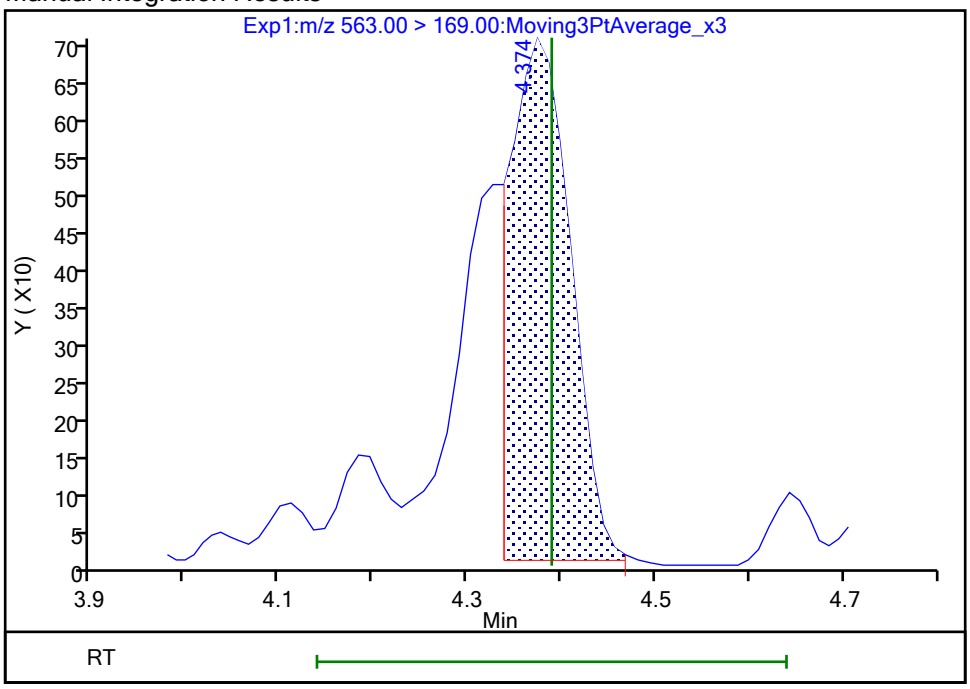
Processing Integration Results

RT: 4.37
Area: 4202
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 3011
Amount: 0.027382
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:11:20 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

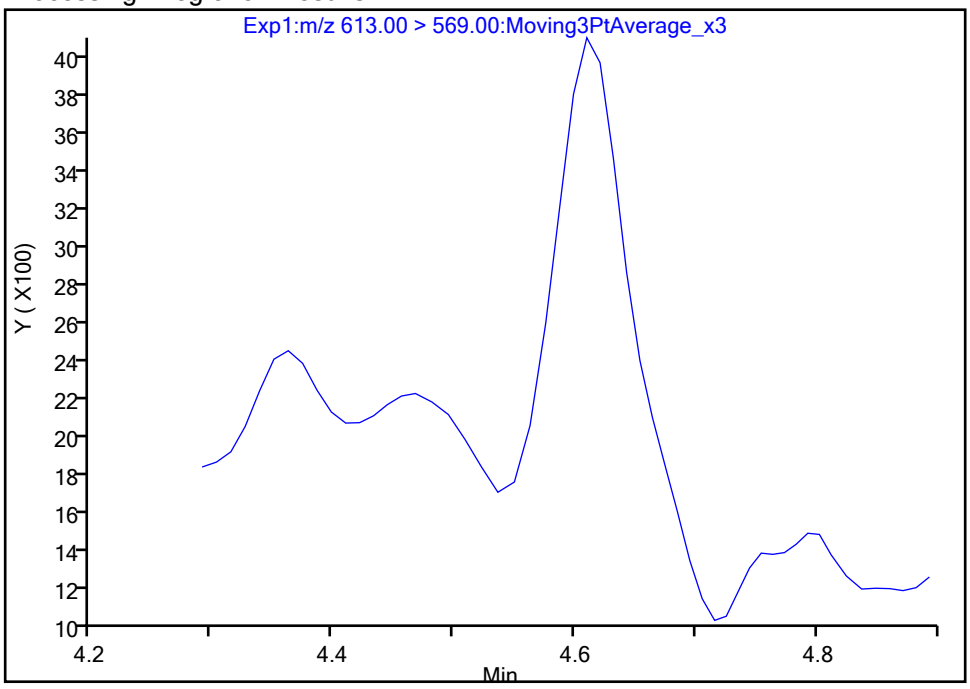
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

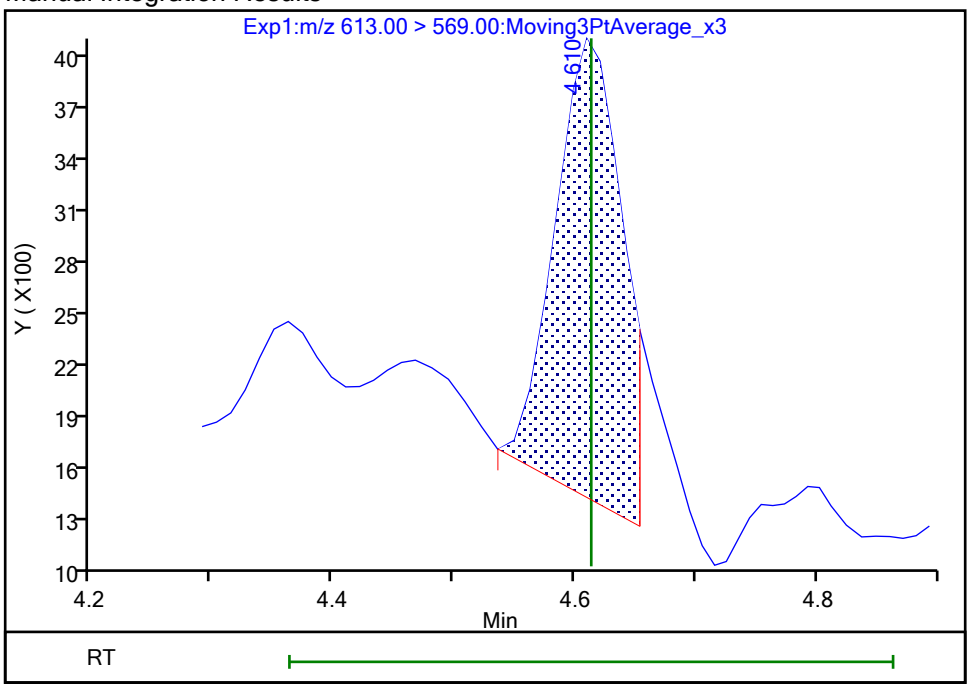
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 9849
Amount: 0.006032
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

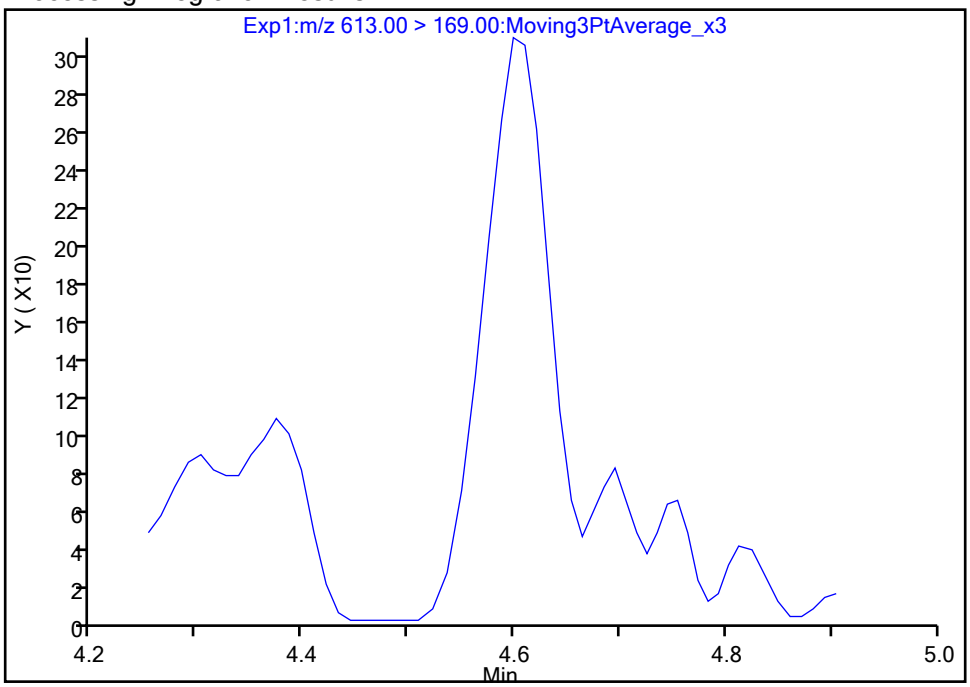
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

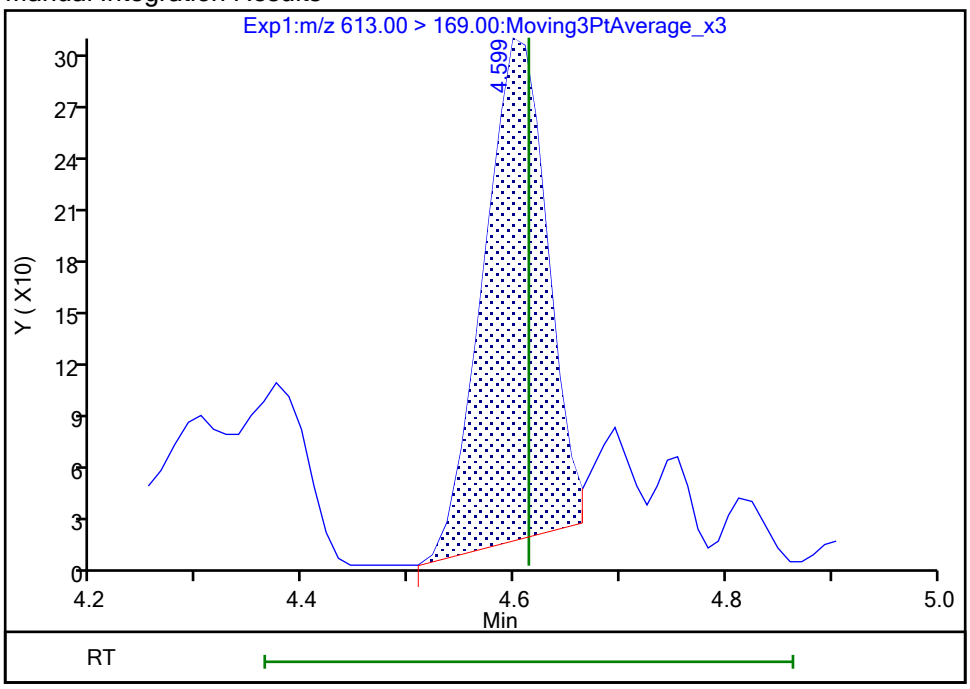
Processing Integration Results

Not Detected
Expected RT: 4.61



Manual Integration Results

RT: 4.60
Area: 1218
Amount: 0.006032
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

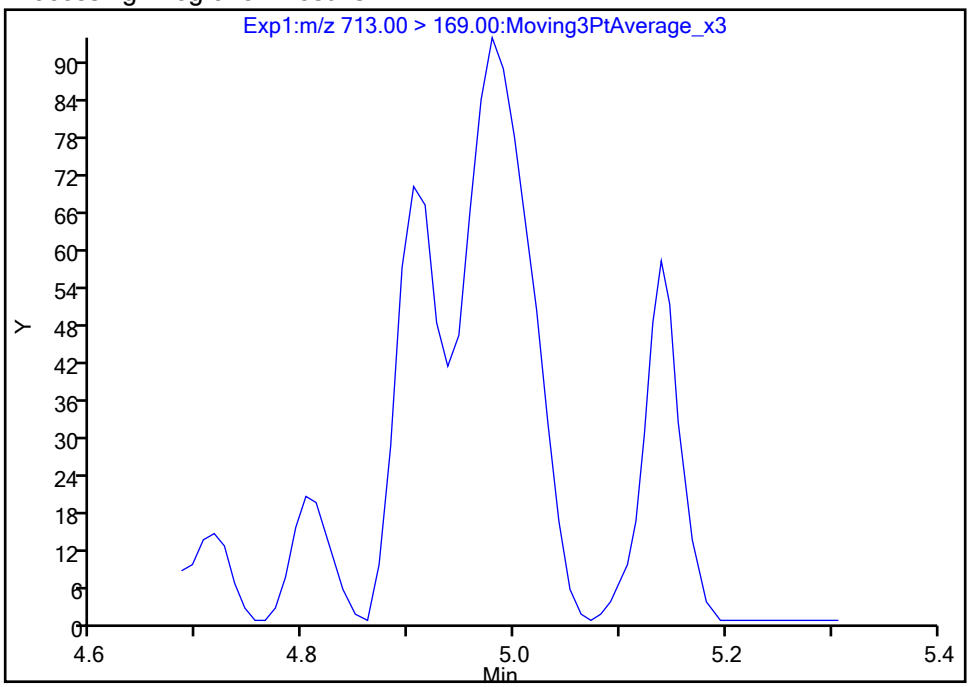
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

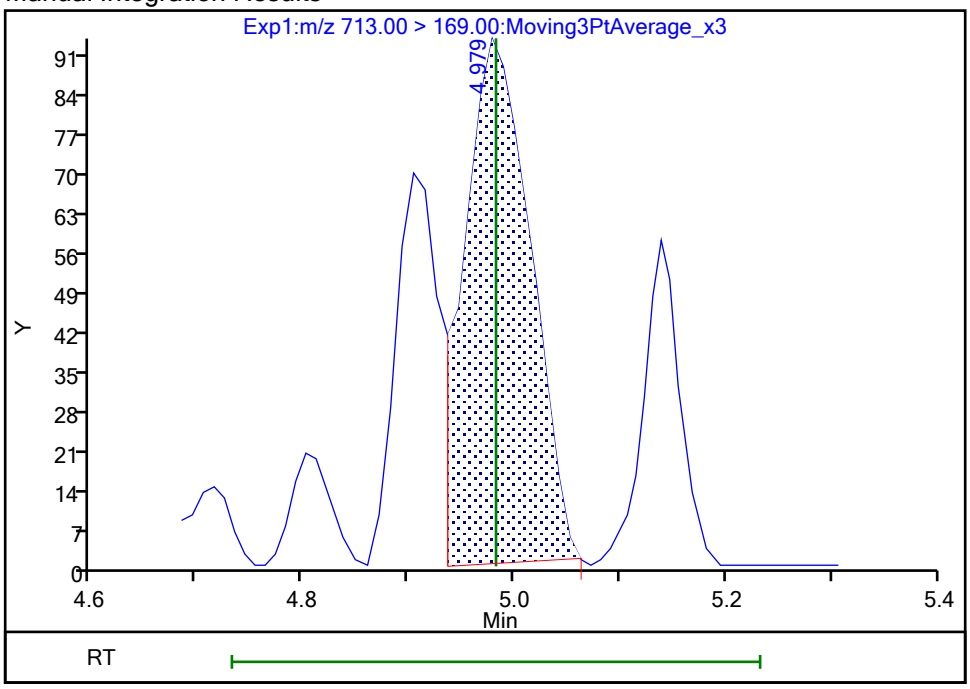
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 403
Amount: 0.002393
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

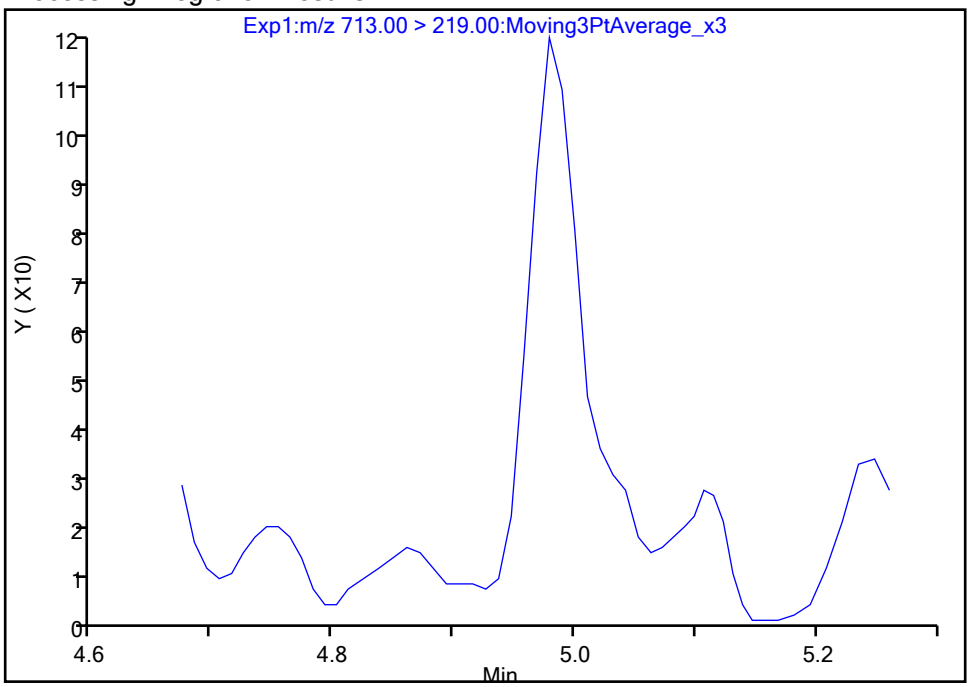
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

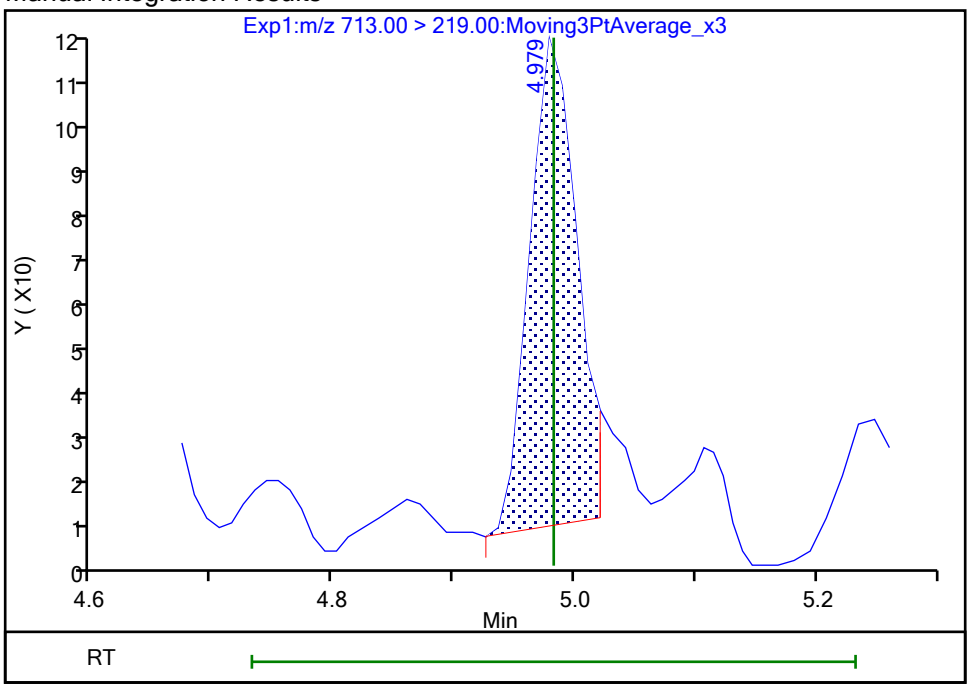
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 280
Amount: 0.002393
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

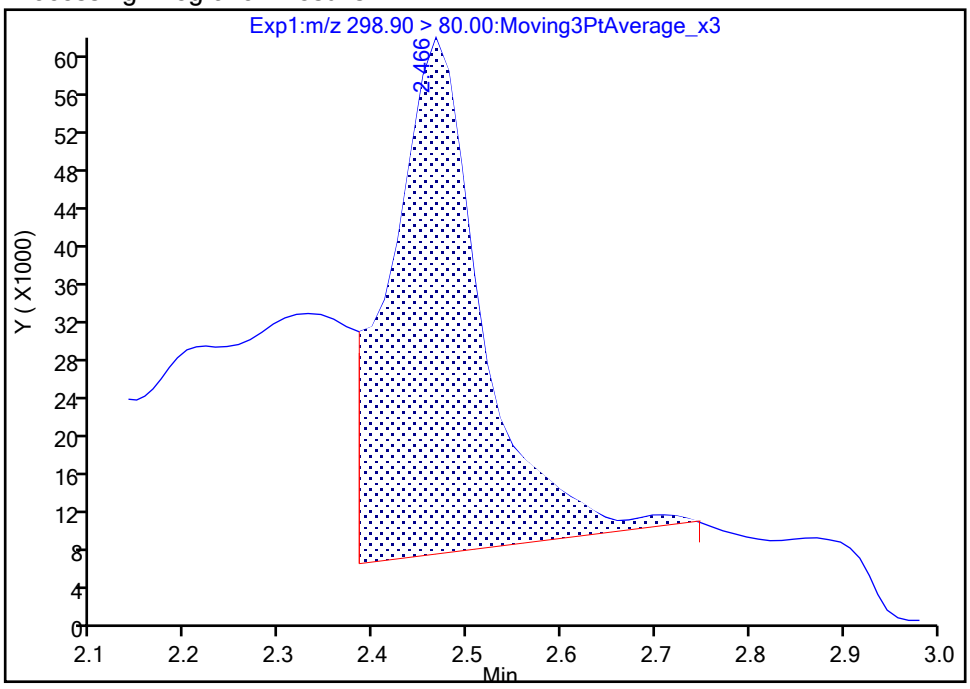
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

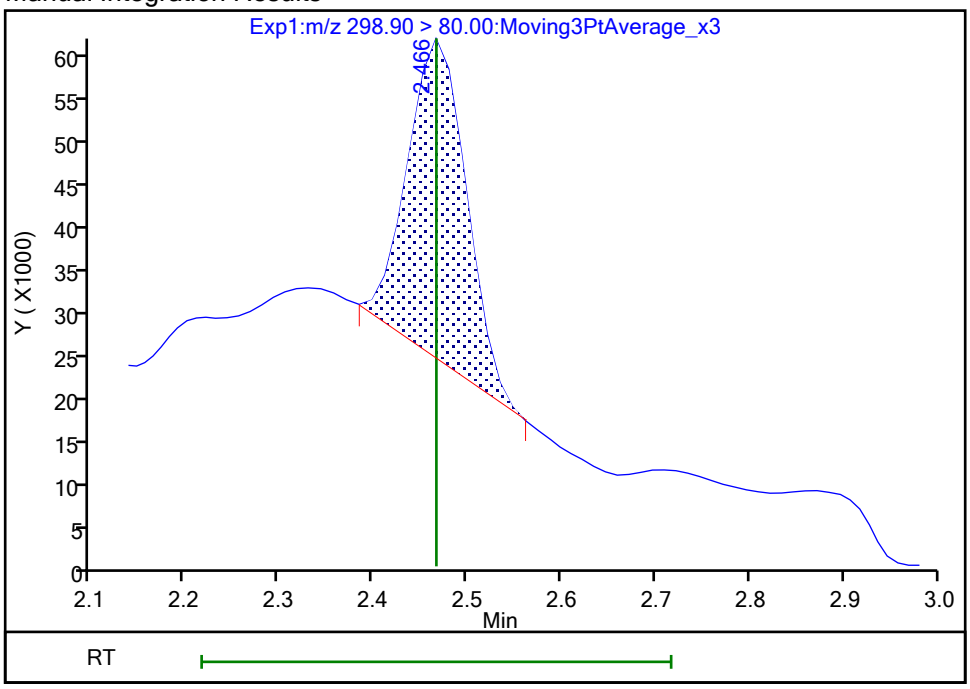
Processing Integration Results

RT: 2.47
Area: 372888
Amount: 0.225909
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 162998
Amount: 0.098750
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

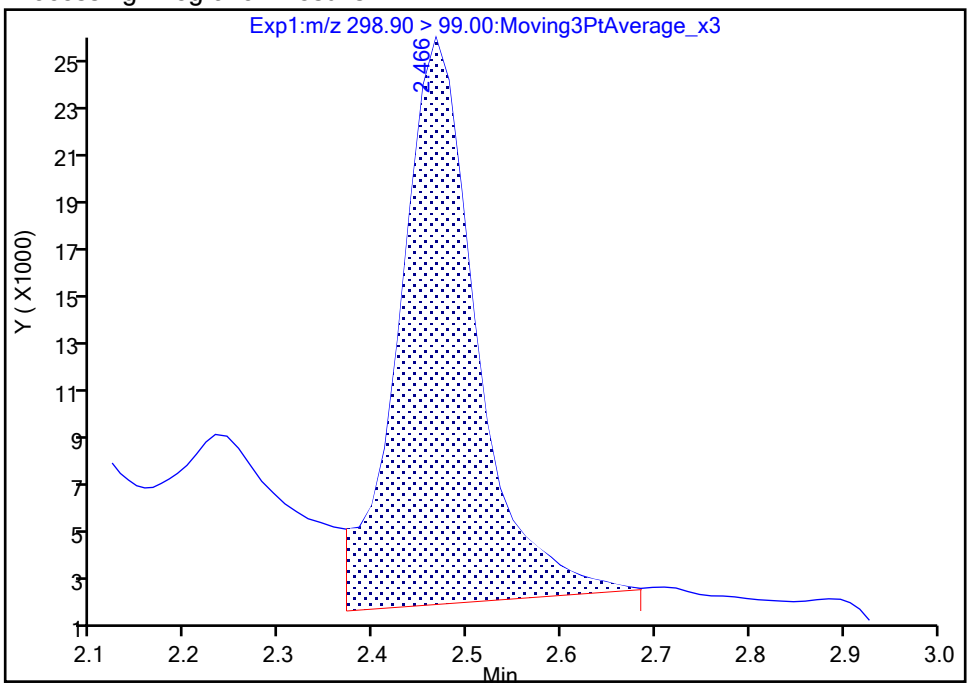
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

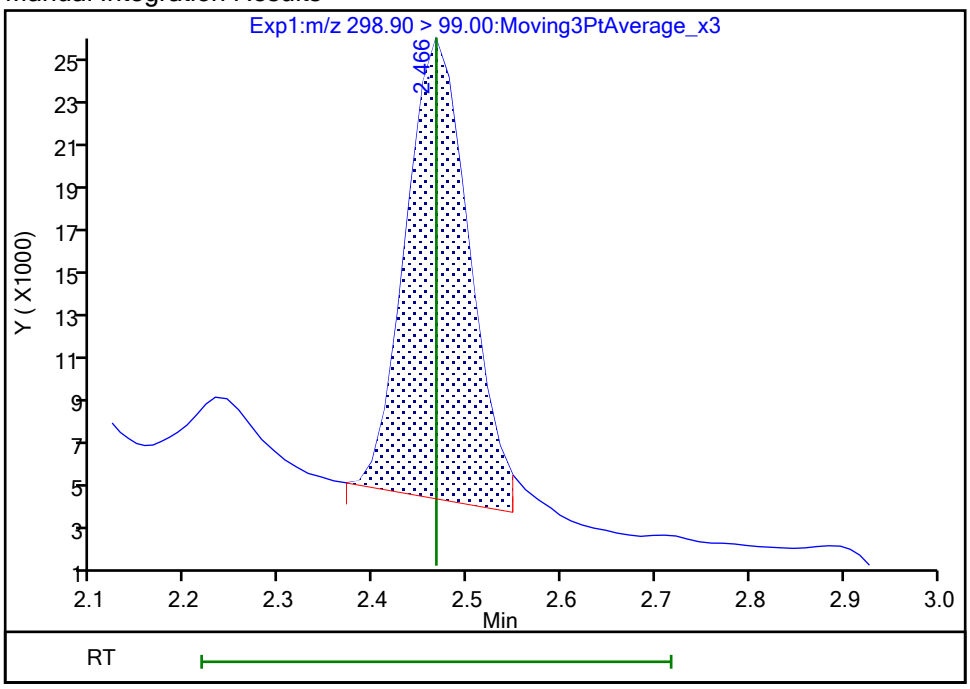
Processing Integration Results

RT: 2.47
Area: 133646
Amount: 0.225909
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 98660
Amount: 0.098750
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

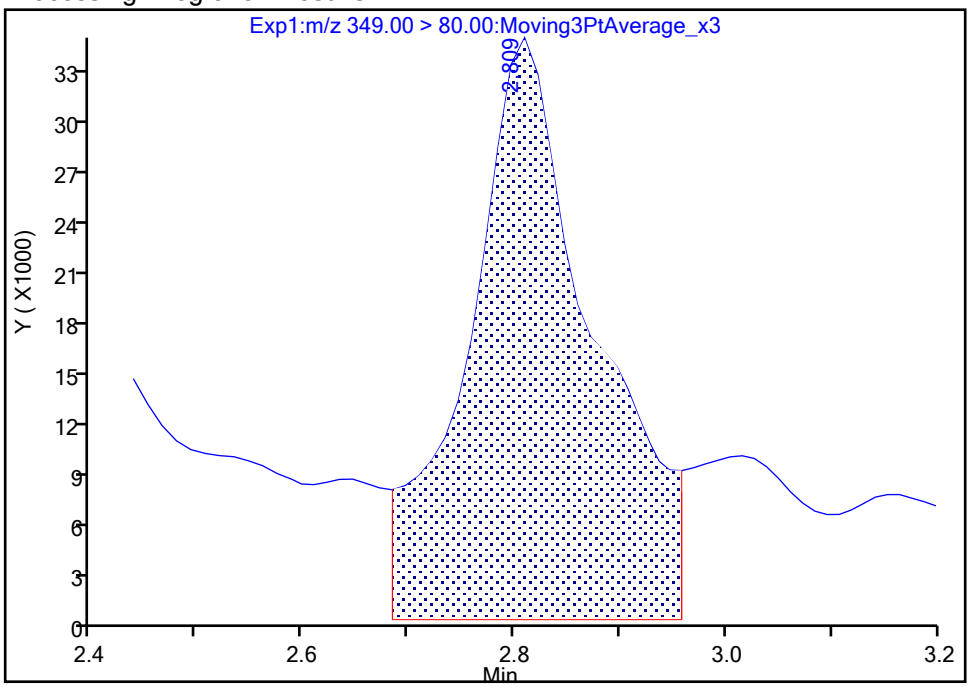
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

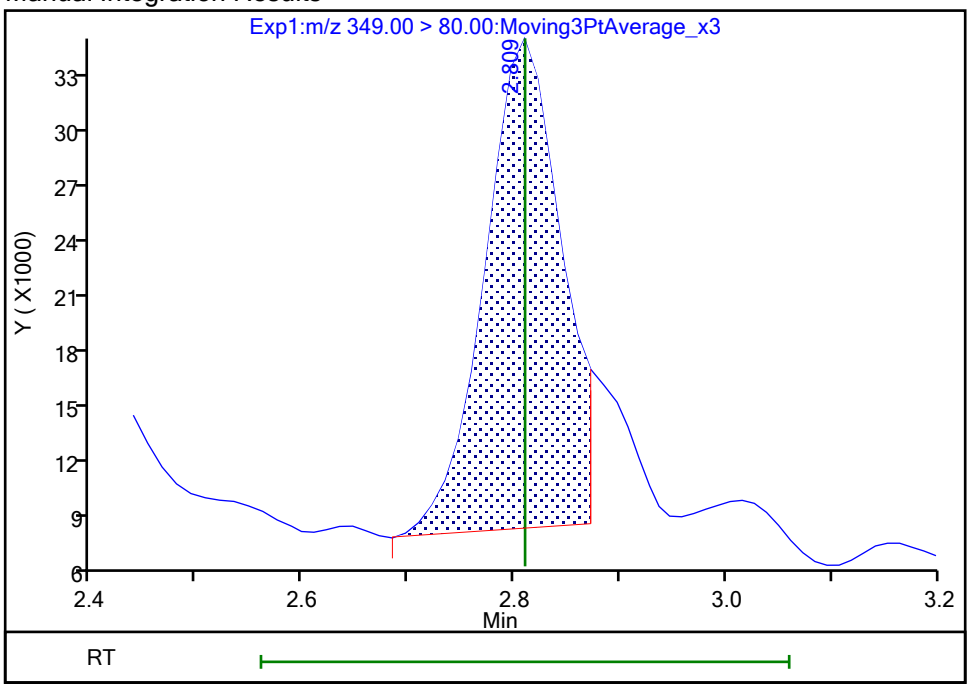
Processing Integration Results

RT: 2.81
Area: 284609
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 130067
Amount: 0.092900
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

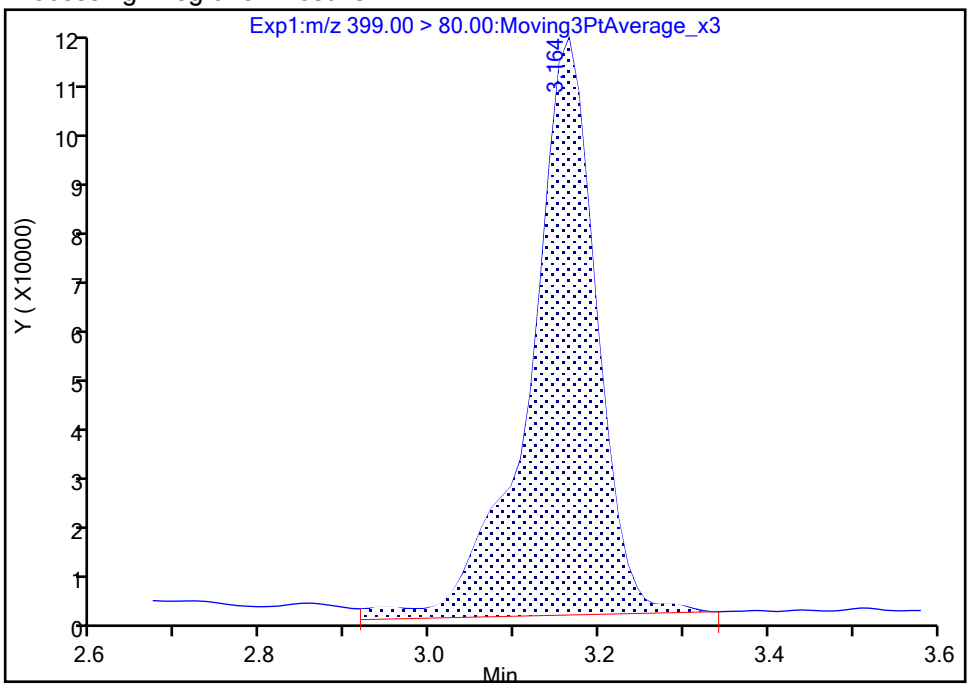
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

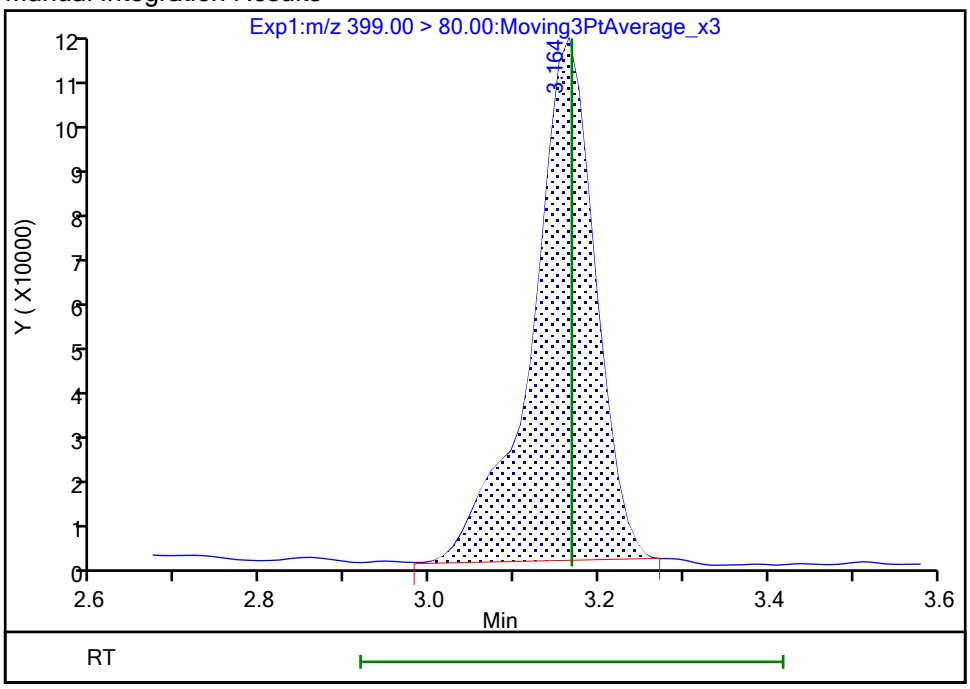
Processing Integration Results

RT: 3.16
Area: 632027
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 586160
Amount: 0.493894
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

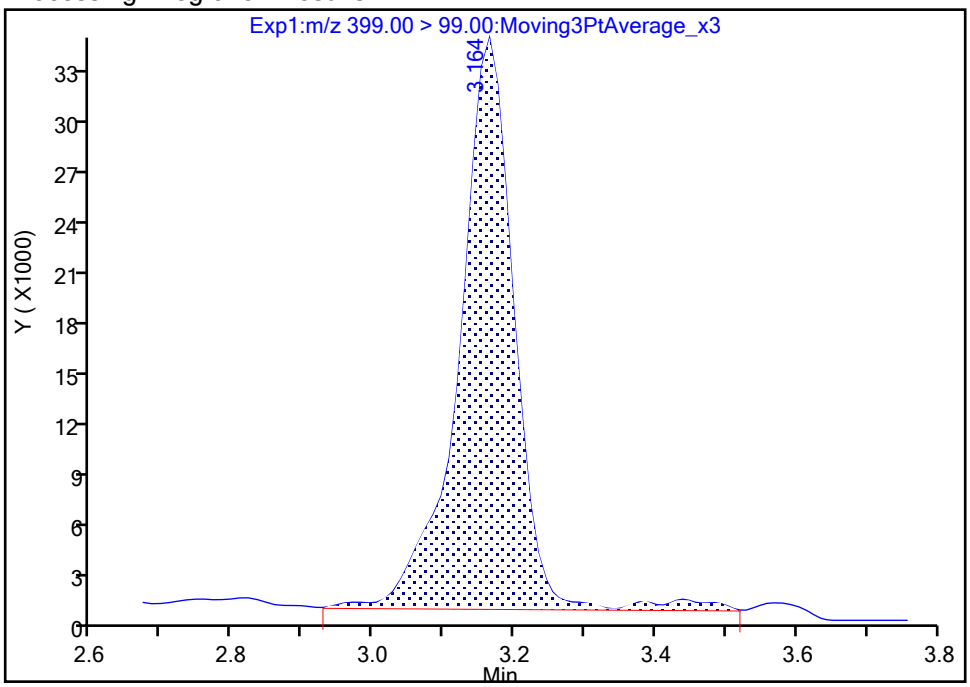
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

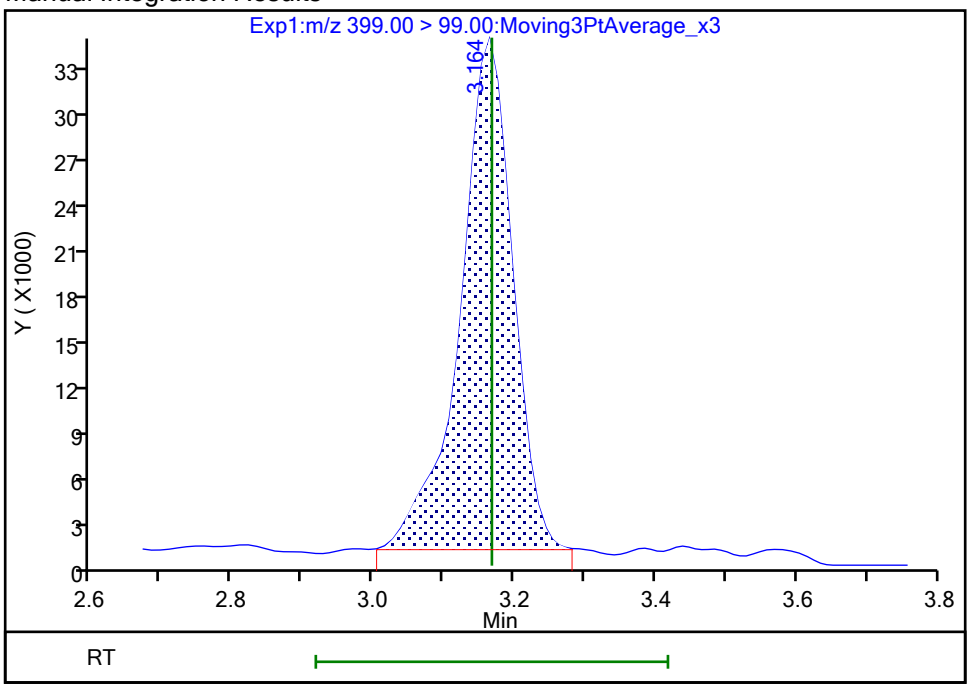
Processing Integration Results

RT: 3.16
Area: 185581
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 173635
Amount: 0.493894
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

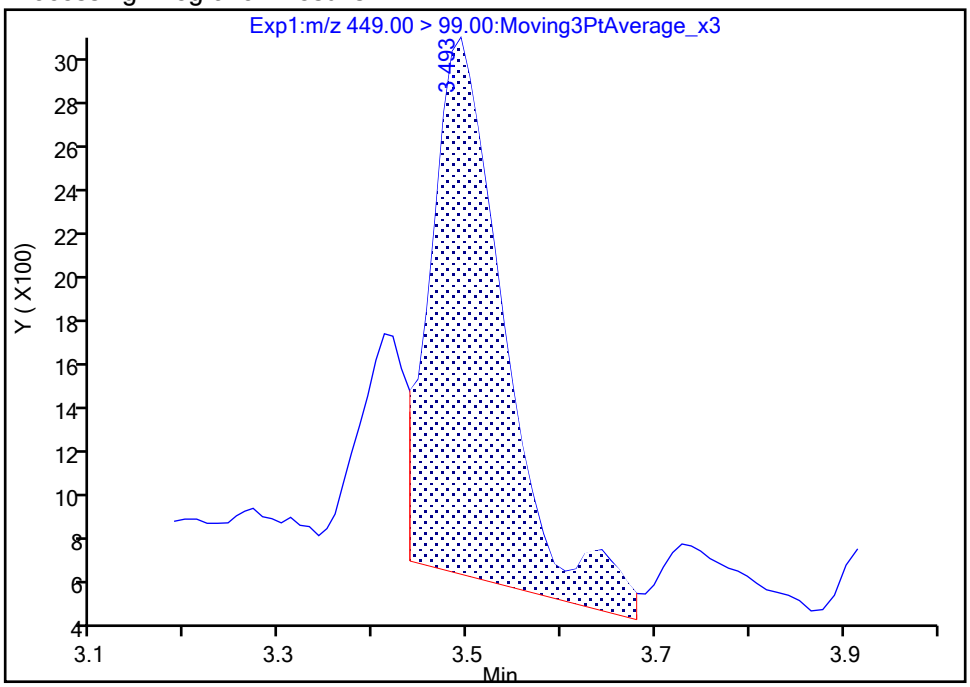
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

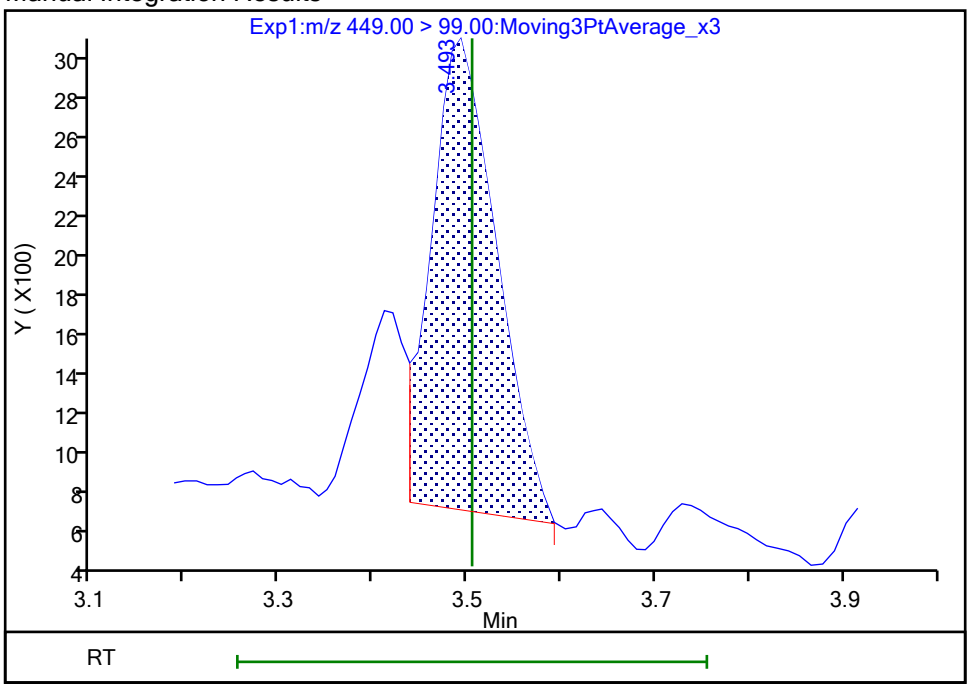
Processing Integration Results

RT: 3.49
Area: 13291
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 11148
Amount: 0.039361
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

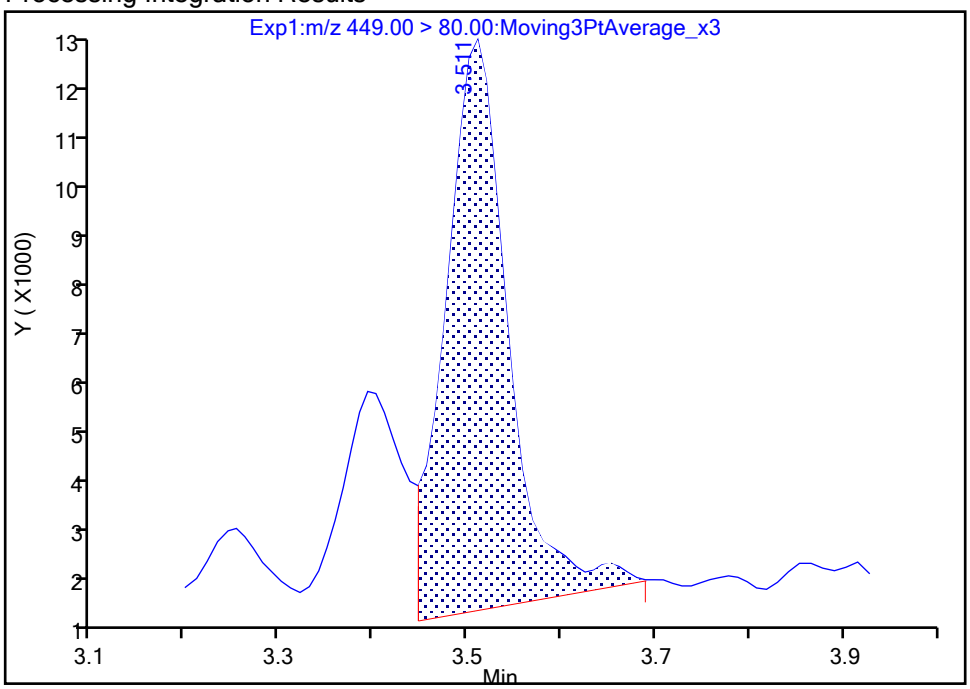
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

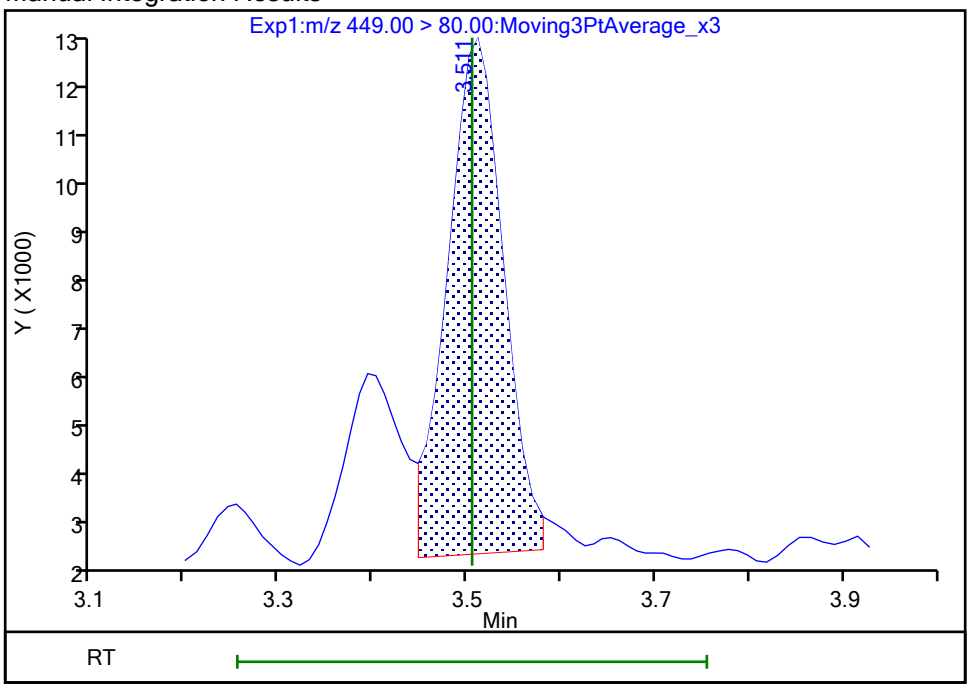
Processing Integration Results

RT: 3.51
Area: 48291
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 40837
Amount: 0.039361
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

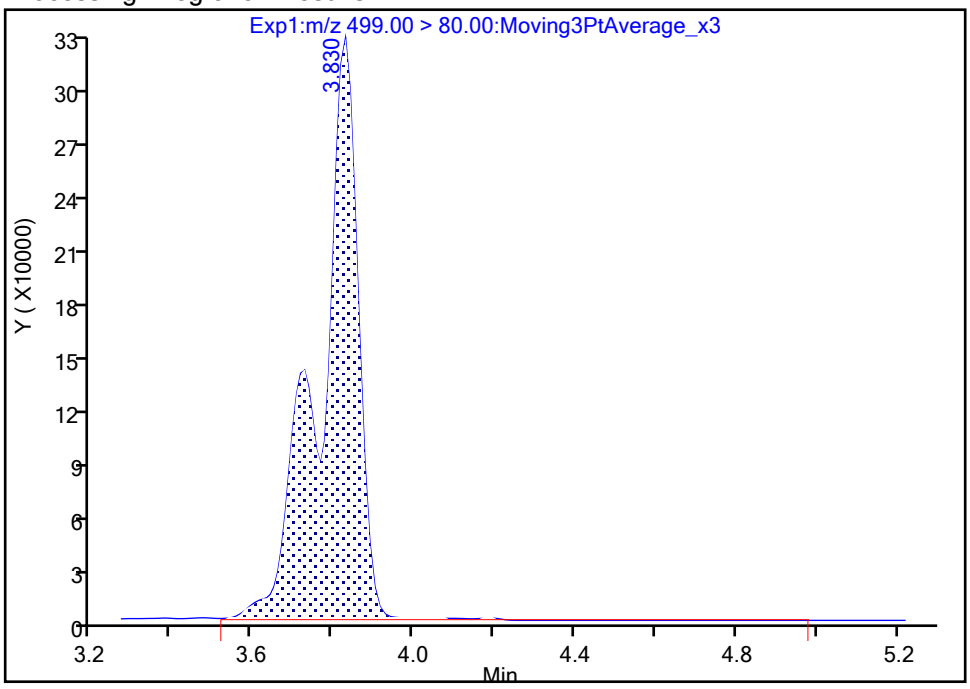
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

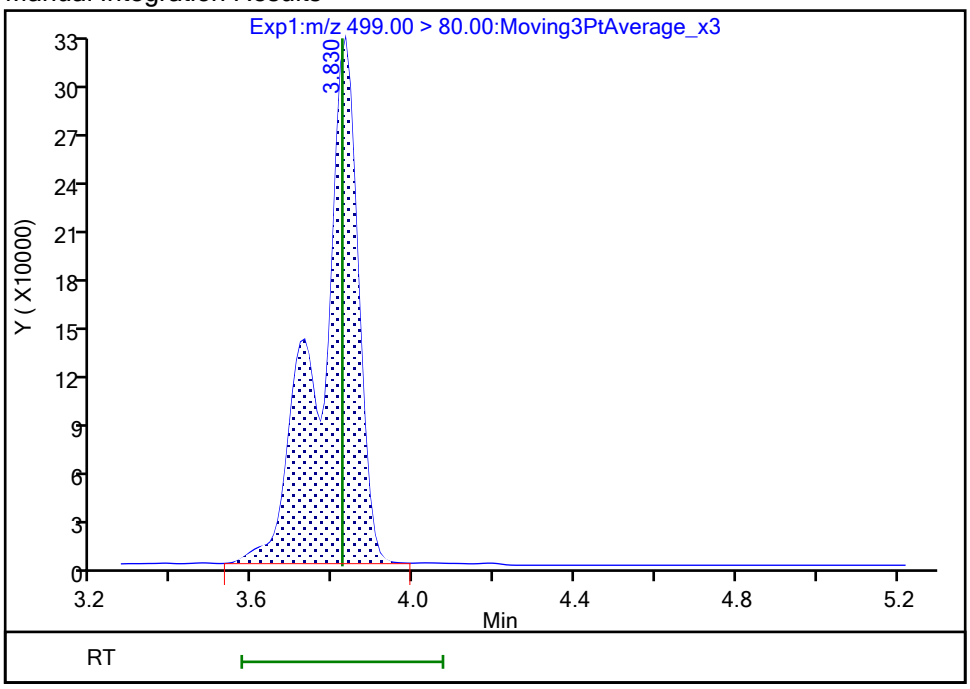
Processing Integration Results

RT: 3.83
Area: 2235859
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 2192812
Amount: 2.618739
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

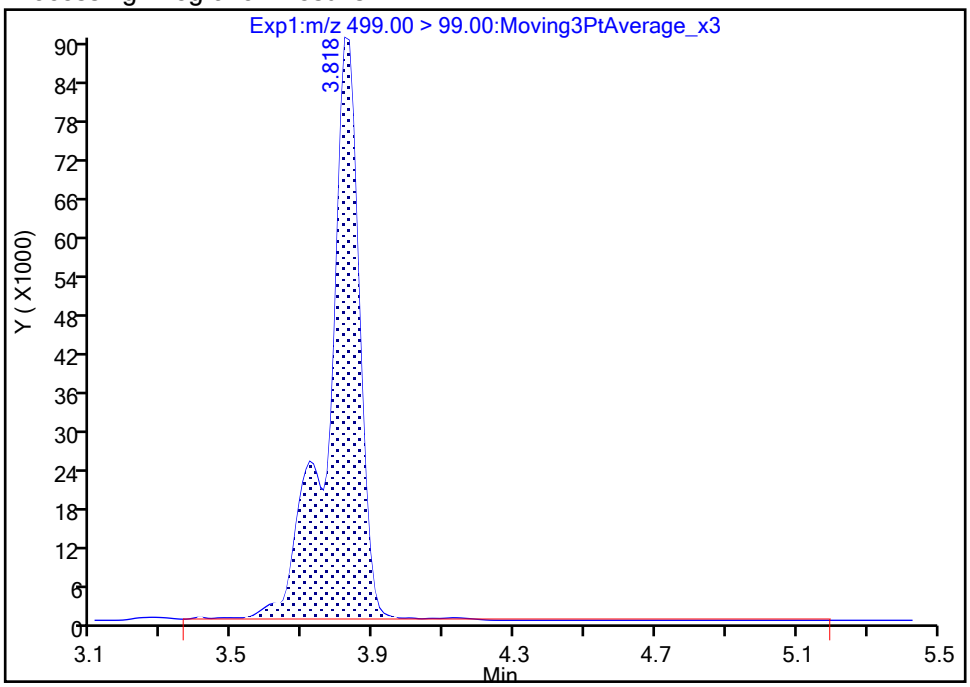
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

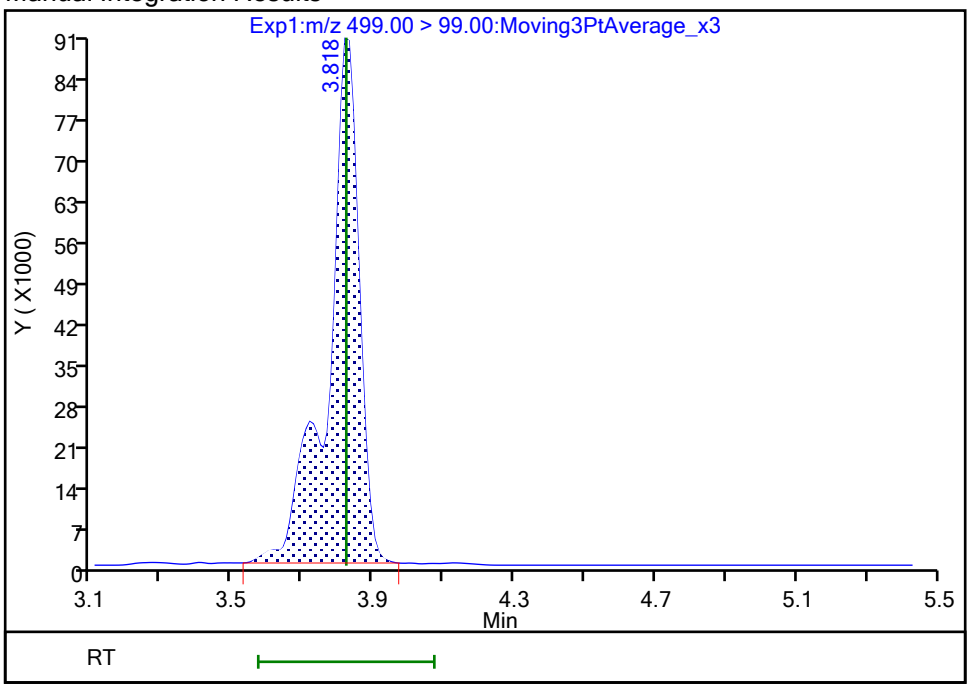
Processing Integration Results

RT: 3.82
Area: 572503
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 557719
Amount: 2.618739
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

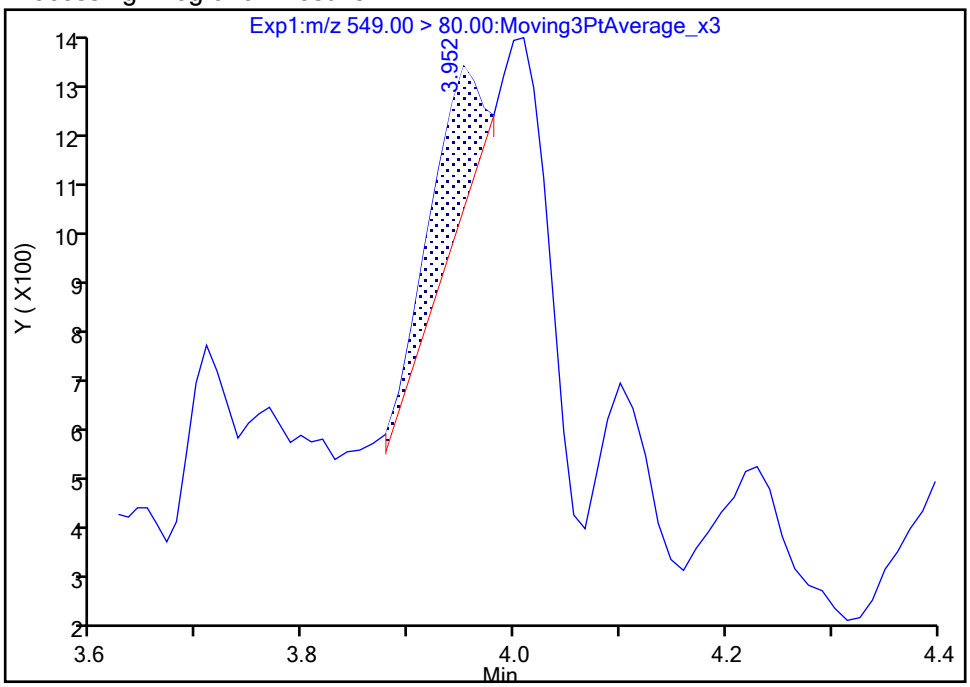
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

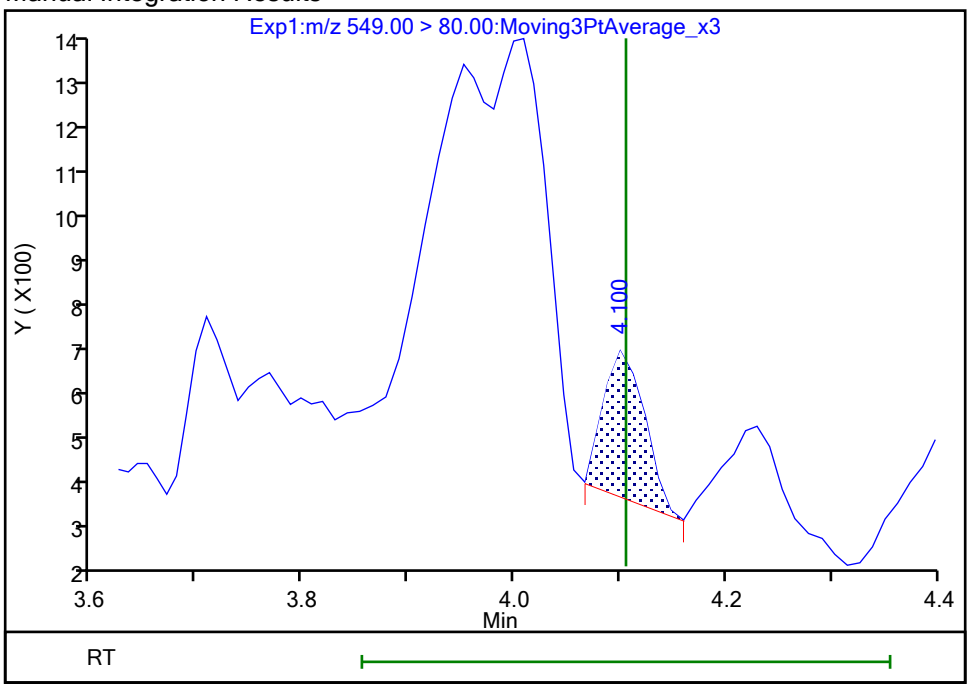
Processing Integration Results

RT: 3.95
Area: 867
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 793
Amount: 0.001245
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

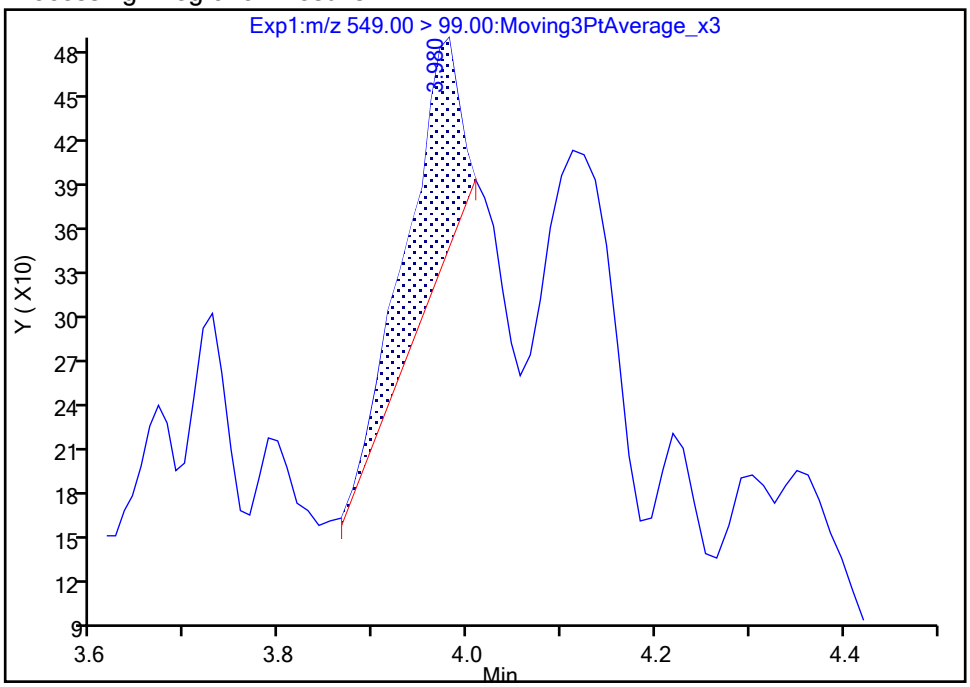
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

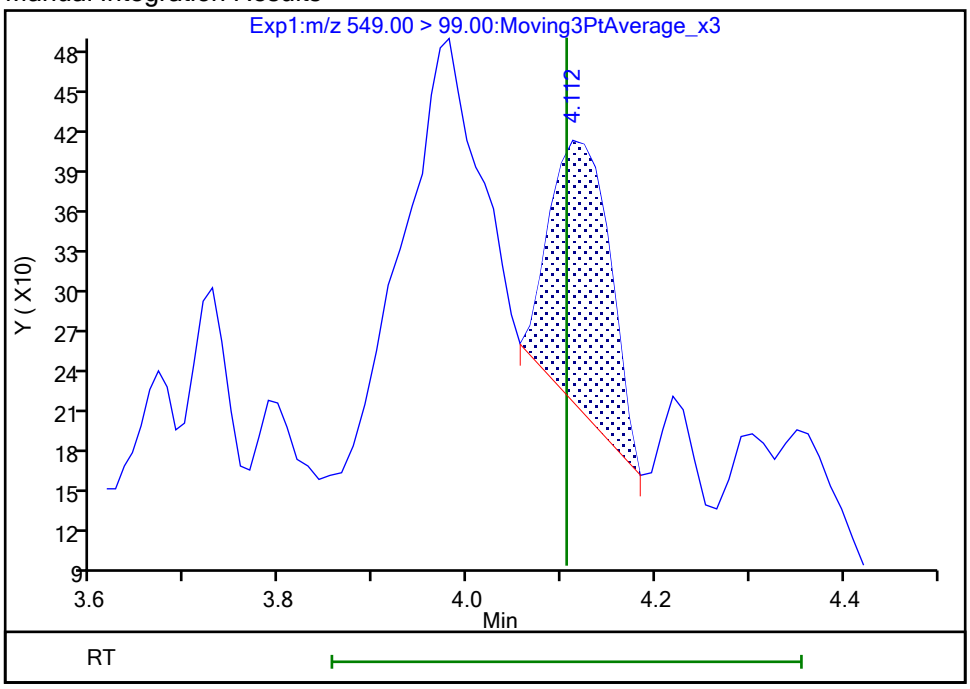
Processing Integration Results

RT: 3.98
Area: 567
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 896
Amount: 0.001245
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

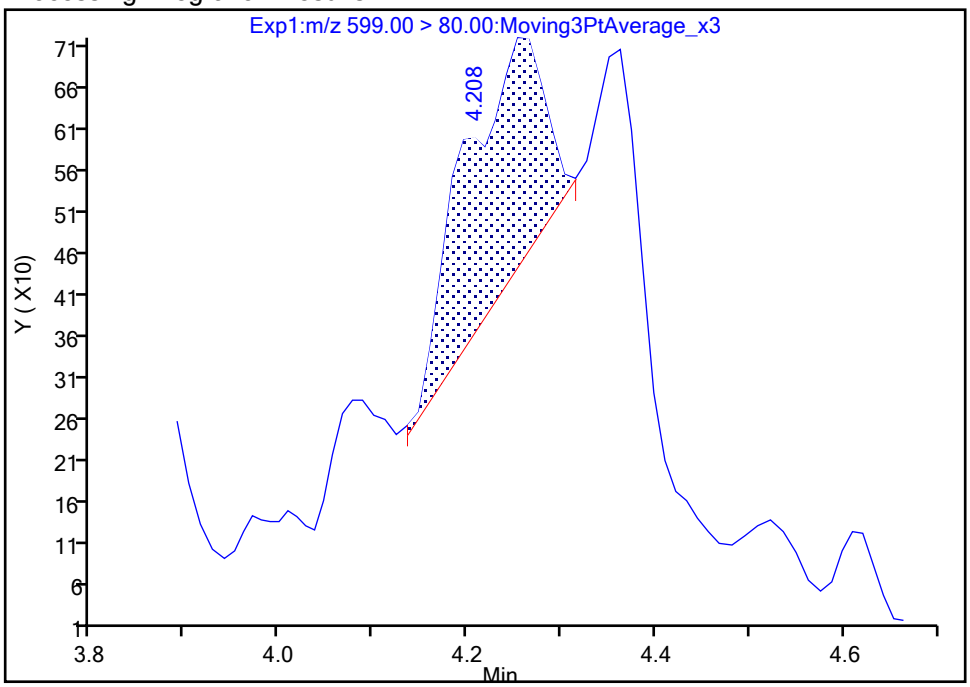
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

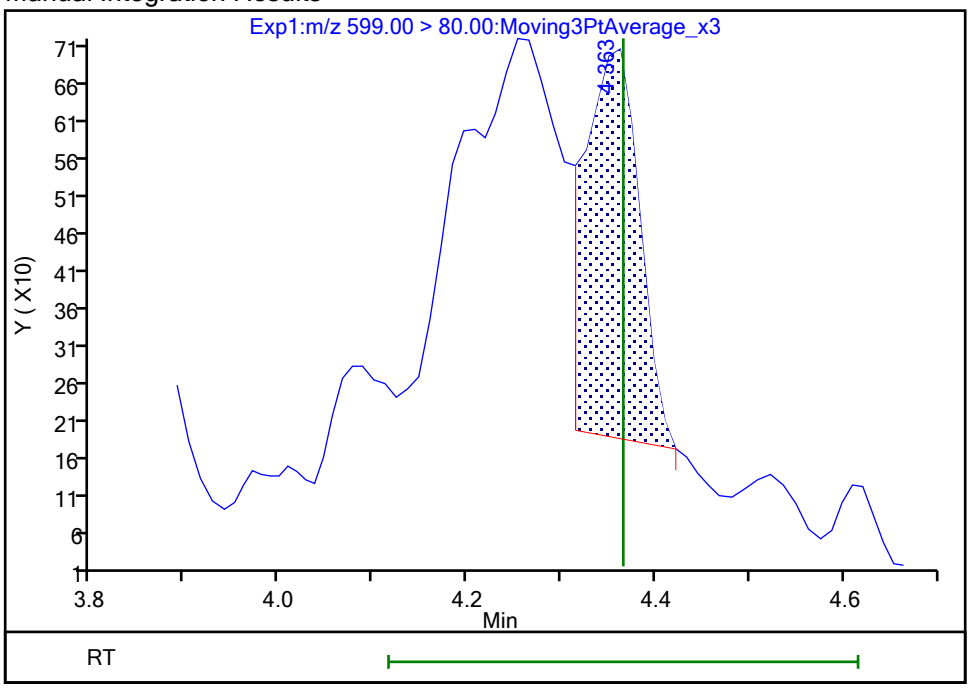
Processing Integration Results

RT: 4.21
Area: 1717
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 2023
Amount: 0.004126
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

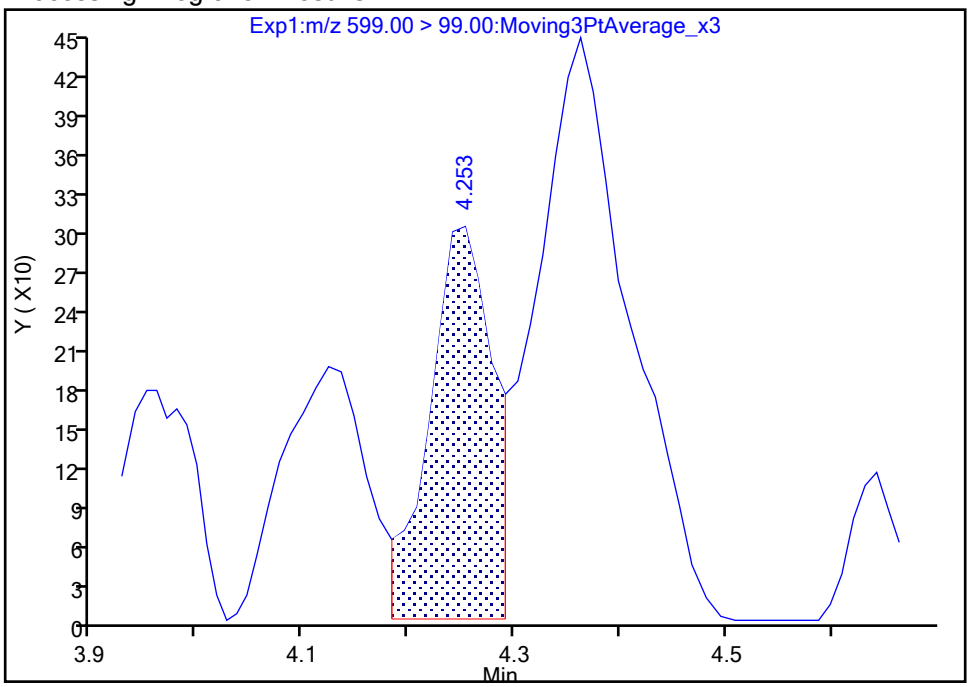
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

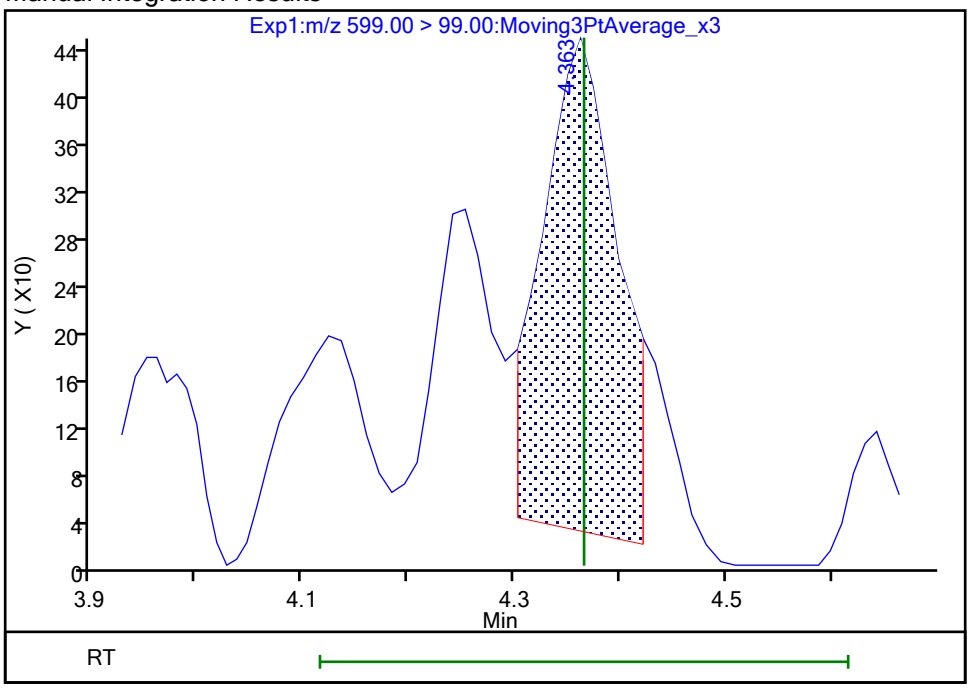
Processing Integration Results

RT: 4.25
Area: 1207
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 2005
Amount: 0.004126
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

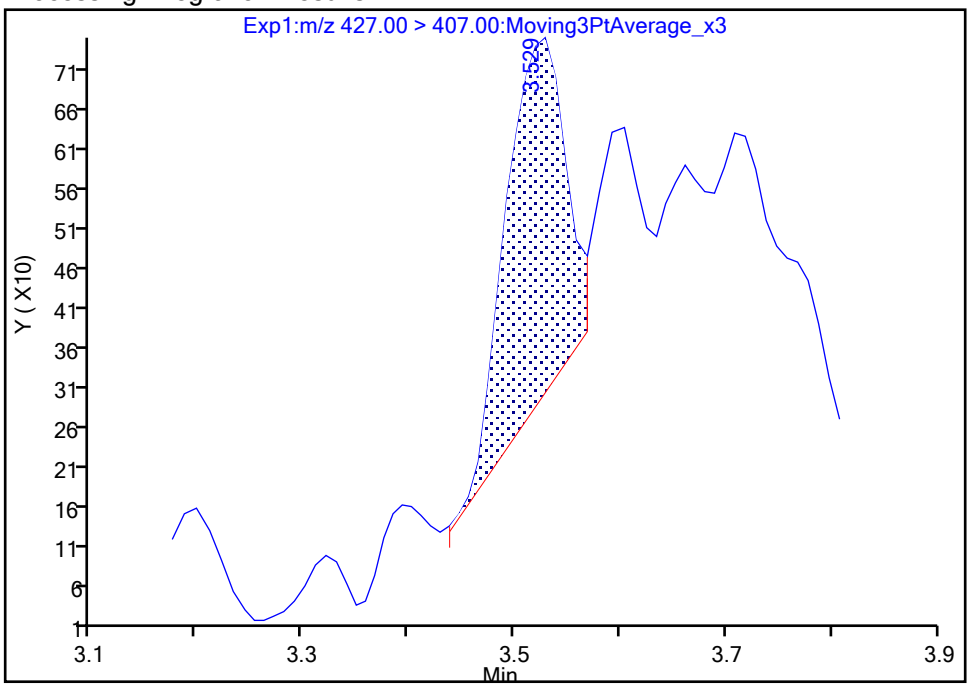
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

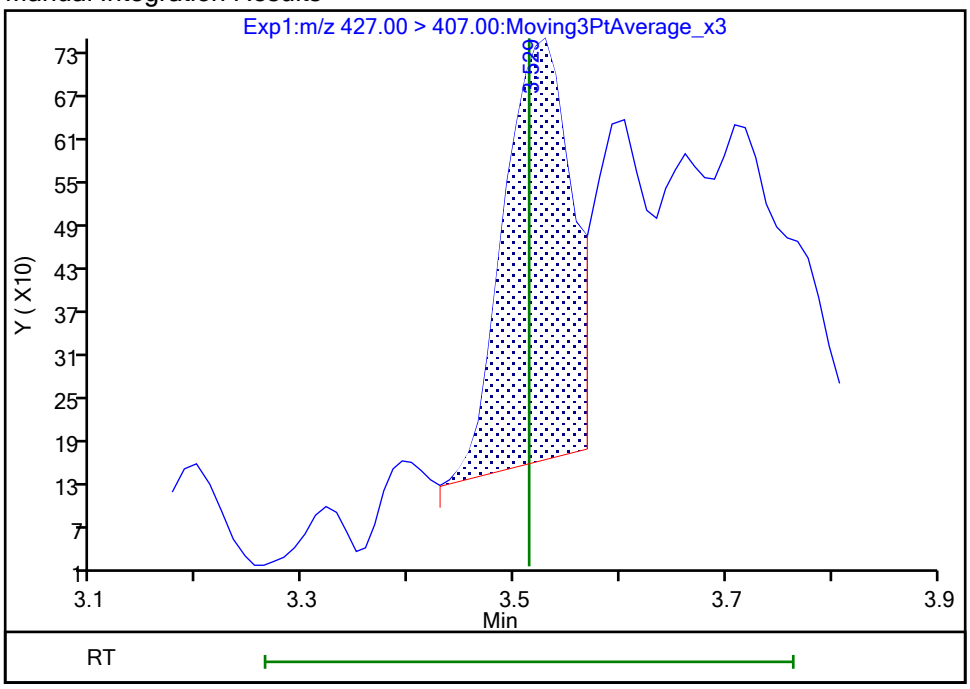
Processing Integration Results

RT: 3.53
Area: 1788
Amount: 0.002351
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 2562
Amount: 0.003368
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:38:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

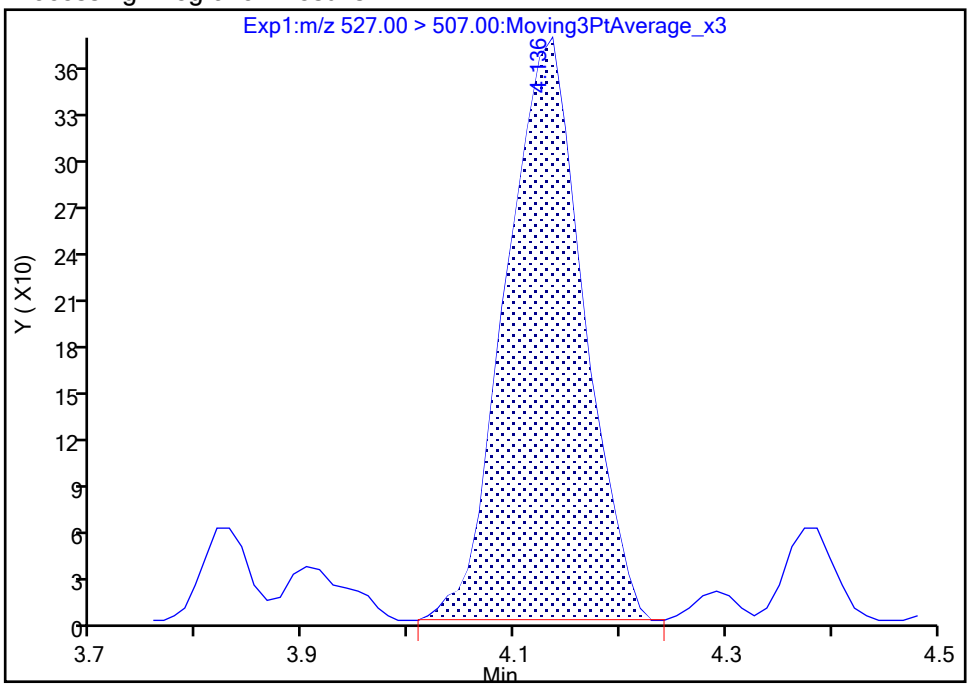
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

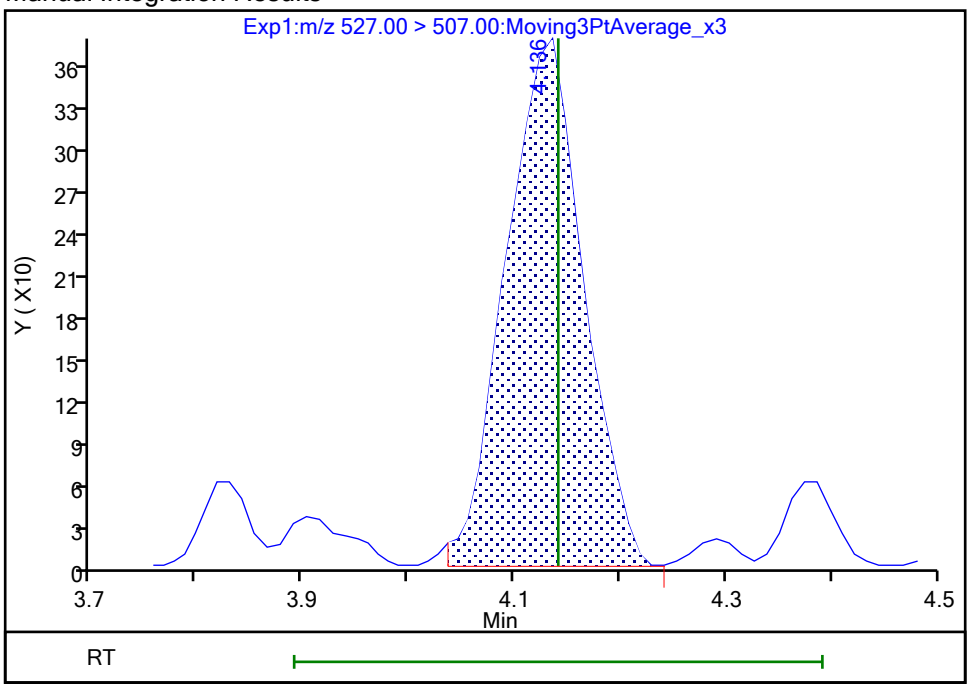
Processing Integration Results

RT: 4.14
Area: 1940
Amount: 0.002908
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1929
Amount: 0.002891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

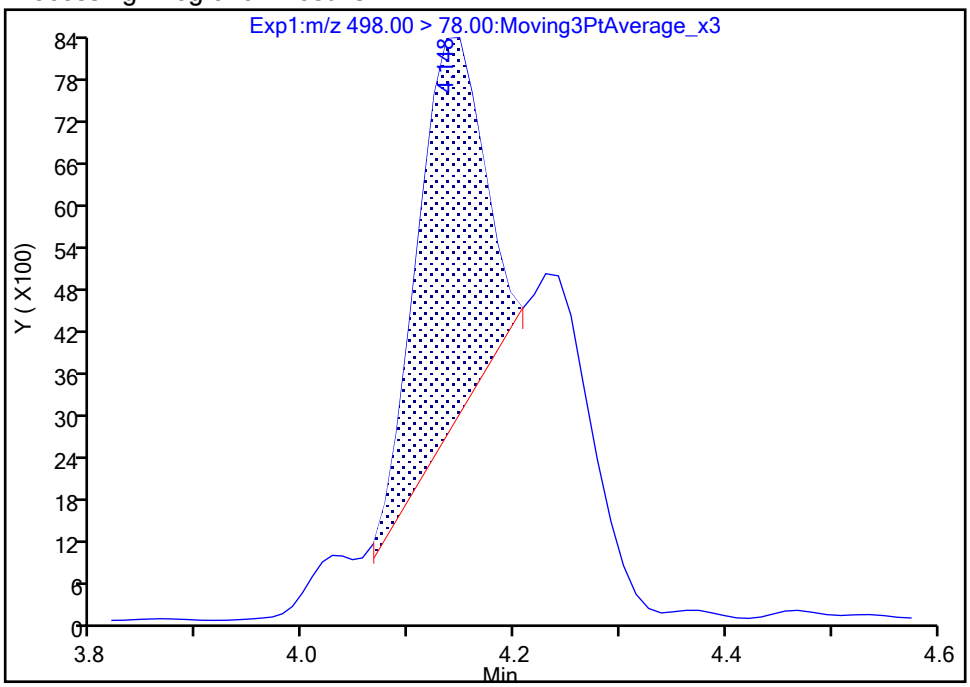
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

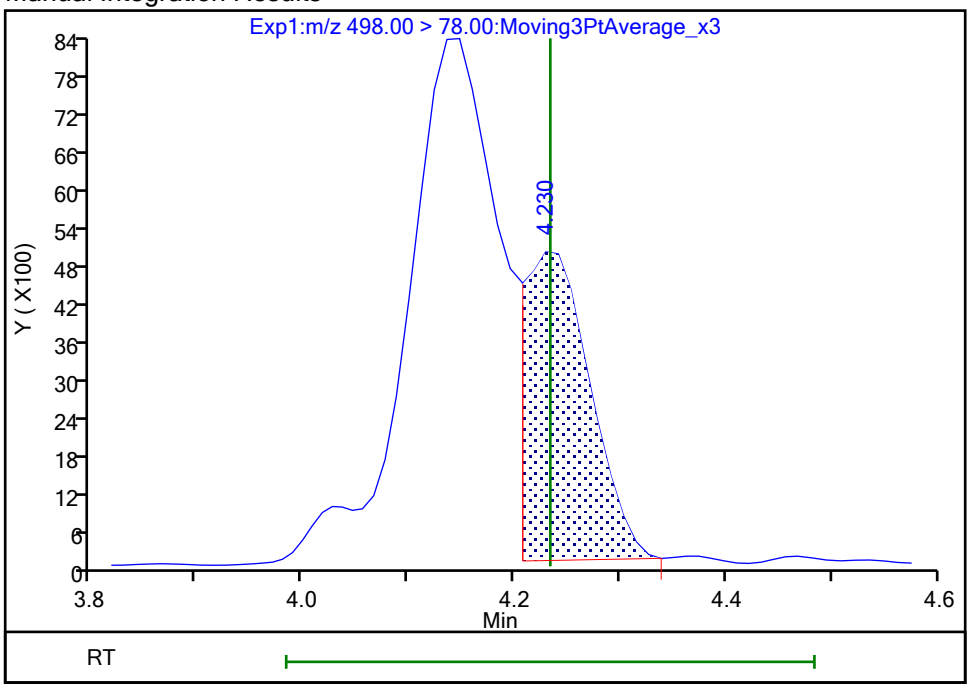
Processing Integration Results

RT: 4.15
Area: 24337
Amount: 0.023343
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 20278
Amount: 0.019450
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

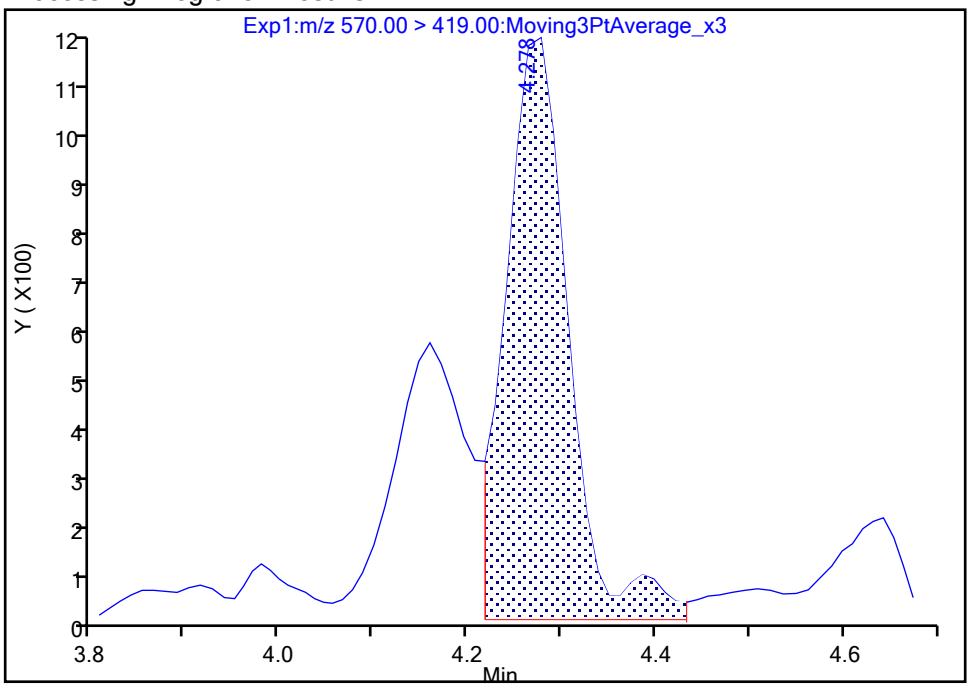
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

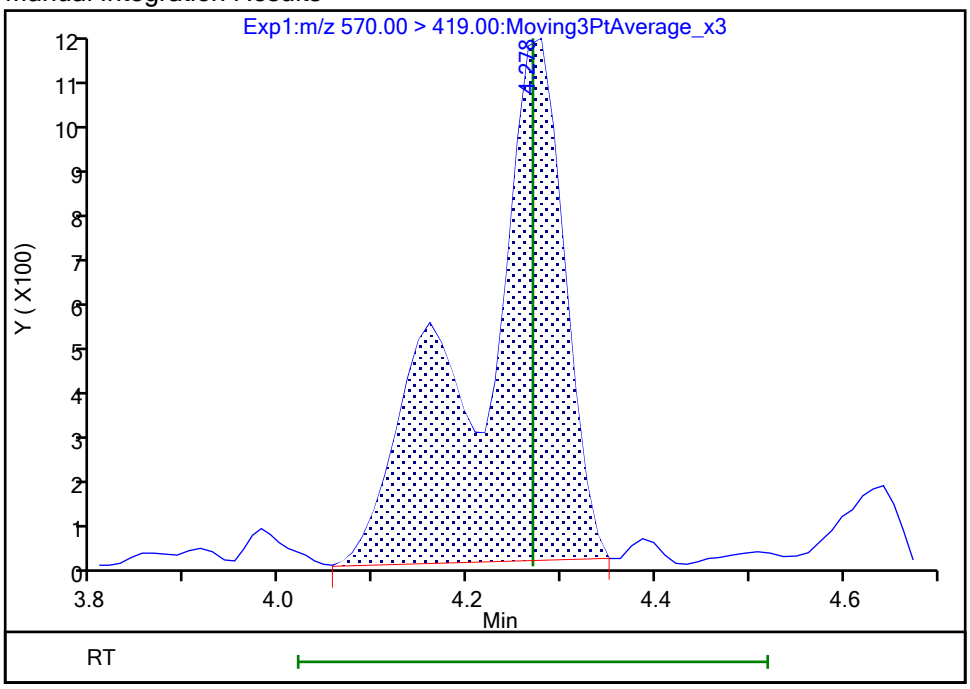
Processing Integration Results

RT: 4.28
Area: 5192
Amount: 0.012625
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 7088
Amount: 0.017236
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:39:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

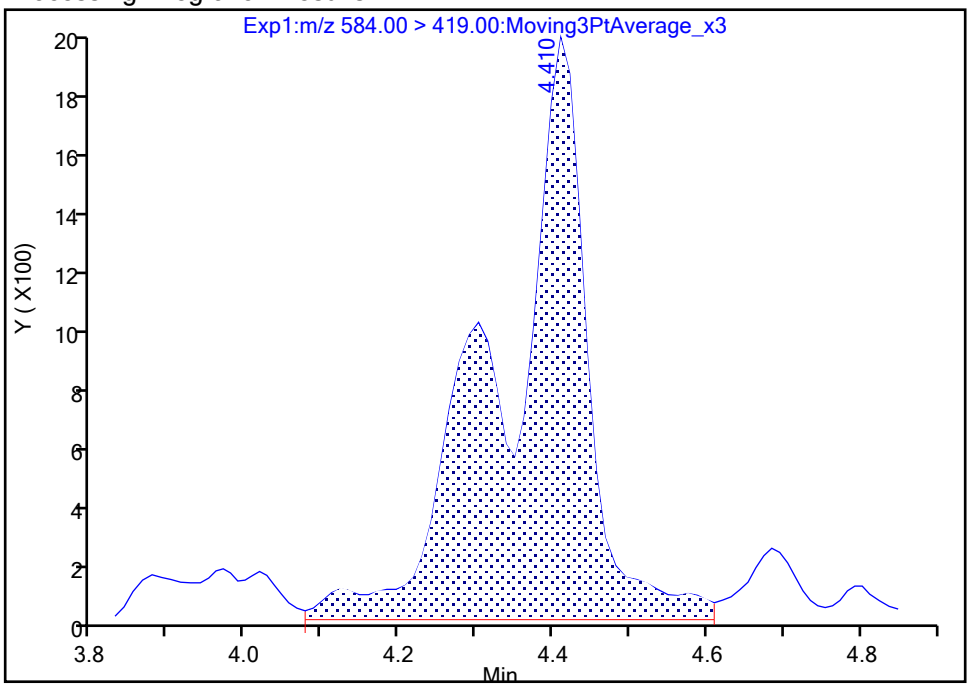
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

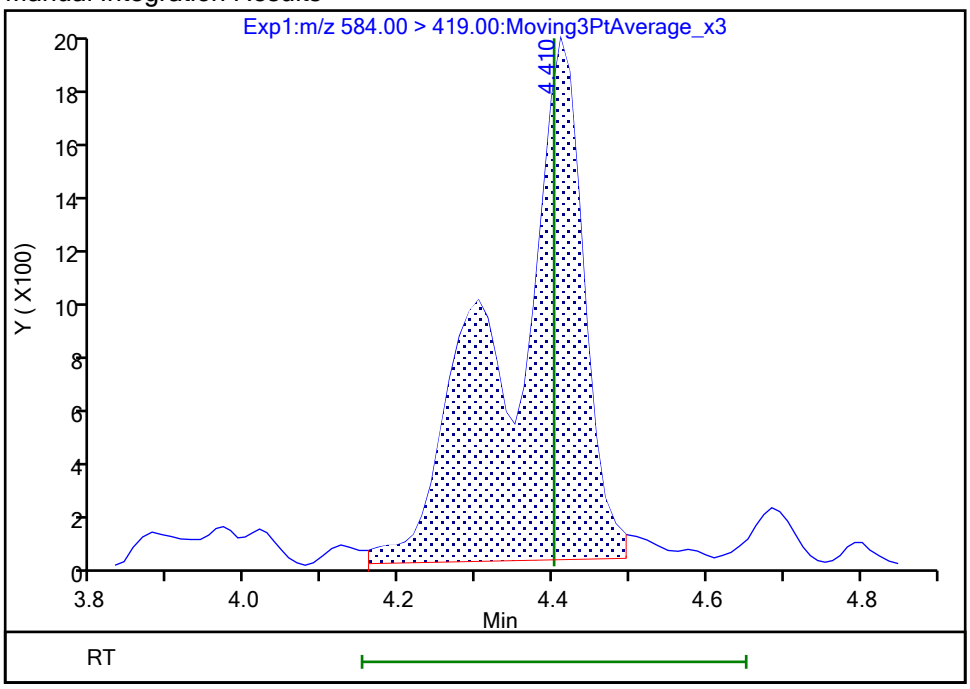
Processing Integration Results

RT: 4.41
Area: 15321
Amount: 0.031597
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 13352
Amount: 0.027536
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:40:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

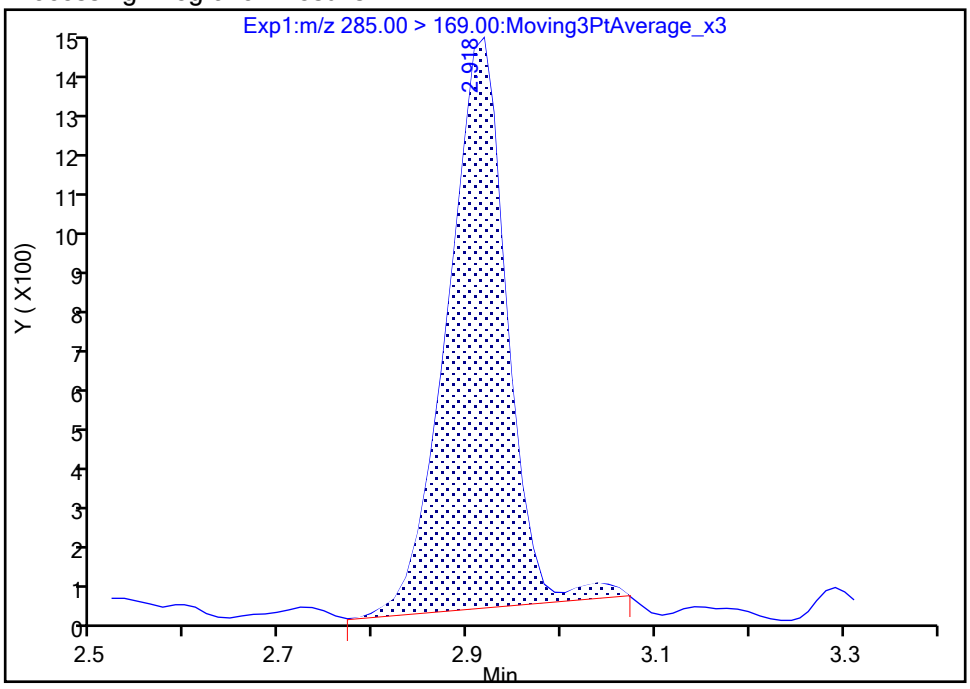
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

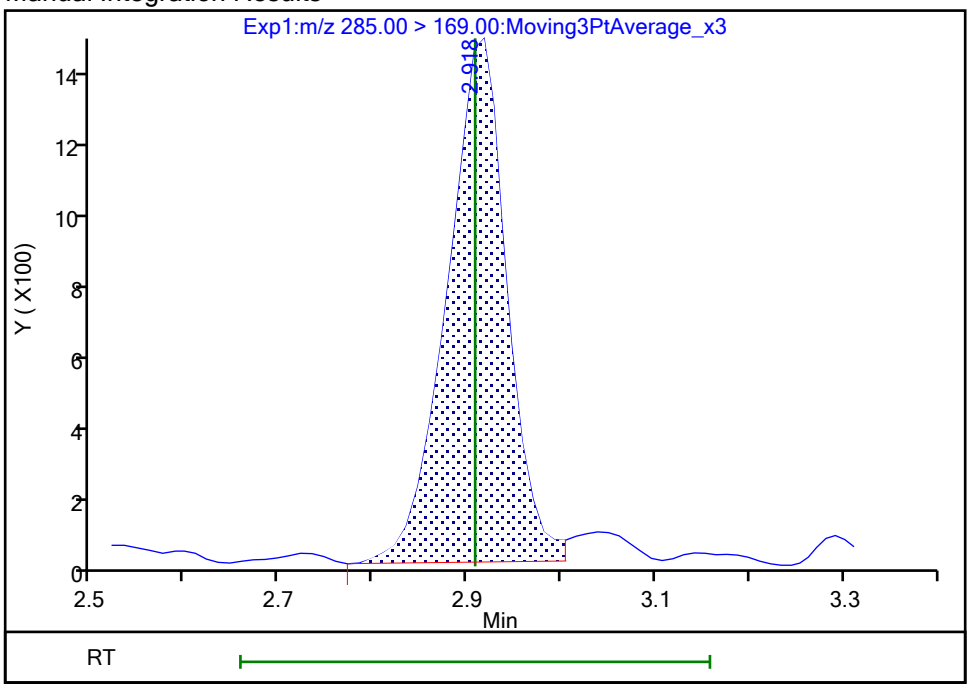
Processing Integration Results

RT: 2.92
Area: 6260
Amount: 0.030521
Amount Units: ng/ml



Manual Integration Results

RT: 2.92
Area: 6373
Amount: 0.031072
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:37:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

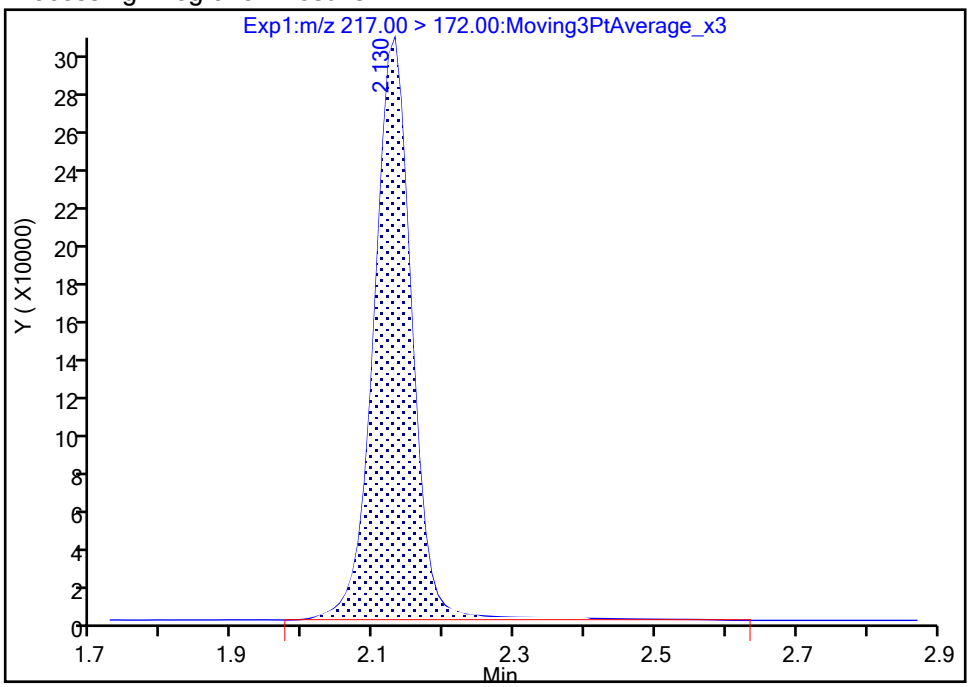
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

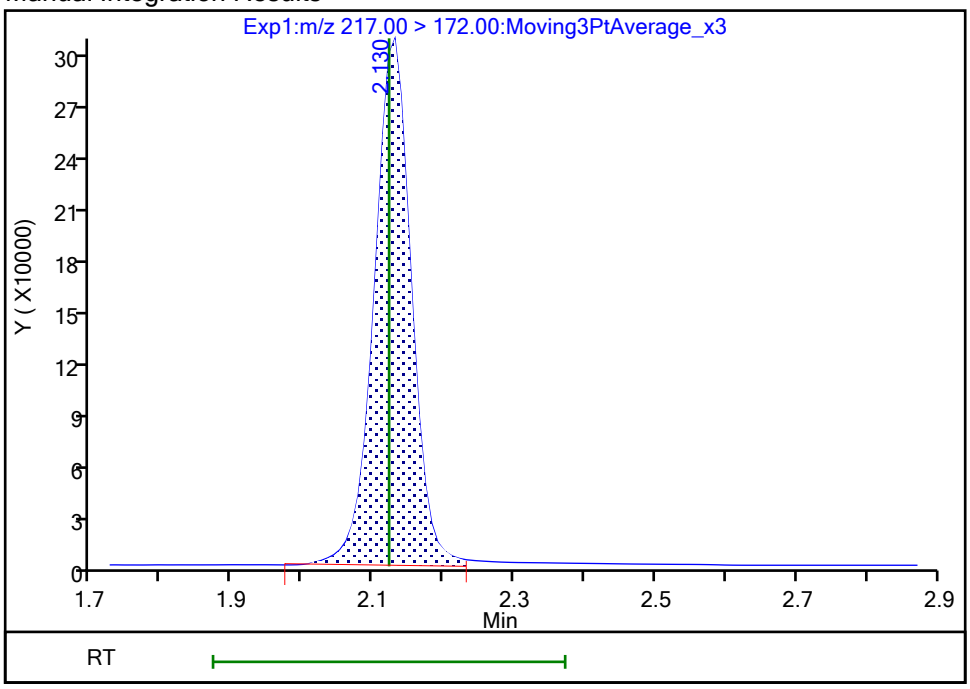
Processing Integration Results

RT: 2.13
Area: 1145611
Amount: 0.837242
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1122358
Amount: 0.820248
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:36:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

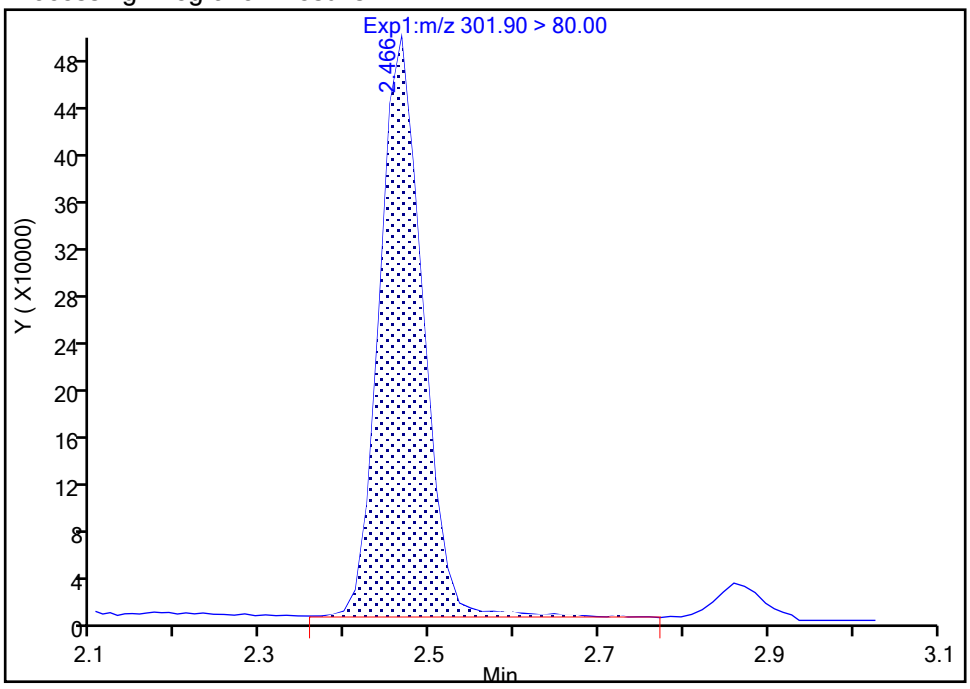
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

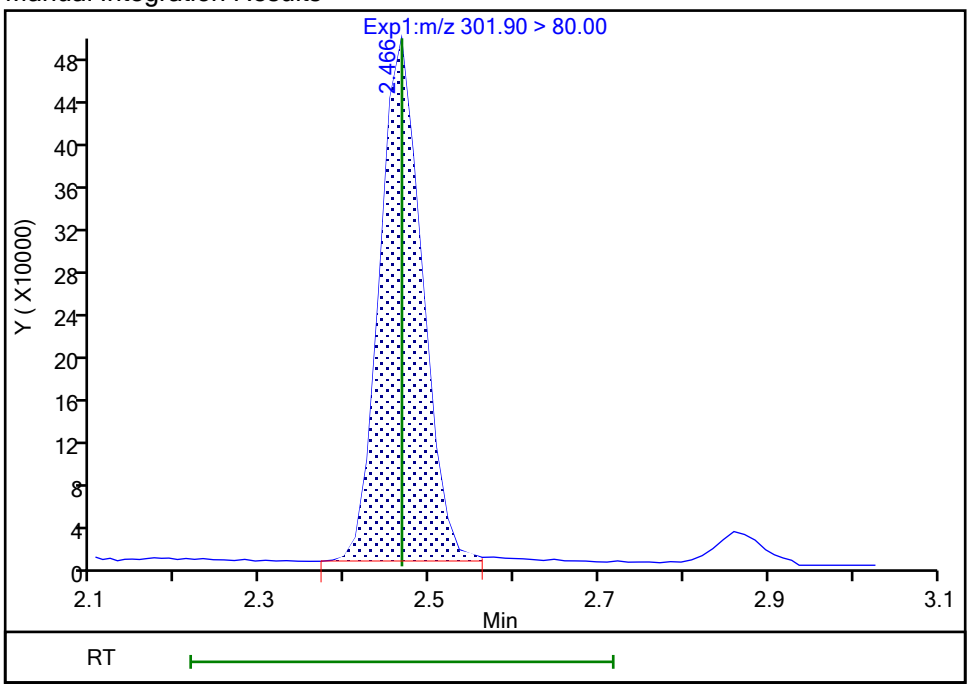
Processing Integration Results

RT: 2.47
Area: 1754713
Amount: 1.221214
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1717996
Amount: 1.195660
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:36:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

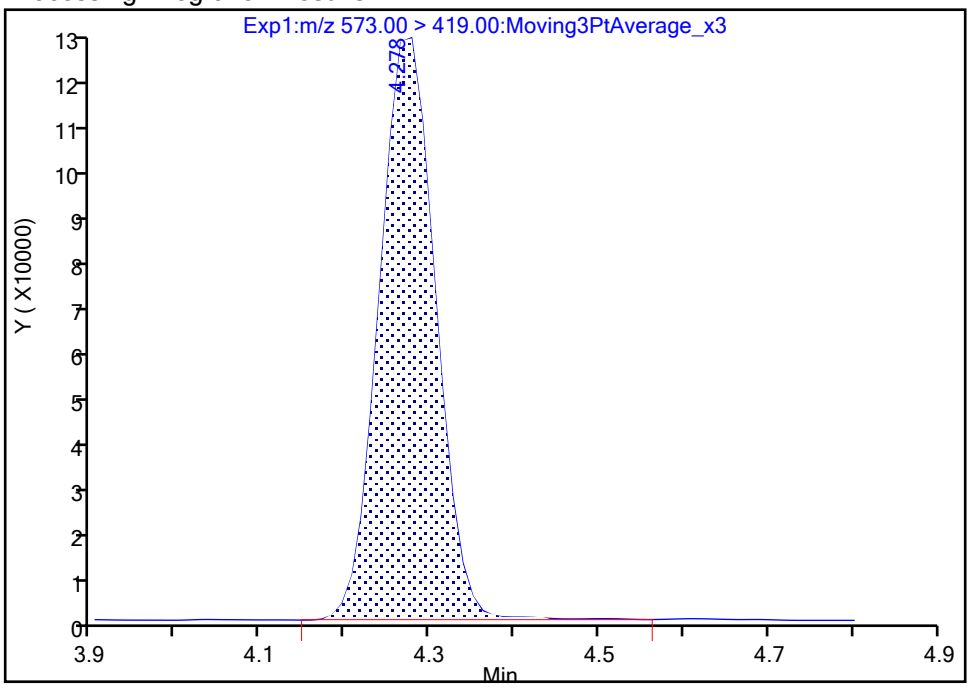
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

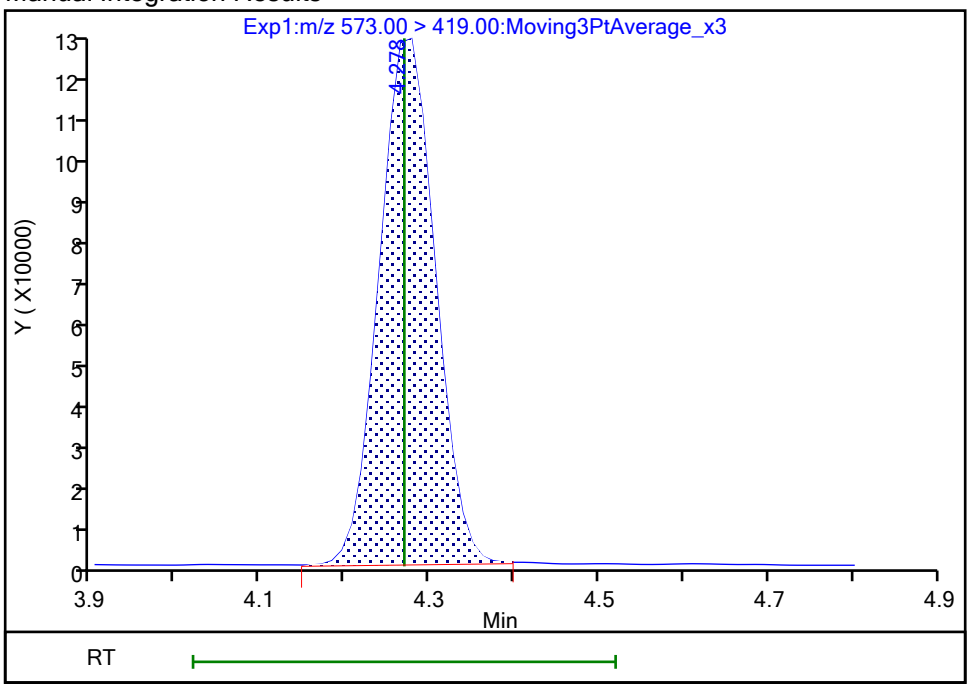
Processing Integration Results

RT: 4.28
Area: 572113
Amount: 1.564564
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 566500
Amount: 1.549214
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:36:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

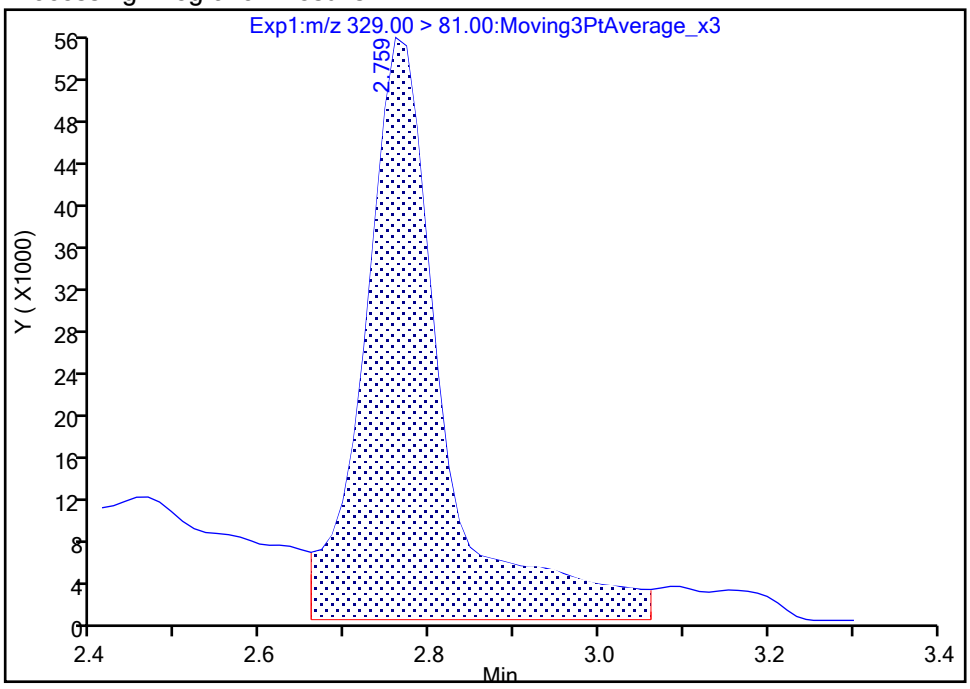
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E21.d				
Injection Date:	24-Oct-2023 08:49:20	Instrument ID:	LC812		
Lims ID:	460-290517-A-2-A	Lab Sample ID:	200-290517-2		
Client ID:	1000-101623-0003				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

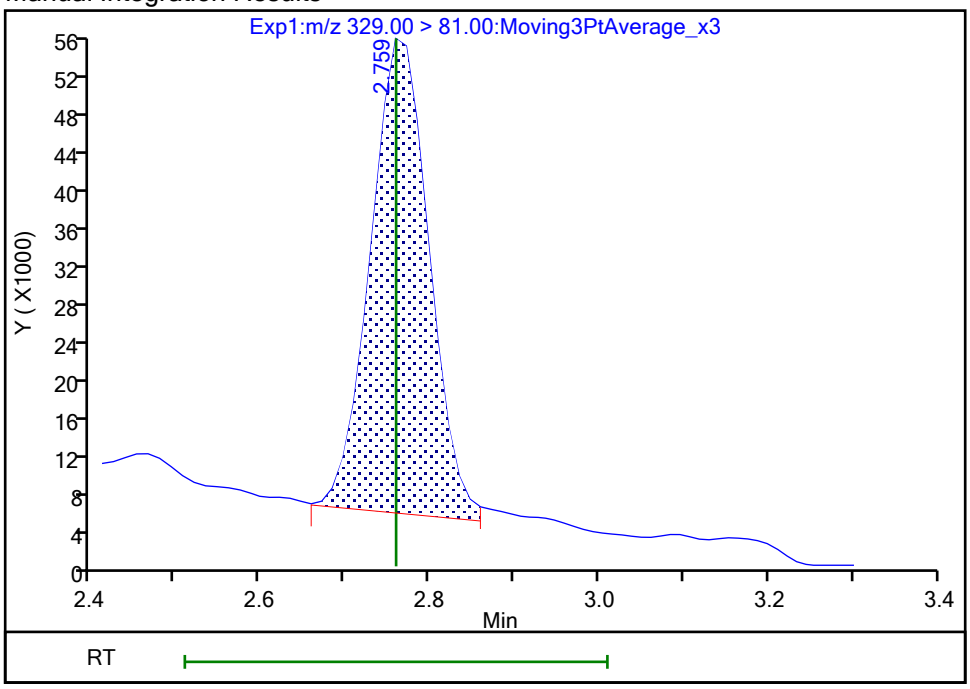
Processing Integration Results

RT: 2.76
Area: 359685
Amount: 2.164586
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 239969
Amount: 1.444134
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:36:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0004 Lab Sample ID: 460-290517-3

Matrix: Water Lab File ID: PA231023E22.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:30

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 281.9(mL) Date Analyzed: 10/24/2023 08:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.43	U	4.43	1.06
2706-90-3	Perfluoropentanoic acid	1.77	U	1.77	0.60
307-24-4	Perfluorohexanoic acid	1.77	U	1.77	0.58
375-85-9	Perfluoroheptanoic acid	1.77	U	1.77	0.48
335-67-1	Perfluorooctanoic acid	1.77	U	1.77	0.67
375-95-1	Perfluorononanoic acid	1.77	U	1.77	0.43
335-76-2	Perfluorodecanoic acid	1.77	U	1.77	0.41
2058-94-8	Perfluoroundecanoic acid	1.77	U	1.77	0.49
307-55-1	Perfluorododecanoic acid	1.77	U	1.77	0.43
72629-94-8	Perfluorotridecanoic acid	1.77	U	1.77	0.43
376-06-7	Perfluorotetradecanoic acid	1.77	U	1.77	0.57
375-73-5	Perfluorobutanesulfonic acid	1.77	U	1.77	0.55
2706-91-4	Perfluoropentanesulfonic acid	1.77	U	1.77	0.44
355-46-4	Perfluorohexanesulfonic acid	1.77	U	1.77	0.49
375-92-8	Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36
1763-23-1	Perfluorooctanesulfonic acid	1.77	U	1.77	0.75
68259-12-1	Perfluorononanesulfonic acid	1.77	U	1.77	0.35
335-77-3	Perfluorodecanesulfonic acid	1.77	U	1.77	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.43	U	4.43	1.15
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68
754-91-6	Perfluorooctanesulfonamide	1.77	U	1.77	0.82
2355-31-9	NMeFOSAA	4.43	U	4.43	1.68
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.43	U	4.43	1.42
13252-13-6	HFPODA	3.55	U	3.55	0.98
919005-14-4	DONA	1.77	U	1.77	0.37
756426-58-1	9Cl-PF3ONS	1.77	U	1.77	0.28
763051-92-9	11Cl-PF3OUdS	1.77	U	1.77	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: 1000-101623-0004 Lab Sample ID: 460-290517-3

Matrix: Water Lab File ID: PA231023E22.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:30

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 281.9(mL) Date Analyzed: 10/24/2023 08:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	100		50-150
STL01893	13C5 PFPeA	96		50-150
STL01892	13C4 PFHpA	103		50-150
STL02116	13C2 PFTeDA	88		50-150
STL02337	13C3 PFBS	95		50-150
STL01056	13C8 FOSA	87		50-150
STL02118	d3-NMeFOSAA	103		50-150
STL02117	d5-NEtFOSAA	99		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	99		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	85		50-150
STL00994	18O2 PFHxS	100		50-150
STL00993	13C2 PFHxA	103		50-150
STL00991	13C4 PFOS	107		50-150
STL00998	13C2 PFDoA	101		50-150
STL00995	13C5 PFNA	104		50-150
STL00996	13C2 PFDA	102		50-150
STL00990	13C4 PFOA	108		50-150
STL00997	13C2 PFUnA	97		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d
Lims ID: 460-290517-A-3-A
Client ID: 1000-101623-0004
Sample Type: Client
Inject. Date: 24-Oct-2023 08:57:31 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-A-3-A
Misc. Info.: 200-0057513-022 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:43:47
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.603	2057482	1.25		99.6	1269	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.008	25665	-0.0236			1.6	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1536527	1.20		95.9	1349	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.507	2.453	0.054	1.028	13545	0.0102			0.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1917276	1.11		95.1	92047	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	219299	1.09		93.6	110	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1675329	1.28		103	6550	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.928	2.908	0.020	1.007	189	0.000877			2.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	268981	1.07		85.2	996	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1477263	1.19		100	5761	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	4893	0.003538	Target=3.32		10.3	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	2122		2.31(1.66-4.98)		1.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1840364	1.29		103	5246	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	302789	1.17		98.7	501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	15831	0.008528	Target=2.88		0.6	M
413.00 > 169.00	3.511	3.514	-0.003	0.997	4335		3.65(1.44-4.32)		7.9	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2178563	1.34		108	7177	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2082221	1.25			6613	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.830	3.822	0.008	1.000	1657	0.001680	Target=4.24		3.1	RM
499.00 > 99.00	3.830	3.822	0.008	1.000	1568		1.06(2.12-6.37)		4.9	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	1010258	1.28		107	5010	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2290134	1.30		104	6157	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.990	3.983	0.007	1.042	184	0.00006098			1.5	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2356942	1.28		102	4181	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	328694	1.13		94.5	807	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	87	0.000144			1.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.234	0.007	1.205	1714028	1.09		87.0	2712	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.270	-0.005	1.212	566829	1.28		103	2310	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.270	0.008	1.003	144	0.000350			1.1	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.246	2112738	1.21		96.9	7614	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.386	4.390	-0.004	1.000	1260	0.000723	Target=12.20		0.5	R
563.00 > 169.00	4.398	4.390	0.008	1.003	443		2.84(6.10-18.31)		9.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.249	523581	1.23		98.5	1010	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.433	4.401	0.032	1.008	928	0.002215			7.4	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2244612	1.27		101	9730	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.610	4.613	-0.003	1.000	2477	0.001355	Target=8.47		0.2	RM
613.00 > 169.00	4.610	4.613	-0.003	1.000	691		3.58(4.23-12.70)		5.9	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.982	0.007	1.417	1942129	1.10		88.0	5140	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

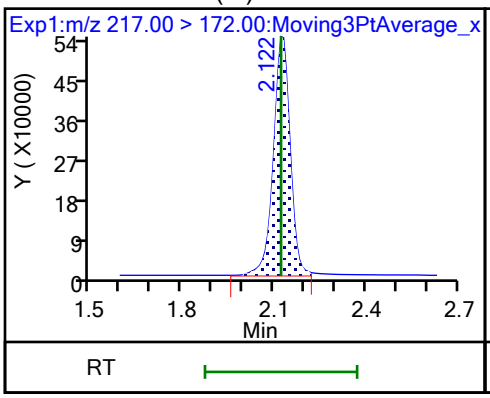
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:50 Chrom Revision: 2.3 18-Oct-2023 21:16:54

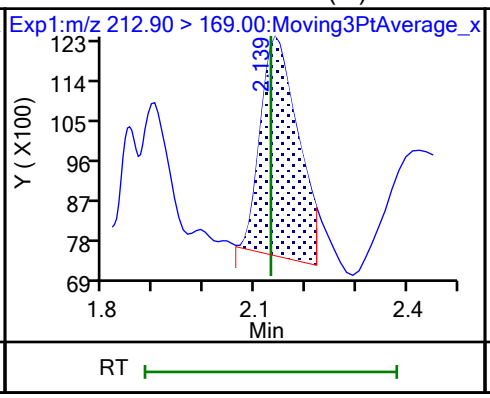
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d
Injection Date: 24-Oct-2023 08:57:31 Instrument ID: LC812
Lims ID: 460-290517-A-3-A Lab Sample ID: 200-290517-3
Client ID: 1000-101623-0004
Operator ID: LC812user ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

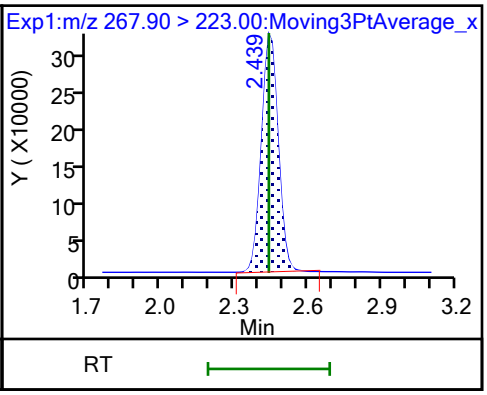
D 1 13C4 PFBA (M)



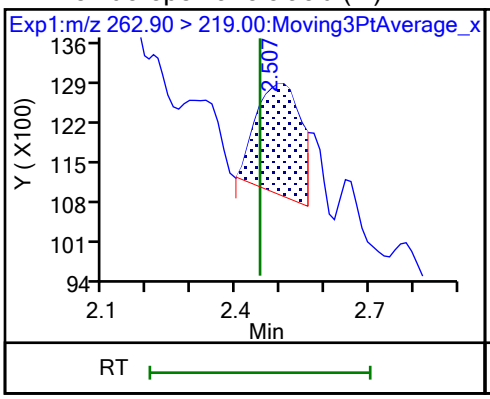
2 Perfluorobutanoic acid (M)



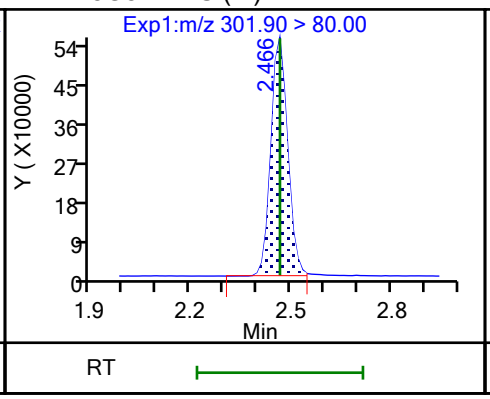
D 3 13C5 PFPeA



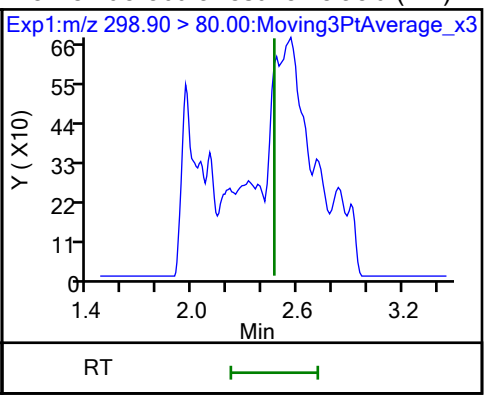
4 Perfluoropentanoic acid (M)



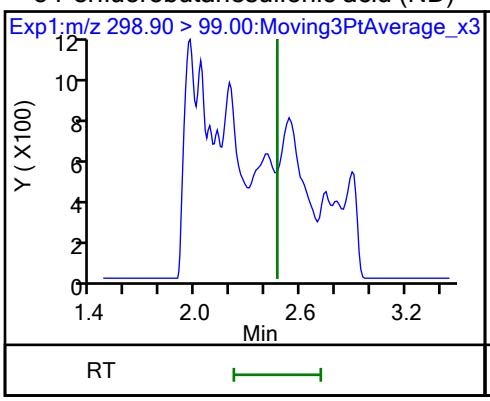
D 47 13C3 PFBS (M)



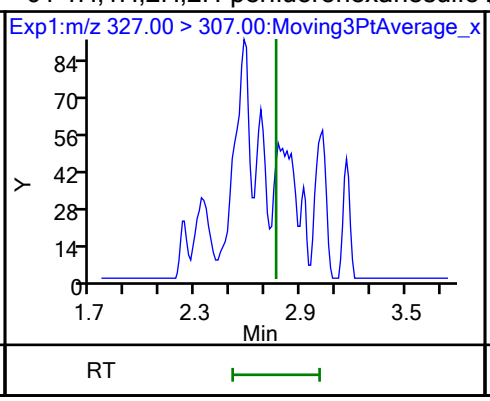
5 Perfluorobutanesulfonic acid (ND)



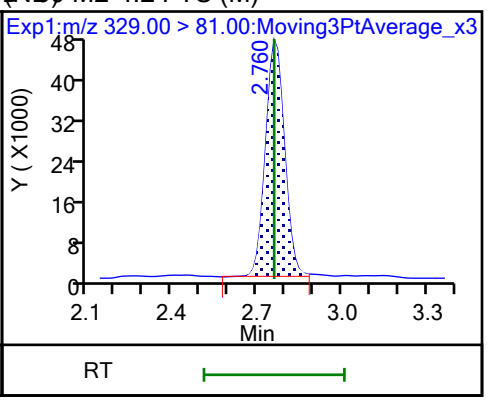
5 Perfluorobutanesulfonic acid (ND)



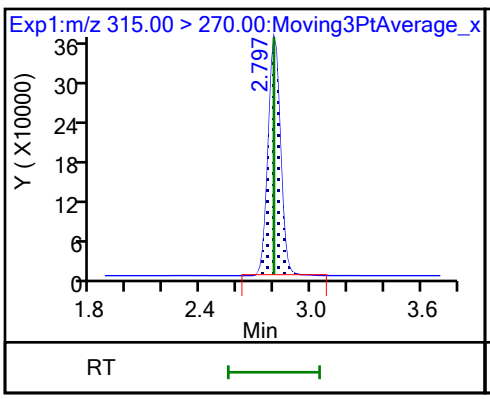
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



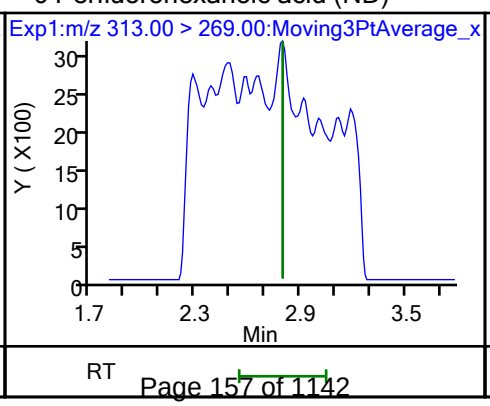
D 60 M2-4:2 FTS (M)



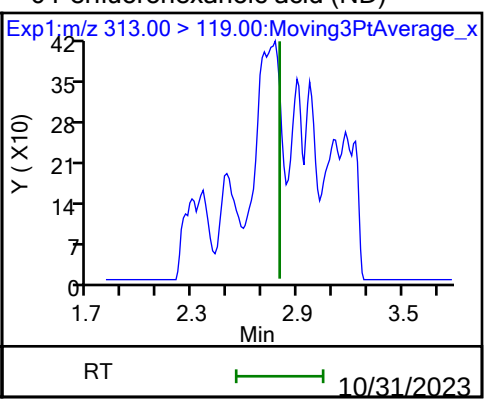
D 7 13C2 PFHxA



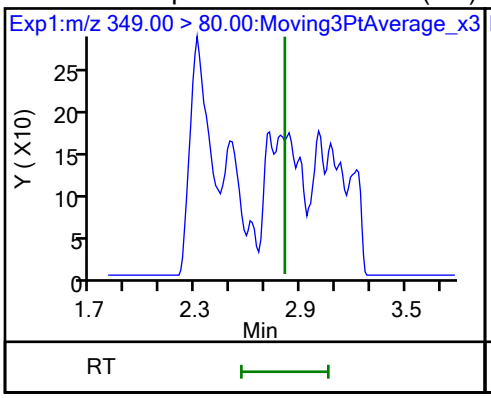
6 Perfluorohexanoic acid (ND)



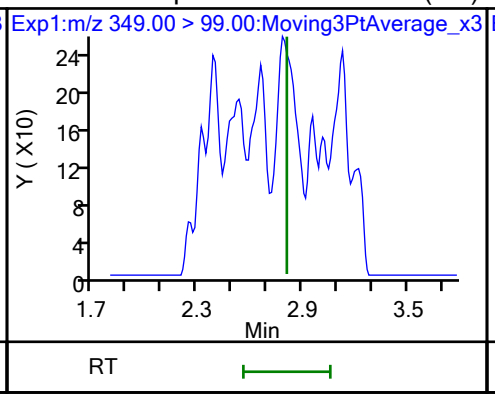
6 Perfluorohexanoic acid (ND)



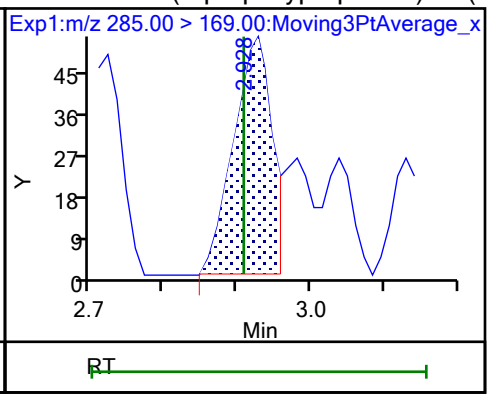
70 Perfluoropentanesulfonic acid (ND)



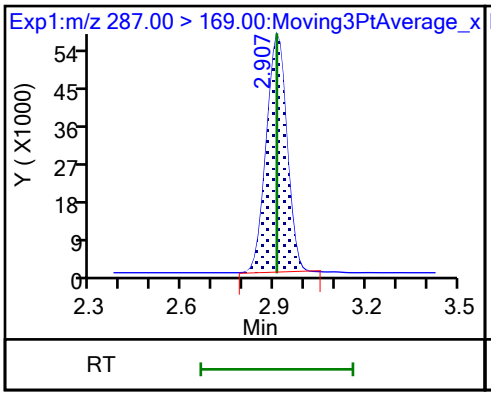
70 Perfluoropentanesulfonic acid (ND)



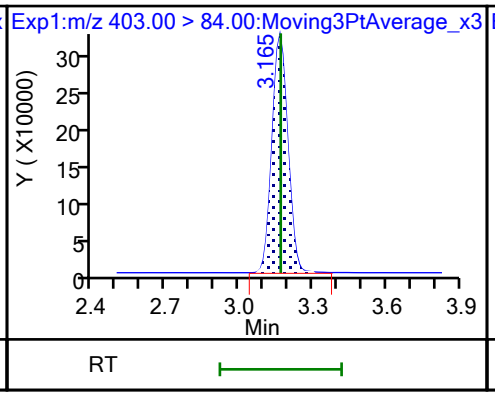
67 Perfluoro(2-propoxypropanoic) ac (M)



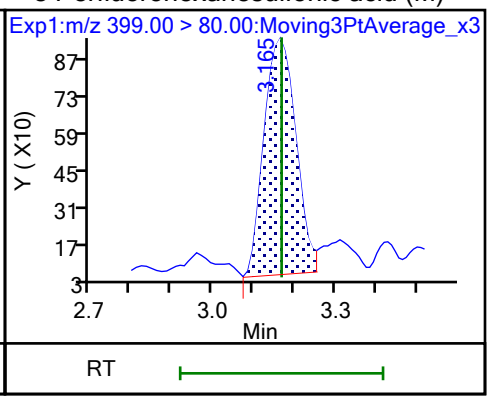
D 64 13C3 HFPO-DA



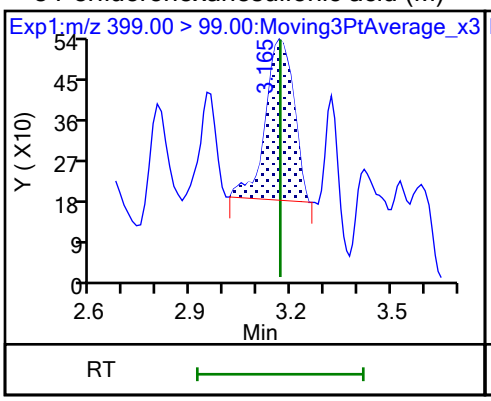
D 11 18O2 PFHxS



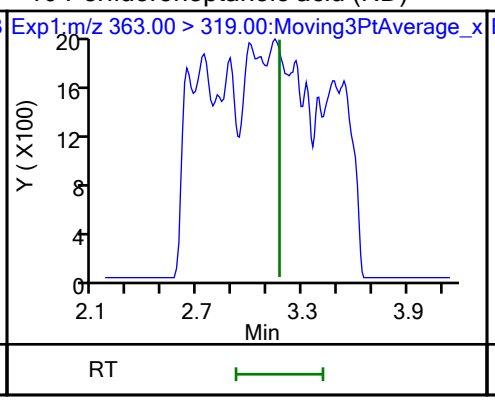
8 Perfluorohexanesulfonic acid (M)



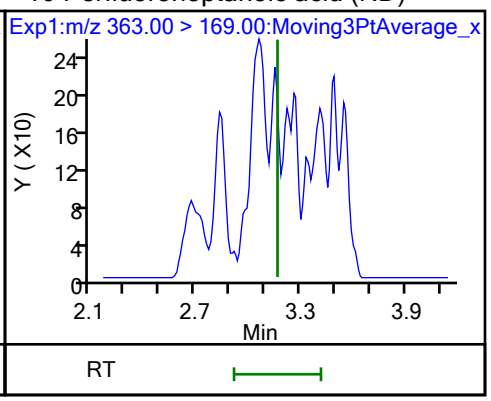
8 Perfluorohexanesulfonic acid (M)



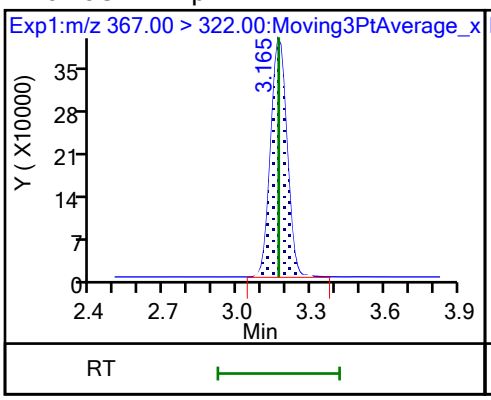
10 Perfluoroheptanoic acid (ND)



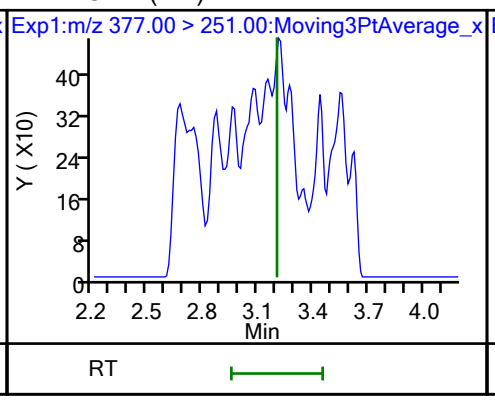
10 Perfluoroheptanoic acid (ND)



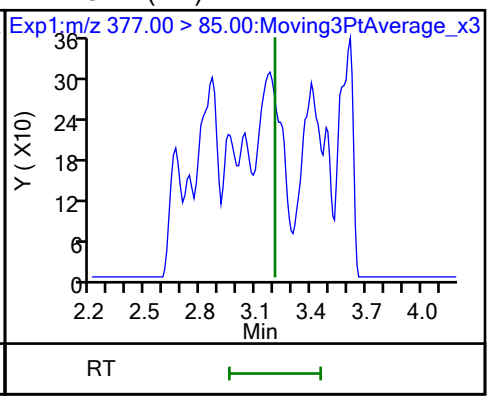
D 9 13C4 PFHpA



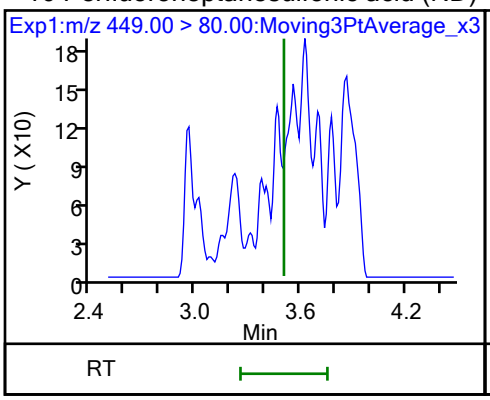
77 DONA (ND)



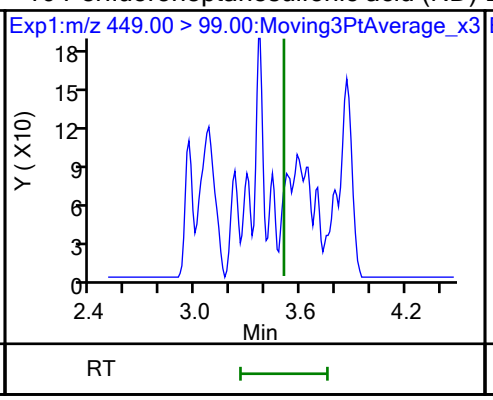
77 DONA (ND)



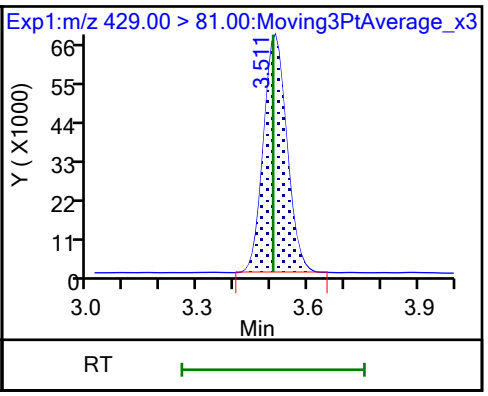
16 Perfluoroheptanesulfonic acid (ND)



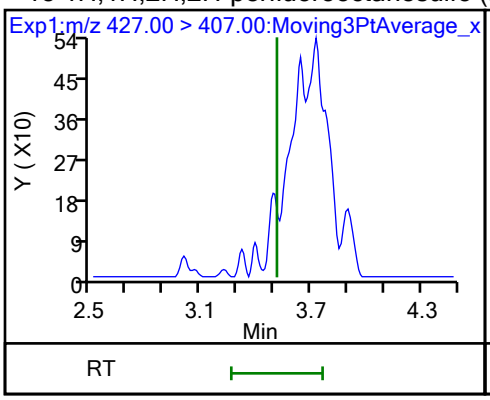
16 Perfluoroheptanesulfonic acid (ND)



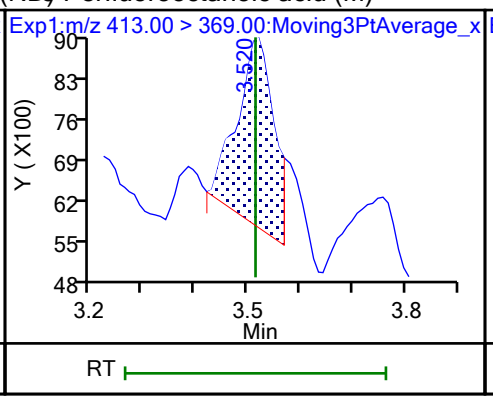
D 12 M2-6:2 FTS



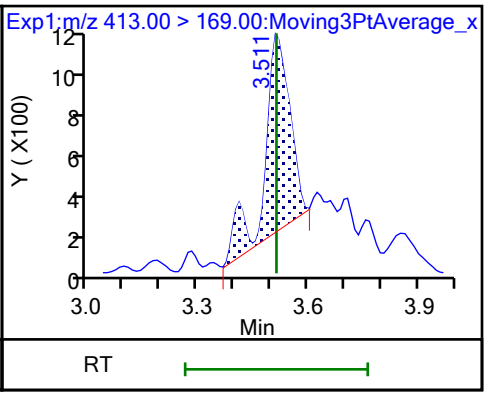
13 1H,1H,2H,2H-perfluorooctanesulfo (ND)



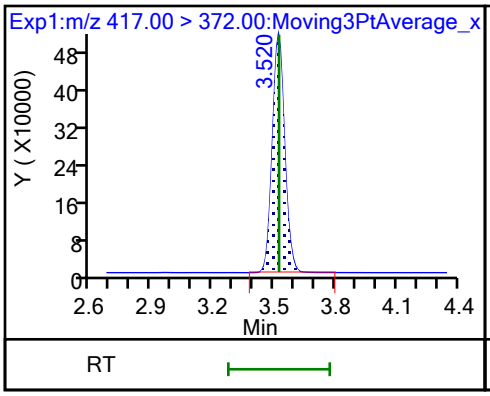
D 5 Perfluorooctanoic acid (M)



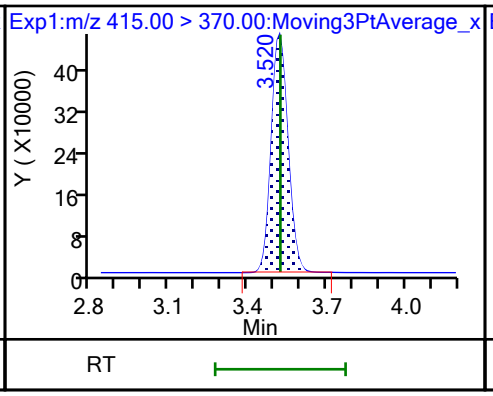
15 Perfluorooctanoic acid



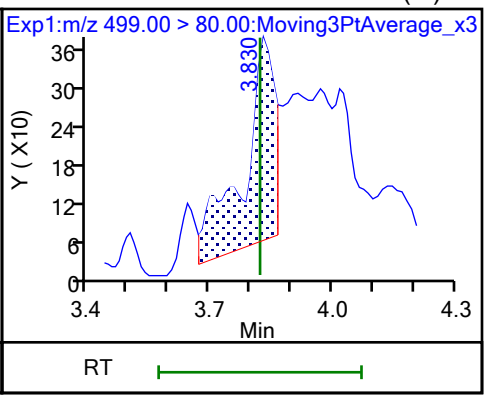
D 14 13C4 PFOA



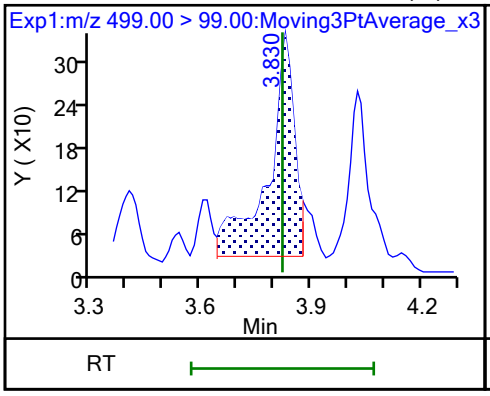
* 62 13C2 PFOA



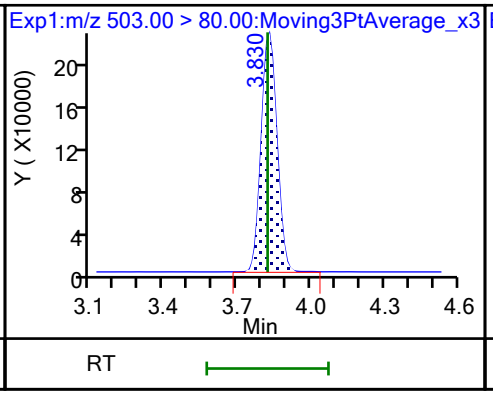
17 Perfluorooctanesulfonic acid (M)



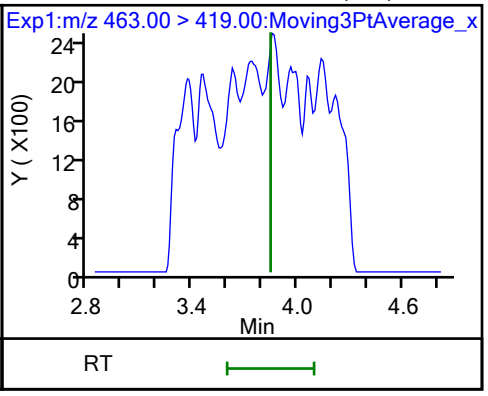
17 Perfluorooctanesulfonic acid (M)



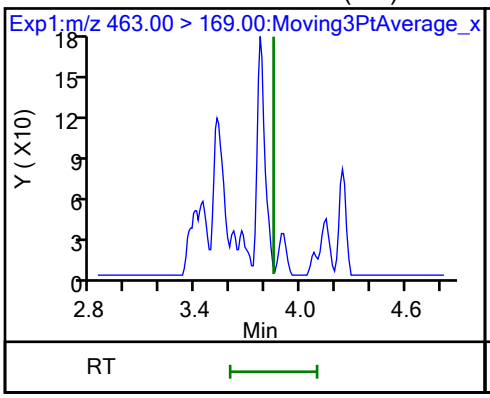
D 18 13C4 PFOS



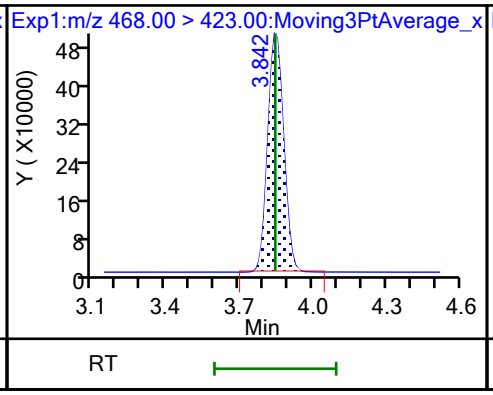
20 Perfluorononanoic acid (ND)



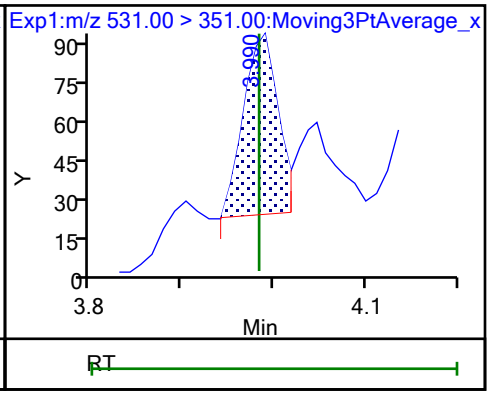
20 Perfluorononanoic acid (ND)



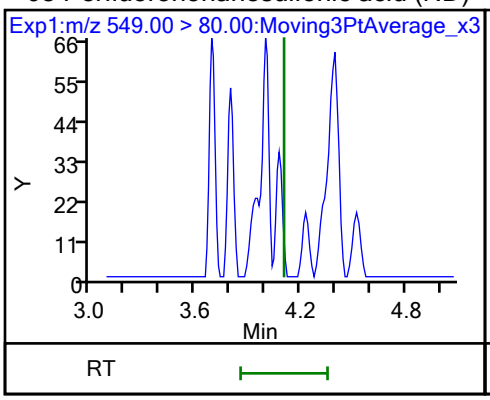
D 19 13C5 PFNA



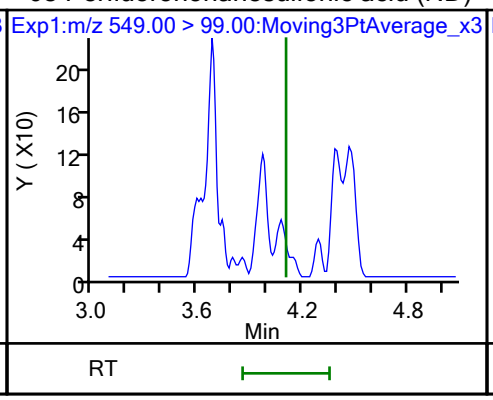
69 9-Chlorohexadecafluoro-3-oxanona (M)



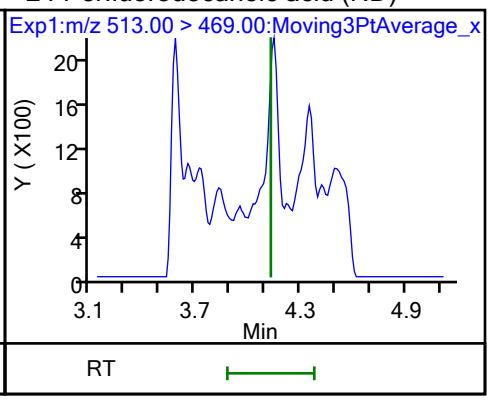
68 Perfluorononanesulfonic acid (ND)



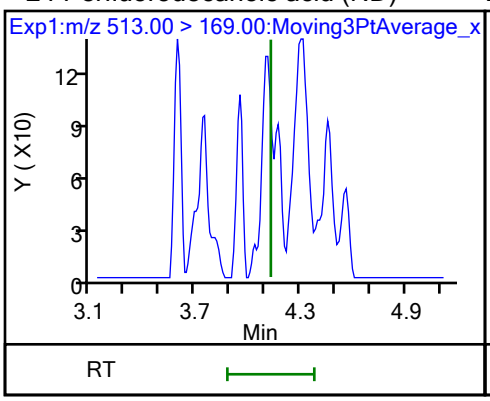
68 Perfluorononanesulfonic acid (ND)



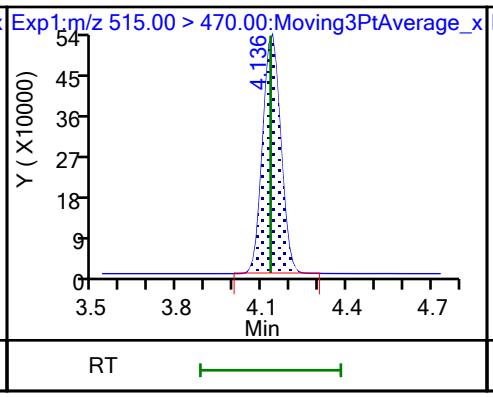
24 Perfluorodecanoic acid (ND)



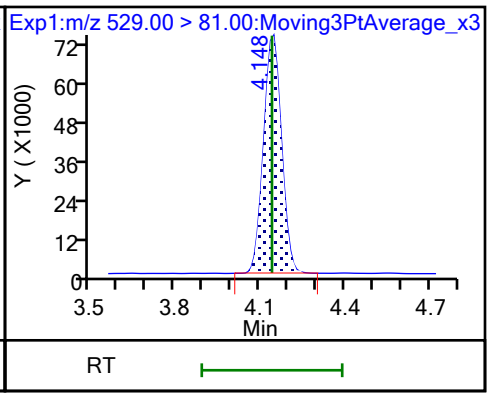
24 Perfluorodecanoic acid (ND)



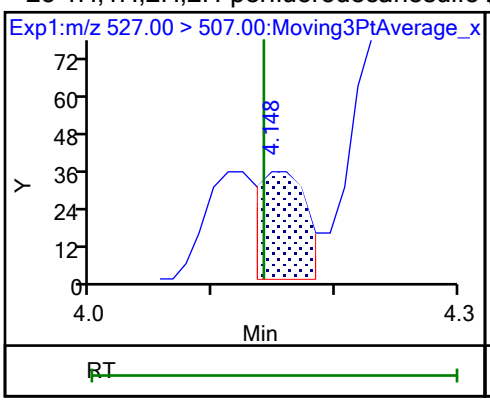
D 23 13C2 PFDA



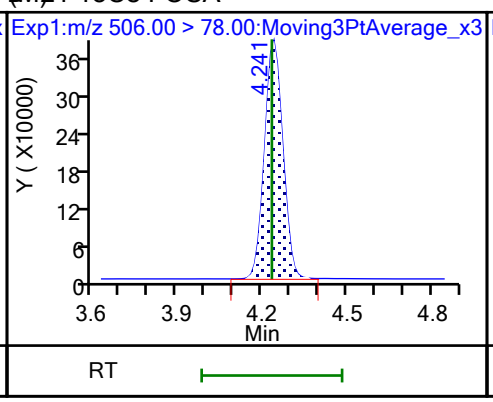
D 26 M2-8:2 FTS



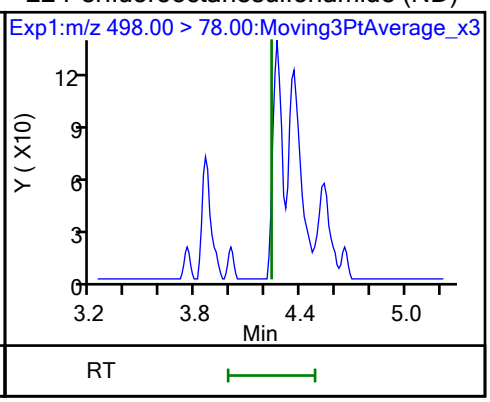
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



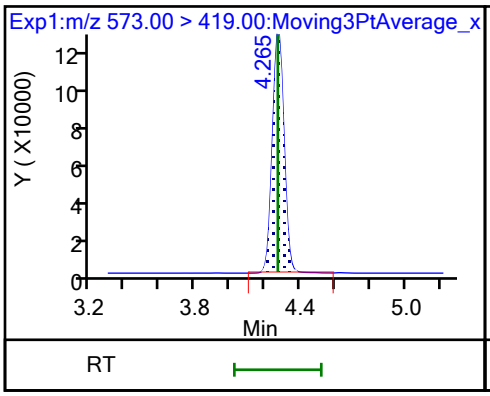
D 21 13C8 FOSA



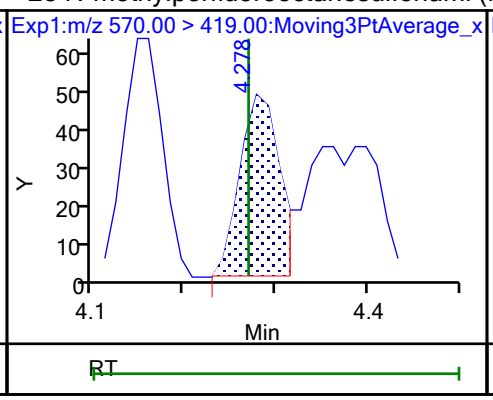
22 Perfluorooctanesulfonamide (ND)



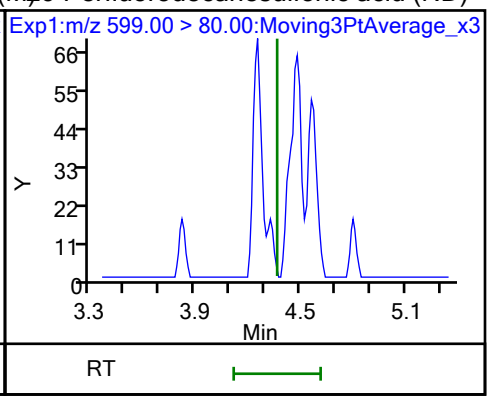
D 27 d3-NMeFOSAA



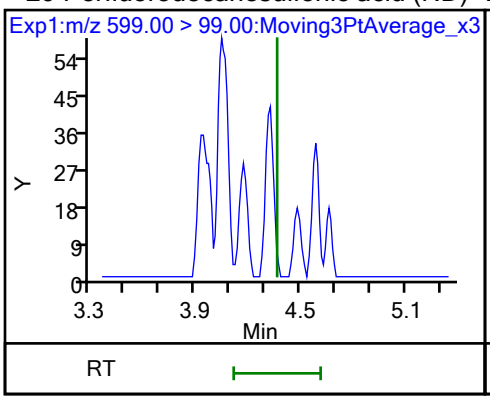
28 N-methylperfluorooctanesulfonami (M)



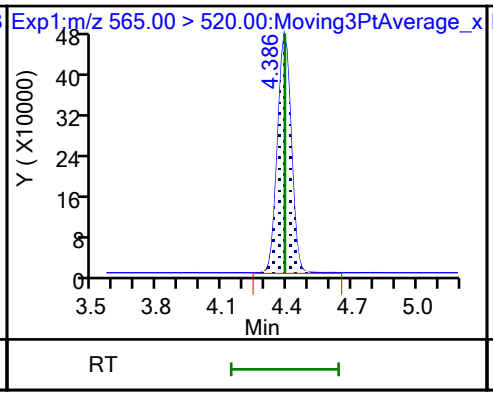
29 Perfluorodecanesulfonic acid (ND)



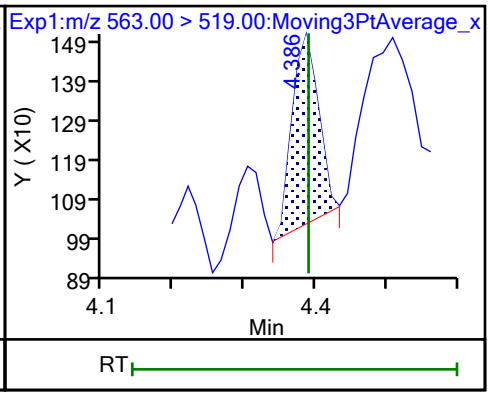
29 Perfluorodecanesulfonic acid (ND)



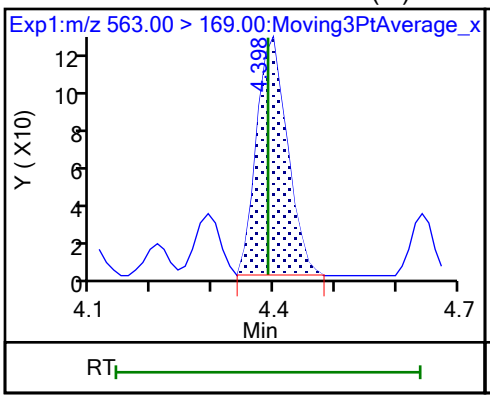
D 30 13C2 PFUnA



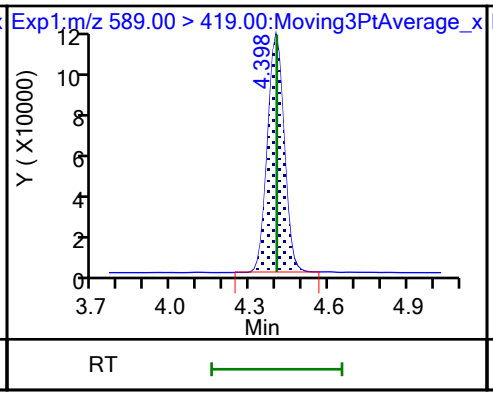
31 Perfluoroundecanoic acid



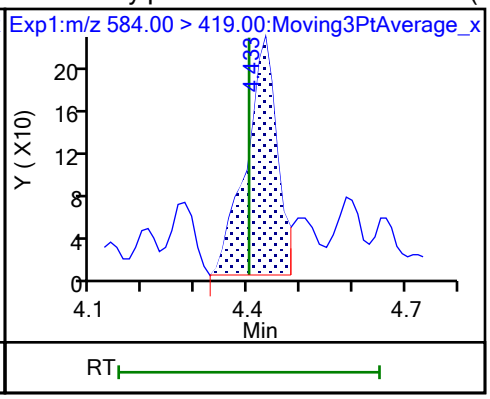
31 Perfluoroundecanoic acid (M)



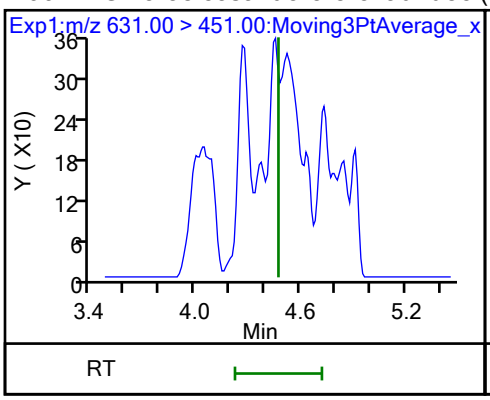
D 32 d5-NEtFOSAA



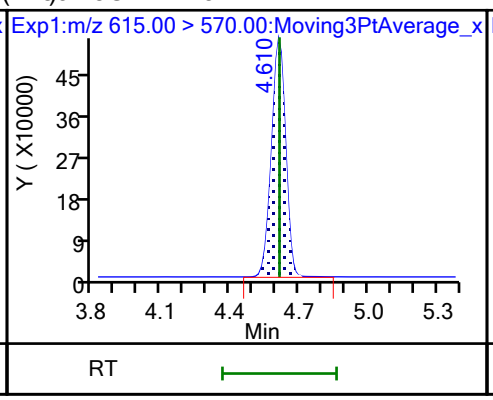
33 N-ethylperfluorooctanesulfonamid (M)



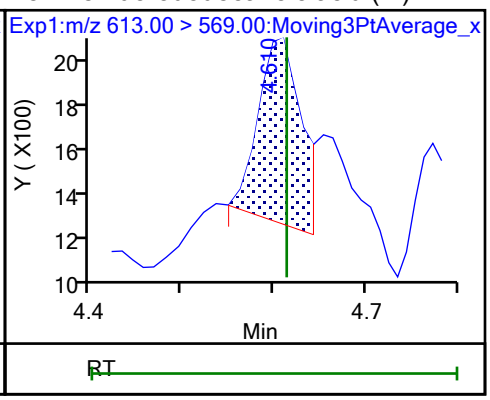
66 11-Chloroeicosafluoro-3-oxaundec (ND)



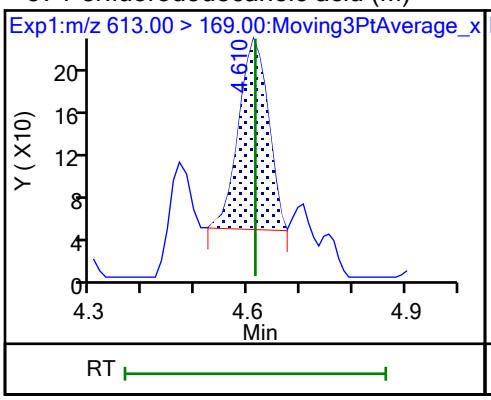
D 36 13C2 PFDoA



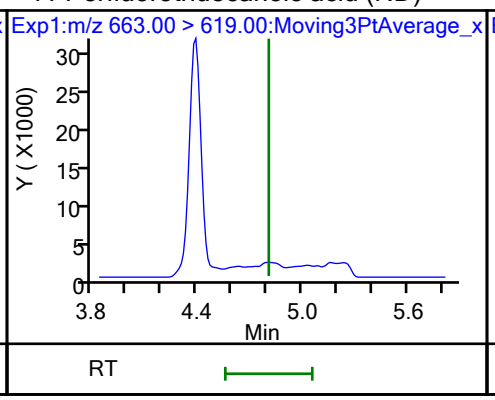
37 Perfluorododecanoic acid (M)



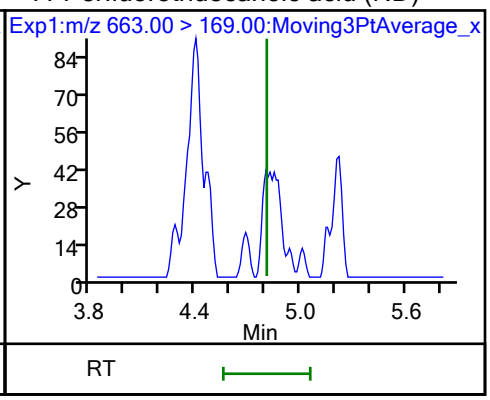
37 Perfluorododecanoic acid (M)



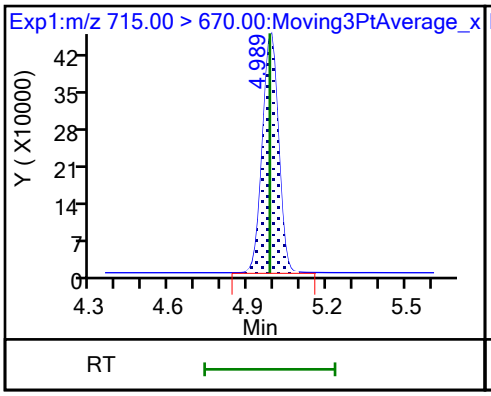
41 Perfluorotridecanoic acid (ND)



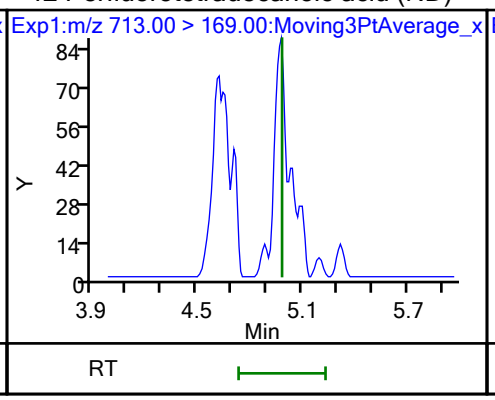
41 Perfluorotridecanoic acid (ND)



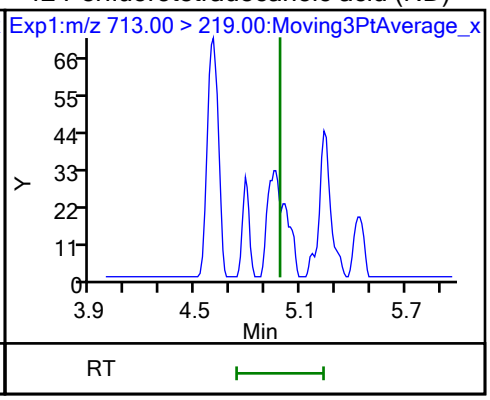
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

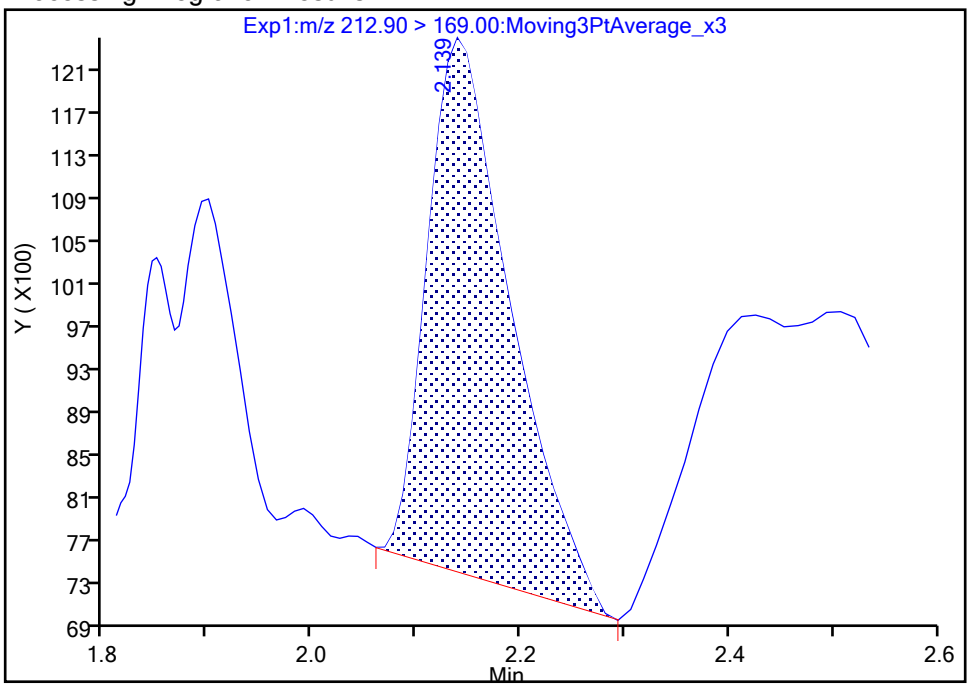
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

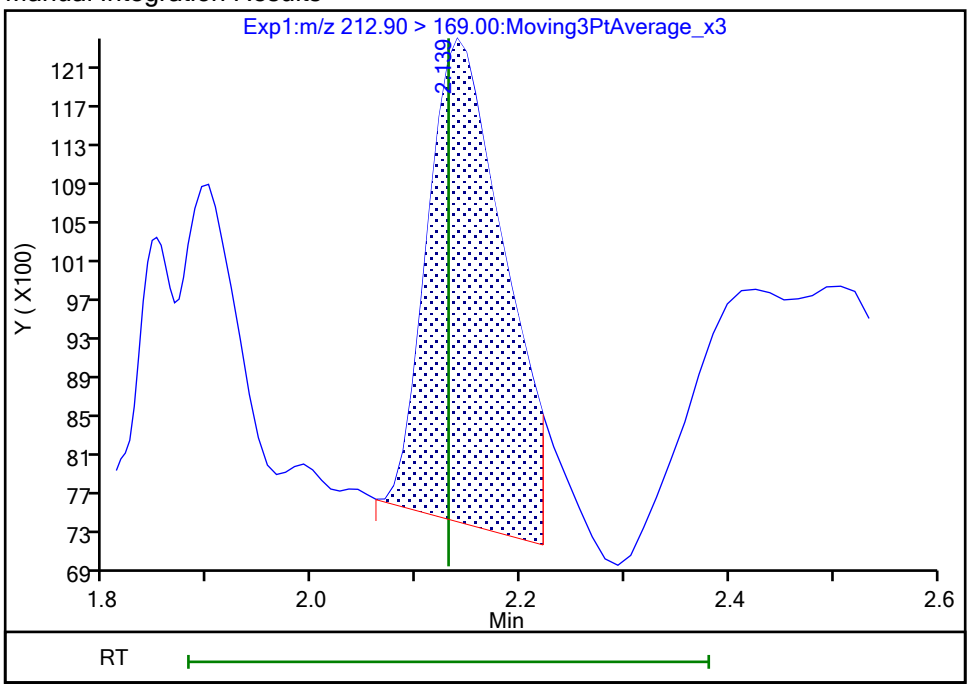
Processing Integration Results

RT: 2.14
Area: 27850
Amount: -0.022172
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 25665
Amount: -0.023640
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

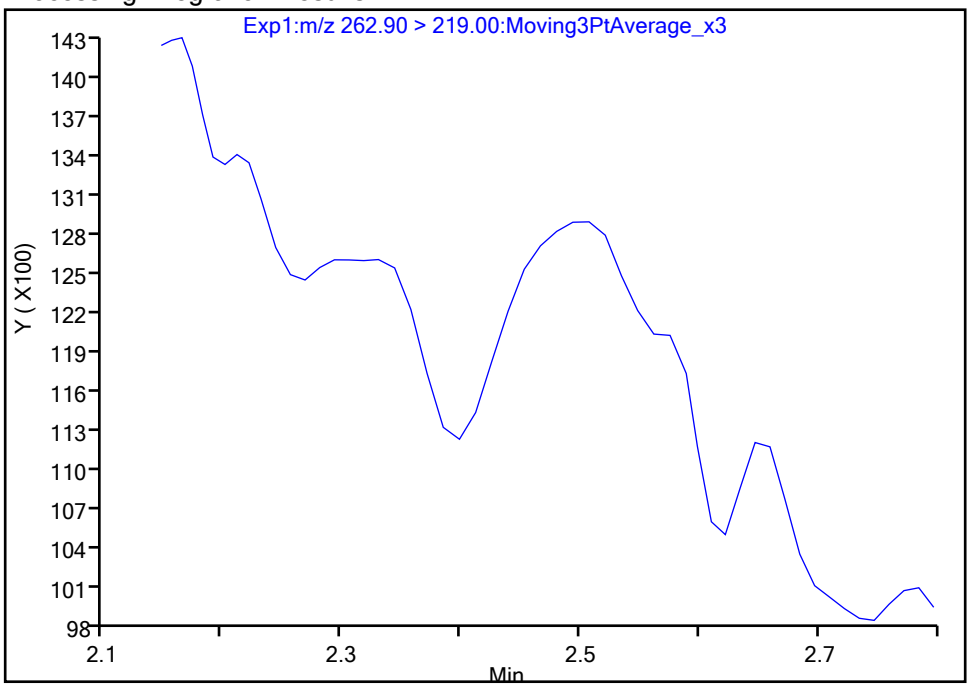
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

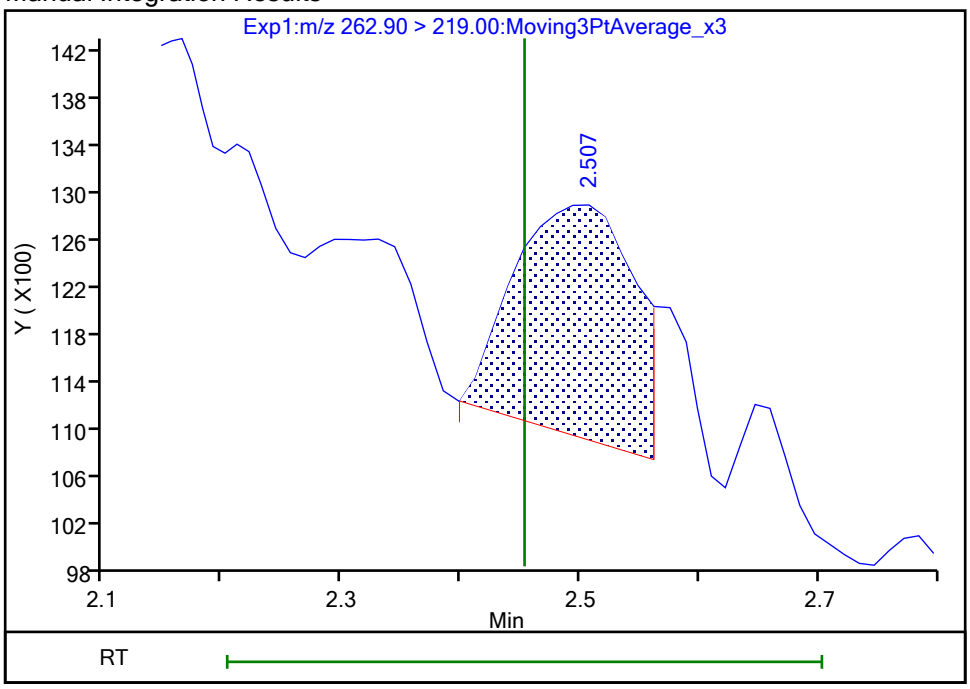
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.51
Area: 13545
Amount: 0.010211
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

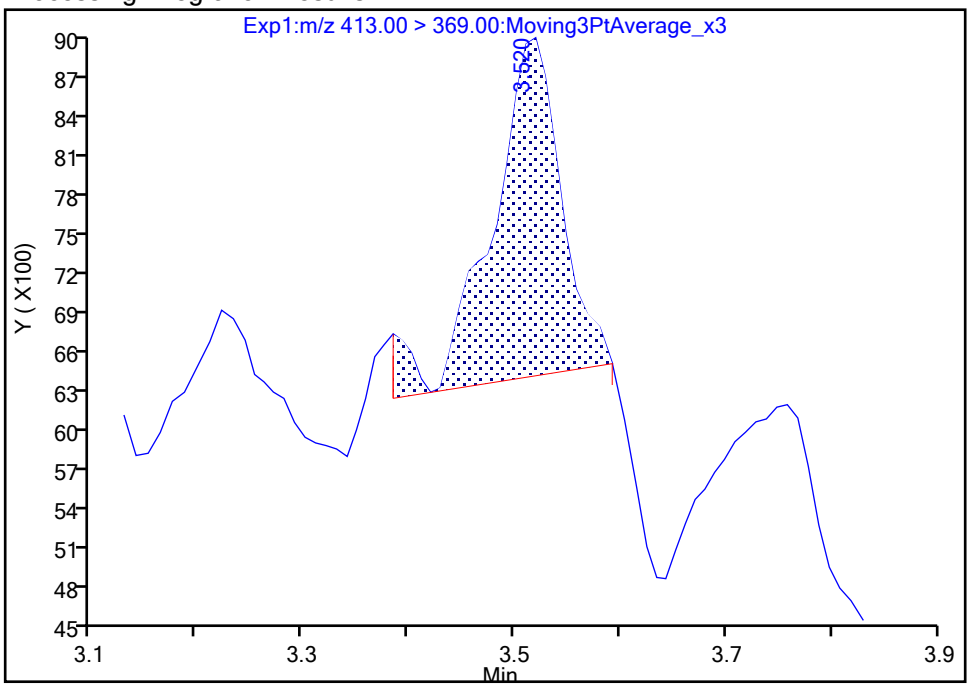
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

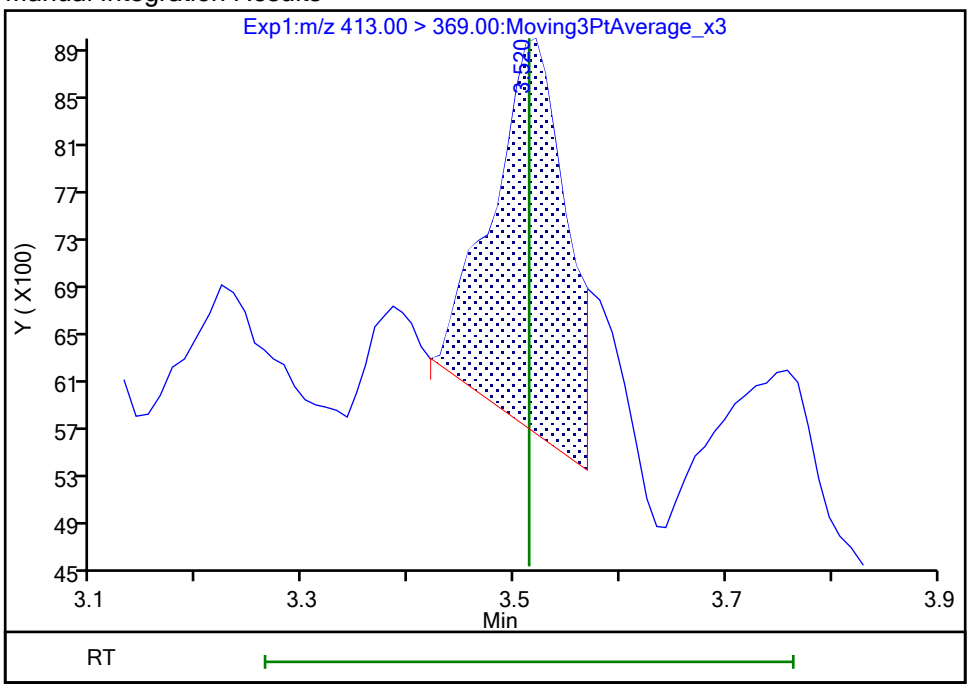
Processing Integration Results

RT: 3.52
Area: 11718
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 15831
Amount: 0.008528
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

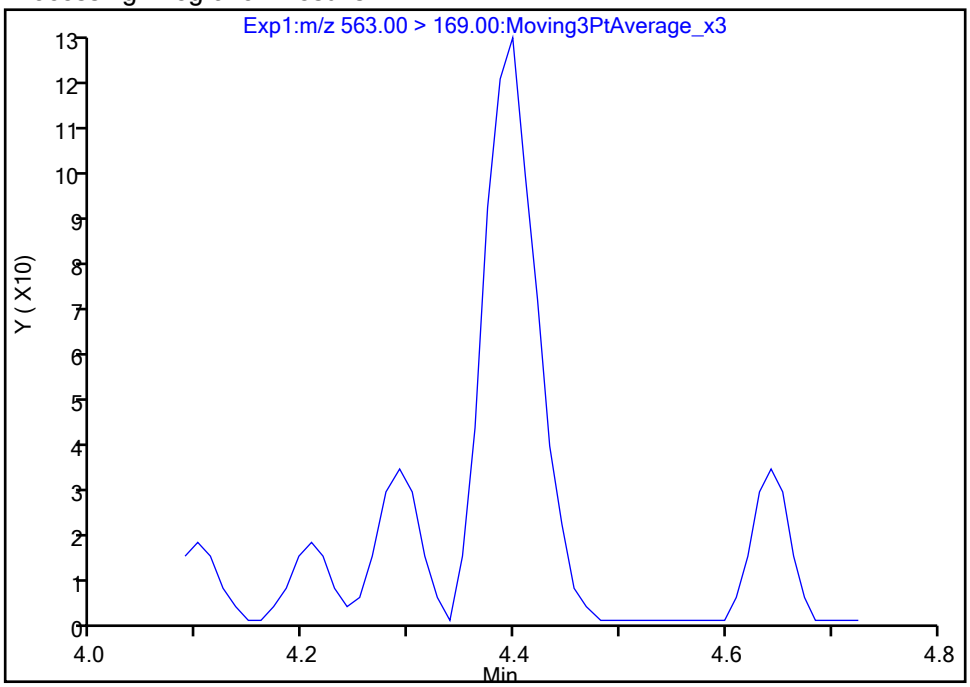
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

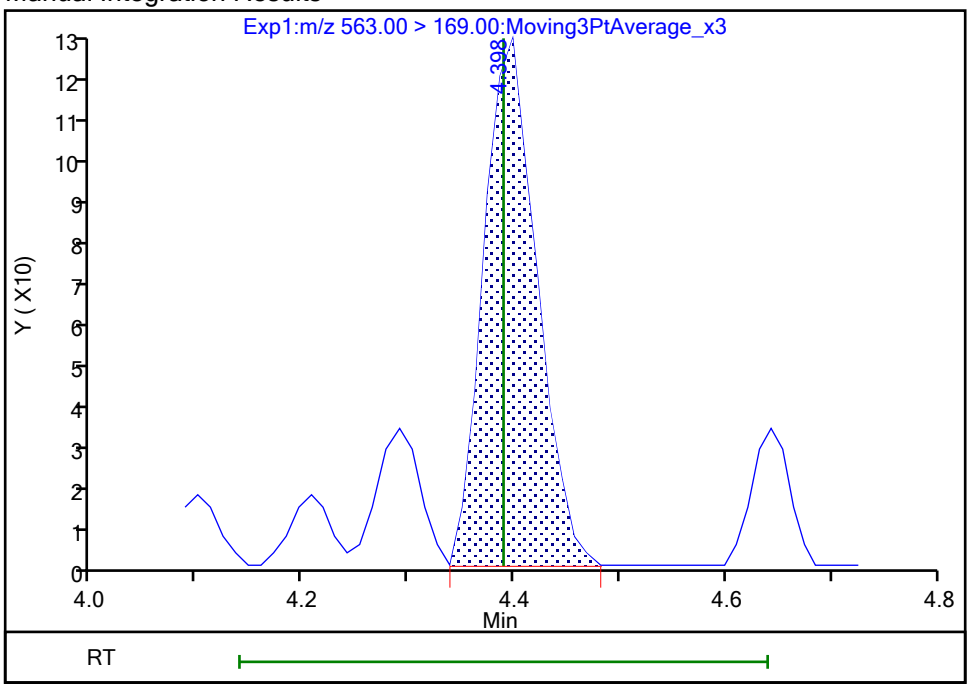
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.40
Area: 443
Amount: 0.000723
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:43:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

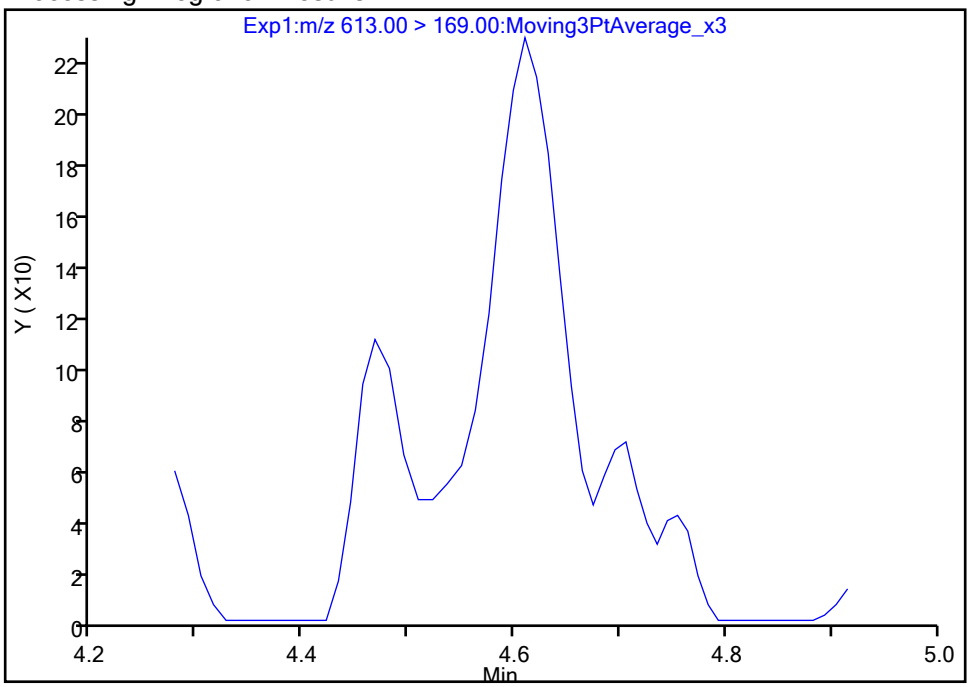
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

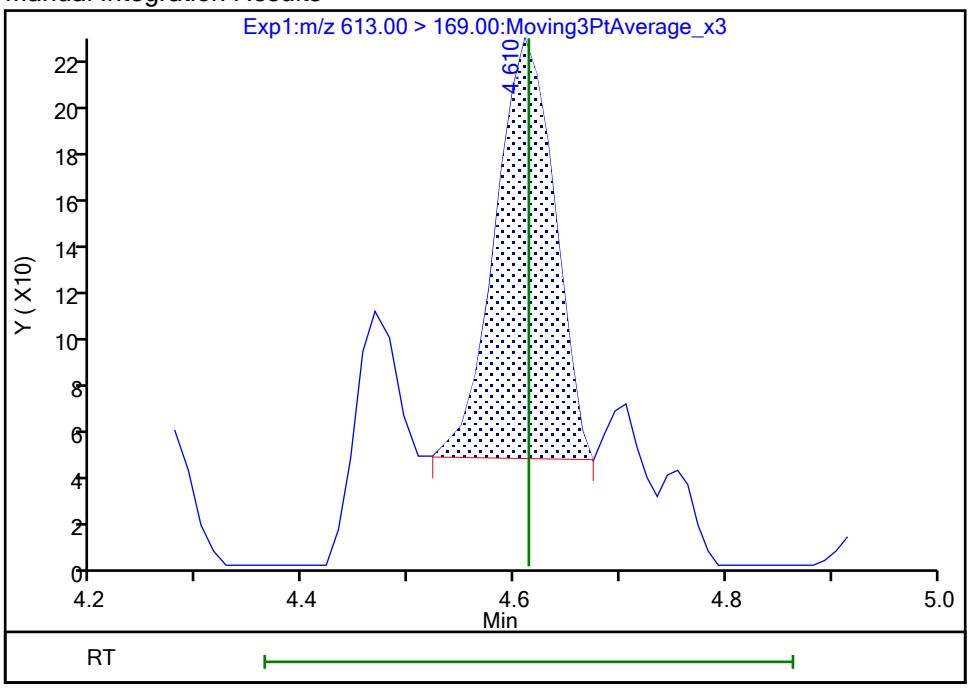
Not Detected
Expected RT: 4.61

Processing Integration Results



RT: 4.61
Area: 691
Amount: 0.001355
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 25-Oct-2023 10:43:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

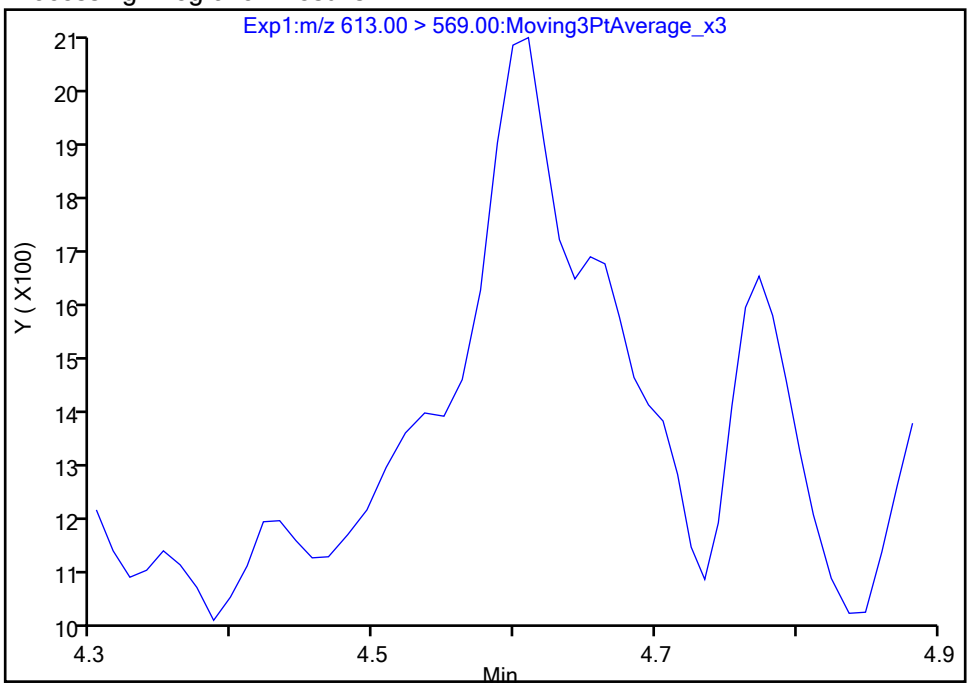
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

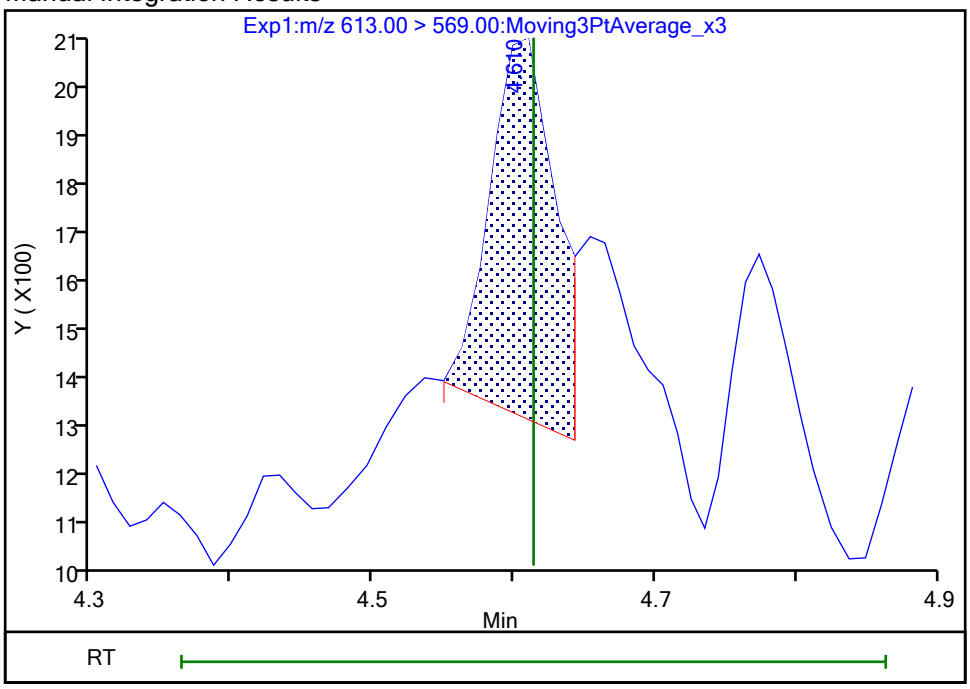
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 2477
Amount: 0.001355
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:43:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

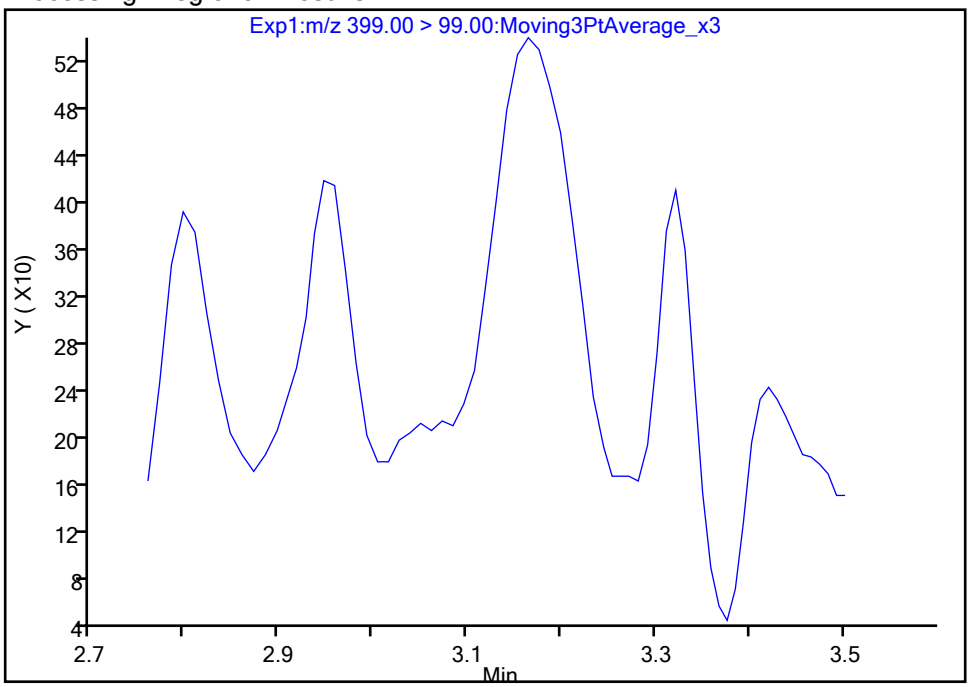
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

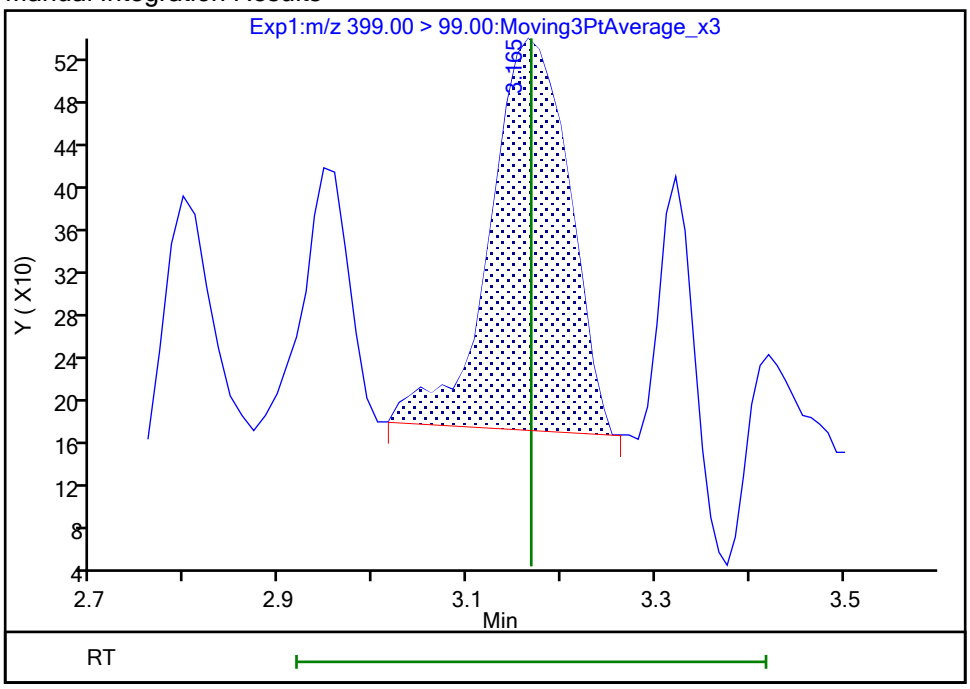
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 2122
Amount: 0.003538
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

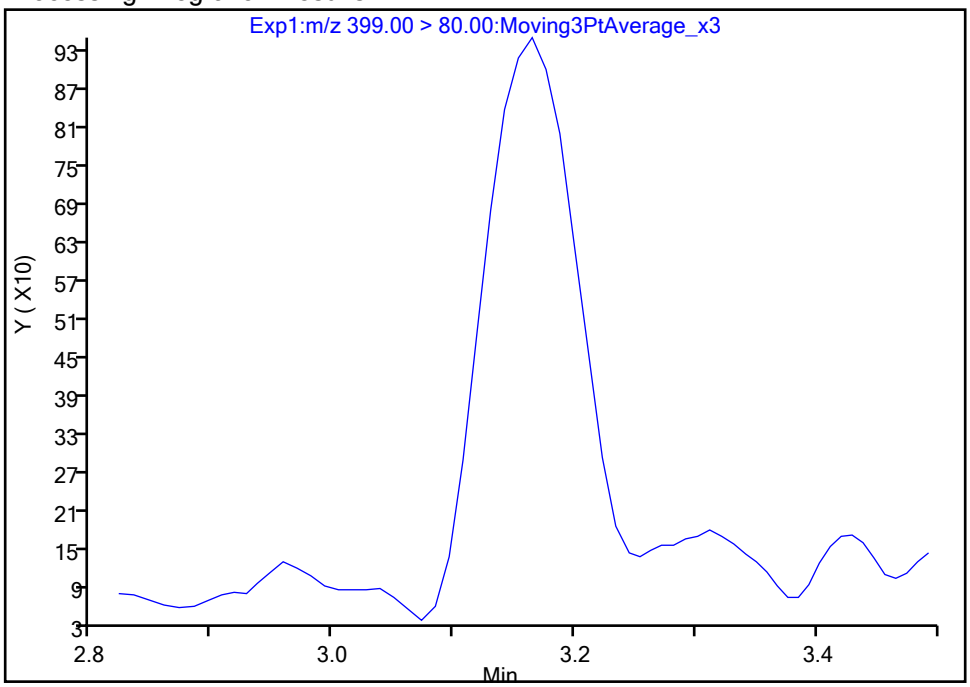
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

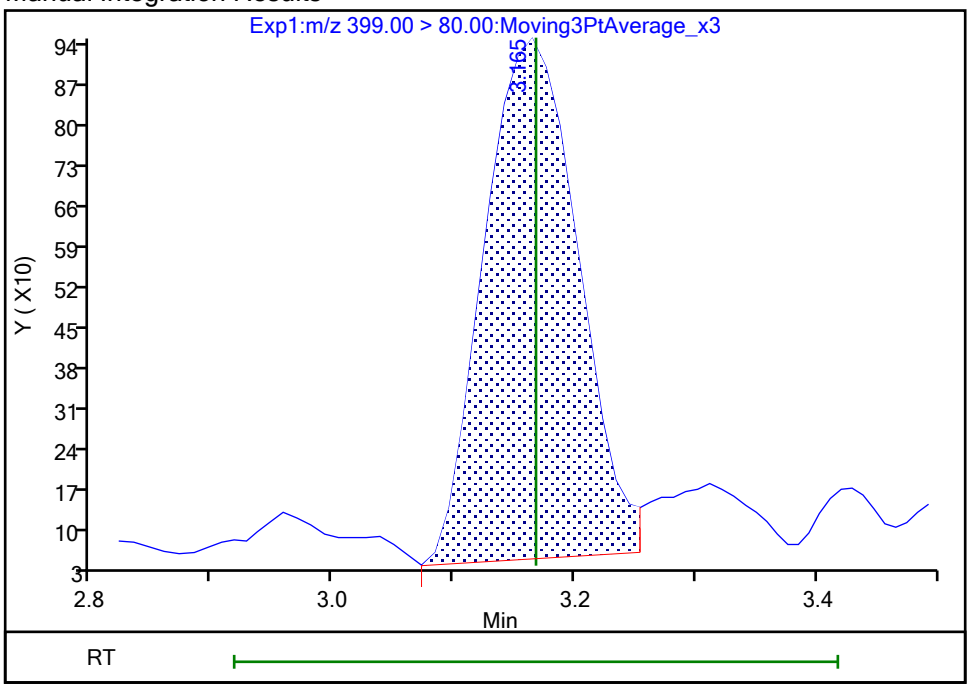
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 4893
Amount: 0.003538
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

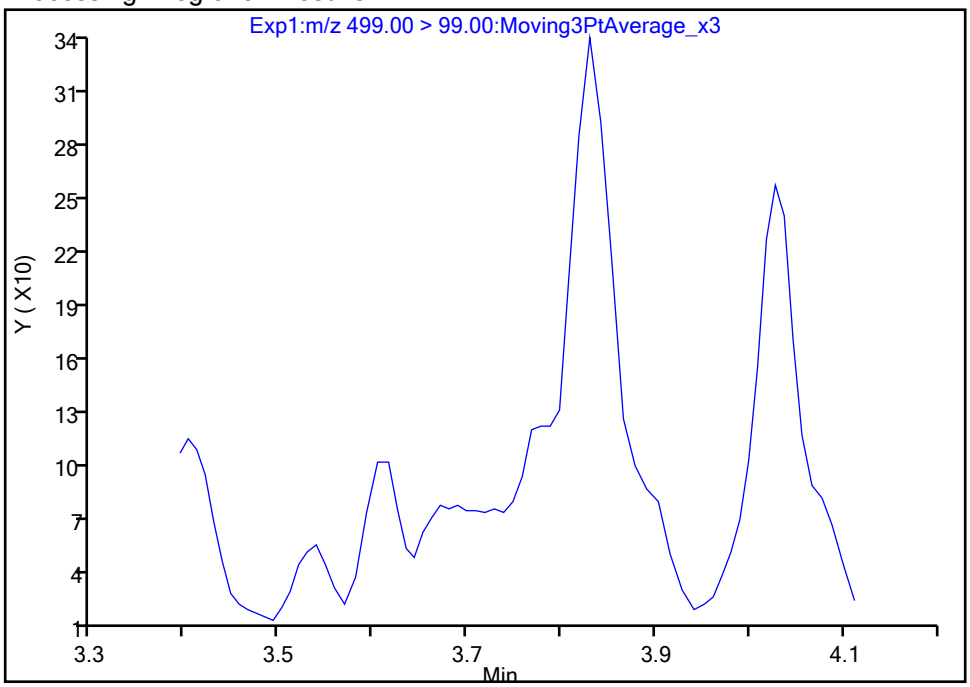
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

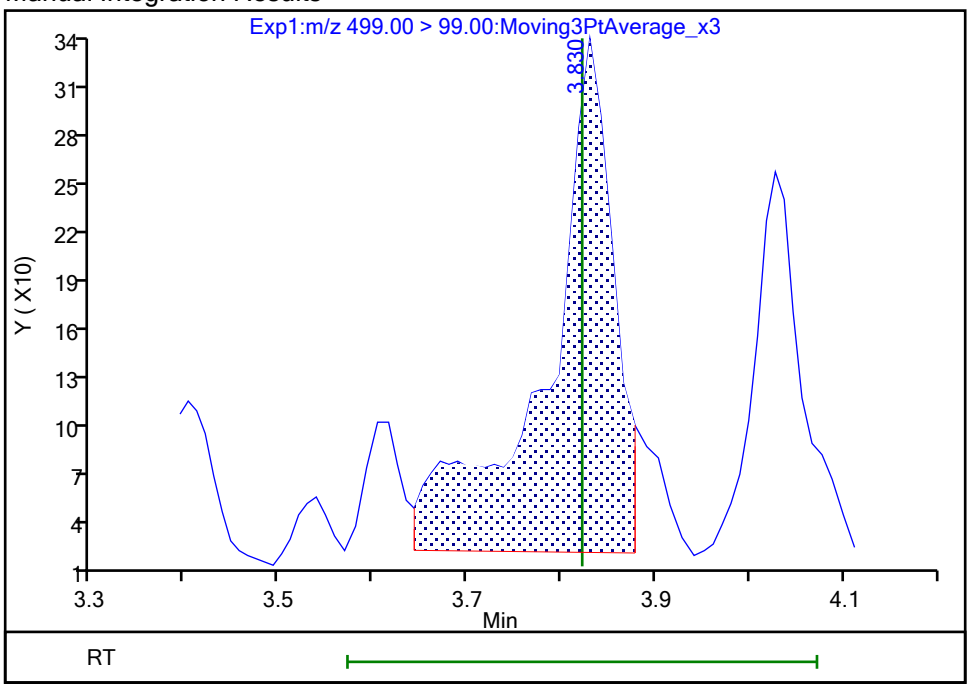
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.83
Area: 1568
Amount: 0.001680
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

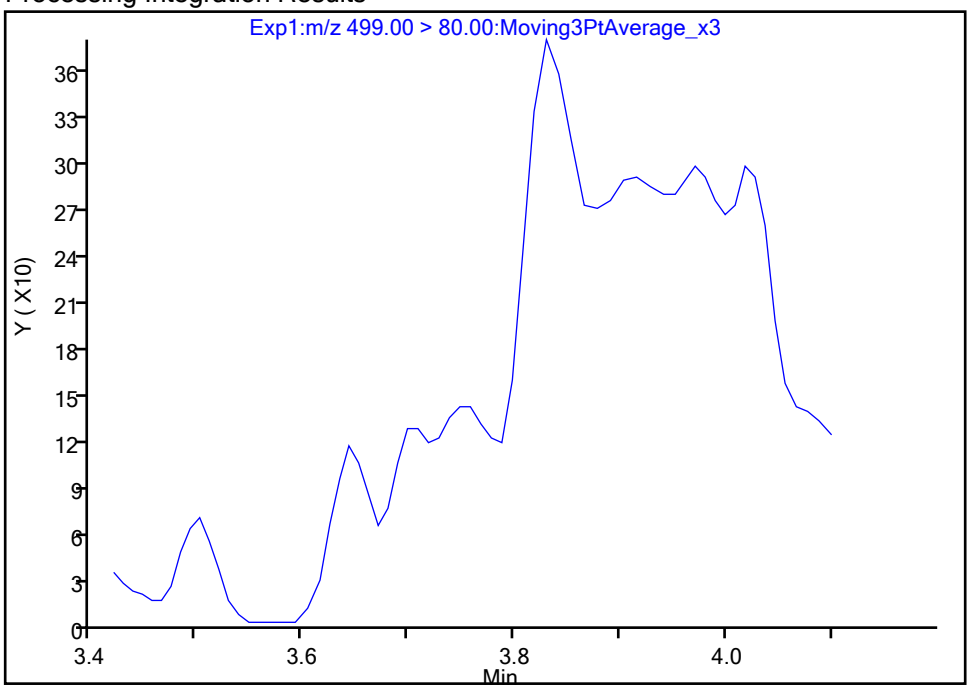
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

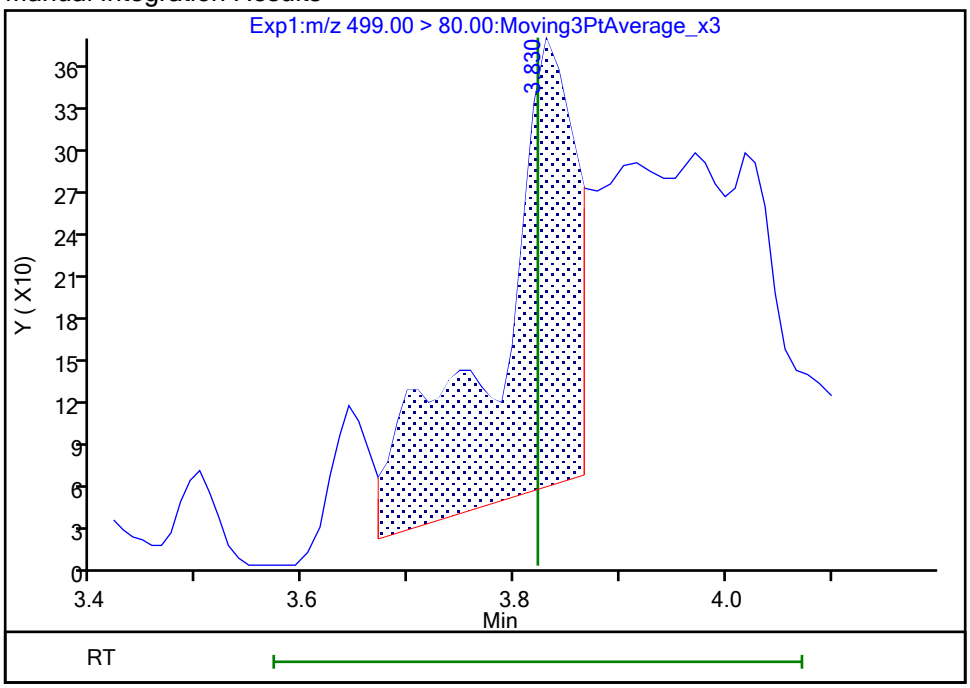
Processing Integration Results

Not Detected
Expected RT: 3.82



Manual Integration Results

RT: 3.83
Area: 1657
Amount: 0.001680
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

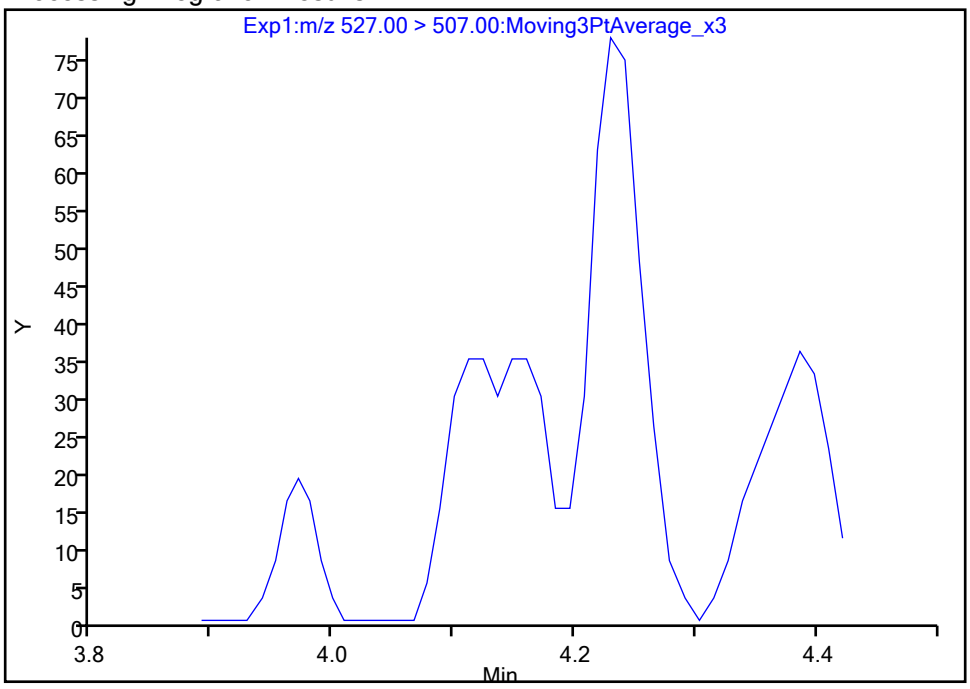
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

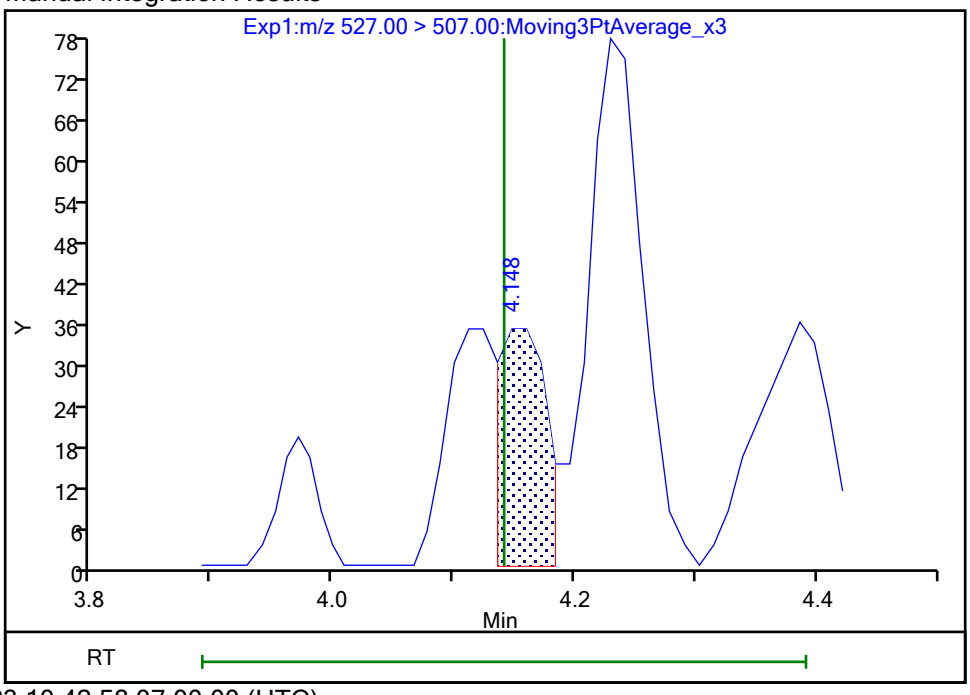
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 87
Amount: 0.000144
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

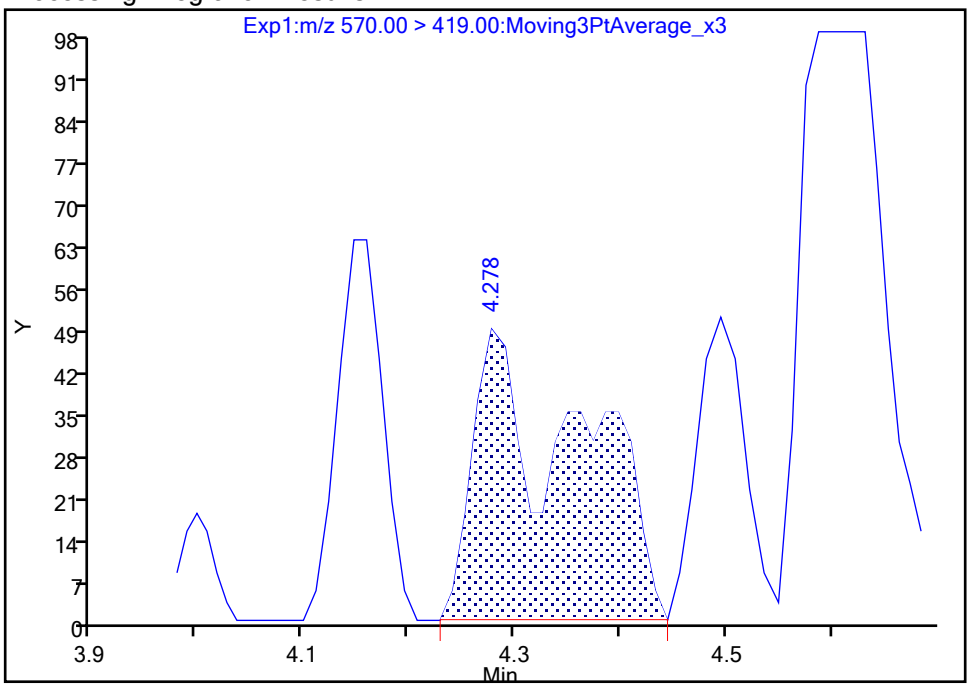
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

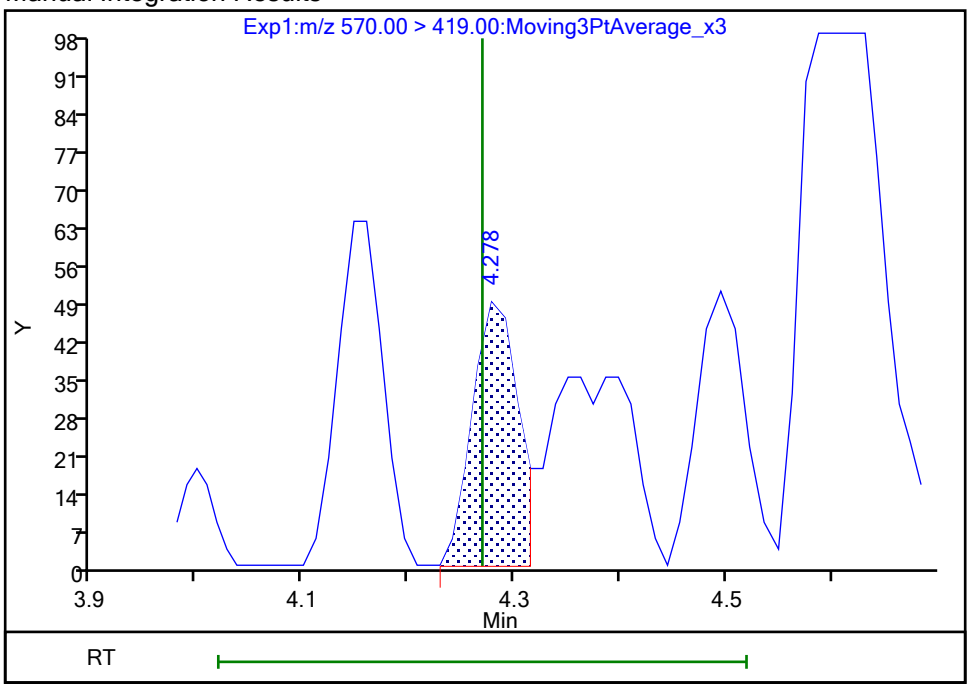
Processing Integration Results

RT: 4.28
Area: 341
Amount: 0.000829
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 144
Amount: 0.000350
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:43:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

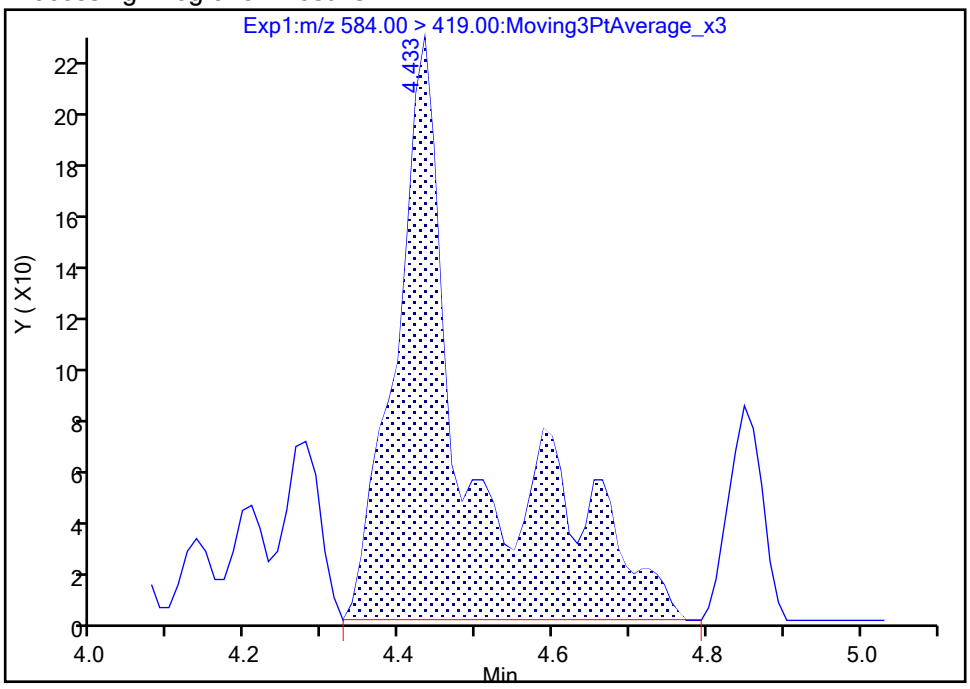
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

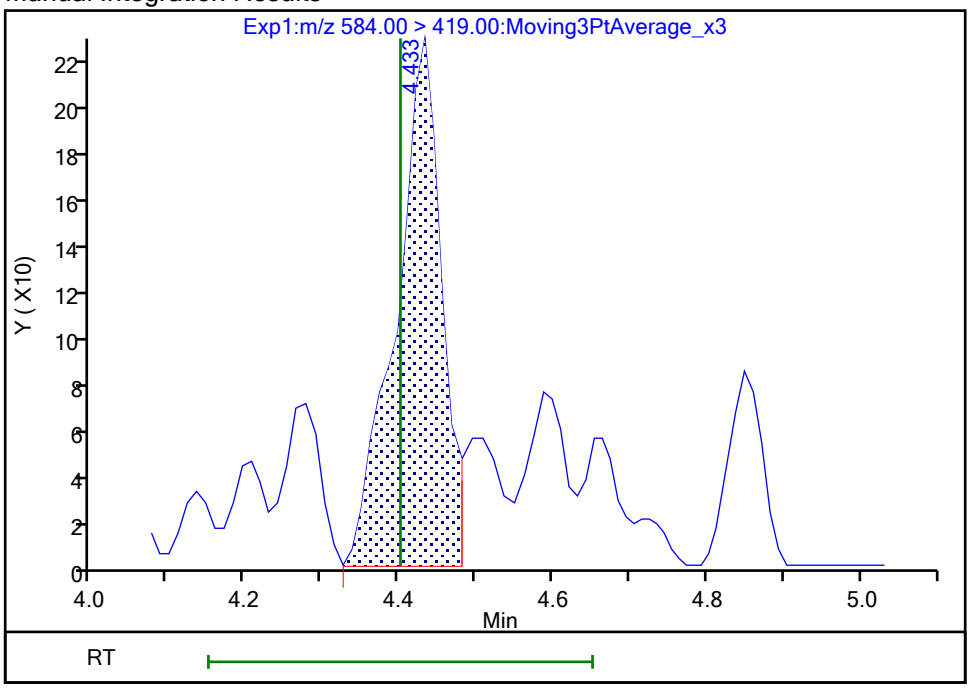
Processing Integration Results

RT: 4.43
Area: 1586
Amount: 0.003786
Amount Units: ng/ml



Manual Integration Results

RT: 4.43
Area: 928
Amount: 0.002215
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:43:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

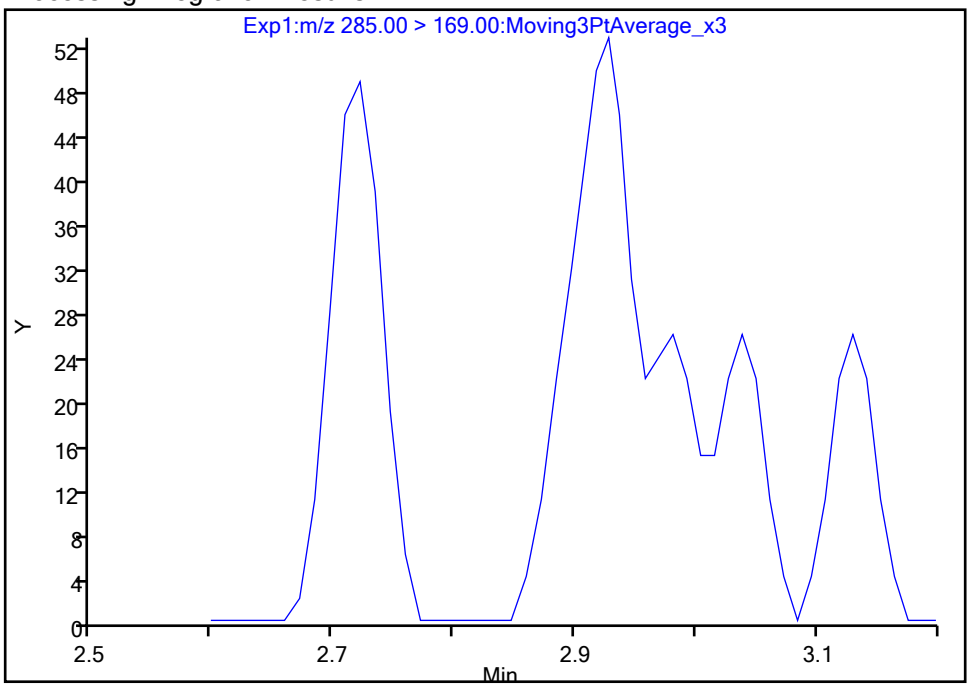
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

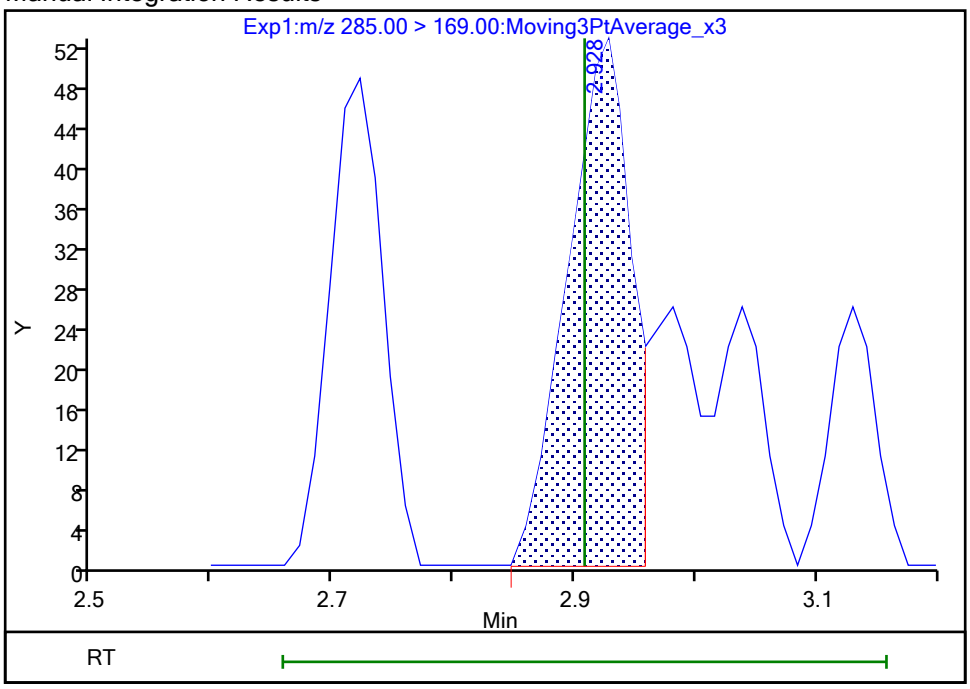
Not Detected
Expected RT: 2.91

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 189
Amount: 0.000877
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

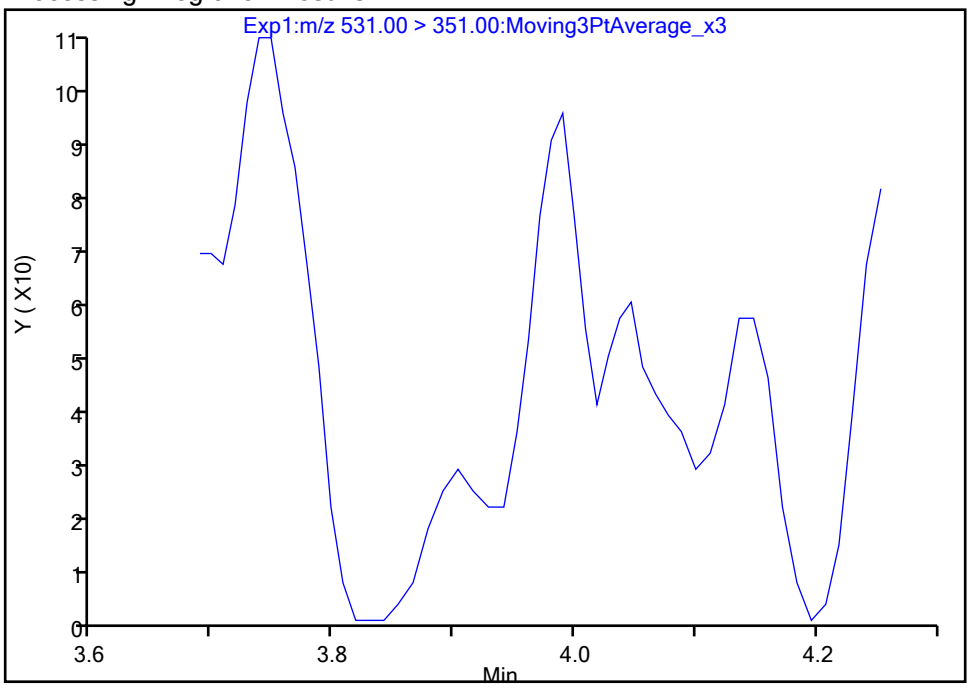
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

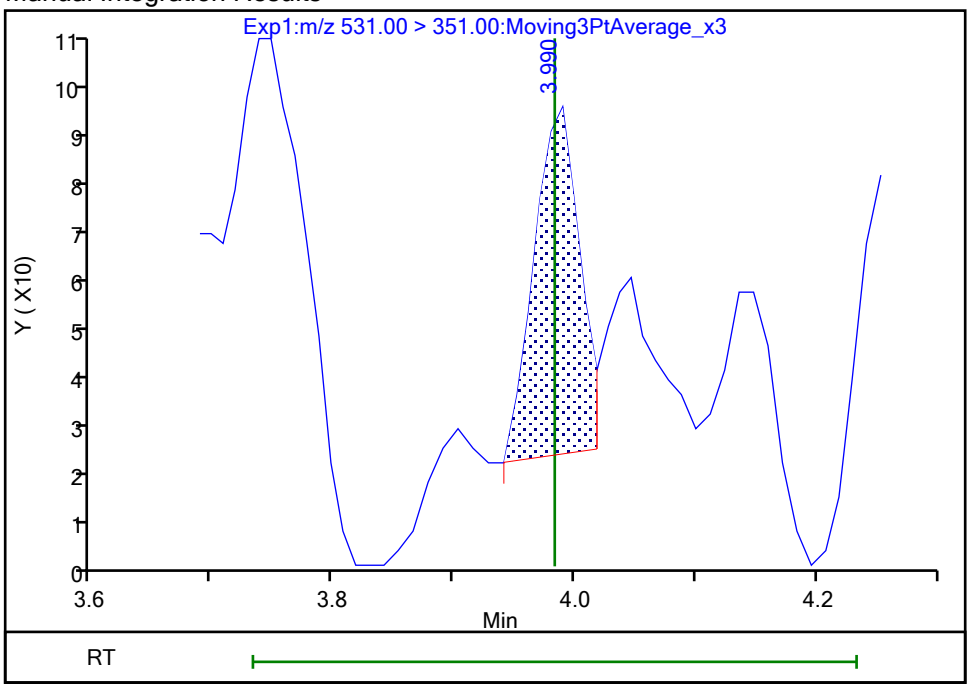
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 184
Amount: 0.000061
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:42:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

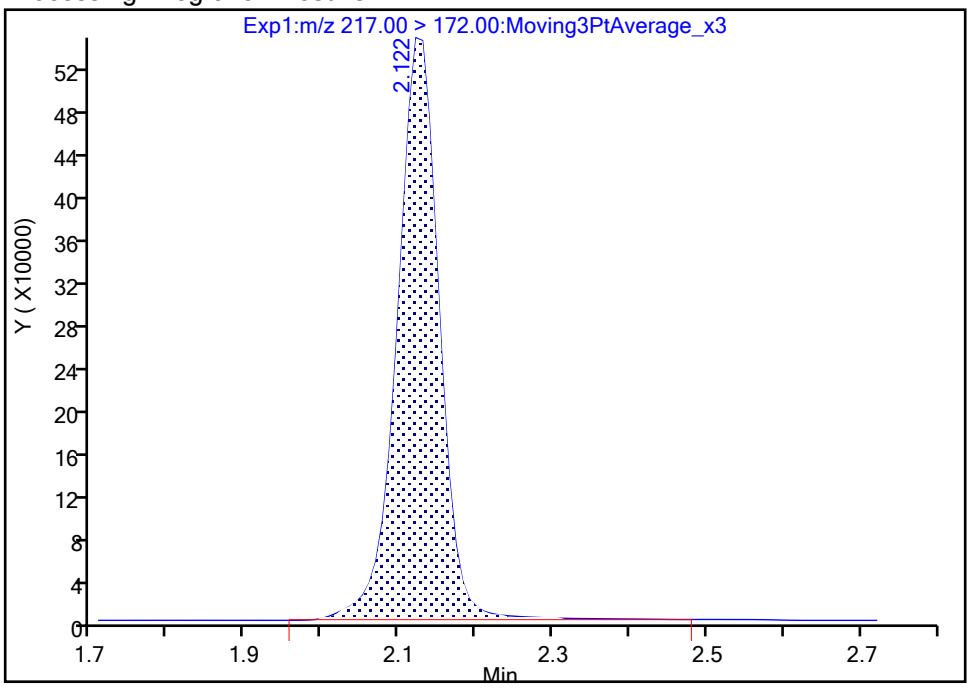
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

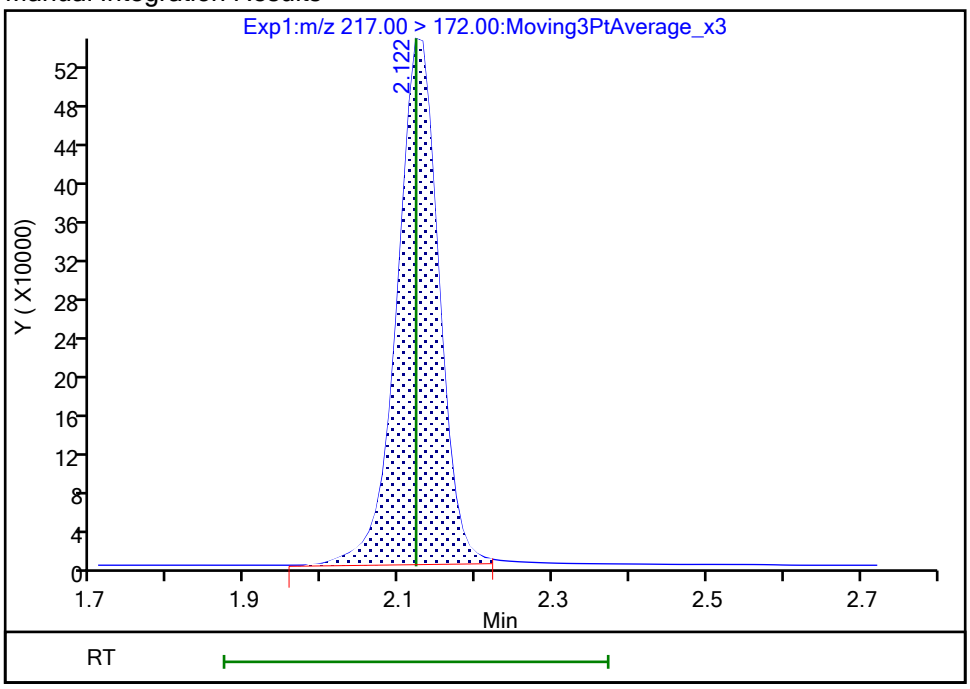
Processing Integration Results

RT: 2.12
Area: 2079723
Amount: 1.258991
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2057482
Amount: 1.245527
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

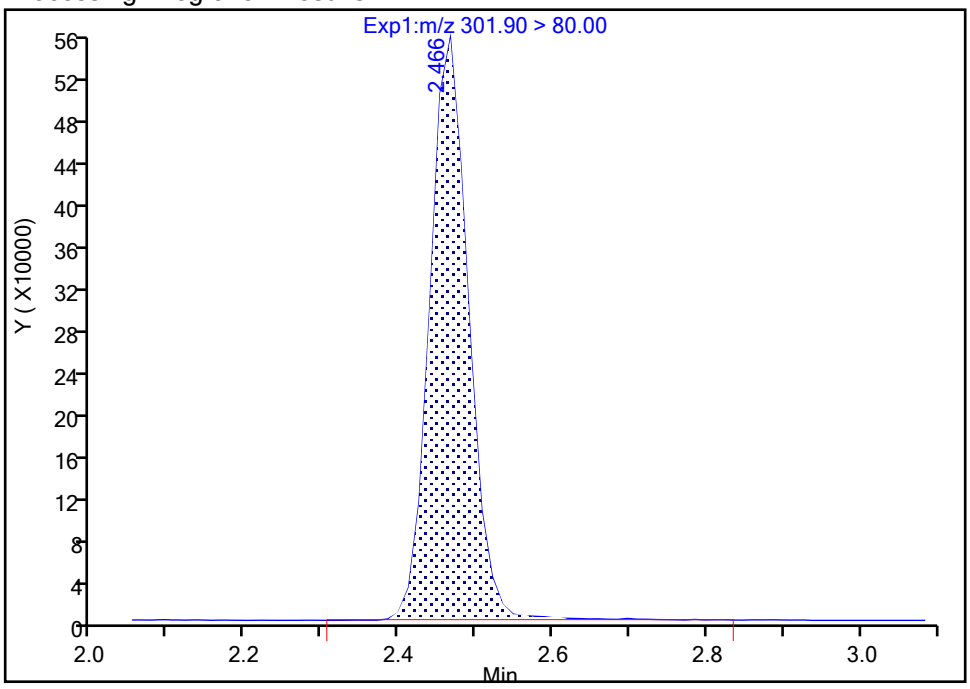
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

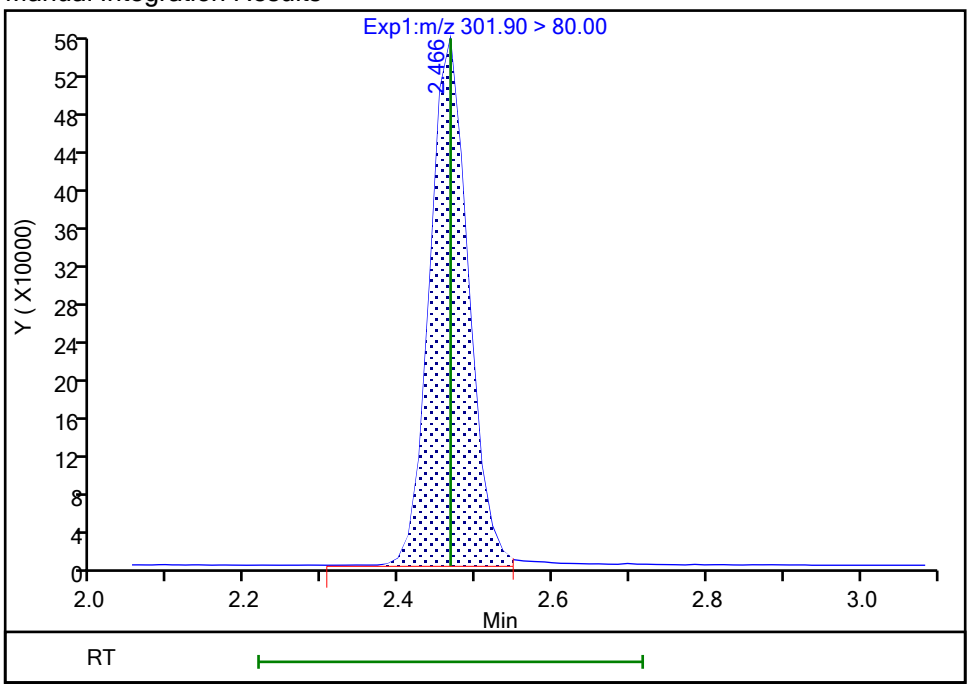
Processing Integration Results

RT: 2.47
Area: 1941260
Amount: 1.119109
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1917276
Amount: 1.105283
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

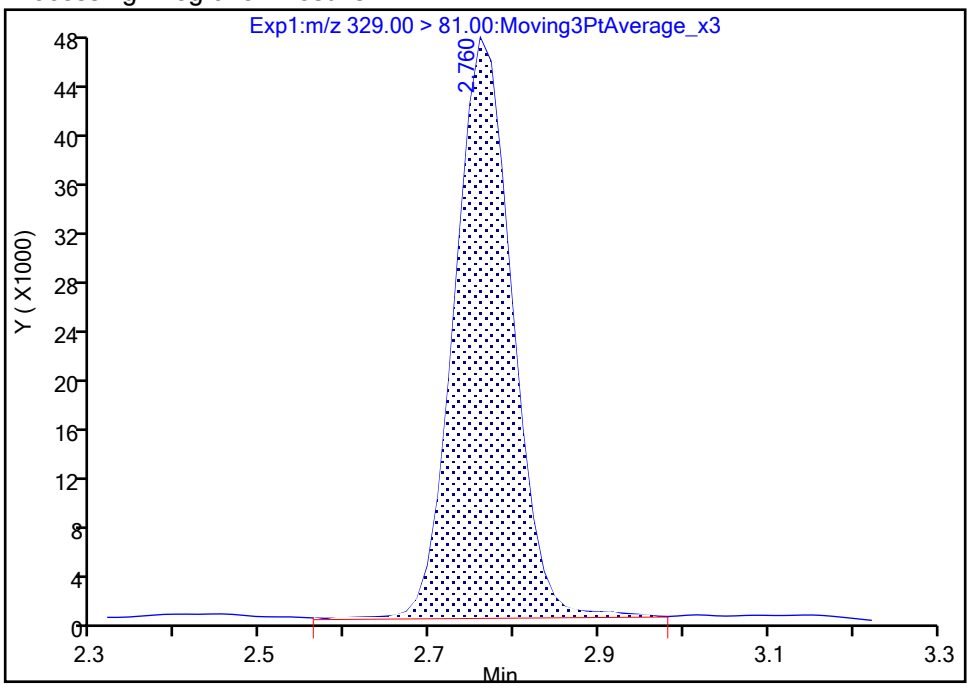
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E22.d				
Injection Date:	24-Oct-2023 08:57:31	Instrument ID:	LC812		
Lims ID:	460-290517-A-3-A	Lab Sample ID:	200-290517-3		
Client ID:	1000-101623-0004				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

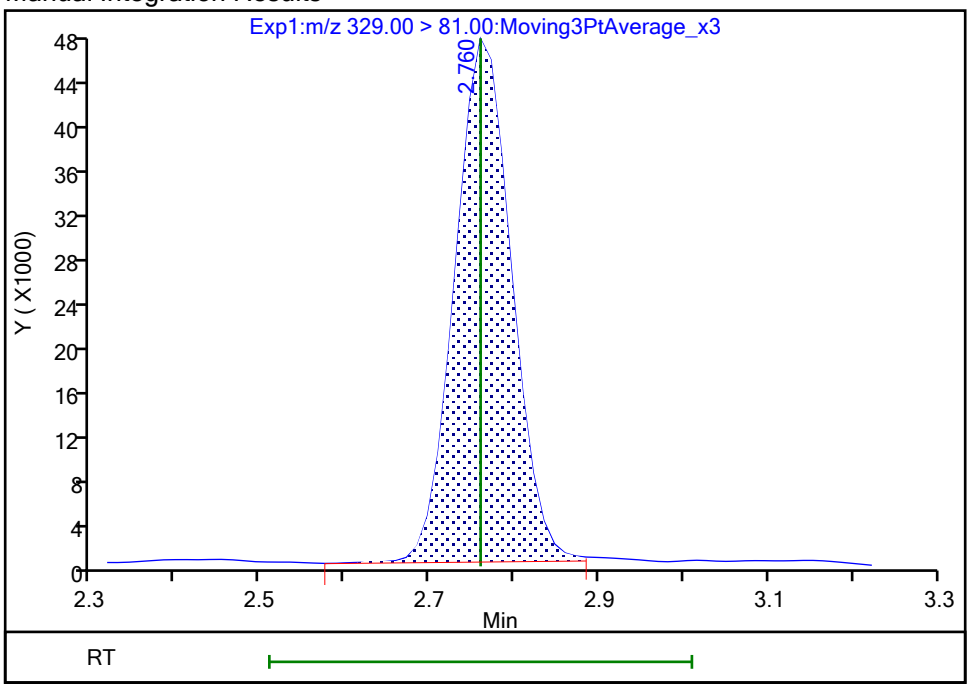
Processing Integration Results

RT: 2.76
Area: 221672
Amount: 1.105010
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 219299
Amount: 1.093181
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:41:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW2-101623-0951-10 | Lab Sample ID: 460-290517-4

Matrix: Water | Lab File ID: PA231023E23.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 09:51

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 298.4(mL) | Date Analyzed: 10/24/2023 09:05

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	14.5		4.19	1.01
2706-90-3	Perfluoropentanoic acid	9.71		1.68	0.57
307-24-4	Perfluorohexanoic acid	11.3		1.68	0.54
375-85-9	Perfluoroheptanoic acid	7.58		1.68	0.45
335-67-1	Perfluorooctanoic acid	23.0		1.68	0.64
375-95-1	Perfluorononanoic acid	2.60		1.68	0.41
335-76-2	Perfluorodecanoic acid	0.53	J	1.68	0.39
2058-94-8	Perfluoroundecanoic acid	1.68	U	1.68	0.46
307-55-1	Perfluorododecanoic acid	1.68	U	1.68	0.41
72629-94-8	Perfluorotridecanoic acid	1.68	U	1.68	0.40
376-06-7	Perfluorotetradecanoic acid	1.68	U	1.68	0.54
375-73-5	Perfluorobutanesulfonic acid	3.07		1.68	0.52
2706-91-4	Perfluoropentanesulfonic acid	3.10		1.68	0.42
355-46-4	Perfluorohexanesulfonic acid	14.1		1.68	0.46
375-92-8	Perfluoroheptanesulfonic acid	7.05		1.68	0.34
68259-12-1	Perfluorononanesulfonic acid	0.34	J	1.68	0.34
335-77-3	Perfluorodecanesulfonic acid	1.68	U	1.68	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.17	J	4.19	1.09
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.39		1.68	0.65
754-91-6	Perfluorooctanesulfonamide	1.68	U	1.68	0.77
2355-31-9	NMeFOSAA	4.19	U	4.19	1.59
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.19	U	4.19	1.34
13252-13-6	HFPODA	3.35	U	3.35	0.92
919005-14-4	DONA	1.68	U	1.68	0.35
756426-58-1	9Cl-PF3ONS	1.68	U	1.68	0.27
763051-92-9	11Cl-PF3OUdS	1.68	U	1.68	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW2-101623-0951-10 Lab Sample ID: 460-290517-4

Matrix: Water Lab File ID: PA231023E23.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 09:51

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 298.4(mL) Date Analyzed: 10/24/2023 09:05

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	79		50-150
STL01893	13C5 PFPeA	90		50-150
STL01892	13C4 PFHpA	97		50-150
STL02116	13C2 PFTeDA	91		50-150
STL02337	13C3 PFBS	97		50-150
STL01056	13C8 FOSA	90		50-150
STL02118	d3-NMeFOSAA	98		50-150
STL02117	d5-NEtFOSAA	103		50-150
STL02395	M2-4:2 FTS	102		50-150
STL02279	M2-6:2 FTS	99		50-150
STL02280	M2-8:2 FTS	99		50-150
STL02255	13C3 HFPO-DA	86		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	89		50-150
STL00991	13C4 PFOS	99		50-150
STL00998	13C2 PFDoA	104		50-150
STL00995	13C5 PFNA	96		50-150
STL00996	13C2 PFDA	102		50-150
STL00990	13C4 PFOA	106		50-150
STL00997	13C2 PFUnA	101		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d
Lims ID: 460-290517-B-4-A
Client ID: MW2-101623-0951-10
Sample Type: Client
Inject. Date: 24-Oct-2023 09:05:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-4-A
Misc. Info.: 200-0057513-023 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:48:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.603	1513694	0.9852		78.8	1371	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	517491	0.4317			30.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1343131	1.13		90.1	314	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	335871	0.2897			1.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1820454	1.13		97.1	16278	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	160314	0.0917	Target=2.06		2.4	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	85160		1.88(1.03-3.09)		5.5	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	221847	1.19		102	12.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1353371	1.12		89.3	2708	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	402389	0.3377	Target=14.12		3.0	M
313.00 > 119.00	2.797	2.797	0.0	1.000	28066		14.34(7.06-21.17)		6.6	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	145086	0.0925	Target=2.72		4.1	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	71148		2.04(1.36-4.09)		9.8	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	4371	0.0215			29.7	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	253480	1.08		86.4	1939	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1420586	1.23		104	4278	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	558910	0.4203	Target=3.32		42.1	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	252173		2.22(1.66-4.98)		83.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	326295	0.2263	Target=4.17		5.6	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	81416		4.01(2.09-6.26)		46.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1608212	1.21		96.7	6704	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	221923	0.2104	Target=4.83		15.5	M
449.00 > 99.00	3.502	3.505	-0.003	0.914	69208		3.21(2.41-7.24)		13.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	281783	1.17		98.7	51.1	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	80687	0.1244			118	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1166175	0.6865	Target=2.88		18.7	M
413.00 > 169.00	3.520	3.514	0.006	1.000	408034		2.86(1.44-4.32)		272	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	1993632	1.32		106	3932	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		1936675	1.25			5218	
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.830	3.822	0.008	1.000	19880010	23.4	Target=4.24		2775	EM
499.00 > 99.00	3.818	3.822	-0.004	0.997	5698112		3.49(2.12-6.37)		2238	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	872071	1.19		99.3	273	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	119419	0.0775	Target=8.34		5.0	M
463.00 > 169.00	3.854	3.845	0.009	1.003	13820		8.64(4.17-12.51)		15.7	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	1965470	1.20		95.8	2618	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.983	-0.012	1.037	273	0.000105			0.6	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.112	4.105	0.007	1.074	6533	0.0101	Target=2.17		1.3	M
549.00 > 99.00	4.088	4.105	-0.017	1.067	5891		1.11(1.08-3.25)		4.4	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.129	0.007	1.000	27556	0.0157	Target=11.44		3.0	M
513.00 > 169.00	4.136	4.129	0.007	1.000	2151		12.81(5.72-17.16)		7.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2196956	1.28		102	6514	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	318903	1.18		98.6	208	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.141	-0.005	0.997	41803	0.0713			407	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1643298	1.12		89.7	4226	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.234	0.008	1.000	2481	0.001978			6.4	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.212	503993	1.23		98.2	1043	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.291	4.270	0.021	1.006	683	0.001867			4.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.246	2053768	1.27		101	8163	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.249	509282	1.29		103	891	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.401	-0.003	1.000	1367	0.003355			2.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2148632	1.30		104	4332	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.599	4.613	-0.014	0.998	2216	0.001267	Target=8.47		0.2	RM
613.00 > 169.00	4.610	4.613	-0.003	1.000	90		24.62(4.23-12.70)		1.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	1868309	1.14		91.1	5056	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.979	4.982	-0.003	1.000	66	0.000395	Target=0.87		1.1	RM
713.00 > 219.00	4.968	4.982	-0.014	0.998	198		0.33(0.43-1.30)		3.0	M

QC Flag Legend

Processing Flags
- R - Failed Signal Ratio Test
- E - Exceeded Maximum Amount

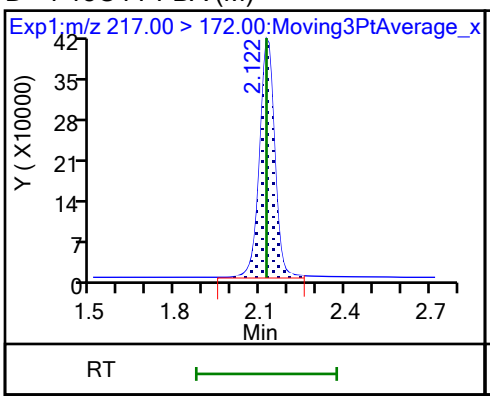
Review Flags
- M - Manually Integrated

Report Date: 25-Oct-2023 23:19:52 Chrom Revision: 2.3 18-Oct-2023 21:16:54

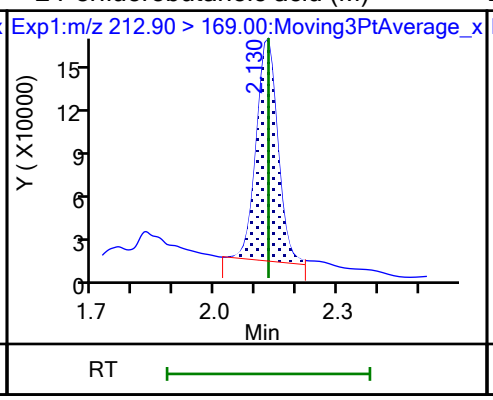
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d
Injection Date: 24-Oct-2023 09:05:42 Instrument ID: LC812
Lims ID: 460-290517-B-4-A Lab Sample ID: 200-290517-4
Client ID: MW2-101623-0951-10
Operator ID: LC812user ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

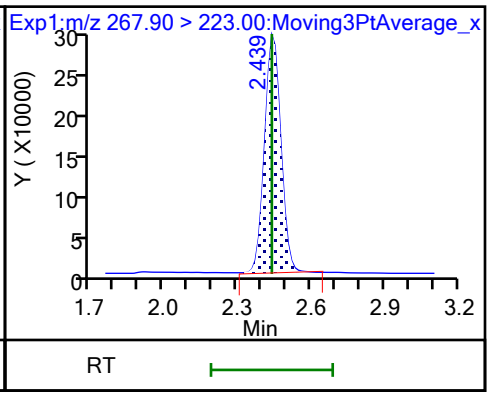
D 1 13C4 PFBA (M)



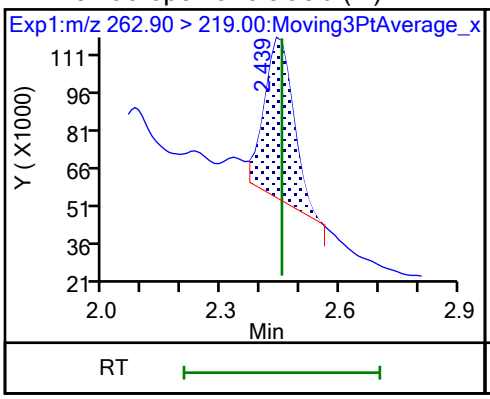
2 Perfluorobutanoic acid (M)



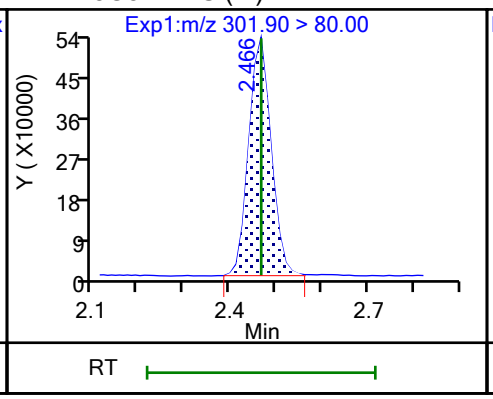
D 3 13C5 PFPeA



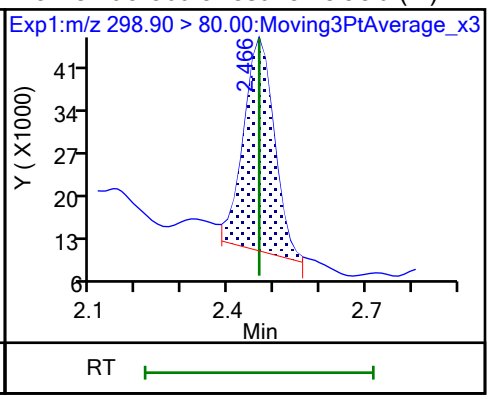
4 Perfluoropentanoic acid (M)



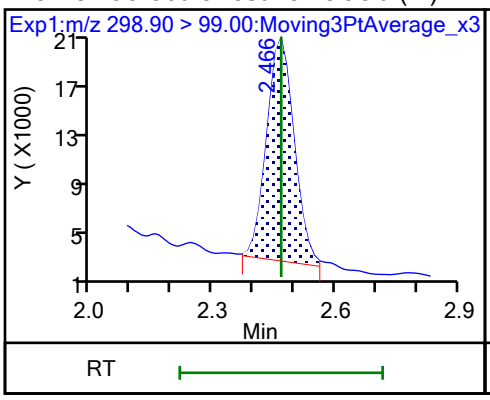
D 47 13C3 PFBS (M)



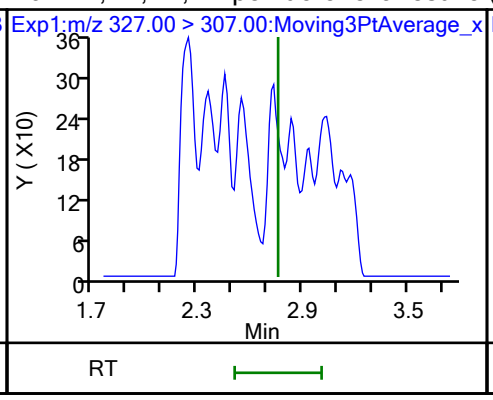
5 Perfluorobutanesulfonic acid (M)



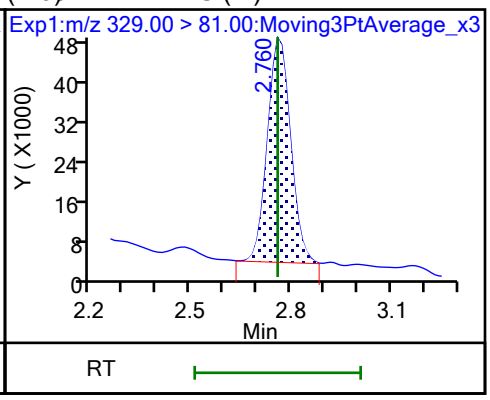
5 Perfluorobutanesulfonic acid (M)



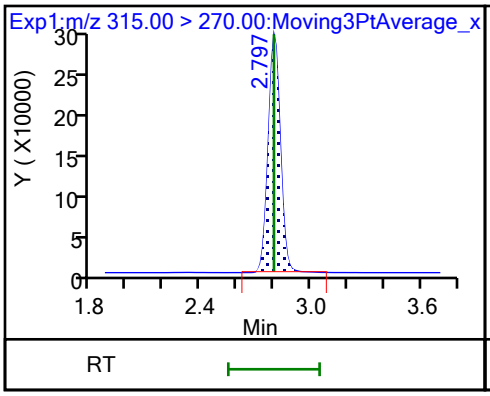
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



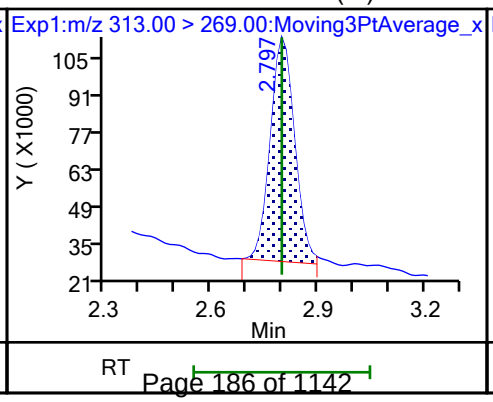
D 60 M2-4:2 FTS (M)



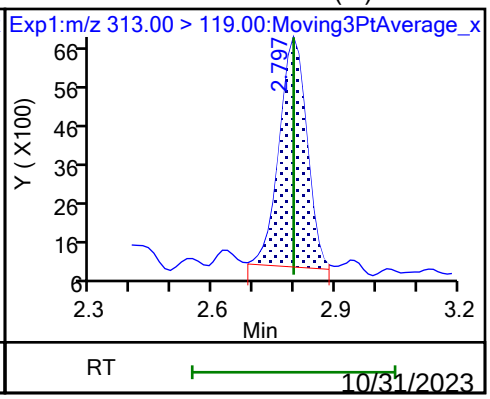
D 7 13C2 PFHxA



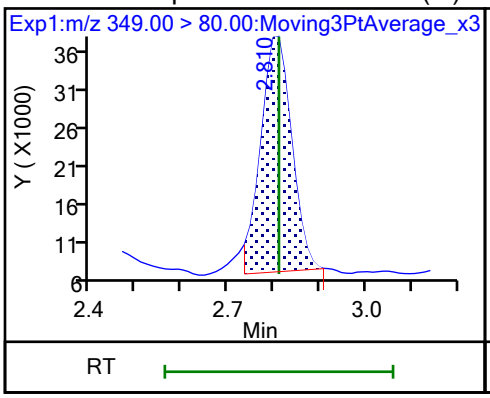
6 Perfluorohexanoic acid (M)



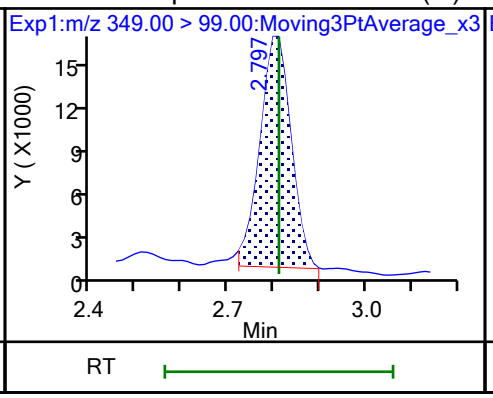
6 Perfluorohexanoic acid (M)



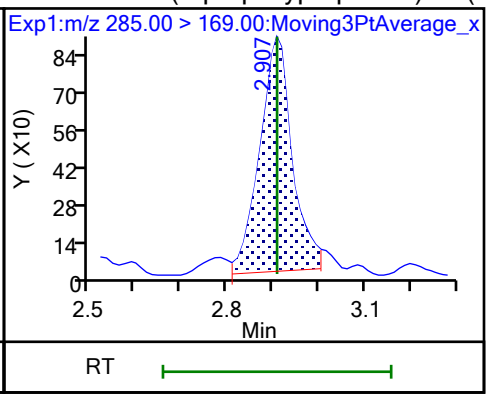
70 Perfluoropentanesulfonic acid (M)



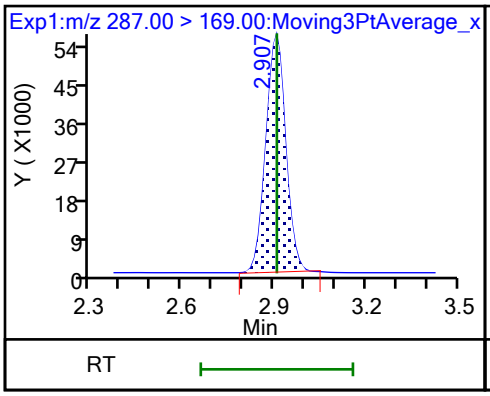
70 Perfluoropentanesulfonic acid (M)



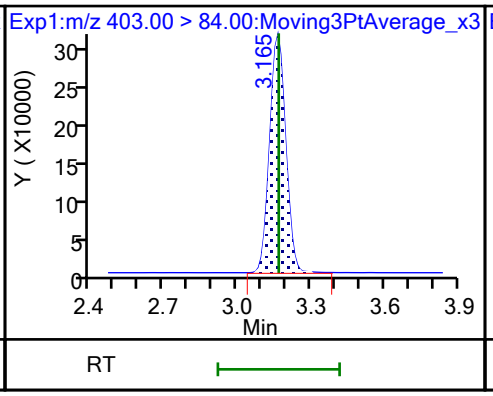
67 Perfluoro(2-propoxypropanoic) ac (M)



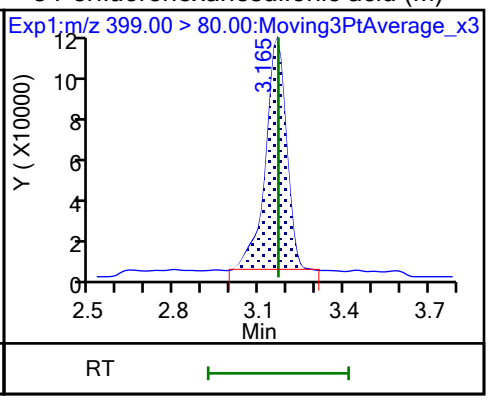
D 64 13C3 HFPO-DA



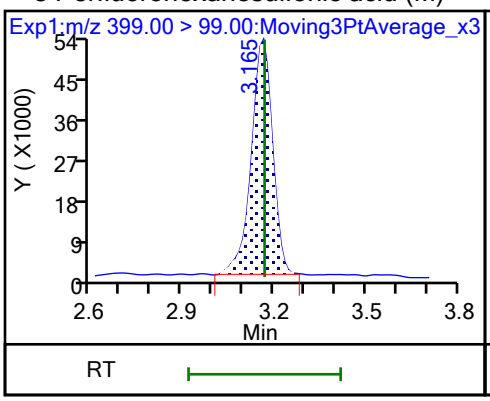
D 11 18O2 PFHxS



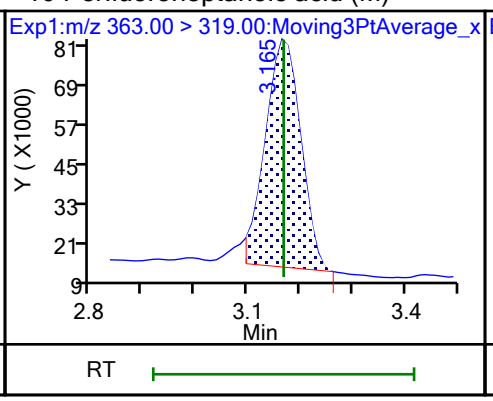
8 Perfluorohexanesulfonic acid (M)



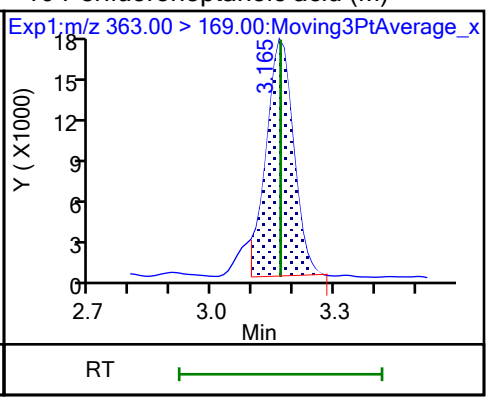
8 Perfluorohexanesulfonic acid (M)



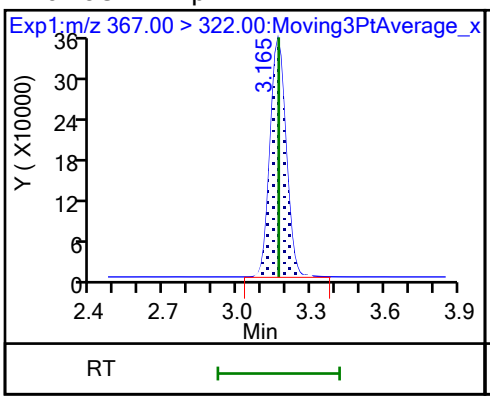
10 Perfluoroheptanoic acid (M)



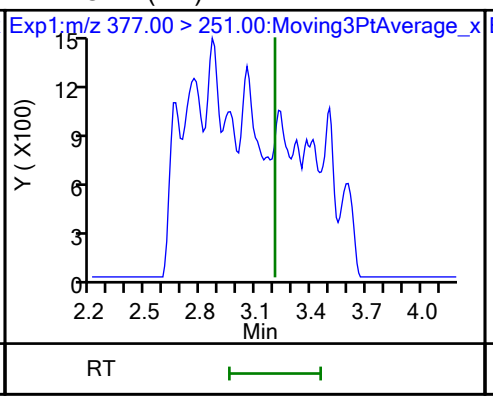
10 Perfluoroheptanoic acid (M)



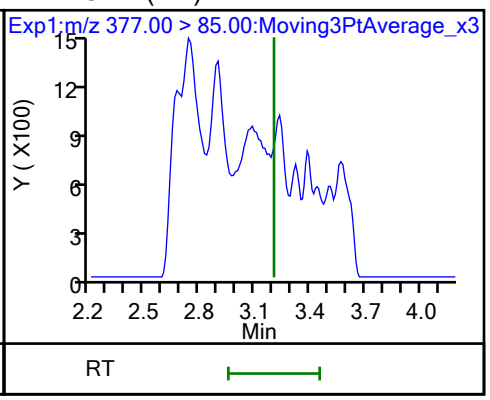
D 9 13C4 PFHpA



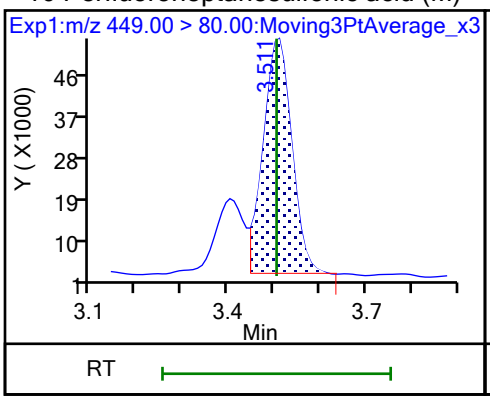
77 DONA (ND)



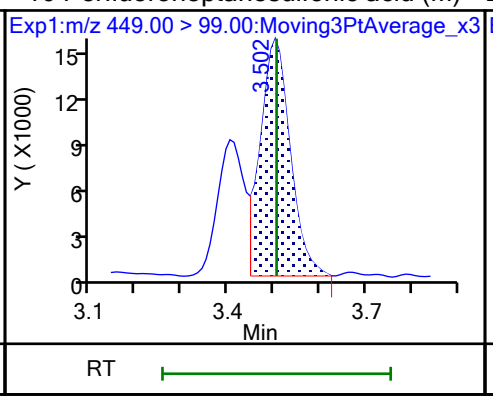
77 DONA (ND)



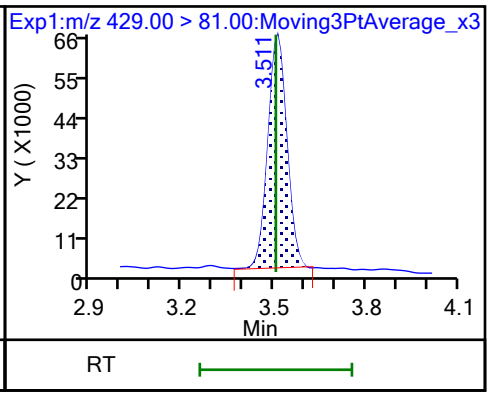
16 Perfluoroheptanesulfonic acid (M)



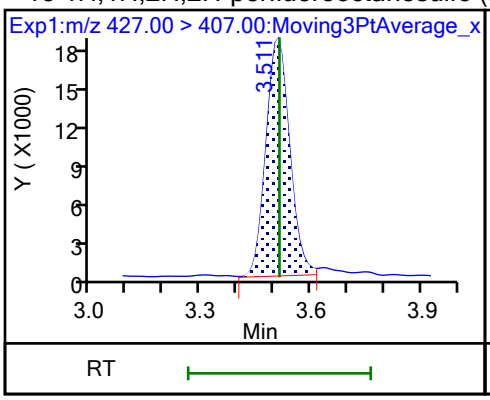
16 Perfluoroheptanesulfonic acid (M)



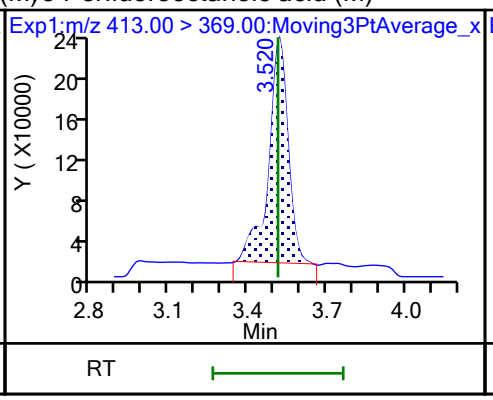
D 12 M2-6:2 FTS



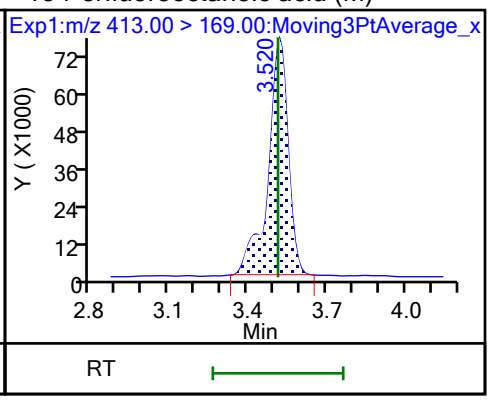
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



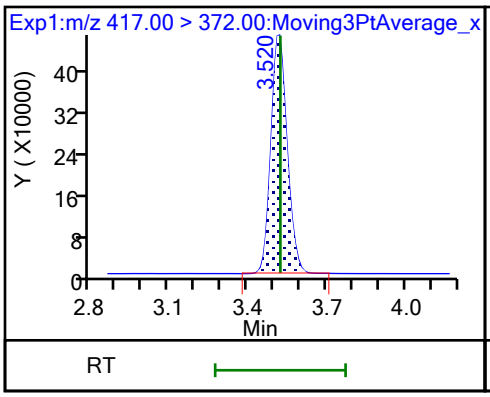
15 Perfluorooctanoic acid (M)



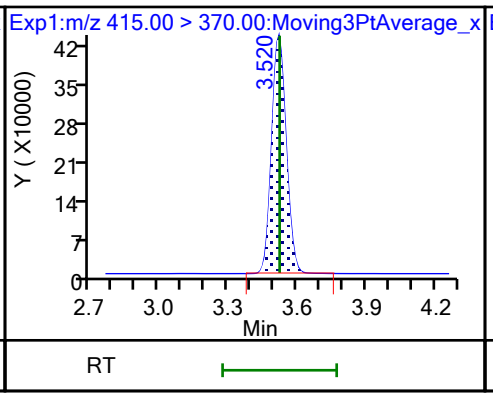
15 Perfluorooctanoic acid (M)



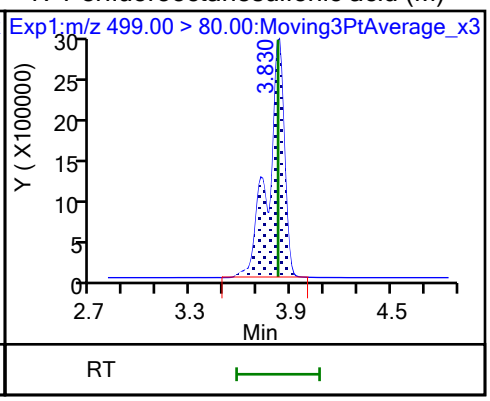
D 14 13C4 PFOA



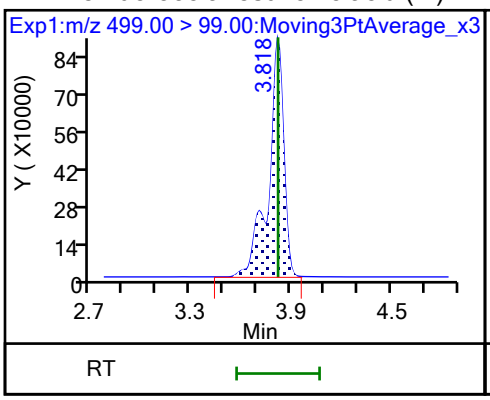
* 62 13C2 PFOA



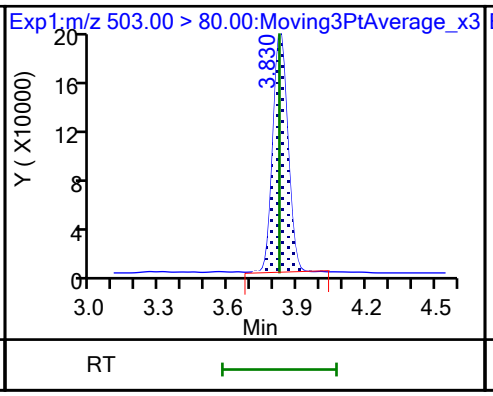
17 Perfluorooctanesulfonic acid (M)



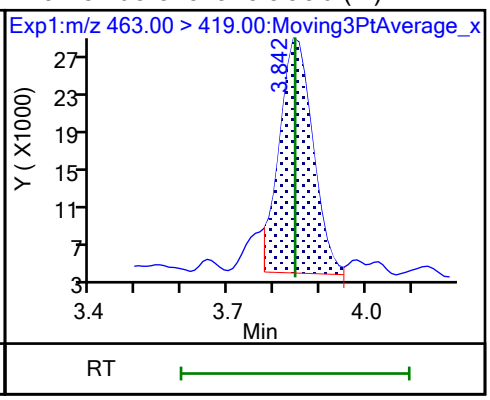
17 Perfluorooctanesulfonic acid (M)



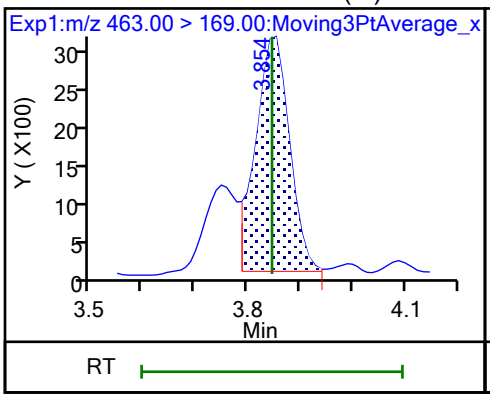
D 18 13C4 PFOS



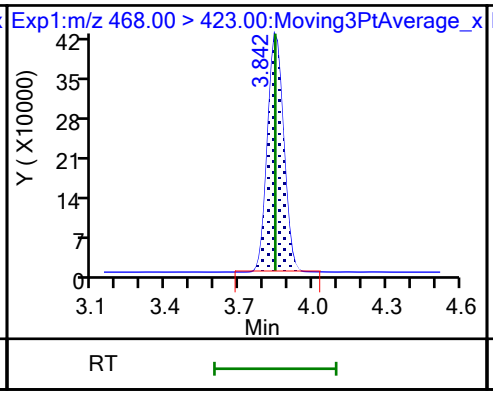
20 Perfluorononanoic acid (M)



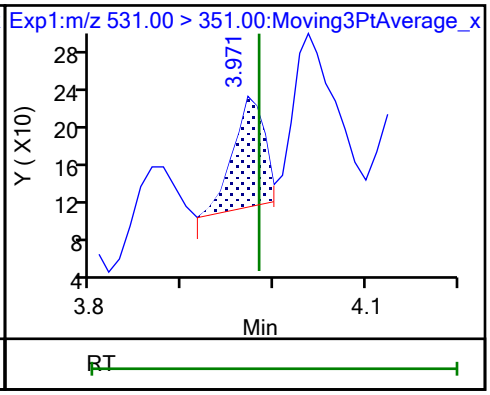
20 Perfluorononanoic acid (M)



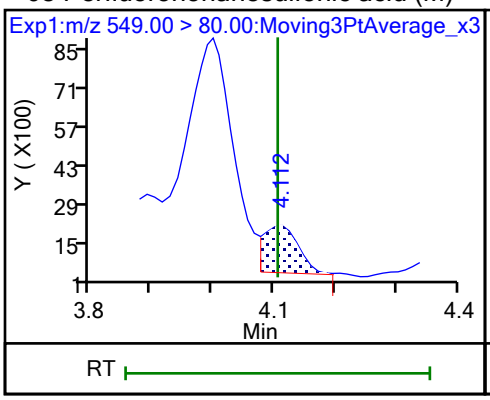
D 19 13C5 PFNA



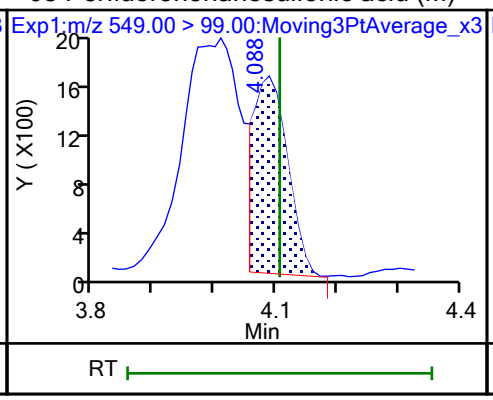
69 9-Chlorohexadecafluoro-3-oxanona (M)



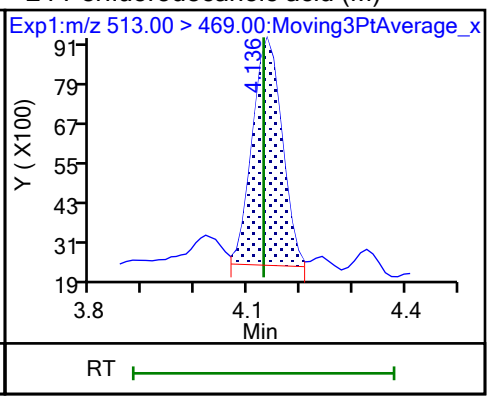
68 Perfluorononanesulfonic acid (M)



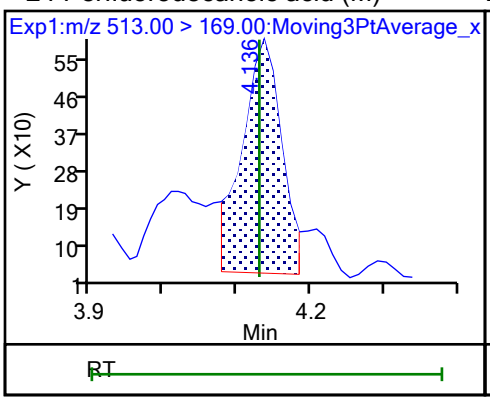
68 Perfluorononanesulfonic acid (M)



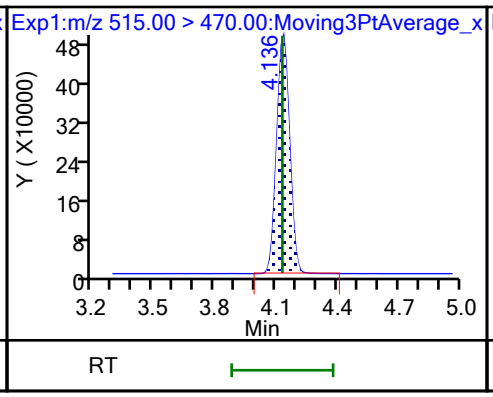
24 Perfluorodecanoic acid (M)



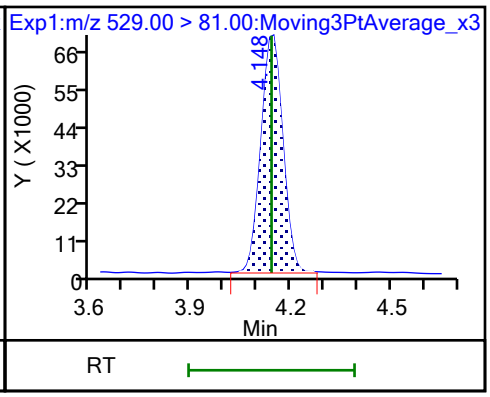
24 Perfluorodecanoic acid (M)



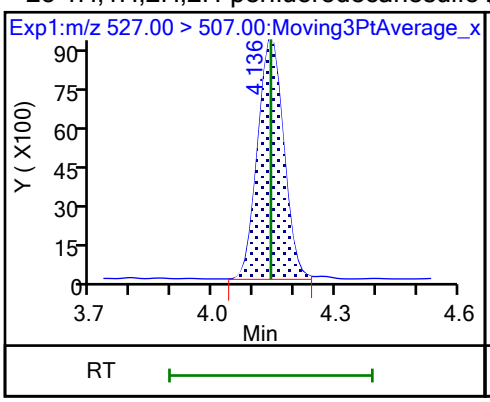
D 23 13C2 PFDA



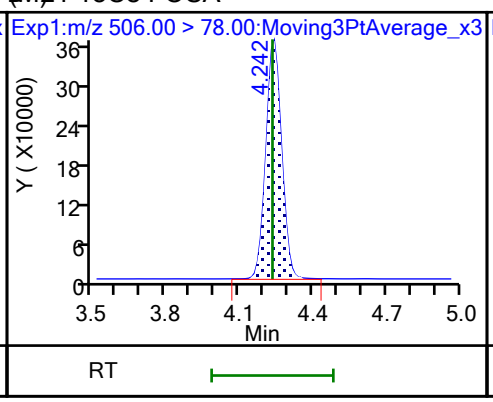
D 26 M2-8:2 FTS



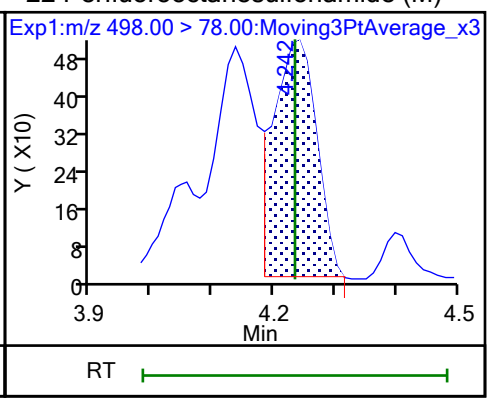
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



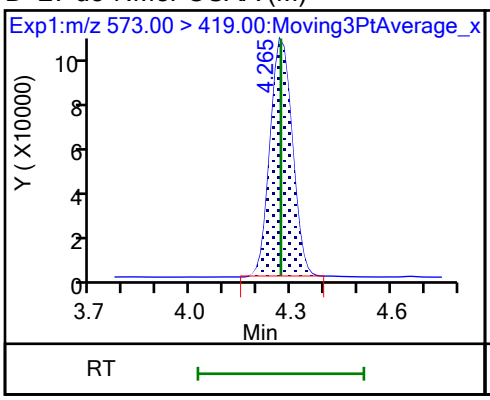
D 21 13C8 FOSA



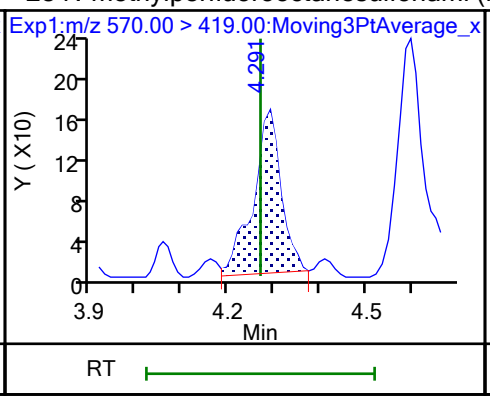
22 Perfluorooctanesulfonamide (M)



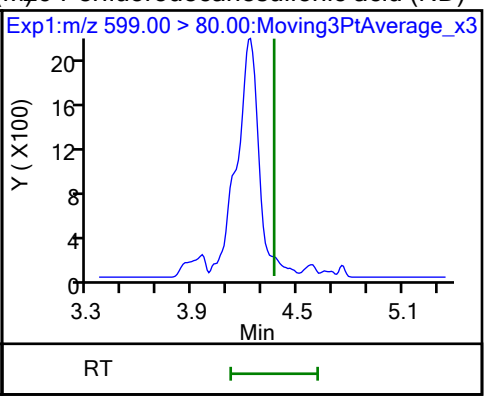
D 27 d3-NMeFOSAA (M)



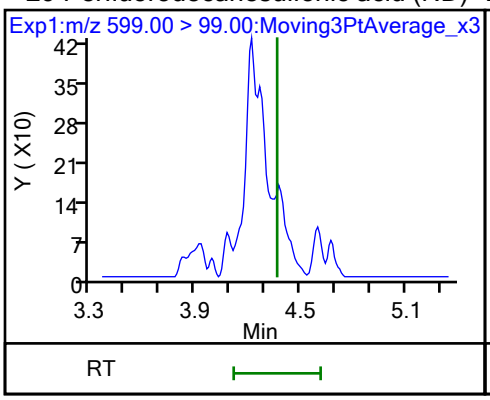
28 N-methylperfluorooctanesulfonami (M)



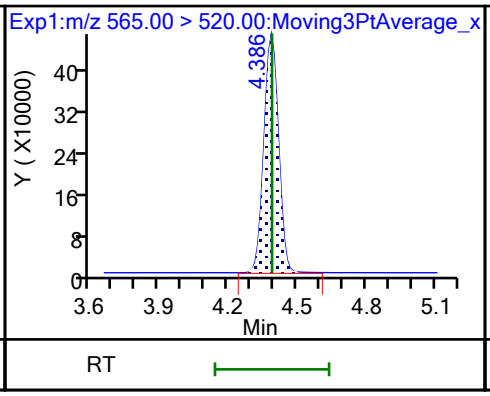
29 Perfluorodecanesulfonic acid (ND)



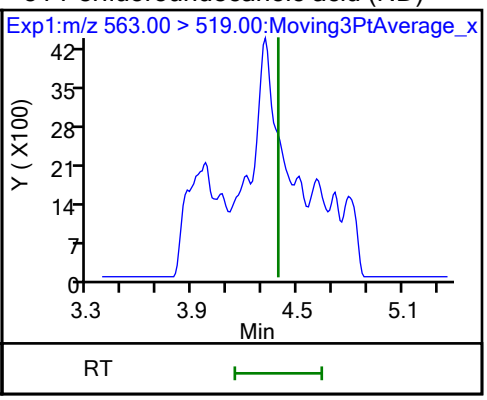
29 Perfluorodecanesulfonic acid (ND)



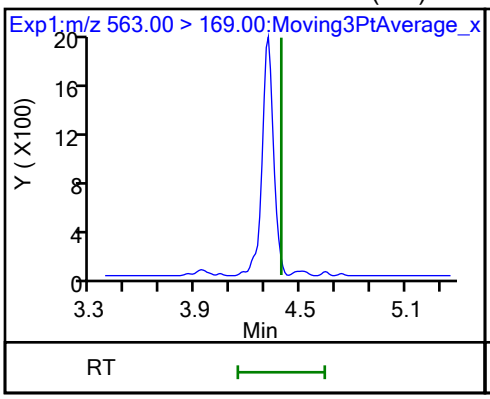
D 30 13C2 PFUnA



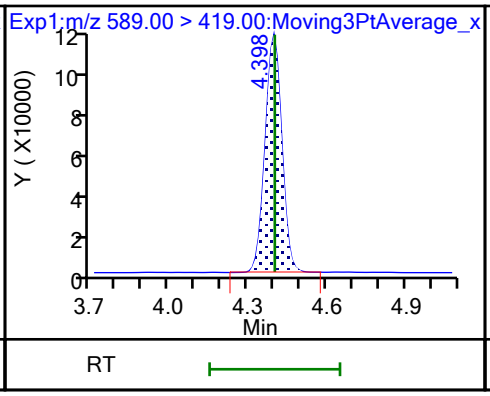
31 Perfluoroundecanoic acid (ND)



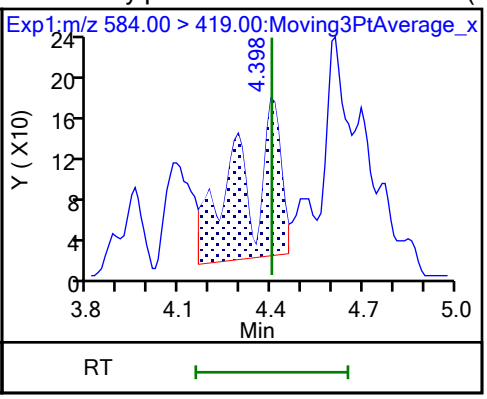
31 Perfluoroundecanoic acid (ND)



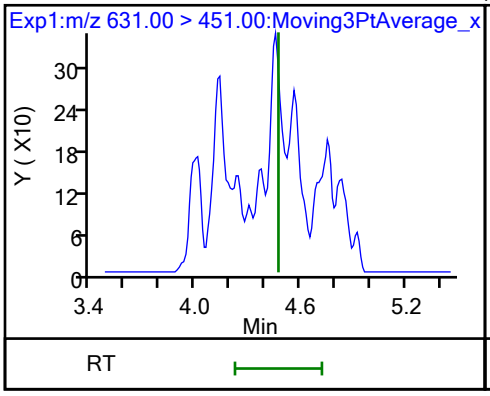
D 32 d5-NEtFOSAA



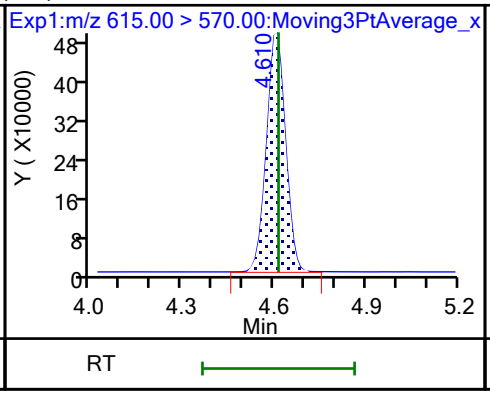
33 N-ethylperfluorooctanesulfonamid (M)



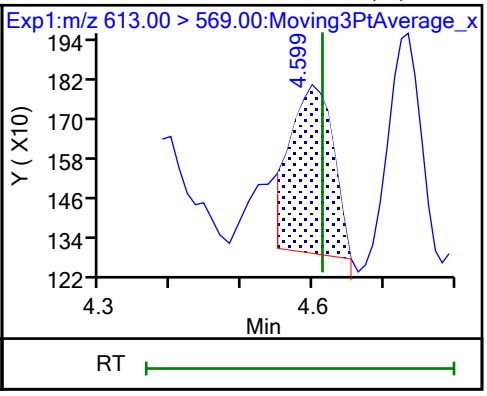
66 11-Chloroeicosafluoro-3-oxaundec (ND)



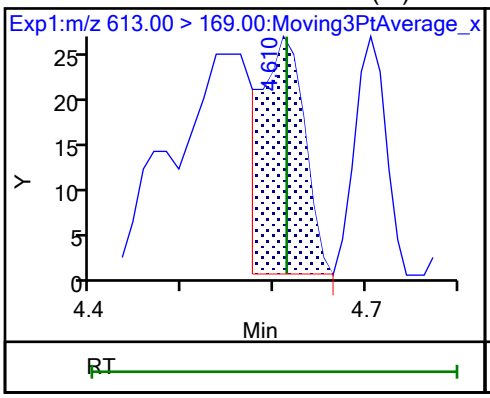
D 36 13C2 PFDoA



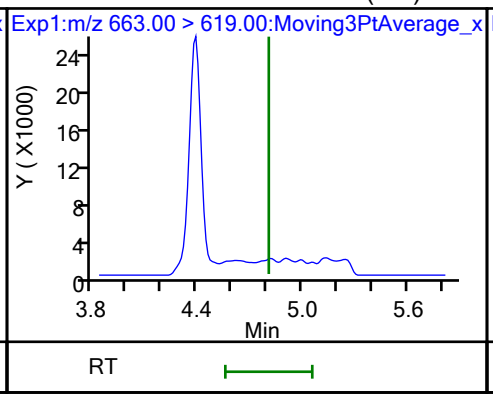
37 Perfluorododecanoic acid (M)



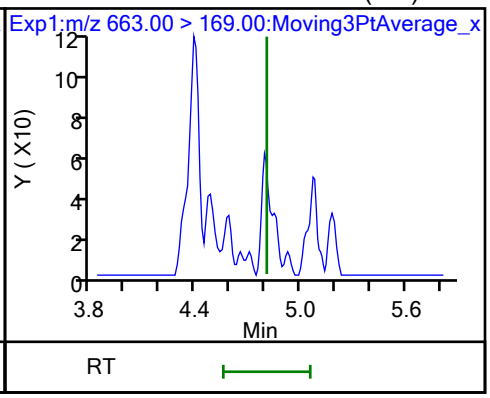
37 Perfluorododecanoic acid (M)



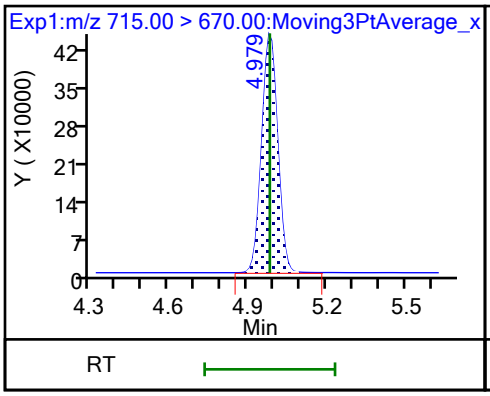
41 Perfluorotridecanoic acid (ND)



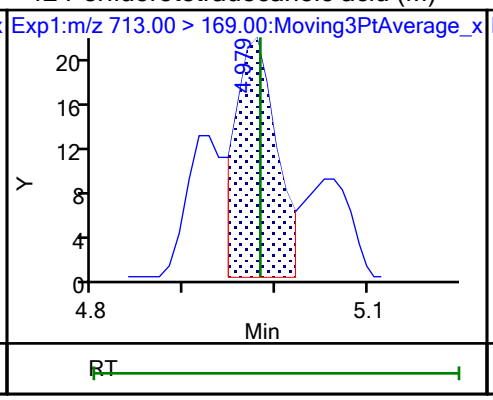
41 Perfluorotridecanoic acid (ND)



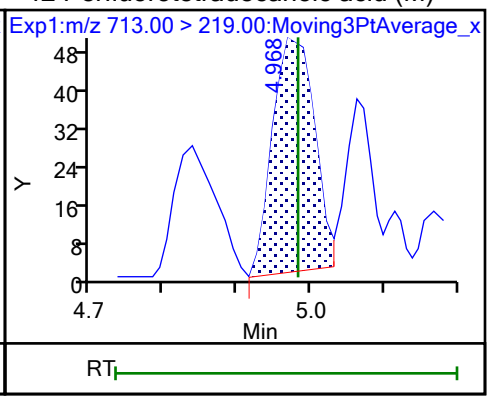
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

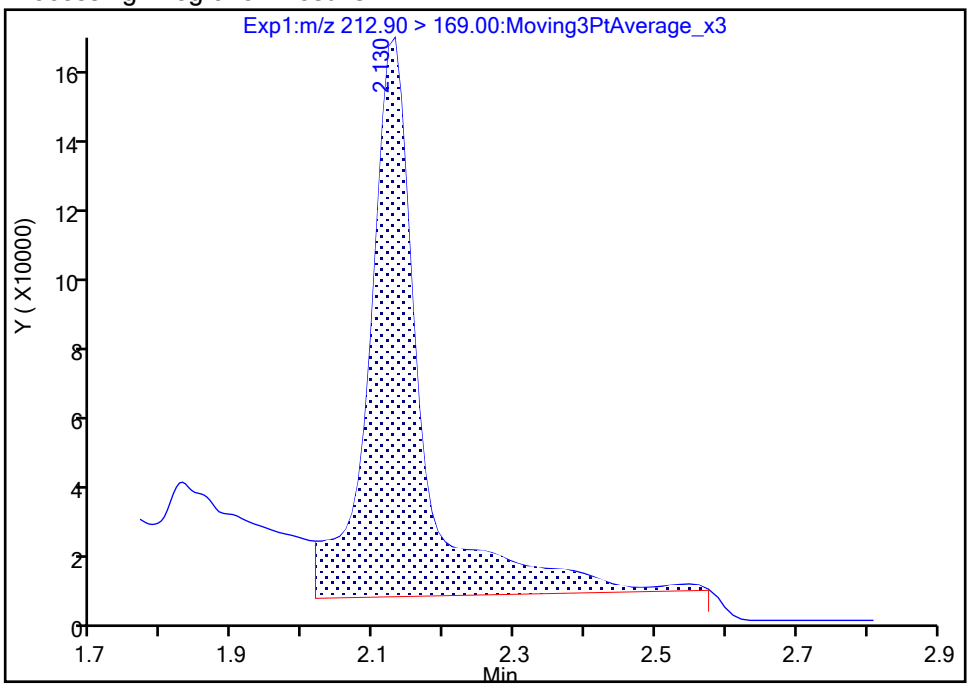
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

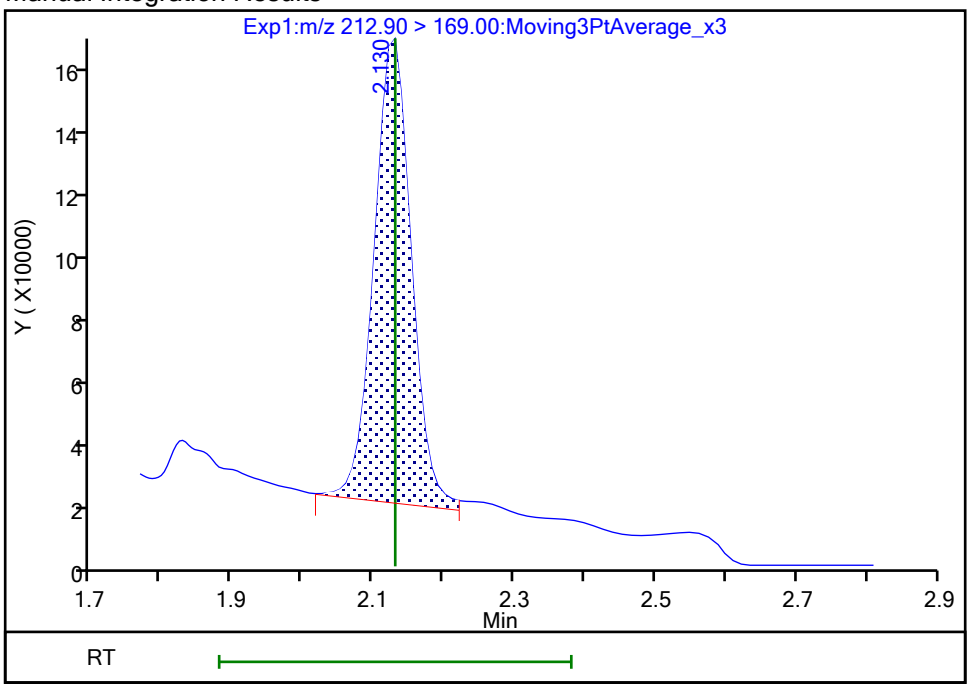
Processing Integration Results

RT: 2.13
Area: 789273
Amount: 0.679896
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 517491
Amount: 0.431699
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:44:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

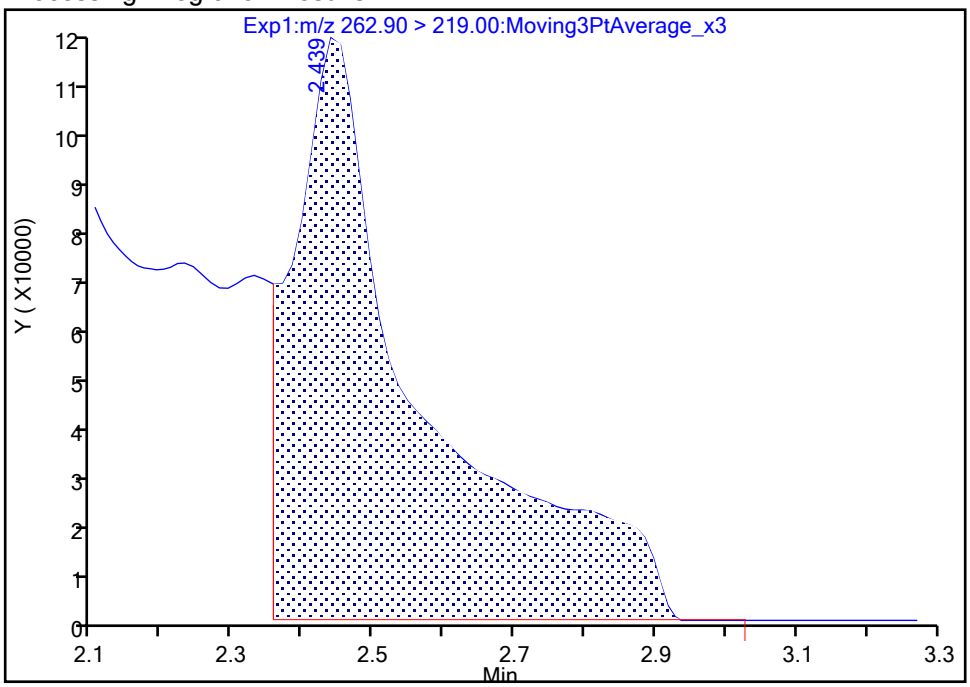
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

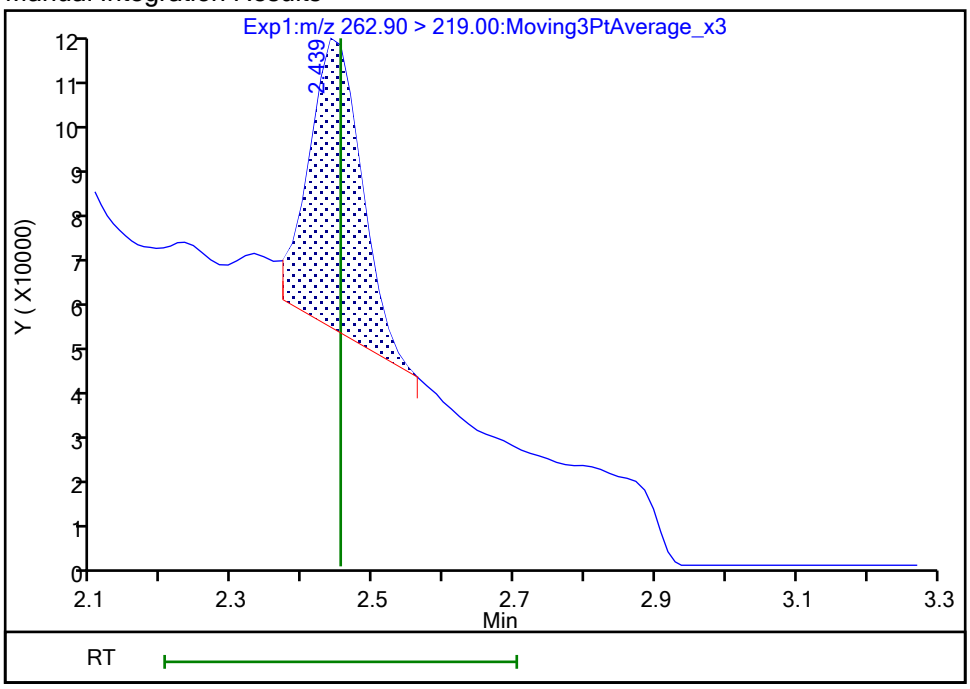
Processing Integration Results

RT: 2.44
Area: 1511927
Amount: 1.303911
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 335871
Amount: 0.289661
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:44:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

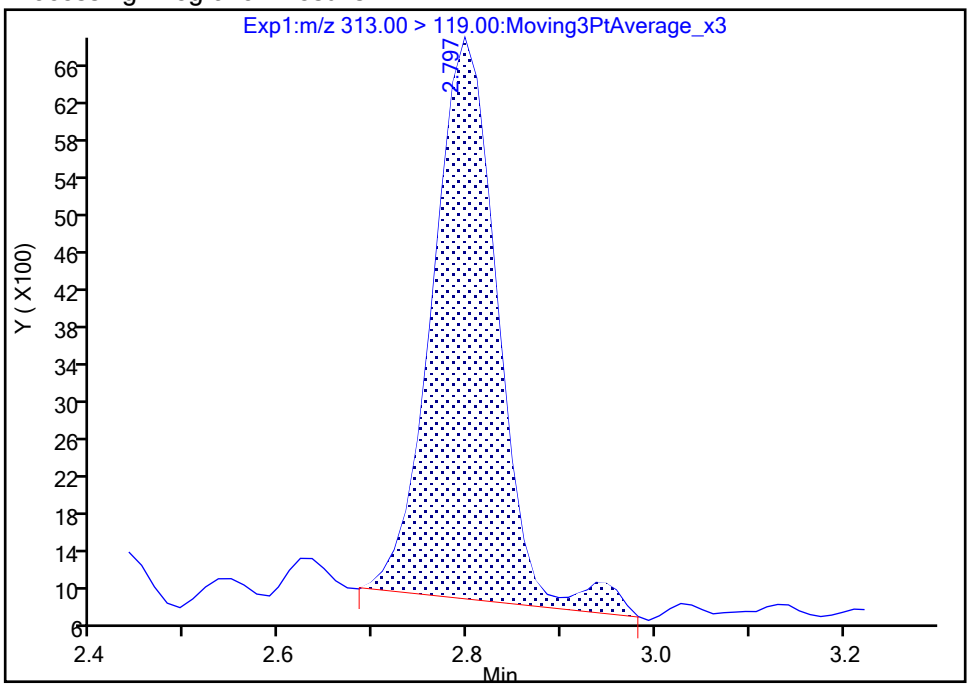
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

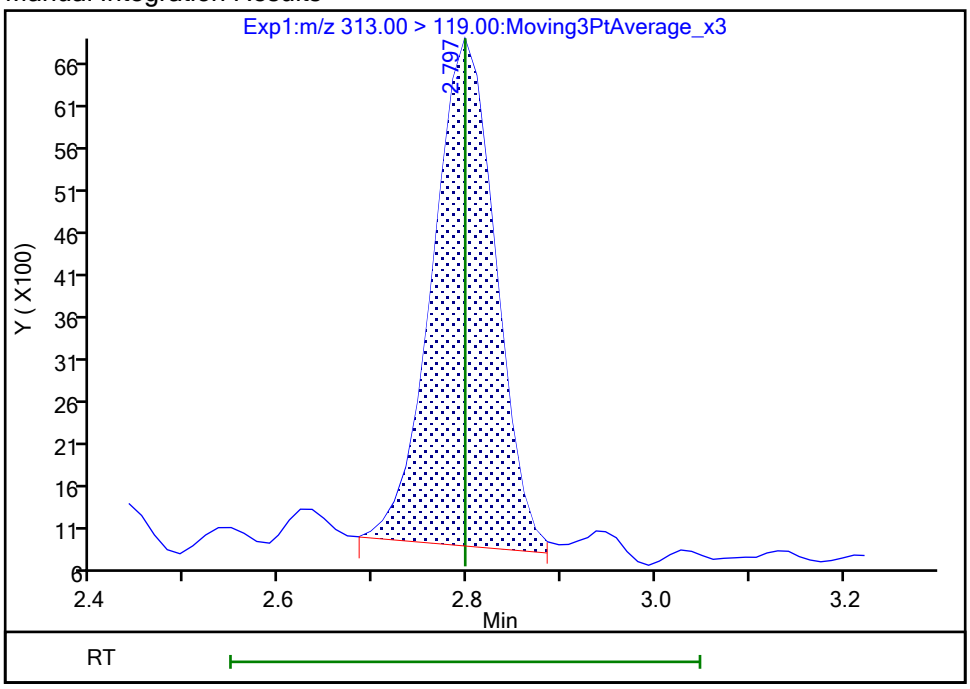
Processing Integration Results

RT: 2.80
Area: 29135
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 28066
Amount: 0.337728
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

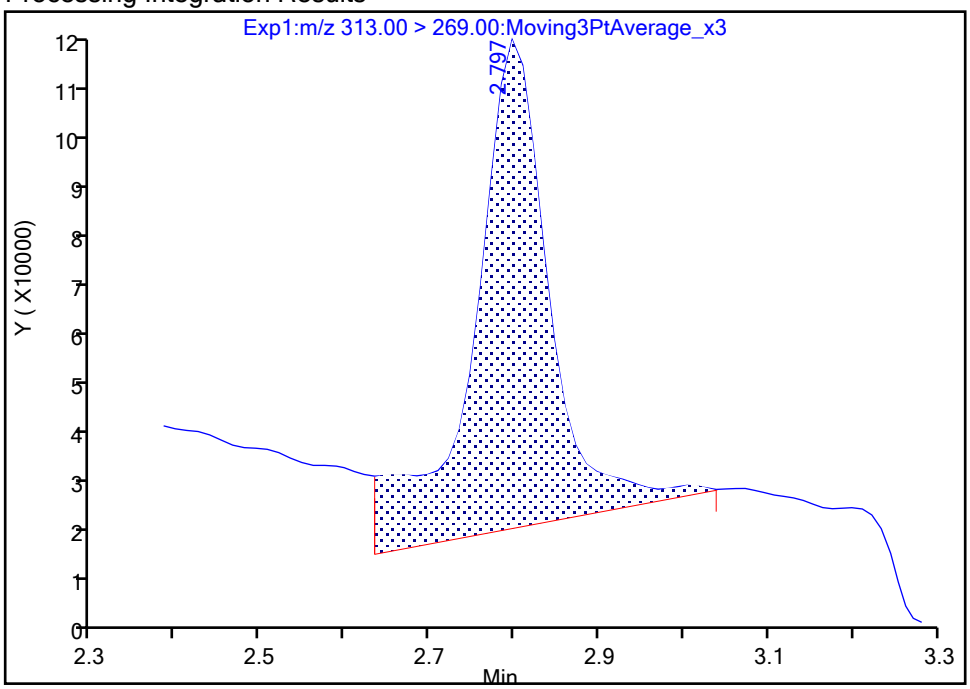
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

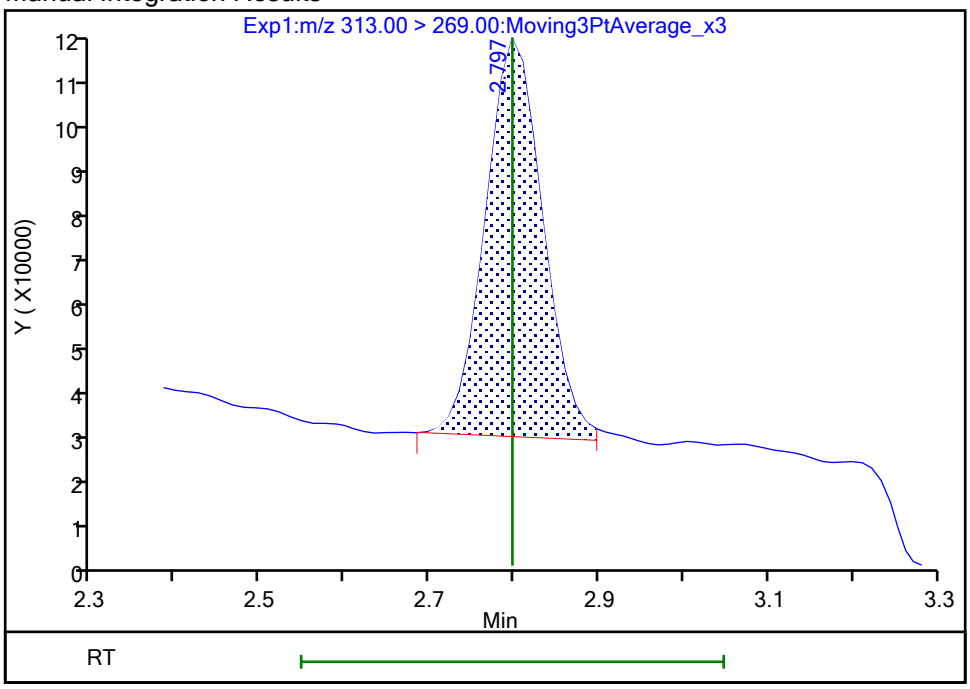
Processing Integration Results

RT: 2.80
Area: 591579
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 402389
Amount: 0.337728
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:13:35 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

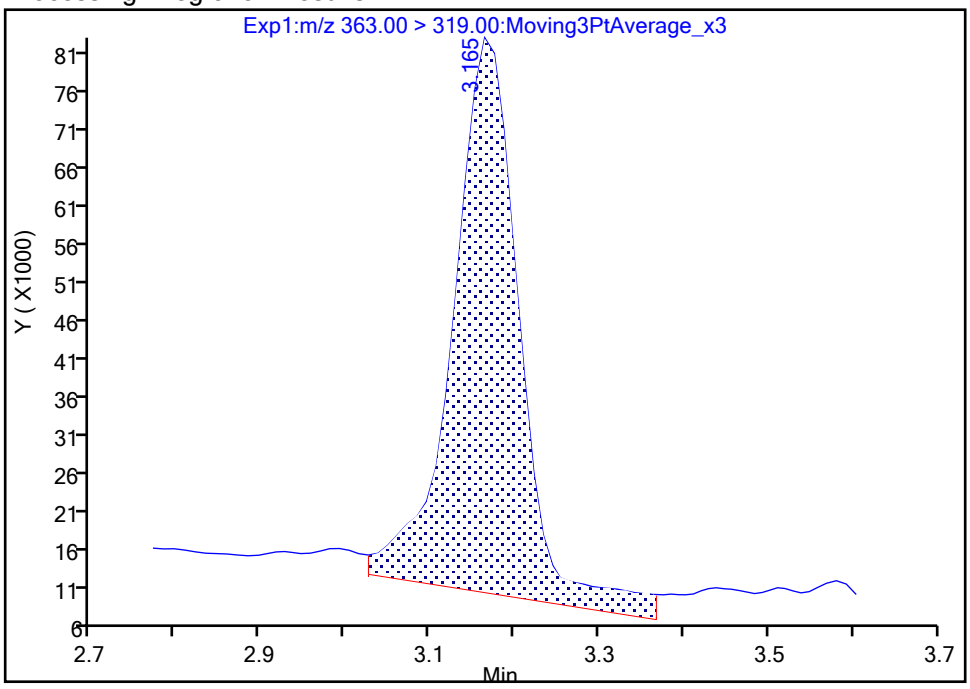
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

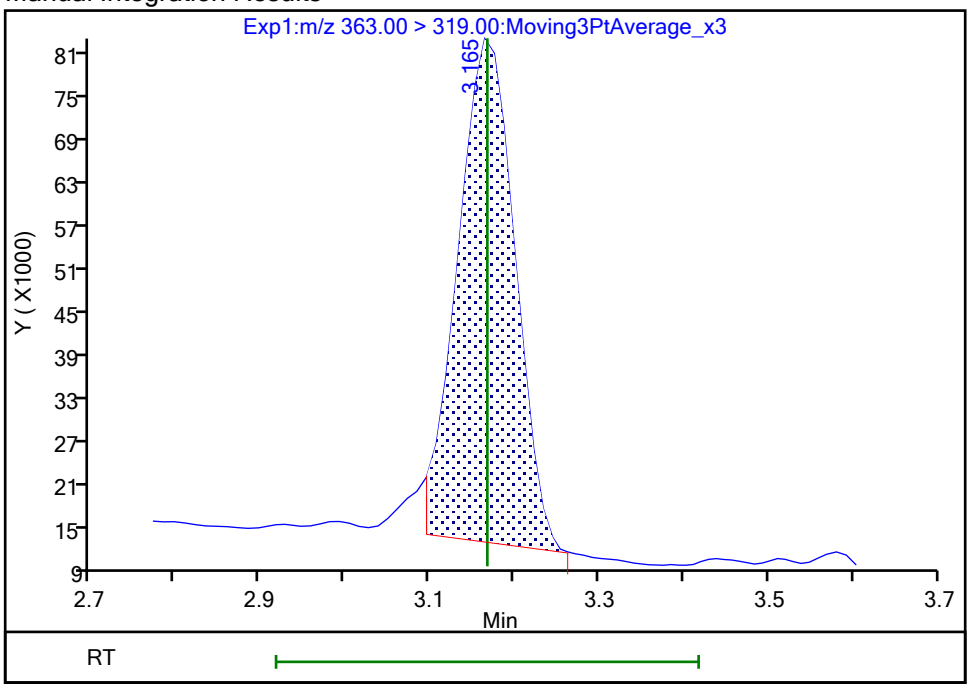
Processing Integration Results

RT: 3.16
Area: 401941
Amount: 0.278720
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 326295
Amount: 0.226264
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

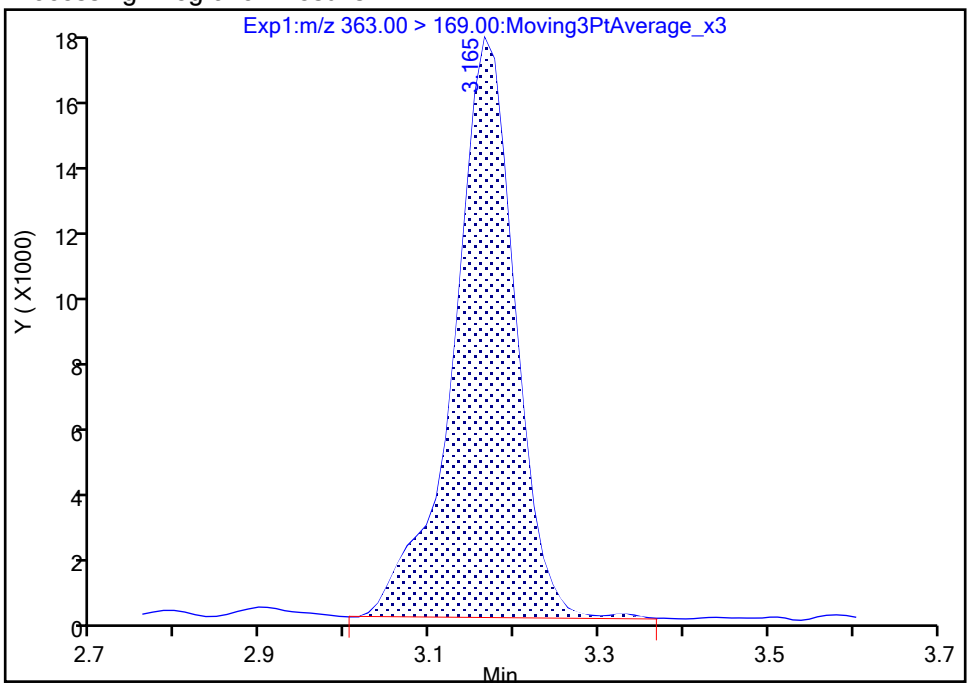
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

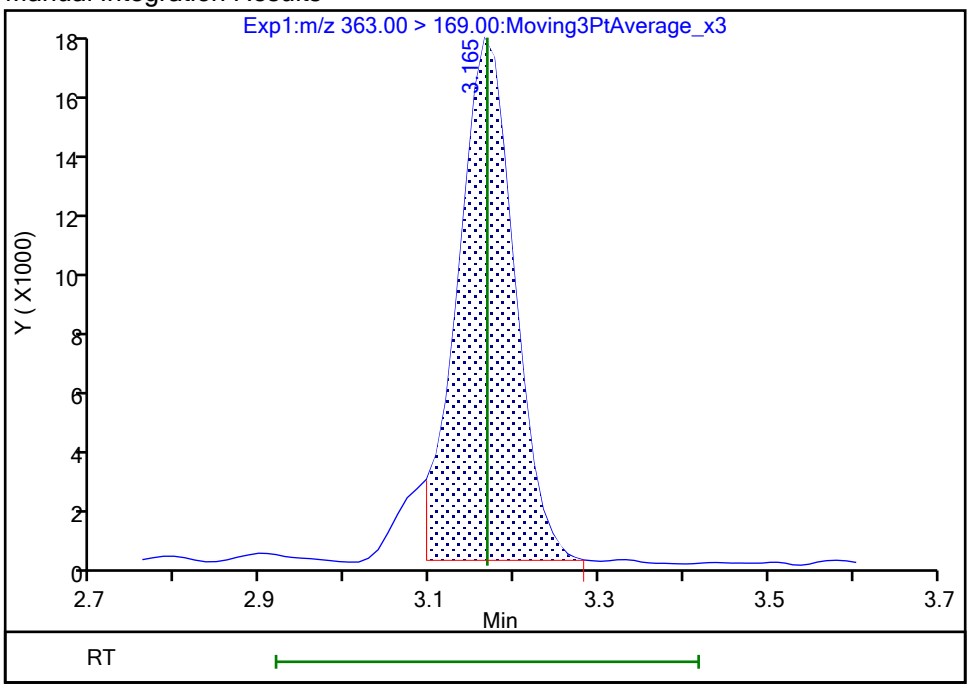
Processing Integration Results

RT: 3.16
Area: 88904
Amount: 0.278720
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 81416
Amount: 0.226264
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

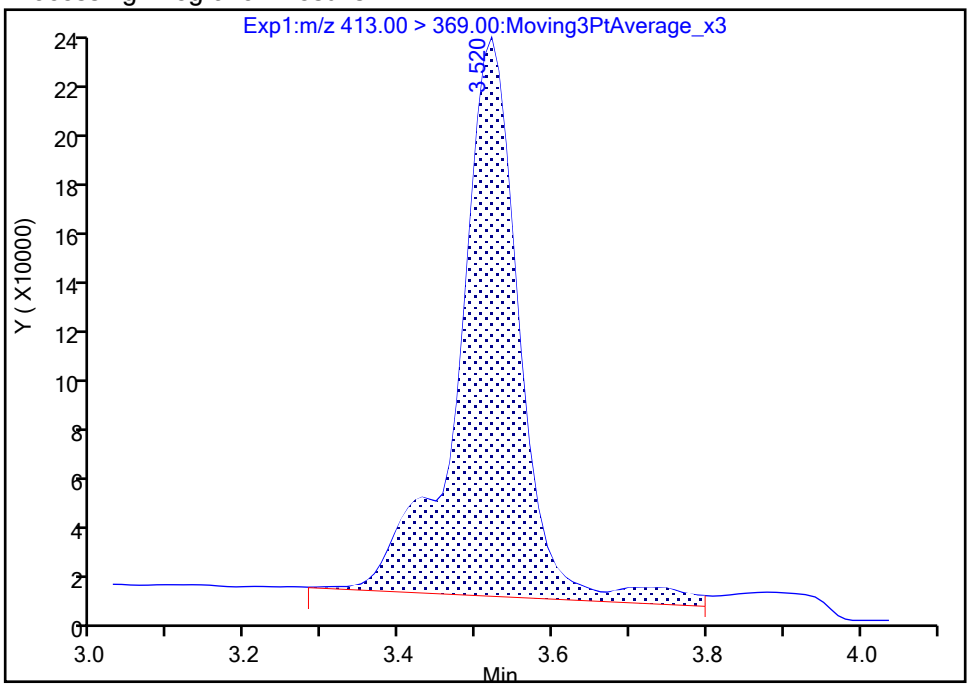
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

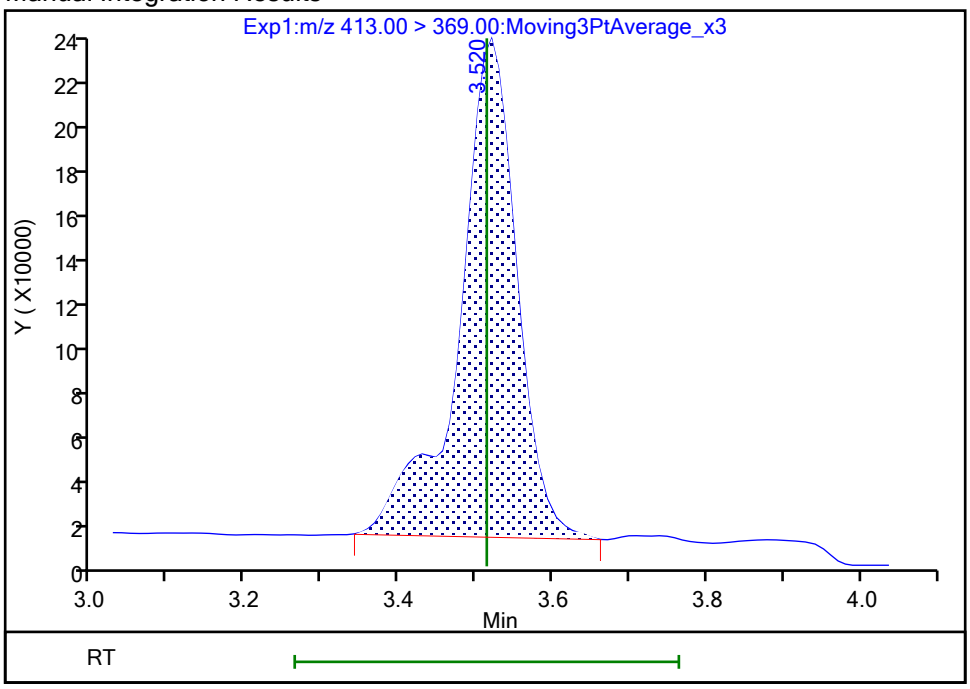
Processing Integration Results

RT: 3.52
Area: 1265442
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1166175
Amount: 0.686471
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:46:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

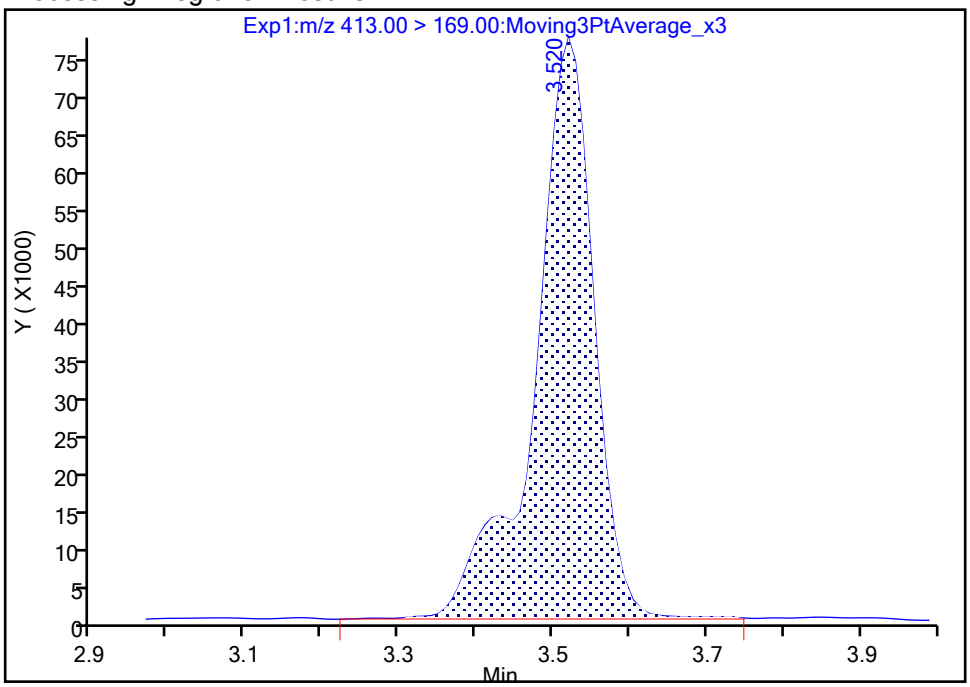
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

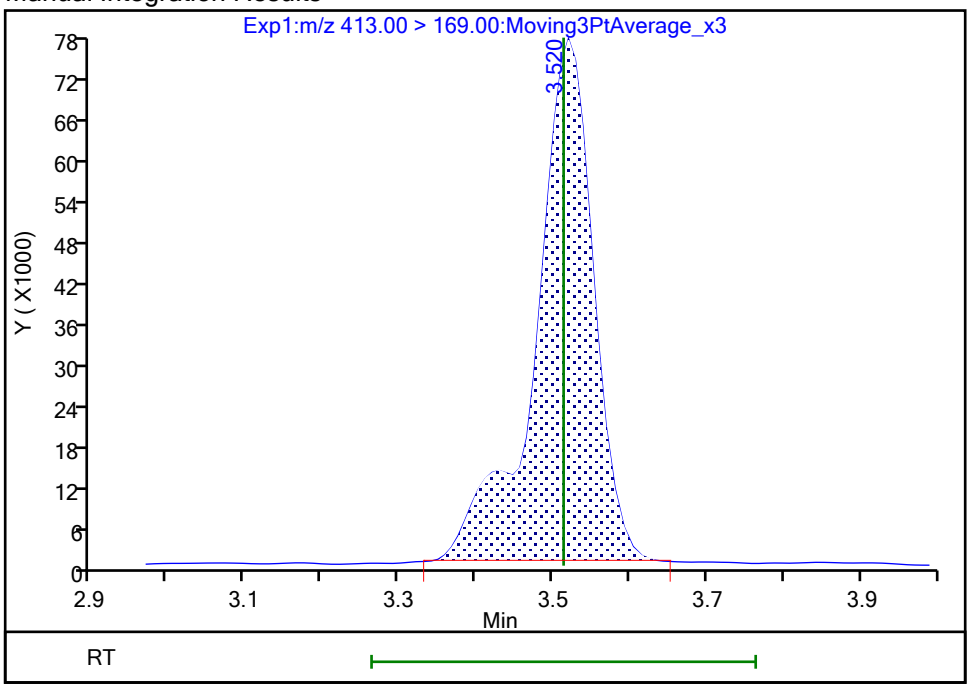
Processing Integration Results

RT: 3.52
Area: 416077
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 408034
Amount: 0.686471
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:46:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

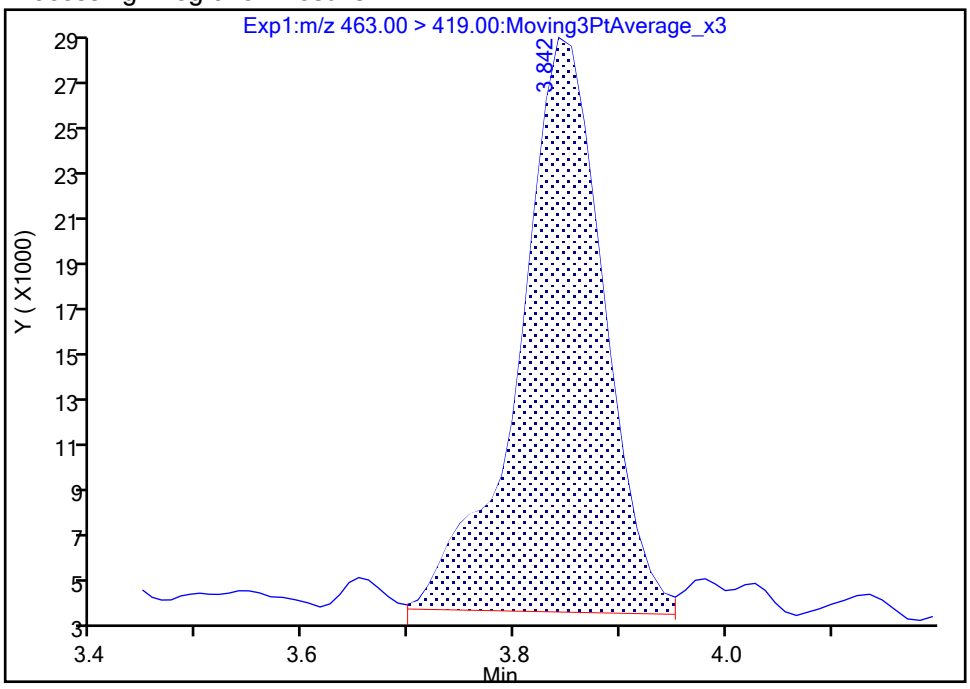
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

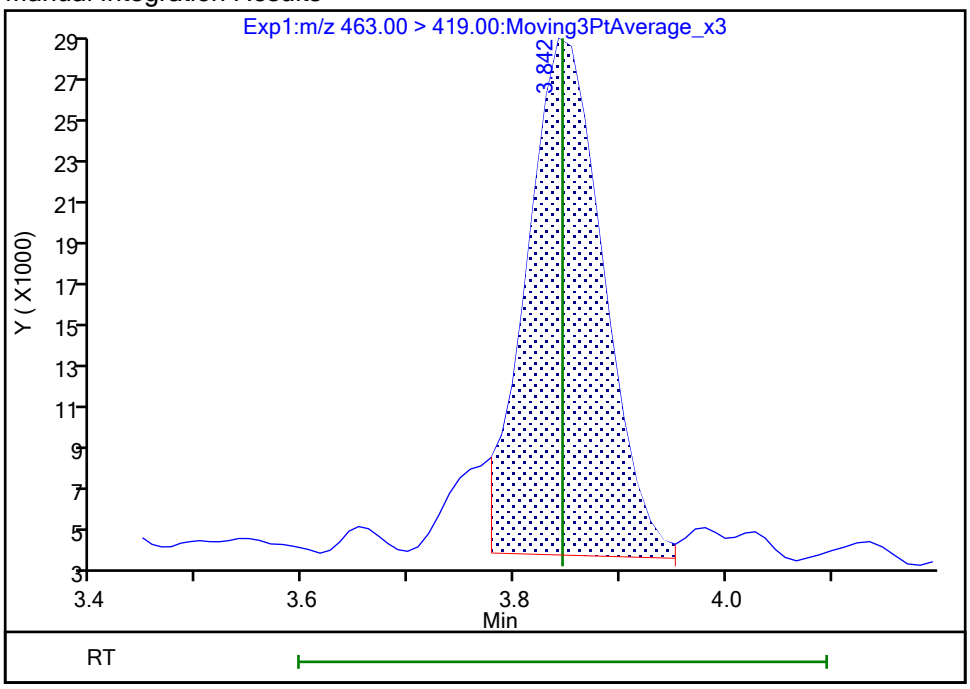
Processing Integration Results

RT: 3.84
Area: 132215
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 119419
Amount: 0.077494
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

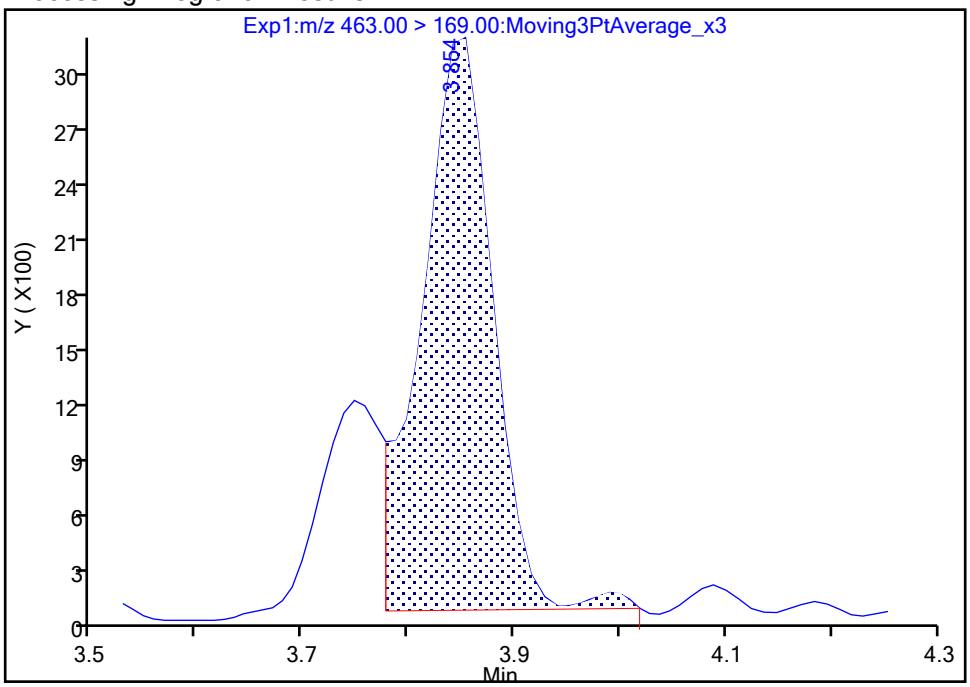
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

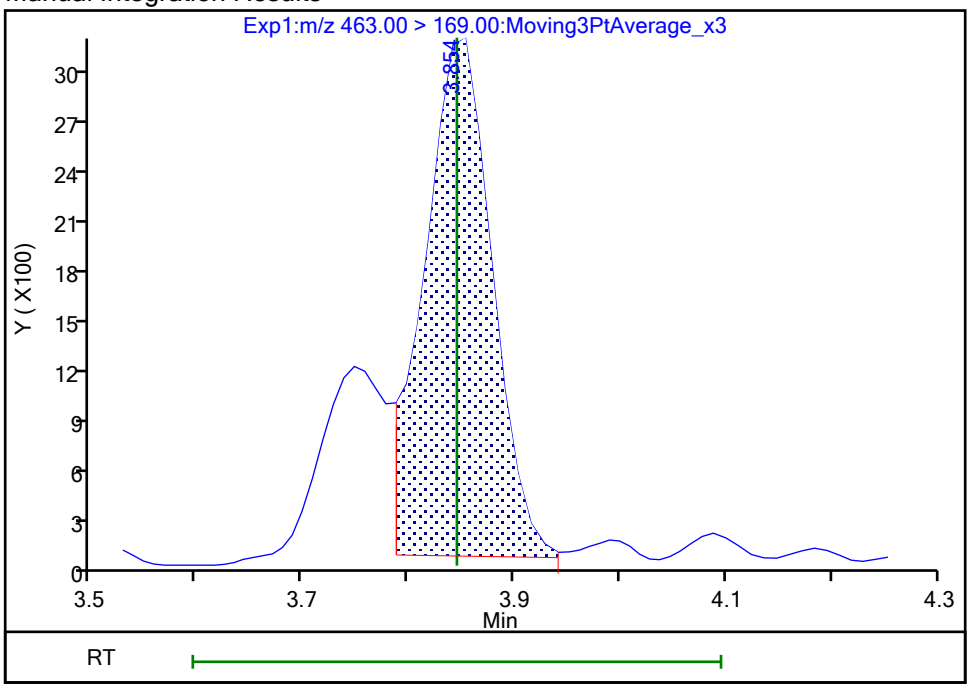
Processing Integration Results

RT: 3.85
Area: 14520
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 13820
Amount: 0.077494
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

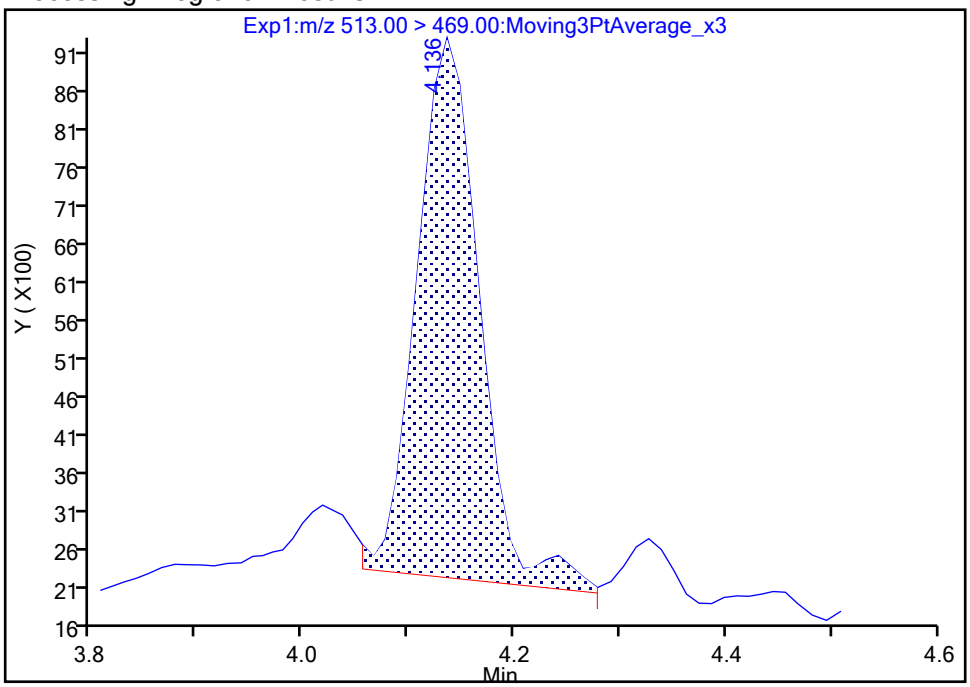
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

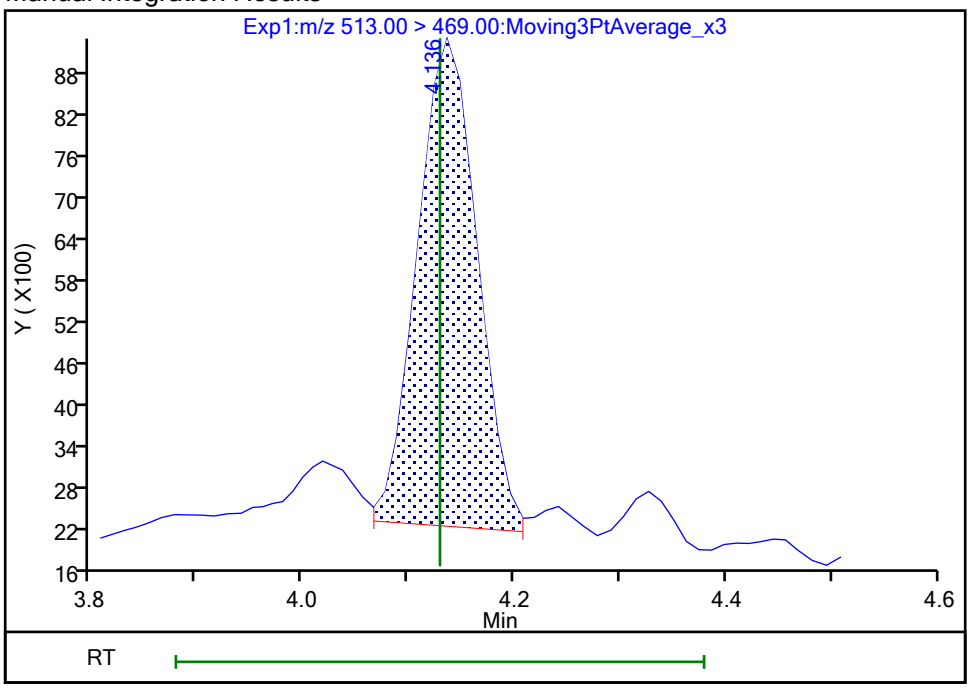
Processing Integration Results

RT: 4.14
Area: 28739
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 27556
Amount: 0.015689
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

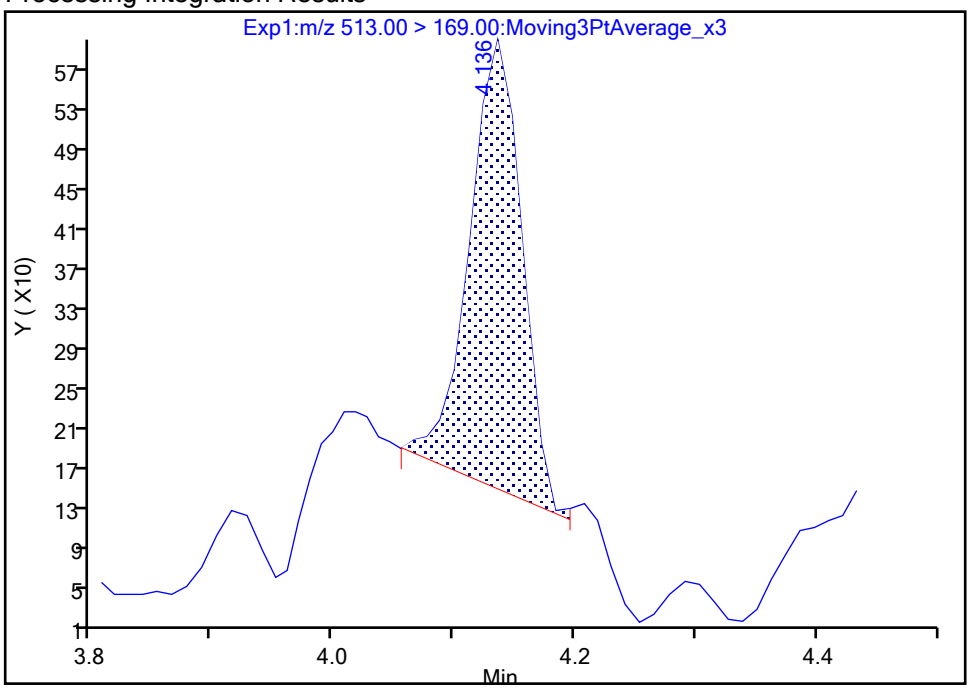
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

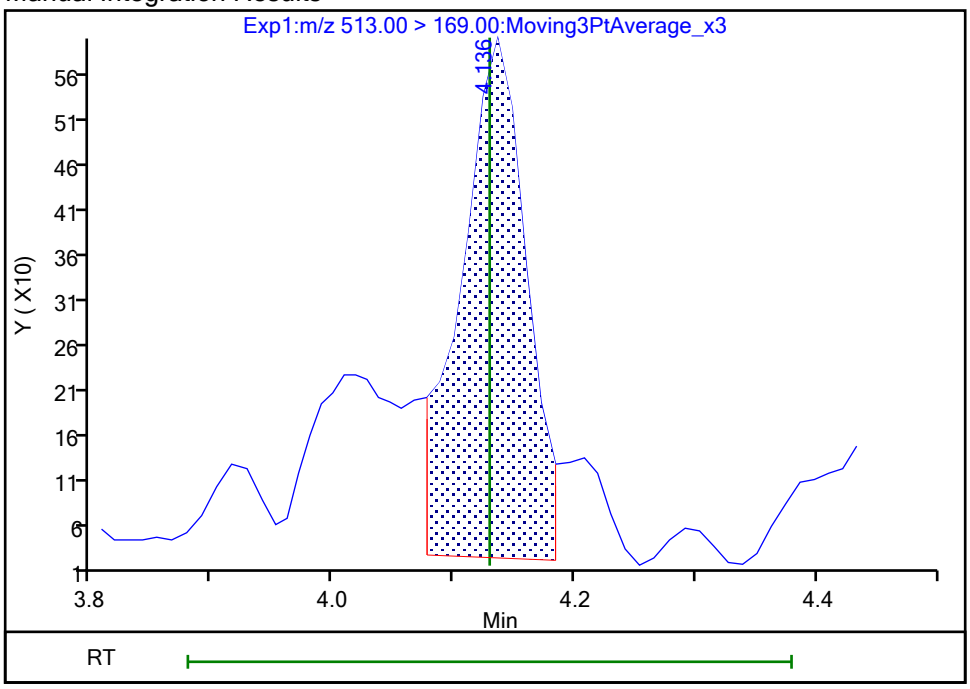
Processing Integration Results

RT: 4.14
Area: 1365
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2151
Amount: 0.015689
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:14:14 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

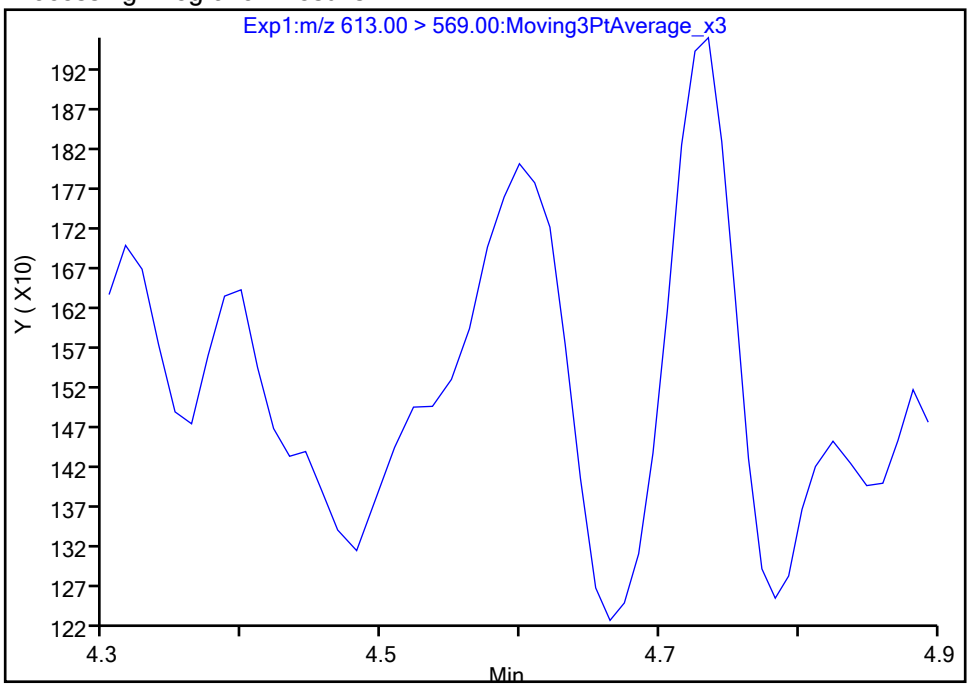
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

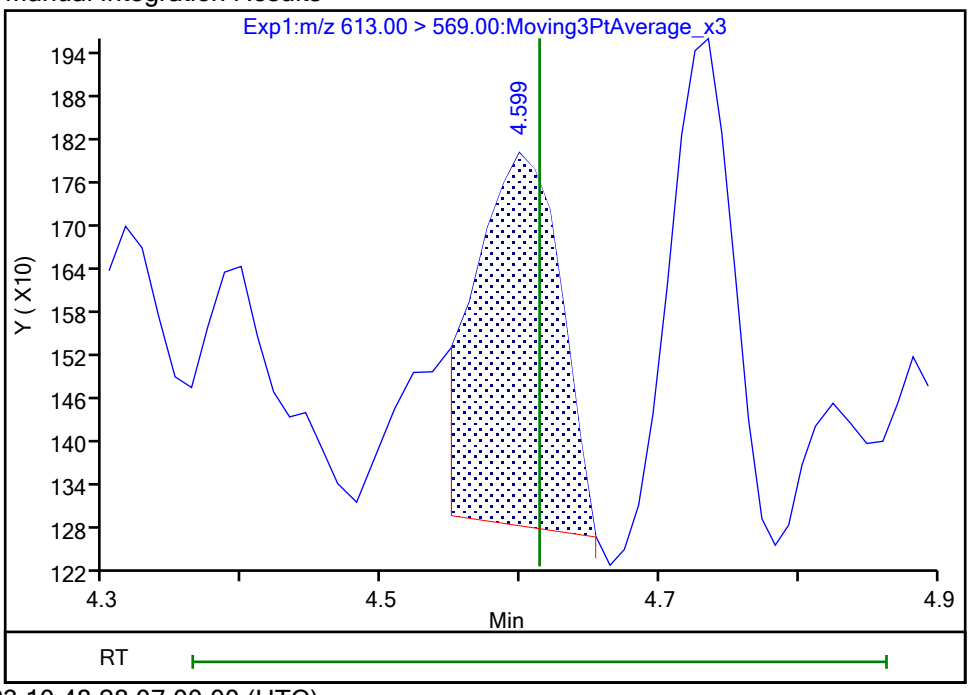
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 2216
Amount: 0.001267
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:48:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

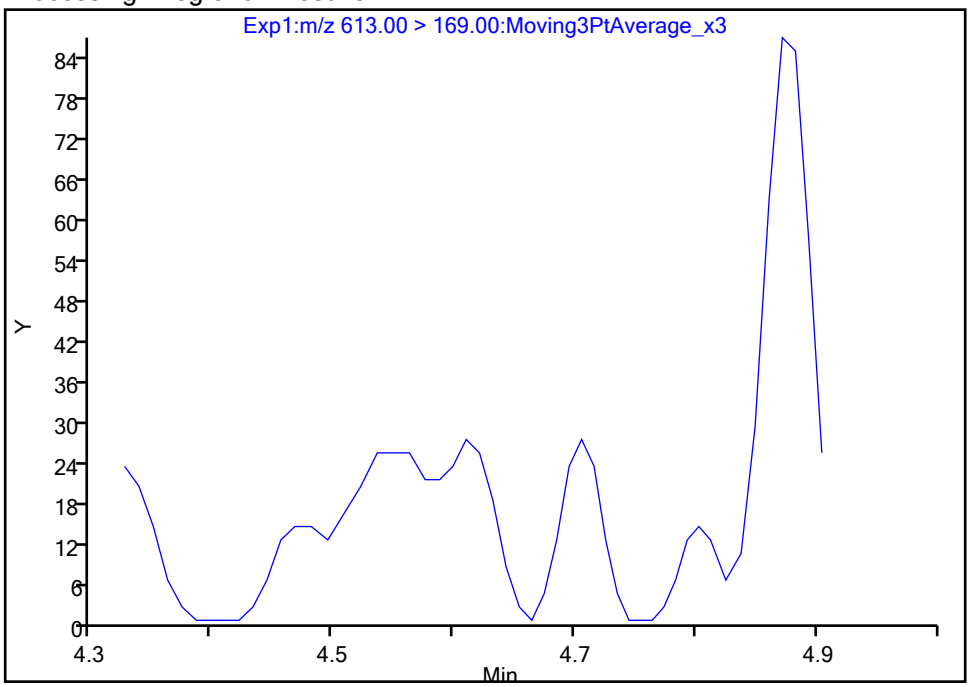
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

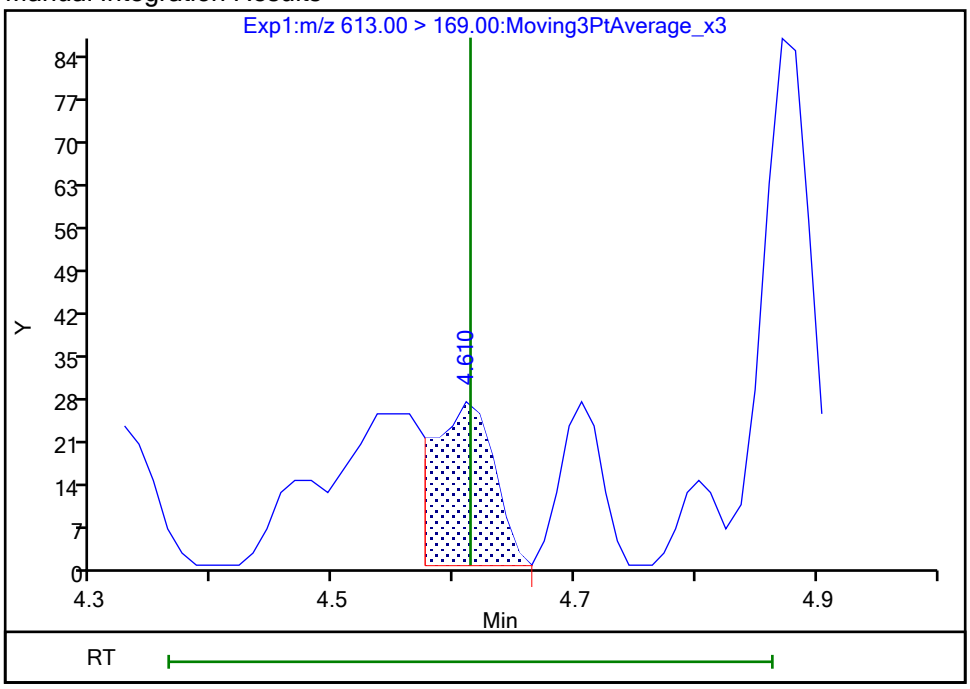
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 90
Amount: 0.001267
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:48:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

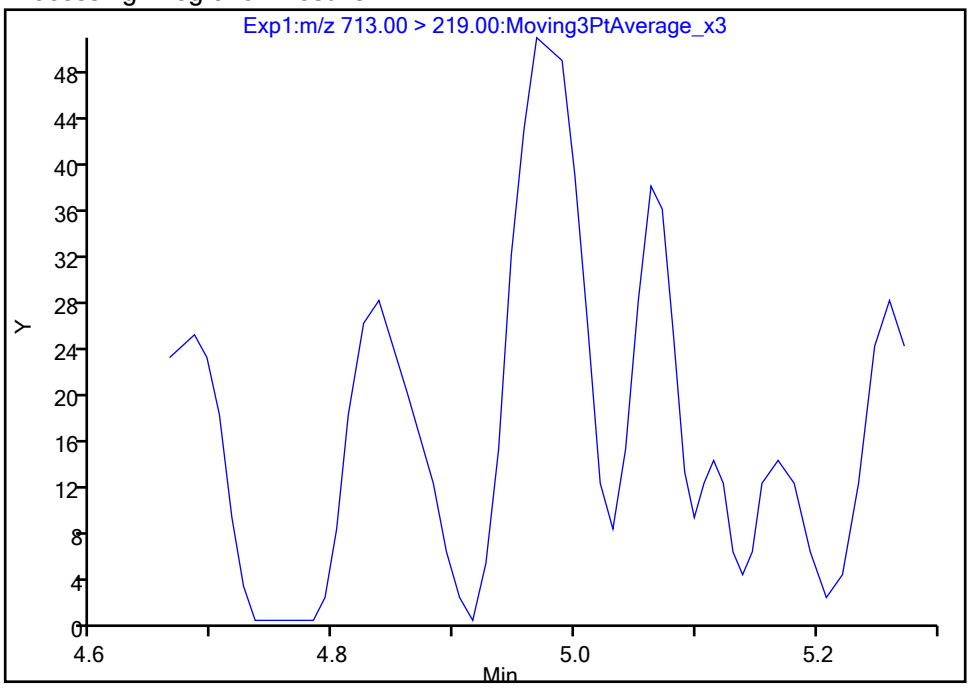
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

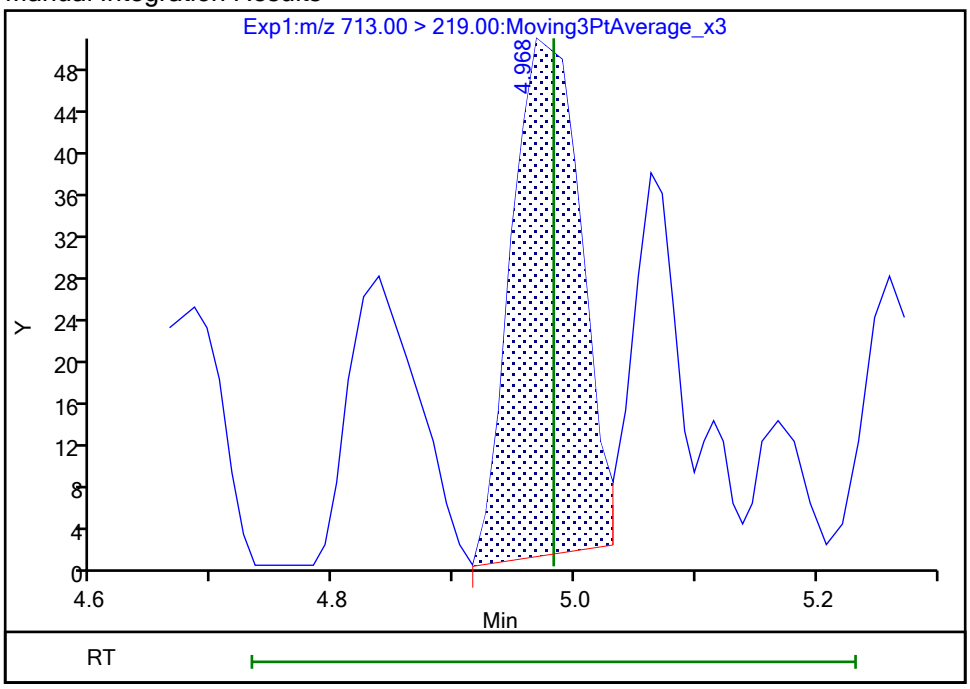
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 198
Amount: 0.000395
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:48:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

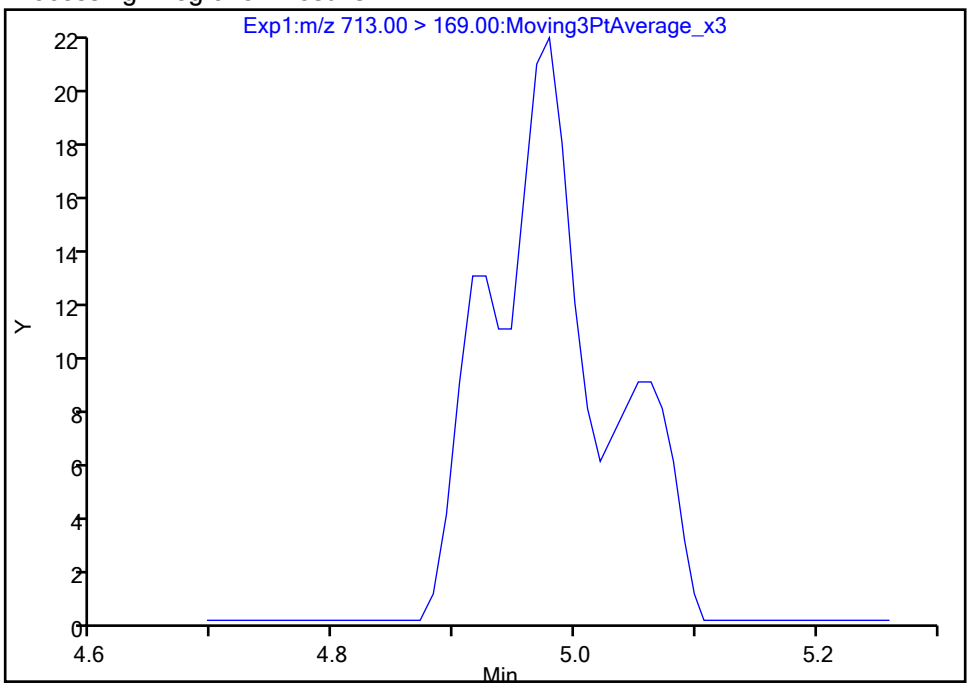
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

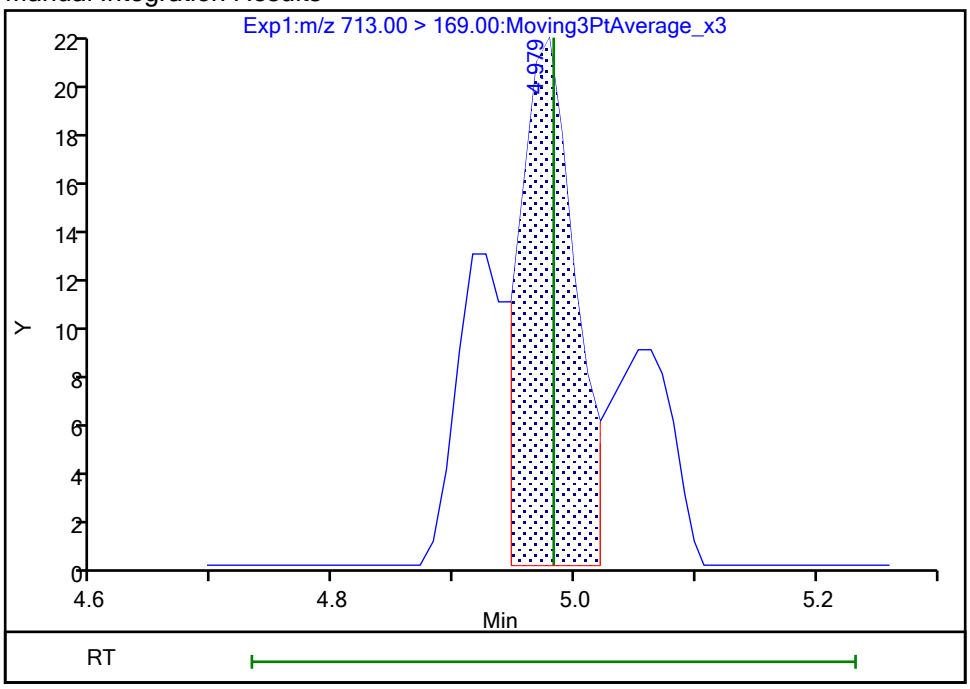
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 66
Amount: 0.000395
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:48:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

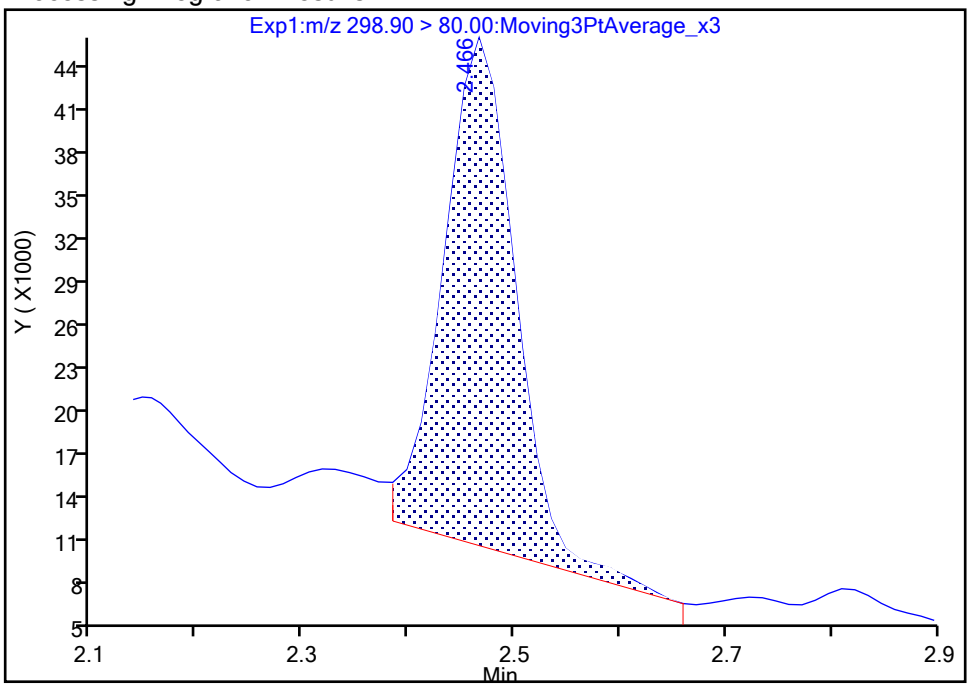
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

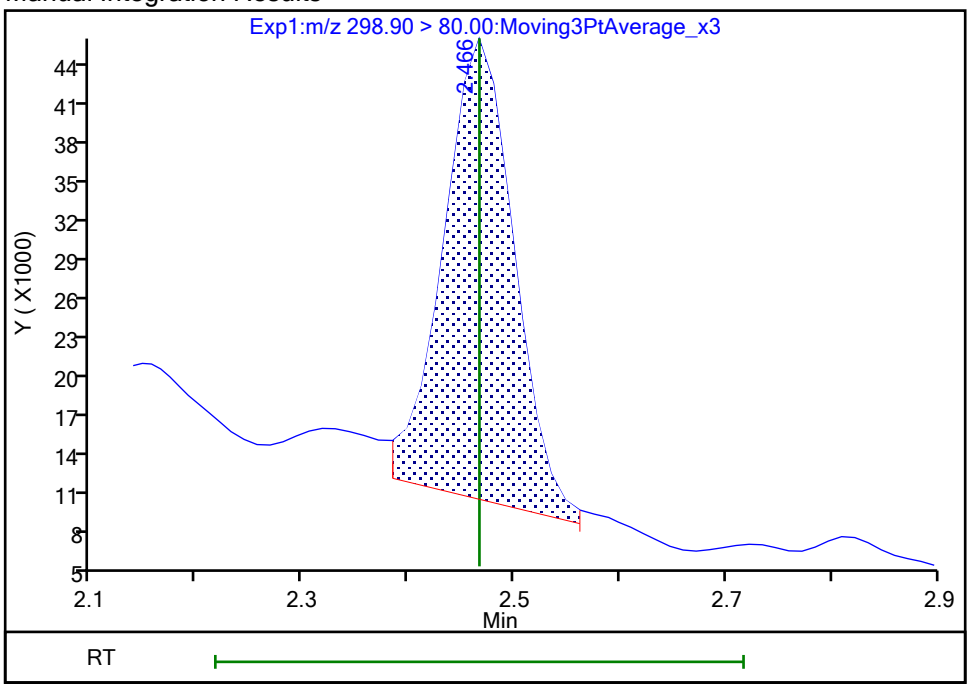
Processing Integration Results

RT: 2.47
Area: 163154
Amount: 0.093281
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 160314
Amount: 0.091658
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

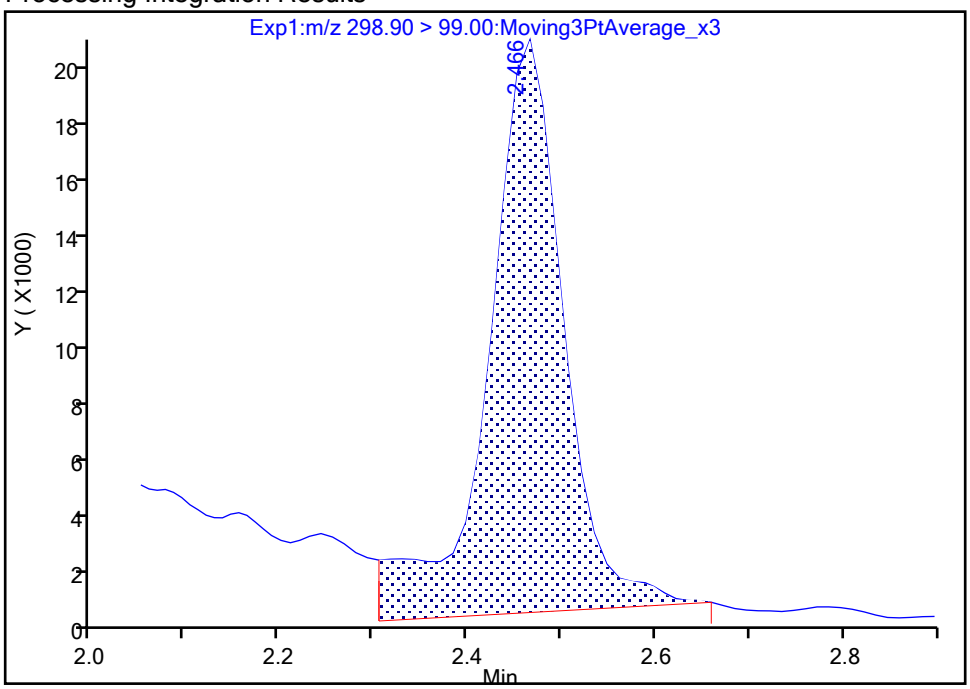
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

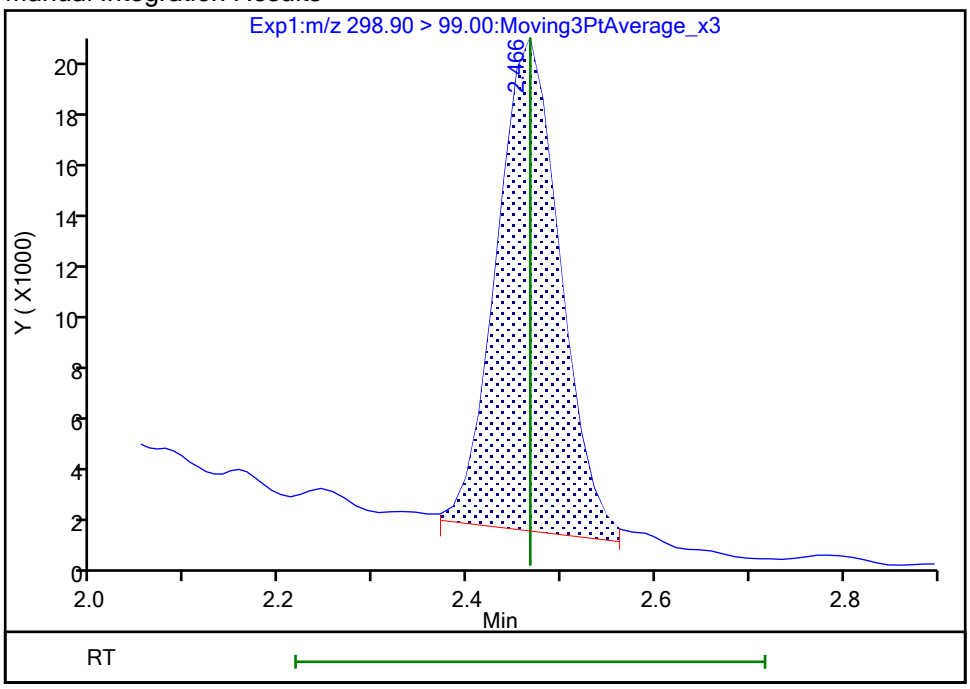
Processing Integration Results

RT: 2.47
Area: 108533
Amount: 0.093281
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 85160
Amount: 0.091658
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

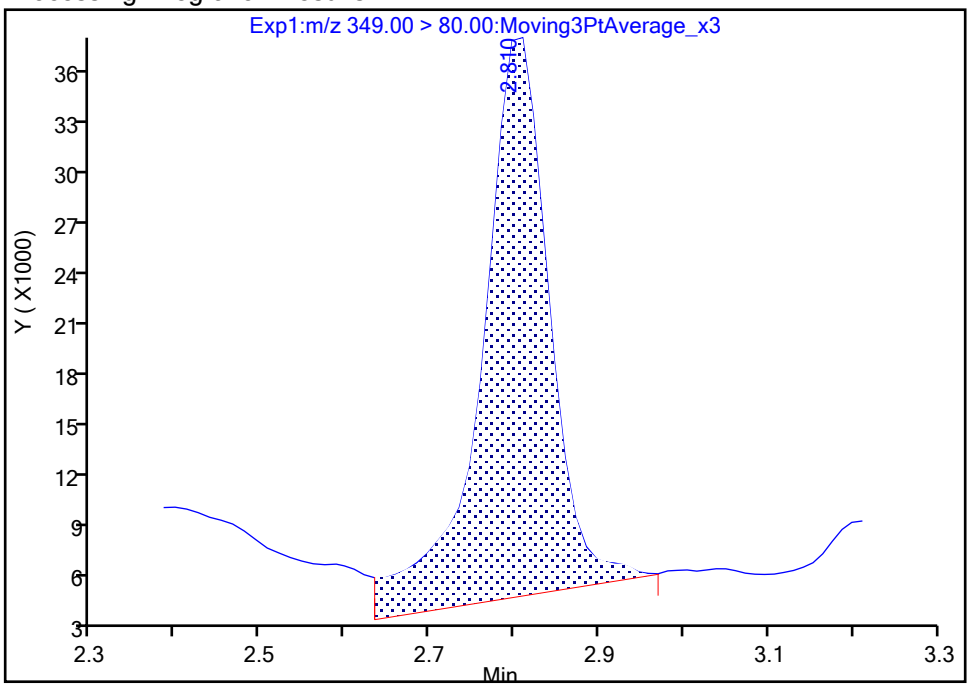
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

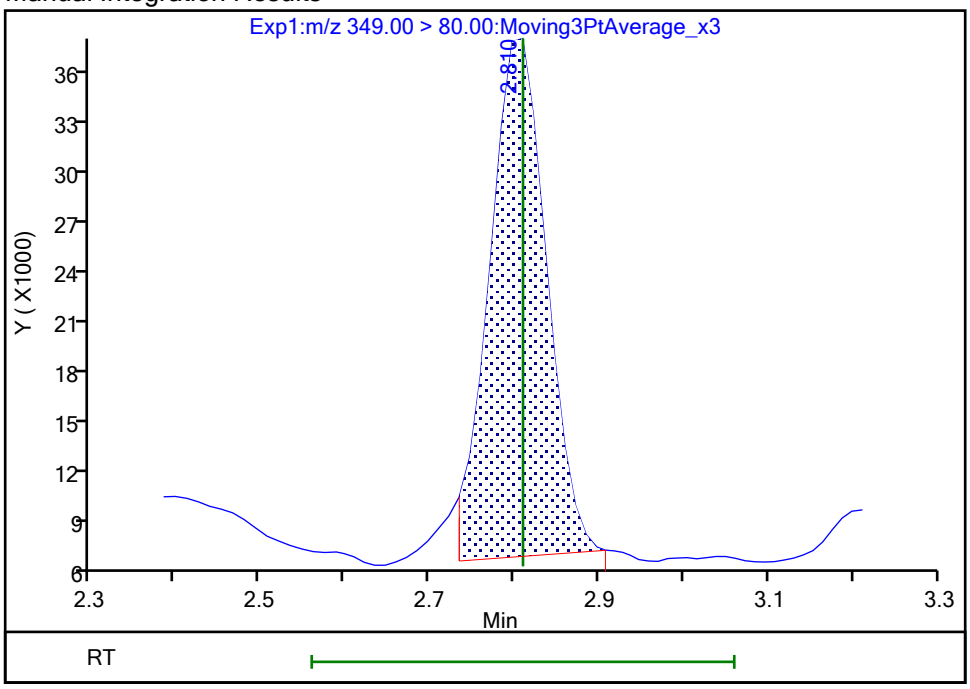
Processing Integration Results

RT: 2.81
Area: 183794
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 145086
Amount: 0.092480
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

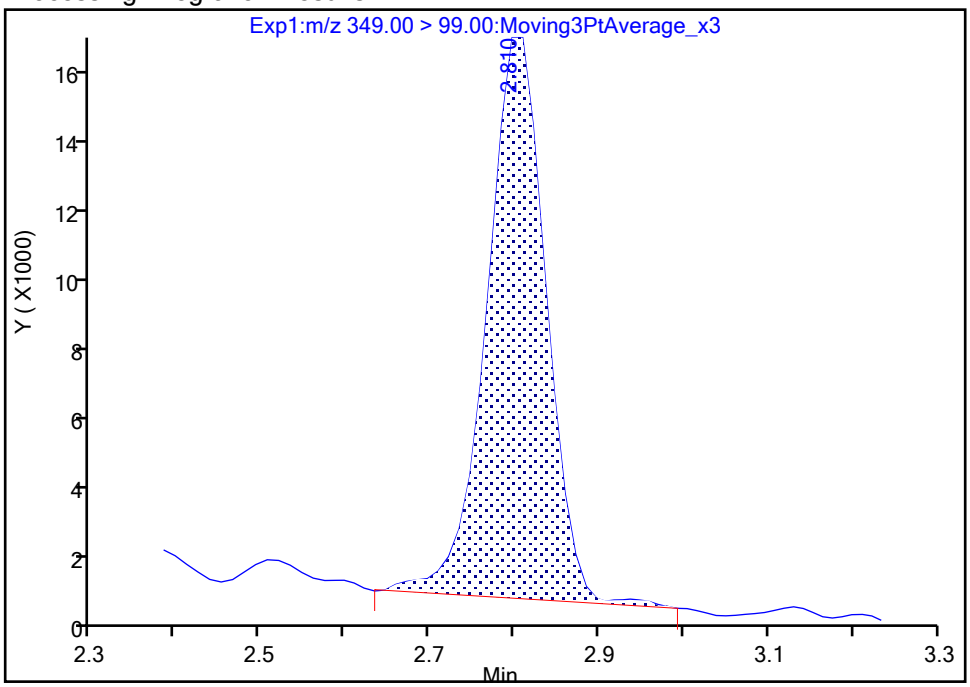
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

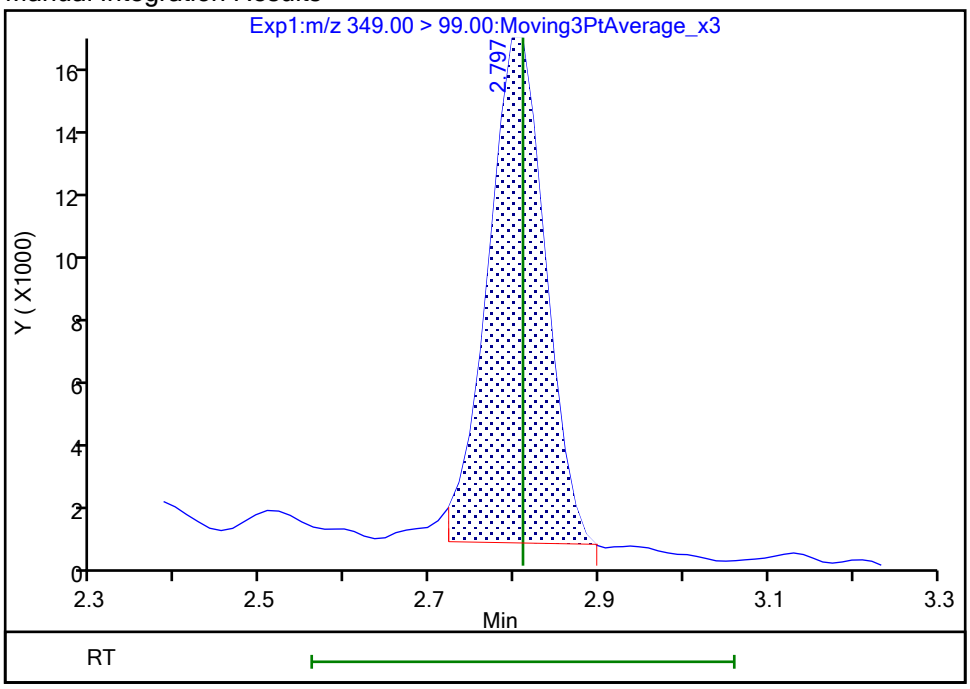
Processing Integration Results

RT: 2.81
Area: 74701
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 71148
Amount: 0.092480
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

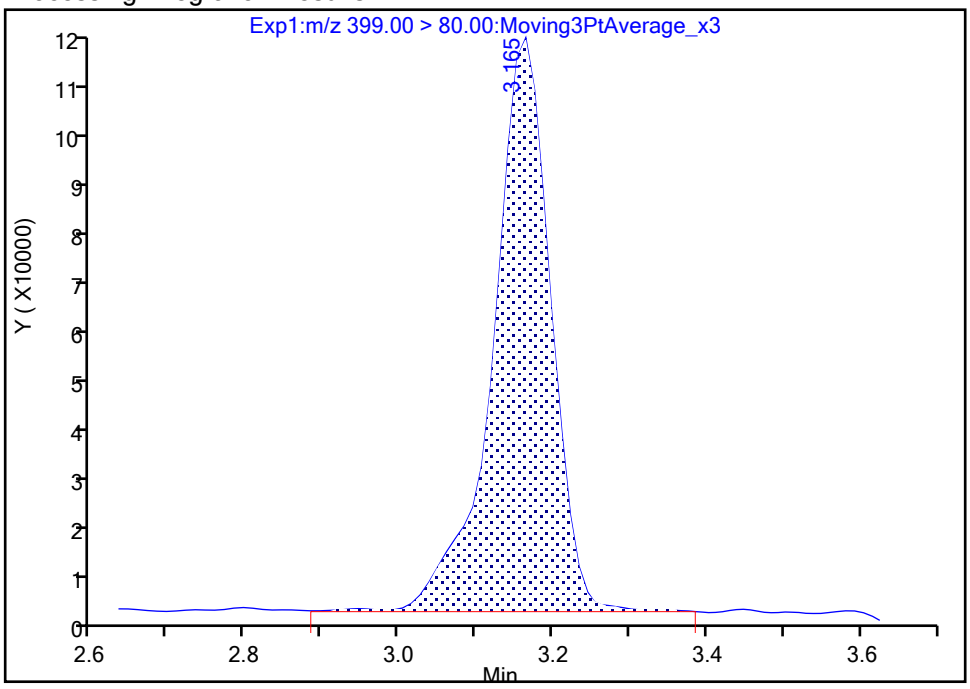
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

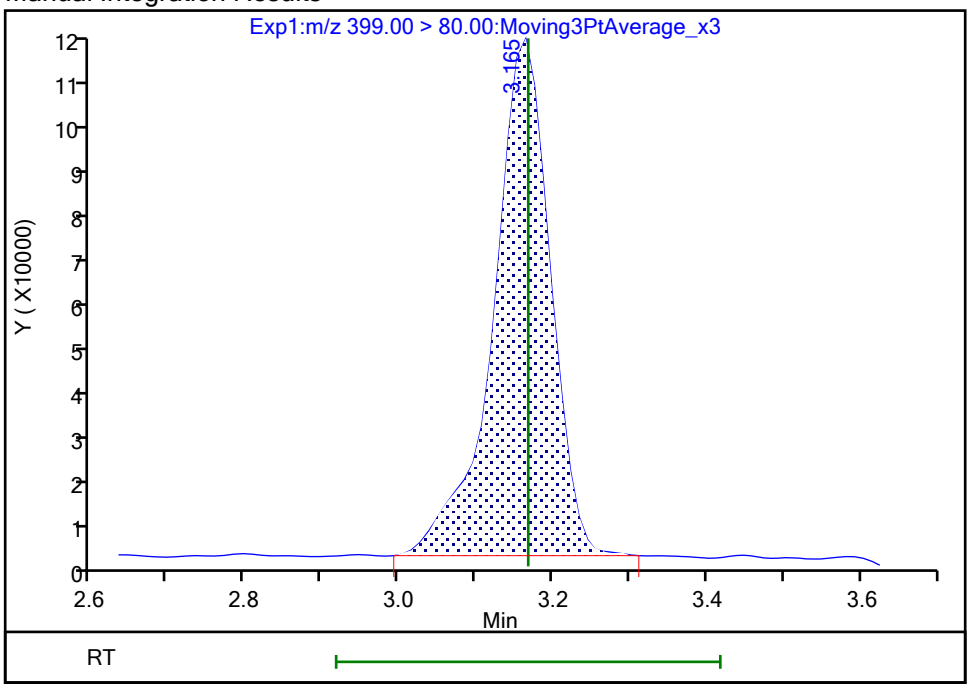
Processing Integration Results

RT: 3.16
Area: 566459
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 558910
Amount: 0.420276
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

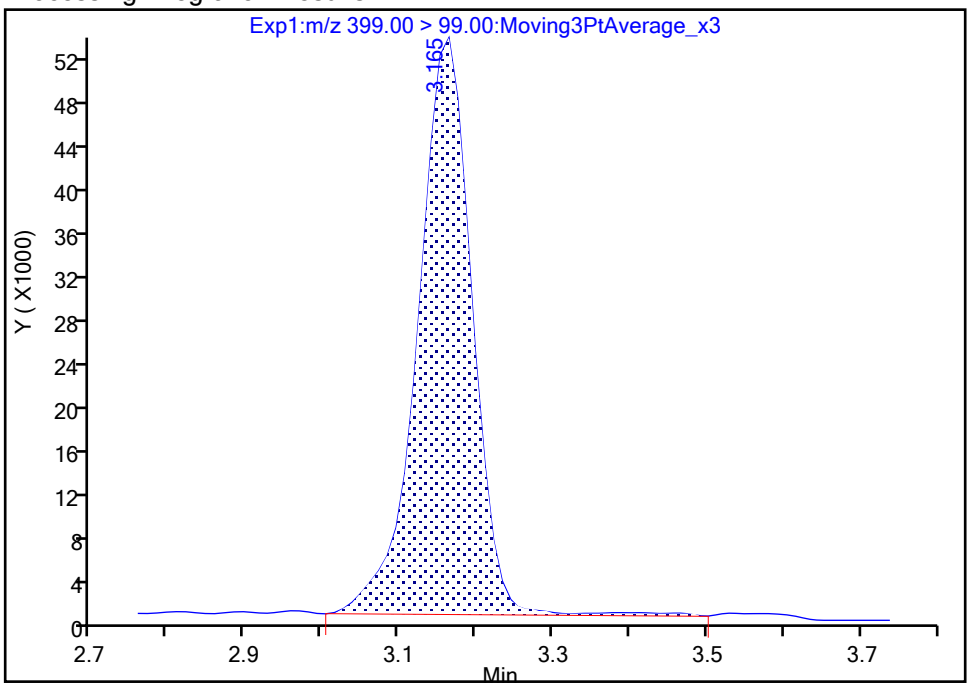
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

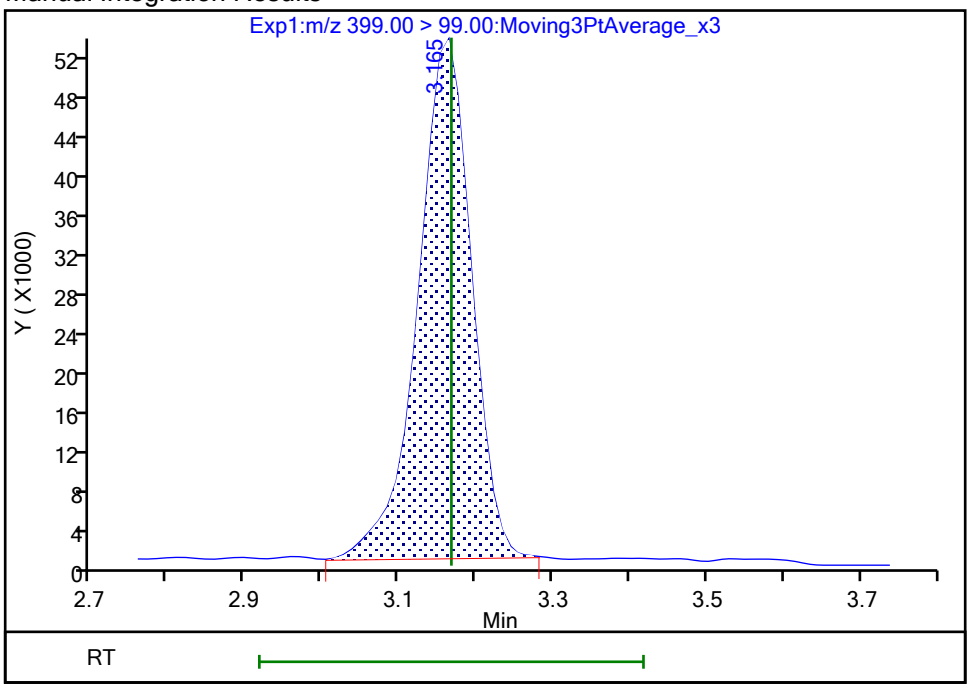
Processing Integration Results

RT: 3.16
Area: 258261
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 252173
Amount: 0.420276
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

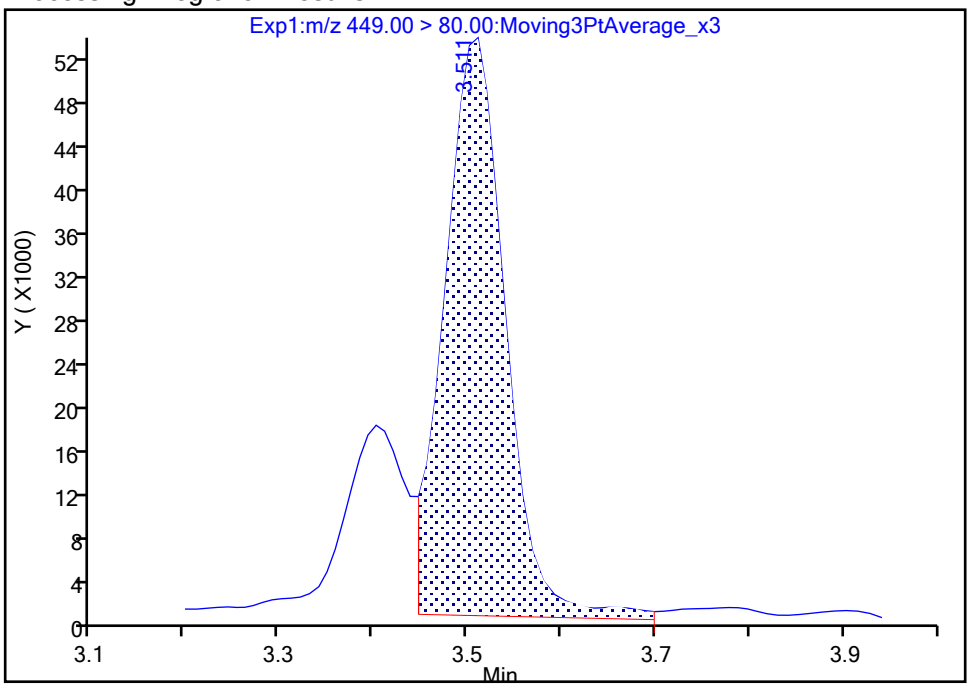
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

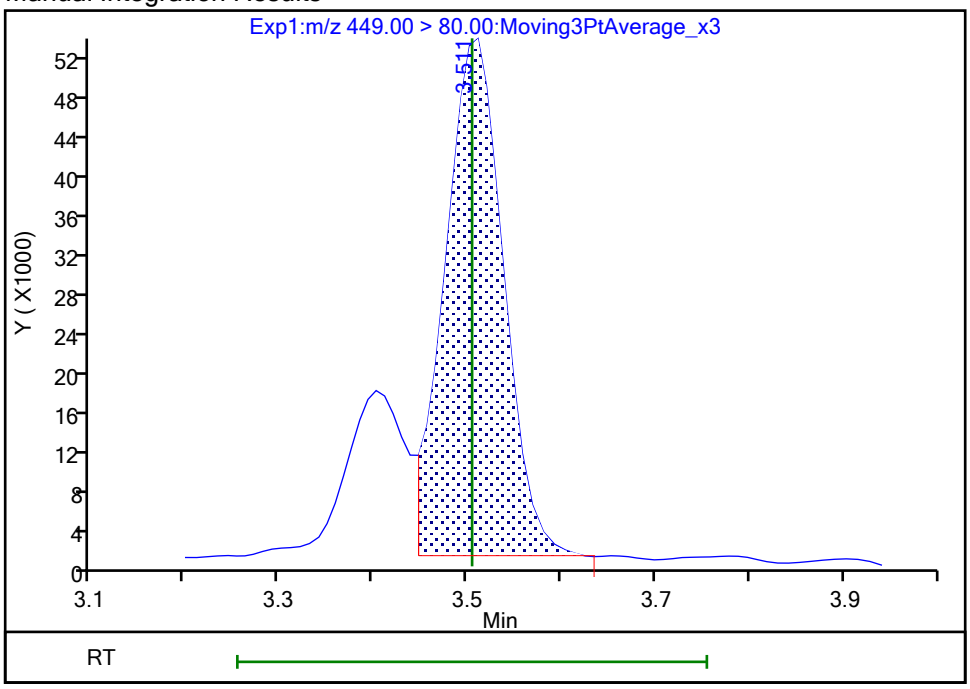
Processing Integration Results

RT: 3.51
Area: 234662
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 221923
Amount: 0.210419
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:46:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

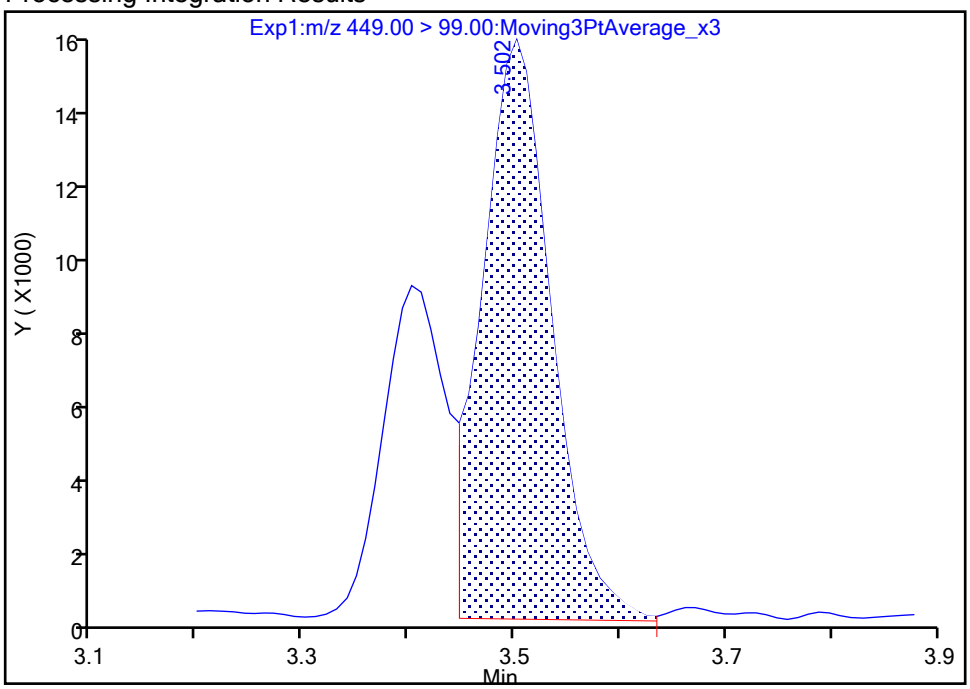
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

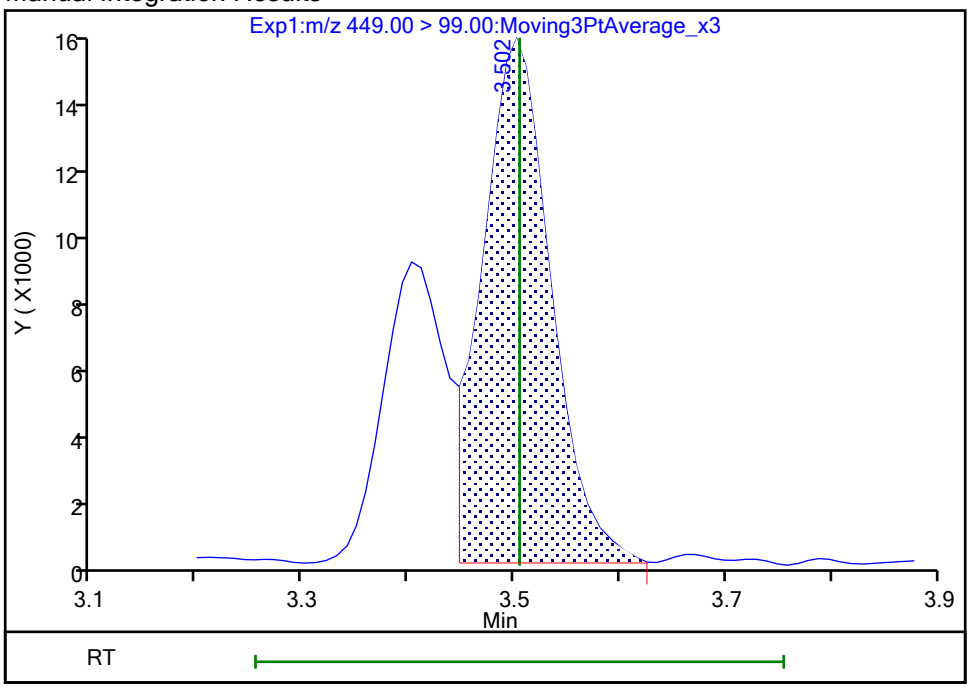
Processing Integration Results

RT: 3.50
Area: 70607
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 69208
Amount: 0.210419
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:46:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

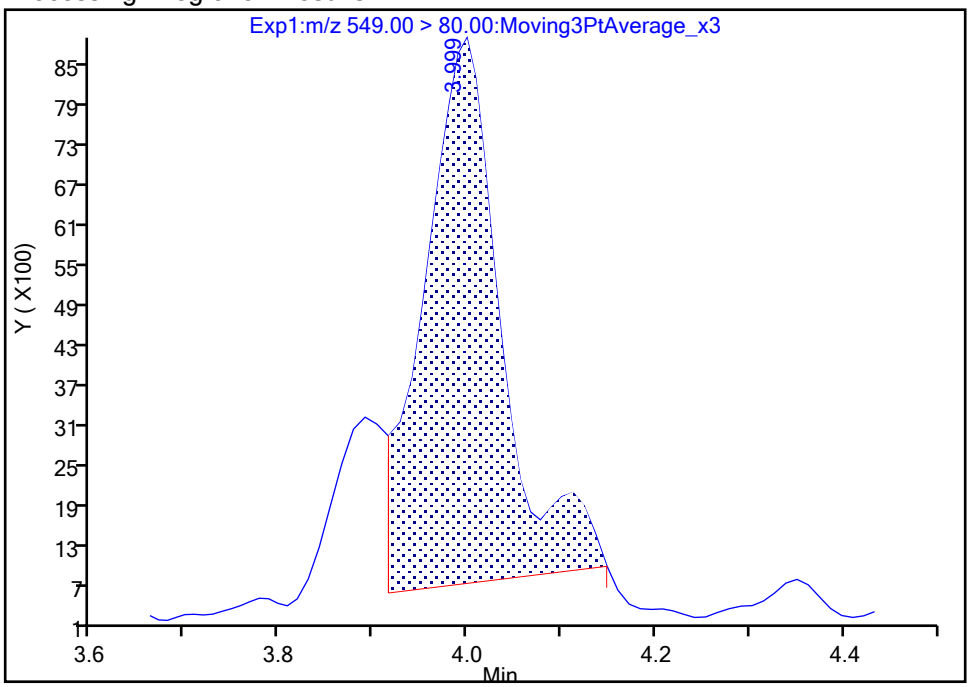
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

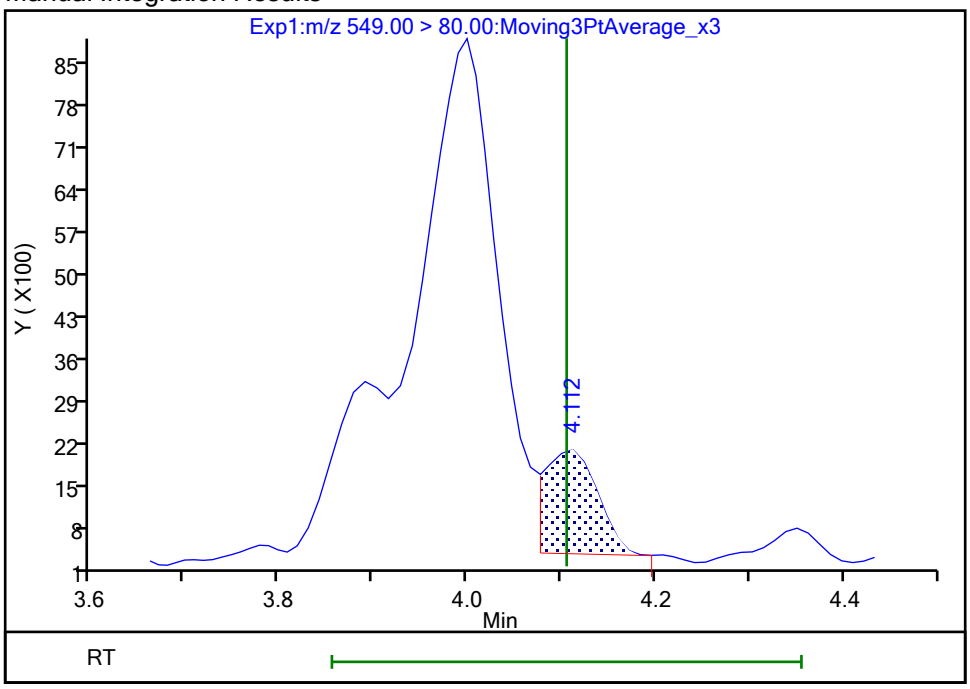
Processing Integration Results

RT: 4.00
Area: 46647
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 6533
Amount: 0.010088
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

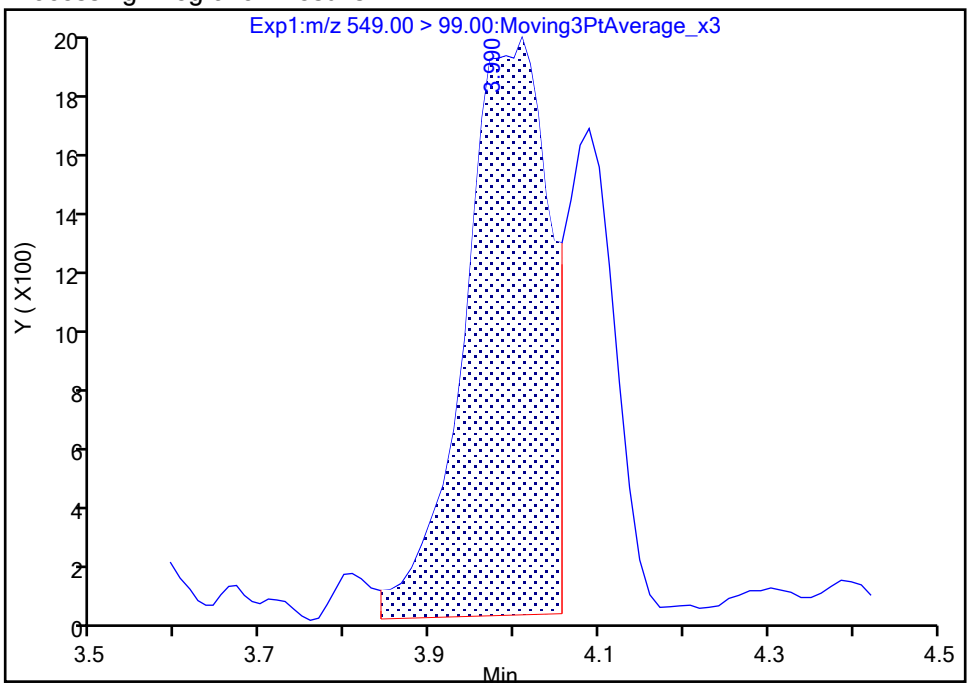
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

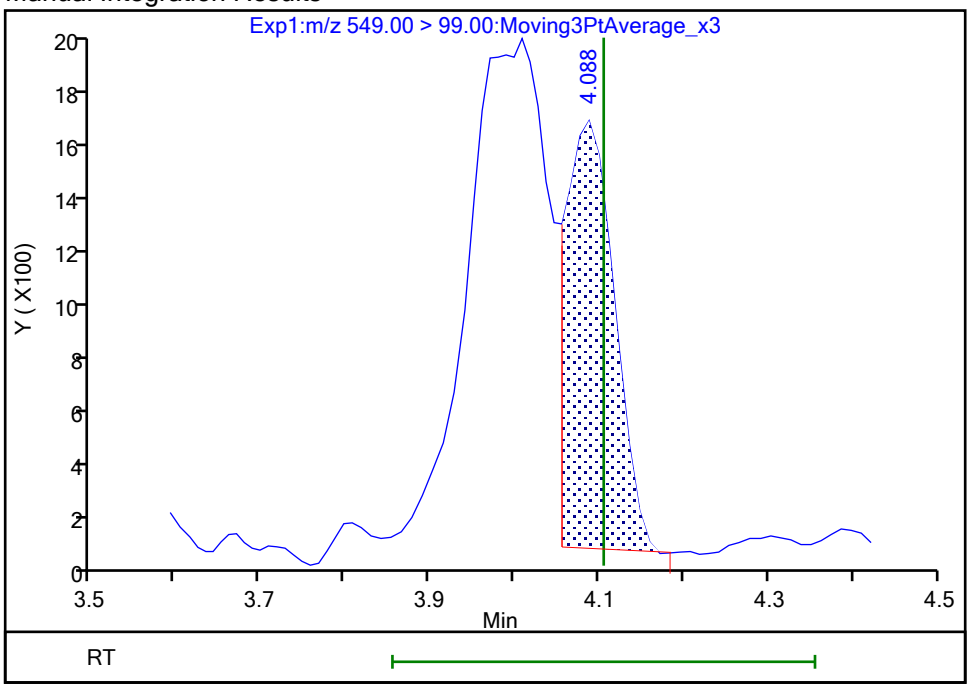
Processing Integration Results

RT: 3.99
Area: 12768
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 5891
Amount: 0.010088
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:14:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

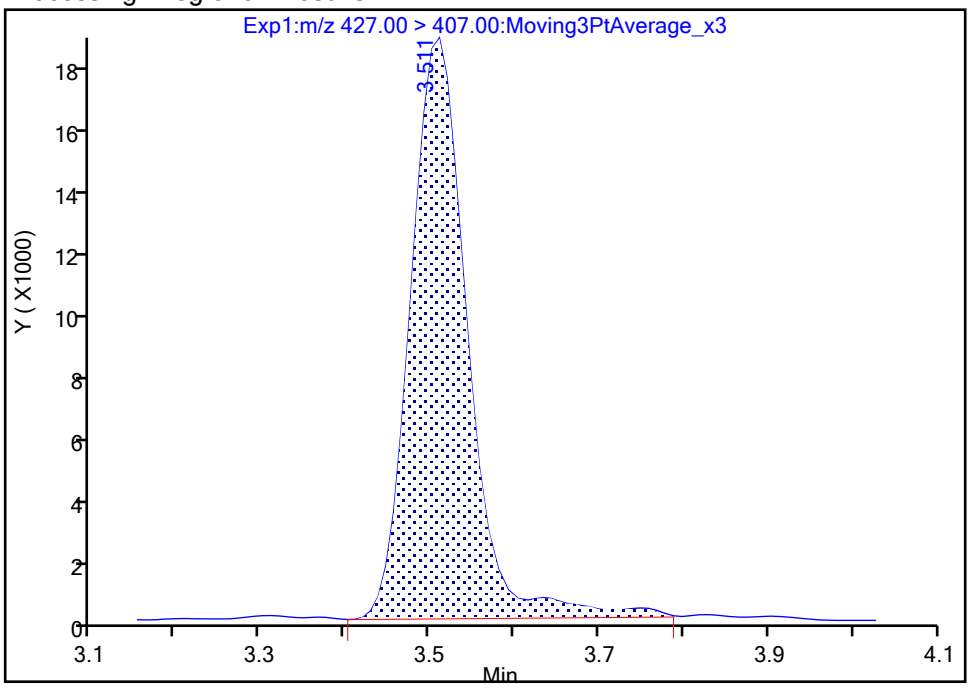
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

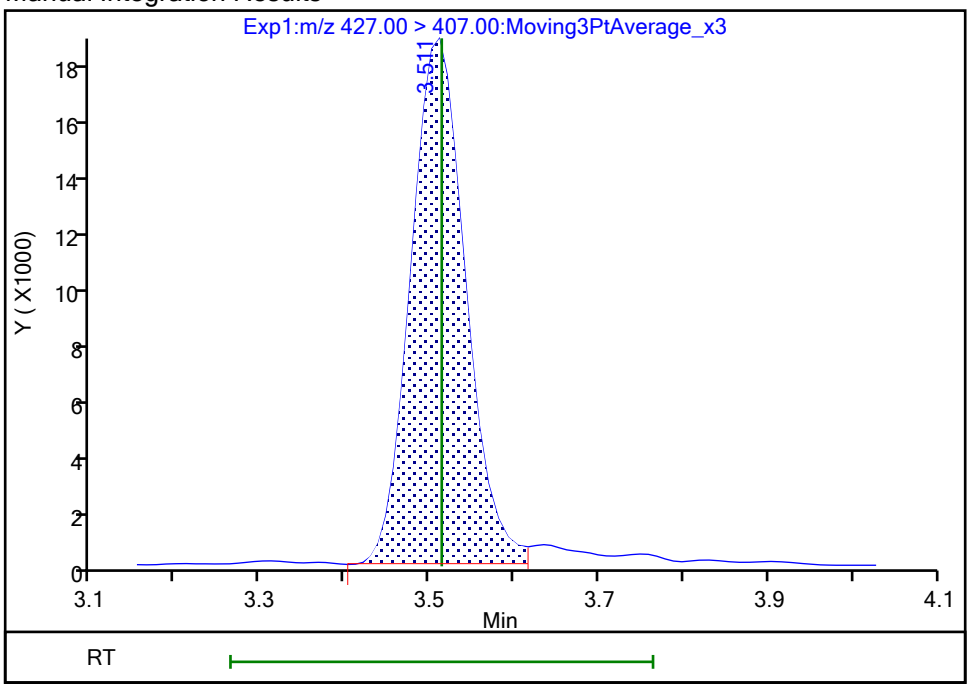
Processing Integration Results

RT: 3.51
Area: 83961
Amount: 0.129456
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 80687
Amount: 0.124408
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:46:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

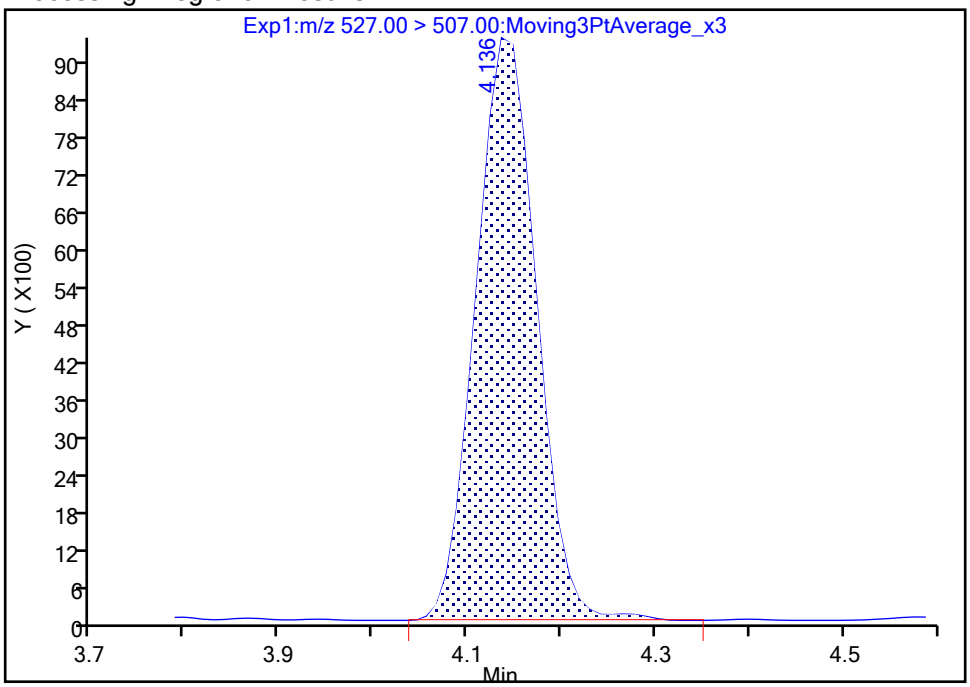
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

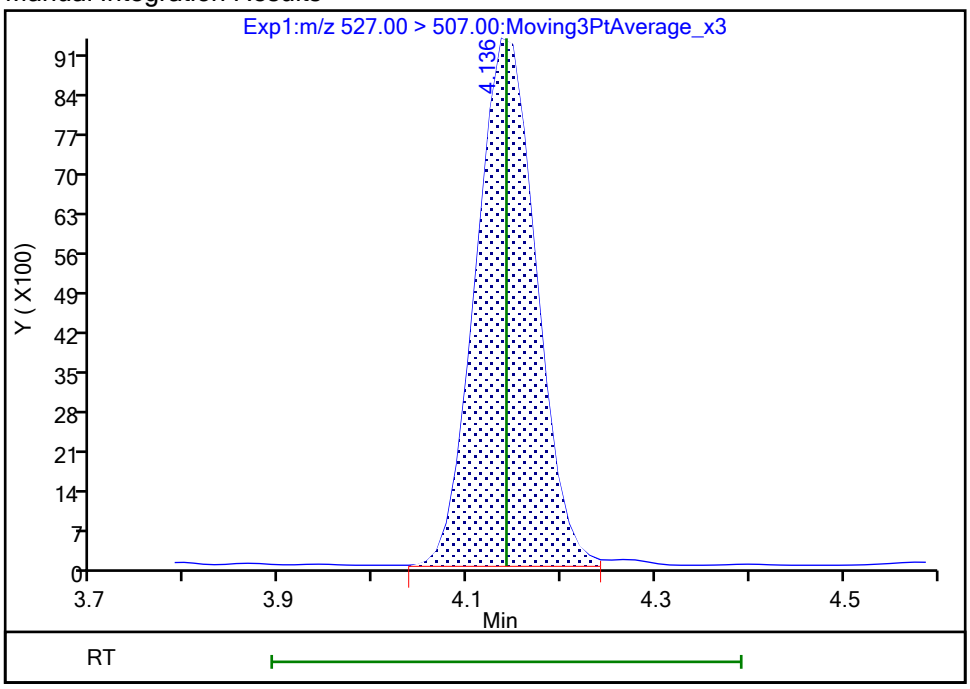
Processing Integration Results

RT: 4.14
Area: 42119
Amount: 0.071842
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 41803
Amount: 0.071303
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

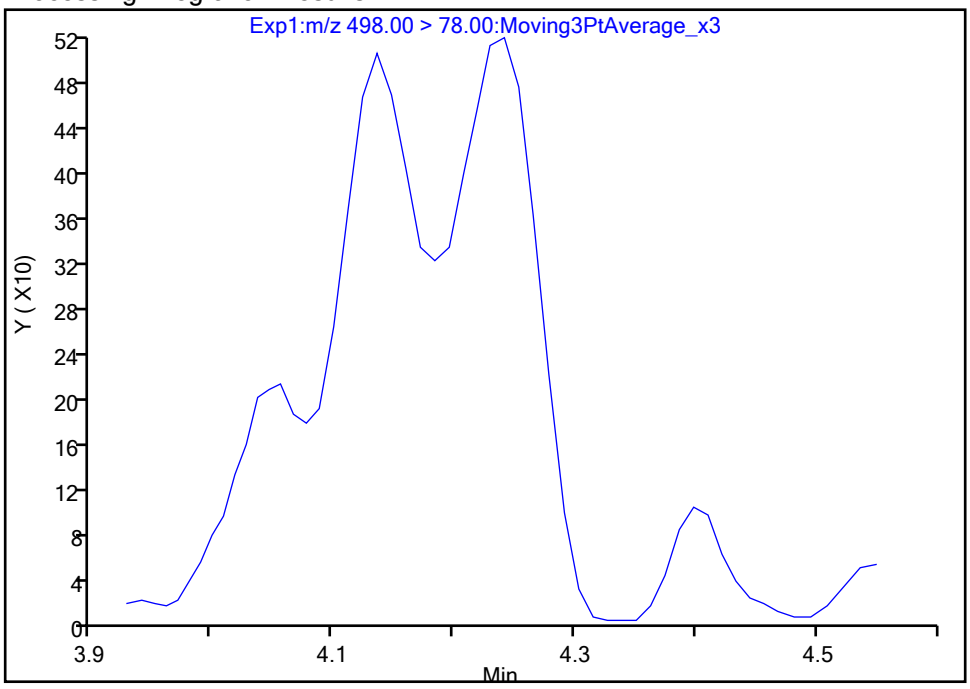
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

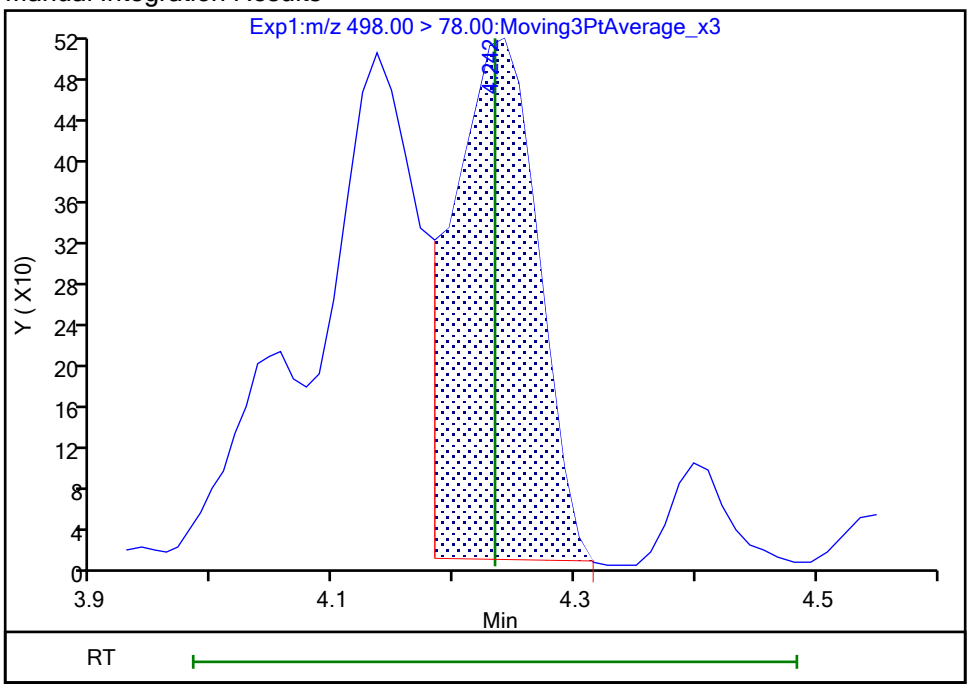
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 2481
Amount: 0.001978
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

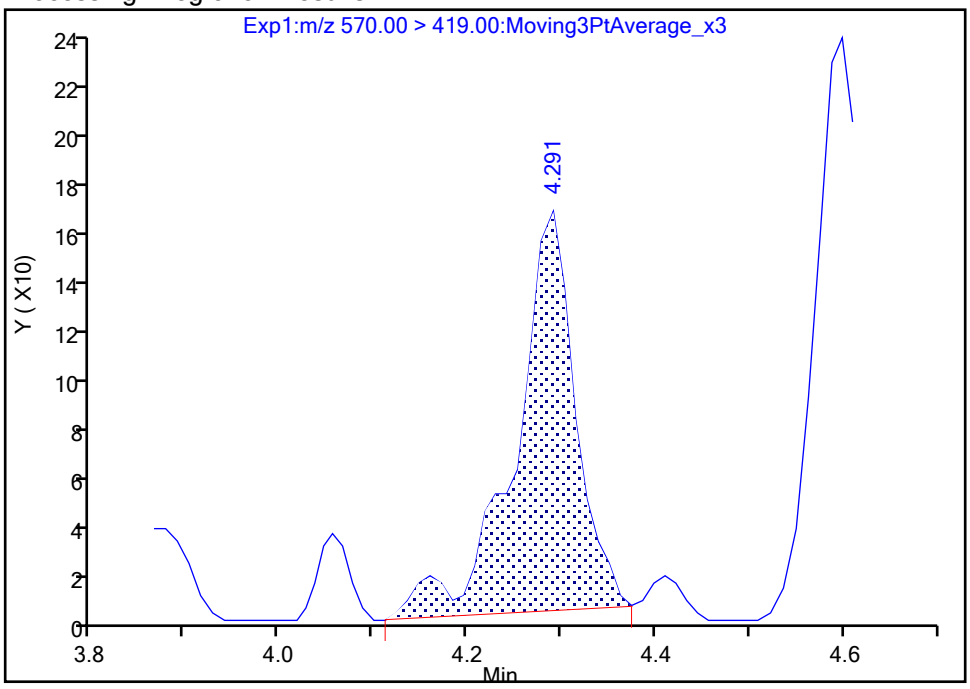
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

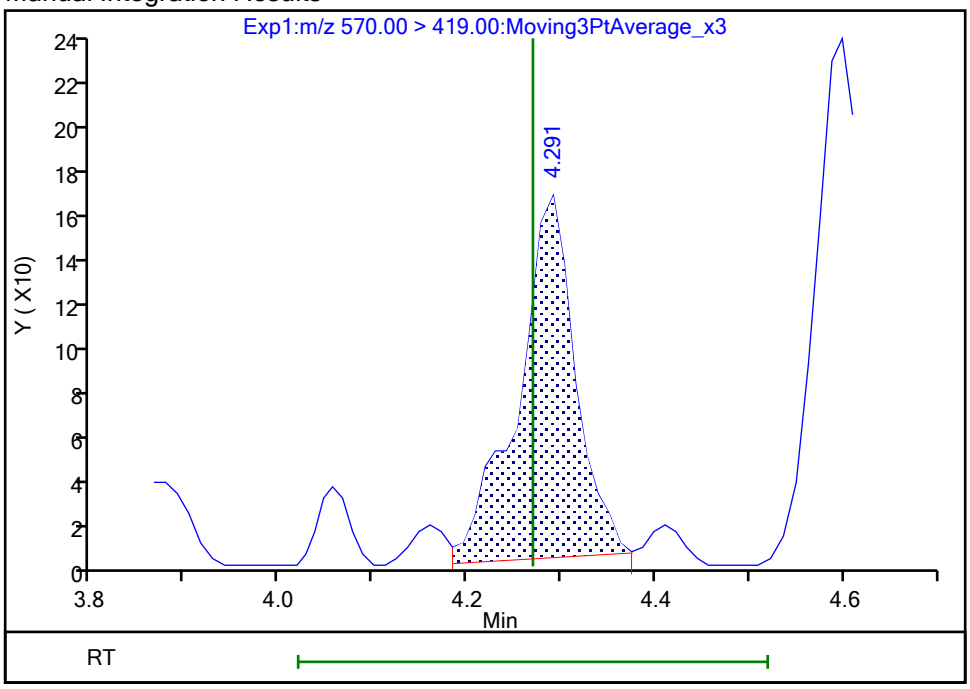
Processing Integration Results

RT: 4.29
Area: 721
Amount: 0.001971
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 683
Amount: 0.001867
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

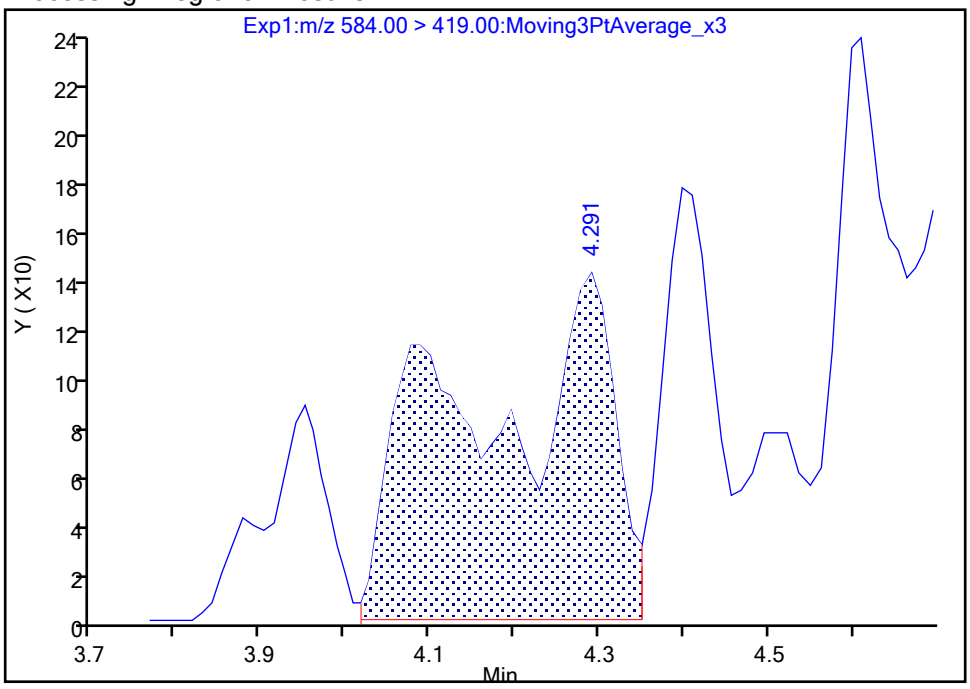
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

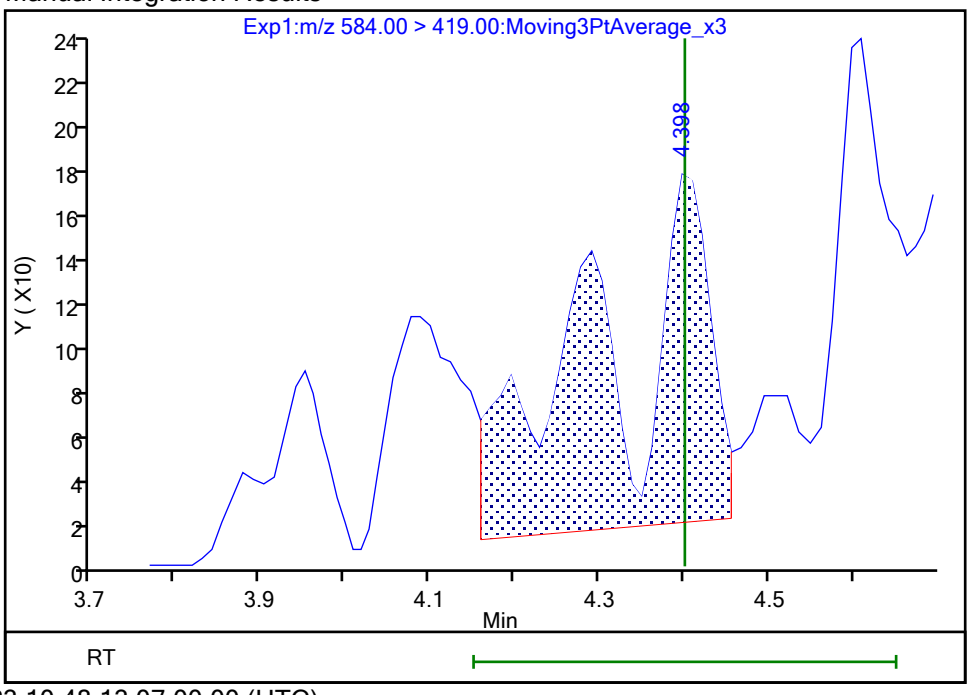
Processing Integration Results

RT: 4.29
Area: 1616
Amount: 0.003966
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 1367
Amount: 0.003355
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:48:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

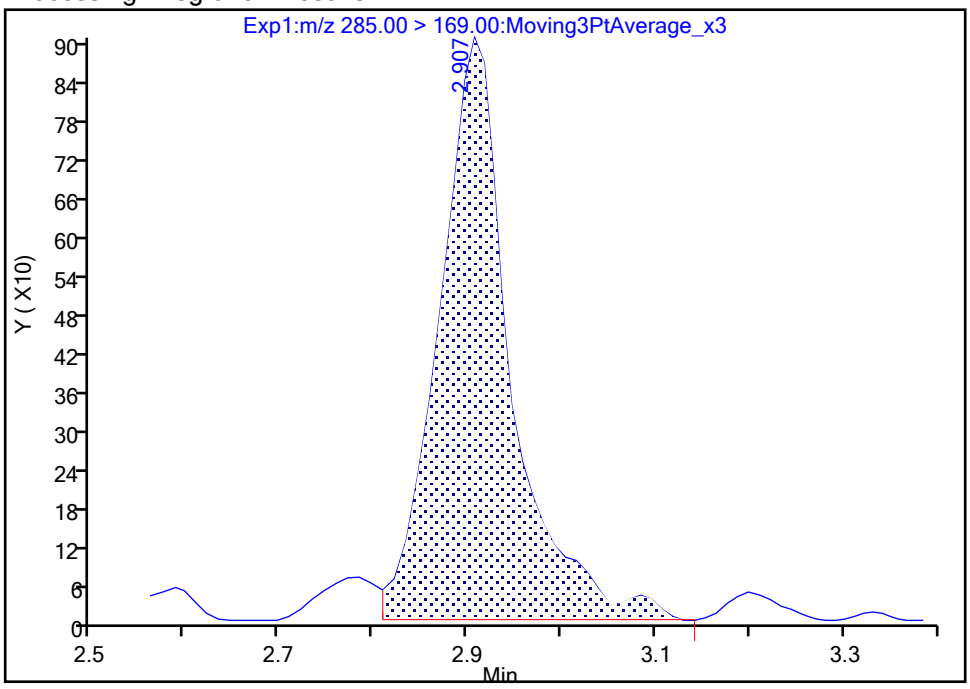
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

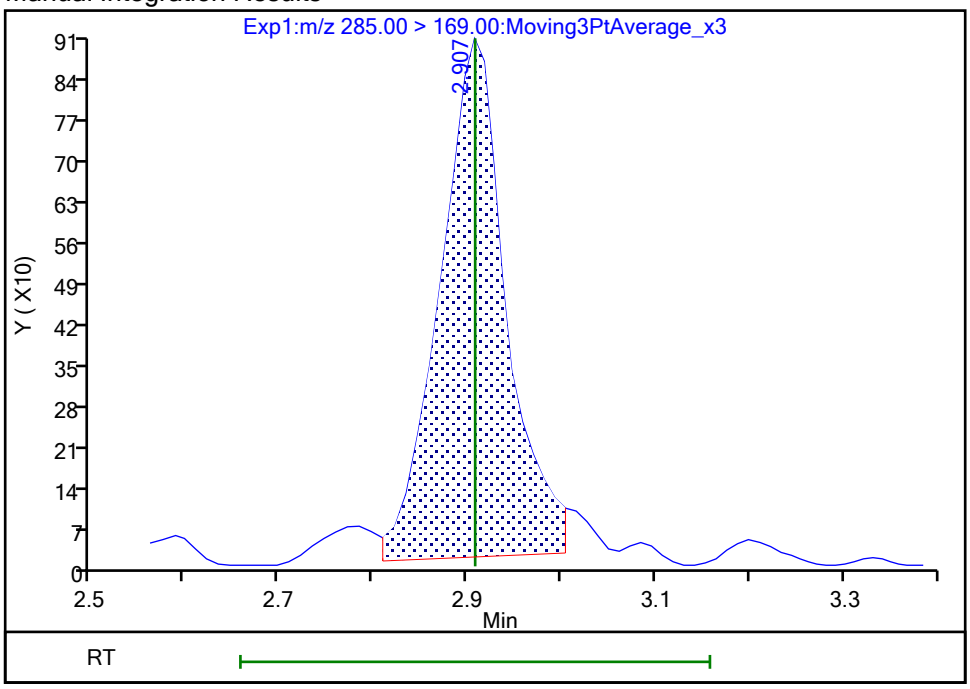
Processing Integration Results

RT: 2.91
Area: 4837
Amount: 0.023825
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 4371
Amount: 0.021529
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:45:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

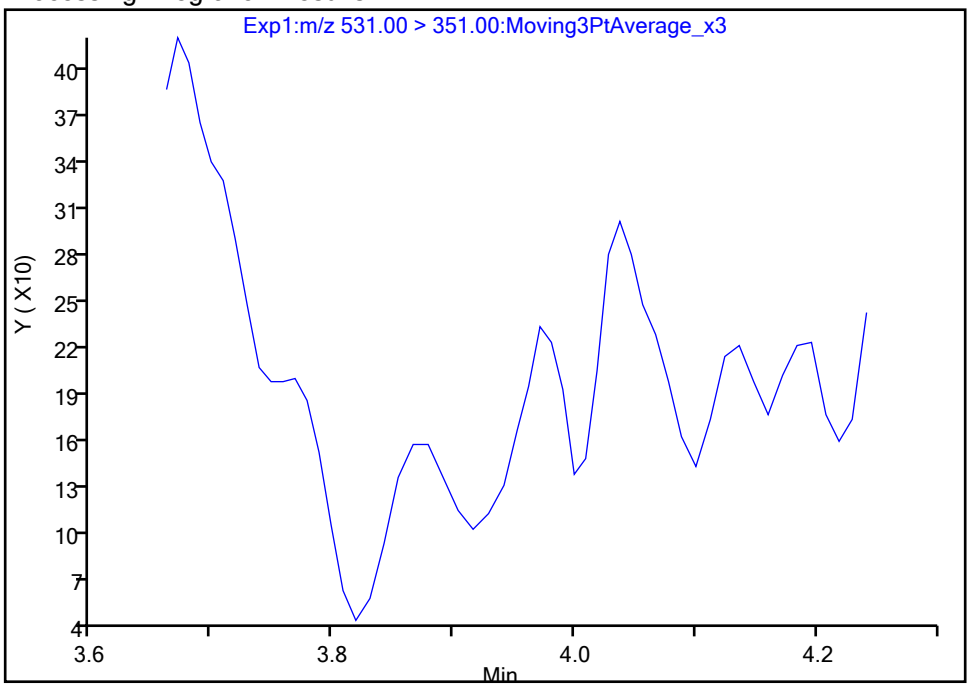
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

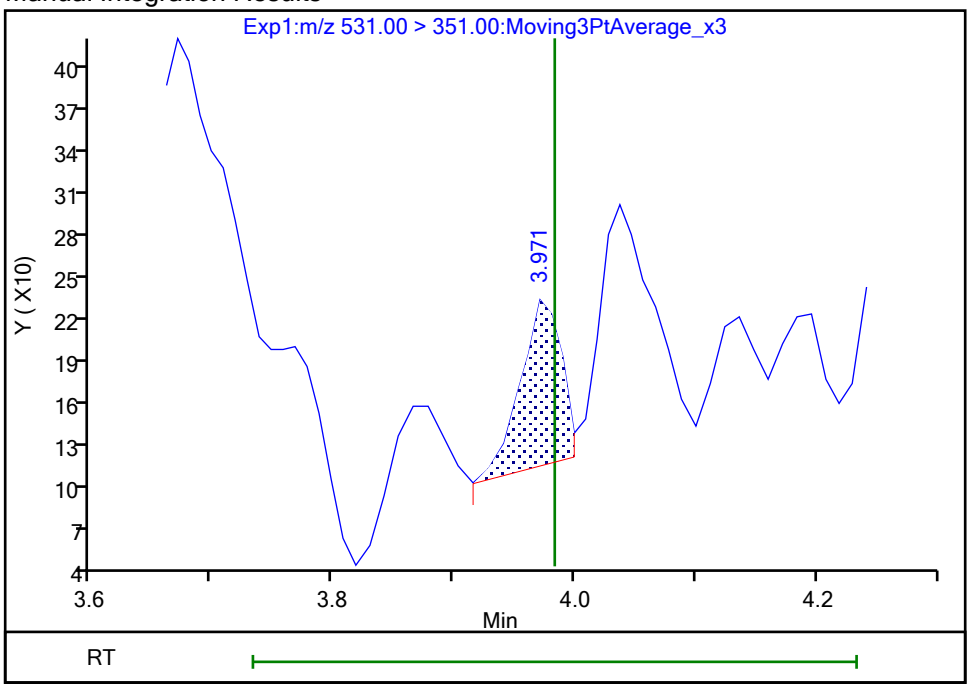
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 273
Amount: 0.000105
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:47:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

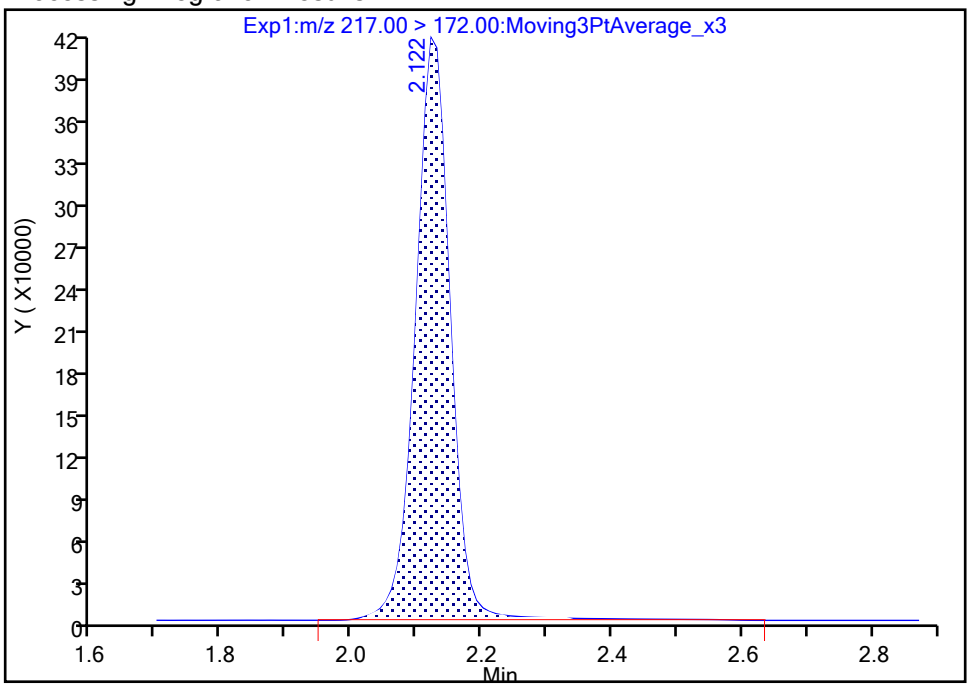
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

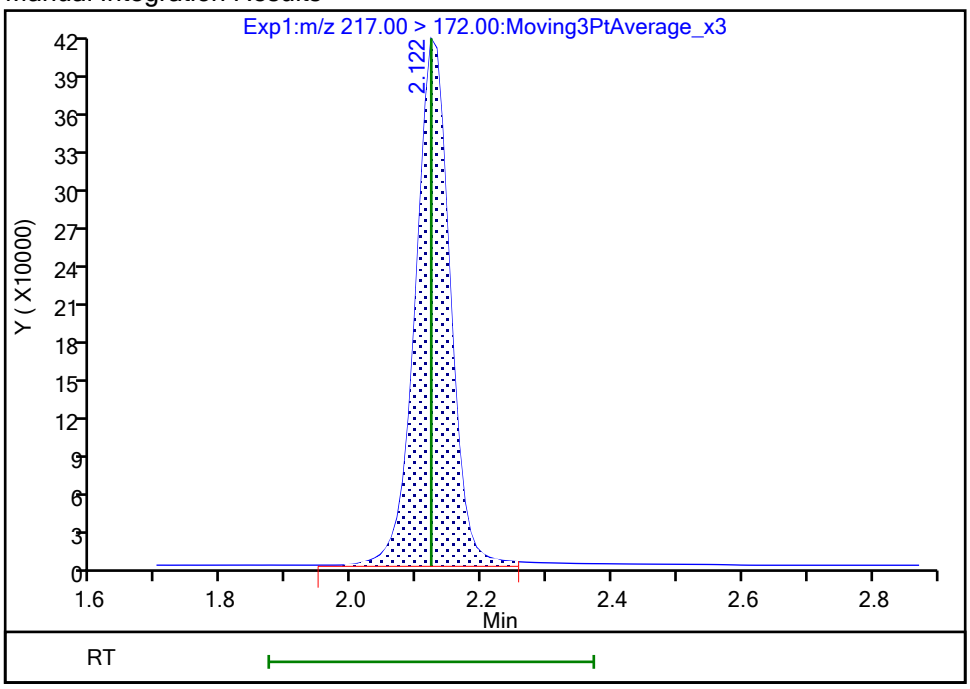
Processing Integration Results

RT: 2.12
Area: 1536295
Amount: 0.999912
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1513694
Amount: 0.985202
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:43:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

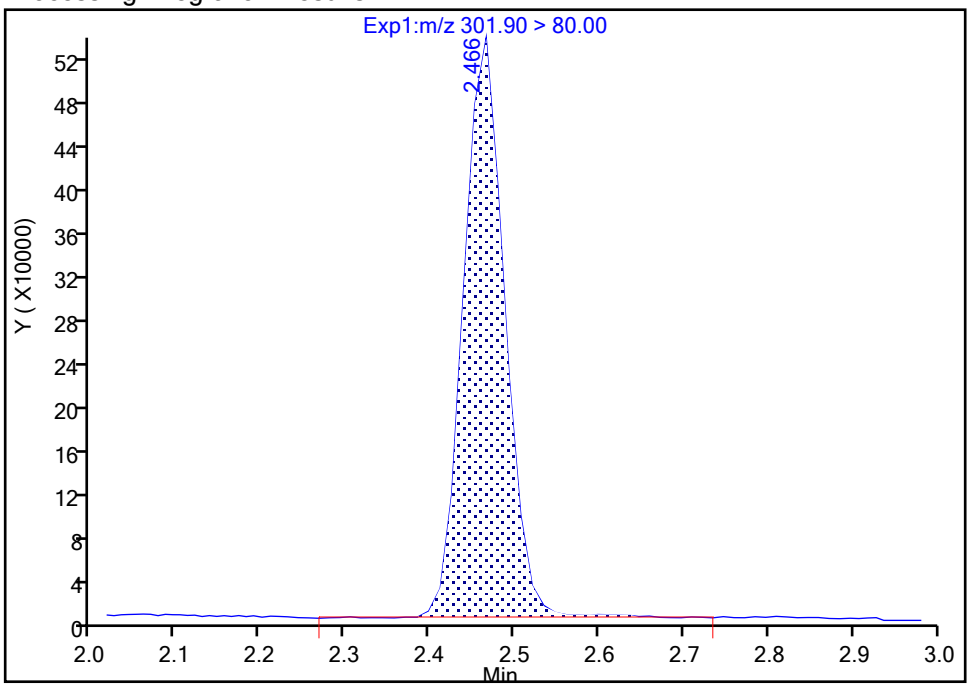
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

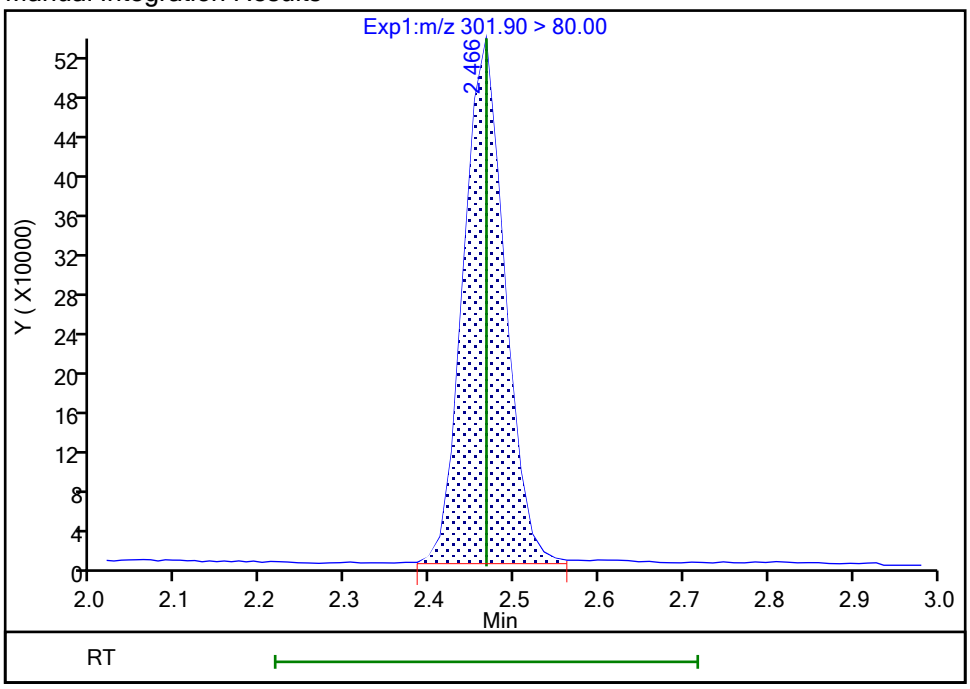
Processing Integration Results

RT: 2.47
Area: 1841986
Amount: 1.141682
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1820454
Amount: 1.128336
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:44:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

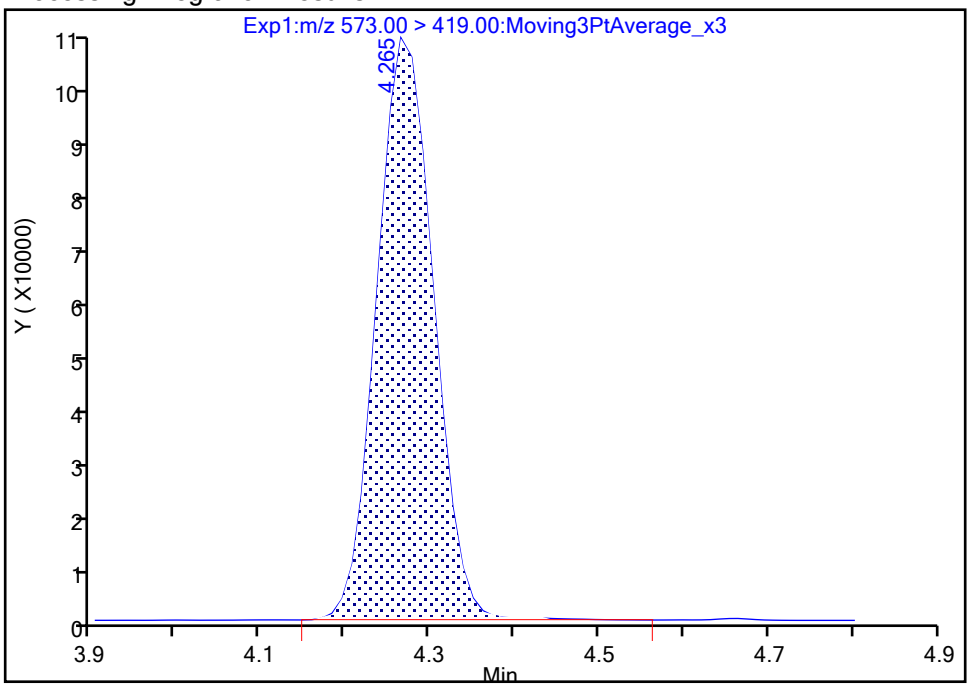
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

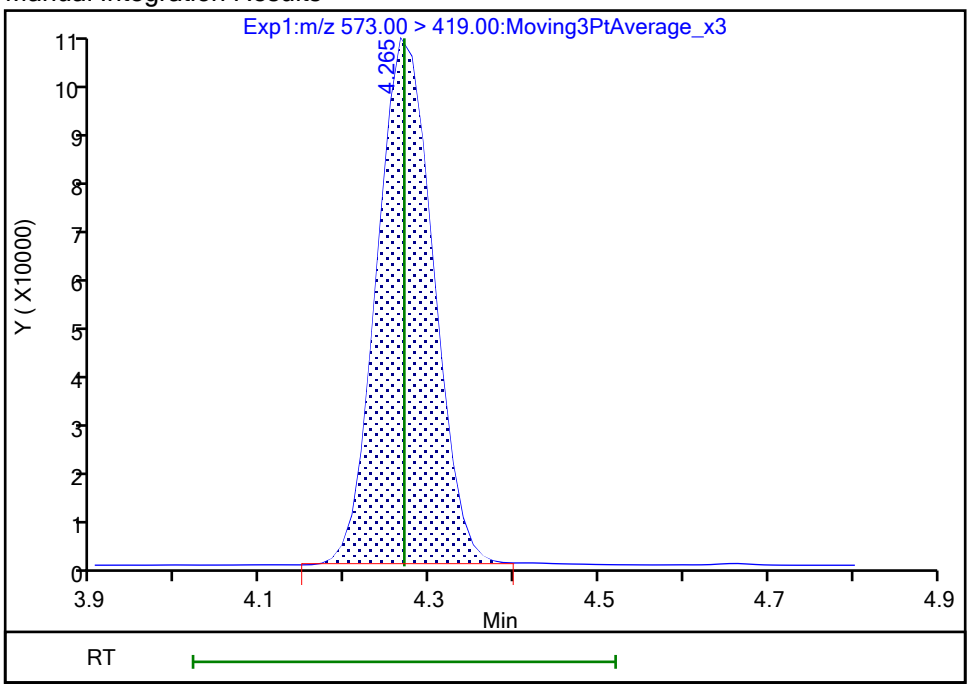
Processing Integration Results

RT: 4.27
Area: 505761
Amount: 1.231771
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 503993
Amount: 1.227465
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:44:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

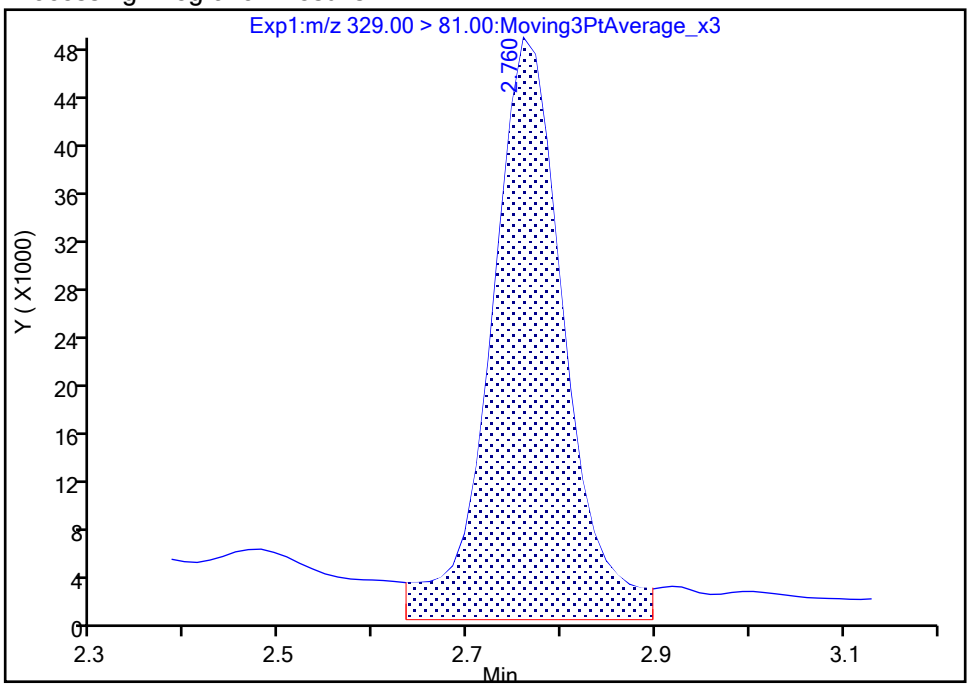
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E23.d				
Injection Date:	24-Oct-2023 09:05:42	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

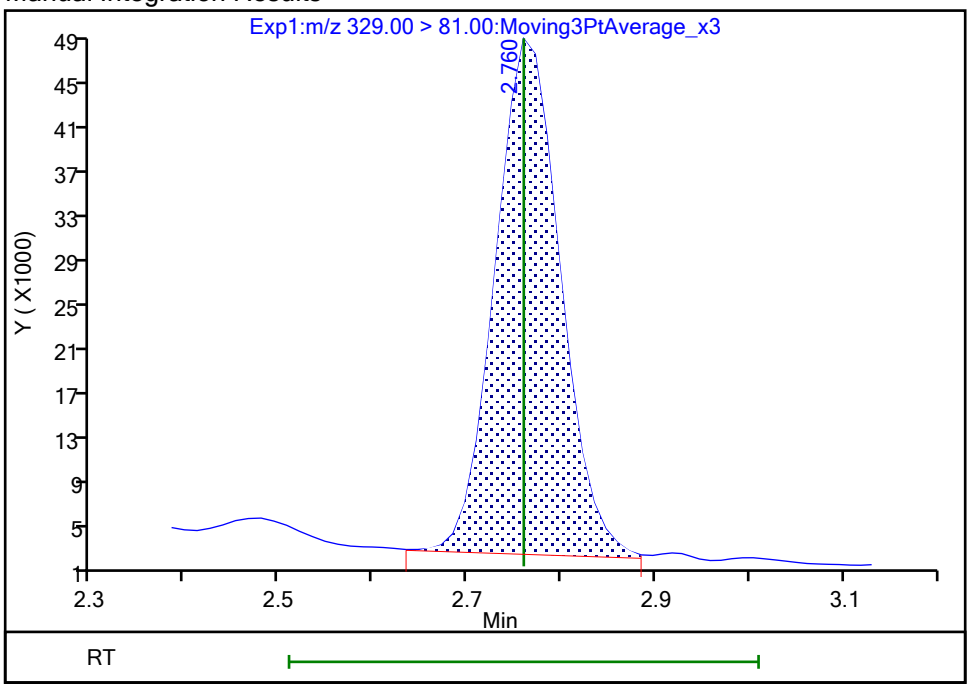
Processing Integration Results

RT: 2.76
Area: 265380
Amount: 1.422309
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 221847
Amount: 1.188993
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:44:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW2-101623-0951-10 DL Lab Sample ID: 460-290517-4 DL

Matrix: Water Lab File ID: PA231026E05.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 09:51

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 298.4(mL) Date Analyzed: 10/27/2023 10:40

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	814	D	8.38	3.56

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	84		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E05.d
Lims ID: 460-290517-B-4-A
Client ID: MW2-101623-0951-10
Sample Type: Client
Inject. Date: 27-Oct-2023 10:40:48 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Sample Info: 460-290517-B-4-A
Misc. Info.: 200-0057578-005 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:58:42
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.607	377842	0.2159		86.4	1434	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	163590	0.0788			10.9	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	280698	0.2067		82.7	239	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	68366	0.0564			0.6	
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.703	384011	0.2090		89.9	10953	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.000	33357	0.0181	Target=2.06		2.4	
298.90 > 99.00	2.467	2.467	0.0	1.000	17044		1.96(1.03-3.09)		3.1	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.786	49661	0.2337		100	10.2	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	282483	0.2044		81.8	1722	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	87646	0.0705	Target=14.12		2.2	
313.00 > 119.00	2.797	2.797	0.0	1.000	5679		15.43(7.06-21.17)		3.8	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.888	45277	0.0301	Target=2.72		4.1	
349.00 > 99.00	2.797	2.797	0.0	0.884	14804		3.06(1.36-4.09)		6.2	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.918	2.897	0.021	1.004	613	0.003039			5.6	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	50360	0.1883		75.3	880	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.153	0.012	0.901	272608	0.2070		87.5	2516	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.165	3.153	0.012	1.000	120309	0.0943	Target=3.32		43.1	
399.00 > 99.00	3.153	3.153	0.0	0.996	47081		2.56(1.66-4.98)		29.6	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.165	0.0	1.000	68384	0.0468	Target=4.17		3.7	
363.00 > 169.00	3.165	3.165	0.0	1.000	15852		4.31(2.09-6.26)		24.1	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	326072	0.2151		86.0	1503	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.917	42776	0.0423	Target=4.83		12.6	
449.00 > 99.00	3.502	3.502	0.0	0.917	13628		3.14(2.41-7.24)		10.1	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	71909	0.2627		111	42.6	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	17475	0.0211			24.1	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.512	0.008	1.003	244449	0.1431	Target=2.88		6.9	
413.00 > 169.00	3.511	3.512	-0.001	1.000	89271		2.74(1.44-4.32)		130	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.512	-0.001	1.000	401053	0.2335		93.4	1807	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.512	-0.001		441179	0.2500			3452	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.819	-0.001	1.000	3965393	4.86	Target=4.24		2155	M
499.00 > 99.00	3.818	3.819	-0.001	1.000	1116201		3.55(2.12-6.37)		1484	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.819	-0.001	1.088	167250	0.1999		83.6	224	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.094	452251	0.2420		96.8	1635	
68 Perfluorononanesulfonic acid										R
549.00 > 80.00	3.980	4.101	-0.121	1.042	11608	0.0187	Target=2.17		27.0	R
549.00 > 99.00	4.018	4.101	-0.083	1.052	1224		9.48(1.08-3.25)		2.2	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.125	0.011	1.178	452548	0.2313		92.5	2075	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.136	0.012	1.003	7233	0.0111			73.3	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.136	0.0	1.178	70916	0.2304		96.2	111	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.205	318659	0.1908		76.3	1313	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.266	-0.001	1.215	93567	0.2001		80.0	652	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.303	4.266	0.037	1.009	759	0.002235			6.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.387	-0.001	1.249	401383	0.2173		86.9	3168	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.399	-0.001	1.253	93735	0.2082		83.3	177	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.495	4.399	0.096	1.022	1904	0.005077			4.7	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.313	413237	0.2201		88.0	2773	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.980	0.009	1.421	366568	0.1961		78.4	1594	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

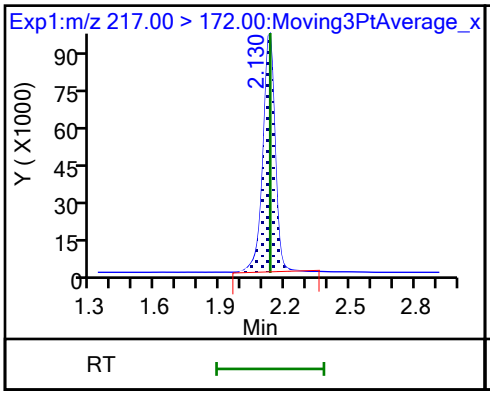
M - Manually Integrated

Report Date: 27-Oct-2023 18:44:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54

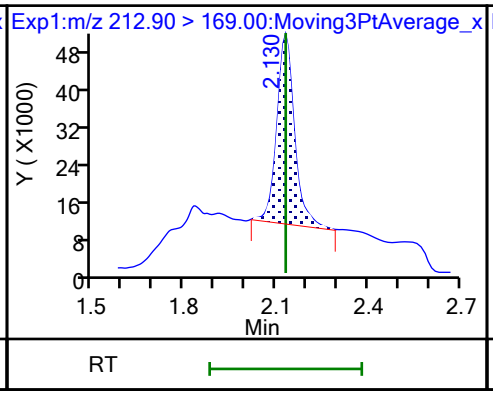
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E05.d
Injection Date: 27-Oct-2023 10:40:48 Instrument ID: LC812
Lims ID: 460-290517-B-4-A Lab Sample ID: 200-290517-4
Client ID: MW2-101623-0951-10
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 5.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

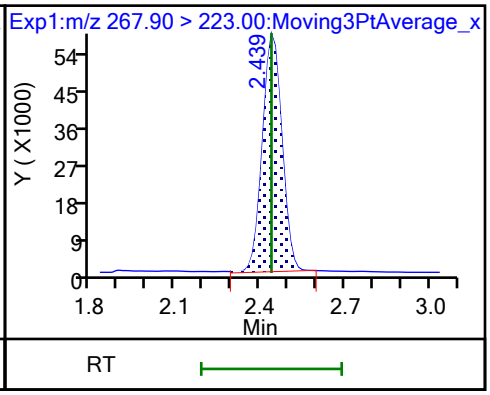
D 1 13C4 PFBA



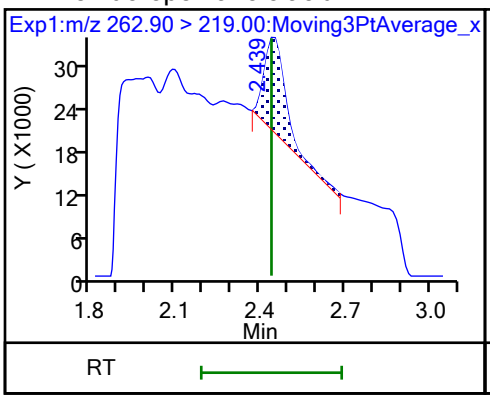
2 Perfluorobutanoic acid



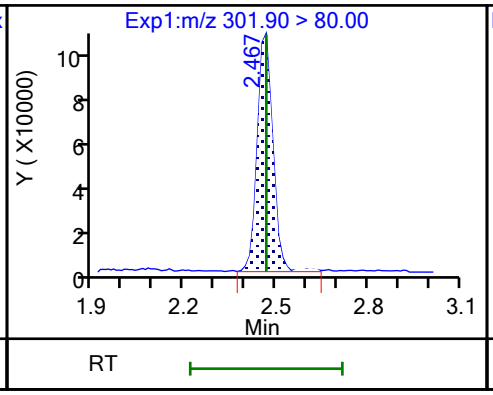
D 3 13C5 PFPeA



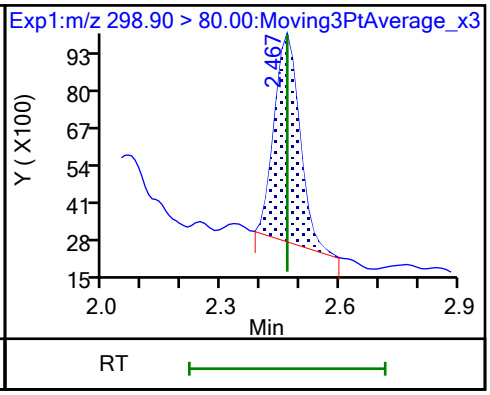
4 Perfluoropentanoic acid



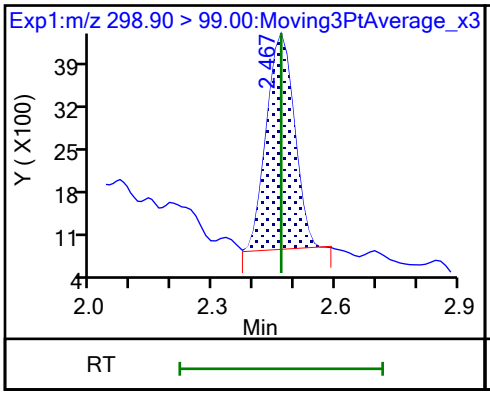
D 47 13C3 PFBS



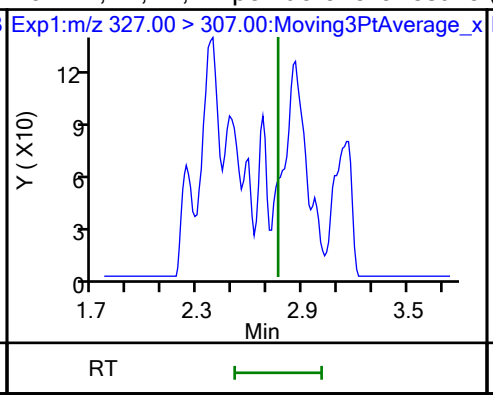
5 Perfluorobutanesulfonic acid



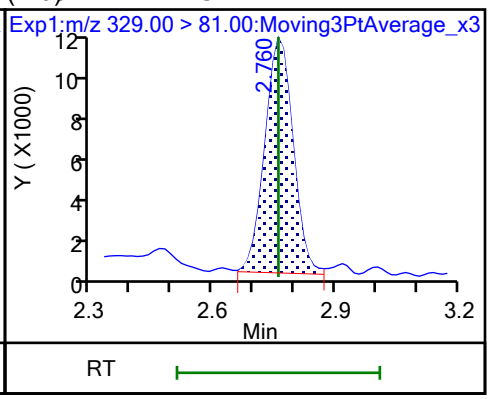
5 Perfluorobutanesulfonic acid



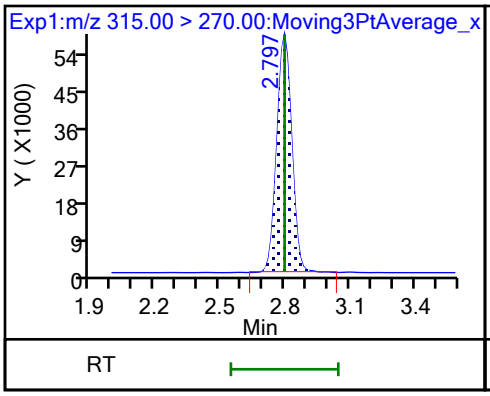
61 1H,1H,2H,2H-perfluorohexanesulfo (NEG)



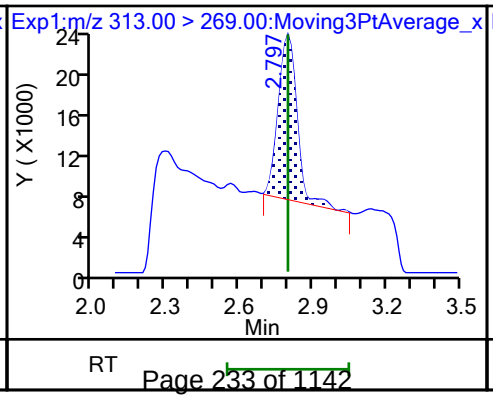
D 50 M2-4:2 FTS



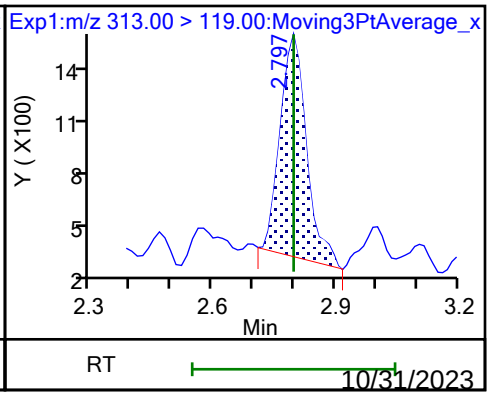
D 7 13C2 PFHxA



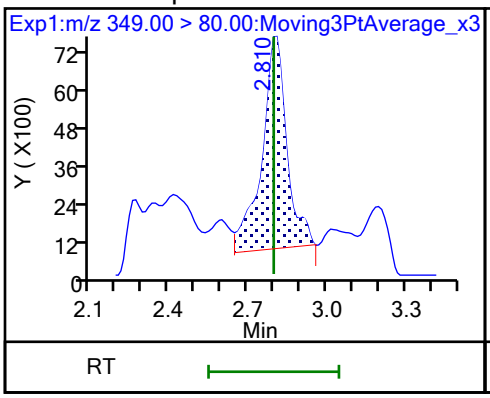
6 Perfluorohexanoic acid



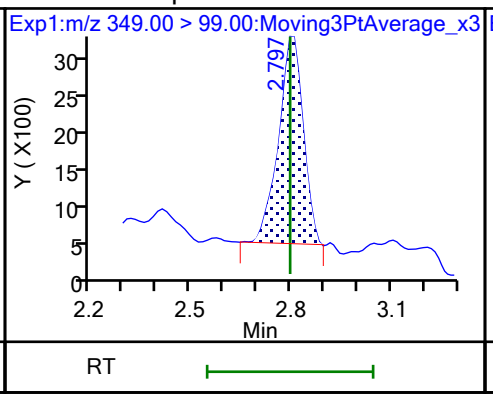
6 Perfluorohexanoic acid



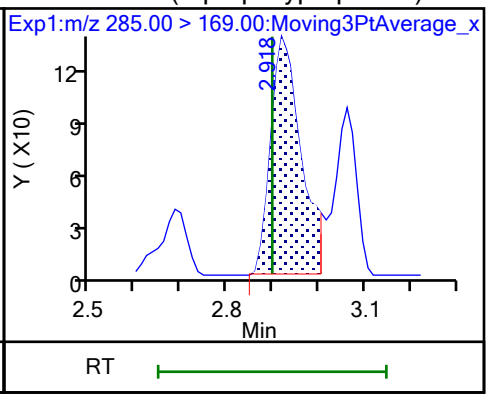
70 Perfluoropentanesulfonic acid



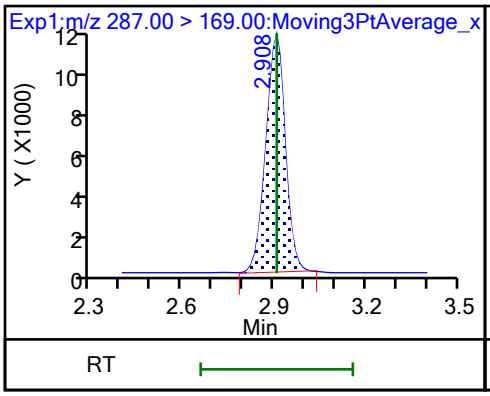
70 Perfluoropentanesulfonic acid



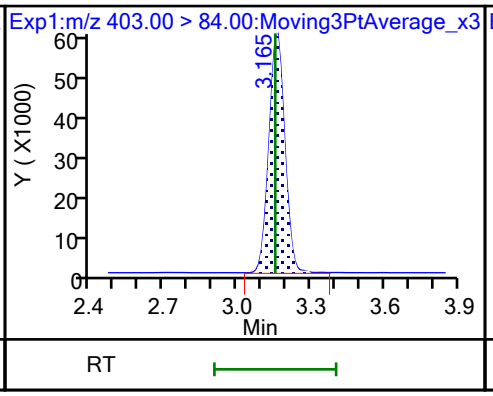
67 Perfluoro(2-propoxypropanoic) ac



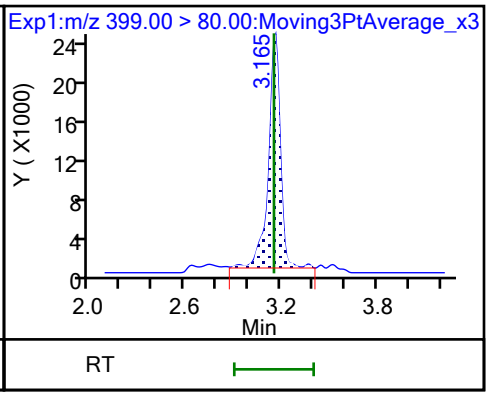
D 64 13C3 HFPO-DA



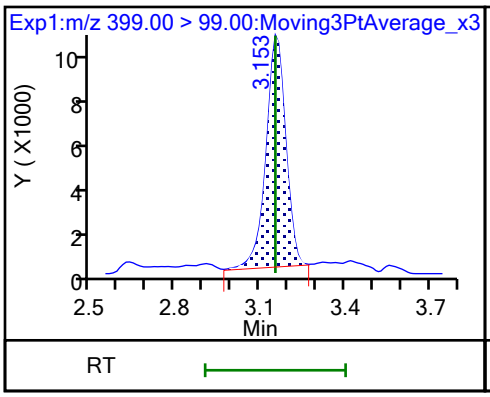
D 11 18O2 PFHxS



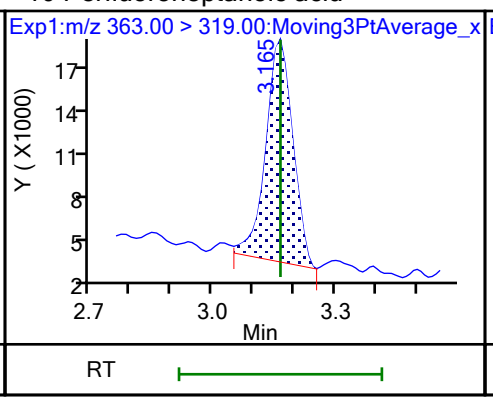
8 Perfluorohexanesulfonic acid



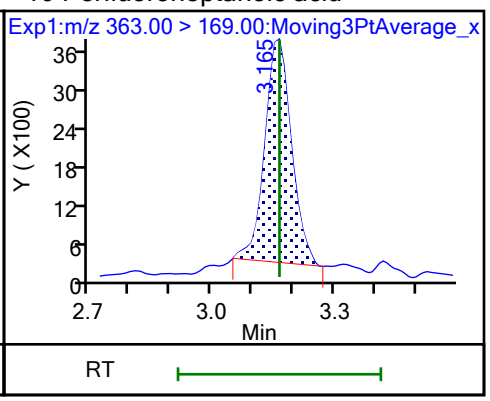
8 Perfluorohexanesulfonic acid



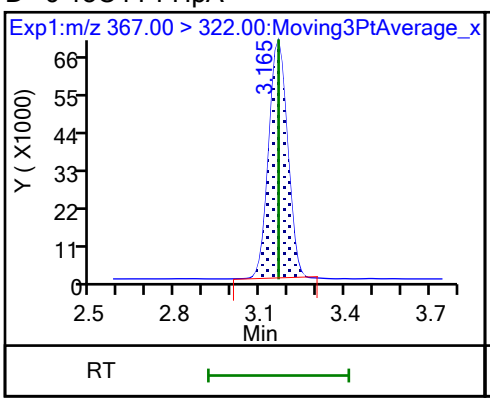
10 Perfluoroheptanoic acid



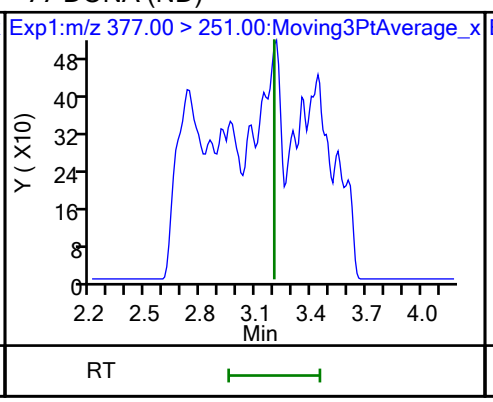
10 Perfluoroheptanoic acid



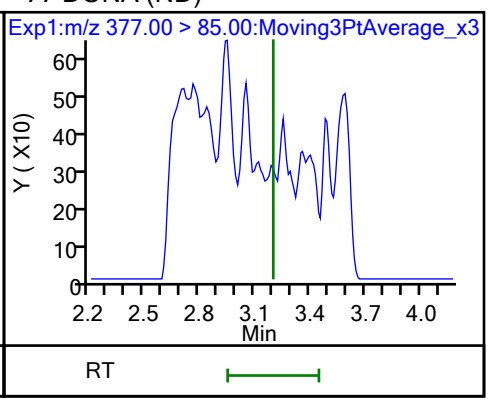
D 9 13C4 PFHpA



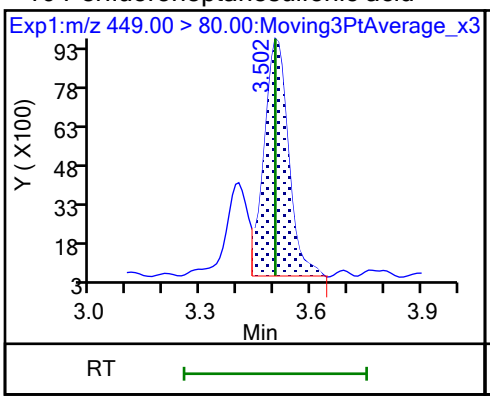
77 DONA (ND)



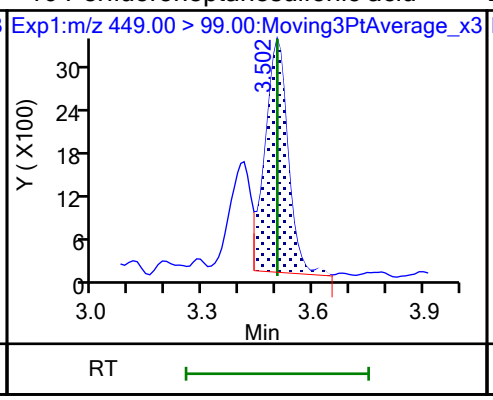
77 DONA (ND)



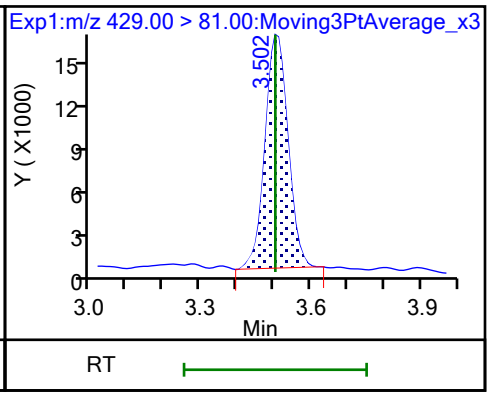
16 Perfluoroheptanesulfonic acid



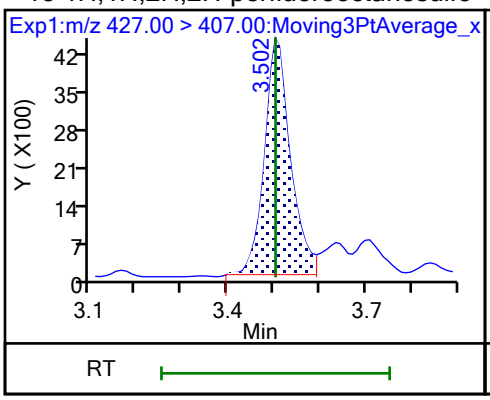
16 Perfluoroheptanesulfonic acid



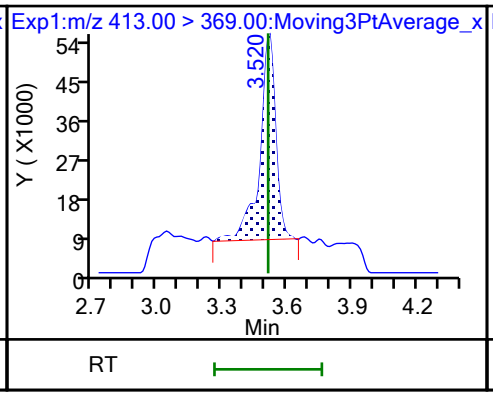
D 12 M2-6:2 FTS



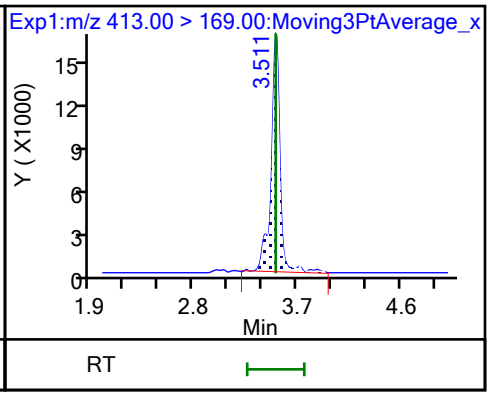
13 1H,1H,2H,2H-perfluorooctanesulfo



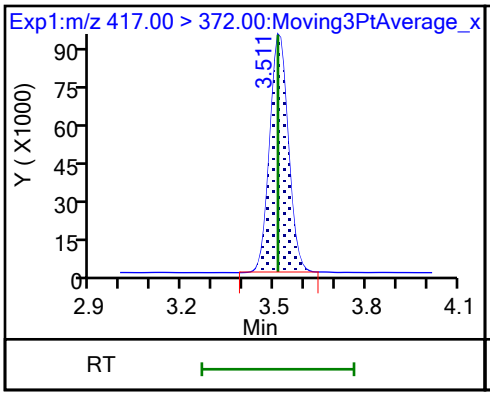
15 Perfluorooctanoic acid



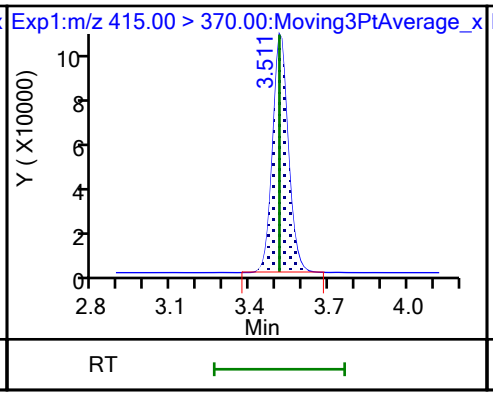
15 Perfluorooctanoic acid



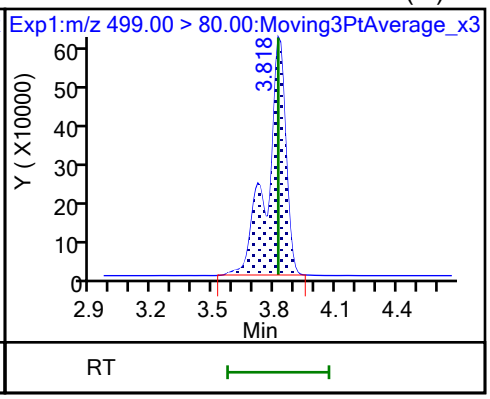
D 14 13C4 PFOA



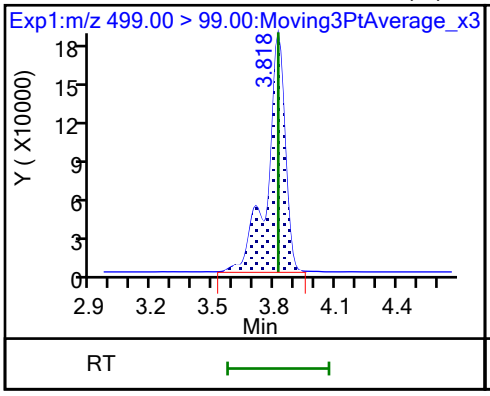
* 62 13C2 PFOA



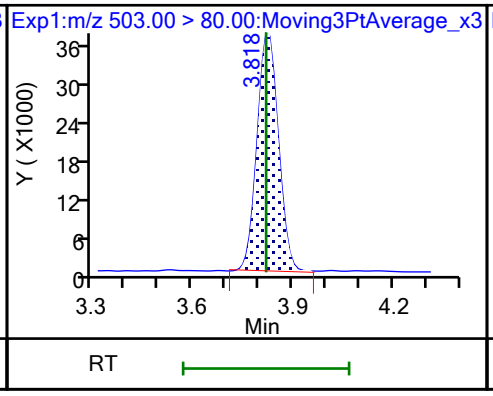
17 Perfluorooctanesulfonic acid (M)



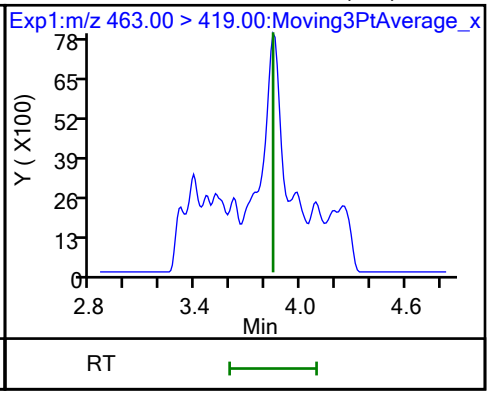
17 Perfluorooctanesulfonic acid (M)



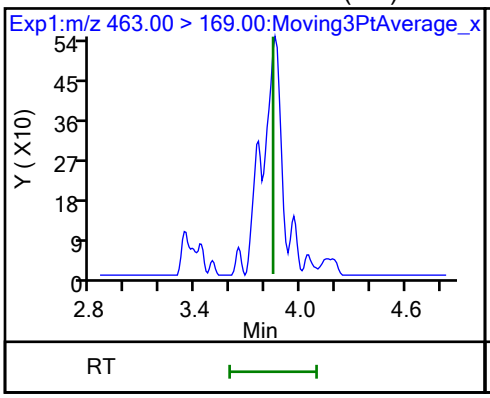
D 18 13C4 PFOS



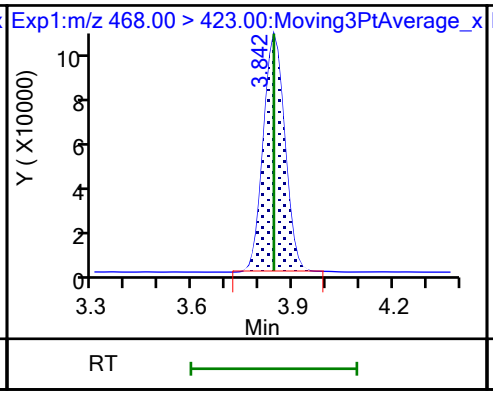
20 Perfluorononanoic acid (ND)



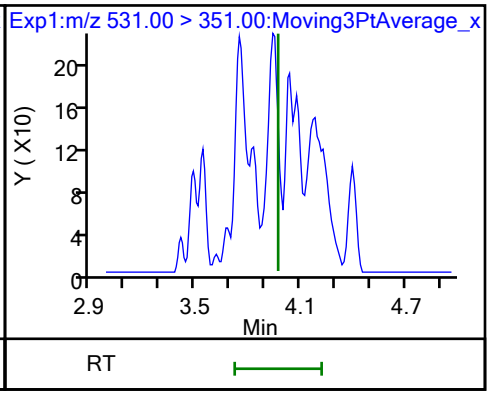
20 Perfluorononanoic acid (ND)



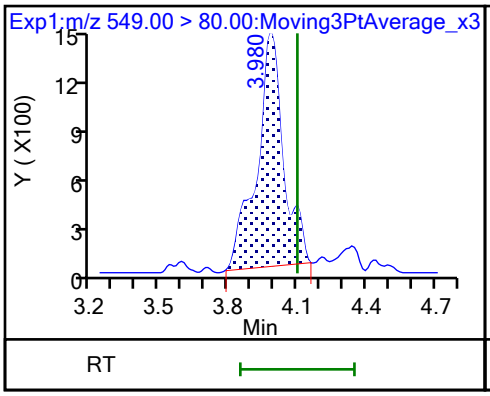
D 19 13C5 PFNA



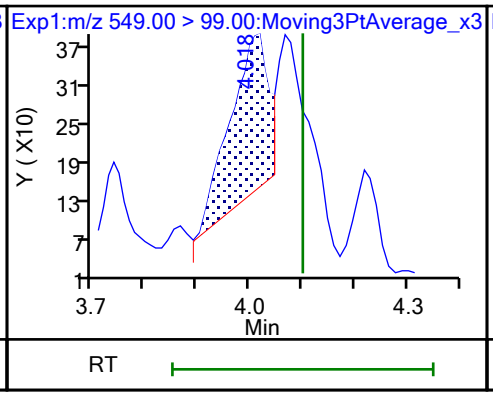
69 9-Chlorohexadecafluoro-3-oxanona (ND)



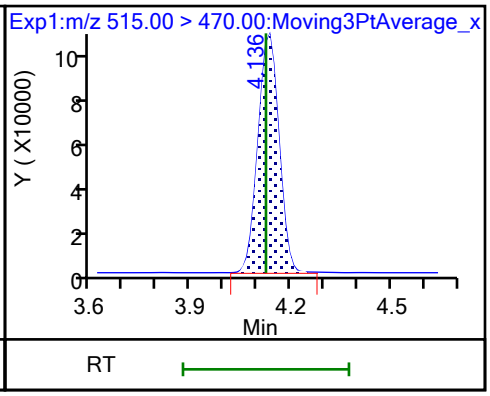
68 Perfluorononanesulfonic acid



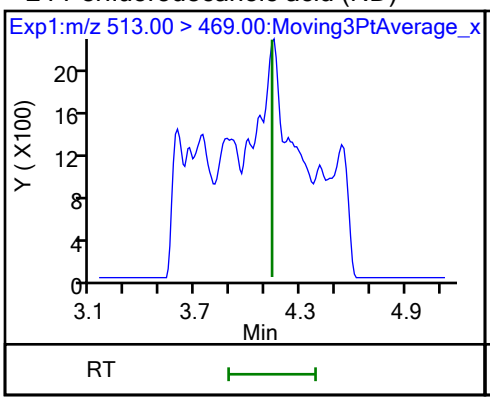
68 Perfluorononanesulfonic acid



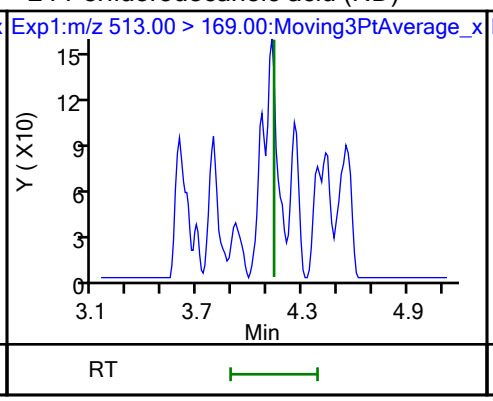
D 23 13C2 PFDA



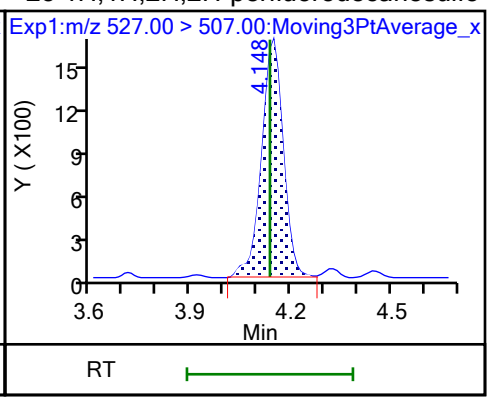
24 Perfluorodecanoic acid (ND)



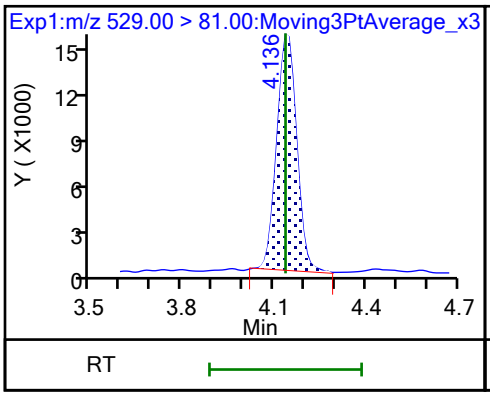
24 Perfluorodecanoic acid (ND)



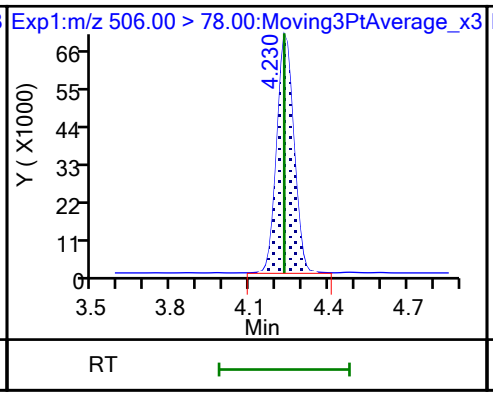
25 1H,1H,2H,2H-perfluorodecanesulfo



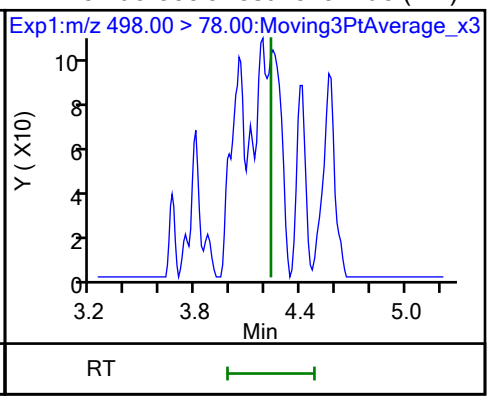
D 26 M2-8:2 FTS



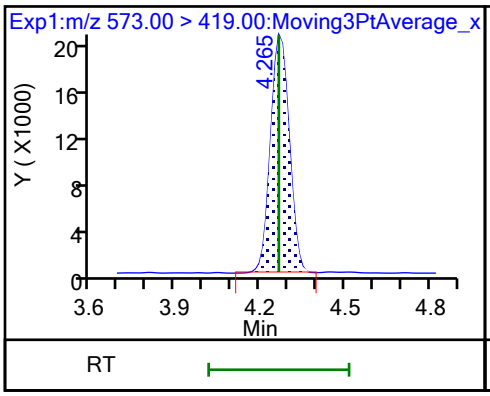
D 21 13C8 FOSA



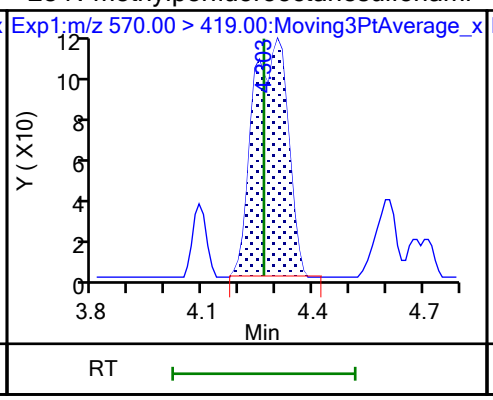
22 Perfluorooctanesulfonamide (ND)



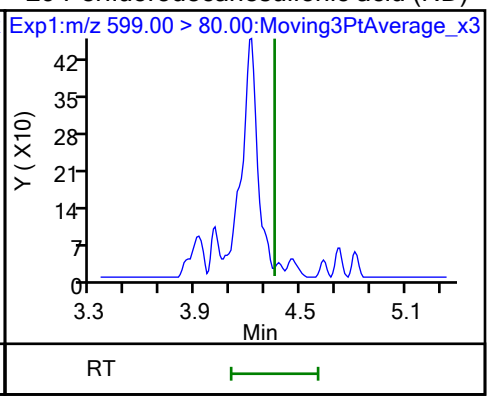
D 27 d3-NMeFOSAA



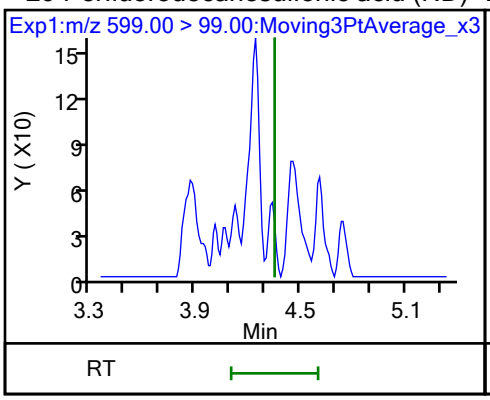
28 N-methylperfluorooctanesulfonami



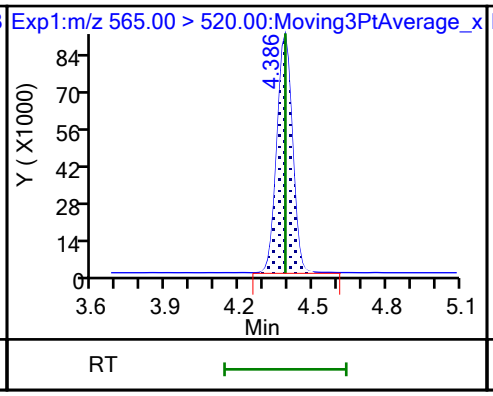
29 Perfluorodecanesulfonic acid (ND)



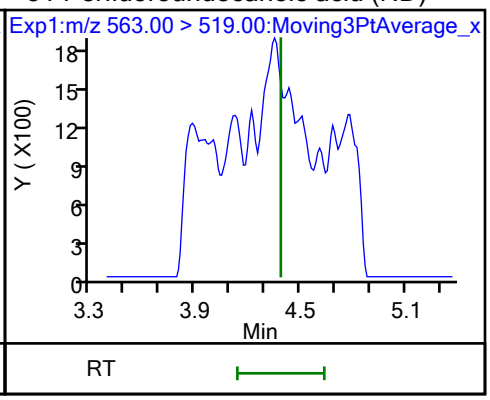
29 Perfluorodecanesulfonic acid (ND)



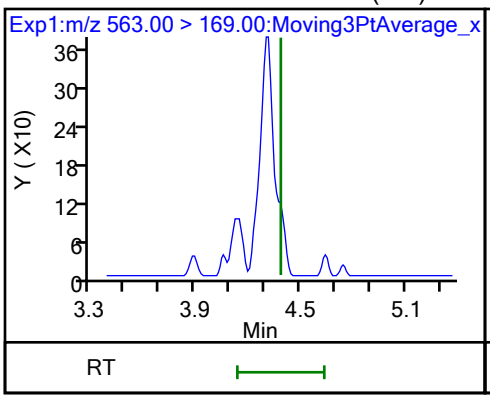
D 30 13C2 PFUnA



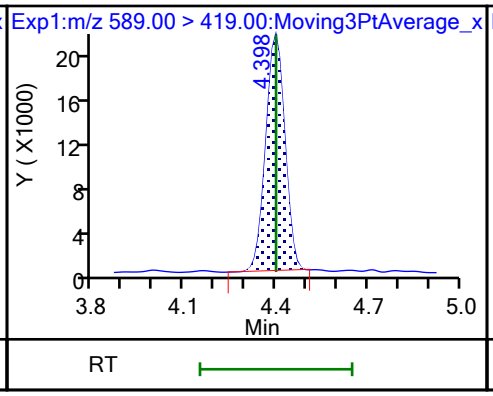
31 Perfluoroundecanoic acid (ND)



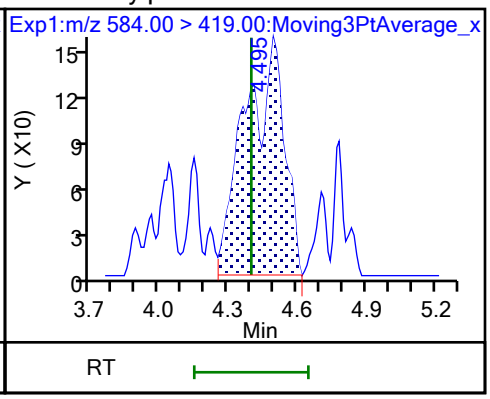
31 Perfluoroundecanoic acid (ND)



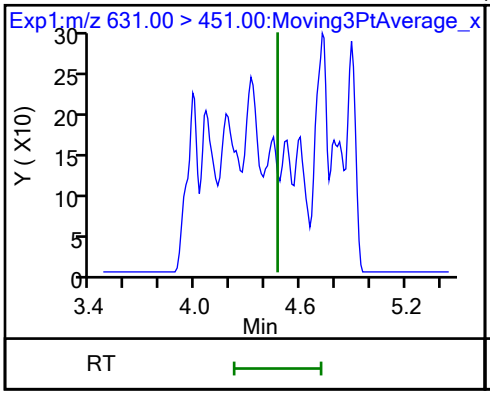
D 32 d5-NEtFOSAA



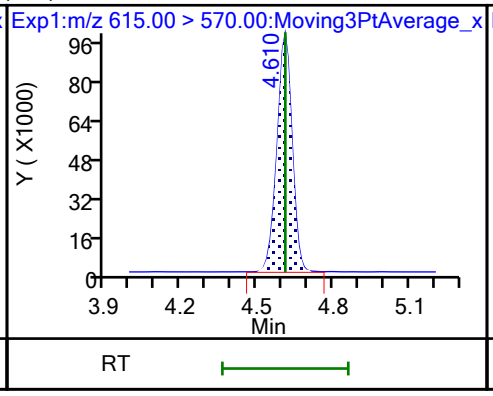
33 N-ethylperfluorooctanesulfonamid



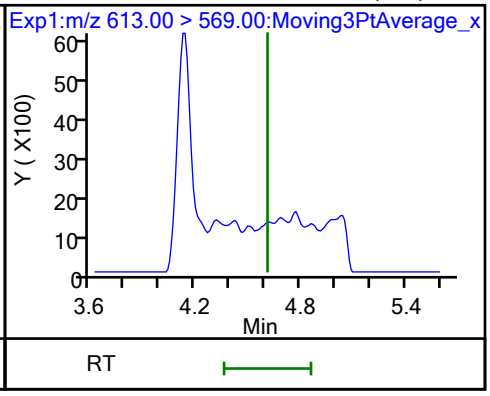
66 11-Chloroeicosafluoro-3-oxaundec (ND)



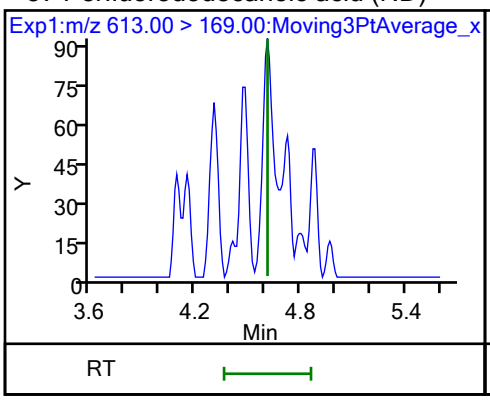
D 36 13C2 PFDoA



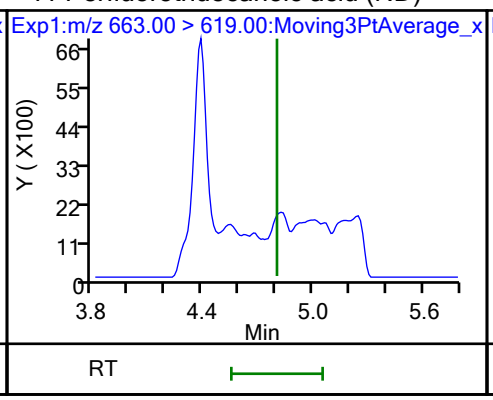
37 Perfluorododecanoic acid (ND)



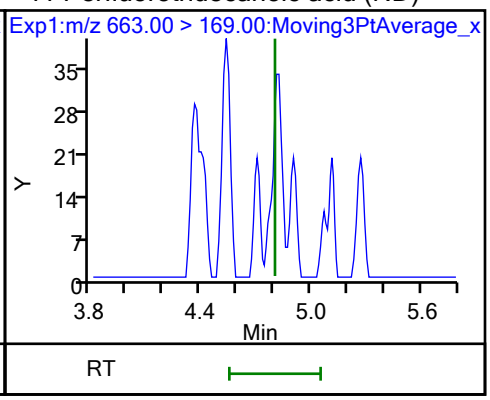
37 Perfluorododecanoic acid (ND)



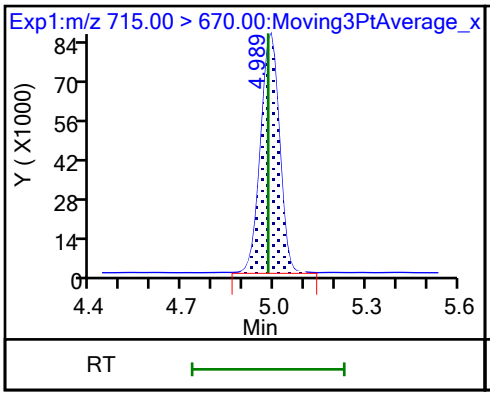
41 Perfluorotridecanoic acid (ND)



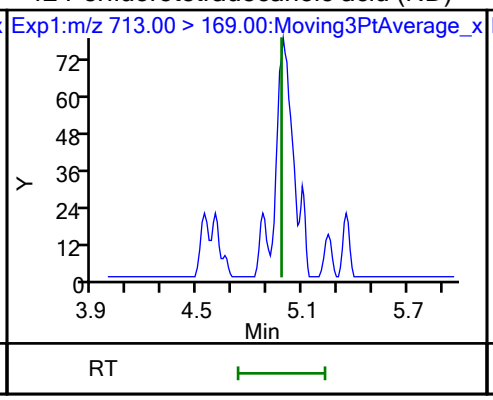
41 Perfluorotridecanoic acid (ND)



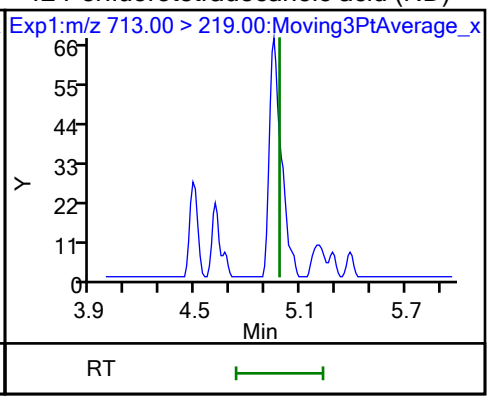
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

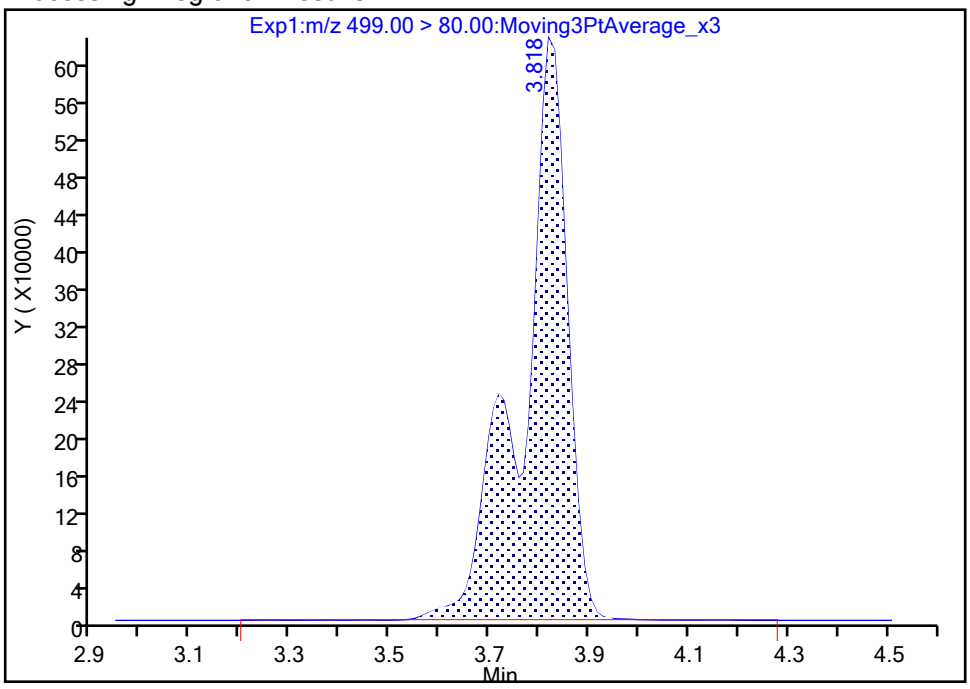
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E05.d				
Injection Date:	27-Oct-2023 10:40:48	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

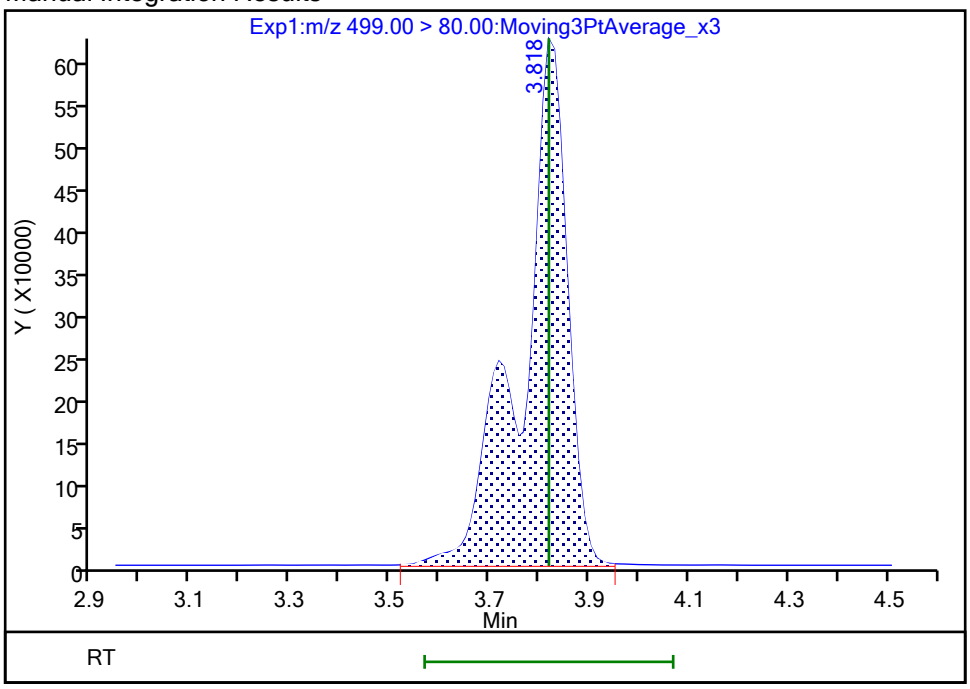
Processing Integration Results

RT: 3.82
Area: 3980889
Amount: 4.877045
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3965393
Amount: 4.858061
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:58:22 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

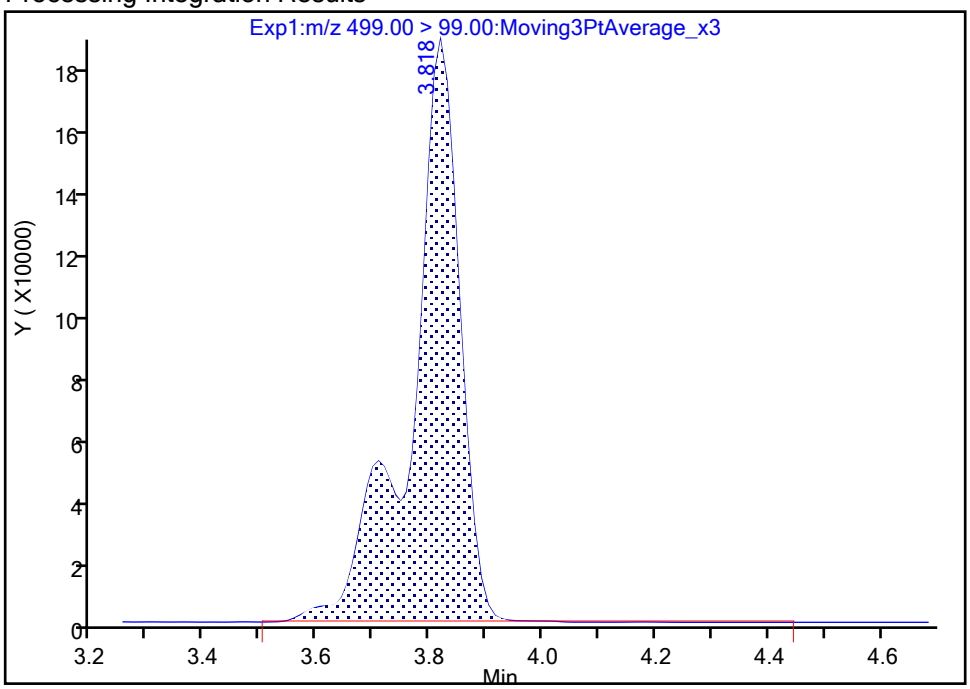
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E05.d				
Injection Date:	27-Oct-2023 10:40:48	Instrument ID:	LC812		
Lims ID:	460-290517-B-4-A	Lab Sample ID:	200-290517-4		
Client ID:	MW2-101623-0951-10				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	5.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

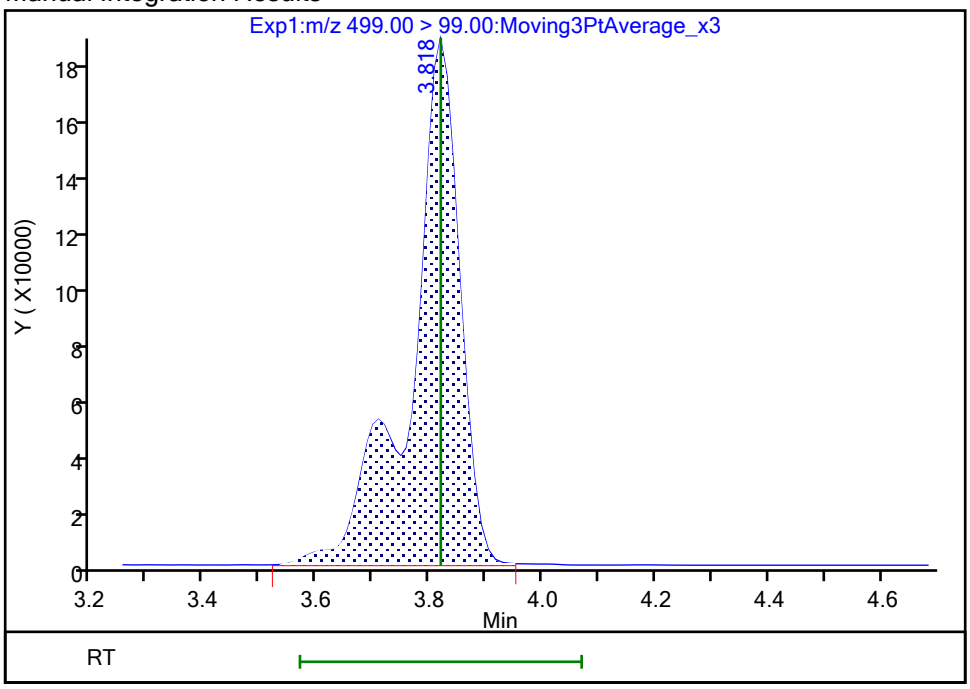
Processing Integration Results

RT: 3.82
Area: 1120823
Amount: 4.877045
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1116201
Amount: 4.858061
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:58:24 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW3-101623-1046-9 | Lab Sample ID: 460-290517-5

Matrix: Water | Lab File ID: PA231023E24.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 10:46

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 298.9(mL) | Date Analyzed: 10/24/2023 09:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	14.3		4.18	1.00
2706-90-3	Perfluoropentanoic acid	12.6		1.67	0.57
307-24-4	Perfluorohexanoic acid	11.3		1.67	0.54
375-85-9	Perfluoroheptanoic acid	8.87		1.67	0.45
335-67-1	Perfluorooctanoic acid	23.4		1.67	0.64
375-95-1	Perfluorononanoic acid	3.45		1.67	0.41
335-76-2	Perfluorodecanoic acid	0.72	J	1.67	0.38
2058-94-8	Perfluoroundecanoic acid	1.67	U	1.67	0.46
307-55-1	Perfluorododecanoic acid	1.67	U	1.67	0.41
72629-94-8	Perfluorotridecanoic acid	1.67	U	1.67	0.40
376-06-7	Perfluorotetradecanoic acid	1.67	U	1.67	0.54
375-73-5	Perfluorobutanesulfonic acid	3.67		1.67	0.52
2706-91-4	Perfluoropentanesulfonic acid	3.40		1.67	0.42
355-46-4	Perfluorohexanesulfonic acid	14.4		1.67	0.46
375-92-8	Perfluoroheptanesulfonic acid	6.60		1.67	0.34
1763-23-1	Perfluorooctanesulfonic acid	757		1.67	0.71
68259-12-1	Perfluorononanesulfonic acid	1.67	U	1.67	0.33
335-77-3	Perfluorodecanesulfonic acid	1.67	U	1.67	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.67	U	1.67	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	8.56		4.18	1.09
39108-34-4	8:2 Fluorotelomer sulfonic acid	6.99		1.67	0.64
754-91-6	Perfluorooctanesulfonamide	1.67	U	1.67	0.77
2355-31-9	NMeFOSAA	4.18	U	4.18	1.59
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.18	U	4.18	1.34
13252-13-6	HFPODA	3.35	U	3.35	0.92
919005-14-4	DONA	1.67	U	1.67	0.35
756426-58-1	9Cl-PF3ONS	1.67	U	1.67	0.27
763051-92-9	11Cl-PF3OUdS	1.67	U	1.67	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW3-101623-1046-9 Lab Sample ID: 460-290517-5

Matrix: Water Lab File ID: PA231023E24.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 10:46

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 298.9(mL) Date Analyzed: 10/24/2023 09:13

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	74		50-150
STL01893	13C5 PFPeA	87		50-150
STL01892	13C4 PFHpA	96		50-150
STL02116	13C2 PFTeDA	91		50-150
STL02337	13C3 PFBS	92		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	97		50-150
STL02117	d5-NEtFOSAA	101		50-150
STL02395	M2-4:2 FTS	108		50-150
STL02279	M2-6:2 FTS	104		50-150
STL02280	M2-8:2 FTS	96		50-150
STL02255	13C3 HFPO-DA	93		50-150
STL00994	18O2 PFHxS	99		50-150
STL00993	13C2 PFHxA	92		50-150
STL00991	13C4 PFOS	98		50-150
STL00998	13C2 PFDoA	94		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	106		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	101		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d
Lims ID: 460-290517-B-5-A
Client ID: MW3-101623-1046-9
Sample Type: Client
Inject. Date: 24-Oct-2023 09:13:54 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-5-A
Misc. Info.: 200-0057513-024 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:53:52
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	1478343	0.9267		74.1	1102	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	500741	0.4273			27.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1352453	1.09		87.4	290	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	441343	0.3780			1.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1799783	1.07		92.4	19393	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	189430	0.1095	Target=2.06		3.0	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	98083		1.93(1.03-3.09)		5.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.747	2.760	-0.013	0.991	537	0.000758			0.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.788	243576	1.26		108	12.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1452384	1.15		92.3	2563	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	432809	0.3385	Target=14.12		3.0	M
313.00 > 119.00	2.797	2.797	0.0	1.000	32135		13.47(7.06-21.17)		8.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	157295	0.1017	Target=2.72		4.6	M
349.00 > 99.00	2.810	2.810	0.0	0.888	72684		2.16(1.36-4.09)		9.0	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.908	-0.011	0.996	2833	0.0125			21.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	282572	1.16		92.7	3463	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1400542	1.17		98.6	4459	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	563785	0.4300	Target=3.32		43.6	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	248809		2.27(1.66-4.98)		80.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.168	0.008	1.004	394098	0.2650	Target=4.17		6.5	M
363.00 > 169.00	3.176	3.168	0.008	1.004	102435		3.85(2.09-6.26)		58.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1658617	1.20		96.0	3367	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	212865	0.1974	Target=4.83		15.2	M
449.00 > 99.00	3.502	3.505	-0.003	0.914	65025		3.27(2.41-7.24)		11.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	306895	1.23		104	53.1	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	180682	0.2558			247	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1164759	0.7008	Target=2.88		20.3	M
413.00 > 169.00	3.520	3.514	0.006	1.000	417003		2.79(1.44-4.32)		402	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	1950533	1.25		99.7	4455	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2010743	1.25			4532	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	19693665	22.6	Target=4.24		2281	M
499.00 > 99.00	3.818	3.822	-0.004	0.997	5589423		3.52(2.12-6.37)		1343	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	891745	1.17		97.8	309	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.853	3.845	0.008	1.000	161260	0.1032	Target=8.34		7.0	M
463.00 > 169.00	3.853	3.845	0.008	1.000	21051		7.66(4.17-12.51)		28.7	M
D 19 13C5 PFNA										
468.00 > 423.00	3.853	3.845	0.008	1.095	1993159	1.17		93.6	3200	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.983	-0.012	1.037	166	0.00006233			0.4	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.129	0.007	1.000	40713	0.0215	Target=11.44		3.8	M
513.00 > 169.00	4.136	4.129	0.007	1.000	2694		15.11(5.72-17.16)		9.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2368046	1.33		106	10132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	323622	1.15		96.3	226	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	124301	0.2089			1255	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.234	0.007	1.205	1578375	1.04		83.0	5121	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.241	4.234	0.007	1.000	1385	0.001150			5.0	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.278	4.270	0.008	1.215	519029	1.22		97.4	1299	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.241	4.270	-0.029	0.991	195	0.000518			0.6	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	1162	0.002280	Target=2.37		1.8	M
599.00 > 99.00	4.351	4.366	-0.015	1.136	366		3.17(1.19-3.56)		1.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.246	2124479	1.26		101	5300	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.249	519619	1.27		101	809	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.386	4.401	-0.015	0.997	1137	0.002735			2.8	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.473	0.009	1.170	4318	0.001057			6.2	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2004624	1.17		93.7	9422	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.613	-0.003	1.000	3490	0.002138	Target=8.47		0.3	M
613.00 > 169.00	4.610	4.613	-0.003	1.000	634		5.50(4.23-12.70)		6.0	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.812	4.806	0.006	1.044	4207	0.002452	Target=6.41		0.4	
663.00 > 169.00	4.825	4.806	0.019	1.047	517		8.14(3.21-9.62)		8.6	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.982	0.007	1.417	1948241	1.14		91.5	6122	

QC Flag Legend

Processing Flags

Review Flags

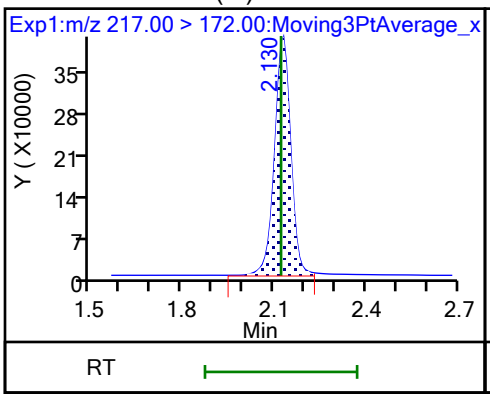
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

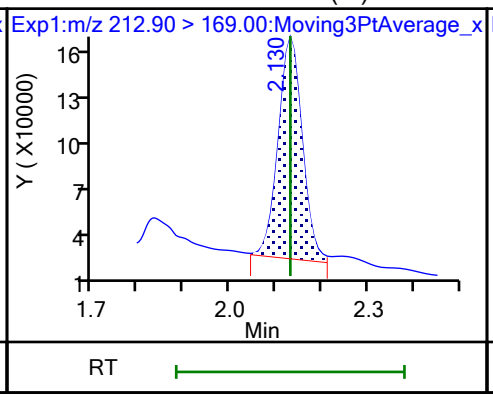
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d
Injection Date: 24-Oct-2023 09:13:54 Instrument ID: LC812
Lims ID: 460-290517-B-5-A Lab Sample ID: 200-290517-5
Client ID: MW3-101623-1046-9
Operator ID: LC812user ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

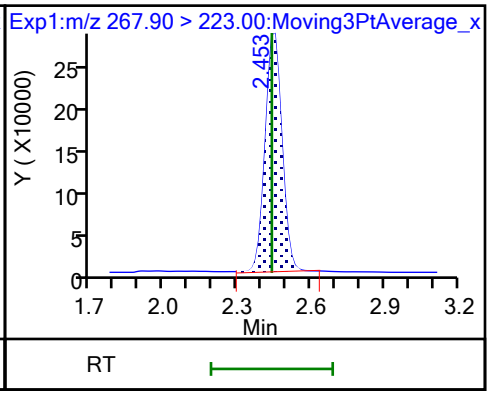
D 1 13C4 PFBA (M)



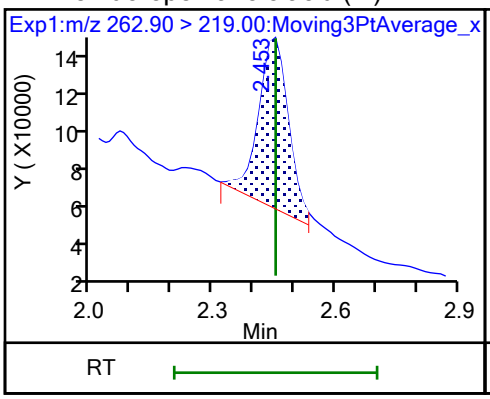
2 Perfluorobutanoic acid (M)



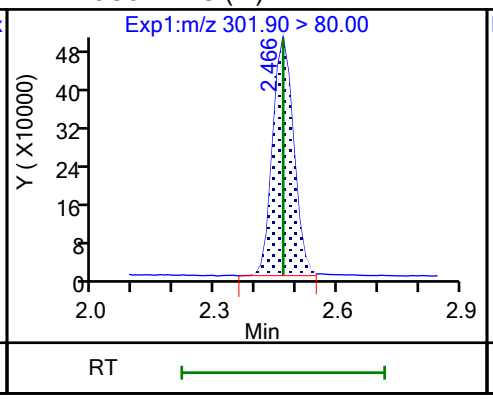
D 3 13C5 PFPeA



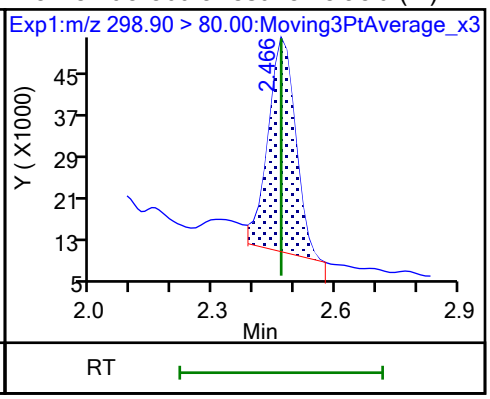
4 Perfluoropentanoic acid (M)



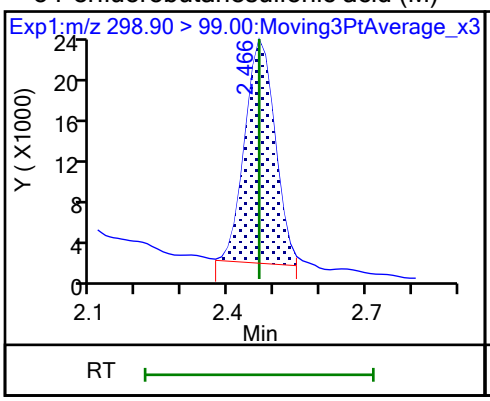
D 47 13C3 PFBS (M)



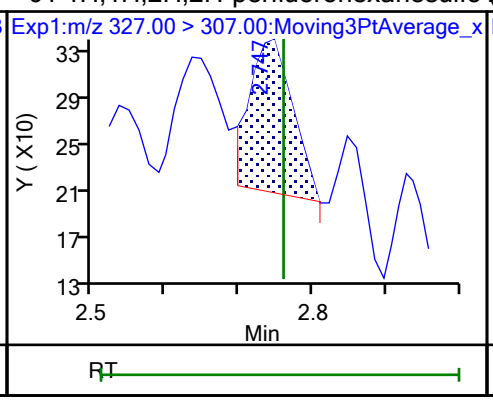
5 Perfluorobutanesulfonic acid (M)



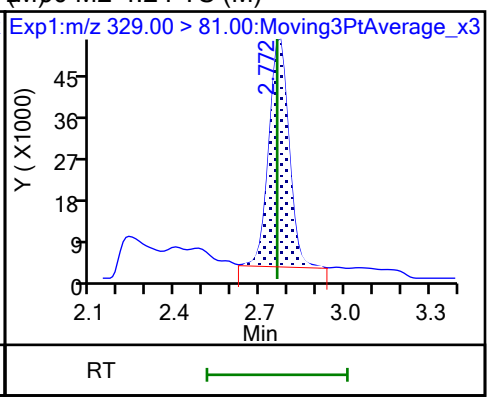
5 Perfluorobutanesulfonic acid (M)



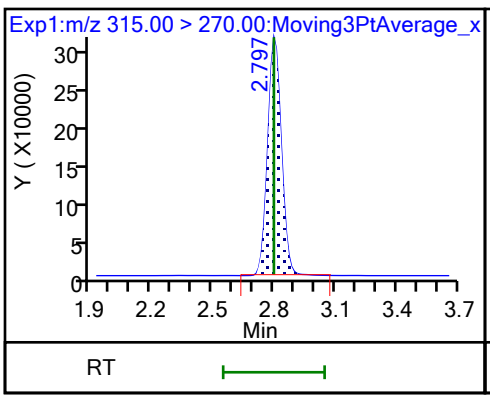
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



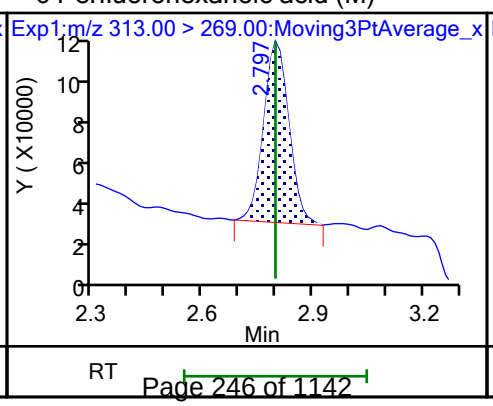
60 M2-4:2 FTS (M)



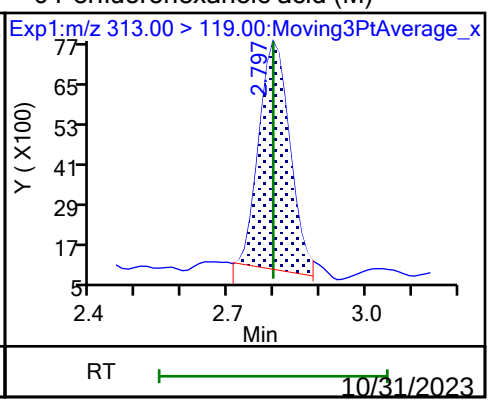
D 7 13C2 PFHxA



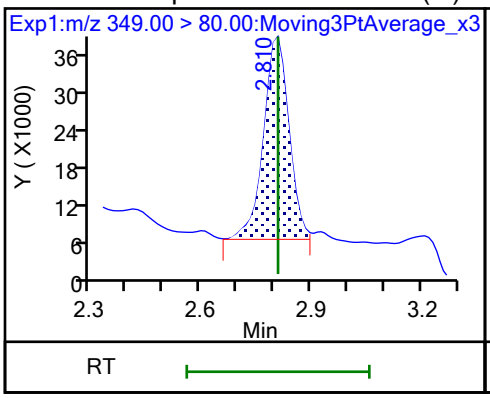
6 Perfluorohexanoic acid (M)



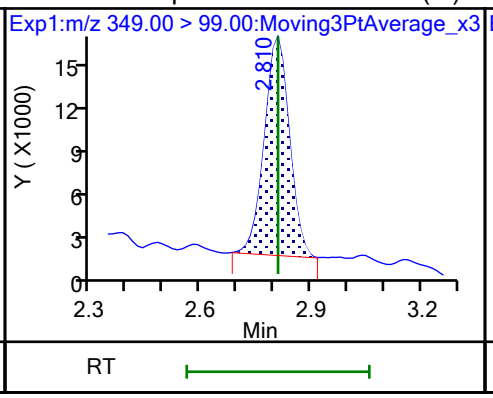
6 Perfluorohexanoic acid (M)



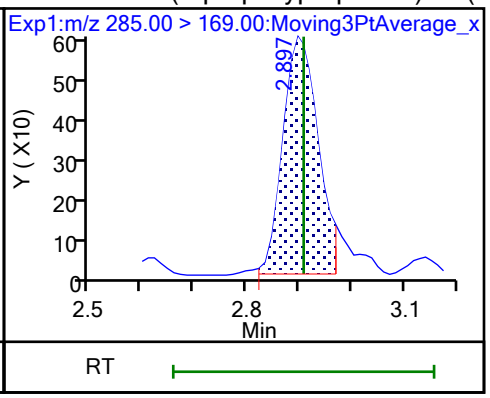
70 Perfluoropentanesulfonic acid (M)



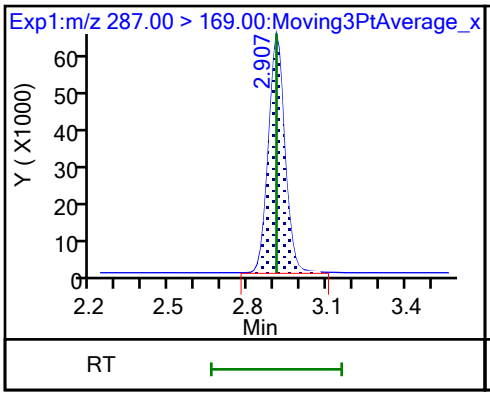
70 Perfluoropentanesulfonic acid (M)



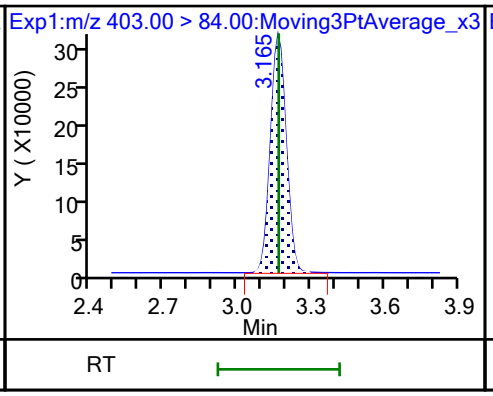
67 Perfluoro(2-propoxypropanoic) ac (M)



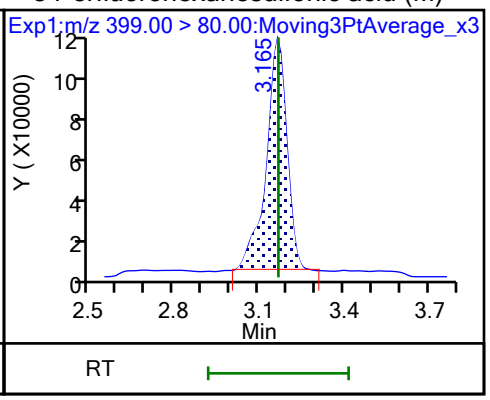
D 64 13C3 HFPO-DA



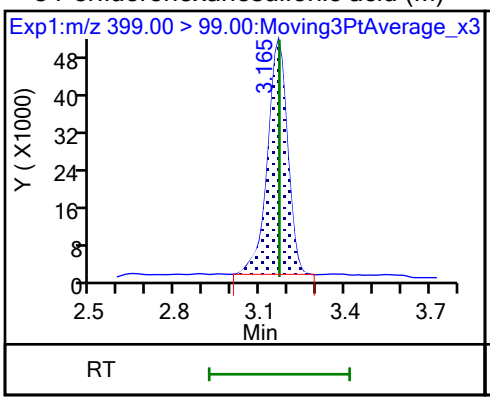
D 11 18O2 PFHxS



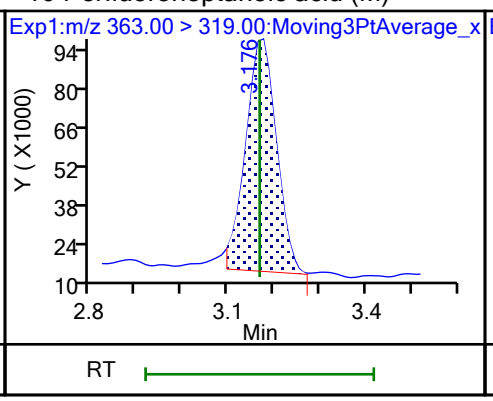
8 Perfluorohexanesulfonic acid (M)



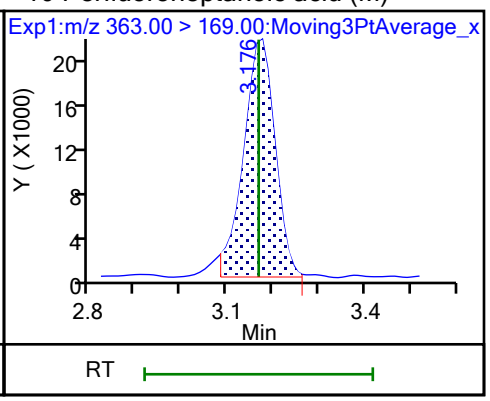
8 Perfluorohexanesulfonic acid (M)



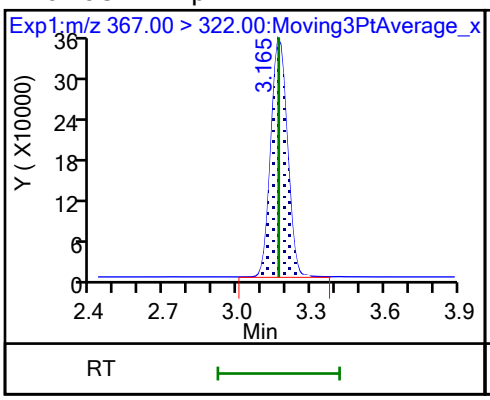
10 Perfluoroheptanoic acid (M)



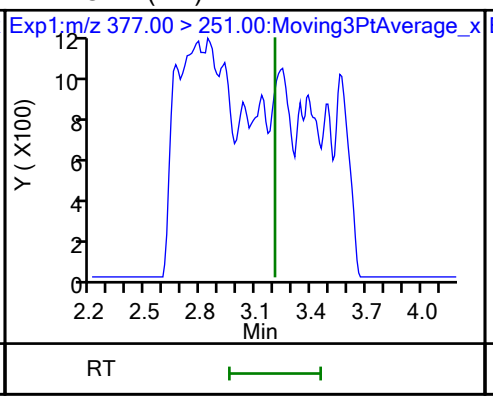
10 Perfluoroheptanoic acid (M)



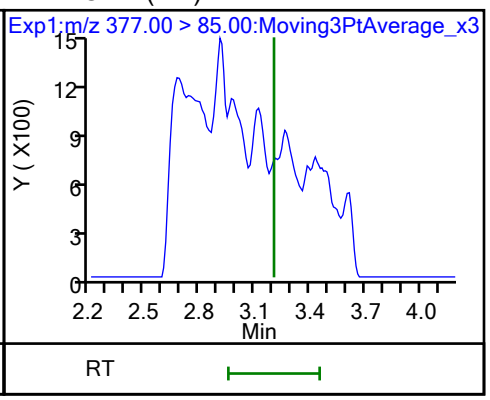
D 9 13C4 PFHpA



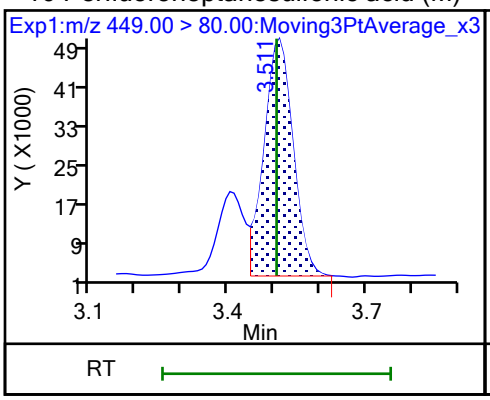
77 DONA (ND)



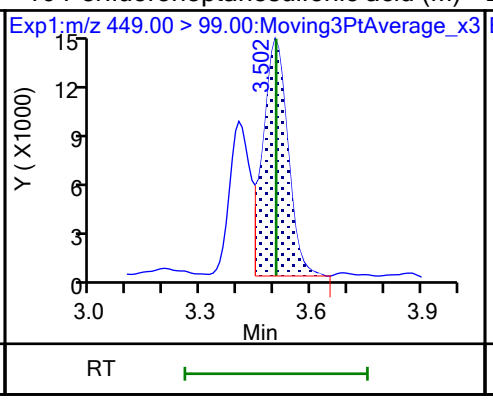
77 DONA (ND)



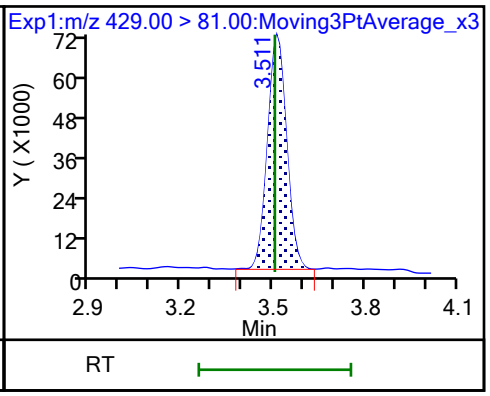
16 Perfluoroheptanesulfonic acid (M)



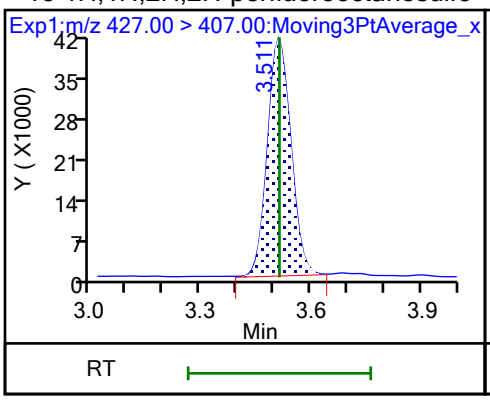
16 Perfluoroheptanesulfonic acid (M)



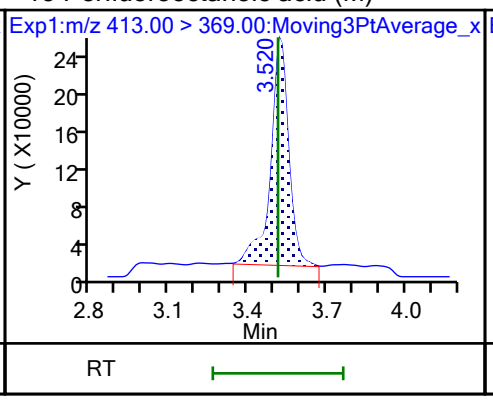
D 12 M2-6:2 FTS



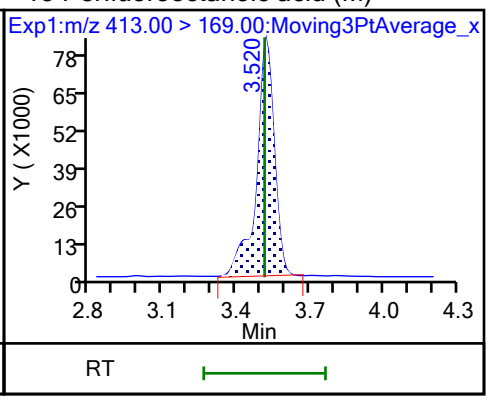
13 1H,1H,2H,2H-perfluorooctanesulfo



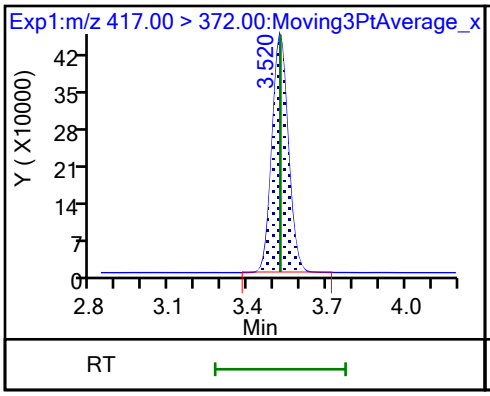
15 Perfluorooctanoic acid (M)



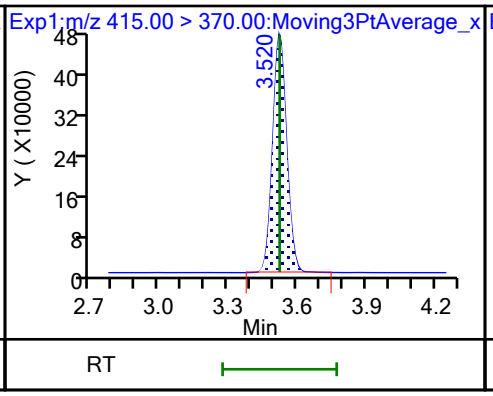
15 Perfluorooctanoic acid (M)



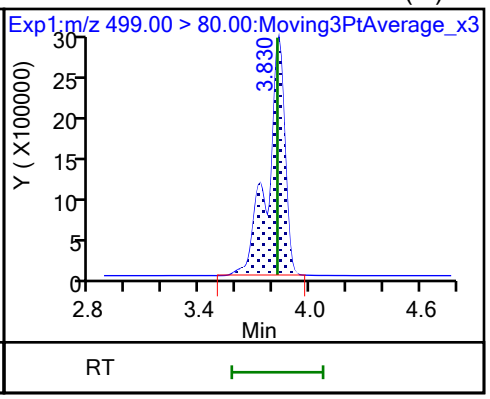
D 14 13C4 PFOA



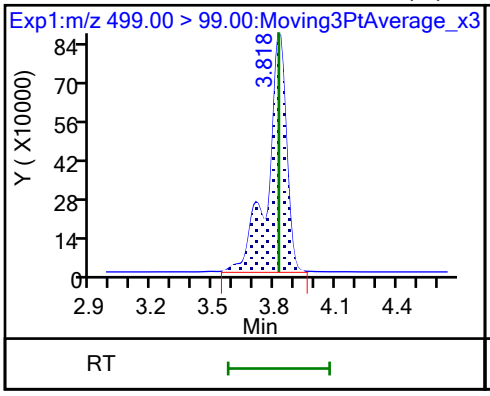
* 62 13C2 PFOA



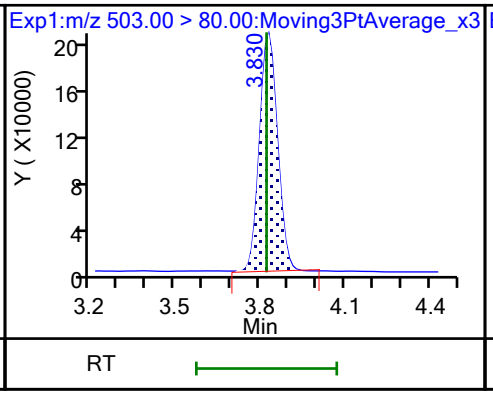
17 Perfluorooctanesulfonic acid (M)



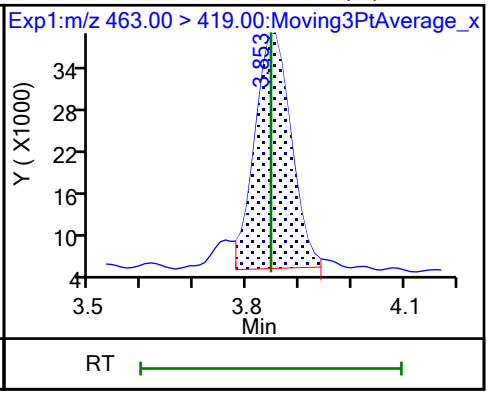
17 Perfluorooctanesulfonic acid (M)



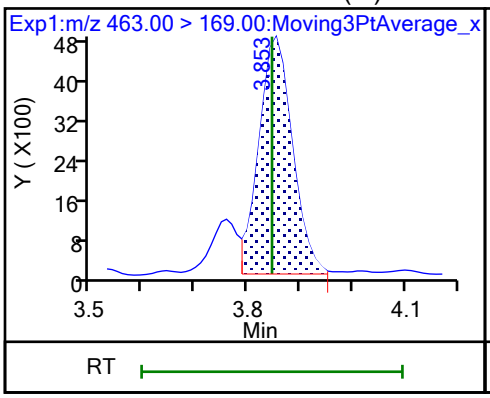
D 18 13C4 PFOS



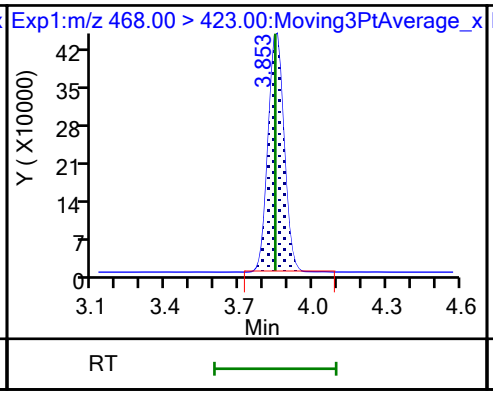
20 Perfluorononanoic acid (M)



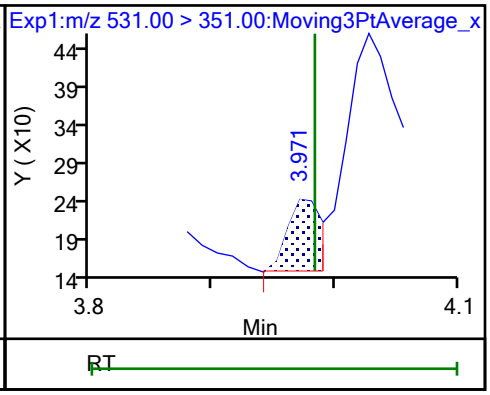
20 Perfluorononanoic acid (M)



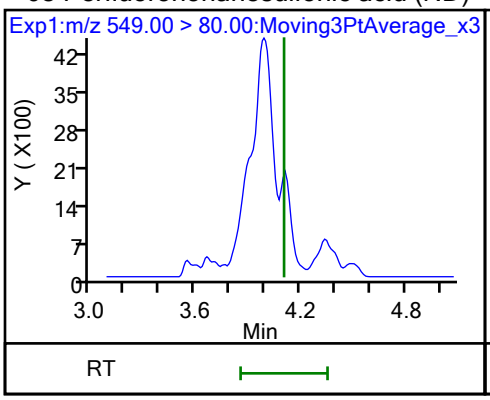
D 19 13C5 PFNA



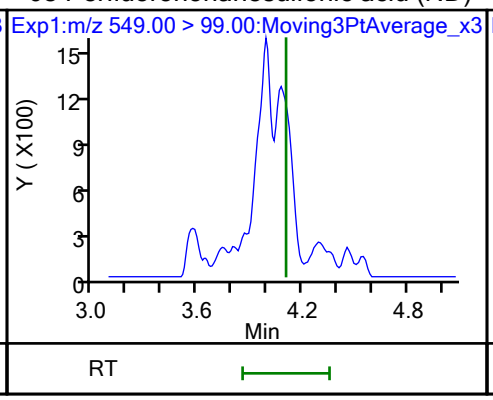
69 9-Chlorohexadecafluoro-3-oxanona (M)



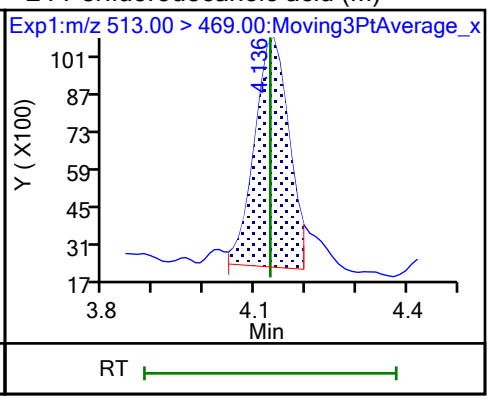
68 Perfluorononanesulfonic acid (ND)



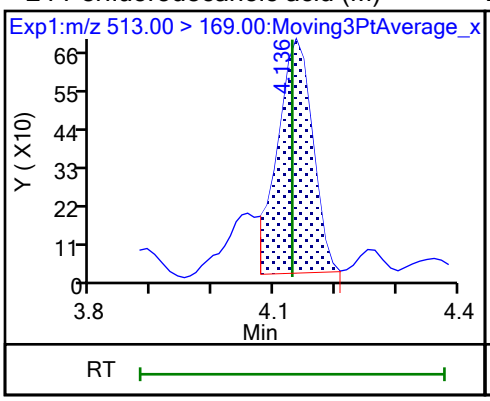
68 Perfluorononanesulfonic acid (ND)



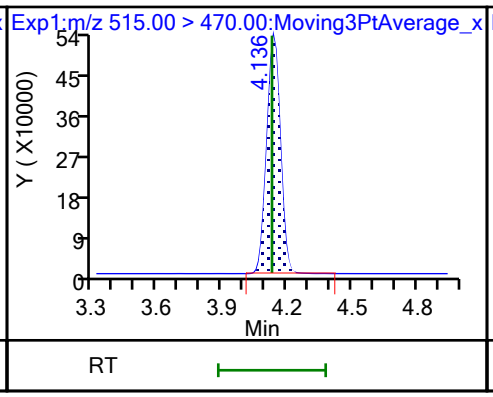
24 Perfluorodecanoic acid (M)



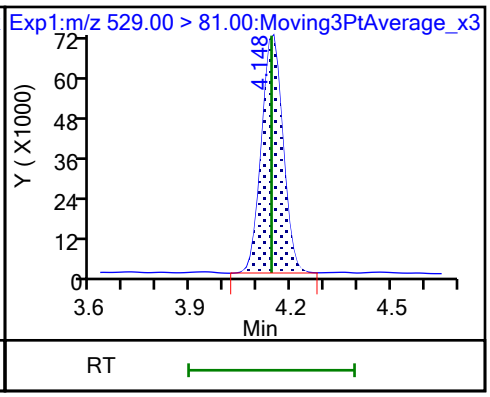
24 Perfluorodecanoic acid (M)



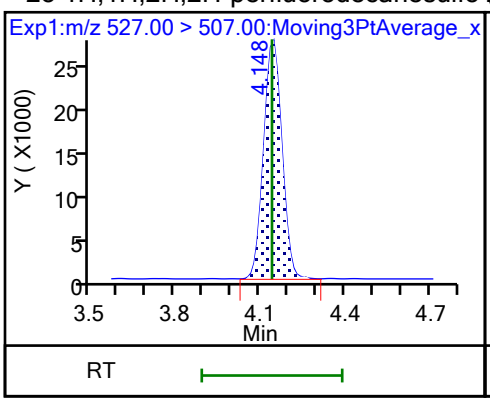
D 23 13C2 PFDA



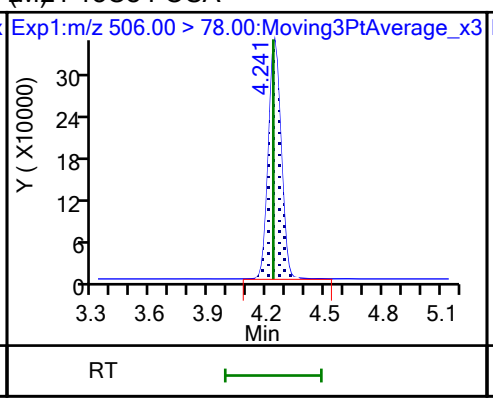
D 26 M2-8:2 FTS



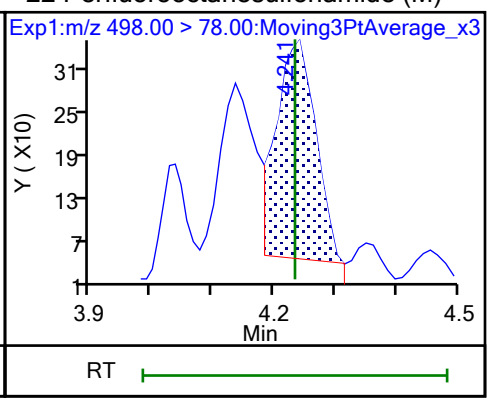
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



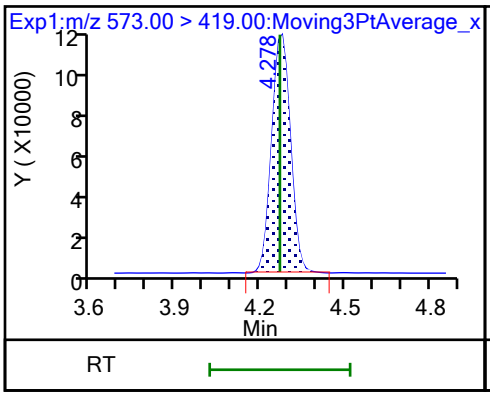
D 21 13C8 FOSA



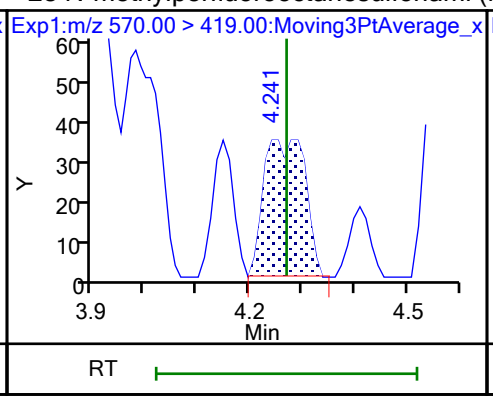
22 Perfluorooctanesulfonamide (M)



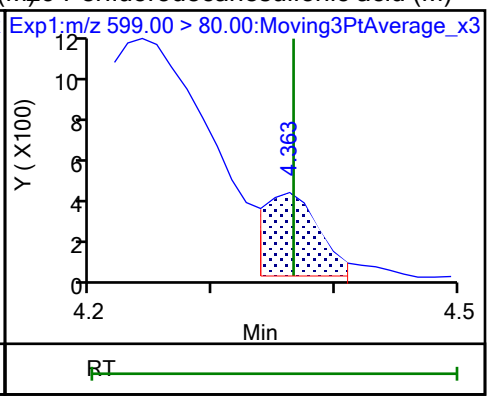
D 27 d3-NMeFOSAA



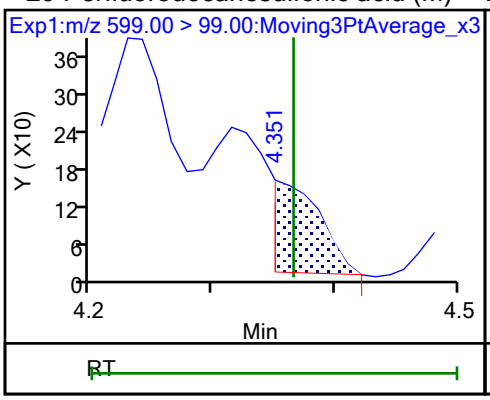
28 N-methylperfluorooctanesulfonami (M)



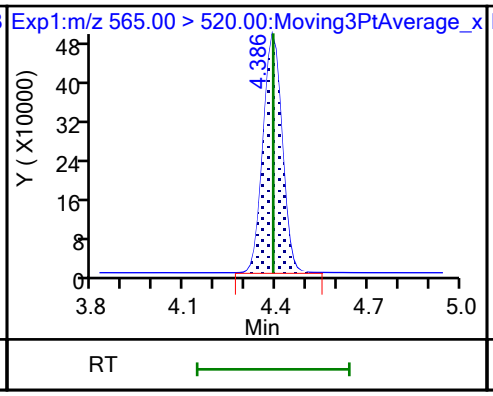
29 Perfluorodecanesulfonic acid (M)



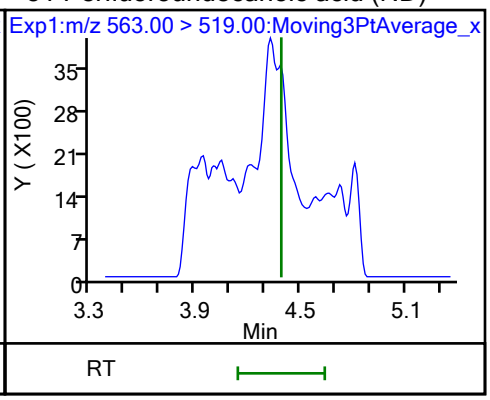
29 Perfluorodecanesulfonic acid (M)



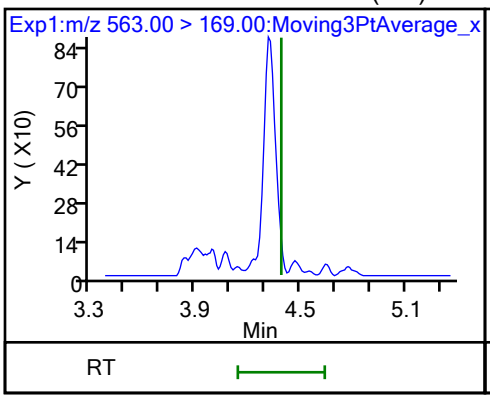
D 30 13C2 PFUnA



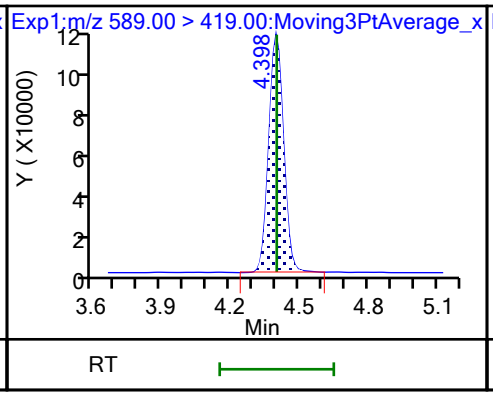
31 Perfluoroundecanoic acid (ND)



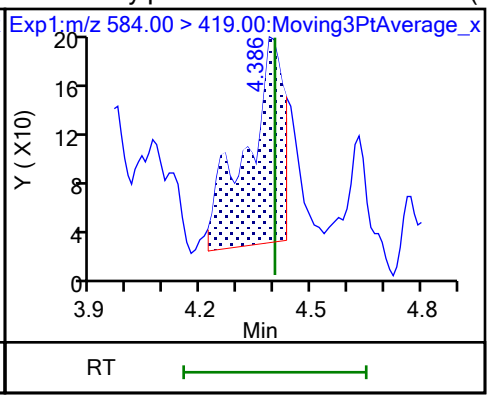
31 Perfluoroundecanoic acid (ND)



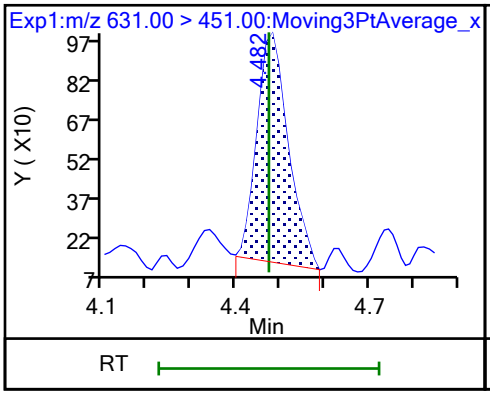
D 32 d5-NEtFOSAA



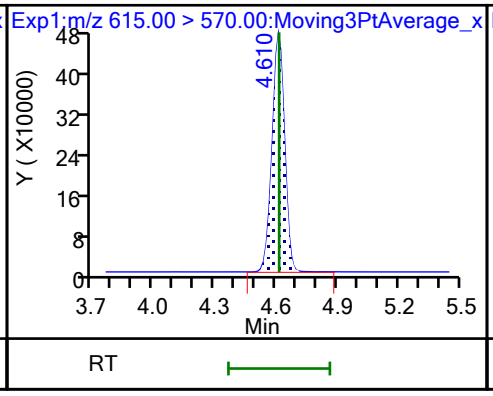
33 N-ethylperfluorooctanesulfonamid (M)



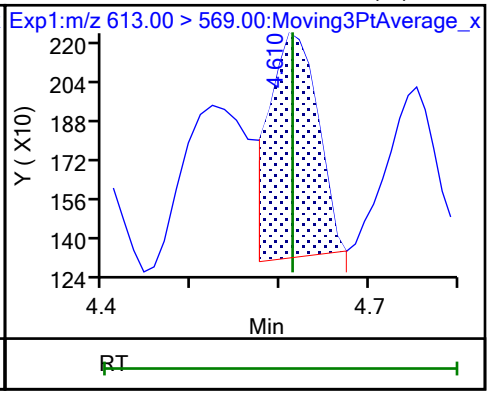
66 11-Chloroeicosafluoro-3-oxaundec



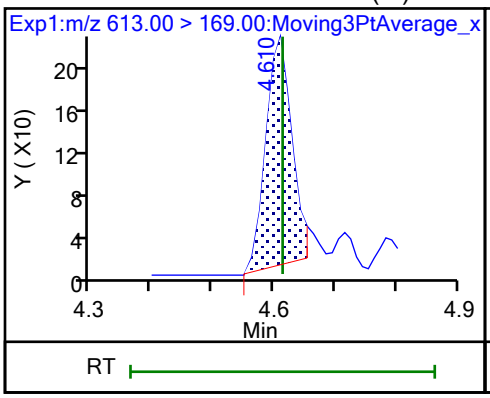
D 36 13C2 PFDoA



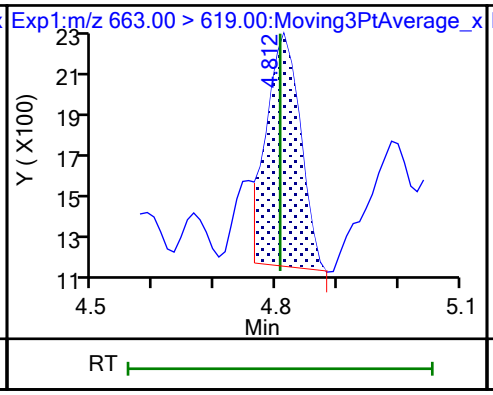
37 Perfluorododecanoic acid (M)



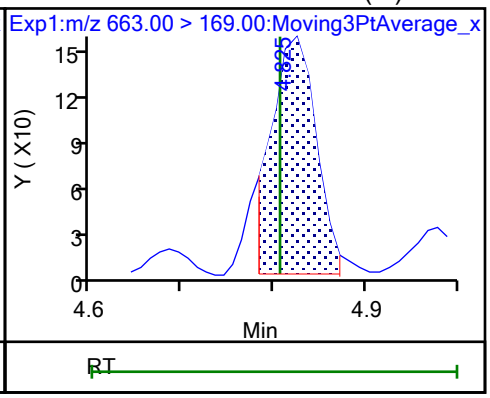
37 Perfluorododecanoic acid (M)



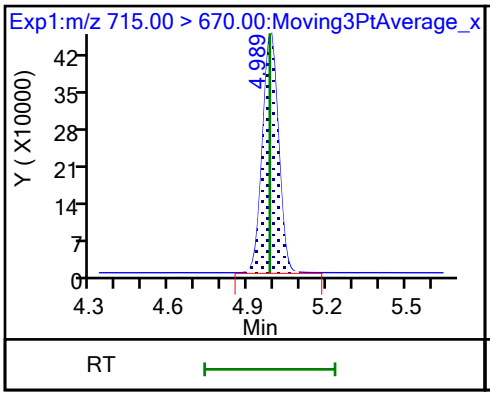
41 Perfluorotridecanoic acid



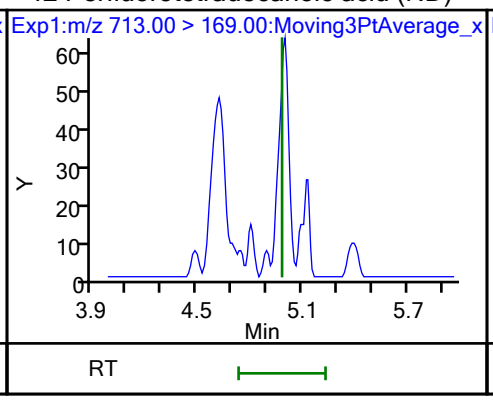
41 Perfluorotridecanoic acid (M)



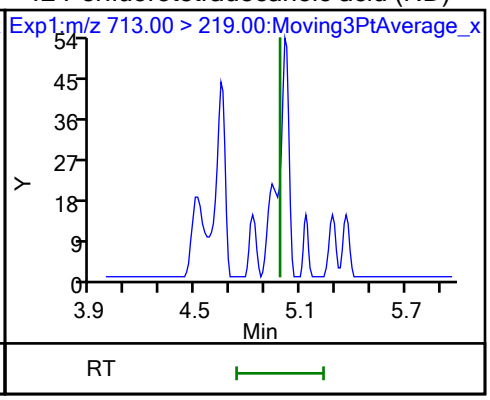
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

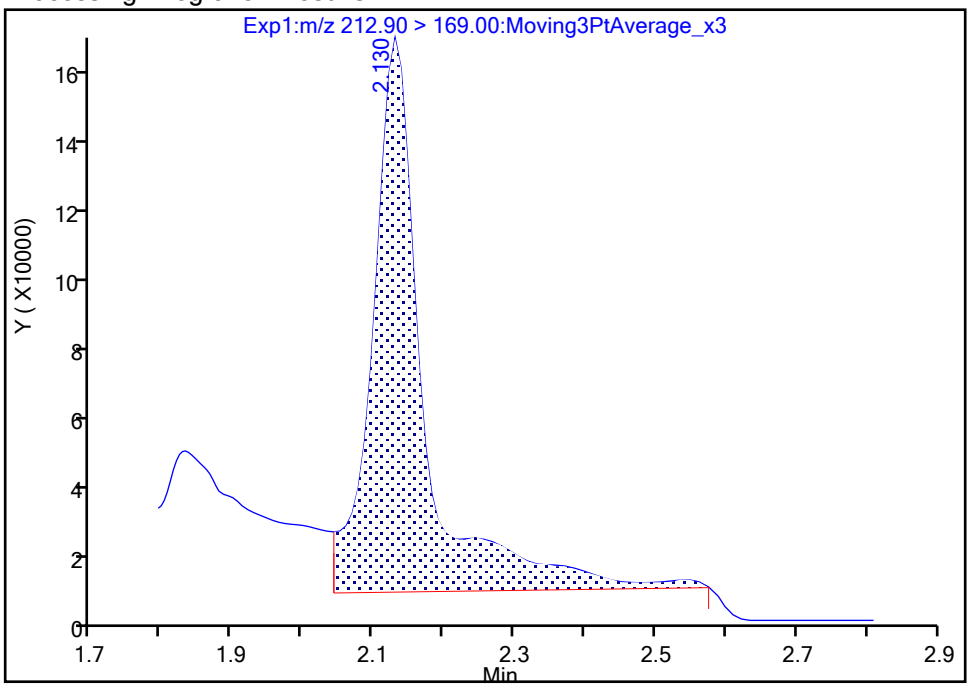
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

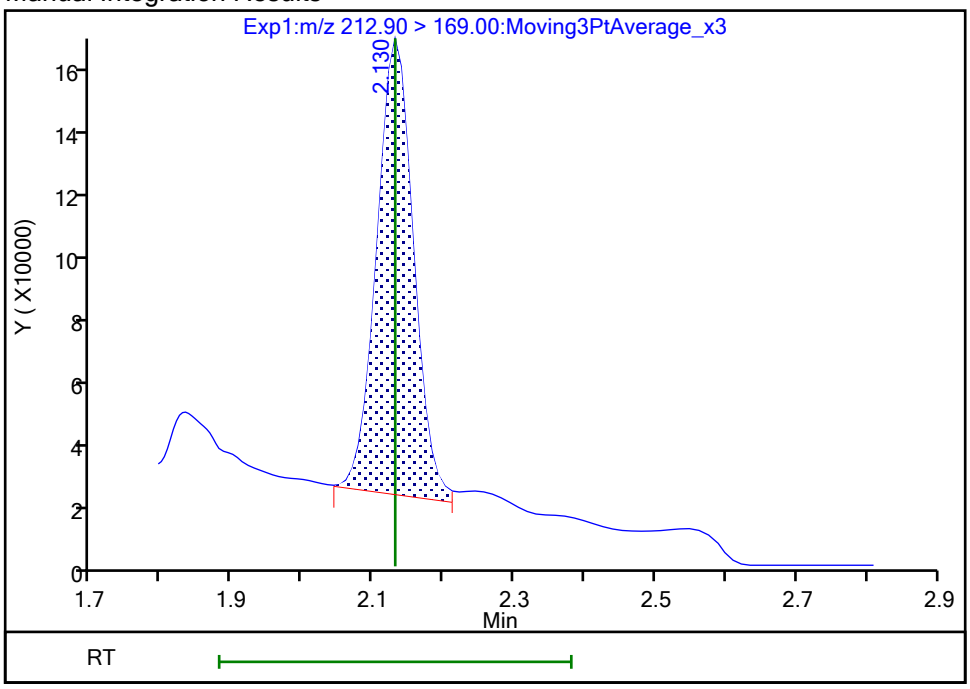
Processing Integration Results

RT: 2.13
Area: 781011
Amount: 0.689406
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 500741
Amount: 0.427338
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

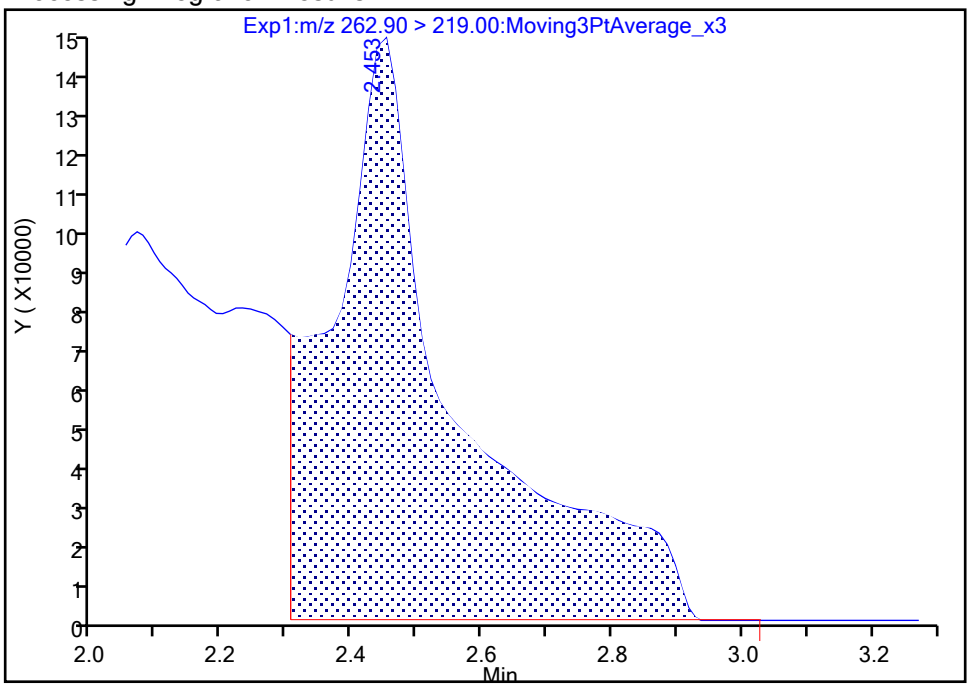
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

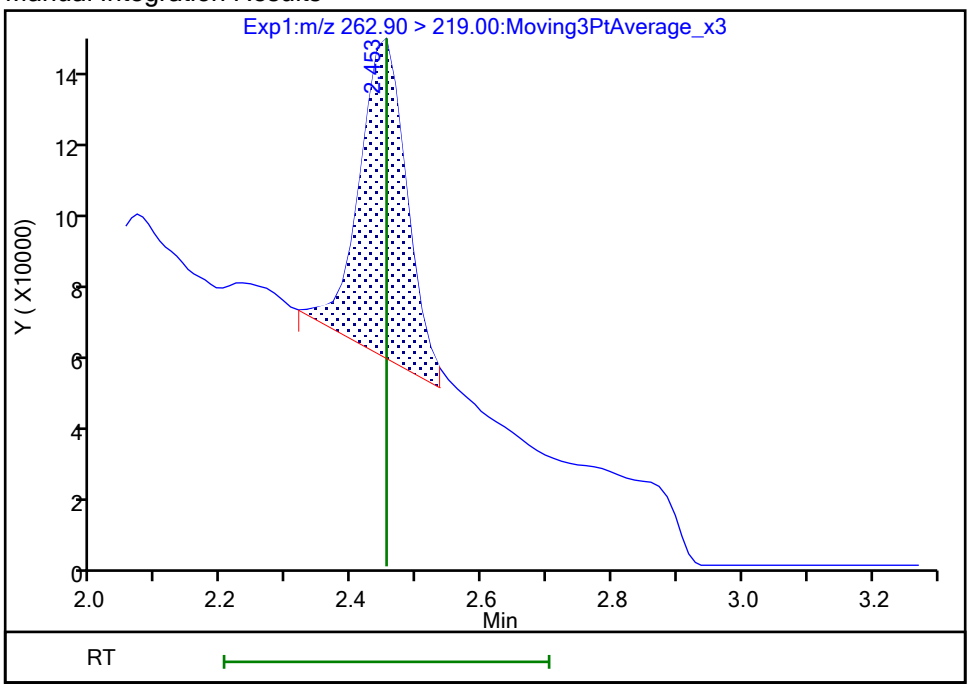
Processing Integration Results

RT: 2.45
Area: 1966225
Amount: 1.684018
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 441343
Amount: 0.377998
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

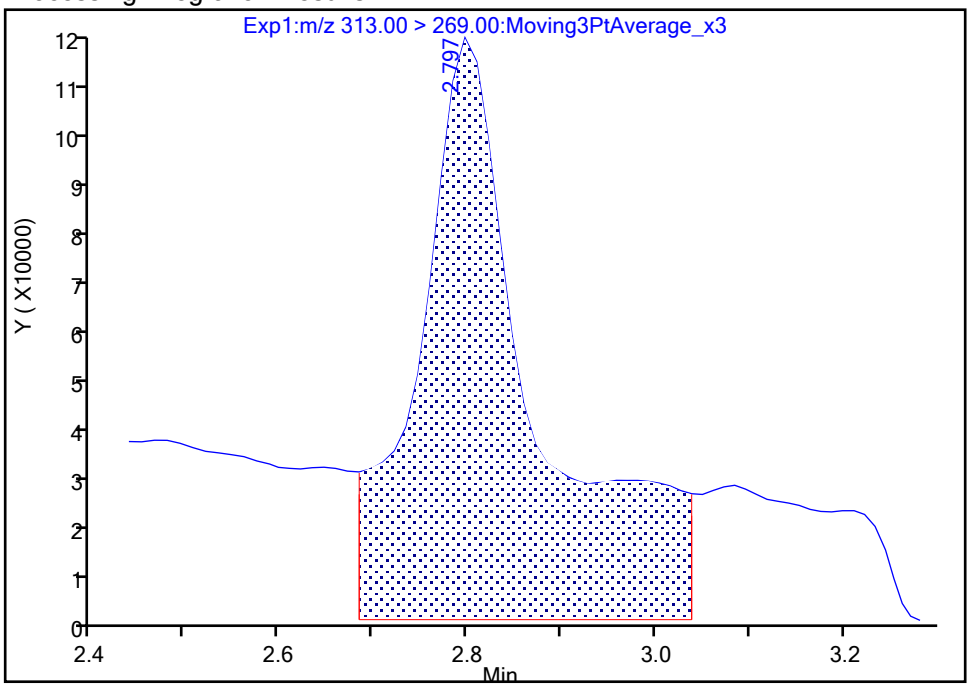
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

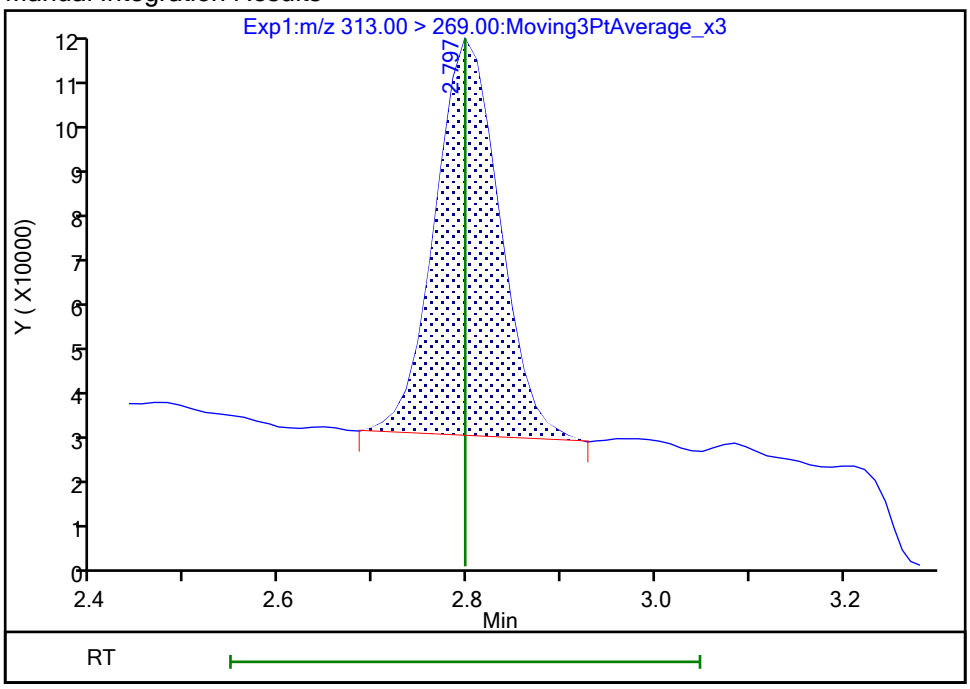
Processing Integration Results

RT: 2.80
Area: 1047619
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 432809
Amount: 0.338495
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

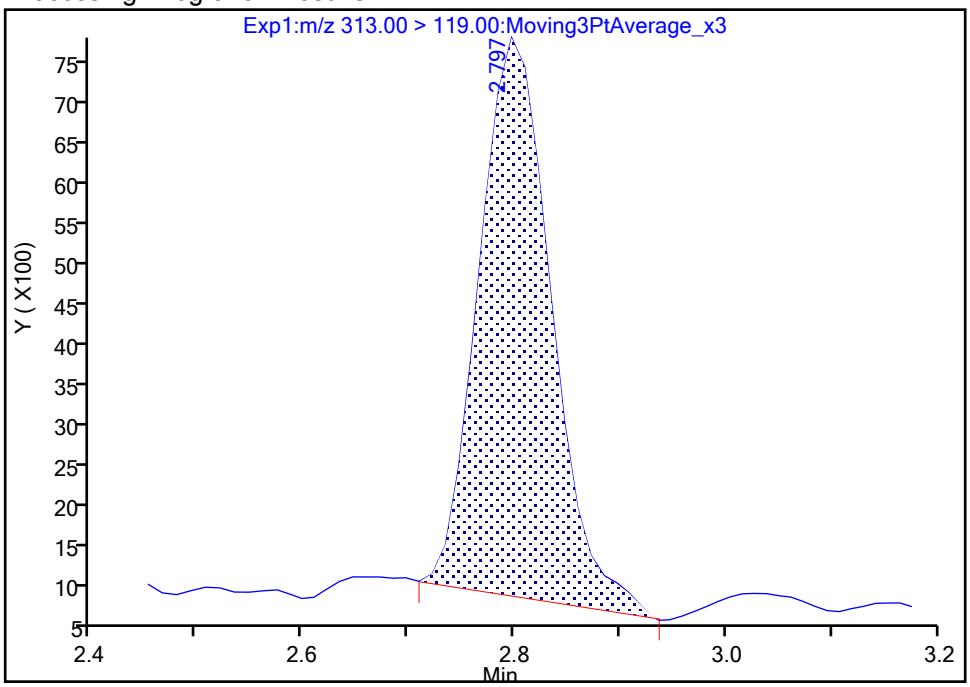
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

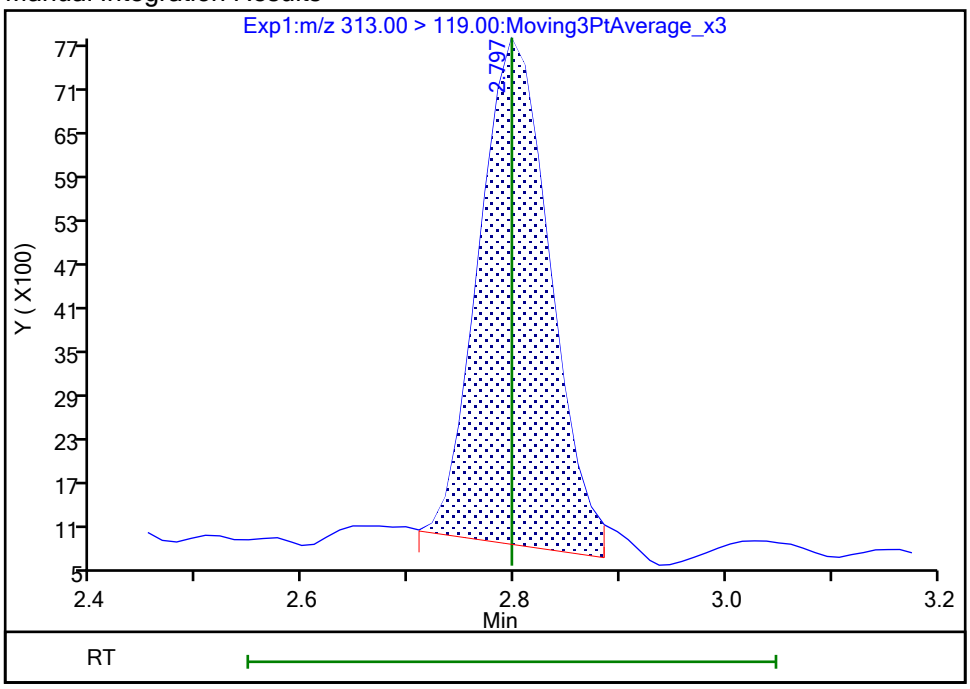
Processing Integration Results

RT: 2.80
Area: 32830
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 32135
Amount: 0.338495
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

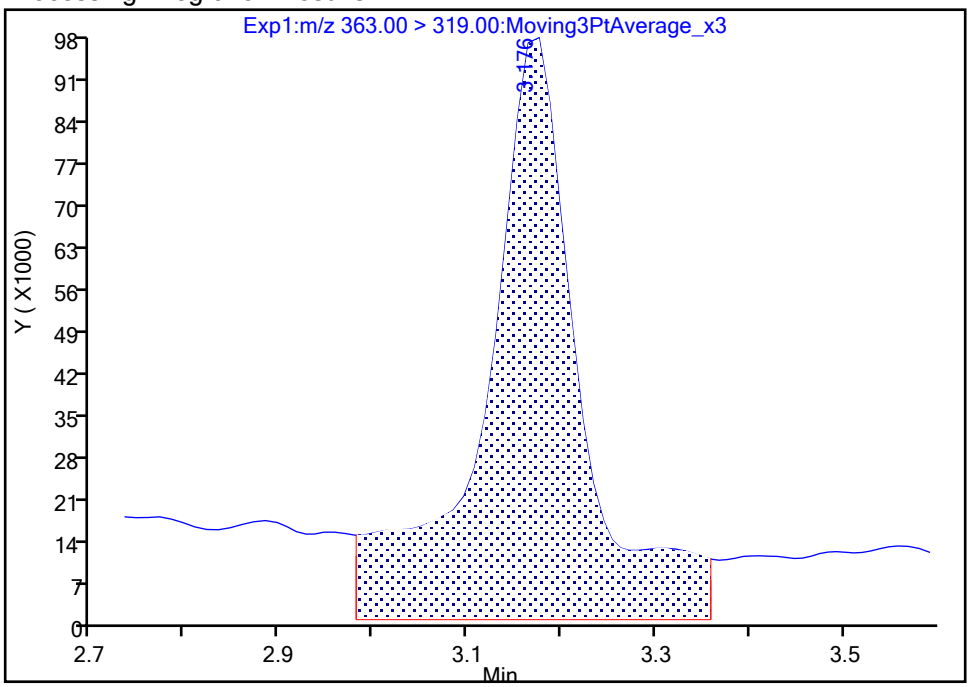
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

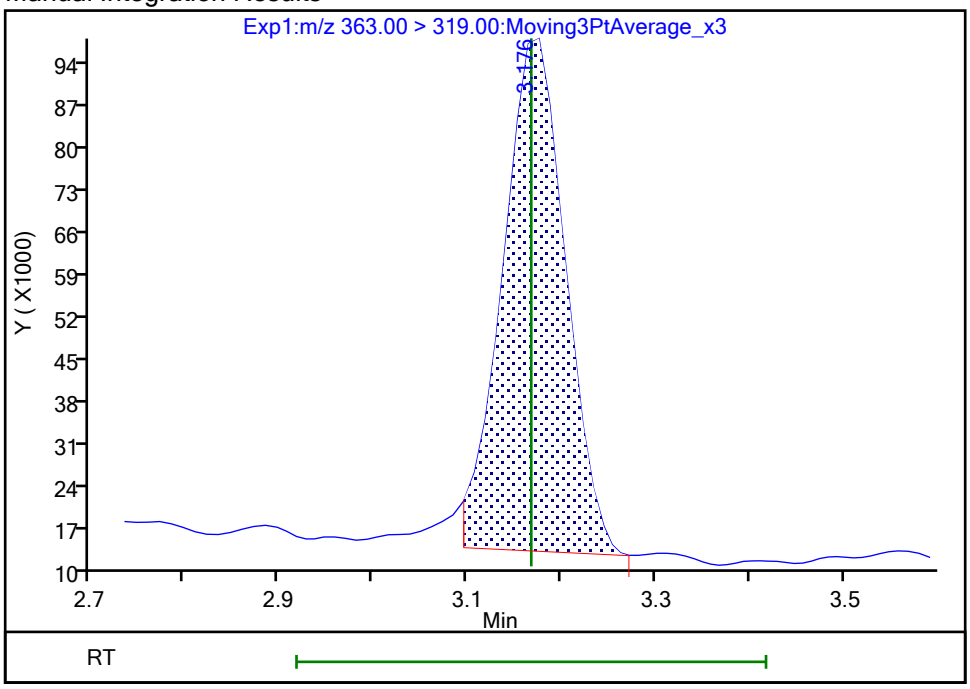
Processing Integration Results

RT: 3.18
Area: 695907
Amount: 0.467901
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 394098
Amount: 0.264976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

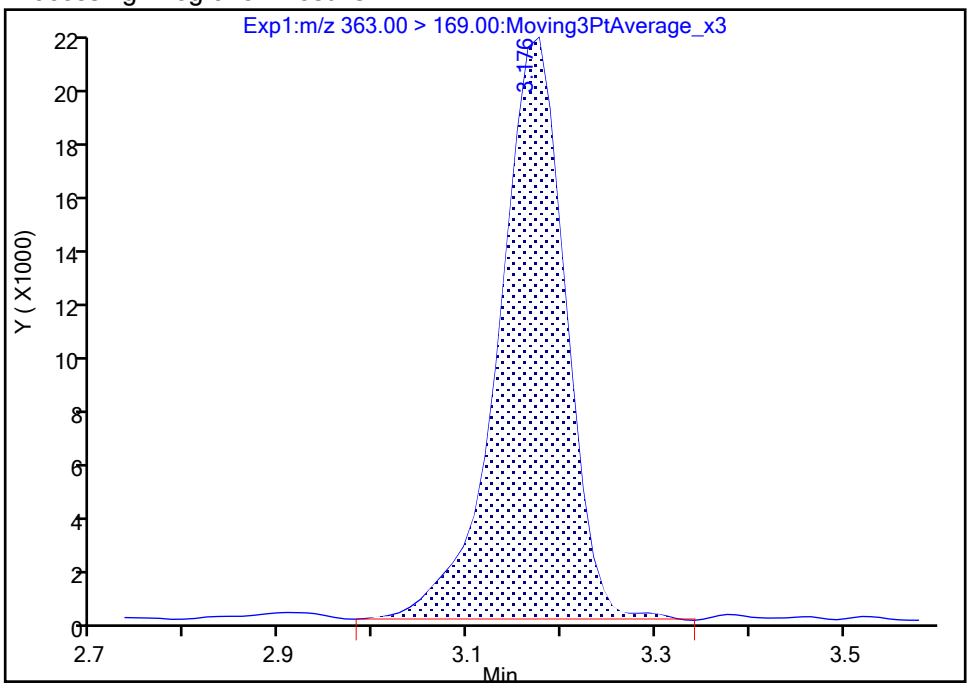
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

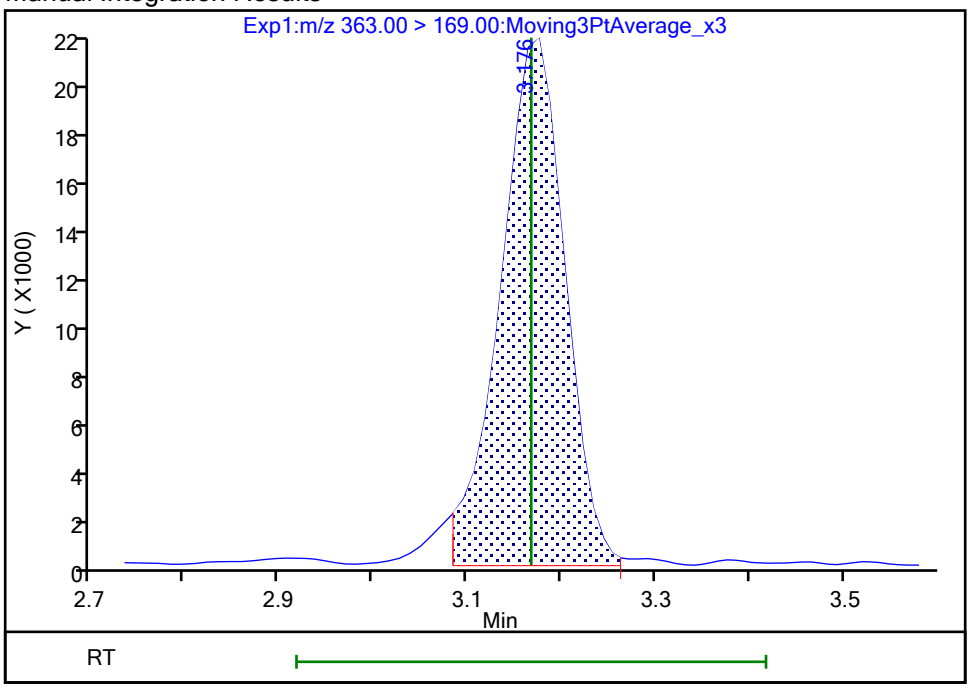
Processing Integration Results

RT: 3.18
Area: 107031
Amount: 0.467901
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 102435
Amount: 0.264976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

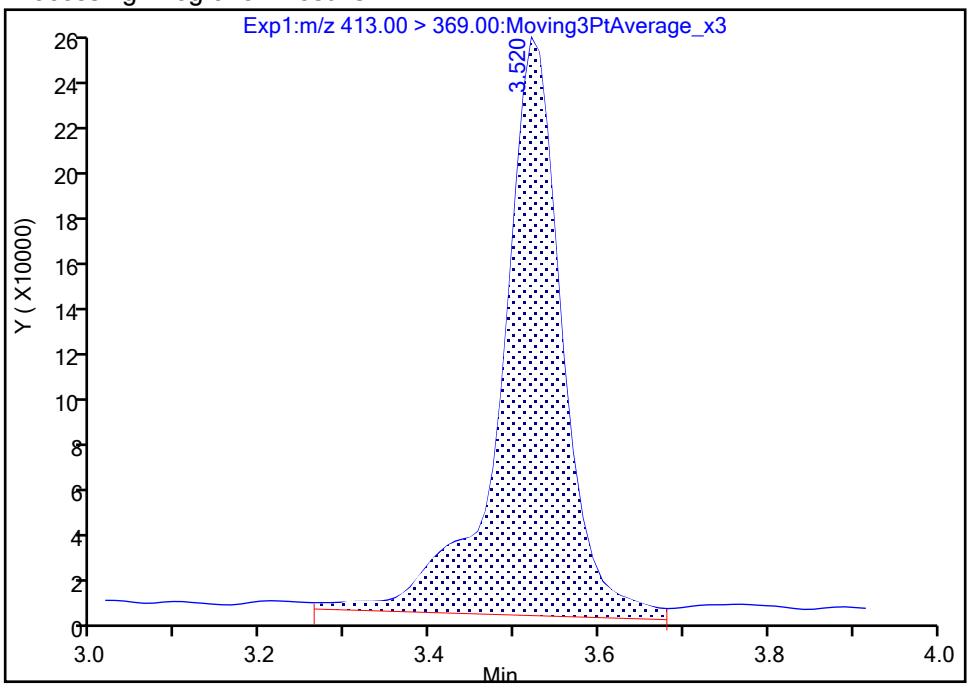
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

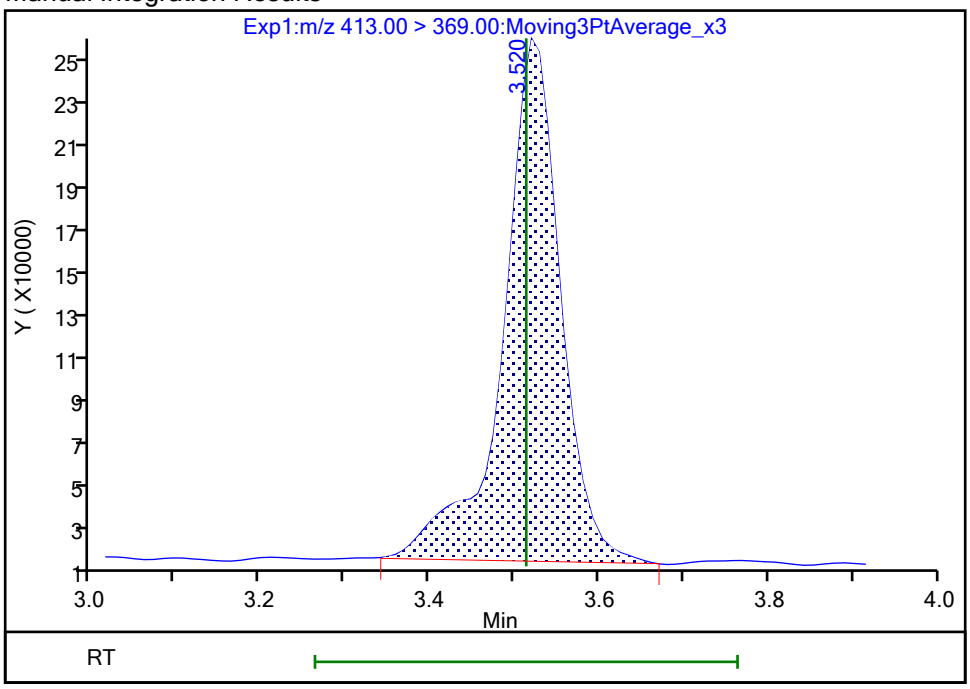
Processing Integration Results

RT: 3.52
Area: 1273460
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1164759
Amount: 0.700787
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

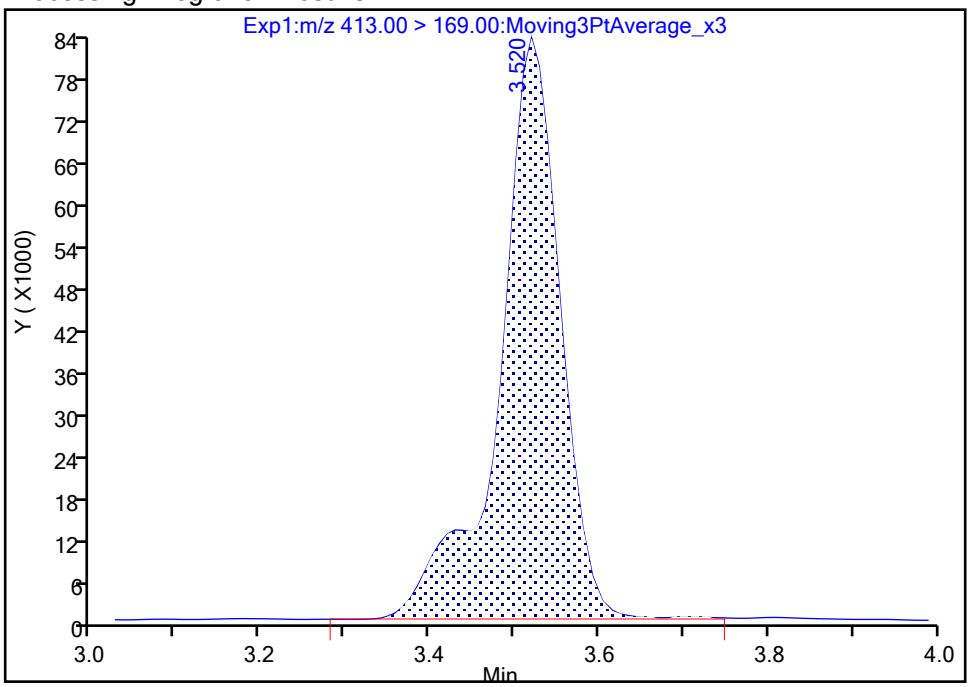
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

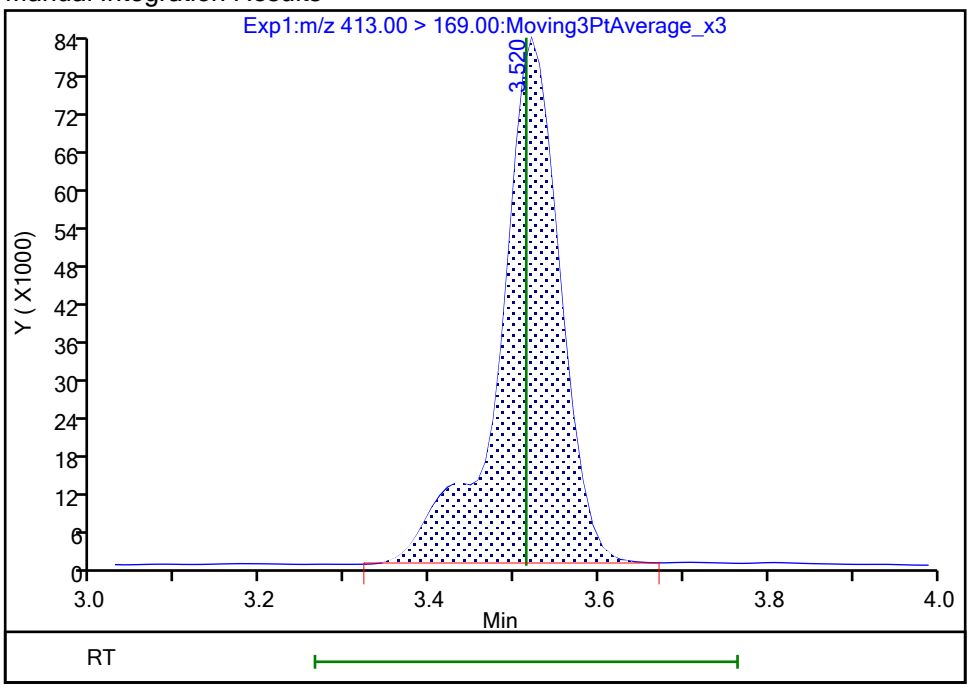
Processing Integration Results

RT: 3.52
Area: 418136
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 417003
Amount: 0.700787
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

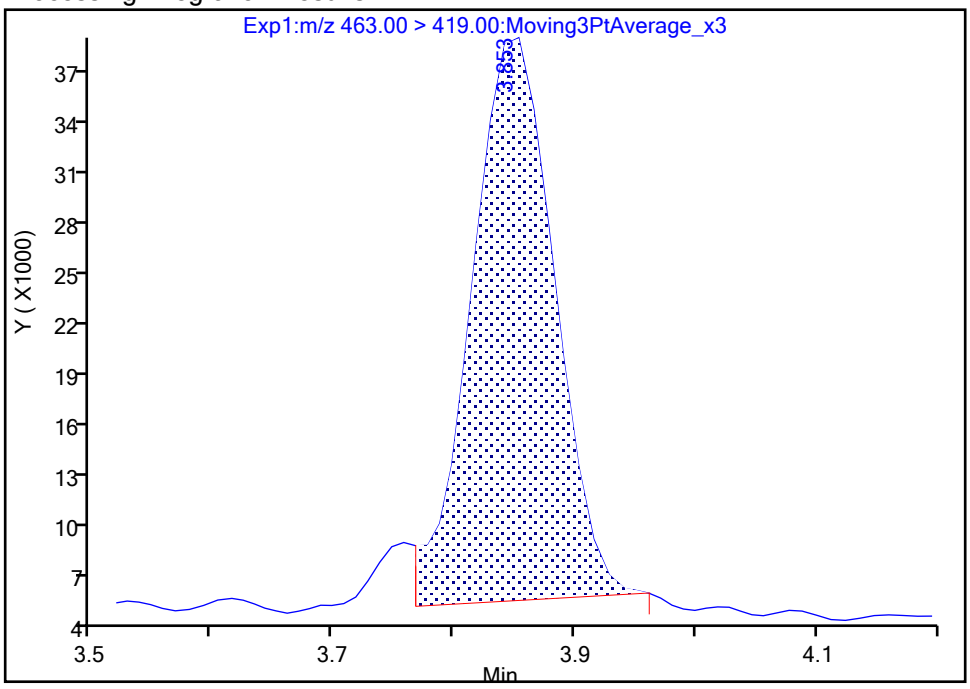
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

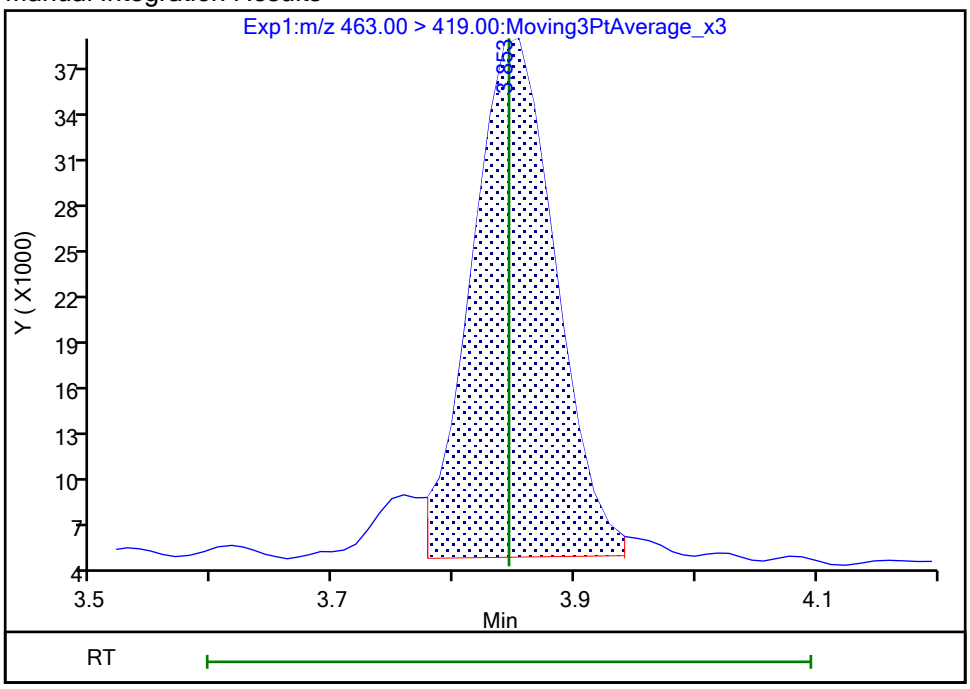
Processing Integration Results

RT: 3.85
Area: 156721
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 161260
Amount: 0.103192
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

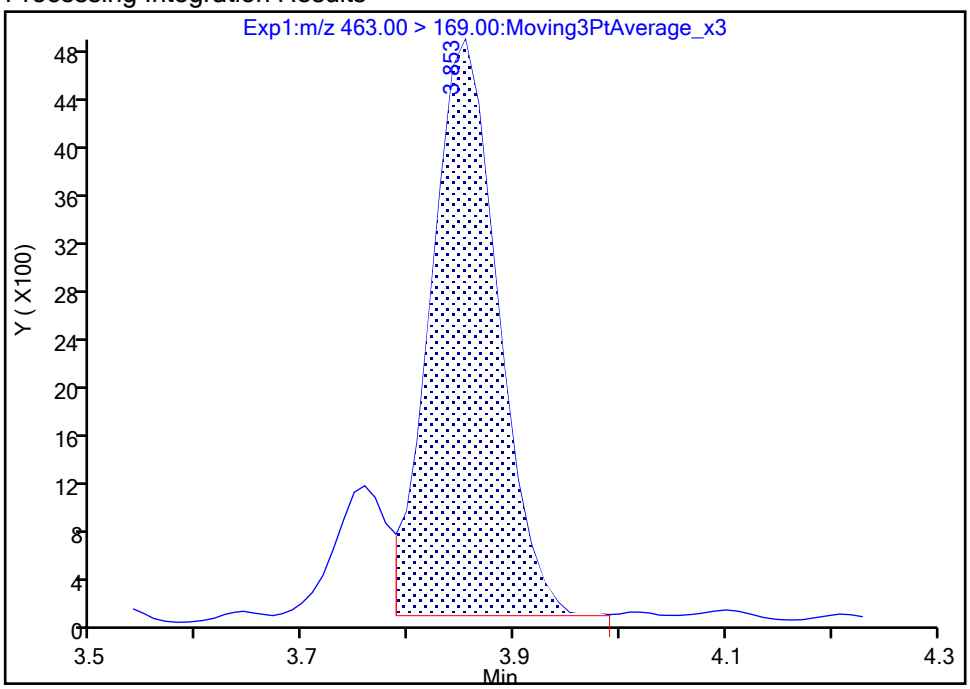
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

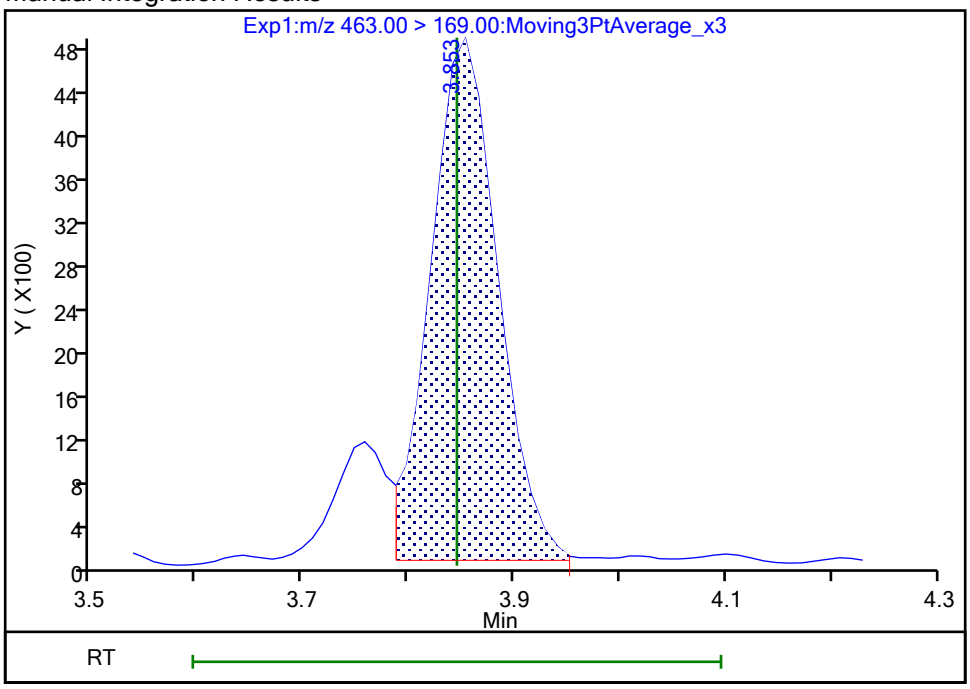
Processing Integration Results

RT: 3.85
Area: 20874
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 21051
Amount: 0.103192
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

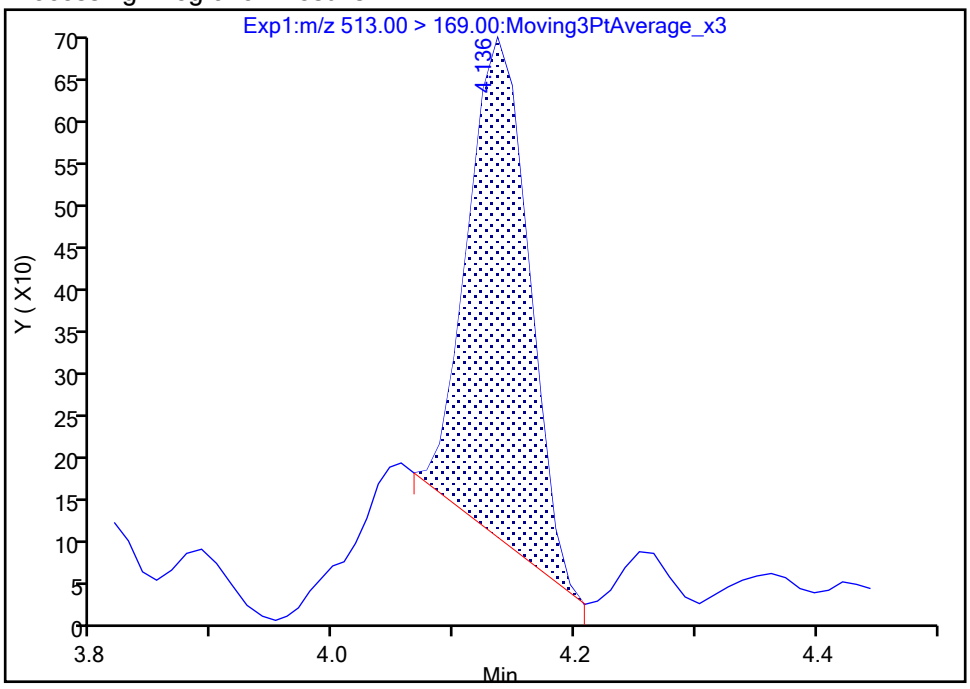
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

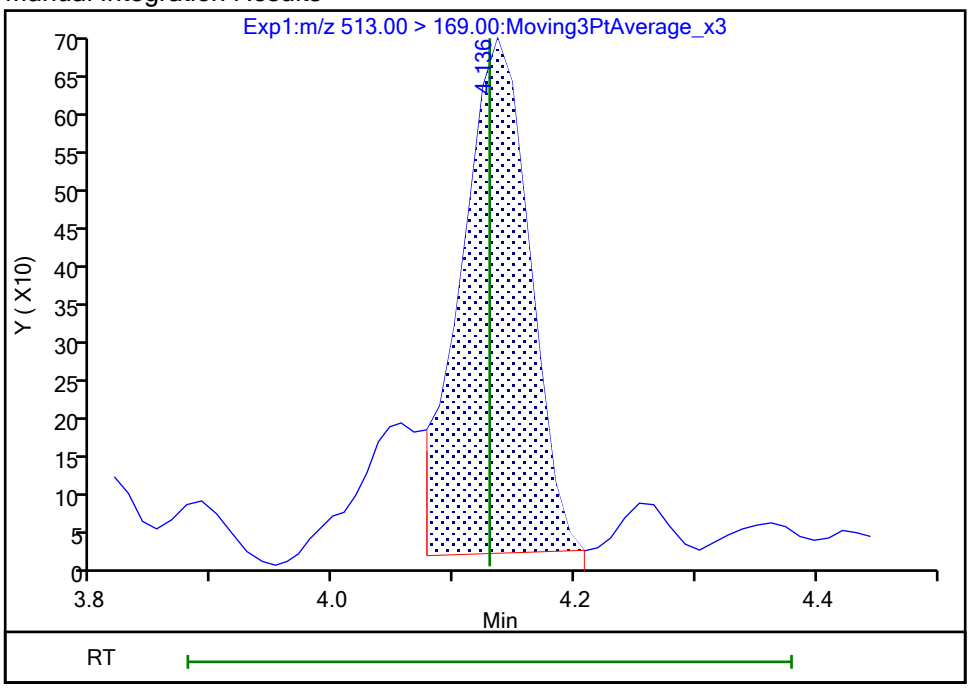
Processing Integration Results

RT: 4.14
Area: 2100
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2694
Amount: 0.021505
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

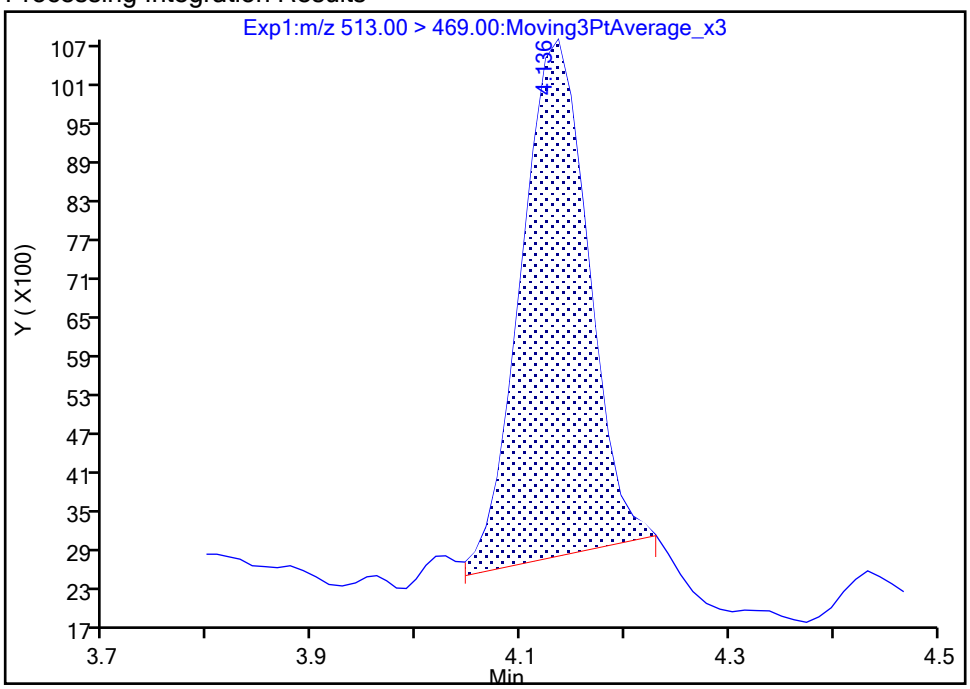
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

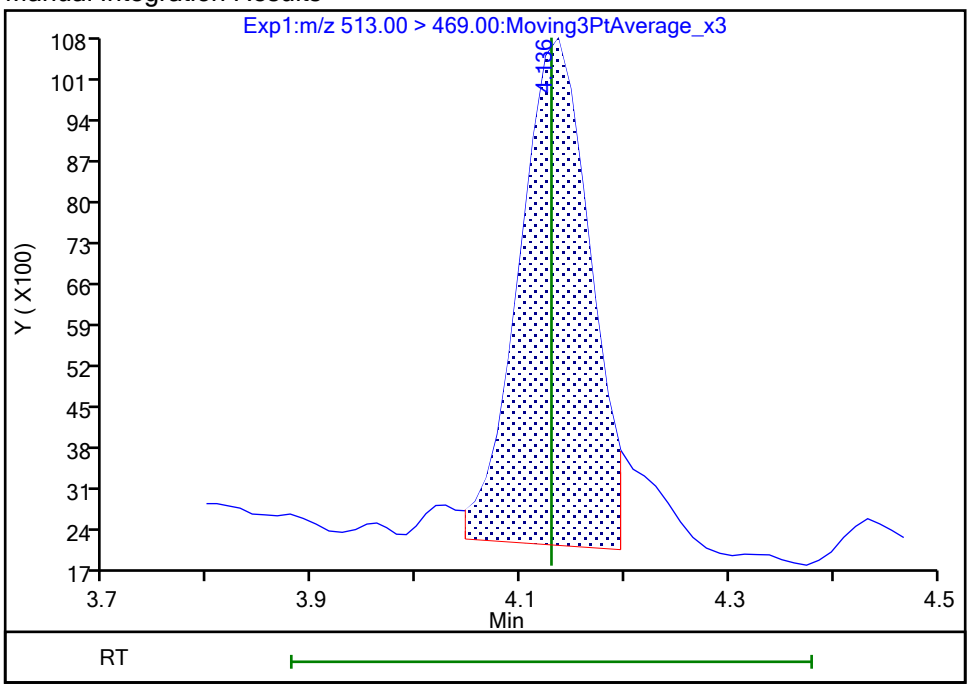
Processing Integration Results

RT: 4.14
Area: 35941
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 40713
Amount: 0.021505
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:15:40 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

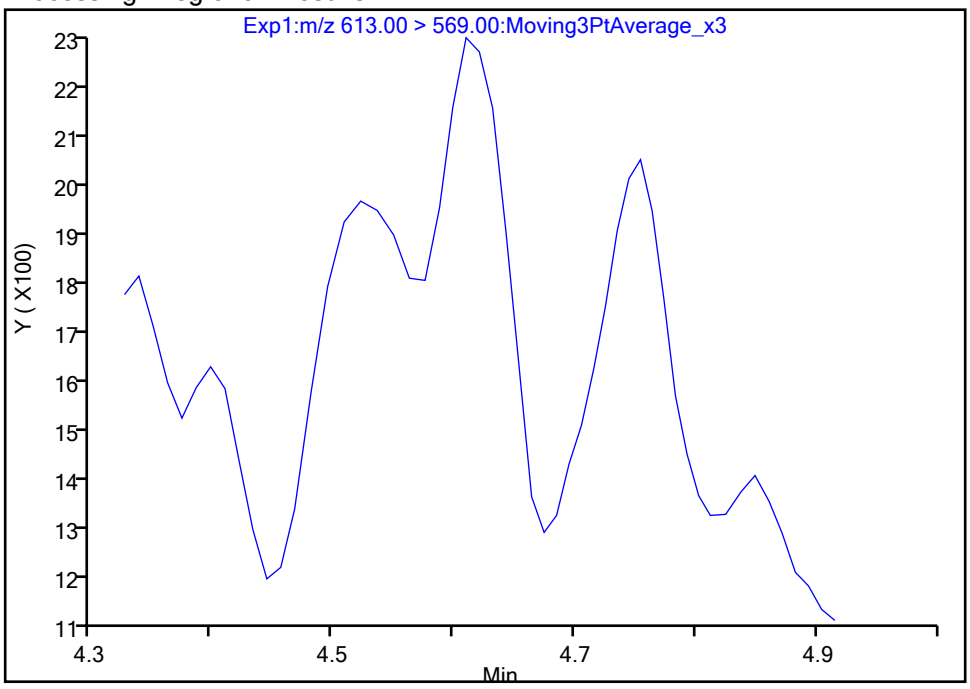
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

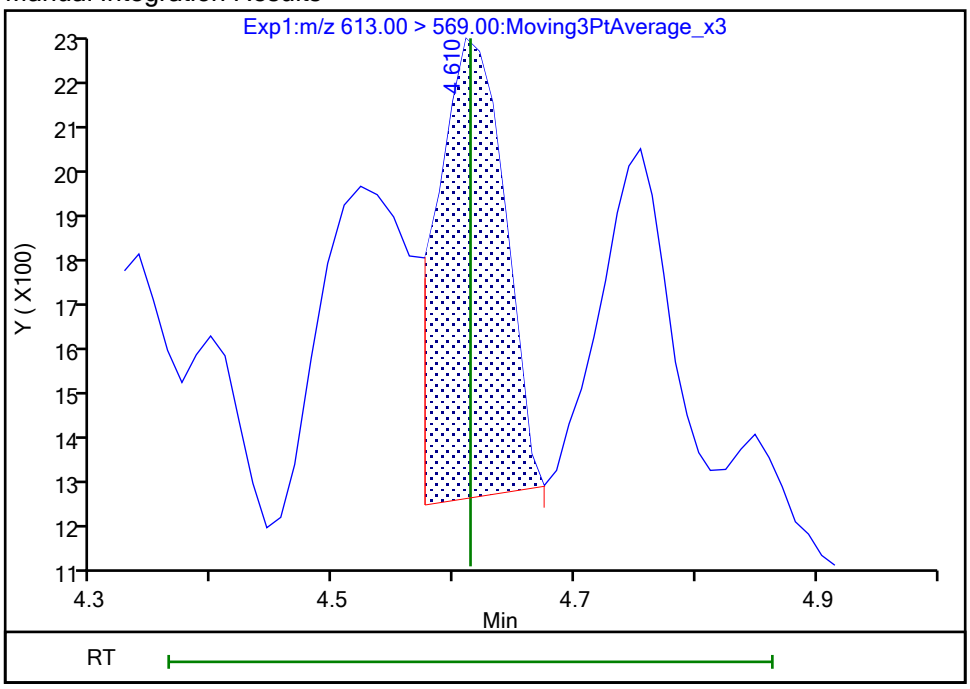
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 3490
Amount: 0.002138
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

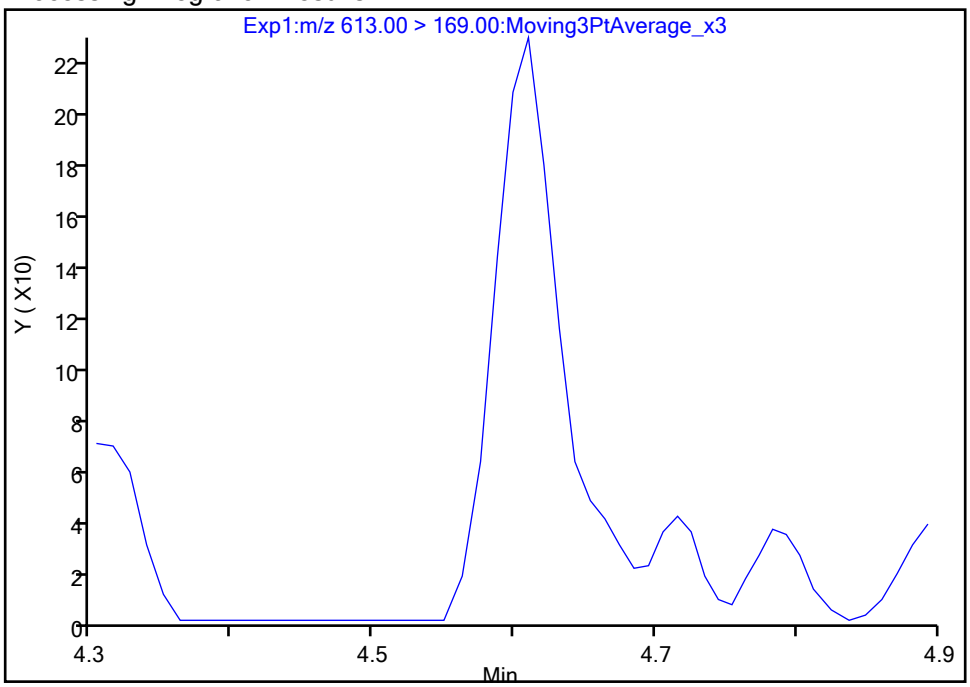
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

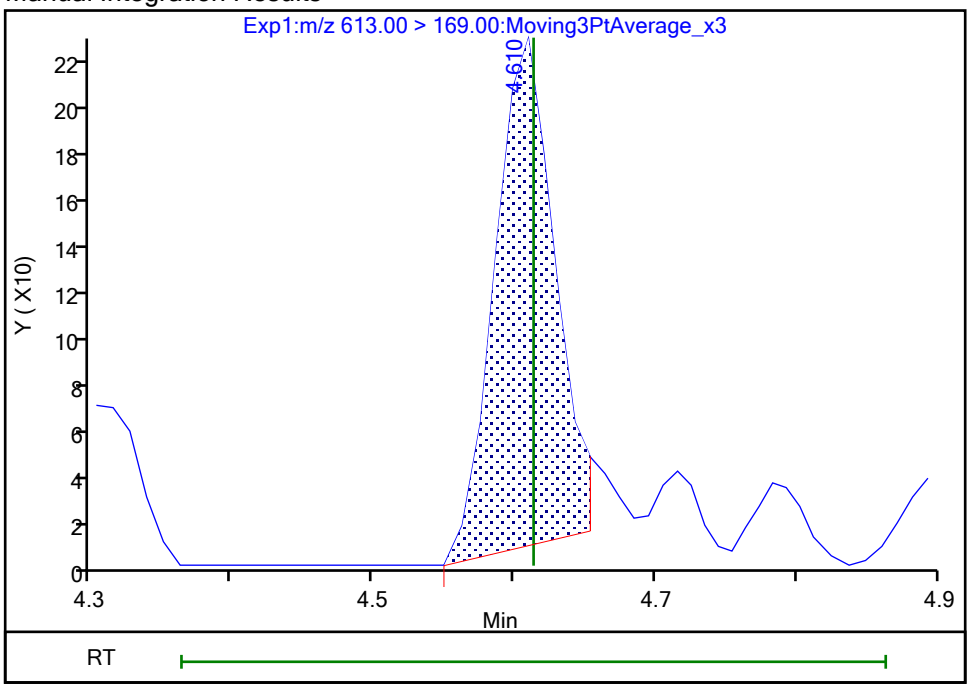
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 634
Amount: 0.002138
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

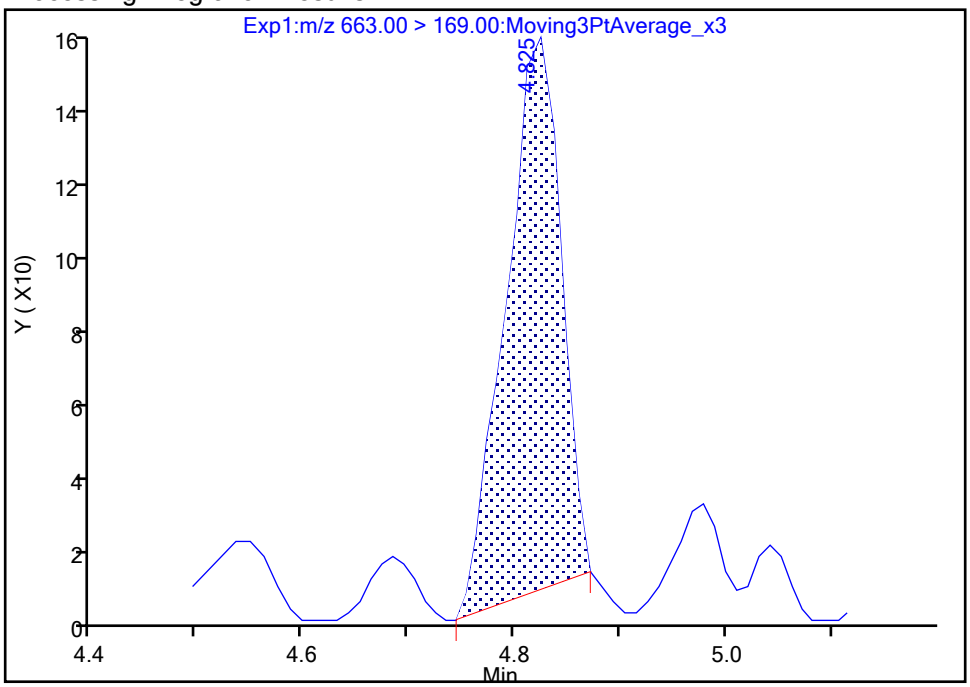
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

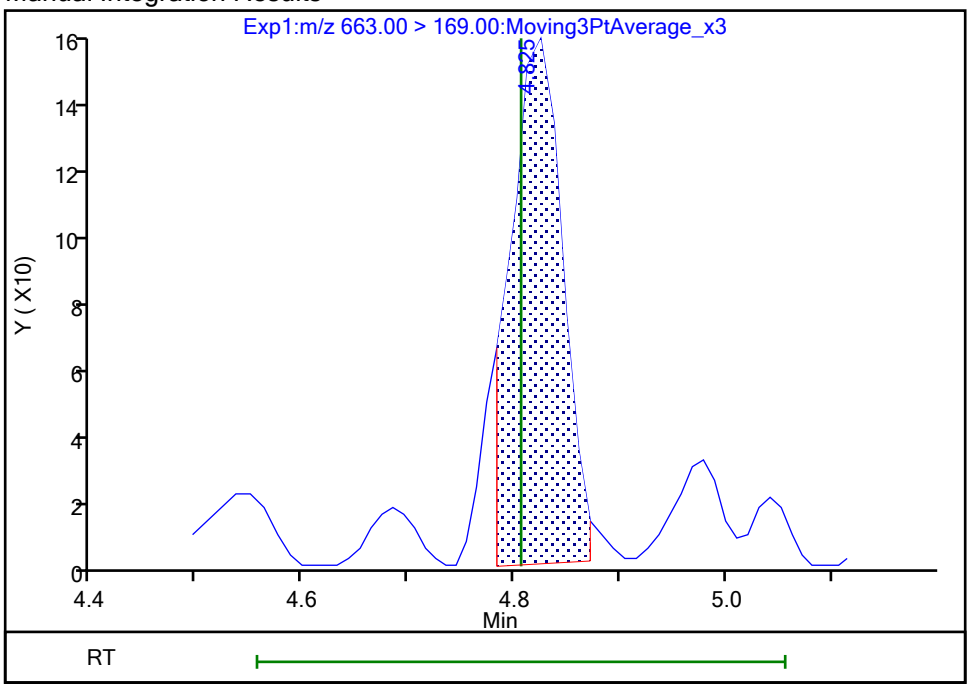
Processing Integration Results

RT: 4.82
Area: 534
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.82
Area: 517
Amount: 0.002452
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

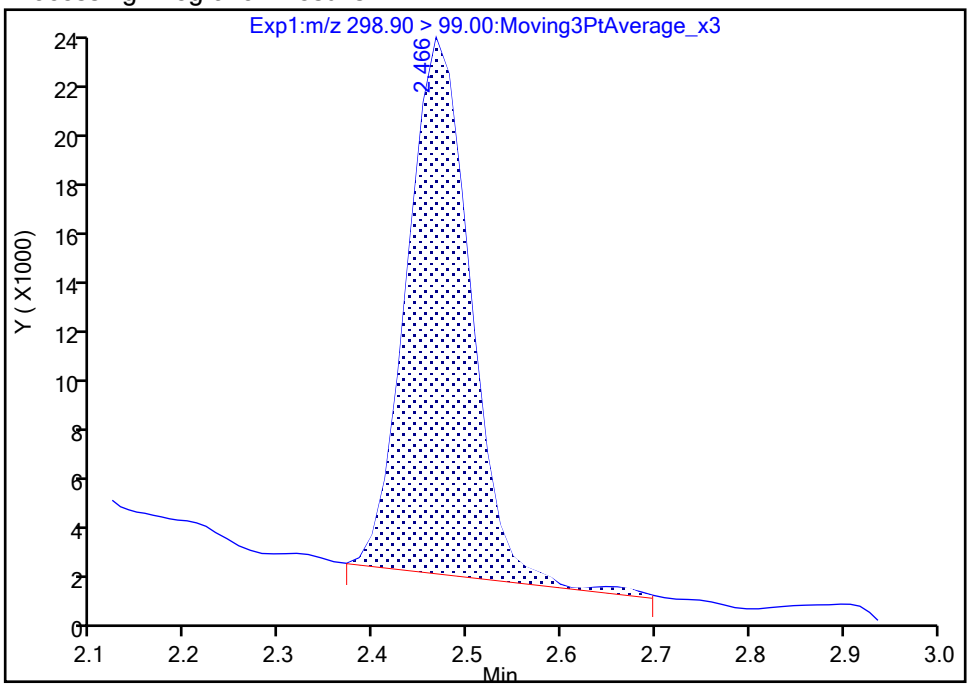
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

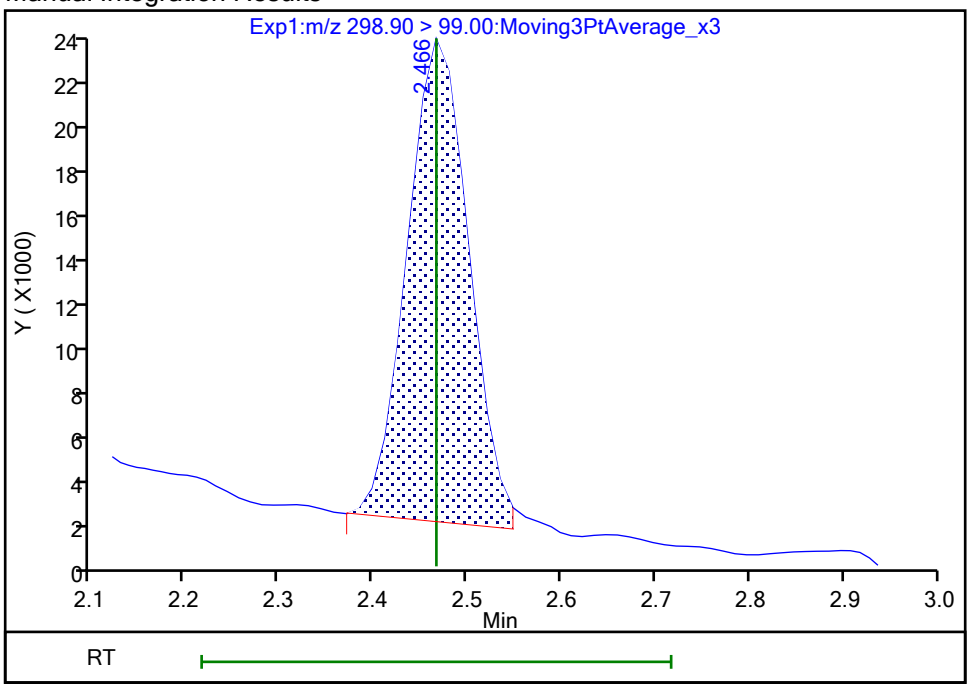
Processing Integration Results

RT: 2.47
Area: 100734
Amount: 0.107601
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 98083
Amount: 0.109548
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

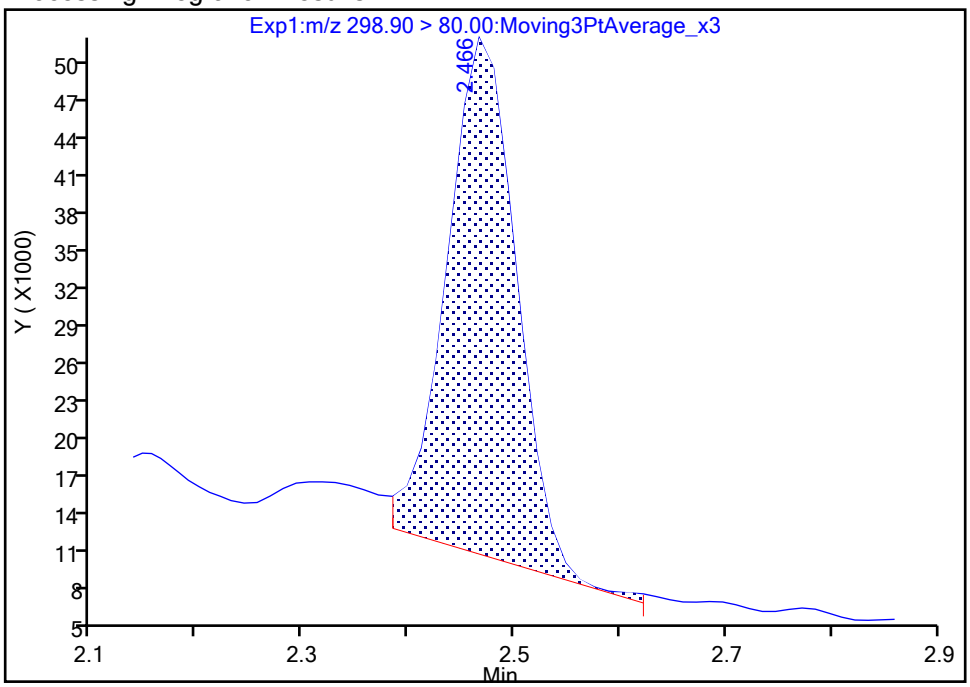
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

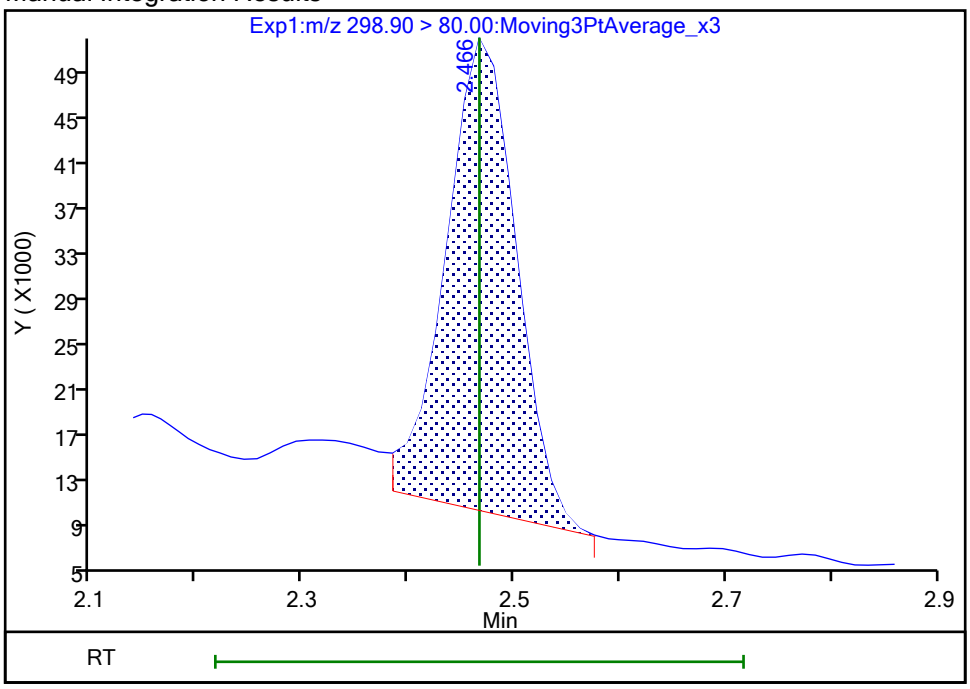
Processing Integration Results

RT: 2.47
Area: 186063
Amount: 0.107601
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 189430
Amount: 0.109548
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

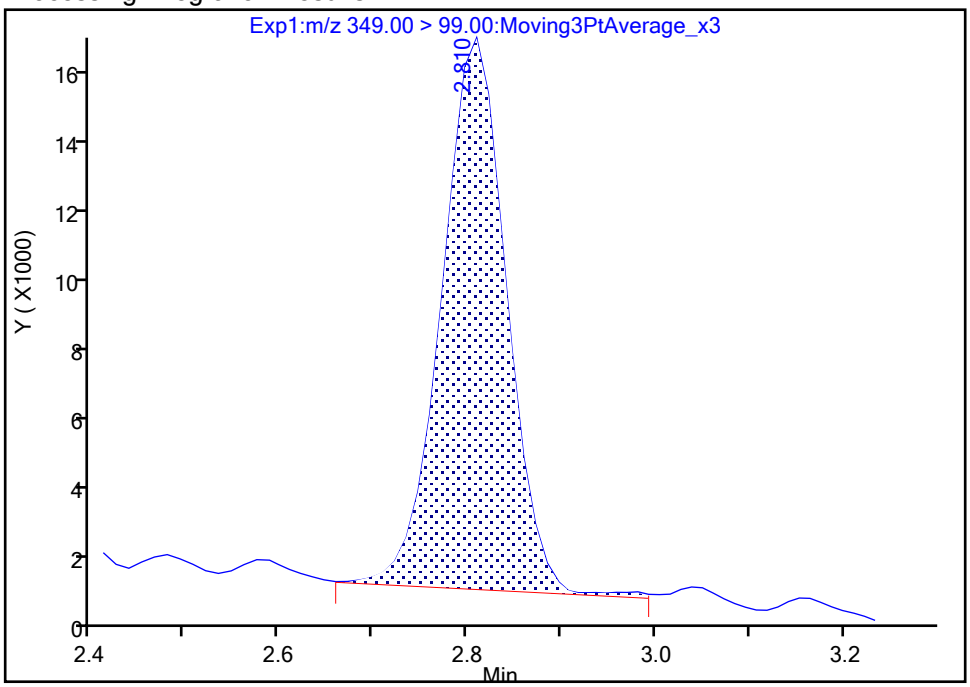
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

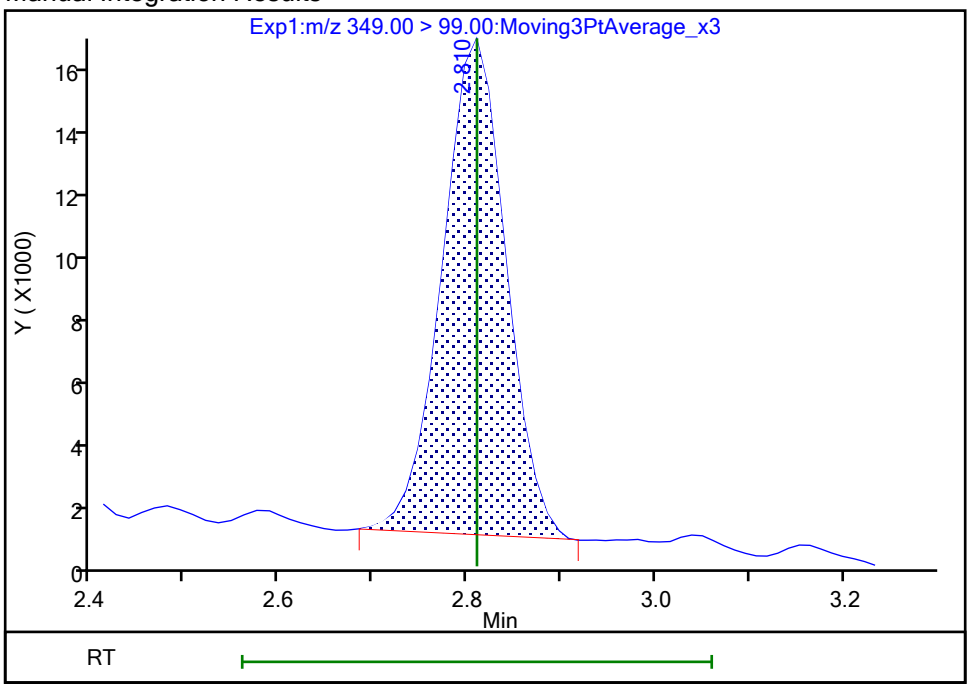
Processing Integration Results

RT: 2.81
Area: 74452
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 72684
Amount: 0.101698
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

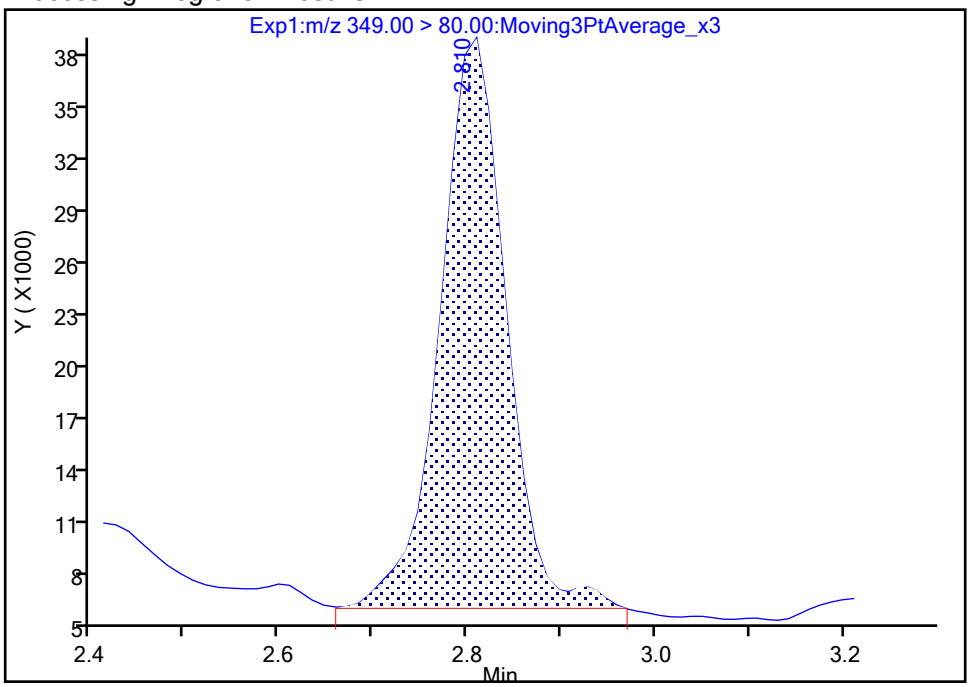
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

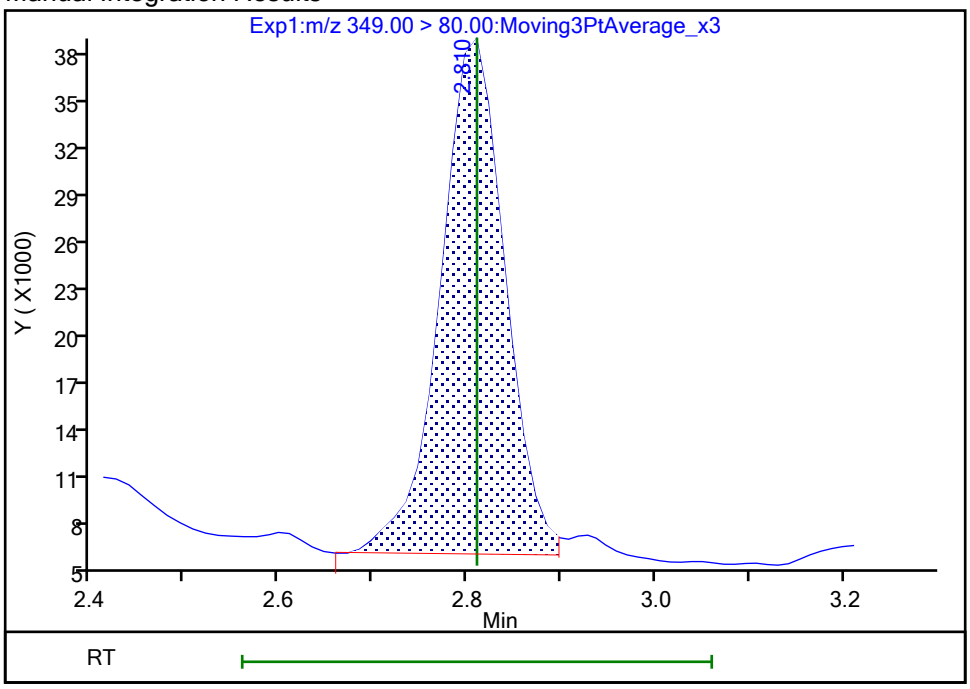
Processing Integration Results

RT: 2.81
Area: 160877
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 157295
Amount: 0.101698
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

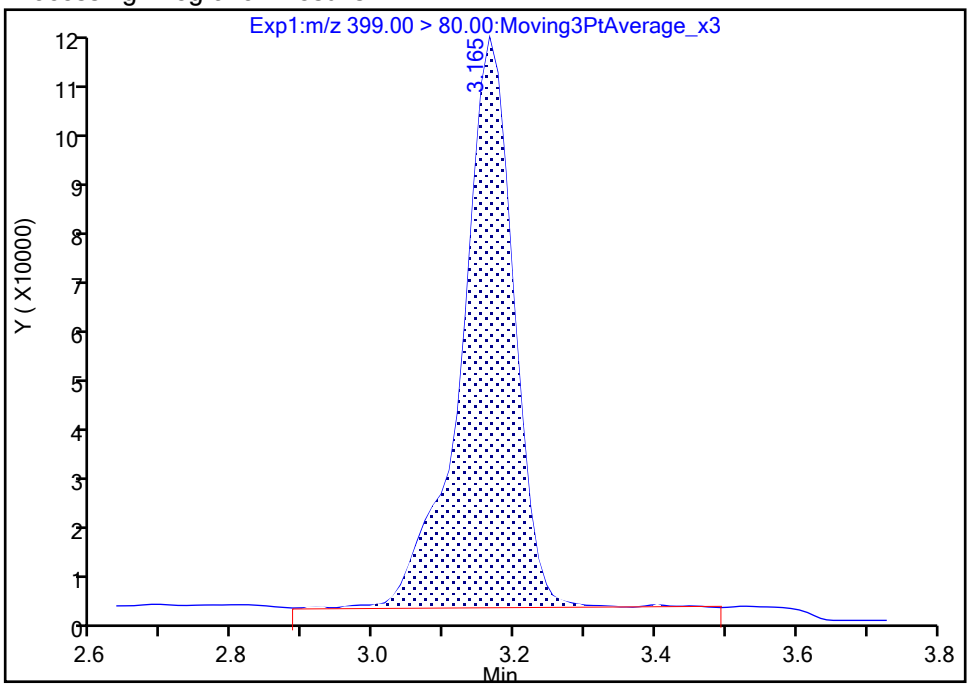
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

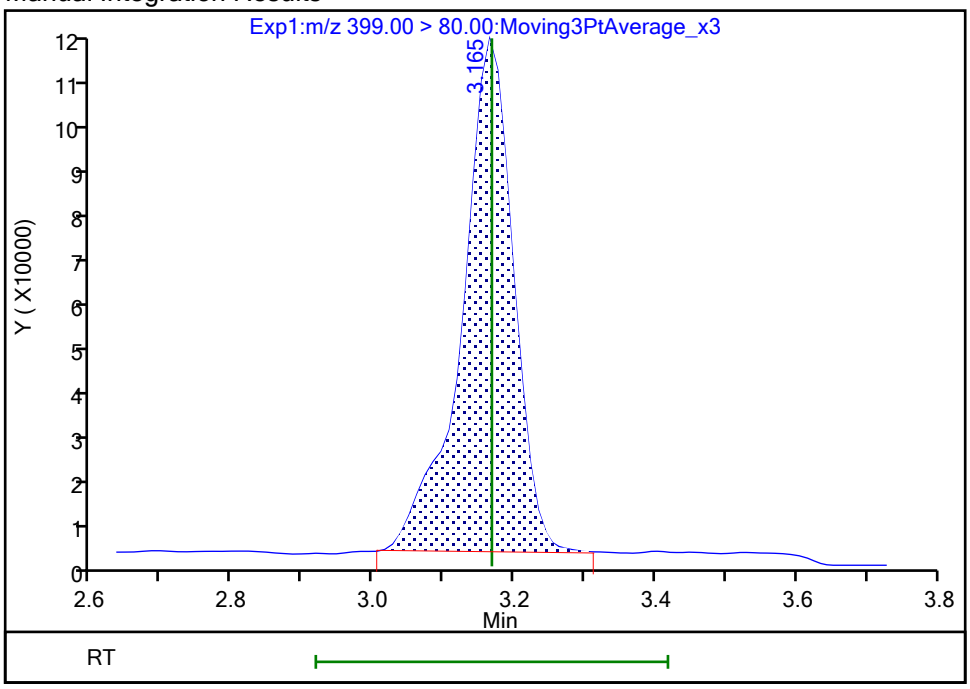
Processing Integration Results

RT: 3.16
Area: 577701
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 563785
Amount: 0.430010
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

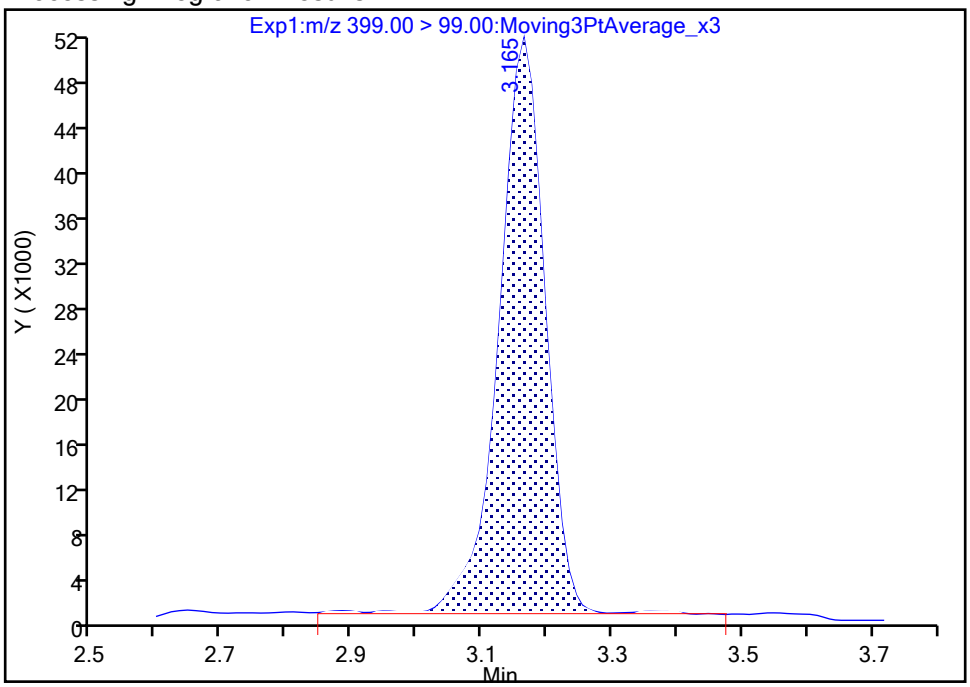
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

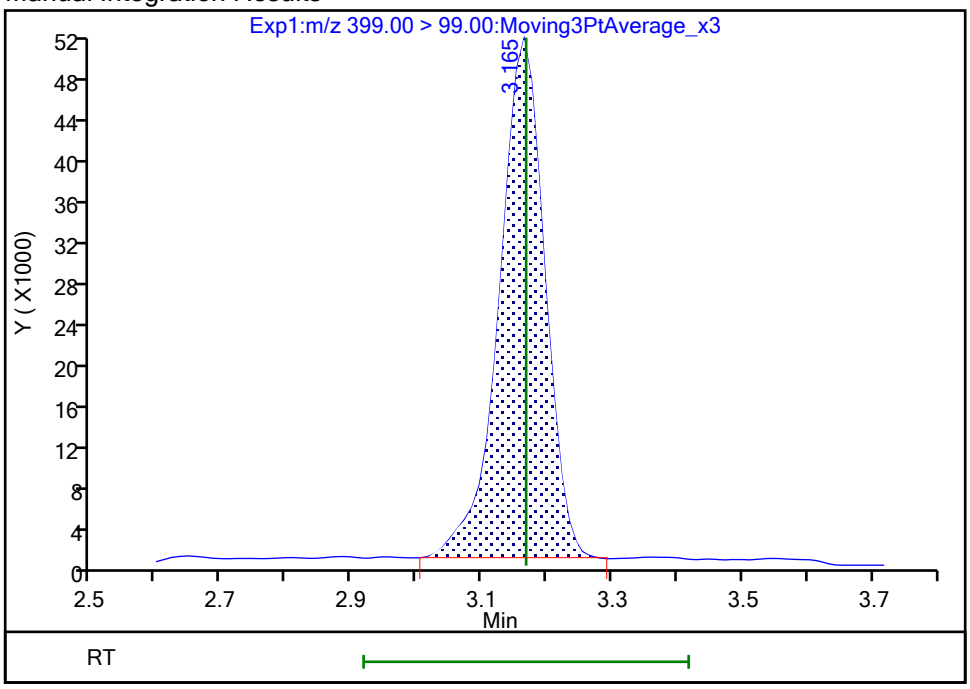
Processing Integration Results

RT: 3.16
Area: 252541
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 248809
Amount: 0.430010
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

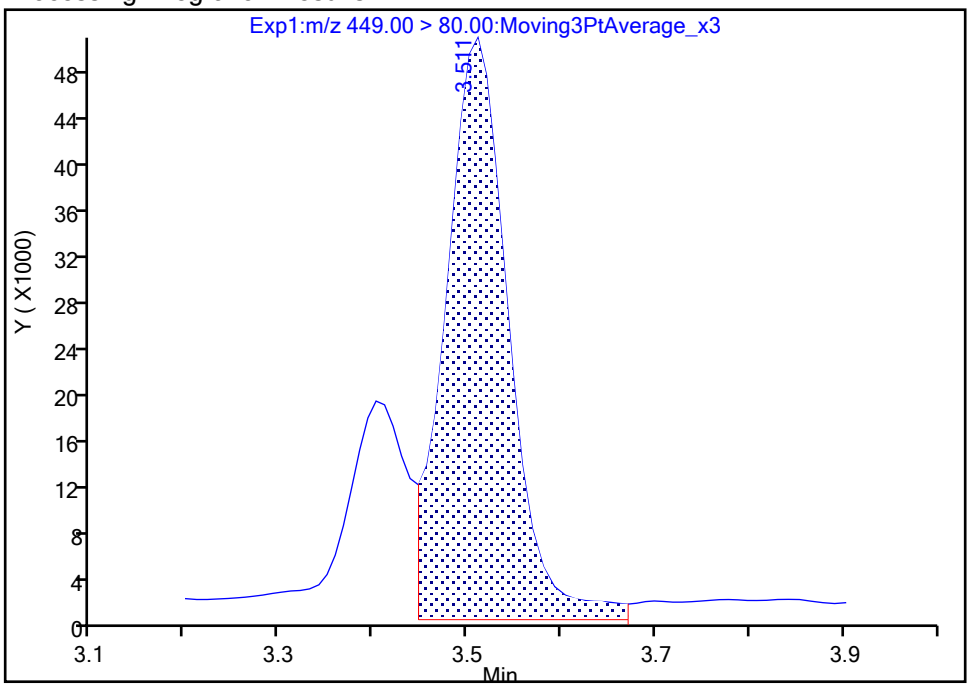
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

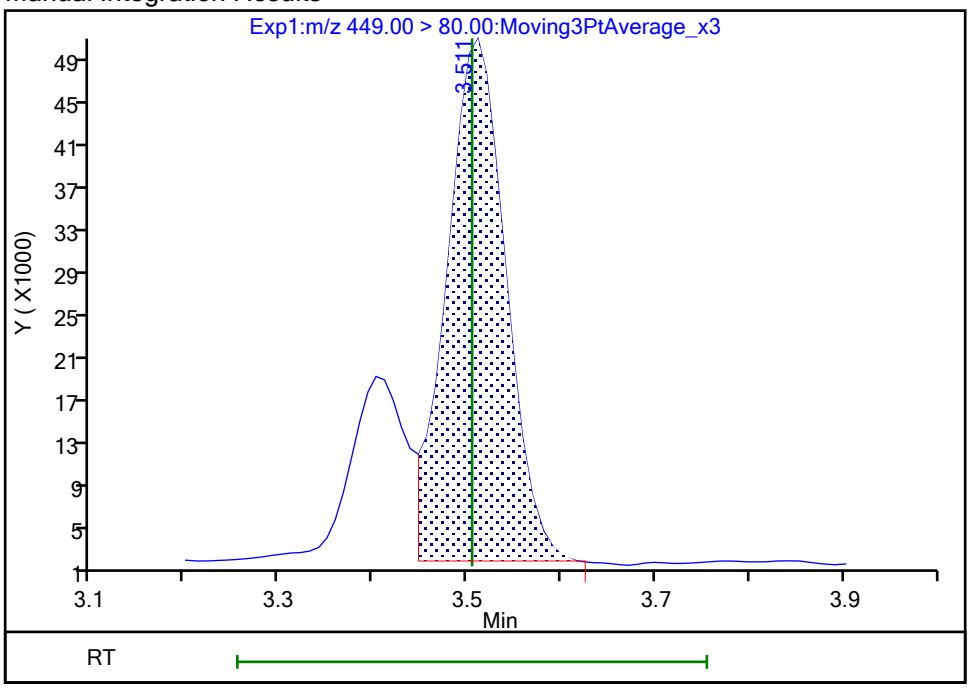
Processing Integration Results

RT: 3.51
Area: 235972
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 212865
Amount: 0.197378
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

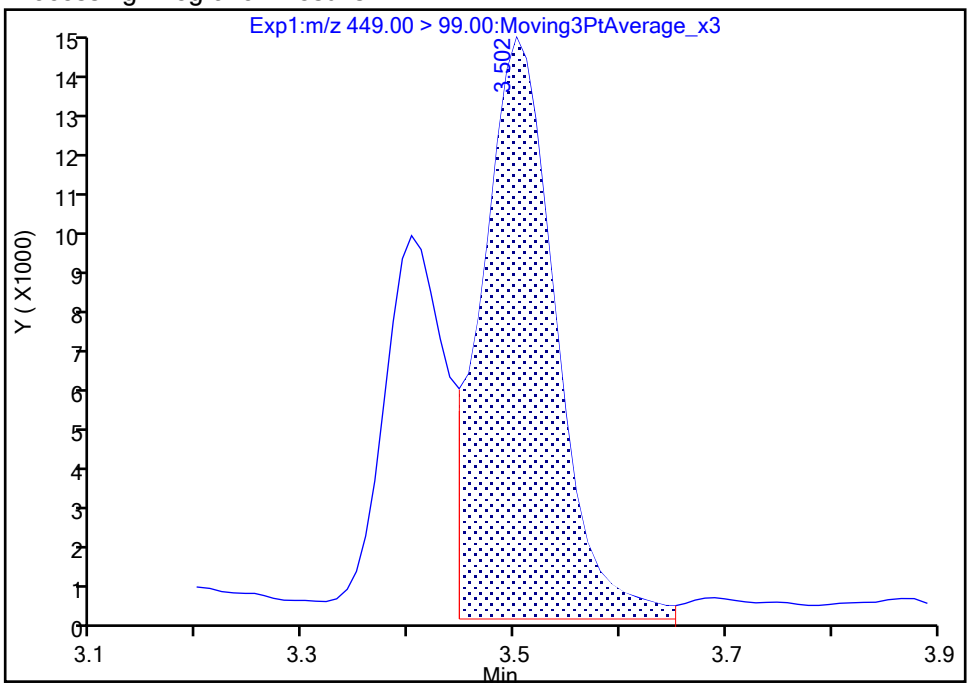
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

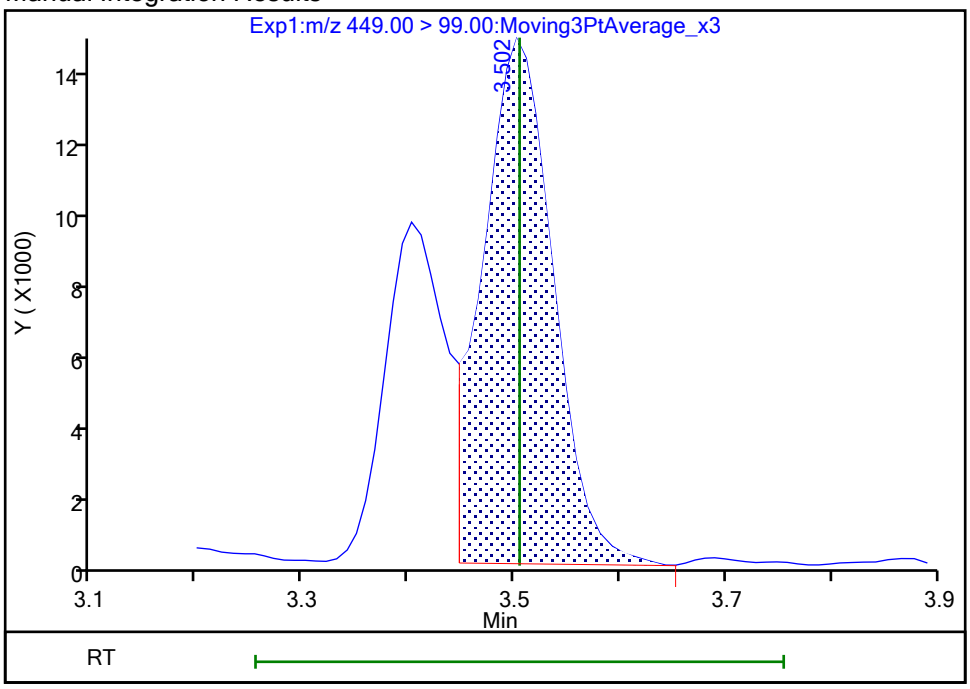
Processing Integration Results

RT: 3.50
Area: 69889
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 65025
Amount: 0.197378
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

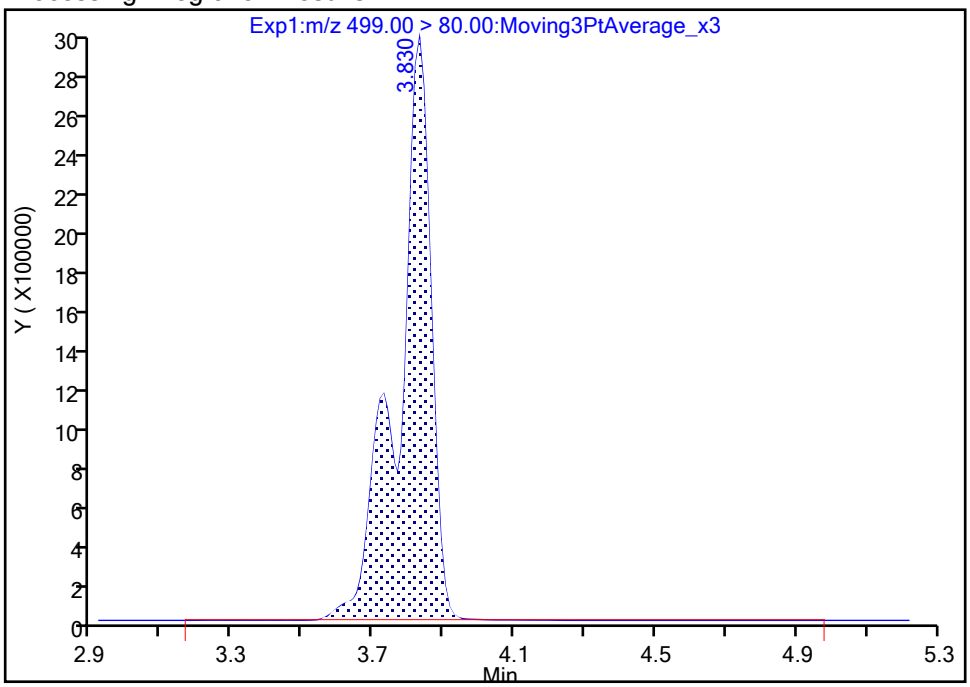
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

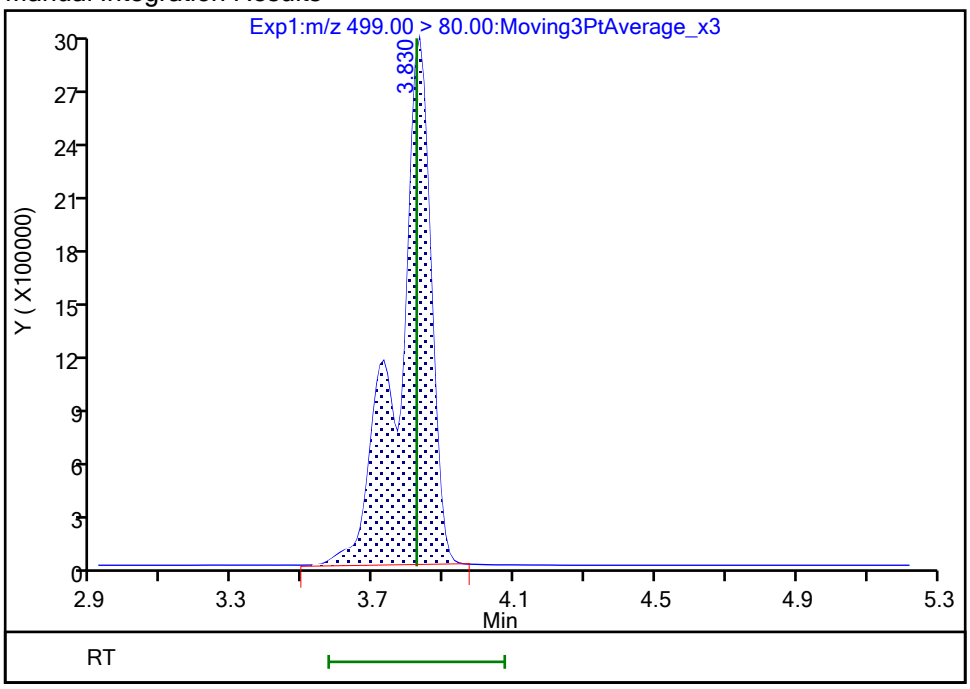
Processing Integration Results

RT: 3.83
Area: 19776575
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 19693665
Amount: 22.625528
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

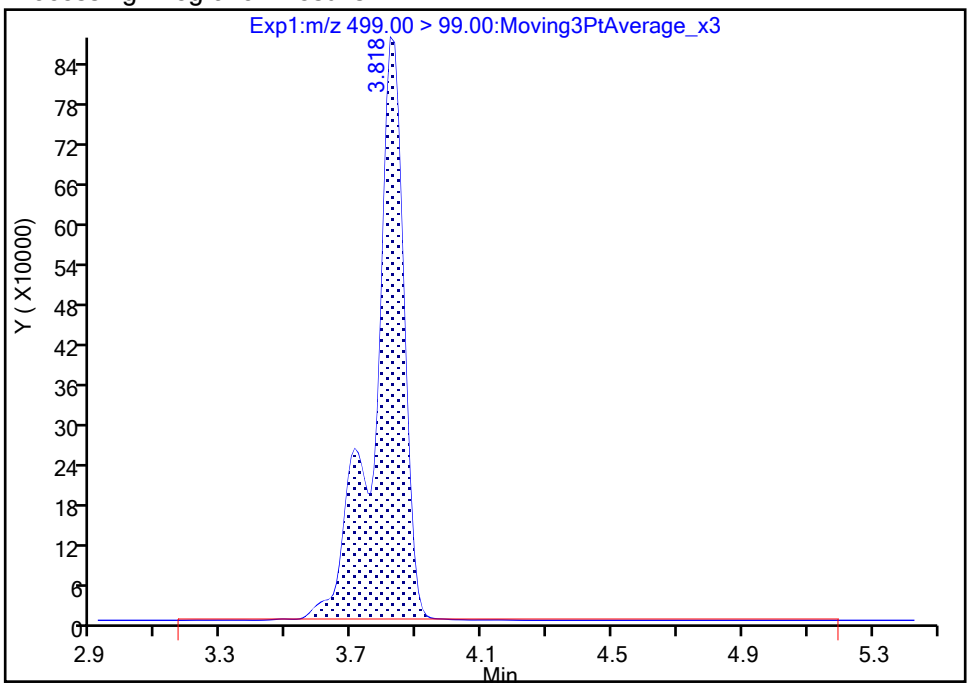
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

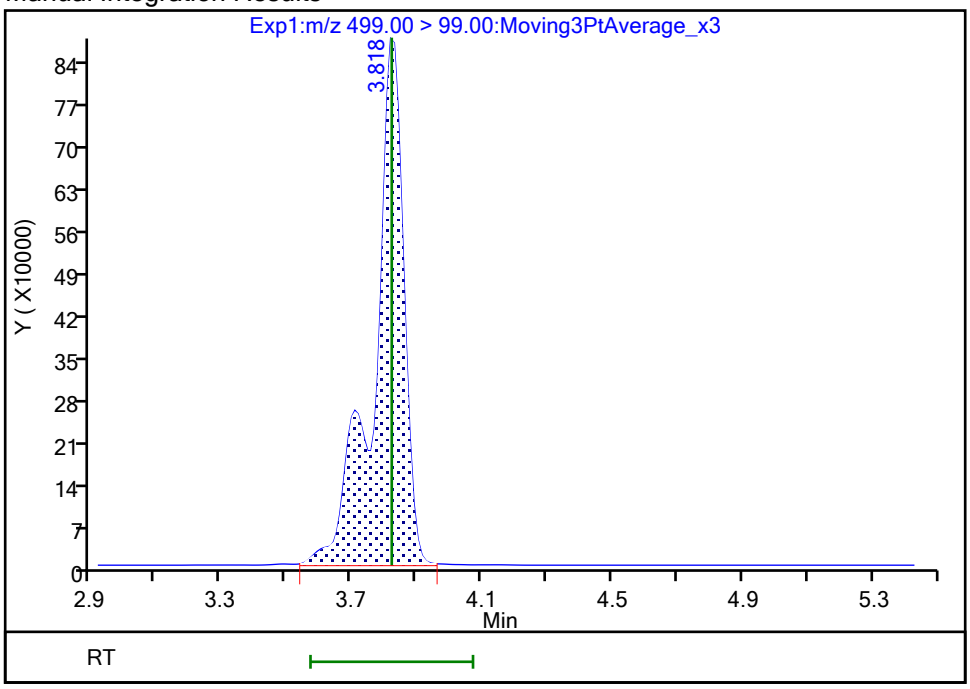
Processing Integration Results

RT: 3.82
Area: 5623674
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 5589423
Amount: 22.625528
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:51:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

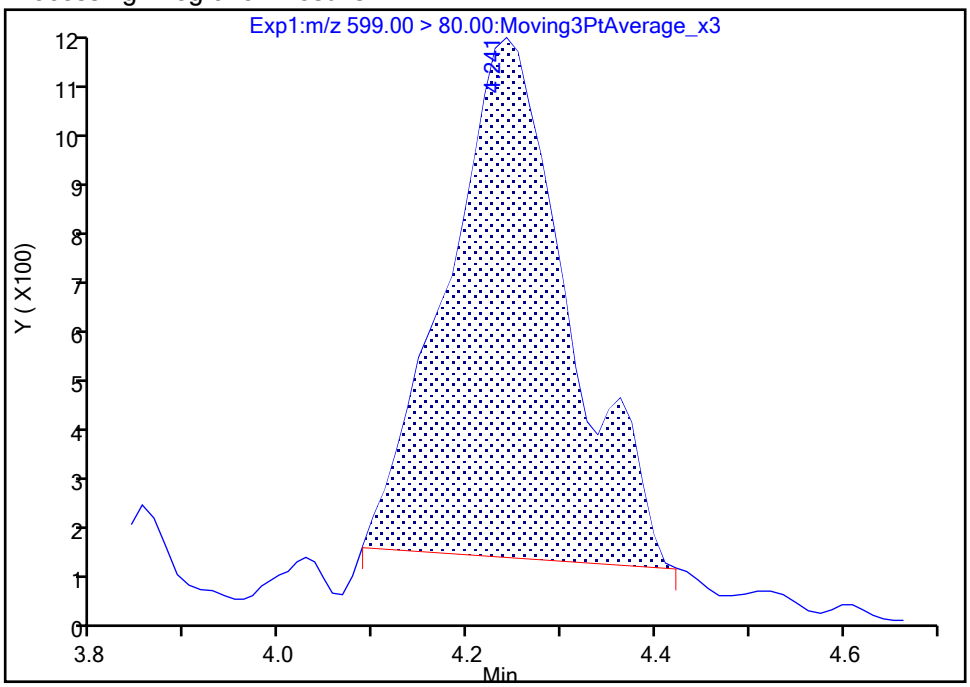
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

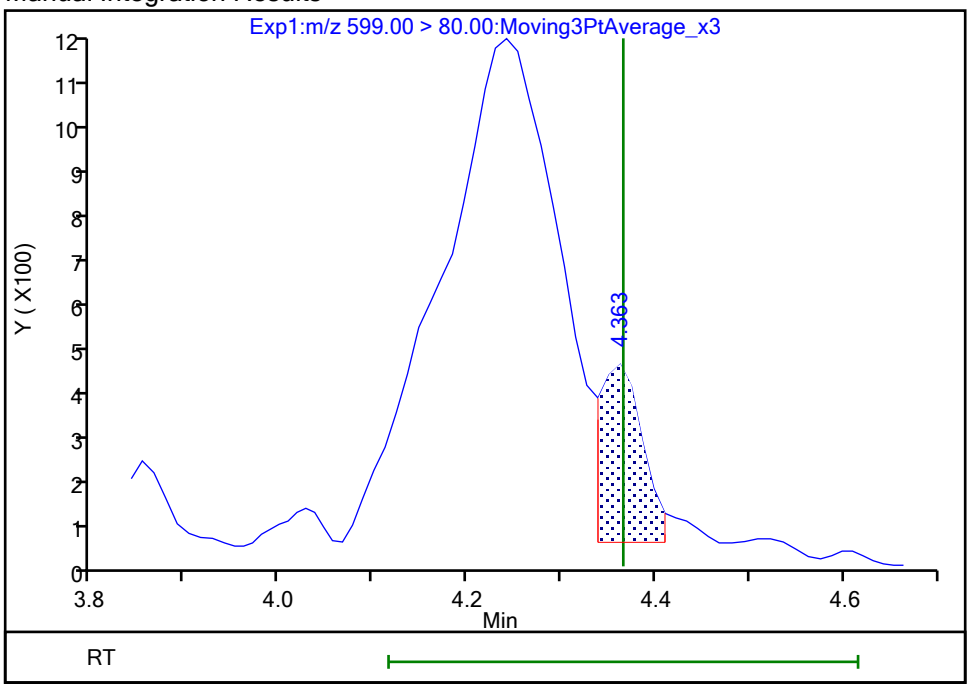
Processing Integration Results

RT: 4.24
Area: 9212
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 1162
Amount: 0.002280
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

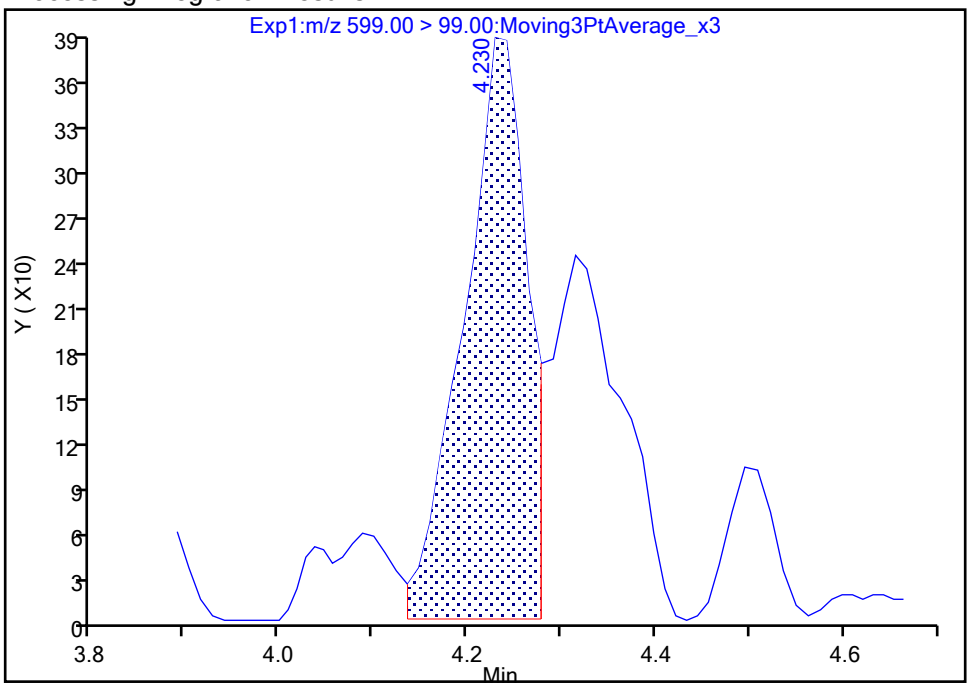
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

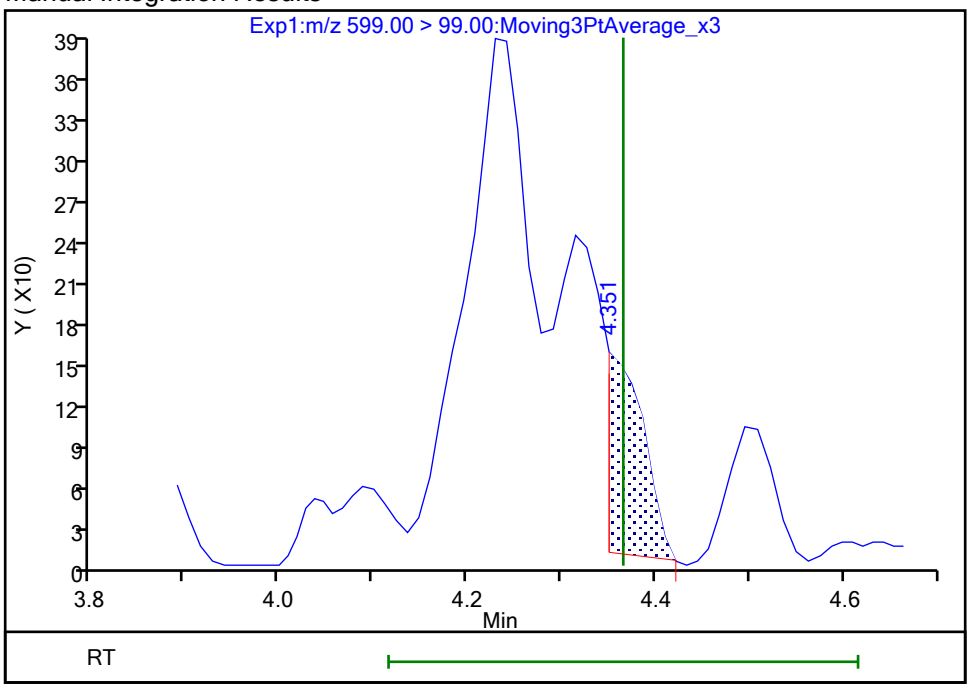
Processing Integration Results

RT: 4.23
Area: 1790
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 366
Amount: 0.002280
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

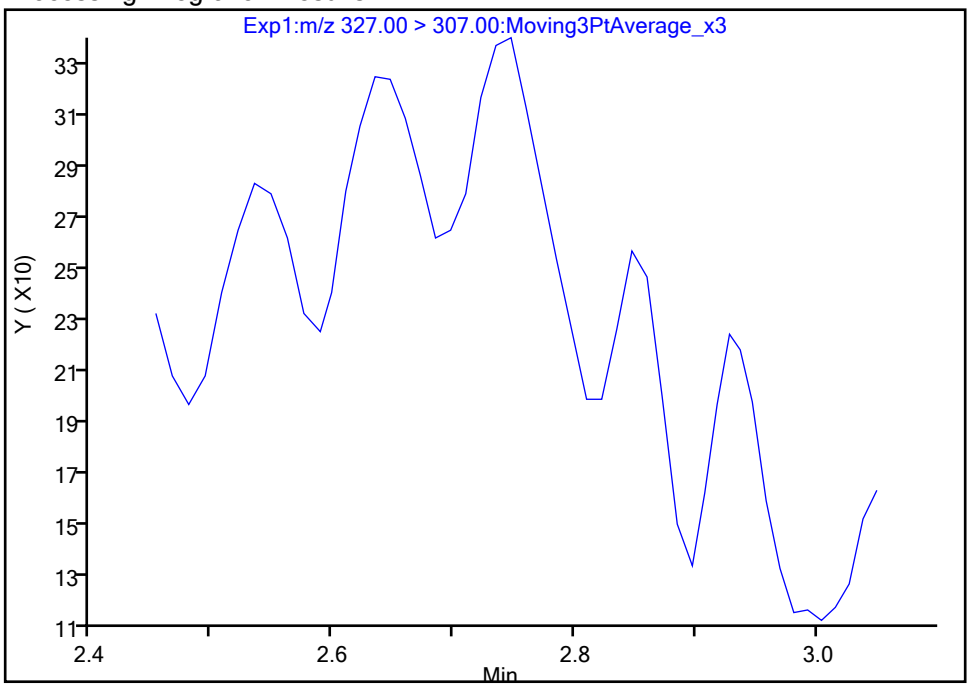
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

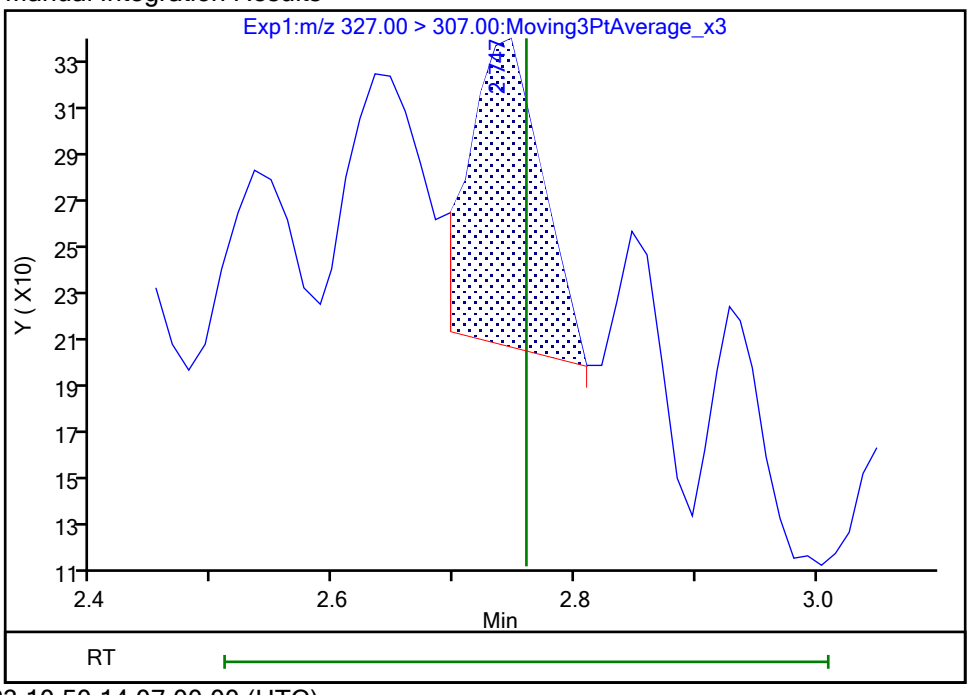
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 537
Amount: 0.000758
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:50:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

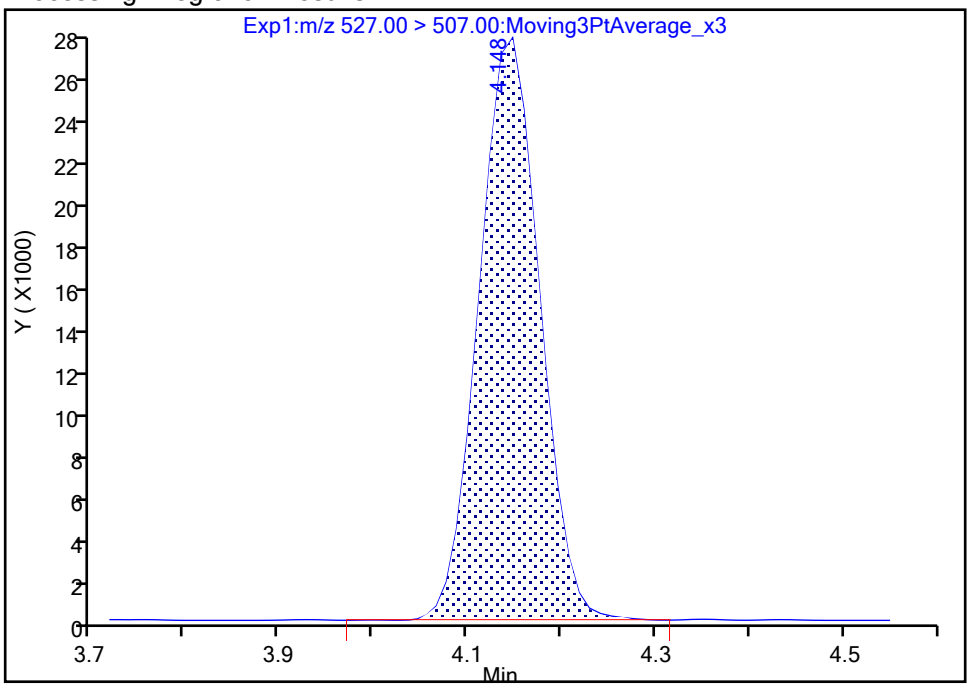
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

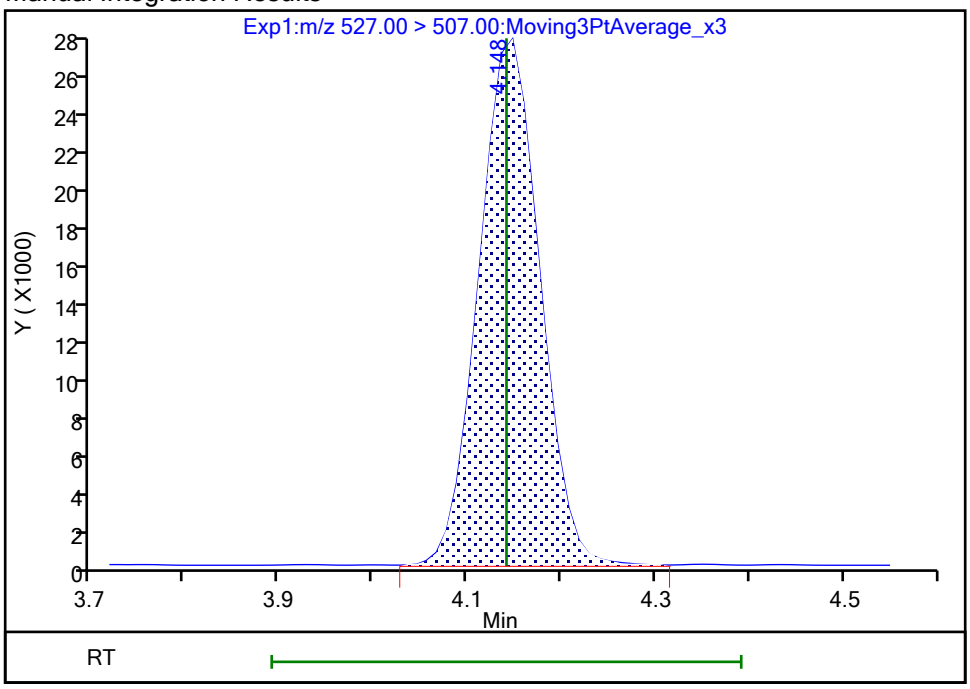
Processing Integration Results

RT: 4.15
Area: 124344
Amount: 0.209001
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 124301
Amount: 0.208928
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

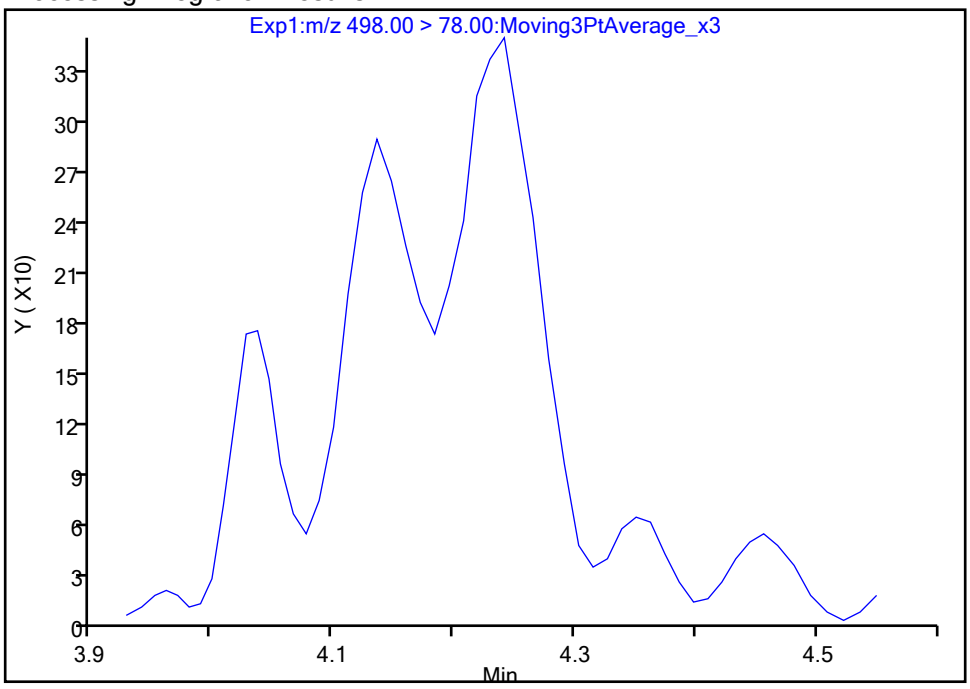
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

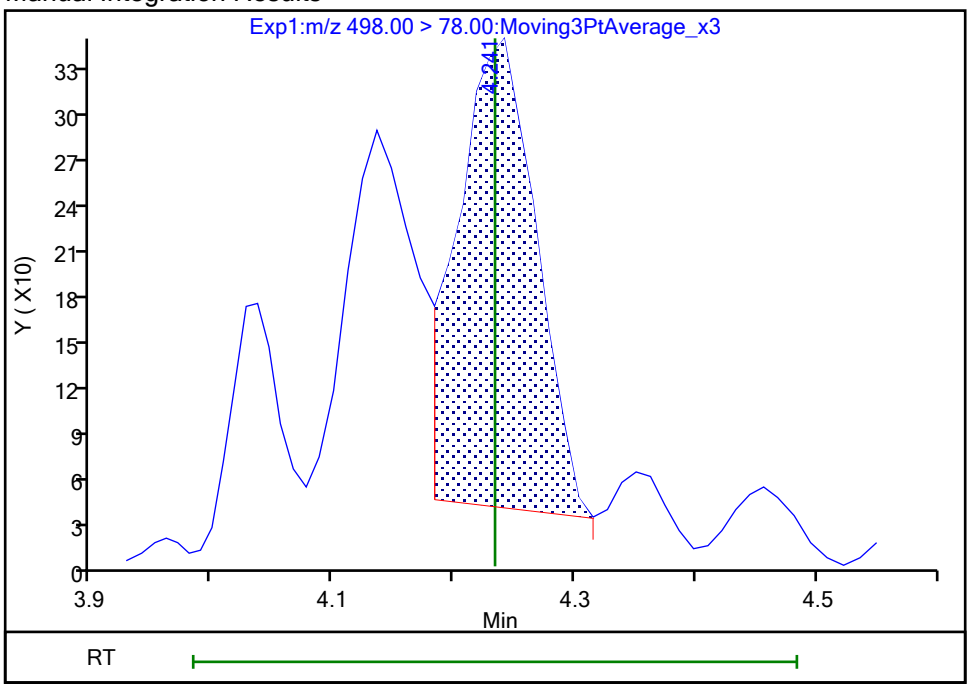
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1385
Amount: 0.001150
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

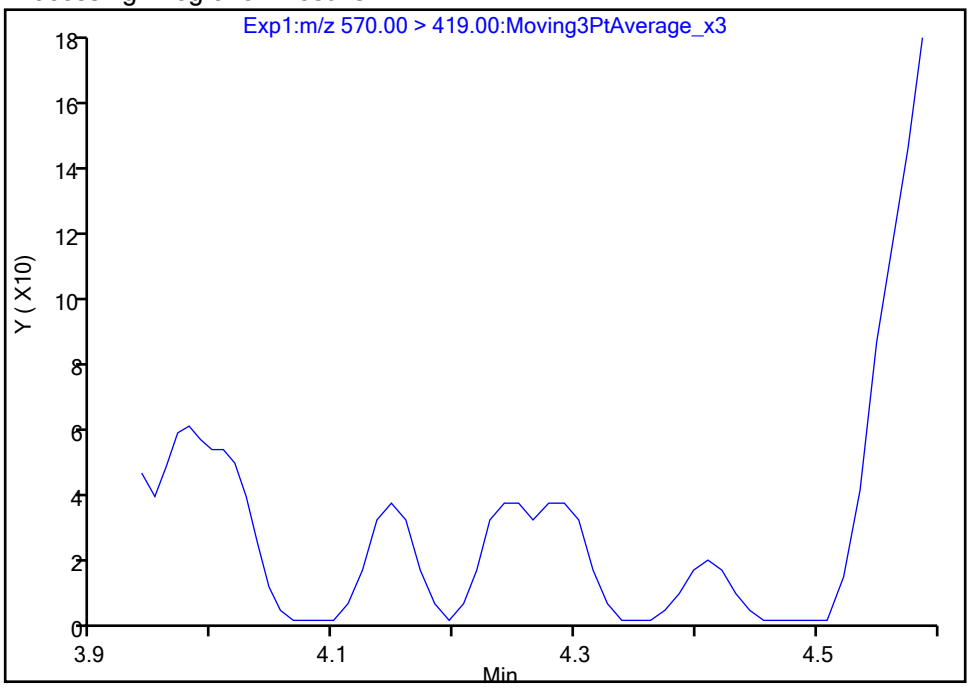
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

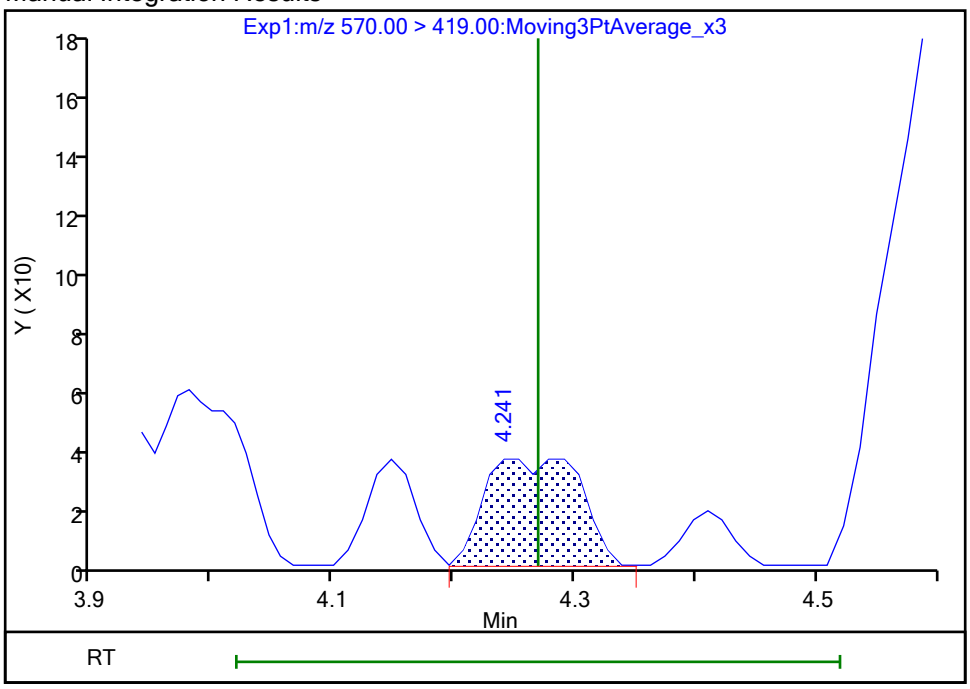
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 195
Amount: 0.000518
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

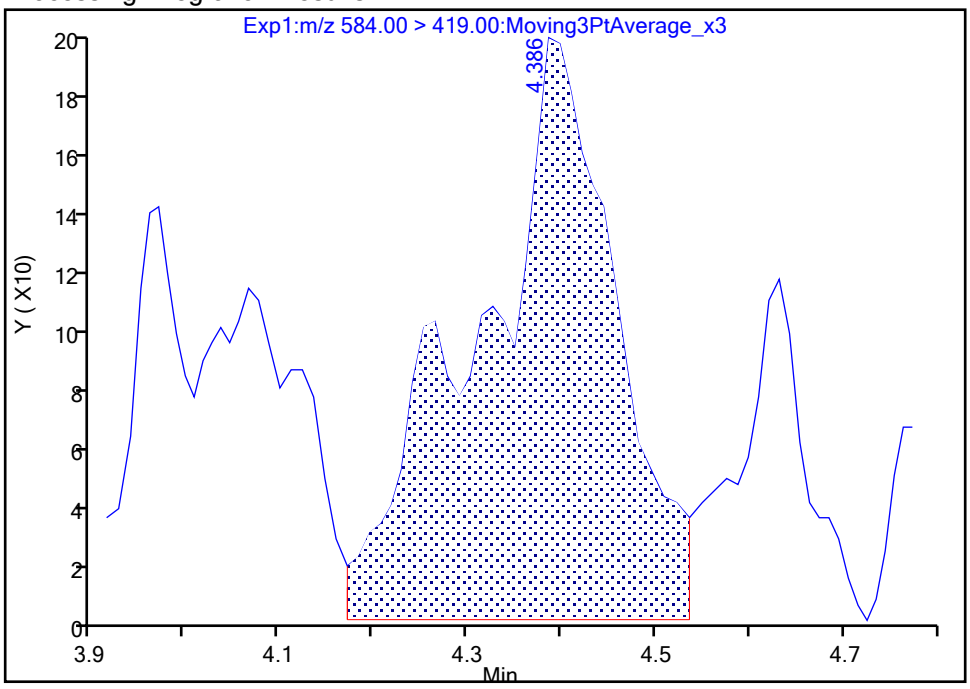
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

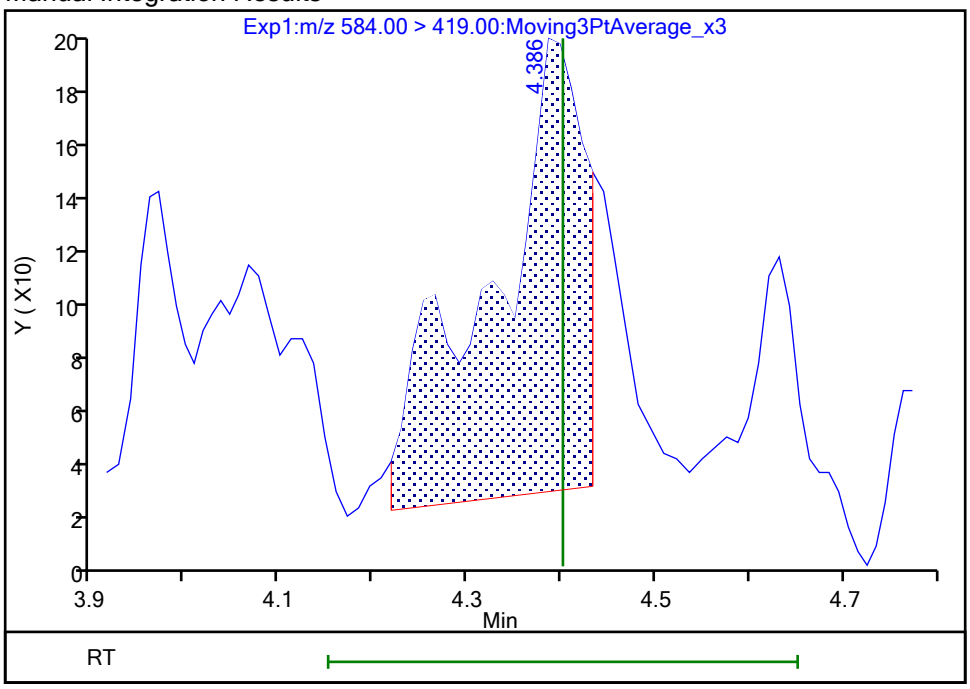
Processing Integration Results

RT: 4.39
Area: 1988
Amount: 0.004781
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 1137
Amount: 0.002735
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:53:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

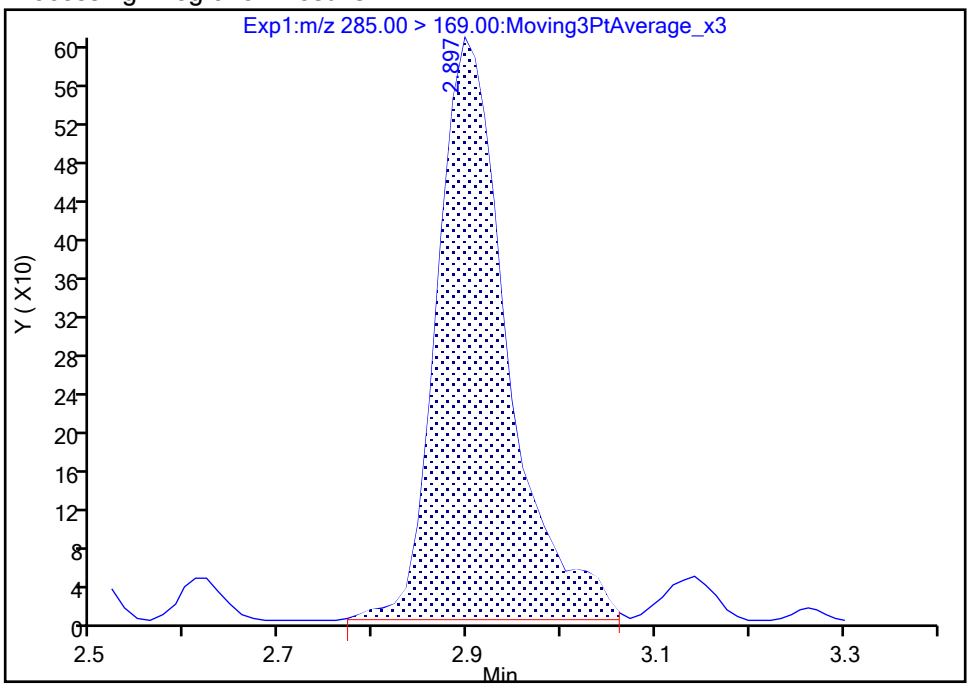
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

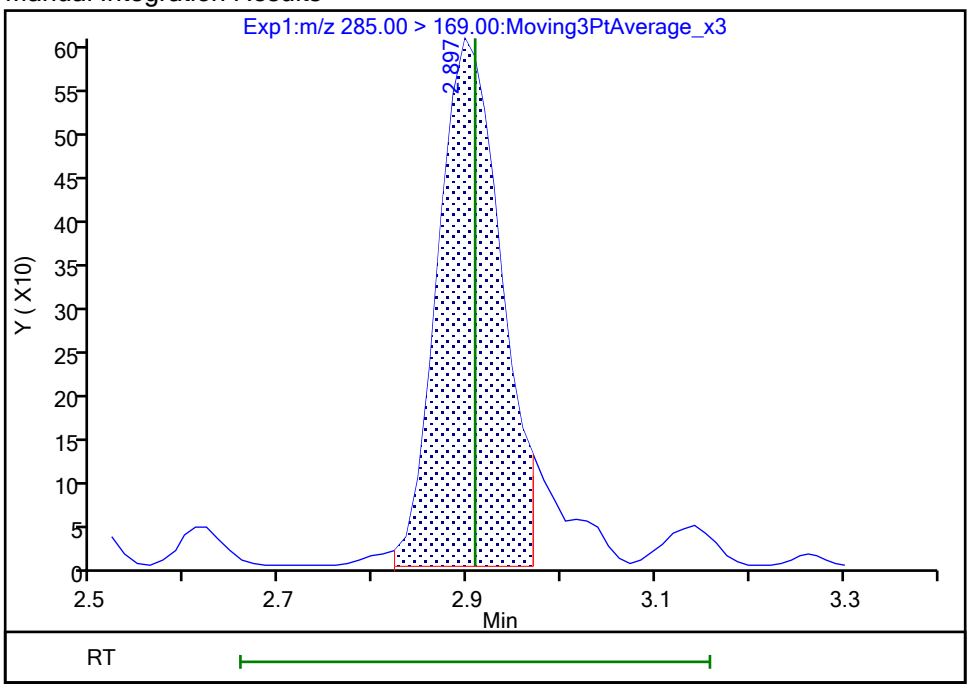
Processing Integration Results

RT: 2.90
Area: 3163
Amount: 0.013975
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 2833
Amount: 0.012517
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:16:08 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

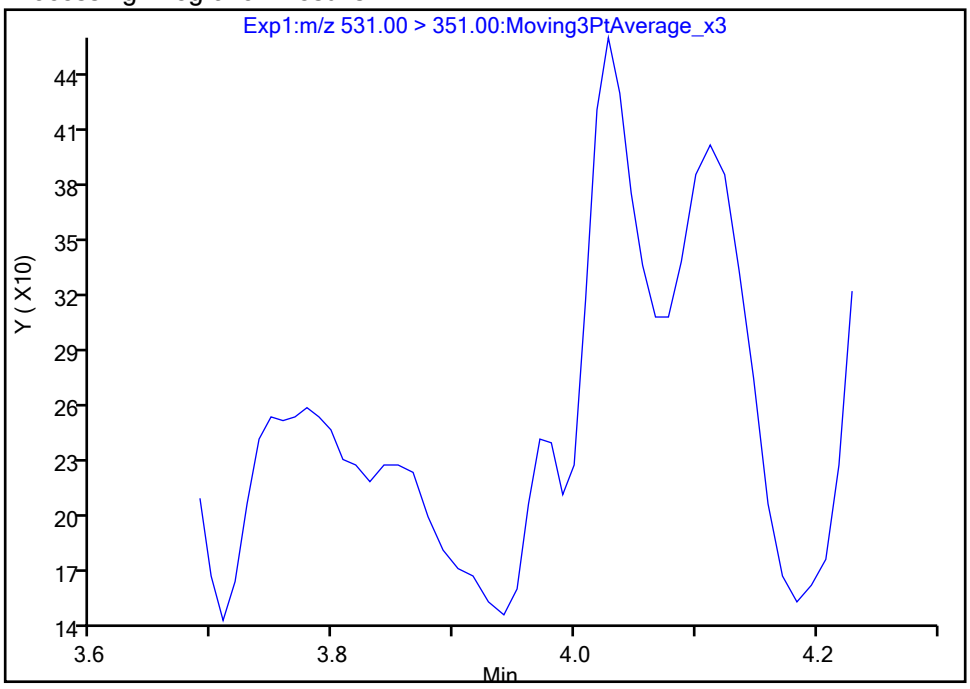
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

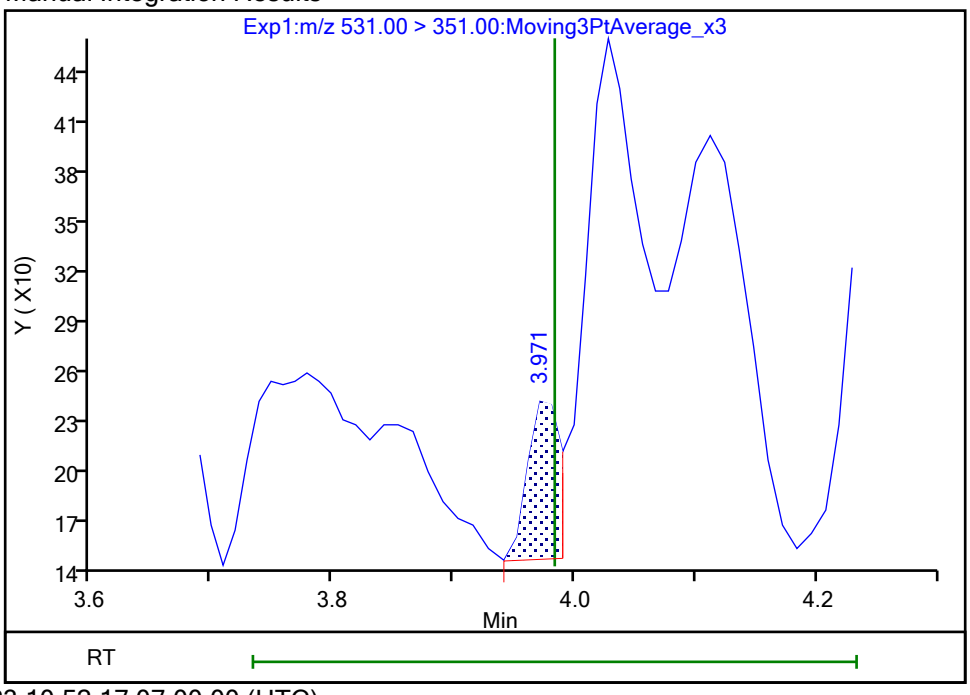
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 166
Amount: 0.000062
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:52:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

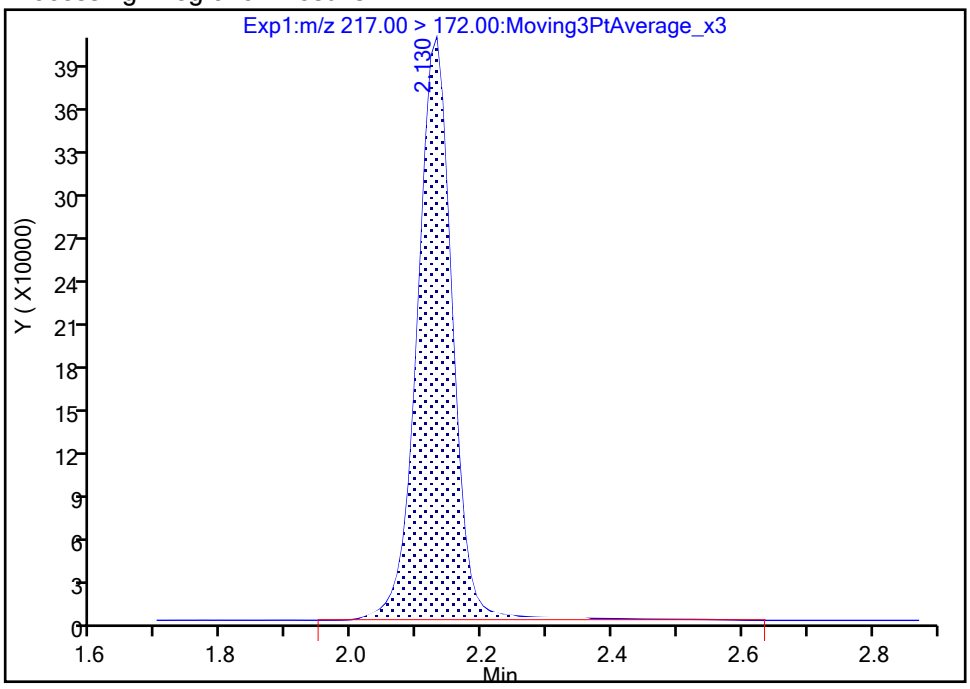
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

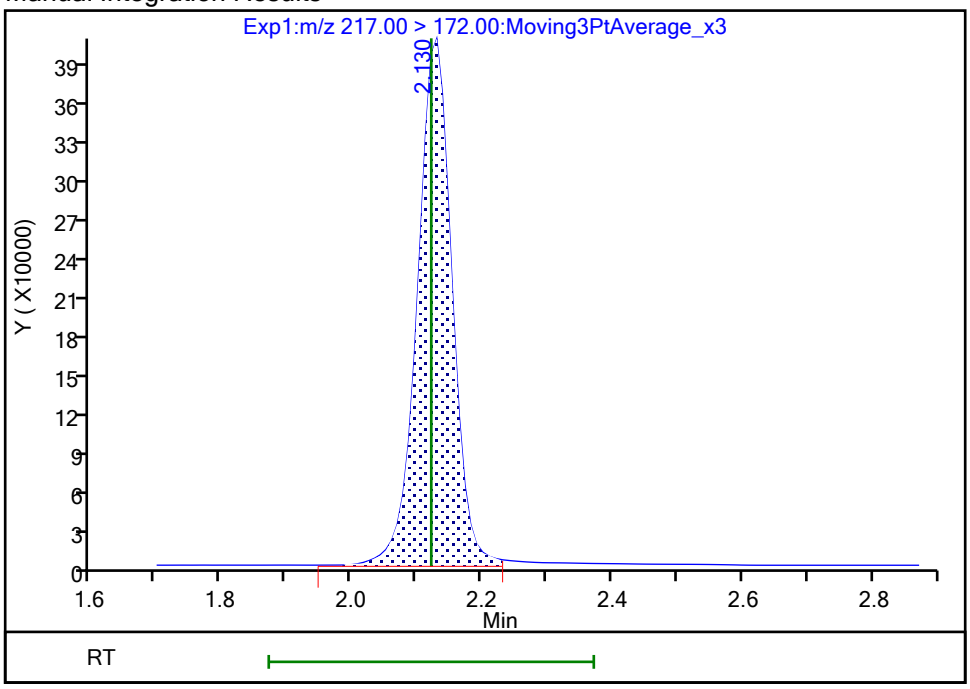
Processing Integration Results

RT: 2.13
Area: 1506881
Amount: 0.944640
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1478343
Amount: 0.926750
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

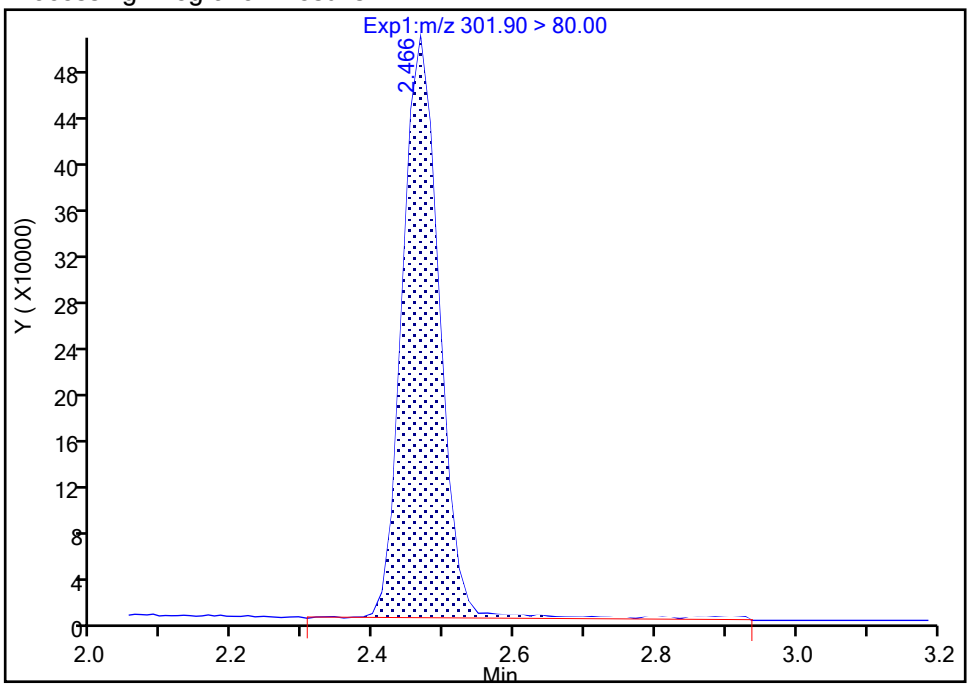
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

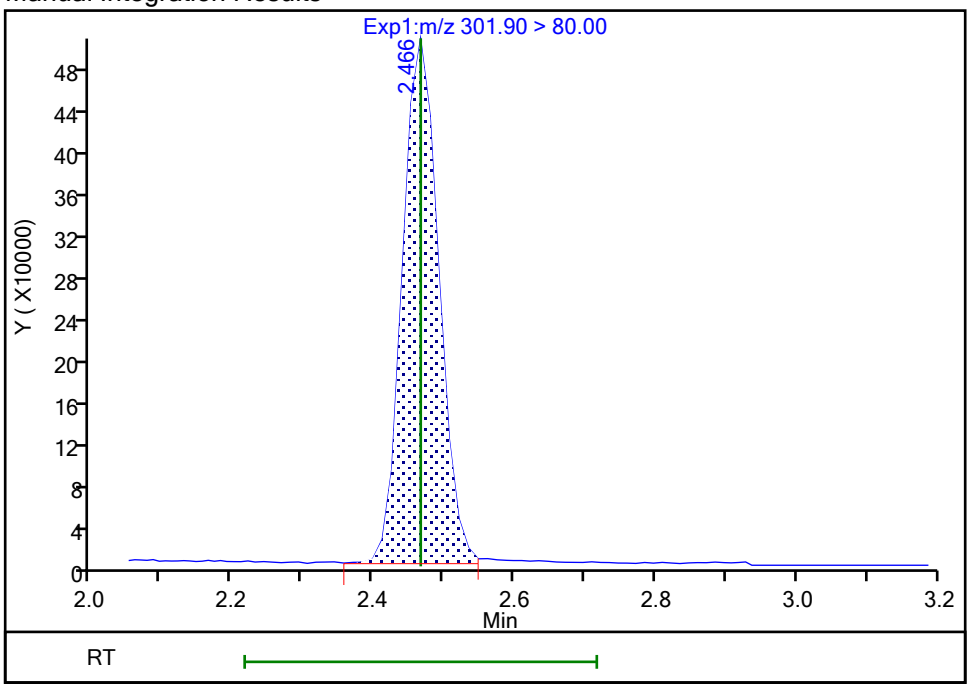
Processing Integration Results

RT: 2.47
Area: 1872914
Amount: 1.118090
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1799783
Amount: 1.074432
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

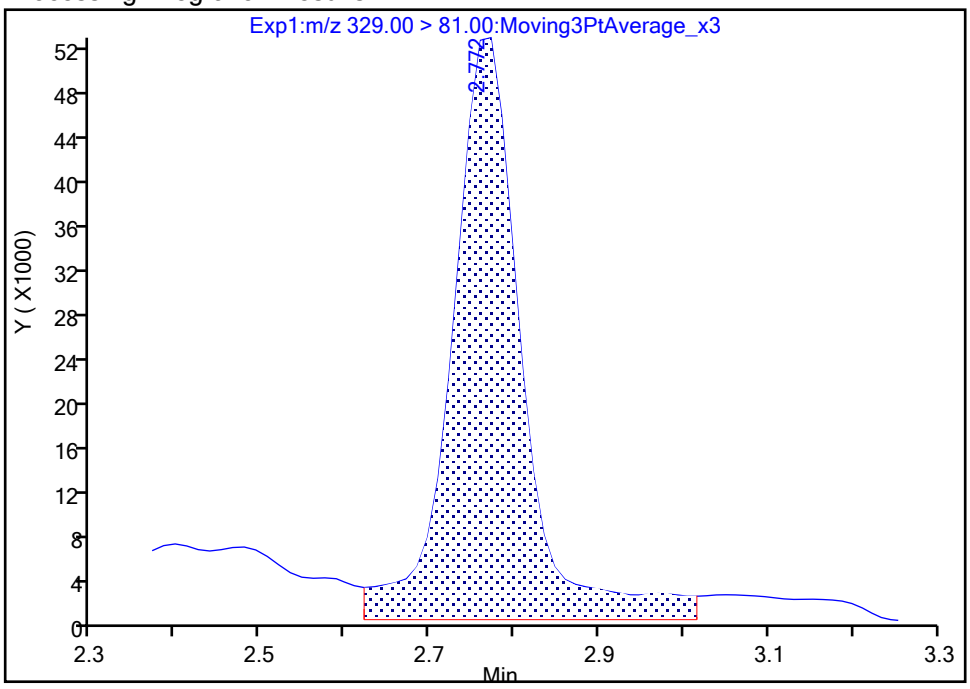
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E24.d				
Injection Date:	24-Oct-2023 09:13:54	Instrument ID:	LC812		
Lims ID:	460-290517-B-5-A	Lab Sample ID:	200-290517-5		
Client ID:	MW3-101623-1046-9				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

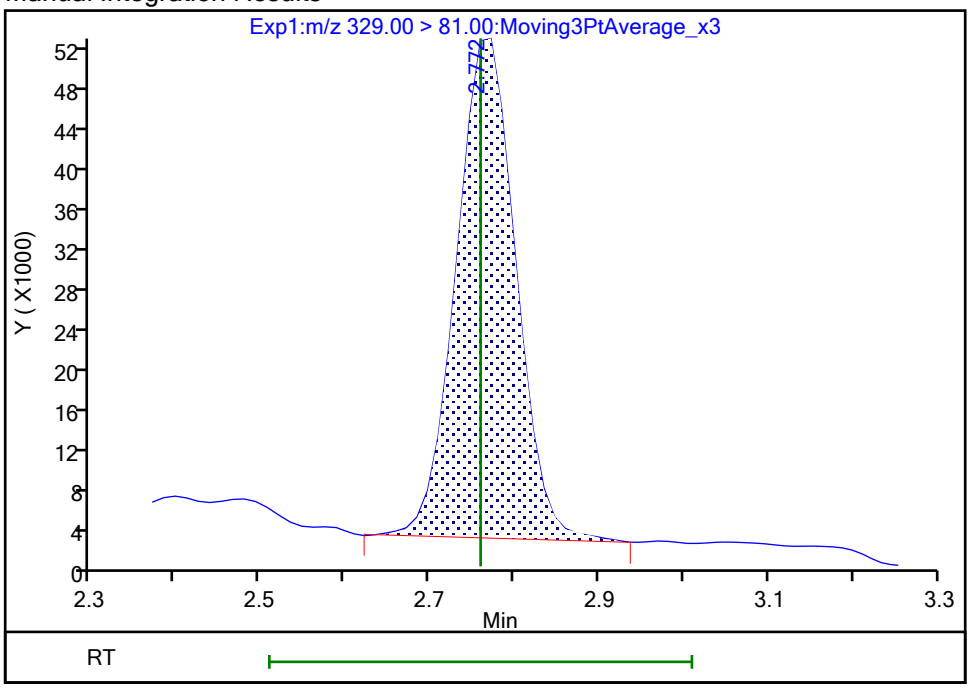
Processing Integration Results

RT: 2.77
Area: 303686
Amount: 1.567655
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 243576
Amount: 1.257362
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:49:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW4-101623-1156-11.5 | Lab Sample ID: 460-290517-6

Matrix: Water | Lab File ID: PA231023E25.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 11:56

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 293.4(mL) | Date Analyzed: 10/24/2023 09:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	37.1		4.26	1.02
2706-90-3	Perfluoropentanoic acid	35.0		1.70	0.58
307-24-4	Perfluorohexanoic acid	39.5		1.70	0.55
375-85-9	Perfluoroheptanoic acid	13.6		1.70	0.46
335-67-1	Perfluorooctanoic acid	55.9		1.70	0.65
375-95-1	Perfluorononanoic acid	7.12		1.70	0.42
335-76-2	Perfluorodecanoic acid	1.55	J	1.70	0.39
2058-94-8	Perfluoroundecanoic acid	1.70	U	1.70	0.47
307-55-1	Perfluorododecanoic acid	1.70	U	1.70	0.42
72629-94-8	Perfluorotridecanoic acid	1.70	U	1.70	0.41
376-06-7	Perfluorotetradecanoic acid	1.70	U	1.70	0.55
375-73-5	Perfluorobutanesulfonic acid	11.7		1.70	0.53
2706-91-4	Perfluoropentanesulfonic acid	11.6		1.70	0.43
355-46-4	Perfluorohexanesulfonic acid	32.9	I	1.70	0.47
375-92-8	Perfluoroheptanesulfonic acid	7.22		1.70	0.35
1763-23-1	Perfluorooctanesulfonic acid	748		1.70	0.72
68259-12-1	Perfluorononanesulfonic acid	0.43	J	1.70	0.34
335-77-3	Perfluorodecanesulfonic acid	1.70	U	1.70	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	7.35		4.26	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.66
754-91-6	Perfluorooctanesulfonamide	1.70	U	1.70	0.78
2355-31-9	NMeFOSAA	4.26	U	4.26	1.62
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.26	U	4.26	1.36
13252-13-6	HFPODA	3.41	U	3.41	0.94
919005-14-4	DONA	1.70	U	1.70	0.36
756426-58-1	9Cl-PF3ONS	1.70	U	1.70	0.27
763051-92-9	11Cl-PF3OUdS	1.70	U	1.70	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW4-101623-1156-11.5 Lab Sample ID: 460-290517-6

Matrix: Water Lab File ID: PA231023E25.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 11:56

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 293.4(mL) Date Analyzed: 10/24/2023 09:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	51		50-150
STL01893	13C5 PFPeA	77		50-150
STL01892	13C4 PFHpA	102		50-150
STL02116	13C2 PFTeDA	104		50-150
STL02337	13C3 PFBS	111		50-150
STL01056	13C8 FOSA	79		50-150
STL02118	d3-NMeFOSAA	127		50-150
STL02117	d5-NEtFOSAA	134		50-150
STL02395	M2-4:2 FTS	146		50-150
STL02279	M2-6:2 FTS	145		50-150
STL02280	M2-8:2 FTS	157	*5+	50-150
STL02255	13C3 HFPO-DA	95		50-150
STL00994	18O2 PFHxS	108		50-150
STL00993	13C2 PFHxA	94		50-150
STL00991	13C4 PFOS	111		50-150
STL00998	13C2 PFDoA	109		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	116		50-150
STL00990	13C4 PFOA	97		50-150
STL00997	13C2 PFUnA	126		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d
Lims ID: 460-290517-B-6-A
Client ID: MW4-101623-1156-11.5
Sample Type: Client
Inject. Date: 24-Oct-2023 09:22:05 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-6-A
Misc. Info.: 200-0057513-025 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:59:56
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.121	2.122	-0.001	0.604	778409	0.6336		50.7	475	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.113	2.130	-0.017	0.996	636492	1.09			5.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	922061	0.9670		77.4	64.5	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	817150	1.03			0.5	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1662486	1.29		111	4890	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	546593	0.3422	Target=2.06		1.0	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	298142		1.83(1.03-3.09)		5.0	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.757	2.760	-0.003	1.000	4148	0.005600			1.1	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.786	254666	1.71		146	5.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.794	2.797	-0.003	0.796	1136043	1.17		93.7	554	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.794	2.797	-0.003	1.000	1160391	1.16	Target=14.12		2.3	M
313.00 > 119.00	2.794	2.797	-0.003	1.000	82096		14.13(7.06-21.17)		6.4	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.794	2.810	-0.016	0.884	444991	0.3401	Target=2.72		3.1	M
349.00 > 99.00	2.794	2.810	-0.016	0.884	286914		1.55(1.36-4.09)		12.0	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.895	2.908	-0.013	0.996	4360	0.0243			11.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.828	223554	1.19		95.2	1215	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.168	-0.006	0.901	1184816	1.28		108	1951	
8 Perfluorohexanesulfonic acid										RM
399.00 > 80.00	3.150	3.168	-0.018	0.996	1070641	0.9653	Target=3.32		15.0	RM
399.00 > 99.00	3.150	3.168	-0.018	0.996	712465		1.50(1.66-4.98)		78.4	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.168	-0.006	1.000	485874	0.4002	Target=4.17		3.3	M
363.00 > 169.00	3.162	3.168	-0.006	1.000	123497		3.93(2.09-6.26)		25.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.168	-0.006	0.901	1354034	1.27		102	1735	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.501	3.505	-0.004	0.915	200173	0.2118	Target=4.83		5.4	M
449.00 > 99.00	3.492	3.505	-0.013	0.913	79717		2.51(2.41-7.24)		6.6	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.501	3.505	-0.004	0.997	331078	1.72		145	16.9	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.501	3.514	-0.013	1.000	164236	0.2155			138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.510	3.514	-0.004	1.000	2047403	1.64	Target=2.88		22.0	M
413.00 > 169.00	3.510	3.514	-0.004	1.000	710088		2.88(1.44-4.32)		186	M
D 14 13C4 PFOA										
417.00 > 372.00	3.510	3.523	-0.013	1.000	1465361	1.22		97.2	1885	
* 62 13C2 PFOA										
415.00 > 370.00	3.510	3.523	-0.013		1548685	1.25			1710	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.822	0.002	1.000	16747789	22.0	Target=4.24		894	M
499.00 > 99.00	3.814	3.822	-0.008	0.997	5182292		3.23(2.12-6.37)		504	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.822	0.002	1.090	781514	1.33		111	60.2	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.836	3.845	-0.009	0.997	255873	0.2090	Target=8.34		6.6	M
463.00 > 169.00	3.836	3.845	-0.009	0.997	30538		8.38(4.17-12.51)		19.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.848	3.845	0.003	1.096	1561646	1.19		95.2	1276	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.995	3.983	0.012	1.045	607	0.000260			0.6	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.096	4.105	-0.009	1.071	7358	0.0127	Target=2.17		1.1	M
549.00 > 99.00	4.084	4.105	-0.021	1.068	4092		1.80(1.08-3.25)		2.3	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.132	4.129	0.003	1.000	72422	0.0454	Target=11.44		4.1	M
513.00 > 169.00	4.132	4.129	0.003	1.000	6702		10.81(5.72-17.16)		9.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.129	0.003	1.177	1995322	1.45		116	4450	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.144	4.141	0.003	1.181	407439	1.89		157	85.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.141	0.003	1.000	13601	0.0182			126	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.236	4.234	0.002	1.207	1154689	0.9850		78.8	2145	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.236	4.234	0.002	1.000	19088	0.0217			13.8	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.260	4.270	-0.010	1.214	519606	1.58		127	1403	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.273	4.270	0.003	1.003	3576	0.009480			8.5	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.366	-0.020	1.136	2647	0.005926	Target=2.37		1.1	M
599.00 > 99.00	4.358	4.366	-0.008	1.139	1454		1.82(1.19-3.56)		2.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.390	-0.009	1.248	2035875	1.57		126	5073	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.401	-0.008	1.252	529450	1.67		134	848	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.401	-0.008	1.000	11167	0.0264			15.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.312	1793197	1.36		109	5524	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.982	0.005	1.421	1714101	1.31		104	4970	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.976	4.982	-0.006	0.998	157	0.001024	Target=0.87		3.5	RM
713.00 > 219.00	4.976	4.982	-0.006	0.998	401		0.39(0.43-1.30)		4.1	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

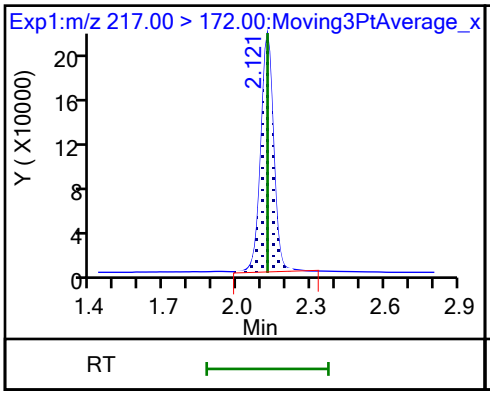
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54

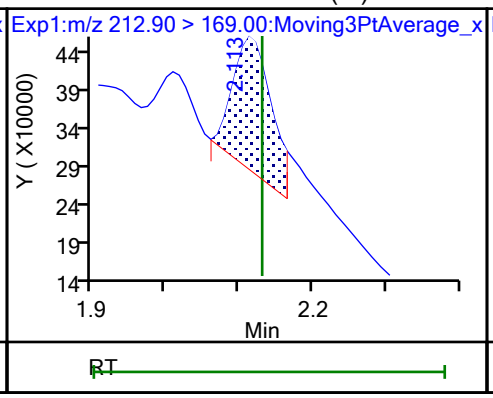
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d
Injection Date: 24-Oct-2023 09:22:05 Instrument ID: LC812
Lims ID: 460-290517-B-6-A Lab Sample ID: 200-290517-6
Client ID: MW4-101623-1156-11.5
Operator ID: LC812user ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

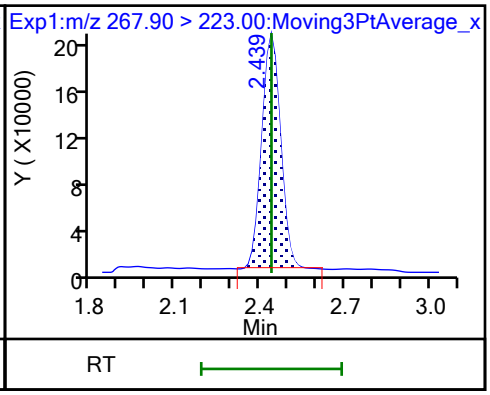
D 1 13C4 PFBA



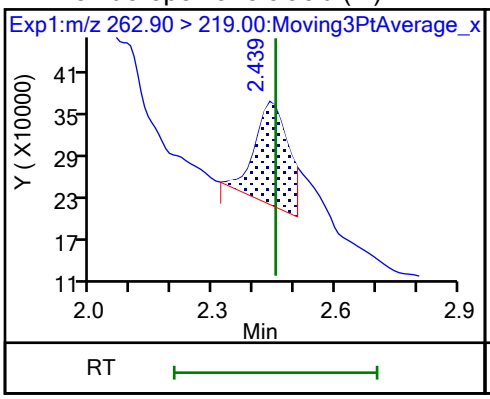
2 Perfluorobutanoic acid (M)



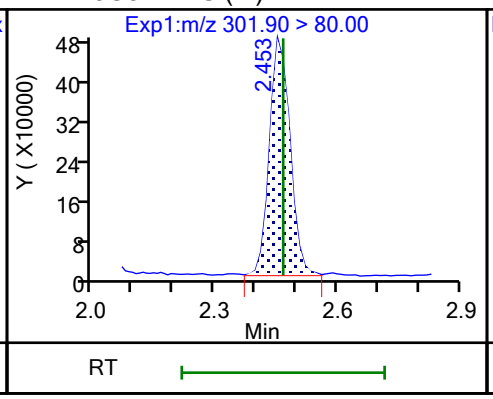
D 3 13C5 PFPeA



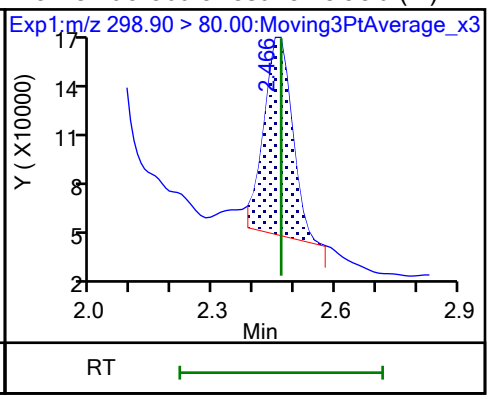
4 Perfluoropentanoic acid (M)



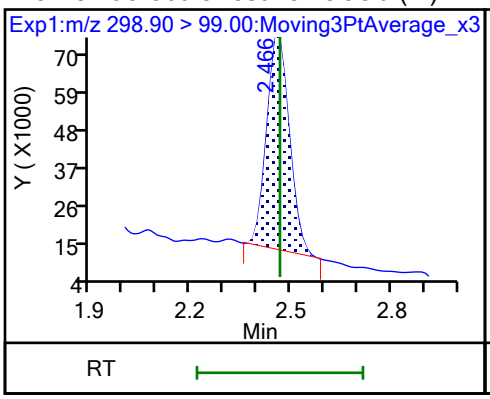
D 47 13C3 PFBS (M)



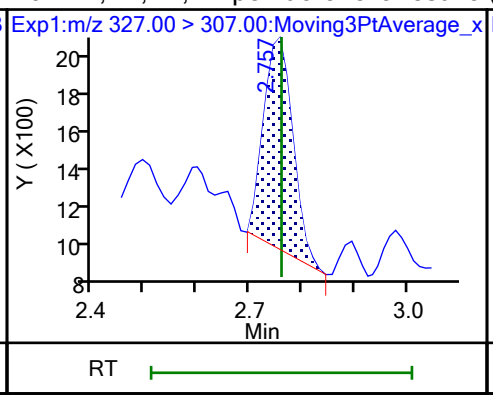
5 Perfluorobutanesulfonic acid (M)



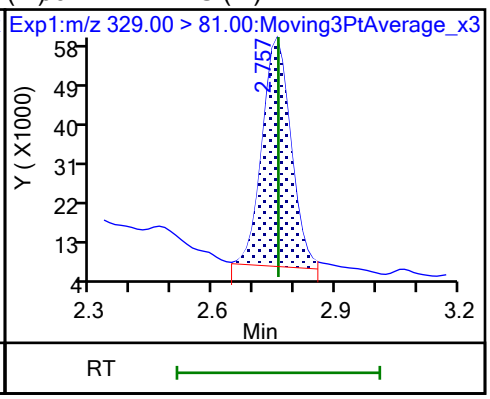
5 Perfluorobutanesulfonic acid (M)



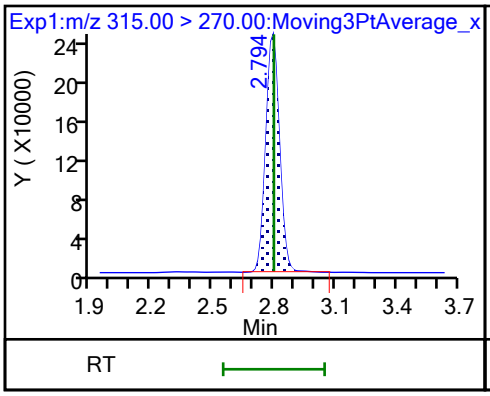
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



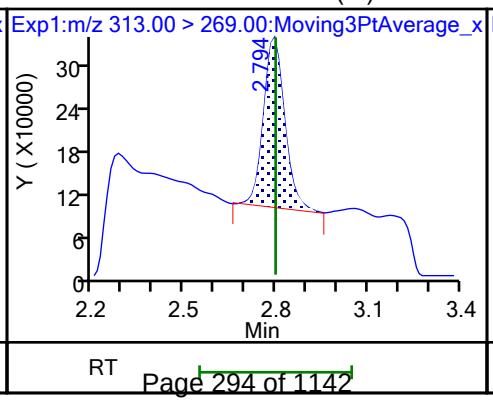
60 M2-4:2 FTS (M)



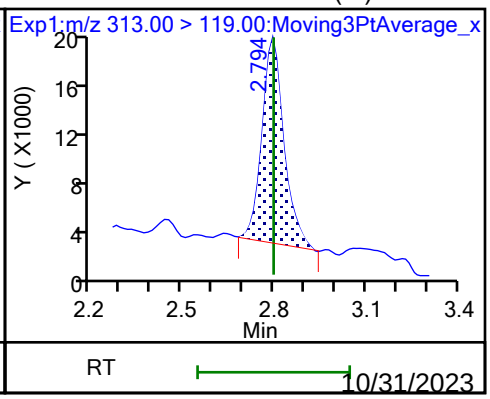
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

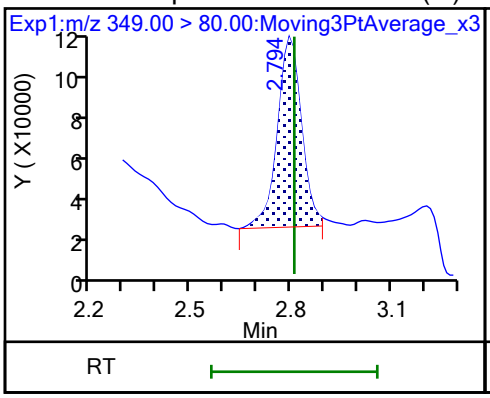


6 Perfluorohexanoic acid (M)

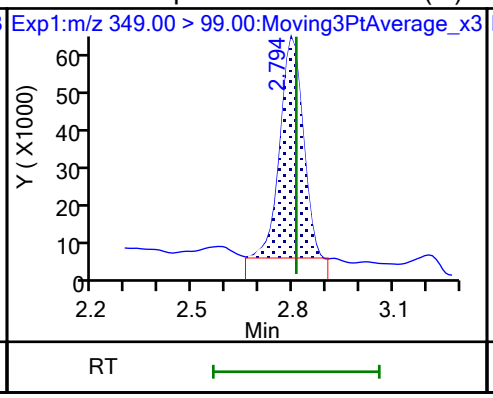


10/31/2023
10:17 AM

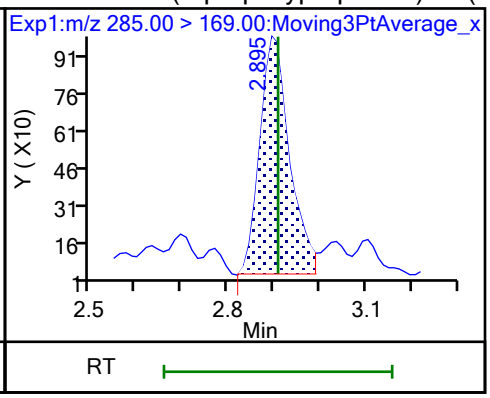
70 Perfluoropentanesulfonic acid (M)



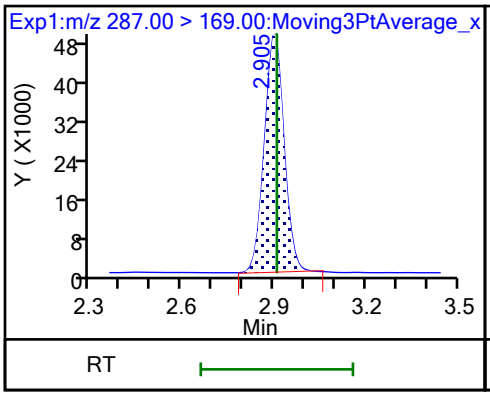
70 Perfluoropentanesulfonic acid (M)



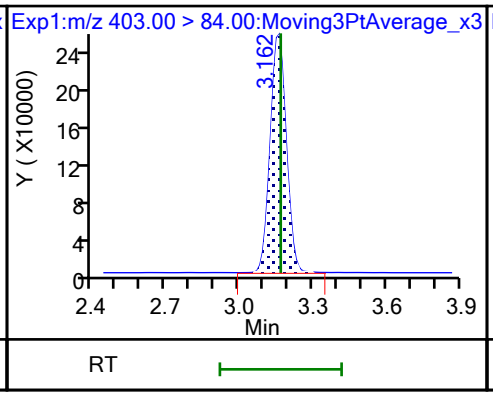
67 Perfluoro(2-propoxypropanoic) ac (M)



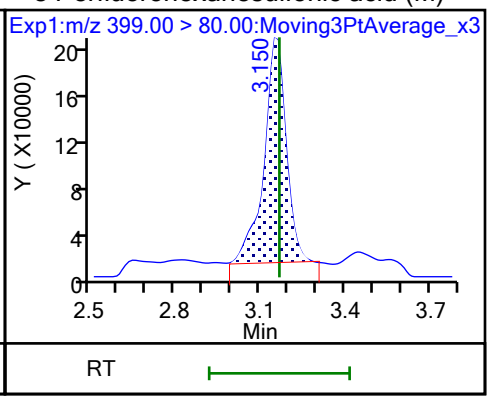
D 64 13C3 HFPO-DA



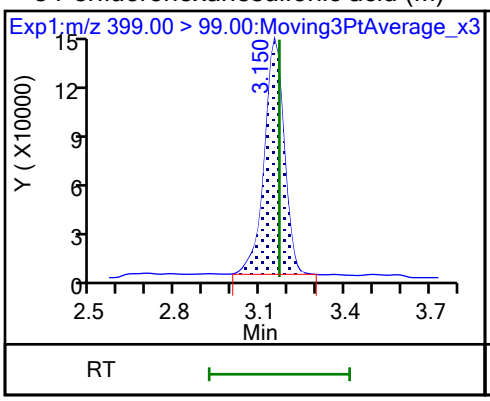
D 11 18O2 PFHxS



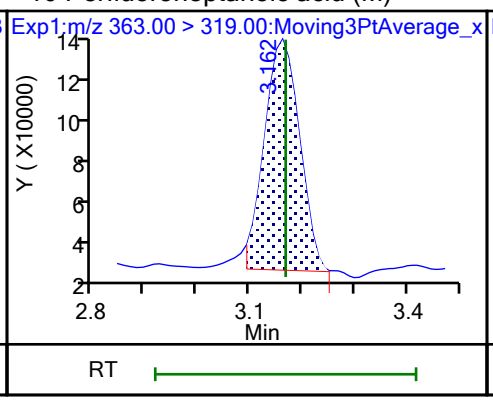
8 Perfluorohexanesulfonic acid (M)



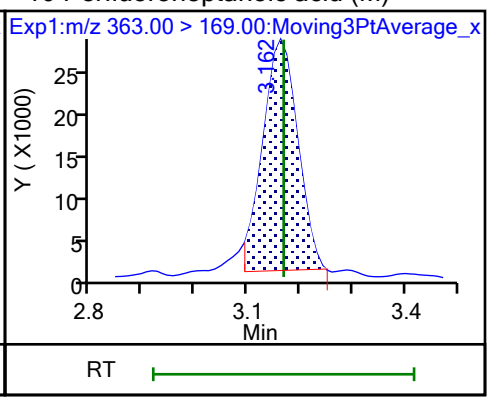
8 Perfluorohexanesulfonic acid (M)



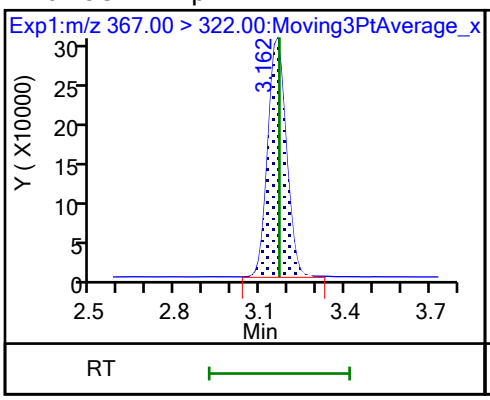
10 Perfluoroheptanoic acid (M)



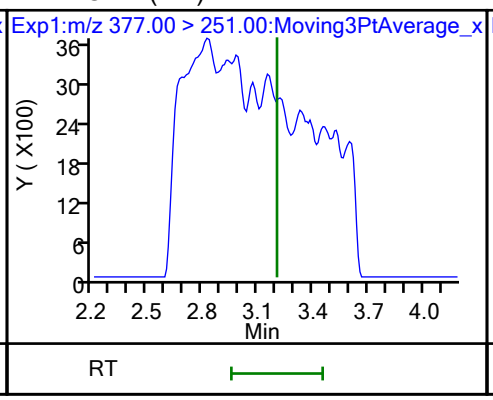
10 Perfluoroheptanoic acid (M)



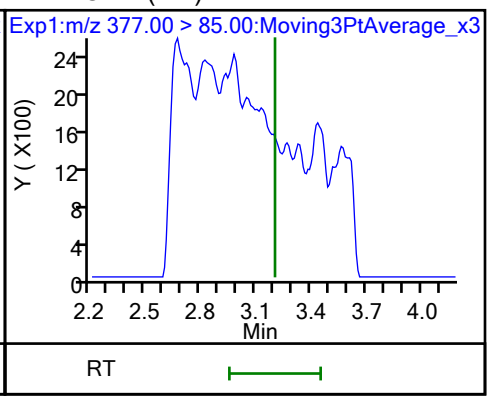
D 9 13C4 PFHpA



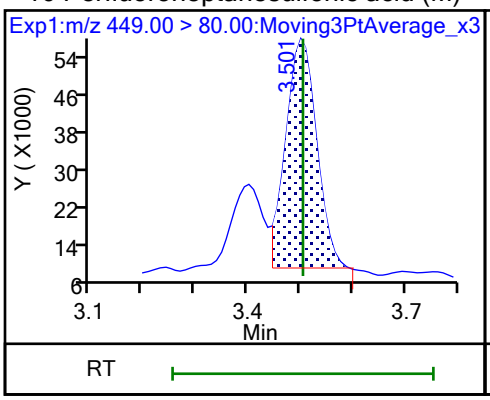
77 DONA (ND)



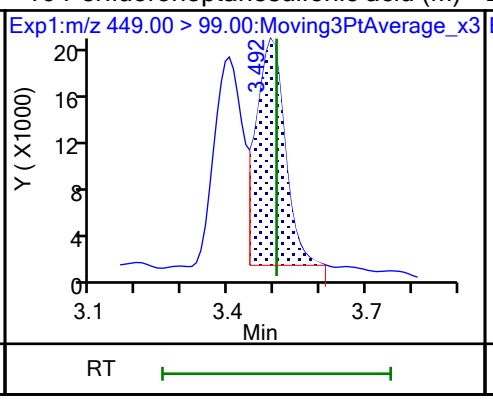
77 DONA (ND)



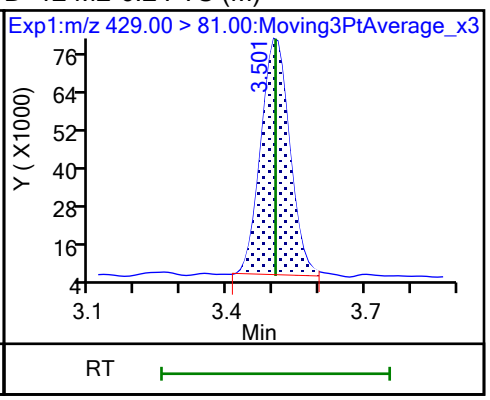
16 Perfluoroheptanesulfonic acid (M)



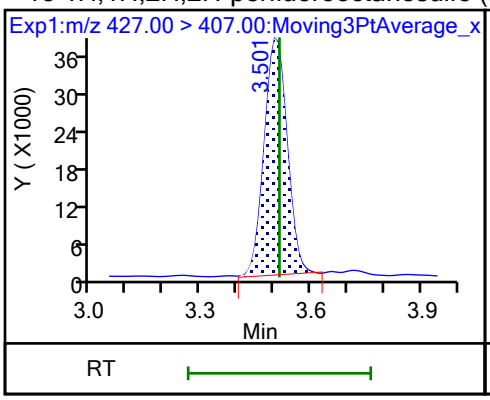
16 Perfluoroheptanesulfonic acid (M)



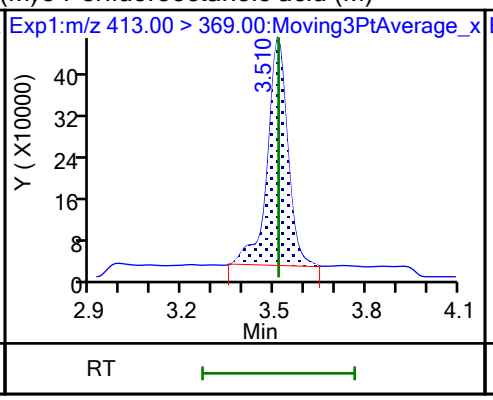
D 12 M2-6:2 FTS (M)



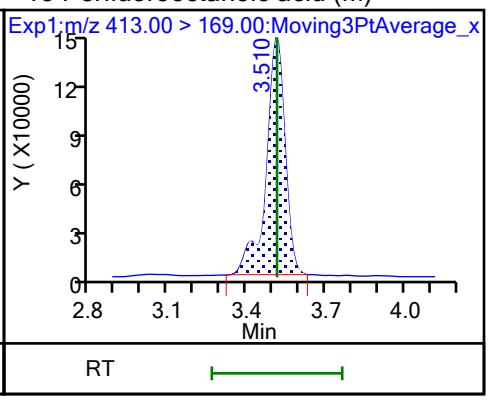
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



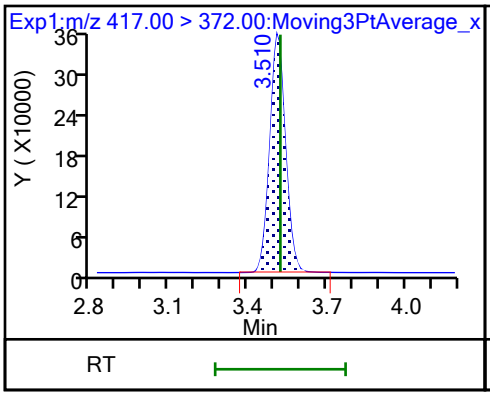
15 Perfluorooctanoic acid (M)



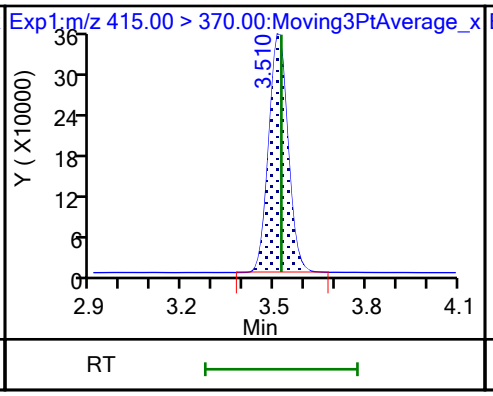
15 Perfluorooctanoic acid (M)



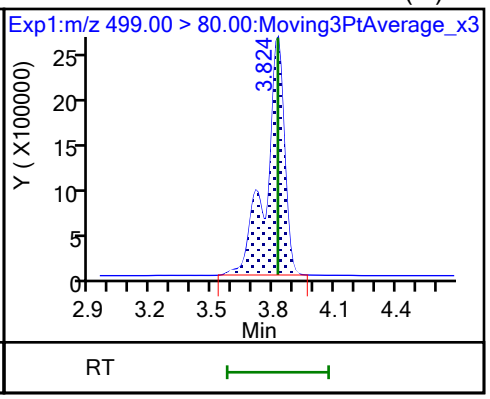
D 14 13C4 PFOA



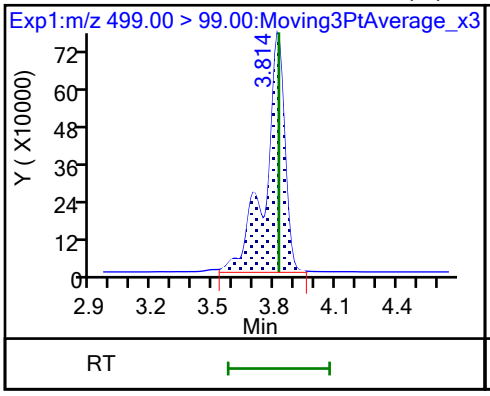
* 62 13C2 PFOA



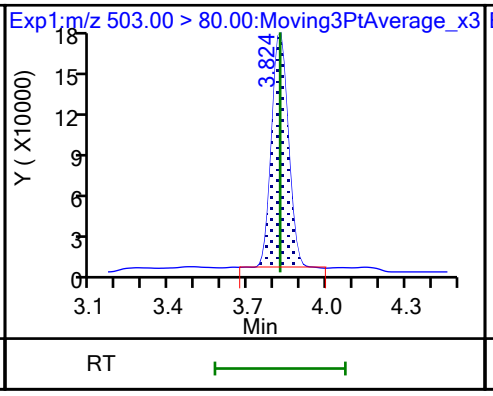
17 Perfluorooctanesulfonic acid (M)



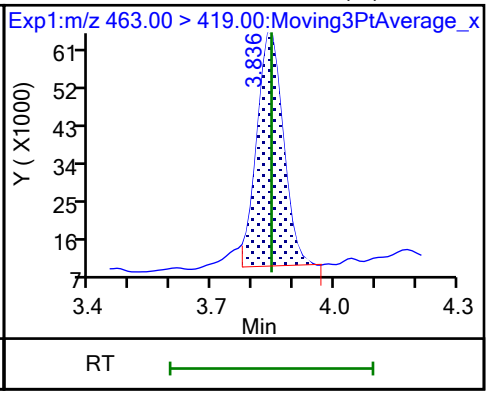
17 Perfluorooctanesulfonic acid (M)



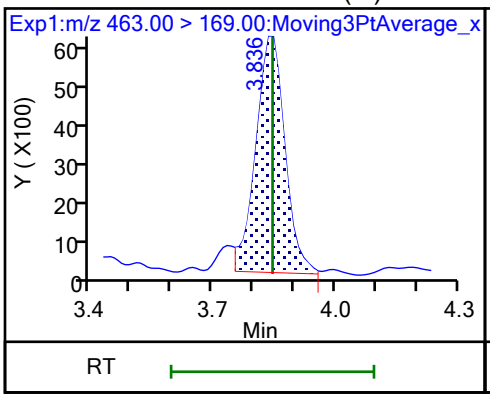
D 18 13C4 PFOS



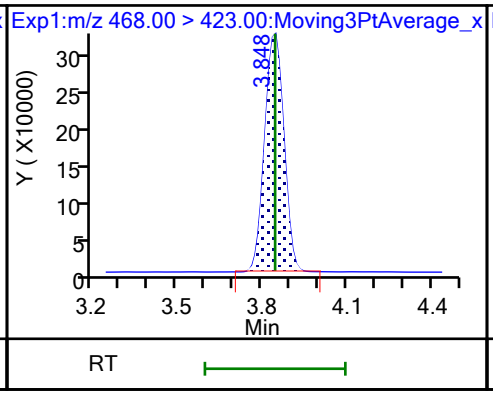
20 Perfluorononanoic acid (M)



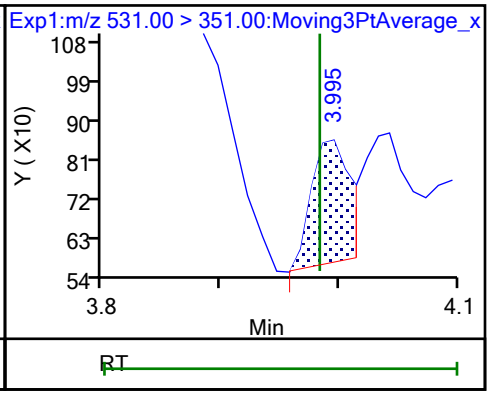
20 Perfluorononanoic acid (M)



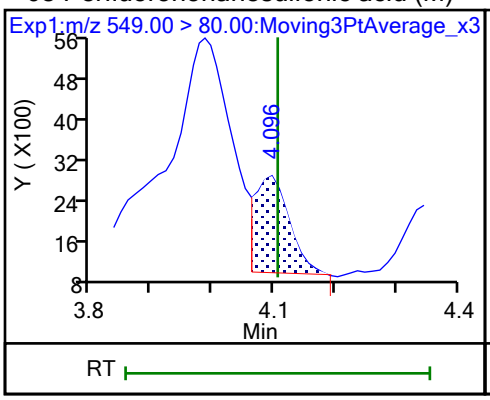
D 19 13C5 PFNA



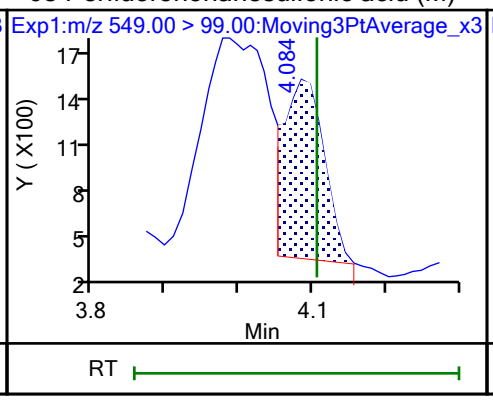
69 9-Chlorohexadecafluoro-3-oxanona (M)



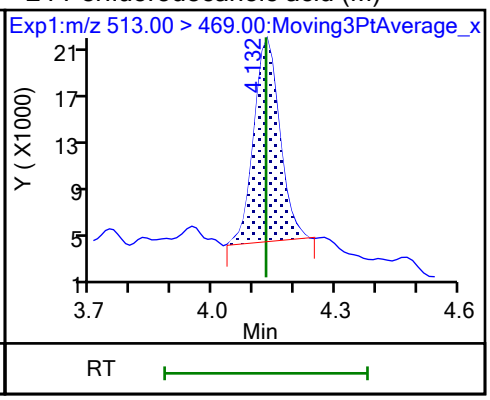
68 Perfluorononanesulfonic acid (M)



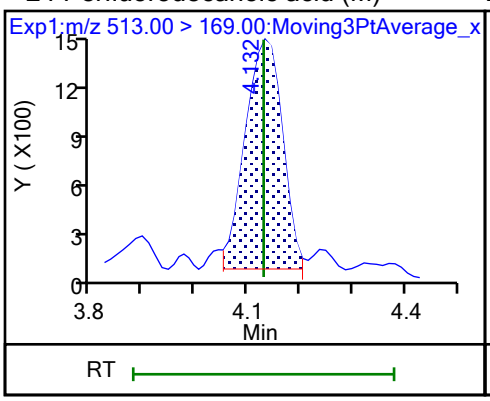
68 Perfluorononanesulfonic acid (M)



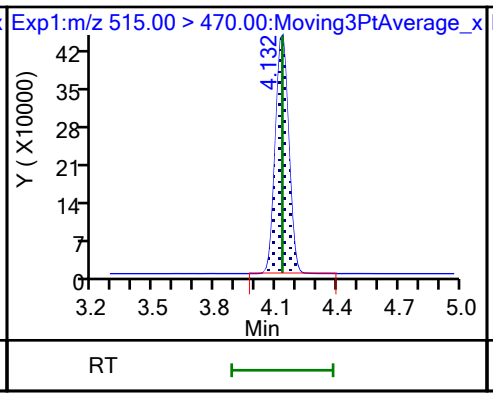
24 Perfluorodecanoic acid (M)



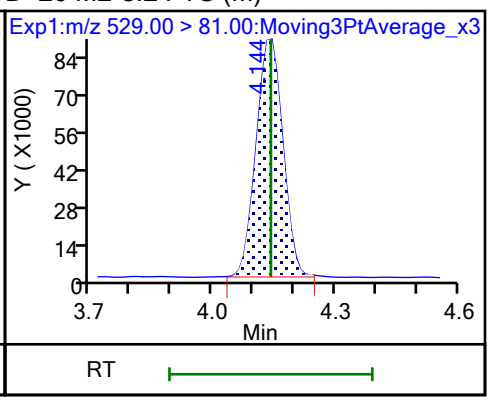
24 Perfluorodecanoic acid (M)



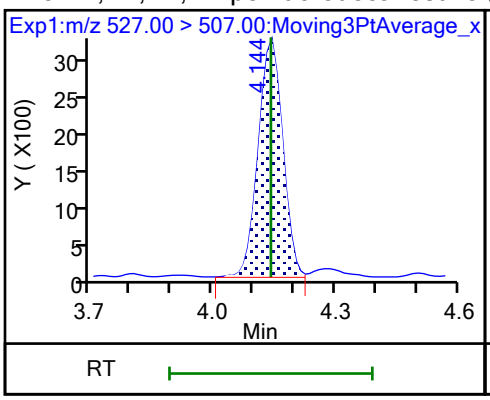
D 23 13C2 PFDA



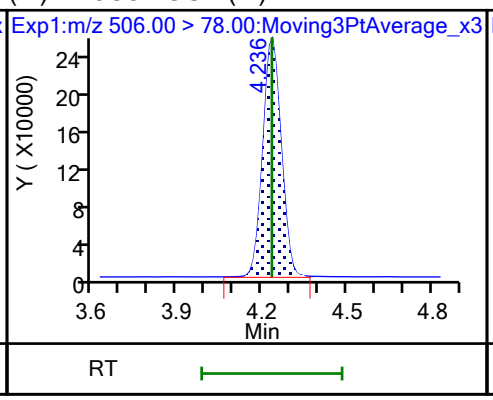
D 26 M2-8:2 FTS (M)



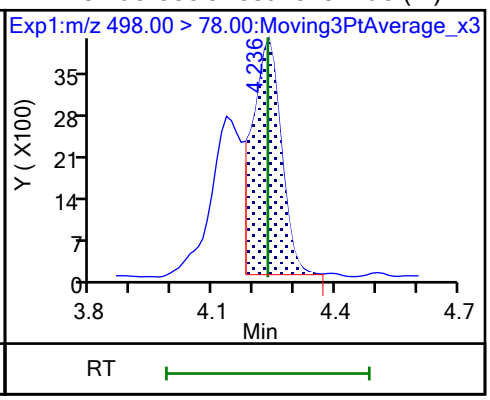
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



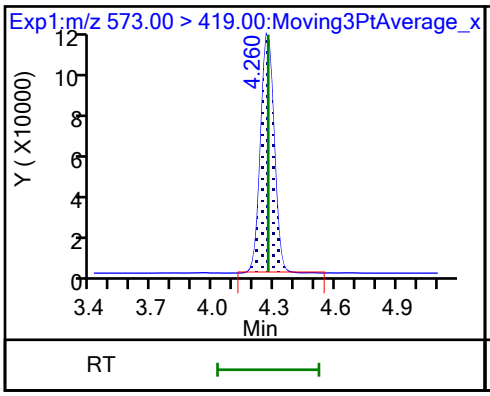
D 21 13C8 FOSA (M)



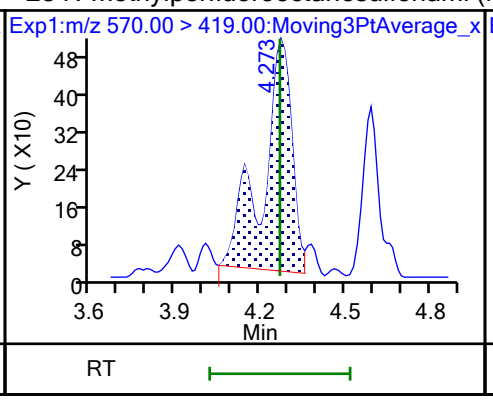
22 Perfluorooctanesulfonamide (M)



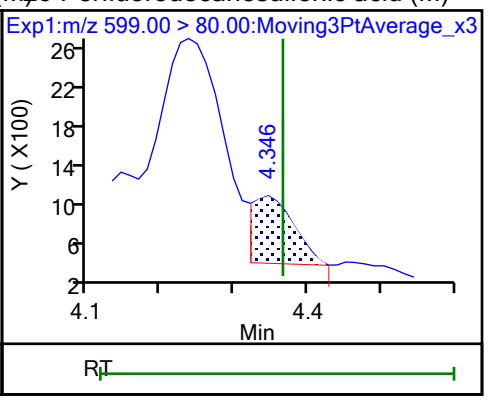
D 27 d3-NMeFOSAA



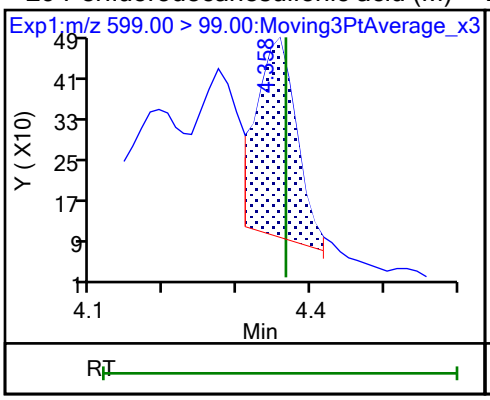
28 N-methylperfluorooctanesulfonami (M)



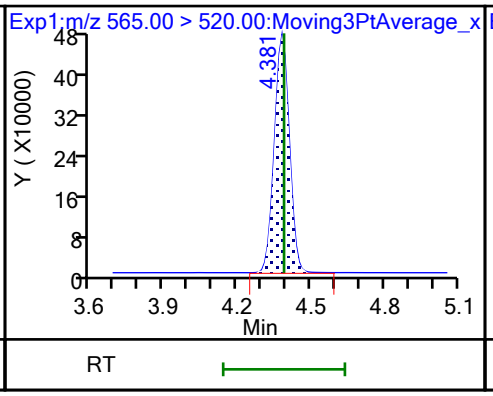
29 Perfluorodecanesulfonic acid (M)



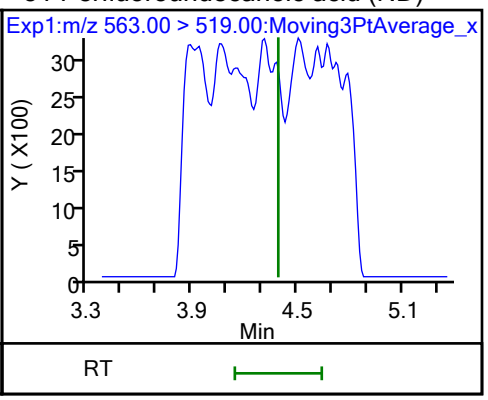
29 Perfluorodecanesulfonic acid (M)



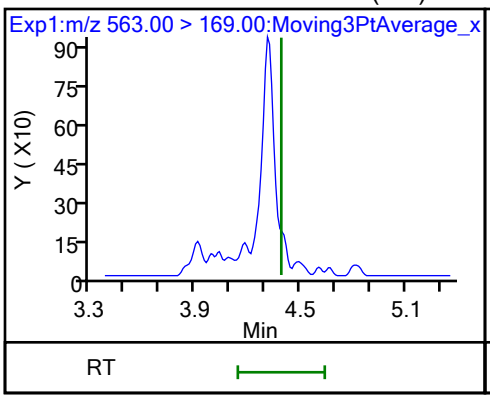
D 30 13C2 PFUnA



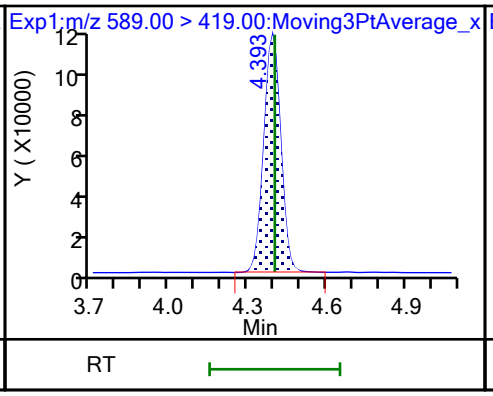
31 Perfluoroundecanoic acid (ND)



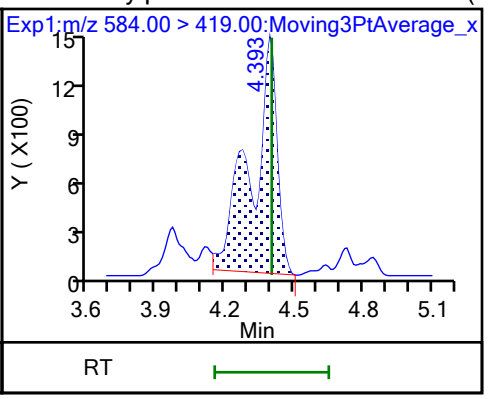
31 Perfluoroundecanoic acid (ND)



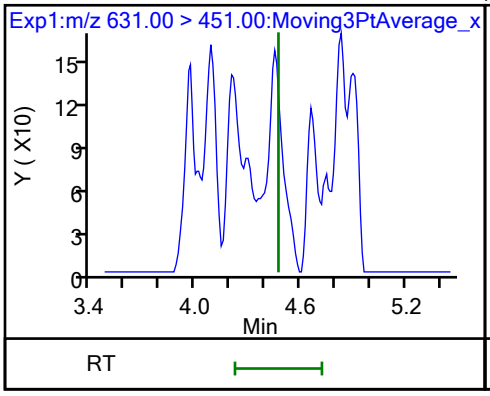
D 32 d5-NEtFOSAA



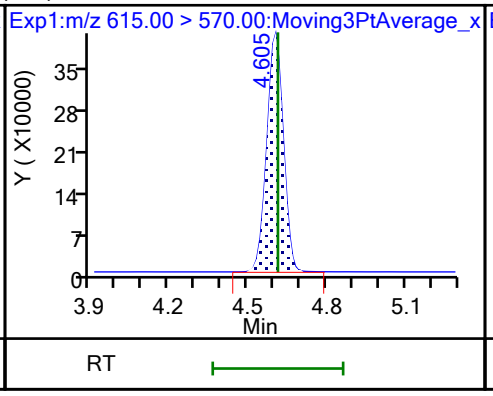
33 N-ethylperfluorooctanesulfonamid (M)



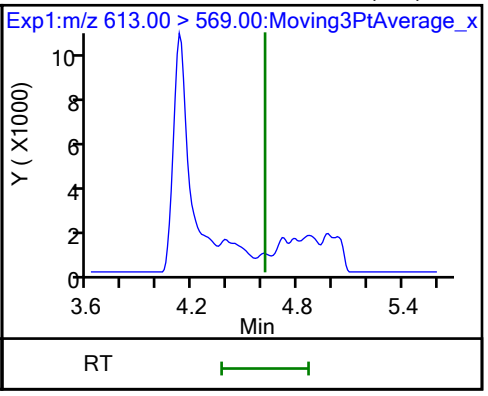
66 11-Chloroeicosafluoro-3-oxaundec (ND)



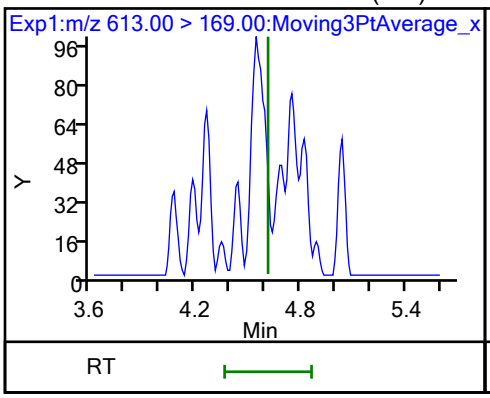
D 36 13C2 PFDoA



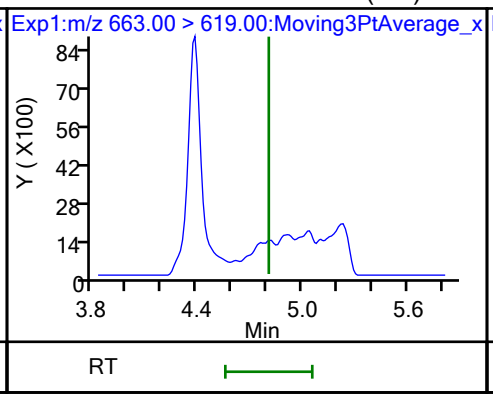
37 Perfluorododecanoic acid (ND)



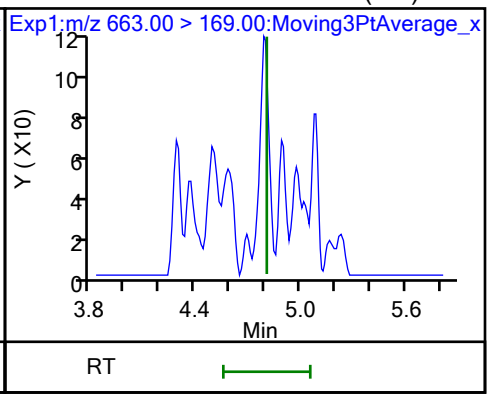
37 Perfluorododecanoic acid (ND)



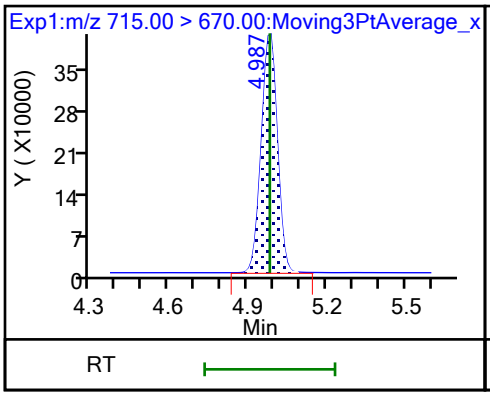
41 Perfluorotridecanoic acid (ND)



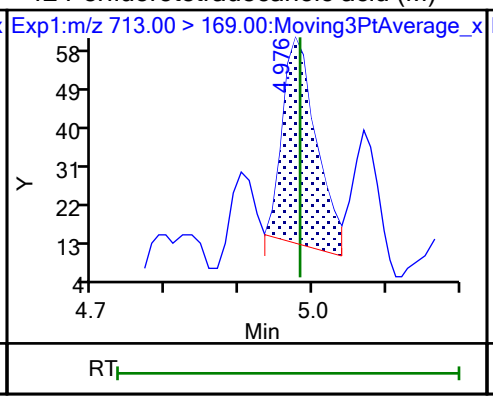
41 Perfluorotridecanoic acid (ND)



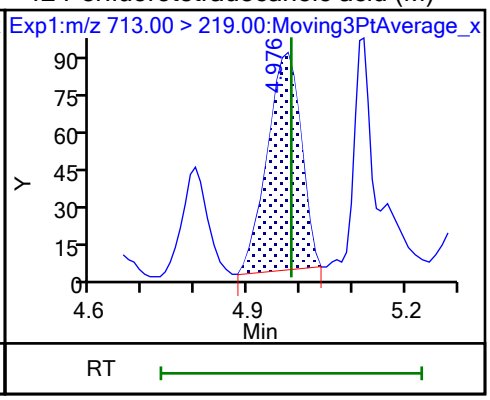
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

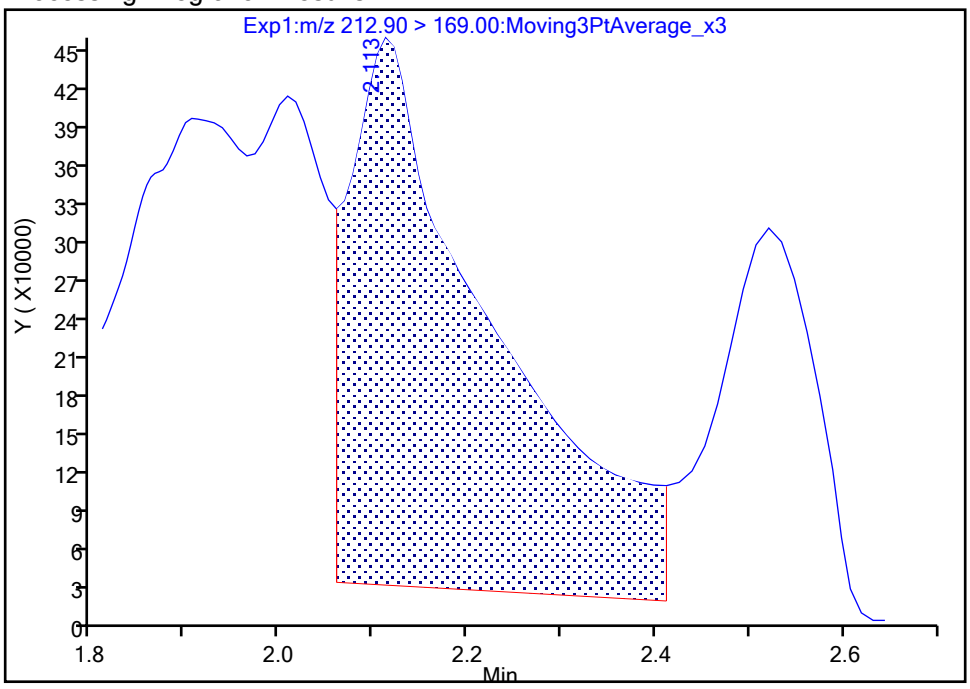
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

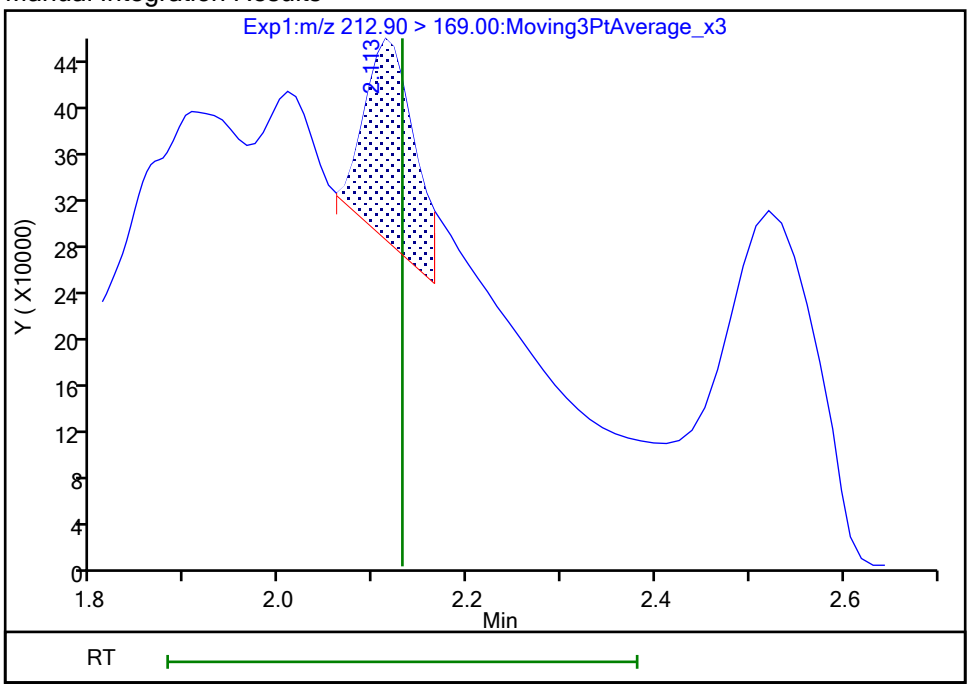
Processing Integration Results

RT: 2.11
Area: 4534754
Amount: 8.012141
Amount Units: ng/ml



Manual Integration Results

RT: 2.11
Area: 636492
Amount: 1.089428
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:17:11 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

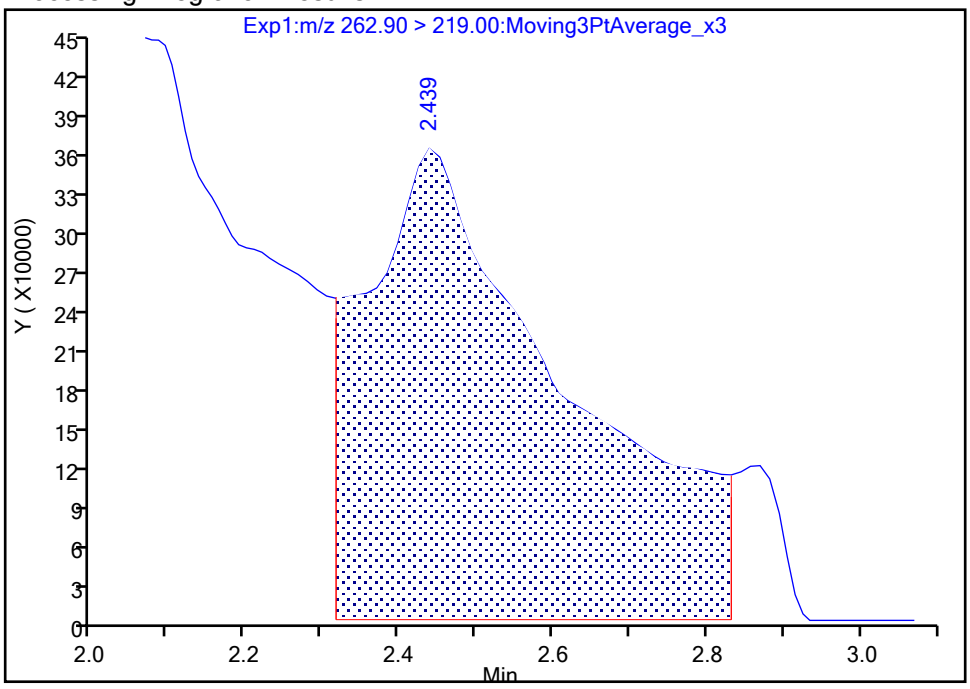
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

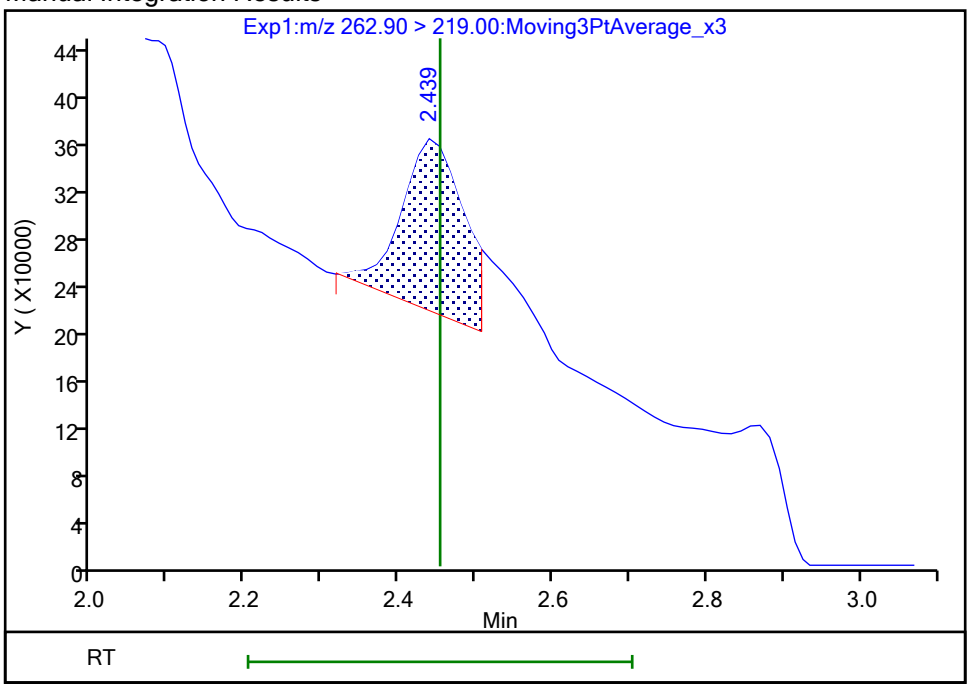
Processing Integration Results

RT: 2.44
Area: 6542494
Amount: 8.219006
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 817150
Amount: 1.026544
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:55:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

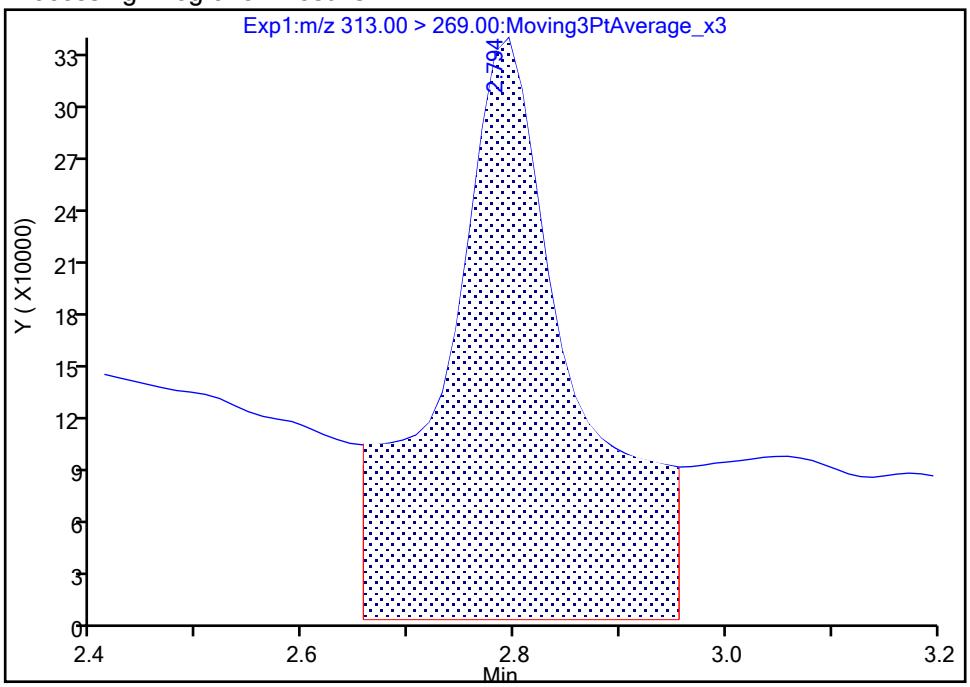
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

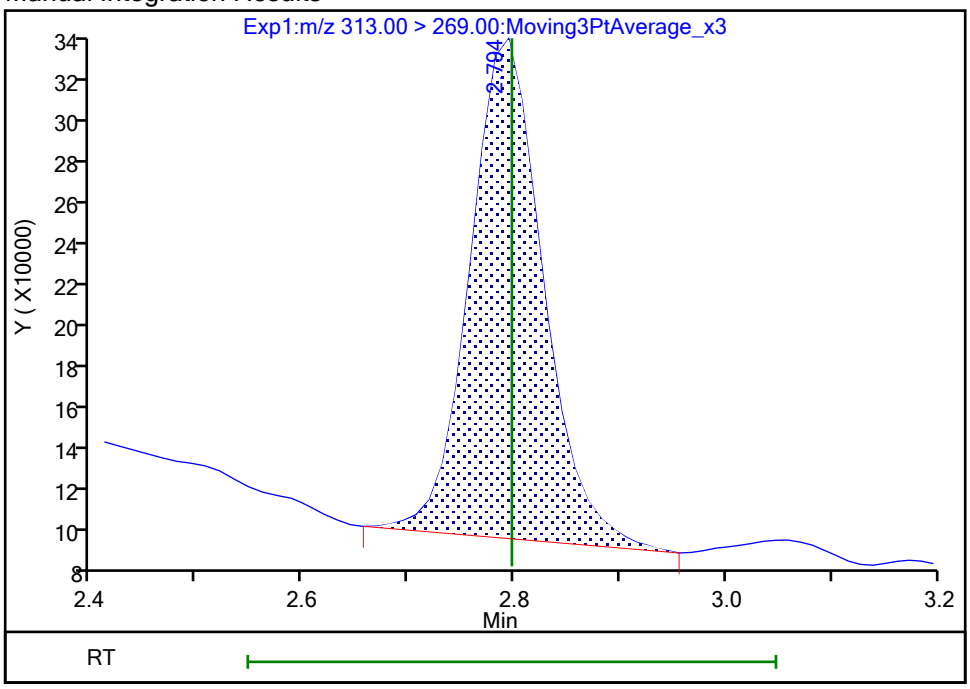
Processing Integration Results

RT: 2.79
Area: 2853797
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1160391
Amount: 1.160238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:55:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

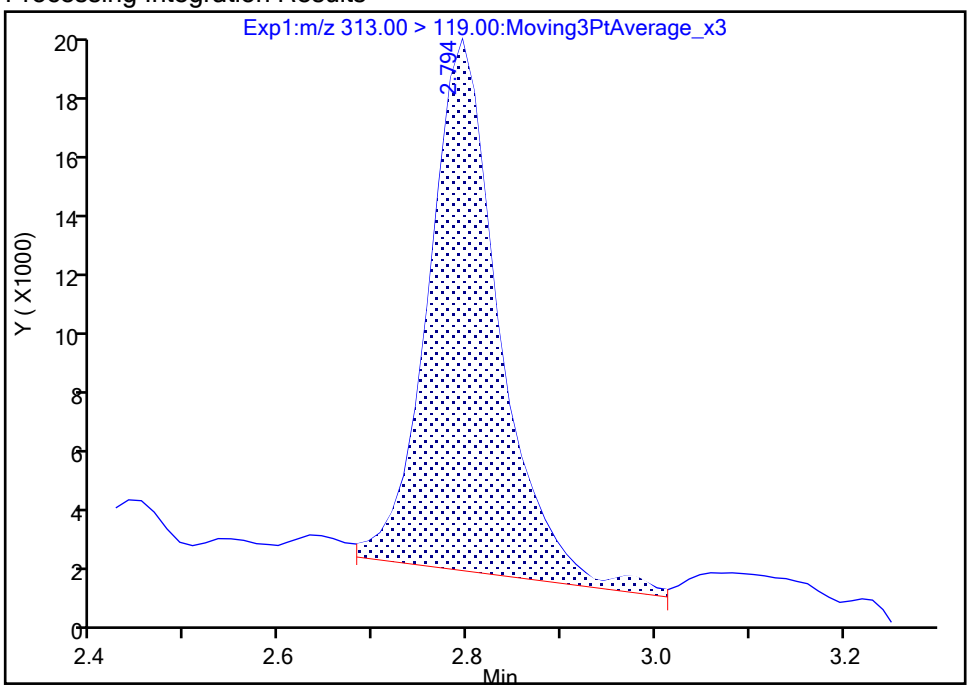
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

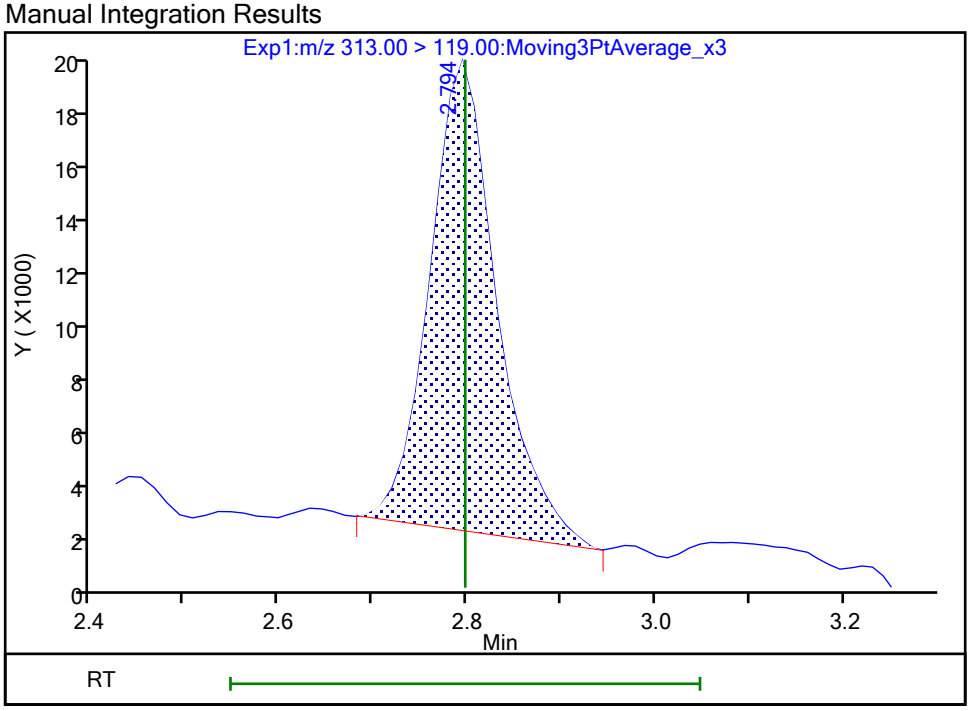
Processing Integration Results

RT: 2.79
Area: 88810
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 82096
Amount: 1.160238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

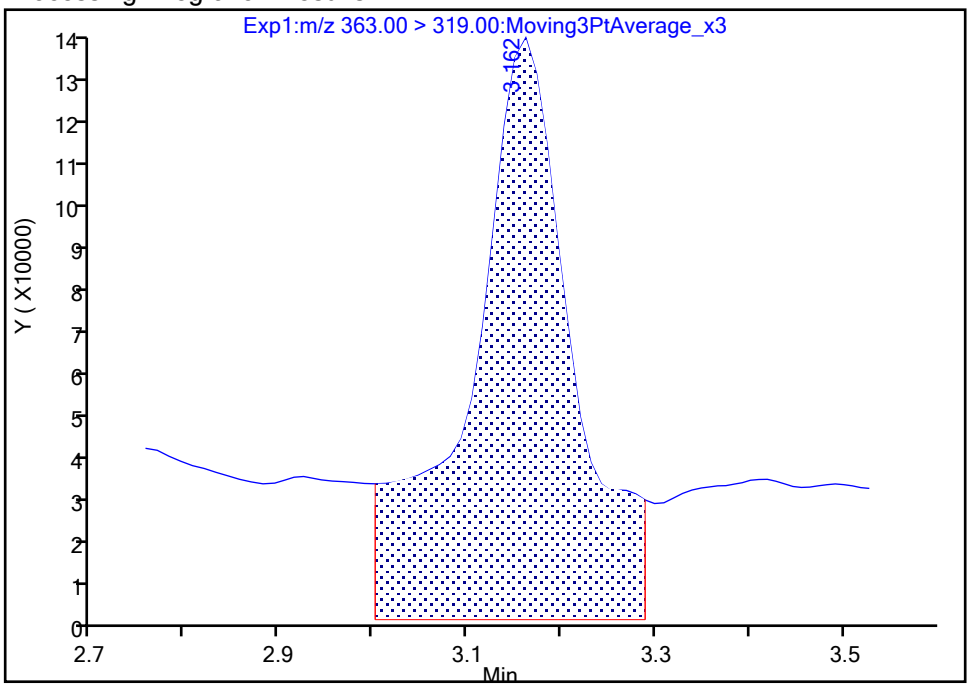
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

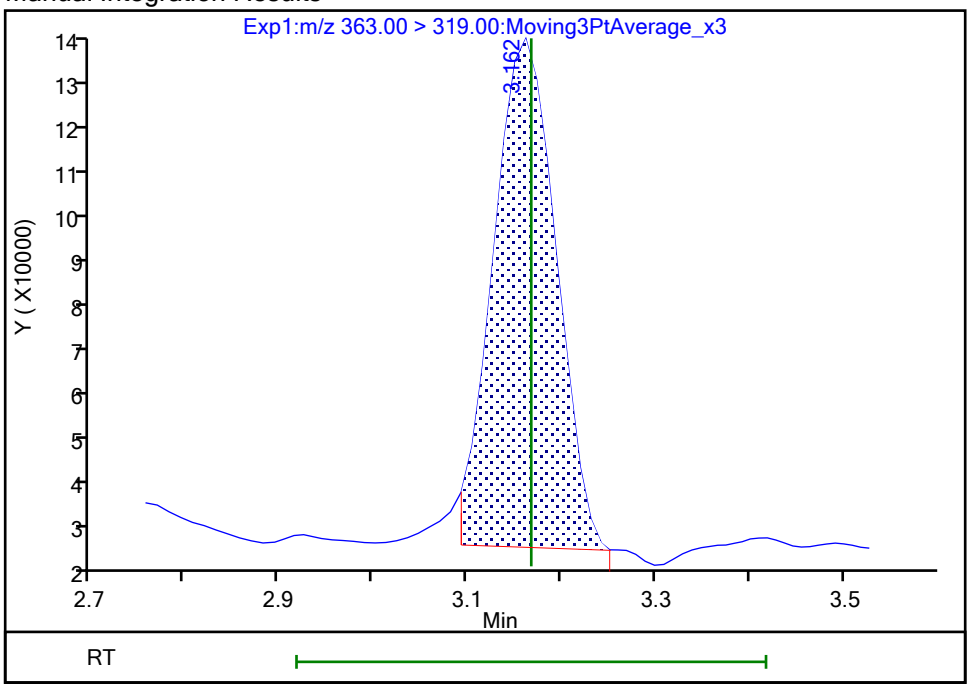
Processing Integration Results

RT: 3.16
Area: 1036550
Amount: 0.853708
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 485874
Amount: 0.400169
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

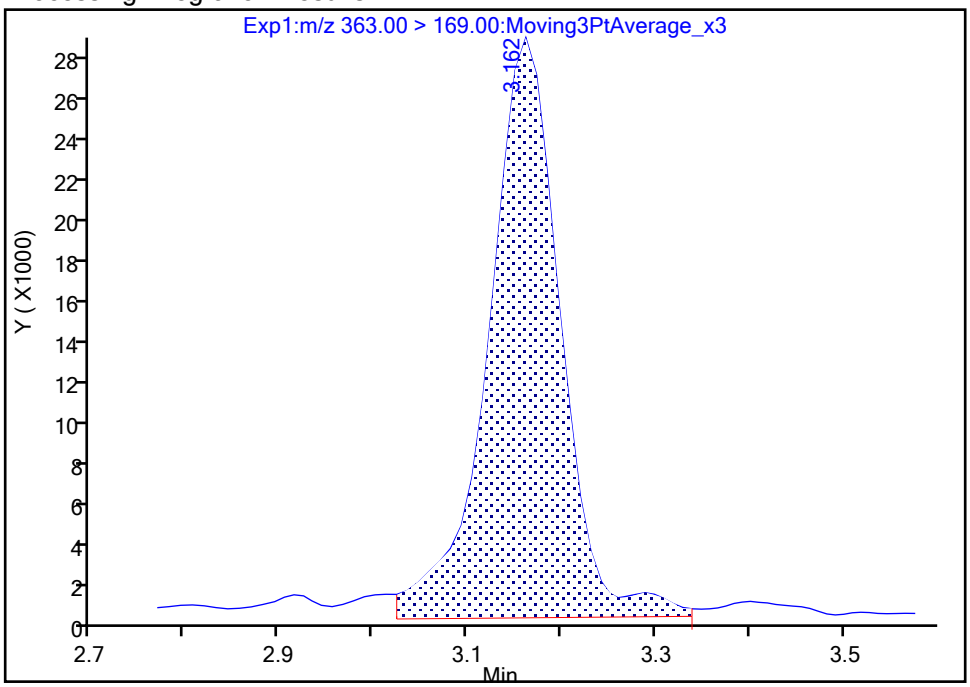
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

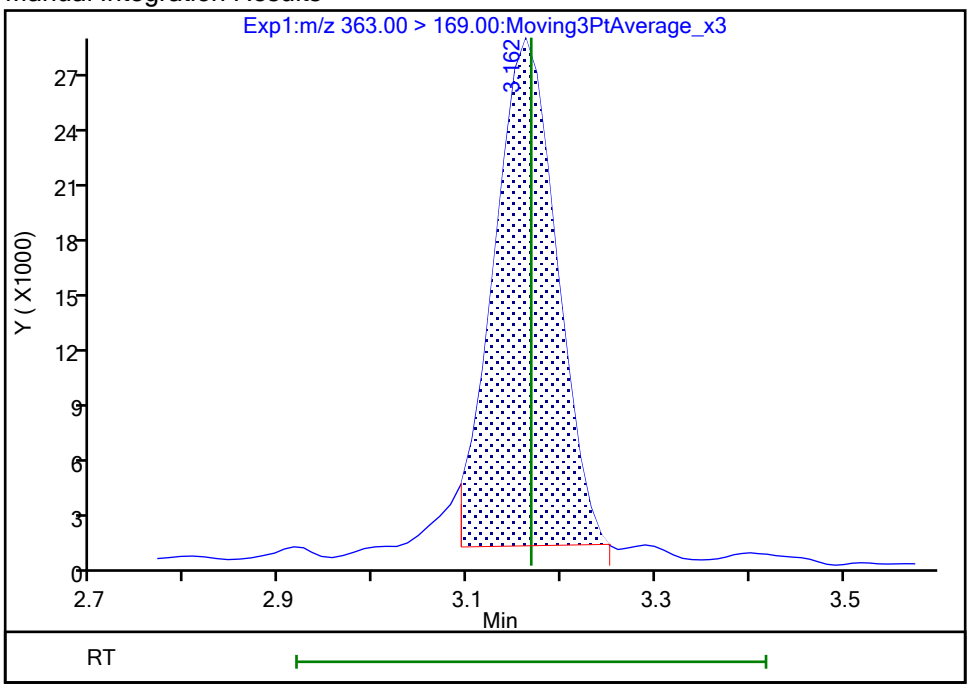
Processing Integration Results

RT: 3.16
Area: 149549
Amount: 0.853708
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 123497
Amount: 0.400169
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

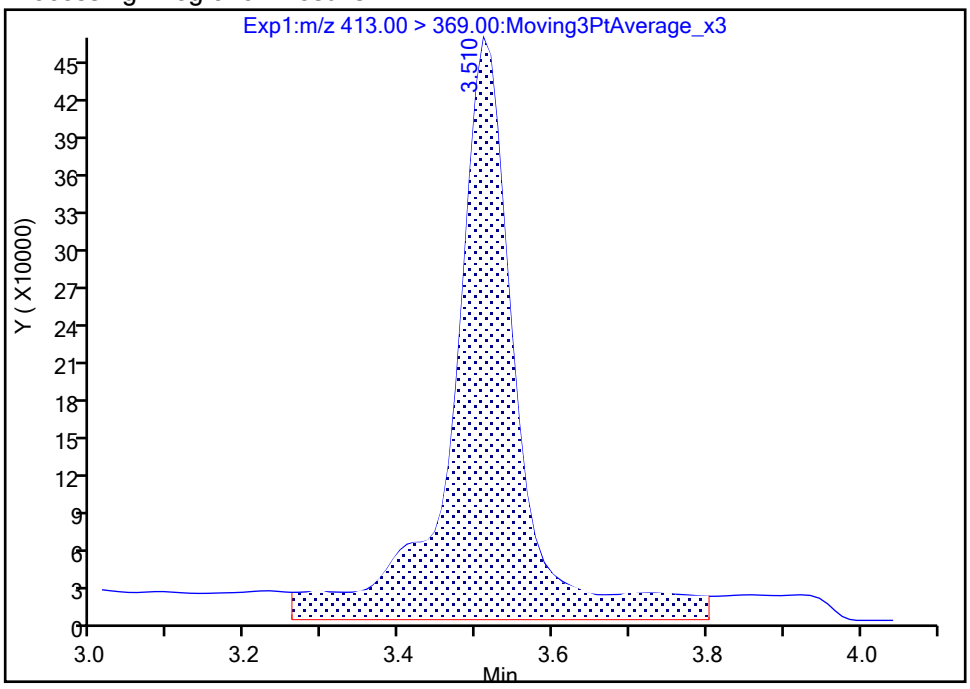
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

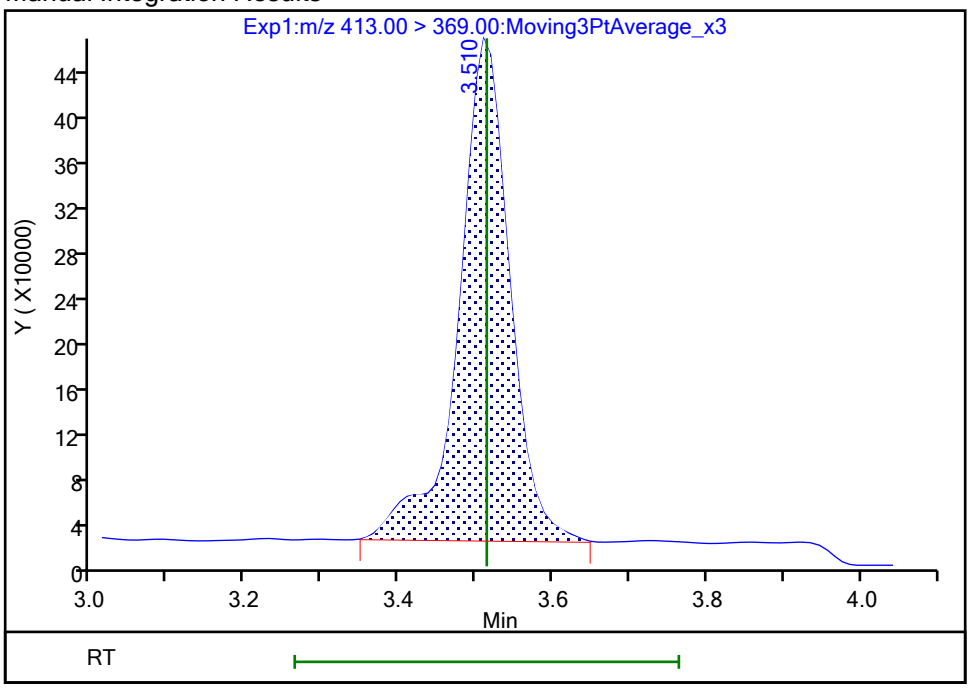
Processing Integration Results

RT: 3.51
Area: 2762380
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2047403
Amount: 1.639692
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

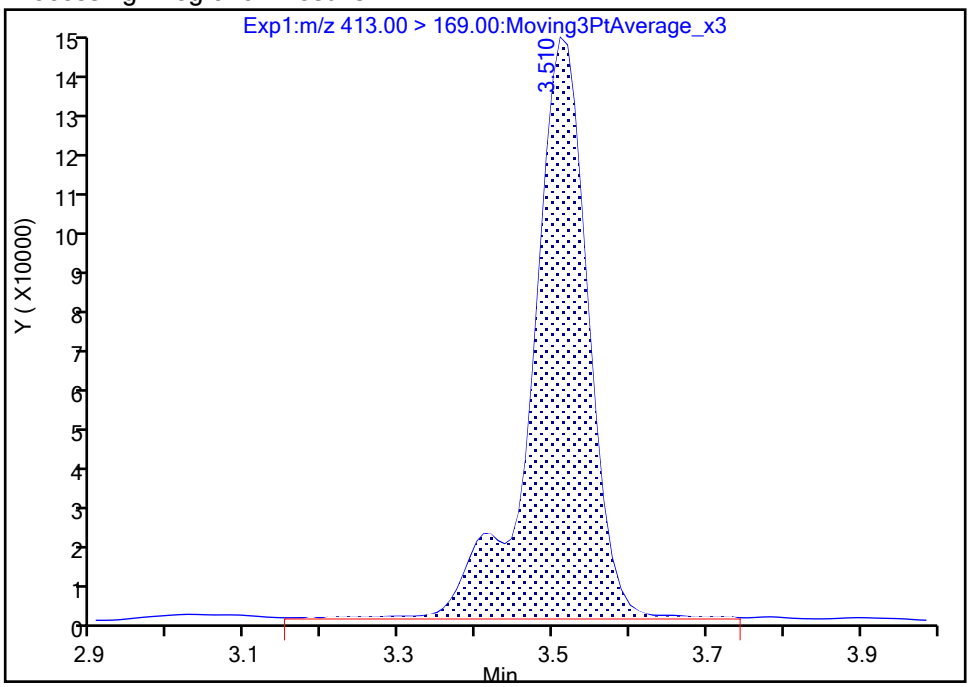
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

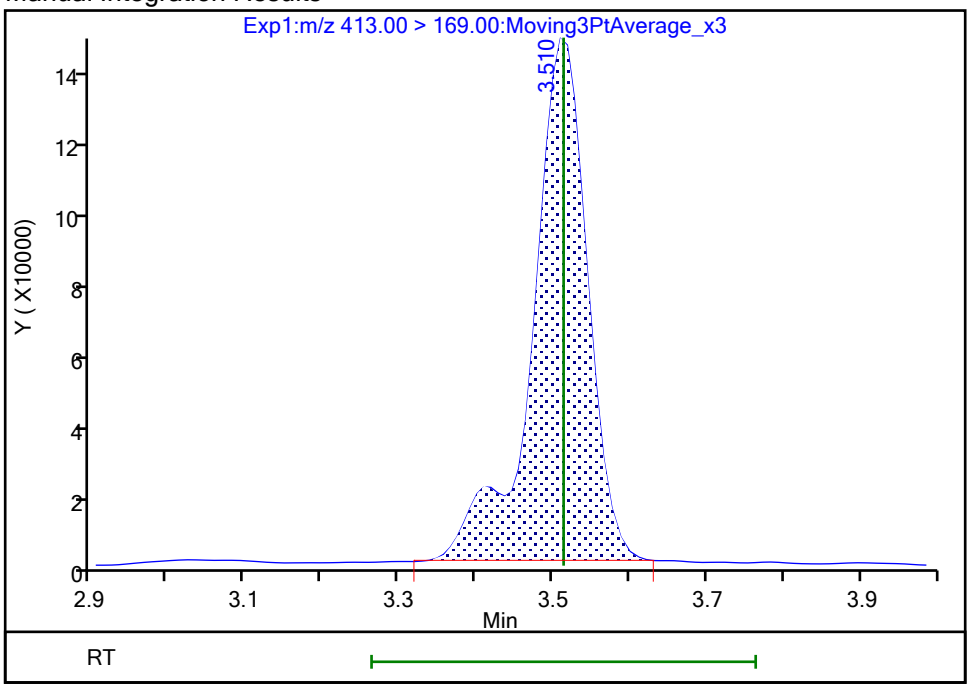
Processing Integration Results

RT: 3.51
Area: 730717
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 710088
Amount: 1.639692
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

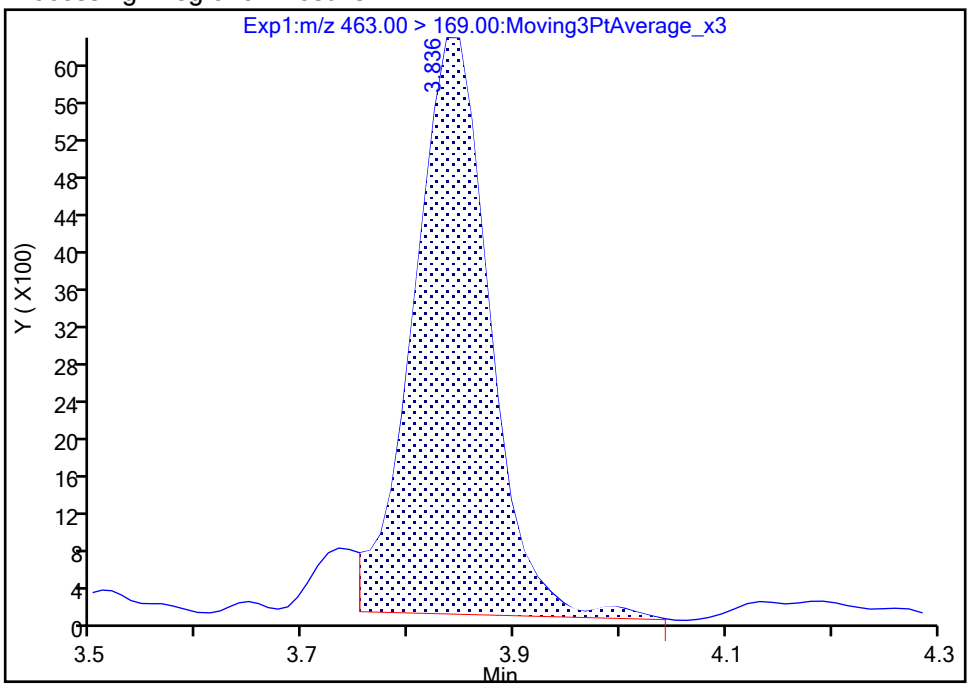
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

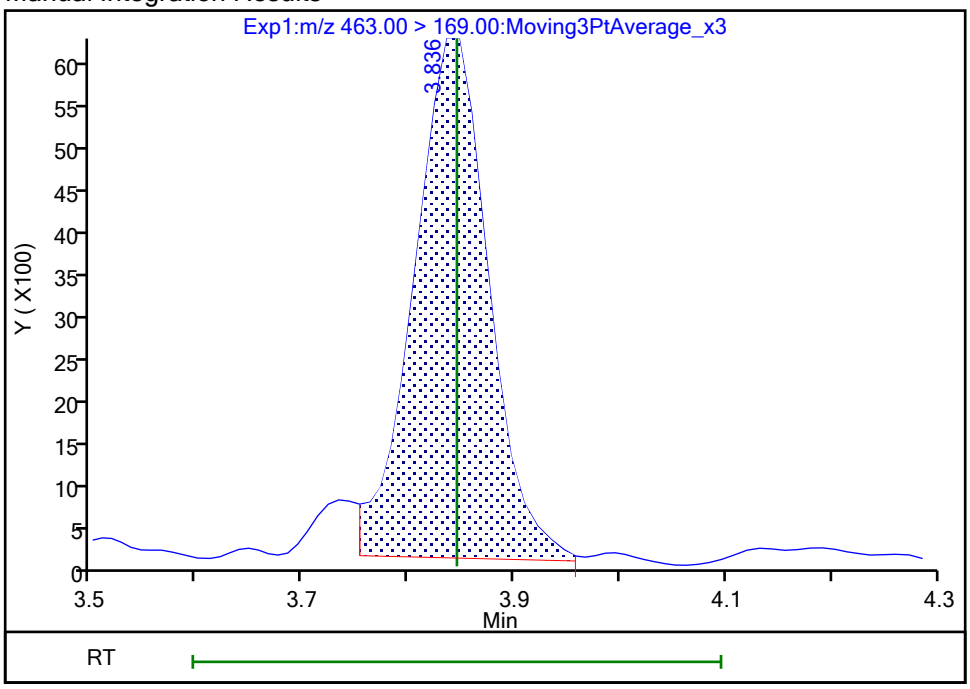
Processing Integration Results

RT: 3.84
Area: 30894
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 30538
Amount: 0.208980
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

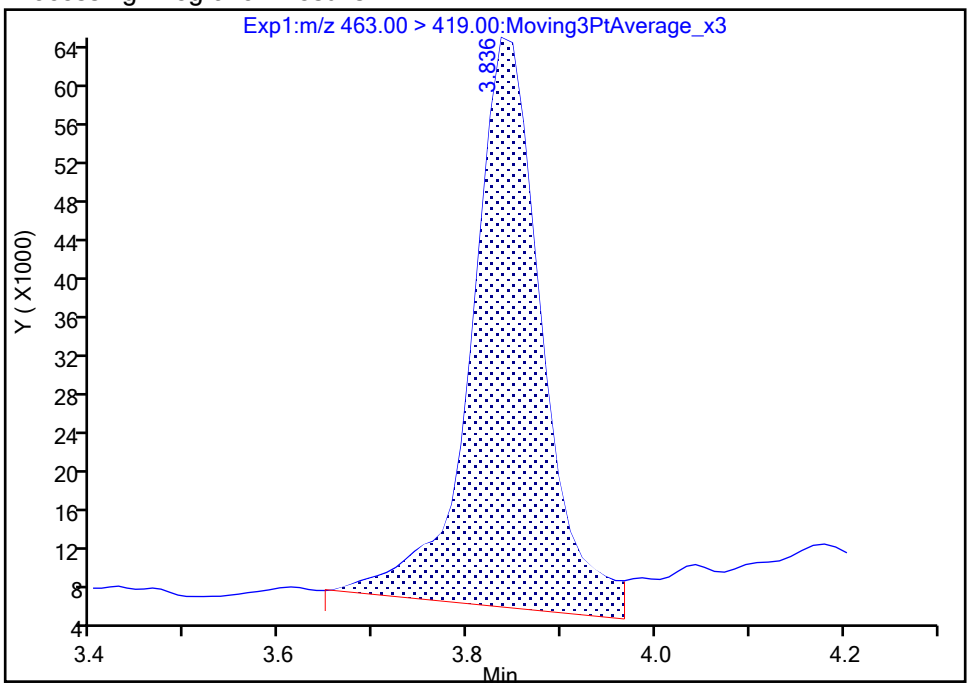
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

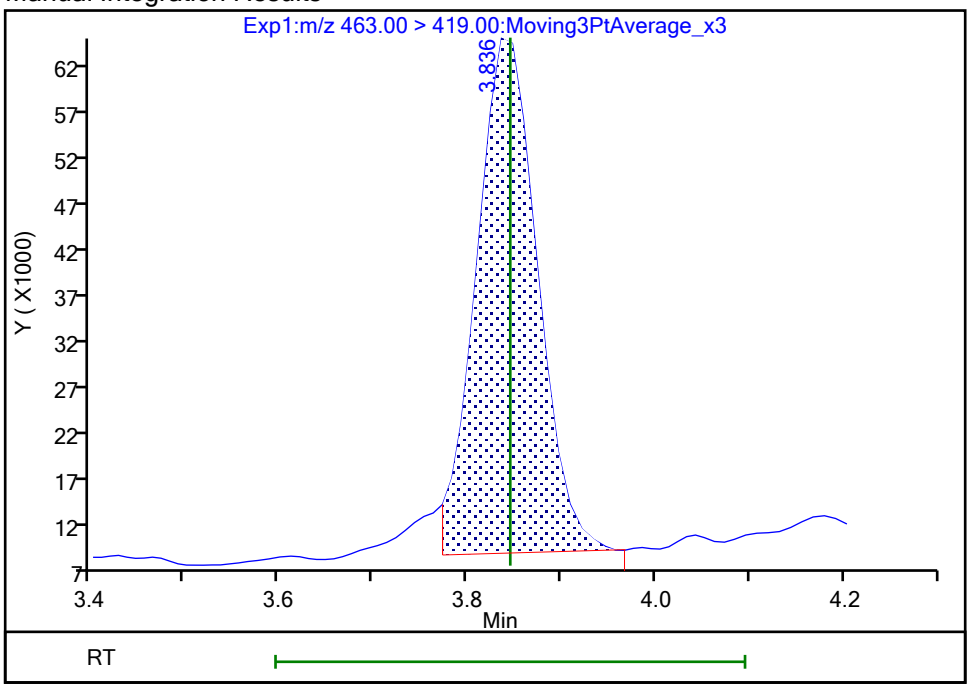
Processing Integration Results

RT: 3.84
Area: 310594
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 255873
Amount: 0.208980
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

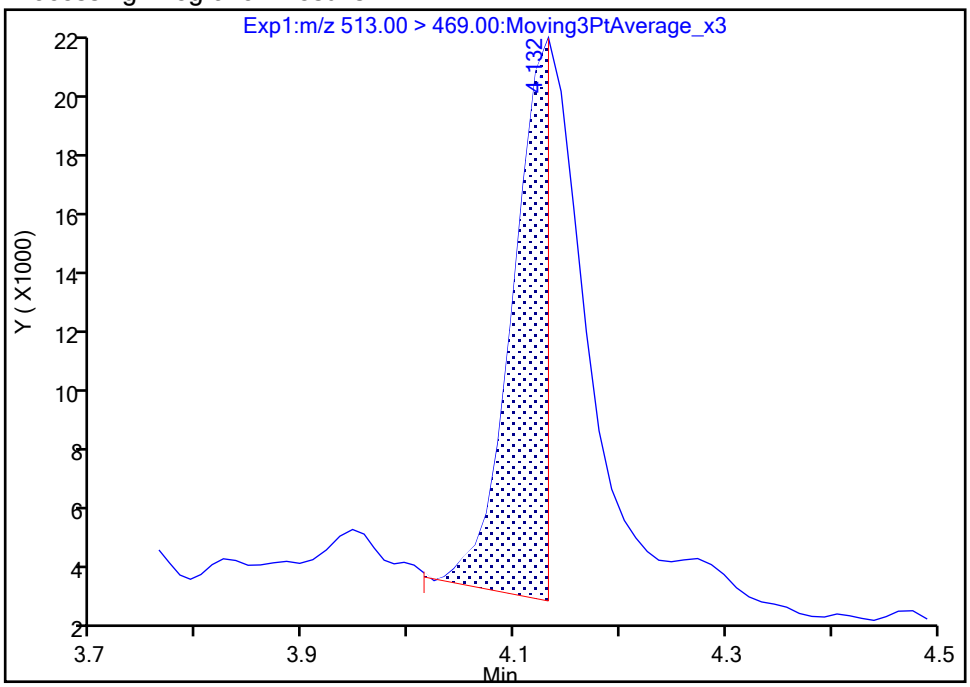
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

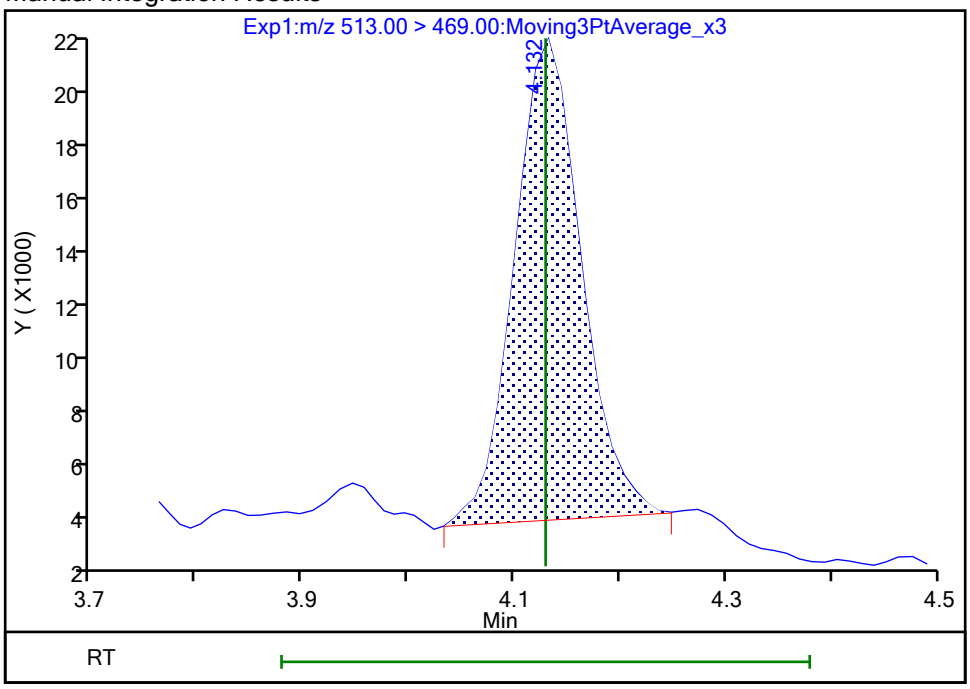
Processing Integration Results

RT: 4.13
Area: 39515
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 72422
Amount: 0.045399
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

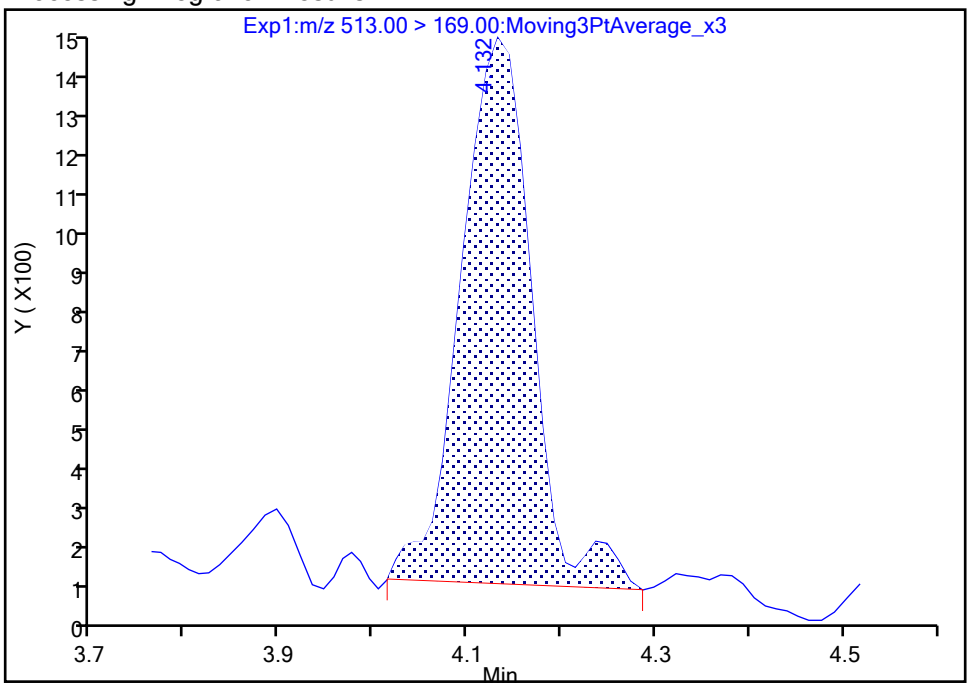
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

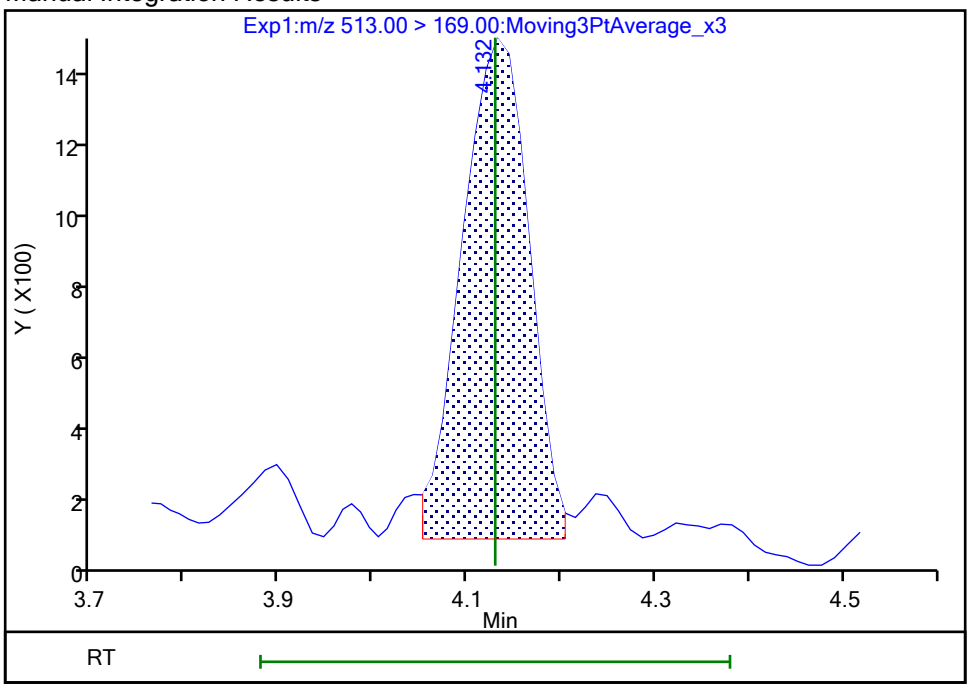
Processing Integration Results

RT: 4.13
Area: 7033
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 6702
Amount: 0.045399
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:17:53 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

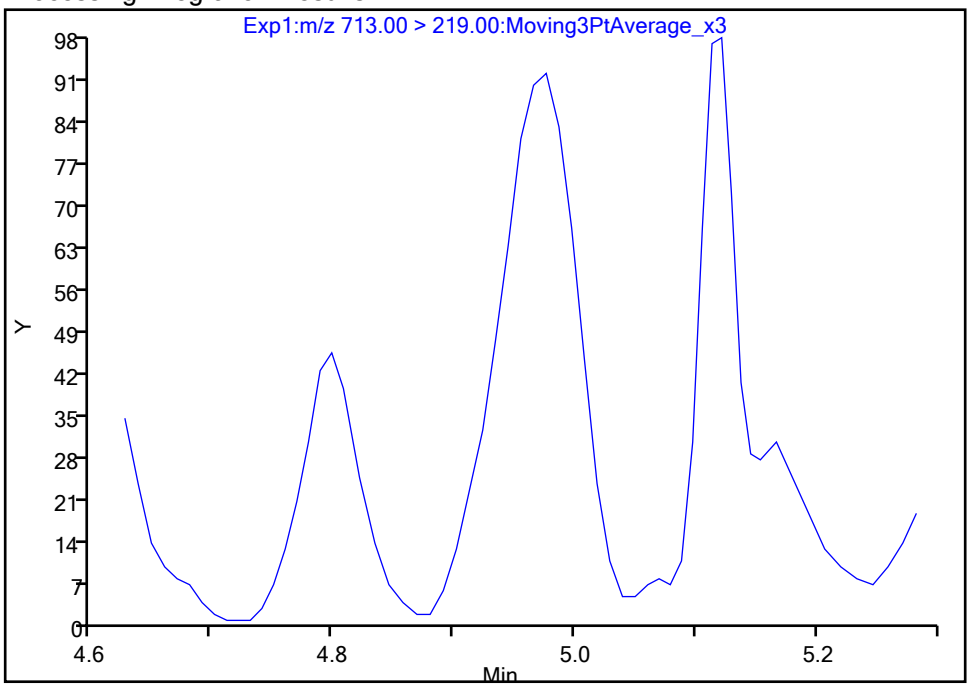
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

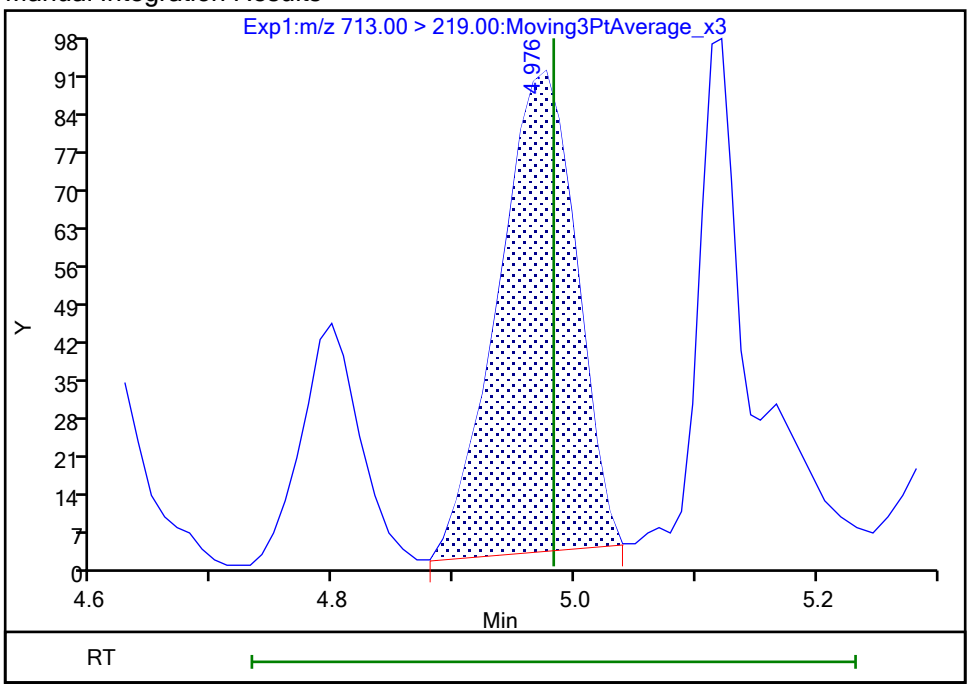
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 401
Amount: 0.001024
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:59:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

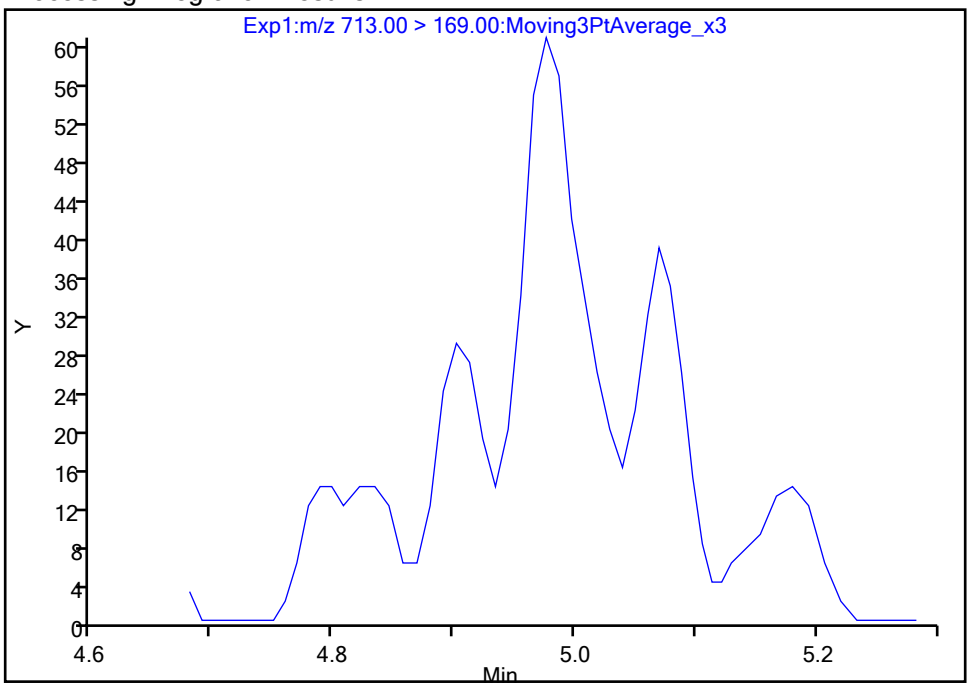
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

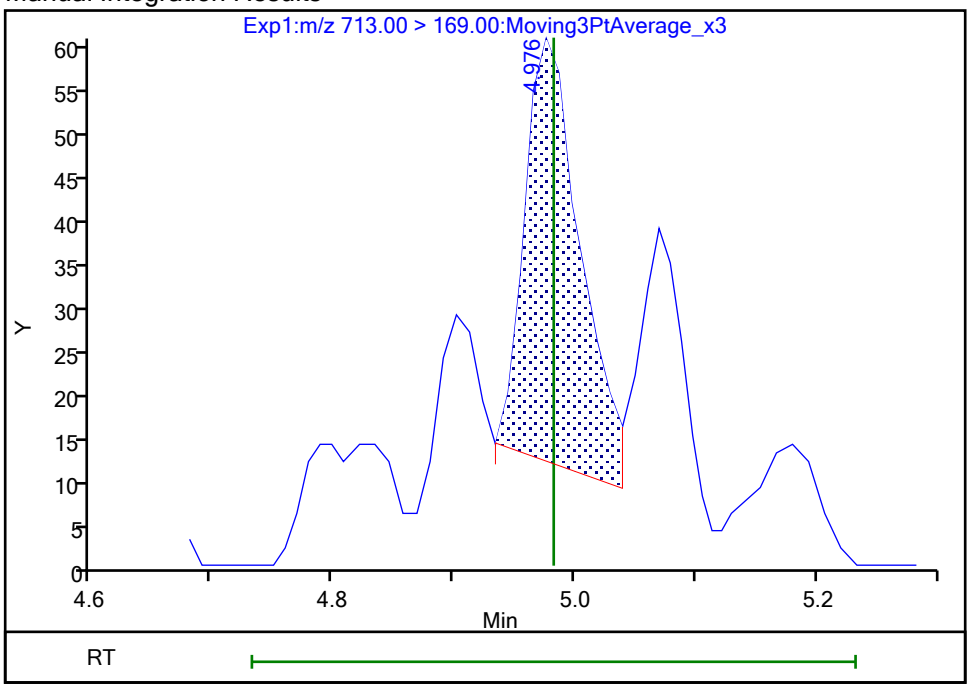
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 157
Amount: 0.001024
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:59:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

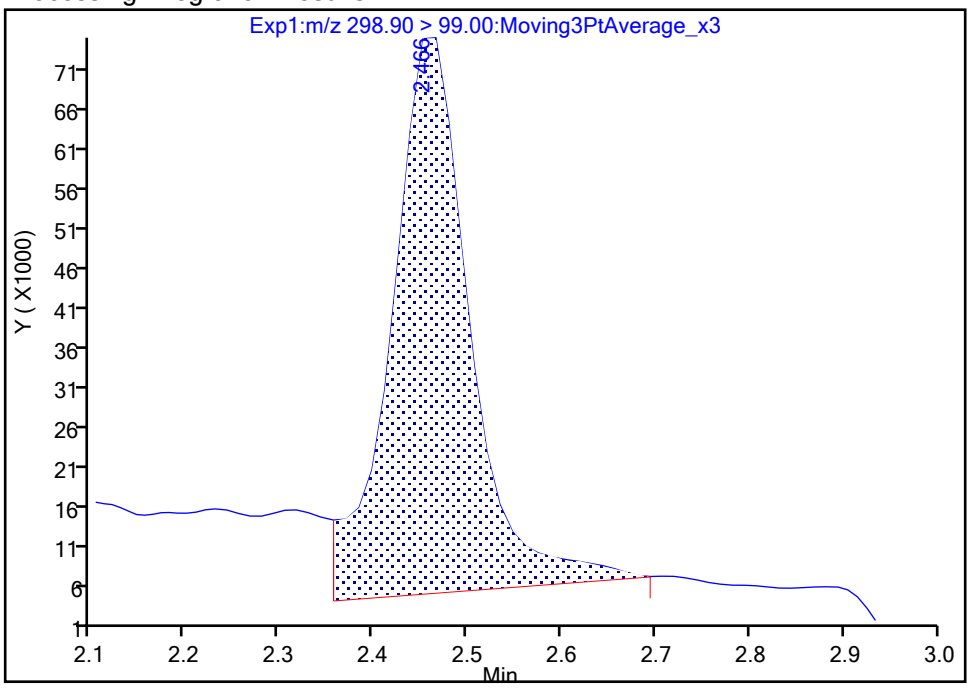
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

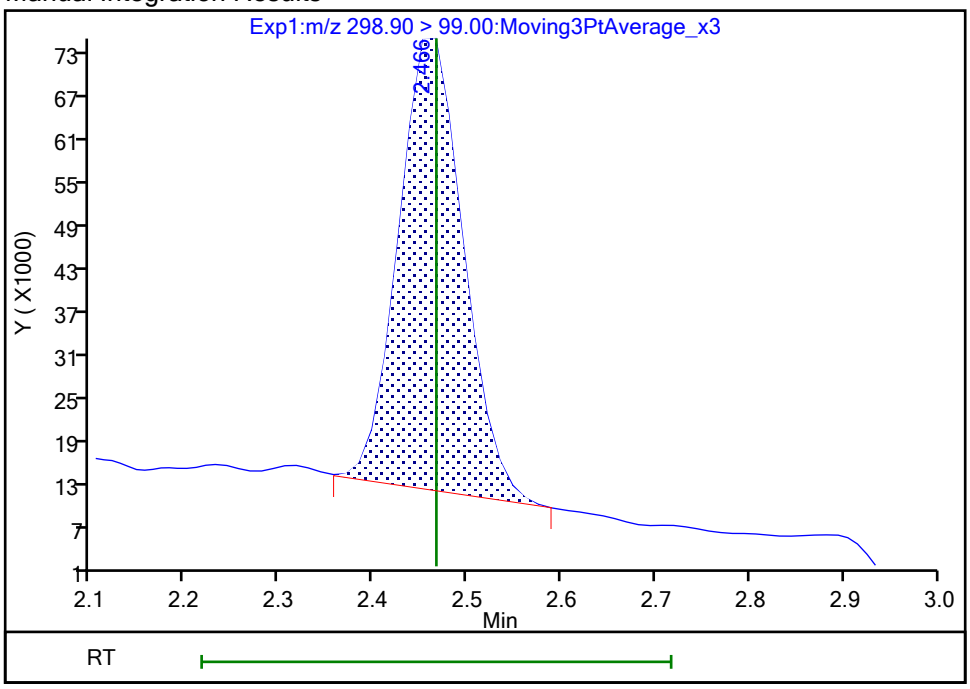
Processing Integration Results

RT: 2.47
Area: 402911
Amount: 0.988899
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 298142
Amount: 0.342202
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:55:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

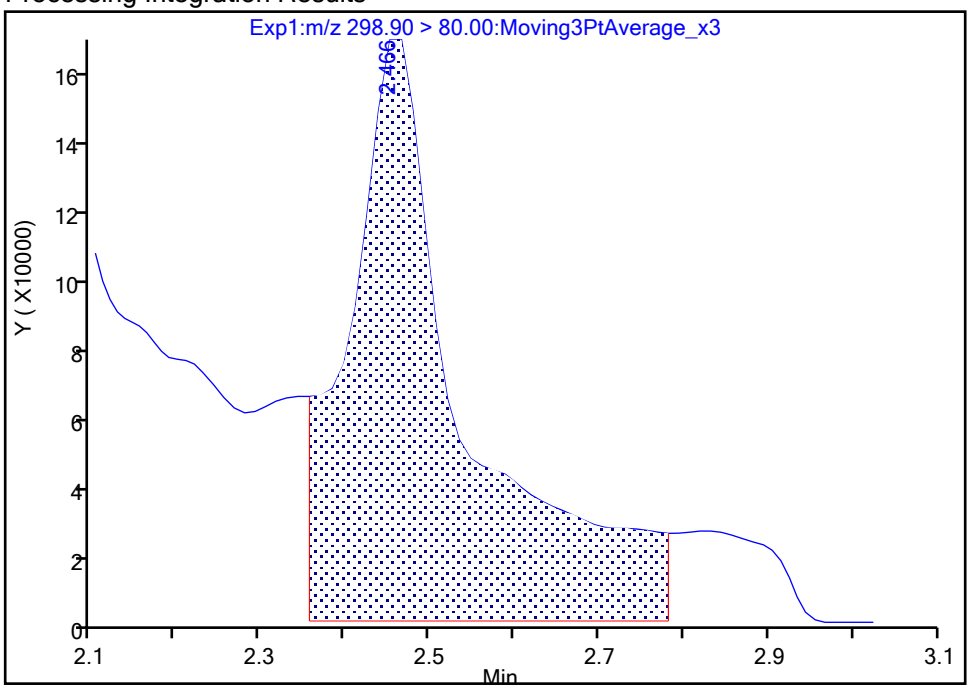
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

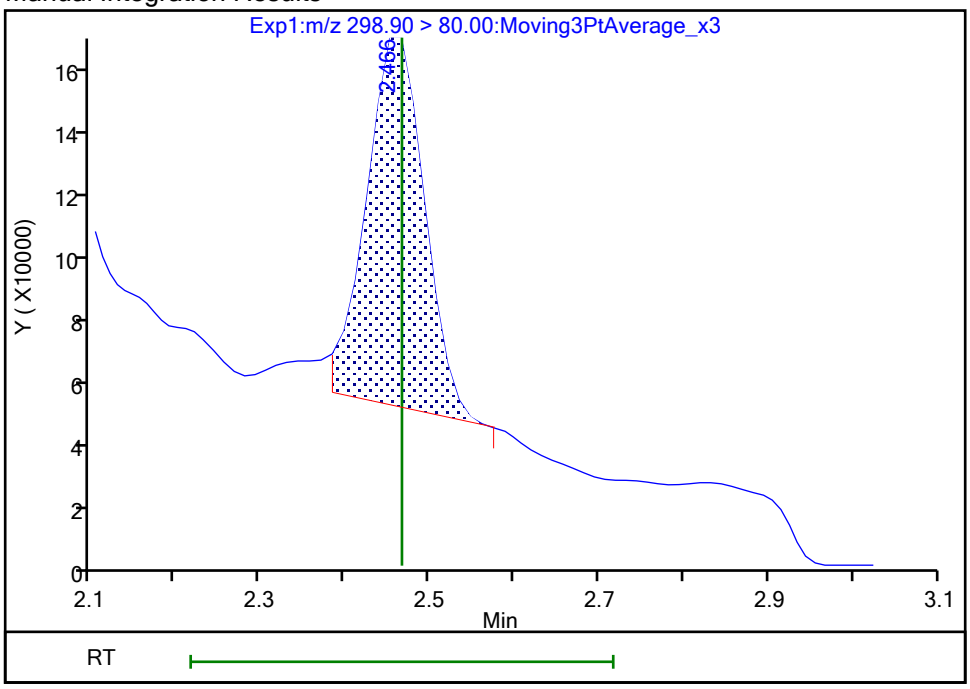
Processing Integration Results

RT: 2.47
Area: 1579550
Amount: 0.988899
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 546593
Amount: 0.342202
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:55:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

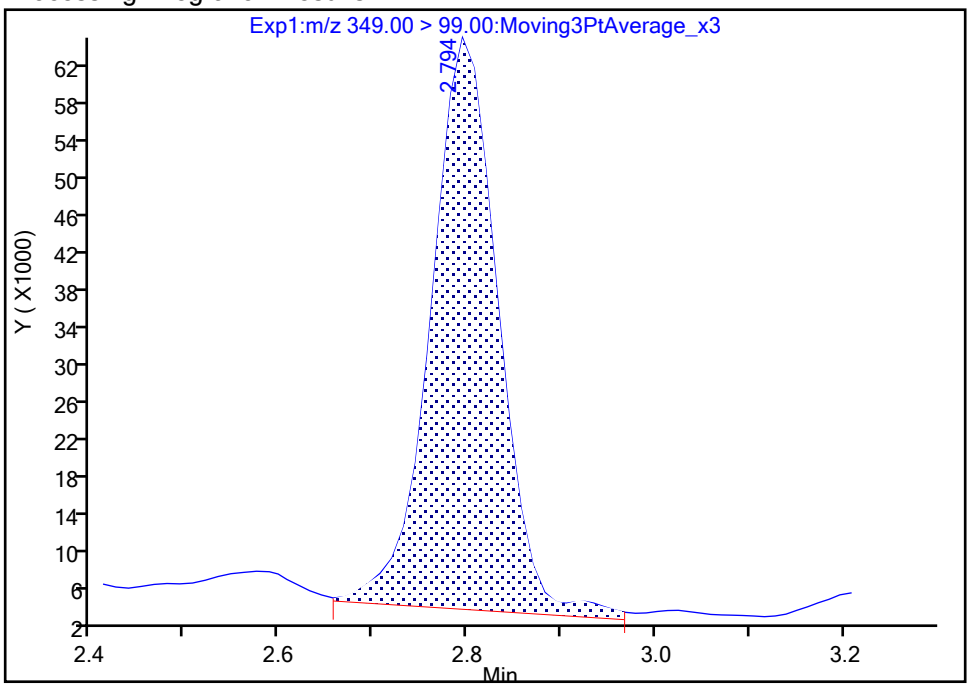
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

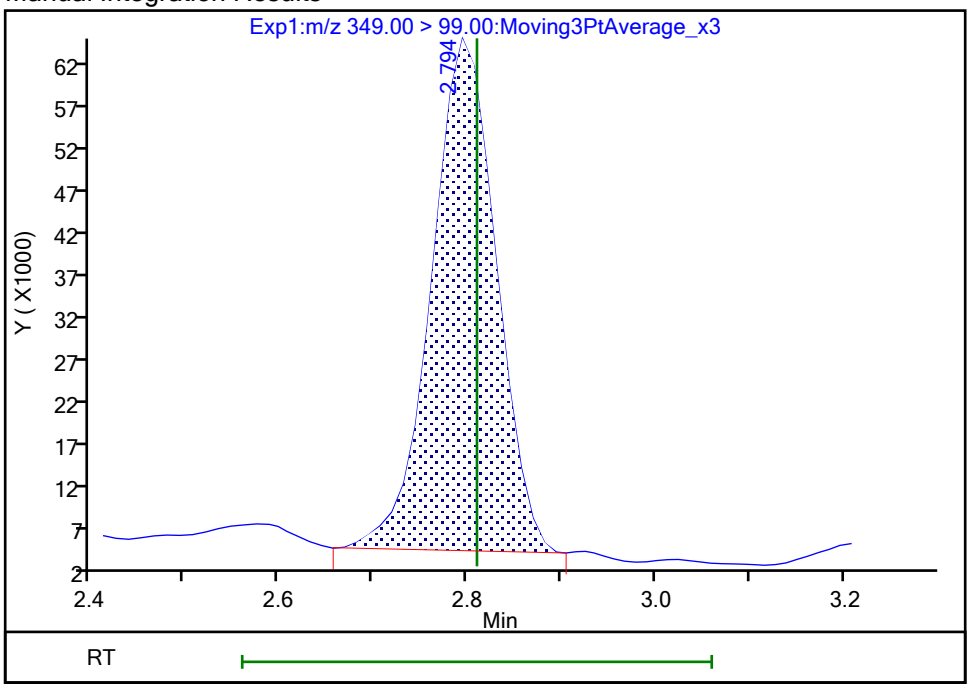
Processing Integration Results

RT: 2.79
Area: 305506
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 286914
Amount: 0.340089
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

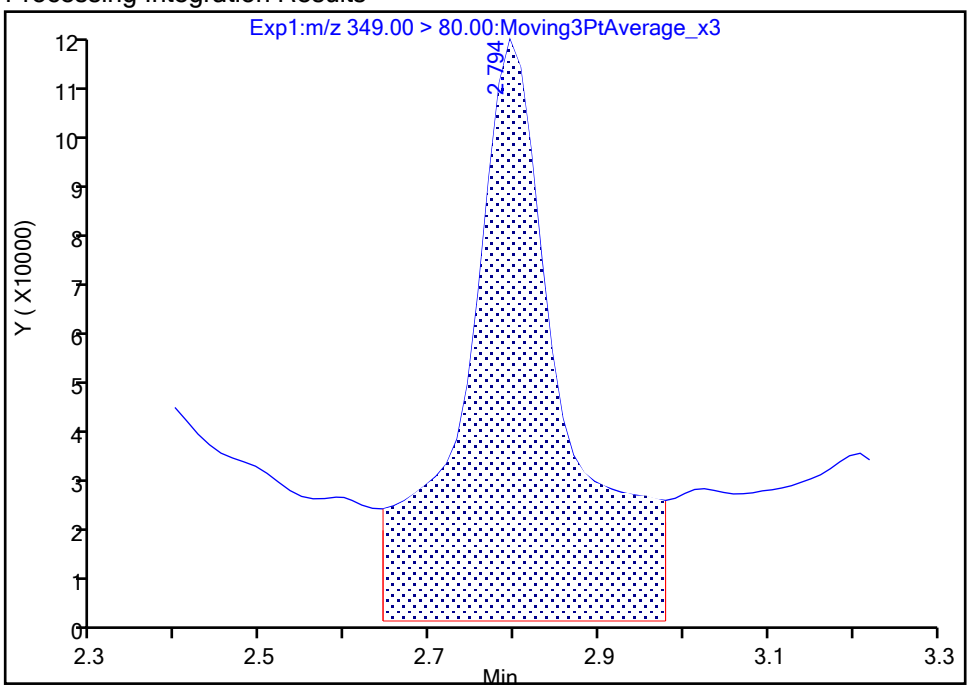
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

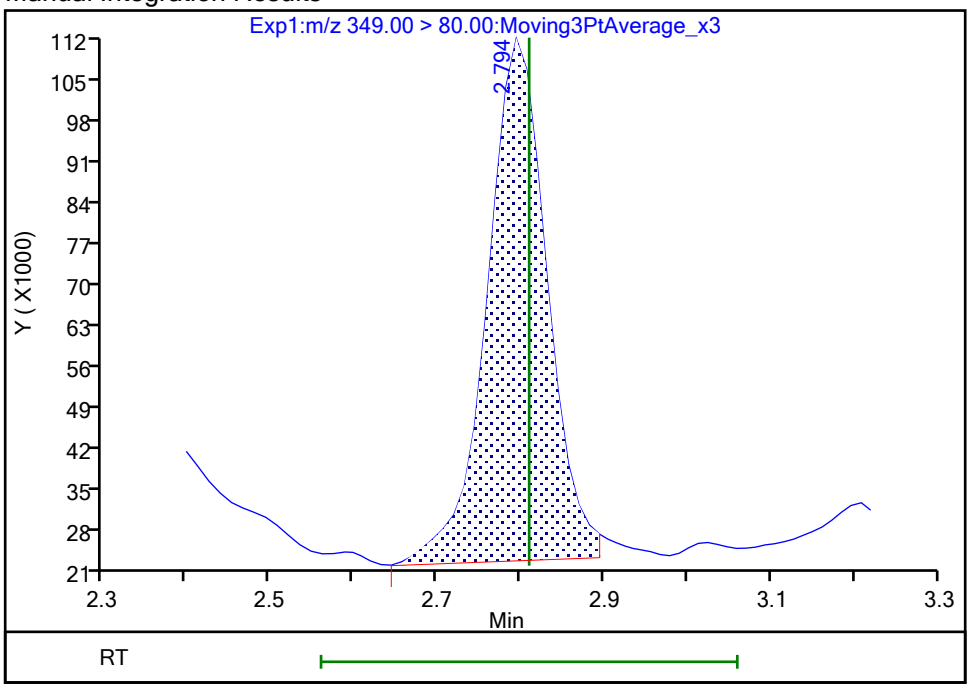
Processing Integration Results

RT: 2.79
Area: 903388
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 444991
Amount: 0.340089
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

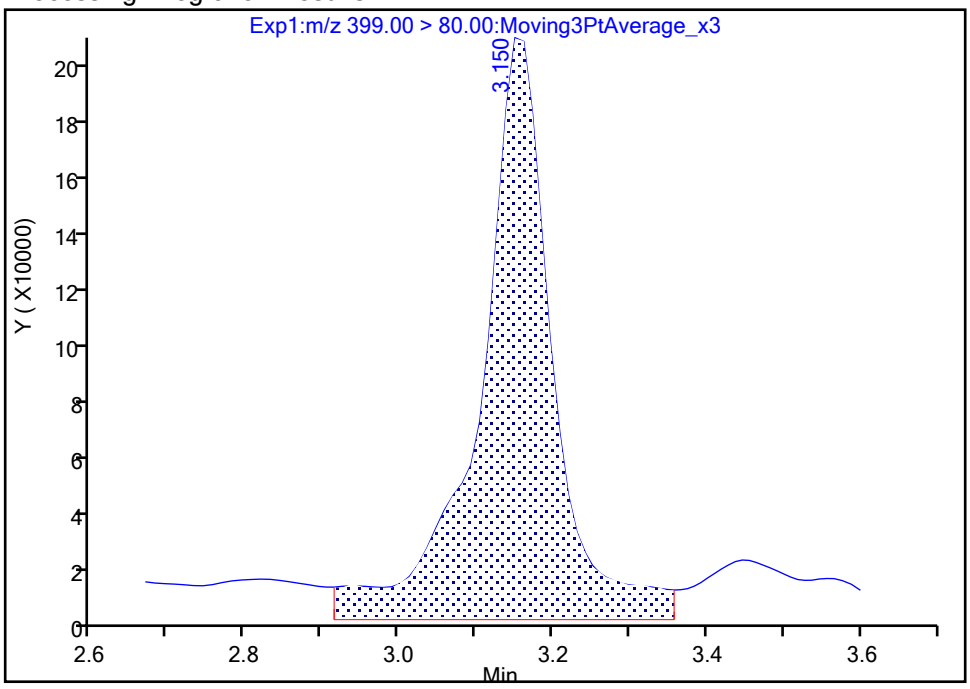
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

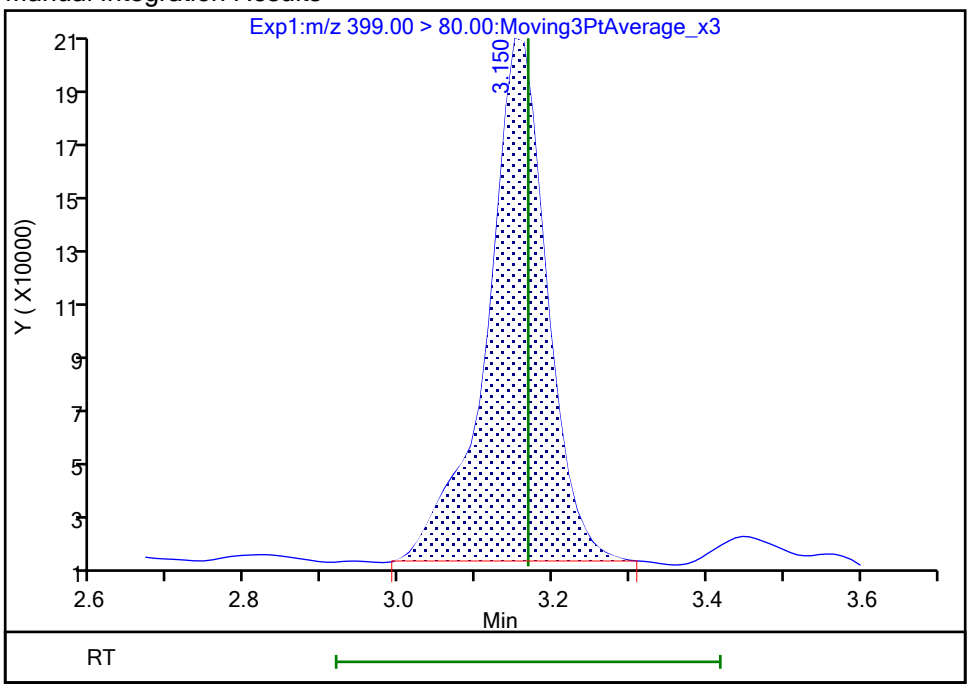
Processing Integration Results

RT: 3.15
Area: 1394052
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 1070641
Amount: 0.965281
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

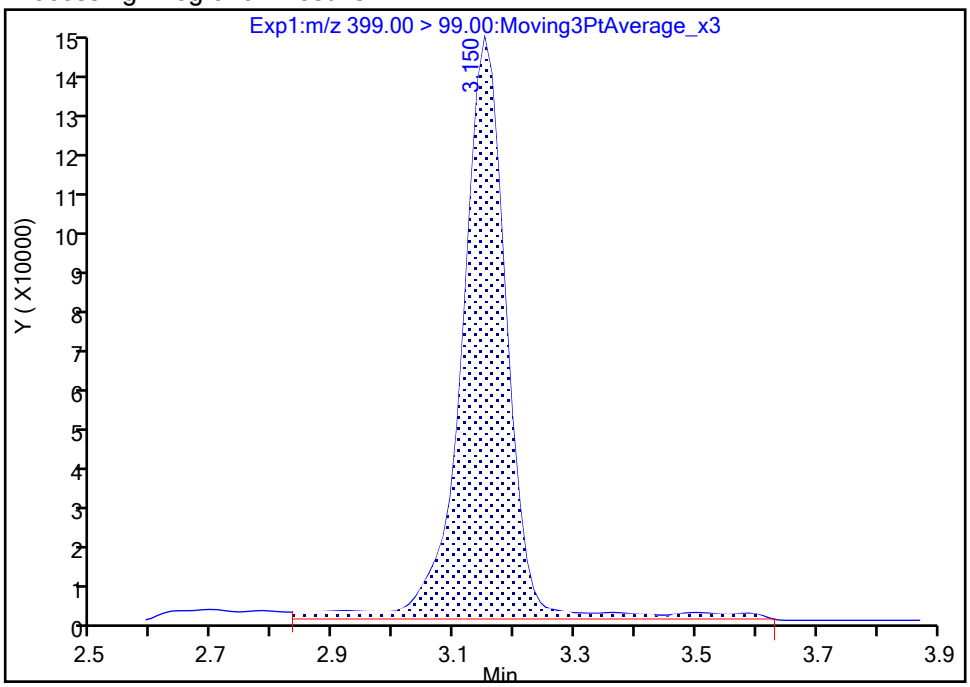
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

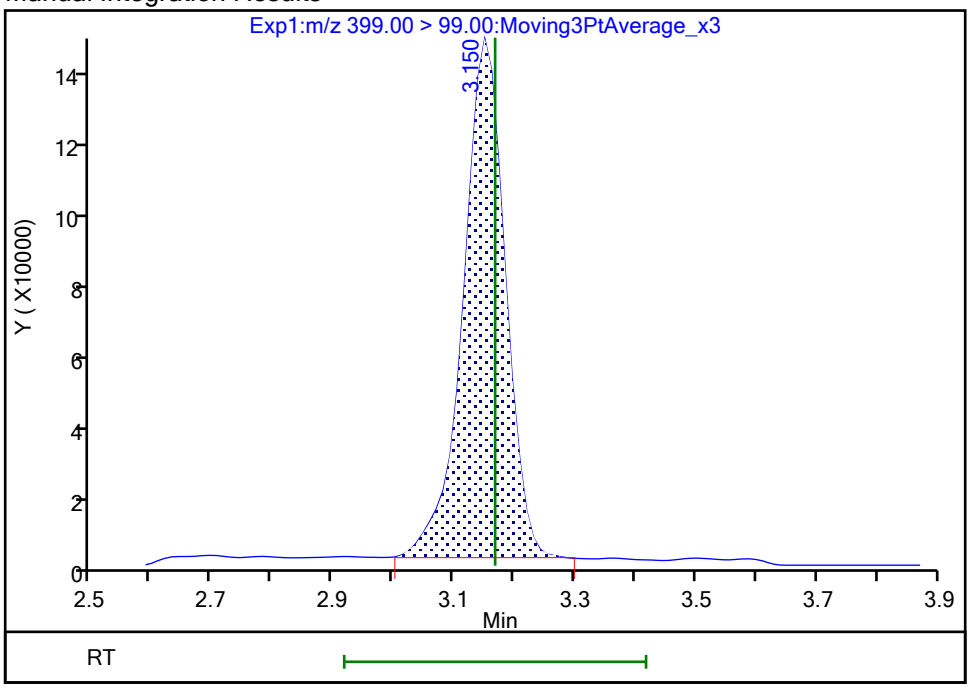
Processing Integration Results

RT: 3.15
Area: 798819
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 712465
Amount: 0.965281
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

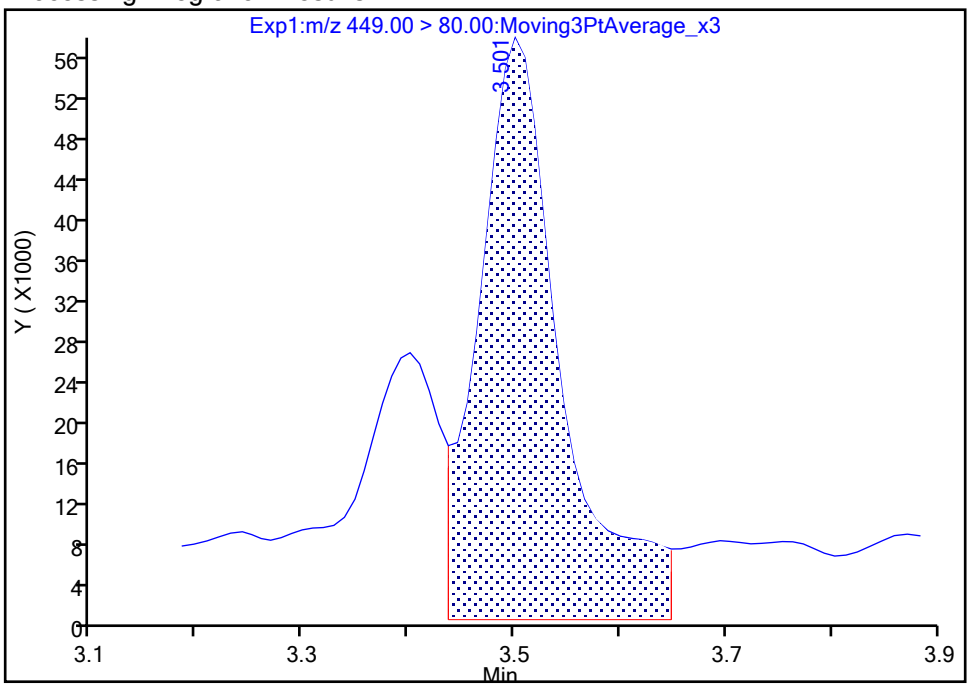
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

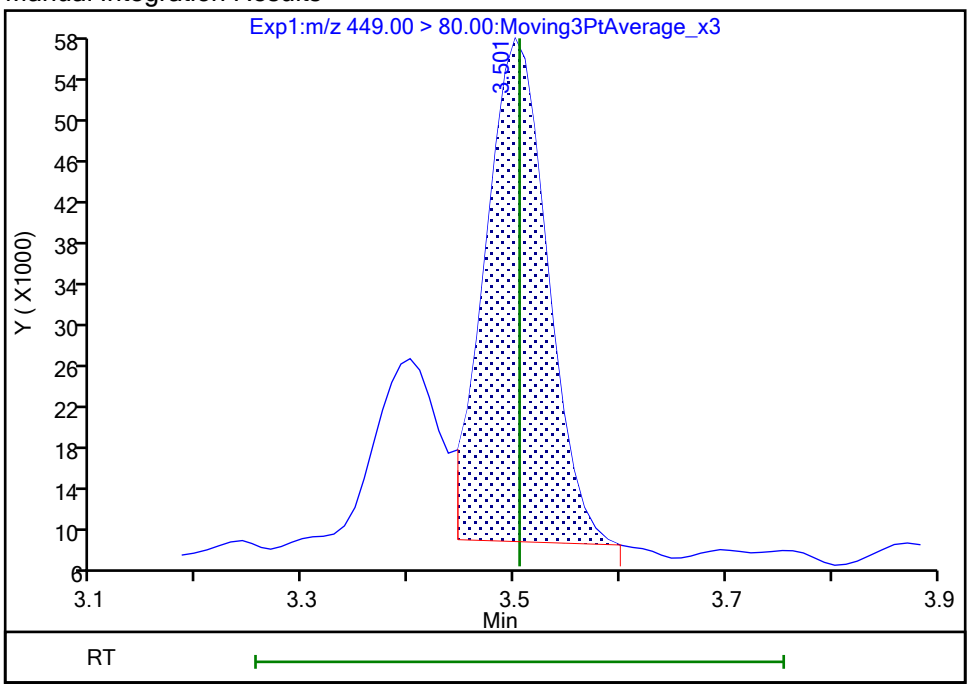
Processing Integration Results

RT: 3.50
Area: 311188
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 200173
Amount: 0.211789
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

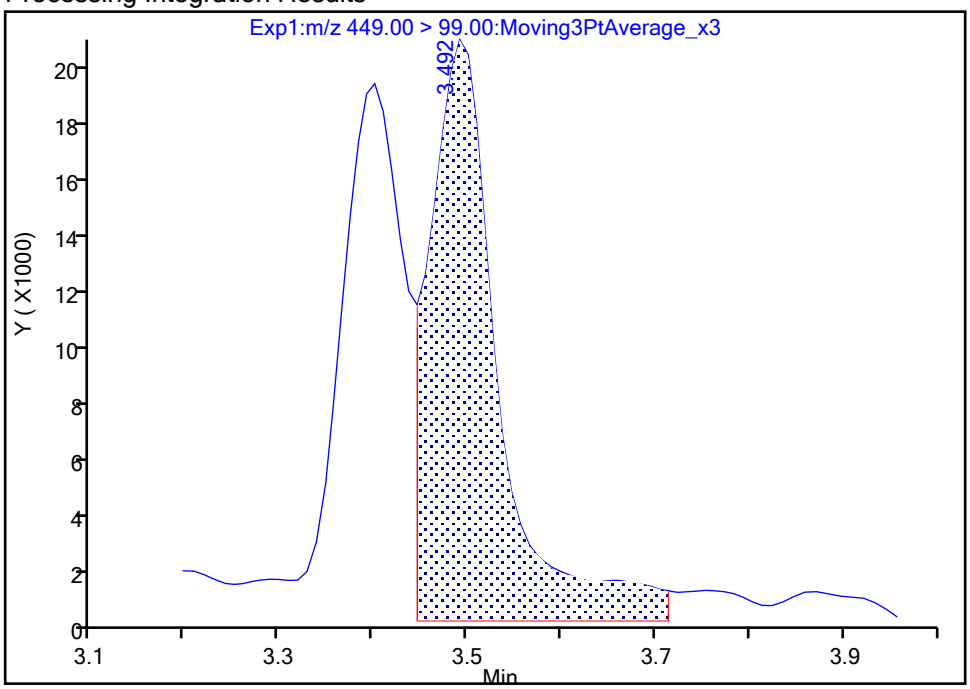
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

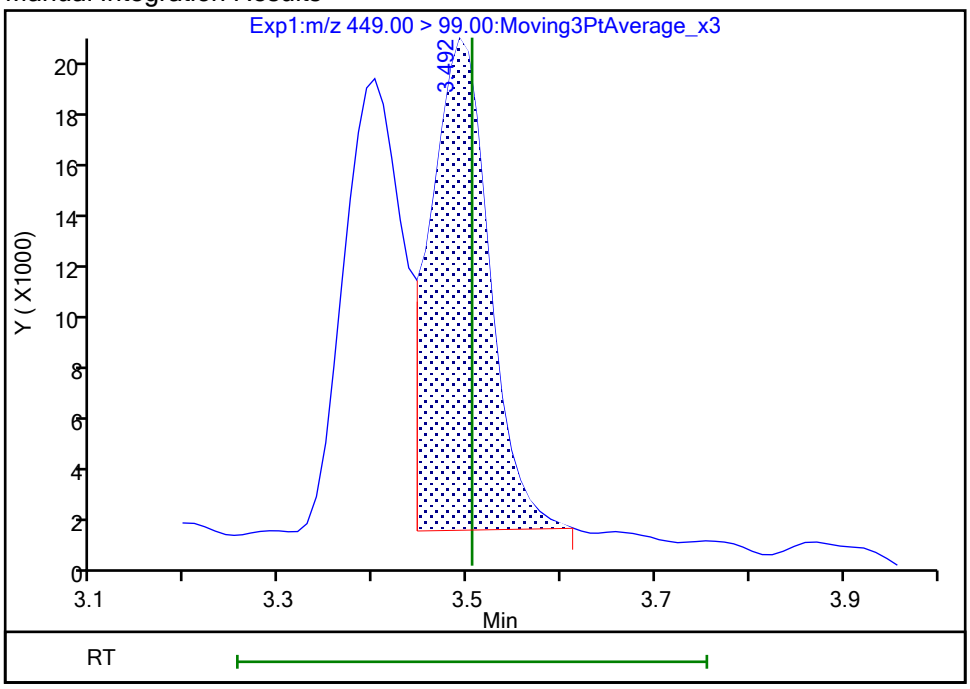
Processing Integration Results

RT: 3.49
Area: 103566
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 79717
Amount: 0.211789
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

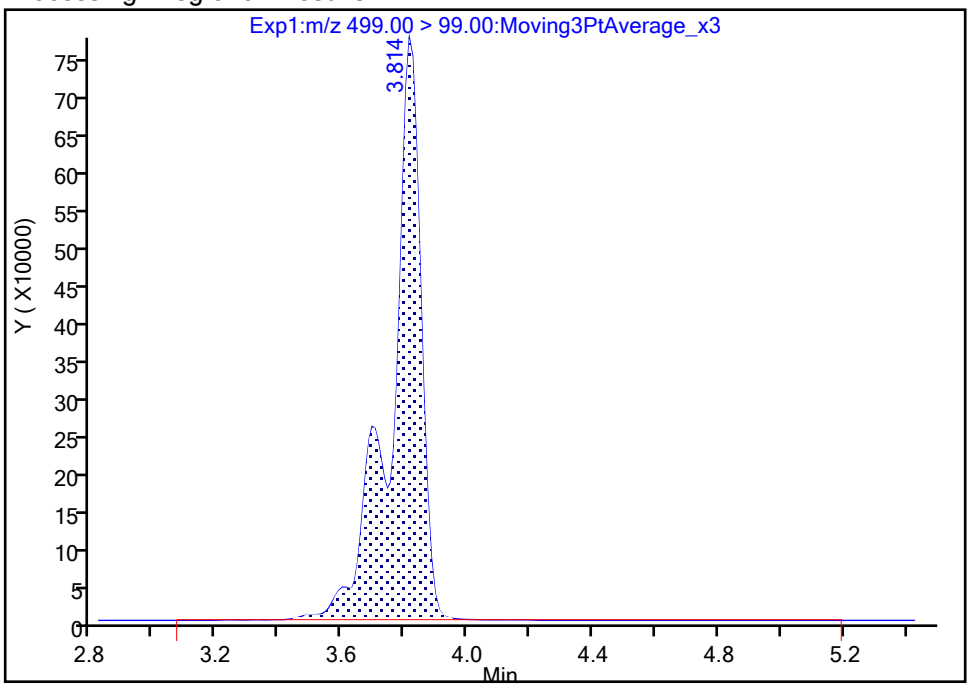
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

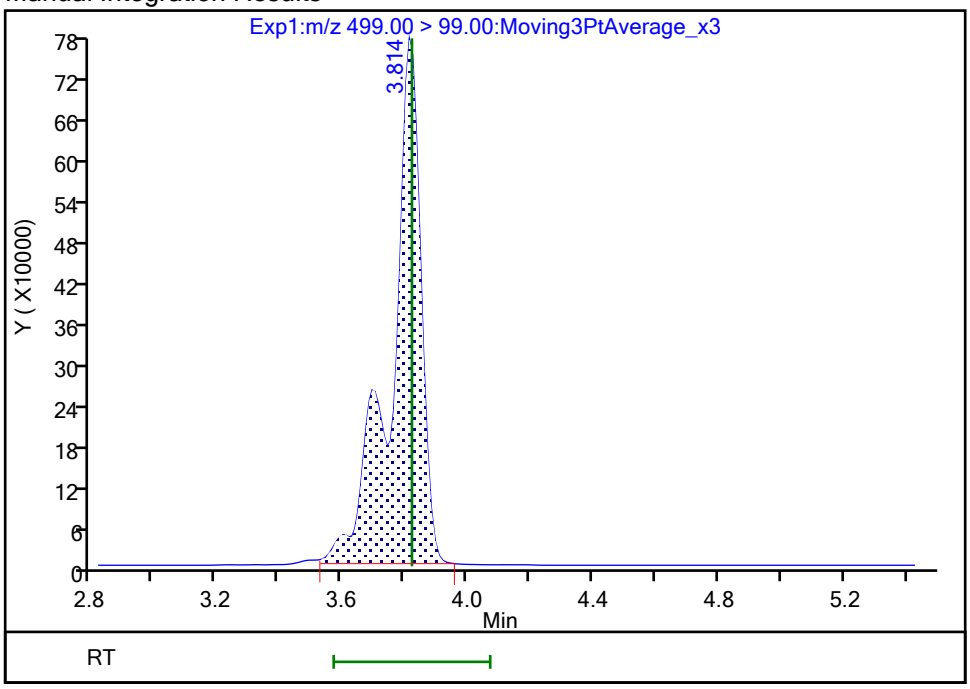
Processing Integration Results

RT: 3.81
Area: 5263669
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 5182292
Amount: 21.955007
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

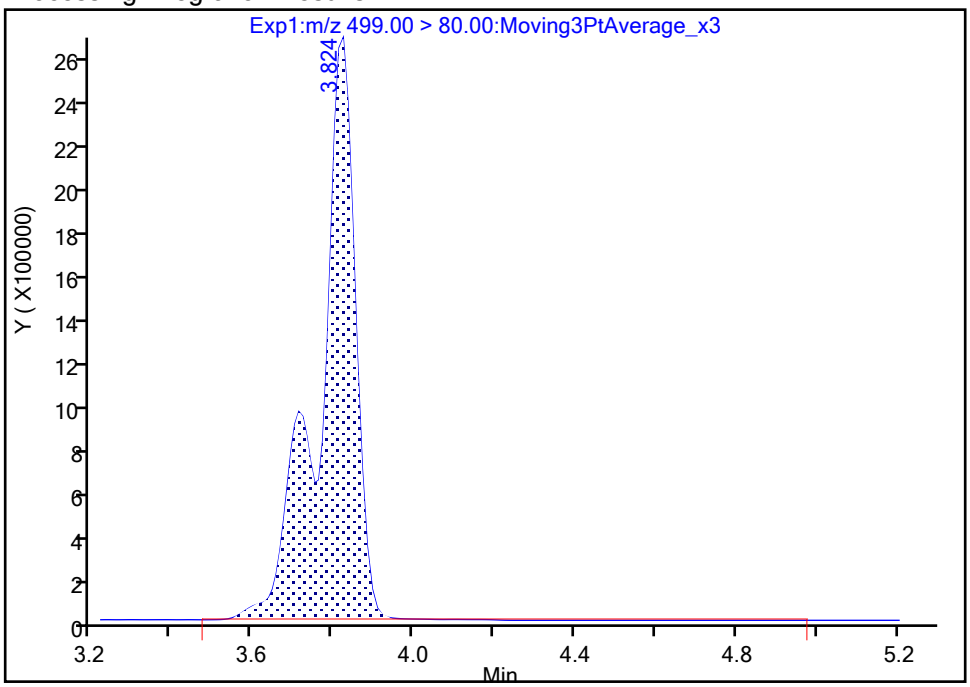
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

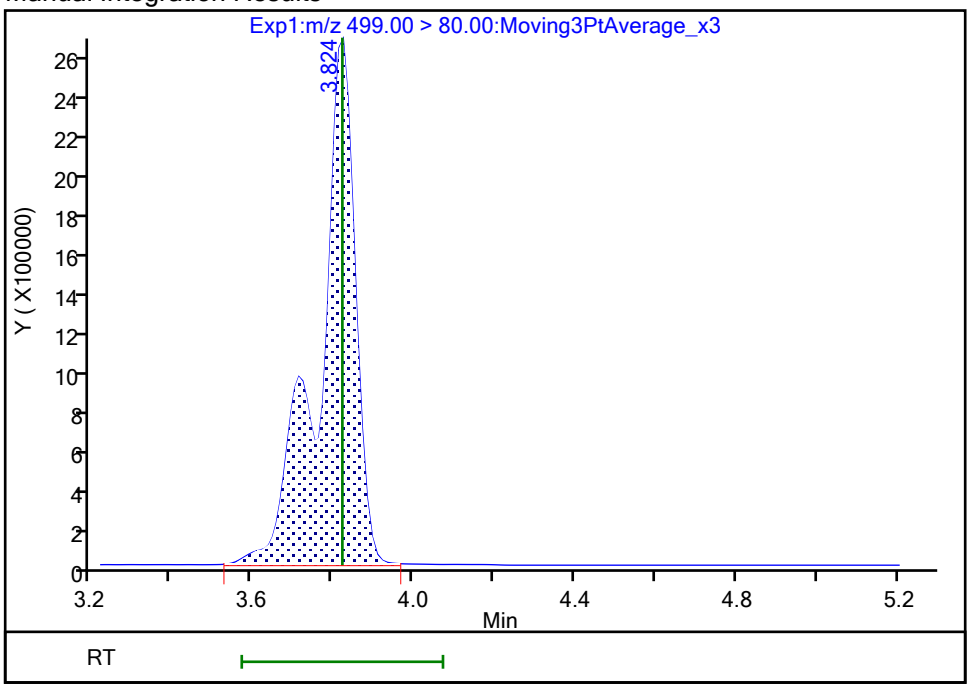
Processing Integration Results

RT: 3.82
Area: 16896039
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 16747789
Amount: 21.955007
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

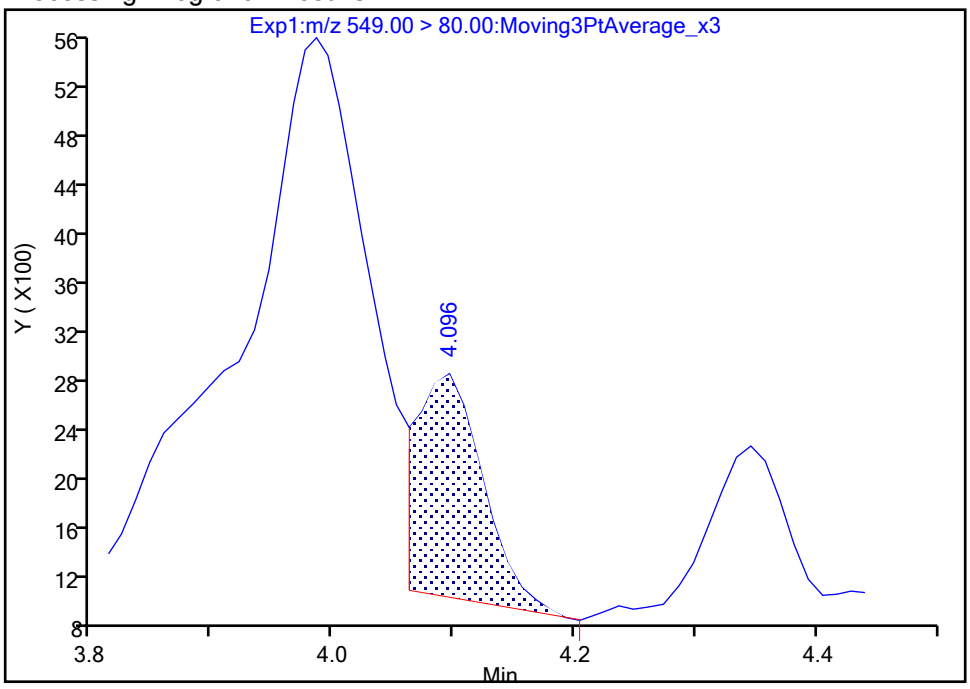
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

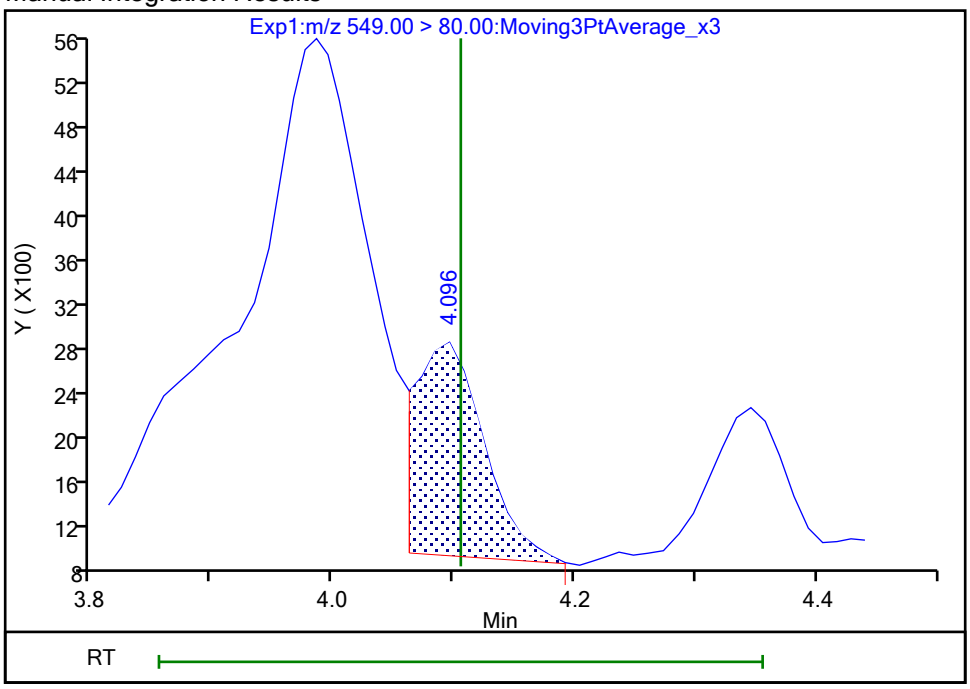
Processing Integration Results

RT: 4.10
Area: 6821
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 7358
Amount: 0.012679
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

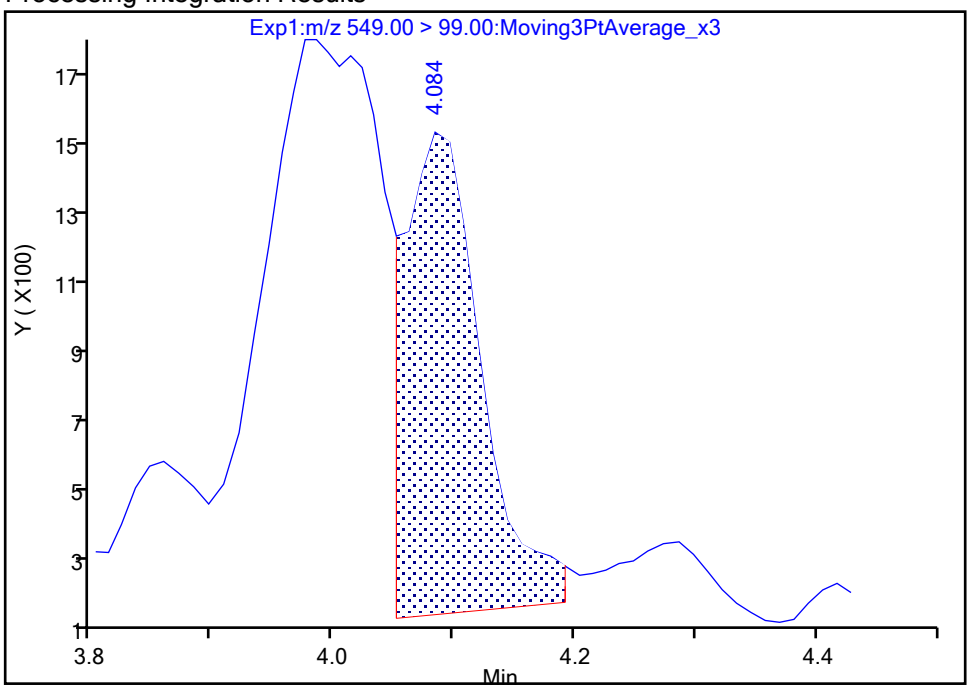
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

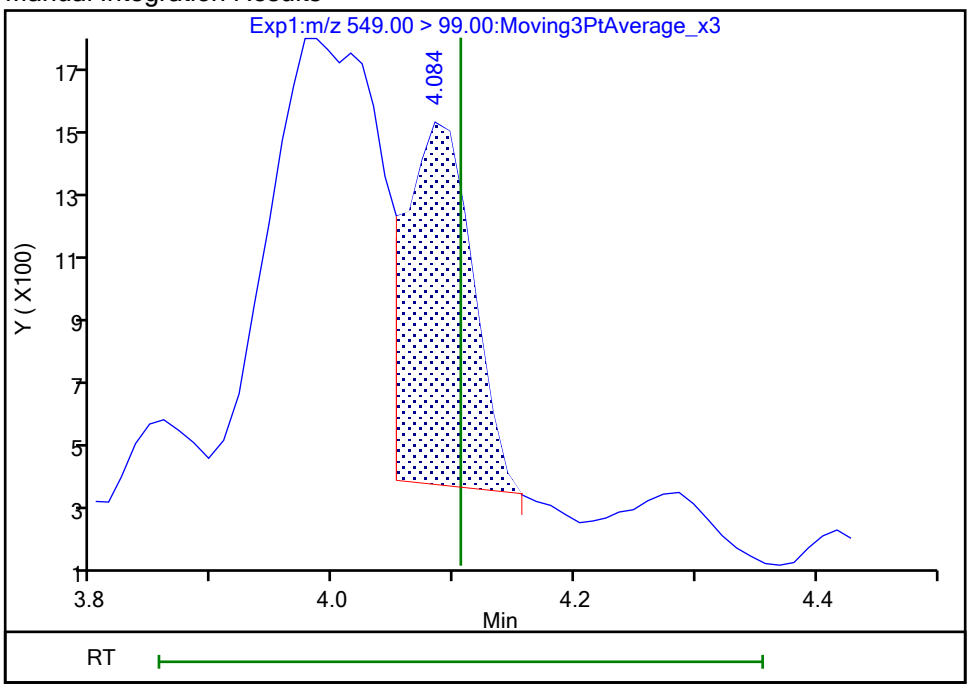
Processing Integration Results

RT: 4.08
Area: 5687
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.08
Area: 4092
Amount: 0.012679
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

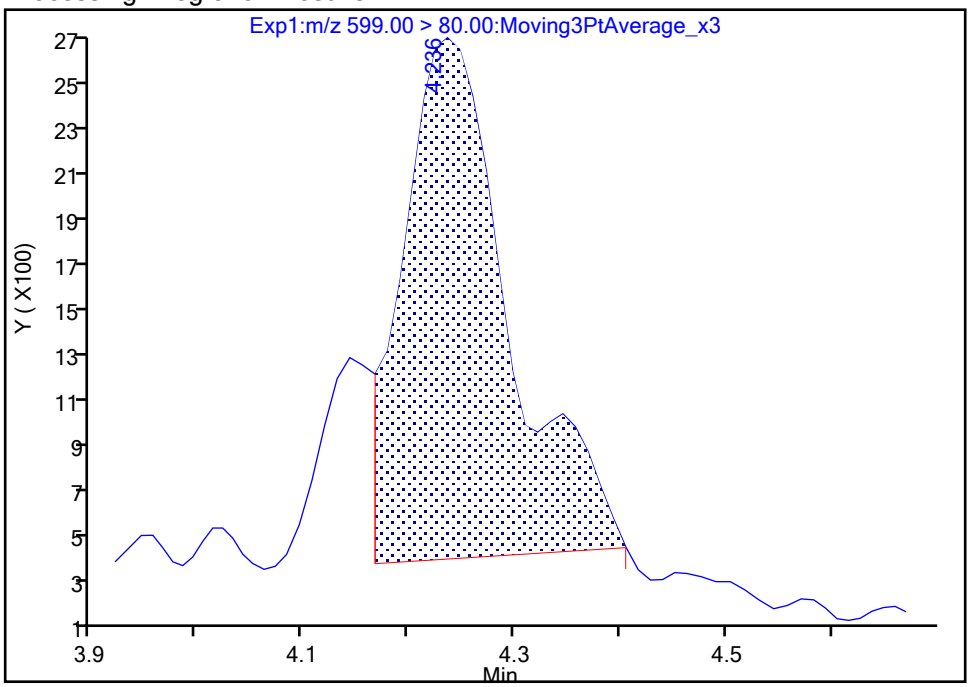
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

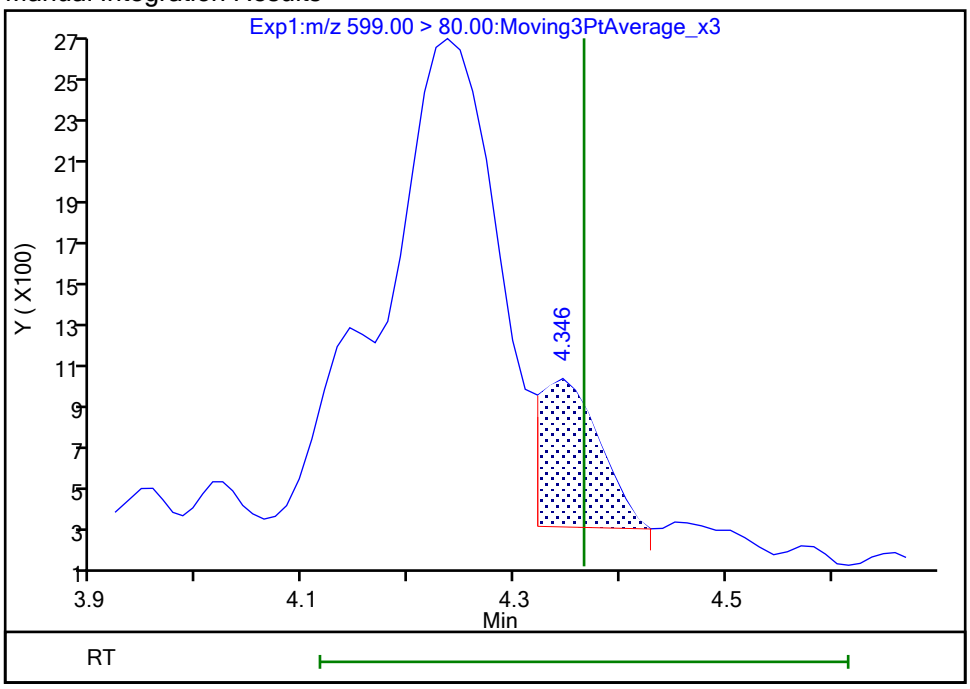
Processing Integration Results

RT: 4.24
Area: 15452
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 2647
Amount: 0.005926
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:59:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

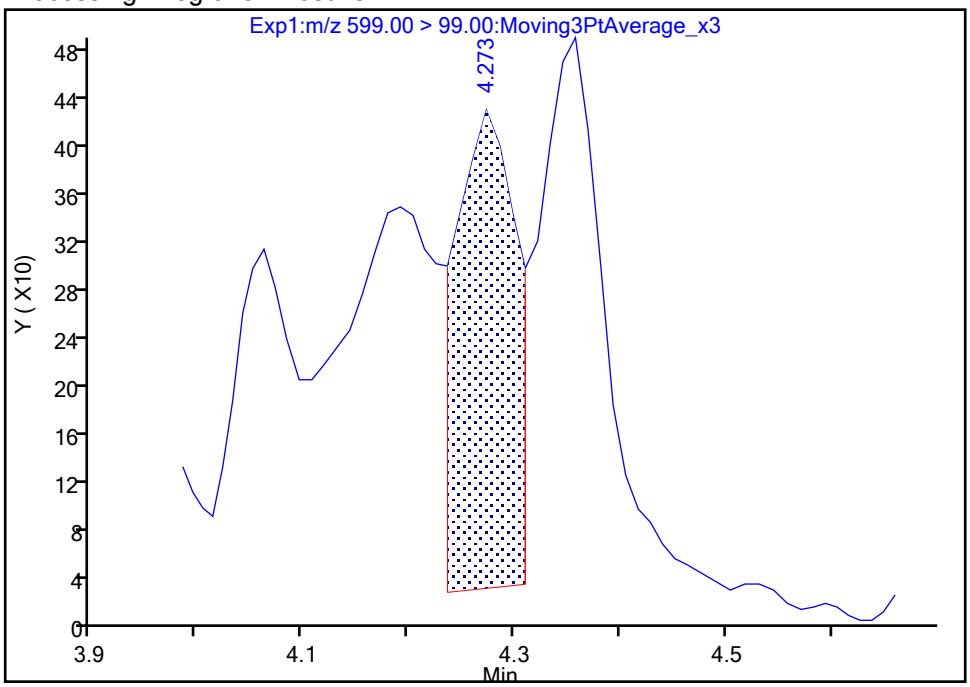
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

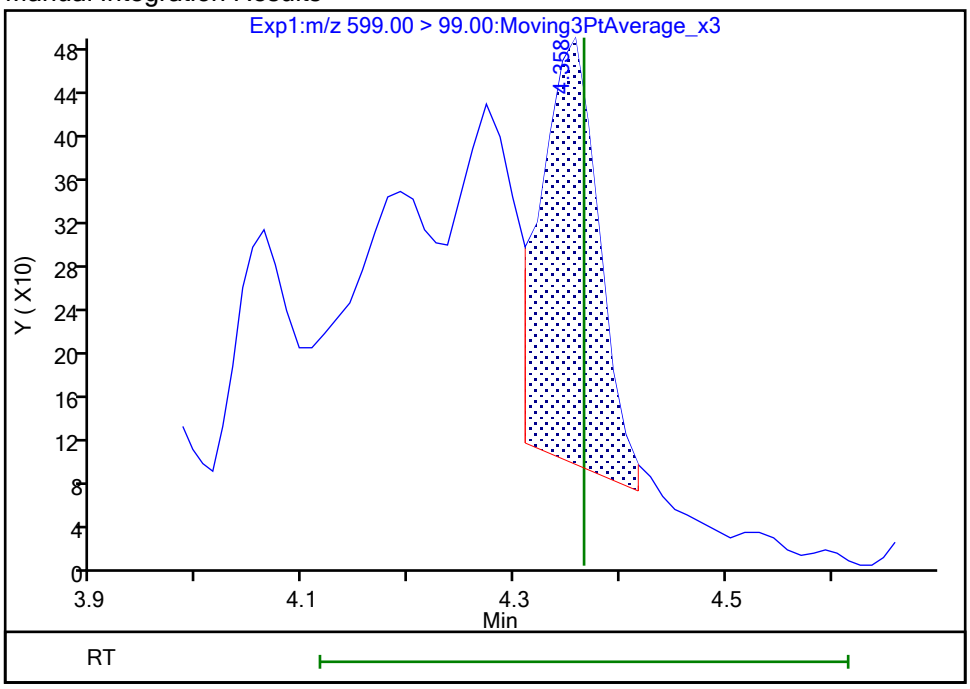
Processing Integration Results

RT: 4.27
Area: 1473
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 1454
Amount: 0.005926
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:59:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

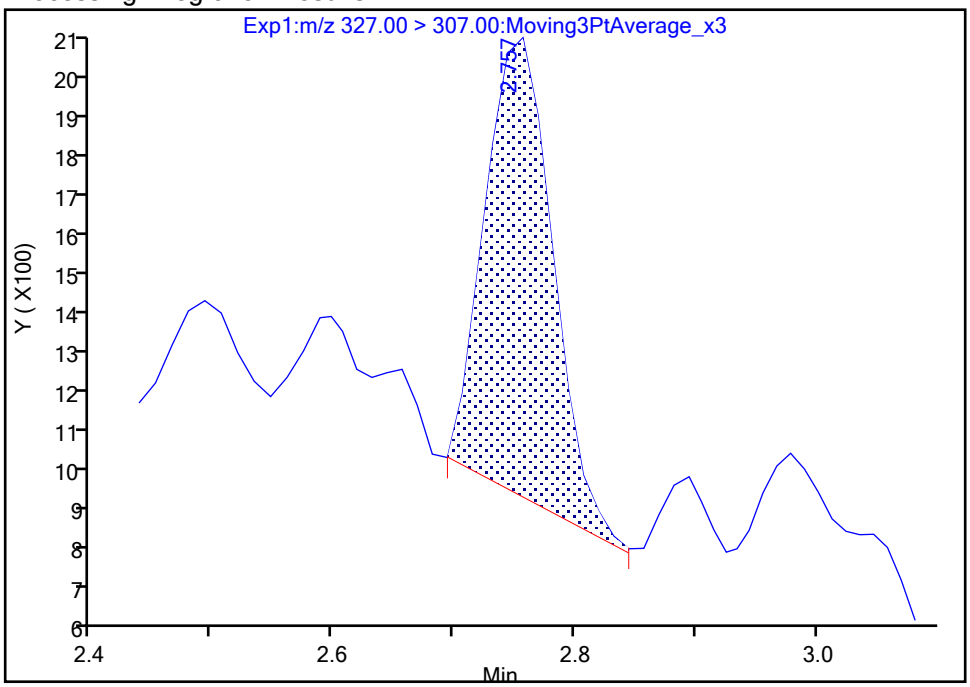
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

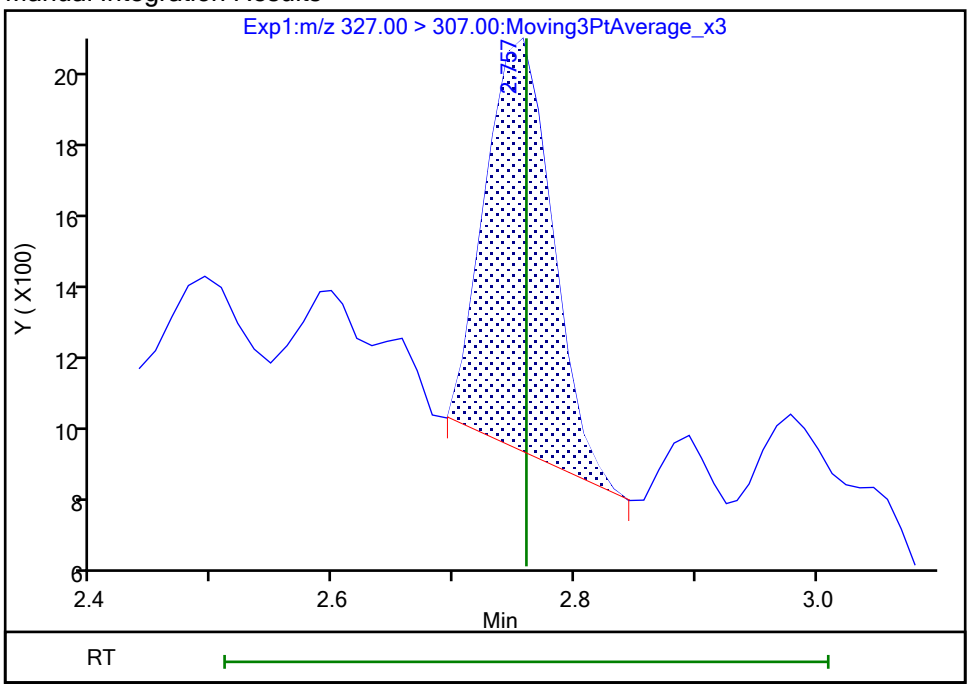
Processing Integration Results

RT: 2.76
Area: 4184
Amount: 0.005648
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 4148
Amount: 0.005600
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:55:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

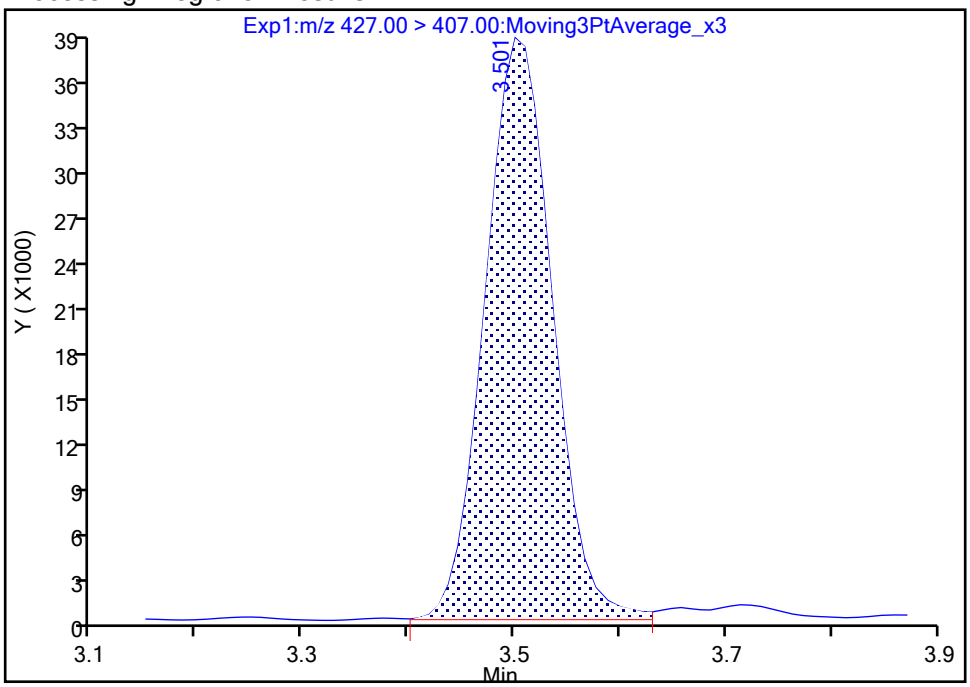
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

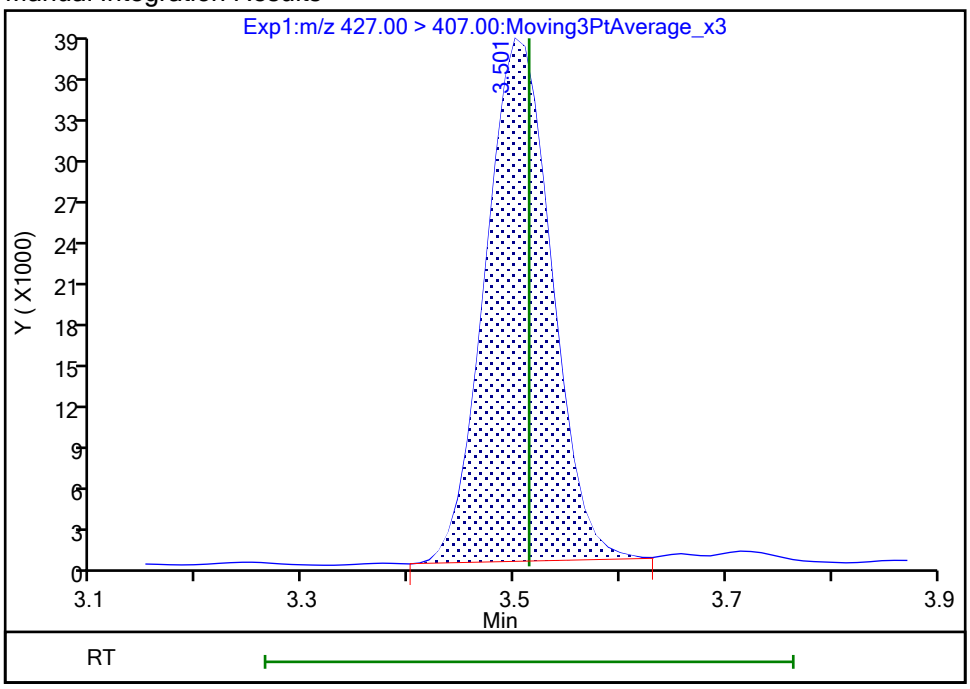
Processing Integration Results

RT: 3.50
Area: 167692
Amount: 0.220060
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 164236
Amount: 0.215525
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

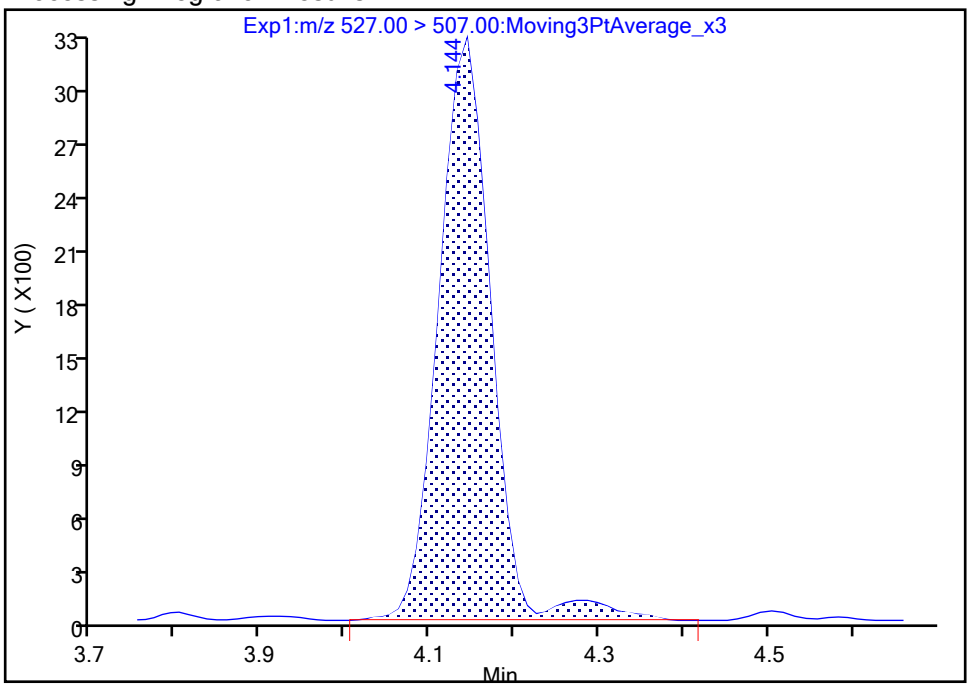
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

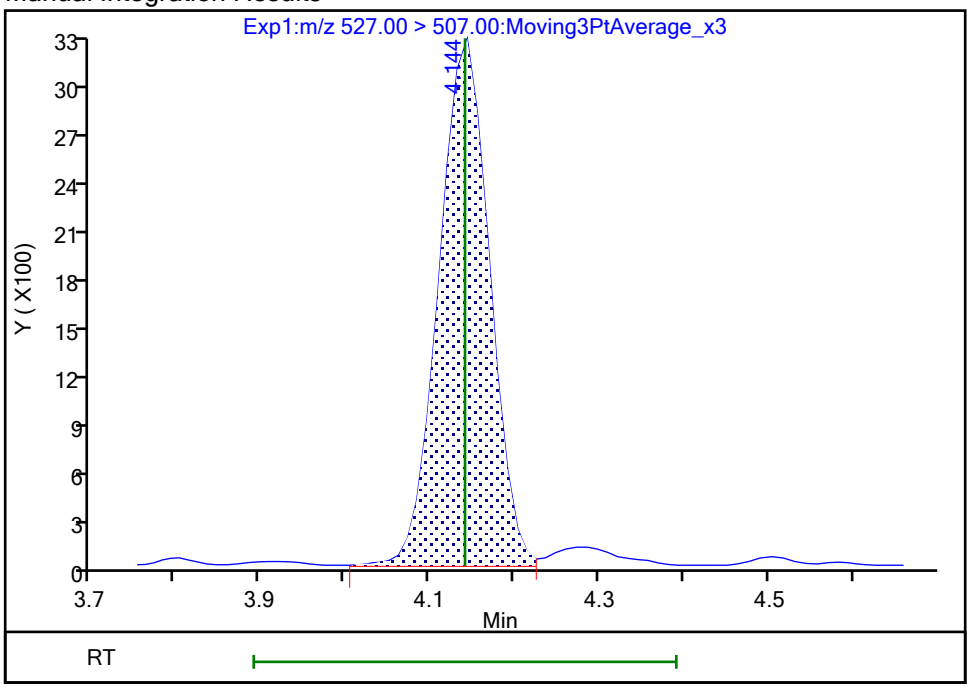
Processing Integration Results

RT: 4.14
Area: 14203
Amount: 0.018962
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 13601
Amount: 0.018158
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

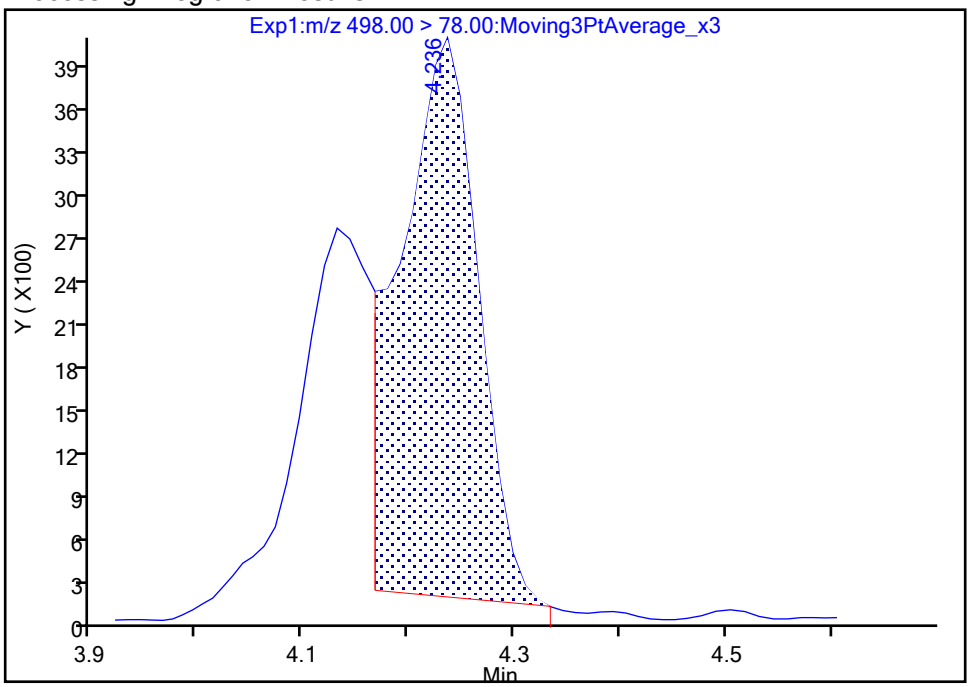
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

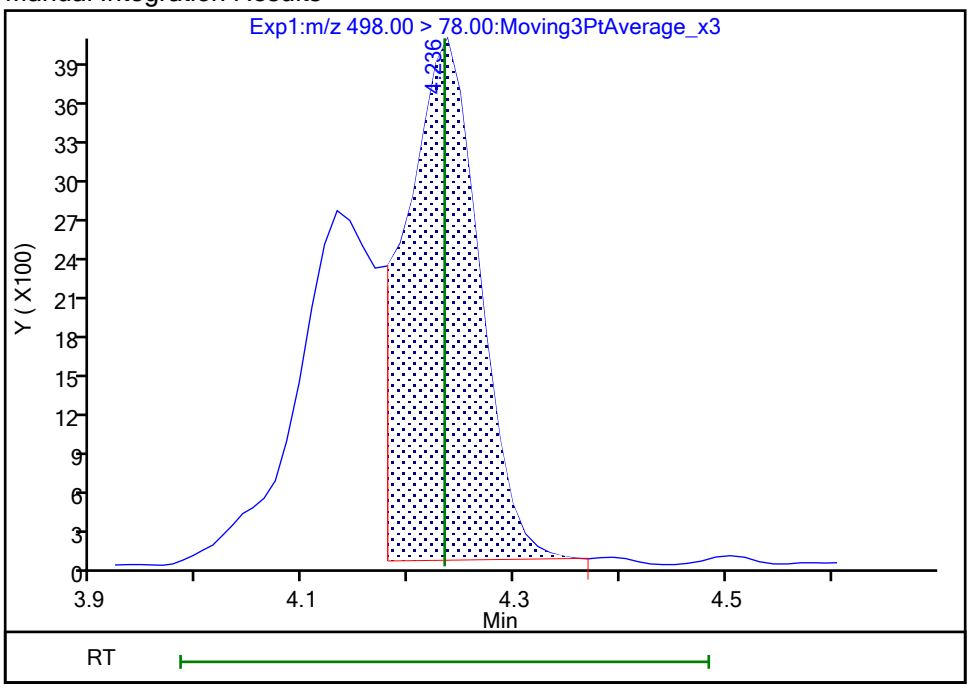
Processing Integration Results

RT: 4.24
Area: 19480
Amount: 0.022108
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 19088
Amount: 0.021663
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

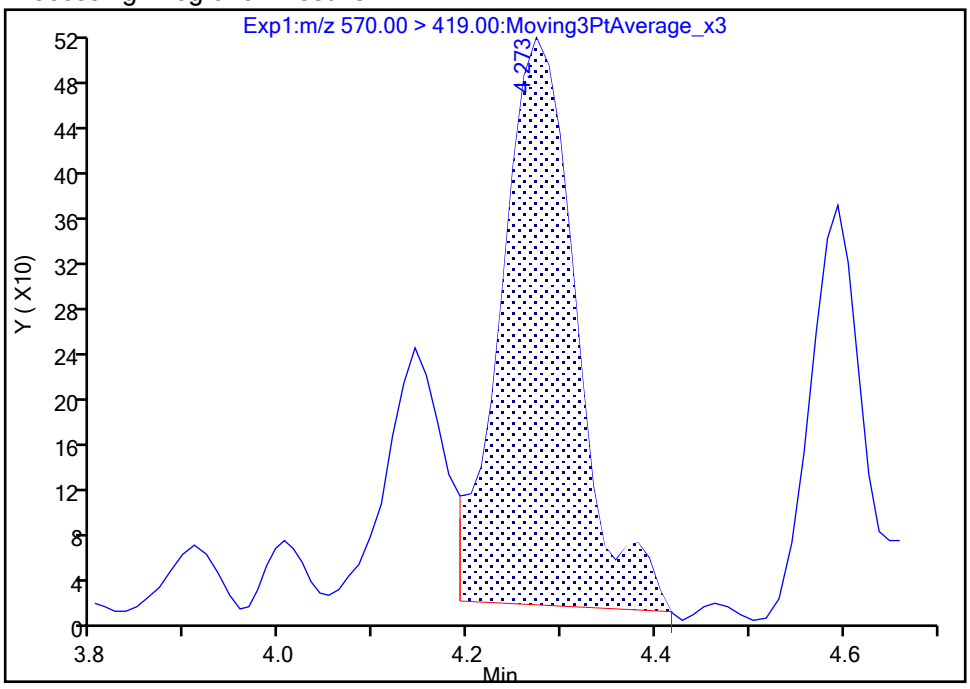
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

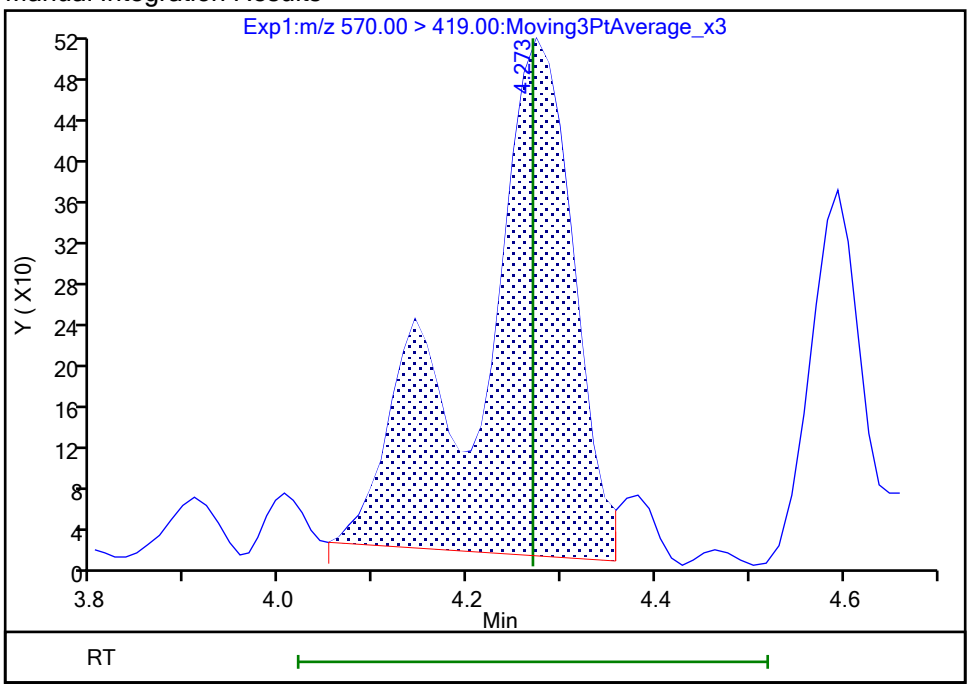
Processing Integration Results

RT: 4.27
Area: 2786
Amount: 0.007386
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 3576
Amount: 0.009480
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:58:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

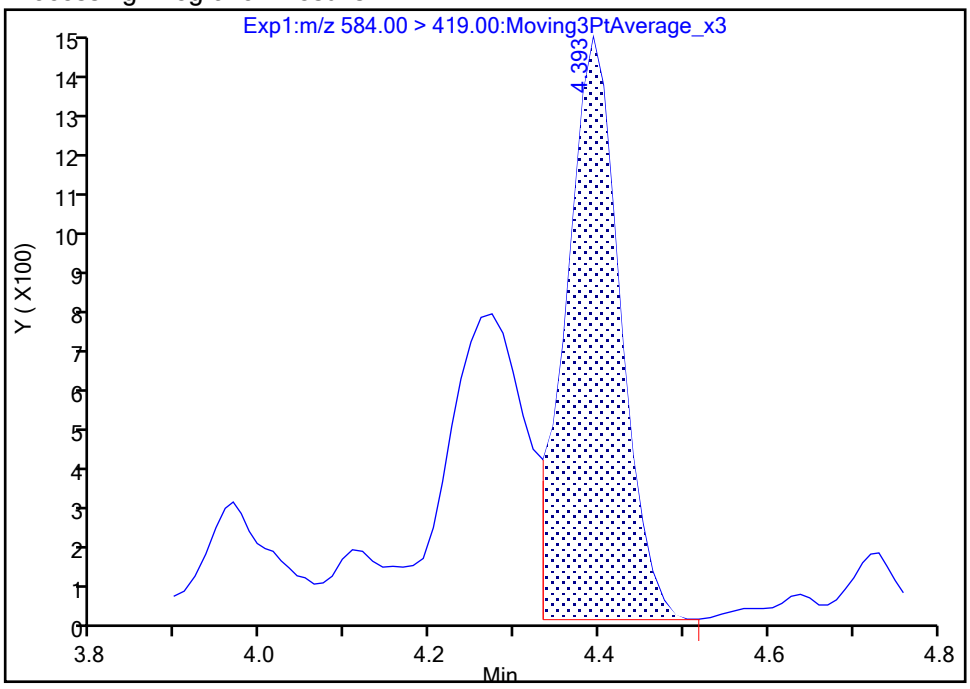
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

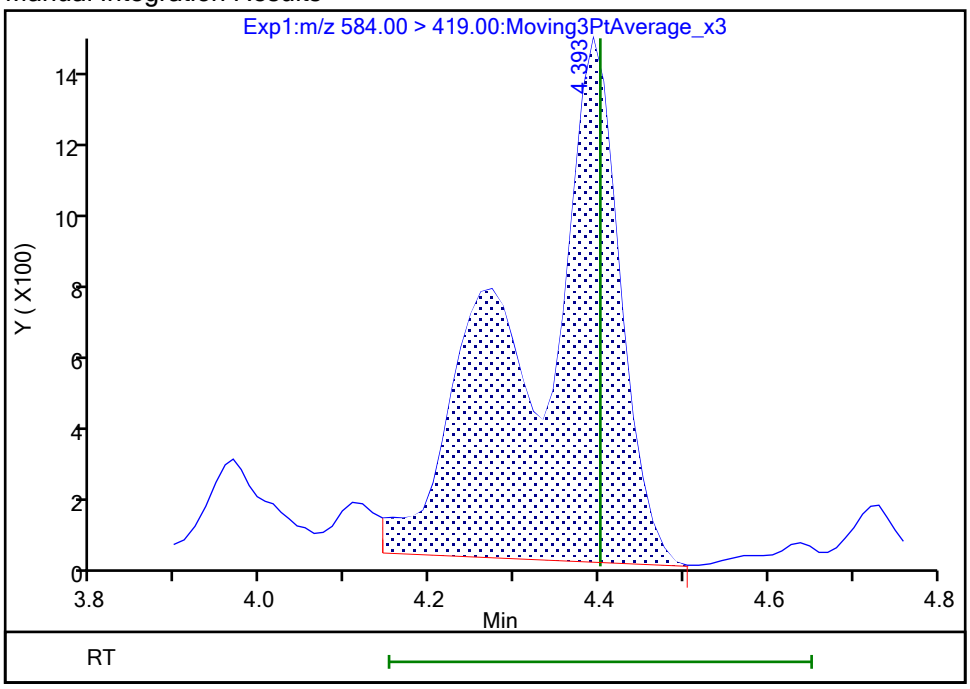
Processing Integration Results

RT: 4.39
Area: 6526
Amount: 0.015404
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 11167
Amount: 0.026359
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:18:16 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

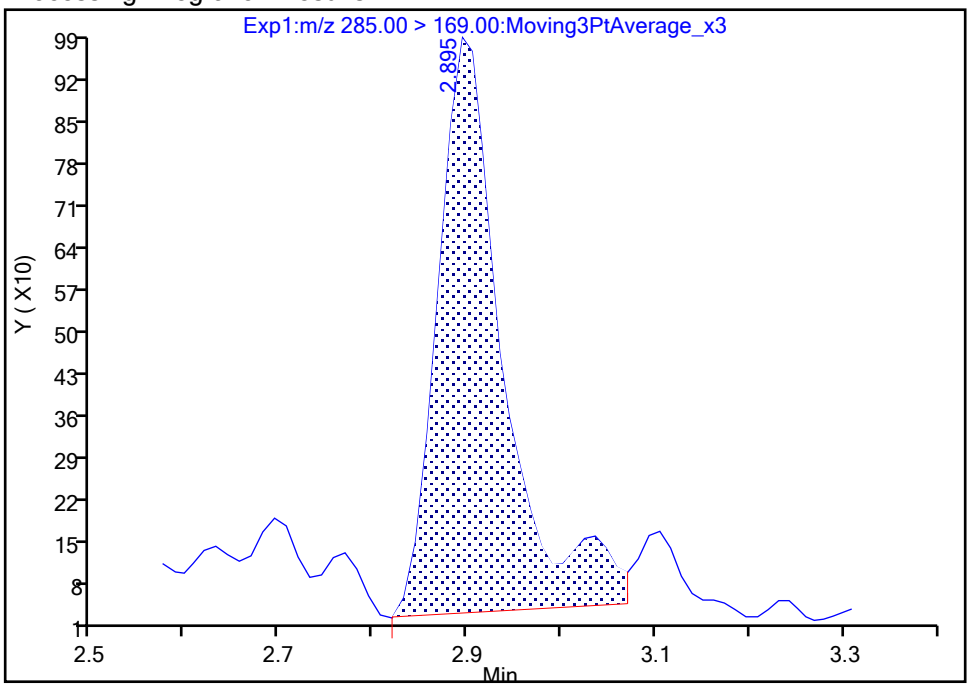
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

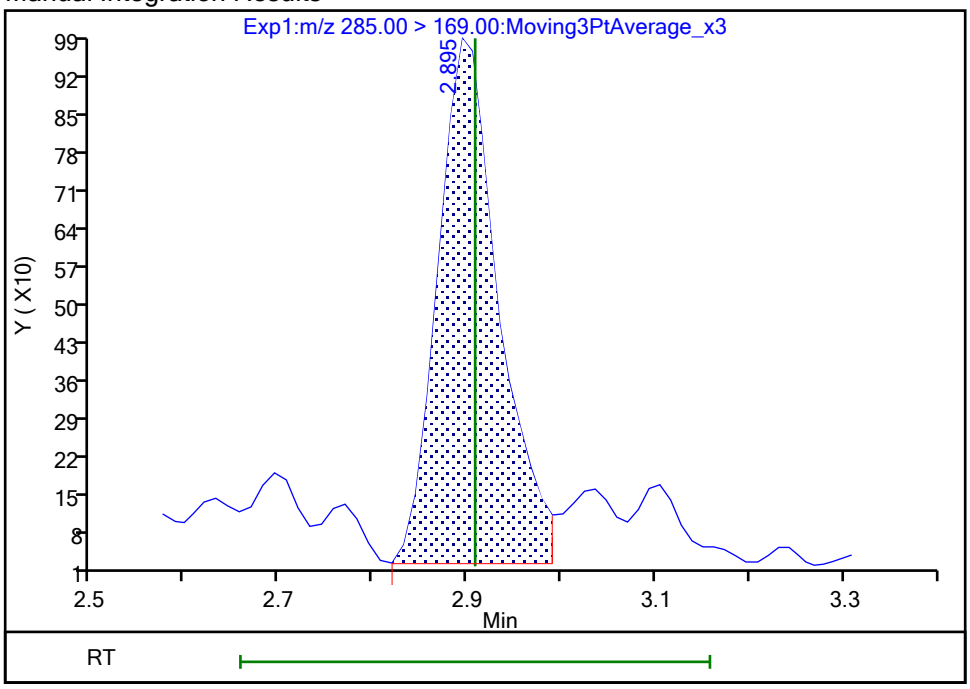
Processing Integration Results

RT: 2.89
Area: 4684
Amount: 0.026159
Amount Units: ng/ml



Manual Integration Results

RT: 2.89
Area: 4360
Amount: 0.024350
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:56:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

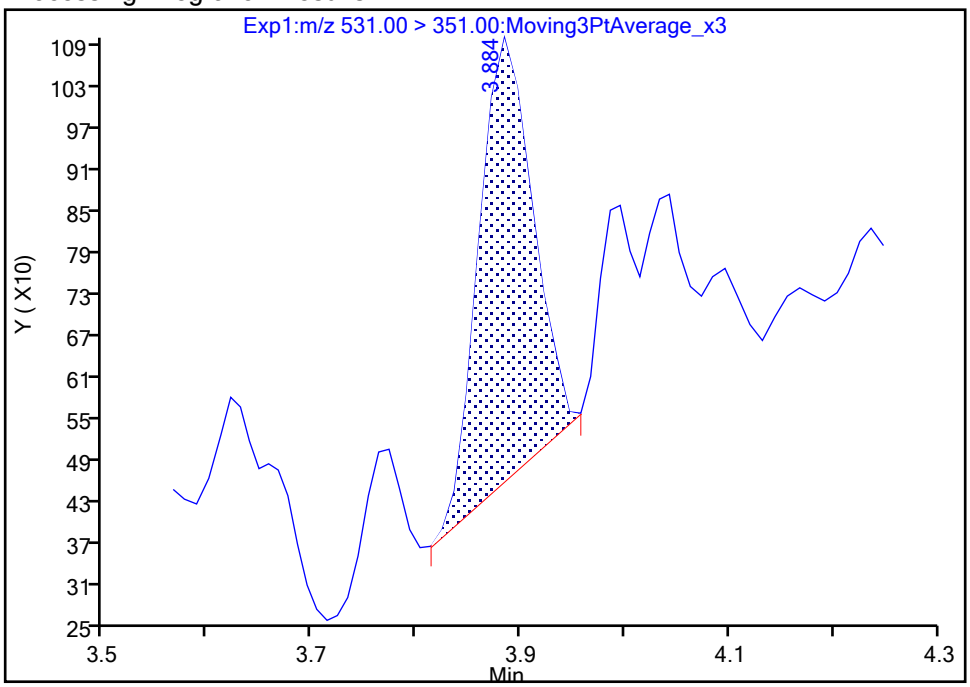
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

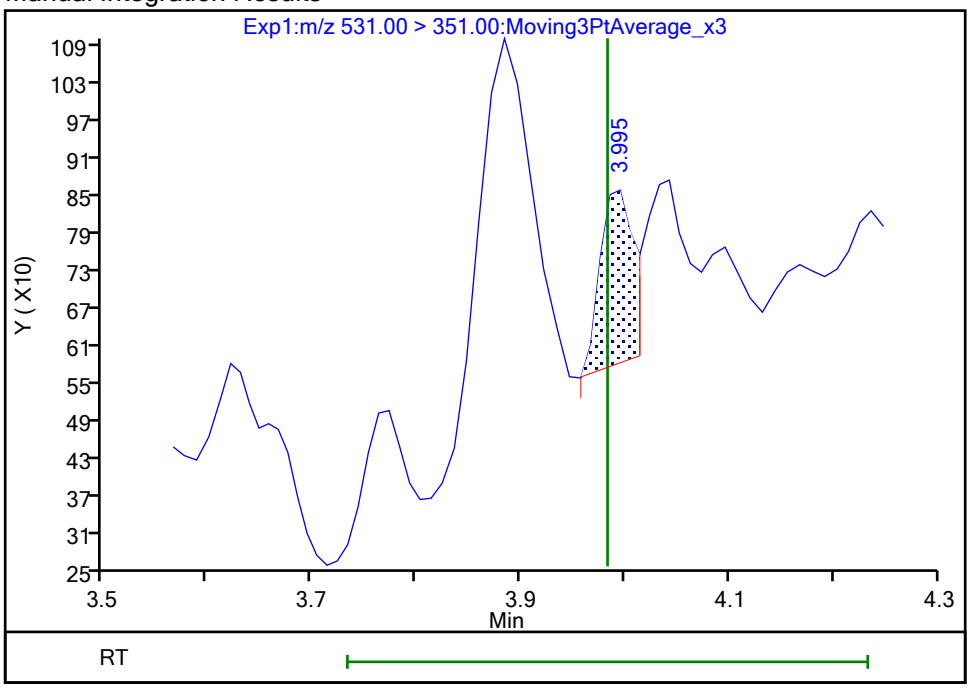
Processing Integration Results

RT: 3.88
Area: 2315
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.00
Area: 607
Amount: 0.000260
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:57:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

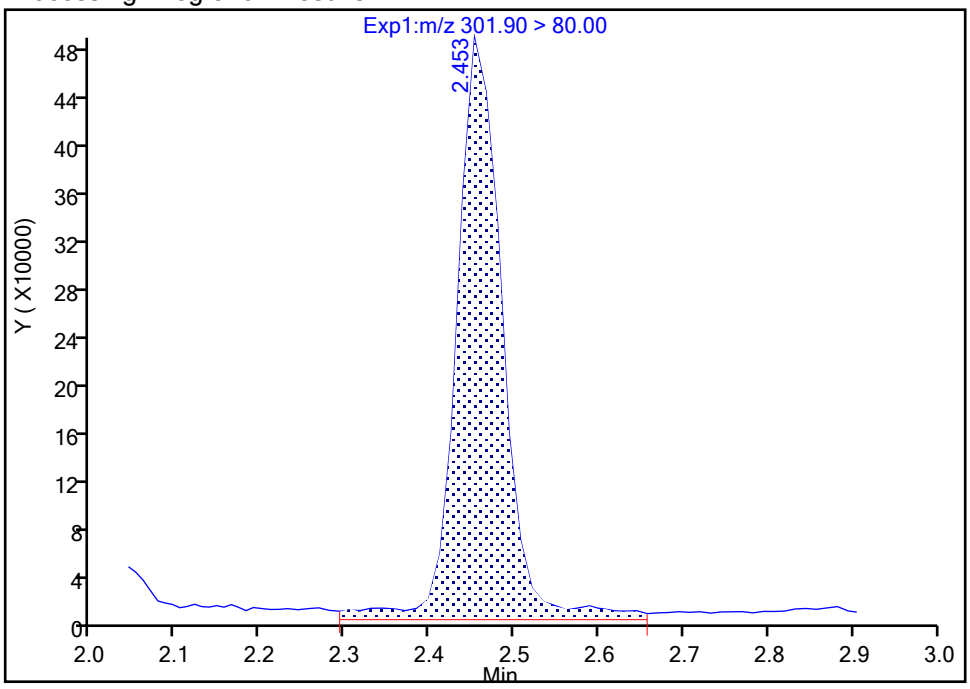
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

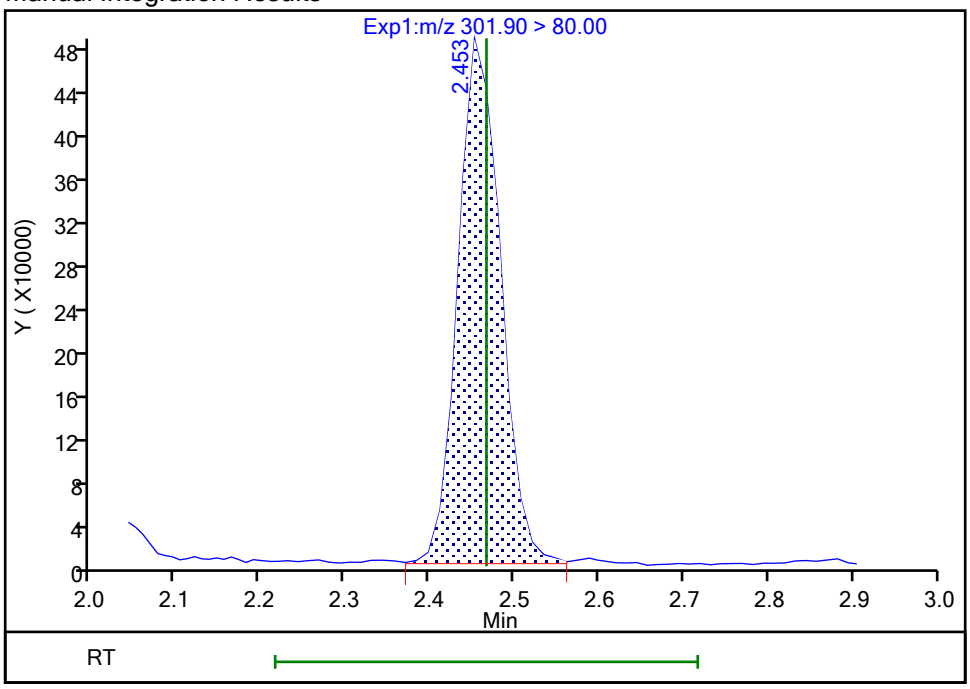
Processing Integration Results

RT: 2.45
Area: 1831300
Amount: 1.419423
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1662486
Amount: 1.288577
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:54:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

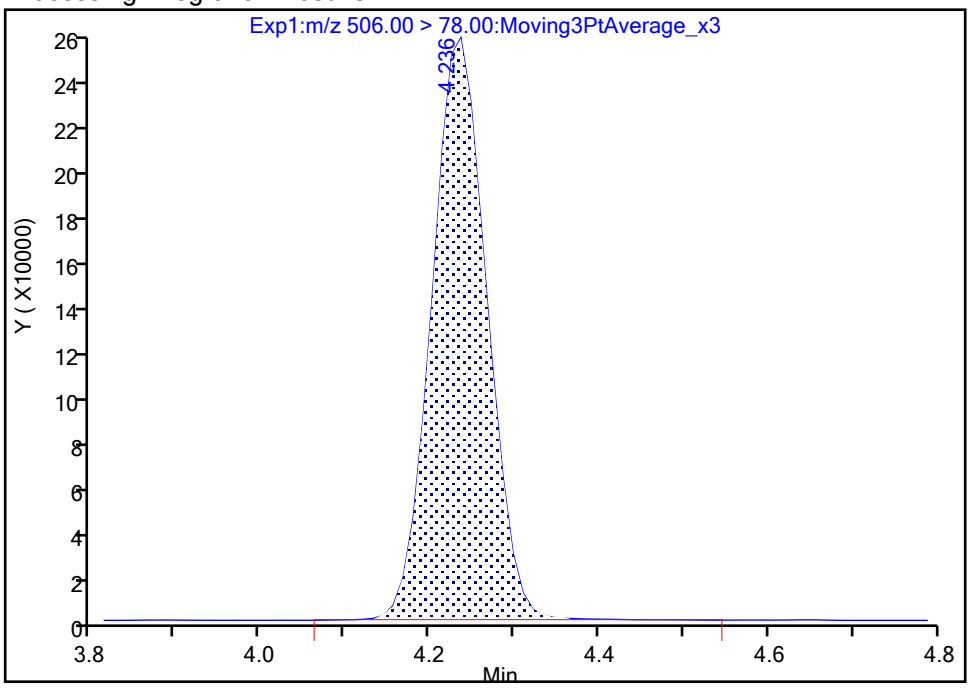
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

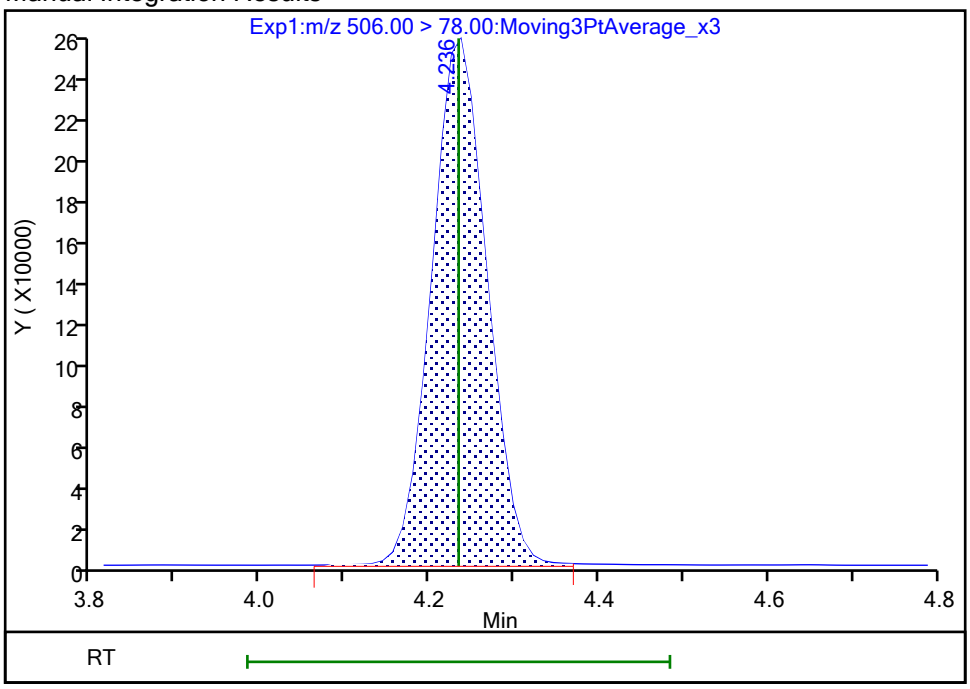
Processing Integration Results

RT: 4.24
Area: 1157203
Amount: 0.987120
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1154689
Amount: 0.984976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:54:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

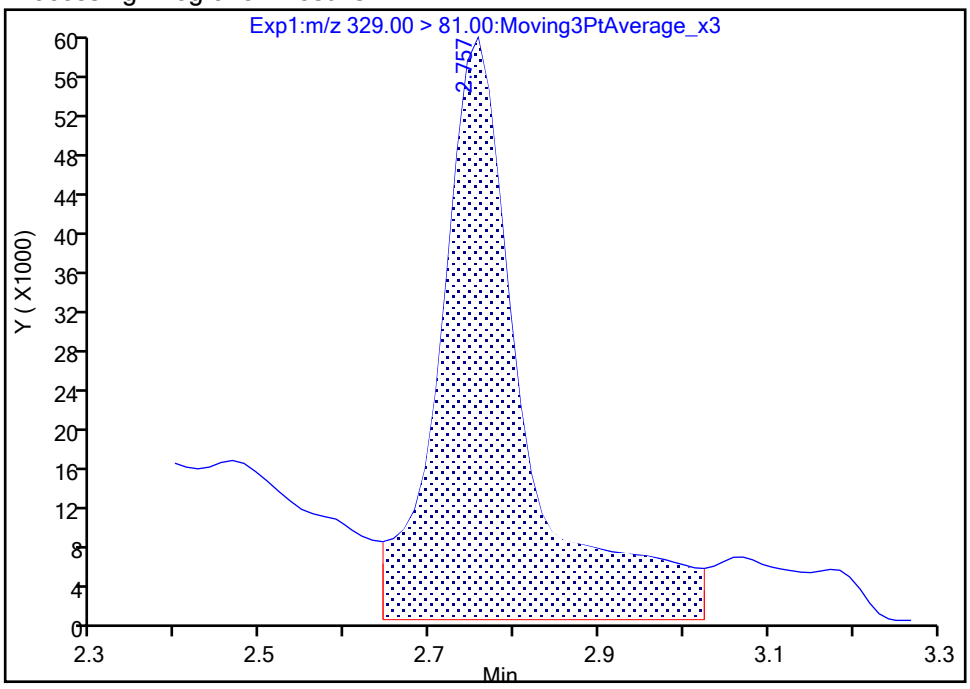
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

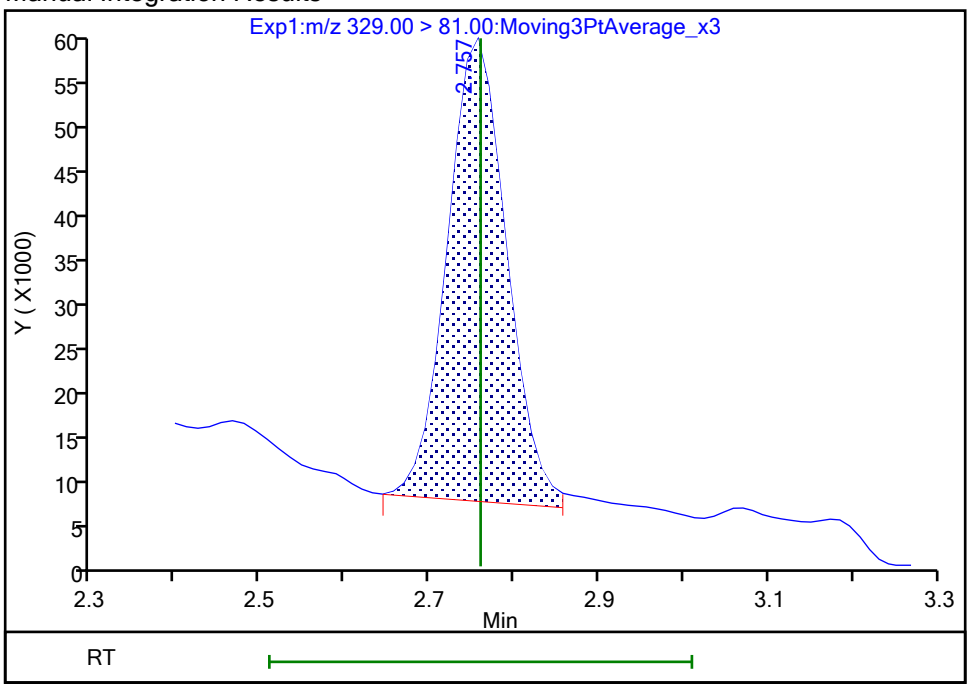
Processing Integration Results

RT: 2.76
Area: 414724
Amount: 2.779575
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 254666
Amount: 1.706830
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:54:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

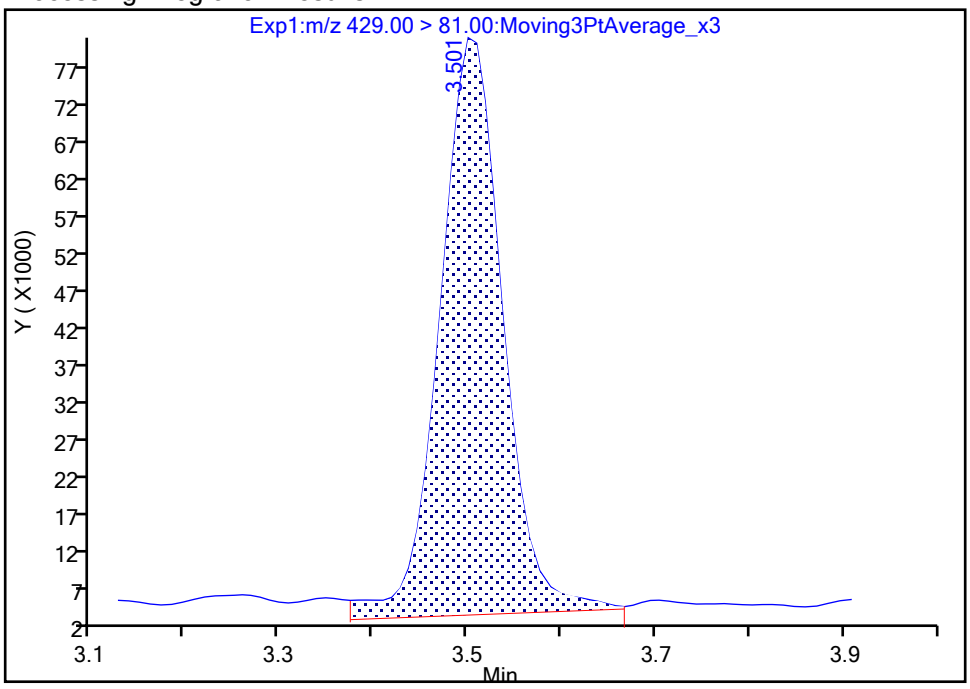
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

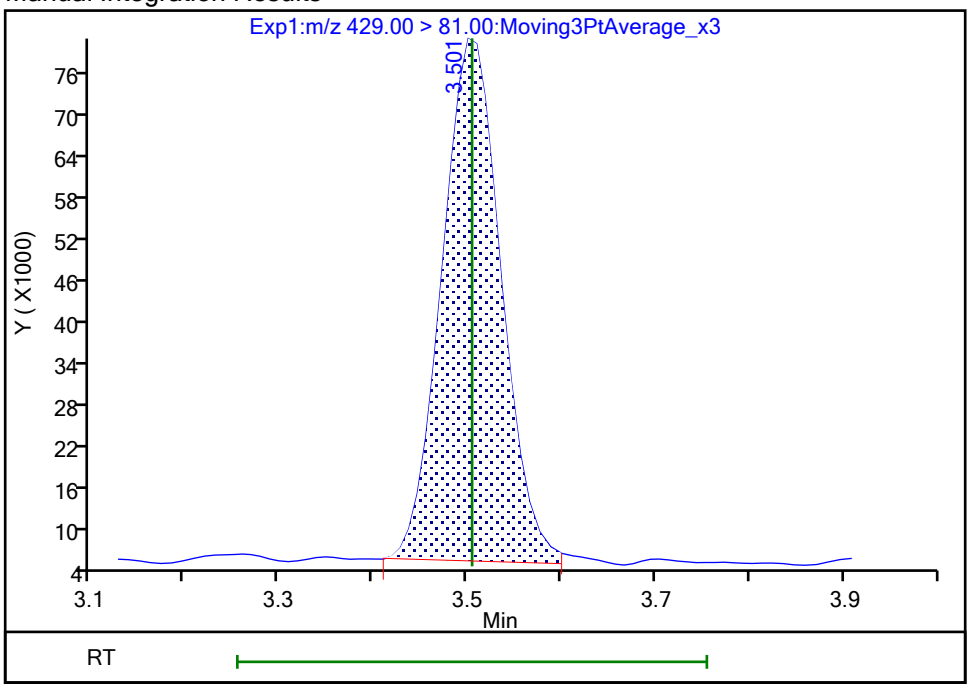
Processing Integration Results

RT: 3.50
Area: 362478
Amount: 1.886248
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 331078
Amount: 1.722850
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:54:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

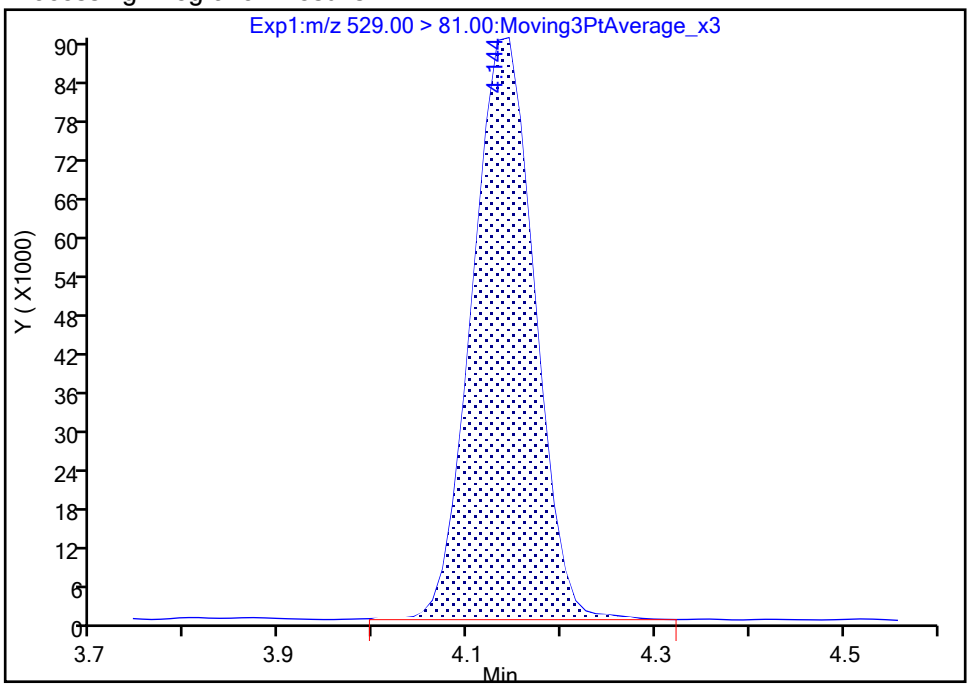
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E25.d				
Injection Date:	24-Oct-2023 09:22:05	Instrument ID:	LC812		
Lims ID:	460-290517-B-6-A	Lab Sample ID:	200-290517-6		
Client ID:	MW4-101623-1156-11.5				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

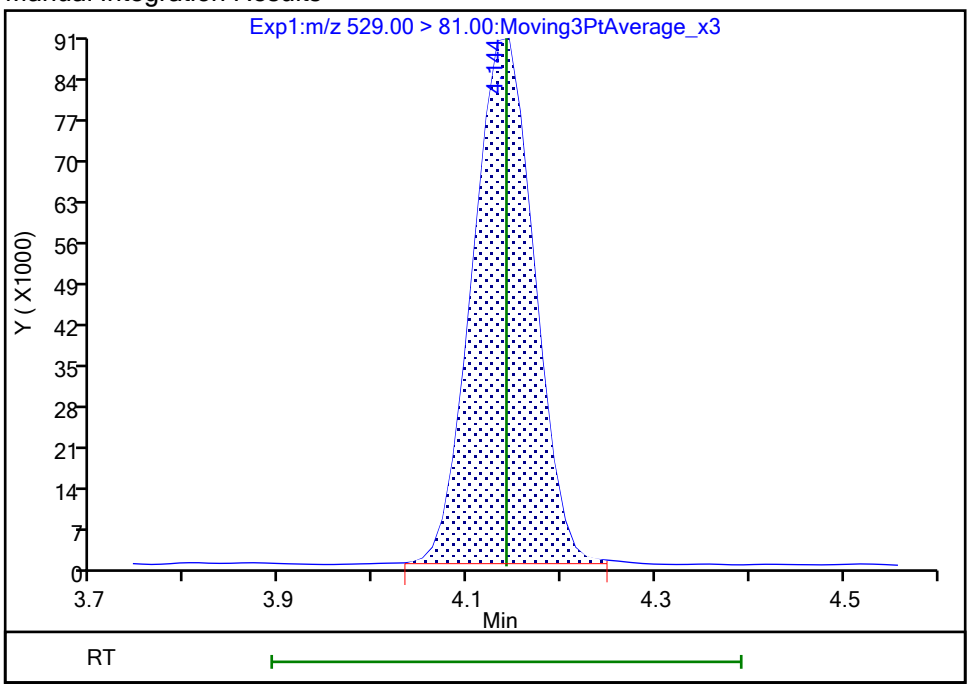
Processing Integration Results

RT: 4.14
Area: 410142
Amount: 1.898203
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 407439
Amount: 1.885693
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:54:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW15-101623-1325-7 Lab Sample ID: 460-290517-7

Matrix: Water Lab File ID: PA231024A08.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 13:25

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 290.9(mL) Date Analyzed: 10/24/2023 18:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	17.8		4.30	1.03
2706-90-3	Perfluoropentanoic acid	29.8		1.72	0.58
307-24-4	Perfluorohexanoic acid	22.6		1.72	0.56
375-85-9	Perfluoroheptanoic acid	11.0		1.72	0.46
335-67-1	Perfluorooctanoic acid	17.5		1.72	0.65
375-95-1	Perfluorononanoic acid	4.08		1.72	0.42
335-76-2	Perfluorodecanoic acid	1.03	J	1.72	0.40
2058-94-8	Perfluoroundecanoic acid	1.72	U	1.72	0.47
307-55-1	Perfluorododecanoic acid	1.72	U	1.72	0.42
72629-94-8	Perfluorotridecanoic acid	1.72	U	1.72	0.41
376-06-7	Perfluorotetradecanoic acid	1.72	U	1.72	0.55
375-73-5	Perfluorobutanesulfonic acid	9.69		1.72	0.53
2706-91-4	Perfluoropentanesulfonic acid	9.45		1.72	0.43
355-46-4	Perfluorohexanesulfonic acid	45.7		1.72	0.47
375-92-8	Perfluoroheptanesulfonic acid	1.48	J	1.72	0.35
1763-23-1	Perfluorooctanesulfonic acid	77.3		1.72	0.73
68259-12-1	Perfluorononanesulfonic acid	1.72	U	1.72	0.34
335-77-3	Perfluorodecanesulfonic acid	1.72	U	1.72	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.30	U	4.30	1.12
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66
754-91-6	Perfluorooctanesulfonamide	1.72	U	1.72	0.79
2355-31-9	NMeFOSAA	4.30	U	4.30	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.30	U	4.30	1.38
13252-13-6	HFPODA	3.44	U	3.44	0.95
919005-14-4	DONA	1.72	U	1.72	0.36
756426-58-1	9Cl-PF3ONS	1.72	U	1.72	0.28
763051-92-9	11Cl-PF3OUdS	1.72	U	1.72	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW15-101623-1325-7 Lab Sample ID: 460-290517-7

Matrix: Water Lab File ID: PA231024A08.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 13:25

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 290.9(mL) Date Analyzed: 10/24/2023 18:57

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		50-150
STL01893	13C5 PFPeA	85		50-150
STL01892	13C4 PFHpA	99		50-150
STL02116	13C2 PFTeDA	83		50-150
STL02337	13C3 PFBS	94		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	86		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	91		50-150
STL02279	M2-6:2 FTS	93		50-150
STL02280	M2-8:2 FTS	89		50-150
STL02255	13C3 HFPO-DA	82		50-150
STL00994	18O2 PFHxS	99		50-150
STL00993	13C2 PFHxA	92		50-150
STL00991	13C4 PFOS	98		50-150
STL00998	13C2 PFDoA	91		50-150
STL00995	13C5 PFNA	92		50-150
STL00996	13C2 PFDA	92		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	92		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d
Lims ID: 460-290517-B-7-A
Client ID: MW15-101623-1325-7
Sample Type: Client
Inject. Date: 24-Oct-2023 18:57:17 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-7-A
Misc. Info.: 200-0057538-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 12:52:06
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1765546	1.09		86.8	1319	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	713528	0.5178			55.8	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1344591	1.07		85.2	936	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	1005262	0.8660			10.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.466	0.001	0.701	1876103	1.10		94.5	28941	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.466	0.001	1.000	508032	0.2818	Target=2.06		23.6	M
298.90 > 99.00	2.467	2.466	0.001	1.000	249515		2.04(1.03-3.09)		35.6	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.747	2.760	-0.013	0.995	277	0.000455			1.5	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	209213	1.06		90.7	15.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1480101	1.15		92.2	4333	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	854943	0.6561	Target=14.12		29.7	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	59426		14.39(7.06-21.17)		34.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	435814	0.2748	Target=2.72		44.0	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	150607		2.89(1.36-4.09)		47.9	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	255946	1.03		82.4	682	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.918	-0.010	1.000	3333	0.0163			36.3	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.166	0.0	0.899	1435869	1.17		99.2	8337	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.166	0.0	1.000	1786497	1.33	Target=3.32		347	M
399.00 > 99.00	3.166	3.166	0.0	1.000	480159		3.72(1.66-4.98)		264	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.177	-0.011	1.000	500480	0.3188	Target=4.17		27.9	M
363.00 > 169.00	3.166	3.177	-0.011	1.000	117968		4.24(2.09-6.26)		132	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.177	-0.011	0.899	1750978	1.24		99.4	5220	
77 DONA										RM
377.00 > 251.00	3.212	3.213	-0.001	0.841	940	0.000214	Target=3.33		0.7	RM
377.00 > 85.00	3.212	3.213	-0.001	0.841	577		1.63(1.66-4.99)		0.8	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.512	-0.009	0.917	47488	0.0430	Target=4.83		11.6	M
449.00 > 99.00	3.512	3.512	0.0	0.919	13152		3.61(2.41-7.24)		11.5	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.512	0.0	0.997	281871	1.11		93.3	114	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.512	-0.009	0.997	1048	0.001615			1.8	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.521	-0.009	0.997	885073	0.5096	Target=2.88		28.6	
413.00 > 169.00	3.521	3.521	0.0	1.000	338112		2.62(1.44-4.32)		386	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.521	0.0	1.000	2038138	1.28		102	9949	
* 62 13C2 PFOA										M
415.00 > 370.00	3.521	3.521	0.0		2050252	1.25			3382	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.832	-0.012	1.000	2001702	2.25	Target=4.24		793	M
499.00 > 99.00	3.820	3.832	-0.012	1.000	506303		3.95(2.12-6.37)		723	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.832	-0.012	1.085	912274	1.17		98.2	843	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.843	3.844	-0.001	1.000	185983	0.1186	Target=8.34		17.1	M
463.00 > 169.00	3.843	3.844	-0.001	1.000	24699		7.53(4.17-12.51)		52.5	M
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.844	-0.001	1.092	2000859	1.15		92.2	4472	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.981	0.0	1.042	1569	0.000576			3.7	M
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.102	4.114	-0.012	1.074	373	0.000551	Target=2.17		0.6	RM
549.00 > 99.00	4.102	4.114	-0.012	1.074	524		0.71(1.08-3.25)		1.6	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.138	0.0	1.000	49861	0.0298	Target=11.44		8.4	M
513.00 > 169.00	4.138	4.138	0.0	1.000	4919		10.14(5.72-17.16)		21.8	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										M
515.00 > 470.00	4.138	4.138	0.0	1.175	2090572	1.15		92.0	4419	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.150	-0.012	1.175	305917	1.07		89.3	333	
D 21 13C8 FOSA										
506.00 > 78.00	4.244	4.244	0.0	1.205	1629161	1.05		84.0	6358	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.244	-0.012	0.997	2365	0.001902			9.2	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.267	4.281	-0.014	1.212	466109	1.07		85.8	1270	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.304	4.281	0.023	1.009	828	0.002447			3.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.388	-0.001	1.246	1978851	1.15		92.2	8810	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.388	-0.001	1.000	15785	0.009675	Target=12.20		2.8	
563.00 > 169.00	4.387	4.388	-0.001	1.000	1057		14.93(6.10-18.31)		7.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.400	-0.001	1.249	459599	1.10		87.8	829	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.423	4.400	0.023	1.005	1280	0.003481			4.1	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.483	4.483	0.0	1.173	3190	0.000763			4.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.611	0.0	1.310	1974530	1.13		90.5	7292	
41 Perfluorotridecanoic acid										RM
663.00 > 619.00	4.804	4.814	-0.010	1.042	1606	0.000950	Target=6.41		0.2	R
663.00 > 169.00	4.826	4.814	0.012	1.047	32		50.19(3.21-9.62)		0.4	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.991	-0.011	1.414	1796676	1.03		82.7	4170	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.990	4.991	-0.001	1.002	300	0.001867	Target=0.87		6.0	M
713.00 > 219.00	4.990	4.991	-0.001	1.002	280		1.07(0.43-1.30)		6.3	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

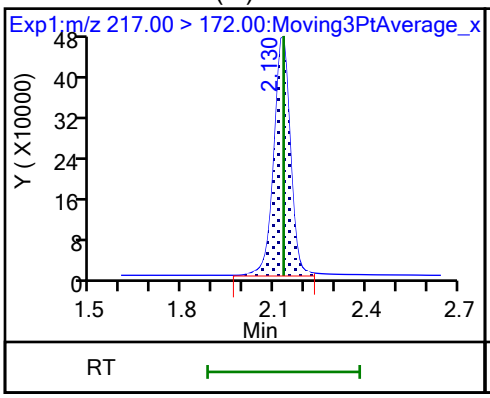
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:02 Chrom Revision: 2.3 18-Oct-2023 21:16:54

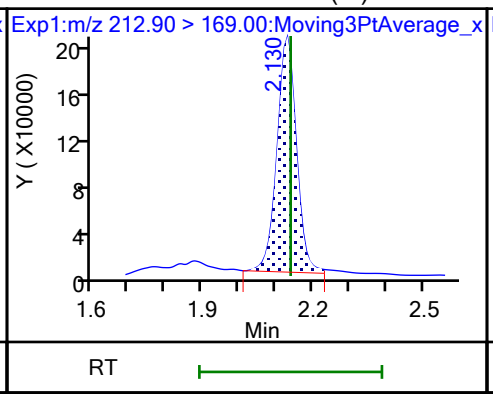
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d
Injection Date: 24-Oct-2023 18:57:17 Instrument ID: LC812
Lims ID: 460-290517-B-7-A Lab Sample ID: 200-290517-7
Client ID: MW15-101623-1325-7
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

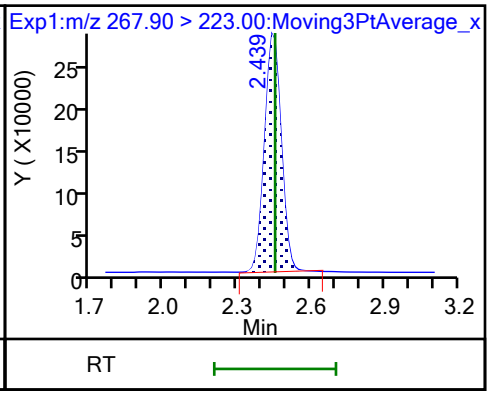
D 1 13C4 PFBA (M)



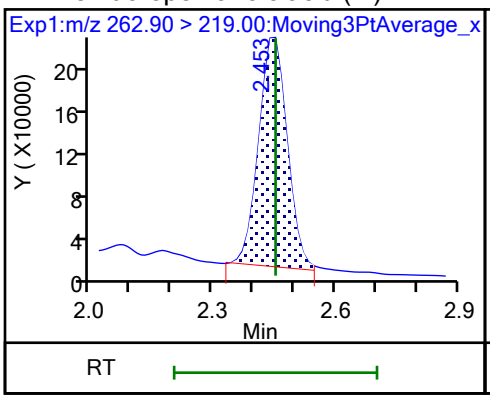
2 Perfluorobutanoic acid (M)



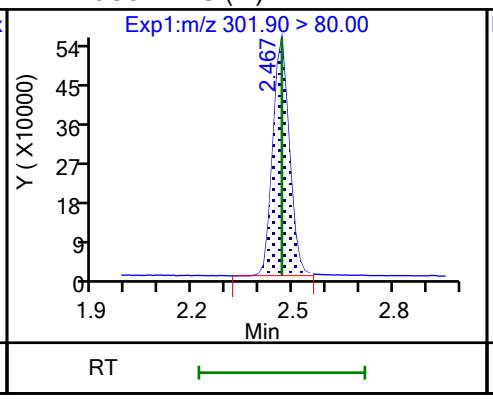
D 3 13C5 PFPeA



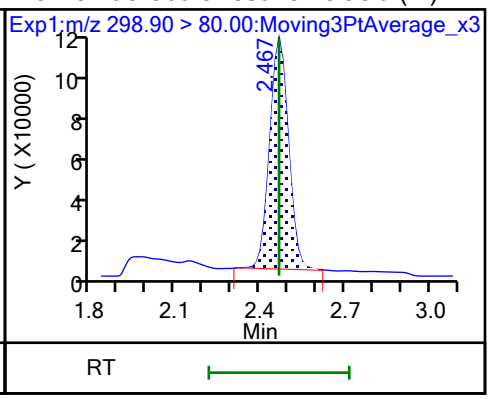
4 Perfluoropentanoic acid (M)



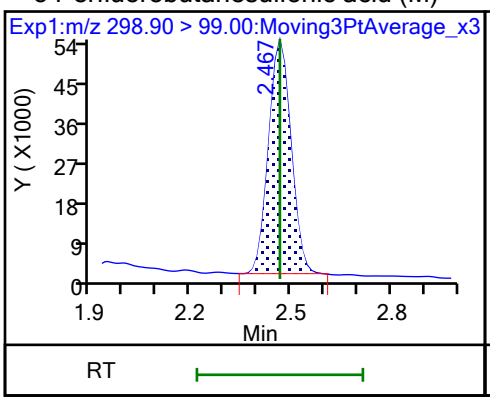
D 47 13C3 PFBS (M)



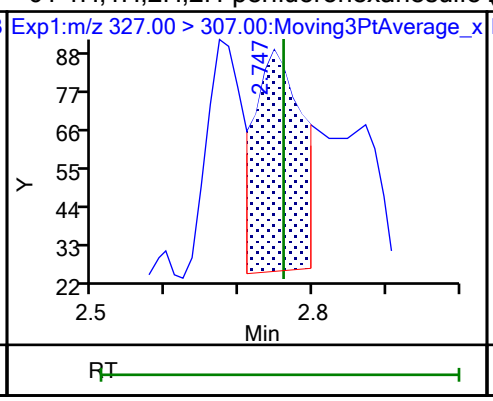
5 Perfluorobutanesulfonic acid (M)



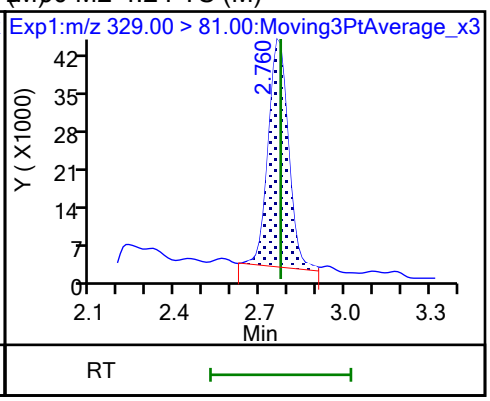
5 Perfluorobutanesulfonic acid (M)



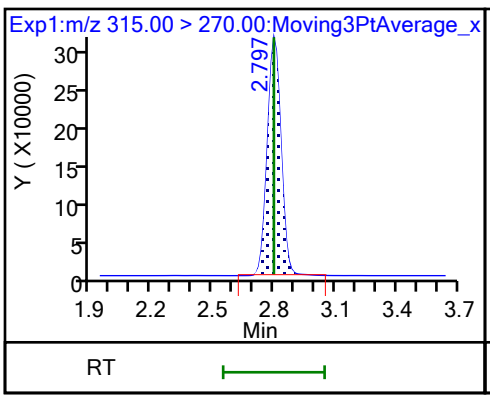
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



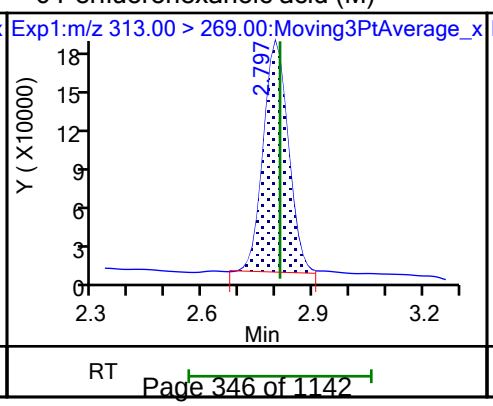
60 M2-4:2 FTS (M)



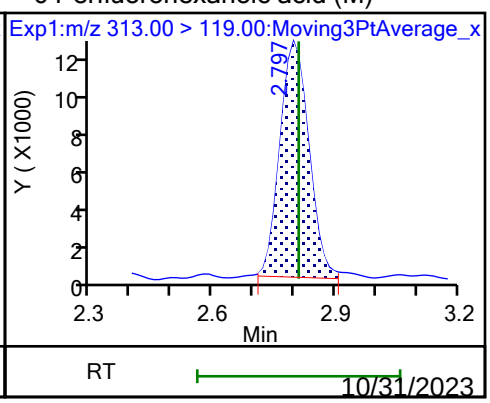
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

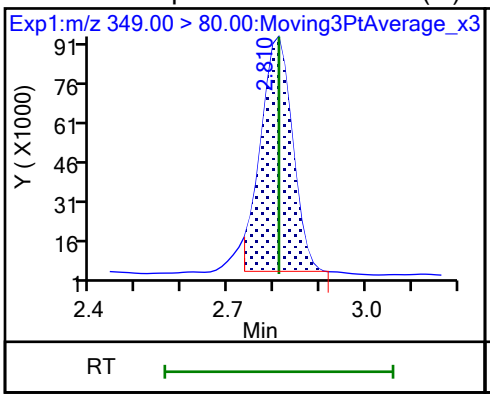


6 Perfluorohexanoic acid (M)

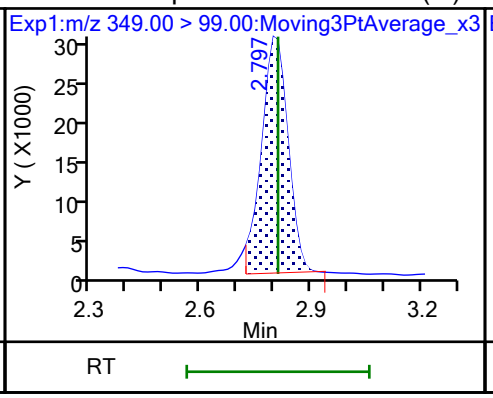


10/31/2023
10:17 AM

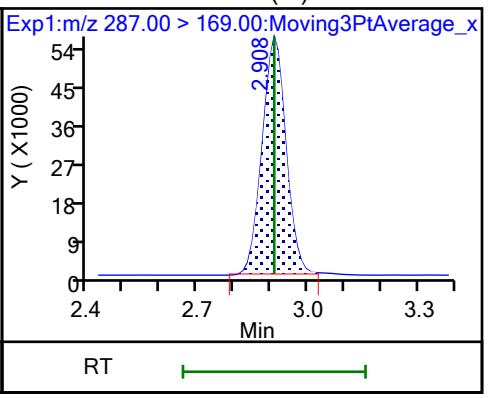
70 Perfluoropentanesulfonic acid (M)



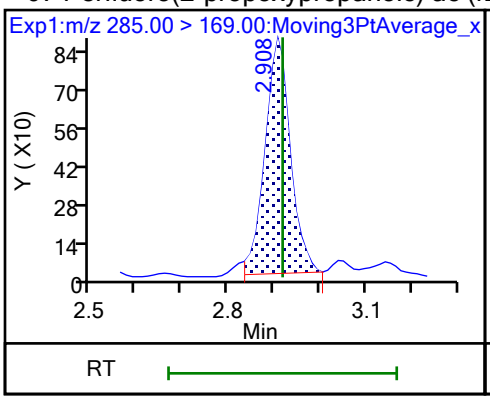
70 Perfluoropentanesulfonic acid (M)



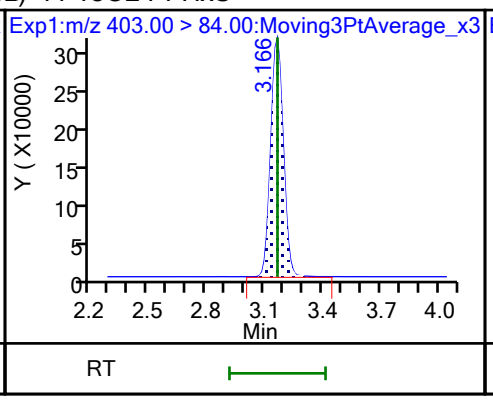
D 64 13C3 HFPO-DA (M)



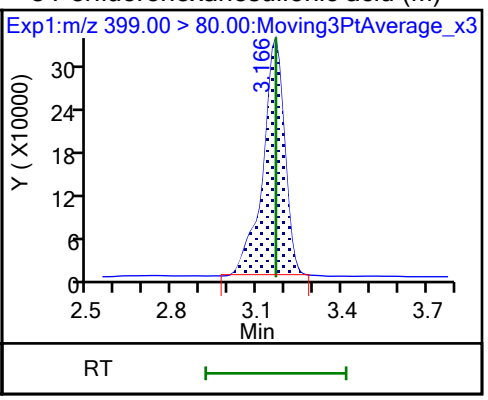
67 Perfluoro(2-propoxypropanoic) ac (M)



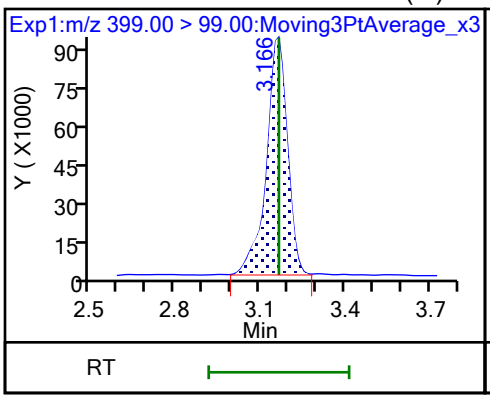
D 11 18O2 PFHxS



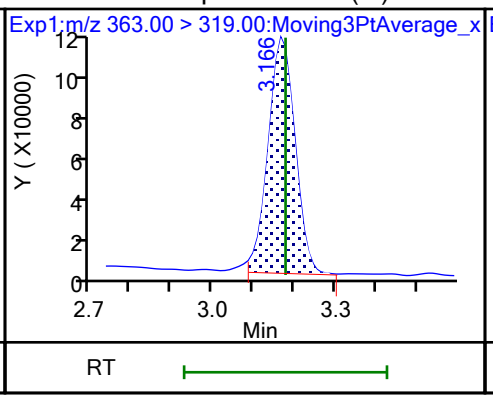
8 Perfluorohexanesulfonic acid (M)



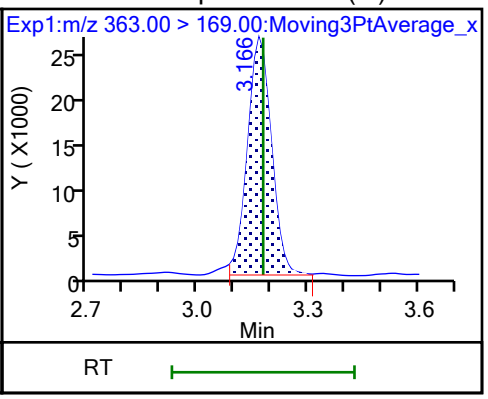
8 Perfluorohexanesulfonic acid (M)



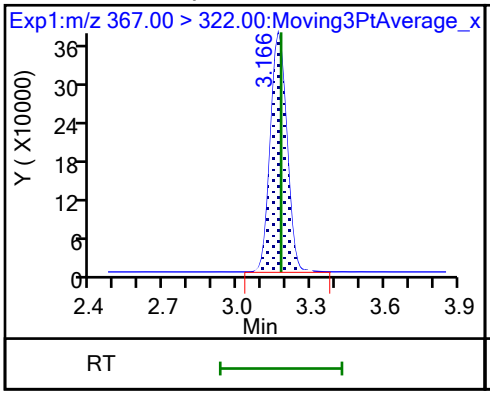
10 Perfluoroheptanoic acid (M)



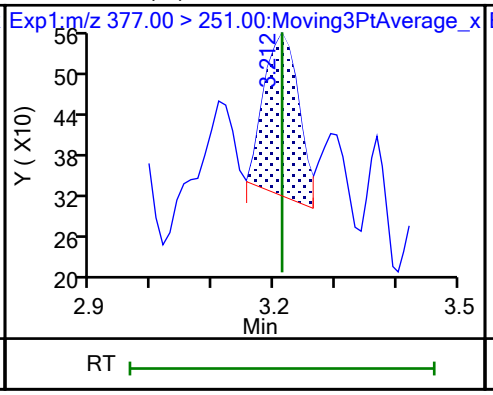
10 Perfluoroheptanoic acid (M)



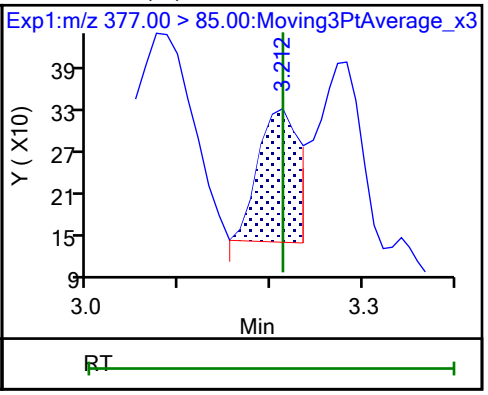
D 9 13C4 PFHpA



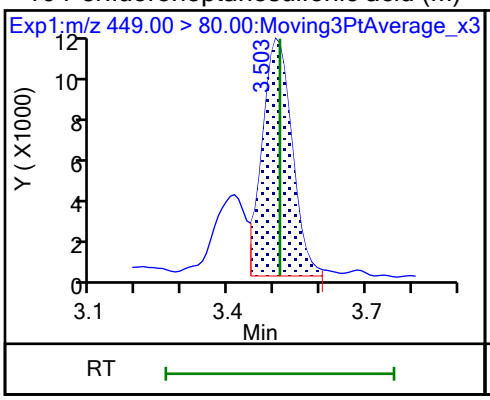
77 DONA (M)



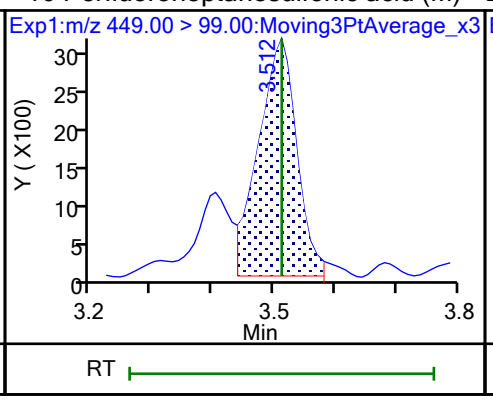
77 DONA (M)



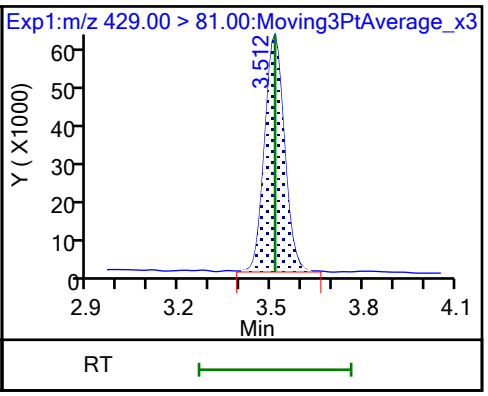
16 Perfluoroheptanesulfonic acid (M)



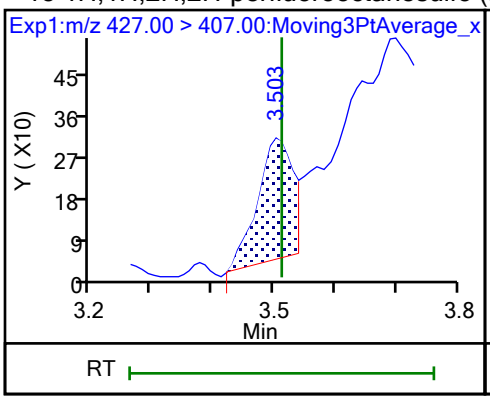
16 Perfluoroheptanesulfonic acid (M)



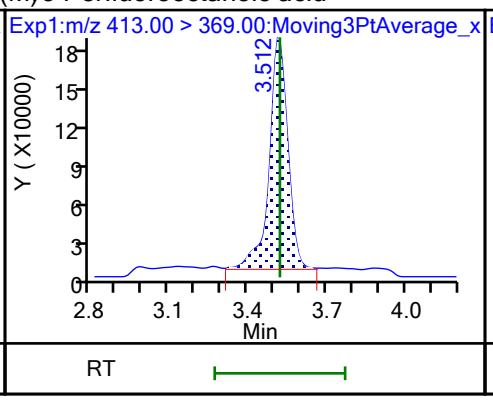
D 12 M2-6:2 FTS



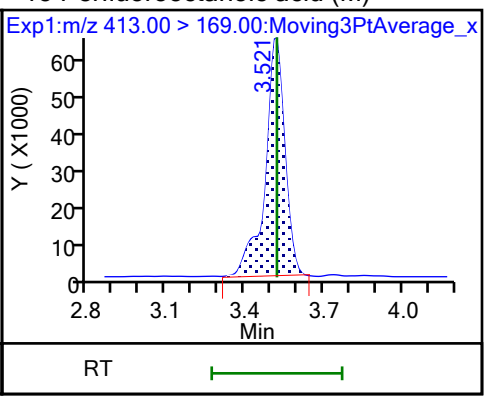
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



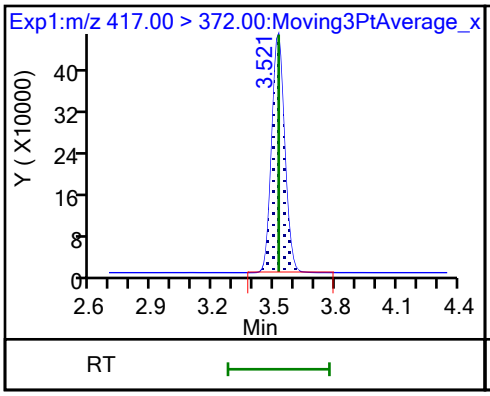
15 Perfluorooctanoic acid



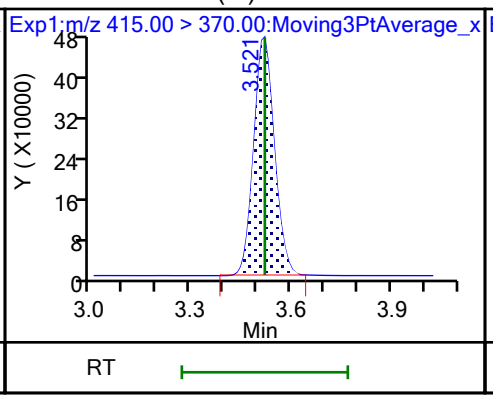
15 Perfluorooctanoic acid (M)



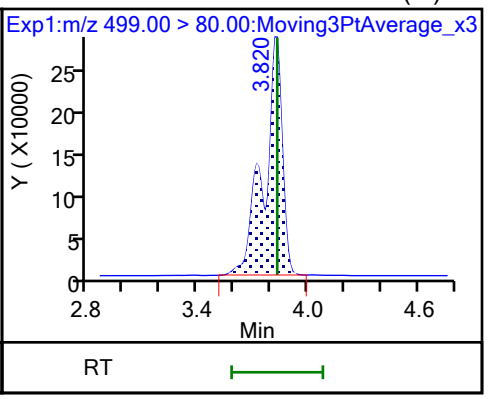
D 14 13C4 PFOA



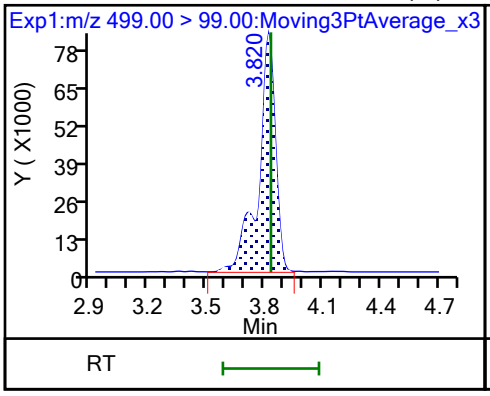
* 62 13C2 PFOA (M)



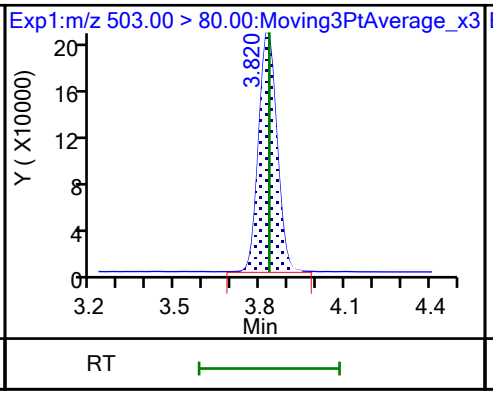
17 Perfluorooctanesulfonic acid (M)



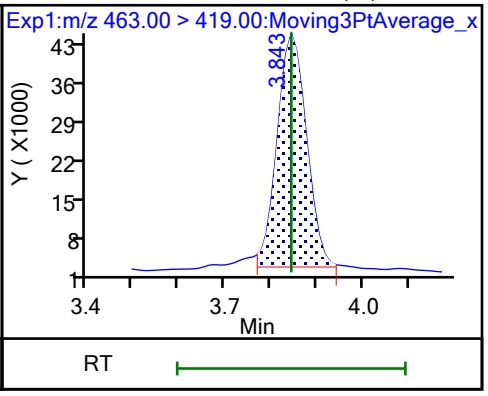
17 Perfluorooctanesulfonic acid (M)



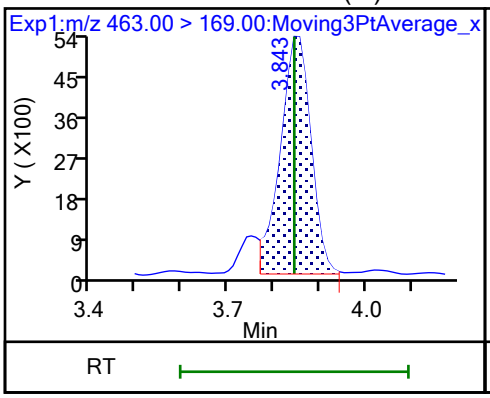
D 18 13C4 PFOS



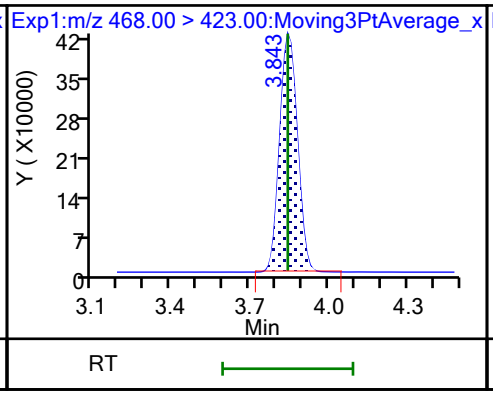
20 Perfluorononanoic acid (M)



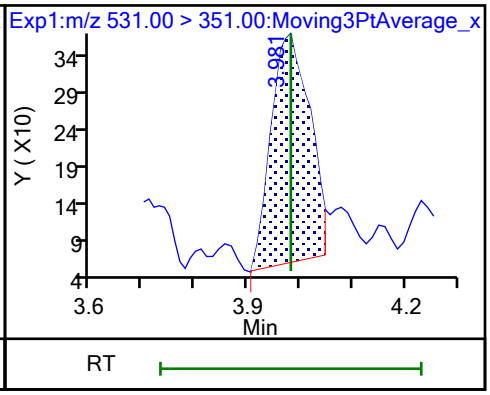
20 Perfluorononanoic acid (M)



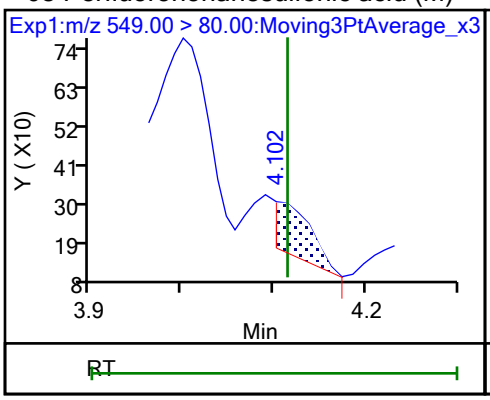
D 19 13C5 PFNA



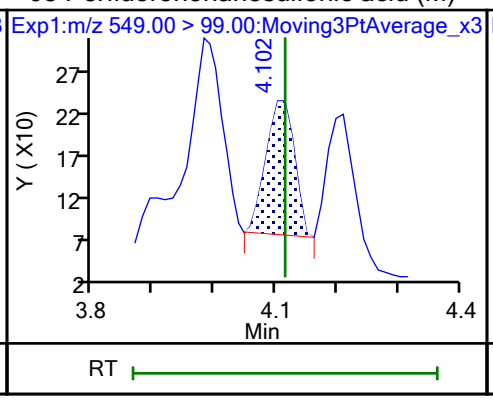
69 9-Chlorohexadecafluoro-3-oxanona (M)



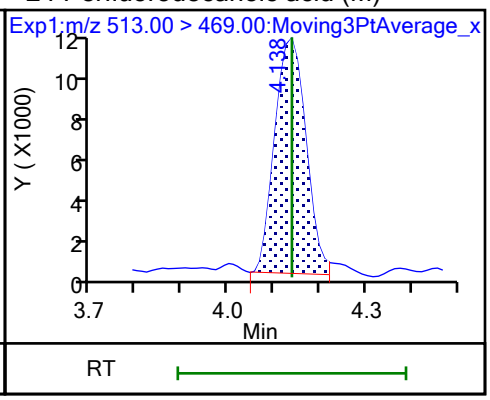
68 Perfluorononanesulfonic acid (M)



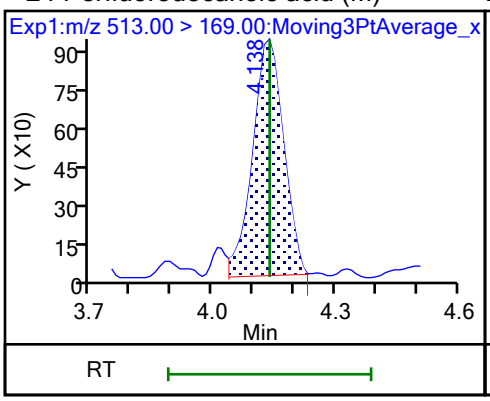
68 Perfluorononanesulfonic acid (M)



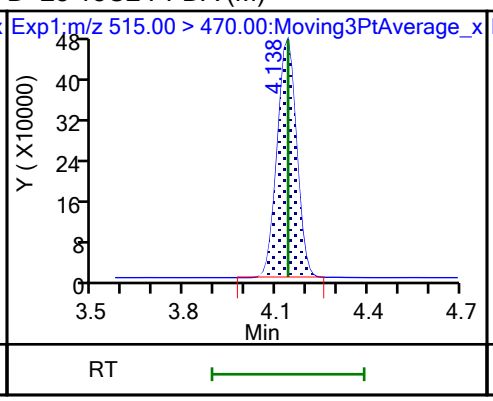
24 Perfluorodecanoic acid (M)



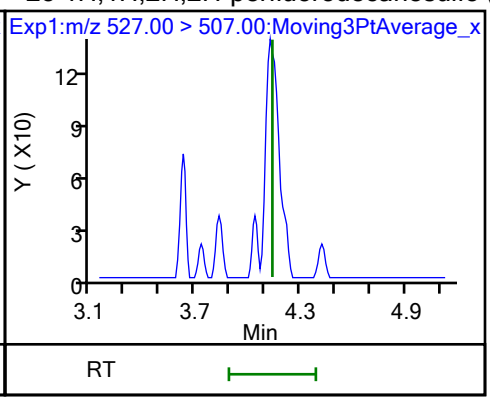
24 Perfluorodecanoic acid (M)



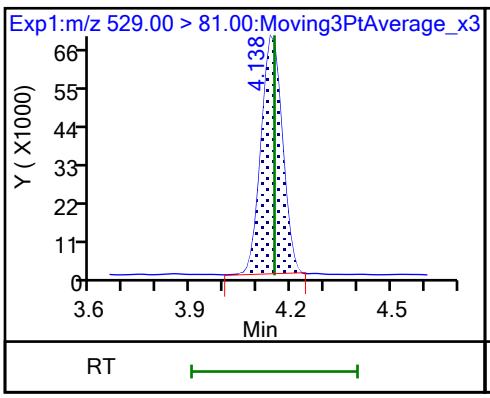
D 23 13C2 PFDA (M)



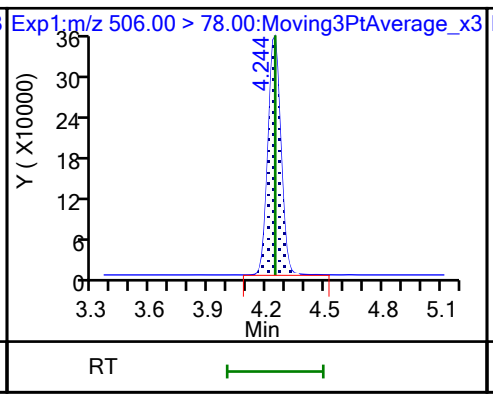
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



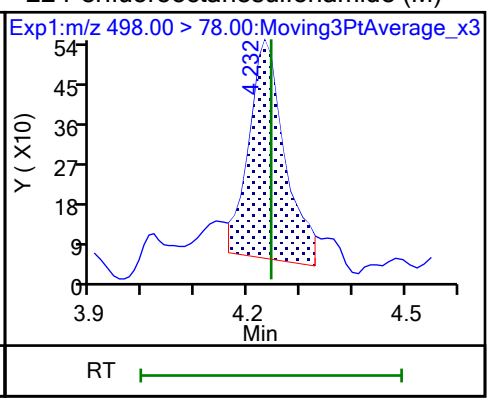
D 26 M2-8:2 FTS



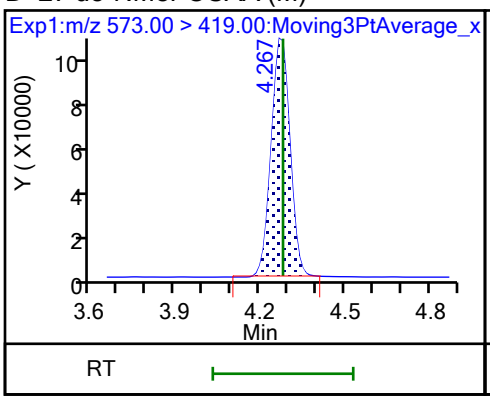
D 21 13C8 FOSA



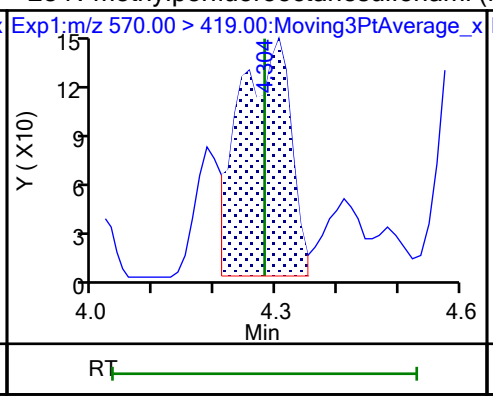
22 Perfluorooctanesulfonamide (M)



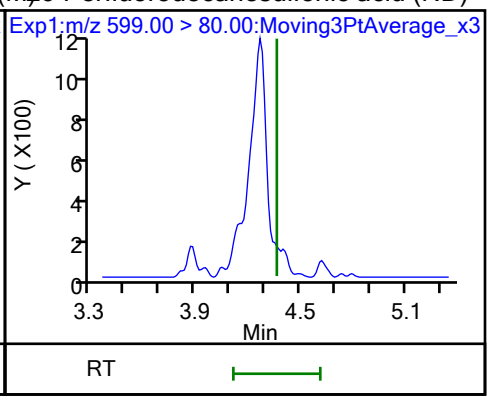
D 27 d3-NMeFOSAA (M)



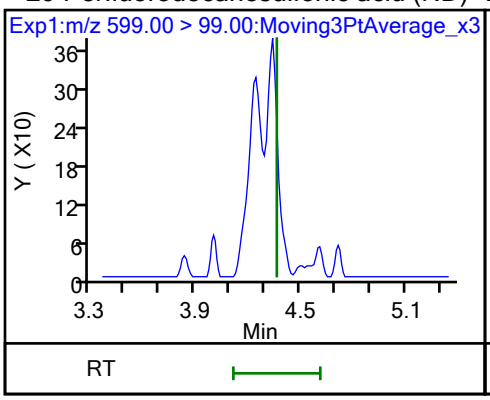
28 N-methylperfluorooctanesulfonami (M)



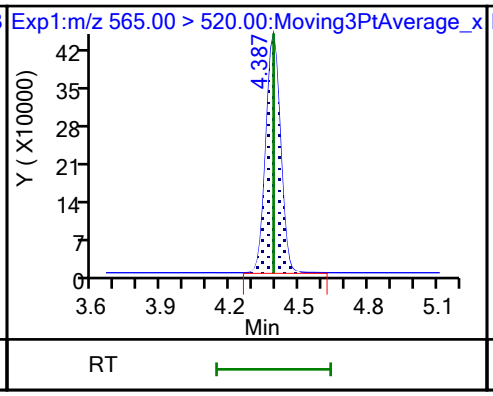
29 Perfluorodecanesulfonic acid (ND)



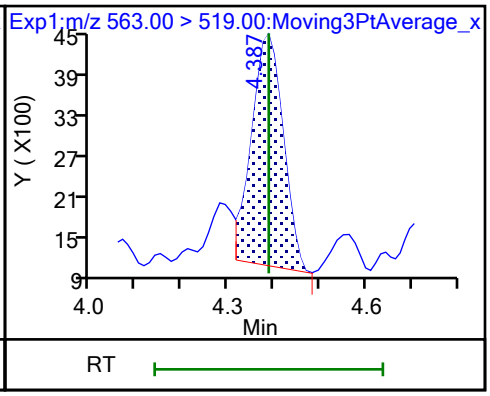
29 Perfluorodecanesulfonic acid (ND)



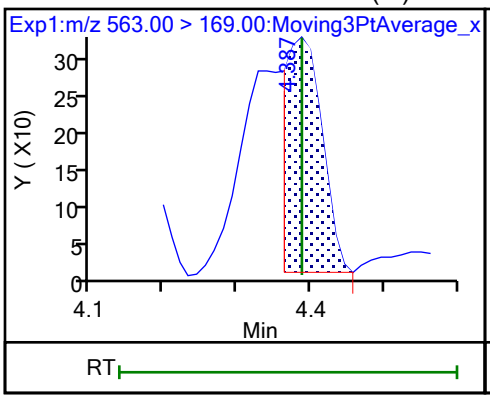
D 30 13C2 PFUnA



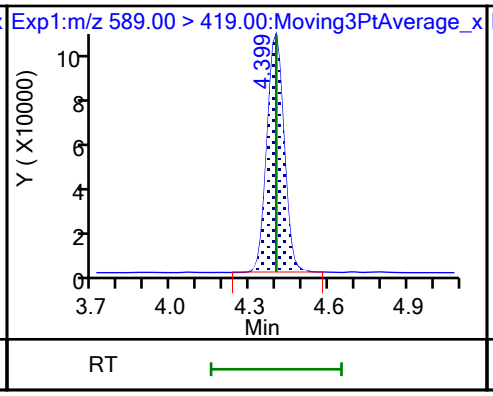
31 Perfluoroundecanoic acid



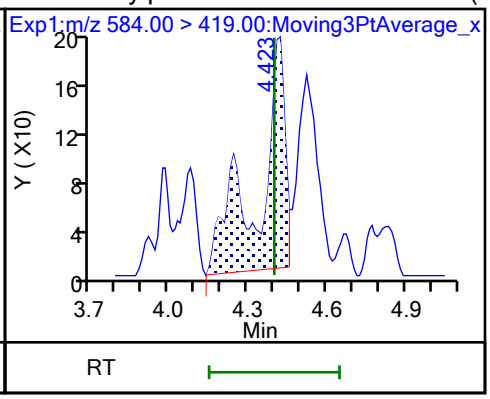
31 Perfluoroundecanoic acid (M)



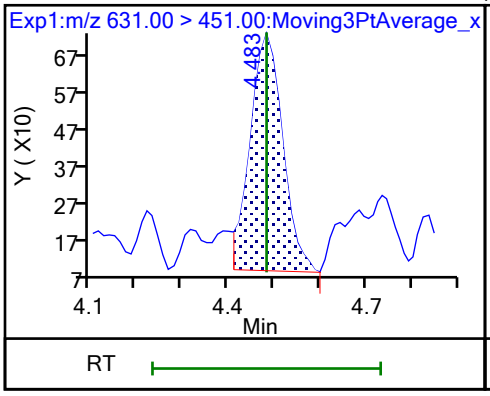
D 32 d5-NEtFOSAA



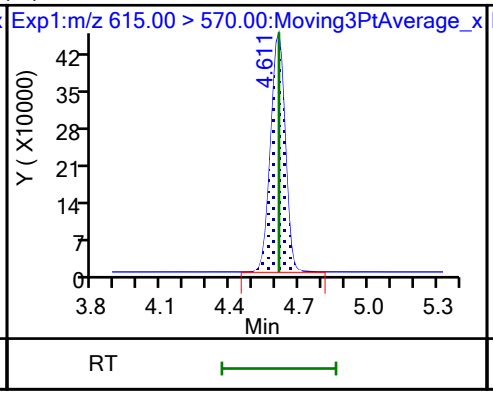
33 N-ethylperfluorooctanesulfonamid (M)



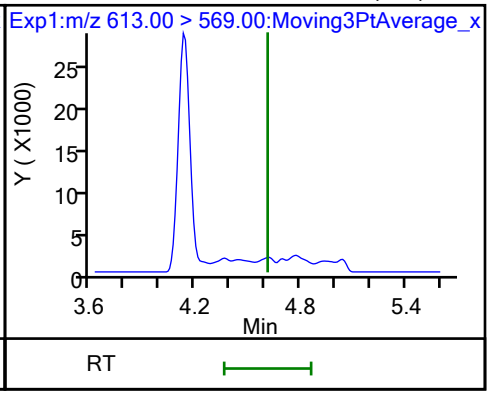
66 11-Chloroeicosafluoro-3-oxaundec (M)



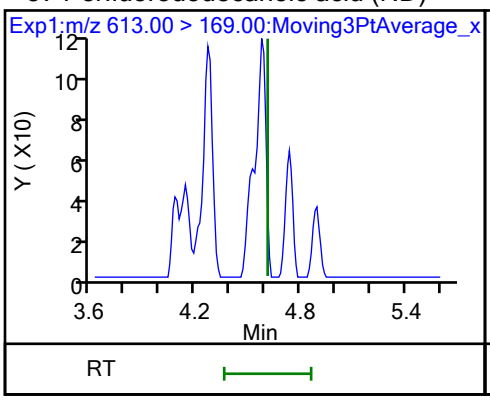
D 36 13C2 PFDoA



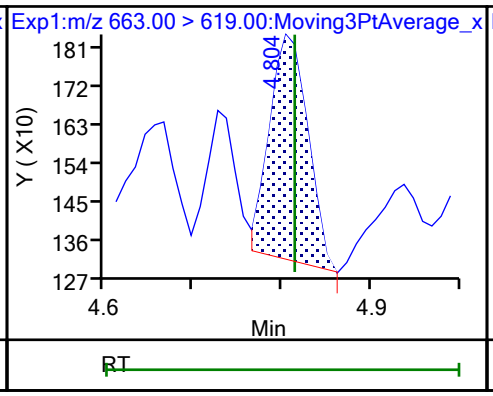
37 Perfluorododecanoic acid (ND)



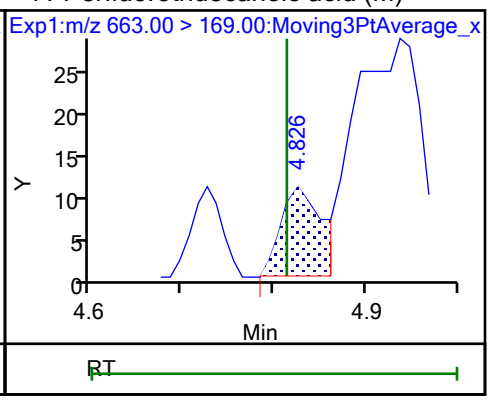
37 Perfluorododecanoic acid (ND)



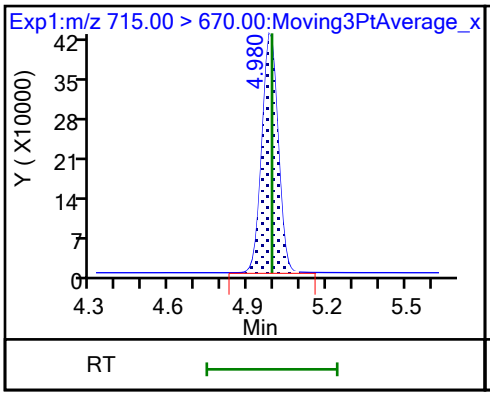
41 Perfluorotridecanoic acid



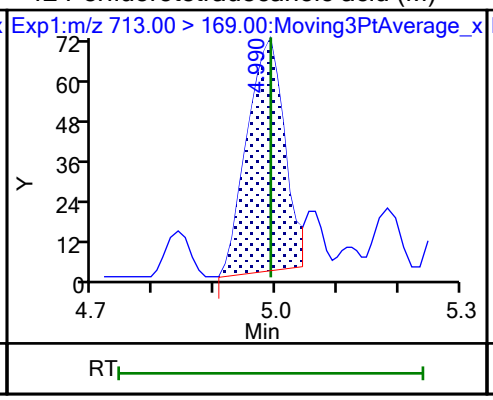
41 Perfluorotridecanoic acid (M)



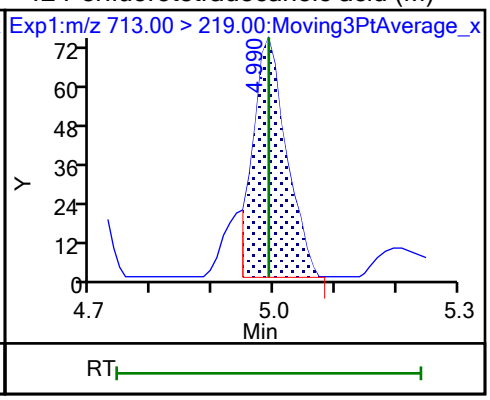
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

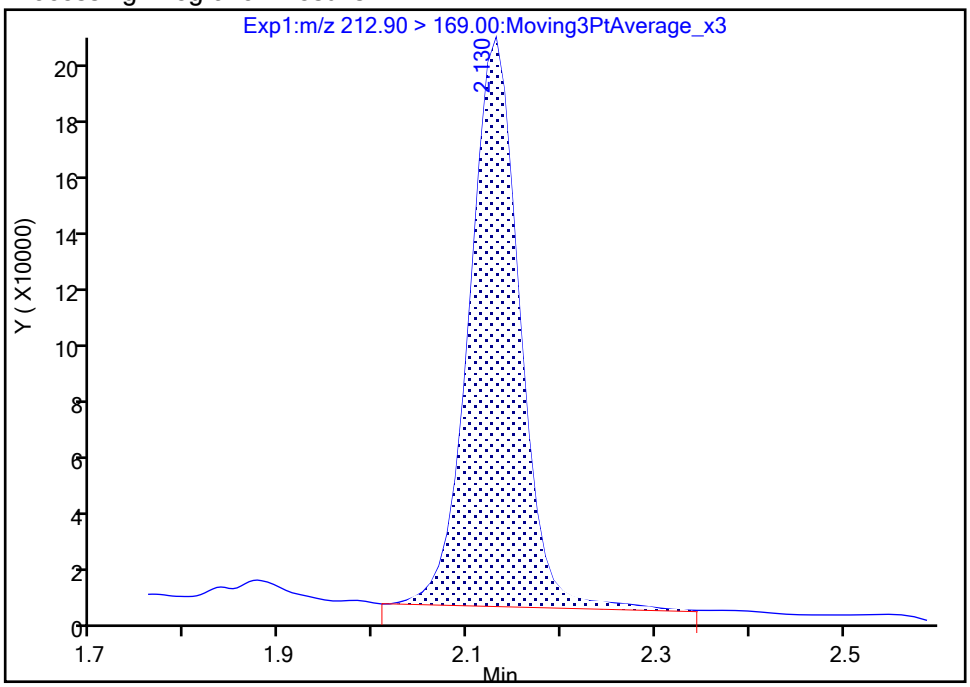
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

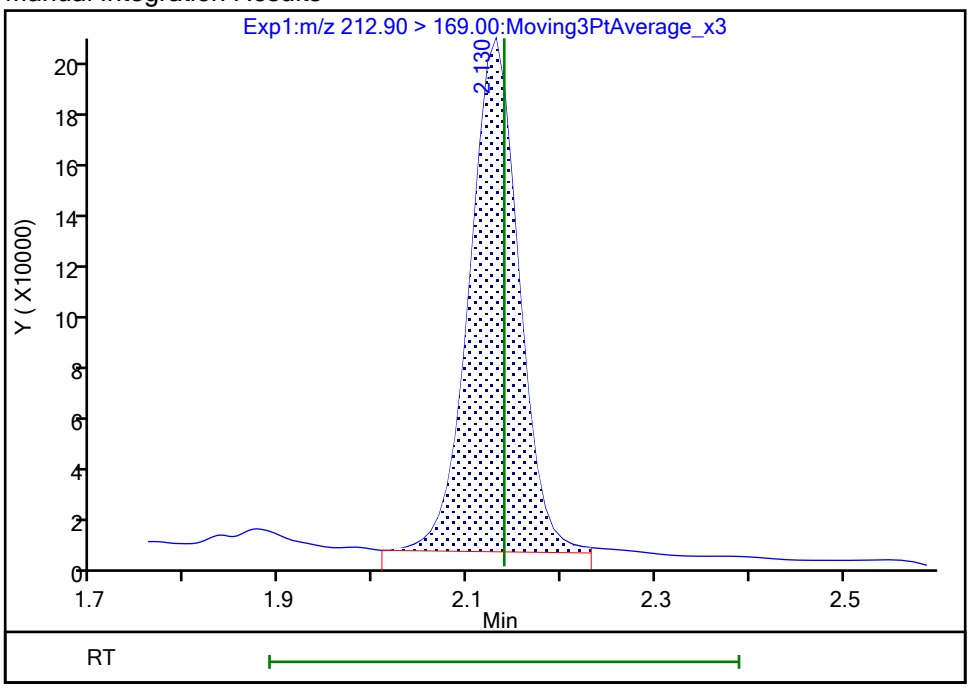
Processing Integration Results

RT: 2.13
Area: 721199
Amount: 0.523779
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 713528
Amount: 0.517773
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

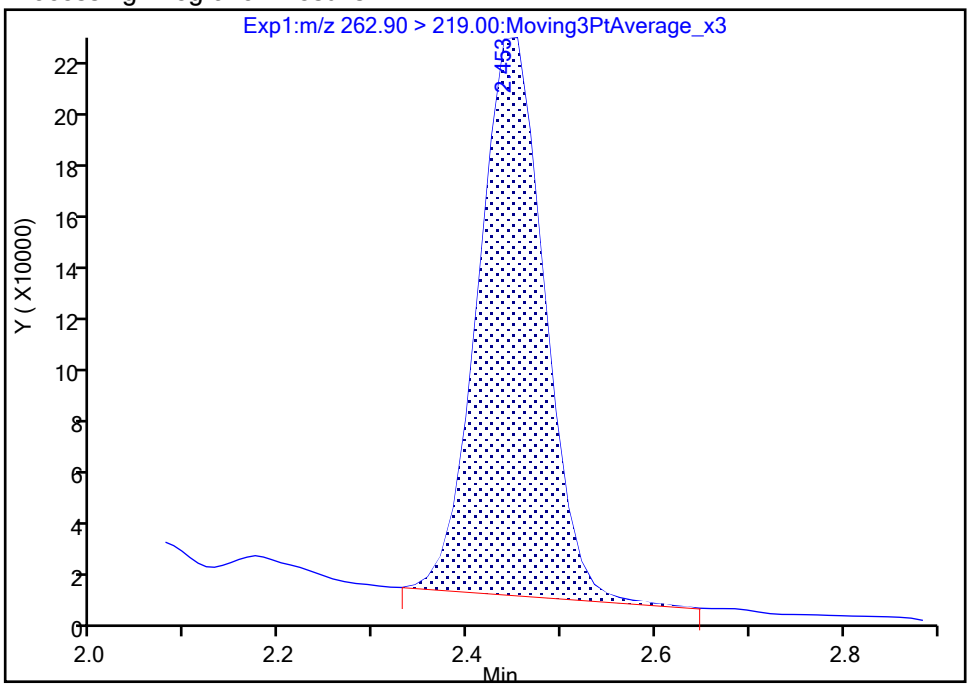
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

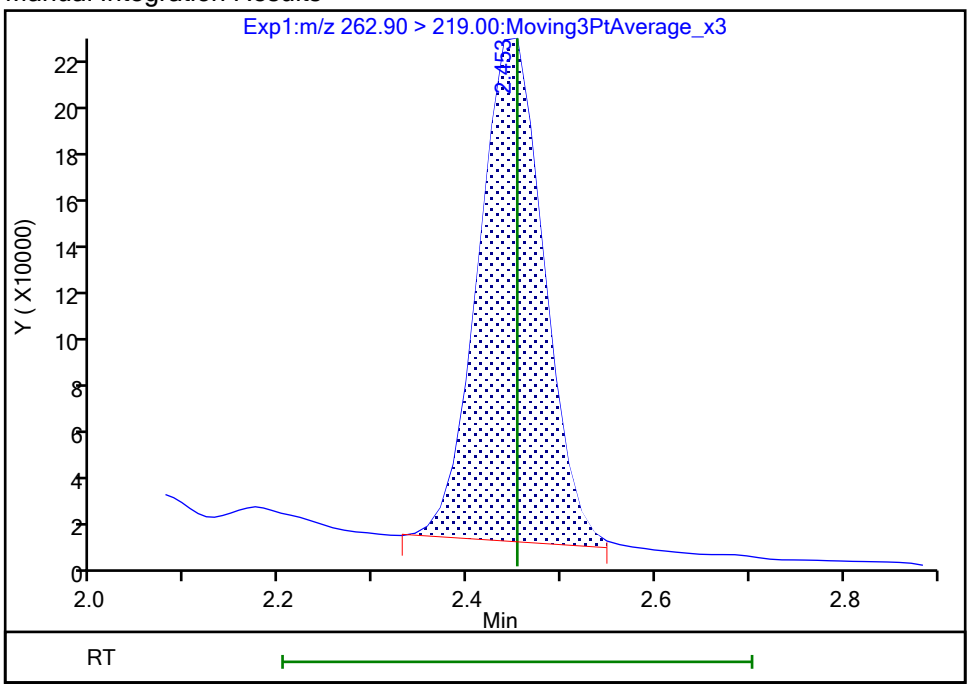
Processing Integration Results

RT: 2.45
Area: 1012557
Amount: 0.872298
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1005262
Amount: 0.866014
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 13:25:22 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

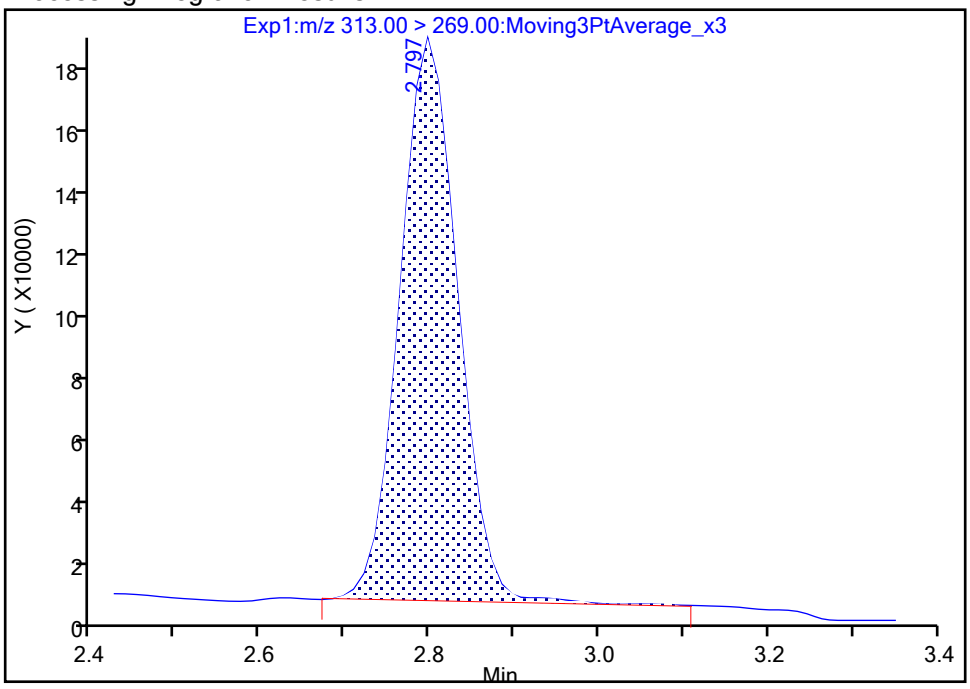
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

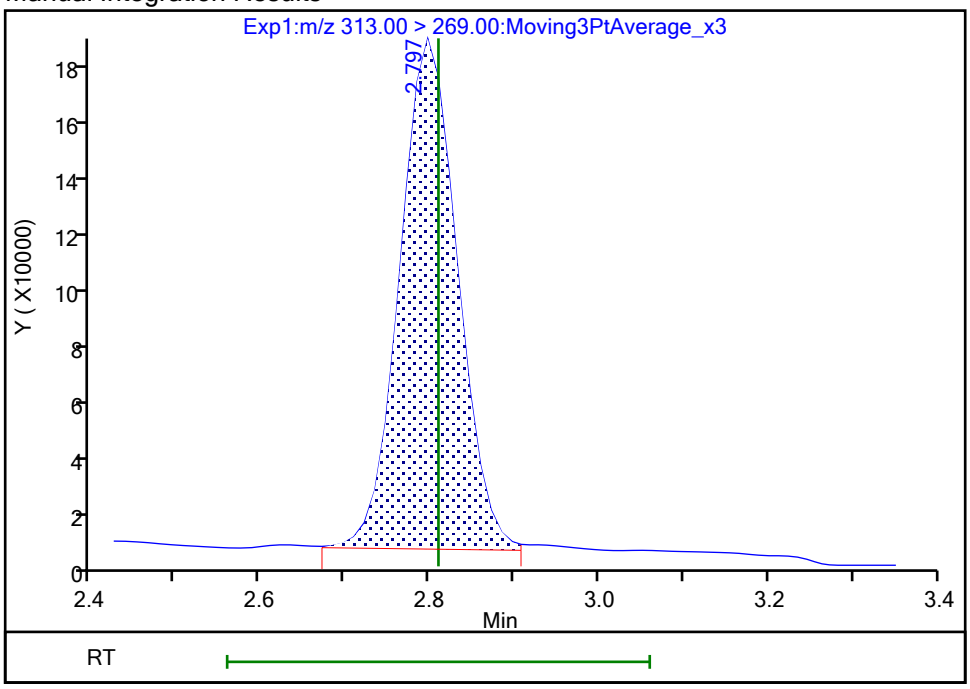
Processing Integration Results

RT: 2.80
Area: 861854
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 854943
Amount: 0.656120
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

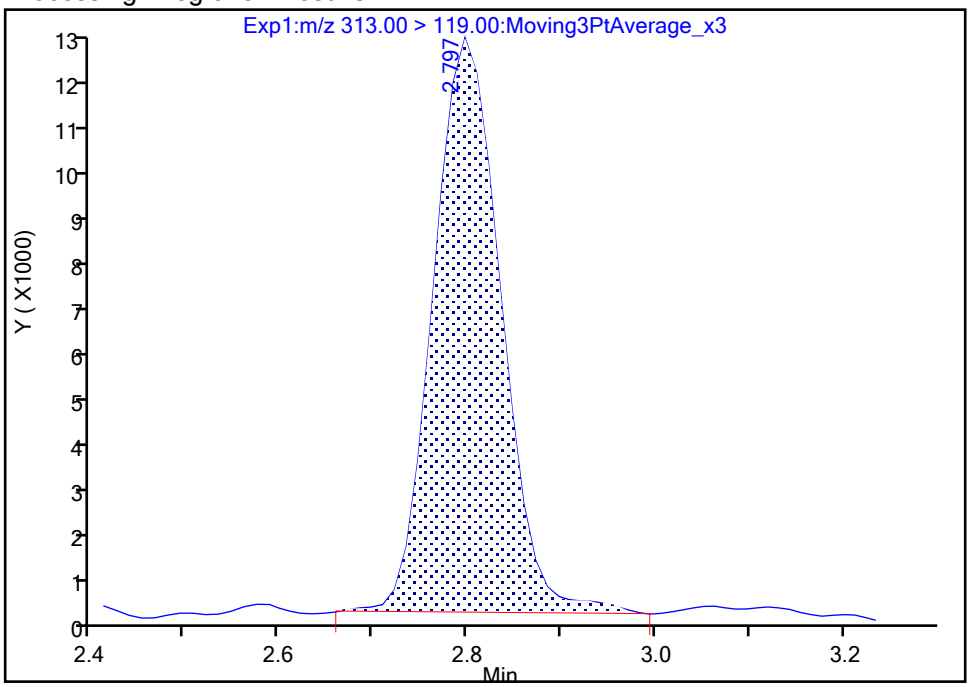
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

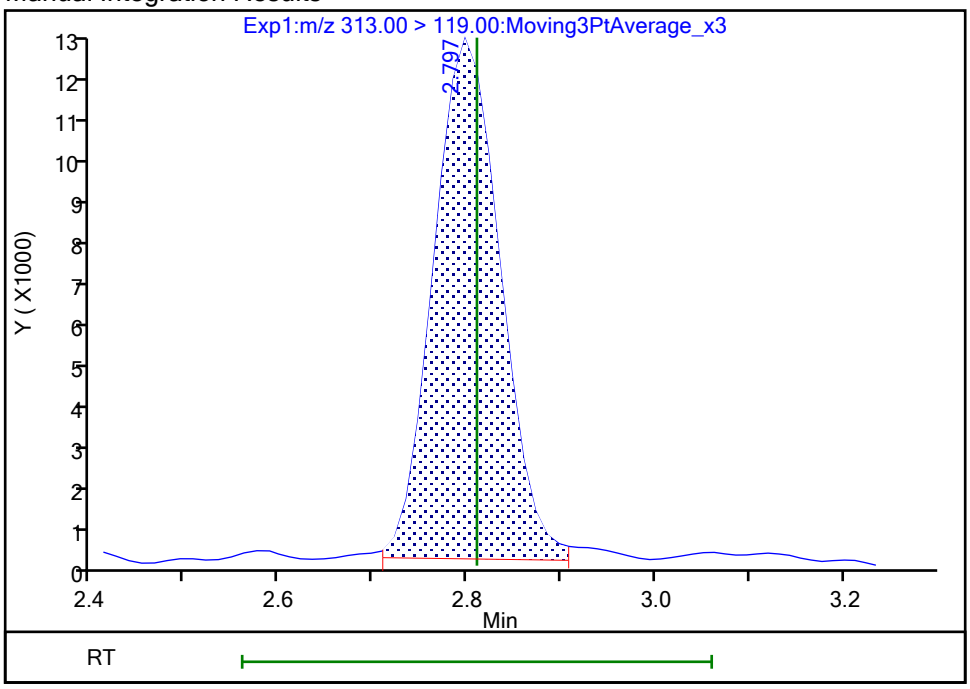
Processing Integration Results

RT: 2.80
Area: 60555
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 59426
Amount: 0.656120
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

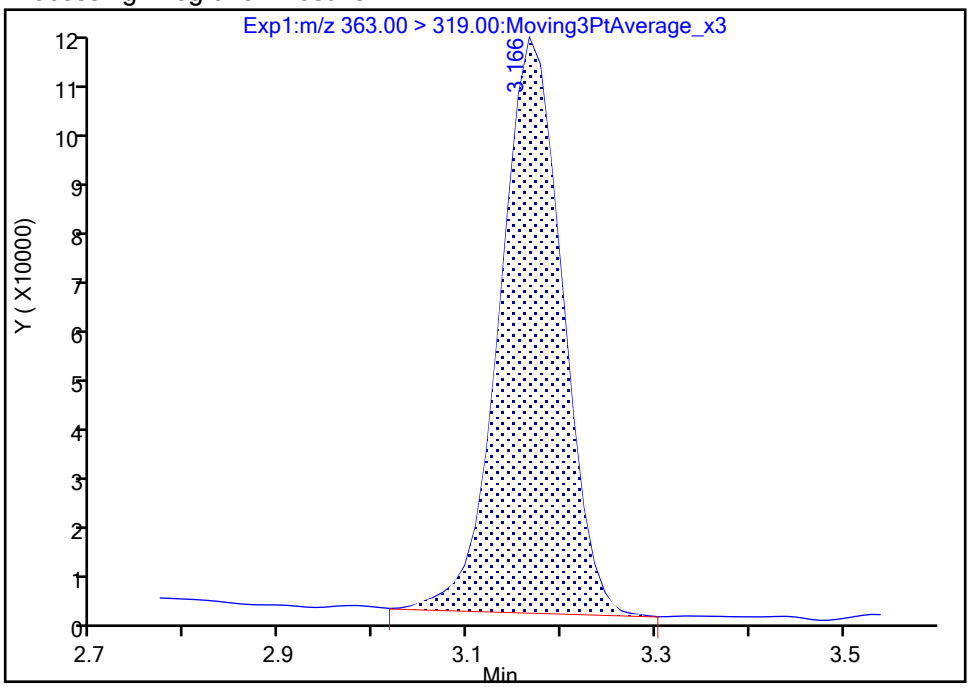
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

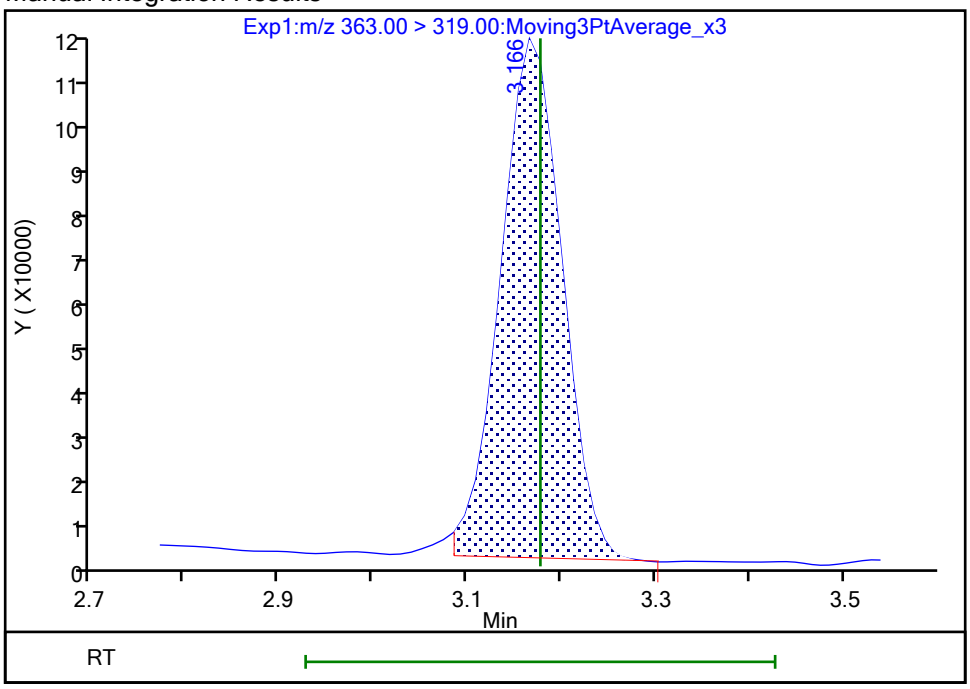
Processing Integration Results

RT: 3.17
Area: 508330
Amount: 0.323753
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 500480
Amount: 0.318753
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

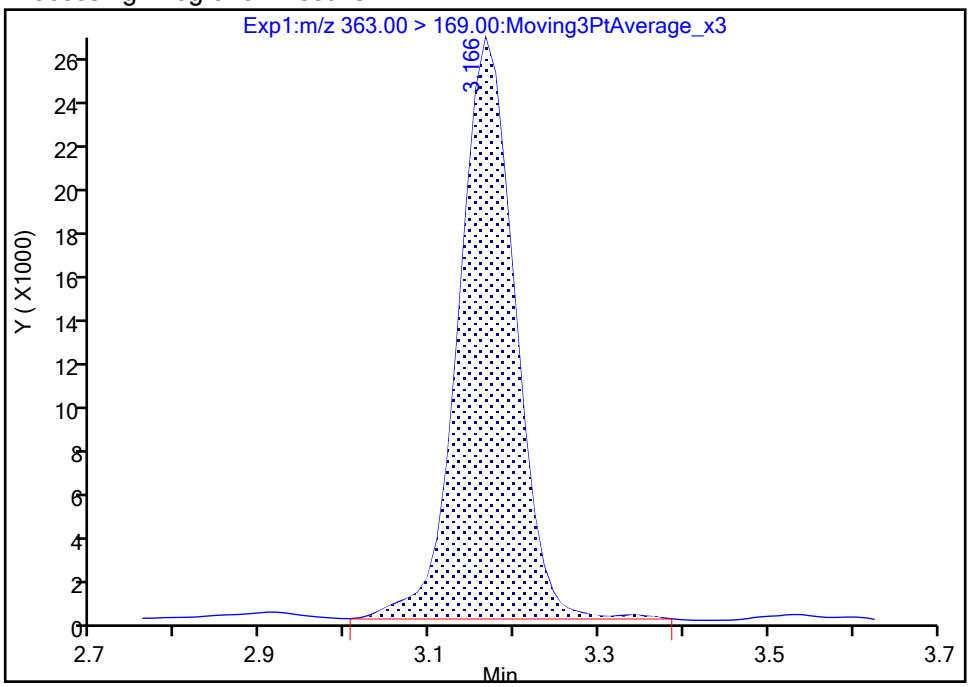
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

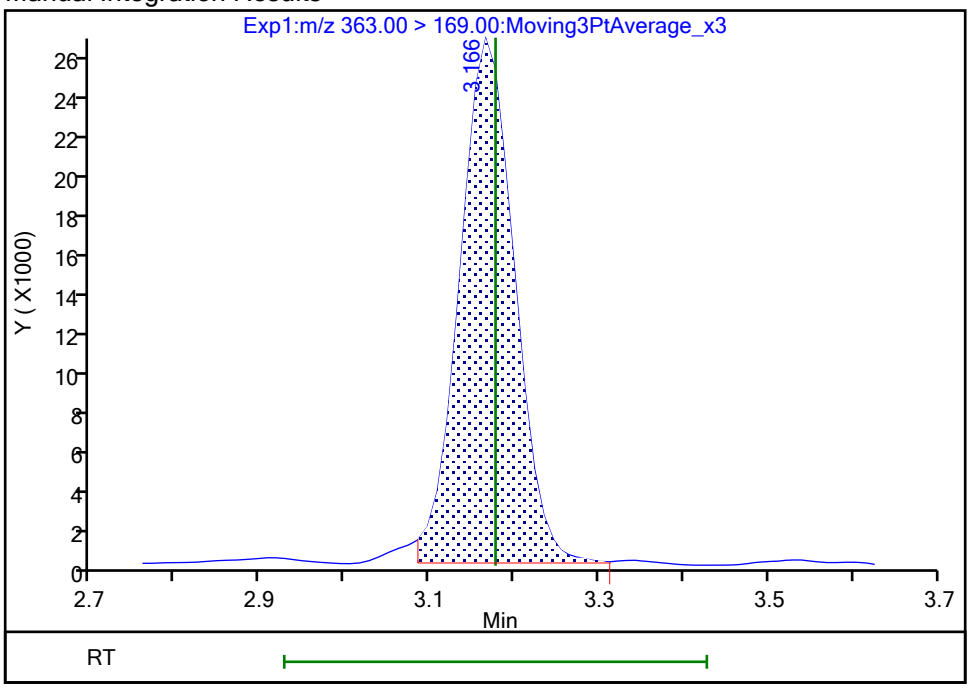
Processing Integration Results

RT: 3.17
Area: 121619
Amount: 0.323753
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 117968
Amount: 0.318753
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

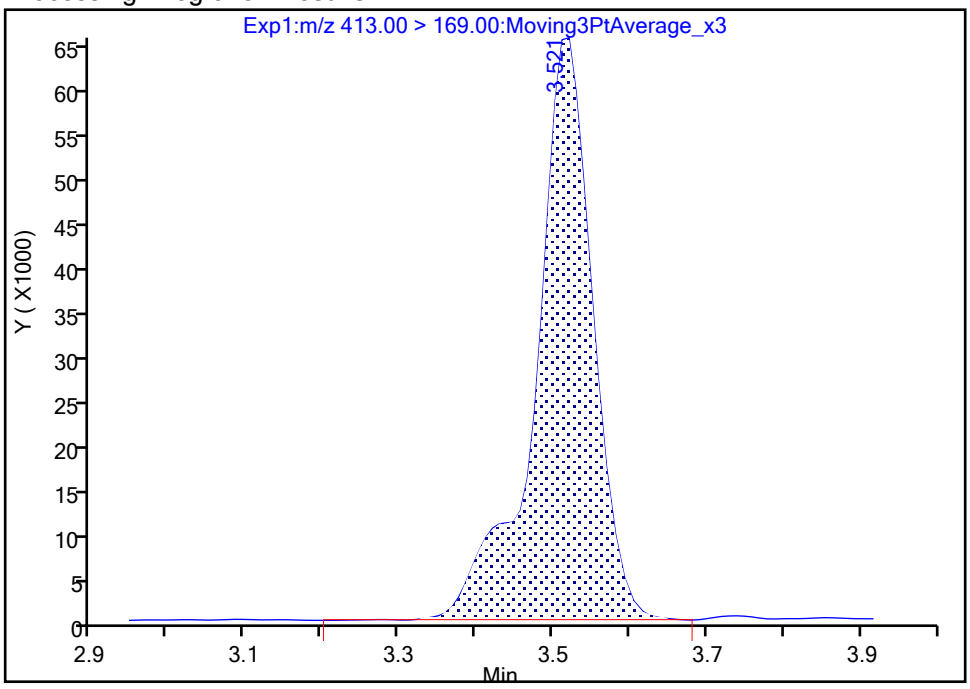
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

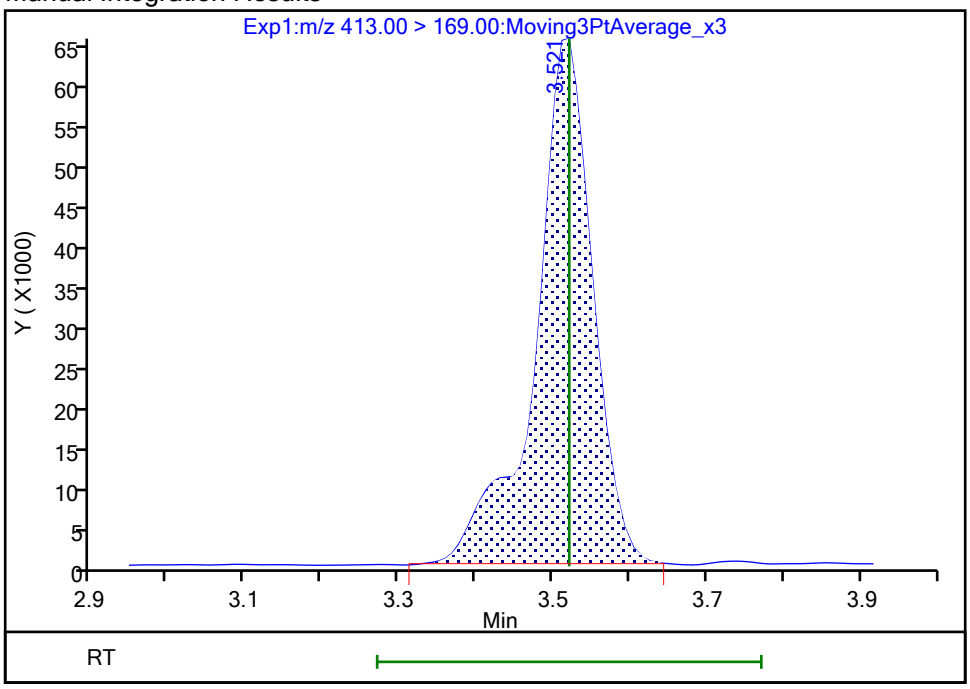
Processing Integration Results

RT: 3.52
Area: 341074
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 338112
Amount: 0.509623
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:49:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

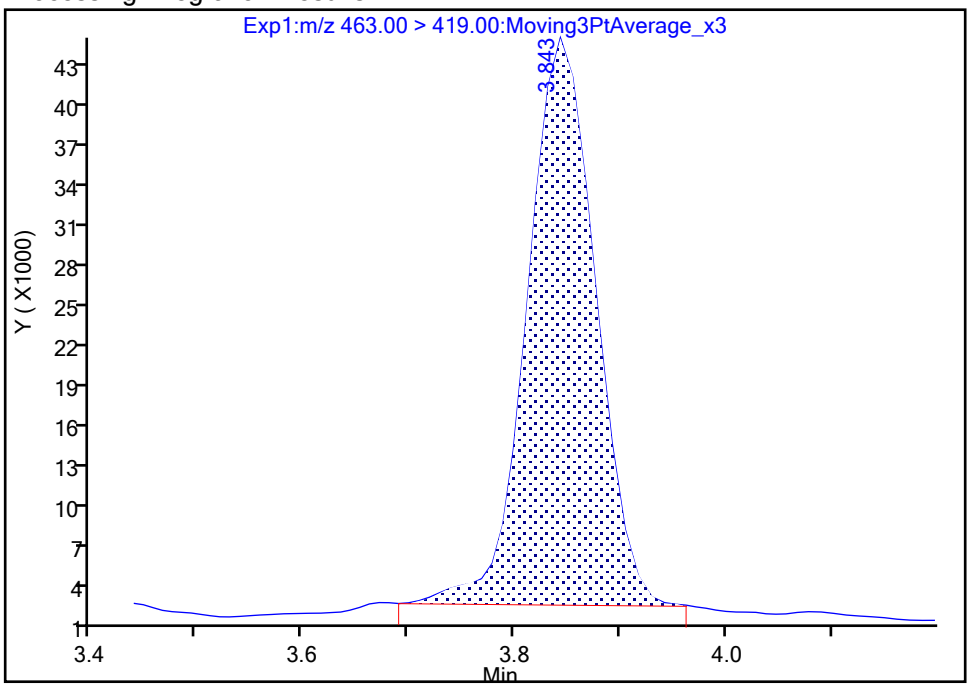
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

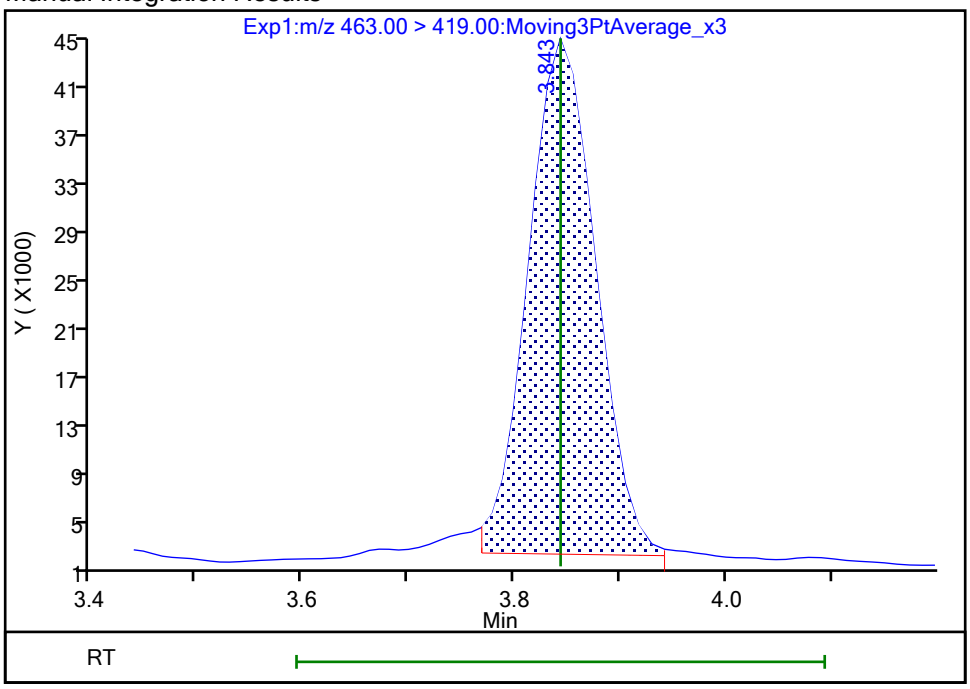
Processing Integration Results

RT: 3.84
Area: 187522
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 185983
Amount: 0.118555
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

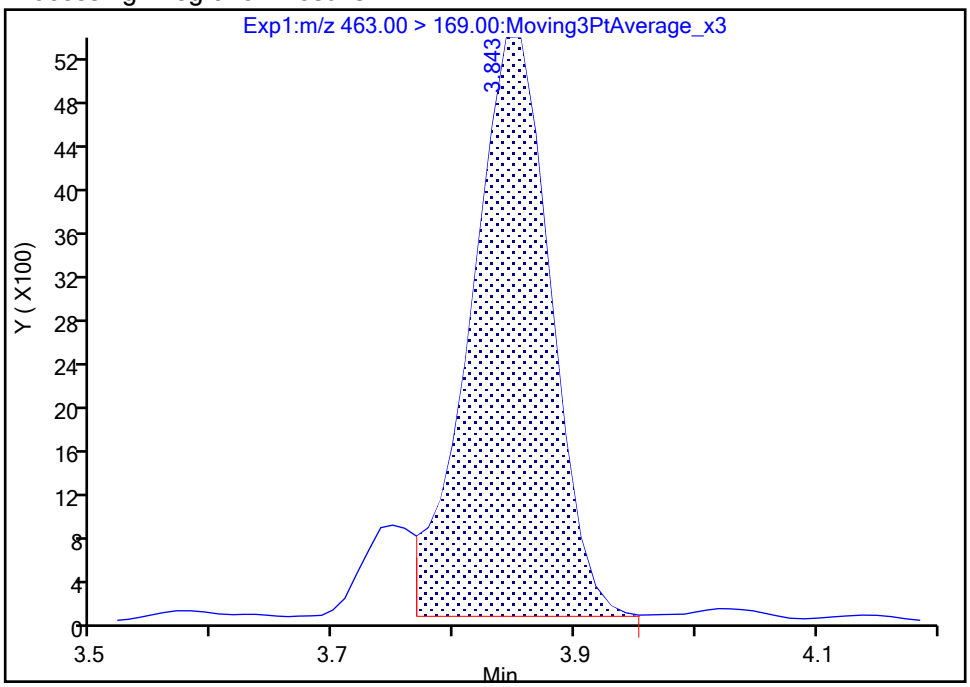
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

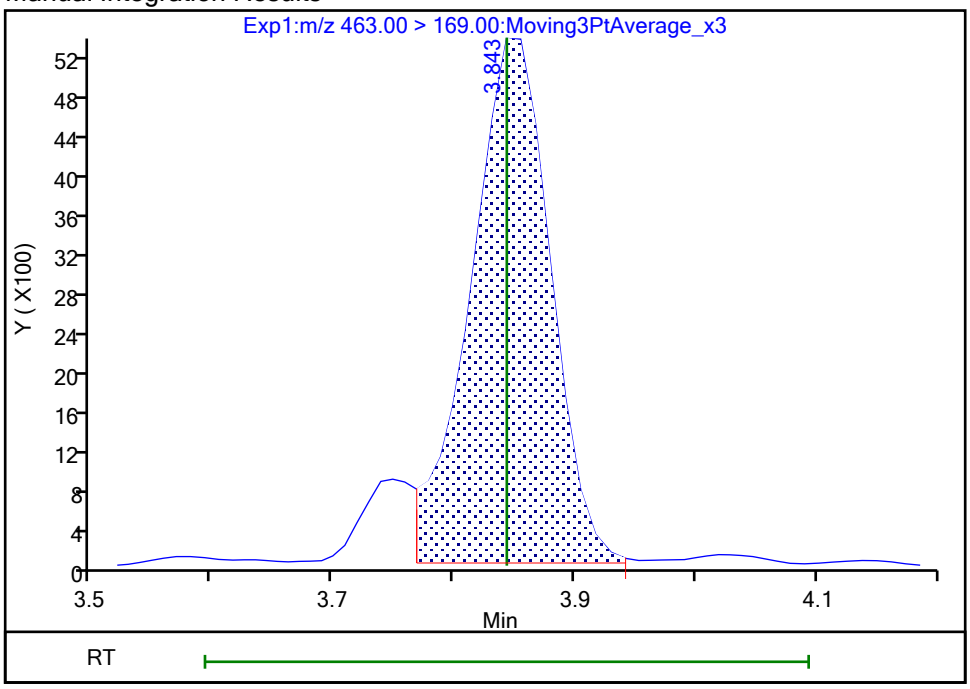
Processing Integration Results

RT: 3.84
Area: 24569
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 24699
Amount: 0.118555
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

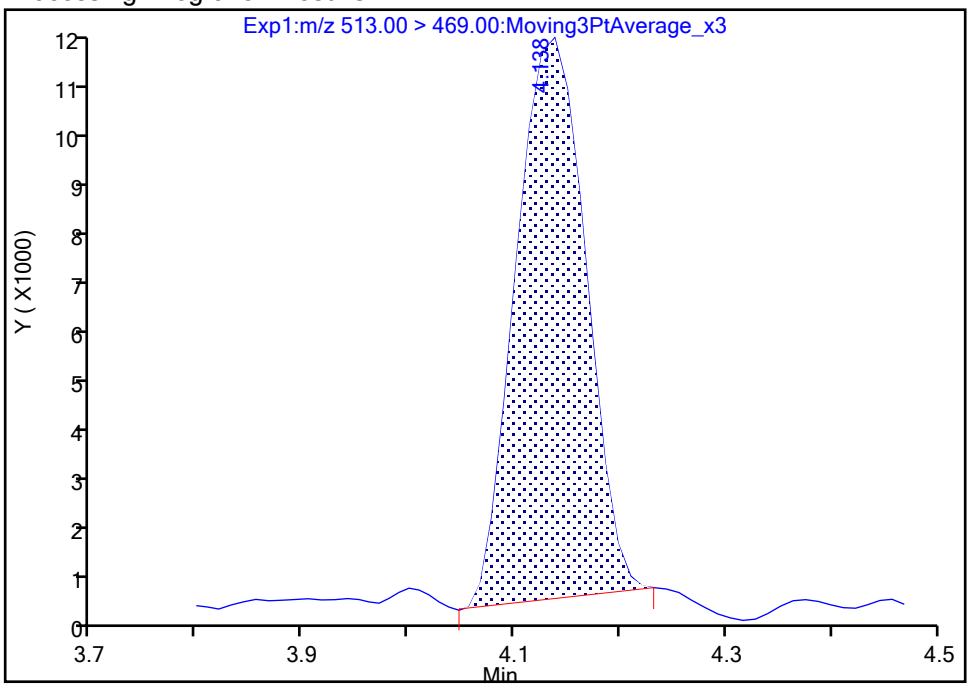
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

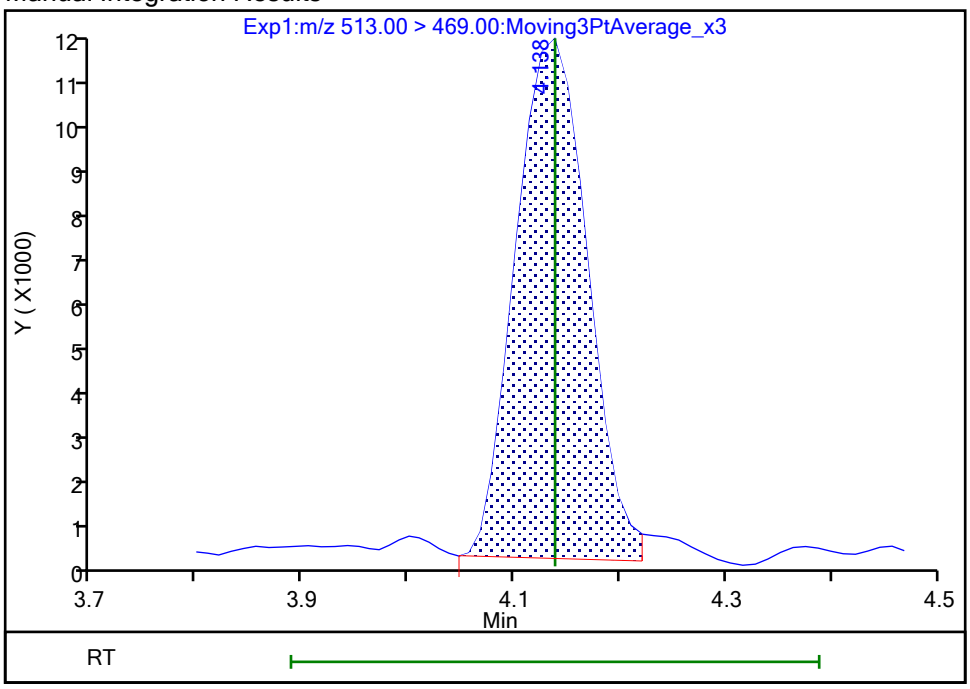
Processing Integration Results

RT: 4.14
Area: 47244
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 49861
Amount: 0.029832
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

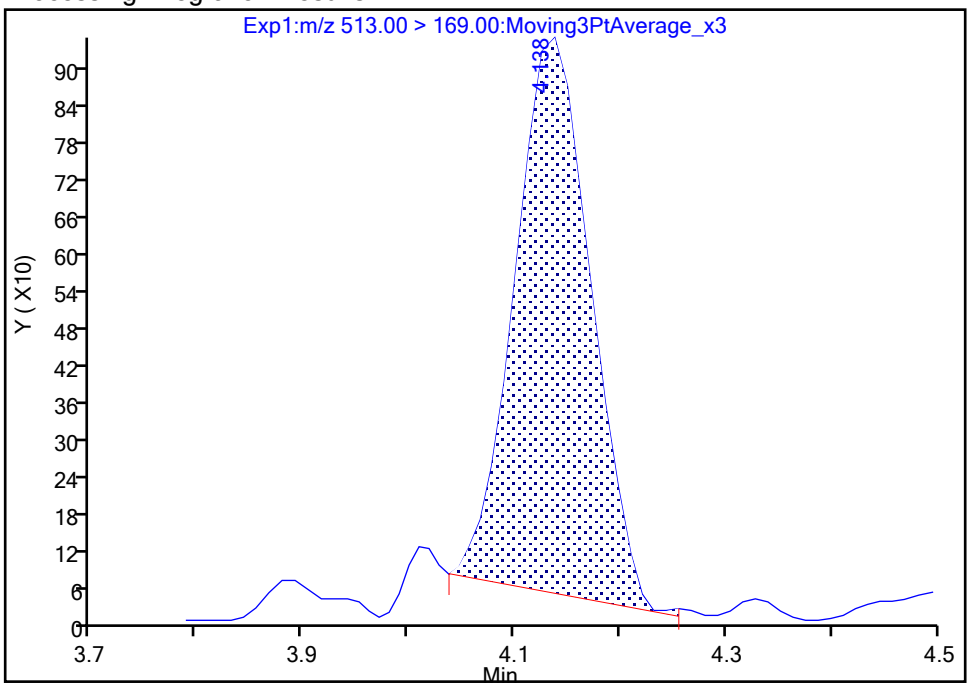
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

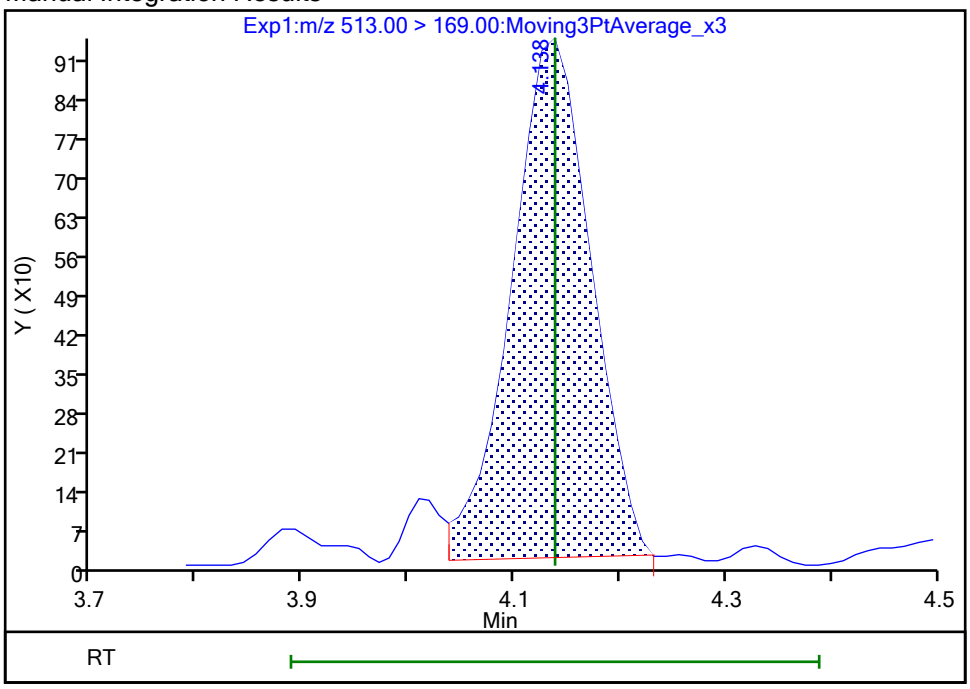
Processing Integration Results

RT: 4.14
Area: 4535
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 4919
Amount: 0.029832
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

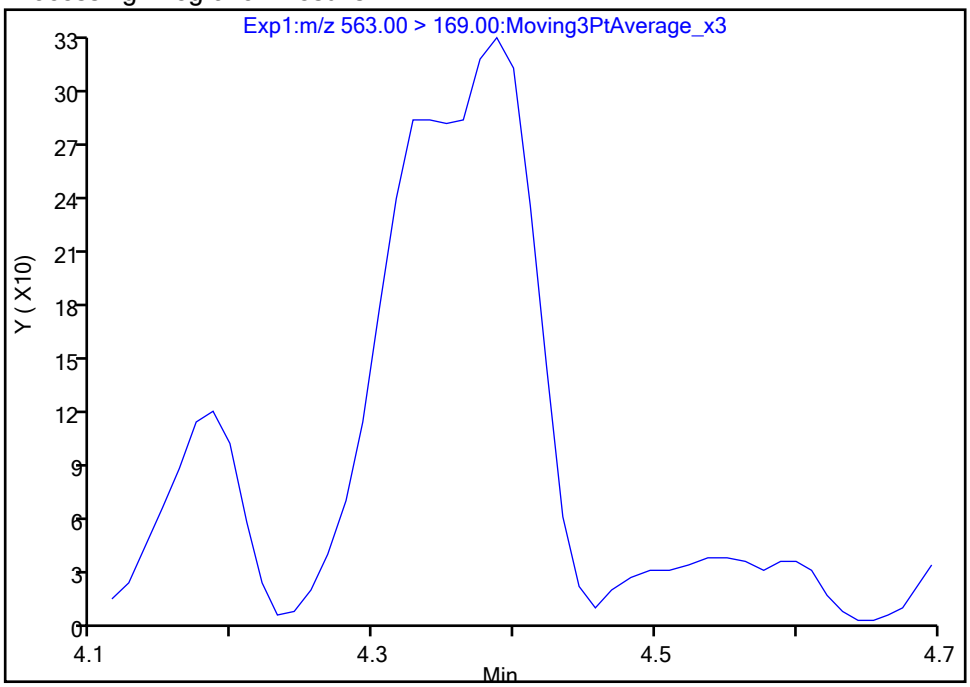
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

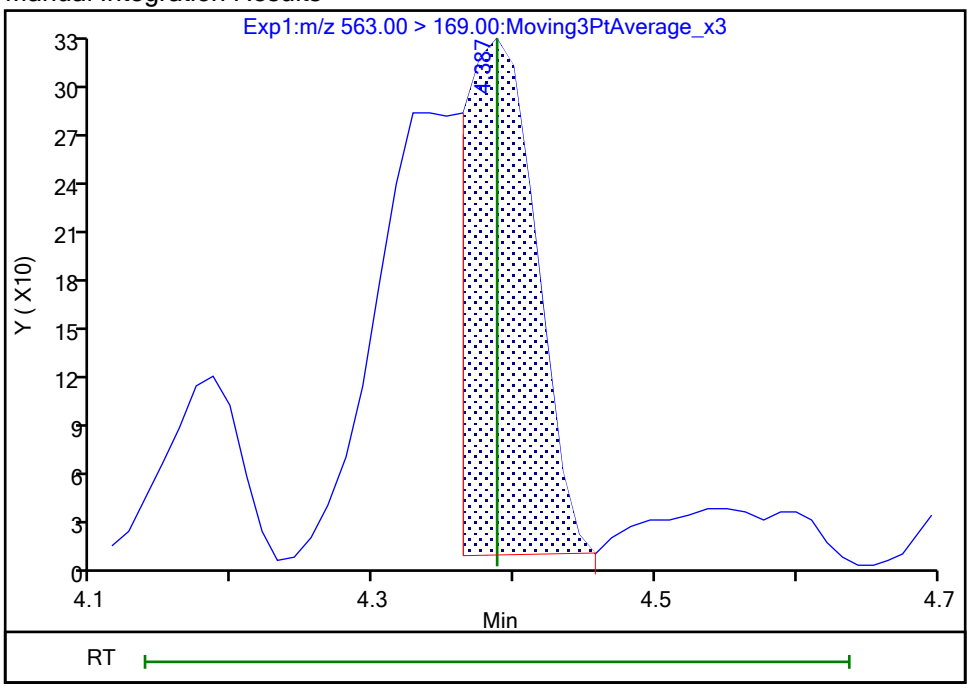
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 1057
Amount: 0.009675
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

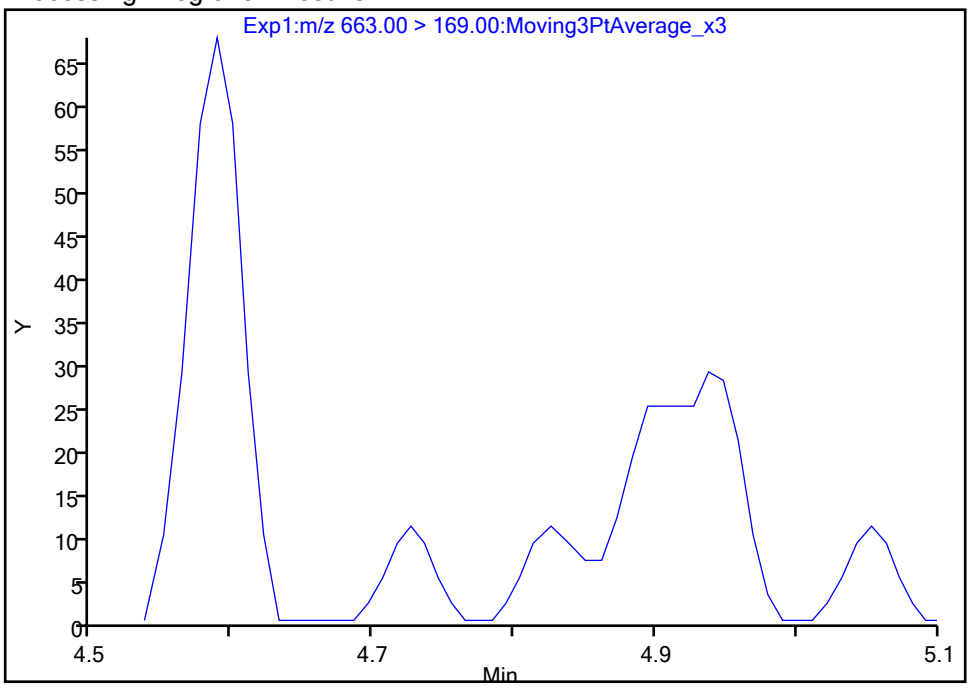
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

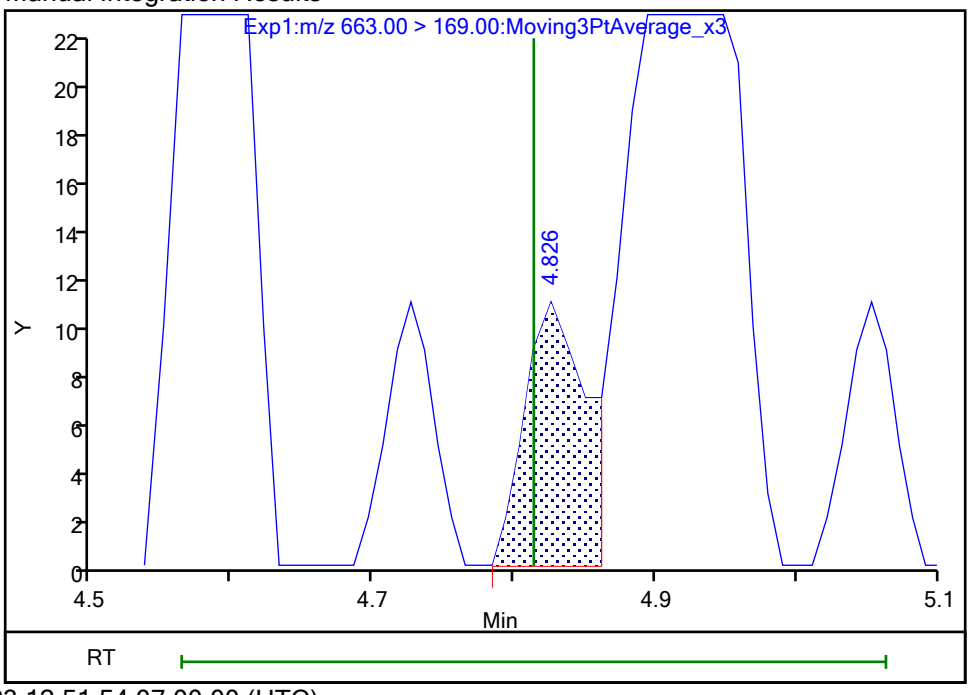
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.83
Area: 32
Amount: 0.000950
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

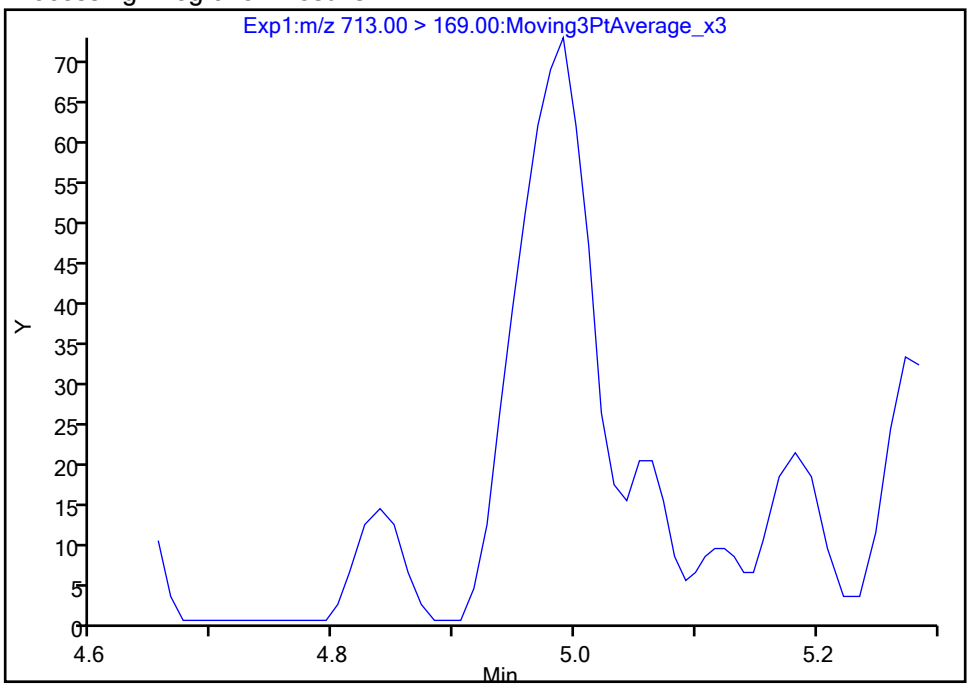
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

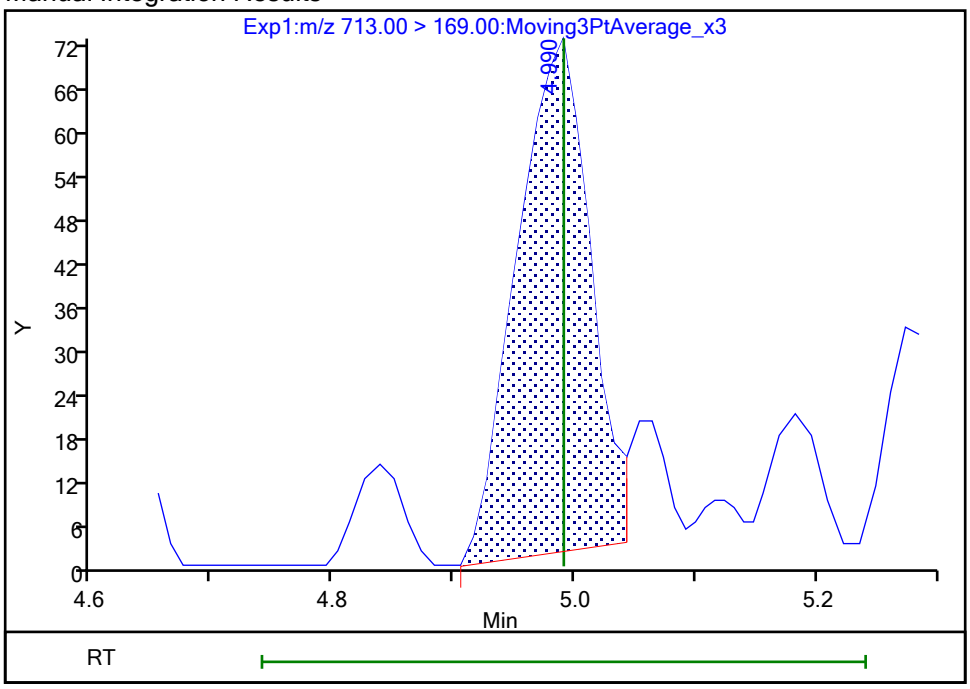
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 300
Amount: 0.001867
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:52:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

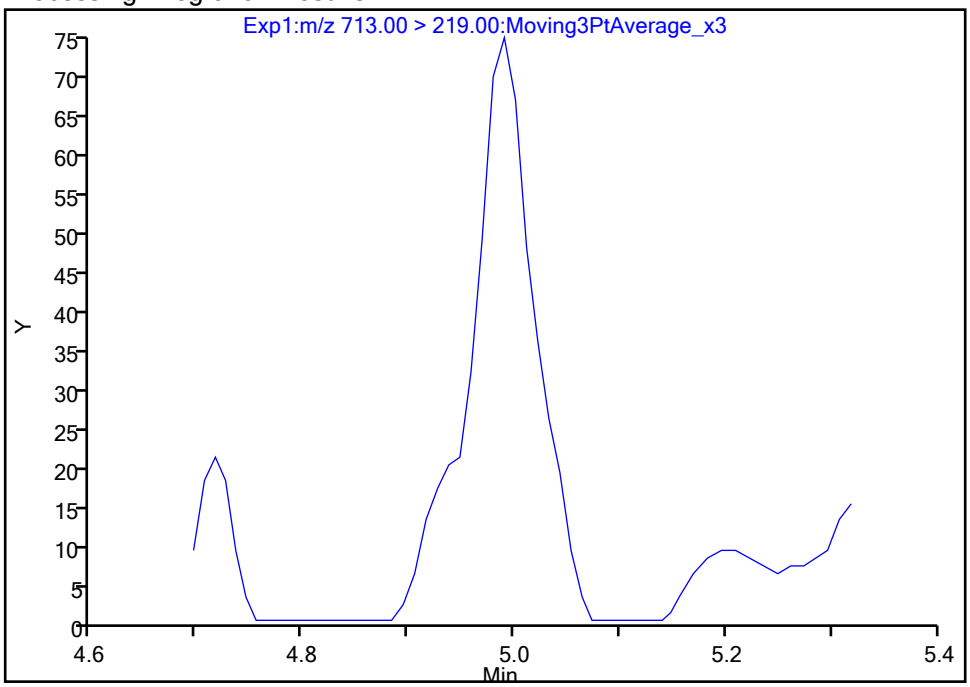
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

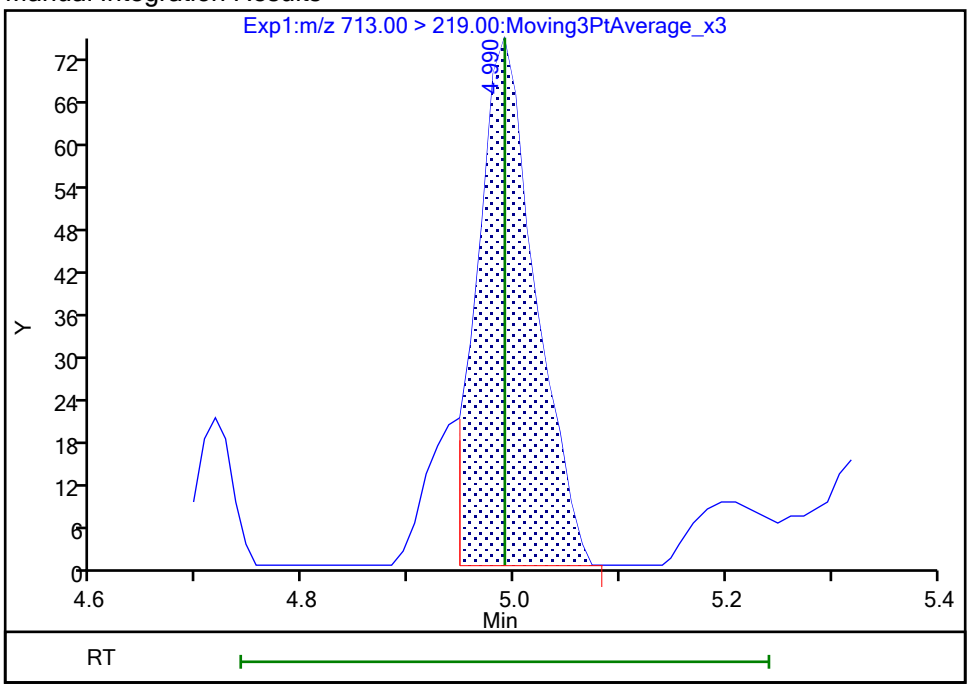
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 280
Amount: 0.001867
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:52:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

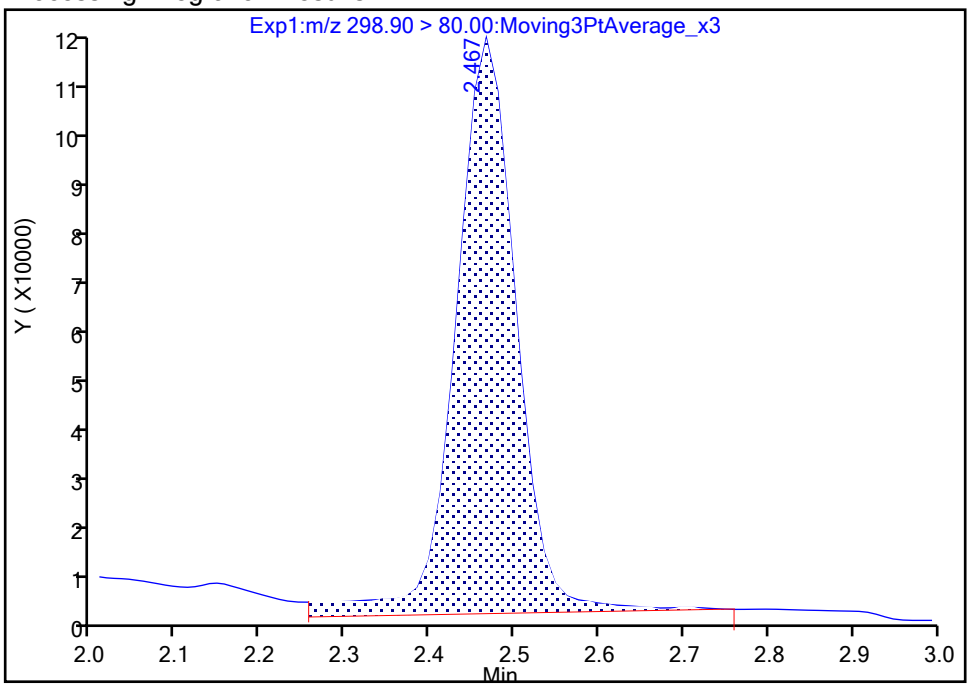
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

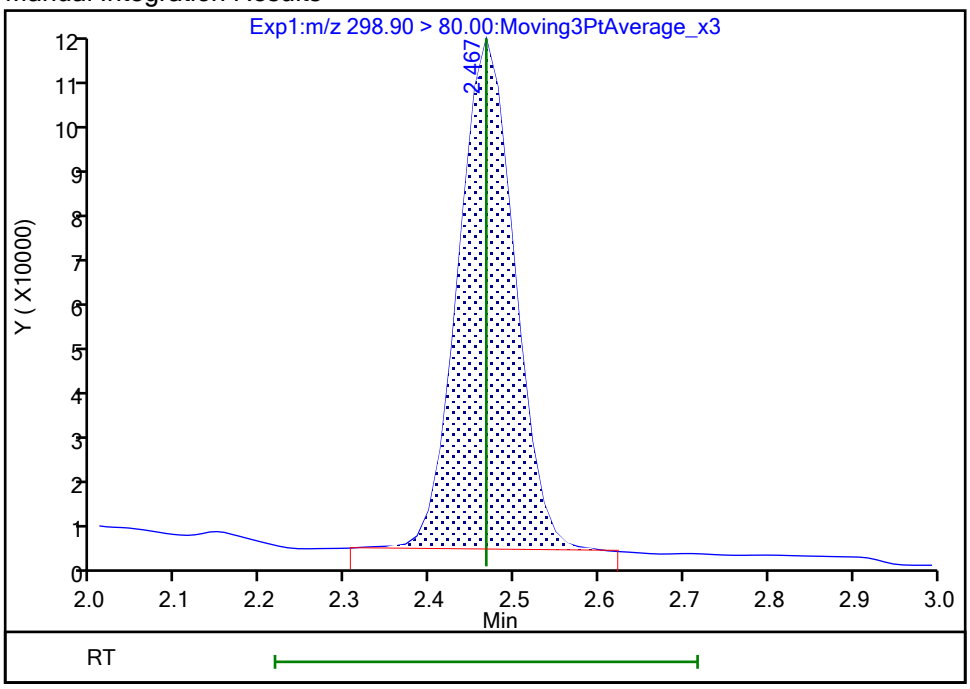
Processing Integration Results

RT: 2.47
Area: 556363
Amount: 0.308658
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 508032
Amount: 0.281845
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

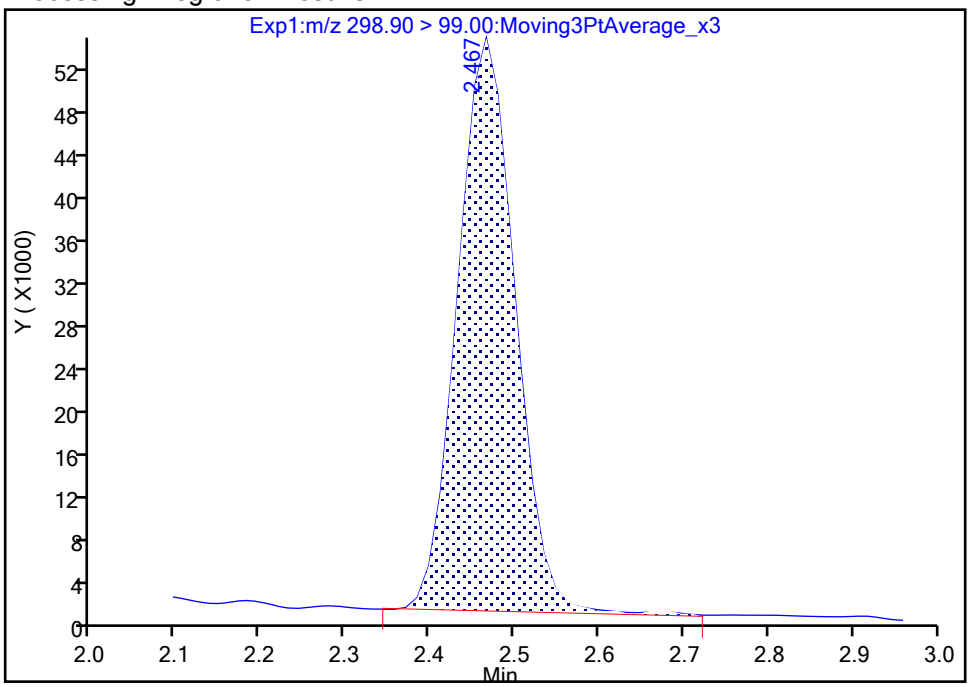
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

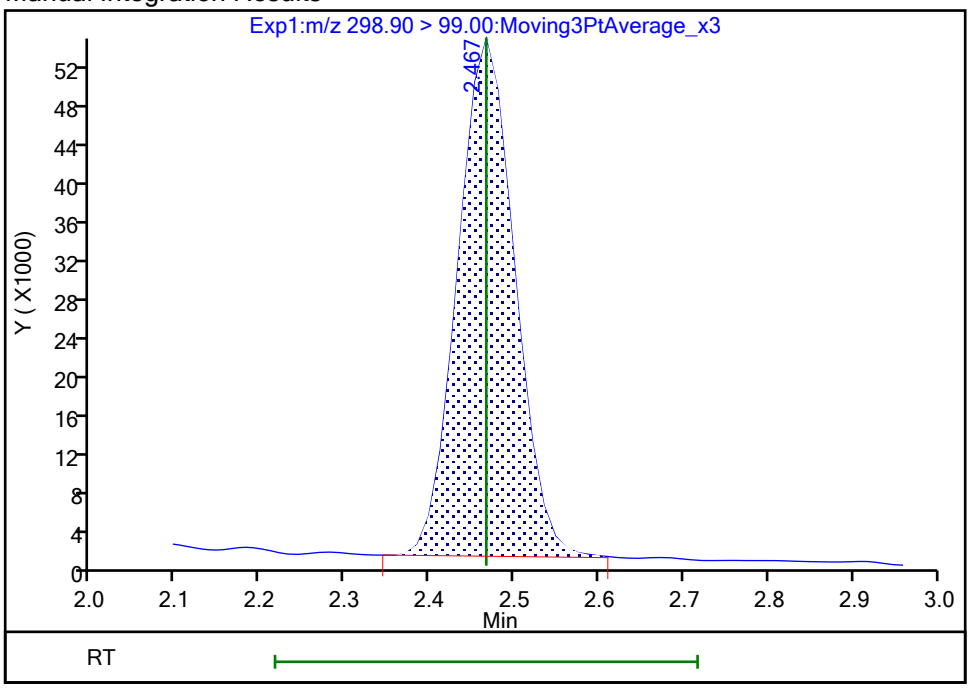
Processing Integration Results

RT: 2.47
Area: 252591
Amount: 0.308658
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 249515
Amount: 0.281845
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

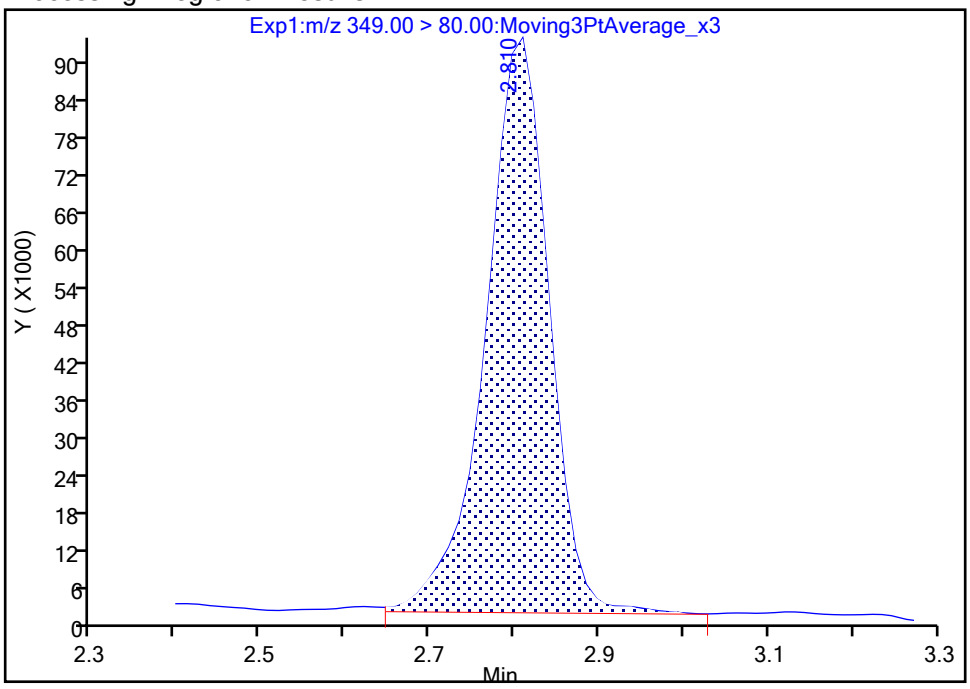
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

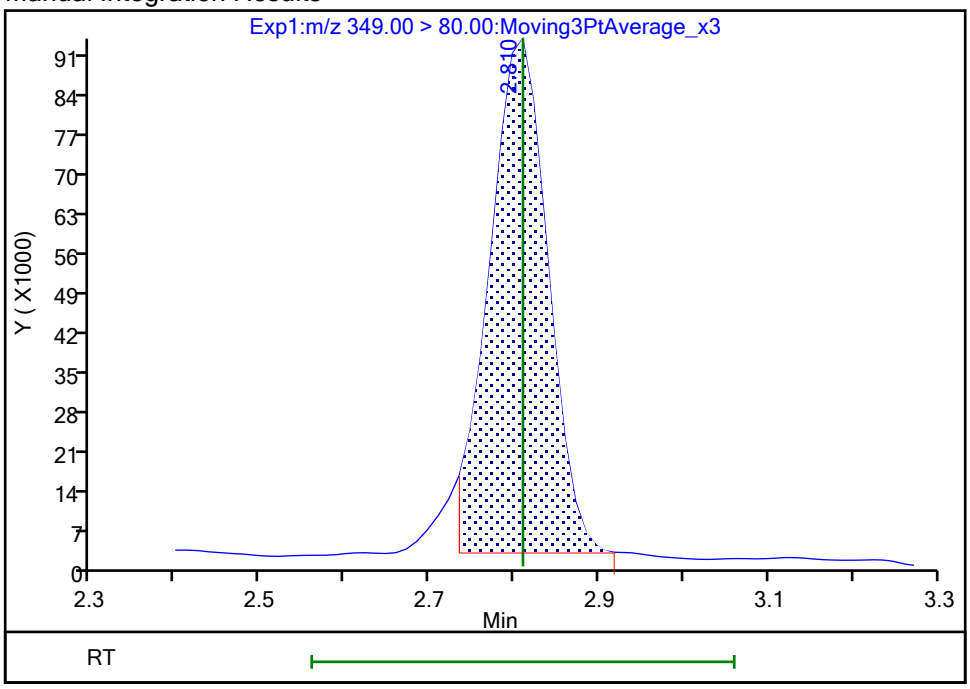
Processing Integration Results

RT: 2.81
Area: 476444
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 435814
Amount: 0.274839
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

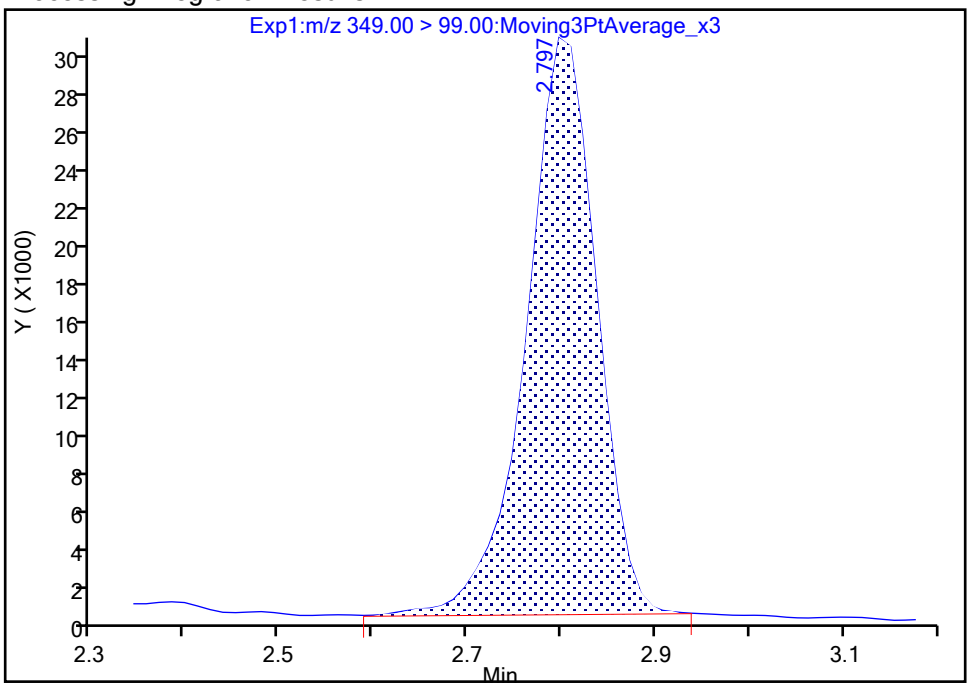
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

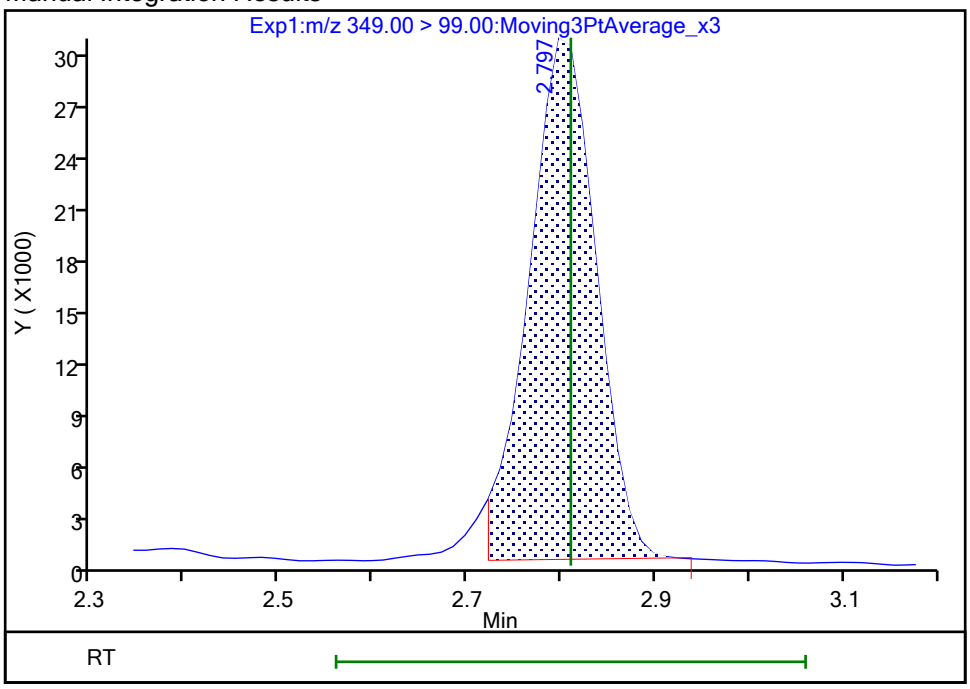
Processing Integration Results

RT: 2.80
Area: 156592
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 150607
Amount: 0.274839
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

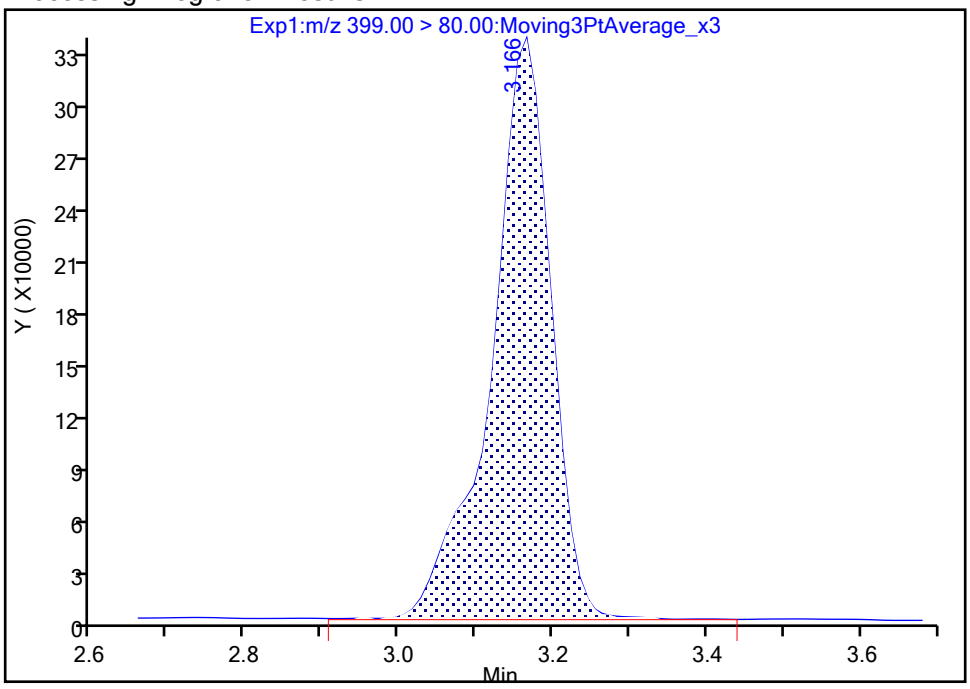
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

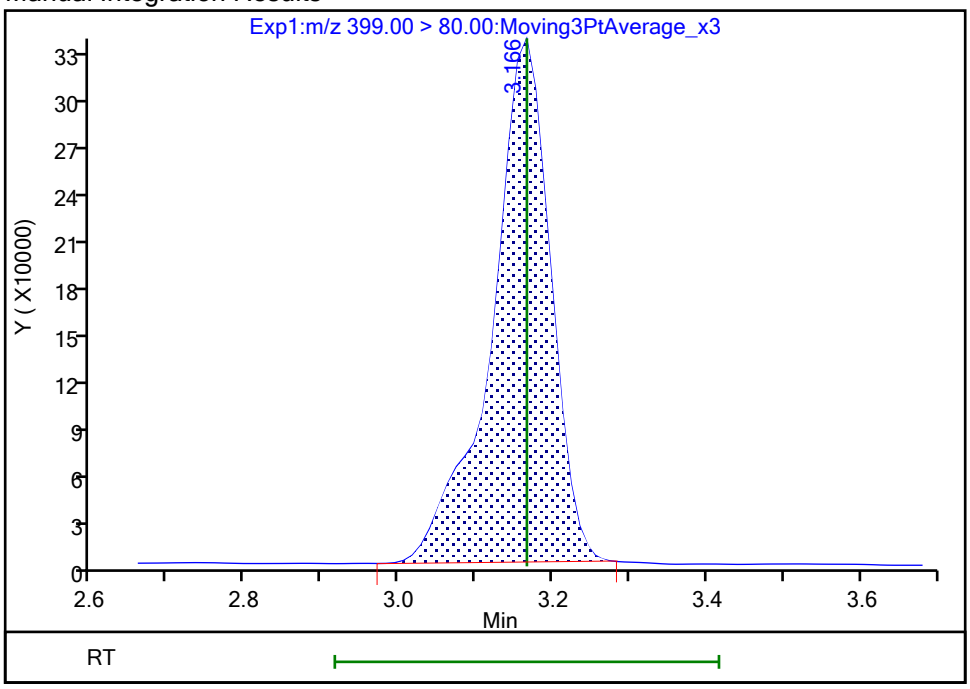
Processing Integration Results

RT: 3.17
Area: 1822081
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1786497
Amount: 1.329071
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

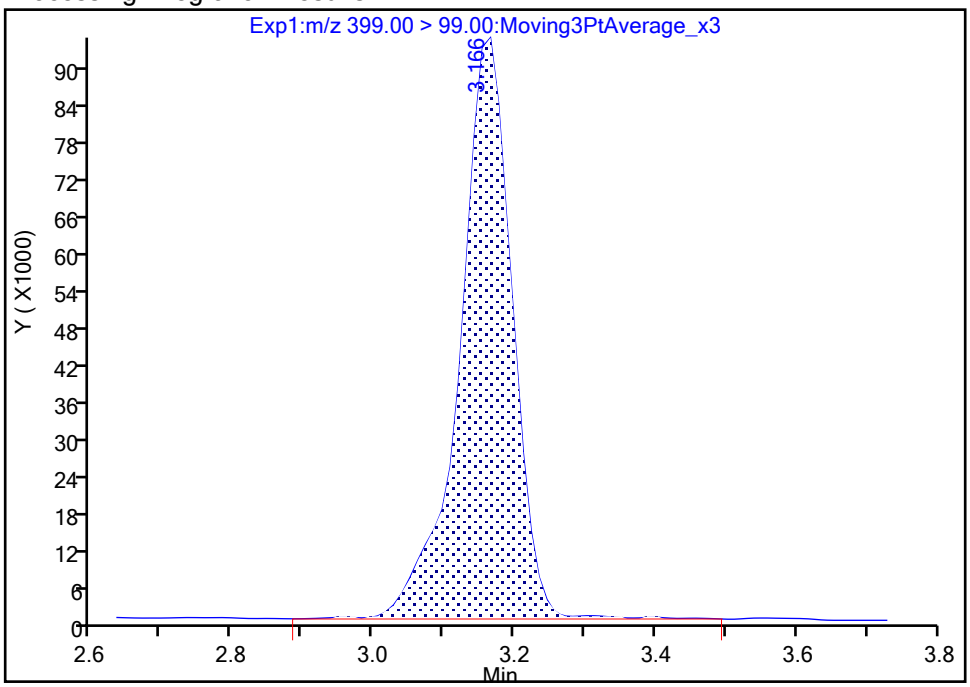
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

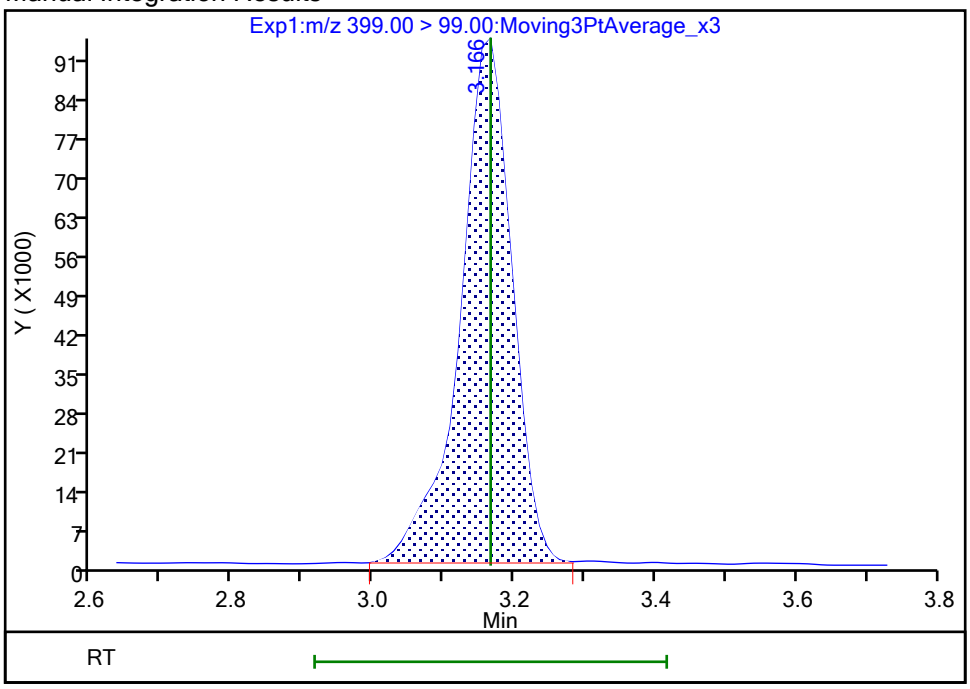
Processing Integration Results

RT: 3.17
Area: 489229
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 480159
Amount: 1.329071
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

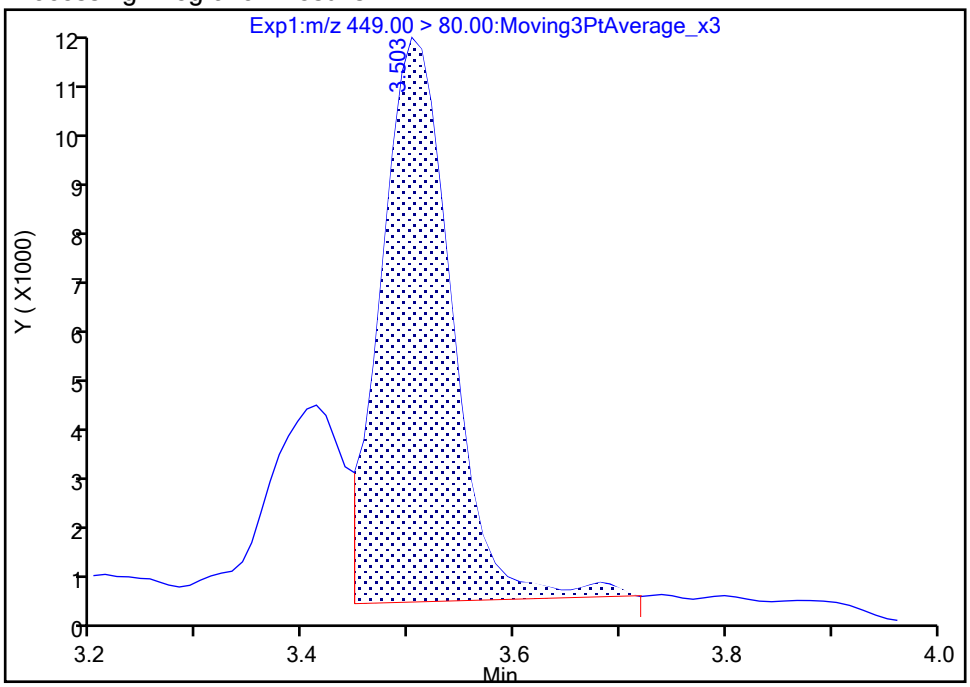
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

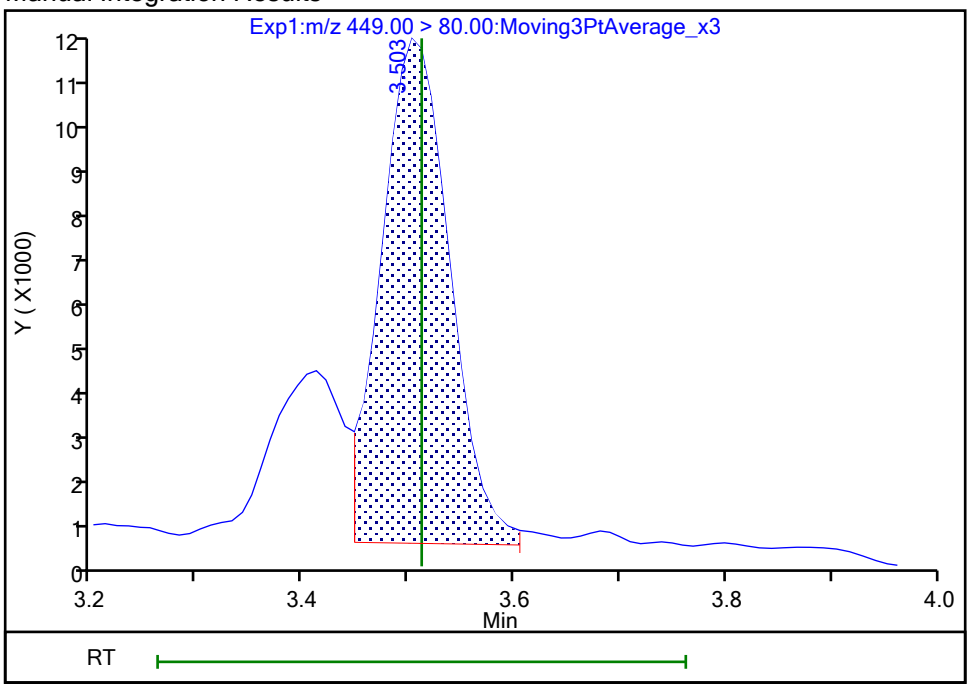
Processing Integration Results

RT: 3.50
Area: 49923
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 47488
Amount: 0.043042
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 13:26:26 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

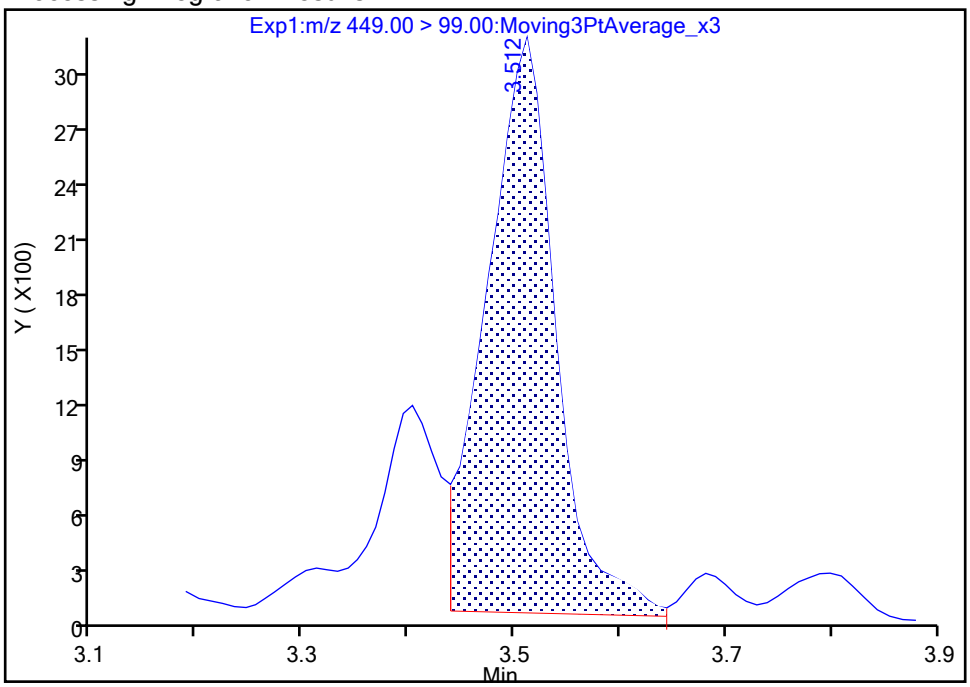
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

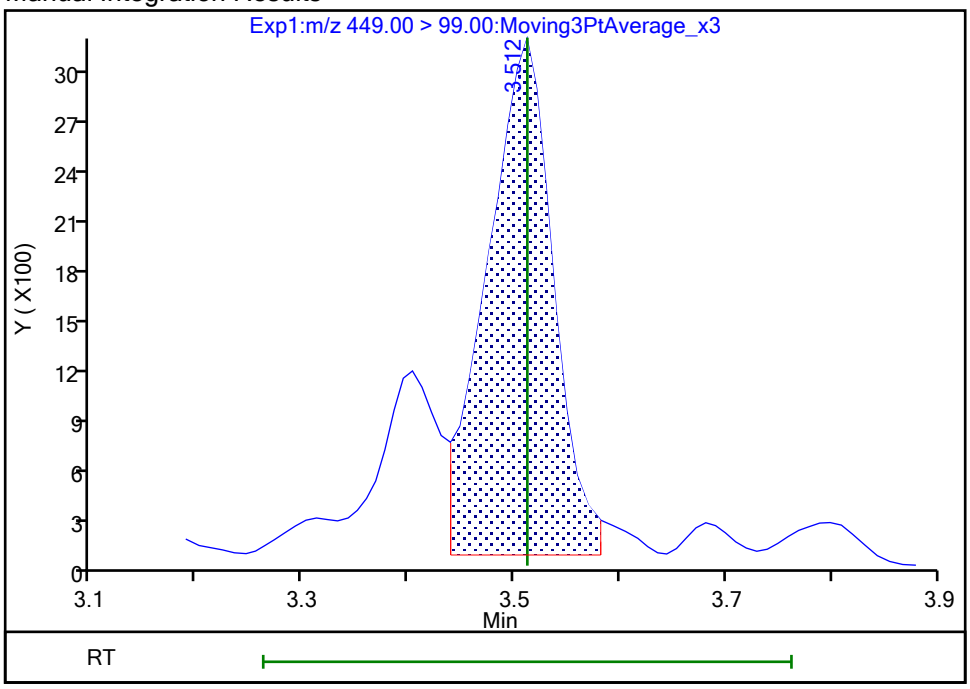
Processing Integration Results

RT: 3.51
Area: 13908
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 13152
Amount: 0.043042
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 13:26:32 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

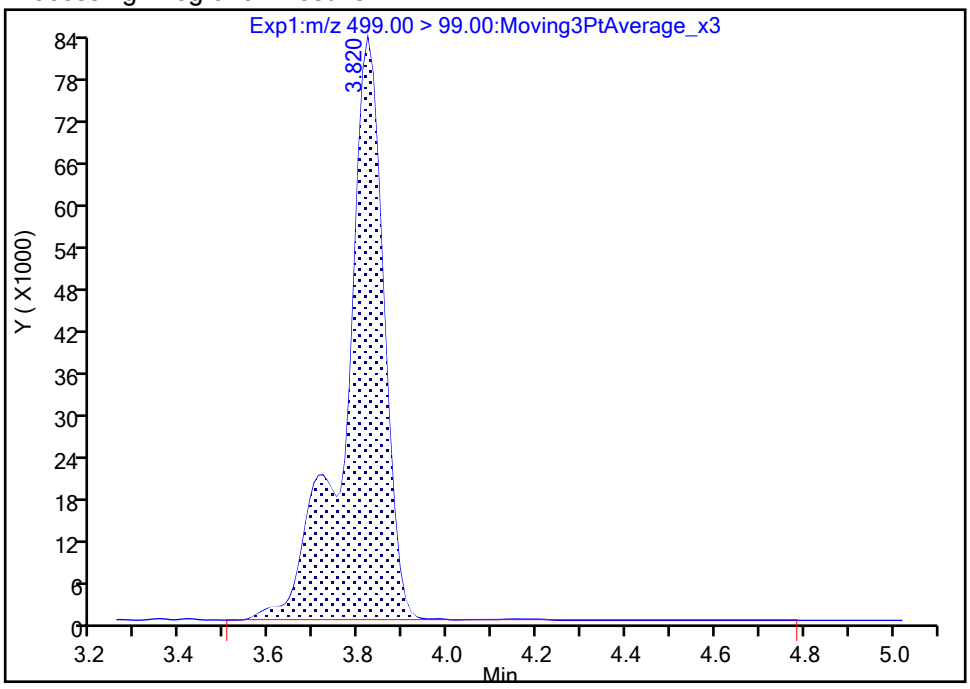
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

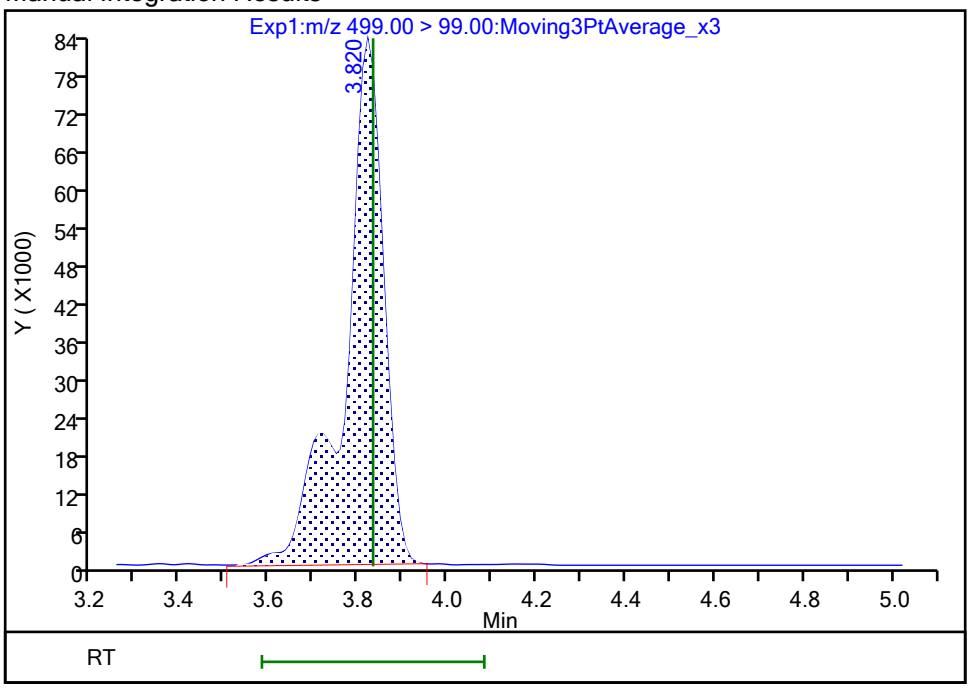
Processing Integration Results

RT: 3.82
Area: 509742
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 506303
Amount: 2.247952
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:49:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

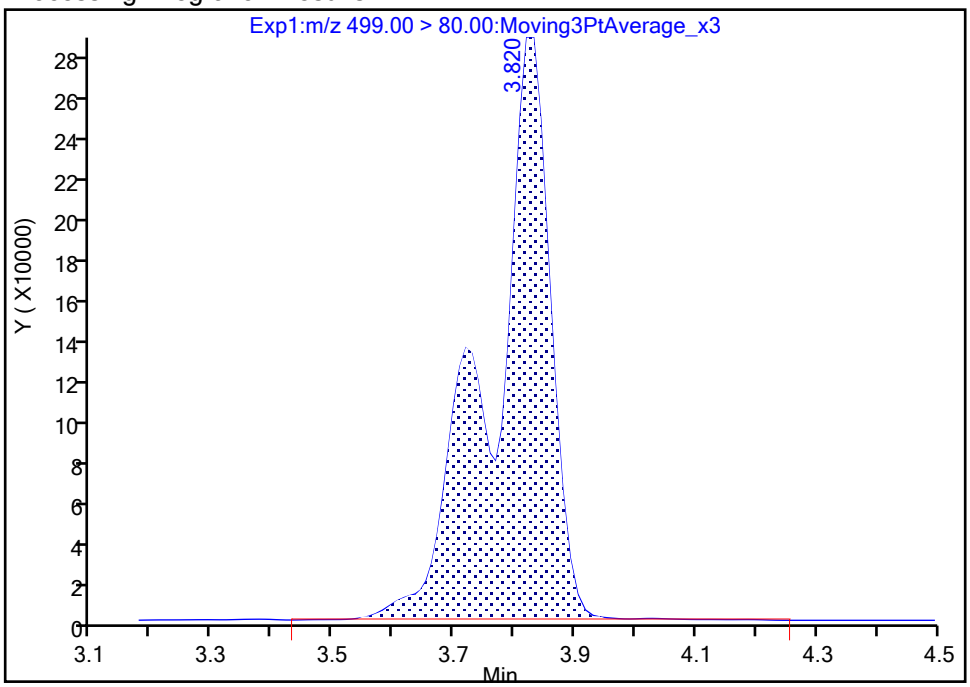
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

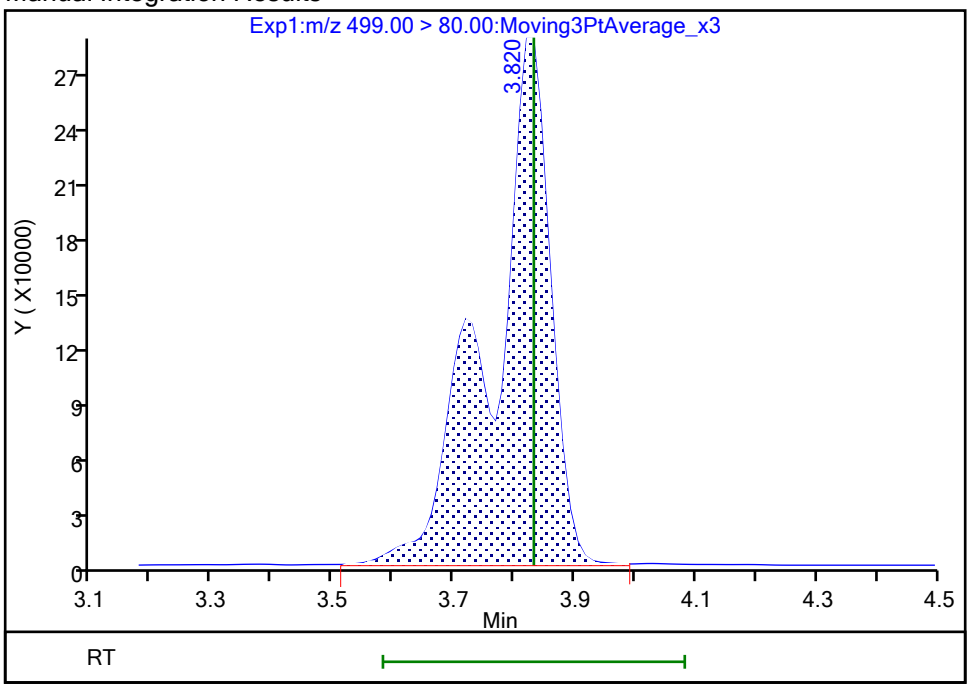
Processing Integration Results

RT: 3.82
Area: 2014455
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2001702
Amount: 2.247952
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

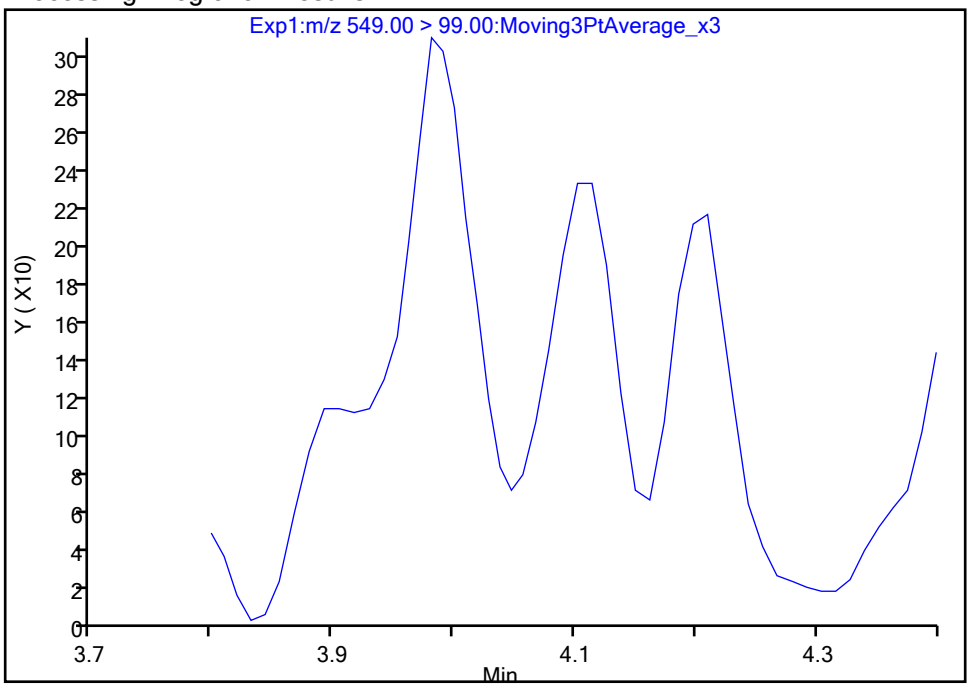
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

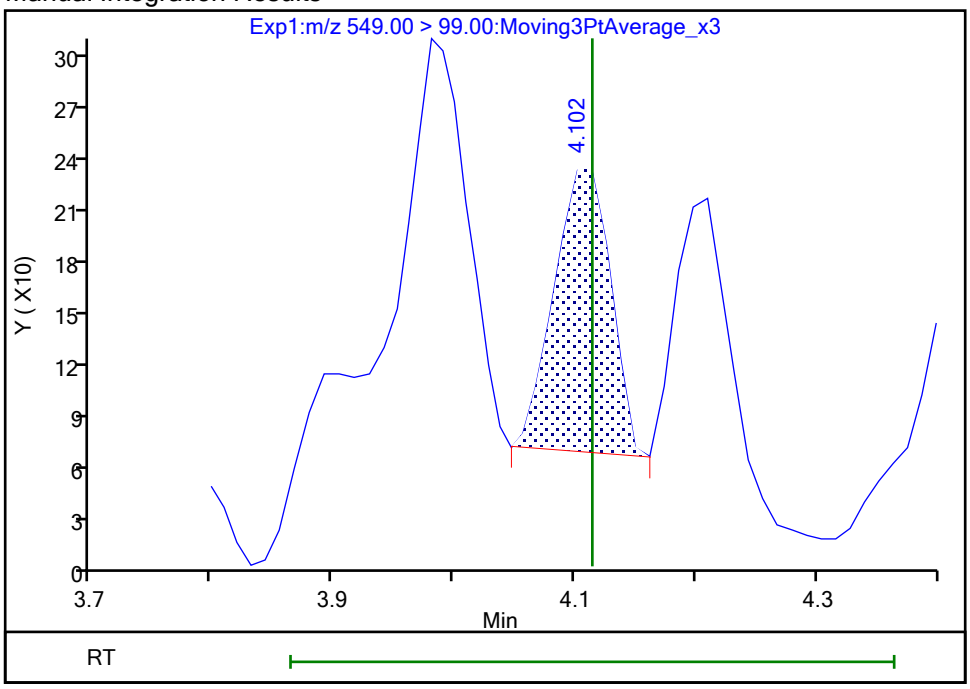
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 524
Amount: 0.000551
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

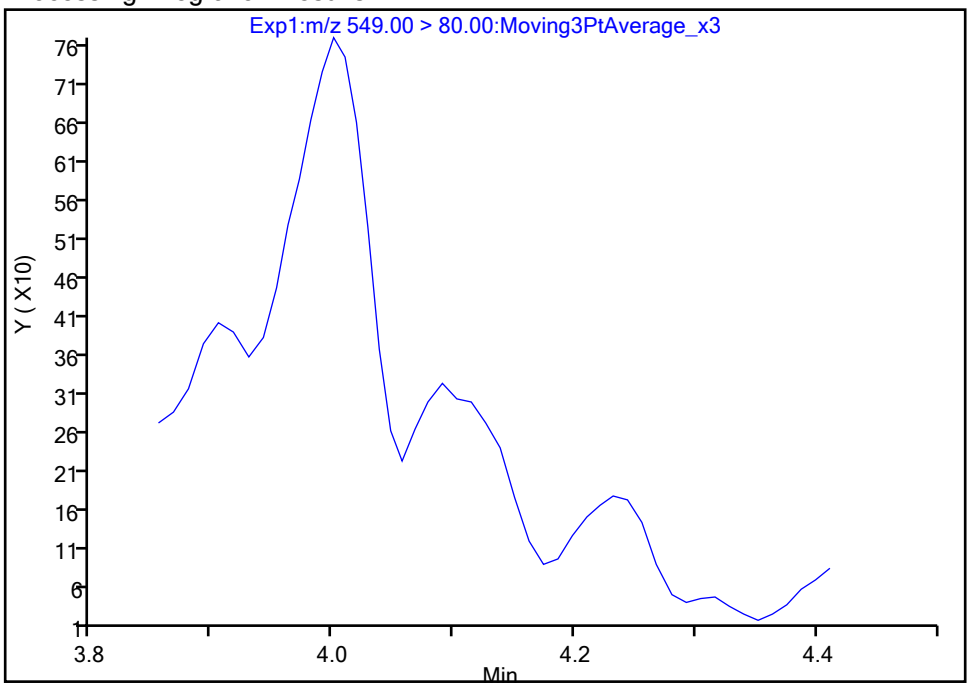
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

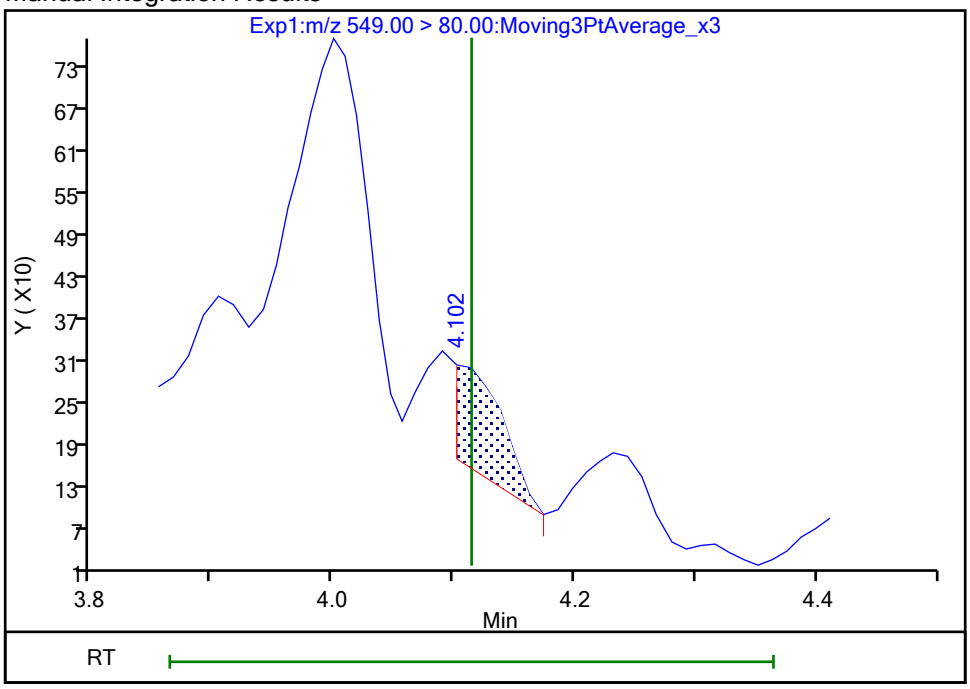
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 373
Amount: 0.000551
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

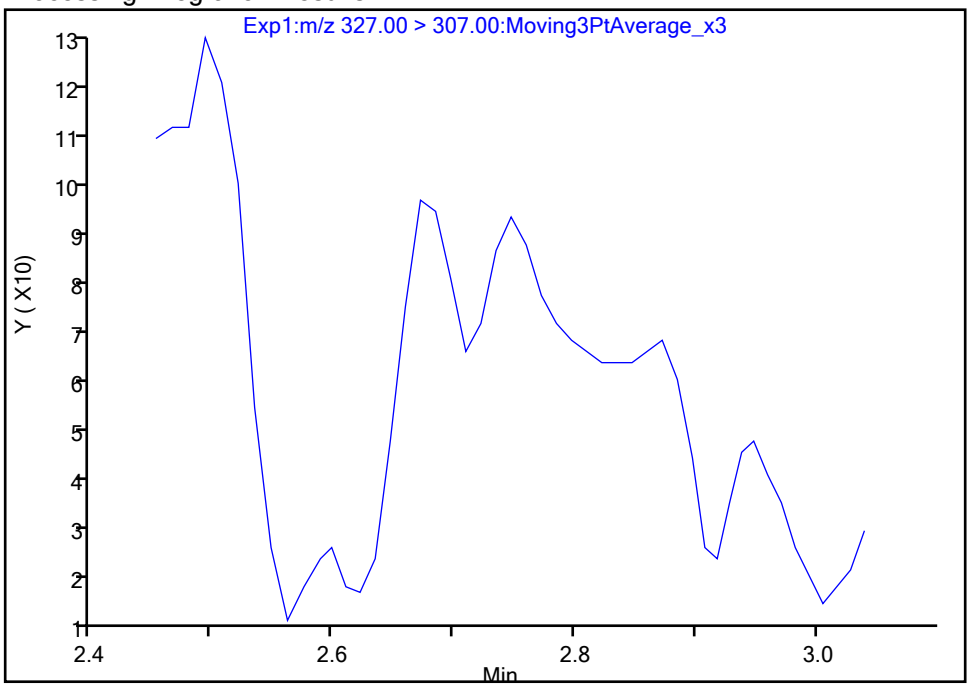
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

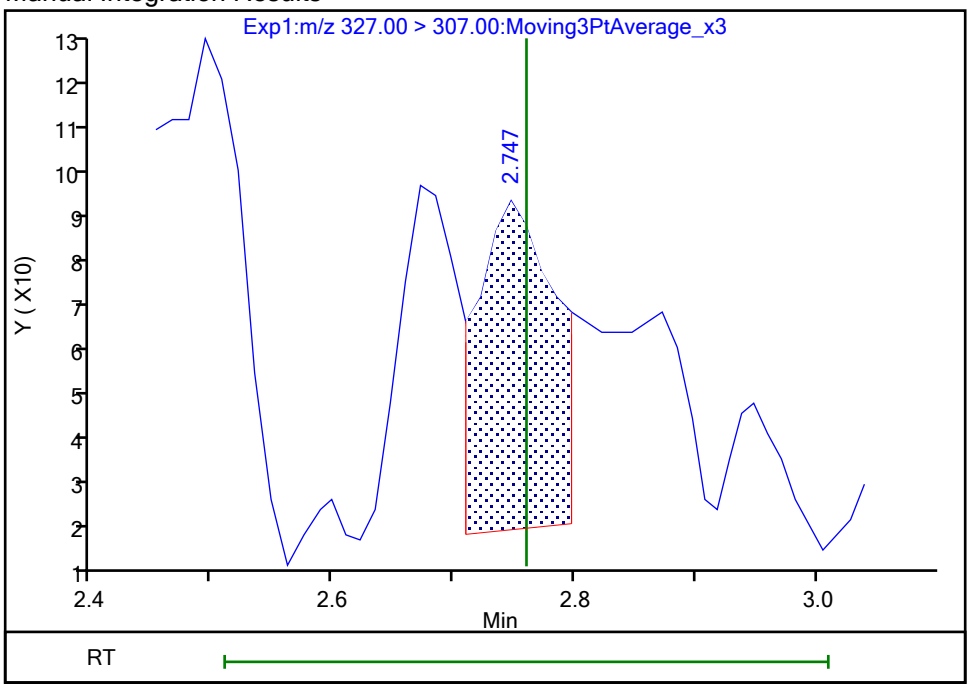
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 277
Amount: 0.000455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

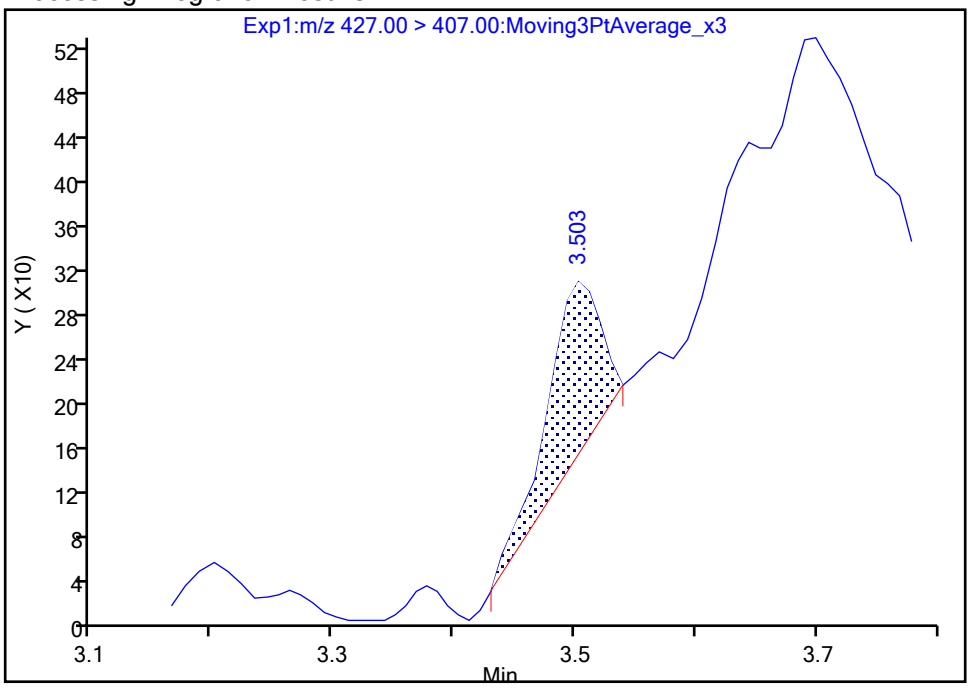
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

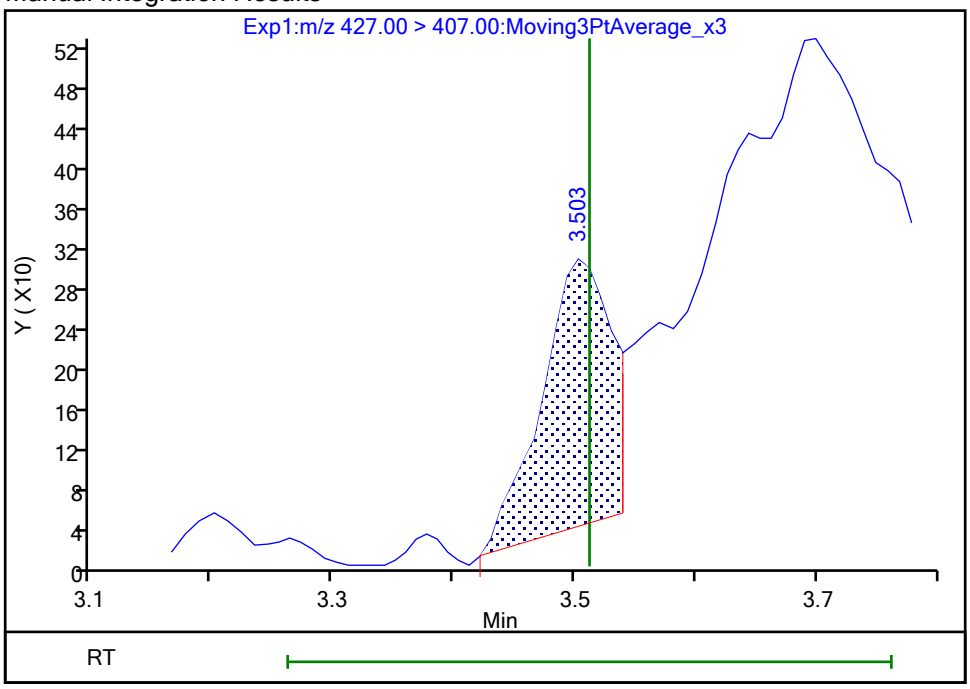
Processing Integration Results

RT: 3.50
Area: 475
Amount: 0.000732
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 1048
Amount: 0.001615
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:49:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

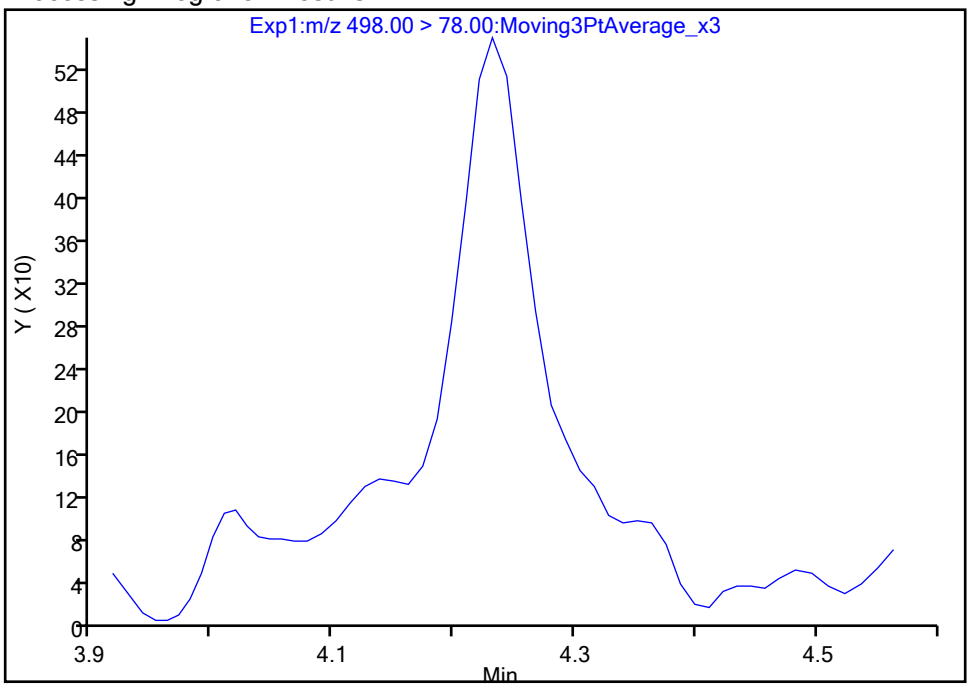
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

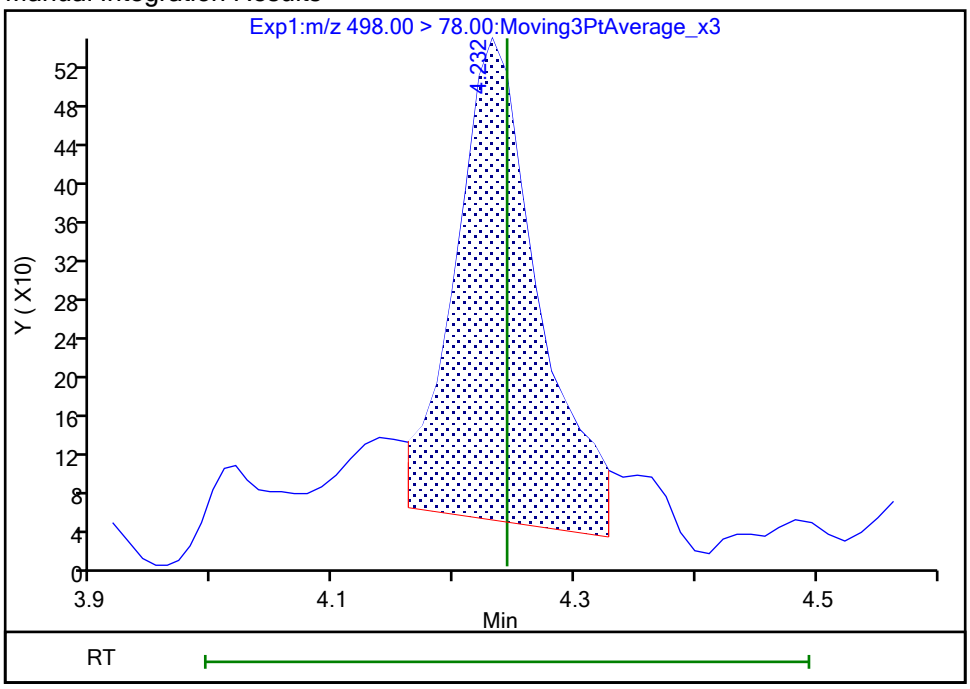
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 2365
Amount: 0.001902
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

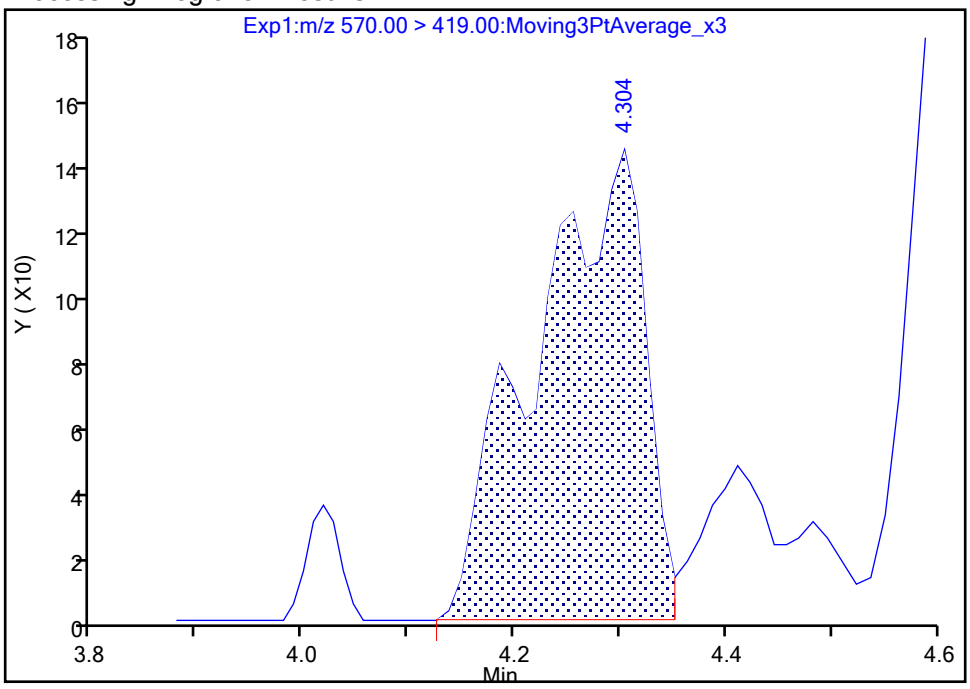
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

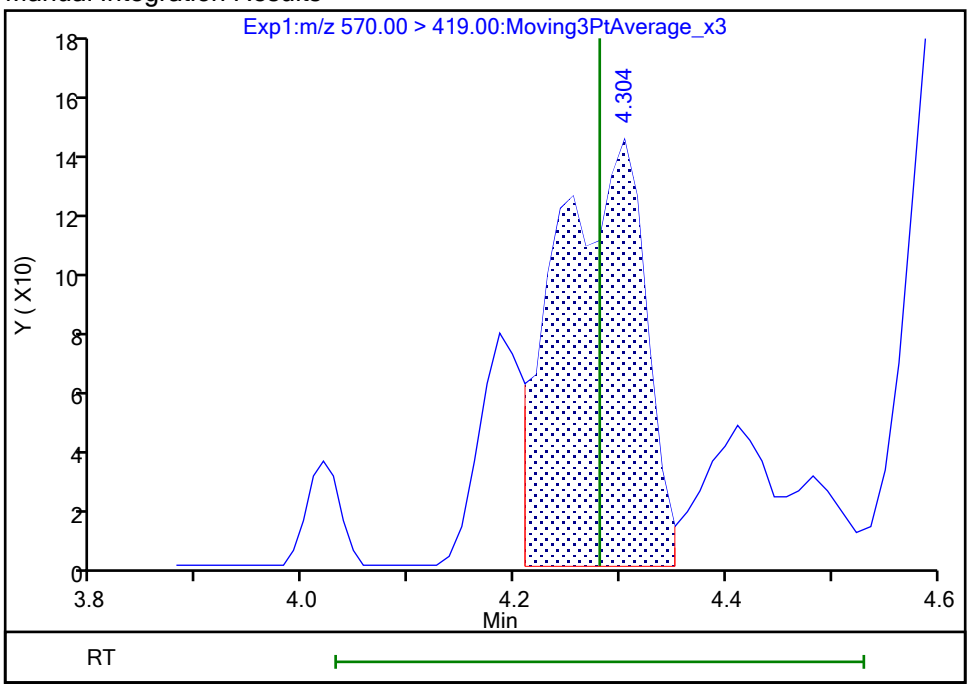
Processing Integration Results

RT: 4.30
Area: 1037
Amount: 0.003065
Amount Units: ng/ml



Manual Integration Results

RT: 4.30
Area: 828
Amount: 0.002447
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

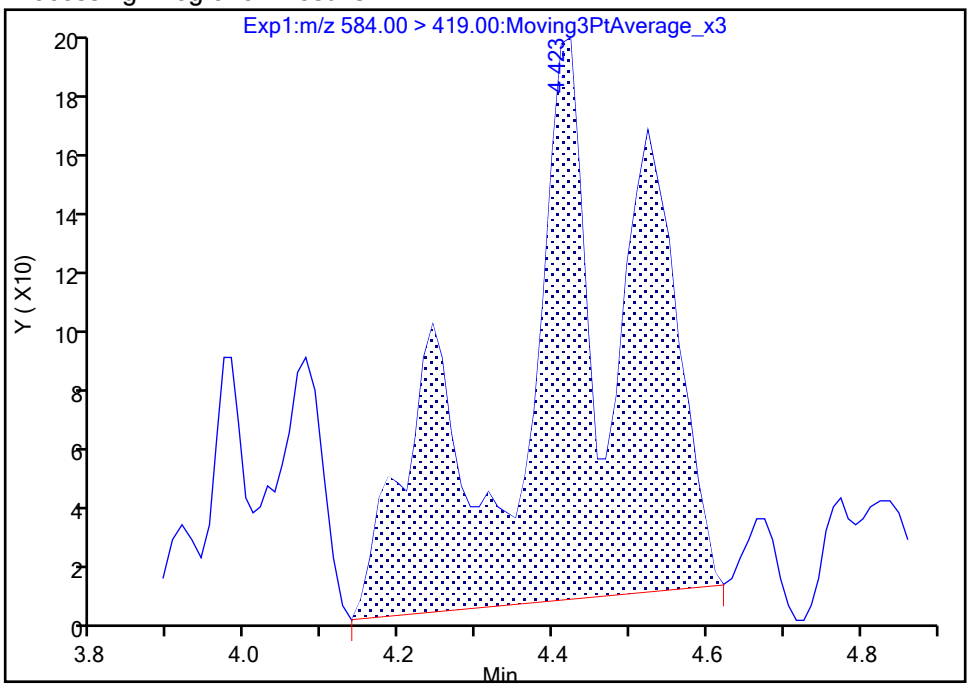
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

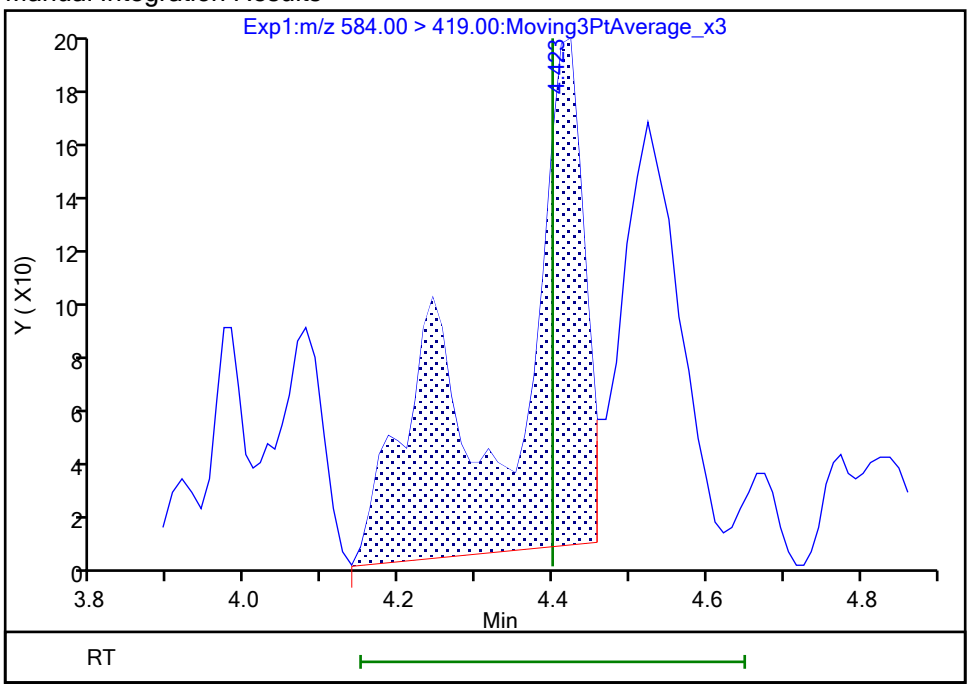
Processing Integration Results

RT: 4.42
Area: 2070
Amount: 0.005629
Amount Units: ng/ml



Manual Integration Results

RT: 4.42
Area: 1280
Amount: 0.003481
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

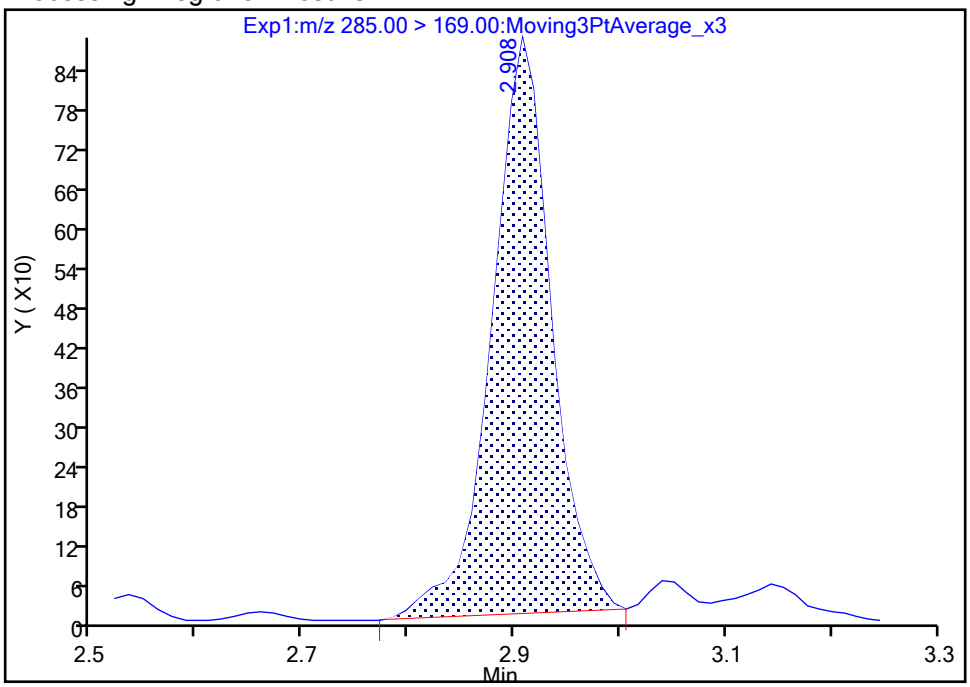
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

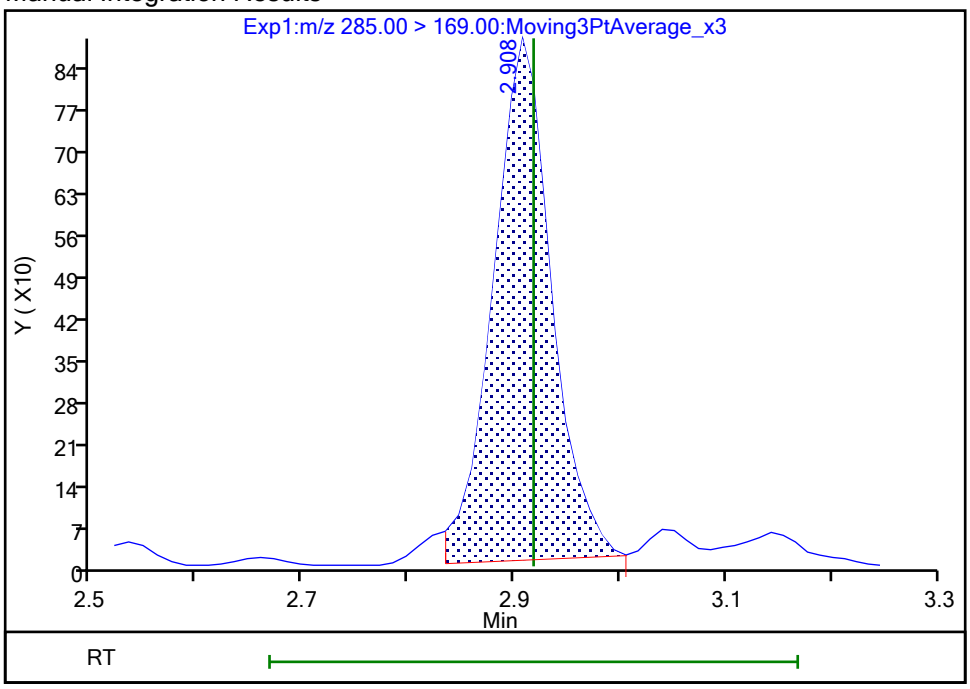
Processing Integration Results

RT: 2.91
Area: 3419
Amount: 0.016678
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 3333
Amount: 0.016259
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:48:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

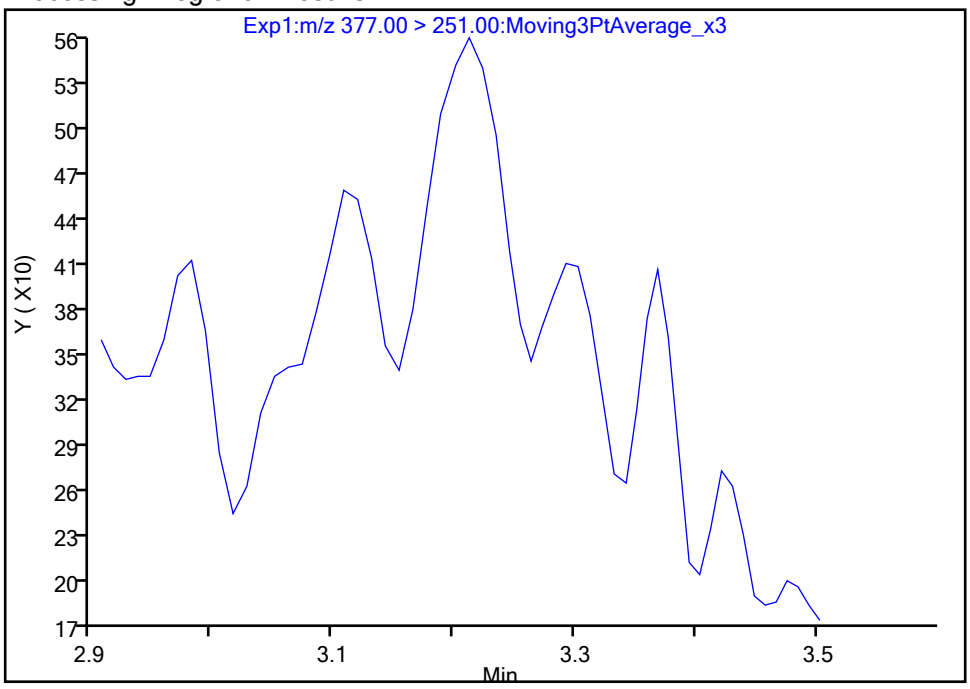
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

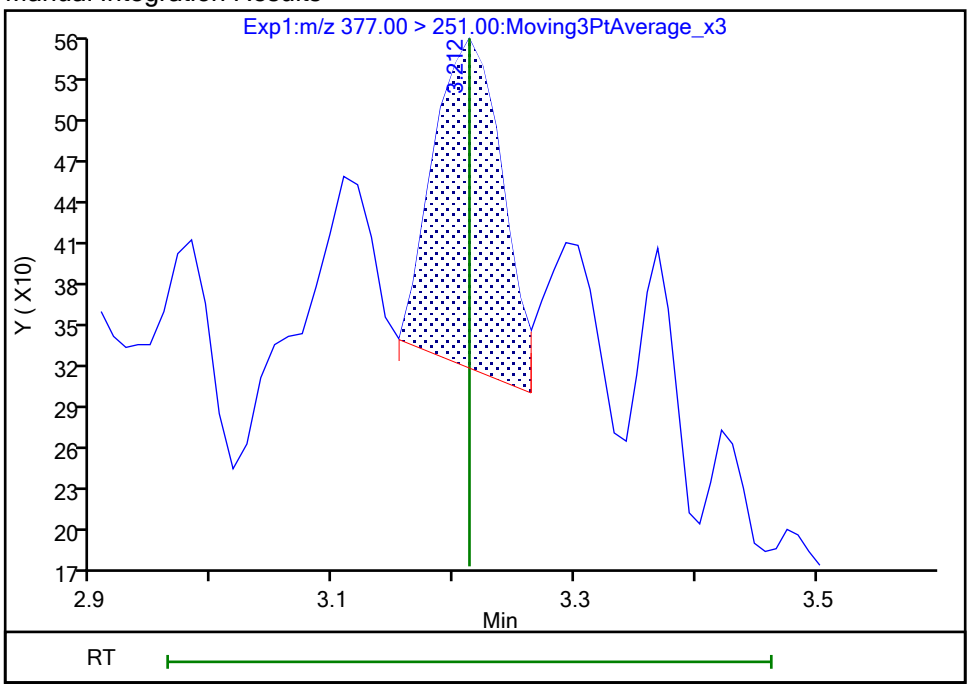
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 940
Amount: 0.000214
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:49:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

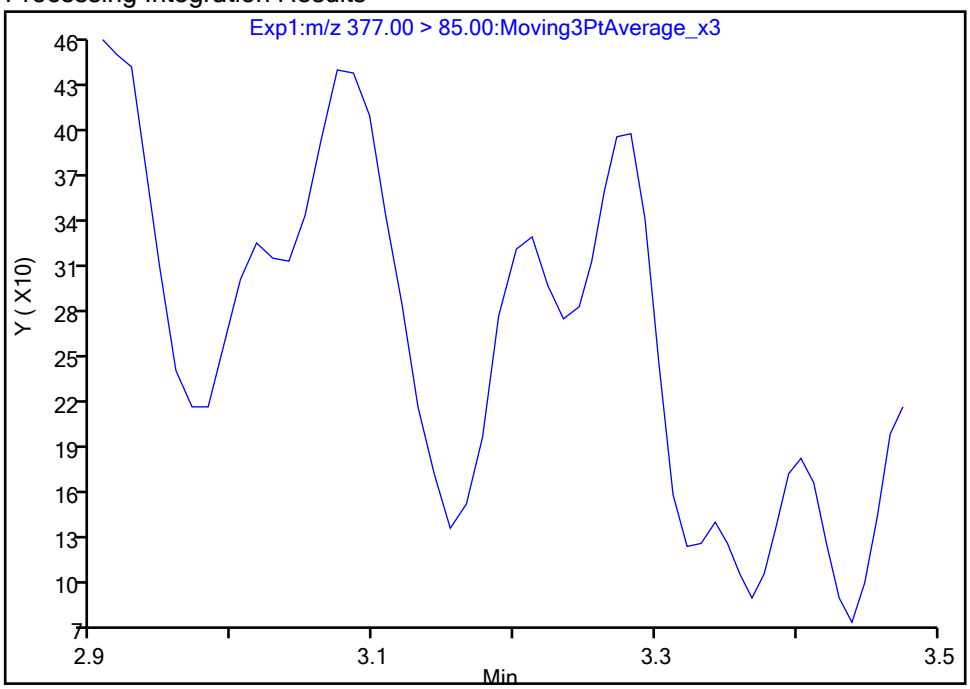
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

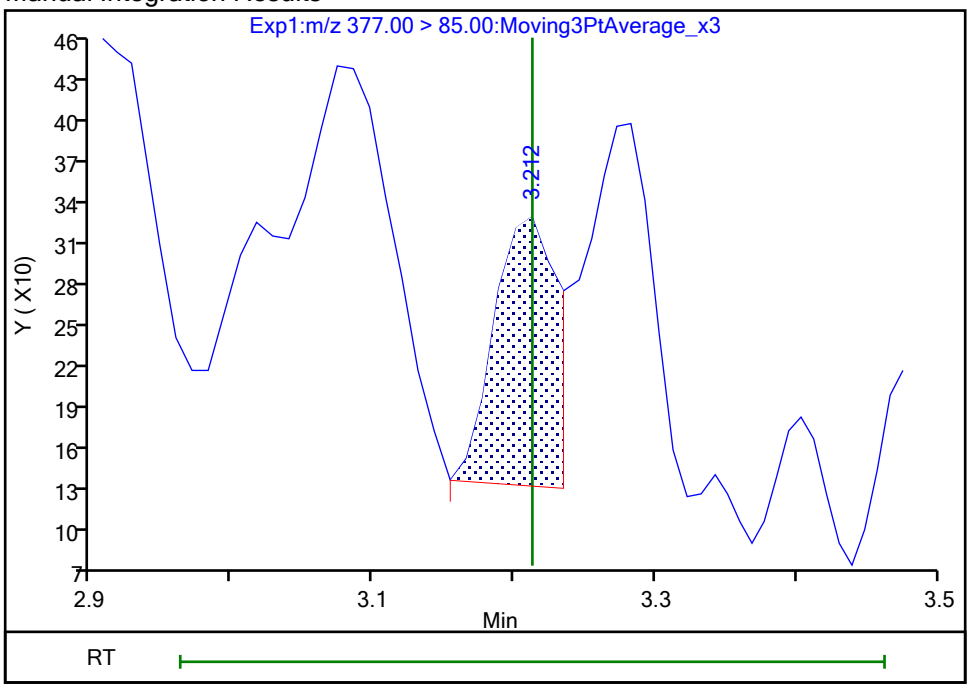
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 577
Amount: 0.000214
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:49:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

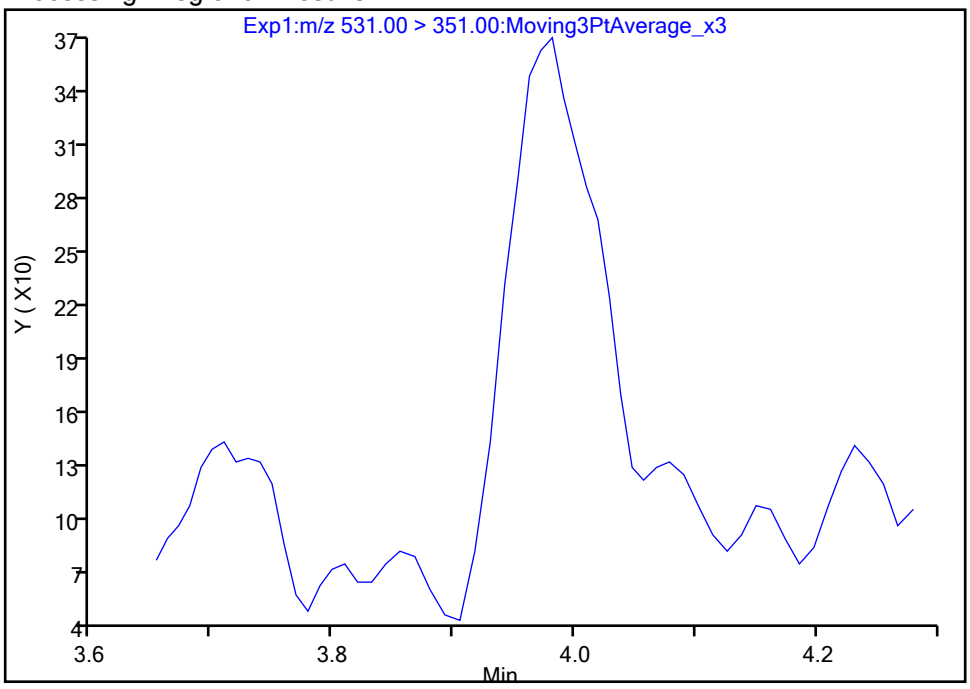
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

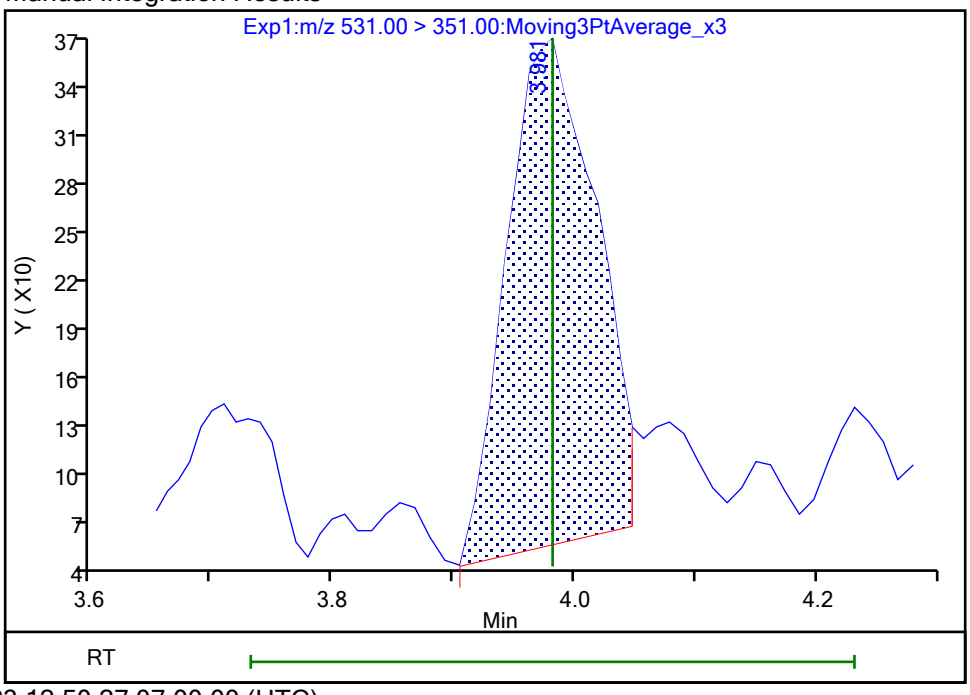
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 1569
Amount: 0.000576
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:50:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

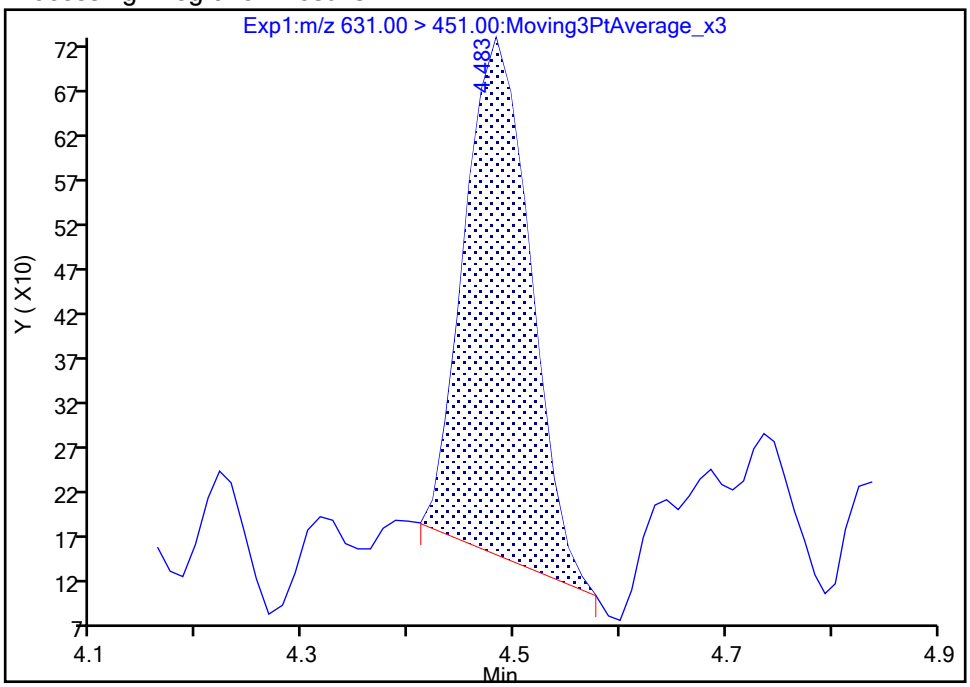
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

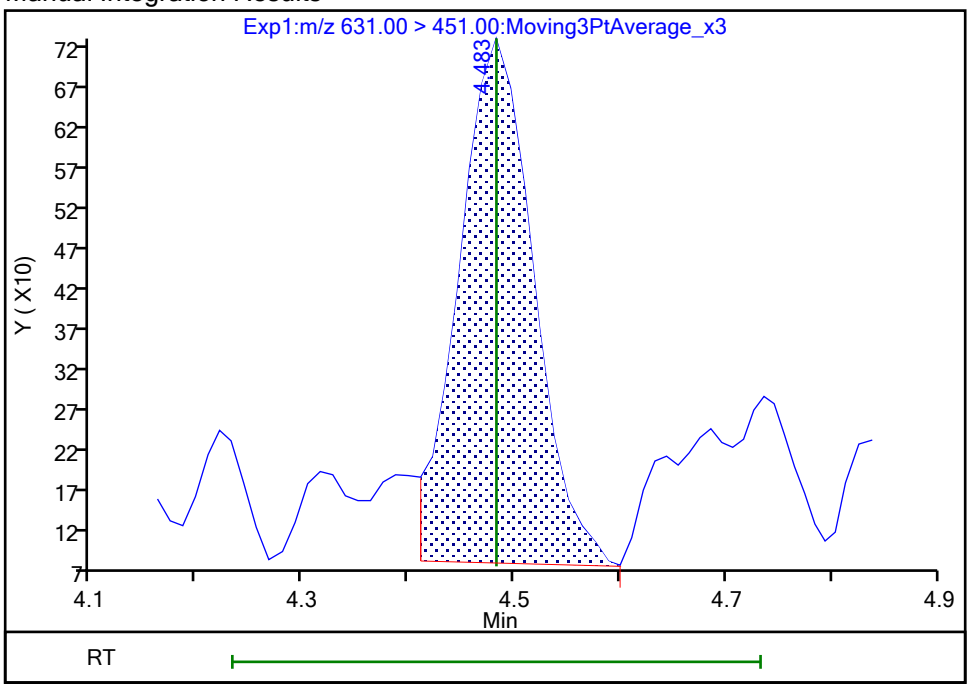
Processing Integration Results

RT: 4.48
Area: 2517
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 3190
Amount: 0.000763
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:51:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

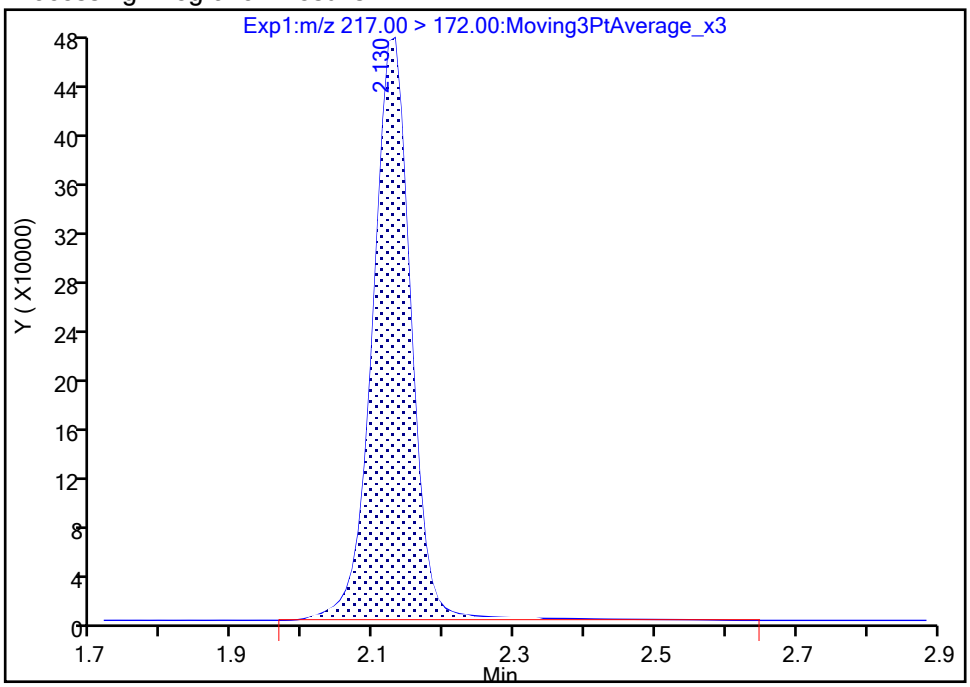
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

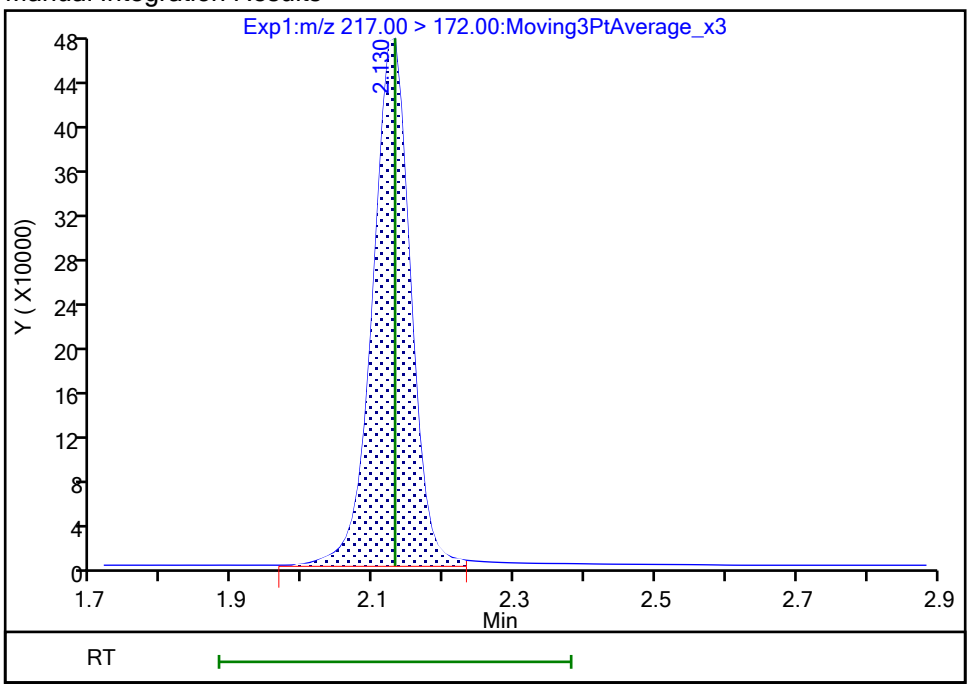
Processing Integration Results

RT: 2.13
Area: 1796367
Amount: 1.102291
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1765546
Amount: 1.085465
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

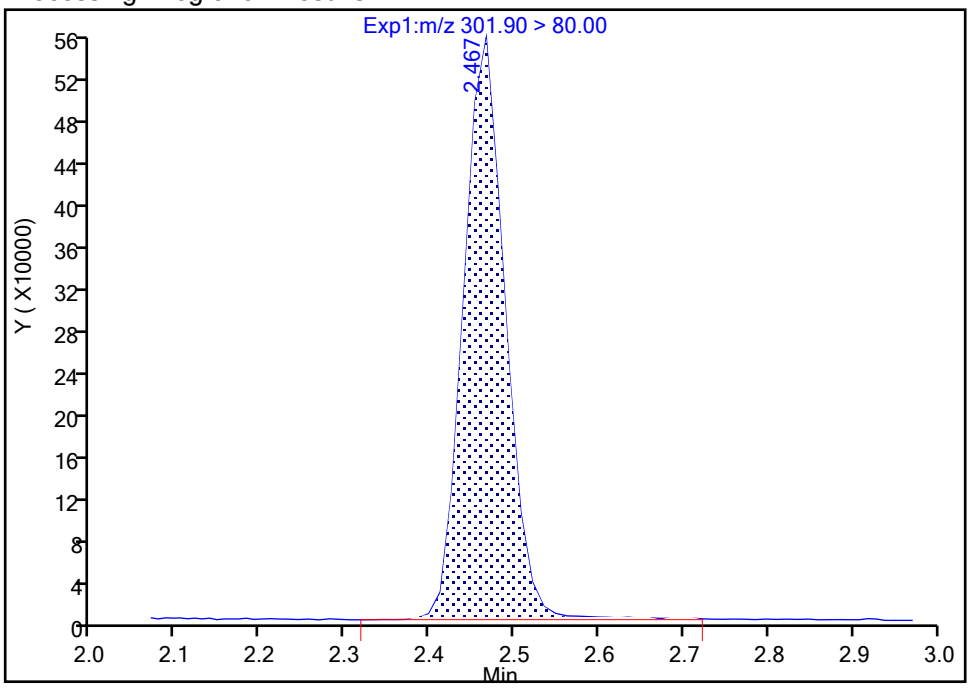
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

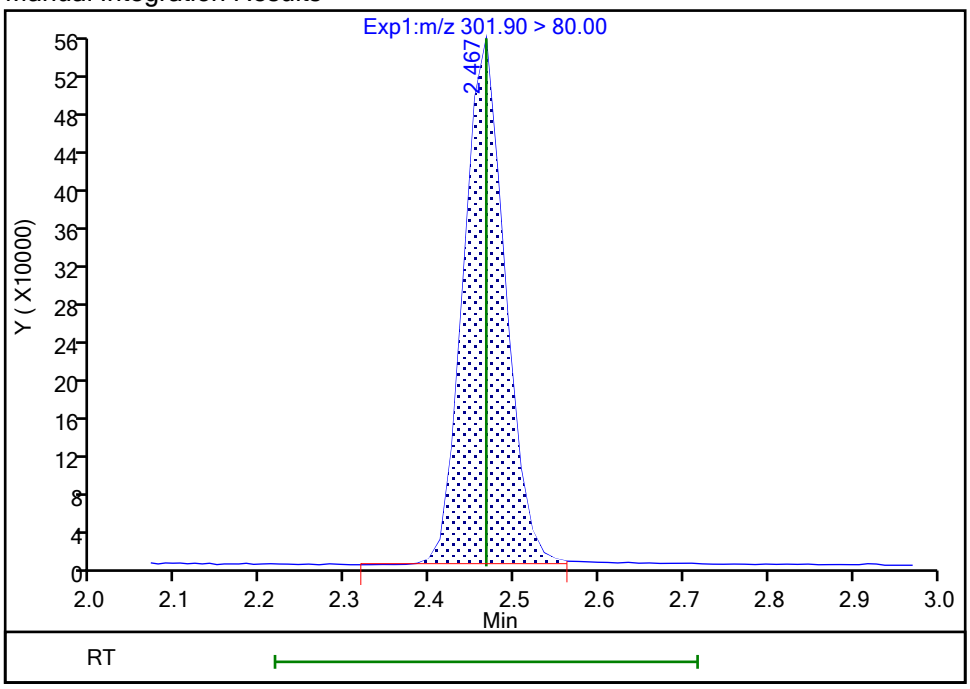
Processing Integration Results

RT: 2.47
Area: 1889566
Amount: 1.104167
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1876103
Amount: 1.098411
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

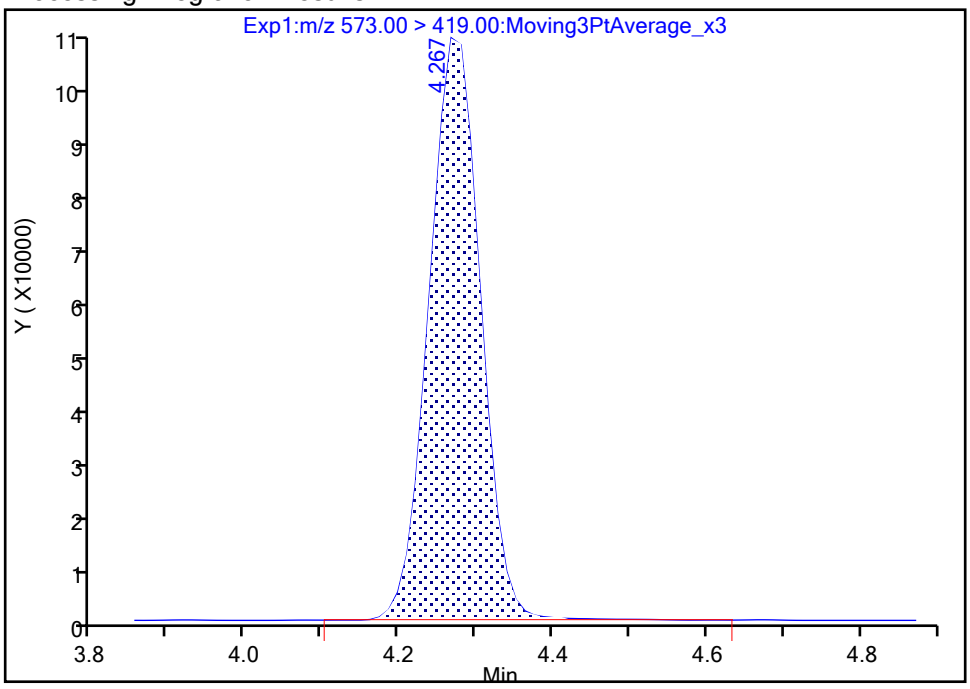
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

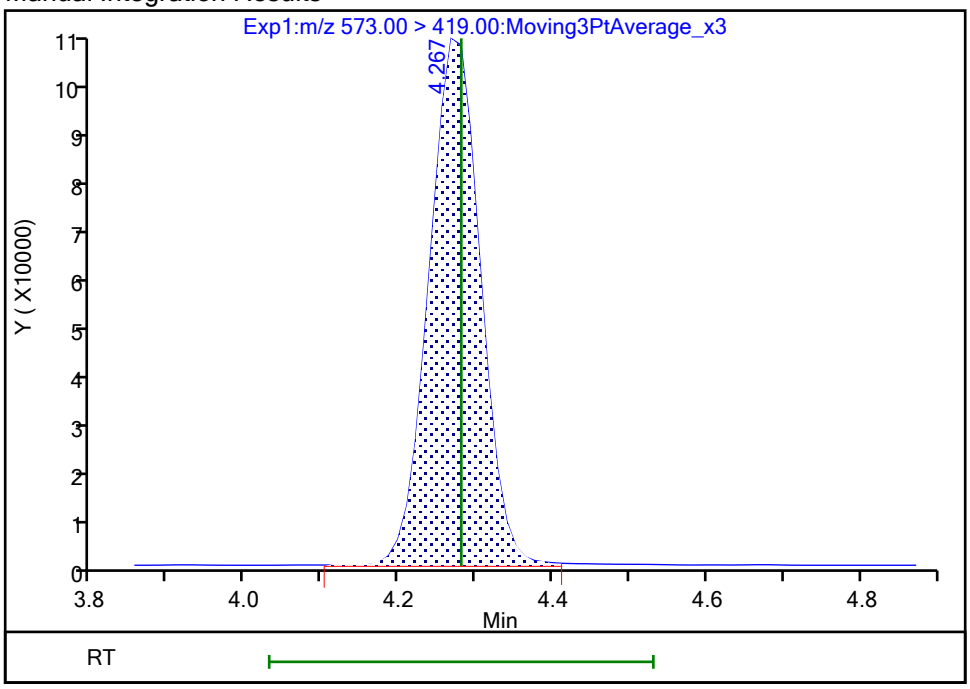
Processing Integration Results

RT: 4.27
Area: 467612
Amount: 1.073703
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 466109
Amount: 1.072313
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

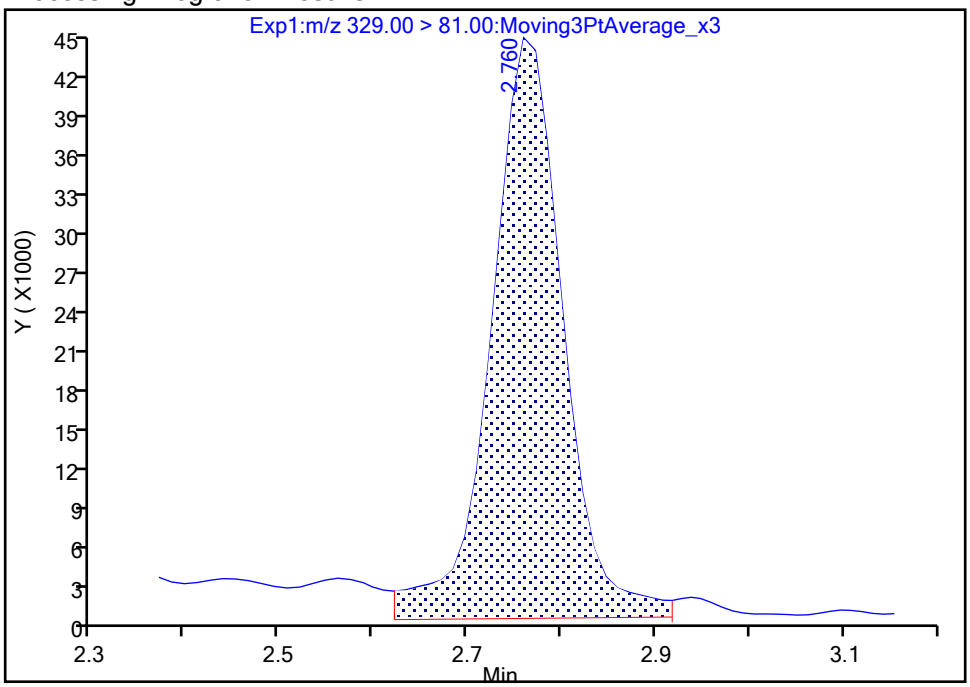
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

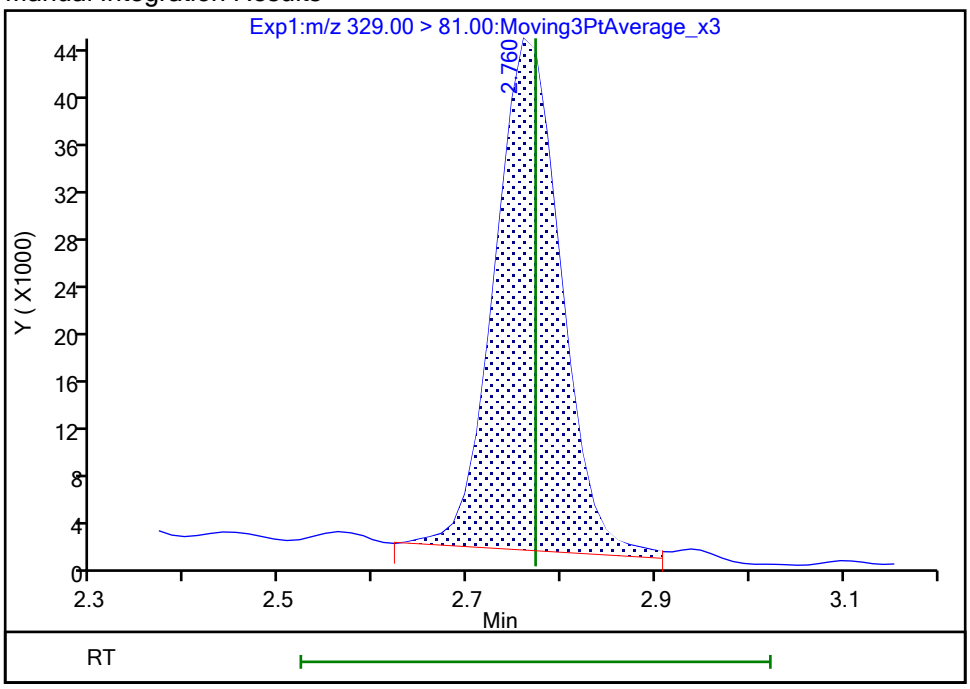
Processing Integration Results

RT: 2.76
Area: 233742
Amount: 1.181072
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 209213
Amount: 1.059165
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

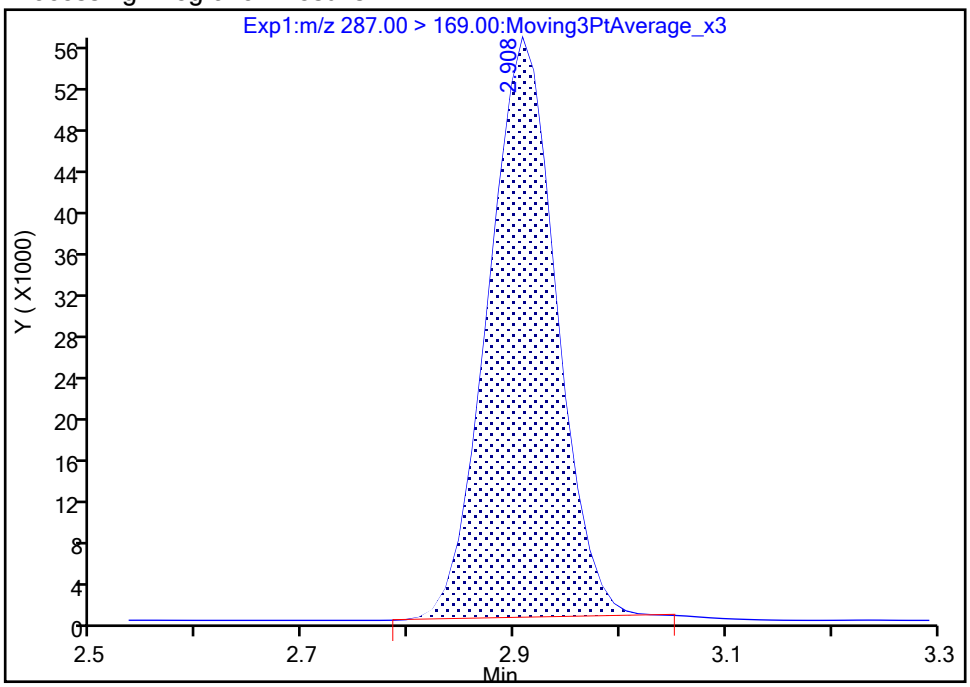
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

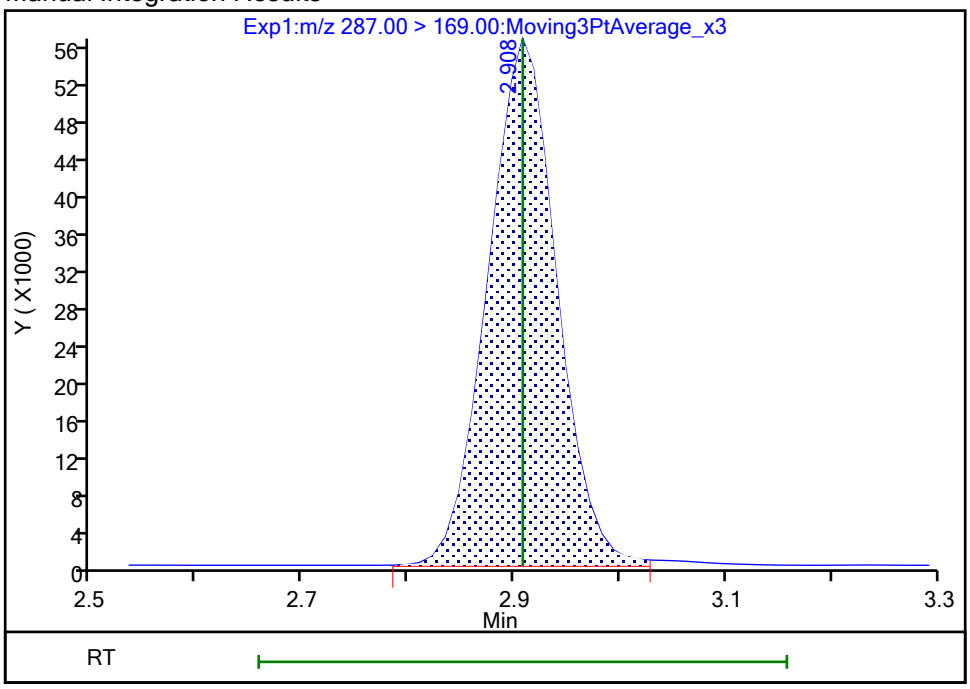
Processing Integration Results

RT: 2.91
Area: 252976
Amount: 1.015757
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 255946
Amount: 1.029662
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

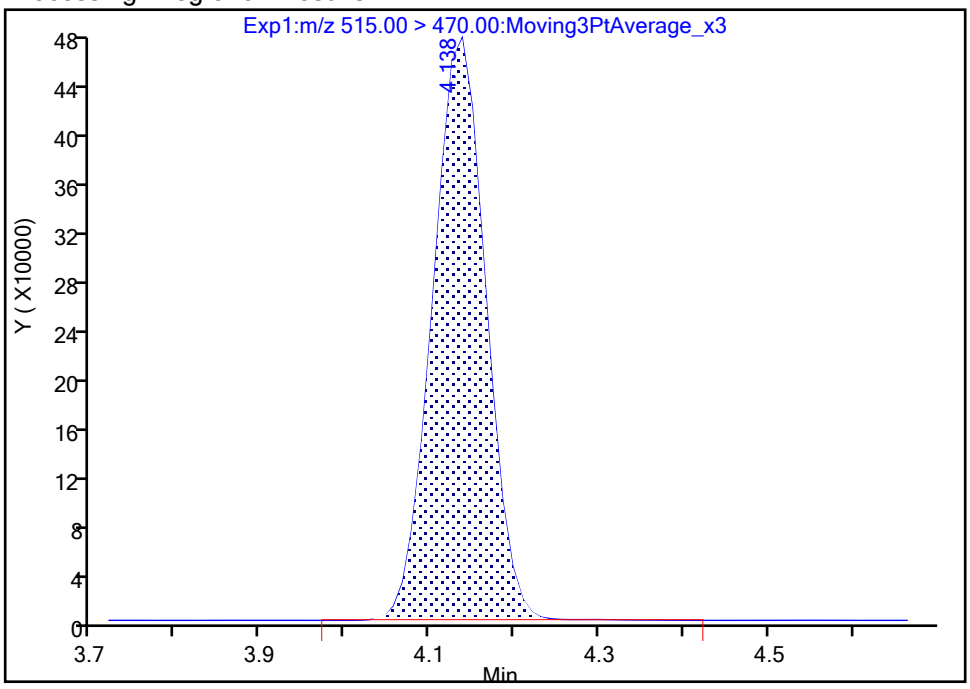
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 23 13C2 PFDA, CAS: STL00996

Signal: 1

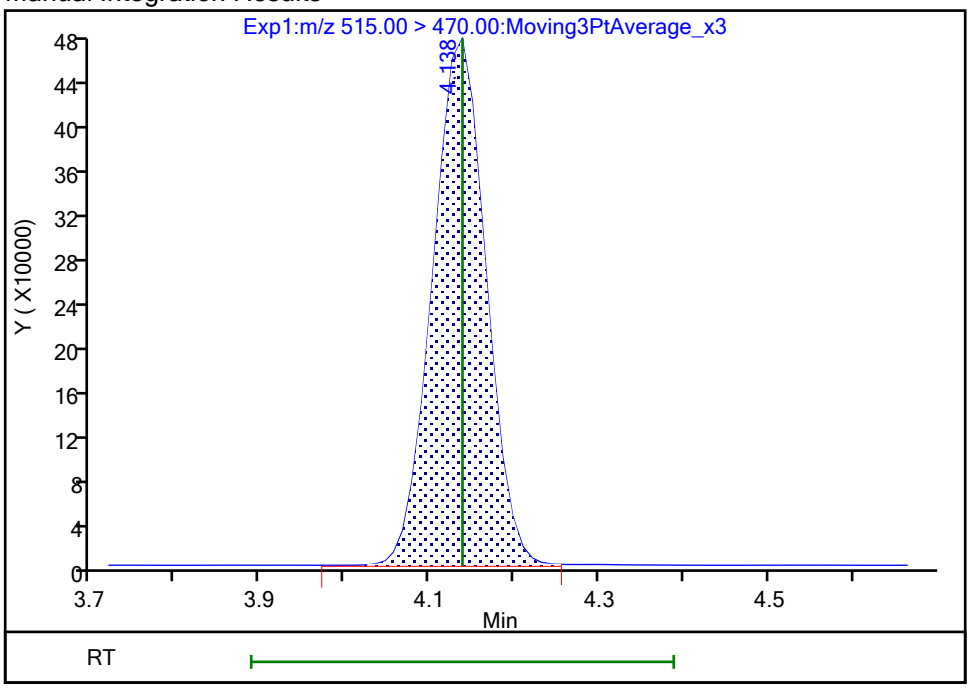
Processing Integration Results

RT: 4.14
Area: 2094230
Amount: 1.149253
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2090572
Amount: 1.149455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:46:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

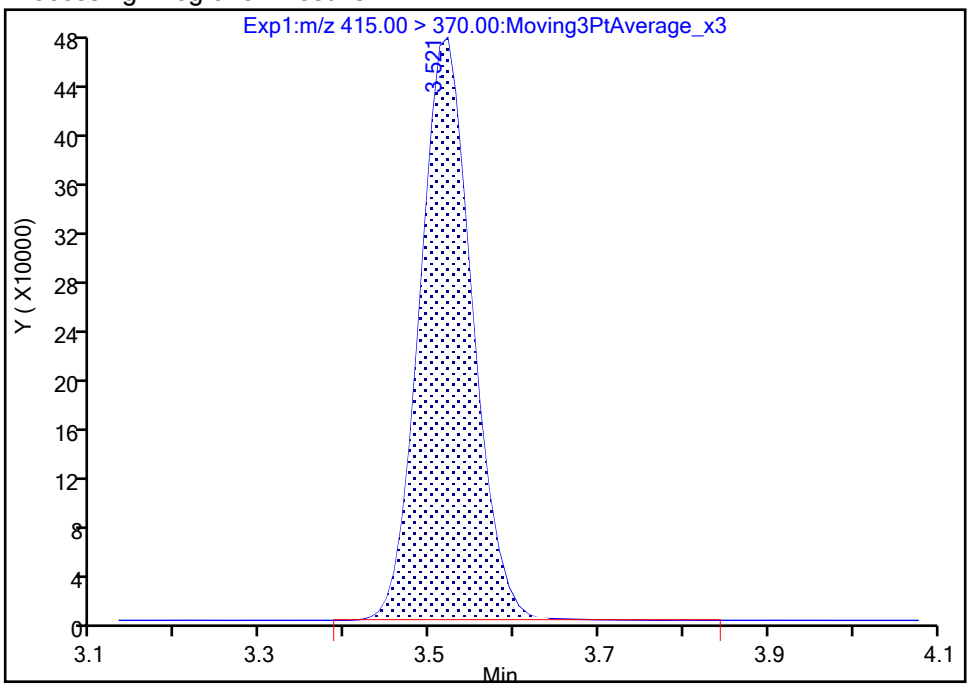
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A08.d				
Injection Date:	24-Oct-2023 18:57:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-7-A	Lab Sample ID:	200-290517-7		
Client ID:	MW15-101623-1325-7				
Operator ID:	LC812user	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

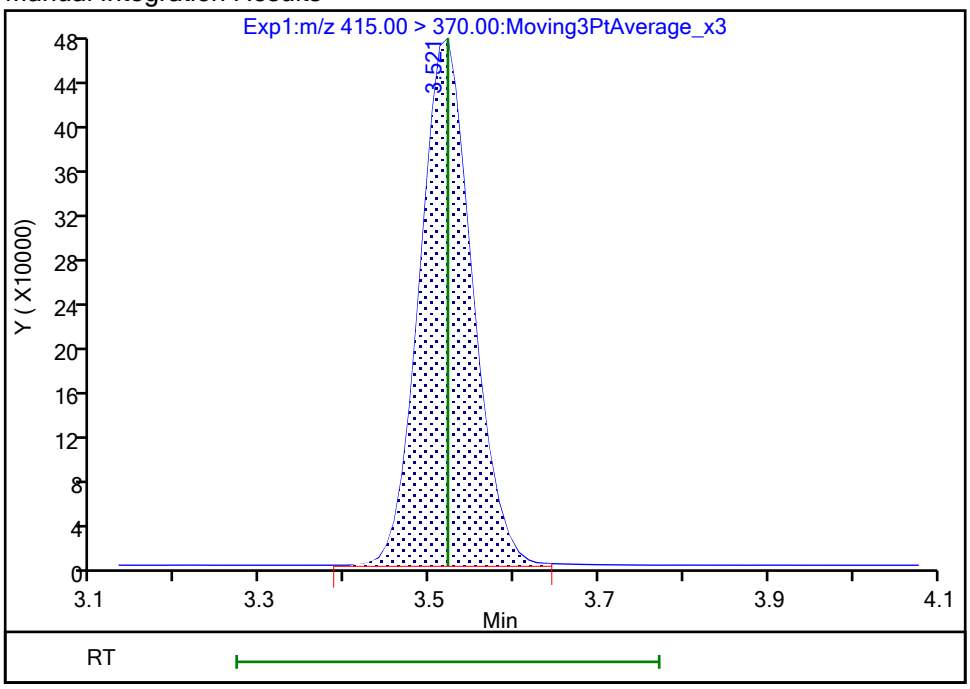
Processing Integration Results

RT: 3.52
Area: 2054201
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 2050252
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:47:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 Lab Sample ID: 460-290517-8

Matrix: Water Lab File ID: PA231024A09.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:21

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 304.4(mL) Date Analyzed: 10/24/2023 19:05

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	29.8		4.11	0.99
2706-90-3	Perfluoropentanoic acid	31.5		1.64	0.56
307-24-4	Perfluorohexanoic acid	26.4		1.64	0.53
375-85-9	Perfluoroheptanoic acid	15.7		1.64	0.44
335-67-1	Perfluorooctanoic acid	42.2		1.64	0.62
375-95-1	Perfluorononanoic acid	6.97		1.64	0.40
335-76-2	Perfluorodecanoic acid	0.93	J	1.64	0.38
2058-94-8	Perfluoroundecanoic acid	1.64	U	1.64	0.45
307-55-1	Perfluorododecanoic acid	1.64	U	1.64	0.40
72629-94-8	Perfluorotridecanoic acid	1.64	U	1.64	0.39
376-06-7	Perfluorotetradecanoic acid	1.64	U	1.64	0.53
375-73-5	Perfluorobutanesulfonic acid	8.33		1.64	0.51
2706-91-4	Perfluoropentanesulfonic acid	5.03		1.64	0.41
355-46-4	Perfluorohexanesulfonic acid	26.6		1.64	0.45
375-92-8	Perfluoroheptanesulfonic acid	1.31	J	1.64	0.34
1763-23-1	Perfluorooctanesulfonic acid	60.3		1.64	0.70
68259-12-1	Perfluorononanesulfonic acid	1.64	U	1.64	0.33
335-77-3	Perfluorodecanesulfonic acid	1.64	U	1.64	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.64	U	1.64	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.11	U	4.11	1.07
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.64	U	1.64	0.63
754-91-6	Perfluorooctanesulfonamide	1.64	U	1.64	0.76
2355-31-9	NMeFOSAA	4.11	U	4.11	1.56
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.11	U	4.11	1.31
13252-13-6	HFPODA	1.26	J	3.29	0.90
919005-14-4	DONA	1.64	U	1.64	0.34
756426-58-1	9Cl-PF3ONS	1.64	U	1.64	0.26
763051-92-9	11Cl-PF3OUdS	1.64	U	1.64	0.71

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 Lab Sample ID: 460-290517-8

Matrix: Water Lab File ID: PA231024A09.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:21

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 304.4(mL) Date Analyzed: 10/24/2023 19:05

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	73		50-150
STL01893	13C5 PFPeA	83		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	91		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	77		50-150
STL02118	d3-NMeFOSAA	96		50-150
STL02117	d5-NEtFOSAA	94		50-150
STL02395	M2-4:2 FTS	88		50-150
STL02279	M2-6:2 FTS	98		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	82		50-150
STL00994	18O2 PFHxS	100		50-150
STL00993	13C2 PFHxA	83		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	95		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	96		50-150
STL00997	13C2 PFUnA	101		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d
Lims ID: 460-290517-B-8-A
Client ID: MW34R-101623-1421-12
Sample Type: Client
Inject. Date: 24-Oct-2023 19:05:27 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-8-A
Misc. Info.: 200-0057538-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 12:58:34
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1434642	0.9093		72.7	1178	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	984000	0.9072			41.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1265503	1.03		82.7	333	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1046108	0.9575			3.9	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.466	0.0	0.701	1732843	1.05		90.0	19738	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.466	0.0	1.000	422256	0.2536	Target=2.06		6.9	M
298.90 > 99.00	2.466	2.466	0.0	1.000	206764		2.04(1.03-3.09)		14.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	0.995	1181	0.002070			2.6	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.788	196143	1.02		87.7	8.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1287744	1.03		82.7	1761	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.810	0.0	1.004	912476	0.8049	Target=14.12		8.6	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	53039		17.20(7.06-21.17)		16.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	236466	0.1532	Target=2.72		10.7	M
349.00 > 99.00	2.810	2.810	0.0	0.888	89584		2.64(1.36-4.09)		15.2	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.908	0.010	0.829	246154	1.02		81.7	1562	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.918	-0.011	0.996	7558	0.0383			89.8	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.899	1397550	1.18		99.5	4543	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	1060852	0.8109	Target=3.32		77.9	M
399.00 > 99.00	3.165	3.166	-0.001	1.000	297183		3.57(1.66-4.98)		98.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.177	-0.001	1.000	679635	0.4773	Target=4.17		14.2	M
363.00 > 169.00	3.176	3.177	-0.001	1.000	174246		3.90(2.09-6.26)		92.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.177	-0.001	0.902	1587918	1.16		93.0	4842	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.512	-0.001	0.917	43900	0.0398	Target=4.83		5.3	M
449.00 > 99.00	3.502	3.512	-0.010	0.914	11782		3.73(2.41-7.24)		7.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.512	-0.001	0.997	287643	1.17		98.2	47.1	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.512	-0.001	1.000	1837	0.002775			4.1	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.529	3.521	0.008	1.003	2036365	1.28	Target=2.88		45.2	M
413.00 > 169.00	3.520	3.521	-0.001	1.000	773820		2.63(1.44-4.32)		833	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.521	-0.001	1.000	1860719	1.20		96.1	5397	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.521	-0.001		1988854	1.25			4780	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.832	-0.002	1.000	1633482	1.84	Target=4.24		256	M
499.00 > 99.00	3.830	3.832	-0.002	1.000	440962		3.70(2.12-6.37)		360	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.832	-0.002	1.088	911618	1.21		101	299	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.844	0.010	1.000	330767	0.2122	Target=8.34		15.3	M
463.00 > 169.00	3.854	3.844	0.010	1.000	40867		8.09(4.17-12.51)		68.4	M
D 19 13C5 PFNA										M
468.00 > 423.00	3.854	3.844	0.010	1.095	1987927	1.18		94.4	3306	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.112	4.114	-0.002	1.074	1277	0.001886	Target=2.17		1.3	
549.00 > 99.00	4.112	4.114	-0.002	1.074	428		2.98(1.08-3.25)		1.2	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.138	-0.002	1.000	50287	0.0284	Target=11.44		5.0	M
513.00 > 169.00	4.136	4.138	-0.002	1.000	5137		9.79(5.72-17.16)		16.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.138	-0.002	1.175	2212936	1.25		100	6673	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.138	-0.002	0.997	768	0.001337			6.5	M
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.150	-0.002	1.178	312458	1.13		94.0	186	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.244	-0.002	1.205	1455463	0.9668		77.3	3538	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.244	0.010	1.003	2135	0.001922			9.3	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.281	-0.002	1.215	504370	1.20		95.7	1371	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.254	4.281	-0.027	0.994	569	0.001554			2.1	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.388	-0.001	1.246	2111357	1.27		101	8163	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.399	4.388	0.011	1.003	14964	0.008596	Target=12.20		2.2	RM
563.00 > 169.00	4.387	4.388	-0.001	1.000	589		25.41(6.10-18.31)		2.9	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.400	-0.001	1.250	478231	1.18		94.2	1102	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.315	4.400	-0.085	0.981	1135	0.002966			2.2	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.611	-0.001	1.310	2016835	1.19		95.3	5160	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.621	4.611	0.010	1.002	1831	0.001115	Target=8.47		0.2	RM
613.00 > 169.00	4.621	4.611	0.010	1.002	101		18.13(4.23-12.70)		1.3	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.991	-0.001	1.417	1925069	1.14		91.4	6075	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.991	-0.012	0.998	168	0.000976	Target=0.87		3.4	M
713.00 > 219.00	4.979	4.991	-0.012	0.998	188		0.89(0.43-1.30)		3.1	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.297	-0.001	1.504	2087690	1.07		86.0	5531	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.307	5.308	-0.001	1.002	3729	0.002233	Target=7.89		0.2	
813.00 > 169.00	5.296	5.308	-0.012	1.000	337		11.07(3.94-11.83)		4.6	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

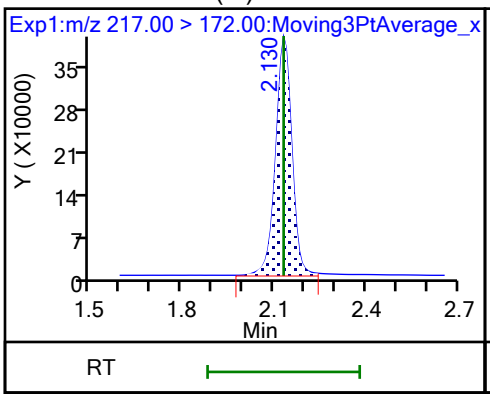
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:07 Chrom Revision: 2.3 18-Oct-2023 21:16:54

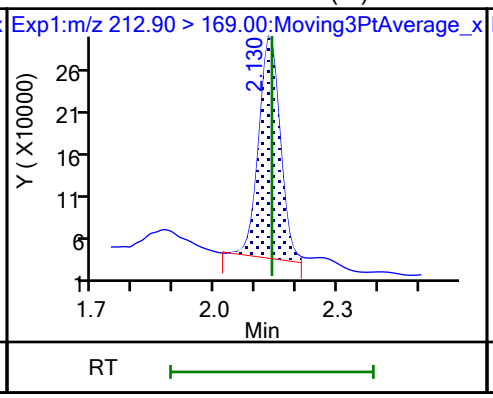
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d
Injection Date: 24-Oct-2023 19:05:27 Instrument ID: LC812
Lims ID: 460-290517-B-8-A Lab Sample ID: 200-290517-8
Client ID: MW34R-101623-1421-12
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

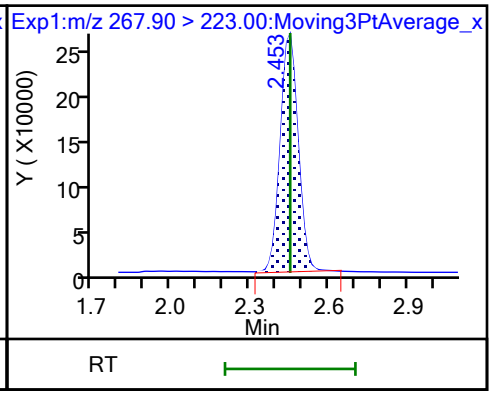
D 1 13C4 PFBA (M)



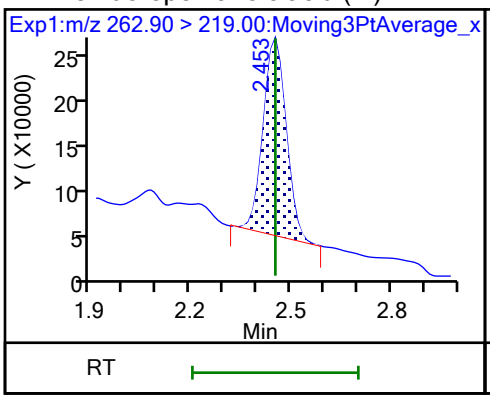
2 Perfluorobutanoic acid (M)



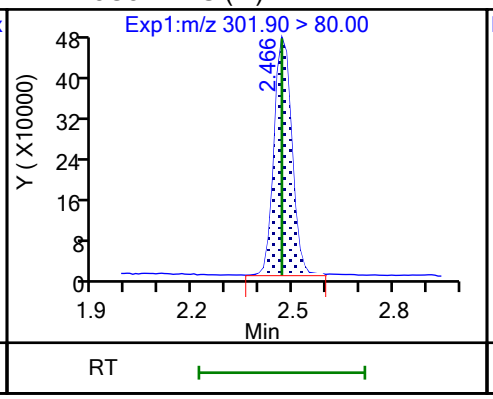
D 3 13C5 PFPeA



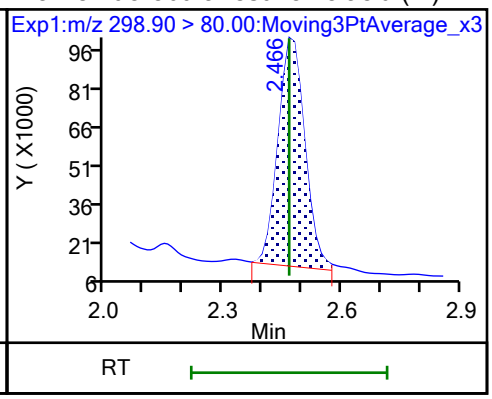
4 Perfluoropentanoic acid (M)



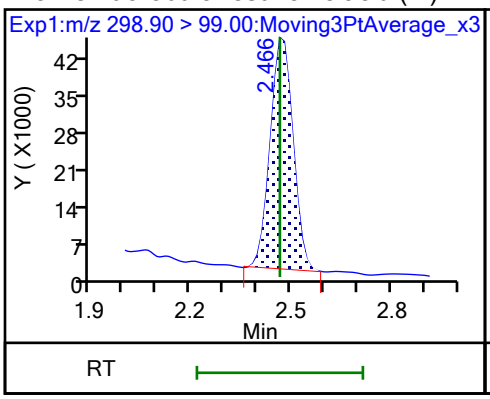
D 47 13C3 PFBS (M)



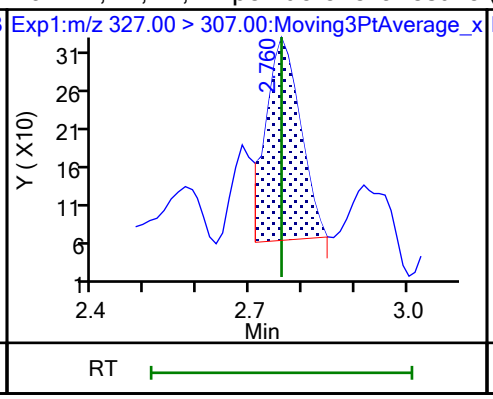
5 Perfluorobutanesulfonic acid (M)



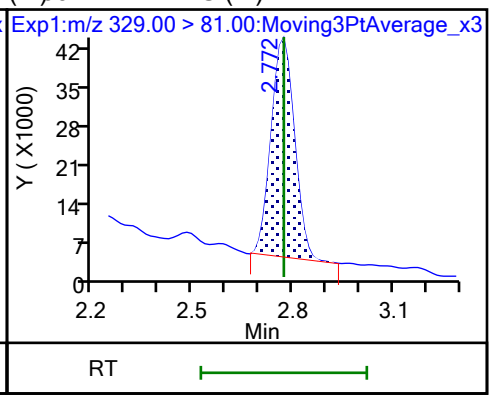
5 Perfluorobutanesulfonic acid (M)



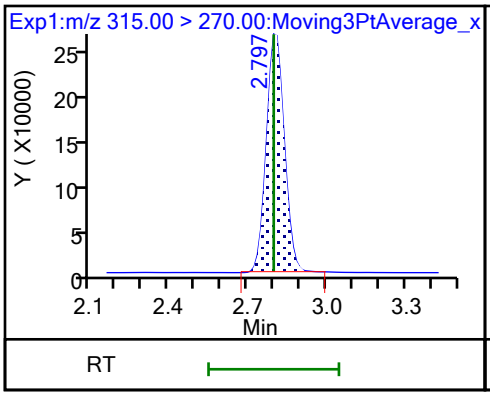
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



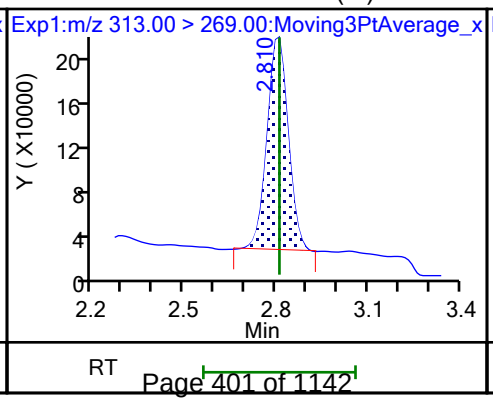
60 M2-4:2 FTS (M)



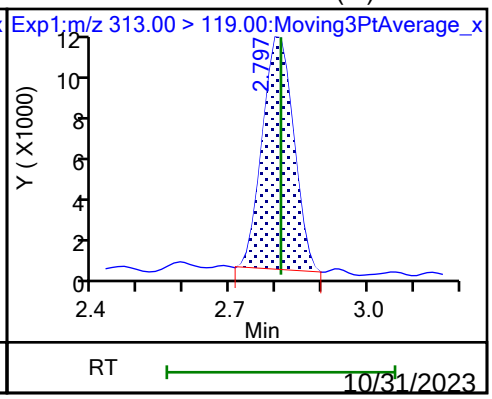
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

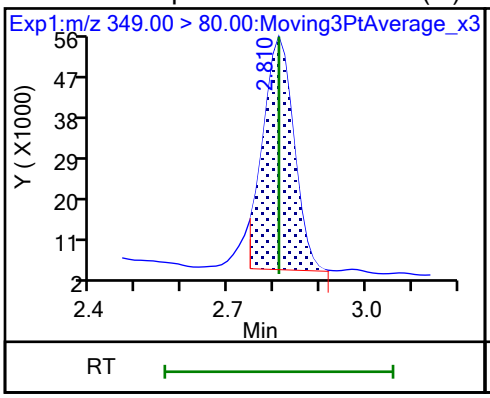


6 Perfluorohexanoic acid (M)

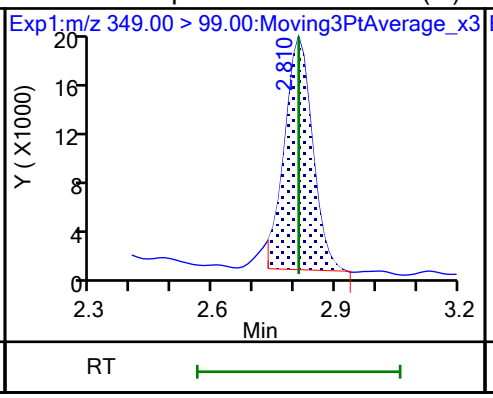


10/31/2023
10:17 AM

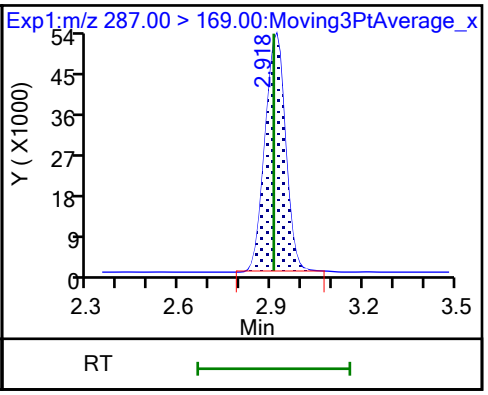
70 Perfluoropentanesulfonic acid (M)



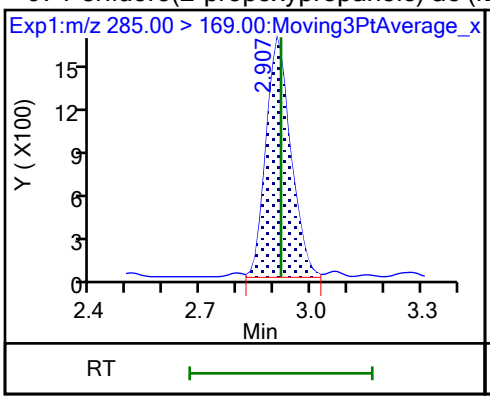
70 Perfluoropentanesulfonic acid (M)



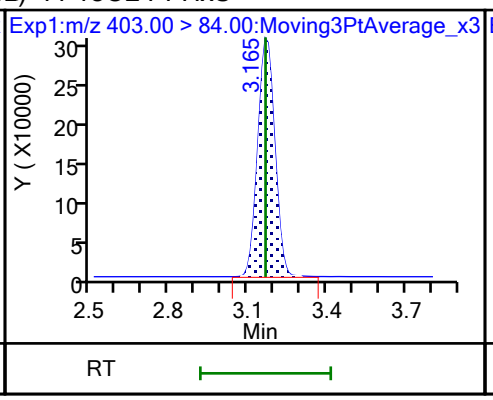
D 64 13C3 HFPO-DA



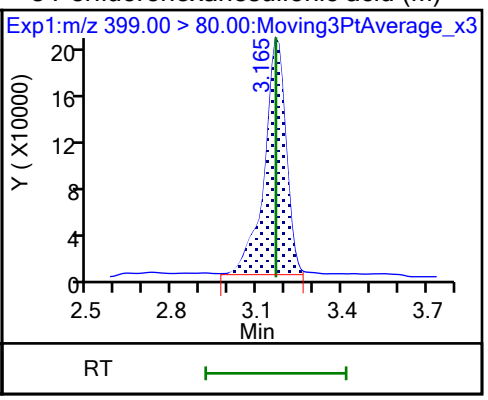
67 Perfluoro(2-propoxypropanoic) ac (M)



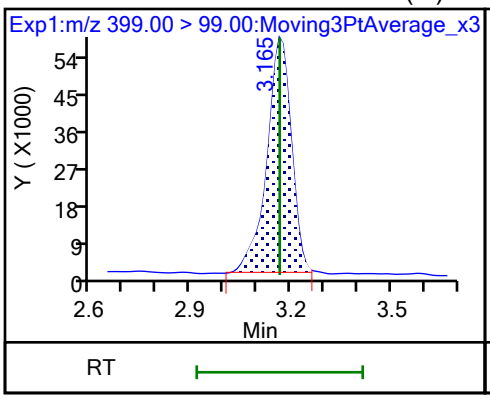
D 11 18O2 PFHxS



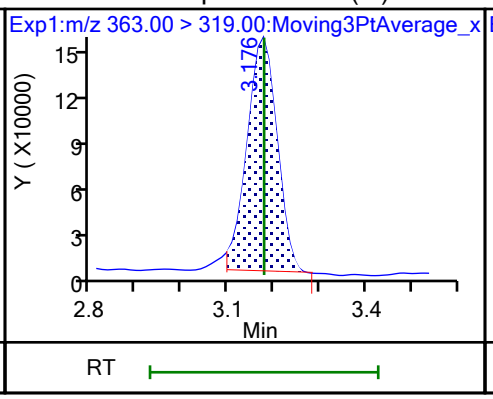
8 Perfluorohexanesulfonic acid (M)



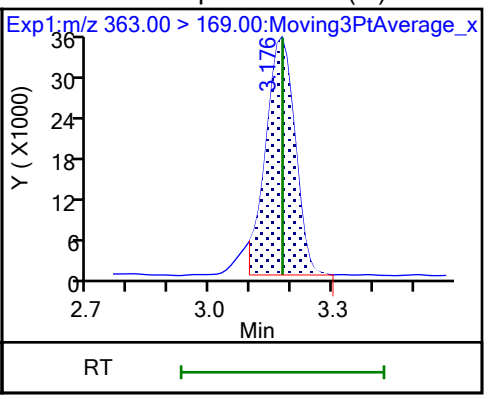
8 Perfluorohexanesulfonic acid (M)



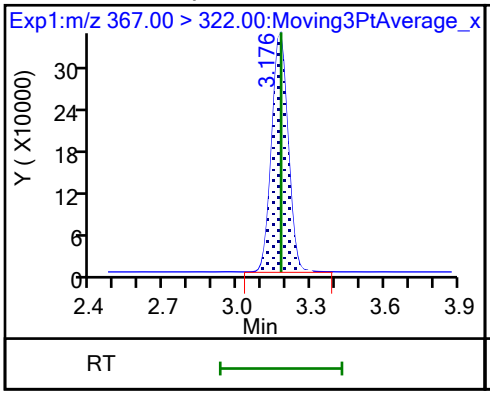
10 Perfluoroheptanoic acid (M)



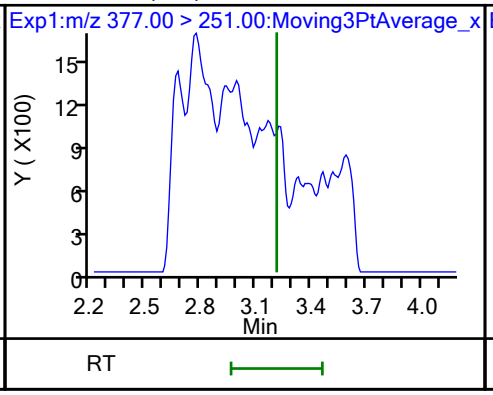
10 Perfluoroheptanoic acid (M)



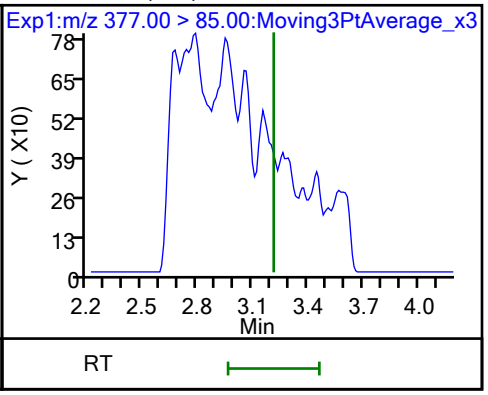
D 9 13C4 PFHpA



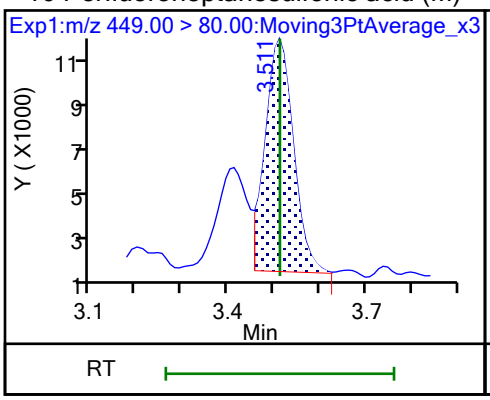
77 DONA (ND)



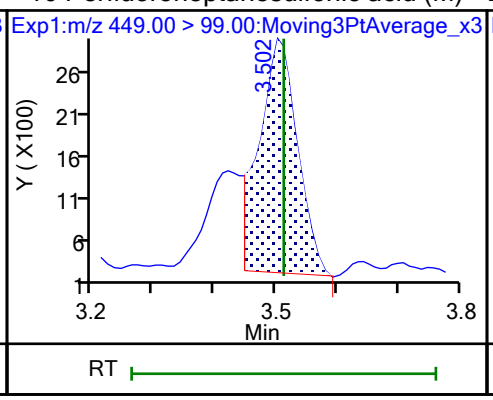
77 DONA (ND)



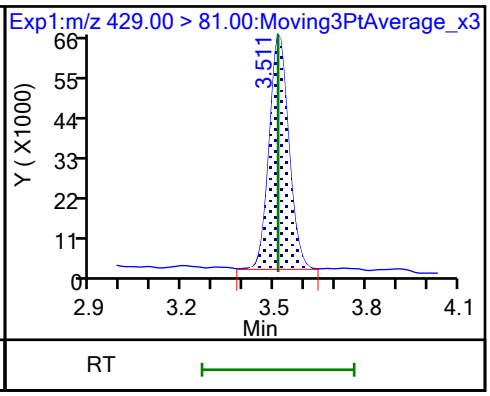
16 Perfluoroheptanesulfonic acid (M)



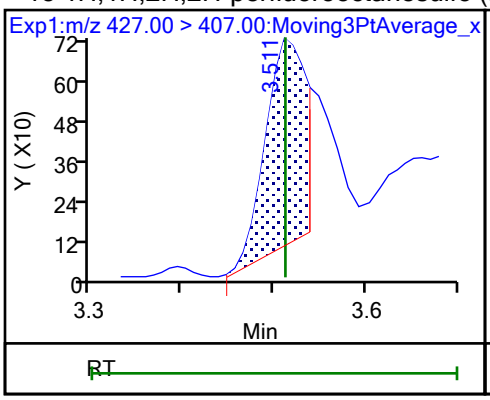
16 Perfluoroheptanesulfonic acid (M)



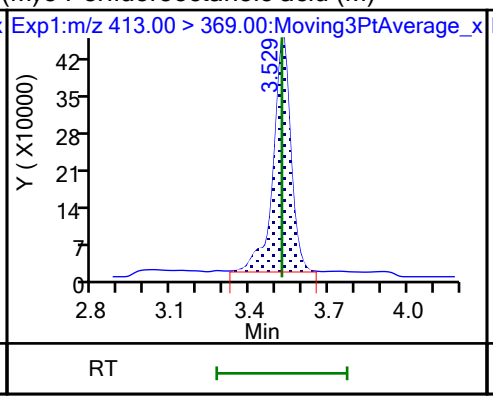
D 12 M2-6:2 FTS



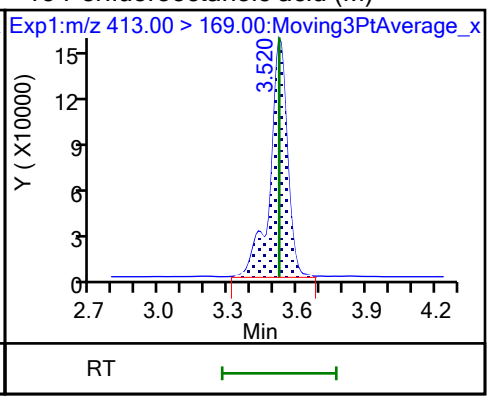
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



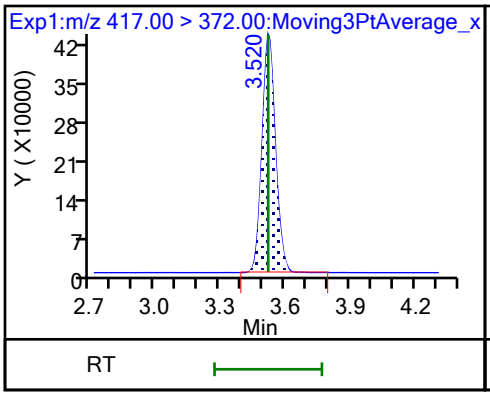
15 Perfluorooctanoic acid (M)



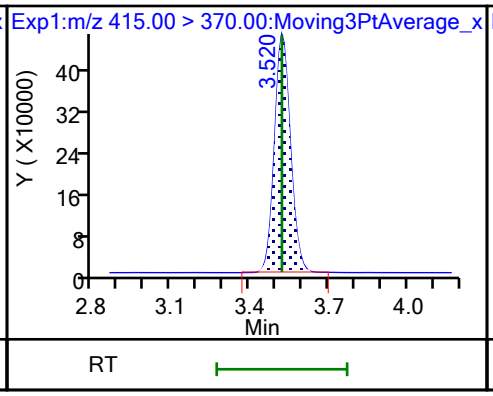
15 Perfluorooctanoic acid (M)



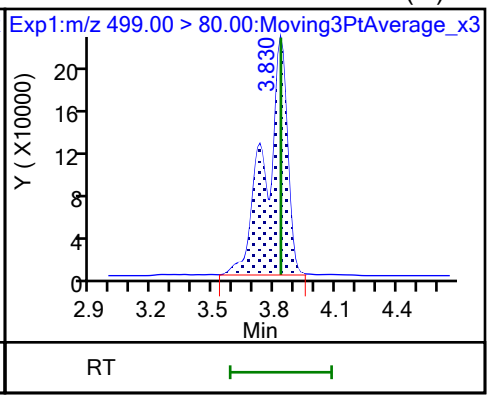
D 14 13C4 PFOA



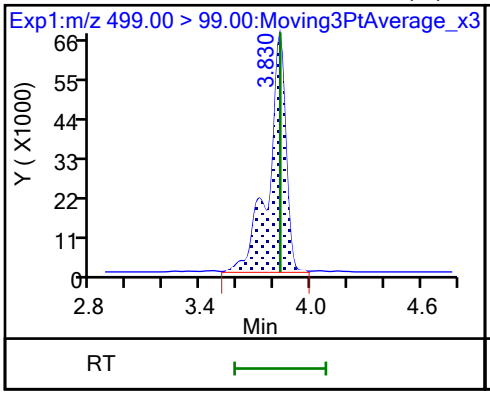
* 62 13C2 PFOA



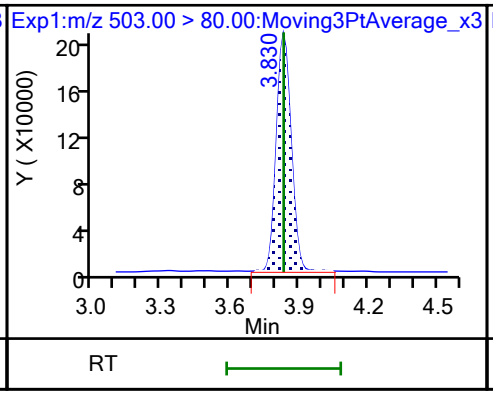
17 Perfluorooctanesulfonic acid (M)



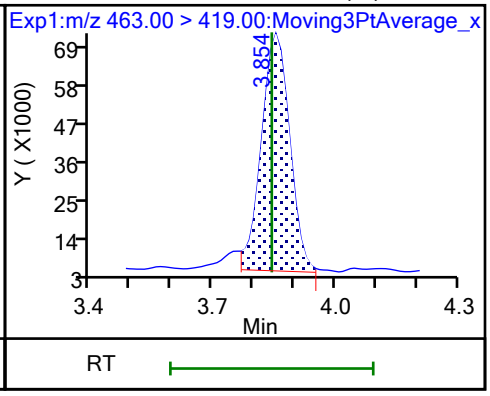
17 Perfluorooctanesulfonic acid (M)



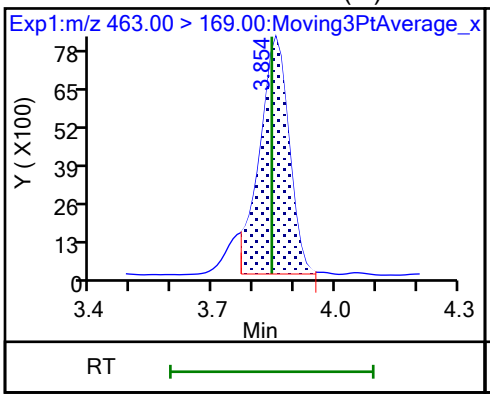
D 18 13C4 PFOS



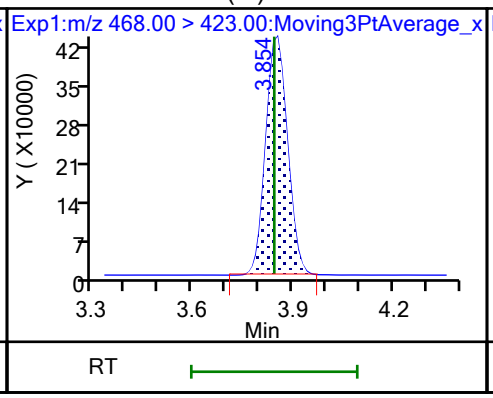
20 Perfluorononanoic acid (M)



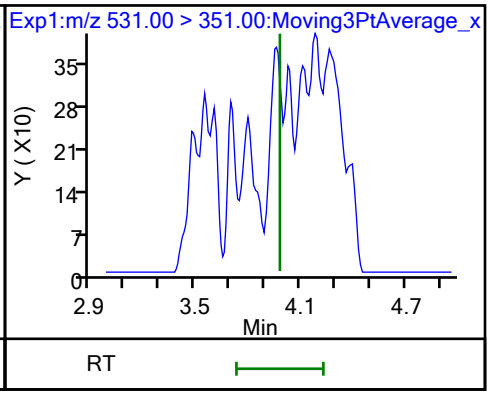
20 Perfluorononanoic acid (M)



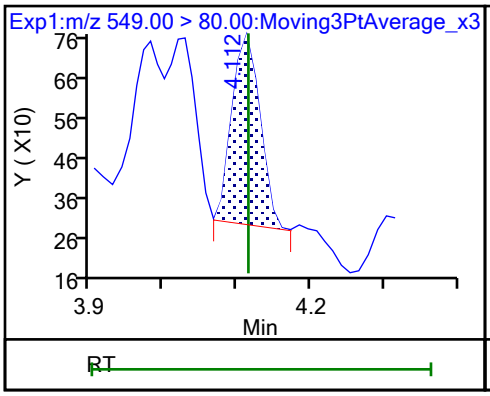
D 19 13C5 PFNA (M)



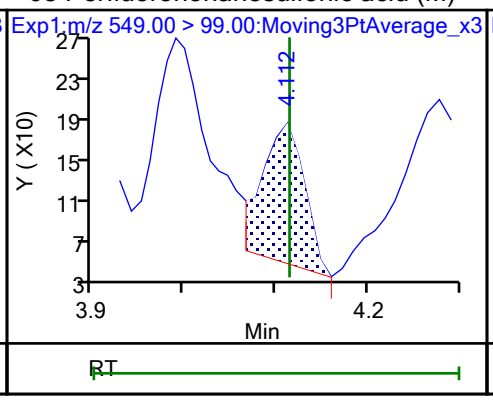
69 9-Chlorohexadecafluoro-3-oxanona (ND)



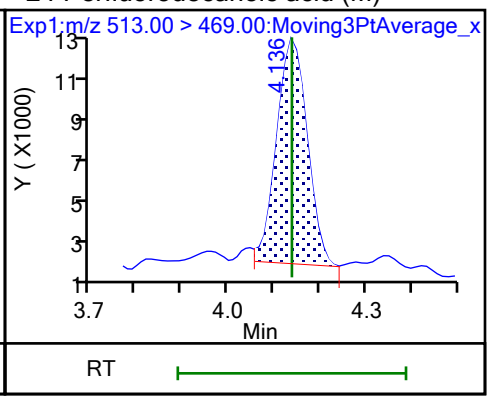
68 Perfluorononanesulfonic acid



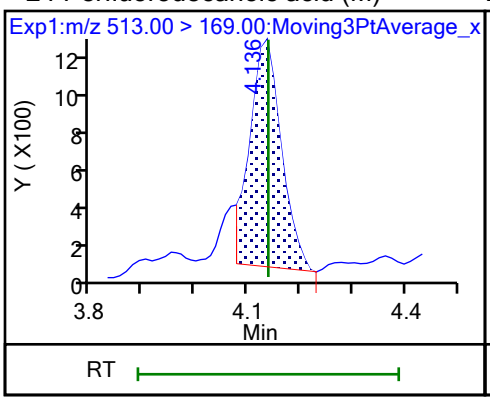
68 Perfluorononanesulfonic acid (M)



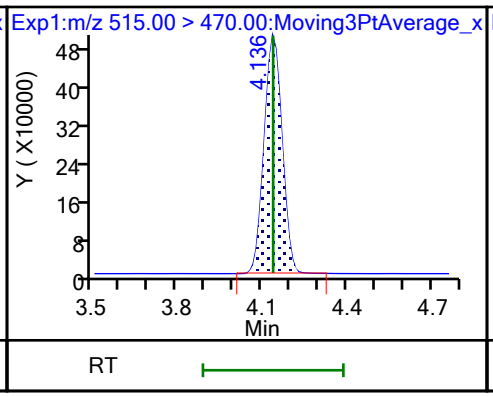
24 Perfluorodecanoic acid (M)



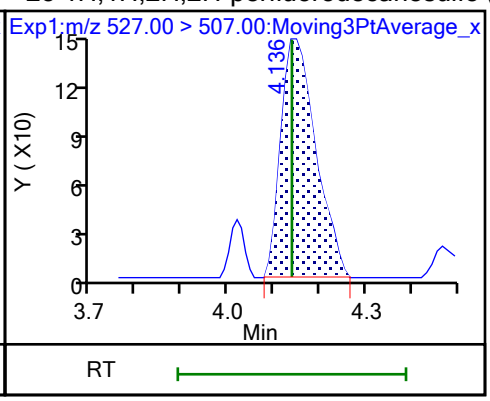
24 Perfluorodecanoic acid (M)



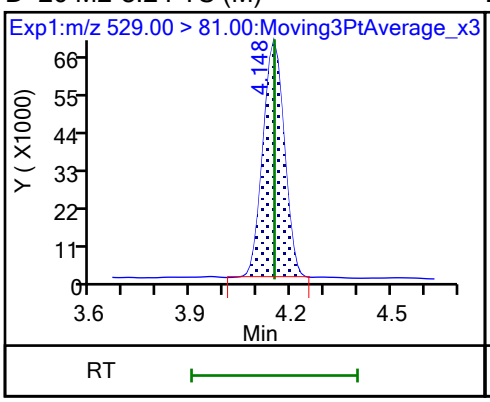
D 23 13C2 PFDA



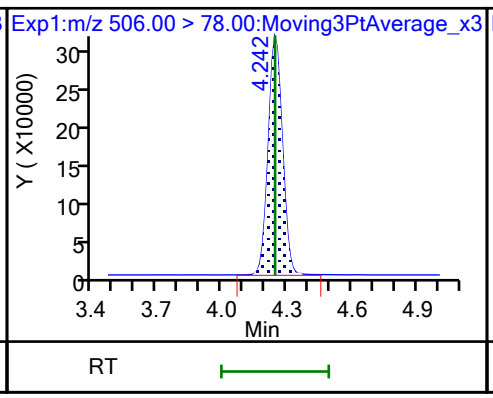
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



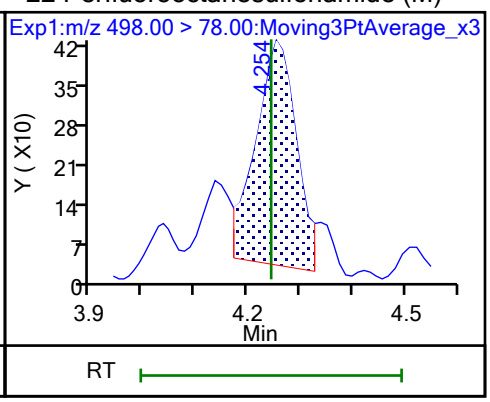
D 26 M2-8:2 FTS (M)



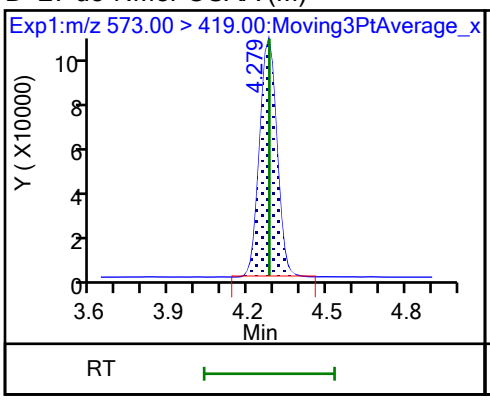
D 21 13C8 FOSA



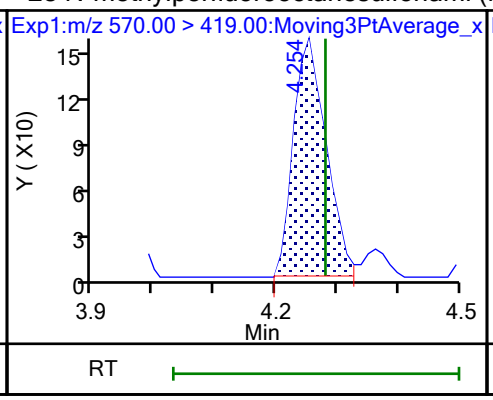
22 Perfluorooctanesulfonamide (M)



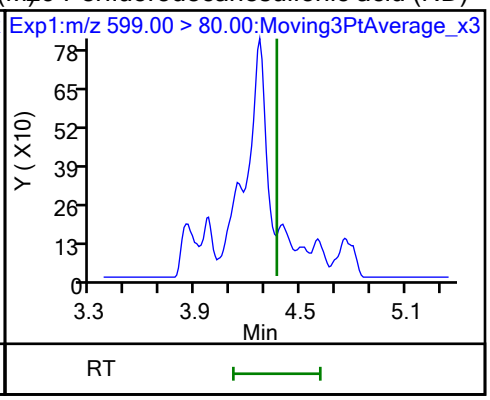
D 27 d3-NMeFOSAA (M)



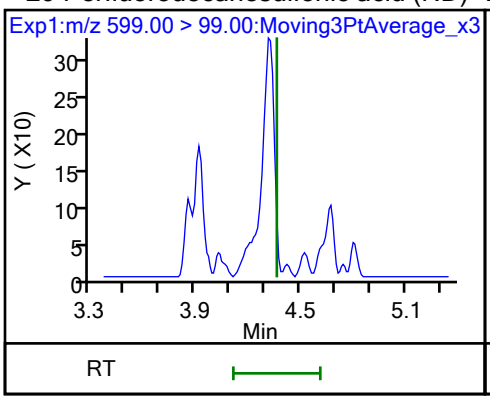
28 N-methylperfluorooctanesulfonami (M)



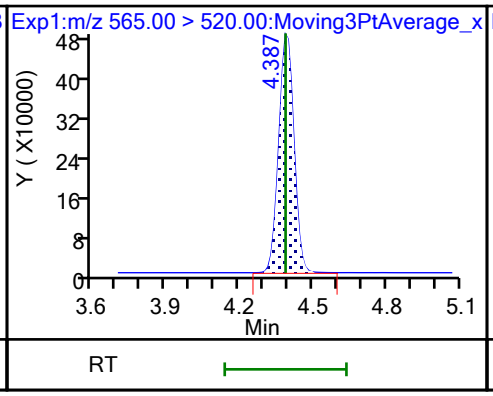
29 Perfluorodecanesulfonic acid (ND)



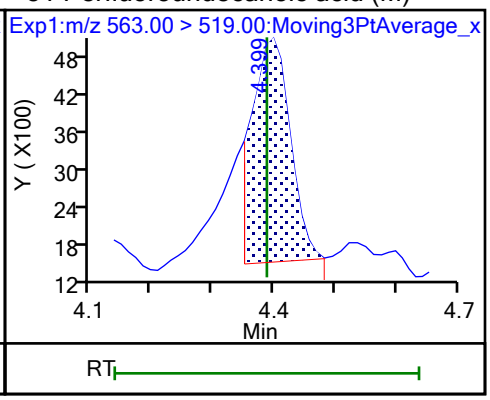
29 Perfluorodecanesulfonic acid (ND)



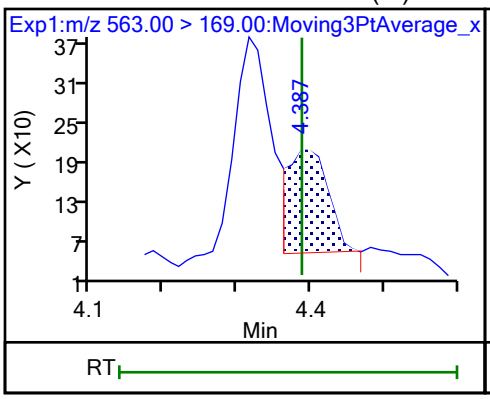
D 30 13C2 PFUnA



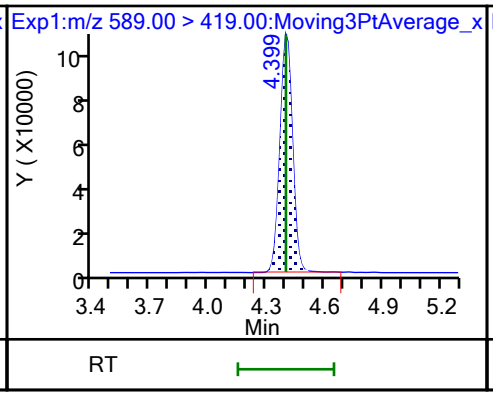
31 Perfluoroundecanoic acid (M)



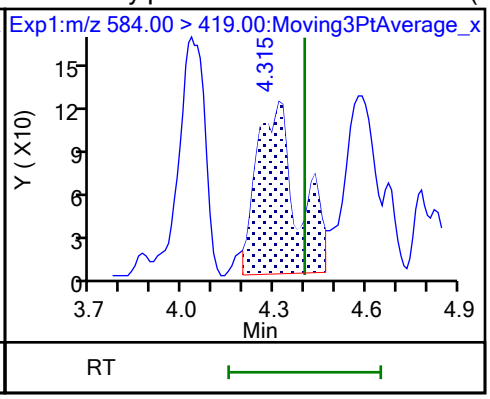
31 Perfluoroundecanoic acid (M)



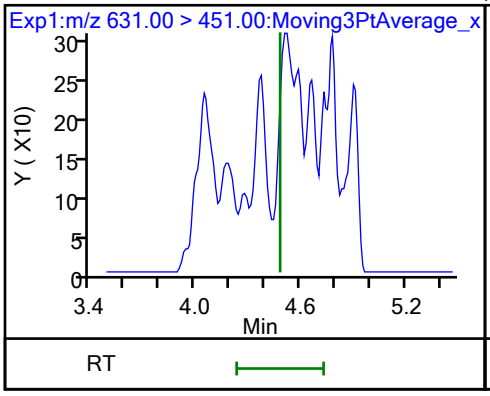
D 32 d5-NEtFOSAA



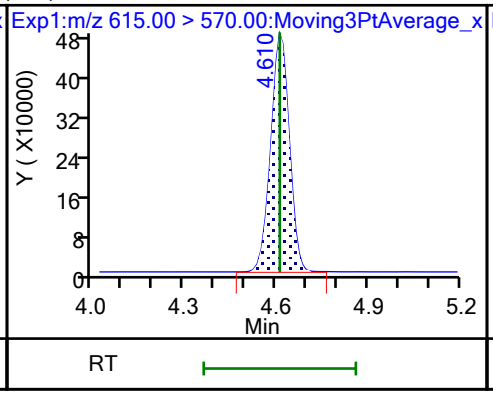
33 N-ethylperfluorooctanesulfonamid (M)



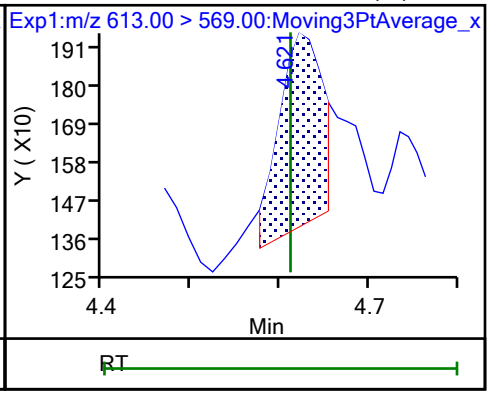
66 11-Chloroeicosafluoro-3-oxaundec (ND)



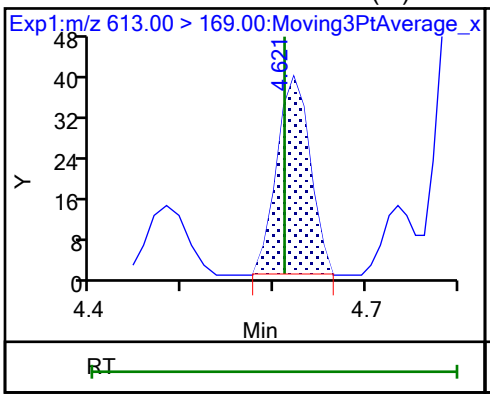
D 36 13C2 PFDoA



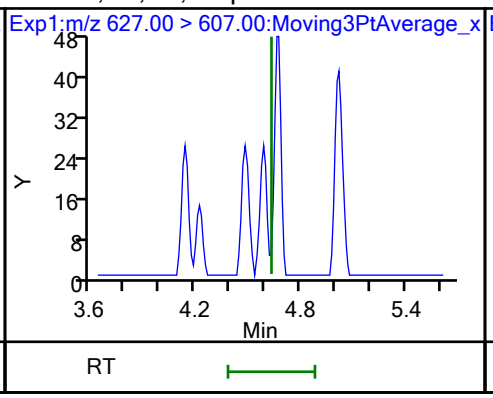
37 Perfluorododecanoic acid (M)



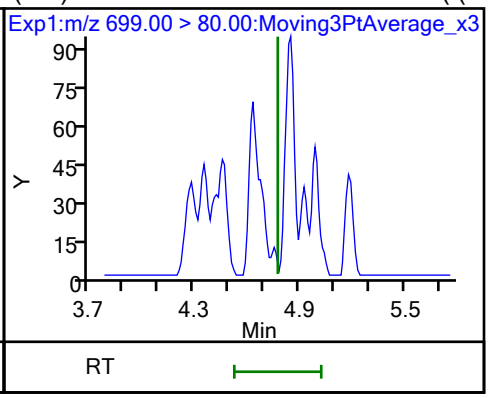
37 Perfluorododecanoic acid (M)



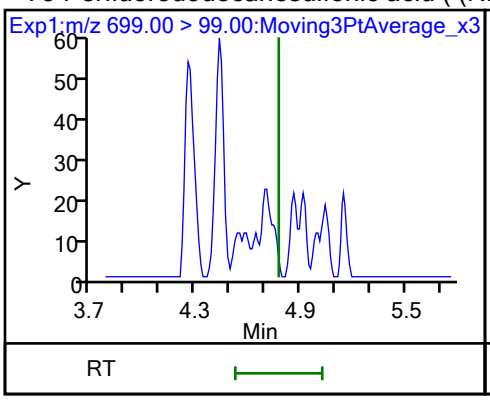
74 1H,1H,2H,2H-perfluorododecanesul (ND)



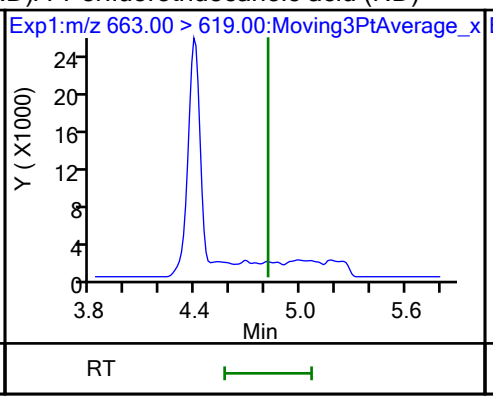
75 Perfluorododecanesulfonic acid ((ND)



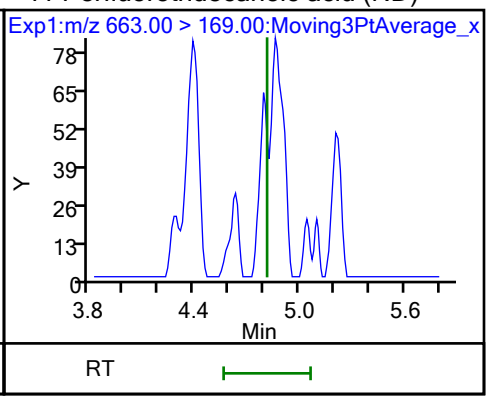
75 Perfluorododecanesulfonic acid ((ND)



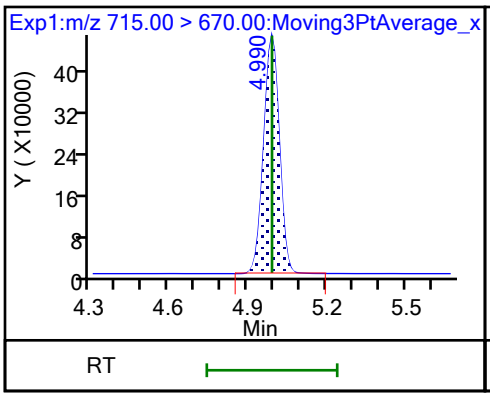
41 Perfluorotridecanoic acid (ND)



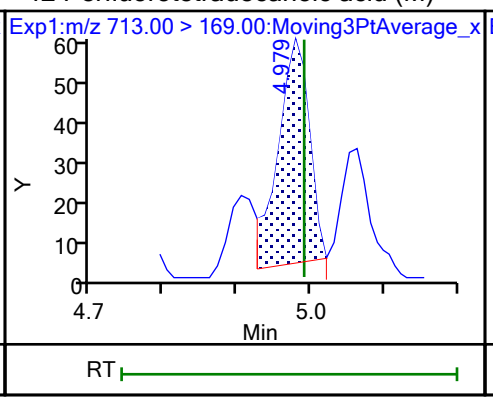
41 Perfluorotridecanoic acid (ND)



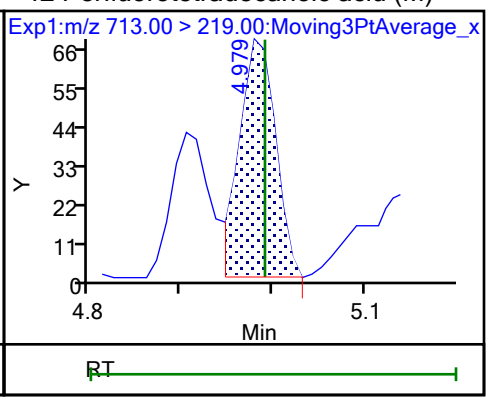
D 43 13C2 PFTeDA



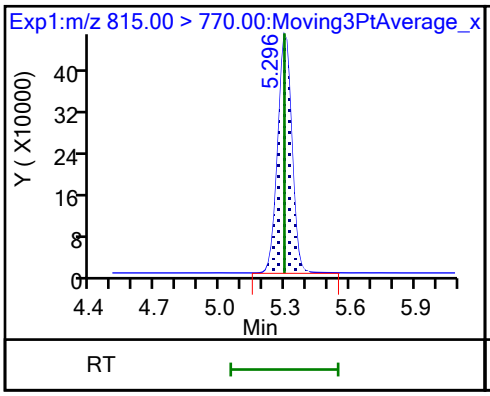
42 Perfluorotetradecanoic acid (M)



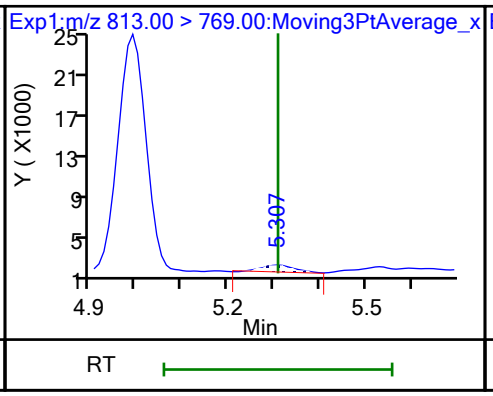
42 Perfluorotetradecanoic acid (M)



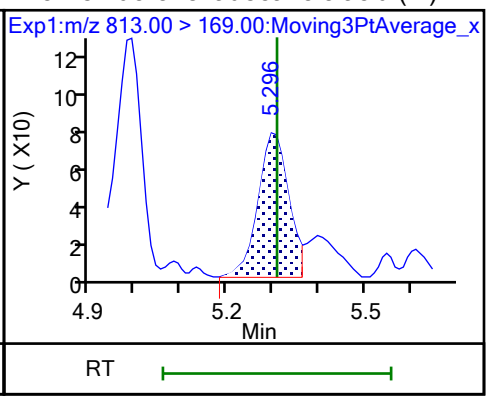
D 44 13C2 PFHxDA



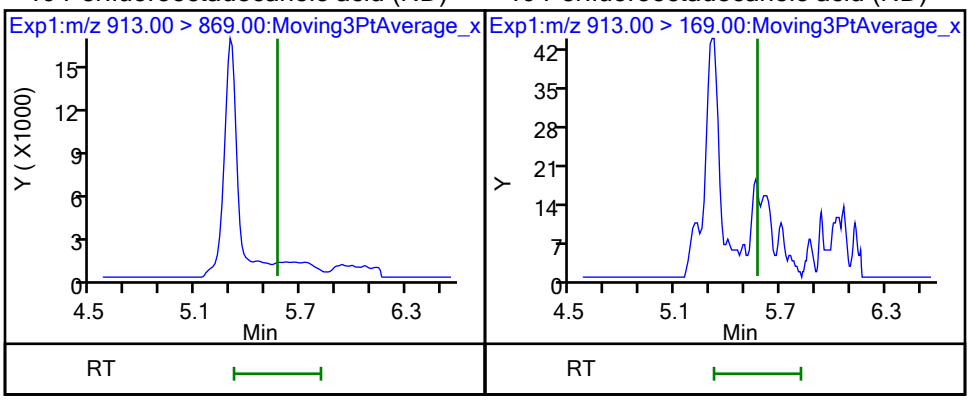
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Eurofins Burlington

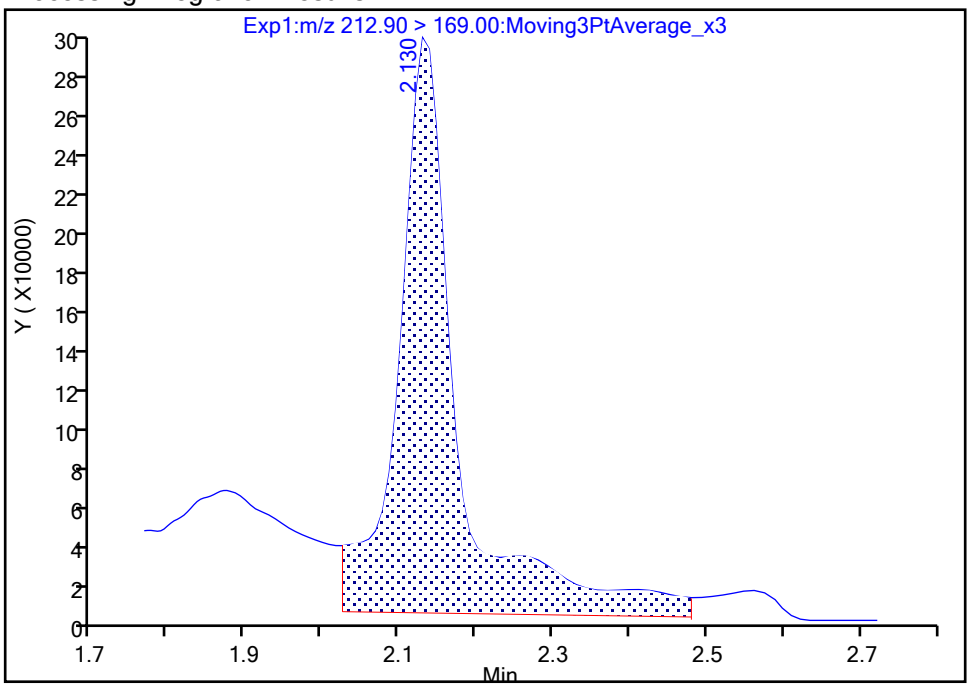
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

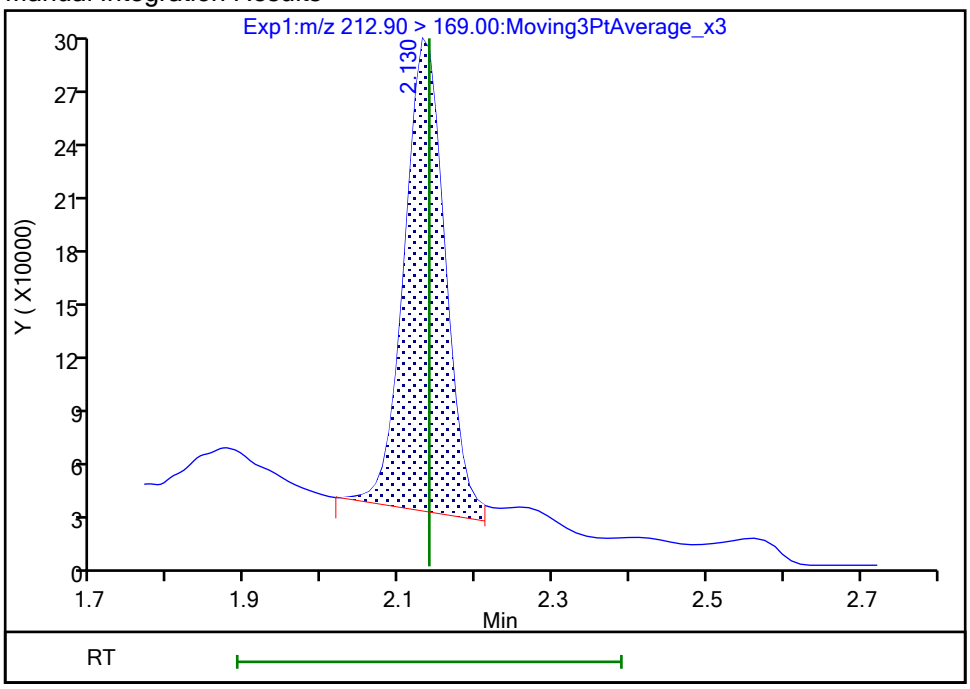
Processing Integration Results

RT: 2.13
Area: 1604083
Amount: 1.504714
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 984000
Amount: 0.907239
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

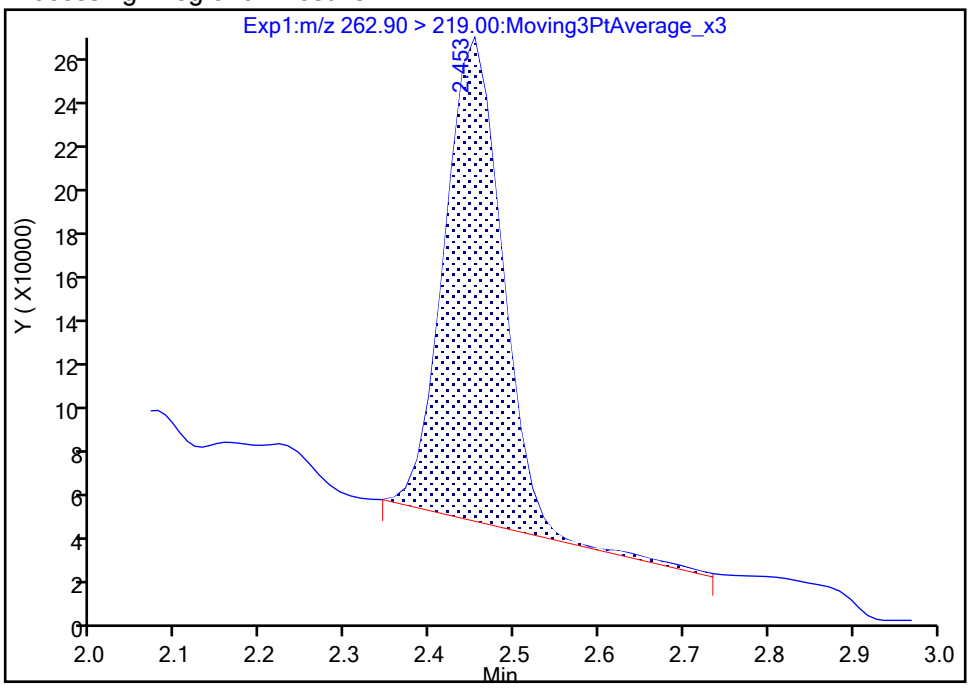
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

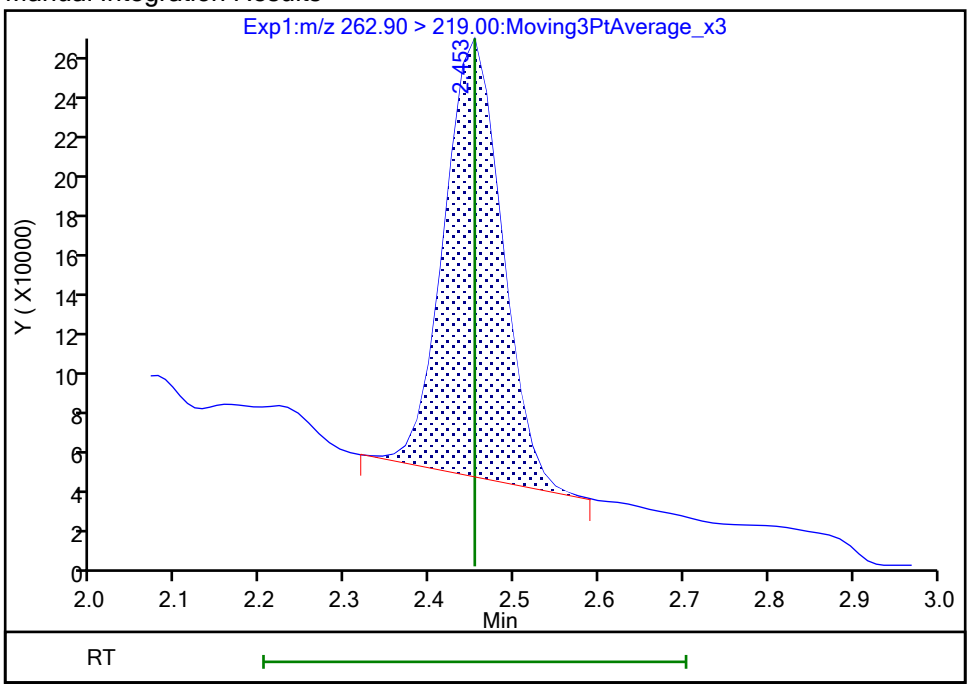
Processing Integration Results

RT: 2.45
Area: 1048940
Amount: 0.960115
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1046108
Amount: 0.957522
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

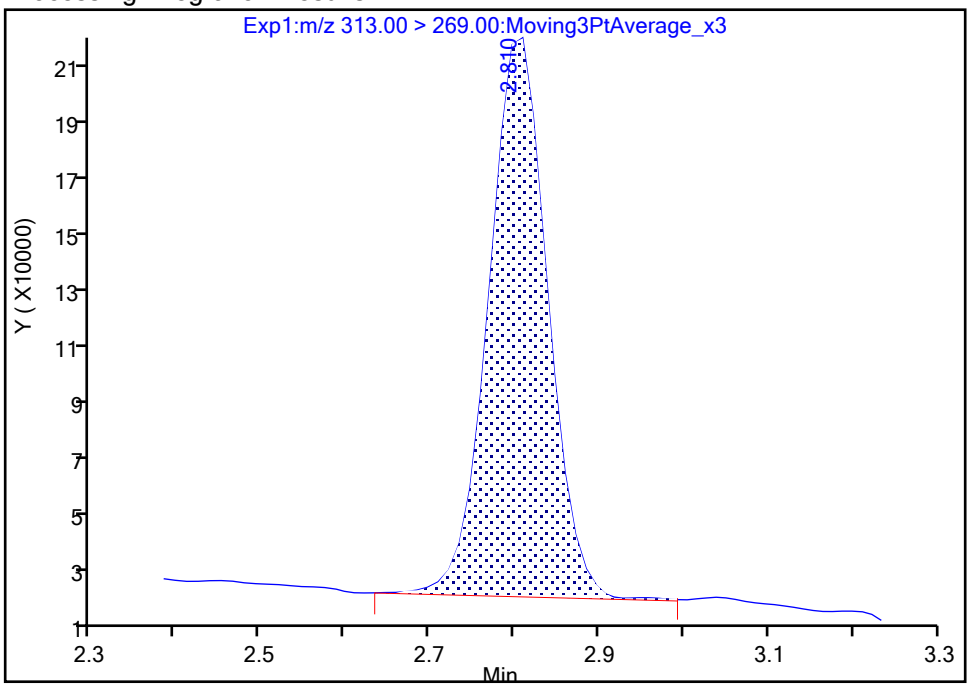
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

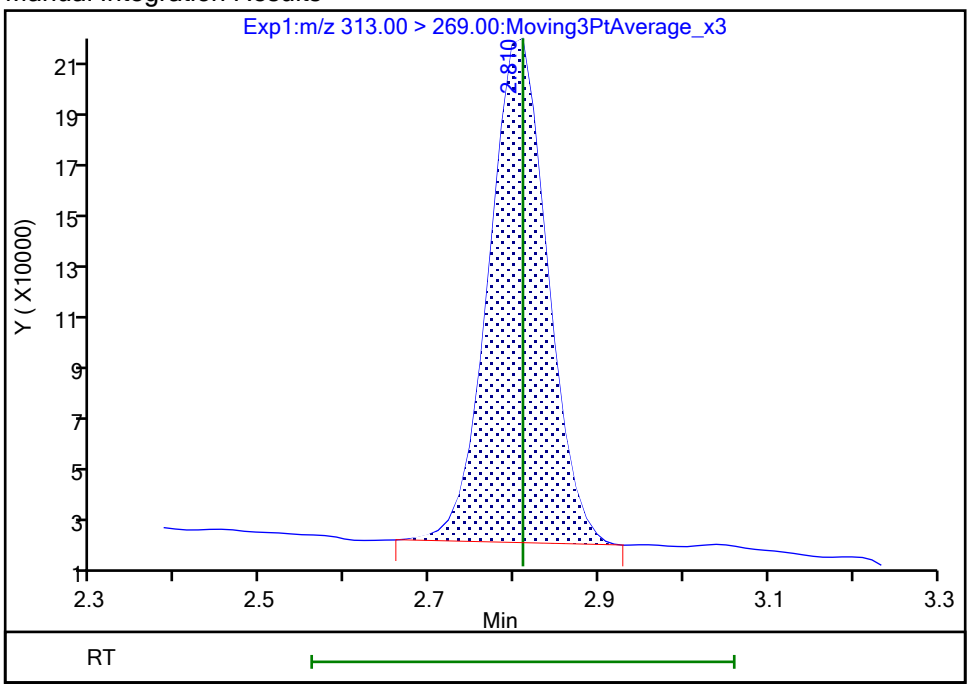
Processing Integration Results

RT: 2.81
Area: 917380
Amount: 0.809202
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 912476
Amount: 0.804877
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

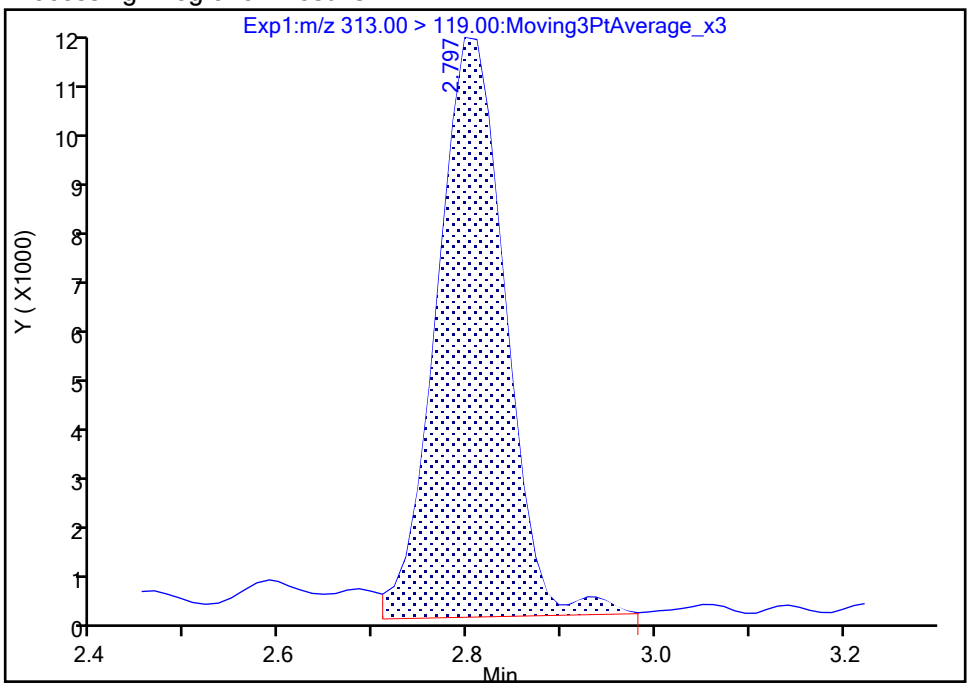
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

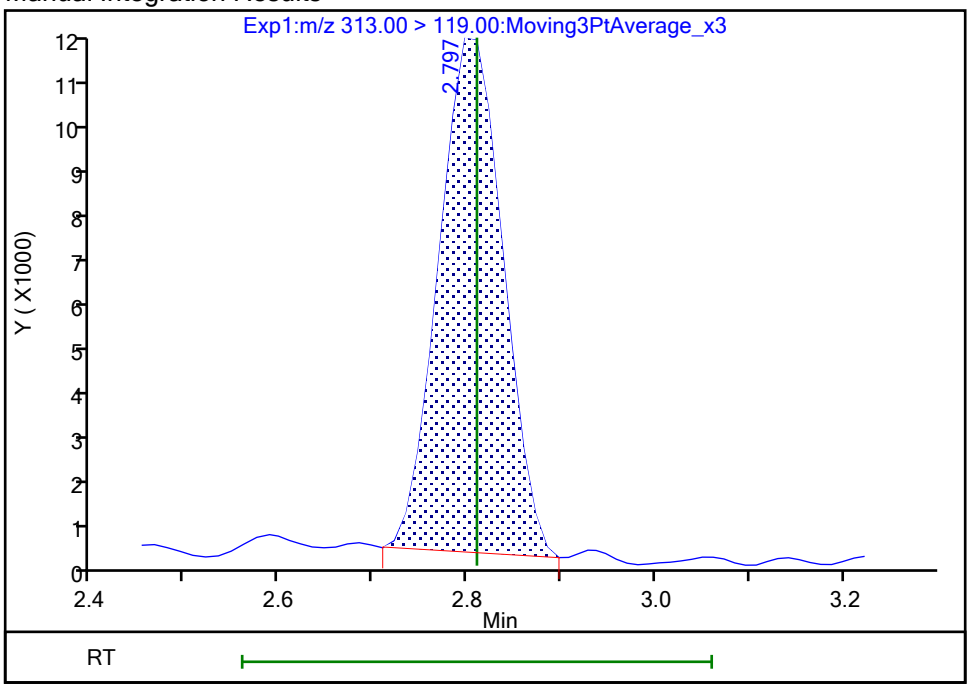
Processing Integration Results

RT: 2.80
Area: 58089
Amount: 0.809202
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 53039
Amount: 0.804877
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

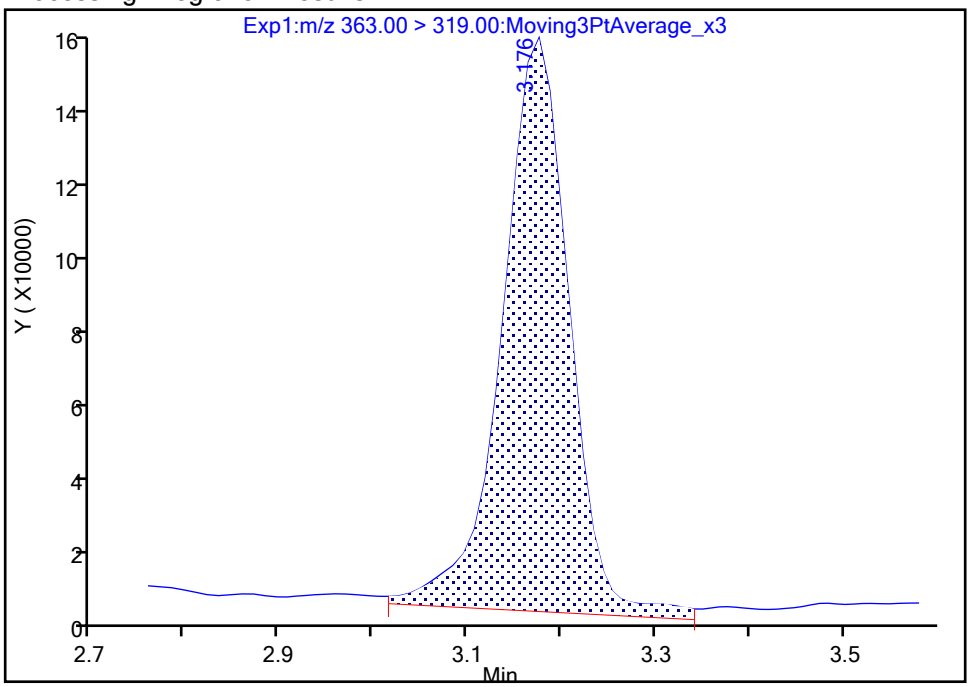
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

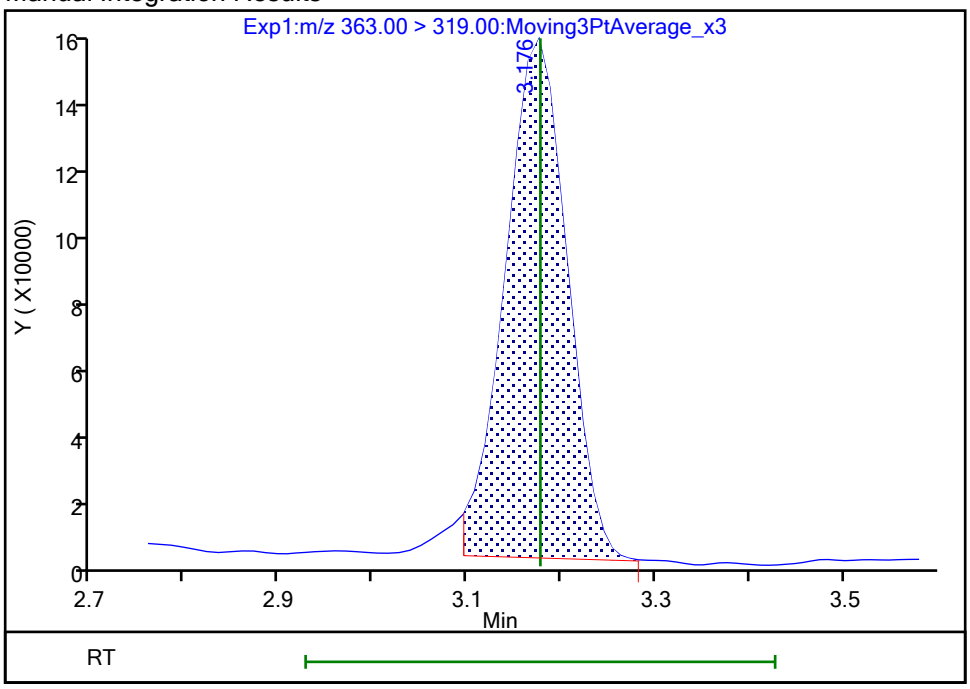
Processing Integration Results

RT: 3.18
Area: 759935
Amount: 0.533700
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 679635
Amount: 0.477306
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

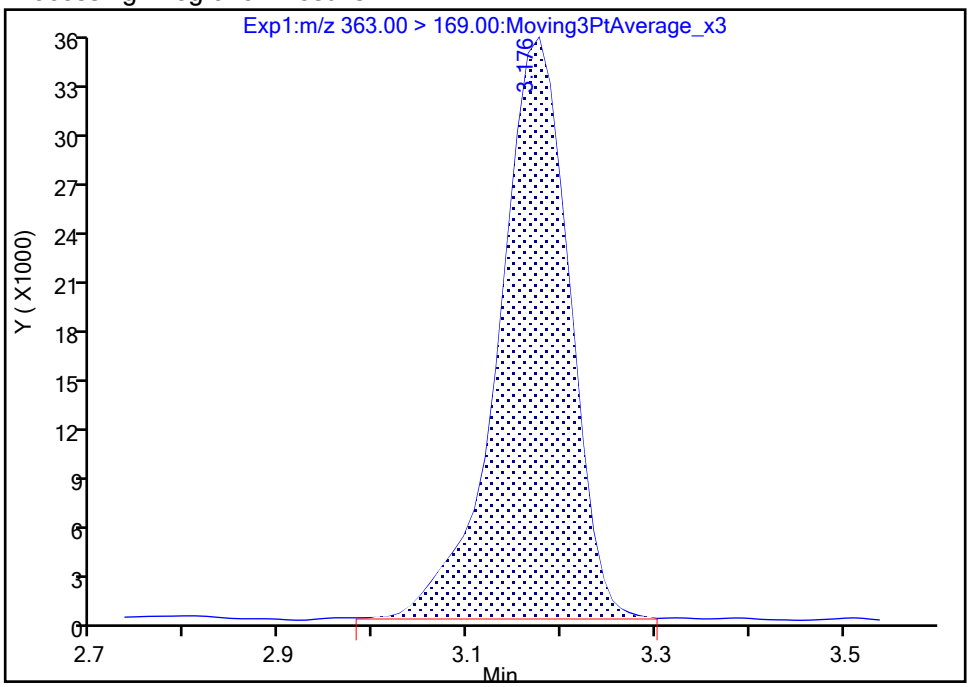
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

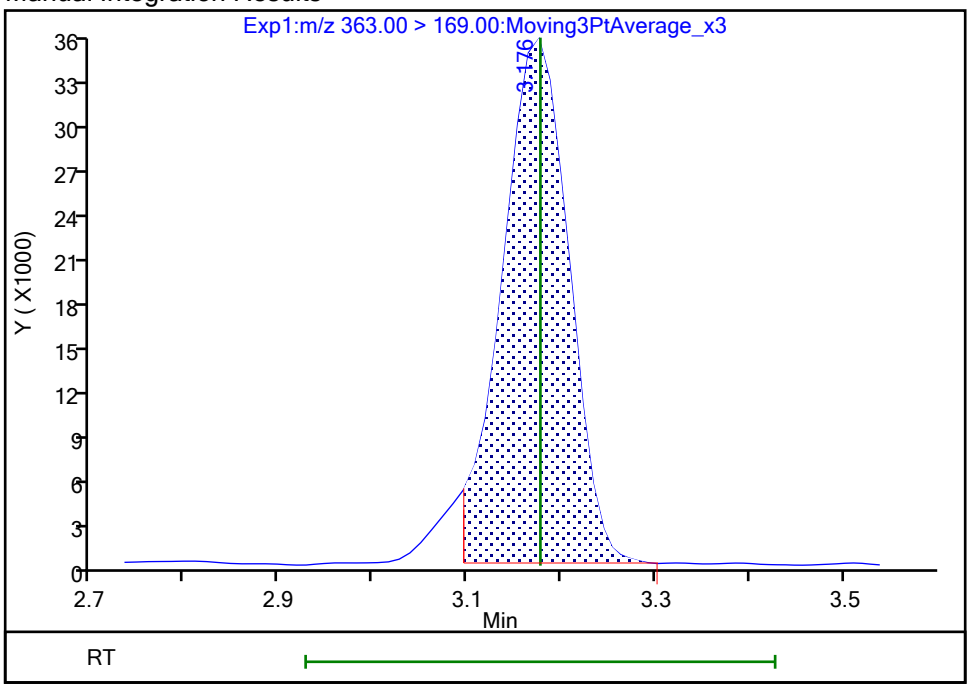
Processing Integration Results

RT: 3.18
Area: 184018
Amount: 0.533700
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 174246
Amount: 0.477306
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

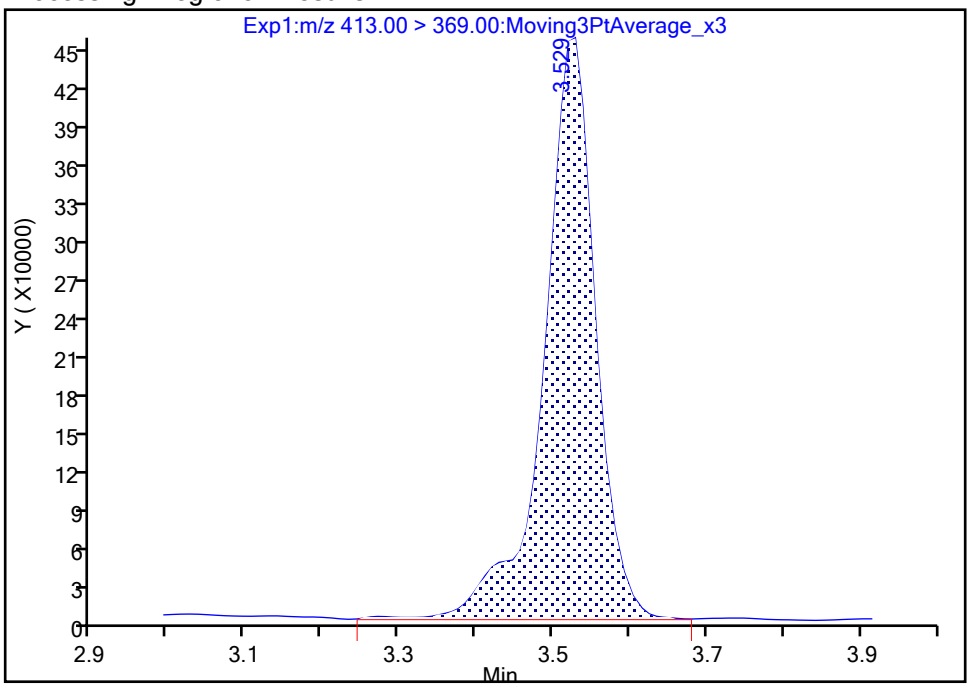
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

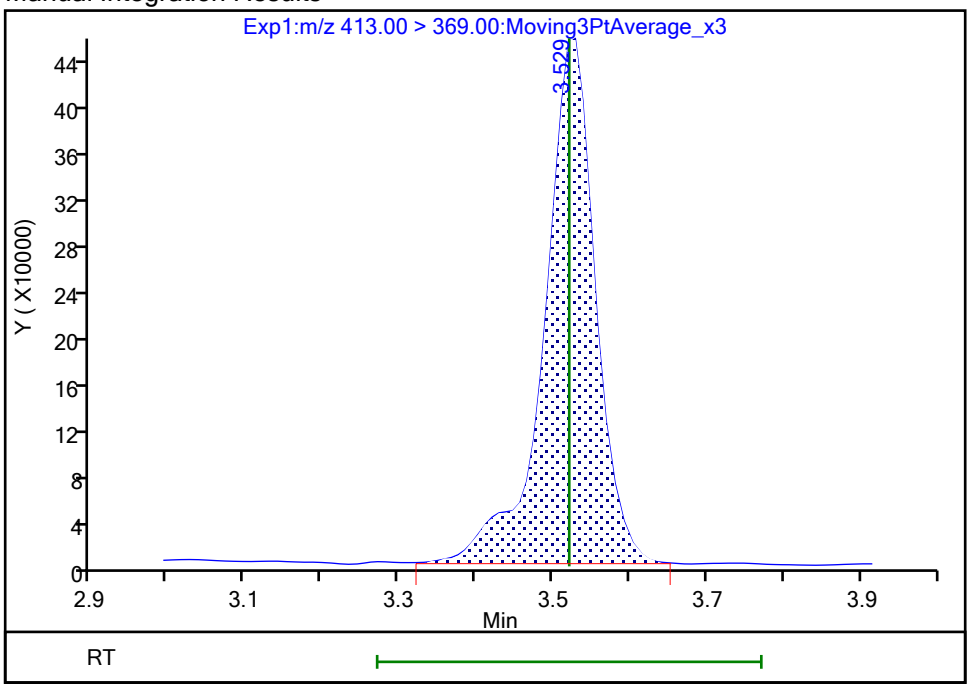
Processing Integration Results

RT: 3.53
Area: 2063546
Amount: 1.301478
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 2036365
Amount: 1.284335
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

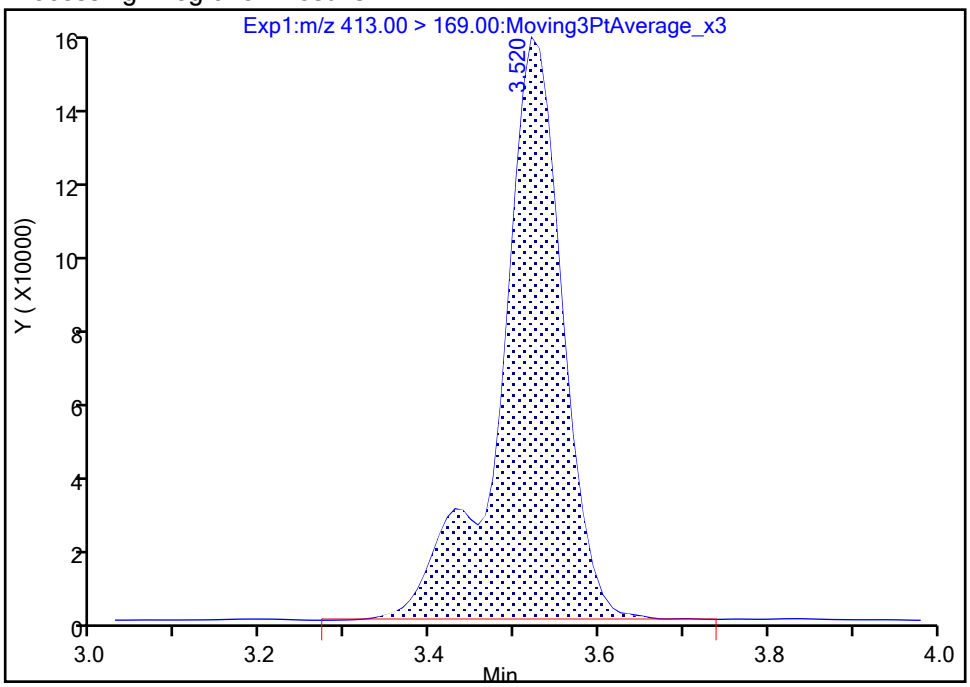
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

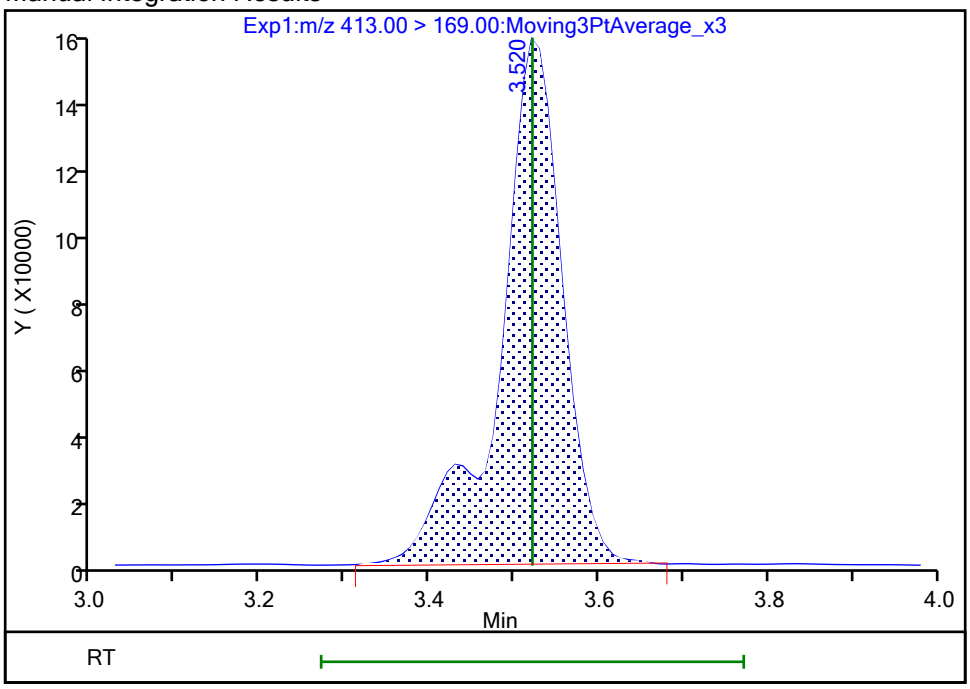
Processing Integration Results

RT: 3.52
Area: 777367
Amount: 1.301478
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 773820
Amount: 1.284335
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

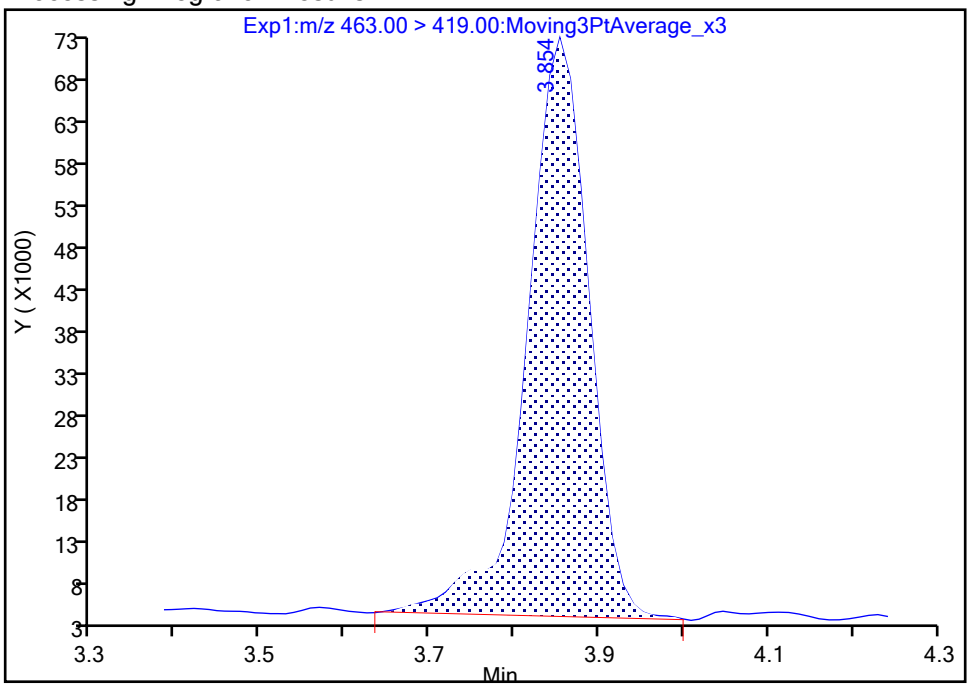
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

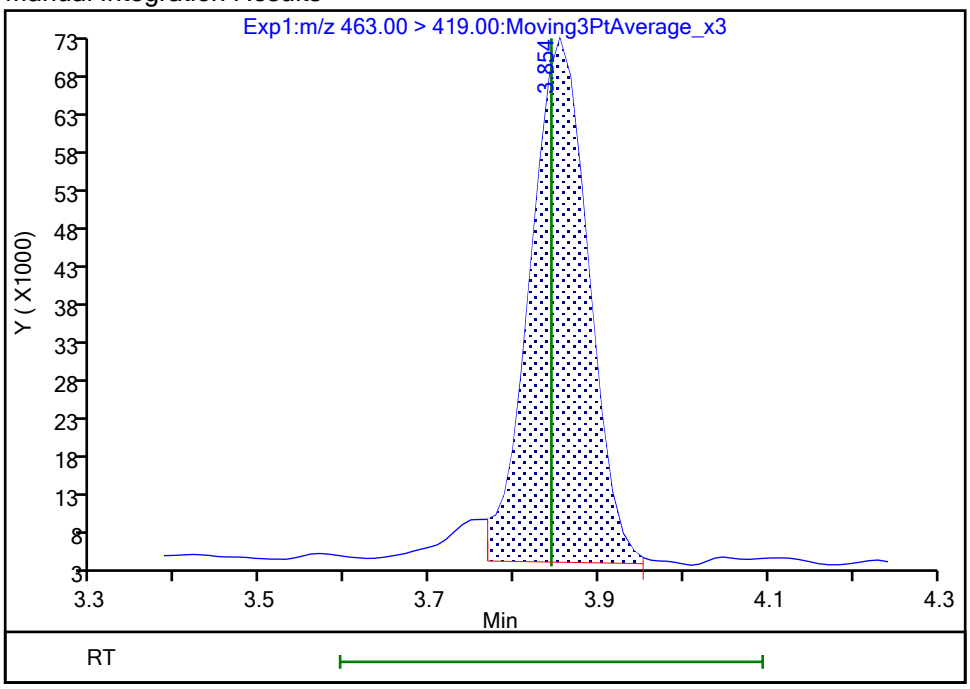
Processing Integration Results

RT: 3.85
Area: 349320
Amount: 0.224123
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 330767
Amount: 0.212219
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

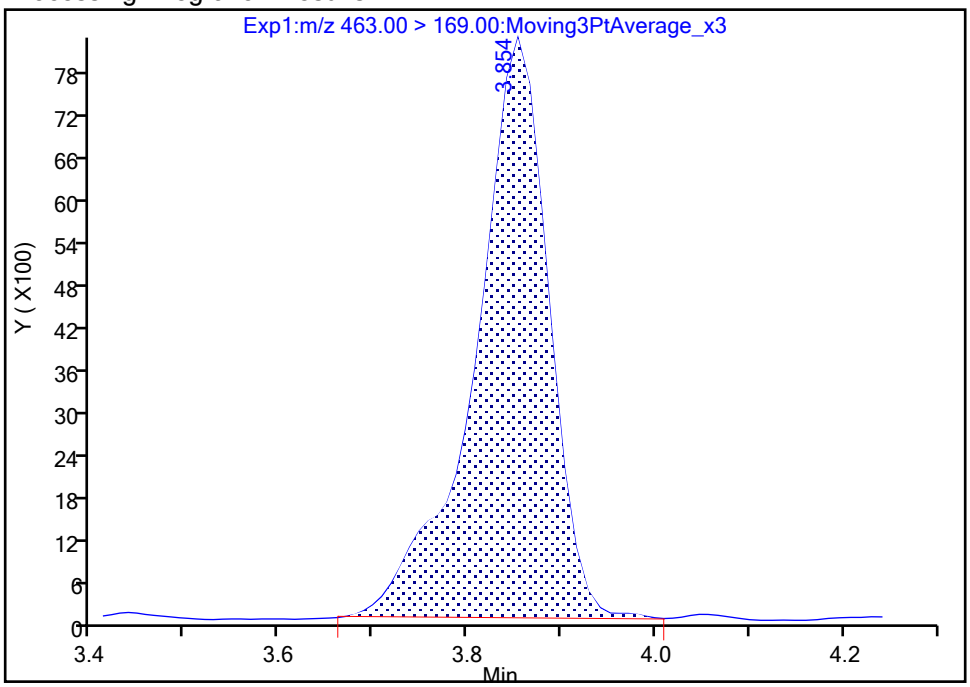
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

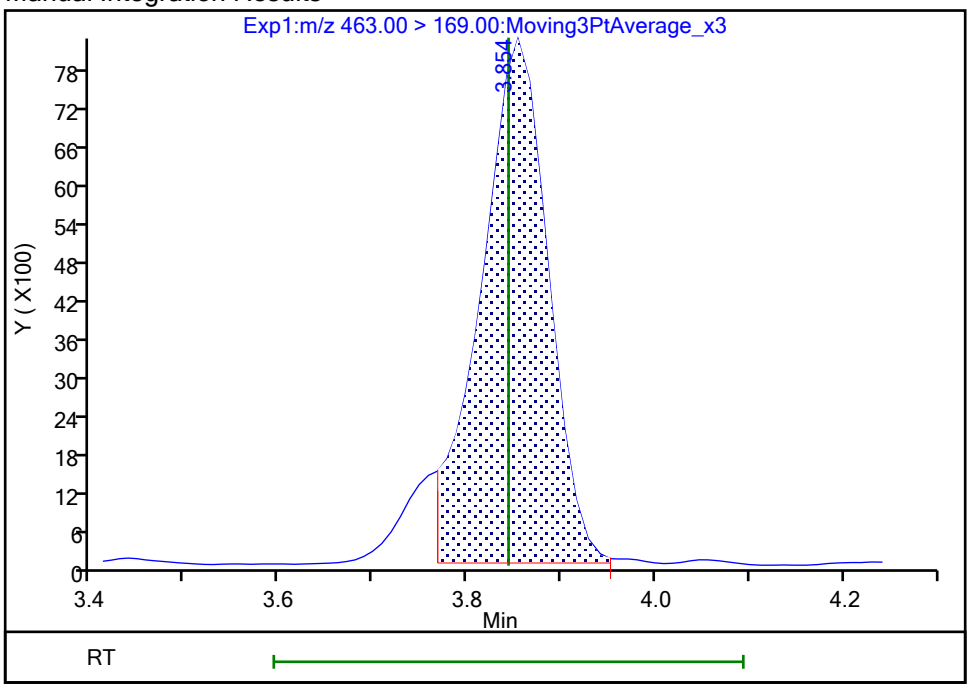
Processing Integration Results

RT: 3.85
Area: 44692
Amount: 0.224123
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 40867
Amount: 0.212219
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

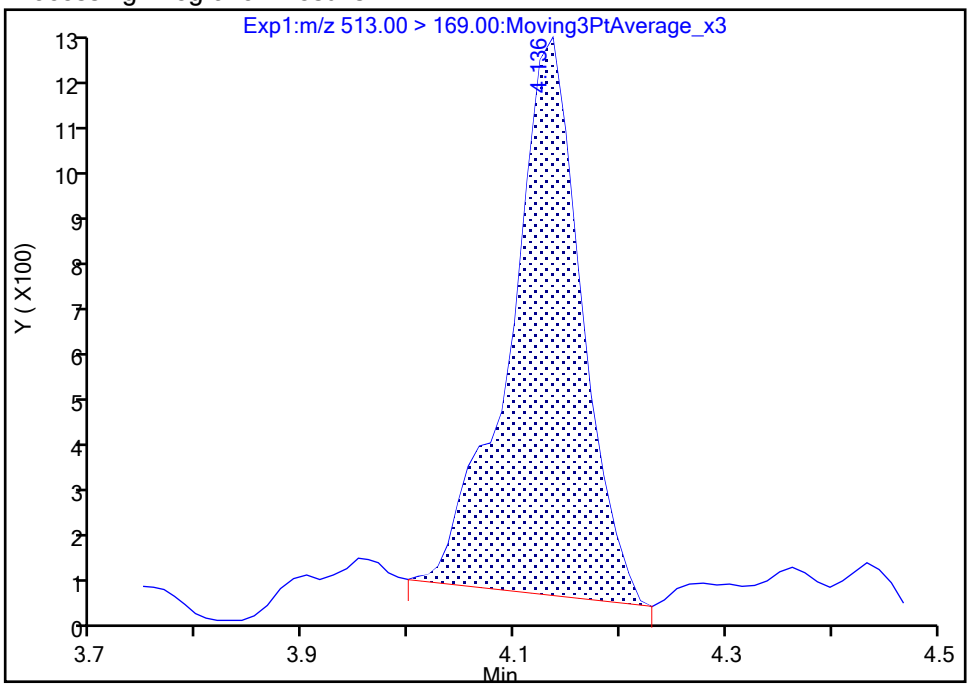
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

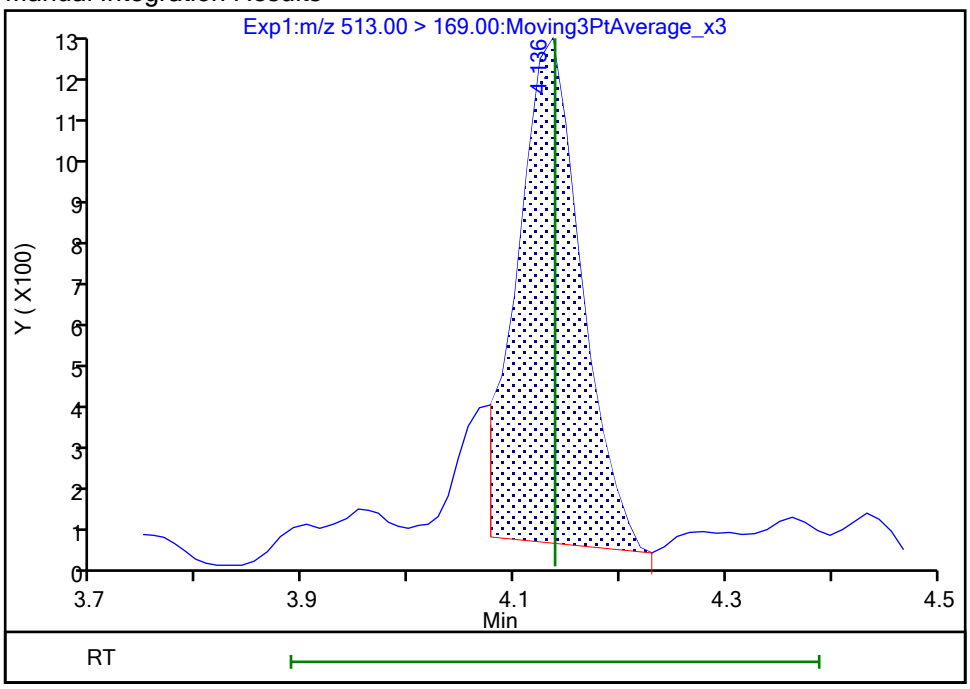
Processing Integration Results

RT: 4.14
Area: 5789
Amount: 0.028424
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 5137
Amount: 0.028424
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

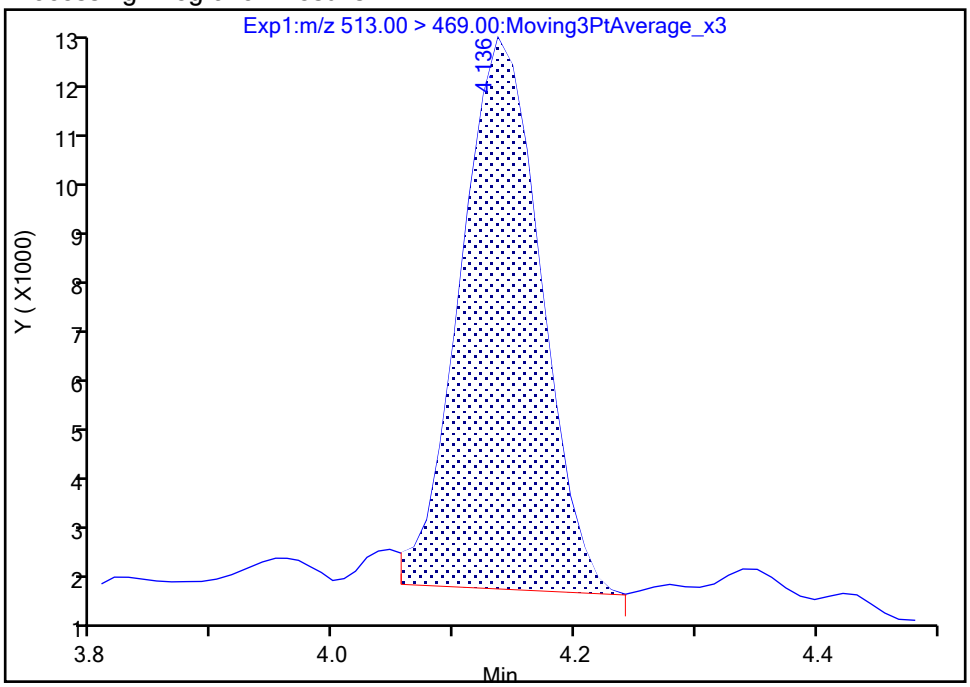
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

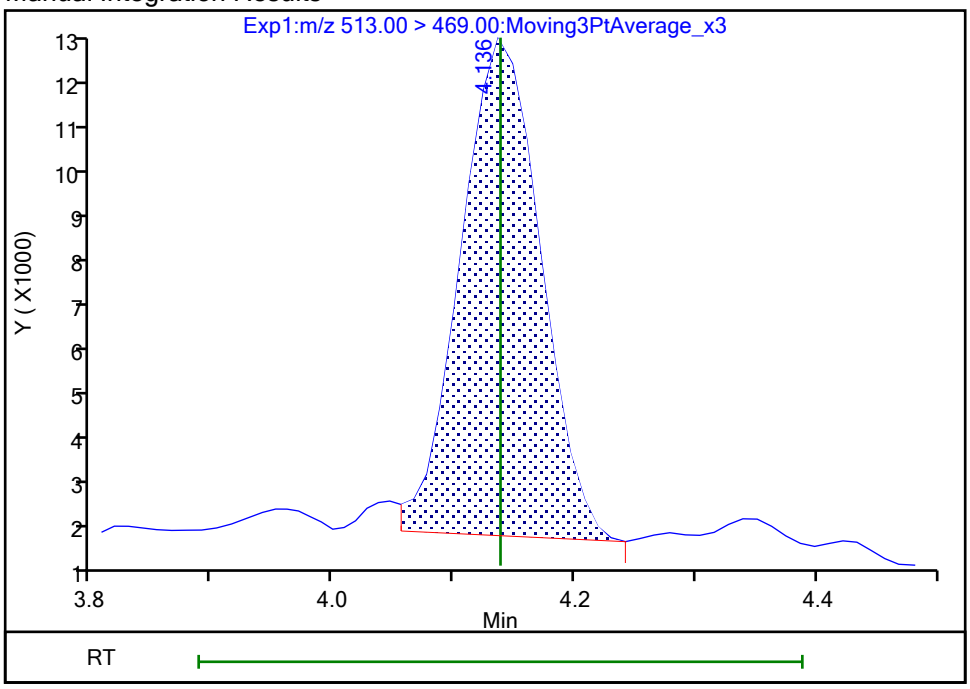
Processing Integration Results

RT: 4.14
Area: 50287
Amount: 0.028424
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 50287
Amount: 0.028424
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

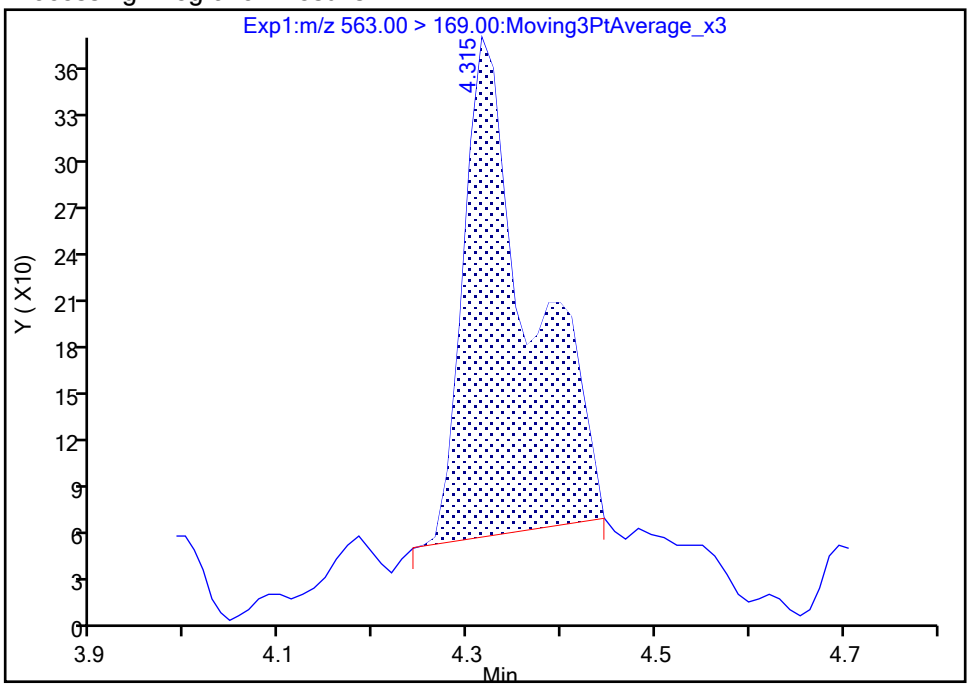
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

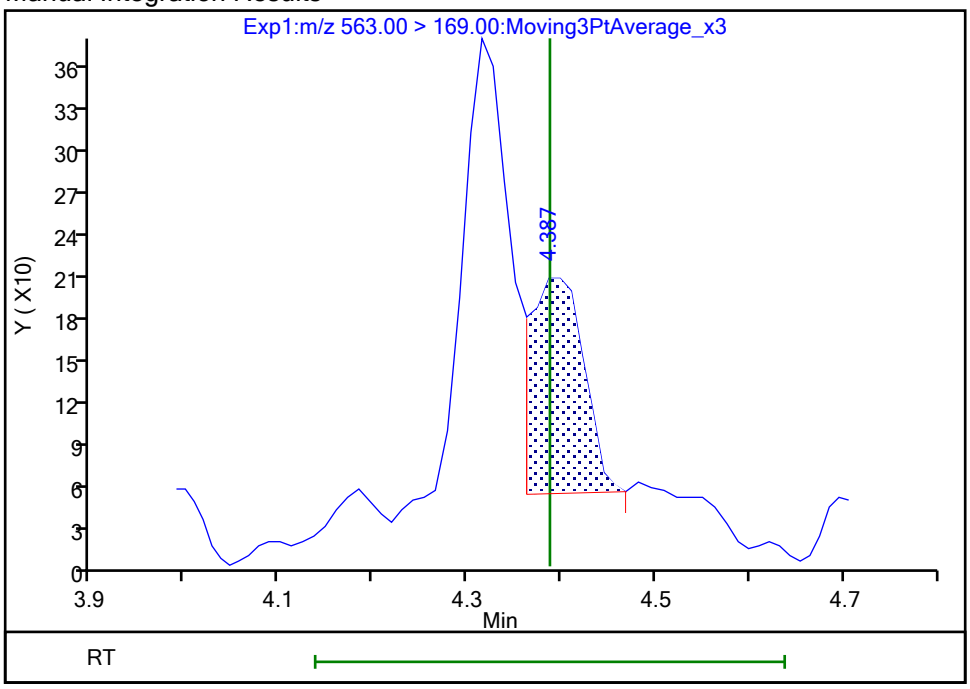
Processing Integration Results

RT: 4.32
Area: 1610
Amount: 0.010796
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 589
Amount: 0.008596
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

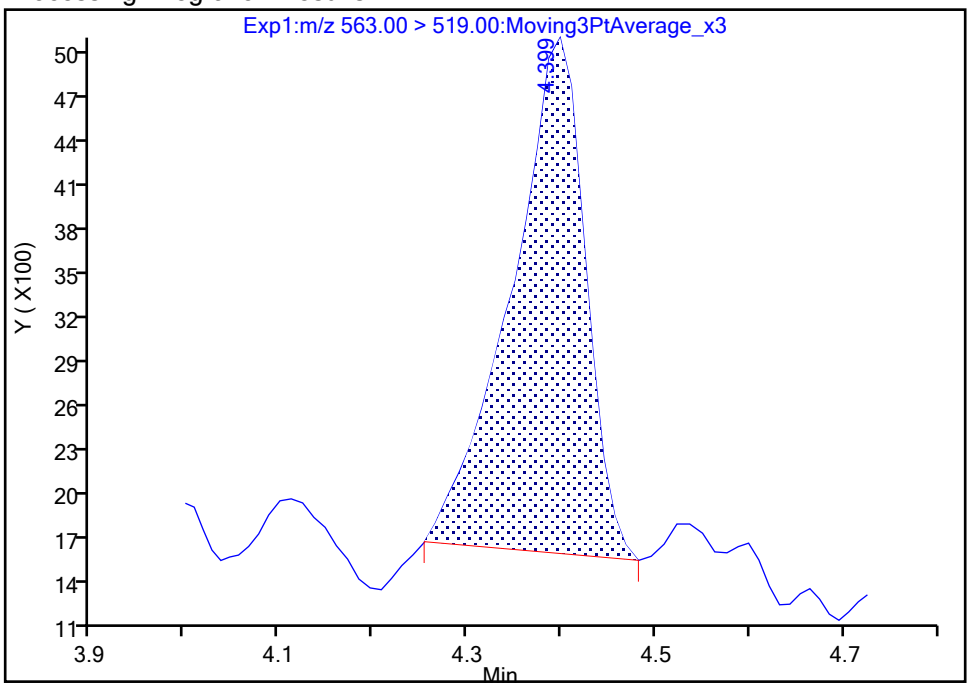
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

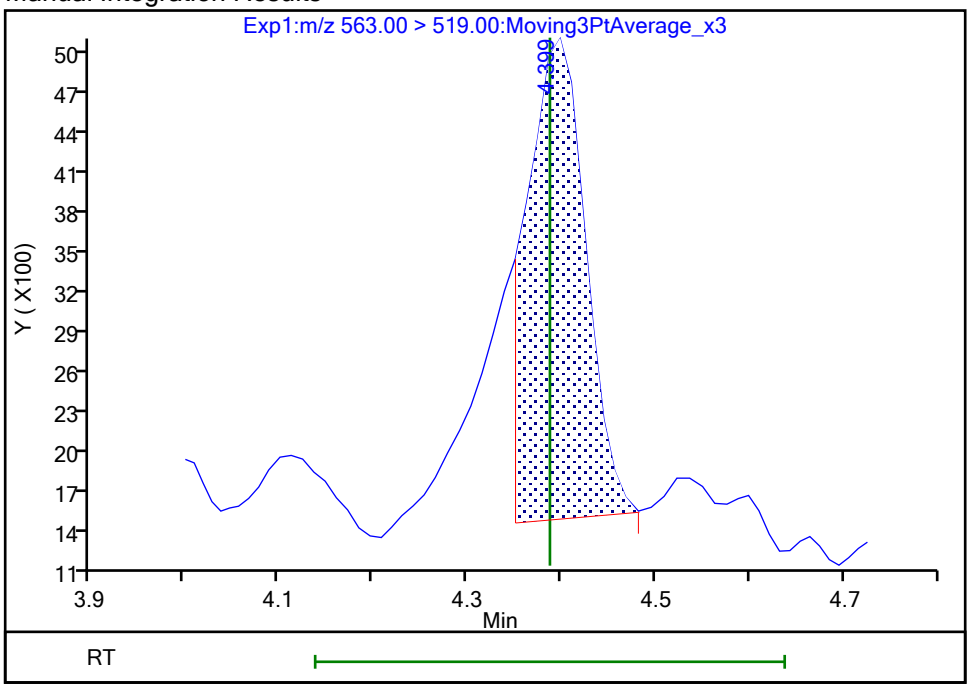
Processing Integration Results

RT: 4.40
Area: 18795
Amount: 0.010796
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 14964
Amount: 0.008596
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

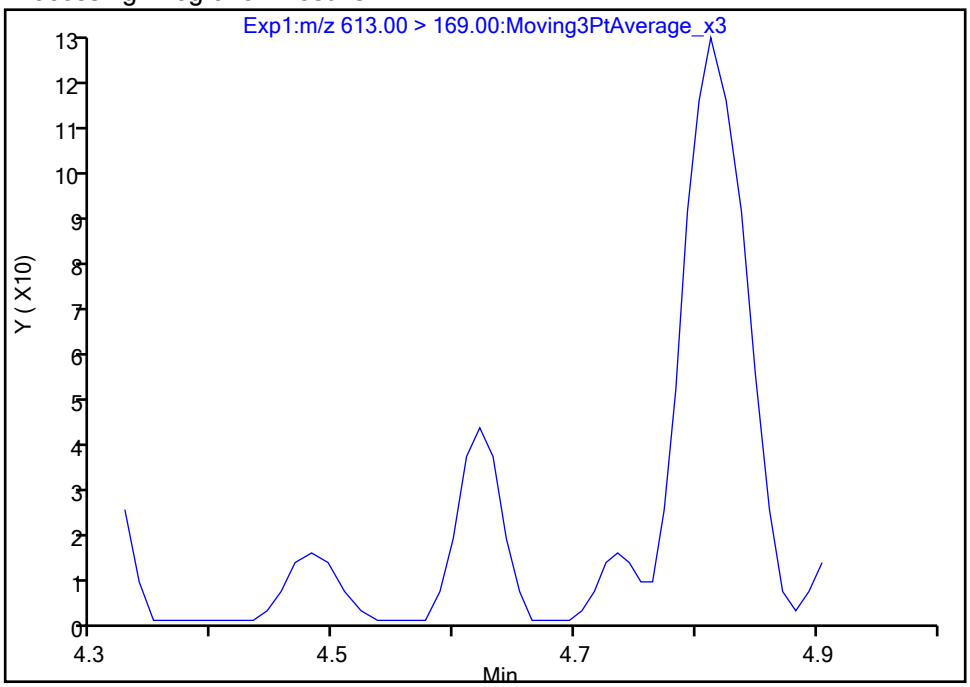
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

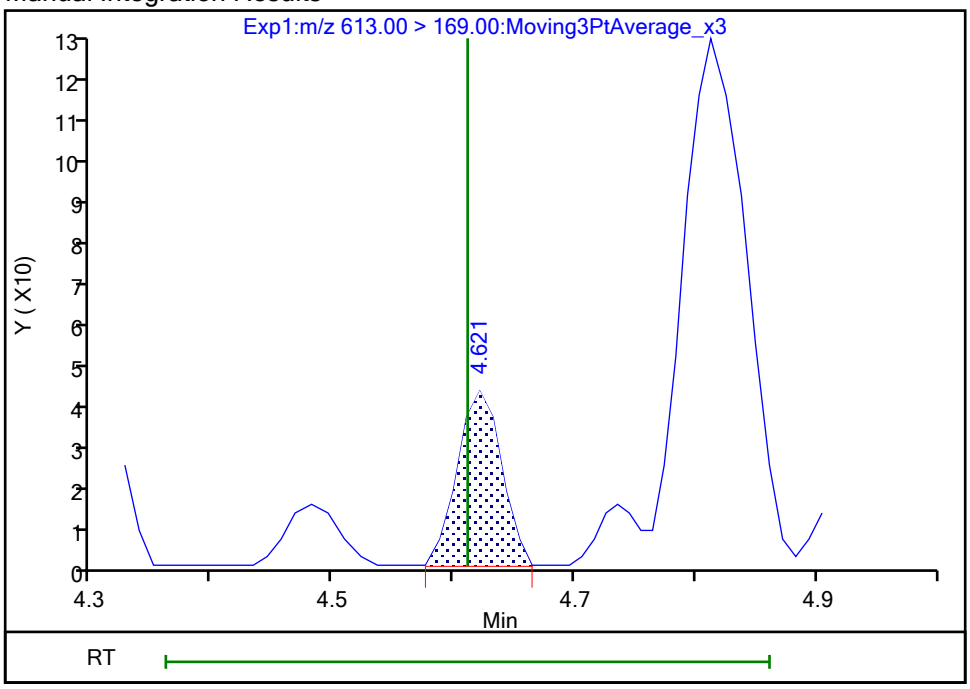
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 101
Amount: 0.001115
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

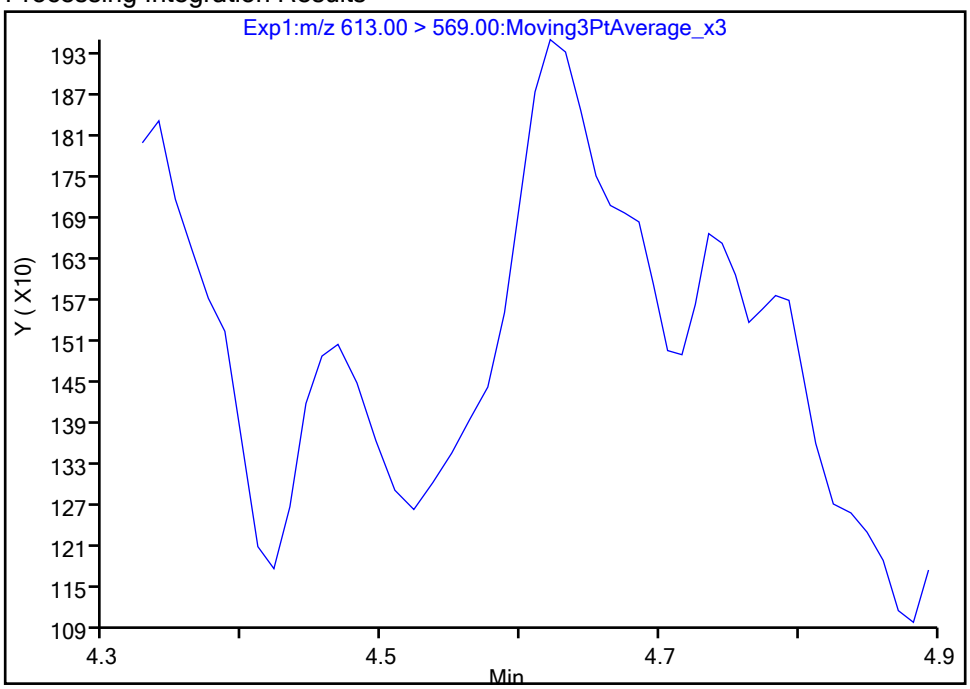
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

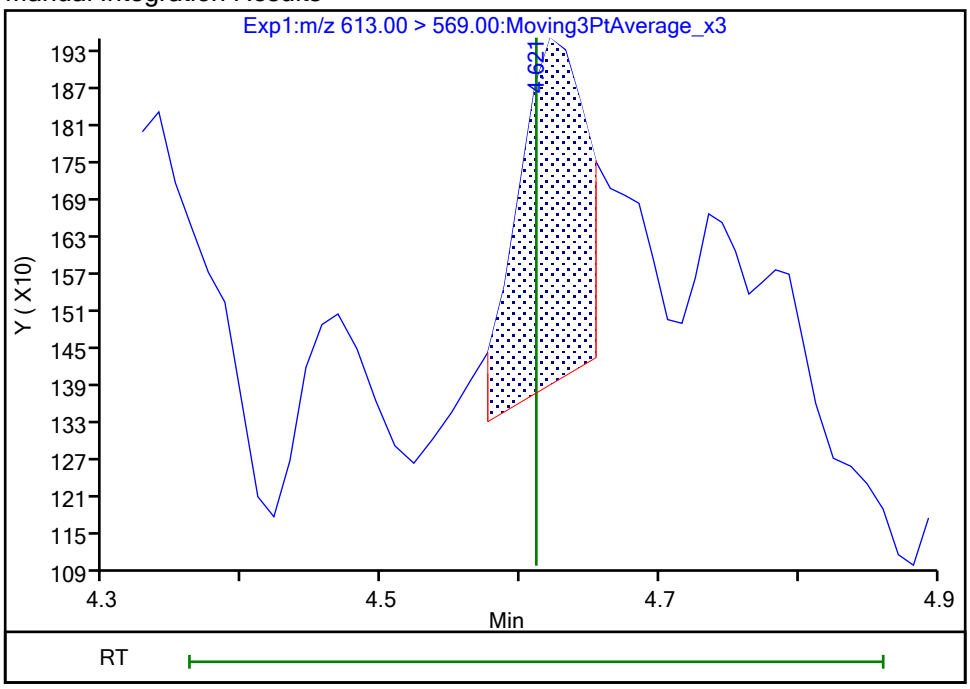
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 1831
Amount: 0.001115
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

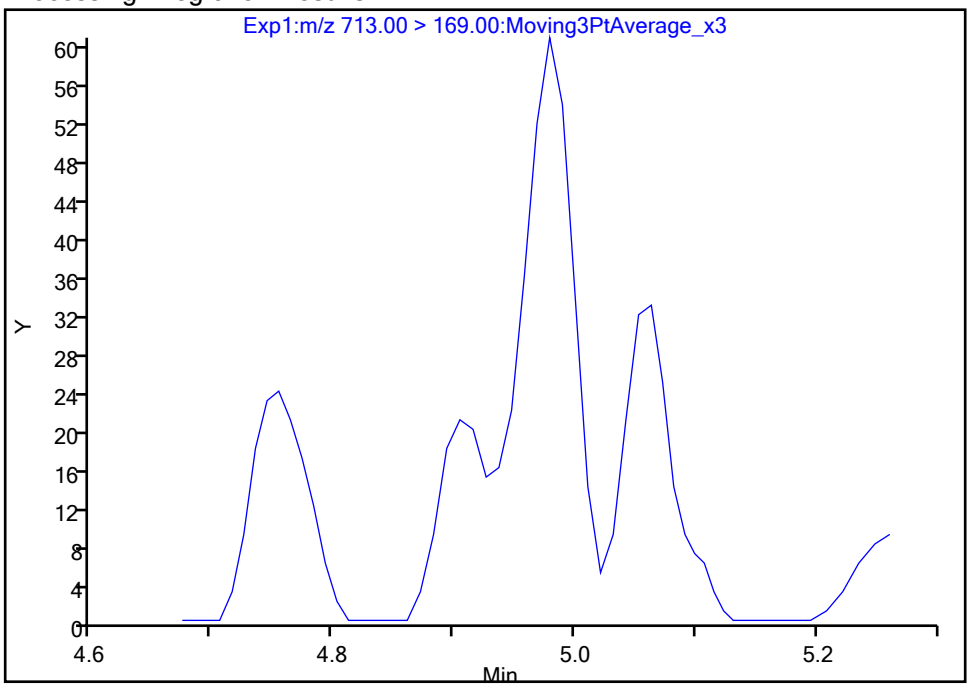
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

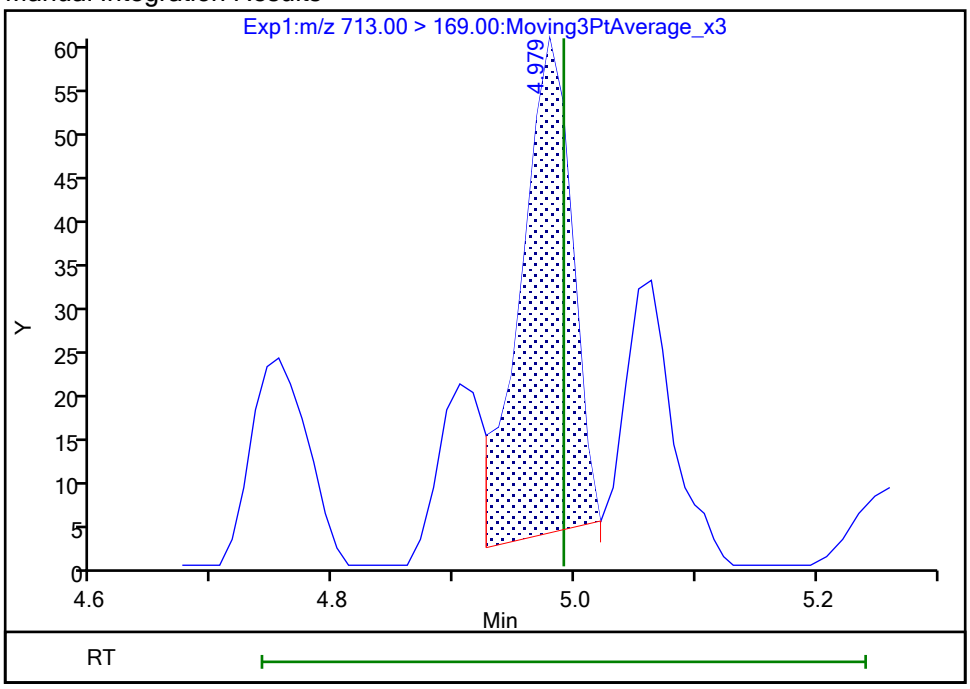
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 168
Amount: 0.000976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:58:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

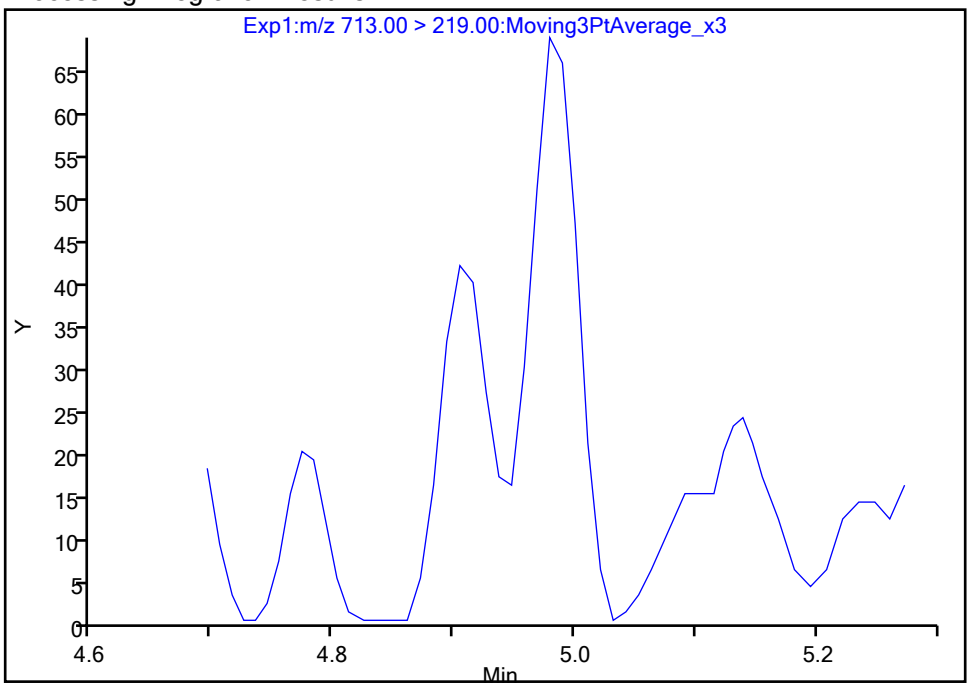
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

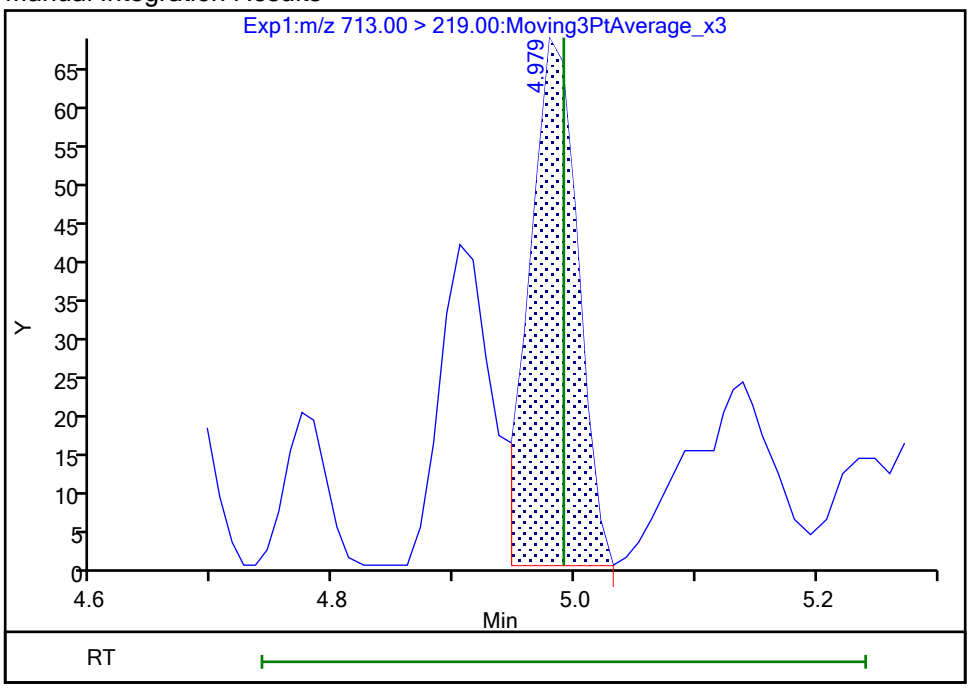
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 188
Amount: 0.000976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:58:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

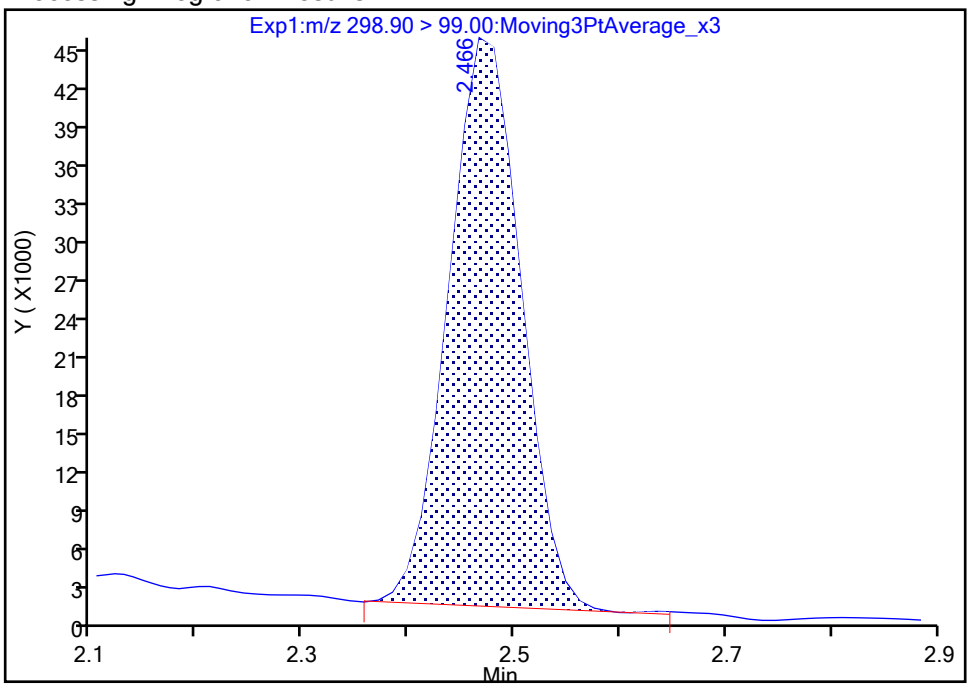
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

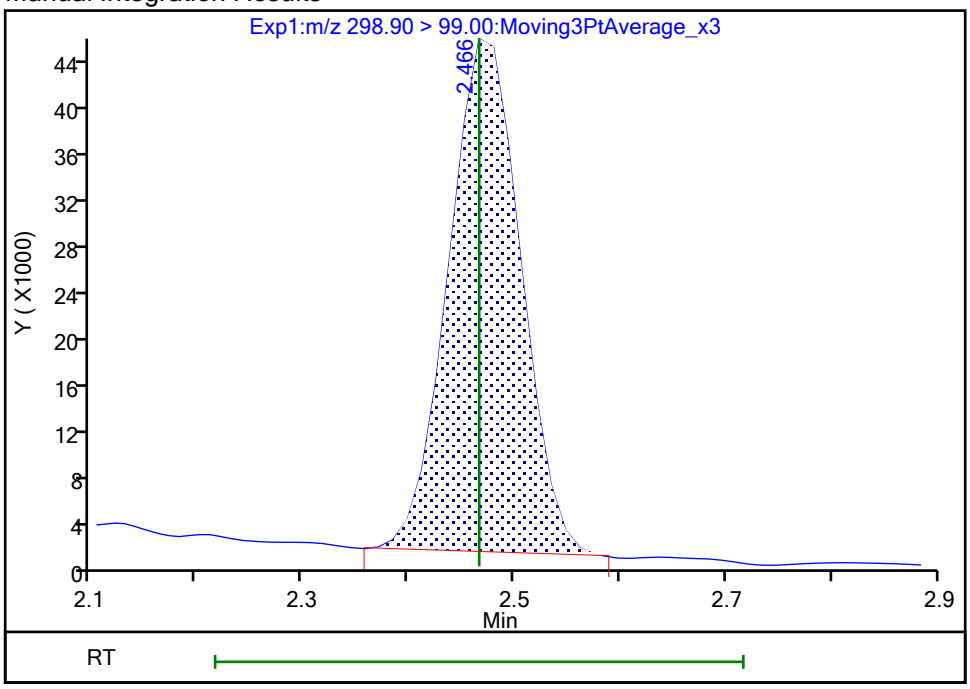
Processing Integration Results

RT: 2.47
Area: 207899
Amount: 0.322880
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 206764
Amount: 0.253626
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

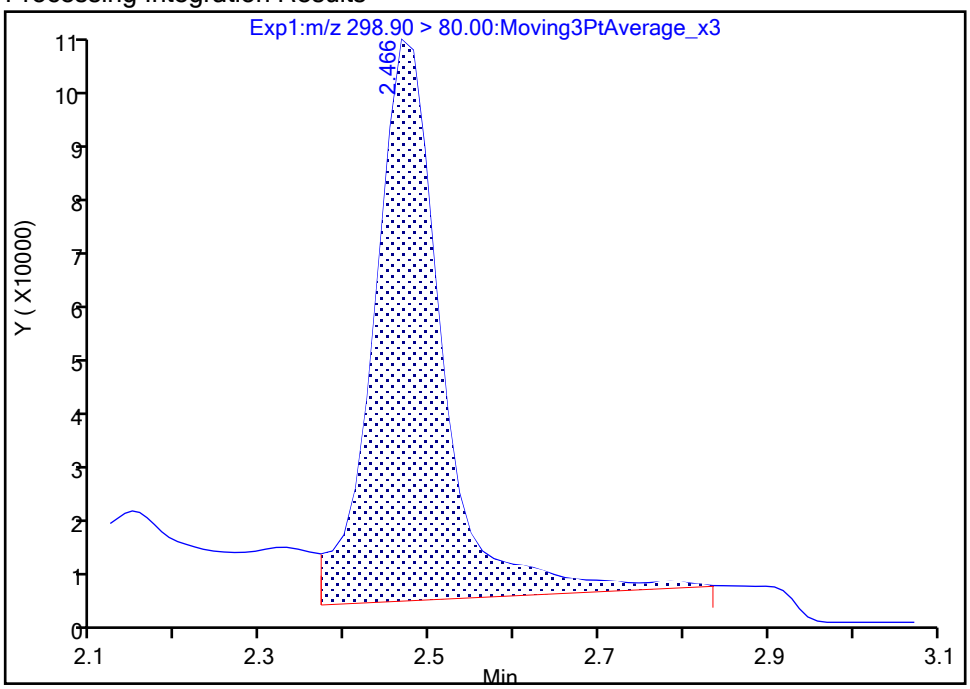
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

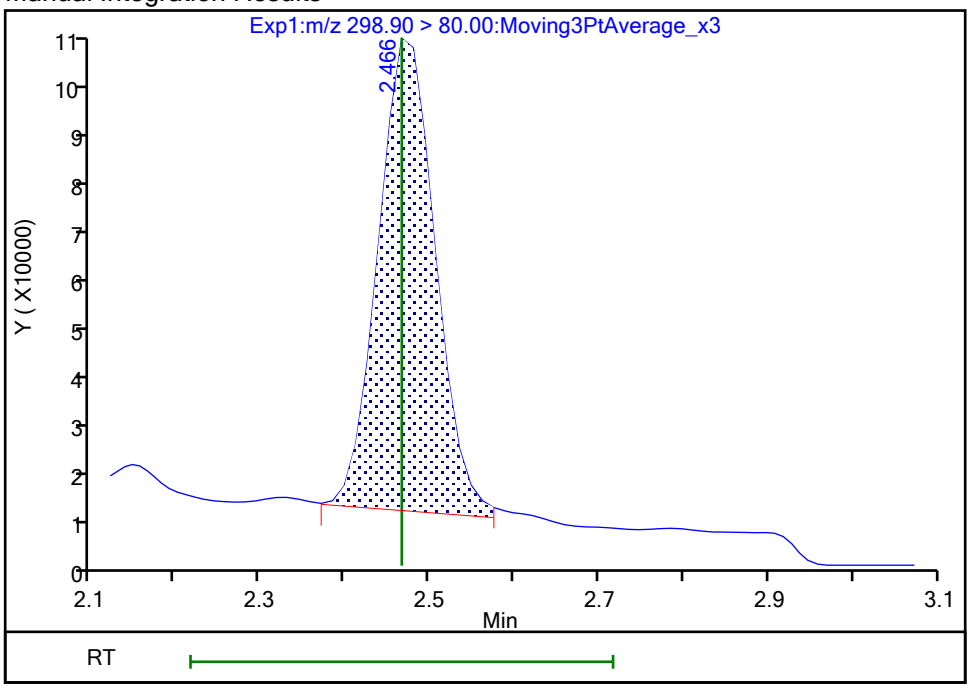
Processing Integration Results

RT: 2.47
Area: 537556
Amount: 0.322880
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 422256
Amount: 0.253626
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

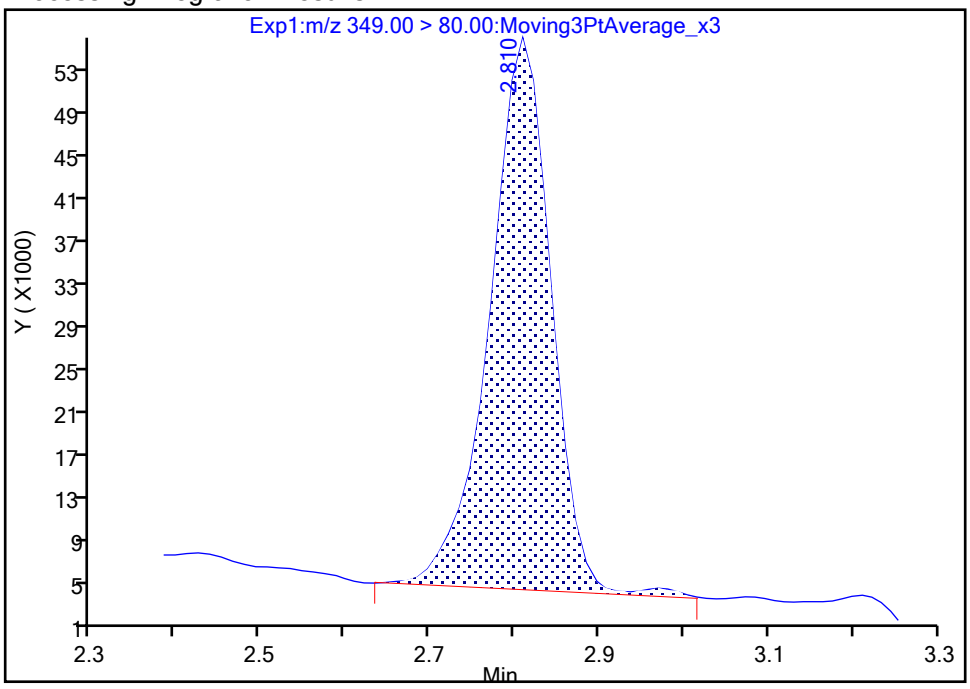
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

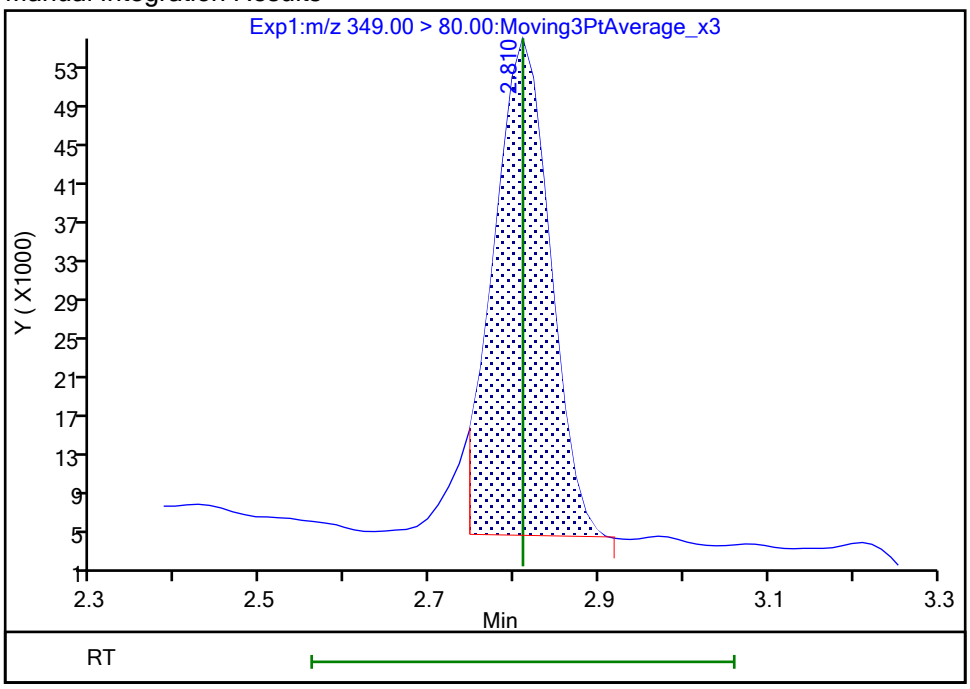
Processing Integration Results

RT: 2.81
Area: 258663
Amount: 0.167594
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 236466
Amount: 0.153212
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

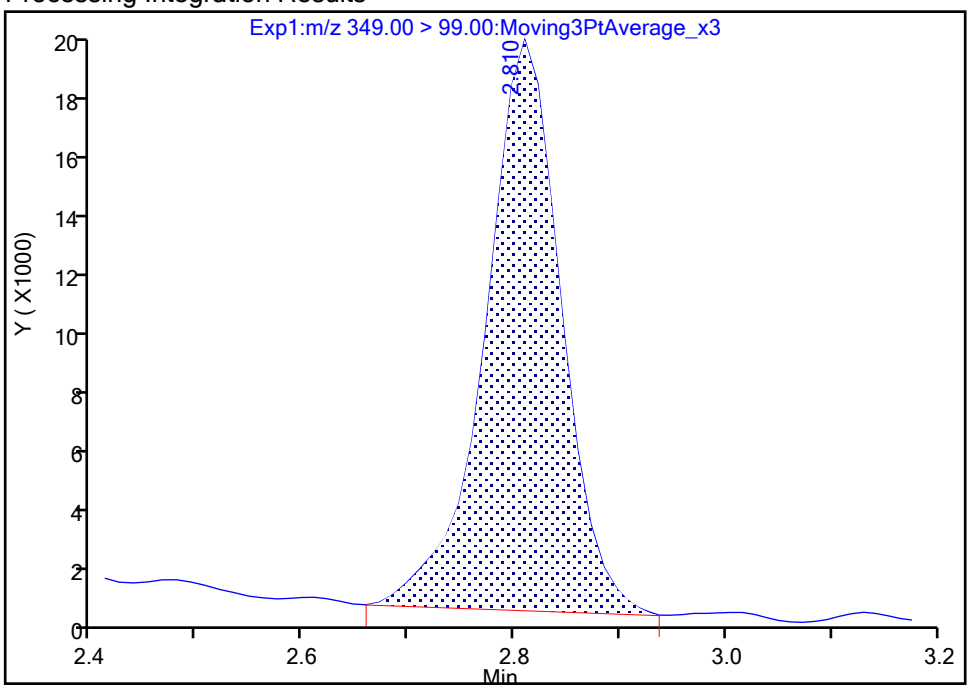
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

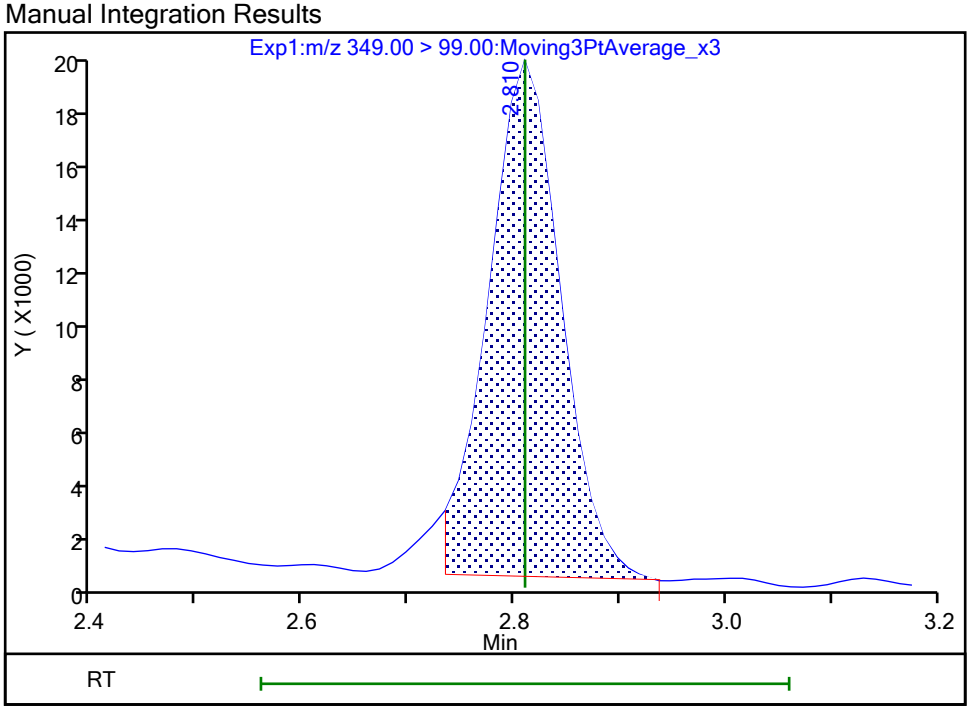
Processing Integration Results

RT: 2.81
Area: 93585
Amount: 0.167594
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 89584
Amount: 0.153212
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

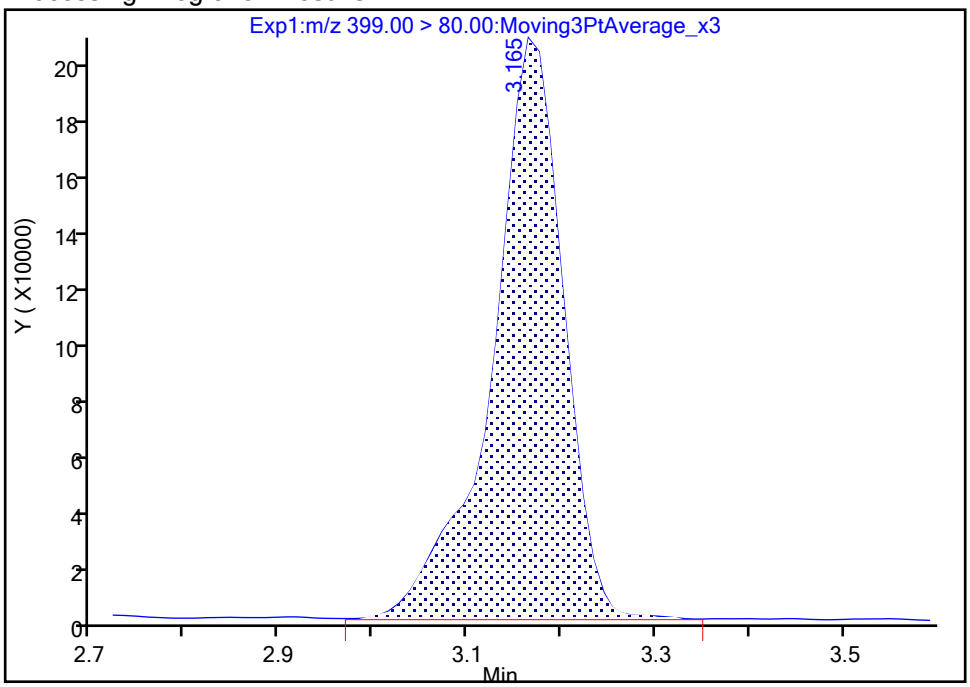
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

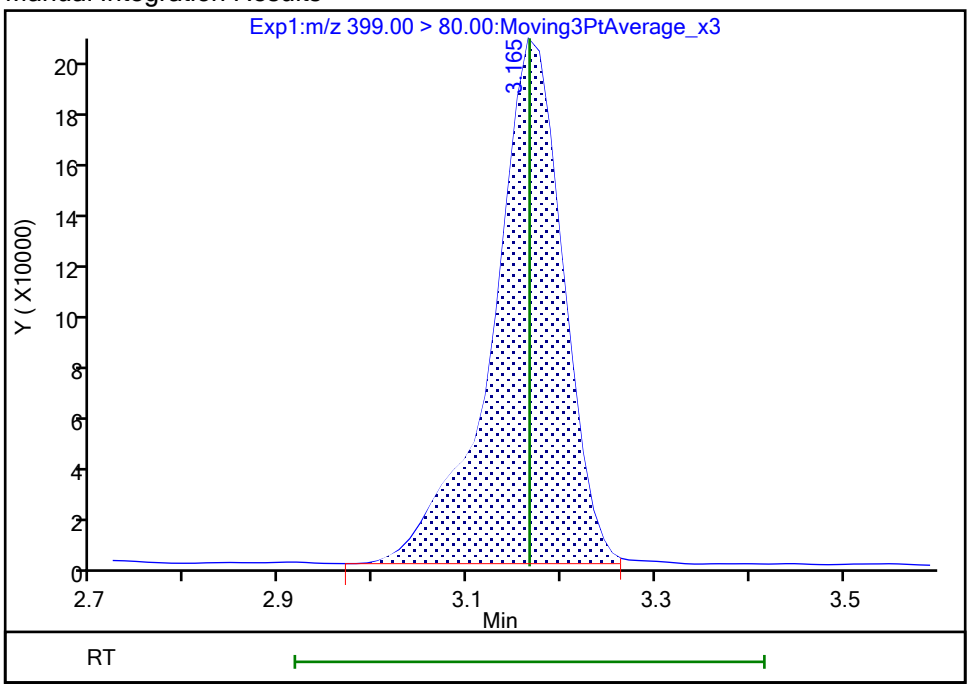
Processing Integration Results

RT: 3.16
Area: 1065225
Amount: 0.814207
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1060852
Amount: 0.810864
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

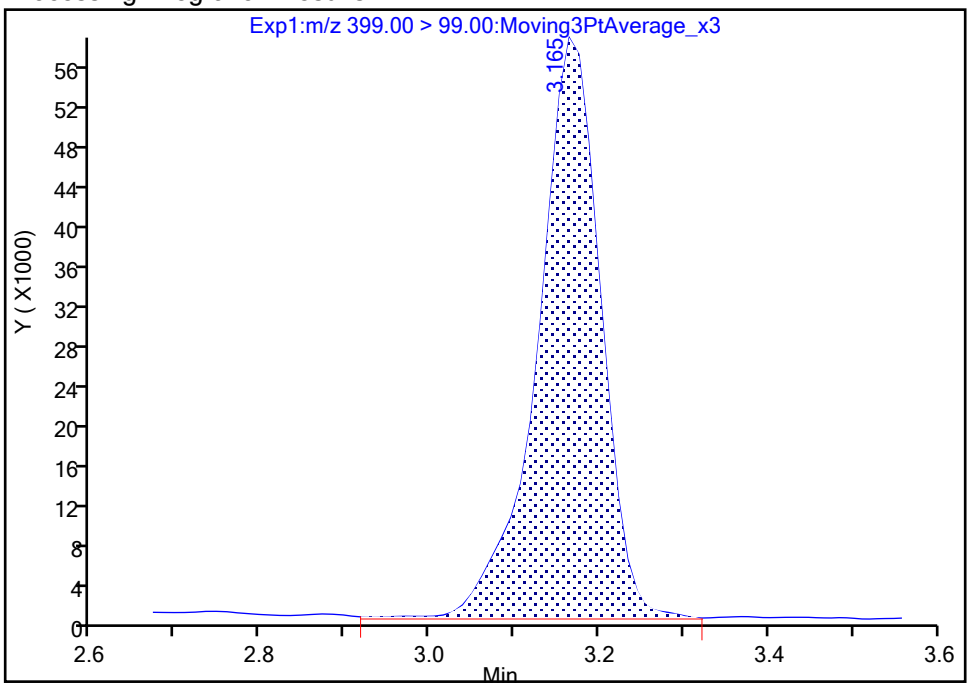
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

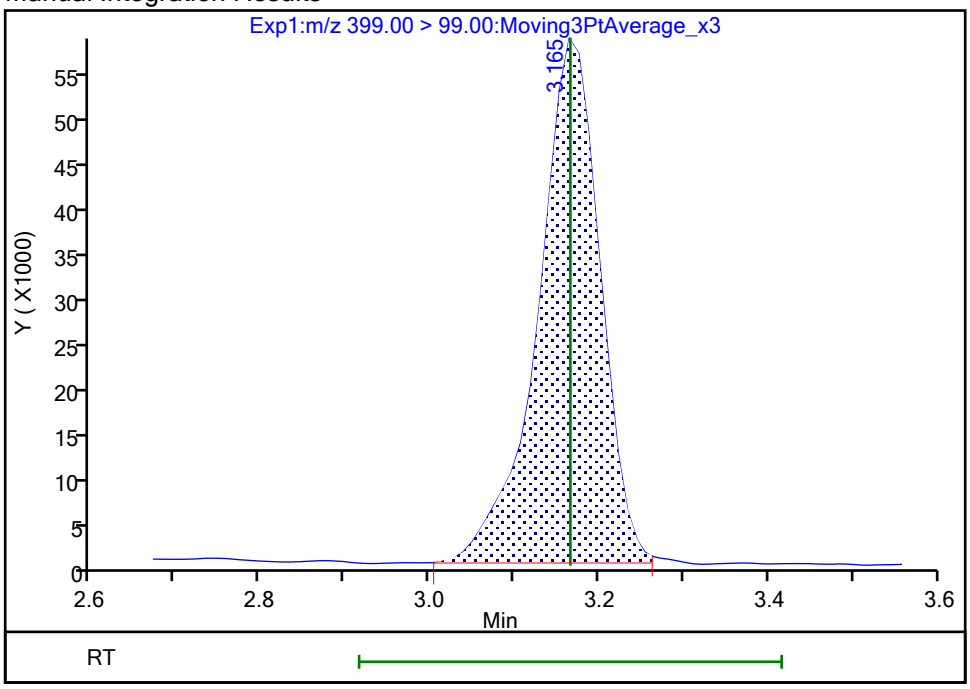
Processing Integration Results

RT: 3.16
Area: 303954
Amount: 0.814207
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 297183
Amount: 0.810864
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

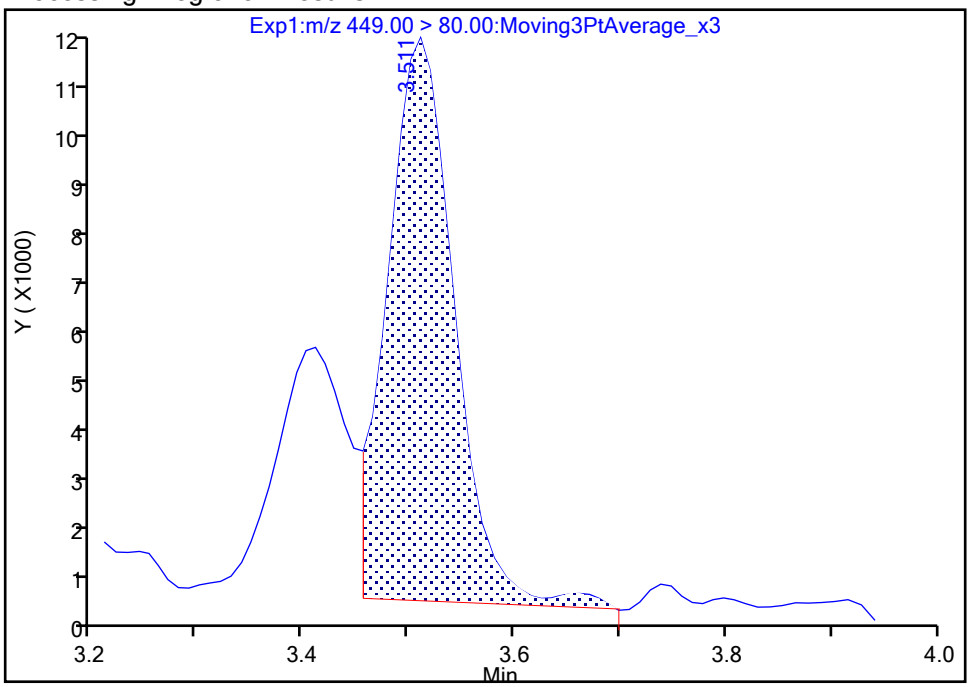
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

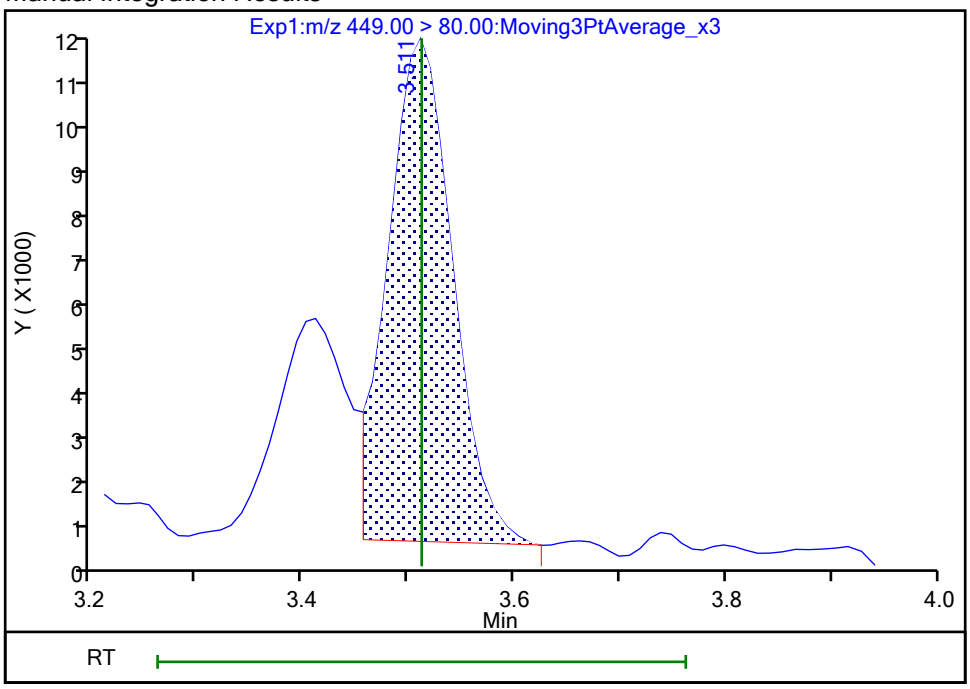
Processing Integration Results

RT: 3.51
Area: 45994
Amount: 0.041718
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 43900
Amount: 0.039819
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

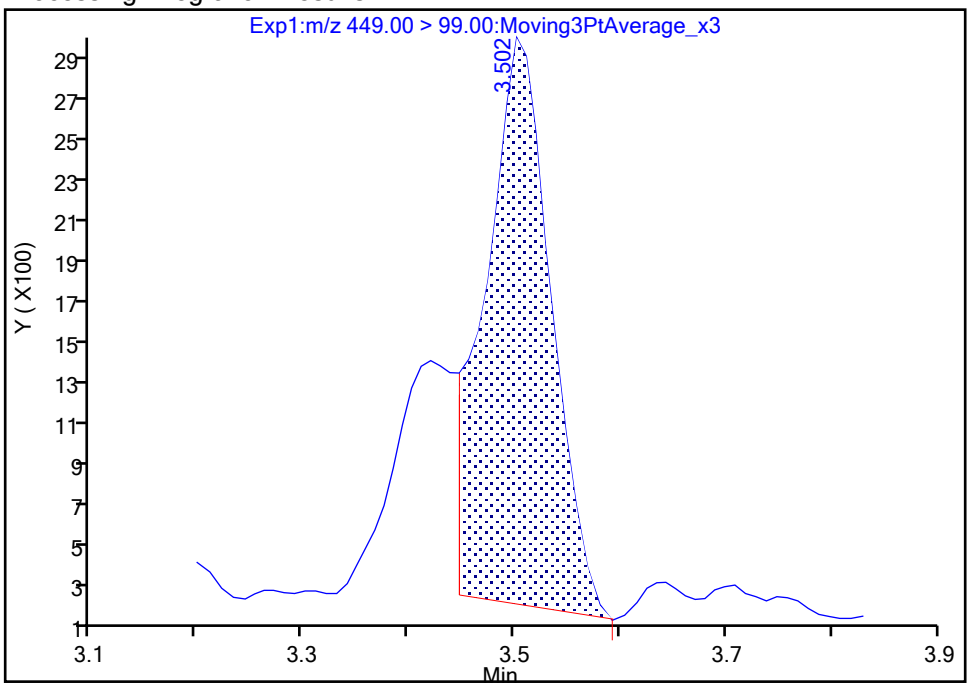
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

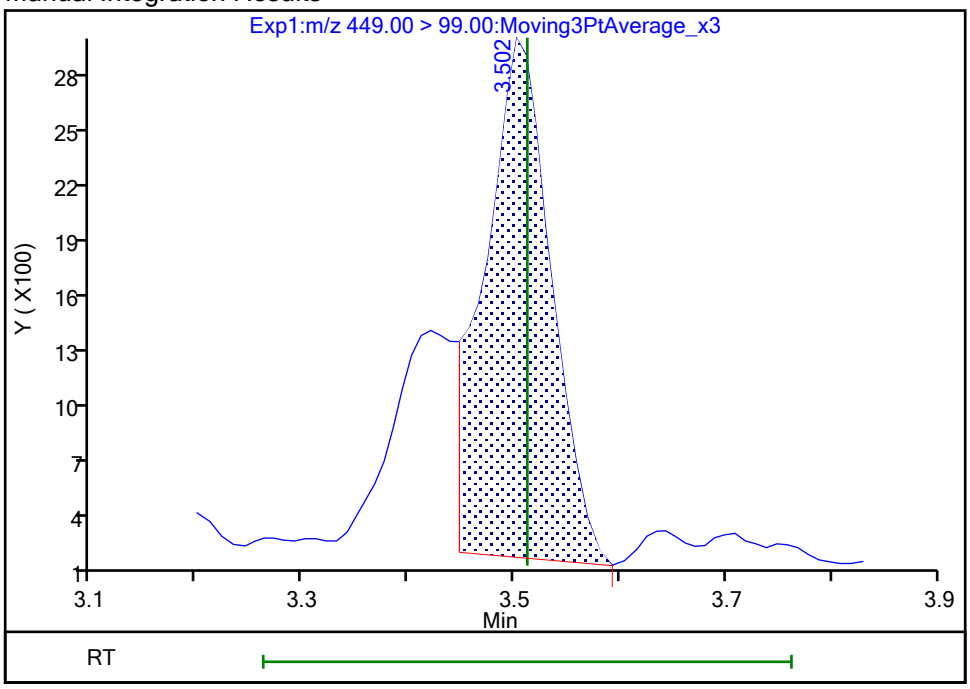
Processing Integration Results

RT: 3.50
Area: 11578
Amount: 0.041718
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 11782
Amount: 0.039819
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

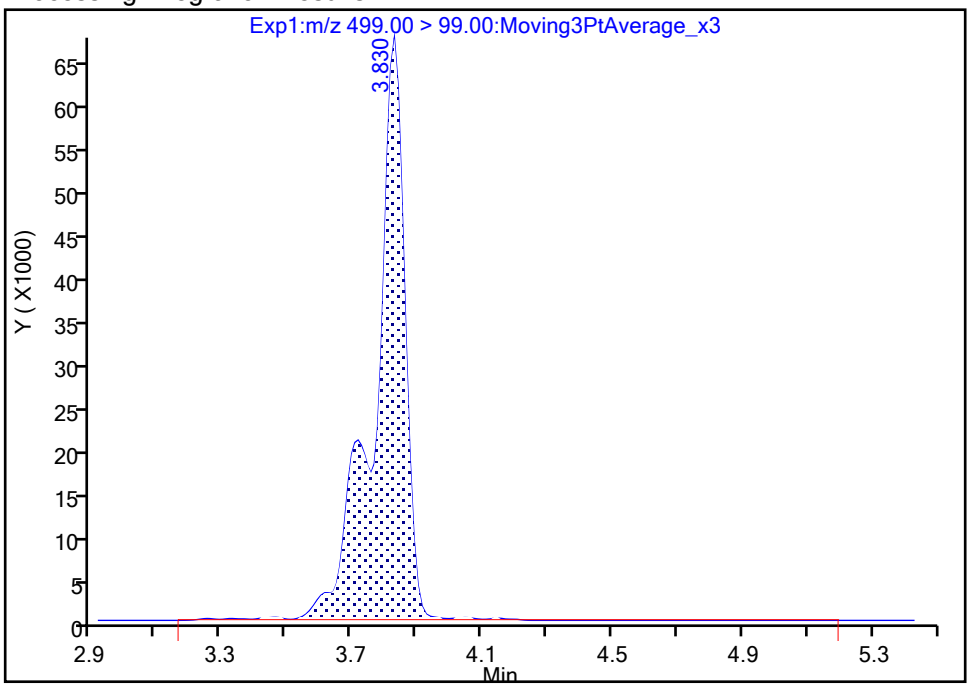
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

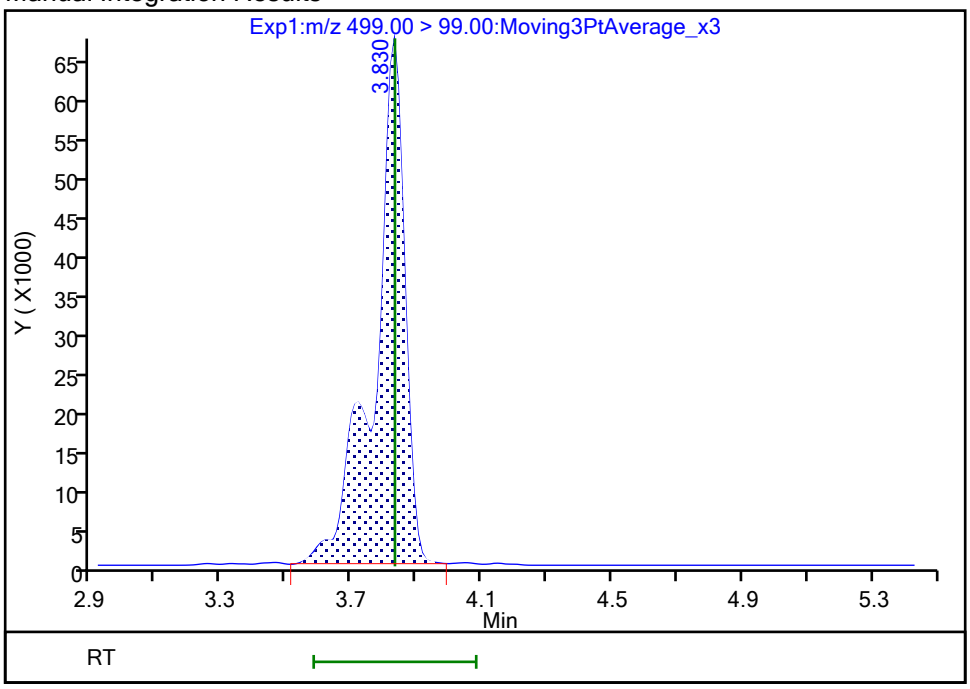
Processing Integration Results

RT: 3.83
Area: 450960
Amount: 1.884529
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 440962
Amount: 1.835753
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

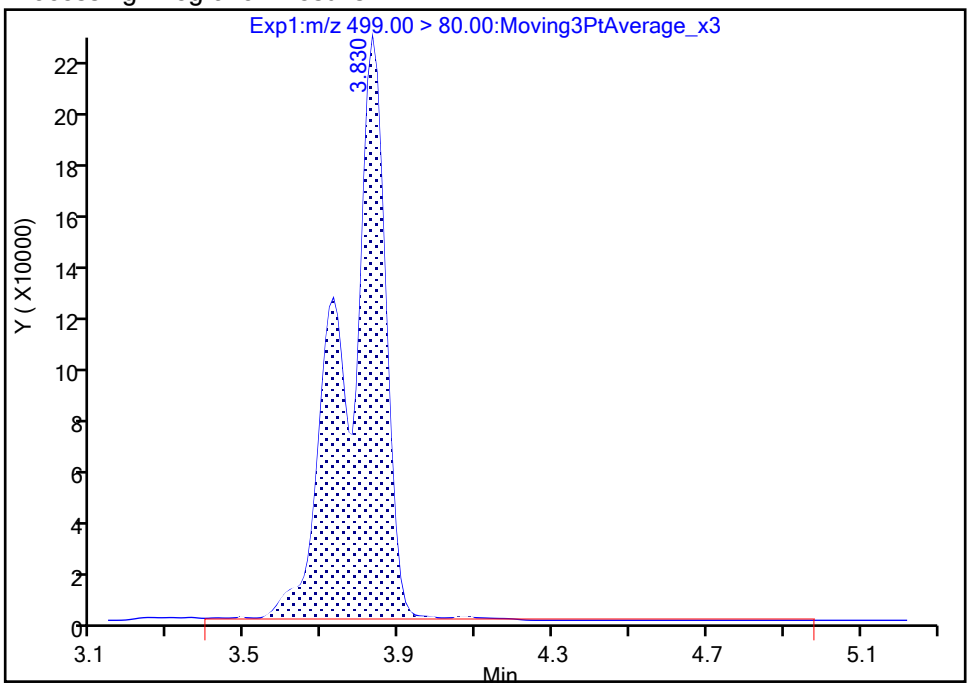
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

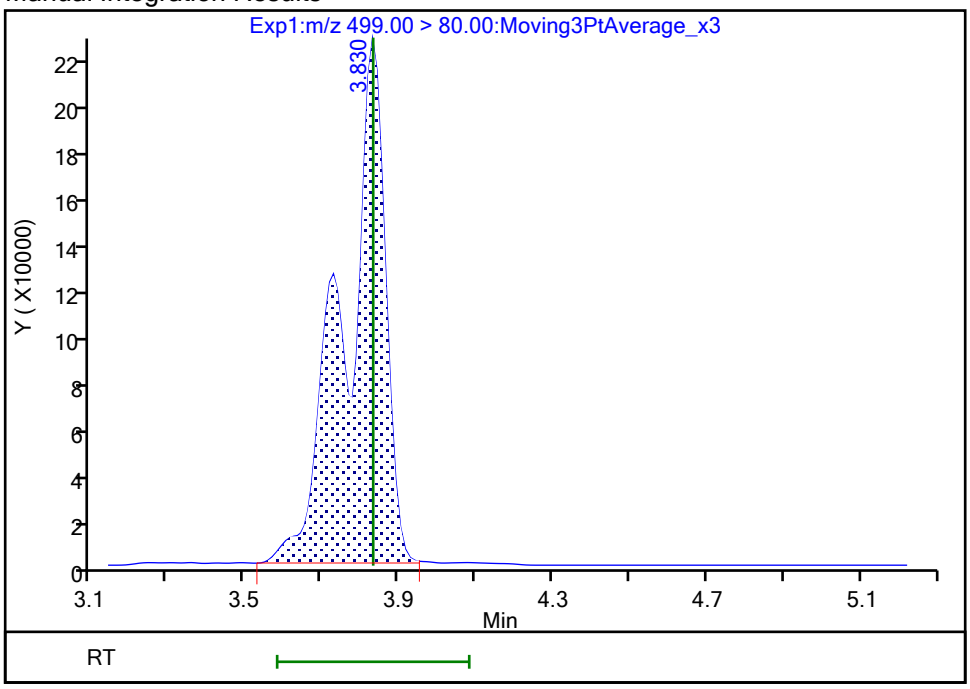
Processing Integration Results

RT: 3.83
Area: 1676883
Amount: 1.884529
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 1633482
Amount: 1.835753
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

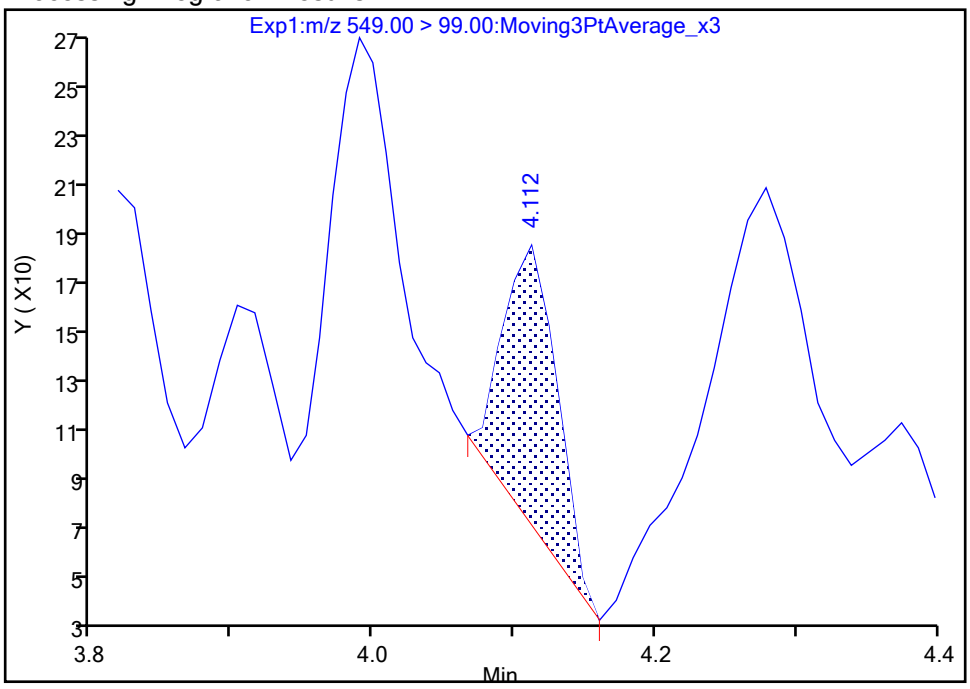
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

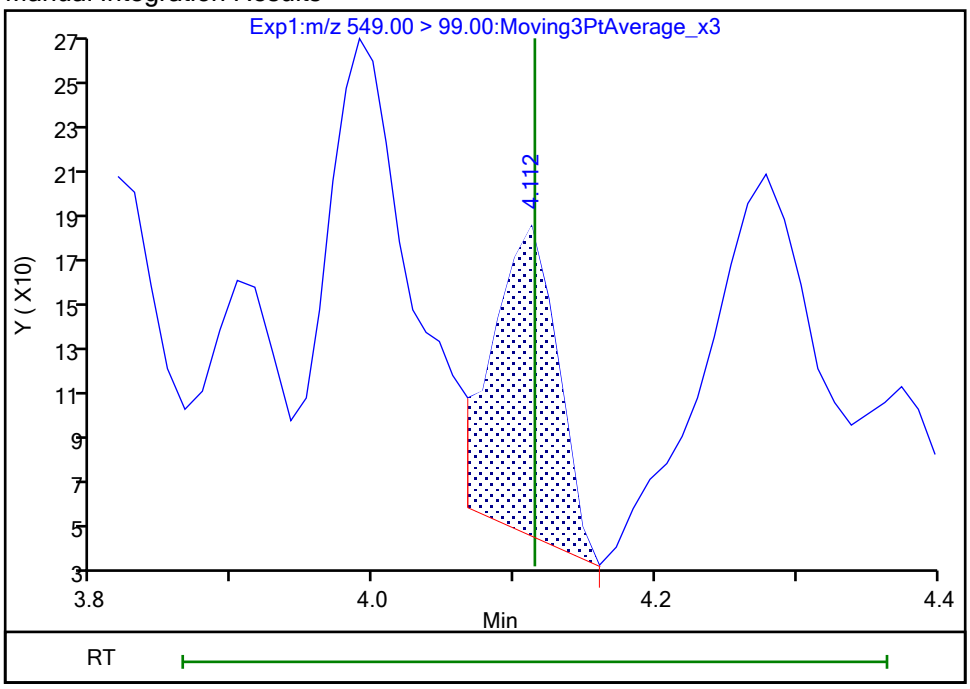
Processing Integration Results

RT: 4.11
Area: 293
Amount: 0.001886
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 428
Amount: 0.001886
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

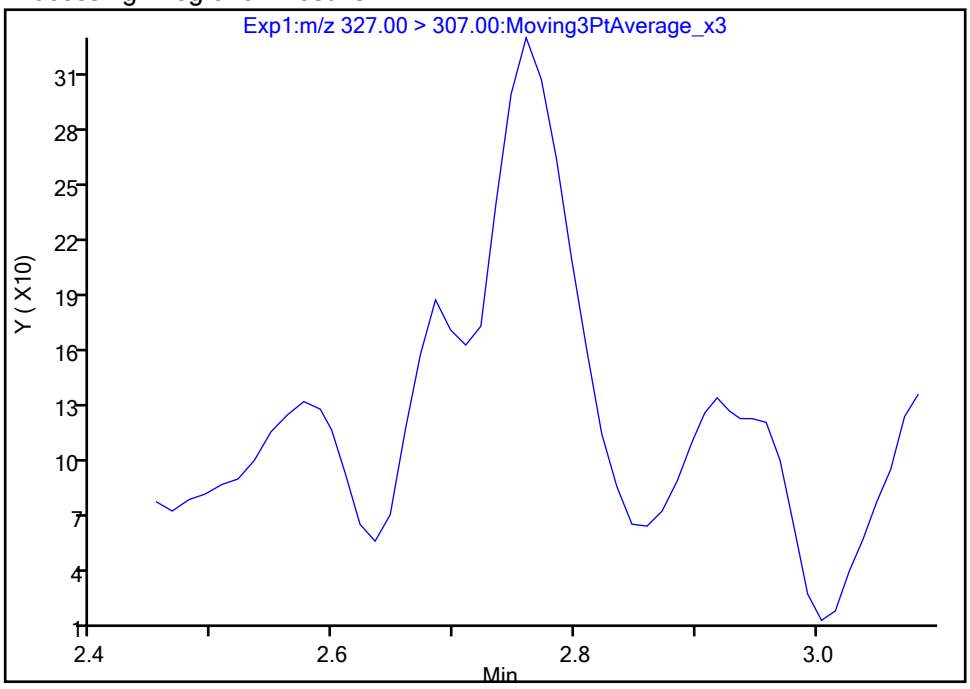
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

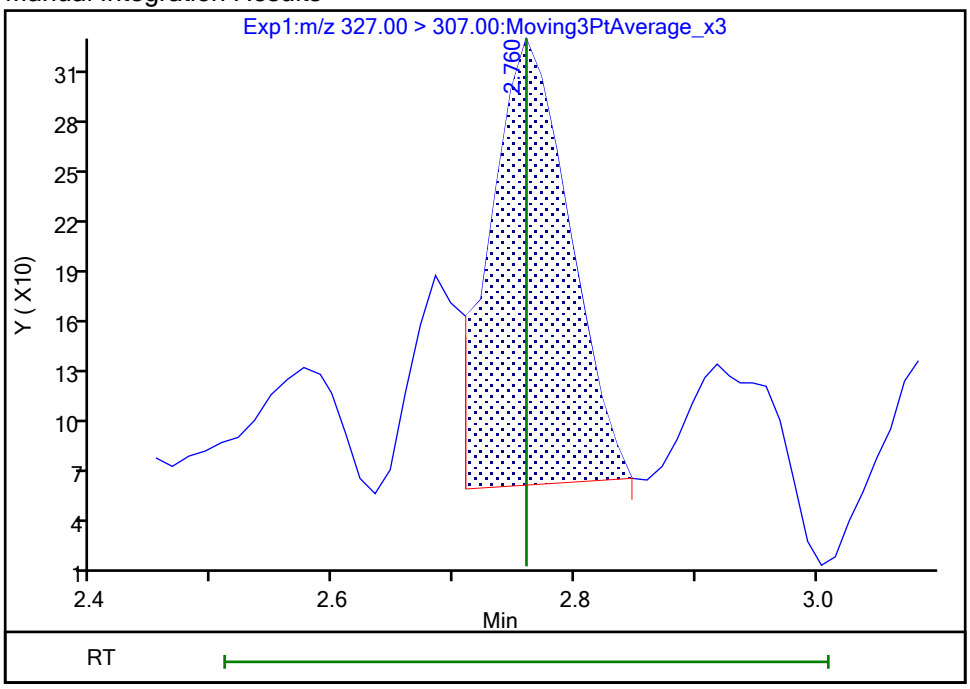
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 1181
Amount: 0.002070
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

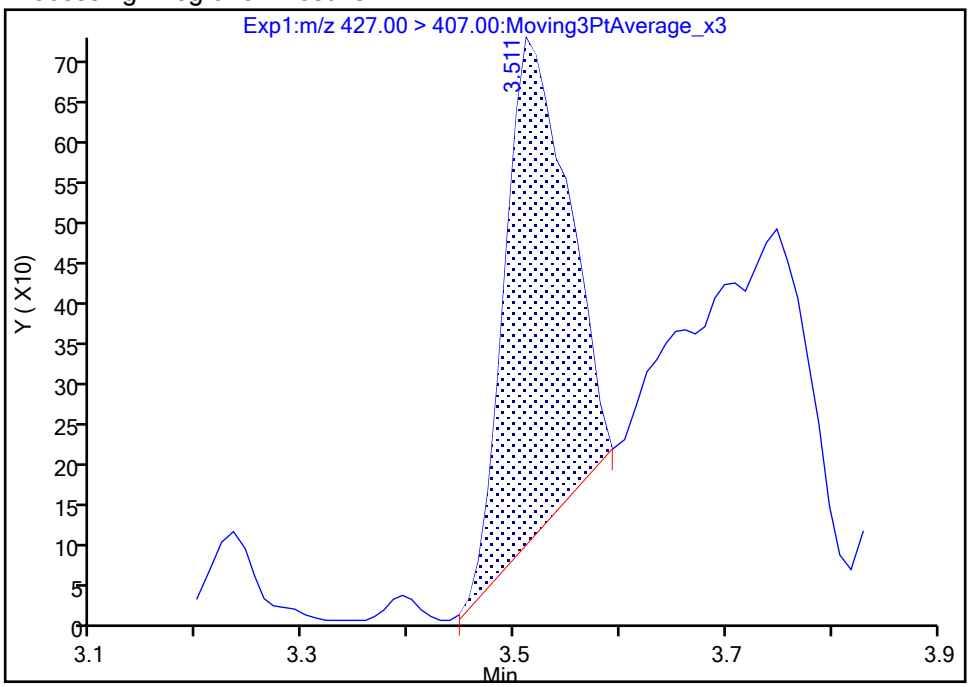
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

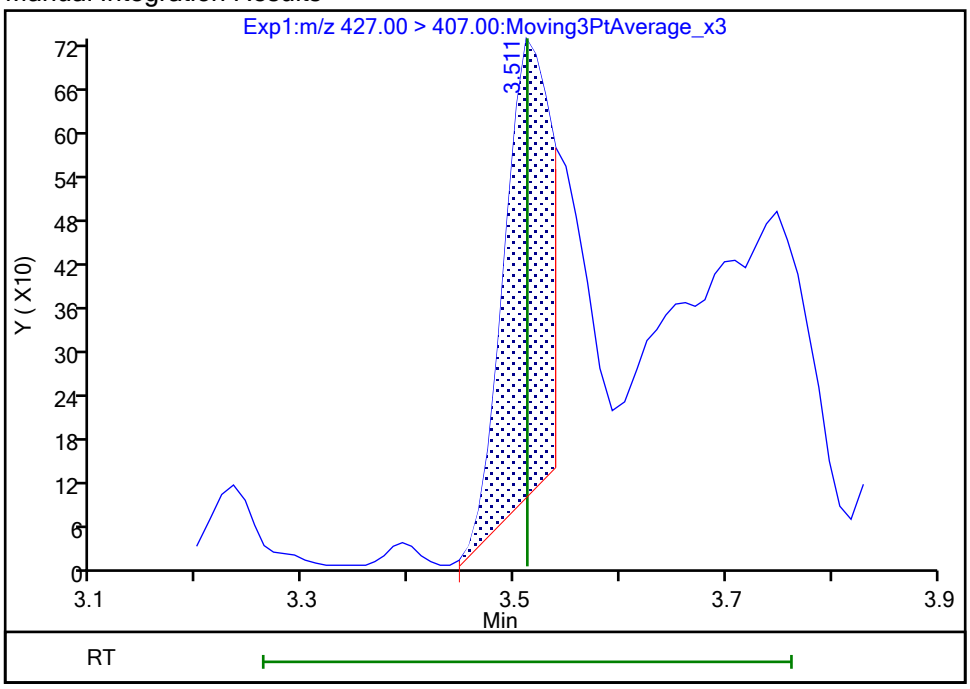
Processing Integration Results

RT: 3.51
Area: 2591
Amount: 0.003914
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1837
Amount: 0.002775
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:55:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

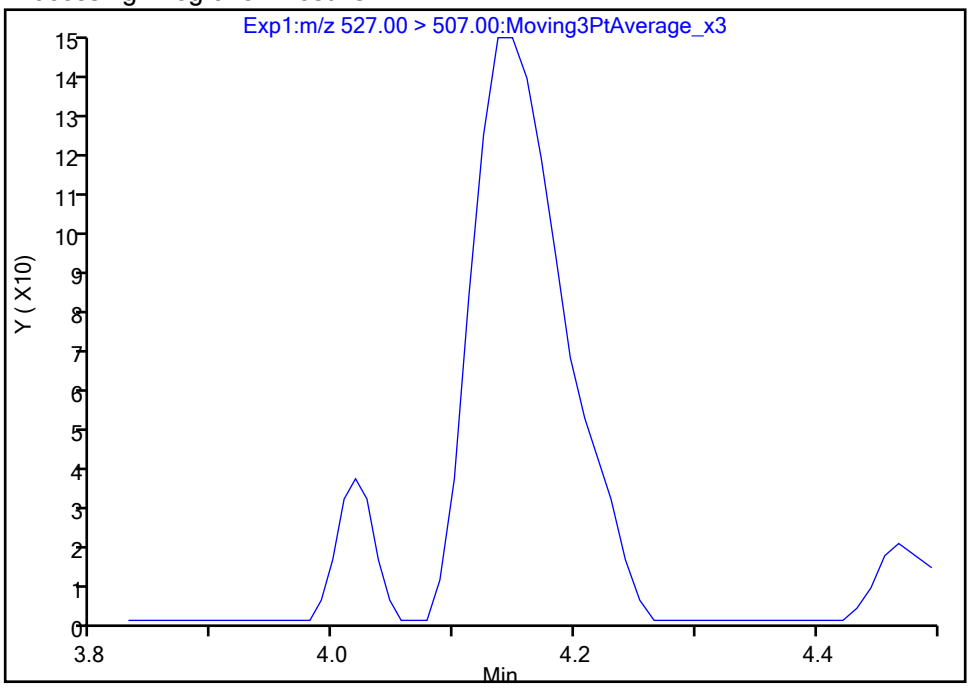
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

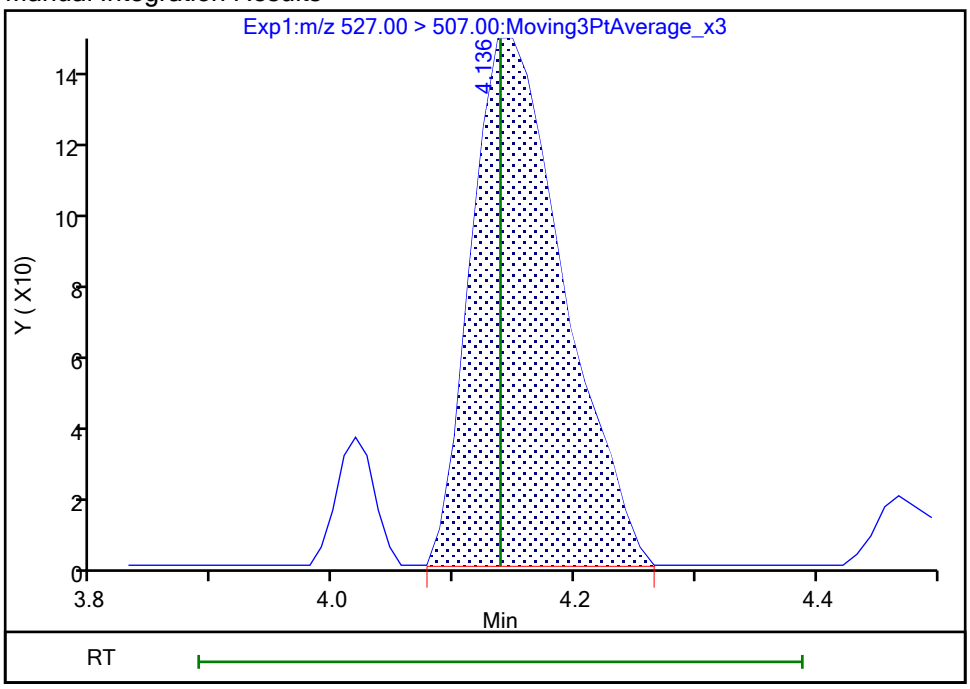
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 768
Amount: 0.001337
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:56:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

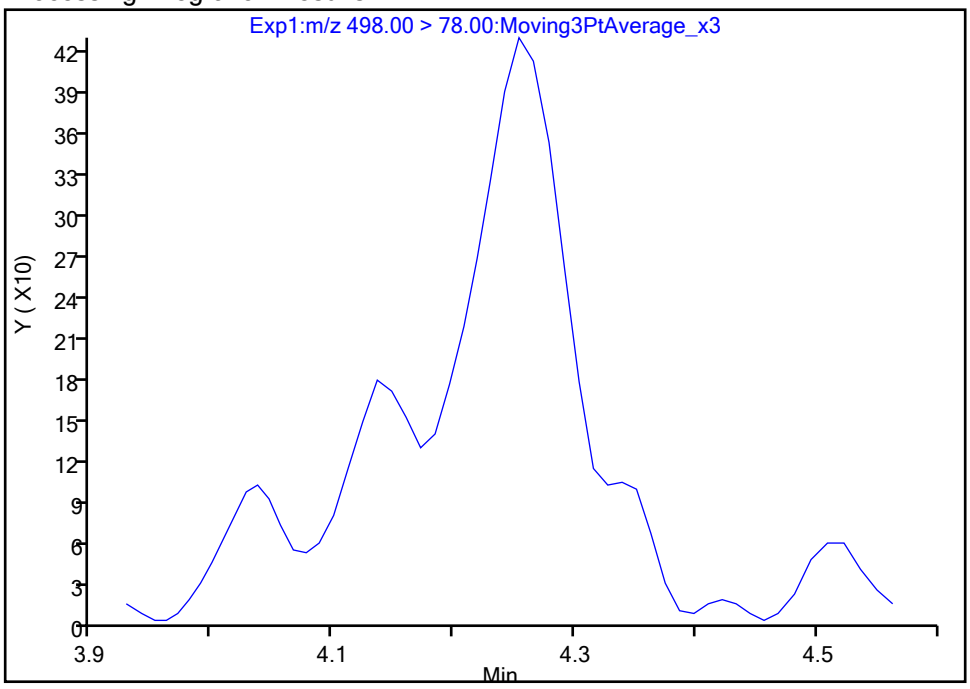
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

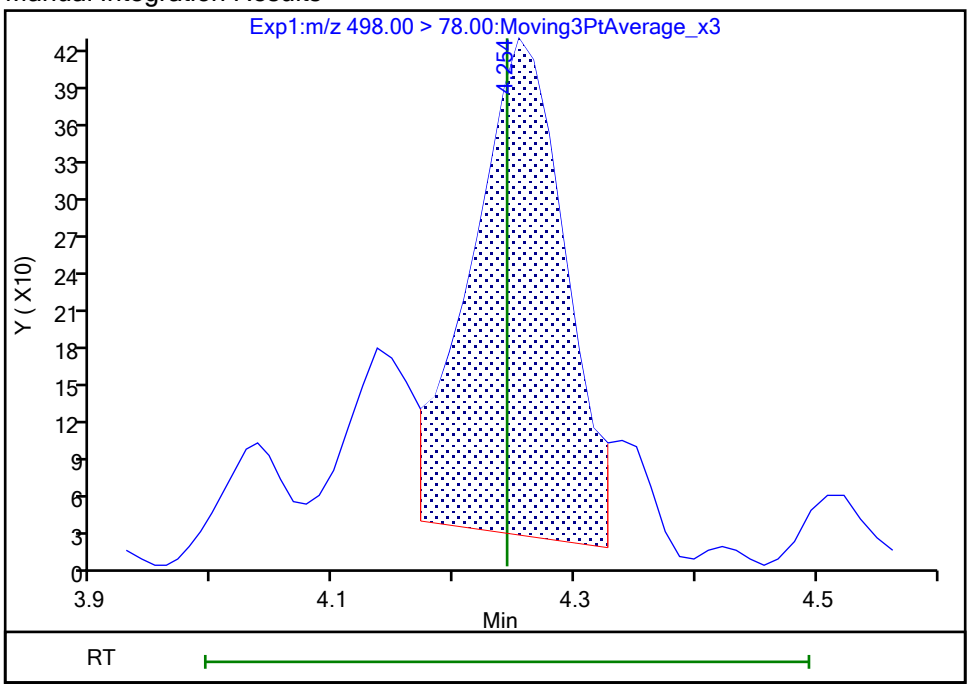
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 2135
Amount: 0.001922
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

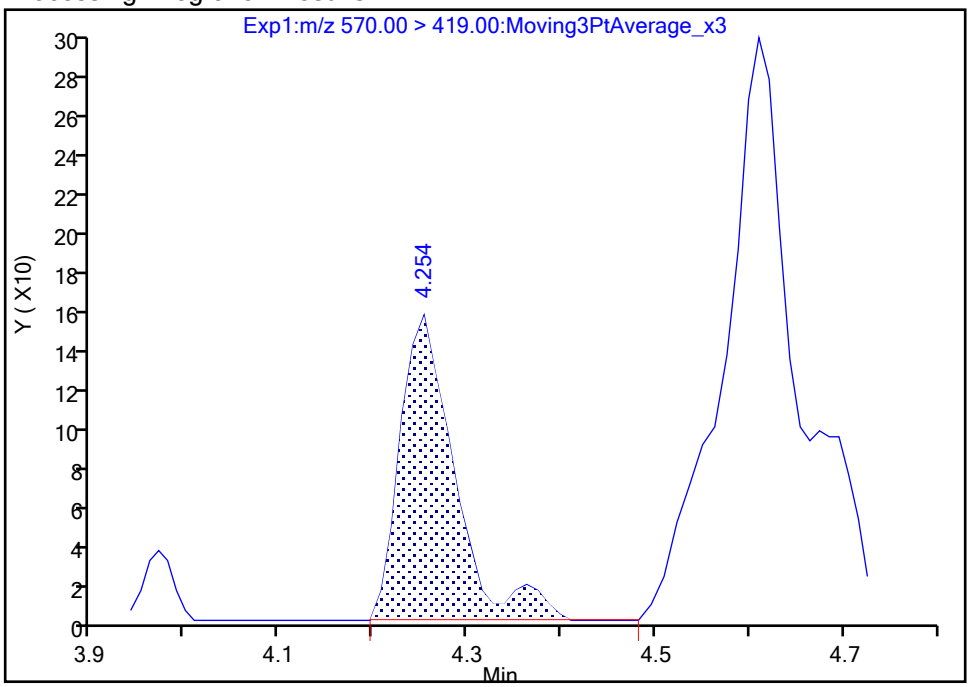
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

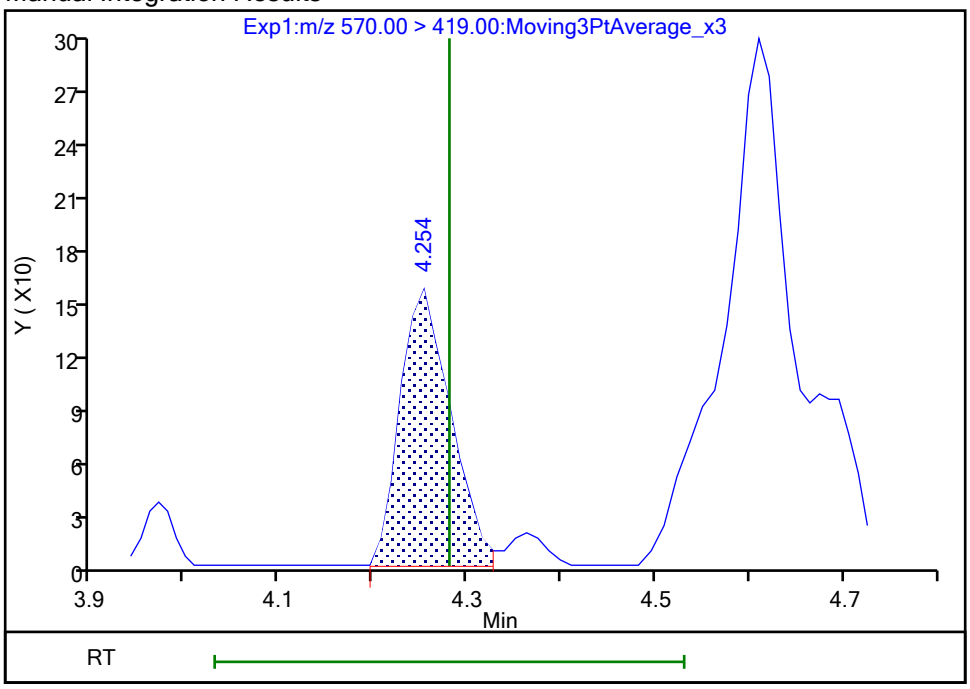
Processing Integration Results

RT: 4.25
Area: 619
Amount: 0.001691
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 569
Amount: 0.001554
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

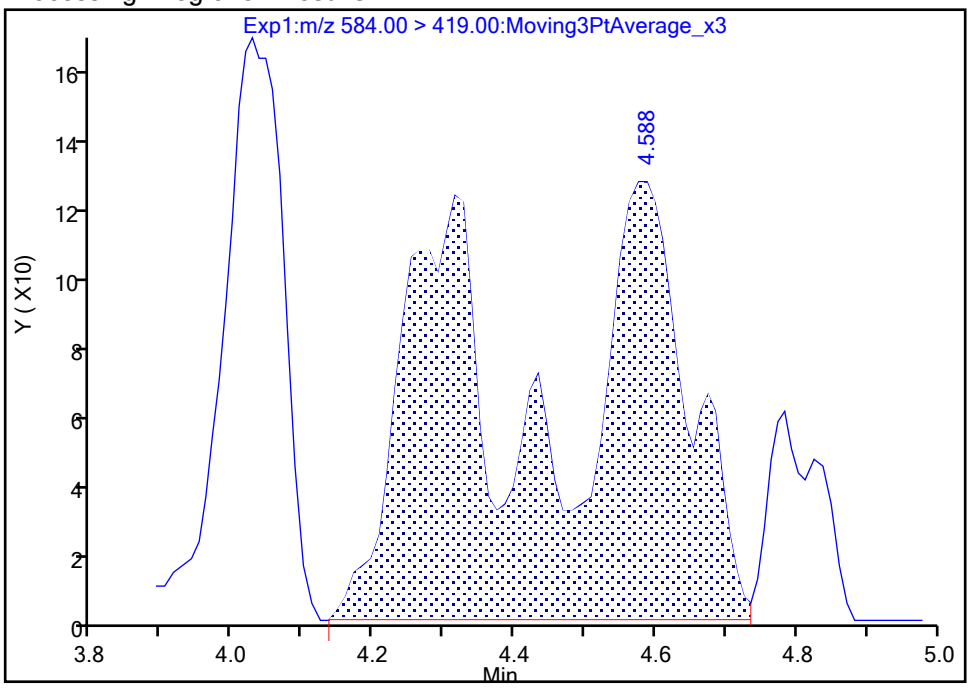
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

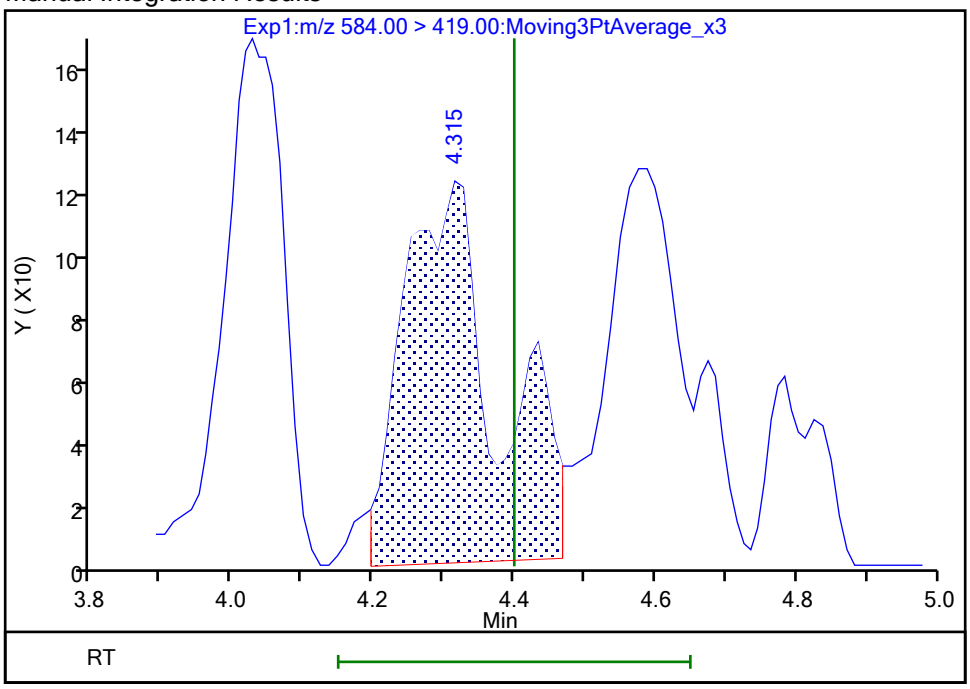
Processing Integration Results

RT: 4.59
Area: 2257
Amount: 0.005898
Amount Units: ng/ml



Manual Integration Results

RT: 4.32
Area: 1135
Amount: 0.002966
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:57:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

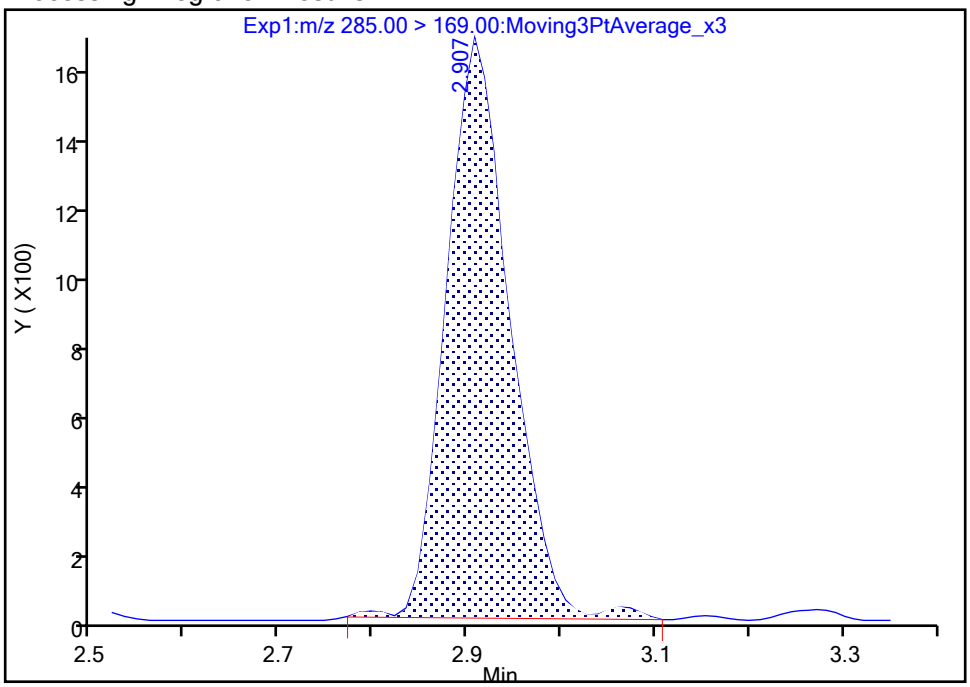
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

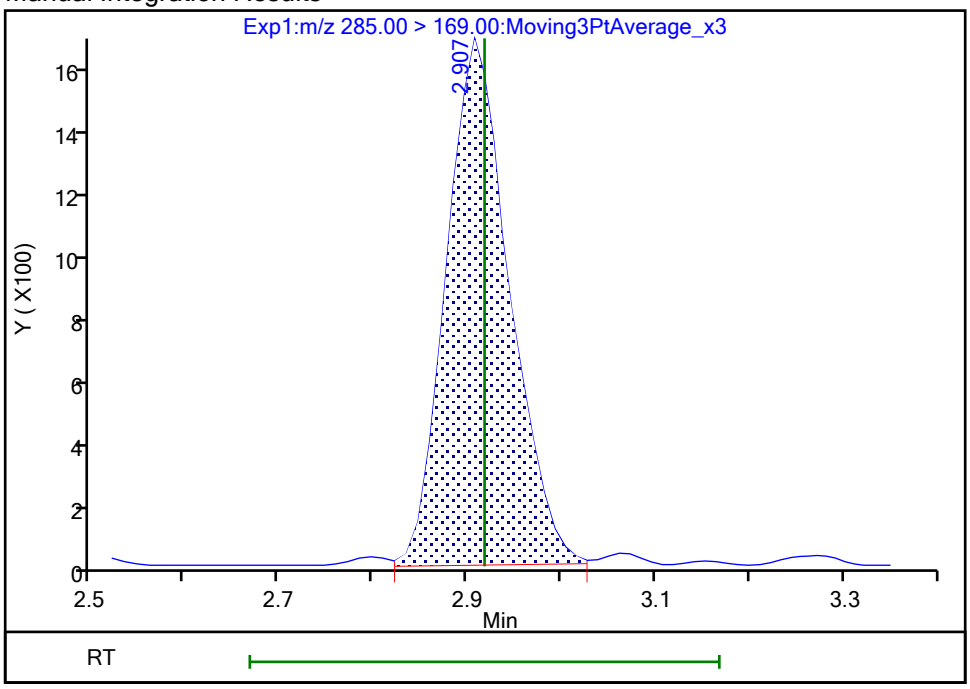
Processing Integration Results

RT: 2.91
Area: 7603
Amount: 0.038563
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 7558
Amount: 0.038335
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:54:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

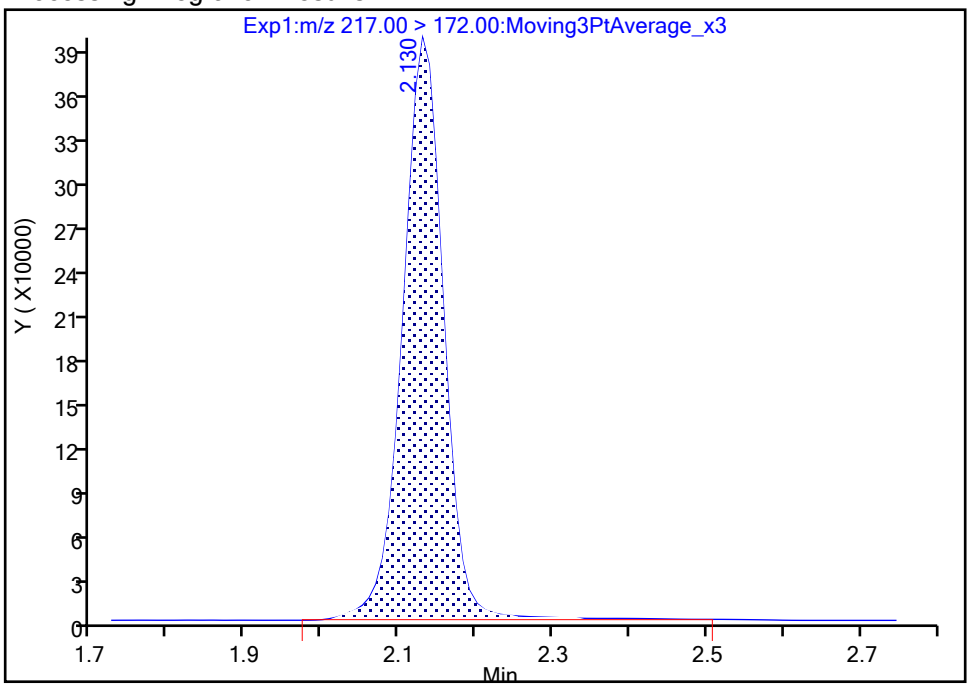
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

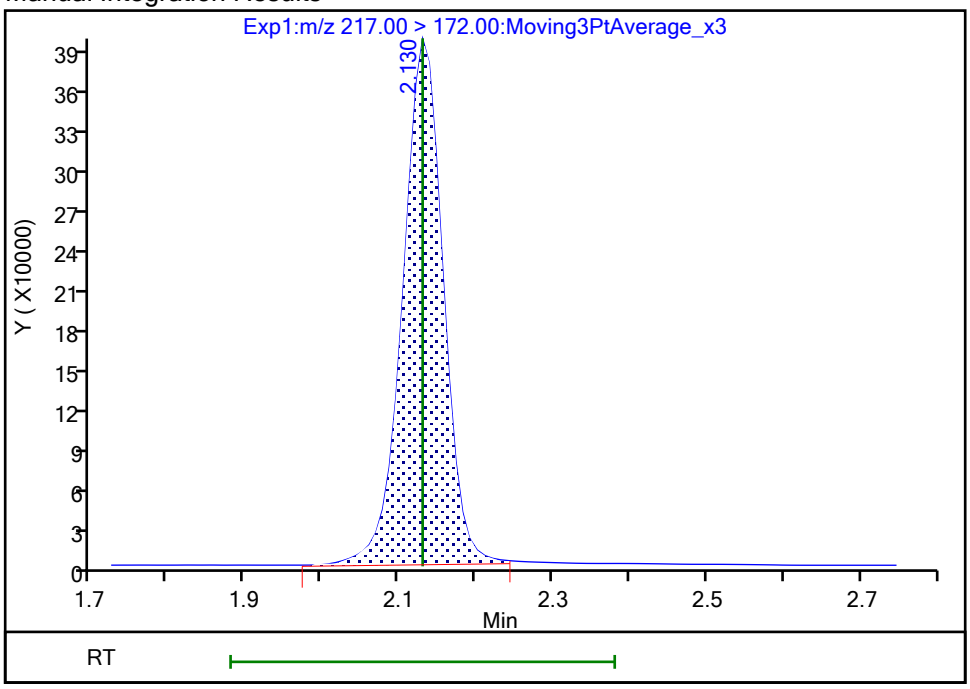
Processing Integration Results

RT: 2.13
Area: 1449327
Amount: 0.918560
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1434642
Amount: 0.909253
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:52:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

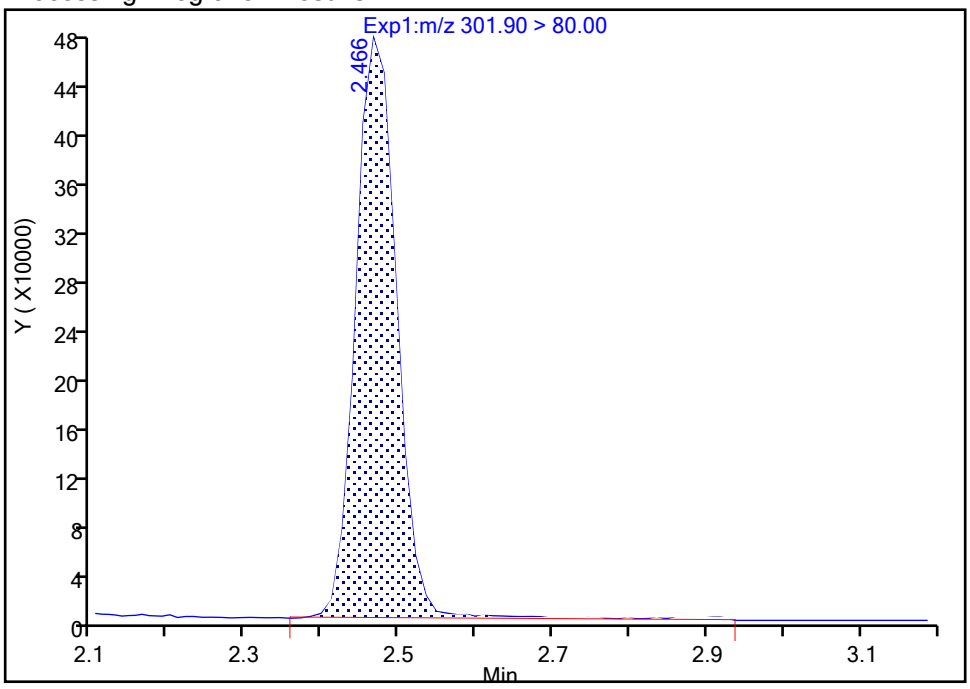
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

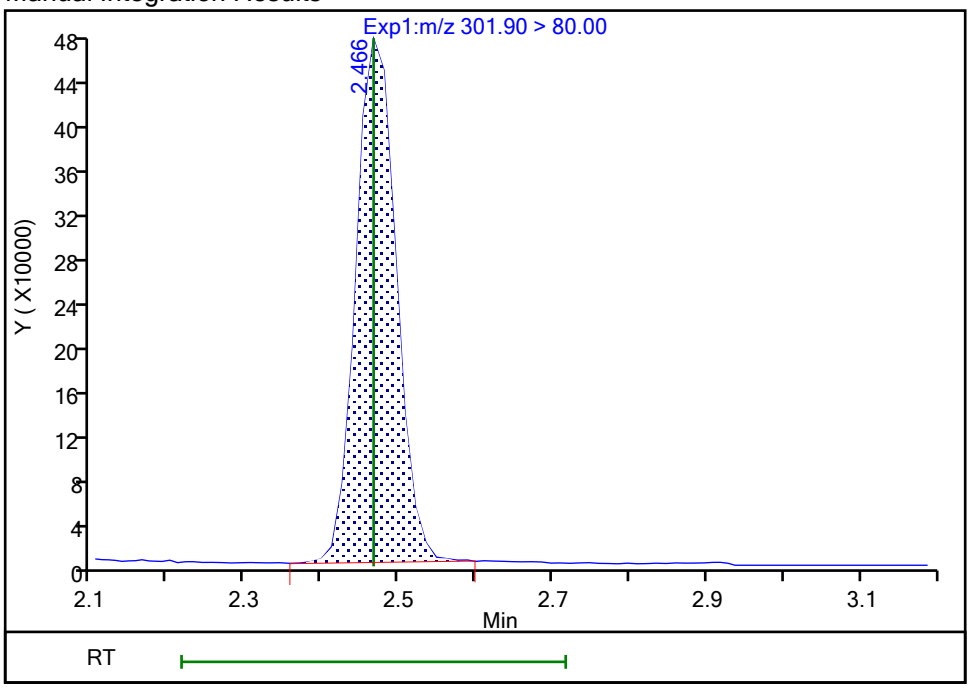
Processing Integration Results

RT: 2.47
Area: 1786566
Amount: 1.078280
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1732843
Amount: 1.045856
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:52:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

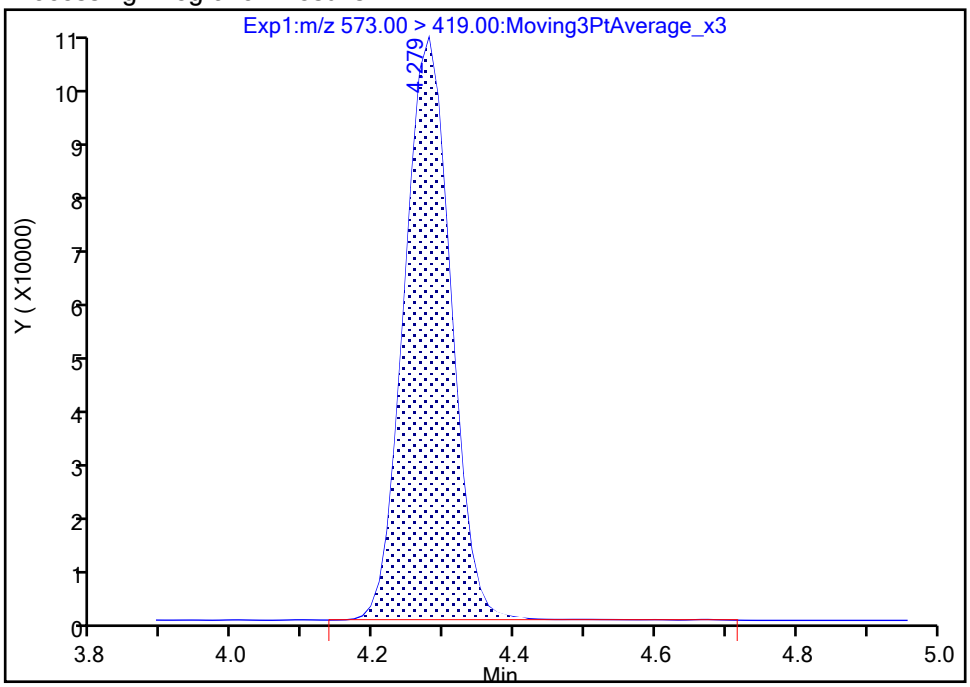
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

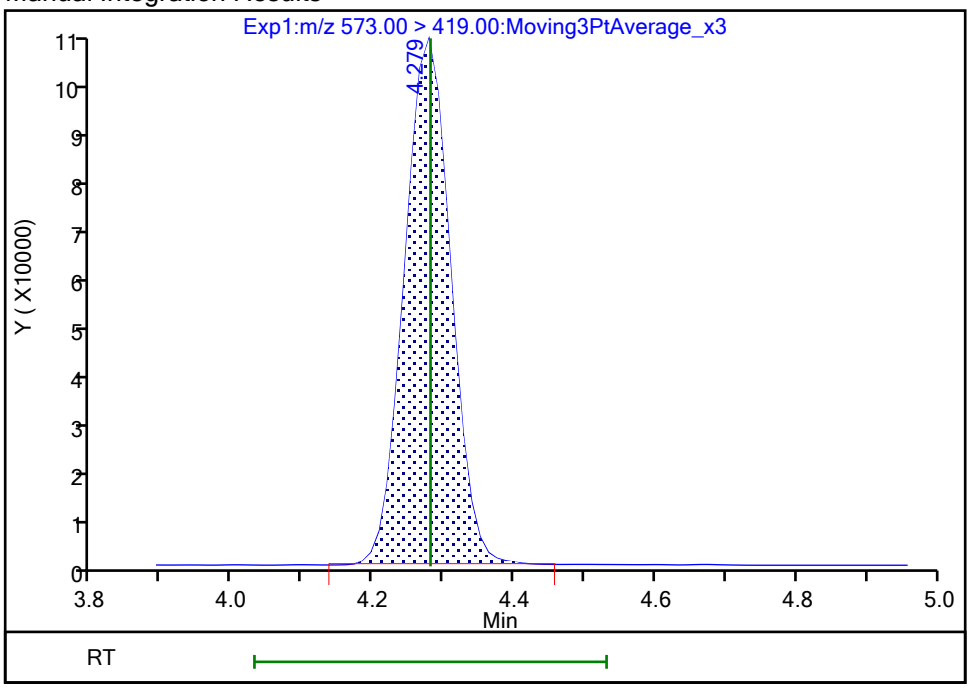
Processing Integration Results

RT: 4.28
Area: 505949
Amount: 1.199901
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 504370
Amount: 1.196156
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

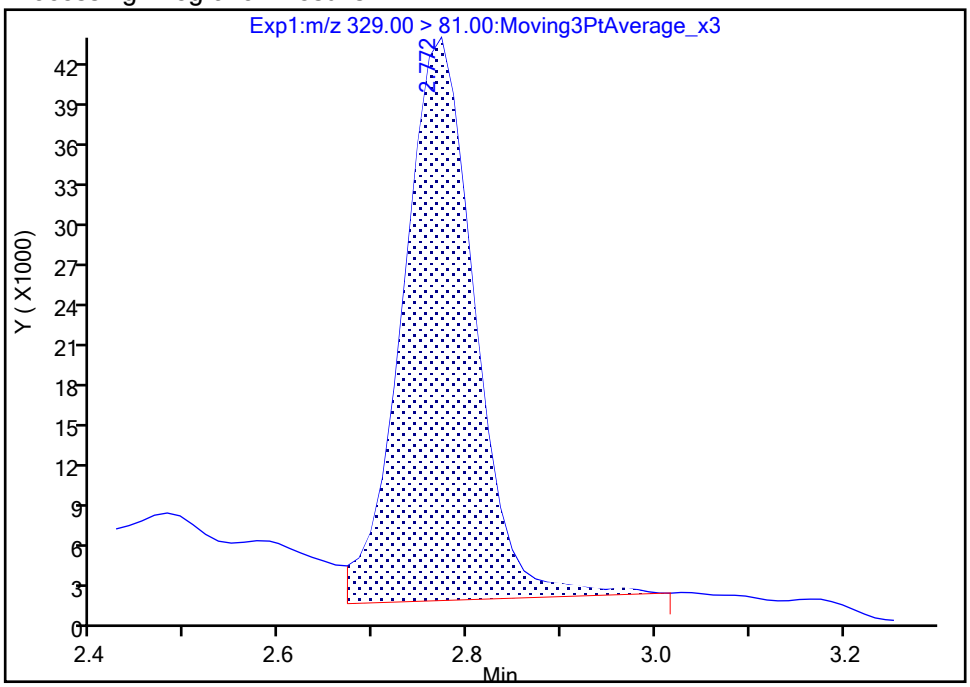
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

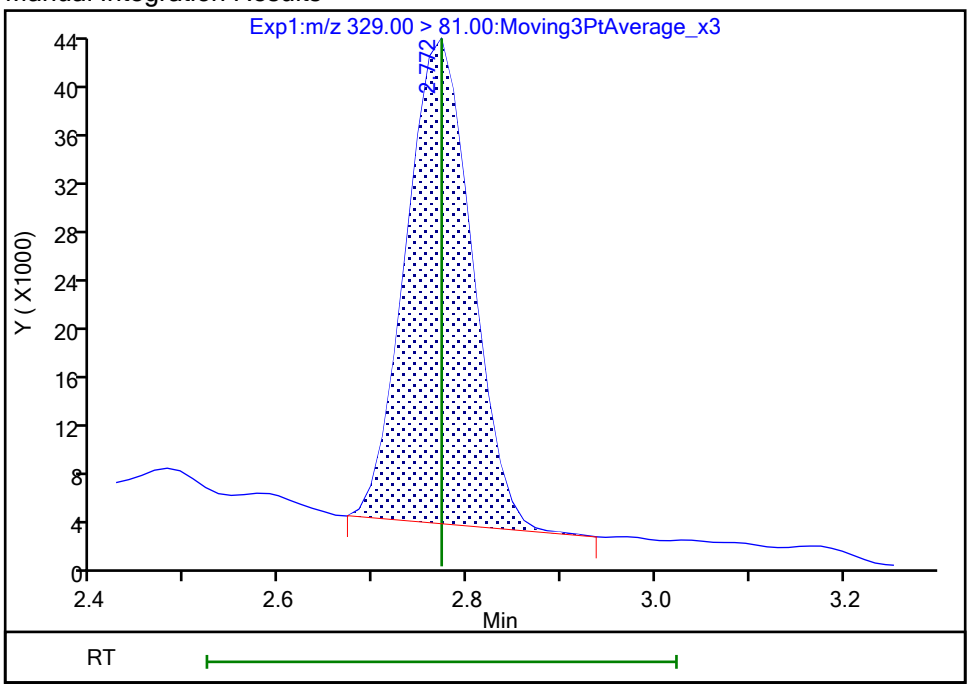
Processing Integration Results

RT: 2.77
Area: 224432
Amount: 1.171290
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 196143
Amount: 1.023652
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:52:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

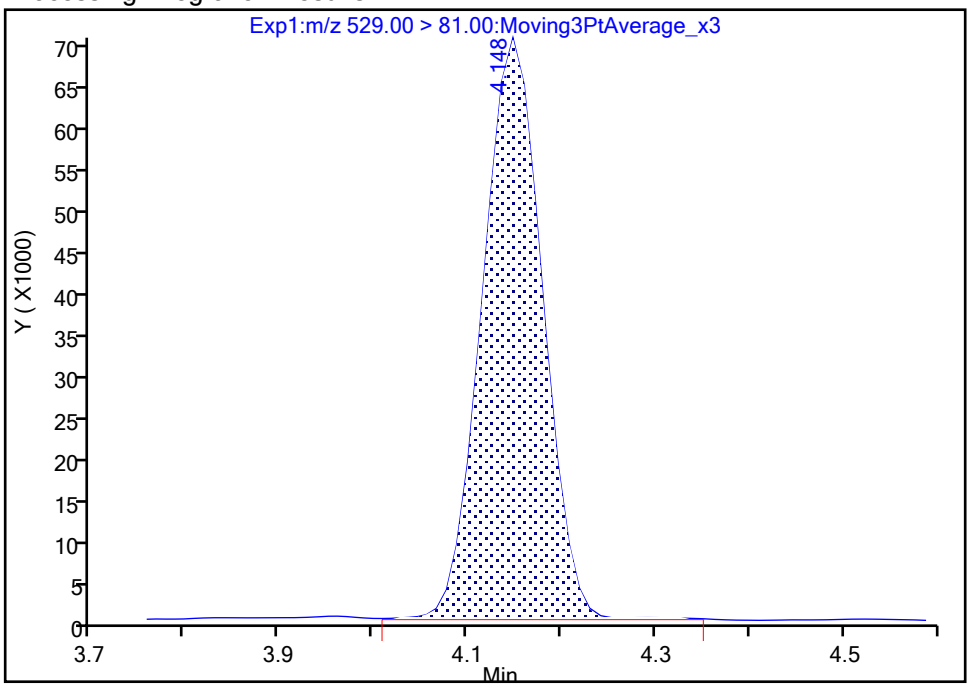
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

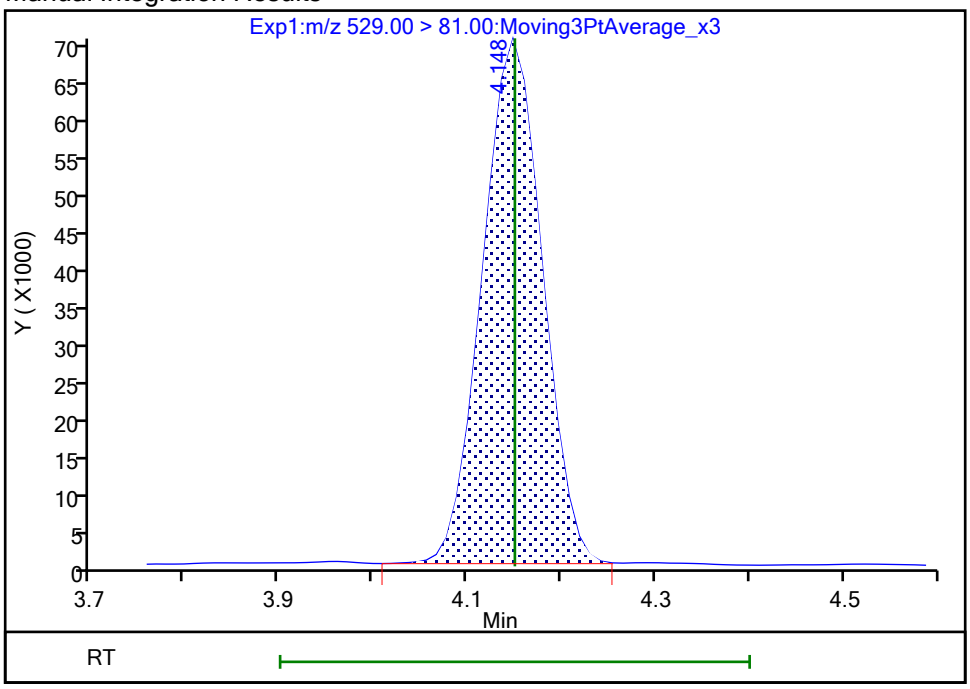
Processing Integration Results

RT: 4.15
Area: 312181
Amount: 1.125059
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 312458
Amount: 1.126057
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

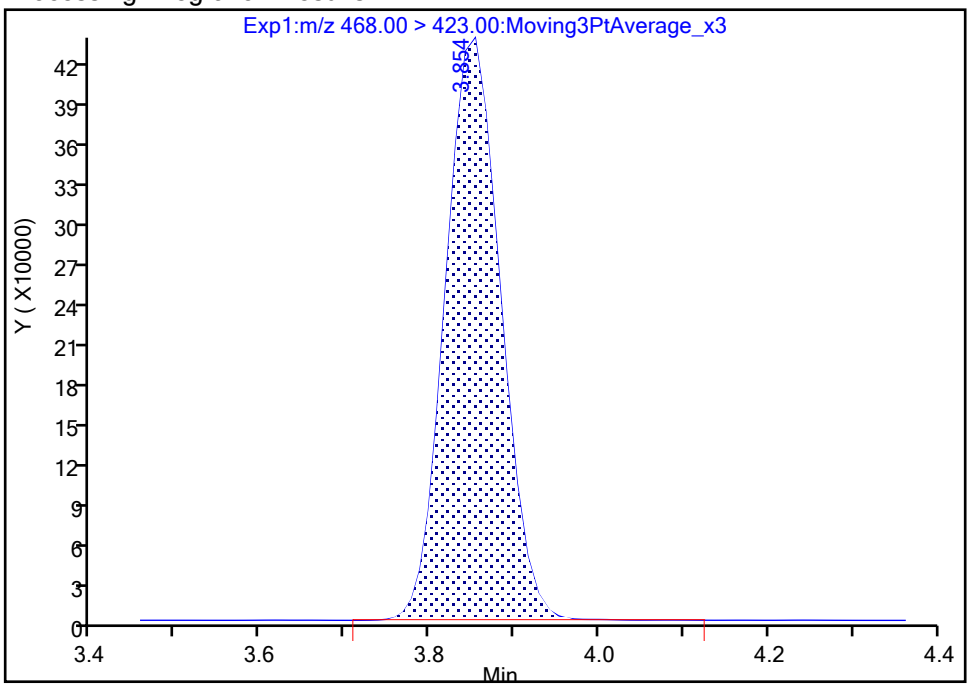
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A09.d				
Injection Date:	24-Oct-2023 19:05:27	Instrument ID:	LC812		
Lims ID:	460-290517-B-8-A	Lab Sample ID:	200-290517-8		
Client ID:	MW34R-101623-1421-12				
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 19 13C5 PFNA, CAS: STL00995

Signal: 1

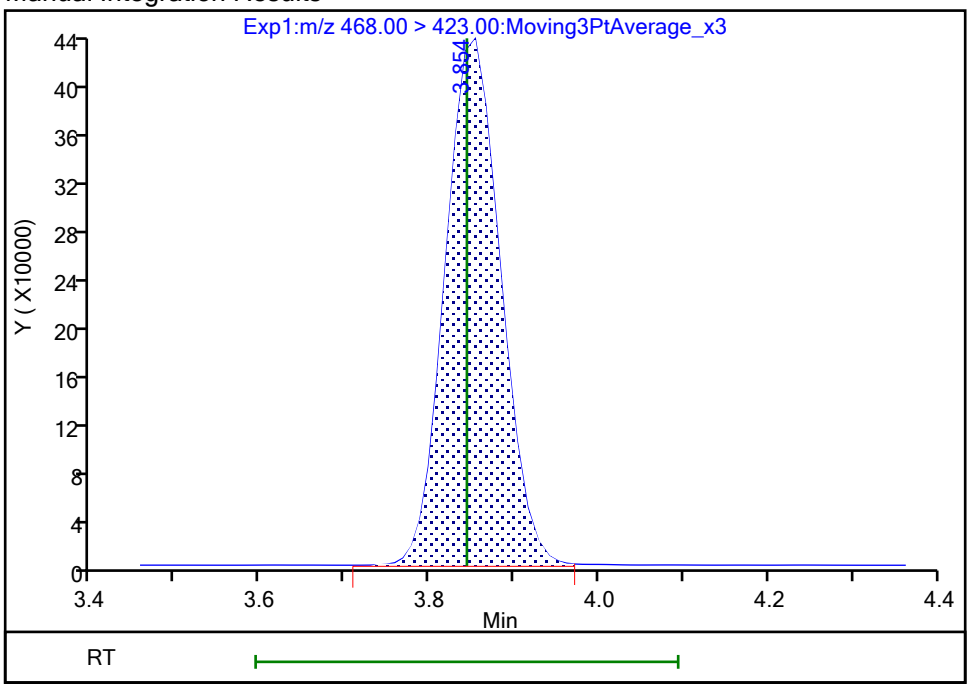
Processing Integration Results

RT: 3.85
Area: 1990515
Amount: 1.181389
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 1987927
Amount: 1.179853
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:53:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW16A-101623-0926-20 | Lab Sample ID: 460-290517-9

Matrix: Water | Lab File ID: PA231024A12.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 09:26

Extraction Method: 3535 | Date Extracted: 10/24/2023 09:04

Sample wt/vol: 286.7(mL) | Date Analyzed: 10/24/2023 19:29

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	10.3		4.36	1.05
2706-90-3	Perfluoropentanoic acid	7.86		1.74	0.59
307-24-4	Perfluorohexanoic acid	6.45		1.74	0.57
375-85-9	Perfluoroheptanoic acid	3.60		1.74	0.47
335-67-1	Perfluorooctanoic acid	10.4		1.74	0.66
375-95-1	Perfluorononanoic acid	1.55	J	1.74	0.43
335-76-2	Perfluorodecanoic acid	0.54	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	5.51		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	3.57		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	14.4		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	2.42		1.74	0.36
1763-23-1	Perfluorooctanesulfonic acid	400		1.74	0.74
68259-12-1	Perfluorononanesulfonic acid	0.35	J	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.36	U	4.36	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.40
13252-13-6	HFPODA	3.49	U	3.49	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW16A-101623-0926-20 Lab Sample ID: 460-290517-9

Matrix: Water Lab File ID: PA231024A12.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 09:26

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 286.7(mL) Date Analyzed: 10/24/2023 19:29

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	90		50-150
STL01893	13C5 PFPeA	89		50-150
STL01892	13C4 PFHpA	95		50-150
STL02116	13C2 PFTeDA	93		50-150
STL02337	13C3 PFBS	95		50-150
STL01056	13C8 FOSA	88		50-150
STL02118	d3-NMeFOSAA	93		50-150
STL02117	d5-NEtFOSAA	97		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	93		50-150
STL02280	M2-8:2 FTS	89		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	100		50-150
STL00993	13C2 PFHxA	94		50-150
STL00991	13C4 PFOS	98		50-150
STL00998	13C2 PFDoA	98		50-150
STL00995	13C5 PFNA	84		50-150
STL00996	13C2 PFDA	95		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	92		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d
Lims ID: 460-290517-B-9-A
Client ID: MW16A-101623-0926-20
Sample Type: Client
Inject. Date: 24-Oct-2023 19:29:58 ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-9-A
Misc. Info.: 200-0057538-012 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 13:13:11
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.604	1740825	1.13		90.1	1484	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	423771	0.2956			28.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.695	1336611	1.11		89.1	630	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	260174	0.2255			1.8	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.466	0.001	0.699	1788232	1.10		94.8	31880	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.466	0.001	1.000	271481	0.1580	Target=2.06		11.4	M
298.90 > 99.00	2.467	2.466	0.001	1.000	136645		1.99(1.03-3.09)		12.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.000	384	0.000676			1.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.786	195271	1.04		89.1	18.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.810	2.797	0.013	0.796	1435040	1.18		94.1	4721	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	0.996	233490	0.1848	Target=14.12		4.0	M
313.00 > 119.00	2.810	2.810	0.0	1.000	15293		15.27(7.06-21.17)		6.6	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	155105	0.1024	Target=2.72		11.5	M
349.00 > 99.00	2.810	2.810	0.0	0.888	60334		2.57(1.36-4.09)		13.1	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.824	267157	1.13		90.5	1461	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.004	964	0.004505			10.5	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.897	1371682	1.18		99.7	5396	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	530666	0.4133	Target=3.32		69.9	M
399.00 > 99.00	3.165	3.166	-0.001	1.000	162123		3.27(1.66-4.98)		69.3	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.177	-0.001	1.000	147376	0.1032	Target=4.17		4.4	M
363.00 > 169.00	3.176	3.177	-0.001	1.000	34452		4.28(2.09-6.26)		26.7	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.177	-0.001	0.900	1593310	1.19		95.2	4466	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.512	-0.001	0.917	72653	0.0695	Target=4.83		12.1	M
449.00 > 99.00	3.511	3.512	-0.001	0.917	24200		3.00(2.41-7.24)		11.4	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.520	3.512	0.008	0.997	266074	1.10		92.7	70.0	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.520	3.512	0.008	1.000	1489	0.002431			3.0	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.529	3.521	0.008	1.000	488841	0.2990	Target=2.88		10.6	M
413.00 > 169.00	3.529	3.521	0.008	1.000	183172		2.67(1.44-4.32)		142	M
D 14 13C4 PFOA										
417.00 > 372.00	3.529	3.521	0.008	1.000	1918639	1.26		101	5358	
* 62 13C2 PFOA										
415.00 > 370.00	3.529	3.521	0.008		1948471	1.25			4131	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.832	-0.002	1.000	9671042	11.5	Target=4.24		1647	M
499.00 > 99.00	3.830	3.832	-0.002	1.000	2660618		3.63(2.12-6.37)		1765	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.832	-0.002	1.085	864137	1.17		97.8	450	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.844	0.010	1.000	60056	0.0444	Target=8.34		3.8	M
463.00 > 169.00	3.854	3.844	0.010	1.000	5934		10.12(4.17-12.51)		17.4	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.844	0.010	1.092	1725269	1.05		83.6	3768	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.981	0.0	1.039	2055	0.000796			2.8	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.100	4.114	-0.014	1.070	6462	0.0101	Target=2.17		2.4	M
549.00 > 99.00	4.088	4.114	-0.026	1.067	3236		2.00(1.08-3.25)		3.6	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.138	-0.002	1.000	25321	0.0155	Target=11.44		3.3	M
513.00 > 169.00	4.124	4.138	-0.014	0.997	2422		10.45(5.72-17.16)		8.5	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.138	-0.002	1.172	2047019	1.18		94.7	10912	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.138	-0.002	0.997	414	0.000780			3.9	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.150	-0.002	1.175	288566	1.06		88.6	226	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.244	-0.002	1.202	1621264	1.10		87.9	4238	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.244	-0.002	1.000	1048	0.000847			6.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.279	4.281	-0.002	1.212	482761	1.17		93.5	2338	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.292	4.281	0.011	1.003	1412	0.004029			5.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.388	-0.001	1.243	1878062	1.15		92.1	7996	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.387	4.388	-0.001	1.000	3952	0.002552	Target=12.20		0.9	RM
563.00 > 169.00	4.387	4.388	-0.001	1.000	806		4.90(6.10-18.31)		7.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.400	-0.001	1.246	480189	1.21		96.6	780	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.375	4.400	-0.025	0.995	1703	0.004432			7.7	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.482	4.483	-0.001	1.170	4518	0.001141			7.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.611	-0.001	1.306	2031735	1.23		98.0	5889	
41 Perfluorotridecanoic acid										RM
663.00 > 619.00	4.803	4.814	-0.011	1.042	4490	0.002582	Target=6.41		0.3	RM
663.00 > 169.00	4.813	4.814	-0.001	1.044	235		19.11(3.21-9.62)		2.7	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.991	-0.001	1.414	1922631	1.16		93.1	7119	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.991	-0.012	0.998	600	0.003489	Target=0.87		7.5	M
713.00 > 219.00	4.969	4.991	-0.022	0.996	649		0.92(0.43-1.30)		12.3	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

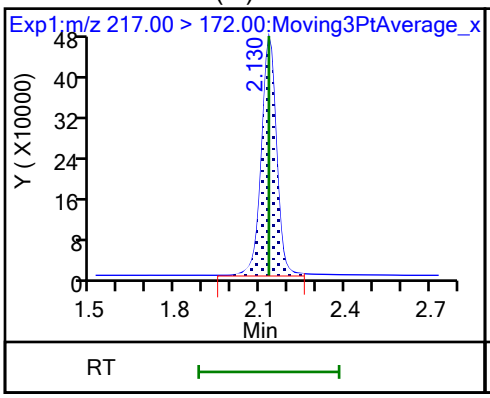
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:25 Chrom Revision: 2.3 18-Oct-2023 21:16:54

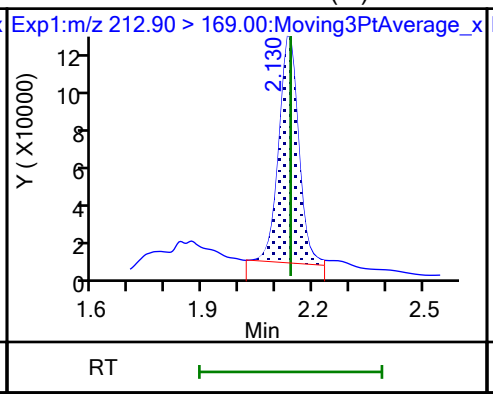
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d
Injection Date: 24-Oct-2023 19:29:58 Instrument ID: LC812
Lims ID: 460-290517-B-9-A Lab Sample ID: 200-290517-9
Client ID: MW16A-101623-0926-20
Operator ID: LC812user ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

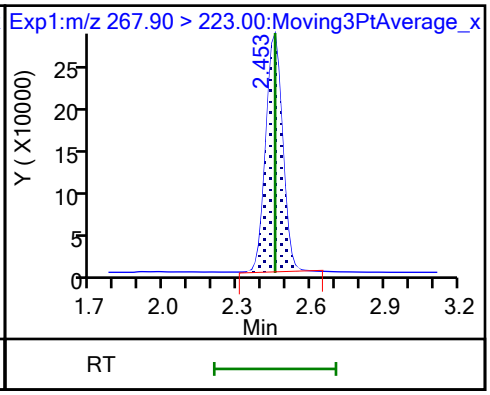
D 1 13C4 PFBA (M)



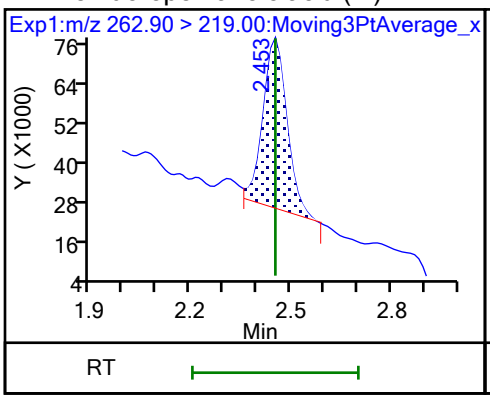
2 Perfluorobutanoic acid (M)



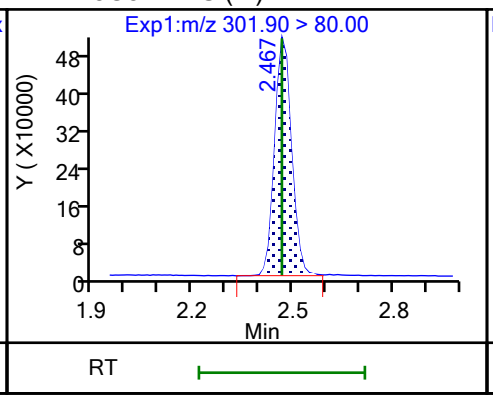
D 3 13C5 PFPeA



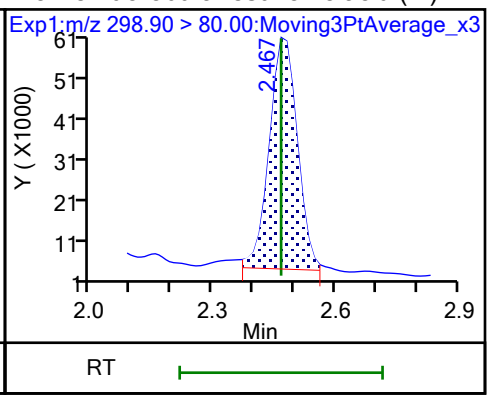
4 Perfluoropentanoic acid (M)



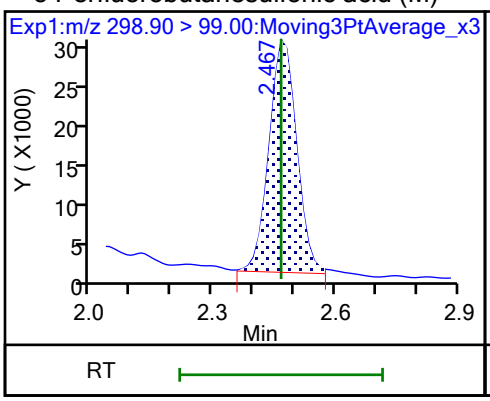
D 47 13C3 PFBS (M)



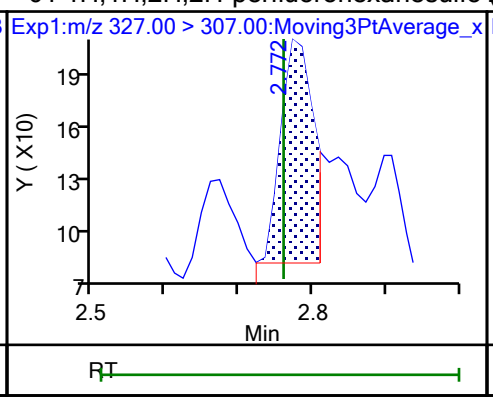
5 Perfluorobutanesulfonic acid (M)



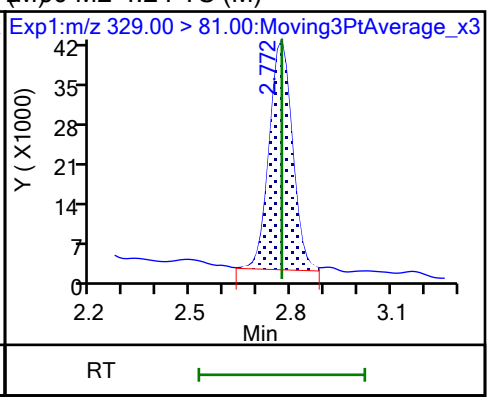
5 Perfluorobutanesulfonic acid (M)



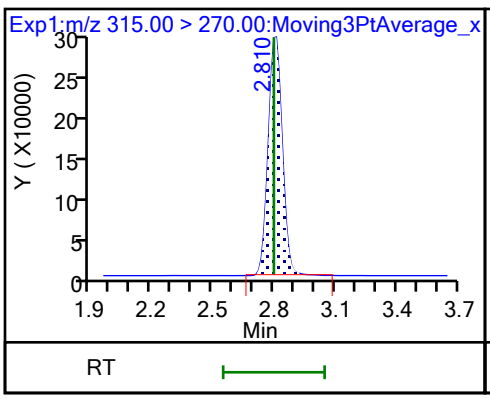
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



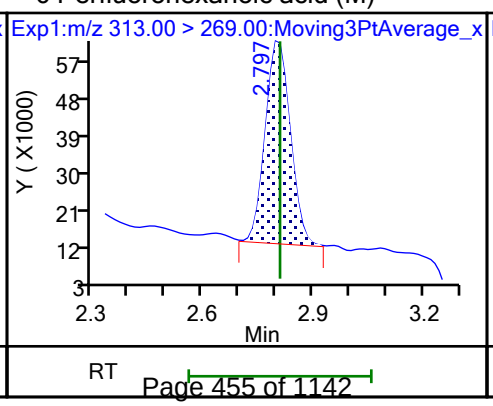
60 M2-4:2 FTS (M)



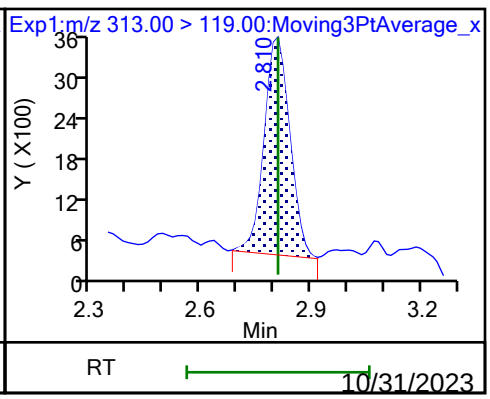
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

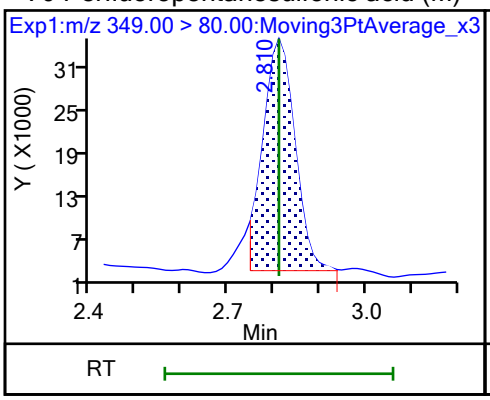


6 Perfluorohexanoic acid

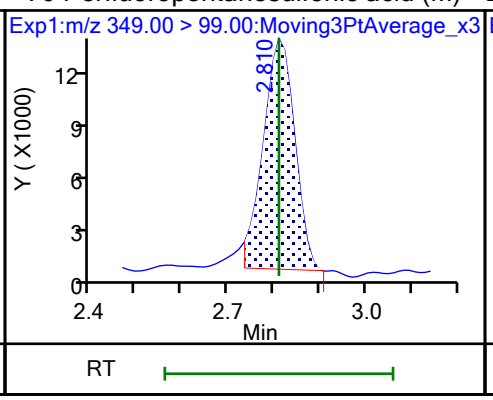


10/31/2023
10:17 AM

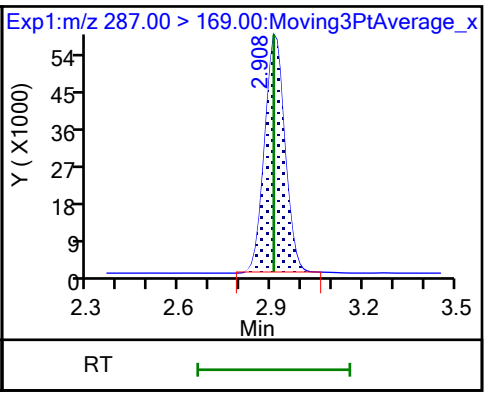
70 Perfluoropentanesulfonic acid (M)



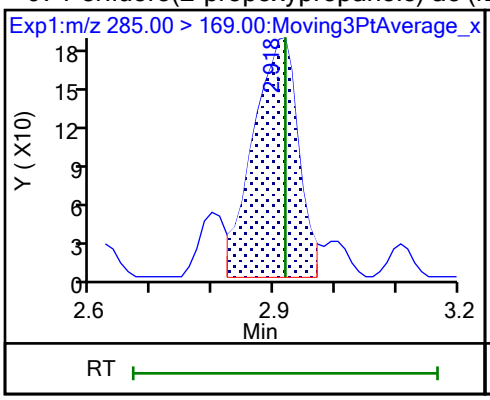
70 Perfluoropentanesulfonic acid (M)



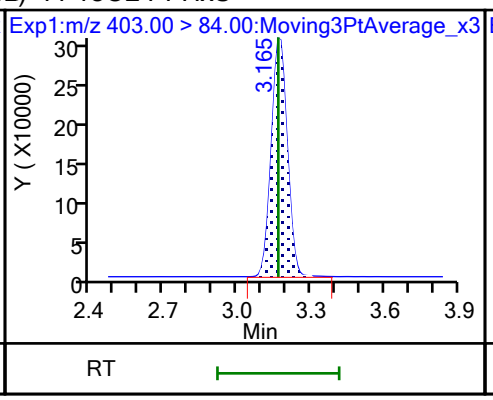
D 64 13C3 HFPO-DA



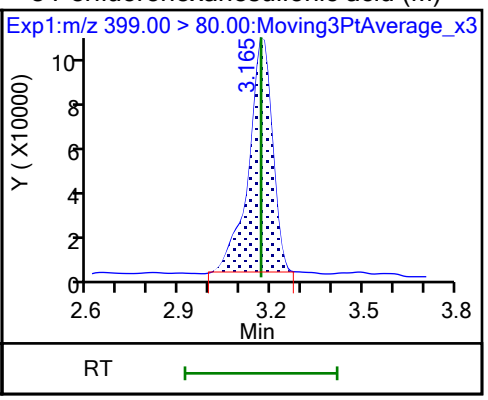
67 Perfluoro(2-propoxypropanoic) ac (M)



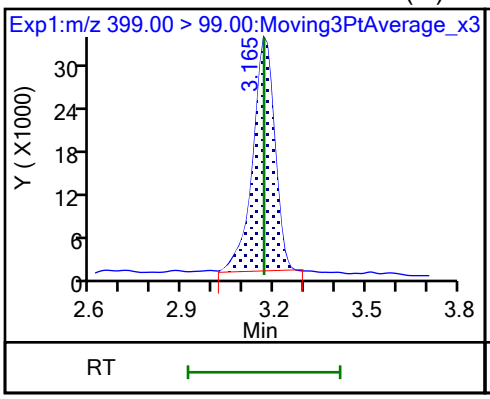
D 11 18O2 PFHxS



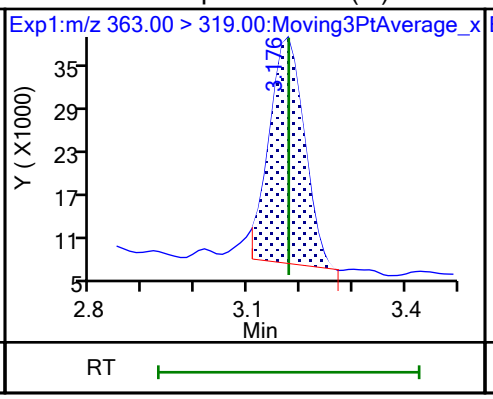
8 Perfluorohexanesulfonic acid (M)



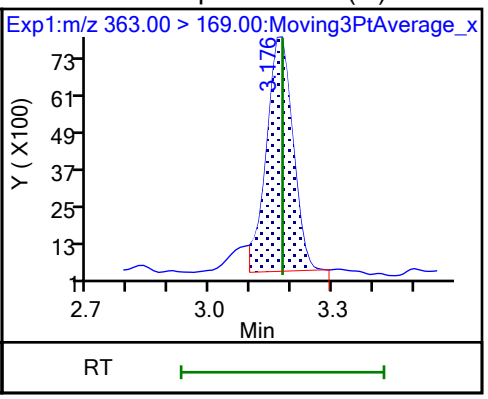
8 Perfluorohexanesulfonic acid (M)



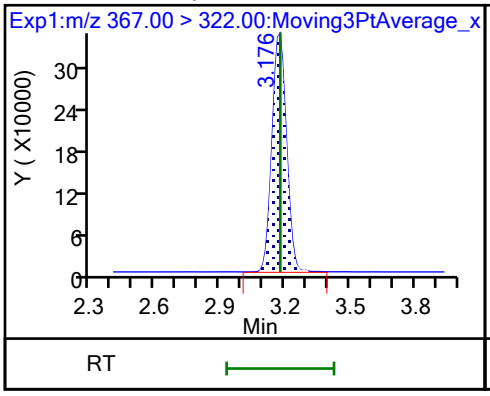
10 Perfluoroheptanoic acid (M)



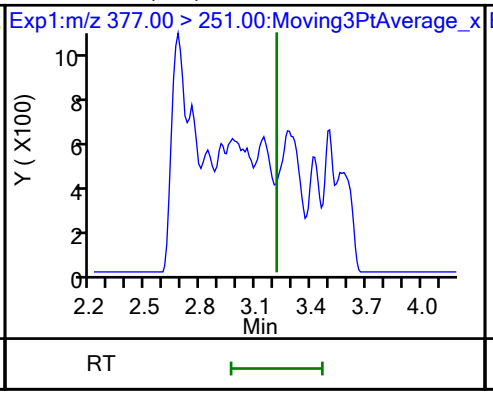
10 Perfluoroheptanoic acid (M)



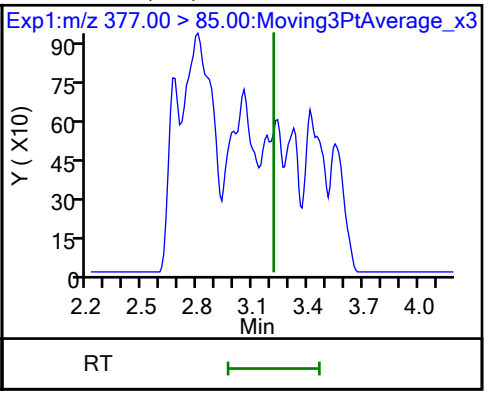
D 9 13C4 PFHpA



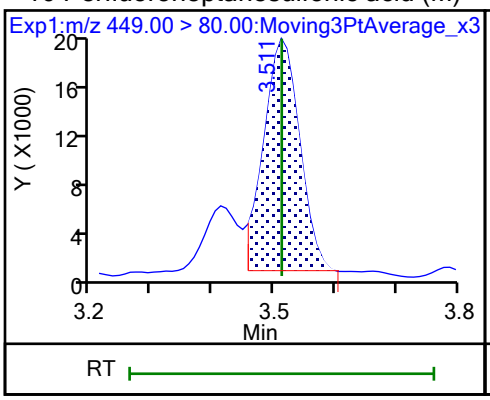
77 DONA (ND)



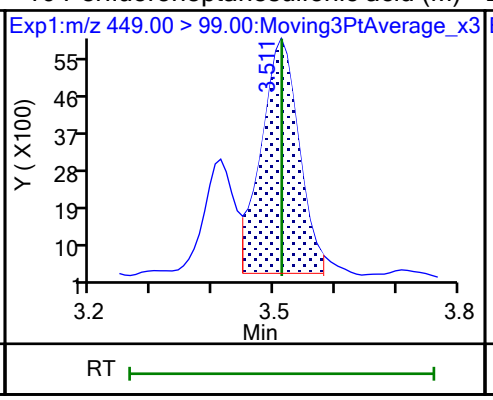
77 DONA (ND)



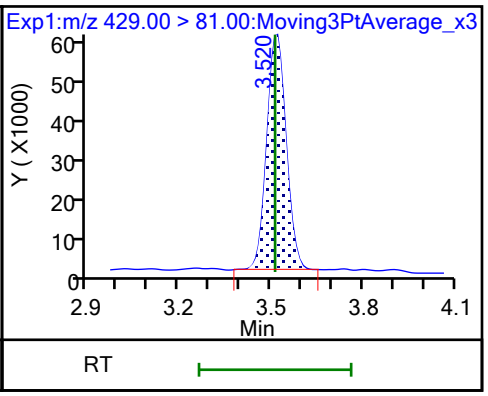
16 Perfluoroheptanesulfonic acid (M)



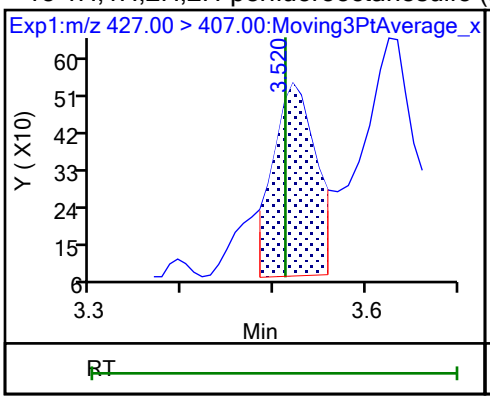
16 Perfluoroheptanesulfonic acid (M)



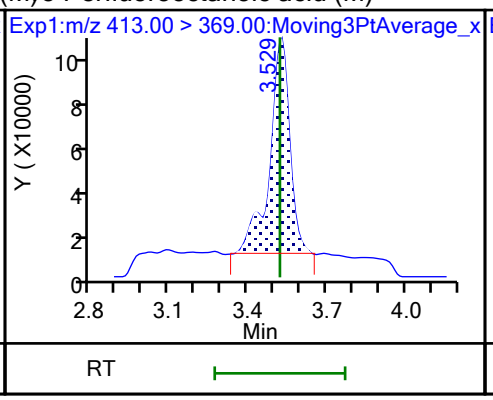
D 12 M2-6:2 FTS



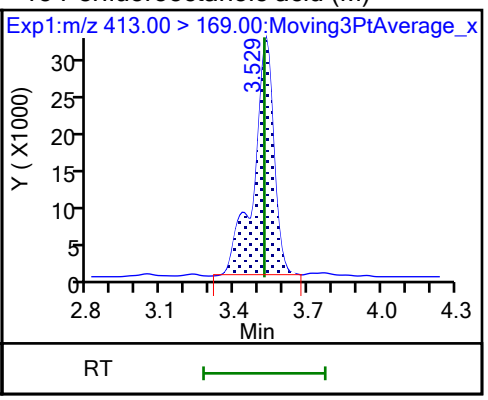
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



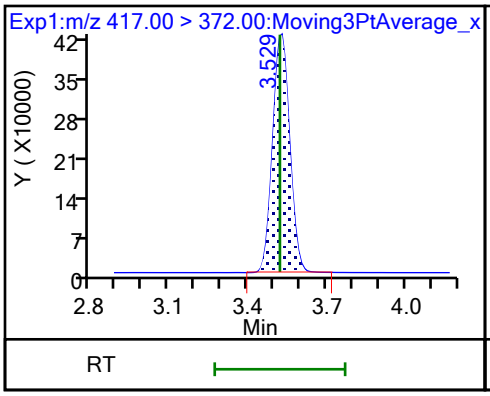
15 Perfluorooctanoic acid (M)



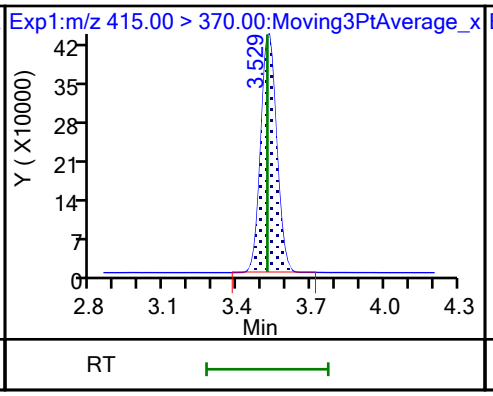
15 Perfluorooctanoic acid (M)



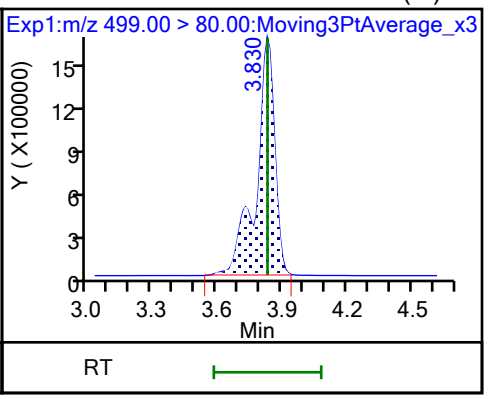
D 14 13C4 PFOA



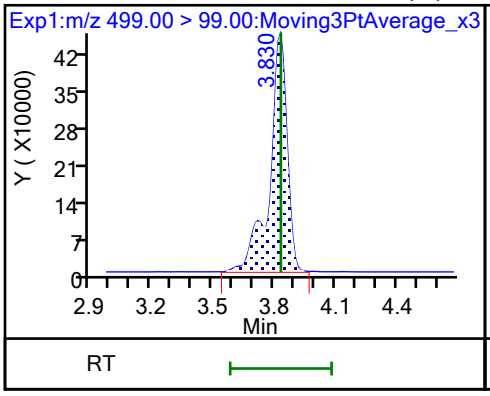
* 62 13C2 PFOA



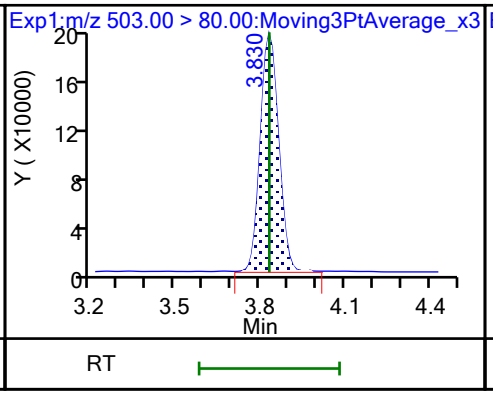
17 Perfluorooctanesulfonic acid (M)



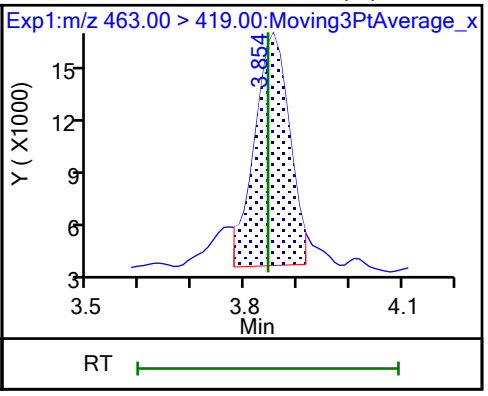
17 Perfluorooctanesulfonic acid (M)



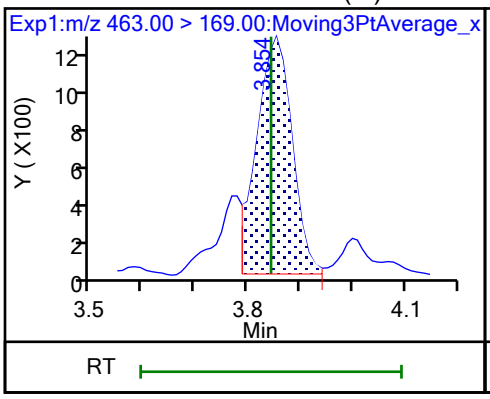
D 18 13C4 PFOS



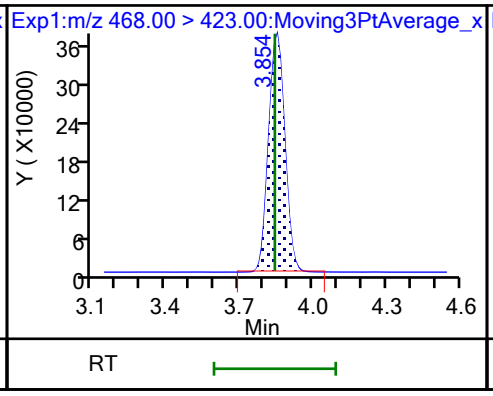
20 Perfluorononanoic acid (M)



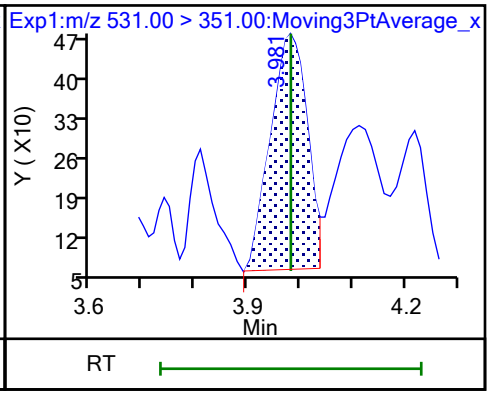
20 Perfluorononanoic acid (M)



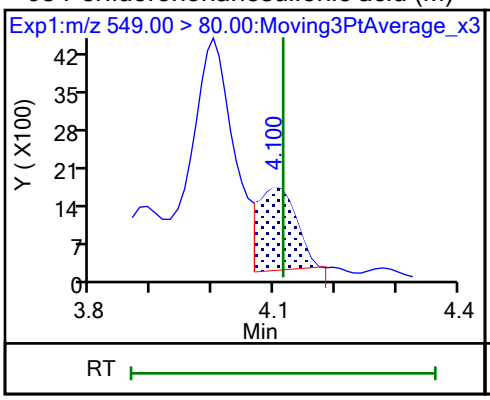
D 19 13C5 PFNA



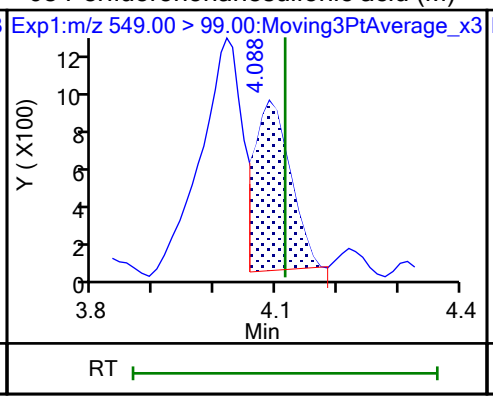
69 9-Chlorohexadecafluoro-3-oxanona (M)



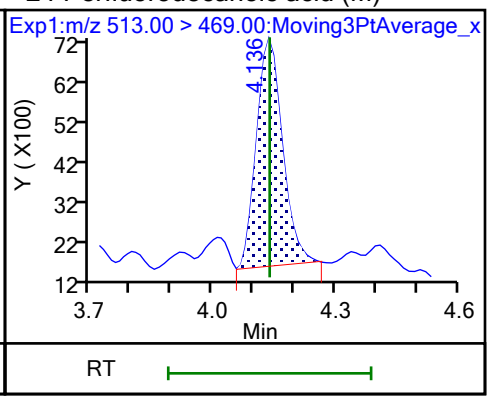
68 Perfluorononanesulfonic acid (M)



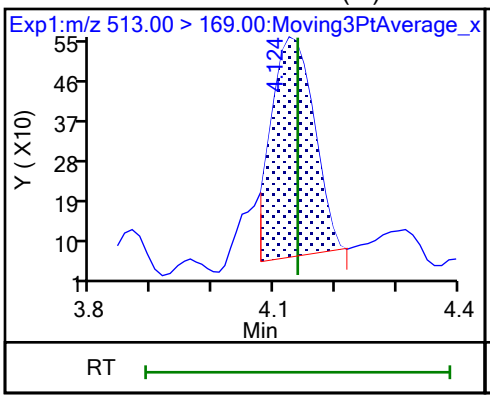
68 Perfluorononanesulfonic acid (M)



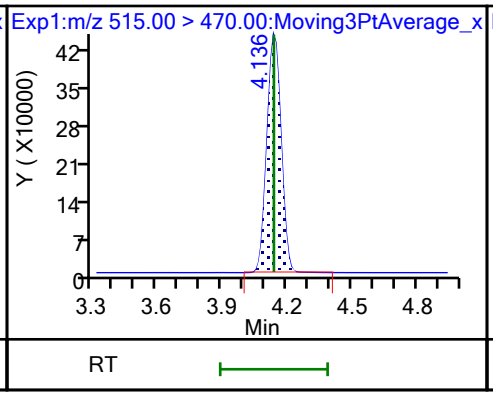
24 Perfluorodecanoic acid (M)



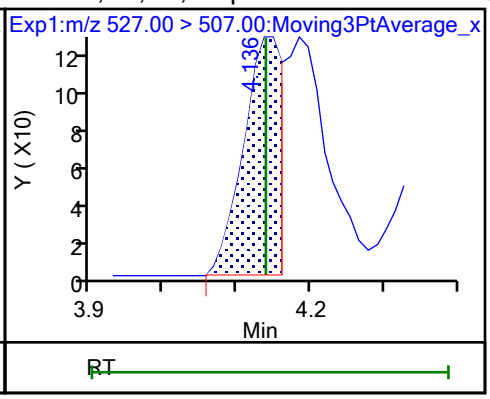
24 Perfluorodecanoic acid (M)



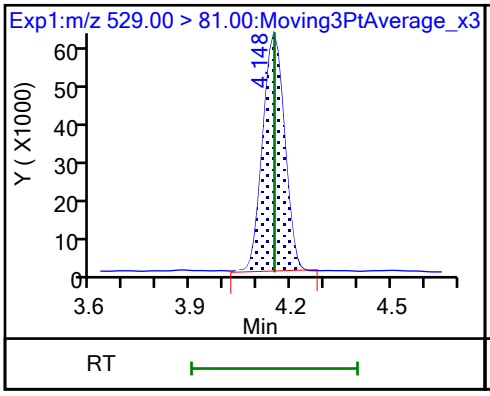
D 23 13C2 PFDA



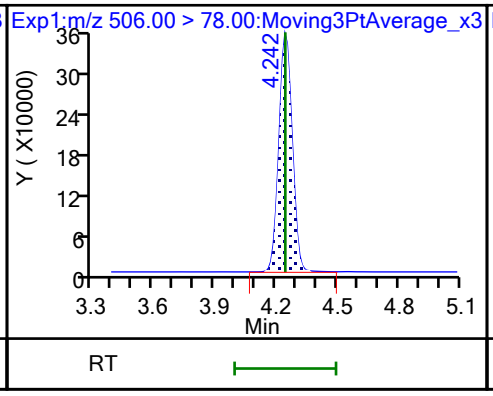
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



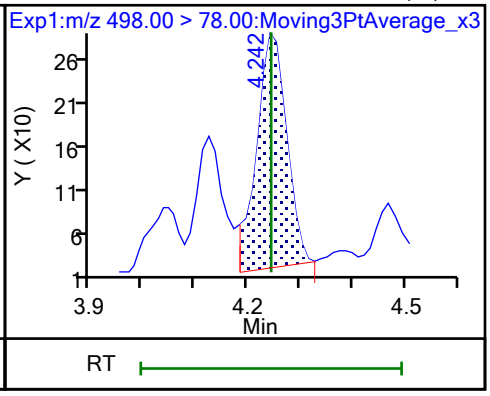
D 26 M2-8:2 FTS



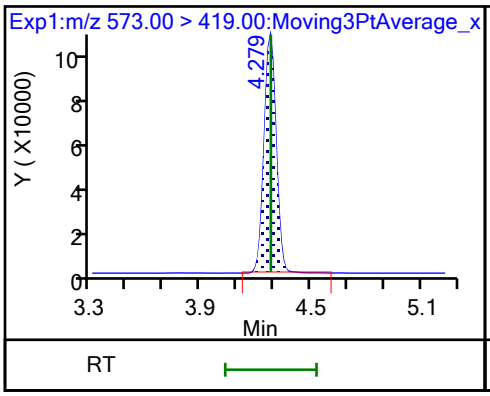
D 21 13C8 FOSA



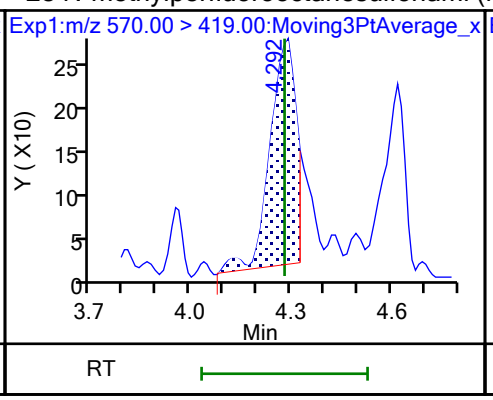
22 Perfluorooctanesulfonamide (M)



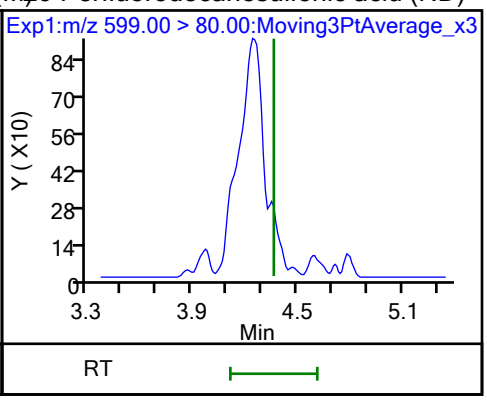
D 27 d3-NMeFOSAA



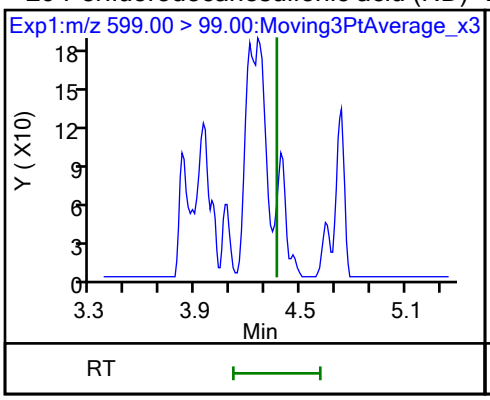
28 N-methylperfluorooctanesulfonami (M)



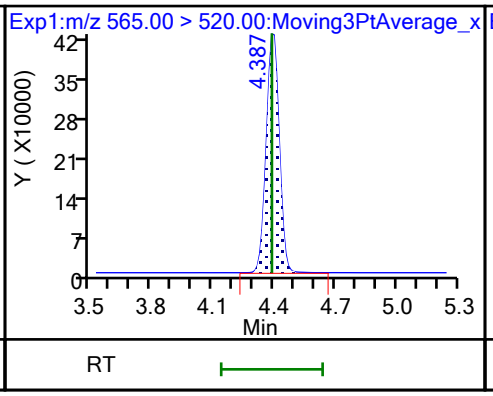
29 Perfluorodecanesulfonic acid (ND)



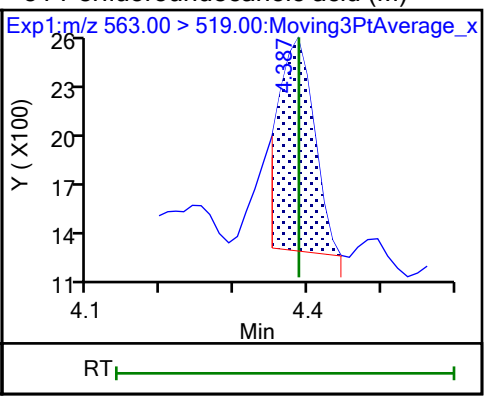
29 Perfluorodecanesulfonic acid (ND)



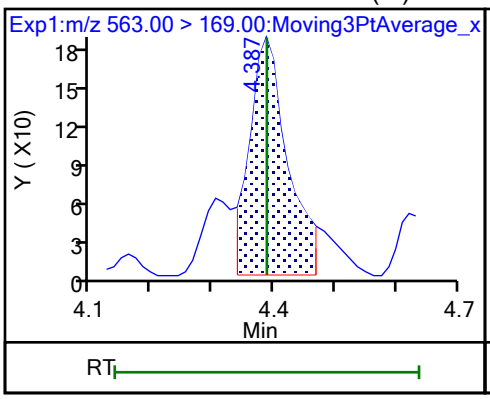
D 30 13C2 PFUnA



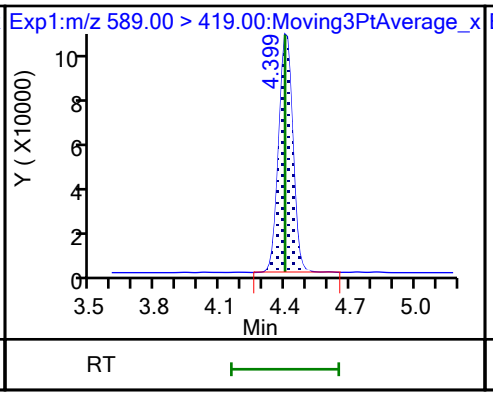
31 Perfluoroundecanoic acid (M)



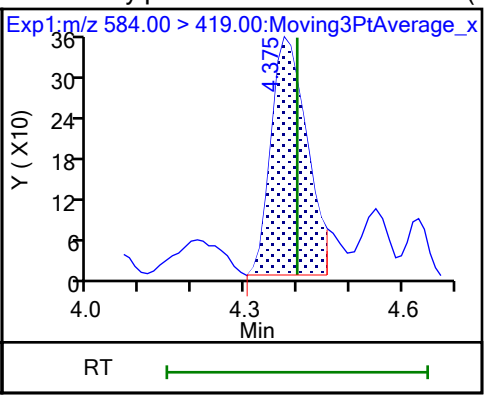
31 Perfluoroundecanoic acid (M)



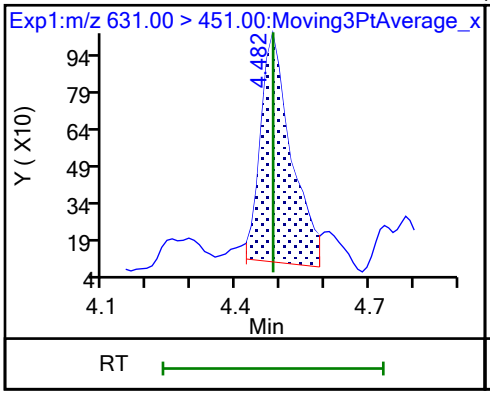
D 32 d5-NEtFOSAA



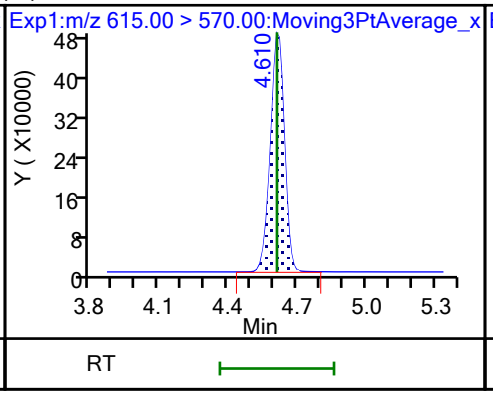
33 N-ethylperfluorooctanesulfonamid (M)



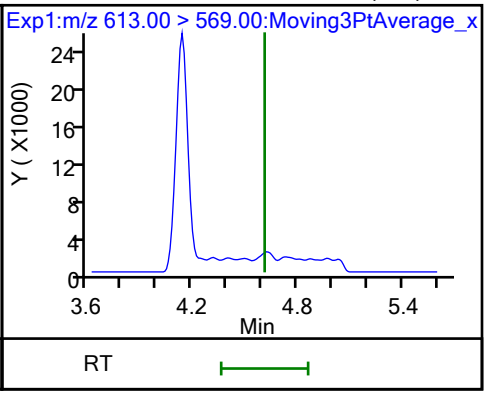
66 11-Chloroeicosafluoro-3-oxaundec (M)



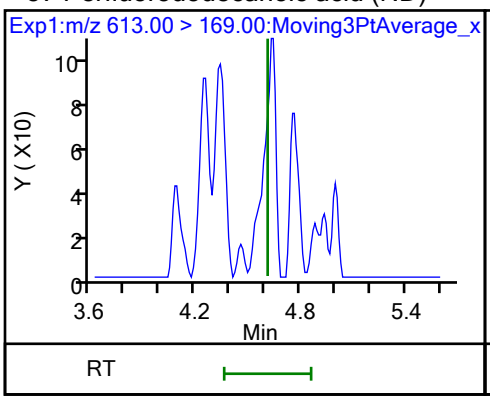
D 36 13C2 PFDoA



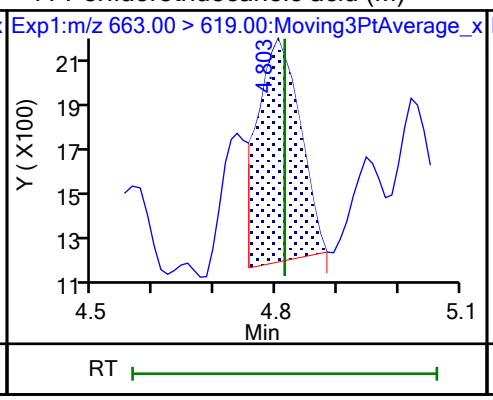
37 Perfluorododecanoic acid (ND)



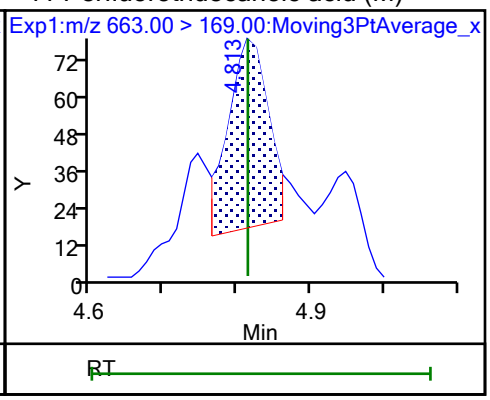
37 Perfluorododecanoic acid (ND)



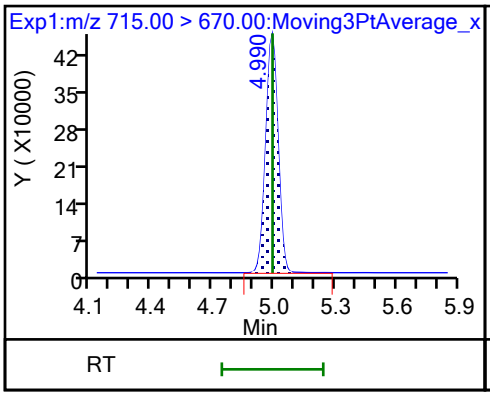
41 Perfluorotridecanoic acid (M)



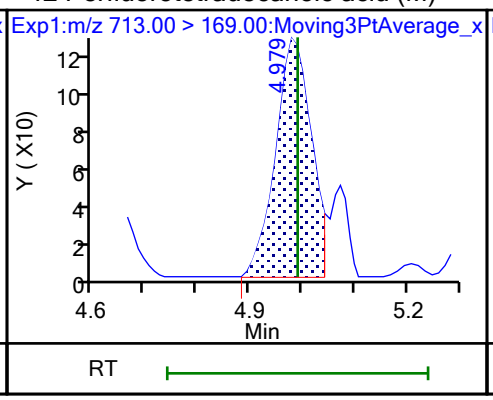
41 Perfluorotridecanoic acid (M)



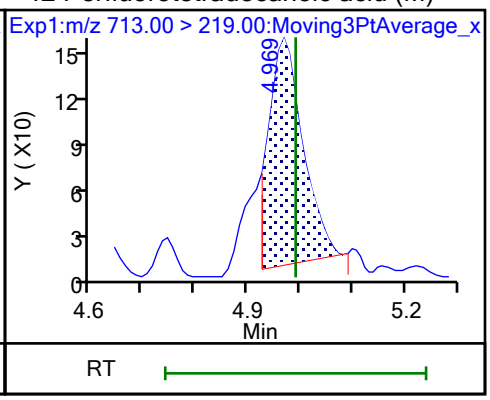
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

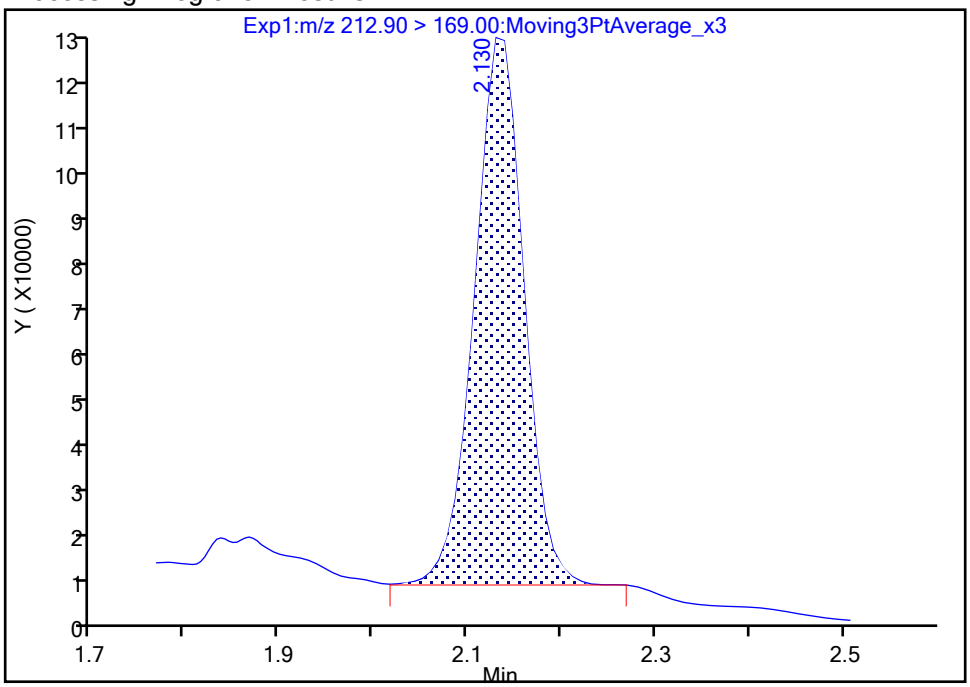
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

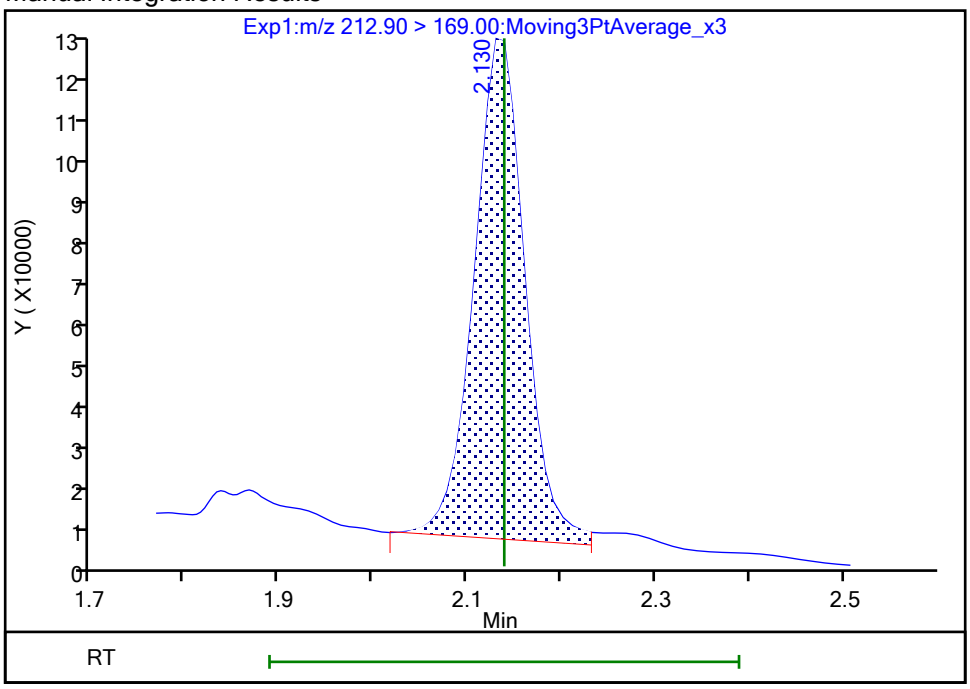
Processing Integration Results

RT: 2.13
Area: 407663
Amount: 0.282829
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 423771
Amount: 0.295620
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:07:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

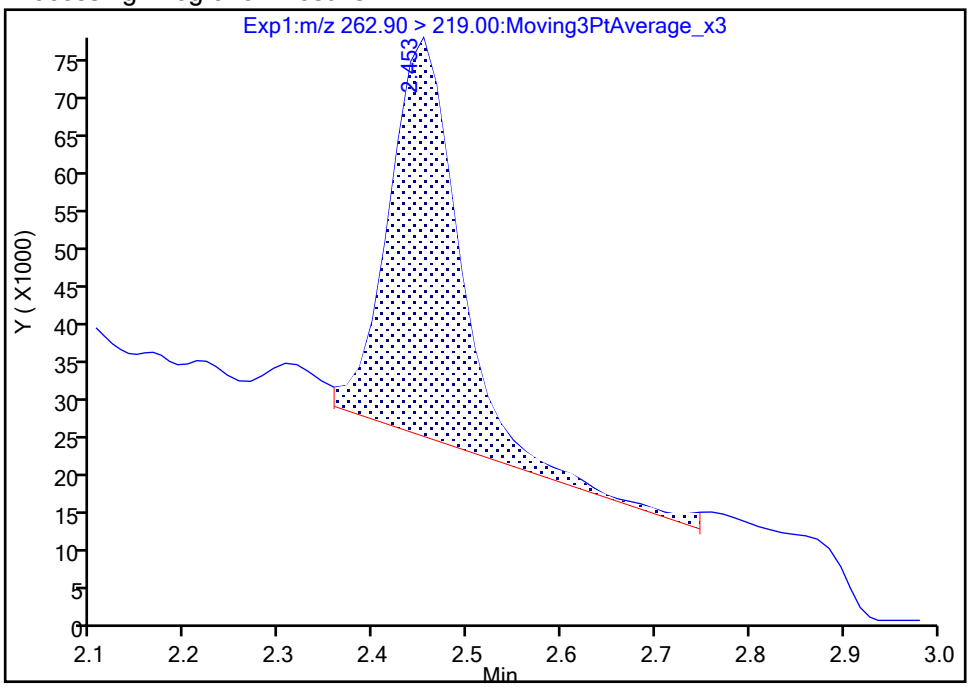
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

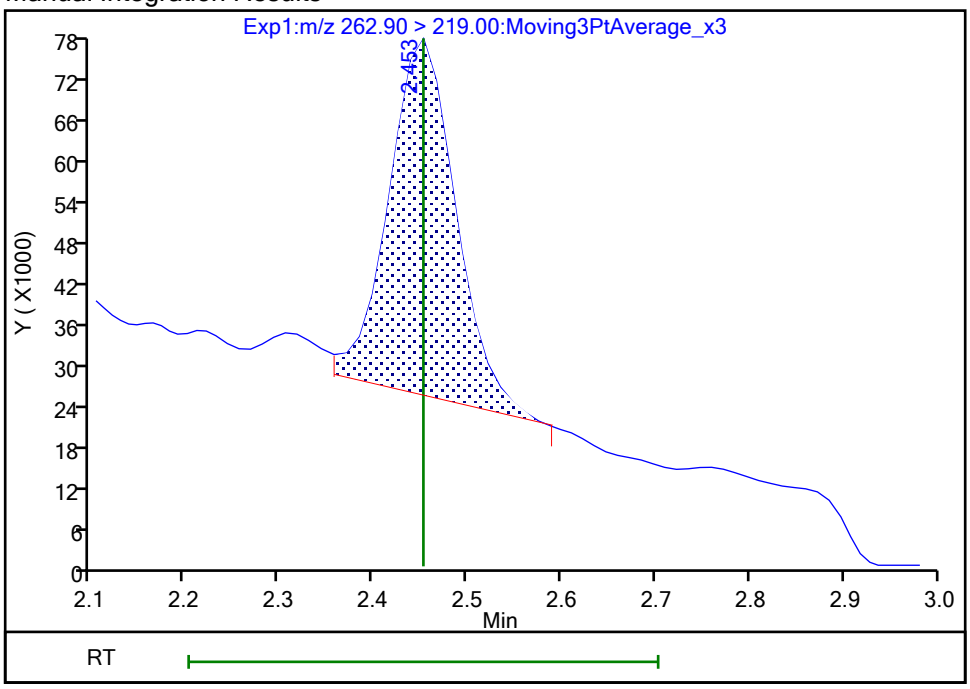
Processing Integration Results

RT: 2.45
Area: 278591
Amount: 0.241434
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 260174
Amount: 0.225473
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

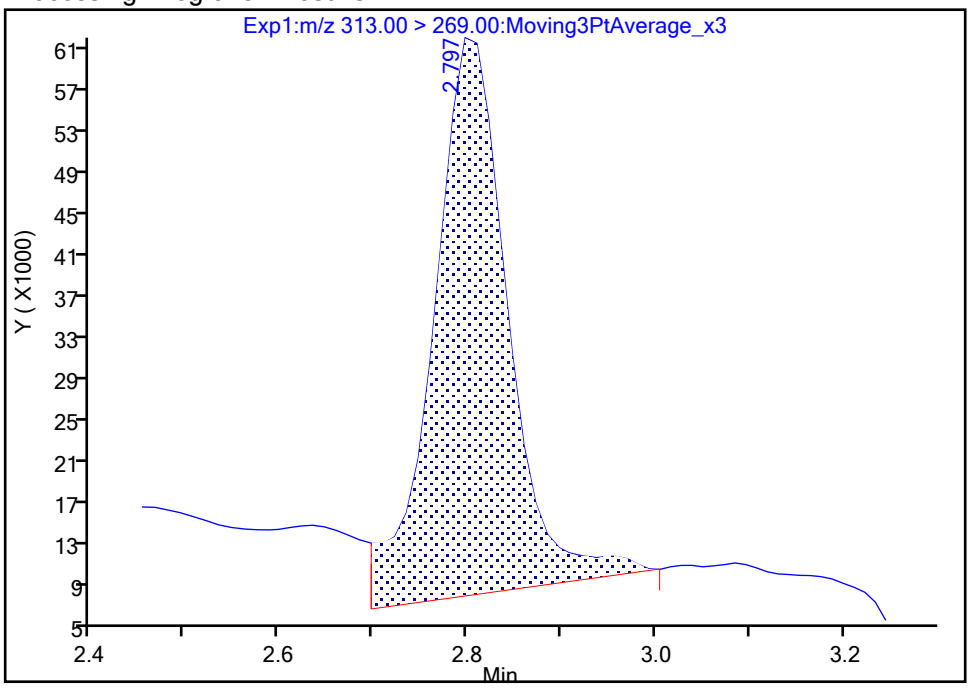
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

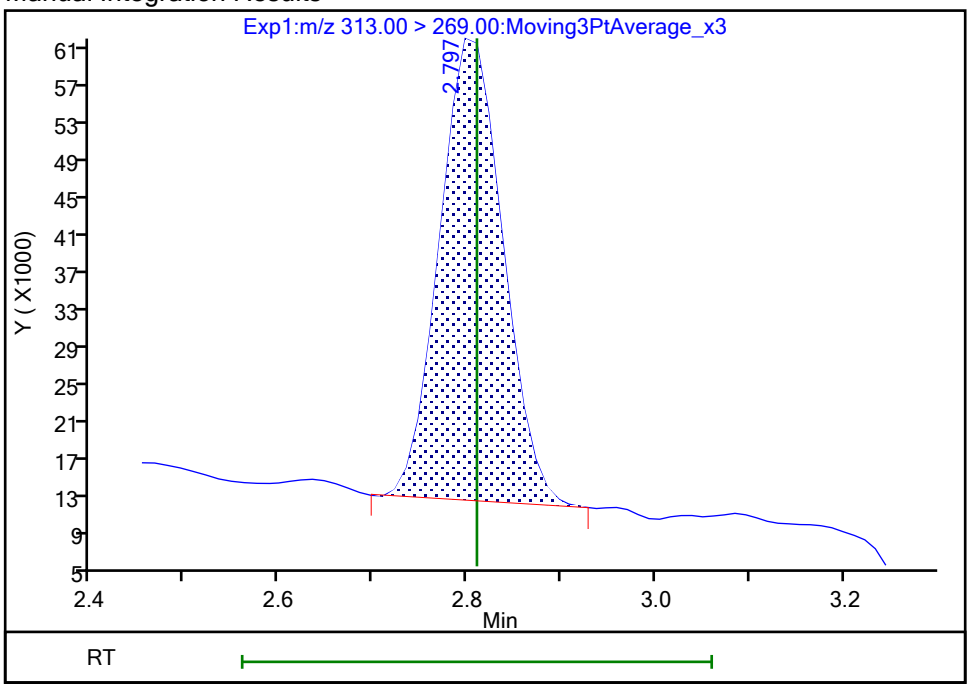
Processing Integration Results

RT: 2.80
Area: 299803
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 233490
Amount: 0.184817
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

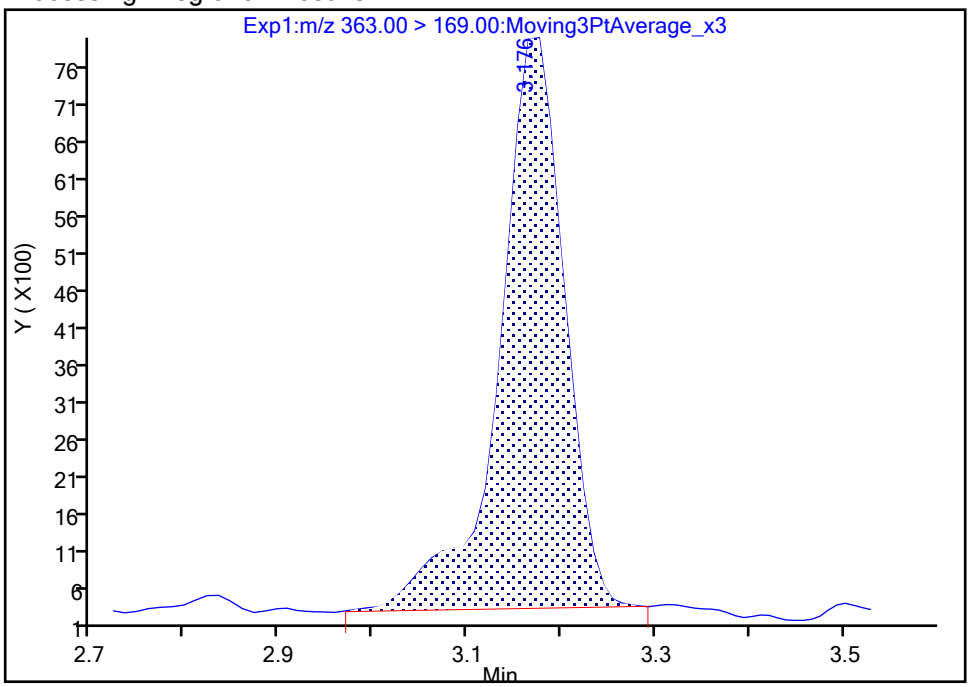
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

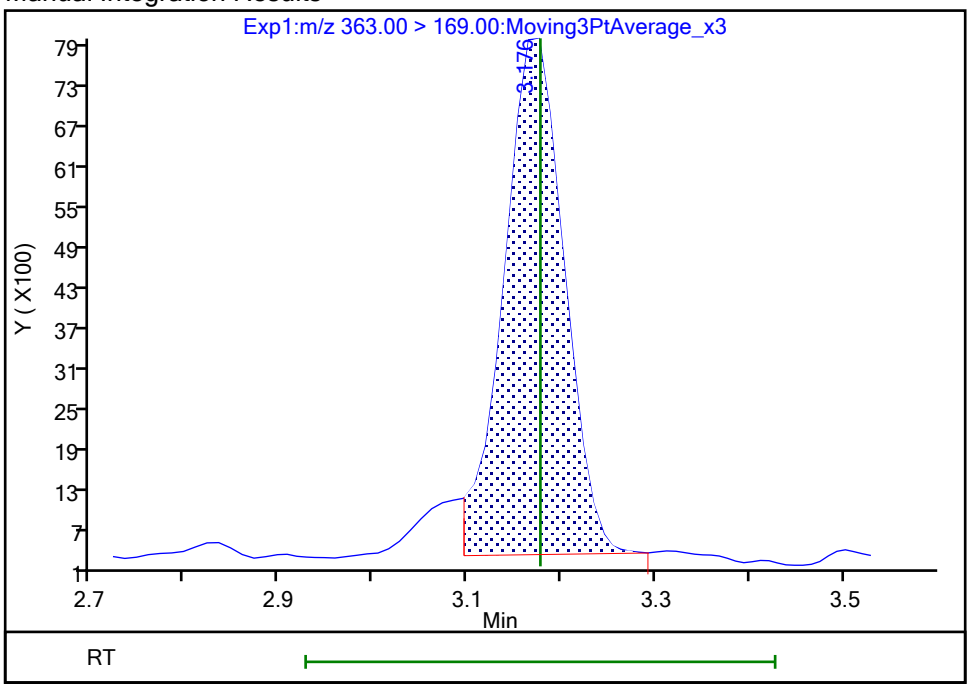
Processing Integration Results

RT: 3.18
Area: 37270
Amount: 0.111110
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 34452
Amount: 0.103151
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

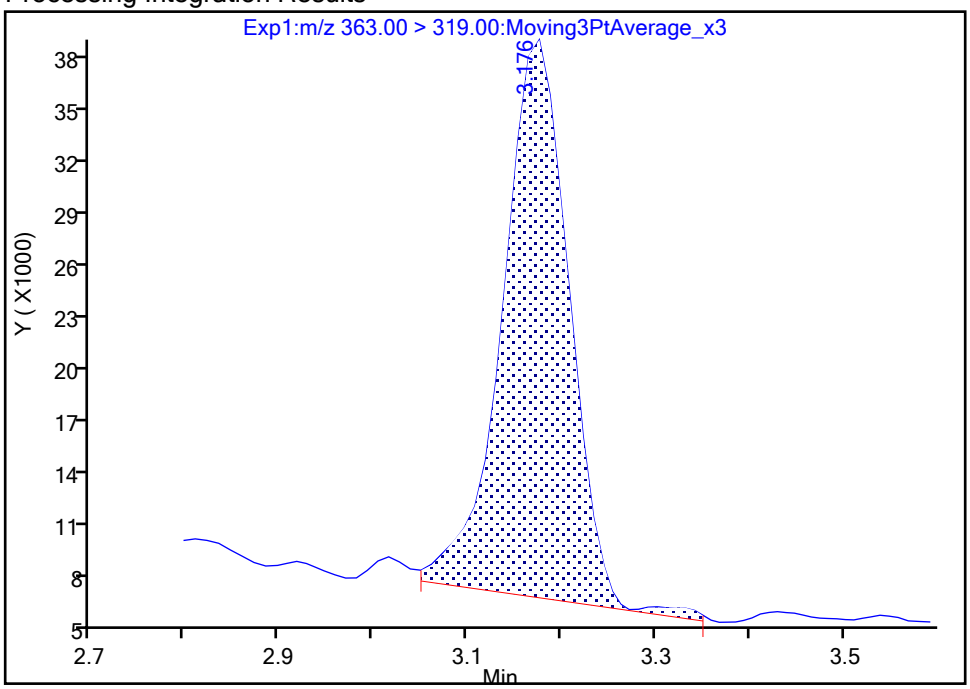
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

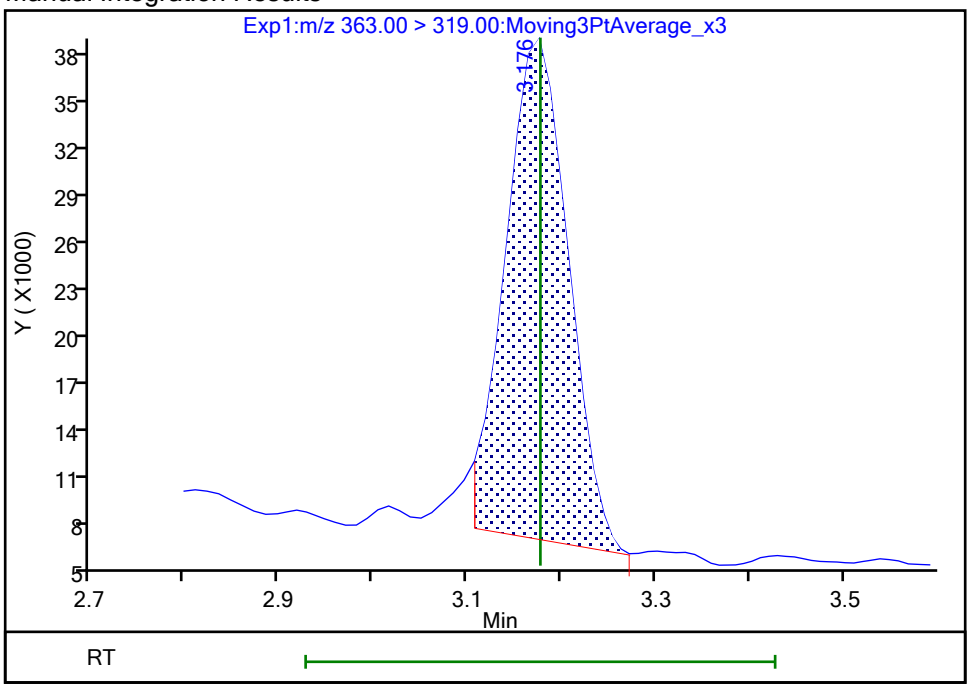
Processing Integration Results

RT: 3.18
Area: 158747
Amount: 0.111110
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 147376
Amount: 0.103151
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

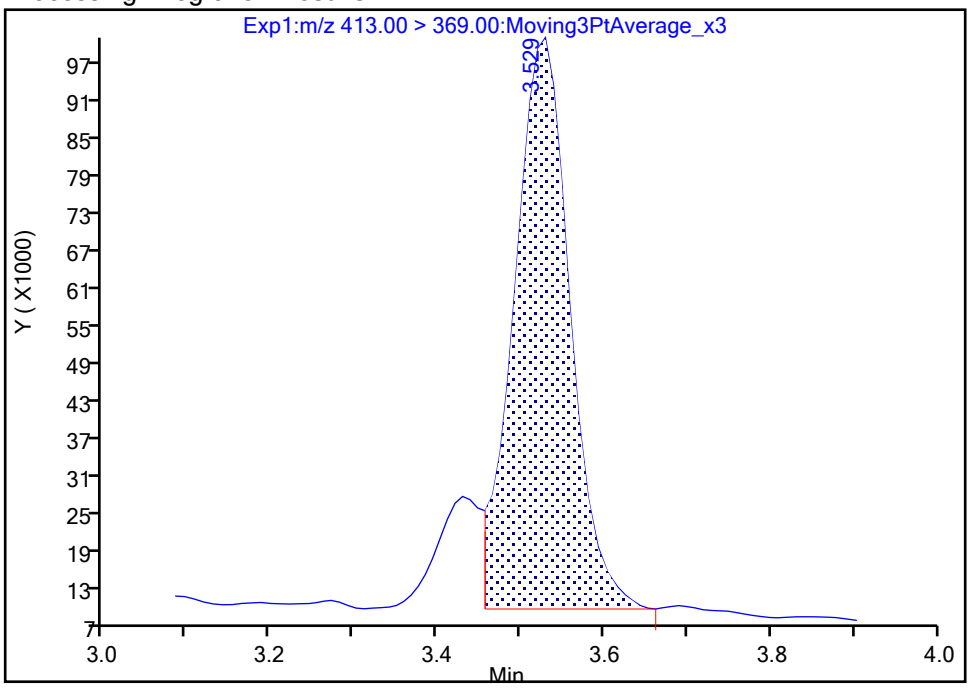
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

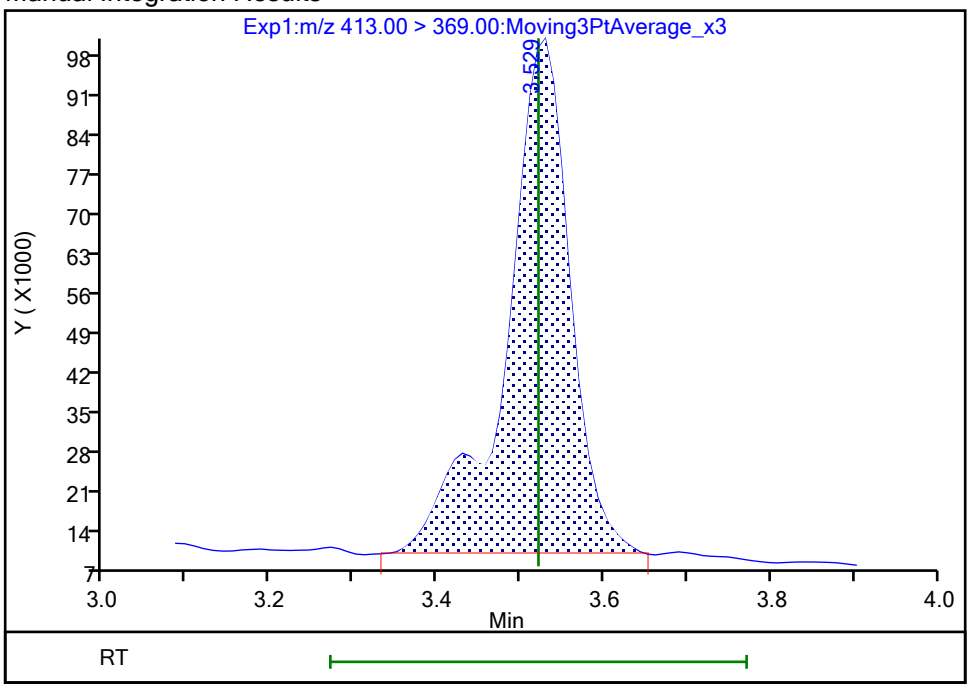
Processing Integration Results

RT: 3.53
Area: 425286
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 488841
Amount: 0.299005
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

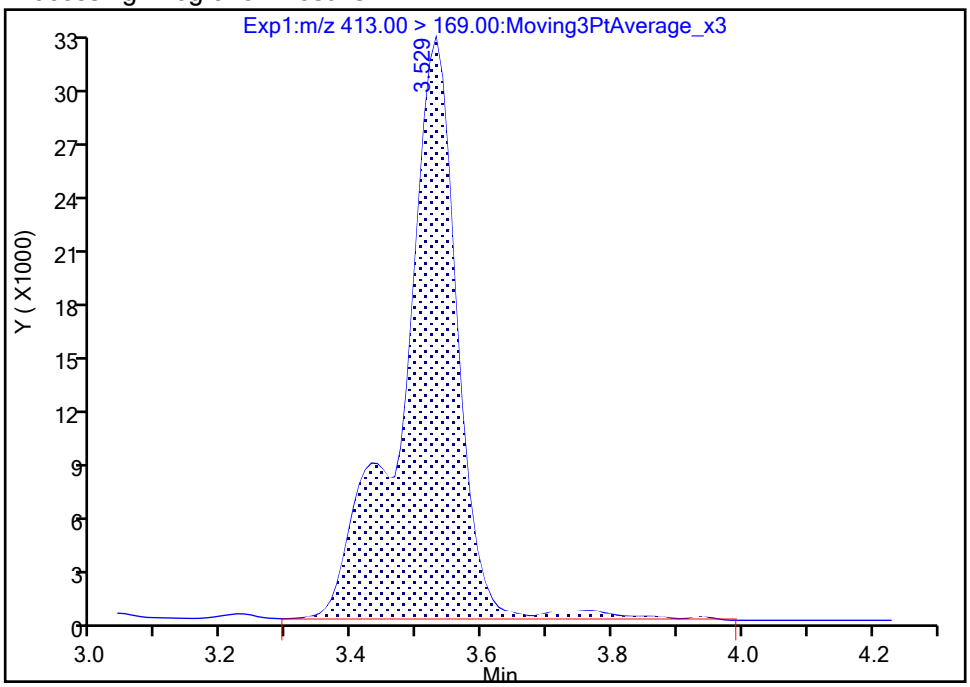
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

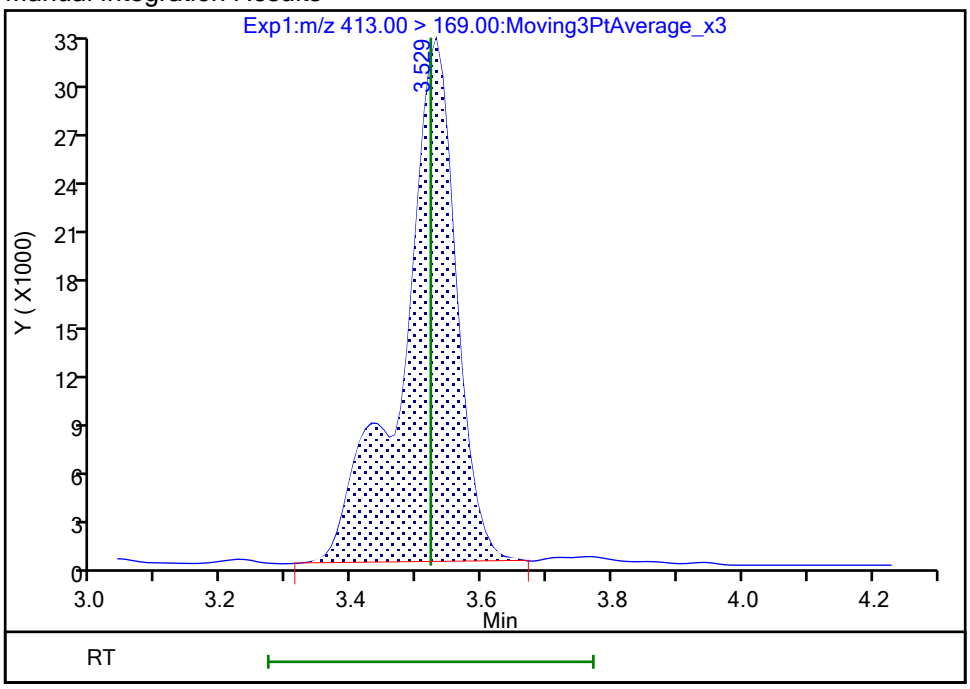
Processing Integration Results

RT: 3.53
Area: 190486
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 183172
Amount: 0.299005
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

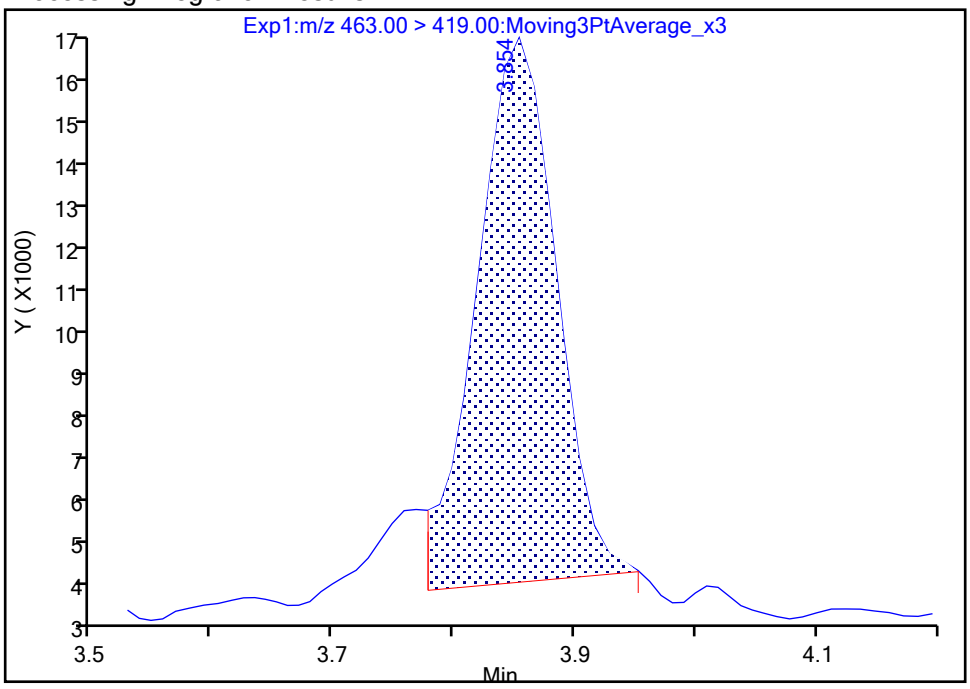
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

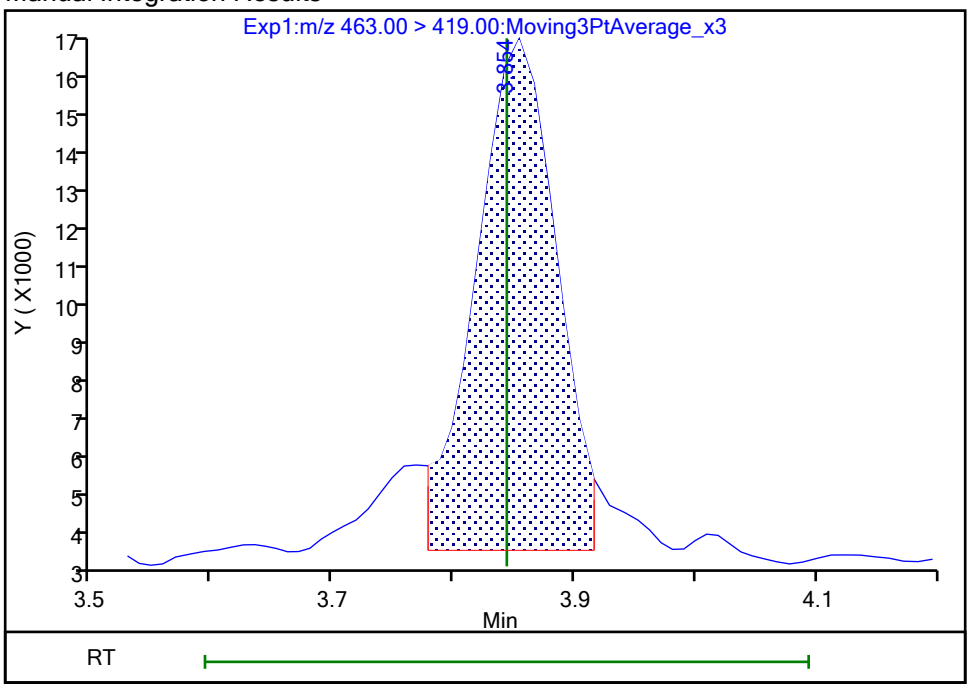
Processing Integration Results

RT: 3.85
Area: 56966
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 60056
Amount: 0.044398
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

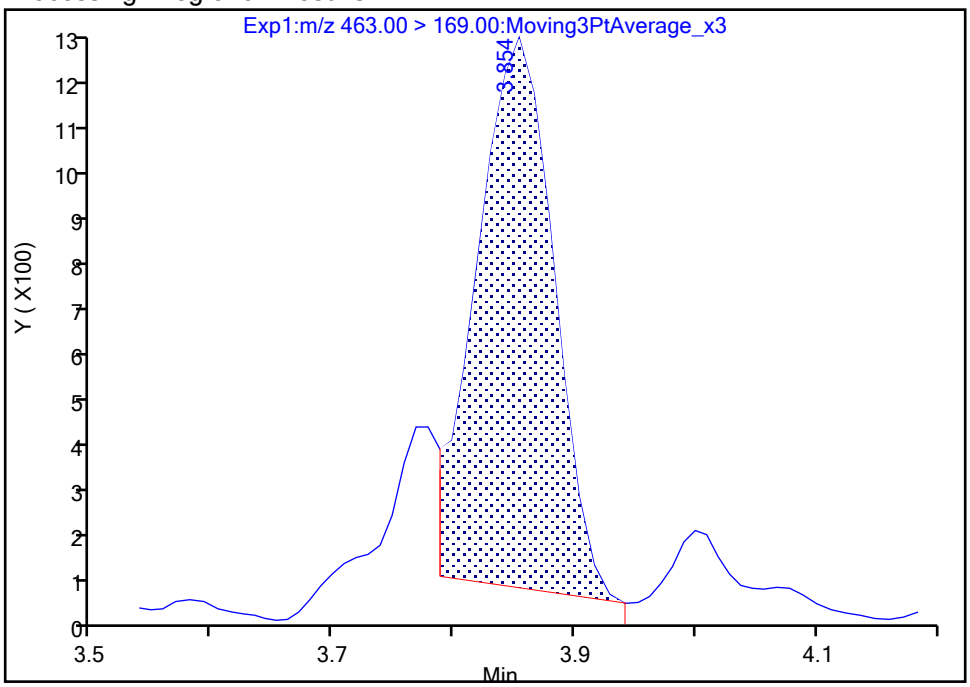
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

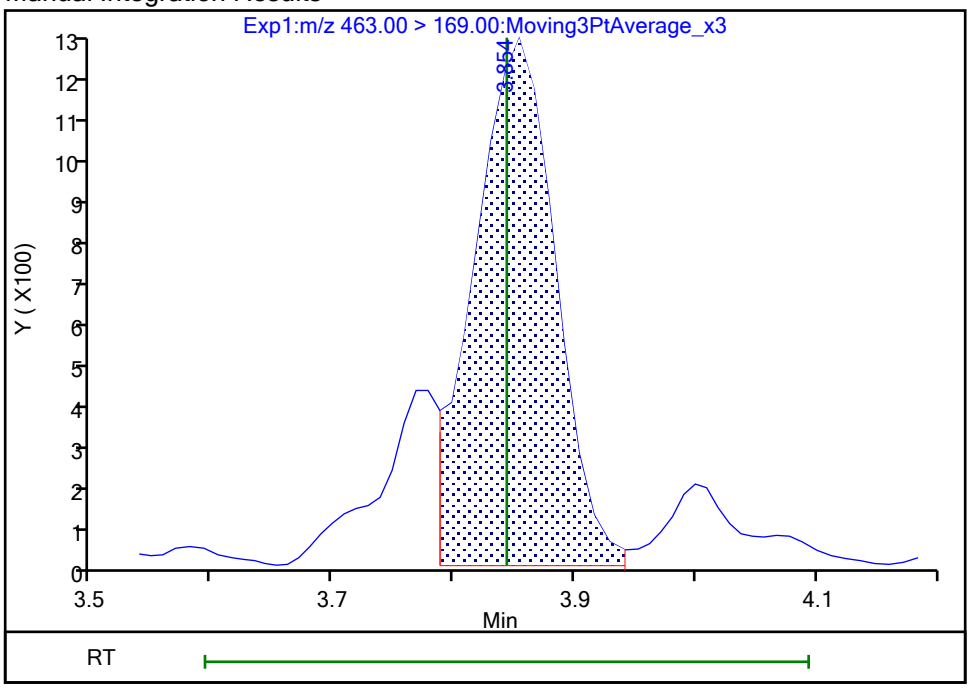
Processing Integration Results

RT: 3.85
Area: 5337
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 5934
Amount: 0.044398
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

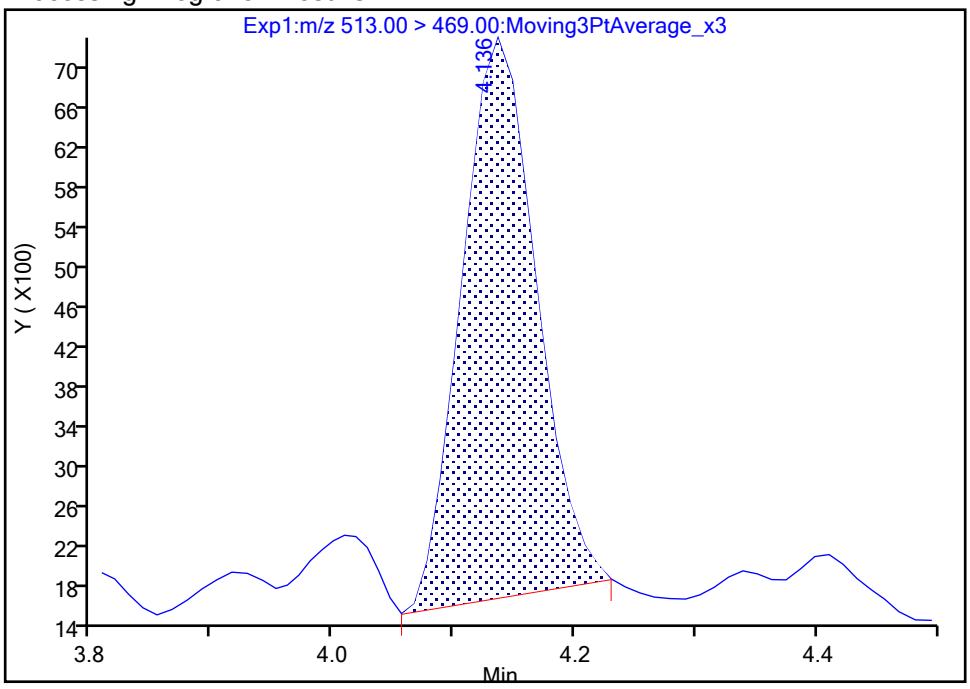
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

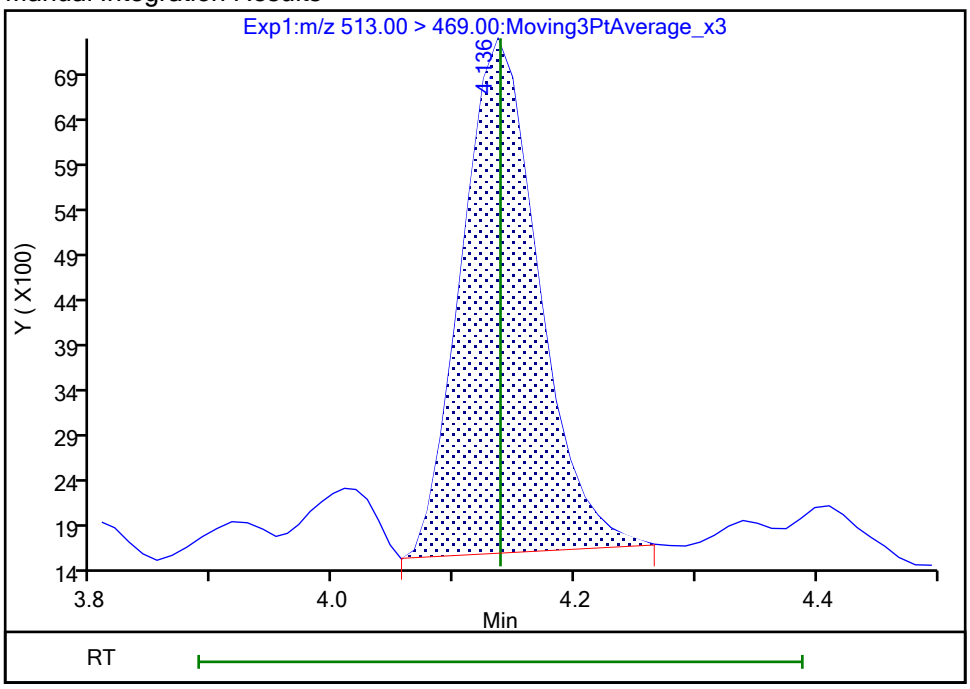
Processing Integration Results

RT: 4.14
Area: 24028
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 25321
Amount: 0.015472
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:11:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

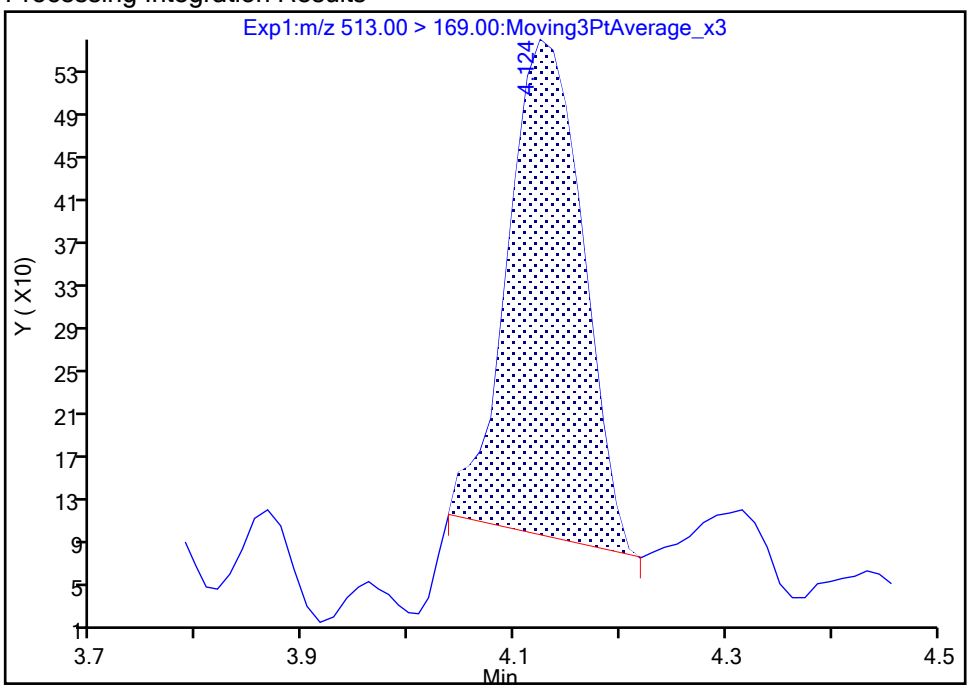
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

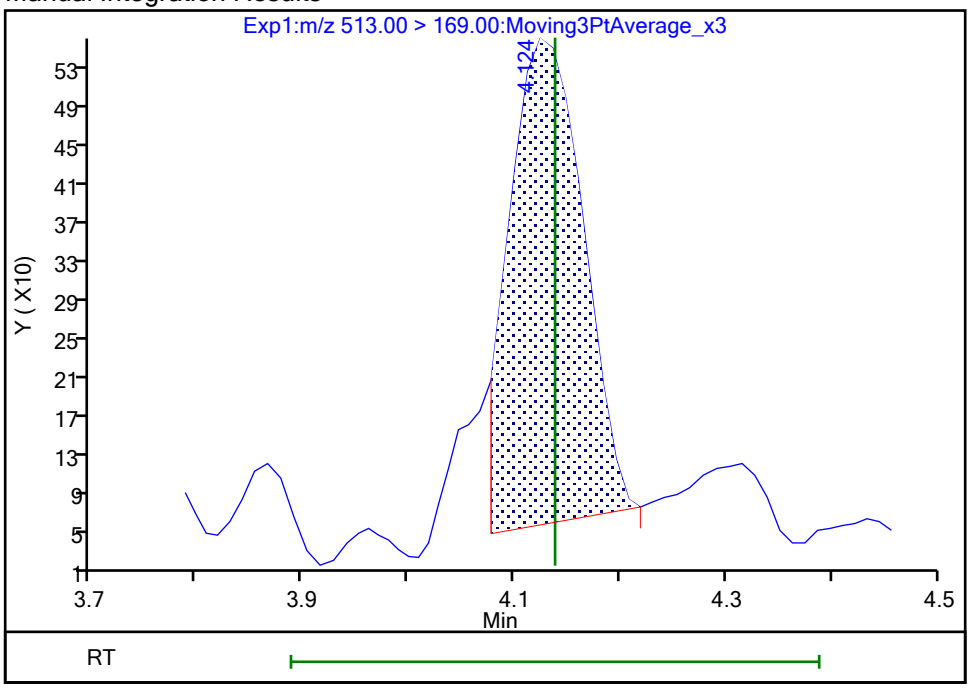
Processing Integration Results

RT: 4.12
Area: 2303
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 2422
Amount: 0.015472
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:11:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

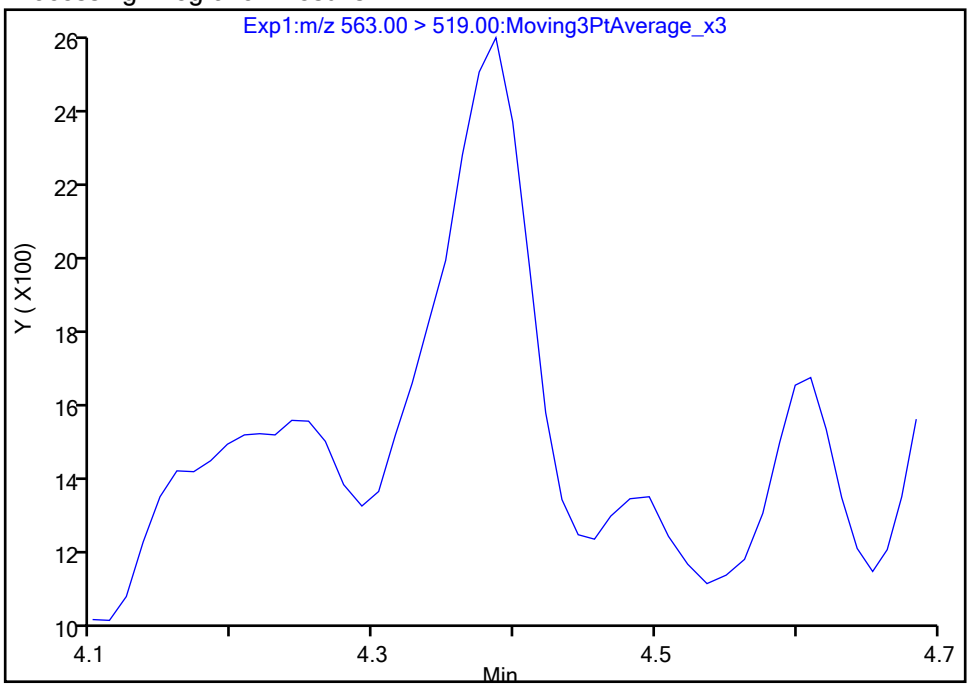
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

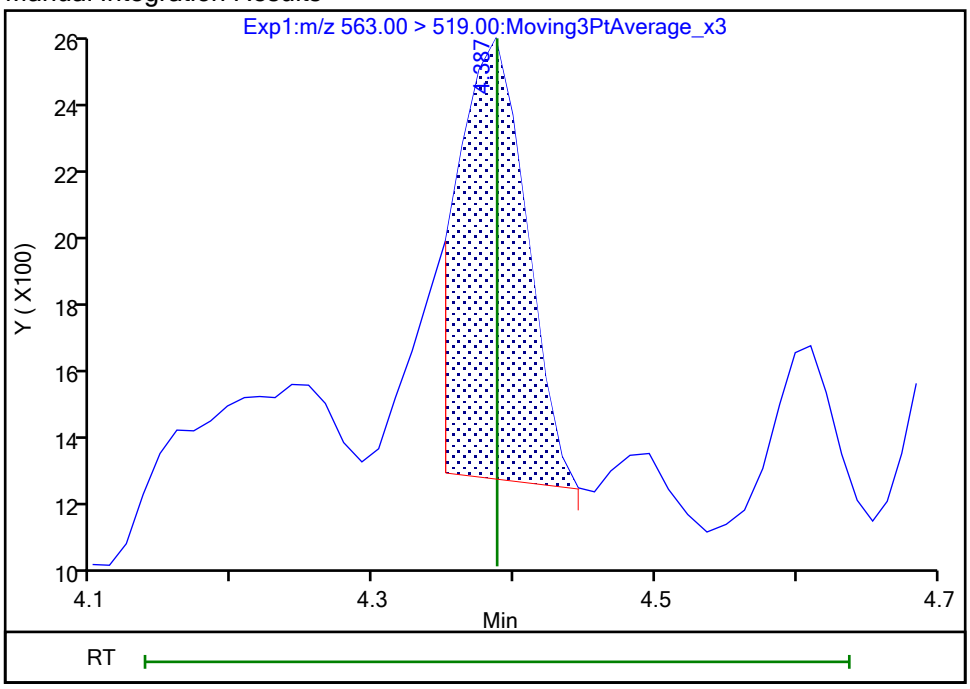
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 3952
Amount: 0.002552
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

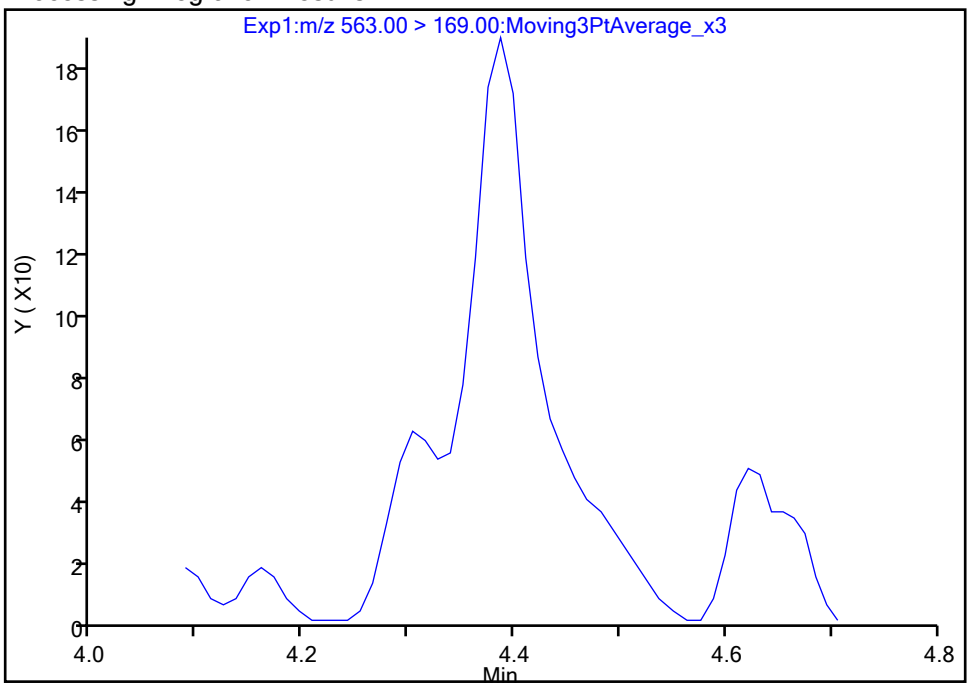
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

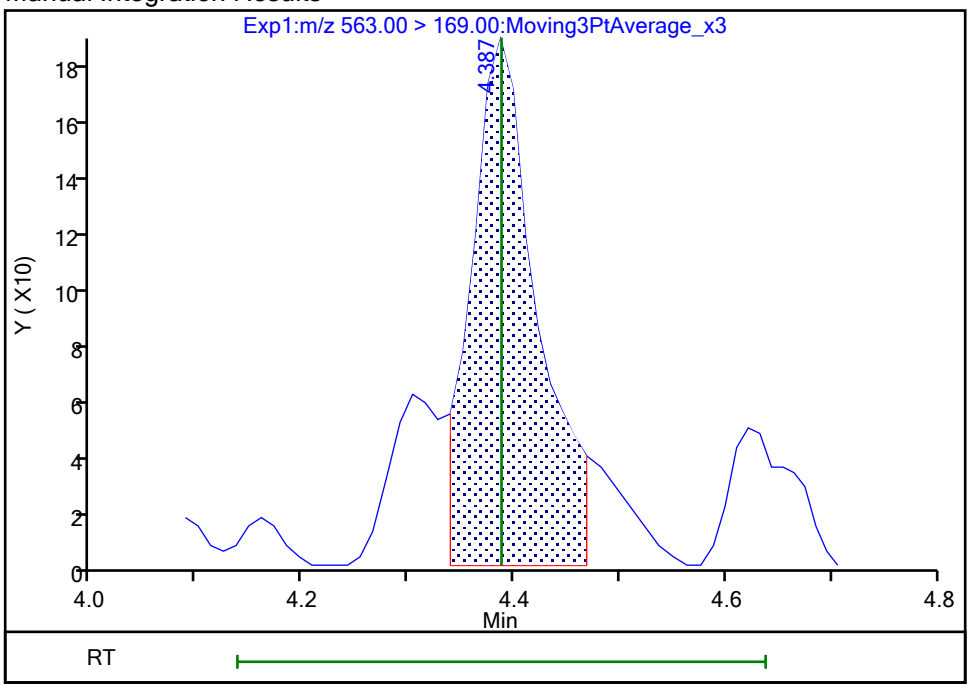
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 806
Amount: 0.002552
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

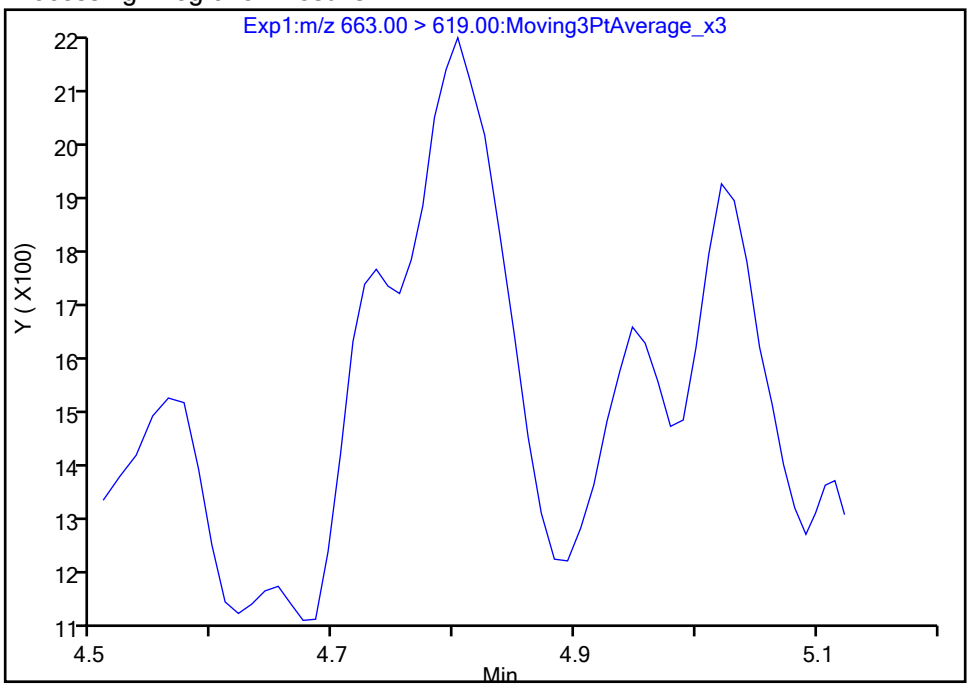
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

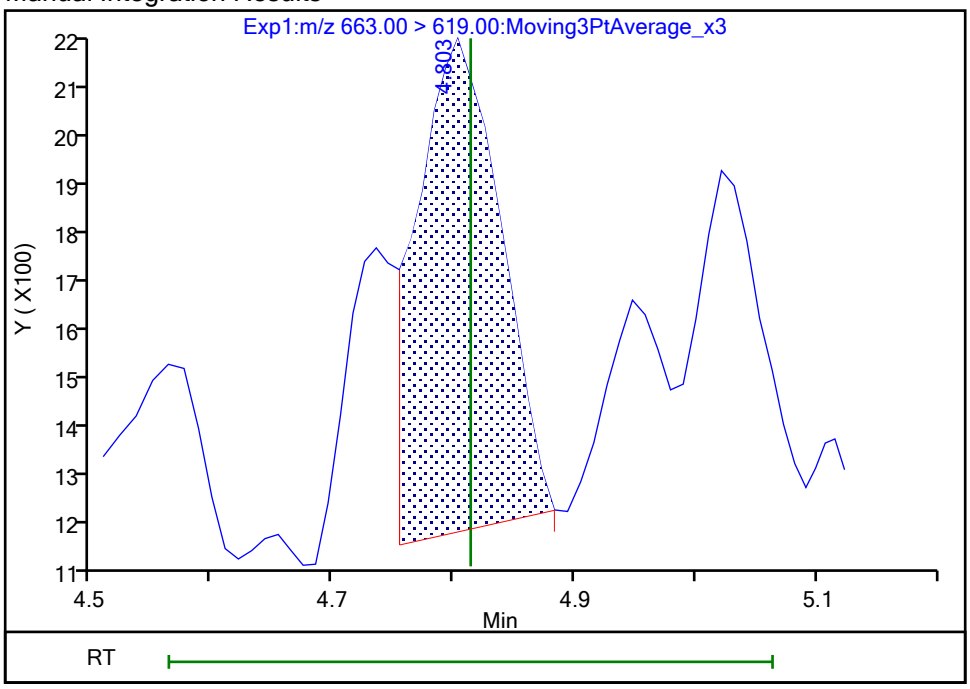
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.80
Area: 4490
Amount: 0.002582
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

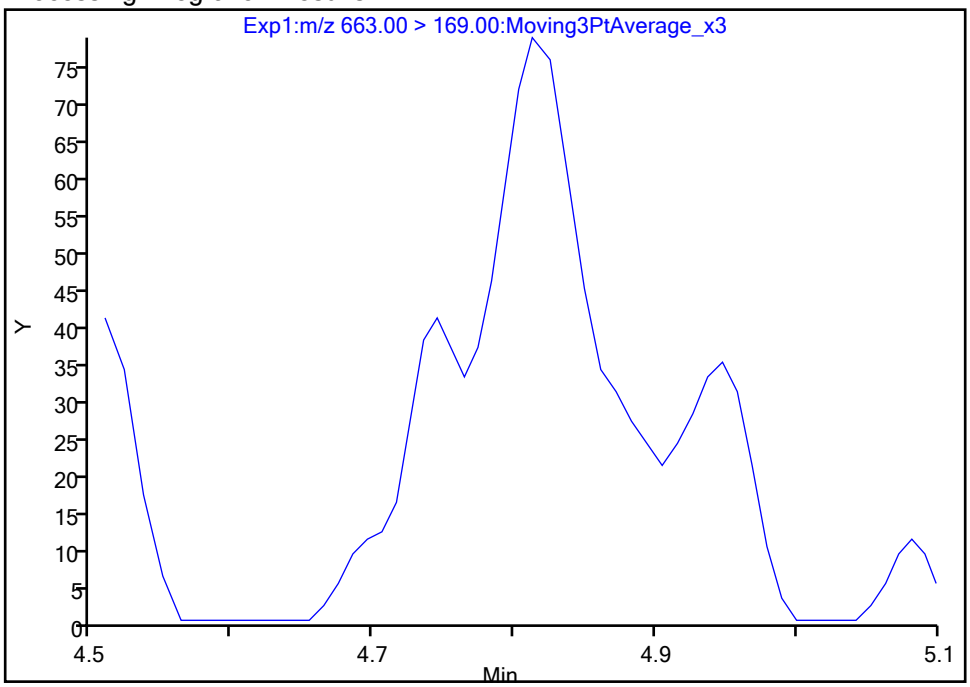
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

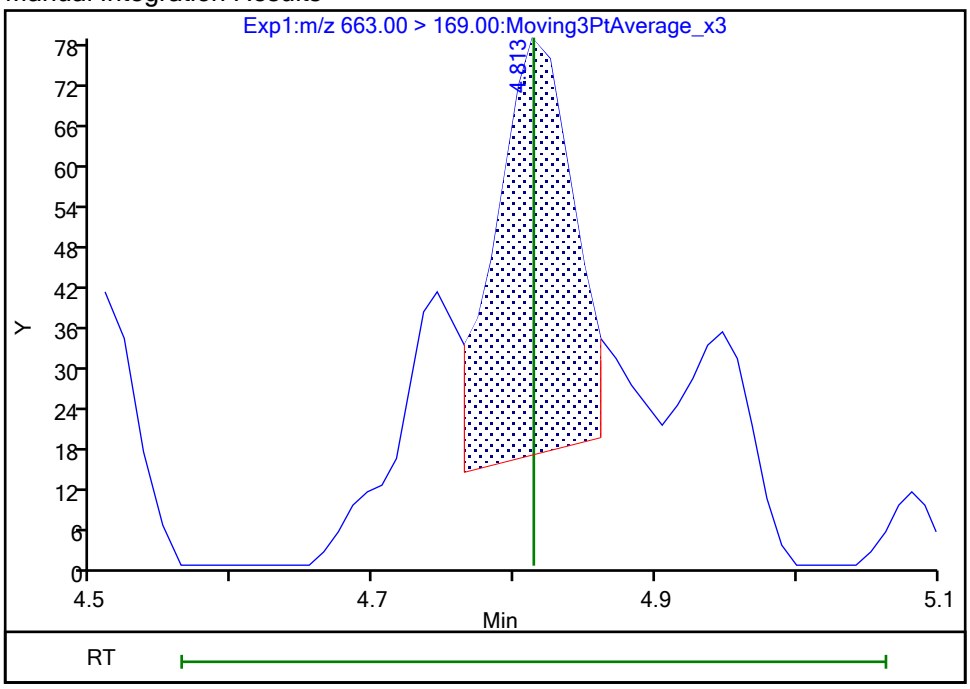
Not Detected
Expected RT: 4.81

Processing Integration Results



Manual Integration Results

RT: 4.81
Area: 235
Amount: 0.002582
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

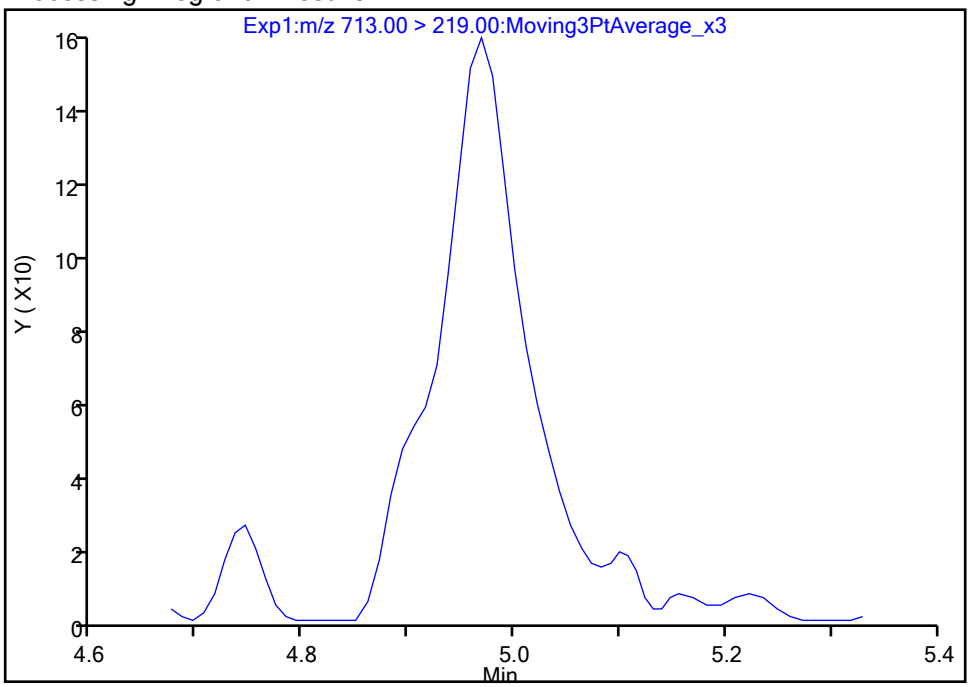
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

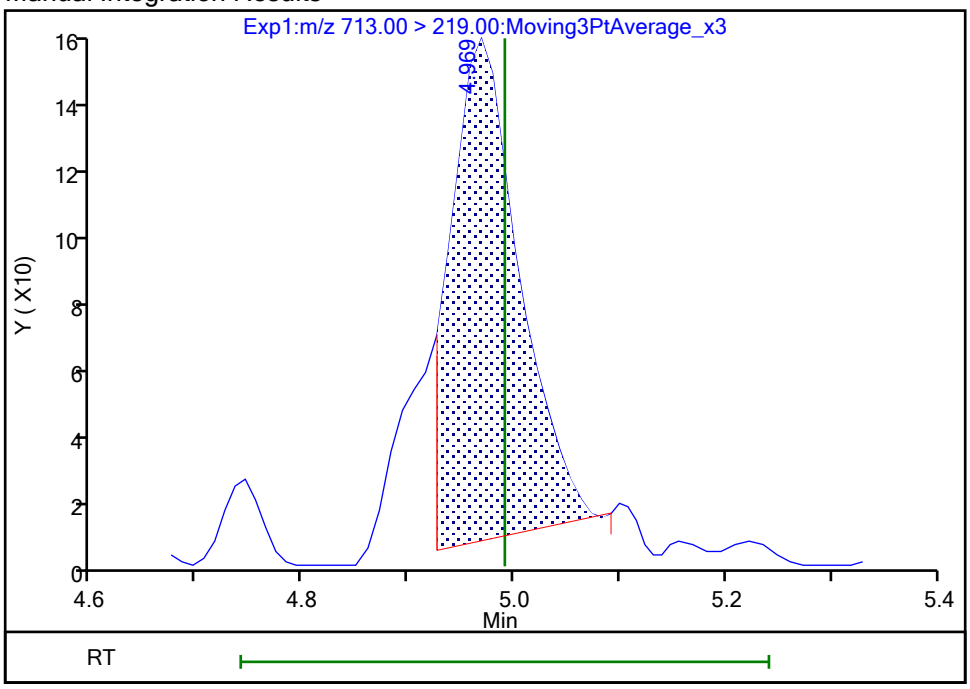
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 649
Amount: 0.003489
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

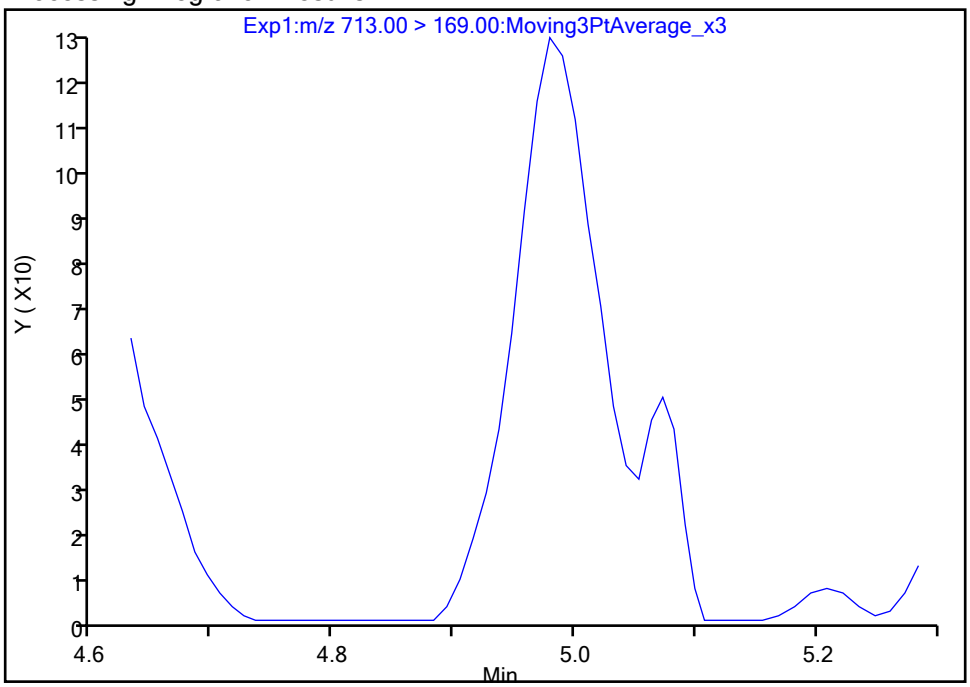
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

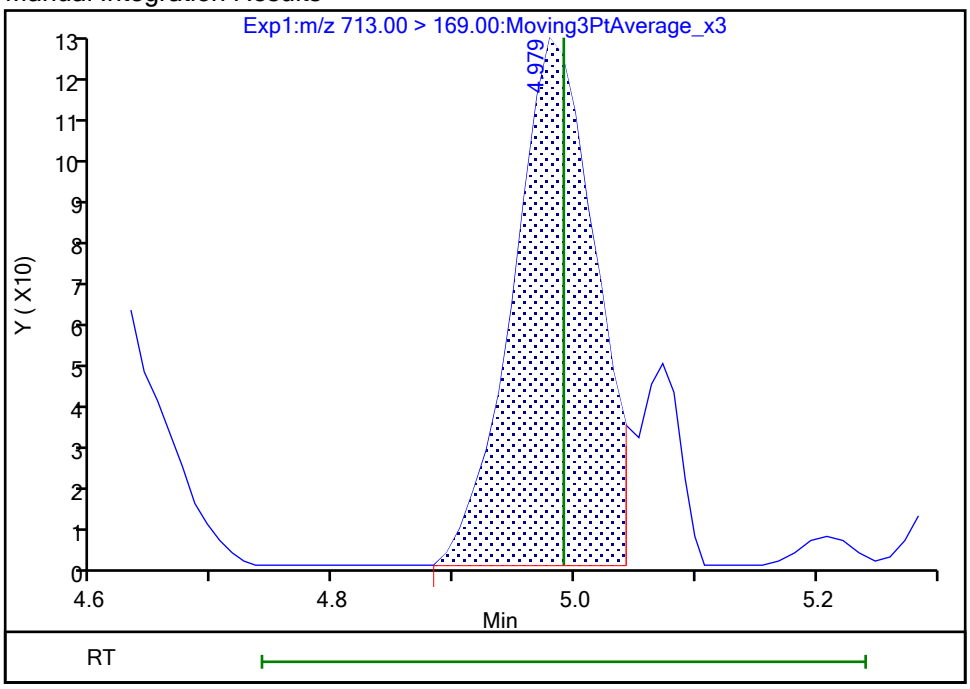
Processing Integration Results

Not Detected
Expected RT: 4.99



Manual Integration Results

RT: 4.98
Area: 600
Amount: 0.003489
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

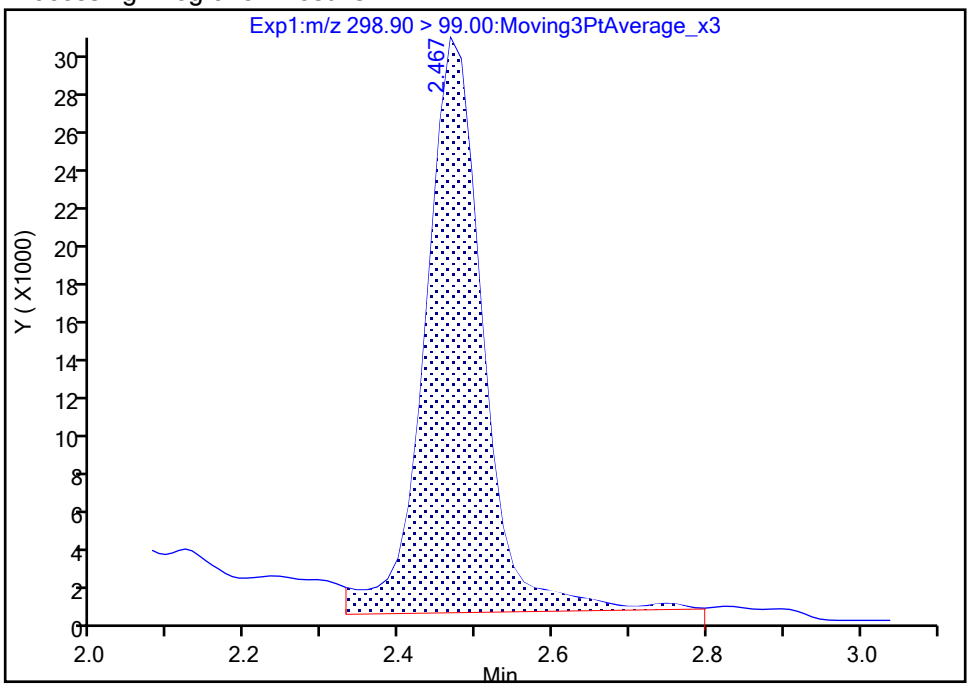
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

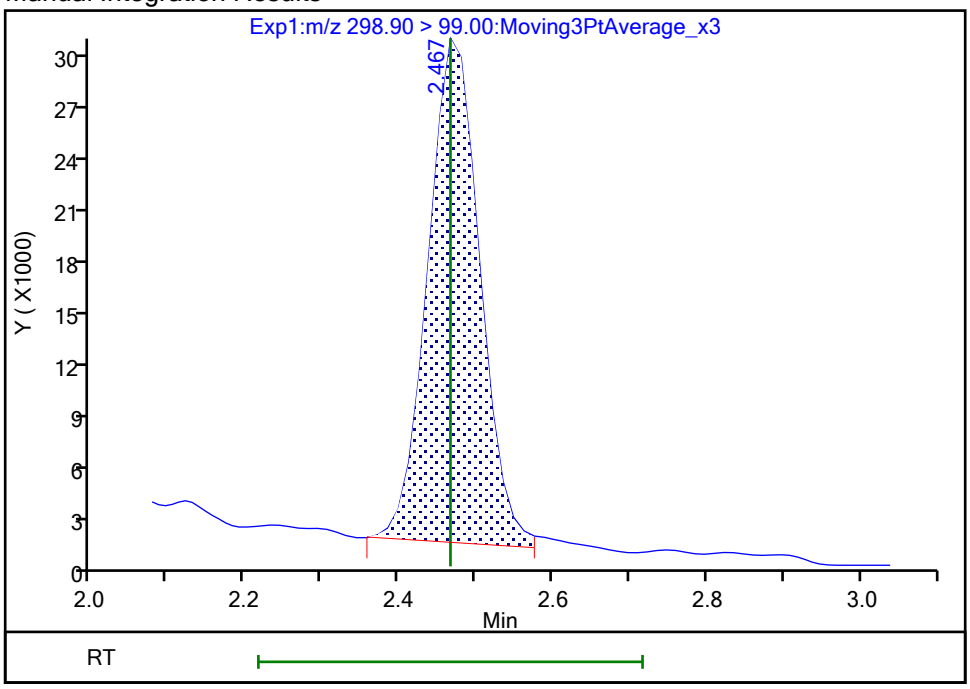
Processing Integration Results

RT: 2.47
Area: 156774
Amount: 0.226808
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 136645
Amount: 0.158013
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

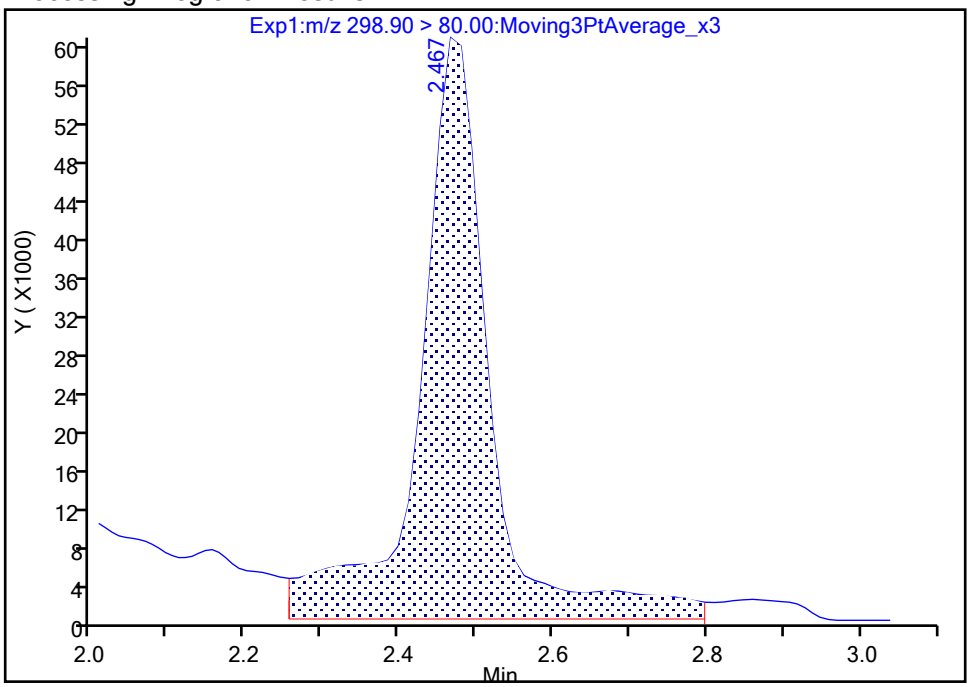
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

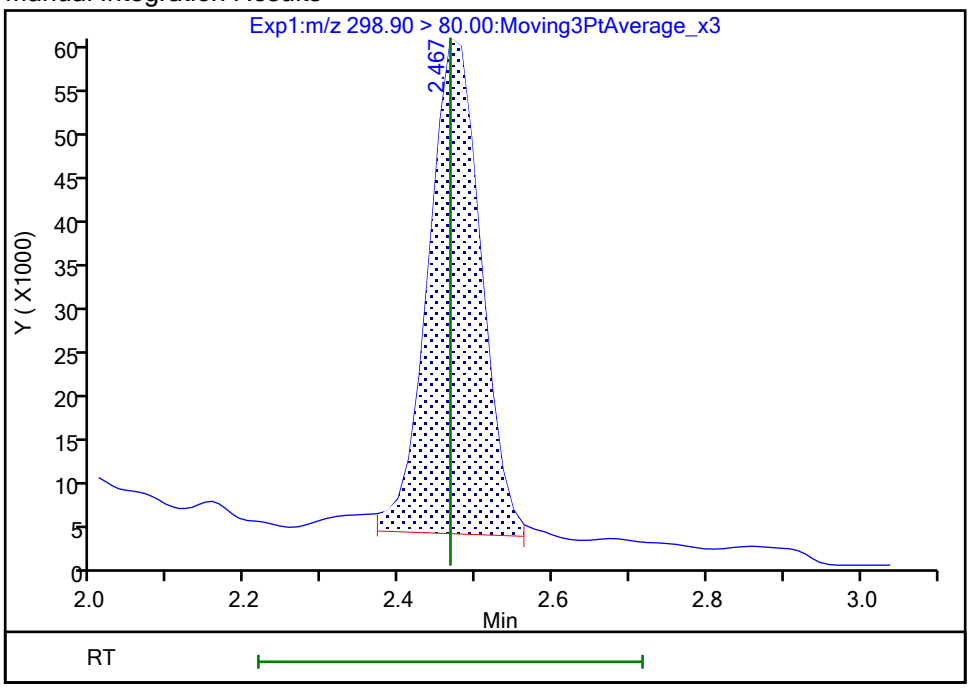
Processing Integration Results

RT: 2.47
Area: 389677
Amount: 0.226808
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 271481
Amount: 0.158013
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

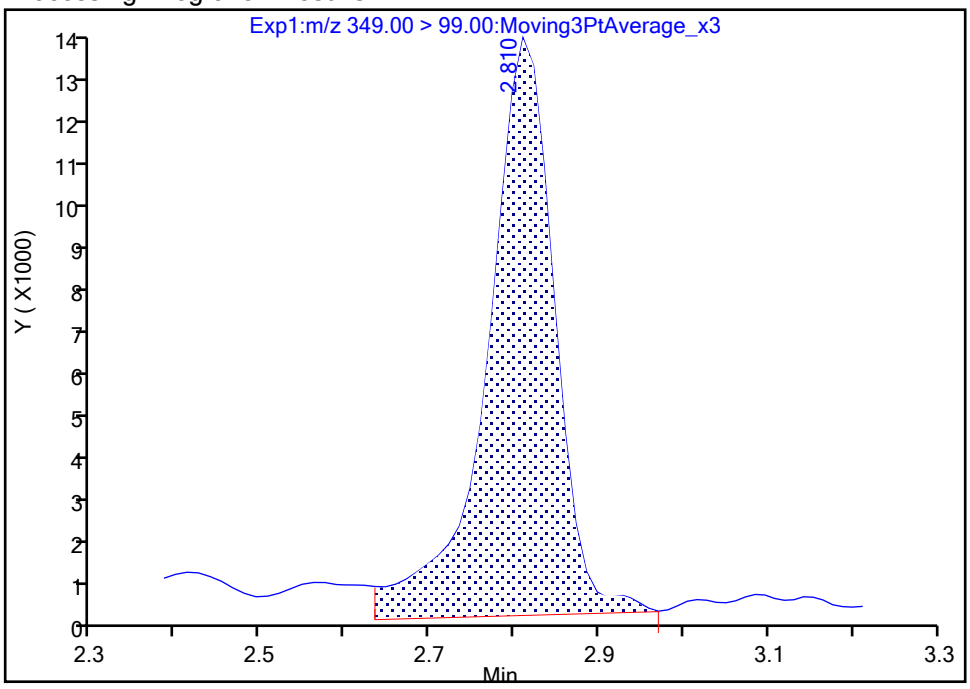
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

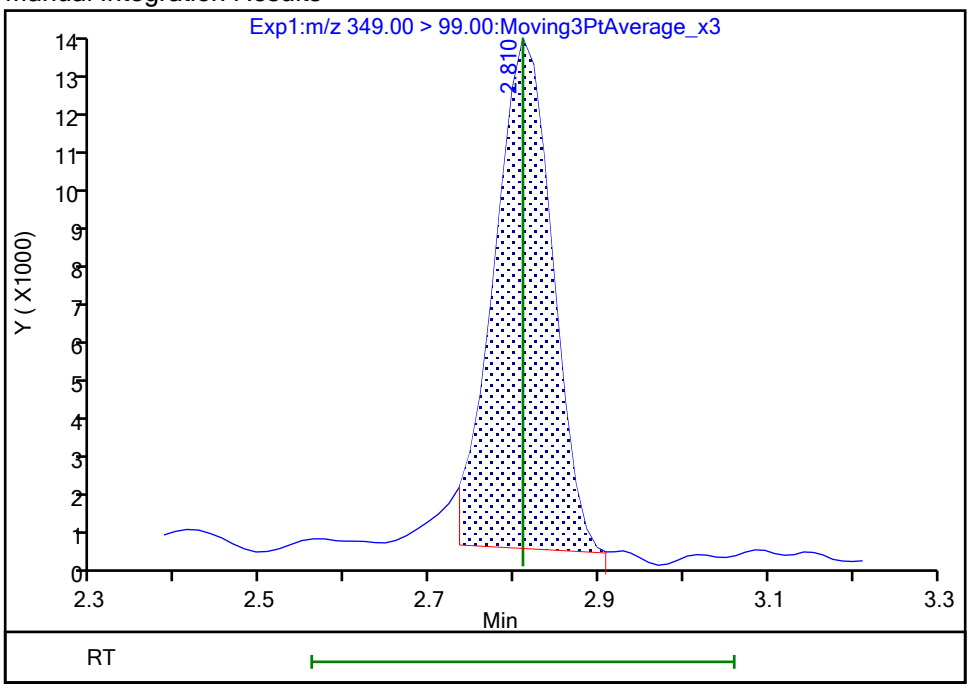
Processing Integration Results

RT: 2.81
Area: 73472
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 60334
Amount: 0.102392
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

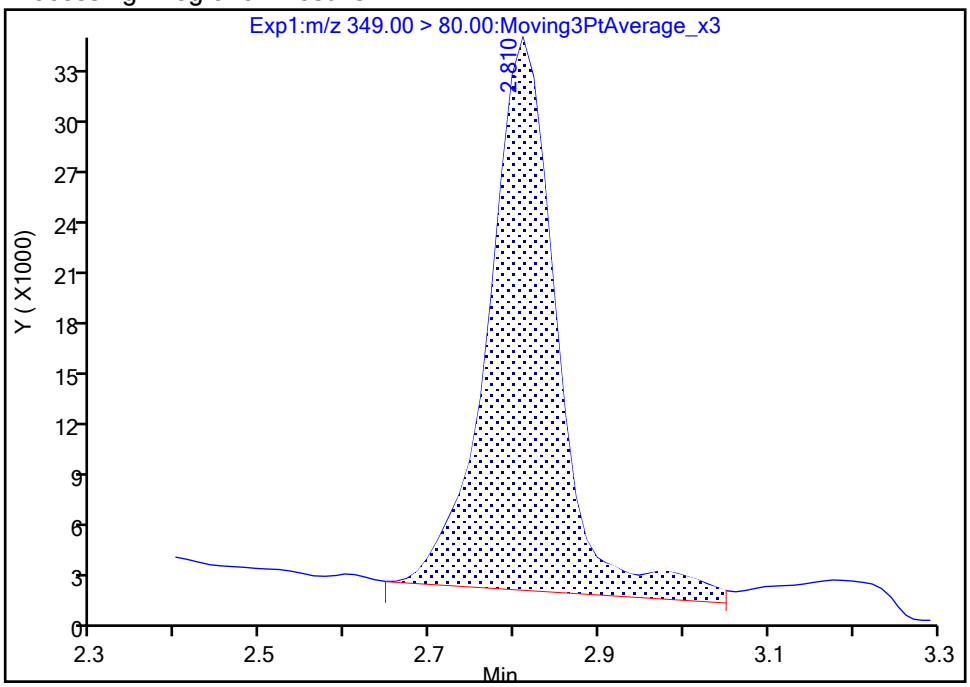
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

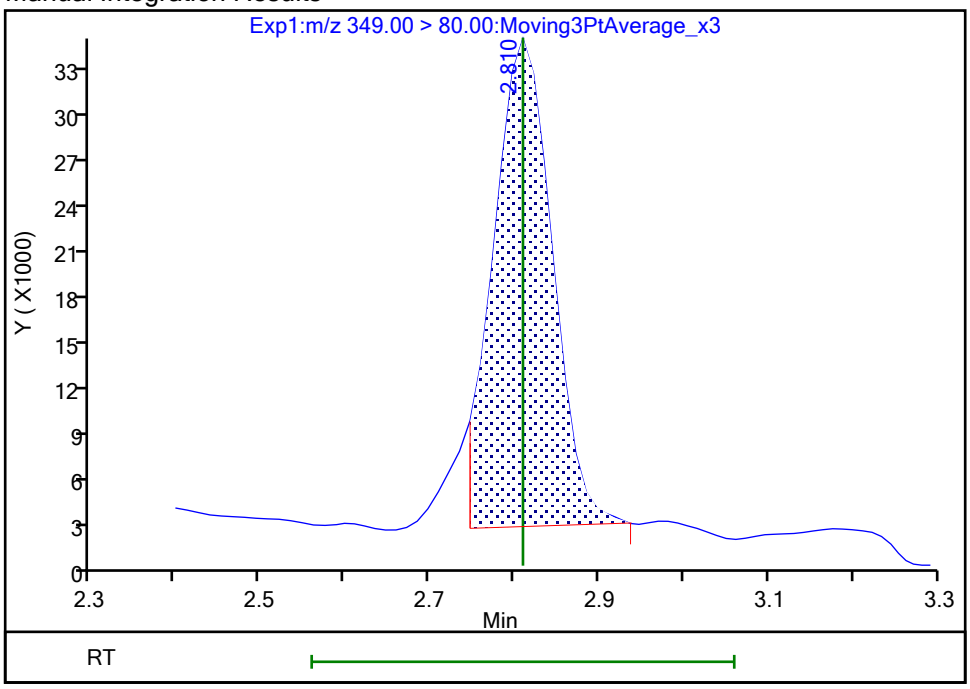
Processing Integration Results

RT: 2.81
Area: 188820
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 155105
Amount: 0.102392
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

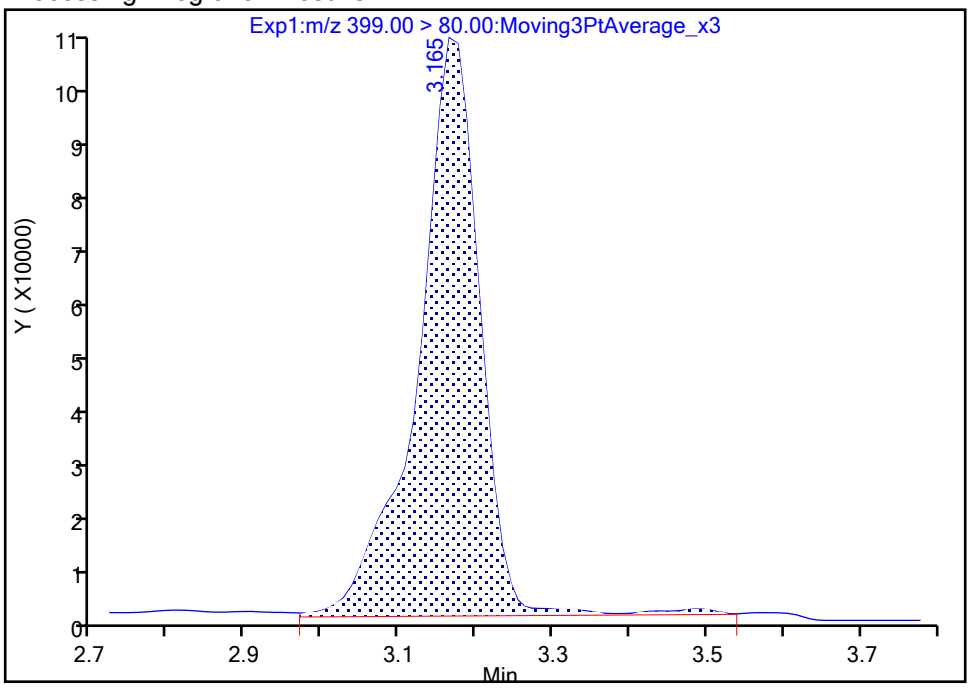
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

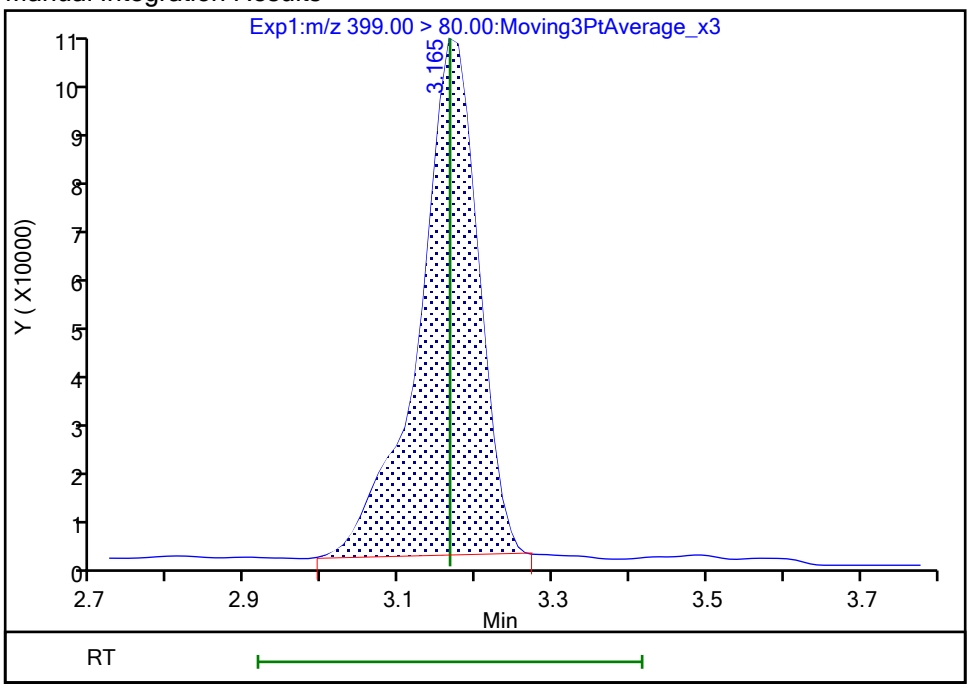
Processing Integration Results

RT: 3.16
Area: 561167
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 530666
Amount: 0.413265
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

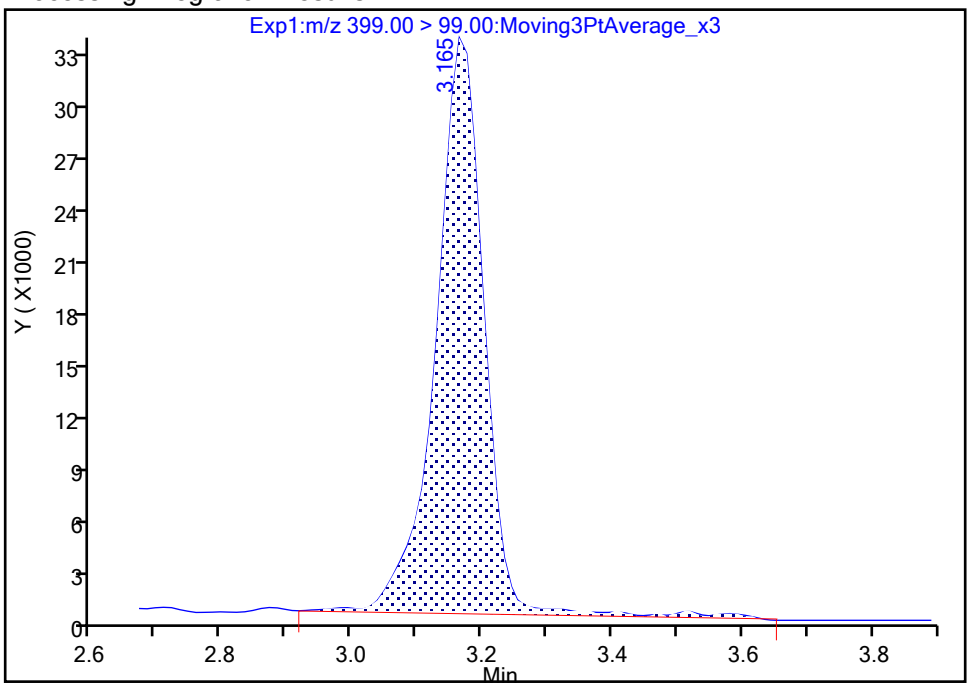
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

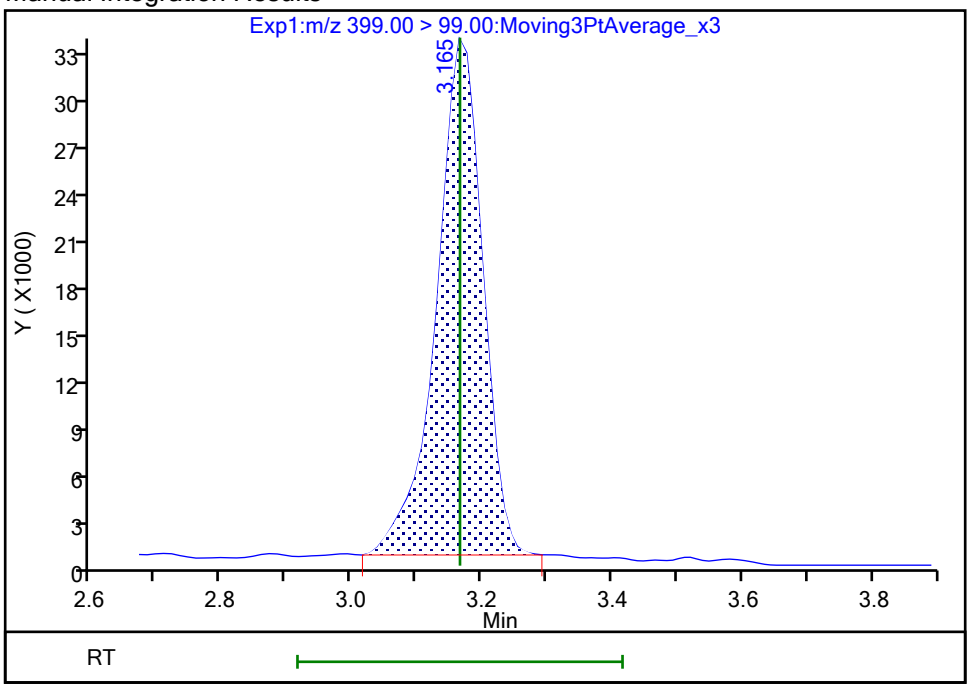
Processing Integration Results

RT: 3.16
Area: 172867
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 162123
Amount: 0.413265
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

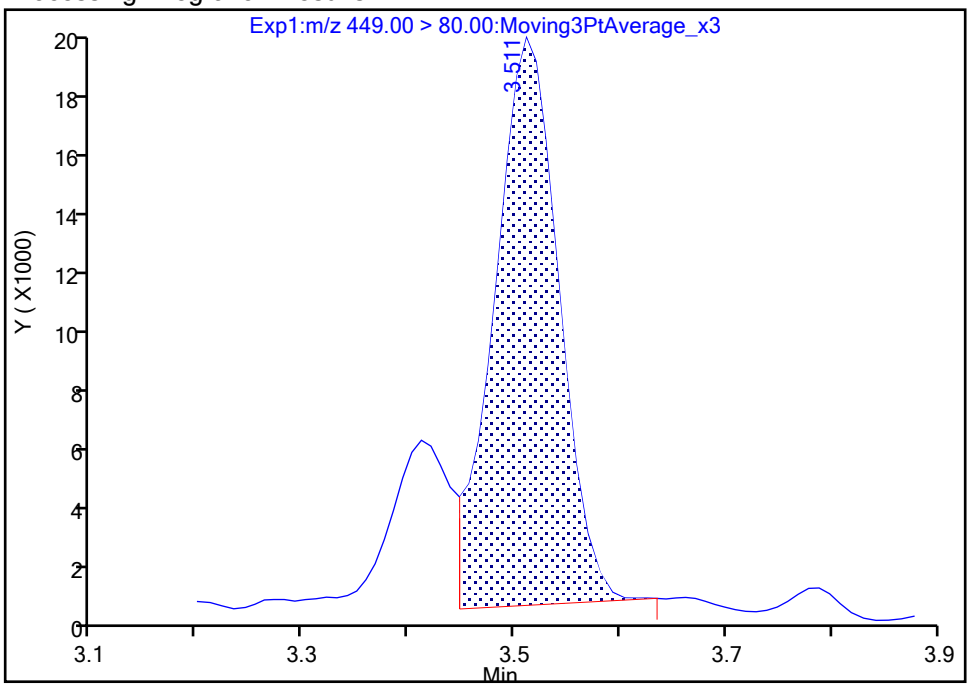
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

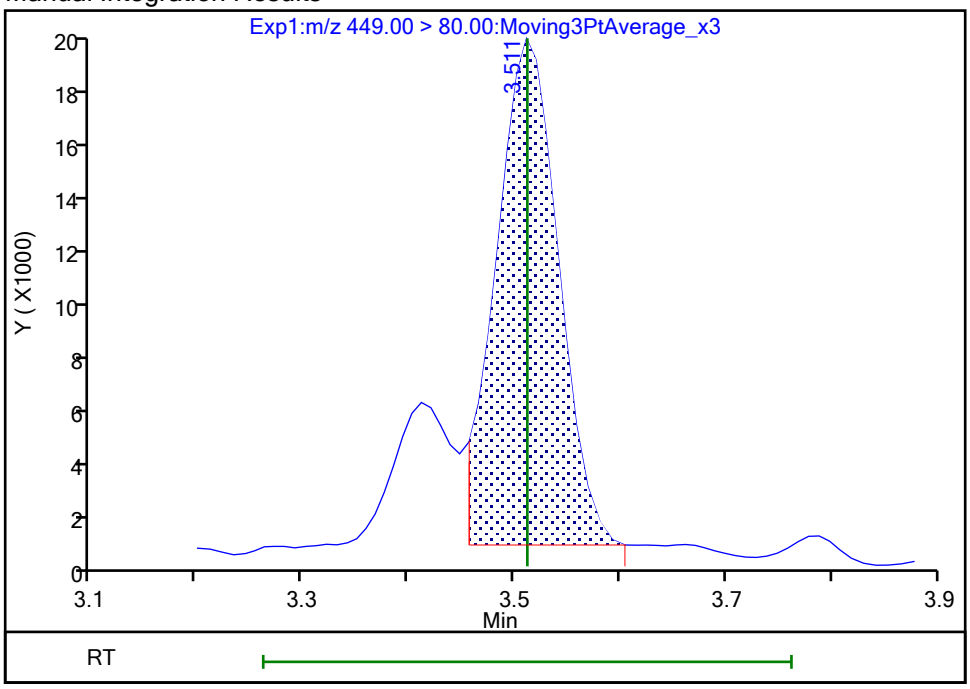
Processing Integration Results

RT: 3.51
Area: 76530
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 72653
Amount: 0.069519
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

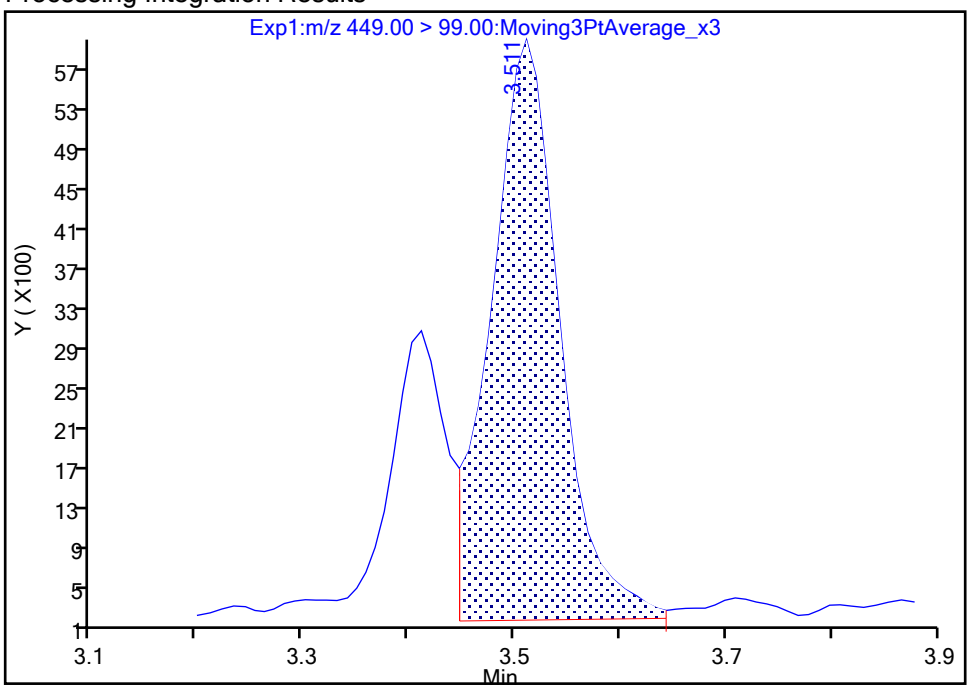
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

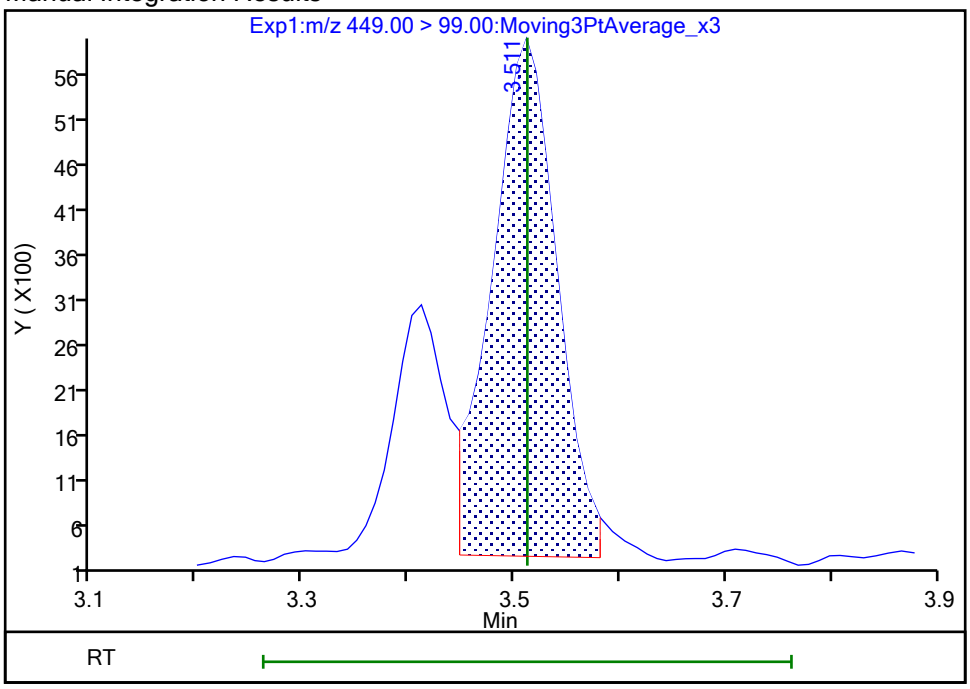
Processing Integration Results

RT: 3.51
Area: 26461
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 24200
Amount: 0.069519
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

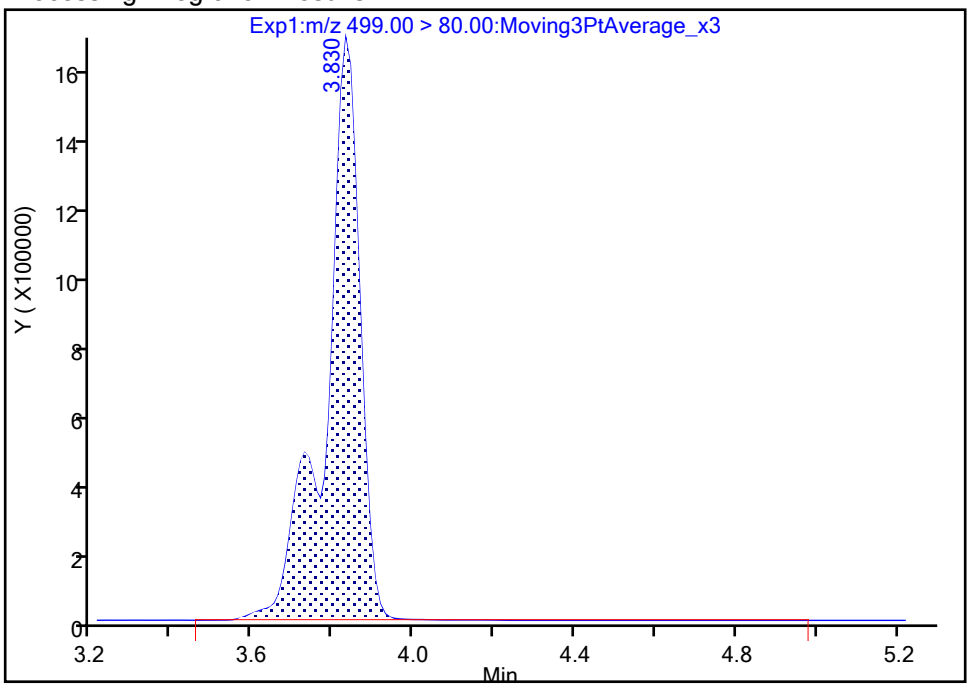
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

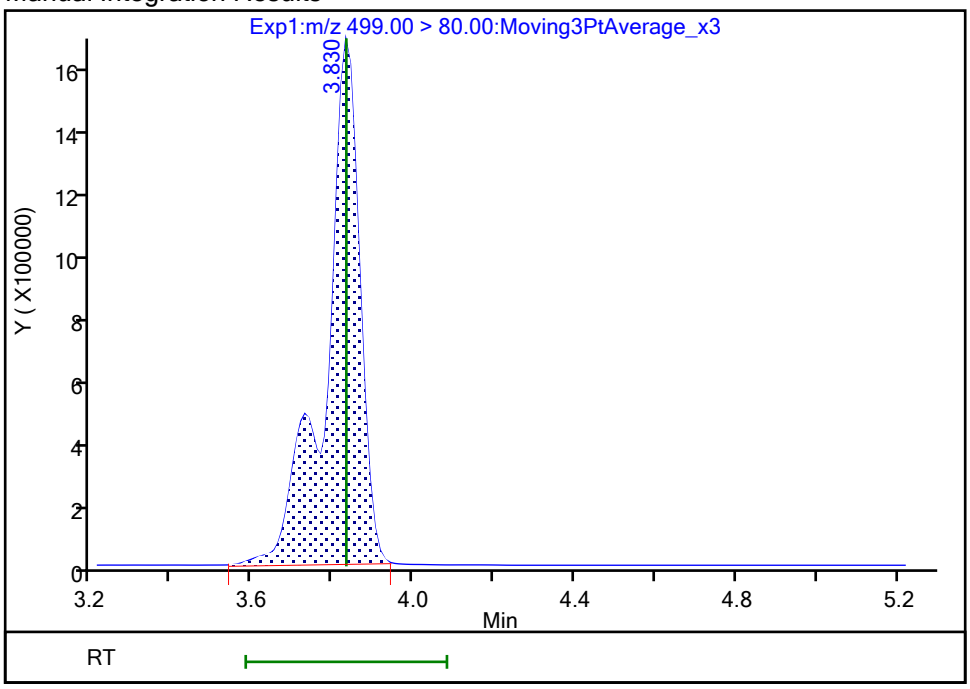
Processing Integration Results

RT: 3.83
Area: 9721735
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 9671042
Amount: 11.465778
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

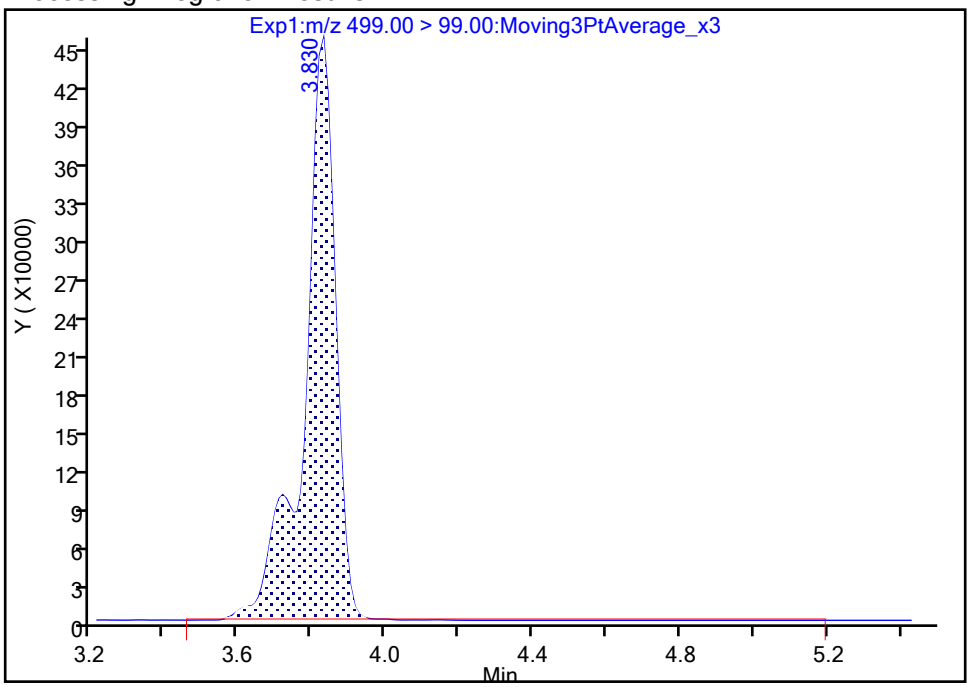
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

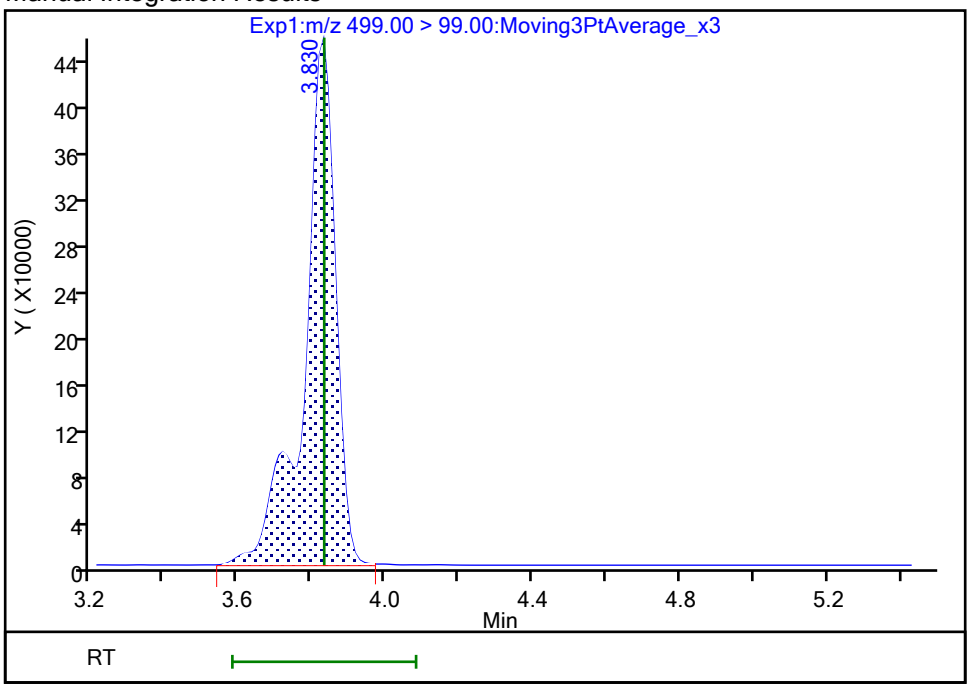
Processing Integration Results

RT: 3.83
Area: 2672724
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 2660618
Amount: 11.465778
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

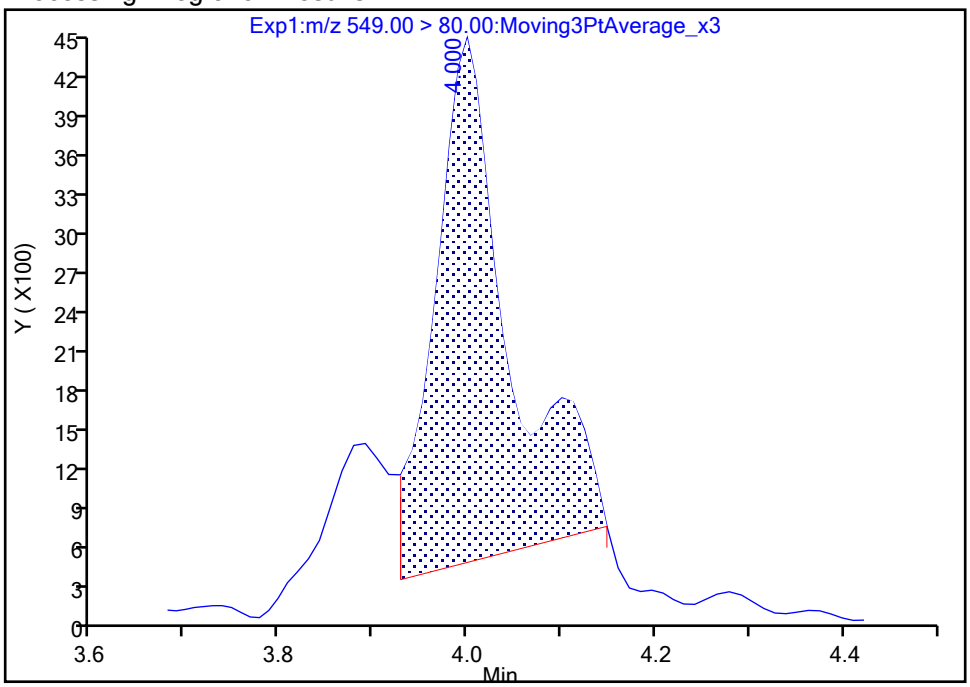
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

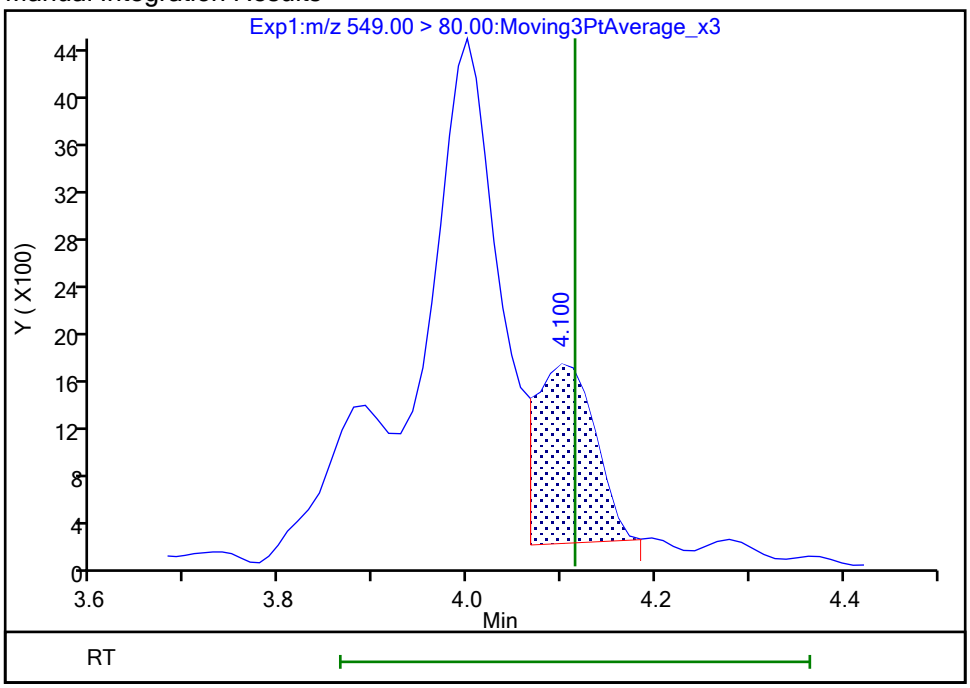
Processing Integration Results

RT: 4.00
Area: 21902
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 6462
Amount: 0.010070
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

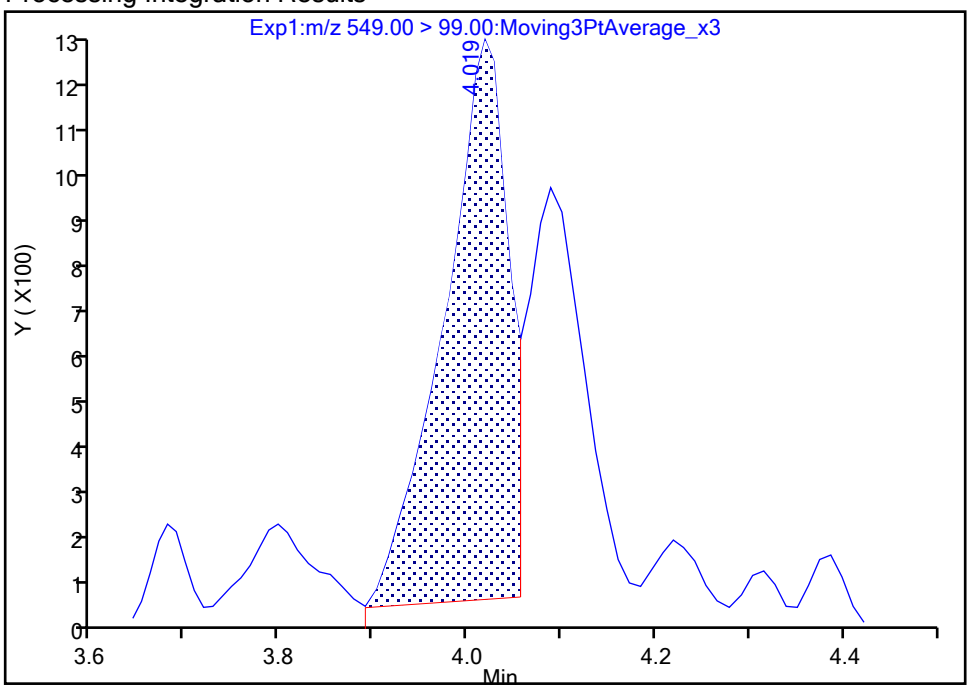
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

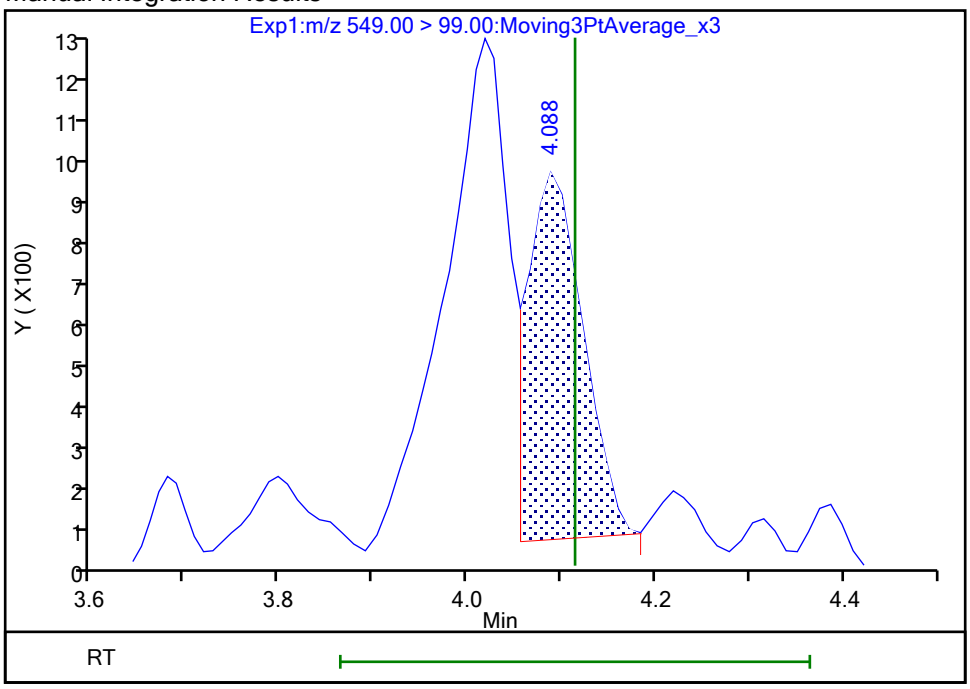
Processing Integration Results

RT: 4.02
Area: 5280
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 3236
Amount: 0.010070
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

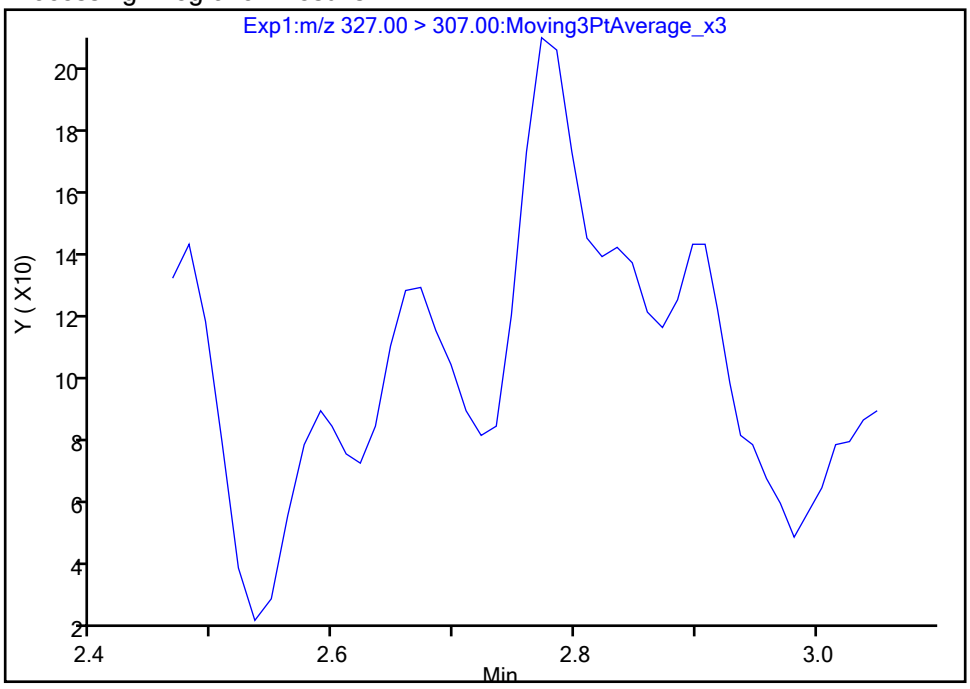
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

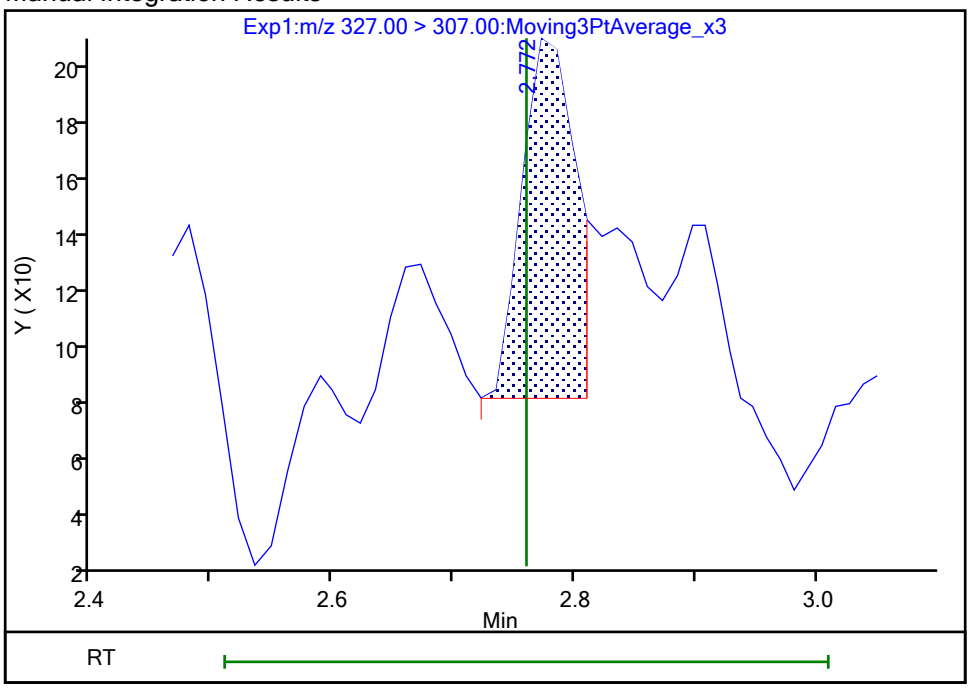
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 384
Amount: 0.000676
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

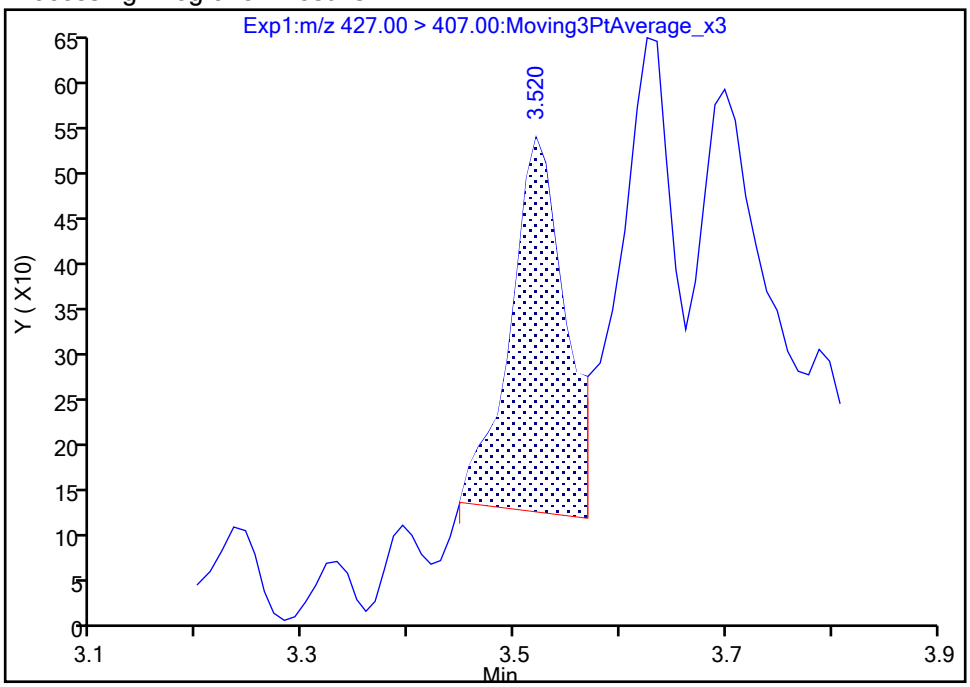
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

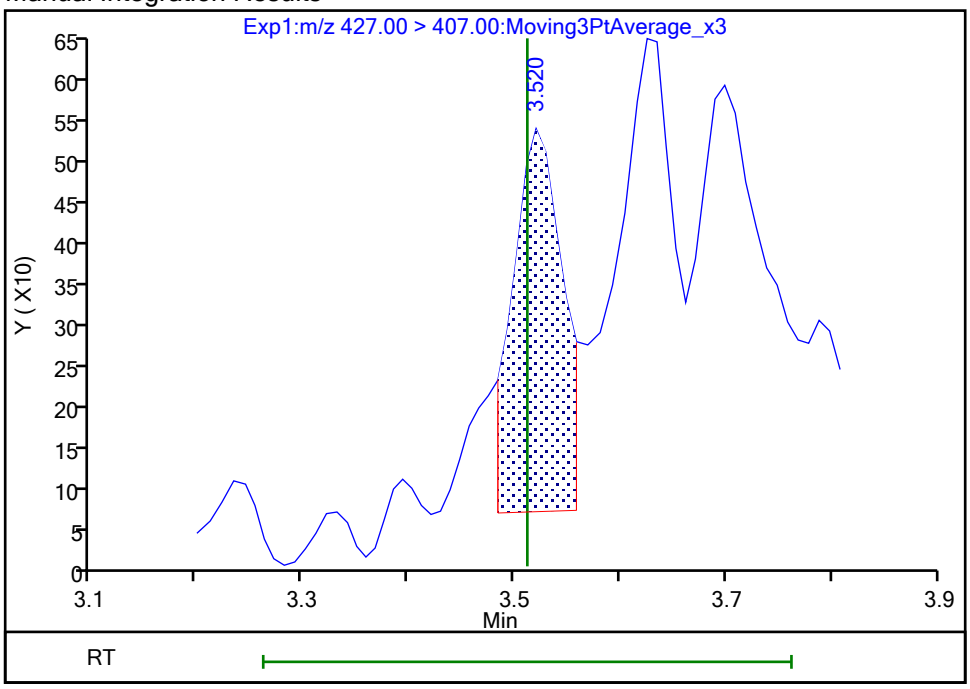
Processing Integration Results

RT: 3.52
Area: 1475
Amount: 0.002409
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1489
Amount: 0.002431
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:09:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

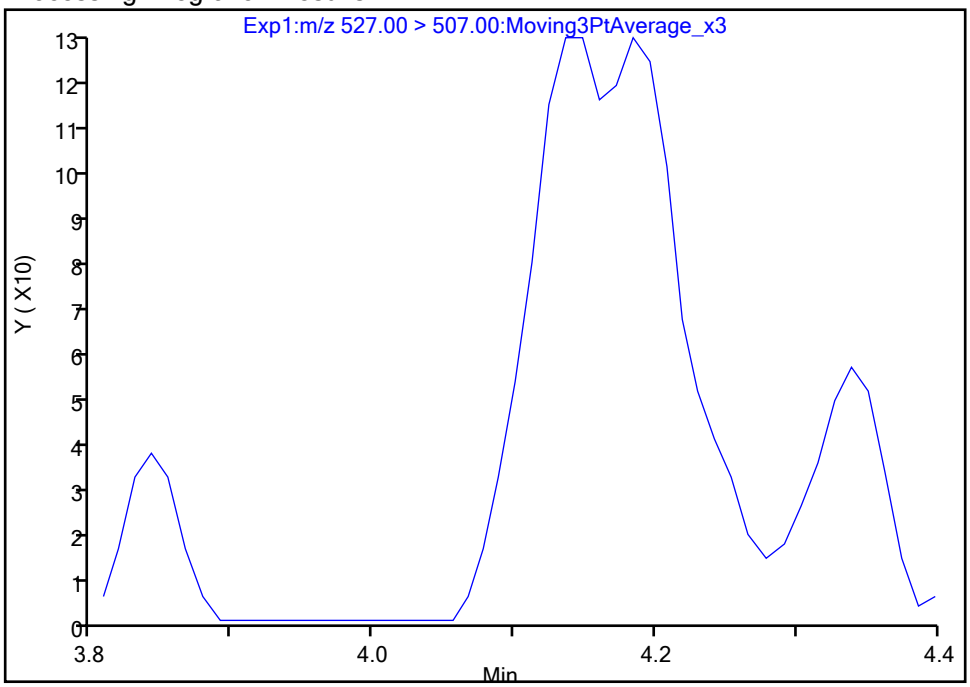
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

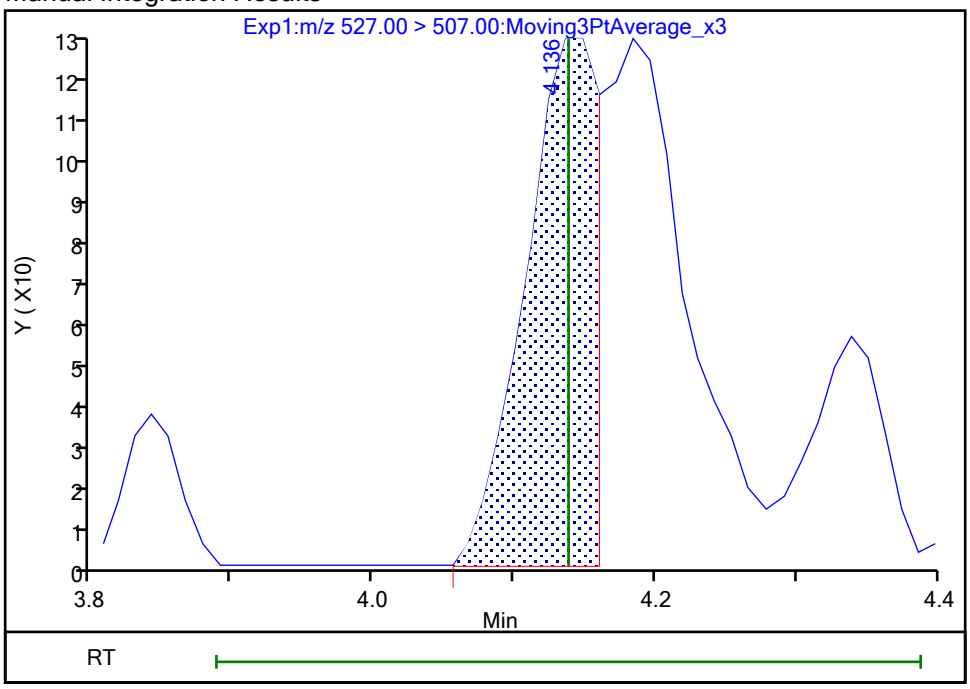
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 414
Amount: 0.000780
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:11:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

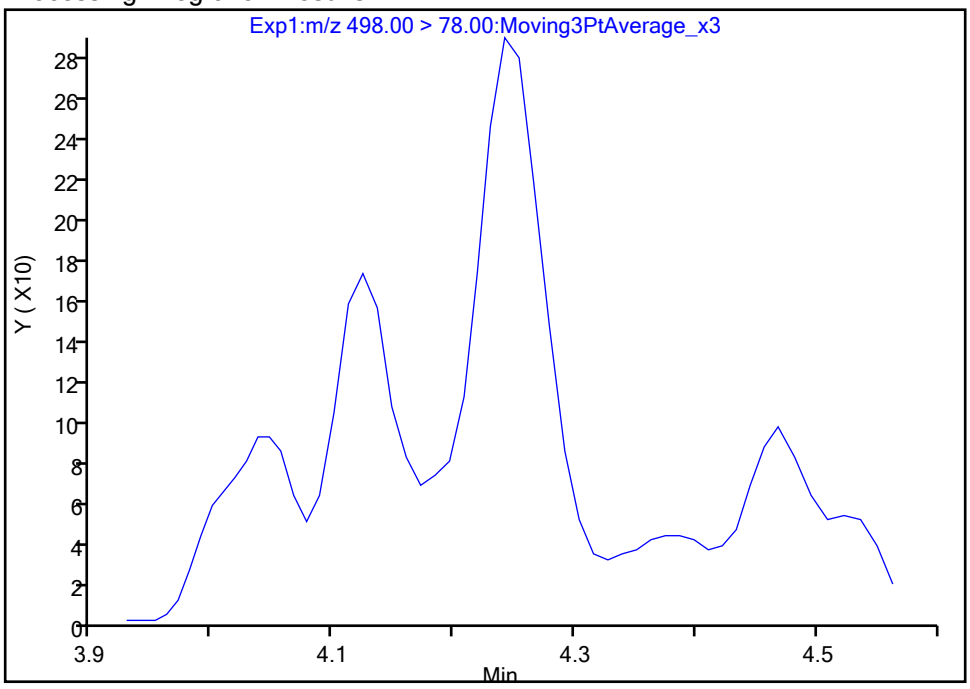
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

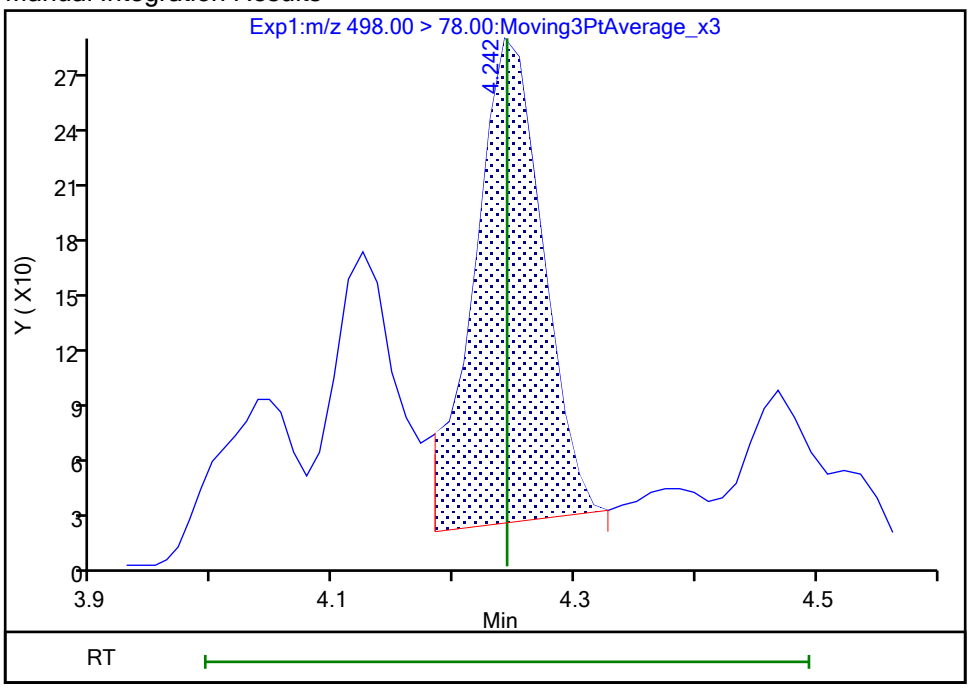
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1048
Amount: 0.000847
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:11:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

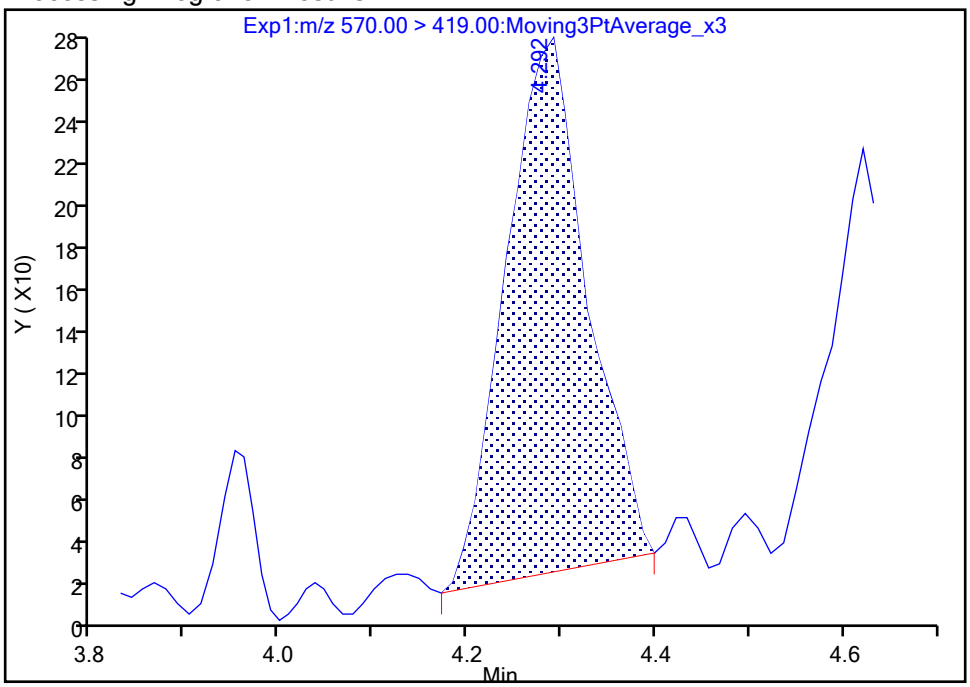
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

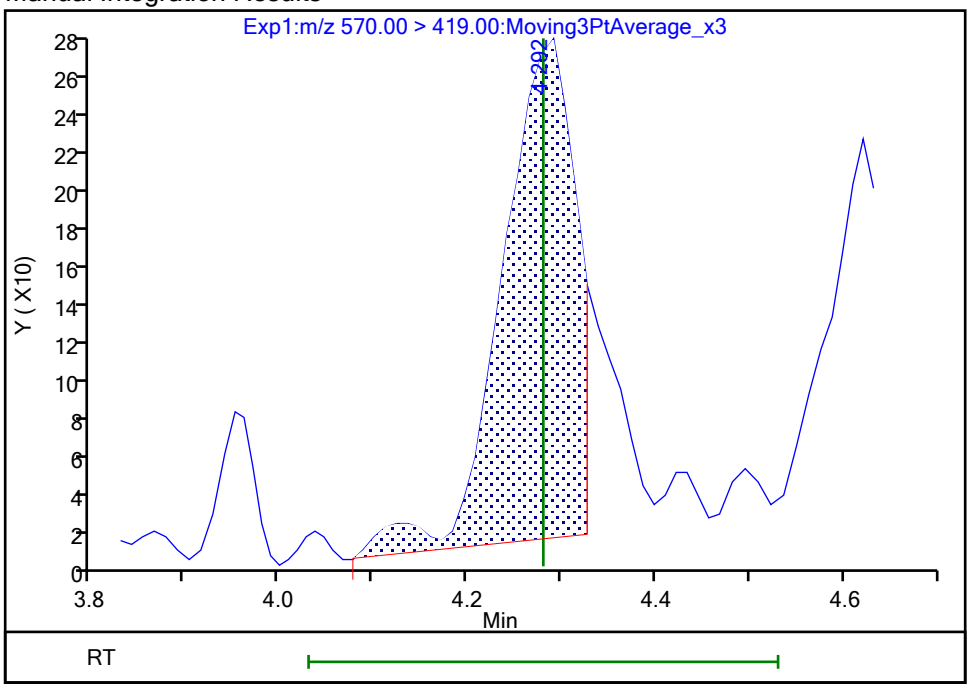
Processing Integration Results

RT: 4.29
Area: 1539
Amount: 0.004392
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 1412
Amount: 0.004029
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:11:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

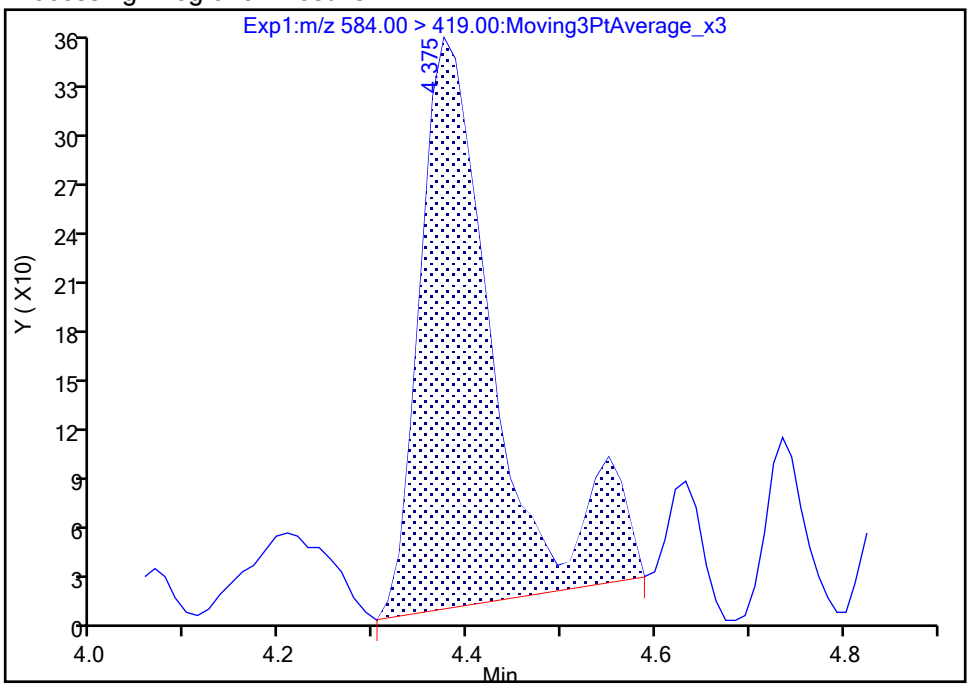
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

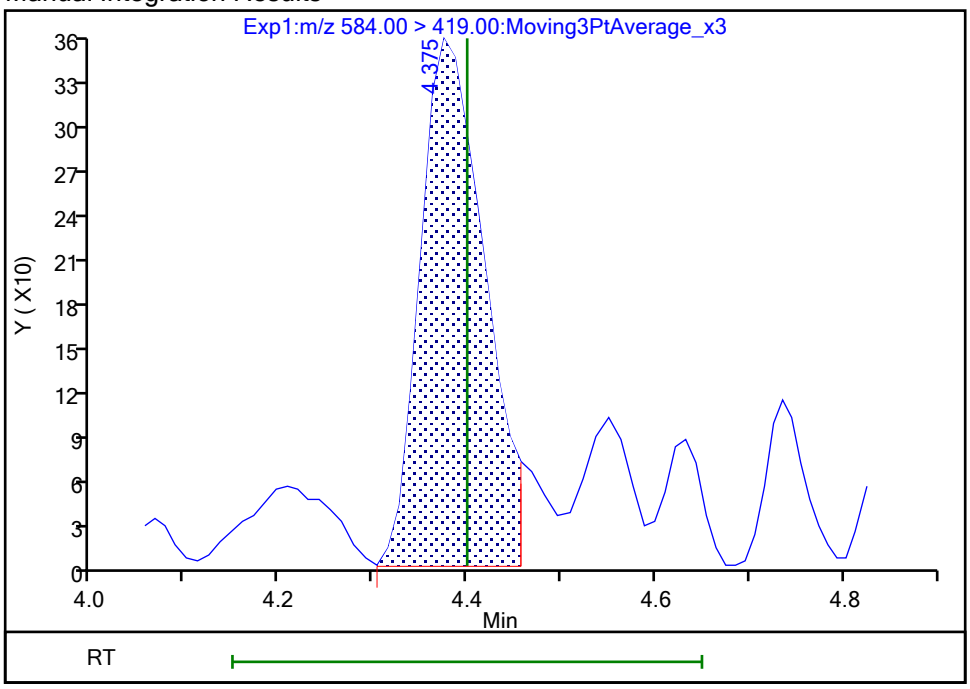
Processing Integration Results

RT: 4.37
Area: 1961
Amount: 0.005104
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 1703
Amount: 0.004432
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

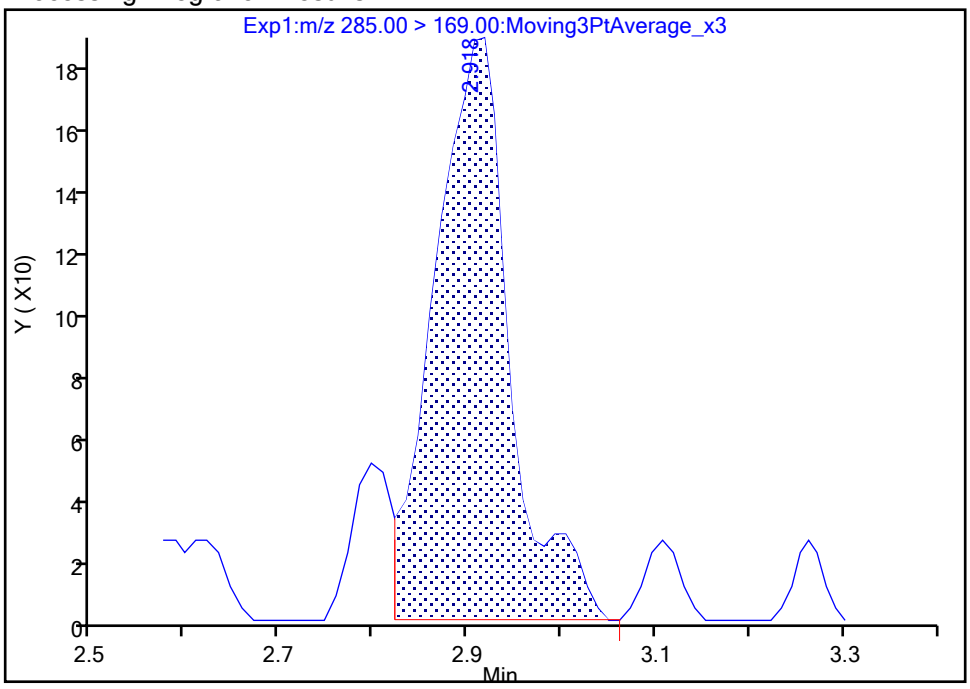
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

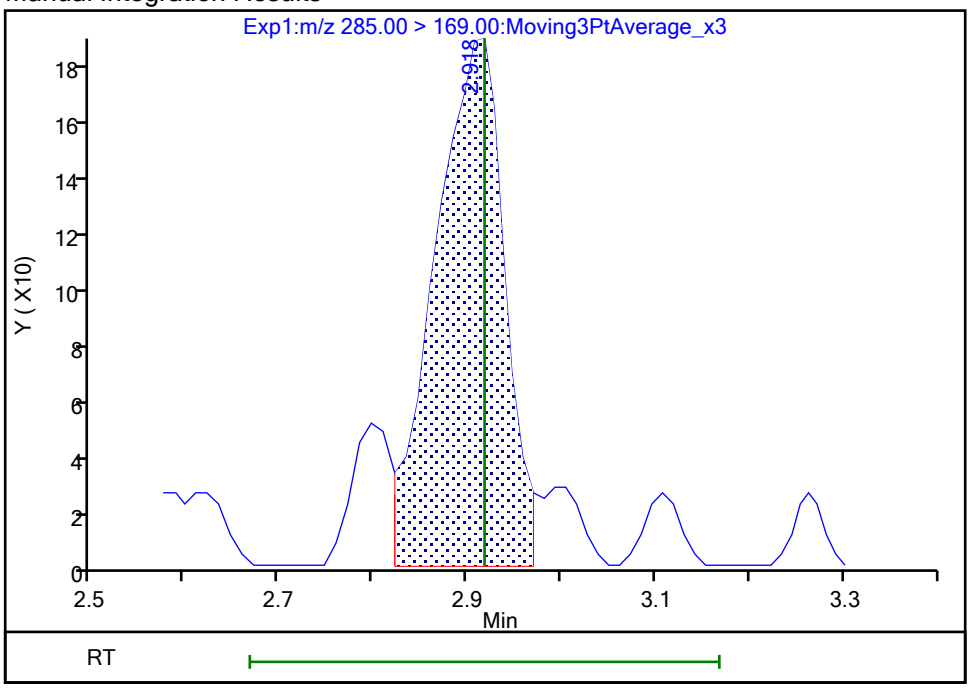
Processing Integration Results

RT: 2.92
Area: 1053
Amount: 0.004921
Amount Units: ng/ml



Manual Integration Results

RT: 2.92
Area: 964
Amount: 0.004505
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:08:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

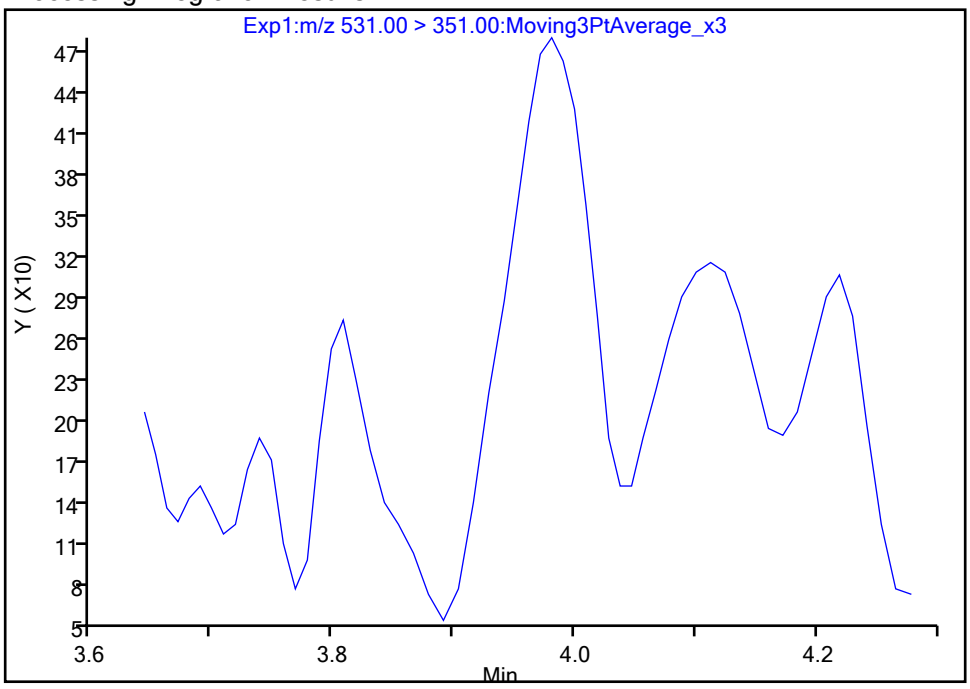
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

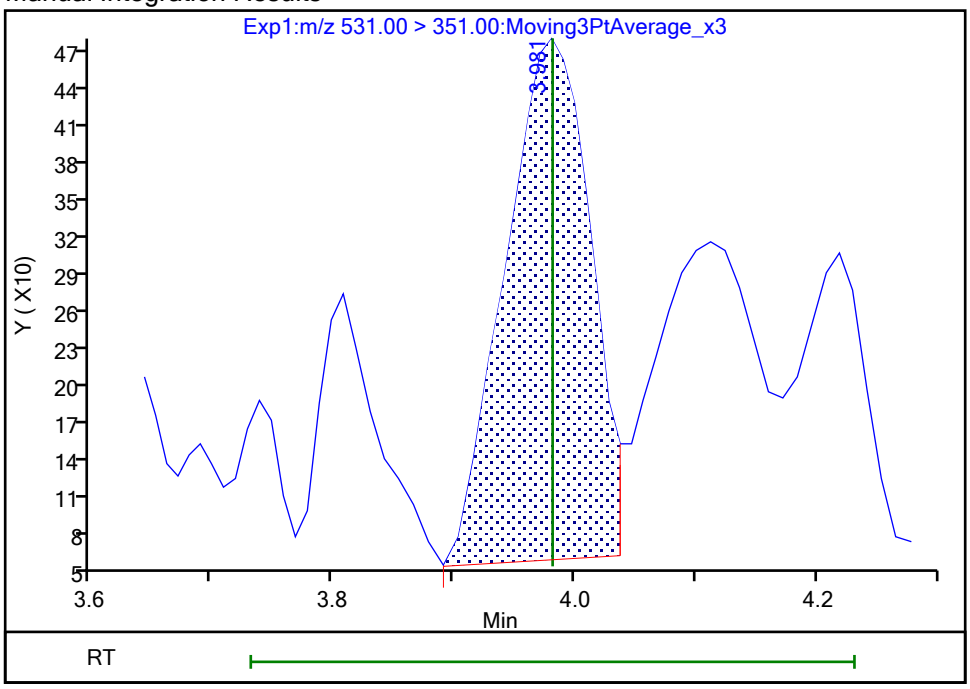
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 2055
Amount: 0.000796
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:10:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

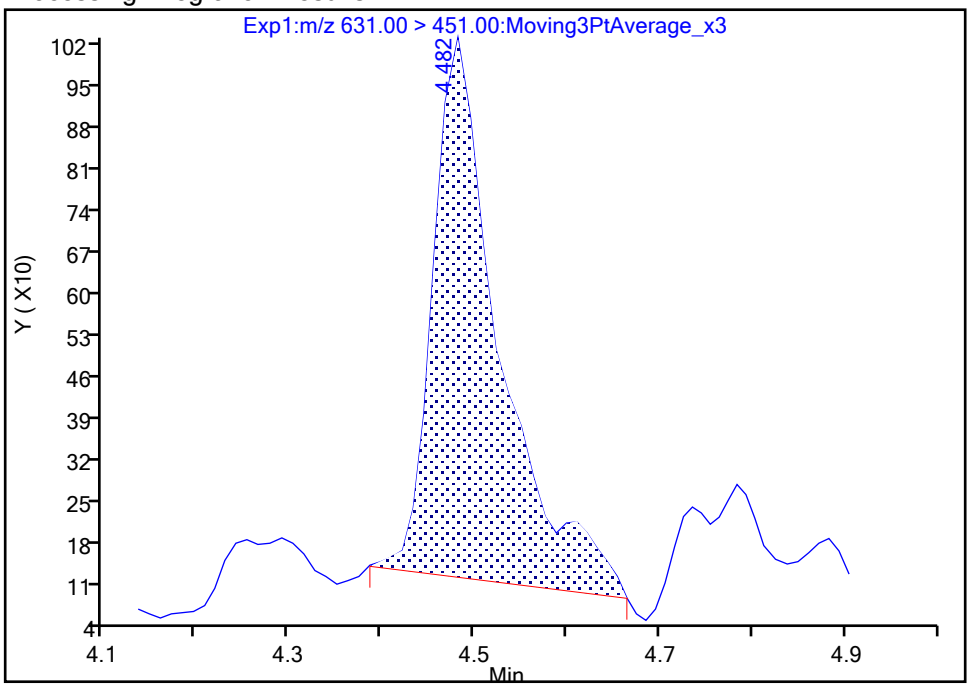
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

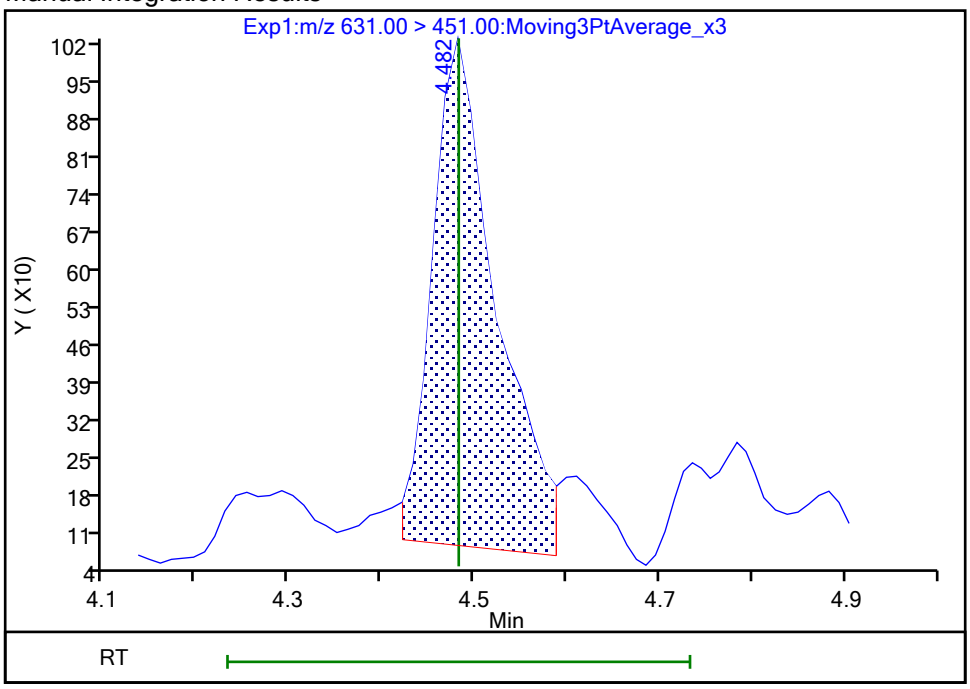
Processing Integration Results

RT: 4.48
Area: 4551
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 4518
Amount: 0.001141
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:12:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

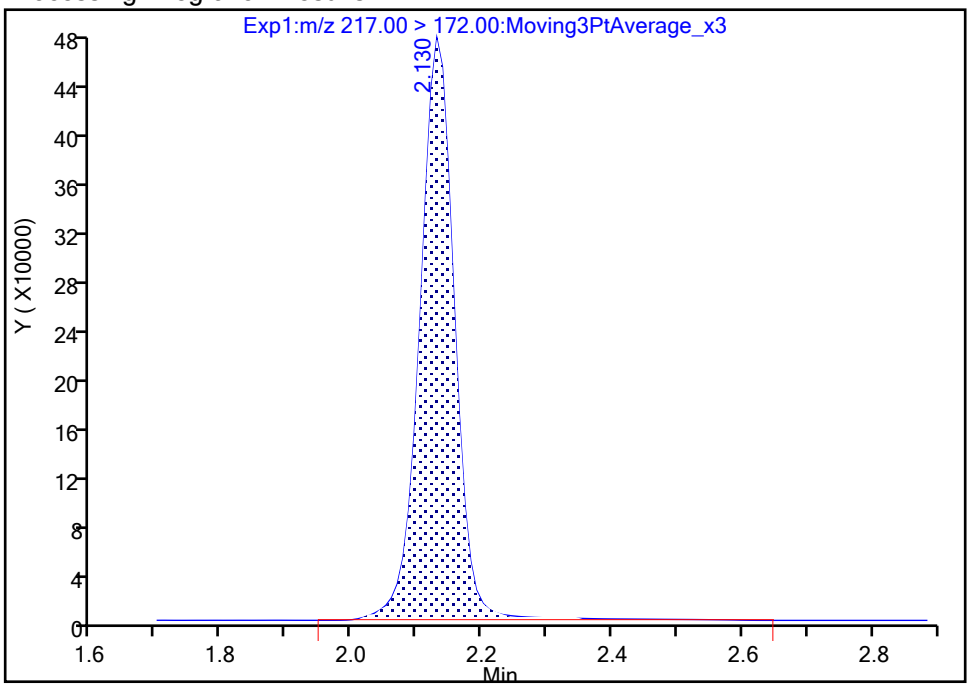
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

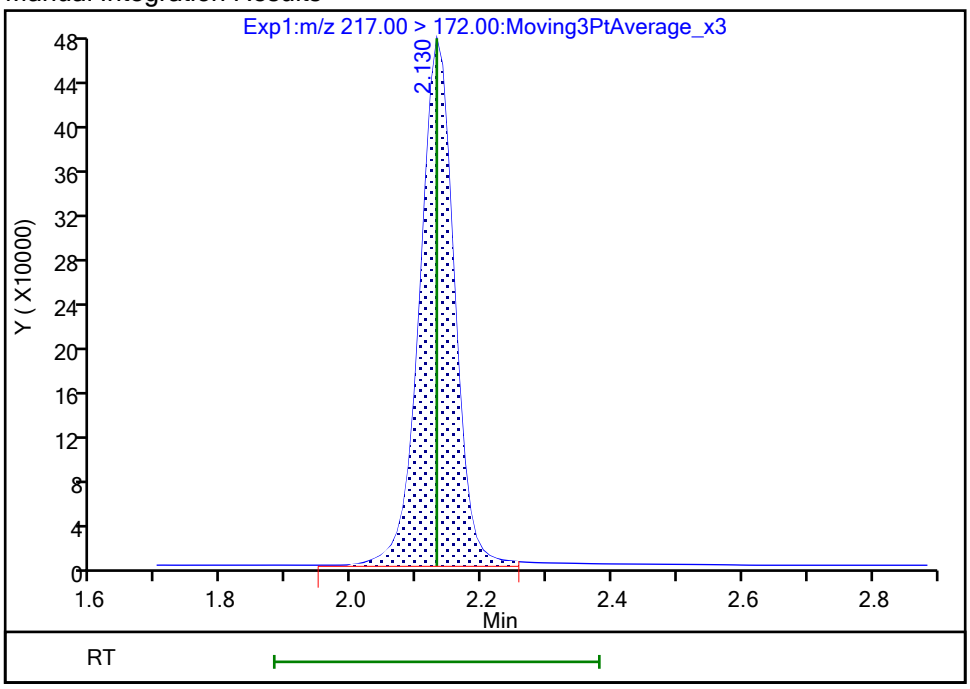
Processing Integration Results

RT: 2.13
Area: 1766168
Amount: 1.142568
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1740825
Amount: 1.126173
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:07:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

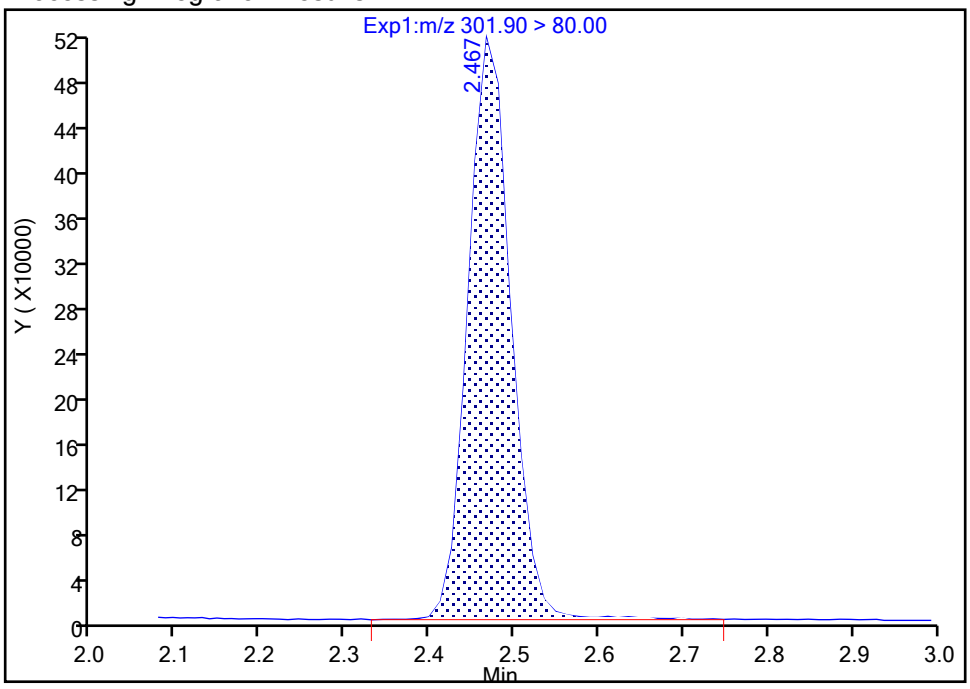
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

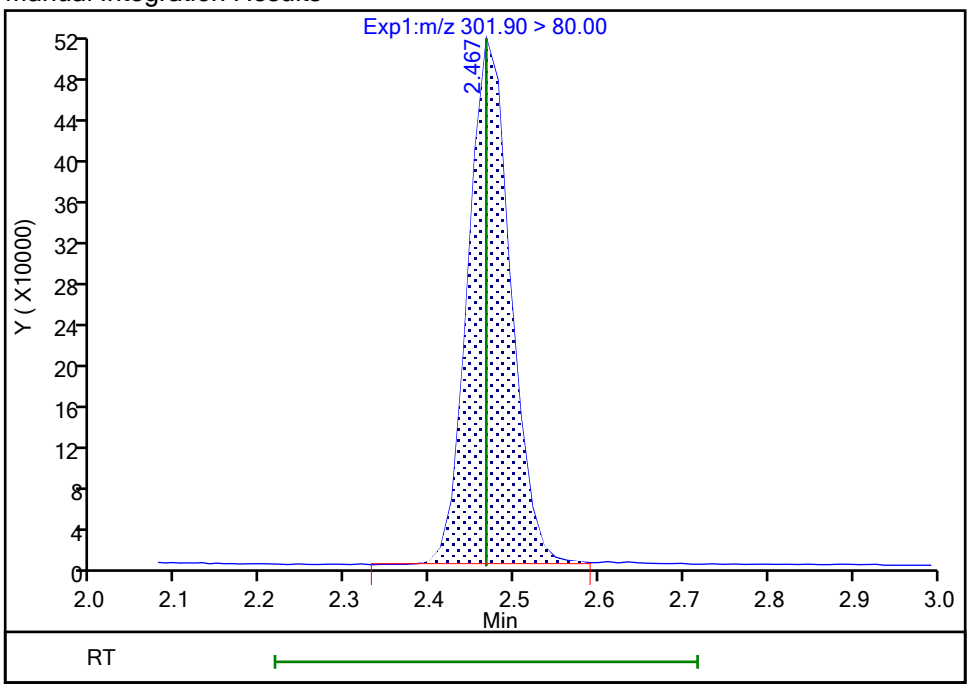
Processing Integration Results

RT: 2.47
Area: 1799649
Amount: 1.108688
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1788232
Amount: 1.101655
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:07:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

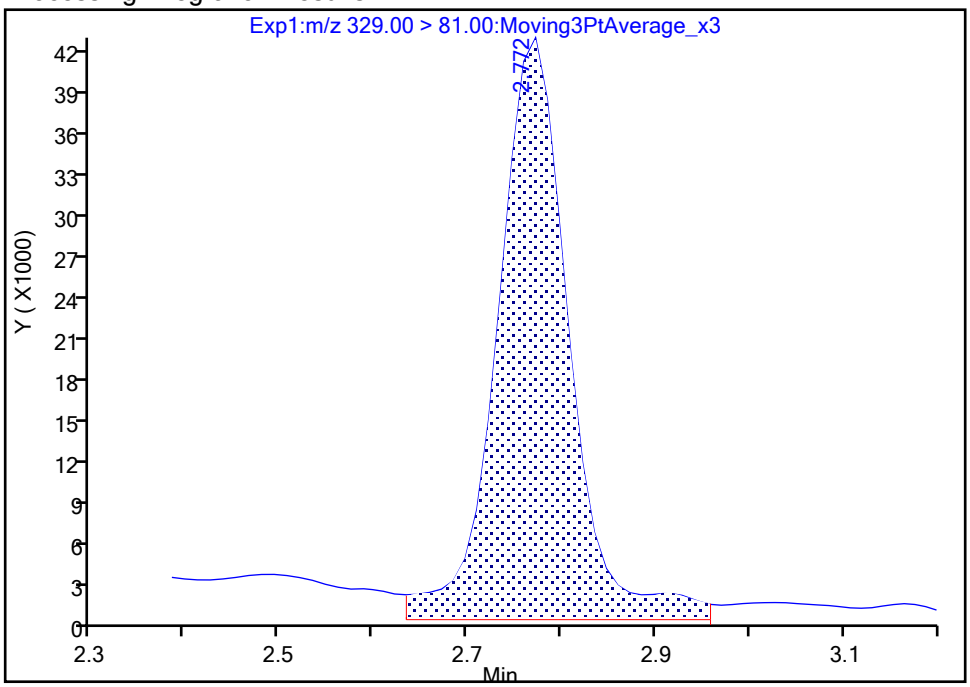
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A12.d				
Injection Date:	24-Oct-2023 19:29:58	Instrument ID:	LC812		
Lims ID:	460-290517-B-9-A	Lab Sample ID:	200-290517-9		
Client ID:	MW16A-101623-0926-20				
Operator ID:	LC812user	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

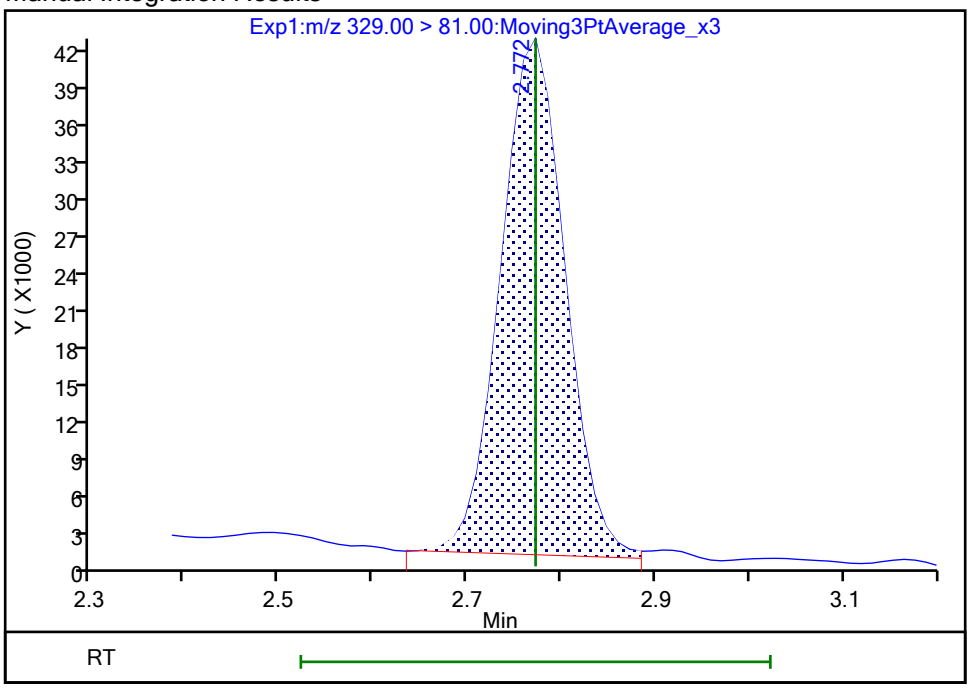
Processing Integration Results

RT: 2.77
Area: 226610
Amount: 1.207167
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 195271
Amount: 1.040222
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:07:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW16C-101623-1026-120 | Lab Sample ID: 460-290517-10

Matrix: Water | Lab File ID: PA231024A13.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 10:26

Extraction Method: 3535 | Date Extracted: 10/24/2023 09:04

Sample wt/vol: 287.3(mL) | Date Analyzed: 10/24/2023 19:38

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	13.1		4.35	1.04
2706-90-3	Perfluoropentanoic acid	61.4		1.74	0.59
307-24-4	Perfluorohexanoic acid	55.2		1.74	0.57
375-85-9	Perfluoroheptanoic acid	19.5		1.74	0.47
335-67-1	Perfluorooctanoic acid	29.5		1.74	0.66
375-95-1	Perfluorononanoic acid	2.44		1.74	0.43
335-76-2	Perfluorodecanoic acid	0.67	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	7.34		1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	9.79		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	33.9		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	13.3		1.74	0.36
68259-12-1	Perfluorononanesulfonic acid	1.74	U	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	0.64	J	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	64.3		4.35	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.35	U	4.35	1.65
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.35	U	4.35	1.39
13252-13-6	HFPODA	3.48	U	3.48	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW16C-101623-1026-120 Lab Sample ID: 460-290517-10

Matrix: Water Lab File ID: PA231024A13.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 10:26

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 287.3(mL) Date Analyzed: 10/24/2023 19:38

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		50-150
STL01893	13C5 PFPeA	97		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	96		50-150
STL02337	13C3 PFBS	101		50-150
STL01056	13C8 FOSA	95		50-150
STL02118	d3-NMeFOSAA	97		50-150
STL02117	d5-NEtFOSAA	99		50-150
STL02395	M2-4:2 FTS	100		50-150
STL02279	M2-6:2 FTS	96		50-150
STL02280	M2-8:2 FTS	97		50-150
STL02255	13C3 HFPO-DA	98		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	101		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	105		50-150
STL00990	13C4 PFOA	97		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d
Lims ID: 460-290517-B-10-A
Client ID: MW16C-101623-1026-120
Sample Type: Client
Inject. Date: 24-Oct-2023 19:38:07 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-10-A
Misc. Info.: 200-0057538-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 13:20:33
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	1751883	1.19		95.0	1303	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	529193	0.3767			35.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1388534	1.21		97.0	514	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	2115082	1.76			14.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.466	0.001	0.701	1814077	1.17		101	29199	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.466	0.001	1.000	367618	0.2109	Target=2.06		7.5	M
298.90 > 99.00	2.467	2.466	0.001	1.000	192341		1.91(1.03-3.09)		17.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	0.995	11305	0.0185			14.2	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.787	209955	1.17		100	9.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1423175	1.22		97.7	3098	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.810	0.0	1.004	1988371	1.59	Target=14.12		29.6	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	135572		14.67(7.06-21.17)		52.7	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	425067	0.2812	Target=2.72		17.1	M
349.00 > 99.00	2.810	2.810	0.0	0.888	207386		2.05(1.36-4.09)		40.6	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	277072	1.23		98.3	2416	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.004	1413	0.006367			23.2	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.899	1368936	1.23		104	6315	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	1249675	0.9752	Target=3.32		142	M
399.00 > 99.00	3.165	3.166	-0.001	1.000	548122		2.28(1.66-4.98)		230	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.177	3.177	0.0	1.004	788933	0.5600	Target=4.17		20.3	M
363.00 > 169.00	3.177	3.177	0.0	1.004	208762		3.78(2.09-6.26)		97.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.177	-0.012	0.899	1571005	1.23		98.4	4759	
77 DONA										M
377.00 > 251.00	3.212	3.213	-0.001	0.839	42115	0.0103	Target=3.33		14.5	M
377.00 > 85.00	3.199	3.213	-0.014	0.835	11335		3.72(1.66-4.99)		4.6	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.512	-0.001	0.917	393468	0.3819	Target=4.83		21.8	M
449.00 > 99.00	3.502	3.512	-0.010	0.914	113368		3.47(2.41-7.24)		14.4	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.521	3.512	0.008	1.000	262326	1.14		95.7	51.5	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.512	-0.001	0.997	1116029	1.85			980	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.530	3.521	0.009	1.003	1272473	0.8469	Target=2.88		26.0	M
413.00 > 169.00	3.521	3.521	-0.001	1.000	437626		2.91(1.44-4.32)		378	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.521	-0.001	1.000	1763322	1.22		97.4	3997	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.521	-0.001		1859545	1.25			5786	
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.831	3.832	-0.001	1.000	24387980	29.3	Target=4.24		2662	EM
499.00 > 99.00	3.819	3.832	-0.013	0.997	7199688		3.39(2.12-6.37)		2831	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.832	-0.001	1.088	851957	1.21		101	359	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.844	0.010	1.000	102379	0.0700	Target=8.34		5.9	
463.00 > 169.00	3.854	3.844	0.010	1.000	9483		10.80(4.17-12.51)		7.3	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.844	0.010	1.095	1865502	1.18		94.7	3474	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.981	-0.010	1.037	1105	0.000434			3.2	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.138	-0.002	1.000	33373	0.0194	Target=11.44		3.9	M
513.00 > 169.00	4.124	4.138	-0.014	0.997	3960		8.43(5.72-17.16)		17.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.138	-0.002	1.175	2156477	1.31		105	8703	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.138	0.010	1.000	706	0.001265			4.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.150	-0.002	1.178	301031	1.16		96.9	234	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.244	-0.002	1.205	1676140	1.19		95.3	4259	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.244	-0.002	1.000	1685	0.001317			6.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.279	4.281	-0.002	1.215	478411	1.21		97.1	2277	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.304	4.281	0.023	1.006	1149	0.003308			3.2	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.375	4.364	0.011	1.142	601	0.001234	Target=2.37		1.1	RM
599.00 > 99.00	4.351	4.364	-0.013	1.136	668		0.90(1.19-3.56)		3.4	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.388	-0.001	1.246	1898374	1.22		97.5	9043	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.400	-0.001	1.249	468816	1.24		98.8	902	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.400	-0.001	1.000	1478	0.003940			4.5	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.483	-0.015	1.166	2391	0.000613			4.2	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.611	-0.001	1.310	1995449	1.26		101	8021	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.991	-0.001	1.417	1884424	1.20		95.7	4831	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

E - Exceeded Maximum Amount

Review Flags

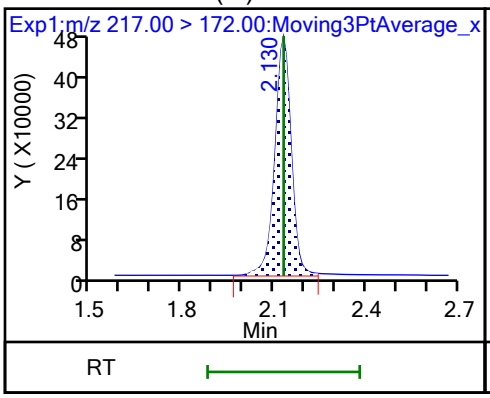
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54

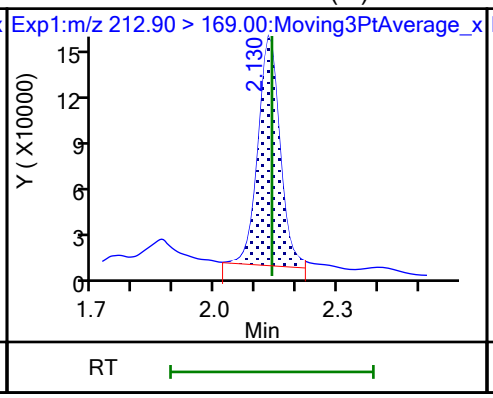
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d
Injection Date: 24-Oct-2023 19:38:07 Instrument ID: LC812
Lims ID: 460-290517-B-10-A Lab Sample ID: 200-290517-10
Client ID: MW16C-101623-1026-120
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

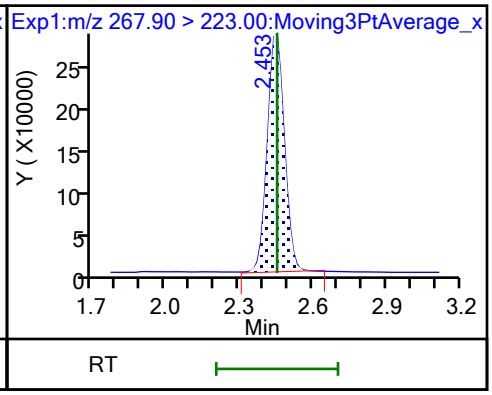
D 1 13C4 PFBA (M)



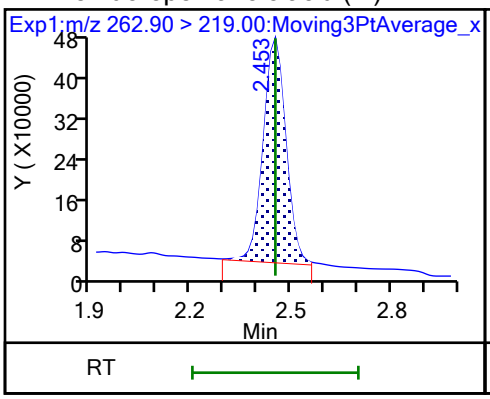
2 Perfluorobutanoic acid (M)



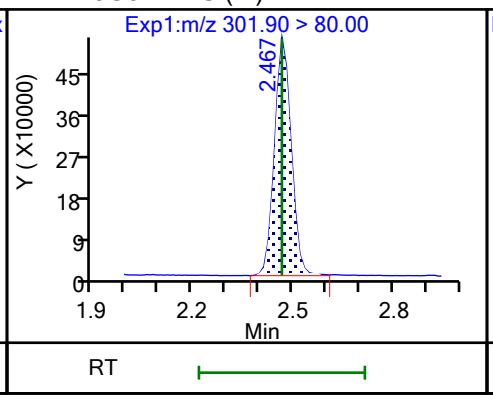
D 3 13C5 PFPeA



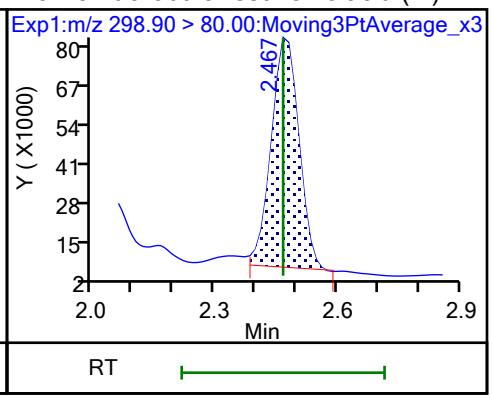
4 Perfluoropentanoic acid (M)



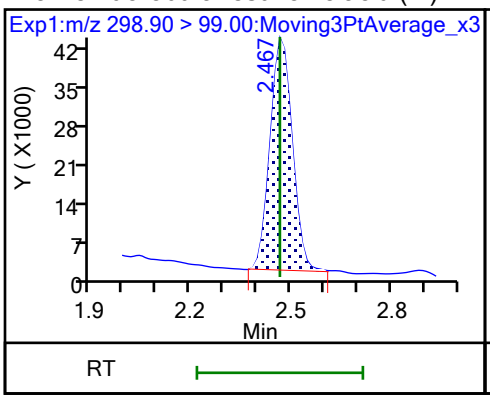
D 47 13C3 PFBS (M)



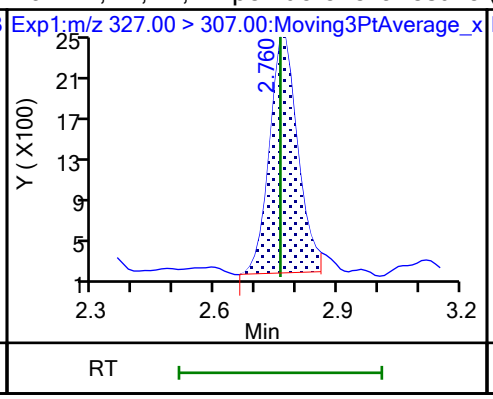
5 Perfluorobutanesulfonic acid (M)



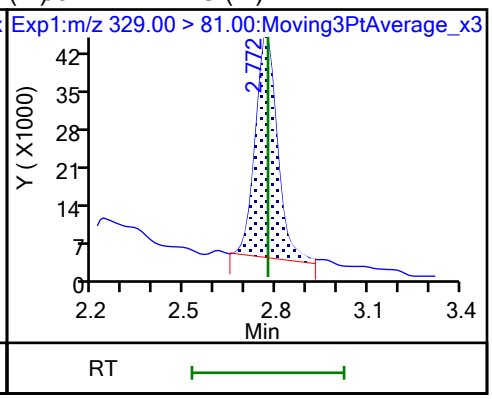
5 Perfluorobutanesulfonic acid (M)



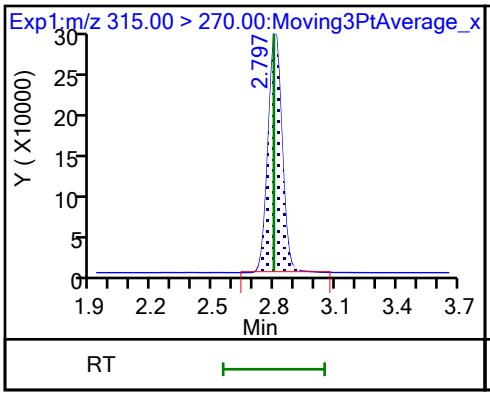
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



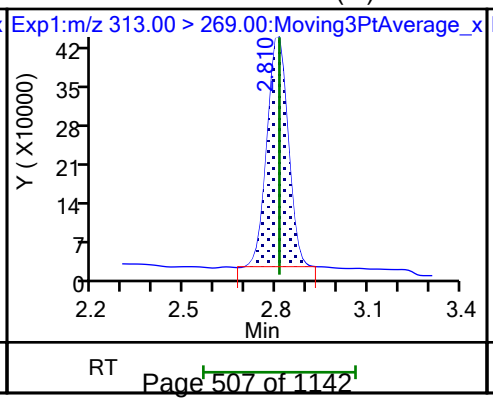
60 M2-4:2 FTS (M)



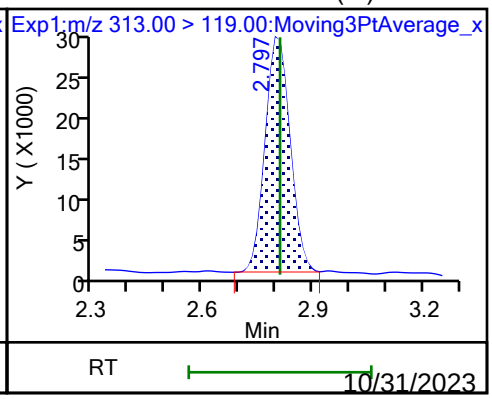
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

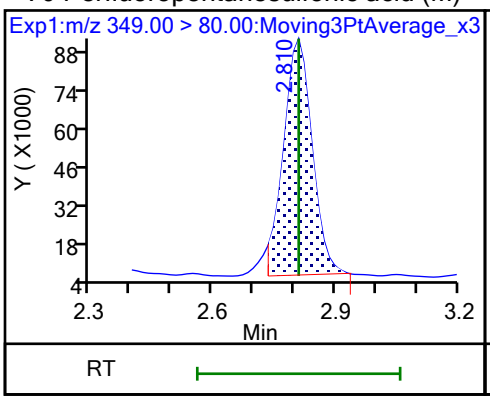


6 Perfluorohexanoic acid (M)

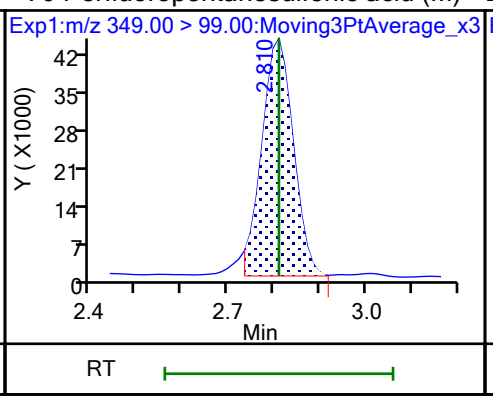


10/31/2023
10:17 AM

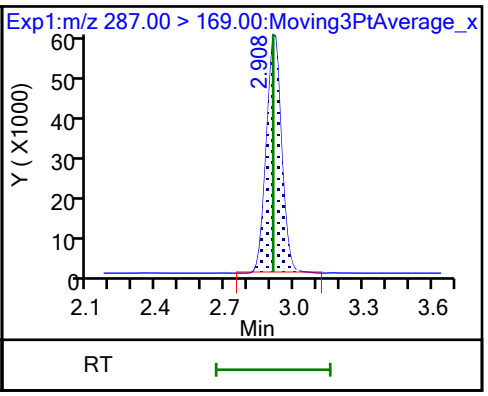
70 Perfluoropentanesulfonic acid (M)



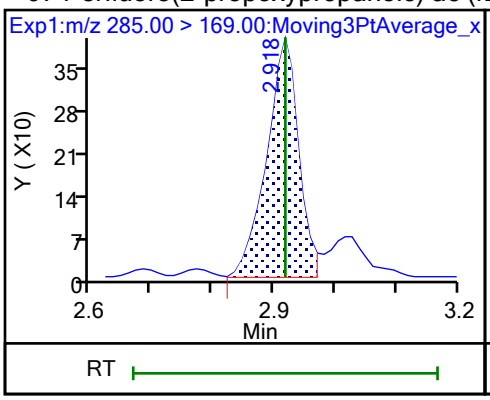
70 Perfluoropentanesulfonic acid (M)



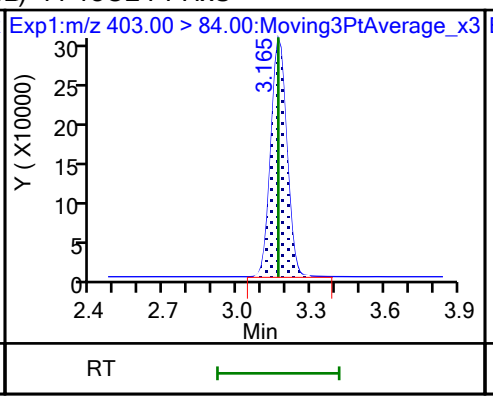
D 64 13C3 HFPO-DA



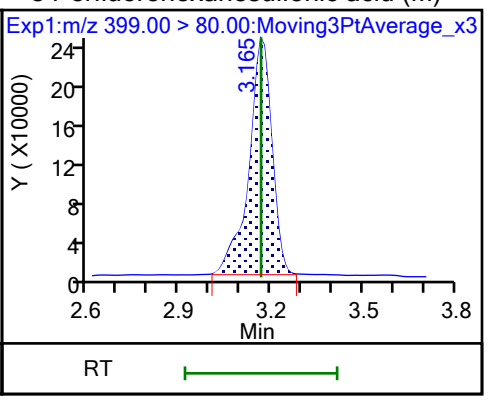
67 Perfluoro(2-propoxypropanoic) ac (M)



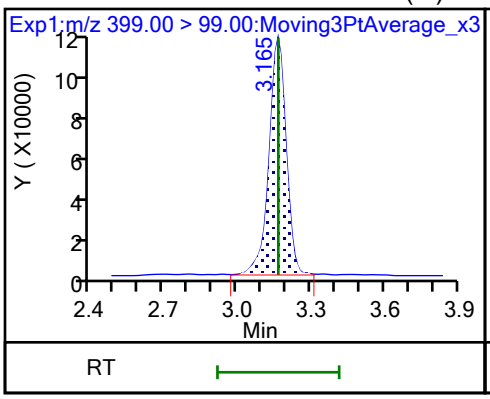
D 11 18O2 PFHxS



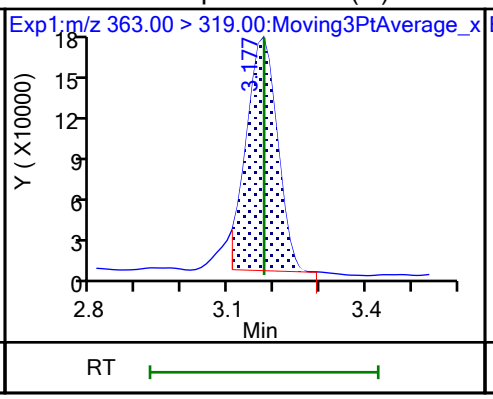
8 Perfluorohexanesulfonic acid (M)



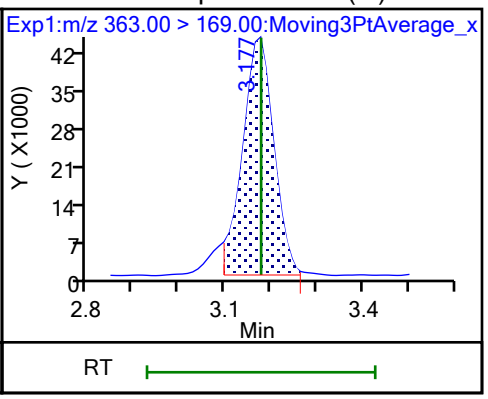
8 Perfluorohexanesulfonic acid (M)



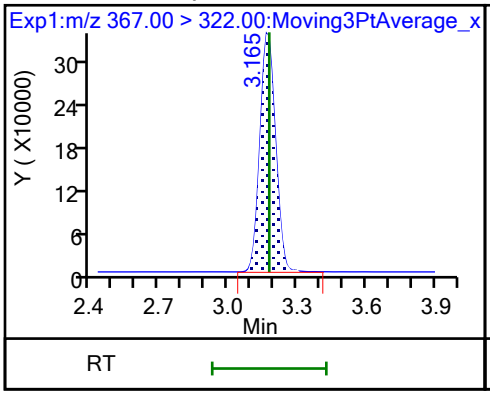
10 Perfluoroheptanoic acid (M)



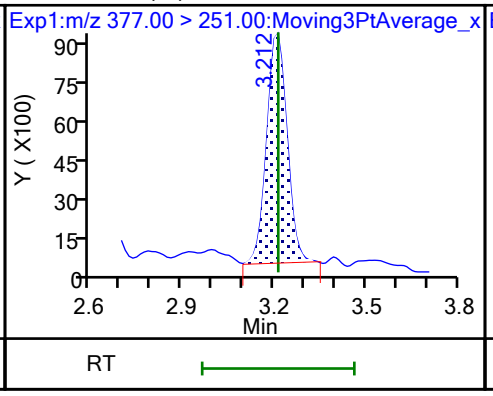
10 Perfluoroheptanoic acid (M)



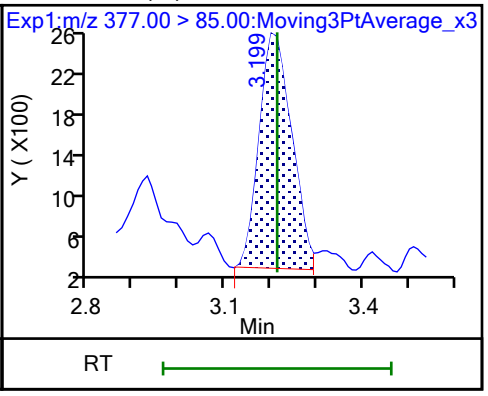
D 9 13C4 PFHpA



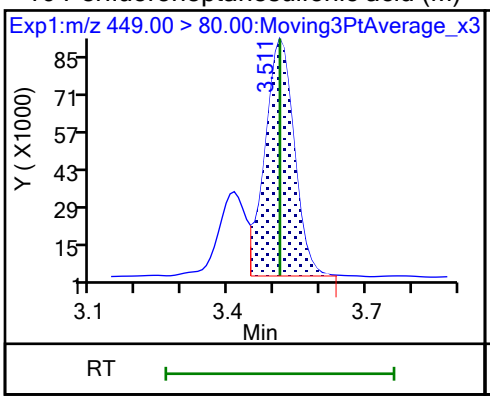
77 DONA (M)



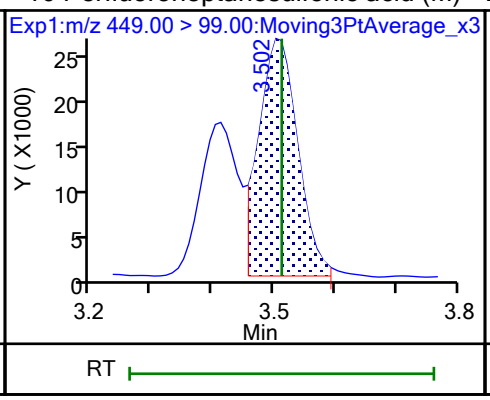
77 DONA (M)



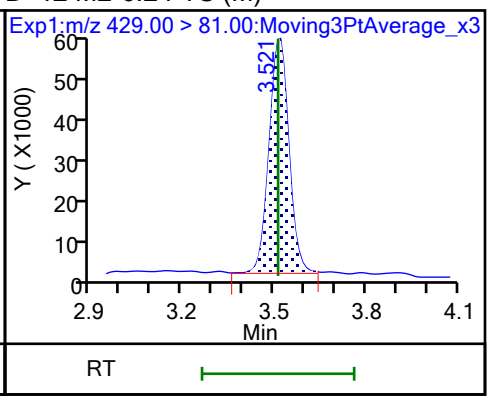
16 Perfluoroheptanesulfonic acid (M)



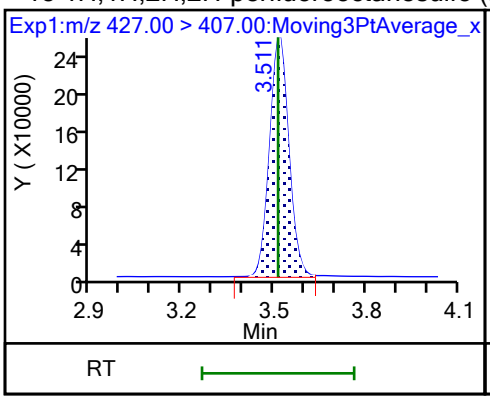
16 Perfluoroheptanesulfonic acid (M)



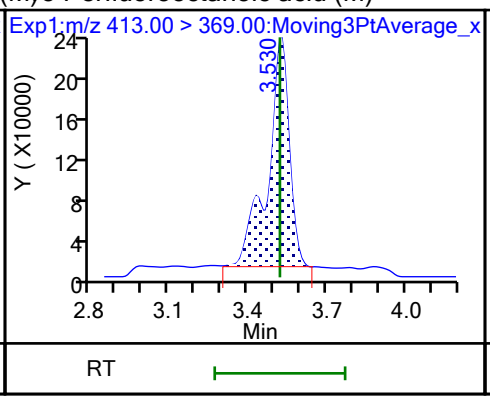
D 12 M2-6:2 FTS (M)



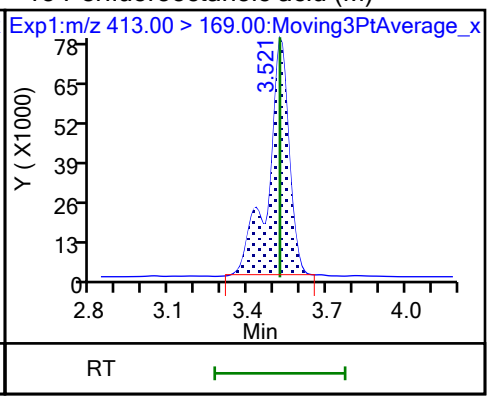
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



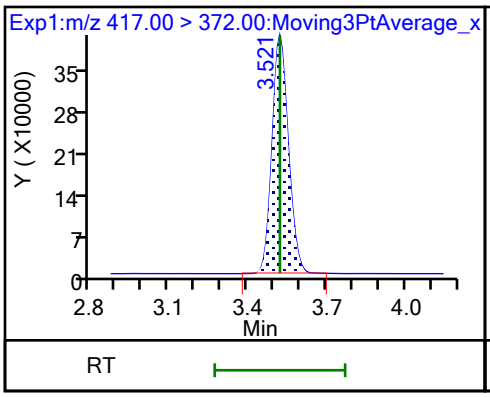
15 Perfluorooctanoic acid (M)



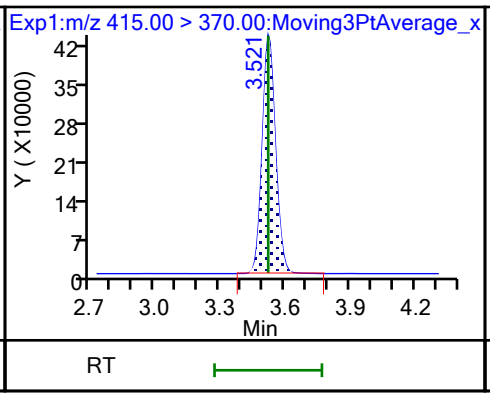
15 Perfluorooctanoic acid (M)



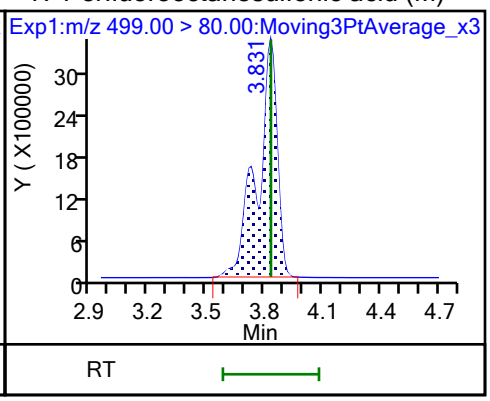
D 14 13C4 PFOA



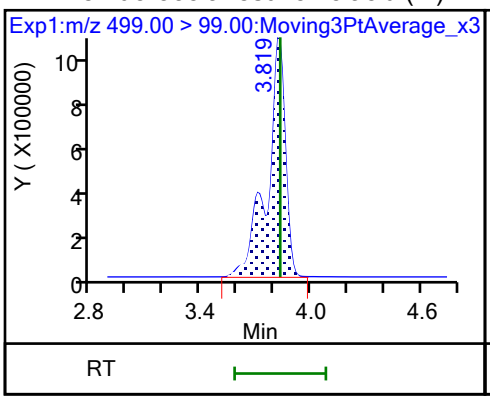
* 62 13C2 PFOA



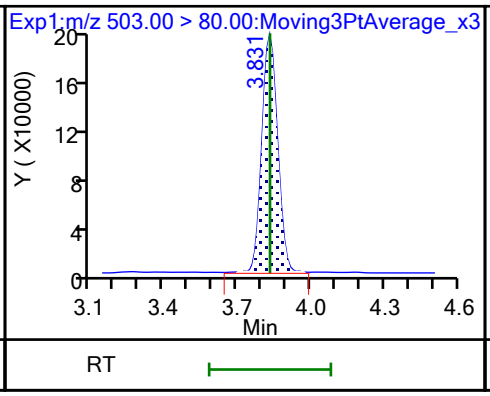
17 Perfluorooctanesulfonic acid (M)



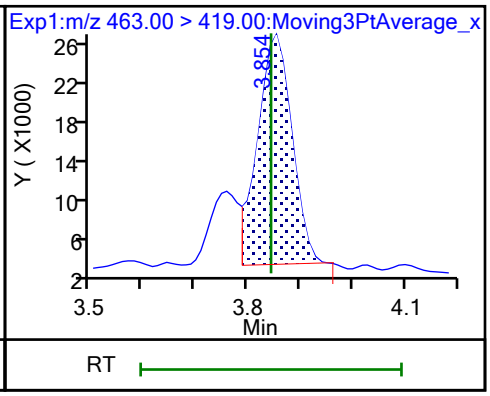
17 Perfluorooctanesulfonic acid (M)



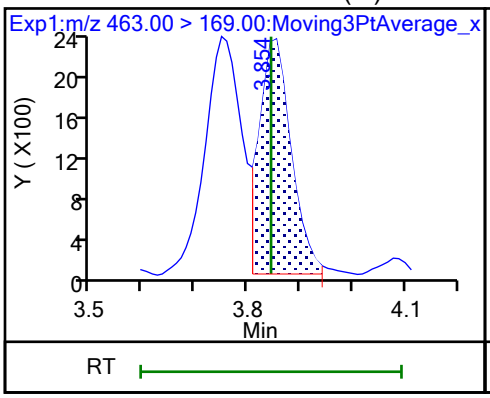
D 18 13C4 PFOS



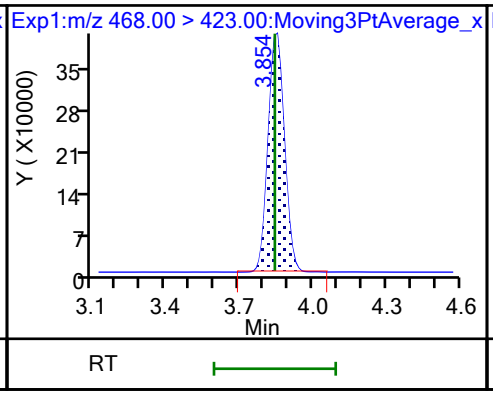
20 Perfluorononanoic acid



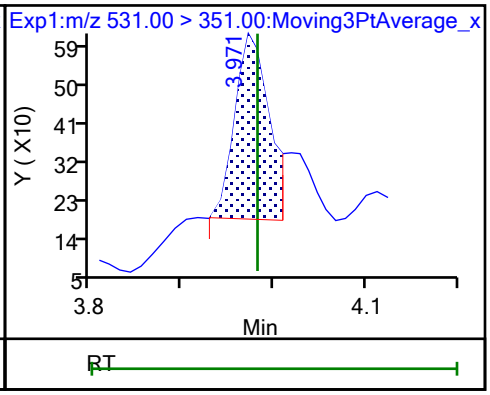
20 Perfluorononanoic acid (M)



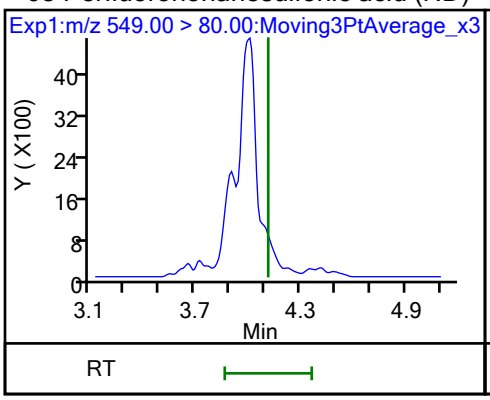
D 19 13C5 PFNA



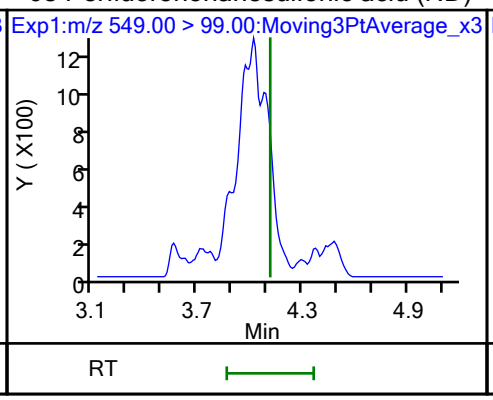
69 9-Chlorohexadecafluoro-3-oxanona (M)



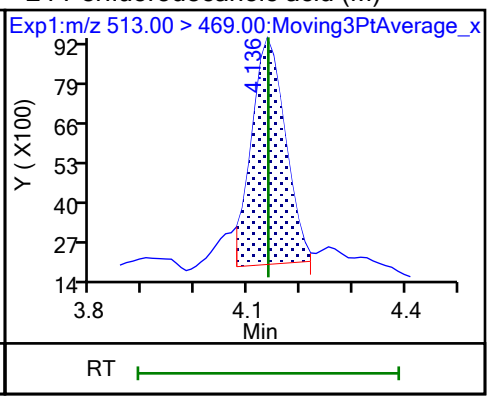
68 Perfluorononanesulfonic acid (ND)



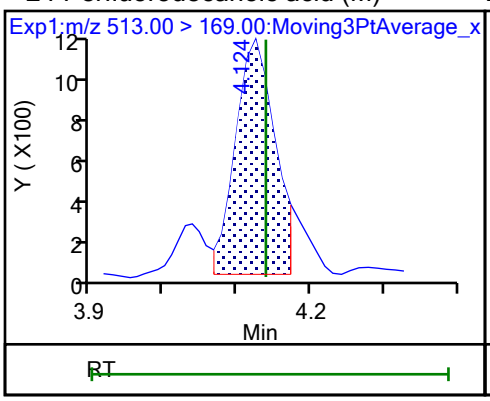
68 Perfluorononanesulfonic acid (ND)



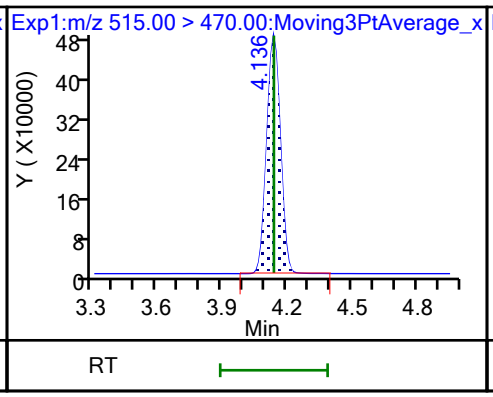
24 Perfluorodecanoic acid (M)



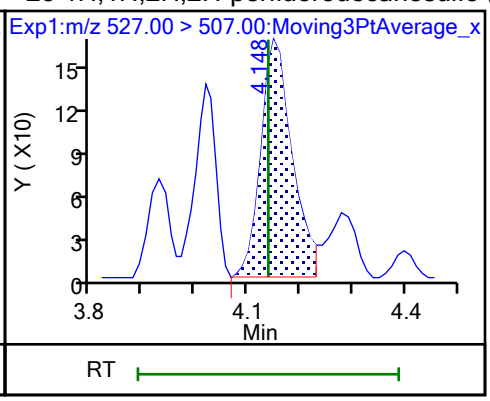
24 Perfluorodecanoic acid (M)



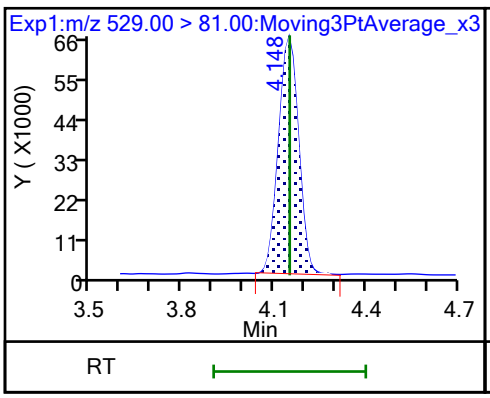
D 23 13C2 PFDA



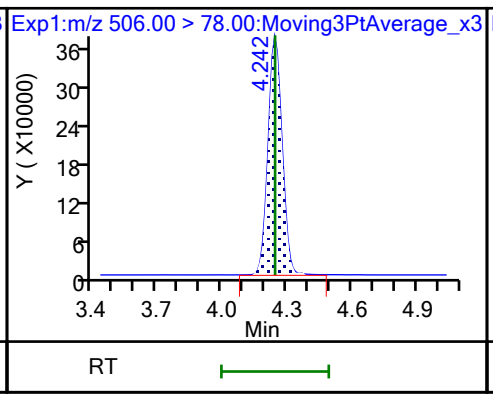
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



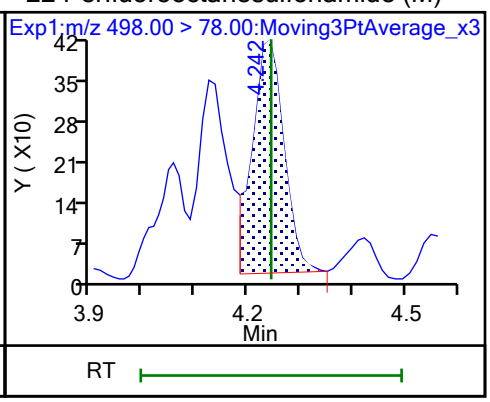
D 26 M2-8:2 FTS



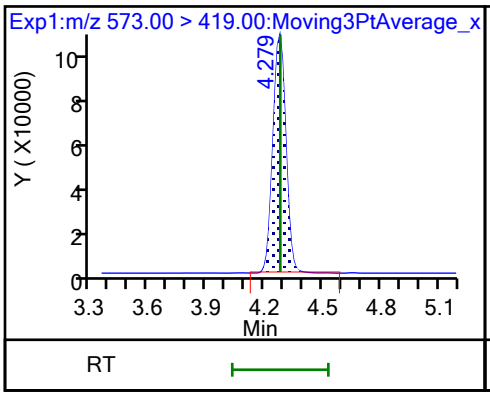
D 21 13C8 FOSA



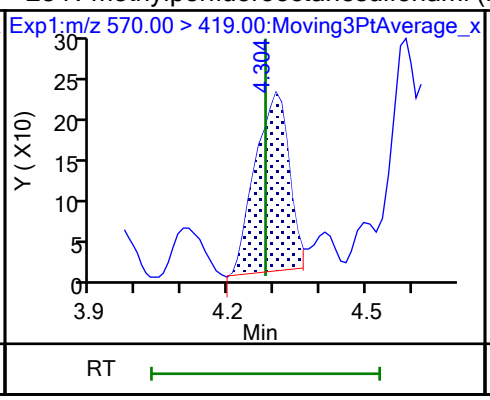
22 Perfluorooctanesulfonamide (M)



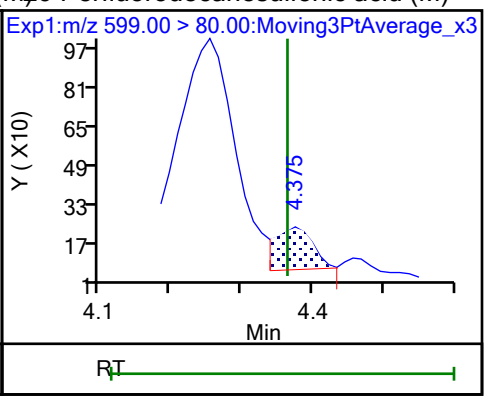
D 27 d3-NMeFOSAA



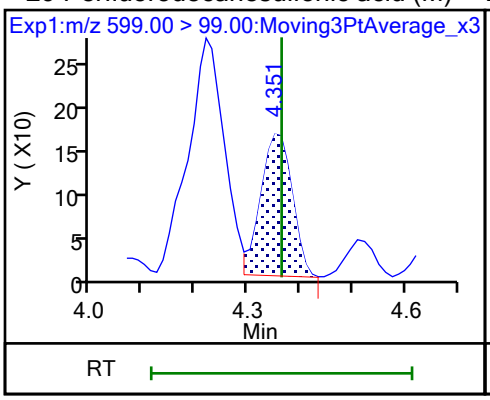
28 N-methylperfluorooctanesulfonami (M)



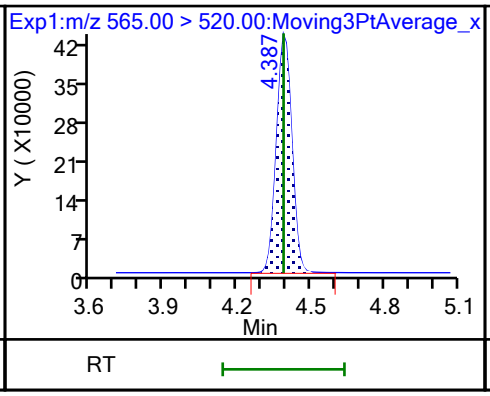
29 Perfluorodecanesulfonic acid (M)



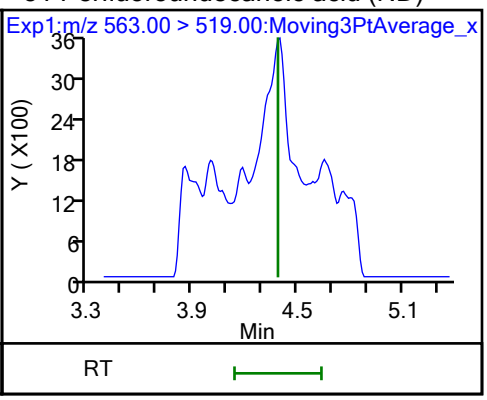
29 Perfluorodecanesulfonic acid (M)



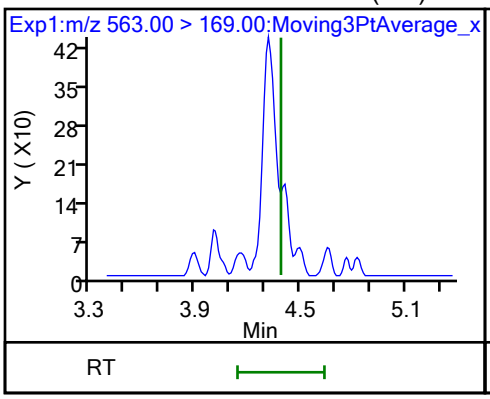
D 30 13C2 PFUnA



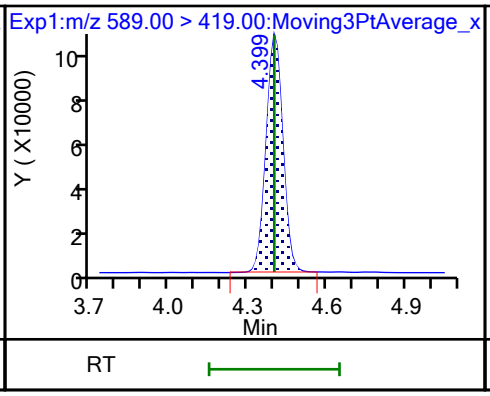
31 Perfluoroundecanoic acid (ND)



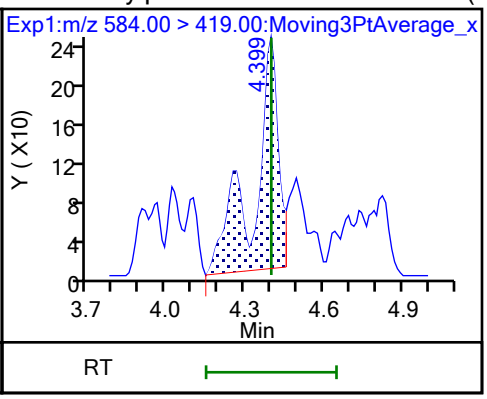
31 Perfluoroundecanoic acid (ND)



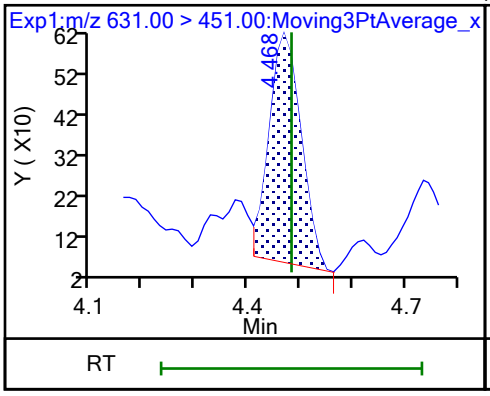
D 32 d5-NEtFOSAA



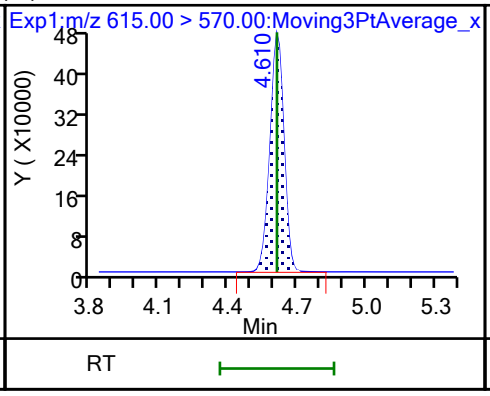
33 N-ethylperfluorooctanesulfonamid (M)



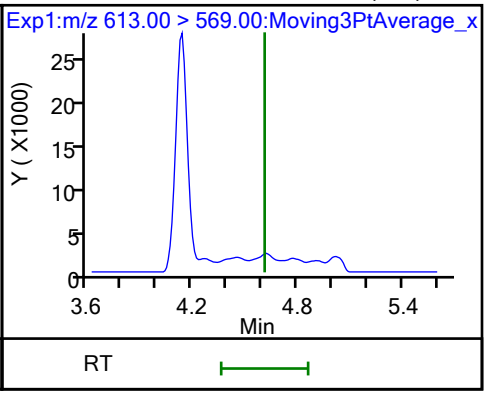
66 11-Chloroeicosafluoro-3-oxaundec (M)



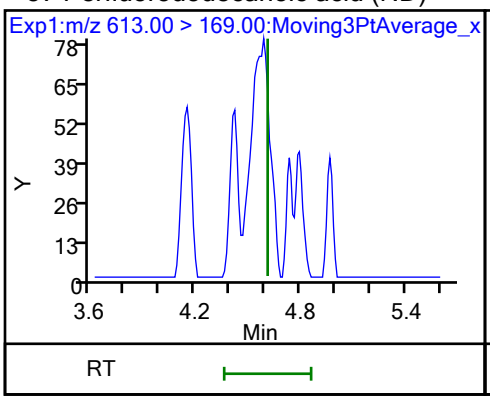
D 36 13C2 PFDoA



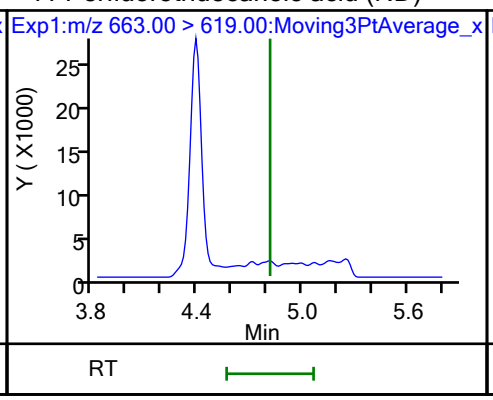
37 Perfluorododecanoic acid (ND)



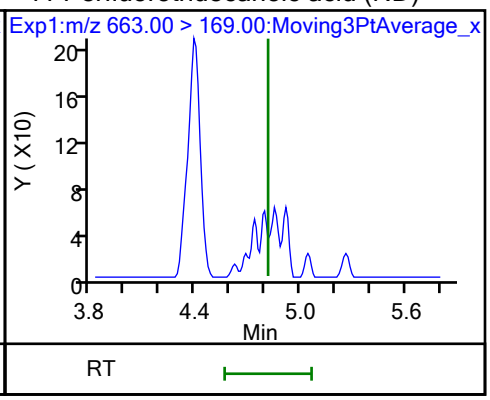
37 Perfluorododecanoic acid (ND)



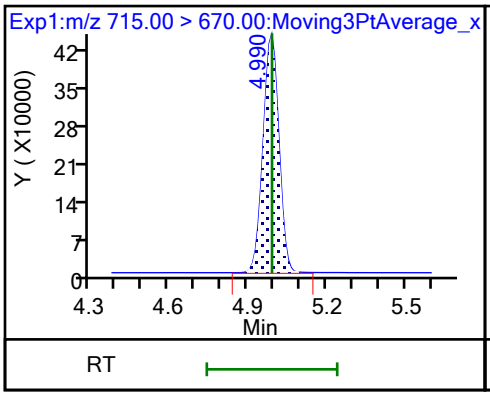
41 Perfluorotridecanoic acid (ND)



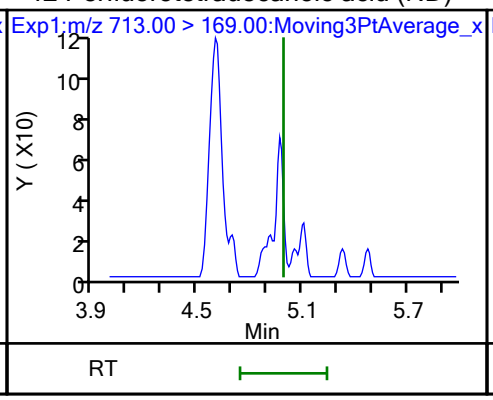
41 Perfluorotridecanoic acid (ND)



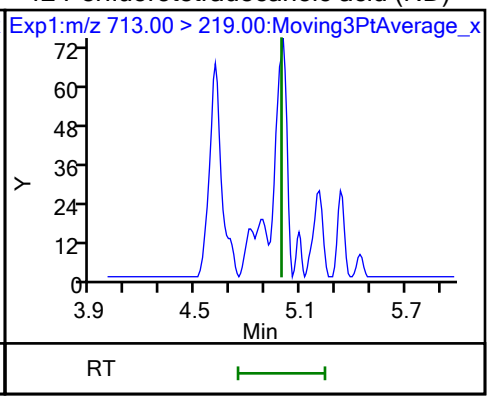
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

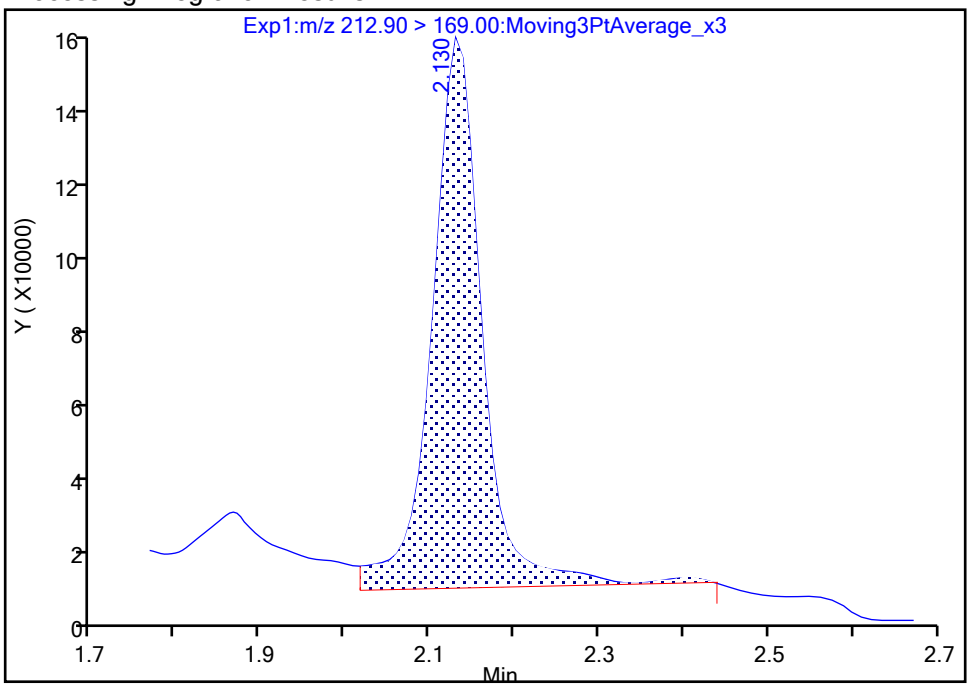
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

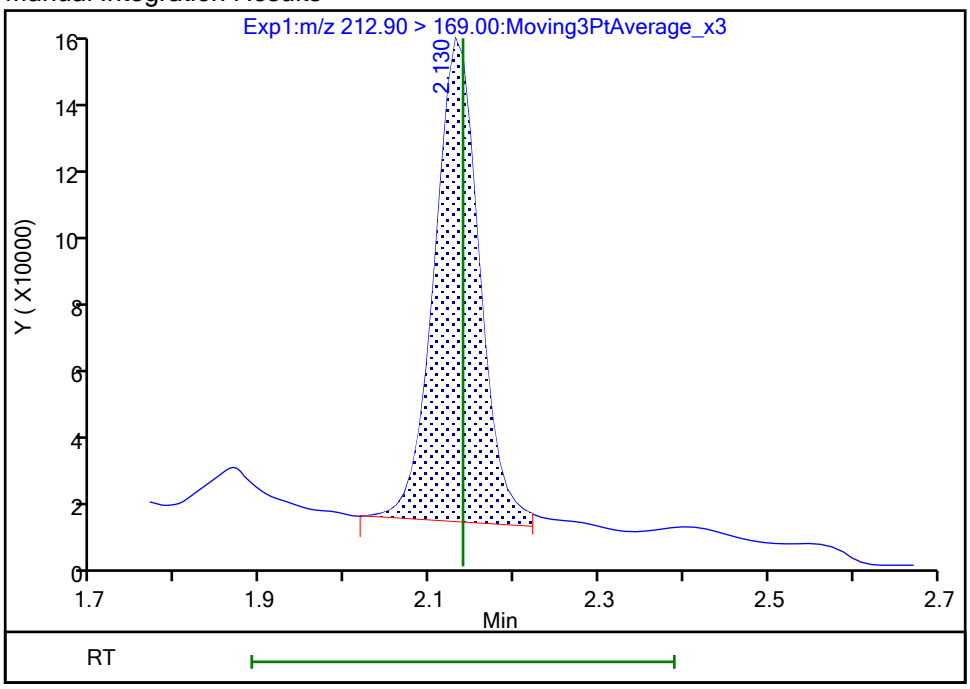
Processing Integration Results

RT: 2.13
Area: 615613
Amount: 0.444870
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 529193
Amount: 0.376679
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:15:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

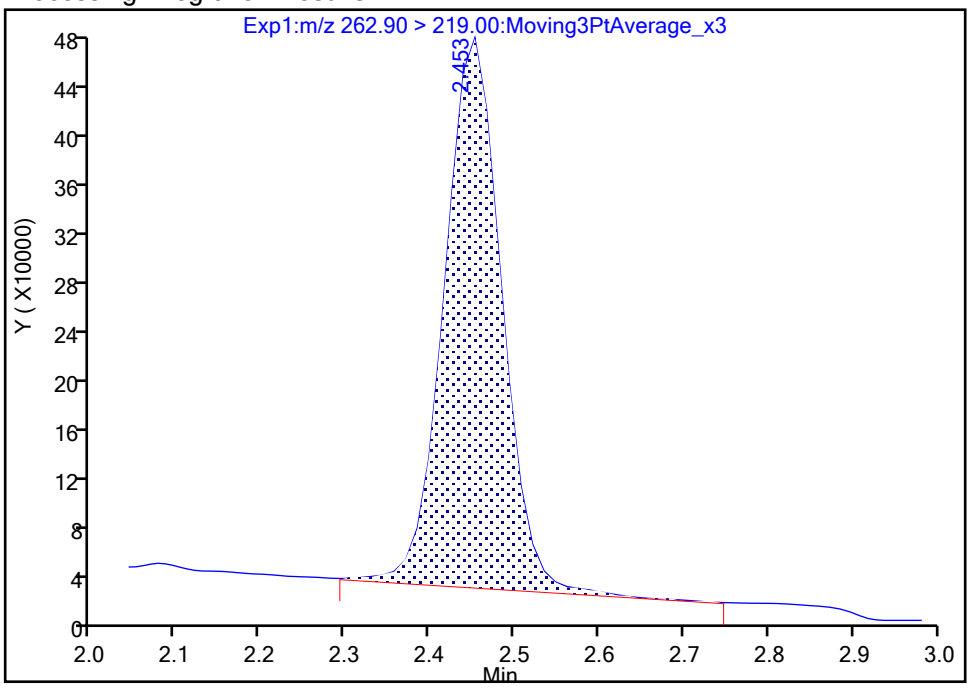
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

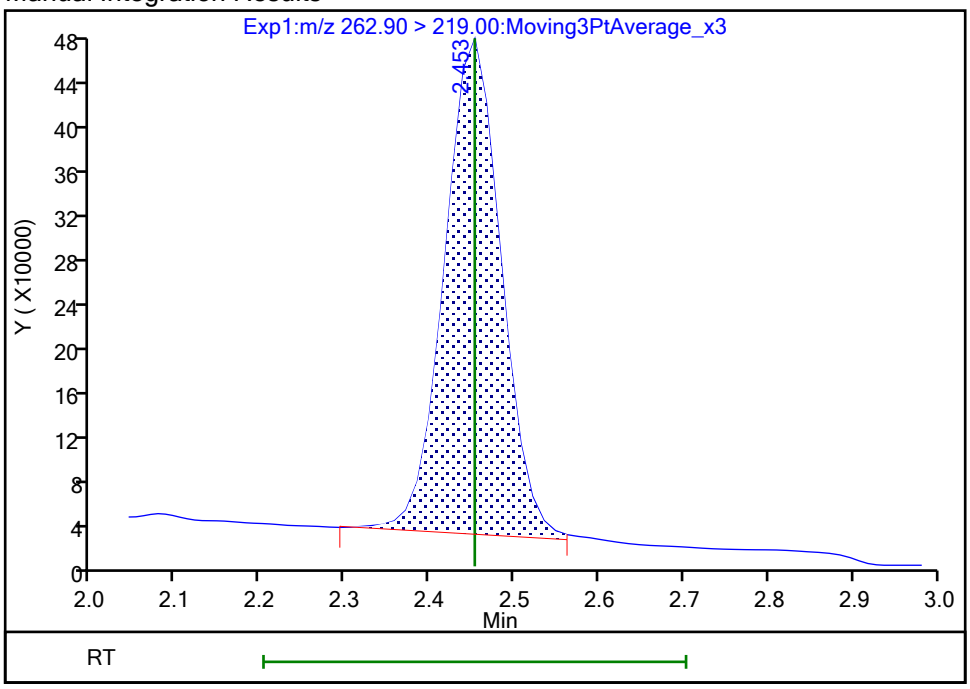
Processing Integration Results

RT: 2.45
Area: 2134477
Amount: 1.780617
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 2115082
Amount: 1.764438
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:15:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

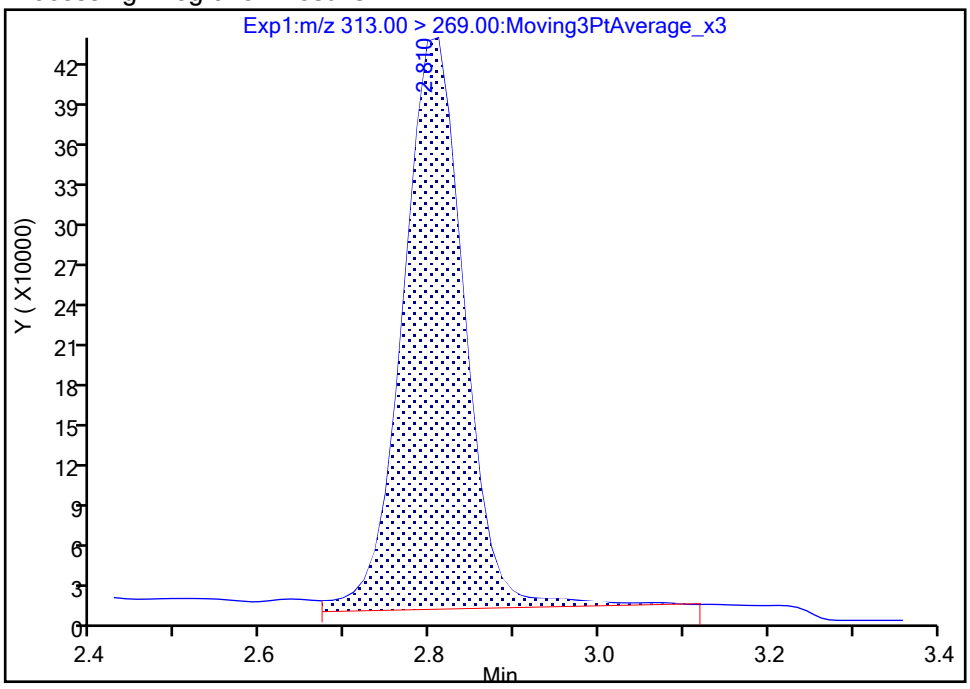
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

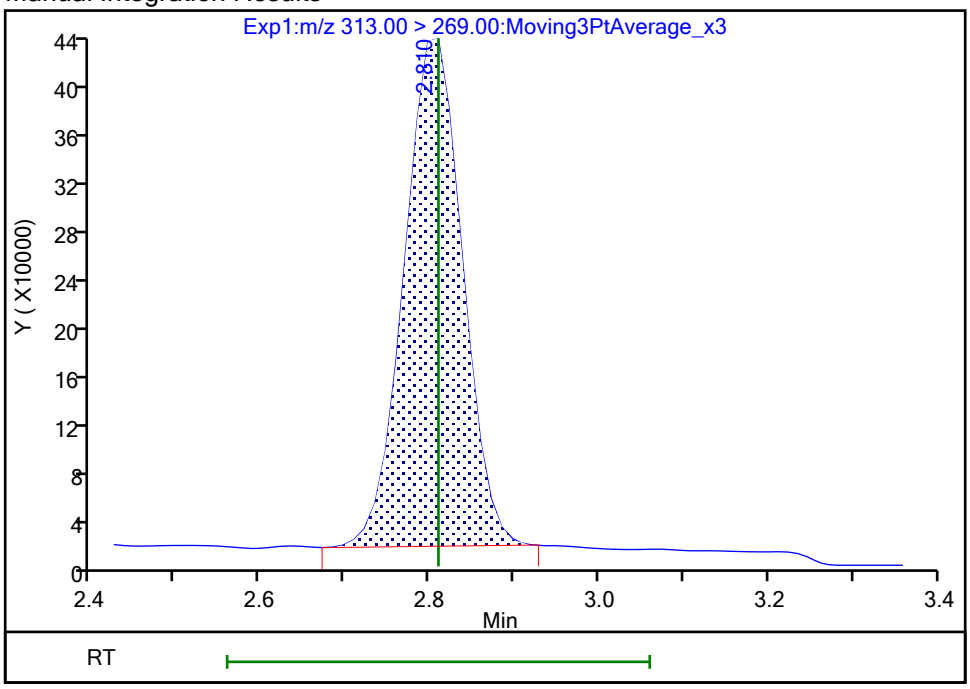
Processing Integration Results

RT: 2.81
Area: 2141346
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1988371
Amount: 1.586999
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

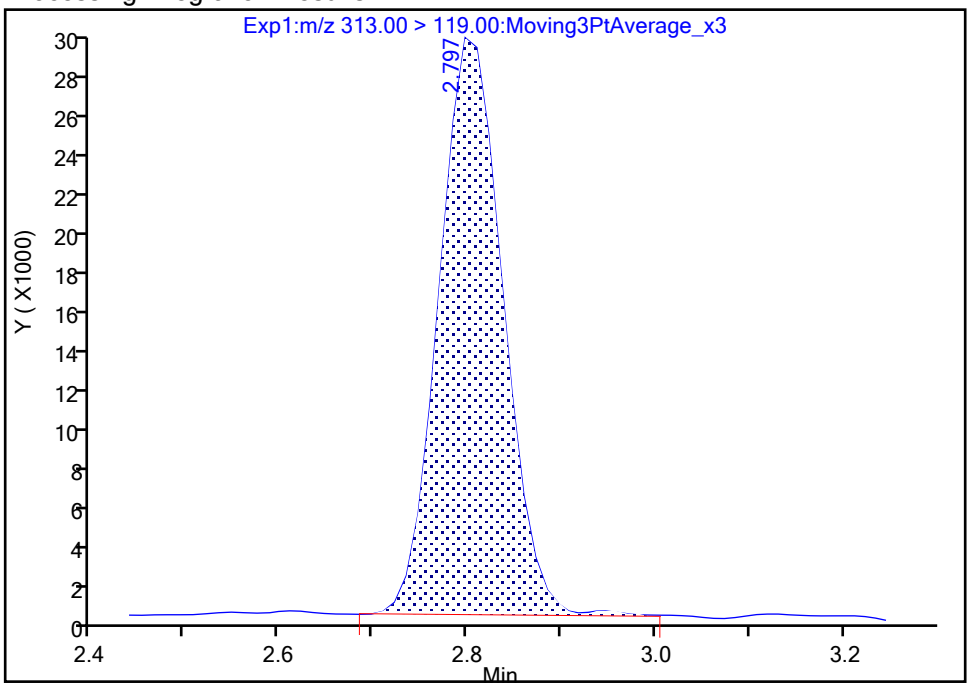
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

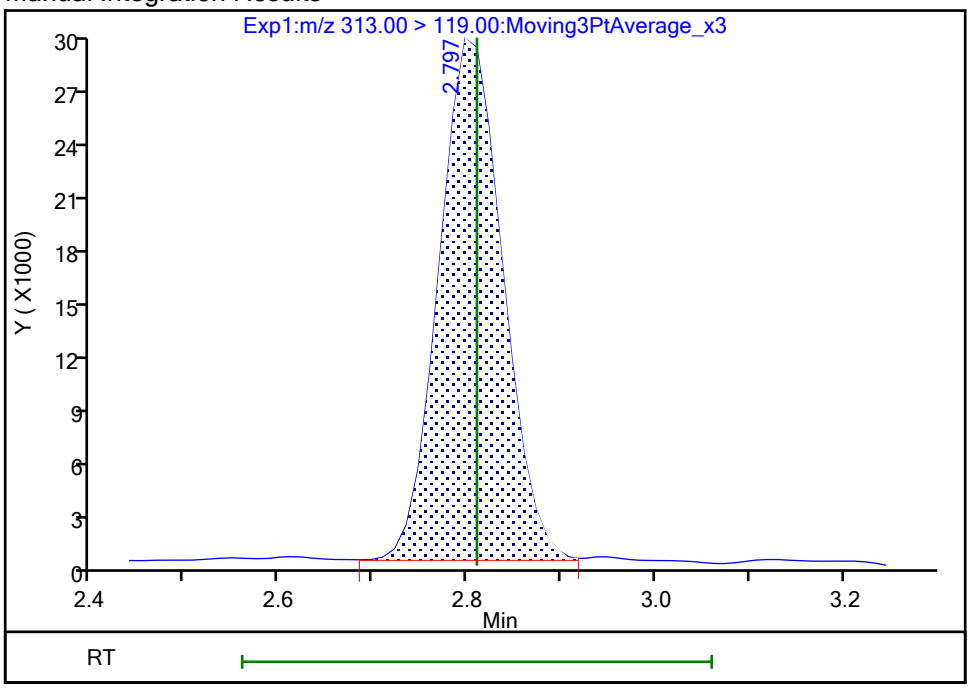
Processing Integration Results

RT: 2.80
Area: 136086
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 135572
Amount: 1.586999
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

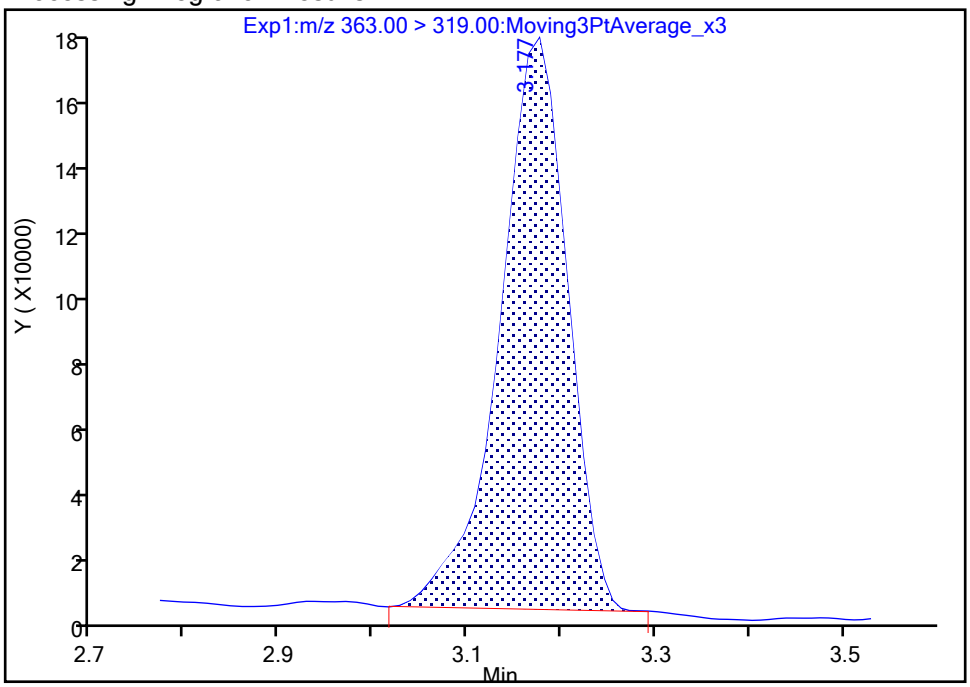
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

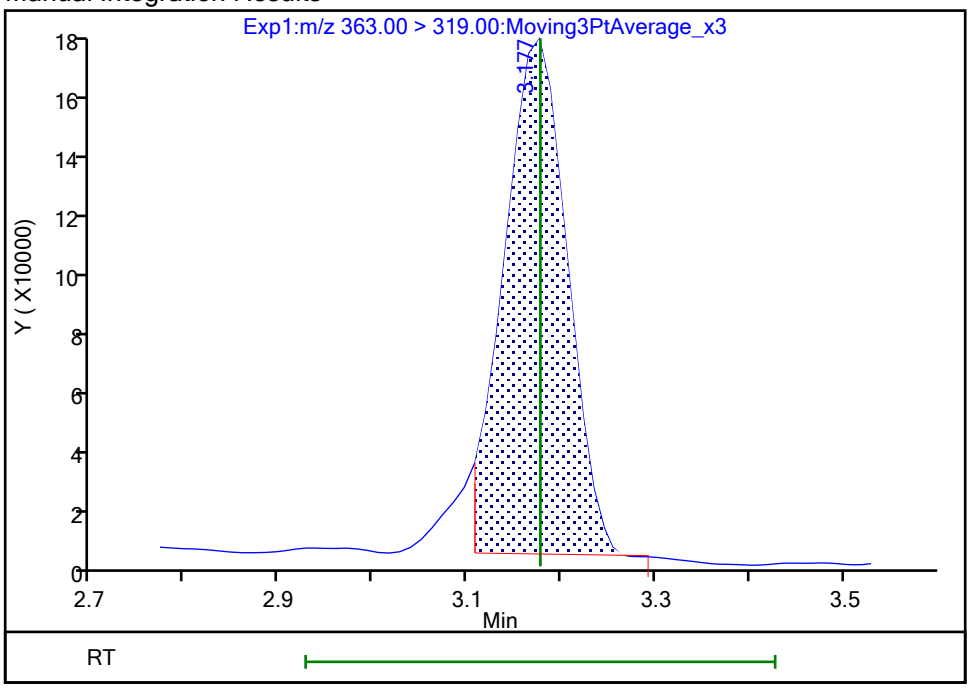
Processing Integration Results

RT: 3.18
Area: 845378
Amount: 0.600098
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 788933
Amount: 0.560030
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

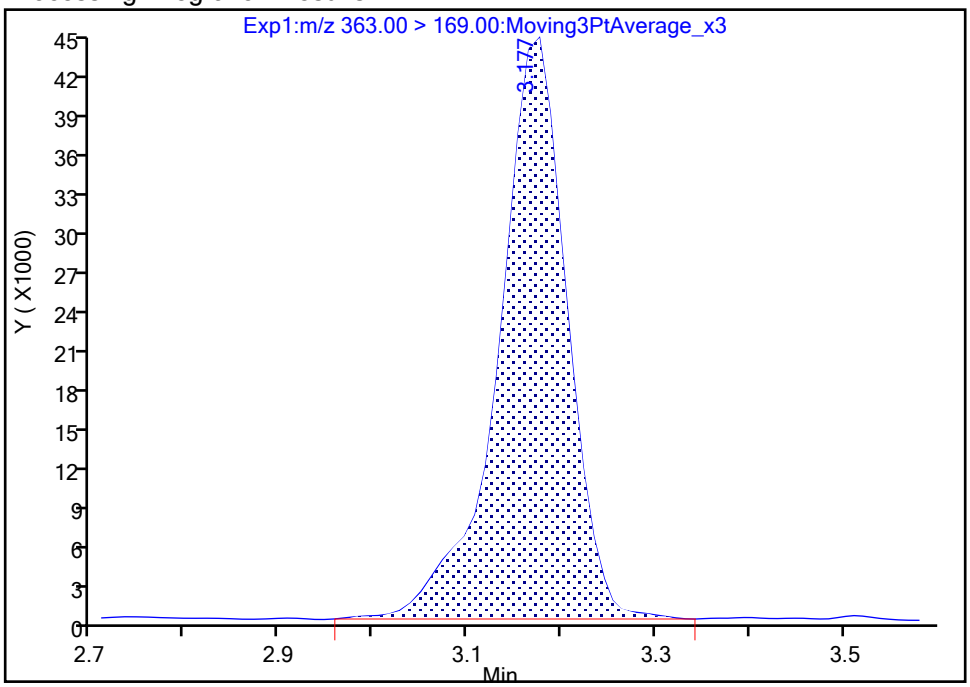
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

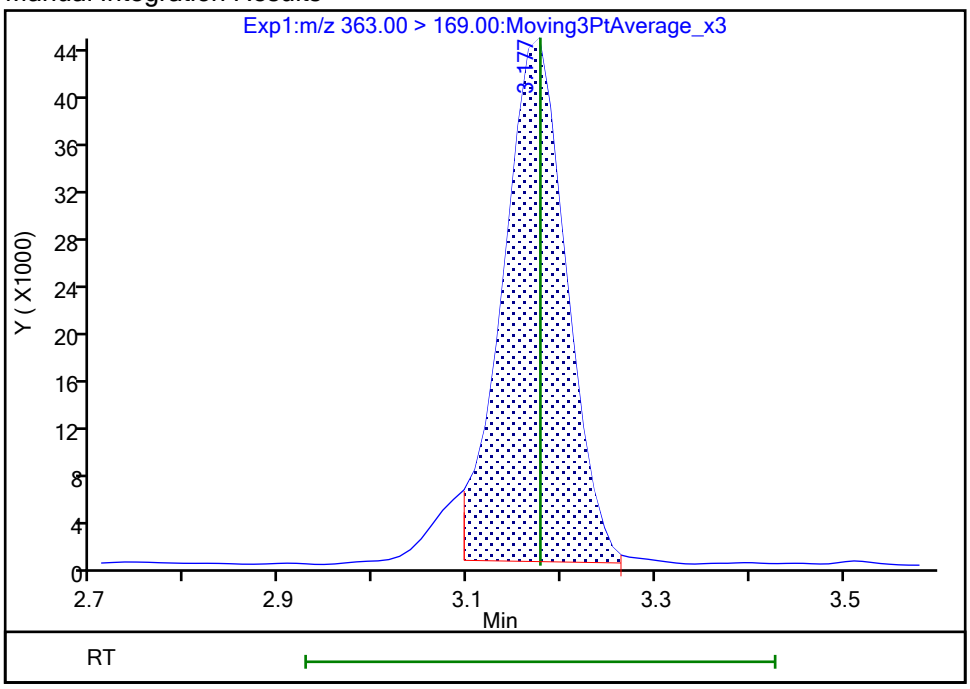
Processing Integration Results

RT: 3.18
Area: 226934
Amount: 0.600098
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 208762
Amount: 0.560030
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

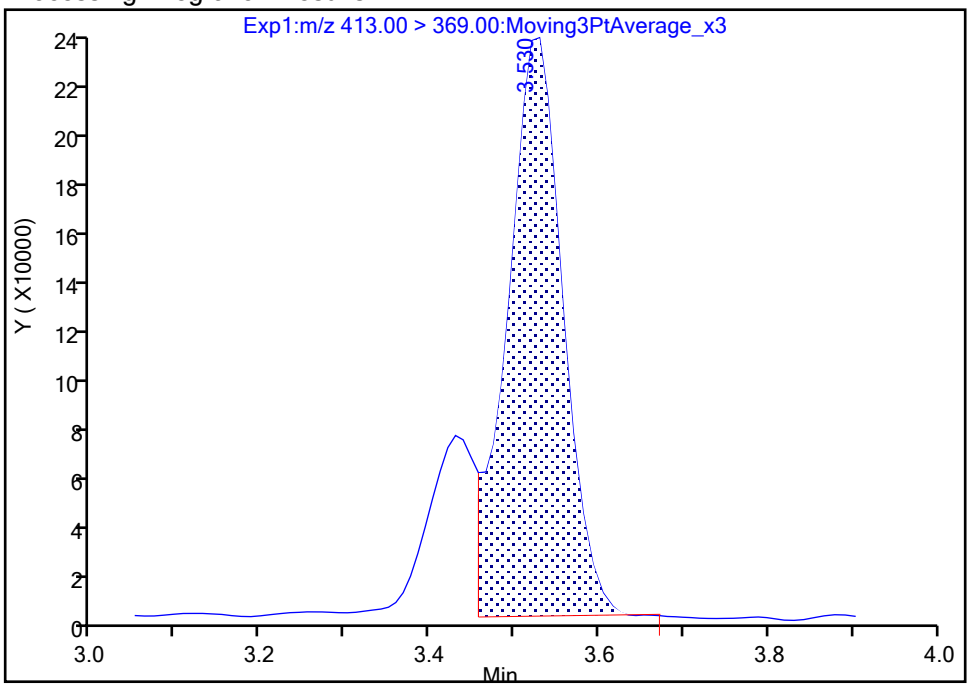
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

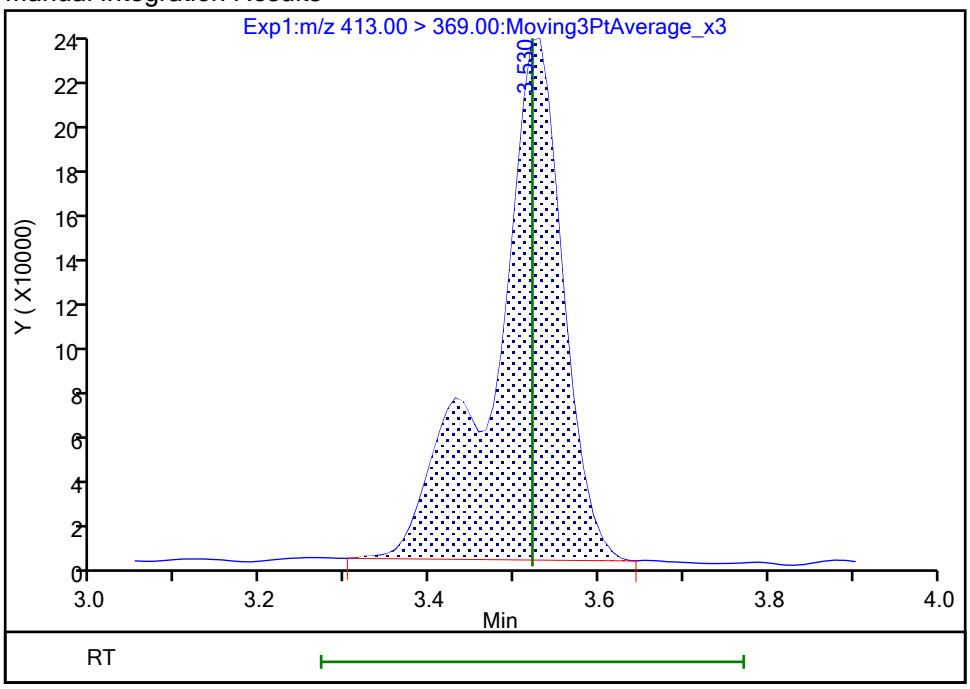
Processing Integration Results

RT: 3.53
Area: 1019696
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 1272473
Amount: 0.846877
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

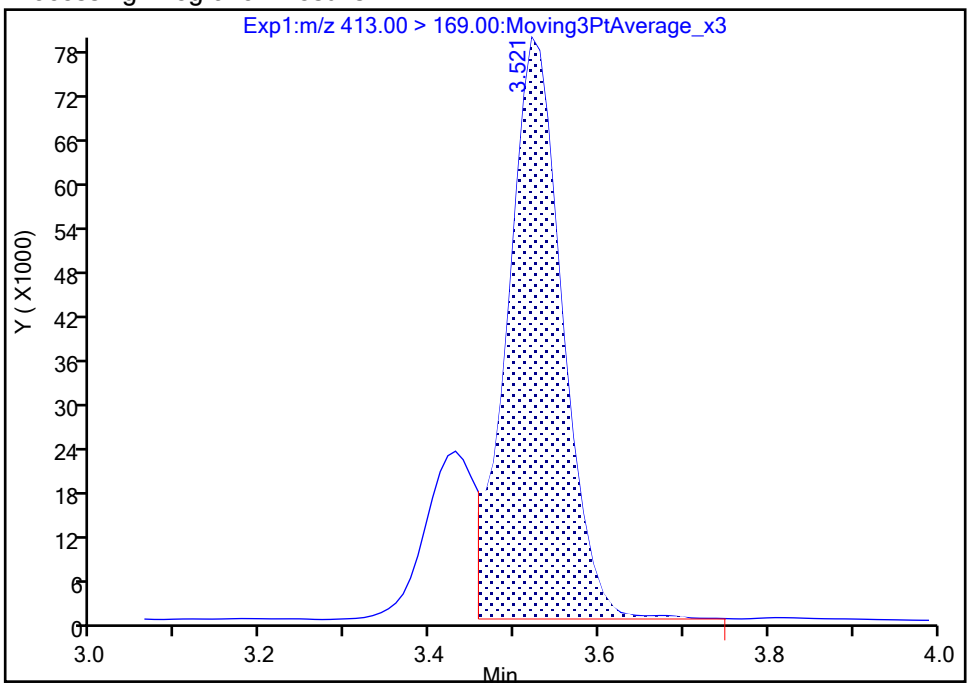
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

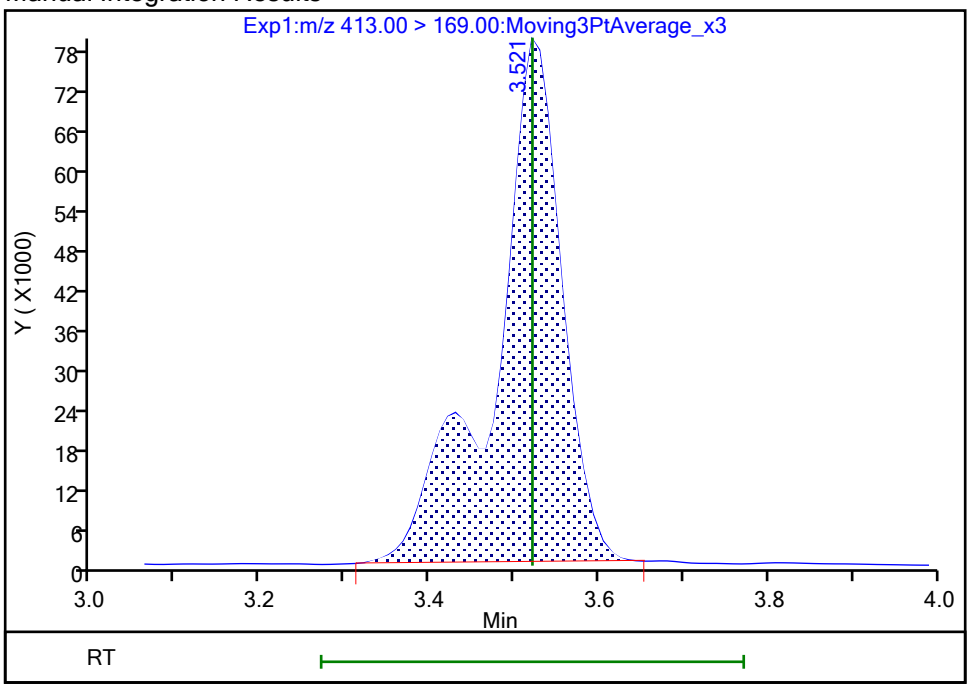
Processing Integration Results

RT: 3.52
Area: 354579
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 437626
Amount: 0.846877
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

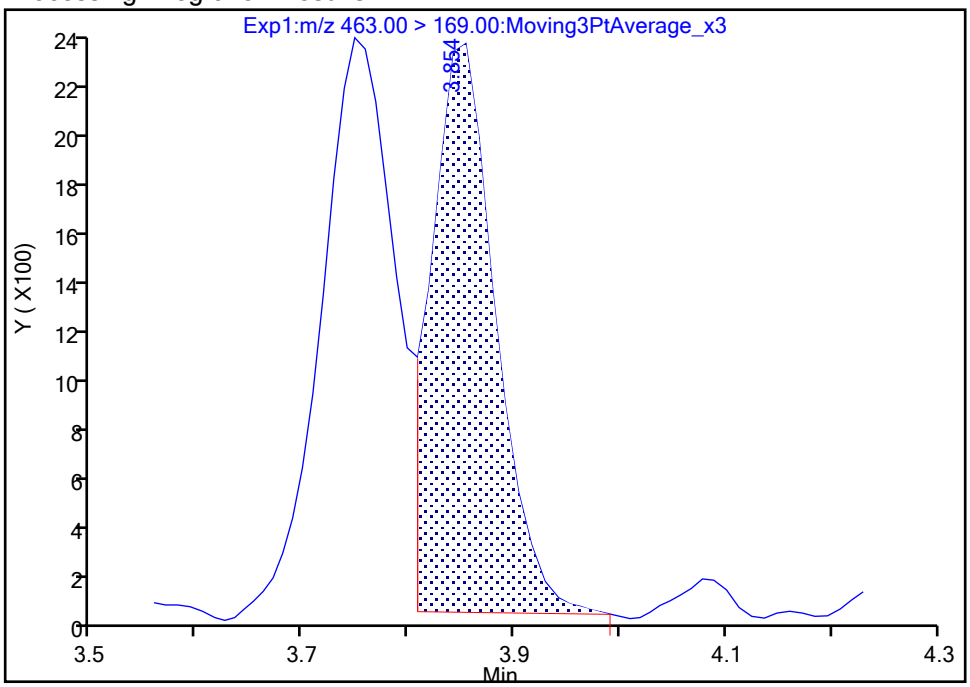
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

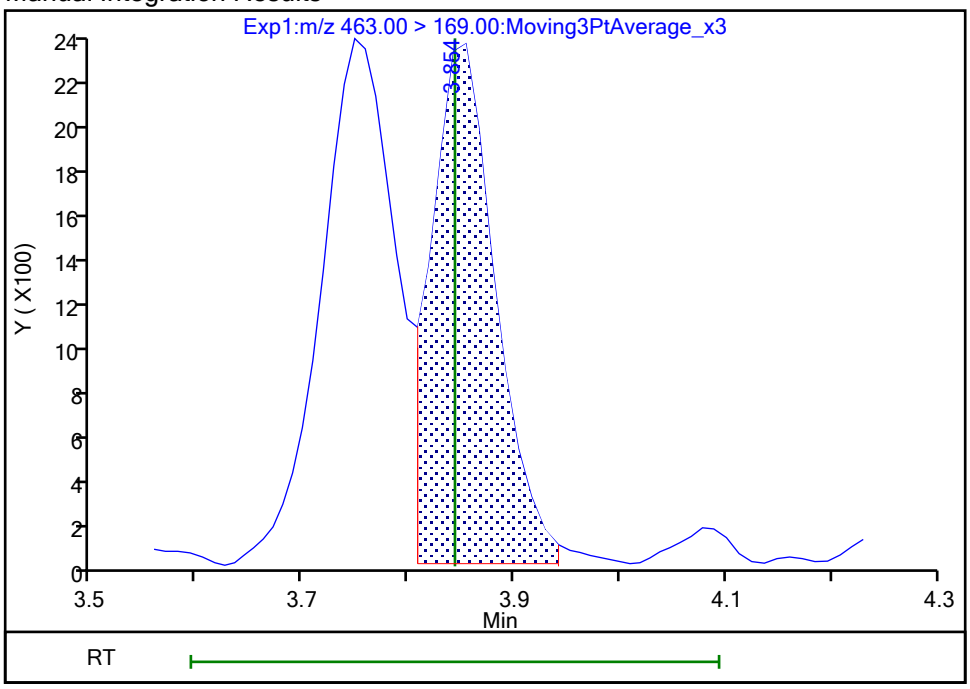
Processing Integration Results

RT: 3.85
Area: 9343
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 9483
Amount: 0.069997
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:18:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

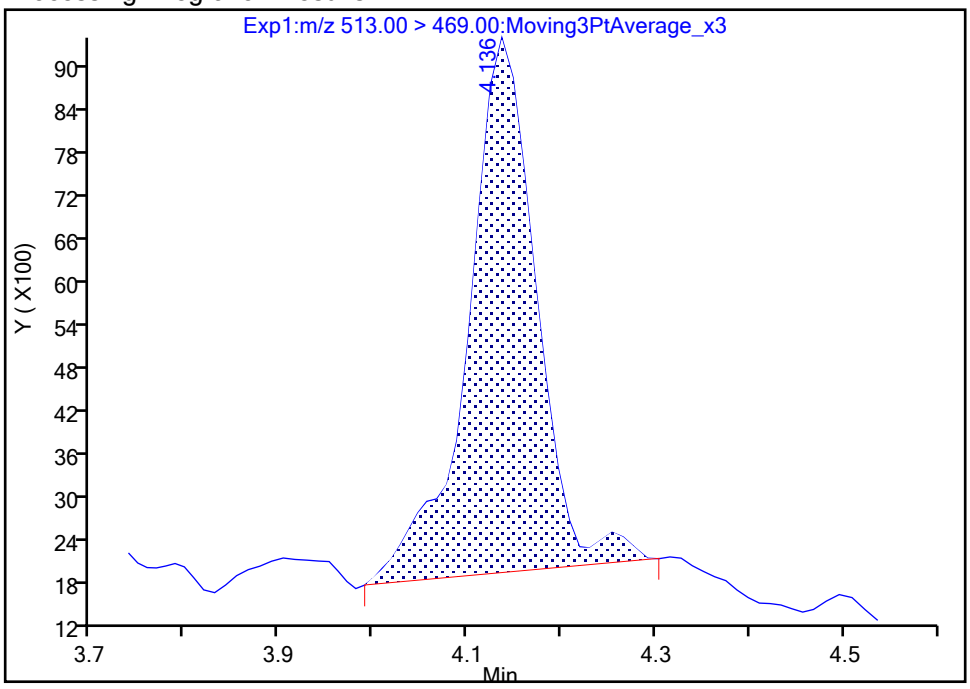
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

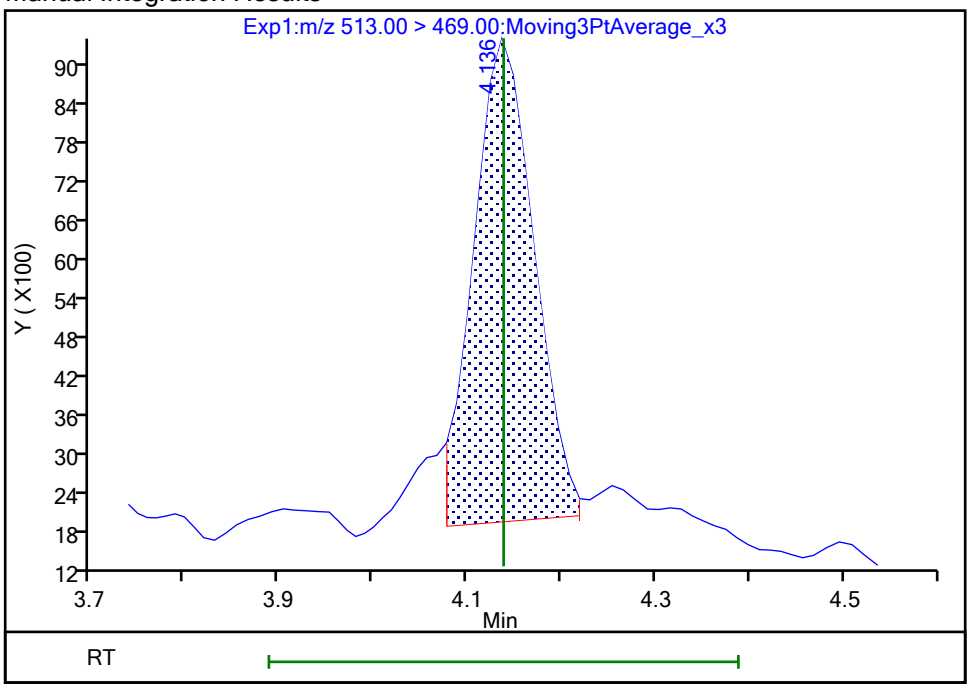
Processing Integration Results

RT: 4.14
Area: 37983
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 33373
Amount: 0.019357
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:19:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

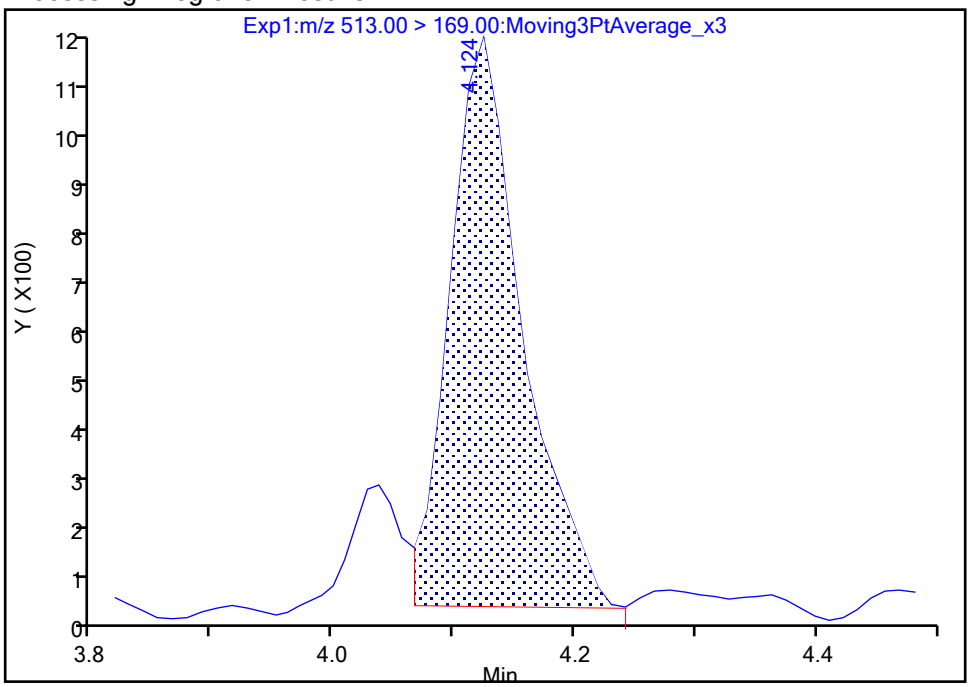
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

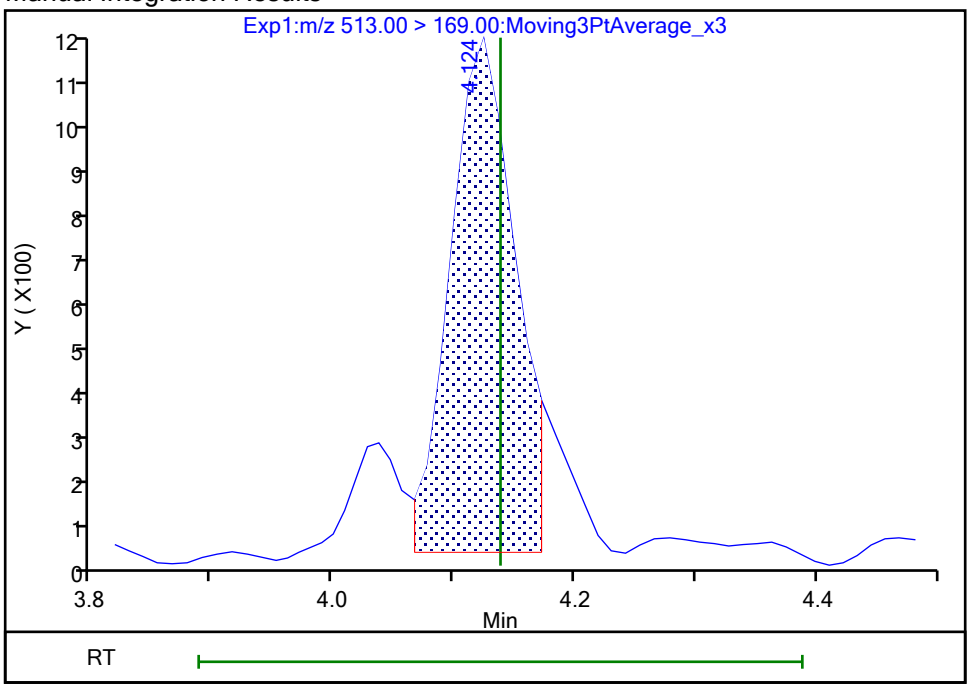
Processing Integration Results

RT: 4.12
Area: 4472
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 3960
Amount: 0.019357
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:19:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

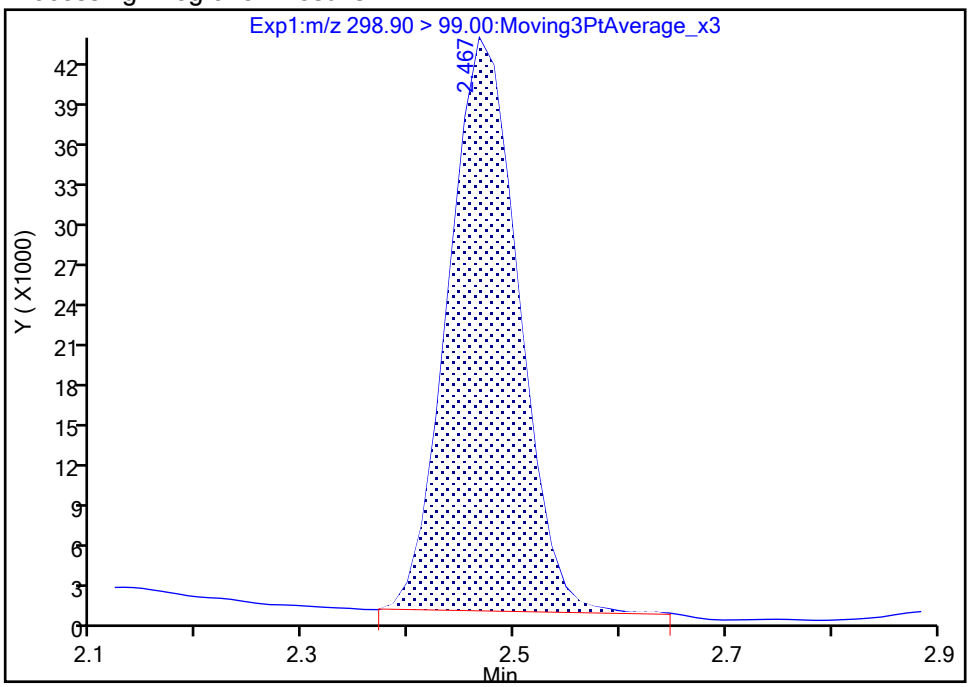
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

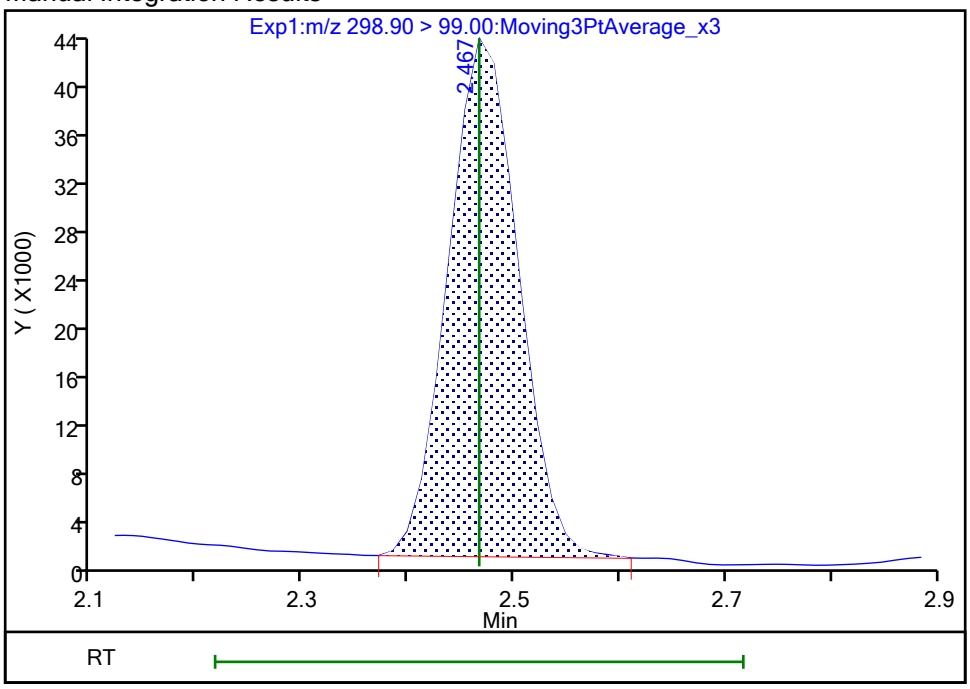
Processing Integration Results

RT: 2.47
Area: 192544
Amount: 0.214712
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 192341
Amount: 0.210920
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:15:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

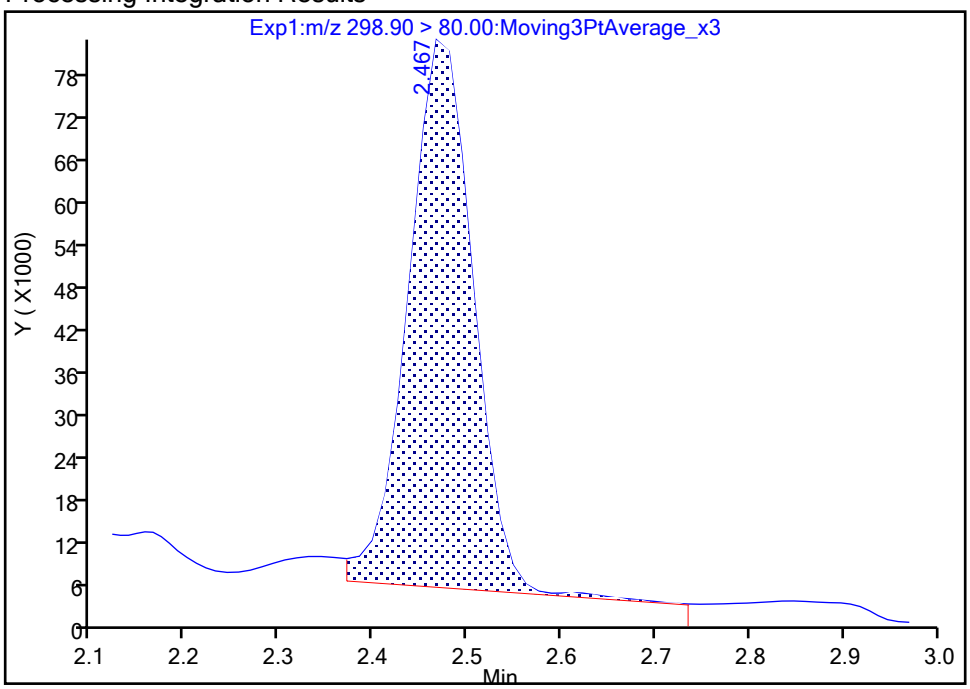
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

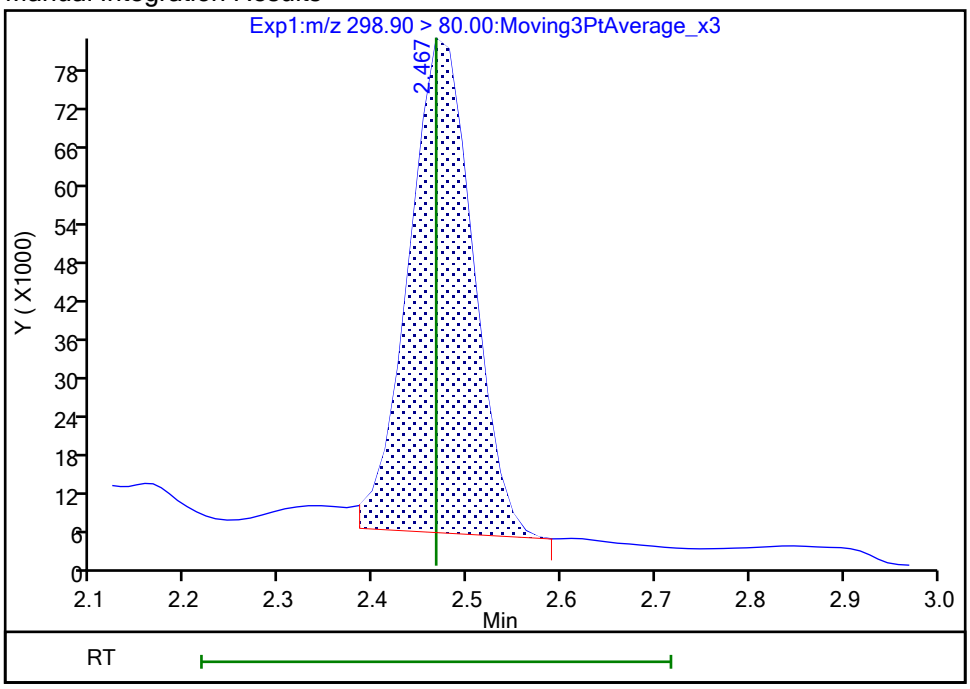
Processing Integration Results

RT: 2.47
Area: 374228
Amount: 0.214712
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 367618
Amount: 0.210920
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:15:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

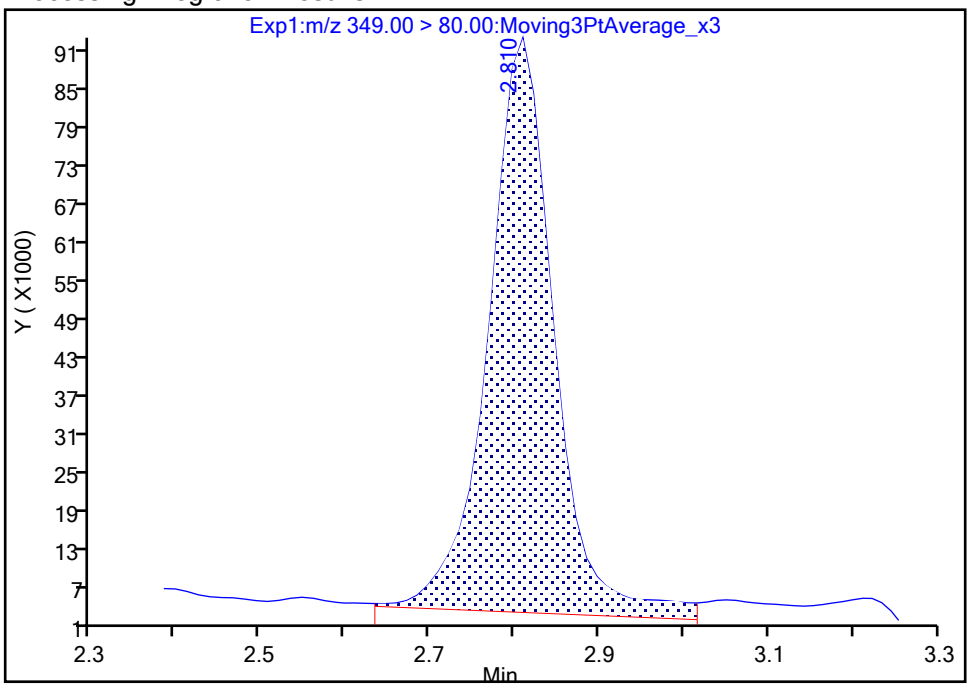
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

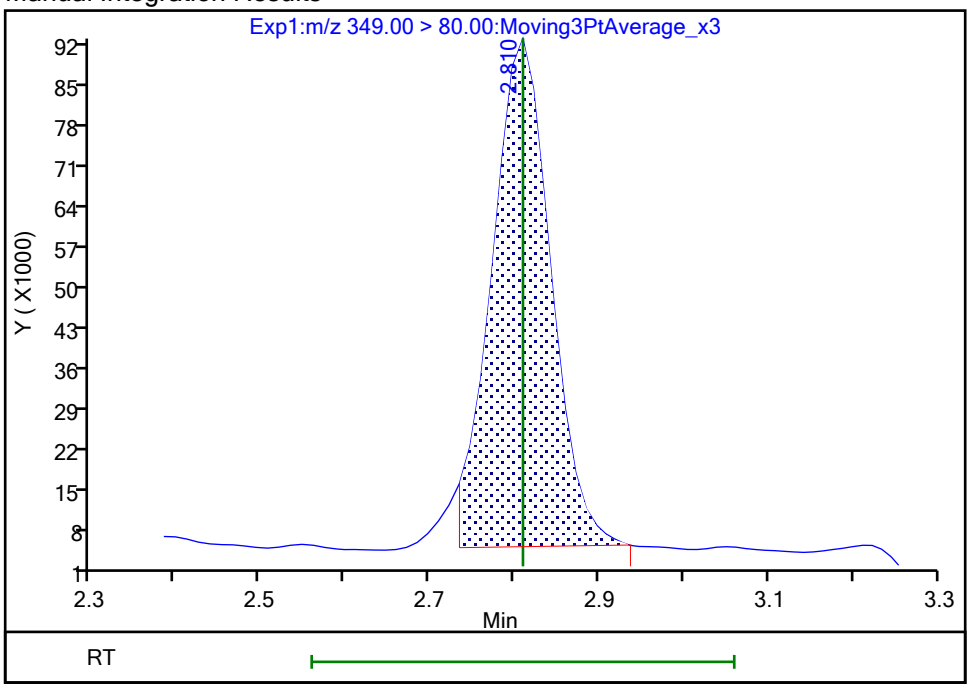
Processing Integration Results

RT: 2.81
Area: 484448
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 425067
Amount: 0.281168
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

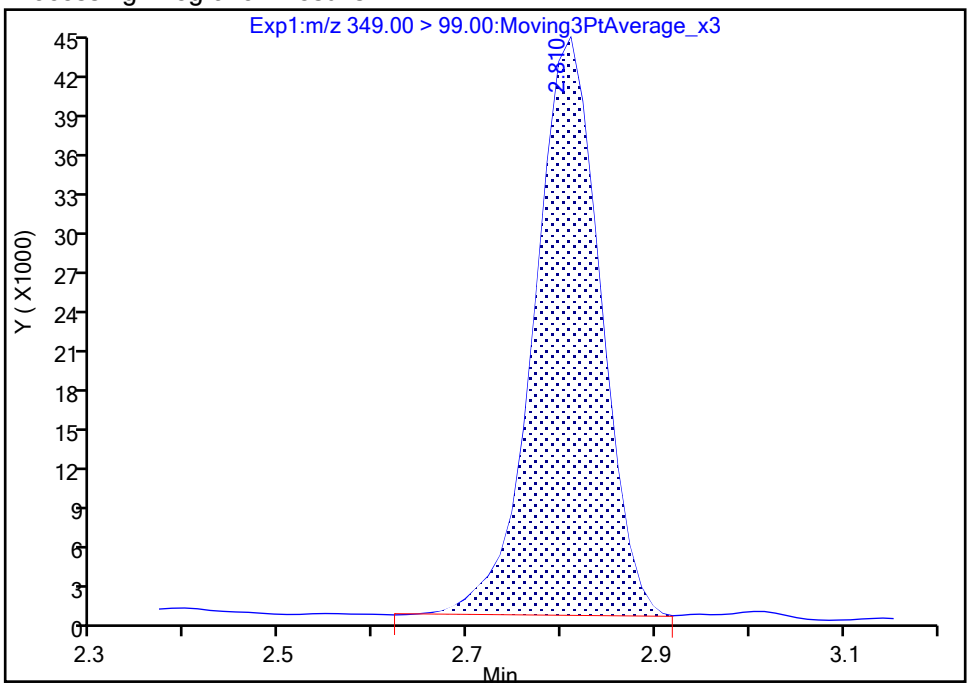
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

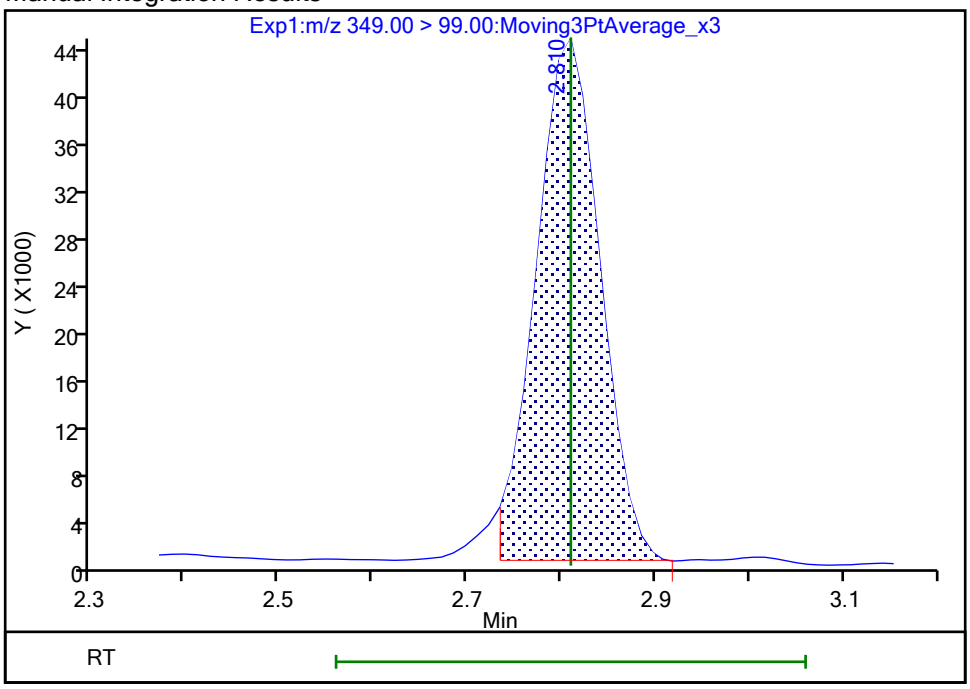
Processing Integration Results

RT: 2.81
Area: 214692
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 207386
Amount: 0.281168
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

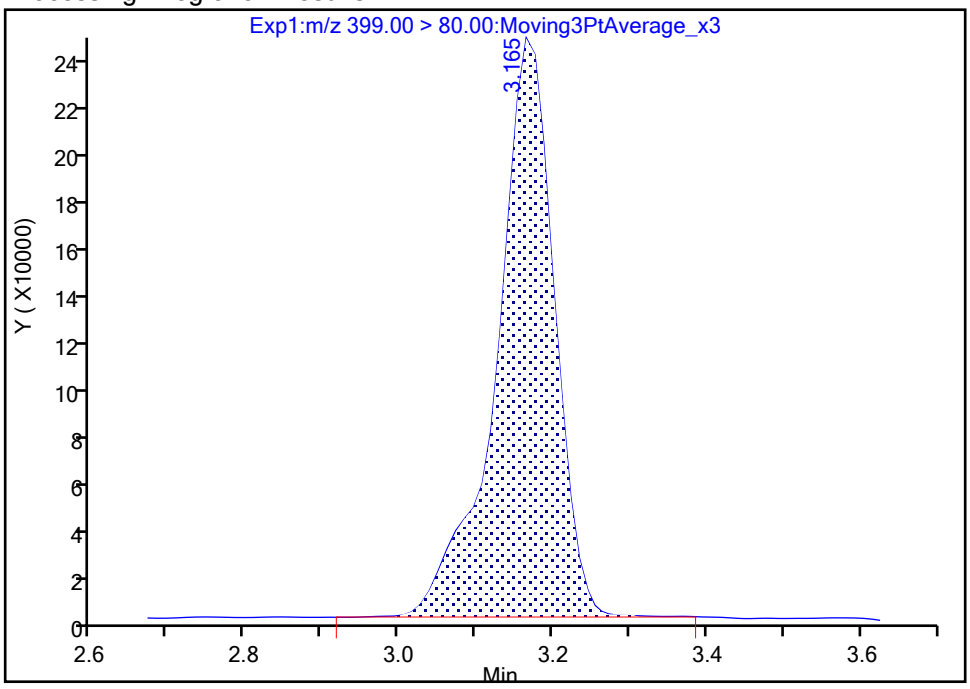
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

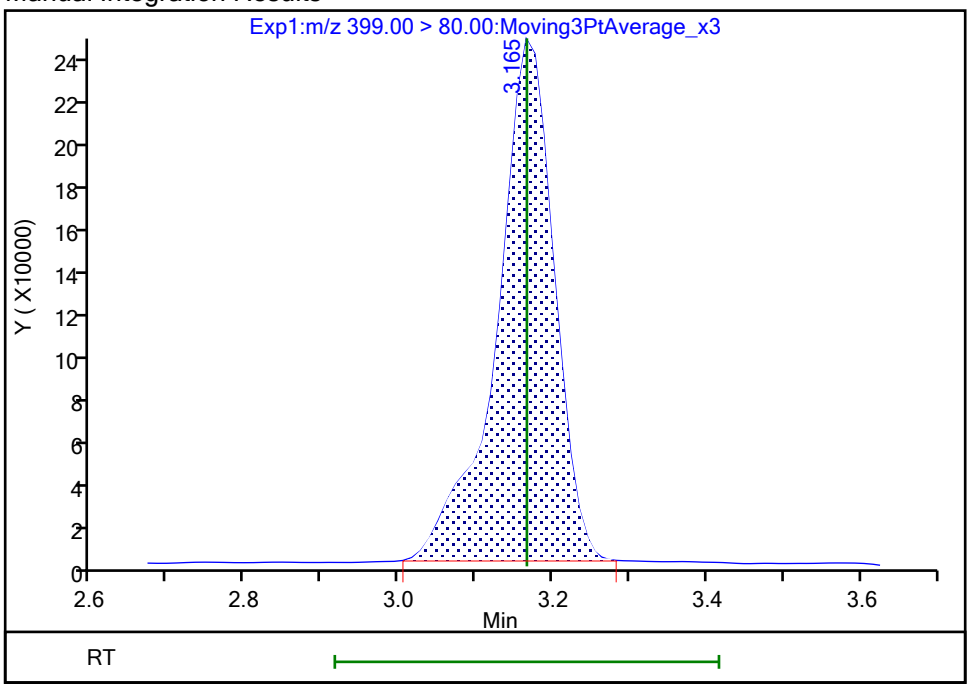
Processing Integration Results

RT: 3.17
Area: 1266579
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1249675
Amount: 0.975157
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

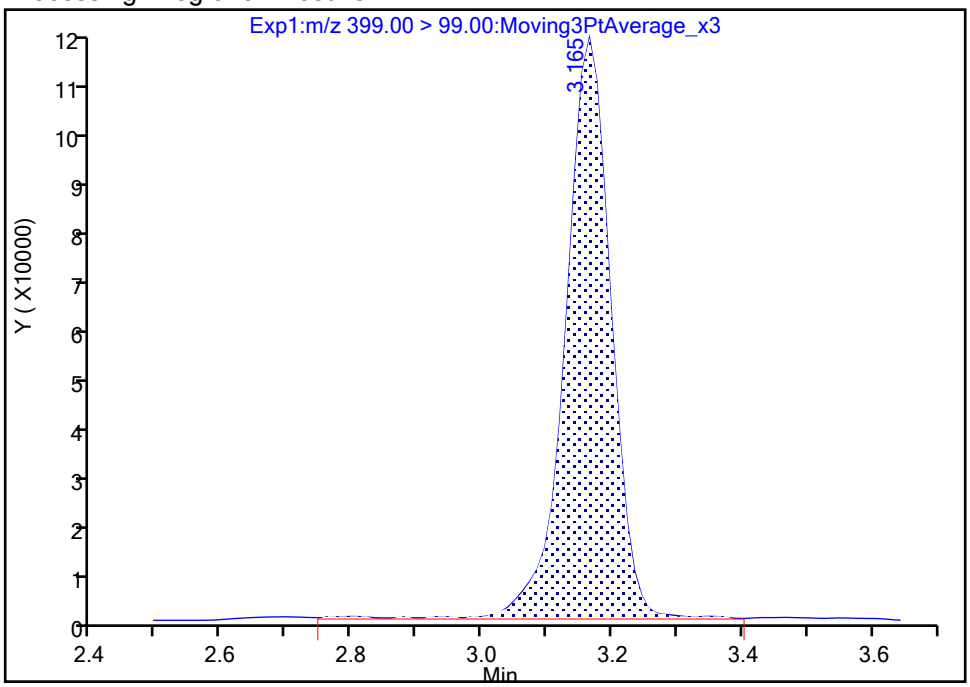
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

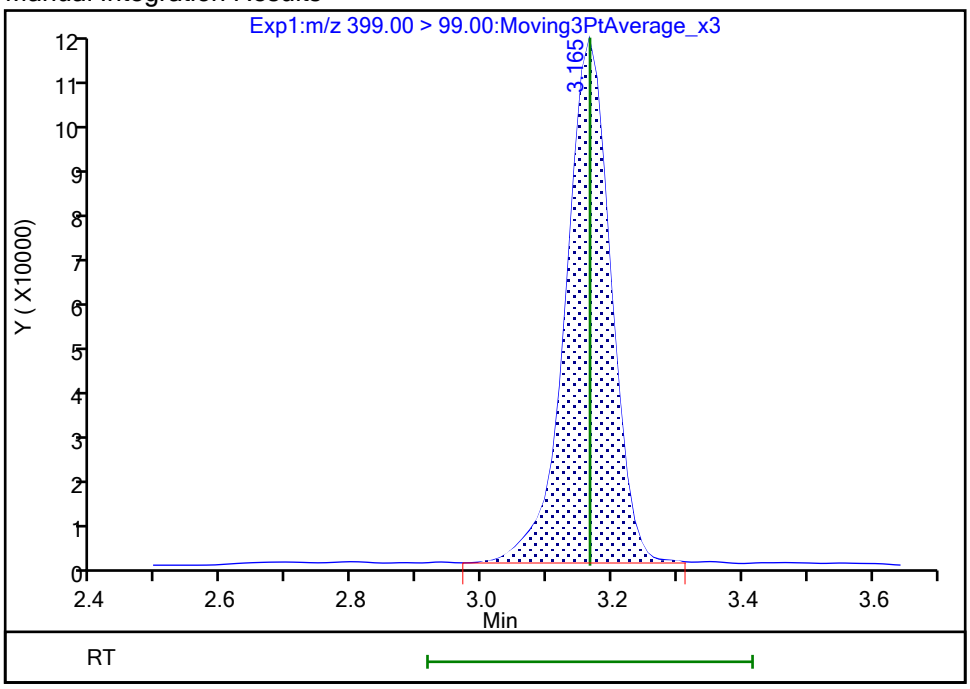
Processing Integration Results

RT: 3.17
Area: 563350
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 548122
Amount: 0.975157
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

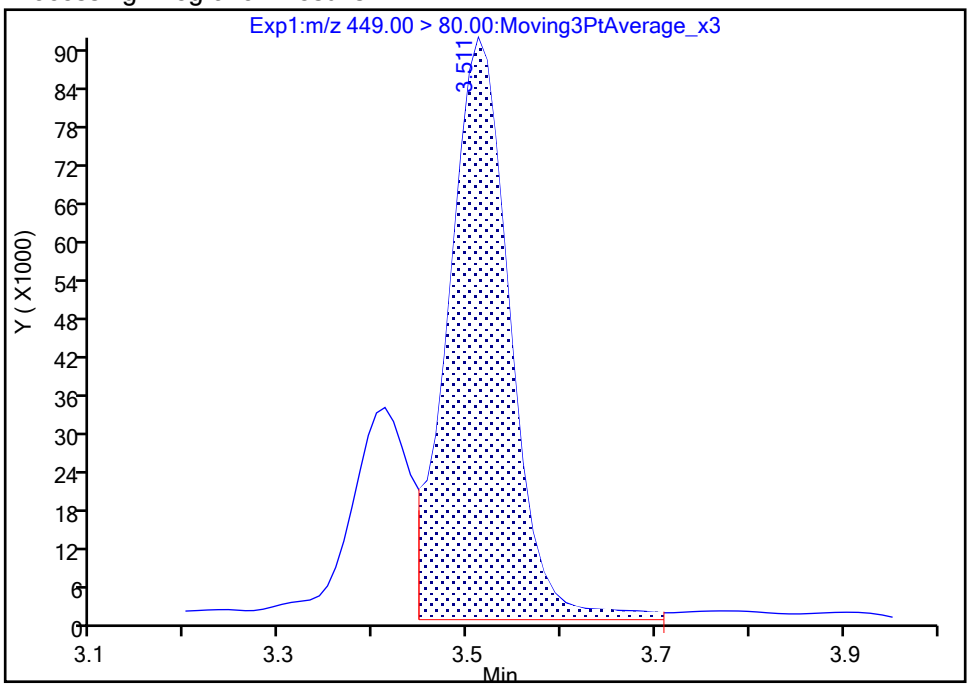
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

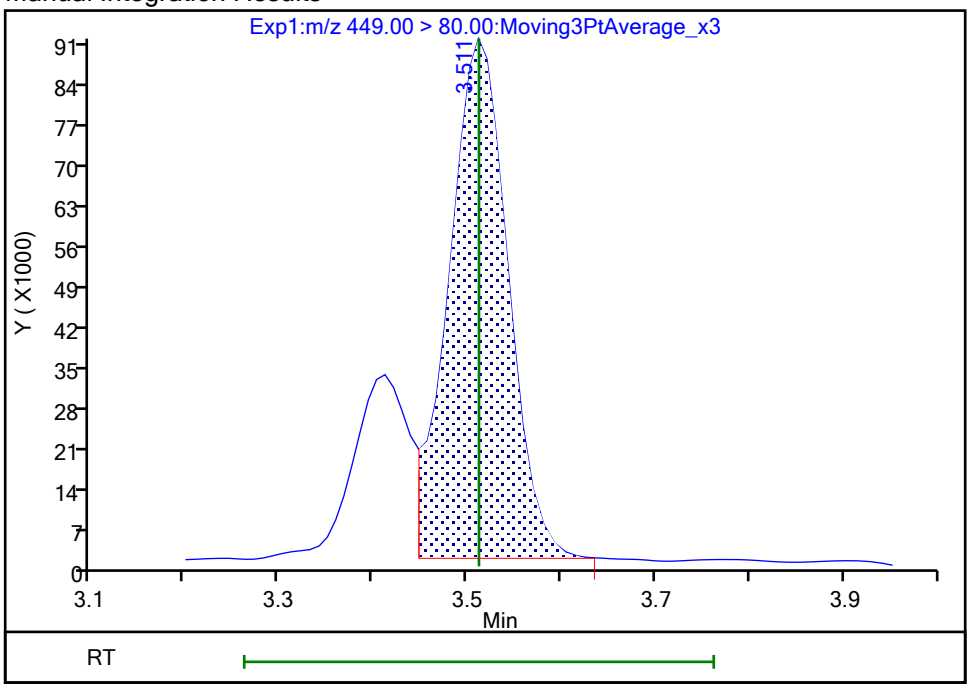
Processing Integration Results

RT: 3.51
Area: 419516
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 393468
Amount: 0.381880
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

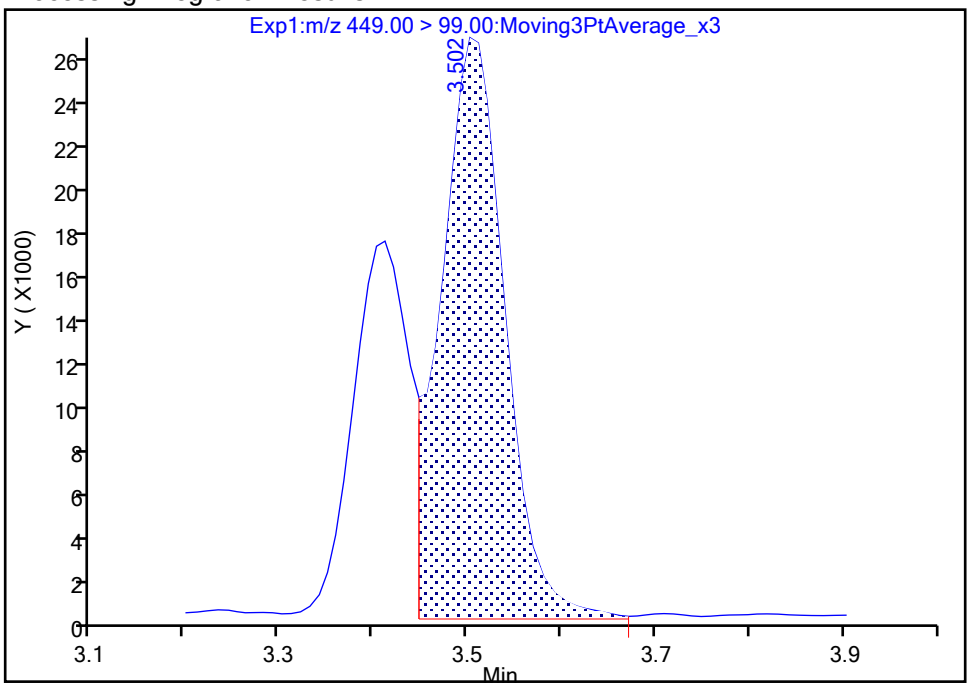
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

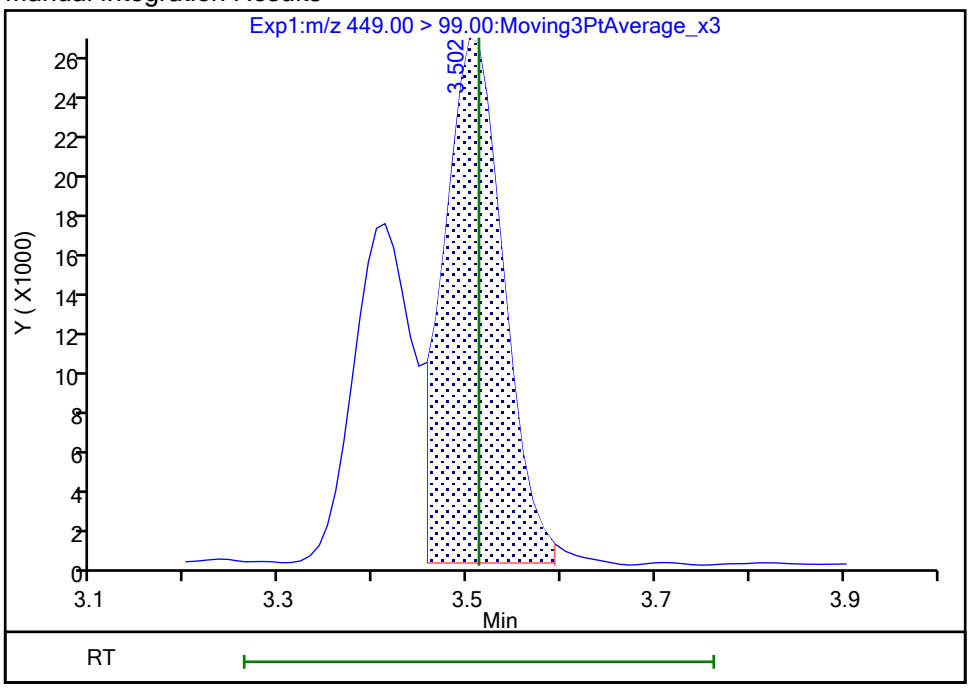
Processing Integration Results

RT: 3.50
Area: 123284
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 113368
Amount: 0.381880
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

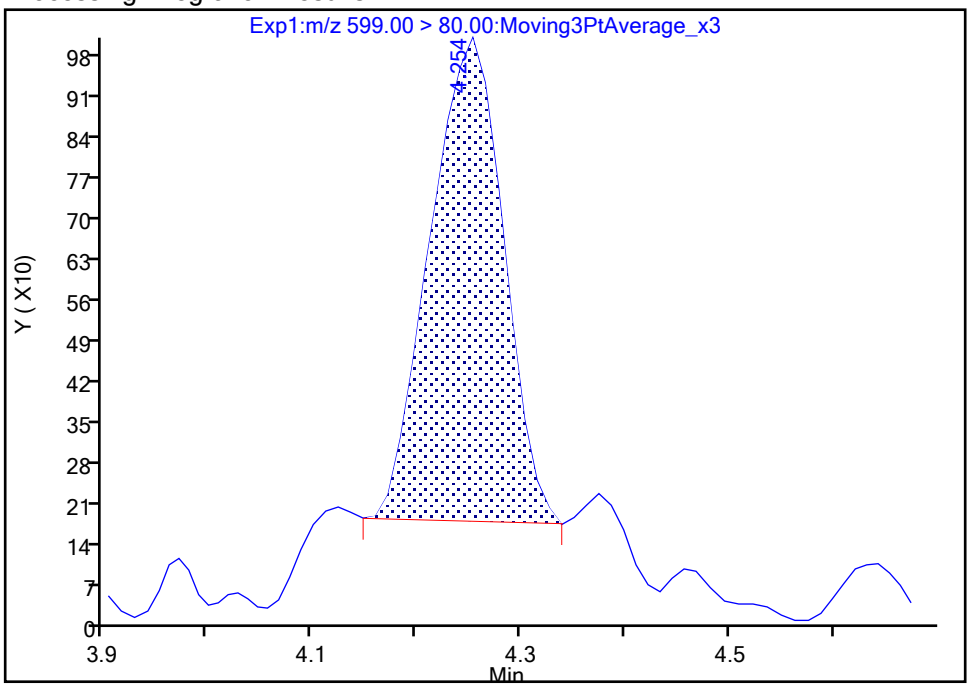
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

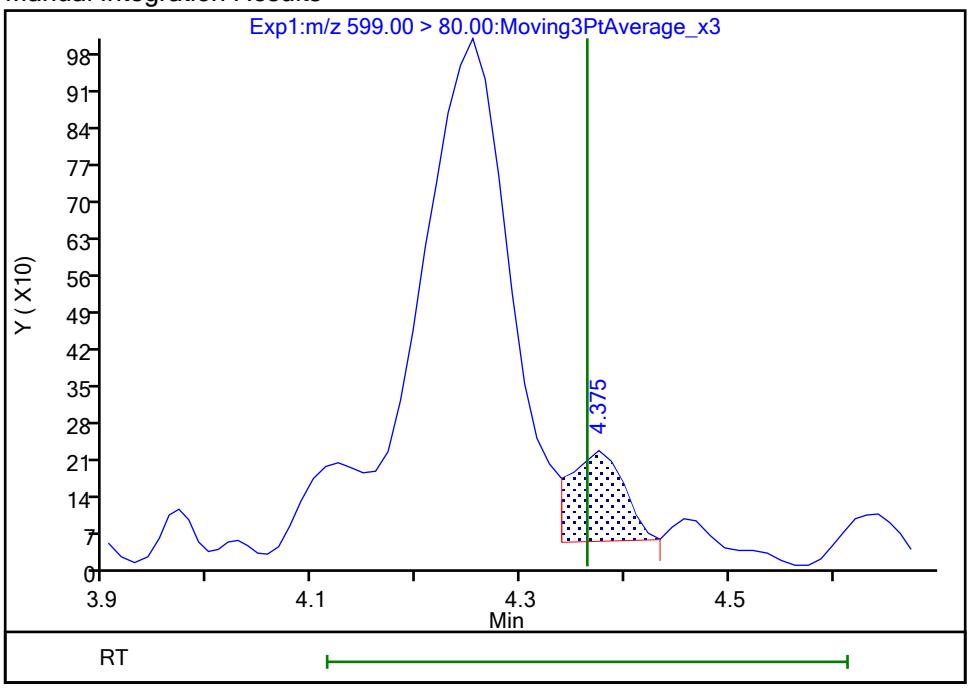
Processing Integration Results

RT: 4.25
Area: 4064
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 601
Amount: 0.001234
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:20:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

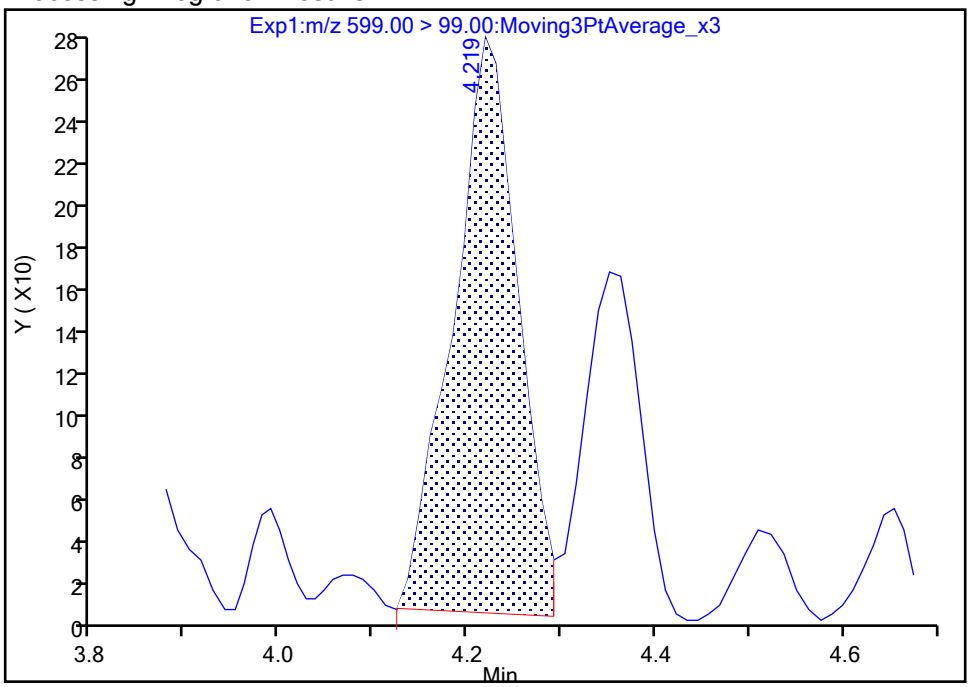
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

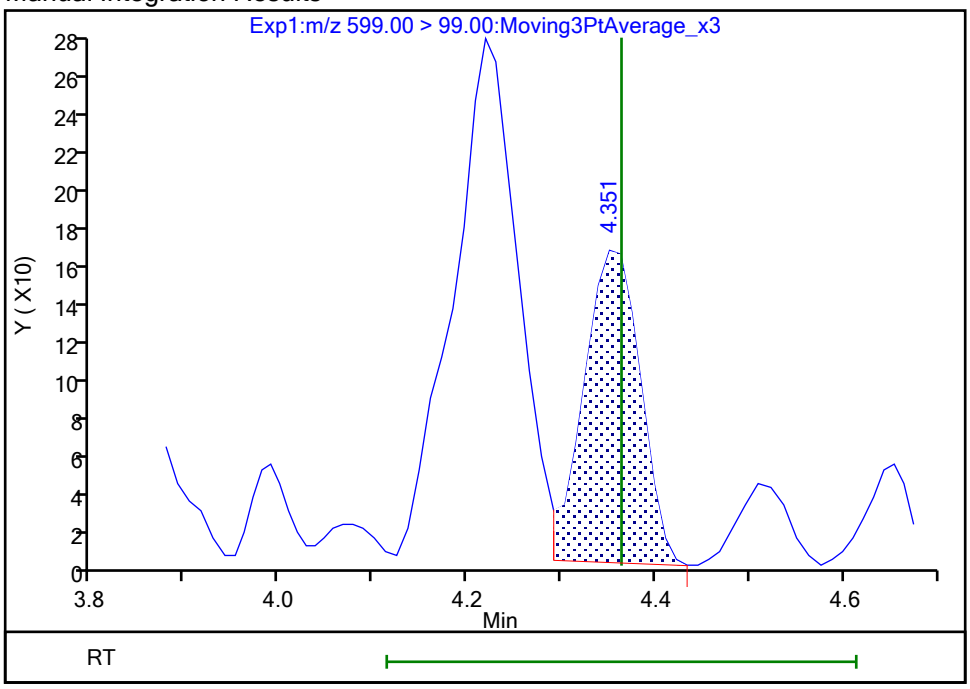
Processing Integration Results

RT: 4.22
Area: 1276
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 668
Amount: 0.001234
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:20:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

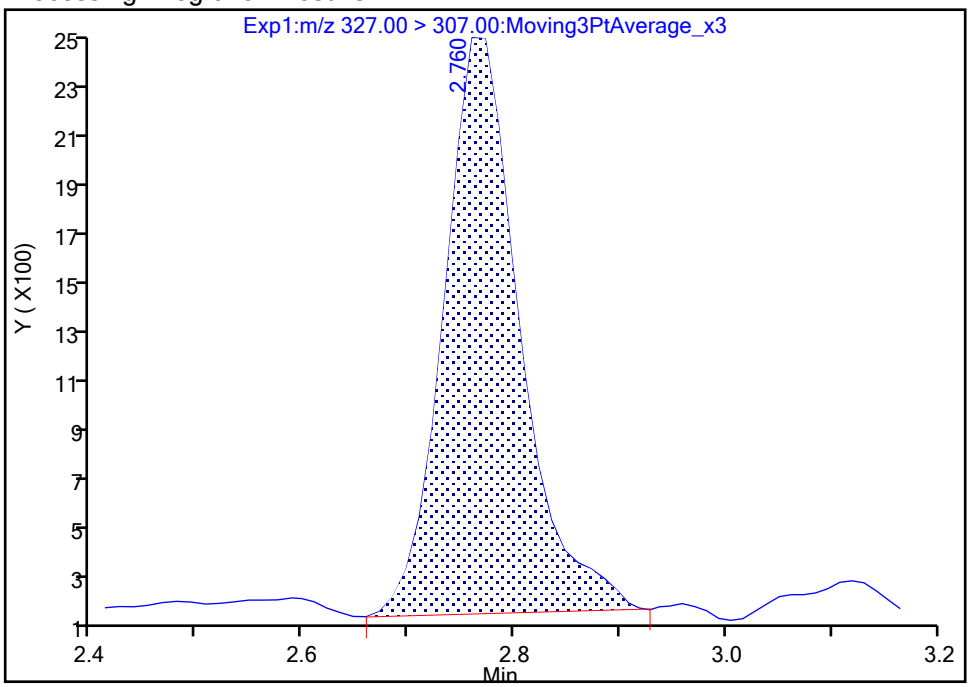
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

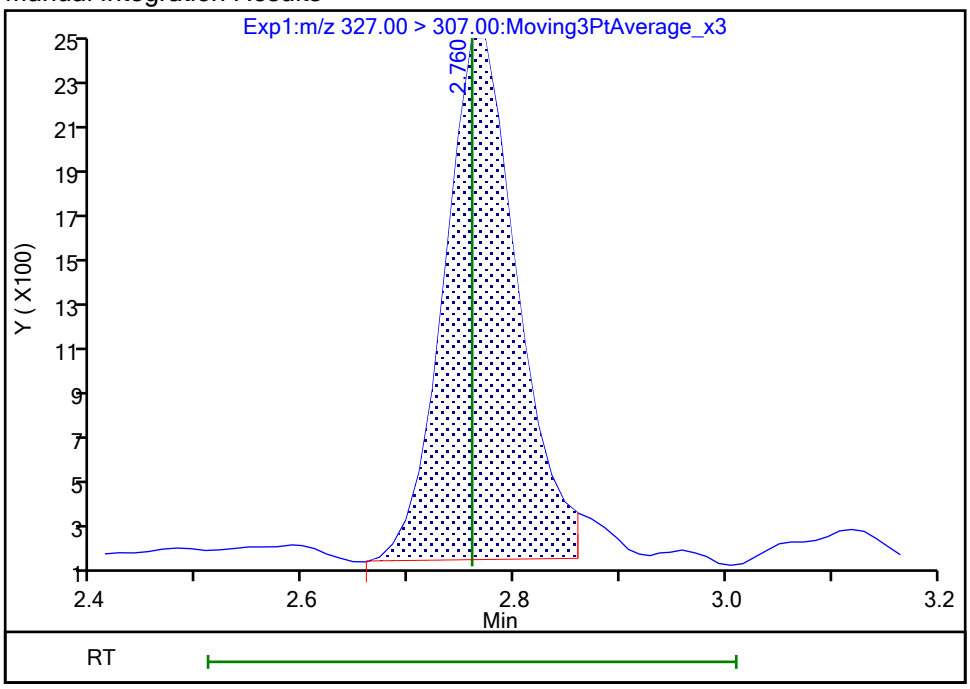
Processing Integration Results

RT: 2.76
Area: 11680
Amount: 0.019126
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 11305
Amount: 0.018512
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:15:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

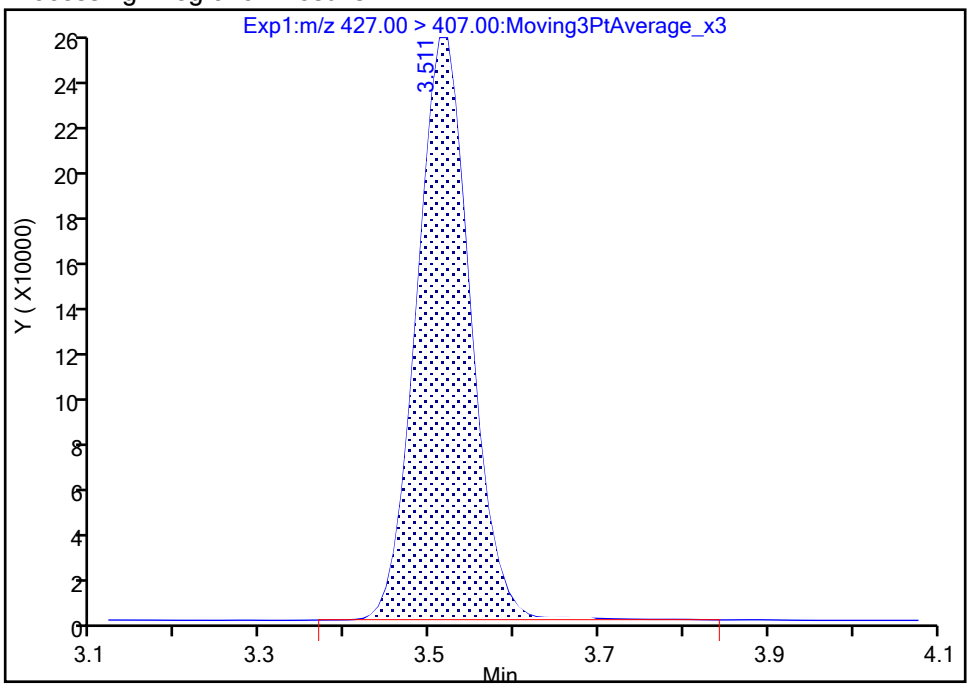
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

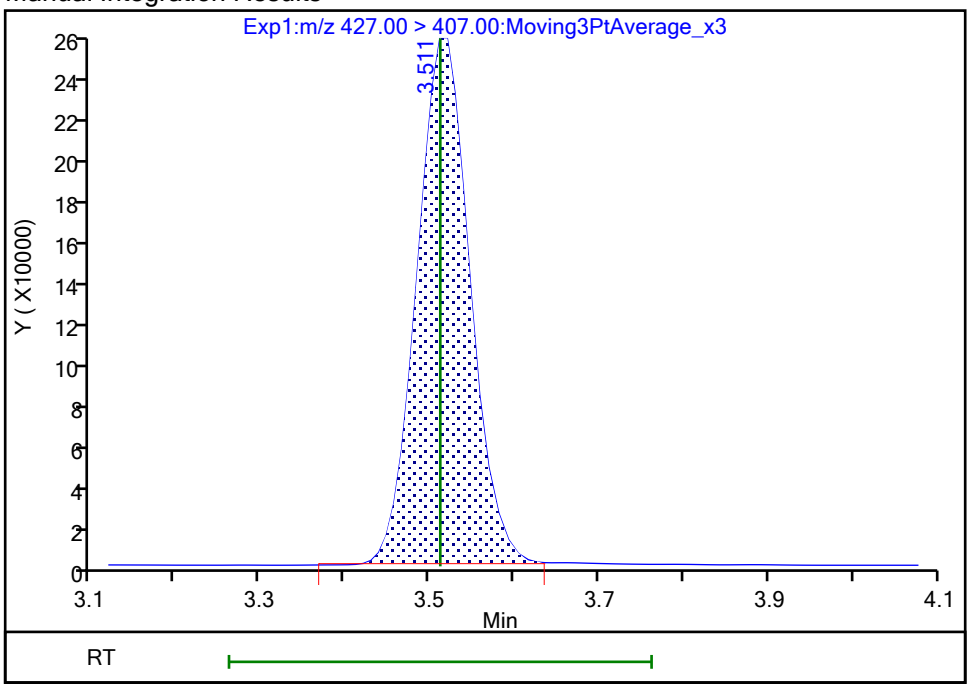
Processing Integration Results

RT: 3.51
Area: 1122088
Amount: 1.858423
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1116029
Amount: 1.848388
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

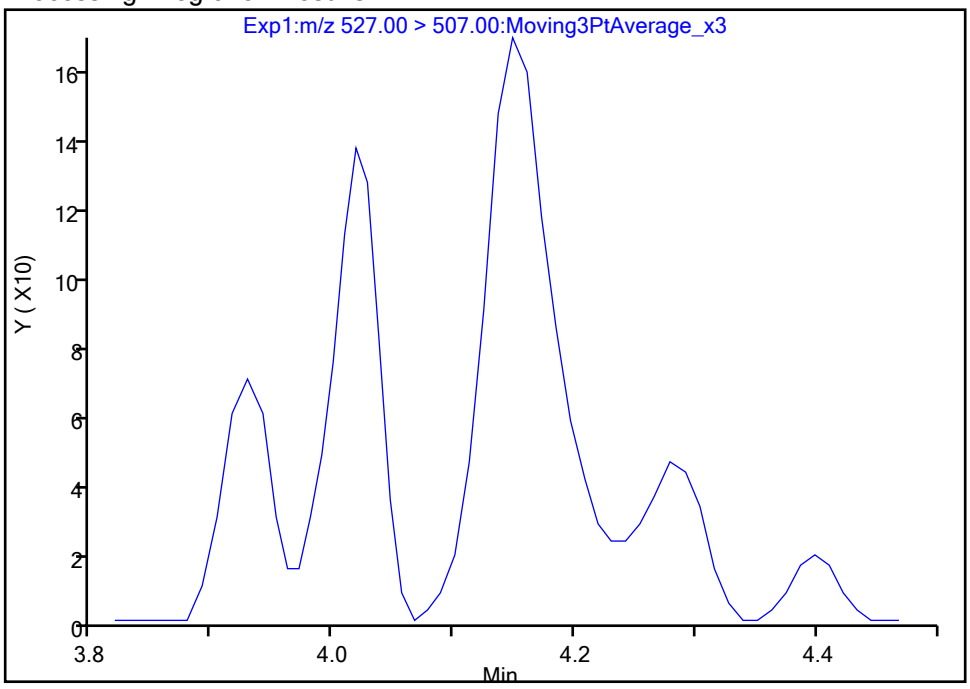
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

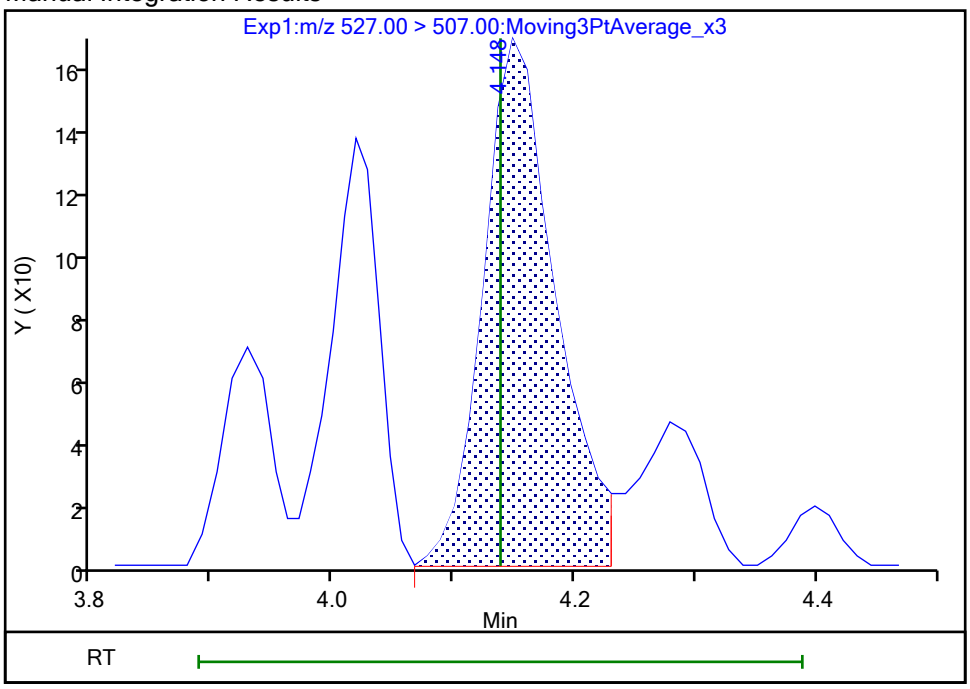
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 700
Amount: 0.001265
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:19:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

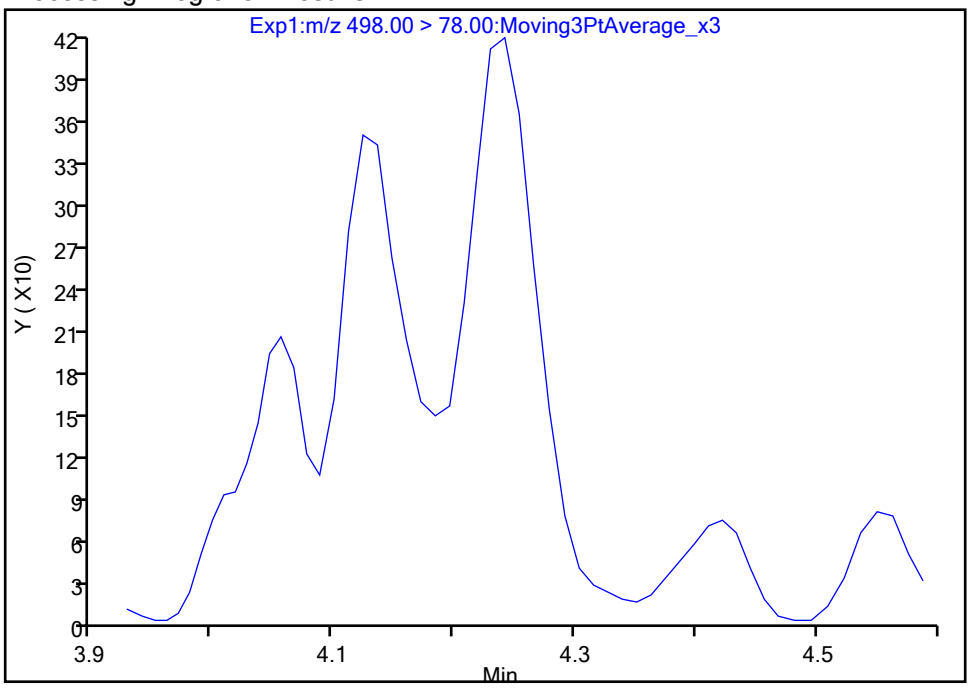
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

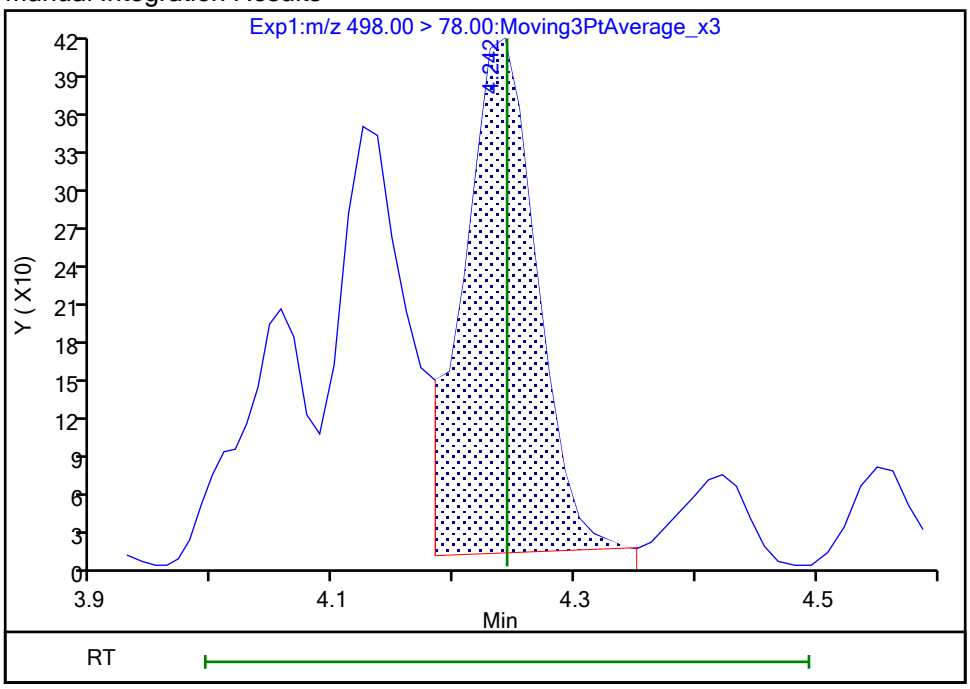
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1685
Amount: 0.001317
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:19:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

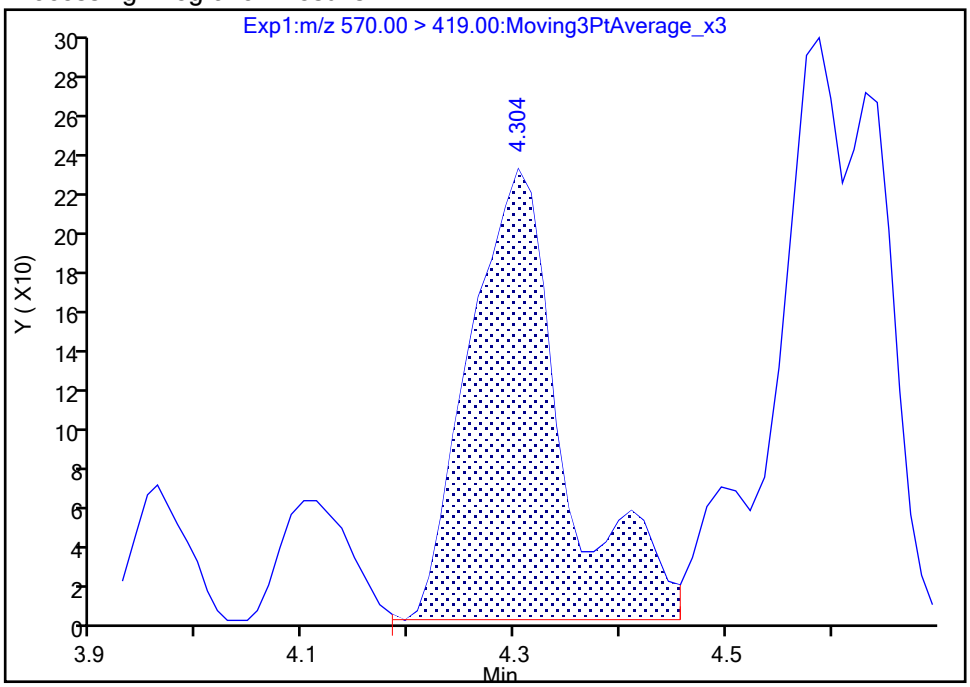
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

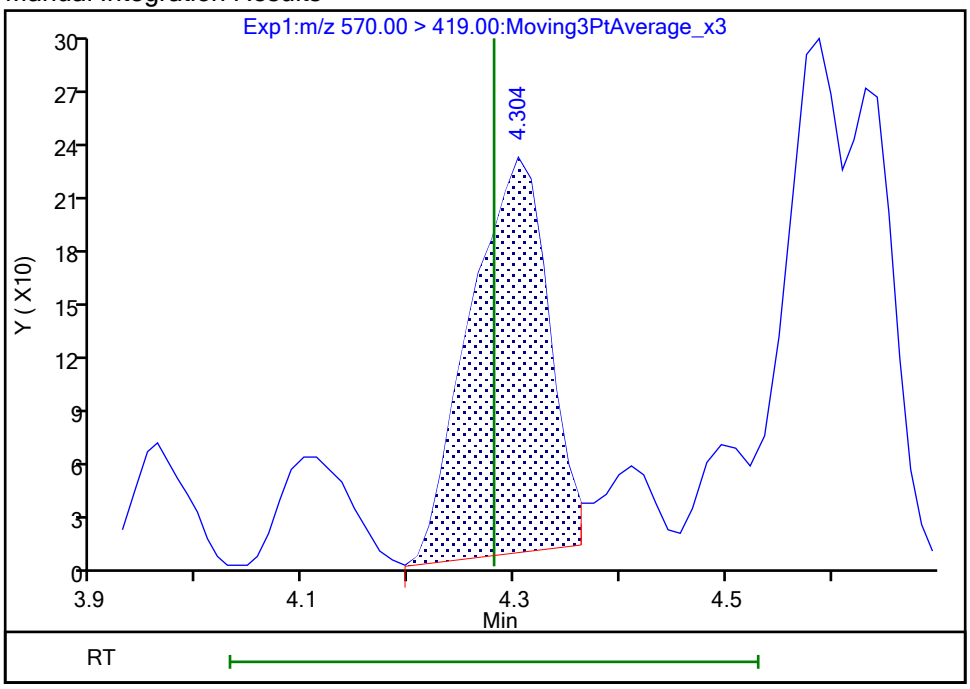
Processing Integration Results

RT: 4.30
Area: 1426
Amount: 0.004106
Amount Units: ng/ml



Manual Integration Results

RT: 4.30
Area: 1149
Amount: 0.003308
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:19:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

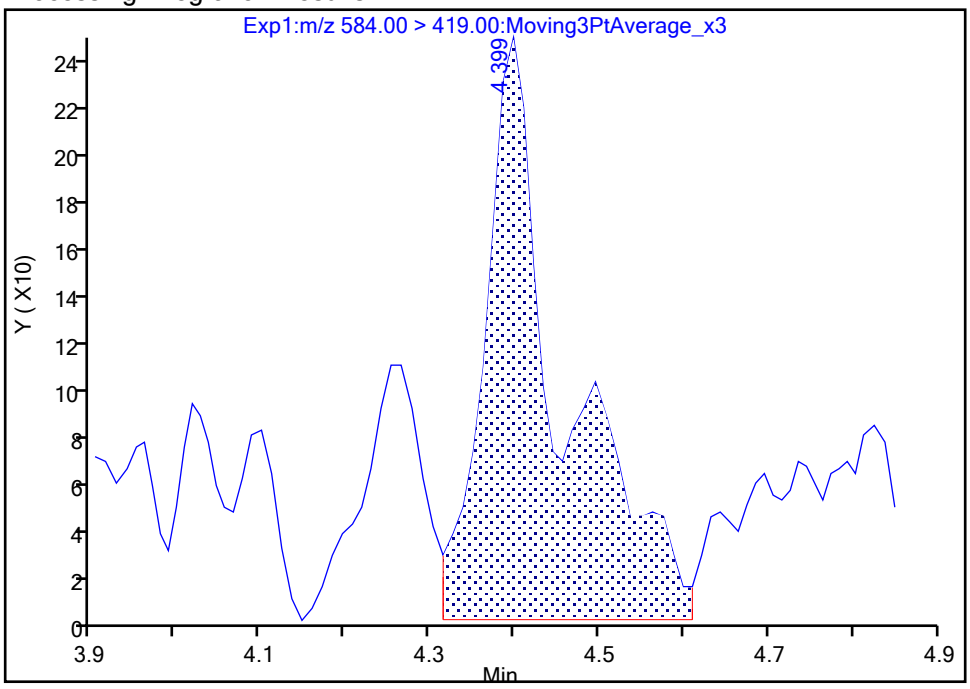
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

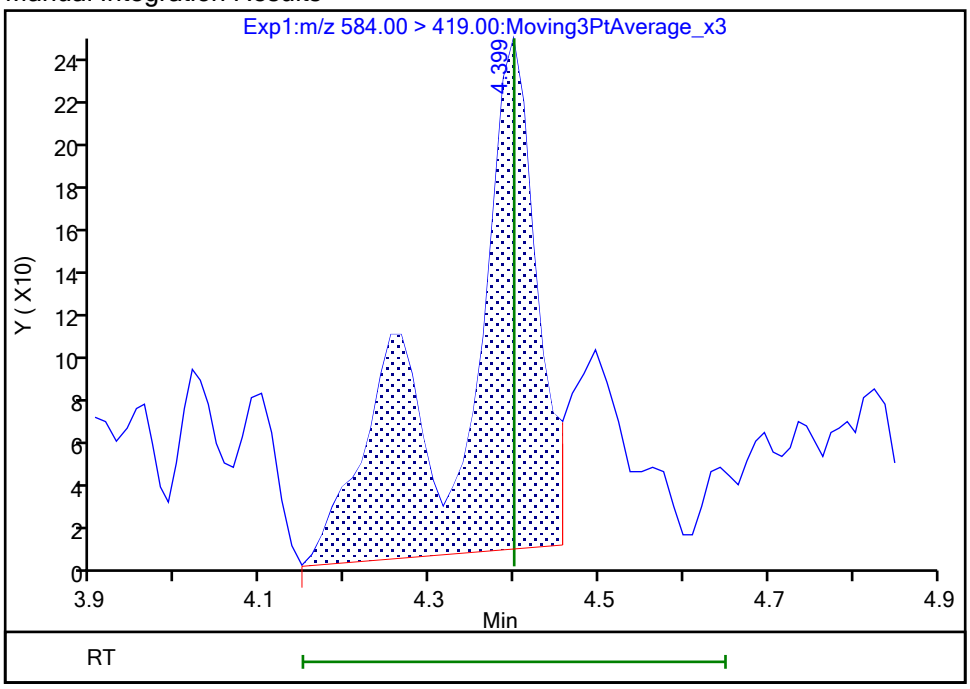
Processing Integration Results

RT: 4.40
Area: 1562
Amount: 0.004164
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 1478
Amount: 0.003940
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:20:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

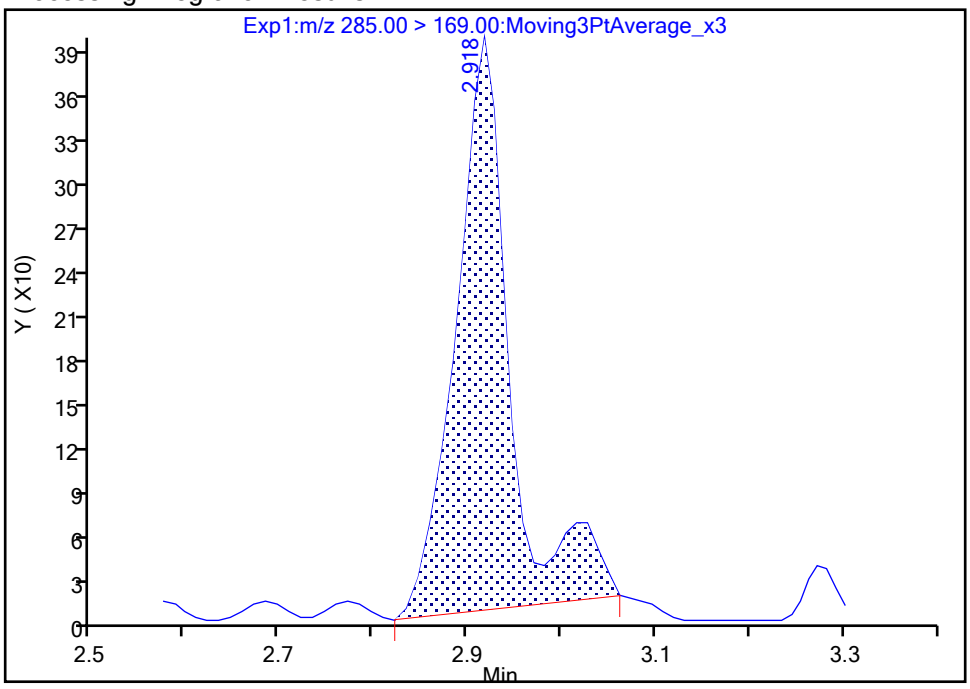
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

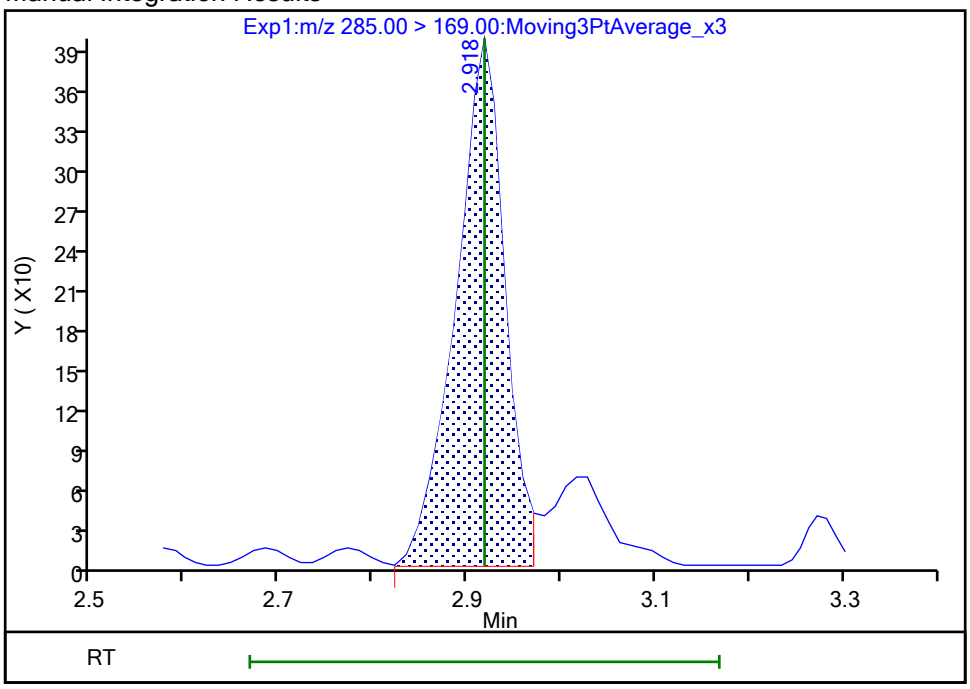
Processing Integration Results

RT: 2.92
Area: 1552
Amount: 0.006993
Amount Units: ng/ml



Manual Integration Results

RT: 2.92
Area: 1413
Amount: 0.006367
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

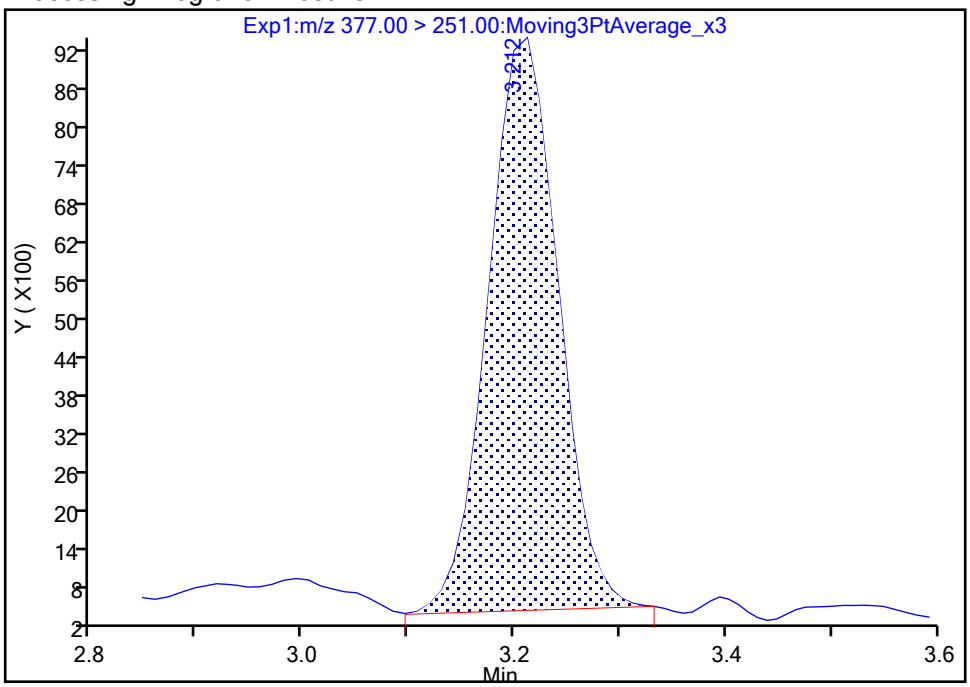
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

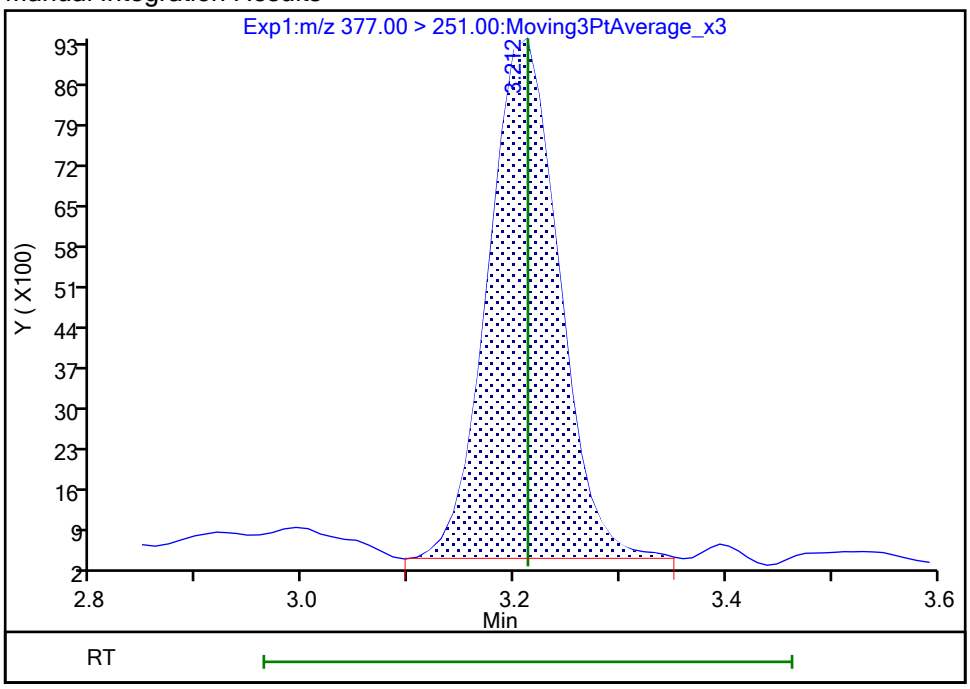
Processing Integration Results

RT: 3.21
Area: 41495
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 42115
Amount: 0.010266
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:16:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

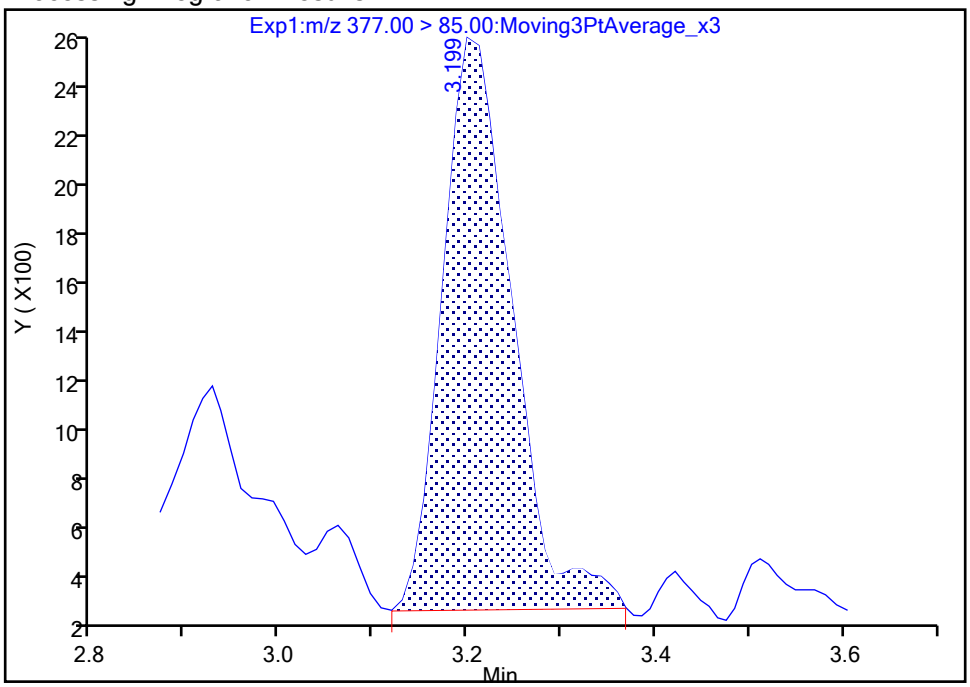
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

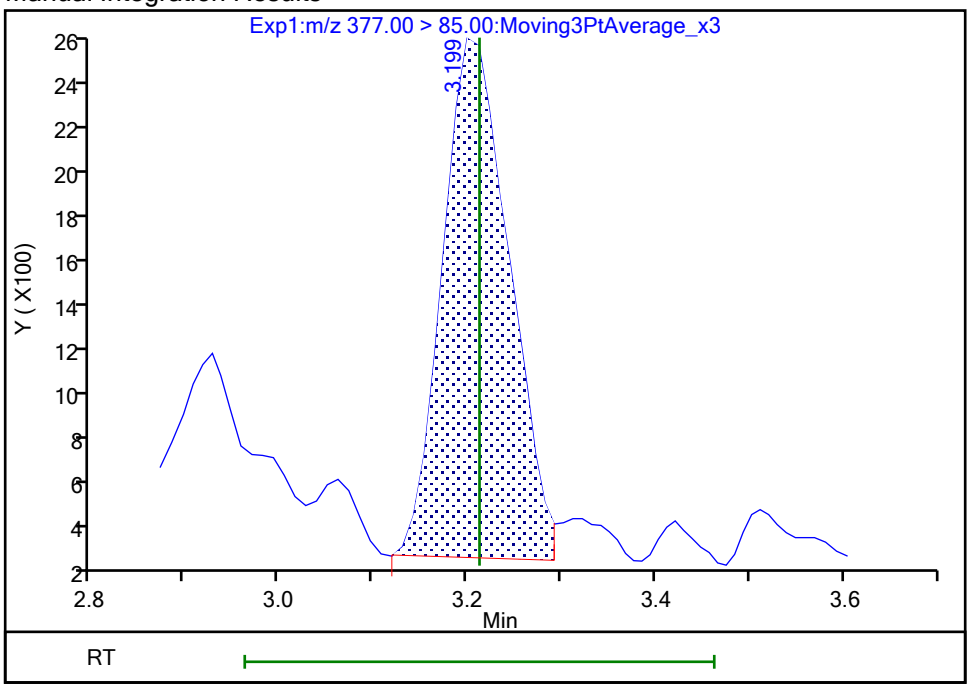
Processing Integration Results

RT: 3.20
Area: 11765
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 11335
Amount: 0.010266
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:17:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

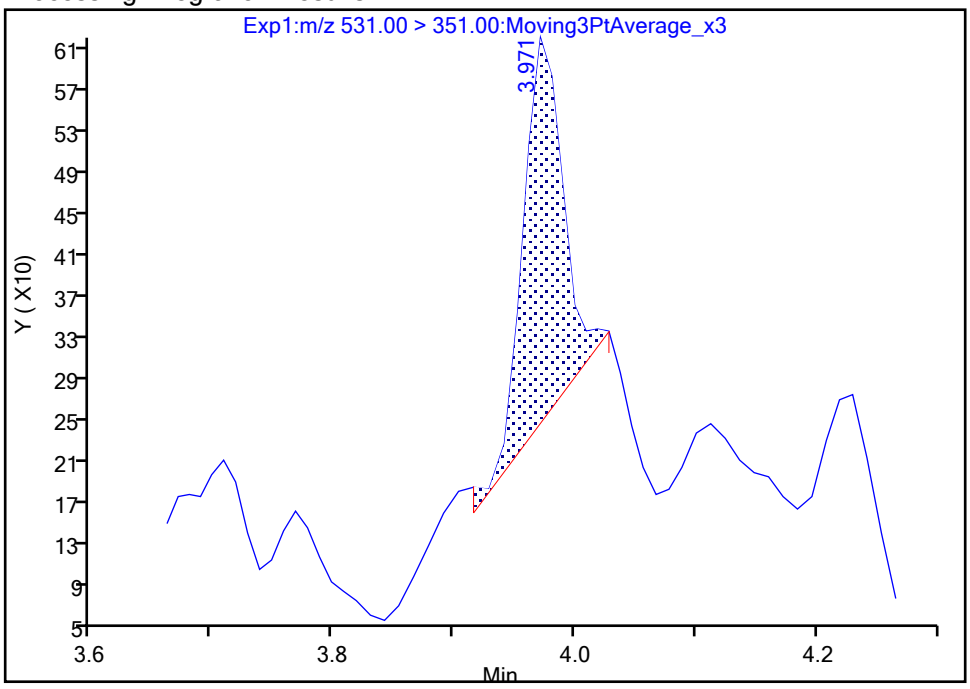
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

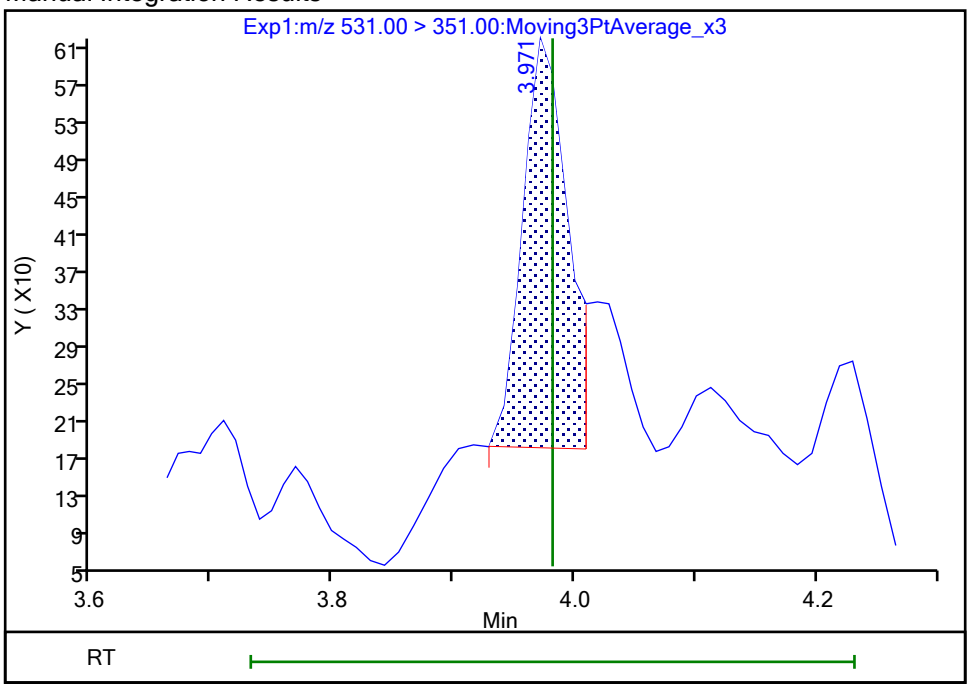
Processing Integration Results

RT: 3.97
Area: 840
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.97
Area: 1105
Amount: 0.000434
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:18:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

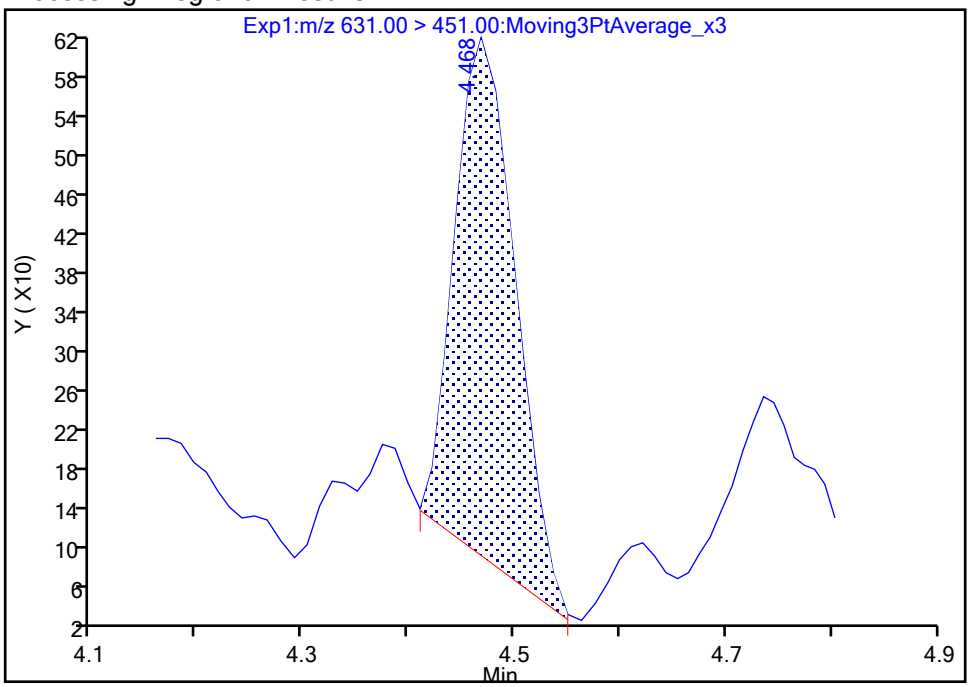
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

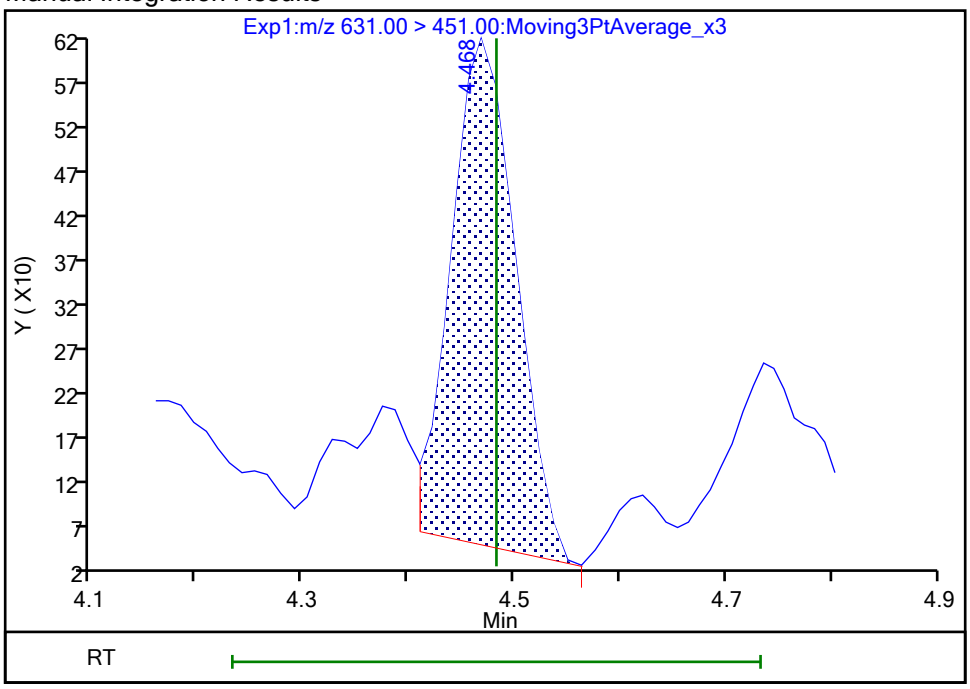
Processing Integration Results

RT: 4.47
Area: 2084
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 2391
Amount: 0.000613
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:20:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

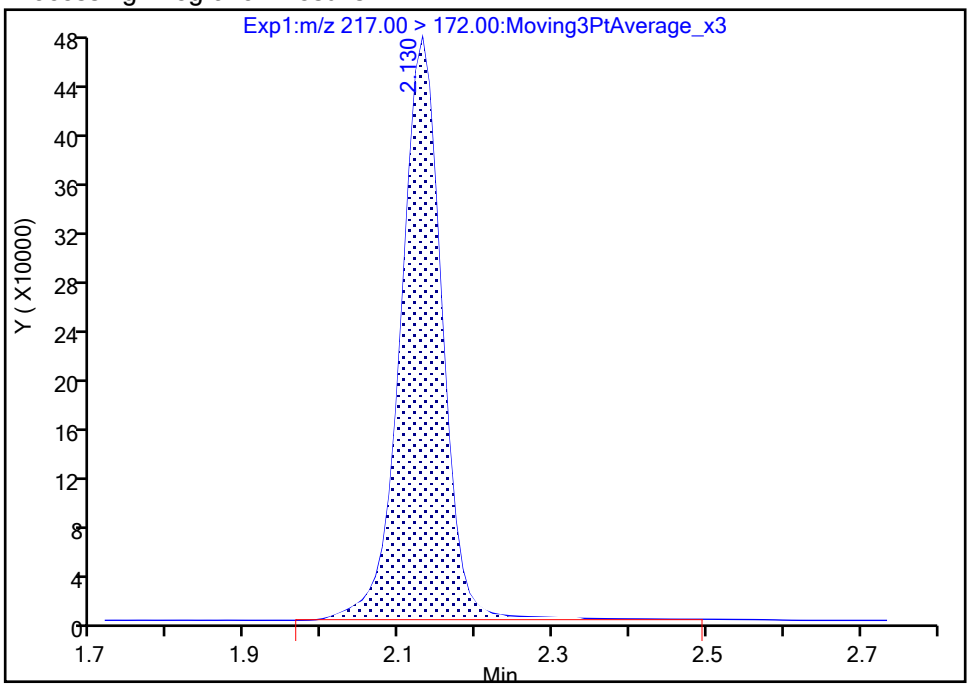
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

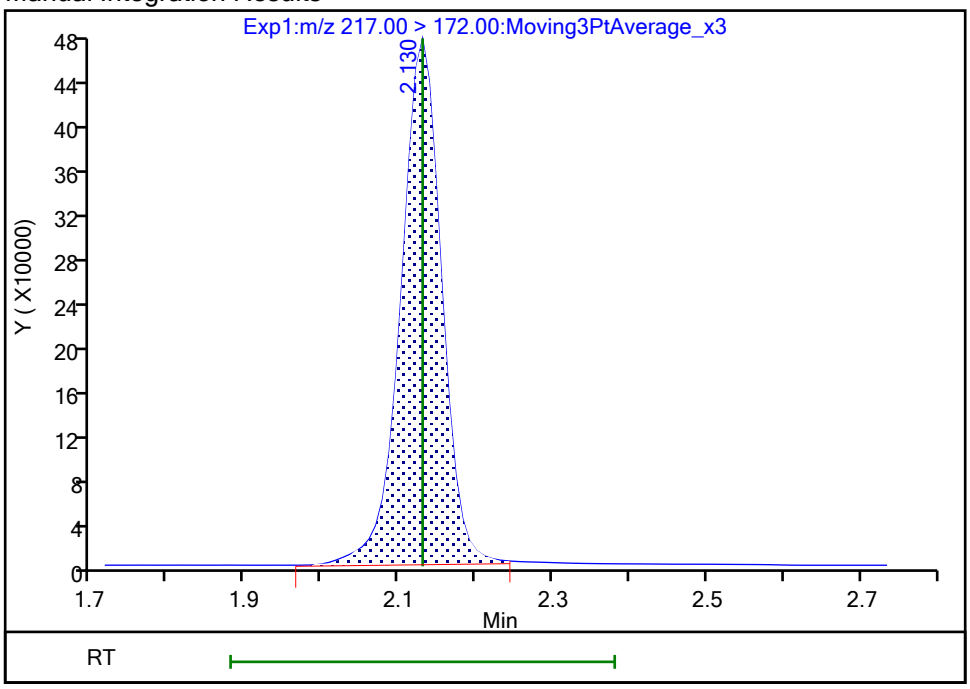
Processing Integration Results

RT: 2.13
Area: 1766710
Amount: 1.197574
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1751883
Amount: 1.187524
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

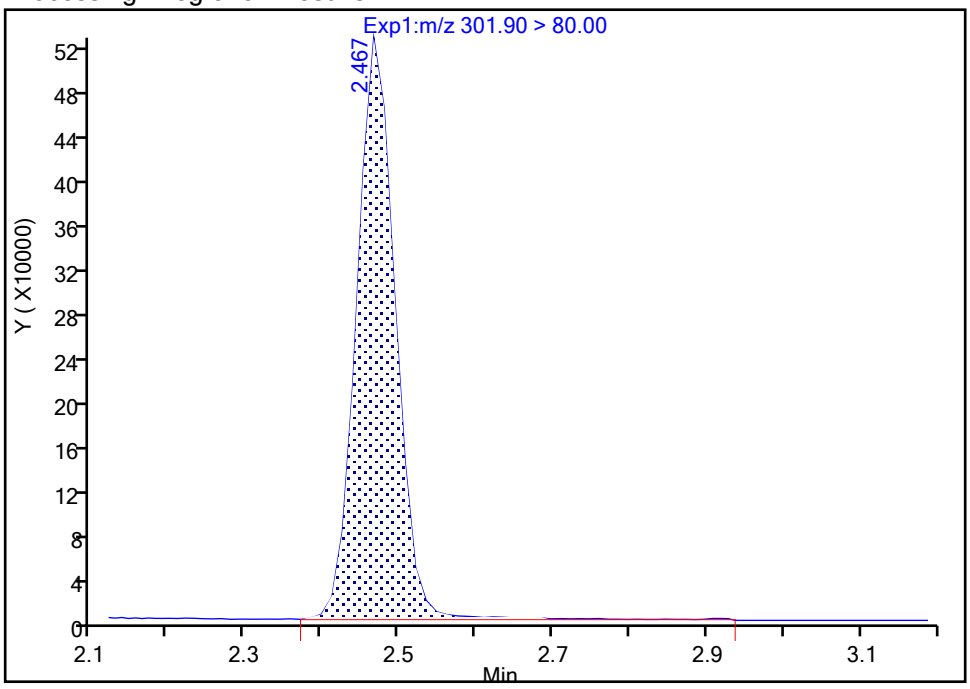
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

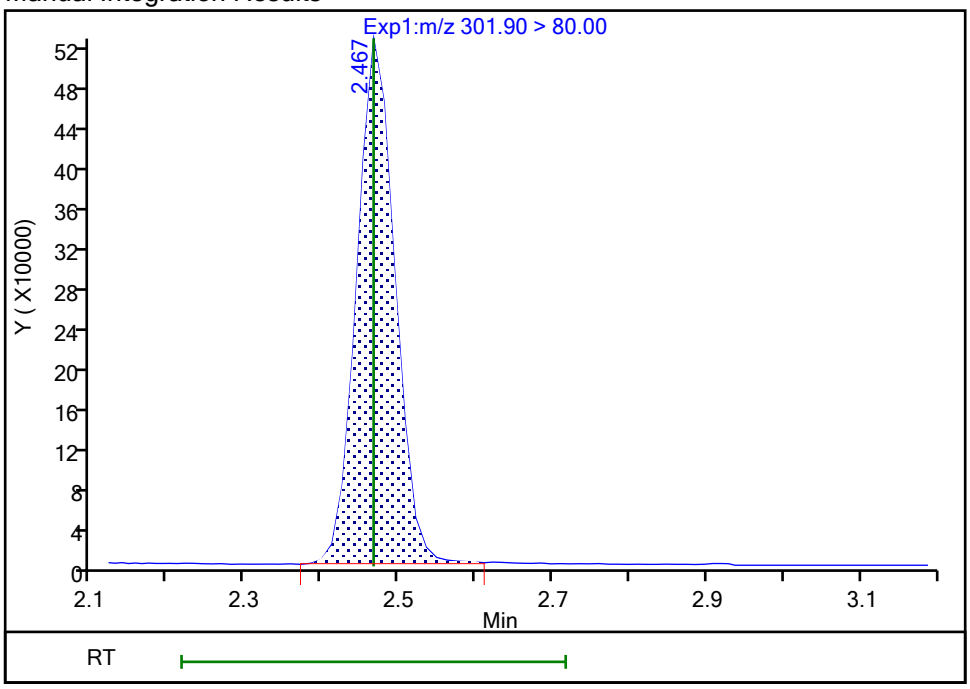
Processing Integration Results

RT: 2.47
Area: 1852696
Amount: 1.195950
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1814077
Amount: 1.171021
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

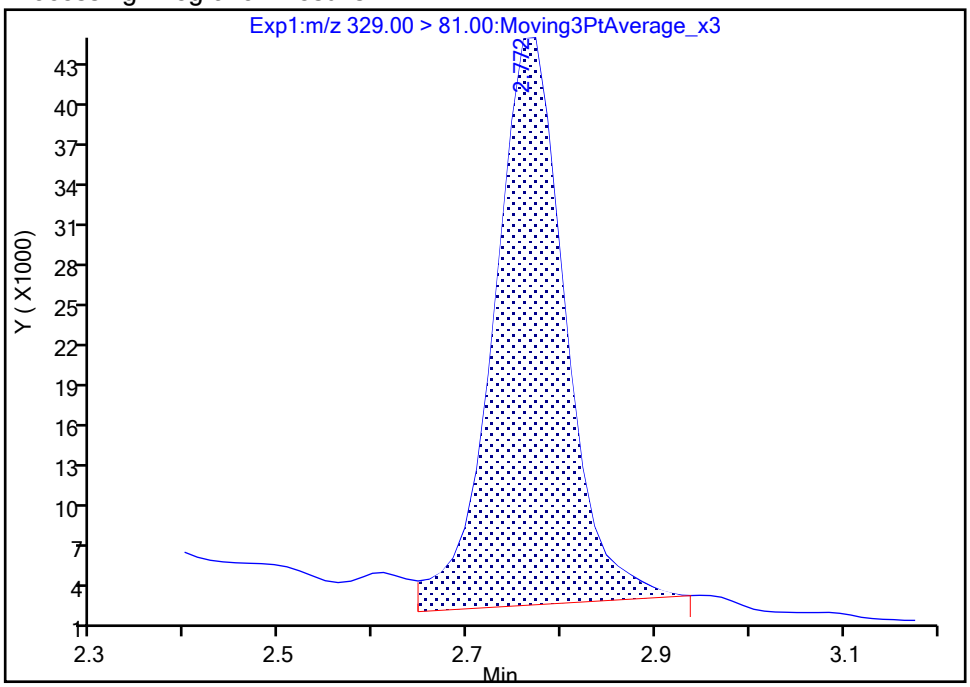
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

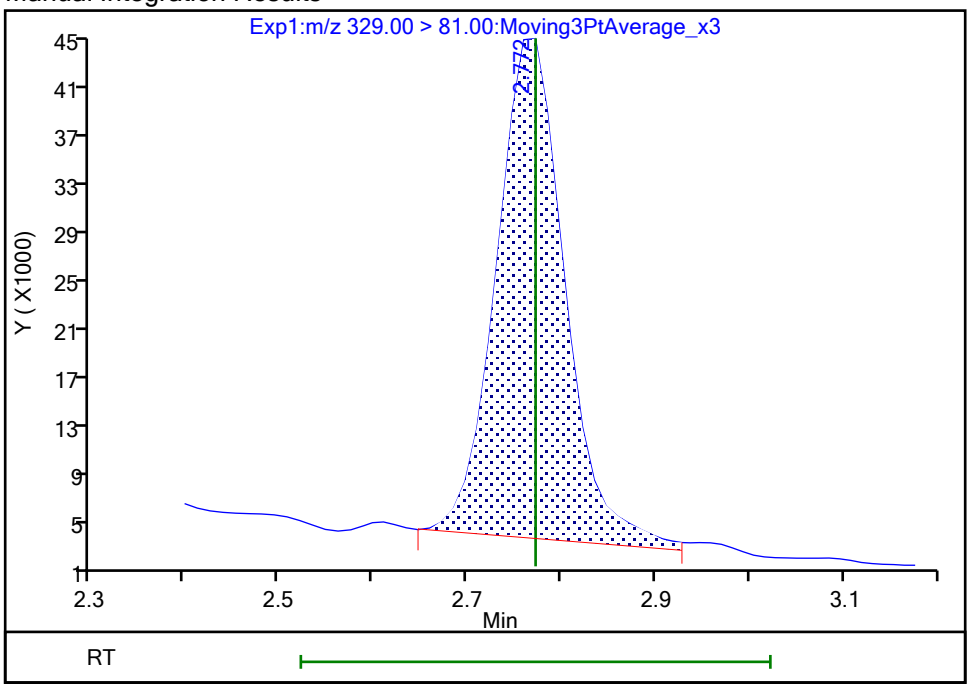
Processing Integration Results

RT: 2.77
Area: 224196
Amount: 1.251421
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 209955
Amount: 1.171931
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

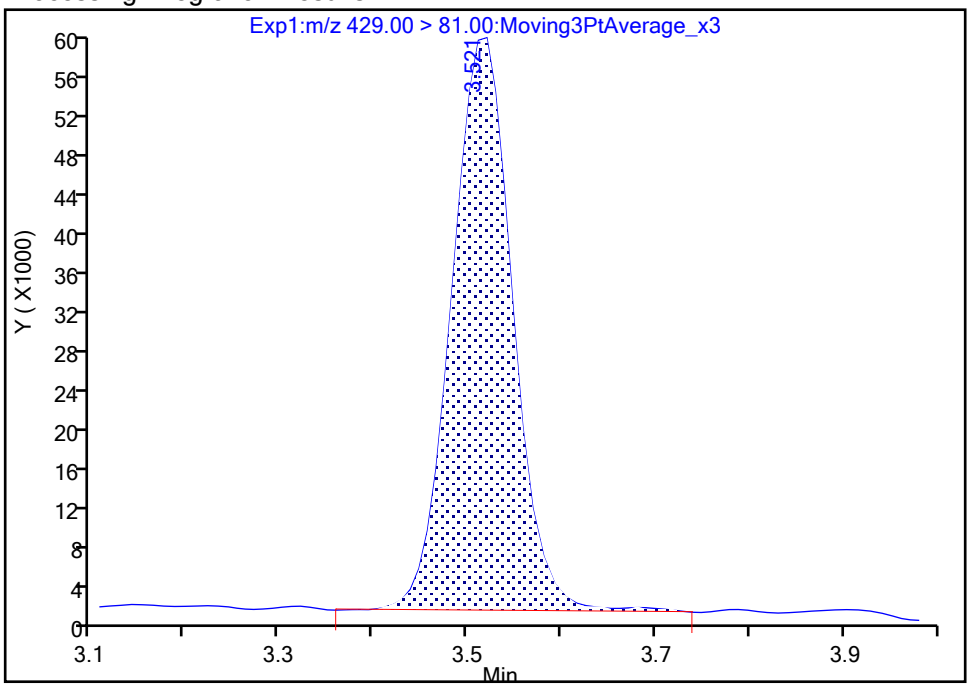
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A13.d				
Injection Date:	24-Oct-2023 19:38:07	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

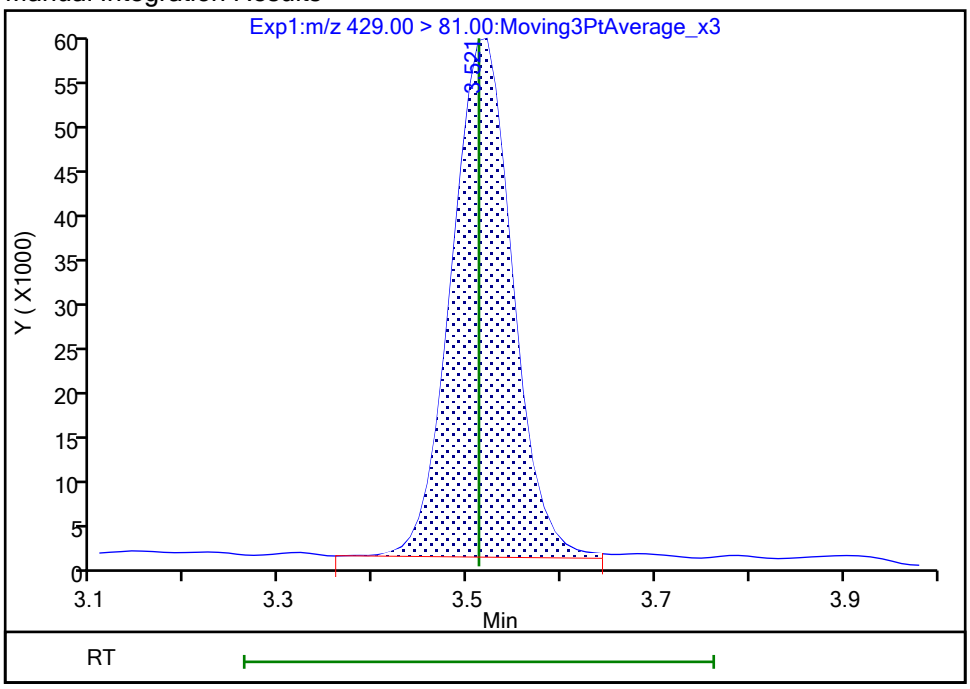
Processing Integration Results

RT: 3.52
Area: 264192
Amount: 1.144968
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 262326
Amount: 1.136881
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:13:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW16C-101623-1026-120 DL Lab Sample ID: 460-290517-10 DL

Matrix: Water Lab File ID: PA231026E14.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 10:26

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 287.3(mL) Date Analyzed: 10/27/2023 11:54

Con. Extract Vol.: 10(mL) Dilution Factor: 2

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	1010	D	3.48	1.48

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	87		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E14.d
Lims ID: 460-290517-B-10-A
Client ID: MW16C-101623-1026-120
Sample Type: Client
Inject. Date: 27-Oct-2023 11:54:28 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 2.0000
Sample Info: 460-290517-B-10-A
Misc. Info.: 200-0057578-014 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:43:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 17:01:45
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	911065	0.5769		92.3	2267	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	306670	0.1918			19.4	
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	697227	0.5689		91.0	477	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.000	1029798	0.8554			10.3	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.701	843248	0.5085		87.5	18724	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	173293	0.1069	Target=2.06		6.8	
298.90 > 99.00	2.466	2.467	-0.001	1.000	93542		1.85(1.03-3.09)		13.8	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	4719	0.005719			12.1	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	141838	0.7396		127	9.5	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	691544	0.5547		88.7	1962	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	930292	0.7640	Target=14.12		25.8	
313.00 > 119.00	2.797	2.797	0.0	1.000	67148		13.85(7.06-21.17)		43.4	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.888	208985	0.1474	Target=2.72		17.3	
349.00 > 99.00	2.797	2.797	0.0	0.884	100469		2.08(1.36-4.09)		38.5	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.897	2.897	0.0	0.996	675	0.003305			7.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	127512	0.5284		84.5	1239	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.153	0.012	0.899	641836	0.5400		91.3	2766	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.165	3.153	0.012	1.000	575891	0.4792	Target=3.32		129	
399.00 > 99.00	3.165	3.153	0.012	1.000	257852		2.23(1.66-4.98)		136	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.165	0.0	1.000	456771	0.3319	Target=4.17		21.3	
363.00 > 169.00	3.165	3.165	0.0	1.000	108625		4.21(2.09-6.26)		138	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.899	767472	0.5611		89.8	3861	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.835	21434	0.005667	Target=3.33		13.5	
377.00 > 85.00	3.212	3.199	0.013	0.838	5851		3.66(1.66-4.99)		3.7	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.502	0.009	0.916	184888	0.1946	Target=4.83		20.7	
449.00 > 99.00	3.502	3.502	0.0	0.914	56506		3.27(2.41-7.24)		13.8	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.502	0.009	0.997	139796	0.5660		95.3	52.7	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.502	0.009	1.000	554787	0.8621			1974	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.512	0.008	1.000	475082	0.3149	Target=2.88		10.3	
413.00 > 169.00	3.520	3.512	0.008	1.000	221962		2.14(1.44-4.32)		239	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.512	0.008	1.000	885227	0.5712		91.4	3445	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.512	0.008		995252	0.6250			6449	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.819	0.012	1.000	11132220	14.5	Target=4.24		3328	M
499.00 > 99.00	3.820	3.819	0.001	0.997	3275409		3.40(2.12-6.37)		2122	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.819	0.012	1.088	392711	0.5201		87.0	352	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.842	0.001	1.000	52796	0.0348	Target=8.34		4.6	
463.00 > 169.00	3.855	3.842	0.013	1.003	5343		9.88(4.17-12.51)		7.4	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.842	0.001	1.092	966475	0.5731		91.7	3211	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.991	3.971	0.020	1.042	3327	0.001418			10.0	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.991	4.101	-0.110	1.042	12541	0.0215	Target=2.17		13.7	
549.00 > 99.00	3.982	4.101	-0.119	1.039	4063		3.09(1.08-3.25)		5.8	
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.125	0.013	1.176	1005720	0.5696		91.1	4267	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.136	0.002	0.997	2214	0.004048			15.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2 FTS										
529.00 > 81.00	4.150	4.136	0.014	1.179	148740	0.5356		89.5	231	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.230	0.002	1.202	732874	0.4864		77.8	3898	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.281	4.266	0.015	1.216	230221	0.5455		87.3	1802	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.281	4.266	0.015	1.000	3005	0.008990			18.3	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.387	0.001	1.246	987472	0.5924		94.8	4073	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.399	0.001	1.250	211921	0.5215		83.4	470	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.411	4.399	0.012	1.003	2638	0.007778			11.5	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.468	0.001	1.167	6561	0.001824			8.7	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.610	0.001	1.310	949983	0.5608		89.7	3745	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.814	4.803	0.011	1.044	6059	0.003726	Target=6.41		0.4	R
663.00 > 169.00	4.839	4.803	0.036	1.049	469		12.92(3.21-9.62)		5.1	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.991	4.980	0.011	1.418	846104	0.5016		80.3	3215	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

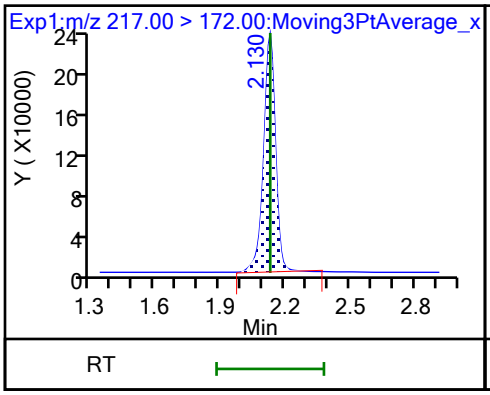
M - Manually Integrated

Report Date: 27-Oct-2023 18:43:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54

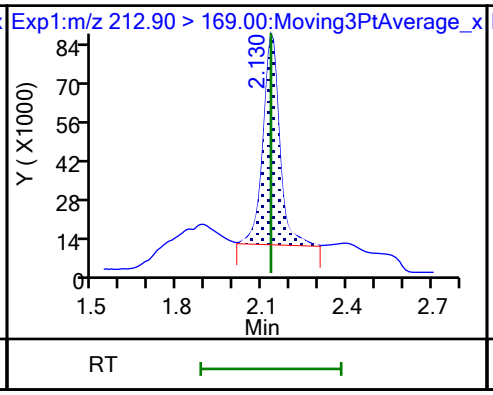
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E14.d
Injection Date: 27-Oct-2023 11:54:28 Instrument ID: LC812
Lims ID: 460-290517-B-10-A Lab Sample ID: 200-290517-10
Client ID: MW16C-101623-1026-120
Operator ID: LC812user ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 2.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

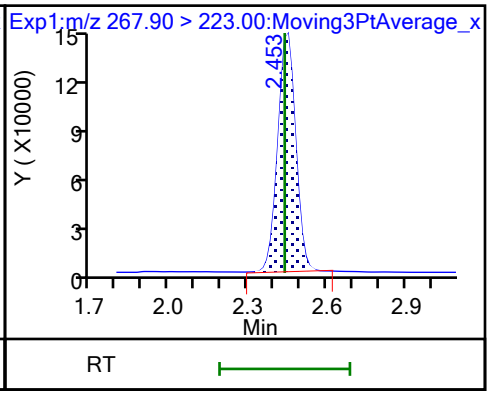
D 1 13C4 PFBA



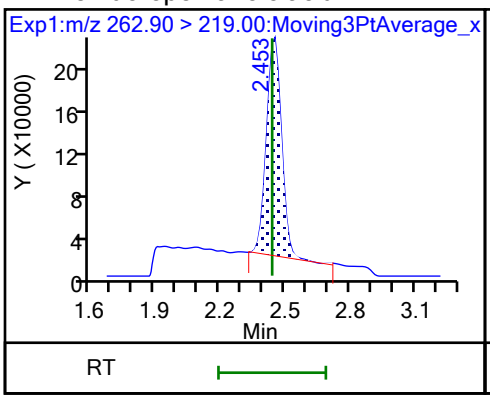
2 Perfluorobutanoic acid



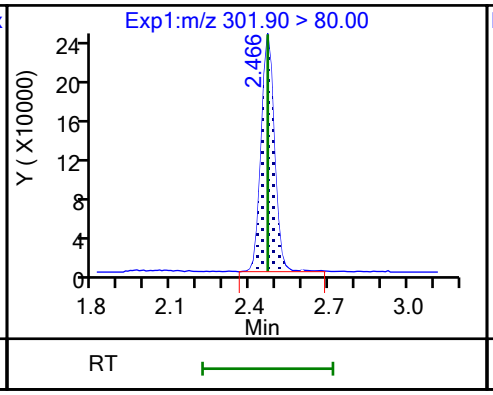
D 3 13C5 PFPeA



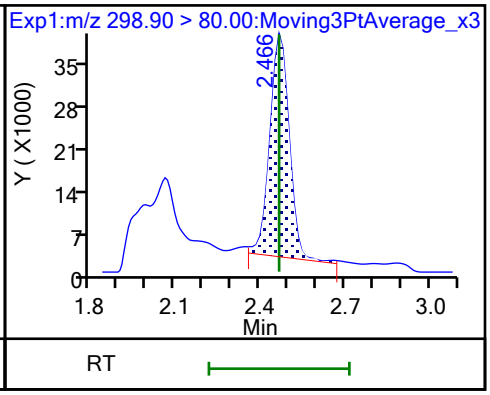
4 Perfluoropentanoic acid



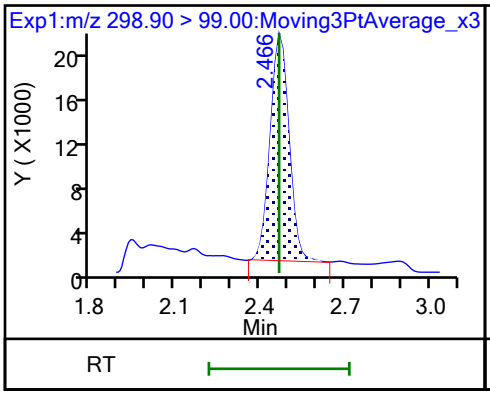
D 47 13C3 PFBS



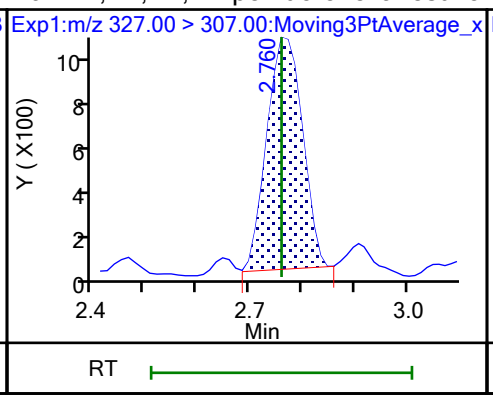
5 Perfluorobutanesulfonic acid



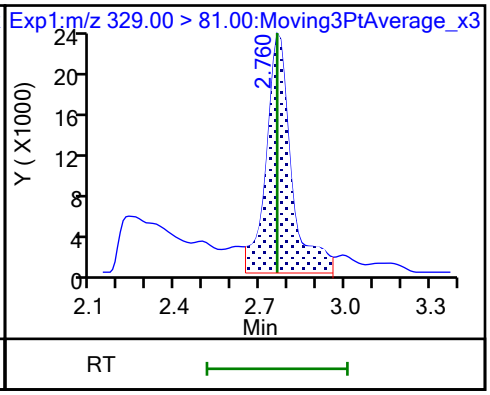
5 Perfluorobutanesulfonic acid



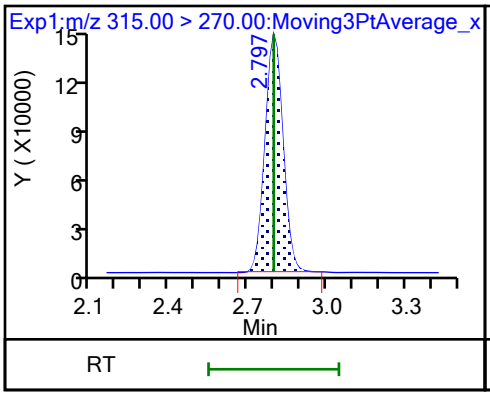
61 1H,1H,2H,2H-perfluorohexanesulfo



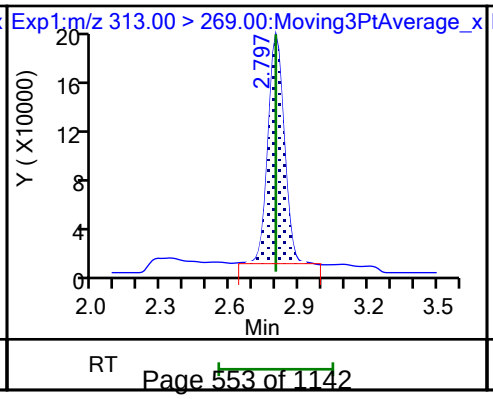
D 60 M2-4:2 FTS



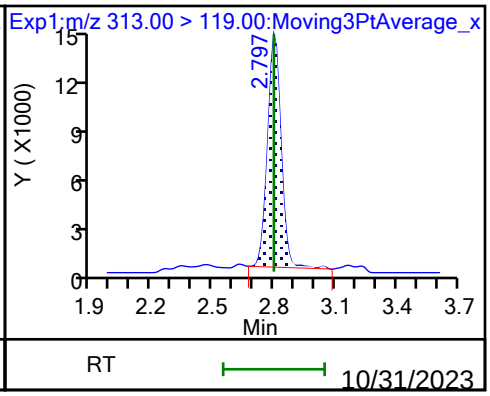
D 7 13C2 PFHxA



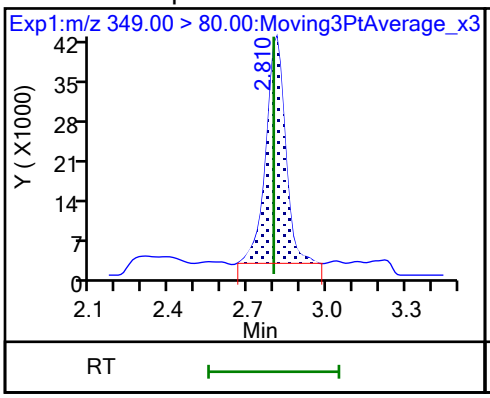
6 Perfluorohexanoic acid



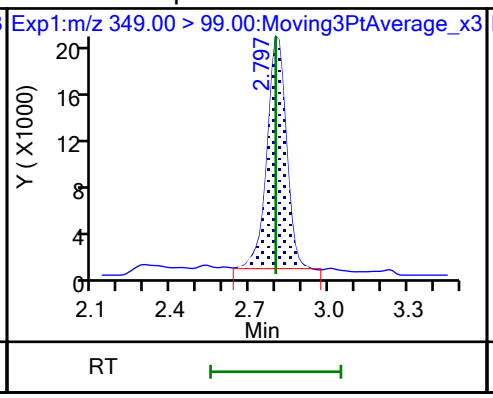
6 Perfluorohexanoic acid



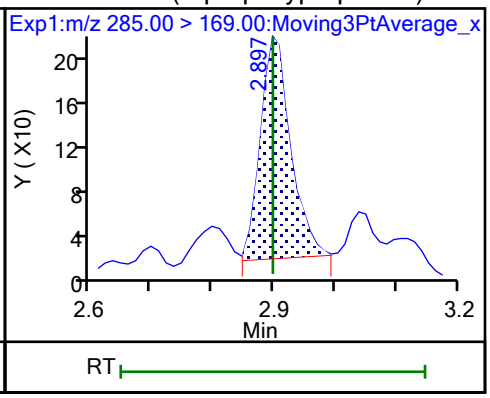
70 Perfluoropentanesulfonic acid



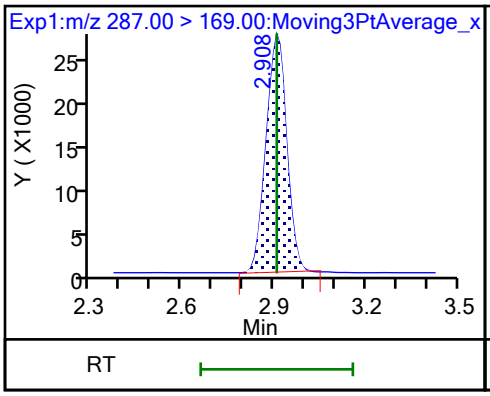
70 Perfluoropentanesulfonic acid



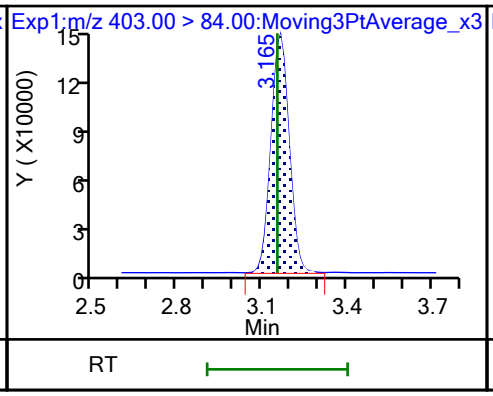
67 Perfluoro(2-propoxypropanoic) ac



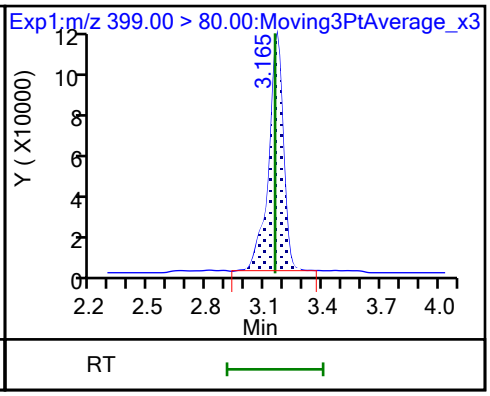
D 64 13C3 HFPO-DA



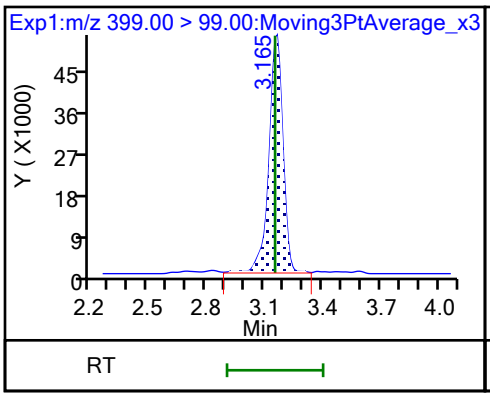
D 11 18O2 PFHxS



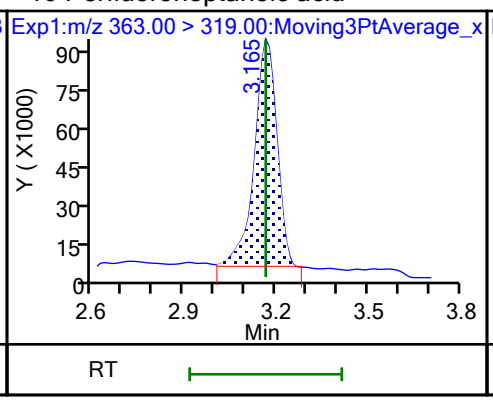
8 Perfluorohexanesulfonic acid



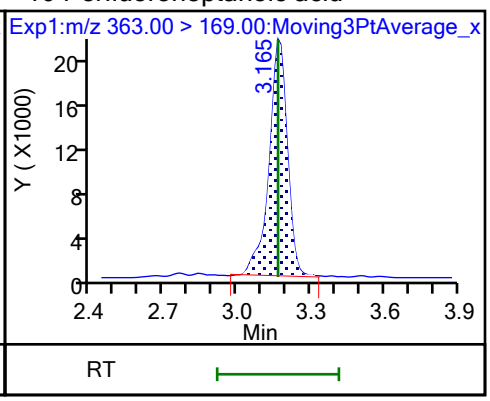
8 Perfluorohexanesulfonic acid



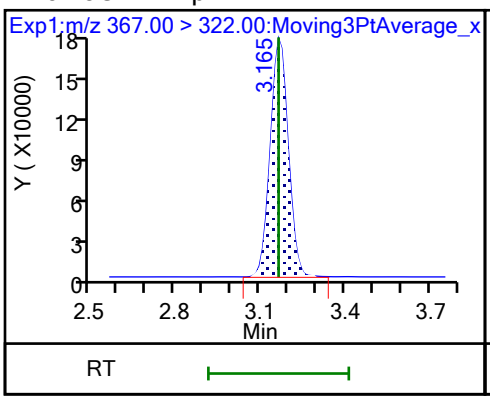
10 Perfluoroheptanoic acid



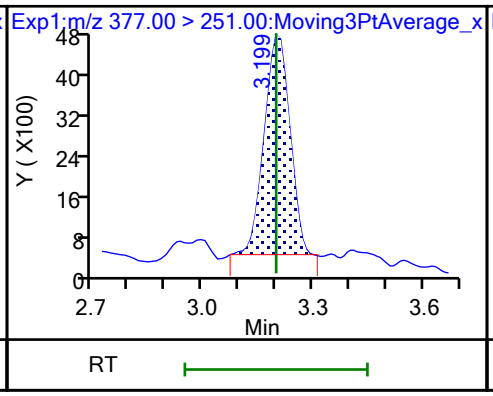
10 Perfluoroheptanoic acid



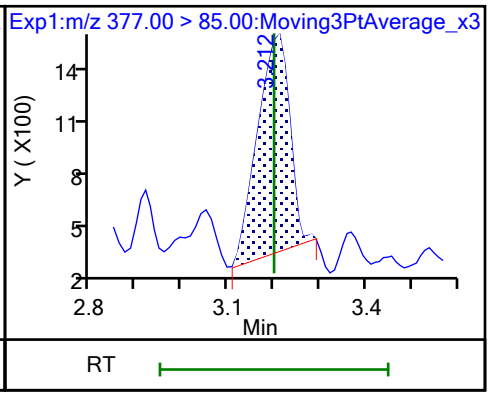
D 9 13C4 PFHpA



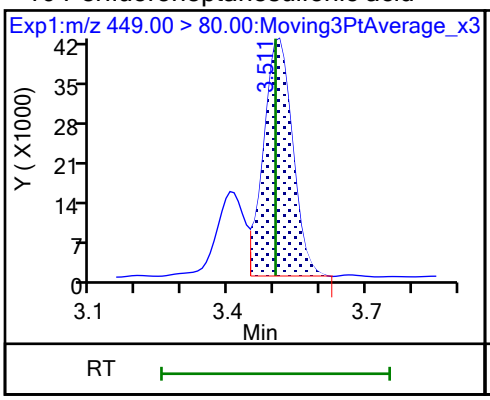
77 DONA



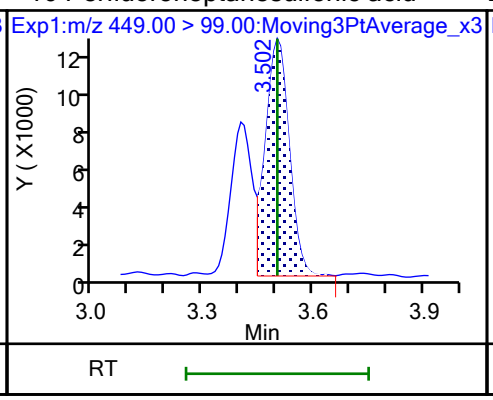
77 DONA



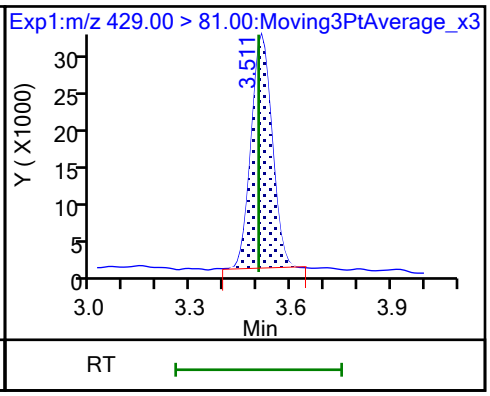
16 Perfluoroheptanesulfonic acid



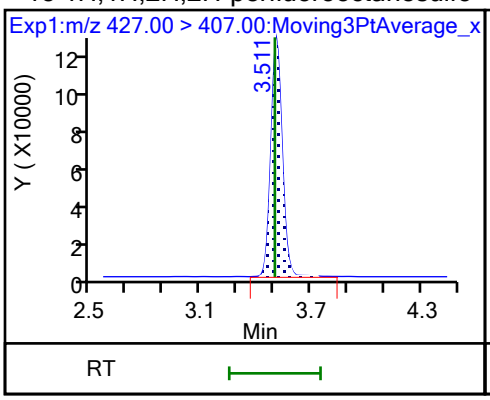
16 Perfluoroheptanesulfonic acid



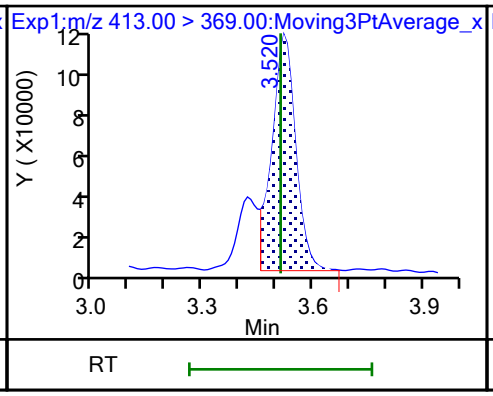
D 12 M2-6:2 FTS



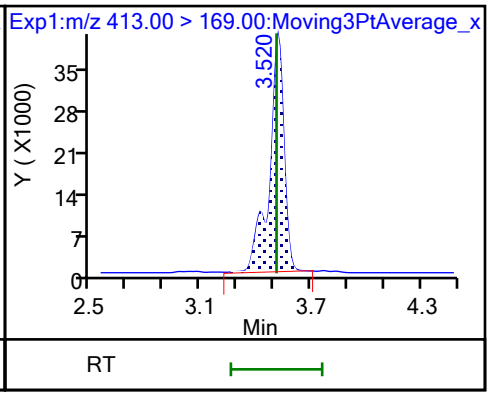
13 1H,1H,2H,2H-perfluorooctanesulfo



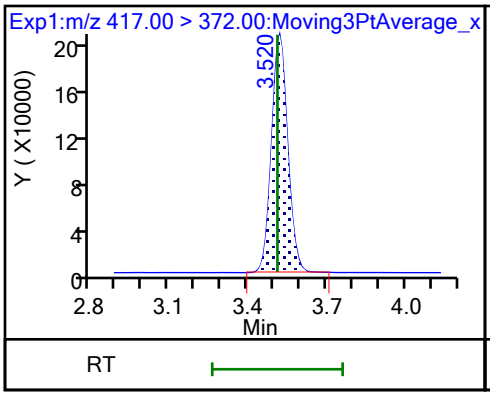
15 Perfluorooctanoic acid



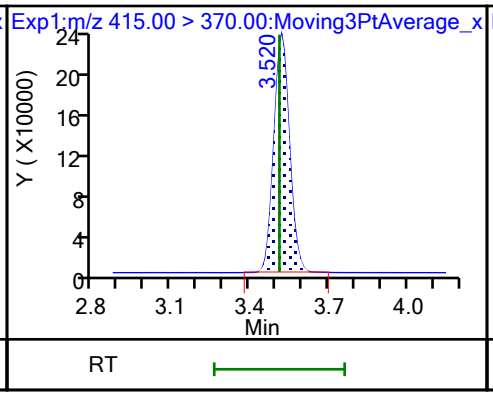
15 Perfluorooctanoic acid



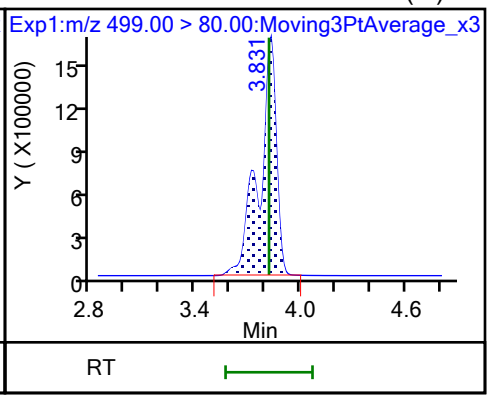
D 14 13C4 PFOA



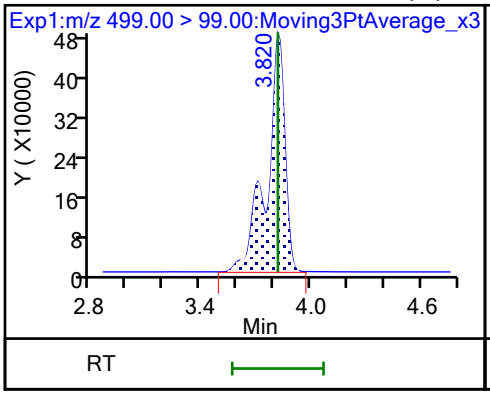
* 62 13C2 PFOA



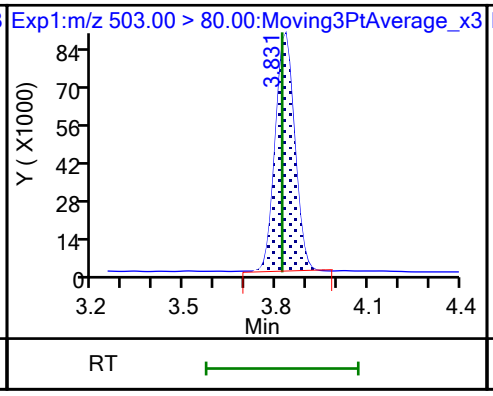
17 Perfluorooctanesulfonic acid (M)



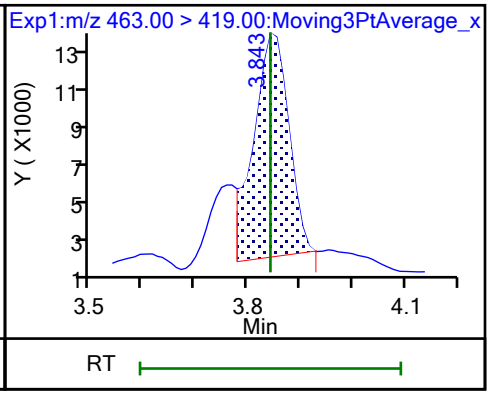
17 Perfluorooctanesulfonic acid (M)



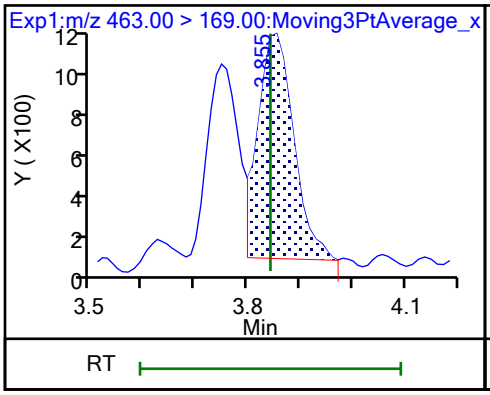
D 18 13C4 PFOS



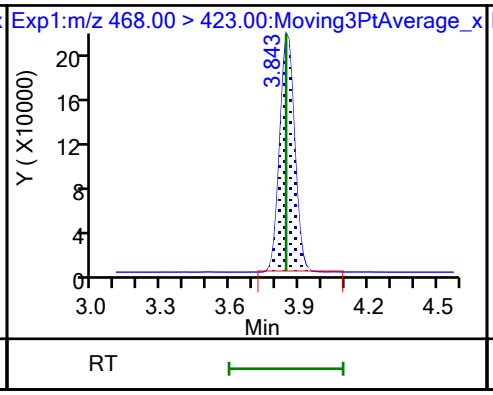
20 Perfluorononanoic acid



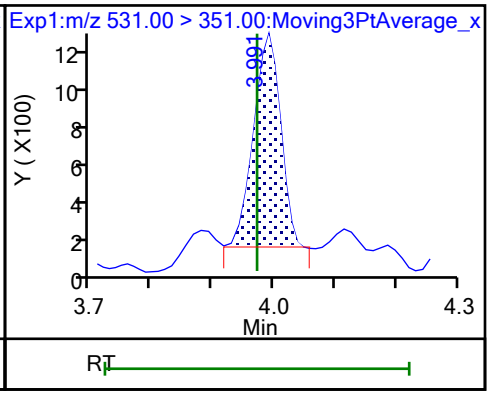
20 Perfluorononanoic acid



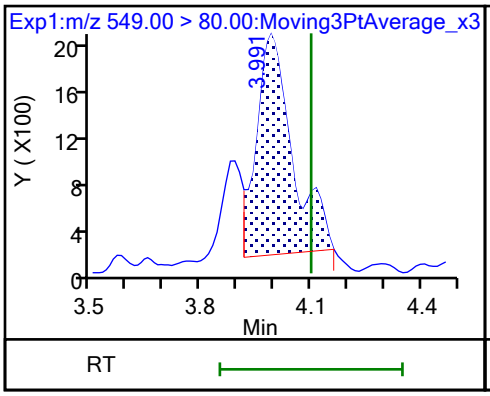
D 19 13C5 PFNA



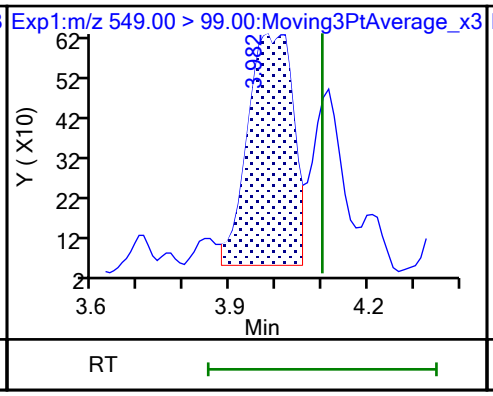
69 9-Chlorohexadecafluoro-3-oxanona



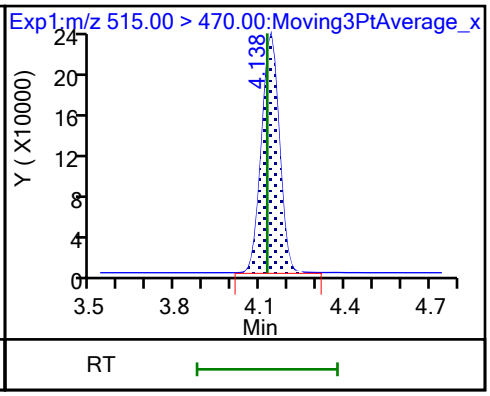
68 Perfluorononanesulfonic acid



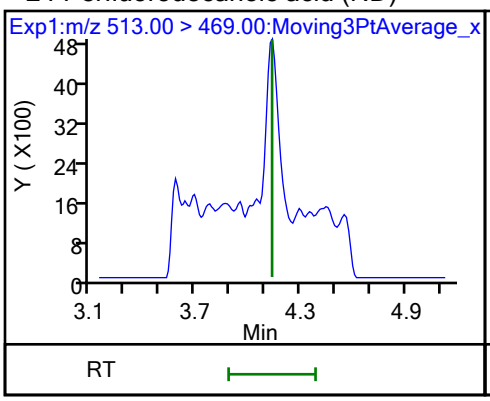
68 Perfluorononanesulfonic acid



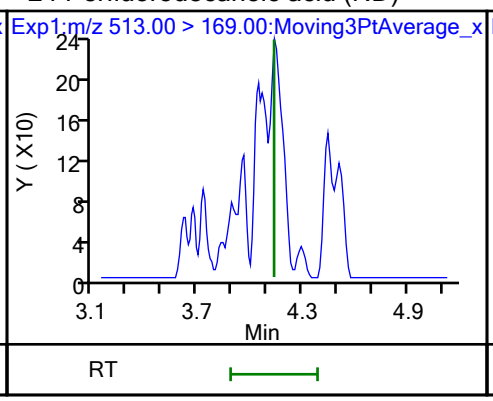
D 23 13C2 PFDA



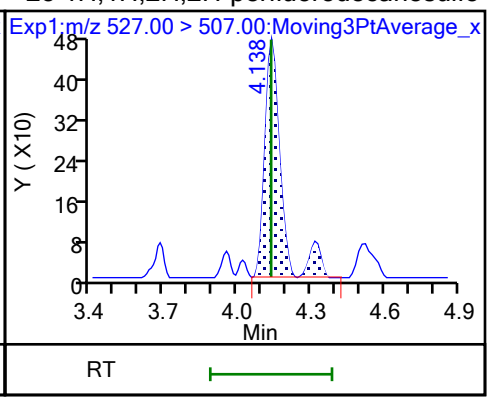
24 Perfluorodecanoic acid (ND)



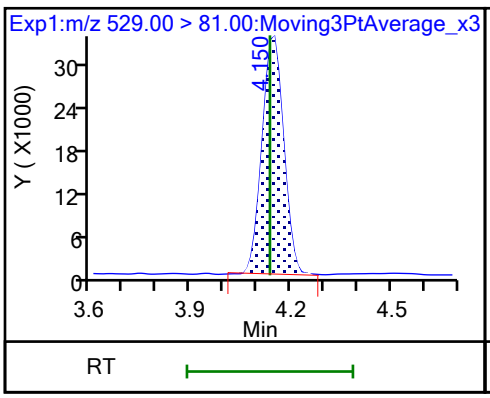
24 Perfluorodecanoic acid (ND)



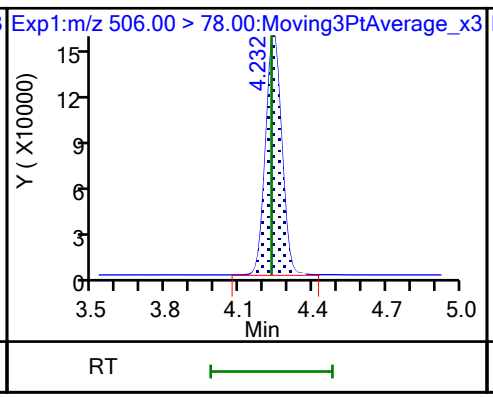
25 1H,1H,2H,2H-perfluorodecanesulfo



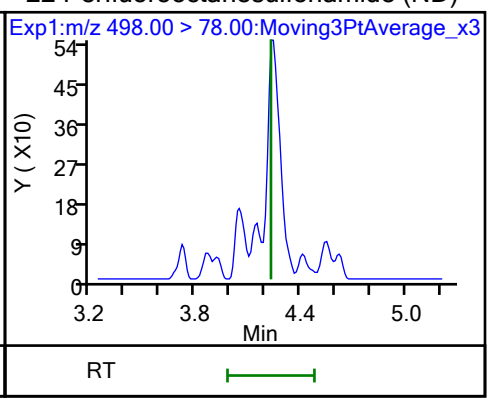
D 26 M2-8:2 FTS



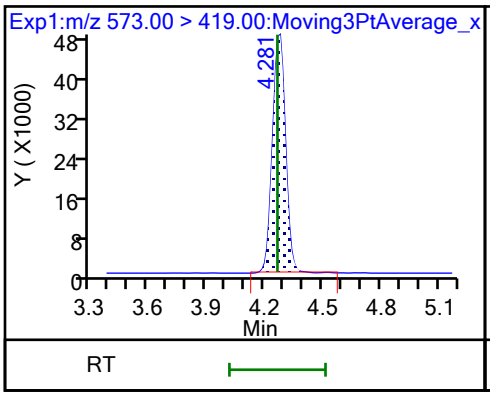
D 21 13C8 FOSA



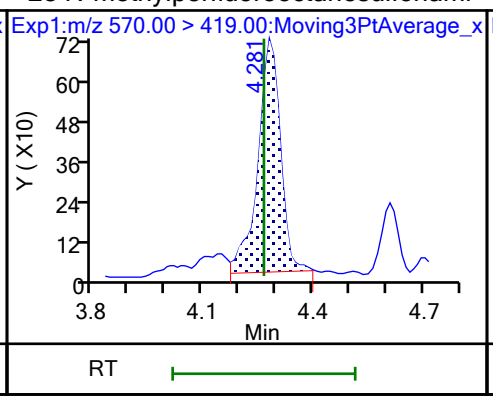
22 Perfluorooctanesulfonamide (ND)



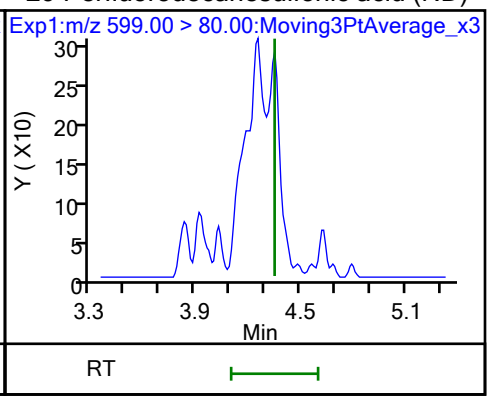
D 27 d3-NMeFOSAA



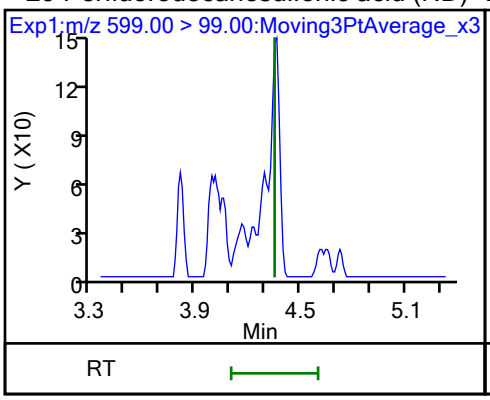
28 N-methylperfluorooctanesulfonami



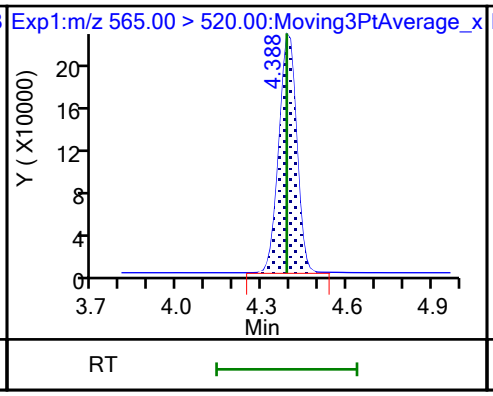
29 Perfluorodecanesulfonic acid (ND)



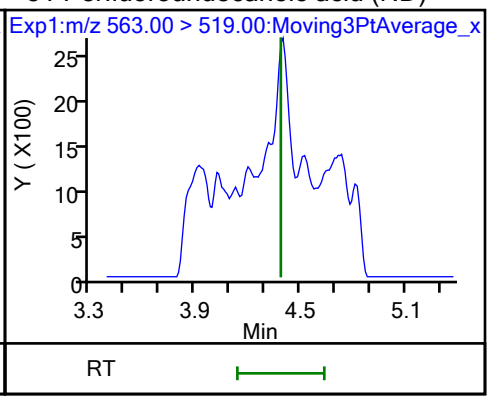
29 Perfluorodecanesulfonic acid (ND)



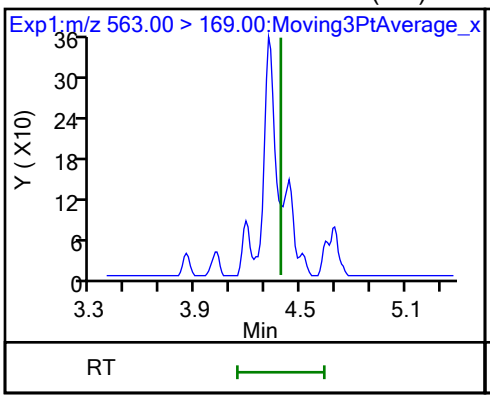
D 30 13C2 PFUnA



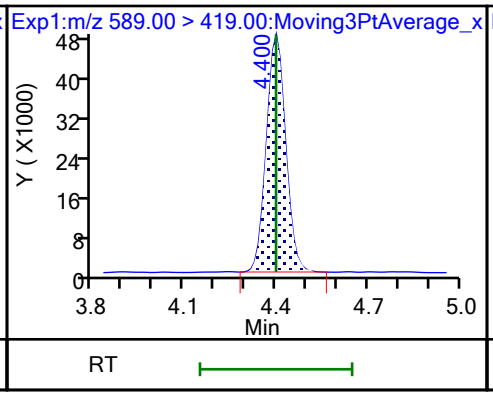
31 Perfluoroundecanoic acid (ND)



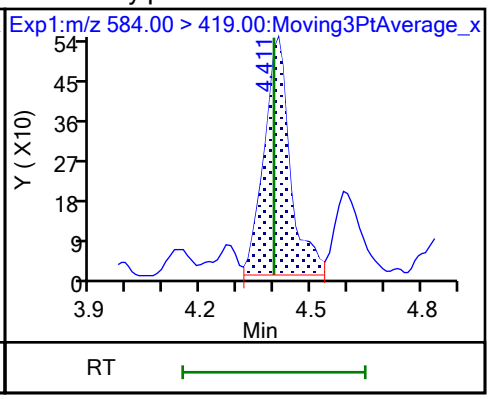
31 Perfluoroundecanoic acid (ND)



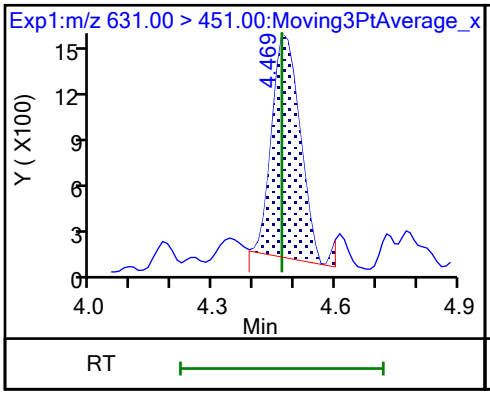
D 32 d5-NEtFOSAA



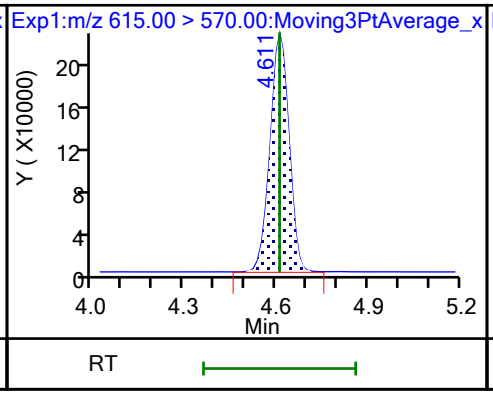
33 N-ethylperfluorooctanesulfonamid



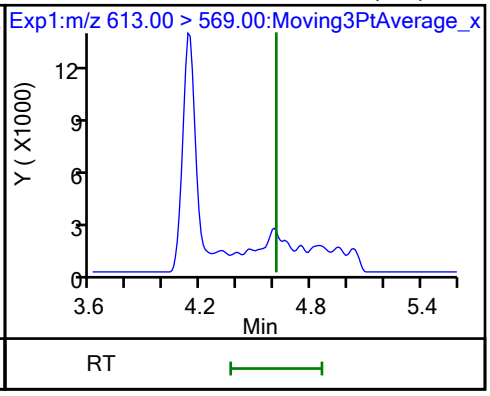
66 11-Chloroeicosafluoro-3-oxaundec



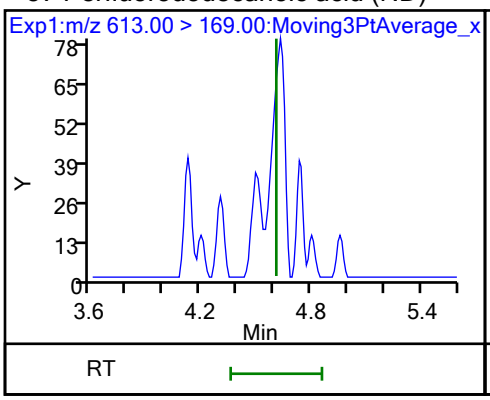
D 36 13C2 PFDoA



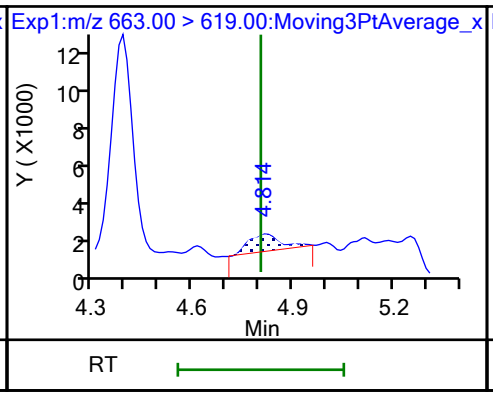
37 Perfluorododecanoic acid (ND)



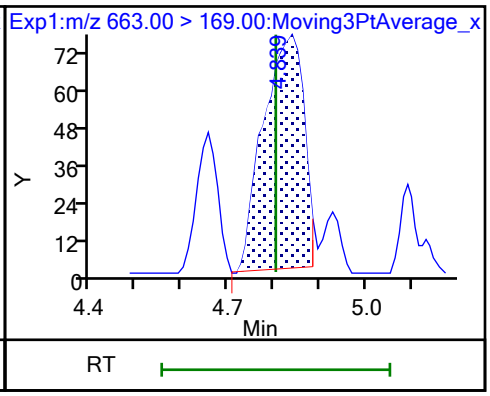
37 Perfluorododecanoic acid (ND)



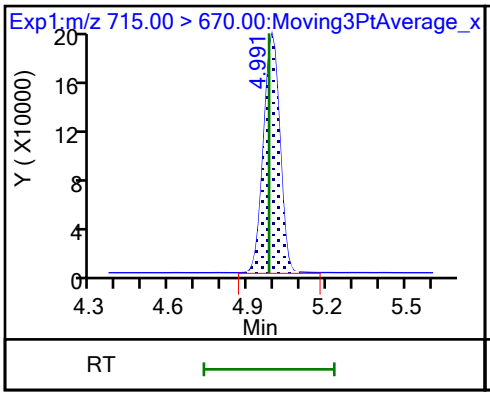
41 Perfluorotridecanoic acid



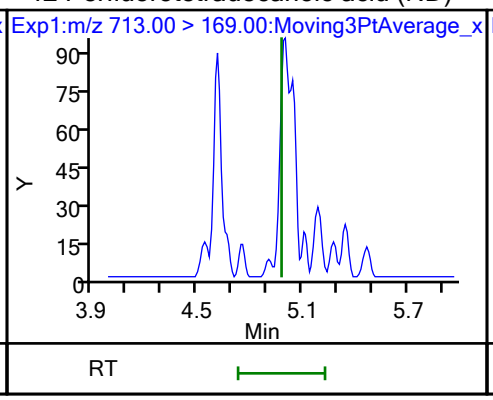
41 Perfluorotridecanoic acid



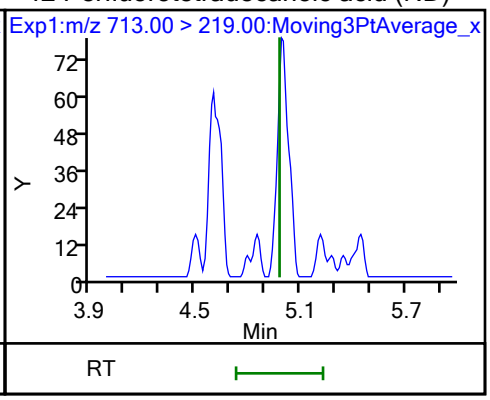
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

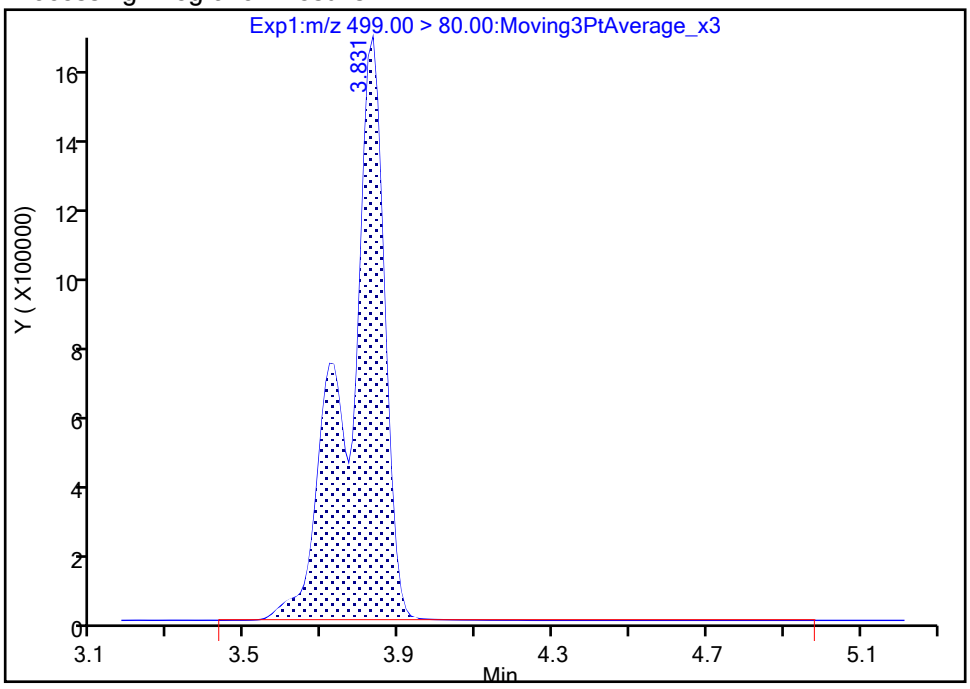
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E14.d				
Injection Date:	27-Oct-2023 11:54:28	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	2.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

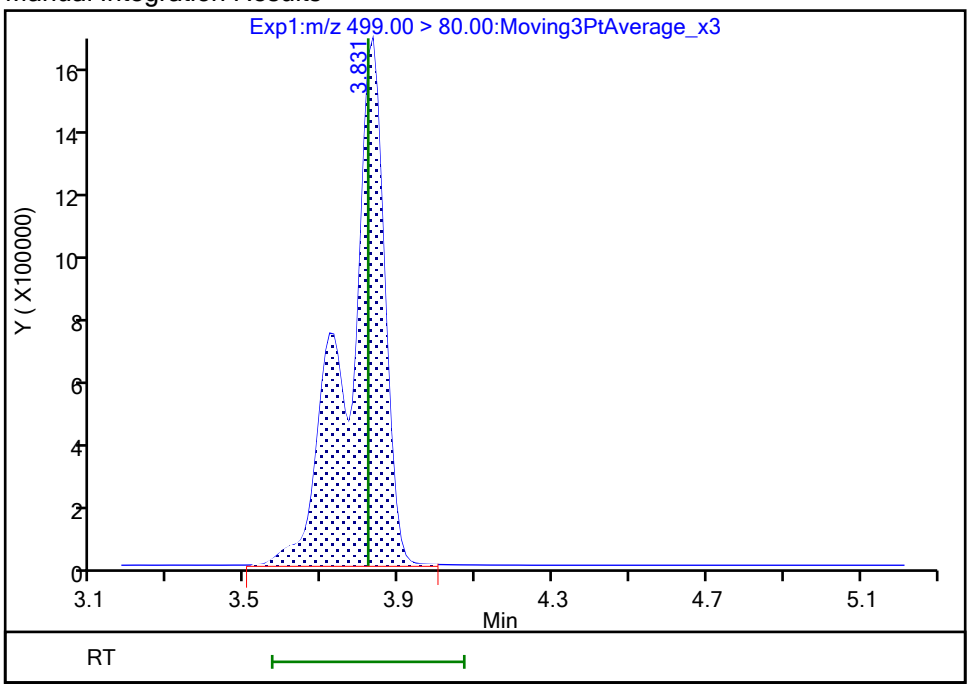
Processing Integration Results

RT: 3.83
Area: 11154793
Amount: 14.550279
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 11132220
Amount: 14.520834
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 17:01:11 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

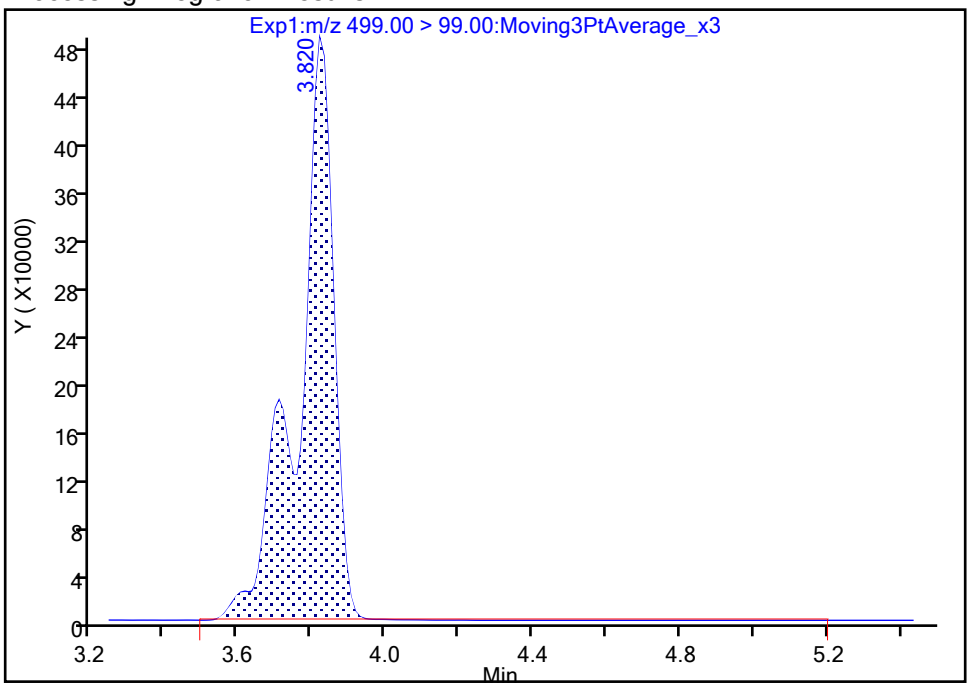
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E14.d				
Injection Date:	27-Oct-2023 11:54:28	Instrument ID:	LC812		
Lims ID:	460-290517-B-10-A	Lab Sample ID:	200-290517-10		
Client ID:	MW16C-101623-1026-120				
Operator ID:	LC812user	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	2.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

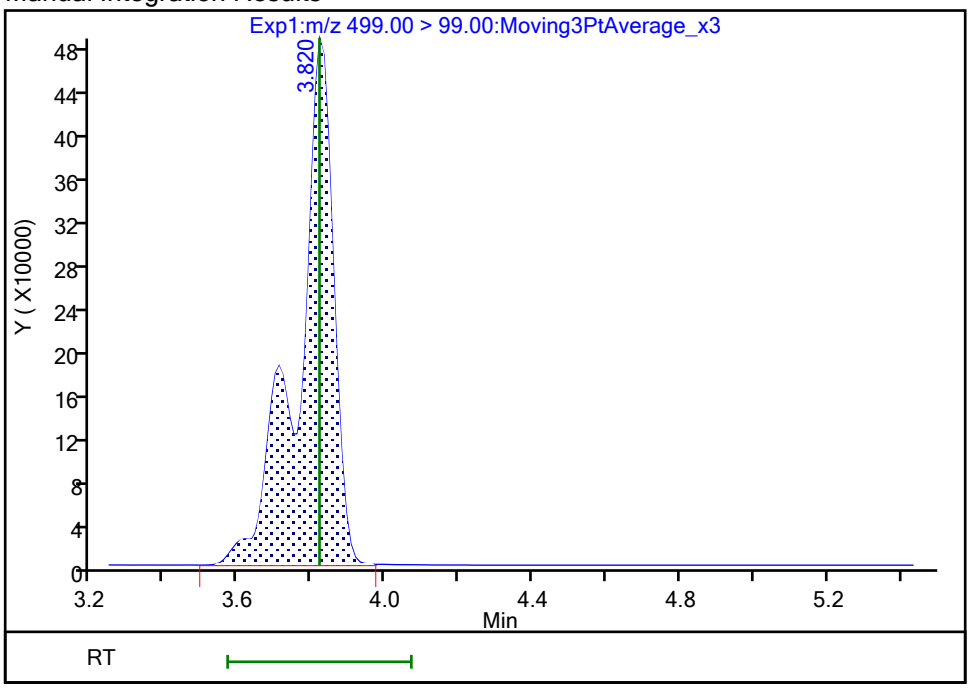
Processing Integration Results

RT: 3.82
Area: 3292018
Amount: 14.550279
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3275409
Amount: 14.520834
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 17:01:13 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW93-101623-1206-30 Lab Sample ID: 460-290517-11

Matrix: Water Lab File ID: PA231024A14.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 12:06

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 286.3(mL) Date Analyzed: 10/24/2023 19:46

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	33.3		4.37	1.05
2706-90-3	Perfluoropentanoic acid	50.7		1.75	0.59
307-24-4	Perfluorohexanoic acid	51.3		1.75	0.57
375-85-9	Perfluoroheptanoic acid	21.9		1.75	0.47
335-67-1	Perfluorooctanoic acid	45.8		1.75	0.66
375-95-1	Perfluorononanoic acid	6.01		1.75	0.43
335-76-2	Perfluorodecanoic acid	7.92		1.75	0.40
2058-94-8	Perfluoroundecanoic acid	0.90	J	1.75	0.48
307-55-1	Perfluorododecanoic acid	1.75	U	1.75	0.43
72629-94-8	Perfluorotridecanoic acid	1.75	U	1.75	0.42
376-06-7	Perfluorotetradecanoic acid	1.75	U	1.75	0.56
375-73-5	Perfluorobutanesulfonic acid	3.39		1.75	0.54
2706-91-4	Perfluoropentanesulfonic acid	3.33		1.75	0.44
355-46-4	Perfluorohexanesulfonic acid	17.6		1.75	0.48
375-92-8	Perfluoroheptanesulfonic acid	1.50	J	1.75	0.36
1763-23-1	Perfluorooctanesulfonic acid	95.6		1.75	0.74
68259-12-1	Perfluorononanesulfonic acid	1.75	U	1.75	0.35
335-77-3	Perfluorodecanesulfonic acid	1.75	U	1.75	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67
754-91-6	Perfluorooctanesulfonamide	1.75	U	1.75	0.80
2355-31-9	NMeFOSAA	4.37	U	4.37	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40
13252-13-6	HFPODA	1.07	J	3.49	0.96
919005-14-4	DONA	1.75	U	1.75	0.37
756426-58-1	9Cl-PF3ONS	1.75	U	1.75	0.28
763051-92-9	11Cl-PF3OUdS	1.75	U	1.75	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW93-101623-1206-30 Lab Sample ID: 460-290517-11

Matrix: Water Lab File ID: PA231024A14.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 12:06

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 286.3(mL) Date Analyzed: 10/24/2023 19:46

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	69		50-150
STL01893	13C5 PFPeA	91		50-150
STL01892	13C4 PFHpA	97		50-150
STL02116	13C2 PFTeDA	108		50-150
STL02337	13C3 PFBS	106		50-150
STL01056	13C8 FOSA	87		50-150
STL02118	d3-NMeFOSAA	127		50-150
STL02117	d5-NEtFOSAA	144		50-150
STL02395	M2-4:2 FTS	125		50-150
STL02279	M2-6:2 FTS	134		50-150
STL02280	M2-8:2 FTS	134		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	106		50-150
STL00993	13C2 PFHxA	97		50-150
STL00991	13C4 PFOS	111		50-150
STL00998	13C2 PFDoA	111		50-150
STL00995	13C5 PFNA	111		50-150
STL00996	13C2 PFDA	116		50-150
STL00990	13C4 PFOA	110		50-150
STL00997	13C2 PFUnA	121		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d
Lims ID: 460-290517-B-11-A
Client ID: MW93-101623-1206-30
Sample Type: Client
Inject. Date: 24-Oct-2023 19:46:17 ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-B-11-A
Misc. Info.: 200-0057538-014 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 13:27:35
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	1084237	0.8568		68.5	831	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.004	779433	0.9528			12.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.695	1118571	1.14		91.1	139	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1402614	1.45			2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.466	0.0	0.702	1641725	1.24		106	6753	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.466	0.0	1.000	153043	0.0970	Target=2.06		1.7	M
298.90 > 99.00	2.466	2.466	0.0	1.000	88492		1.73(1.03-3.09)		3.5	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.786	224804	1.46		125	6.7	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1213459	1.21		97.2	1029	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1568475	1.47	Target=14.12		5.5	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	104955		14.94(7.06-21.17)		15.5	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	125811	0.0954	Target=2.72		2.8	M
349.00 > 99.00	2.810	2.810	0.0	0.888	43983		2.86(1.36-4.09)		3.5	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	218254	1.13		90.3	1449	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.918	-0.010	1.000	5362	0.0307			19.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.901	1194701	1.25		106	5418	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	564680	0.5049	Target=3.32		31.6	M
399.00 > 99.00	3.154	3.166	-0.012	0.996	158403		3.56(1.66-4.98)		35.6	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.177	-0.012	1.000	749825	0.6282	Target=4.17		7.6	M
363.00 > 169.00	3.165	3.177	-0.012	1.000	198604		3.78(2.09-6.26)		136	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.177	-0.012	0.901	1331173	1.21		97.2	2819	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.512	-0.009	0.917	41673	0.0431	Target=4.83		3.7	M
449.00 > 99.00	3.503	3.512	-0.009	0.917	9975		4.18(2.41-7.24)		3.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.512	-0.009	0.997	313994	1.59		134	37.3	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.521	0.0	1.003	1902000	1.31	Target=2.88		23.5	M
413.00 > 169.00	3.521	3.521	0.0	1.003	712751		2.67(1.44-4.32)		379	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.521	-0.009	1.000	1701974	1.37		110	3180	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.521	-0.009		1595121	1.25			2270	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.832	-0.012	1.000	2138071	2.74	Target=4.24		330	M
499.00 > 99.00	3.820	3.832	-0.012	1.000	554805		3.85(2.12-6.37)		292	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.832	-0.012	1.088	799968	1.32		111	169	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.843	3.844	-0.001	1.000	252299	0.1721	Target=8.34		7.6	M
463.00 > 169.00	3.843	3.844	-0.001	1.000	29172		8.65(4.17-12.51)		57.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.844	-0.001	1.094	1869842	1.38		111	2381	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.103	4.114	-0.011	1.074	657	0.001106	Target=2.17		0.5	M
549.00 > 99.00	4.115	4.114	0.001	1.077	467		1.41(1.08-3.25)		0.9	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.127	4.138	-0.011	0.997	370401	0.2267	Target=11.44		23.3	
513.00 > 169.00	4.139	4.138	0.001	1.000	33276		11.13(5.72-17.16)		84.5	
D 23 13C2 PFDA										
515.00 > 470.00	4.139	4.138	0.001	1.179	2043252	1.44		116	4128	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.127	4.138	-0.011	0.997	1108	0.001687			13.3	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.139	4.150	-0.011	1.179	357309	1.61		134	135	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.244	-0.012	1.205	1314638	1.09		87.1	5916	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.244	-0.012	1.000	18981	0.0189			5.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.281	-0.013	1.215	538717	1.59		127	1398	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.281	0.0	1.003	9092	0.0232			21.5	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.364	4.364	0.0	1.143	1142	0.002498	Target=2.37		1.8	RM
599.00 > 99.00	4.352	4.364	-0.012	1.139	1774		0.64(1.19-3.56)		5.7	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.388	0.0	1.250	2026355	1.52		121	9028	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.388	0.0	1.000	42939	0.0257	Target=12.20		4.3	M
563.00 > 169.00	4.388	4.388	0.0	1.000	6020		7.13(6.10-18.31)		24.6	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.400	0.0	1.253	587197	1.80		144	853	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.400	0.0	1.000	12633	0.0269			21.2	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.469	4.483	-0.014	1.170	1089	0.000297			2.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.611	0.0	1.313	1878838	1.38		111	4046	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.611	0.0	1.000	9470	0.006190	Target=8.47		0.9	M
613.00 > 169.00	4.600	4.611	-0.011	0.998	1214		7.80(4.23-12.70)		8.2	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.991	-0.011	1.418	1832353	1.36		108	4116	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

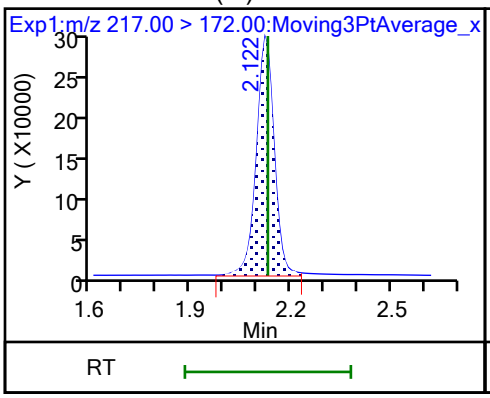
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:52 Chrom Revision: 2.3 18-Oct-2023 21:16:54

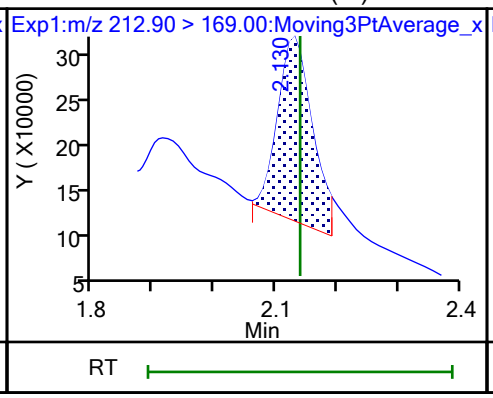
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d
Injection Date: 24-Oct-2023 19:46:17 Instrument ID: LC812
Lims ID: 460-290517-B-11-A Lab Sample ID: 200-290517-11
Client ID: MW93-101623-1206-30
Operator ID: LC812user ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

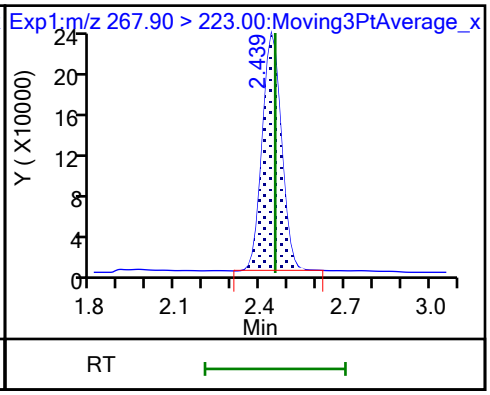
D 1 13C4 PFBA (M)



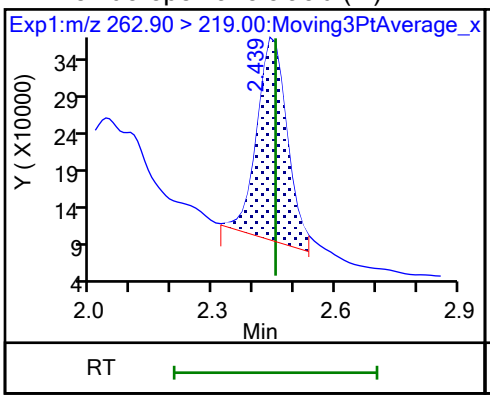
2 Perfluorobutanoic acid (M)



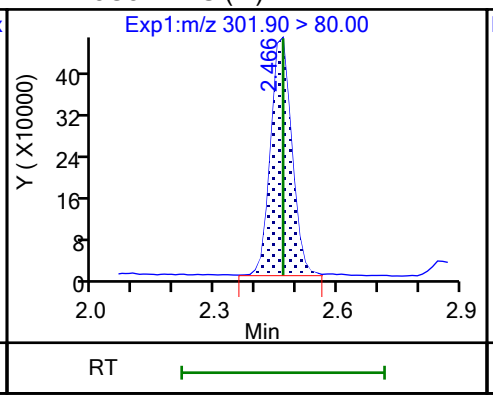
D 3 13C5 PFPeA



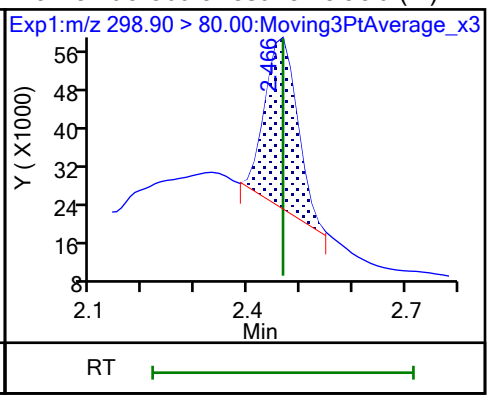
4 Perfluoropentanoic acid (M)



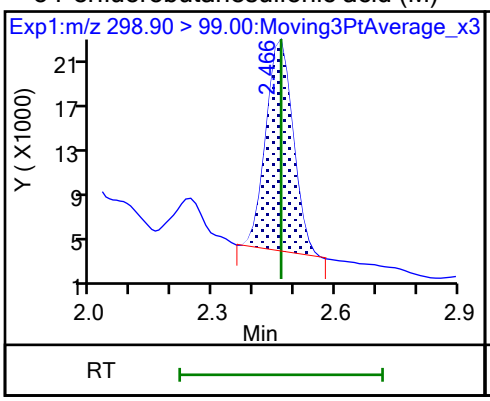
D 47 13C3 PFBS (M)



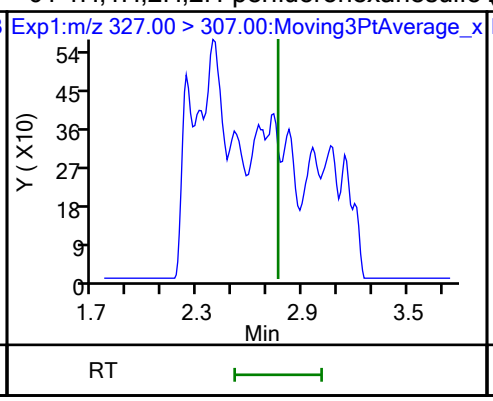
5 Perfluorobutanesulfonic acid (M)



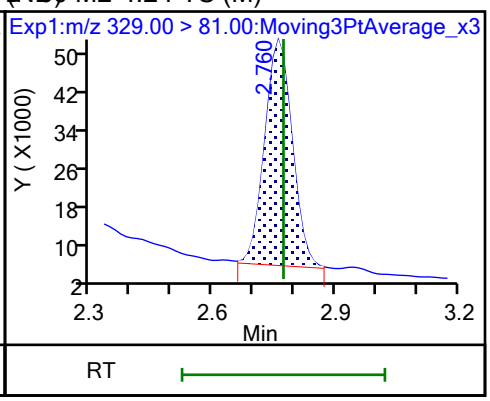
5 Perfluorobutanesulfonic acid (M)



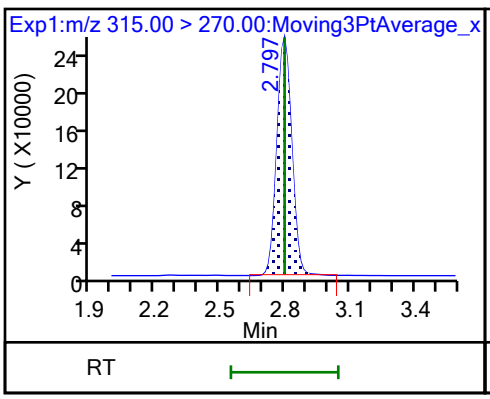
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



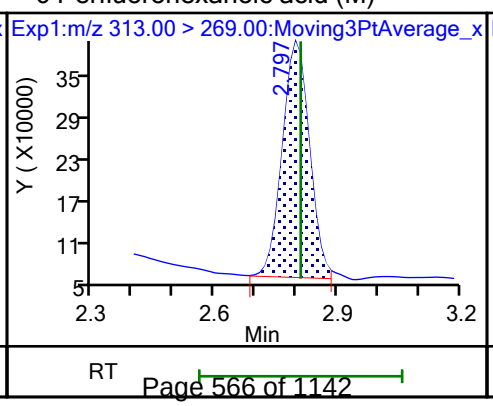
D 80 M2-4:2 FTS (M)



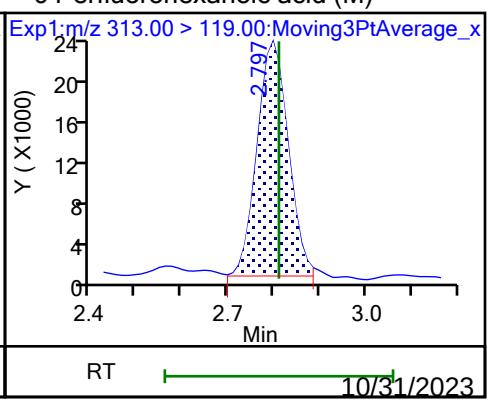
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

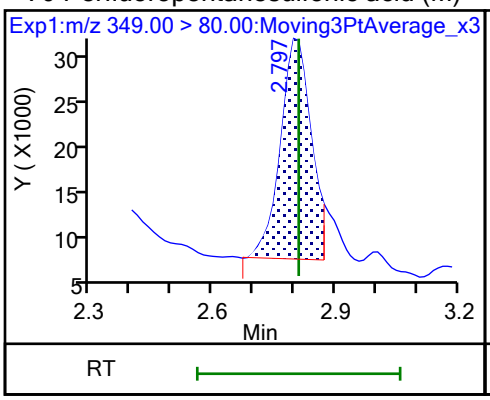


6 Perfluorohexanoic acid (M)

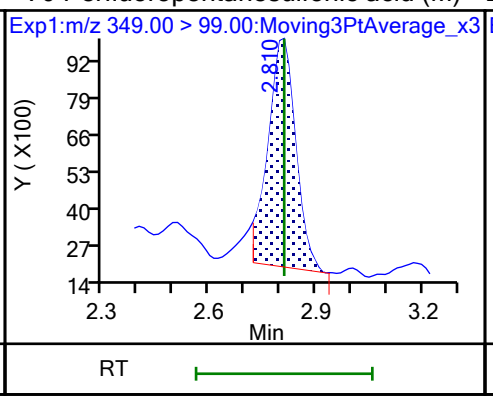


10/31/2023
10:17 AM

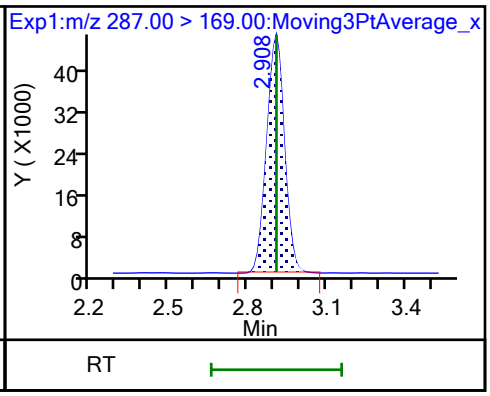
70 Perfluoropentanesulfonic acid (M)



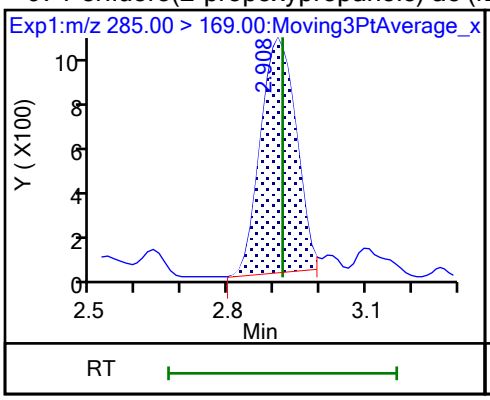
70 Perfluoropentanesulfonic acid (M)



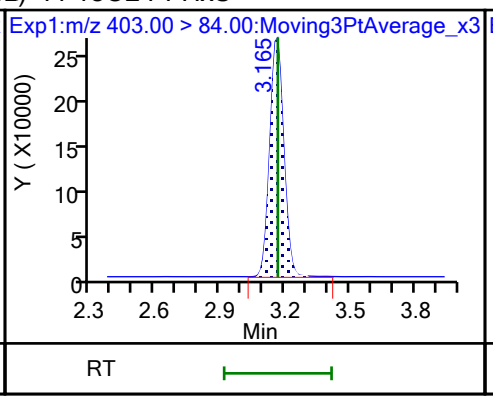
D 64 13C3 HFPO-DA



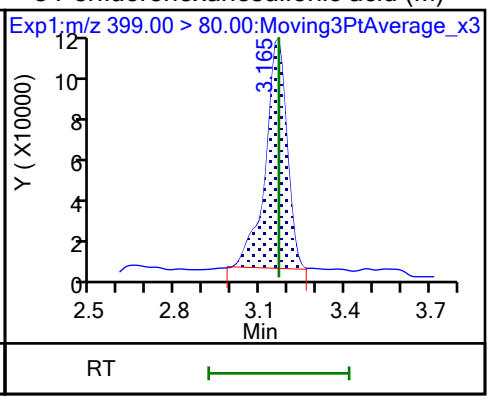
67 Perfluoro(2-propoxypropanoic) ac (M)



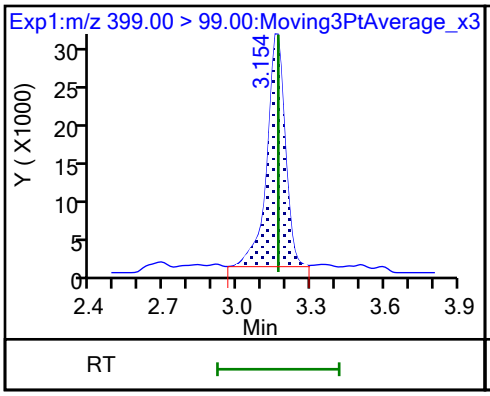
D 11 18O2 PFHxS



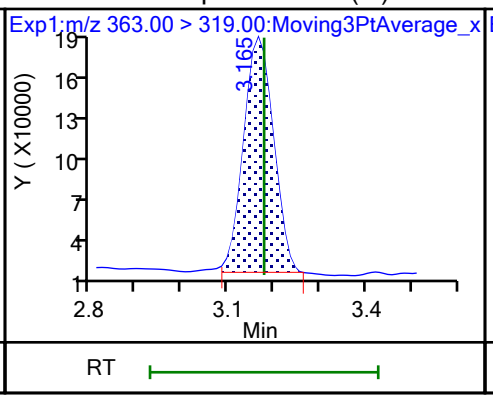
8 Perfluorohexanesulfonic acid (M)



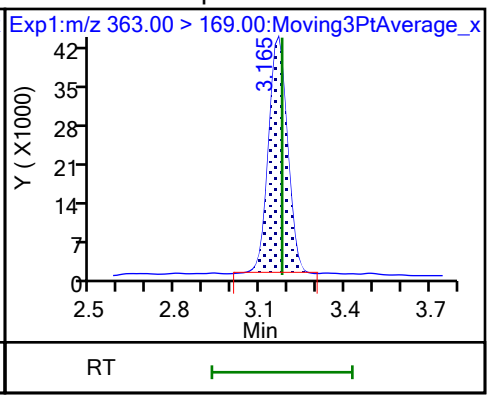
8 Perfluorohexanesulfonic acid



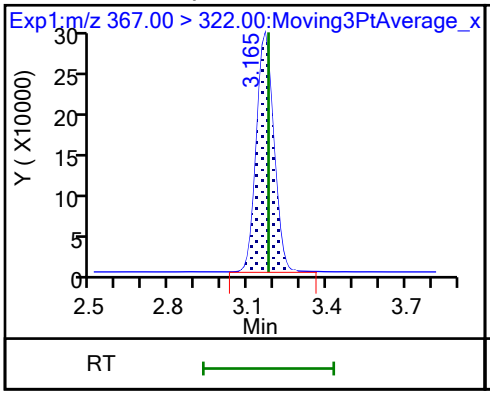
10 Perfluoroheptanoic acid (M)



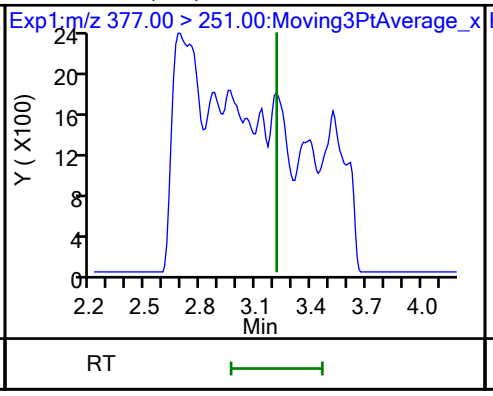
10 Perfluoroheptanoic acid



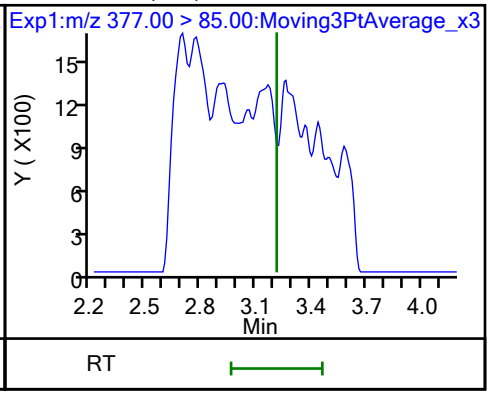
D 9 13C4 PFHpA



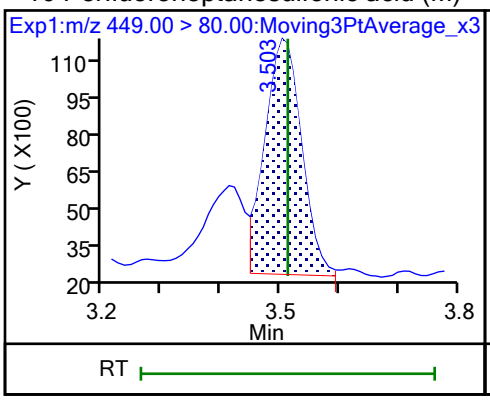
77 DONA (ND)



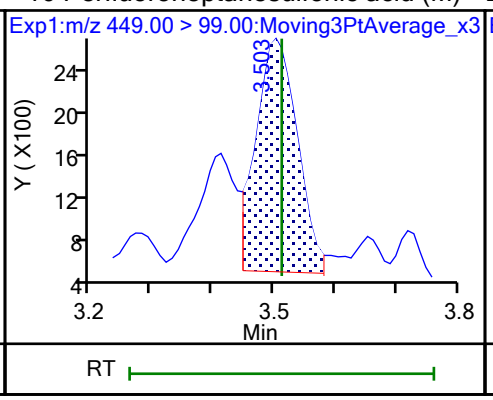
77 DONA (ND)



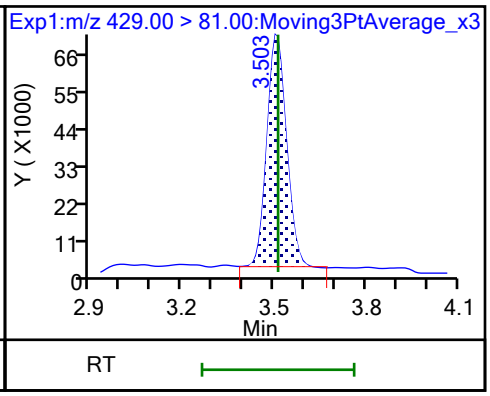
16 Perfluoroheptanesulfonic acid (M)



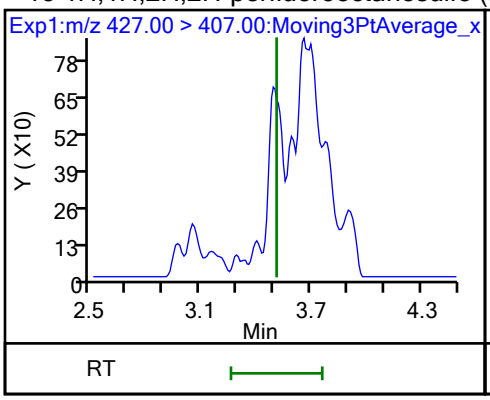
16 Perfluoroheptanesulfonic acid (M)



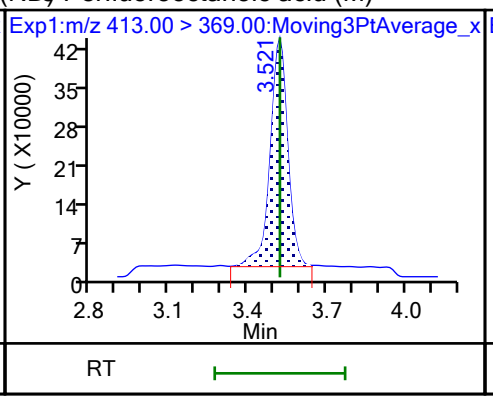
D 12 M2-6:2 FTS



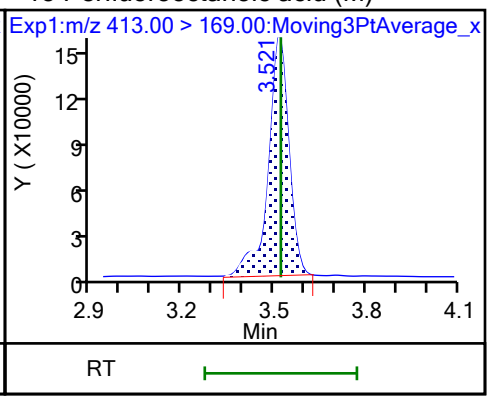
13 1H,1H,2H,2H-perfluorooctanesulfo (NDS)



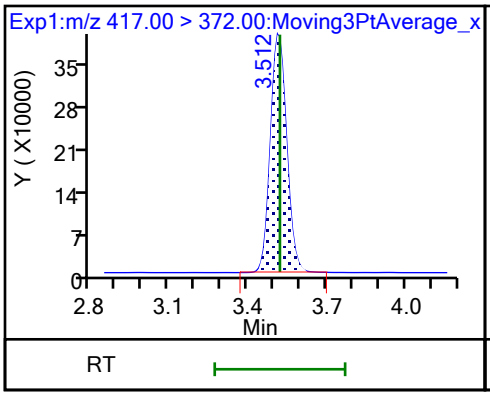
15 Perfluorooctanoic acid (M)



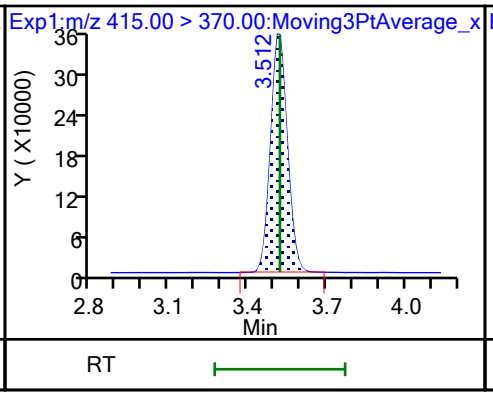
15 Perfluorooctanoic acid (M)



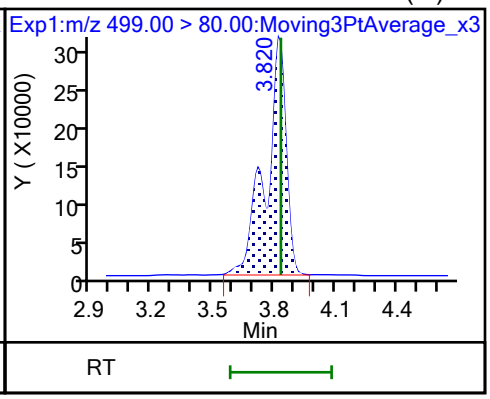
D 14 13C4 PFOA



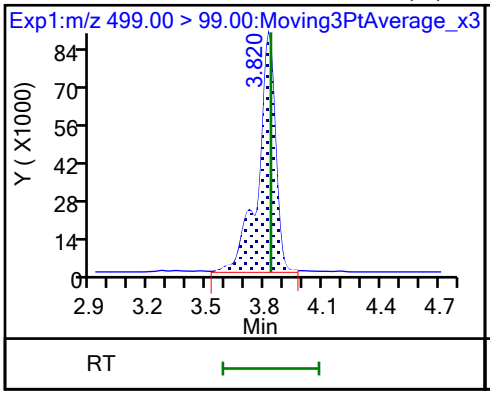
* 62 13C2 PFOA



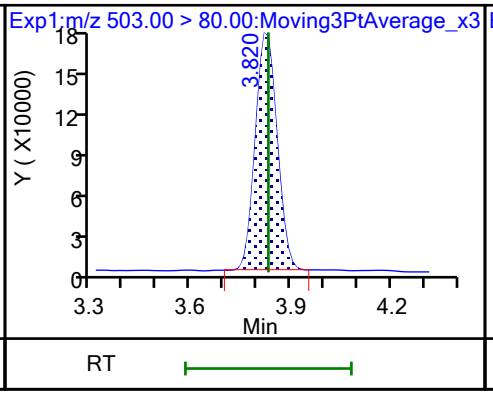
17 Perfluorooctanesulfonic acid (M)



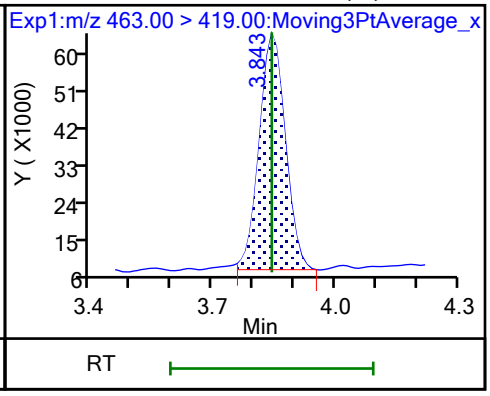
17 Perfluorooctanesulfonic acid (M)



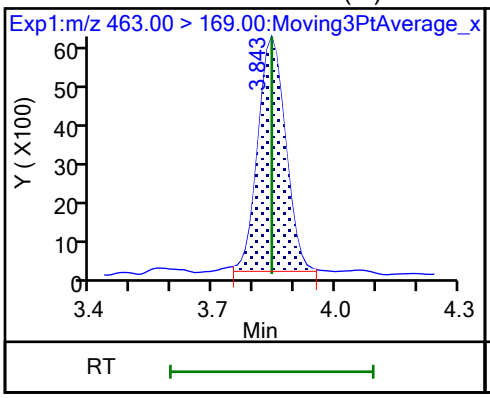
D 18 13C4 PFOS



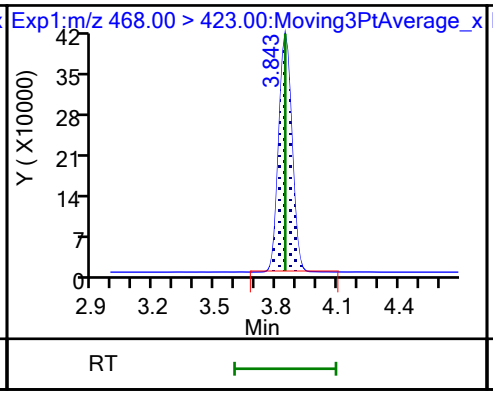
20 Perfluorononanoic acid (M)



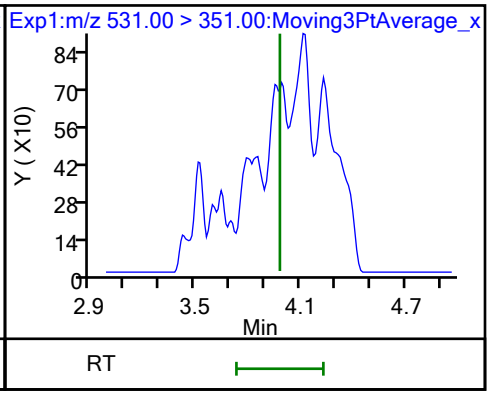
20 Perfluorononanoic acid (M)



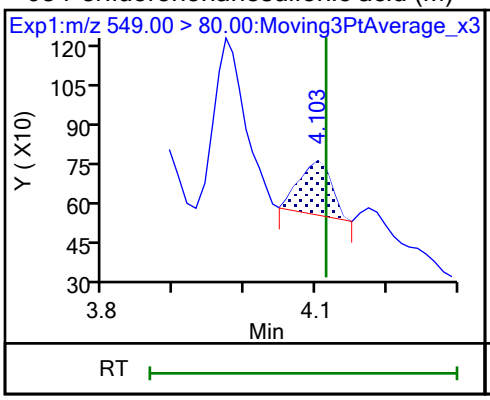
D 19 13C5 PFNA



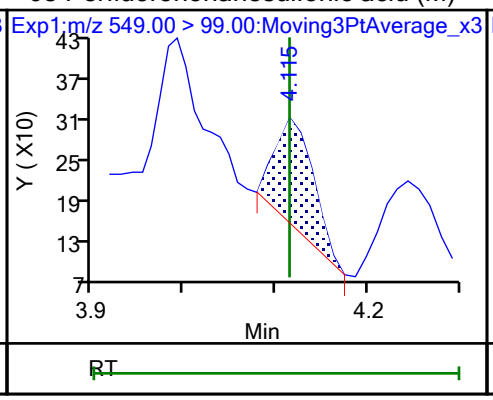
69 9-Chlorohexadecafluoro-3-oxanona (ND)



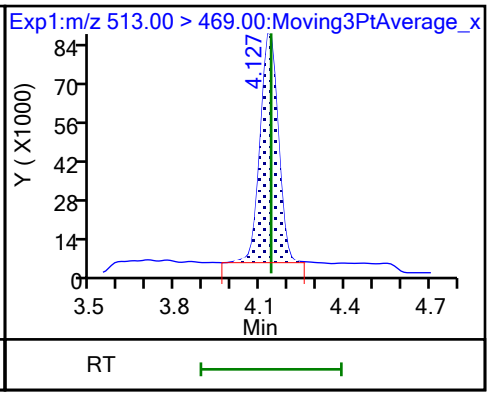
68 Perfluorononanesulfonic acid (M)



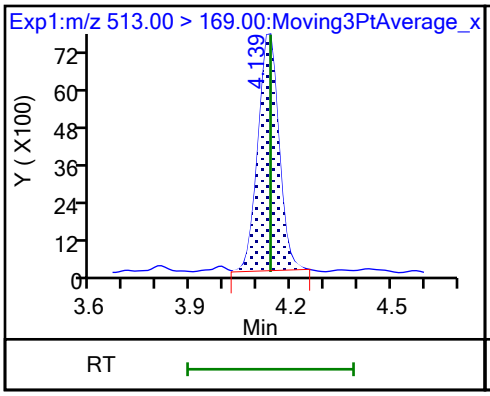
68 Perfluorononanesulfonic acid (M)



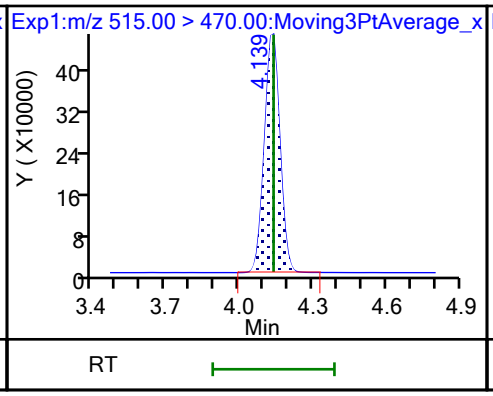
24 Perfluorodecanoic acid



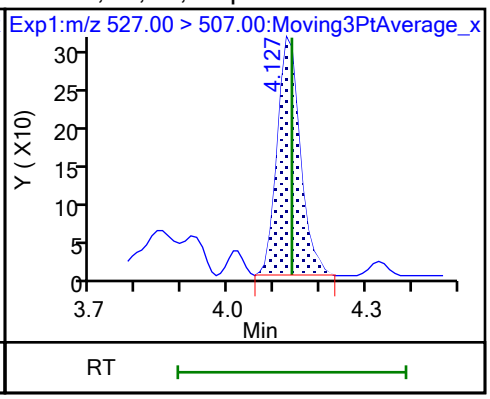
24 Perfluorodecanoic acid



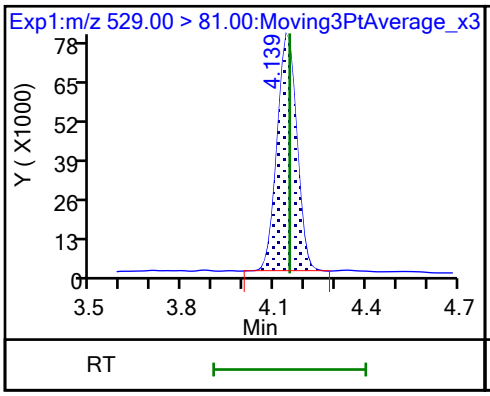
D 23 13C2 PFDA



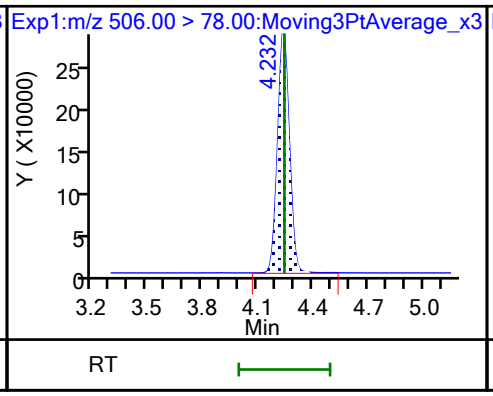
25 1H,1H,2H,2H-perfluorodecanesulfo



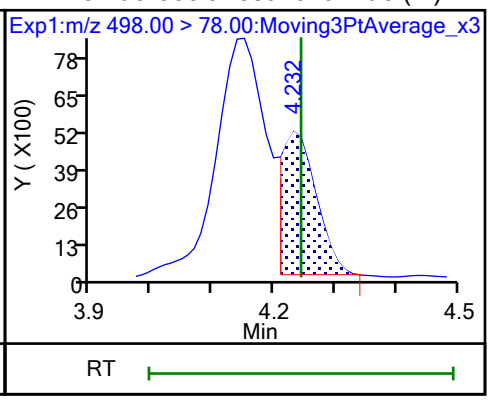
D 26 M2-8:2 FTS



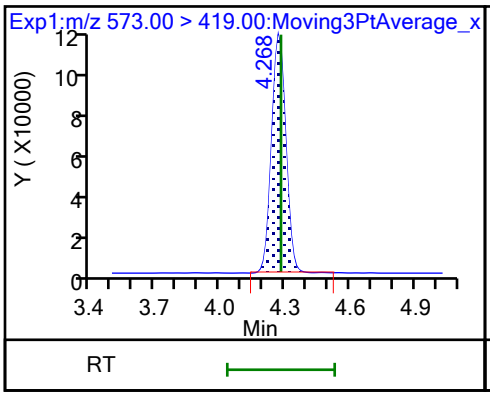
D 21 13C8 FOSA



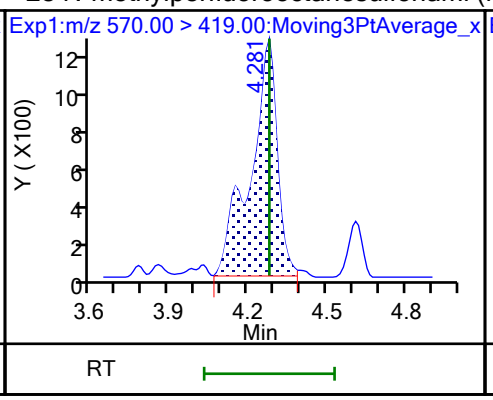
22 Perfluorooctanesulfonamide (M)



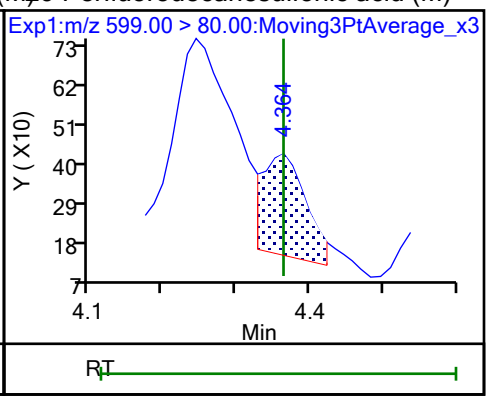
D 27 d3-NMeFOSAA



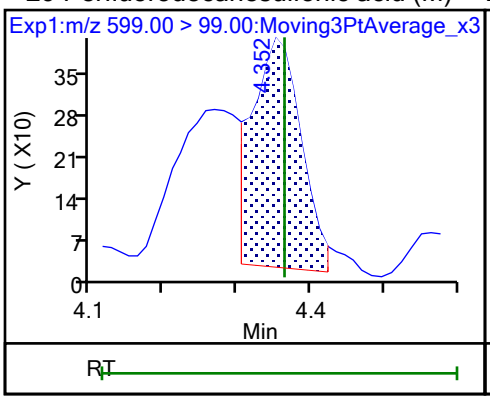
28 N-methylperfluorooctanesulfonami (M)



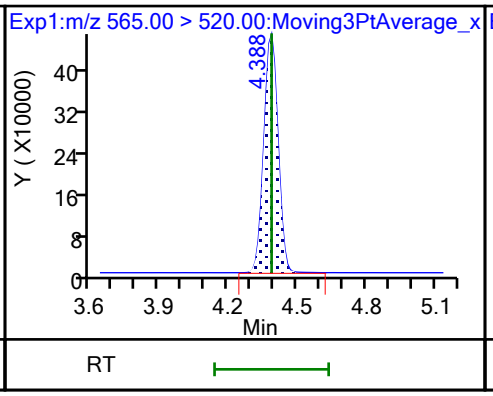
29 Perfluorodecanesulfonic acid (M)



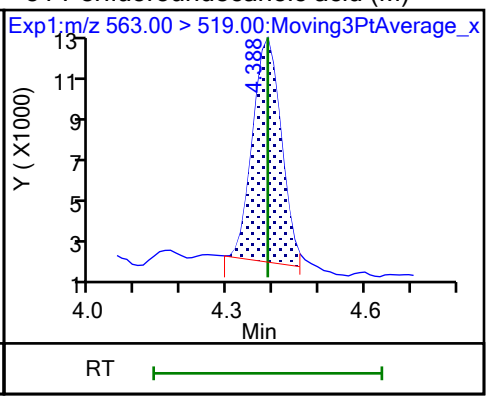
29 Perfluorodecanesulfonic acid (M)



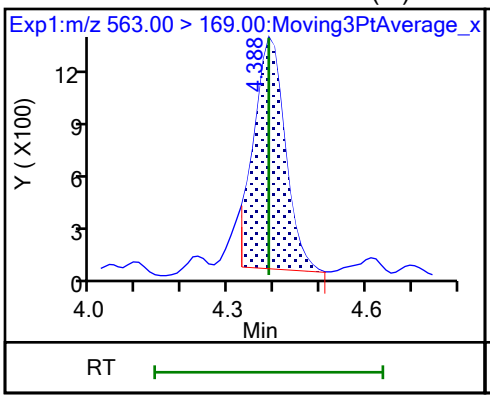
D 30 13C2 PFUnA



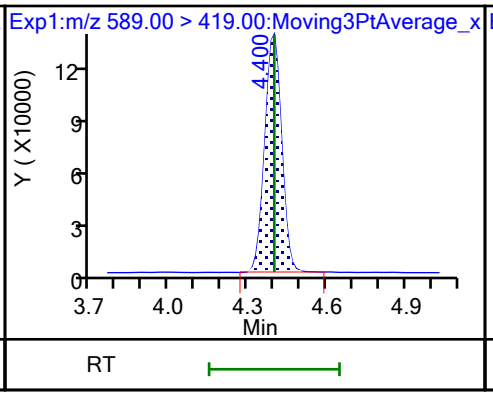
31 Perfluoroundecanoic acid (M)



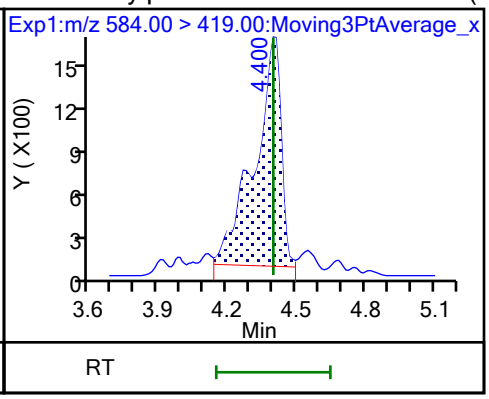
31 Perfluoroundecanoic acid (M)



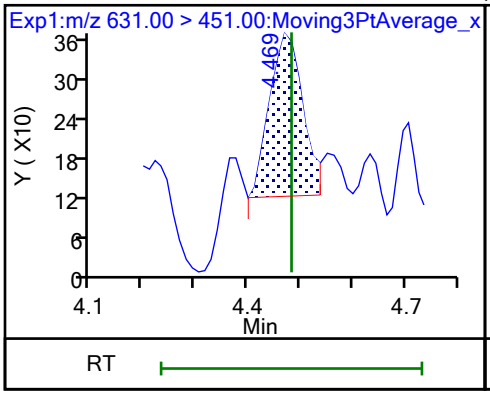
D 32 d5-NEtFOSAA



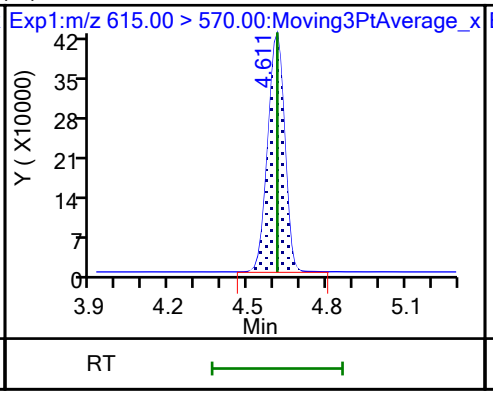
33 N-ethylperfluorooctanesulfonamid (M)



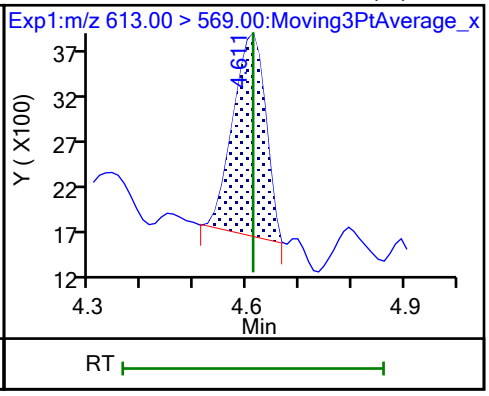
66 11-Chloroeicosafluoro-3-oxaundec (M)



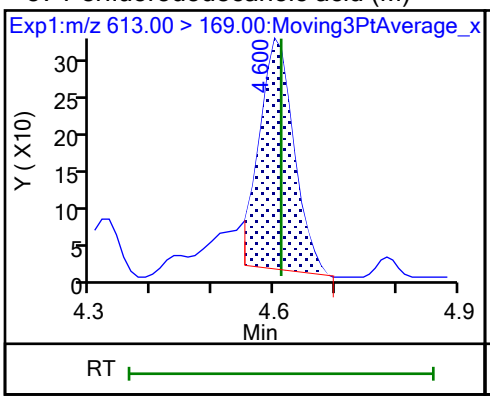
D 36 13C2 PFDoA



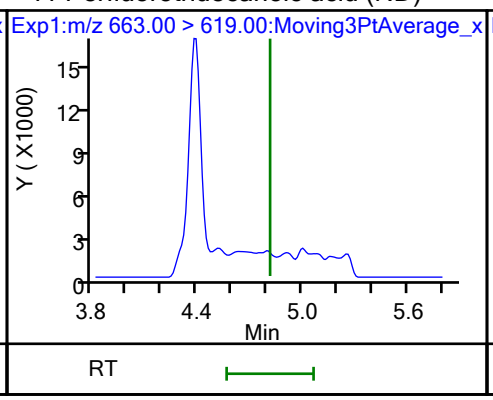
37 Perfluorododecanoic acid (M)



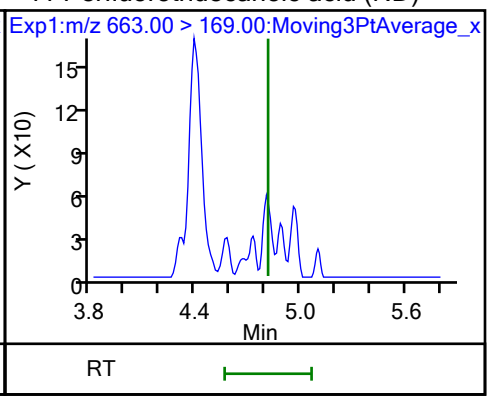
37 Perfluorododecanoic acid (M)



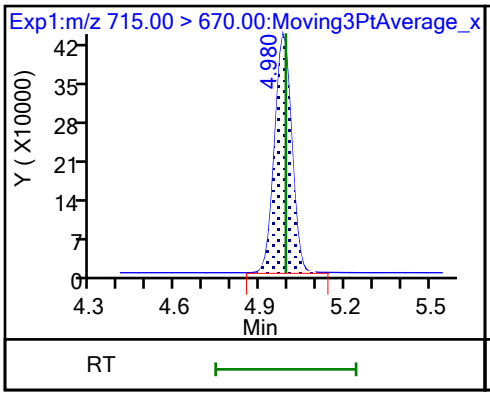
41 Perfluorotridecanoic acid (ND)



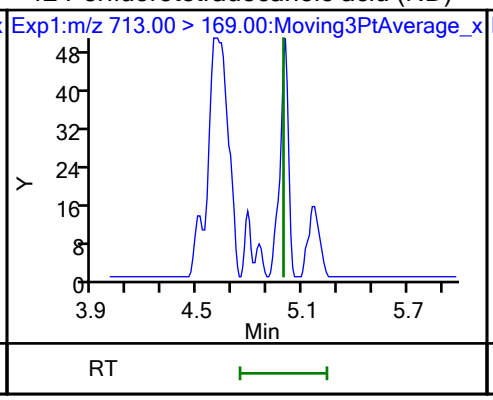
41 Perfluorotridecanoic acid (ND)



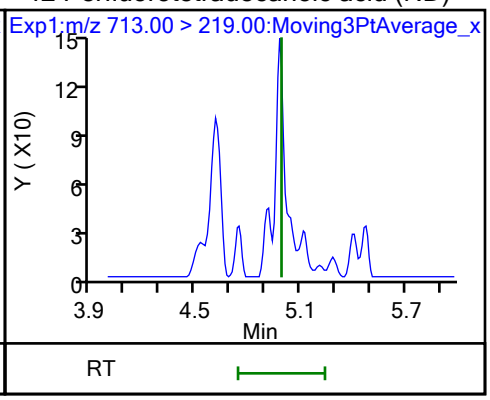
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

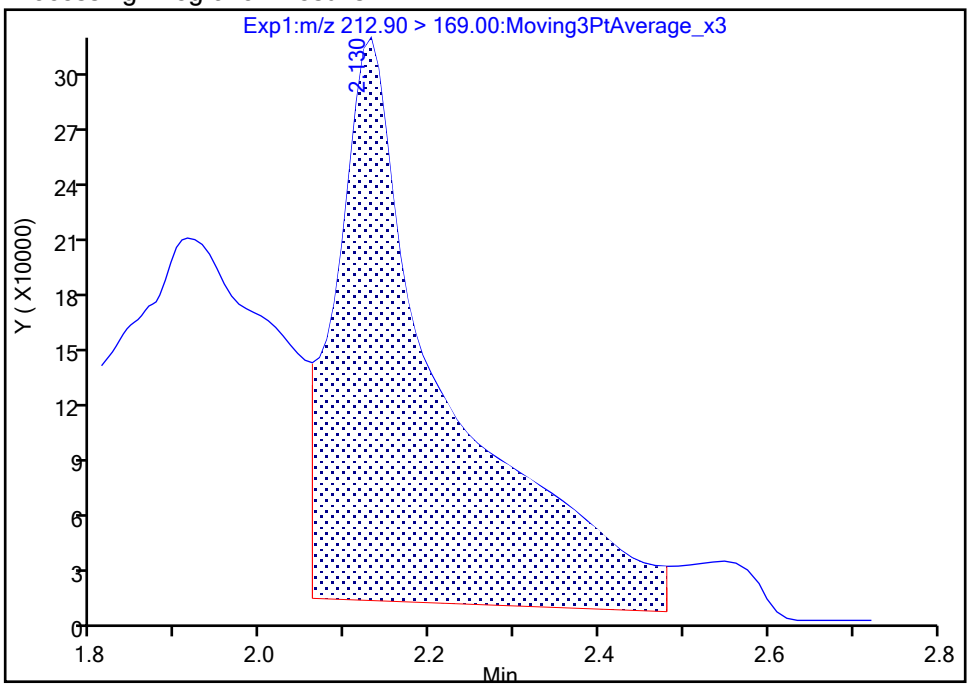
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

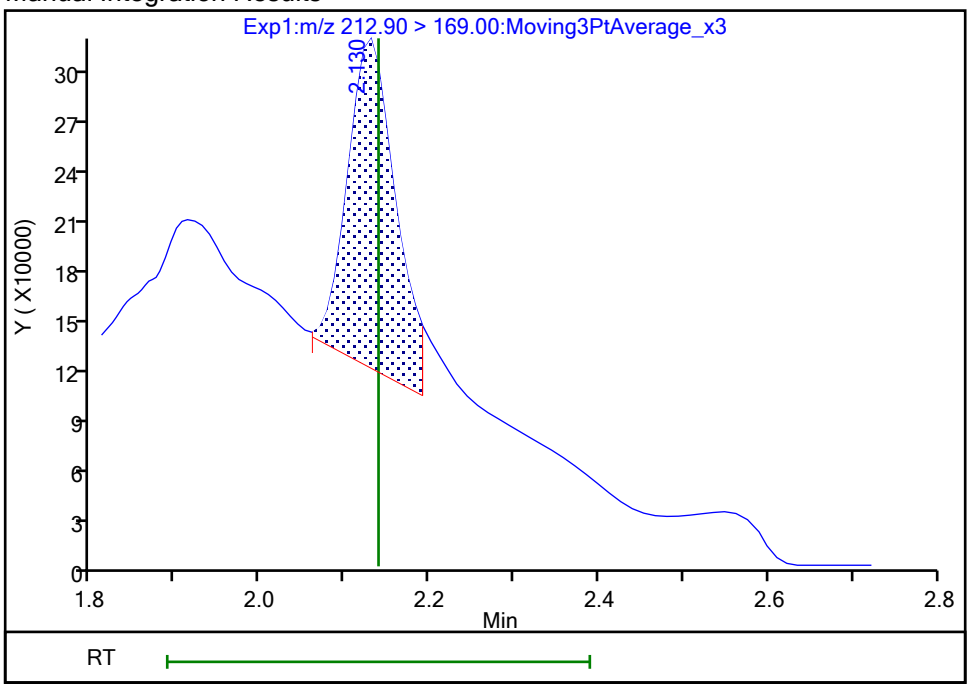
Processing Integration Results

RT: 2.13
Area: 2761921
Amount: 3.480393
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 779433
Amount: 0.952845
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:01:14 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

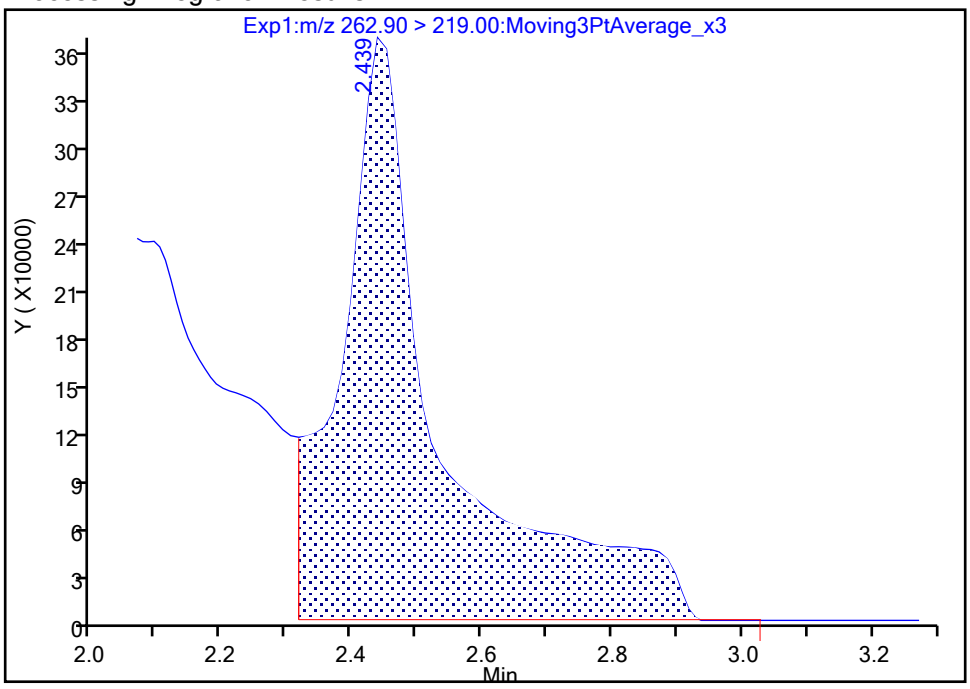
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

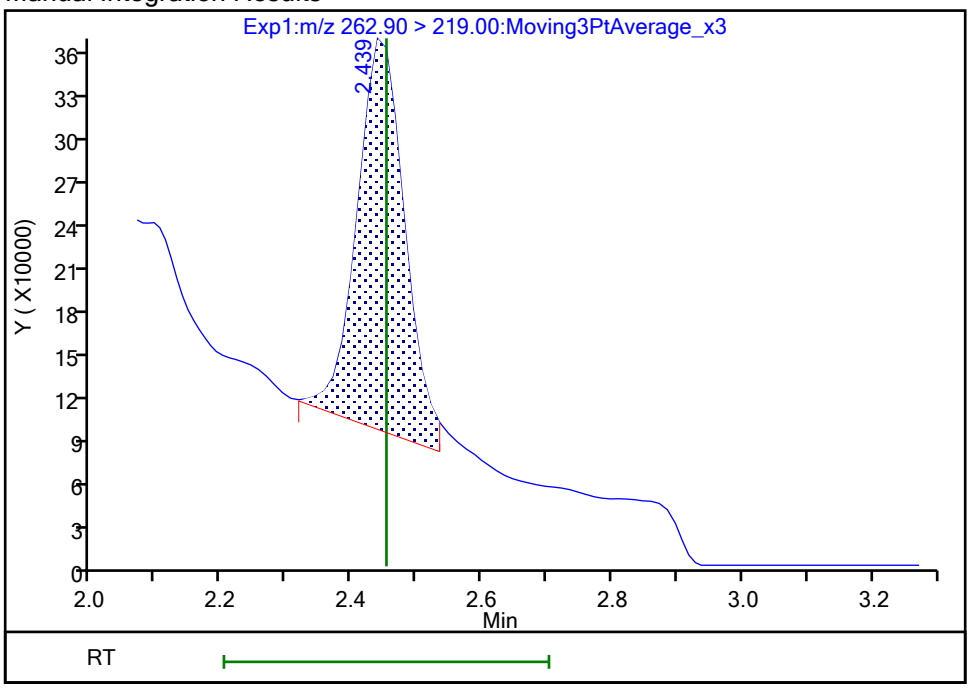
Processing Integration Results

RT: 2.44
Area: 3966054
Amount: 4.107057
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1402614
Amount: 1.452480
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:23:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

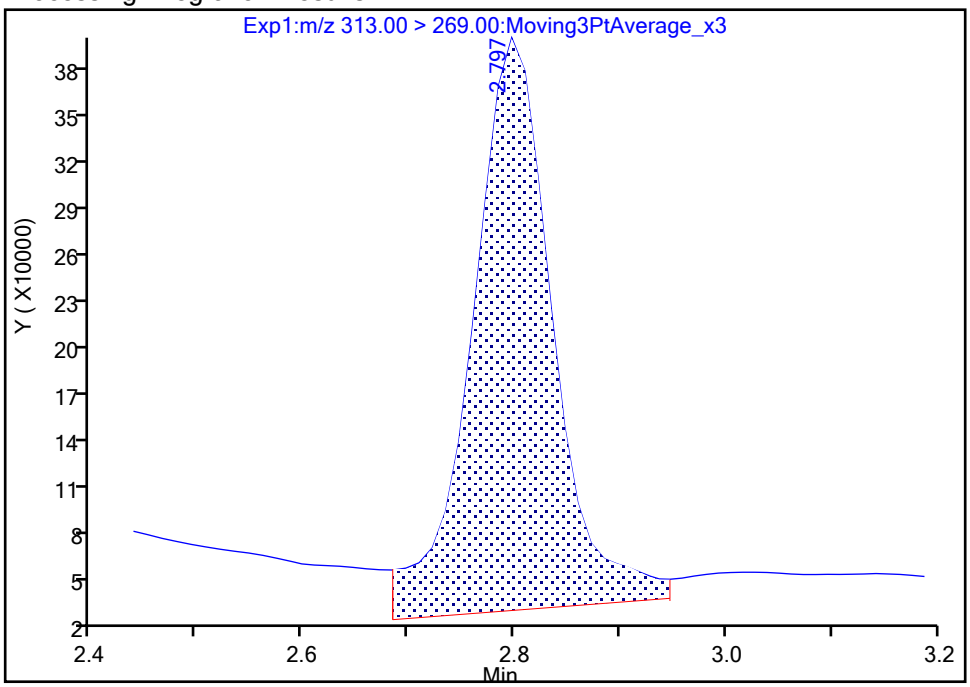
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

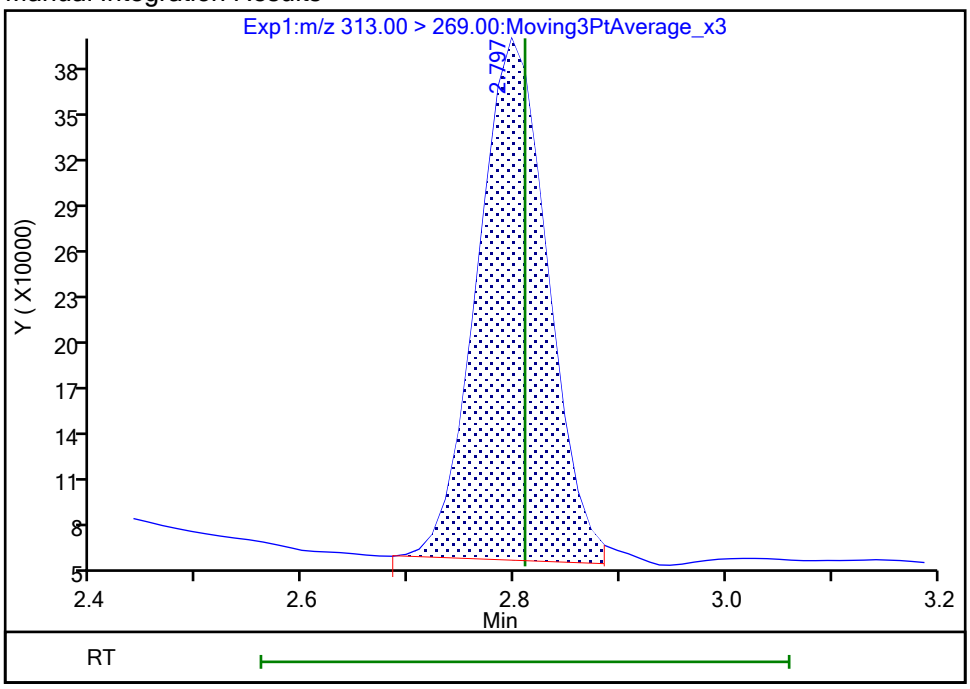
Processing Integration Results

RT: 2.80
Area: 1936753
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1568475
Amount: 1.468216
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:00:44 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

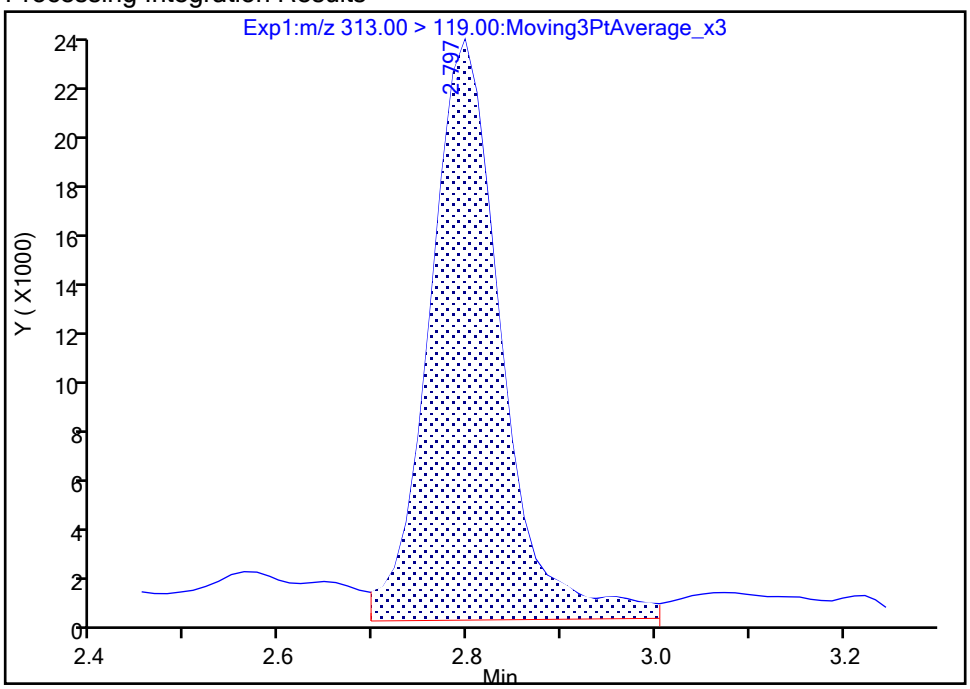
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

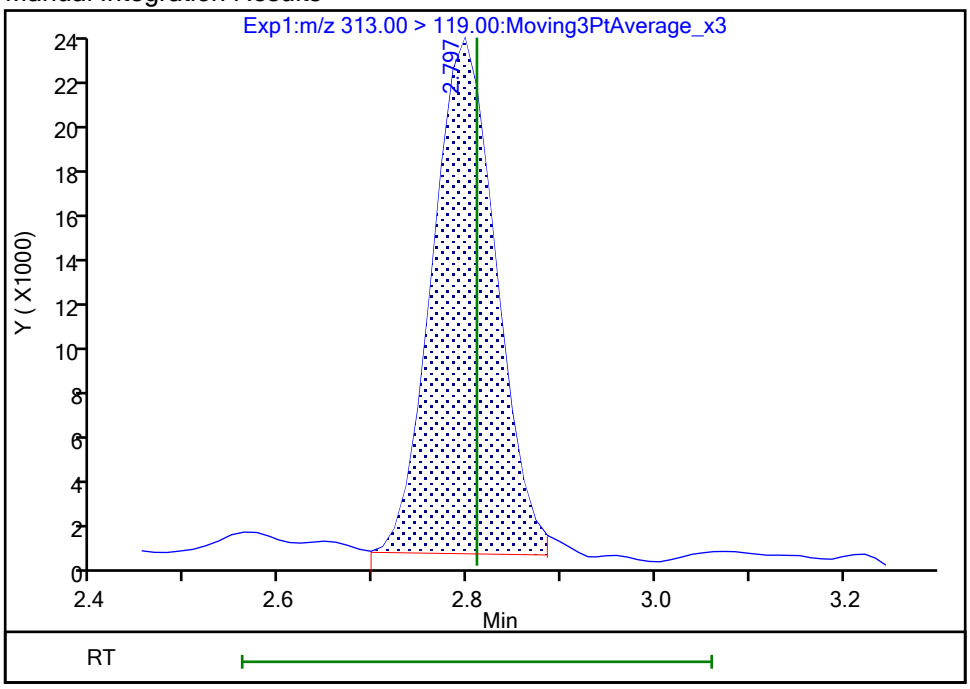
Processing Integration Results

RT: 2.80
Area: 124026
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 104955
Amount: 1.468216
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:00:46 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

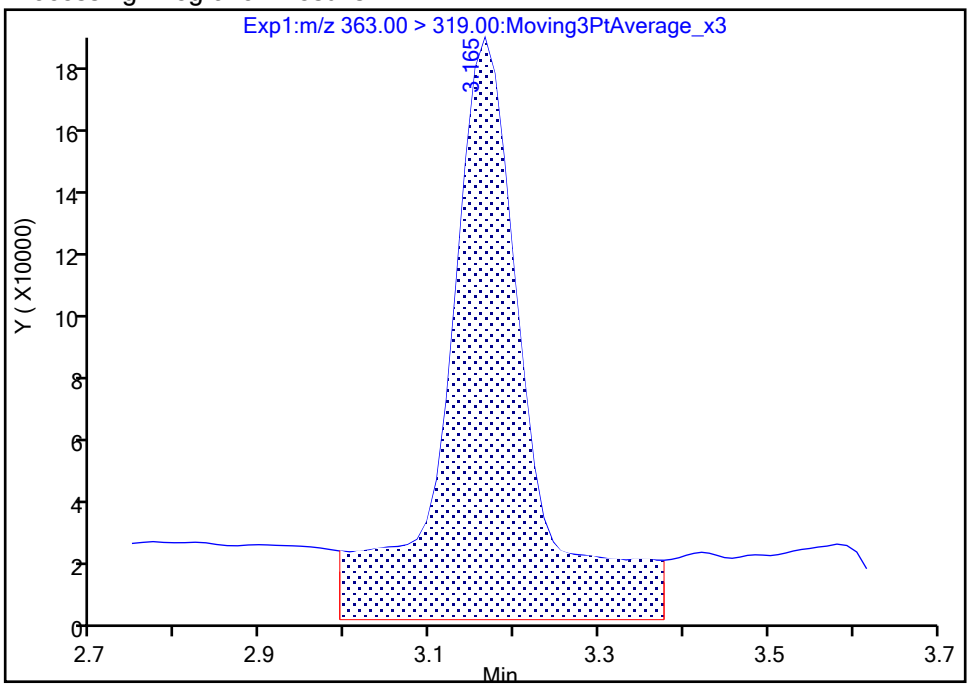
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

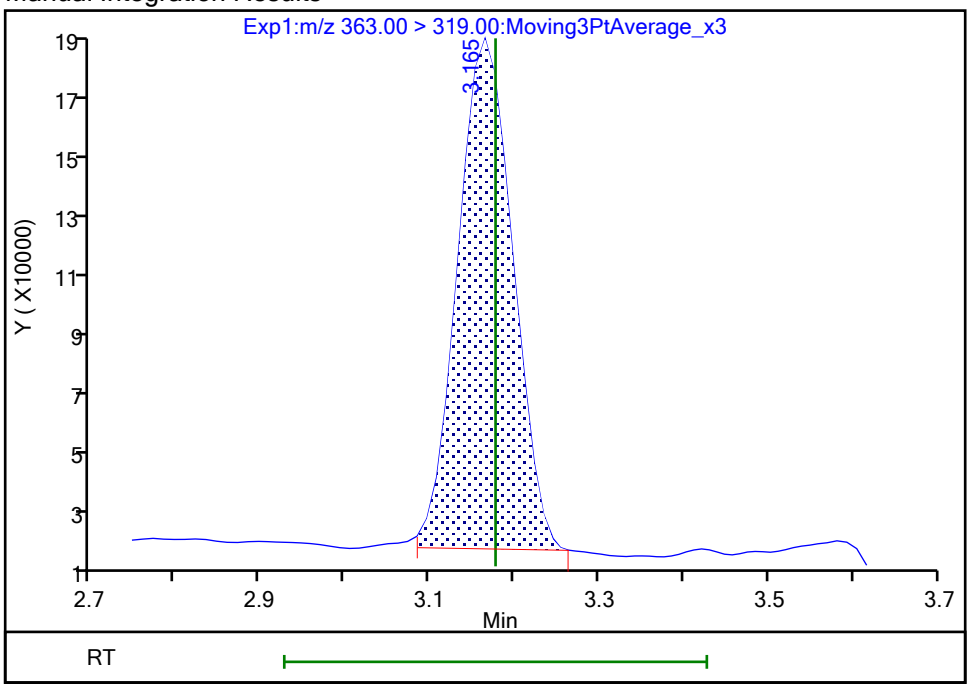
Processing Integration Results

RT: 3.17
Area: 1245409
Amount: 1.043341
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 749825
Amount: 0.628166
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

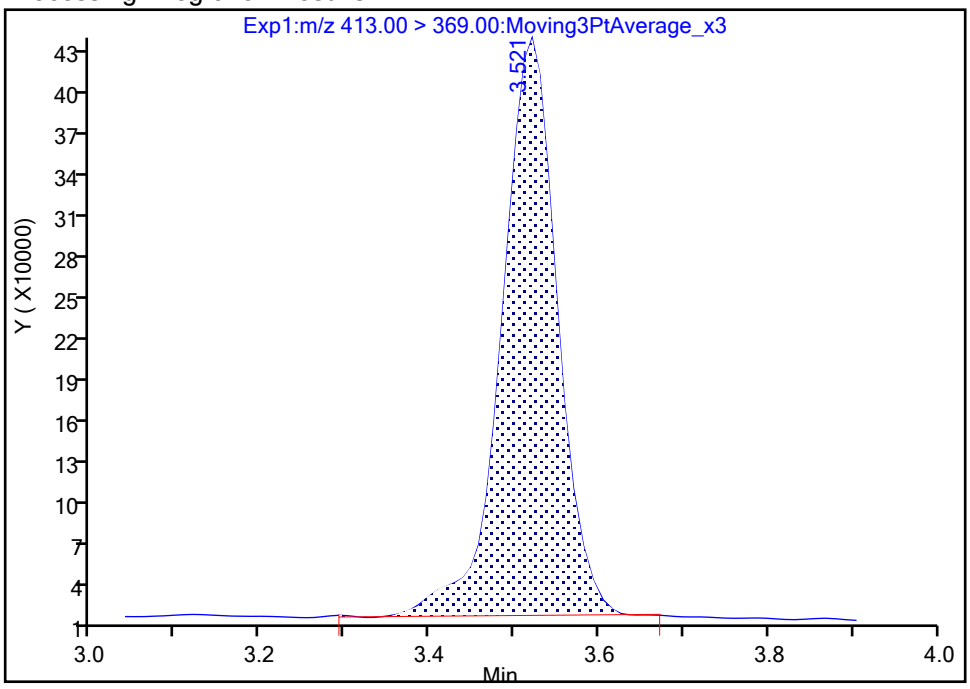
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

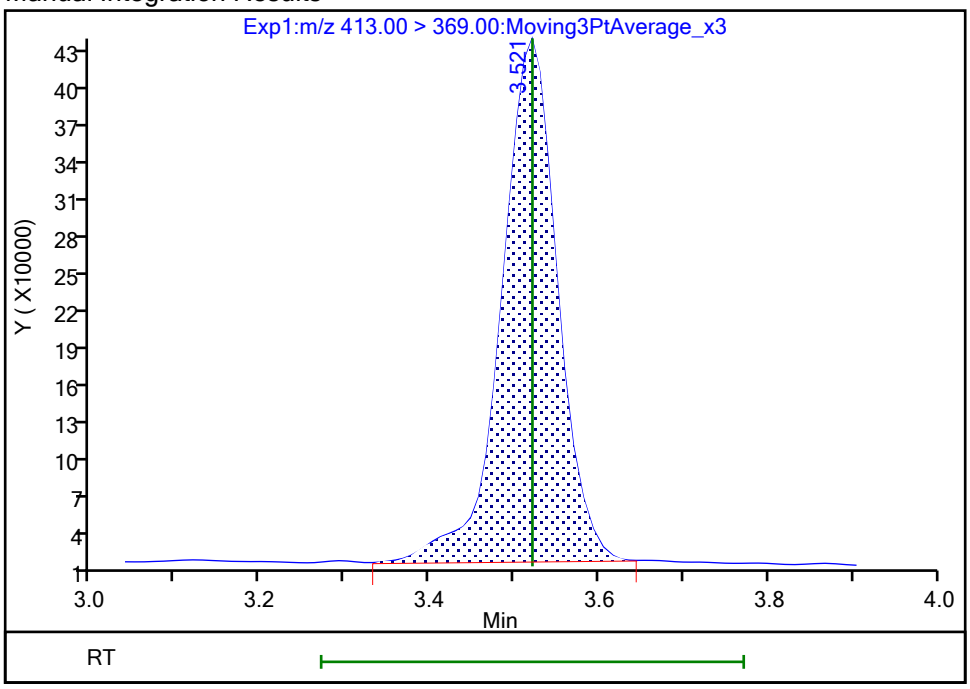
Processing Integration Results

RT: 3.52
Area: 1906854
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1902000
Amount: 1.311478
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

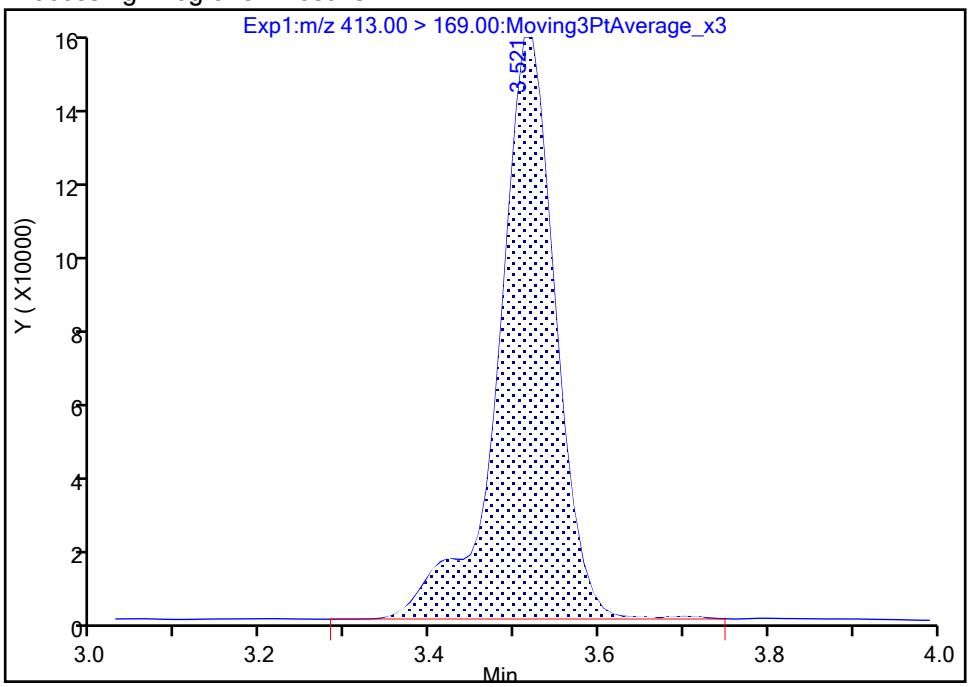
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

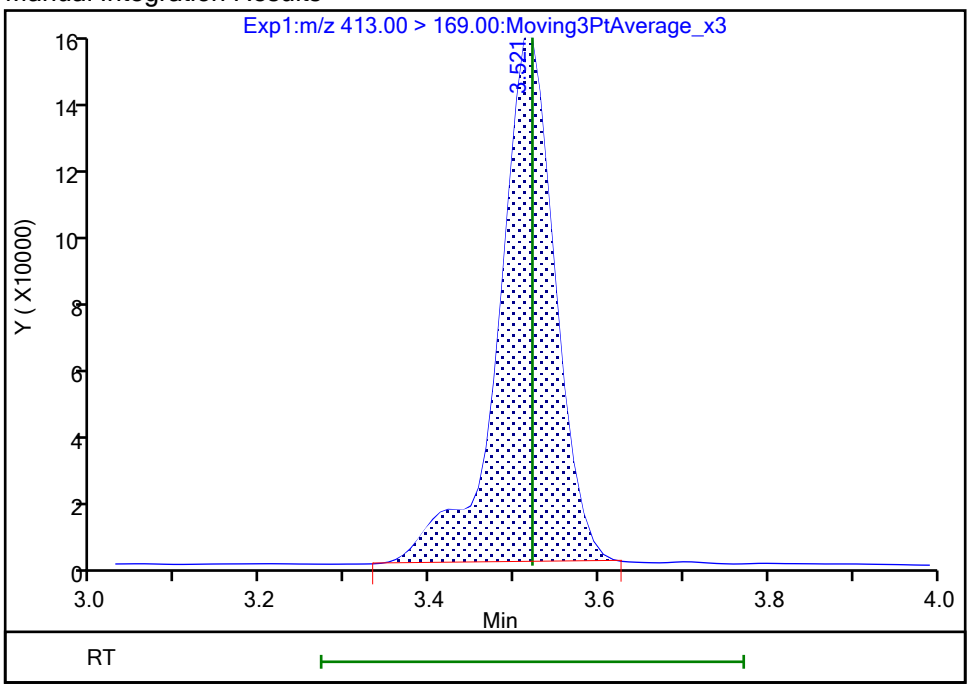
Processing Integration Results

RT: 3.52
Area: 723287
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 712751
Amount: 1.311478
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

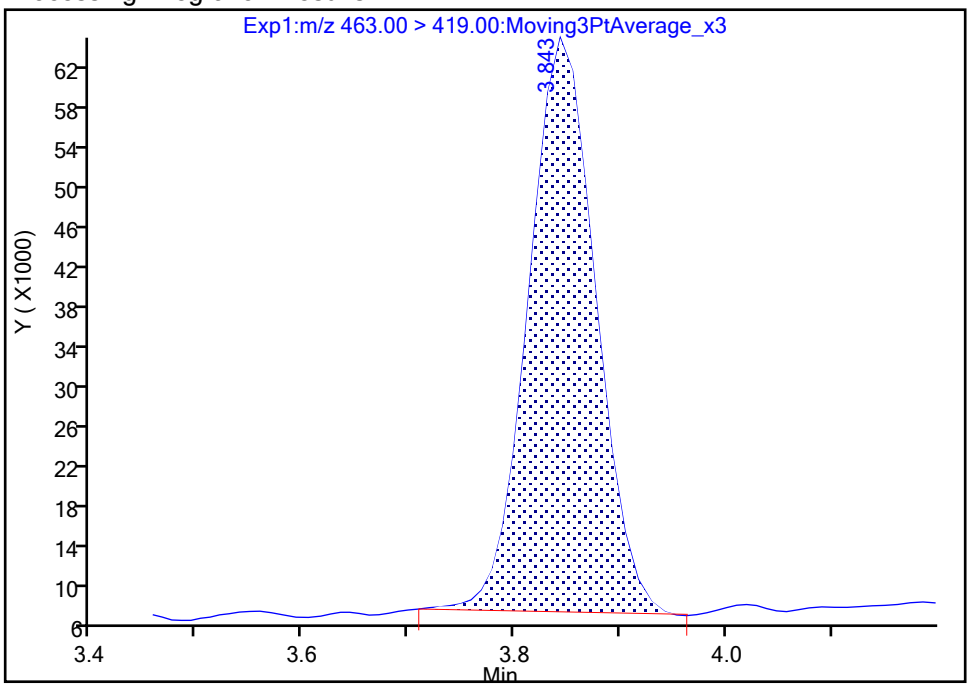
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

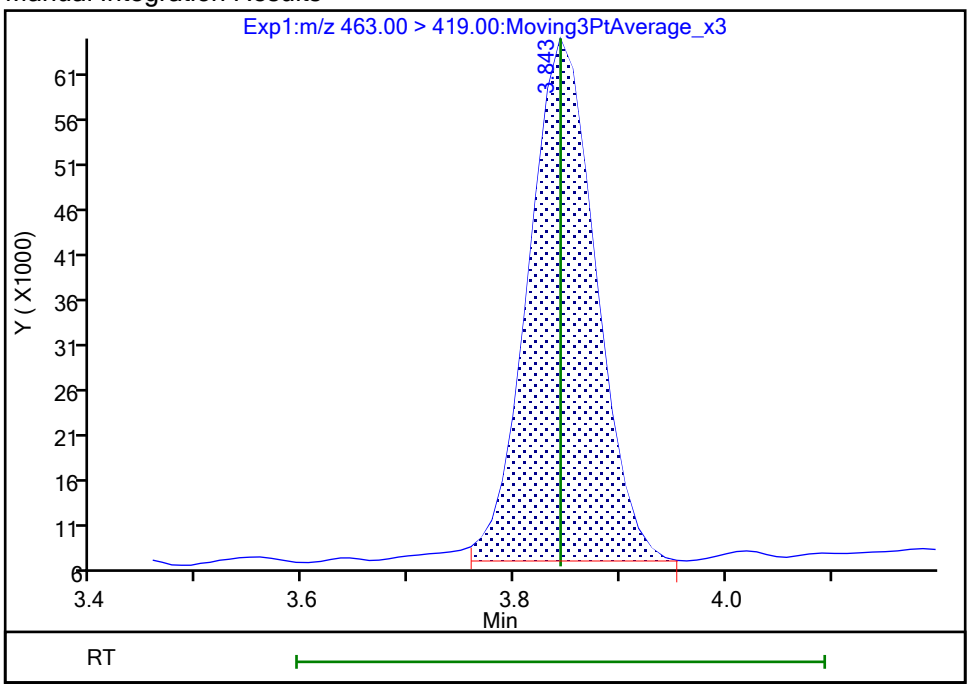
Processing Integration Results

RT: 3.84
Area: 250960
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 252299
Amount: 0.172097
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

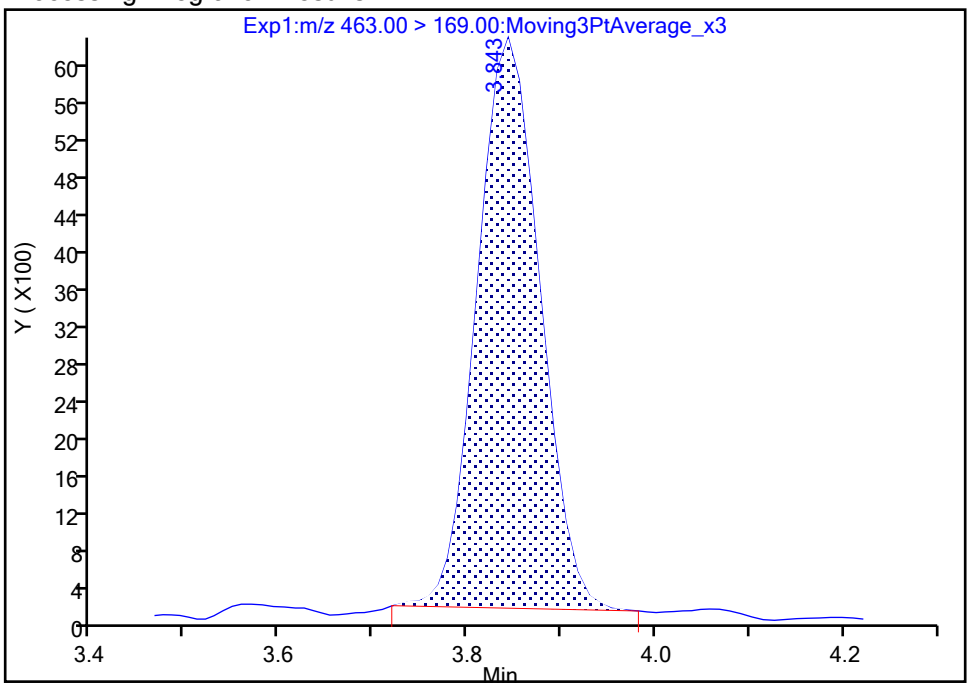
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

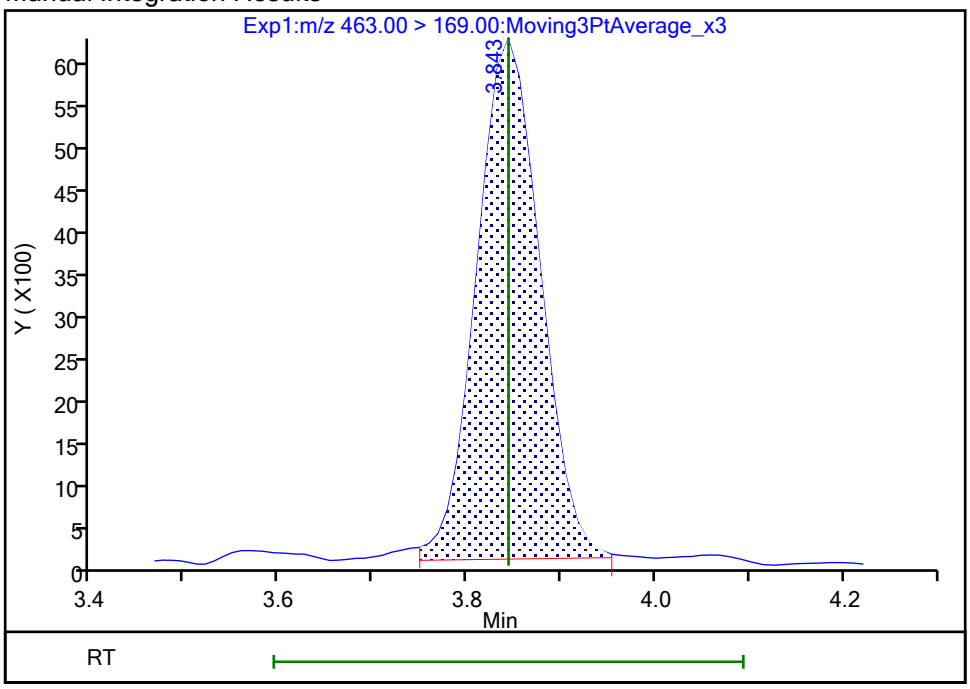
Processing Integration Results

RT: 3.84
Area: 28549
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 29172
Amount: 0.172097
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

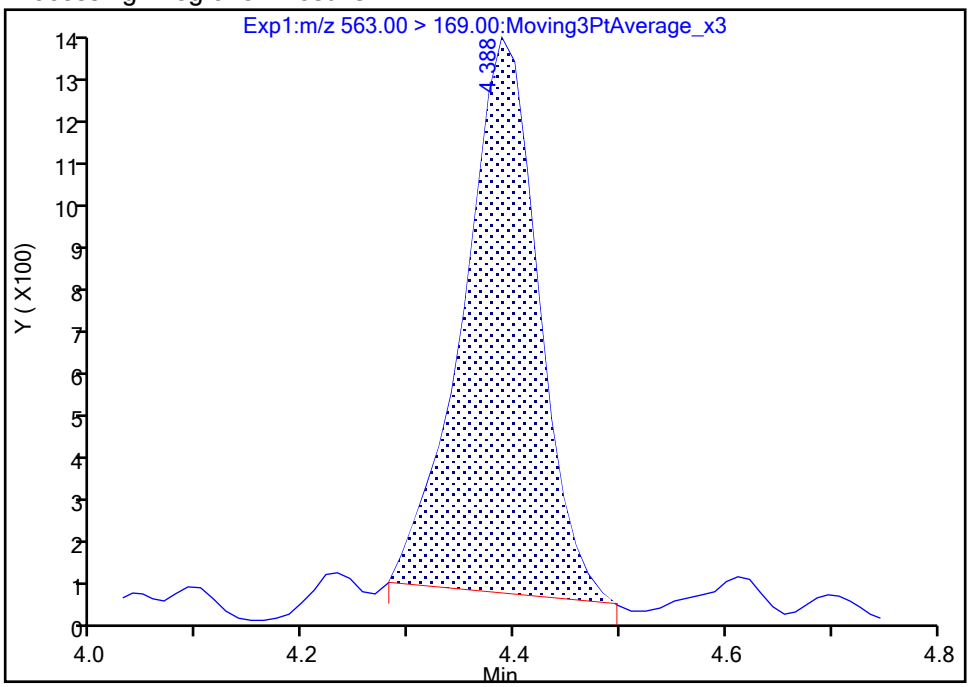
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

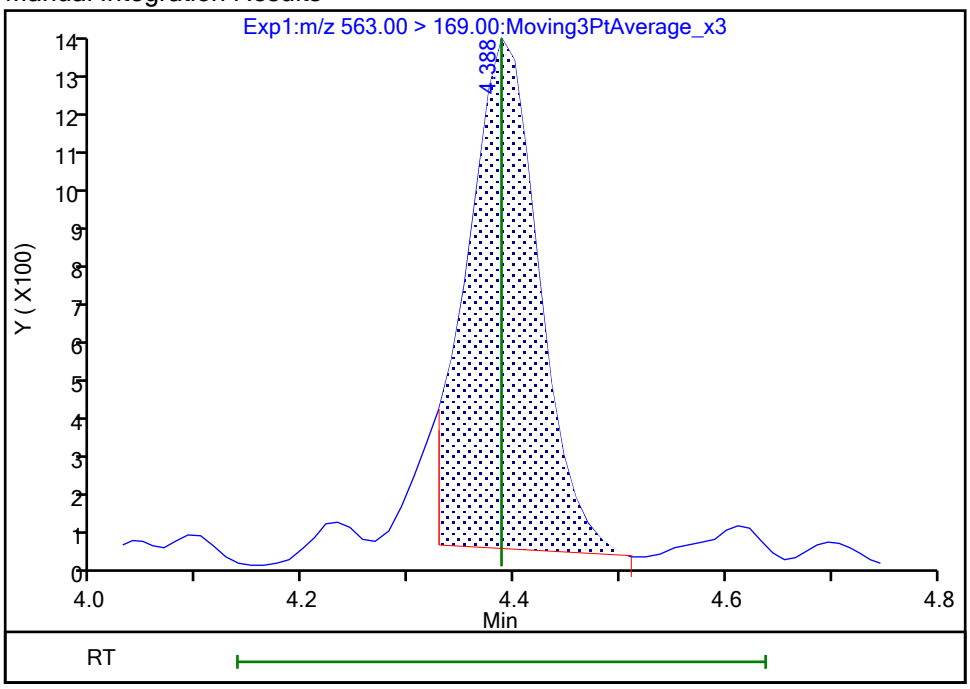
Processing Integration Results

RT: 4.39
Area: 6261
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 6020
Amount: 0.025700
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

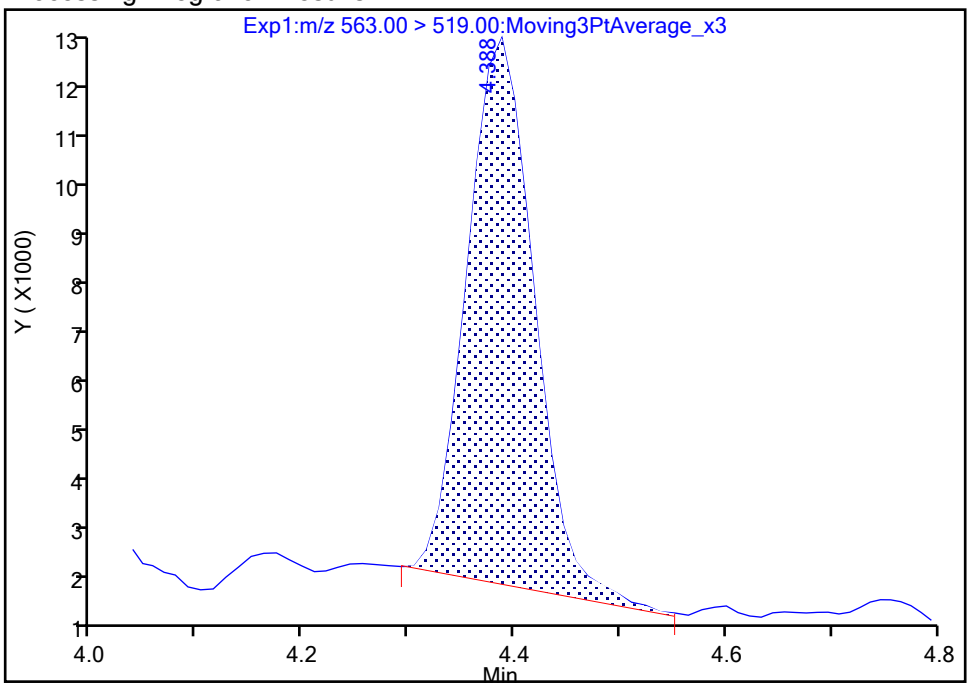
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

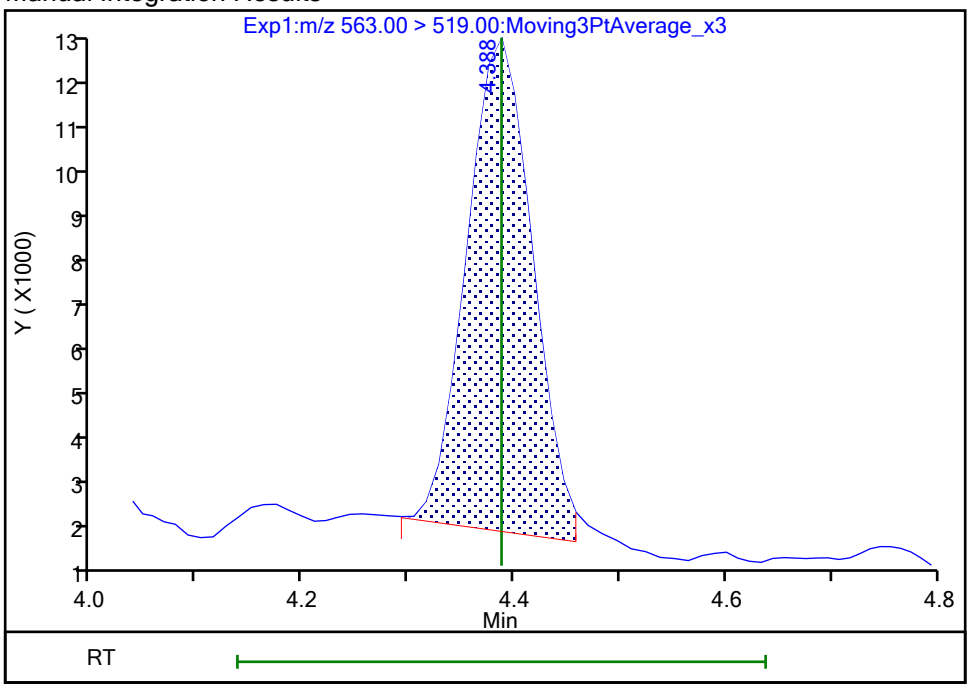
Processing Integration Results

RT: 4.39
Area: 44392
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 42939
Amount: 0.025700
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:02:36 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

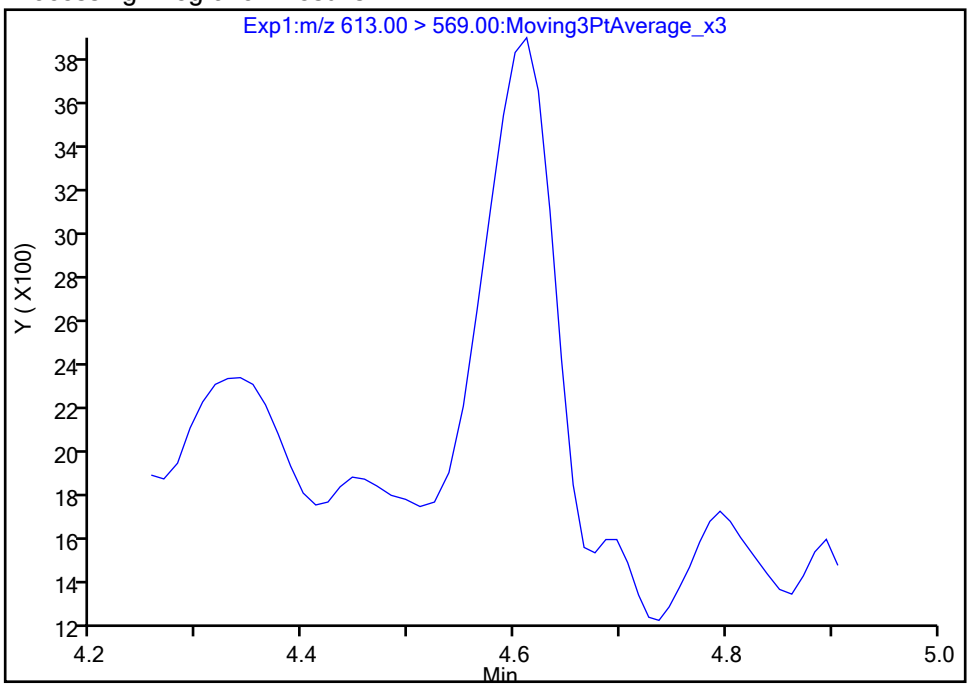
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

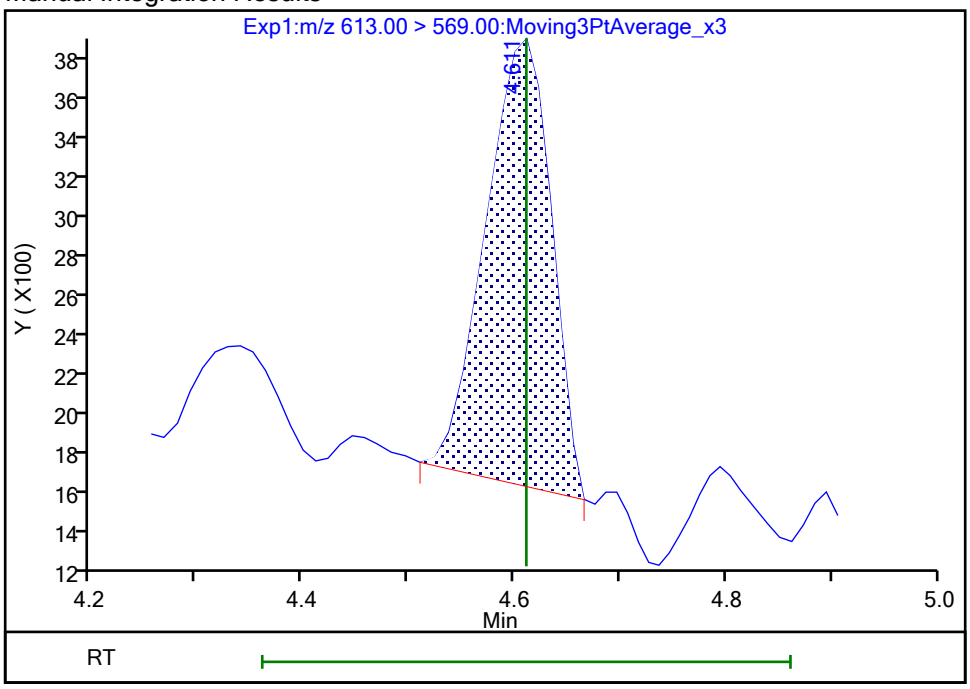
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 9470
Amount: 0.006190
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

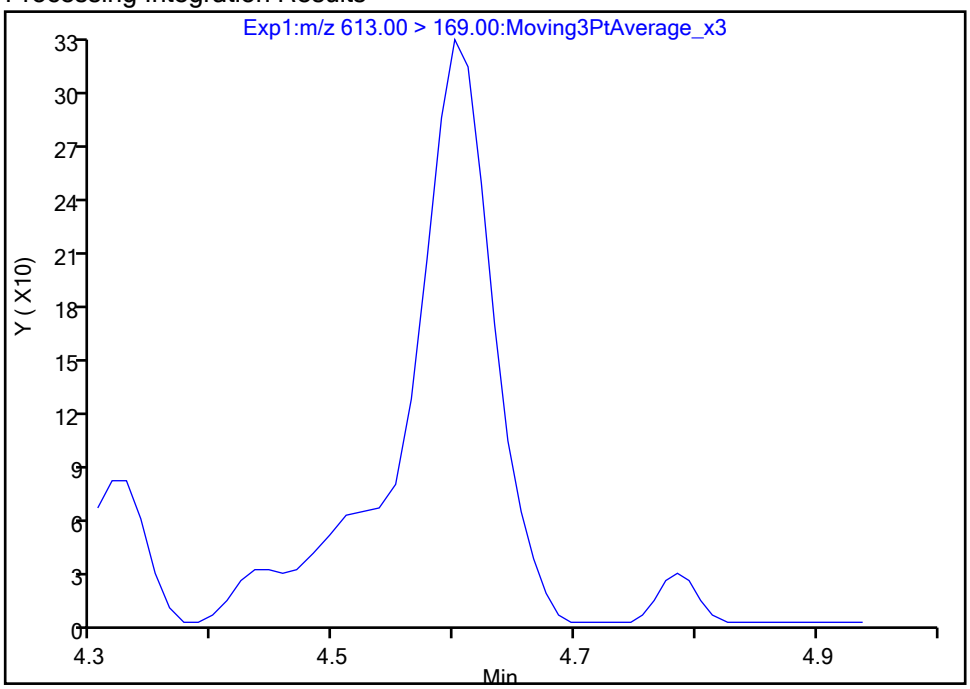
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

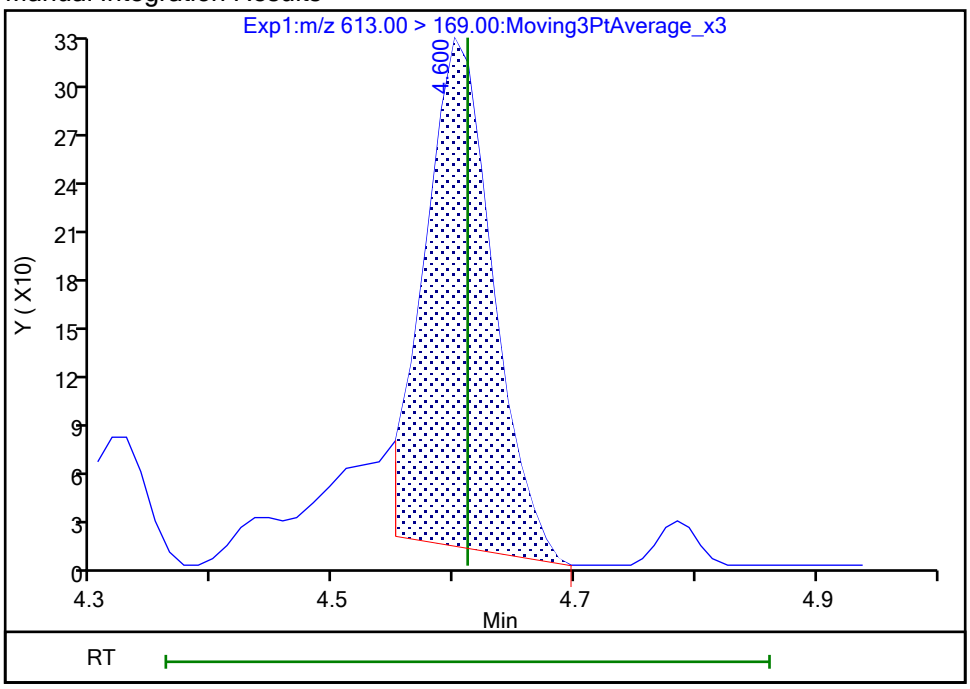
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 1214
Amount: 0.006190
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

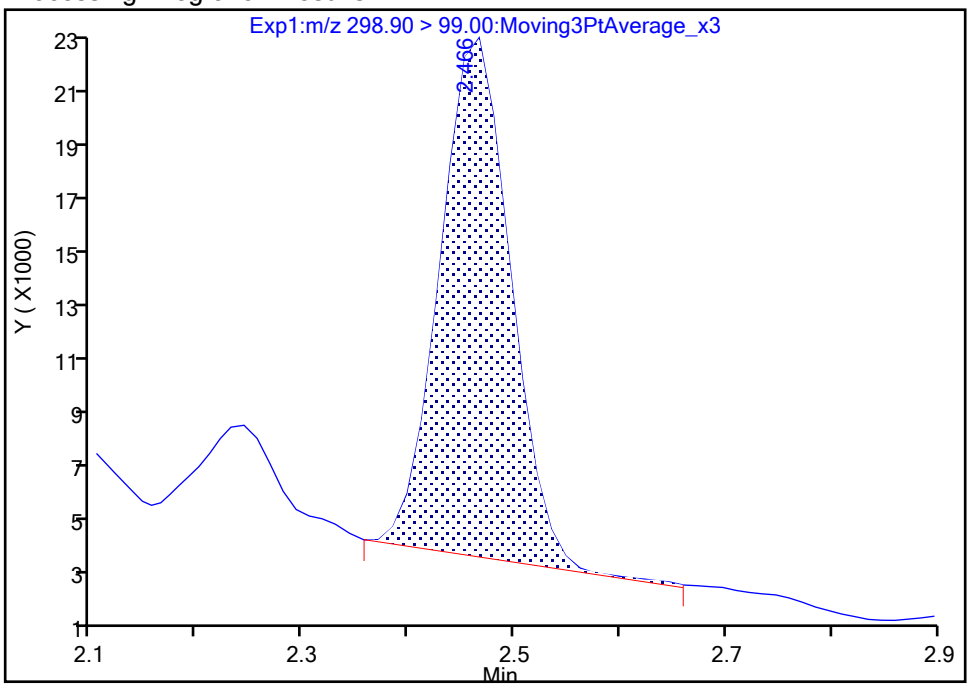
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

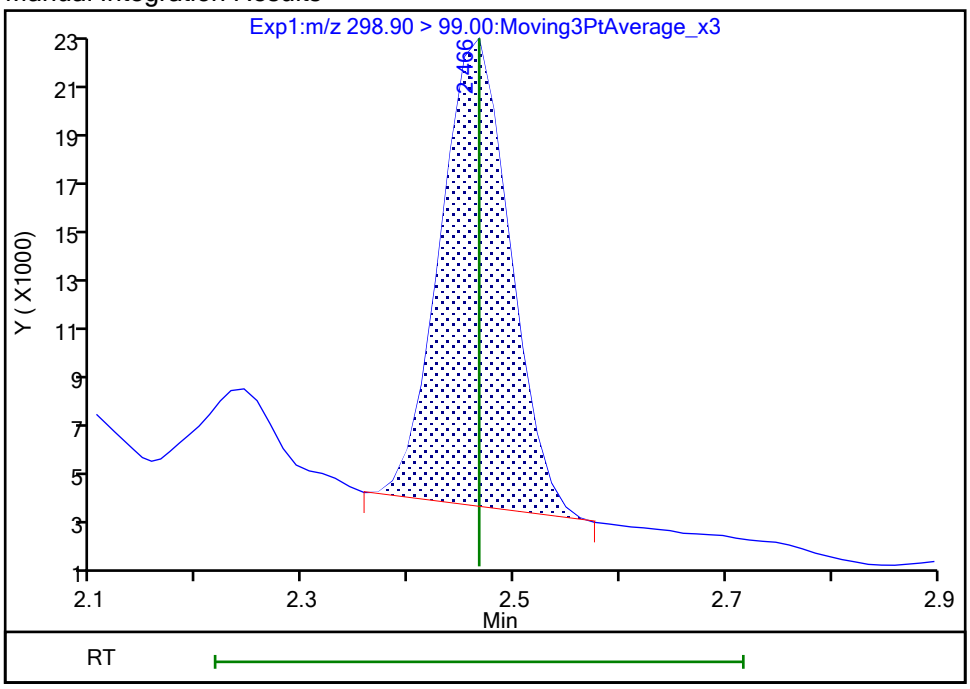
Processing Integration Results

RT: 2.47
Area: 88959
Amount: 0.247191
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 88492
Amount: 0.097026
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

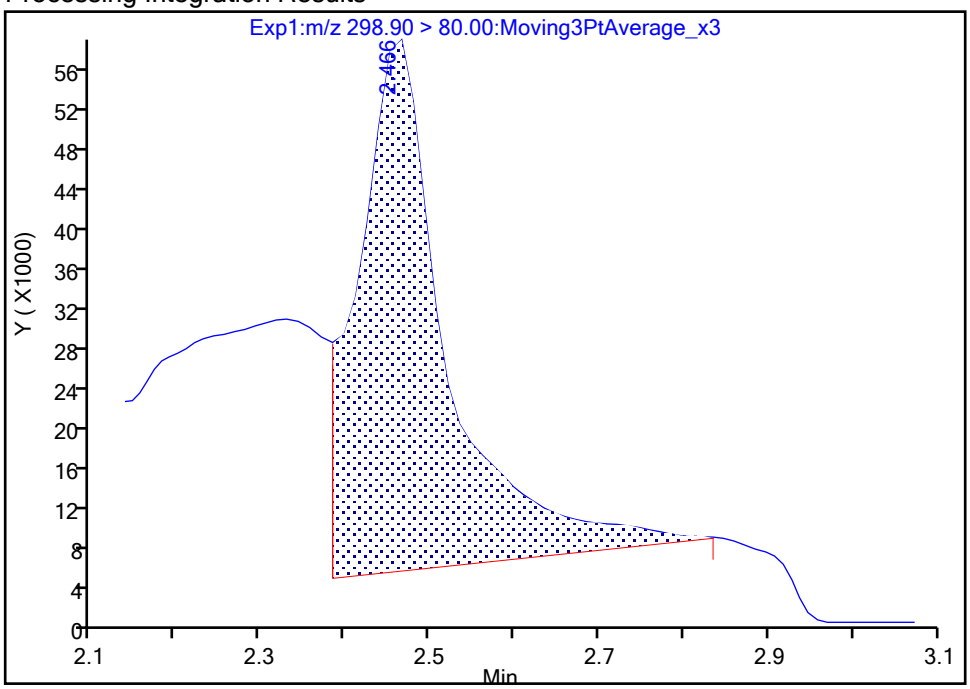
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

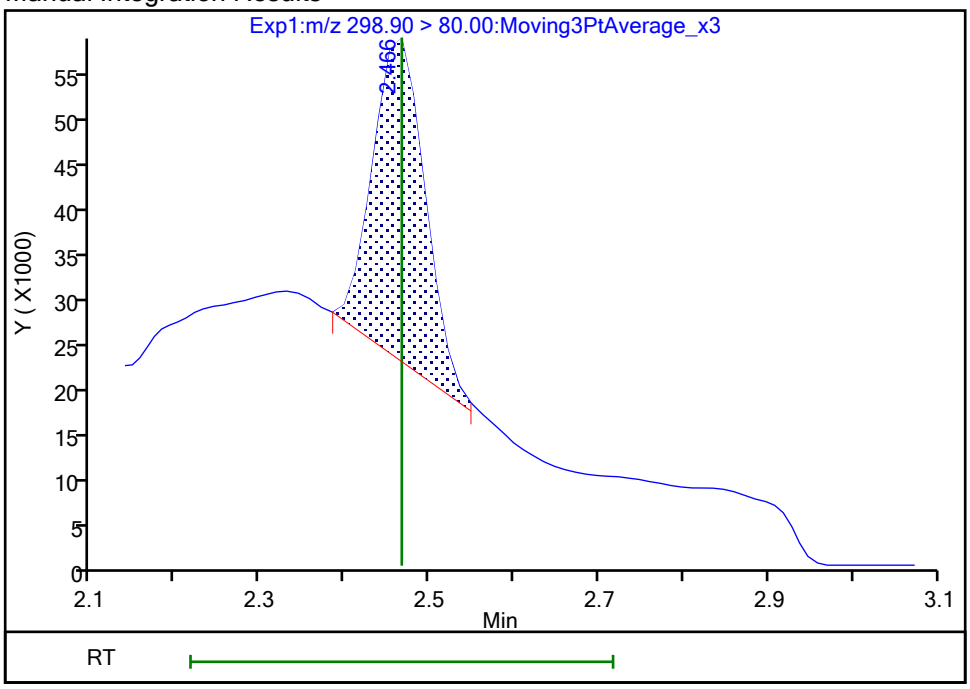
Processing Integration Results

RT: 2.47
Area: 389903
Amount: 0.247191
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 153043
Amount: 0.097026
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

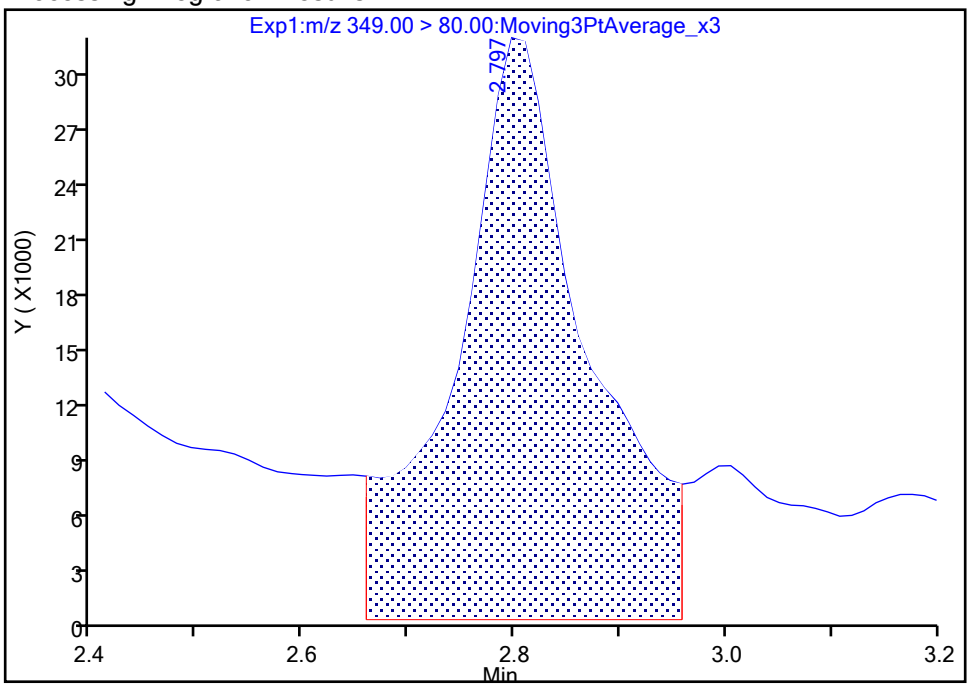
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

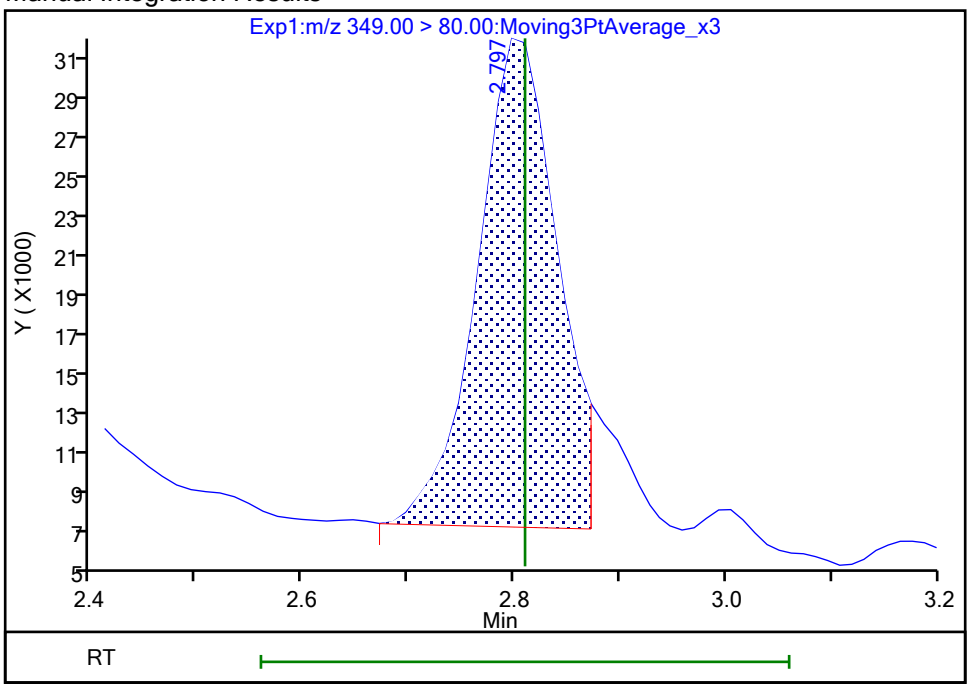
Processing Integration Results

RT: 2.80
Area: 274964
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 125811
Amount: 0.095357
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

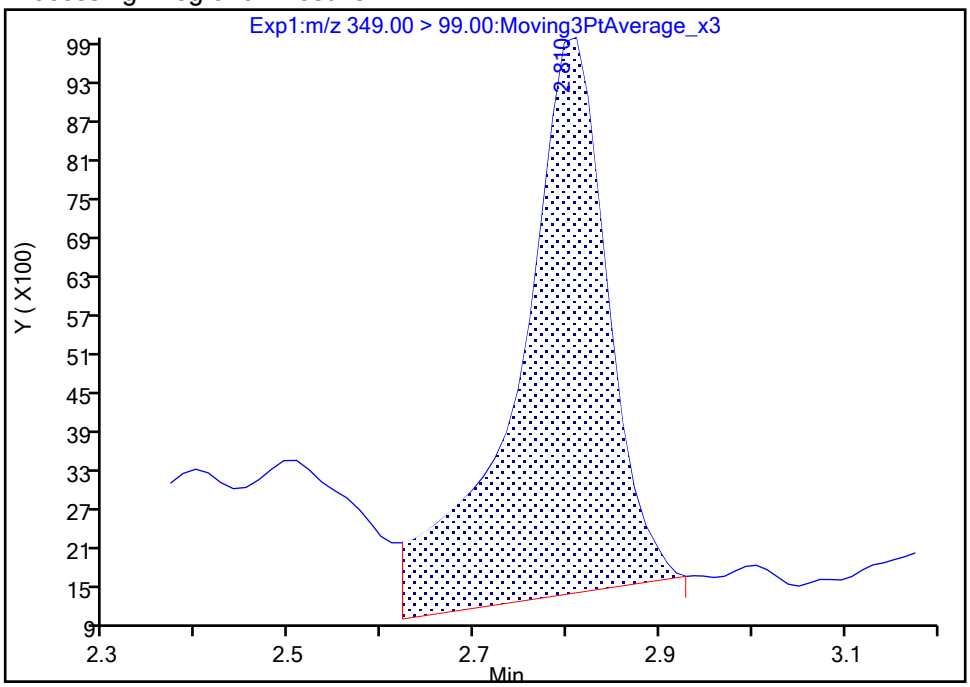
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

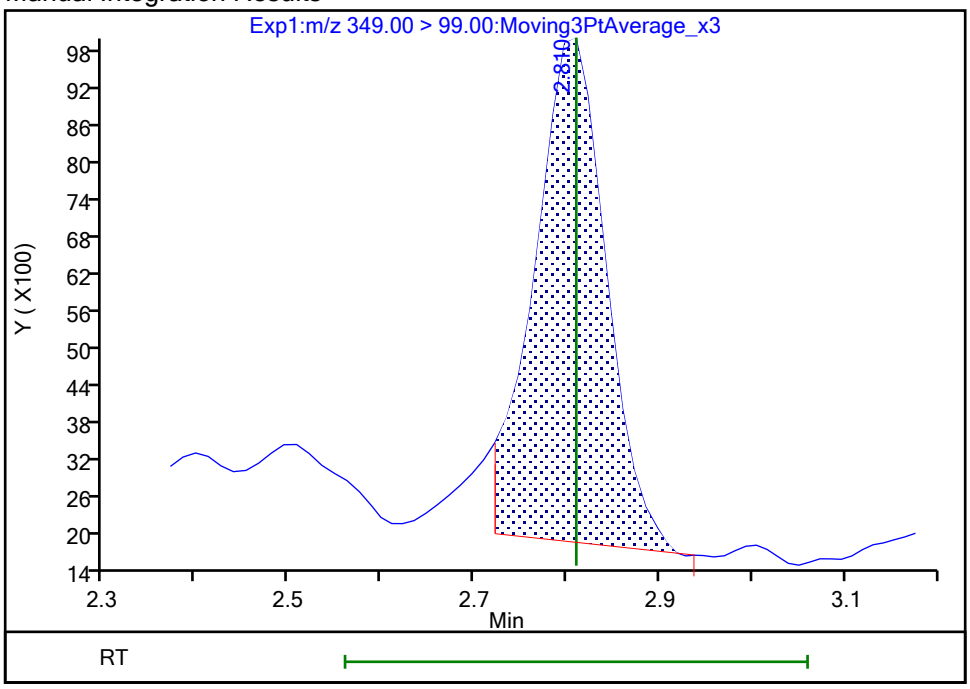
Processing Integration Results

RT: 2.81
Area: 58754
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 43983
Amount: 0.095357
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

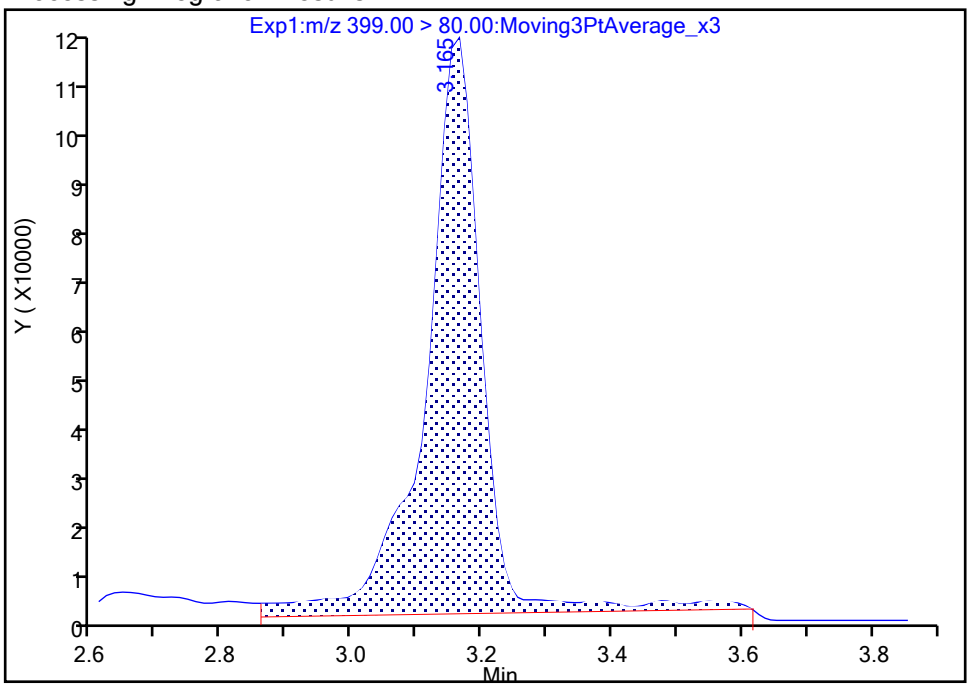
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

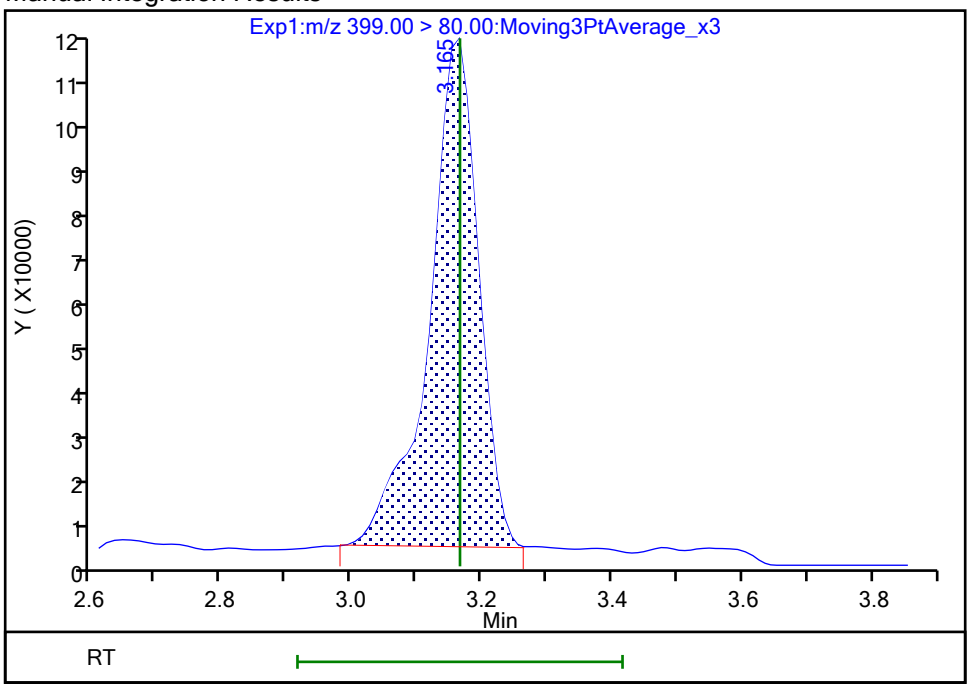
Processing Integration Results

RT: 3.17
Area: 671683
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 564680
Amount: 0.504898
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

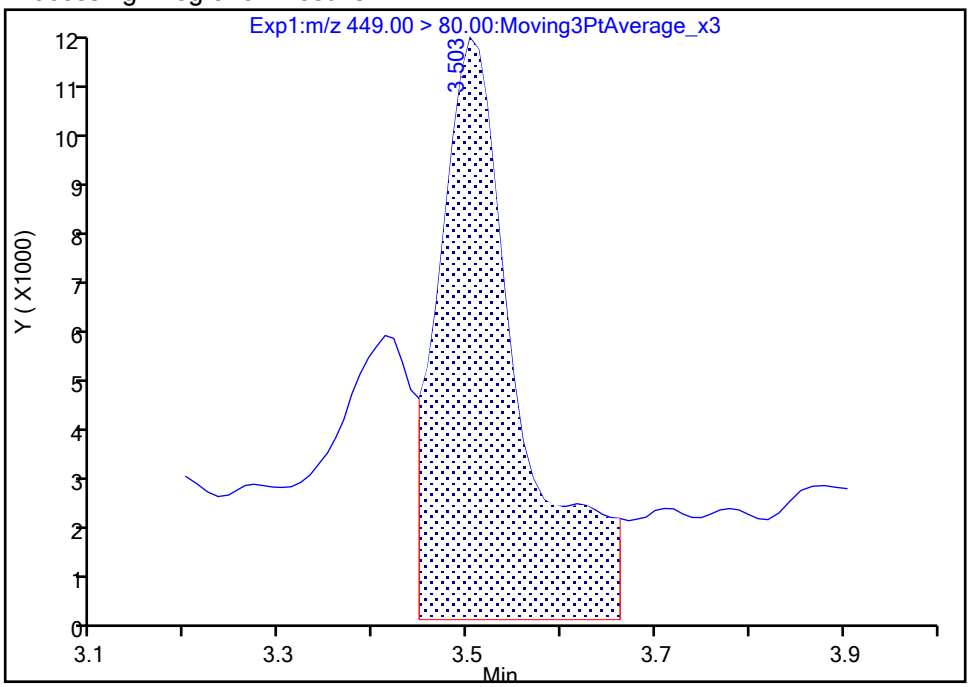
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

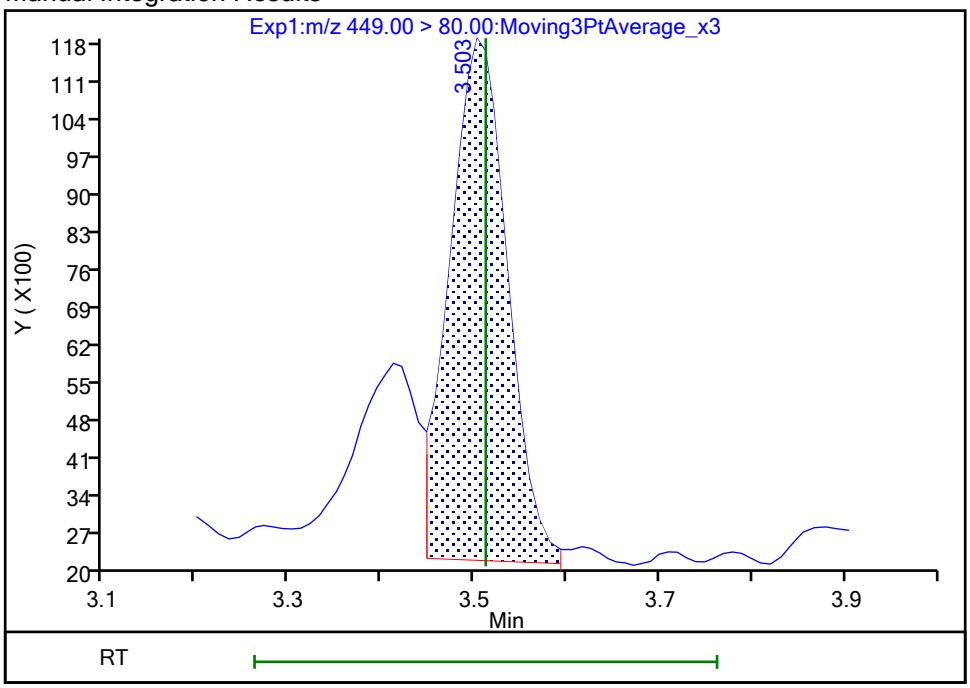
Processing Integration Results

RT: 3.50
Area: 69339
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 41673
Amount: 0.043074
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:01:52 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

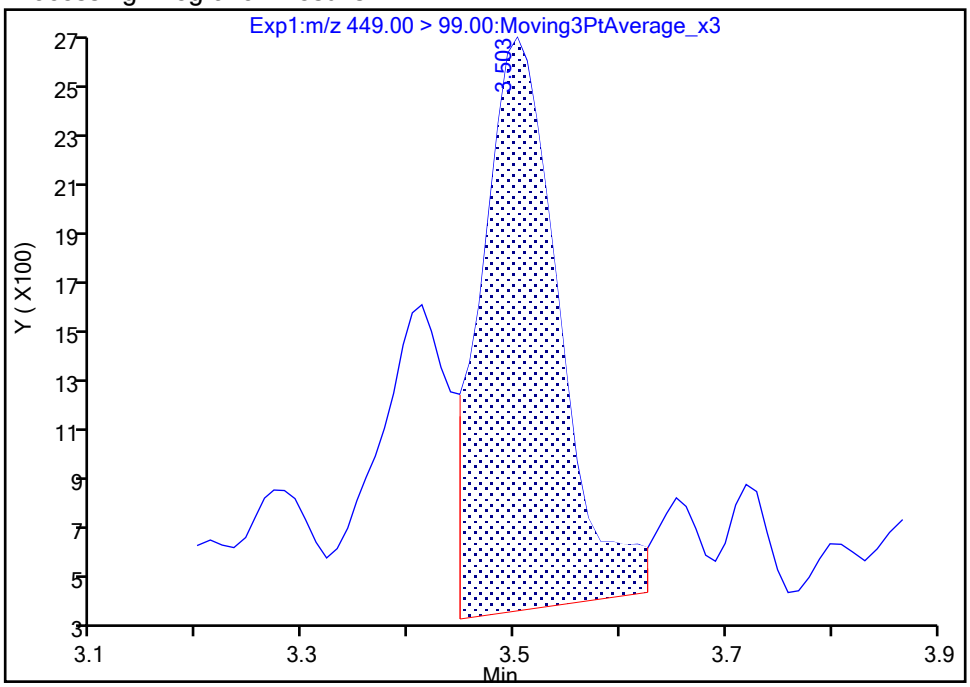
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

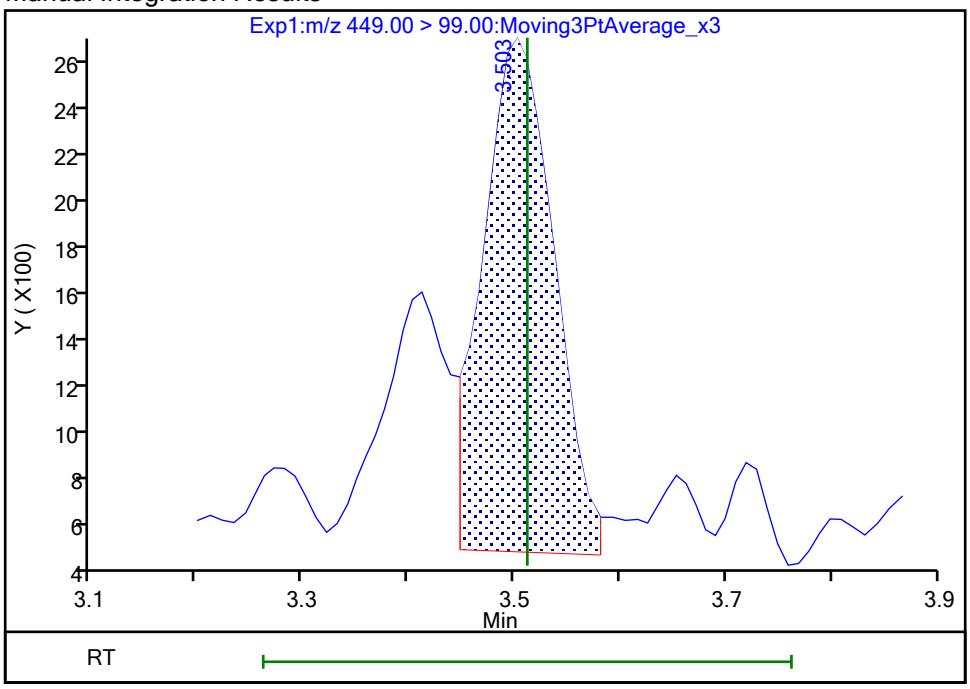
Processing Integration Results

RT: 3.50
Area: 11487
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 9975
Amount: 0.043074
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:01:59 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

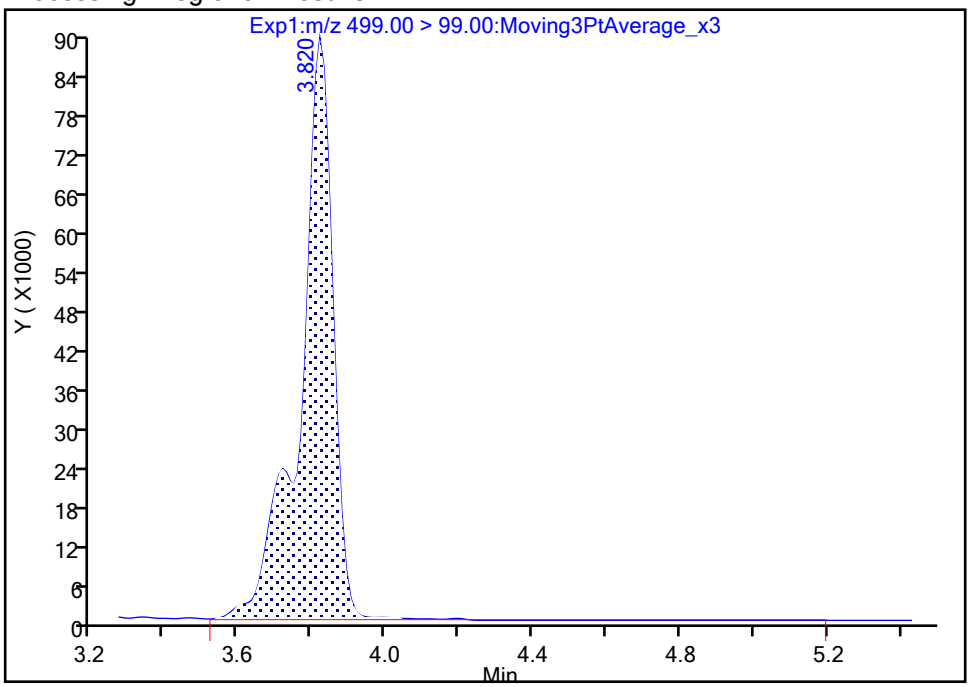
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

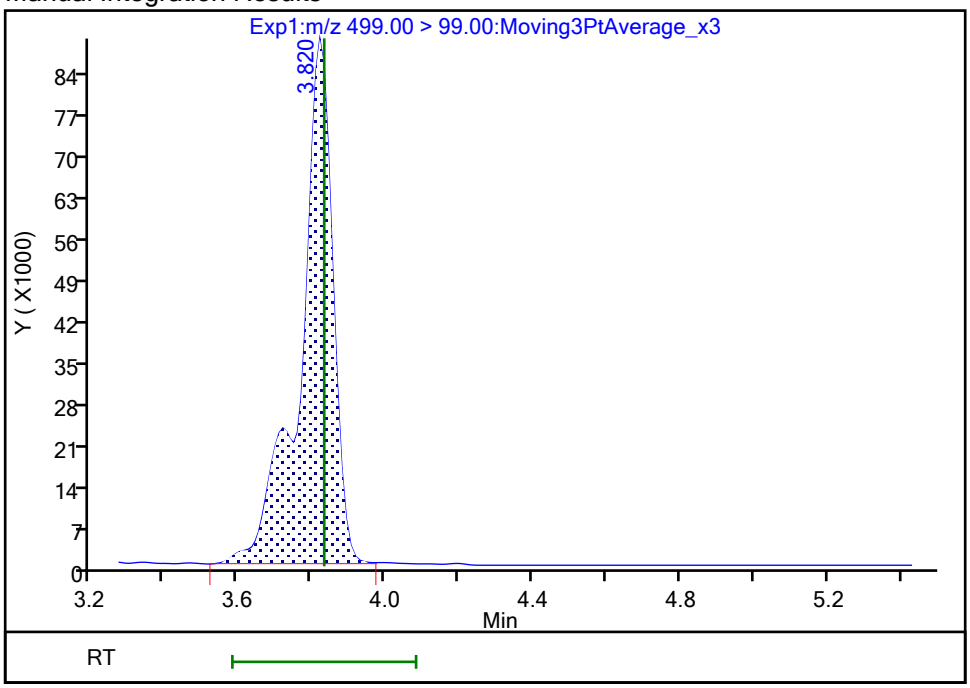
Processing Integration Results

RT: 3.82
Area: 564948
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 554805
Amount: 2.738182
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

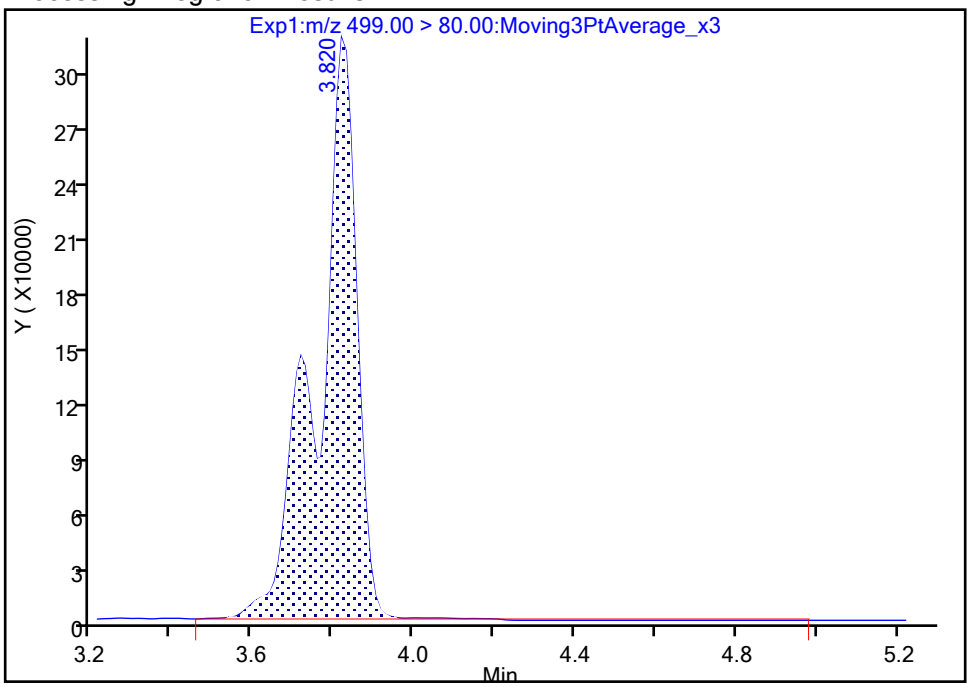
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

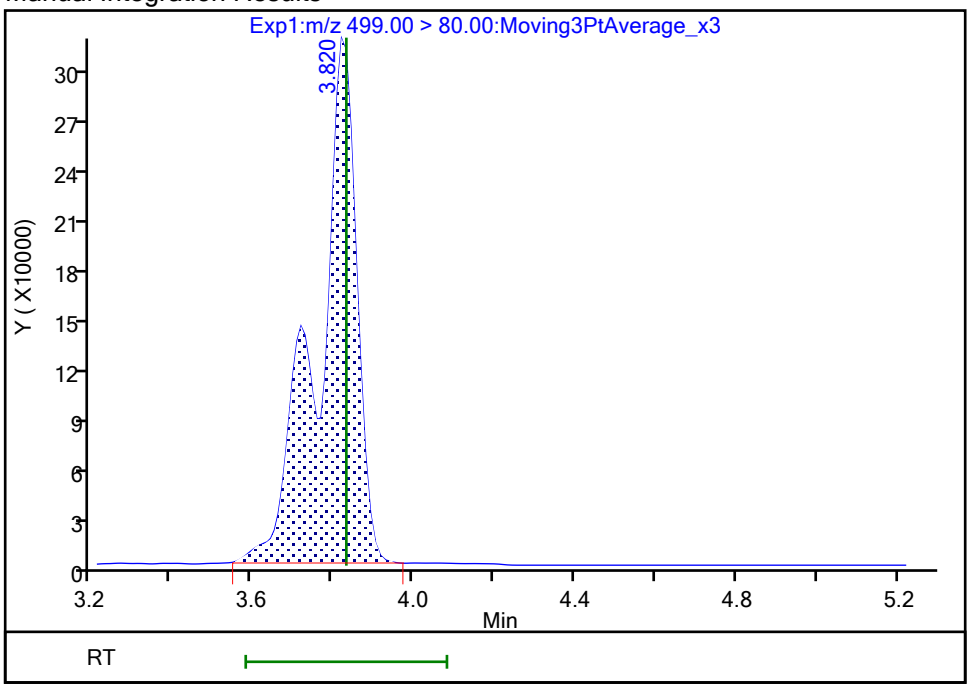
Processing Integration Results

RT: 3.82
Area: 2181028
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 2138071
Amount: 2.738182
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:25:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

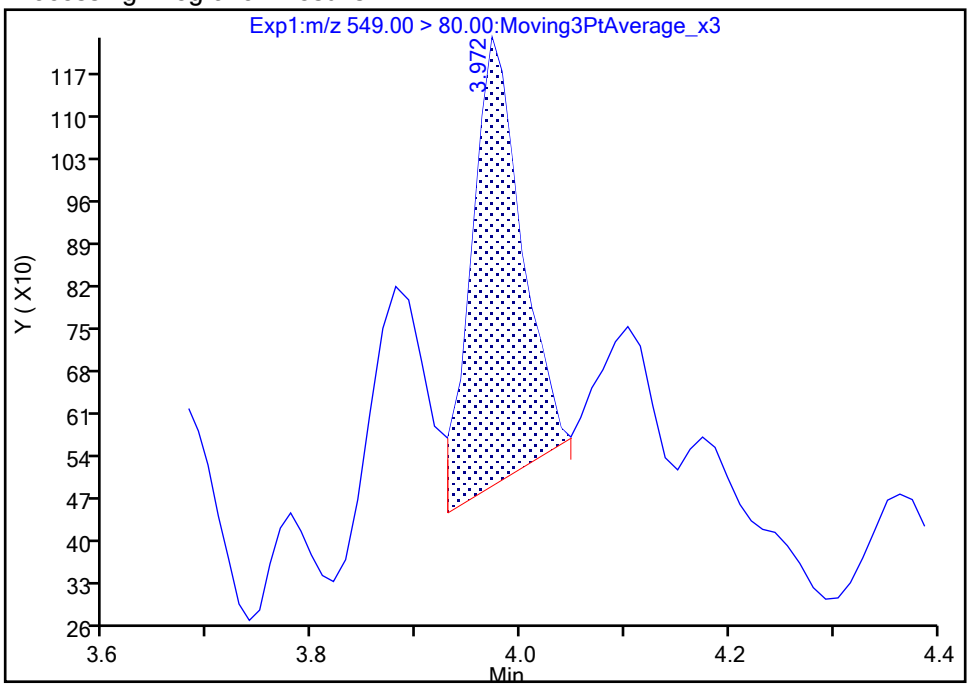
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

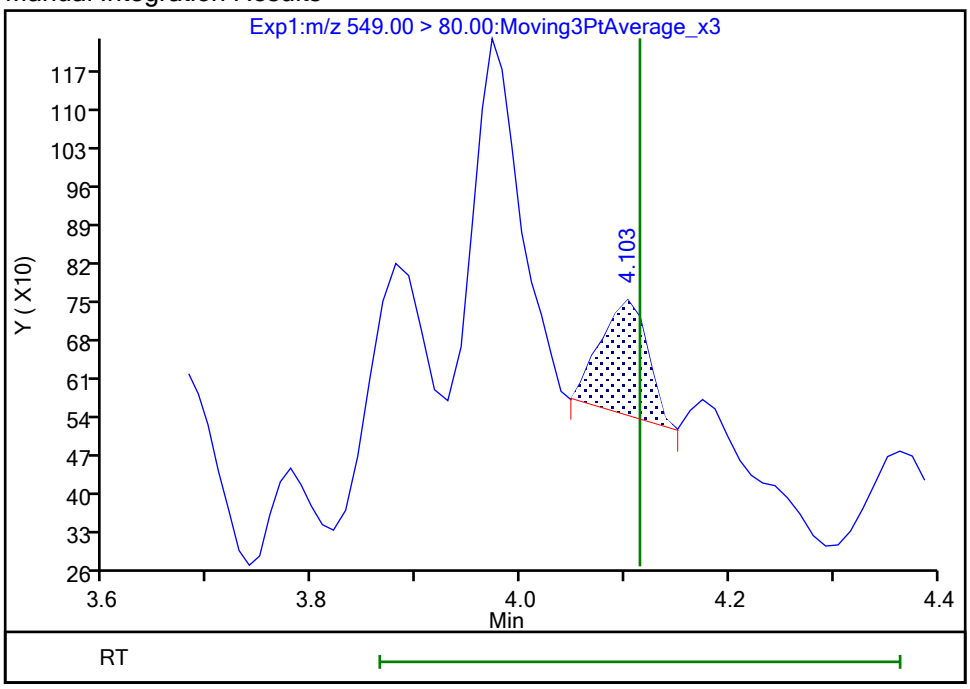
Processing Integration Results

RT: 3.97
Area: 2420
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 657
Amount: 0.001106
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

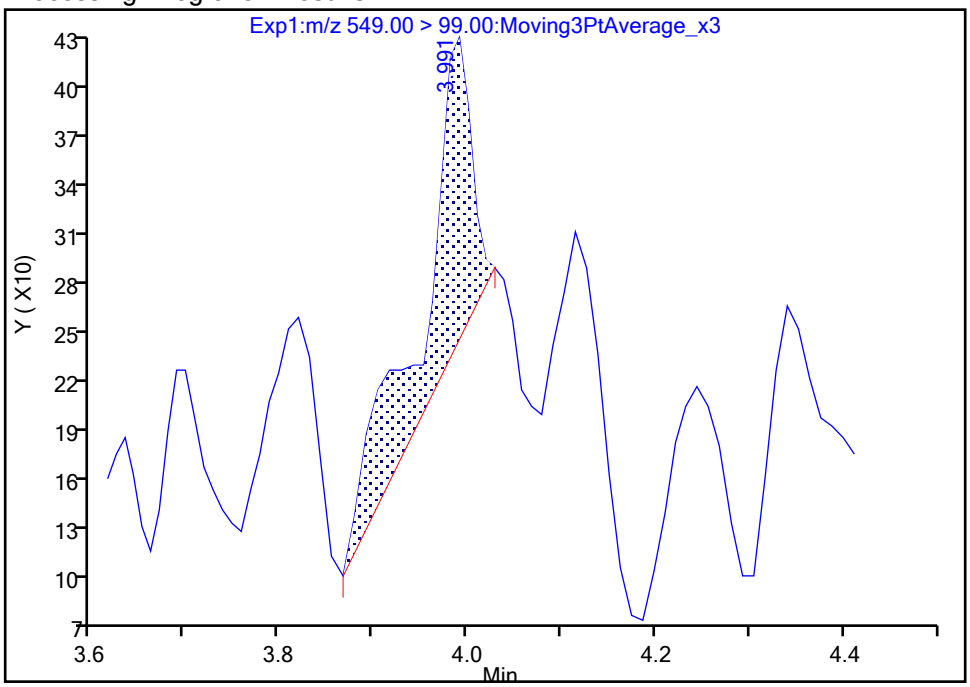
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

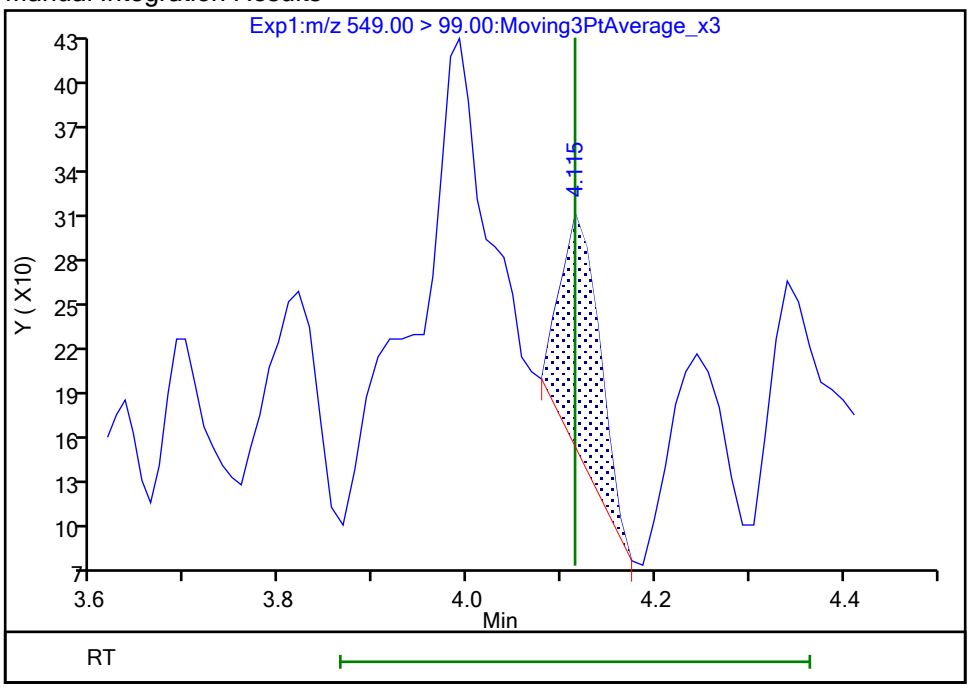
Processing Integration Results

RT: 3.99
Area: 669
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 467
Amount: 0.001106
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

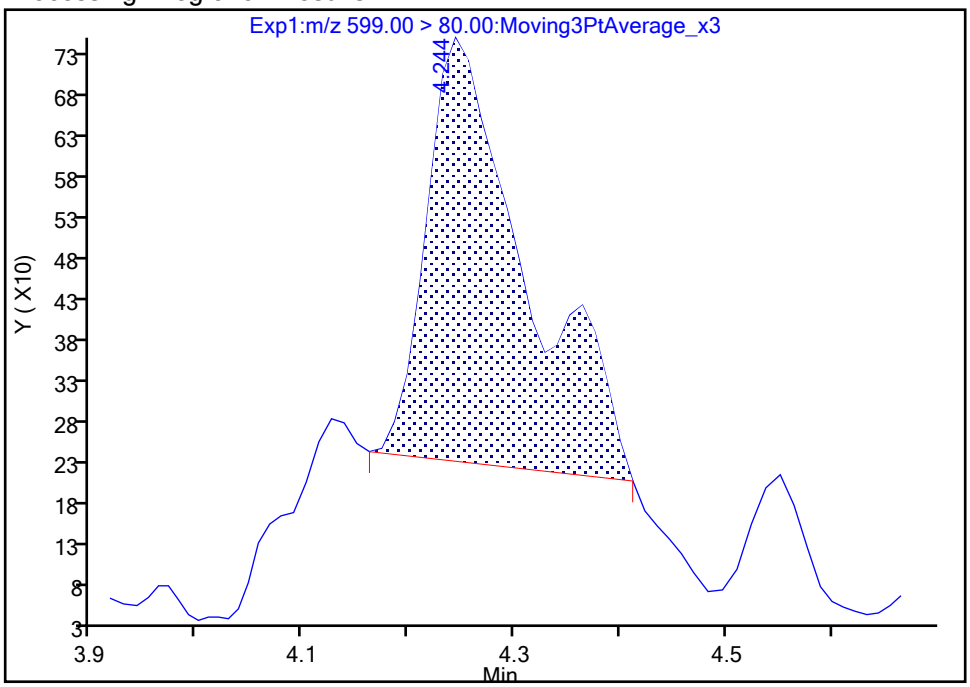
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

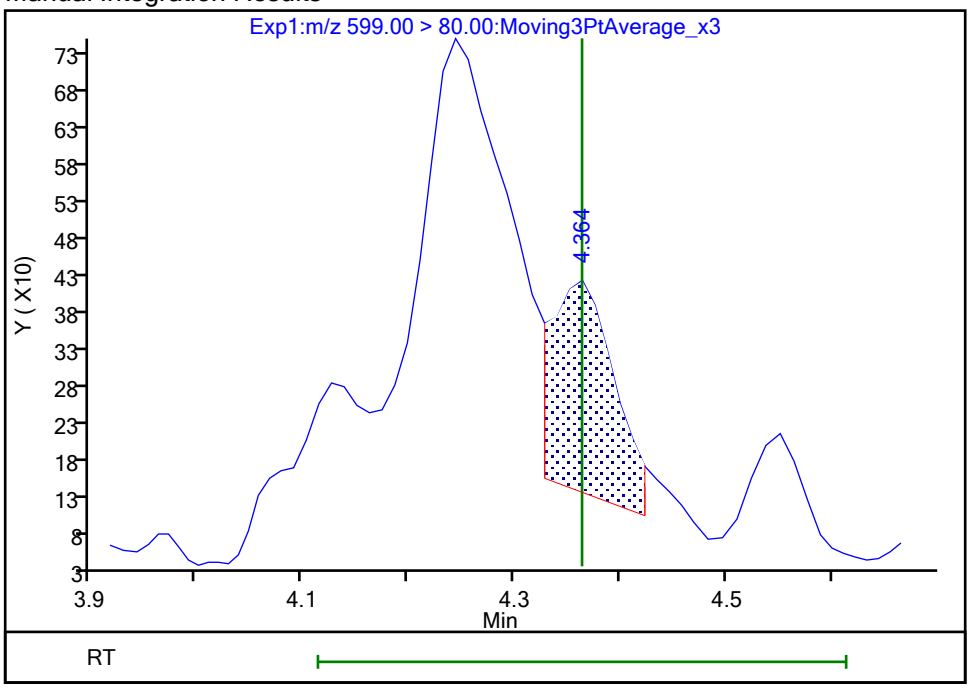
Processing Integration Results

RT: 4.24
Area: 3363
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 1142
Amount: 0.002498
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

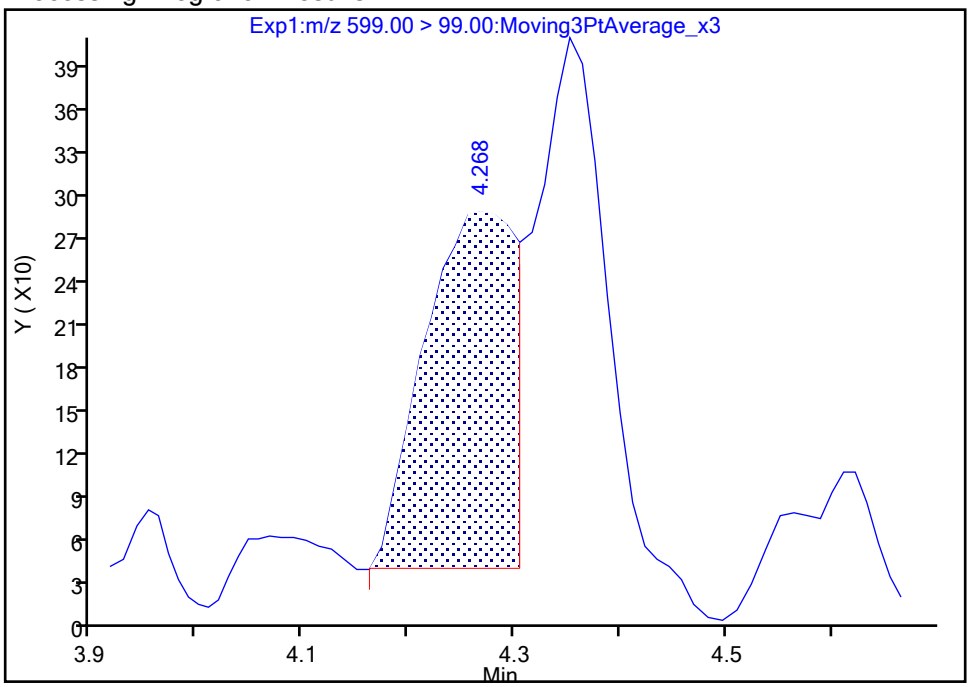
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

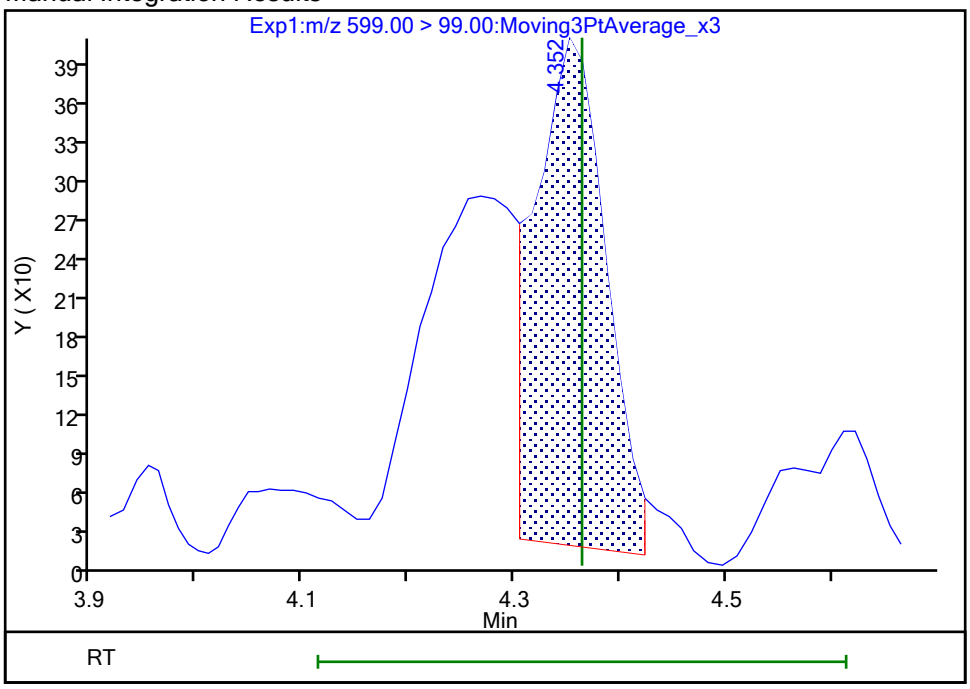
Processing Integration Results

RT: 4.27
Area: 1423
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 1774
Amount: 0.002498
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

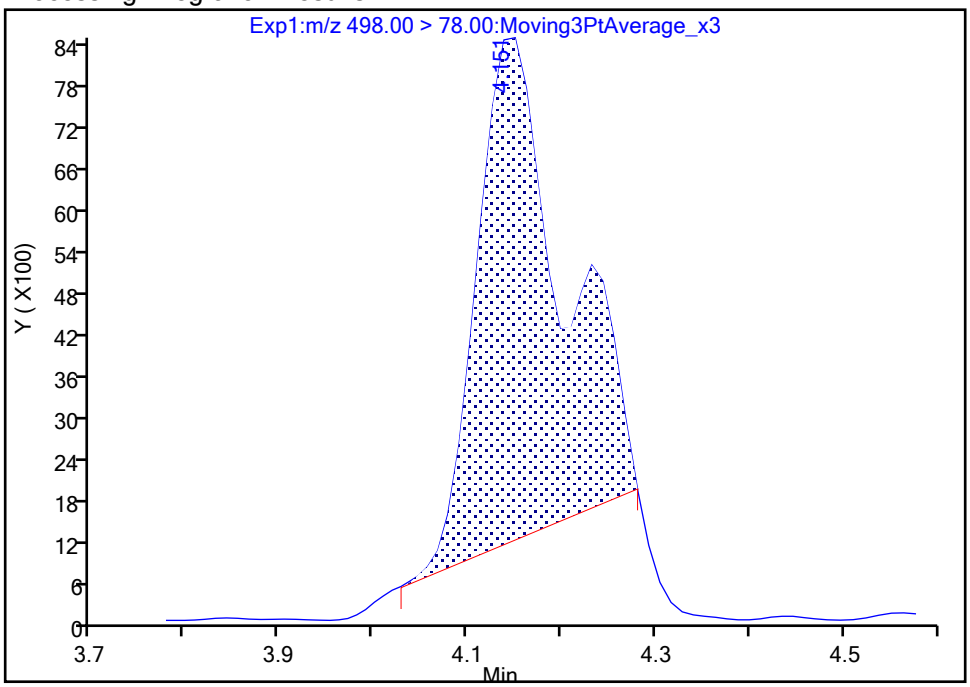
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

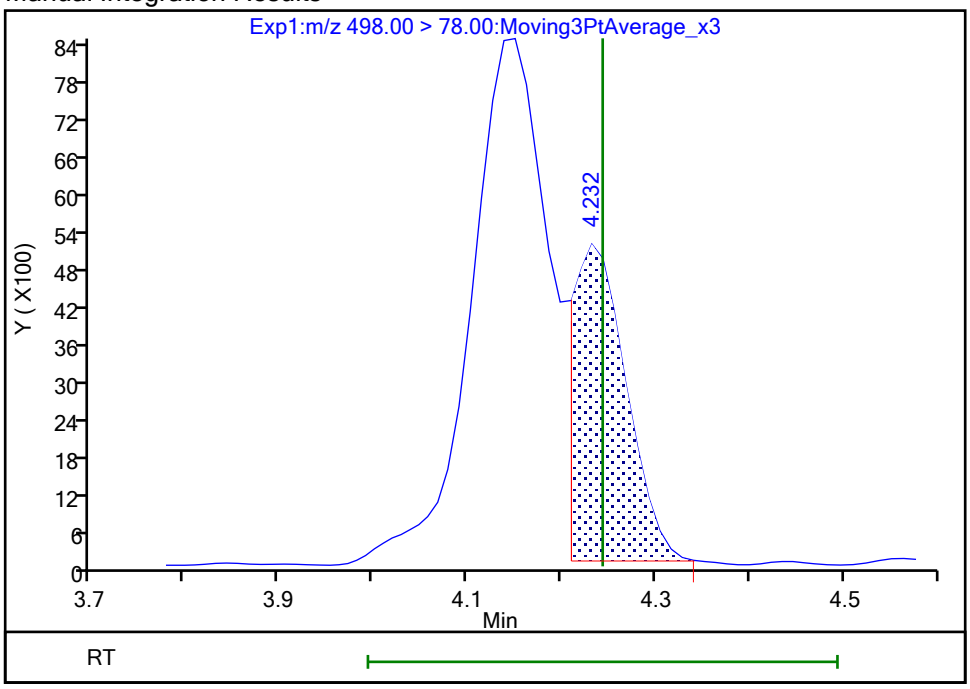
Processing Integration Results

RT: 4.15
Area: 46795
Amount: 0.046646
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 18981
Amount: 0.018921
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

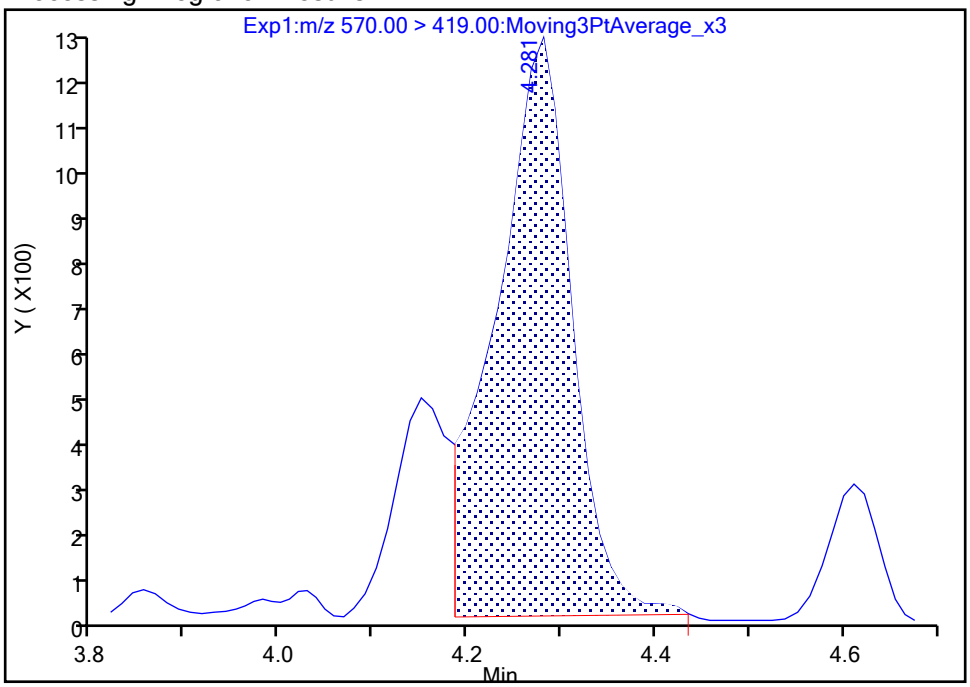
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

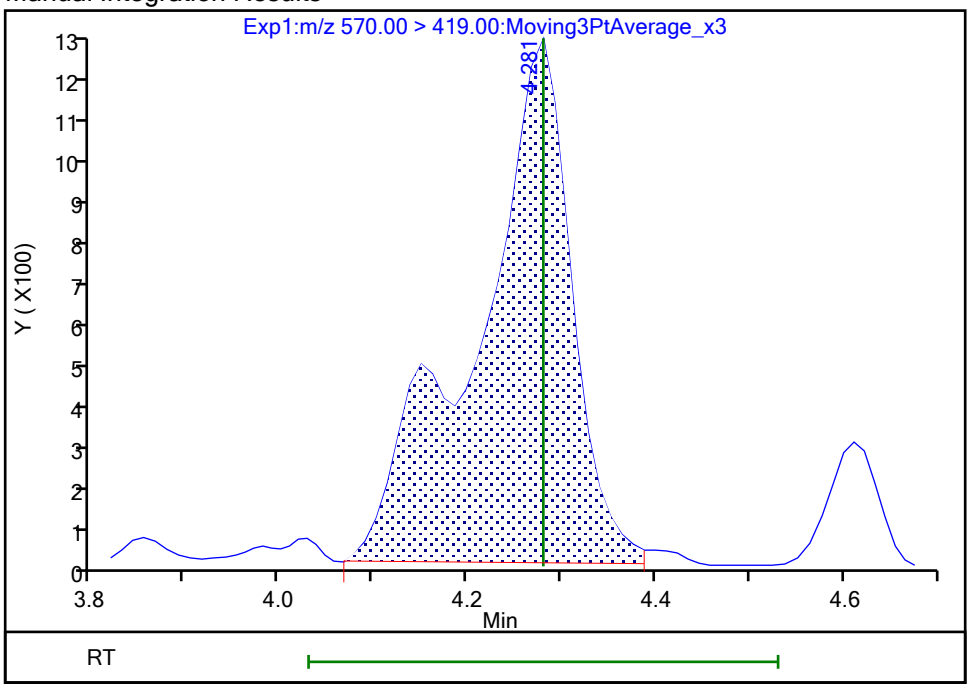
Processing Integration Results

RT: 4.28
Area: 7133
Amount: 0.018240
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 9092
Amount: 0.023249
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:26:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

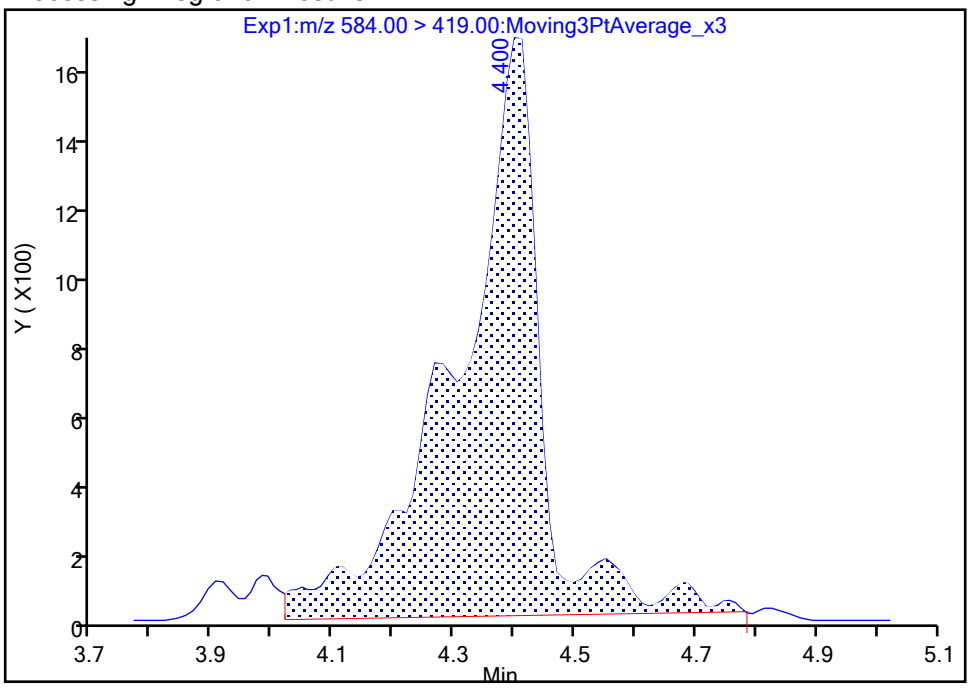
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

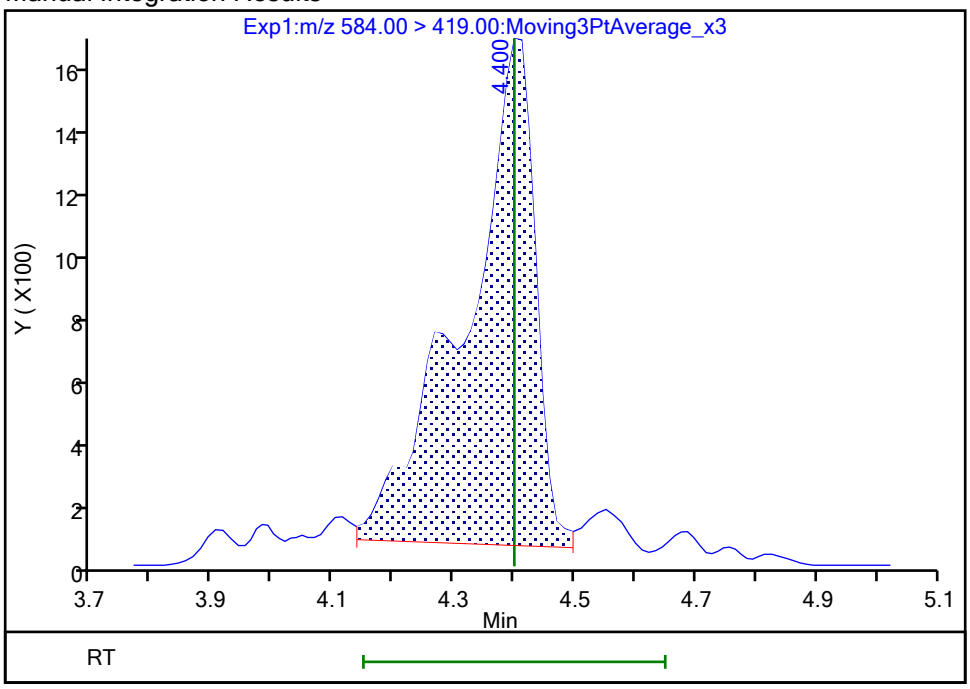
Processing Integration Results

RT: 4.40
Area: 15753
Amount: 0.033528
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 12633
Amount: 0.026887
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

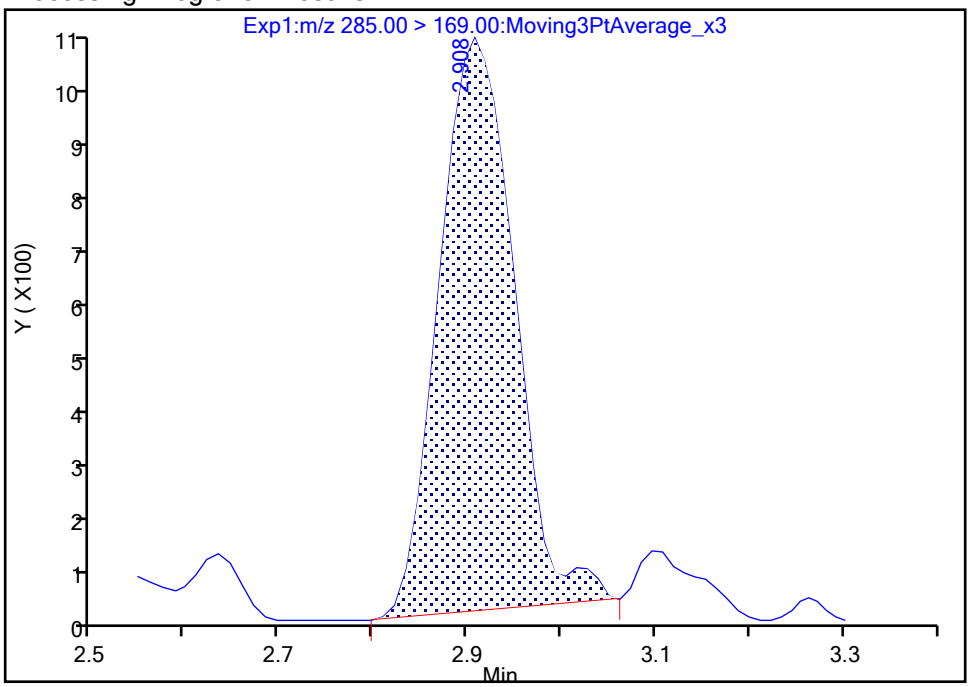
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

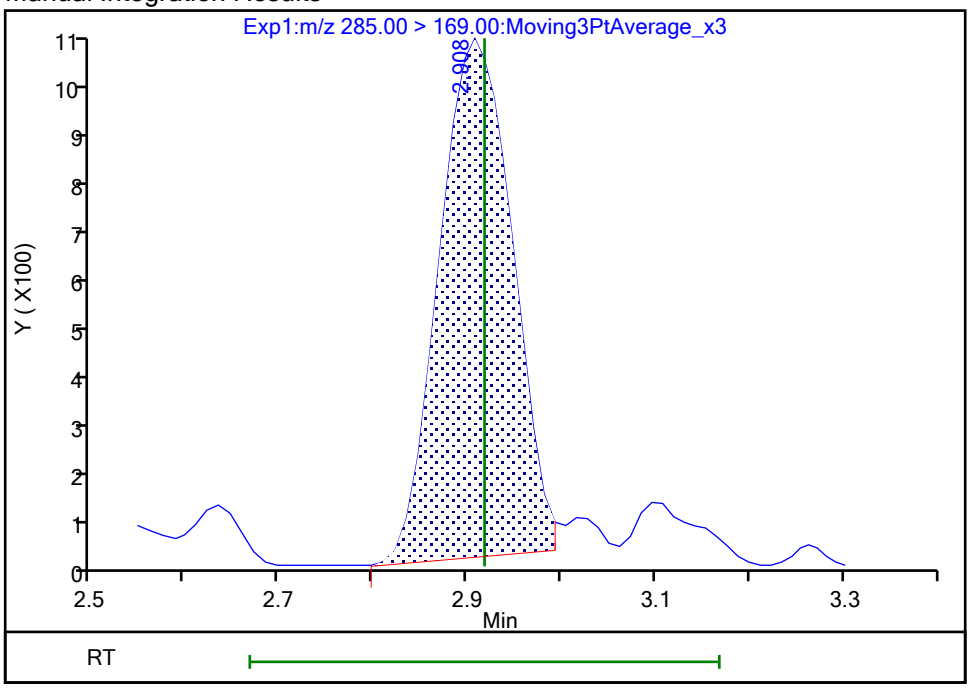
Processing Integration Results

RT: 2.91
Area: 5524
Amount: 0.031600
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 5362
Amount: 0.030673
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:24:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

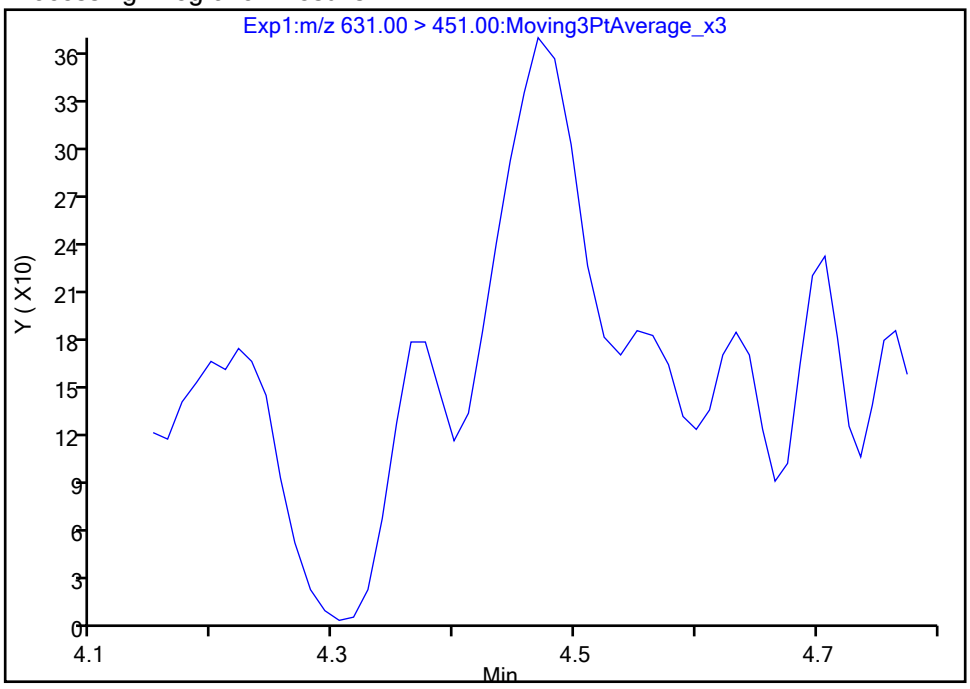
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

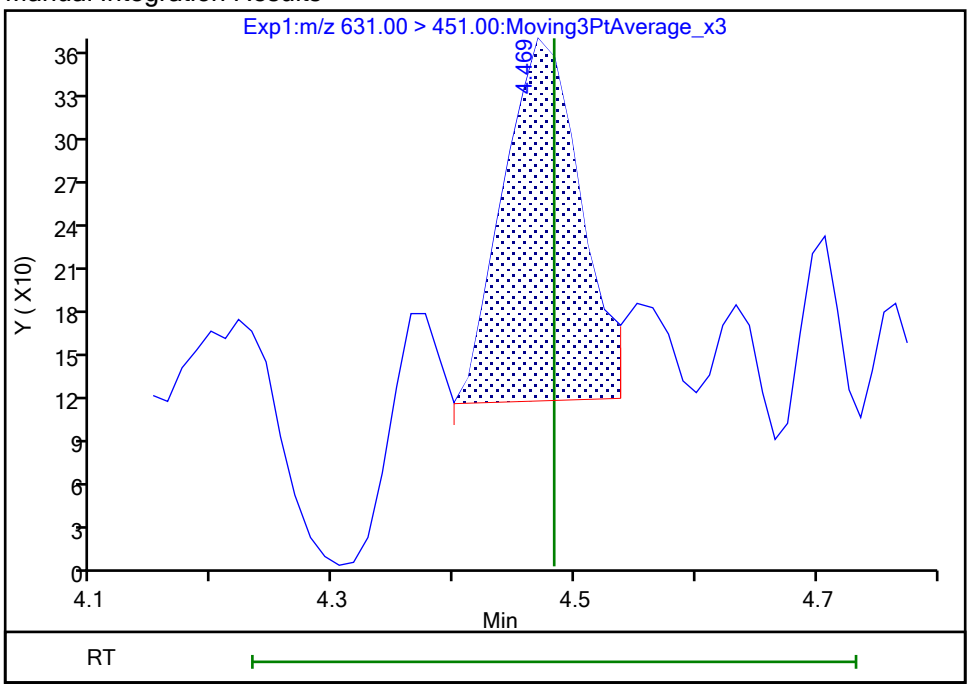
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.47
Area: 1089
Amount: 0.000297
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

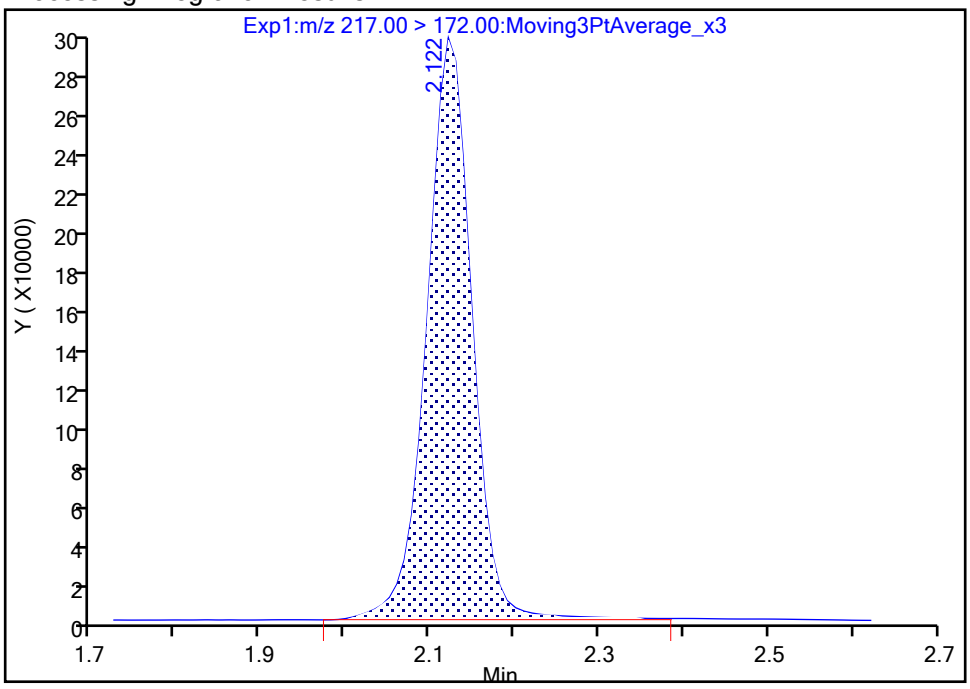
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

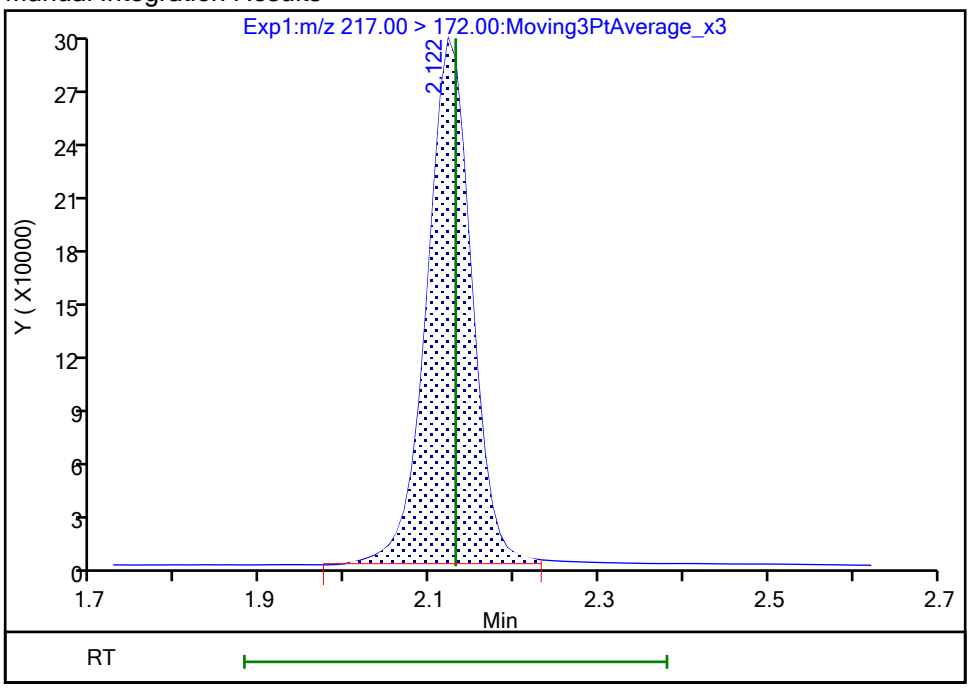
Processing Integration Results

RT: 2.12
Area: 1091292
Amount: 0.862365
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1084237
Amount: 0.856790
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:20:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

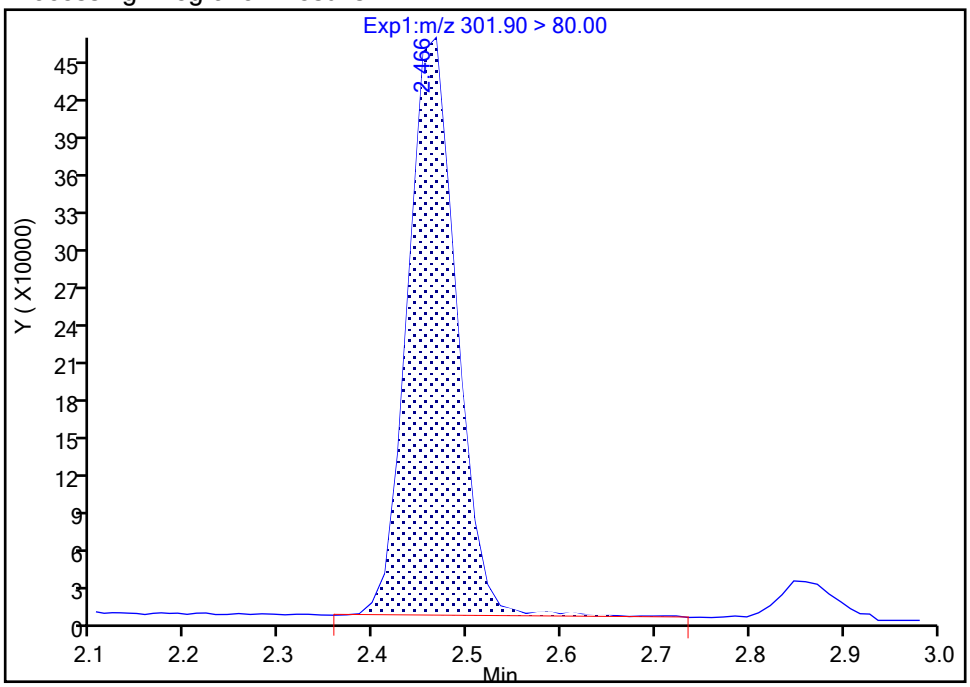
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

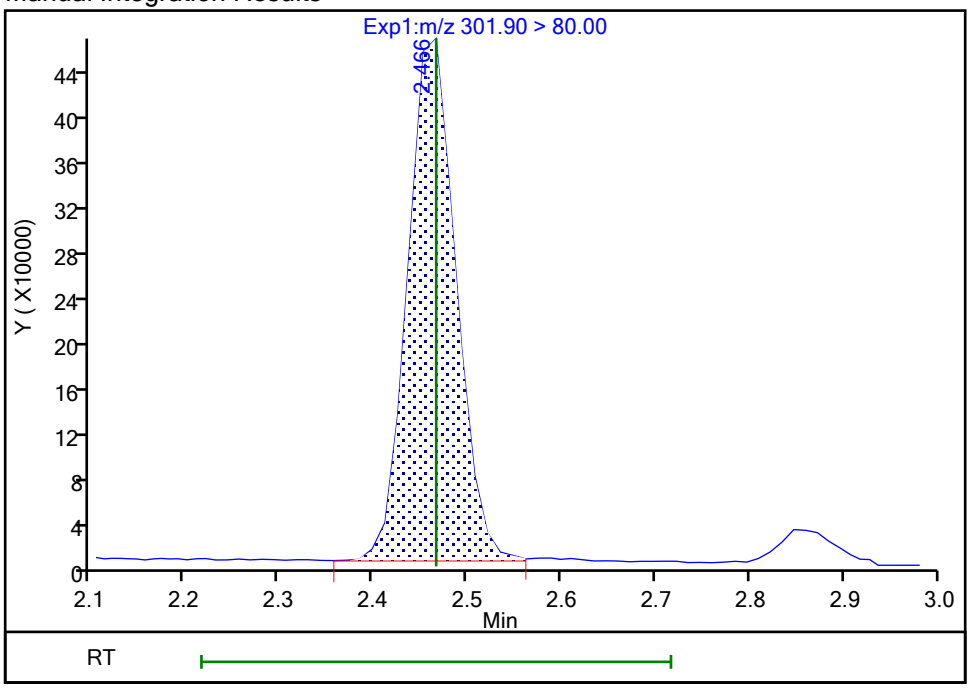
Processing Integration Results

RT: 2.47
Area: 1660128
Amount: 1.249291
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1641725
Amount: 1.235442
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:21:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

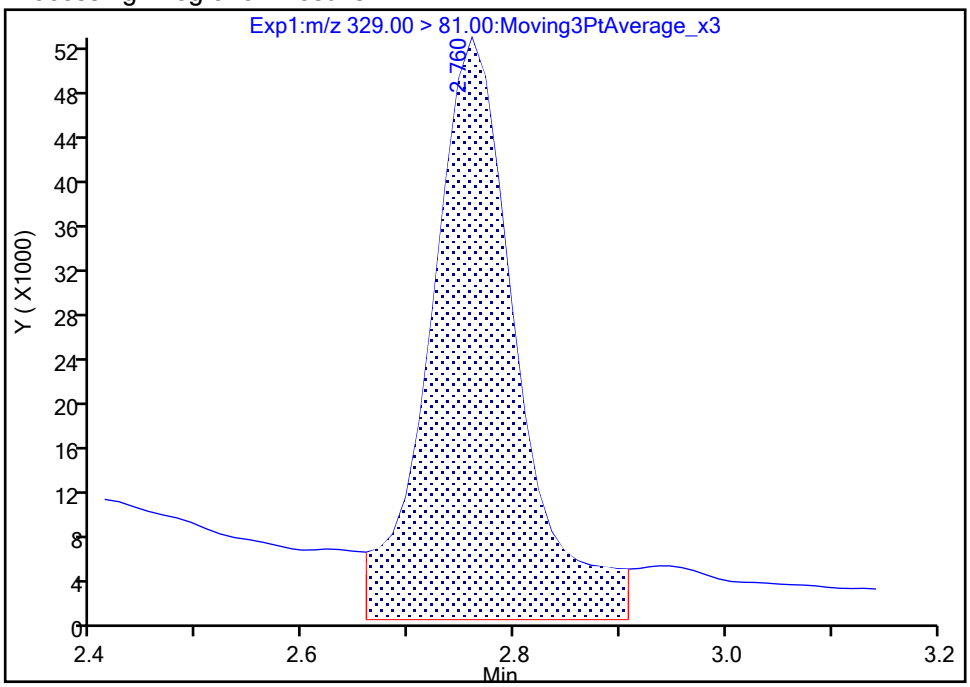
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A14.d				
Injection Date:	24-Oct-2023 19:46:17	Instrument ID:	LC812		
Lims ID:	460-290517-B-11-A	Lab Sample ID:	200-290517-11		
Client ID:	MW93-101623-1206-30				
Operator ID:	LC812user	ALS Bottle#:	11	Worklist Smp#:	14
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

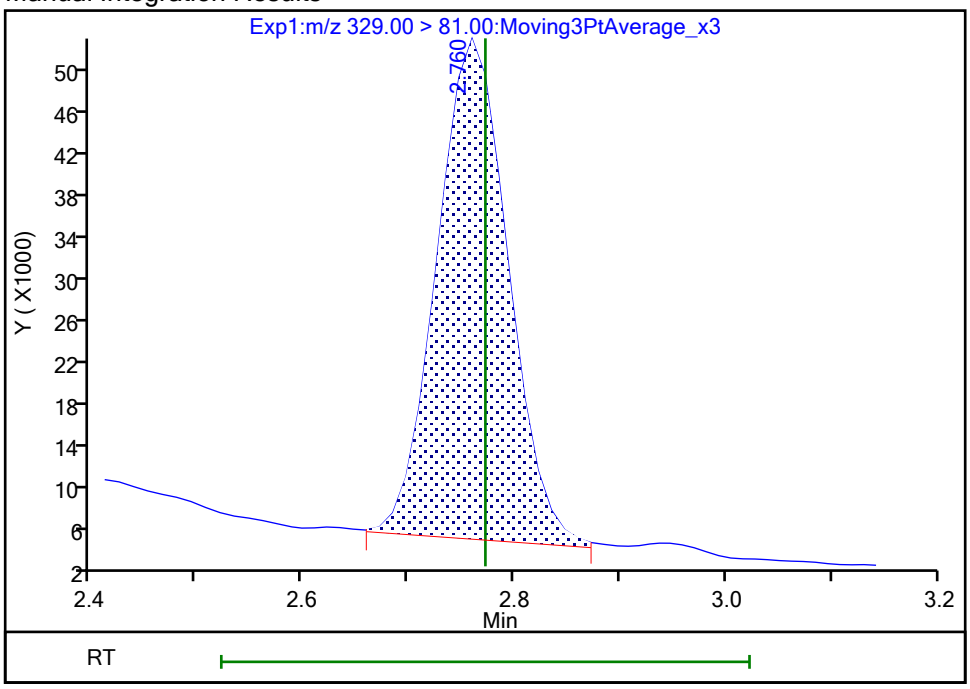
Processing Integration Results

RT: 2.76
Area: 301547
Amount: 1.962202
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 224804
Amount: 1.462826
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:22:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW93A-101623-1311-65 Lab Sample ID: 460-290517-12

Matrix: Water Lab File ID: PA231024A15.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 13:11

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 285.9(mL) Date Analyzed: 10/24/2023 19:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	16.8		4.37	1.05
2706-90-3	Perfluoropentanoic acid	6.75		1.75	0.59
307-24-4	Perfluorohexanoic acid	6.90		1.75	0.57
375-85-9	Perfluoroheptanoic acid	2.18		1.75	0.47
335-67-1	Perfluorooctanoic acid	18.9		1.75	0.66
375-95-1	Perfluorononanoic acid	1.87		1.75	0.43
335-76-2	Perfluorodecanoic acid	0.77	J	1.75	0.40
2058-94-8	Perfluoroundecanoic acid	1.75	U	1.75	0.48
307-55-1	Perfluorododecanoic acid	1.75	U	1.75	0.43
72629-94-8	Perfluorotridecanoic acid	1.75	U	1.75	0.42
376-06-7	Perfluorotetradecanoic acid	1.75	U	1.75	0.56
375-73-5	Perfluorobutanesulfonic acid	2.31		1.75	0.54
2706-91-4	Perfluoropentanesulfonic acid	3.55		1.75	0.44
355-46-4	Perfluorohexanesulfonic acid	13.3		1.75	0.48
375-92-8	Perfluoroheptanesulfonic acid	5.50		1.75	0.36
1763-23-1	Perfluorooctanesulfonic acid	377		1.75	0.74
68259-12-1	Perfluorononanesulfonic acid	1.75	U	1.75	0.35
335-77-3	Perfluorodecanesulfonic acid	1.75	U	1.75	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67
754-91-6	Perfluorooctanesulfonamide	1.75	U	1.75	0.80
2355-31-9	NMeFOSAA	4.37	U	4.37	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40
13252-13-6	HFPODA	3.50	U	3.50	0.96
919005-14-4	DONA	1.75	U	1.75	0.37
756426-58-1	9Cl-PF3ONS	1.75	U	1.75	0.28
763051-92-9	11Cl-PF3OUdS	1.75	U	1.75	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW93A-101623-1311-65 Lab Sample ID: 460-290517-12

Matrix: Water Lab File ID: PA231024A15.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 13:11

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 285.9(mL) Date Analyzed: 10/24/2023 19:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	74		50-150
STL01893	13C5 PFPeA	84		50-150
STL01892	13C4 PFHpA	97		50-150
STL02116	13C2 PFTeDA	102		50-150
STL02337	13C3 PFBS	98		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	109		50-150
STL02117	d5-NEtFOSAA	122		50-150
STL02395	M2-4:2 FTS	106		50-150
STL02279	M2-6:2 FTS	108		50-150
STL02280	M2-8:2 FTS	104		50-150
STL02255	13C3 HFPO-DA	88		50-150
STL00994	18O2 PFHxS	97		50-150
STL00993	13C2 PFHxA	94		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	105		50-150
STL00995	13C5 PFNA	102		50-150
STL00996	13C2 PFDA	102		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	108		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d
Lims ID: 460-290517-A-12-A
Client ID: MW93A-101623-1311-65
Sample Type: Client
Inject. Date: 24-Oct-2023 19:54:26 ALS Bottle#: 12 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290517-A-12-A
Misc. Info.: 200-0057538-015 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 13:33:31
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.604	1297751	0.9294		74.4	1125	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.139	-0.017	1.000	490354	0.4814			13.0	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.453	-0.014	0.694	1143689	1.06		84.4	201	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	190588	0.1930			0.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.466	0.001	0.702	1666829	1.14		97.8	14303	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.453	2.466	-0.013	0.994	105817	0.0661	Target=2.06		0.5	M
298.90 > 99.00	2.467	2.466	0.001	1.000	53118		1.99(1.03-3.09)		3.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.785	210165	1.24		106	6.8	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.796	1291149	1.17		93.7	1467	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	224113	0.1972	Target=14.12		1.0	M
313.00 > 119.00	2.785	2.810	-0.025	0.996	18050		12.42(7.06-21.17)		3.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.890	135501	0.1015	Target=2.72		1.7	M
349.00 > 99.00	2.797	2.810	-0.013	0.886	68334		1.98(1.36-4.09)		9.6	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.827	235786	1.10		88.4	2182	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.918	-0.021	0.996	739	0.003913			7.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.157	3.166	-0.009	0.898	1208642	1.15		97.3	4986	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.157	3.166	-0.009	1.000	430233	0.3802	Target=3.32		19.6	M
399.00 > 99.00	3.157	3.166	-0.009	1.000	232211		1.85(1.66-4.98)		76.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.157	3.177	-0.020	0.996	81713	0.0623	Target=4.17		1.0	M
363.00 > 169.00	3.169	3.177	-0.008	1.000	28302		2.89(2.09-6.26)		16.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.169	3.177	-0.008	0.902	1463685	1.21		96.8	2736	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.506	3.512	-0.006	0.917	153214	0.1571	Target=4.83		8.3	M
449.00 > 99.00	3.497	3.512	-0.015	0.915	52690		2.91(2.41-7.24)		9.3	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.506	3.512	-0.006	0.997	279814	1.28		108	26.2	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.515	3.521	-0.006	1.000	800851	0.5407	Target=2.88		8.8	M
413.00 > 169.00	3.524	3.521	0.003	1.003	255669		3.13(1.44-4.32)		214	M
D 14 13C4 PFOA										
417.00 > 372.00	3.515	3.521	-0.006	1.000	1738050	1.27		101	2457	
* 62 13C2 PFOA										
415.00 > 370.00	3.515	3.521	-0.006		1760039	1.25			4433	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.832	-0.008	1.000	8480334	10.8	Target=4.24		850	M
499.00 > 99.00	3.813	3.832	-0.019	0.997	2874717		2.95(2.12-6.37)		1599	M
D 18 13C4 PFOS										M
503.00 > 80.00	3.824	3.832	-0.008	1.088	806307	1.21		101	162	M
20 Perfluorononanoic acid										M
463.00 > 419.00	3.847	3.844	0.003	1.000	79493	0.0534	Target=8.34		2.5	M
463.00 > 169.00	3.835	3.844	-0.009	0.997	8097		9.82(4.17-12.51)		13.3	M
D 19 13C5 PFNA										M
468.00 > 423.00	3.847	3.844	0.003	1.095	1897943	1.27		102	1703	M
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.985	3.981	0.004	1.042	2290	0.000951			2.1	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.131	4.138	-0.007	1.000	34984	0.0220	Target=11.44		1.6	M
513.00 > 169.00	4.131	4.138	-0.007	1.000	2338		14.96(5.72-17.16)		6.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.131	4.138	-0.007	1.175	1991533	1.28		102	4792	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.131	4.138	-0.007	0.997	953	0.001701			5.9	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.143	4.150	-0.007	1.179	304754	1.24		104	164	
D 21 13C8 FOSA										
506.00 > 78.00	4.236	4.244	-0.008	1.205	1405025	1.05		84.4	4256	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.236	4.244	-0.008	1.000	2384	0.002224			7.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.281	-0.008	1.216	506688	1.36		109	1766	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.286	4.281	0.005	1.003	519	0.001411			2.1	M
29 Perfluorodecanesulfonic acid										RM
599.00 > 80.00	4.345	4.364	-0.019	1.136	753	0.001634	Target=2.37		1.0	RM
599.00 > 99.00	4.357	4.364	-0.007	1.139	64		11.77(1.19-3.56)		0.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.388	-0.007	1.246	1992831	1.35		108	9966	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.381	4.388	-0.007	1.000	6293	0.003830	Target=12.20		0.9	R
563.00 > 169.00	4.393	4.388	0.005	1.003	59		106.66(6.10-18.31)		0.6	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.400	-0.007	1.250	548086	1.53		122	1015	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.404	4.400	0.004	1.003	3527	0.008042			4.4	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.476	4.483	-0.007	1.171	1651	0.000447			2.9	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.611	-0.006	1.310	1974707	1.32		105	5316	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.983	4.991	-0.008	1.418	1908994	1.28		102	5287	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

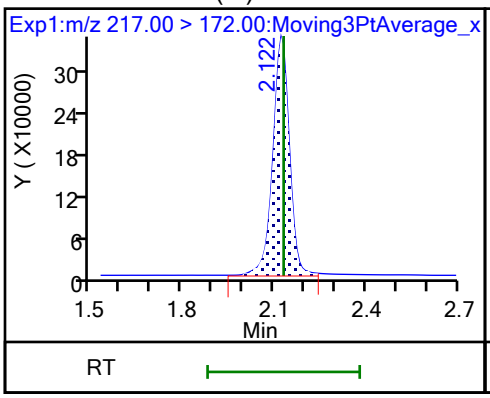
M - Manually Integrated

Report Date: 26-Oct-2023 14:49:59 Chrom Revision: 2.3 18-Oct-2023 21:16:54

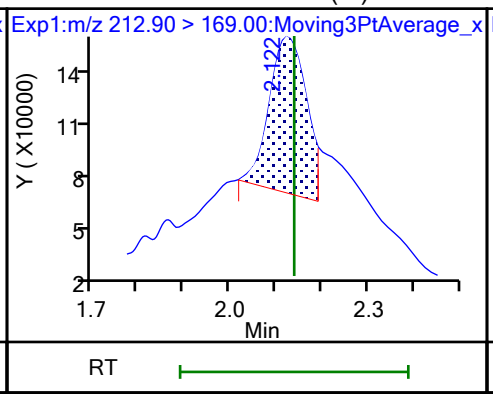
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d
Injection Date: 24-Oct-2023 19:54:26 Instrument ID: LC812
Lims ID: 460-290517-A-12-A Lab Sample ID: 200-290517-12
Client ID: MW93A-101623-1311-65
Operator ID: LC812user ALS Bottle#: 12 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

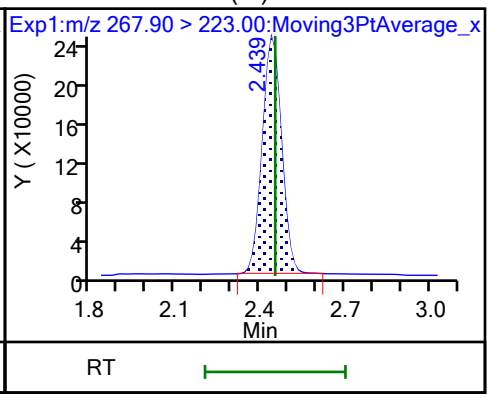
D 1 13C4 PFBA (M)



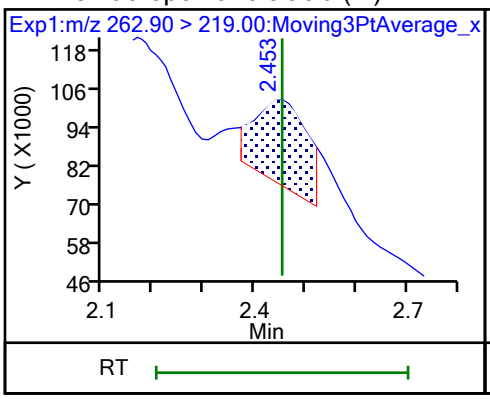
2 Perfluorobutanoic acid (M)



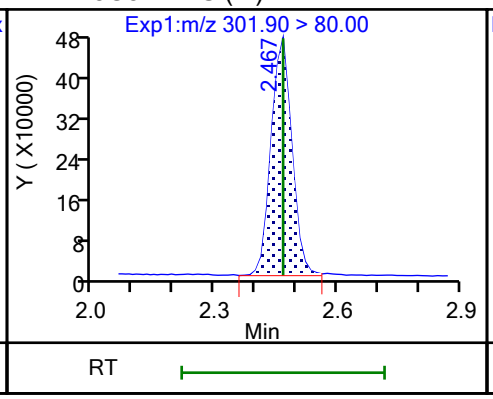
D 3 13C5 PFPeA (M)



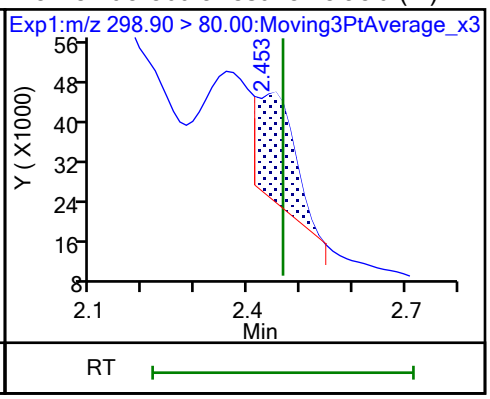
4 Perfluoropentanoic acid (M)



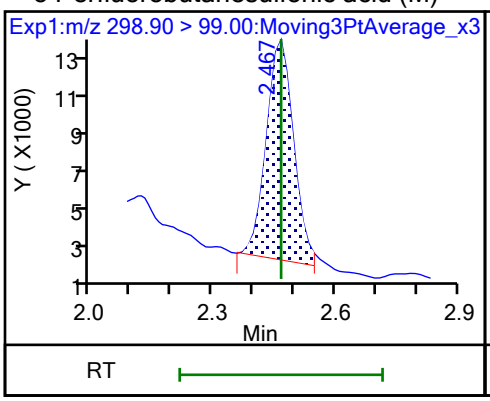
D 47 13C3 PFBS (M)



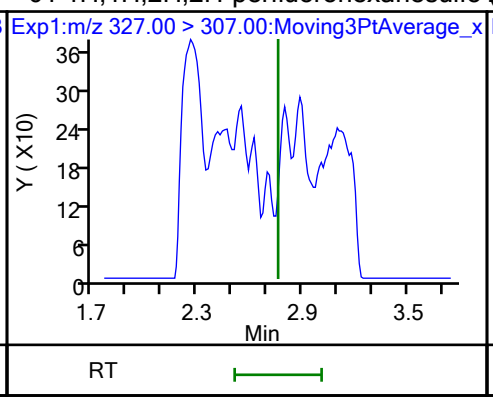
5 Perfluorobutanesulfonic acid (M)



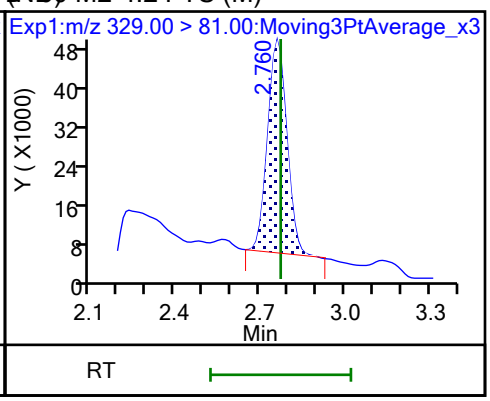
5 Perfluorobutanesulfonic acid (M)



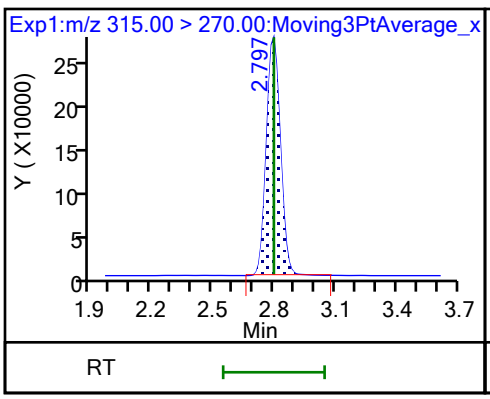
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



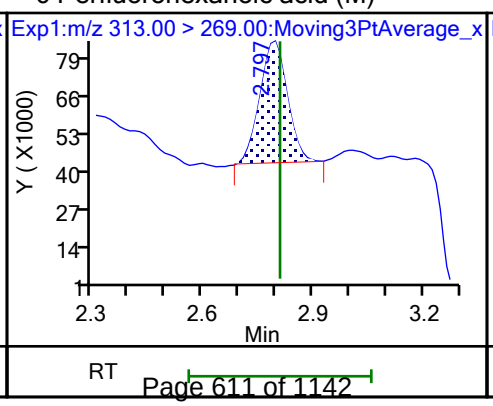
D 80 M2-4:2 FTS (M)



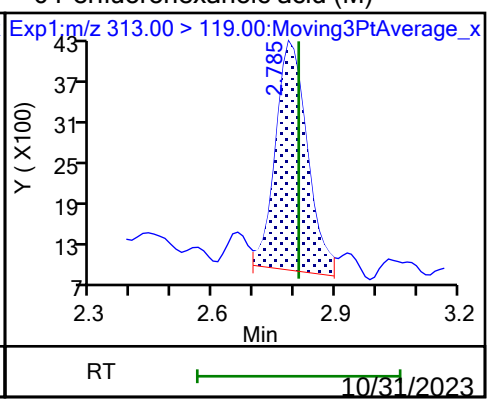
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

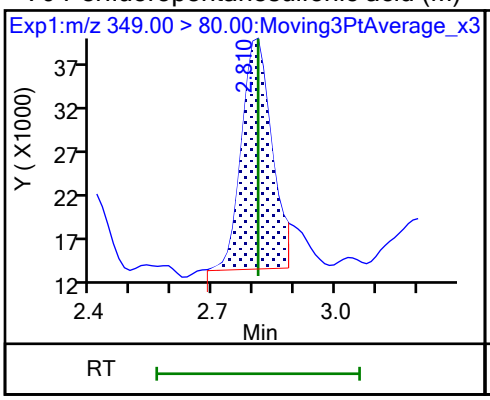


6 Perfluorohexanoic acid (M)

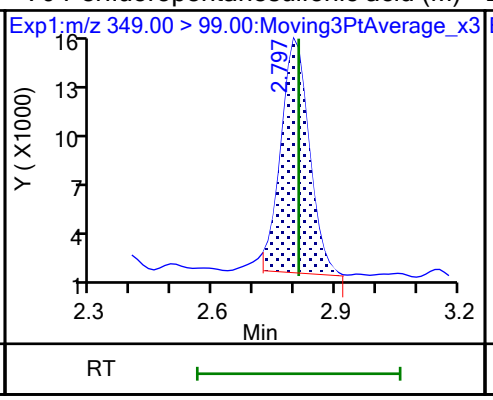


10/31/2023
10:17 AM

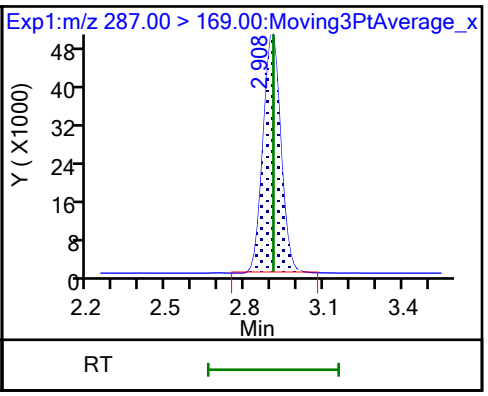
70 Perfluoropentanesulfonic acid (M)



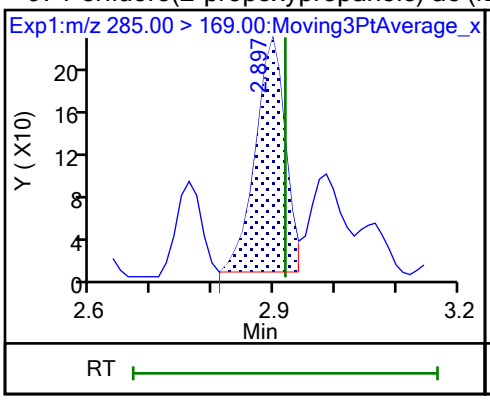
70 Perfluoropentanesulfonic acid (M)



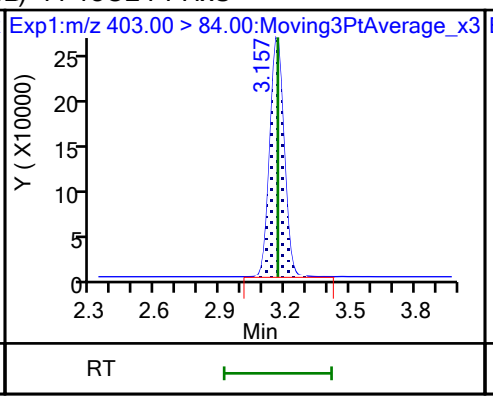
D 64 13C3 HFPO-DA



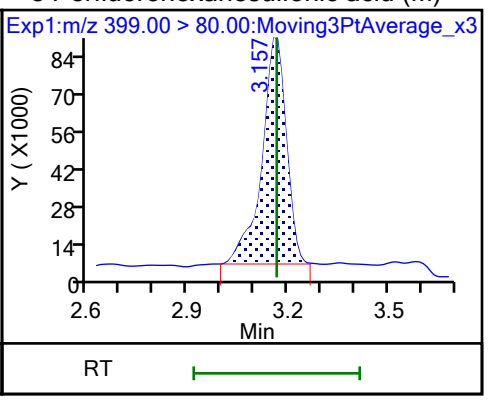
67 Perfluoro(2-propoxypropanoic) ac (M)



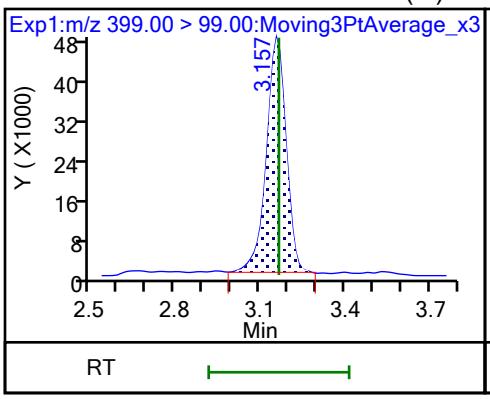
D 11 18O2 PFHxS



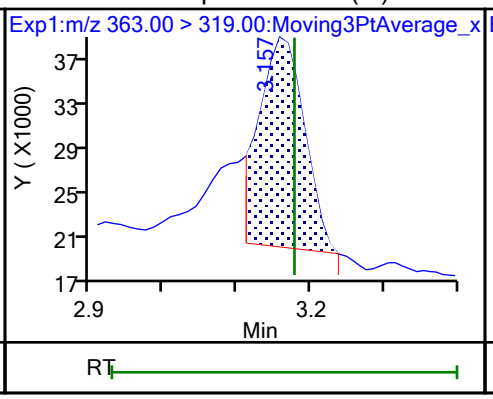
8 Perfluorohexanesulfonic acid (M)



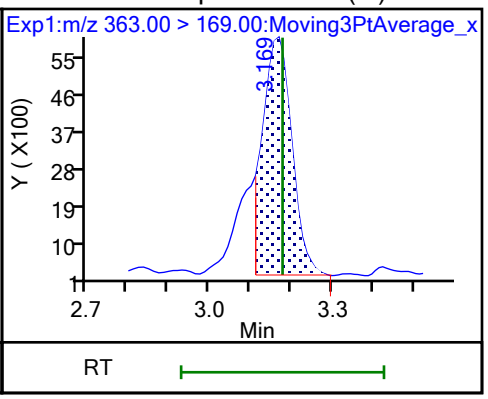
8 Perfluorohexanesulfonic acid (M)



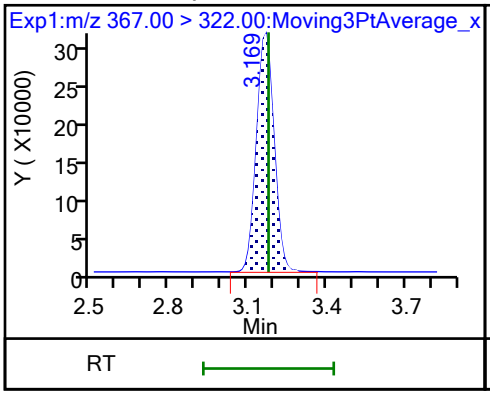
10 Perfluoroheptanoic acid (M)



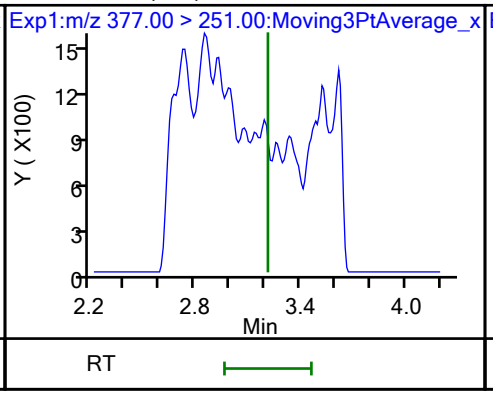
10 Perfluoroheptanoic acid (M)



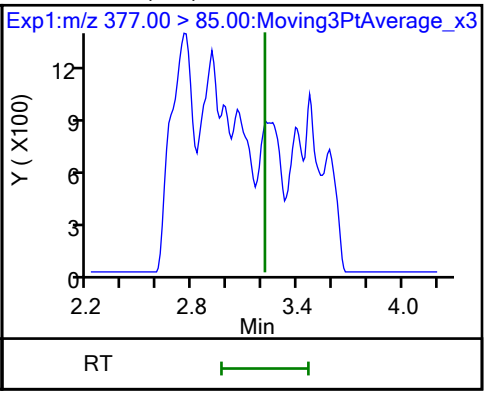
D 9 13C4 PFHpA



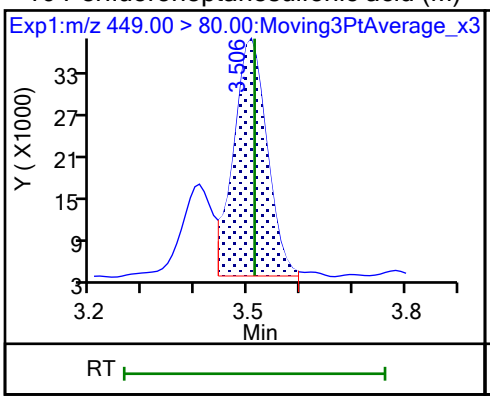
77 DONA (ND)



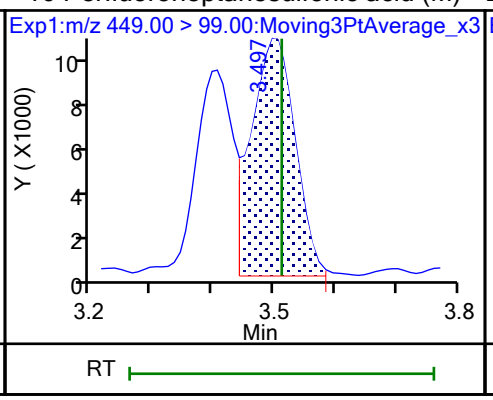
77 DONA (ND)



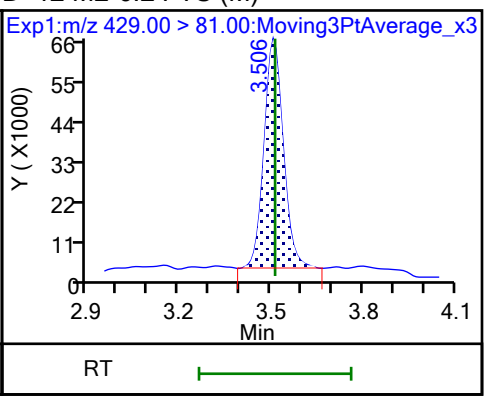
16 Perfluoroheptanesulfonic acid (M)



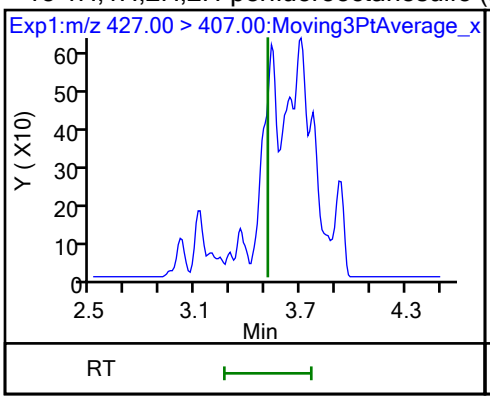
16 Perfluoroheptanesulfonic acid (M)



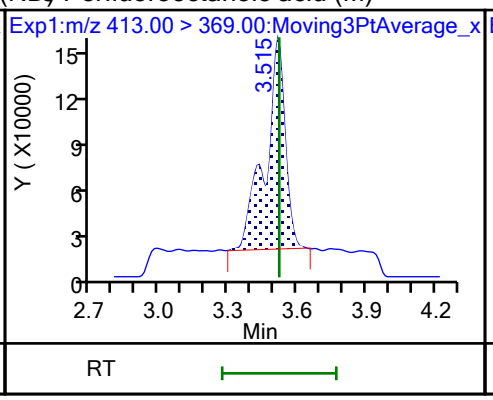
D 12 M2-6:2 FTS (M)



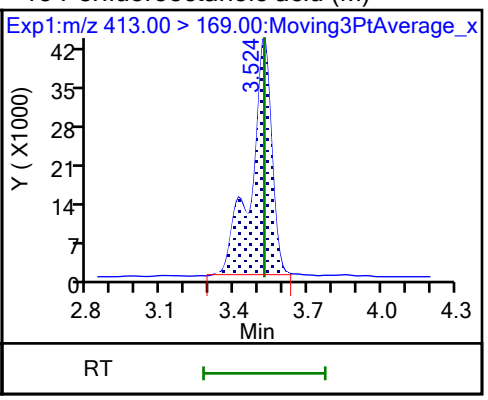
13 1H,1H,2H,2H-perfluorooctanesulfo (NDS)



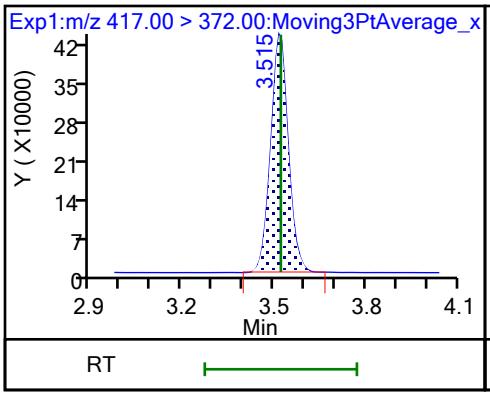
D 15 Perfluorooctanoic acid (M)



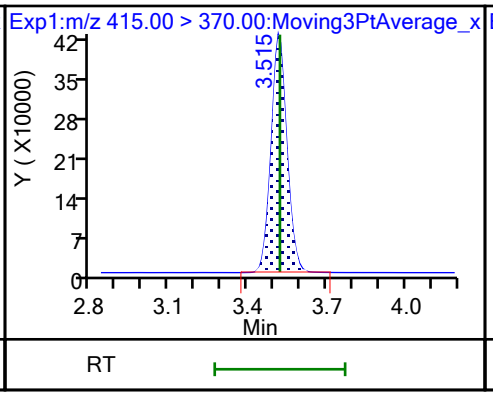
15 Perfluorooctanoic acid (M)



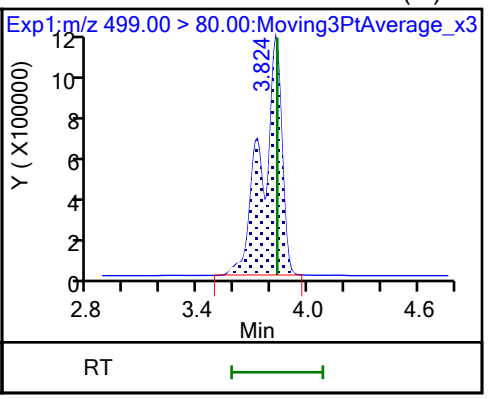
D 14 13C4 PFOA



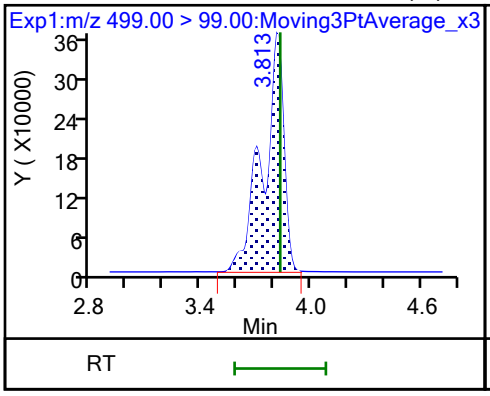
* 62 13C2 PFOA



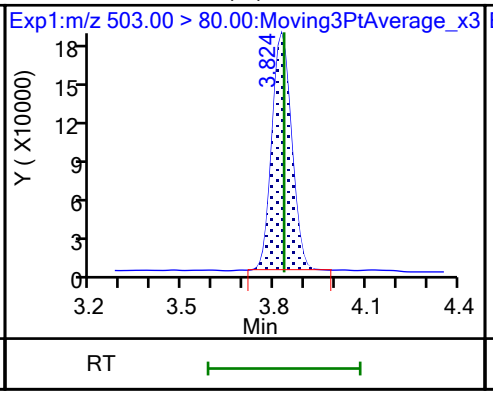
17 Perfluorooctanesulfonic acid (M)



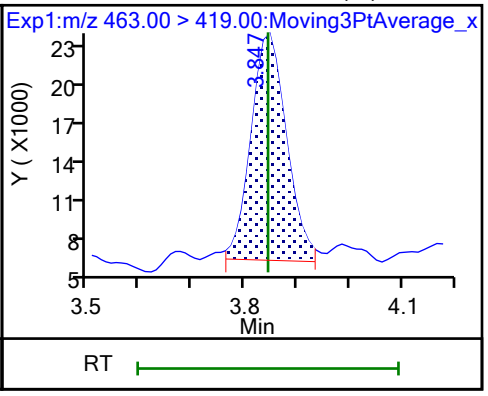
17 Perfluorooctanesulfonic acid (M)



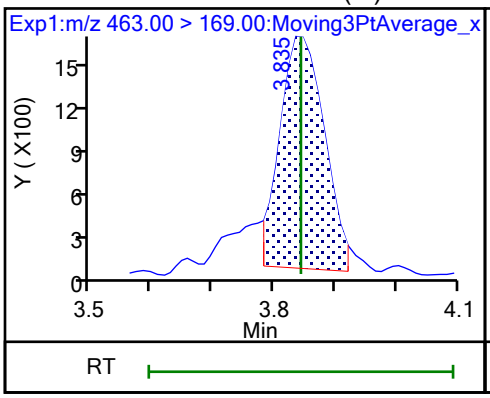
D 18 13C4 PFOS (M)



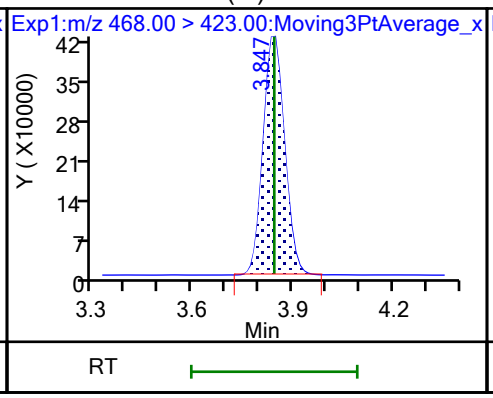
20 Perfluorononanoic acid (M)



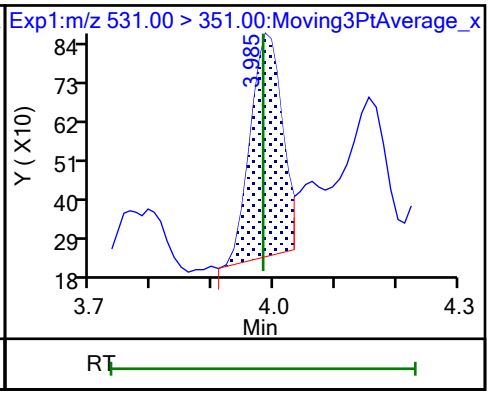
20 Perfluorononanoic acid (M)



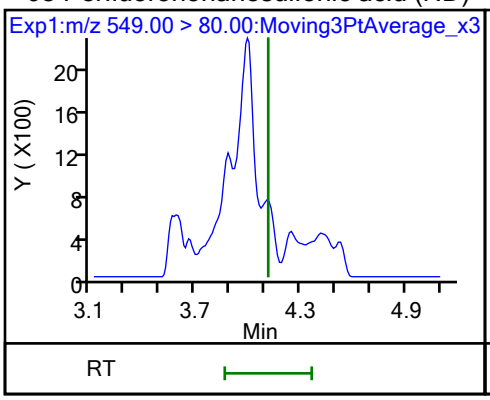
D 19 13C5 PFNA (M)



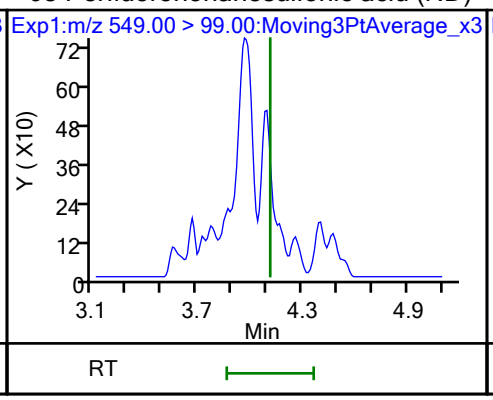
69 9-Chlorohexadecafluoro-3-oxanona (M)



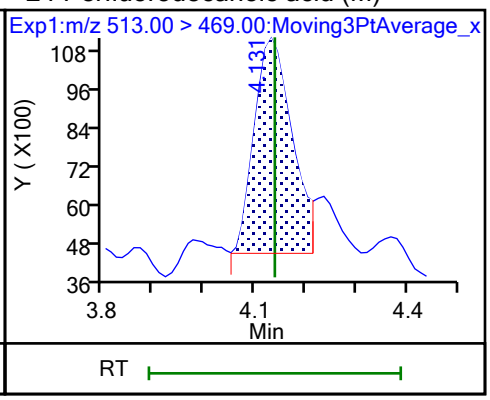
68 Perfluorononanesulfonic acid (ND)



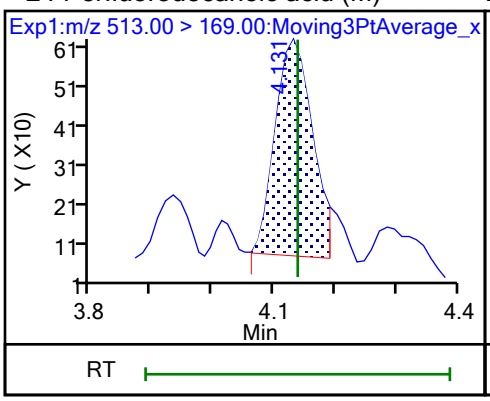
68 Perfluorononanesulfonic acid (ND)



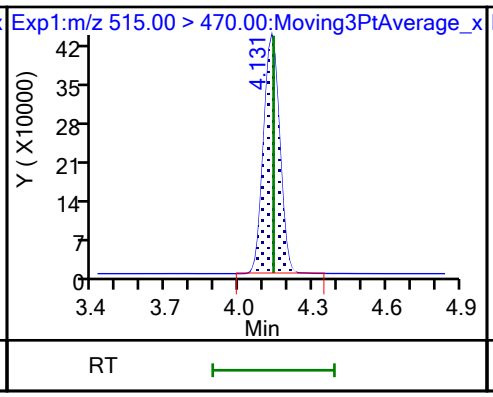
24 Perfluorodecanoic acid (M)



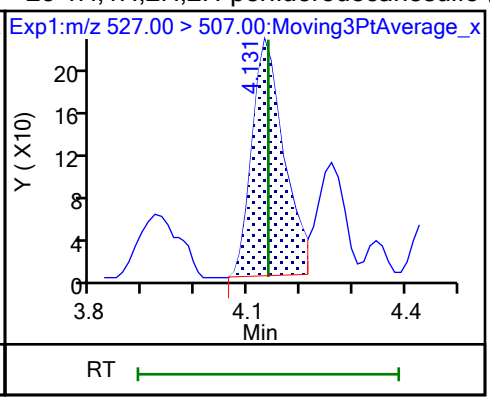
24 Perfluorodecanoic acid (M)



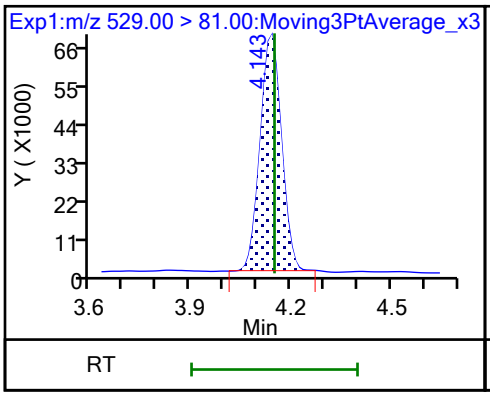
D 23 13C2 PFDA



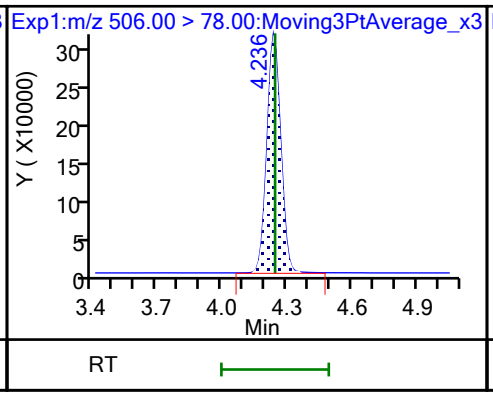
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



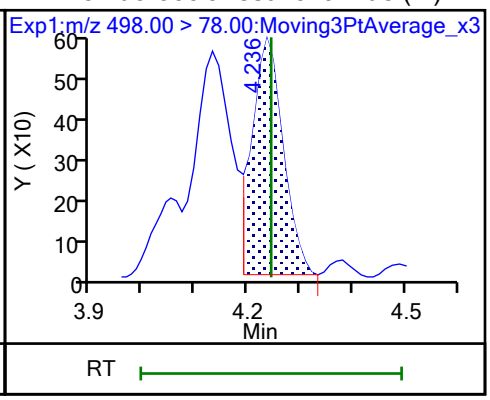
D 26 M2-8:2 FTS



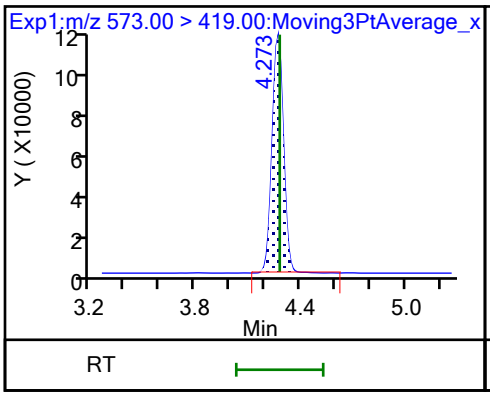
D 21 13C8 FOSA



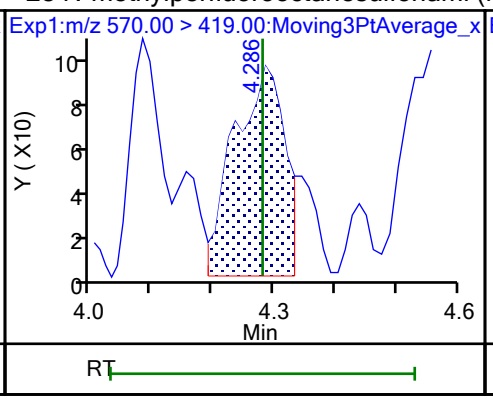
22 Perfluorooctanesulfonamide (M)



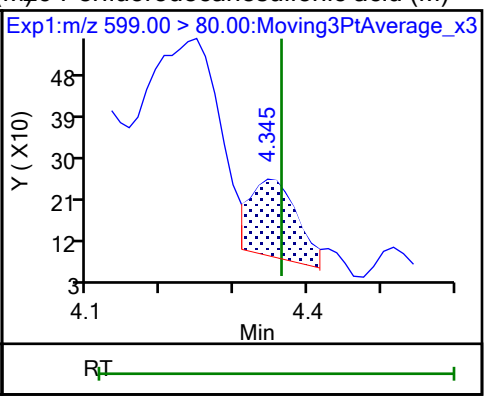
D 27 d3-NMeFOSAA



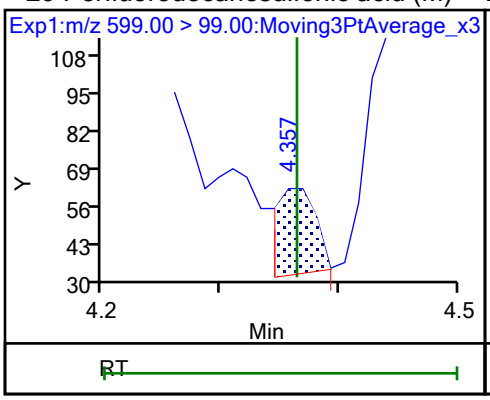
28 N-methylperfluorooctanesulfonami (M)



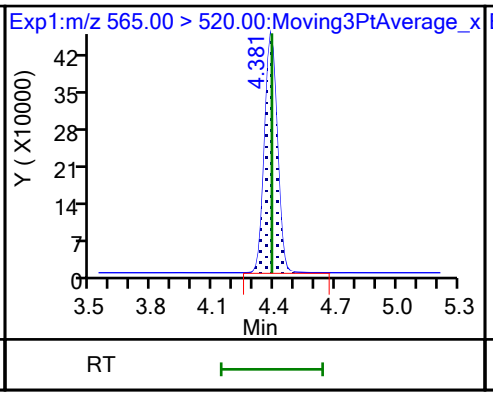
29 Perfluorodecanesulfonic acid (M)



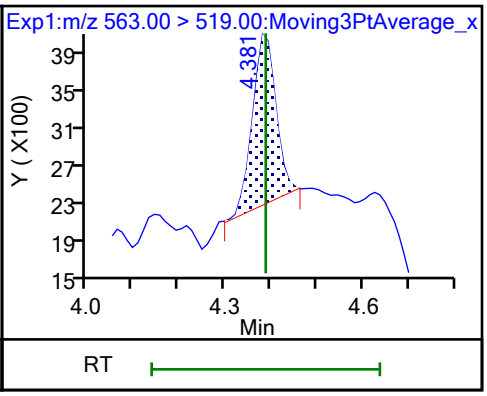
29 Perfluorodecanesulfonic acid (M)



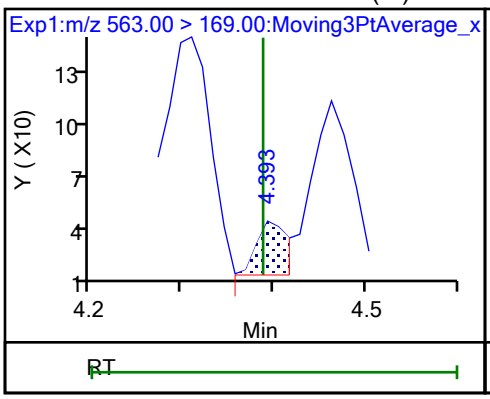
D 30 13C2 PFUnA



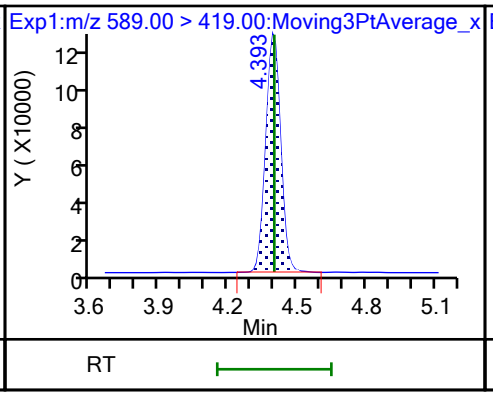
31 Perfluoroundecanoic acid



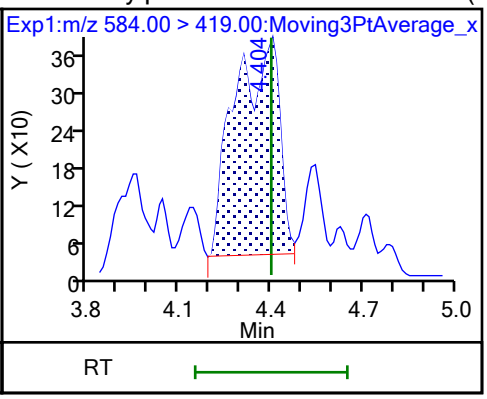
31 Perfluoroundecanoic acid (M)



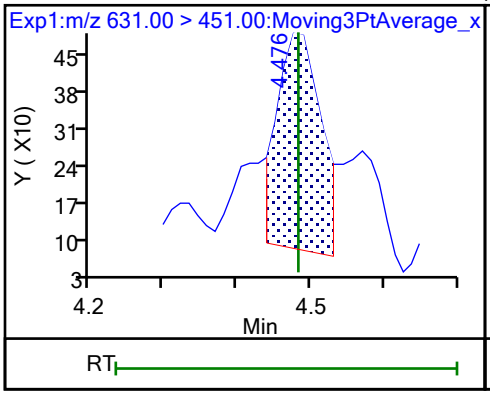
D 32 d5-NEtFOSAA



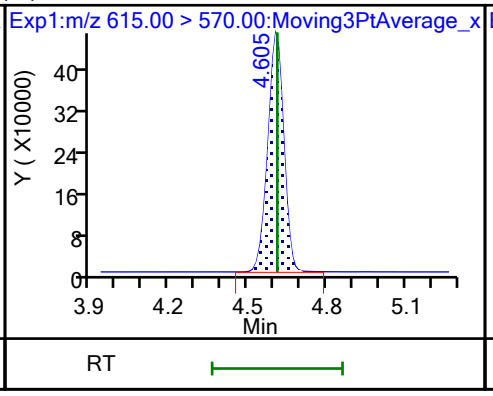
33 N-ethylperfluorooctanesulfonamid (M)



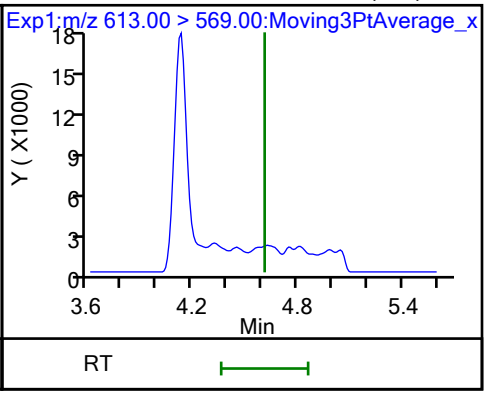
66 11-Chloroeicosafluoro-3-oxaundec (M)



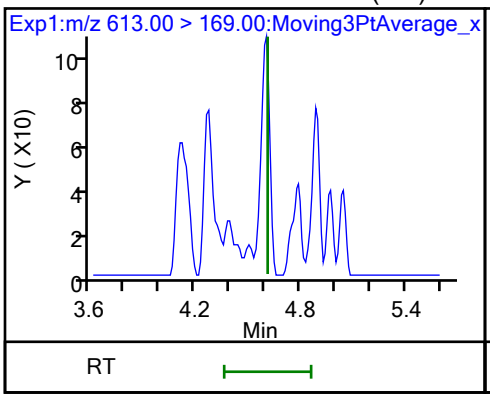
D 36 13C2 PFDoA



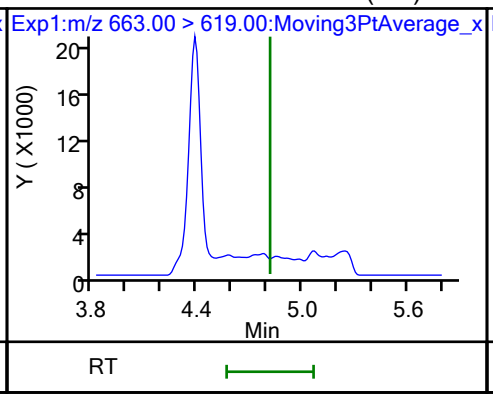
37 Perfluorododecanoic acid (ND)



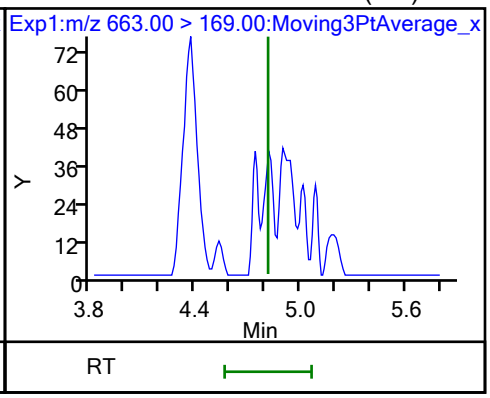
37 Perfluorododecanoic acid (ND)



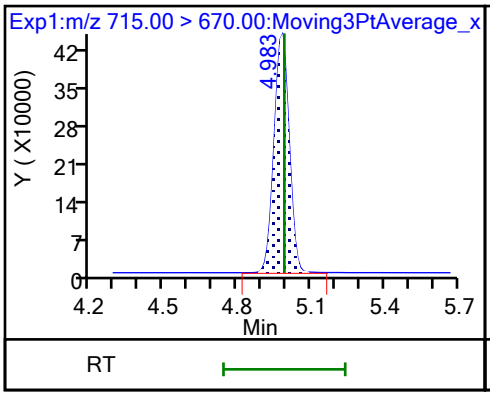
41 Perfluorotridecanoic acid (ND)



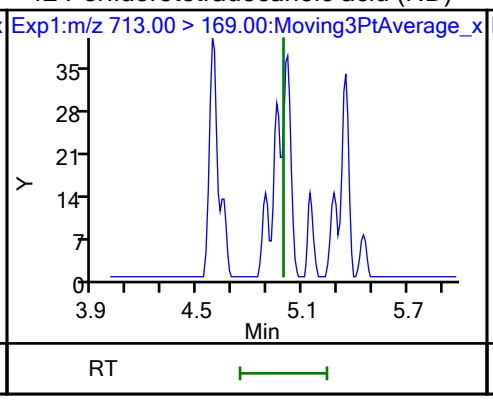
41 Perfluorotridecanoic acid (ND)



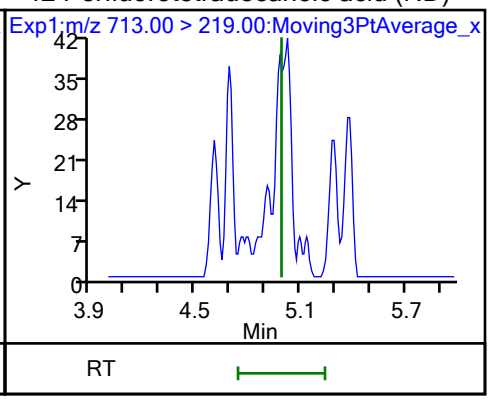
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

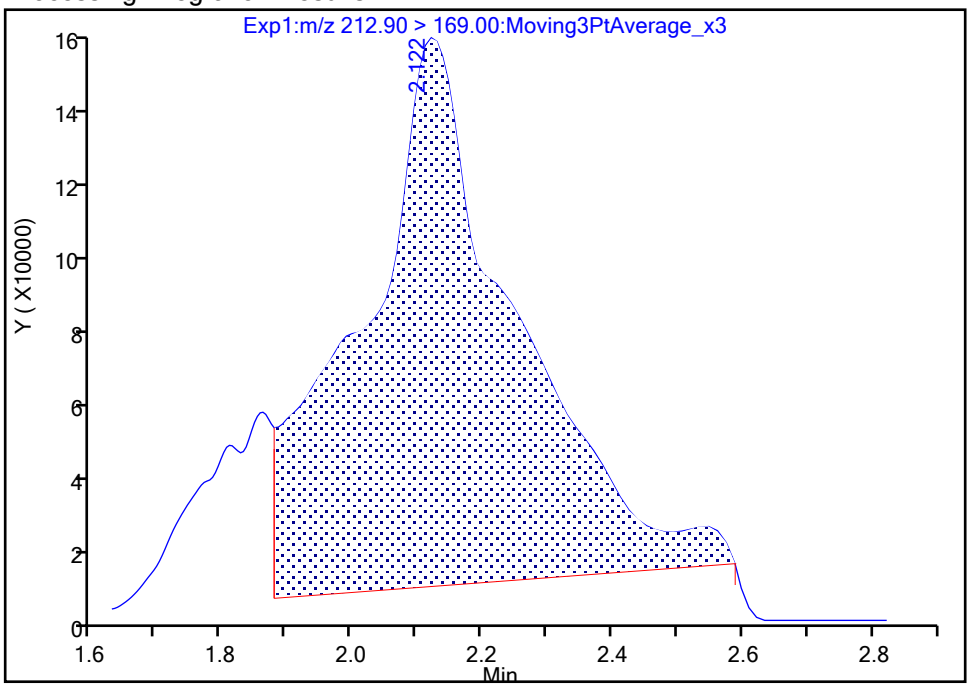
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

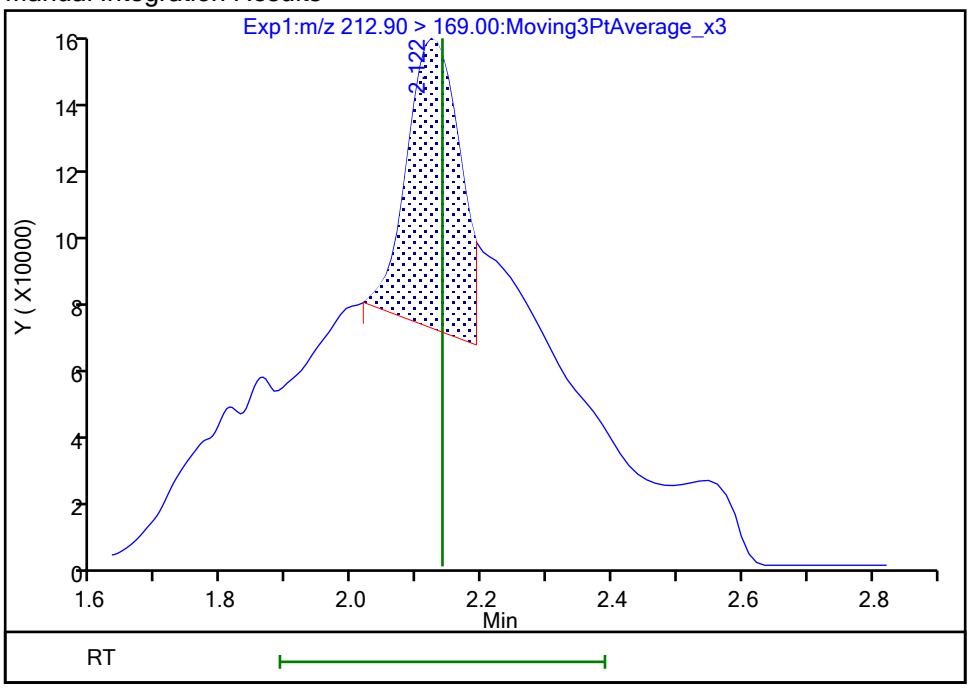
Processing Integration Results

RT: 2.12
Area: 2470955
Amount: 2.591121
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 490354
Amount: 0.481430
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:29:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

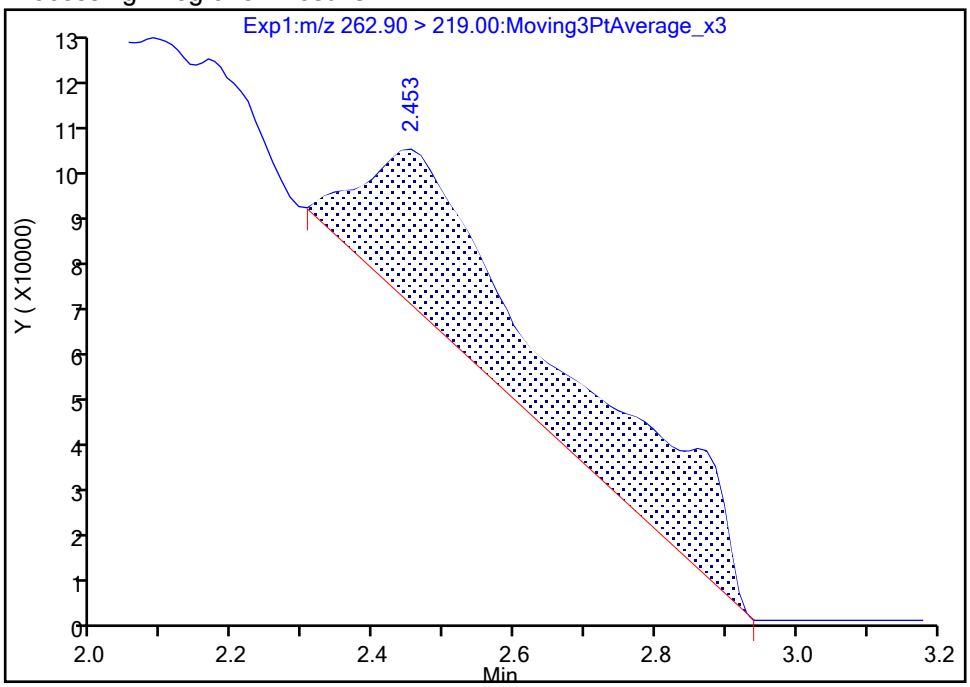
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

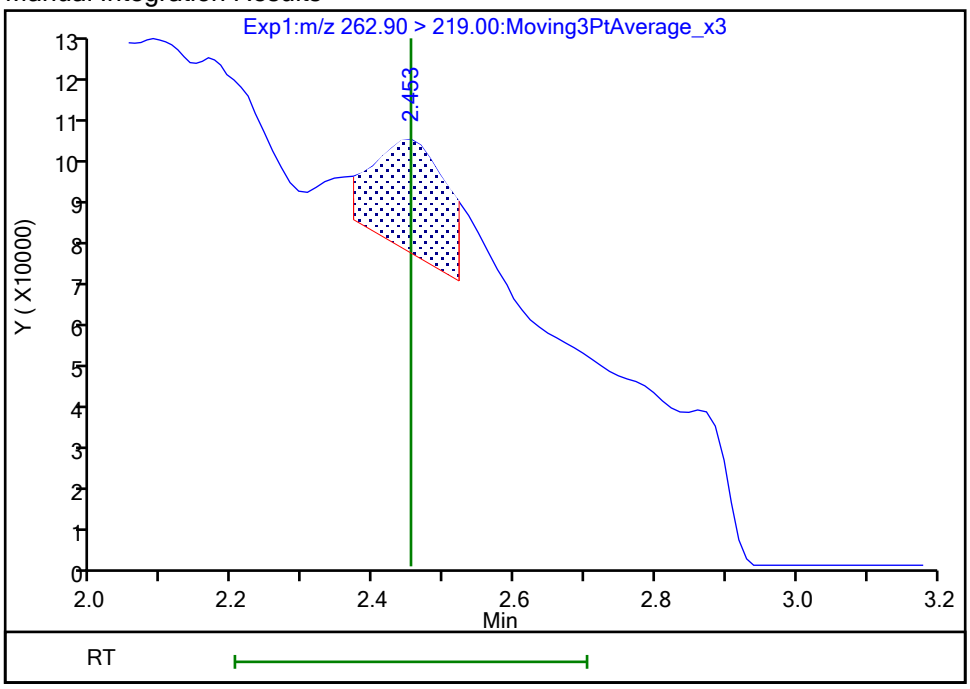
Processing Integration Results

RT: 2.45
Area: 733493
Amount: 0.742889
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 190588
Amount: 0.193029
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:29:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

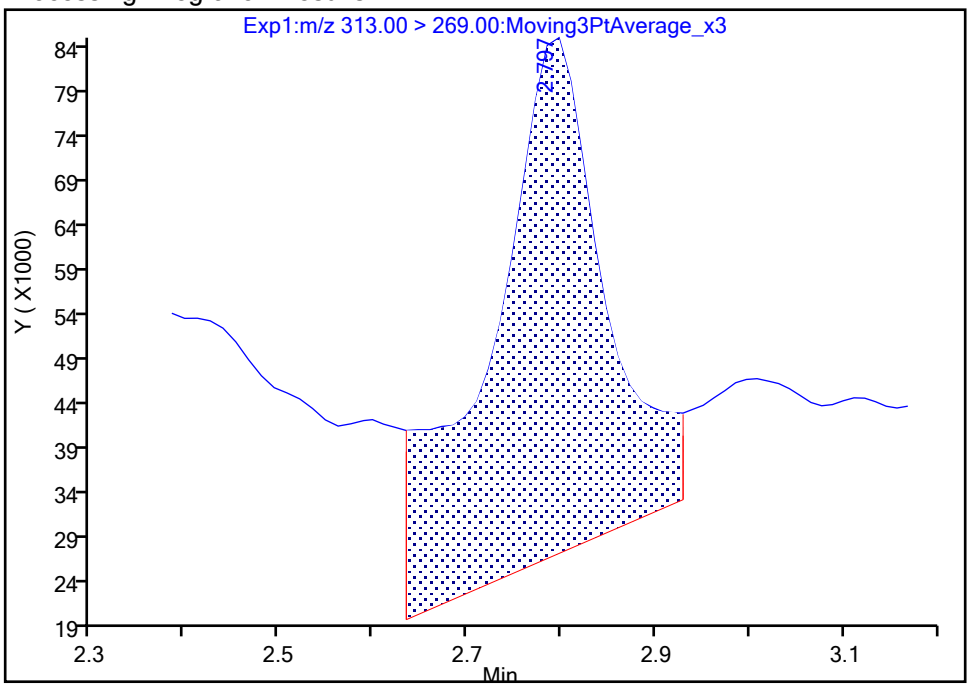
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

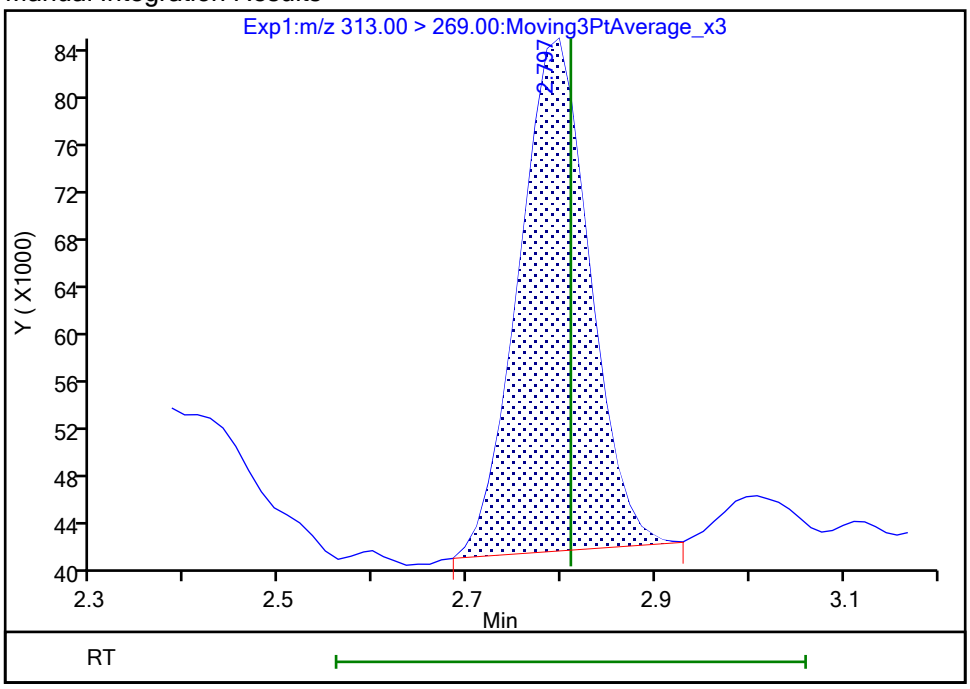
Processing Integration Results

RT: 2.80
Area: 500032
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 224113
Amount: 0.197164
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:29:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

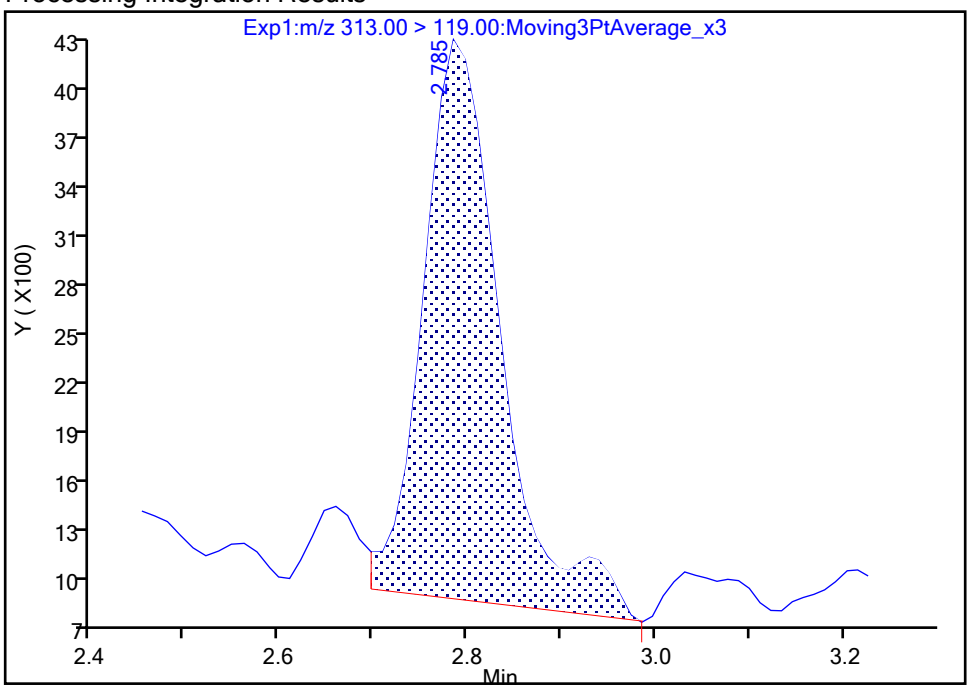
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

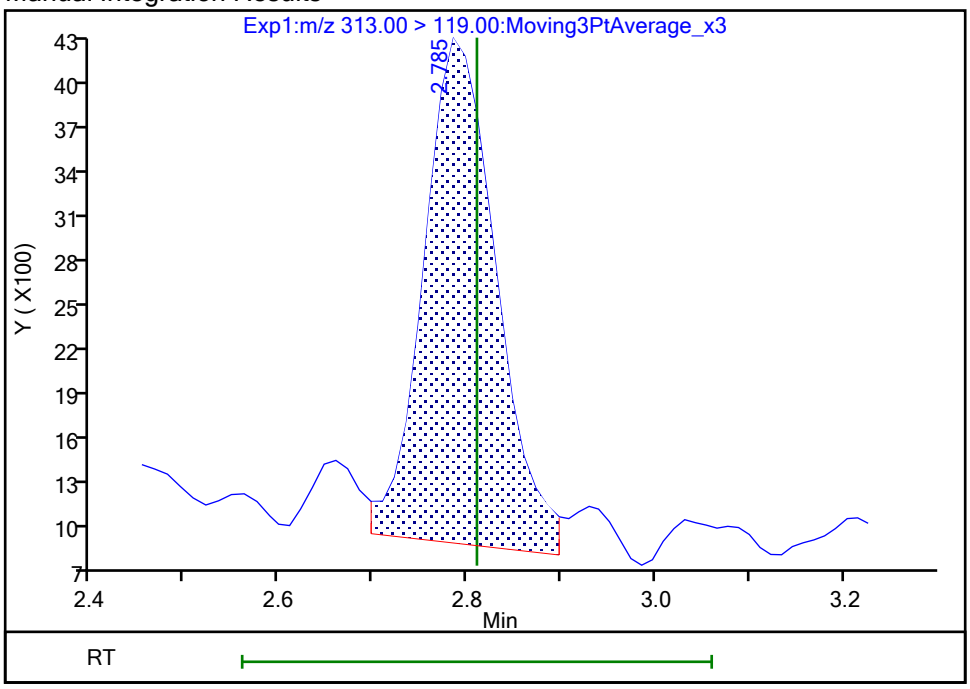
Processing Integration Results

RT: 2.78
Area: 19251
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.78
Area: 18050
Amount: 0.197164
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

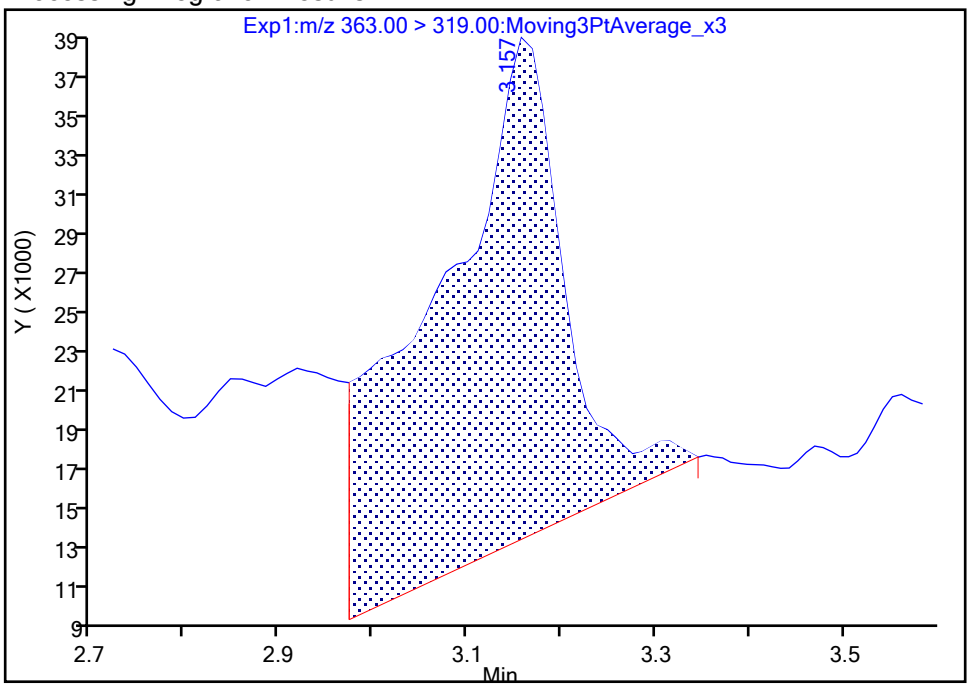
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

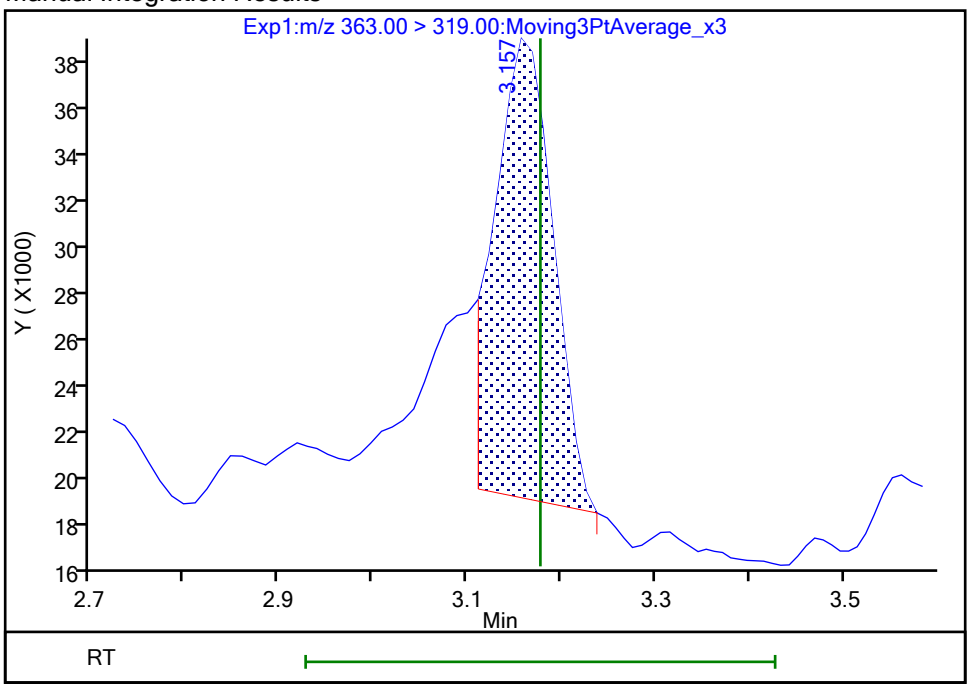
Processing Integration Results

RT: 3.16
Area: 251259
Amount: 0.191436
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 81713
Amount: 0.062258
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

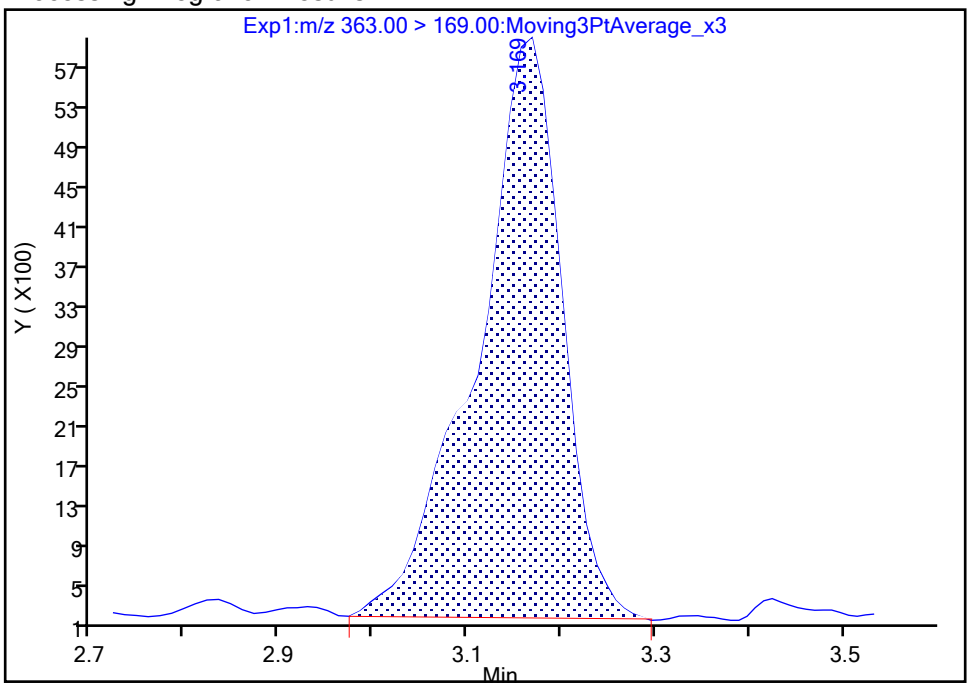
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

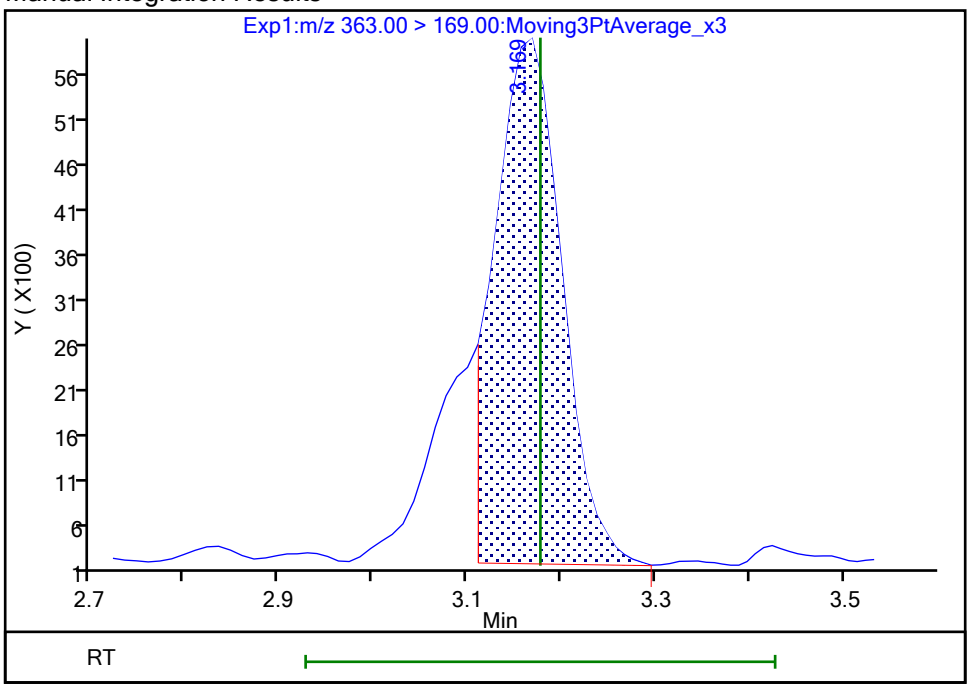
Processing Integration Results

RT: 3.17
Area: 36287
Amount: 0.191436
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 28302
Amount: 0.062258
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

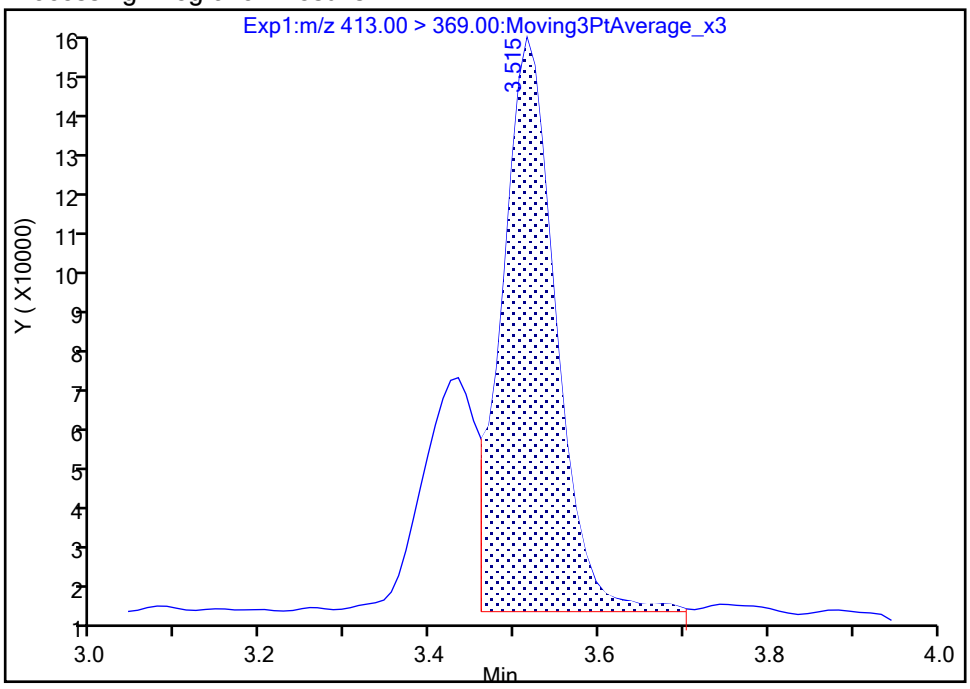
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

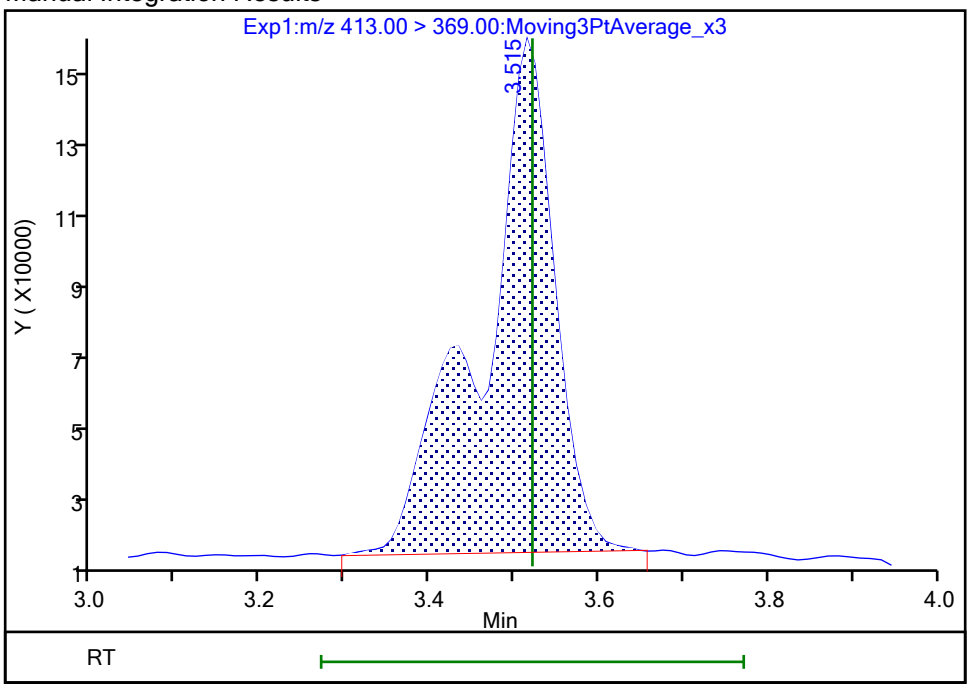
Processing Integration Results

RT: 3.51
Area: 589097
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 800851
Amount: 0.540746
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

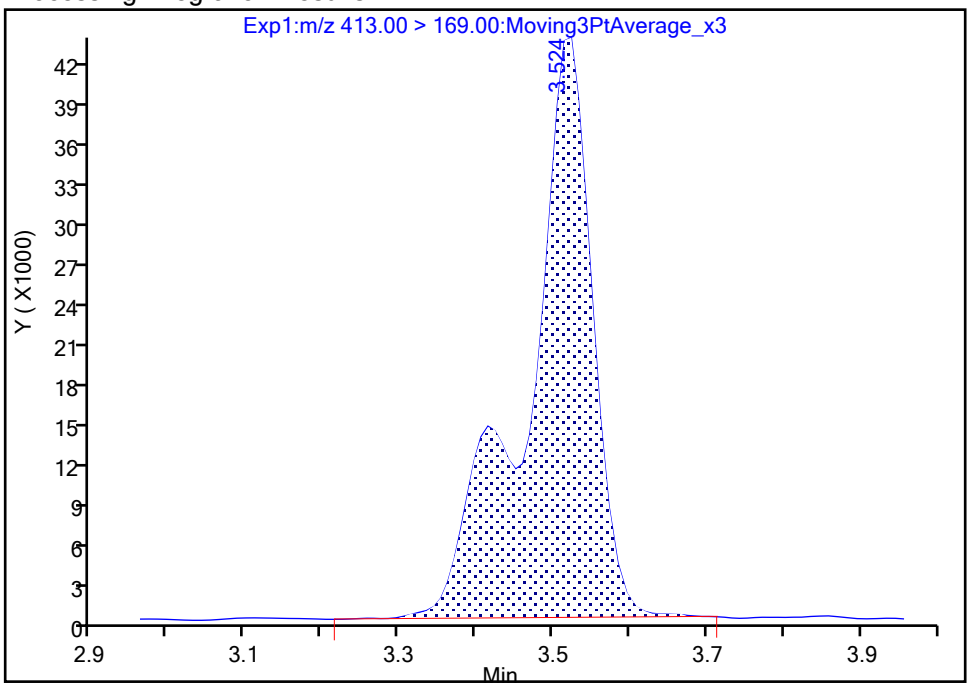
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

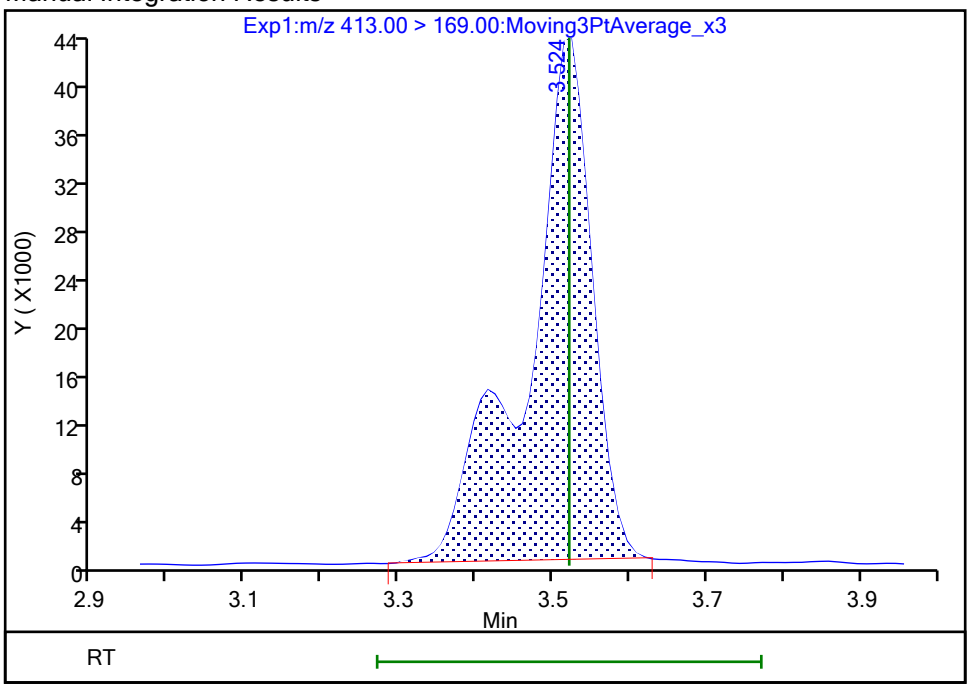
Processing Integration Results

RT: 3.52
Area: 259909
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 255669
Amount: 0.540746
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

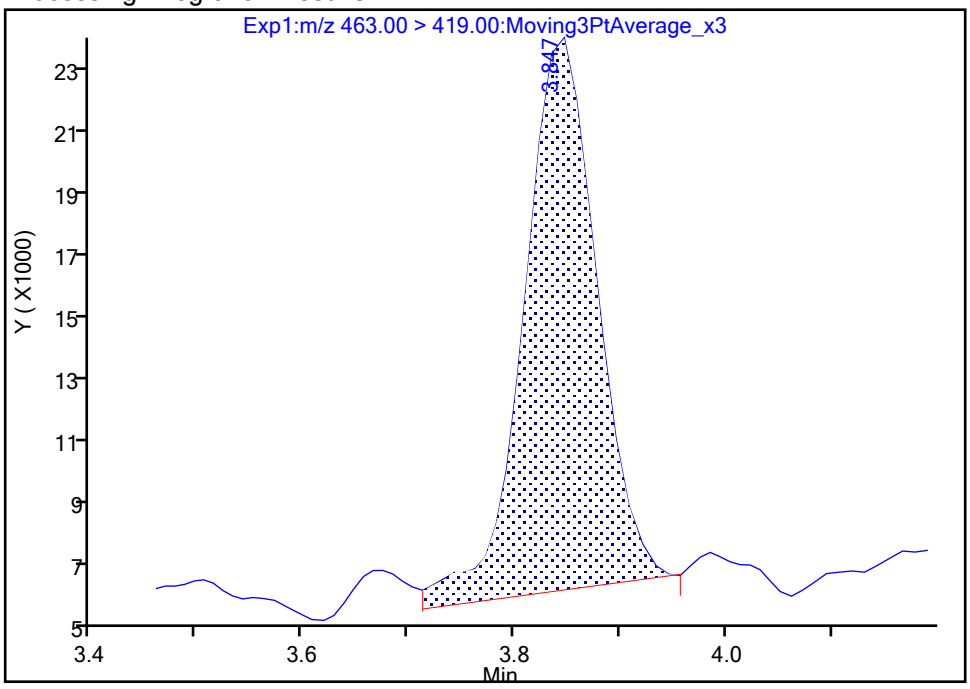
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

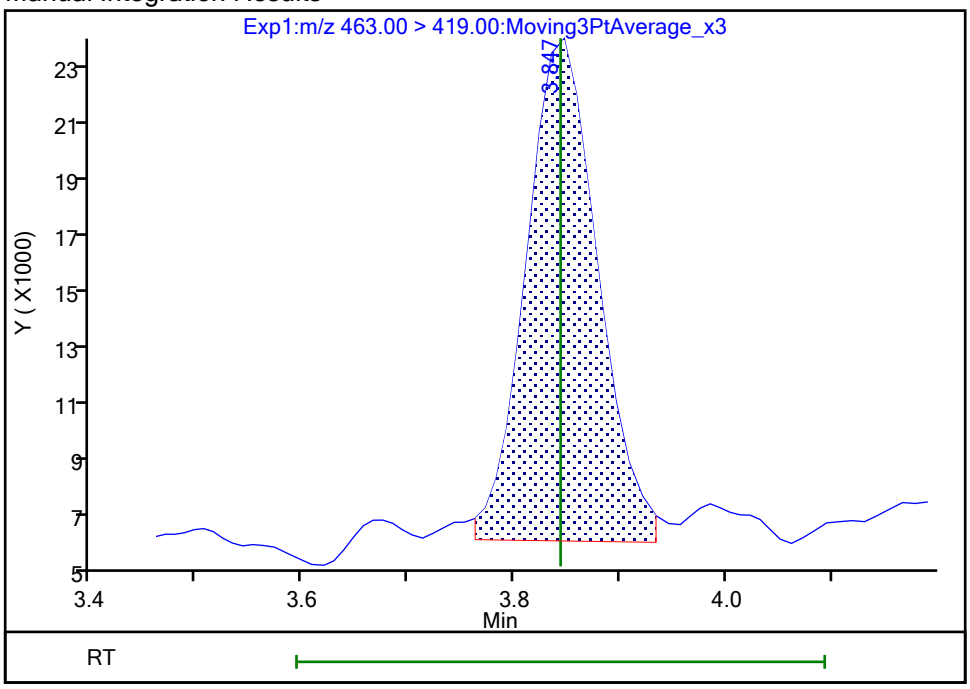
Processing Integration Results

RT: 3.85
Area: 81298
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 79493
Amount: 0.053421
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

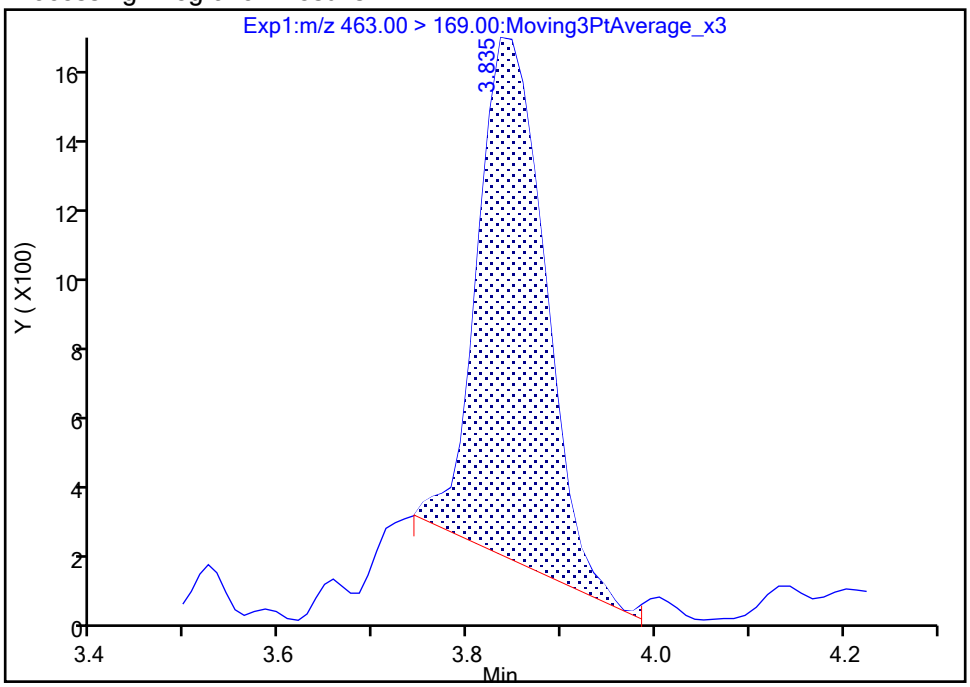
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

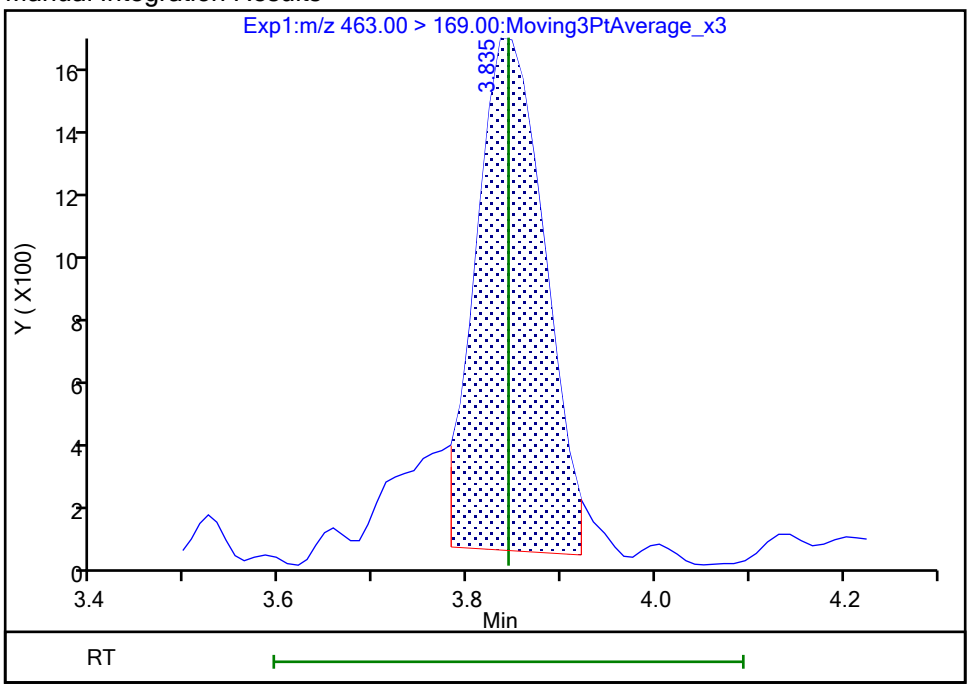
Processing Integration Results

RT: 3.84
Area: 7456
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 8097
Amount: 0.053421
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

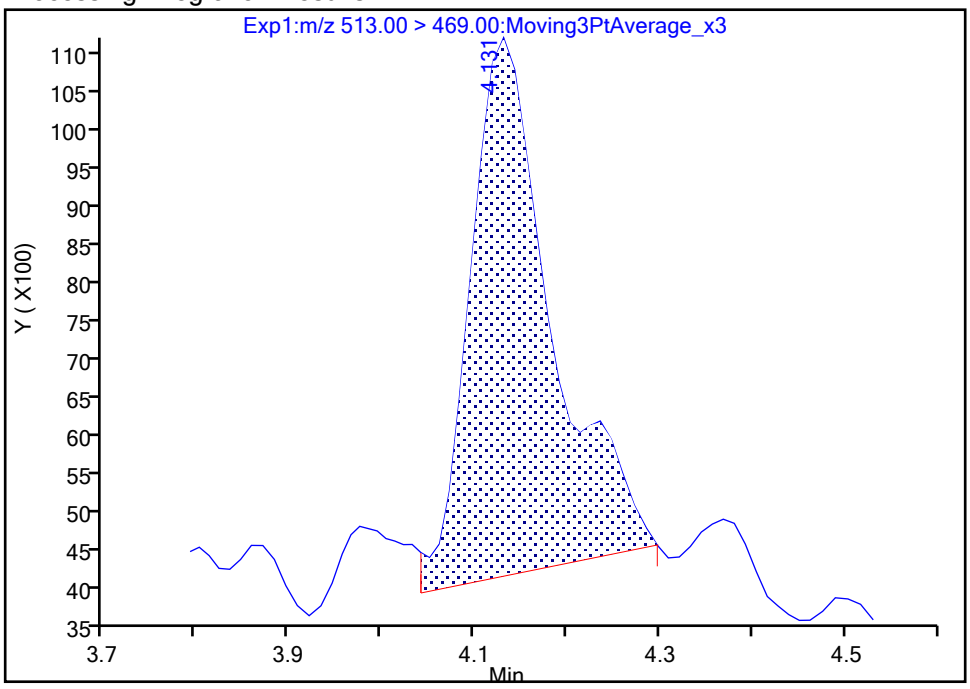
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

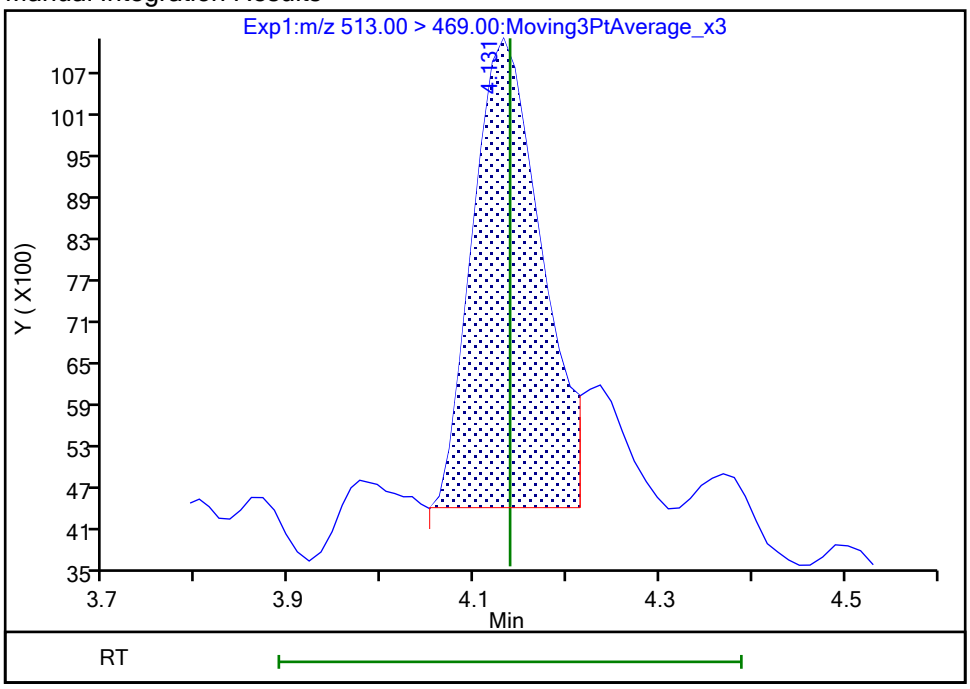
Processing Integration Results

RT: 4.13
Area: 42953
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 34984
Amount: 0.021972
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

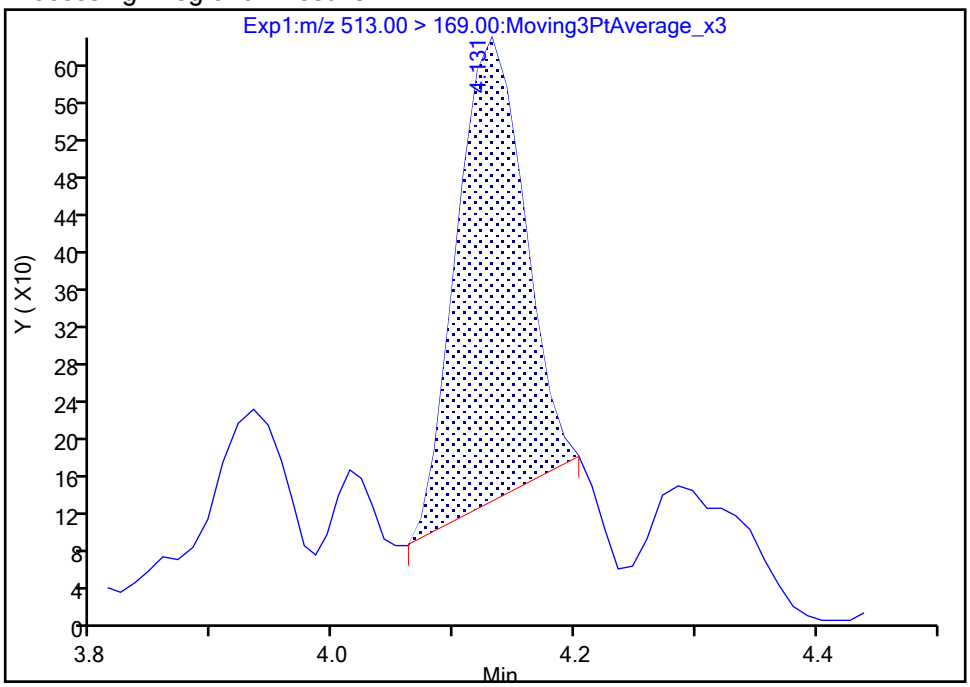
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

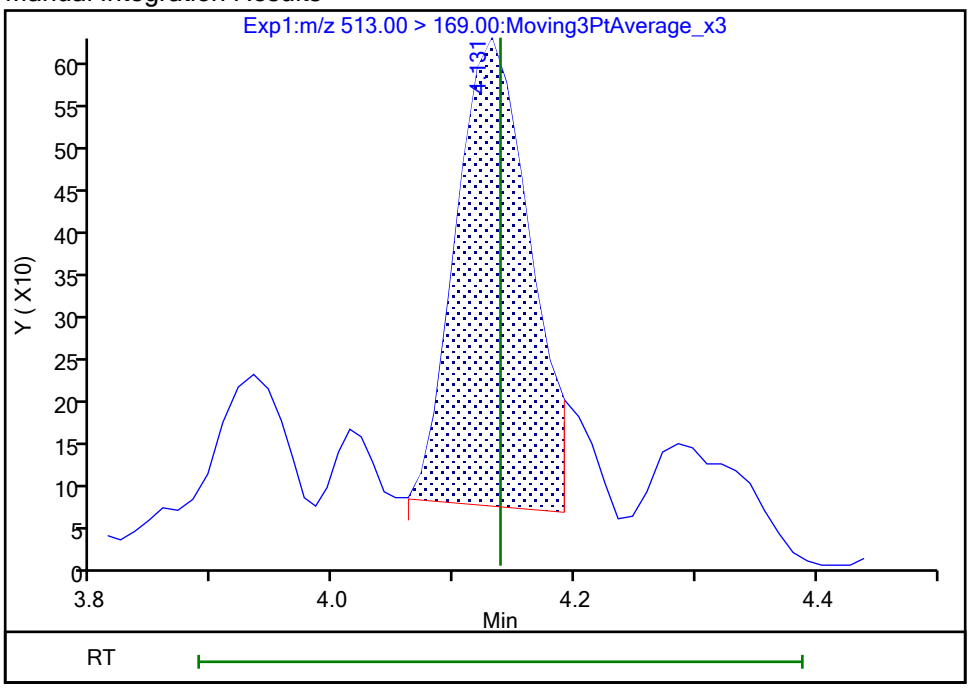
Processing Integration Results

RT: 4.13
Area: 1942
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 2338
Amount: 0.021972
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

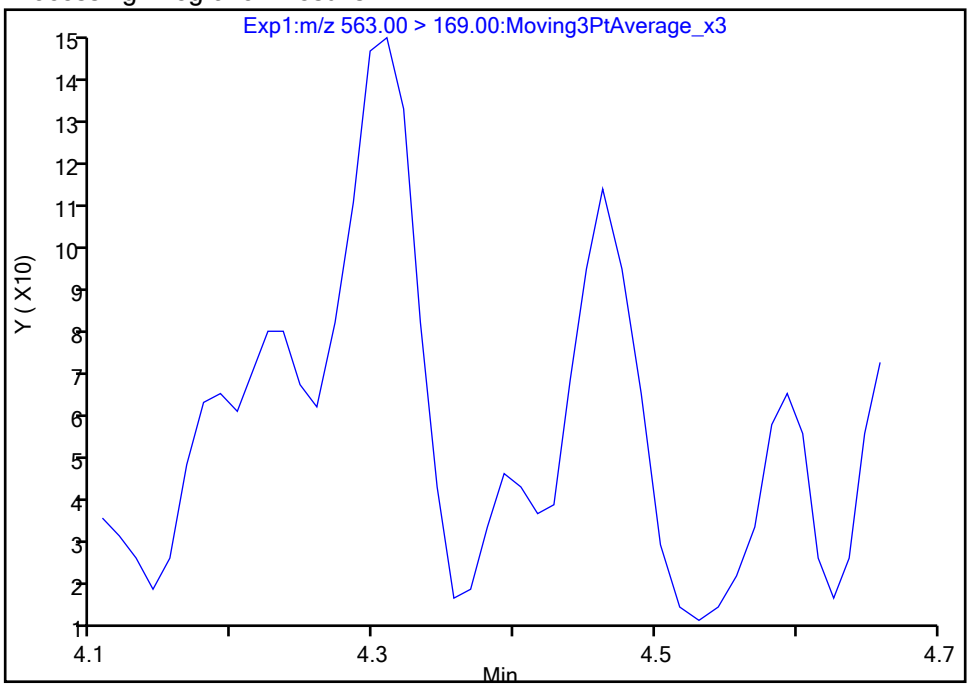
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

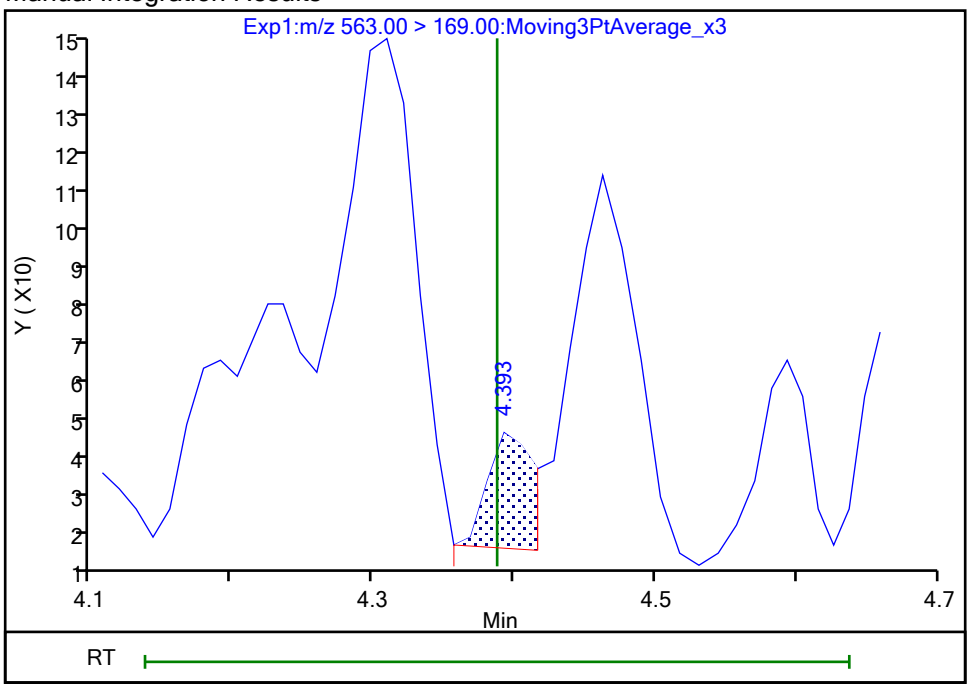
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 59
Amount: 0.003830
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:33:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

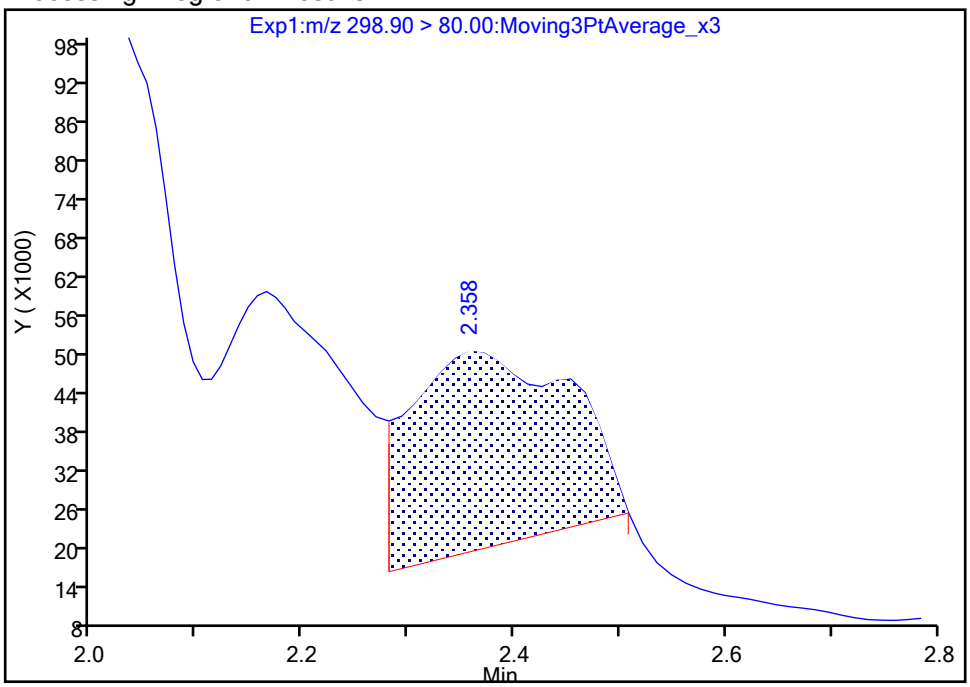
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

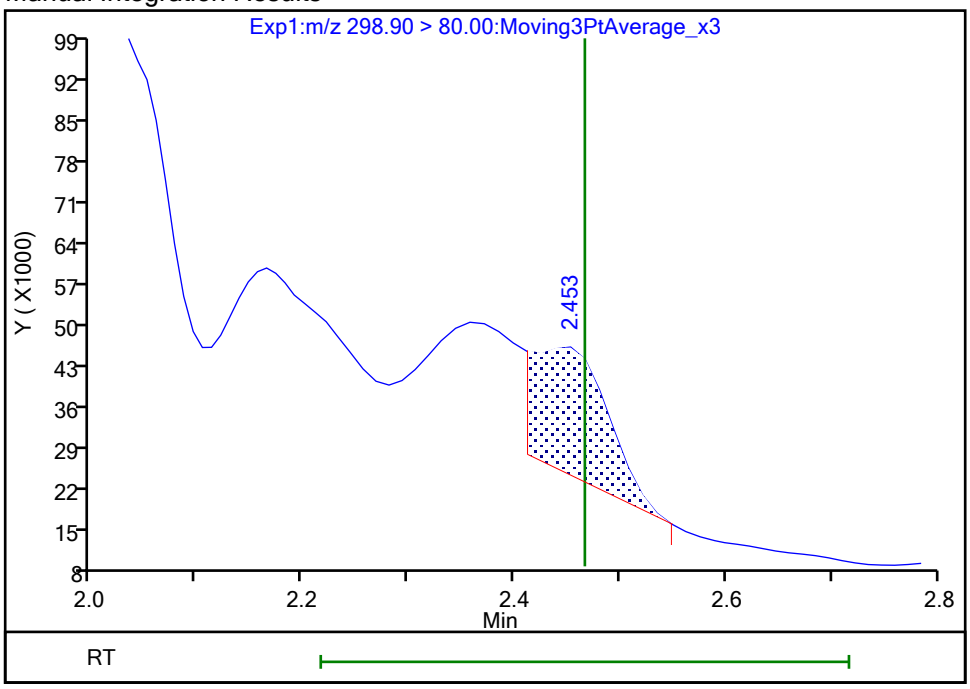
Processing Integration Results

RT: 2.36
Area: 315925
Amount: 0.197274
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 105817
Amount: 0.066076
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:29:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

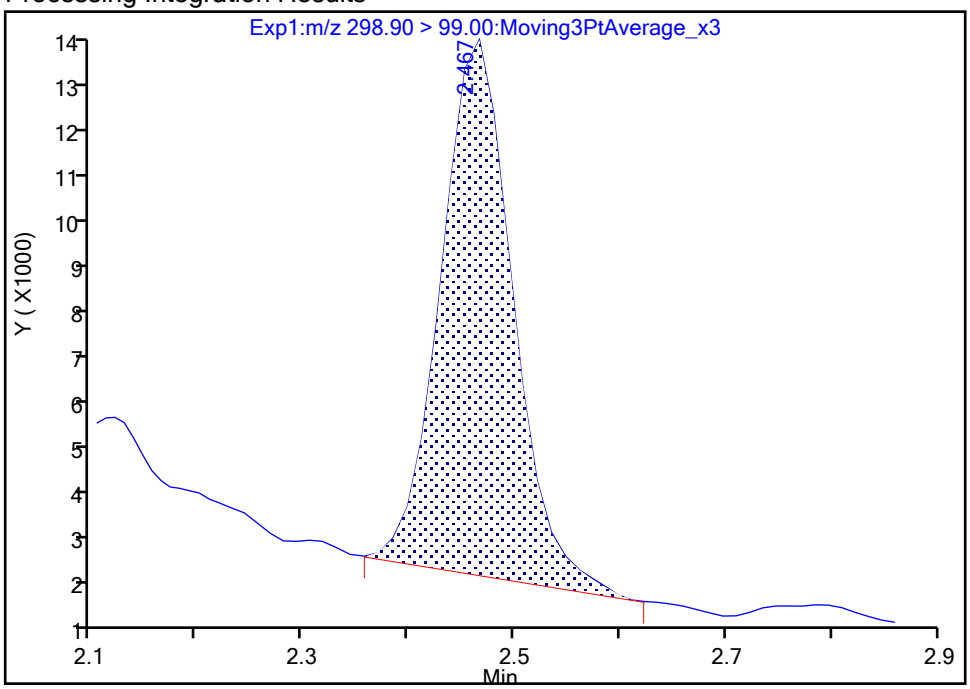
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

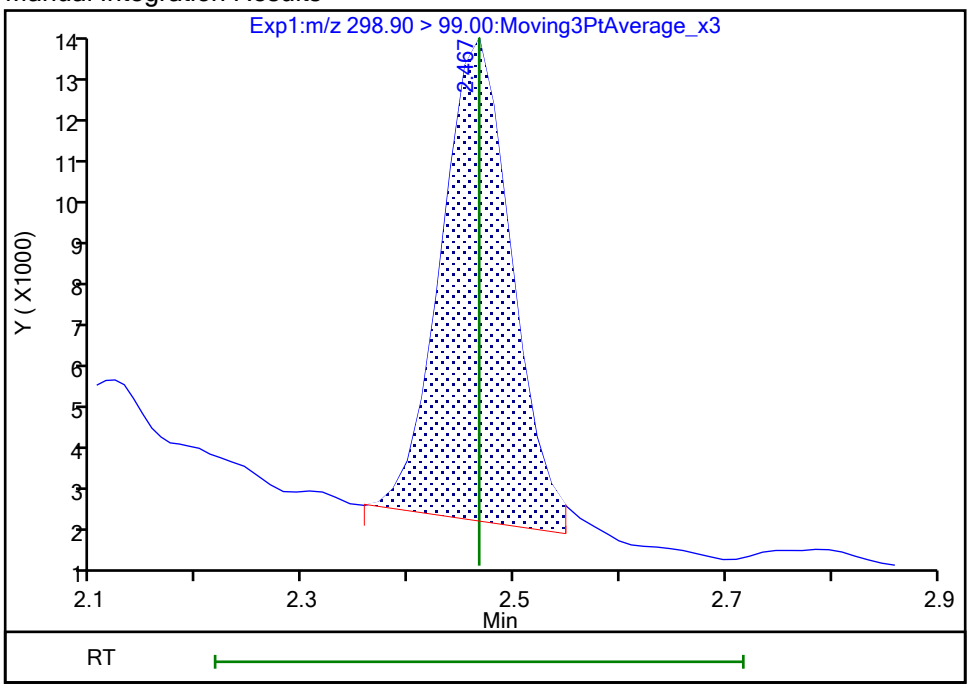
Processing Integration Results

RT: 2.47
Area: 54280
Amount: 0.197274
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 53118
Amount: 0.066076
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:29:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

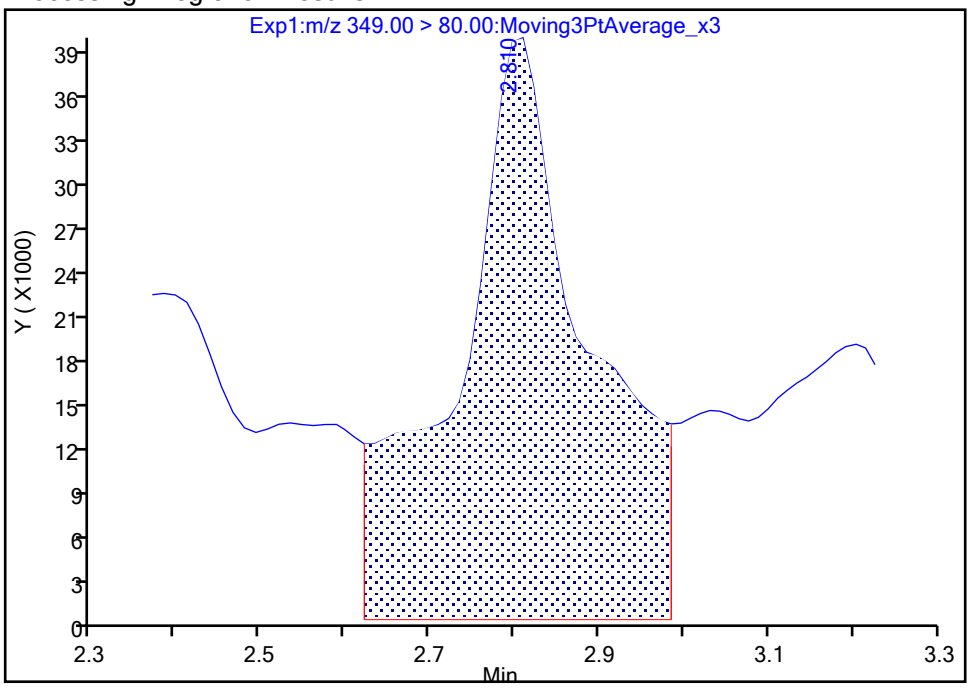
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

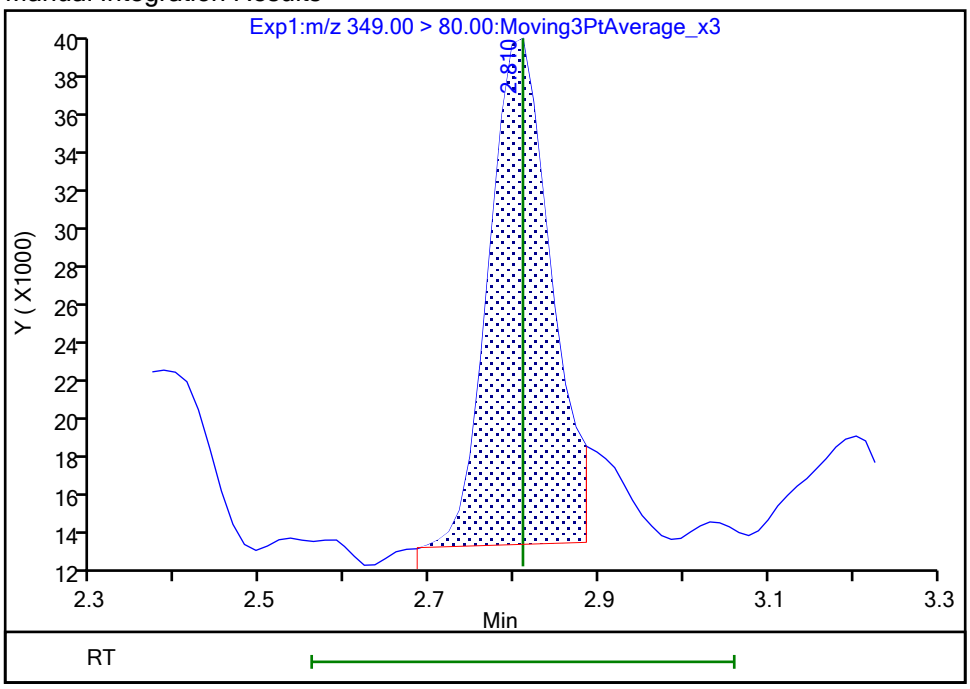
Processing Integration Results

RT: 2.81
Area: 434802
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 135501
Amount: 0.101517
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

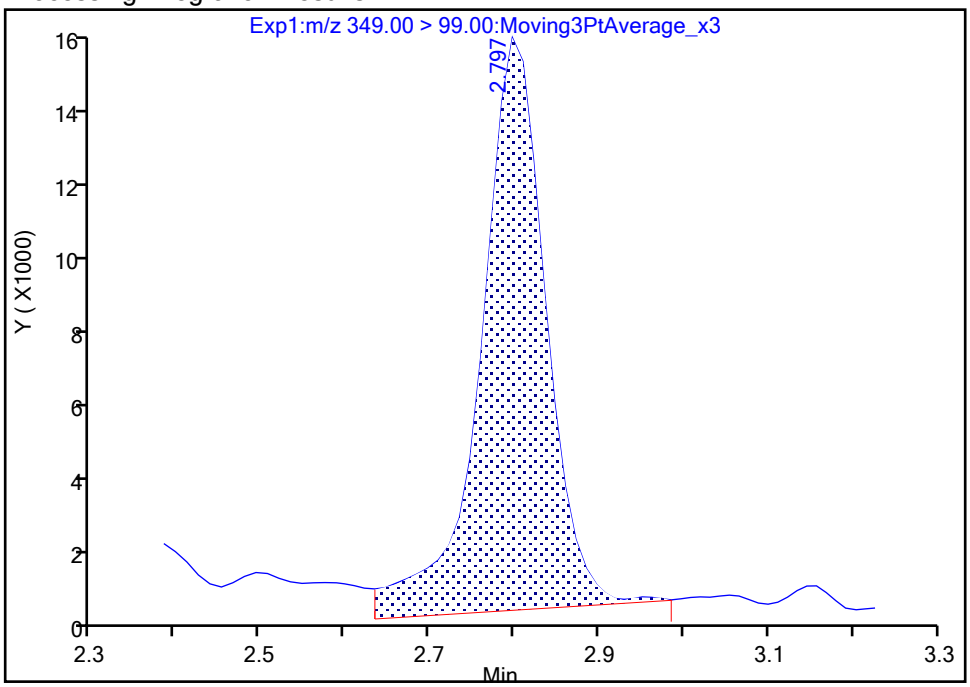
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

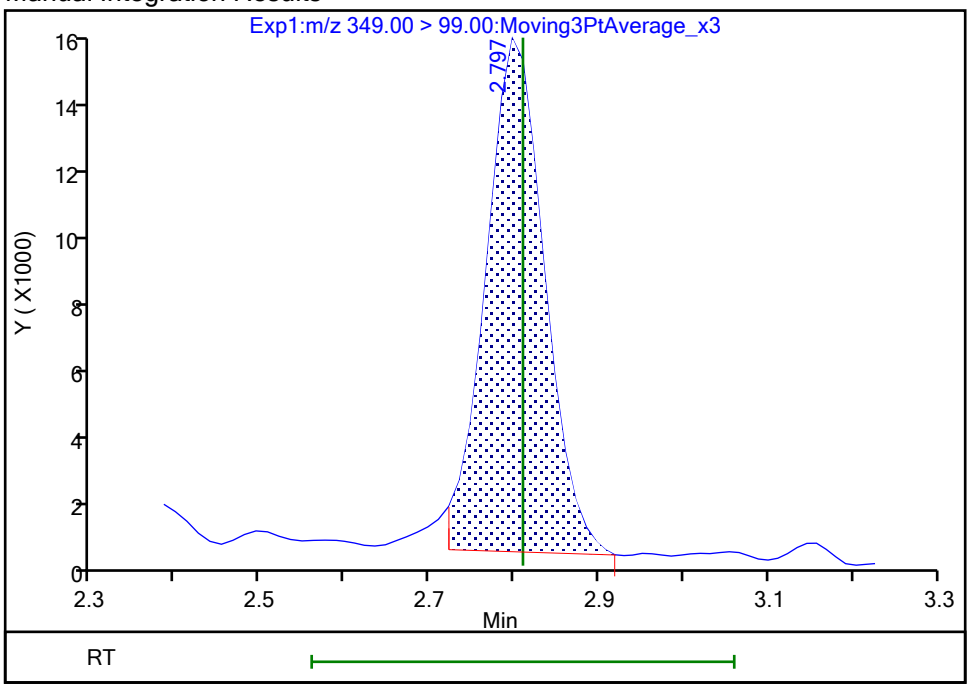
Processing Integration Results

RT: 2.80
Area: 78845
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 68334
Amount: 0.101517
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

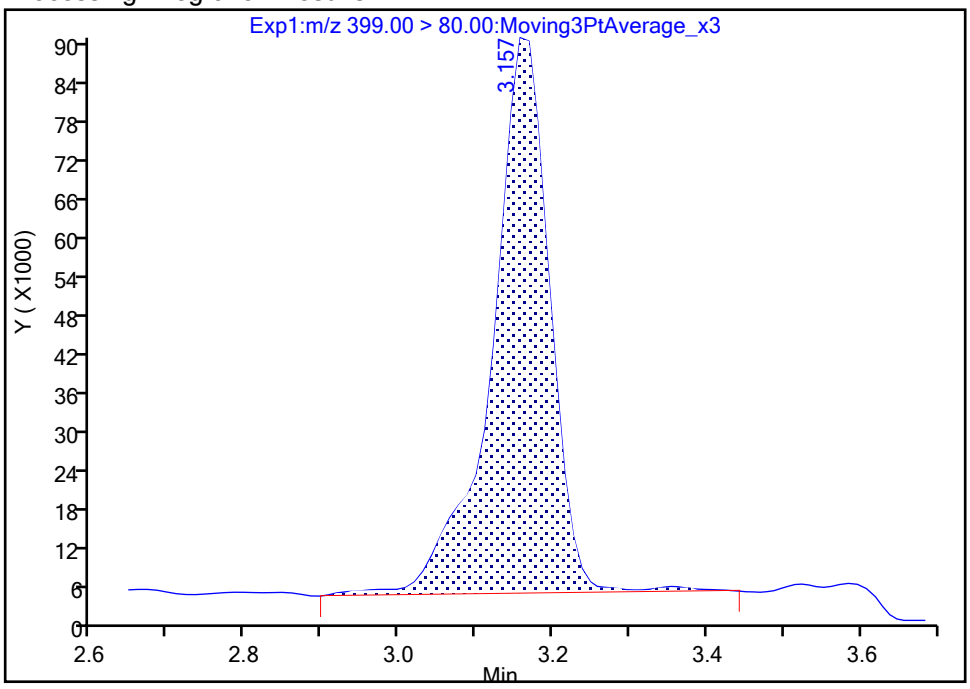
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

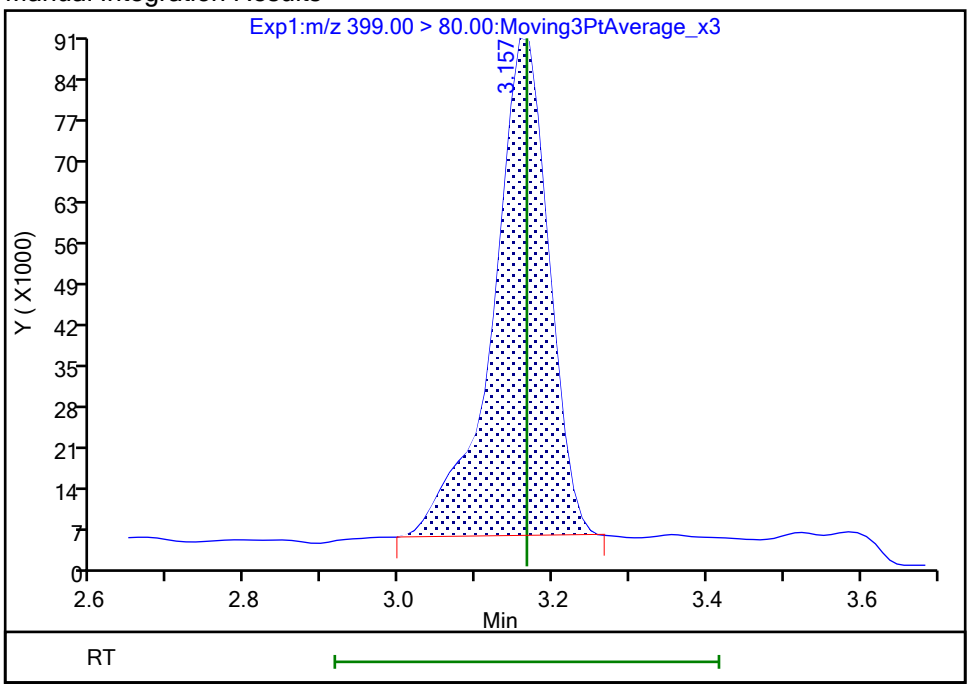
Processing Integration Results

RT: 3.16
Area: 453258
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 430233
Amount: 0.380248
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

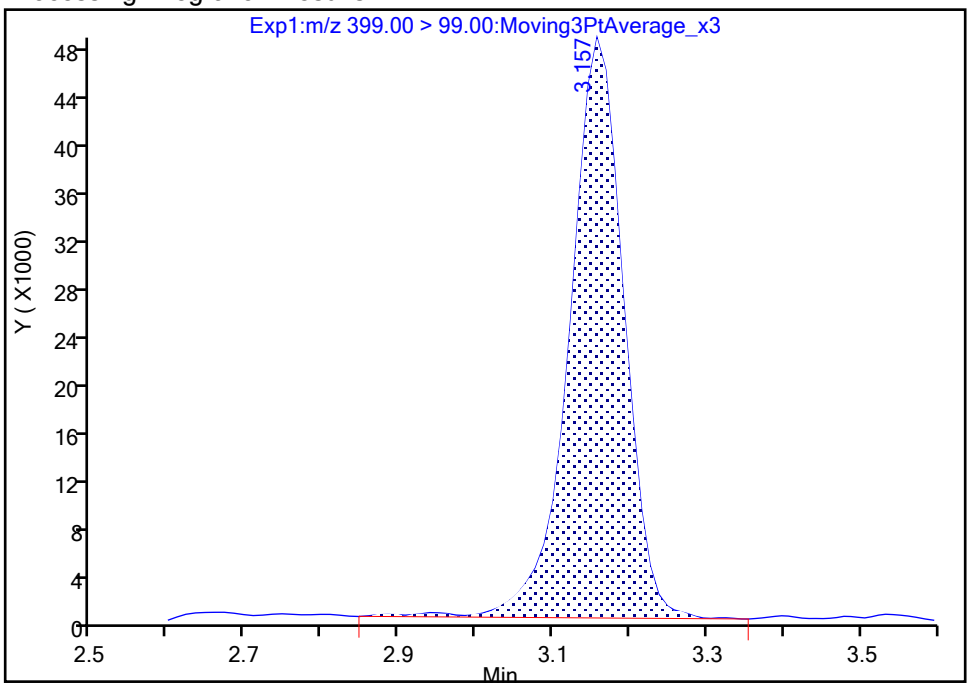
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

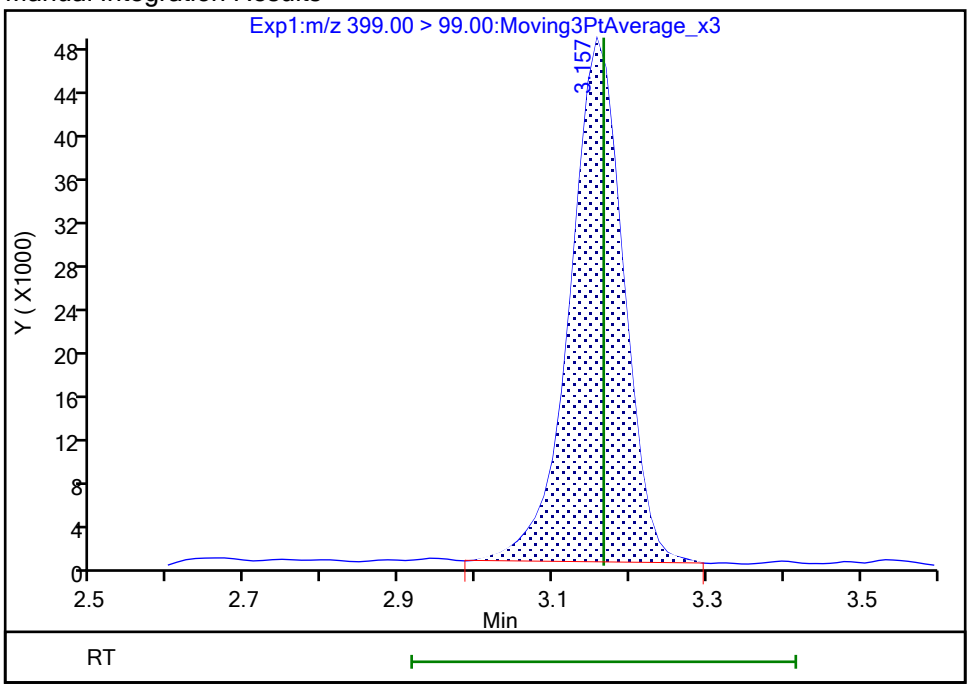
Processing Integration Results

RT: 3.16
Area: 235851
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 232211
Amount: 0.380248
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

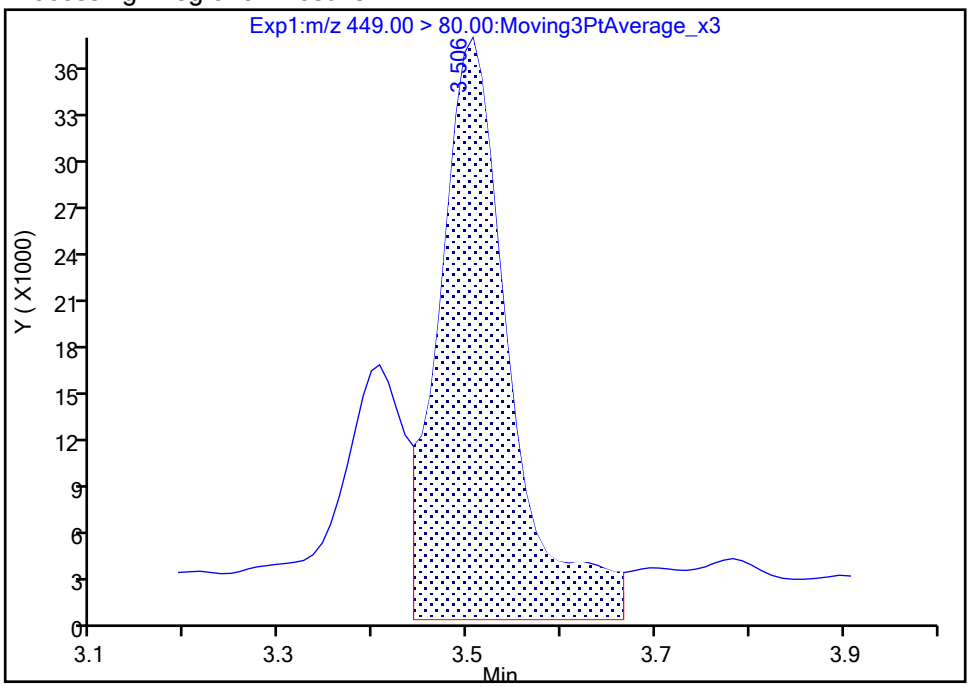
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

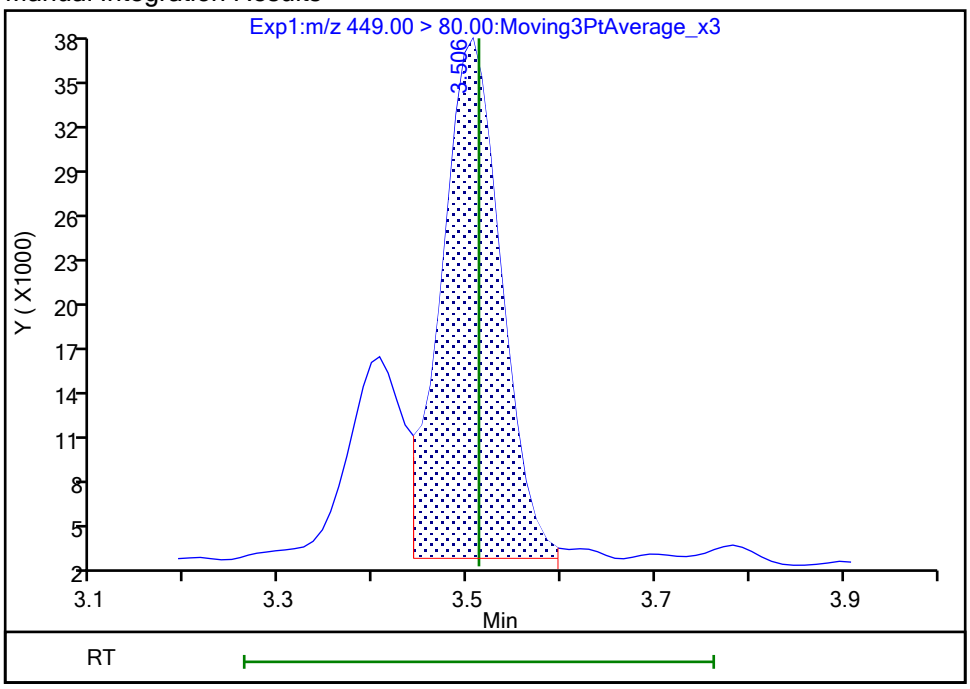
Processing Integration Results

RT: 3.51
Area: 196255
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 153214
Amount: 0.157121
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:03:33 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

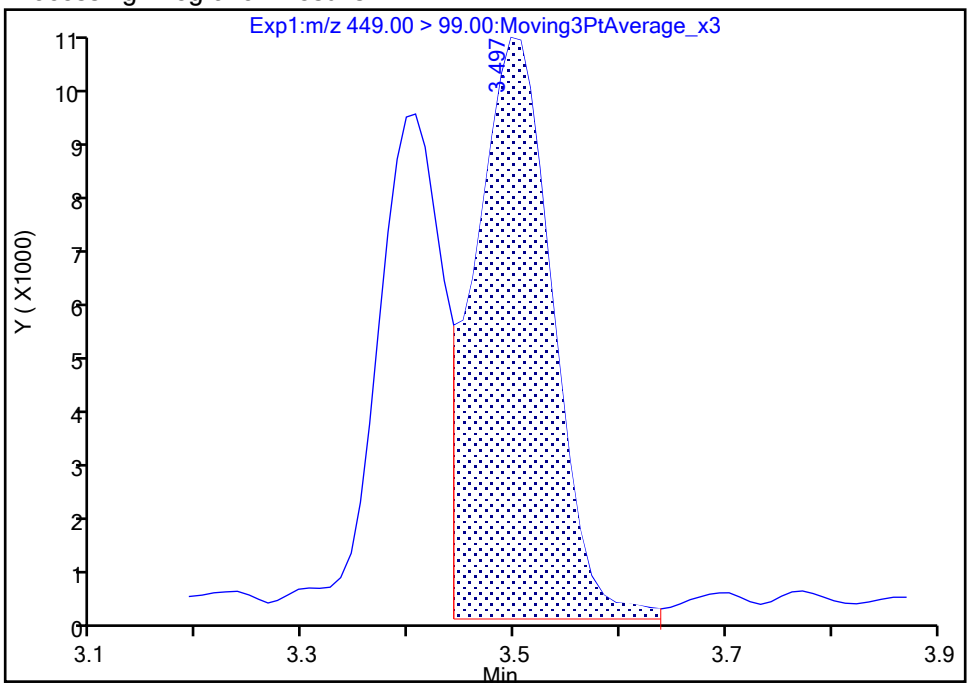
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

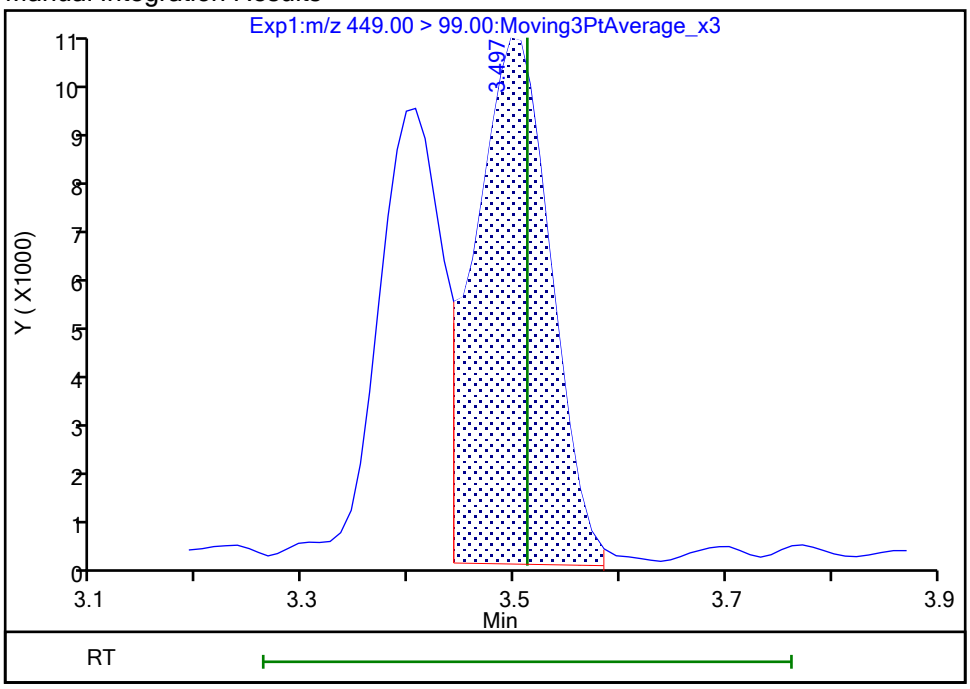
Processing Integration Results

RT: 3.50
Area: 54991
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 52690
Amount: 0.157121
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 14:03:40 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

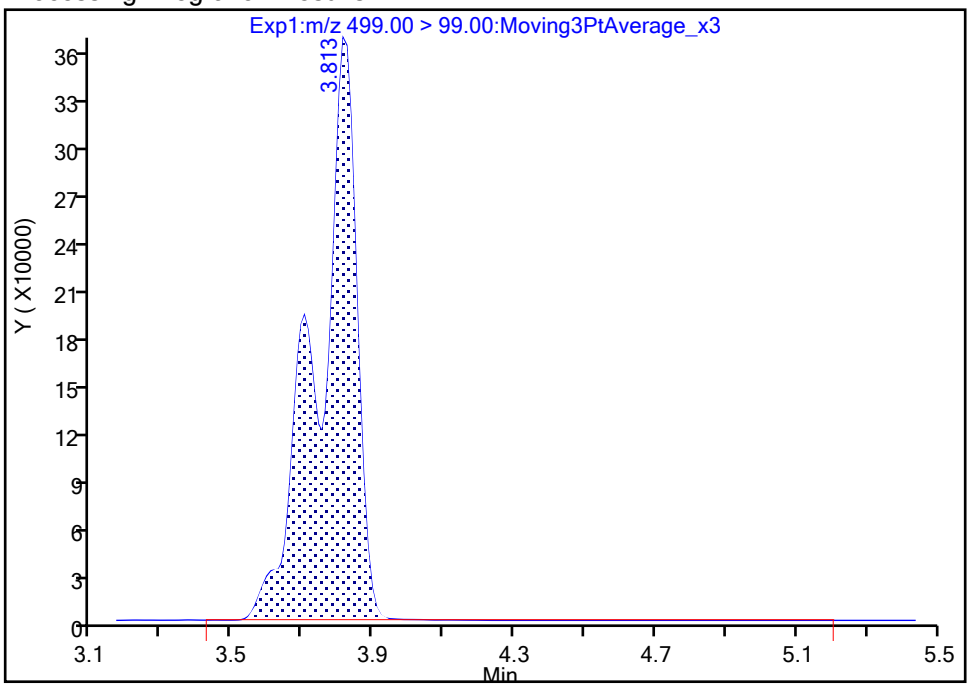
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

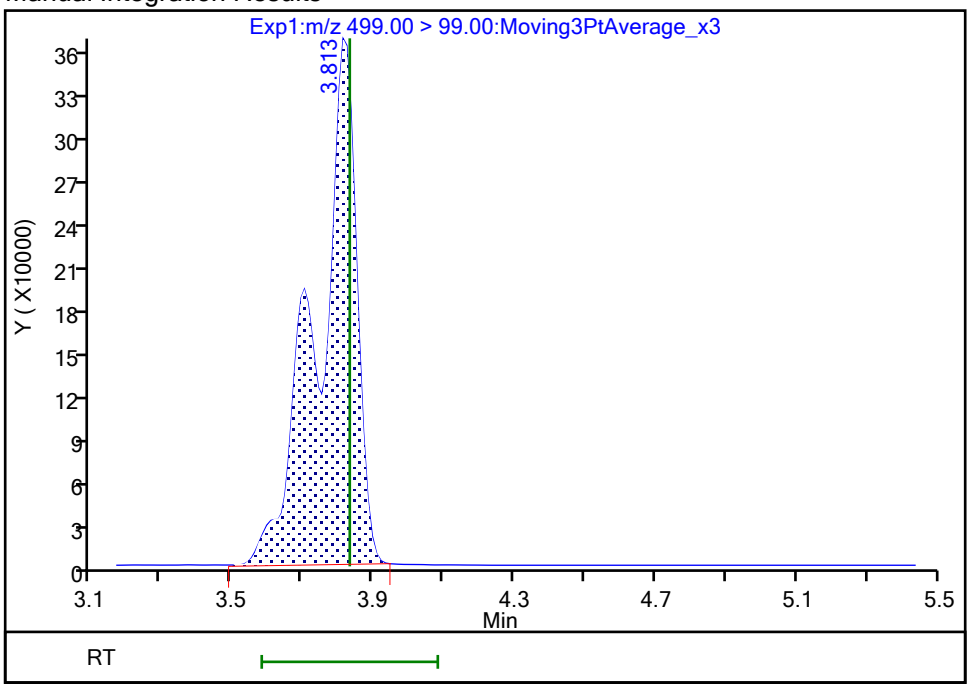
Processing Integration Results

RT: 3.81
Area: 2886035
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 2874717
Amount: 10.775201
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

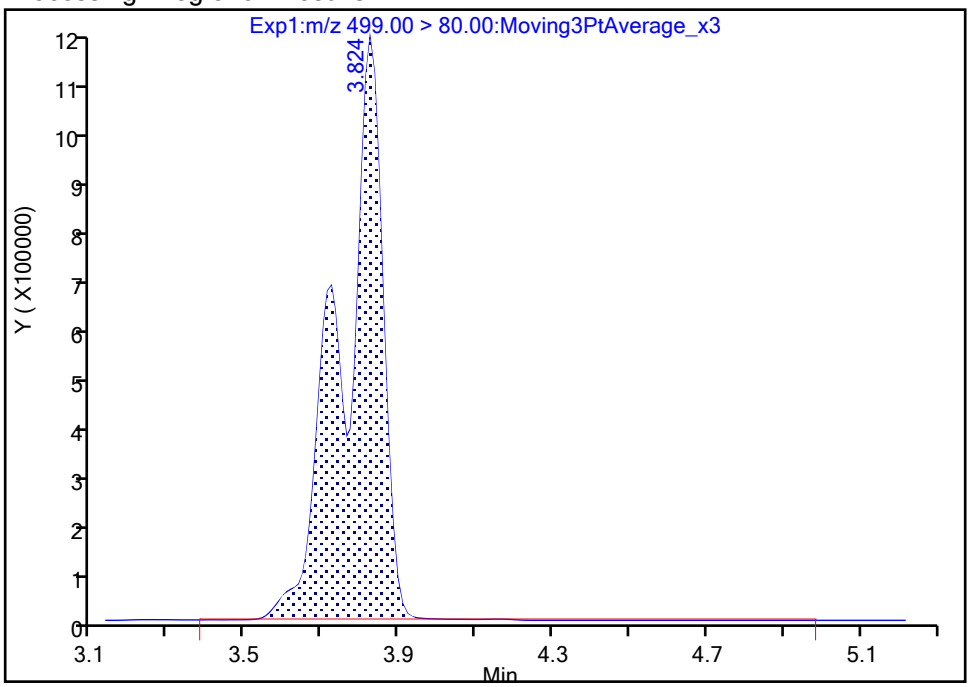
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

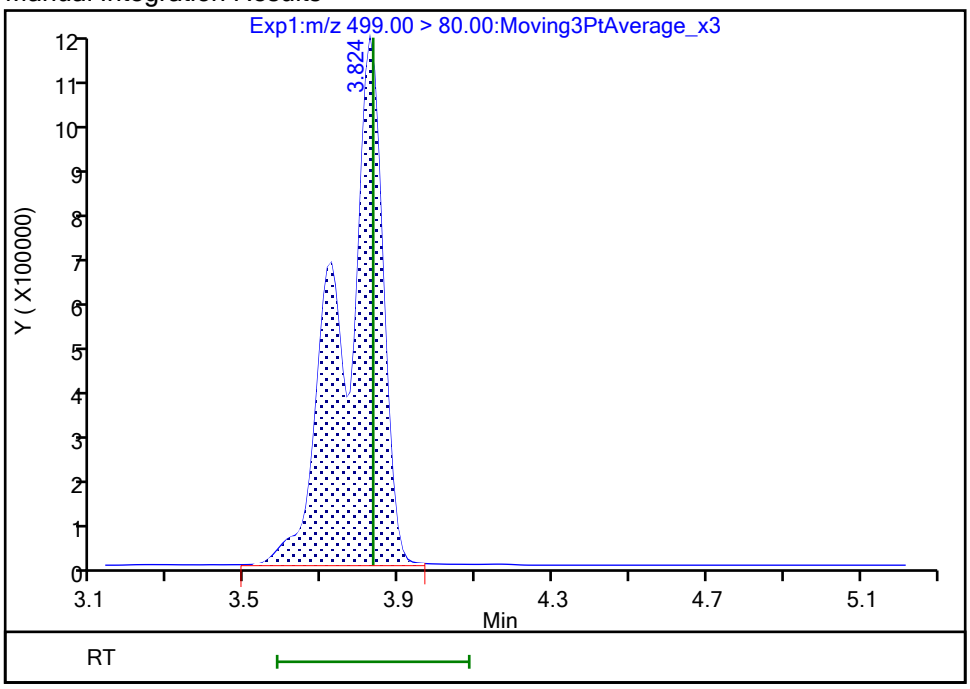
Processing Integration Results

RT: 3.82
Area: 8553093
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 8480334
Amount: 10.775201
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

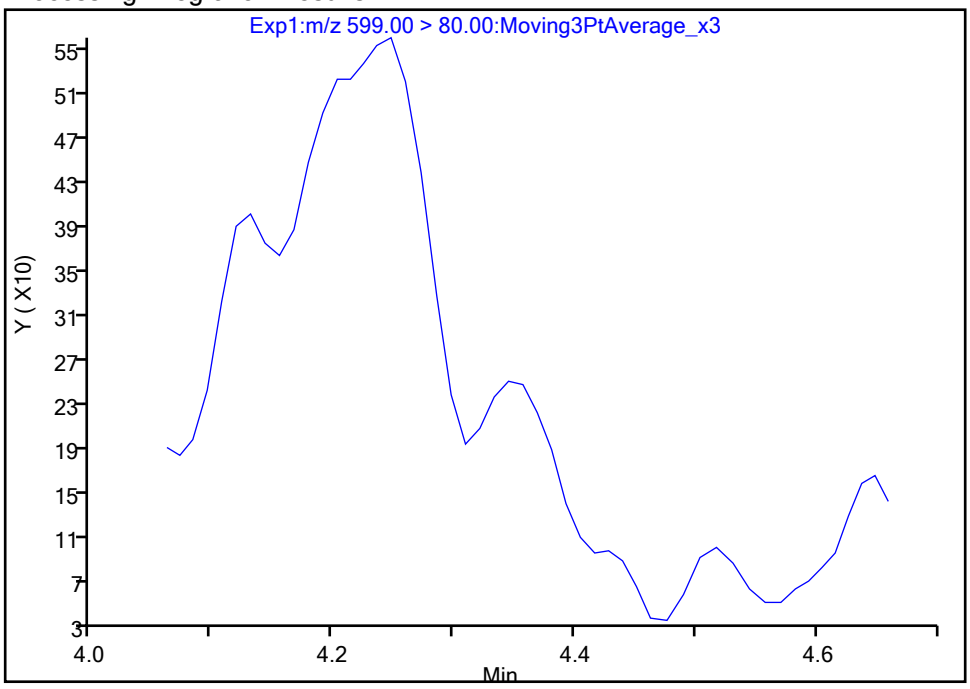
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

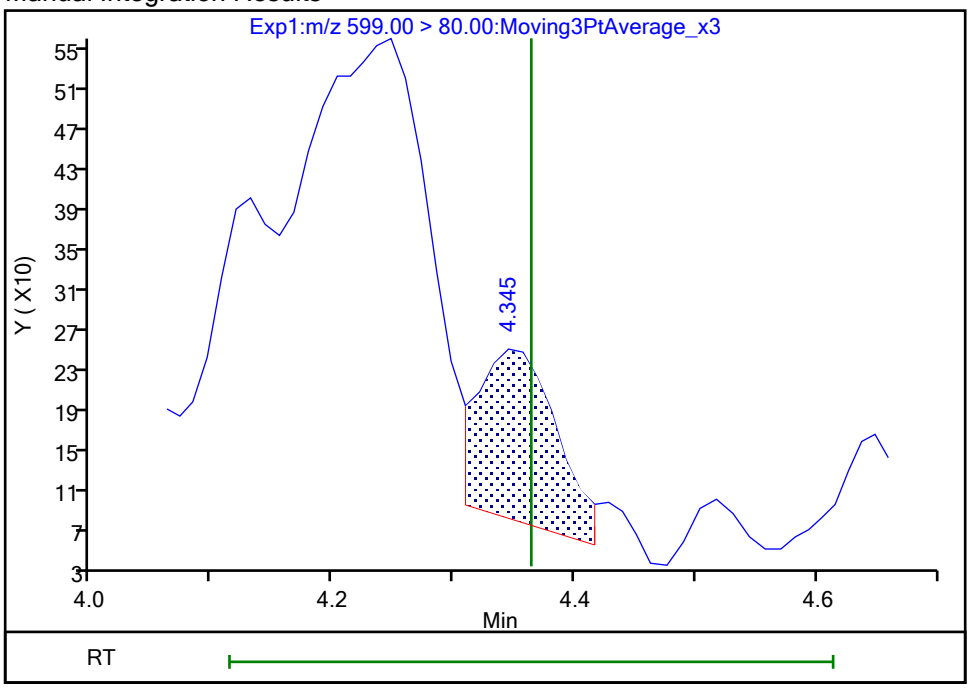
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.34
Area: 753
Amount: 0.001634
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

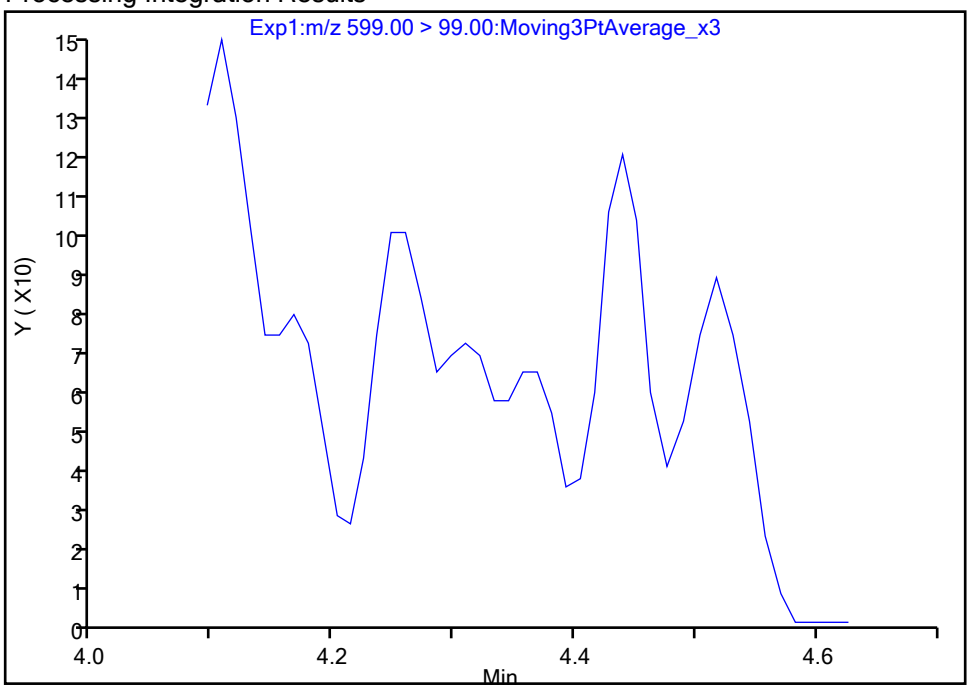
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

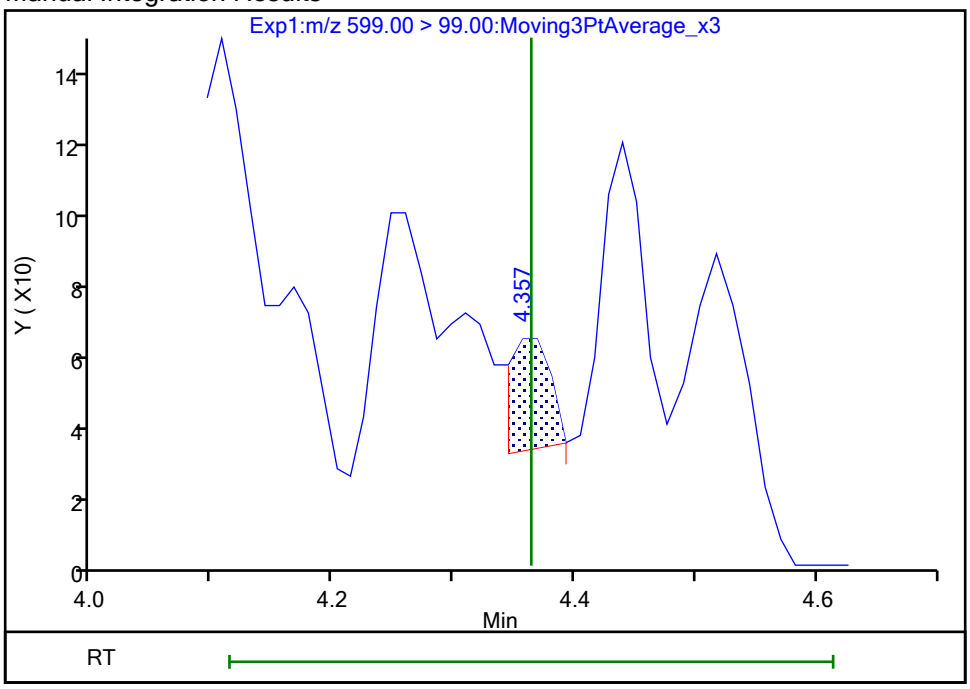
Not Detected
Expected RT: 4.36

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 64
Amount: 0.001634
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

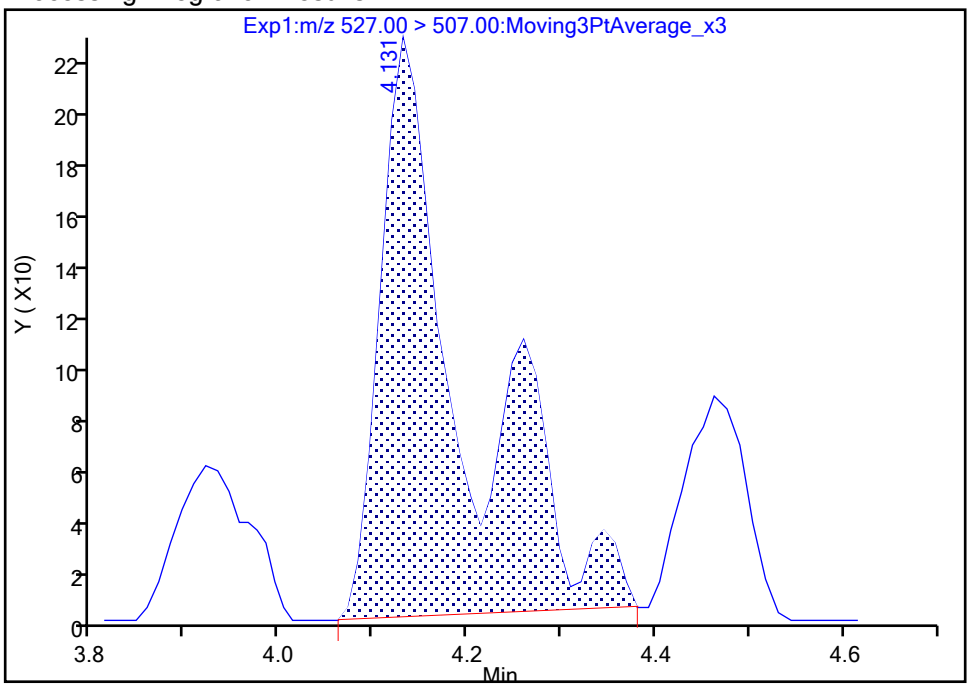
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

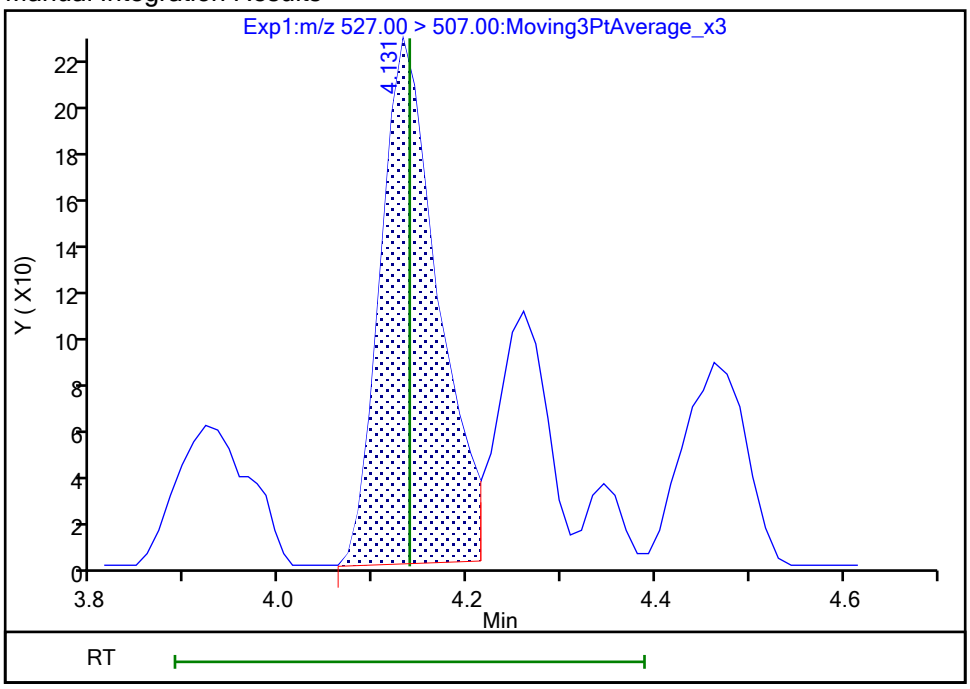
Processing Integration Results

RT: 4.13
Area: 1401
Amount: 0.002501
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 953
Amount: 0.001701
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

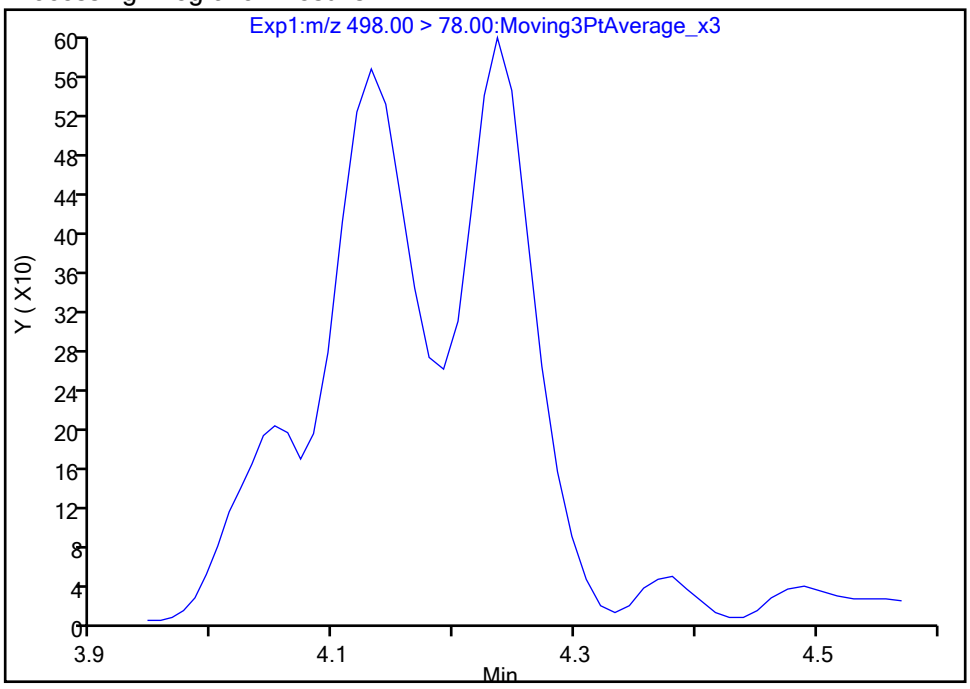
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

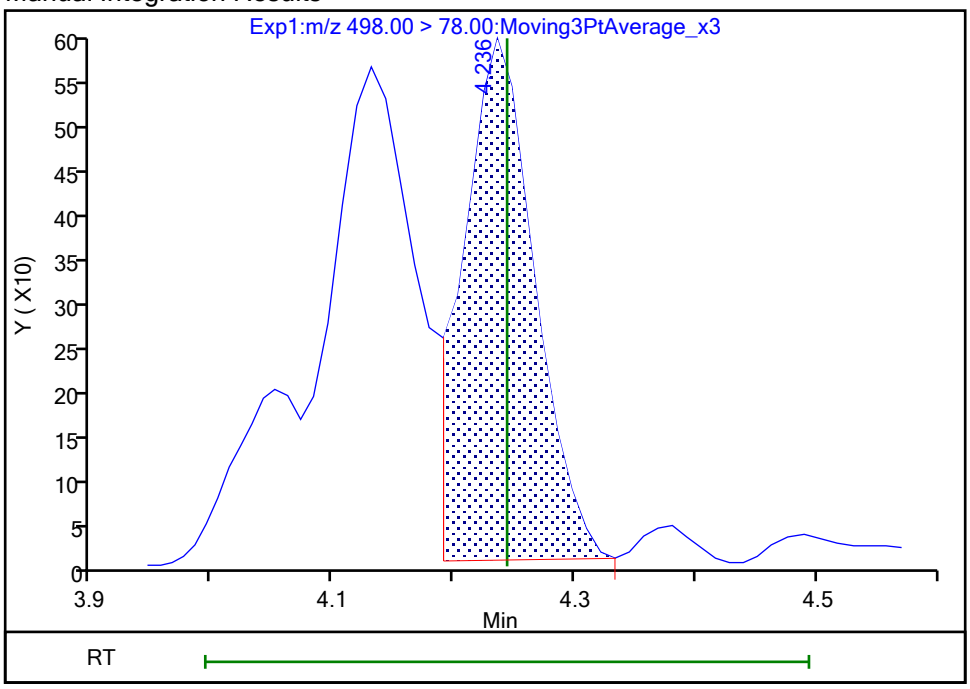
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 2384
Amount: 0.002224
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

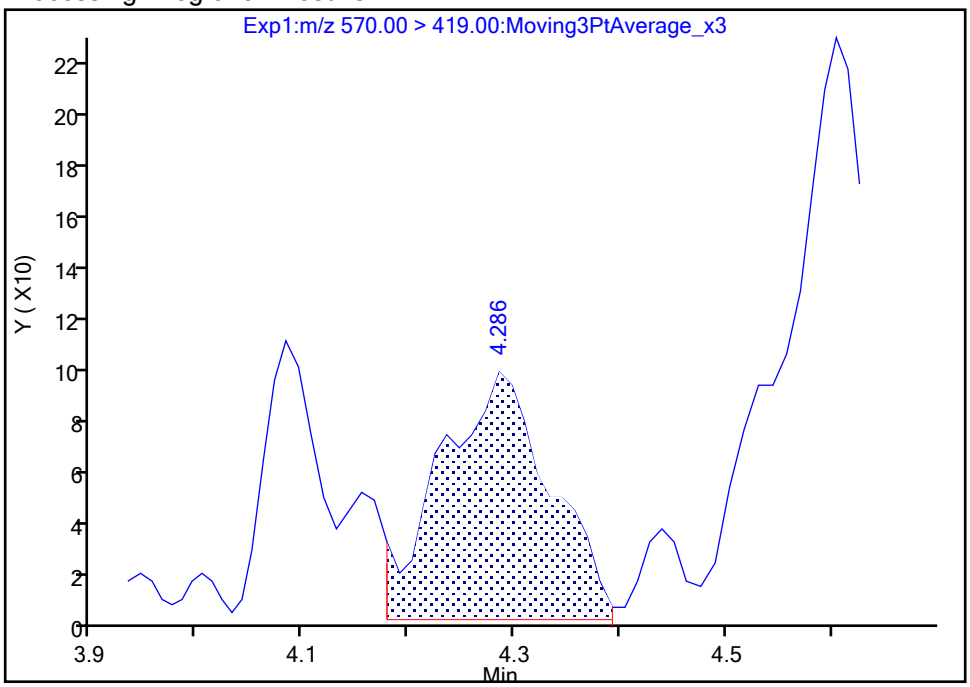
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

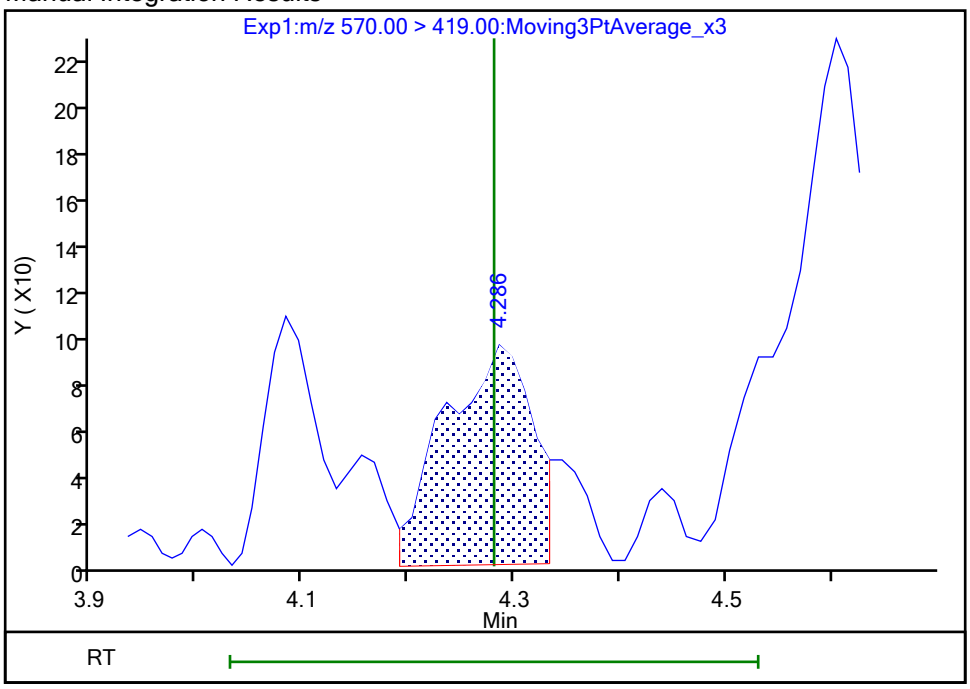
Processing Integration Results

RT: 4.29
Area: 682
Amount: 0.001854
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 519
Amount: 0.001411
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:32:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

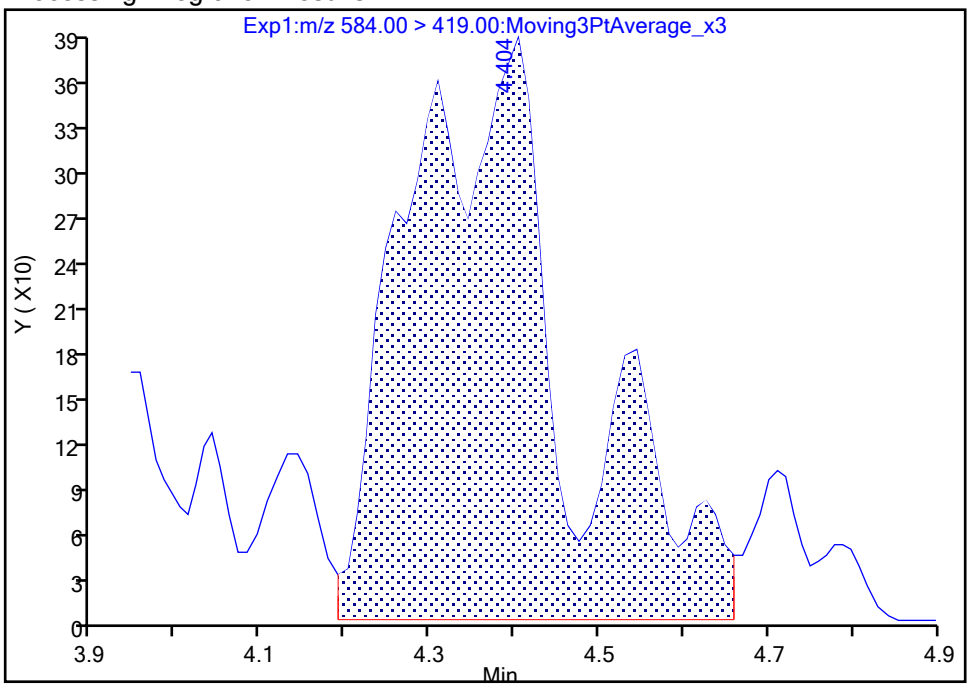
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

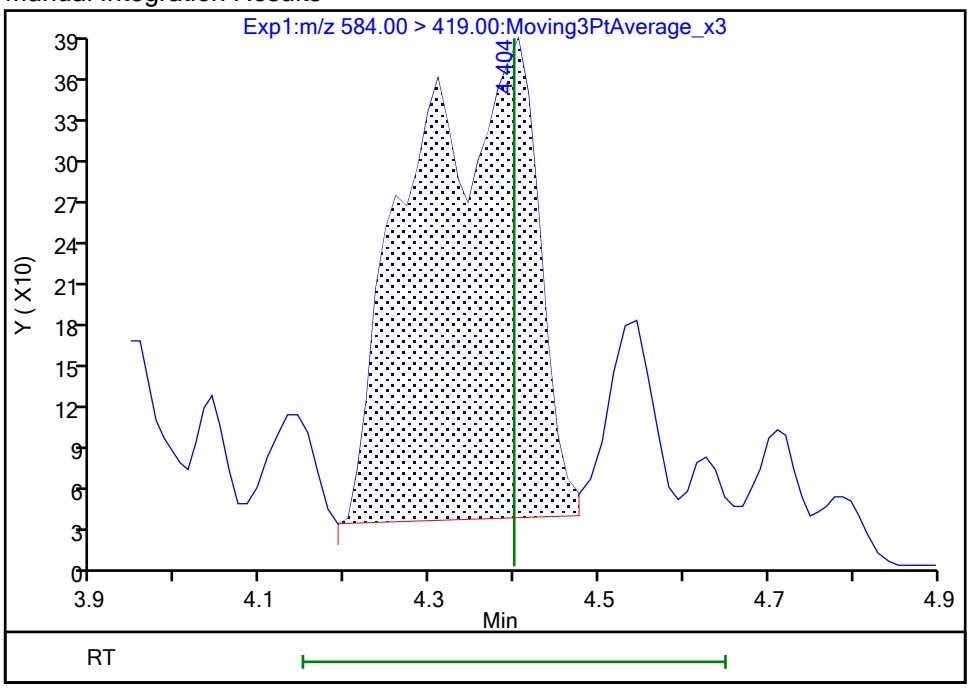
Processing Integration Results

RT: 4.40
Area: 5130
Amount: 0.011697
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 3527
Amount: 0.008042
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:33:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

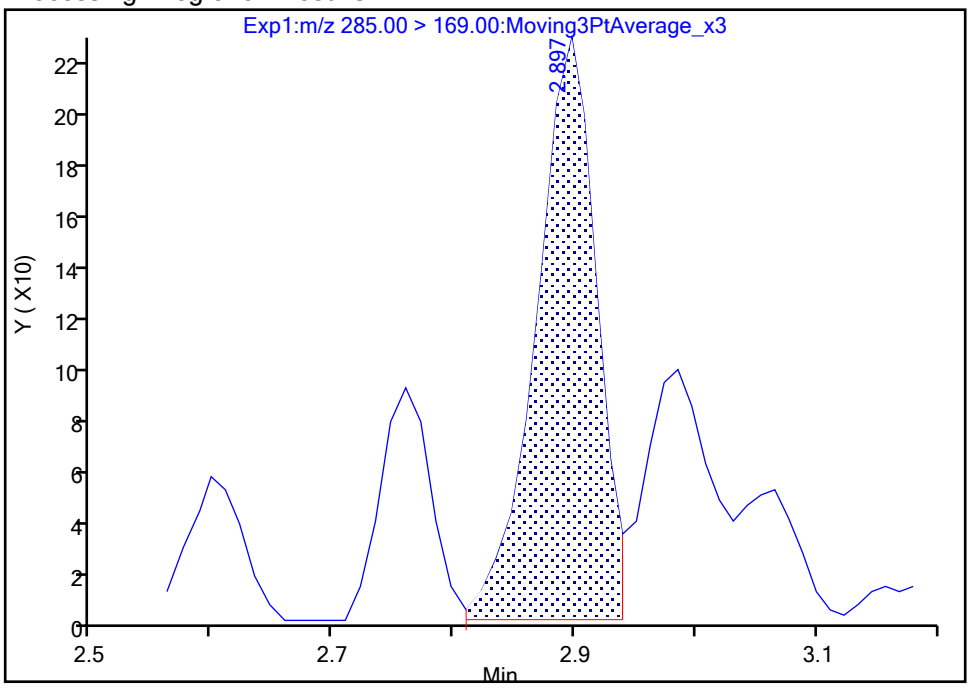
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

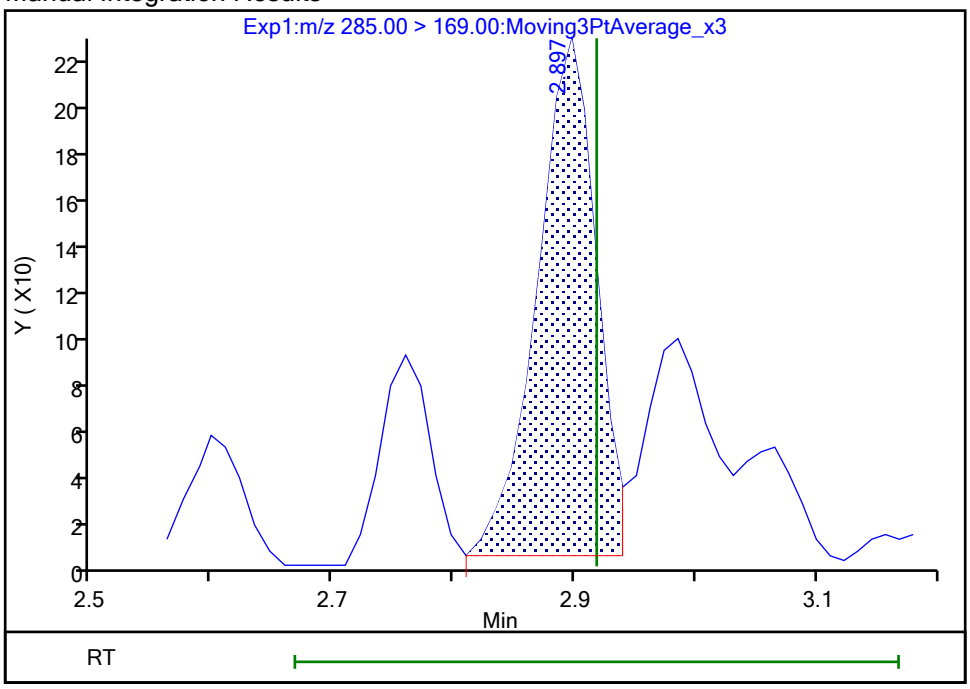
Processing Integration Results

RT: 2.90
Area: 770
Amount: 0.004077
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 739
Amount: 0.003913
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:30:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

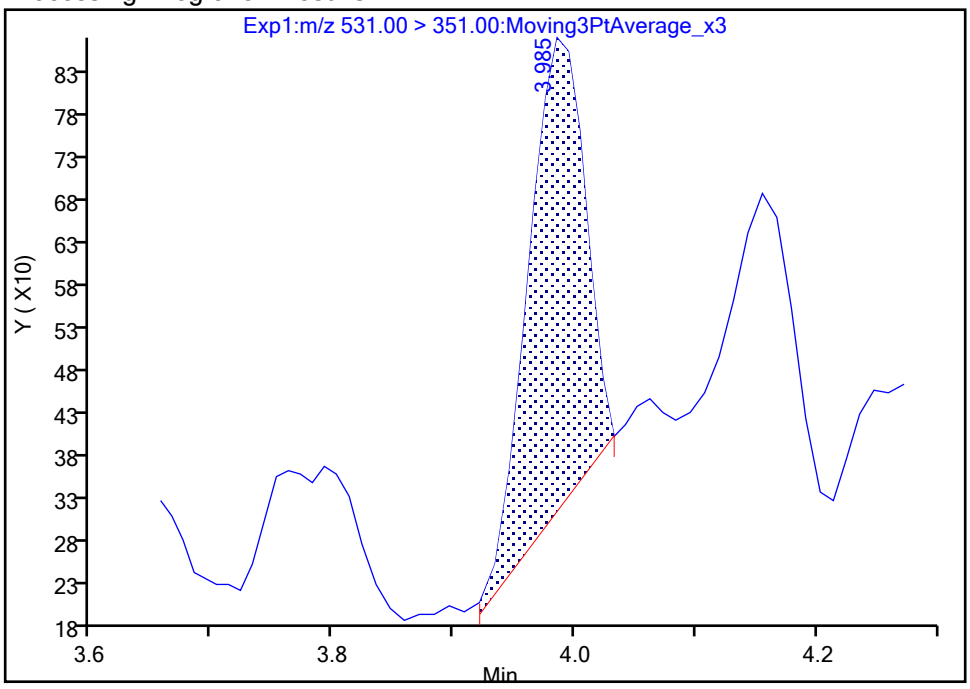
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

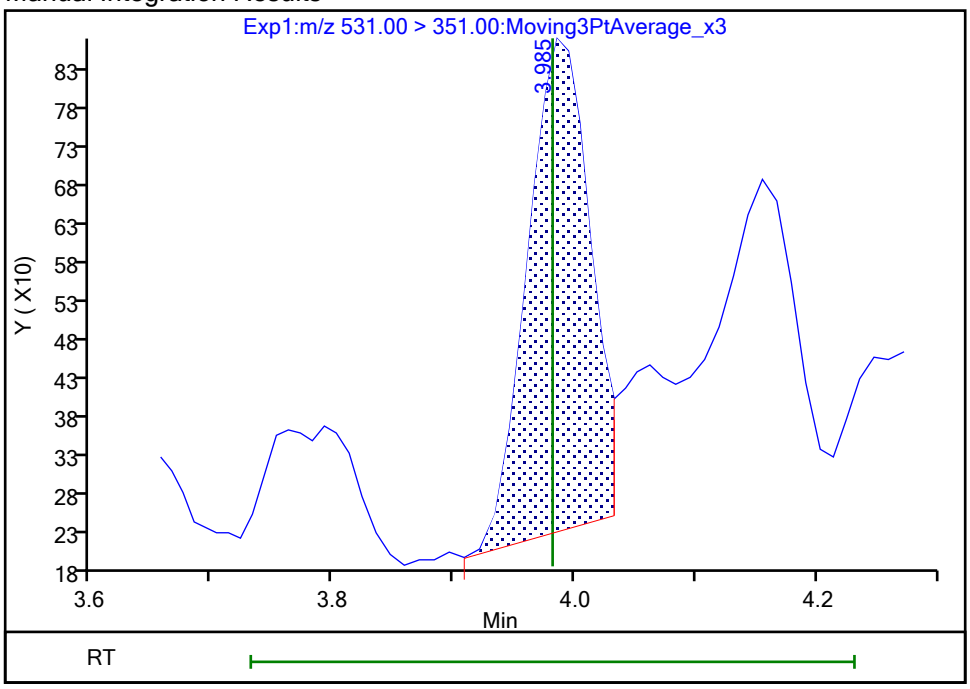
Processing Integration Results

RT: 3.99
Area: 1808
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.99
Area: 2290
Amount: 0.000951
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:31:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

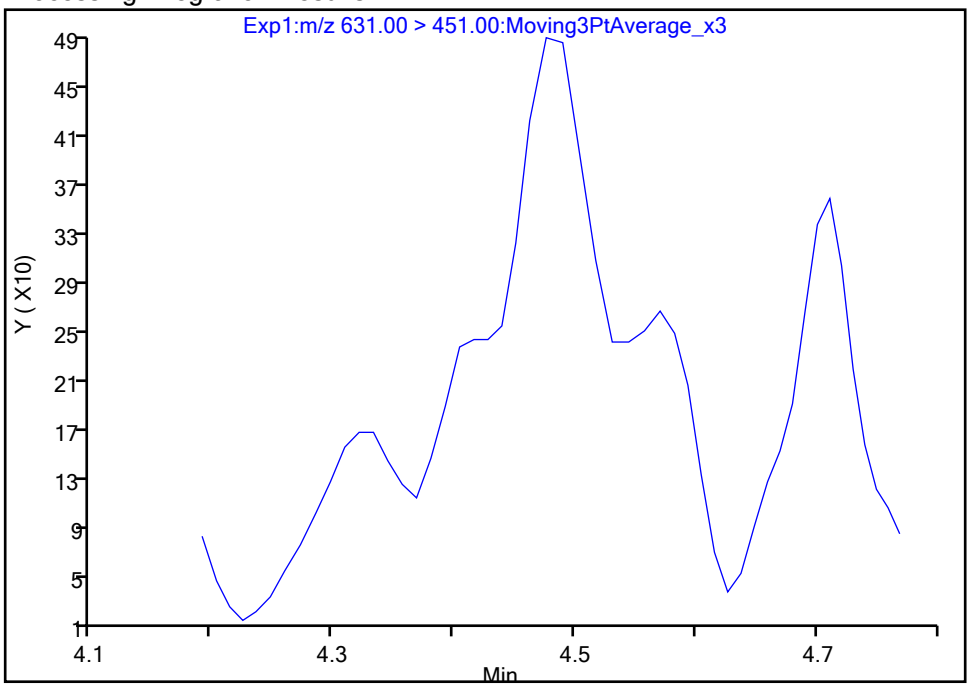
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

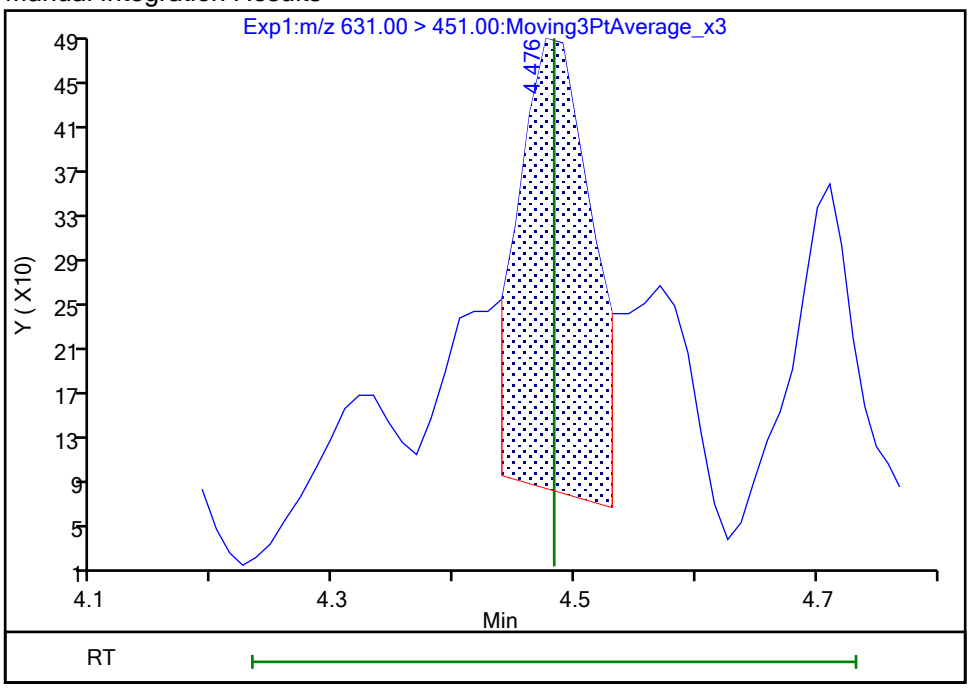
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.48
Area: 1651
Amount: 0.000447
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:33:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

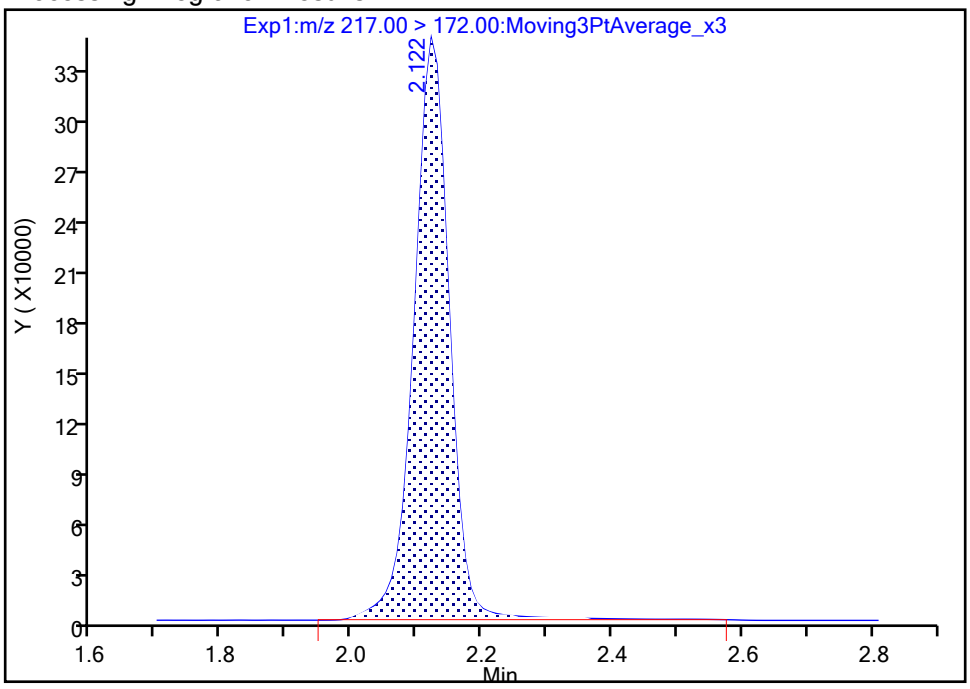
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

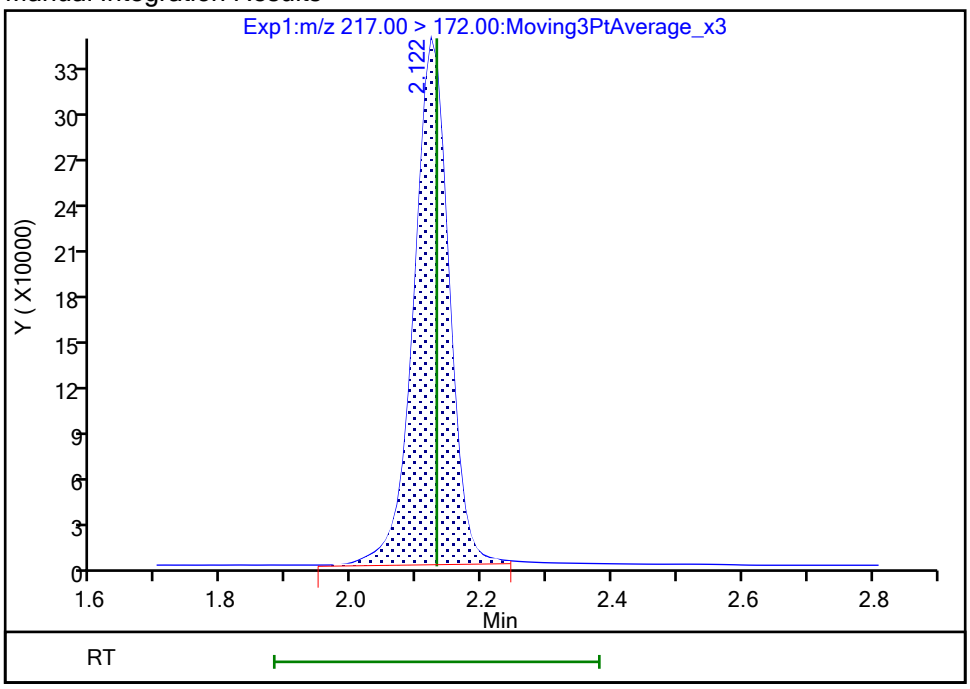
Processing Integration Results

RT: 2.12
Area: 1313299
Amount: 0.940557
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1297751
Amount: 0.929422
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

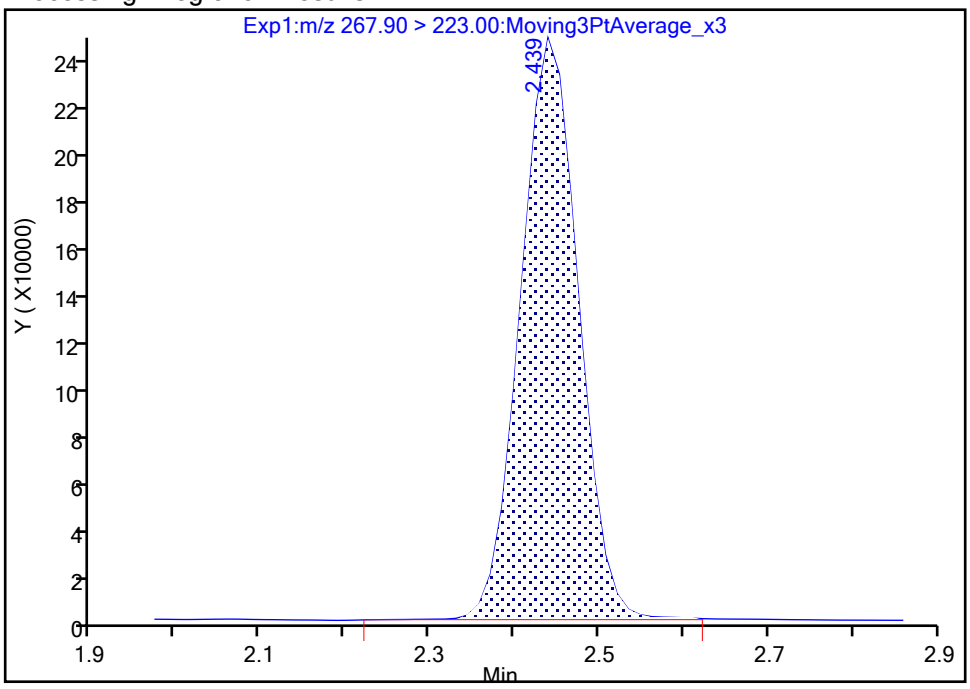
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

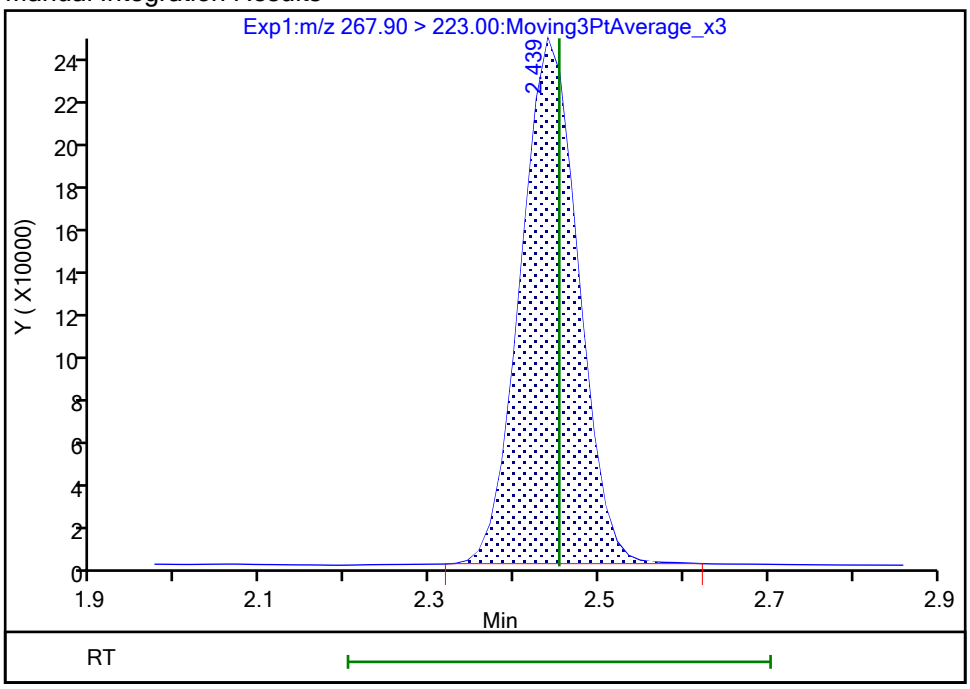
Processing Integration Results

RT: 2.44
Area: 1144425
Amount: 1.056079
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1143689
Amount: 1.055400
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

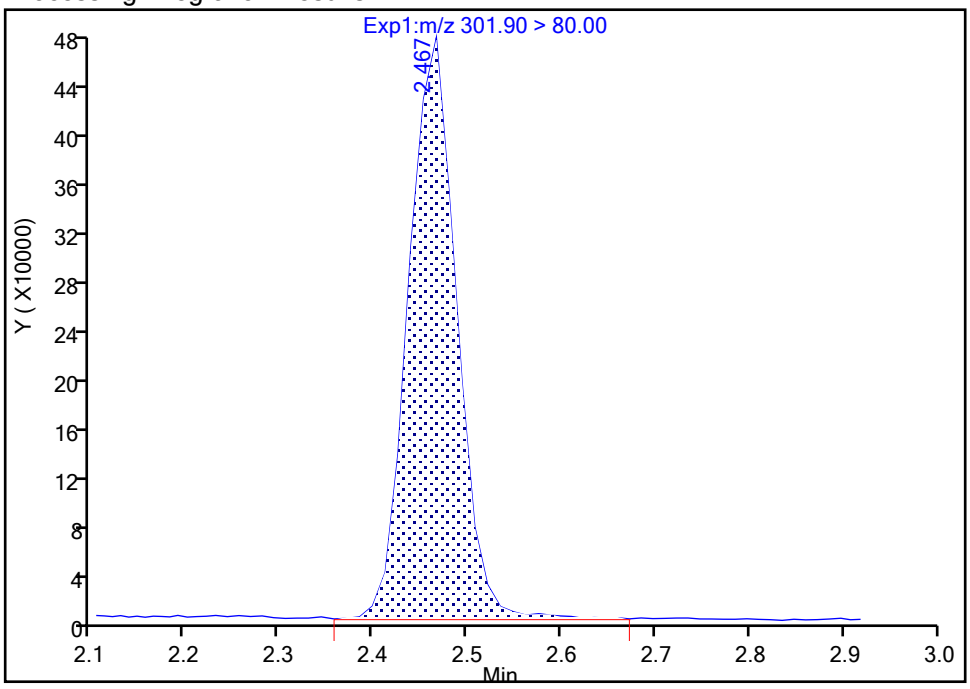
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

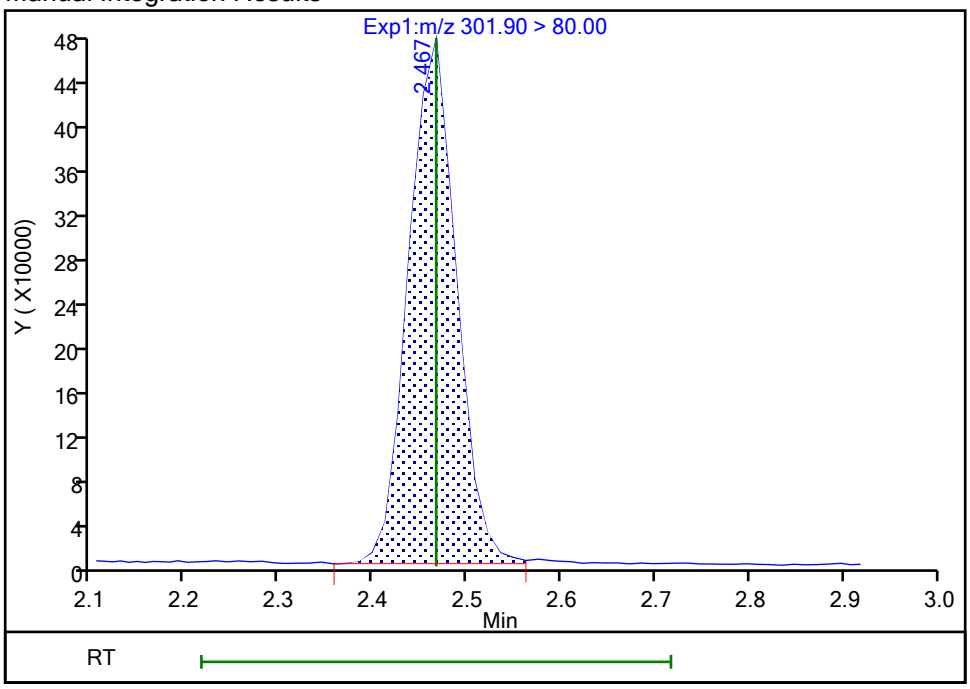
Processing Integration Results

RT: 2.47
Area: 1678951
Amount: 1.145068
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1666829
Amount: 1.136801
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

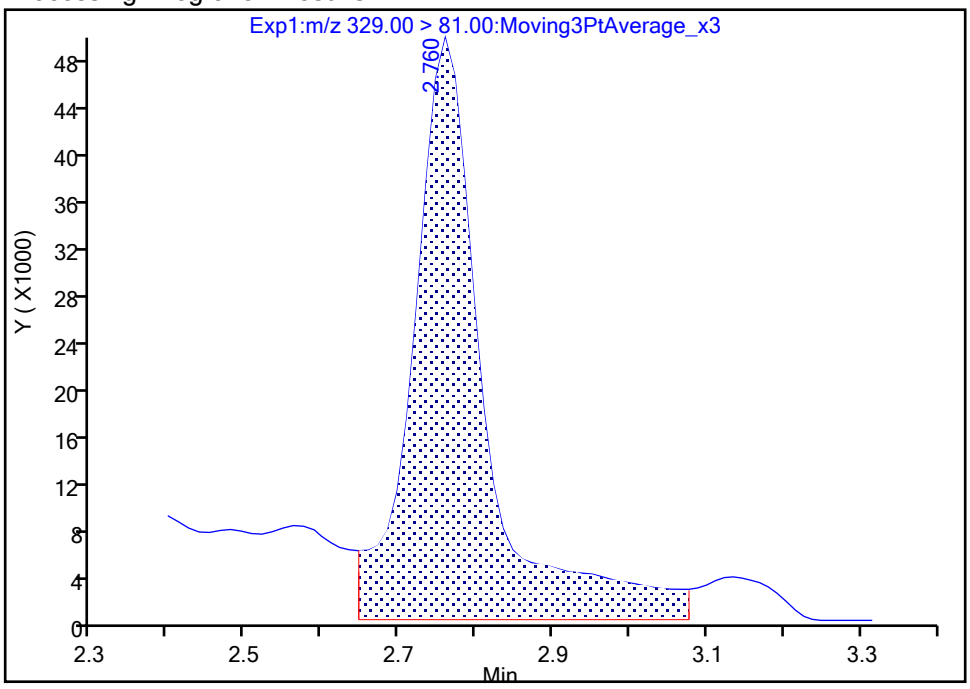
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

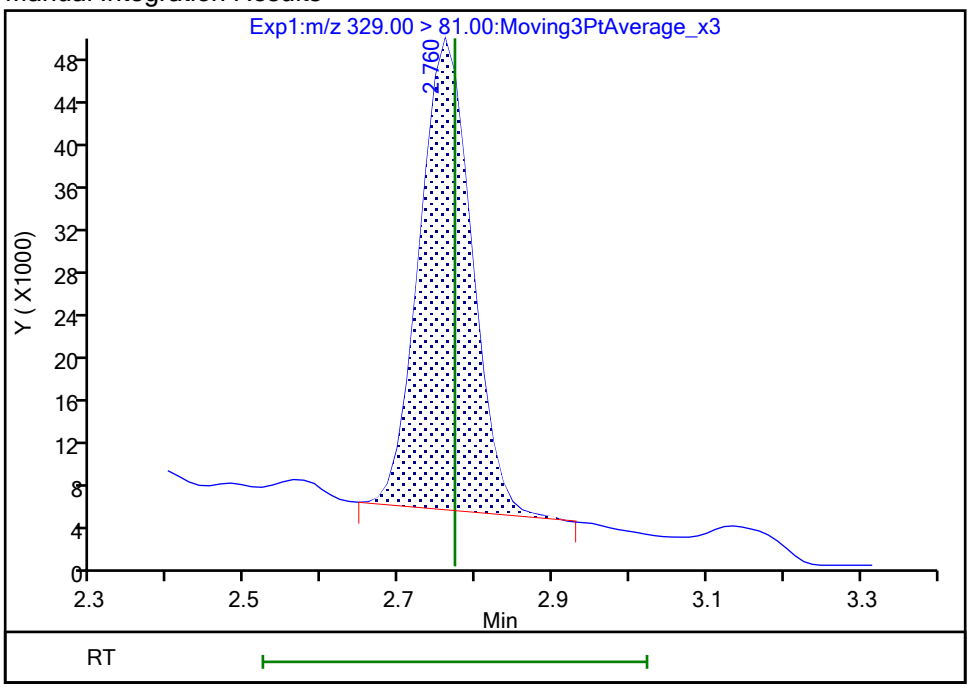
Processing Integration Results

RT: 2.76
Area: 322731
Amount: 1.903272
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 210165
Amount: 1.239426
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:27:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

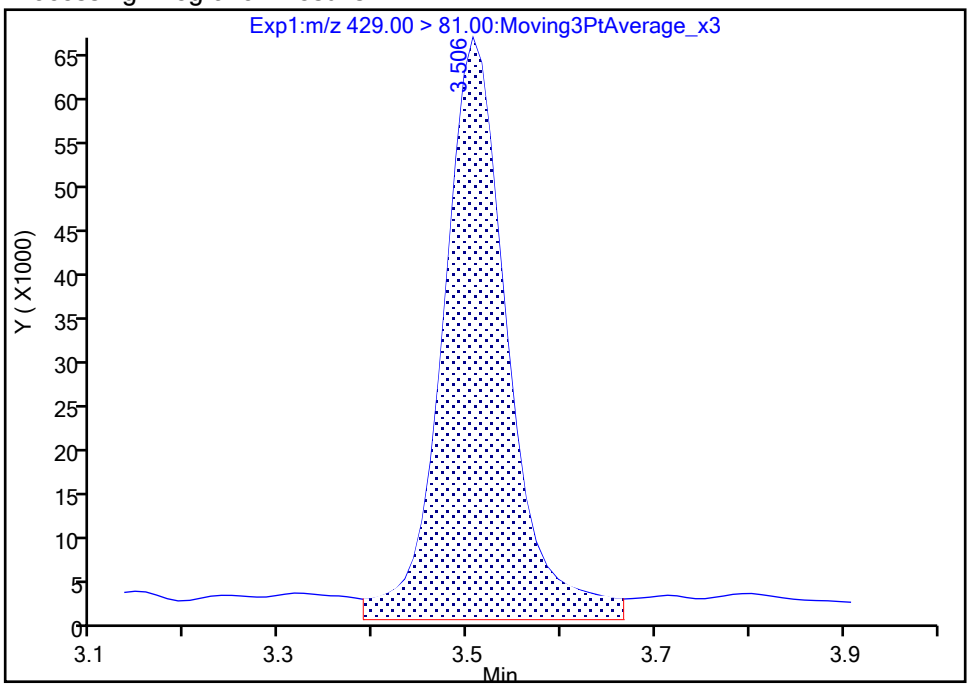
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

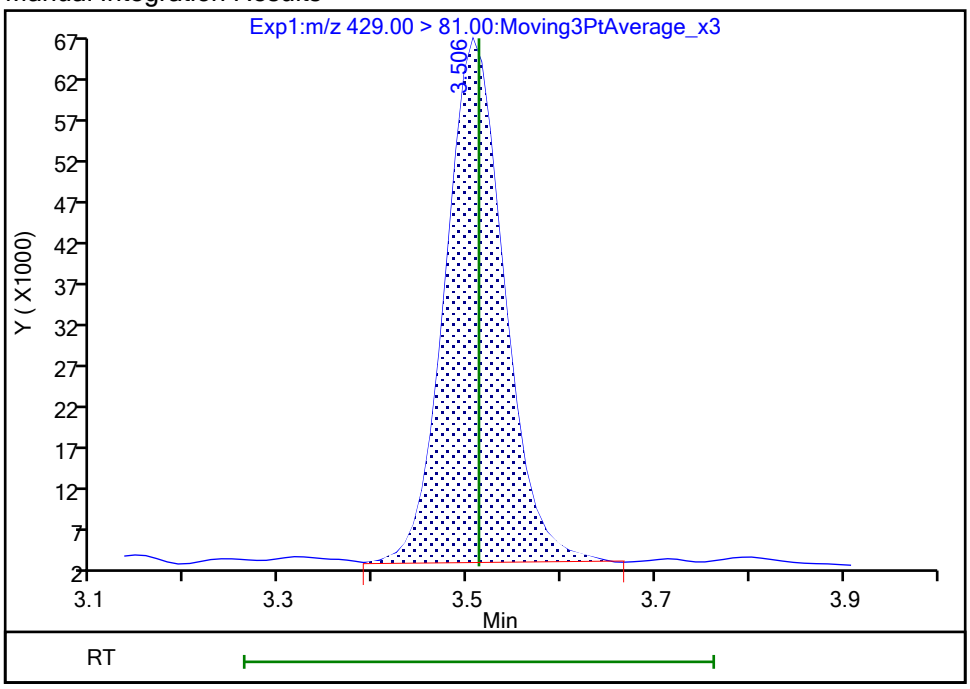
Processing Integration Results

RT: 3.51
Area: 320089
Amount: 1.465645
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 279814
Amount: 1.281231
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:28:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

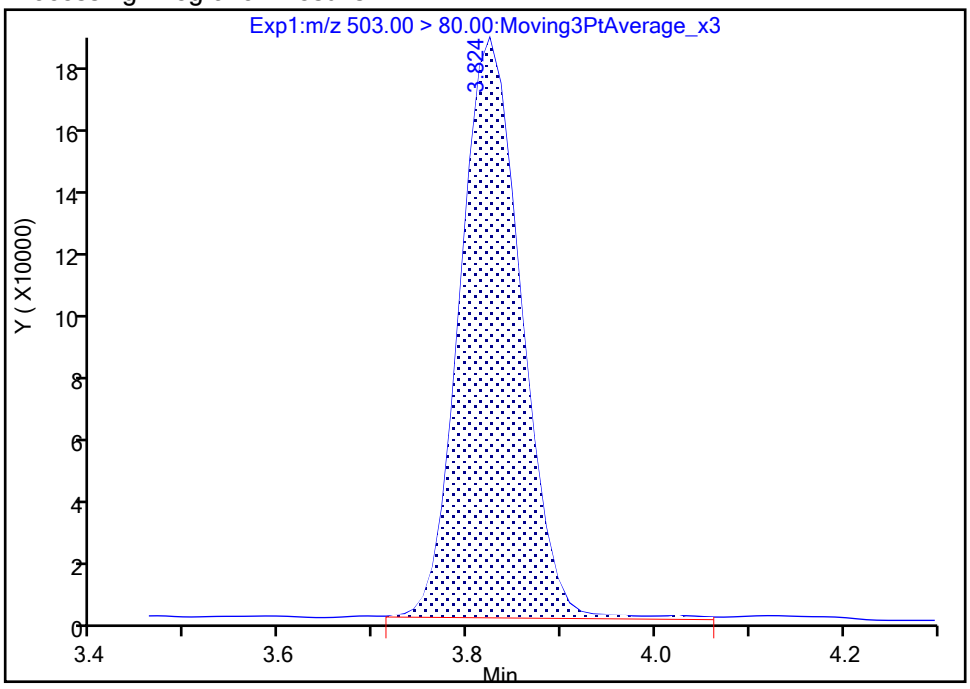
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 18 13C4 PFOS, CAS: STL00991

Signal: 1

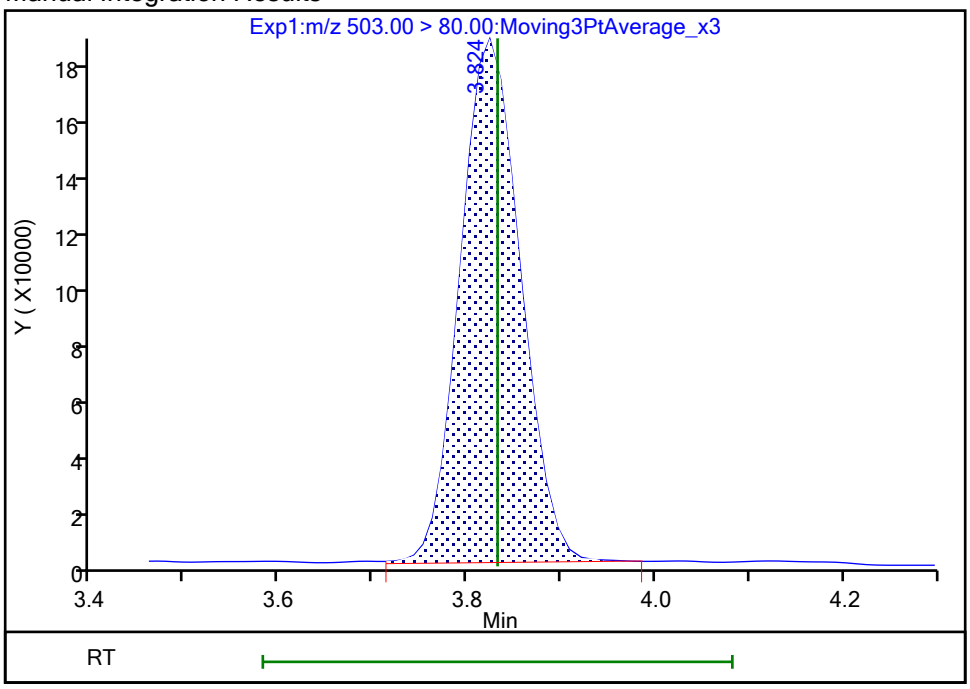
Processing Integration Results

RT: 3.82
Area: 819547
Amount: 1.227480
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 806307
Amount: 1.207650
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:28:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

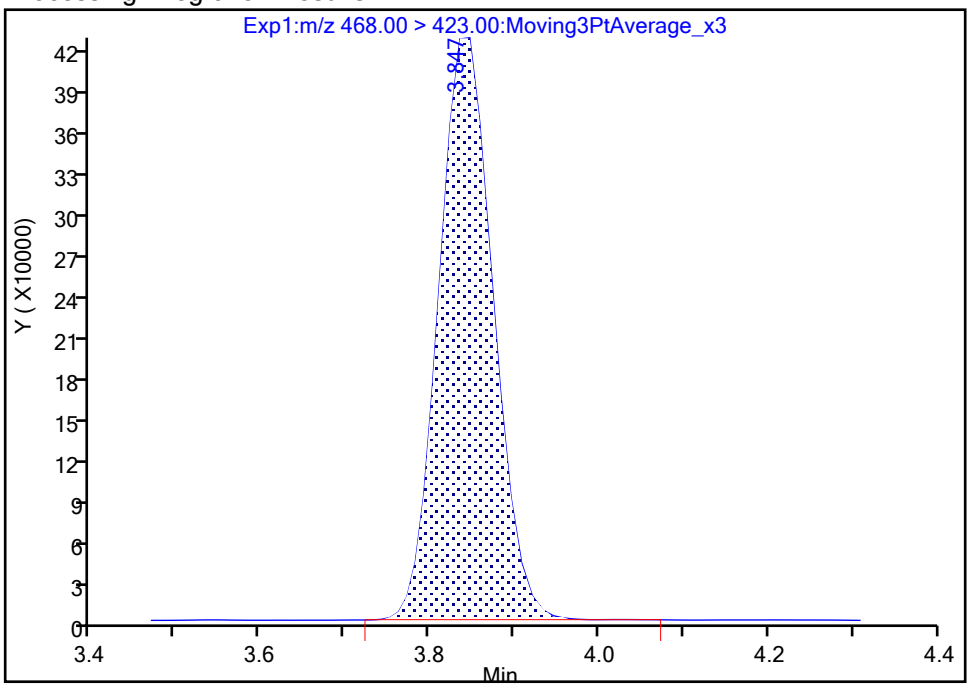
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A15.d				
Injection Date:	24-Oct-2023 19:54:26	Instrument ID:	LC812		
Lims ID:	460-290517-A-12-A	Lab Sample ID:	200-290517-12		
Client ID:	MW93A-101623-1311-65				
Operator ID:	LC812user	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 19 13C5 PFNA, CAS: STL00995

Signal: 1

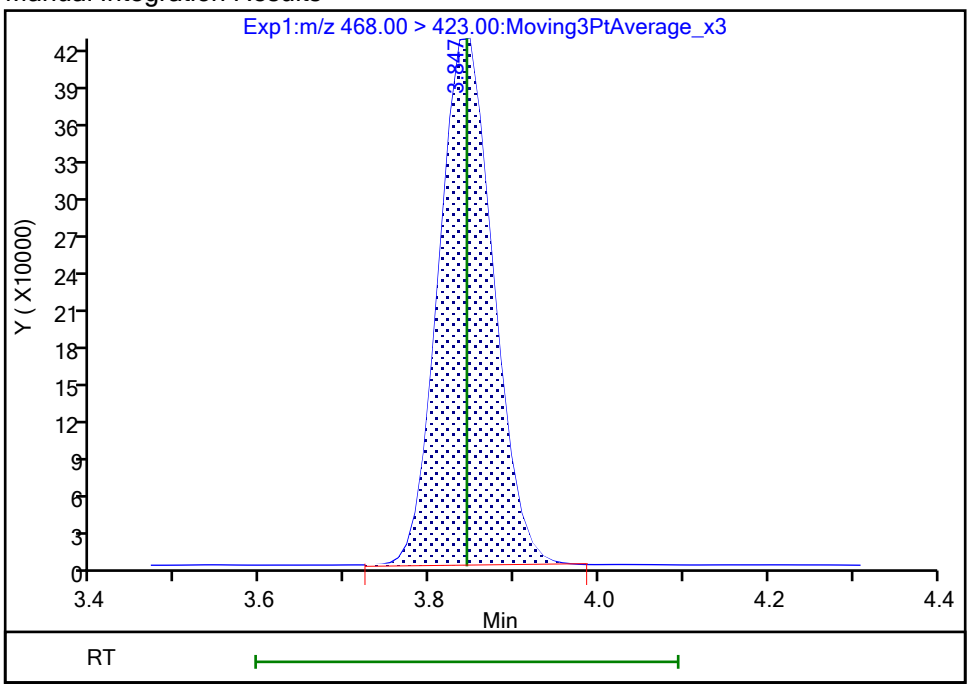
Processing Integration Results

RT: 3.85
Area: 1898774
Amount: 1.273448
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 1897943
Amount: 1.272891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 13:28:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290517-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.6524 0.9526	1.2498 0.8290	1.0107	0.9321	0.9433	L2ID	0.0370	0.9043							0.9970		0.9900
Perfluoropentanoic acid	0.9814 1.1023	1.2167 0.9980	1.0808	1.1330	1.0416	AveID		1.0791				7.6		20.0			
Perfluorobutanesulfonic acid	1.1612 1.1003	1.1884 0.9103	1.1783	1.1604	1.1195	AveID		1.1169				8.6		20.0			
4:2 Fluorotelomer sulfonic acid	3.4184 3.3656	3.9768 3.1033	3.3451	3.2188	3.3429	AveID		3.3958				8.2		20.0			
Perfluorohexanoic acid	1.1882 1.0691	1.1566 1.0070	1.1410	1.0537	1.0877	AveID		1.1005				5.8		20.0			
Perfluoropentanesulfonic acid	1.4845 1.2935	1.4521 1.1291	1.2900	1.2829	1.2091	AveID		1.3059				9.6		20.0			
HFPODA	0.9814 0.9865	1.0329 1.0173	1.0323	0.9948	0.9631	AveID		1.0012				2.7		20.0			
Perfluorohexanesulfonic acid	1.2928 1.0776	1.1776 1.0324	1.0608	1.0404	1.0673	AveID		1.1070				8.6		20.0			
Perfluoroheptanoic acid	1.2326 1.1236	1.2826 0.9928	1.0542	1.0768	1.0835	AveID		1.1209				9.1		20.0			
DONA	6.2912 5.4323	5.8563 +++++	5.6532	5.8591	5.4332	AveID		5.7542				5.6		20.0			
Perfluoroheptanesulfonic acid	1.5386 1.5214	1.4429 1.3749	1.4126	1.3983	1.4277	AveID		1.4452				4.3		20.0			
6:2 Fluorotelomer sulfonic acid	3.0797 2.6772	2.9248 2.3586	2.8187	2.5735	2.6999	AveID		2.7332				8.6		20.0			
Perfluorooctanoic acid	1.2162 0.9982	1.1278 1.0173	1.0470	1.0322	1.0174	AveID		1.0651				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290517-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid	1.2942 1.1749	1.2075 1.1201	1.1227	1.1283	1.1172	AveID		1.1664				5.6		20.0			
Perfluorononanoic acid	1.0909 0.9315	1.0135 0.8900	0.9991	0.9692	0.9662	AveID		0.9800				6.5		20.0			
9Cl-PF3ONS	4.1020 3.5800	3.6236 2.9351	3.5909	3.5582	3.5944	AveID		3.5692				9.5		20.0			
Perfluorononanesulfonic acid	0.9328 0.9318	0.8683 0.8687	0.8784	0.8769	0.8548	AveID		0.8874				3.6		20.0			
Perfluorodecanoic acid	1.0281 0.9602	1.0154 0.8863	1.0541	1.0439	1.0074	AveID		0.9994				5.8		20.0			
8:2 Fluorotelomer sulfonic acid	2.4547 2.0072	2.6137 1.8970	2.2575	2.0908	2.0894	AveID		2.2015				11.6		20.0			
Perfluorooctanesulfonamide	1.0228 0.9436	0.9703 0.8970	0.9494	0.9521	0.9419	AveID		0.9539				4.0		20.0			
NMeFOSAA	0.9443 0.8812	0.9804 0.8681	0.9111	0.8934	0.8734	AveID		0.9074				4.6		20.0			
Perfluorodecanesulfonic acid	0.7041 0.7196	0.6658 0.6468	0.6593	0.6839	0.7012	AveID		0.6830				3.9		20.0			
Perfluoroundecanoic acid	1.0537 0.9843	1.1393 0.9061	1.0315	1.0530	1.0465	AveID		1.0306				6.9		20.0			
N-ethylperfluorooctanesulfonamidoacetic acid	1.2597 0.9339	1.0412 0.9751	0.9527	0.9331	0.9057	AveID		1.0002				12.2		20.0			
11Cl-PF3OUdS	6.1952 4.9604	5.5951 +++++	5.4392	5.5008	5.1507	AveID		5.4735				7.8		20.0			
Perfluorododecanoic acid	1.1479 1.0203	1.0537 0.8606	1.0533	0.9749	1.0139	AveID		1.0178				8.6		20.0			
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	1.4856 1.2641	1.3967 1.2755	1.3186	1.2286	1.2426	AveID		1.3160				7.1		20.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2394 0.2329	0.2672 0.2134	0.2319	0.2233	0.2121	AveID		0.2315				8.1		20.0			
Perfluorotridecanoic acid	1.2114 1.0324	1.0619 0.8831	1.1223	1.0731	1.1045	AveID		1.0698				9.4		20.0			
Perfluorotetradecanoic acid	0.1299 0.1049	0.1180 0.1087	0.1103	0.1048	0.1060	AveID		0.1118				8.2		20.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.1830 0.9749	1.1040 0.8219	0.9746	0.9651	0.9768	AveID		1.0000				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290517-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoro-n-octadecanoic acid (PFODA)	0.8629 0.7648	0.8634 0.6721	0.7865	0.8020	0.7147	AveI n		0.7809				9.1		20.0			
13C4 PFBA	1.0672 0.9509	0.9641 0.9862	0.9676	0.9942	1.0117	Ave		0.9917				3.9		50.0			
13C5 PFPeA	0.8654 0.7385	0.7296 0.7399	0.7610	0.7877	0.7652	Ave		0.7696				6.1		50.0			
13C3 PFBS	1.0756 1.0192	0.9876 1.1612	0.9549	1.0294	1.0615	Ave		1.0413				6.4		50.0			
M2-4:2 FTS	0.1343 0.1194	0.1086 0.1243	0.1164	0.1216	0.1185	Ave		0.1204				6.5		50.0			
13C2 PFHxA	0.8778 0.7694	0.7838 0.7387	0.7436	0.7956	0.7718	Ave		0.7830				5.9		50.0			
13C3 HFPO-DA	0.1643 0.1519	0.1501 0.1535	0.1409	0.1528	0.1474	Ave		0.1516				4.7		50.0			
18O2 PFHxS	0.7448 0.7507	0.6904 0.8129	0.7226	0.7607	0.7427	Ave		0.7464				5.0		50.0			
13C4 PFHpA	0.8886 0.8385	0.8151 0.8749	0.8445	0.8653	0.8858	Ave		0.8590				3.2		50.0			
M2-6:2 FTS	0.1544 0.1505	0.1511 0.1604	0.1460	0.1626	0.1607	Ave		0.1551				4.0		50.0			
13C4 PFOA	0.9601 0.9669	0.9919 0.9091	0.9657	0.9965	1.0218	Ave		0.9731				3.7		50.0			
13C4 PFOS	0.4674 0.4580	0.4521 0.5077	0.4662	0.4873	0.4807	Ave		0.4742				4.0		50.0			
13C5 PFNA	1.1059 1.0804	0.9837 1.0672	1.0142	1.1040	1.0572	Ave		1.0590				4.3		50.0			
13C2 PFDA	1.1803 1.1318	1.0494 1.1115	1.0411	1.0951	1.1528	Ave		1.1089				4.6		50.0			
M2-8:2 FTS	0.1812 0.1848	0.1605 0.1855	0.1573	0.1785	0.1730	Ave		0.1744				6.5		50.0			
13C8 FOSA	0.8923 0.9862	0.9301 0.9872	0.9041	0.9724	0.9514	Ave		0.9462				4.1		50.0			
d3-NMeFOSAA	0.2790 0.2660	0.2549 0.2833	0.2456	0.2672	0.2590	Ave		0.2650				5.0		50.0			
13C2 PFUnA	1.1562 1.0399	0.9889 1.0045	1.0013	1.0578	1.0784	Ave		1.0467				5.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290517-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
d5-NEtFOSAA	0.2684 0.2609	0.2442 0.2414	0.2482	0.2513	0.2718	Ave		0.2552				4.7		50.0			
13C2 PFDoA	1.0873 1.0291	1.0666 1.1188	1.0211	1.0940	1.0303	Ave		1.0639				3.6		50.0			
13C2 PFTeDA	1.0903 1.0729	1.0314 1.0760	1.0078	1.0703	1.0665	Ave		1.0593				2.7		50.0			
13C2 PFHxDA	1.3133 1.1726	1.1714 1.2858	1.1658	1.2481	1.1872	Ave		1.2206				5.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290517-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid		L2ID	148954 12675387	192635 29150051	774804	1439078	3820872	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanoic acid		AveID	71742 11390973	141937 26331175	651716	1385943	3191311	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorobutanesulfonic acid		AveID	93584 13919716	166434 33432260	790713	1645342	4220392	0.0444 8.87	0.0887 22.2	0.444	0.887	2.22
4:2 Fluorotelomer sulfonic acid		AveID	36330 5267048	64699 12889559	288946	569311	1486720	0.0469 9.37	0.0937 23.4	0.469	0.937	2.34
Perfluorohexanoic acid		AveID	88105 11510430	144941 26521589	672203	1301870	3361171	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanesulfonic acid		AveID	87889 12787110	150824 30796216	694967	1426185	3383549	0.0471 9.41	0.0941 23.5	0.471	0.941	2.35
HFPODA		AveID	13619 2096317	24788 5568235	115257	235976	568553	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorohexanesulfonic acid		AveID	74343 10346652	118807 27349473	555092	1123331	2901162	0.0457 9.14	0.0914 22.9	0.457	0.914	2.29
Perfluoroheptanoic acid		AveID	92528 13183148	167142 30971904	705383	1446925	3843212	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
DONA		AveID	234702 32898209	400019 +++++	1973200	4190396	9881253	0.0473 9.45	0.0945 +++++	0.473	0.945	2.36
Perfluoroheptanesulfonic acid		AveID	57887 9291673	99394 23718890	497245	1008539	2618603	0.0477 9.53	0.0953 23.8	0.477	0.953	2.38
6:2 Fluorotelomer sulfonic acid		AveID	38205 5360896	67191 12827492	310157	618135	1652144	0.0476 9.51	0.0951 23.8	0.476	0.951	2.38
Perfluorooctanoic acid		AveID	98642 13504480	178853 32974345	801060	1597361	4162515	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorooctanesulfonic acid		AveID	47415 6987392	80998 18816206	384806	792430	1995347	0.0464 9.28	0.0928 23.2	0.464	0.928	2.32
Perfluorononanoic acid		AveID	101909 14082035	159396 33868175	802848	1661649	4090183	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
9Cl-PF3ONS		AveID	151088	244371	1237458	2512476	6453976	0.0467	0.0933	0.467	0.933	2.33

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290517-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21405197	49573864				9.33	23.3			
Perfluorononanesulfonic acid		AveID	35424 5744699	60375 15127922	312103	638462	1582540	0.0481 9.62	0.0962 24.1	0.481	0.962	2.41
Perfluorodecanoic acid		AveID	102502 15207258	170377 35125264	869526	1775242	4650088	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
8:2 Fluorotelomer sulfonic acid		AveID	36060 4983035	64388 12048759	270156	556332	1389051	0.0480 9.60	0.0960 24.0	0.480	0.960	2.40
Perfluorooctanesulfonamide		AveID	77087 13020569	144294 31572610	680067	1437750	3587757	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
NMeFOSAA		AveID	22256 3280076	39956 8770277	177278	370720	905881	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorodecanesulfonic acid		AveID	26824 4450137	46440 11299421	234996	499466	1302171	0.0483 9.65	0.0965 24.1	0.483	0.965	2.41
Perfluoroundecanoic acid		AveID	102917 14323125	180134 32455800	818335	1729770	4518784	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	28562 3409503	40651 8392085	187350	364226	985607	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
11Cl-PF3OUdS		AveID	230633 29976782	381367 +++++	1894487	3925775	9347621	0.0472 9.43	0.0943 +++++	0.472	0.943	2.36
Perfluorododecanoic acid		AveID	105433 14693173	179683 34331936	852163	1656352	4182445	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)		AveID	21915 3151402	34552 8134970	158460	328276	829529	0.0482 9.64	0.0964 24.1	0.482	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	9148 1445002	18698 3739893	82920	163618	395113	0.0484 9.68	0.0968 24.2	0.484	0.968	2.42
Perfluorotridecanoic acid		AveID	111264 14866529	181083 35226779	907955	1823052	4556433	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorotetradecanoic acid		AveID	11967 1575221	19454 4171778	88102	174160	452708	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		AveID	131230 15997184	206767 37681202	900190	1870661	4643411	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	95729 12548221	161712 30813591	726427	1554372	3397685	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
13C4 PFBA	13PFOA	Ave	2253572 1663241	1926725 1758198	1916527	1929850	2025338	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290517-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C5 PFPeA	13PFOA	Ave	1827623 1291692	1458161 1319141	1507442	1529086	1531883	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 PFBS	13PFOA	Ave	2112456 1657995	1835537 1925353	1758991	1858340	1976378	1.16 1.16	1.16 1.16	1.16	1.16	1.16
M2-4:2 FTS	13PFOA	Ave	264843 194992	202715 207012	215257	220382	221658	1.17 1.17	1.17 1.17	1.17	1.17	1.17
13C2 PFHxA	13PFOA	Ave	1853797 1345799	1566461 1316912	1472867	1544435	1545081	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 HFPO-DA	13PFOA	Ave	346930 265620	299977 273677	279126	296521	295164	1.25 1.25	1.25 1.25	1.25	1.25	1.25
18O2 PFHxS	13PFOA	Ave	1487994 1242233	1305238 1370941	1353967	1396957	1406672	1.18 1.18	1.18 1.18	1.18	1.18	1.18
13C4 PFHpA	13PFOA	Ave	1876608 1466571	1628956 1559821	1672833	1679653	1773444	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-6:2 FTS	13PFOA	Ave	309808 250039	286854 271643	274798	299923	305639	1.19 1.19	1.19 1.19	1.19	1.19	1.19
13C4 PFOA	13PFOA	Ave	2027588 1691186	1982384 1620734	1912820	1934463	2045642	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C4 PFOS	13PFOA	Ave	943517 765818	863764 865311	882764	904398	919926	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C5 PFNA	13PFOA	Ave	2335475 1889768	1965971 1902682	2008931	2143126	2116548	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDA	13PFOA	Ave	2492424 1979736	2097344 1981566	2062234	2125756	2307904	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	13PFOA	Ave	366485 309678	307295 316911	298552	331913	331708	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C8 FOSA	13PFOA	Ave	1884229 1724931	1858847 1759972	1790735	1887535	1904586	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290517-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d3-NMeFOSAA	13PFOA	Ave	589245 465286	509447 505130	486461	518688	518571	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFUnA	13PFOA	Ave	2441700 1818926	1976379 1790927	1983358	2053330	2158999	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d5-NEtFOSAA	13PFOA	Ave	566846 456350	488020 430319	491633	487913	544137	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDoA	13PFOA	Ave	2296115 1800020	2131572 1994604	2022512	2123640	2062631	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	13PFOA	Ave	2302510 1876594	2061289 1918275	1996289	2077683	2135161	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFHxDA	13PFOA	Ave	2773326 2051028	2341179 2292454	2309121	2422773	2376838	1.25 1.25	1.25 1.25	1.25	1.25	1.25

Curve Type Legend:
Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Jul-2023 17:16:50 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 1
Misc. Info.: 200-0056441-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:27:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.112	2.103	0.009	0.616	2253572	1.35		108	1147	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.120	2.112	0.008	1.004	148954	0.0505		101	7.7	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.704	1827623	1.41		112	783	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.411	2.411	0.0	1.000	71742	0.0455		90.9	3.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.708	2112456	1.20		103	64154	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	93584	0.0461	Target=2.07	104	18.4	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	42190		2.22(1.04-3.11)	104	8.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.693	2.694	-0.001	0.786	264843	1.30		111	103	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.693	2.694	-0.001	1.000	36330	0.0472		101	404	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.797	1853797	1.40		112	1419	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	88105	0.0540	Target=14.29	108	11.4	M
313.00 > 119.00	2.718	2.731	-0.013	0.995	5337		16.51(7.15-21.44)	108	3.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.896	87889	0.0535	Target=2.78	114	123	M
349.00 > 99.00	2.731	2.731	0.0	0.896	29458		2.98(1.39-4.17)	114	37.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.806	2.844	-0.038	0.819	346930	1.36		108	1501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.806	2.844	-0.038	1.000	13619	0.0490		98.0	101	
D 11 18O2 PFHxS										
403.00 > 84.00	3.046	3.092	-0.046	0.889	1487994	1.18		99.8	3478	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.046	3.092	-0.046	1.000	74343	0.0534	Target=3.23	117	116	M
399.00 > 99.00	3.046	3.092	-0.046	1.000	22455		3.31(1.62-4.84)	117	14.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.058	3.104	-0.046	1.000	92528	0.0550	Target=4.11	110	17.1	M
363.00 > 169.00	3.058	3.104	-0.046	1.000	21986		4.21(2.06-6.17)	110	17.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.058	3.104	-0.046	0.892	1876608	1.29		103	5156	
77 DONA										
377.00 > 251.00	3.092	3.138	-0.046	0.824	234702	0.0517	Target=3.28	109	257	
377.00 > 85.00	3.092	3.138	-0.046	0.824	72544		3.24(1.64-4.92)	109	83.1	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.408	3.446	-0.038	0.908	57887	0.0507	Target=4.71	106	138	
449.00 > 99.00	3.408	3.446	-0.038	0.908	11640		4.97(2.36-7.07)	106	22.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.417	3.446	-0.029	0.997	309808	1.18		99.6	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.417	3.446	-0.029	1.000	38205	0.0536		113	138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.426	3.464	-0.038	1.000	98642	0.0571	Target=2.90	114	6.8	M
413.00 > 169.00	3.426	3.464	-0.038	1.000	31899		3.09(1.45-4.35)	114	28.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.426	3.464	-0.038	1.000	2027588	1.23		98.7	5902	
* 62 13C2 PFOA										
415.00 > 370.00	3.426	3.464	-0.038		2111765	1.25			5485	
D 18 13C4 PFOS										
503.00 > 80.00	3.754	3.783	-0.029	1.096	943517	1.18		98.6	4119	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.754	3.783	-0.029	1.000	47415	0.0515	Target=4.11	111	65.8	M
499.00 > 99.00	3.754	3.783	-0.029	1.000	11529		4.11(2.05-6.16)	111	16.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.774	3.793	-0.019	1.101	2335475	1.31		104	6410	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.774	3.803	-0.029	1.000	101909	0.0557	Target=8.48	111	17.9	M
463.00 > 169.00	3.764	3.803	-0.039	0.997	10750		9.48(4.24-12.72)	111	35.9	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.922	3.947	-0.025	1.045	151088	0.0536		115	288	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.063	4.074	-0.011	1.082	35424	0.0506	Target=2.17	105	275	M
549.00 > 99.00	4.063	4.074	-0.011	1.082	15853		2.23(1.08-3.25)	105	31.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.084	4.108	-0.024	1.192	2492424	1.33		106	10504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.084	4.108	-0.024	1.000	102502	0.0514	Target=10.55	103	25.3	
513.00 > 169.00	4.084	4.108	-0.024	1.000	10265		9.99(5.27-15.82)	103	39.8	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.096	4.108	-0.012	1.196	366485	1.24		104	569	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.096	4.120	-0.024	1.000	36060	0.0535		112	260	M
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.224	1884229	1.18		94.3	3520	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	77087	0.0536		107	320	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.237	4.249	-0.012	1.237	589245	1.32		105	1006	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.260	-0.011	1.003	22256	0.0520		104	39.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.334	4.346	-0.012	1.155	26824	0.0497	Target=2.28	103	168	
599.00 > 99.00	4.334	4.346	-0.012	1.155	12867		2.08(1.14-3.42)	103	59.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.275	2441700	1.38		110	9527	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.000	102917	0.0511	Target=11.30	102	27.7	
563.00 > 169.00	4.370	4.382	-0.012	1.000	10486		9.81(5.65-16.96)	102	73.6	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.382	4.393	-0.011	1.279	566846	1.31		105	864	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.382	4.393	-0.011	1.000	28562	0.0630		126	124	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.189	230633	0.0534		113	329	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.344	2296115	1.28		102	6831	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	105433	0.0564	Target=8.15	113	10.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	13359		7.89(4.07-12.22)	113	79.9	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.130	21915	0.0544		113	524	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.780	4.779	0.001	1.273	9148	0.0501	Target=0.50	103	110	M
699.00 > 99.00	4.780	4.779	0.001	1.273	18434		0.50(0.25-0.75)	103	160	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	111264	0.0566	Target=6.61	113	12.0	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	15139		7.35(3.31-9.92)	113	149	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.459	2302510	1.29		103	7005	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.002	11967	0.0581	Target=0.96	116	150	
713.00 > 219.00	4.998	5.008	-0.010	1.000	11422		1.05(0.48-1.44)	116	211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	131230	0.0591	Target=7.69	118	14.7	
813.00 > 169.00	5.328	5.328	0.0	1.000	16433		7.99(3.85-11.54)	118	172	
D 44 13C2 PFHxDA										M
815.00 > 770.00	5.328	5.328	0.0	1.555	2773326	1.34		108	1764	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.620	5.611	0.009	1.055	95729	0.0553	Target=9.13	111	15.3	M
913.00 > 169.00	5.620	5.611	0.009	1.055	9904		9.67(4.56-13.69)	111	101	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

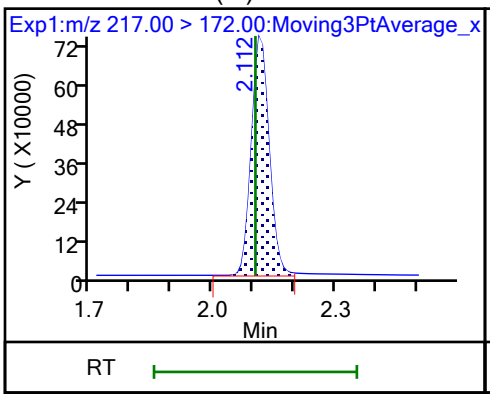
PFAS32NCIC1_00015 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:37 Chrom Revision: 2.3 19-Jul-2023 18:28:48

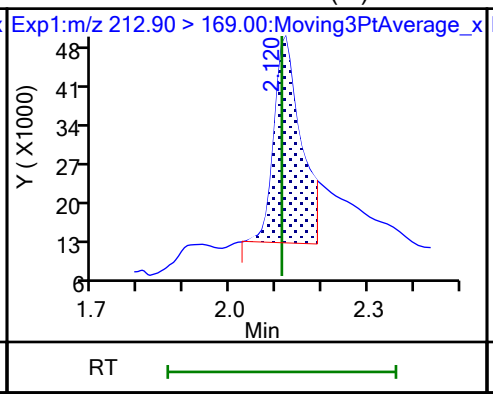
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Injection Date: 26-Jul-2023 17:16:50 Instrument ID: LC812
Lims ID: IC 1
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

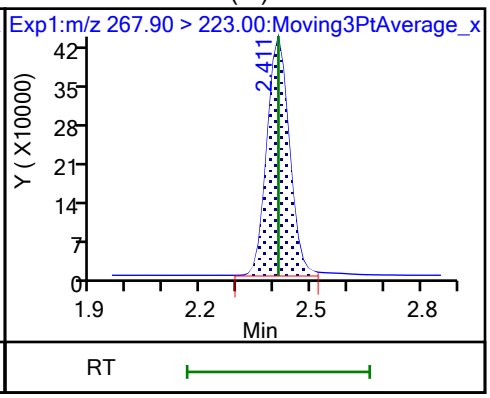
D 1 13C4 PFBA (M)



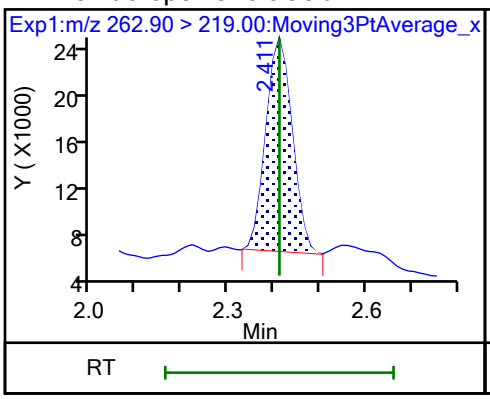
2 Perfluorobutanoic acid (M)



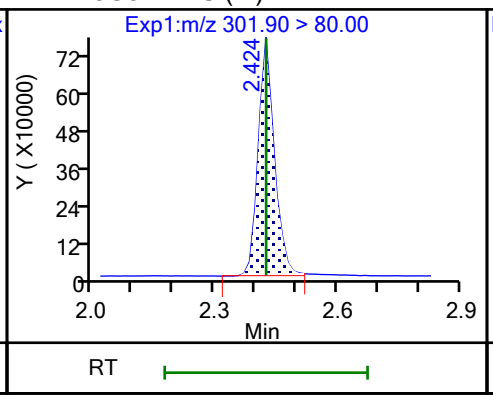
D 3 13C5 PFPeA (M)



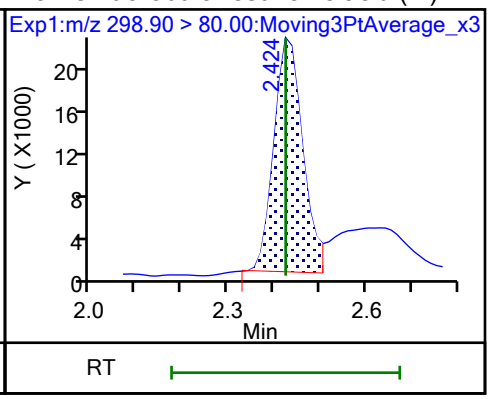
4 Perfluoropentanoic acid



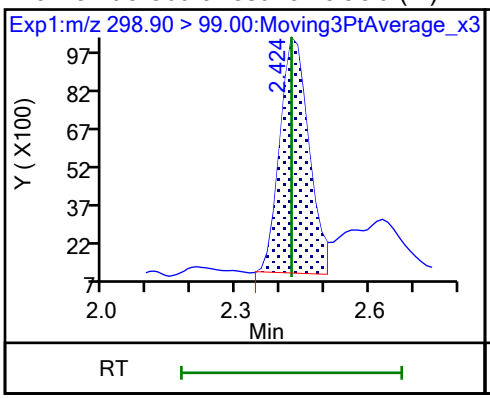
D 47 13C3 PFBS (M)



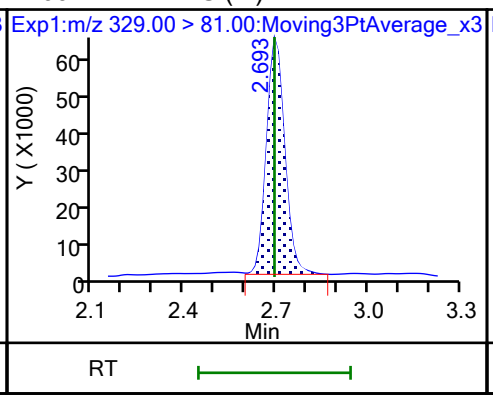
5 Perfluorobutanesulfonic acid (M)



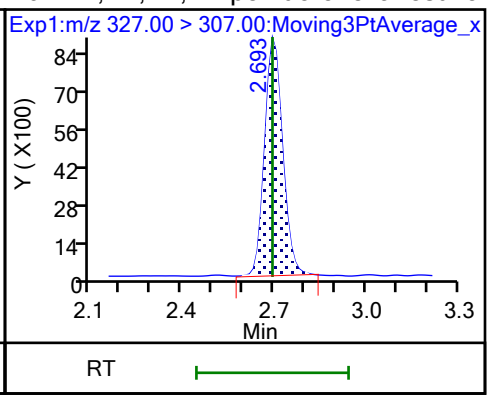
5 Perfluorobutanesulfonic acid (M)



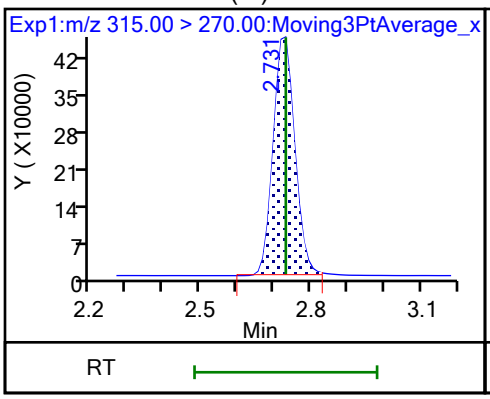
D 60 M2-4:2 FTS (M)



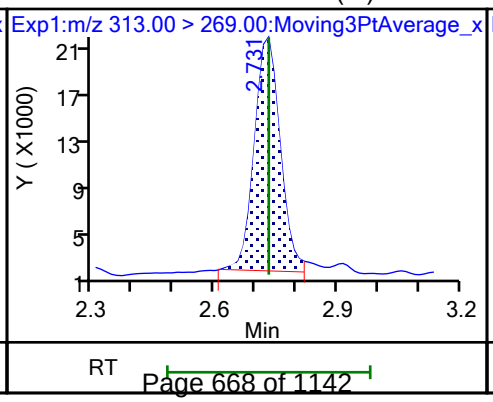
61 1H,1H,2H,2H-perfluorohexanesulfo



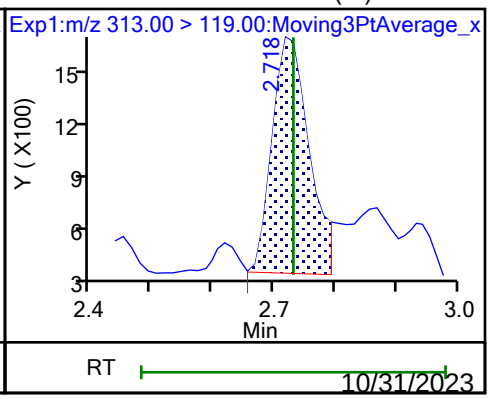
D 7 13C2 PFHxA (M)



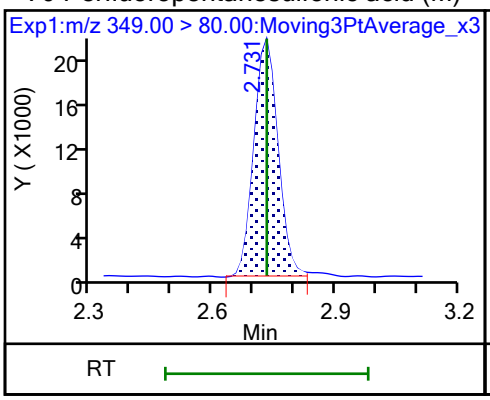
6 Perfluorohexanoic acid (M)



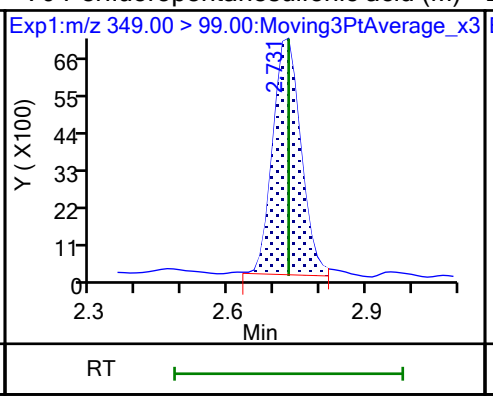
6 Perfluorohexanoic acid (M)



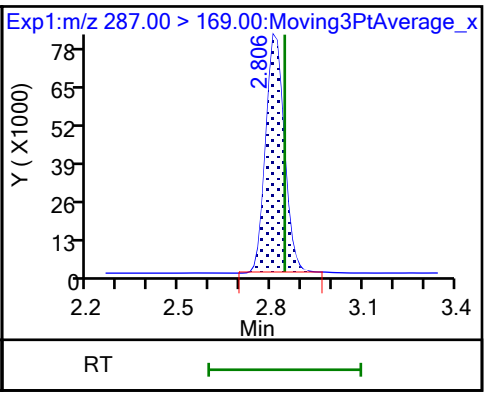
70 Perfluoropentanesulfonic acid (M)



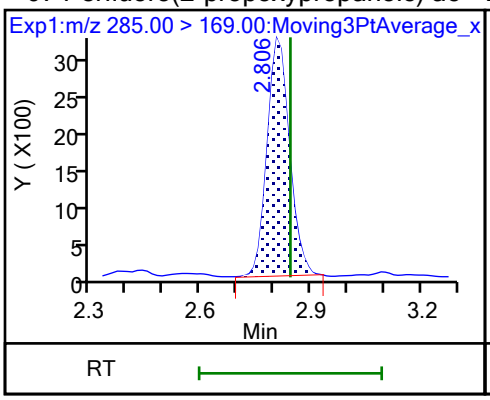
70 Perfluoropentanesulfonic acid (M)



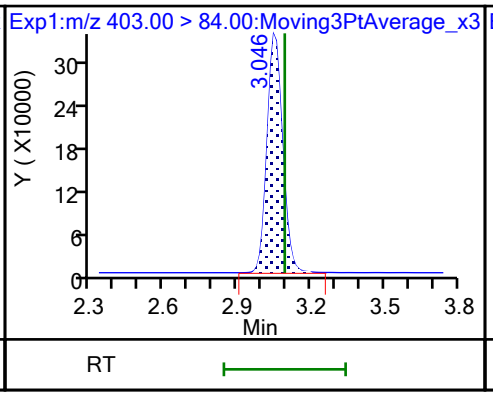
D 64 13C3 HFPO-DA



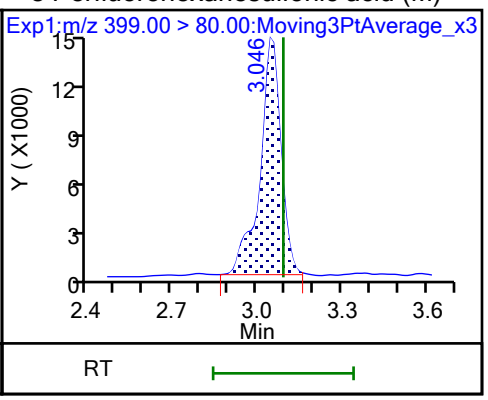
67 Perfluoro(2-propoxypropanoic) ac



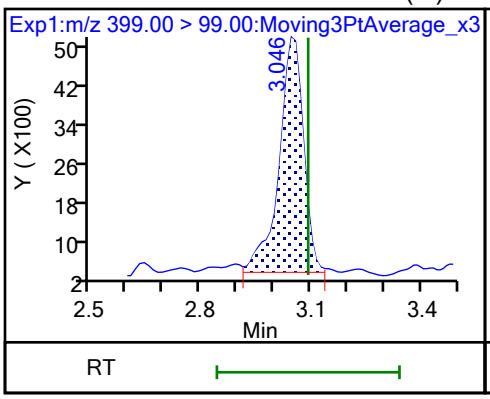
D 11 18O2 PFHxS



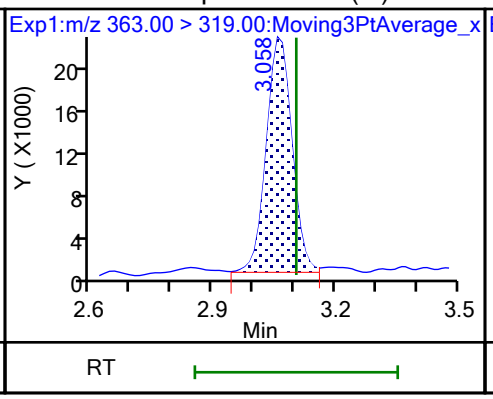
8 Perfluorohexanesulfonic acid (M)



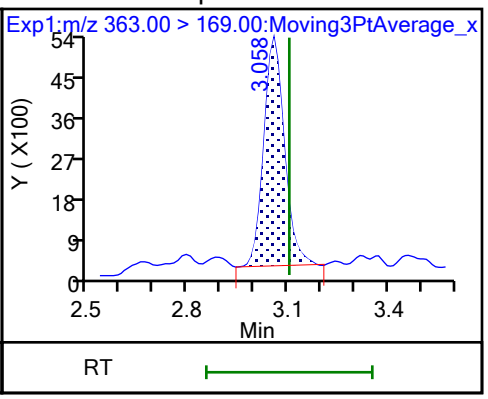
8 Perfluorohexanesulfonic acid (M)



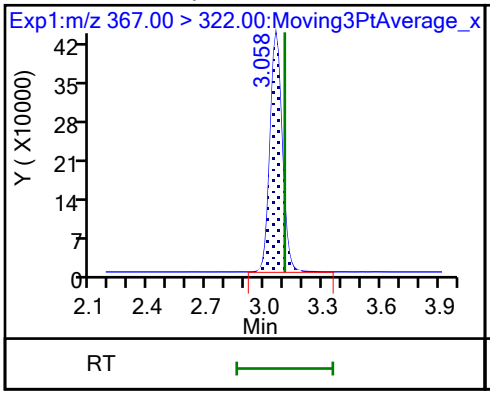
10 Perfluoroheptanoic acid (M)



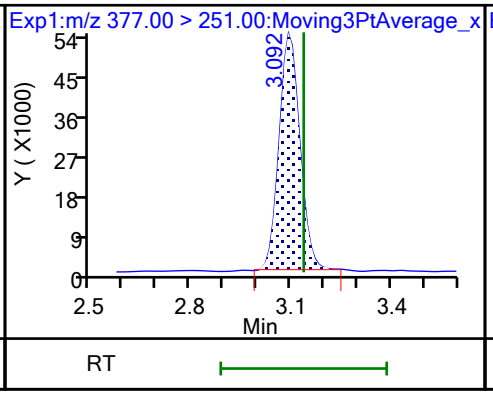
10 Perfluoroheptanoic acid



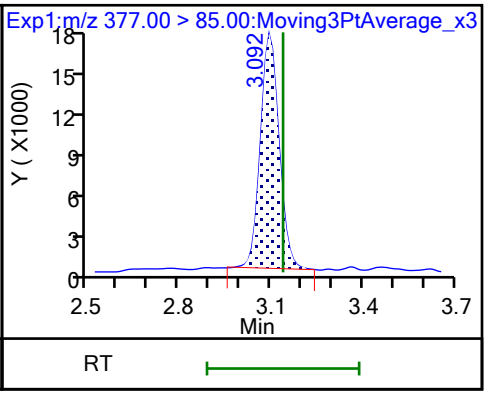
D 9 13C4 PFHpA



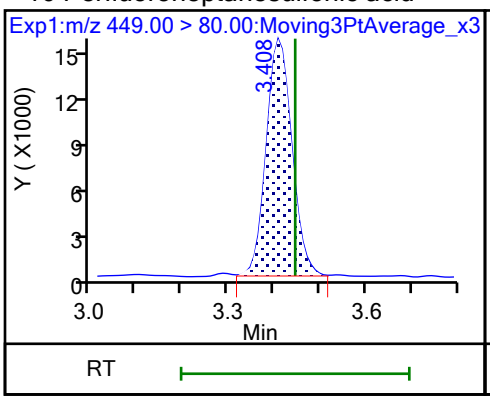
77 DONA



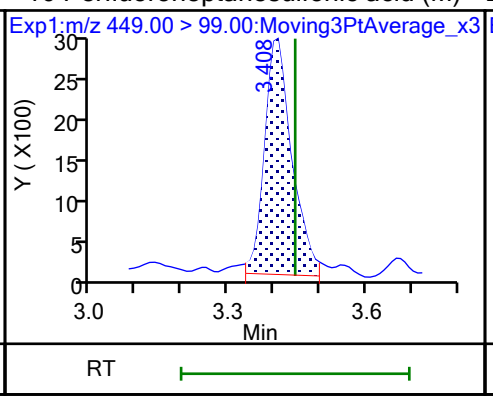
77 DONA



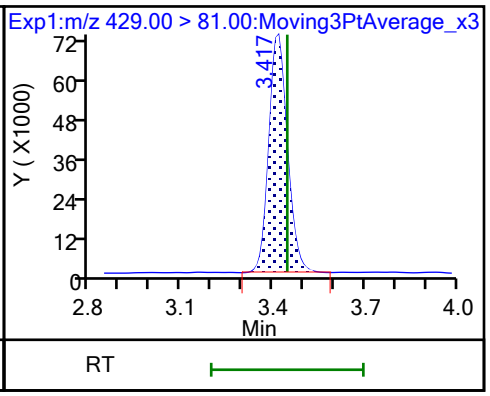
16 Perfluoroheptanesulfonic acid



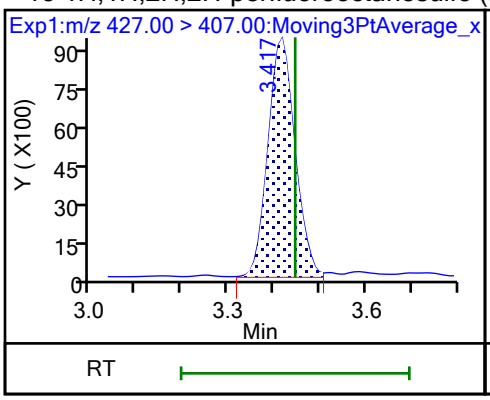
16 Perfluoroheptanesulfonic acid (M)



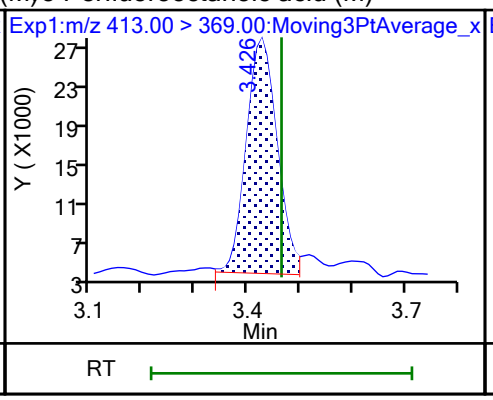
D 12 M2-6:2 FTS



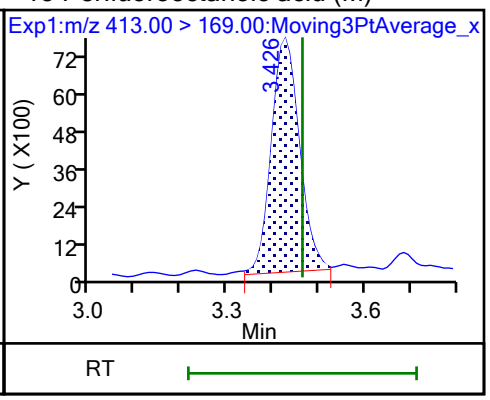
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



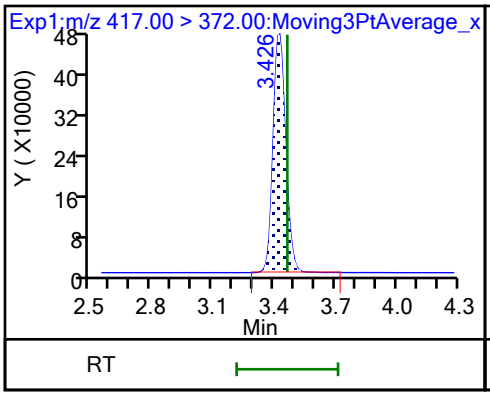
15 Perfluorooctanoic acid (M)



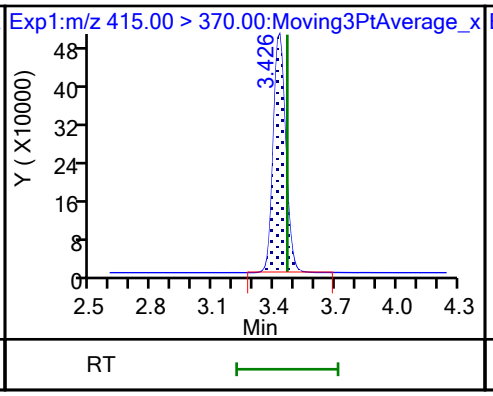
15 Perfluorooctanoic acid (M)



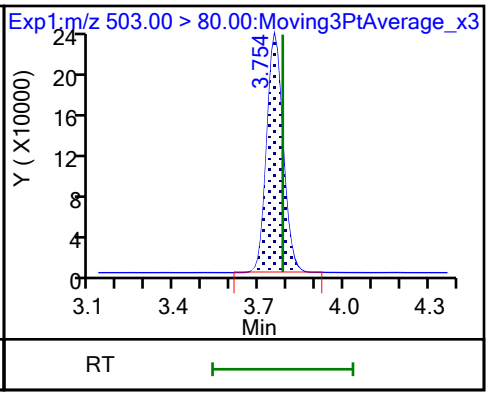
D 14 13C4 PFOA



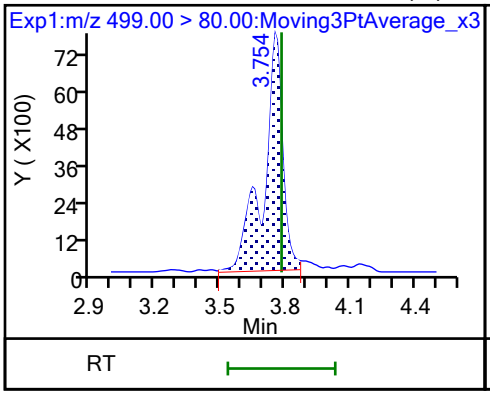
* 62 13C2 PFOA



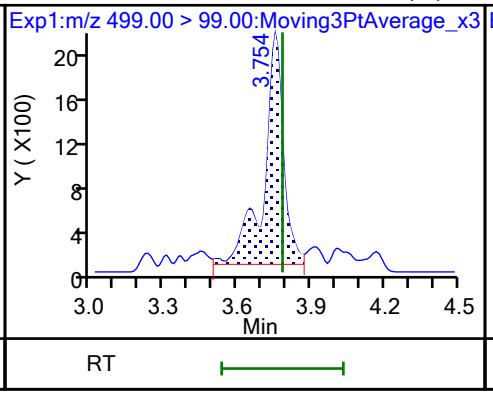
D 18 13C4 PFOS



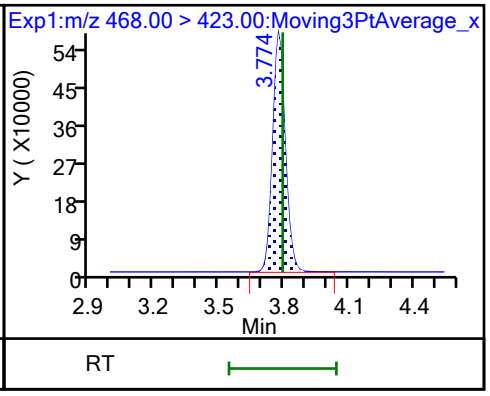
17 Perfluorooctanesulfonic acid (M)



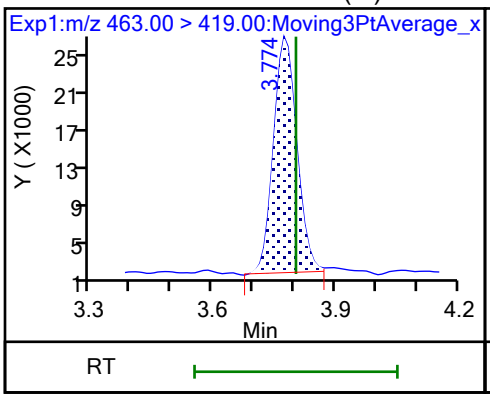
17 Perfluorooctanesulfonic acid (M)



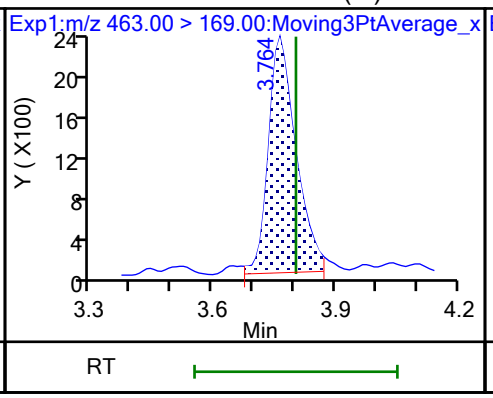
D 19 13C5 PFNA



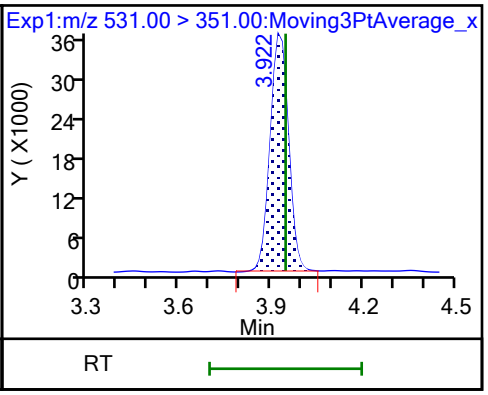
20 Perfluorononanoic acid (M)



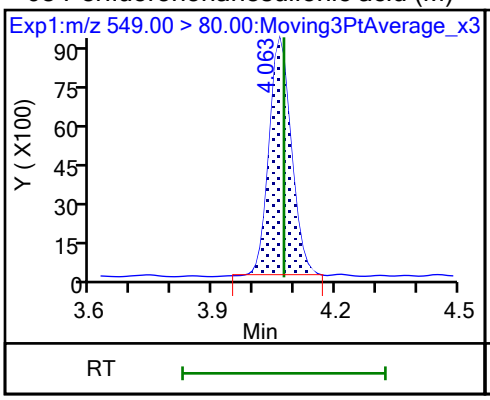
20 Perfluorononanoic acid (M)



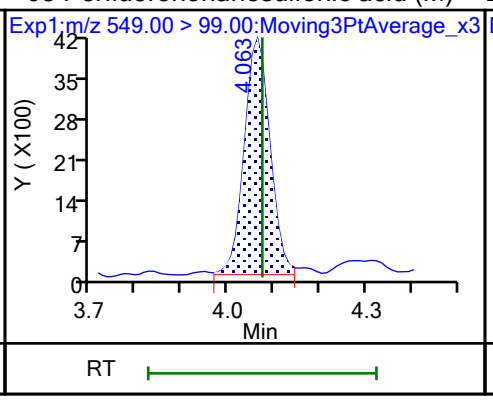
69 9-Chlorohexadecafluoro-3-oxanona



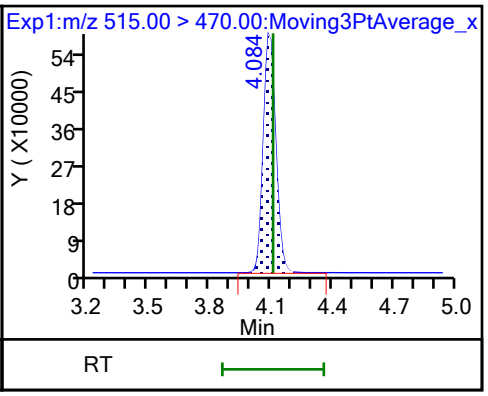
68 Perfluorononanesulfonic acid (M)



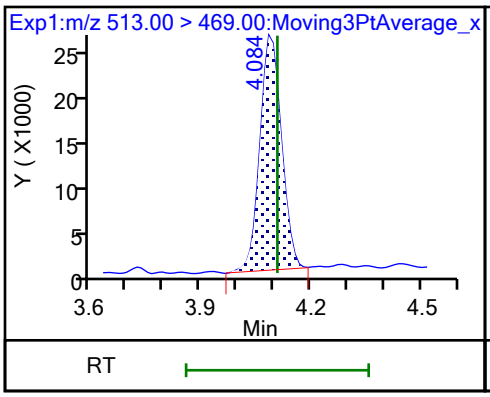
68 Perfluorononanesulfonic acid (M)



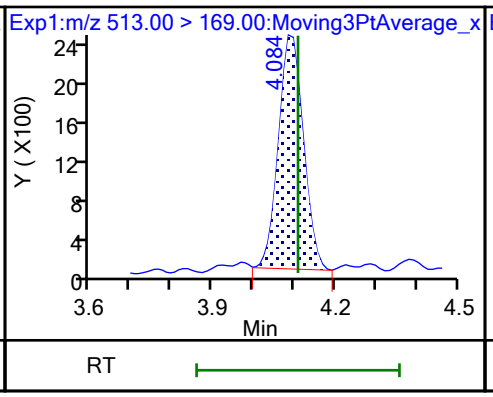
D 23 13C2 PFDA



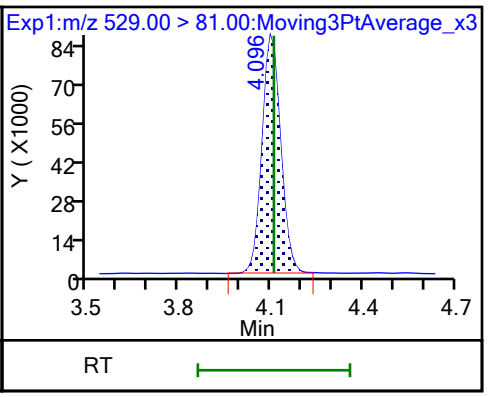
24 Perfluorodecanoic acid



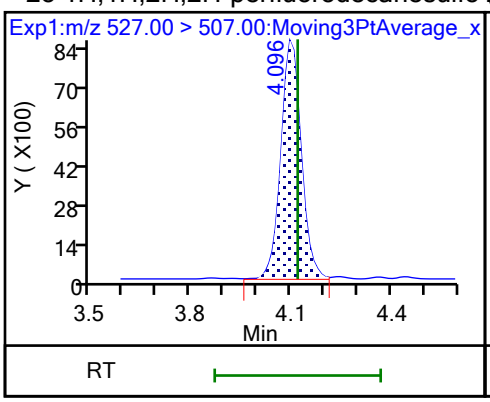
24 Perfluorodecanoic acid



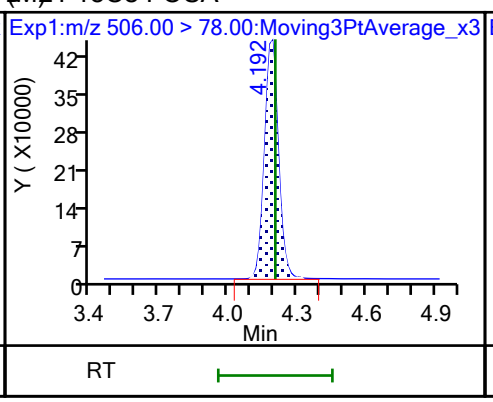
D 26 M2-8:2 FTS



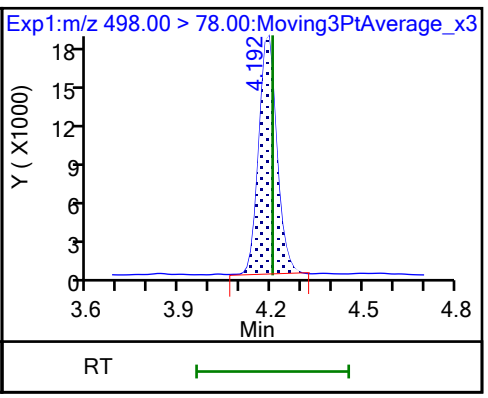
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



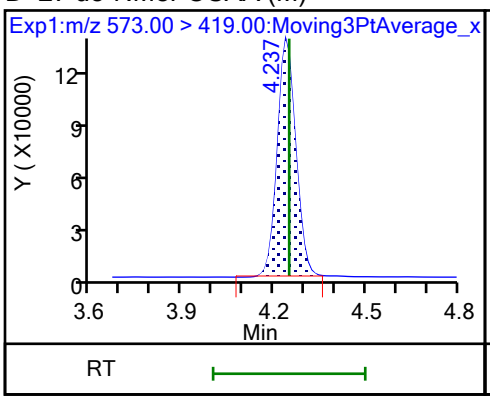
D 21 13C8 FOSA



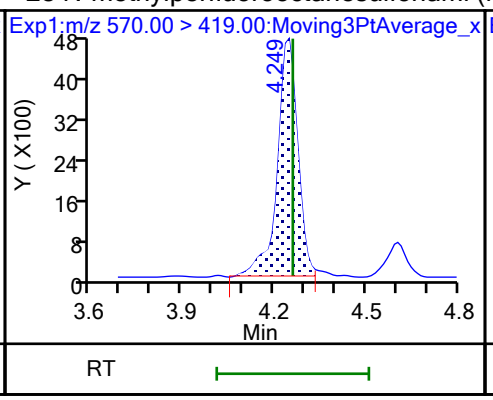
22 Perfluorooctanesulfonamide



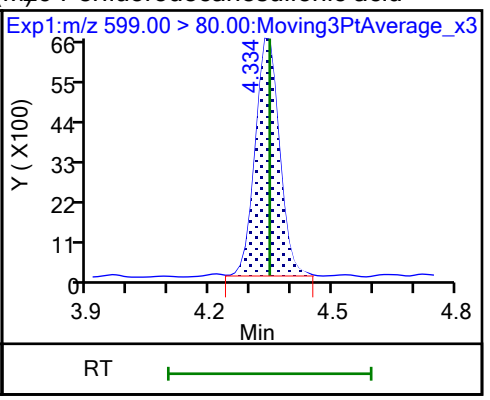
D 27 d3-NMeFOSAA (M)



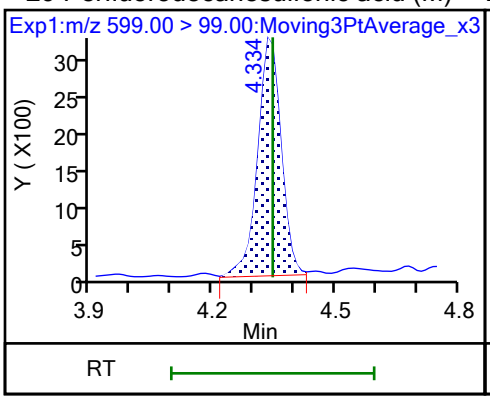
28 N-methylperfluorooctanesulfonami (M)



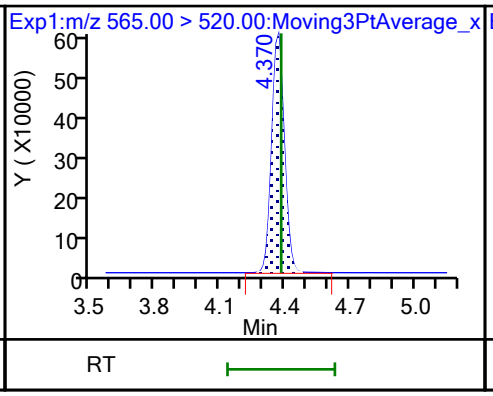
29 Perfluorodecanesulfonic acid



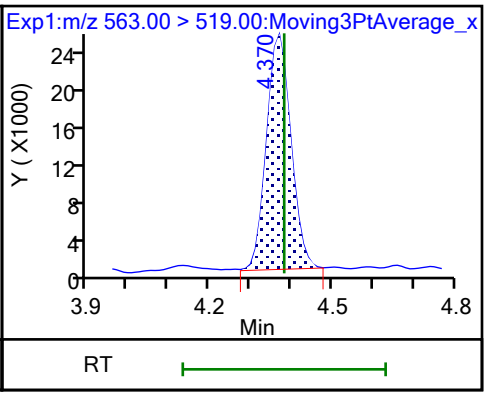
29 Perfluorodecanesulfonic acid (M)



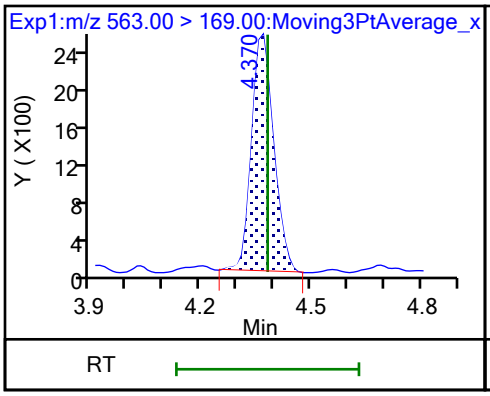
D 30 13C2 PFUnA



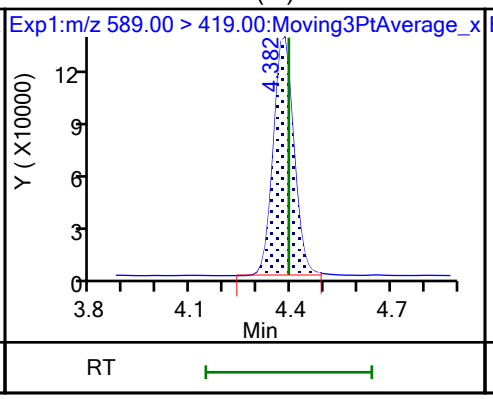
31 Perfluoroundecanoic acid



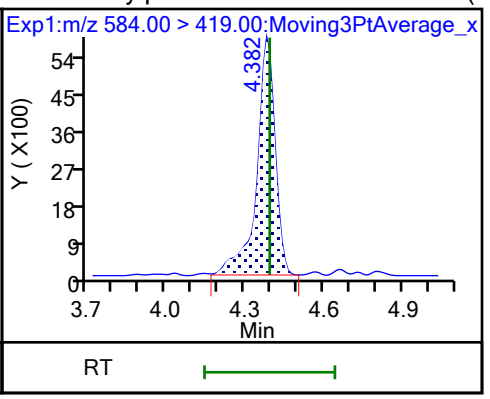
31 Perfluoroundecanoic acid



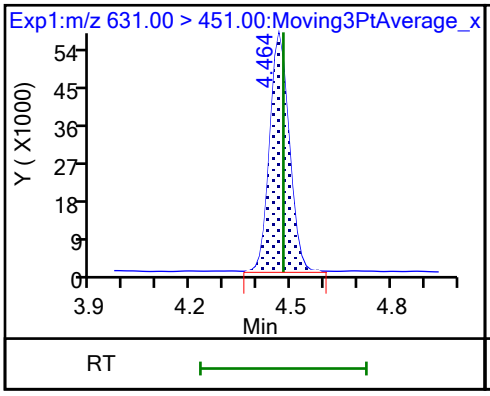
D 32 d5-NEtFOSAA (M)



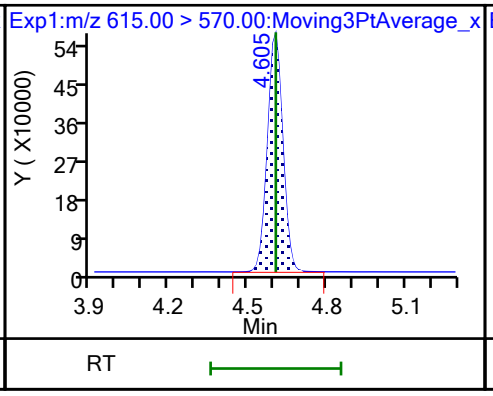
33 N-ethylperfluorooctanesulfonamid (M)



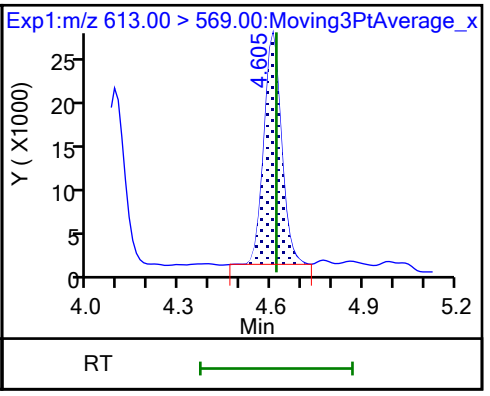
66 11-Chloroeicosafluoro-3-oxaundec



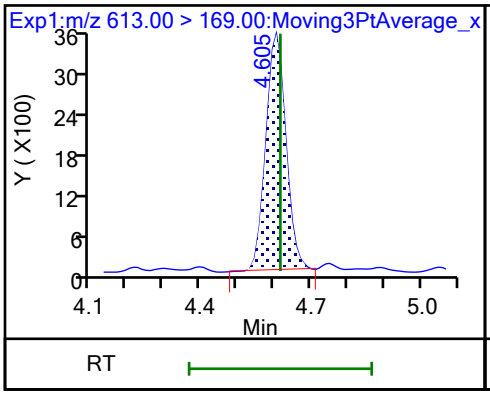
D 36 13C2 PFDoA



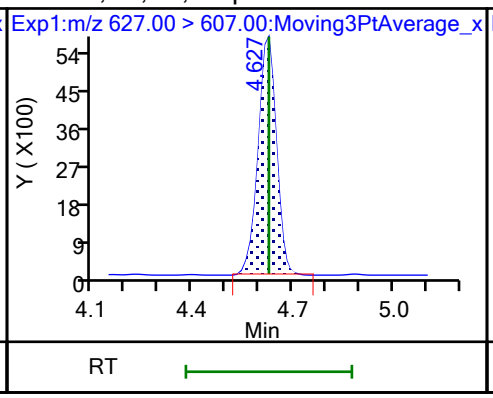
37 Perfluorododecanoic acid



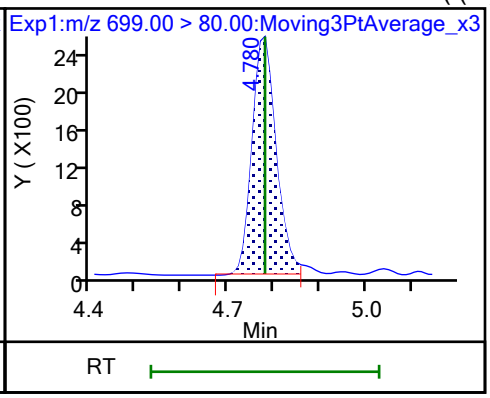
37 Perfluorododecanoic acid



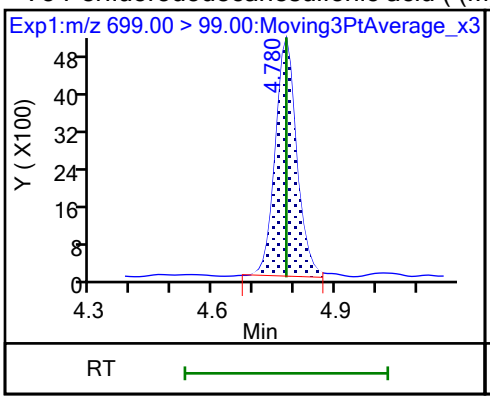
74 1H,1H,2H,2H-perfluorododecanesul



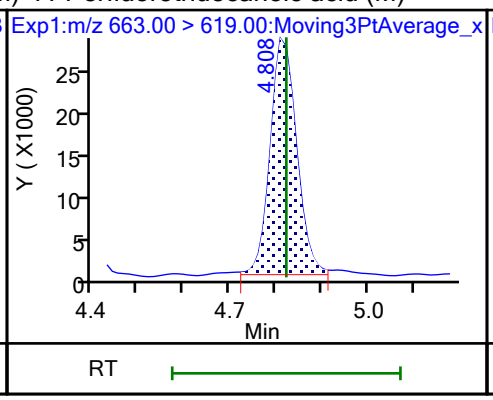
75 Perfluorododecanesulfonic acid ((M)



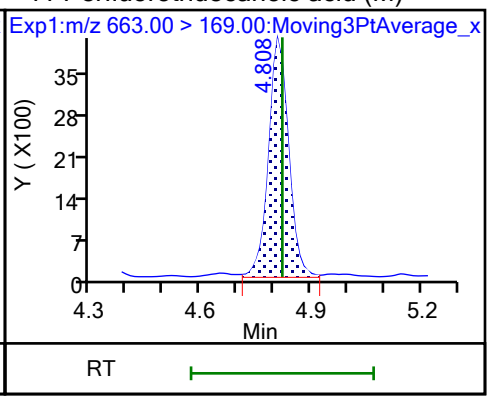
75 Perfluorododecanesulfonic acid ((M)



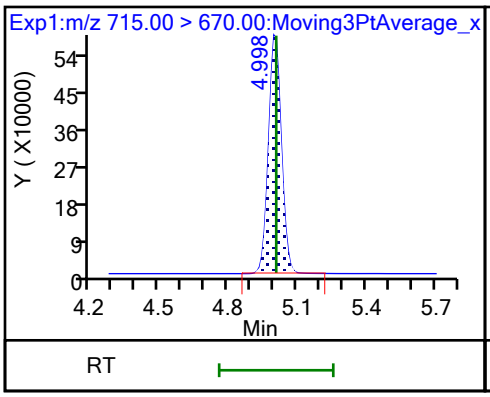
41 Perfluorotridecanoic acid (M)



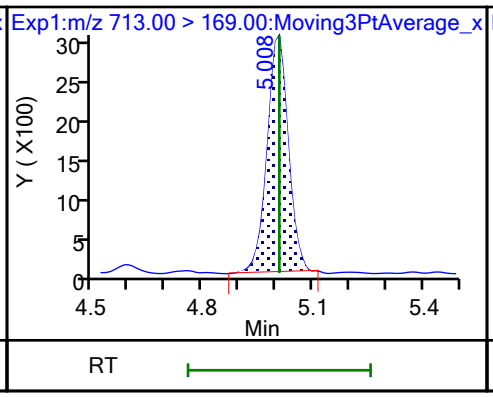
41 Perfluorotridecanoic acid (M)



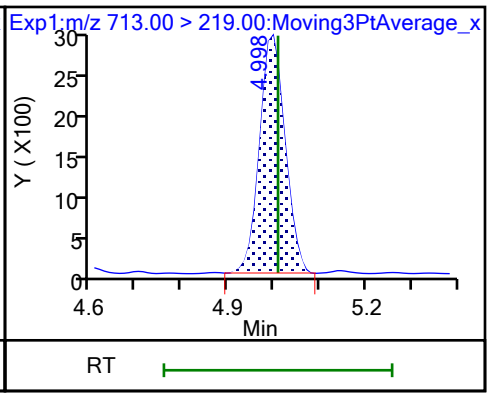
D 43 13C2 PFTeDA



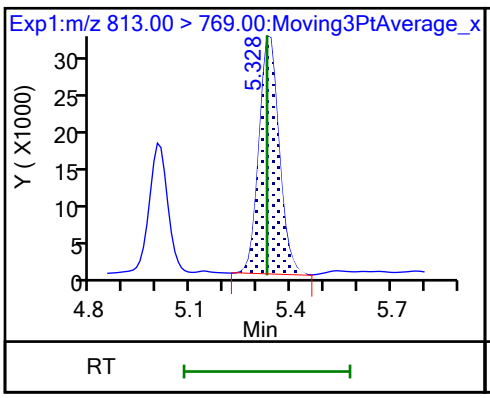
42 Perfluorotetradecanoic acid



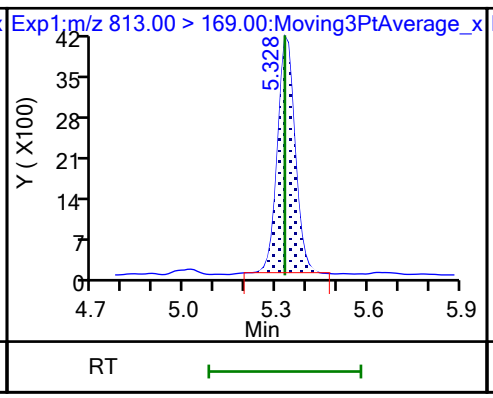
42 Perfluorotetradecanoic acid



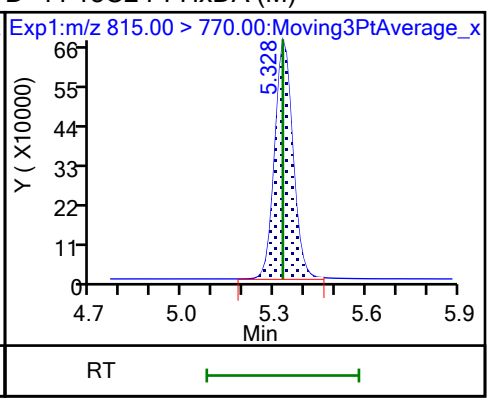
45 Perfluorohexadecanoic acid



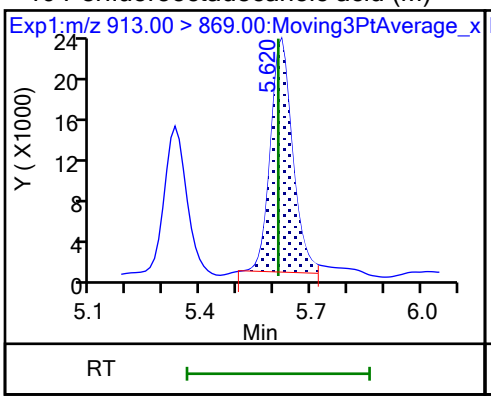
45 Perfluorohexadecanoic acid



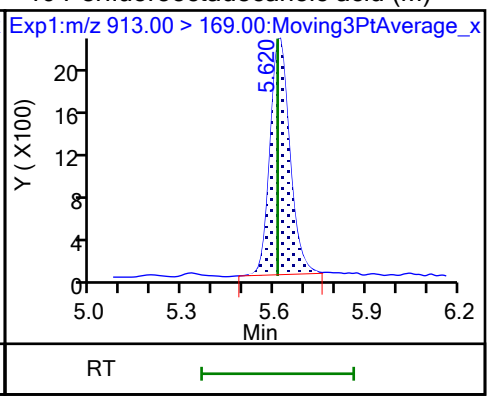
D 44 13C2 PFHxDA (M)



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Jul-2023 17:25:00 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 200-0056441-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:42 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:45:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	1926725	1.22		97.2	993	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	192635	0.0973		97.3	11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1458161	1.19		94.8	648	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	141937	0.1128		113	6.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.699	1835537	1.10		94.8	58282	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	166434	0.0944	Target=2.07	106	35.5	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	85051		1.96(1.04-3.11)	106	17.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	202715	1.05		90.2	72.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.718	2.694	0.024	1.000	64699	0.1097		117	613	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1566461	1.25		100	1391	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	144941	0.1051	Target=14.29	105	19.0	M
313.00 > 119.00	2.755	2.731	0.024	1.000	10821		13.39(7.15-21.44)	105	7.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.755	2.731	0.024	0.885	150824	0.1046	Target=2.78	111	211	M
349.00 > 99.00	2.755	2.731	0.024	0.885	53128		2.84(1.39-4.17)	111	51.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.826	299977	1.24		99.0	1628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.868	2.844	0.024	1.000	24788	0.1032		103	273	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1305238	1.09		92.5	2984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	118807	0.0972	Target=3.23	106	250	M
399.00 > 99.00	3.114	3.092	0.022	1.000	38530		3.08(1.62-4.84)	106	21.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.126	3.104	0.022	1.004	167142	0.1144	Target=4.11	114	33.0	M
363.00 > 169.00	3.126	3.104	0.022	1.004	38992		4.29(2.06-6.17)	114	33.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1628956	1.19		94.9	4384	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	400019	0.0962	Target=3.28	102	466	
377.00 > 85.00	3.160	3.138	0.022	0.835	118017		3.39(1.64-4.92)	102	143	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.461	3.446	0.015	0.915	99394	0.0951	Target=4.71	99.8	250	
449.00 > 99.00	3.461	3.446	0.015	0.915	23637		4.21(2.36-7.07)	99.8	50.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	286854	1.16		97.4	368	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.470	3.446	0.024	1.003	67191	0.1018		107	230	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.470	3.464	0.006	1.000	178853	0.1059	Target=2.90	106	14.0	M
413.00 > 169.00	3.479	3.464	0.015	1.003	59442		3.01(1.45-4.35)	106	72.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	1982384	1.27		102	5935	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		1998562	1.25			4141	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	863764	1.14		95.3	3395	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	80998	0.0961	Target=4.11	104	153	M
499.00 > 99.00	3.783	3.783	0.0	1.000	22759		3.56(2.05-6.16)	104	37.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1965971	1.16		92.9	4371	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.803	3.803	0.0	1.000	159396	0.1034	Target=8.48	103	30.7	
463.00 > 169.00	3.803	3.803	0.0	1.000	20785		7.67(4.24-12.72)	103	124	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.046	244371	0.0947		102	482	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.084	4.074	0.010	1.080	60375	0.0941	Target=2.17	97.8	490	
549.00 > 99.00	4.074	4.074	0.0	1.077	30462		1.98(1.08-3.25)	97.8	79.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2097344	1.18		94.6	8331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.108	4.108	0.0	1.000	170377	0.1016	Target=10.55	102	41.1	M
513.00 > 169.00	4.108	4.108	0.0	1.000	16328		10.43(5.27-15.82)	102	43.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	307295	1.10		92.0	634	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	64388	0.1140		119	478	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1858847	1.23		98.3	3368	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	144294	0.1017		102	567	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	509447	1.20		96.2	2611	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.260	0.001	1.003	39956	0.1080		108	67.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.346	0.0	1.149	46440	0.0941	Target=2.28	97.5	269	
599.00 > 99.00	4.346	4.346	0.0	1.149	23477		1.98(1.14-3.42)	97.5	80.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.263	1976379	1.18		94.5	7486	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.382	0.0	1.000	180134	0.1105	Target=11.30	111	48.4	
563.00 > 169.00	4.382	4.382	0.0	1.000	13744		13.11(5.65-16.96)	111	83.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	488020	1.20		95.7	1048	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	40651	0.1041		104	155	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	381367	0.0964		102	559	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	2131572	1.25		100	9591	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.616	-0.011	1.000	179683	0.1035	Target=8.15	104	19.1	M
613.00 > 169.00	4.605	4.616	-0.011	1.000	22765		7.89(4.07-12.22)	104	200	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.627	4.627	0.0	1.123	34552	0.1023		106	582	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	18698	0.1118	Target=0.50	115	275	
699.00 > 99.00	4.780	4.779	0.001	1.263	34305		0.55(0.25-0.75)	115	396	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	181083	0.0993	Target=6.61	99.3	22.2	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	27094		6.68(3.31-9.92)	99.3	218	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2061289	1.22		97.4	7140	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	19454	0.1055	Target=0.96	106	217	
713.00 > 219.00	4.998	5.008	-0.010	1.000	19131		1.02(0.48-1.44)	106	242	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	206767	0.1104	Target=7.69	110	24.0	
813.00 > 169.00	5.328	5.328	0.0	1.000	26550		7.79(3.85-11.54)	110	351	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.535	2341179	1.20		96.0	5506	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	161712	0.1106	Target=9.13	111	27.0	M
913.00 > 169.00	5.611	5.611	0.0	1.053	16958		9.54(4.56-13.69)	111	117	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

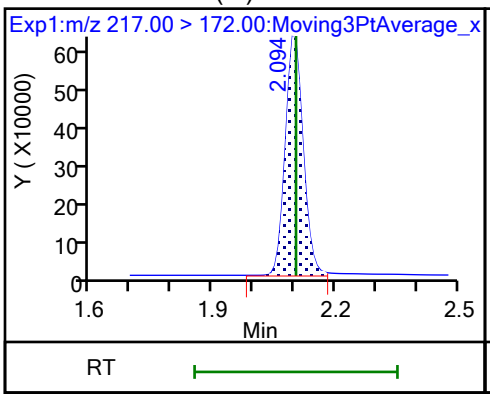
PFAS32NCIC2_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:44 Chrom Revision: 2.3 19-Jul-2023 18:28:48

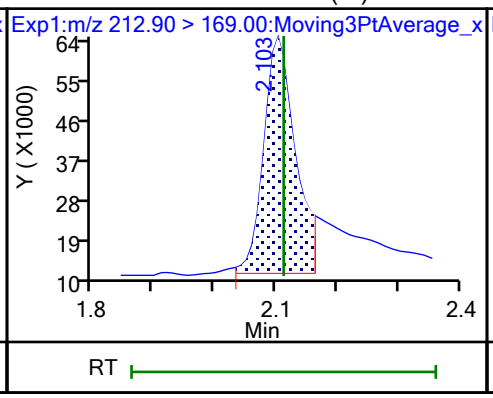
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Injection Date: 26-Jul-2023 17:25:00 Instrument ID: LC812
Lims ID: IC 2
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

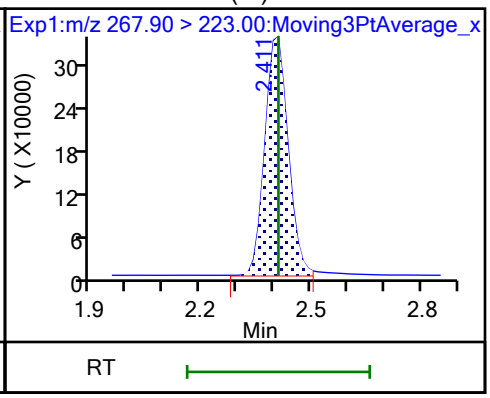
D 1 13C4 PFBA (M)



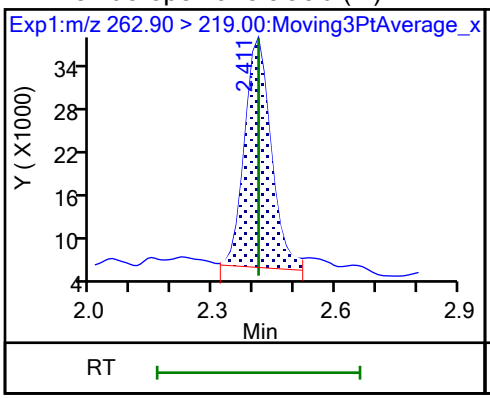
2 Perfluorobutanoic acid (M)



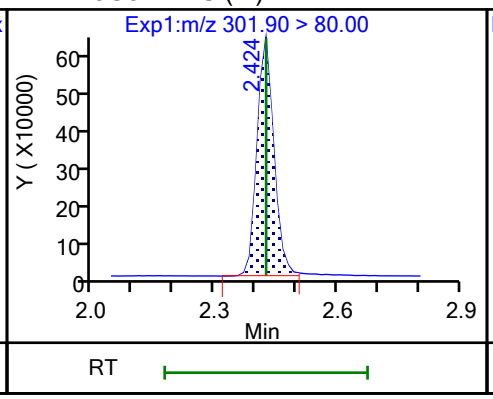
D 3 13C5 PFPeA (M)



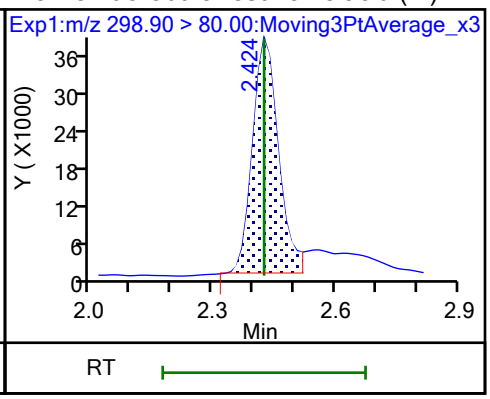
4 Perfluoropentanoic acid (M)



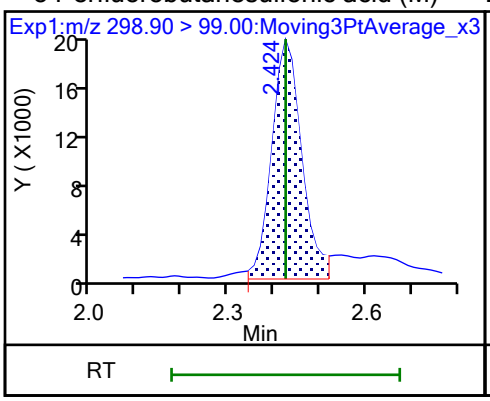
D 47 13C3 PFBS (M)



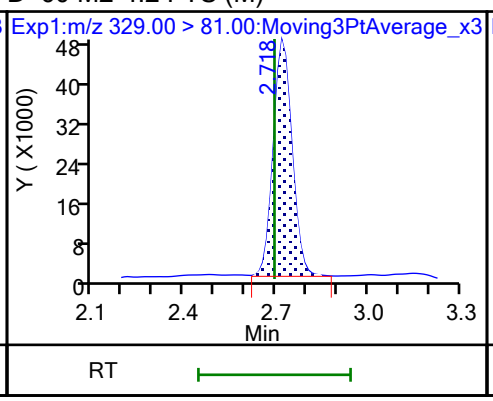
5 Perfluorobutanesulfonic acid (M)



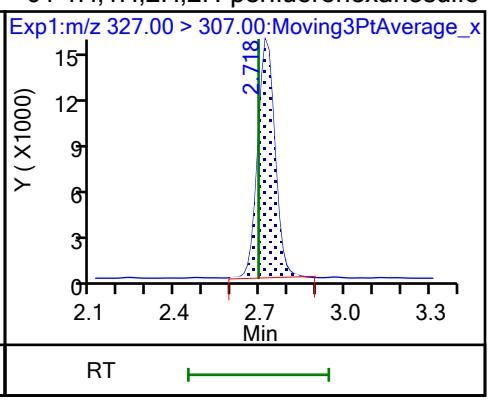
5 Perfluorobutanesulfonic acid (M)



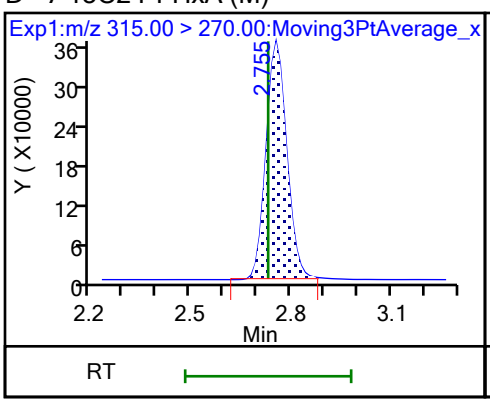
D 60 M2-4:2 FTS (M)



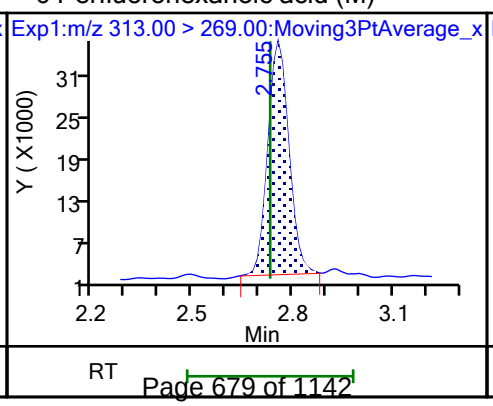
61 1H,1H,2H,2H-perfluorohexanesulfo



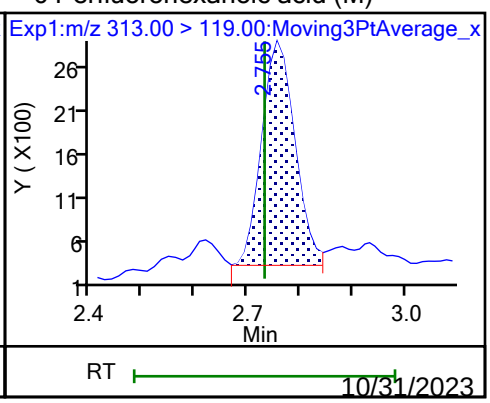
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

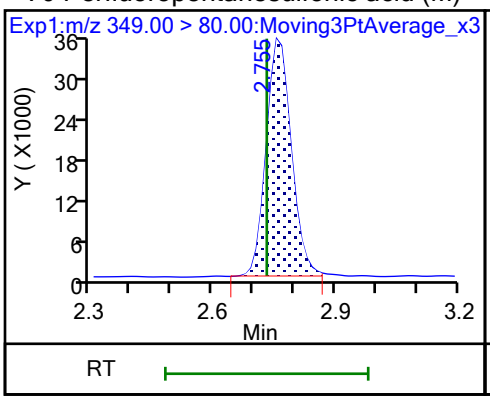


6 Perfluorohexanoic acid (M)

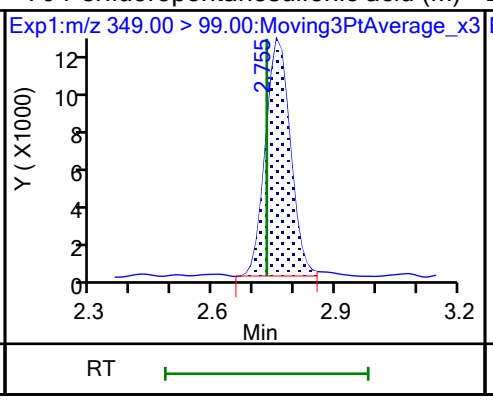


10/31/2023
10:17 AM

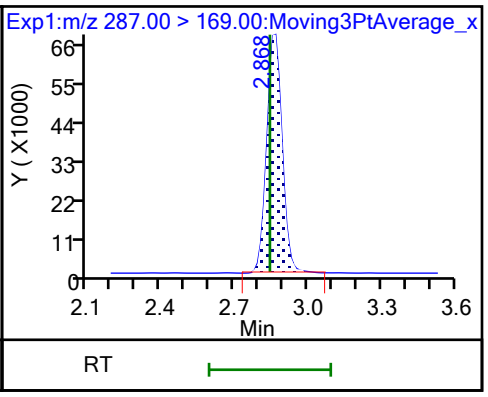
70 Perfluoropentanesulfonic acid (M)



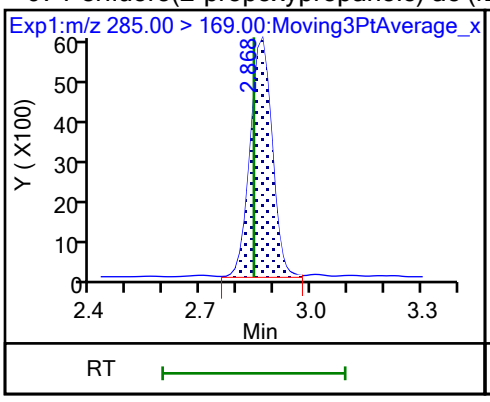
70 Perfluoropentanesulfonic acid (M)



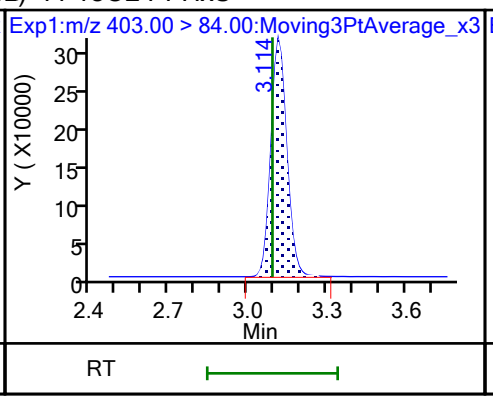
D 64 13C3 HFPO-DA



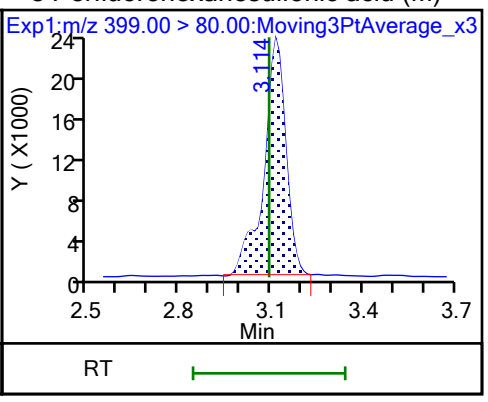
67 Perfluoro(2-propoxypropanoic) ac (M)



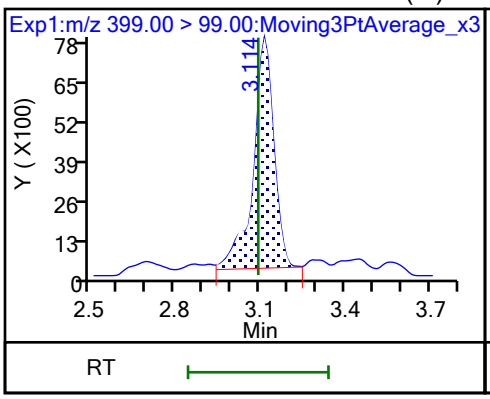
D 11 18O2 PFHxS



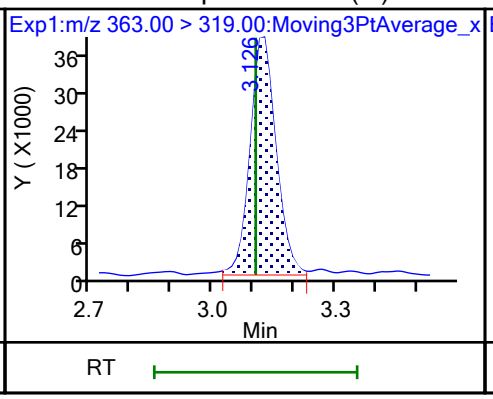
8 Perfluorohexanesulfonic acid (M)



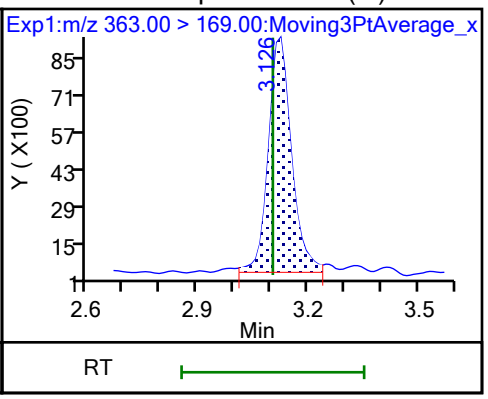
8 Perfluorohexanesulfonic acid (M)



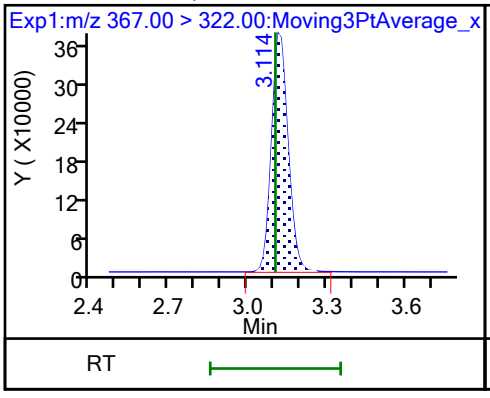
10 Perfluoroheptanoic acid (M)



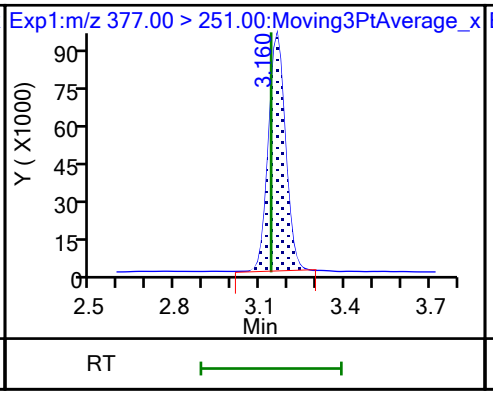
10 Perfluoroheptanoic acid (M)



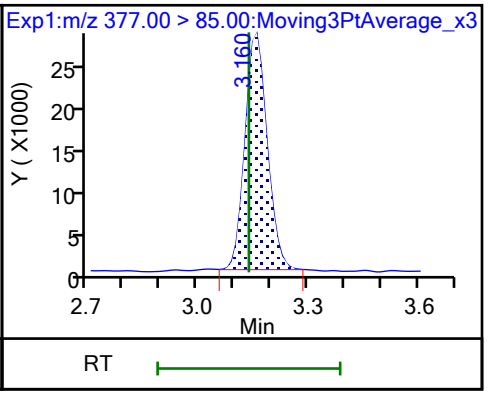
D 9 13C4 PFHpA



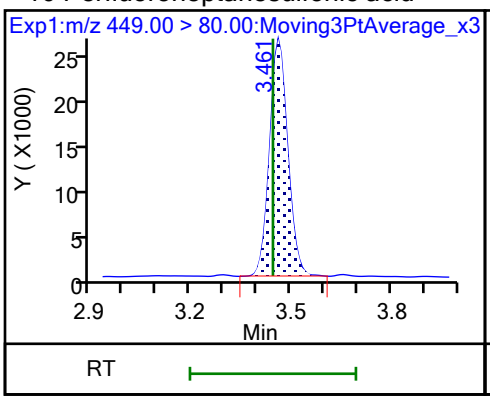
77 DONA



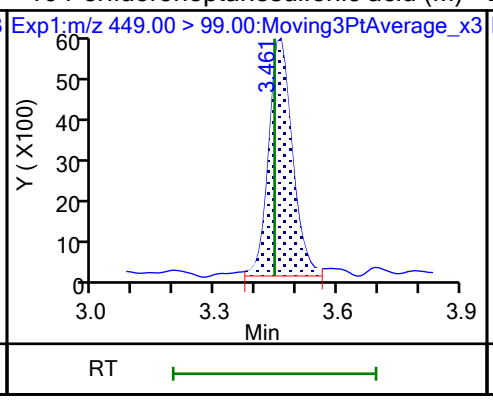
77 DONA



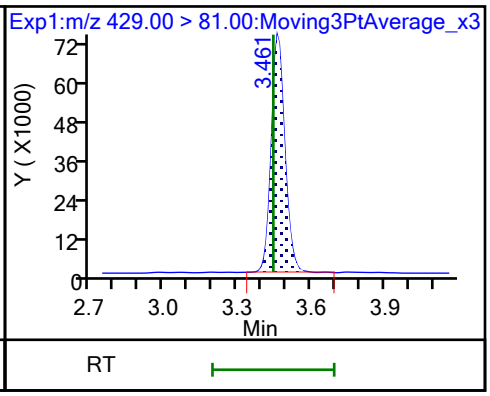
16 Perfluoroheptanesulfonic acid



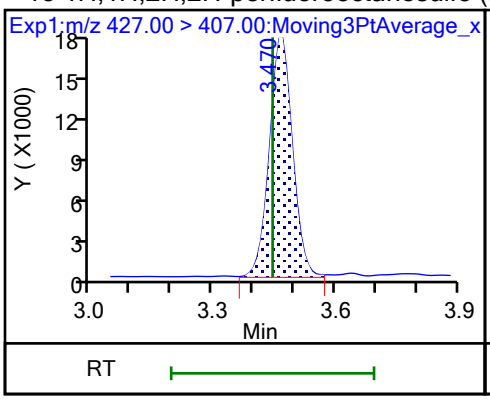
16 Perfluoroheptanesulfonic acid (M)



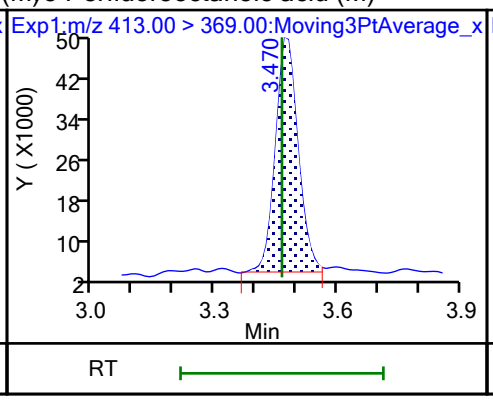
D 12 M2-6:2 FTS



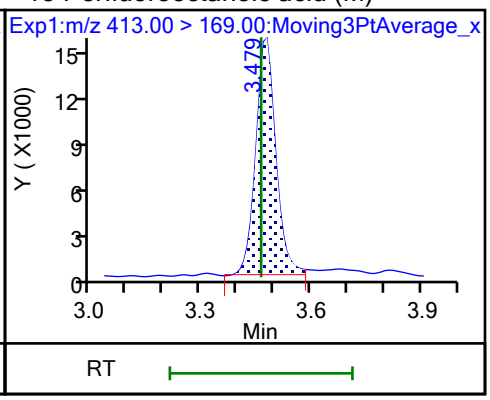
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



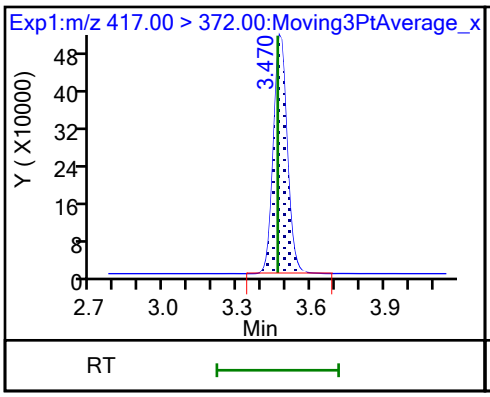
15 Perfluorooctanoic acid (M)



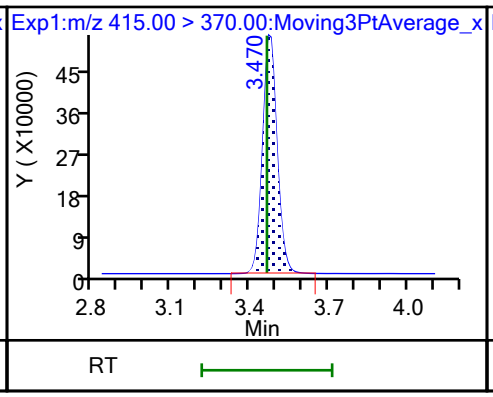
15 Perfluorooctanoic acid (M)



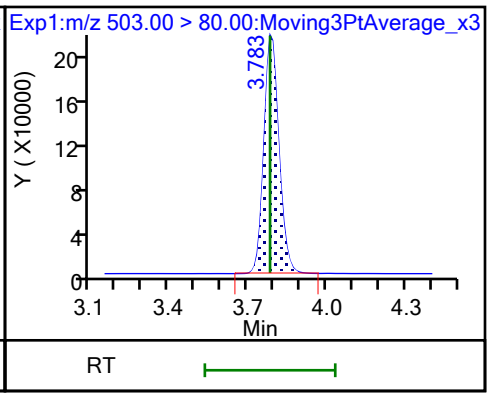
D 14 13C4 PFOA



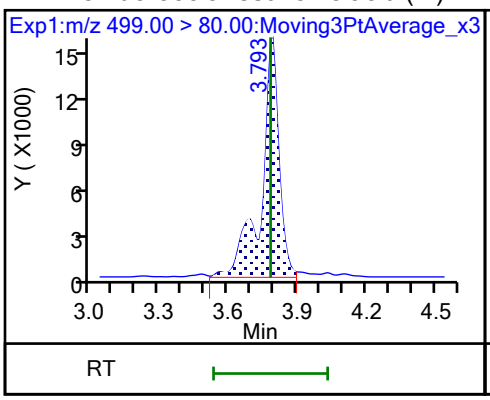
* 62 13C2 PFOA



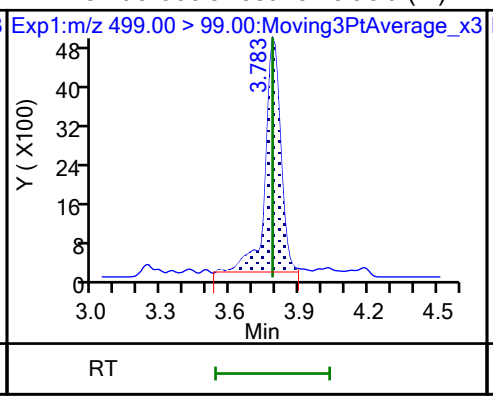
D 18 13C4 PFOS



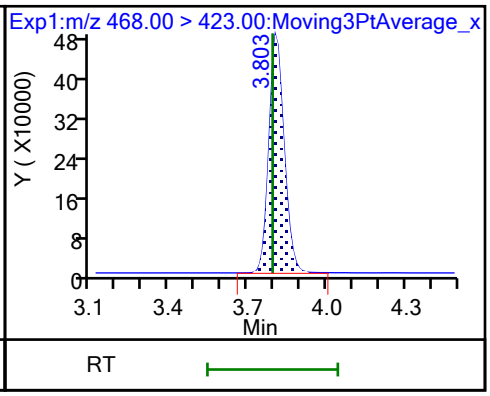
17 Perfluorooctanesulfonic acid (M)



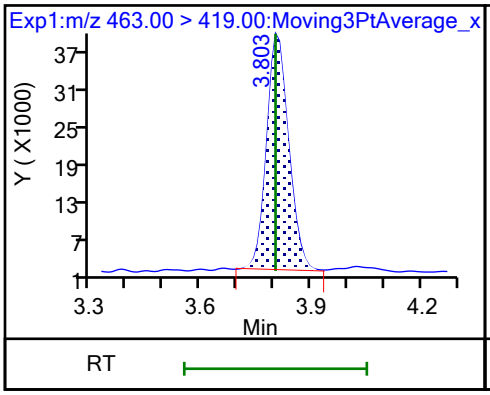
17 Perfluorooctanesulfonic acid (M)



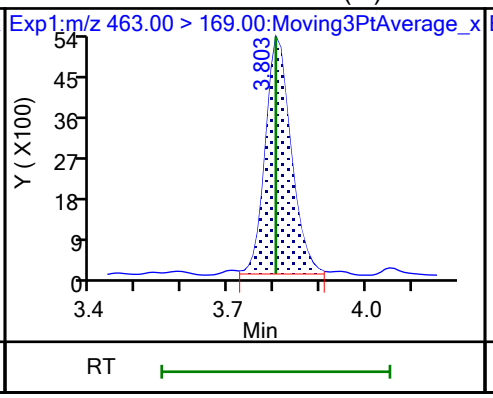
D 19 13C5 PFNA



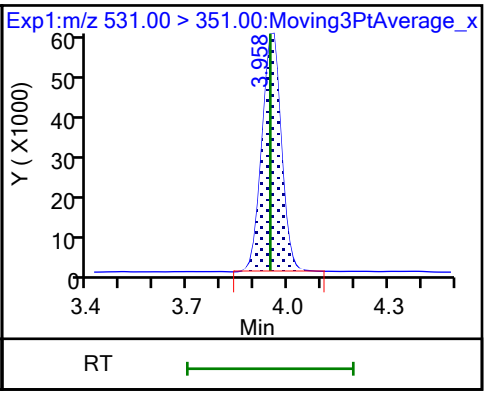
20 Perfluorononanoic acid



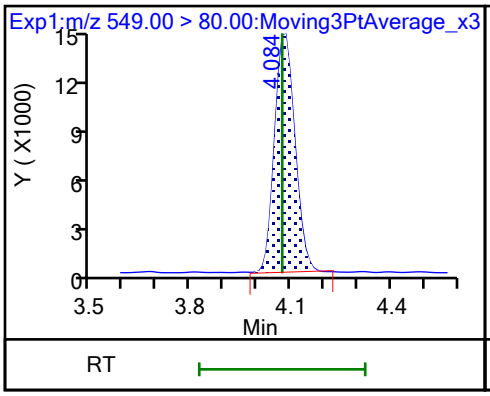
20 Perfluorononanoic acid (M)



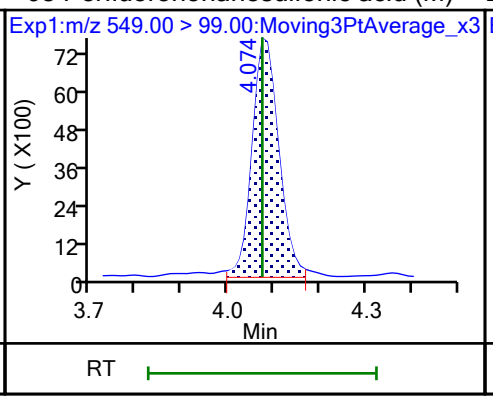
69 9-Chlorohexadecafluoro-3-oxanona



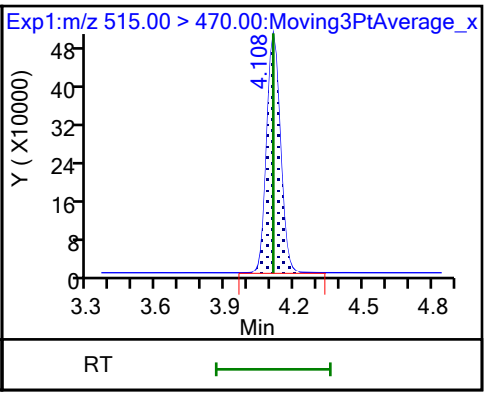
68 Perfluorononanesulfonic acid



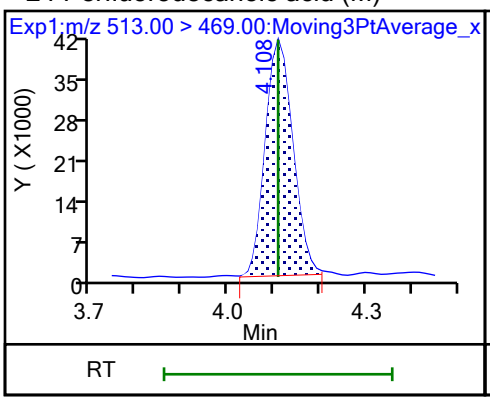
68 Perfluorononanesulfonic acid (M)



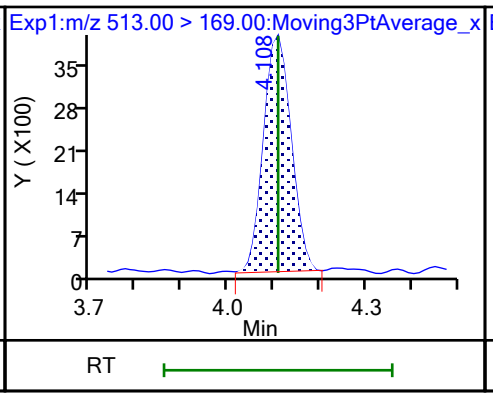
D 23 13C2 PFDA



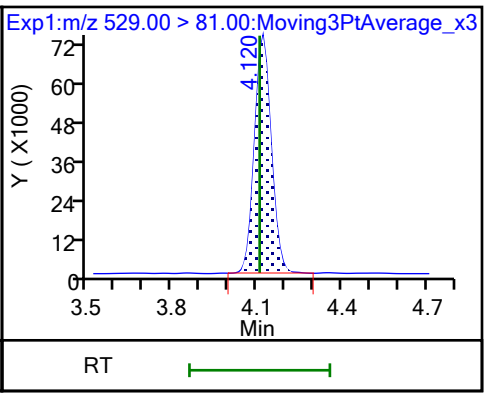
24 Perfluorodecanoic acid (M)



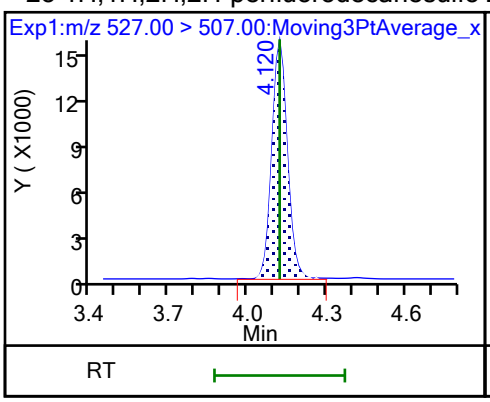
24 Perfluorodecanoic acid



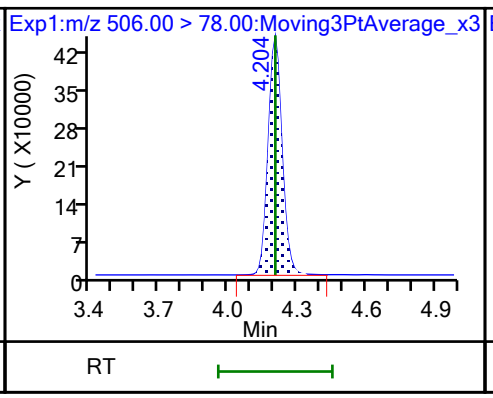
D 26 M2-8:2 FTS



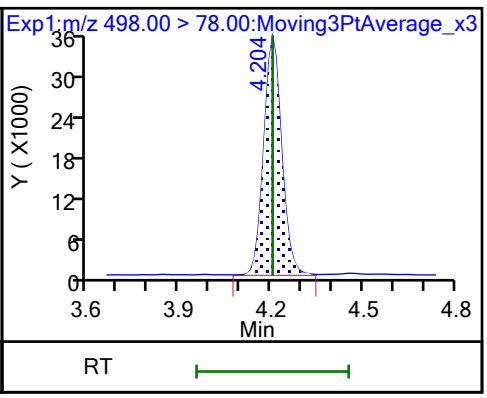
25 1H,1H,2H,2H-perfluorodecanesulfo



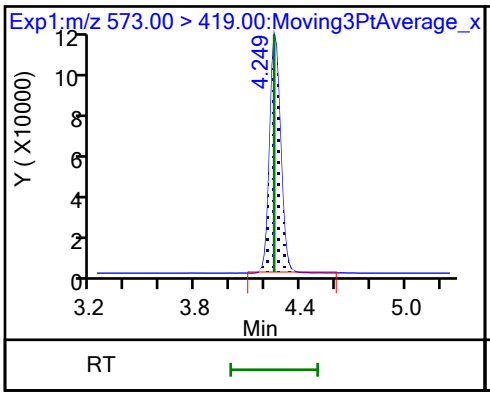
D 21 13C8 FOSA



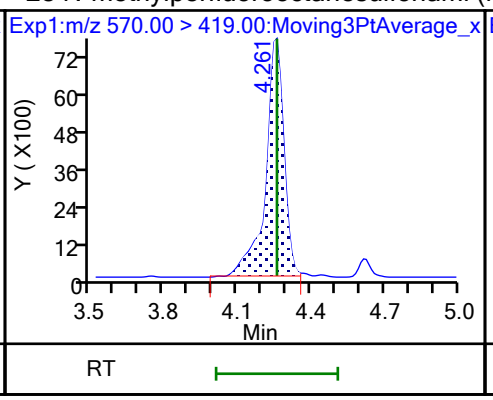
22 Perfluorooctanesulfonamide



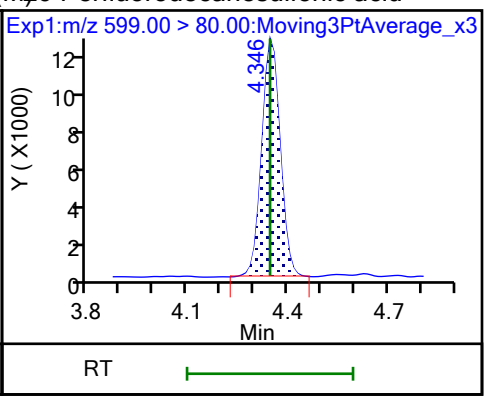
D 27 d3-NMeFOSAA



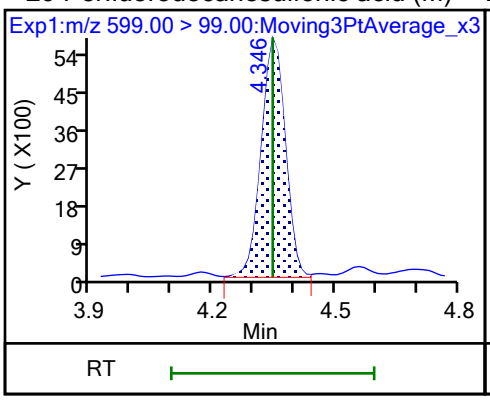
28 N-methylperfluorooctanesulfonami (M)



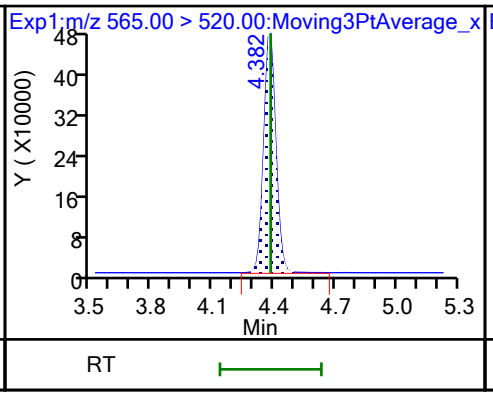
29 Perfluorodecanesulfonic acid



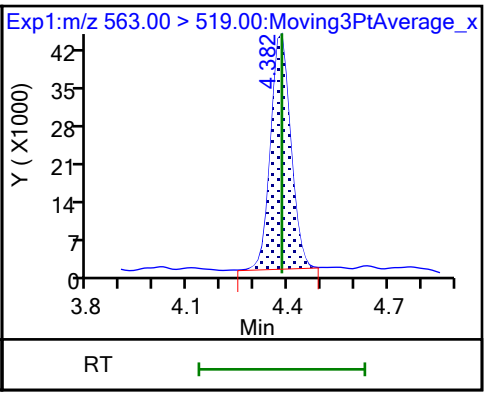
29 Perfluorodecanesulfonic acid (M)



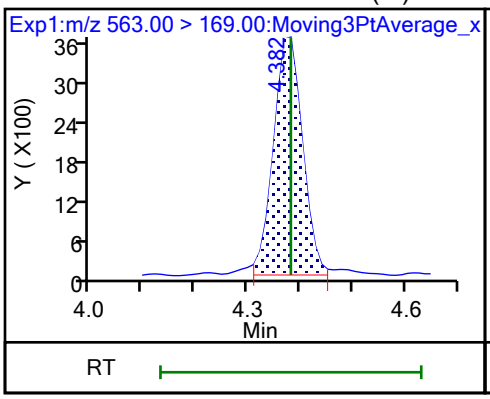
D 30 13C2 PFUnA



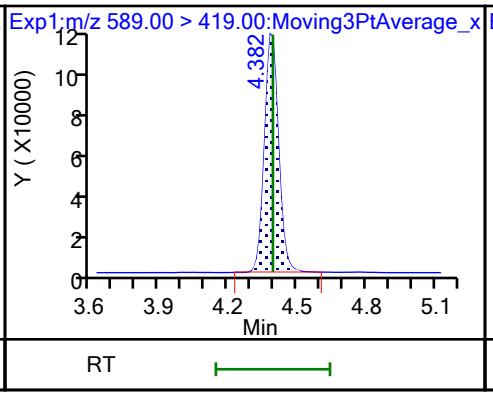
31 Perfluoroundecanoic acid



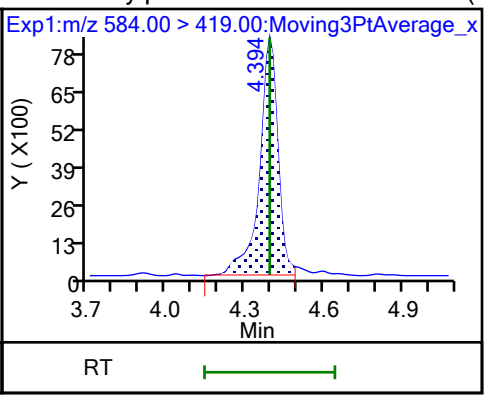
31 Perfluoroundecanoic acid (M)



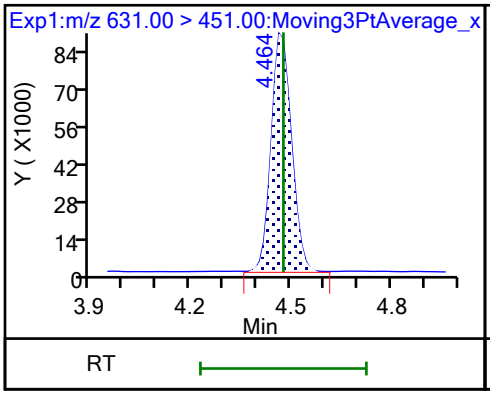
D 32 d5-NEtFOSAA



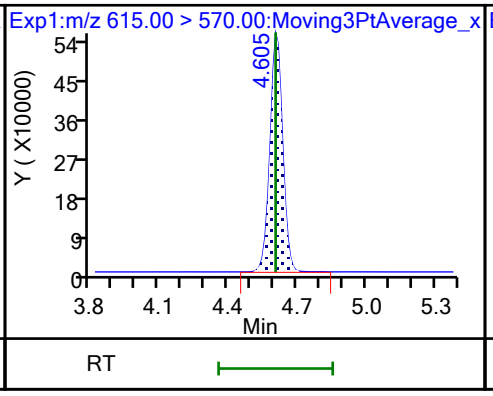
33 N-ethylperfluorooctanesulfonamid (M)



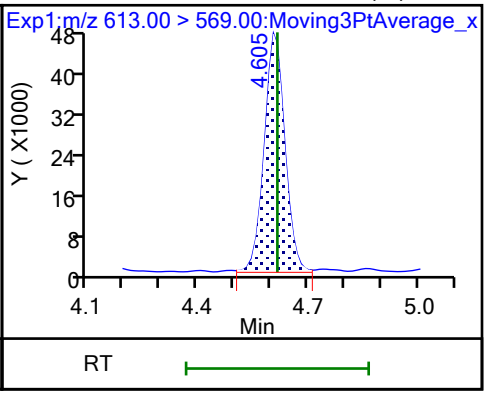
66 11-Chloroeicosafluoro-3-oxaundec



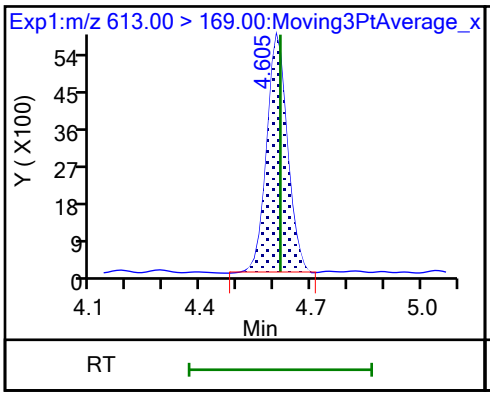
D 36 13C2 PFDoA



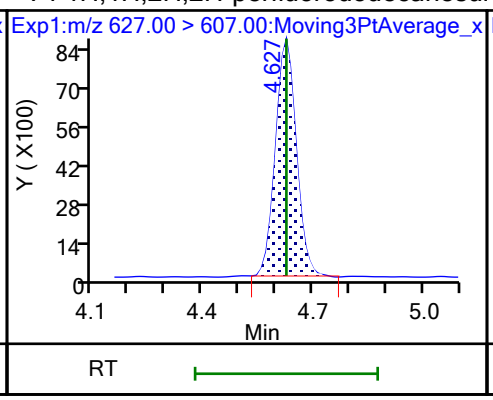
37 Perfluorododecanoic acid (M)



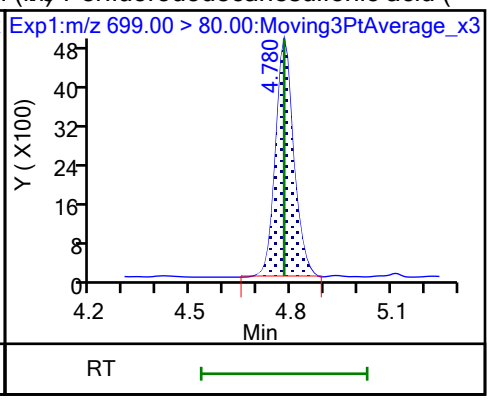
37 Perfluorododecanoic acid



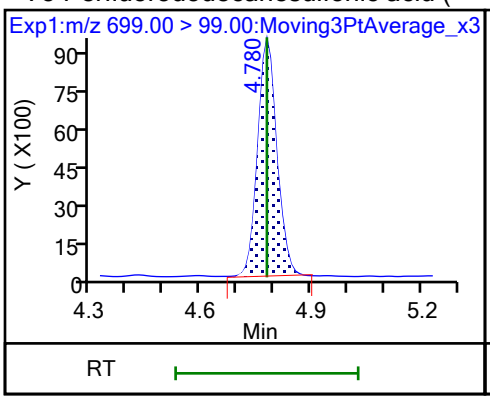
74 1H,1H,2H,2H-perfluorododecanesul (M)



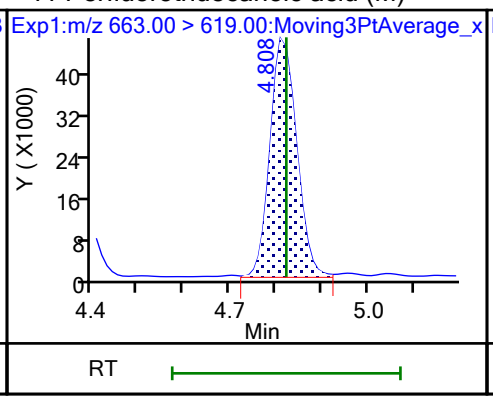
75 Perfluorododecanesulfonic acid (



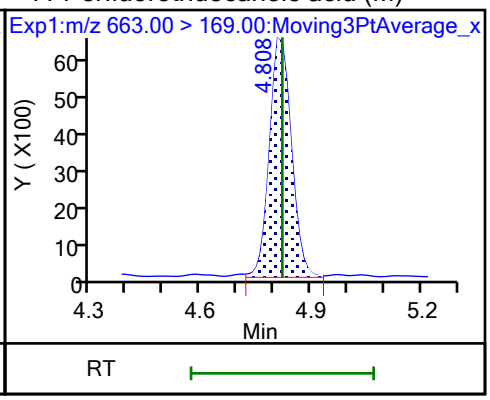
75 Perfluorododecanesulfonic acid (



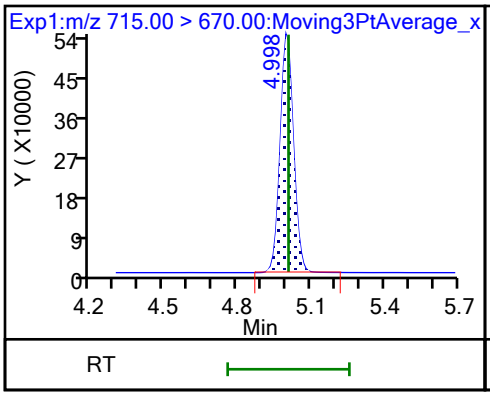
41 Perfluorotridecanoic acid (M)



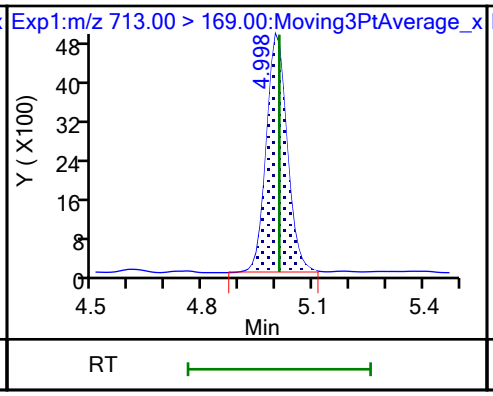
41 Perfluorotridecanoic acid (M)



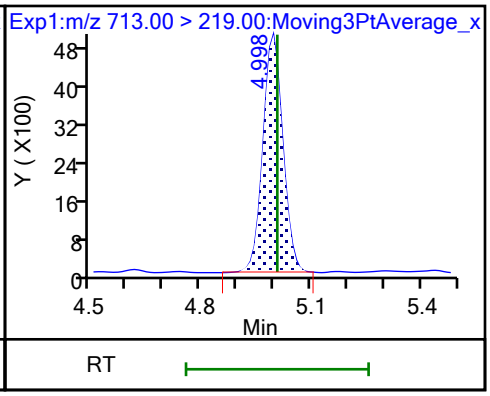
D 43 13C2 PFTeDA



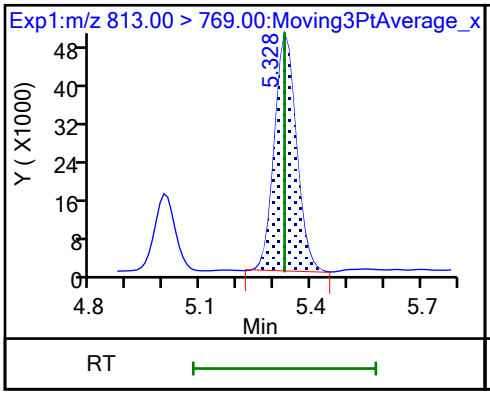
42 Perfluorotetradecanoic acid



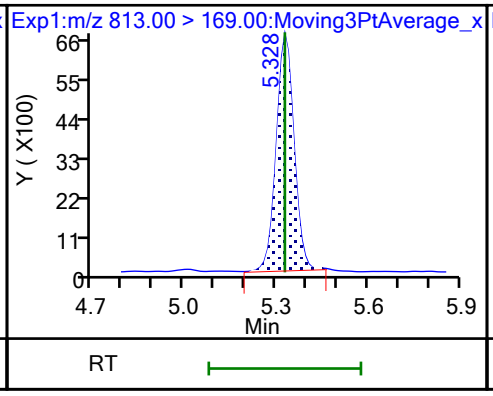
42 Perfluorotetradecanoic acid



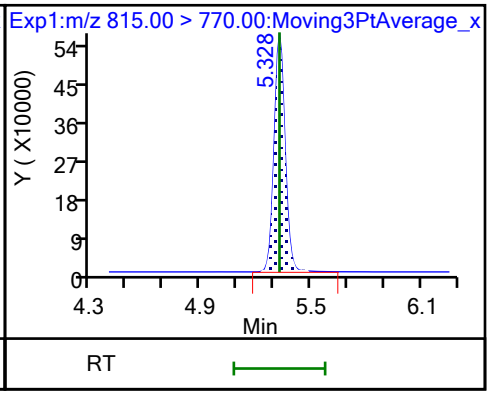
45 Perfluorohexadecanoic acid



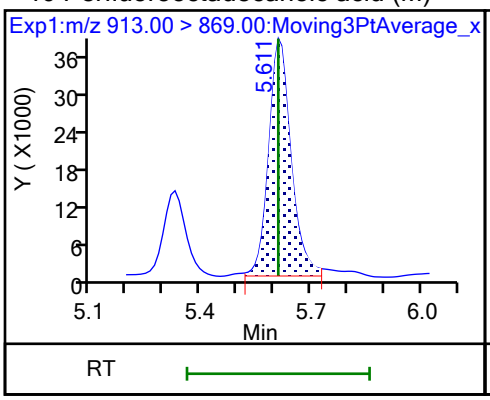
45 Perfluorohexadecanoic acid



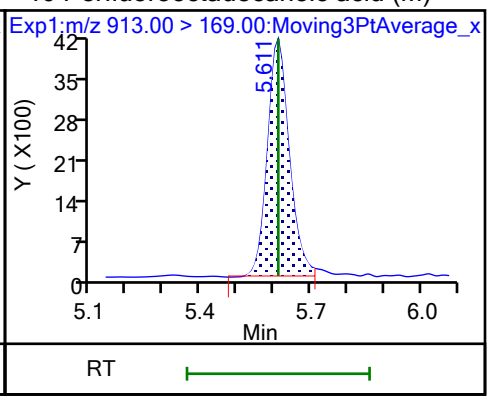
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Jul-2023 17:33:10 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 200-0056441-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:49 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:49:59
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.602	1916527	1.22		97.6	1037	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	774804	0.5180		104	49.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.693	1507442	1.24		98.9	854	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	651716	0.5008		100	28.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.697	1758991	1.07		91.7	56488	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	790713	0.4679	Target=2.07	105	143	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	376898		2.10(1.04-3.11)	105	75.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.781	215257	1.13		96.6	77.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	288946	0.4615		98.5	883	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.755	2.731	0.024	0.792	1472867	1.19		95.0	3850	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	672203	0.5184	Target=14.29	104	87.4	
313.00 > 119.00	2.755	2.731	0.024	1.000	43102		15.60(7.15-21.44)	104	30.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	694967	0.4648	Target=2.78	98.8	1051	
349.00 > 99.00	2.755	2.731	0.024	0.885	242262		2.87(1.39-4.17)	98.8	272	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.824	279126	1.16		93.0	2331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	0.996	115257	0.5155		103	712	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.895	1353967	1.14		96.8	3822	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	555092	0.4379	Target=3.23	95.8	787	M
399.00 > 99.00	3.114	3.092	0.022	1.000	169403		3.28(1.62-4.84)	95.8	113	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.126	3.104	0.022	1.004	705383	0.4702	Target=4.11	94.0	148	
363.00 > 169.00	3.114	3.104	0.010	1.000	172971		4.08(2.06-6.17)	94.0	135	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.895	1672833	1.23		98.3	4178	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	1973200	0.4642	Target=3.28	98.2	2579	
377.00 > 85.00	3.160	3.138	0.022	0.835	597494		3.30(1.64-4.92)	98.2	814	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.461	3.446	0.015	0.915	497245	0.4658	Target=4.71	97.7	1145	
449.00 > 99.00	3.461	3.446	0.015	0.915	101764		4.89(2.36-7.07)	97.7	193	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.995	274798	1.12		94.2	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	310157	0.4904		103	795	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.479	3.464	0.015	1.003	801060	0.4915	Target=2.90	98.3	61.0	
413.00 > 169.00	3.479	3.464	0.015	1.003	274444		2.92(1.45-4.35)	98.3	334	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	0.997	1912820	1.24		99.2	5100	
* 62 13C2 PFOA										
415.00 > 370.00	3.479	3.464	0.015		1980756	1.25			7103	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.087	882764	1.17		98.3	3627	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	384806	0.4466	Target=4.11	96.2	673	M
499.00 > 99.00	3.793	3.783	0.010	1.003	97181		3.96(2.05-6.16)	96.2	140	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.093	2008931	1.20		95.8	5719	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	802848	0.5097	Target=8.48	102	153	
463.00 > 169.00	3.803	3.803	0.0	1.000	92789		8.65(4.24-12.72)	102	535	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	1237458	0.4693		101	2329	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.080	312103	0.4761	Target=2.17	99.0	1622	
549.00 > 99.00	4.084	4.074	0.010	1.080	140337		2.22(1.08-3.25)	99.0	373	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.181	2062234	1.17		93.9	9314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	869526	0.5274	Target=10.55	105	223	
513.00 > 169.00	4.108	4.108	0.0	1.000	81818		10.63(5.27-15.82)	105	203	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.184	298552	1.08		90.2	633	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	270156	0.4922		103	2104	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.208	1790735	1.19		95.5	3553	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	680067	0.4977		99.5	1708	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.248	4.249	-0.001	1.221	486461	1.16		92.7	1692	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.248	4.260	-0.012	1.000	177278	0.5020		100	343	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	234996	0.4658	Target=2.28	96.5	994	
599.00 > 99.00	4.346	4.346	0.0	1.149	102960		2.28(1.14-3.42)	96.5	384	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.382	-0.001	1.259	1983358	1.20		95.7	15111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.382	-0.001	1.000	818335	0.5004	Target=11.30	100	237	
563.00 > 169.00	4.381	4.382	-0.001	1.000	76353		10.72(5.65-16.96)	100	564	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.381	4.393	-0.012	1.259	491633	1.22		97.3	1018	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.003	187350	0.4763		95.3	408	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	1894487	0.4685		99.4	2418	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.324	2022512	1.20		96.0	6242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	852163	0.5175	Target=8.15	103	86.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	100190		8.51(4.07-12.22)	103	964	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	158460	0.4830		100	1667	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	82920	0.4849	Target=0.50	100	1359	
699.00 > 99.00	4.779	4.779	0.0	1.263	159027		0.52(0.25-0.75)	100	1291	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	907955	0.5245	Target=6.61	105	105	
663.00 > 169.00	4.808	4.822	-0.014	1.044	136886		6.63(3.31-9.92)	105	771	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.994	5.008	-0.014	1.435	1996289	1.19		95.1	6980	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.994	5.008	-0.014	1.000	88102	0.4934	Target=0.96	98.7	1397	
713.00 > 219.00	4.994	5.008	-0.014	1.000	92762		0.95(0.48-1.44)	98.7	896	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.326	5.328	-0.002	1.000	900190	0.4873	Target=7.69	97.5	97.8	
813.00 > 169.00	5.326	5.328	-0.002	1.000	120909		7.45(3.85-11.54)	97.5	1116	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.326	5.328	-0.002	1.531	2309121	1.19		95.5	3874	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.609	5.611	-0.002	1.053	726427	0.5036	Target=9.13	101	95.3	M
913.00 > 169.00	5.600	5.611	-0.011	1.051	78986		9.20(4.56-13.69)	101	265	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

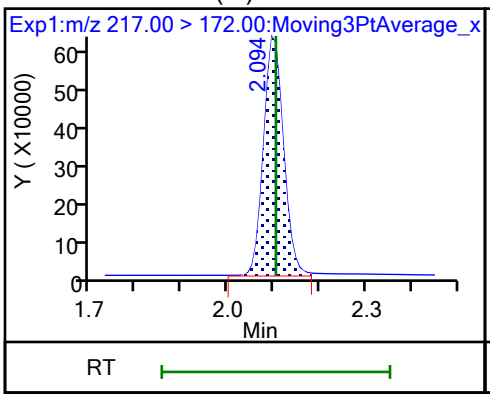
PFAS32NCIC3_00016 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:50 Chrom Revision: 2.3 19-Jul-2023 18:28:48

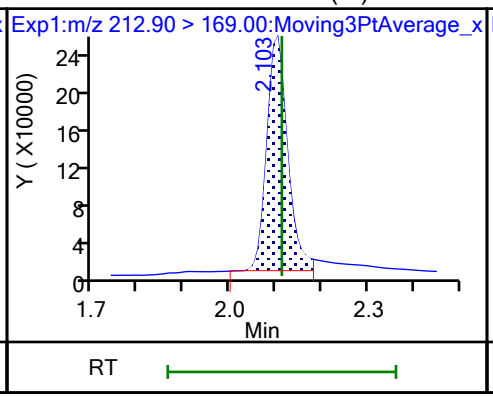
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Injection Date: 26-Jul-2023 17:33:10 Instrument ID: LC812
Lims ID: IC 3
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

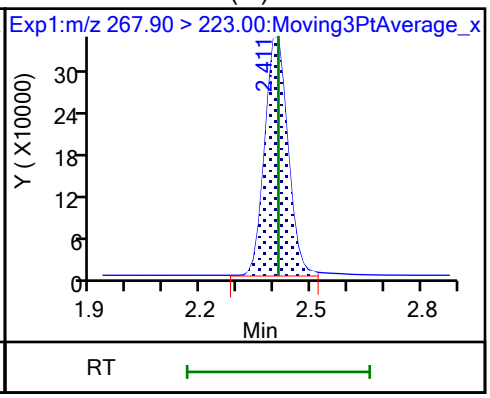
D 1 13C4 PFBA (M)



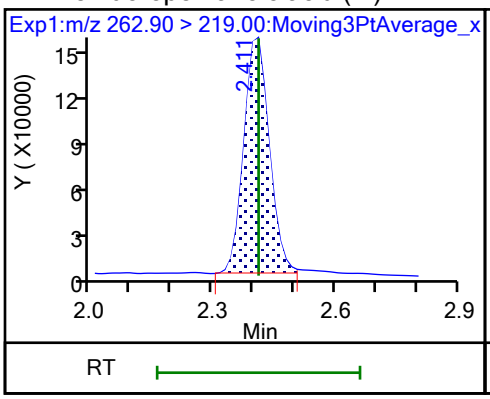
2 Perfluorobutanoic acid (M)



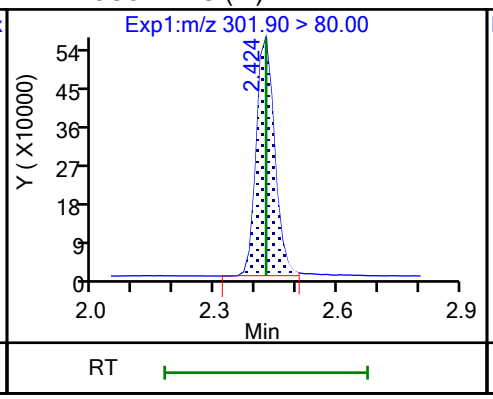
D 3 13C5 PFPeA (M)



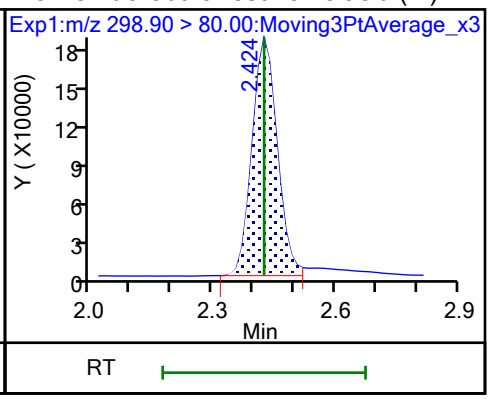
4 Perfluoropentanoic acid (M)



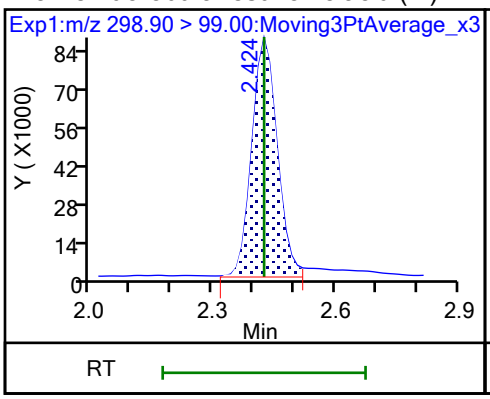
D 47 13C3 PFBS (M)



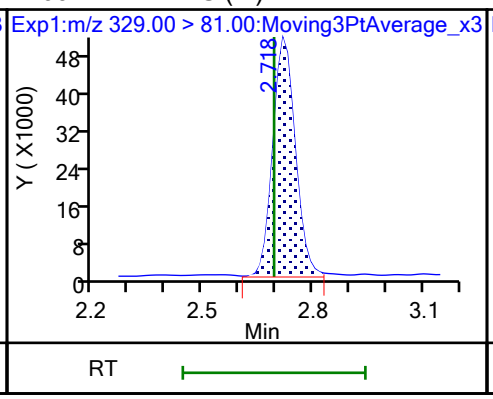
5 Perfluorobutanesulfonic acid (M)



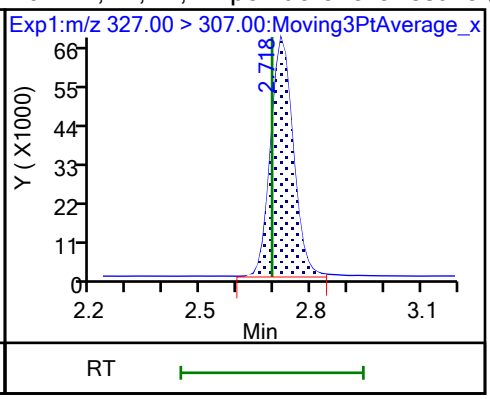
5 Perfluorobutanesulfonic acid (M)



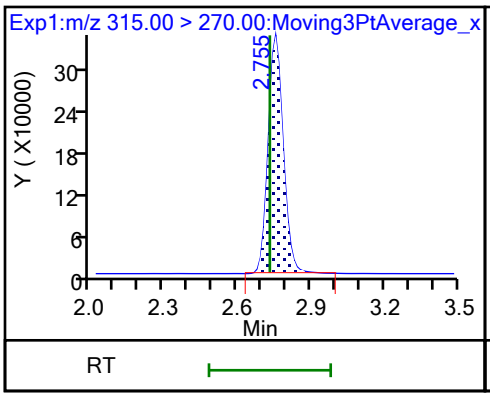
D 60 M2-4:2 FTS (M)



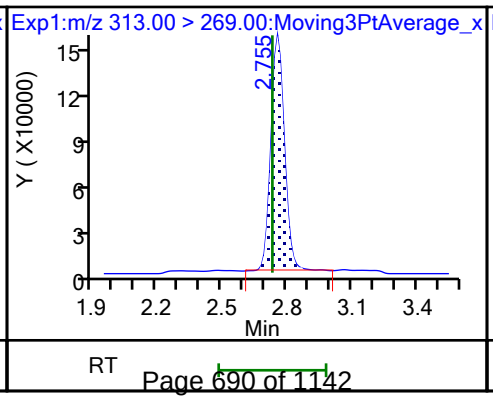
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



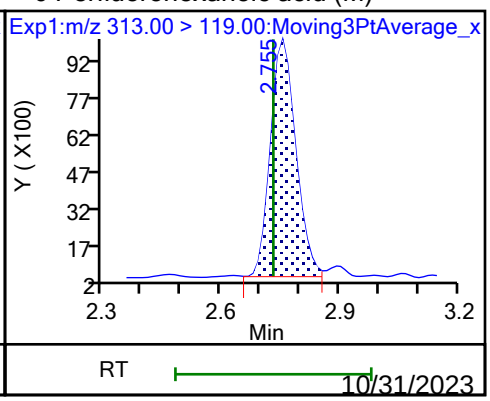
D 7 13C2 PFHxA



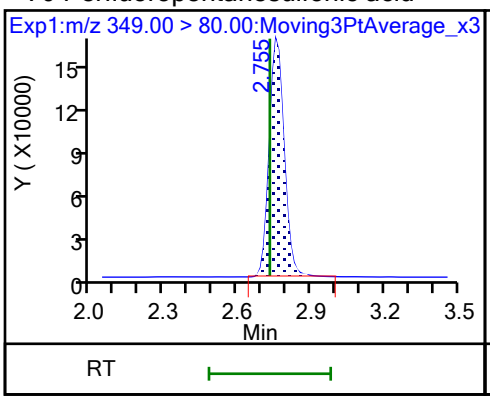
6 Perfluorohexanoic acid



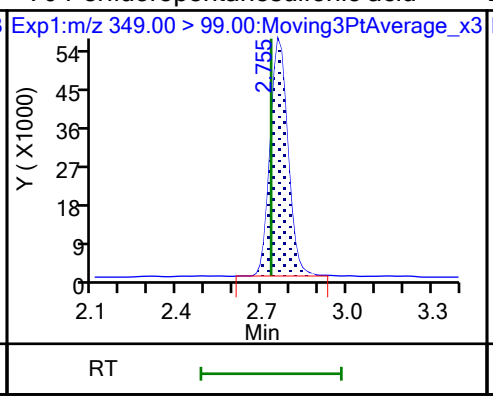
6 Perfluorohexanoic acid (M)



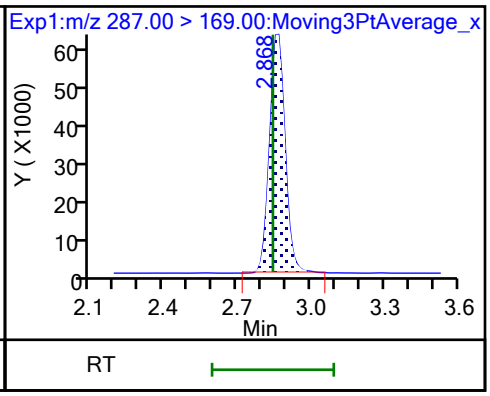
70 Perfluoropentanesulfonic acid



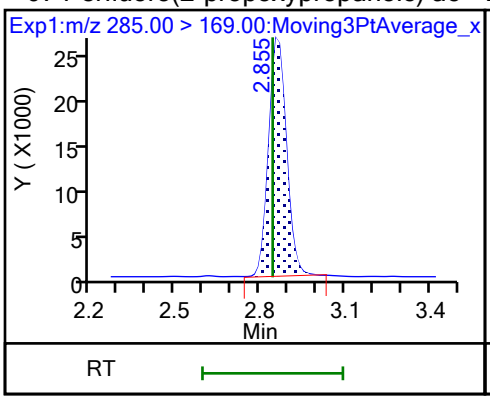
70 Perfluoropentanesulfonic acid



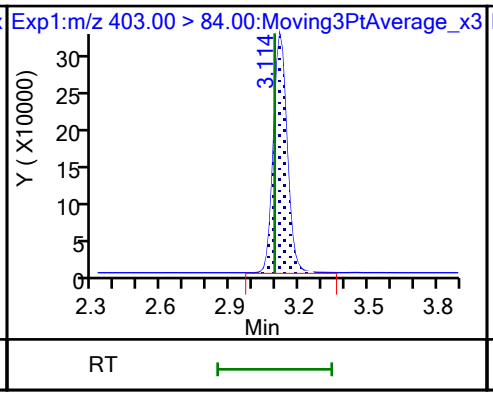
D 64 13C3 HFPO-DA



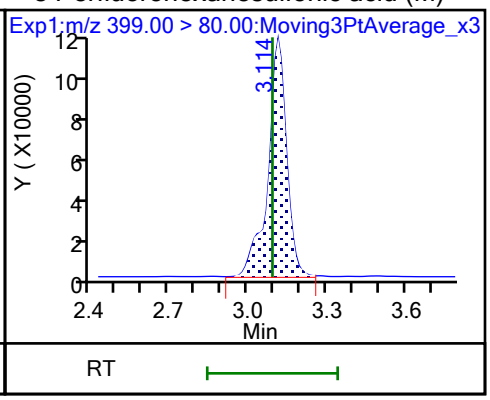
67 Perfluoro(2-propoxypropanoic) ac



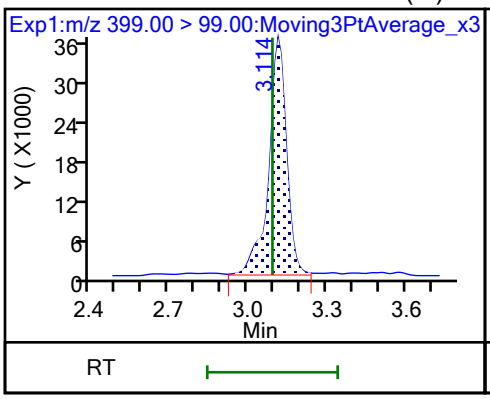
D 11 18O2 PFHxS



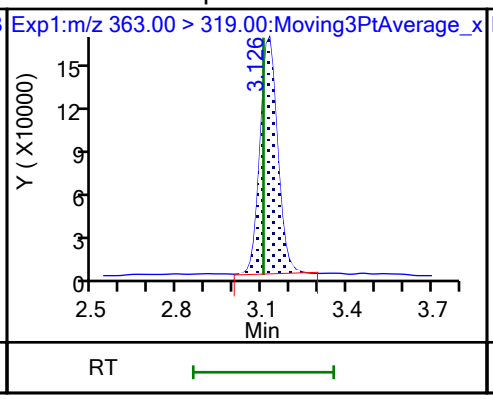
8 Perfluorohexanesulfonic acid (M)



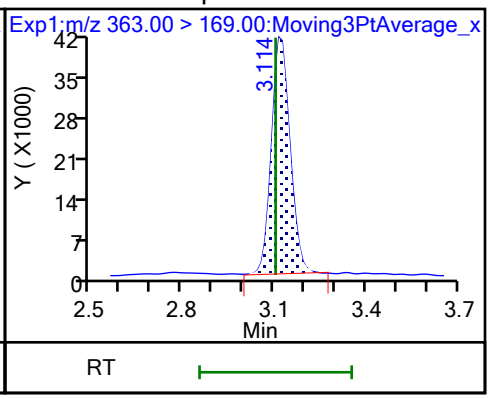
8 Perfluorohexanesulfonic acid (M)



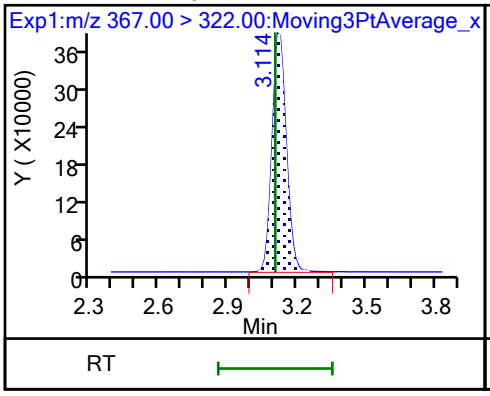
10 Perfluoroheptanoic acid



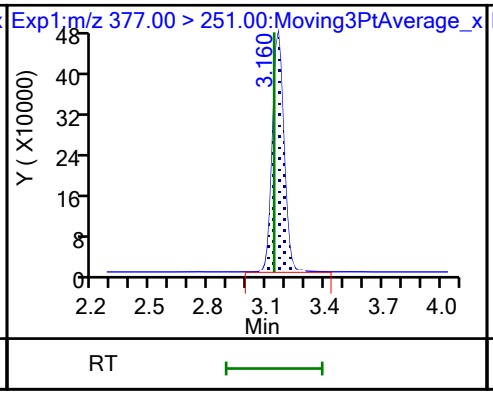
10 Perfluoroheptanoic acid



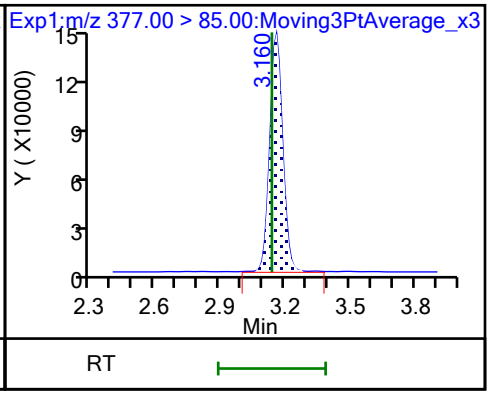
D 9 13C4 PFHpA



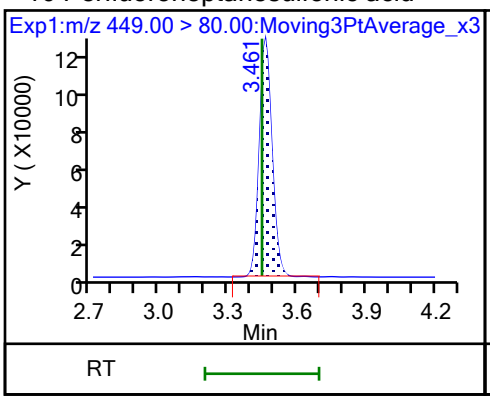
77 DONA



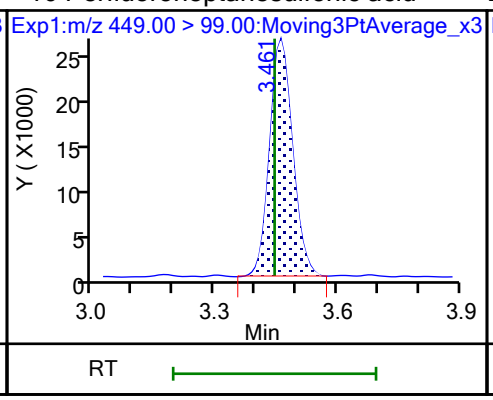
77 DONA



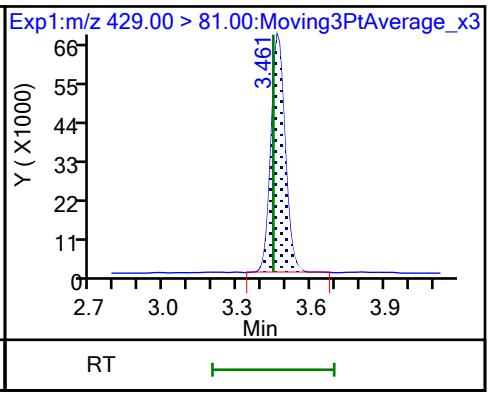
16 Perfluoroheptanesulfonic acid



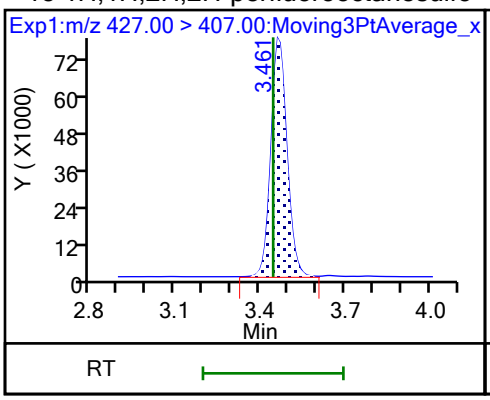
16 Perfluoroheptanesulfonic acid



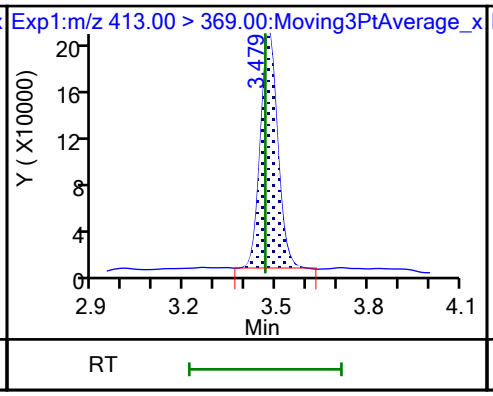
D 12 M2-6:2 FTS



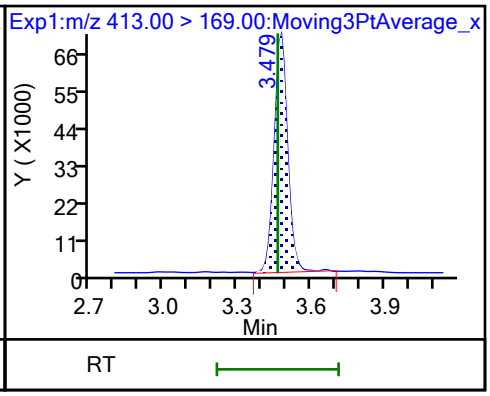
13 1H,1H,2H,2H-perfluorooctanesulfo



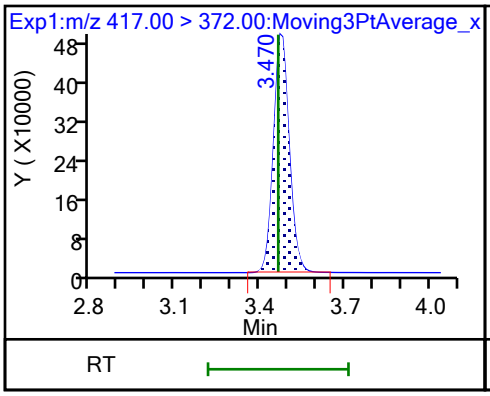
15 Perfluorooctanoic acid



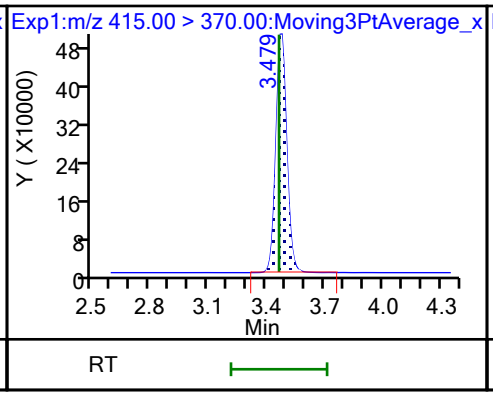
15 Perfluorooctanoic acid



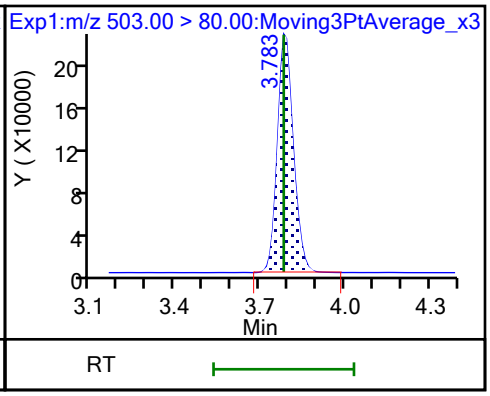
D 14 13C4 PFOA



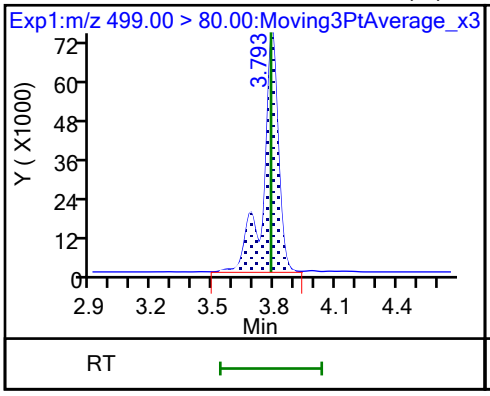
* 62 13C2 PFOA



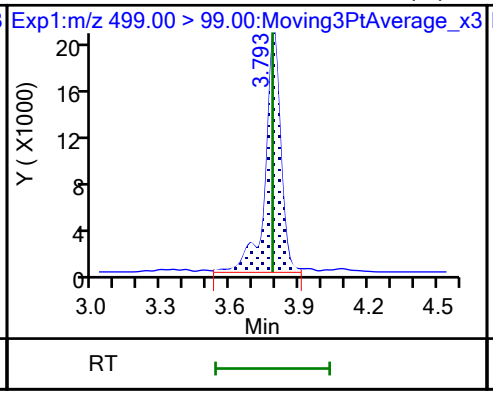
D 18 13C4 PFOS



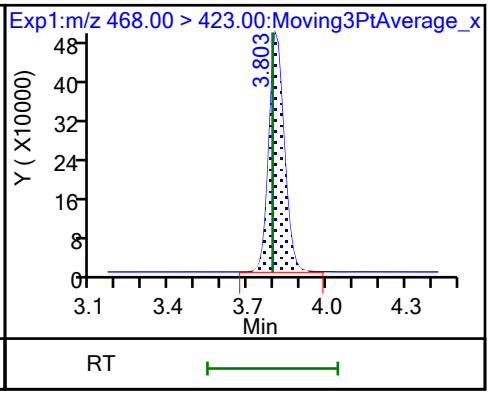
17 Perfluorooctanesulfonic acid (M)



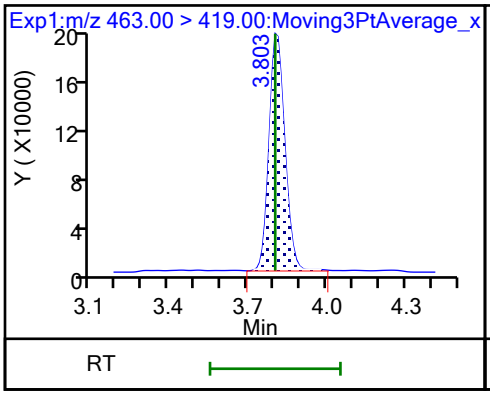
17 Perfluorooctanesulfonic acid (M)



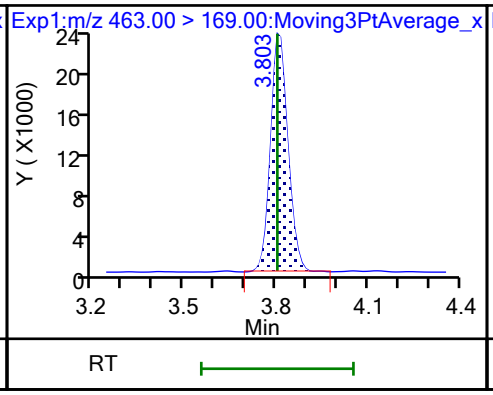
D 19 13C5 PFNA



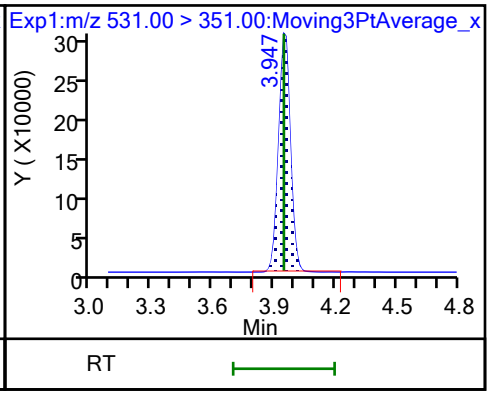
20 Perfluorononanoic acid



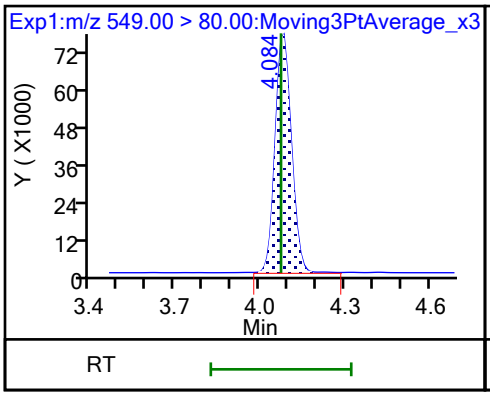
20 Perfluorononanoic acid



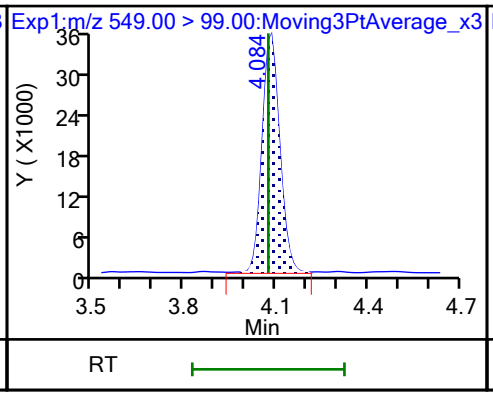
69 9-Chlorohexadecafluoro-3-oxanona



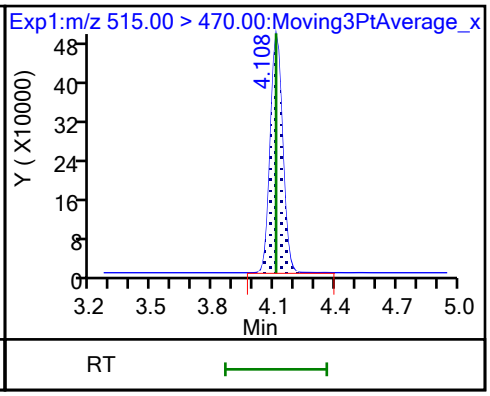
68 Perfluorononanesulfonic acid



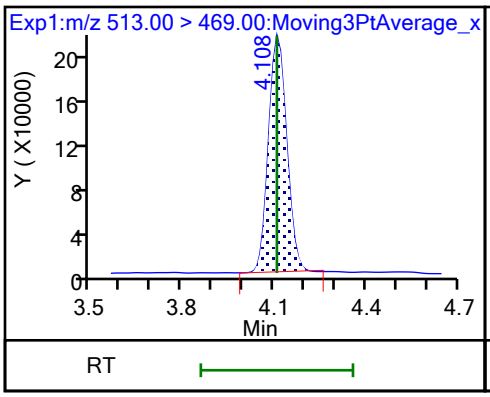
68 Perfluorononanesulfonic acid



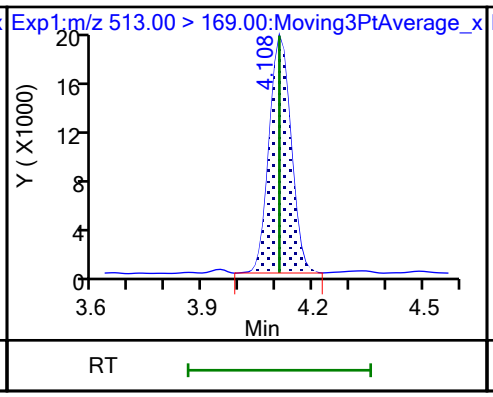
D 23 13C2 PFDA



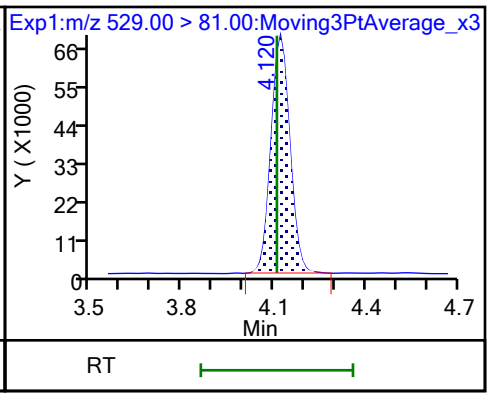
24 Perfluorodecanoic acid



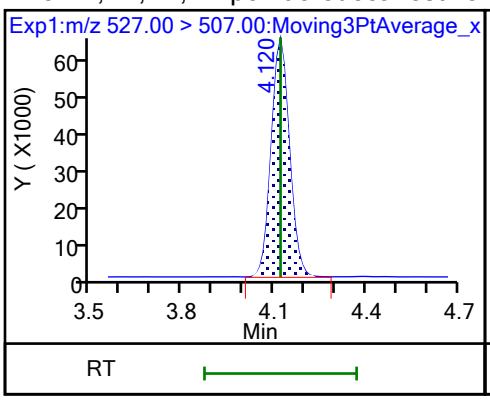
24 Perfluorodecanoic acid



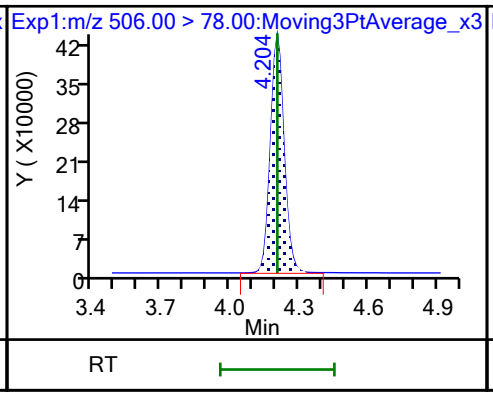
D 26 M2-8:2 FTS



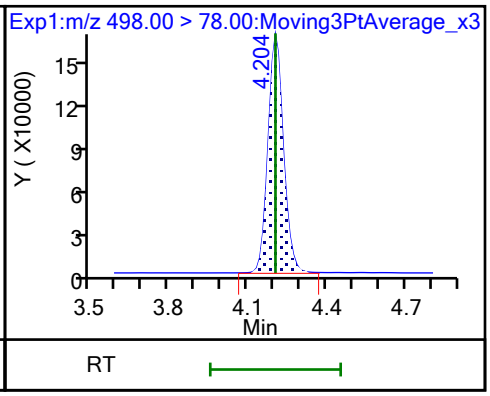
25 1H,1H,2H,2H-perfluorodecanesulfo



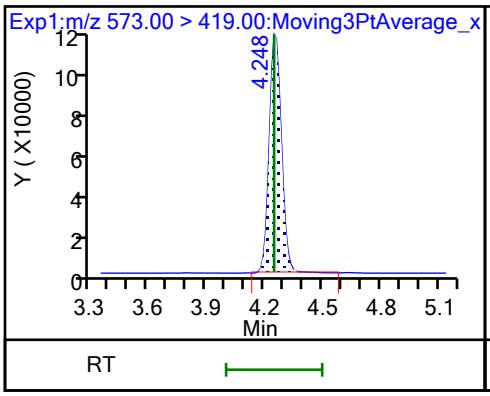
D 21 13C8 FOSA



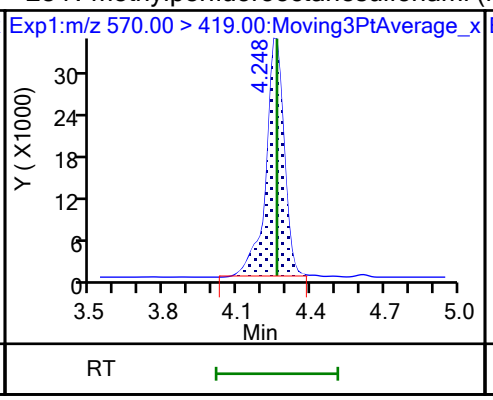
22 Perfluorooctanesulfonamide



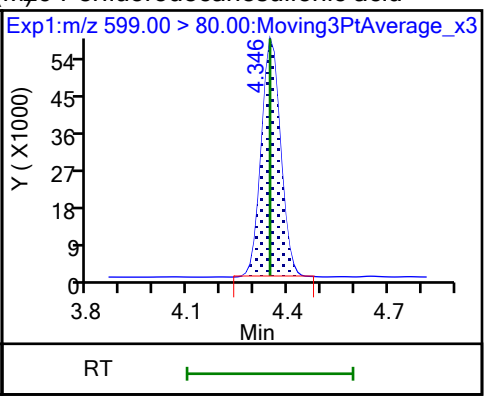
D 27 d3-NMeFOSAA



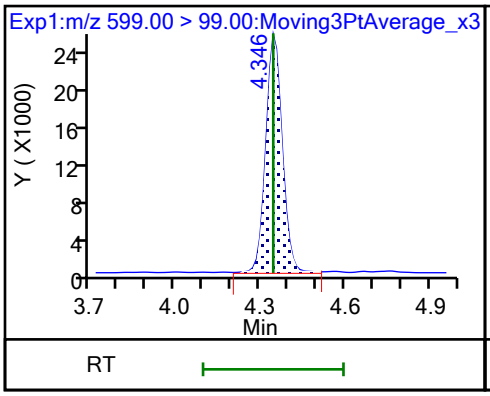
28 N-methylperfluorooctanesulfonami (M)



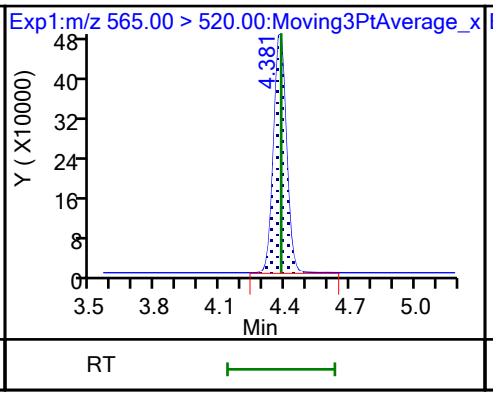
29 Perfluorodecanesulfonic acid



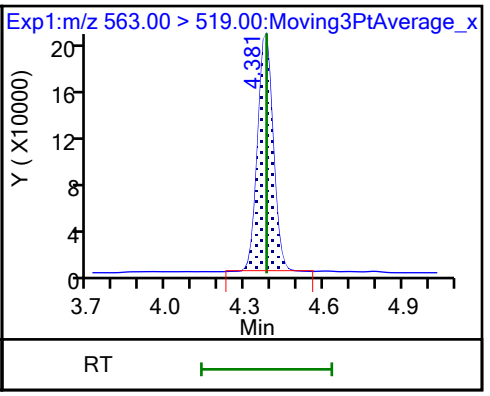
29 Perfluorodecanesulfonic acid



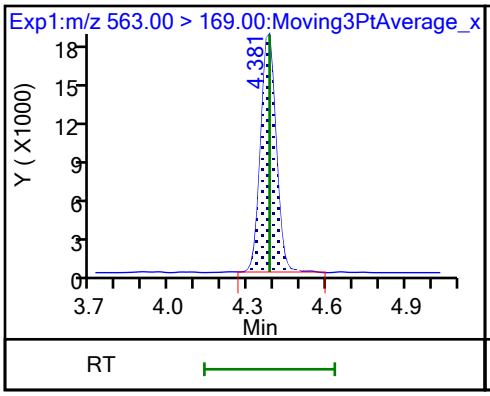
D 30 13C2 PFUnA



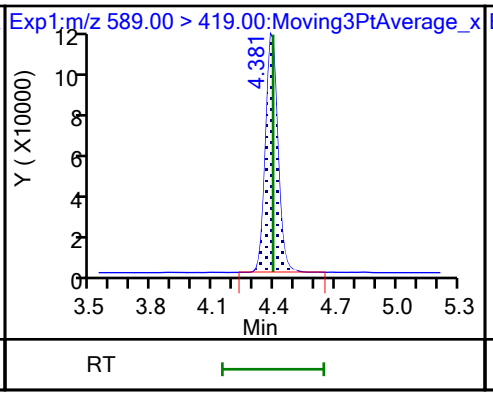
31 Perfluoroundecanoic acid



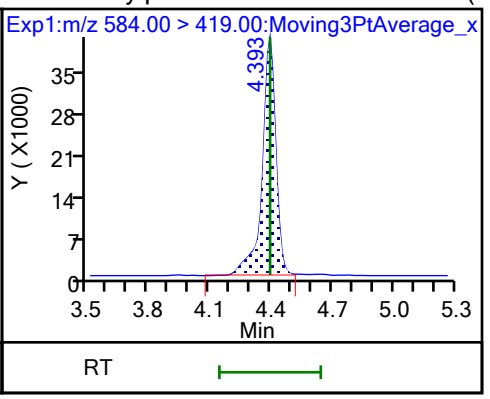
31 Perfluoroundecanoic acid



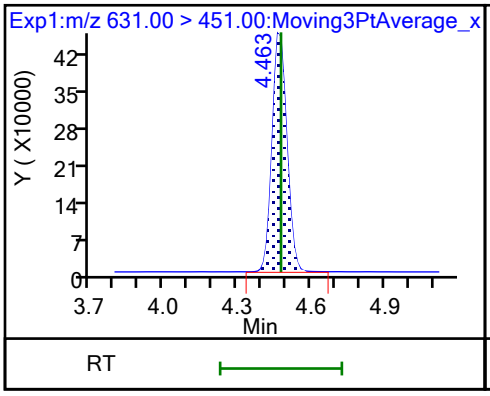
D 32 d5-NEtFOSAA



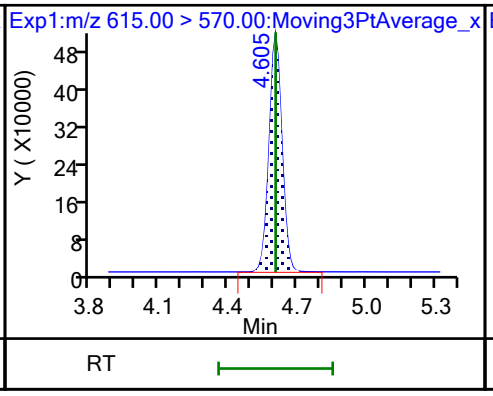
33 N-ethylperfluorooctanesulfonamid (M)



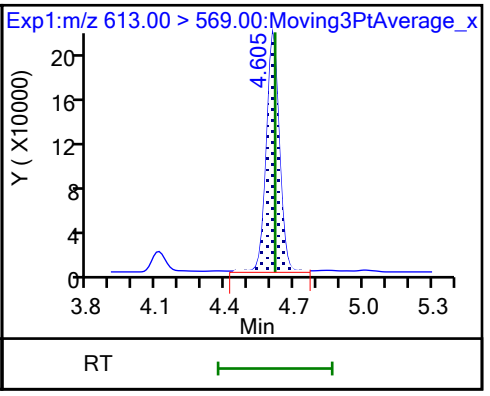
66 11-Chloroeicosafluoro-3-oxaundec



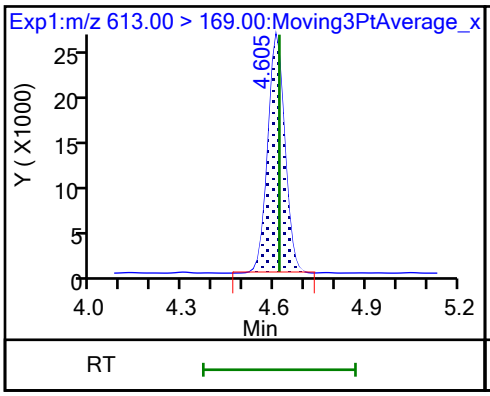
D 36 13C2 PFDoA



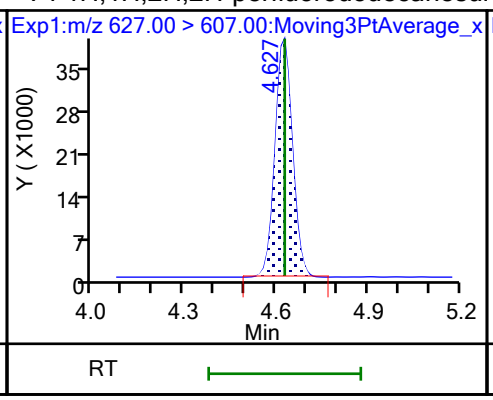
37 Perfluorododecanoic acid



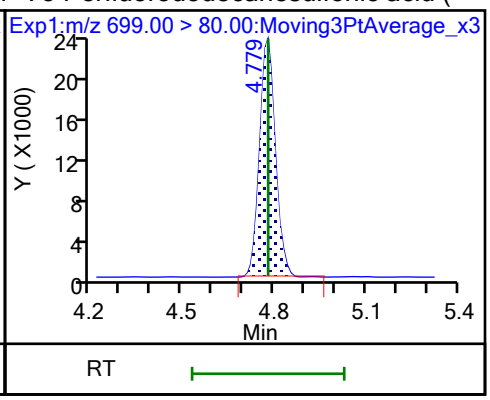
37 Perfluorododecanoic acid



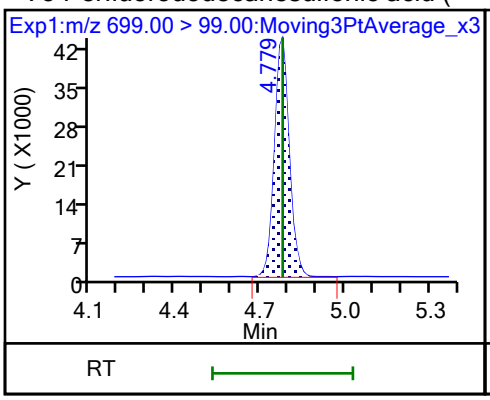
74 1H,1H,2H,2H-perfluorododecanesul



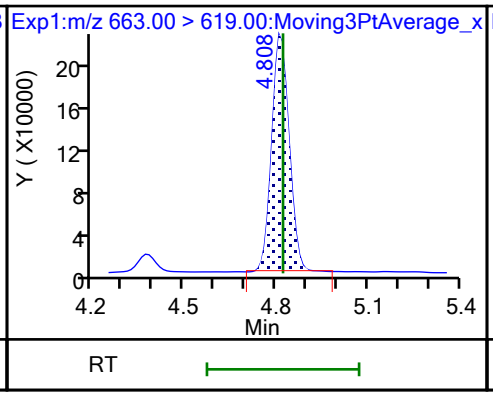
75 Perfluorododecanesulfonic acid (



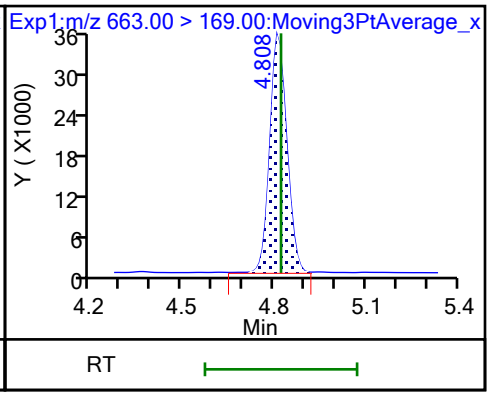
75 Perfluorododecanesulfonic acid (



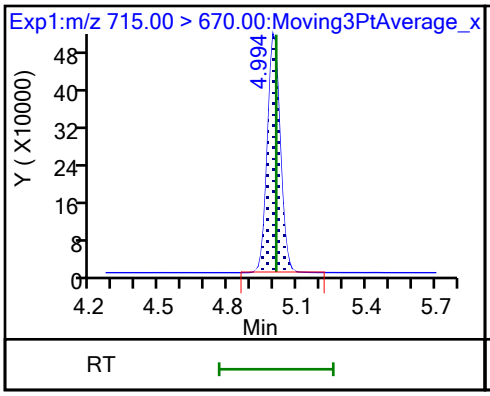
41 Perfluorotridecanoic acid



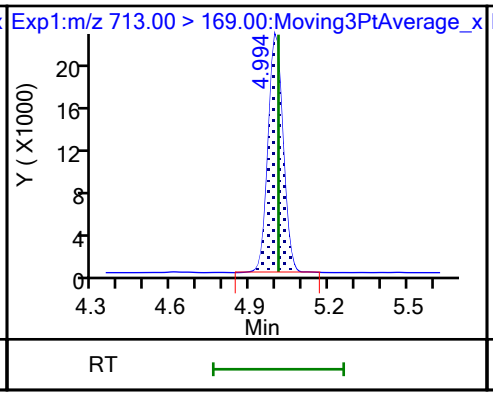
41 Perfluorotridecanoic acid



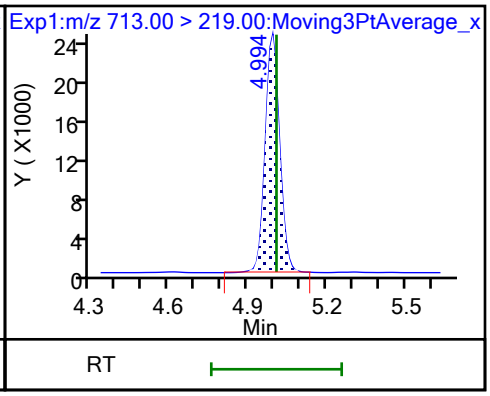
D 43 13C2 PFTeDA



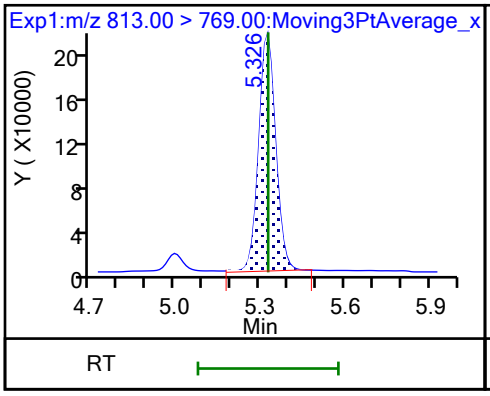
42 Perfluorotetradecanoic acid



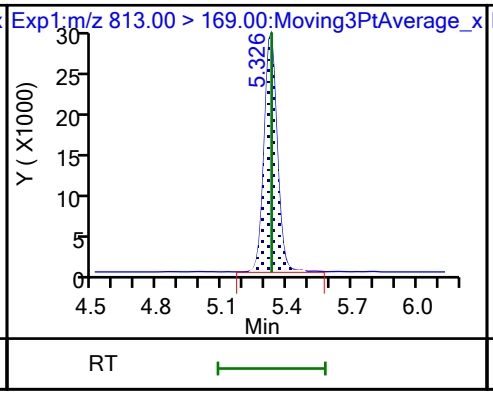
42 Perfluorotetradecanoic acid



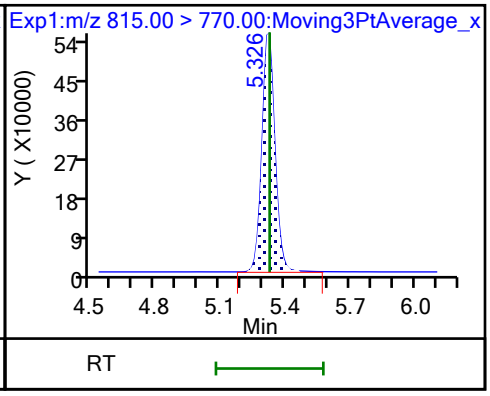
45 Perfluorohexadecanoic acid



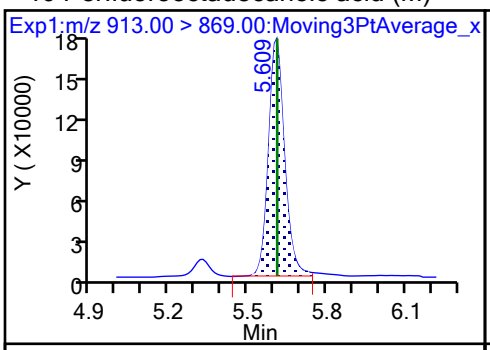
45 Perfluorohexadecanoic acid



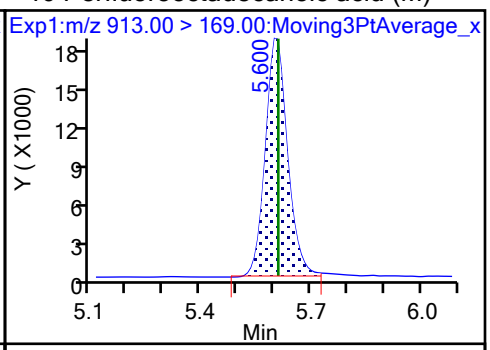
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Lims ID: ICISAV
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 26-Jul-2023 17:41:18 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICISAV
Misc. Info.: 200-0056441-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:28 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:44:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.607	1929850	1.25		100	852	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.112	2.112	0.0	1.004	1439078	0.9899		99.0	94.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.696	1529086	1.28		102	548	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1385943	1.05		105	60.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.425	2.425	0.0	0.700	1858340	1.15		98.8	53325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.425	2.425	0.0	1.000	1645342	0.9215	Target=2.07	104	208	M
298.90 > 99.00	2.425	2.425	0.0	1.000	798559		2.06(1.04-3.11)	104	141	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.694	2.694	0.0	0.778	220382	1.18		101	73.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.694	2.694	0.0	1.000	569311	0.8881		94.8	567	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.789	1544435	1.27		102	502	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	1301870	0.9575	Target=14.29	95.7	137	M
313.00 > 119.00	2.731	2.731	0.0	1.000	92229		14.12(7.15-21.44)	95.7	50.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.883	1426185	0.9245	Target=2.78	98.2	453	M
349.00 > 99.00	2.731	2.731	0.0	0.883	523421		2.72(1.39-4.17)	98.2	329	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.844	2.844	0.0	0.821	296521	1.26		101	448	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.844	2.844	0.0	1.000	235976	0.99		99.4	561	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.092	3.092	0.0	1.000	1123331	0.8590	Target=3.23	94.0	519	M
399.00 > 99.00	3.092	3.092	0.0	1.000	338365		3.32(1.62-4.84)	94.0	154	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.092	3.092	0.0	0.893	1396957	1.21		102	6682	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.104	3.104	0.0	1.000	1446925	0.9607	Target=4.11	96.1	215	M
363.00 > 169.00	3.104	3.104	0.0	1.000	346831		4.17(2.06-6.17)	96.1	225	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.104	3.104	0.0	0.896	1679653	1.26		101	737	M
77 DONA										
377.00 > 251.00	3.138	3.138	0.0	0.830	4190396	0.9622	Target=3.28	102	3717	
377.00 > 85.00	3.138	3.138	0.0	0.830	1260116		3.33(1.64-4.92)	102	1390	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.446	3.446	0.0	0.911	1008539	0.9221	Target=4.71	96.8	1714	
449.00 > 99.00	3.446	3.446	0.0	0.911	208912		4.83(2.36-7.07)	96.8	432	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.446	0.0	0.995	299923	1.25		105	422	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.446	3.446	0.0	1.000	618135	0.8954		94.2	1663	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.464	3.464	0.0	1.000	1597361	0.9691	Target=2.90	96.9	122	
413.00 > 169.00	3.464	3.464	0.0	1.000	554295		2.88(1.45-4.35)	96.9	502	M
D 14 13C4 PFOA										
417.00 > 372.00	3.464	3.464	0.0	1.000	1934463	1.28		102	3978	
* 62 13C2 PFOA										
415.00 > 370.00	3.464	3.464	0.0		1941206	1.25			4649	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.092	904398	1.23		103	2576	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	792430	0.8977	Target=4.11	96.7	1005	M
499.00 > 99.00	3.783	3.783	0.0	1.000	186696		4.24(2.05-6.16)	96.7	256	M
D 19 13C5 PFNA										
468.00 > 423.00	3.793	3.793	0.0	1.095	2143126	1.30		104	7977	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.003	1661649	0.9889	Target=8.48	98.9	305	
463.00 > 169.00	3.803	3.803	0.0	1.003	199241		8.34(4.24-12.72)	98.9	1189	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	2512476	0.9301		99.7	3906	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	638462	0.9507	Target=2.17	98.8	2935	
549.00 > 99.00	4.074	4.074	0.0	1.077	294408		2.17(1.08-3.25)	98.8	552	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.186	2125756	1.23		98.8	9272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	1775242	1.04	Target=10.55	104	474	
513.00 > 169.00	4.108	4.108	0.0	1.000	155159		11.44(5.27-15.82)	104	563	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.186	331913	1.23		102	577	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	556332	0.9117		95.0	3162	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.214	1887535	1.28		103	3920	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1437750	1.00		99.8	2735	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.227	518688	1.26		101	1367	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.260	0.0	1.003	370720	0.9846		98.5	480	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	499466	0.9663	Target=2.28	100	1659	
599.00 > 99.00	4.346	4.346	0.0	1.149	210609		2.37(1.14-3.42)	100	596	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	1729770	1.02	Target=11.30	102	492	
563.00 > 169.00	4.370	4.382	-0.012	0.997	141730		12.20(5.65-16.96)	102	888	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.265	2053330	1.26		101	9003	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.393	4.393	0.0	1.268	487913	1.23		98.5	834	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.000	364226	0.9329		93.3	589	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.477	0.0	1.183	3925775	0.9477		100	4259	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.330	2123640	1.29		103	8948	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.616	4.616	0.0	1.002	1656352	0.9579	Target=8.15	95.8	155	
613.00 > 169.00	4.616	4.616	0.0	1.002	195564		8.47(4.07-12.22)	95.8	1566	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.126	328276	0.9000		93.4	3601	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	163618	0.9340	Target=0.50	96.5	1669	
699.00 > 99.00	4.779	4.779	0.0	1.263	340004		0.48(0.25-0.75)	96.5	2126	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.822	4.822	0.0	1.047	1823052	1.00	Target=6.61	100	159	
663.00 > 169.00	4.822	4.822	0.0	1.047	284386		6.41(3.31-9.92)	100	1889	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.008	5.008	0.0	1.446	2077683	1.26		101	7096	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.000	174160	0.9371	Target=0.96	93.7	2069	
713.00 > 219.00	4.997	5.008	-0.011	0.998	200239		0.87(0.48-1.44)	93.7	2335	

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48
Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.538	2422773	1.28		102	5274	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	1870661	0.9651	Target=7.69	96.5	189	
813.00 > 169.00	5.328	5.328	0.0	1.000	237159		7.89(3.85-11.54)	96.5	1188	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	1554372	1.03	Target=9.13	103	171	M
913.00 > 169.00	5.611	5.611	0.0	1.053	165585		9.39(4.56-13.69)	103	338	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

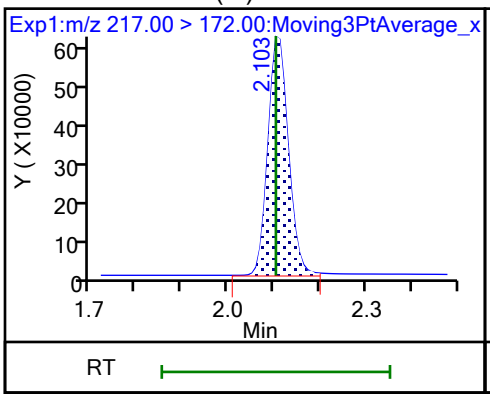
PFAS32NCIC4_00042 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48

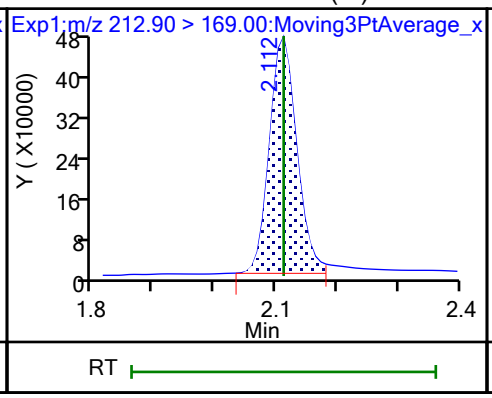
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Injection Date: 26-Jul-2023 17:41:18 Instrument ID: LC812
Lims ID: ICISAV
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

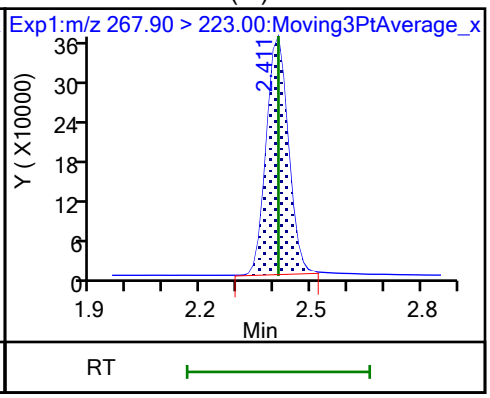
D 1 13C4 PFBA (M)



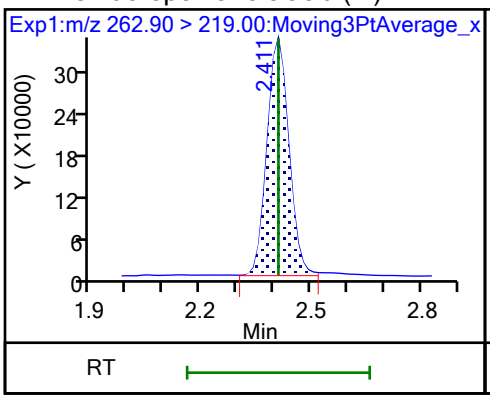
2 Perfluorobutanoic acid (M)



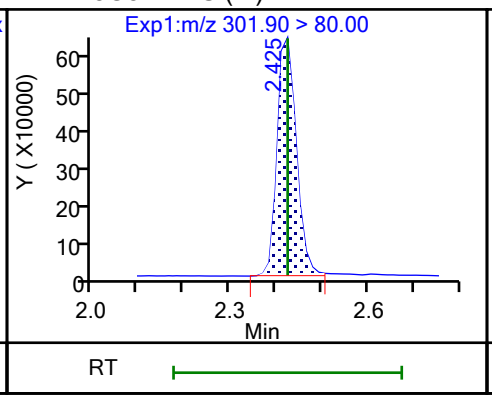
D 3 13C5 PFPeA (M)



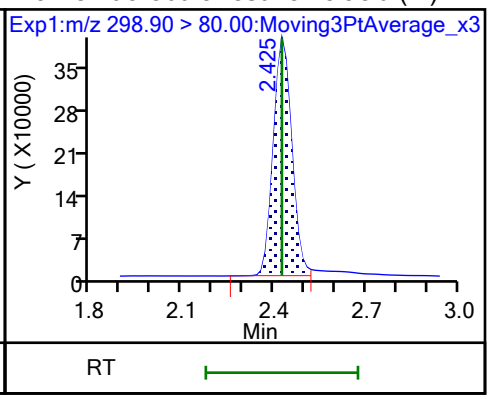
4 Perfluoropentanoic acid (M)



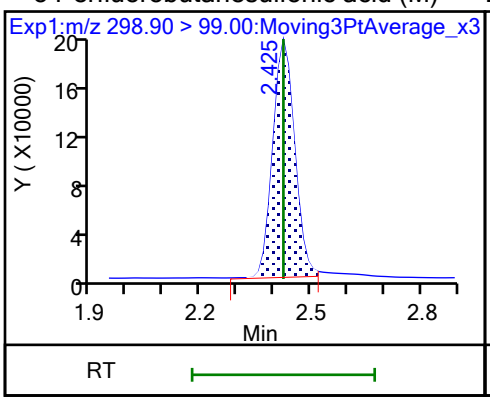
D 47 13C3 PFBS (M)



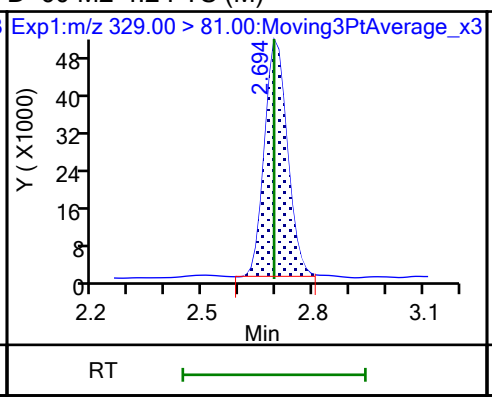
5 Perfluorobutanesulfonic acid (M)



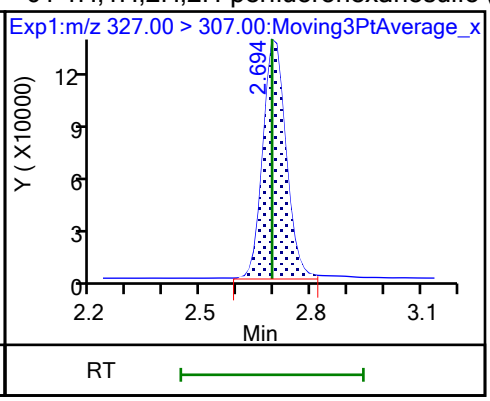
5 Perfluorobutanesulfonic acid (M)



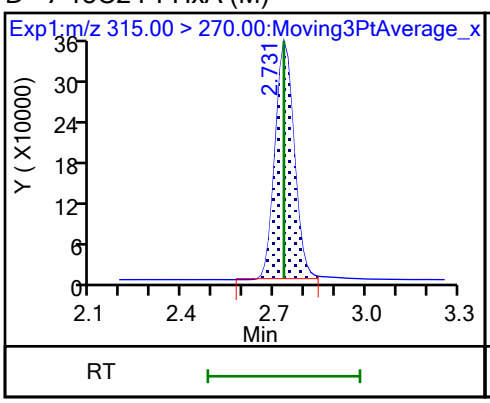
D 60 M2-4:2 FTS (M)



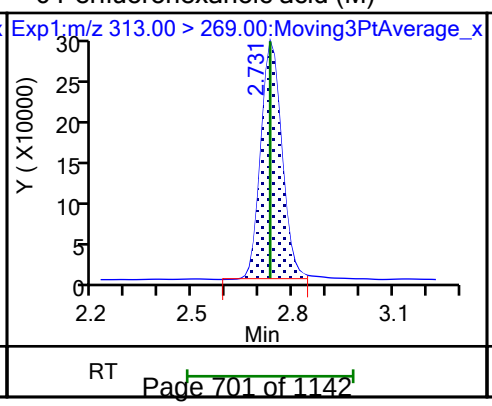
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



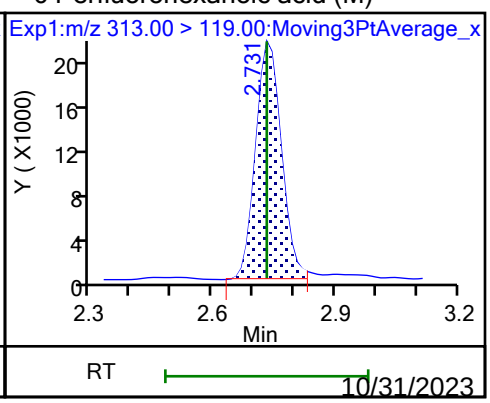
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

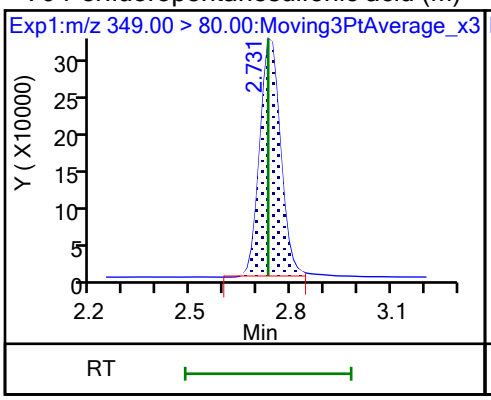


6 Perfluorohexanoic acid (M)

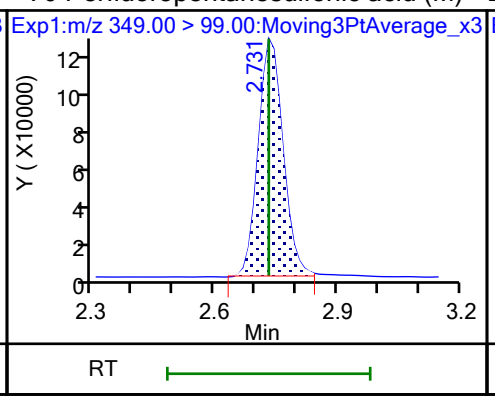


10/31/2023
10:17 AM

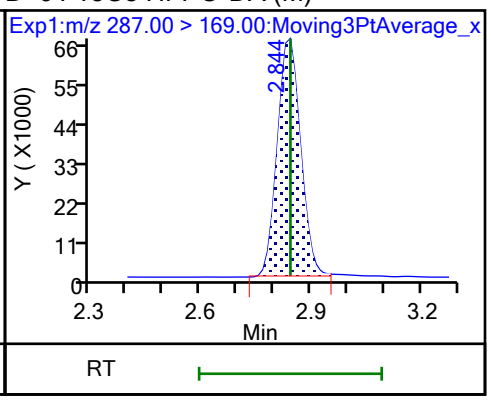
70 Perfluoropentanesulfonic acid (M)



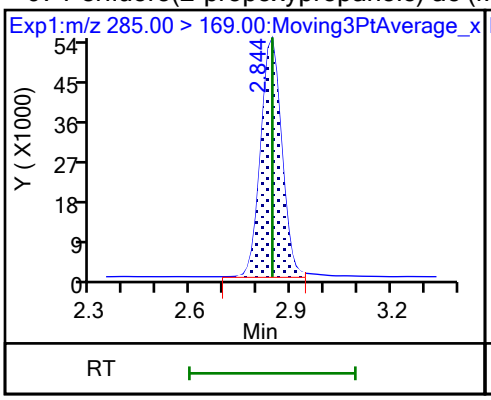
70 Perfluoropentanesulfonic acid (M)



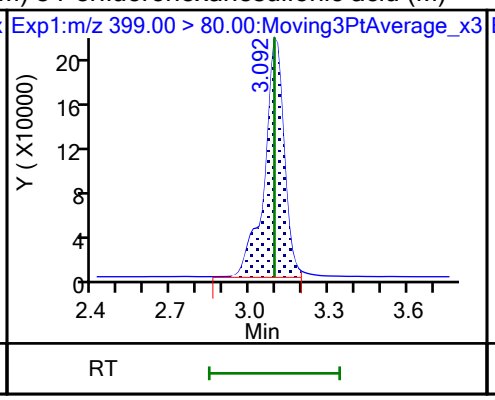
D 64 13C3 HFPO-DA (M)



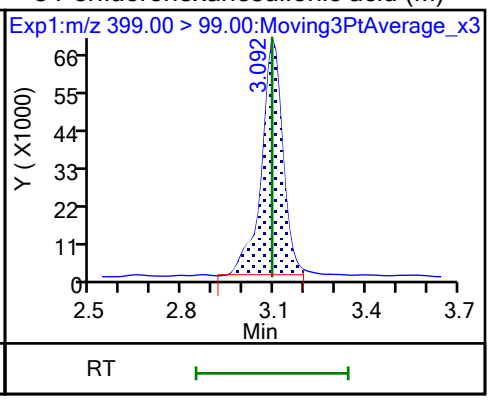
67 Perfluoro(2-propoxypropanoic) ac (M)



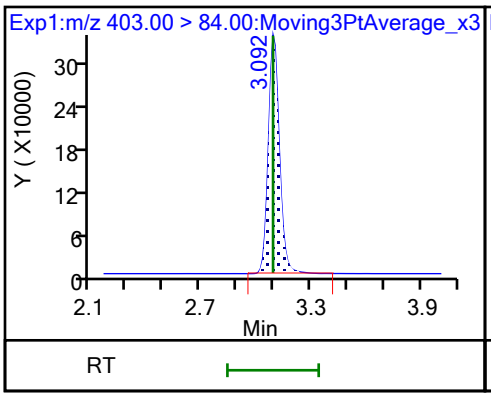
8 Perfluorohexanesulfonic acid (M)



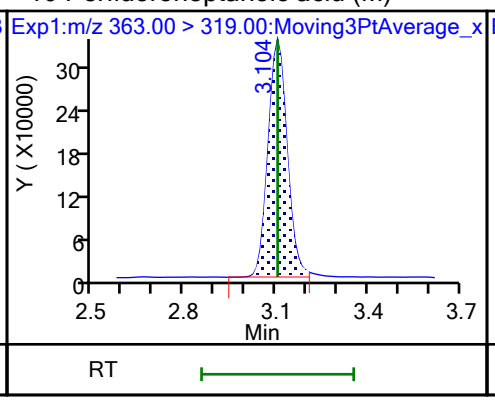
8 Perfluorohexanesulfonic acid (M)



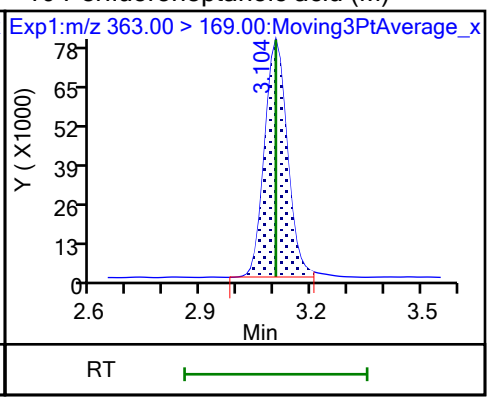
D 11 18O2 PFHxS



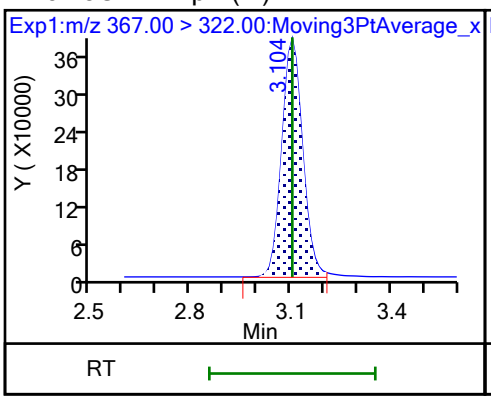
10 Perfluoroheptanoic acid (M)



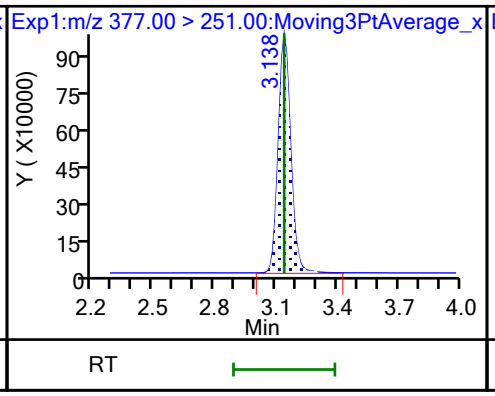
10 Perfluoroheptanoic acid (M)



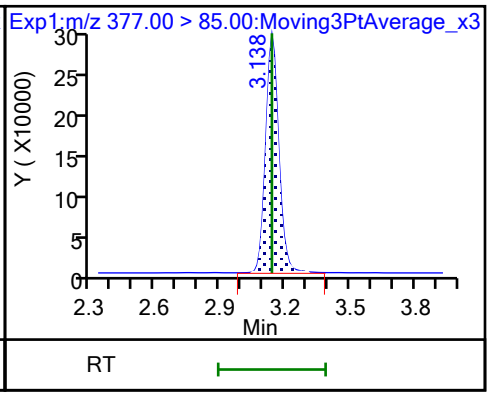
D 9 13C4 PFHpA (M)



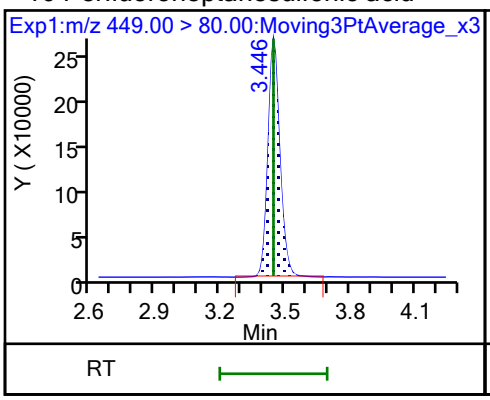
77 DONA



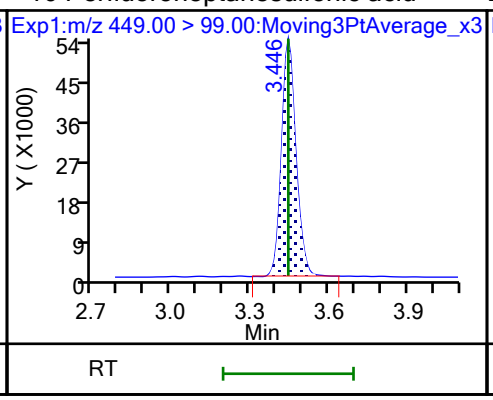
77 DONA



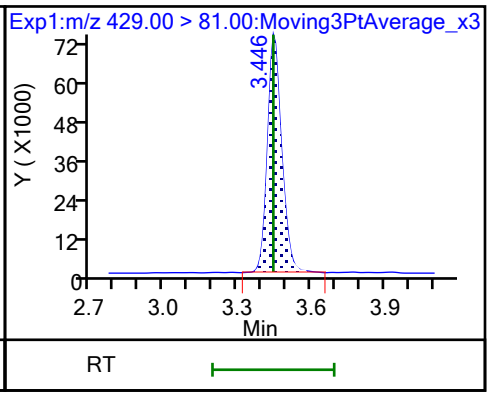
16 Perfluoroheptanesulfonic acid



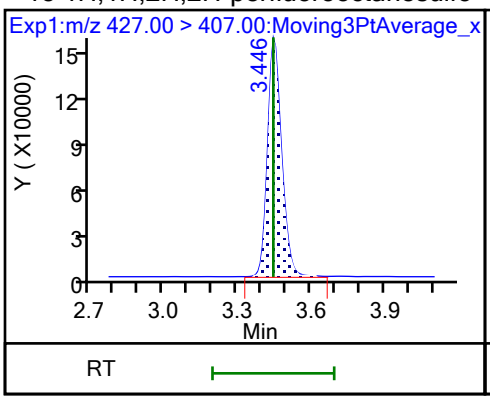
16 Perfluoroheptanesulfonic acid



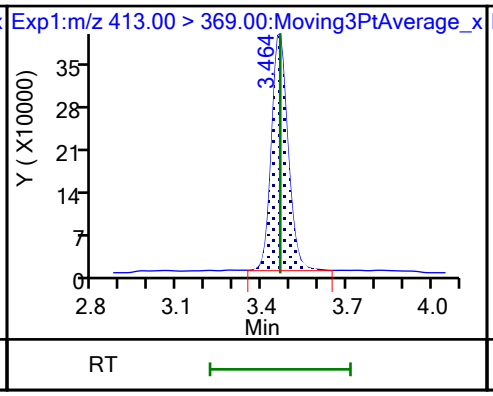
D 12 M2-6:2 FTS



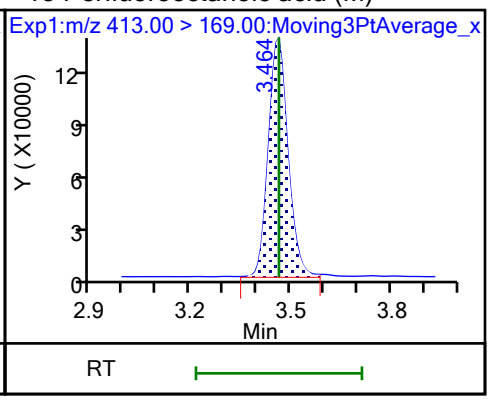
13 1H,1H,2H,2H-perfluorooctanesulfo



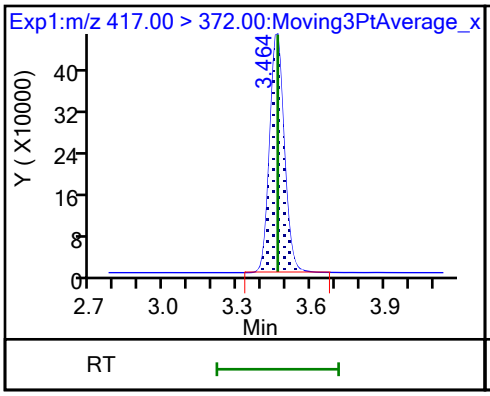
15 Perfluorooctanoic acid



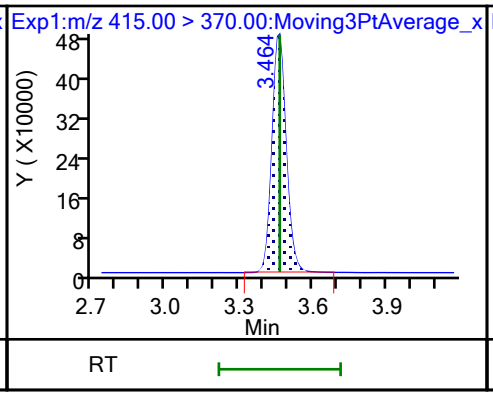
15 Perfluorooctanoic acid (M)



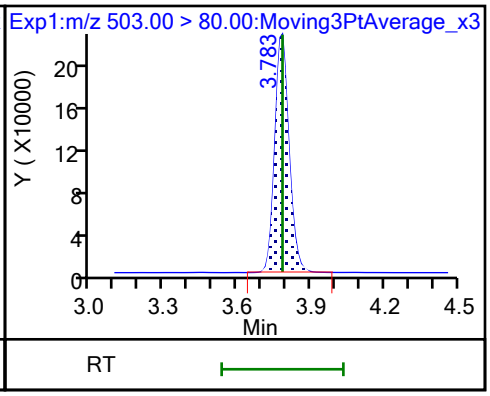
D 14 13C4 PFOA



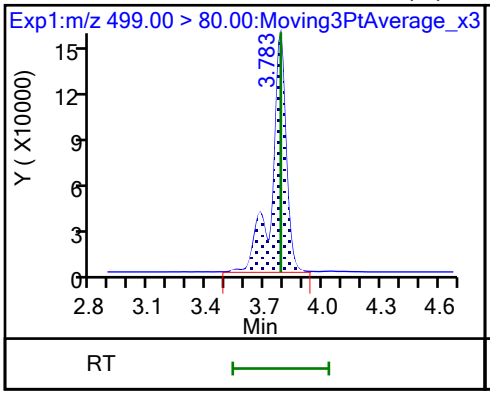
* 62 13C2 PFOA



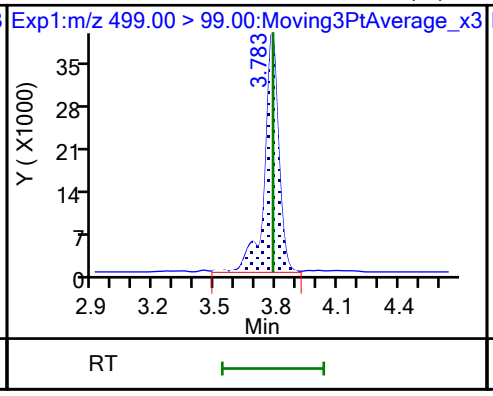
D 18 13C4 PFOS



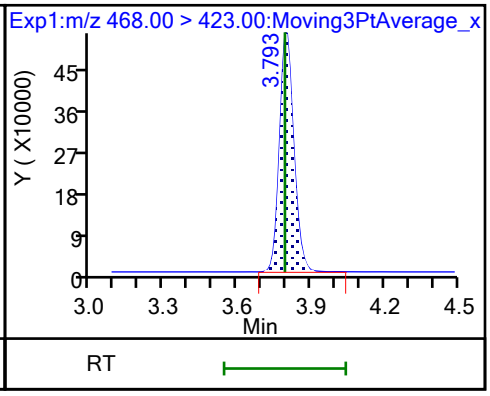
17 Perfluorooctanesulfonic acid (M)



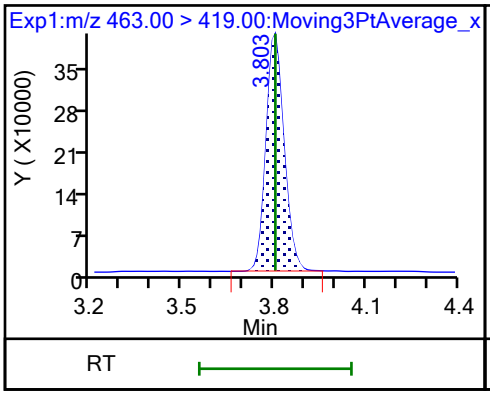
17 Perfluorooctanesulfonic acid (M)



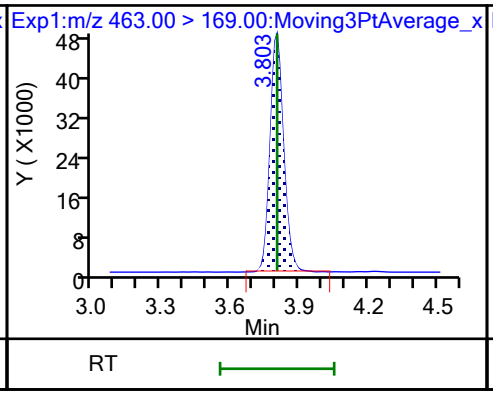
D 19 13C5 PFNA



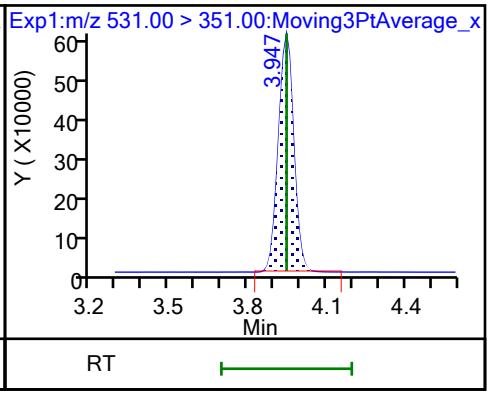
20 Perfluorononanoic acid



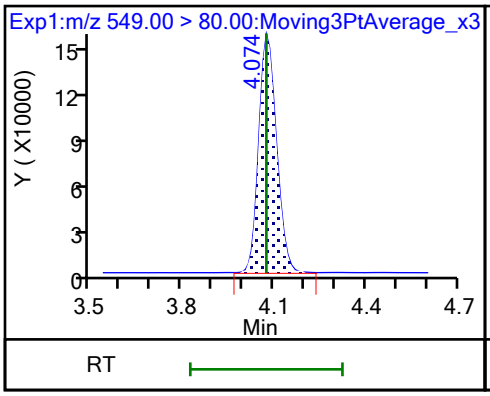
20 Perfluorononanoic acid



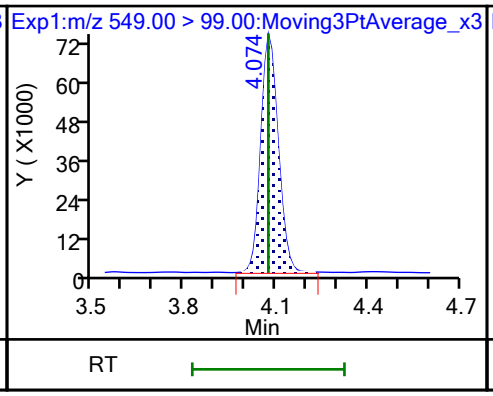
69 9-Chlorohexadecafluoro-3-oxanona



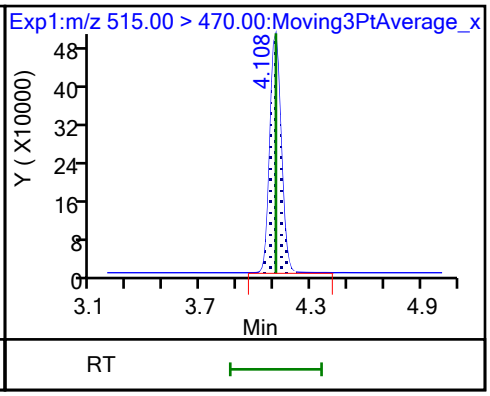
68 Perfluorononanesulfonic acid



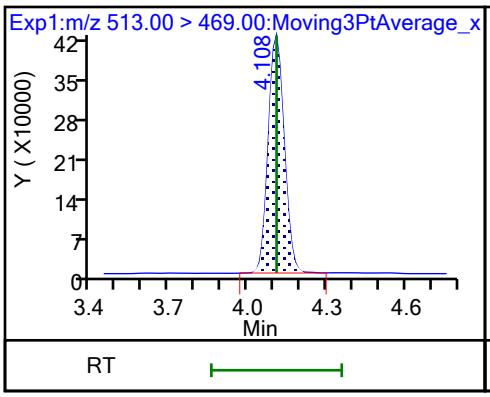
68 Perfluorononanesulfonic acid



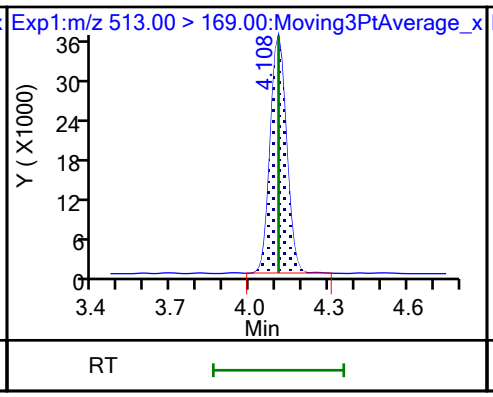
D 23 13C2 PFDA



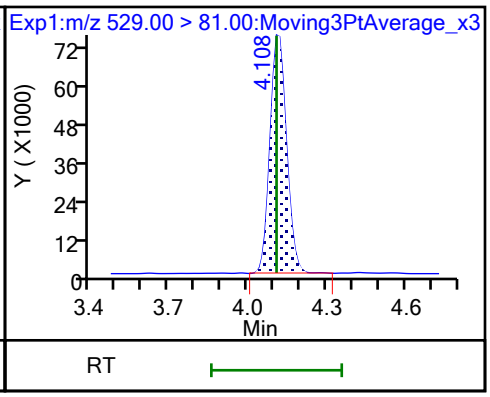
24 Perfluorodecanoic acid



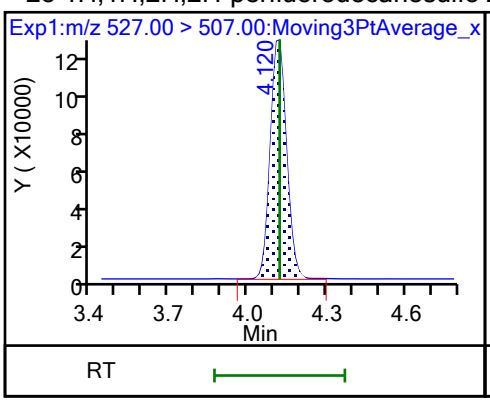
24 Perfluorodecanoic acid



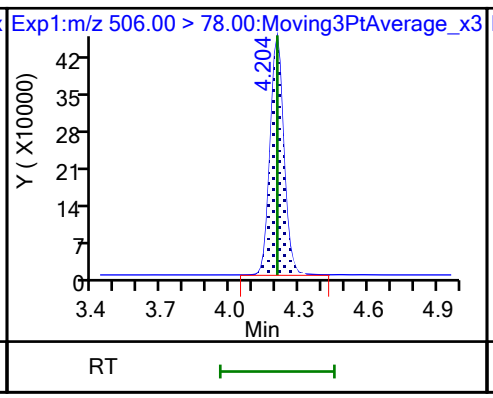
D 26 M2-8:2 FTS



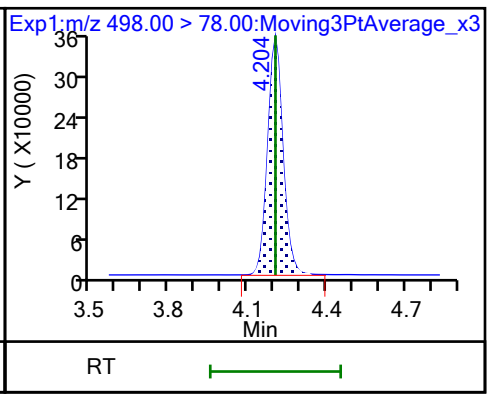
25 1H,1H,2H,2H-perfluorodecanesulfo



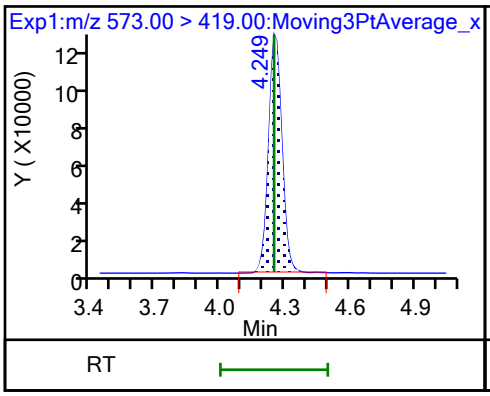
D 21 13C8 FOSA



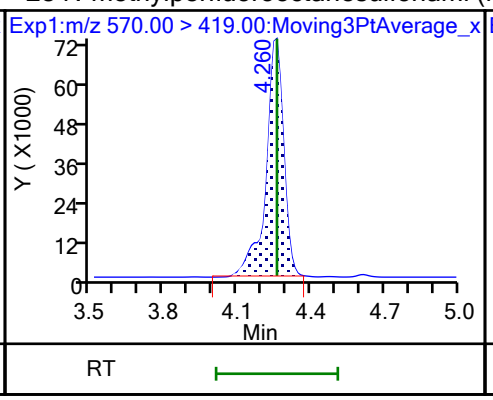
22 Perfluorooctanesulfonamide



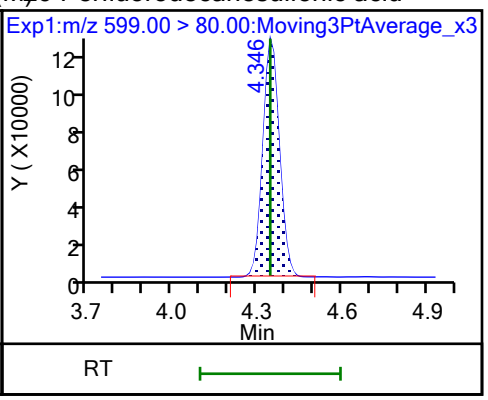
D 27 d3-NMeFOSAA



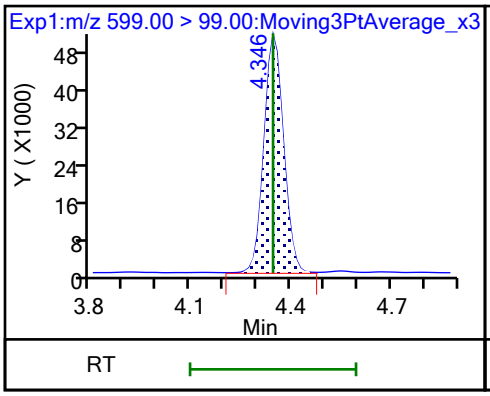
28 N-methylperfluorooctanesulfonami (M)



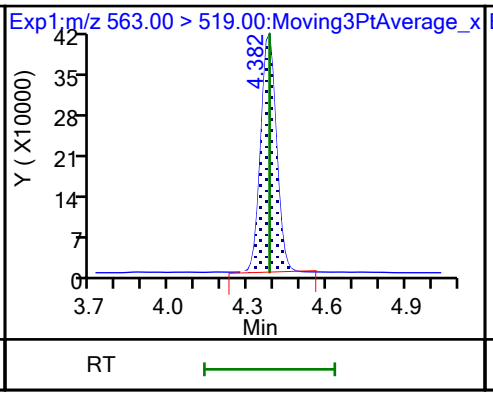
29 Perfluorodecanesulfonic acid



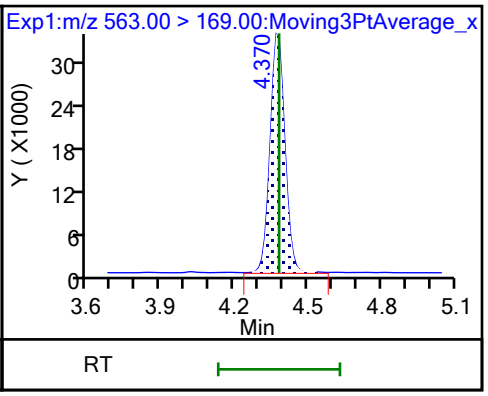
29 Perfluorodecanesulfonic acid



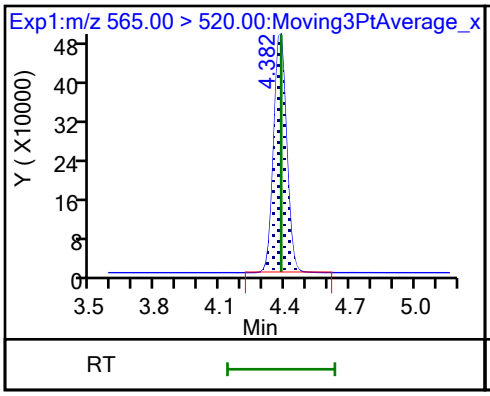
31 Perfluoroundecanoic acid



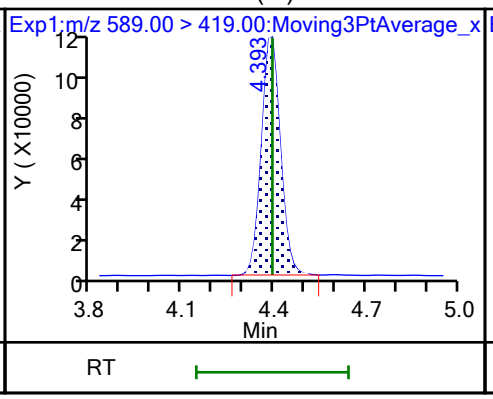
31 Perfluoroundecanoic acid



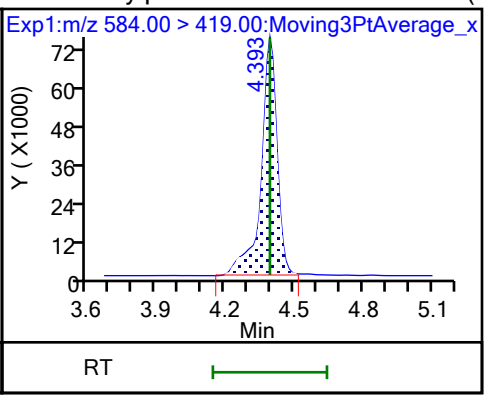
D 30 13C2 PFUnA



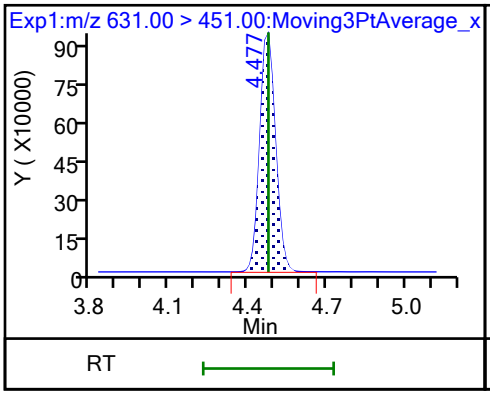
D 32 d5-NEtFOSAA (M)



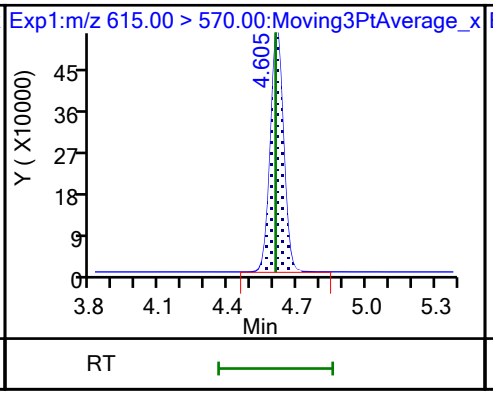
33 N-ethylperfluorooctanesulfonamid (M)



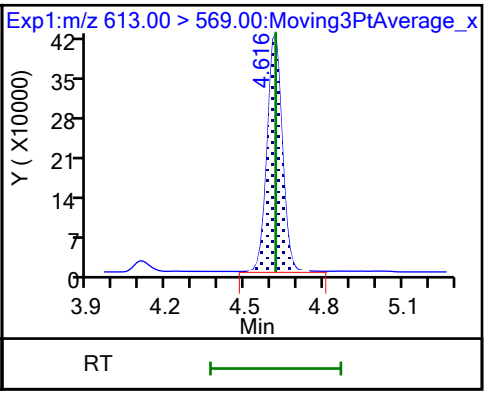
66 11-Chloroeicosafluoro-3-oxaundec



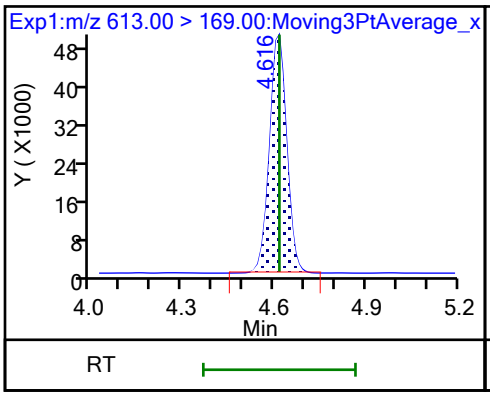
D 36 13C2 PFDoA



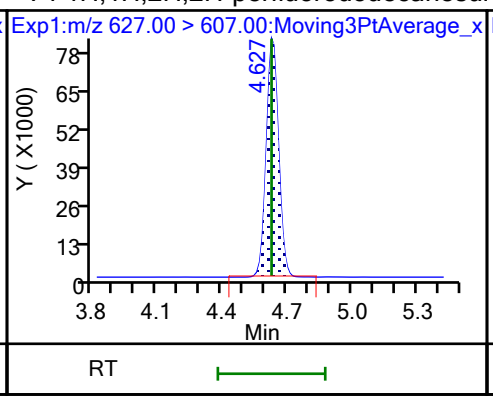
37 Perfluorododecanoic acid



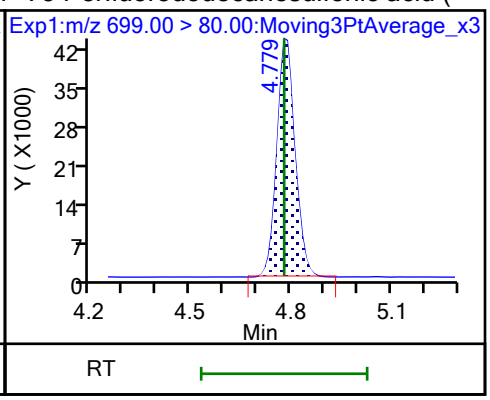
37 Perfluorododecanoic acid



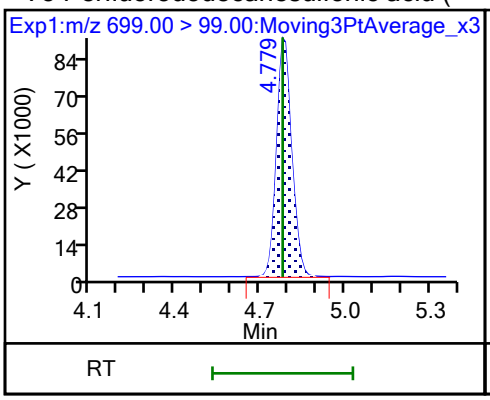
74 1H,1H,2H,2H-perfluorododecanesul



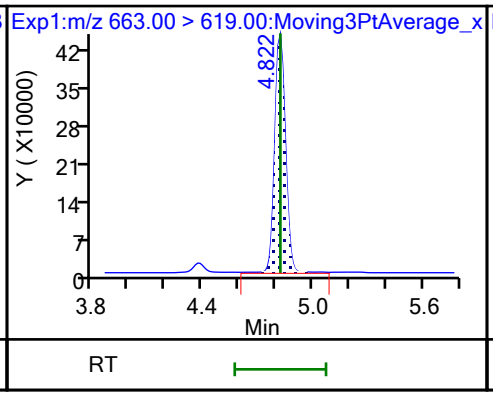
75 Perfluorododecanesulfonic acid (



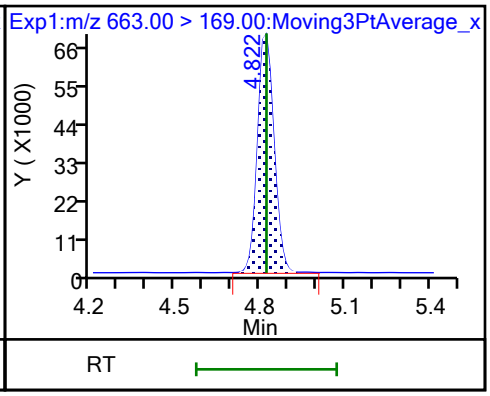
75 Perfluorododecanesulfonic acid (



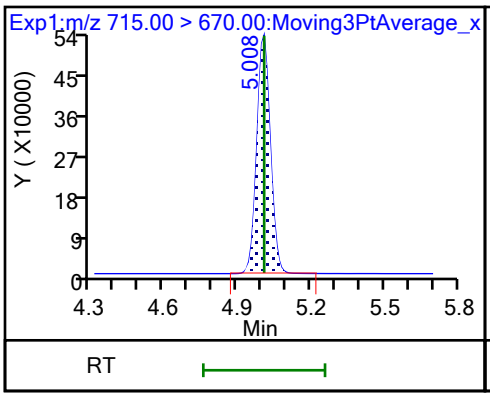
41 Perfluorotridecanoic acid



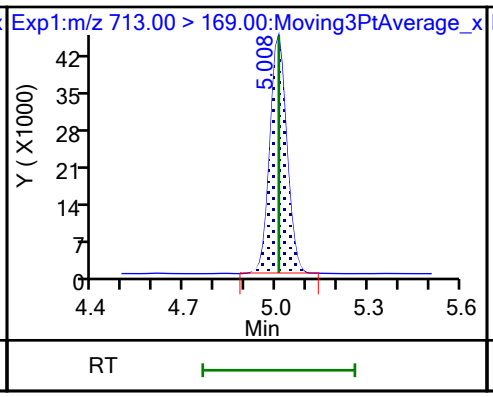
41 Perfluorotridecanoic acid



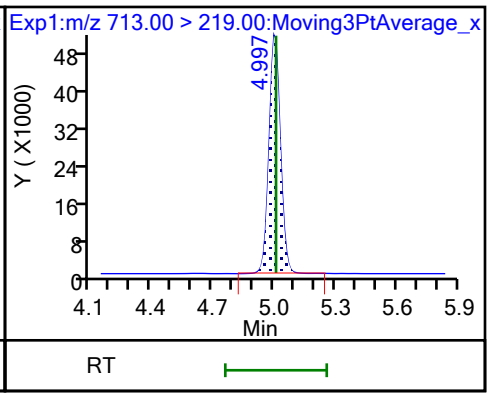
D 43 13C2 PFTeDA



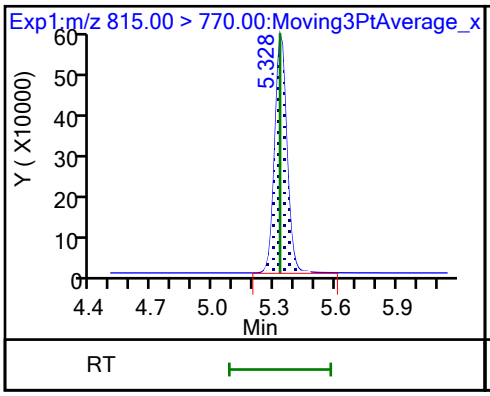
42 Perfluorotetradecanoic acid



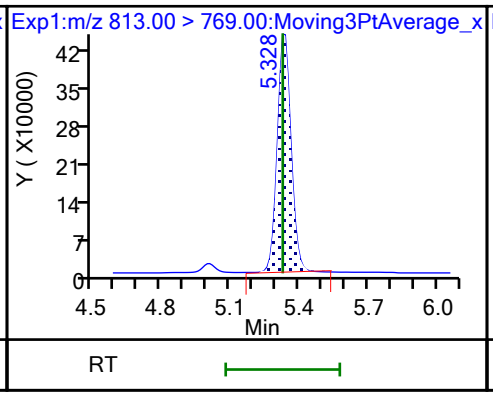
42 Perfluorotetradecanoic acid



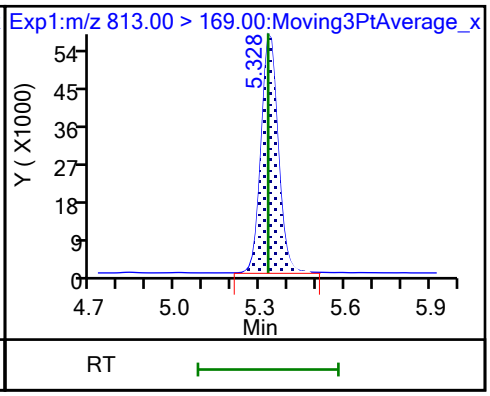
D 44 13C2 PFHxDA



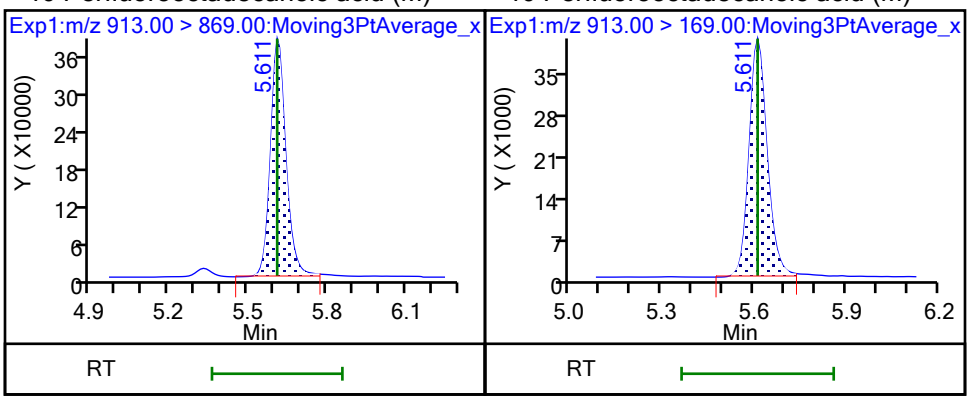
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Jul-2023 17:49:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 5
Misc. Info.: 200-0056441-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:56 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:04:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	2025338	1.28		102	885	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	3820872	2.57		103	264	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1531883	1.24		99.4	493	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	3191311	2.41		96.5	120	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1976378	1.19		102	60670	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	4220392	2.22	Target=2.07	100	362	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	1966405		2.15(1.04-3.11)	100	237	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.780	221658	1.15		98.4	76.5	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.719	2.694	0.025	1.005	1486720	2.31		98.4	503	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.790	1545081	1.23		98.6	491	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.756	2.731	0.025	1.005	3361171	2.47	Target=14.29	98.8	262	M
313.00 > 119.00	2.744	2.731	0.013	1.000	242572		13.86(7.15-21.44)	98.8	132	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	3383549	2.18	Target=2.78	92.6	480	M
349.00 > 99.00	2.756	2.731	0.025	0.885	1222931		2.77(1.39-4.17)	92.6	414	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.856	2.844	0.012	0.823	295164	1.22		97.3	301	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	568553	2.40		96.2	587	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.115	3.092	0.023	0.897	1406672	1.18		99.5	777	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.115	3.092	0.023	1.000	2901162	2.20	Target=3.23	96.4	1836	M
399.00 > 99.00	3.115	3.092	0.023	1.000	881531		3.29(1.62-4.84)	96.4	477	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	3843212	2.42	Target=4.11	96.7	693	
363.00 > 169.00	3.115	3.104	0.011	1.000	912116		4.21(2.06-6.17)	96.7	744	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.897	1773444	1.29		103	6393	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.832	9881253	2.23	Target=3.28	94.4	5501	
377.00 > 85.00	3.150	3.138	0.012	0.832	2882143		3.43(1.64-4.92)	94.4	2174	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.453	3.446	0.007	0.913	2618603	2.35	Target=4.71	98.8	7174	
449.00 > 99.00	3.453	3.446	0.007	0.913	550605		4.76(2.36-7.07)	98.8	949	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	305639	1.23		104	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	1652144	2.35		98.8	5134	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.471	3.464	0.007	1.000	4162515	2.39	Target=2.90	95.5	331	
413.00 > 169.00	3.471	3.464	0.007	1.000	1483061		2.81(1.45-4.35)	95.5	1671	
D 14 13C4 PFOA										
417.00 > 372.00	3.471	3.464	0.007	1.000	2045642	1.31		105	7037	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		2001977	1.25			5933	
D 18 13C4 PFOS										
503.00 > 80.00	3.784	3.783	0.001	1.090	919926	1.21		101	2583	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.784	3.783	0.001	1.000	1995347	2.22	Target=4.11	95.8	1944	M
499.00 > 99.00	3.784	3.783	0.001	1.000	459970		4.34(2.05-6.16)	95.8	606	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2116548	1.25		99.8	6446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	4090183	2.46	Target=8.48	98.6	745	
463.00 > 169.00	3.803	3.803	0.0	1.000	474097		8.63(4.24-12.72)	98.6	2866	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	6453976	2.35		101	11165	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	1582540	2.32	Target=2.17	96.3	4256	
549.00 > 99.00	4.074	4.074	0.0	1.077	738106		2.14(1.08-3.25)	96.3	2145	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2307904	1.30		104	5432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	4650088	2.52	Target=10.55	101	1254	
513.00 > 169.00	4.108	4.108	0.0	1.000	427287		10.88(5.27-15.82)	101	1132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	331708	1.19		99.2	445	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	1389051	2.28		94.9	12042	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1904586	1.26		101	11251	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	3587757	2.47		98.7	5778	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.249	4.249	0.0	1.224	518571	1.22		97.7	719	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	905881	2.41		96.3	1138	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	1302171	2.48	Target=2.28	103	3082	
599.00 > 99.00	4.346	4.346	0.0	1.149	526351		2.47(1.14-3.42)	103	2245	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2158999	1.29		103	6427	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.003	4518784	2.54	Target=11.30	102	1338	
563.00 > 169.00	4.370	4.382	-0.012	1.000	385480		11.72(5.65-16.96)	102	1987	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	544137	1.33		107	1362	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	985607	2.26		90.5	993	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	9347621	2.22		94.1	9361	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.605	0.001	1.327	2062631	1.21		96.8	7038	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.606	4.616	-0.010	1.000	4182445	2.49	Target=8.15	99.6	410	
613.00 > 169.00	4.606	4.616	-0.010	1.000	492816		8.49(4.07-12.22)	99.6	2697	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.628	4.627	0.001	1.123	829529	2.28		94.4	4461	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	395113	2.22	Target=0.50	91.6	5811	
699.00 > 99.00	4.770	4.779	-0.009	1.261	796739		0.50(0.25-0.75)	91.6	3768	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.044	4556433	2.58	Target=6.61	103	378	
663.00 > 169.00	4.809	4.822	-0.013	1.044	675409		6.75(3.31-9.92)	103	3752	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2135161	1.26		101	5547	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	452708	2.37	Target=0.96	94.8	4679	
713.00 > 219.00	4.987	5.008	-0.021	0.998	484354		0.93(0.48-1.44)	94.8	3347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.317	5.328	-0.011	1.000	4643411	2.44	Target=7.69	97.7	433	
813.00 > 169.00	5.317	5.328	-0.011	1.000	592603		7.84(3.85-11.54)	97.7	1734	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2376838	1.22		97.3	4400	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	3397685	2.29	Target=9.13	91.5	226	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	378101		8.99(4.56-13.69)	91.5	321	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

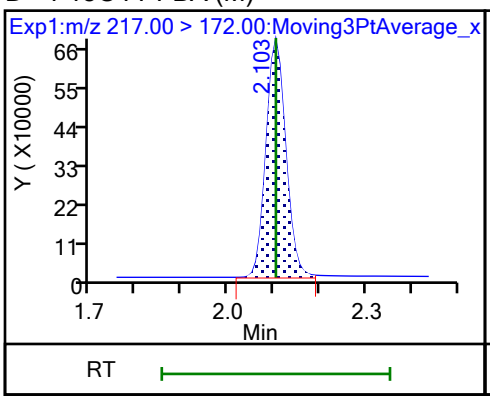
PFAS32NCIC5_00035 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:57 Chrom Revision: 2.3 19-Jul-2023 18:28:48

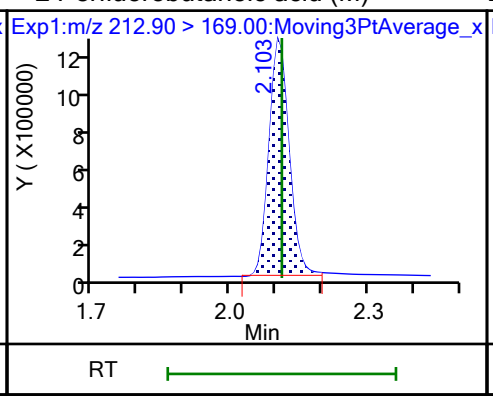
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Injection Date: 26-Jul-2023 17:49:28 Instrument ID: LC812
Lims ID: IC 5
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

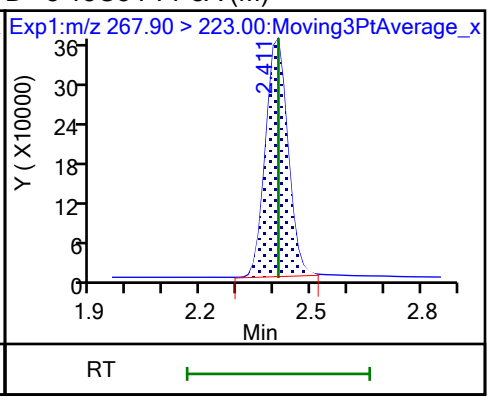
D 1 13C4 PFBA (M)



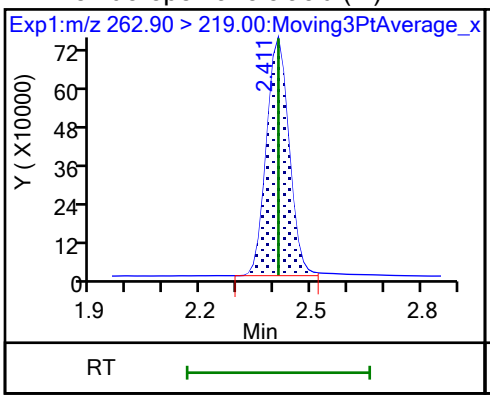
2 Perfluorobutanoic acid (M)



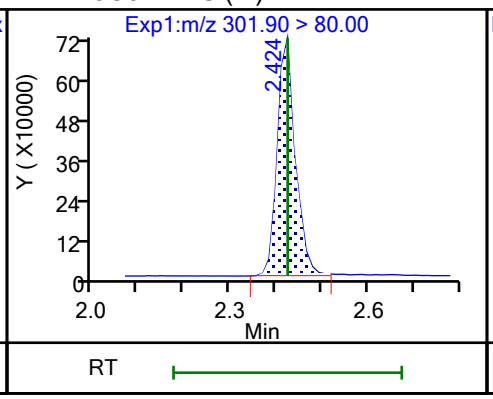
D 3 13C5 PFPeA (M)



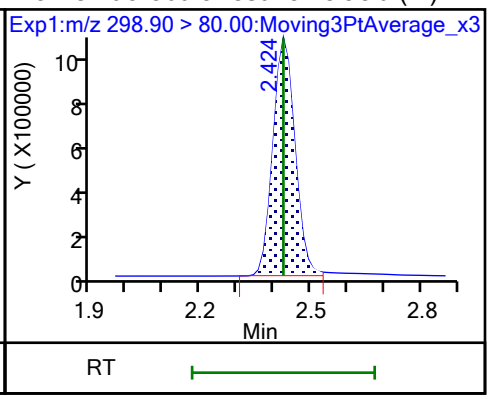
4 Perfluoropentanoic acid (M)



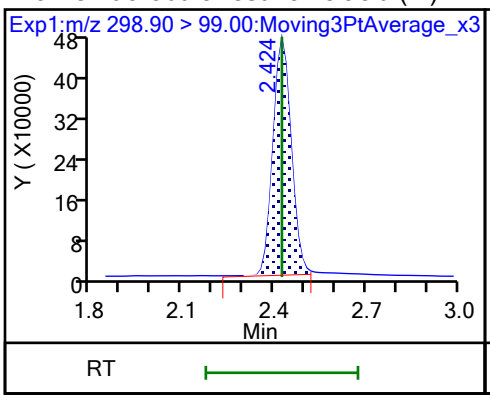
D 47 13C3 PFBS (M)



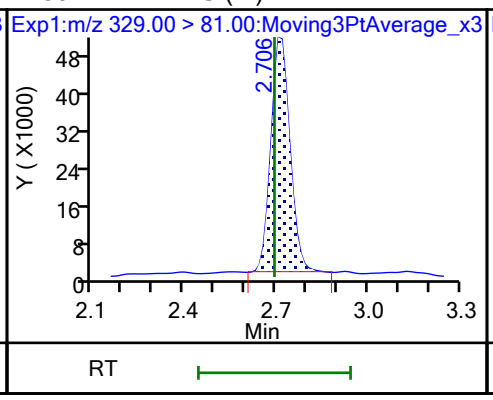
5 Perfluorobutanesulfonic acid (M)



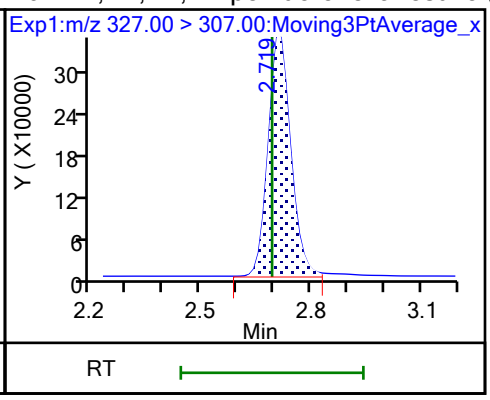
5 Perfluorobutanesulfonic acid (M)



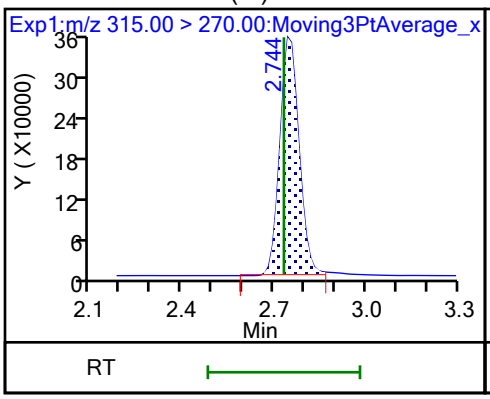
D 60 M2-4:2 FTS (M)



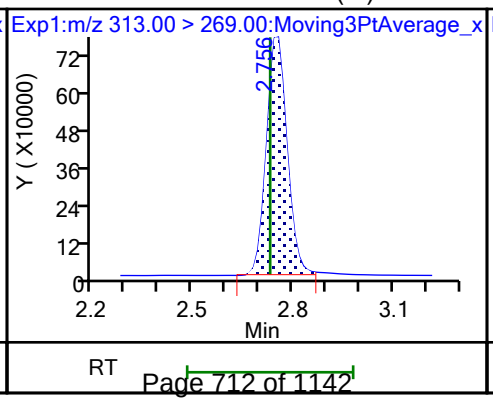
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



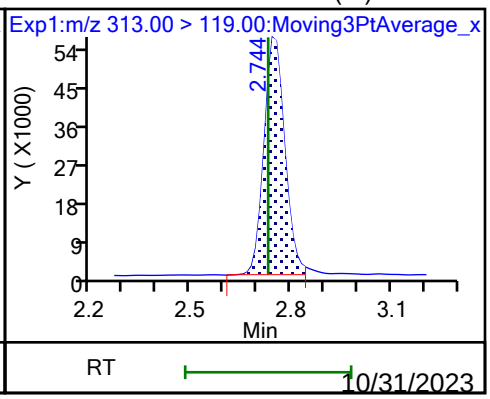
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

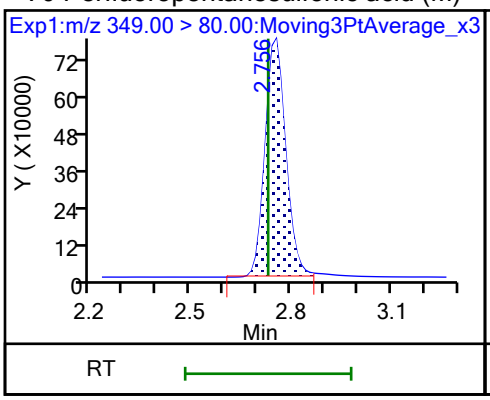


6 Perfluorohexanoic acid (M)

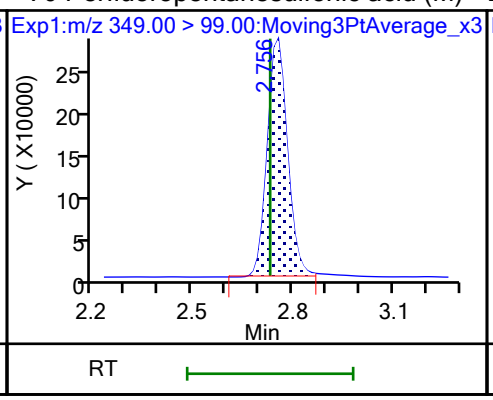


10/31/2023
10:17 AM

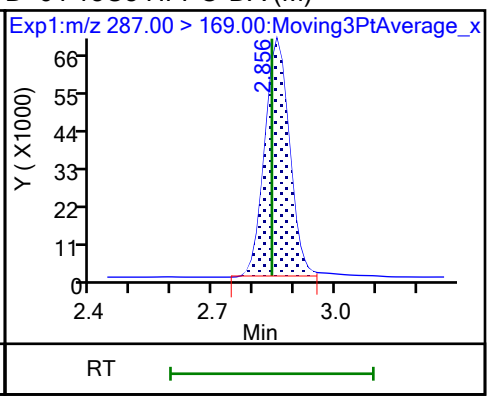
70 Perfluoropentanesulfonic acid (M)



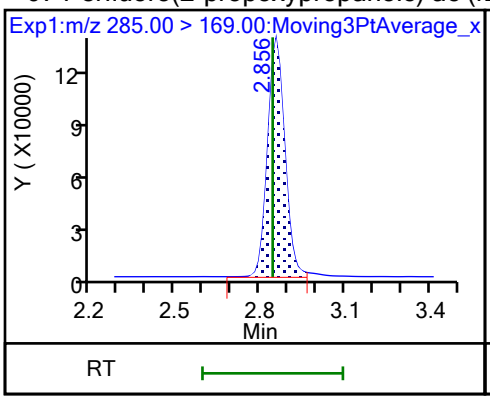
70 Perfluoropentanesulfonic acid (M)



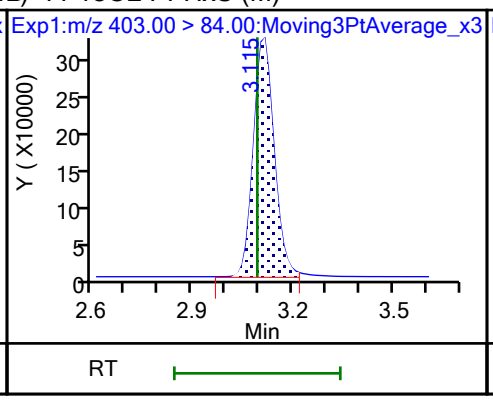
D 64 13C3 HFPO-DA (M)



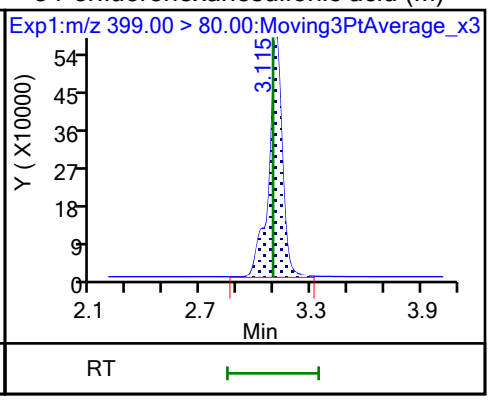
67 Perfluoro(2-propoxypropanoic) ac (M)



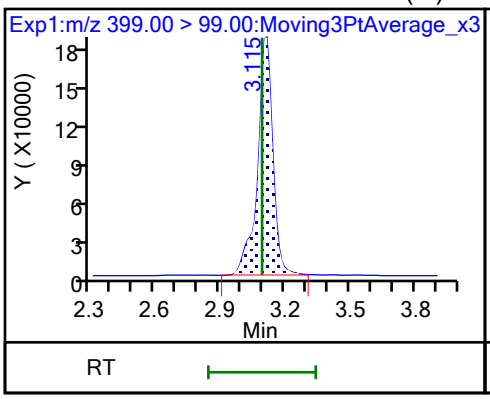
D 11 18O2 PFHxS (M)



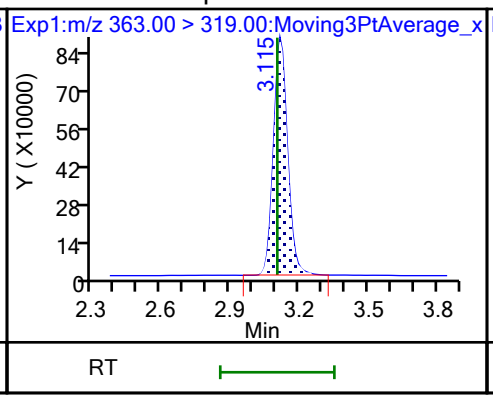
8 Perfluorohexanesulfonic acid (M)



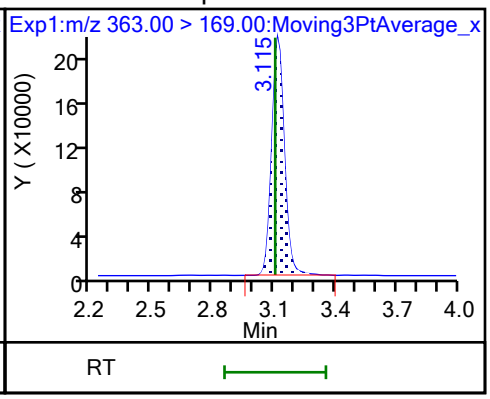
8 Perfluorohexanesulfonic acid (M)



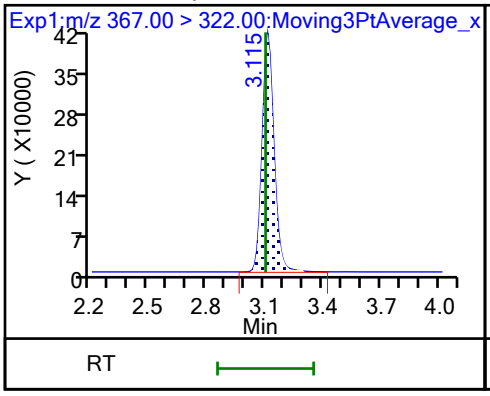
10 Perfluoroheptanoic acid



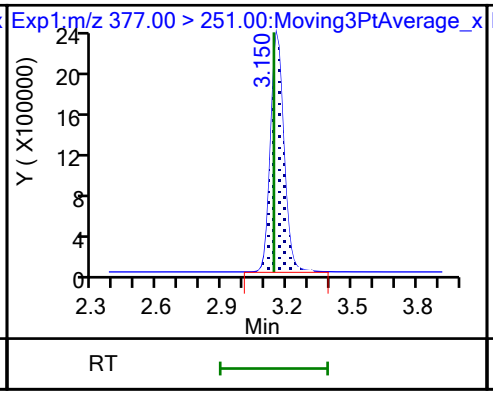
10 Perfluoroheptanoic acid



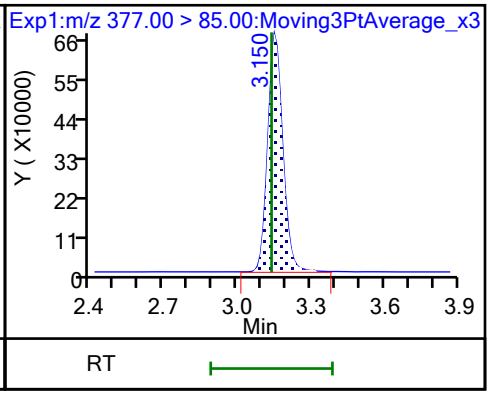
D 9 13C4 PFHpA



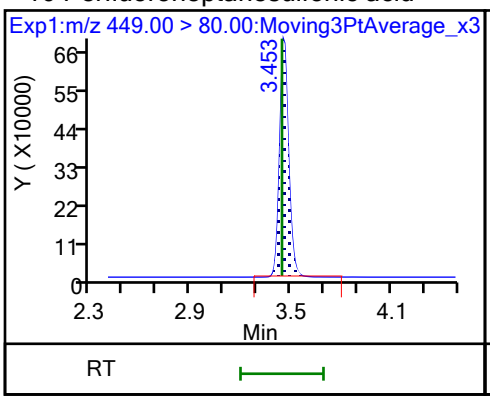
77 DONA



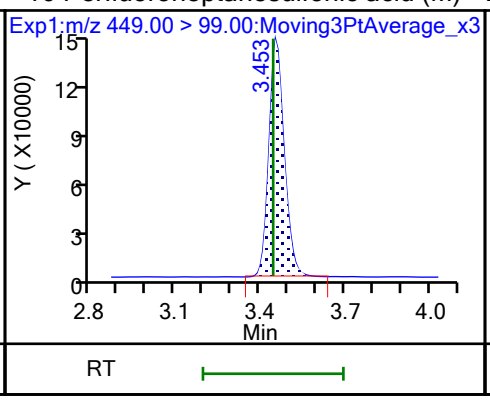
77 DONA



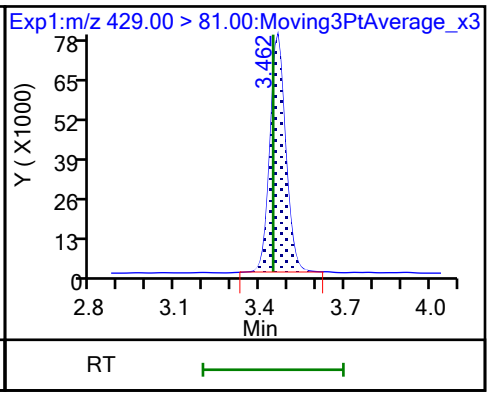
16 Perfluoroheptanesulfonic acid



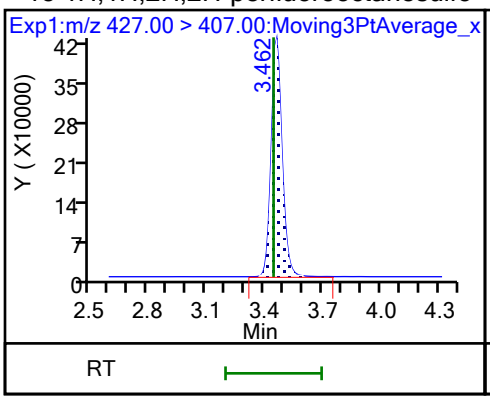
16 Perfluoroheptanesulfonic acid (M)



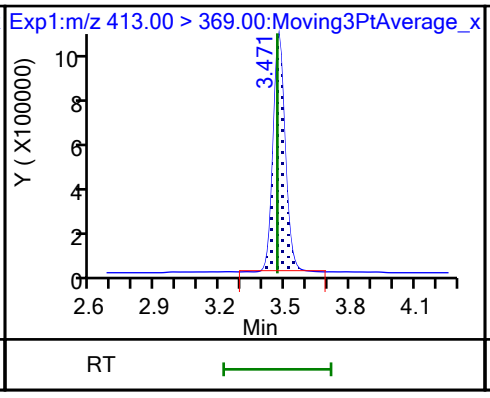
D 12 M2-6:2 FTS



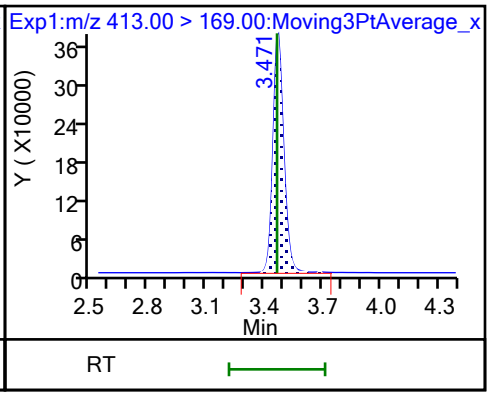
13 1H,1H,2H,2H-perfluorooctanesulfo



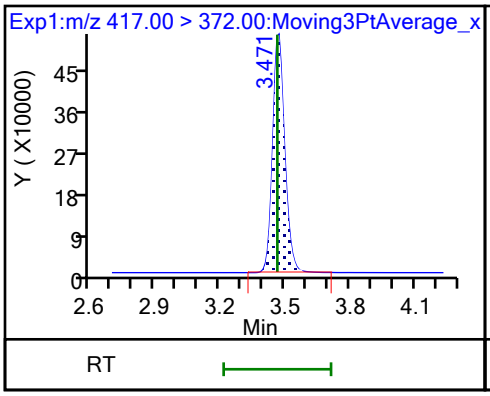
15 Perfluorooctanoic acid



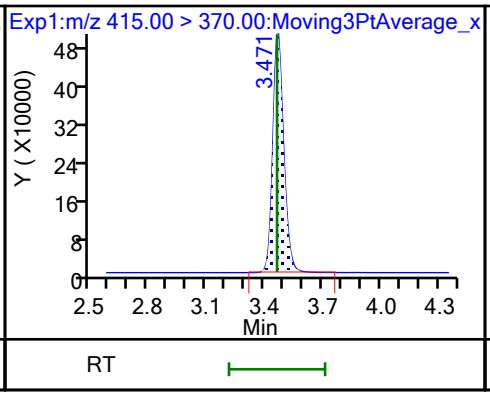
15 Perfluorooctanoic acid



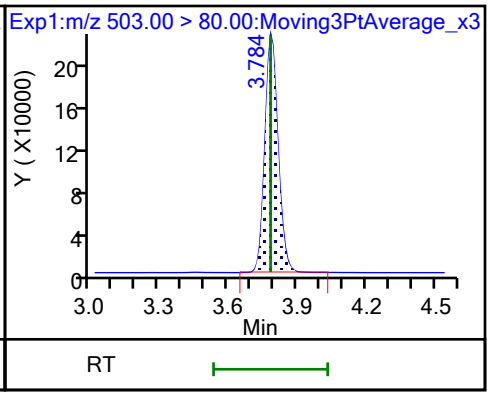
D 14 13C4 PFOA



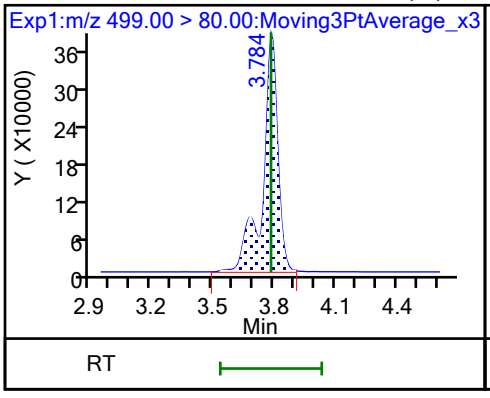
* 62 13C2 PFOA



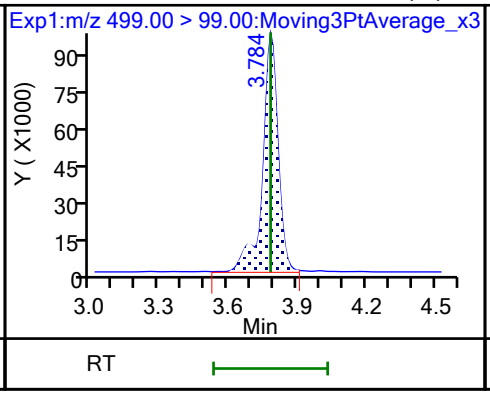
D 18 13C4 PFOS



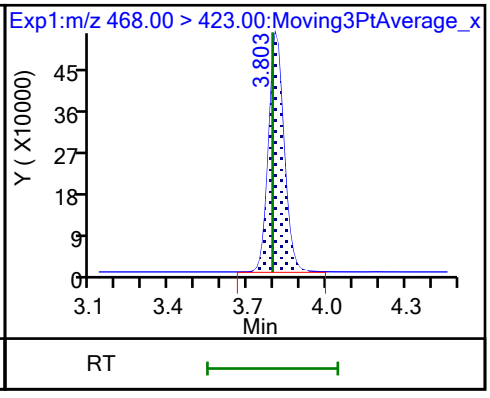
17 Perfluorooctanesulfonic acid (M)



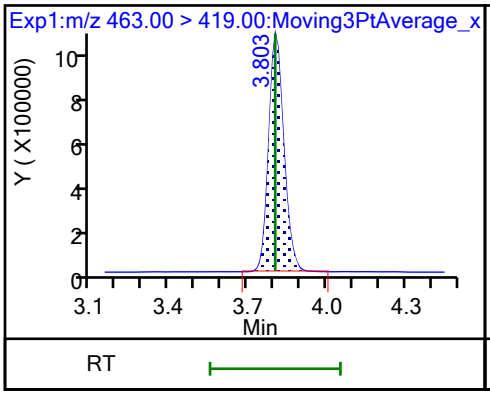
17 Perfluorooctanesulfonic acid (M)



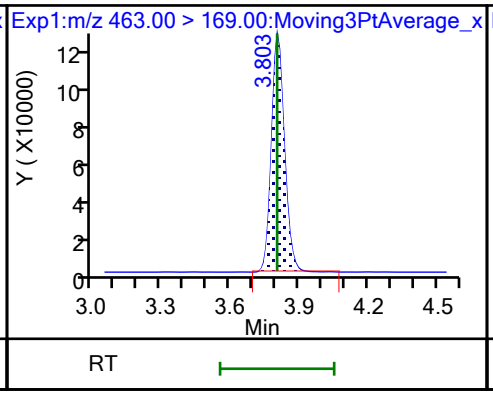
D 19 13C5 PFNA



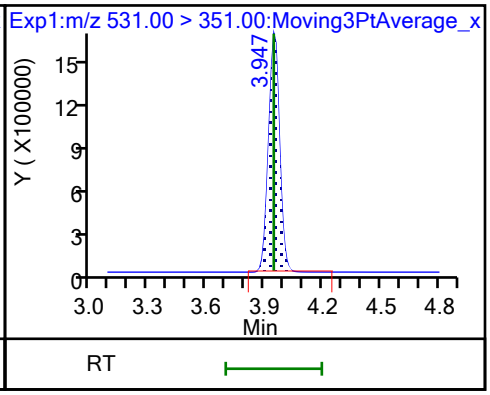
20 Perfluorononanoic acid



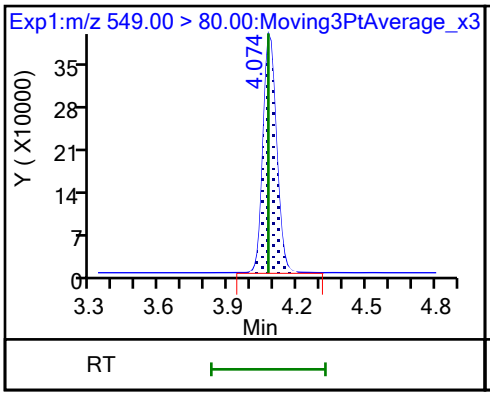
20 Perfluorononanoic acid



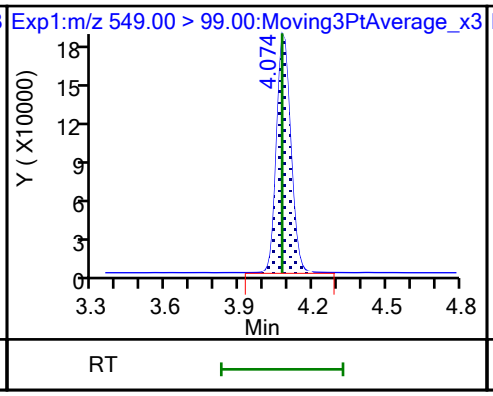
69 9-Chlorohexadecafluoro-3-oxanona



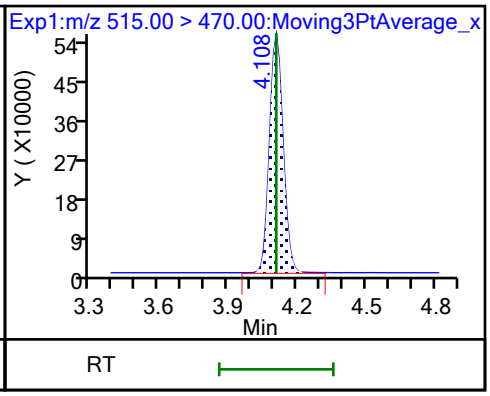
68 Perfluorononanesulfonic acid



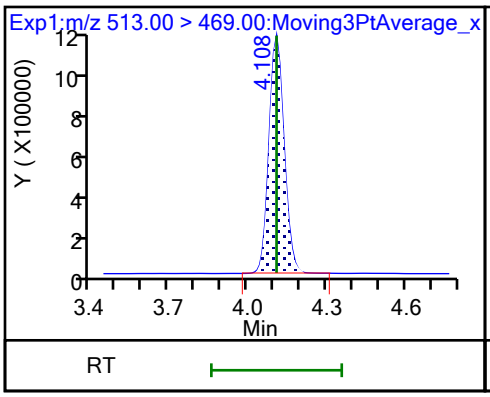
68 Perfluorononanesulfonic acid



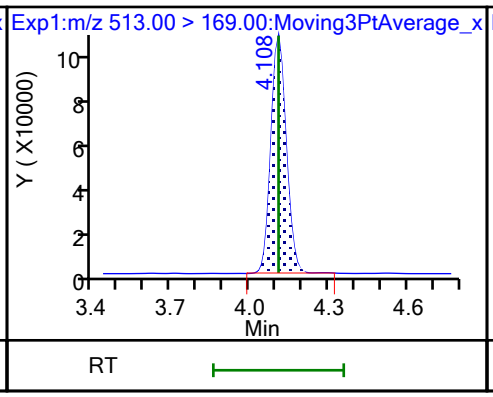
D 23 13C2 PFDA



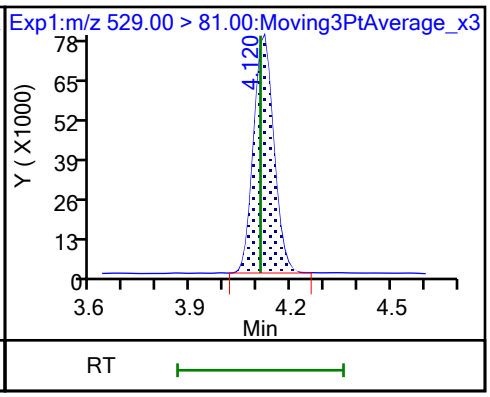
24 Perfluorodecanoic acid



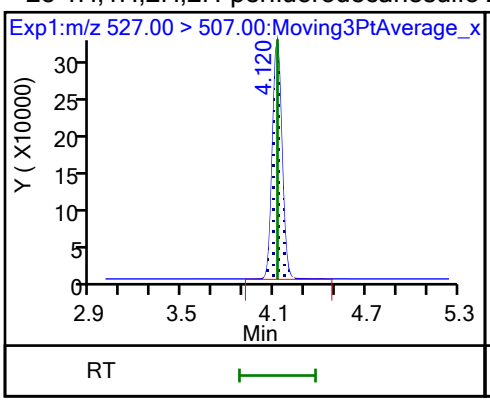
24 Perfluorodecanoic acid



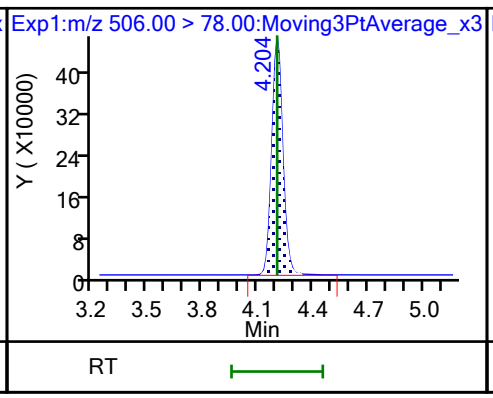
D 26 M2-8:2 FTS



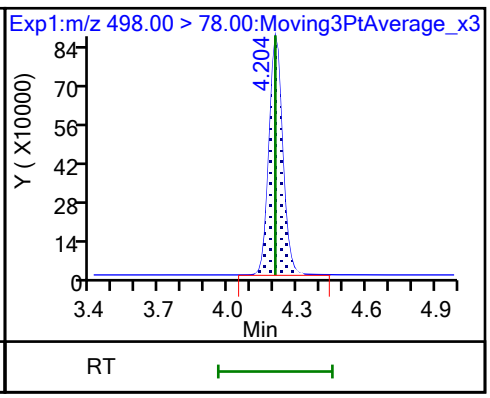
25 1H,1H,2H,2H-perfluorodecanesulfo



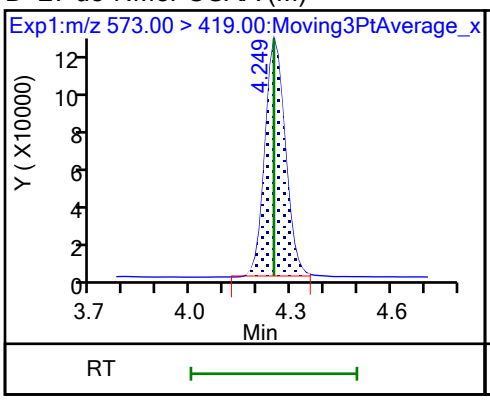
D 21 13C8 FOSA



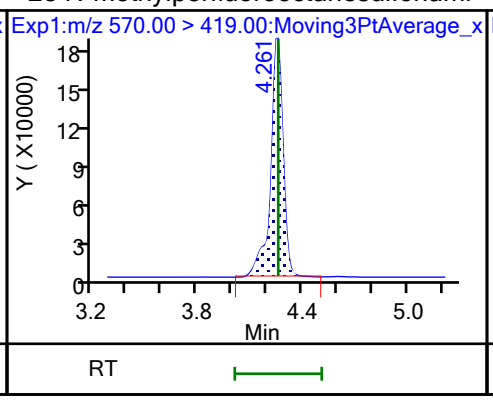
22 Perfluorooctanesulfonamide



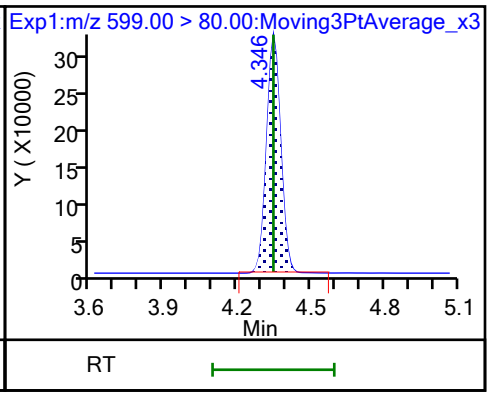
D 27 d3-NMeFOSAA (M)



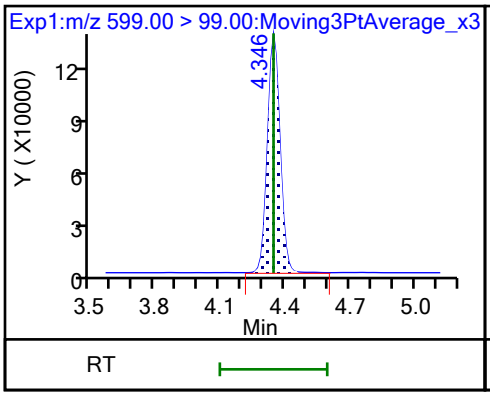
28 N-methylperfluorooctanesulfonami



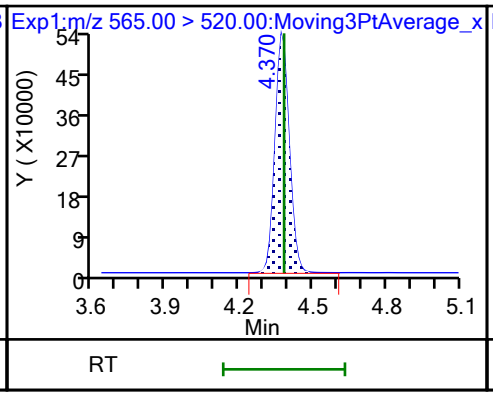
29 Perfluorodecanesulfonic acid



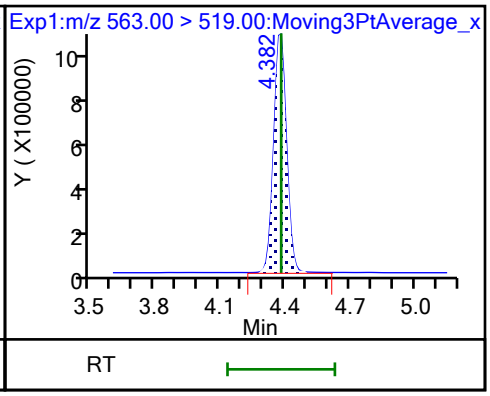
29 Perfluorodecanesulfonic acid



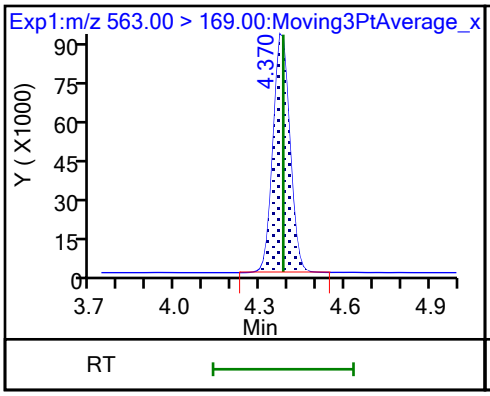
D 30 13C2 PFUnA



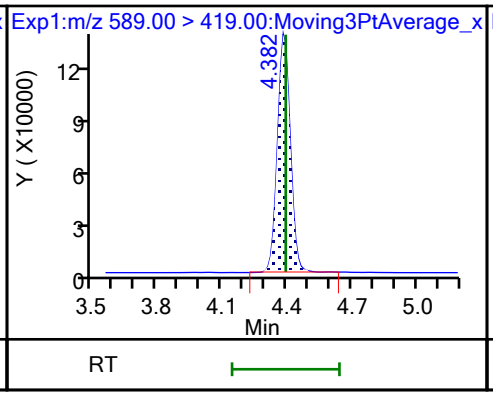
31 Perfluoroundecanoic acid



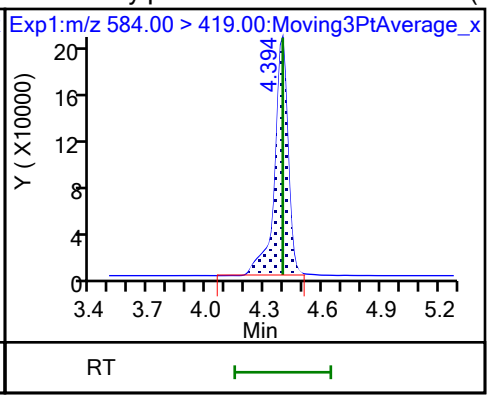
31 Perfluoroundecanoic acid



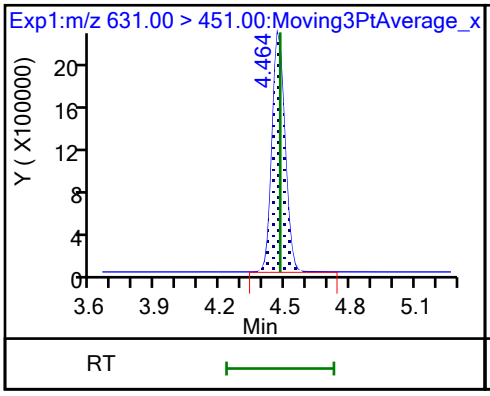
D 32 d5-NEtFOSAA



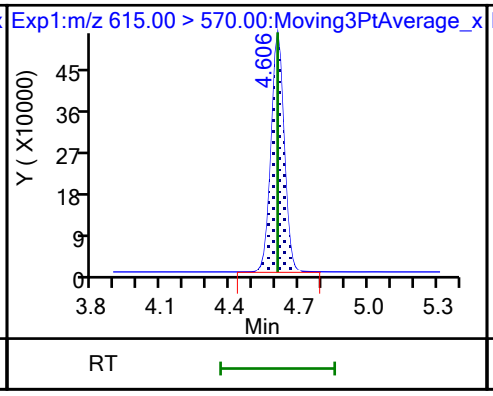
33 N-ethylperfluorooctanesulfonamid (M)



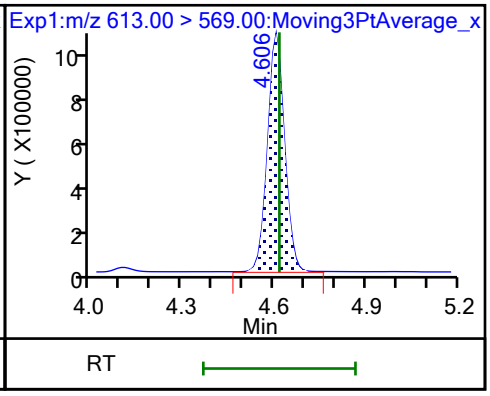
66 11-Chloroeicosafluoro-3-oxaundec



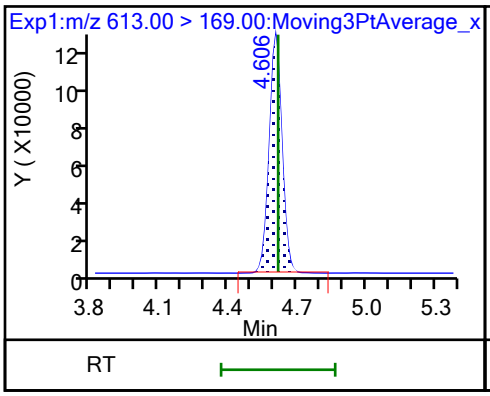
D 36 13C2 PFDoA



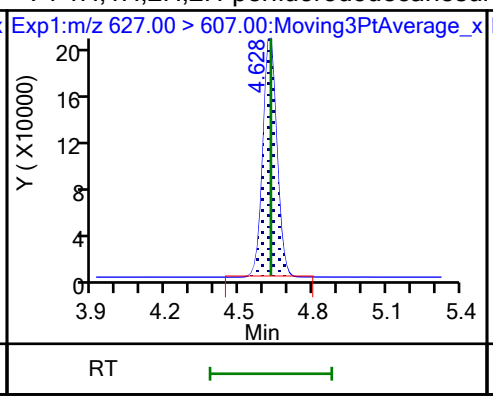
37 Perfluorododecanoic acid



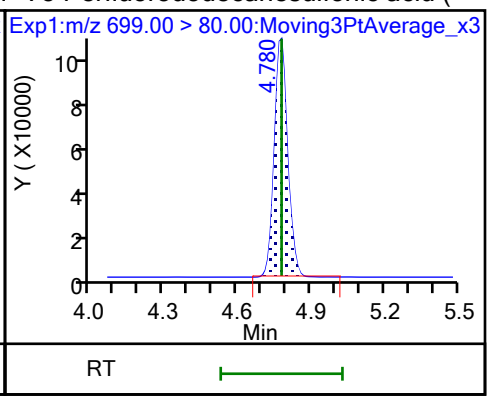
37 Perfluorododecanoic acid



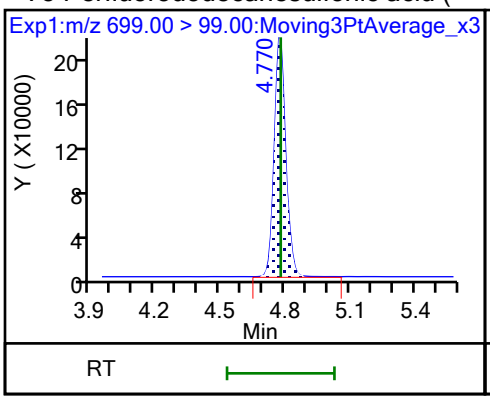
74 1H,1H,2H,2H-perfluorododecanesul



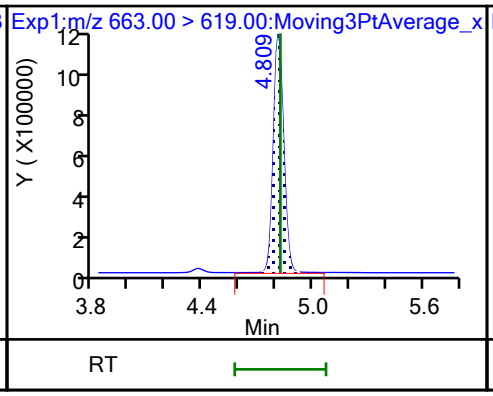
75 Perfluorododecanesulfonic acid (



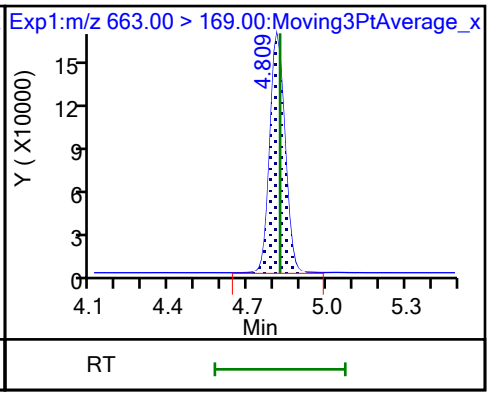
75 Perfluorododecanesulfonic acid (



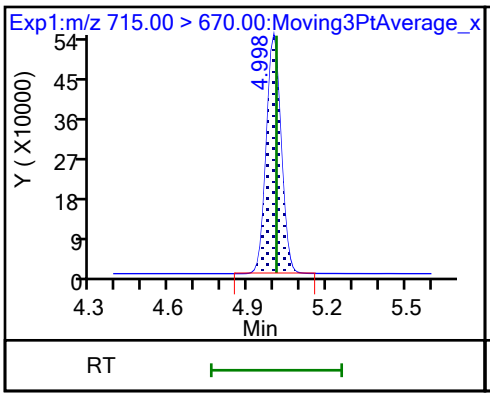
41 Perfluorotridecanoic acid



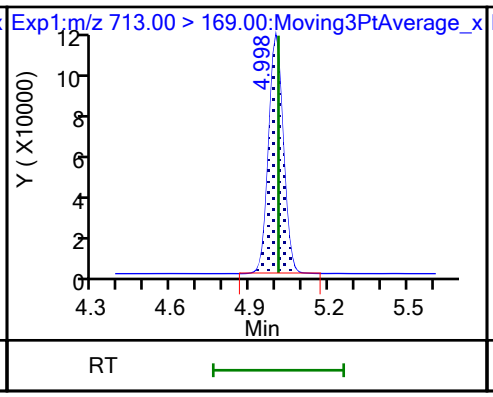
41 Perfluorotridecanoic acid



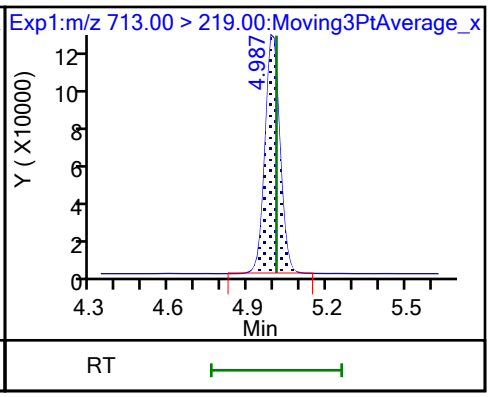
D 43 13C2 PFTeDA



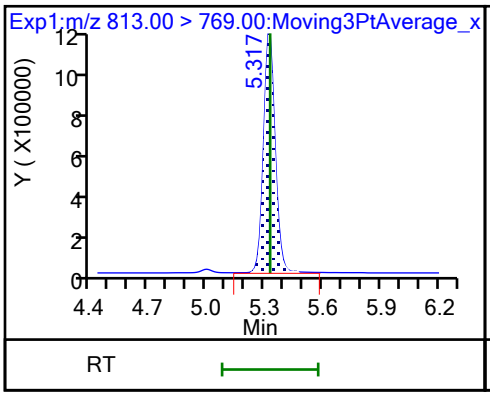
42 Perfluorotetradecanoic acid



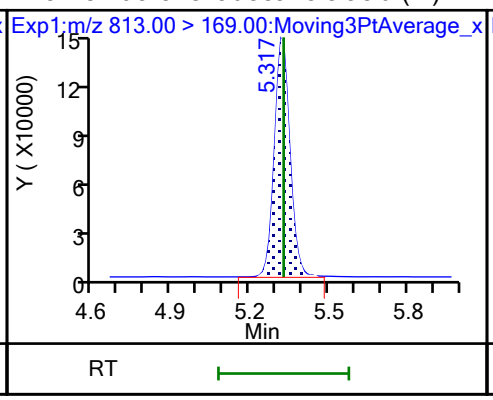
42 Perfluorotetradecanoic acid



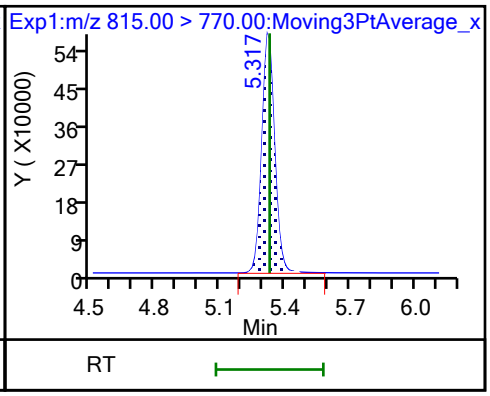
45 Perfluorohexadecanoic acid



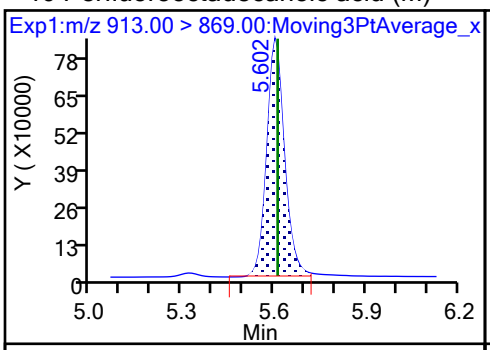
45 Perfluorohexadecanoic acid (M)



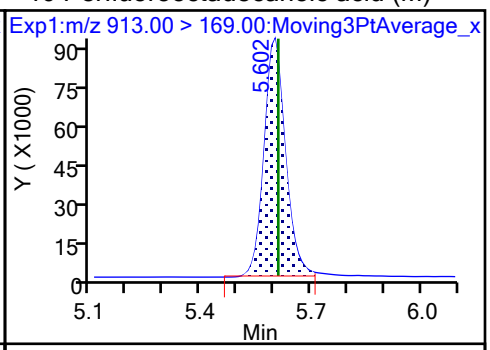
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Jul-2023 17:57:38 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 200-0056441-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:11:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	1663241	1.20		95.9	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	12675387	10.5		105	832	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1291692	1.20		96.0	717	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	11390973	10.2		102	344	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1657995	1.14		97.9	71060	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	13919716	8.74	Target=2.07	98.5	587	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	6698425		2.08(1.04-3.11)	98.5	540	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	194992	1.16		99.1	74.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	5267048	9.29		99.1	971	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.756	2.731	0.025	0.794	1345799	1.23		98.3	1043	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.756	2.731	0.025	1.000	11510430	9.72	Target=14.29	97.2	1512	
313.00 > 119.00	2.756	2.731	0.025	1.000	852173		13.51(7.15-21.44)	97.2	531	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.768	2.731	0.037	0.889	12787110	9.32	Target=2.78	99.1	25077	
349.00 > 99.00	2.756	2.731	0.025	0.885	4667101		2.74(1.39-4.17)	99.1	3572	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.869	2.844	0.025	0.826	265620	1.25		100	1509	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.869	2.844	0.025	1.000	2096317	9.85		98.5	8124	
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.897	1242233	1.19		101	4445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	10346652	8.90	Target=3.23	97.3	5752	
399.00 > 99.00	3.115	3.092	0.023	1.000	3264172		3.17(1.62-4.84)	97.3	1903	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.127	3.104	0.023	1.000	13183148	10.0	Target=4.11	100	2397	
363.00 > 169.00	3.127	3.104	0.023	1.000	3246220		4.06(2.06-6.17)	100	2137	
D 9 13C4 PFHpA										
367.00 > 322.00	3.127	3.104	0.023	0.901	1466571	1.22		97.6	3939	
77 DONA										
377.00 > 251.00	3.161	3.138	0.023	0.833	32898209	8.92	Target=3.28	94.4	23285	
377.00 > 85.00	3.161	3.138	0.023	0.833	10971378		3.00(1.64-4.92)	94.4	8094	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.462	3.446	0.016	0.913	9291673	10.0	Target=4.71	105	9326	
449.00 > 99.00	3.462	3.446	0.016	0.913	1923167		4.83(2.36-7.07)	105	2597	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	250039	1.15		97.0	319	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	5360896	9.32		98.0	3149	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.480	3.464	0.016	1.000	13504480	9.37	Target=2.90	93.7	1069	
413.00 > 169.00	3.480	3.464	0.016	1.000	4762707		2.84(1.45-4.35)	93.7	6332	
D 14 13C4 PFOA										
417.00 > 372.00	3.480	3.464	0.016	1.003	1691186	1.24		99.4	4091	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		1749133	1.25			3853	
D 18 13C4 PFOS										
503.00 > 80.00	3.793	3.783	0.010	1.093	765818	1.15		96.6	1062	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.000	6987392	9.35	Target=4.11	101	3645	M
499.00 > 99.00	3.783	3.783	0.0	0.997	1609293		4.34(2.05-6.16)	101	1686	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1889768	1.28		102	5845	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	14082035	9.50	Target=8.48	95.0	2121	
463.00 > 169.00	3.814	3.803	0.011	1.003	1663440		8.47(4.24-12.72)	95.0	6569	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.043	21405197	9.36		100	14512	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.077	5744699	10.1	Target=2.17	105	9927	
549.00 > 99.00	4.084	4.074	0.010	1.077	2540483		2.26(1.08-3.25)	105	4161	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	1979736	1.28		102	4717	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	15207258	9.61	Target=10.55	96.1	3130	
513.00 > 169.00	4.108	4.108	0.0	1.000	1435944		10.59(5.27-15.82)	96.1	3360	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	309678	1.27		106	551	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	4983035	8.75		91.2	118767	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1724931	1.30		104	4594	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	13020569	9.89		98.9	8748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	465286	1.25		100	354	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	3280076	9.71		97.1	1965	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.146	4450137	10.2	Target=2.28	105	9388	
599.00 > 99.00	4.346	4.346	0.0	1.146	1850008		2.41(1.14-3.42)	105	4976	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.262	1818926	1.24		99.3	12538	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	14323125	9.55	Target=11.30	95.5	3667	
563.00 > 169.00	4.382	4.382	0.0	1.000	1240618		11.55(5.65-16.96)	95.5	7177	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	456350	1.28		102	1074	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.394	4.393	0.001	1.003	3409503	9.34		93.4	39384	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.177	29976782	8.55		90.6	25762	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	1800020	1.21		96.7	6856	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	14693173	10.0	Target=8.15	100	1405	
613.00 > 169.00	4.605	4.616	-0.011	1.000	1710081		8.59(4.07-12.22)	100	10412	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	3151402	9.26		96.1	16125	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.260	1445002	9.74	Target=0.50	101	8185	
699.00 > 99.00	4.780	4.779	0.001	1.260	2914789		0.50(0.25-0.75)	101	8974	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	14866529	9.65	Target=6.61	96.5	1279	
663.00 > 169.00	4.808	4.822	-0.014	1.044	2252925		6.60(3.31-9.92)	96.5	4587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	1876594	1.27		101	6427	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.997	5.008	-0.011	1.000	1575221	9.38	Target=0.96	93.8	6626	
713.00 > 219.00	4.997	5.008	-0.011	1.000	1663605		0.95(0.48-1.44)	93.8	6338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.002	15997184	9.75	Target=7.69	97.5	1329	
813.00 > 169.00	5.317	5.328	-0.011	1.000	2021184		7.91(3.85-11.54)	97.5	3771	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2051028	1.20		96.1	4731	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	12548221	9.79	Target=9.13	97.9	379	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	1429786		8.78(4.56-13.69)	97.9	466	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

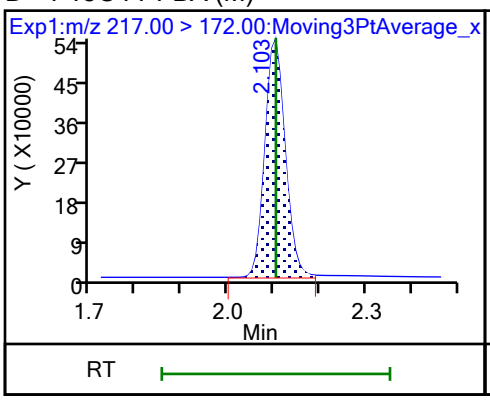
PFAS32NCIC6_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:03 Chrom Revision: 2.3 19-Jul-2023 18:28:48

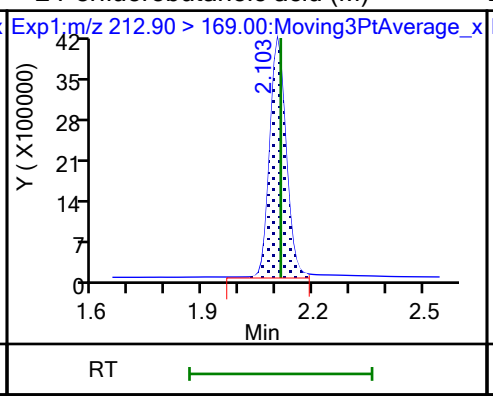
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Injection Date: 26-Jul-2023 17:57:38 Instrument ID: LC812
Lims ID: IC 6
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

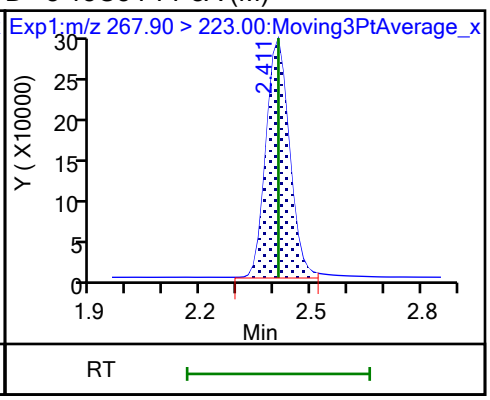
D 1 13C4 PFBA (M)



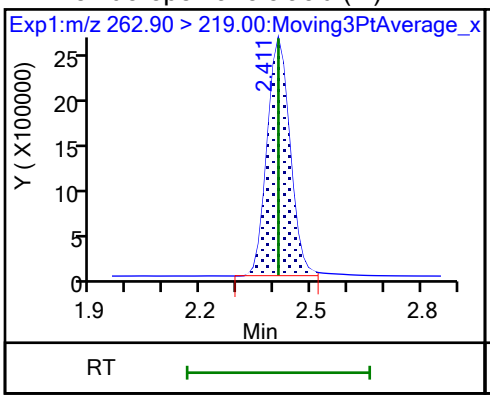
2 Perfluorobutanoic acid (M)



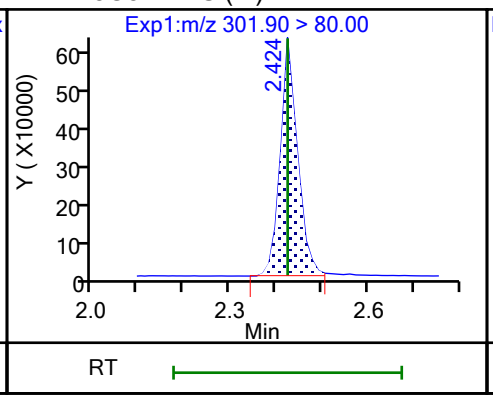
D 3 13C5 PFPeA (M)



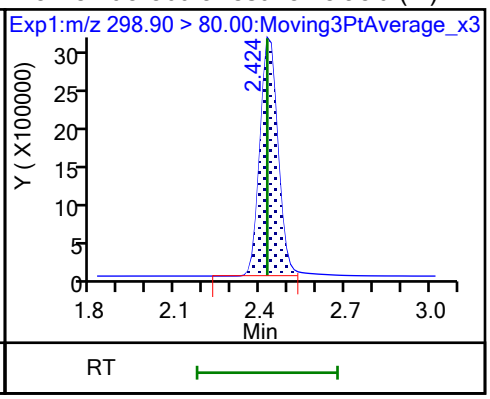
4 Perfluoropentanoic acid (M)



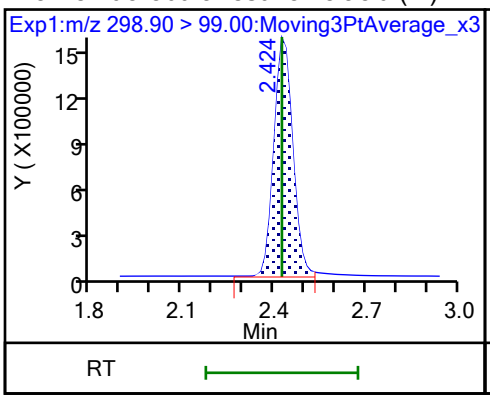
D 47 13C3 PFBS (M)



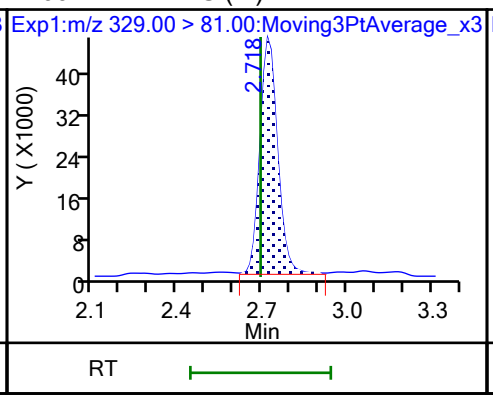
5 Perfluorobutanesulfonic acid (M)



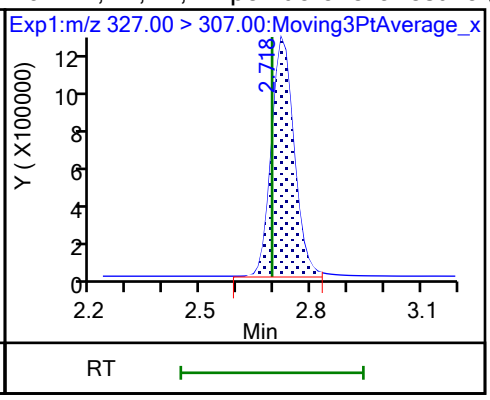
5 Perfluorobutanesulfonic acid (M)



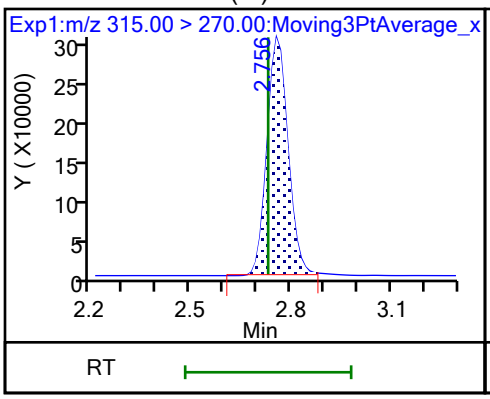
D 60 M2-4:2 FTS (M)



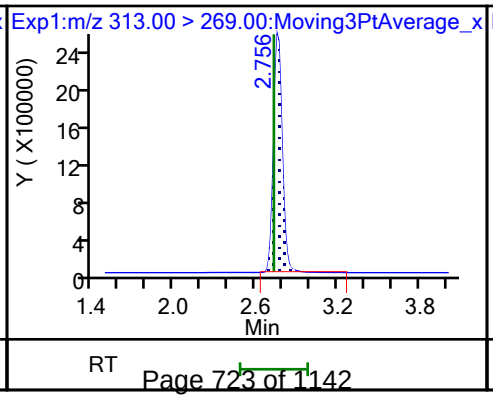
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



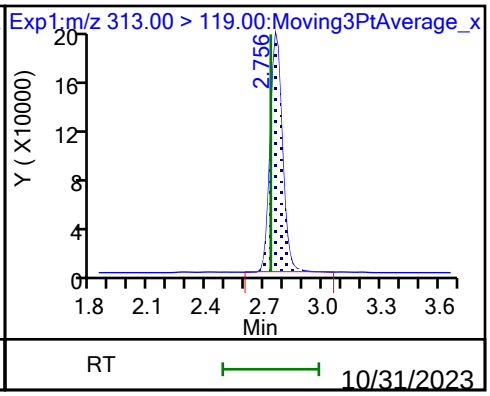
D 7 13C2 PFHxA (M)



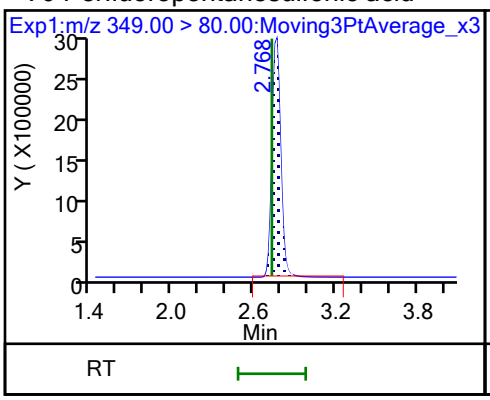
6 Perfluorohexanoic acid



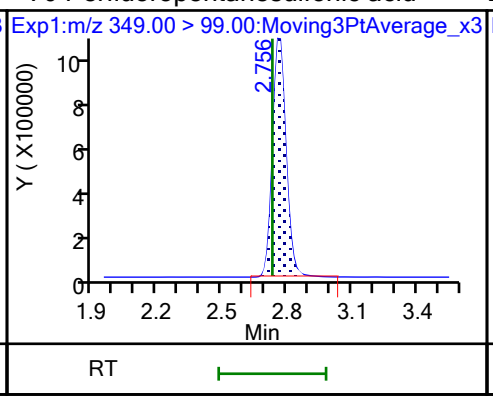
6 Perfluorohexanoic acid



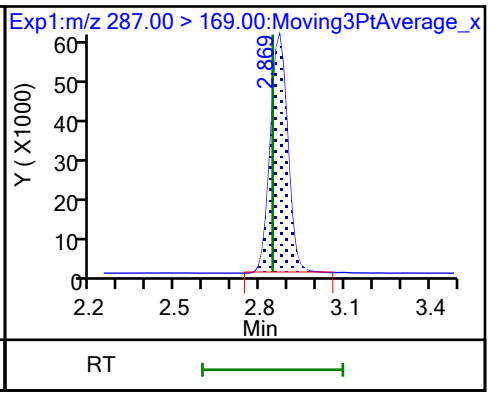
70 Perfluoropentanesulfonic acid



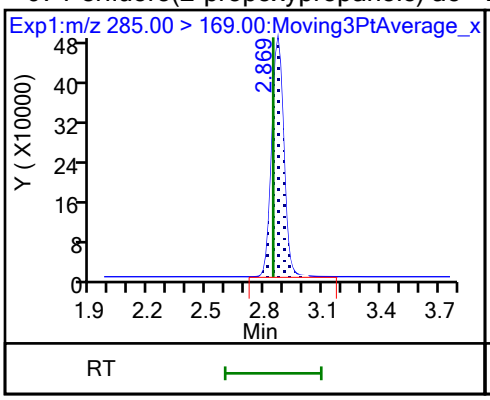
70 Perfluoropentanesulfonic acid



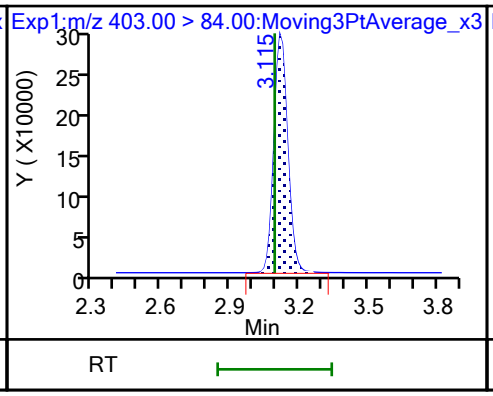
D 64 13C3 HFPO-DA



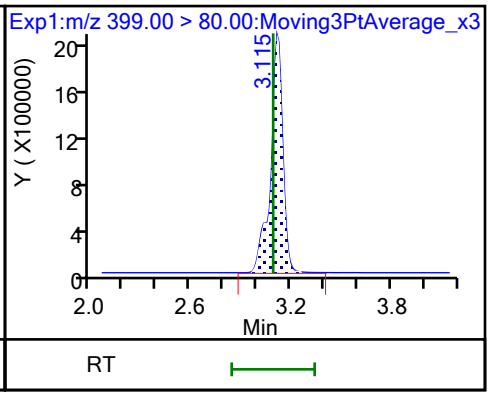
67 Perfluoro(2-propoxypropanoic) ac



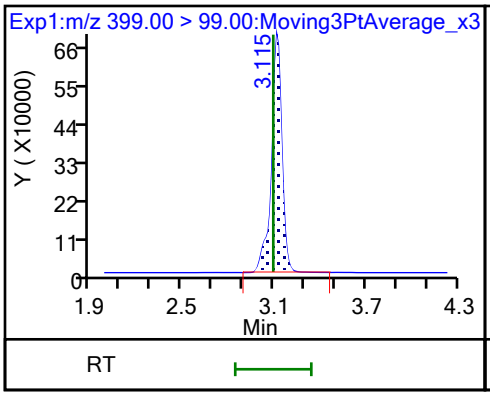
D 11 18O2 PFHxS



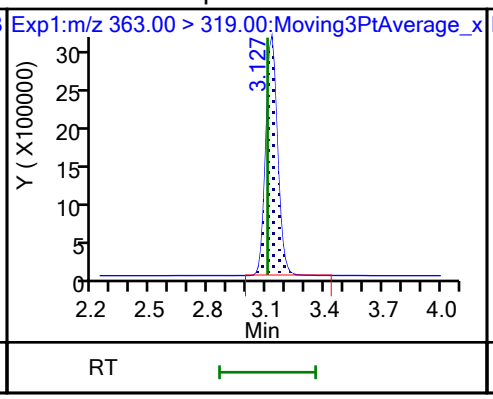
8 Perfluorohexanesulfonic acid



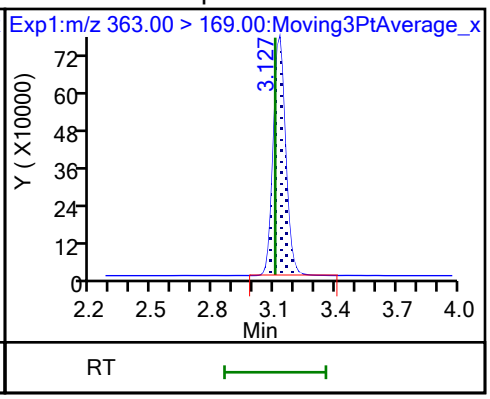
8 Perfluorohexanesulfonic acid



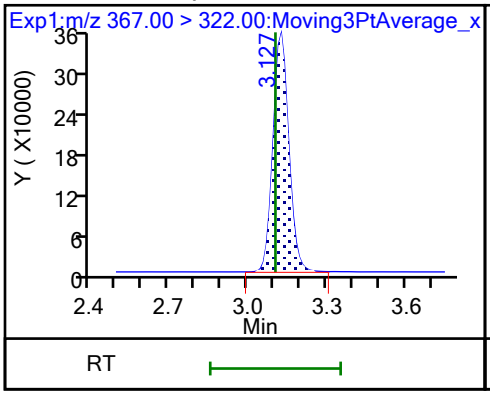
10 Perfluoroheptanoic acid



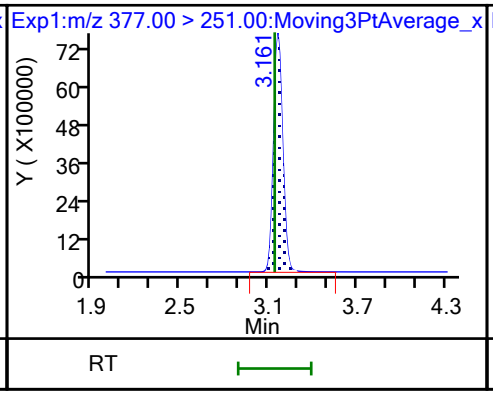
10 Perfluoroheptanoic acid



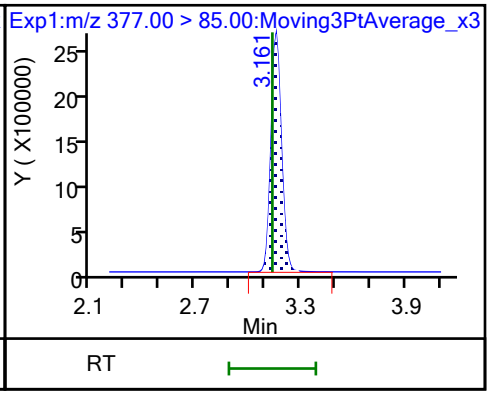
D 9 13C4 PFHpA



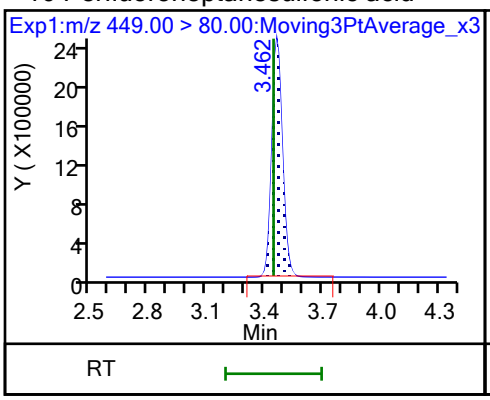
77 DONA



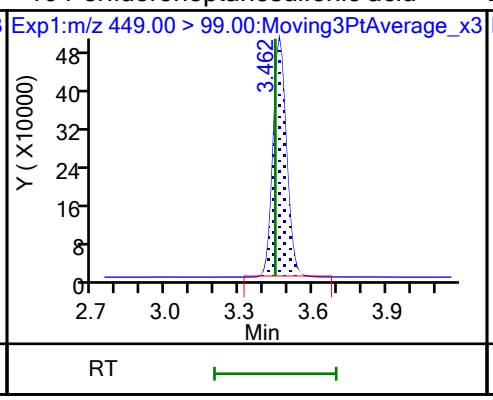
77 DONA



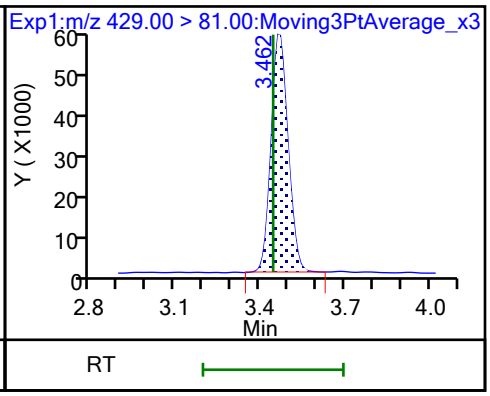
16 Perfluoroheptanesulfonic acid



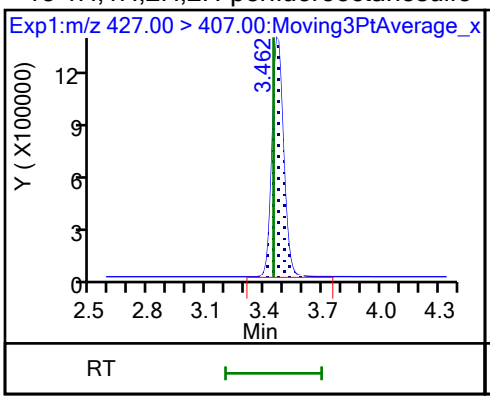
16 Perfluoroheptanesulfonic acid



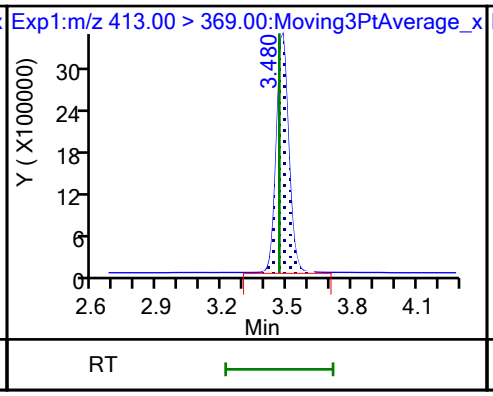
D 12 M2-6:2 FTS



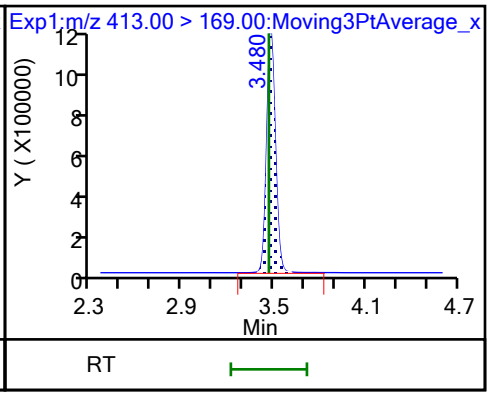
13 1H,1H,2H,2H-perfluorooctanesulfo



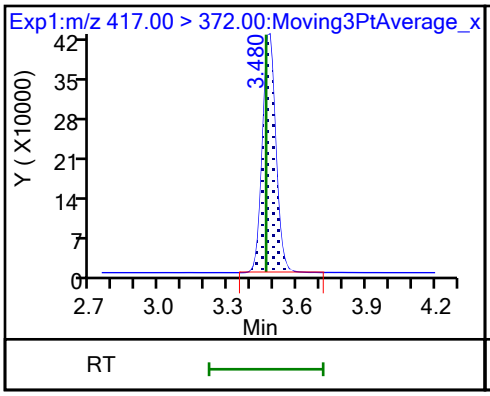
15 Perfluorooctanoic acid



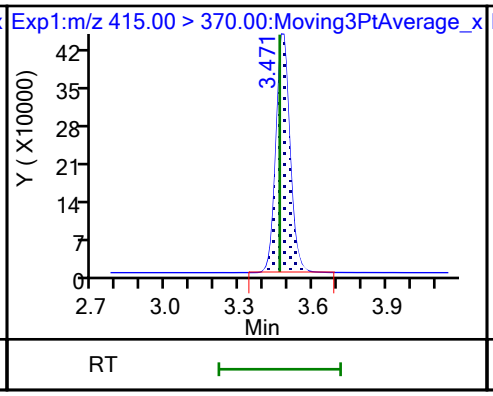
15 Perfluorooctanoic acid



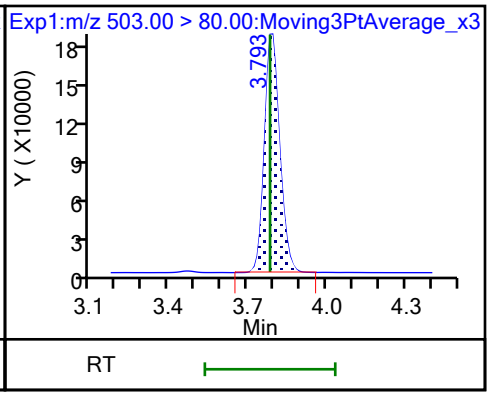
D 14 13C4 PFOA



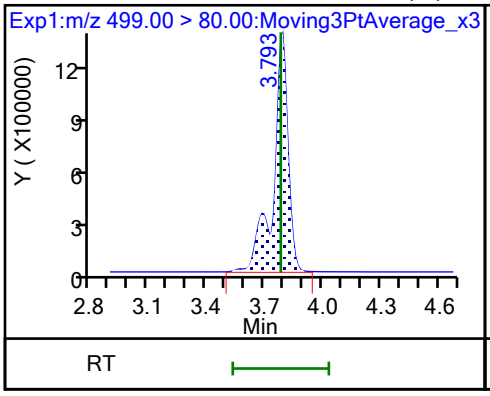
* 62 13C2 PFOA



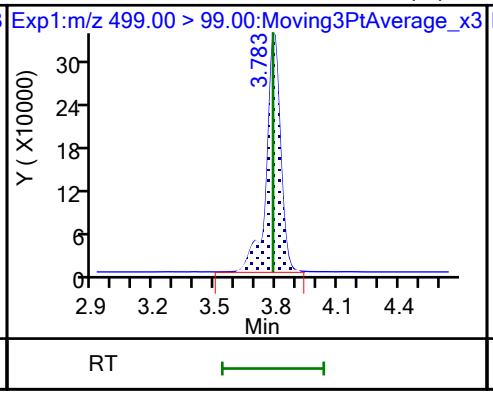
D 18 13C4 PFOS



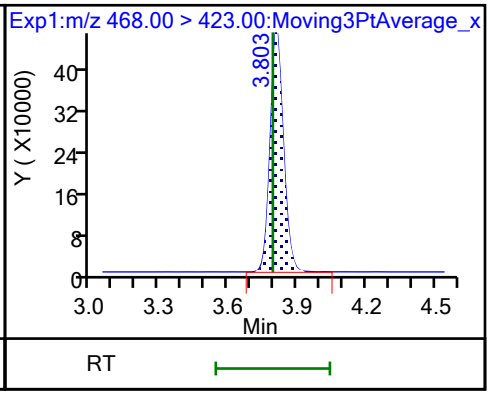
17 Perfluorooctanesulfonic acid (M)



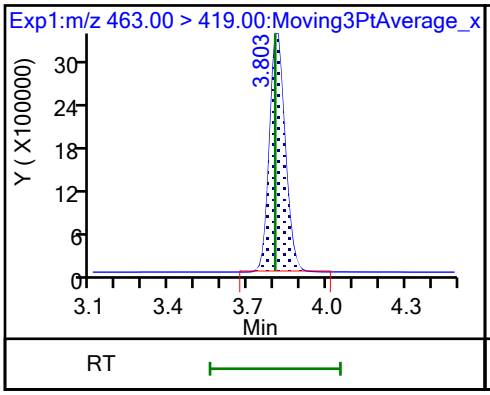
17 Perfluorooctanesulfonic acid (M)



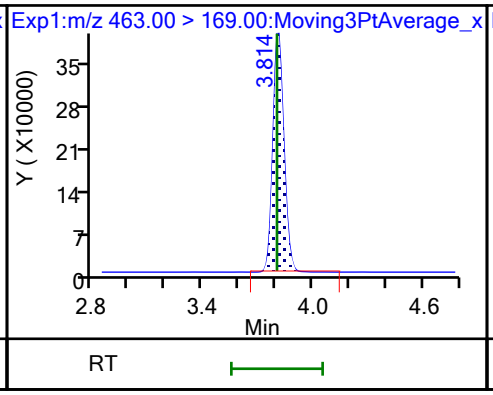
D 19 13C5 PFNA



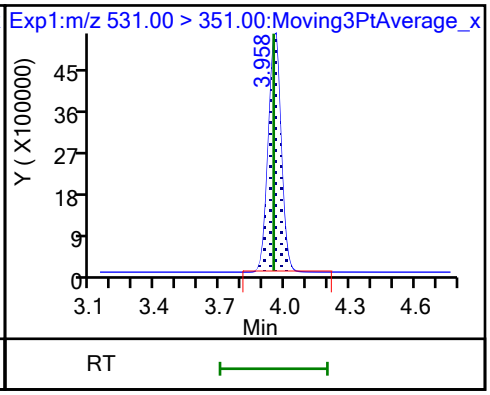
20 Perfluorononanoic acid



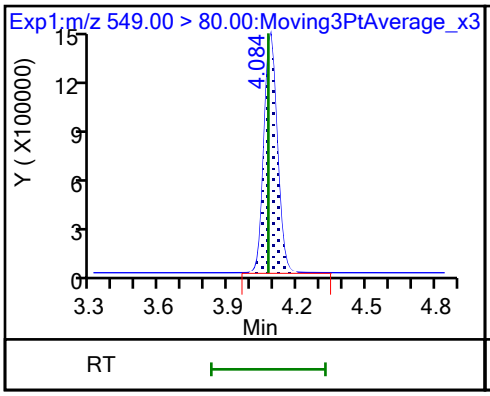
20 Perfluorononanoic acid



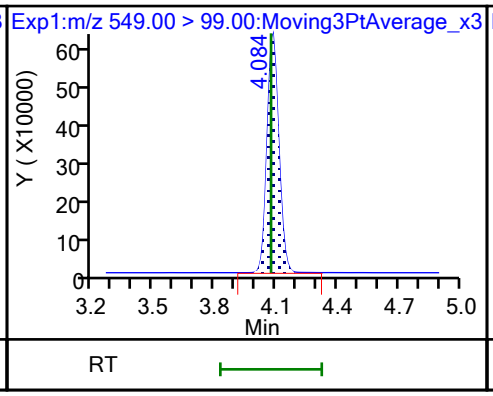
69 9-Chlorohexadecafluoro-3-oxanona



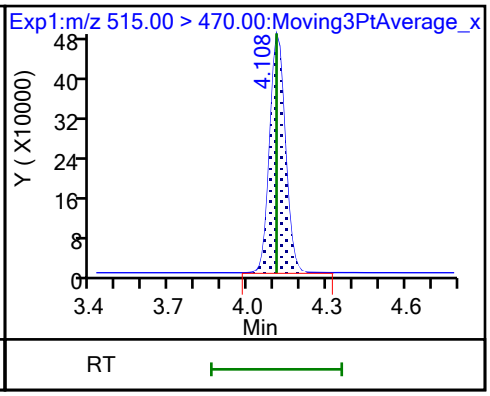
68 Perfluorononanesulfonic acid



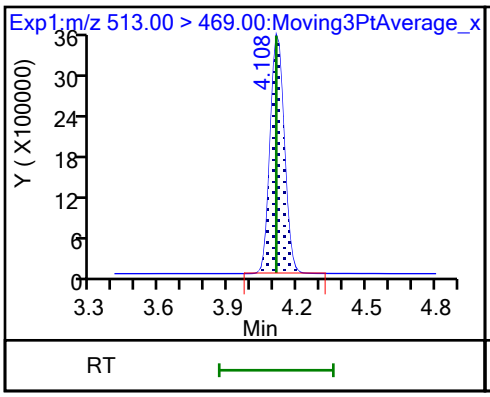
68 Perfluorononanesulfonic acid



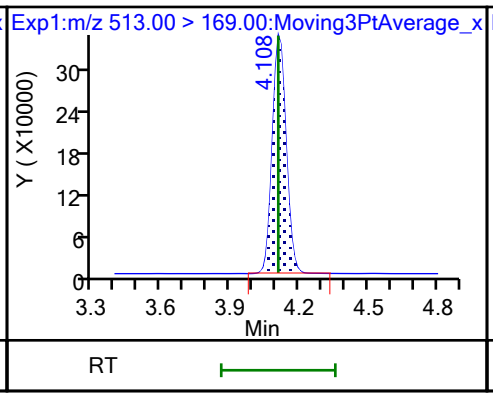
D 23 13C2 PFDA



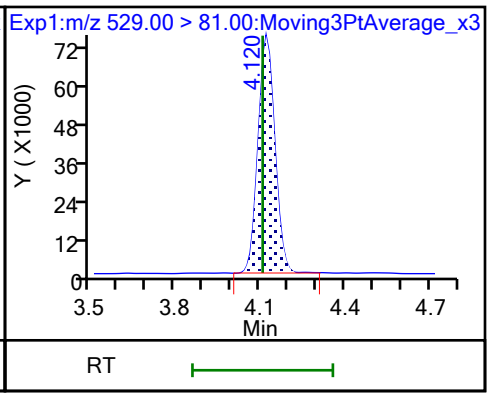
24 Perfluorodecanoic acid



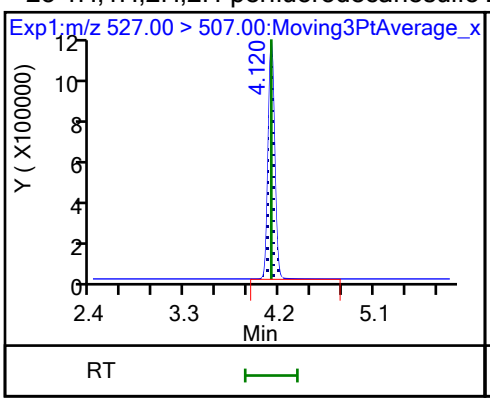
24 Perfluorodecanoic acid



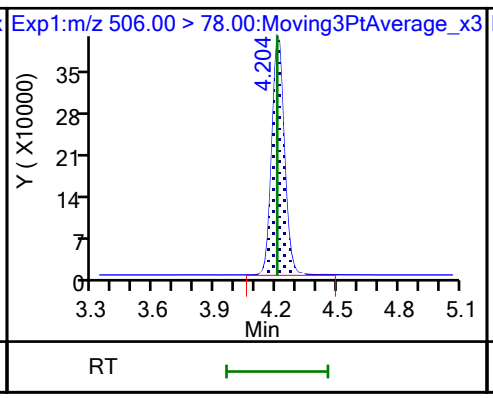
D 26 M2-8:2 FTS



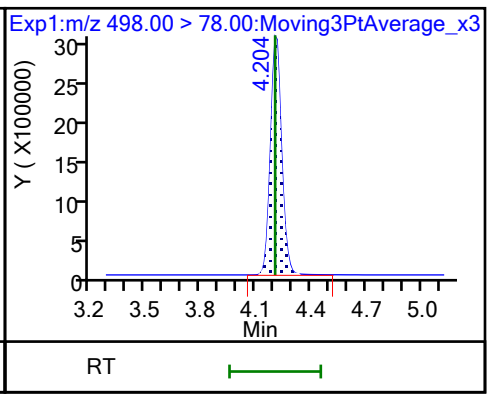
25 1H,1H,2H,2H-perfluorodecanesulfo



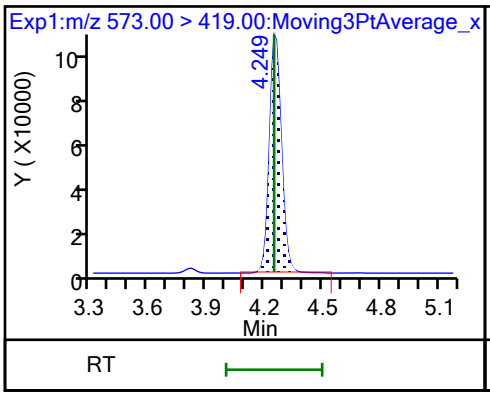
D 21 13C8 FOSA



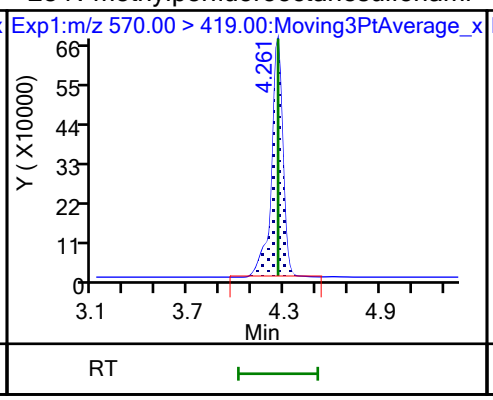
22 Perfluorooctanesulfonamide



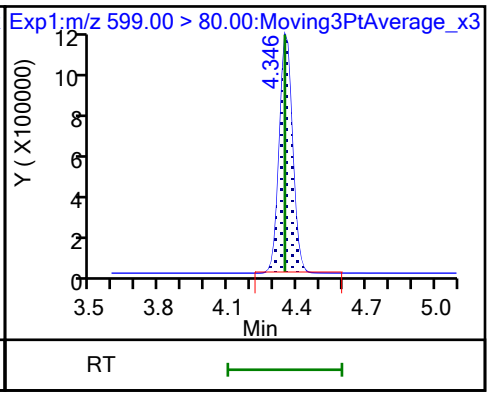
D 27 d3-NMeFOSAA



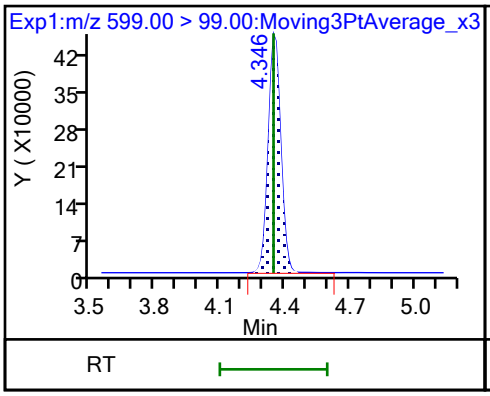
28 N-methylperfluorooctanesulfonami



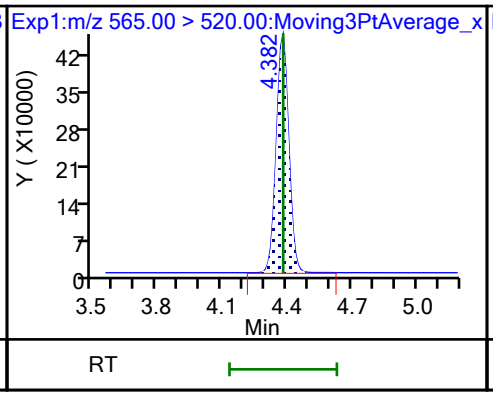
29 Perfluorodecanesulfonic acid



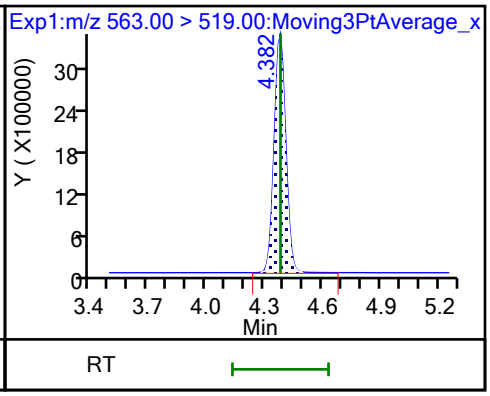
29 Perfluorodecanesulfonic acid



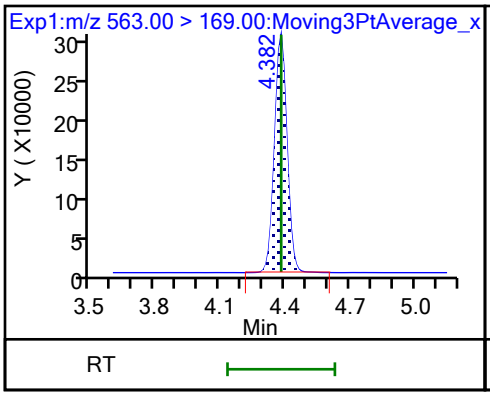
D 30 13C2 PFUnA



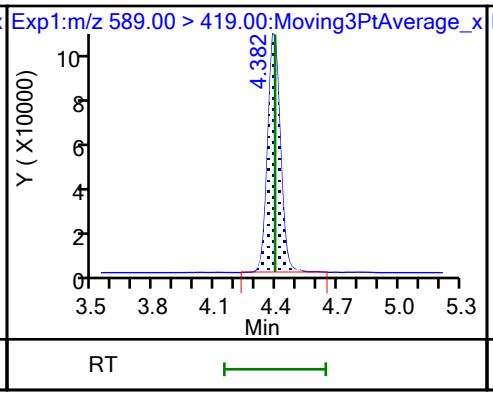
31 Perfluoroundecanoic acid



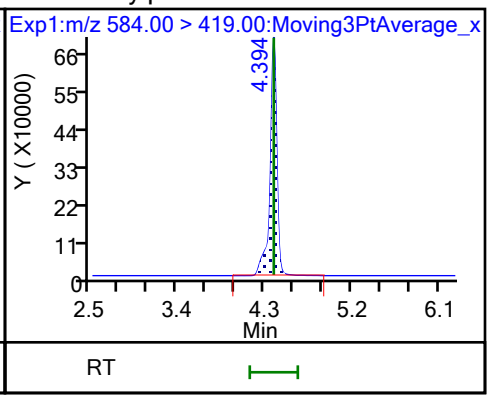
31 Perfluoroundecanoic acid



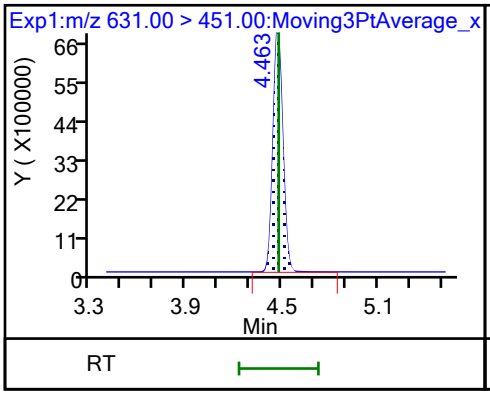
D 32 d5-NEtFOSAA



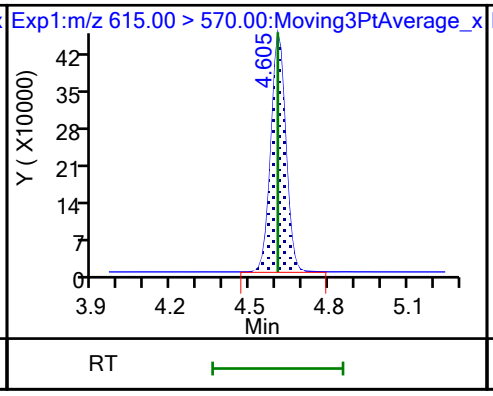
33 N-ethylperfluorooctanesulfonamid



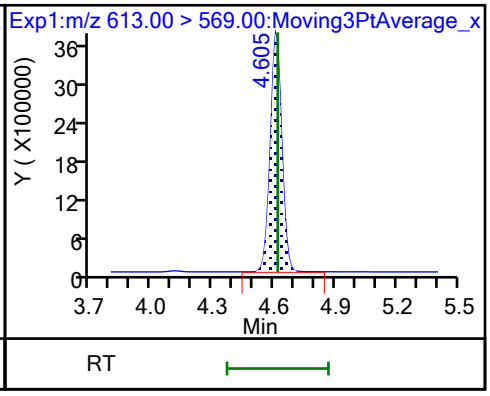
66 11-Chloroeicosafluoro-3-oxaundec



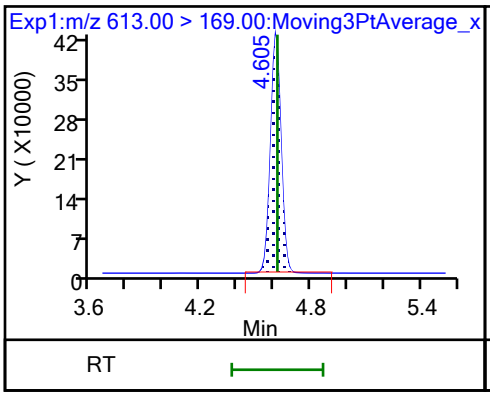
D 36 13C2 PFDoA



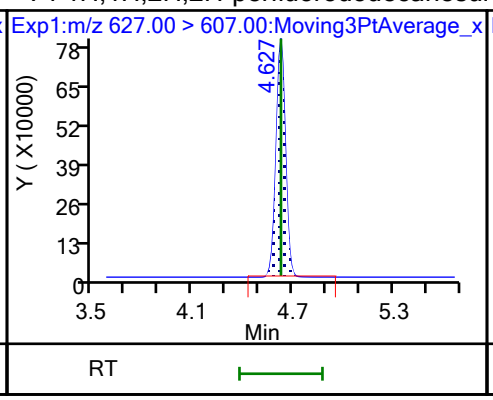
37 Perfluorododecanoic acid



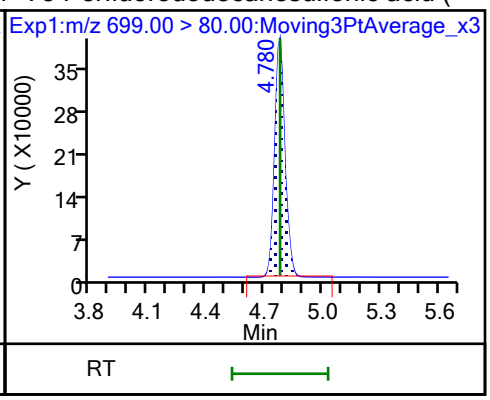
37 Perfluorododecanoic acid



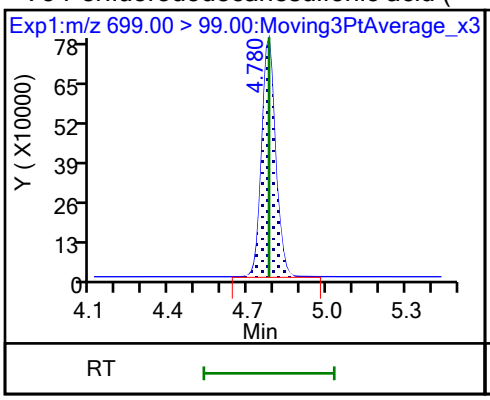
74 1H,1H,2H,2H-perfluorododecanesul



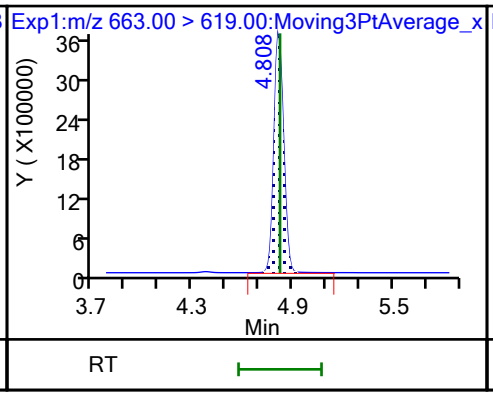
75 Perfluorododecanesulfonic acid (



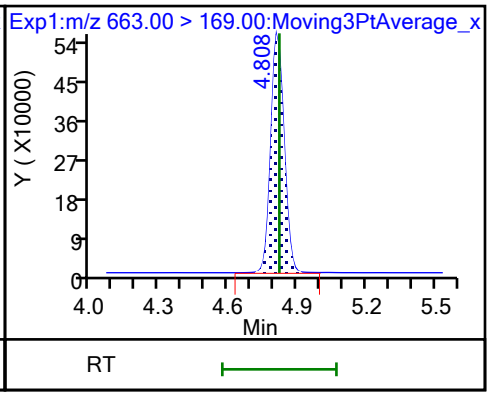
75 Perfluorododecanesulfonic acid (



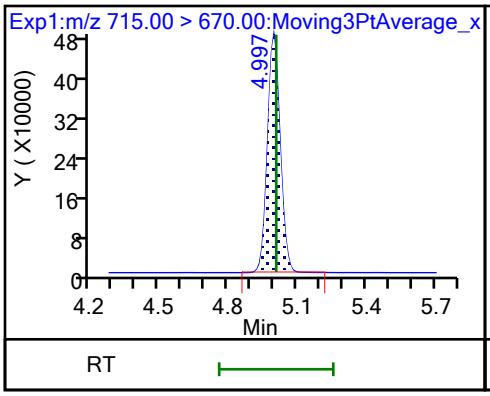
41 Perfluorotridecanoic acid



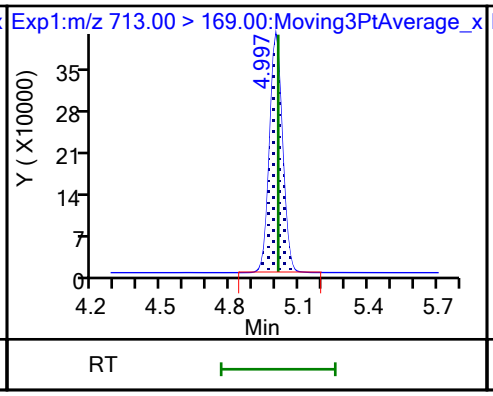
41 Perfluorotridecanoic acid



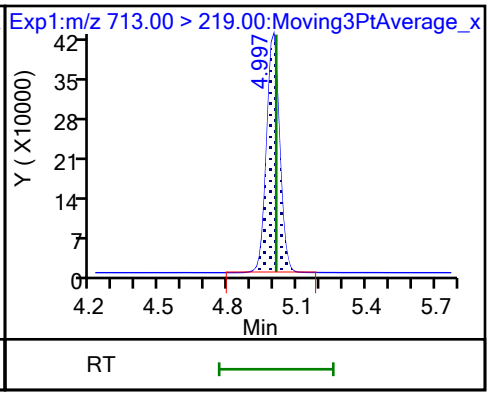
D 43 13C2 PFTeDA



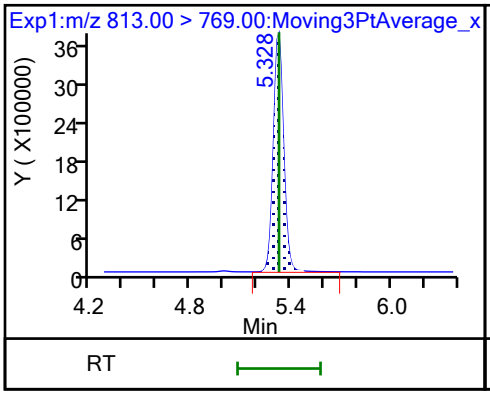
42 Perfluorotetradecanoic acid



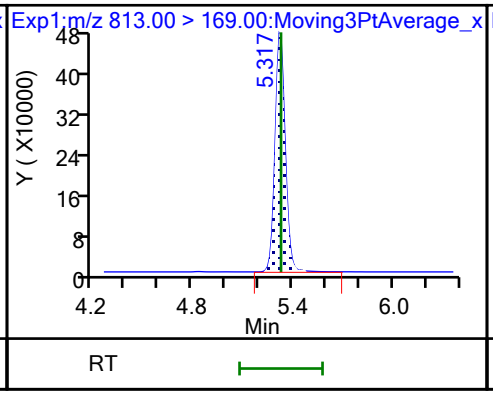
42 Perfluorotetradecanoic acid



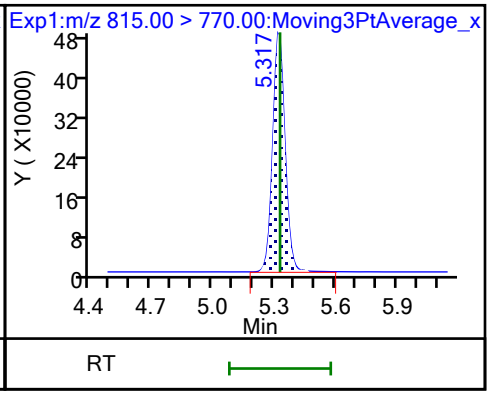
45 Perfluorohexadecanoic acid



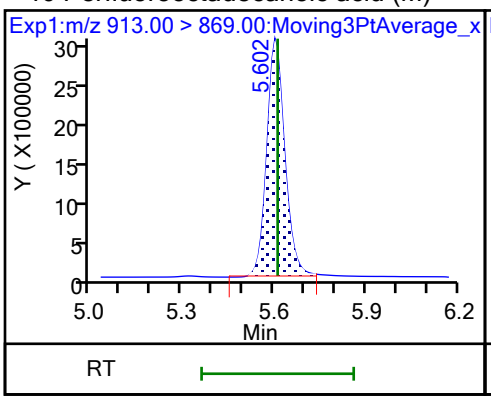
45 Perfluorohexadecanoic acid



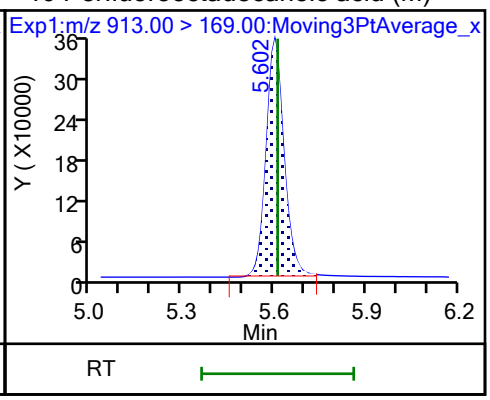
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Jul-2023 18:05:46 ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 200-0056441-011 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:07 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:17:02
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.606	1758198	1.24		99.4	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	29150051	22.9		91.5	1625	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.397	2.411	-0.014	0.694	1319141	1.20		96.1	720	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.397	2.411	-0.014	1.000	26331175	23.1		92.5	419	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.698	1925353	1.30		112	70151	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.411	2.425	-0.014	1.000	33432260	18.1	Target=2.07	81.5	580	M
298.90 > 99.00	2.411	2.425	-0.014	1.000	17197877		1.94(1.04-3.11)	81.5	556	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.784	207012	1.21		103	77.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.706	2.694	0.012	1.000	12889559	21.4		91.4	85591	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.794	1316912	1.18		94.3	776	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.744	2.731	0.013	1.000	26521589	22.9	Target=14.29	91.5	753	M
313.00 > 119.00	2.744	2.731	0.013	1.000	2031245		13.06(7.15-21.44)	91.5	678	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	30796216	20.3	Target=2.78	86.5	1048	M
349.00 > 99.00	2.756	2.731	0.025	0.885	12222657		2.52(1.39-4.17)	86.5	1012	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.856	2.844	0.012	0.827	273677	1.27		101	1285	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	5568235	25.4		102	6439	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.902	1370941	1.29		109	2166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	27349473	21.3	Target=3.23	93.3	7764	
399.00 > 99.00	3.115	3.092	0.023	1.000	8658987		3.16(1.62-4.84)	93.3	7018	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	30971904	22.1	Target=4.11	88.6	5231	
363.00 > 169.00	3.115	3.104	0.011	1.000	8208481		3.77(2.06-6.17)	88.6	4733	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.902	1559821	1.27		102	3648	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.837	68369017	16.4	Target=3.28	69.5	79642	
377.00 > 85.00	3.150	3.138	0.012	0.837	26772118		2.55(1.64-4.92)	69.5	10230	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.435	3.446	-0.011	0.913	23718890	22.7	Target=4.71	95.1	34545	
449.00 > 99.00	3.435	3.446	-0.011	0.913	5261248		4.51(2.36-7.07)	95.1	8032	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.444	3.446	-0.002	0.997	271643	1.23		103	338	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.444	3.446	-0.002	1.000	12827492	20.5		86.3	1734	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.453	3.464	-0.011	1.000	32974345	23.9	Target=2.90	95.5	2249	
413.00 > 169.00	3.453	3.464	-0.011	1.000	11969902		2.75(1.45-4.35)	95.5	9272	
D 14 13C4 PFOA										
417.00 > 372.00	3.453	3.464	-0.011	1.000	1620734	1.17		93.4	5069	
* 62 13C2 PFOA										
415.00 > 370.00	3.453	3.464	-0.011		1782839	1.25			3950	
D 18 13C4 PFOS										
503.00 > 80.00	3.764	3.783	-0.019	1.090	865311	1.28		107	633	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.764	3.783	-0.019	1.000	18816206	22.3	Target=4.11	96.0	9491	M
499.00 > 99.00	3.764	3.783	-0.019	1.000	4470828		4.21(2.05-6.16)	96.0	4135	M
D 19 13C5 PFNA										
468.00 > 423.00	3.794	3.793	0.001	1.098	1902682	1.26		101	3585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.784	3.803	-0.019	0.997	33868175	22.7	Target=8.48	90.8	4295	
463.00 > 169.00	3.794	3.803	-0.009	1.000	4166541		8.13(4.24-12.72)	90.8	5885	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.935	3.947	-0.012	1.045	49573864	19.2		82.2	122080	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.063	4.074	-0.011	1.080	15127922	23.5	Target=2.17	97.9	34897	
549.00 > 99.00	4.063	4.074	-0.011	1.080	7013195		2.16(1.08-3.25)	97.9	11531	
D 23 13C2 PFDA										
515.00 > 470.00	4.097	4.108	-0.011	1.186	1981566	1.25		100	6749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.097	4.108	-0.011	1.000	35125264	22.2	Target=10.55	88.7	8430	
513.00 > 169.00	4.097	4.108	-0.011	1.000	3557829		9.87(5.27-15.82)	88.7	7050	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.109	4.108	0.001	1.190	316911	1.27		106	810	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.109	4.120	-0.011	1.000	12048759	20.7		86.2	64543	
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.214	1759972	1.30		104	4229	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	31572610	23.5		94.0	87074	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.237	4.249	-0.012	1.227	505130	1.34		107	228	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.237	4.260	-0.023	1.000	8770277	23.9		95.7	2253	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.334	4.346	-0.012	1.152	11299421	22.8	Target=2.28	94.7	10546	
599.00 > 99.00	4.334	4.346	-0.012	1.152	4799204		2.35(1.14-3.42)	94.7	10362	
D 30 13C2 PFUnA										
565.00 > 520.00	4.358	4.382	-0.024	1.262	1790927	1.20		96.0	5216	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.003	32455800	22.0	Target=11.30	87.9	7502	
563.00 > 169.00	4.370	4.382	-0.012	1.003	3240672		10.02(5.65-16.96)	87.9	10679	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.370	4.393	-0.023	1.265	430319	1.18		94.6	987	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.003	8392085	24.4		97.5	27196	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.186	64636051	16.3		69.2	118442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.595	4.605	-0.010	1.330	1994604	1.31		105	5976	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.595	4.616	-0.021	1.000	34331936	21.1	Target=8.15	84.6	1991	
613.00 > 169.00	4.595	4.616	-0.021	1.000	4769328		7.20(4.07-12.22)	84.6	22673	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.627	-0.010	1.124	8134970	23.4		96.9	121535	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.267	3739893	22.3	Target=0.50	92.2	19469	
699.00 > 99.00	4.770	4.779	-0.009	1.267	7697869		0.49(0.25-0.75)	92.2	16871	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.047	35226779	20.6	Target=6.61	82.5	2165	
663.00 > 169.00	4.809	4.822	-0.013	1.047	5990766		5.88(3.31-9.92)	82.5	4583	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.447	1918275	1.27		102	5387	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	4171778	24.3	Target=0.96	97.2	14200	
713.00 > 219.00	4.987	5.008	-0.021	0.998	4312498		0.97(0.48-1.44)	97.2	10053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	37681202	20.5	Target=7.69	82.2	1953	
813.00 > 169.00	5.317	5.328	-0.011	1.000	5392503		6.99(3.85-11.54)	82.2	4998	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.540	2292454	1.32		105	5350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	30813591	21.5	Target=9.13	86.1	331	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	3700392		8.33(4.56-13.69)	86.1	382	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

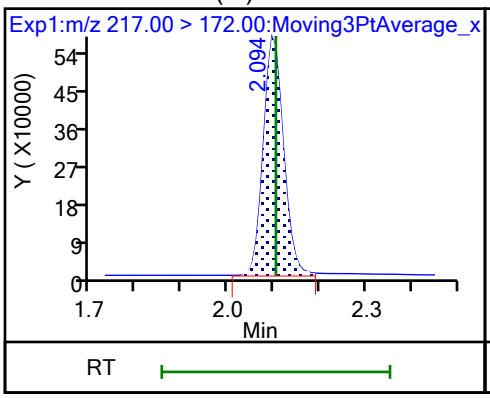
PFAS23NCIC7_00001 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:08 Chrom Revision: 2.3 19-Jul-2023 18:28:48

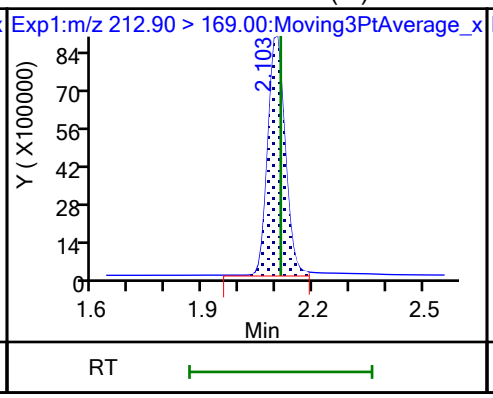
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Injection Date: 26-Jul-2023 18:05:46 Instrument ID: LC812
Lims ID: IC 7
Client ID:
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

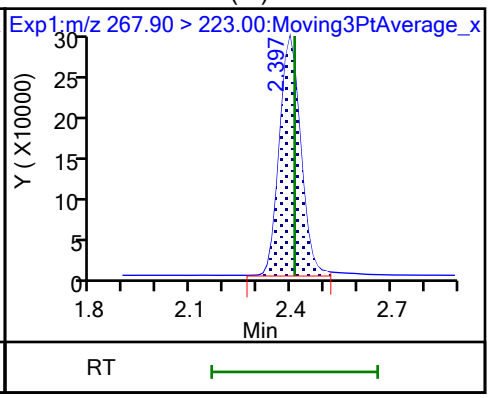
D 1 13C4 PFBA (M)



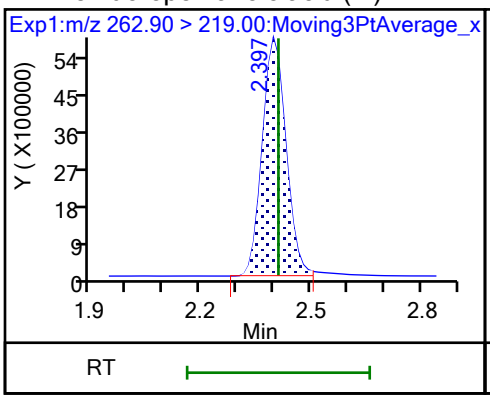
2 Perfluorobutanoic acid (M)



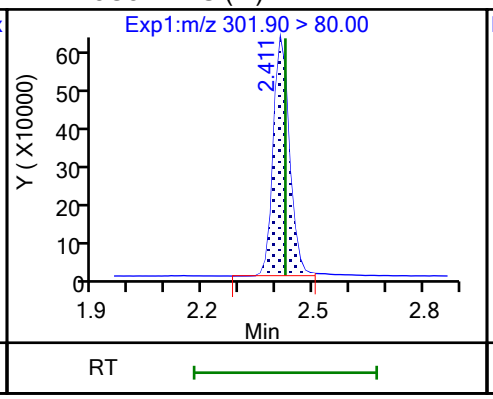
D 3 13C5 PFPeA (M)



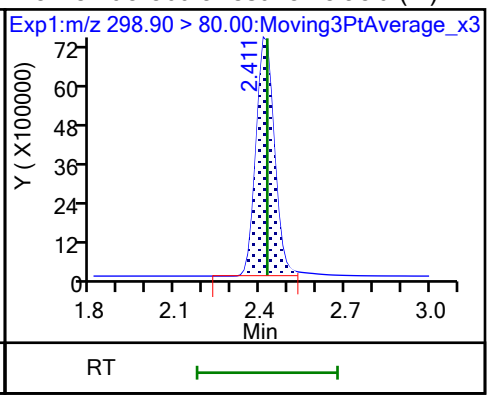
4 Perfluoropentanoic acid (M)



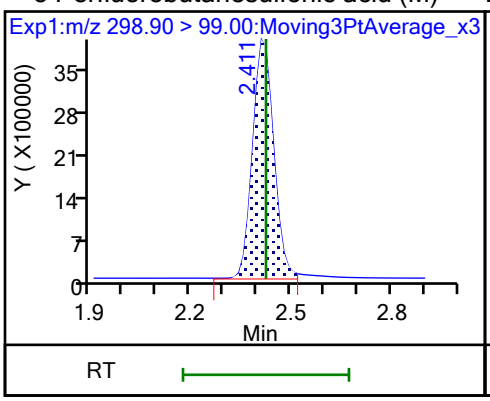
D 47 13C3 PFBS (M)



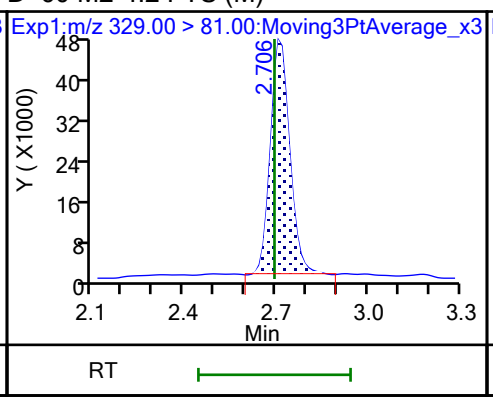
5 Perfluorobutanesulfonic acid (M)



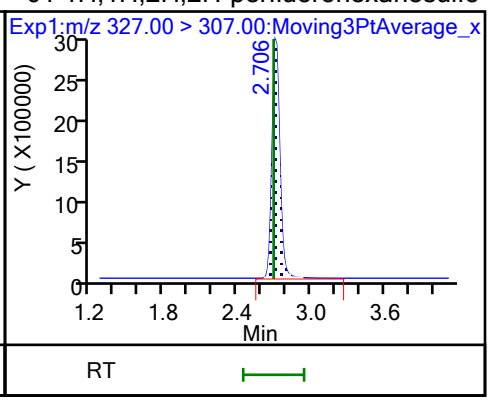
5 Perfluorobutanesulfonic acid (M)



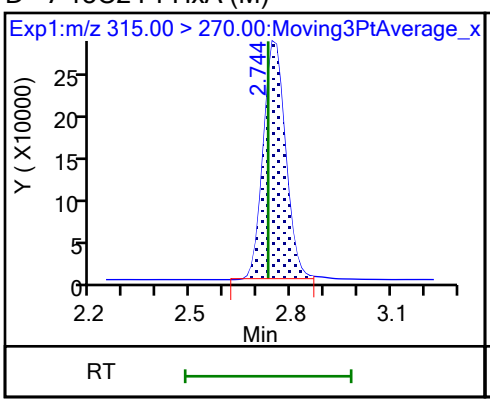
D 60 M2-4:2 FTS (M)



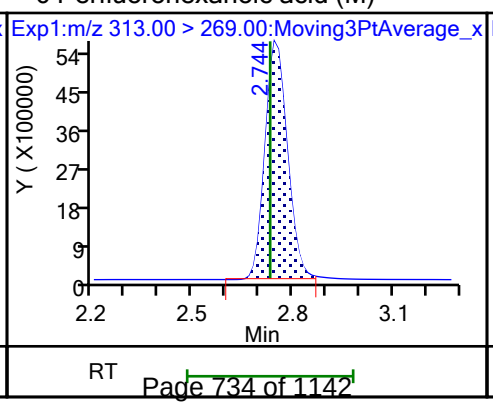
61 1H,1H,2H,2H-perfluorohexanesulfo



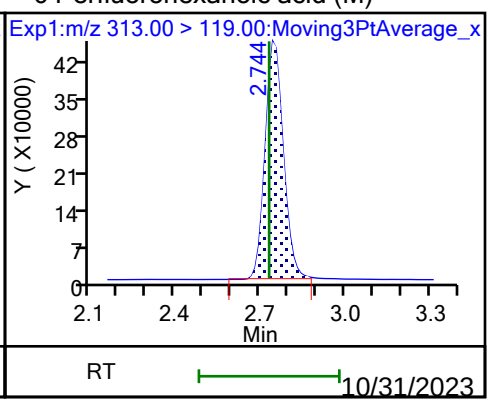
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

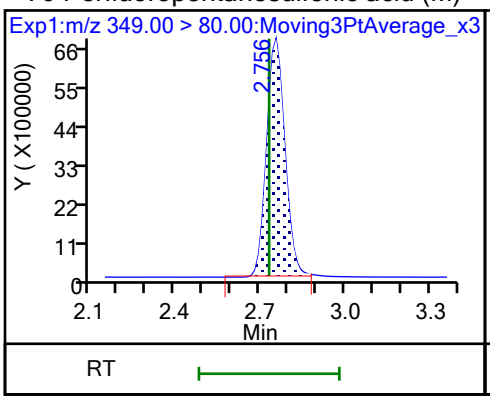


6 Perfluorohexanoic acid (M)

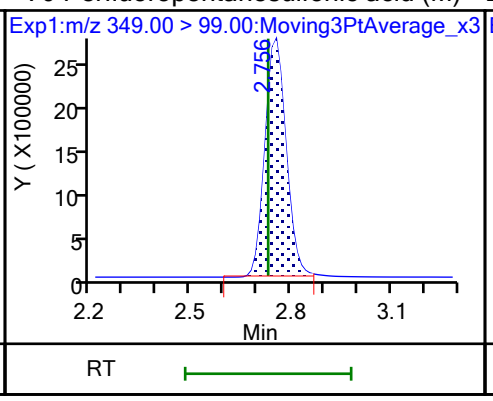


10/31/2023
10:17 AM

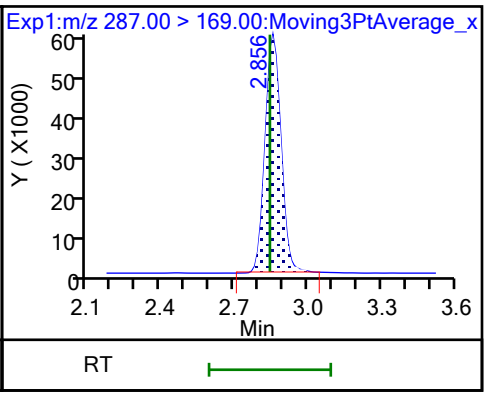
70 Perfluoropentanesulfonic acid (M)



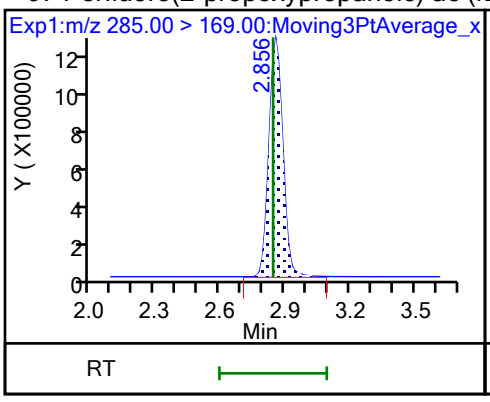
70 Perfluoropentanesulfonic acid (M)



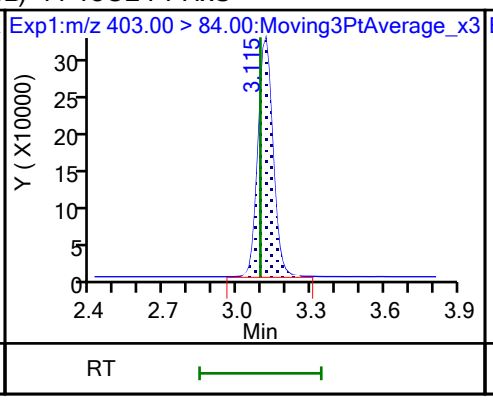
D 64 13C3 HFPO-DA



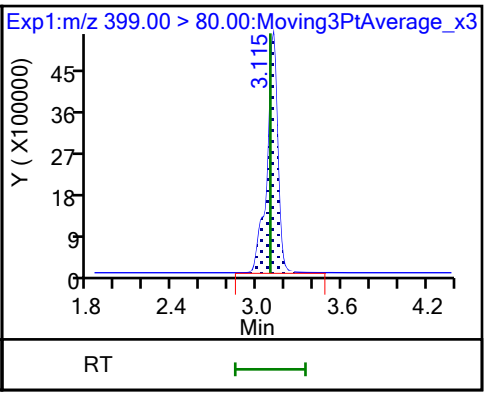
67 Perfluoro(2-propoxypropanoic) ac (M)



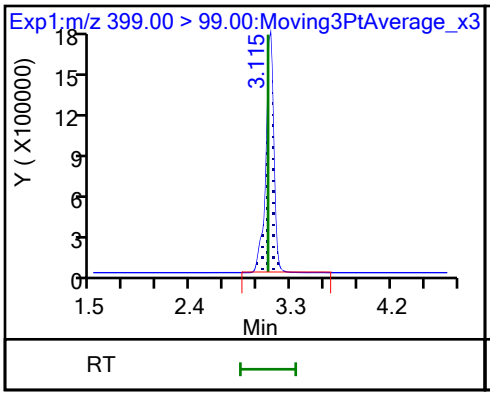
D 11 18O2 PFHxS



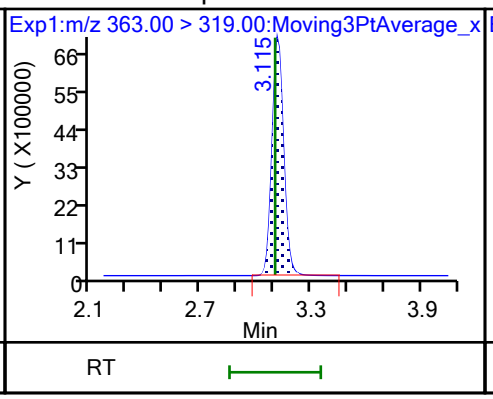
8 Perfluorohexanesulfonic acid



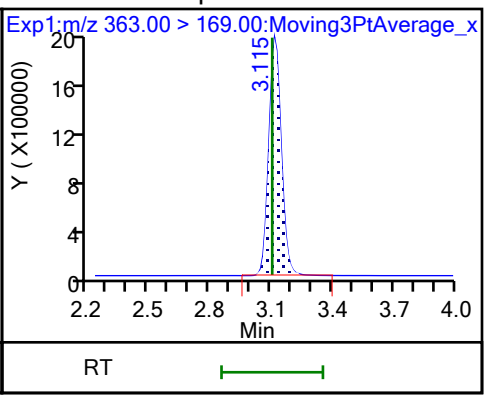
8 Perfluorohexanesulfonic acid



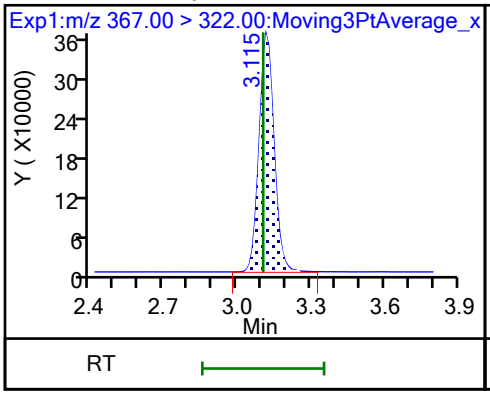
10 Perfluoroheptanoic acid



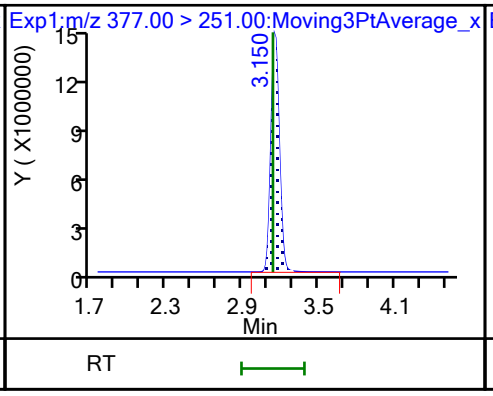
10 Perfluoroheptanoic acid



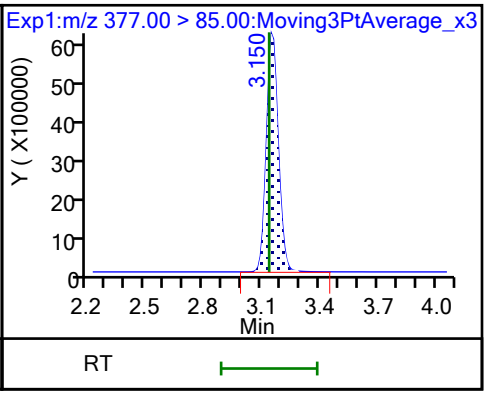
D 9 13C4 PFHpA



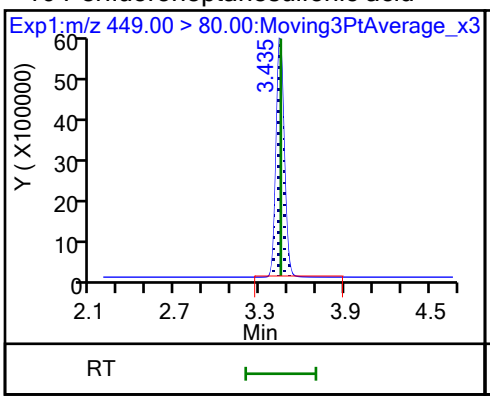
77 DONA



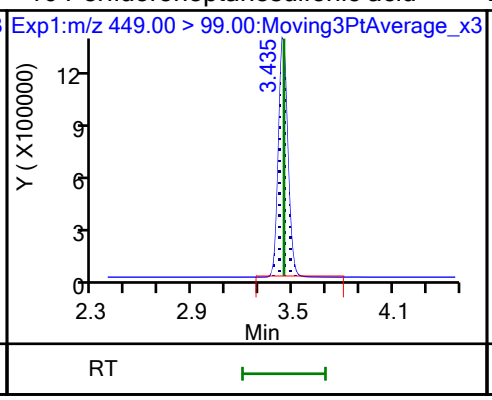
77 DONA



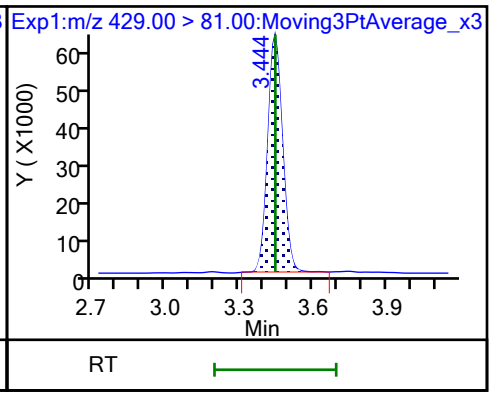
16 Perfluoroheptanesulfonic acid



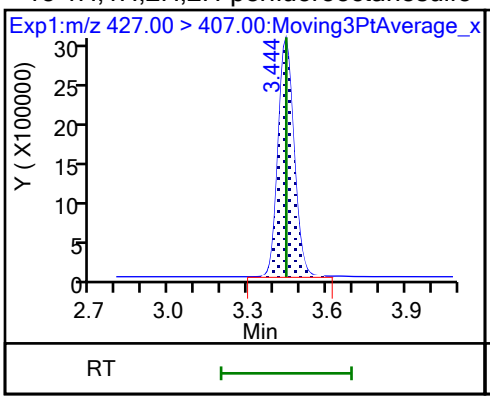
16 Perfluoroheptanesulfonic acid



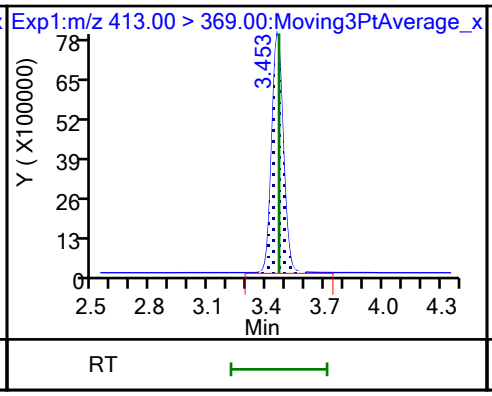
D 12 M2-6:2 FTS



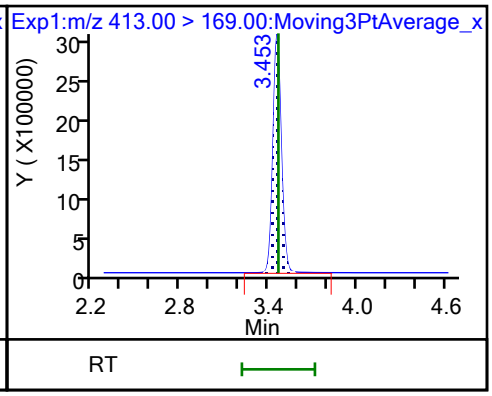
13 1H,1H,2H,2H-perfluorooctanesulfo



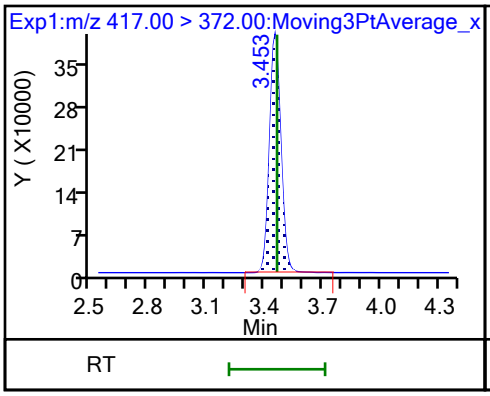
15 Perfluorooctanoic acid



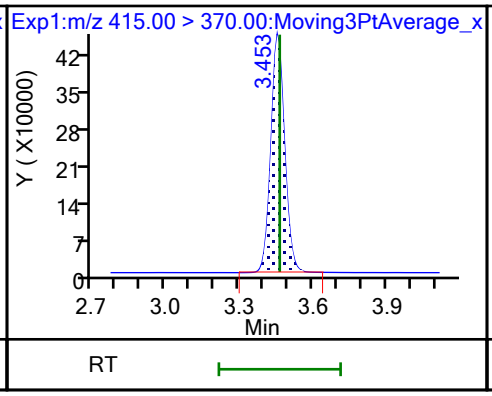
15 Perfluorooctanoic acid



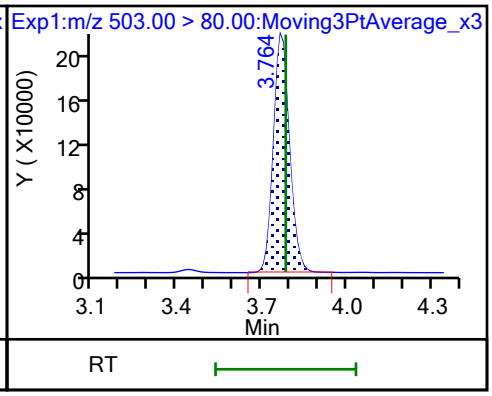
D 14 13C4 PFOA



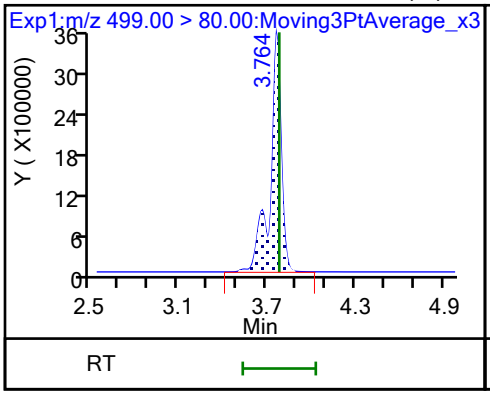
* 62 13C2 PFOA



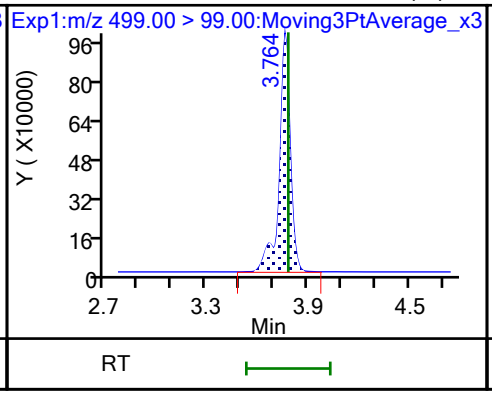
D 18 13C4 PFOS



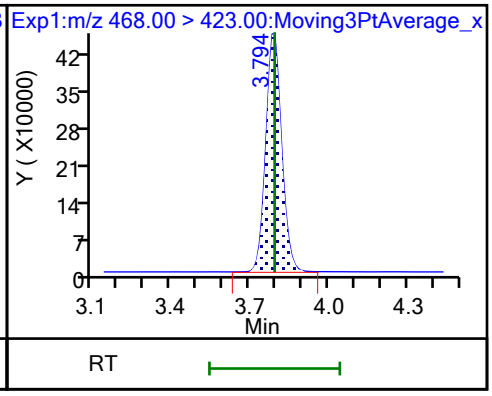
17 Perfluorooctanesulfonic acid (M)



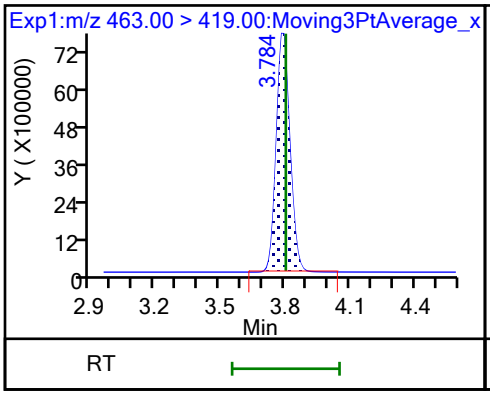
17 Perfluorooctanesulfonic acid (M)



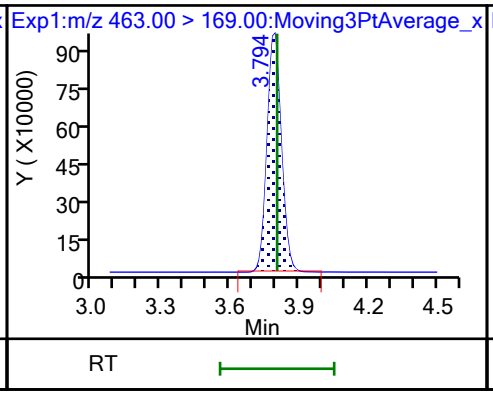
D 19 13C5 PFNA



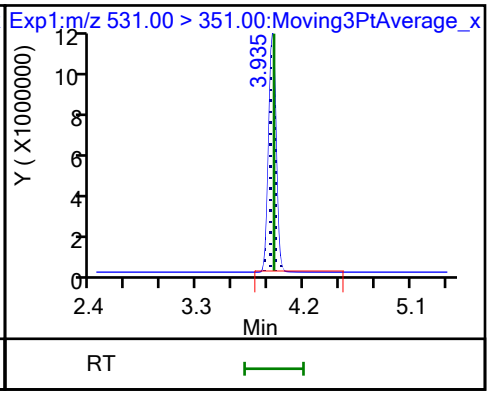
20 Perfluorononanoic acid



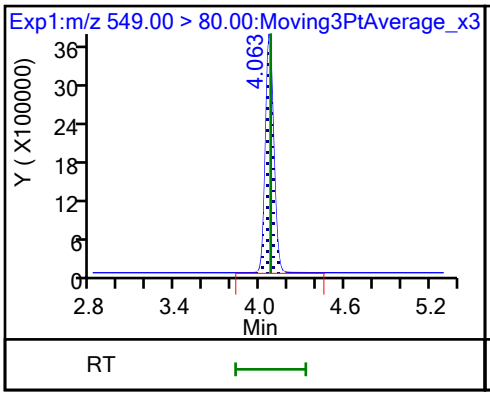
20 Perfluorononanoic acid



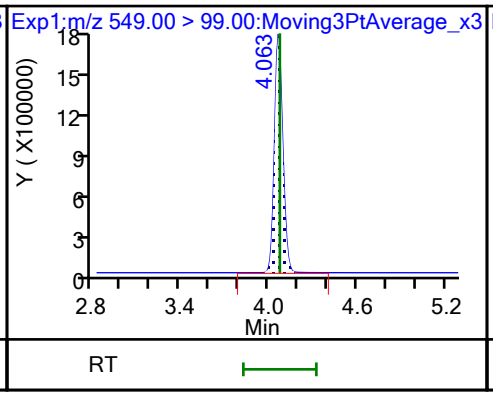
69 9-Chlorohexadecafluoro-3-oxanona



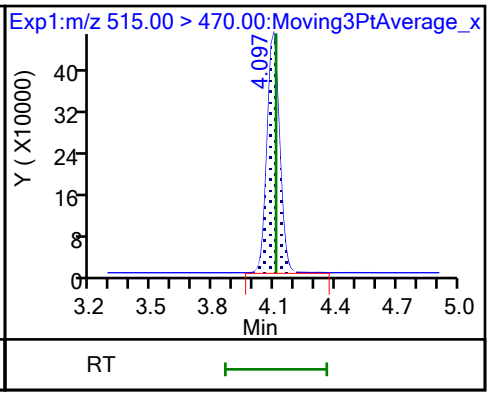
68 Perfluorononanesulfonic acid



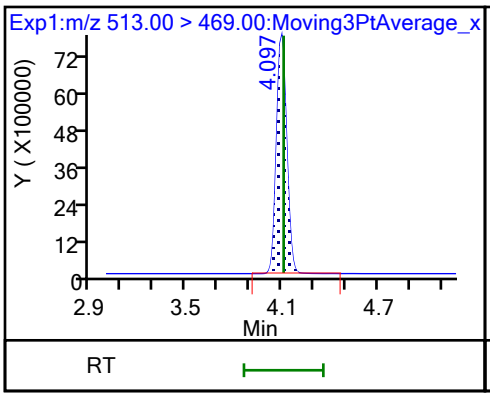
68 Perfluorononanesulfonic acid



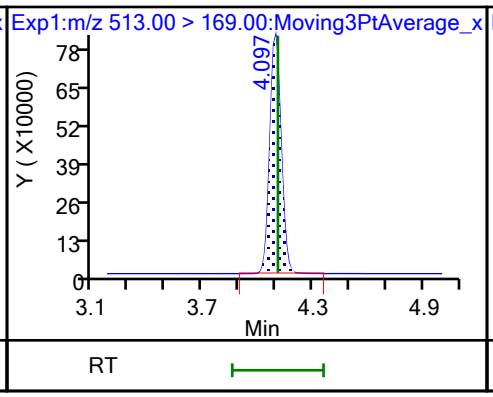
D 23 13C2 PFDA



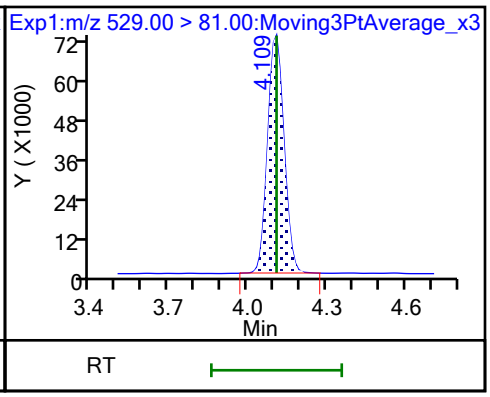
24 Perfluorodecanoic acid



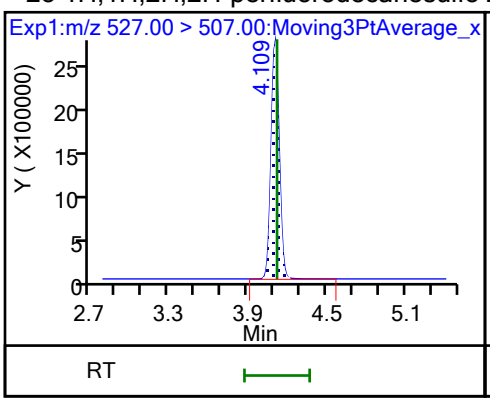
24 Perfluorodecanoic acid



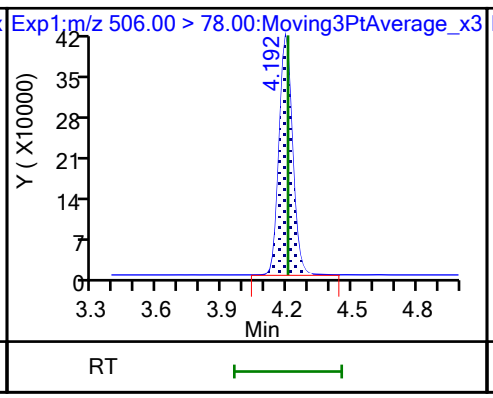
D 26 M2-8:2 FTS



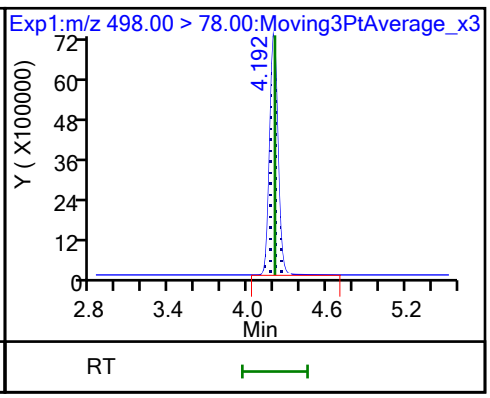
25 1H,1H,2H,2H-perfluorodecanesulfo



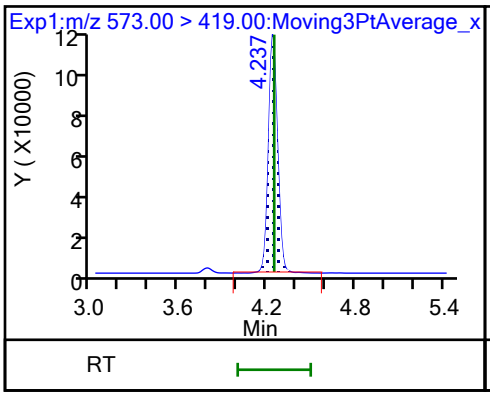
D 21 13C8 FOSA



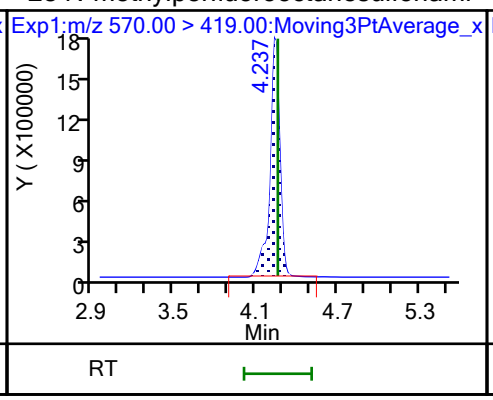
22 Perfluorooctanesulfonamide



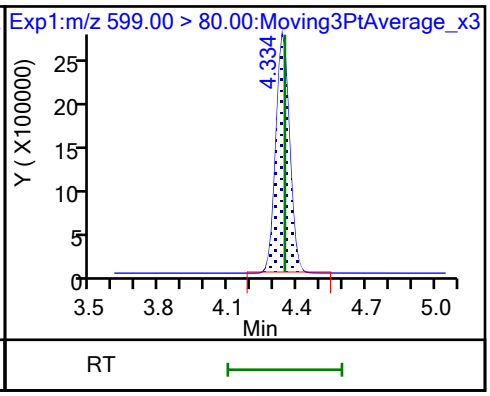
D 27 d3-NMeFOSAA



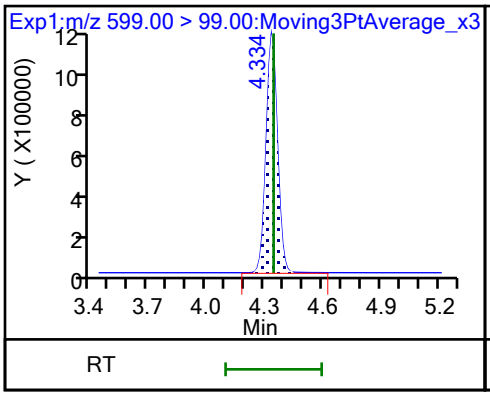
28 N-methylperfluorooctanesulfonami



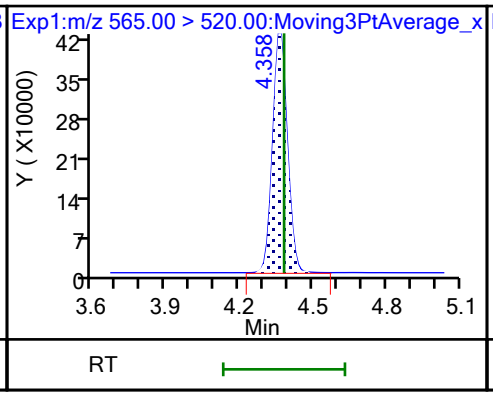
29 Perfluorodecanesulfonic acid



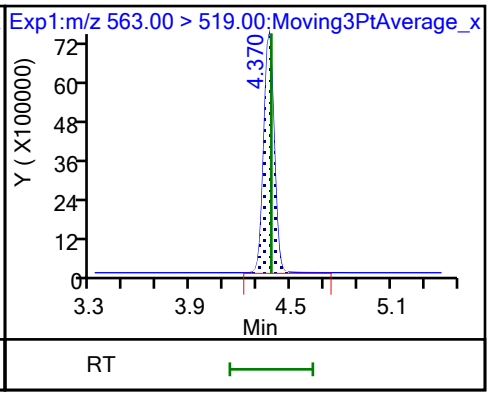
29 Perfluorodecanesulfonic acid



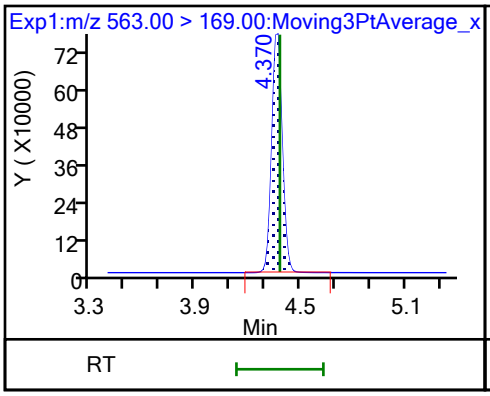
D 30 13C2 PFUnA



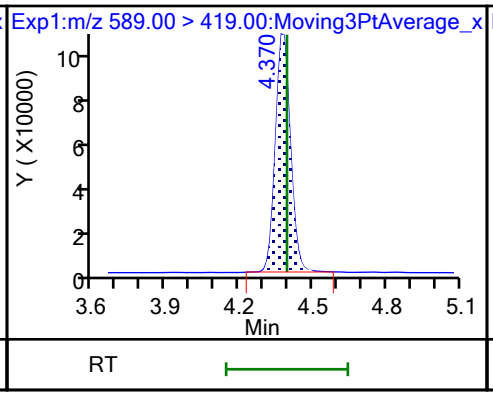
31 Perfluoroundecanoic acid



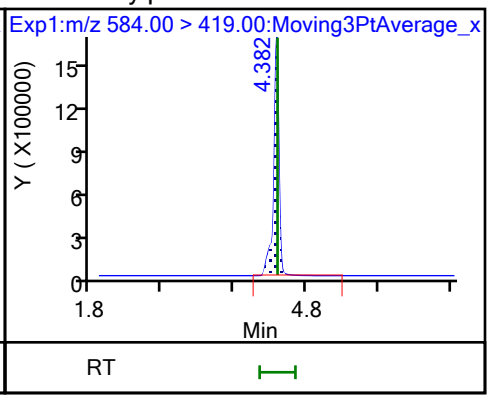
31 Perfluoroundecanoic acid



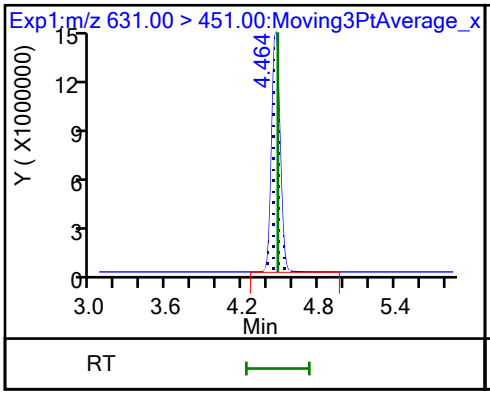
D 32 d5-NEtFOSAA



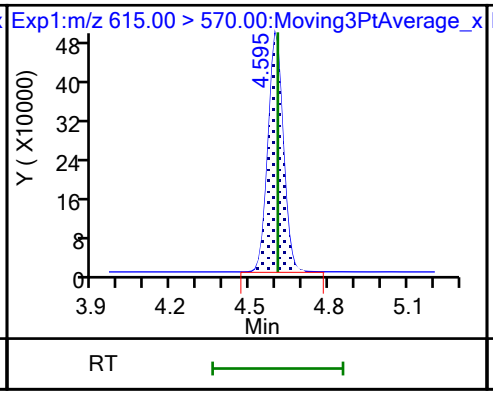
33 N-ethylperfluorooctanesulfonamid



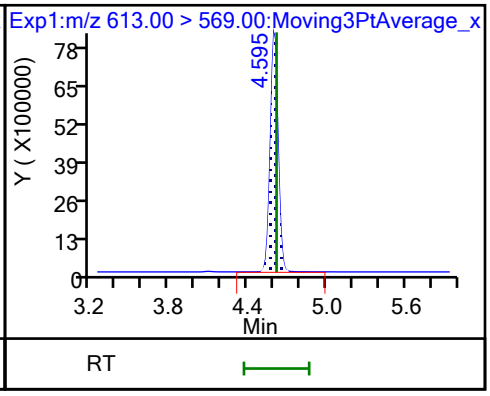
66 11-Chloroeicosafluoro-3-oxaundec



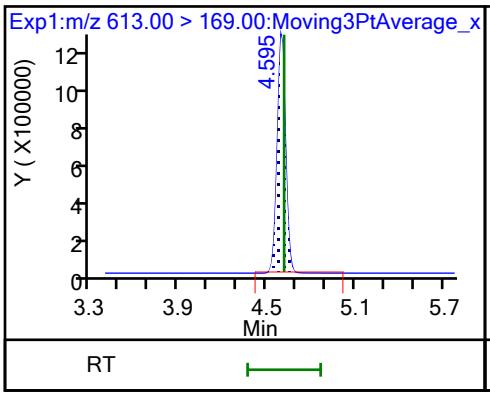
D 36 13C2 PFDoA



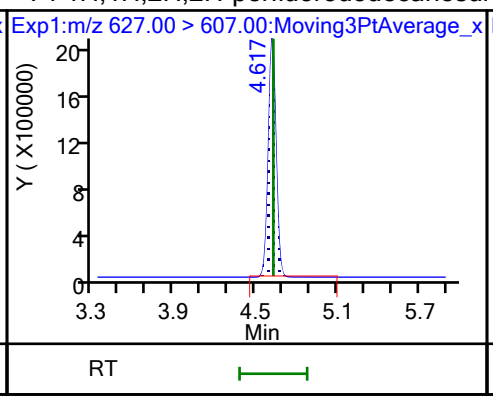
37 Perfluorododecanoic acid



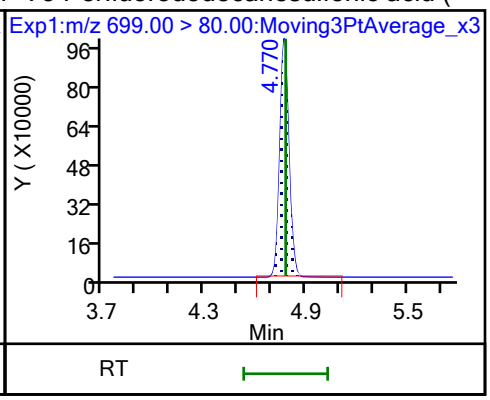
37 Perfluorododecanoic acid



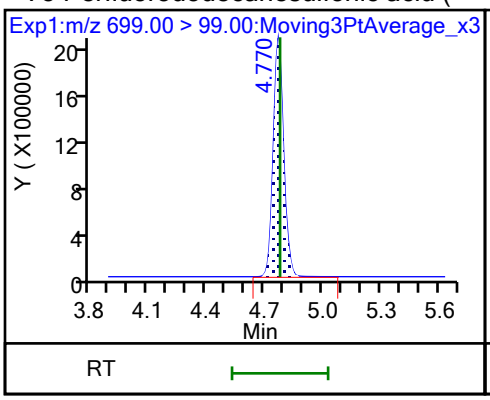
74 1H,1H,2H,2H-perfluorododecanesul



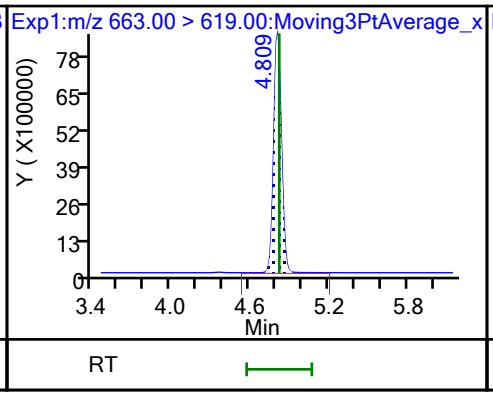
75 Perfluorododecanesulfonic acid (



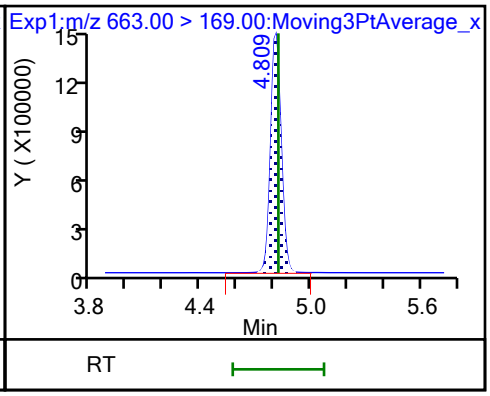
75 Perfluorododecanesulfonic acid (



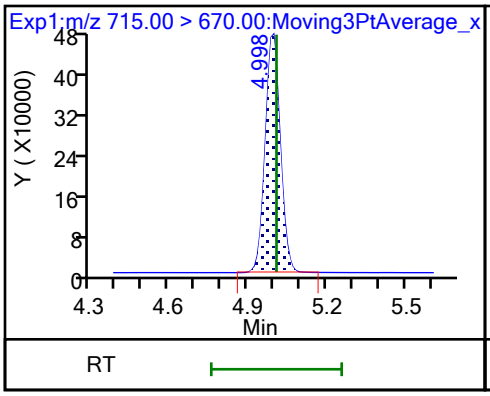
41 Perfluorotridecanoic acid



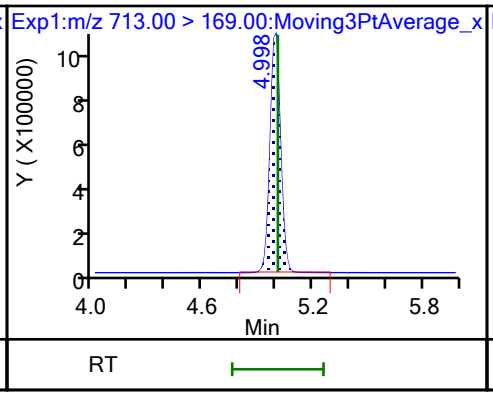
41 Perfluorotridecanoic acid



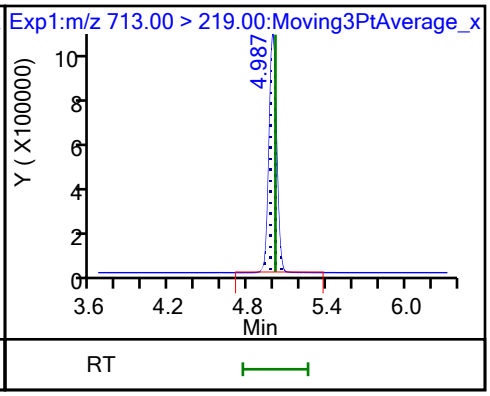
D 43 13C2 PFTeDA



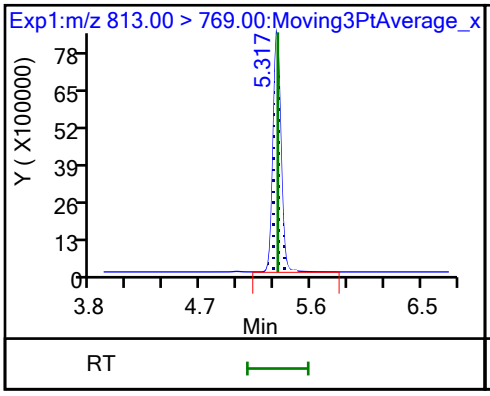
42 Perfluorotetradecanoic acid



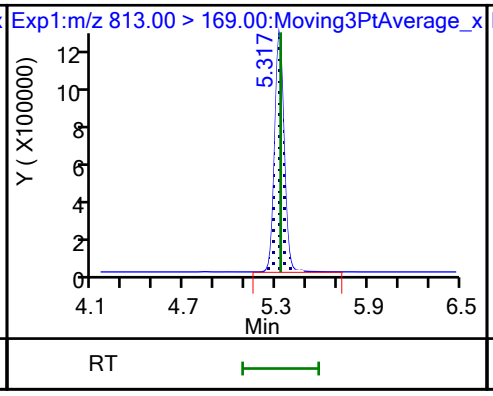
42 Perfluorotetradecanoic acid



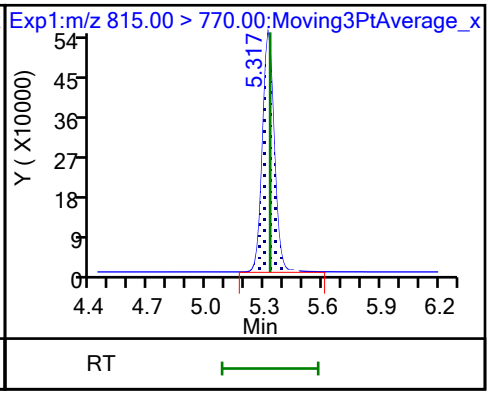
45 Perfluorohexadecanoic acid



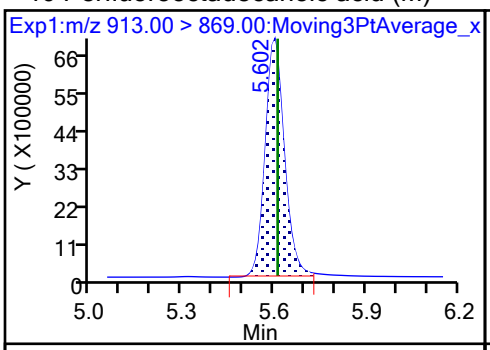
45 Perfluorohexadecanoic acid



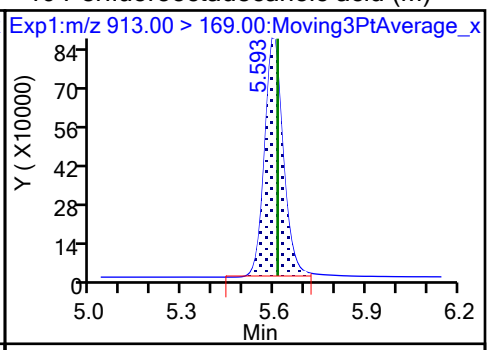
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Calibration / Perfluorobutanoic acid

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

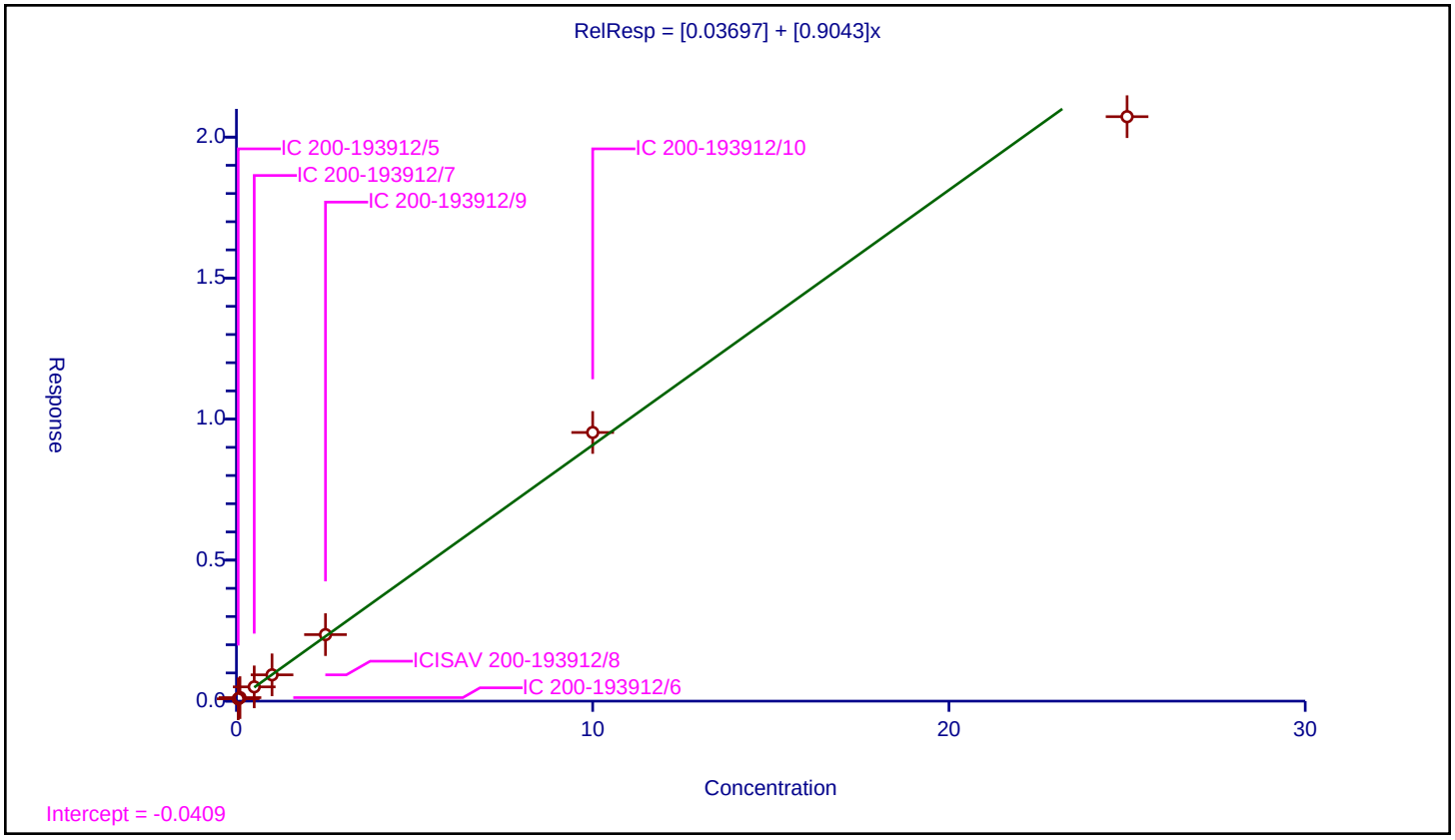
Curve Coefficients

Intercept:	0.03697
Slope:	0.9043

Error Coefficients

Standard Error:	14300000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.082621	1.25	2253572.0	1.652421	Y
2	IC 200-193912/6	0.1	0.124976	1.25	1926725.0	1.249757	Y
3	IC 200-193912/7	0.5	0.505344	1.25	1916527.0	1.010688	Y
4	ICISAV 200-193912/8	1.0	0.932118	1.25	1929850.0	0.932118	Y
5	IC 200-193912/9	2.5	2.358169	1.25	2025338.0	0.943268	Y
6	IC 200-193912/10	10.0	9.52612	1.25	1663241.0	0.952612	Y
7	IC 200-193912/11	25.0	20.72438	1.25	1758198.0	0.828975	Y



10/31/2023
10:17 AM

Calibration / Perfluoropentanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

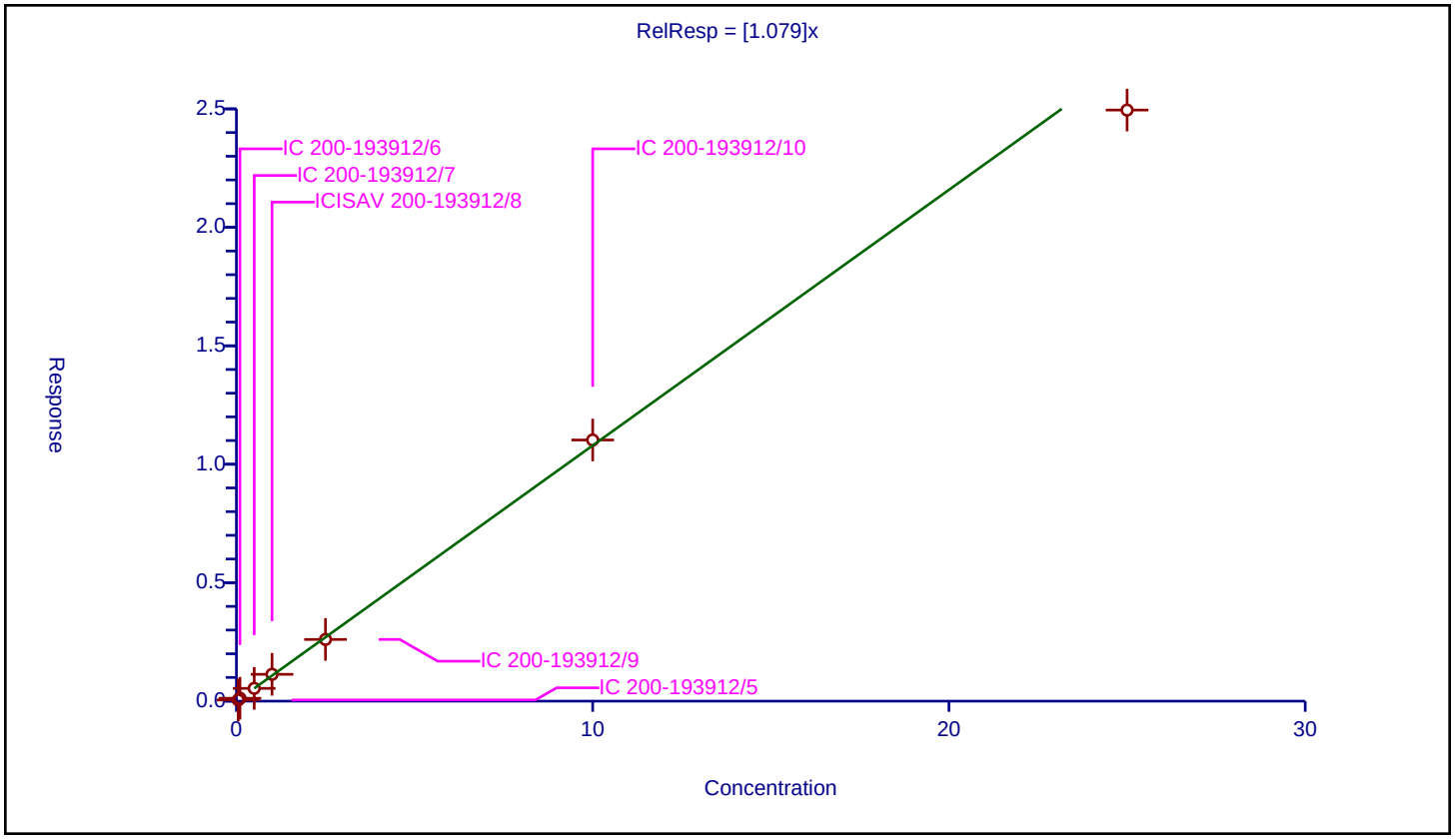
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.049068	1.25	1827623.0	0.981357	Y
2	IC 200-193912/6	0.1	0.121675	1.25	1458161.0	1.216747	Y
3	IC 200-193912/7	0.5	0.540415	1.25	1507442.0	1.080831	Y
4	ICISAV 200-193912/8	1.0	1.132983	1.25	1529086.0	1.132983	Y
5	IC 200-193912/9	2.5	2.604075	1.25	1531883.0	1.04163	Y
6	IC 200-193912/10	10.0	11.023306	1.25	1291692.0	1.102331	Y
7	IC 200-193912/11	25.0	24.951062	1.25	1319141.0	0.998042	Y



10/31/2023
10:17 AM

Calibration / Perfluorobutanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

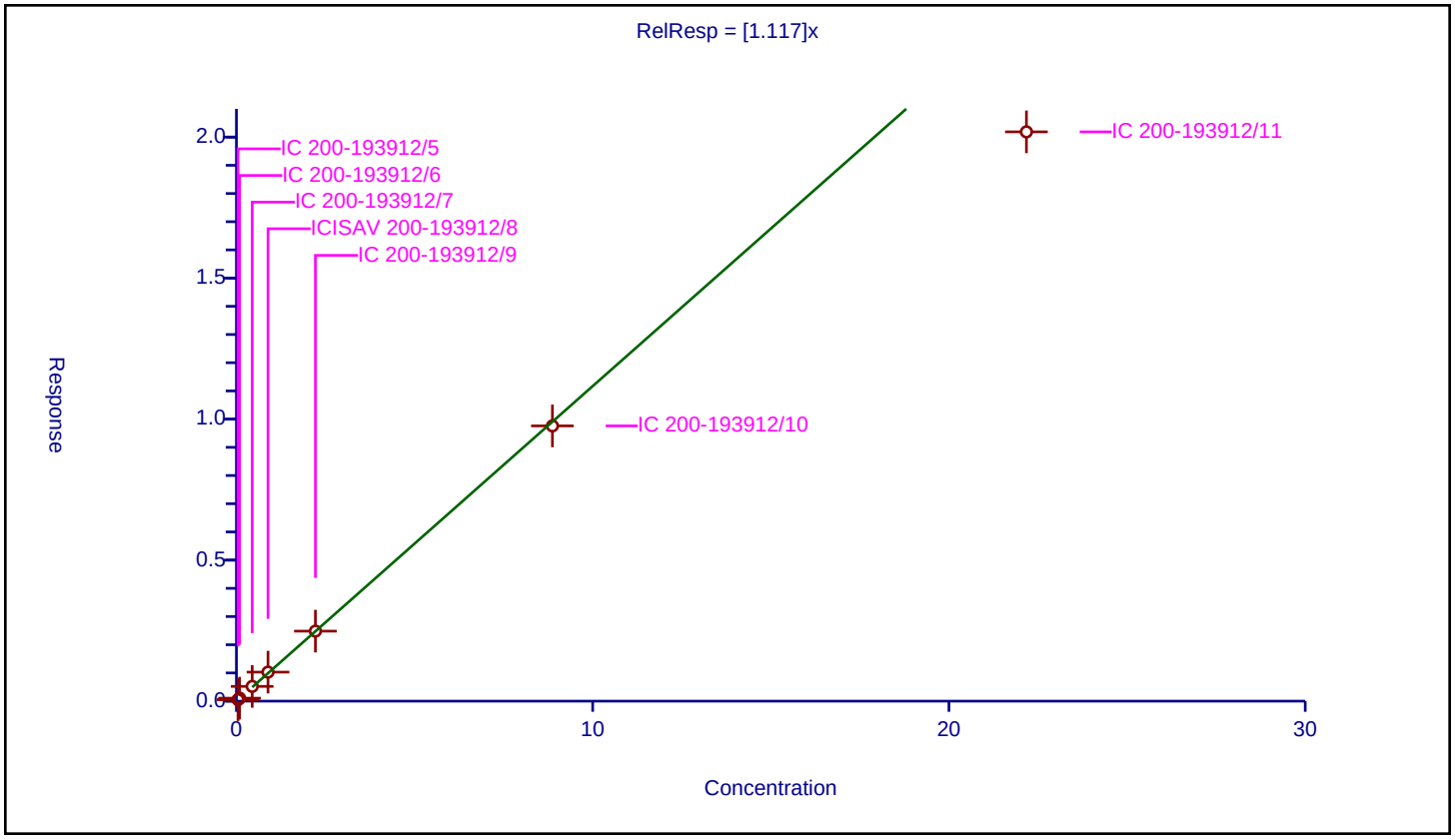
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	14900000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04435	0.0515	1.1625	2112456.0	1.161217	Y
2	IC 200-193912/6	0.0887	0.105408	1.1625	1835537.0	1.188361	Y
3	IC 200-193912/7	0.4435	0.522575	1.1625	1758991.0	1.178297	Y
4	ICISAV 200-193912/8	0.887	1.029257	1.1625	1858340.0	1.16038	Y
5	IC 200-193912/9	2.2175	2.482423	1.1625	1976378.0	1.119469	Y
6	IC 200-193912/10	8.87	9.759782	1.1625	1657995.0	1.100314	Y
7	IC 200-193912/11	22.175	20.18591	1.1625	1925353.0	0.9103	Y



10/31/2023
10:17 AM

Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

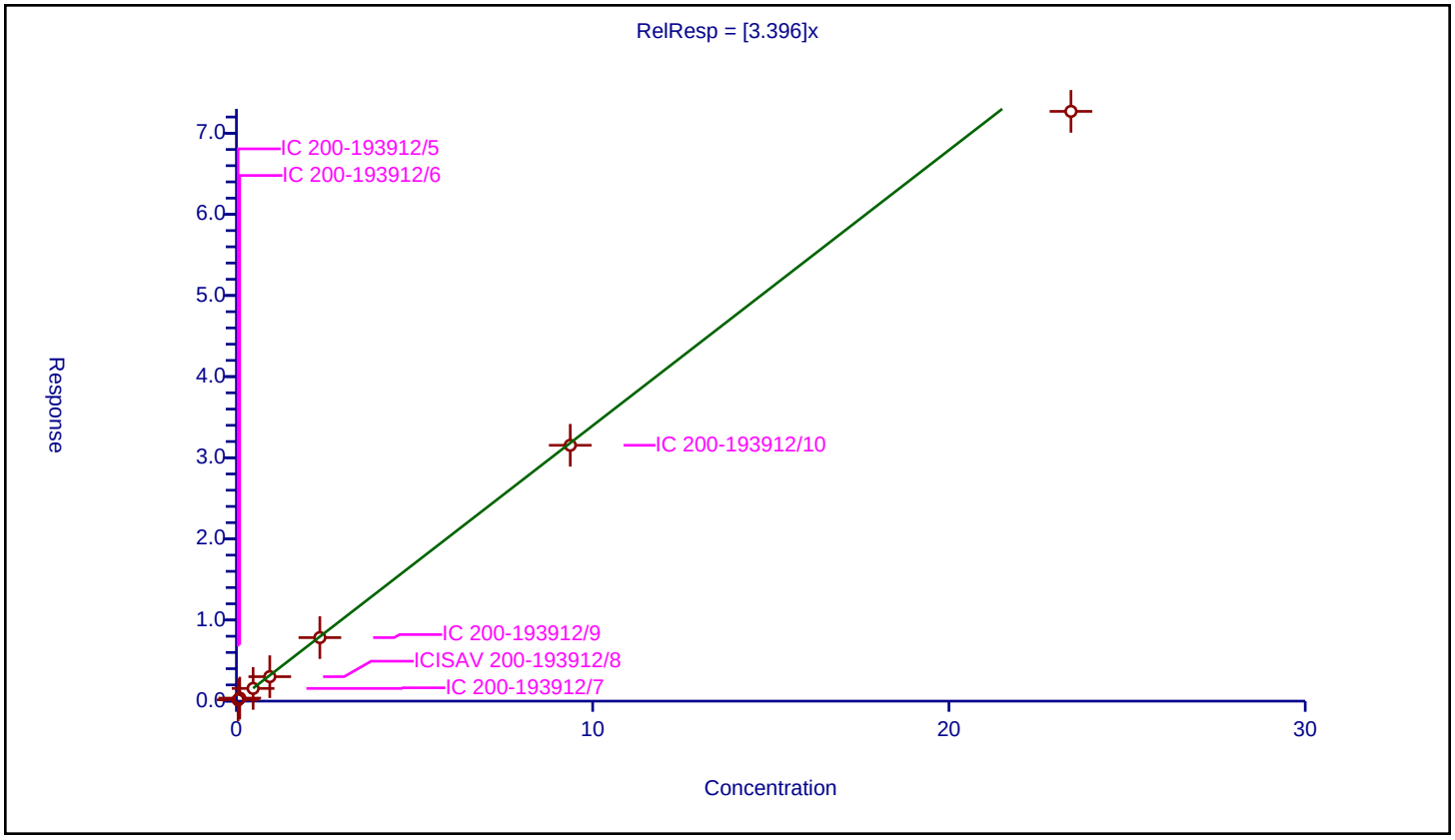
Curve Coefficients

Intercept:	0
Slope:	3.396

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04685	0.160153	1.1675	264843.0	3.41841	Y
2	IC 200-193912/6	0.0937	0.372622	1.1675	202715.0	3.976756	Y
3	IC 200-193912/7	0.4685	1.567171	1.1675	215257.0	3.345081	Y
4	ICISAV 200-193912/8	0.937	3.015993	1.1675	220382.0	3.218776	Y
5	IC 200-193912/9	2.3425	7.830737	1.1675	221658.0	3.342898	Y
6	IC 200-193912/10	9.37	31.536056	1.1675	194992.0	3.365641	Y
7	IC 200-193912/11	23.425	72.694144	1.1675	207012.0	3.103272	Y



Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

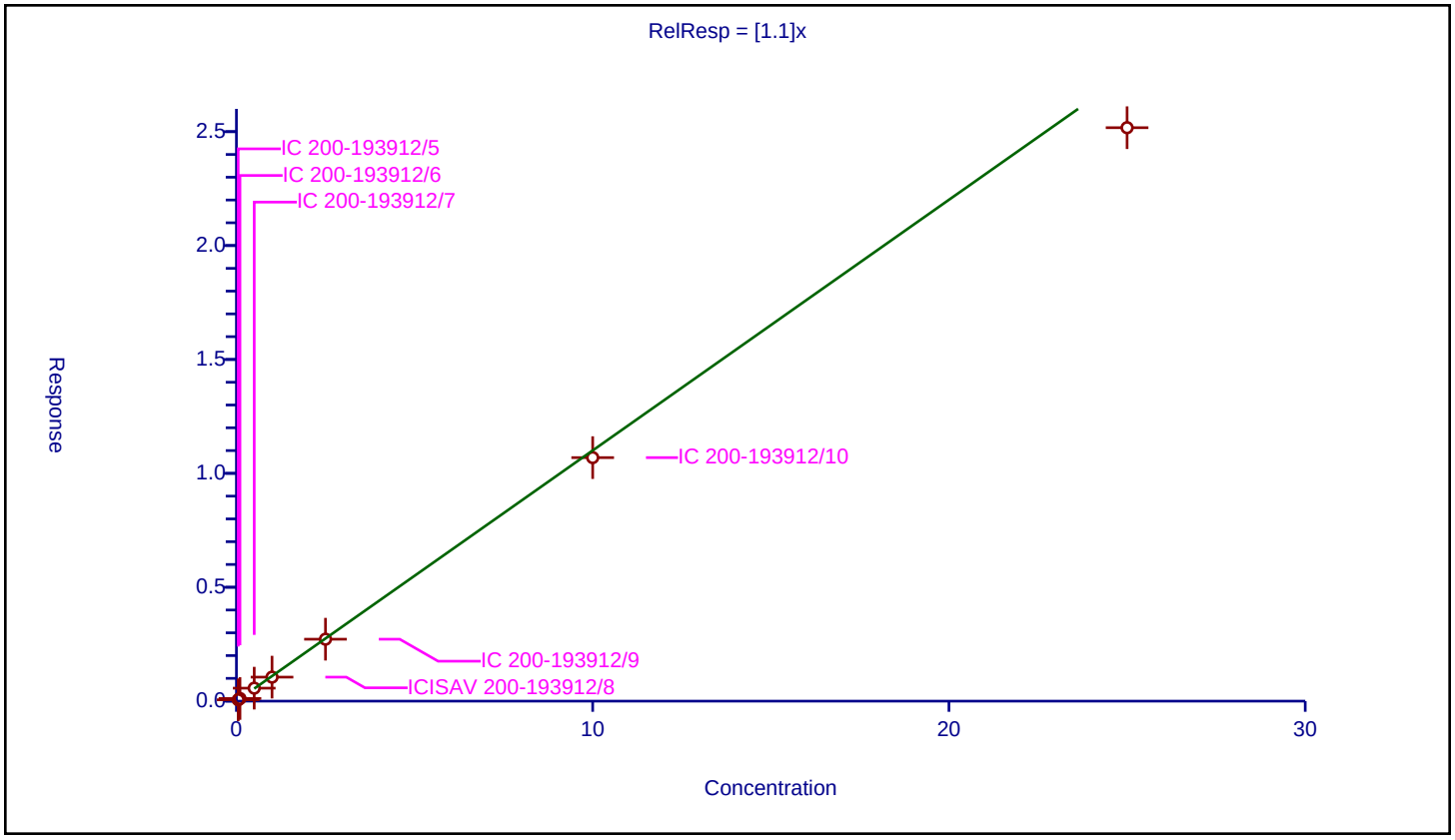
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059408	1.25	1853797.0	1.188169	Y
2	IC 200-193912/6	0.1	0.11566	1.25	1566461.0	1.156596	Y
3	IC 200-193912/7	0.5	0.570489	1.25	1472867.0	1.140977	Y
4	ICISAV 200-193912/8	1.0	1.053678	1.25	1544435.0	1.053678	Y
5	IC 200-193912/9	2.5	2.719251	1.25	1545081.0	1.087701	Y
6	IC 200-193912/10	10.0	10.691075	1.25	1345799.0	1.069107	Y
7	IC 200-193912/11	25.0	25.174033	1.25	1316912.0	1.006961	Y



Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

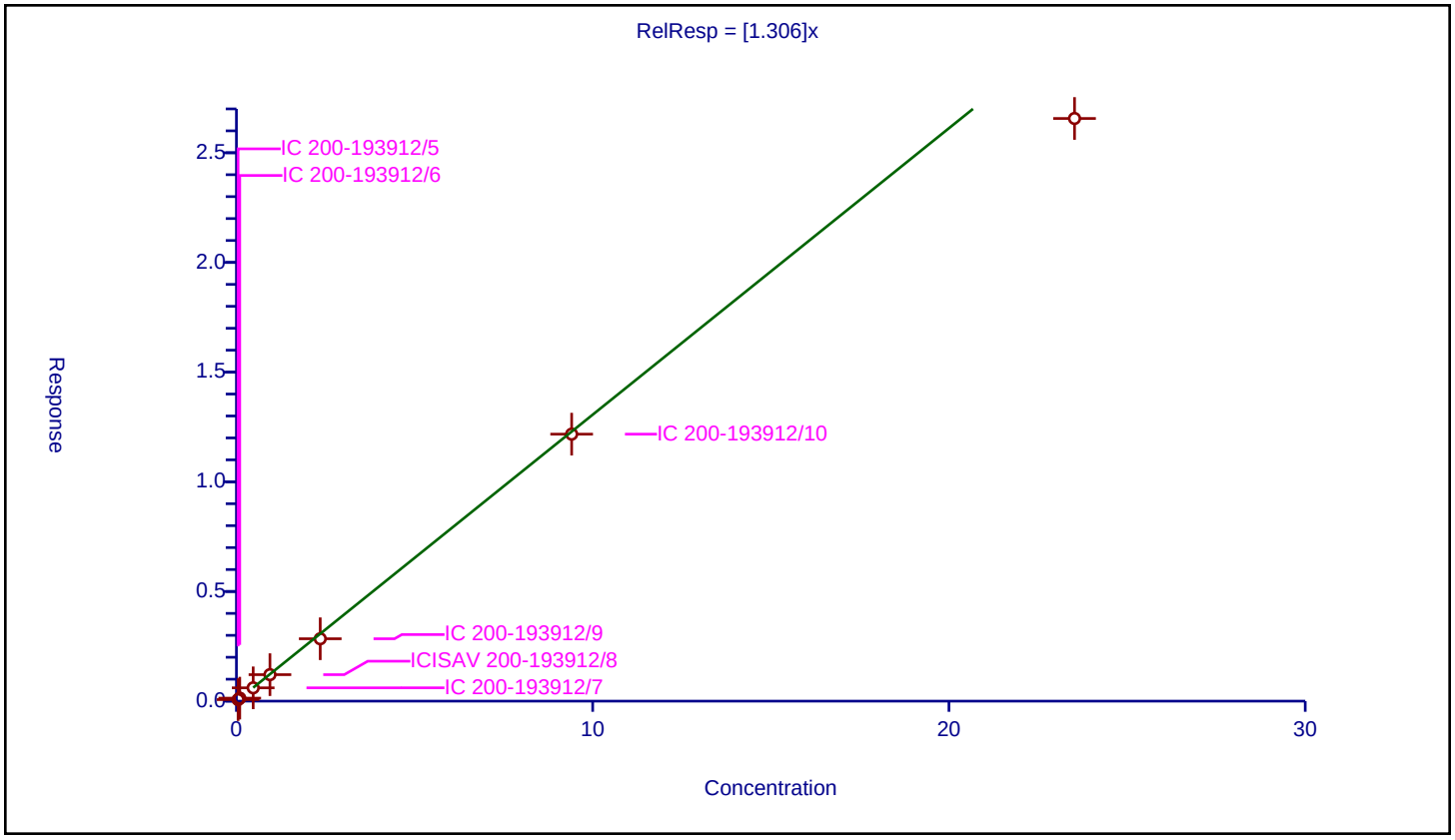
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04705	0.069845	1.1825	1487994.0	1.484482	Y
2	IC 200-193912/6	0.0941	0.136641	1.1825	1305238.0	1.452086	Y
3	IC 200-193912/7	0.4705	0.606956	1.1825	1353967.0	1.290024	Y
4	ICISAV 200-193912/8	0.941	1.207241	1.1825	1396957.0	1.282934	Y
5	IC 200-193912/9	2.3525	2.844335	1.1825	1406672.0	1.209069	Y
6	IC 200-193912/10	9.41	12.172239	1.1825	1242233.0	1.293543	Y
7	IC 200-193912/11	23.525	26.56316	1.1825	1370941.0	1.129146	Y



Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

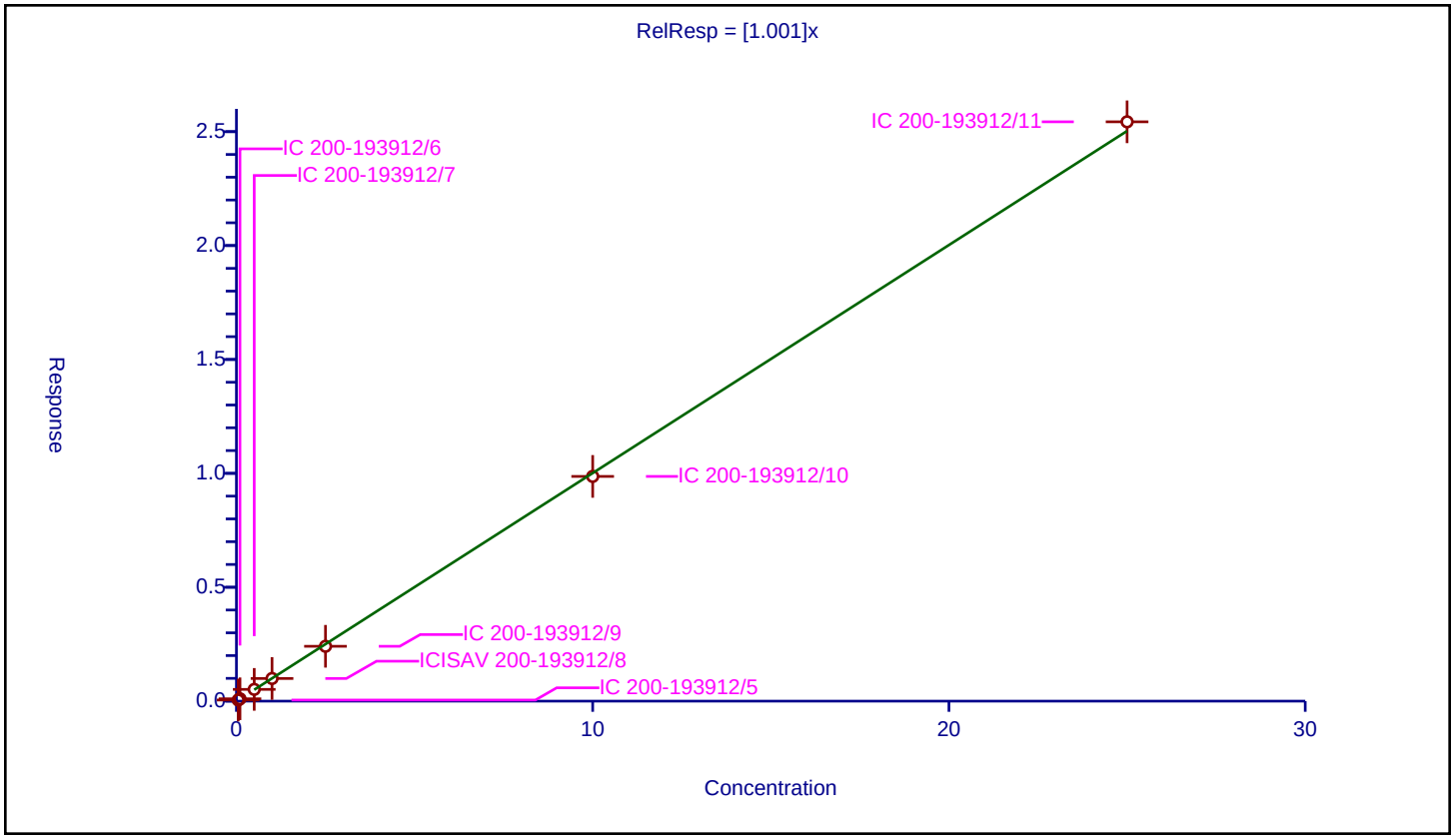
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.04907	1.25	346930.0	0.981394	Y
2	IC 200-193912/6	0.1	0.103291	1.25	299977.0	1.032913	Y
3	IC 200-193912/7	0.5	0.516151	1.25	279126.0	1.032303	Y
4	ICISAV 200-193912/8	1.0	0.994769	1.25	296521.0	0.994769	Y
5	IC 200-193912/9	2.5	2.407784	1.25	295164.0	0.963114	Y
6	IC 200-193912/10	10.0	9.865207	1.25	265620.0	0.986521	Y
7	IC 200-193912/11	25.0	25.432513	1.25	273677.0	1.017301	Y



10/31/2023
10:17 AM

Calibration / Perfluorohexanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

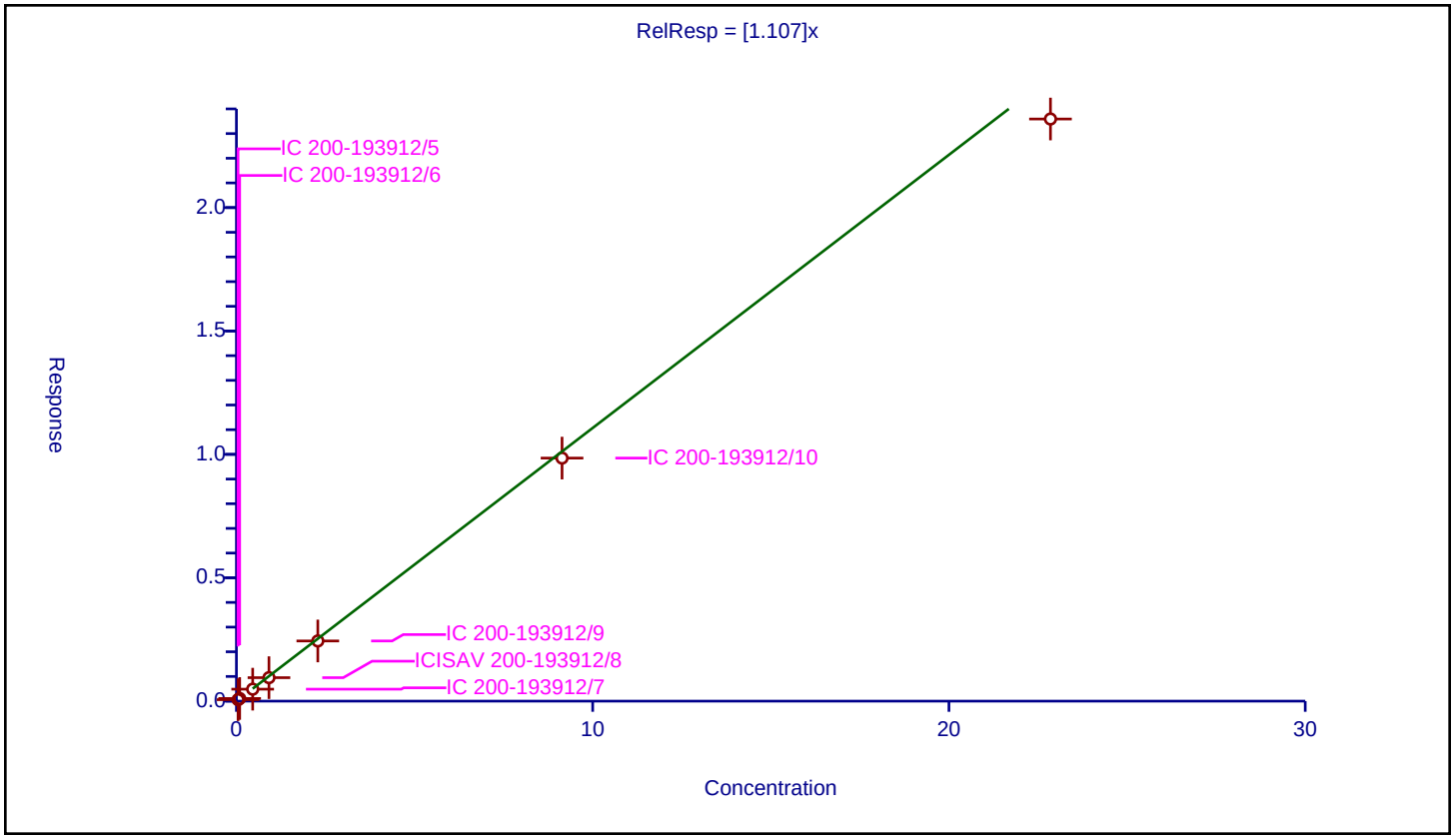
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0457	0.05908	1.1825	1487994.0	1.292778	Y
2	IC 200-193912/6	0.0914	0.107635	1.1825	1305238.0	1.177626	Y
3	IC 200-193912/7	0.457	0.484795	1.1825	1353967.0	1.06082	Y
4	ICISAV 200-193912/8	0.914	0.95088	1.1825	1396957.0	1.04035	Y
5	IC 200-193912/9	2.285	2.438823	1.1825	1406672.0	1.067319	Y
6	IC 200-193912/10	9.14	9.849131	1.1825	1242233.0	1.077585	Y
7	IC 200-193912/11	22.85	23.590185	1.1825	1370941.0	1.032393	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

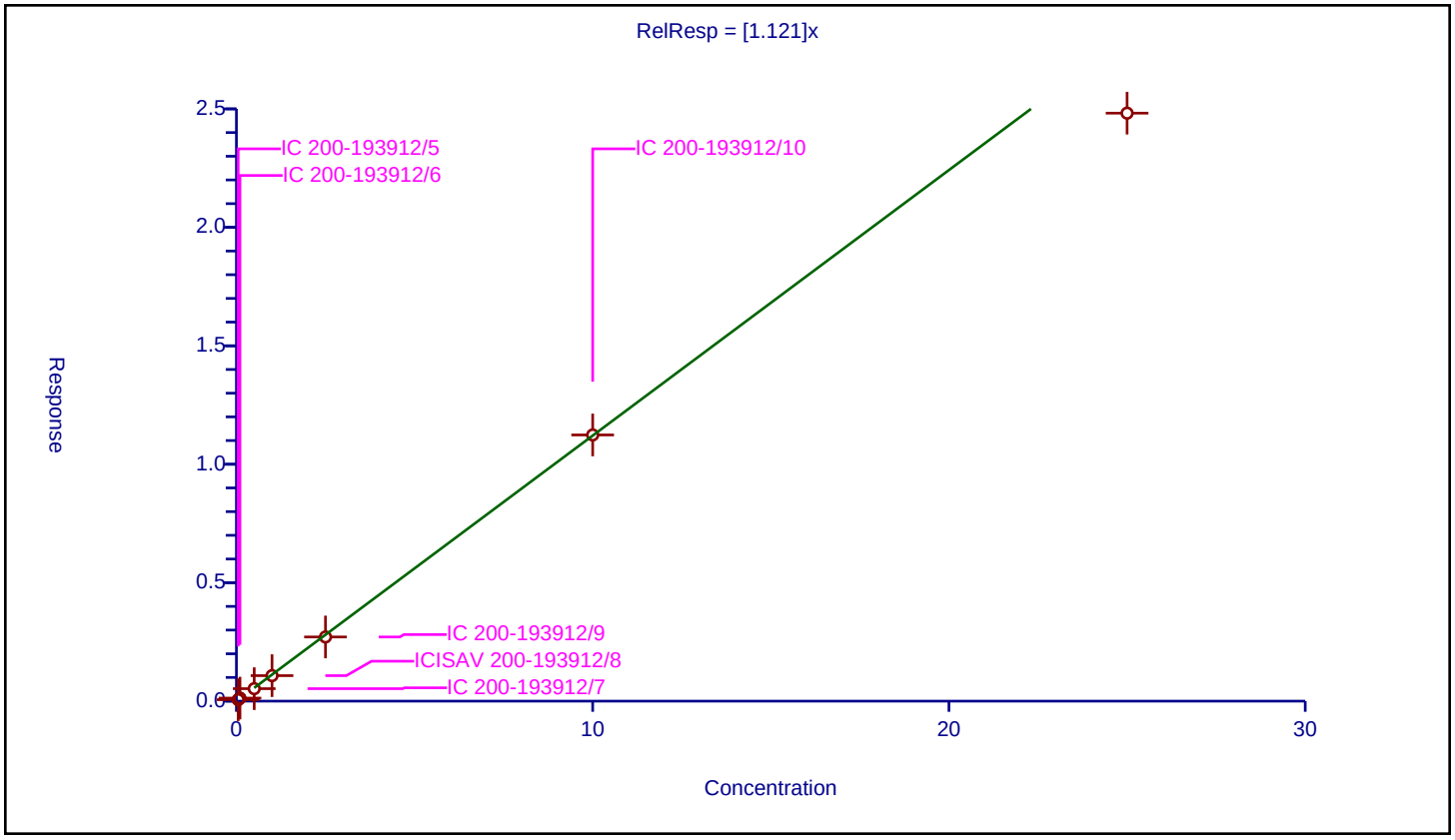
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.061632	1.25	1876608.0	1.23265	Y
2	IC 200-193912/6	0.1	0.128259	1.25	1628956.0	1.282585	Y
3	IC 200-193912/7	0.5	0.527087	1.25	1672833.0	1.054174	Y
4	ICISAV 200-193912/8	1.0	1.076804	1.25	1679653.0	1.076804	Y
5	IC 200-193912/9	2.5	2.708862	1.25	1773444.0	1.083545	Y
6	IC 200-193912/10	10.0	11.23637	1.25	1466571.0	1.123637	Y
7	IC 200-193912/11	25.0	24.820079	1.25	1559821.0	0.992803	Y



Calibration / DONA

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

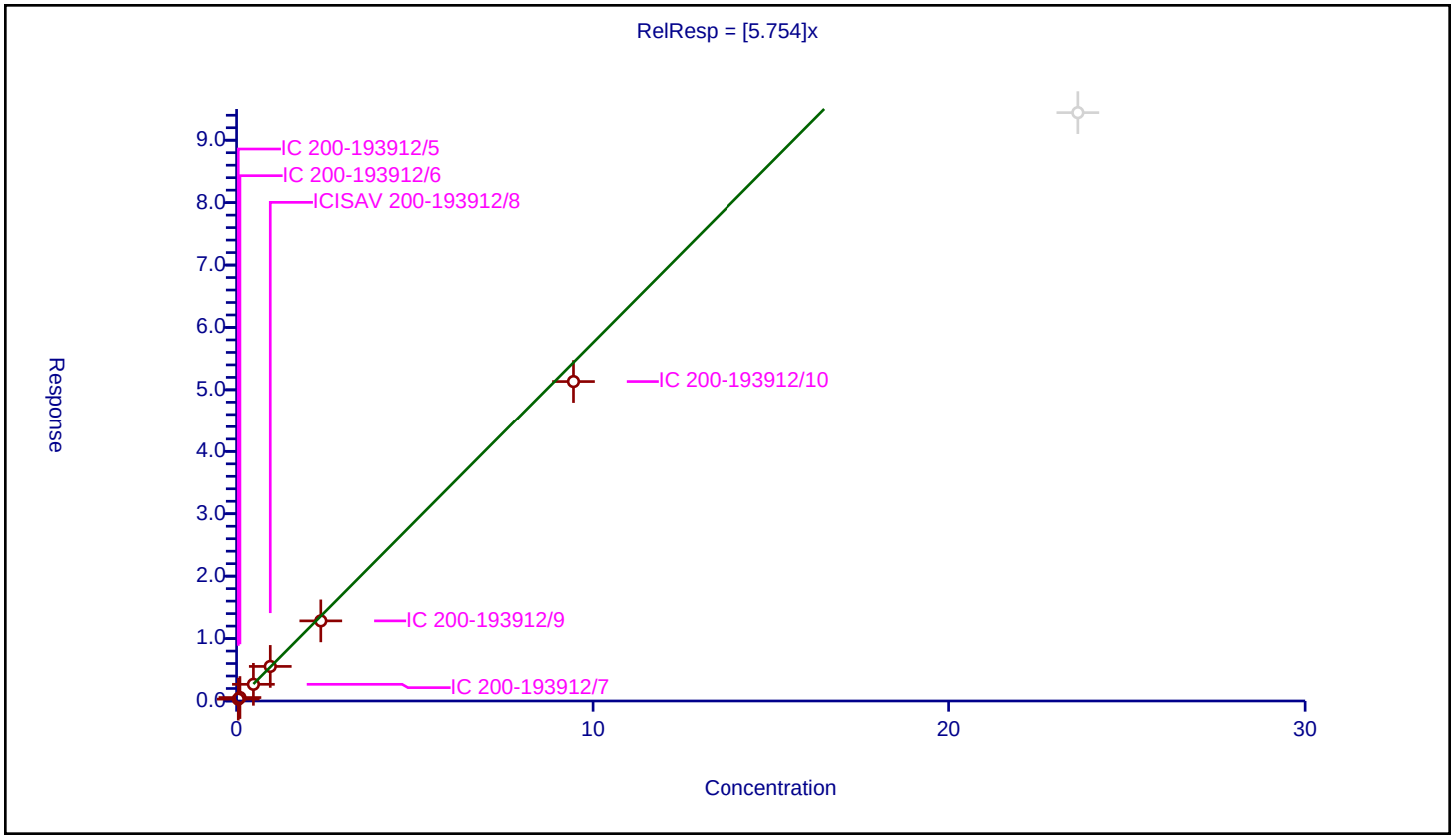
Curve Coefficients

Intercept:	0
Slope:	5.754

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04725	0.297259	1.195	943517.0	6.291195	Y
2	IC 200-193912/6	0.0945	0.553418	1.195	863764.0	5.856277	Y
3	IC 200-193912/7	0.4725	2.671126	1.195	882764.0	5.653177	Y
4	ICISAV 200-193912/8	0.945	5.536858	1.195	904398.0	5.859109	Y
5	IC 200-193912/9	2.3625	12.835921	1.195	919926.0	5.433194	Y
6	IC 200-193912/10	9.45	51.335121	1.195	765818.0	5.432288	Y
7	IC 200-193912/11	23.625	94.418048	1.195	865311.0	3.996531	N



10/31/2023
10:17 AM

Calibration / Perfluoroheptanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

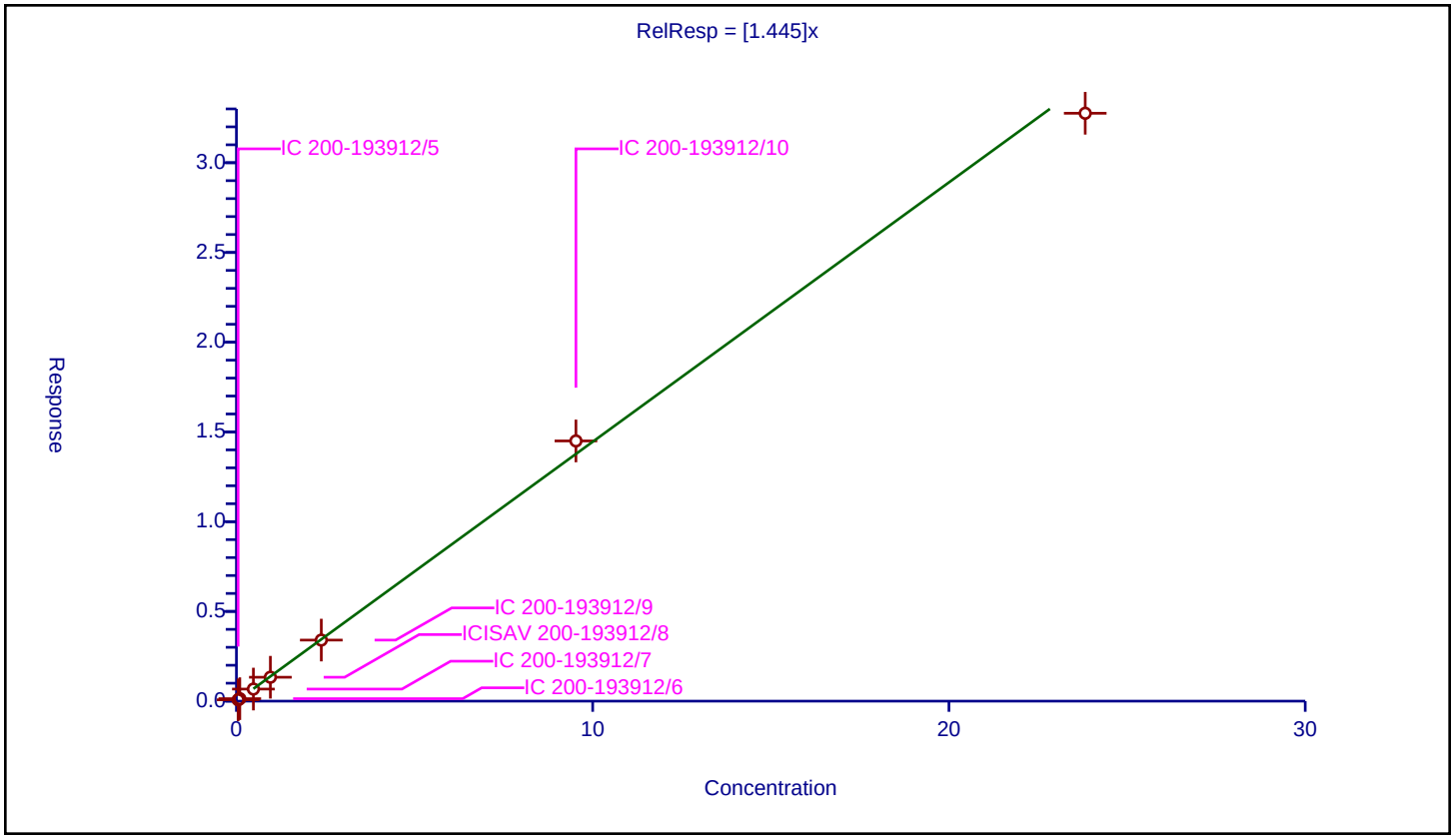
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04765	0.073316	1.195	943517.0	1.538638	Y
2	IC 200-193912/6	0.0953	0.13751	1.195	863764.0	1.442913	Y
3	IC 200-193912/7	0.4765	0.673122	1.195	882764.0	1.412638	Y
4	ICISAV 200-193912/8	0.953	1.332604	1.195	904398.0	1.398325	Y
5	IC 200-193912/9	2.3825	3.401611	1.195	919926.0	1.427749	Y
6	IC 200-193912/10	9.53	14.49894	1.195	765818.0	1.5214	Y
7	IC 200-193912/11	23.825	32.755938	1.195	865311.0	1.374856	Y



Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

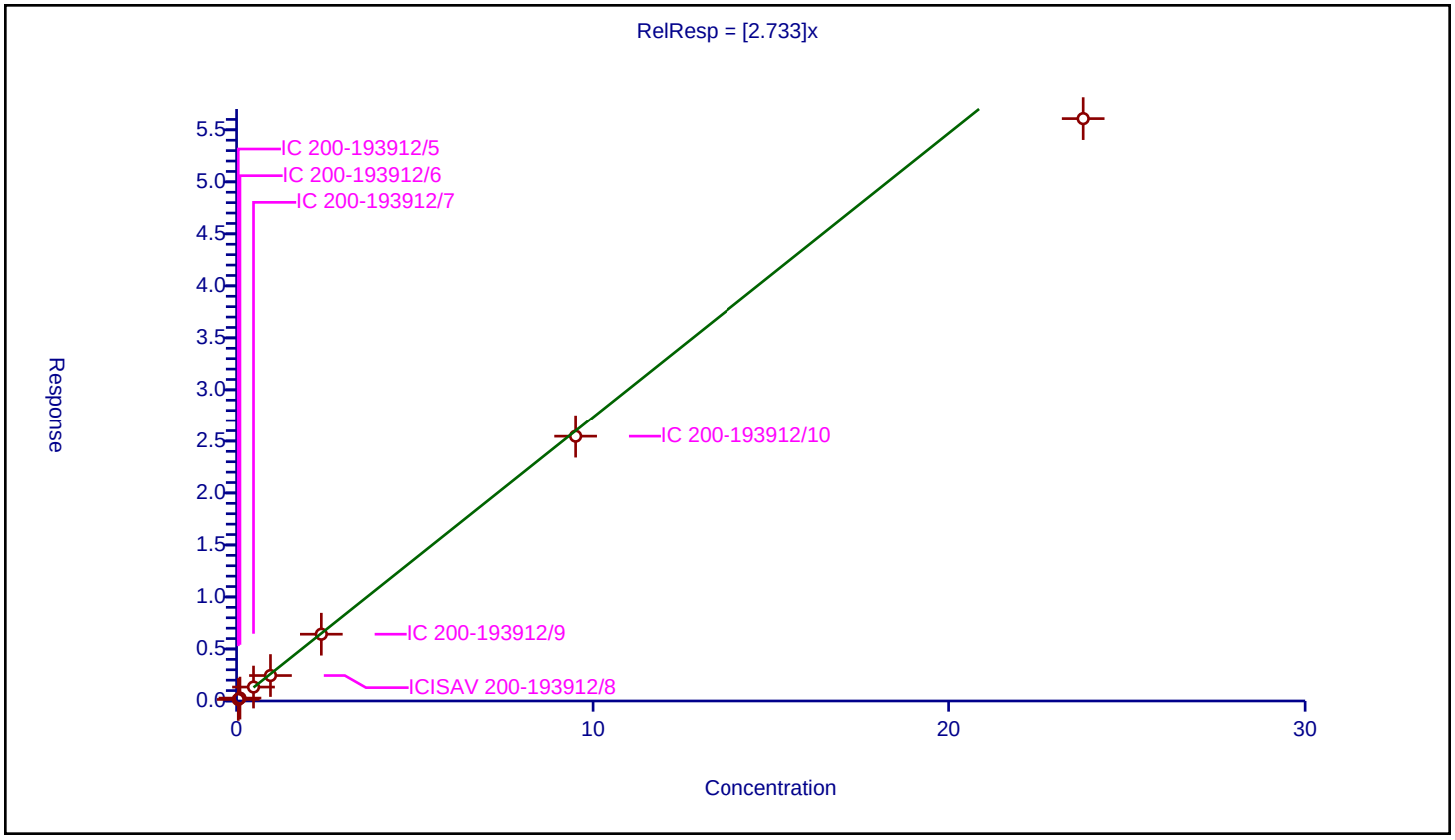
Curve Coefficients

Intercept:	0
Slope:	2.733

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04755	0.14644	1.1875	309808.0	3.079716	Y
2	IC 200-193912/6	0.0951	0.278153	1.1875	286854.0	2.924848	Y
3	IC 200-193912/7	0.4755	1.340299	1.1875	274798.0	2.818715	Y
4	ICISAV 200-193912/8	0.951	2.447413	1.1875	299923.0	2.573515	Y
5	IC 200-193912/9	2.3775	6.419079	1.1875	305639.0	2.699928	Y
6	IC 200-193912/10	9.51	25.460284	1.1875	250039.0	2.677212	Y
7	IC 200-193912/11	23.775	56.075977	1.1875	271643.0	2.358611	Y



10/31/2023
10:17 AM

Calibration / Perfluorooctanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

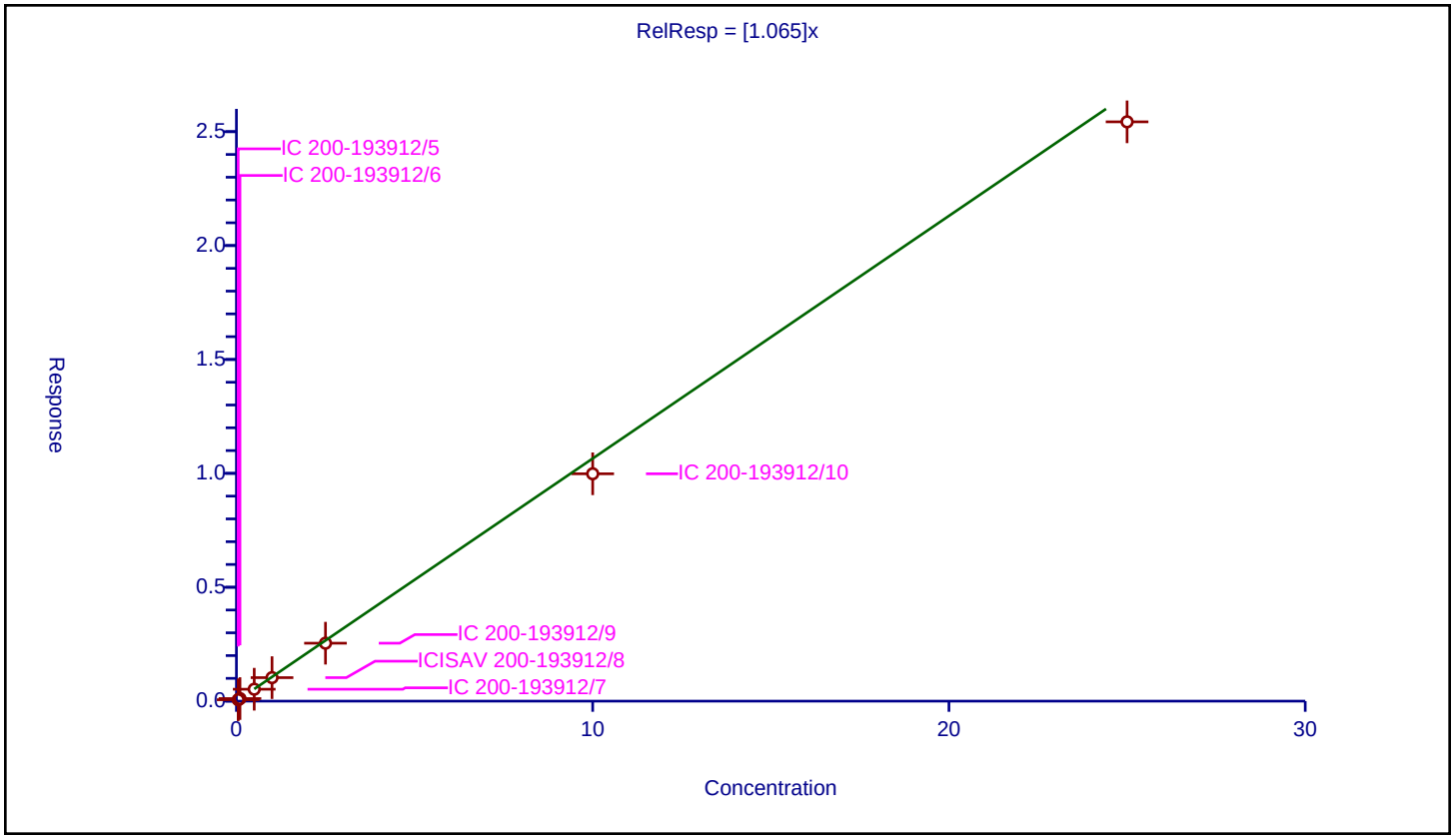
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	14700000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060812	1.25	2027588.0	1.216248	Y
2	IC 200-193912/6	0.1	0.112776	1.25	1982384.0	1.127765	Y
3	IC 200-193912/7	0.5	0.523481	1.25	1912820.0	1.046962	Y
4	ICISAV 200-193912/8	1.0	1.032173	1.25	1934463.0	1.032173	Y
5	IC 200-193912/9	2.5	2.543526	1.25	2045642.0	1.01741	Y
6	IC 200-193912/10	10.0	9.981516	1.25	1691186.0	0.998152	Y
7	IC 200-193912/11	25.0	25.431645	1.25	1620734.0	1.017266	Y



Calibration / Perfluorooctanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

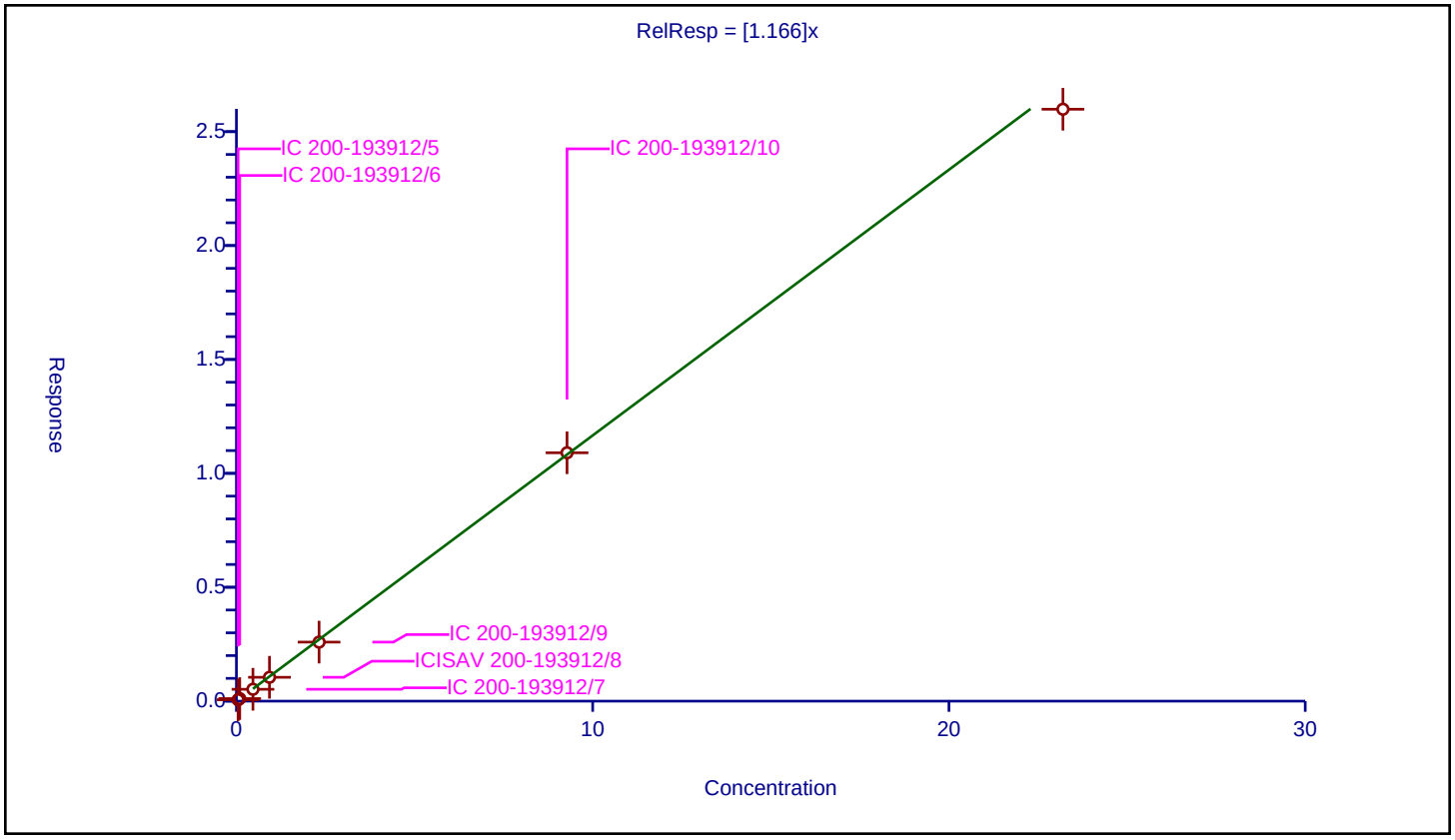
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	8240000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0464	0.060053	1.195	943517.0	1.294243	Y
2	IC 200-193912/6	0.0928	0.112059	1.195	863764.0	1.207533	Y
3	IC 200-193912/7	0.464	0.520913	1.195	882764.0	1.122657	Y
4	ICISAV 200-193912/8	0.928	1.047054	1.195	904398.0	1.128291	Y
5	IC 200-193912/9	2.32	2.591991	1.195	919926.0	1.117237	Y
6	IC 200-193912/10	9.28	10.903287	1.195	765818.0	1.174923	Y
7	IC 200-193912/11	23.2	25.9853	1.195	865311.0	1.120056	Y



Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

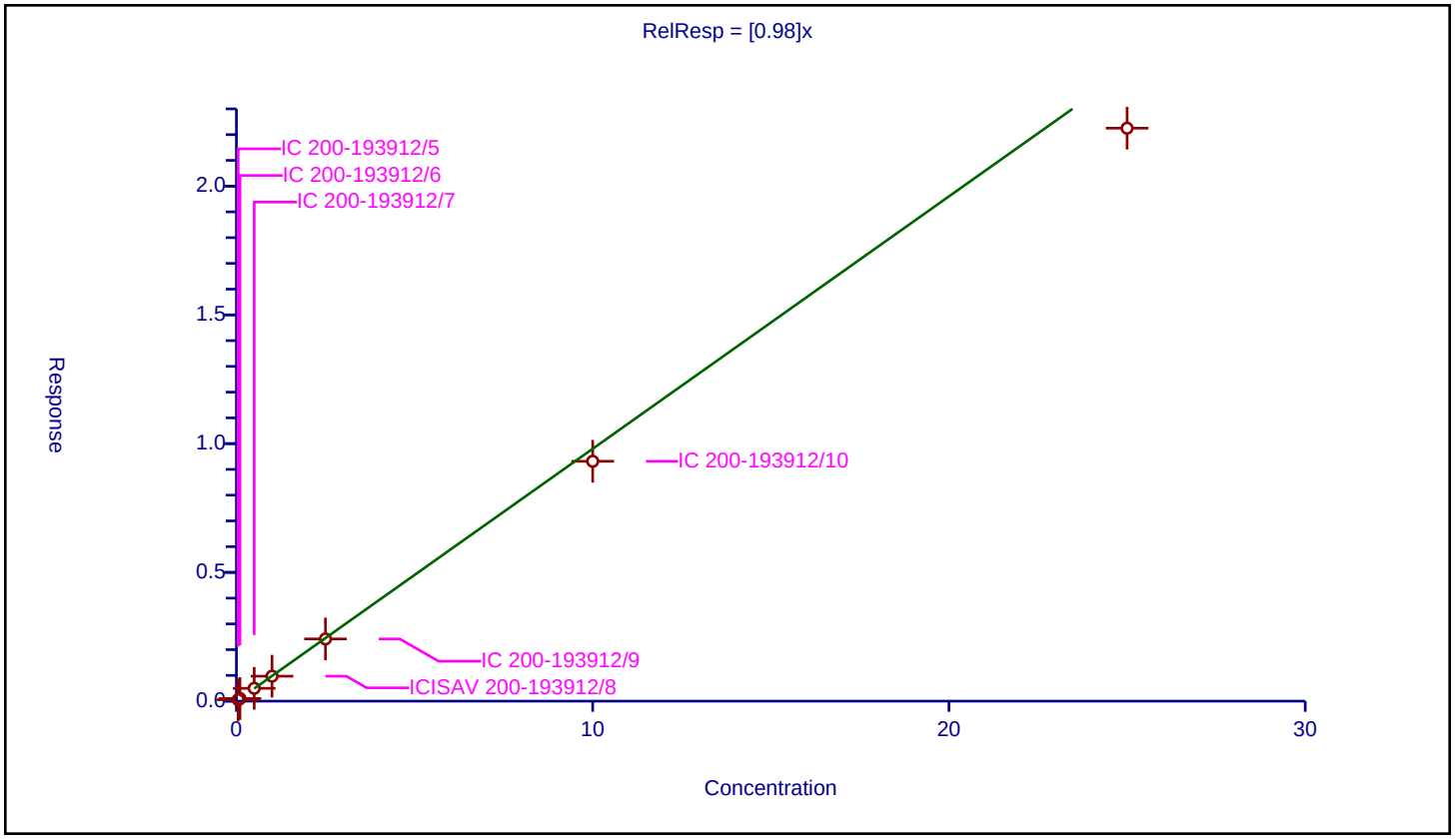
Curve Coefficients

Intercept:	0
Slope:	0.98

Error Coefficients

Standard Error:	15100000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.054544	1.25	2335475.0	1.090881	Y
2	IC 200-193912/6	0.1	0.101347	1.25	1965971.0	1.013469	Y
3	IC 200-193912/7	0.5	0.499549	1.25	2008931.0	0.999099	Y
4	ICISAV 200-193912/8	1.0	0.969174	1.25	2143126.0	0.969174	Y
5	IC 200-193912/9	2.5	2.415598	1.25	2116548.0	0.966239	Y
6	IC 200-193912/10	10.0	9.314659	1.25	1889768.0	0.931466	Y
7	IC 200-193912/11	25.0	22.250286	1.25	1902682.0	0.890011	Y



Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

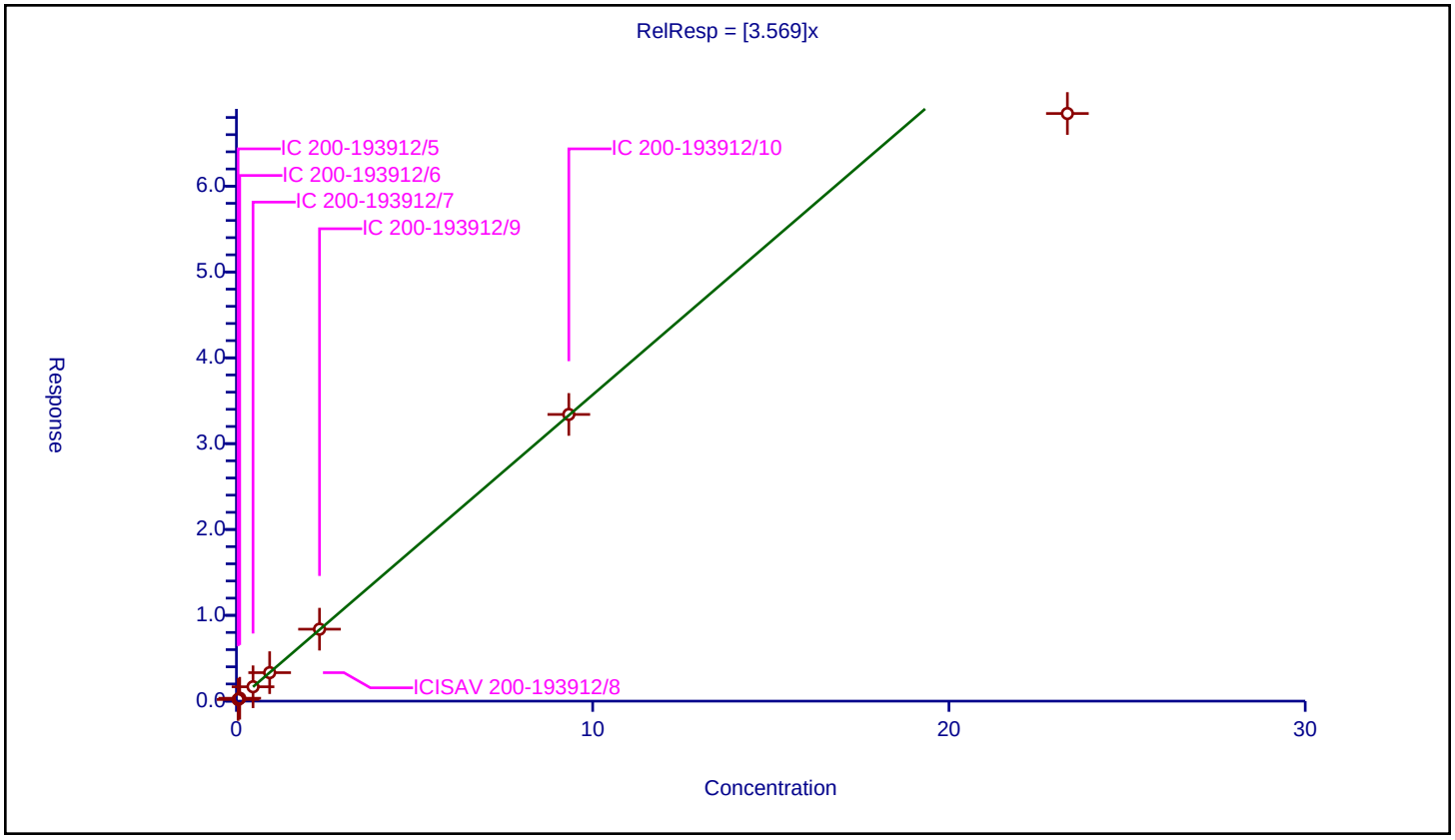
Curve Coefficients

Intercept:	0
Slope:	3.569

Error Coefficients

Standard Error:	22200000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04665	0.191359	1.195	943517.0	4.102008	Y
2	IC 200-193912/6	0.0933	0.338082	1.195	863764.0	3.623605	Y
3	IC 200-193912/7	0.4665	1.67515	1.195	882764.0	3.59089	Y
4	ICISAV 200-193912/8	0.933	3.319787	1.195	904398.0	3.558186	Y
5	IC 200-193912/9	2.3325	8.383828	1.195	919926.0	3.594353	Y
6	IC 200-193912/10	9.33	33.401161	1.195	765818.0	3.579974	Y
7	IC 200-193912/11	23.325	68.461822	1.195	865311.0	2.935126	Y



Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

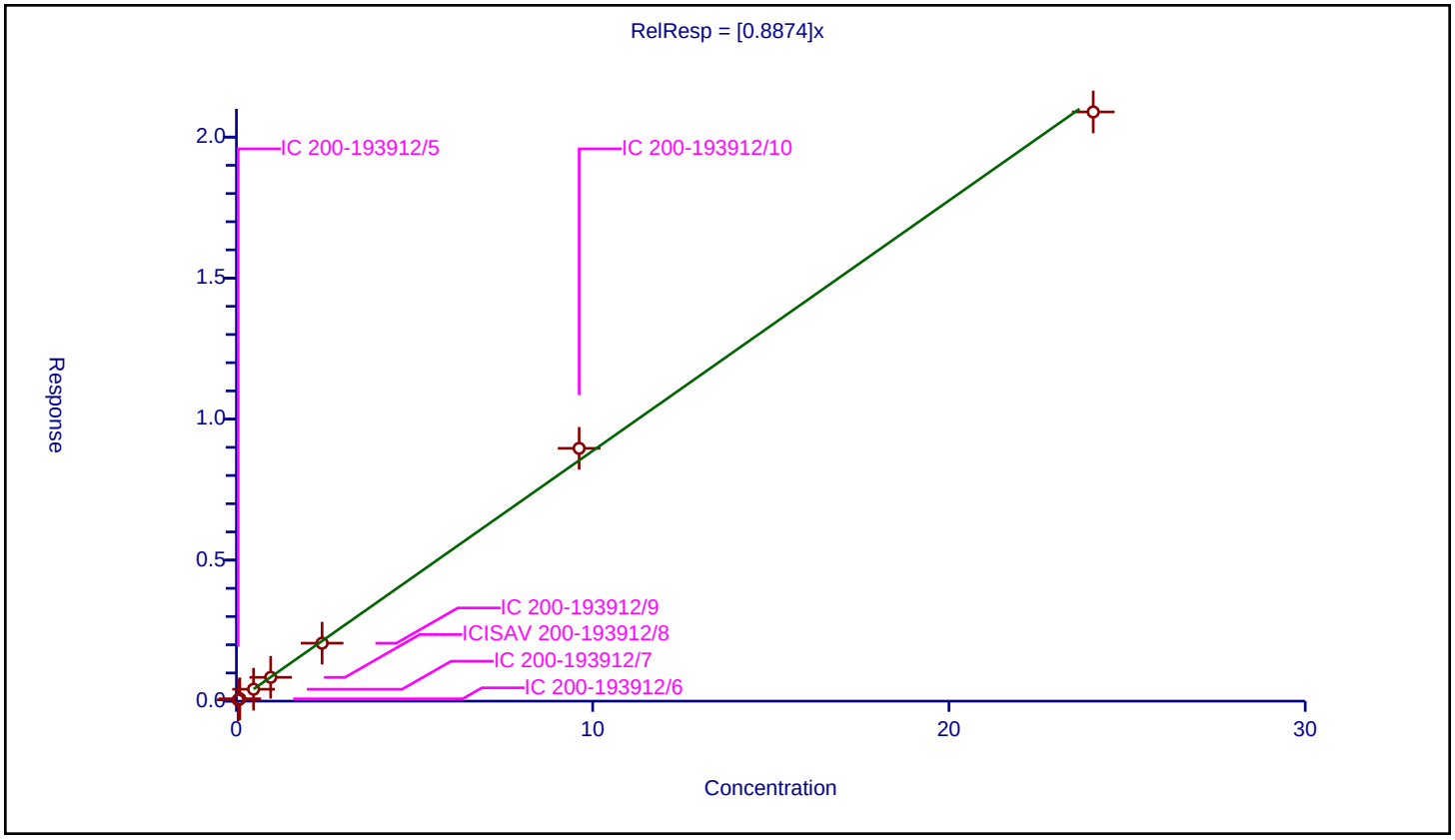
Curve Coefficients

Intercept:	0
Slope:	0.8874

Error Coefficients

Standard Error:	6640000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0481	0.044866	1.195	943517.0	0.932762	Y
2	IC 200-193912/6	0.0962	0.083528	1.195	863764.0	0.86827	Y
3	IC 200-193912/7	0.481	0.422495	1.195	882764.0	0.878367	Y
4	ICISAV 200-193912/8	0.962	0.843613	1.195	904398.0	0.876937	Y
5	IC 200-193912/9	2.405	2.055747	1.195	919926.0	0.854781	Y
6	IC 200-193912/10	9.62	8.96416	1.195	765818.0	0.931825	Y
7	IC 200-193912/11	24.05	20.891757	1.195	865311.0	0.86868	Y



10/31/2023
10:17 AM

Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

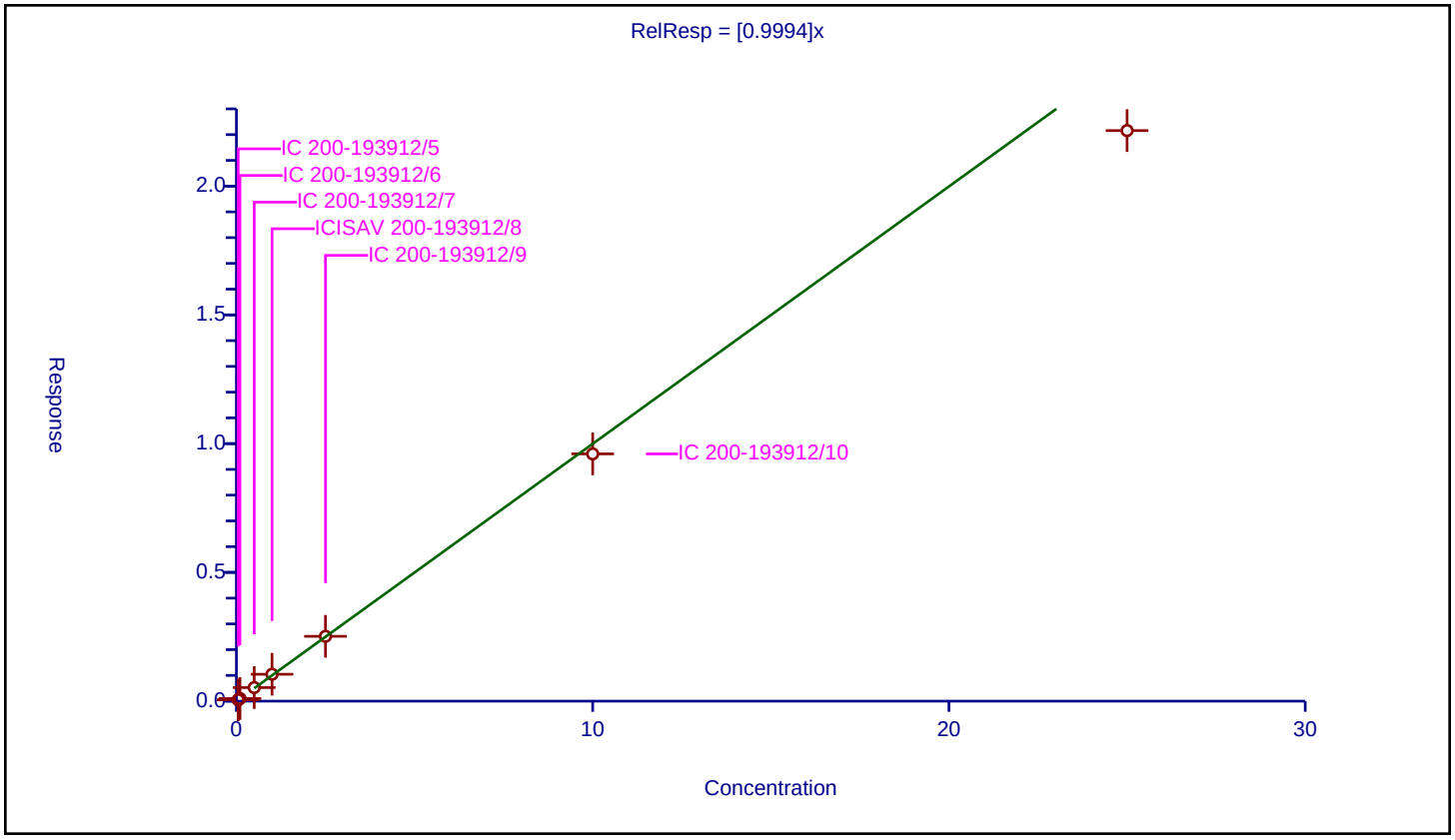
Curve Coefficients

Intercept:	0
Slope:	0.9994

Error Coefficients

Standard Error:	15800000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.051407	1.25	2492424.0	1.028136	Y
2	IC 200-193912/6	0.1	0.101543	1.25	2097344.0	1.015433	Y
3	IC 200-193912/7	0.5	0.527053	1.25	2062234.0	1.054107	Y
4	ICISAV 200-193912/8	1.0	1.043889	1.25	2125756.0	1.043889	Y
5	IC 200-193912/9	2.5	2.518567	1.25	2307904.0	1.007427	Y
6	IC 200-193912/10	10.0	9.601822	1.25	1979736.0	0.960182	Y
7	IC 200-193912/11	25.0	22.157516	1.25	1981566.0	0.886301	Y



10/31/2023
10:17 AM

Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

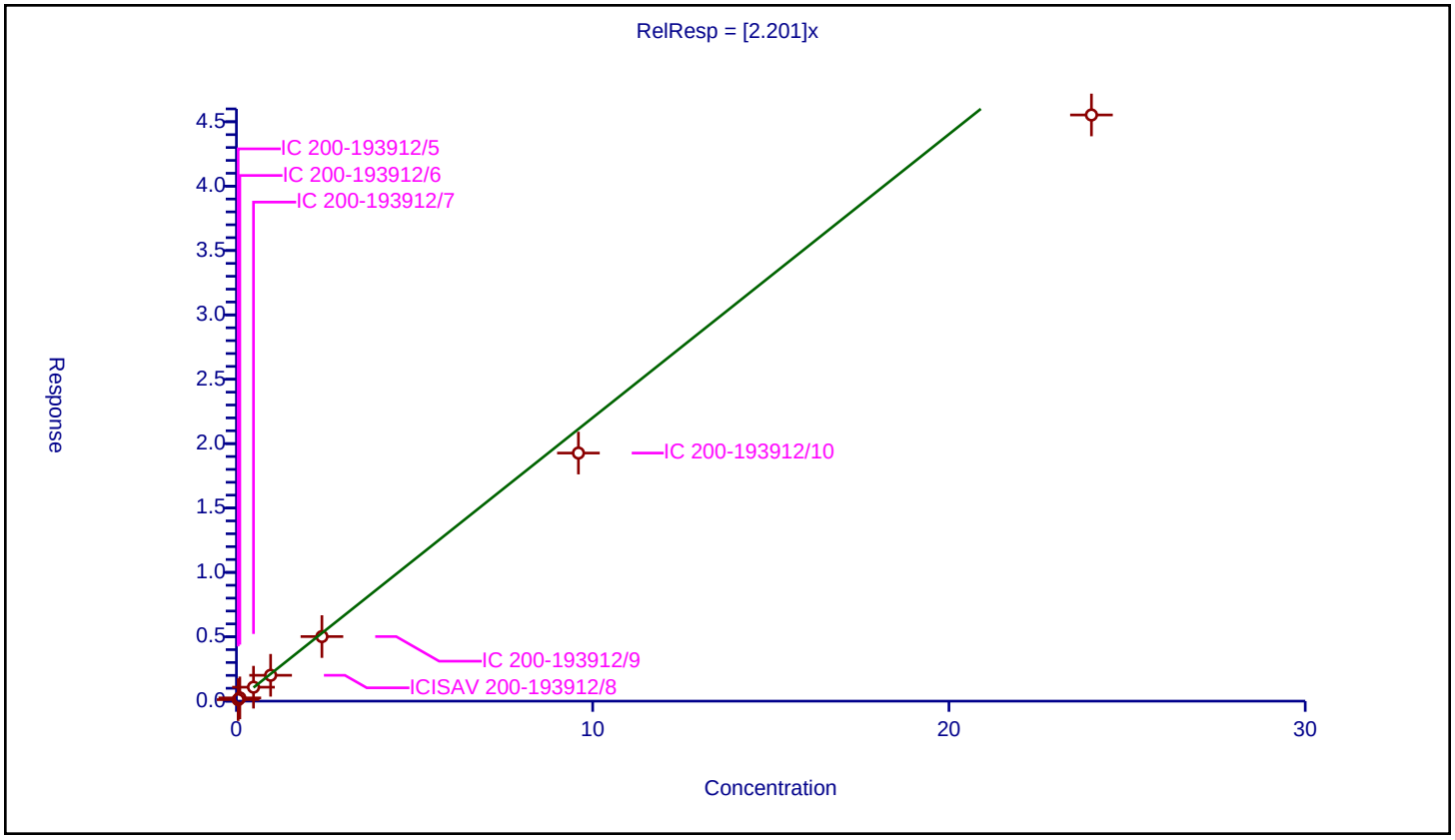
Curve Coefficients

Intercept:	0
Slope:	2.201

Error Coefficients

Standard Error:	5360000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.048	0.117827	1.1975	366485.0	2.45473	Y
2	IC 200-193912/6	0.096	0.250914	1.1975	307295.0	2.613688	Y
3	IC 200-193912/7	0.48	1.083603	1.1975	298552.0	2.257506	Y
4	ICISAV 200-193912/8	0.96	2.007175	1.1975	331913.0	2.090808	Y
5	IC 200-193912/9	2.4	5.014617	1.1975	331708.0	2.089424	Y
6	IC 200-193912/10	9.6	19.268997	1.1975	309678.0	2.007187	Y
7	IC 200-193912/11	24.0	45.528205	1.1975	316911.0	1.897009	Y



10/31/2023
10:17 AM

Calibration / Perfluorooctanesulfonamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

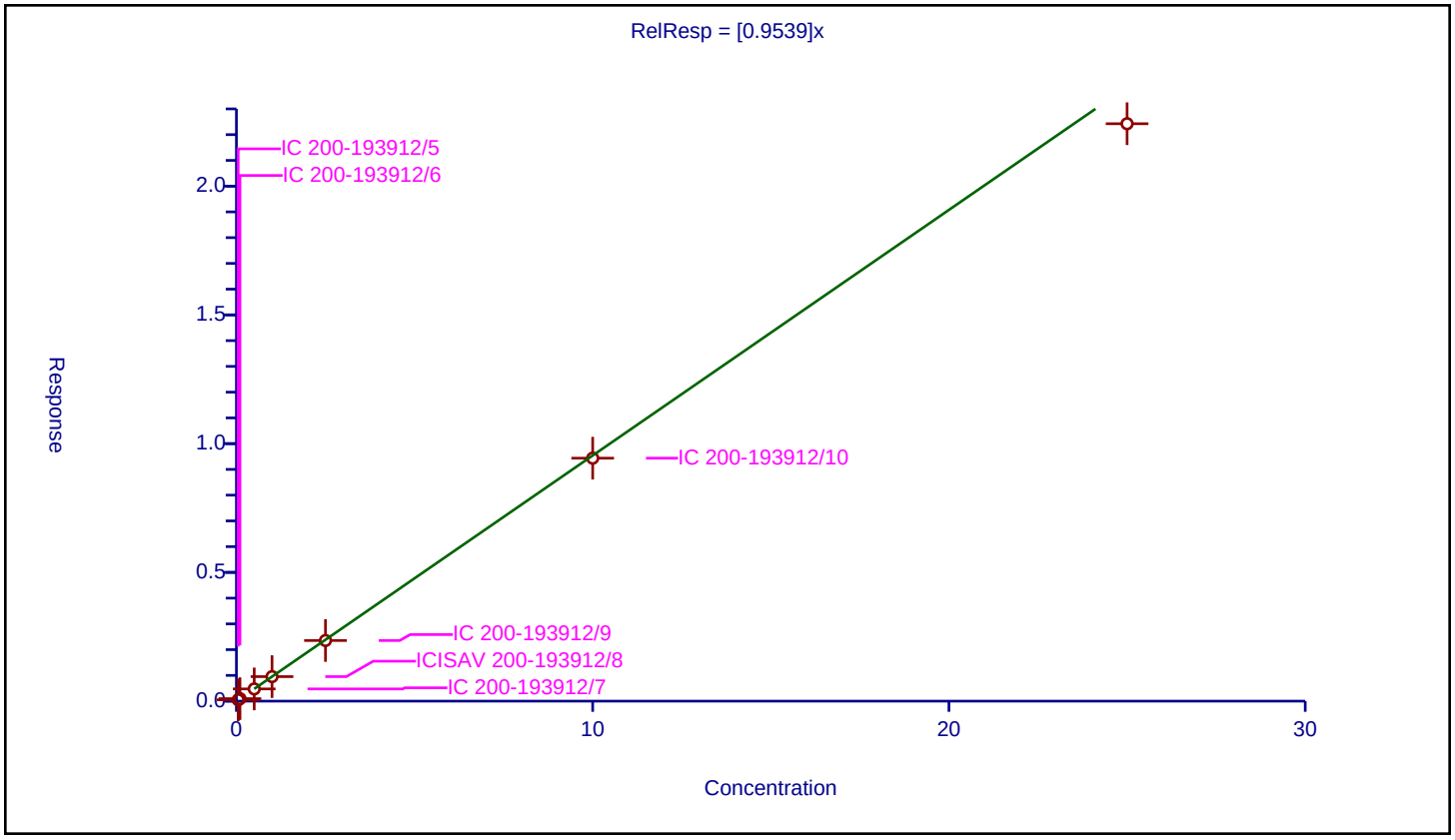
Curve Coefficients

Intercept:	0
Slope:	0.9539

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.05114	1.25	1884229.0	1.022792	Y
2	IC 200-193912/6	0.1	0.097032	1.25	1858847.0	0.970319	Y
3	IC 200-193912/7	0.5	0.474712	1.25	1790735.0	0.949424	Y
4	ICISAV 200-193912/8	1.0	0.952135	1.25	1887535.0	0.952135	Y
5	IC 200-193912/9	2.5	2.354683	1.25	1904586.0	0.941873	Y
6	IC 200-193912/10	10.0	9.435572	1.25	1724931.0	0.943557	Y
7	IC 200-193912/11	25.0	22.424085	1.25	1759972.0	0.896963	Y



Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

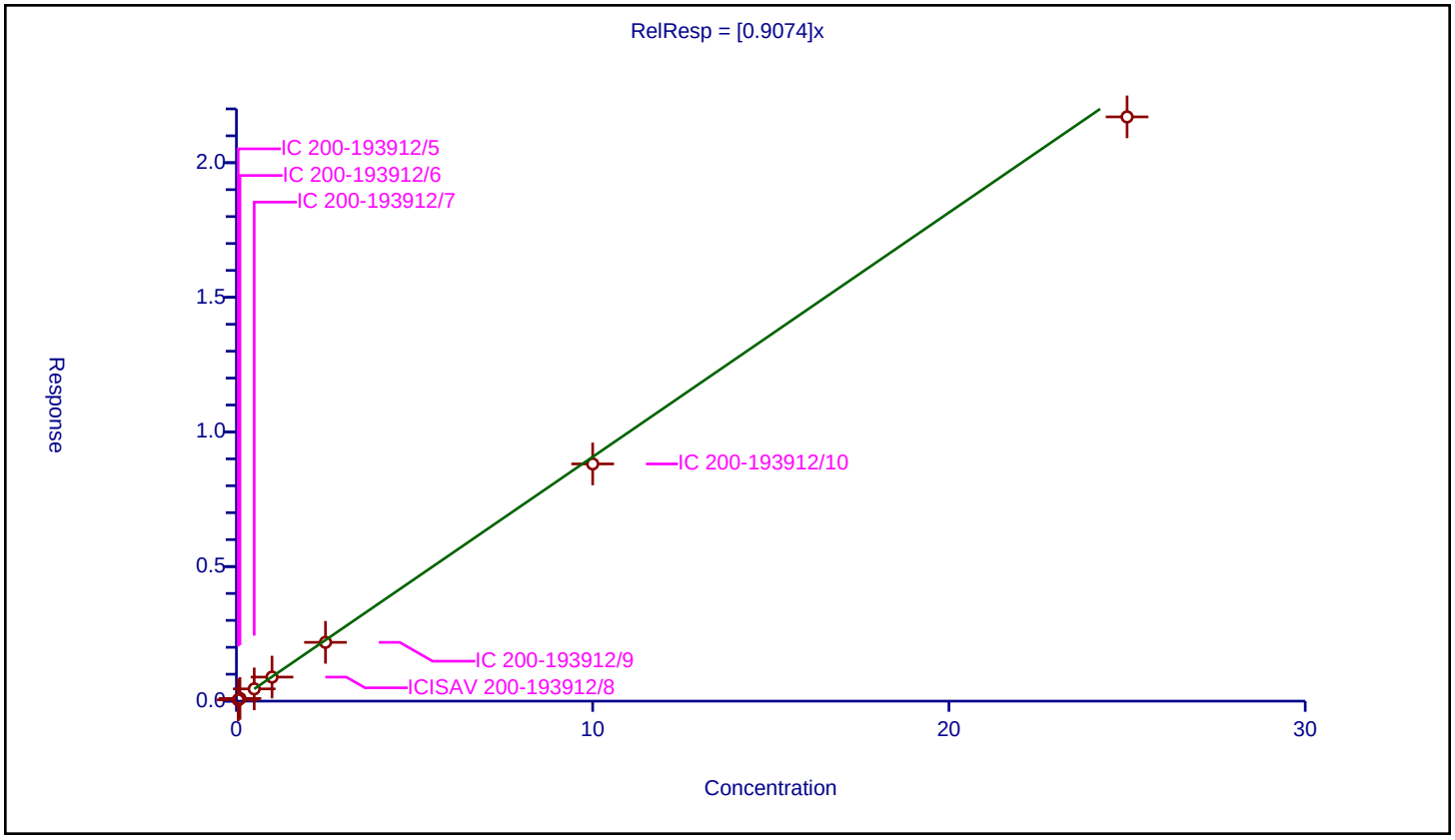
Curve Coefficients

Intercept:	0
Slope:	0.9074

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.047213	1.25	589245.0	0.944259	Y
2	IC 200-193912/6	0.1	0.098038	1.25	509447.0	0.980377	Y
3	IC 200-193912/7	0.5	0.45553	1.25	486461.0	0.91106	Y
4	ICISAV 200-193912/8	1.0	0.893408	1.25	518688.0	0.893408	Y
5	IC 200-193912/9	2.5	2.183599	1.25	518571.0	0.87344	Y
6	IC 200-193912/10	10.0	8.811989	1.25	465286.0	0.881199	Y
7	IC 200-193912/11	25.0	21.70302	1.25	505130.0	0.868121	Y



10/31/2023
10:17 AM

Calibration / Perfluorodecanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

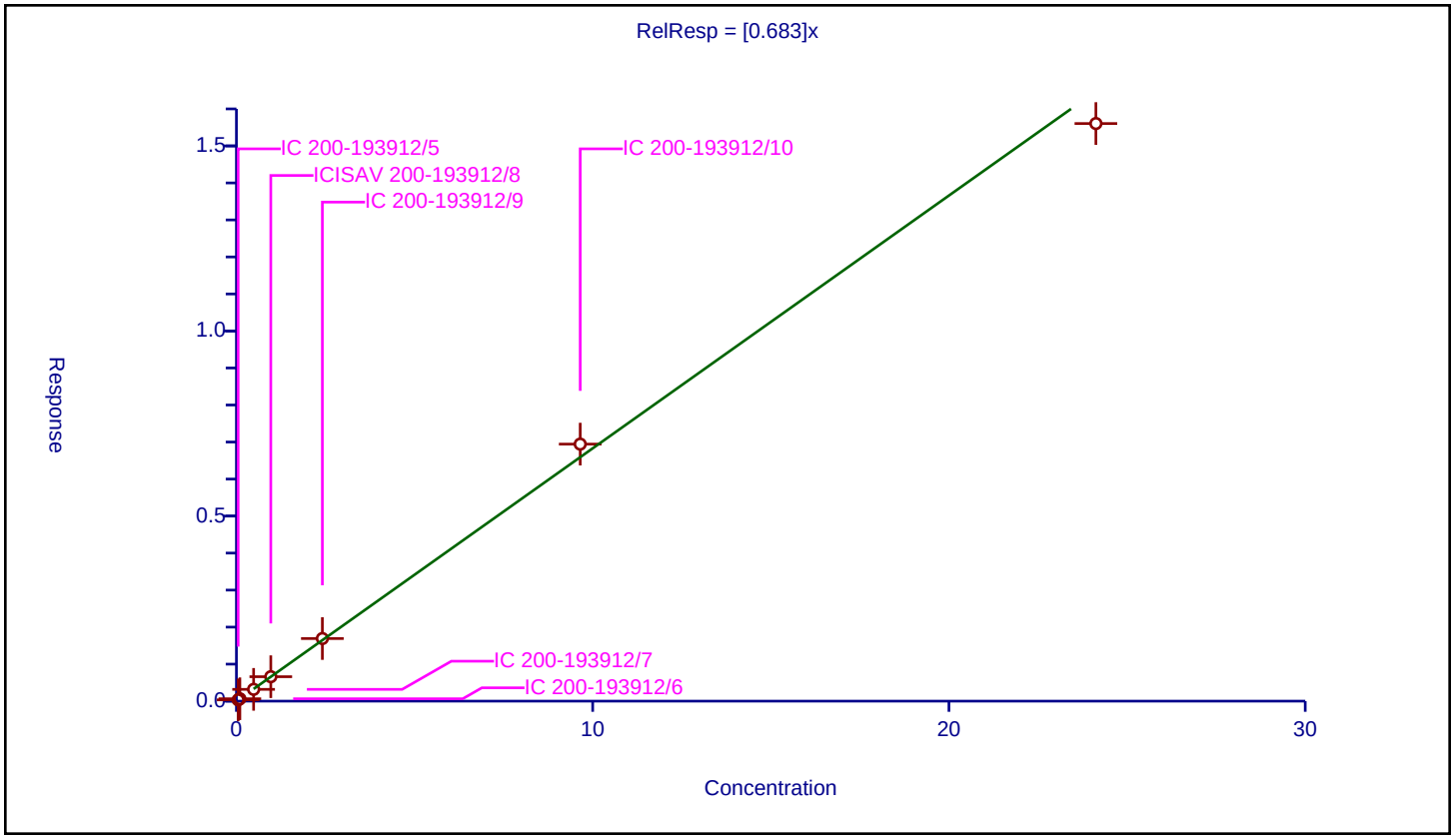
Curve Coefficients

Intercept:	0
Slope:	0.683

Error Coefficients

Standard Error:	4990000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04825	0.033974	1.195	943517.0	0.704116	Y
2	IC 200-193912/6	0.0965	0.064249	1.195	863764.0	0.665791	Y
3	IC 200-193912/7	0.4825	0.318115	1.195	882764.0	0.659305	Y
4	ICISAV 200-193912/8	0.965	0.659955	1.195	904398.0	0.683891	Y
5	IC 200-193912/9	2.4125	1.691543	1.195	919926.0	0.701158	Y
6	IC 200-193912/10	9.65	6.944096	1.195	765818.0	0.719595	Y
7	IC 200-193912/11	24.125	15.604572	1.195	865311.0	0.646822	Y



10/31/2023
10:17 AM

Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

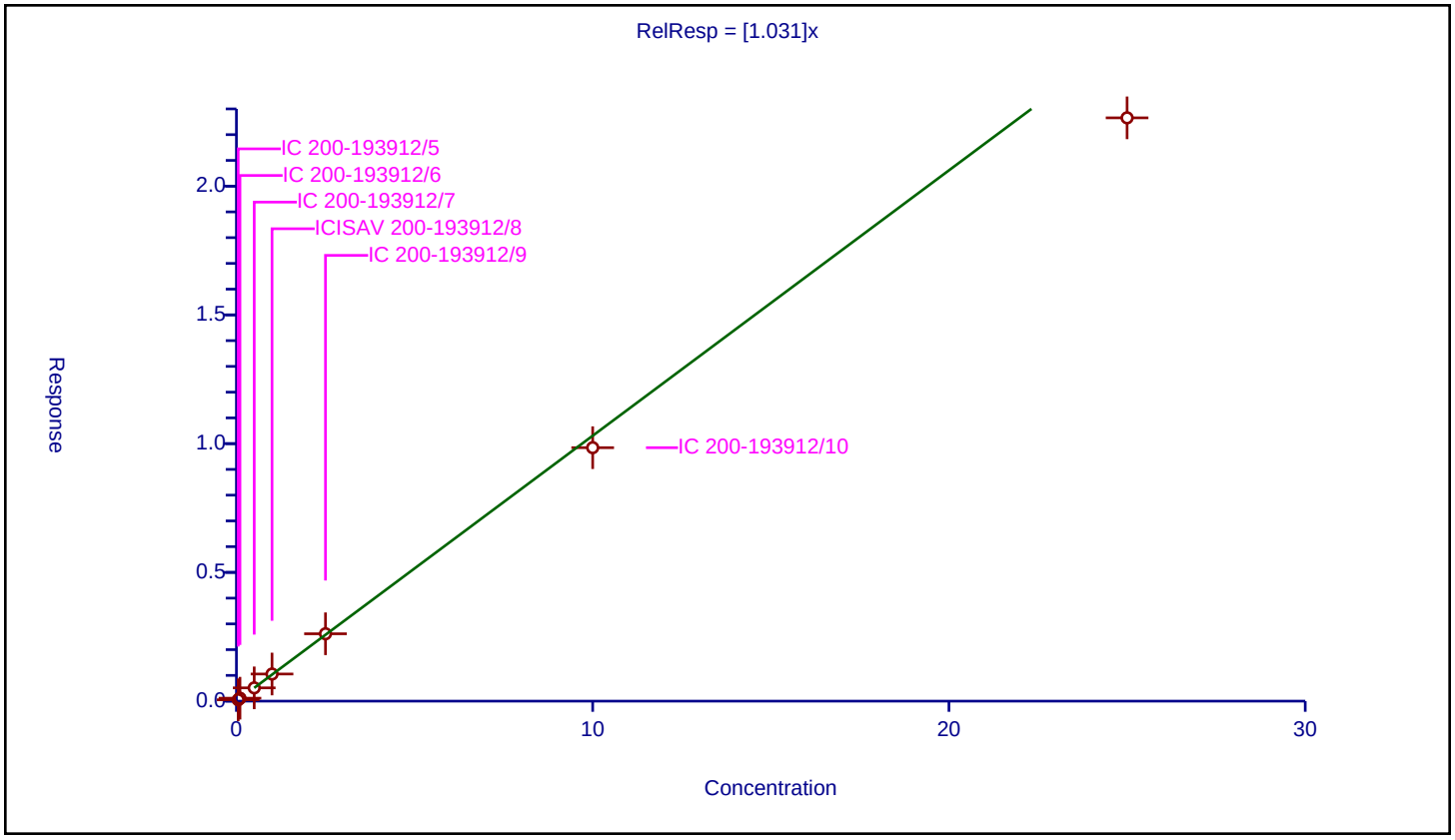
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	14600000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.052687	1.25	2441700.0	1.053743	Y
2	IC 200-193912/6	0.1	0.113929	1.25	1976379.0	1.139293	Y
3	IC 200-193912/7	0.5	0.515751	1.25	1983358.0	1.031502	Y
4	ICISAV 200-193912/8	1.0	1.053027	1.25	2053330.0	1.053027	Y
5	IC 200-193912/9	2.5	2.616249	1.25	2158999.0	1.0465	Y
6	IC 200-193912/10	10.0	9.84312	1.25	1818926.0	0.984312	Y
7	IC 200-193912/11	25.0	22.652933	1.25	1790927.0	0.906117	Y



10/31/2023
10:17 AM

Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

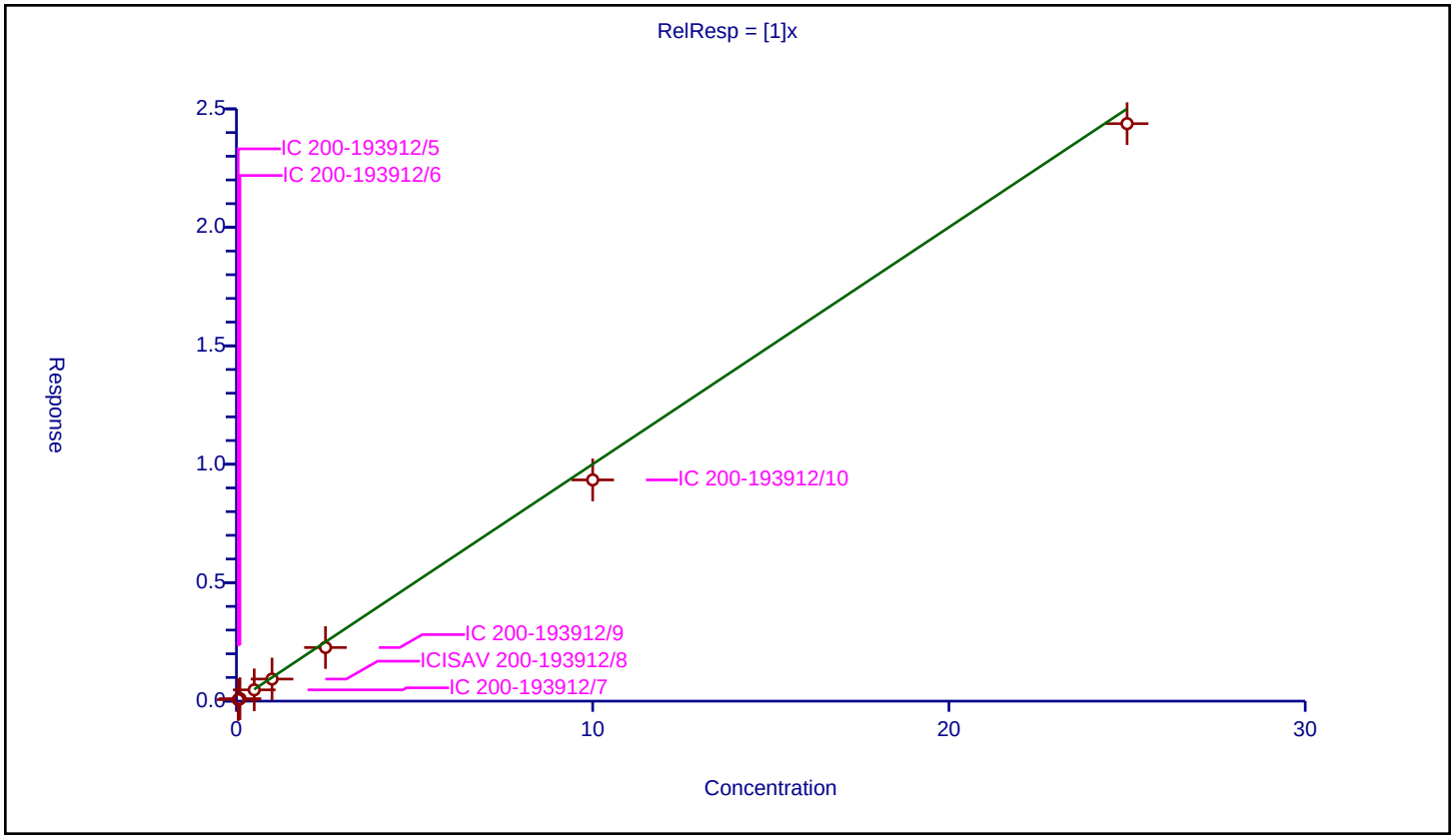
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.062984	1.25	566846.0	1.25969	Y
2	IC 200-193912/6	0.1	0.104122	1.25	488020.0	1.041223	Y
3	IC 200-193912/7	0.5	0.476346	1.25	491633.0	0.952692	Y
4	ICISAV 200-193912/8	1.0	0.933122	1.25	487913.0	0.933122	Y
5	IC 200-193912/9	2.5	2.264152	1.25	544137.0	0.905661	Y
6	IC 200-193912/10	10.0	9.339057	1.25	456350.0	0.933906	Y
7	IC 200-193912/11	25.0	24.377511	1.25	430319.0	0.9751	Y



Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

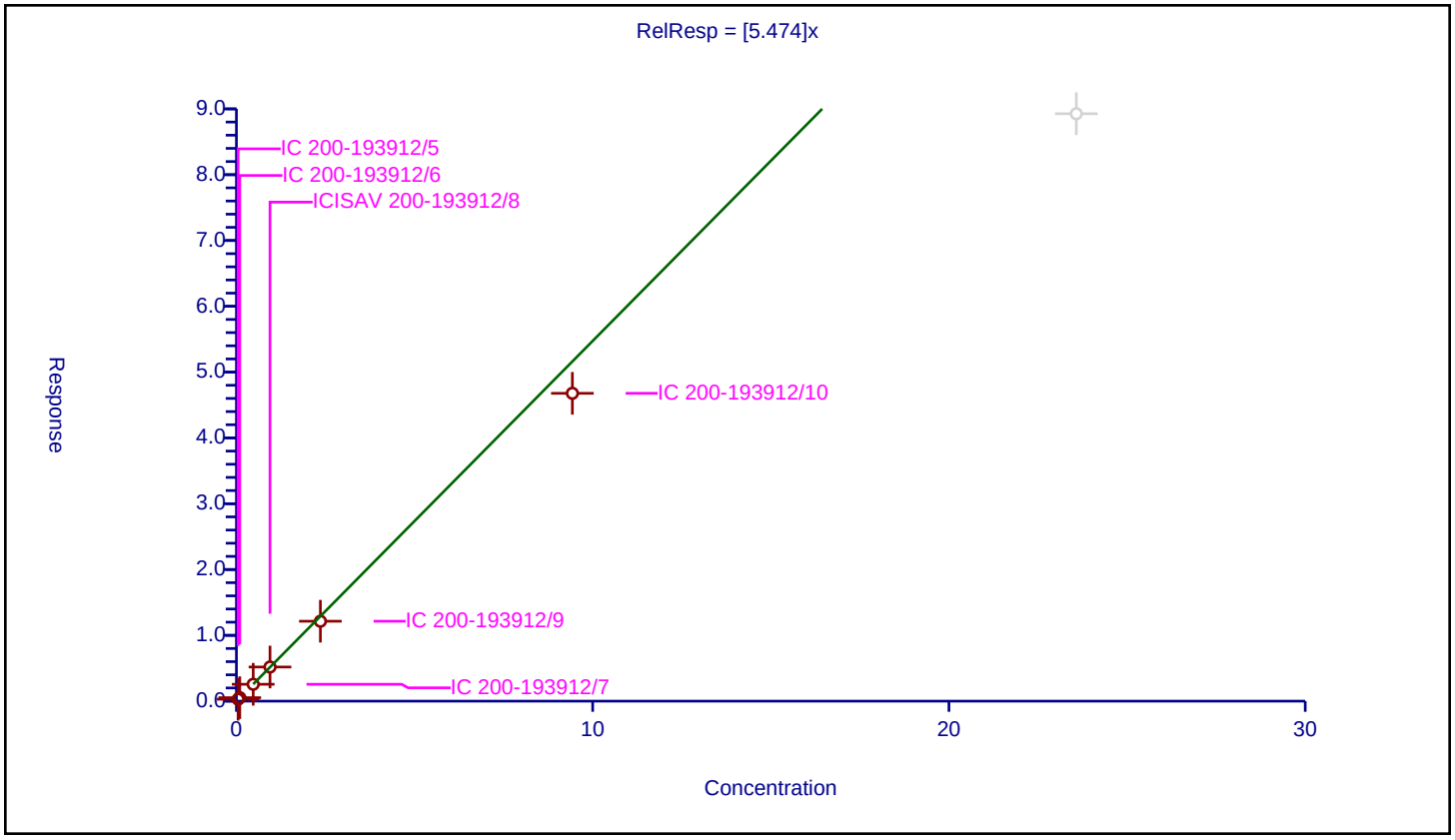
Curve Coefficients

Intercept:	0
Slope:	5.474

Error Coefficients

Standard Error:	14200000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04715	0.292105	1.195	943517.0	6.195237	Y
2	IC 200-193912/6	0.0943	0.527614	1.195	863764.0	5.595053	Y
3	IC 200-193912/7	0.4715	2.564572	1.195	882764.0	5.439177	Y
4	ICISAV 200-193912/8	0.943	5.187209	1.195	904398.0	5.500751	Y
5	IC 200-193912/9	2.3575	12.142724	1.195	919926.0	5.150678	Y
6	IC 200-193912/10	9.43	46.776459	1.195	765818.0	4.960388	Y
7	IC 200-193912/11	23.575	89.262798	1.195	865311.0	3.786333	N



Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

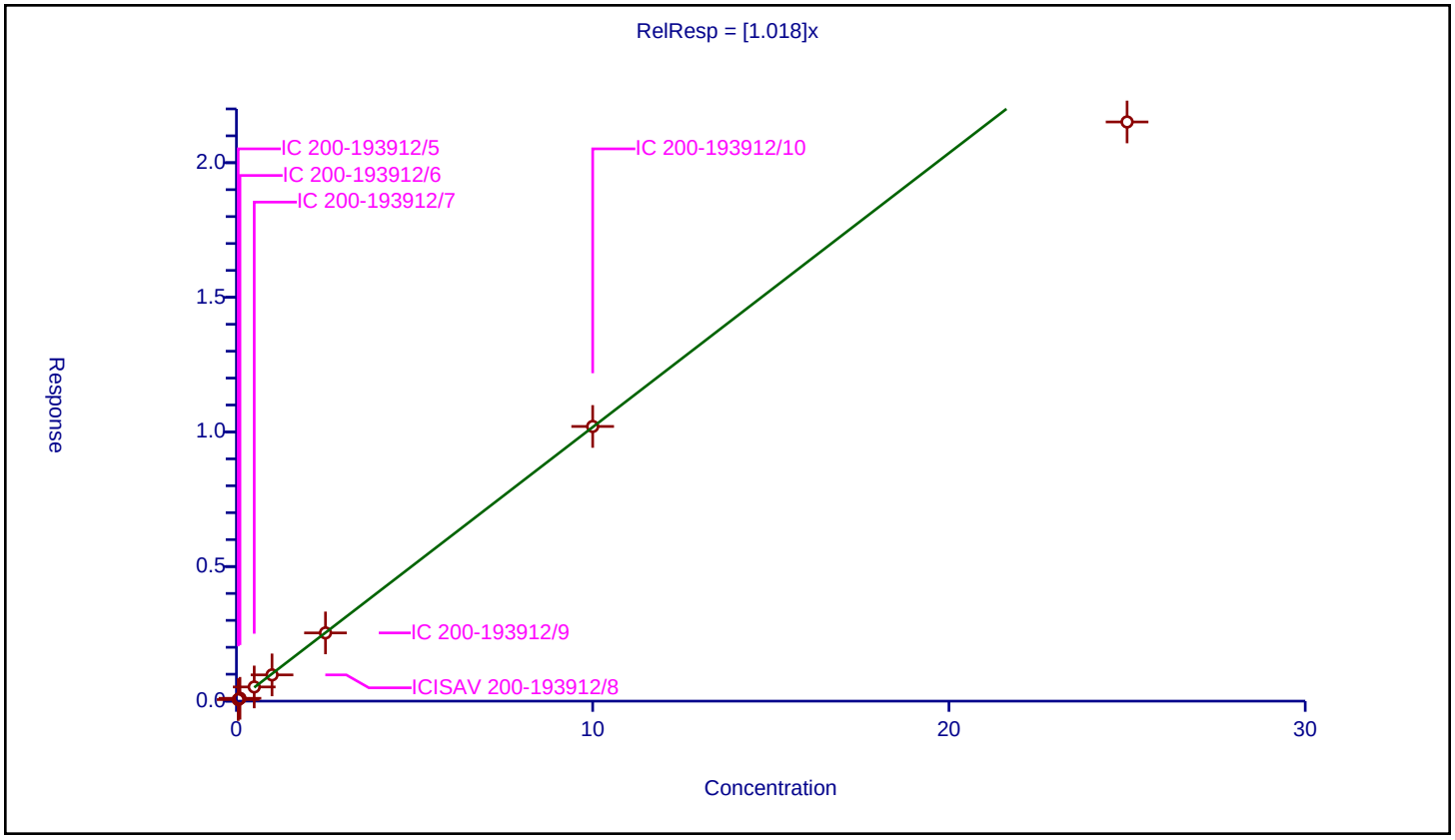
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	15400000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.057397	1.25	2296115.0	1.14795	Y
2	IC 200-193912/6	0.1	0.10537	1.25	2131572.0	1.0537	Y
3	IC 200-193912/7	0.5	0.526674	1.25	2022512.0	1.053347	Y
4	ICISAV 200-193912/8	1.0	0.974949	1.25	2123640.0	0.974949	Y
5	IC 200-193912/9	2.5	2.534654	1.25	2062631.0	1.013862	Y
6	IC 200-193912/10	10.0	10.203479	1.25	1800020.0	1.020348	Y
7	IC 200-193912/11	25.0	21.515509	1.25	1994604.0	0.86062	Y



Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

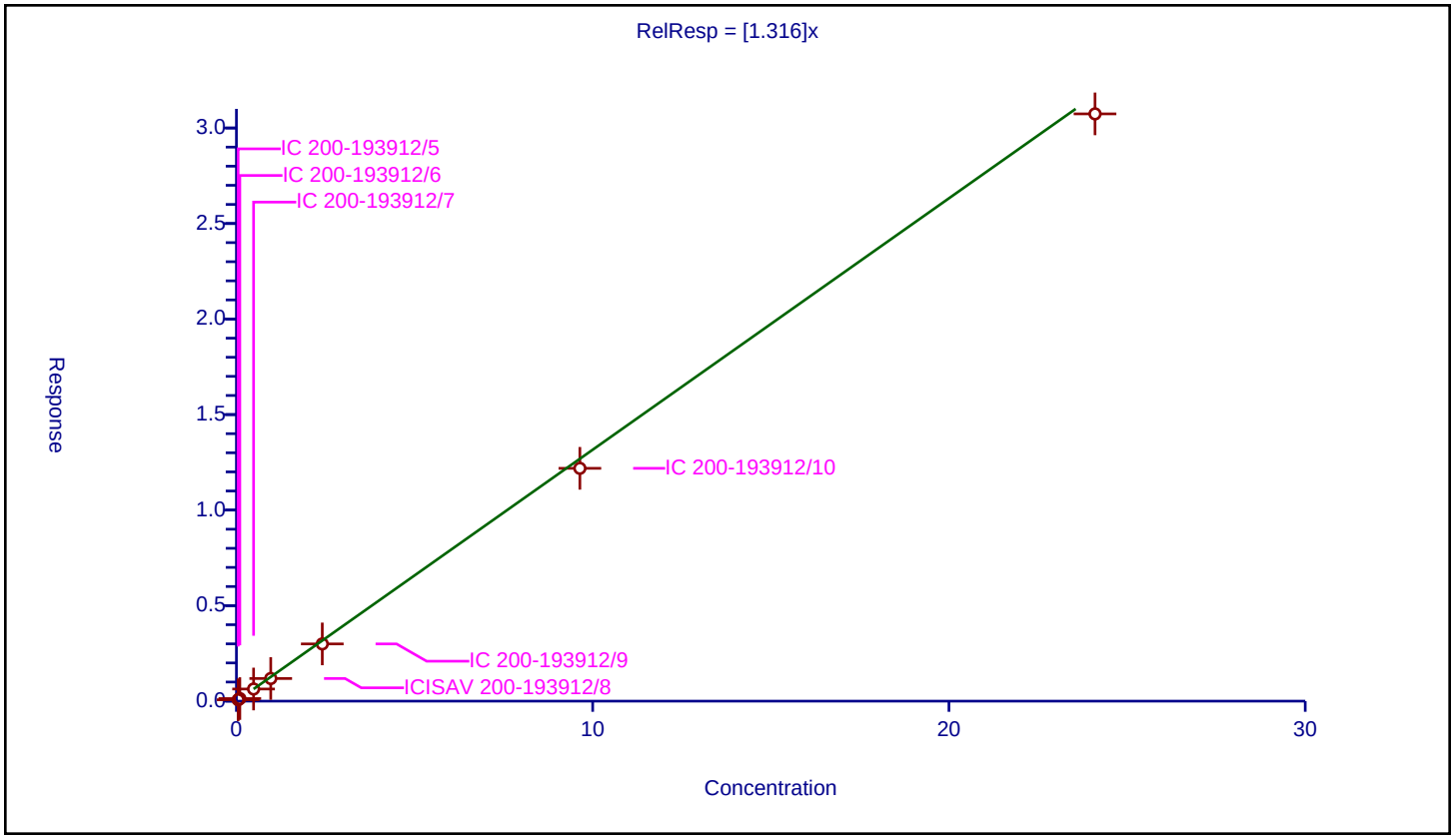
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	3580000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0482	0.071608	1.1975	366485.0	1.485641	Y
2	IC 200-193912/6	0.0964	0.134646	1.1975	307295.0	1.396742	Y
3	IC 200-193912/7	0.482	0.635587	1.1975	298552.0	1.318646	Y
4	ICISAV 200-193912/8	0.964	1.184378	1.1975	331913.0	1.228608	Y
5	IC 200-193912/9	2.41	2.994685	1.1975	331708.0	1.242608	Y
6	IC 200-193912/10	9.64	12.186219	1.1975	309678.0	1.264131	Y
7	IC 200-193912/11	24.1	30.739313	1.1975	316911.0	1.27549	Y



Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

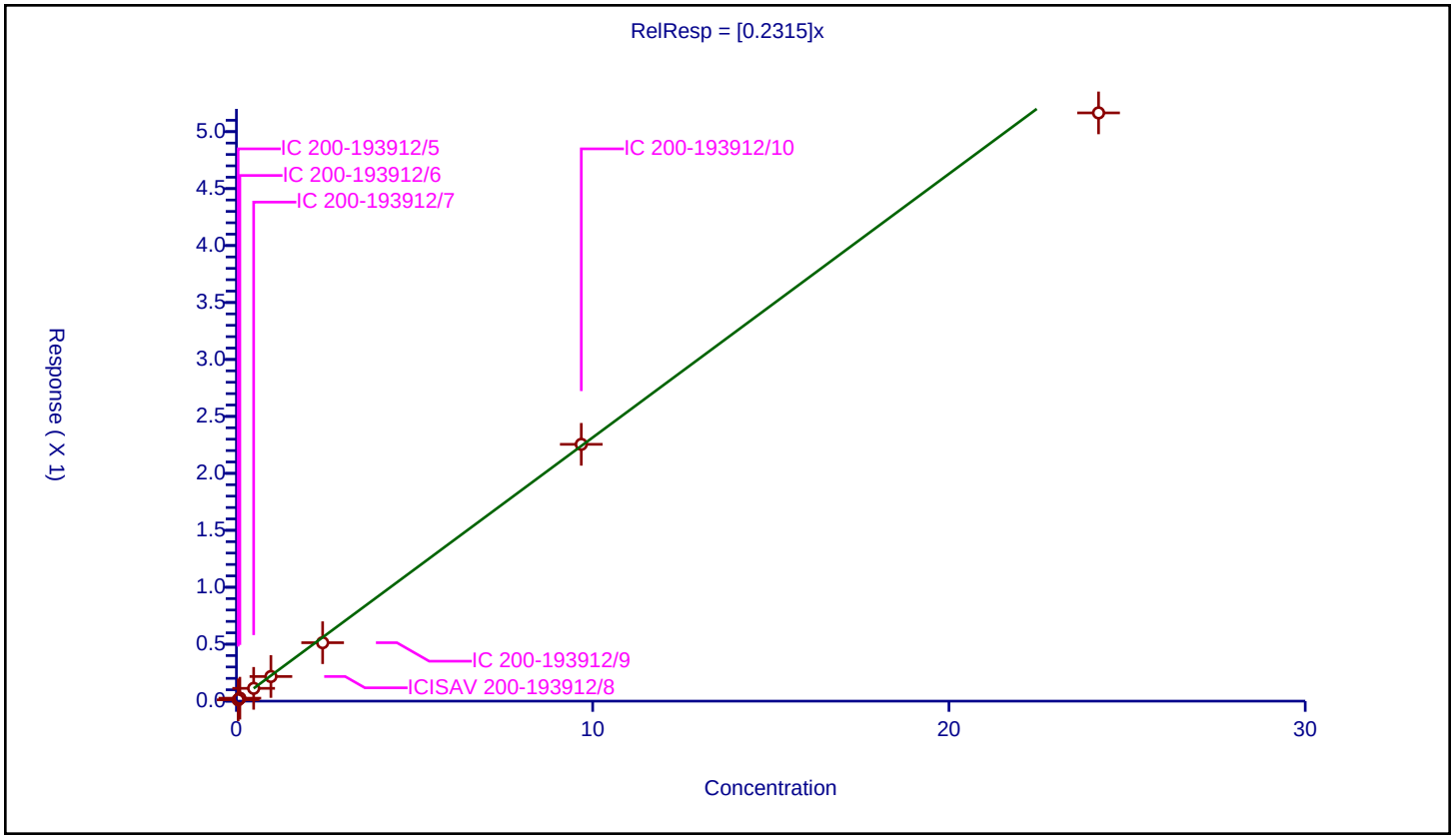
Curve Coefficients

Intercept:	0
Slope:	0.2315

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0484	0.011586	1.195	943517.0	0.239386	Y
2	IC 200-193912/6	0.0968	0.025868	1.195	863764.0	0.267235	Y
3	IC 200-193912/7	0.484	0.112249	1.195	882764.0	0.231919	Y
4	ICISAV 200-193912/8	0.968	0.216192	1.195	904398.0	0.223339	Y
5	IC 200-193912/9	2.42	0.513259	1.195	919926.0	0.21209	Y
6	IC 200-193912/10	9.68	2.254814	1.195	765818.0	0.232935	Y
7	IC 200-193912/11	24.2	5.164816	1.195	865311.0	0.213422	Y



Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

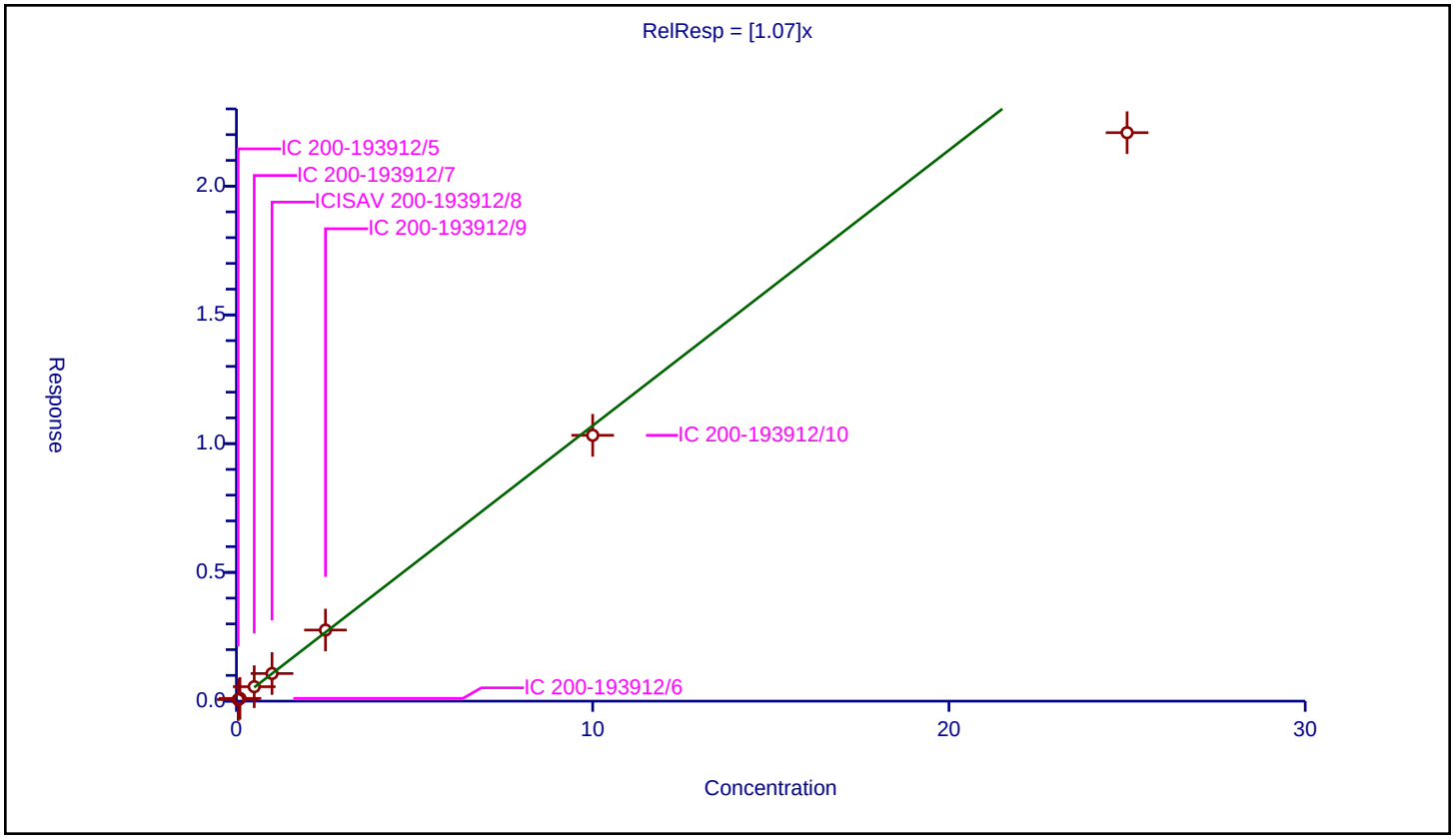
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	15700000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060572	1.25	2296115.0	1.211438	Y
2	IC 200-193912/6	0.1	0.106191	1.25	2131572.0	1.06191	Y
3	IC 200-193912/7	0.5	0.561156	1.25	2022512.0	1.122311	Y
4	ICISAV 200-193912/8	1.0	1.07307	1.25	2123640.0	1.07307	Y
5	IC 200-193912/9	2.5	2.761299	1.25	2062631.0	1.10452	Y
6	IC 200-193912/10	10.0	10.323864	1.25	1800020.0	1.032386	Y
7	IC 200-193912/11	25.0	22.076299	1.25	1994604.0	0.883052	Y



10/31/2023
10:17 AM

Calibration / Perfluorotetradecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

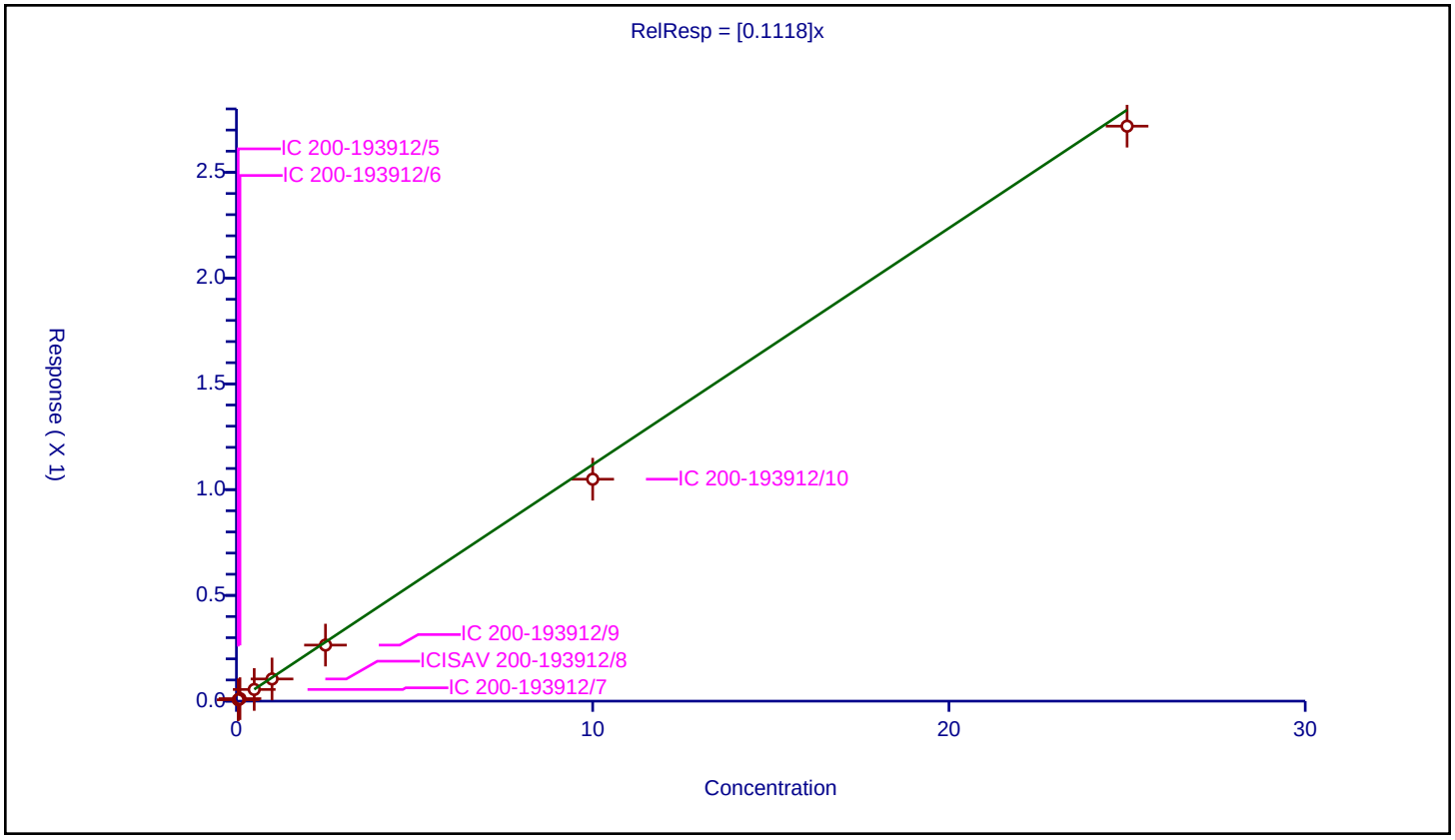
Curve Coefficients

Intercept:	0
Slope:	0.1118

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.006497	1.25	2302510.0	0.129934	Y
2	IC 200-193912/6	0.1	0.011797	1.25	2061289.0	0.117972	Y
3	IC 200-193912/7	0.5	0.055166	1.25	1996289.0	0.110332	Y
4	ICISAV 200-193912/8	1.0	0.10478	1.25	2077683.0	0.10478	Y
5	IC 200-193912/9	2.5	0.265032	1.25	2135161.0	0.106013	Y
6	IC 200-193912/10	10.0	1.049255	1.25	1876594.0	0.104926	Y
7	IC 200-193912/11	25.0	2.718444	1.25	1918275.0	0.108738	Y



Calibration / Perfluorohexadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

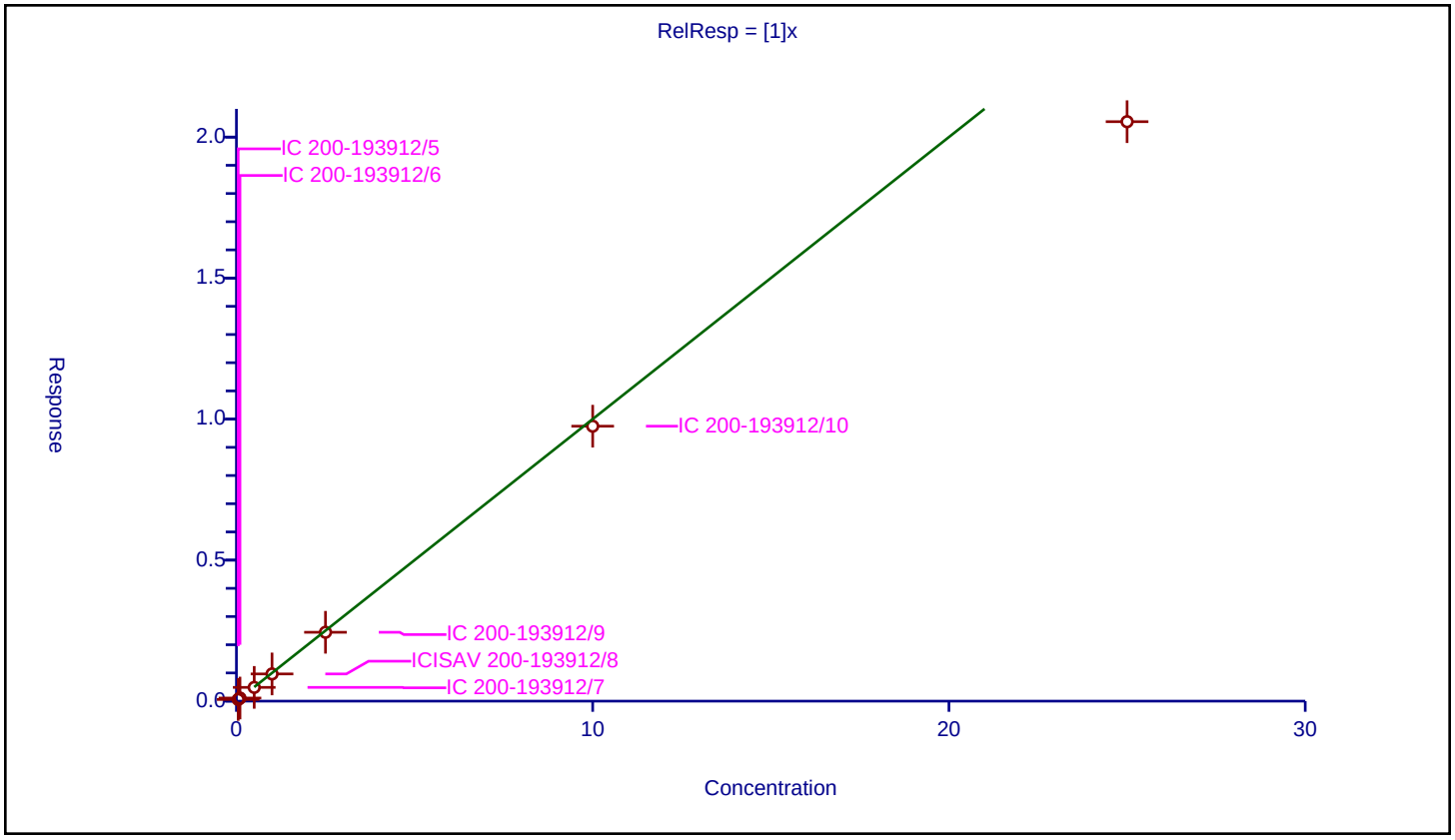
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	16800000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059148	1.25	2773326.0	1.182966	Y
2	IC 200-193912/6	0.1	0.110397	1.25	2341179.0	1.103968	Y
3	IC 200-193912/7	0.5	0.487301	1.25	2309121.0	0.974602	Y
4	ICISAV 200-193912/8	1.0	0.965145	1.25	2422773.0	0.965145	Y
5	IC 200-193912/9	2.5	2.442011	1.25	2376838.0	0.976804	Y
6	IC 200-193912/10	10.0	9.749491	1.25	2051028.0	0.974949	Y
7	IC 200-193912/11	25.0	20.546324	1.25	2292454.0	0.821853	Y



10/31/2023
10:17 AM

Calibration / Perfluorooctadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

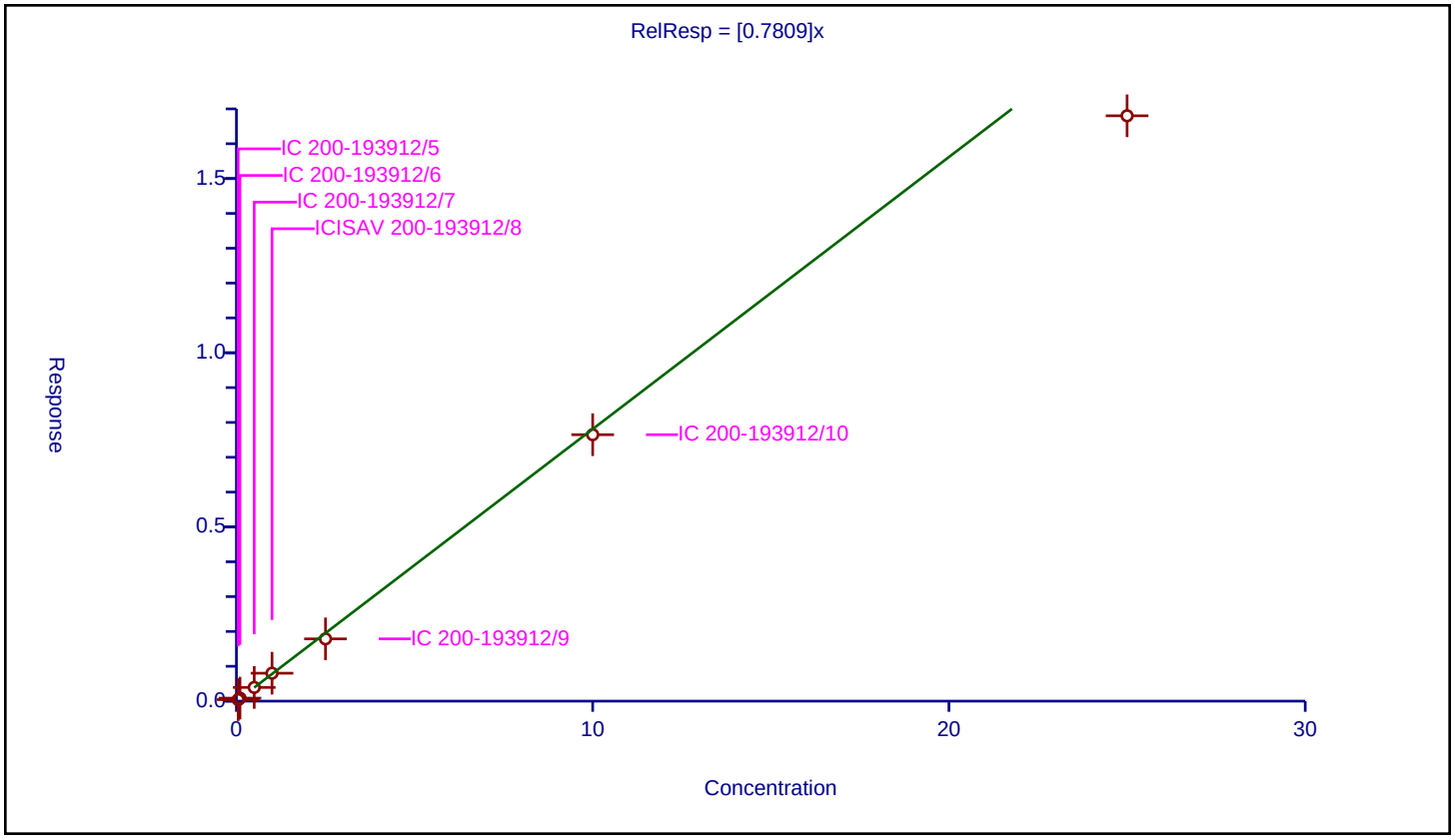
Curve Coefficients

Intercept:	0
Slope:	0.7809

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.043147	1.25	2773326.0	0.862944	Y
2	IC 200-193912/6	0.1	0.086341	1.25	2341179.0	0.863411	Y
3	IC 200-193912/7	0.5	0.393238	1.25	2309121.0	0.786476	Y
4	ICISAV 200-193912/8	1.0	0.801959	1.25	2422773.0	0.801959	Y
5	IC 200-193912/9	2.5	1.786872	1.25	2376838.0	0.714749	Y
6	IC 200-193912/10	10.0	7.647519	1.25	2051028.0	0.764752	Y
7	IC 200-193912/11	25.0	16.801641	1.25	2292454.0	0.672066	Y



10/31/2023
10:17 AM

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.091		1.17	1.00	16.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.233		1.15	1.01	14.2	30.0
Perfluorobutanesulfonic acid	AveID	1.117	1.273		1.14	1.00	14.0	30.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.749		1.10	1.00	10.4	30.0
Perfluorohexanoic acid	AveID	1.100	1.265		1.16	1.01	14.9	30.0
Perfluoropentanesulfonic acid	AveID	1.306	1.519		1.16	1.00	16.3	30.0
HFPODA	AveID	1.001	1.187		1.20	1.01	18.5	30.0
Perfluoroheptanoic acid	AveID	1.121	1.275		1.14	1.00	13.8	30.0
Perfluorohexanesulfonic acid	AveID	1.107	1.171		1.07	1.01	5.8	30.0
DONA	AveID	5.754	6.626		1.15	1.00	15.1	30.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.589		1.10	1.00	10.0	30.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.837		1.04	1.00	3.8	30.0
Perfluorooctanoic acid	AveID	1.065	1.147		1.08	1.00	7.6	30.0
Perfluorooctanesulfonic acid	AveID	1.166	1.129		0.977	1.01	-3.2	30.0
Perfluorononanoic acid	AveID	0.9800	1.173		1.20	1.00	19.7	30.0
9Cl-PF3ONS	AveID	3.569	3.916		1.10	1.00	9.7	30.0
Perfluorononanesulfonic acid	AveID	0.8874	0.9697		1.10	1.01	9.3	30.0
Perfluorodecanoic acid	AveID	0.999	1.132		1.13	1.00	13.3	30.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.648		1.22	1.01	20.3	30.0
Perfluorooctanesulfonamide	AveID	0.9539	1.010		1.06	1.00	5.9	30.0
NMeFOSAA	AveID	0.9074	1.065		1.17	1.00	17.3	30.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7209		1.07	1.01	5.6	30.0
Perfluoroundecanoic acid	AveID	1.031	1.105		1.07	1.00	7.2	30.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.079		1.08	1.00	7.9	30.0
11Cl-PF3OUdS	AveID	5.474	5.985		1.09	1.00	9.3	30.0
Perfluorododecanoic acid	AveID	1.018	1.033		1.02	1.00	1.5	30.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.421		1.04	0.964	7.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2219		0.928	0.968	-4.1	30.0
Perfluorotridecanoic acid	AveID	1.070	1.093		1.02	1.00	2.2	30.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1309		1.17	1.00	17.1	30.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9902		0.990	1.00	-1.0	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7992		1.02	1.00	2.3	30.0
13C4 PFBA	Ave	0.9917	0.9819		1.24	1.25	-1.0	50.0
13C3 PFBS	Ave	1.041	0.9897		1.11	1.16	-5.0	50.0
13C5 PFPeA	Ave	0.7696	0.7799		1.27	1.25	1.3	50.0
M2-4:2 FTS	Ave	0.1204	0.1244		1.21	1.17	3.3	50.0

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7614		1.22	1.25	-2.8	50.0
13C3 HFPO-DA	Ave	0.1516	0.1402		1.16	1.25	-7.5	50.0
13C4 PFHpA	Ave	0.8590	0.8570		1.25	1.25	-0.2	50.0
18O2 PFHxS	Ave	0.7464	0.7510		1.19	1.18	0.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1630		1.25	1.19	5.1	50.0
13C4 PFOA	Ave	0.9731	0.9893		1.27	1.25	1.7	50.0
13C4 PFOS	Ave	0.4742	0.4785		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.073		1.27	1.25	1.4	50.0
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	50.0
M2-8:2 FTS	Ave	0.1744	0.1644		1.13	1.20	-5.8	50.0
13C8 FOSA	Ave	0.9462	0.9298		1.23	1.25	-1.7	50.0
d3-NMeFOSAA	Ave	0.2650	0.2507		1.18	1.25	-5.4	50.0
13C2 PFUnA	Ave	1.047	1.065		1.27	1.25	1.7	50.0
d5-NEtFOSAA	Ave	0.2552	0.2498		1.22	1.25	-2.1	50.0
13C2 PFDoA	Ave	1.064	1.040		1.22	1.25	-2.3	50.0
13C2 PFTeDA	Ave	1.059	1.068		1.26	1.25	0.8	50.0
13C2 PFHxDA	Ave	1.221	1.213		1.24	1.25	-0.6	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Jul-2023 18:22:05 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0056441-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:46:57 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:36:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	2061390	1.24		99.0	1111	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	1799894	1.17			128	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1637273	1.27		101	855	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1630838	1.15			72.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.695	1932315	1.10		95.0	61660	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.006	2115731	1.14	Target=2.06		394	M
298.90 > 99.00	2.424	2.425	-0.001	1.006	951335		2.22(1.03-3.09)		205	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	243947	1.21		103	89.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	783361	1.10			1210	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1598439	1.22		97.2	1019	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	1633342	1.16	Target=14.12		201	M
313.00 > 119.00	2.755	2.731	0.024	1.000	119996		13.61(7.06-21.17)		87.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	1915826	1.16	Target=2.72		2515	
349.00 > 99.00	2.755	2.731	0.024	0.885	690197		2.78(1.36-4.09)		775	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.855	2.844	0.011	0.823	294290	1.16		92.5	1359	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	1.000	282227	1.20			1561	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1491459	1.19		101	3008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.114	3.092	0.022	1.000	1492005	1.07	Target=3.32		2002	
399.00 > 99.00	3.114	3.092	0.022	1.000	447913		3.33(1.66-4.98)		275	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.114	3.104	0.010	1.000	1835676	1.14	Target=4.17		375	
363.00 > 169.00	3.114	3.104	0.010	1.000	421780		4.35(2.09-6.26)		330	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1799170	1.25		99.8	4344	
77 DONA										
377.00 > 251.00	3.149	3.138	0.011	0.832	5325110	1.15	Target=3.33		4580	
377.00 > 85.00	3.149	3.138	0.011	0.832	1587786		3.35(1.66-4.99)		1564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.452	3.446	0.006	0.913	1277458	1.10	Target=4.83		2835	
449.00 > 99.00	3.452	3.446	0.006	0.913	271741		4.70(2.41-7.24)		608	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	325183	1.25		105	449	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	776988	1.04			1505	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.470	3.464	0.006	1.000	1905230	1.08	Target=2.88		155	
413.00 > 169.00	3.470	3.464	0.006	1.000	700454		2.72(1.44-4.32)		688	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	2077032	1.27		102	10779	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		2099437	1.25			5857	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	960411	1.21		101	3123	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	916205	0.9773	Target=4.24		1279	M
499.00 > 99.00	3.783	3.783	0.0	1.000	219275		4.18(2.12-6.37)		332	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2253485	1.27		101	8237	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	2114355	1.20	Target=8.34		396	
463.00 > 169.00	3.803	3.803	0.0	1.000	258068		8.19(4.17-12.51)		1687	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	3147105	1.10			4619	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	787129	1.10	Target=2.17		3635	
549.00 > 99.00	4.074	4.074	0.0	1.077	362945		2.17(1.08-3.25)		1106	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2306656	1.24		99.1	7364	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	2089059	1.13	Target=11.44		513	
513.00 > 169.00	4.108	4.108	0.0	1.000	187846		11.12(5.72-17.16)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.184	330559	1.13		94.2	534	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	738302	1.21			3324	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1951992	1.23		98.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1577862	1.06			1967	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	526368	1.18		94.6	1324	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.249	4.260	-0.011	1.000	448255	1.17			766	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	585144	1.07	Target=2.37		2036	
599.00 > 99.00	4.346	4.346	0.0	1.149	247580		2.36(1.19-3.56)		636	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2235945	1.27		102	10895	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.370	4.382	-0.012	1.000	1976512	1.07	Target=12.20		463	M
563.00 > 169.00	4.370	4.382	-0.012	1.000	173430		11.40(6.10-18.31)		356	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	524453	1.22		97.9	1054	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.000	452913	1.08			5512	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	4810172	1.09			5397	
D 36 13C2 PFDoA										
615.00 > 570.00	4.594	4.605	-0.011	1.324	2183255	1.22		97.7	5174	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.002	1804447	1.02	Target=8.47		152	
613.00 > 169.00	4.605	4.616	-0.011	1.002	231970		7.78(4.23-12.70)		1231	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.627	-0.011	1.124	378024	1.04			6028	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.261	172632	0.9280	Target=0.48		1502	
699.00 > 99.00	4.770	4.779	-0.009	1.261	341632		0.51(0.24-0.72)		2051	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.822	-0.023	1.044	1909411	1.02	Target=6.41		181	M
663.00 > 169.00	4.799	4.822	-0.023	1.044	273530		6.98(3.21-9.62)		474	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	2241989	1.26		101	6438	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.997	5.008	-0.011	1.000	234844	1.17	Target=0.87		1052	M
713.00 > 219.00	4.987	5.008	-0.021	0.998	248103		0.95(0.43-1.30)		673	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	2016874	0.99	Target=7.89		201	
813.00 > 169.00	5.317	5.328	-0.011	1.000	259711		7.77(3.94-11.83)		1503	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2546016	1.24		99.4	4909	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	1627913	1.02	Target=9.39		156	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	179766		9.06(4.69-14.08)		339	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

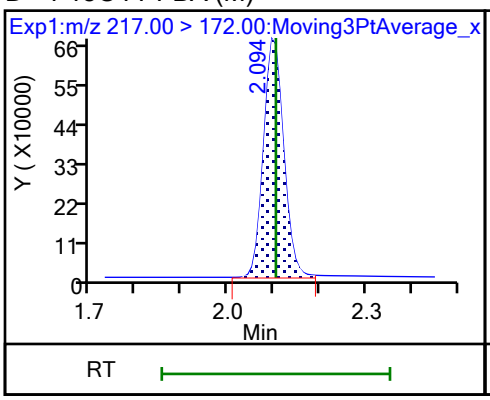
LCPFAS28NCICV_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:46:58 Chrom Revision: 2.3 19-Jul-2023 18:28:48

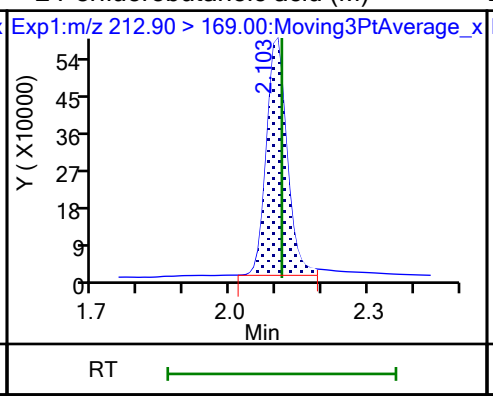
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Injection Date: 26-Jul-2023 18:22:05 Instrument ID: LC812
Lims ID: ICV
Client ID:
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

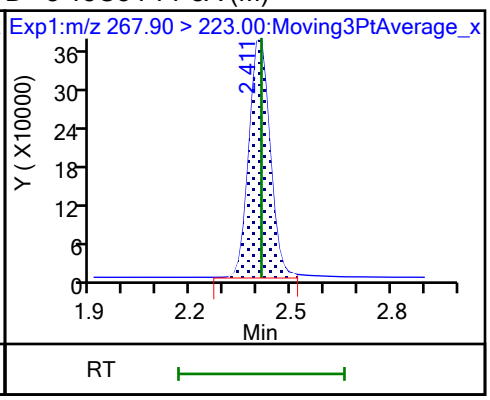
D 1 13C4 PFBA (M)



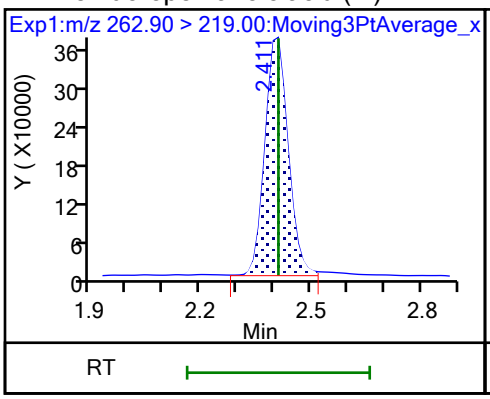
2 Perfluorobutanoic acid (M)



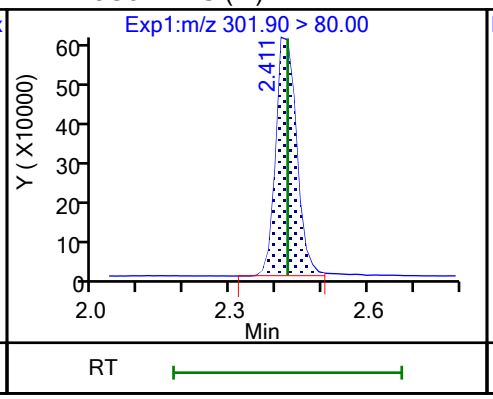
D 3 13C5 PFPeA (M)



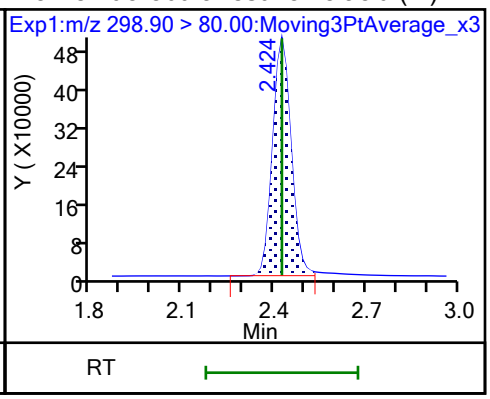
4 Perfluoropentanoic acid (M)



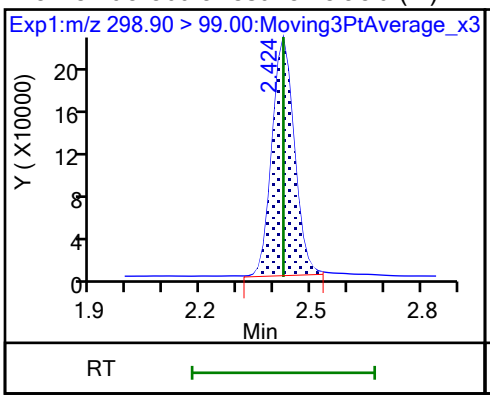
D 47 13C3 PFBS (M)



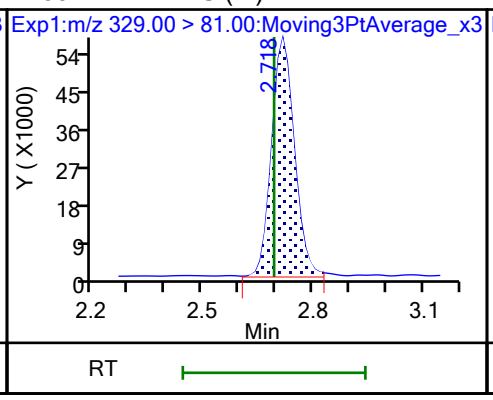
5 Perfluorobutanesulfonic acid (M)



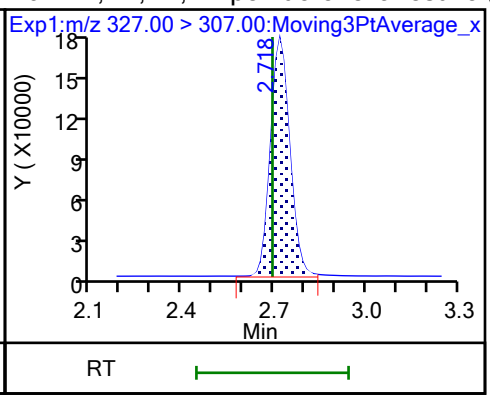
5 Perfluorobutanesulfonic acid (M)



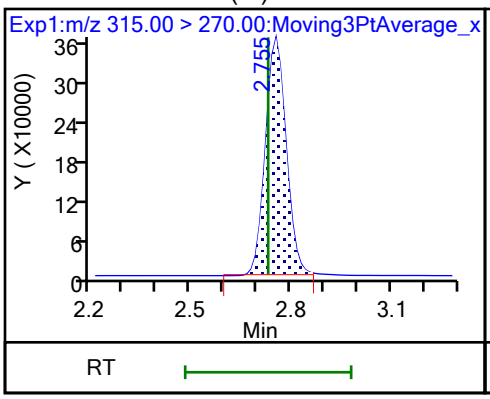
D 60 M2-4:2 FTS (M)



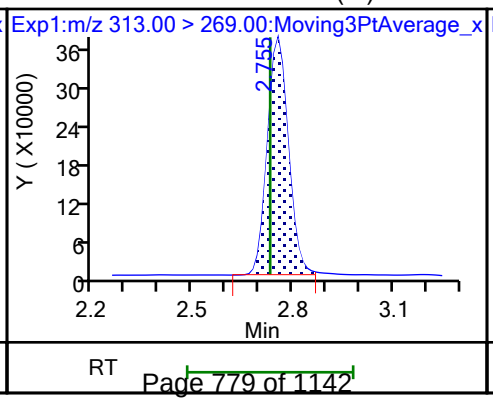
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



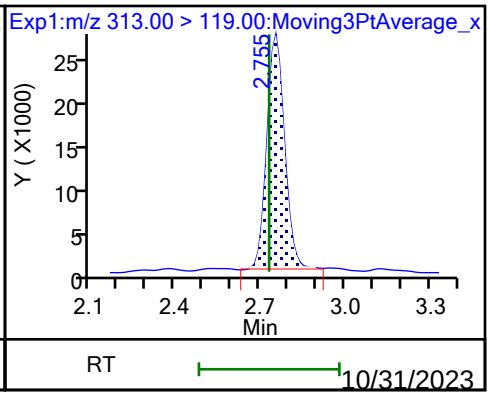
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

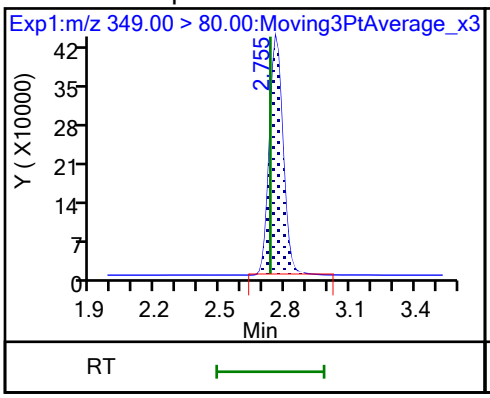


6 Perfluorohexanoic acid

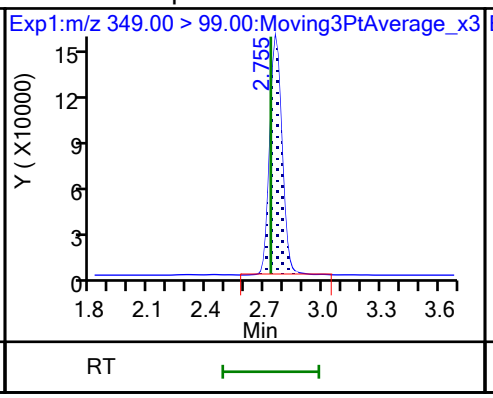


10/31/2023
10:17 AM

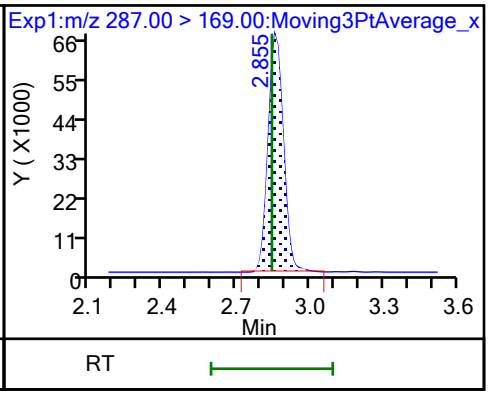
70 Perfluoropentanesulfonic acid



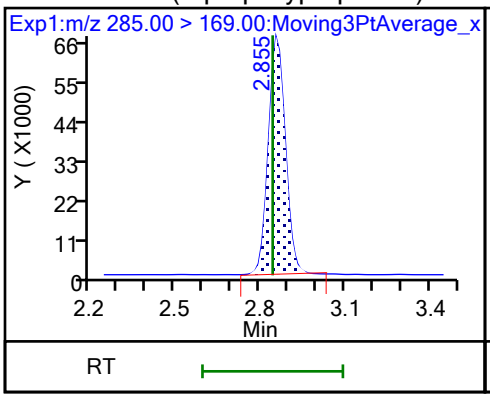
70 Perfluoropentanesulfonic acid



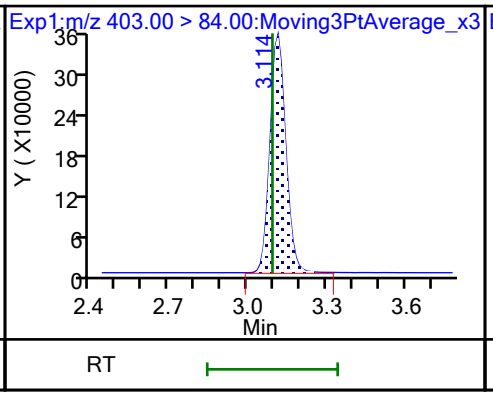
D 64 13C3 HFPO-DA



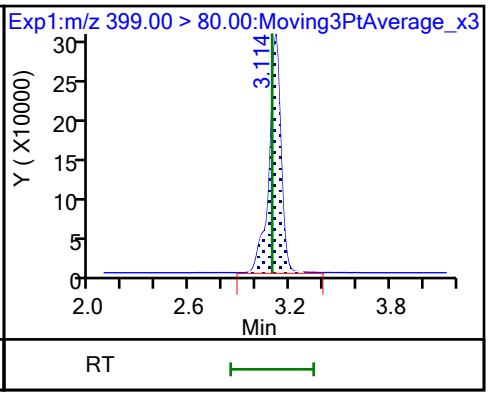
67 Perfluoro(2-propoxypropanoic) ac



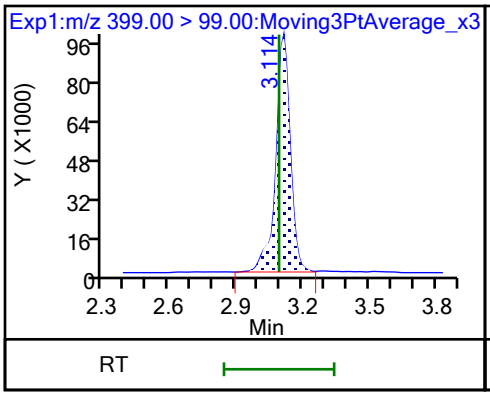
D 11 18O2 PFHxS



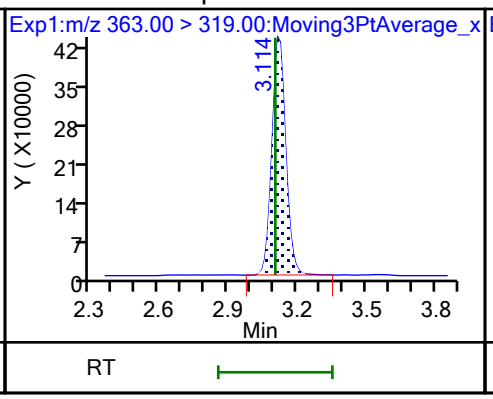
8 Perfluorohexanesulfonic acid



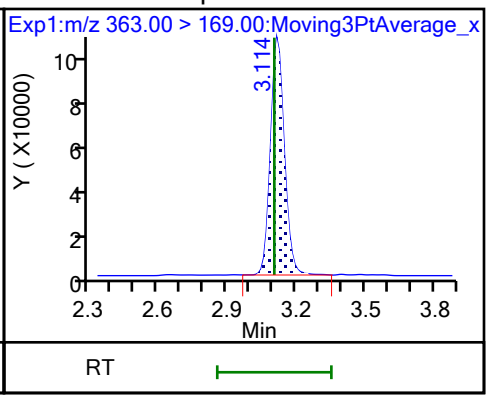
8 Perfluorohexanesulfonic acid



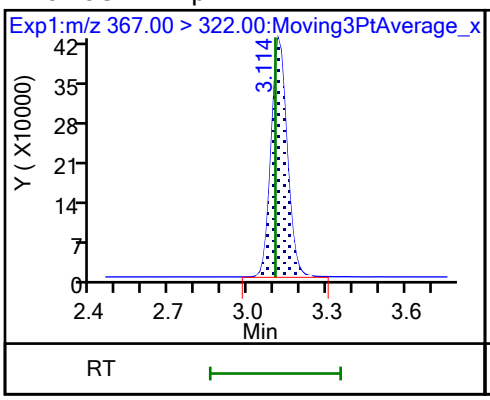
10 Perfluoroheptanoic acid



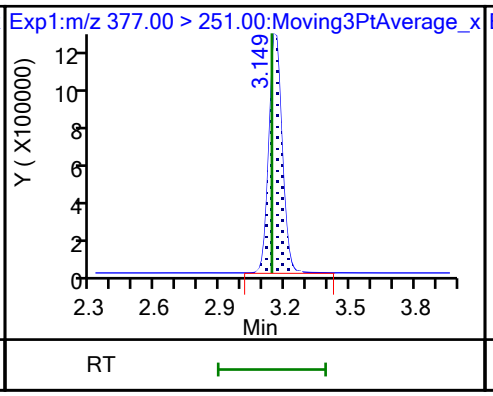
10 Perfluoroheptanoic acid



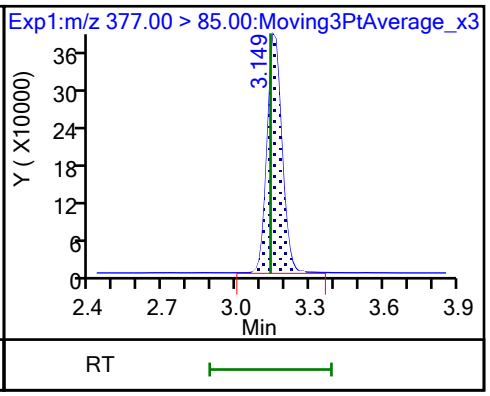
D 9 13C4 PFHpA



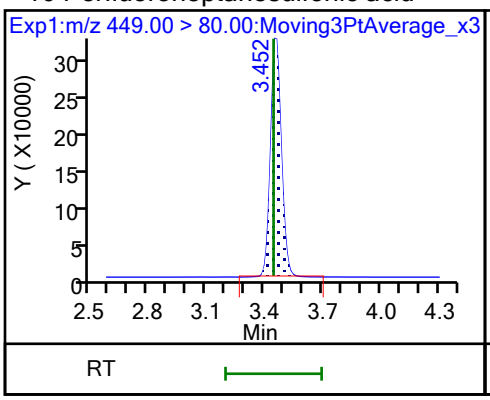
77 DONA



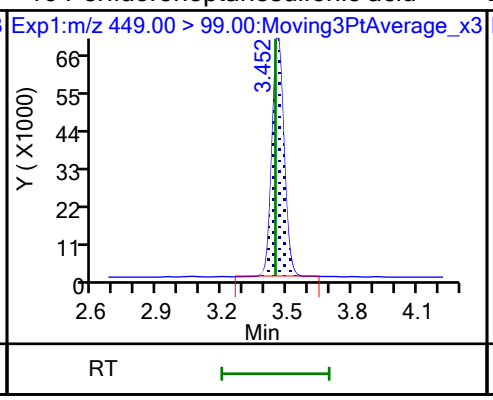
77 DONA



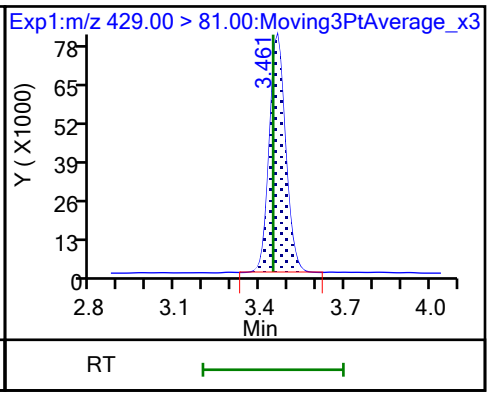
16 Perfluoroheptanesulfonic acid



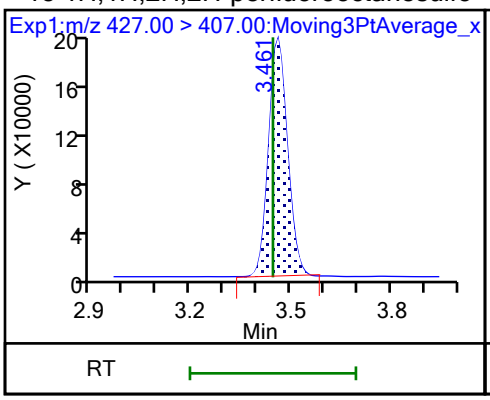
16 Perfluoroheptanesulfonic acid



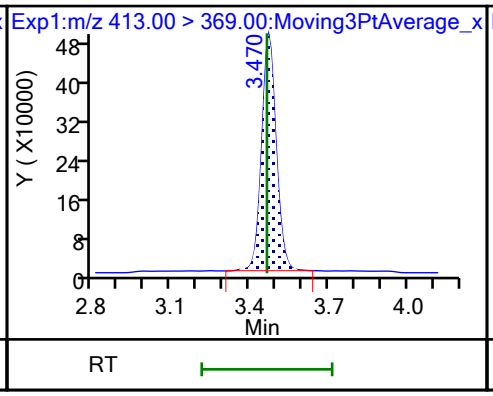
D 12 M2-6:2 FTS



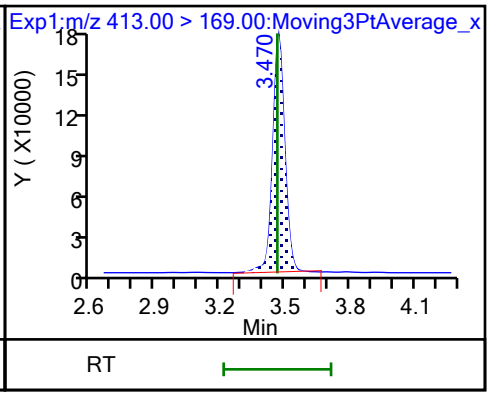
13 1H,1H,2H,2H-perfluorooctanesulfo



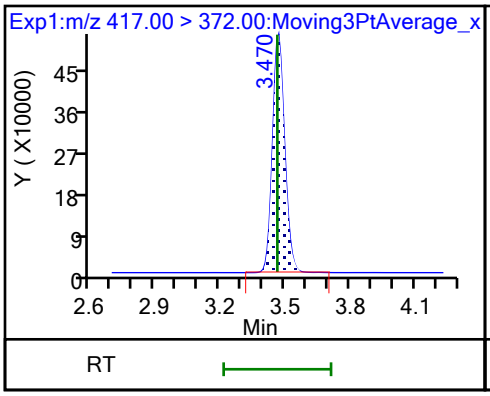
15 Perfluorooctanoic acid



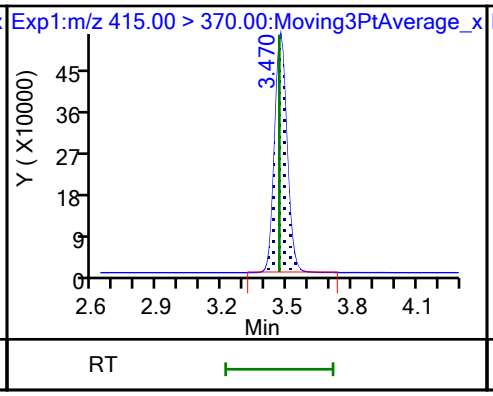
15 Perfluorooctanoic acid



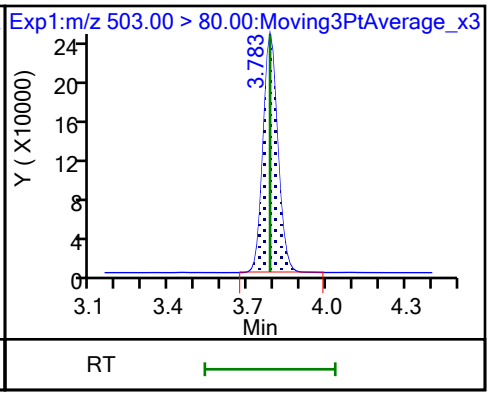
D 14 13C4 PFOA



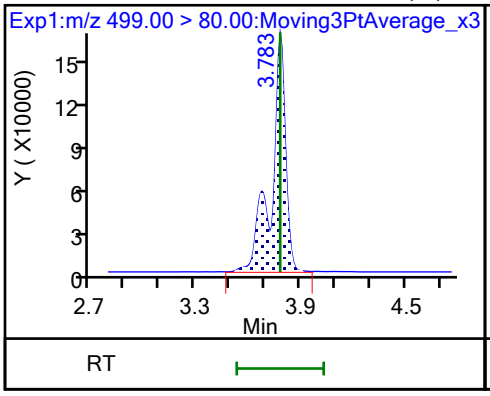
* 62 13C2 PFOA



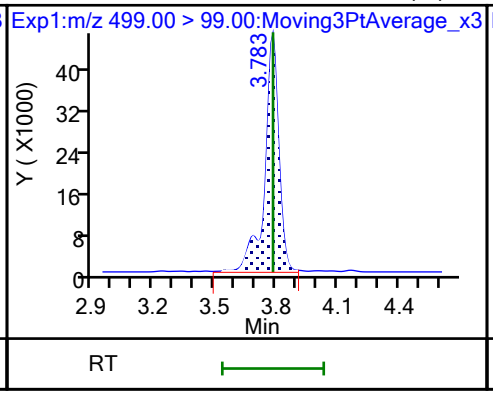
D 18 13C4 PFOS



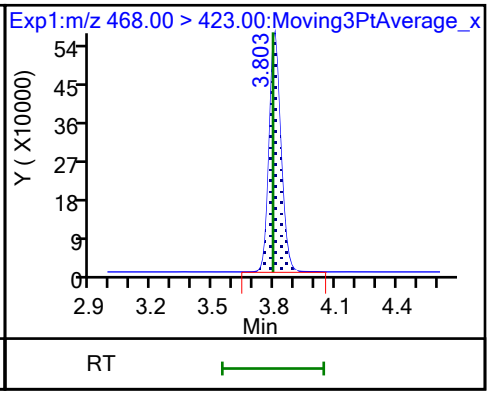
17 Perfluorooctanesulfonic acid (M)



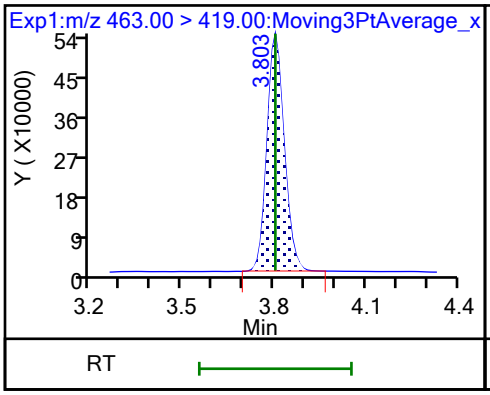
17 Perfluorooctanesulfonic acid (M)



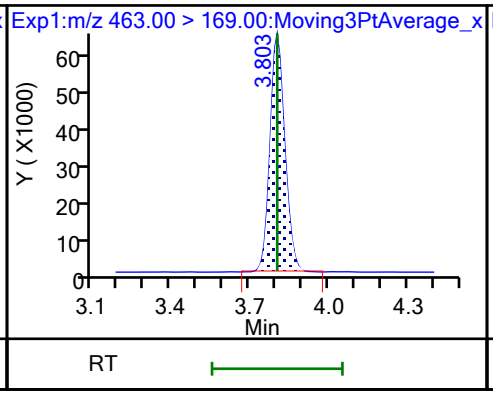
D 19 13C5 PFNA



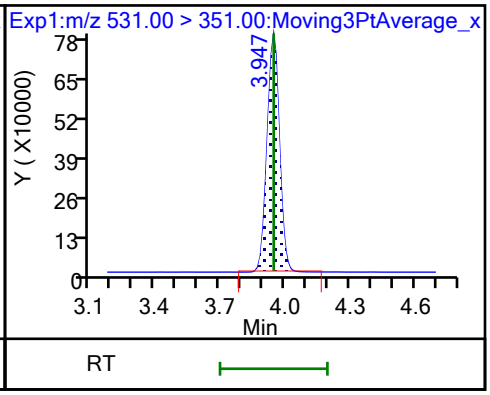
20 Perfluorononanoic acid



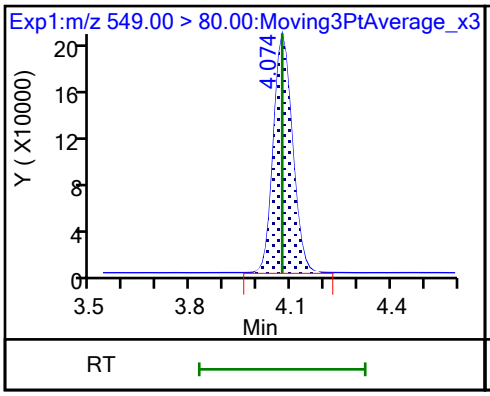
20 Perfluorononanoic acid



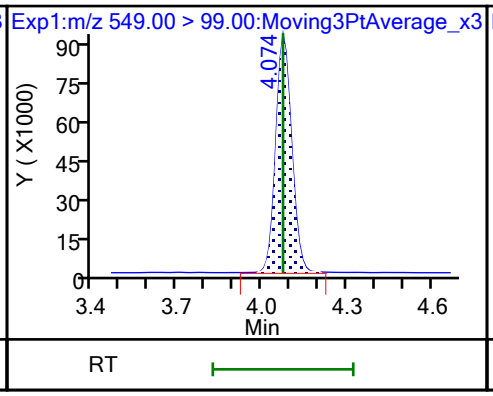
69 9-Chlorohexadecafluoro-3-oxanona



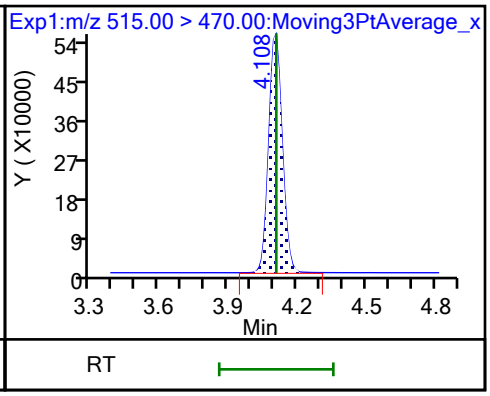
68 Perfluorononanesulfonic acid



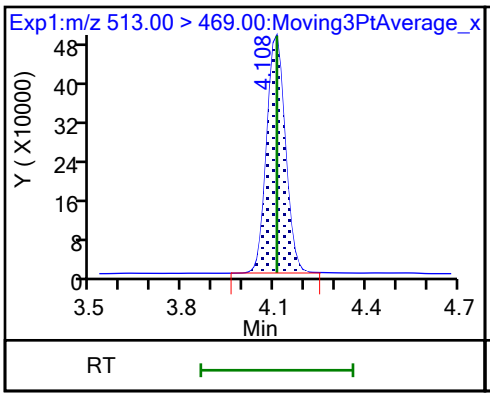
68 Perfluorononanesulfonic acid



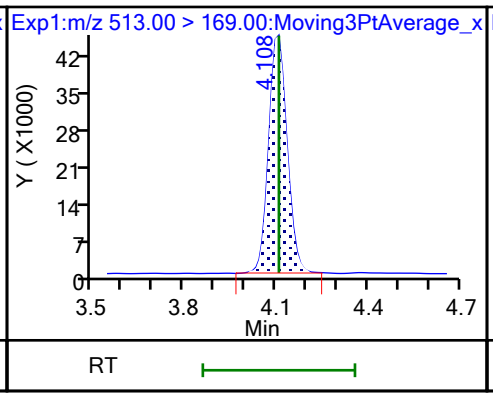
D 23 13C2 PFDA



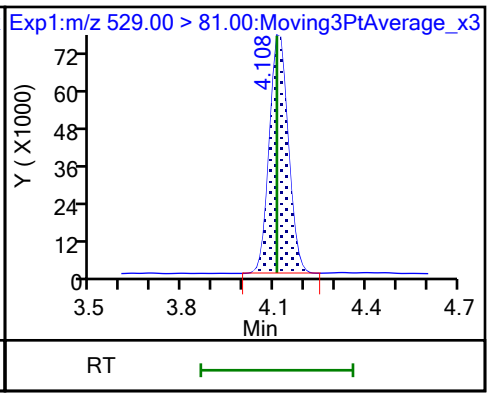
24 Perfluorodecanoic acid



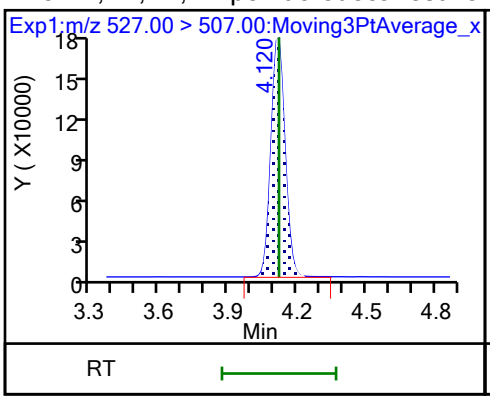
24 Perfluorodecanoic acid



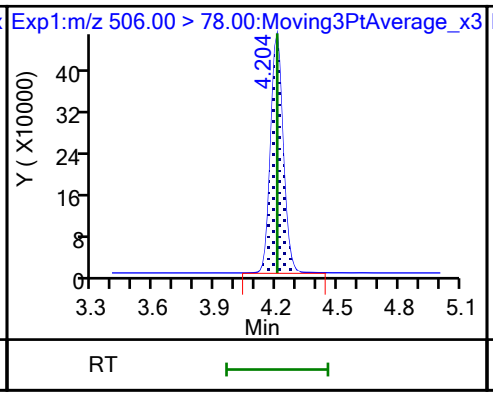
D 26 M2-8:2 FTS



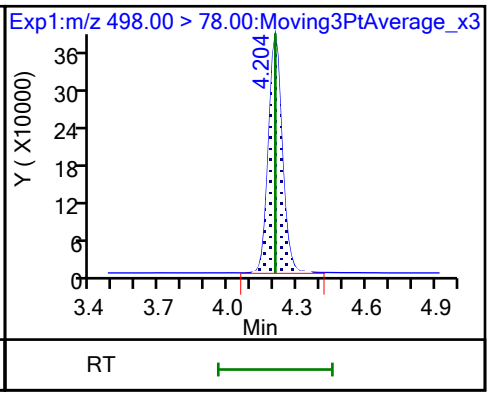
25 1H,1H,2H,2H-perfluorodecanesulfo



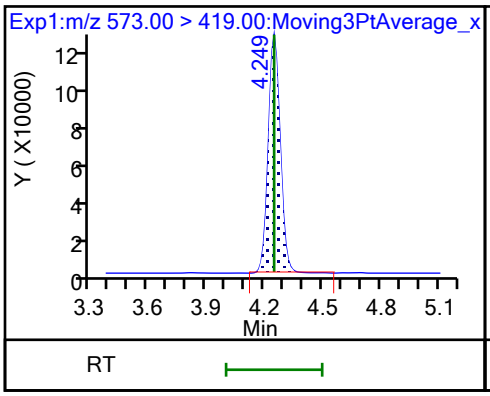
D 21 13C8 FOSA



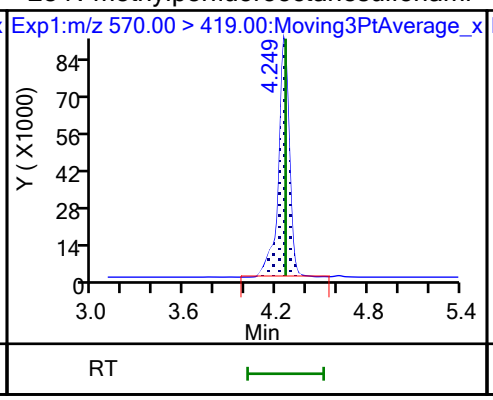
22 Perfluorooctanesulfonamide



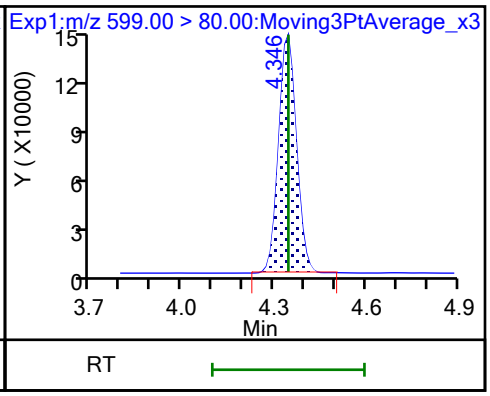
D 27 d3-NMeFOSAA



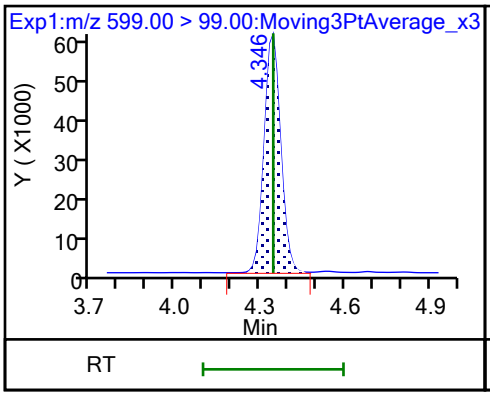
28 N-methylperfluorooctanesulfonami



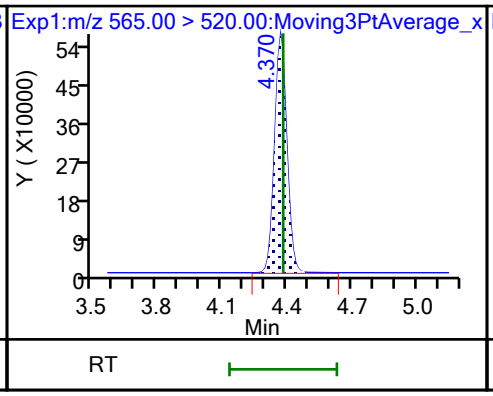
29 Perfluorodecanesulfonic acid



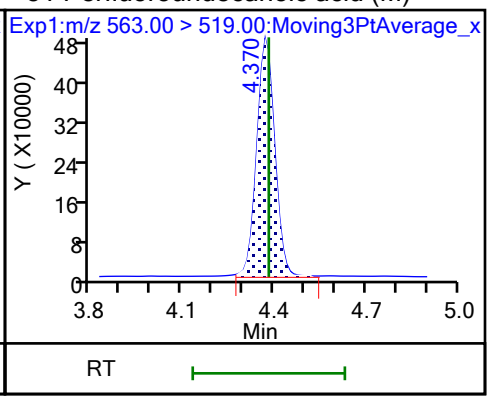
29 Perfluorodecanesulfonic acid



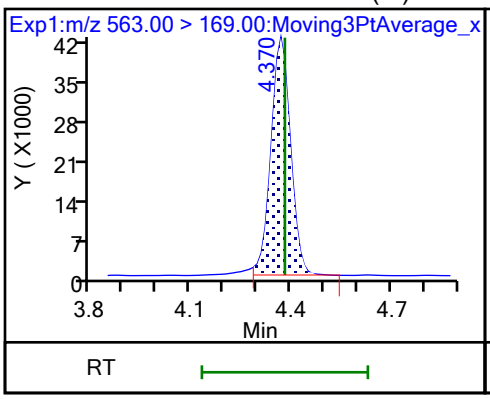
D 30 13C2 PFUnA



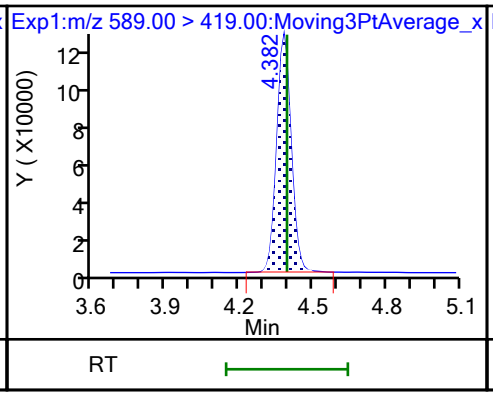
31 Perfluoroundecanoic acid (M)



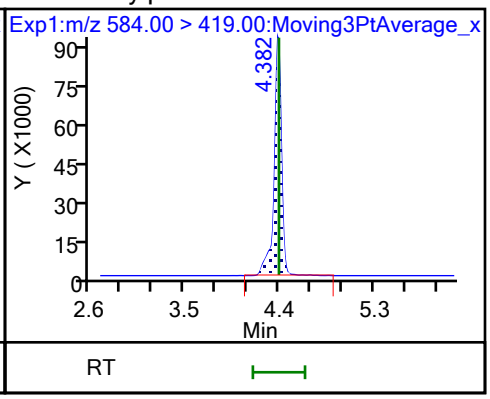
31 Perfluoroundecanoic acid (M)



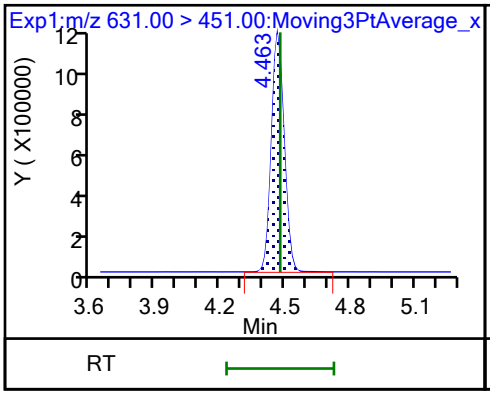
D 32 d5-NEtFOSAA



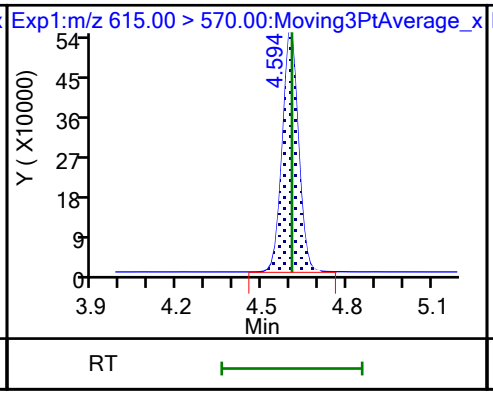
33 N-ethylperfluorooctanesulfonamid



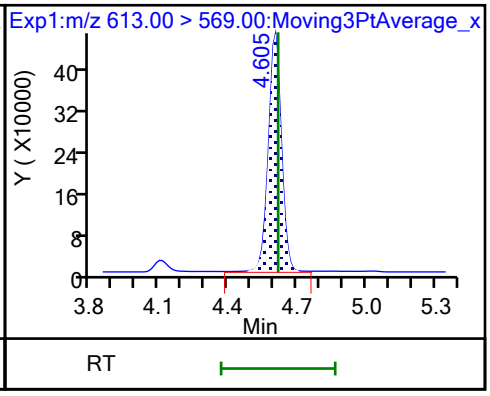
66 11-Chloroeicosafluoro-3-oxaundec



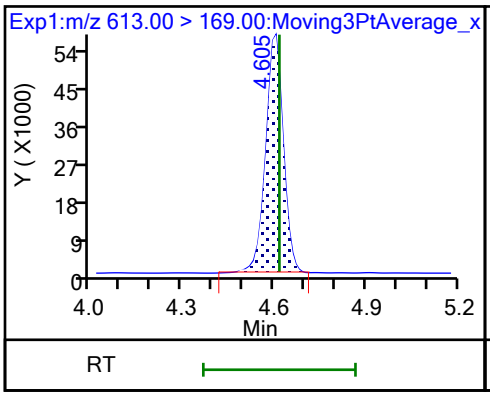
D 36 13C2 PFDoA



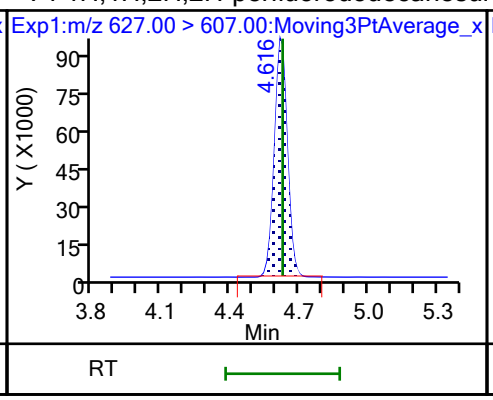
37 Perfluorododecanoic acid



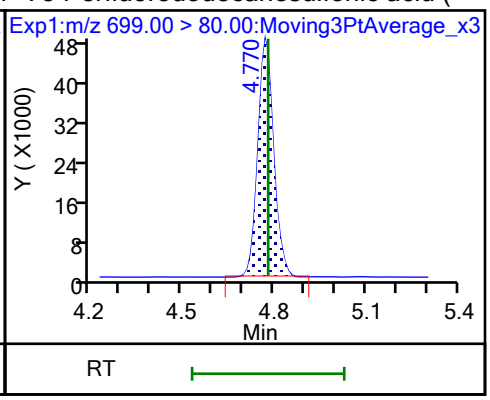
37 Perfluorododecanoic acid



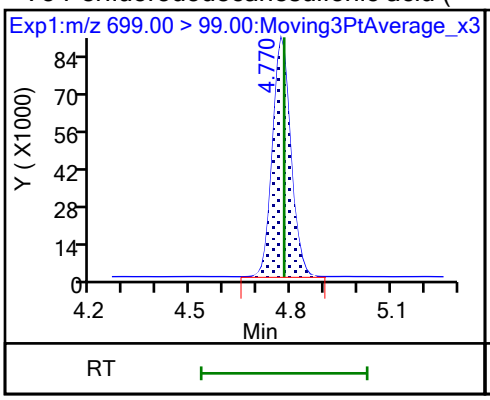
74 1H,1H,2H,2H-perfluorododecanesul



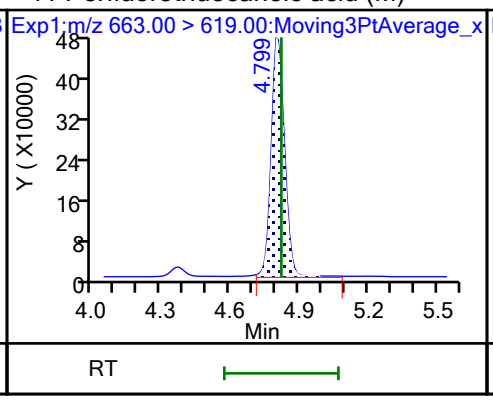
75 Perfluorododecanesulfonic acid (



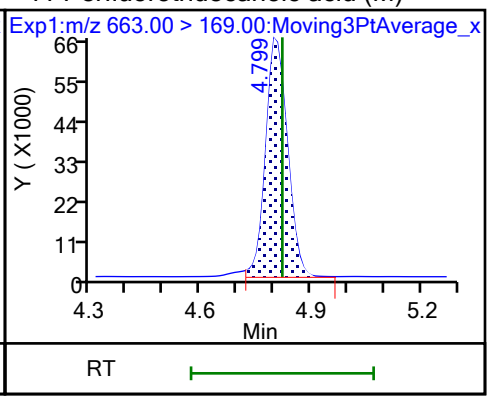
75 Perfluorododecanesulfonic acid (



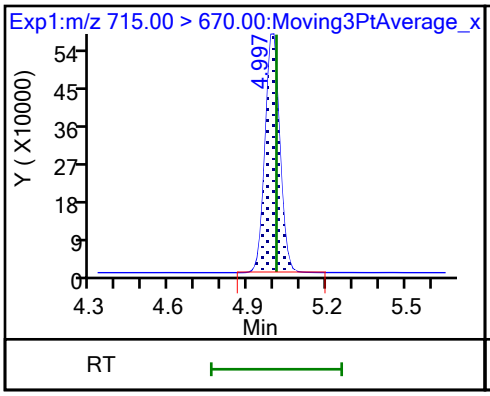
41 Perfluorotridecanoic acid (M)



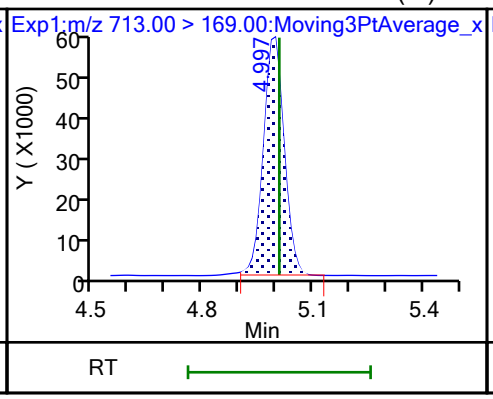
41 Perfluorotridecanoic acid (M)



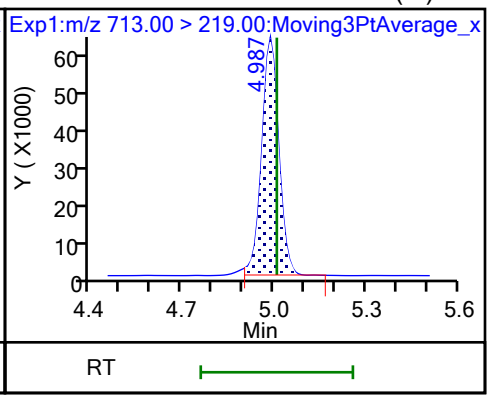
D 43 13C2 PFTeDA



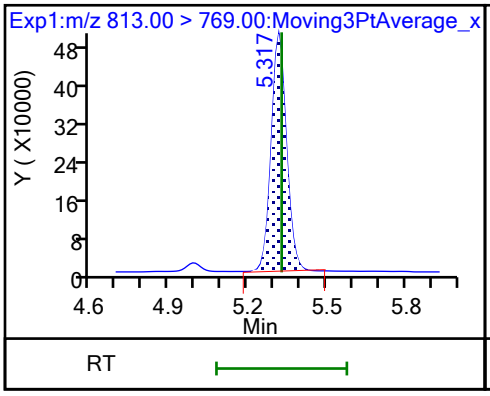
42 Perfluorotetradecanoic acid (M)



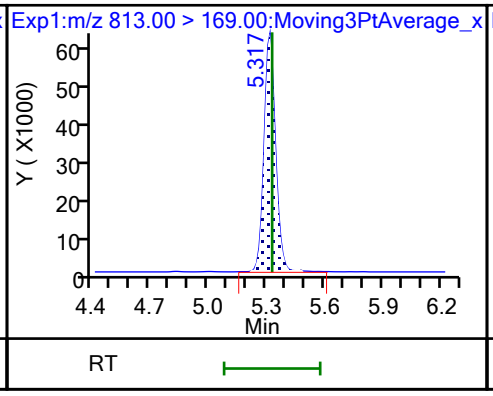
42 Perfluorotetradecanoic acid (M)



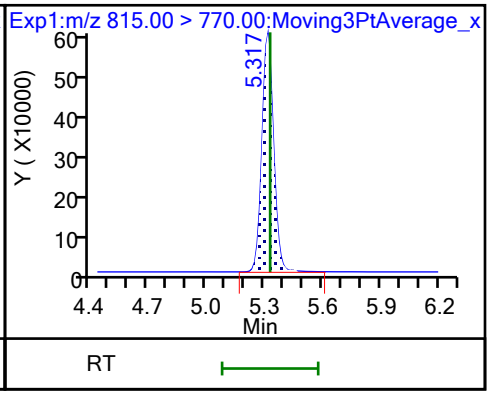
45 Perfluorohexadecanoic acid



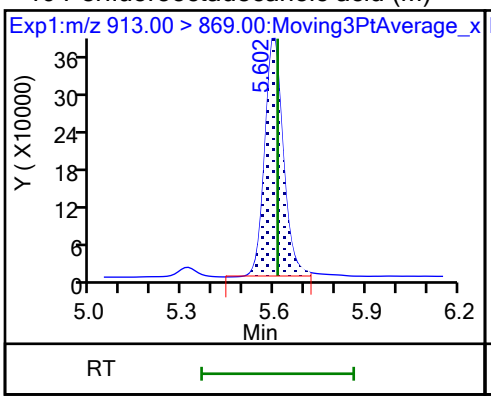
45 Perfluorohexadecanoic acid



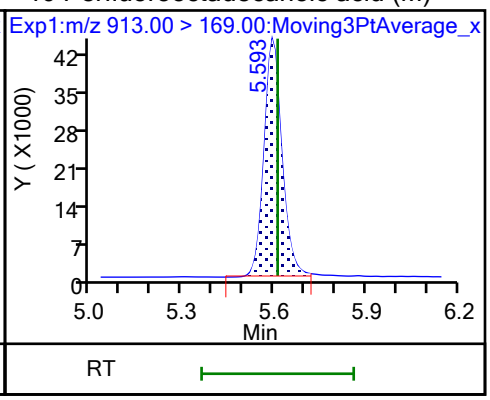
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.196		0.124	0.125	-0.4	50.0
Perfluoropentanoic acid	AveID	1.079	1.275		0.0591	0.0500	18.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.240		0.0492	0.0444	11.0	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.667		0.0506	0.0469	8.0	50.0
Perfluorohexanoic acid	AveID	1.100	1.099		0.0500	0.0500	-0.1	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.386		0.0499	0.0471	6.1	50.0
HFPODA	AveID	1.001	1.202		0.120	0.100	20.0	50.0
Perfluoroheptanoic acid	AveID	1.121	1.158		0.0516	0.0500	3.3	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.137		0.0469	0.0457	2.7	50.0
DONA	AveID	5.754	6.340		0.0521	0.0473	10.2	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.534		0.0506	0.0477	6.1	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.238		0.141	0.119	18.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.153		0.0541	0.0500	8.2	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.254		0.0499	0.0464	7.5	50.0
Perfluorononanoic acid	AveID	0.9800	0.9579		0.0489	0.0500	-2.3	50.0
9Cl-PF3ONS	AveID	3.569	4.158		0.0543	0.0467	16.5	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8228		0.0446	0.0481	-7.3	50.0
Perfluorodecanoic acid	AveID	0.999	1.005		0.0503	0.0500	0.6	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.579		0.0562	0.0480	17.1	50.0
Perfluorooctanesulfonamide	AveID	0.9539	1.006		0.0527	0.0500	5.4	50.0
NMeFOSAA	AveID	0.9074	1.018		0.140	0.125	12.2	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6403		0.0452	0.0483	-6.2	50.0
Perfluoroundecanoic acid	AveID	1.031	1.062		0.0515	0.0500	3.1	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.102		0.138	0.125	10.2	50.0
11Cl-PF3OUdS	AveID	5.474	6.185		0.0533	0.0472	13.0	50.0
Perfluorododecanoic acid	AveID	1.018	0.996		0.0489	0.0500	-2.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.758		0.0644	0.0482	33.6	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2146		0.0449	0.0484	-7.3	50.0
Perfluorotridecanoic acid	AveID	1.070	1.138		0.0532	0.0500	6.4	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1294		0.0579	0.0500	15.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.113		0.0557	0.0500	11.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7867		0.0504	0.0500	0.7	50.0
13C4 PFBA	Ave	0.9917	0.9573		1.21	1.25	-3.5	
13C5 PFPeA	Ave	0.7696	0.7248		1.18	1.25	-5.8	
13C3 PFBS	Ave	1.041	0.8566		0.956	1.16	-17.7	
M2-4:2 FTS	Ave	0.1204	0.0991		0.961	1.17	-17.7	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7870		1.26	1.25	0.5	
13C3 HFPO-DA	Ave	0.1516	0.1401		1.16	1.25	-7.5	
13C4 PFHpA	Ave	0.8590	0.8057		1.17	1.25	-6.2	
18O2 PFHxS	Ave	0.7464	0.6670		1.06	1.18	-10.6	
M2-6:2 FTS	Ave	0.1551	0.1371		1.05	1.19	-11.6	
13C4 PFOA	Ave	0.9731	0.9317		1.20	1.25	-4.3	
13C4 PFOS	Ave	0.4742	0.4296		1.08	1.20	-9.4	
13C5 PFNA	Ave	1.059	1.034		1.22	1.25	-2.4	
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	
M2-8:2 FTS	Ave	0.1744	0.1424		0.978	1.20	-18.3	
13C8 FOSA	Ave	0.9462	0.8471		1.12	1.25	-10.5	
d3-NMeFOSAA	Ave	0.2650	0.2316		1.09	1.25	-12.6	
13C2 PFUnA	Ave	1.047	1.010		1.21	1.25	-3.5	
d5-NEtFOSAA	Ave	0.2552	0.2406		1.18	1.25	-5.7	
13C2 PFDoA	Ave	1.064	1.081		1.27	1.25	1.7	
13C2 PFTeDA	Ave	1.059	1.041		1.23	1.25	-1.7	
13C2 PFHxDA	Ave	1.221	1.217		1.25	1.25	-0.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 23-Oct-2023 15:47:27 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057509-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 11:54:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.602	2165365	1.21		96.5	1549	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	258970	0.1244		99.6	28.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.692	1639412	1.18		94.2	2238	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	83586	0.0591		118	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.700	1802004	0.9563		82.3	88832	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	85221	0.0492	Target=2.06	111	77.3	M
298.90 > 99.00	2.467	2.467	0.0	1.000	41747		2.04(1.03-3.09)		15.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	30812	0.0506		108	208	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.783	209392	0.9609		82.3	158	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1780135	1.26		101	1668	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	78281	0.0500	Target=14.12	99.9	17.5	M
313.00 > 119.00	2.797	2.797	0.0	1.000	5833		13.42(7.06-21.17)		8.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.887	78694	0.0499	Target=2.72	106	125	
349.00 > 99.00	2.810	2.810	0.0	0.887	26871		2.93(1.36-4.09)		60.2	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	30475	0.1200		120	211	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.825	316943	1.16		92.5	3607	
D 11 18O2 PFHxS										
403.00 > 84.00	3.168	3.168	0.0	0.899	1427286	1.06		89.4	6130	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.168	3.168	0.0	1.000	62731	0.0469	Target=3.32	103	156	M
399.00 > 99.00	3.168	3.168	0.0	1.000	20807		3.01(1.66-4.98)		20.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.168	0.0	1.000	84395	0.0516	Target=4.17	103	18.3	M
363.00 > 169.00	3.168	3.168	0.0	1.000	19852		4.25(2.09-6.26)		43.5	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.168	3.168	0.0	0.899	1822385	1.17		93.8	10832	
77 DONA										M
377.00 > 251.00	3.203	3.203	0.0	0.838	232884	0.0521	Target=3.33	110	272	
377.00 > 85.00	3.203	3.203	0.0	0.838	61876		3.76(1.66-4.99)		109	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.505	3.505	0.0	0.917	56810	0.0506	Target=4.83	106	126	
449.00 > 99.00	3.514	3.505	0.009	0.919	12577		4.52(2.41-7.24)		41.6	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.505	3.505	0.0	0.995	294545	1.05		88.4	543	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.514	3.514	0.0	1.003	95292	0.1406		118	138	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.514	0.0	0.997	97192	0.0541	Target=2.88	108	4.7	M
413.00 > 169.00	3.514	3.514	0.0	0.997	39538		2.46(1.44-4.32)		71.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.523	3.523	0.0	1.000	2107370	1.20		95.7	6086	
* 62 13C2 PFOA										
415.00 > 370.00	3.523	3.523	0.0		2261885	1.25			8183	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.822	3.822	0.0	1.000	45243	0.0499	Target=4.24	108	88.9	M
499.00 > 99.00	3.822	3.822	0.0	1.000	11094		4.08(2.12-6.37)		27.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.822	0.0	1.085	928977	1.08		90.6	4921	
20 Perfluorononanoic acid										
463.00 > 419.00	3.845	3.845	0.0	1.000	89574	0.0489	Target=8.34	97.7	12.4	
463.00 > 169.00	3.845	3.845	0.0	1.000	11550		7.76(4.17-12.51)		121	
D 19 13C5 PFNA										
468.00 > 423.00	3.845	3.845	0.0	1.092	2337864	1.22		97.6	6498	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.983	3.983	0.0	1.042	150787	0.0543		116	608	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.105	4.105	0.0	1.074	30768	0.0446	Target=2.17	92.7	225	
549.00 > 99.00	4.105	4.105	0.0	1.074	13897		2.21(1.08-3.25)		53.0	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.129	4.129	0.0	1.000	99944	0.0503	Target=11.44	101	28.0	M
513.00 > 169.00	4.141	4.129	0.012	1.003	9567		10.45(5.72-17.16)		53.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.129	0.0	1.172	2486286	1.24		99.1	8282	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.141	4.141	0.0	1.176	308613	0.9779		81.7	576	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.141	4.141	0.0	1.000	31903	0.0562		117	299	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.234	4.234	0.0	1.202	1915989	1.12		89.5	2754	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.234	4.234	0.0	1.000	77077	0.0527		105	452	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.270	4.270	0.0	1.212	523930	1.09		87.4	1392	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.270	4.270	0.0	1.000	53350	0.1403		112	142	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.366	4.366	0.0	1.142	24017	0.0452	Target=2.37	93.8	186	M
599.00 > 99.00	4.354	4.366	-0.012	1.139	9428		2.55(1.19-3.56)		85.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.390	4.390	0.0	1.246	2285192	1.21		96.5	7490	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.390	4.390	0.0	1.000	97109	0.0515	Target=12.20	103	22.1	
563.00 > 169.00	4.390	4.390	0.0	1.000	10875		8.93(6.10-18.31)		203	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.401	4.401	0.0	1.249	544262	1.18		94.3	1595	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.401	4.401	0.0	1.000	59994	0.1378		110	240	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.473	4.473	0.0	1.170	226708	0.0533		113	413	
D 36 13C2 PFDoA										
615.00 > 570.00	4.613	4.613	0.0	1.310	2446106	1.27		102	10235	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.613	0.0	1.000	97419	0.0489	Target=8.47	97.8	6.6	
613.00 > 169.00	4.602	4.613	-0.011	0.998	12328		7.90(4.23-12.70)		101	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.624	4.624	0.0	1.117	21839	0.0644		134	295	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.777	4.777	0.0	1.250	8075	0.0449	Target=0.48	92.7	126	
699.00 > 99.00	4.777	4.777	0.0	1.250	18264		0.44(0.24-0.72)		360	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.806	4.806	0.0	1.042	111351	0.0532	Target=6.41	106	7.1	M
663.00 > 169.00	4.806	4.806	0.0	1.042	17275		6.45(3.21-9.62)		196	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.982	4.982	0.0	1.414	2355579	1.23		98.3	5019	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.982	4.982	0.0	1.000	12192	0.0579	Target=0.87	116	174	
713.00 > 219.00	4.982	4.982	0.0	1.000	12559		0.97(0.43-1.30)		160	M

Report Date: 25-Oct-2023 15:12:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.292	5.292	0.0	1.502	2751956	1.25		99.7	6121	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.292	5.292	0.0	1.000	122528	0.0557	Target=7.89	111	8.5	M
813.00 > 169.00	5.292	5.292	0.0	1.000	14094		8.69(3.94-11.83)		156	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.563	0.0	1.051	86604	0.0504	Target=9.39	101	11.5	M
913.00 > 169.00	5.554	5.563	-0.009	1.049	8285		10.45(4.69-14.08)		139	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

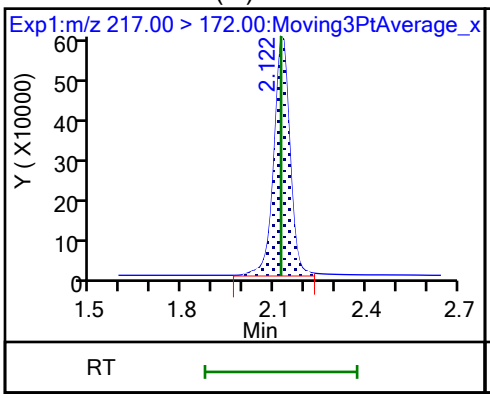
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:12:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

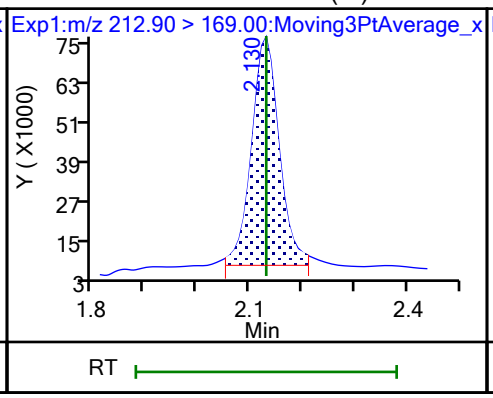
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Injection Date: 23-Oct-2023 15:47:27 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

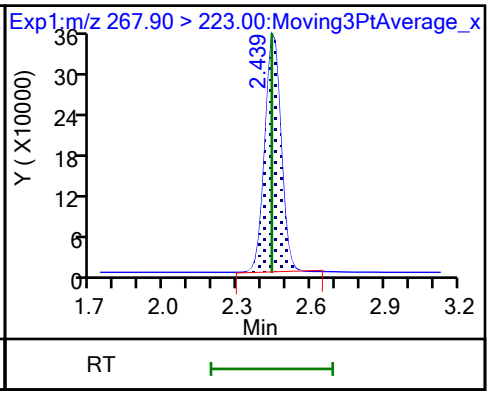
D 1 13C4 PFBA (M)



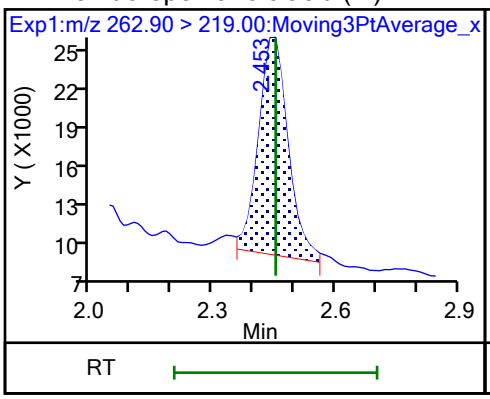
2 Perfluorobutanoic acid (M)



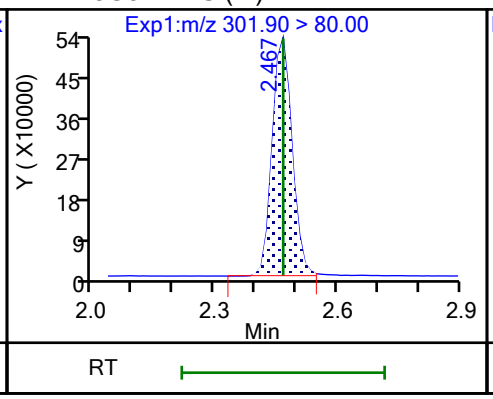
D 3 13C5 PFPeA



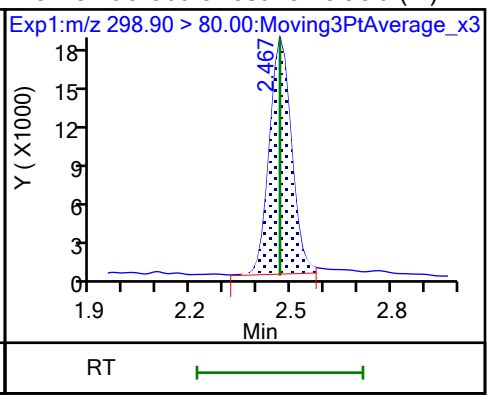
4 Perfluoropentanoic acid (M)



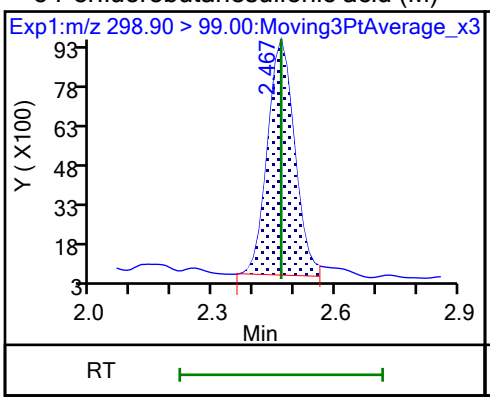
D 47 13C3 PFBS (M)



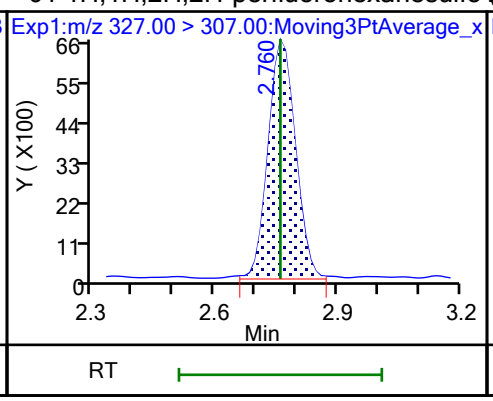
5 Perfluorobutanesulfonic acid (M)



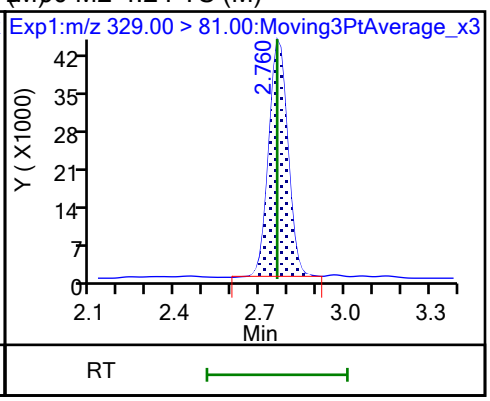
5 Perfluorobutanesulfonic acid (M)



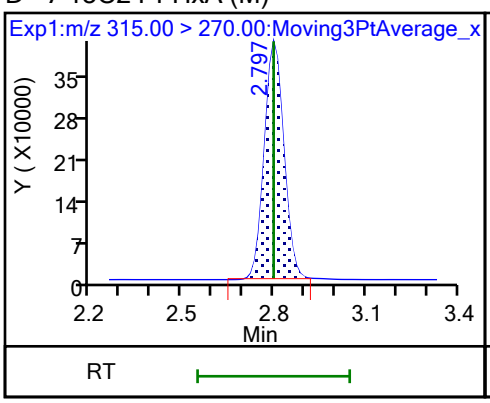
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



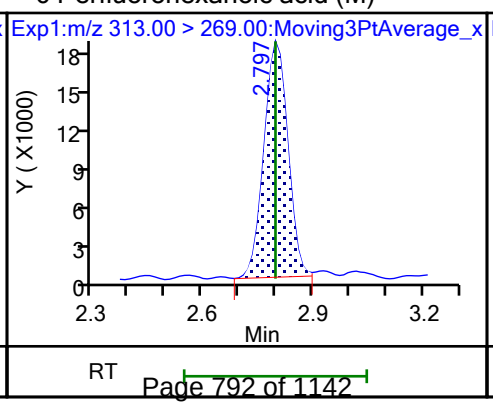
60 M2-4:2 FTS (M)



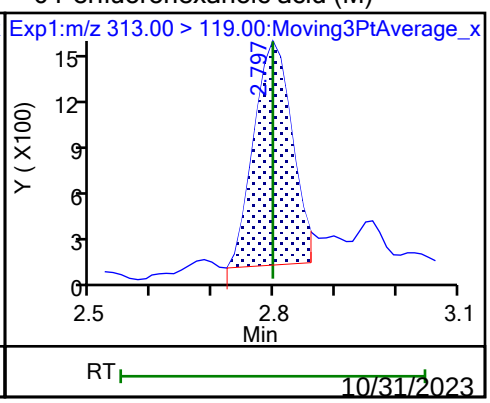
D 7 13C2 PFHxA (M)



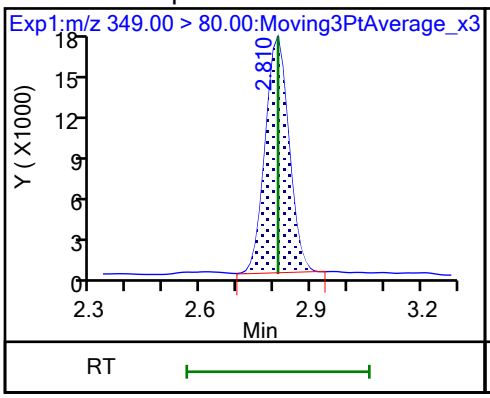
6 Perfluorohexanoic acid (M)



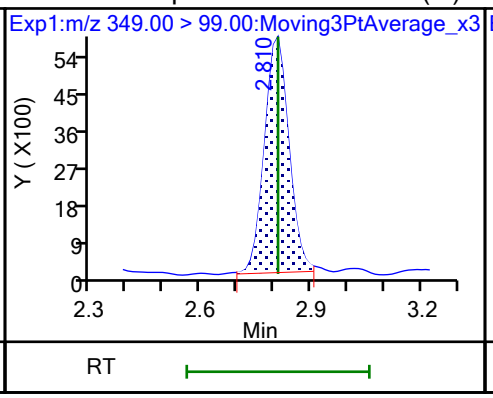
6 Perfluorohexanoic acid (M)



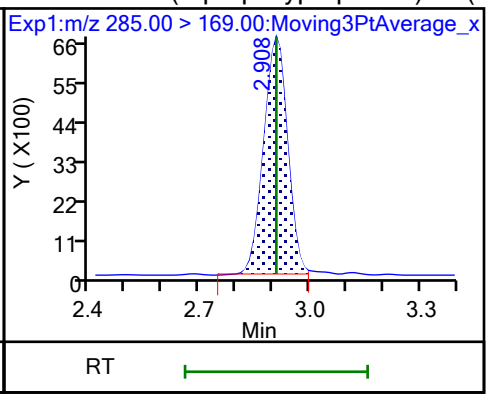
70 Perfluoropentanesulfonic acid



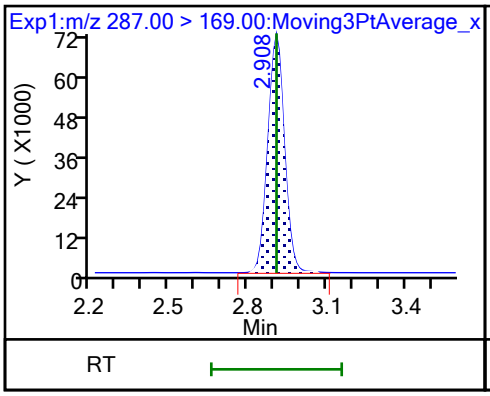
70 Perfluoropentanesulfonic acid (M)



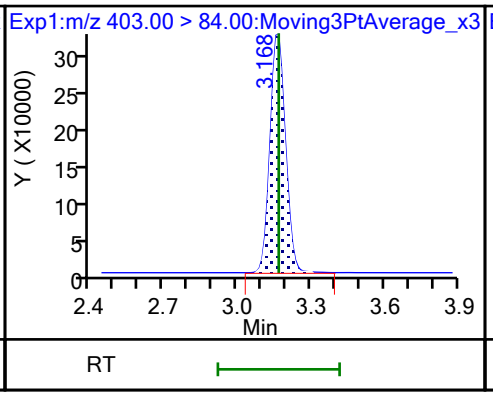
67 Perfluoro(2-propoxypropanoic) ac (M)



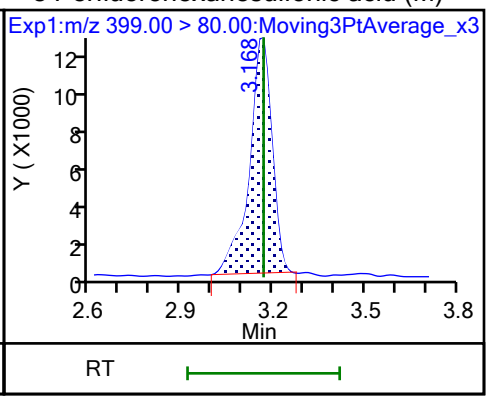
D 64 13C3 HFPO-DA



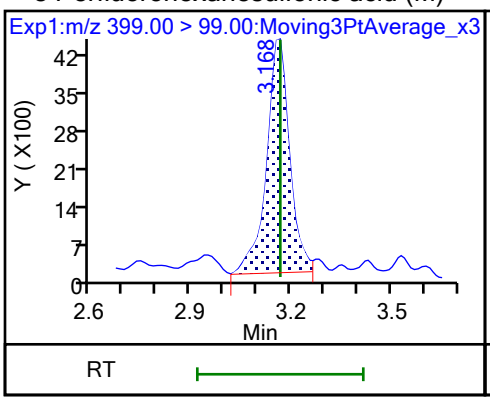
D 11 18O2 PFHxS



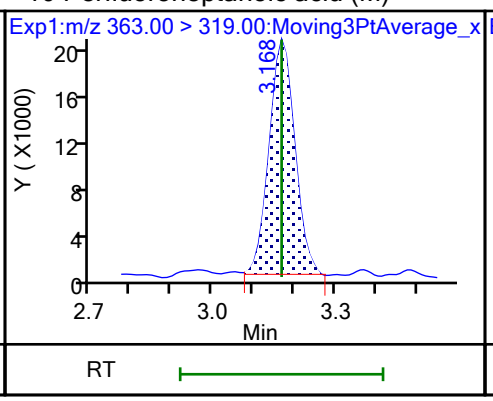
8 Perfluorohexanesulfonic acid (M)



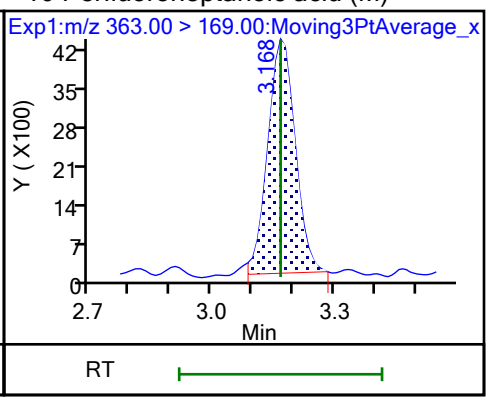
8 Perfluorohexanesulfonic acid (M)



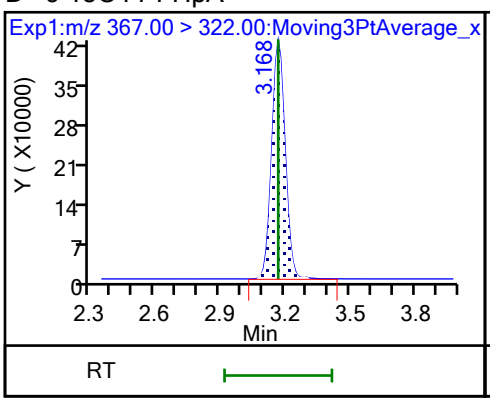
10 Perfluoroheptanoic acid (M)



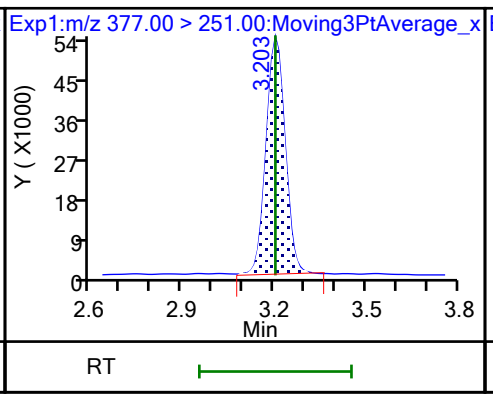
10 Perfluoroheptanoic acid (M)



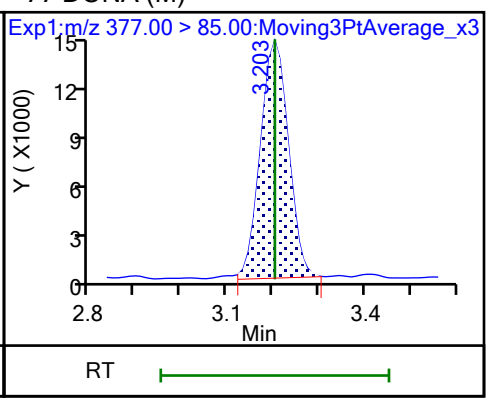
D 9 13C4 PFHpA



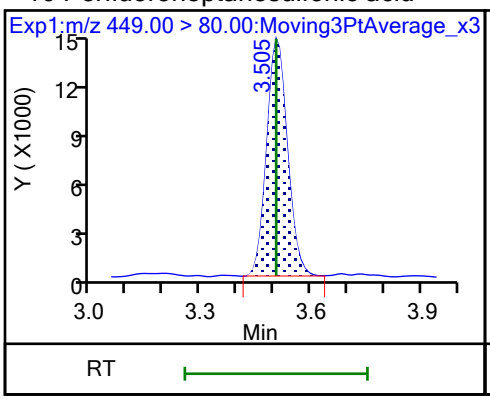
77 DONA



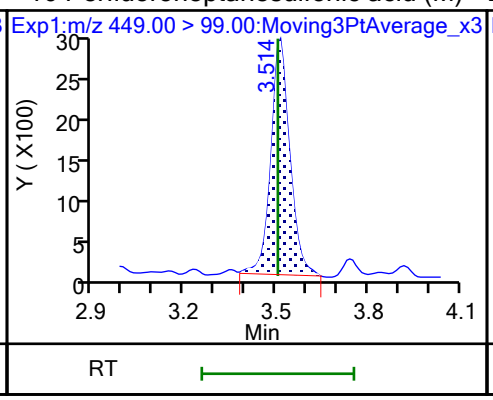
77 DONA (M)



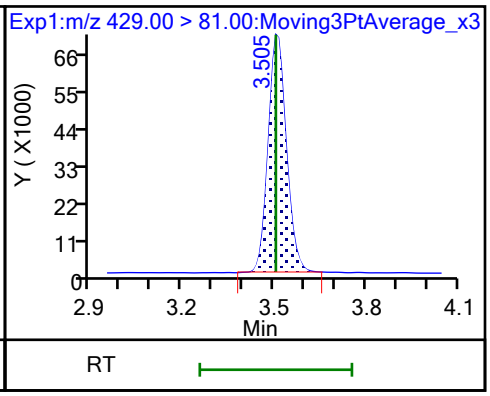
16 Perfluoroheptanesulfonic acid



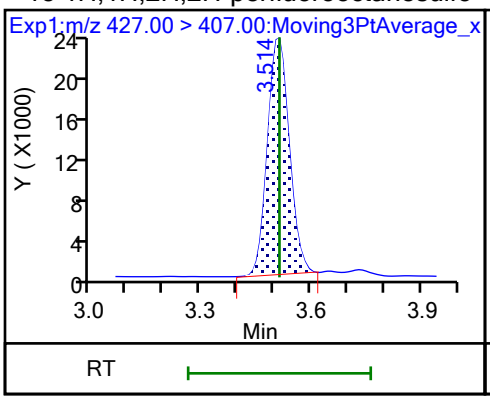
16 Perfluoroheptanesulfonic acid (M)



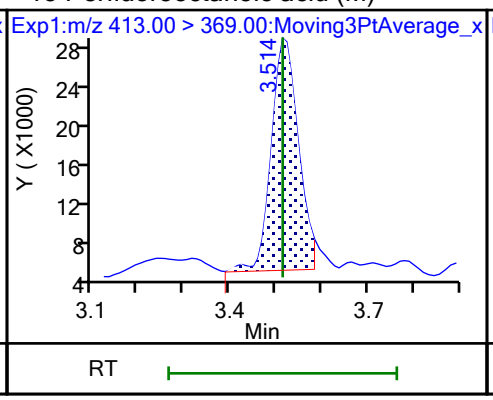
D 12 M2-6:2 FTS



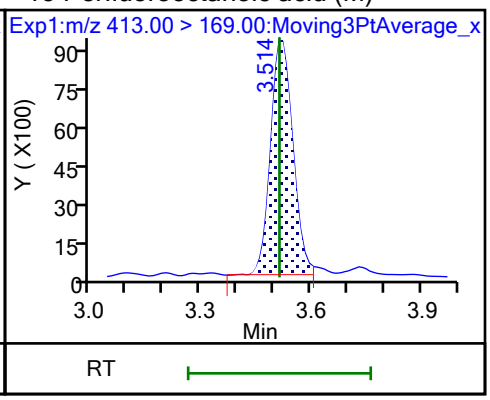
13 1H,1H,2H,2H-perfluorooctanesulfo



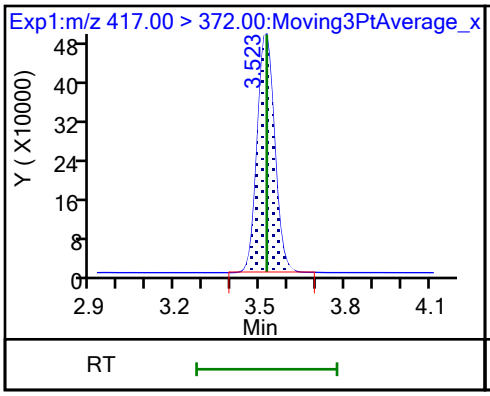
15 Perfluorooctanoic acid (M)



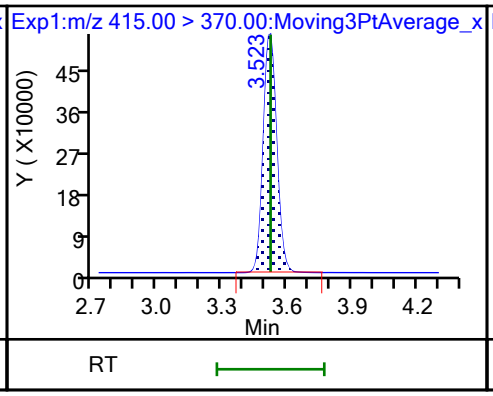
15 Perfluorooctanoic acid (M)



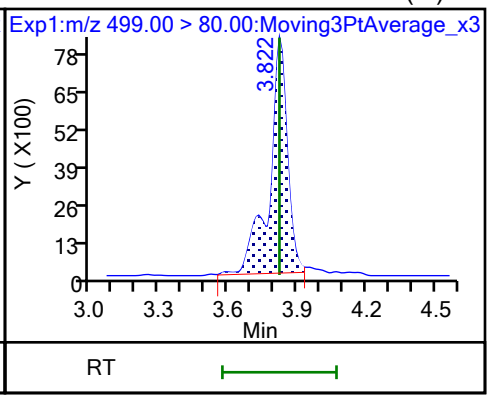
D 14 13C4 PFOA



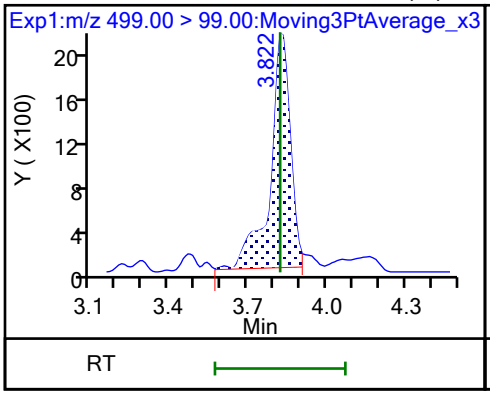
* 62 13C2 PFOA



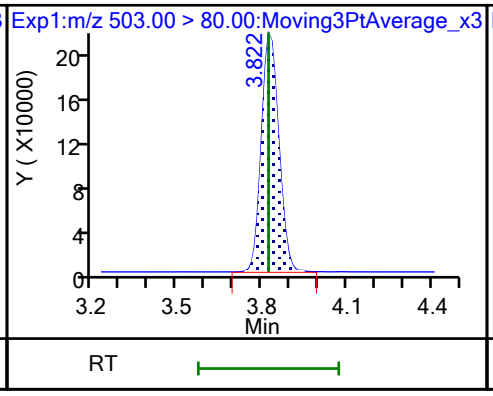
17 Perfluorooctanesulfonic acid (M)



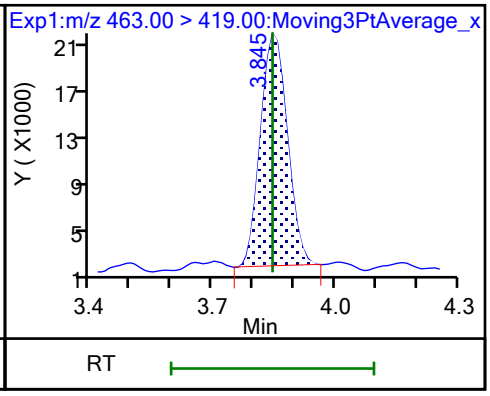
17 Perfluorooctanesulfonic acid (M)



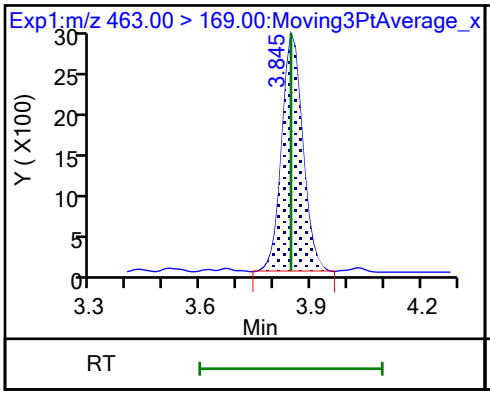
D 18 13C4 PFOS



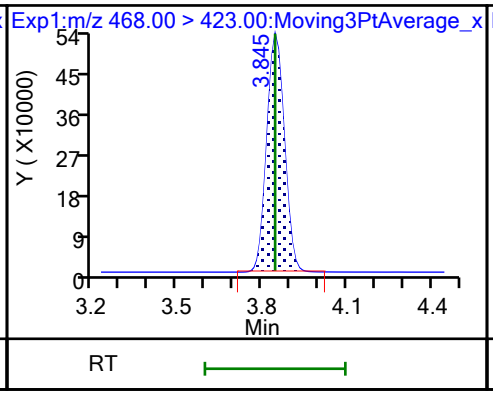
20 Perfluorononanoic acid



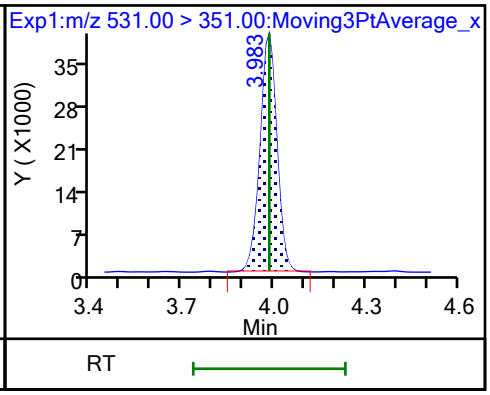
20 Perfluorononanoic acid



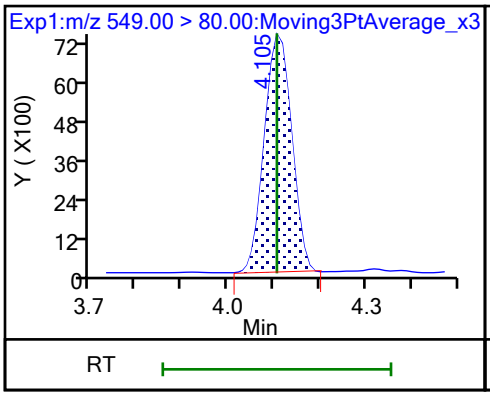
D 19 13C5 PFNA



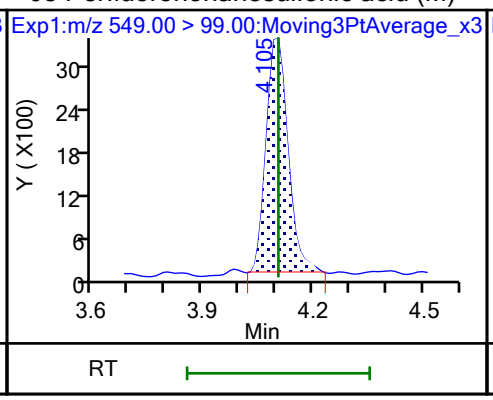
69 9-Chlorohexadecafluoro-3-oxanona



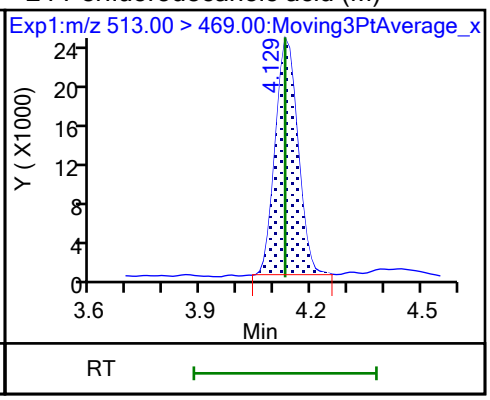
68 Perfluorononanesulfonic acid



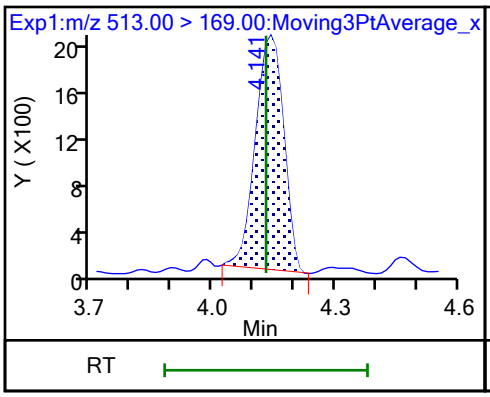
68 Perfluorononanesulfonic acid (M)



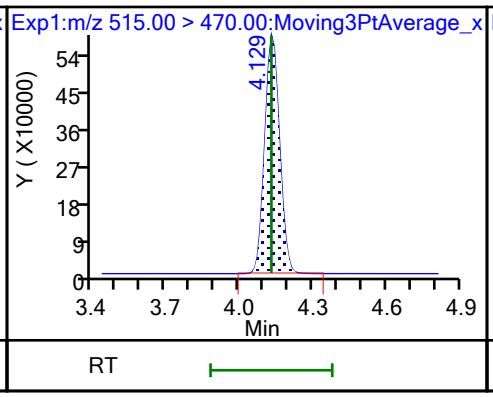
24 Perfluorodecanoic acid (M)



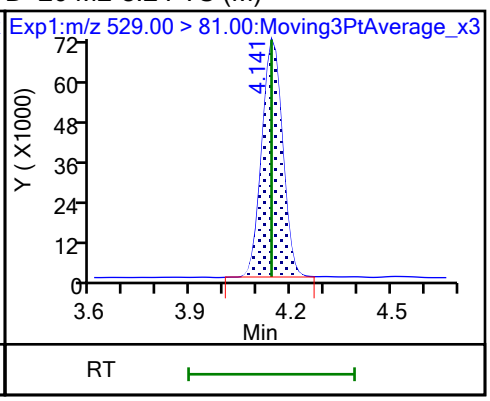
24 Perfluorodecanoic acid



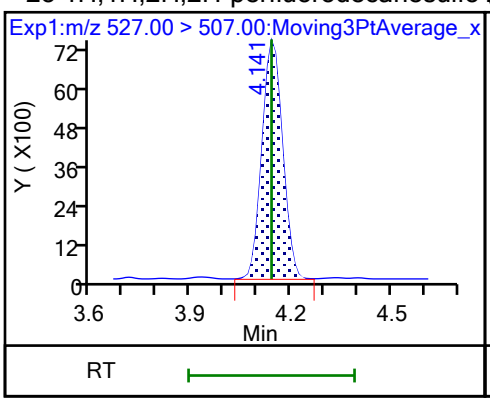
D 23 13C2 PFDA



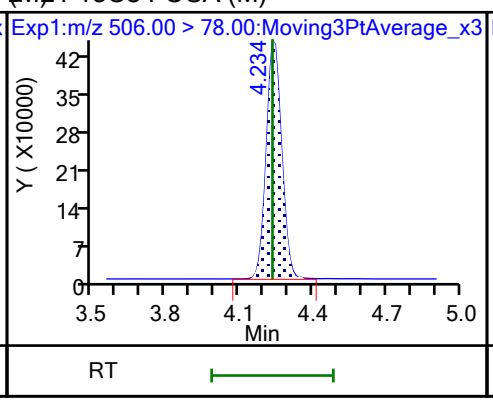
D 26 M2-8:2 FTS (M)



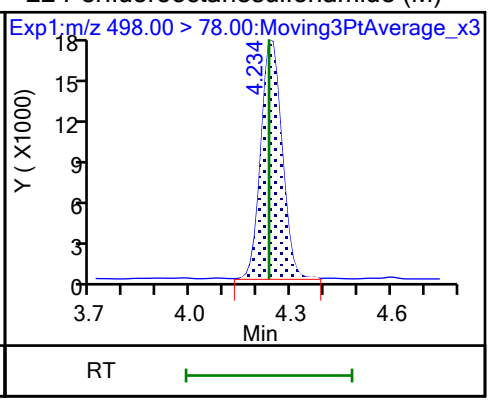
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



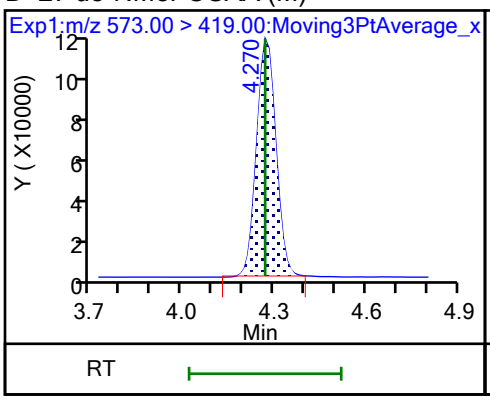
D 21 13C8 FOSA (M)



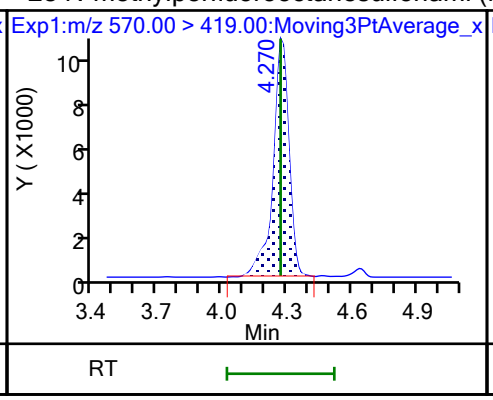
22 Perfluorooctanesulfonamide (M)



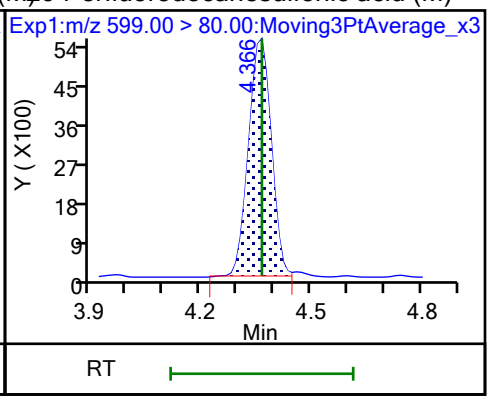
D 27 d3-NMeFOSAA (M)



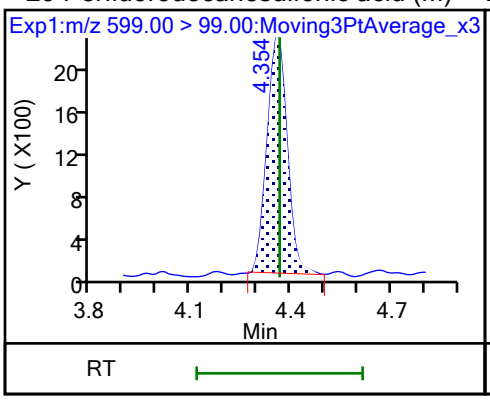
28 N-methylperfluorooctanesulfonami (M)



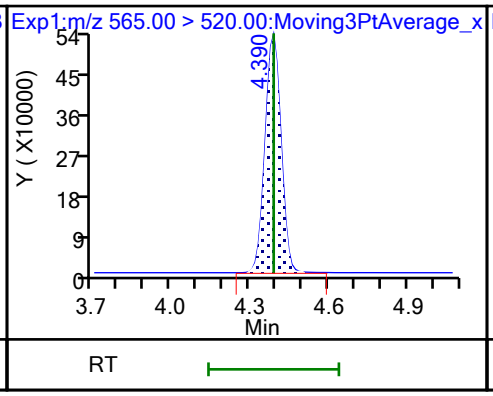
29 Perfluorodecanesulfonic acid (M)



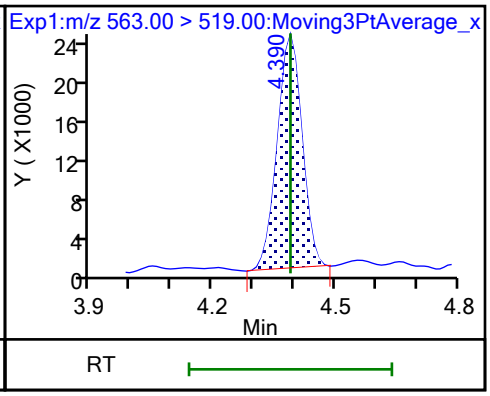
29 Perfluorodecanesulfonic acid (M)



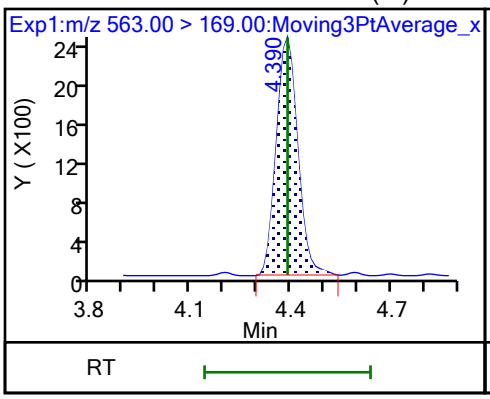
D 30 13C2 PFUnA



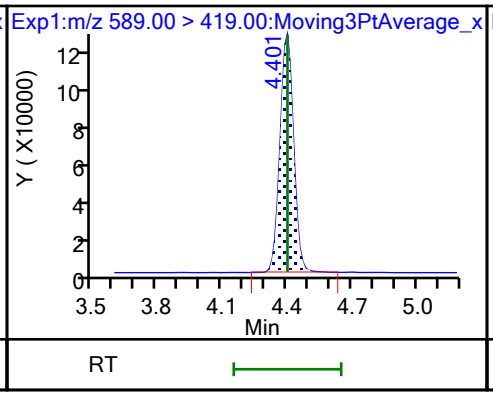
31 Perfluoroundecanoic acid



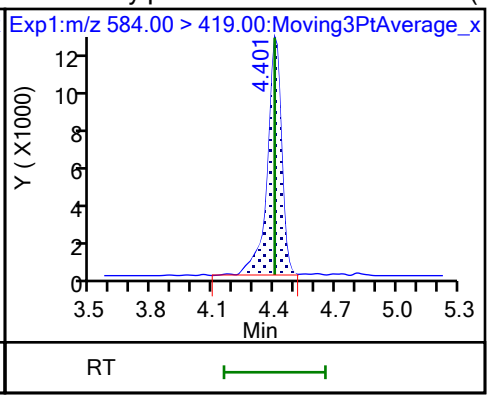
31 Perfluoroundecanoic acid (M)



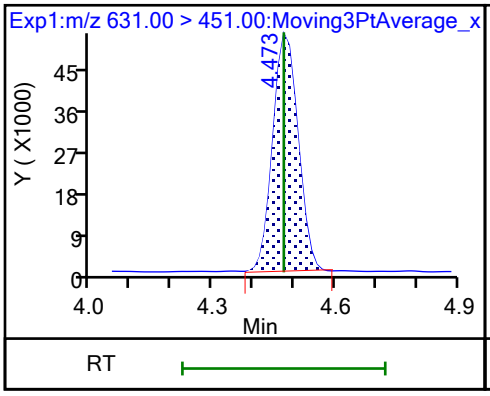
D 32 d5-NEtFOSAA



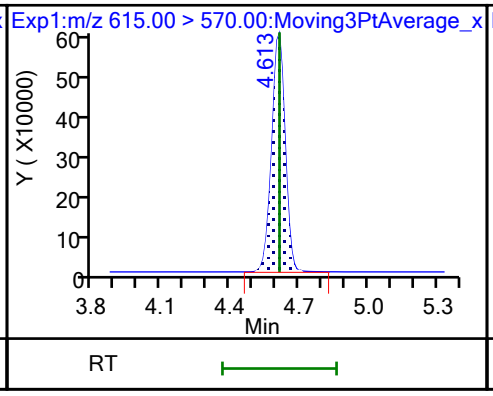
33 N-ethylperfluorooctanesulfonamid (M)



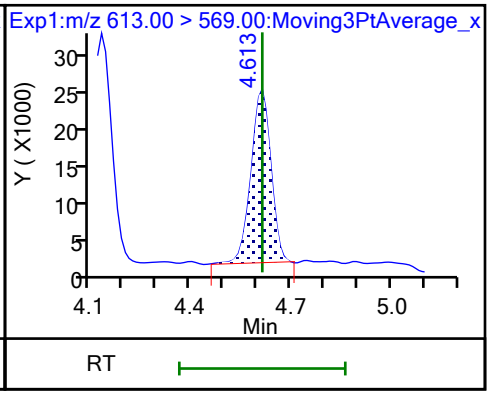
66 11-Chloroeicosafluoro-3-oxaundec



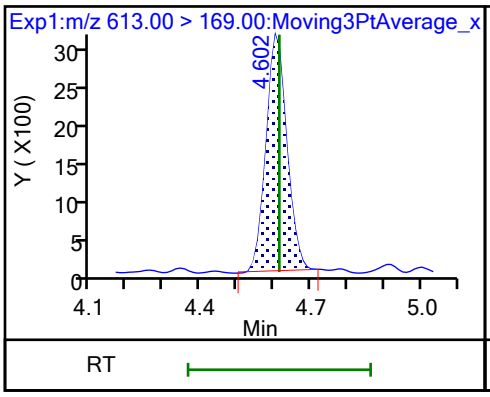
D 36 13C2 PFDoA



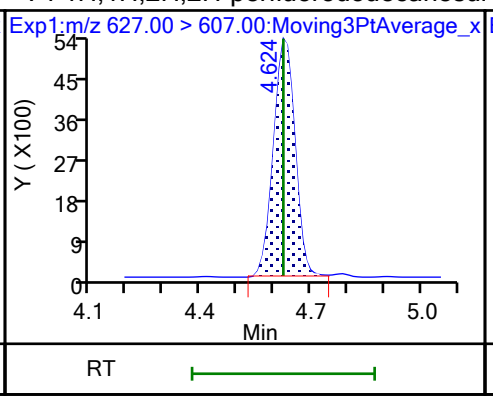
37 Perfluorododecanoic acid



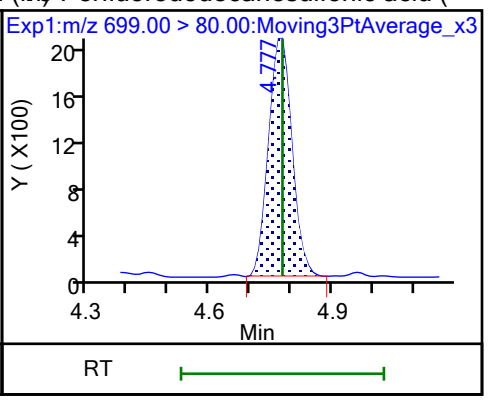
37 Perfluorododecanoic acid



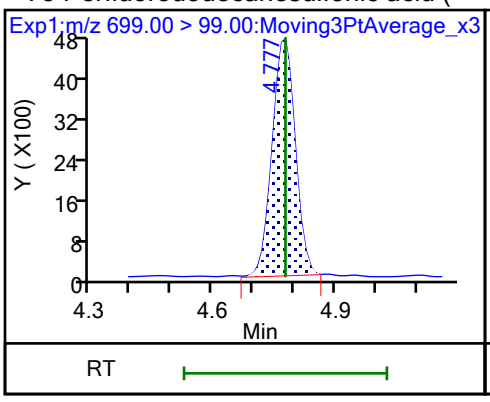
74 1H,1H,2H,2H-perfluorododecanesul (M)



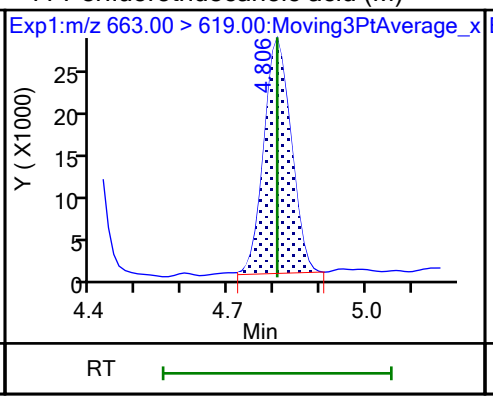
75 Perfluorododecanesulfonic acid (



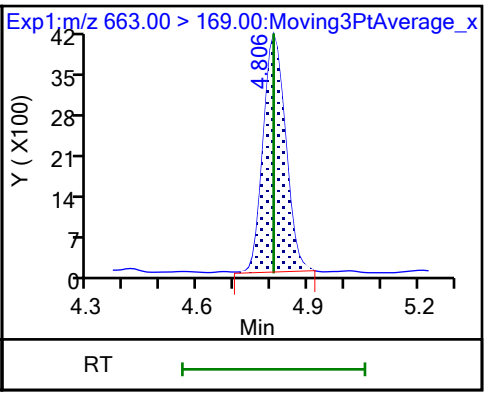
75 Perfluorododecanesulfonic acid (



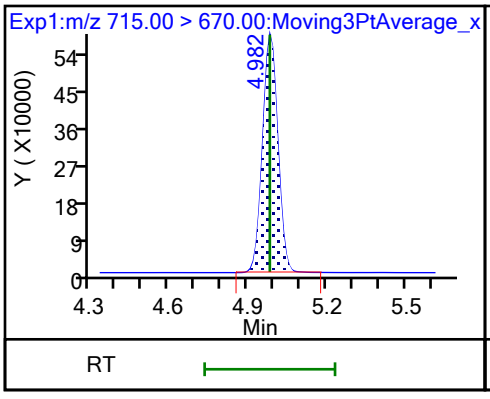
41 Perfluorotridecanoic acid (M)



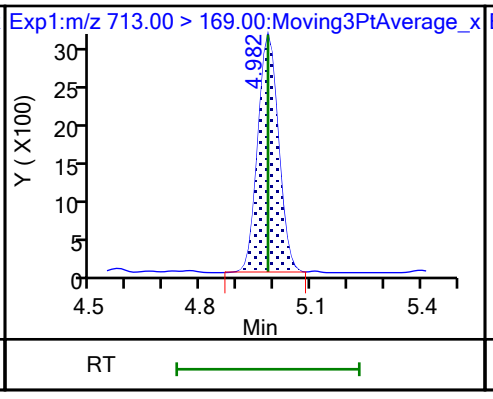
41 Perfluorotridecanoic acid



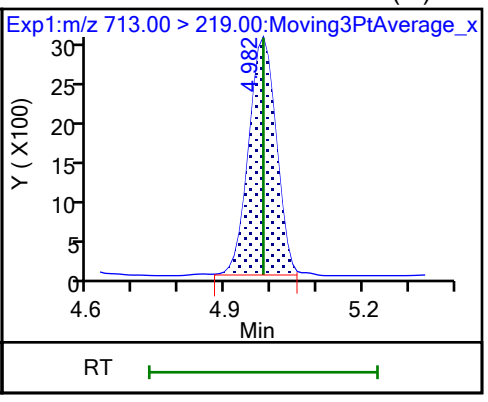
D 43 13C2 PFTeDA



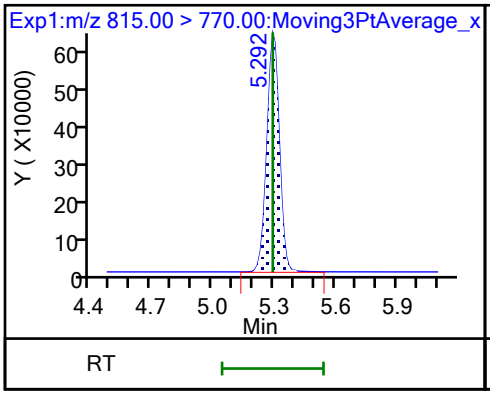
42 Perfluorotetradecanoic acid



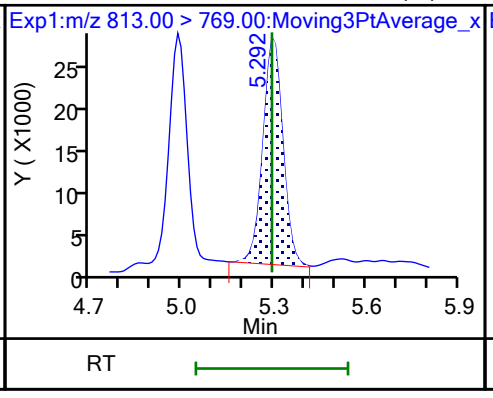
42 Perfluorotetradecanoic acid (M)



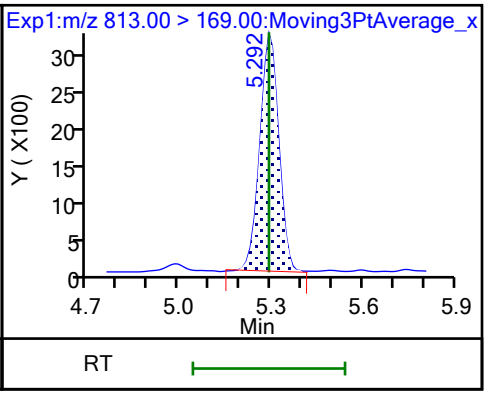
D 44 13C2 PFHxDA



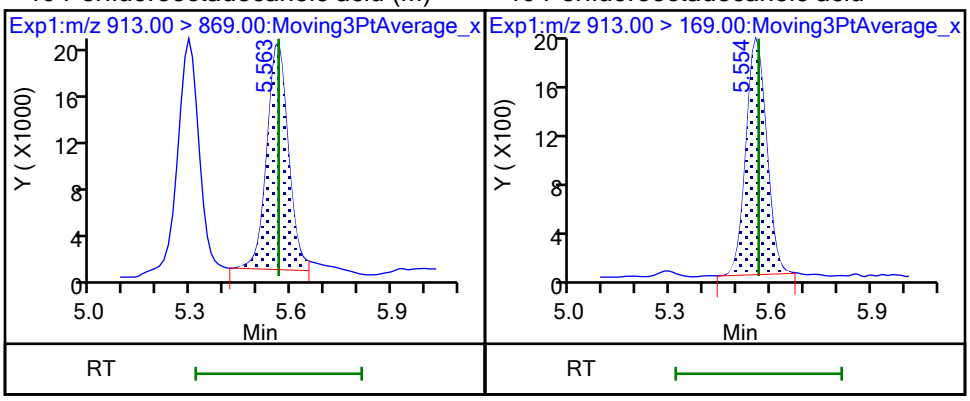
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/1 Calibration Date: 10/24/2023 06:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8779		0.930	1.00	-7.0	30.0
Perfluoropentanoic acid	AveID	1.079	1.075		0.996	1.00	-0.4	
Perfluorobutanesulfonic acid	AveID	1.117	1.082		0.859	0.887	-3.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.467		0.957	0.937	2.1	
Perfluorohexanoic acid	AveID	1.100	1.121		1.02	1.00	1.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.258		0.906	0.941	-3.7	
HFPODA	AveID	1.001	0.9472		0.946	1.00	-5.4	
Perfluoroheptanoic acid	AveID	1.121	1.093		0.975	1.00	-2.5	
Perfluorohexanesulfonic acid	AveID	1.107	0.9928		0.820	0.914	-10.3	
DONA	AveID	5.754	5.412		0.889	0.945	-6.0	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.682		0.933	0.951	-1.9	
Perfluoroheptanesulfonic acid	AveID	1.445	1.396		0.921	0.953	-3.4	
Perfluorooctanoic acid	AveID	1.065	1.005		0.944	1.00	-5.6	
Perfluorooctanesulfonic acid	AveID	1.166	1.058		0.842	0.928	-9.3	
Perfluorononanoic acid	AveID	0.9800	0.8145		0.831	1.00	-16.9	
9Cl-PF3ONS	AveID	3.569	3.642		0.952	0.933	2.0	
Perfluorononanesulfonic acid	AveID	0.8874	0.8065		0.874	0.962	-9.1	
Perfluorodecanoic acid	AveID	0.999	0.9870		0.988	1.00	-1.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.230		0.973	0.960	1.3	
Perfluorooctanesulfonamide	AveID	0.9539	0.9602		1.01	1.00	0.7	
NMeFOSAA	AveID	0.9074	0.9109		1.00	1.00	0.4	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6354		0.898	0.965	-7.0	
Perfluoroundecanoic acid	AveID	1.031	0.9754		0.946	1.00	-5.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9852		0.985	1.00	-1.5	
11Cl-PF3OUdS	AveID	5.474	5.480		0.944	0.943	0.1	
Perfluorododecanoic acid	AveID	1.018	0.9206		0.904	1.00	-9.6	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.358		0.995	0.964	3.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2206		0.923	0.968	-4.7	
Perfluorotridecanoic acid	AveID	1.070	1.003		0.938	1.00	-6.2	
Perfluorotetradecanoic acid	AveID	0.1118	0.1043		0.933	1.00	-6.7	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9544		0.954	1.00	-4.6	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7198		0.922	1.00	-7.8	
13C4 PFBA	Ave	0.9917	1.098		1.38	1.25	10.7	
13C5 PFPeA	Ave	0.7696	0.7654		1.24	1.25	-0.5	
13C3 PFBS	Ave	1.041	1.028		1.15	1.16	-1.3	
M2-4:2 FTS	Ave	0.1204	0.1127		1.09	1.17	-6.4	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/1 Calibration Date: 10/24/2023 06:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7224		1.15	1.25	-7.7	
13C3 HFPO-DA	Ave	0.1516	0.1416		1.17	1.25	-6.6	
13C4 PFHpA	Ave	0.8590	0.8800		1.28	1.25	2.4	50.0
18O2 PFHxS	Ave	0.7464	0.7857		1.25	1.18	5.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1613		1.24	1.19	4.0	
13C4 PFOA	Ave	0.9731	1.031		1.32	1.25	5.9	50.0
13C4 PFOS	Ave	0.4742	0.4929		1.24	1.20	4.0	50.0
13C5 PFNA	Ave	1.059	1.176		1.39	1.25	11.0	50.0
13C2 PFDA	Ave	1.109	1.100		1.24	1.25	-0.8	
M2-8:2 FTS	Ave	0.1744	0.1655		1.14	1.20	-5.1	
13C8 FOSA	Ave	0.9462	0.9342		1.23	1.25	-1.3	
d3-NMeFOSAA	Ave	0.2650	0.2701		1.27	1.25	1.9	
13C2 PFUnA	Ave	1.047	1.077		1.29	1.25	2.9	
d5-NEtFOSAA	Ave	0.2552	0.2606		1.28	1.25	2.1	
13C2 PFDoA	Ave	1.064	1.154		1.36	1.25	8.4	
13C2 PFTeDA	Ave	1.059	1.065		1.26	1.25	0.5	
13C2 PFHxDA	Ave	1.221	1.202		1.23	1.25	-1.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 06:05:38 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057513-001 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: khanphomeea Date: 25-Oct-2023 08:39:40
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2264860	1.38		111	1423	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1590623	0.9299		93.0	148	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1578399	1.24		99.5	1612	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.453	0.0	1.006	1357071	1.00		99.6	34.3	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1970900	1.15		98.7	90505	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1626581	0.8590	Target=2.06	96.8	1860	
298.90 > 99.00	2.467	2.467	0.0	1.000	825548		1.97(1.03-3.09)		351	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.772	2.760	0.012	1.005	604139	0.9566		102	8202	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	217121	1.09		93.6	149	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1489650	1.15		92.3	6052	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1335900	1.02	Target=14.12	102	275	M
313.00 > 119.00	2.797	2.797	0.0	1.000	87521		15.26(7.06-21.17)		81.5	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1534245	0.9063	Target=2.72	96.3	2779	
349.00 > 99.00	2.810	2.810	0.0	0.888	533431		2.88(1.36-4.09)		889	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.918	2.908	0.010	1.004	221246	0.9461		94.6	2611	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	291981	1.17		93.4	1269	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1532862	1.24		105	8197	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1176219	0.8197	Target=3.32	89.7	1996	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	360771		3.26(1.66-4.98)		281	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	1586283	0.9748	Target=4.17	97.5	355	
363.00 > 169.00	3.165	3.168	-0.003	1.000	412124		3.85(2.09-6.26)		1118	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1814749	1.28		102	6243	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.835	4159043	0.8888	Target=3.33	94.0	4414	
377.00 > 85.00	3.199	3.203	-0.004	0.835	1118594		3.72(1.66-4.99)		1420	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.917	1081929	0.9205	Target=4.83	96.6	4378	
449.00 > 99.00	3.511	3.505	0.006	0.917	211334		5.12(2.41-7.24)		664	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	316020	1.23		104	586	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	678863	0.9333		98.1	1003	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1709302	0.9439	Target=2.88	94.4	77.8	M
413.00 > 169.00	3.520	3.514	0.006	1.000	600667		2.85(1.44-4.32)		904	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2125282	1.32		106	4521	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2062208	1.25			3612	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	798248	0.8415	Target=4.24	90.7	1232	M
499.00 > 99.00	3.819	3.822	-0.003	0.997	187307		4.26(2.12-6.37)		296	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	971830	1.24		104	2597	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1579525	0.8311	Target=8.34	83.1	210	
463.00 > 169.00	3.842	3.845	-0.003	1.000	197689		7.99(4.17-12.51)		1316	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2424153	1.39		111	5392	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.039	2763526	0.9521		102	7001	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.105	0.007	1.074	630945	0.8743	Target=2.17	90.9	3386	
549.00 > 99.00	4.100	4.105	-0.005	1.070	264289		2.39(1.08-3.25)		1171	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1790940	0.9877	Target=11.44	98.8	484	
513.00 > 169.00	4.136	4.129	0.007	1.000	181396		9.87(5.72-17.16)		876	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2268104	1.24		99.2	6525	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.141	0.007	1.178	326866	1.14		94.9	714	M
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.141	0.007	1.000	584426	0.9726		101	4020	
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.234	0.008	1.205	1926589	1.23		98.7	4314	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1479888	1.01		101	3708	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.212	557090	1.27		102	1541	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.270	0.008	1.003	405984	1.00		100	611	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	498644	0.8978	Target=2.37	93.0	4966	
599.00 > 99.00	4.363	4.366	-0.003	1.139	196456		2.54(1.19-3.56)		2953	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2220890	1.29		103	11032	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1733073	0.9464	Target=12.20	94.6	388	
563.00 > 169.00	4.387	4.390	-0.003	1.000	157568		11.00(6.10-18.31)		1190	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.250	537499	1.28		102	1086	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.401	-0.003	1.000	423639	0.9850		98.5	729	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.473	-0.005	1.167	4202385	0.9441		100	4936	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2378843	1.36		108	9479	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.613	-0.003	1.000	1751934	0.9045	Target=8.47	90.4	81.7	
613.00 > 169.00	4.610	4.613	-0.003	1.000	218129		8.03(4.23-12.70)		1540	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.624	0.008	1.117	357440	1.00		103	10138	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.777	-0.003	1.246	173685	0.9226	Target=0.48	95.3	1734	
699.00 > 99.00	4.774	4.777	-0.003	1.246	355377		0.49(0.24-0.72)		2332	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.806	-0.003	1.042	1909583	0.9379	Target=6.41	93.8	94.0	M
663.00 > 169.00	4.803	4.806	-0.003	1.042	295095		6.47(3.21-9.62)		2265	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	2195294	1.26		100	4308	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.982	-0.003	1.000	183219	0.9330	Target=0.87	93.3	1340	
713.00 > 219.00	4.979	4.982	-0.003	1.000	205926		0.89(0.43-1.30)		1925	

Report Date: 25-Oct-2023 23:19:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.292	0.003	1.504	2479665	1.23		98.5	5848	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.292	0.003	1.000	1893352	0.9544	Target=7.89	95.4	101	M
813.00 > 169.00	5.295	5.292	0.003	1.000	244194		7.75(3.94-11.83)		2491	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.566	5.563	0.003	1.051	1427984	0.9218	Target=9.39	92.2	124	M
913.00 > 169.00	5.557	5.563	-0.006	1.049	144769		9.86(4.69-14.08)		720	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

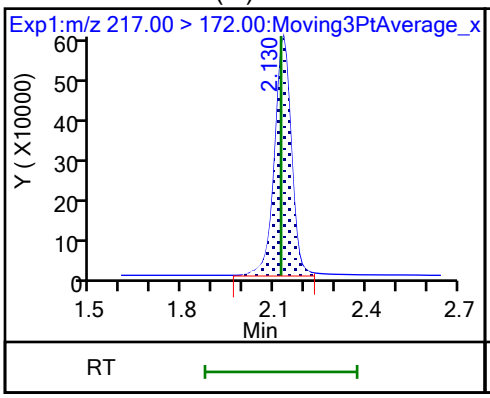
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:19:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54

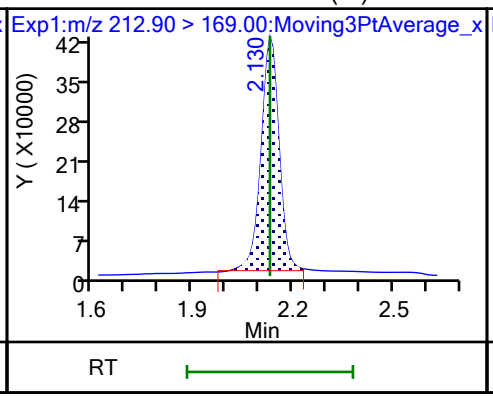
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Injection Date: 24-Oct-2023 06:05:38 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

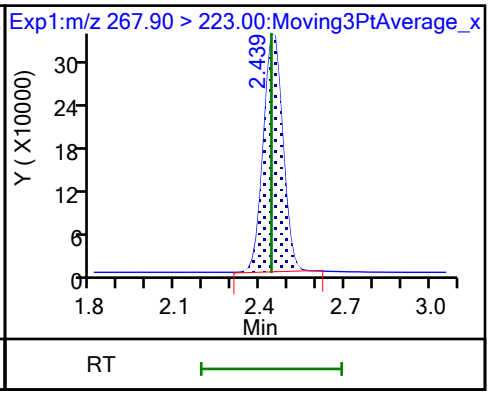
D 1 13C4 PFBA (M)



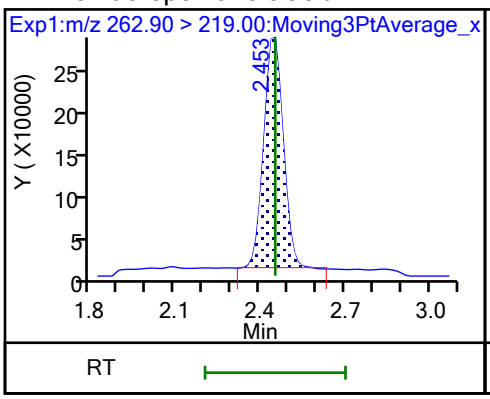
2 Perfluorobutanoic acid (M)



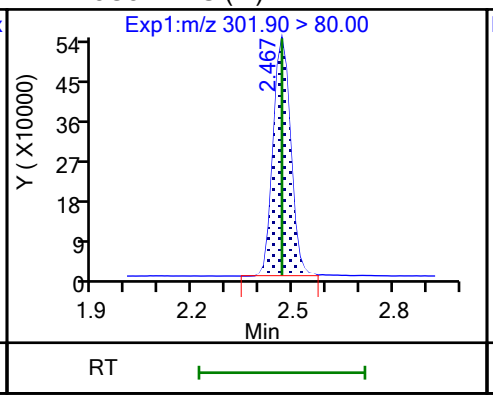
D 3 13C5 PFPeA



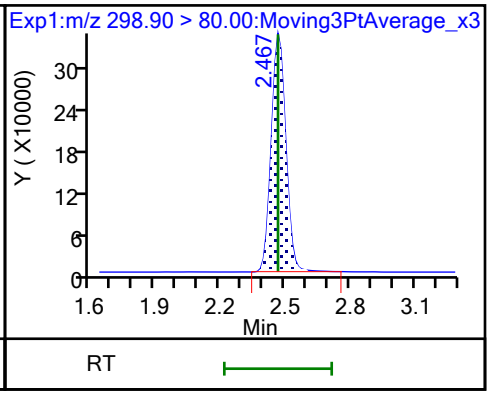
4 Perfluoropentanoic acid



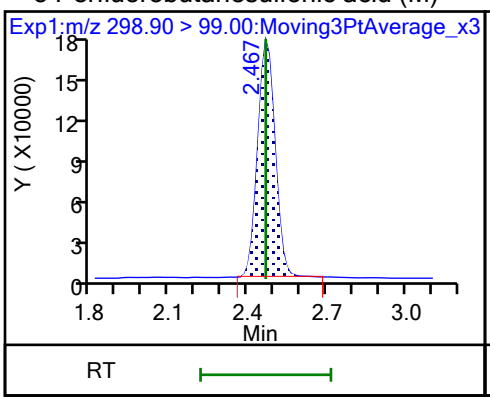
D 47 13C3 PFBS (M)



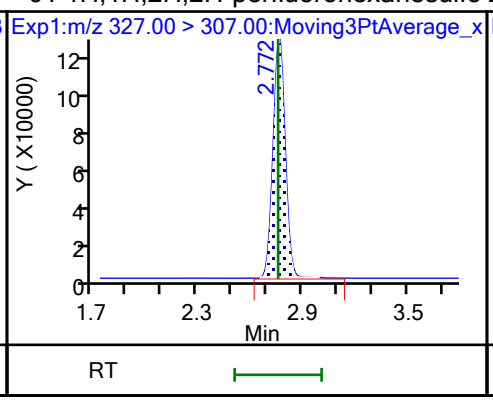
5 Perfluorobutanesulfonic acid



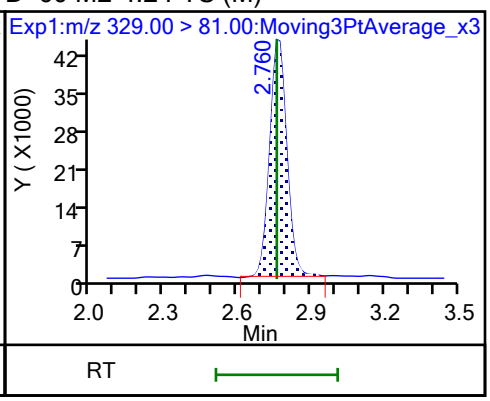
5 Perfluorobutanesulfonic acid (M)



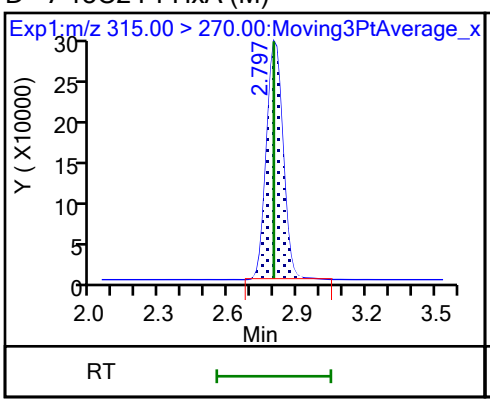
61 1H,1H,2H,2H-perfluorohexanesulfo



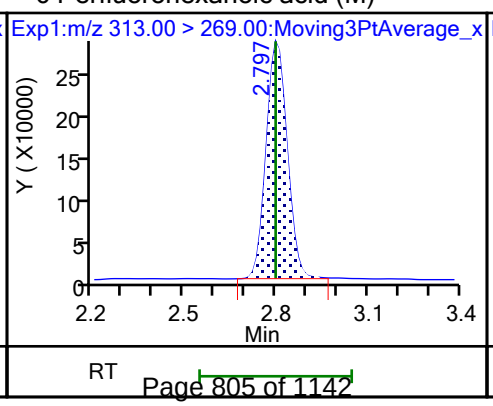
D 60 M2-4:2 FTS (M)



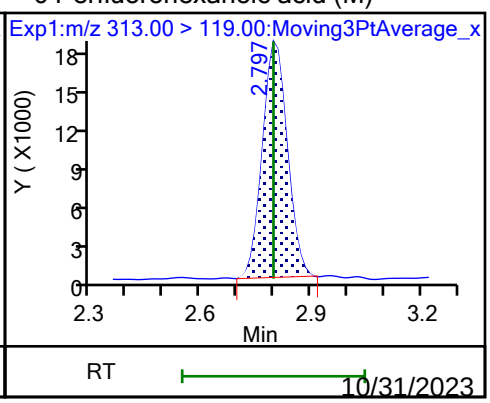
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

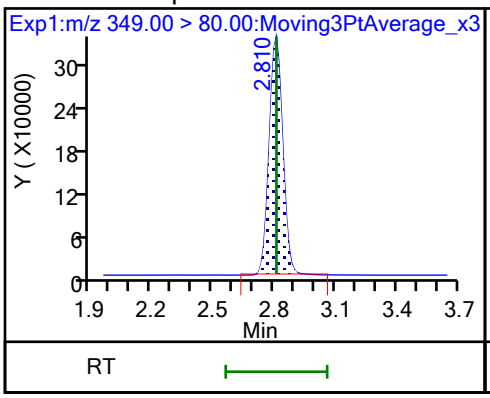


6 Perfluorohexanoic acid (M)

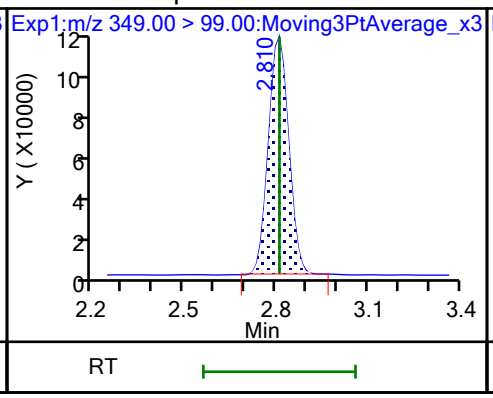


10/31/2023
10:17 AM

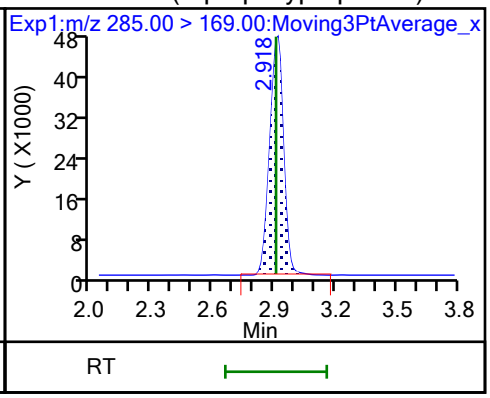
70 Perfluoropentanesulfonic acid



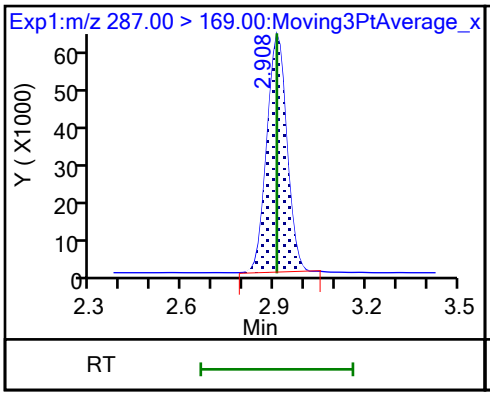
70 Perfluoropentanesulfonic acid



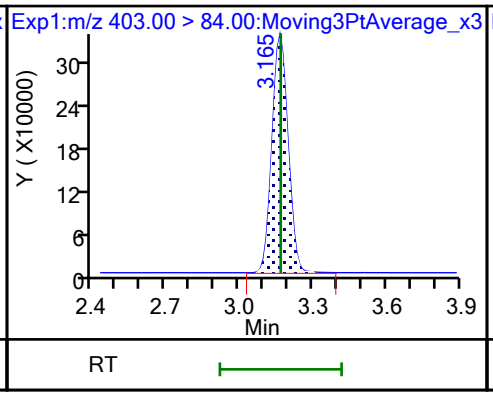
67 Perfluoro(2-propoxypropanoic) ac



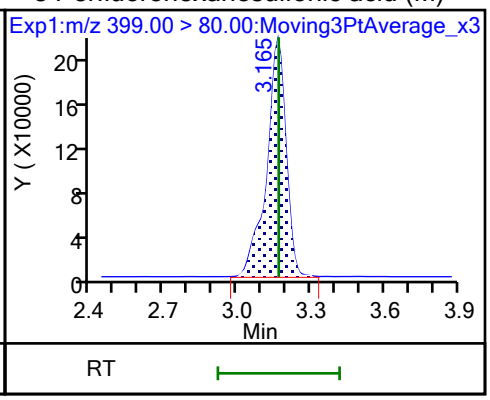
D 64 13C3 HFPO-DA



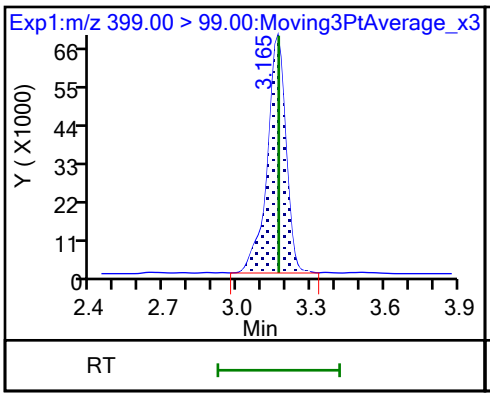
D 11 18O2 PFHxS



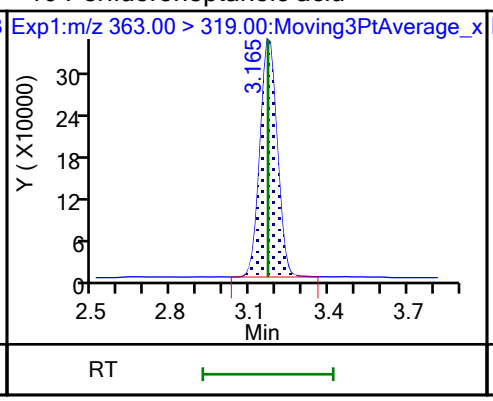
8 Perfluorohexanesulfonic acid (M)



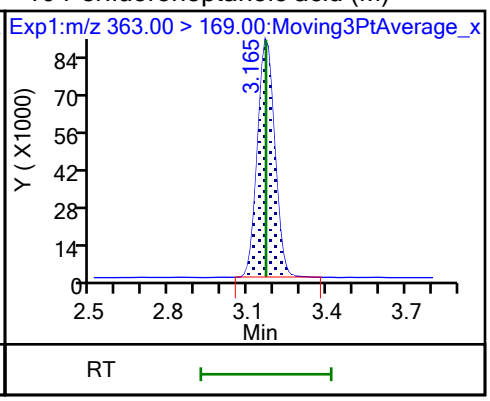
8 Perfluorohexanesulfonic acid



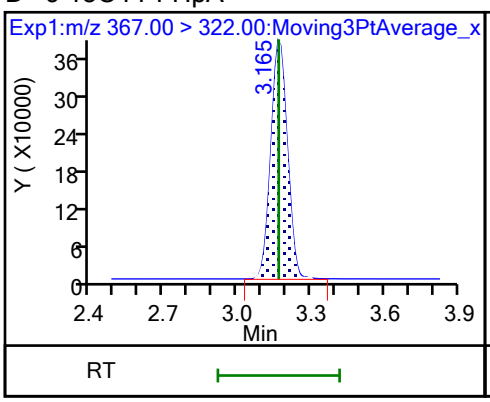
10 Perfluoroheptanoic acid



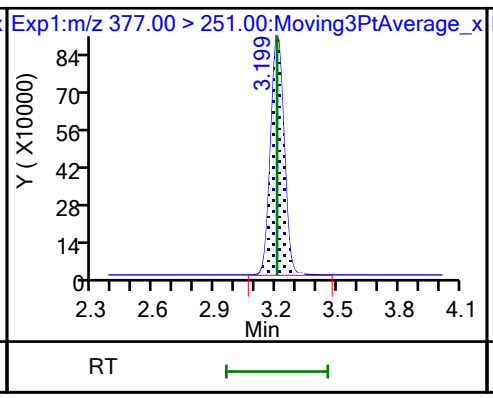
10 Perfluoroheptanoic acid (M)



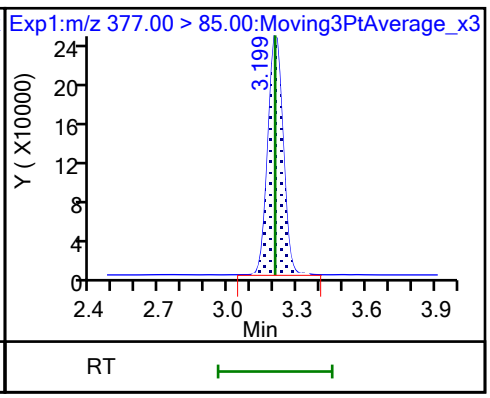
D 9 13C4 PFHpA



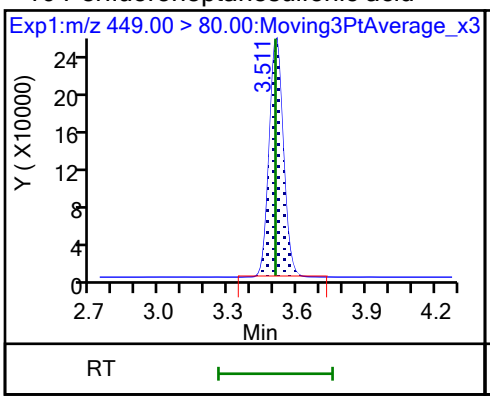
77 DONA



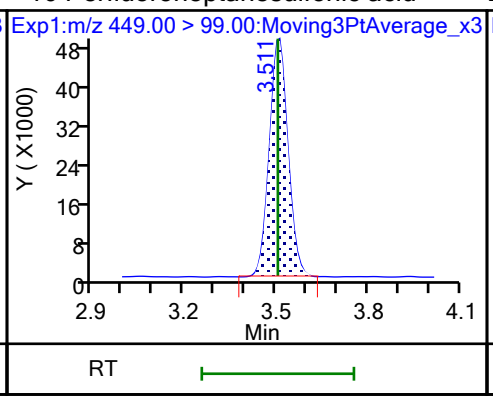
77 DONA



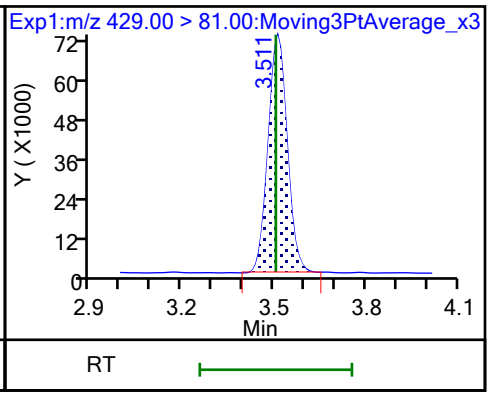
16 Perfluoroheptanesulfonic acid



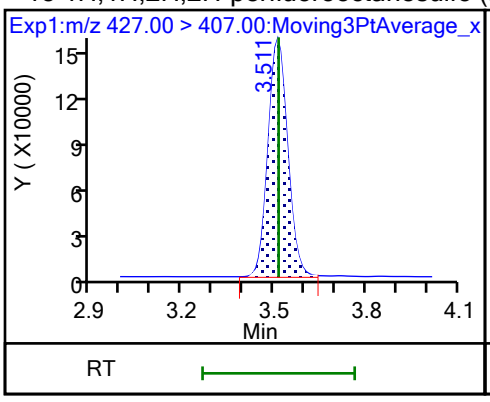
16 Perfluoroheptanesulfonic acid



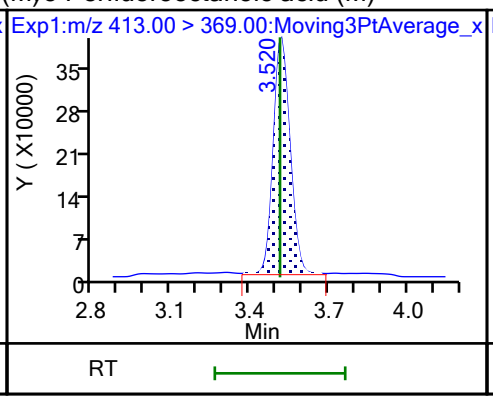
D 12 M2-6:2 FTS



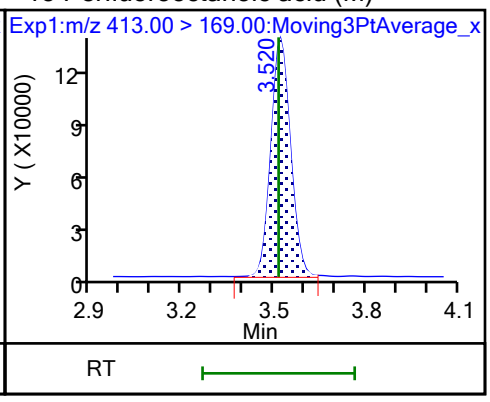
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



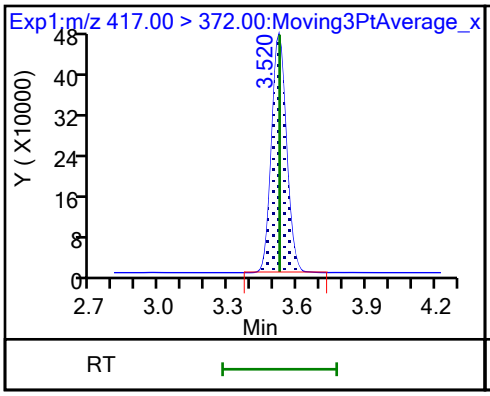
15 Perfluorooctanoic acid (M)



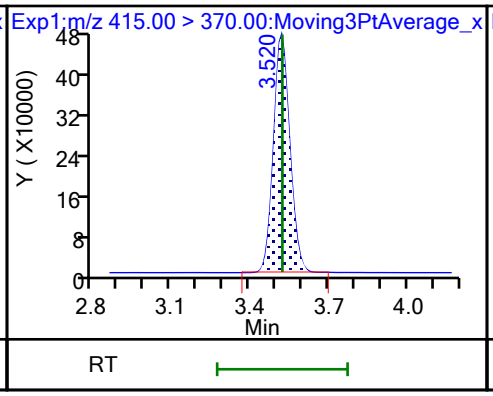
15 Perfluorooctanoic acid (M)



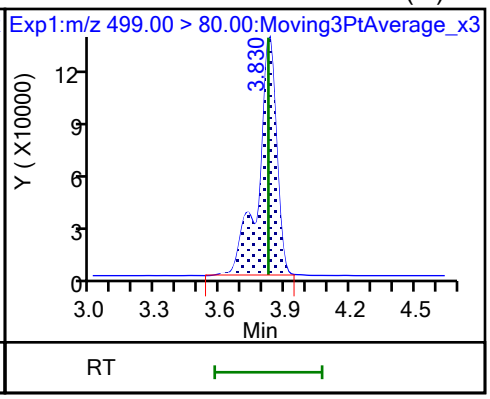
D 14 13C4 PFOA



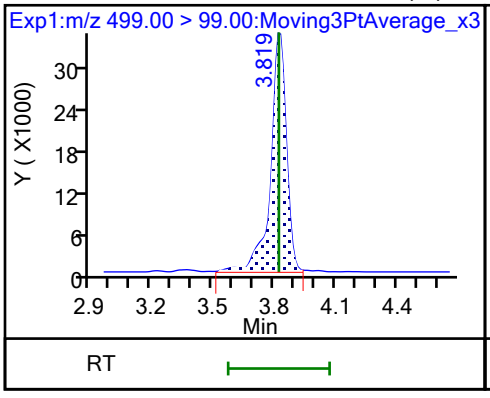
* 62 13C2 PFOA



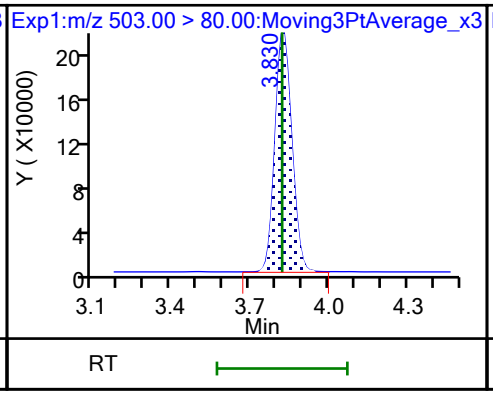
17 Perfluorooctanesulfonic acid (M)



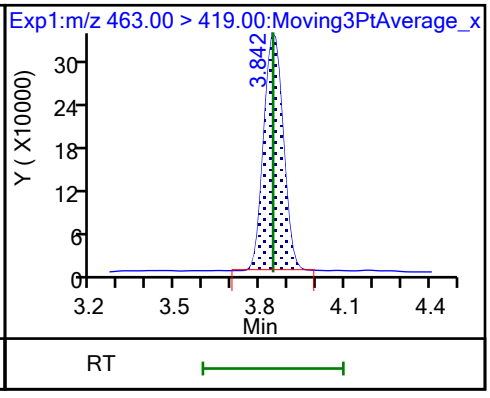
17 Perfluorooctanesulfonic acid (M)



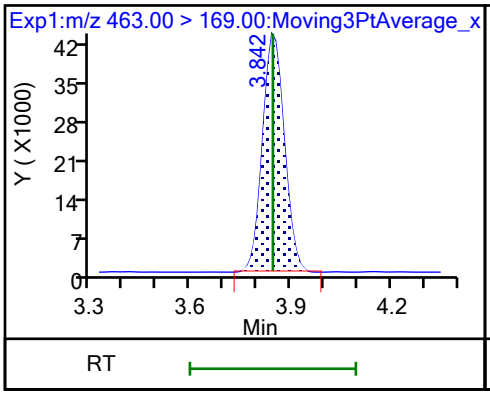
D 18 13C4 PFOS



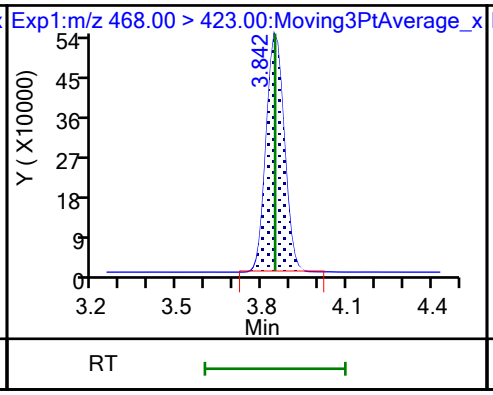
20 Perfluorononanoic acid



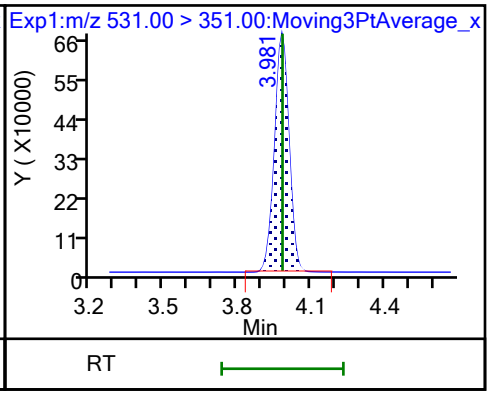
20 Perfluorononanoic acid



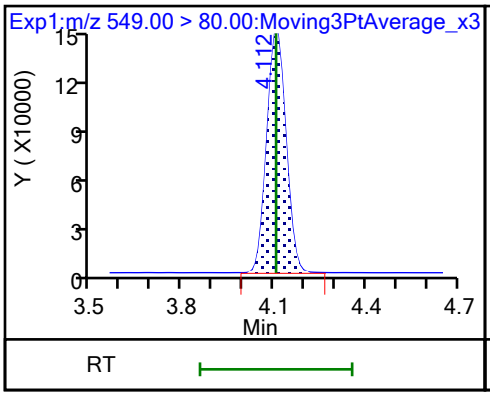
D 19 13C5 PFNA



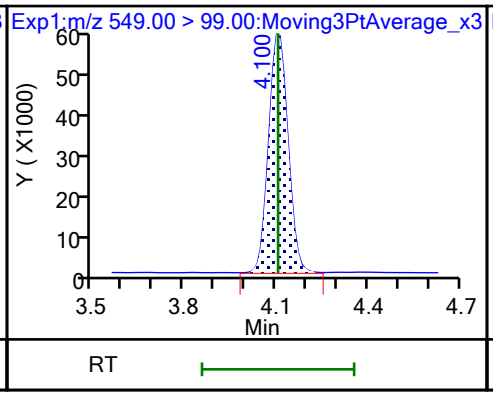
69 9-Chlorohexadecafluoro-3-oxanona



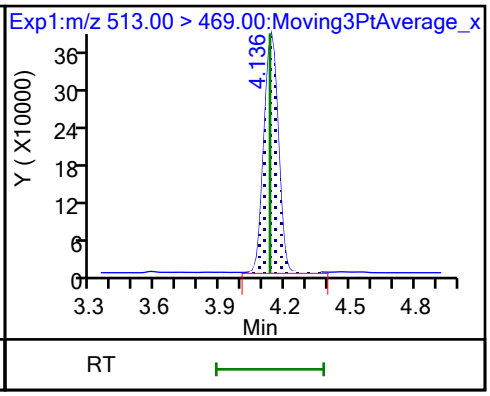
68 Perfluorononanesulfonic acid



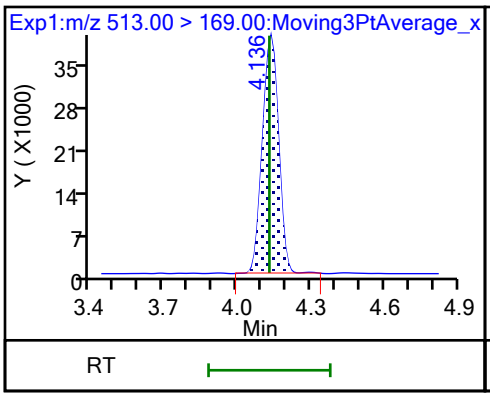
68 Perfluorononanesulfonic acid



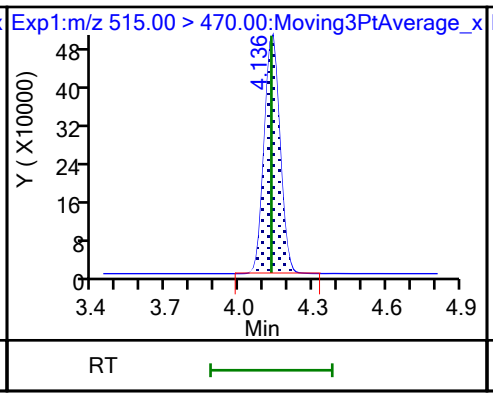
24 Perfluorodecanoic acid



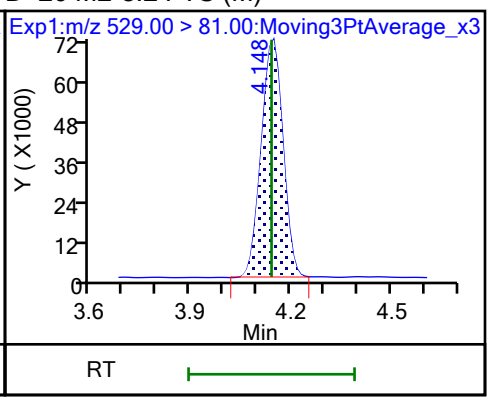
24 Perfluorodecanoic acid



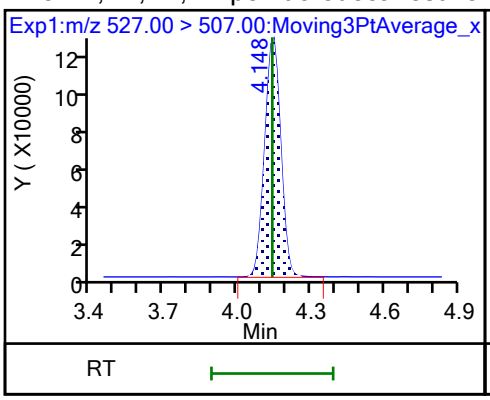
D 23 13C2 PFDA



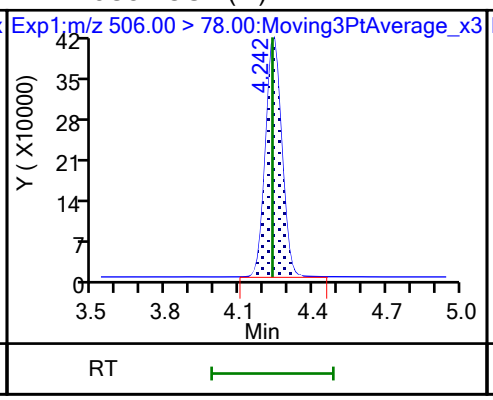
D 26 M2-8:2 FTS (M)



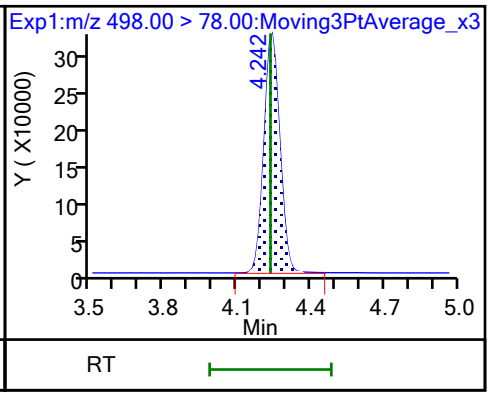
25 1H,1H,2H,2H-perfluorodecanesulfo



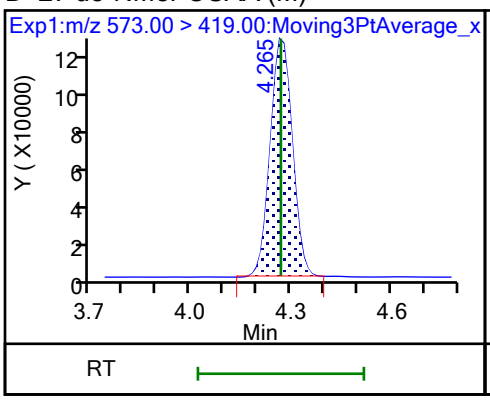
D 21 13C8 FOSA (M)



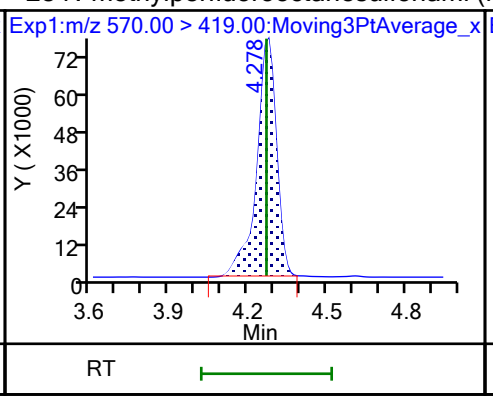
22 Perfluorooctanesulfonamide



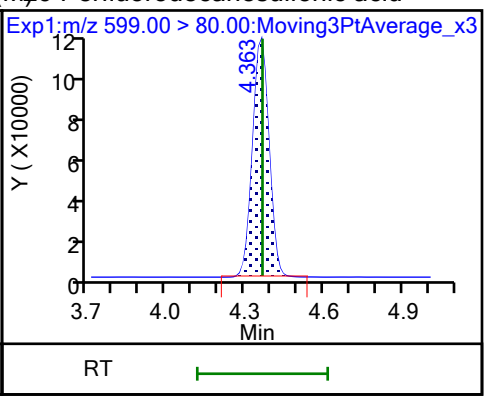
D 27 d3-NMeFOSAA (M)



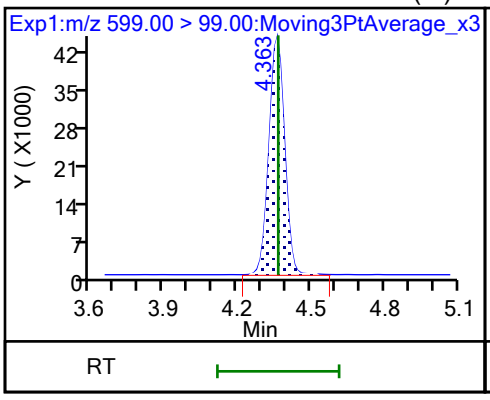
28 N-methylperfluorooctanesulfonami (M)



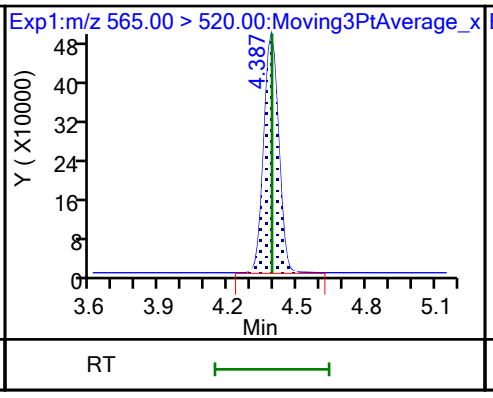
29 Perfluorodecanesulfonic acid



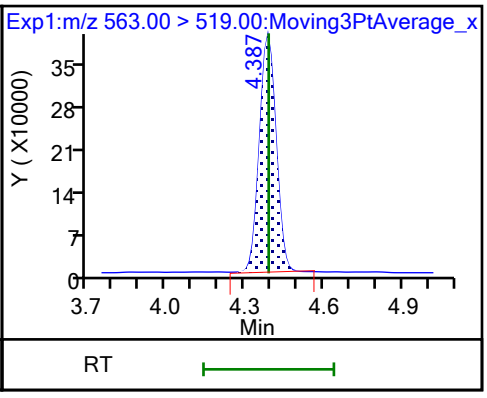
29 Perfluorodecanesulfonic acid (M)



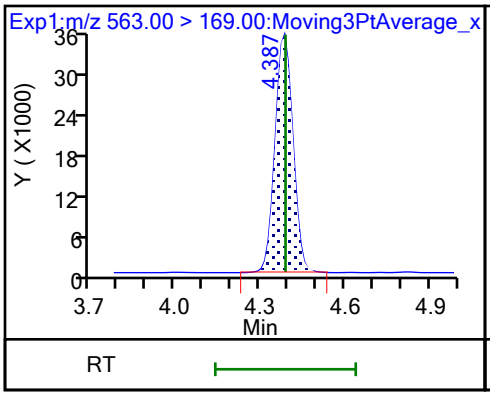
D 30 13C2 PFUnA



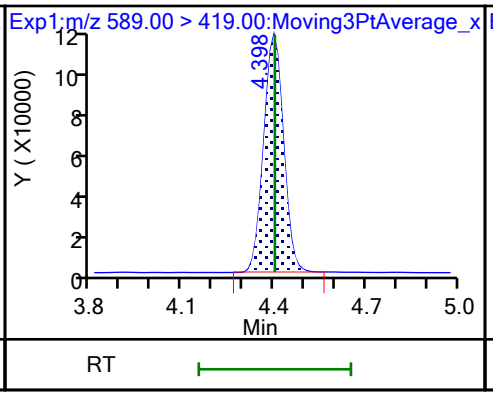
31 Perfluoroundecanoic acid



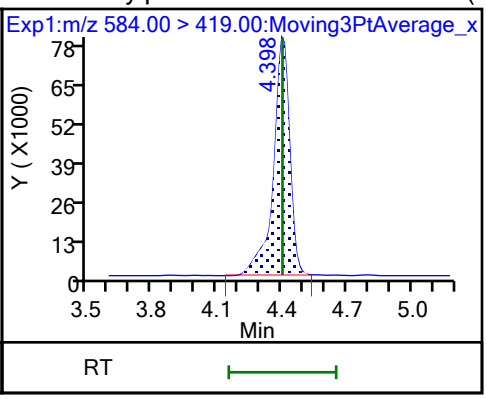
31 Perfluoroundecanoic acid



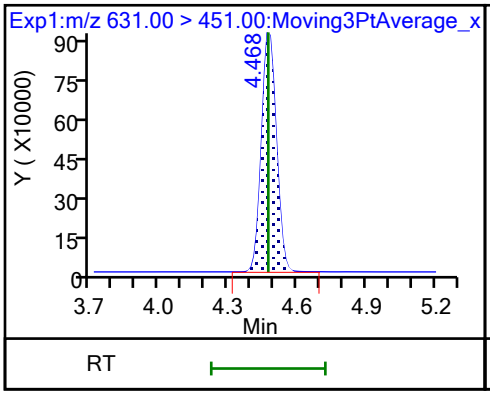
D 32 d5-NEtFOSAA



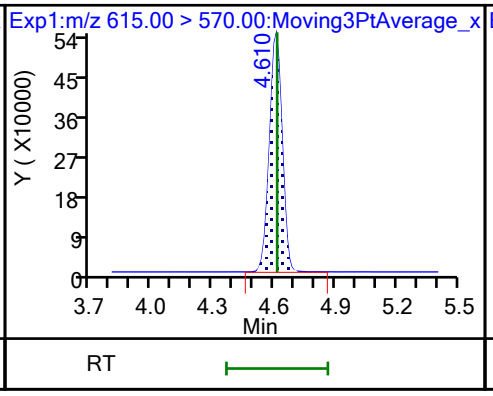
33 N-ethylperfluorooctanesulfonamid (M)



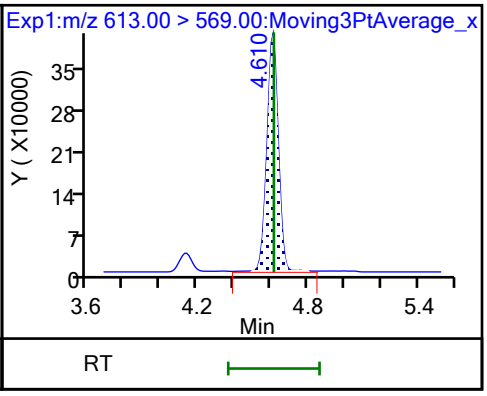
66 11-Chloroeicosafluoro-3-oxaundec



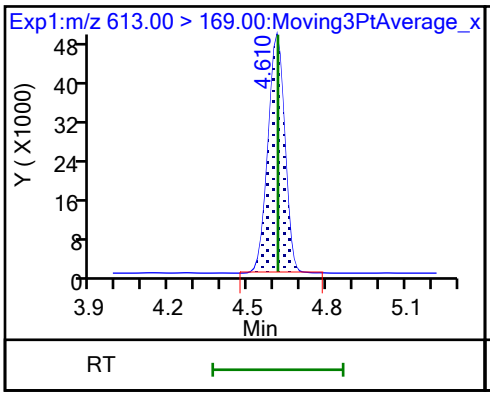
D 36 13C2 PFDoA



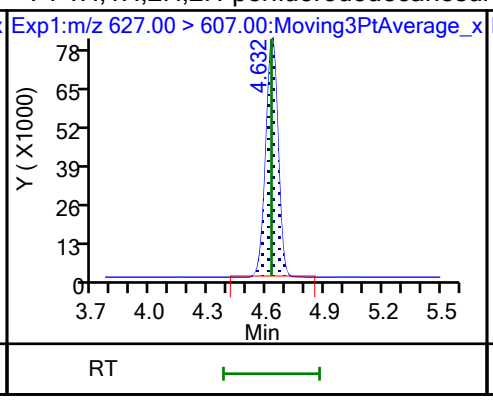
37 Perfluorododecanoic acid



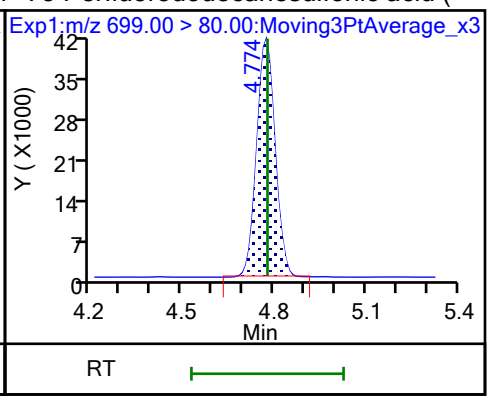
37 Perfluorododecanoic acid



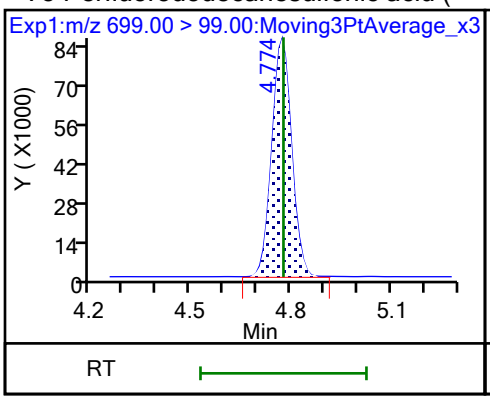
74 1H,1H,2H,2H-perfluorododecanesul



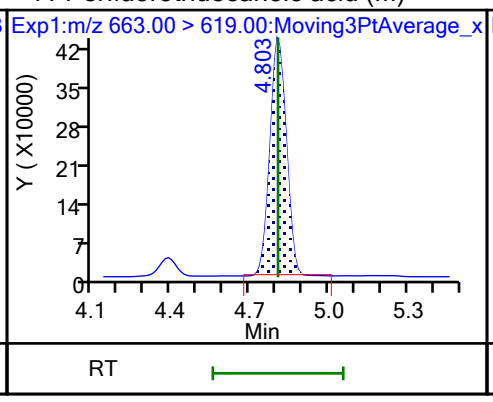
75 Perfluorododecanesulfonic acid (



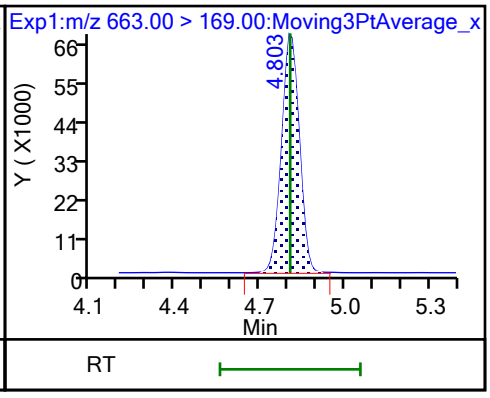
75 Perfluorododecanesulfonic acid (



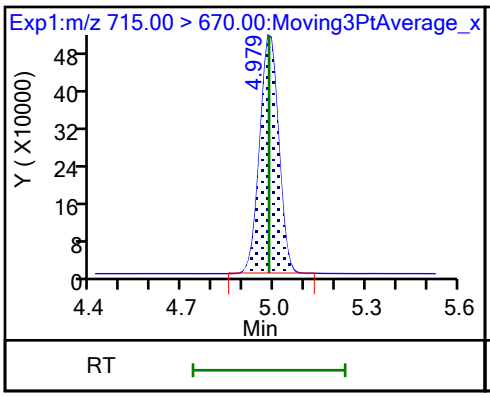
41 Perfluorotridecanoic acid (M)



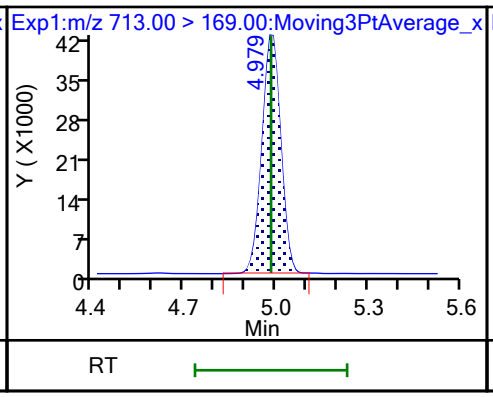
41 Perfluorotridecanoic acid



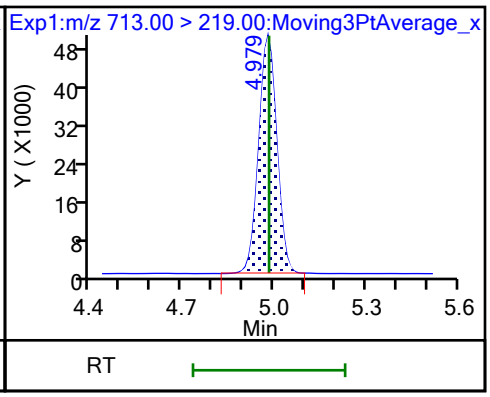
D 43 13C2 PFTeDA



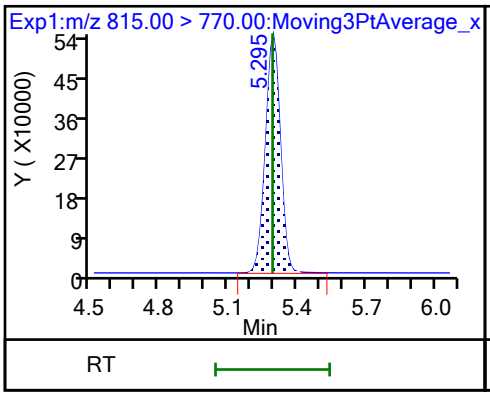
42 Perfluorotetradecanoic acid



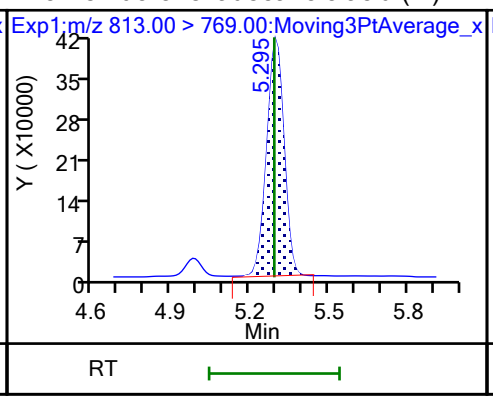
42 Perfluorotetradecanoic acid



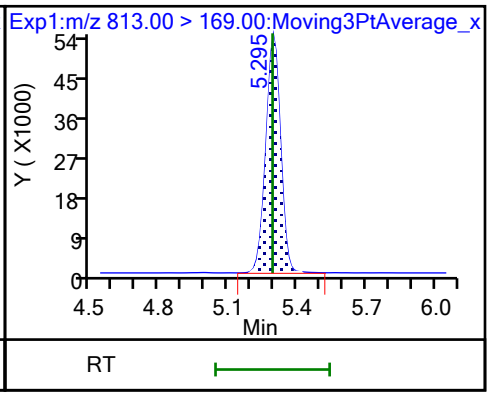
D 44 13C2 PFHxDA



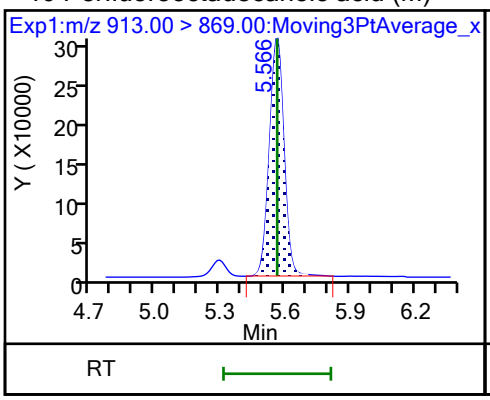
45 Perfluorohexadecanoic acid (M)



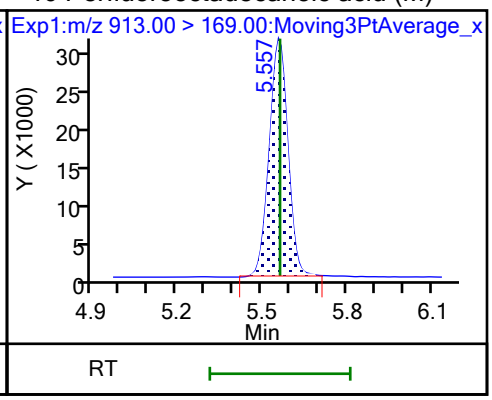
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/15 Calibration Date: 10/24/2023 08:00

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8947		2.43	2.50	-2.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.028		2.38	2.50	-4.7	
Perfluorobutanesulfonic acid	AveID	1.117	1.134		2.25	2.22	1.5	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.455		2.38	2.34	1.7	
Perfluorohexanoic acid	AveID	1.100	0.9847		2.24	2.50	-10.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.370		2.47	2.35	4.9	
HFPODA	AveID	1.001	0.9592		2.40	2.50	-4.2	
Perfluoroheptanoic acid	AveID	1.121	1.055		2.35	2.50	-5.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.077		2.22	2.29	-2.7	
DONA	AveID	5.754	5.602		2.30	2.36	-2.6	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.669		2.32	2.38	-2.3	
Perfluoroheptanesulfonic acid	AveID	1.445	1.375		2.27	2.38	-4.8	
Perfluorooctanoic acid	AveID	1.065	1.044		2.45	2.50	-2.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.078		2.14	2.32	-7.6	
Perfluorononanoic acid	AveID	0.9800	0.9435		2.41	2.50	-3.7	
9Cl-PF3ONS	AveID	3.569	3.600		2.35	2.33	0.9	
Perfluorononanesulfonic acid	AveID	0.8874	0.7903		2.14	2.41	-10.9	
Perfluorodecanoic acid	AveID	0.999	0.9320		2.33	2.50	-6.7	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.348		2.56	2.40	6.7	
Perfluorooctanesulfonamide	AveID	0.9539	0.9934		2.60	2.50	4.1	
NMeFOSAA	AveID	0.9074	0.8824		2.43	2.50	-2.8	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6228		2.20	2.41	-8.8	
Perfluoroundecanoic acid	AveID	1.031	0.9570		2.32	2.50	-7.1	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9381		2.35	2.50	-6.2	
11Cl-PF3OUdS	AveID	5.474	5.573		2.40	2.36	1.8	
Perfluorododecanoic acid	AveID	1.018	0.9241		2.27	2.50	-9.2	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.387		2.54	2.41	5.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2211		2.31	2.42	-4.5	
Perfluorotridecanoic acid	AveID	1.070	1.012		2.36	2.50	-5.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1089		2.43	2.50	-2.6	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9784		2.45	2.50	-2.2	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7387		2.37	2.50	-5.4	
13C4 PFBA	Ave	0.9917	1.044		1.32	1.25	5.3	
13C5 PFPeA	Ave	0.7696	0.7345		1.19	1.25	-4.6	
13C3 PFBS	Ave	1.041	0.9652		1.08	1.16	-7.3	
M2-4:2 FTS	Ave	0.1204	0.1071		1.04	1.17	-11.1	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/15 Calibration Date: 10/24/2023 08:00

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7452		1.19	1.25	-4.8	
13C3 HFPO-DA	Ave	0.1516	0.1338		1.10	1.25	-11.7	
13C4 PFHpA	Ave	0.8590	0.8376		1.22	1.25	-2.5	50.0
18O2 PFHxS	Ave	0.7464	0.7221		1.14	1.18	-3.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1498		1.15	1.19	-3.4	
13C4 PFOA	Ave	0.9731	0.9529		1.22	1.25	-2.1	50.0
13C4 PFOS	Ave	0.4742	0.4828		1.22	1.20	1.8	50.0
13C5 PFNA	Ave	1.059	1.019		1.20	1.25	-3.8	50.0
13C2 PFDA	Ave	1.109	1.136		1.28	1.25	2.4	
M2-8:2 FTS	Ave	0.1744	0.1583		1.09	1.20	-9.2	
13C8 FOSA	Ave	0.9462	0.8918		1.18	1.25	-5.7	
d3-NMeFOSAA	Ave	0.2650	0.2691		1.27	1.25	1.5	
13C2 PFUnA	Ave	1.047	1.113		1.33	1.25	6.3	
d5-NEtFOSAA	Ave	0.2552	0.2578		1.26	1.25	1.0	
13C2 PFDoA	Ave	1.064	1.081		1.27	1.25	1.6	
13C2 PFTeDA	Ave	1.059	1.008		1.19	1.25	-4.8	
13C2 PFHxDA	Ave	1.221	1.122		1.15	1.25	-8.1	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 08:00:13 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057513-015 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:04:14
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.607	2198931	1.32		105	1557	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.000	3934978	2.43		97.3	367	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1546407	1.19		95.4	2506	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	3179372	2.38		95.3	84.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1889948	1.08		92.7	74129	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	4088863	2.25	Target=2.06	102	1297	M
298.90 > 99.00	2.467	2.467	0.0	1.000	2031167		2.01(1.03-3.09)		871	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1460022	2.38		102	1224	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	210604	1.04		88.9	122	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1568901	1.19		95.2	1457	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	3089849	2.24	Target=14.12	89.5	563	M
313.00 > 119.00	2.797	2.797	0.0	1.000	236797		13.05(7.06-21.17)		245	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	3919318	2.47	Target=2.72	105	1423	M
349.00 > 99.00	2.810	2.810	0.0	0.888	1332021		2.94(1.36-4.09)		1038	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	540639	2.40		95.8	2466	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.828	281805	1.10		88.3	1513	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.901	1438257	1.14		96.7	5596	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.168	-0.002	1.000	2993489	2.22	Target=3.32	97.3	3476	M
399.00 > 99.00	3.166	3.168	-0.002	1.000	876995		3.41(1.66-4.98)		777	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	1.000	3722708	2.35	Target=4.17	94.2	874	M
363.00 > 169.00	3.166	3.168	-0.002	1.000	932574		3.99(2.09-6.26)		1781	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.168	-0.002	0.901	1763569	1.22		97.5	8591	
77 DONA										
377.00 > 251.00	3.201	3.203	-0.002	0.838	10764113	2.30	Target=3.33	97.4	10329	
377.00 > 85.00	3.201	3.203	-0.002	0.838	2955185		3.64(1.66-4.99)		4136	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.505	-0.002	0.917	2665024	2.27	Target=4.83	95.2	3401	M
449.00 > 99.00	3.503	3.505	-0.002	0.917	536953		4.96(2.41-7.24)		2014	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.505	-0.002	0.997	299726	1.15		96.6	616	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.514	-0.011	1.000	1601635	2.32		97.7	1010	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.514	0.007	1.003	4188248	2.45	Target=2.88	98.0	188	M
413.00 > 169.00	3.521	3.514	0.007	1.003	1517706		2.76(1.44-4.32)		1472	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.523	-0.011	1.000	2006353	1.22		97.9	6124	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.523	-0.011		2105481	1.25			6286	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.822	-0.002	1.000	2034032	2.14	Target=4.24	92.4	2440	M
499.00 > 99.00	3.820	3.822	-0.002	1.000	463988		4.38(2.12-6.37)		1078	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.822	-0.002	1.088	971845	1.22		102	2310	
20 Perfluorononanoic acid										
463.00 > 419.00	3.844	3.845	-0.001	1.000	4048723	2.41	Target=8.34	96.3	600	
463.00 > 169.00	3.844	3.845	-0.001	1.000	491993		8.23(4.17-12.51)		3458	
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.845	-0.001	1.094	2145700	1.20		96.2	7482	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.983	-0.002	1.042	6828956	2.35		101	6508	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.105	-0.003	1.074	1545753	2.14	Target=2.17	89.1	5239	
549.00 > 99.00	4.102	4.105	-0.003	1.074	637132		2.43(1.08-3.25)		2354	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.126	4.129	-0.003	1.000	4457638	2.33	Target=11.44	93.3	1273	
513.00 > 169.00	4.126	4.129	-0.003	1.000	429529		10.38(5.72-17.16)		2244	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.129	-0.003	1.175	2391339	1.28		102	5998	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.178	319368	1.09		90.8	824	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.141	-0.003	1.000	1503120	2.56		107	4912	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.234	-0.002	1.205	1877727	1.18		94.3	5099	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.234	-0.002	1.000	3730670	2.60		104	5016	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.270	-0.002	1.215	566538	1.27		102	1188	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.270	-0.002	1.000	999791	2.43		97.2	1219	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.352	4.366	-0.014	1.139	1221944	2.20	Target=2.37	91.2	5548	
599.00 > 99.00	4.352	4.366	-0.014	1.139	481697		2.54(1.19-3.56)		3524	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.249	2342775	1.33		106	6004	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.390	-0.002	1.000	4484050	2.32	Target=12.20	92.9	879	M
563.00 > 169.00	4.388	4.390	-0.002	1.000	379163		11.83(6.10-18.31)		2301	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.253	542694	1.26		101	765	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	1018222	2.34		93.8	1334	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.473	-0.004	1.170	10685448	2.40		102	7464	
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.613	-0.013	1.310	2275789	1.27		102	7730	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.613	-0.002	1.002	4206261	2.27	Target=8.47	90.8	235	M
613.00 > 169.00	4.600	4.613	-0.013	1.000	523791		8.03(4.23-12.70)		5490	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.624	-0.002	1.117	891665	2.54		105	5878	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.765	4.777	-0.012	1.247	435159	2.31	Target=0.48	95.5	3379	
699.00 > 99.00	4.765	4.777	-0.012	1.247	893253		0.49(0.24-0.72)		4509	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.044	4604316	2.36	Target=6.41	94.6	241	M
663.00 > 169.00	4.804	4.806	-0.002	1.044	685875		6.71(3.21-9.62)		2912	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.418	2122817	1.19		95.2	5517	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.980	4.982	-0.002	1.000	462193	2.43	Target=0.87	97.4	3656	
713.00 > 219.00	4.980	4.982	-0.002	1.000	514031		0.90(0.43-1.30)		3072	

Report Date: 25-Oct-2023 23:19:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.297	5.292	0.005	1.508	2361814	1.15		91.9	6089	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.297	5.292	0.005	1.000	4621661	2.45	Target=7.89	97.8	245	M
813.00 > 169.00	5.297	5.292	0.005	1.000	581603		7.95(3.94-11.83)		3457	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.559	5.563	-0.004	1.049	3489242	2.36	Target=9.39	94.6	273	M
913.00 > 169.00	5.550	5.563	-0.013	1.048	372230		9.37(4.69-14.08)		981	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

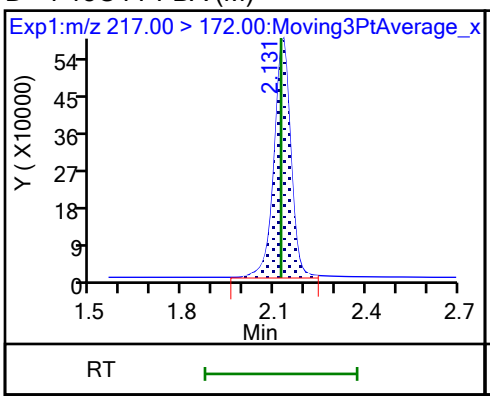
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:19:31 Chrom Revision: 2.3 18-Oct-2023 21:16:54

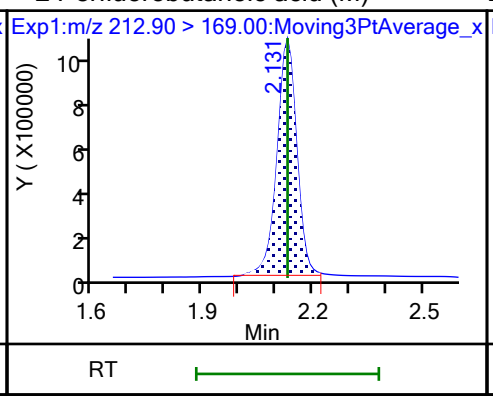
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Injection Date: 24-Oct-2023 08:00:13 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

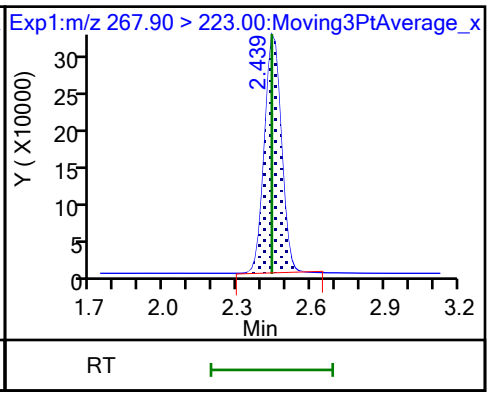
D 1 13C4 PFBA (M)



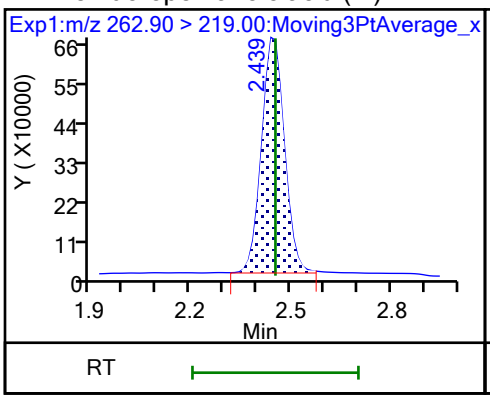
2 Perfluorobutanoic acid (M)



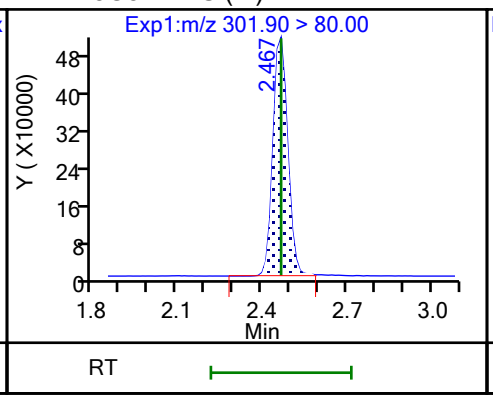
D 3 13C5 PFPeA



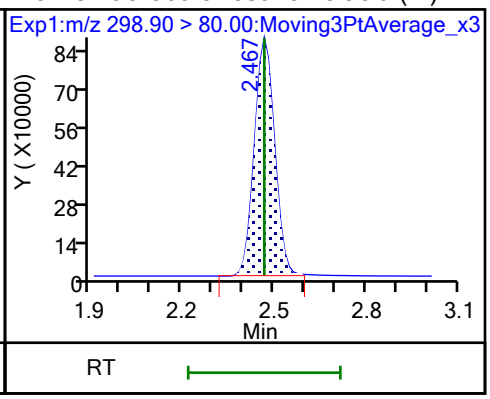
4 Perfluoropentanoic acid (M)



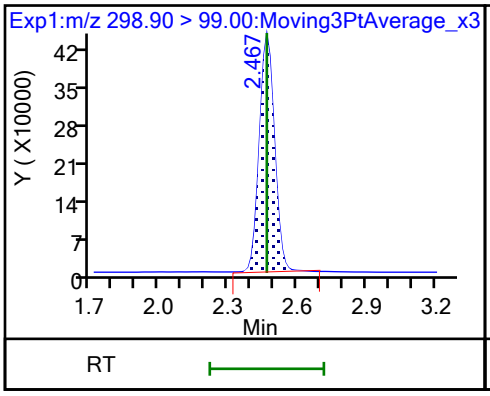
D 47 13C3 PFBS (M)



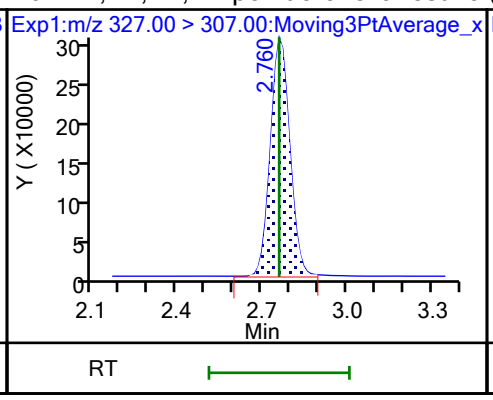
5 Perfluorobutanesulfonic acid (M)



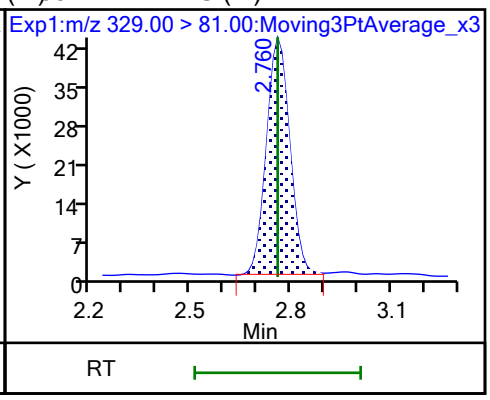
5 Perfluorobutanesulfonic acid



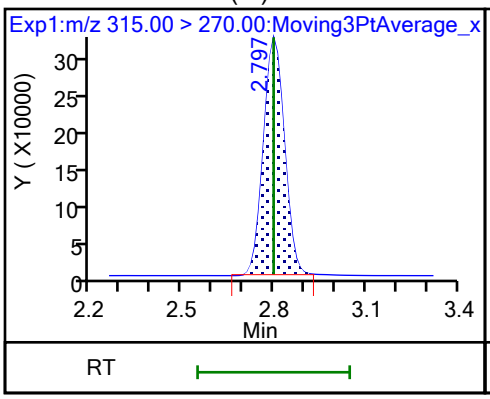
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



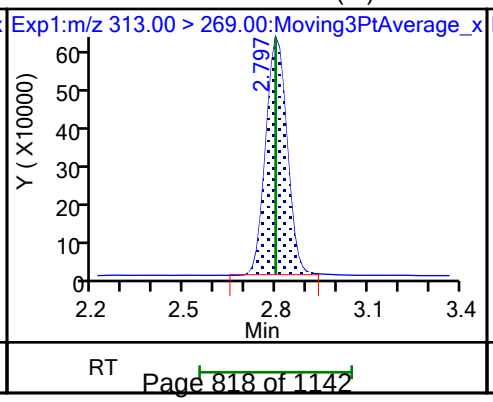
D 60 M2-4:2 FTS (M)



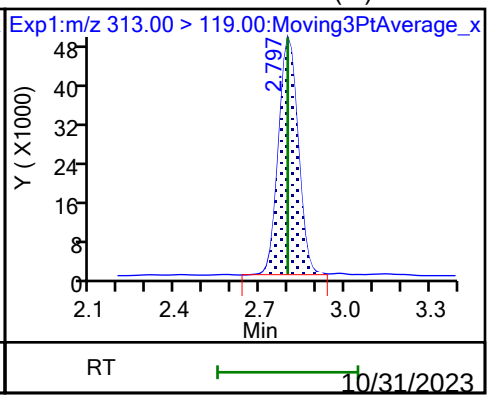
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

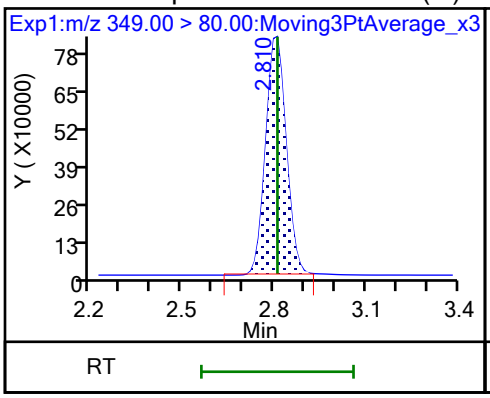


6 Perfluorohexanoic acid (M)

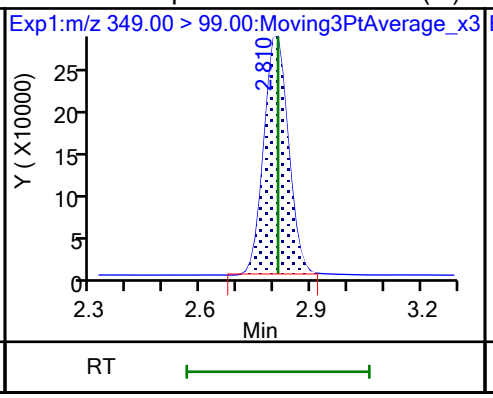


10/31/2023
10:17 AM

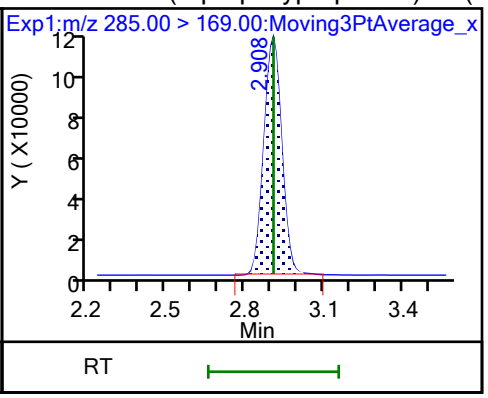
70 Perfluoropentanesulfonic acid (M)



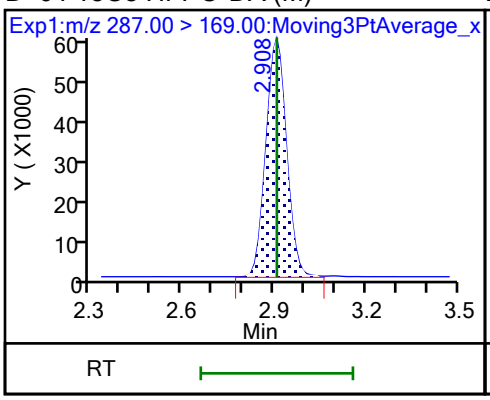
70 Perfluoropentanesulfonic acid (M)



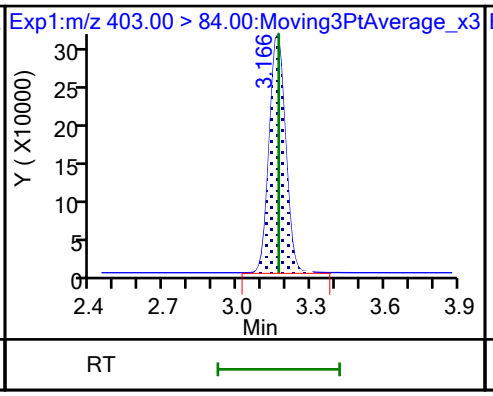
67 Perfluoro(2-propoxypropanoic) ac (M)



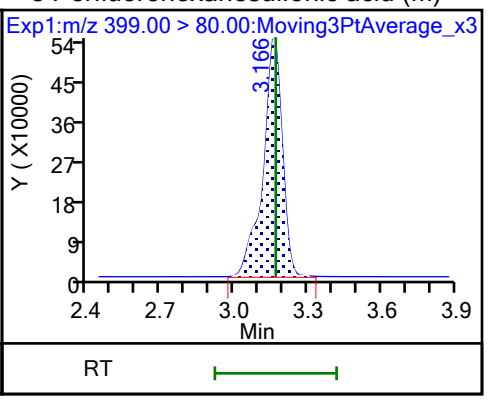
D 64 13C3 HFPO-DA (M)



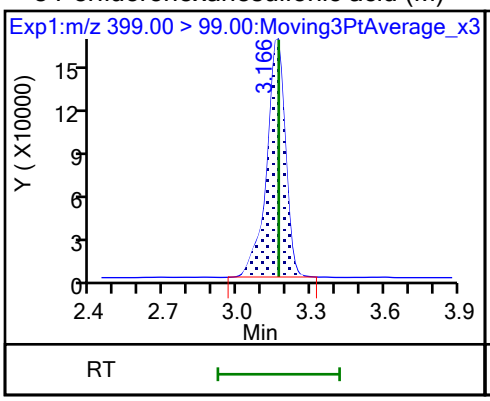
D 11 18O2 PFHxS



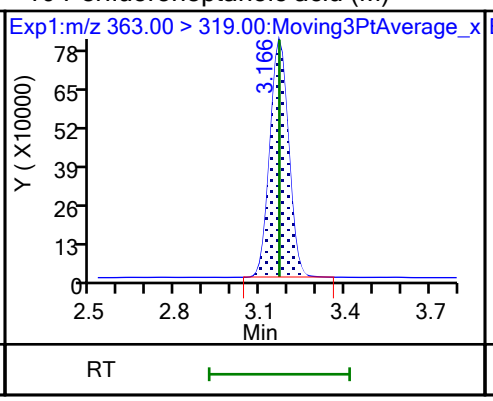
8 Perfluorohexanesulfonic acid (M)



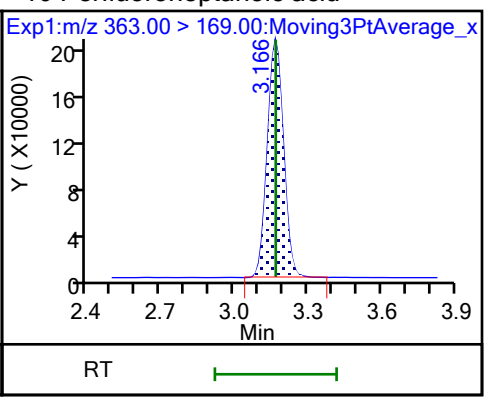
8 Perfluorohexanesulfonic acid (M)



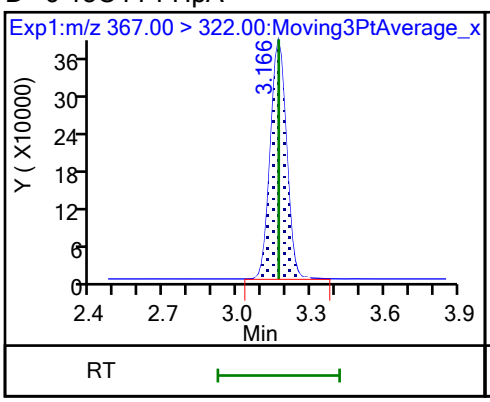
10 Perfluoroheptanoic acid (M)



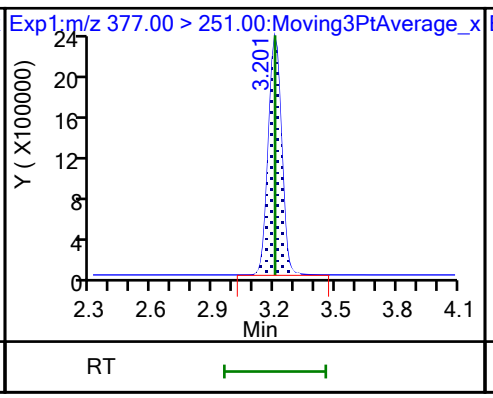
10 Perfluoroheptanoic acid



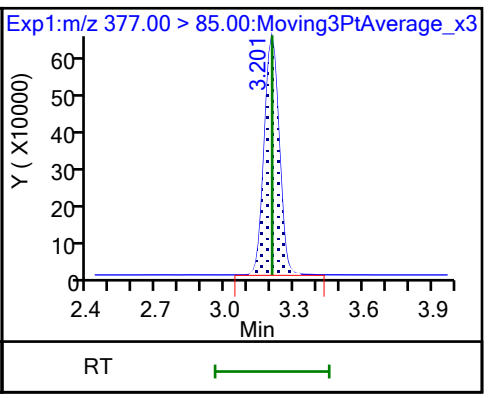
D 9 13C4 PFHpA



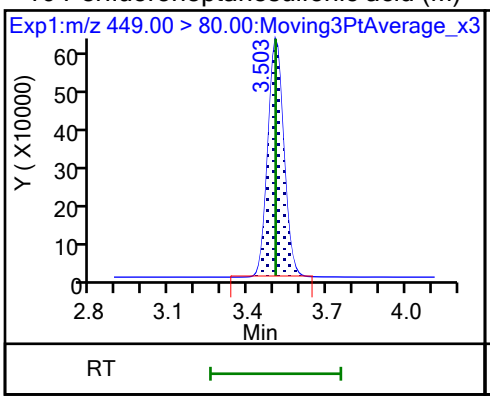
77 DONA



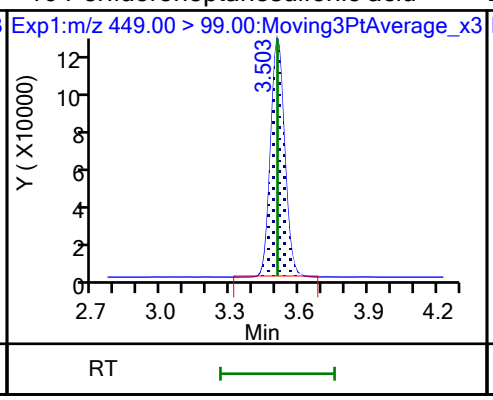
77 DONA



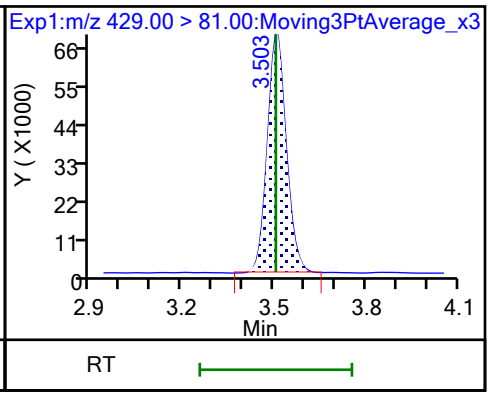
16 Perfluoroheptanesulfonic acid (M)



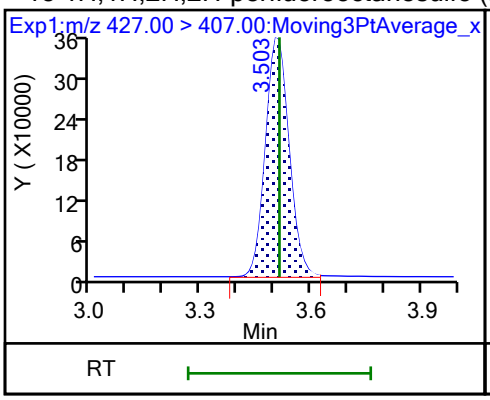
16 Perfluoroheptanesulfonic acid



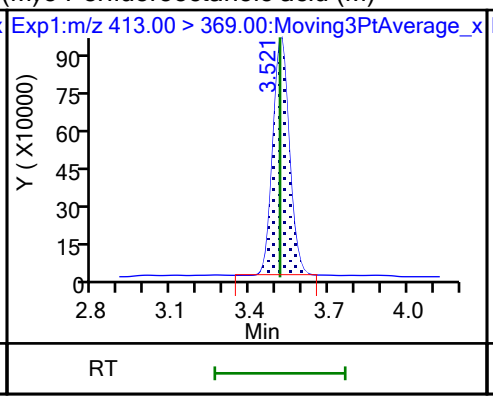
D 12 M2-6:2 FTS



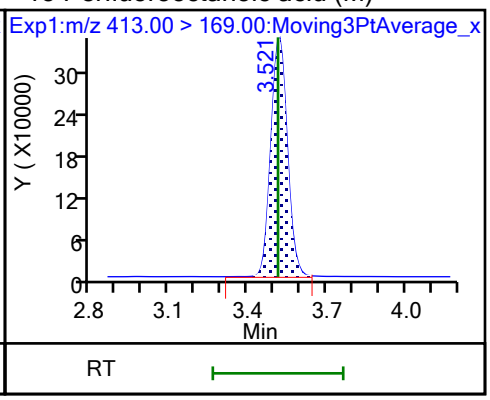
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



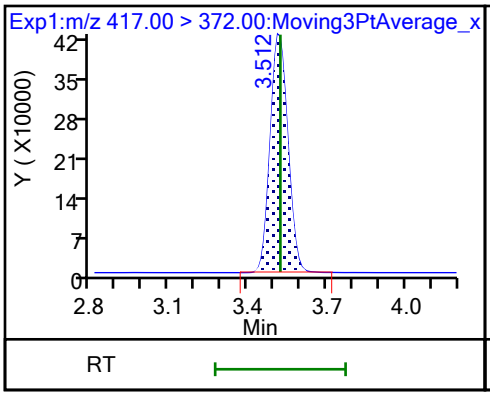
15 Perfluorooctanoic acid (M)



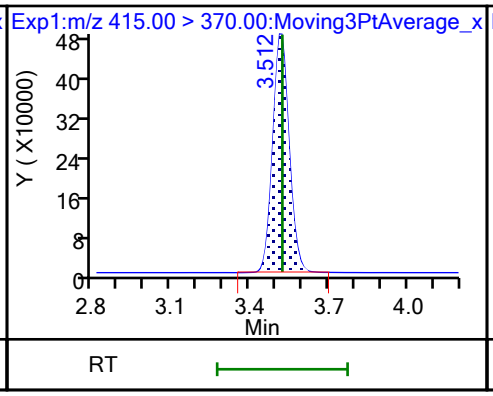
15 Perfluorooctanoic acid (M)



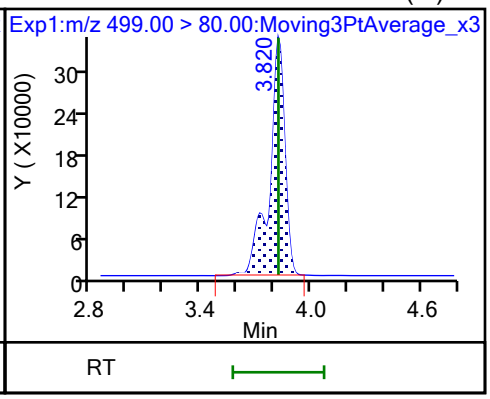
D 14 13C4 PFOA



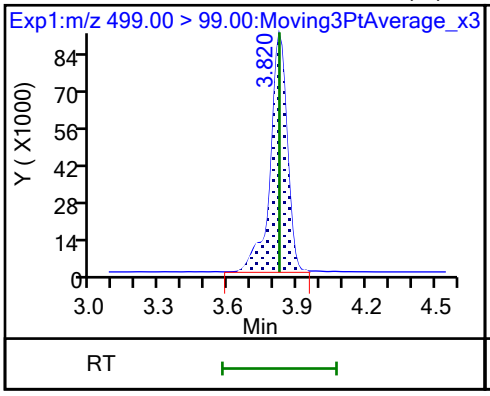
* 62 13C2 PFOA



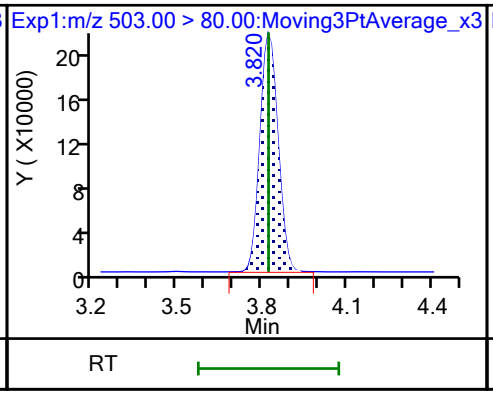
17 Perfluorooctanesulfonic acid (M)



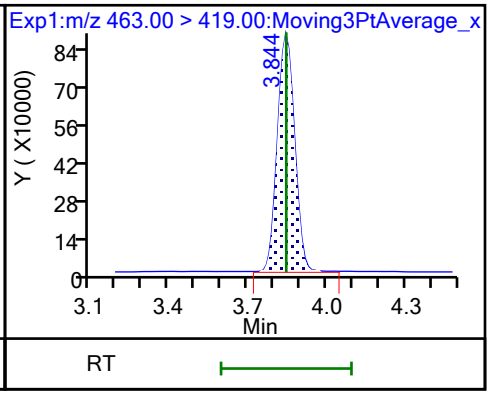
17 Perfluorooctanesulfonic acid (M)



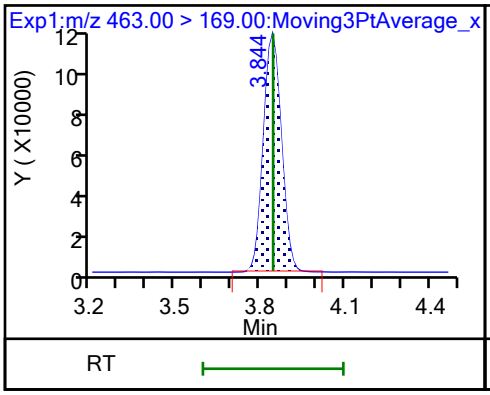
D 18 13C4 PFOS



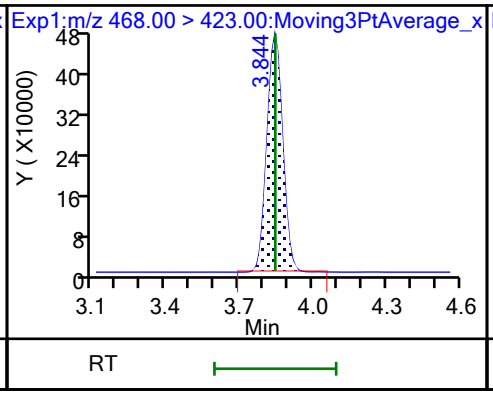
20 Perfluorononanoic acid



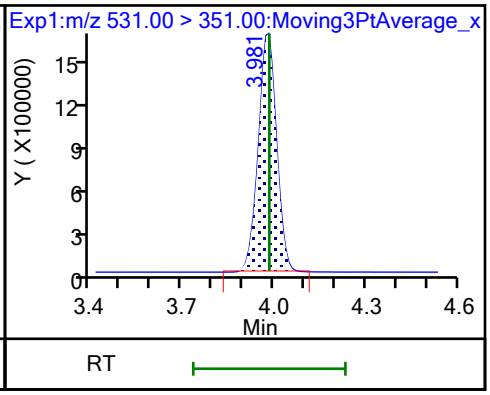
20 Perfluorononanoic acid



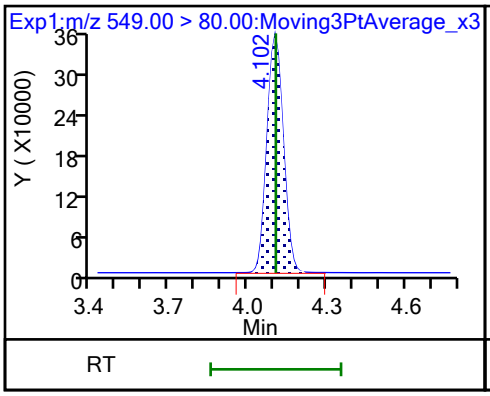
D 19 13C5 PFNA



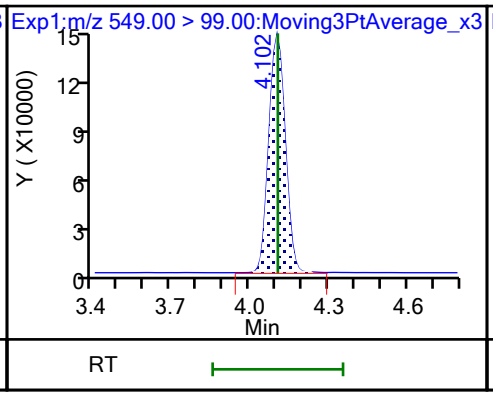
69 9-Chlorohexadecafluoro-3-oxanona (M)



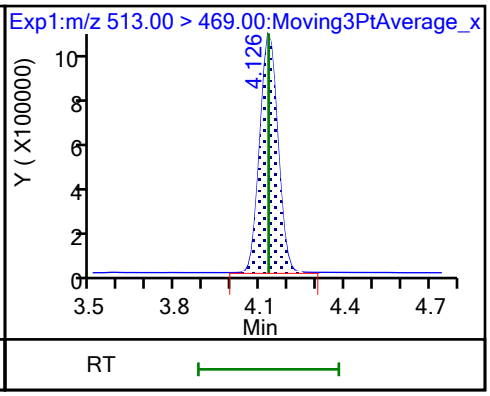
68 Perfluorononanesulfonic acid



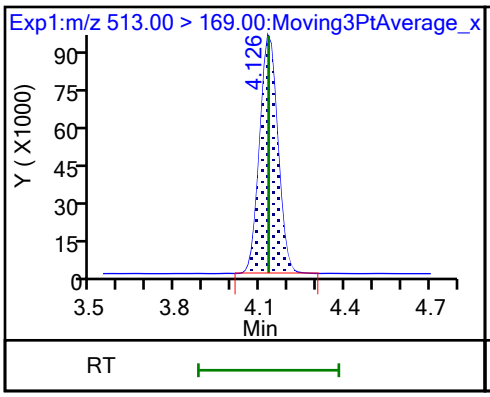
68 Perfluorononanesulfonic acid



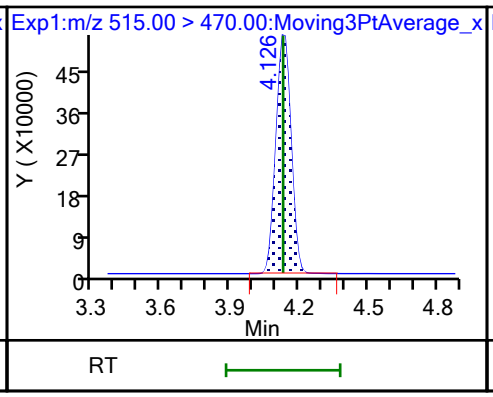
24 Perfluorodecanoic acid



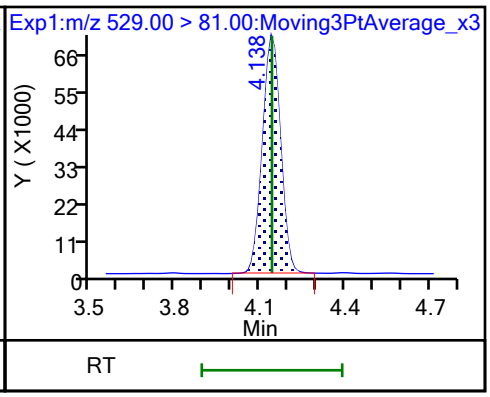
24 Perfluorodecanoic acid



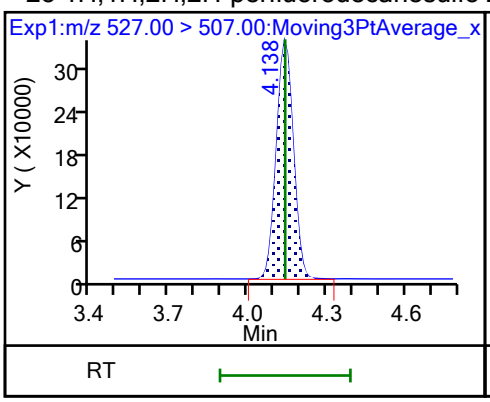
D 23 13C2 PFDA



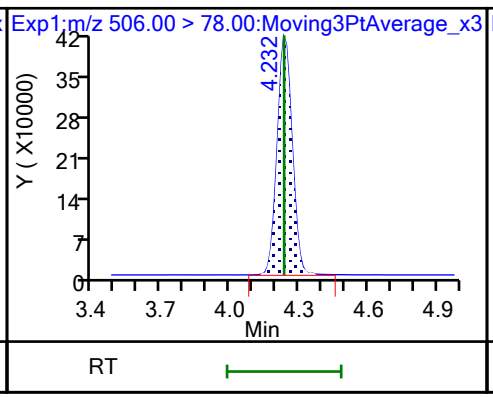
D 26 M2-8:2 FTS



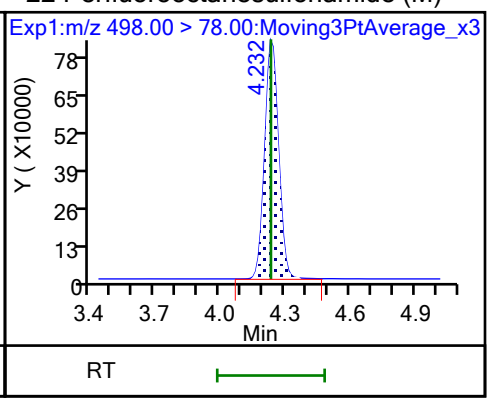
25 1H,1H,2H,2H-perfluorodecanesulfo



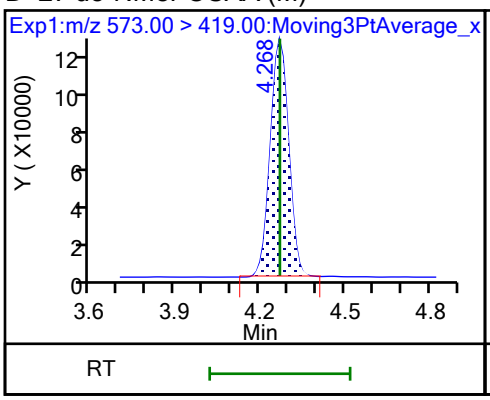
D 21 13C8 FOSA



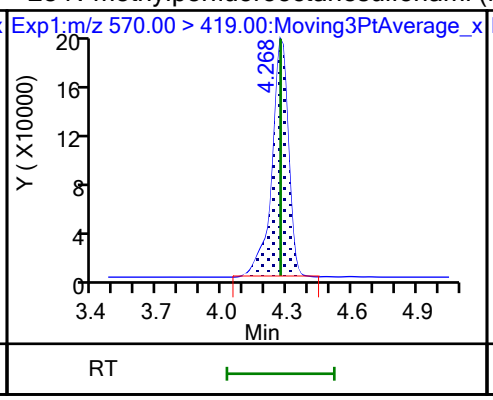
22 Perfluorooctanesulfonamide (M)



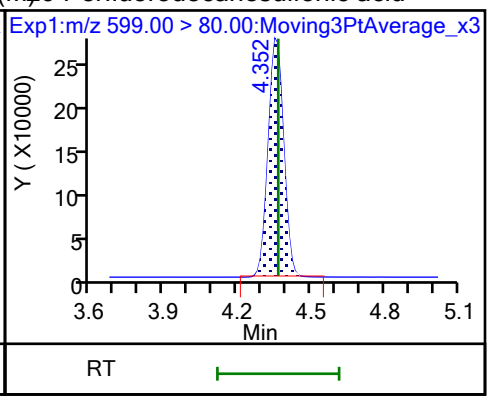
D 27 d3-NMeFOSAA (M)



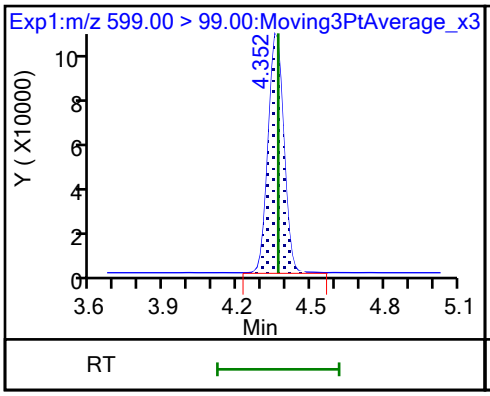
28 N-methylperfluorooctanesulfonami (M)



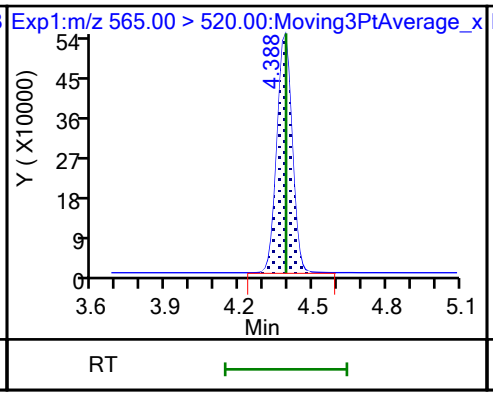
29 Perfluorodecanesulfonic acid



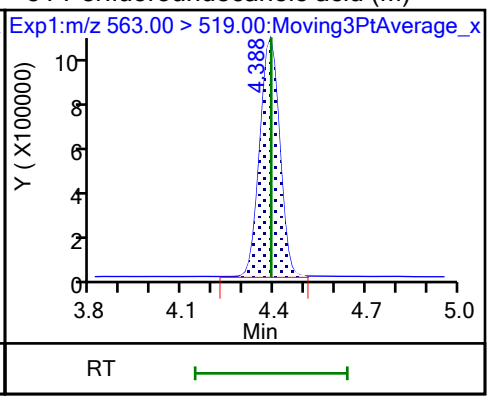
29 Perfluorodecanesulfonic acid



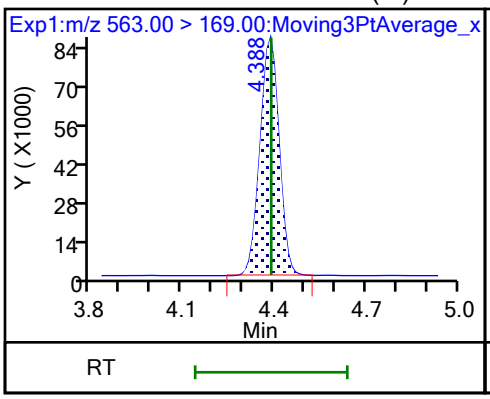
D 30 13C2 PFUnA



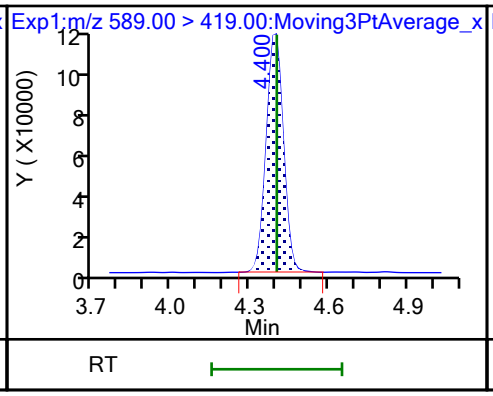
31 Perfluoroundecanoic acid (M)



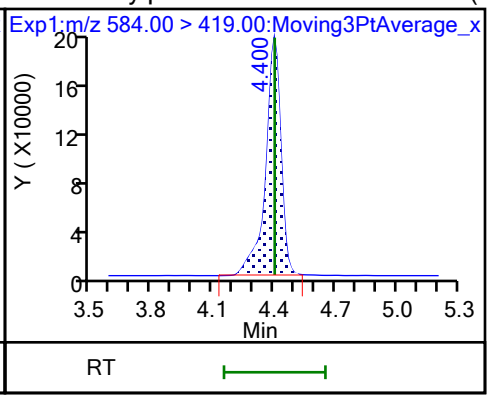
31 Perfluoroundecanoic acid (M)



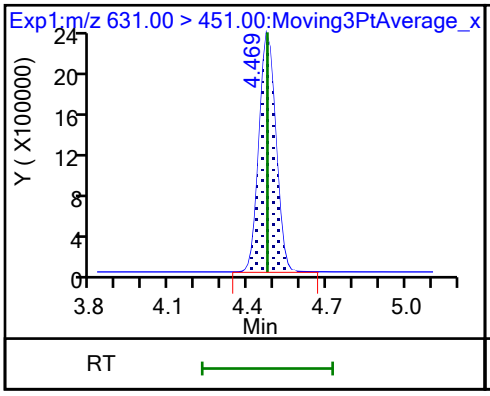
D 32 d5-NEtFOSAA



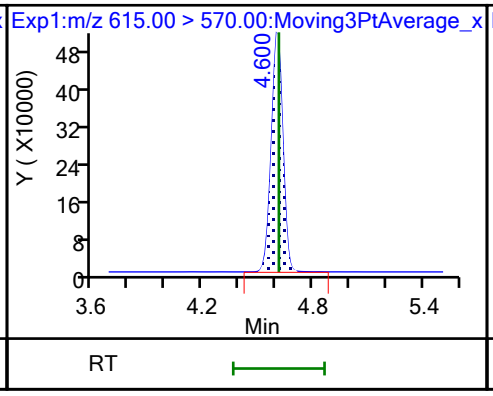
33 N-ethylperfluorooctanesulfonamid (M)



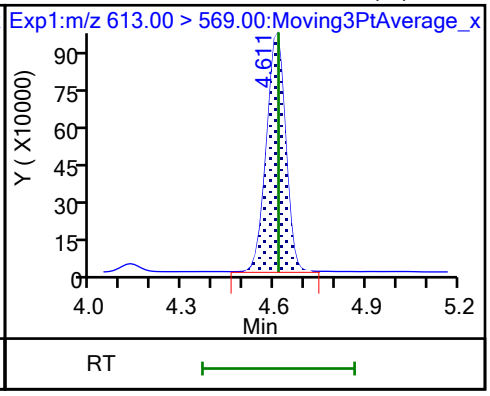
66 11-Chloroeicosafluoro-3-oxaundec



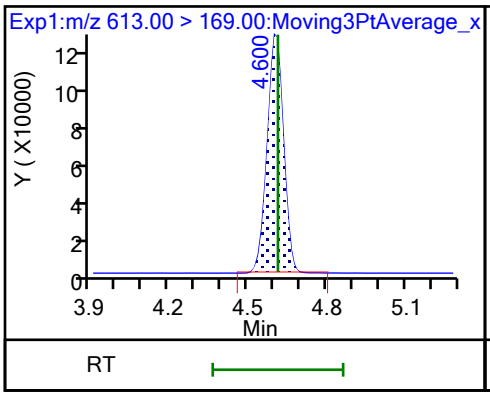
D 36 13C2 PFDoA



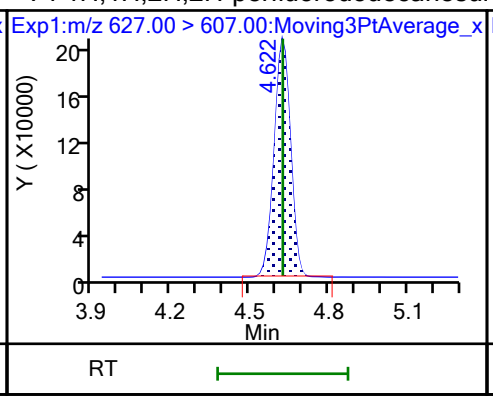
37 Perfluorododecanoic acid (M)



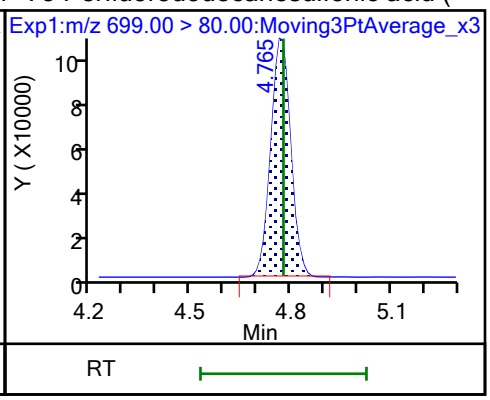
37 Perfluorododecanoic acid



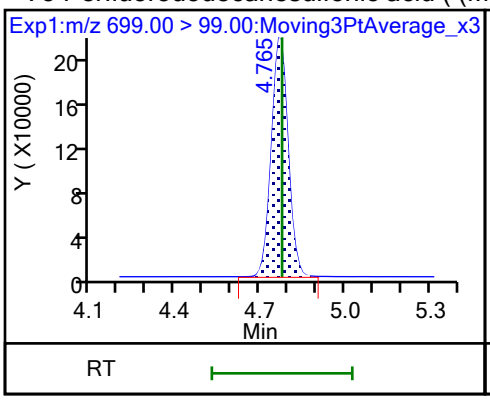
74 1H,1H,2H,2H-perfluorododecanesul



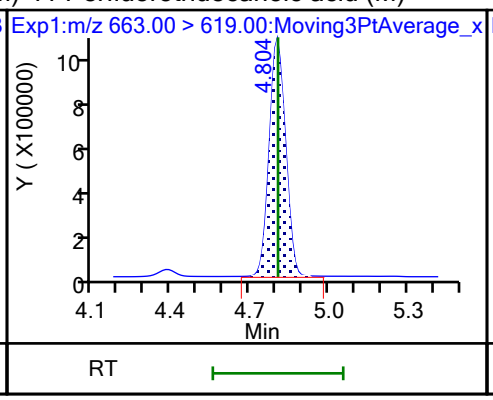
75 Perfluorododecanesulfonic acid (



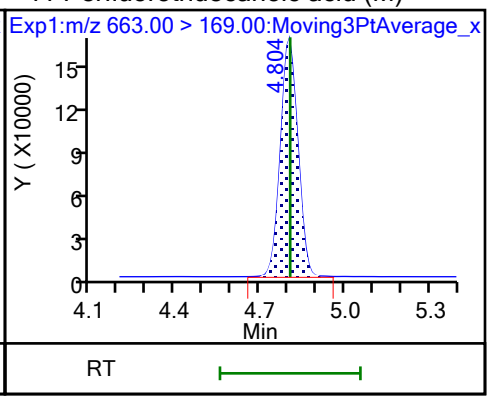
75 Perfluorododecanesulfonic acid ((M)



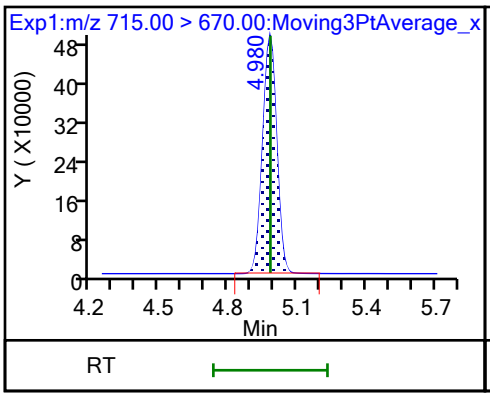
41 Perfluorotridecanoic acid (M)



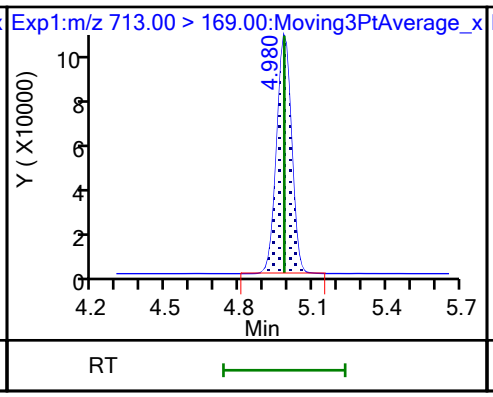
41 Perfluorotridecanoic acid (M)



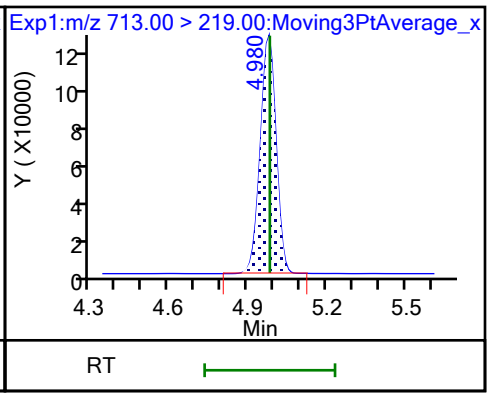
D 43 13C2 PFTeDA



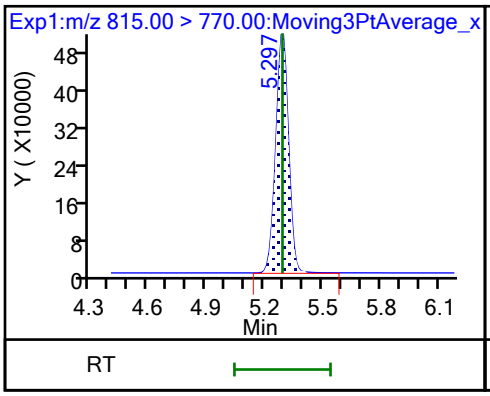
42 Perfluorotetradecanoic acid



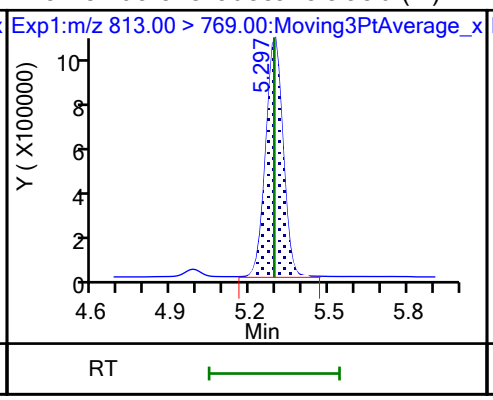
42 Perfluorotetradecanoic acid



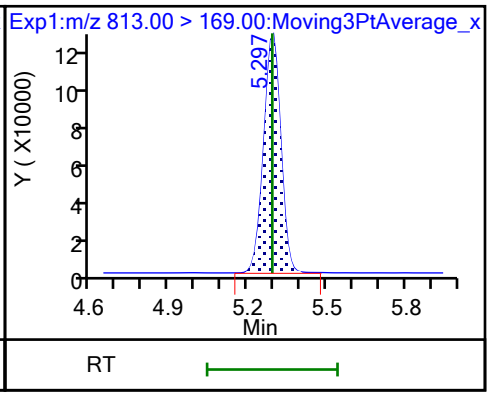
D 44 13C2 PFHxDA



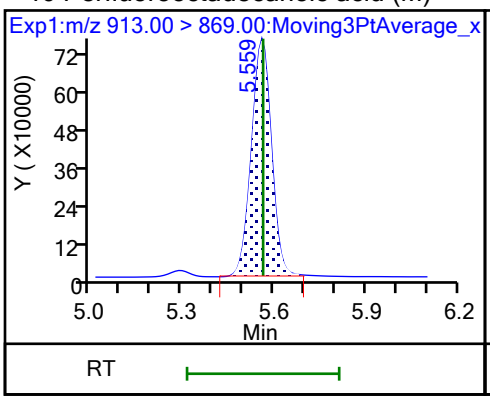
45 Perfluorohexadecanoic acid (M)



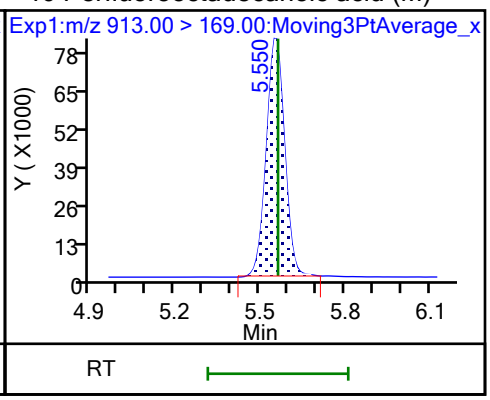
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/26 Calibration Date: 10/24/2023 09:30

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E26.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8701		0.921	1.00	-7.9	30.0
Perfluoropentanoic acid	AveID	1.079	1.065		0.987	1.00	-1.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.086		0.863	0.887	-2.8	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.410		0.941	0.937	0.4	
Perfluorohexanoic acid	AveID	1.100	1.027		0.933	1.00	-6.7	
Perfluoropentanesulfonic acid	AveID	1.306	1.300		0.937	0.941	-0.5	
HFPODA	AveID	1.001	0.9254		0.924	1.00	-7.6	
Perfluoroheptanoic acid	AveID	1.121	1.081		0.964	1.00	-3.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.045		0.863	0.914	-5.6	
DONA	AveID	5.754	5.358		0.880	0.945	-6.9	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.730		0.950	0.951	-0.1	
Perfluoroheptanesulfonic acid	AveID	1.445	1.380		0.910	0.953	-4.5	
Perfluorooctanoic acid	AveID	1.065	0.9432		0.886	1.00	-11.4	
Perfluorooctanesulfonic acid	AveID	1.166	1.112		0.885	0.928	-4.6	
Perfluorononanoic acid	AveID	0.9800	0.9507		0.970	1.00	-3.0	
9Cl-PF3ONS	AveID	3.569	3.624		0.947	0.933	1.5	
Perfluorononanesulfonic acid	AveID	0.8874	0.7756		0.841	0.962	-12.6	
Perfluorodecanoic acid	AveID	0.999	0.8487		0.849	1.00	-15.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.317		1.01	0.960	5.2	
Perfluorooctanesulfonamide	AveID	0.9539	0.9761		1.02	1.00	2.3	
NMeFOSAA	AveID	0.9074	0.9059		0.998	1.00	-0.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6466		0.914	0.965	-5.3	
Perfluoroundecanoic acid	AveID	1.031	0.9515		0.923	1.00	-7.7	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9397		0.940	1.00	-6.0	
11Cl-PF3OUdS	AveID	5.474	5.767		0.994	0.943	5.4	
Perfluorododecanoic acid	AveID	1.018	0.9555		0.939	1.00	-6.1	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.434		1.05	0.964	8.9	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2240		0.937	0.968	-3.2	
Perfluorotridecanoic acid	AveID	1.070	1.096		1.03	1.00	2.5	
Perfluorotetradecanoic acid	AveID	0.1118	0.1074		0.961	1.00	-3.9	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.005		1.01	1.00	0.5	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7224		0.925	1.00	-7.5	
13C4 PFBA	Ave	0.9917	0.9935		1.25	1.25	0.2	
13C5 PFPeA	Ave	0.7696	0.7100		1.15	1.25	-7.7	
13C3 PFBS	Ave	1.041	0.9871		1.10	1.16	-5.2	
M2-4:2 FTS	Ave	0.1204	0.1050		1.02	1.17	-12.8	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196692/26 Calibration Date: 10/24/2023 09:30

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E26.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7231		1.16	1.25	-7.6	
13C3 HFPO-DA	Ave	0.1516	0.1343		1.11	1.25	-11.4	
18O2 PFHxS	Ave	0.7464	0.7518		1.19	1.18	0.7	50.0
13C4 PFHpA	Ave	0.8590	0.8203		1.19	1.25	-4.5	50.0
M2-6:2 FTS	Ave	0.1551	0.1445		1.11	1.19	-6.9	
13C4 PFOA	Ave	0.9731	0.999		1.28	1.25	2.7	50.0
13C4 PFOS	Ave	0.4742	0.4786		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.047		1.24	1.25	-1.1	50.0
13C2 PFDA	Ave	1.109	1.129		1.27	1.25	1.9	
M2-8:2 FTS	Ave	0.1744	0.1530		1.05	1.20	-12.3	
13C8 FOSA	Ave	0.9462	0.8852		1.17	1.25	-6.5	
d3-NMeFOSAA	Ave	0.2650	0.2526		1.19	1.25	-4.7	
13C2 PFUnA	Ave	1.047	1.064		1.27	1.25	1.6	
d5-NEtFOSAA	Ave	0.2552	0.2553		1.25	1.25	0.0	
13C2 PFDoA	Ave	1.064	1.047		1.23	1.25	-1.6	
13C2 PFTeDA	Ave	1.059	1.036		1.22	1.25	-2.2	
13C2 PFHxDA	Ave	1.221	1.130		1.16	1.25	-7.4	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 09:30:16 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057513-026 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:20:00 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:15:52
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.605	2039728	1.25		100	1286	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	1419871	0.9214		92.1	96.8	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1457681	1.15		92.3	798	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1242429	0.9873		98.7	13.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1884681	1.10		94.8	76618	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.467	0.013	1.006	1561893	0.8626	Target=2.06	97.2	508	M
298.90 > 99.00	2.467	2.467	0.0	1.000	781427		2.00(1.03-3.09)		158	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.000	550954	0.9410		100	1863	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	201298	1.02		87.2	98.8	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1484670	1.15		92.4	1565	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.797	0.013	1.004	1219373	0.9329	Target=14.12	93.3	55.3	M
313.00 > 119.00	2.810	2.797	0.013	1.004	81641		14.94(7.06-21.17)		59.8	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1510389	0.9367	Target=2.72	99.5	1388	
349.00 > 99.00	2.810	2.810	0.0	0.888	510255		2.96(1.36-4.09)		495	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.908	0.010	1.000	204061	0.9243		92.4	541	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.918	2.908	0.010	0.829	275630	1.11		88.6	1393	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.899	1460106	1.19		101	6551	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.168	-0.002	1.000	1179822	0.8632	Target=3.32	94.4	1813	M
399.00 > 99.00	3.166	3.168	-0.002	1.000	339939		3.47(1.66-4.98)		236	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	0.996	1456479	0.9644	Target=4.17	96.4	123	M
363.00 > 169.00	3.166	3.168	-0.002	0.996	324368		4.49(2.09-6.26)		631	
D 9 13C4 PFHpA										
367.00 > 322.00	3.177	3.168	0.009	0.902	1684130	1.19		95.5	5386	
77 DONA										
377.00 > 251.00	3.213	3.203	0.010	0.838	3980659	0.8800	Target=3.33	93.1	2775	
377.00 > 85.00	3.213	3.203	0.010	0.838	1083224		3.67(1.66-4.99)		1273	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.512	3.505	0.007	0.917	1033996	0.9101	Target=4.83	95.5	1710	M
449.00 > 99.00	3.512	3.505	0.007	0.917	204864		5.05(2.41-7.24)		494	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.505	0.007	0.997	281751	1.11		93.1	445	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.512	3.514	-0.002	1.000	615903	0.9497		99.9	878	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.530	3.514	0.016	1.003	1548399	0.8855	Target=2.88	88.6	60.4	M
413.00 > 169.00	3.521	3.514	0.007	1.000	549898		2.82(1.44-4.32)		667	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.523	-0.002	1.000	2051993	1.28		103	4933	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.523	-0.002		2053093	1.25			11287	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.832	3.822	0.010	1.000	811461	0.8850	Target=4.24	95.4	1348	M
499.00 > 99.00	3.832	3.822	0.010	1.000	187414		4.33(2.12-6.37)		264	M
D 18 13C4 PFOS										
503.00 > 80.00	3.832	3.822	0.010	1.088	939401	1.21		101	3537	
20 Perfluorononanoic acid										
463.00 > 419.00	3.844	3.845	-0.001	0.997	1634791	0.9701	Target=8.34	97.0	206	
463.00 > 169.00	3.844	3.845	-0.001	0.997	206032		7.93(4.17-12.51)		1429	
D 19 13C5 PFNA										
468.00 > 423.00	3.855	3.845	0.010	1.095	2149450	1.24		98.9	4930	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.982	3.983	-0.001	1.039	2657833	0.9473		102	4003	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.114	4.105	0.009	1.074	586556	0.8409	Target=2.17	87.4	4332	
549.00 > 99.00	4.114	4.105	0.009	1.074	244359		2.40(1.08-3.25)		837	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.129	0.009	1.000	1574306	0.8492	Target=11.44	84.9	389	
513.00 > 169.00	4.138	4.129	0.009	1.000	150974		10.43(5.72-17.16)		715	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.175	2318773	1.27		102	7196	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.150	4.141	0.009	1.179	300867	1.05		87.7	993	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.141	0.009	1.000	558748	1.01		105	1402	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.234	0.010	1.205	1817325	1.17		93.5	2248	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.234	0.010	1.000	1419110	1.02		102	2253	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.270	-0.002	1.212	518566	1.19		95.3	2507	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.270	0.011	1.003	375805	1.00		99.8	787	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.139	490476	0.9136	Target=2.37	94.7	4363	
599.00 > 99.00	4.364	4.366	-0.002	1.139	191639		2.56(1.19-3.56)		2069	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	2183935	1.27		102	7314	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	1662380	0.9232	Target=12.20	92.3	371	
563.00 > 169.00	4.388	4.390	-0.002	1.000	155683		10.68(6.10-18.31)		1992	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.249	524122	1.25		100	1015	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	394026	0.9395		94.0	963	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.473	0.010	1.170	4275398	0.99		105	5254	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2148658	1.23		98.4	6294	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.613	-0.002	1.000	1642427	0.9388	Target=8.47	93.9	98.8	
613.00 > 169.00	4.611	4.613	-0.002	1.000	209762		7.83(4.23-12.70)		2264	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.633	4.624	0.009	1.116	347229	1.05		109	4272	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.246	170448	0.9367	Target=0.48	96.8	2408	
699.00 > 99.00	4.775	4.777	-0.002	1.246	348927		0.49(0.24-0.72)		4054	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.814	4.806	0.008	1.044	1884683	1.02	Target=6.41	102	104	M
663.00 > 169.00	4.814	4.806	0.008	1.044	272316		6.92(3.21-9.62)		1637	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.991	4.982	0.009	1.417	2127364	1.22		97.8	4529	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.991	4.982	0.009	1.000	182843	0.9608	Target=0.87	96.1	1704	
713.00 > 219.00	4.980	4.982	-0.002	0.998	194106		0.94(0.43-1.30)		2285	

Report Date: 25-Oct-2023 23:20:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.297	5.292	0.005	1.504	2321011	1.16		92.6	4109	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.297	5.292	0.005	1.000	1866913	1.01	Target=7.89	101	111	M
813.00 > 169.00	5.297	5.292	0.005	1.000	229927		8.12(3.94-11.83)		1800	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.568	5.563	0.005	1.051	1341394	0.9251	Target=9.39	92.5	129	M
913.00 > 169.00	5.568	5.563	0.005	1.051	139141		9.64(4.69-14.08)		1064	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

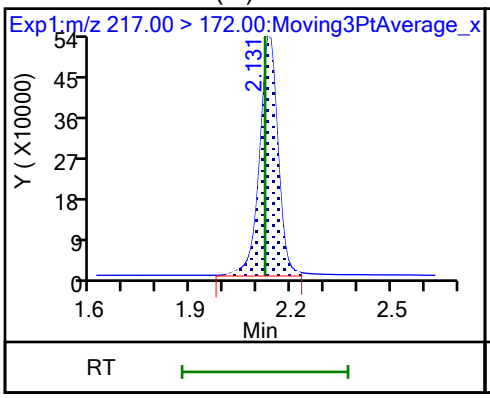
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:20:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54

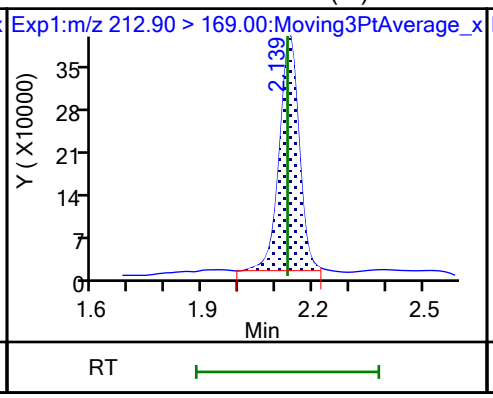
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Injection Date: 24-Oct-2023 09:30:16 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

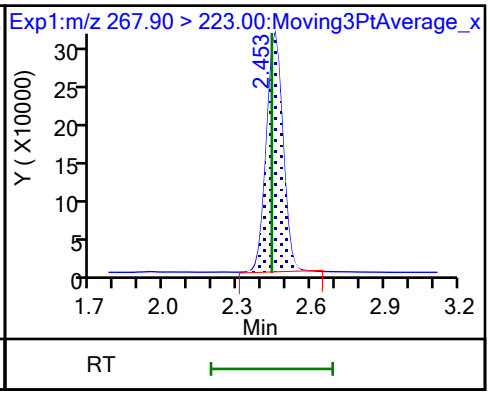
D 1 13C4 PFBA (M)



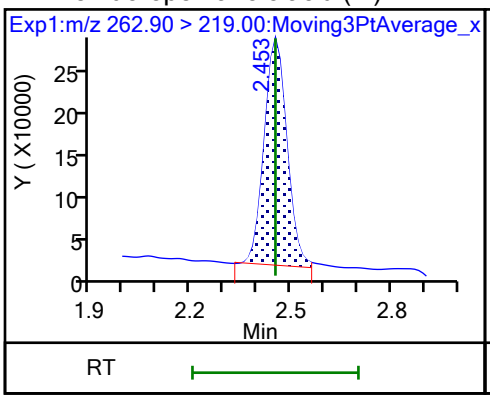
2 Perfluorobutanoic acid (M)



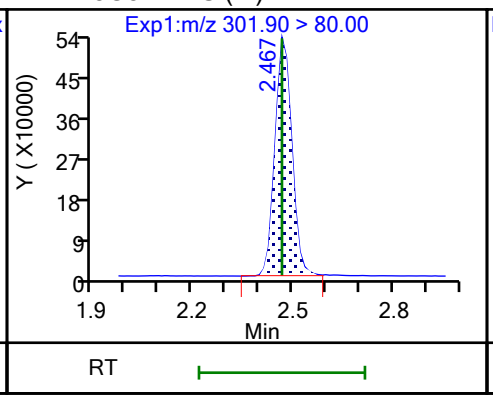
D 3 13C5 PFPeA



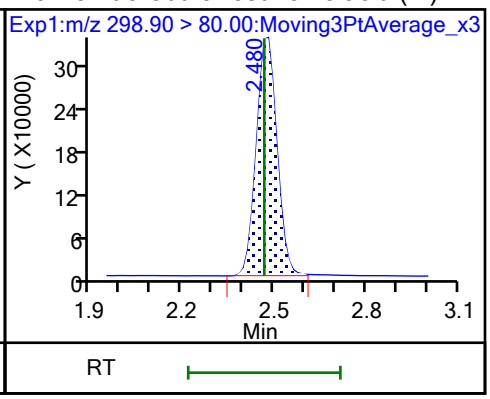
4 Perfluoropentanoic acid (M)



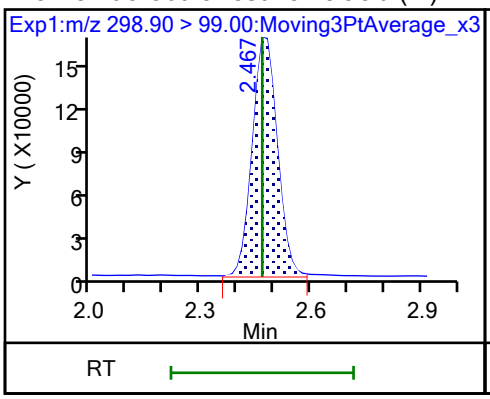
D 47 13C3 PFBS (M)



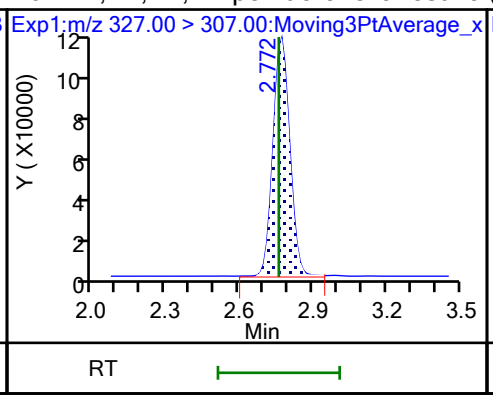
5 Perfluorobutanesulfonic acid (M)



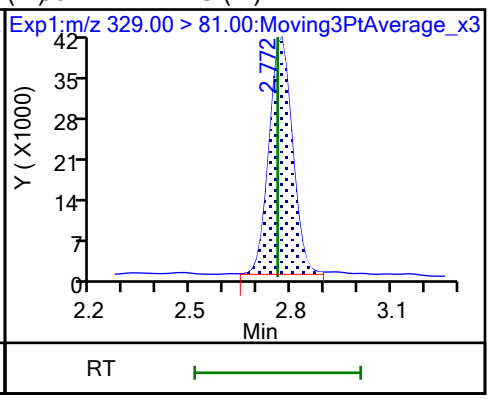
5 Perfluorobutanesulfonic acid (M)



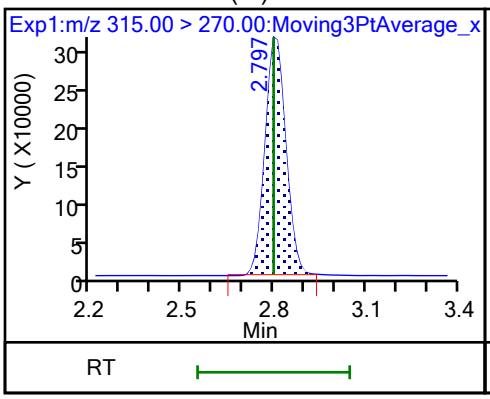
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



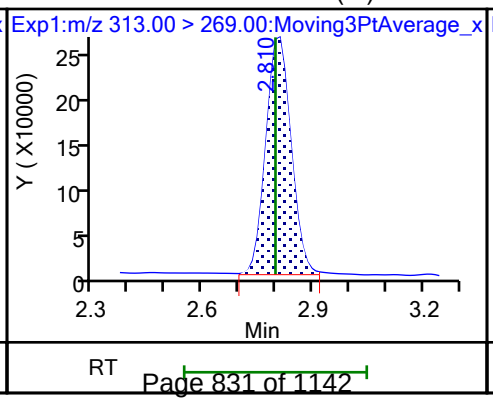
D 60 M2-4:2 FTS (M)



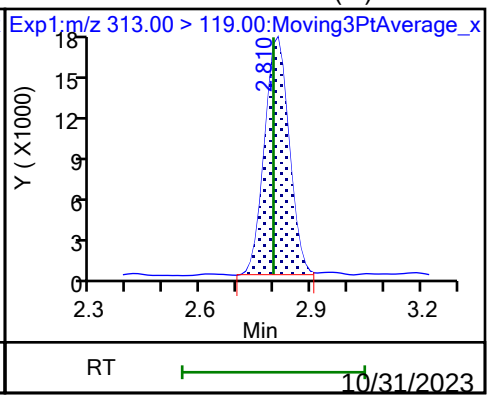
D 7 13C2 PFHxA (M)



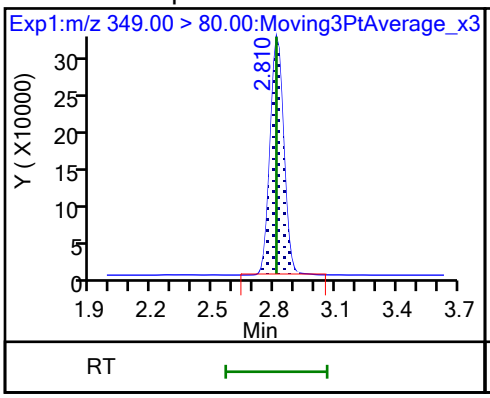
6 Perfluorohexanoic acid (M)



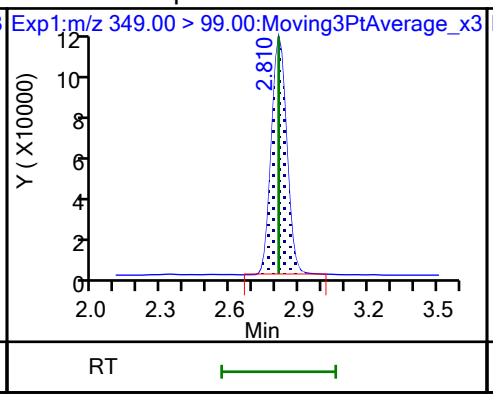
6 Perfluorohexanoic acid (M)



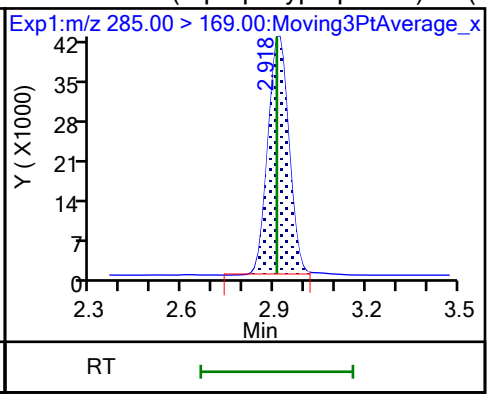
70 Perfluoropentanesulfonic acid



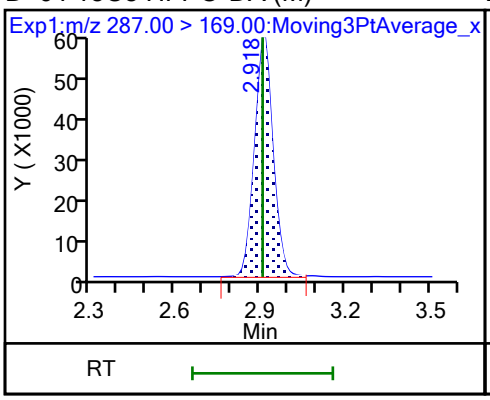
70 Perfluoropentanesulfonic acid



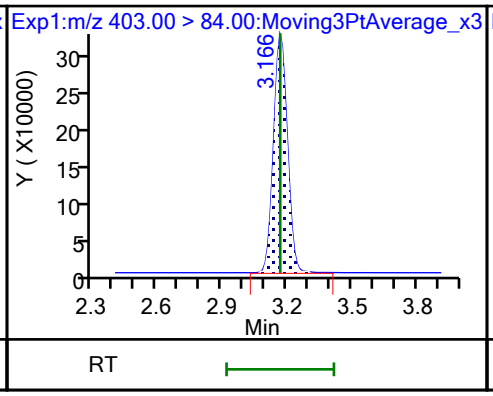
67 Perfluoro(2-propoxypropanoic) ac (M)



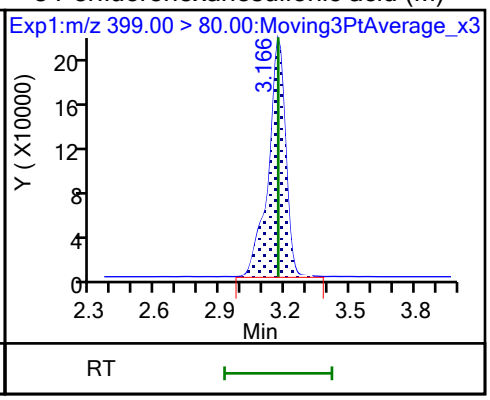
D 64 13C3 HFPO-DA (M)



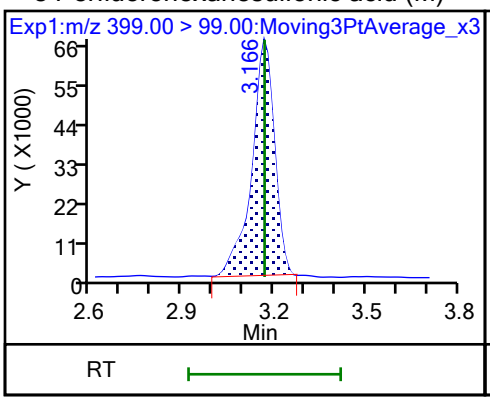
D 11 18O2 PFHxS



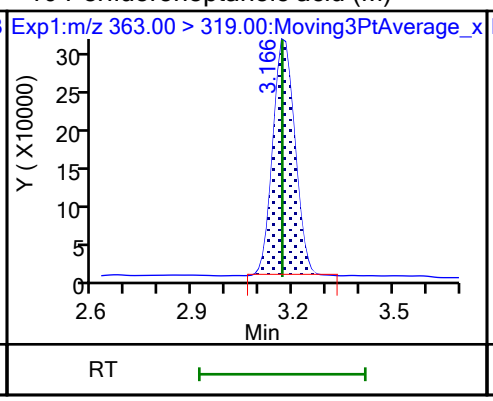
8 Perfluorohexanesulfonic acid (M)



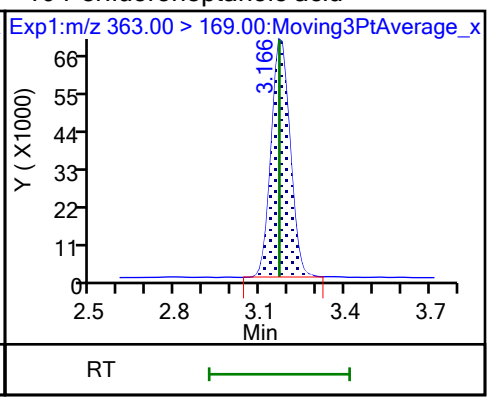
8 Perfluorohexanesulfonic acid (M)



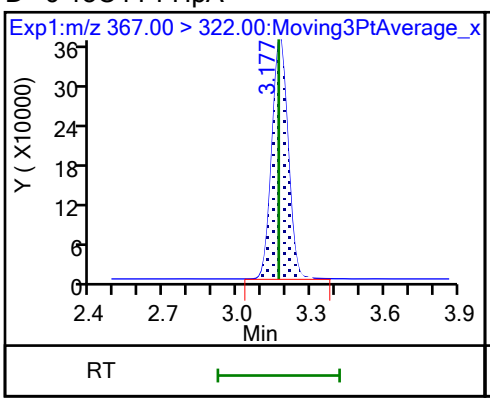
10 Perfluoroheptanoic acid (M)



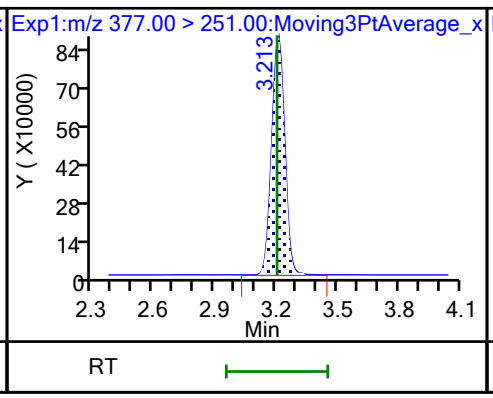
10 Perfluoroheptanoic acid



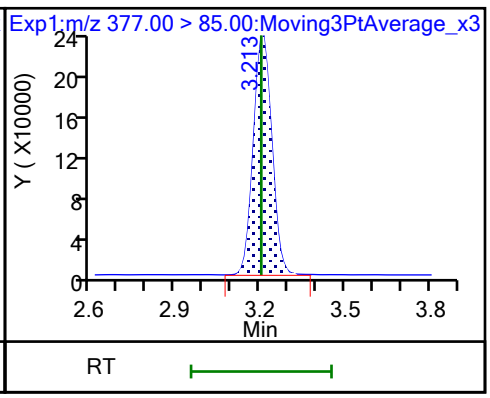
D 9 13C4 PFHpA



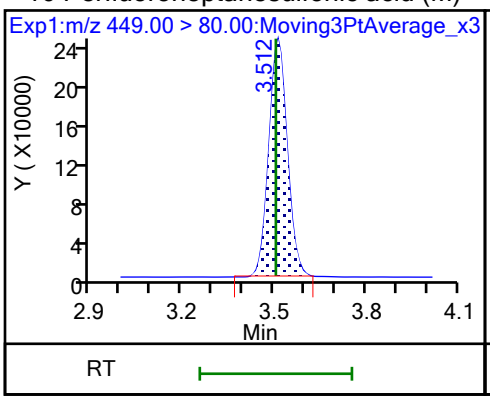
77 DONA



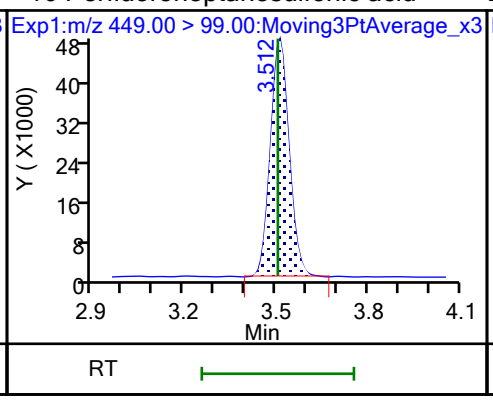
77 DONA



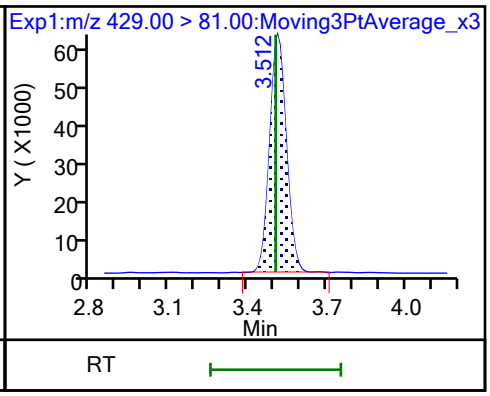
16 Perfluoroheptanesulfonic acid (M)



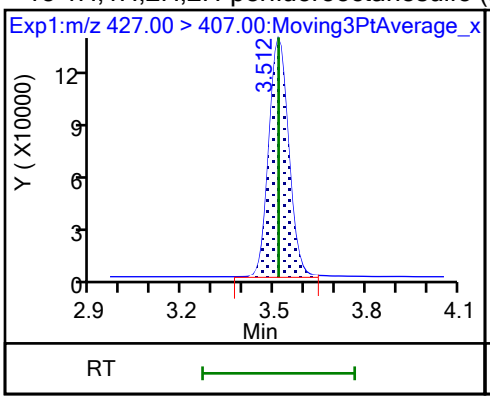
16 Perfluoroheptanesulfonic acid



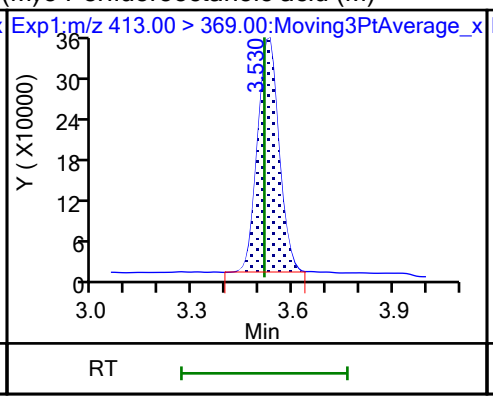
D 12 M2-6:2 FTS



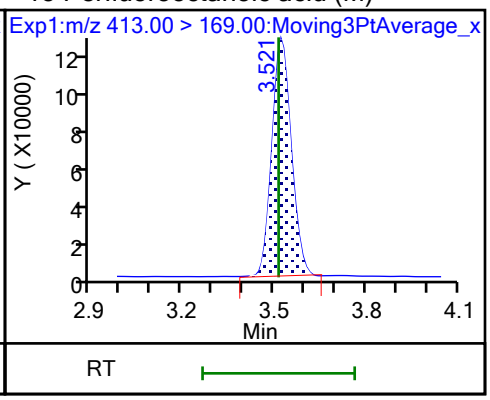
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



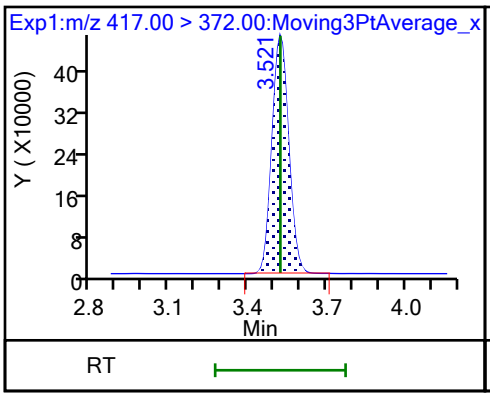
15 Perfluorooctanoic acid (M)



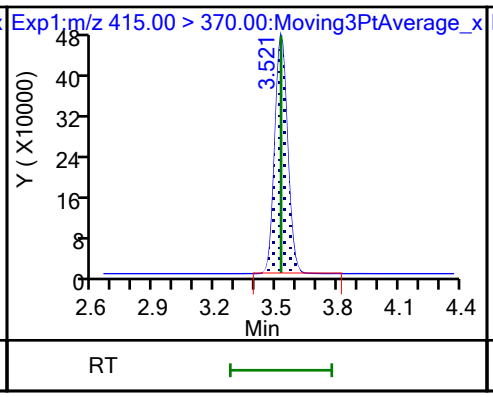
15 Perfluorooctanoic acid (M)



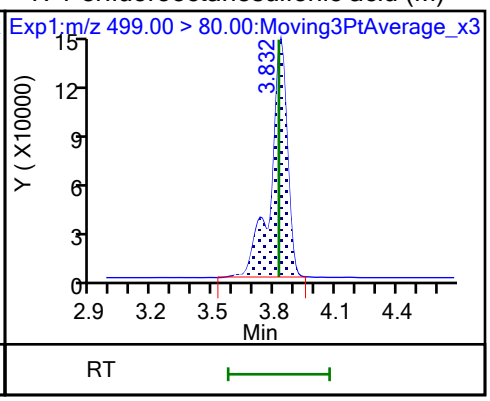
D 14 13C4 PFOA



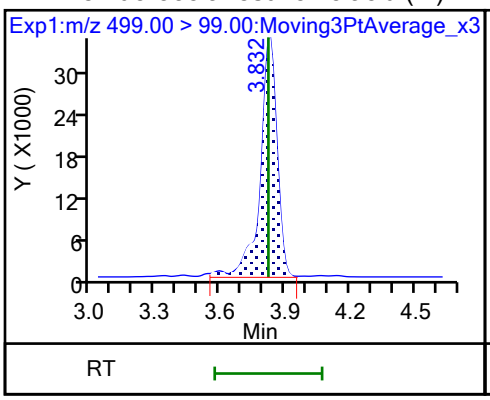
* 62 13C2 PFOA



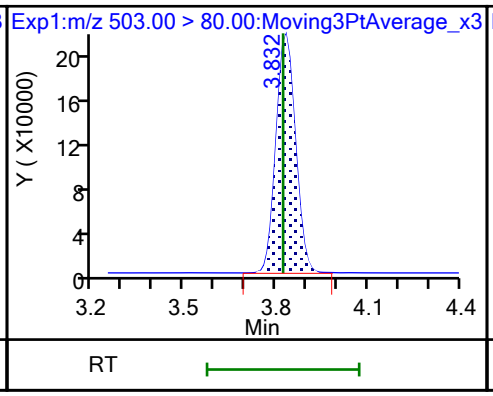
17 Perfluorooctanesulfonic acid (M)



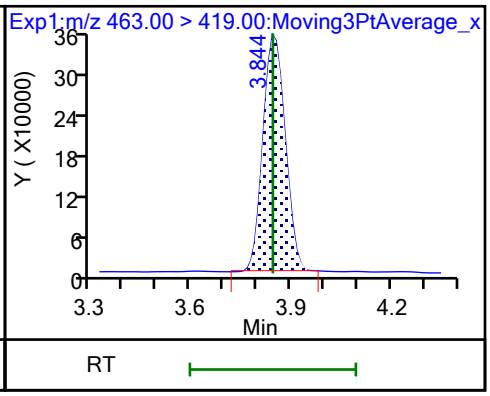
17 Perfluorooctanesulfonic acid (M)



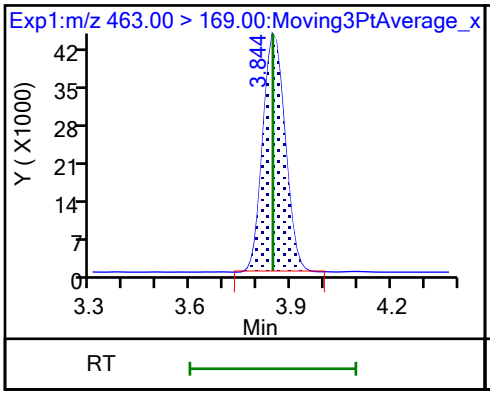
D 18 13C4 PFOS



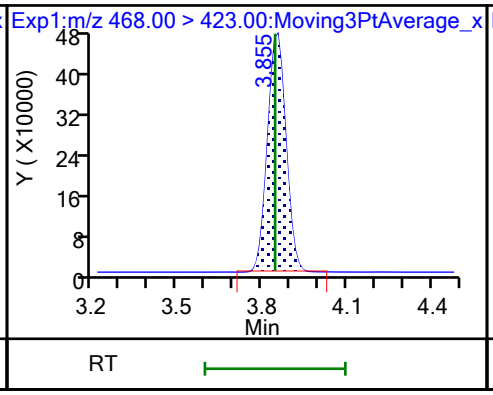
20 Perfluorononanoic acid



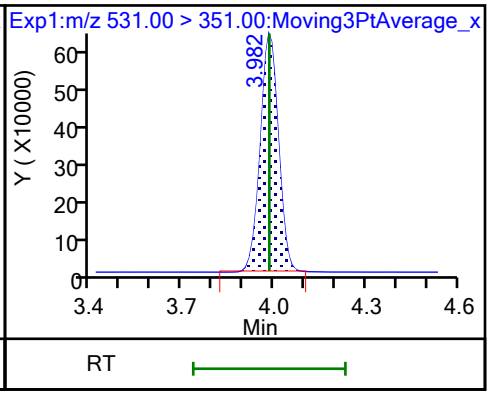
20 Perfluorononanoic acid



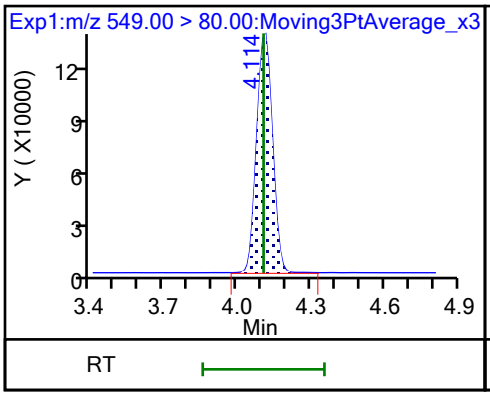
D 19 13C5 PFNA



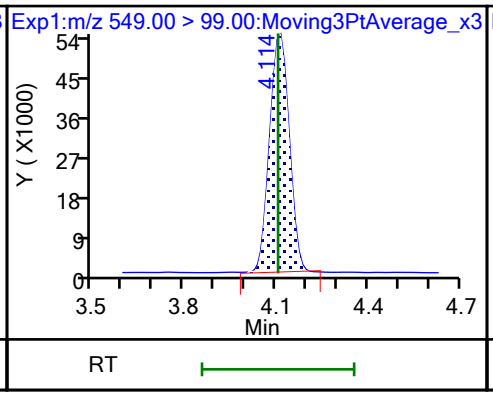
69 9-Chlorohexadecafluoro-3-oxanona (M)



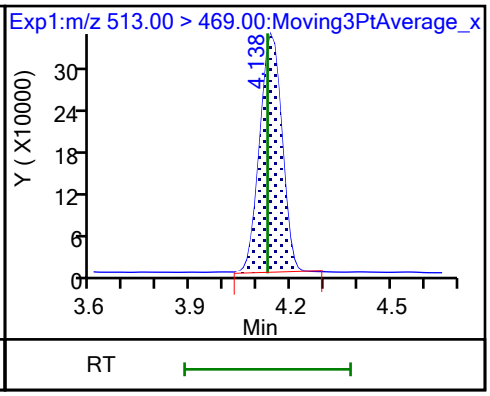
68 Perfluorononanesulfonic acid



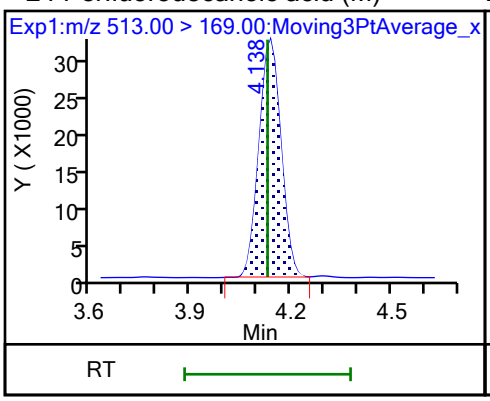
68 Perfluorononanesulfonic acid



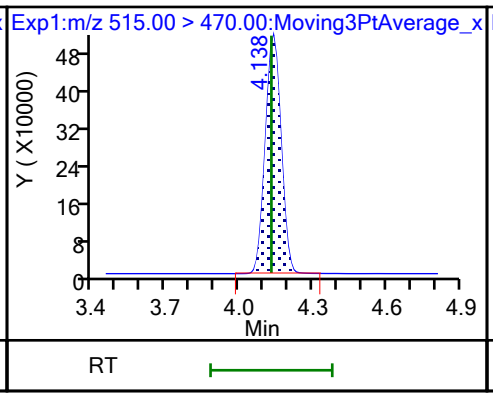
24 Perfluorodecanoic acid



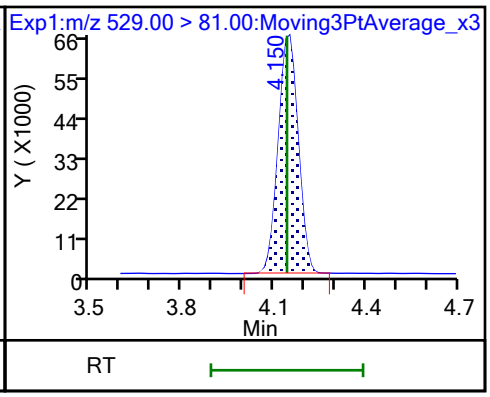
24 Perfluorodecanoic acid (M)



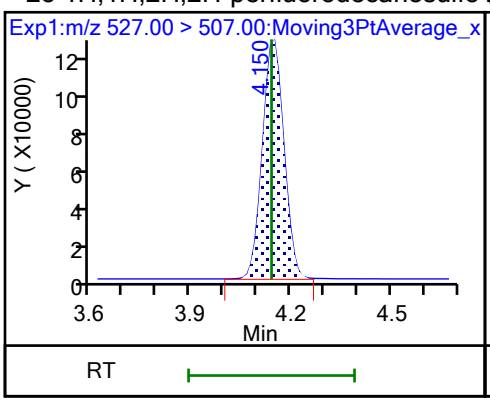
D 23 13C2 PFDA



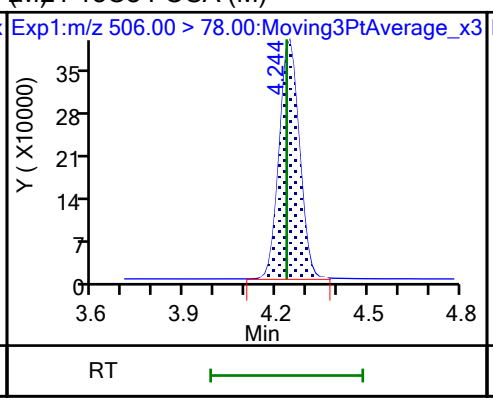
D 26 M2-8:2 FTS



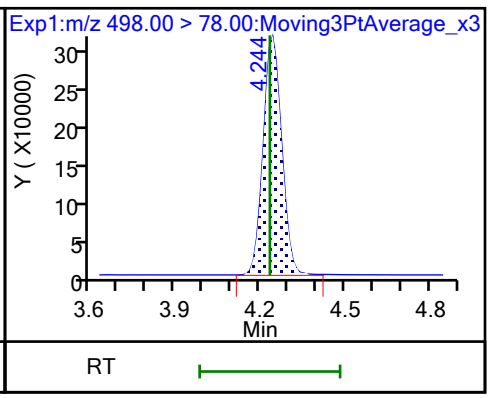
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



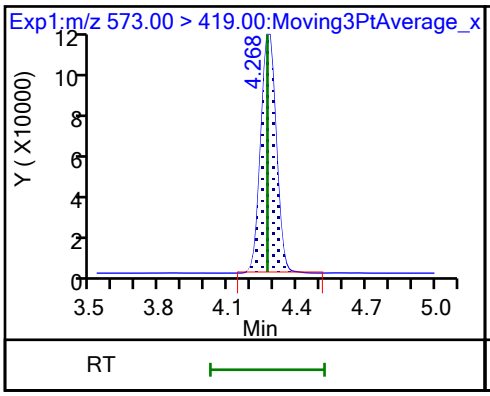
D 21 13C8 FOSA (M)



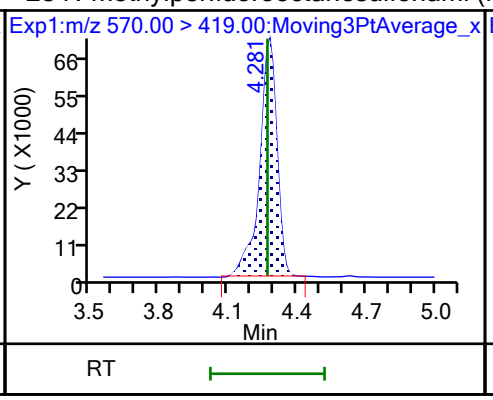
22 Perfluorooctanesulfonamide



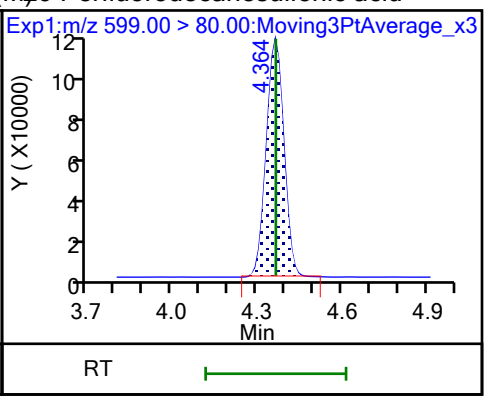
D 27 d3-NMeFOSAA



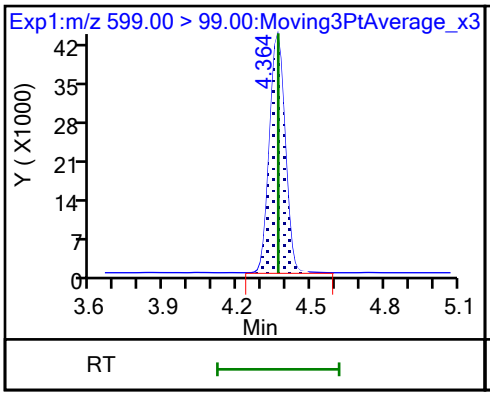
28 N-methylperfluorooctanesulfonami (M)



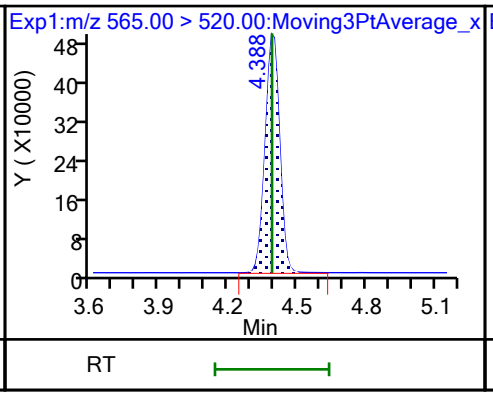
29 Perfluorodecanesulfonic acid



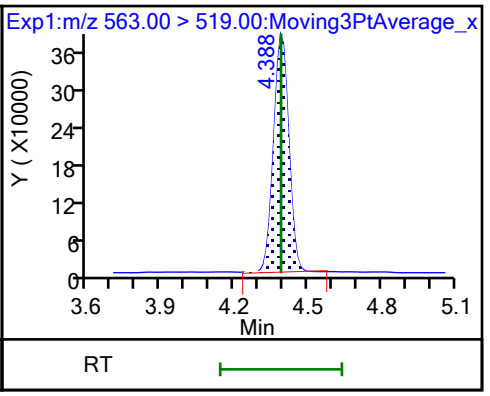
29 Perfluorodecanesulfonic acid



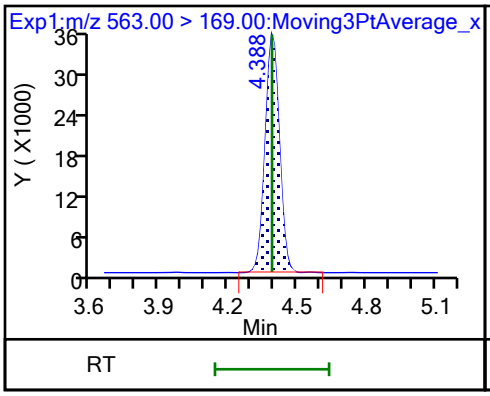
D 30 13C2 PFUnA



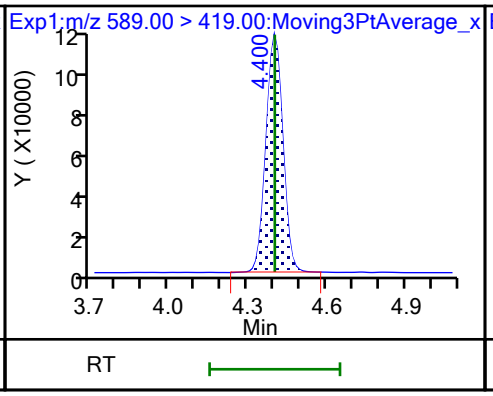
31 Perfluoroundecanoic acid



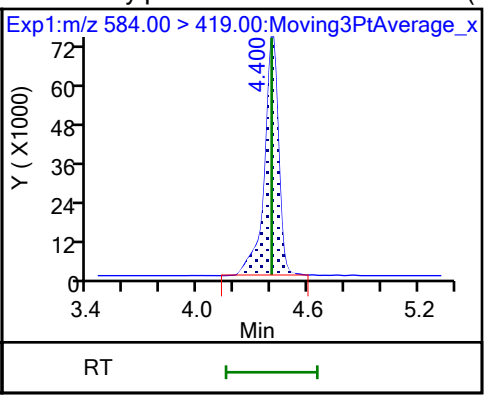
31 Perfluoroundecanoic acid



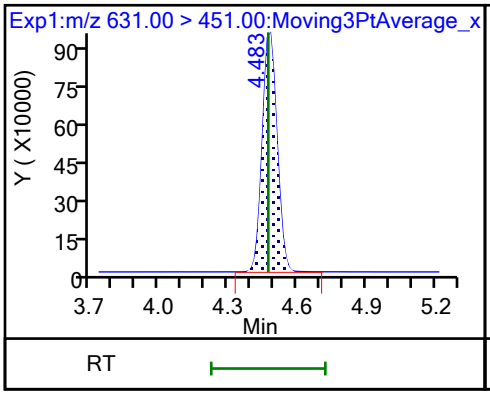
D 32 d5-NEtFOSAA



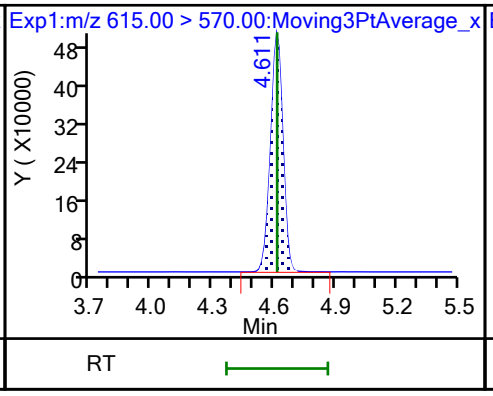
33 N-ethylperfluorooctanesulfonamid (M)



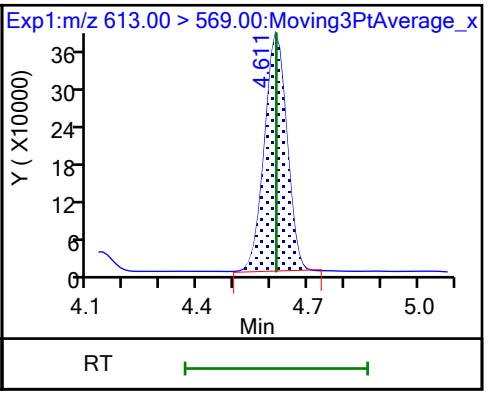
66 11-Chloroeicosafluoro-3-oxaundec



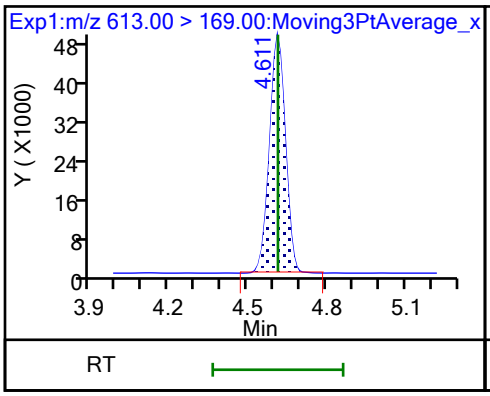
D 36 13C2 PFDoA



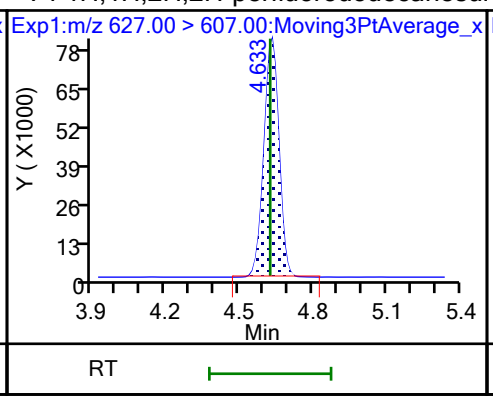
37 Perfluorododecanoic acid



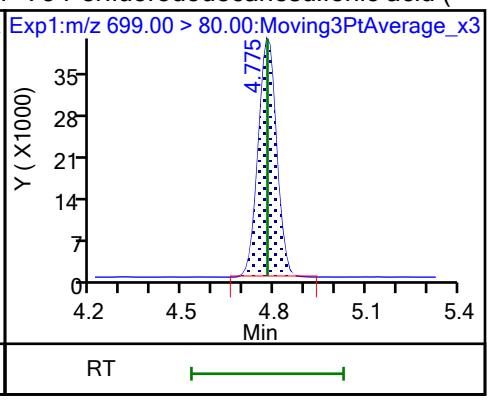
37 Perfluorododecanoic acid



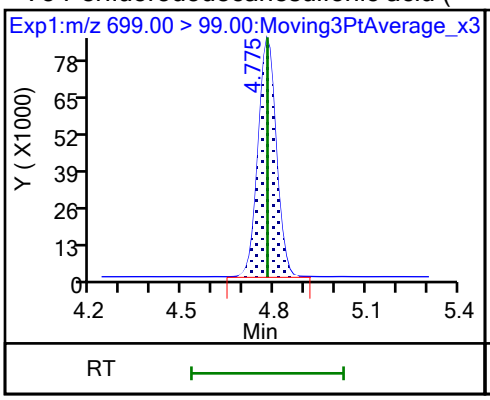
74 1H,1H,2H,2H-perfluorododecanesul



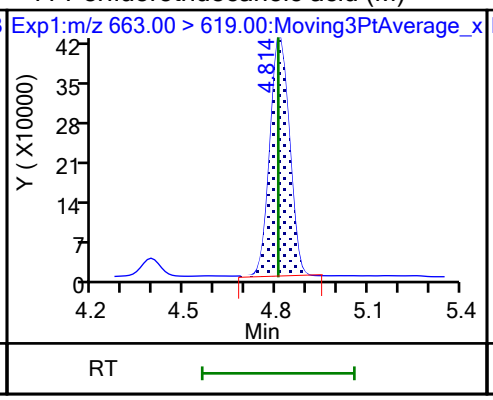
75 Perfluorododecanesulfonic acid (



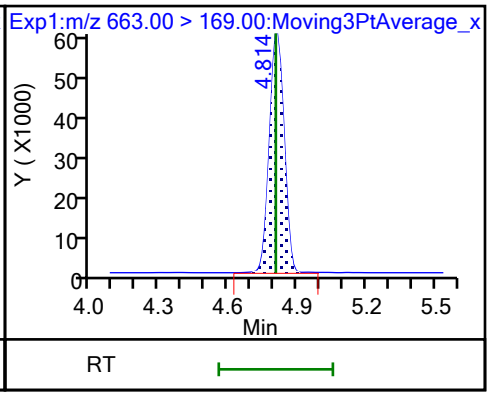
75 Perfluorododecanesulfonic acid (



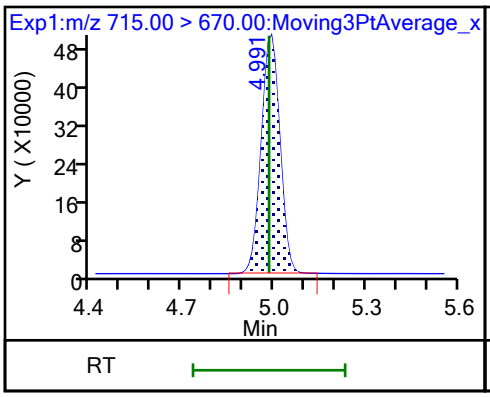
41 Perfluorotridecanoic acid (M)



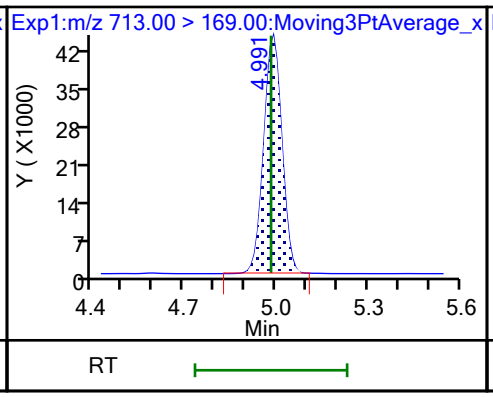
41 Perfluorotridecanoic acid



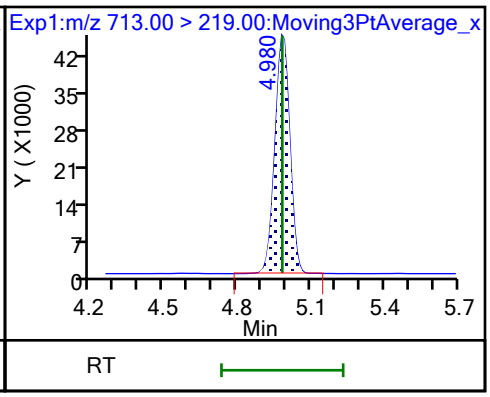
D 43 13C2 PFTeDA



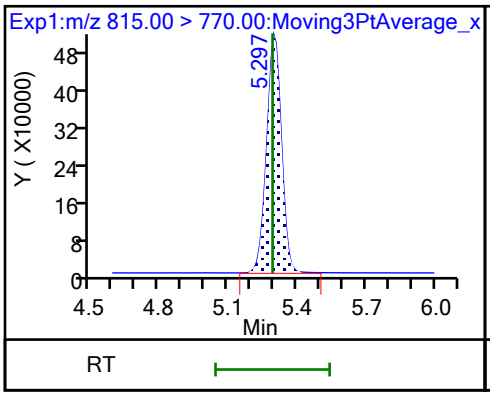
42 Perfluorotetradecanoic acid



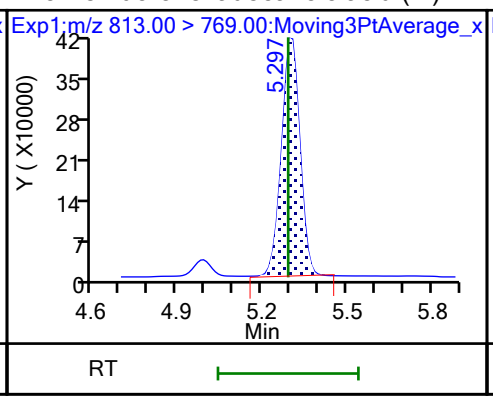
42 Perfluorotetradecanoic acid



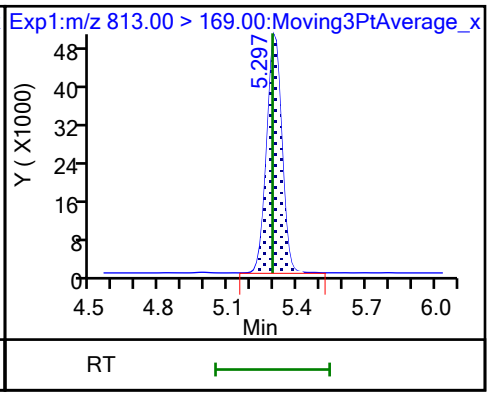
D 44 13C2 PFHxDA



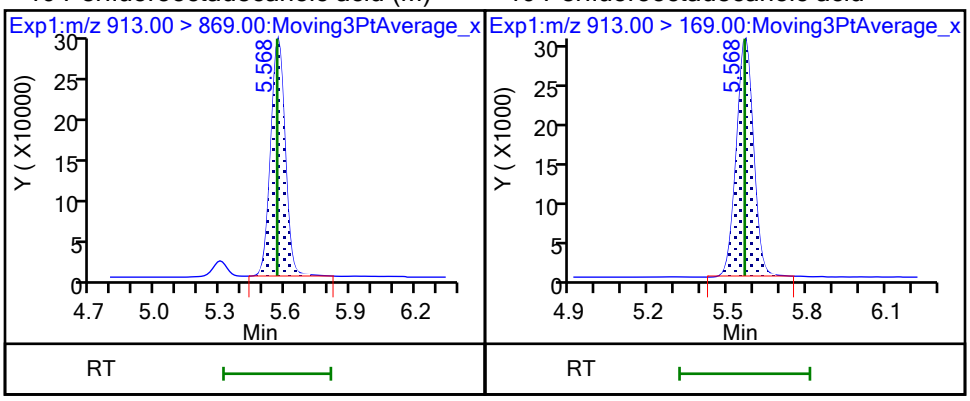
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196739/5 Calibration Date: 10/24/2023 18:32

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231024A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.231		0.129	0.125	3.5	50.0
Perfluoropentanoic acid	AveID	1.079	1.263		0.0585	0.0500	17.0	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.257		0.0499	0.0444	12.6	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.684		0.0508	0.0469	8.5	50.0
Perfluorohexanoic acid	AveID	1.100	1.252		0.0569	0.0500	13.7	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.395		0.0503	0.0471	6.8	50.0
HFPODA	AveID	1.001	1.089		0.109	0.100	8.8	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.265		0.0522	0.0457	14.3	50.0
Perfluoroheptanoic acid	AveID	1.121	1.078		0.0481	0.0500	-3.8	50.0
DONA	AveID	5.754	5.861		0.0481	0.0473	1.8	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.471		0.151	0.119	27.0	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.527		0.0504	0.0477	5.7	50.0
Perfluorooctanoic acid	AveID	1.065	1.169		0.0549	0.0500	9.8	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.264		0.0503	0.0464	8.3	50.0
Perfluorononanoic acid	AveID	0.9800	0.9762		0.0498	0.0500	-0.4	50.0
9Cl-PF3ONS	AveID	3.569	4.159		0.0544	0.0467	16.5	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8815		0.0478	0.0481	-0.7	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.608		0.0569	0.0480	18.5	50.0
Perfluorodecanoic acid	AveID	0.999	0.9799		0.0490	0.0500	-1.9	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9820		0.0515	0.0500	3.0	50.0
NMeFOSAA	AveID	0.9074	1.041		0.143	0.125	14.7	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6430		0.0454	0.0483	-5.8	50.0
Perfluoroundecanoic acid	AveID	1.031	0.9896		0.0480	0.0500	-4.0	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.157		0.145	0.125	15.7	50.0
11Cl-PF3OUdS	AveID	5.474	6.139		0.0529	0.0472	12.2	50.0
Perfluorododecanoic acid	AveID	1.018	0.9822		0.0483	0.0500	-3.5	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.700		0.0623	0.0482	29.2	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2793		0.0584	0.0484	20.7	50.0
Perfluorotridecanoic acid	AveID	1.070	1.138		0.0532	0.0500	6.4	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1189		0.0532	0.0500	6.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.185		0.0592	0.0500	18.5	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7575		0.0485	0.0500	-3.0	50.0
13C4 PFBA	Ave	0.9917	1.087		1.37	1.25	9.6	
13C5 PFPeA	Ave	0.7696	0.7911		1.29	1.25	2.8	
13C3 PFBS	Ave	1.041	1.056		1.18	1.16	1.4	
M2-4:2 FTS	Ave	0.1204	0.1255		1.22	1.17	4.2	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196739/5 Calibration Date: 10/24/2023 18:32

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231024A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7591		1.21	1.25	-3.0	
13C3 HFPO-DA	Ave	0.1516	0.1441		1.19	1.25	-4.9	
18O2 PFHxS	Ave	0.7464	0.8013		1.27	1.18	7.4	
13C4 PFHpA	Ave	0.8590	0.9016		1.31	1.25	5.0	
M2-6:2 FTS	Ave	0.1551	0.1680		1.29	1.19	8.3	
13C4 PFOA	Ave	0.9731	1.091		1.40	1.25	12.1	
13C4 PFOS	Ave	0.4742	0.5194		1.31	1.20	9.5	
13C5 PFNA	Ave	1.059	1.113		1.31	1.25	5.1	
13C2 PFDA	Ave	1.109	1.179		1.33	1.25	6.3	
M2-8:2 FTS	Ave	0.1744	0.1623		1.12	1.20	-6.9	
13C8 FOSA	Ave	0.9462	1.036		1.37	1.25	9.5	
d3-NMeFOSAA	Ave	0.2650	0.2885		1.36	1.25	8.9	
13C2 PFUnA	Ave	1.047	1.116		1.33	1.25	6.7	
d5-NEtFOSAA	Ave	0.2552	0.2791		1.37	1.25	9.4	
13C2 PFDoA	Ave	1.064	1.155		1.36	1.25	8.6	
13C2 PFTeDA	Ave	1.059	1.105		1.30	1.25	4.3	
13C2 PFHxDA	Ave	1.221	1.210		1.24	1.25	-0.8	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 24-Oct-2023 18:32:46 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057538-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 11:16:53
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	2111269	1.37		110	2411	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.139	0.0	1.004	259985	0.1293		103	22.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1536466	1.28		103	2028	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	77604	0.0585		117	2.1	M
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.466	0.0	0.700	1907495	1.18		101	92763	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.466	0.0	1.000	91507	0.0499	Target=2.06	113	71.9	M
298.90 > 99.00	2.466	2.466	0.0	1.000	43195		2.12(1.03-3.09)		17.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	0.995	33656	0.0508		108	340	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.787	227680	1.22		104	121	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1474315	1.21		97.0	5529	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.810	0.0	1.004	73808	0.0569	Target=14.12	114	15.2	
313.00 > 119.00	2.810	2.810	0.0	1.004	4906		15.04(7.06-21.17)		5.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	81736	0.0503	Target=2.72	107	141	
349.00 > 99.00	2.810	2.810	0.0	0.888	27147		3.01(1.36-4.09)		53.7	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	279867	1.19		95.1	1689	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.004	24380	0.1088		109	189	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.166	0.0	0.899	1472227	1.27		107	5934	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.166	0.0	1.000	71979	0.0522	Target=3.32	114	189	M
399.00 > 99.00	3.177	3.166	0.011	1.004	19110		3.77(1.66-4.98)		17.1	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.177	3.177	0.0	1.000	75501	0.0481	Target=4.17	96.2	17.3	M
363.00 > 169.00	3.177	3.177	0.0	1.000	18279		4.13(2.09-6.26)		39.0	
D 9 13C4 PFHpA										
367.00 > 322.00	3.177	3.177	0.0	0.902	1751105	1.31		105	5593	
77 DONA										
377.00 > 251.00	3.213	3.213	0.0	0.838	223485	0.0481	Target=3.33	102	257	
377.00 > 85.00	3.201	3.213	-0.012	0.835	59249		3.77(1.66-4.99)		96.9	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.512	3.512	0.0	0.917	58728	0.0504	Target=4.83	106	180	M
449.00 > 99.00	3.512	3.512	0.0	0.917	11489		5.11(2.41-7.24)		34.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.512	0.0	0.997	309974	1.29		108	725	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.512	3.512	0.0	1.000	107497	0.1507		127	148	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.521	0.0	1.000	99075	0.0549	Target=2.88	110	4.3	M
413.00 > 169.00	3.521	3.521	0.0	1.000	31331		3.16(1.44-4.32)		44.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.521	0.0	1.000	2118225	1.40		112	9374	
* 62 13C2 PFOA										M
415.00 > 370.00	3.521	3.521	0.0		1942156	1.25			5990	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.832	3.832	0.0	1.000	47316	0.0503	Target=4.24	108	121	M
499.00 > 99.00	3.820	3.832	-0.012	0.997	8985		5.27(2.12-6.37)		20.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.832	3.832	0.0	1.088	964439	1.31		110	3847	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.844	3.844	0.0	1.000	84372	0.0498	Target=8.34	99.6	12.1	M
463.00 > 169.00	3.855	3.844	0.011	1.003	11881		7.10(4.17-12.51)		80.2	M
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.844	0.0	1.092	2160825	1.31		105	9468	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.981	0.0	1.039	156583	0.0544		117	510	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.114	4.114	0.0	1.074	34220	0.0478	Target=2.17	99.3	349	M
549.00 > 99.00	4.114	4.114	0.0	1.074	13198		2.59(1.08-3.25)		52.7	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.138	0.0	1.000	89723	0.0490	Target=11.44	98.1	24.6	M
513.00 > 169.00	4.126	4.138	-0.012	0.997	9969		9.00(5.72-17.16)		50.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										M
515.00 > 470.00	4.138	4.138	0.0	1.175	2289046	1.33		106	3085	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.138	4.138	0.0	0.997	31568	0.0569		118	199	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.150	4.150	0.0	1.179	301998	1.11		93.1	719	
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.244	0.0	1.205	2011737	1.37		109	2672	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.244	0.0	1.000	79025	0.0515		103	514	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.281	4.281	0.0	1.216	560388	1.36		109	1504	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.281	0.0	1.000	58328	0.1434		115	109	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.364	4.364	0.0	1.139	25039	0.0454	Target=2.37	94.2	222	
599.00 > 99.00	4.376	4.364	0.012	1.142	11260		2.22(1.19-3.56)		85.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.388	0.0	1.246	2168119	1.33		107	8533	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.388	0.0	1.000	85820	0.0480	Target=12.20	96.0	18.2	
563.00 > 169.00	4.376	4.388	-0.012	0.997	8352		10.28(6.10-18.31)		50.3	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.400	0.0	1.249	542124	1.37		109	912	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.400	0.0	1.000	62727	0.1446		116	286	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.483	0.0	1.170	233593	0.0529		112	318	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.611	0.0	1.310	2243960	1.36		109	5737	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.611	0.0	1.000	88162	0.0483	Target=8.47	96.5	5.7	M
613.00 > 169.00	4.611	4.611	0.0	1.000	13219		6.67(4.23-12.70)		103	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.633	4.633	0.0	1.116	20666	0.0623		129	388	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.775	0.0	1.246	10910	0.0584	Target=0.48	121	127	
699.00 > 99.00	4.775	4.775	0.0	1.246	19097		0.57(0.24-0.72)		372	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.814	4.814	0.0	1.044	102173	0.0532	Target=6.41	106	5.7	M
663.00 > 169.00	4.804	4.814	-0.010	1.042	13773		7.42(3.21-9.62)		83.9	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.991	4.991	0.0	1.417	2145793	1.30		104	6498	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.991	4.991	0.0	1.000	10205	0.0532	Target=0.87	106	163	
713.00 > 219.00	4.991	4.991	0.0	1.000	11752		0.87(0.43-1.30)		205	

Report Date: 26-Oct-2023 14:48:44 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A05.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.297	5.297	0.0	1.504	2350480	1.24		99.2	5426	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.308	5.308	0.0	1.002	111398	0.0592	Target=7.89	118	6.7	
813.00 > 169.00	5.297	5.308	-0.011	1.000	13025		8.55(3.94-11.83)		146	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.568	5.568	0.0	1.051	71221	0.0485	Target=9.39	97.0	8.3	M
913.00 > 169.00	5.559	5.568	-0.009	1.049	7399		9.63(4.69-14.08)		116	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

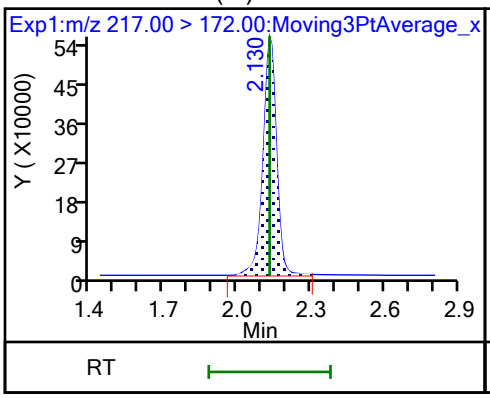
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 26-Oct-2023 14:48:44 Chrom Revision: 2.3 18-Oct-2023 21:16:54

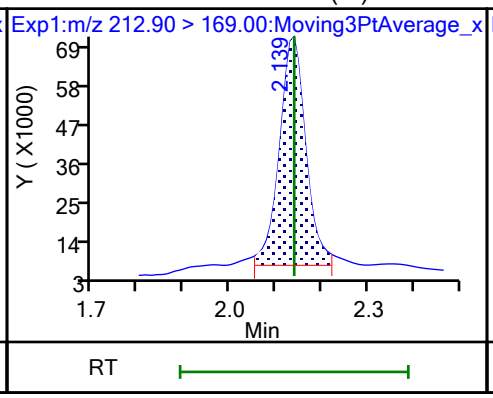
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A05.d
Injection Date: 24-Oct-2023 18:32:46 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

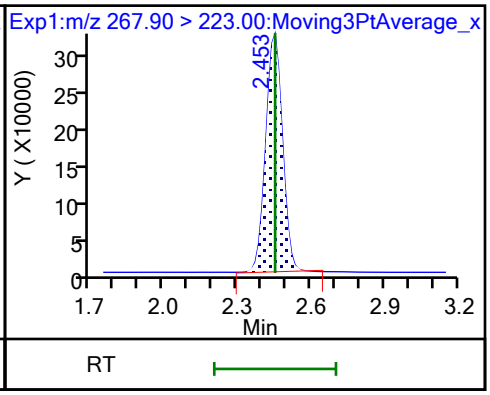
D 1 13C4 PFBA (M)



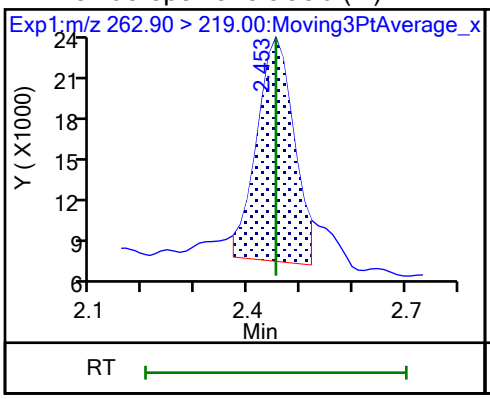
2 Perfluorobutanoic acid (M)



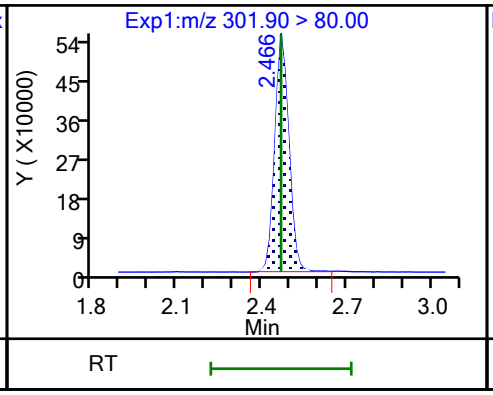
D 3 13C5 PFPeA



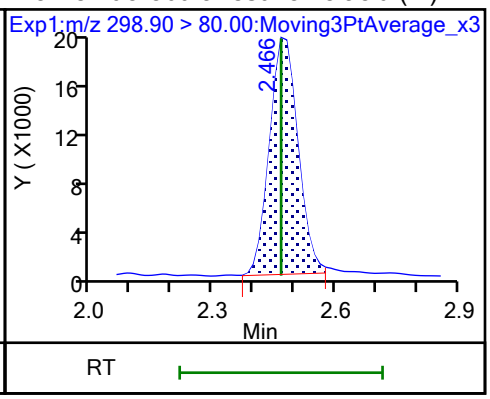
4 Perfluoropentanoic acid (M)



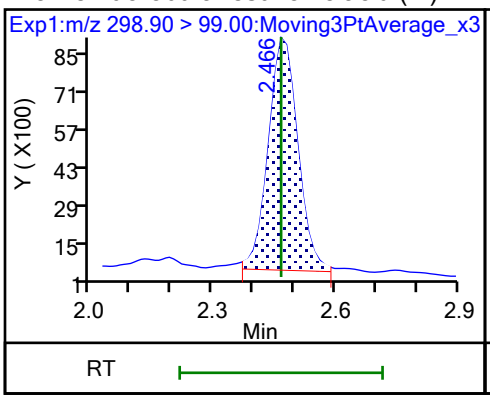
D 47 13C3 PFBS



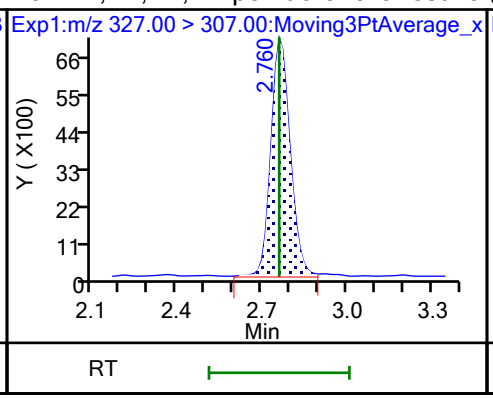
5 Perfluorobutanesulfonic acid (M)



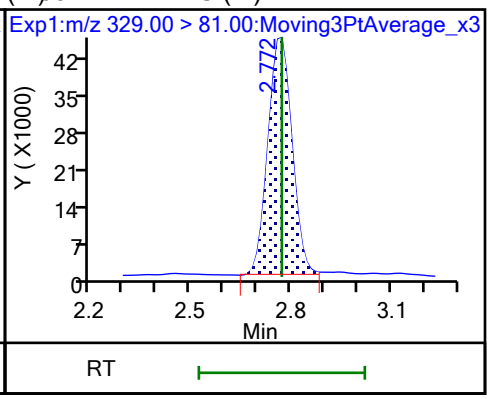
5 Perfluorobutanesulfonic acid (M)



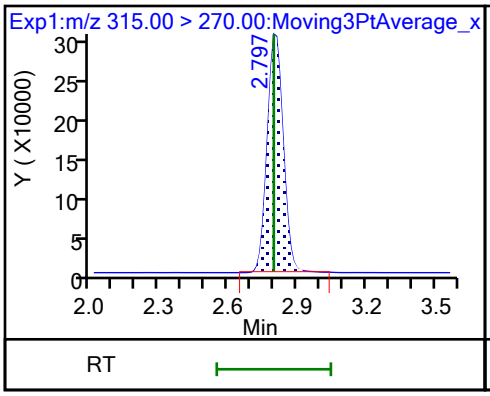
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



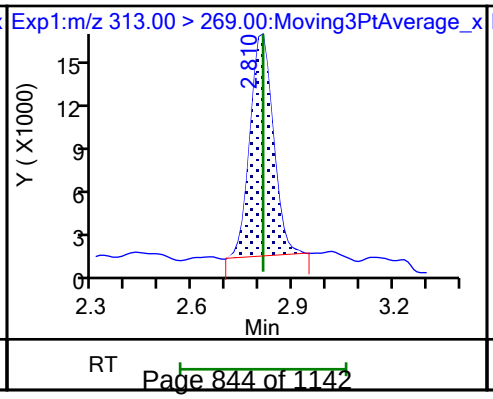
60 M2-4:2 FTS (M)



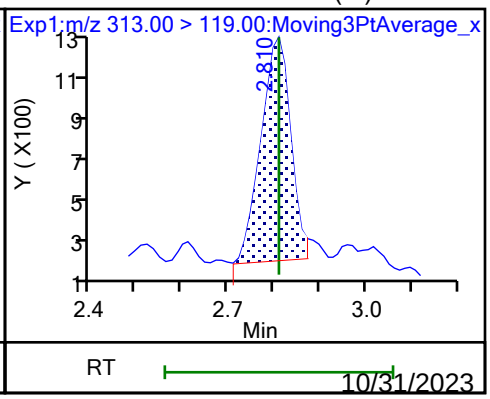
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

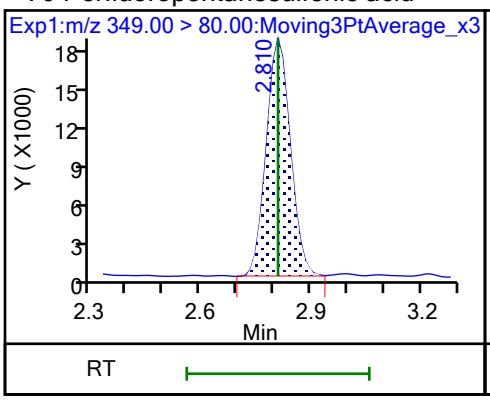


6 Perfluorohexanoic acid (M)

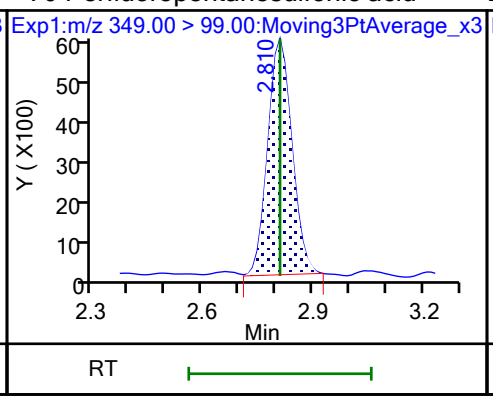


10/31/2023
10:17 AM

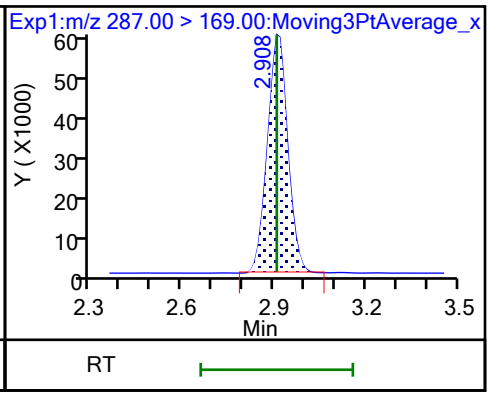
70 Perfluoropentanesulfonic acid



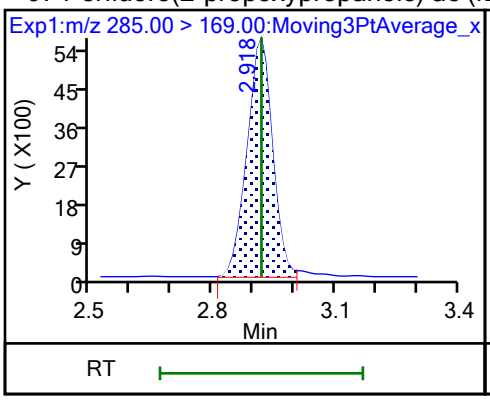
70 Perfluoropentanesulfonic acid



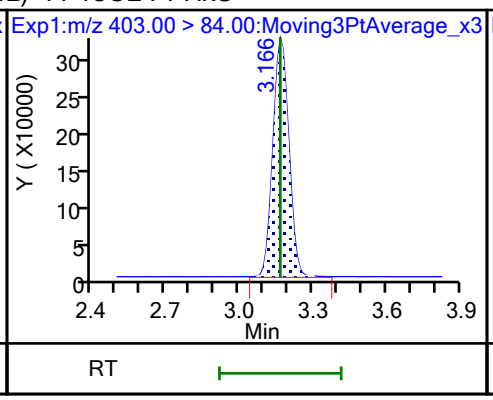
D 64 13C3 HFPO-DA



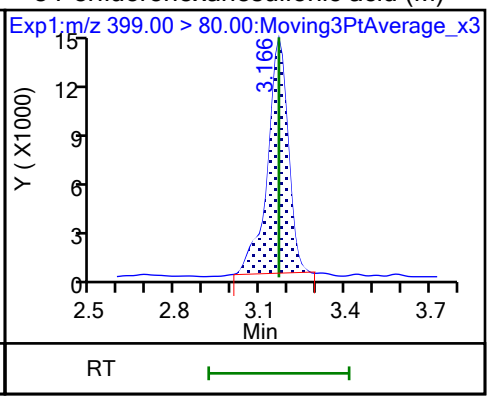
67 Perfluoro(2-propoxypropanoic) ac (M)



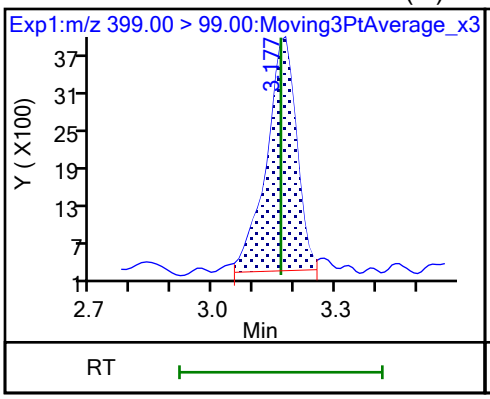
D 11 18O2 PFHxS



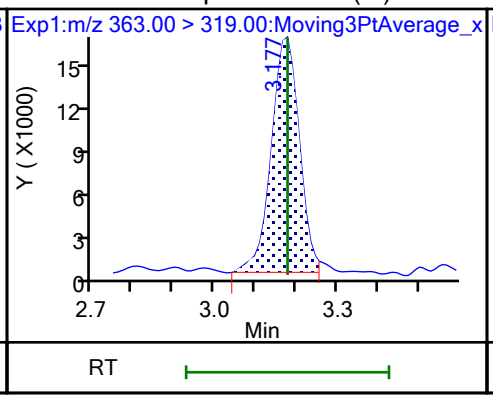
8 Perfluorohexanesulfonic acid (M)



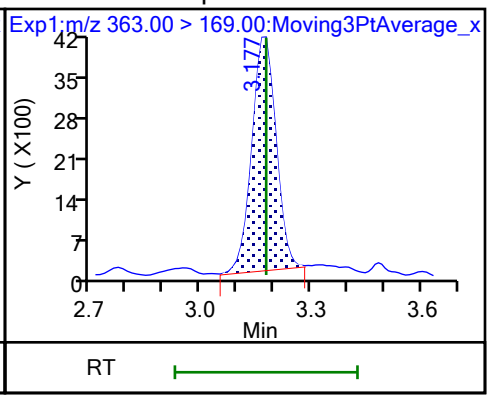
8 Perfluorohexanesulfonic acid (M)



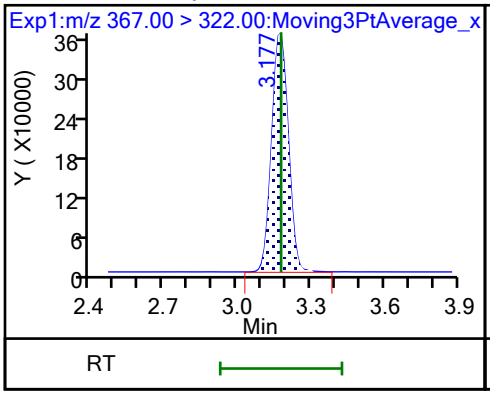
10 Perfluoroheptanoic acid (M)



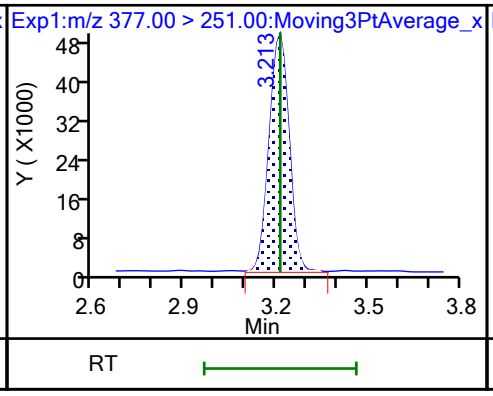
10 Perfluoroheptanoic acid



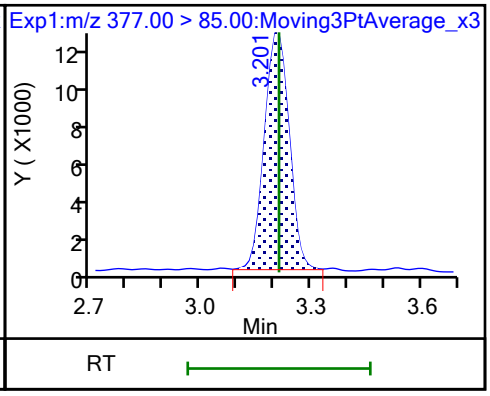
D 9 13C4 PFHpA



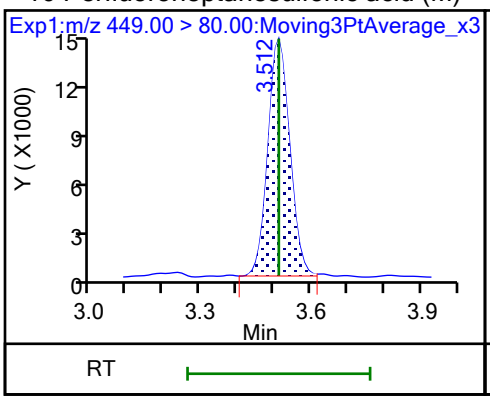
77 DONA



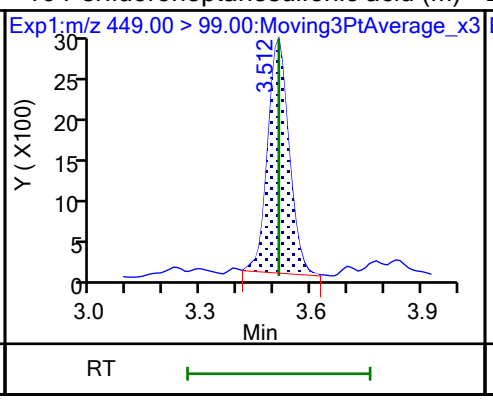
77 DONA



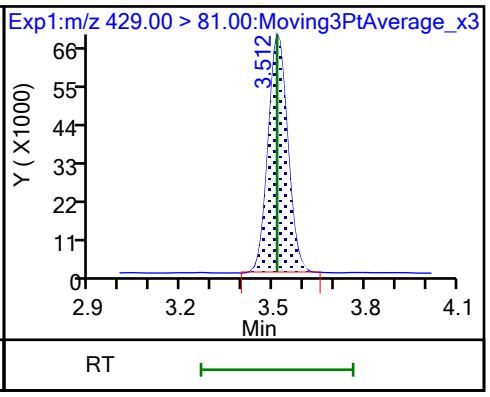
16 Perfluoroheptanesulfonic acid (M)



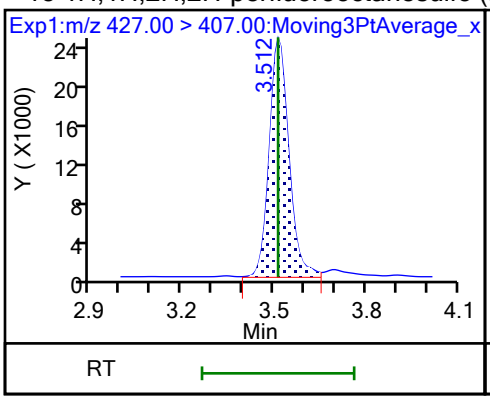
16 Perfluoroheptanesulfonic acid (M)



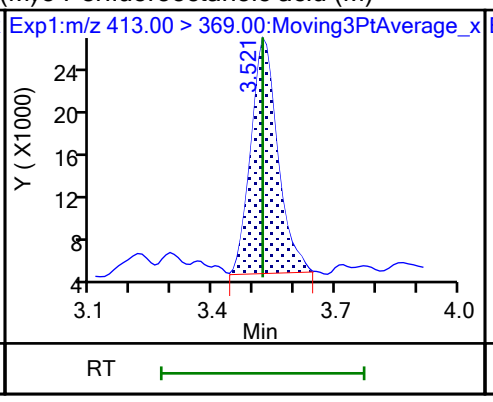
D 12 M2-6:2 FTS



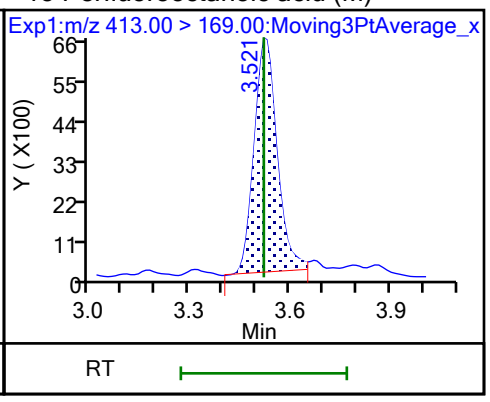
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



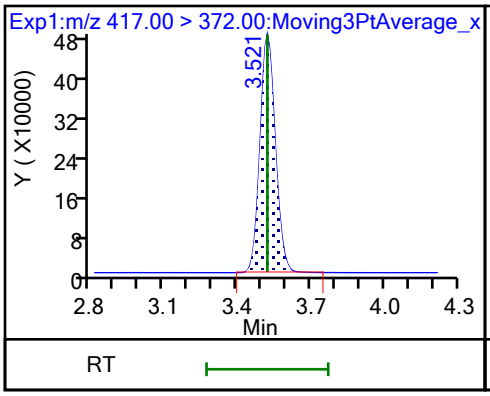
15 Perfluorooctanoic acid (M)



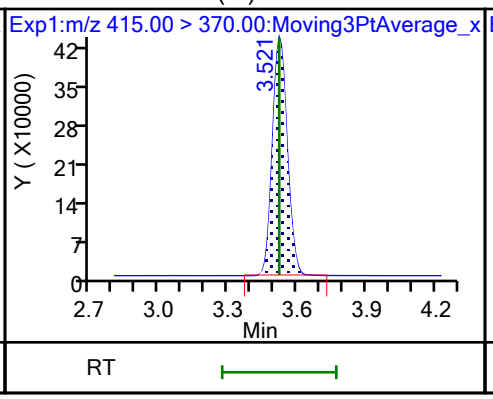
15 Perfluorooctanoic acid (M)



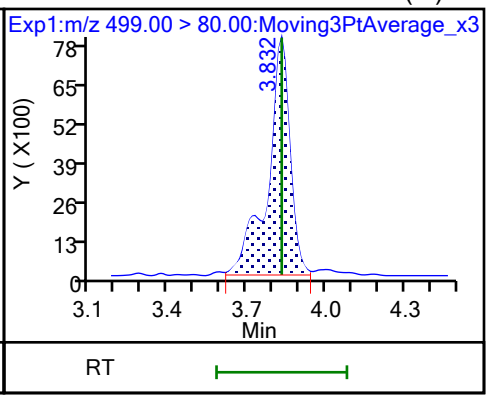
D 14 13C4 PFOA



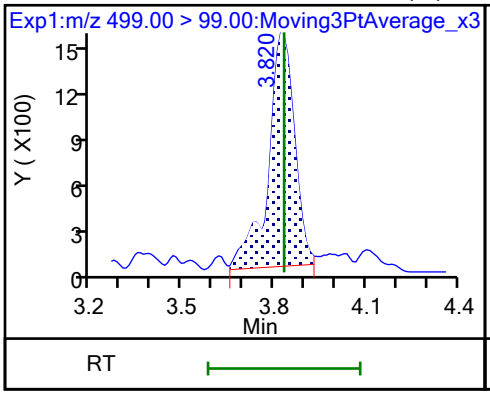
* 62 13C2 PFOA (M)



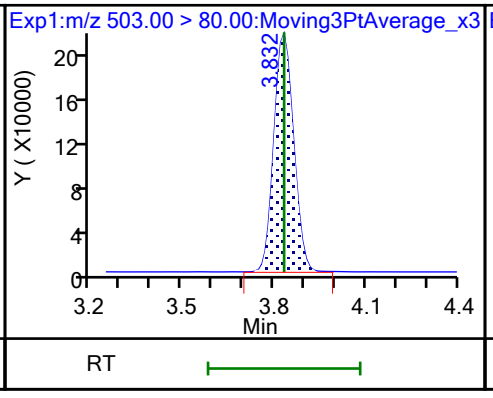
17 Perfluorooctanesulfonic acid (M)



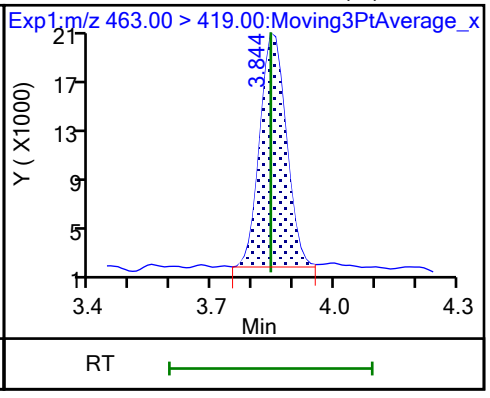
17 Perfluorooctanesulfonic acid (M)



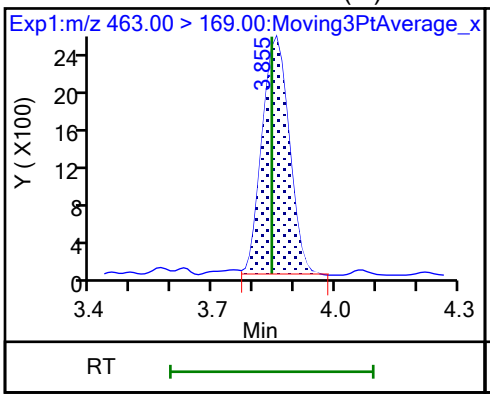
D 18 13C4 PFOS



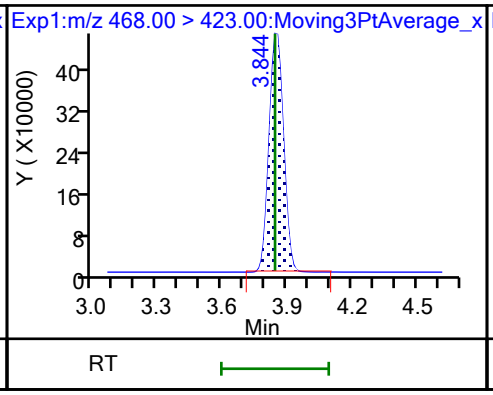
20 Perfluorononanoic acid (M)



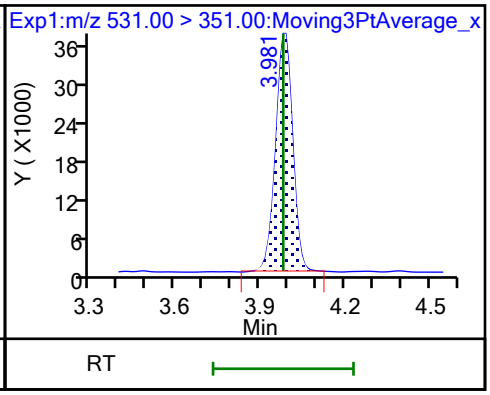
20 Perfluorononanoic acid (M)



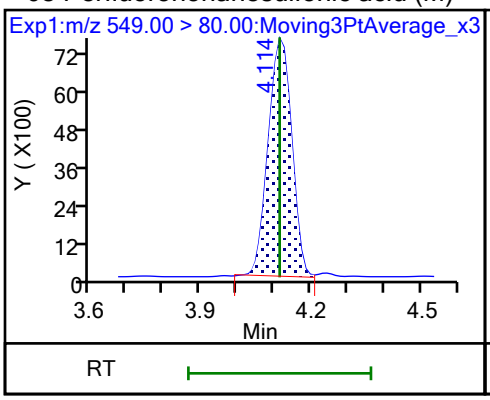
D 19 13C5 PFNA



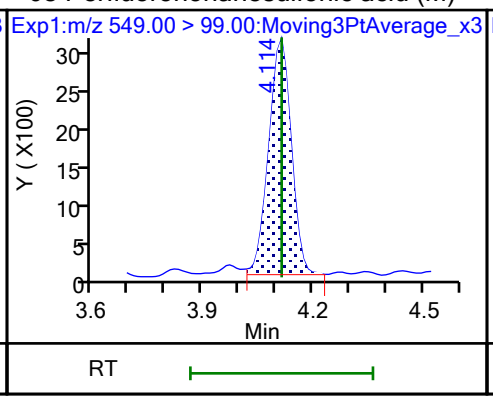
69 9-Chlorohexadecafluoro-3-oxanona



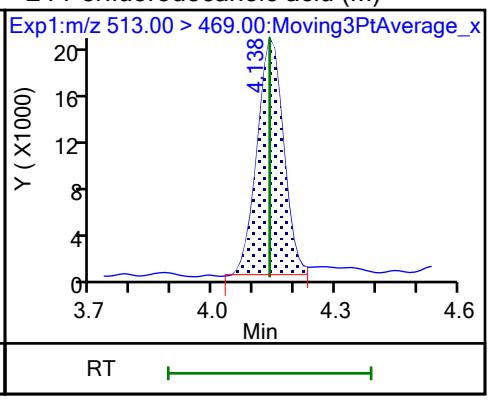
68 Perfluorononanesulfonic acid (M)



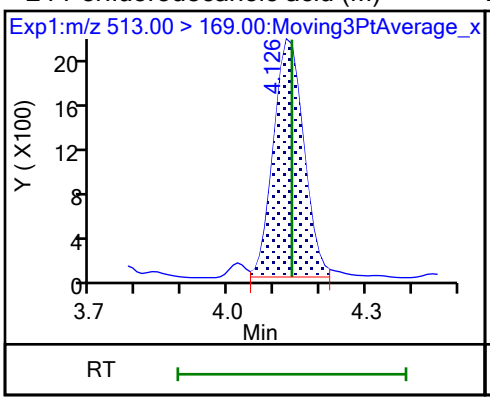
68 Perfluorononanesulfonic acid (M)



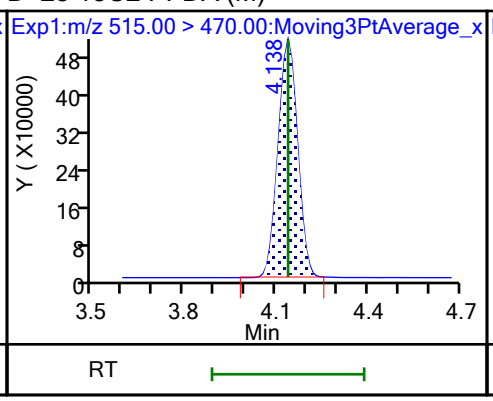
24 Perfluorodecanoic acid (M)



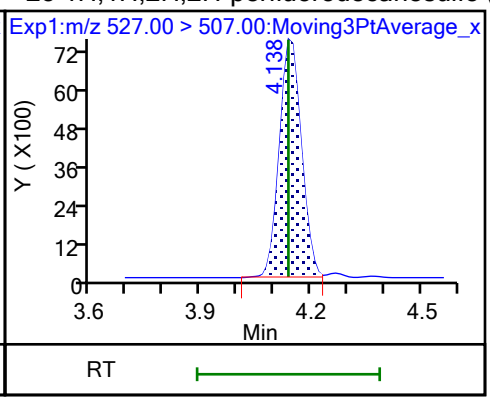
24 Perfluorodecanoic acid (M)



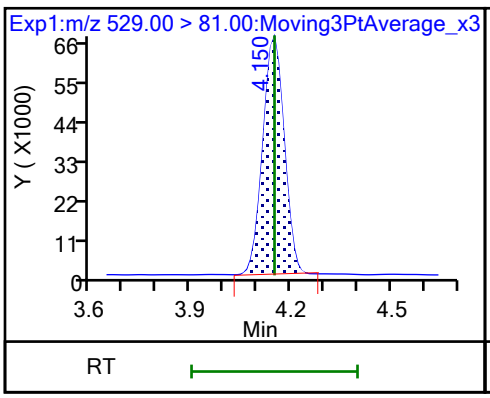
D 23 13C2 PFDA (M)



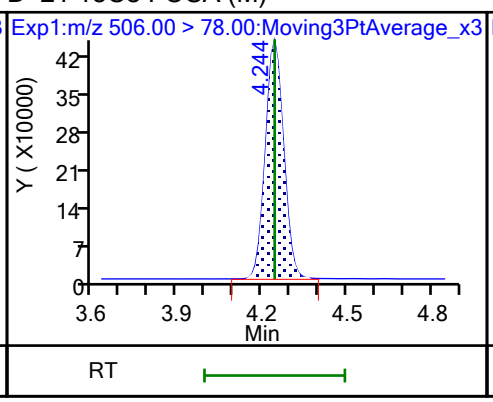
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



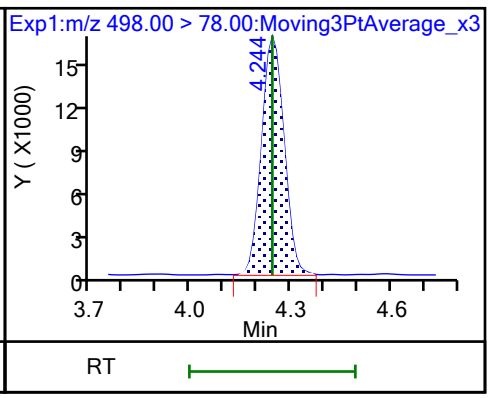
D 26 M2-8:2 FTS



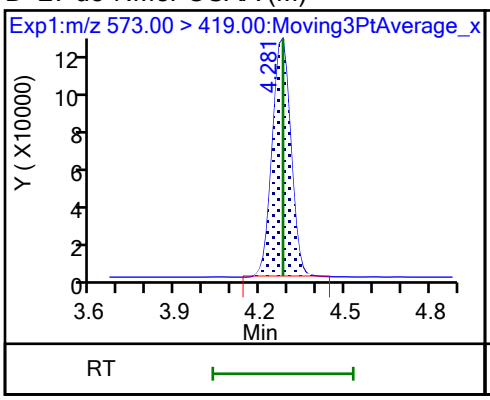
D 21 13C8 FOSA (M)



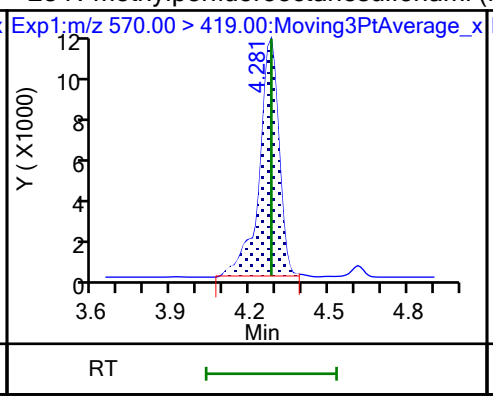
22 Perfluorooctanesulfonamide



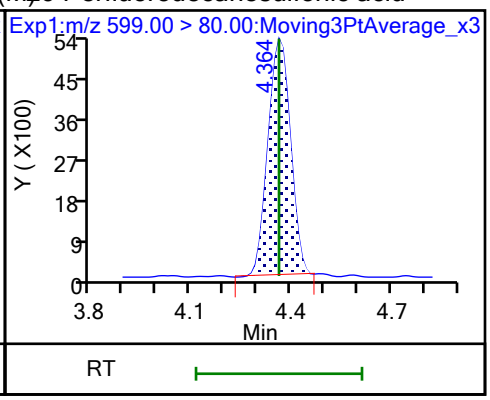
D 27 d3-NMeFOSAA (M)



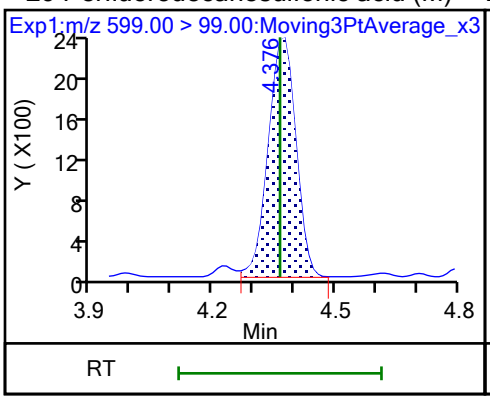
28 N-methylperfluorooctanesulfonami (M)



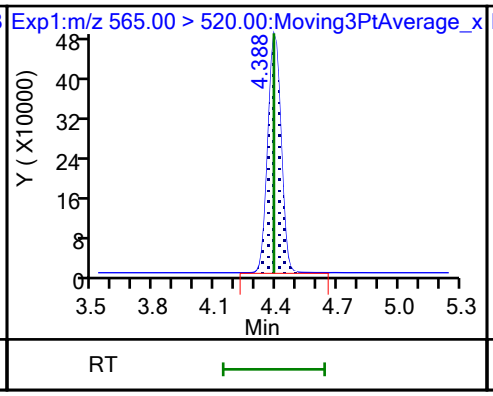
29 Perfluorodecanesulfonic acid



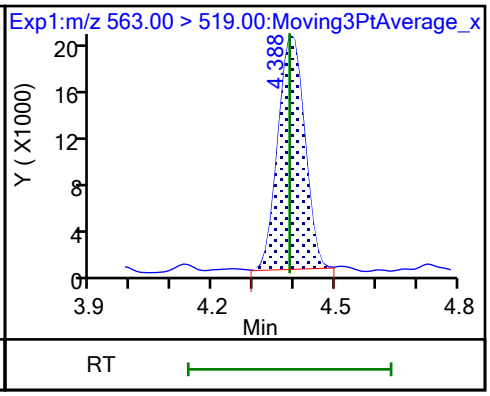
29 Perfluorodecanesulfonic acid (M)



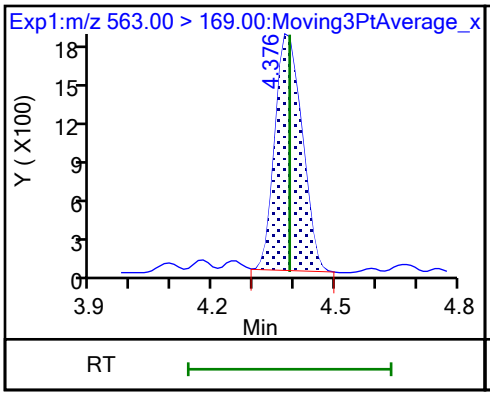
D 30 13C2 PFUnA



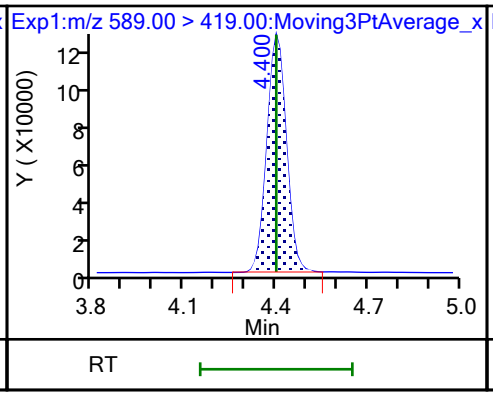
31 Perfluoroundecanoic acid



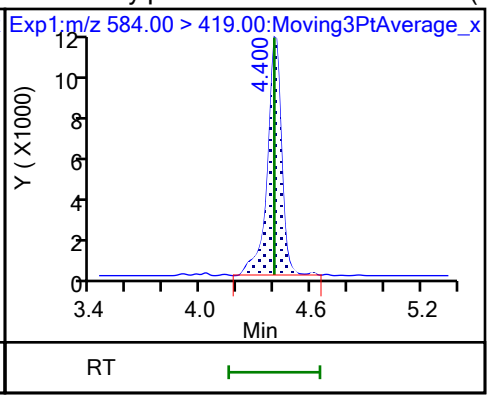
31 Perfluoroundecanoic acid



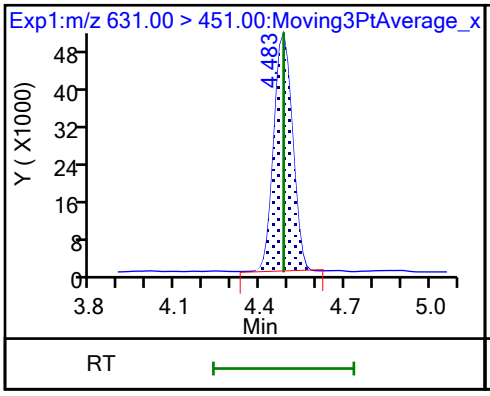
D 32 d5-NEtFOSAA



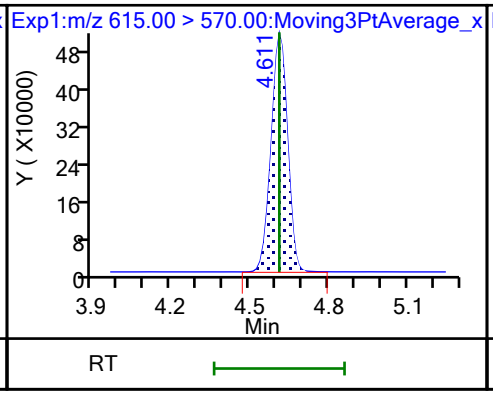
33 N-ethylperfluorooctanesulfonamid (M)



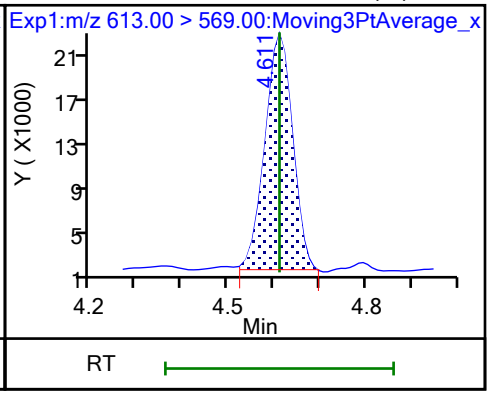
66 11-Chloroeicosafluoro-3-oxaundec



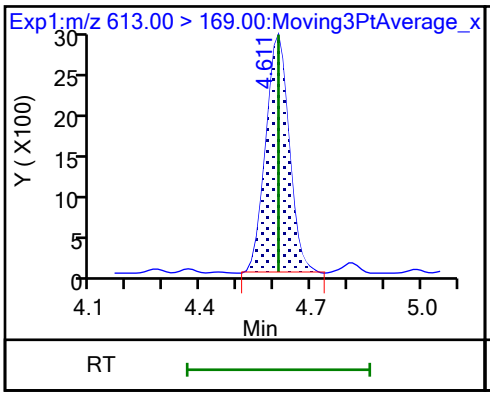
D 36 13C2 PFDoA



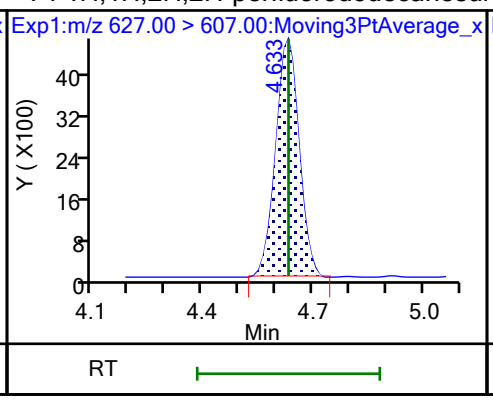
37 Perfluorododecanoic acid (M)



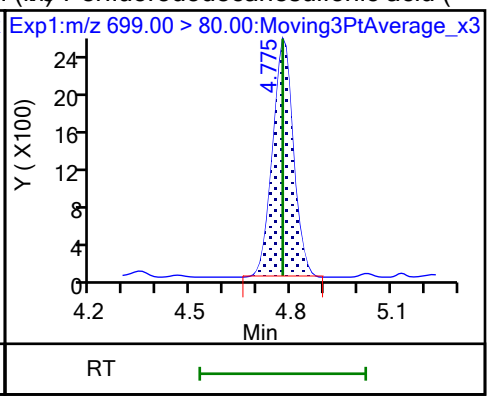
37 Perfluorododecanoic acid



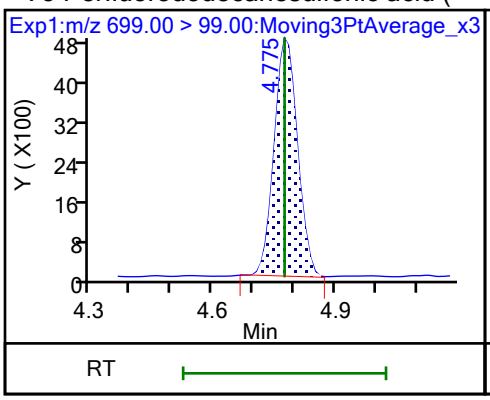
74 1H,1H,2H,2H-perfluorododecanesul (M)



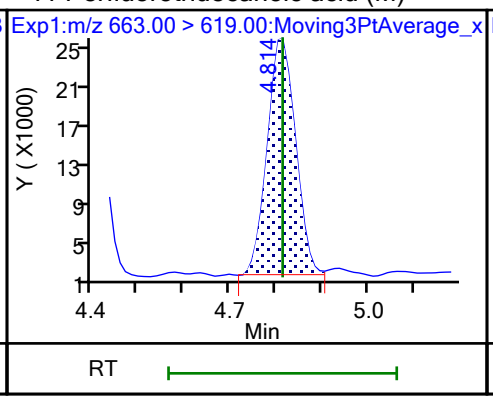
75 Perfluorododecanesulfonic acid (



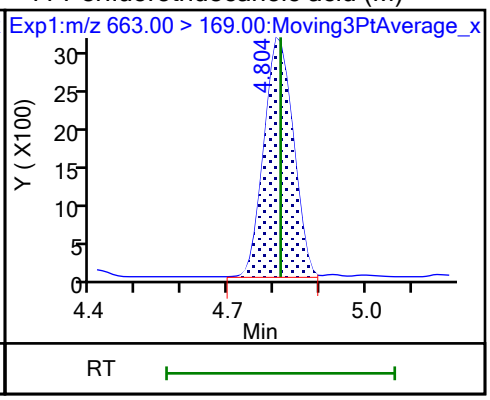
75 Perfluorododecanesulfonic acid (



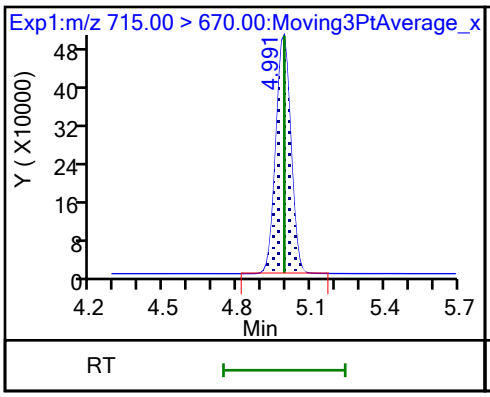
41 Perfluorotridecanoic acid (M)



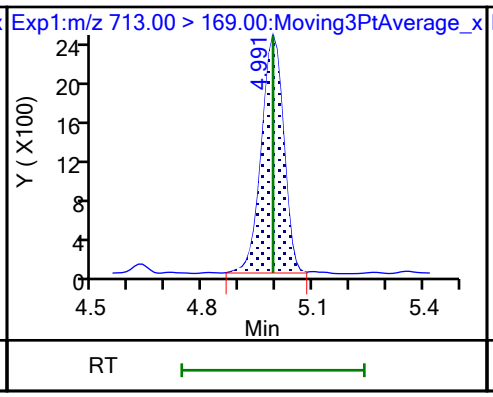
41 Perfluorotridecanoic acid (M)



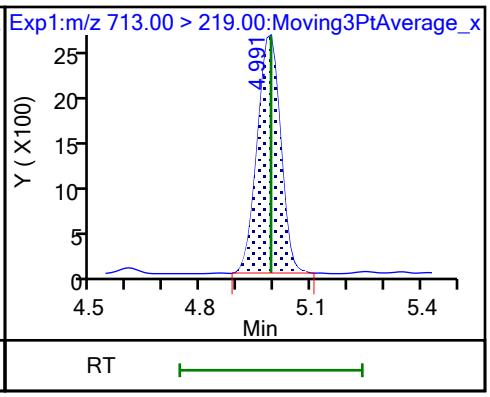
D 43 13C2 PFTeDA



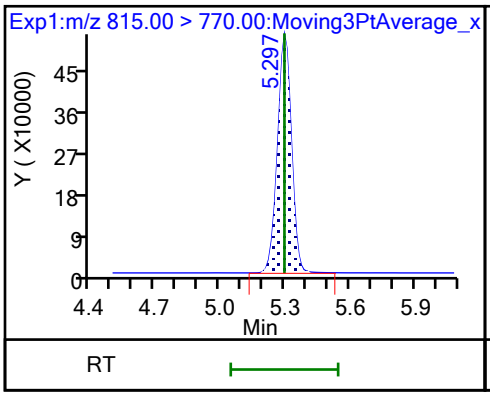
42 Perfluorotetradecanoic acid



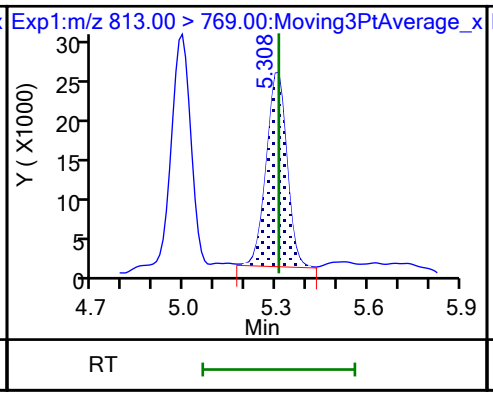
42 Perfluorotetradecanoic acid



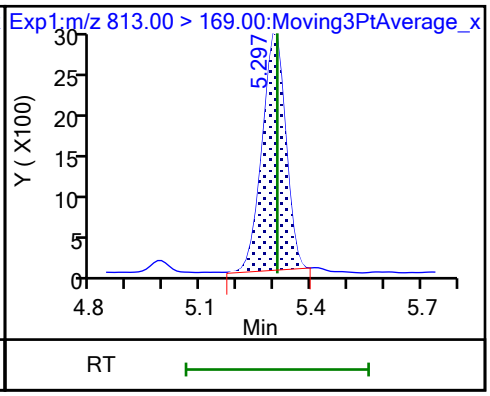
D 44 13C2 PFHxDA



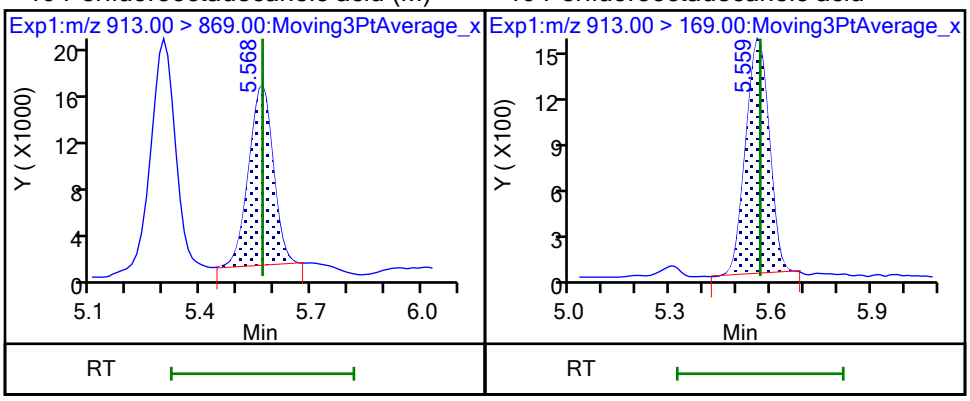
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196739/20 Calibration Date: 10/24/2023 20:35

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231024A20.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8897		0.943	1.00	-5.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.007		0.933	1.00	-6.7	
Perfluorobutanesulfonic acid	AveID	1.117	1.055		0.838	0.887	-5.5	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.334		0.920	0.937	-1.8	
Perfluorohexanoic acid	AveID	1.100	1.015		0.923	1.00	-7.7	
Perfluoropentanesulfonic acid	AveID	1.306	1.236		0.891	0.941	-5.3	
HFPODA	AveID	1.001	0.9260		0.925	1.00	-7.5	
Perfluoroheptanoic acid	AveID	1.121	1.080		0.964	1.00	-3.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.001		0.826	0.914	-9.6	
DONA	AveID	5.754	5.395		0.886	0.945	-6.2	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.696		0.938	0.951	-1.3	
Perfluoroheptanesulfonic acid	AveID	1.445	1.352		0.891	0.953	-6.5	
Perfluorooctanoic acid	AveID	1.065	0.9659		0.907	1.00	-9.3	
Perfluorooctanesulfonic acid	AveID	1.166	1.057		0.841	0.928	-9.4	
Perfluorononanoic acid	AveID	0.9800	0.9442		0.963	1.00	-3.7	
9Cl-PF3ONS	AveID	3.569	3.767		0.985	0.933	5.5	
Perfluorononanesulfonic acid	AveID	0.8874	0.8007		0.868	0.962	-9.8	
Perfluorodecanoic acid	AveID	0.999	0.998		0.999	1.00	-0.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.447		1.07	0.960	11.2	
Perfluorooctanesulfonamide	AveID	0.9539	0.9464		0.992	1.00	-0.8	
NMeFOSAA	AveID	0.9074	0.9054		0.998	1.00	-0.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6120		0.865	0.965	-10.4	
Perfluoroundecanoic acid	AveID	1.031	1.076		1.04	1.00	4.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9288		0.929	1.00	-7.1	
11Cl-PF3OUdS	AveID	5.474	5.483		0.945	0.943	0.2	
Perfluorododecanoic acid	AveID	1.018	0.9068		0.891	1.00	-10.9	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.405		1.03	0.964	6.7	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2234		0.934	0.968	-3.5	
Perfluorotridecanoic acid	AveID	1.070	1.098		1.03	1.00	2.6	
Perfluorotetradecanoic acid	AveID	0.1118	0.1017		0.910	1.00	-9.0	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9558		0.956	1.00	-4.4	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.6836		0.875	1.00	-12.5	
13C4 PFBA	Ave	0.9917	1.050		1.32	1.25	5.8	
13C5 PFPeA	Ave	0.7696	0.7483		1.22	1.25	-2.8	
13C3 PFBS	Ave	1.041	0.9933		1.11	1.16	-4.6	
M2-4:2 FTS	Ave	0.1204	0.1118		1.08	1.17	-7.1	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196739/20 Calibration Date: 10/24/2023 20:35

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231024A20.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8105		1.29	1.25	3.5	
13C3 HFPO-DA	Ave	0.1516	0.1351		1.11	1.25	-10.9	
13C4 PFHpA	Ave	0.8590	0.8255		1.20	1.25	-3.9	50.0
18O2 PFHxS	Ave	0.7464	0.7466		1.18	1.18	0.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1512		1.16	1.19	-2.5	
13C4 PFOA	Ave	0.9731	1.070		1.38	1.25	10.0	50.0
13C4 PFOS	Ave	0.4742	0.4748		1.20	1.20	0.1	50.0
13C5 PFNA	Ave	1.059	1.056		1.25	1.25	-0.3	50.0
13C2 PFDA	Ave	1.109	1.090		1.23	1.25	-1.7	
M2-8:2 FTS	Ave	0.1744	0.1505		1.03	1.20	-13.7	
13C8 FOSA	Ave	0.9462	0.8781		1.16	1.25	-7.2	
d3-NMeFOSAA	Ave	0.2650	0.2524		1.19	1.25	-4.8	
13C2 PFUnA	Ave	1.047	0.9945		1.19	1.25	-5.0	
d5-NEtFOSAA	Ave	0.2552	0.2536		1.24	1.25	-0.6	
13C2 PFDoA	Ave	1.064	1.072		1.26	1.25	0.8	
13C2 PFTeDA	Ave	1.059	1.046		1.24	1.25	-1.2	
13C2 PFHxDA	Ave	1.221	1.142		1.17	1.25	-6.4	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A20.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 20:35:14 ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057538-020 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:50:18 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 11:20:24
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	2199826	1.32		106	1454	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	1565711	0.9430		94.3	138	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1568366	1.22		97.2	1966	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.453	0.0	1.000	1263906	0.9335		93.3	33.4	
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.466	0.0	0.701	1936089	1.11		95.4	90220	M
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.466	0.0	1.000	1558787	0.8380	Target=2.06	94.5	1490	
298.90 > 99.00	2.466	2.466	0.0	1.000	775977		2.01(1.03-3.09)		342	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.759	2.760	-0.001	1.000	585871	0.9200		98.2	1201	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.772	-0.013	0.784	218937	1.08		92.9	137	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1698661	1.29		104	4573	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1379568	0.9225	Target=14.12	92.3	246	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	95146		14.50(7.06-21.17)		104	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.809	2.810	-0.001	0.888	1456325	0.8909	Target=2.72	94.7	1173	M
349.00 > 99.00	2.809	2.810	-0.001	0.888	505839		2.88(1.36-4.09)		881	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	283093	1.11		89.1	3241	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.918	-0.011	1.000	209705	0.9249		92.5	356	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.166	-0.002	0.899	1480149	1.18		100	4801	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.164	3.166	-0.002	1.000	1145061	0.8264	Target=3.32	90.4	2055	M
399.00 > 99.00	3.164	3.166	-0.002	1.000	340406		3.36(1.66-4.98)		335	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.164	3.177	-0.013	1.000	1495228	0.9638	Target=4.17	96.4	300	
363.00 > 169.00	3.164	3.177	-0.013	1.000	361132		4.14(2.09-6.26)		662	
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.177	-0.013	0.899	1730132	1.20		96.1	8254	
77 DONA										
377.00 > 251.00	3.211	3.213	-0.002	0.839	4058271	0.8860	Target=3.33	93.8	4475	
377.00 > 85.00	3.211	3.213	-0.002	0.839	1130794		3.59(1.66-4.99)		1913	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.512	-0.001	0.918	1025499	0.8914	Target=4.83	93.5	3064	
449.00 > 99.00	3.511	3.512	-0.001	0.918	196934		5.21(2.41-7.24)		499	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.512	-0.001	0.997	301022	1.16		97.5	632	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.512	-0.001	1.000	650047	0.9382		98.7	1351	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.521	-0.001	1.000	1733597	0.9068	Target=2.88	90.7	79.5	
413.00 > 169.00	3.529	3.521	0.008	1.003	587779		2.95(1.44-4.32)		695	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.521	-0.001	1.000	2243487	1.38		110	4104	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.521	-0.001		2095793	1.25			8843	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.826	3.832	-0.006	1.000	780631	0.8407	Target=4.24	90.6	1494	M
499.00 > 99.00	3.826	3.832	-0.006	1.000	172914		4.51(2.12-6.37)		569	M
D 18 13C4 PFOS										
503.00 > 80.00	3.826	3.832	-0.006	1.087	951265	1.20		100	5372	
20 Perfluorononanoic acid										
463.00 > 419.00	3.850	3.844	0.006	1.000	1671965	0.9634	Target=8.34	96.3	220	
463.00 > 169.00	3.850	3.844	0.006	1.000	192449		8.69(4.17-12.51)		1217	
D 19 13C5 PFNA										
468.00 > 423.00	3.850	3.844	0.006	1.094	2213426	1.25		99.7	6120	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.979	3.981	-0.002	1.040	2797545	0.9846		106	7011	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.111	4.114	-0.003	1.074	613155	0.8680	Target=2.17	90.2	4159	
549.00 > 99.00	4.111	4.114	-0.003	1.074	238829		2.57(1.08-3.25)		1162	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.135	4.138	-0.003	1.000	1825037	1.00	Target=11.44	99.9	567	
513.00 > 169.00	4.135	4.138	-0.003	1.000	179781		10.15(5.72-17.16)		1749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.135	4.138	-0.003	1.175	2285036	1.23		98.3	7951	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.147	4.138	0.009	1.000	592921	1.07		111	2824	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.147	4.150	-0.003	1.178	302254	1.03		86.3	773	
D 21 13C8 FOSA										M
506.00 > 78.00	4.240	4.244	-0.004	1.205	1840348	1.16		92.8	1972	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.240	4.244	-0.004	1.000	1393414	0.99		99.2	2349	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.277	4.281	-0.004	1.215	528974	1.19		95.2	1423	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.277	4.281	-0.004	1.000	383165	1.00		99.8	472	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.361	4.364	-0.003	1.140	470134	0.8648	Target=2.37	89.6	3489	M
599.00 > 99.00	4.361	4.364	-0.003	1.140	185920		2.53(1.19-3.56)		1857	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.385	4.388	-0.003	1.246	2084188	1.19		95.0	8542	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.385	4.388	-0.003	1.000	1794870	1.04	Target=12.20	104	363	M
563.00 > 169.00	4.385	4.388	-0.003	1.000	136512		13.15(6.10-18.31)		1533	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.397	4.400	-0.003	1.249	531523	1.24		99.4	1119	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.409	4.400	0.009	1.003	394941	0.9286		92.9	961	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.481	4.483	-0.002	1.171	4115741	0.9446		100	3626	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.609	4.611	-0.002	1.309	2247175	1.26		101	6406	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.609	4.611	-0.002	1.000	1630122	0.8909	Target=8.47	89.1	89.3	M
613.00 > 169.00	4.609	4.611	-0.002	1.000	204821		7.96(4.23-12.70)		1161	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.631	4.633	-0.002	1.117	341782	1.03		107	1650	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.773	4.775	-0.002	1.247	172160	0.9343	Target=0.48	96.5	2032	
699.00 > 99.00	4.773	4.775	-0.002	1.247	351730		0.49(0.24-0.72)		4113	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.811	4.814	-0.003	1.044	1974017	1.03	Target=6.41	103	106	M
663.00 > 169.00	4.802	4.814	-0.012	1.042	298460		6.61(3.21-9.62)		1407	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.991	-0.002	1.417	2192594	1.23		98.8	4994	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.989	4.991	-0.002	1.000	178428	0.9097	Target=0.87	91.0	2348	
713.00 > 219.00	4.978	4.991	-0.013	0.998	190517		0.94(0.43-1.30)		2797	

Report Date: 26-Oct-2023 14:50:19 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A20.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.297	-0.003	1.504	2394060	1.17		93.6	5293	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.308	-0.014	1.000	1830553	0.9557	Target=7.89	95.6	103	M
813.00 > 169.00	5.295	5.308	-0.014	1.000	231665		7.90(3.94-11.83)		2984	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.565	5.568	-0.003	1.051	1309350	0.8754	Target=9.39	87.5	125	M
913.00 > 169.00	5.565	5.568	-0.003	1.051	136300		9.61(4.69-14.08)		971	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

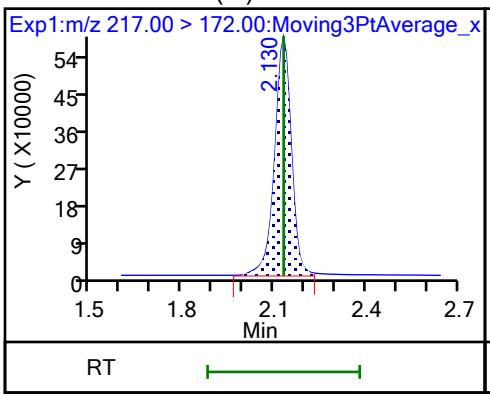
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 26-Oct-2023 14:50:19 Chrom Revision: 2.3 18-Oct-2023 21:16:54

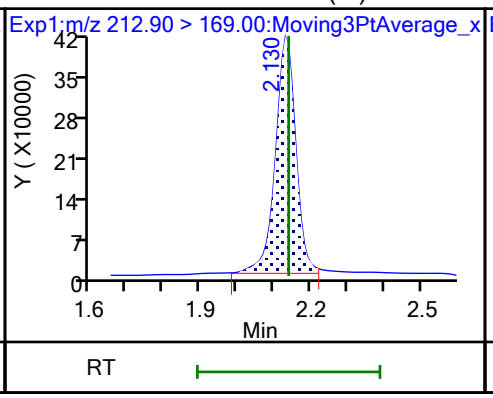
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A20.d
Injection Date: 24-Oct-2023 20:35:14 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

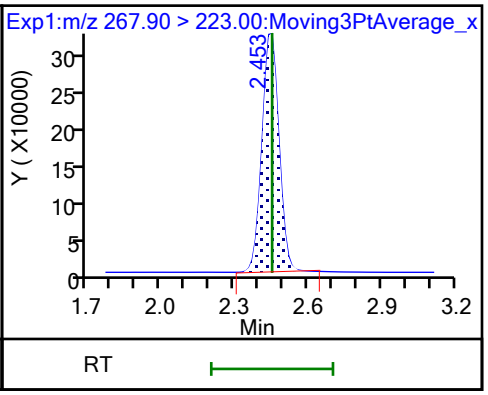
D 1 13C4 PFBA (M)



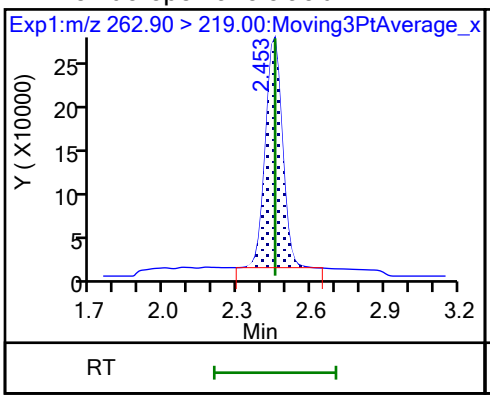
2 Perfluorobutanoic acid (M)



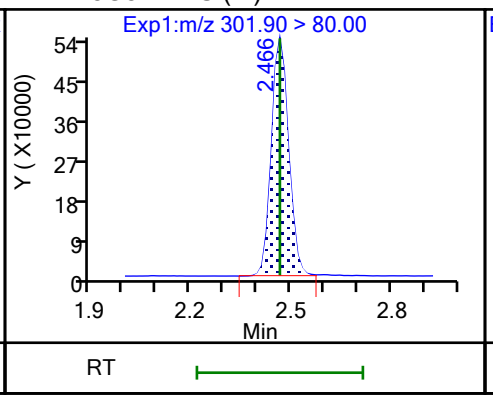
D 3 13C5 PFPeA



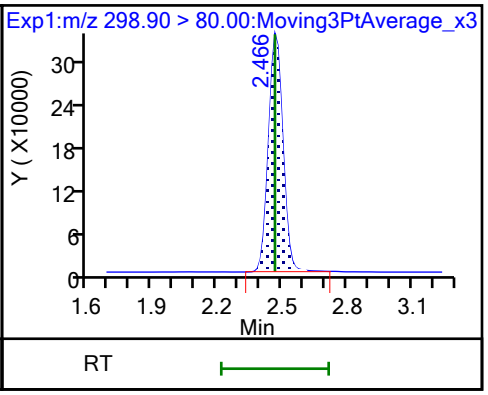
4 Perfluoropentanoic acid



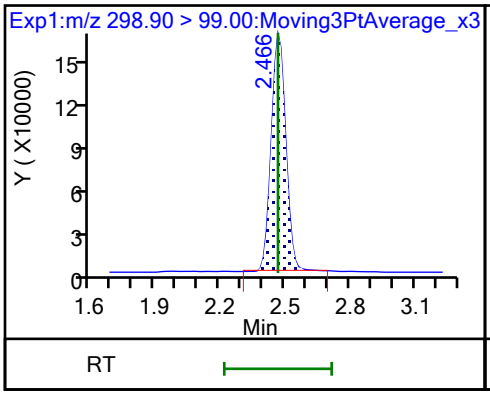
D 47 13C3 PFBS (M)



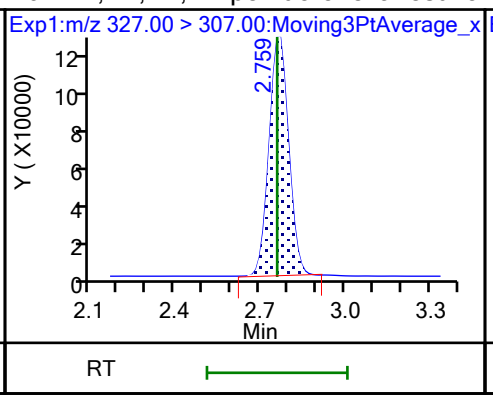
5 Perfluorobutanesulfonic acid



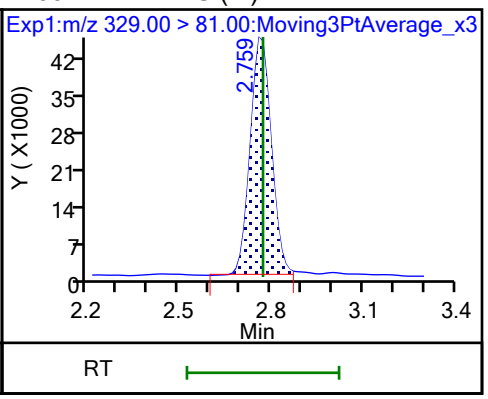
5 Perfluorobutanesulfonic acid



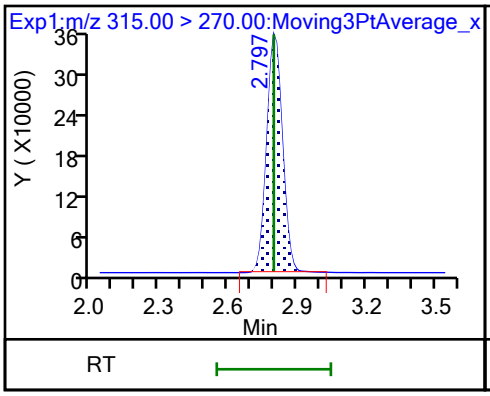
61 1H,1H,2H,2H-perfluorohexanesulfo



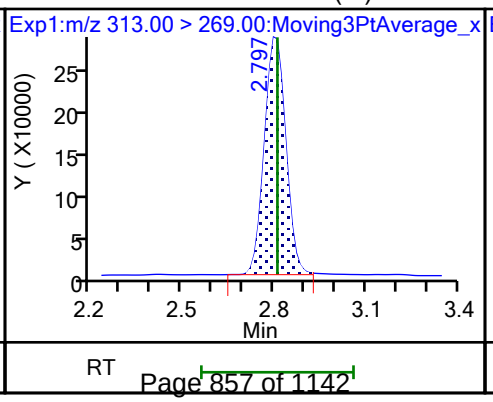
D 60 M2-4:2 FTS (M)



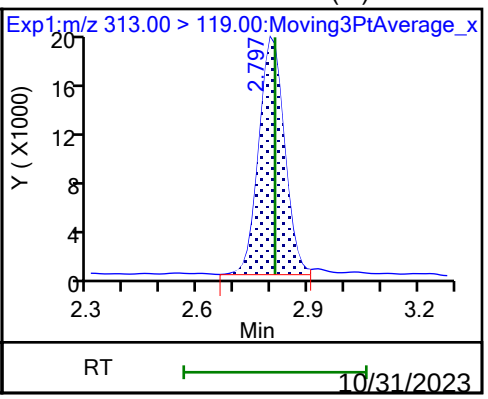
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

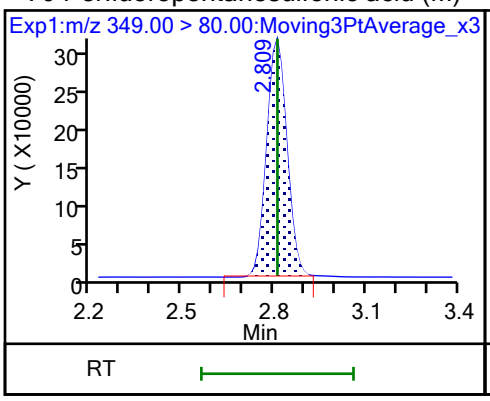


6 Perfluorohexanoic acid (M)

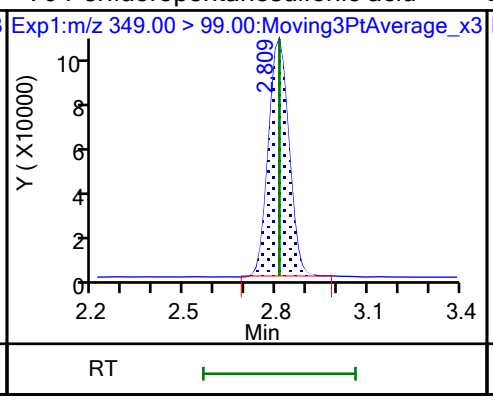


10/31/2023
10:17 AM

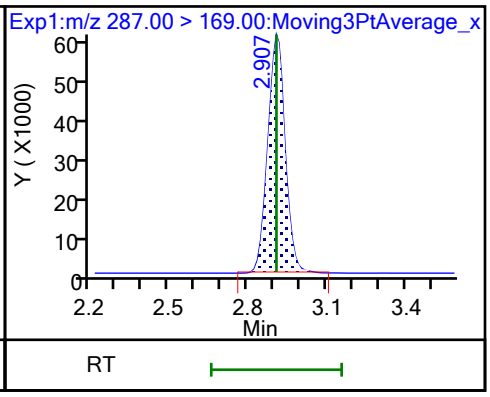
70 Perfluoropentanesulfonic acid (M)



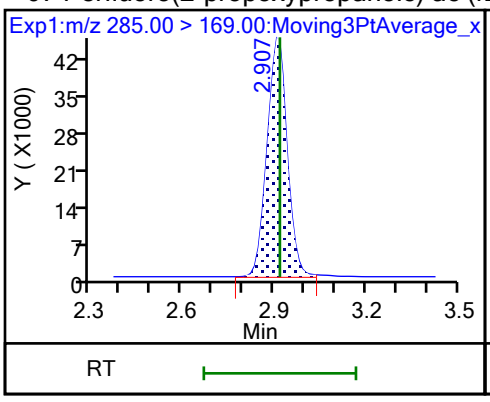
70 Perfluoropentanesulfonic acid



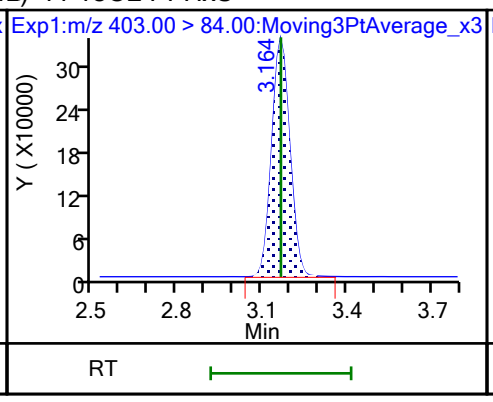
D 64 13C3 HFPO-DA



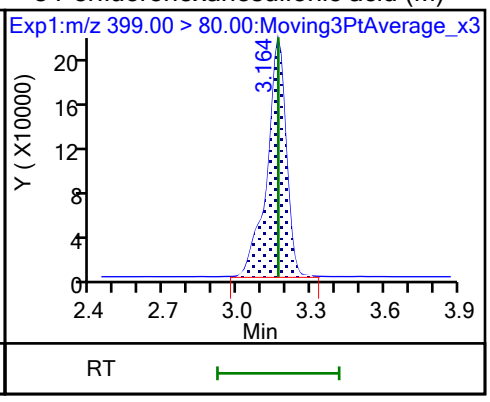
67 Perfluoro(2-propoxypropanoic) ac (M)



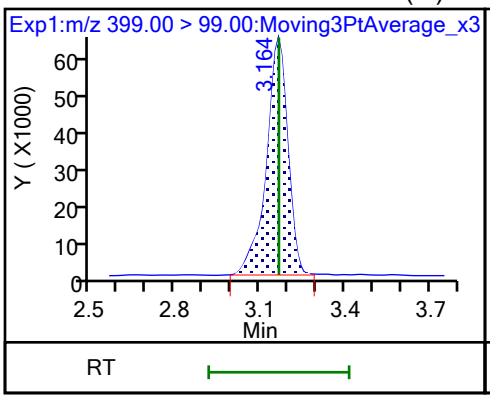
D 11 18O2 PFHxS



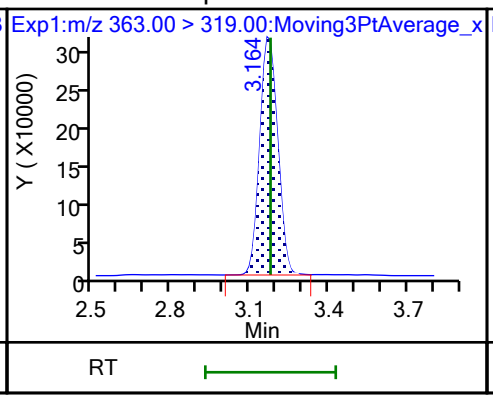
8 Perfluorohexanesulfonic acid (M)



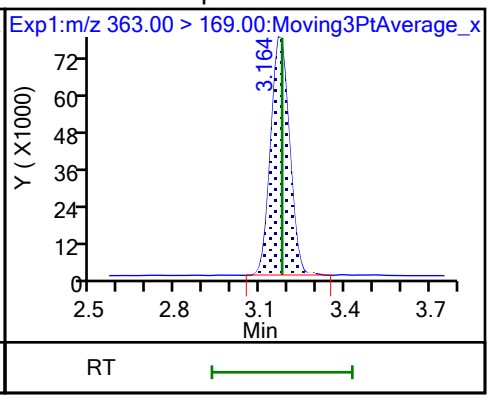
8 Perfluorohexanesulfonic acid (M)



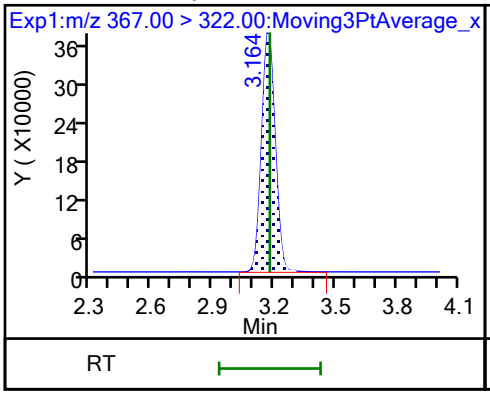
10 Perfluoroheptanoic acid



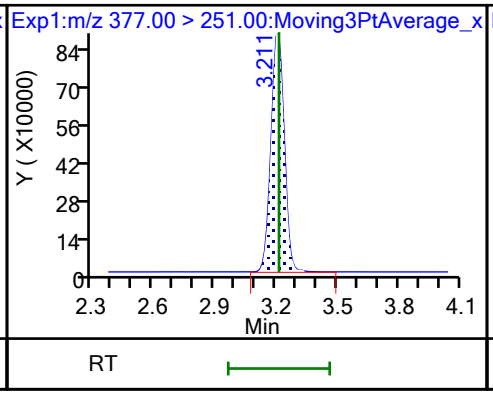
10 Perfluoroheptanoic acid



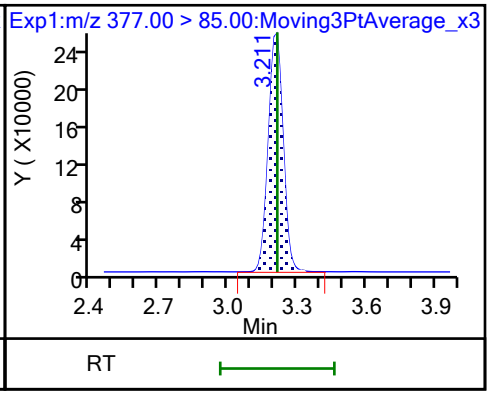
D 9 13C4 PFHpA



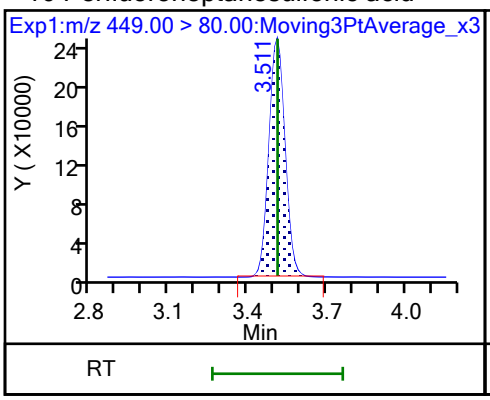
77 DONA



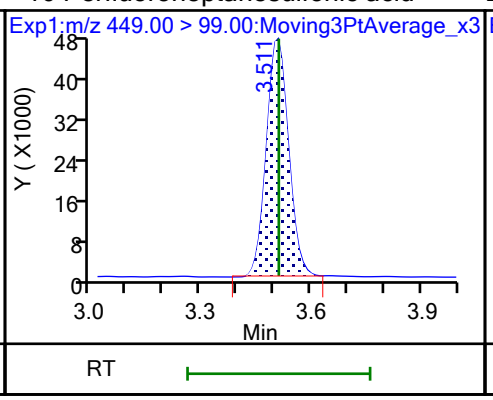
77 DONA



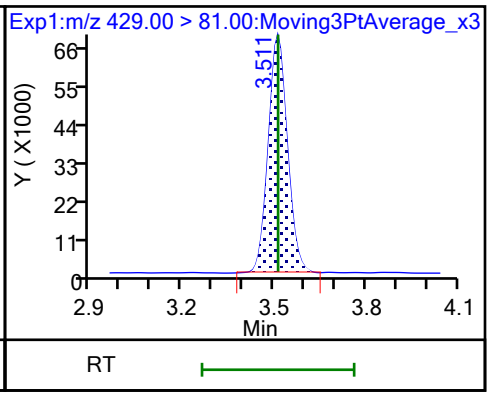
16 Perfluoroheptanesulfonic acid



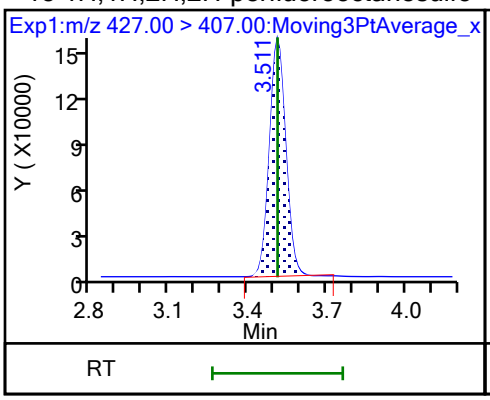
16 Perfluoroheptanesulfonic acid



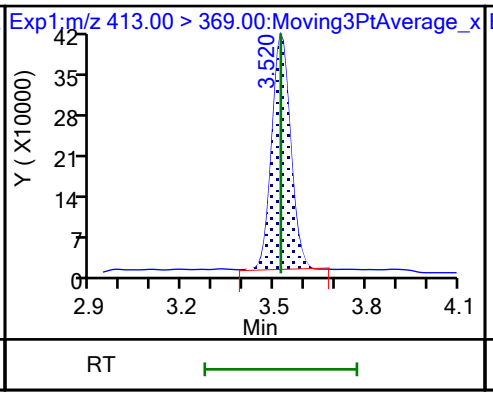
D 12 M2-6:2 FTS



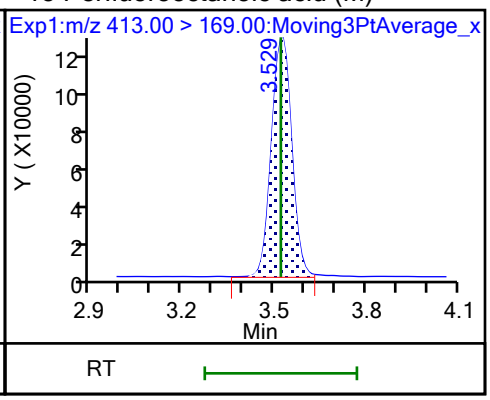
13 1H,1H,2H,2H-perfluorooctanesulfo



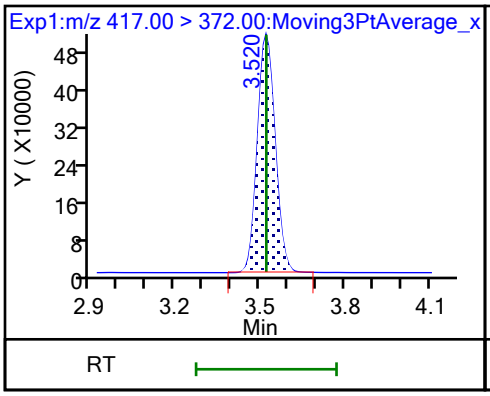
15 Perfluorooctanoic acid



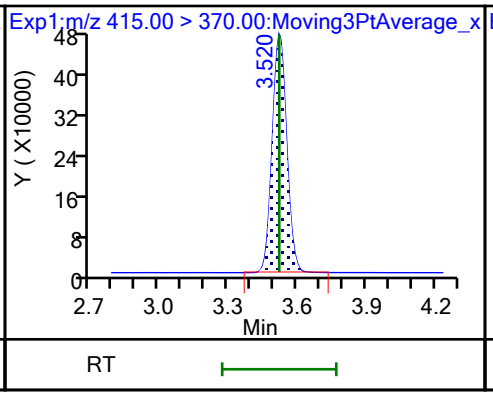
15 Perfluorooctanoic acid (M)



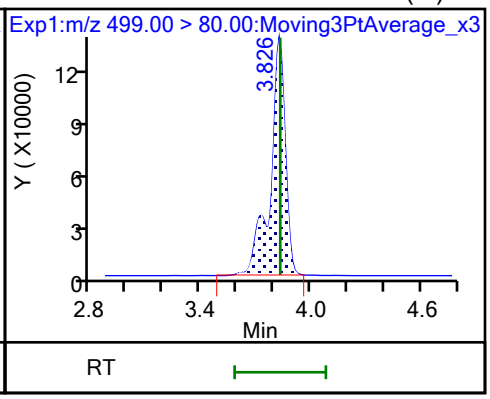
D 14 13C4 PFOA



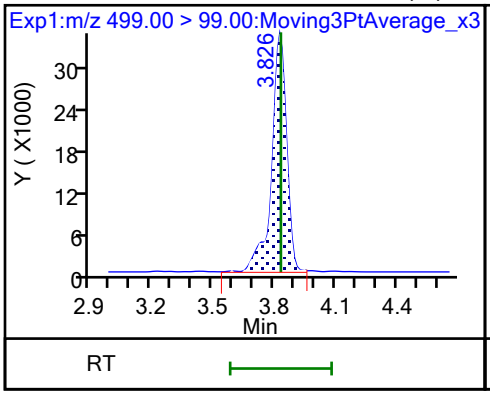
* 62 13C2 PFOA



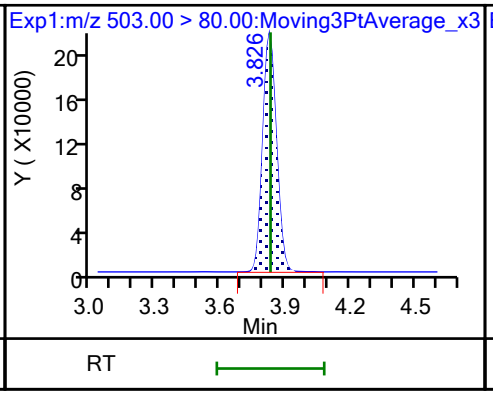
17 Perfluorooctanesulfonic acid (M)



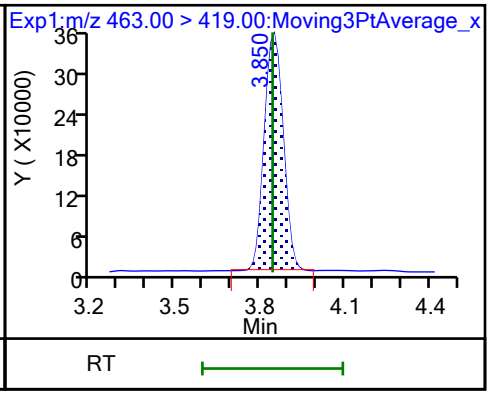
17 Perfluorooctanesulfonic acid (M)



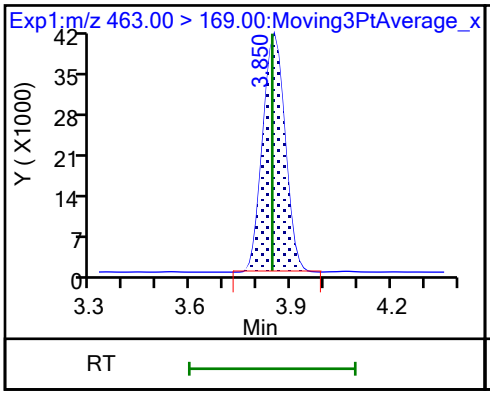
D 18 13C4 PFOS



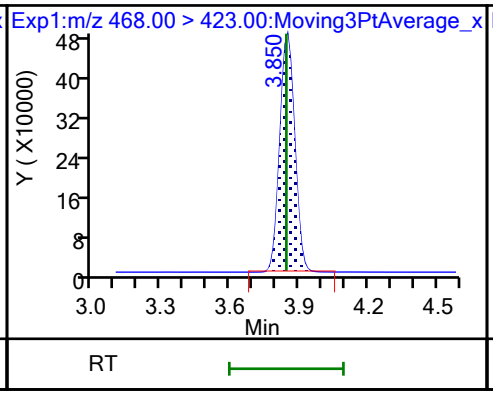
20 Perfluorononanoic acid



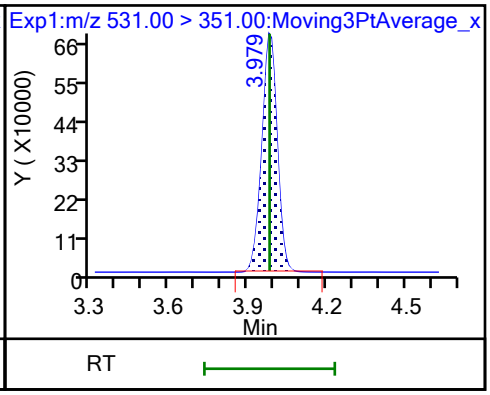
20 Perfluorononanoic acid



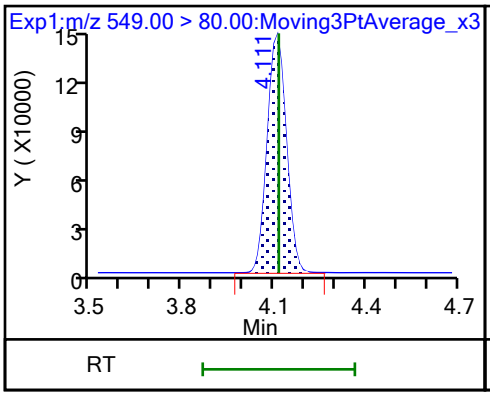
D 19 13C5 PFNA



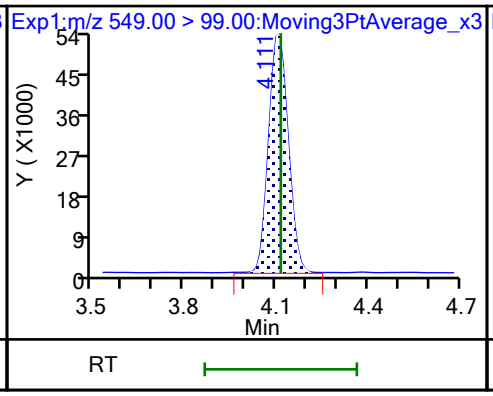
69 9-Chlorohexadecafluoro-3-oxanona



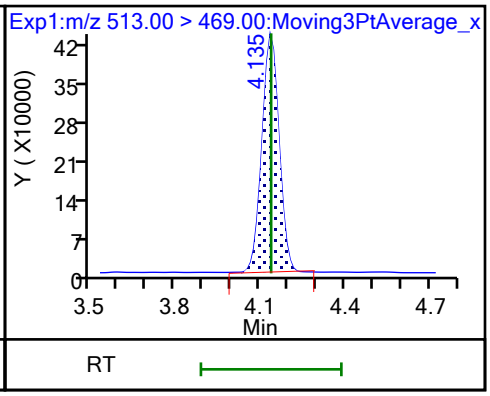
68 Perfluorononanesulfonic acid



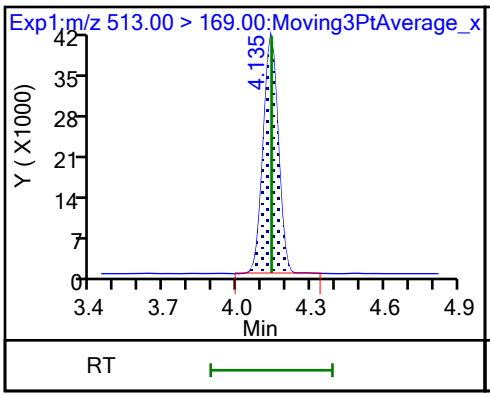
68 Perfluorononanesulfonic acid



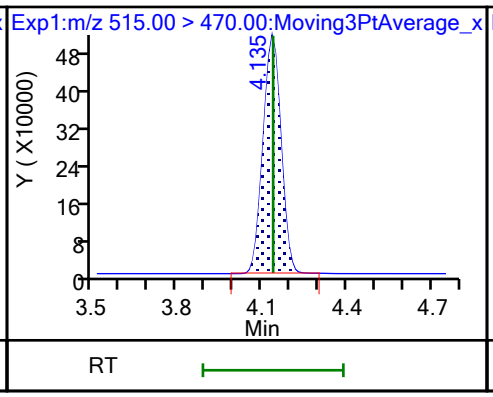
24 Perfluorodecanoic acid



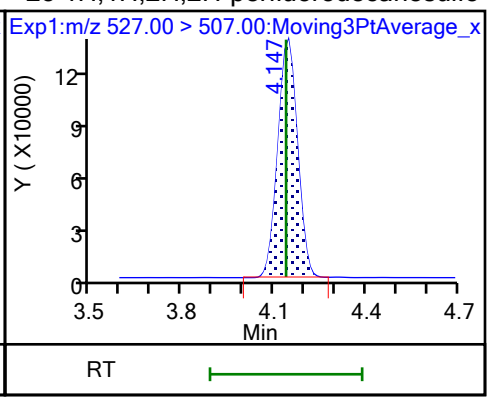
24 Perfluorodecanoic acid



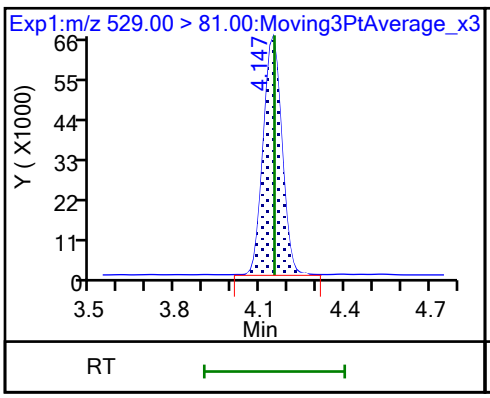
D 23 13C2 PFDA



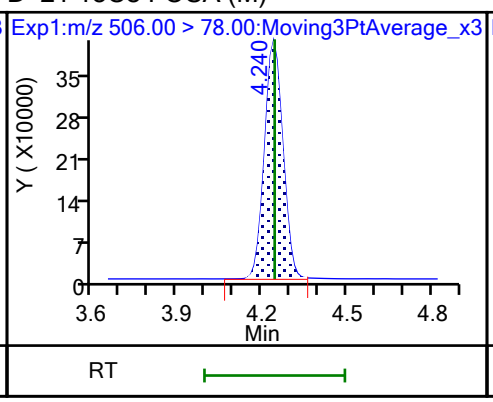
25 1H,1H,2H,2H-perfluorodecanesulfo



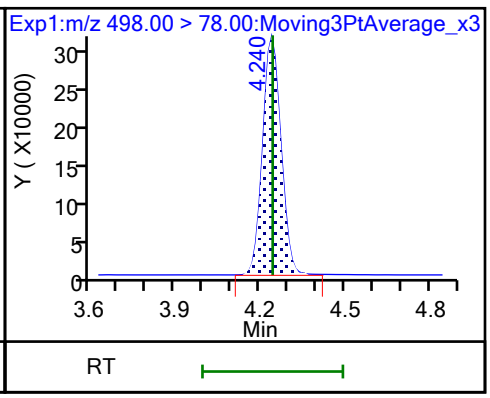
D 26 M2-8:2 FTS



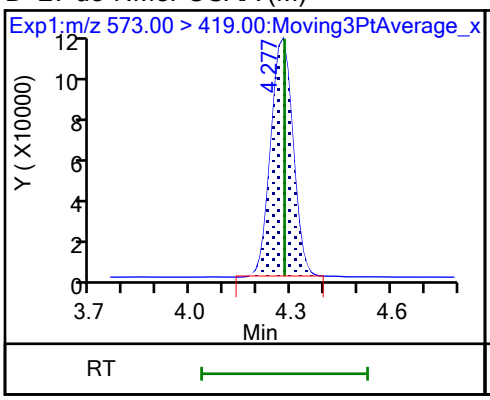
D 21 13C8 FOSA (M)



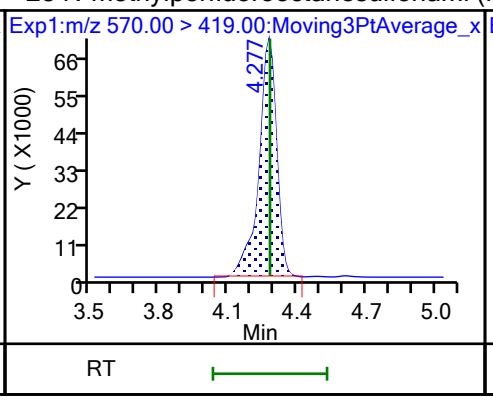
22 Perfluorooctanesulfonamide



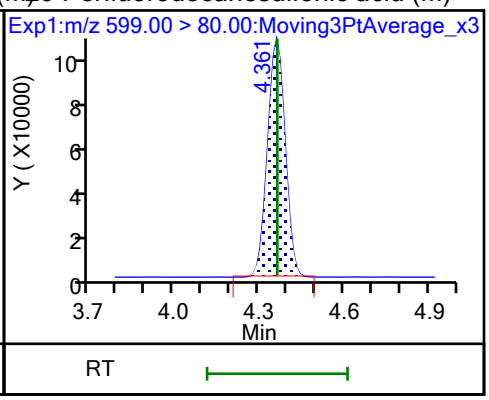
D 27 d3-NMeFOSAA (M)



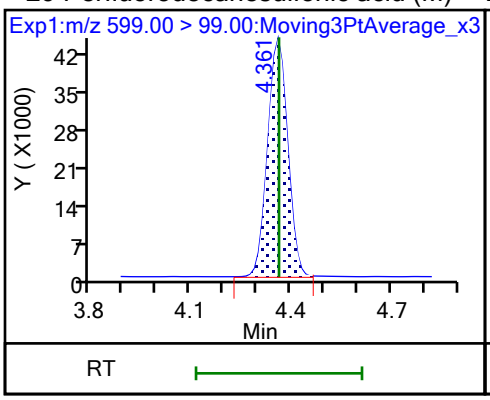
28 N-methylperfluorooctanesulfonami (M)



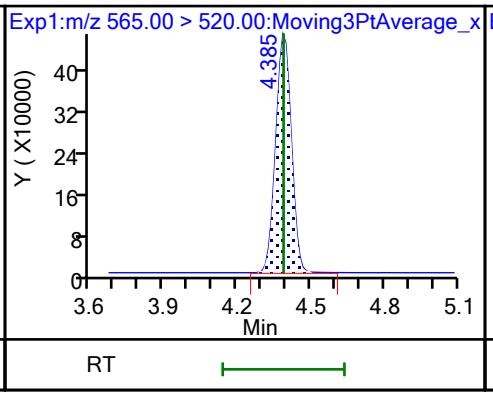
29 Perfluorodecanesulfonic acid (M)



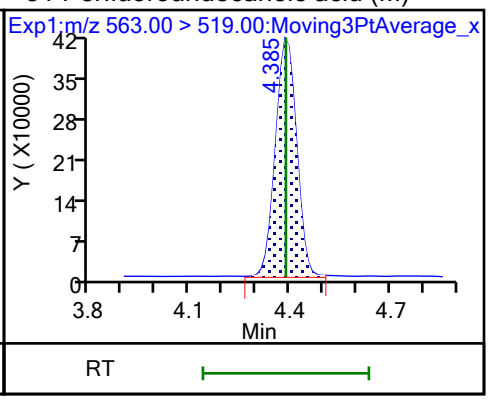
29 Perfluorodecanesulfonic acid (M)



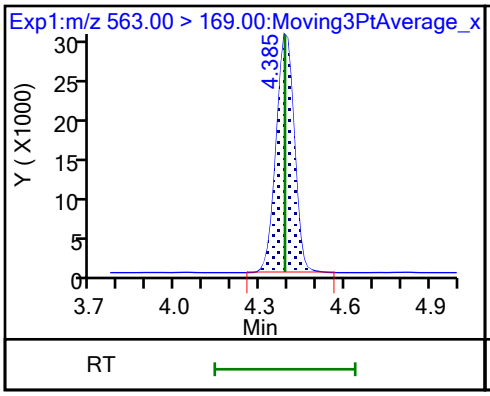
D 30 13C2 PFUnA



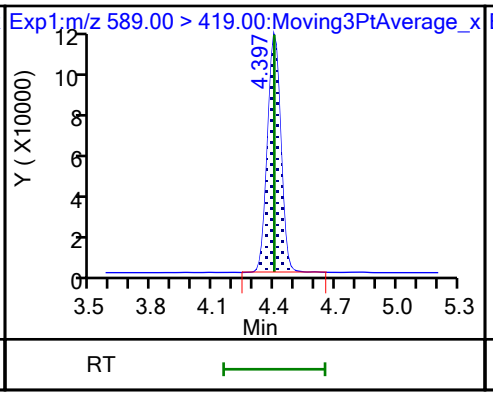
31 Perfluoroundecanoic acid (M)



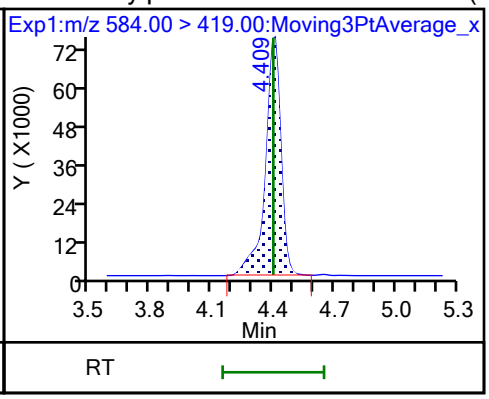
31 Perfluoroundecanoic acid



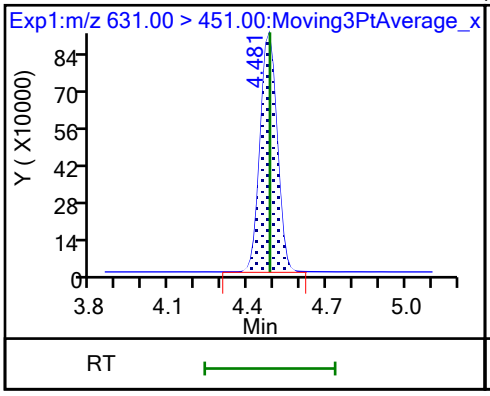
D 32 d5-NEtFOSAA



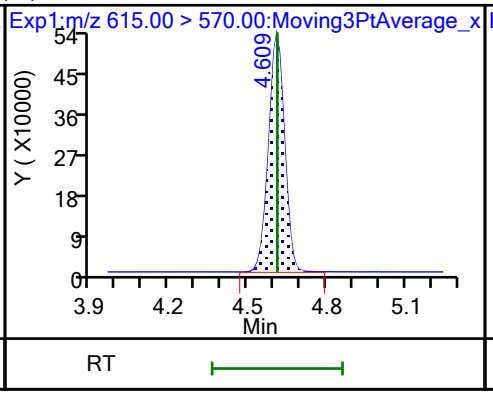
33 N-ethylperfluorooctanesulfonamid (M)



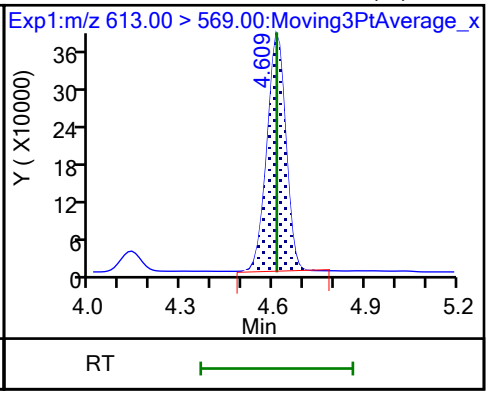
66 11-Chloroeicosafluoro-3-oxaundec (M)



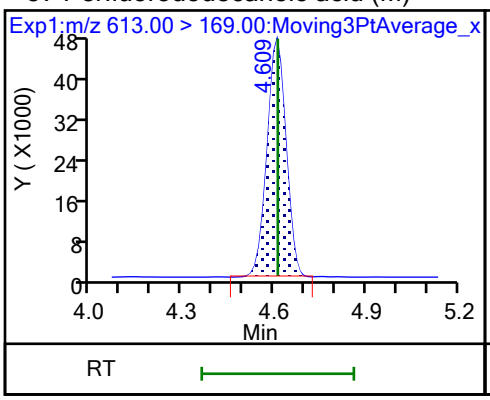
D 36 13C2 PFDoA



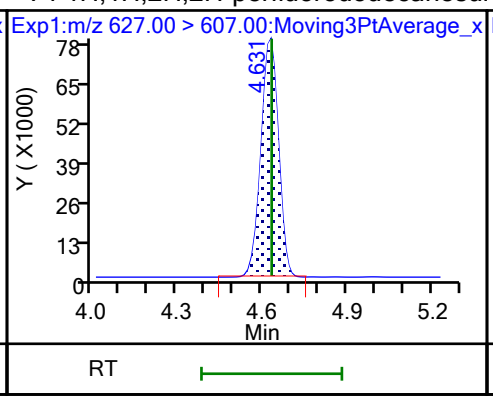
37 Perfluorododecanoic acid (M)



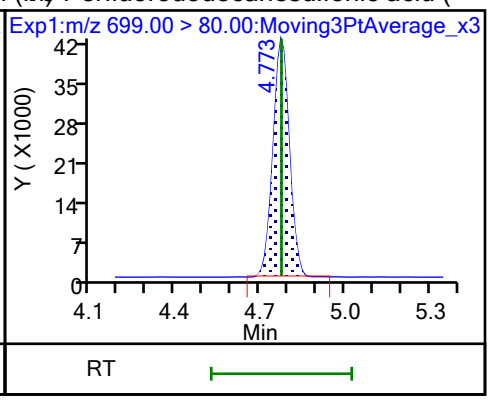
37 Perfluorododecanoic acid (M)



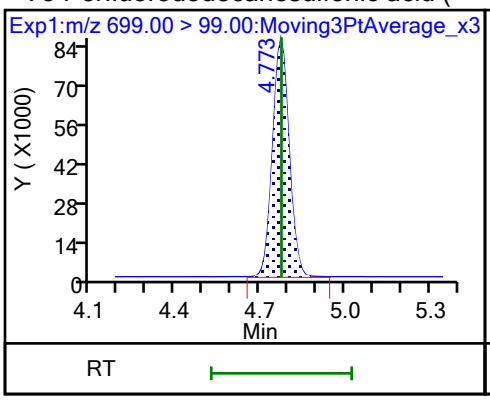
74 1H,1H,2H,2H-perfluorododecanesul (M)



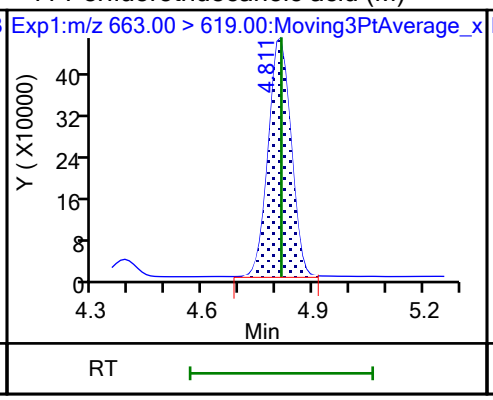
75 Perfluorododecanesulfonic acid (



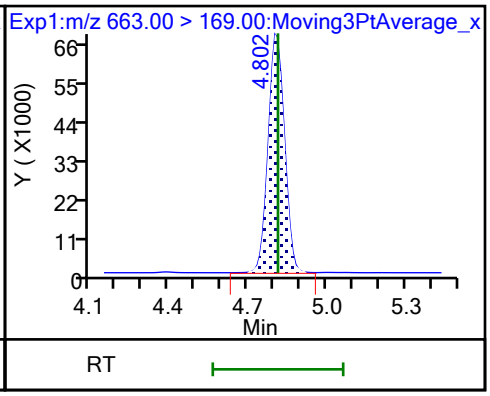
75 Perfluorododecanesulfonic acid (



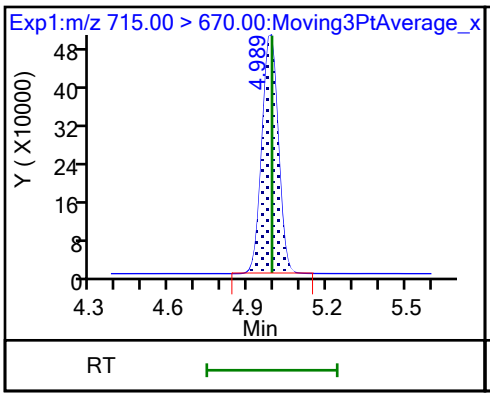
41 Perfluorotridecanoic acid (M)



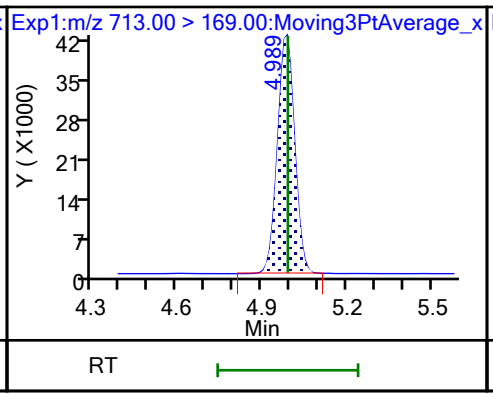
41 Perfluorotridecanoic acid



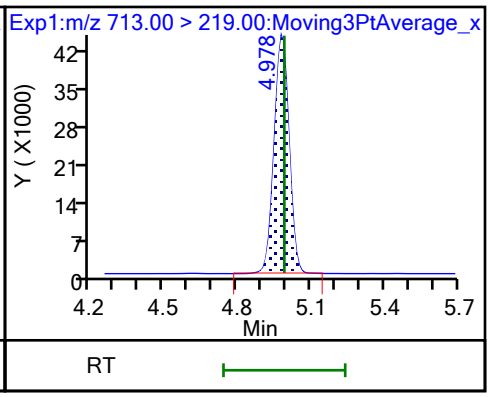
D 43 13C2 PFTeDA



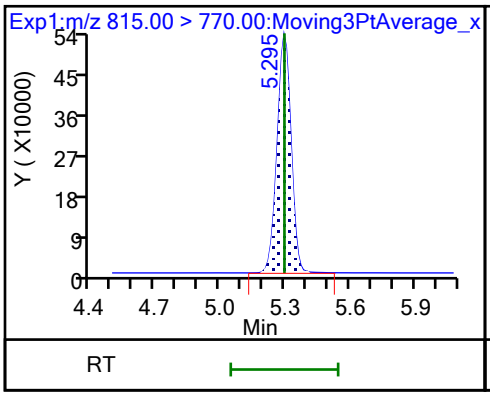
42 Perfluorotetradecanoic acid



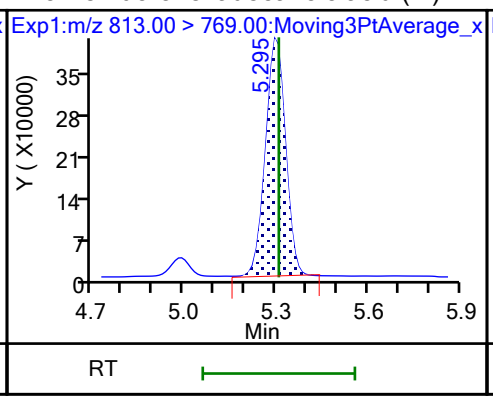
42 Perfluorotetradecanoic acid



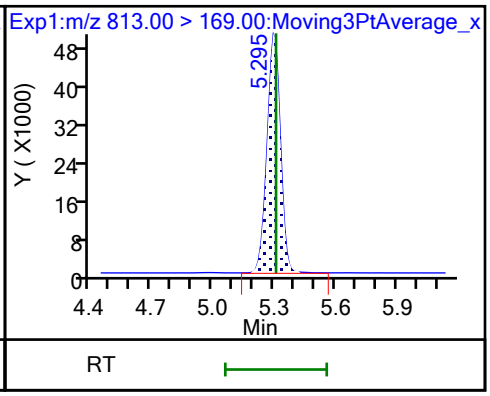
D 44 13C2 PFHxDA



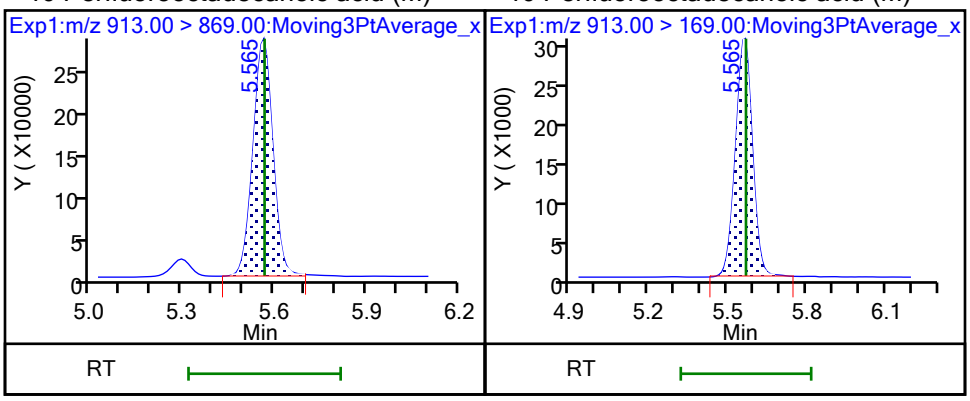
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.307		0.140	0.125	11.8	50.0
Perfluoropentanoic acid	AveID	1.079	1.232		0.0571	0.0500	14.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.213		0.0482	0.0444	8.6	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	4.068		0.0561	0.0469	19.8	50.0
Perfluorohexanoic acid	AveID	1.100	1.181		0.0537	0.0500	7.3	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.370		0.0494	0.0471	4.9	50.0
HFPODA	AveID	1.001	1.221		0.122	0.100	22.0	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.256		0.0518	0.0457	13.4	50.0
Perfluoroheptanoic acid	AveID	1.121	1.125		0.0502	0.0500	0.4	50.0
DONA	AveID	5.754	5.863		0.0481	0.0473	1.9	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.323		0.144	0.119	21.6	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.467		0.0484	0.0477	1.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.166		0.0548	0.0500	9.5	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.286		0.0512	0.0464	10.3	50.0
Perfluorononanoic acid	AveID	0.9800	1.016		0.0519	0.0500	3.7	50.0
9Cl-PF3ONS	AveID	3.569	3.899		0.0510	0.0467	9.2	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8088		0.0438	0.0481	-8.9	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.553		0.0557	0.0480	16.0	50.0
Perfluorodecanoic acid	AveID	0.999	1.000		0.0500	0.0500	0.0	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9624		0.0504	0.0500	0.9	50.0
NMeFOSAA	AveID	0.9074	1.102		0.152	0.125	21.5	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6279		0.0444	0.0483	-8.1	50.0
Perfluoroundecanoic acid	AveID	1.031	1.029		0.0499	0.0500	-0.2	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.125		0.141	0.125	12.5	50.0
11Cl-PF3OUdS	AveID	5.474	6.210		0.0535	0.0472	13.5	50.0
Perfluorododecanoic acid	AveID	1.018	1.030		0.0506	0.0500	1.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.609		0.0589	0.0482	22.2	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2184		0.0457	0.0484	-5.6	50.0
Perfluorotridecanoic acid	AveID	1.070	1.269		0.0593	0.0500	18.7	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1170		0.0523	0.0500	4.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.235		0.0617	0.0500	23.4	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7816		0.0500	0.0500	0.0	50.0
13C4 PFBA	Ave	0.9917	1.038		1.31	1.25	4.7	
13C5 PFPeA	Ave	0.7696	0.7780		1.26	1.25	1.1	
13C3 PFBS	Ave	1.041	0.996		1.11	1.16	-4.3	
M2-4:2 FTS	Ave	0.1204	0.1093		1.06	1.17	-9.3	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8006		1.28	1.25	2.3	
13C3 HFPO-DA	Ave	0.1516	0.1454		1.20	1.25	-4.0	
18O2 PFHxS	Ave	0.7464	0.7550		1.20	1.18	1.2	
13C4 PFHpA	Ave	0.8590	0.9204		1.34	1.25	7.1	
M2-6:2 FTS	Ave	0.1551	0.1545		1.18	1.19	-0.4	
13C4 PFOA	Ave	0.9731	0.9523		1.22	1.25	-2.1	
13C4 PFOS	Ave	0.4742	0.4939		1.25	1.20	4.2	
13C5 PFNA	Ave	1.059	1.048		1.24	1.25	-1.1	
13C2 PFDA	Ave	1.109	1.041		1.17	1.25	-6.1	
M2-8:2 FTS	Ave	0.1744	0.1534		1.05	1.20	-12.0	
13C8 FOSA	Ave	0.9462	0.9336		1.23	1.25	-1.3	
d3-NMeFOSAA	Ave	0.2650	0.2548		1.20	1.25	-3.9	
13C2 PFUnA	Ave	1.047	1.088		1.30	1.25	4.0	
d5-NEtFOSAA	Ave	0.2552	0.2515		1.23	1.25	-1.4	
13C2 PFDoA	Ave	1.064	1.035		1.22	1.25	-2.7	
13C2 PFTeDA	Ave	1.059	1.014		1.20	1.25	-4.2	
13C2 PFHxDA	Ave	1.221	1.113		1.14	1.25	-8.8	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 26-Oct-2023 21:03:32 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057574-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 13:24:45 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1667

First Level Reviewer: nampitakw Date: 27-Oct-2023 12:19:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.131	0.0	0.607	2054138	1.31		105	1366	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.131	2.131	0.0	1.000	268511	0.1398		112	19.0	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1539344	1.26		101	1509	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	75830	0.0571		114	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1833232	1.11		95.7	72941	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	84851	0.0482	Target=2.06	109	78.8	M
298.90 > 99.00	2.467	2.467	0.0	1.000	40718		2.08(1.03-3.09)		19.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	32965	0.0561		120	315	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	201925	1.06		90.7	139	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1584164	1.28		102	1284	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	74832	0.0537	Target=14.12	107	14.9	M
313.00 > 119.00	2.797	2.797	0.0	1.000	6397		11.70(7.06-21.17)		6.7	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	77028	0.0494	Target=2.72	105	128	
349.00 > 99.00	2.797	2.797	0.0	0.887	26651		2.89(1.36-4.09)		61.8	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.897	0.0	0.996	28108	0.1220		122	222	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	287765	1.20		96.0	1168	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1413192	1.20		101	5945	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.153	0.0	1.000	68587	0.0518	Target=3.32	113	169	M
399.00 > 99.00	3.153	3.153	0.0	1.000	21002		3.27(1.66-4.98)		18.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.165	0.0	1.000	81947	0.0502	Target=4.17	100	19.2	M
363.00 > 169.00	3.153	3.165	-0.012	0.996	19395		4.23(2.09-6.26)		31.4	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	1821068	1.34		107	9840	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	216549	0.0481	Target=3.33	102	253	
377.00 > 85.00	3.199	3.199	0.0	0.838	55649		3.89(1.66-4.99)		97.4	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.502	0.0	0.917	54643	0.0484	Target=4.83	102	123	
449.00 > 99.00	3.493	3.502	-0.009	0.915	10155		5.38(2.41-7.24)		31.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	290445	1.18		99.6	600	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	96429	0.1442		122	104	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.512	0.0	1.000	87916	0.0548	Target=2.88	110	3.6	M
413.00 > 169.00	3.512	3.512	0.0	1.000	27579		3.19(1.44-4.32)		49.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.512	0.0	1.000	1884337	1.22		97.9	8541	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.512	0.0		1978630	1.25			12318	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.819	0.0	1.000	46664	0.0512	Target=4.24	110	101	M
499.00 > 99.00	3.808	3.819	-0.011	0.997	10051		4.64(2.12-6.37)		26.4	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.819	0.0	1.088	934177	1.24		104	3103	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.842	0.0	1.000	84262	0.0519	Target=8.34	104	13.5	
463.00 > 169.00	3.842	3.842	0.0	1.000	8391		10.04(4.17-12.51)		61.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.094	2072676	1.24		98.9	5533	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.971	3.971	0.0	1.040	142187	0.0510		109	619	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.101	4.101	0.0	1.074	30412	0.0438	Target=2.17	91.1	379	M
549.00 > 99.00	4.101	4.101	0.0	1.074	12431		2.45(1.08-3.25)		55.8	
D 23 13C2 PFDA										
515.00 > 470.00	4.125	4.125	0.0	1.175	2060552	1.17		93.9	10196	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.136	0.0	1.003	82424	0.0500	Target=11.44	100	21.3	
513.00 > 169.00	4.125	4.136	-0.011	1.000	10789		7.64(5.72-17.16)		52.6	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.136	0.0	1.000	29767	0.0557		116	290	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.136	0.0	1.178	290857	1.05		88.0	737	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.205	1847283	1.23		98.7	6873	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.230	4.230	0.0	1.000	71115	0.0504		101	506	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.266	0.0	1.215	504175	1.20		96.1	1733	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.266	0.0	1.000	55582	0.1519		121	158	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.351	4.351	0.0	1.139	23685	0.0444	Target=2.37	91.9	208	
599.00 > 99.00	4.351	4.351	0.0	1.139	10917		2.17(1.19-3.56)		99.5	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.249	2153250	1.30		104	9920	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.387	0.0	1.000	88595	0.0499	Target=12.20	99.8	21.8	M
563.00 > 169.00	4.387	4.387	0.0	1.000	8100		10.94(6.10-18.31)		55.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.253	497581	1.23		98.6	898	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.399	0.0	1.000	55982	0.1406		112	210	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.468	0.0	1.170	228912	0.0535		113	446	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.313	2047635	1.22		97.3	4419	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.610	0.0	1.000	84345	0.0506	Target=8.47	101	5.7	M
613.00 > 169.00	4.599	4.610	-0.011	0.998	9299		9.07(4.23-12.70)		79.6	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.621	0.0	1.117	18834	0.0589		122	322	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.764	4.764	0.0	1.248	8265	0.0457	Target=0.48	94.4	107	
699.00 > 99.00	4.764	4.764	0.0	1.248	17651		0.47(0.24-0.72)		261	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.803	0.0	1.042	103978	0.0593	Target=6.41	119	7.0	
663.00 > 169.00	4.803	4.803	0.0	1.042	14615		7.11(3.21-9.62)		199	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.980	0.0	1.418	2007031	1.20		95.8	6419	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.980	0.0	1.000	9391	0.0523	Target=0.87	105	119	
713.00 > 219.00	4.980	4.980	0.0	1.000	9666		0.97(0.43-1.30)		214	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.508	2201944	1.14		91.2	5047	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.296	0.0	1.000	108735	0.0617	Target=7.89	123	7.9	M
813.00 > 169.00	5.296	5.296	0.0	1.000	12052		9.02(3.94-11.83)		140	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.567	5.567	0.0	1.051	68840	0.0500	Target=9.39	100	9.5	M
913.00 > 169.00	5.567	5.567	0.0	1.051	7125		9.66(4.69-14.08)		180	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

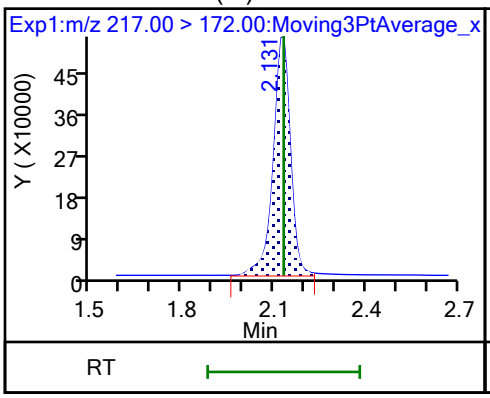
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 13:24:45 Chrom Revision: 2.3 18-Oct-2023 21:16:54

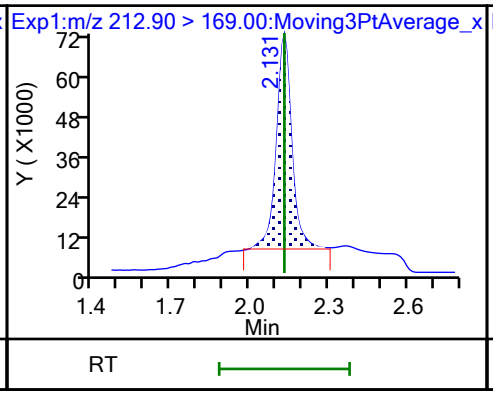
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Injection Date: 26-Oct-2023 21:03:32 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

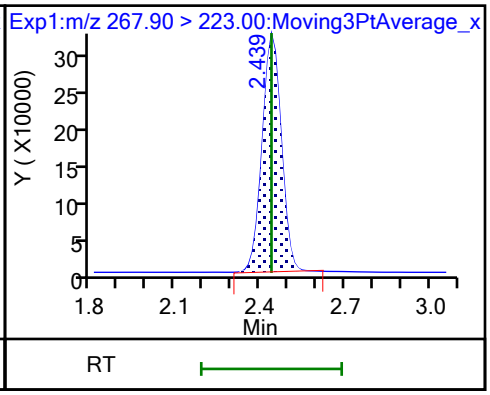
D 1 13C4 PFBA (M)



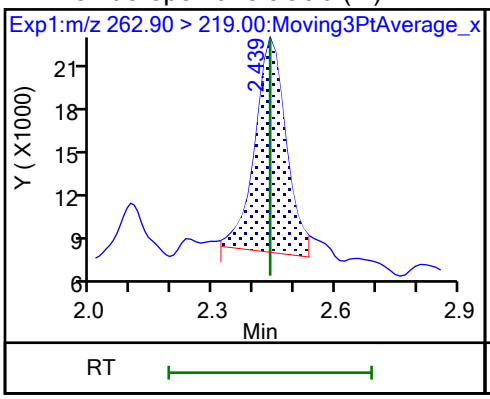
2 Perfluorobutanoic acid



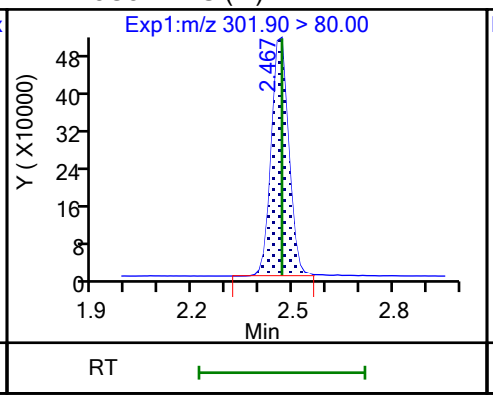
D 3 13C5 PFPeA



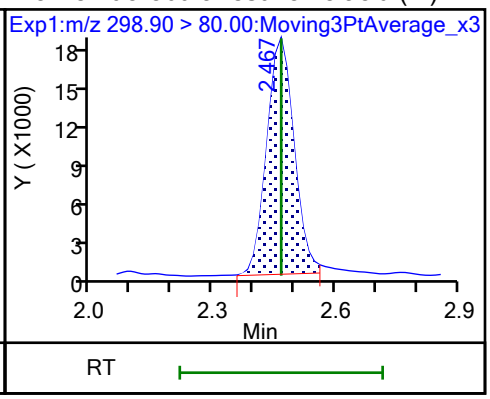
4 Perfluoropentanoic acid (M)



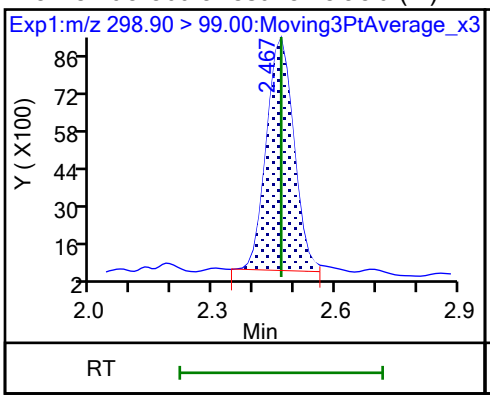
D 47 13C3 PFBS (M)



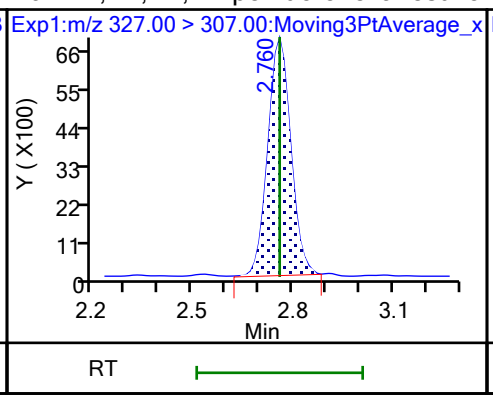
5 Perfluorobutanesulfonic acid (M)



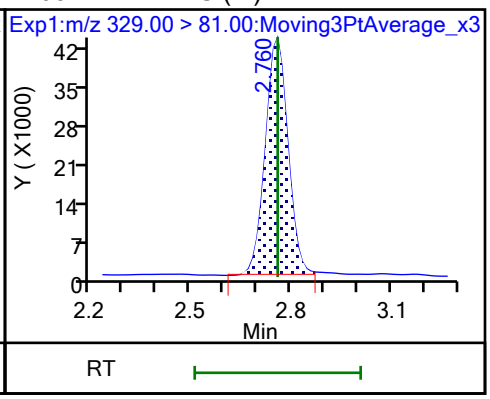
5 Perfluorobutanesulfonic acid (M)



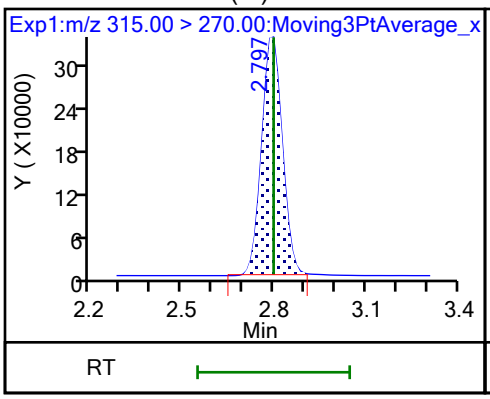
61 1H,1H,2H,2H-perfluorohexanesulfo



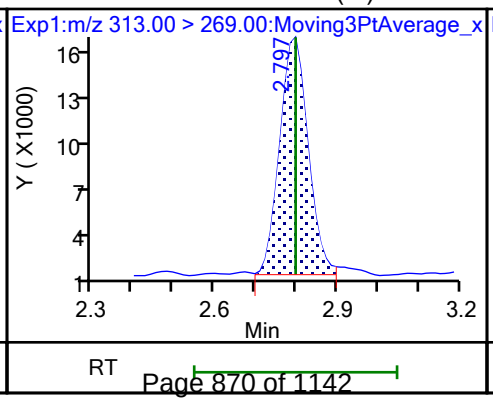
D 60 M2-4:2 FTS (M)



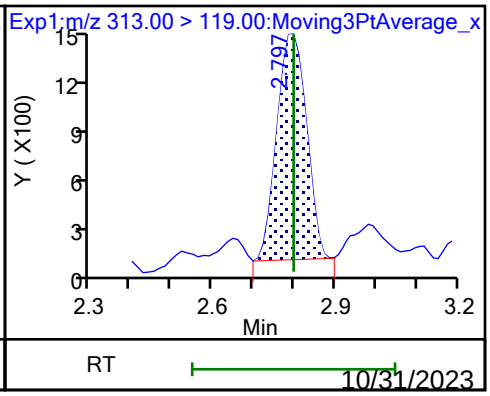
D 7 13C2 PFHxA (M)



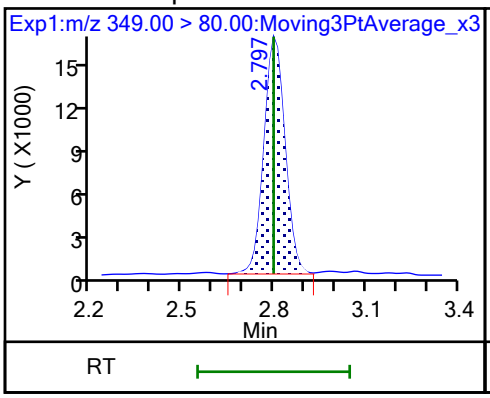
6 Perfluorohexanoic acid (M)



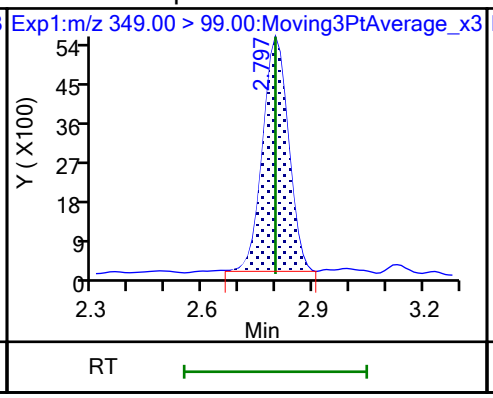
6 Perfluorohexanoic acid



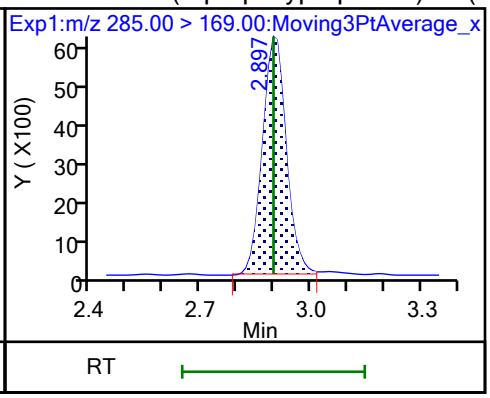
70 Perfluoropentanesulfonic acid



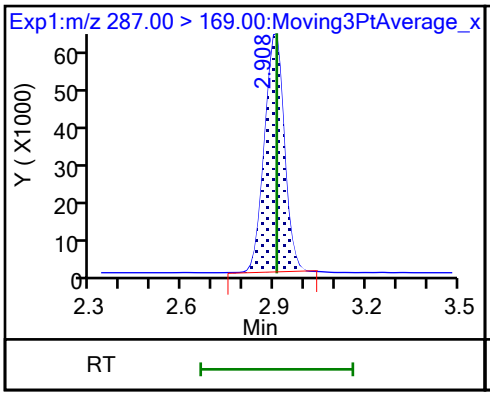
70 Perfluoropentanesulfonic acid



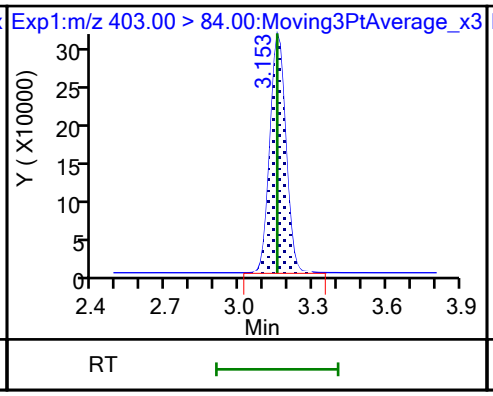
67 Perfluoro(2-propoxypropanoic) ac (M)



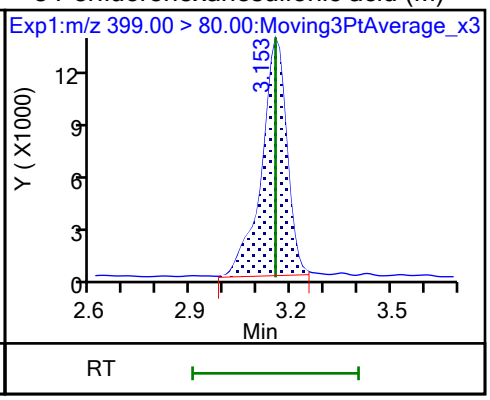
D 64 13C3 HFPO-DA



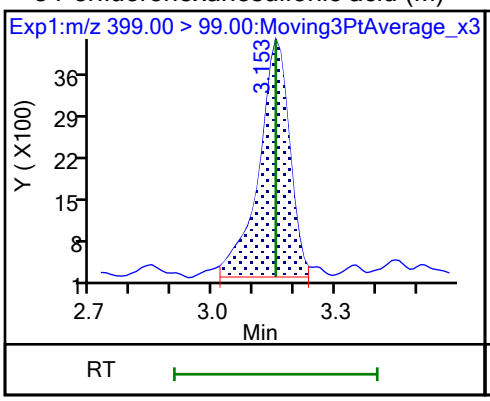
D 11 18O2 PFHxS



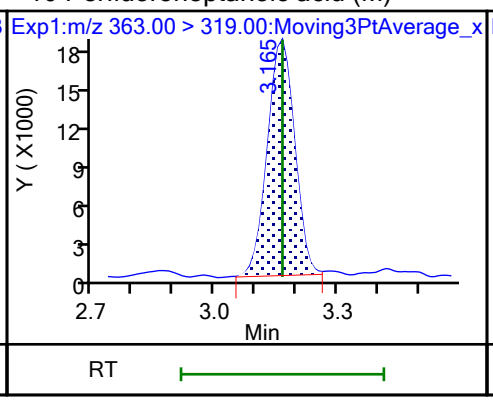
8 Perfluorohexanesulfonic acid (M)



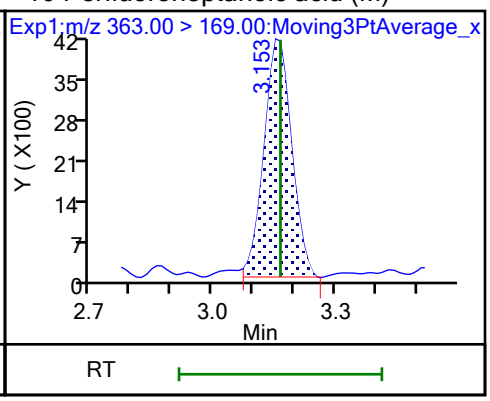
8 Perfluorohexanesulfonic acid (M)



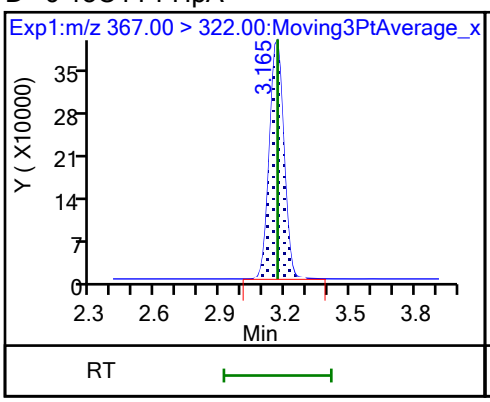
10 Perfluoroheptanoic acid (M)



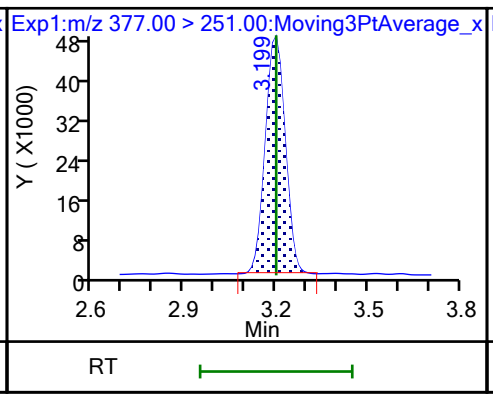
10 Perfluoroheptanoic acid (M)



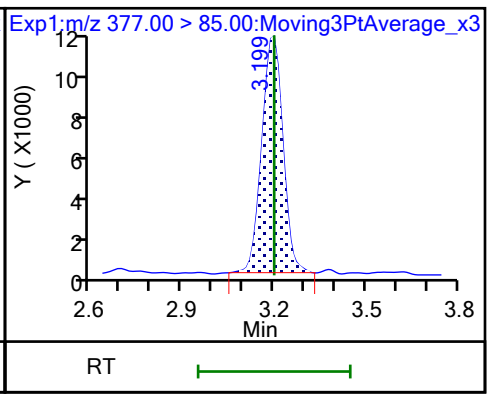
D 9 13C4 PFHpA



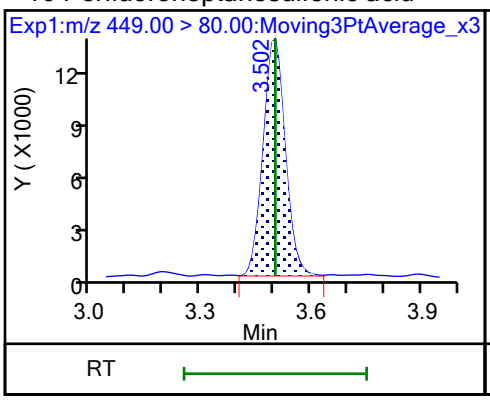
77 DONA



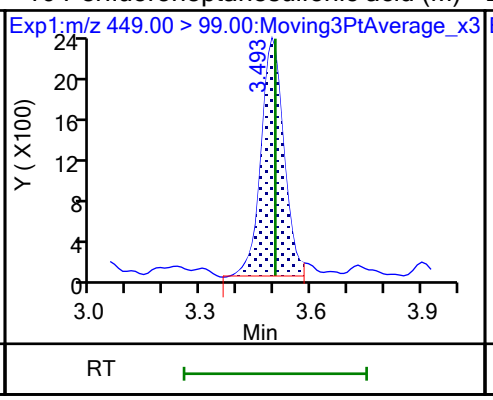
77 DONA



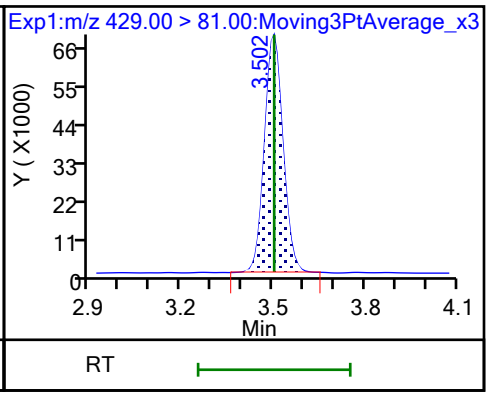
16 Perfluoroheptanesulfonic acid



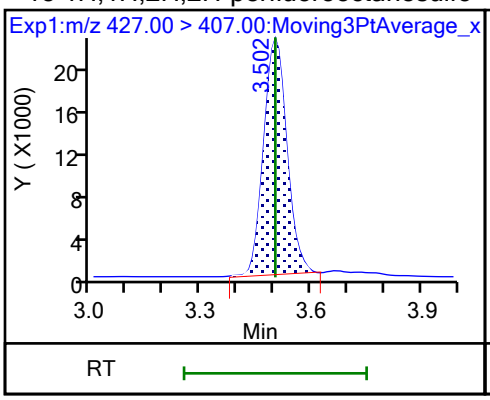
16 Perfluoroheptanesulfonic acid (M)



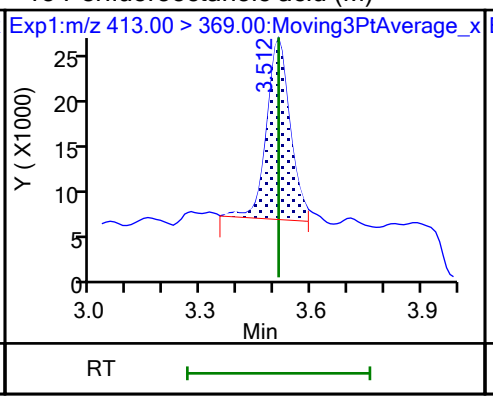
D 12 M2-6:2 FTS



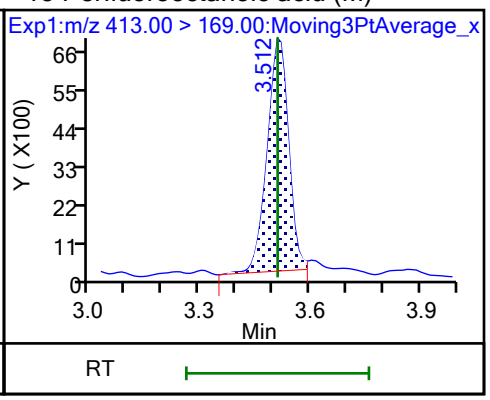
13 1H,1H,2H,2H-perfluorooctanesulfo



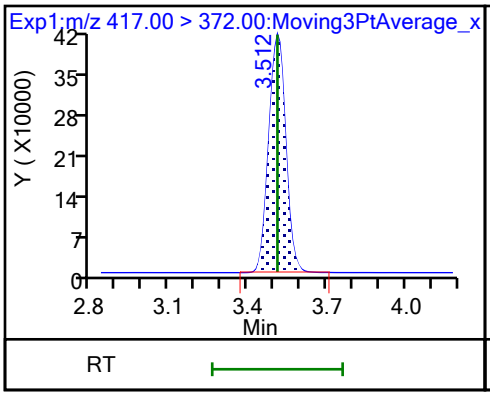
15 Perfluorooctanoic acid (M)



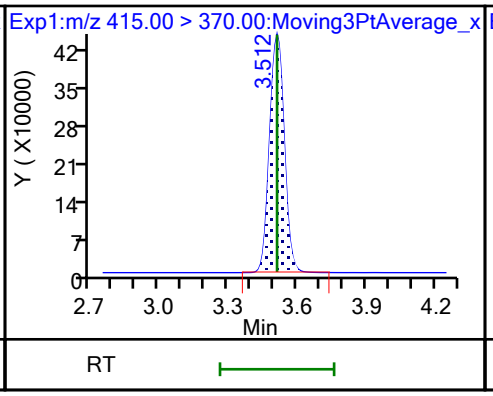
15 Perfluorooctanoic acid (M)



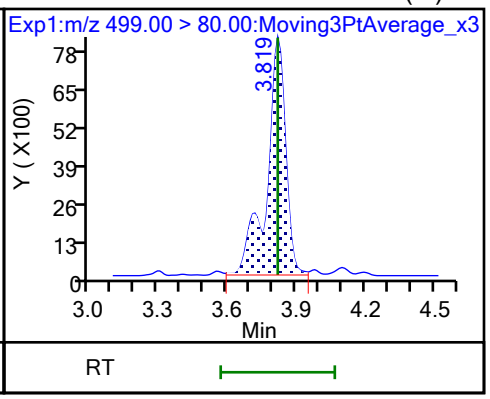
D 14 13C4 PFOA



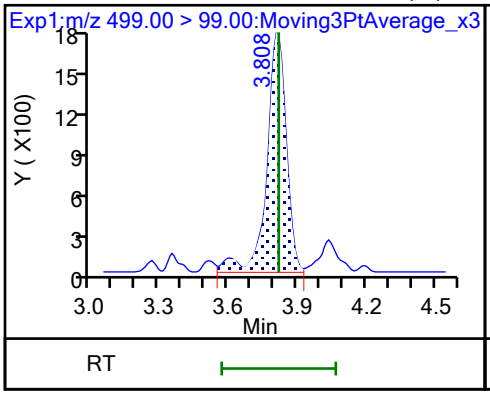
* 62 13C2 PFOA



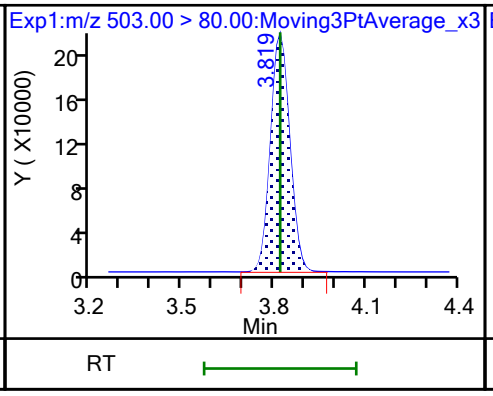
17 Perfluorooctanesulfonic acid (M)



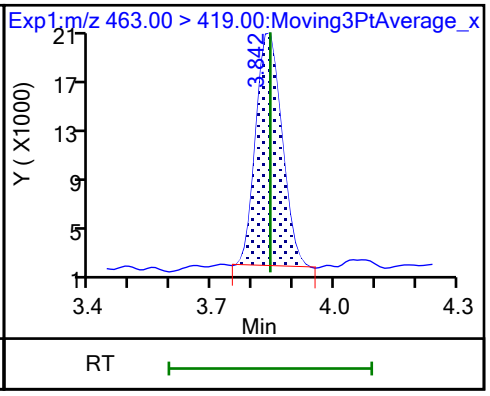
17 Perfluorooctanesulfonic acid (M)



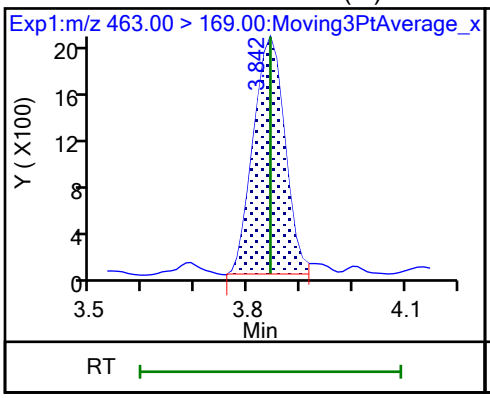
D 18 13C4 PFOS



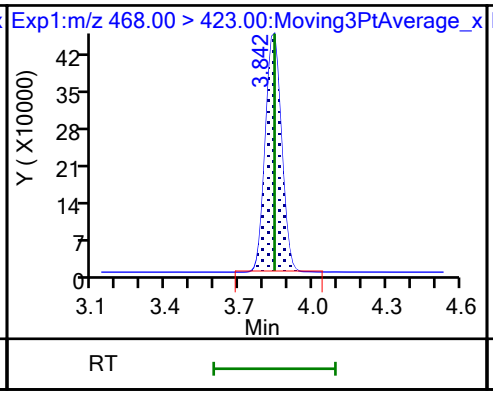
20 Perfluorononanoic acid



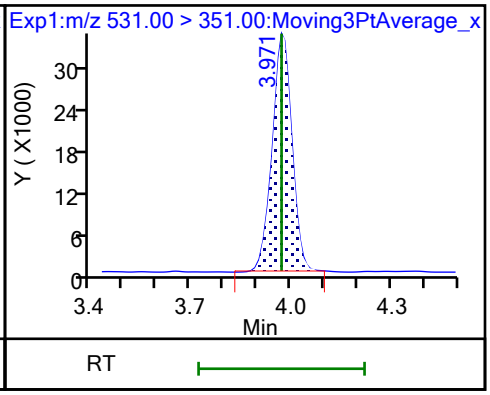
20 Perfluorononanoic acid (M)



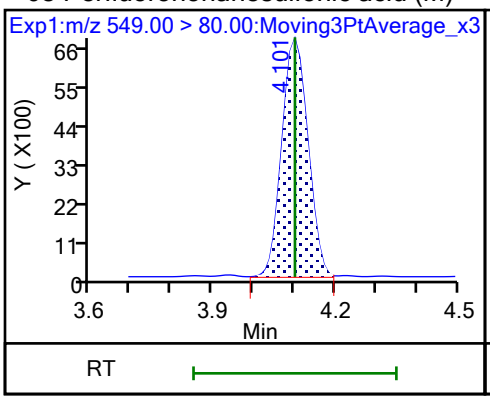
D 19 13C5 PFNA



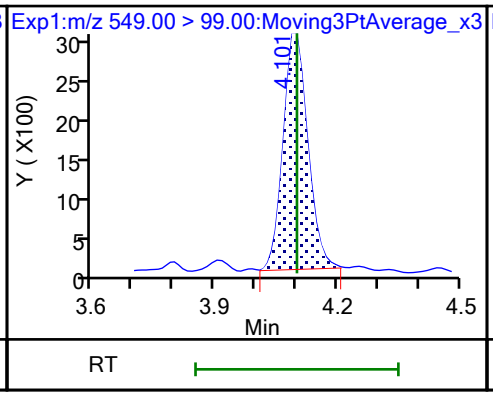
69 9-Chlorohexadecafluoro-3-oxanona



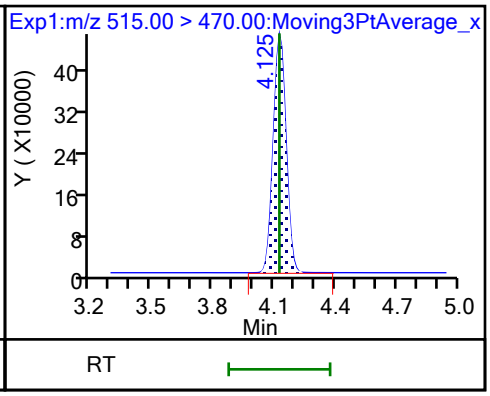
68 Perfluorononanesulfonic acid (M)



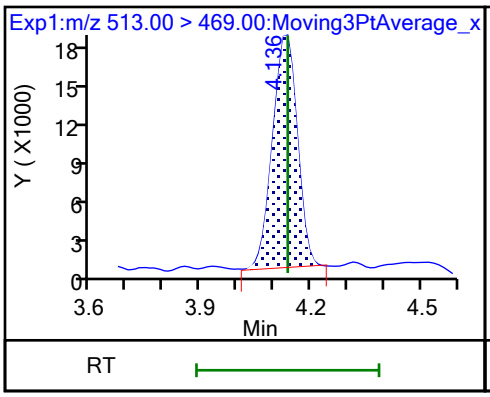
68 Perfluorononanesulfonic acid



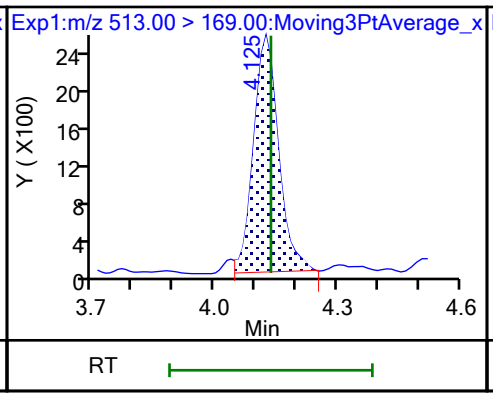
D 23 13C2 PFDA



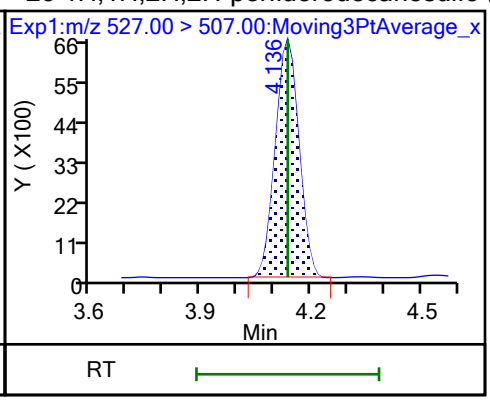
24 Perfluorodecanoic acid



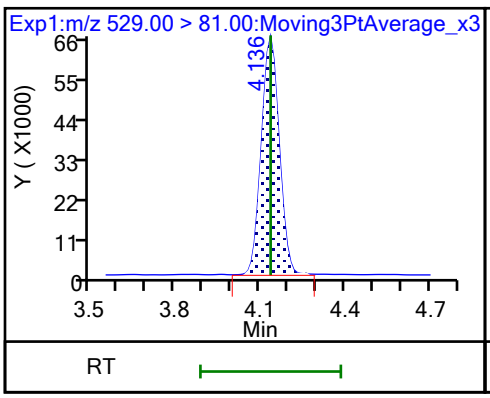
24 Perfluorodecanoic acid



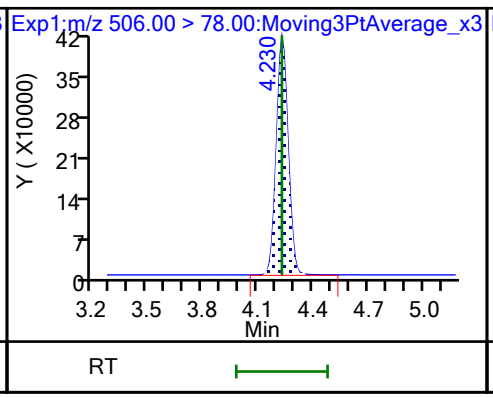
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



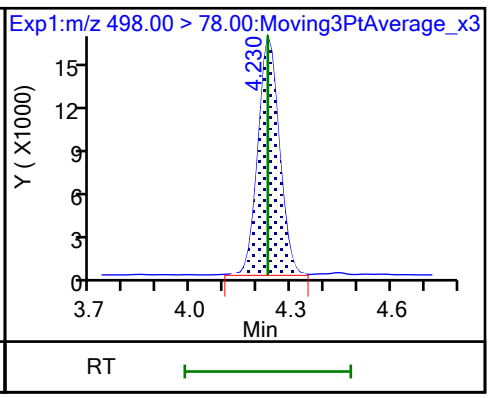
D 26 M2-8:2 FTS



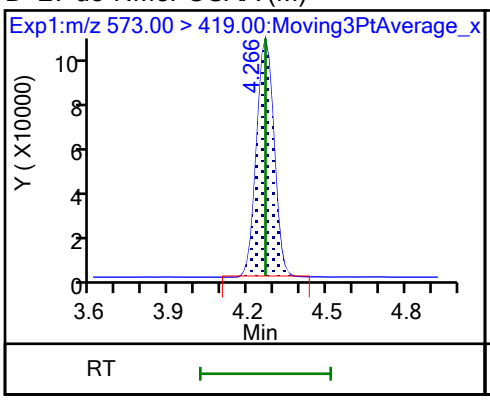
D 21 13C8 FOSA



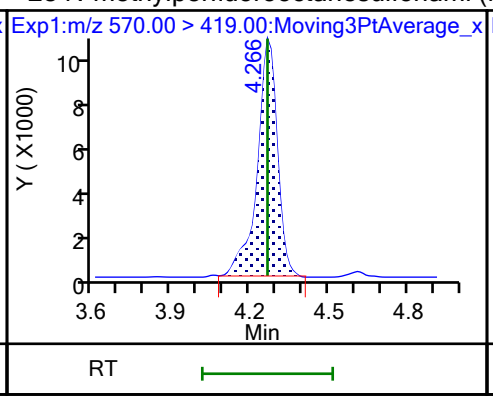
22 Perfluorooctanesulfonamide



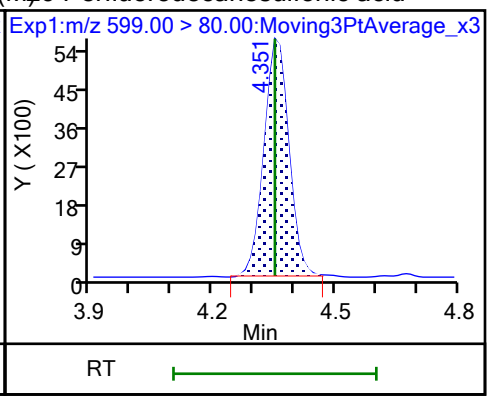
D 27 d3-NMeFOSAA (M)



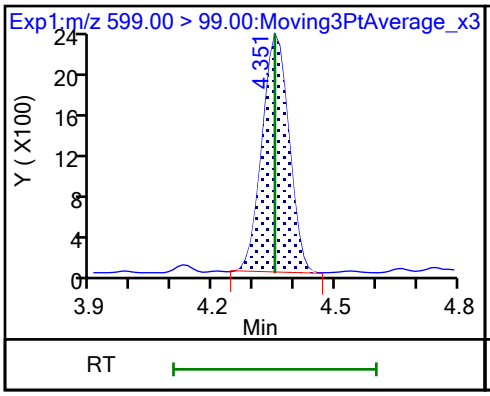
28 N-methylperfluorooctanesulfonami (M)



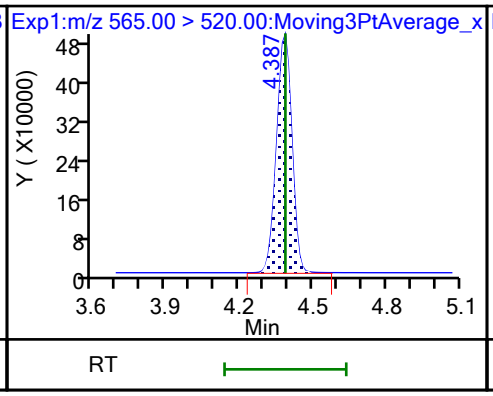
29 Perfluorodecanesulfonic acid



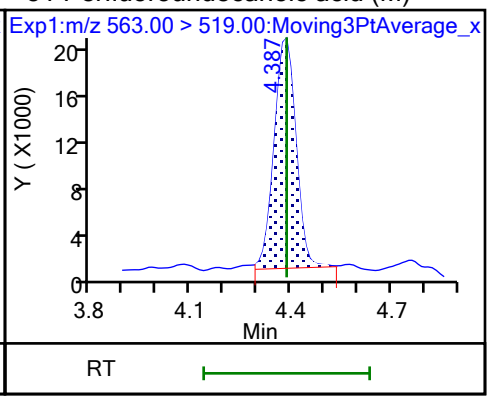
29 Perfluorodecanesulfonic acid



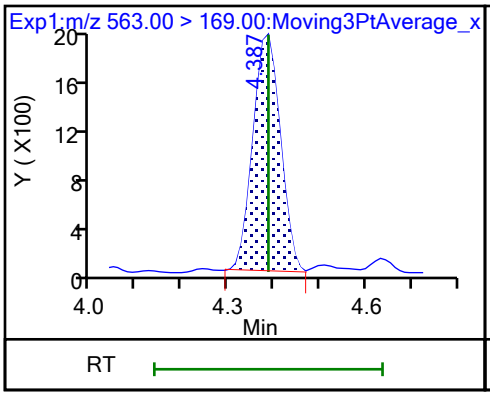
D 30 13C2 PFUnA



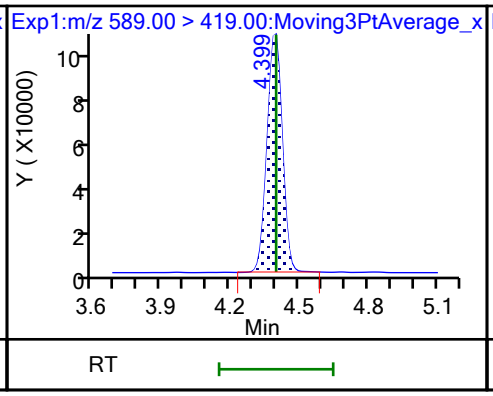
31 Perfluoroundecanoic acid (M)



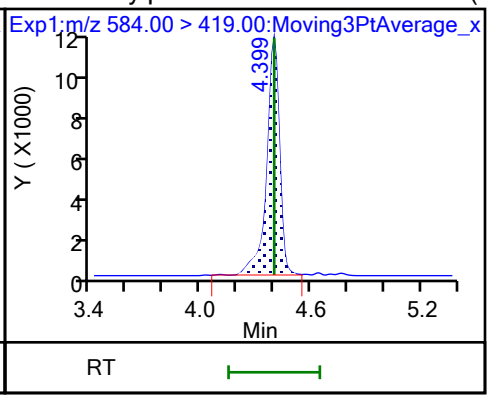
31 Perfluoroundecanoic acid



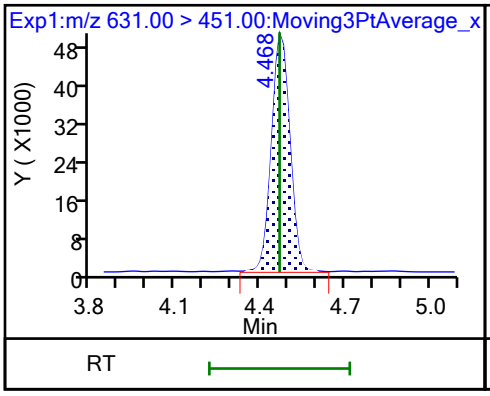
D 32 d5-NEtFOSAA



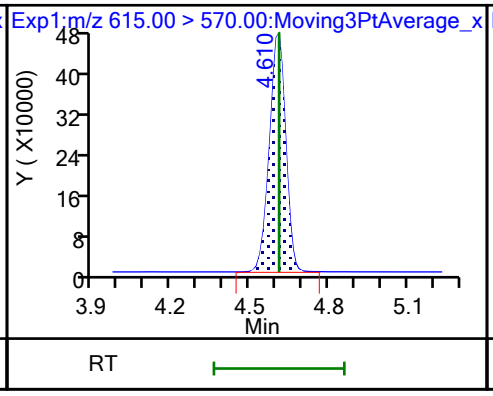
33 N-ethylperfluorooctanesulfonamid (M)



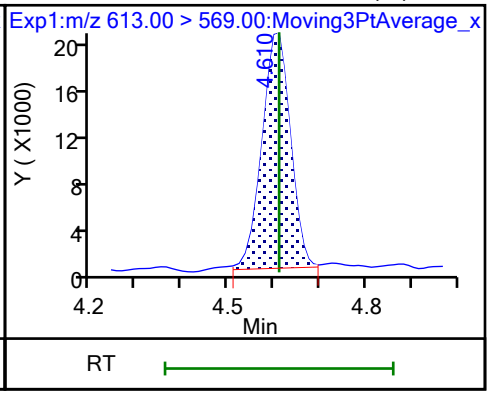
66 11-Chloroeicosafluoro-3-oxaundec



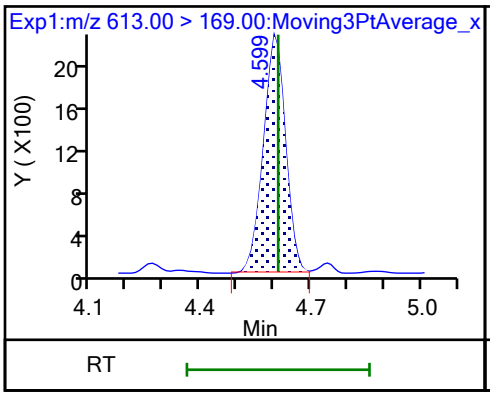
D 36 13C2 PFDoA



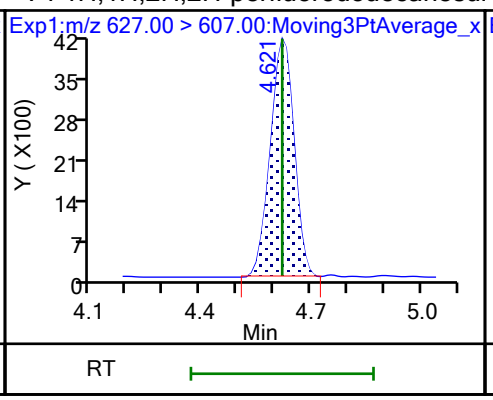
37 Perfluorododecanoic acid (M)



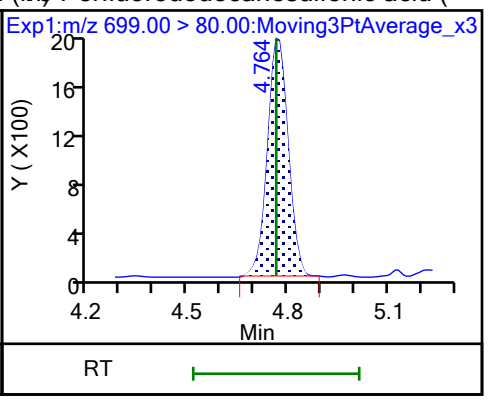
37 Perfluorododecanoic acid



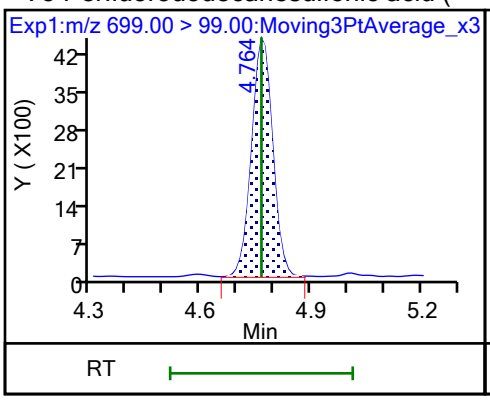
74 1H,1H,2H,2H-perfluorododecanesul (M)



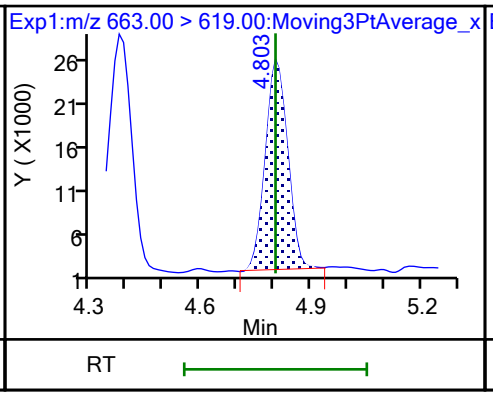
75 Perfluorododecanesulfonic acid (



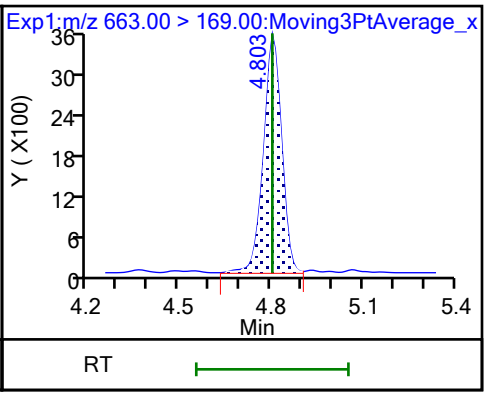
75 Perfluorododecanesulfonic acid (



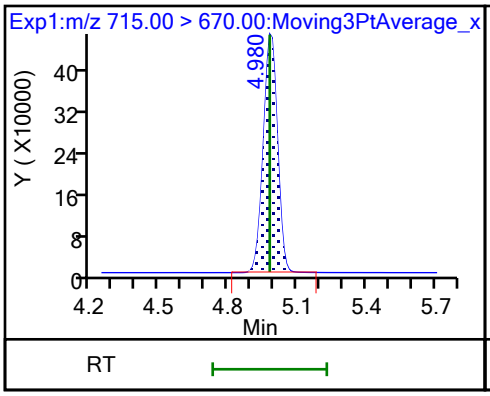
41 Perfluorotridecanoic acid



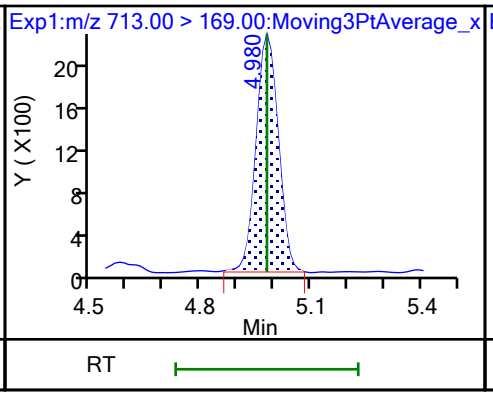
41 Perfluorotridecanoic acid



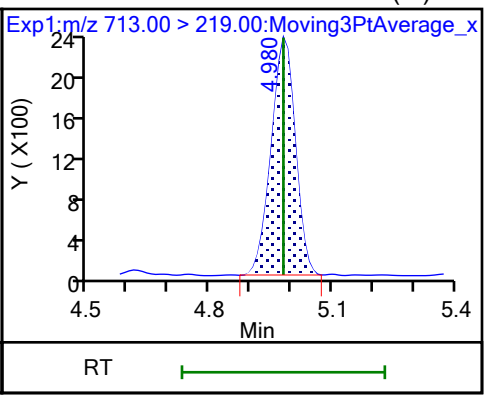
D 43 13C2 PFTeDA



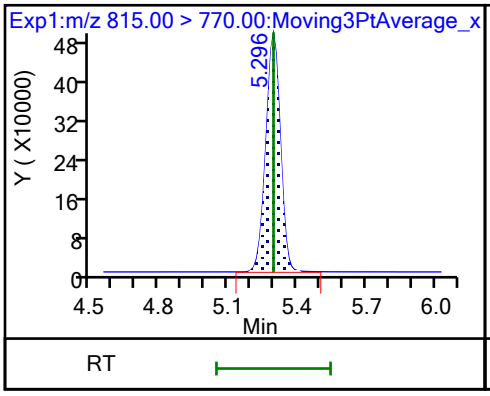
42 Perfluorotetradecanoic acid



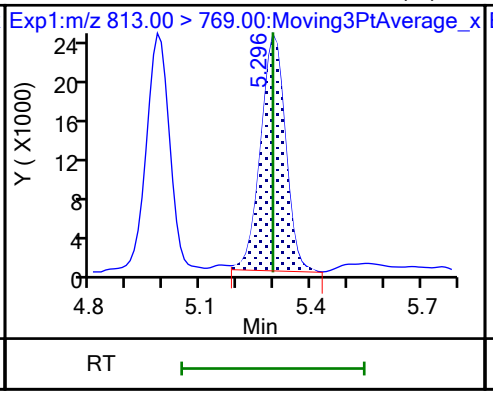
42 Perfluorotetradecanoic acid (M)



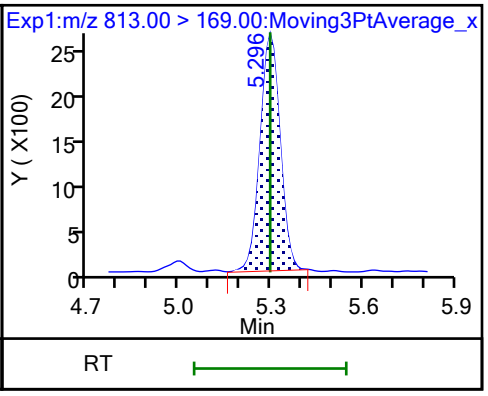
D 44 13C2 PFHxDA



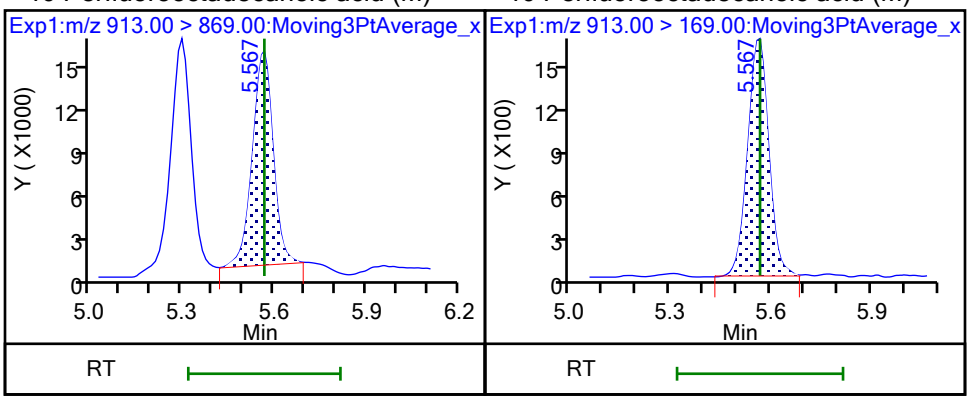
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8845		0.937	1.00	-6.3	30.0
Perfluoropentanoic acid	AveID	1.079	1.002		0.929	1.00	-7.1	
Perfluorobutanesulfonic acid	AveID	1.117	1.084		0.861	0.887	-3.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.411		0.941	0.937	0.4	
Perfluorohexanoic acid	AveID	1.100	0.9258		0.841	1.00	-15.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.302		0.938	0.941	-0.3	
HFPODA	AveID	1.001	1.007		1.01	1.00	0.6	
Perfluoroheptanoic acid	AveID	1.121	1.025		0.914	1.00	-8.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.028		0.849	0.914	-7.2	
DONA	AveID	5.754	5.442		0.894	0.945	-5.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.675		0.931	0.951	-2.1	
Perfluoroheptanesulfonic acid	AveID	1.445	1.337		0.882	0.953	-7.5	
Perfluorooctanoic acid	AveID	1.065	0.9783		0.918	1.00	-8.2	
Perfluorooctanesulfonic acid	AveID	1.166	1.066		0.848	0.928	-8.6	
Perfluorononanoic acid	AveID	0.9800	0.8904		0.908	1.00	-9.2	
9Cl-PF3ONS	AveID	3.569	3.655		0.955	0.933	2.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7591		0.823	0.962	-14.5	
Perfluorodecanoic acid	AveID	0.999	0.9170		0.918	1.00	-8.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.245		0.979	0.960	2.0	
Perfluorooctanesulfonamide	AveID	0.9539	0.9694		1.02	1.00	1.6	
NMeFOSAA	AveID	0.9074	0.9155		1.01	1.00	0.9	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5933		0.838	0.965	-13.1	
Perfluoroundecanoic acid	AveID	1.031	1.129		1.10	1.00	9.5	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9949		0.995	1.00	-0.5	
11Cl-PF3OUdS	AveID	5.474	5.626		0.969	0.943	2.8	
Perfluorododecanoic acid	AveID	1.018	0.9187		0.903	1.00	-9.7	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.314		0.963	0.964	-0.1	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2133		0.892	0.968	-7.8	
Perfluorotridecanoic acid	AveID	1.070	1.003		0.937	1.00	-6.3	
Perfluorotetradecanoic acid	AveID	0.1118	0.1057		0.946	1.00	-5.4	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9895		0.989	1.00	-1.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7205		0.923	1.00	-7.7	
13C4 PFBA	Ave	0.9917	1.084		1.37	1.25	9.3	
13C5 PFPeA	Ave	0.7696	0.7787		1.27	1.25	1.2	
13C3 PFBS	Ave	1.041	1.008		1.13	1.16	-3.2	
M2-4:2 FTS	Ave	0.1204	0.1105		1.07	1.17	-8.2	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8015		1.28	1.25	2.4	
13C3 HFPO-DA	Ave	0.1516	0.1441		1.19	1.25	-4.9	
13C4 PFHpA	Ave	0.8590	0.9113		1.33	1.25	6.1	50.0
18O2 PFHxS	Ave	0.7464	0.7317		1.16	1.18	-2.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1472		1.13	1.19	-5.1	
13C4 PFOA	Ave	0.9731	0.9842		1.26	1.25	1.1	50.0
13C4 PFOS	Ave	0.4742	0.4824		1.22	1.20	1.7	50.0
13C5 PFNA	Ave	1.059	1.102		1.30	1.25	4.1	50.0
13C2 PFDA	Ave	1.109	1.124		1.27	1.25	1.3	
M2-8:2 FTS	Ave	0.1744	0.1633		1.12	1.20	-6.3	
13C8 FOSA	Ave	0.9462	0.8662		1.14	1.25	-8.5	
d3-NMeFOSAA	Ave	0.2650	0.2633		1.24	1.25	-0.6	
13C2 PFUnA	Ave	1.047	0.9382		1.12	1.25	-10.4	
d5-NEtFOSAA	Ave	0.2552	0.2483		1.22	1.25	-2.7	
13C2 PFDoA	Ave	1.064	1.068		1.26	1.25	0.4	
13C2 PFTeDA	Ave	1.059	0.9784		1.15	1.25	-7.6	
13C2 PFHxDA	Ave	1.221	1.073		1.10	1.25	-12.1	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 10:08:01 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057578-001 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:39:49
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	2275064	1.37		109	14777	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	1609883	0.9373		93.7	123	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1634357	1.26		101	2148	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	1310252	0.9286		92.9	37.8	
D 47 13C3 PFBS										
301.90 > 80.00	2.453	2.467	-0.014	0.697	1967633	1.13		96.8	184829	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.006	1627370	0.8608	Target=2.06	97.0	2450	
298.90 > 99.00	2.466	2.467	-0.001	1.006	807201		2.02(1.03-3.09)		414	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.757	2.760	-0.003	1.000	592851	0.9411		100	3437	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.784	216590	1.07		91.8	161	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.797	-0.002	0.794	1682082	1.28		102	3385	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.795	2.797	-0.002	1.000	1245813	0.8413	Target=14.12	84.1	278	
313.00 > 119.00	2.795	2.797	-0.002	1.000	94484		13.19(7.06-21.17)		116	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.807	2.797	0.010	0.888	1505539	0.9384	Target=2.72	99.7	3515	
349.00 > 99.00	2.795	2.797	-0.002	0.884	524410		2.87(1.36-4.09)		1013	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.897	0.008	1.000	243662	1.01		101	2981	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.826	302365	1.19		95.1	1027	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.153	0.009	0.899	1452715	1.16		98.0	6427	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.162	3.153	0.009	1.000	1154067	0.8486	Target=3.32	92.8	2711	
399.00 > 99.00	3.162	3.153	0.009	1.000	349326		3.30(1.66-4.98)		346	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.162	3.165	-0.003	1.000	1568062	0.9143	Target=4.17	91.4	384	
363.00 > 169.00	3.162	3.165	-0.003	1.000	399811		3.92(2.09-6.26)		673	
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.165	-0.003	0.899	1912570	1.33		106	6299	
77 DONA										
377.00 > 251.00	3.196	3.199	-0.003	0.836	4164940	0.8937	Target=3.33	94.6	4632	
377.00 > 85.00	3.196	3.199	-0.003	0.836	1057463		3.94(1.66-4.99)		1726	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.501	3.502	-0.001	0.915	1032239	0.8819	Target=4.83	92.5	4894	
449.00 > 99.00	3.501	3.502	-0.001	0.915	201535		5.12(2.41-7.24)		892	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.502	-0.001	0.995	293481	1.13		94.9	631	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.501	3.502	-0.001	1.000	628674	0.9307		97.9	1525	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.510	3.512	-0.002	0.997	1616503	0.9185	Target=2.88	91.8	70.4	
413.00 > 169.00	3.519	3.512	0.007	1.000	595616		2.71(1.44-4.32)		1043	
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.512	0.007	1.000	2065460	1.26		101	3653	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.512	0.007		2098703	1.25			5518	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.819	0.005	1.000	801537	0.8485	Target=4.24	91.4	1743	M
499.00 > 99.00	3.824	3.819	0.005	1.000	175470		4.57(2.12-6.37)		555	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.819	0.005	1.087	967818	1.22		102	5141	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.842	-0.006	1.000	1647748	0.9085	Target=8.34	90.8	261	
463.00 > 169.00	3.836	3.842	-0.006	1.000	193445		8.52(4.17-12.51)		1043	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.842	-0.006	1.090	2313282	1.30		104	7815	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.971	0.006	1.040	2761509	0.9553		102	5779	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.108	4.101	0.007	1.074	591463	0.8230	Target=2.17	85.5	3361	
549.00 > 99.00	4.096	4.101	-0.005	1.071	246199		2.40(1.08-3.25)		975	
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.125	0.007	1.174	2357959	1.27		101	11804	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.136	-0.004	1.000	1729777	0.9176	Target=11.44	91.8	542	
513.00 > 169.00	4.132	4.136	-0.004	1.000	169079		10.23(5.72-17.16)		990	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.144	4.136	0.008	1.000	590917	0.9788		102	3088	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.136	0.008	1.178	328393	1.12		93.7	1040	
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.230	0.007	1.204	1817949	1.14		91.5	4046	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.230	0.007	1.000	1409809	1.02		102	2897	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.266	0.007	1.214	552638	1.24		99.4	2863	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.273	4.266	0.007	1.000	404763	1.01		101	550	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.358	4.351	0.007	1.139	463690	0.8383	Target=2.37	86.9	6020	
599.00 > 99.00	4.358	4.351	0.007	1.139	180684		2.57(1.19-3.56)		1820	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.387	-0.006	1.245	1968994	1.12		89.6	7624	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.387	-0.006	1.000	1778460	1.10	Target=12.20	110	456	
563.00 > 169.00	4.381	4.387	-0.006	1.000	139905		12.71(6.10-18.31)		1361	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.399	-0.006	1.249	521030	1.22		97.3	801	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.405	4.399	0.006	1.003	414687	0.99		99.5	3987	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.468	0.009	1.171	4297045	0.9693		103	3676	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.610	-0.005	1.309	2242309	1.26		100	8638	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.610	-0.005	1.000	1647921	0.9026	Target=8.47	90.3	99.1	
613.00 > 169.00	4.605	4.610	-0.005	1.000	206263		7.99(4.23-12.70)		3012	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.621	0.006	1.117	347422	0.9627		99.9	4533	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.764	0.006	1.247	167251	0.8922	Target=0.48	92.2	2743	
699.00 > 99.00	4.770	4.764	0.006	1.247	339439		0.49(0.24-0.72)		5849	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.803	0.005	1.044	1798382	0.9371	Target=6.41	93.7	81.6	
663.00 > 169.00	4.799	4.803	-0.004	1.042	273816		6.57(3.21-9.62)		1529	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.980	0.007	1.417	2053279	1.15		92.4	5747	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.987	4.980	0.007	1.000	173695	0.9457	Target=0.87	94.6	2394	
713.00 > 219.00	4.976	4.980	-0.004	0.998	187778		0.93(0.43-1.30)		2095	

Report Date: 27-Oct-2023 18:44:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.294	5.296	-0.002	1.505	2251339	1.10		87.9	5273	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.294	5.296	-0.002	1.000	1782230	0.9895	Target=7.89	98.9	109	
813.00 > 169.00	5.294	5.296	-0.002	1.000	223547		7.97(3.94-11.83)		1890	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.565	5.567	-0.002	1.051	1297759	0.9227	Target=9.39	92.3	133	
913.00 > 169.00	5.565	5.567	-0.002	1.051	135453		9.58(4.69-14.08)		1105	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

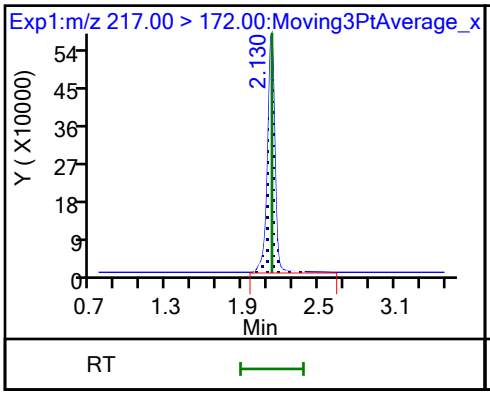
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:44:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54

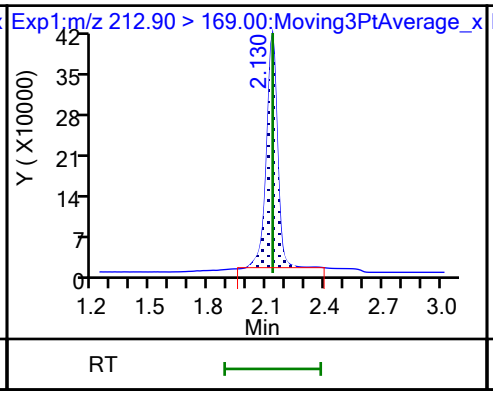
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Injection Date: 27-Oct-2023 10:08:01 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

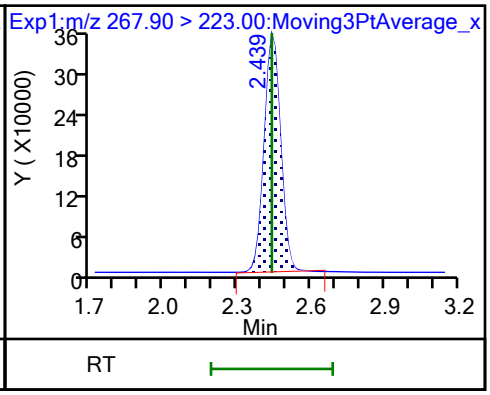
D 1 13C4 PFBA



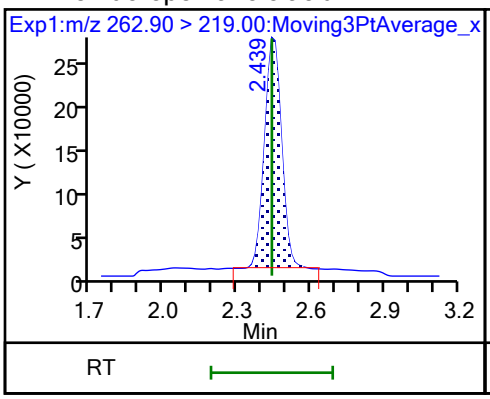
2 Perfluorobutanoic acid



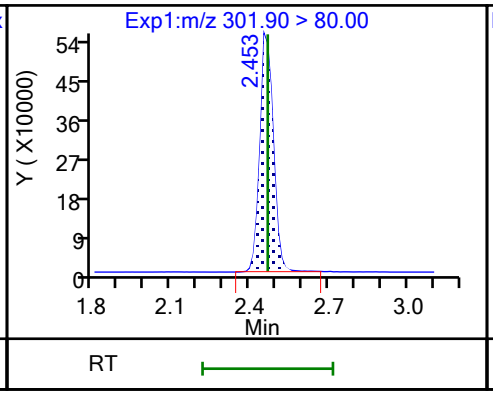
D 3 13C5 PFPeA



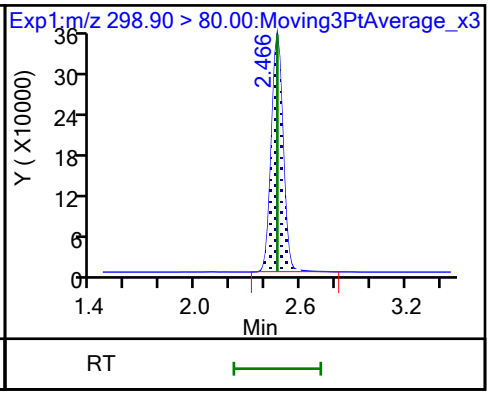
4 Perfluoropentanoic acid



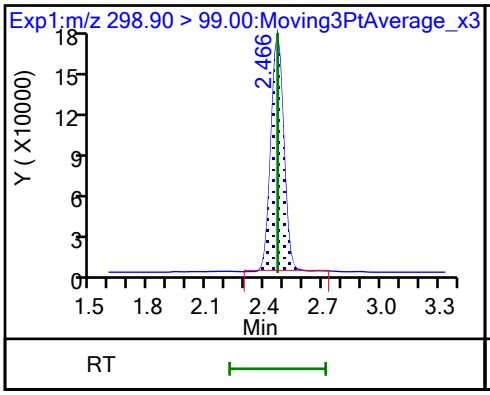
D 47 13C3 PFBS



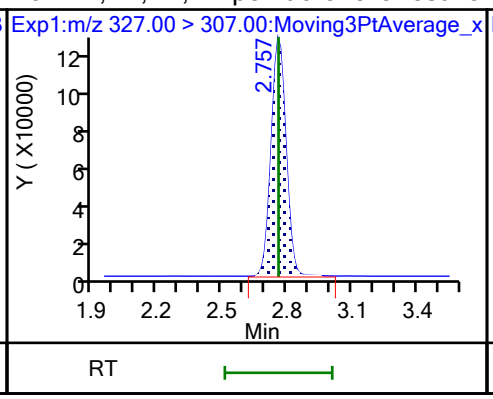
5 Perfluorobutanesulfonic acid



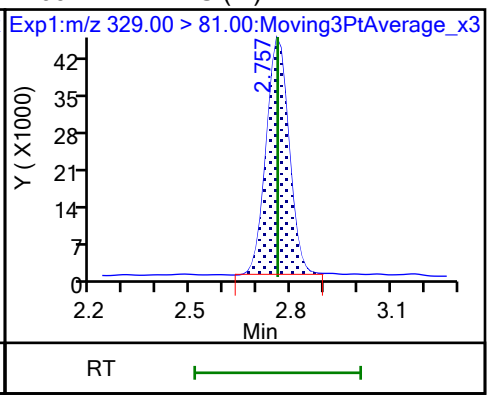
5 Perfluorobutanesulfonic acid



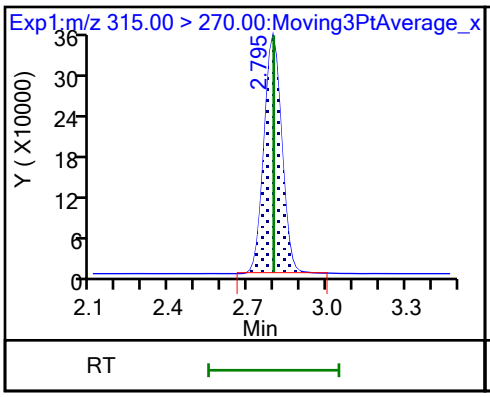
61 1H,1H,2H,2H-perfluorohexanesulfo



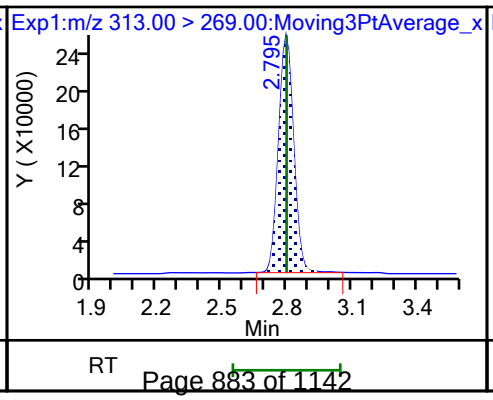
D 60 M2-4:2 FTS (M)



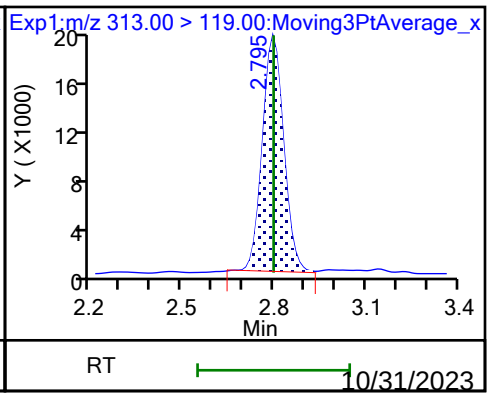
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

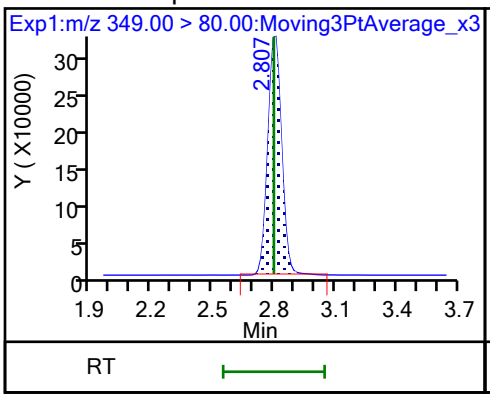


6 Perfluorohexanoic acid

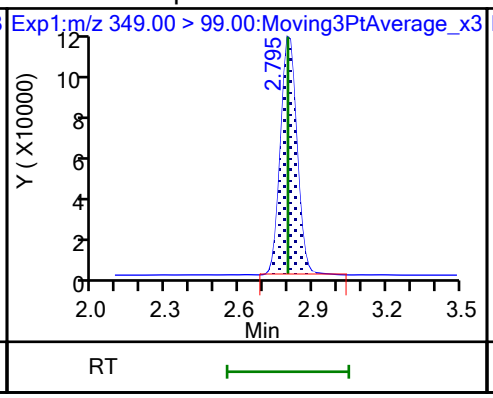


10/31/2023
10:17 AM

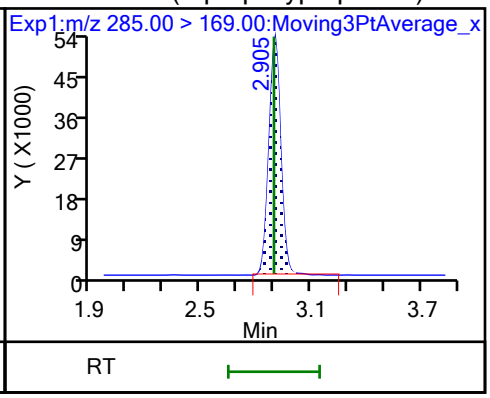
70 Perfluoropentanesulfonic acid



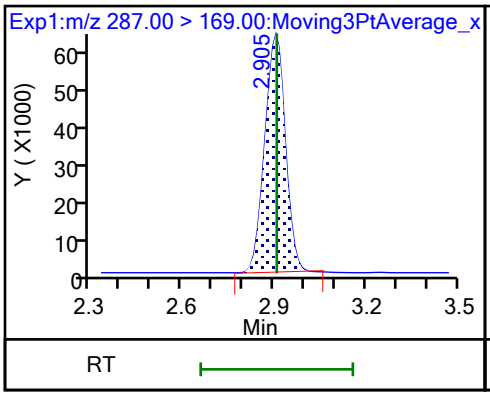
70 Perfluoropentanesulfonic acid



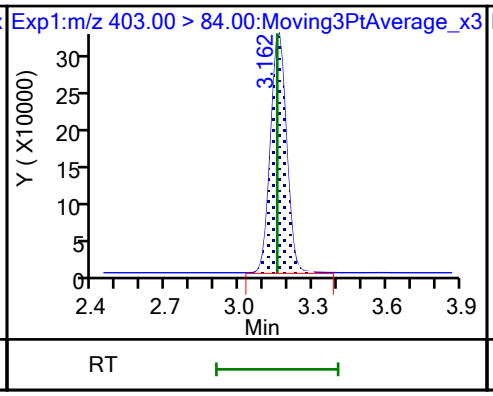
67 Perfluoro(2-propoxypropanoic) ac



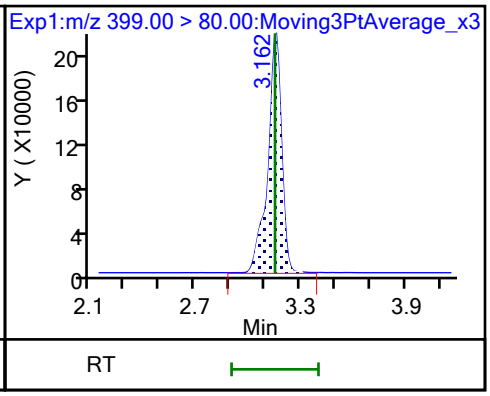
D 64 13C3 HFPO-DA



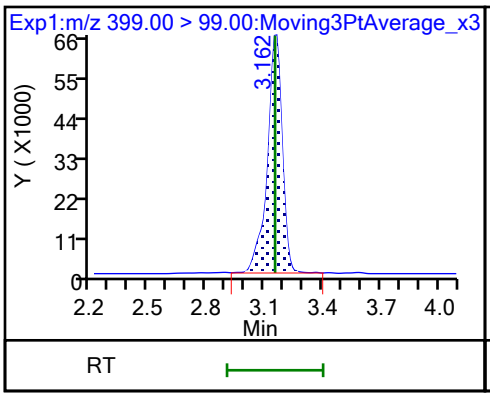
D 11 18O2 PFHxS



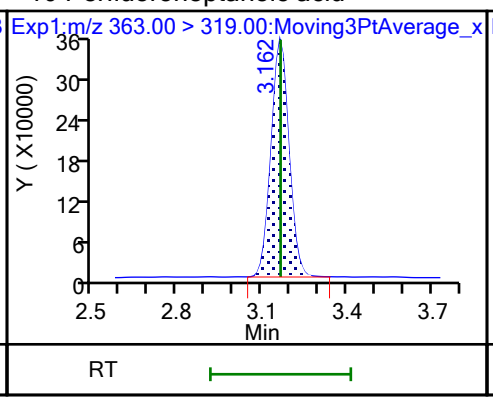
8 Perfluorohexanesulfonic acid



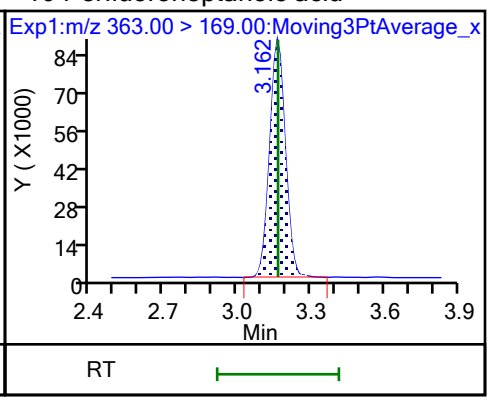
8 Perfluorohexanesulfonic acid



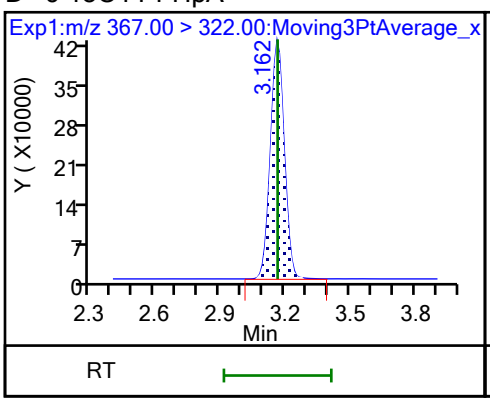
10 Perfluoroheptanoic acid



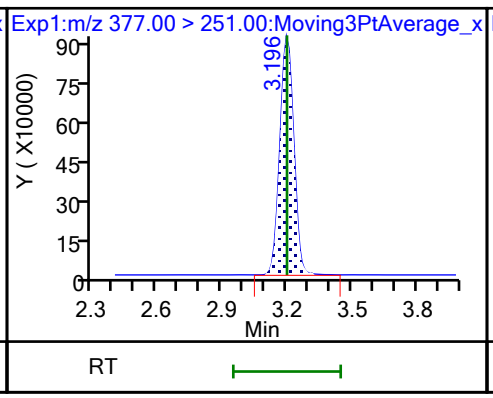
10 Perfluoroheptanoic acid



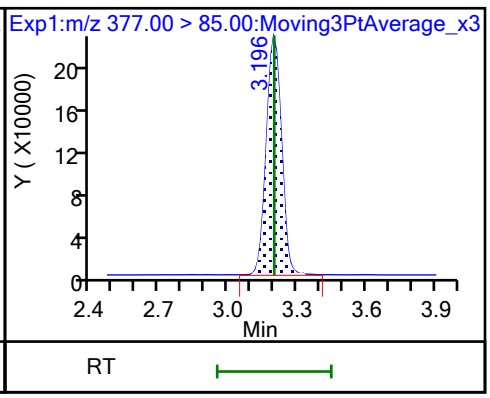
D 9 13C4 PFHpA



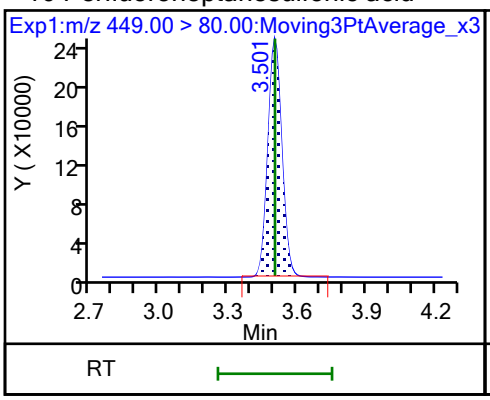
77 DONA



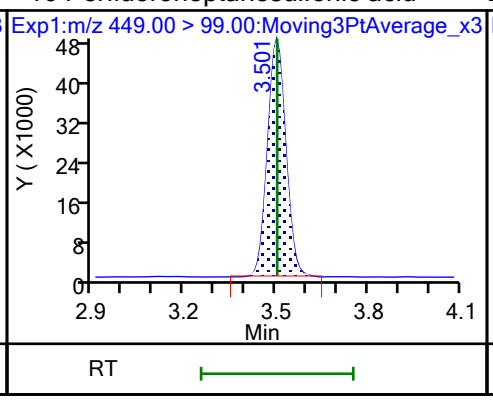
77 DONA



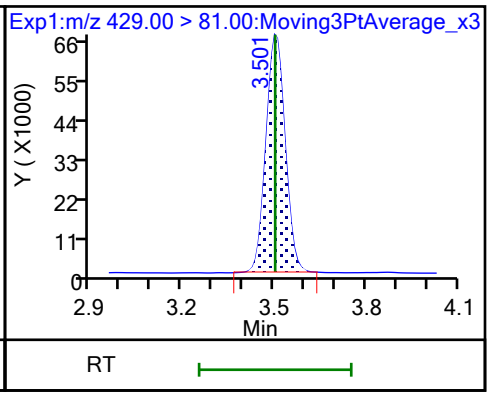
16 Perfluoroheptanesulfonic acid



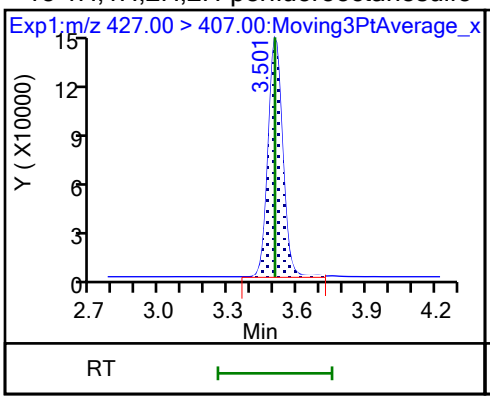
16 Perfluoroheptanesulfonic acid



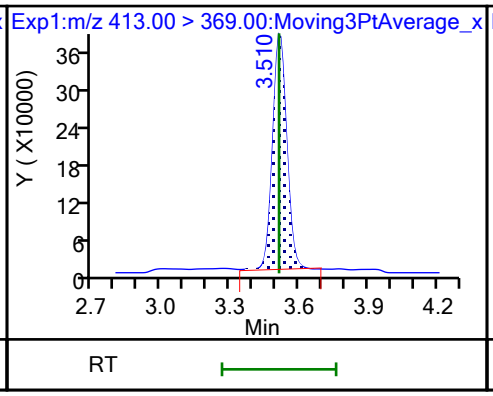
D 12 M2-6:2 FTS



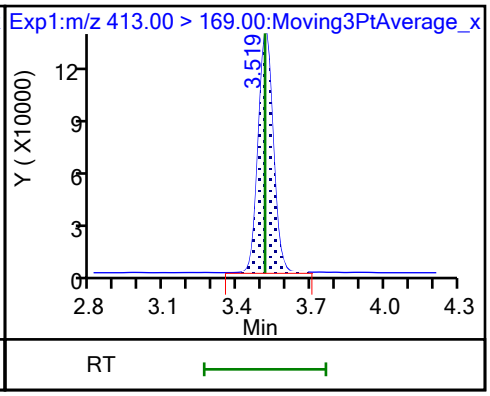
13 1H,1H,2H,2H-perfluorooctanesulfo



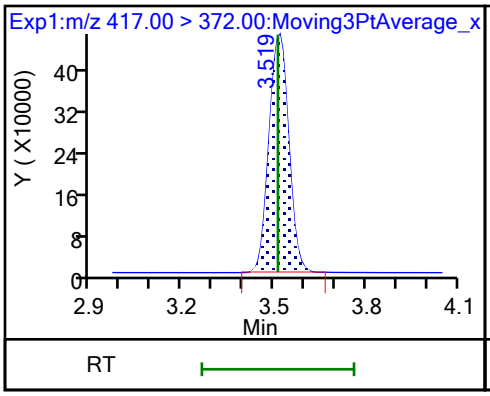
15 Perfluorooctanoic acid



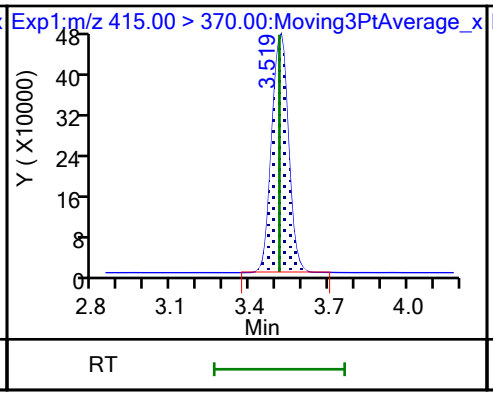
15 Perfluorooctanoic acid



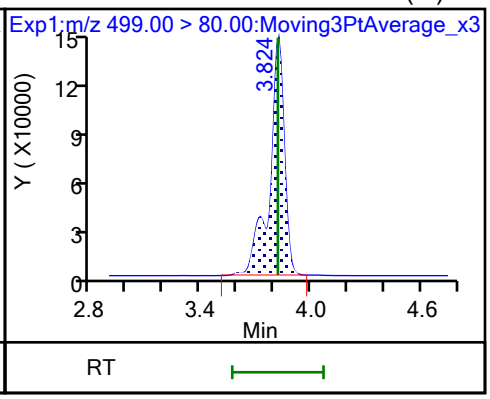
D 14 13C4 PFOA



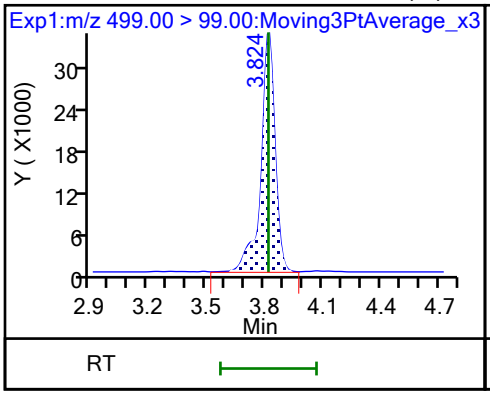
* 62 13C2 PFOA



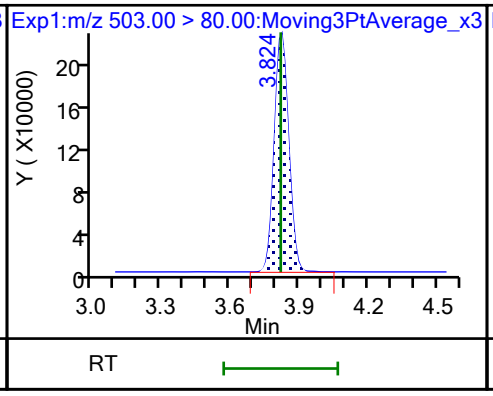
17 Perfluorooctanesulfonic acid (M)



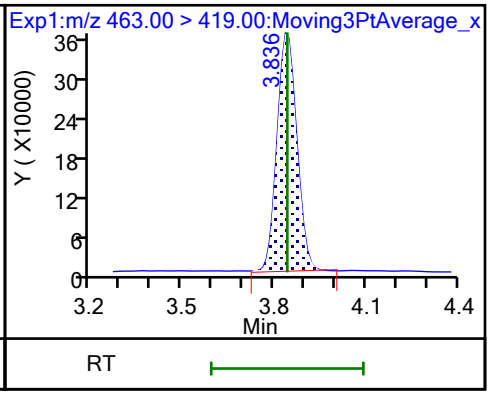
17 Perfluorooctanesulfonic acid (M)



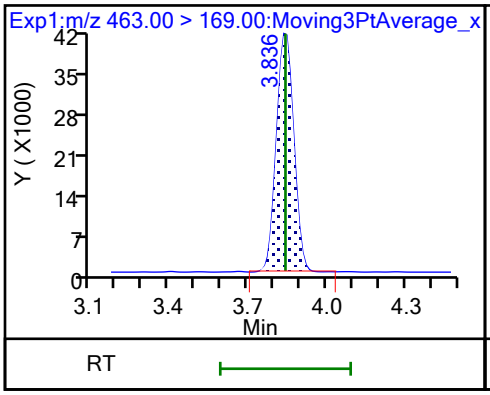
D 18 13C4 PFOS



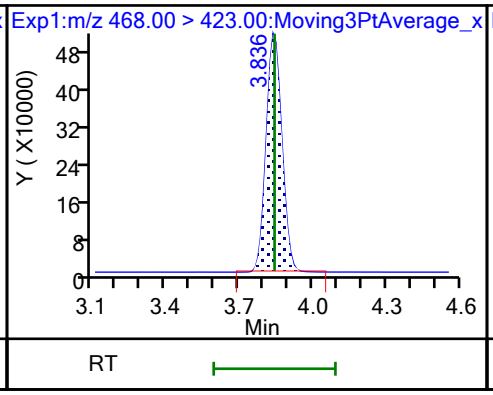
20 Perfluorononanoic acid



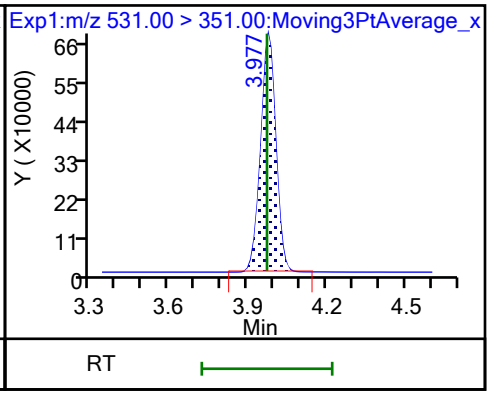
20 Perfluorononanoic acid



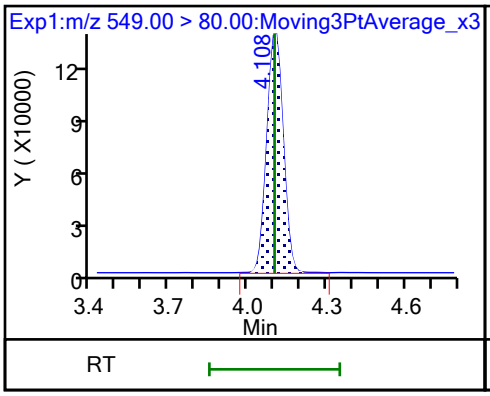
D 19 13C5 PFNA



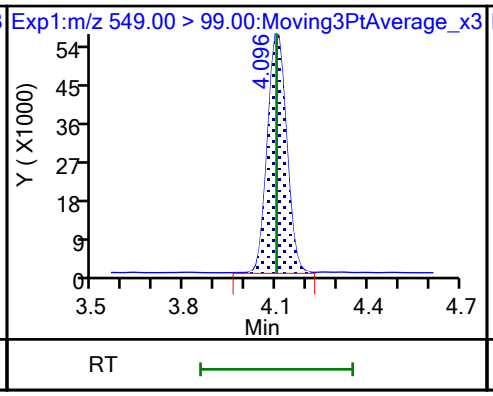
69 9-Chlorohexadecafluoro-3-oxanona



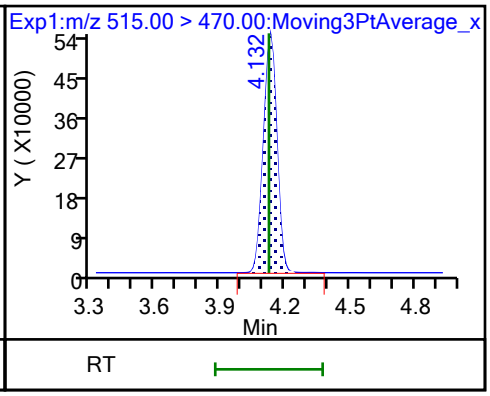
68 Perfluorononanesulfonic acid



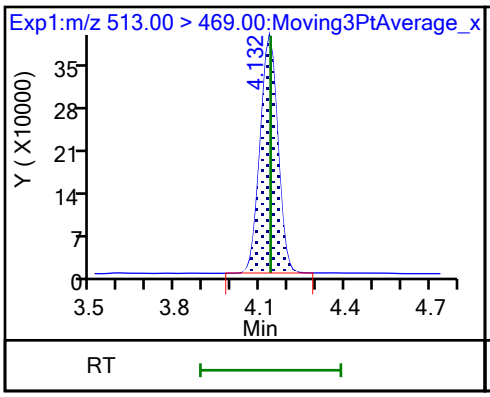
68 Perfluorononanesulfonic acid



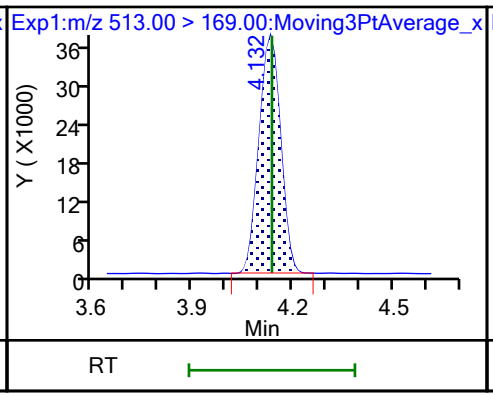
D 23 13C2 PFDA



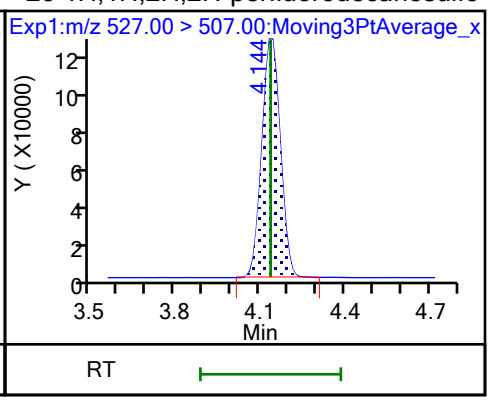
24 Perfluorodecanoic acid



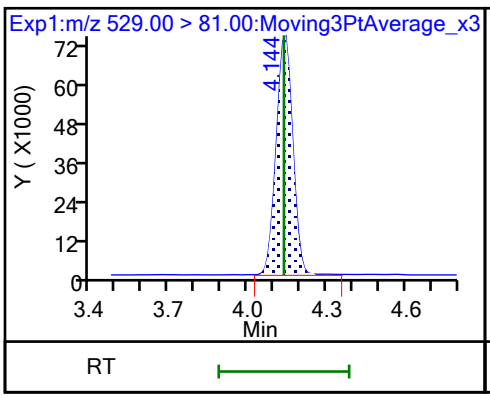
24 Perfluorodecanoic acid



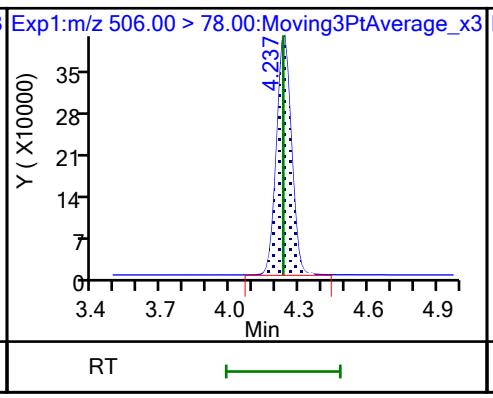
25 1H,1H,2H,2H-perfluorodecanesulfo



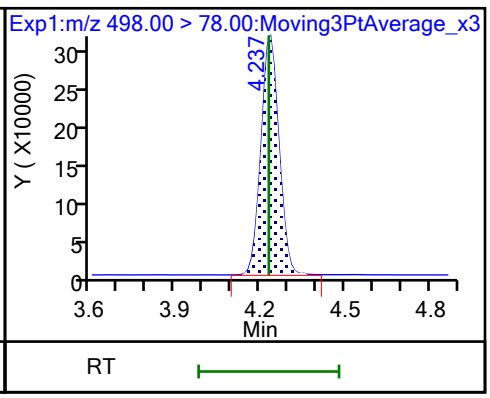
D 26 M2-8:2 FTS



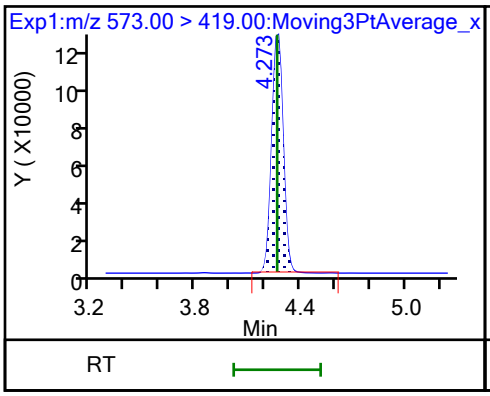
D 21 13C8 FOSA



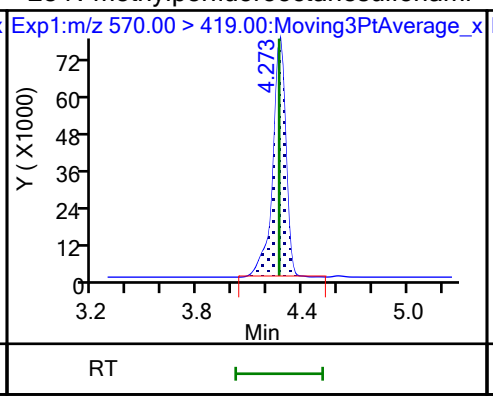
22 Perfluorooctanesulfonamide



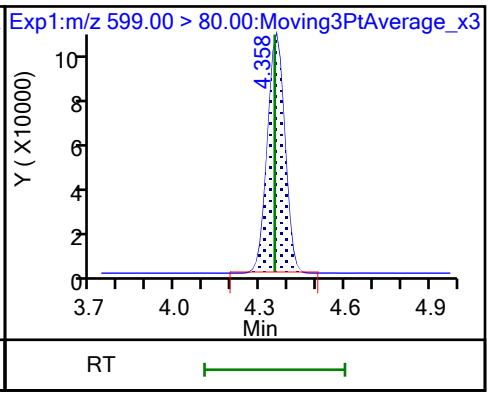
D 27 d3-NMeFOSAA



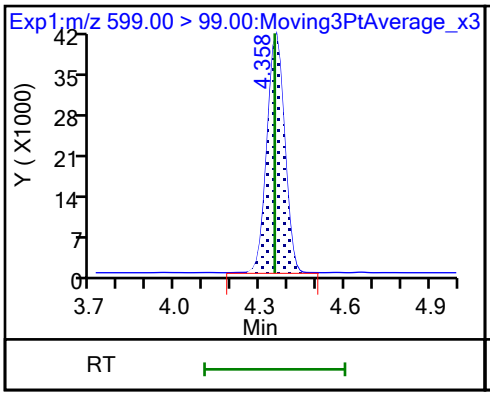
28 N-methylperfluorooctanesulfonami



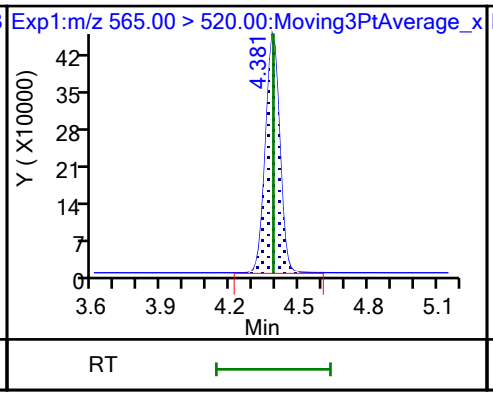
29 Perfluorodecanesulfonic acid



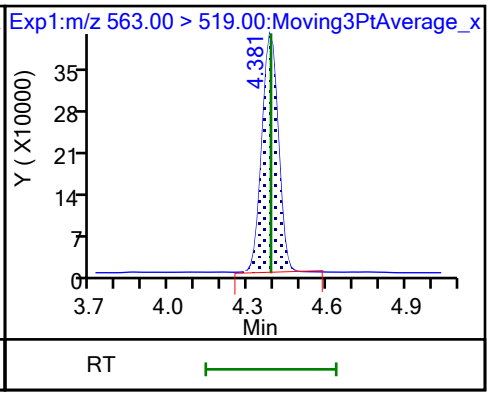
29 Perfluorodecanesulfonic acid



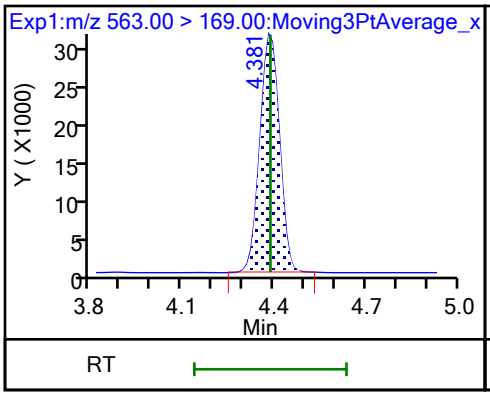
D 30 13C2 PFUnA



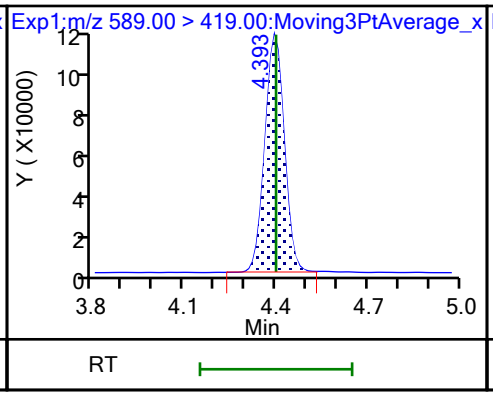
31 Perfluoroundecanoic acid



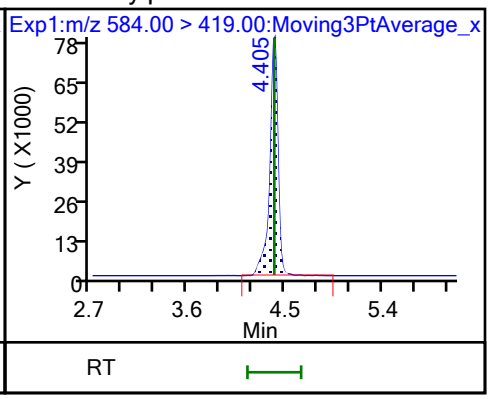
31 Perfluoroundecanoic acid



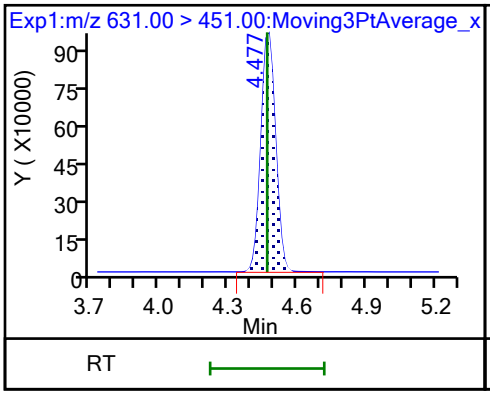
D 32 d5-NEtFOSAA



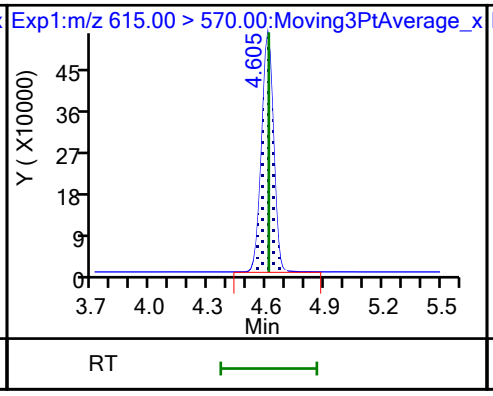
33 N-ethylperfluorooctanesulfonamid



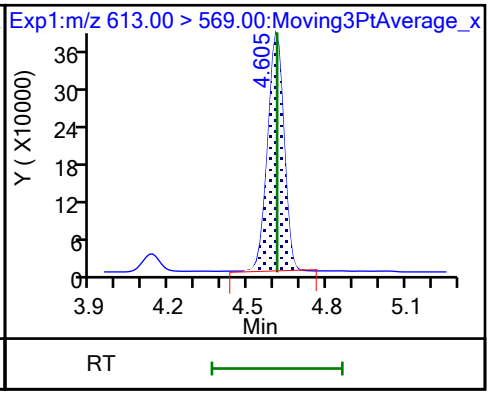
66 11-Chloroeicosafluoro-3-oxaundec



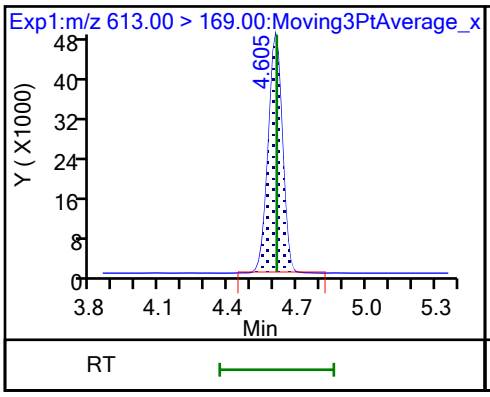
D 36 13C2 PFDoA



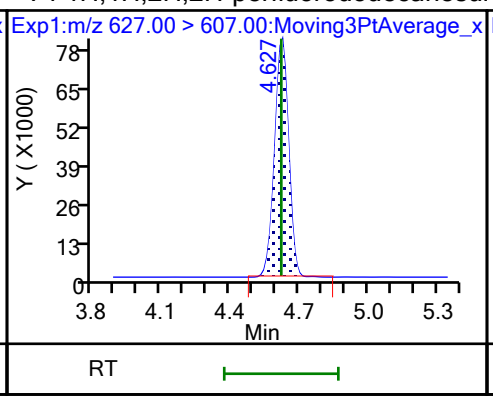
37 Perfluorododecanoic acid



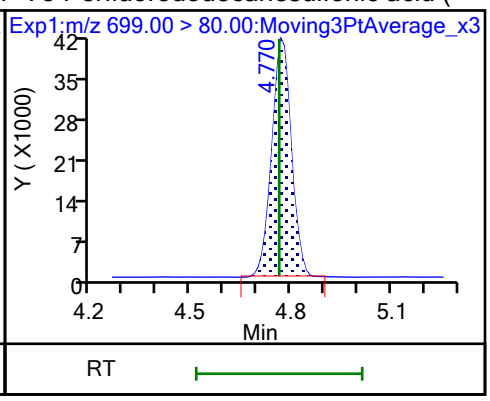
37 Perfluorododecanoic acid



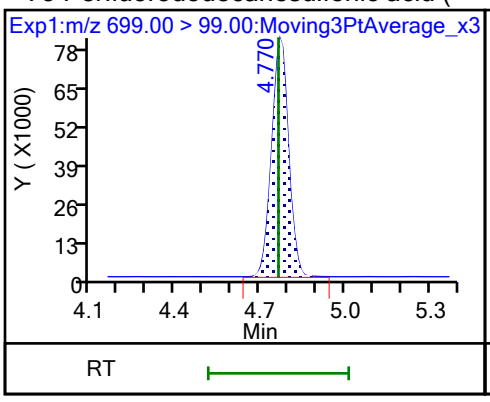
74 1H,1H,2H,2H-perfluorododecanesul



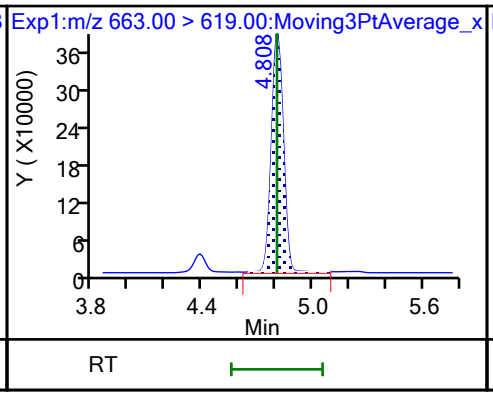
75 Perfluorododecanesulfonic acid (



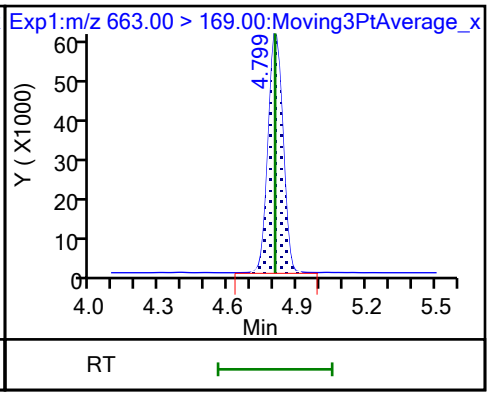
75 Perfluorododecanesulfonic acid (



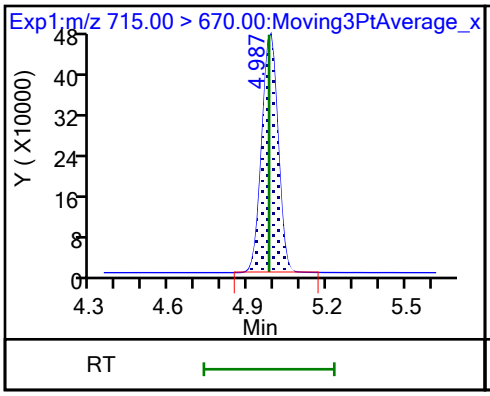
41 Perfluorotridecanoic acid



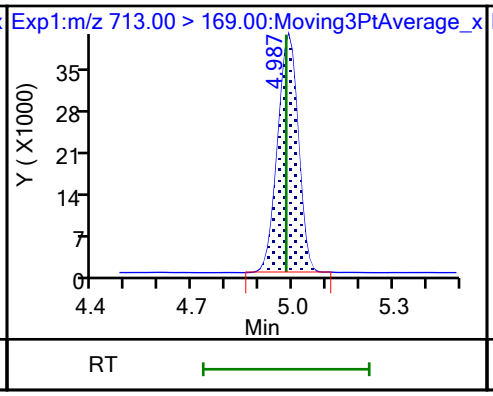
41 Perfluorotridecanoic acid



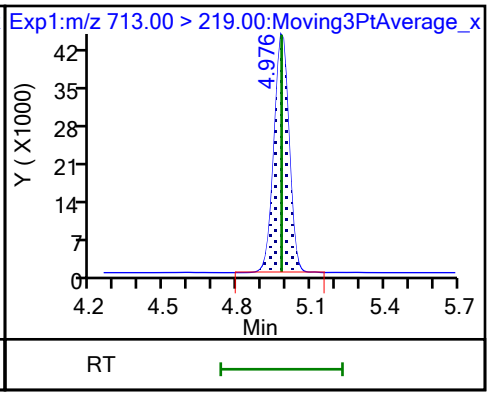
D 43 13C2 PFTeDA



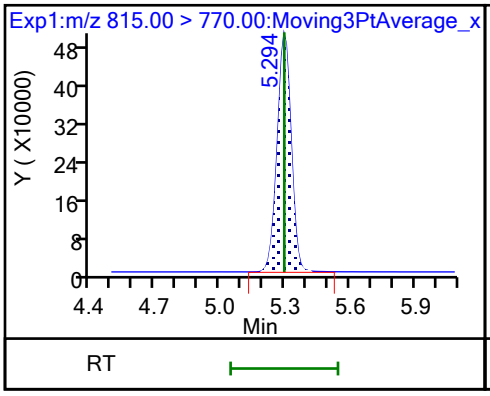
42 Perfluorotetradecanoic acid



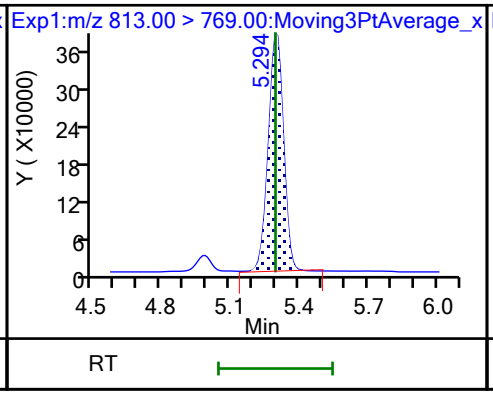
42 Perfluorotetradecanoic acid



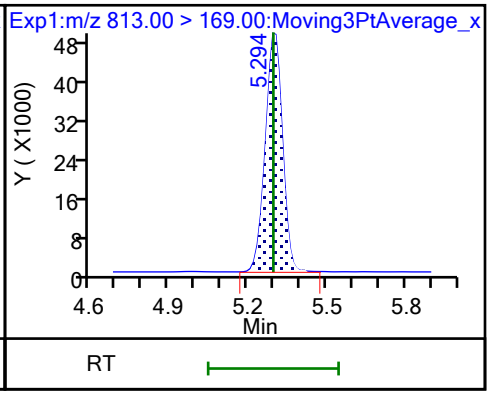
D 44 13C2 PFHxDA



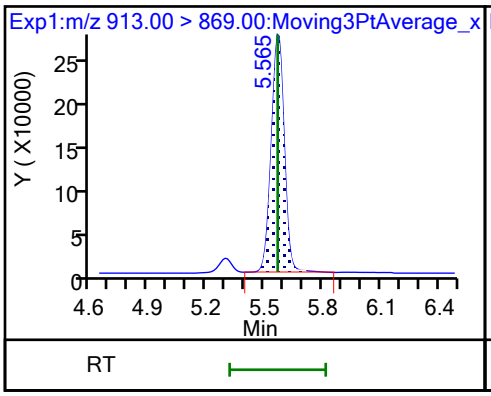
45 Perfluorohexadecanoic acid



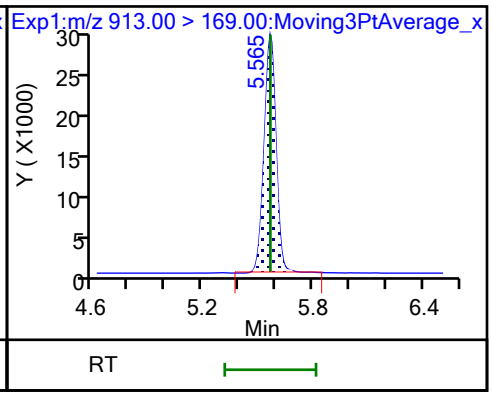
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9180		2.50	2.50	-0.1	30.0
Perfluoropentanoic acid	AveID	1.079	1.022		2.37	2.50	-5.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.115		2.21	2.22	-0.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.588		2.48	2.34	5.7	
Perfluorohexanoic acid	AveID	1.100	1.062		2.41	2.50	-3.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.373		2.47	2.35	5.2	
HFPODA	AveID	1.001	0.9607		2.40	2.50	-4.0	
Perfluoroheptanoic acid	AveID	1.121	1.152		2.57	2.50	2.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.066		2.20	2.29	-3.7	
DONA	AveID	5.754	5.627		2.31	2.36	-2.2	
Perfluoroheptanesulfonic acid	AveID	1.445	1.405		2.32	2.38	-2.8	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.771		2.41	2.38	1.4	
Perfluorooctanoic acid	AveID	1.065	1.066		2.50	2.50	0.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.087		2.16	2.32	-6.8	
Perfluorononanoic acid	AveID	0.9800	0.9588		2.45	2.50	-2.2	
9Cl-PF3ONS	AveID	3.569	3.904		2.55	2.33	9.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.8067		2.19	2.41	-9.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.361		2.57	2.40	7.3	
Perfluorodecanoic acid	AveID	0.999	0.9706		2.43	2.50	-2.9	
Perfluorooctanesulfonamide	AveID	0.9539	1.008		2.64	2.50	5.6	
NMeFOSAA	AveID	0.9074	0.9166		2.53	2.50	1.0	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6186		2.19	2.41	-9.4	
Perfluoroundecanoic acid	AveID	1.031	0.9238		2.24	2.50	-10.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9481		2.37	2.50	-5.2	
11Cl-PF3OUdS	AveID	5.474	5.645		2.43	2.36	3.1	
Perfluorododecanoic acid	AveID	1.018	0.9330		2.29	2.50	-8.3	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.544		2.83	2.41	17.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2174		2.27	2.42	-6.1	
Perfluorotridecanoic acid	AveID	1.070	1.012		2.37	2.50	-5.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1031		2.31	2.50	-7.8	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.001		2.50	2.50	0.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7527		2.41	2.50	-3.6	
13C4 PFBA	Ave	0.9917	1.058		1.33	1.25	6.7	
13C5 PFPeA	Ave	0.7696	0.7716		1.25	1.25	0.3	
13C3 PFBS	Ave	1.041	1.001		1.12	1.16	-3.9	
M2-4:2 FTS	Ave	0.1204	0.1055		1.02	1.17	-12.4	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7452		1.19	1.25	-4.8	
13C3 HFPO-DA	Ave	0.1516	0.1399		1.15	1.25	-7.7	
13C4 PFHpA	Ave	0.8590	0.8240		1.20	1.25	-4.1	50.0
18O2 PFHxS	Ave	0.7464	0.7087		1.12	1.18	-5.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1421		1.09	1.19	-8.4	
13C4 PFOA	Ave	0.9731	0.9798		1.26	1.25	0.7	50.0
13C4 PFOS	Ave	0.4742	0.4644		1.17	1.20	-2.1	50.0
13C5 PFNA	Ave	1.059	1.004		1.19	1.25	-5.2	50.0
13C2 PFDA	Ave	1.109	1.085		1.22	1.25	-2.1	
M2-8:2 FTS	Ave	0.1744	0.1477		1.01	1.20	-15.3	
13C8 FOSA	Ave	0.9462	0.8497		1.12	1.25	-10.2	
d3-NMeFOSAA	Ave	0.2650	0.2600		1.23	1.25	-1.9	
13C2 PFUnA	Ave	1.047	1.027		1.23	1.25	-1.9	
d5-NEtFOSAA	Ave	0.2552	0.2514		1.23	1.25	-1.5	
13C2 PFDoA	Ave	1.064	1.053		1.24	1.25	-1.0	
13C2 PFTeDA	Ave	1.059	1.007		1.19	1.25	-4.9	
13C2 PFHxDA	Ave	1.221	1.056		1.08	1.25	-13.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 11:46:16 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057578-013 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:43:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:48:18
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.131	-0.001	0.605	2189160	1.33		107	5990	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	4019437	2.50		99.9	301	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1596766	1.25		100	2032	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.006	3263790	2.37		94.7	90.0	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.701	1926203	1.12		96.1	190461	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	4097122	2.21	Target=2.06	99.8	5762	
298.90 > 99.00	2.466	2.467	-0.001	1.000	2023548		2.02(1.03-3.09)		953	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	1468199	2.47		106	5376	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	203959	1.02		87.6	141	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1542134	1.19		95.2	11380	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	3274160	2.41	Target=14.12	96.5	614	
313.00 > 119.00	2.797	2.797	0.0	1.000	237941		13.76(7.06-21.17)		342	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.887	3790920	2.47	Target=2.72	105	8468	
349.00 > 99.00	2.810	2.797	0.013	0.887	1268036		2.99(1.36-4.09)		1348	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.897	0.011	1.000	556302	2.40		96.0	2991	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	289539	1.15		92.3	2667	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.153	0.013	0.899	1387573	1.12		95.0	5155	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.166	3.153	0.013	1.000	2857763	2.20	Target=3.32	96.3	5666	
399.00 > 99.00	3.154	3.153	0.001	0.996	851433		3.36(1.66-4.98)		742	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.166	3.165	0.001	1.000	3929063	2.57	Target=4.17	103	817	
363.00 > 169.00	3.166	3.165	0.001	1.000	912458		4.31(2.09-6.26)		1680	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.165	0.001	0.899	1705244	1.20		95.9	6645	
77 DONA										
377.00 > 251.00	3.201	3.199	0.002	0.838	10220608	2.31	Target=3.33	97.8	8777	
377.00 > 85.00	3.201	3.199	0.002	0.838	2756017		3.71(1.66-4.99)		3834	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.503	3.502	0.001	0.917	2573479	2.32	Target=4.83	97.2	7904	
449.00 > 99.00	3.503	3.502	0.001	0.917	513213		5.01(2.41-7.24)		1555	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.502	0.010	0.997	279380	1.09		91.6	507	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.512	3.502	0.010	1.000	1550097	2.41		101	3226	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.521	3.512	0.009	1.000	4323734	2.50	Target=2.88	100	184	
413.00 > 169.00	3.521	3.512	0.009	1.000	1486274		2.91(1.44-4.32)		2633	
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.512	0.009	1.000	2027805	1.26		101	13444	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.512	0.009		2069548	1.25			13237	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.819	0.001	1.000	1939107	2.16	Target=4.24	93.2	3362	M
499.00 > 99.00	3.820	3.819	0.001	1.000	428452		4.53(2.12-6.37)		1318	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.819	0.001	1.085	918783	1.17		97.9	3099	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.842	0.001	1.000	3983291	2.45	Target=8.34	97.8	608	
463.00 > 169.00	3.843	3.842	0.001	1.000	476670		8.36(4.17-12.51)		3129	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.842	0.001	1.092	2077322	1.18		94.8	3566	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.971	0.010	1.042	7000977	2.55		109	22006	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.101	0.001	1.074	1491733	2.19	Target=2.17	90.9	8252	
549.00 > 99.00	4.102	4.101	0.001	1.074	604081		2.47(1.08-3.25)		2435	
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.125	0.013	1.175	2245976	1.22		97.9	7309	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.138	4.136	0.002	1.000	4359910	2.43	Target=11.44	97.1	1314	
513.00 > 169.00	4.138	4.136	0.002	1.000	400157		10.90(5.72-17.16)		1531	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.136	0.002	1.000	1385409	2.57		107	5715	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.136	0.002	1.175	292765	1.01		84.7	726	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.230	0.002	1.202	1758541	1.12		89.8	12188	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.230	0.002	1.000	3543658	2.64		106	8138	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.267	4.266	0.001	1.212	537988	1.23		98.1	2700	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.280	4.266	0.014	1.003	986205	2.53		101	1987	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.351	0.013	1.142	1147393	2.19	Target=2.37	90.6	5892	
599.00 > 99.00	4.364	4.351	0.013	1.142	444525		2.58(1.19-3.56)		3966	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.246	2124874	1.23		98.1	12021	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.387	0.0	1.000	3925723	2.24	Target=12.20	89.6	834	
563.00 > 169.00	4.387	4.387	0.0	1.000	343879		11.42(6.10-18.31)		3941	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.249	520343	1.23		98.5	1239	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.399	4.399	0.0	1.000	986631	2.37		94.8	5937	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.468	0.001	1.170	10232851	2.43		103	10191	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.610	0.001	1.310	2178851	1.24		99.0	8083	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.610	0.001	1.000	4065566	2.29	Target=8.47	91.7	218	
613.00 > 169.00	4.611	4.610	0.001	1.000	480695		8.46(4.23-12.70)		3052	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.621	0.001	1.117	909994	2.83		117	19016	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.764	0.011	1.250	404415	2.27	Target=0.48	93.9	4198	
699.00 > 99.00	4.775	4.764	0.011	1.250	841430		0.48(0.24-0.72)		7046	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.813	4.803	0.010	1.044	4410278	2.37	Target=6.41	94.6	249	
663.00 > 169.00	4.803	4.803	0.0	1.042	671283		6.57(3.21-9.62)		3204	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.417	2084655	1.19		95.1	6359	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.980	0.010	1.000	430026	2.31	Target=0.87	92.2	3778	
713.00 > 219.00	4.980	4.980	0.0	0.998	466930		0.92(0.43-1.30)		5724	

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.504	2185654	1.08		86.5	6373	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.307	5.296	0.011	1.002	4374410	2.50	Target=7.89	100	257	
813.00 > 169.00	5.296	5.296	0.0	1.000	549671		7.96(3.94-11.83)		4870	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.576	5.567	0.009	1.053	3290435	2.41	Target=9.39	96.4	293	
913.00 > 169.00	5.567	5.567	0.0	1.051	344054		9.56(4.69-14.08)		1486	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

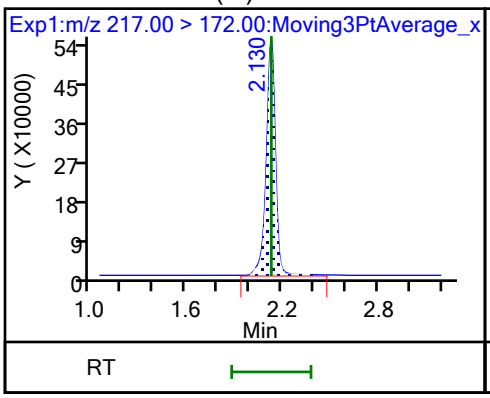
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54

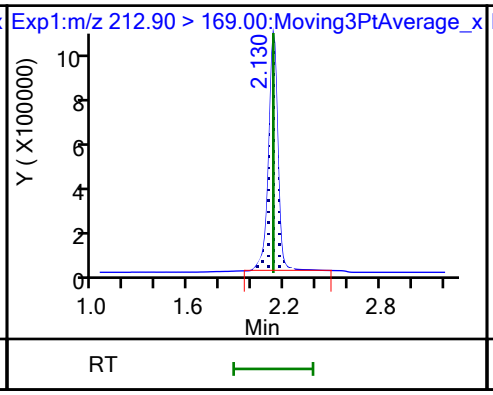
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Injection Date: 27-Oct-2023 11:46:16 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

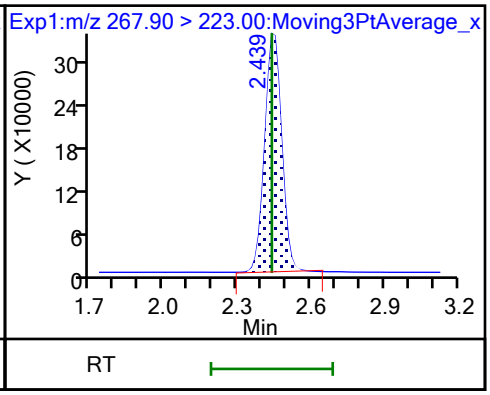
D 1 13C4 PFBA (M)



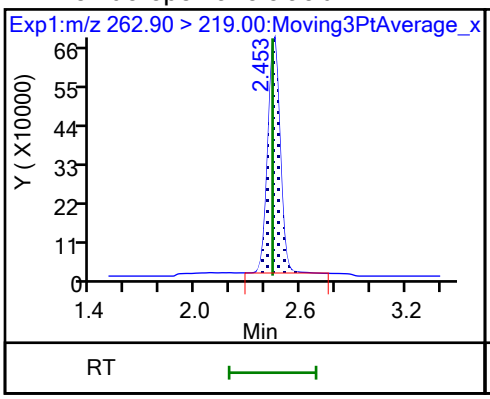
2 Perfluorobutanoic acid



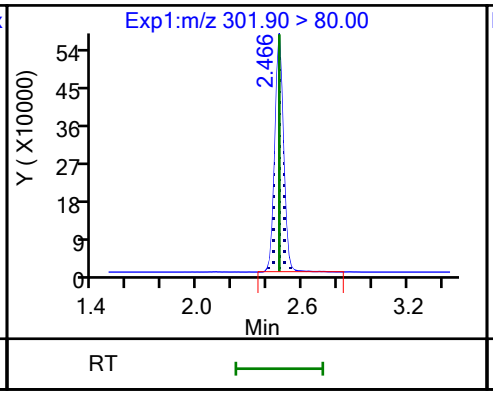
D 3 13C5 PFPeA



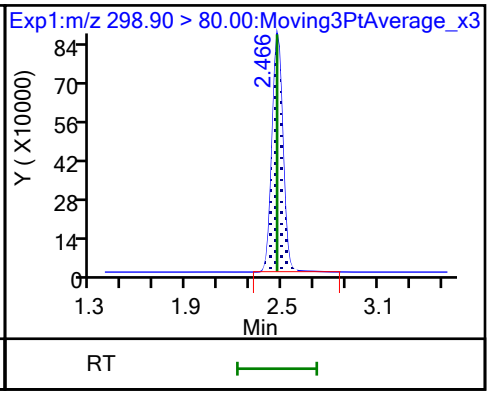
4 Perfluoropentanoic acid



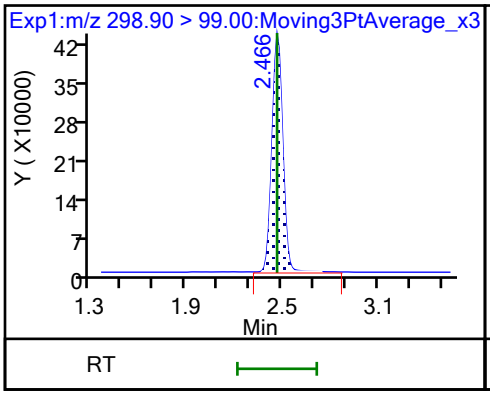
D 47 13C3 PFBS



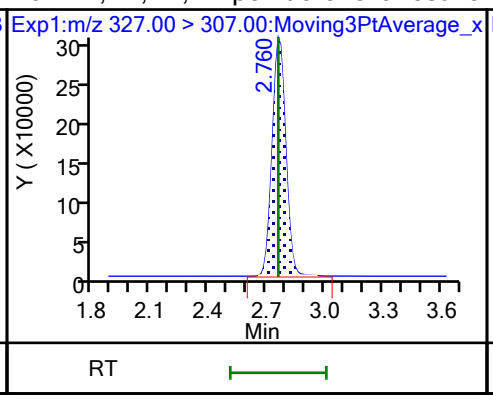
5 Perfluorobutanesulfonic acid



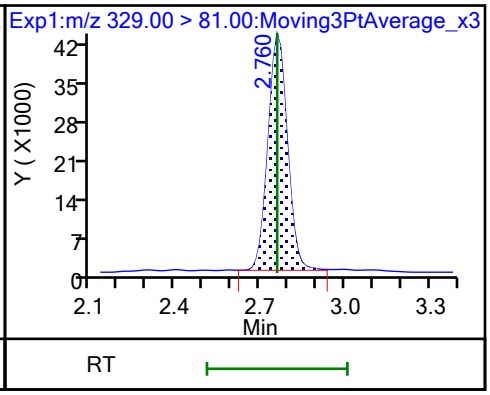
5 Perfluorobutanesulfonic acid



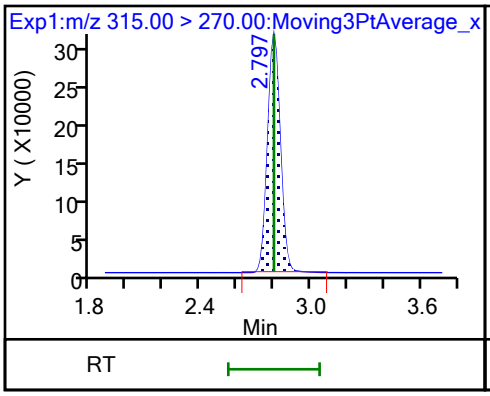
61 1H,1H,2H,2H-perfluorohexanesulfo



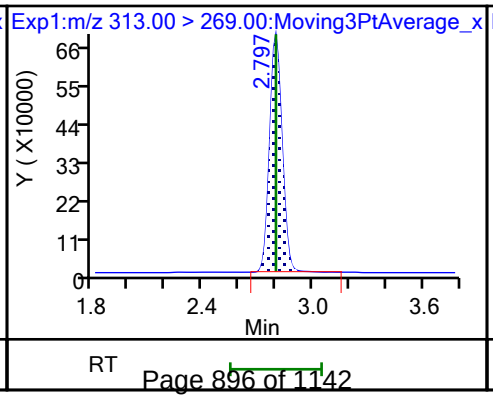
D 60 M2-4:2 FTS



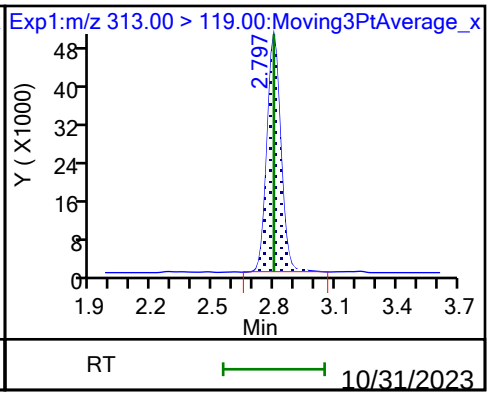
D 7 13C2 PFHxA



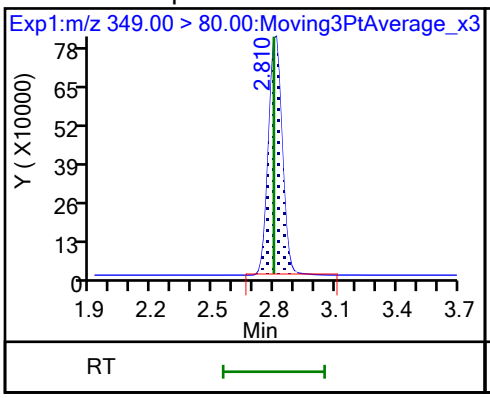
6 Perfluorohexanoic acid



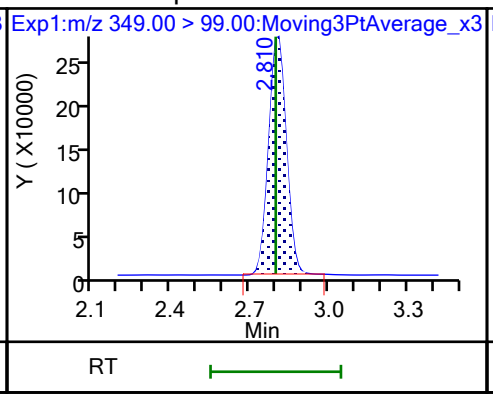
6 Perfluorohexanoic acid



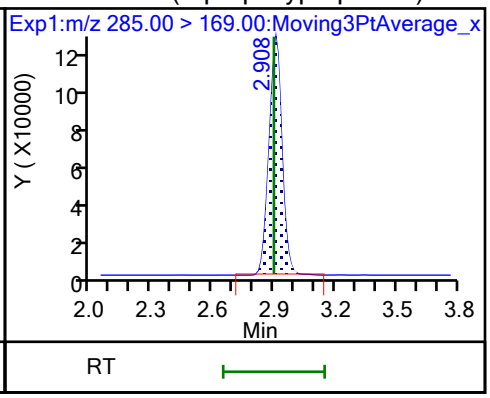
70 Perfluoropentanesulfonic acid



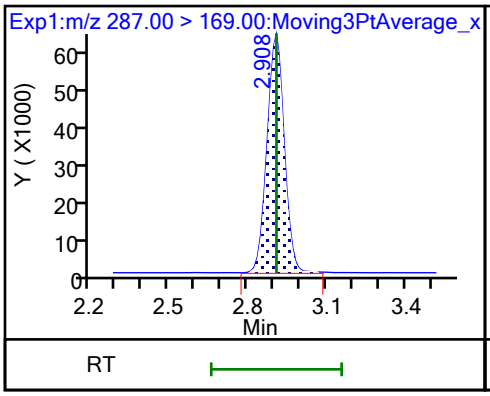
70 Perfluoropentanesulfonic acid



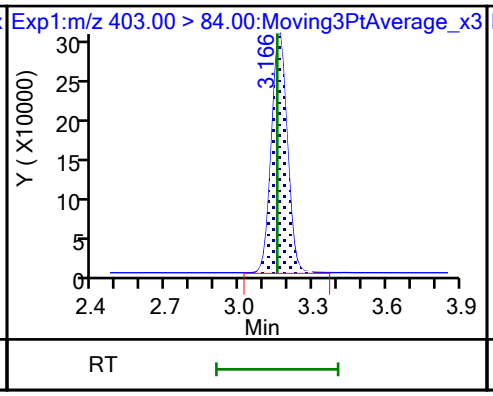
67 Perfluoro(2-propoxypropanoic) ac



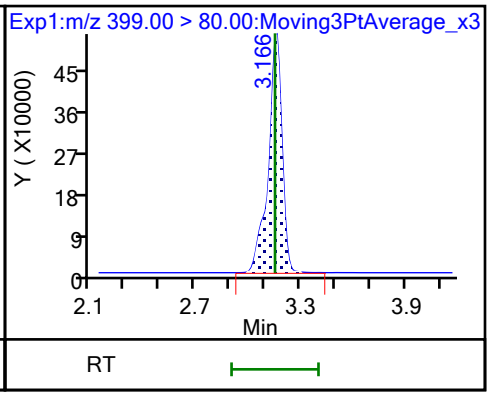
D 64 13C3 HFPO-DA



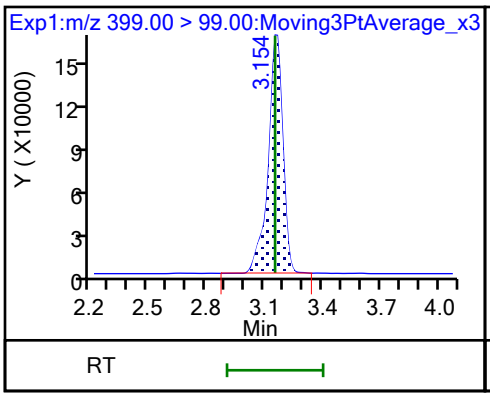
D 11 18O2 PFHxS



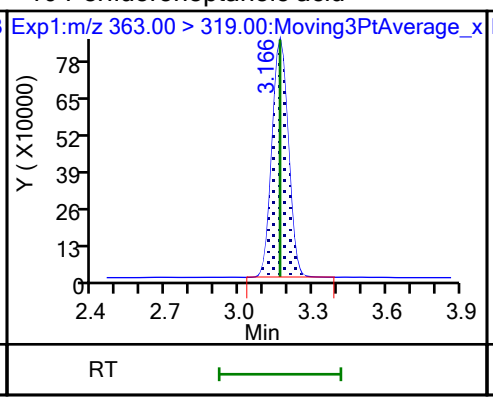
8 Perfluorohexanesulfonic acid



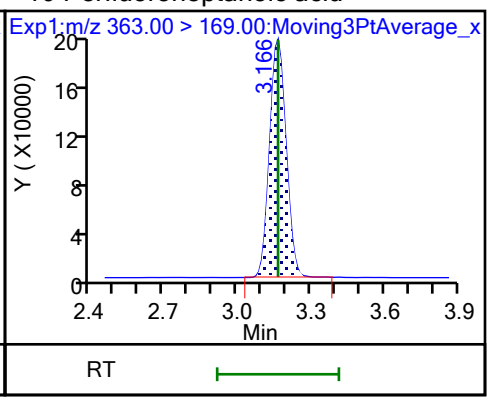
8 Perfluorohexanesulfonic acid



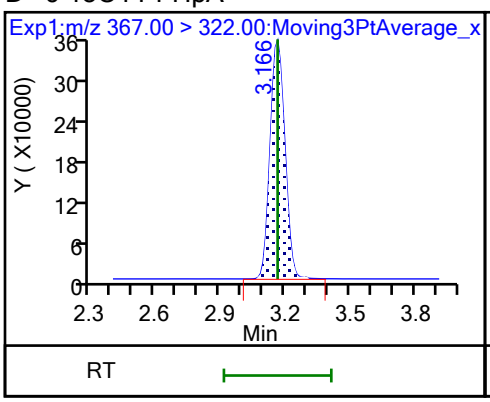
10 Perfluoroheptanoic acid



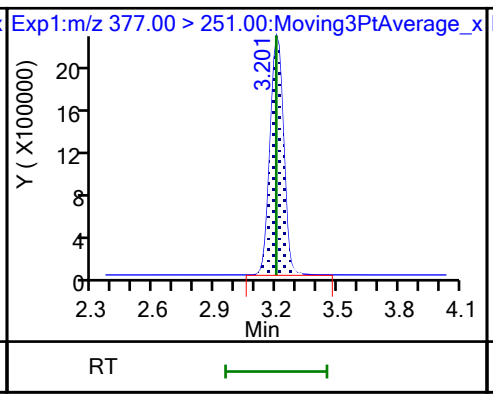
10 Perfluoroheptanoic acid



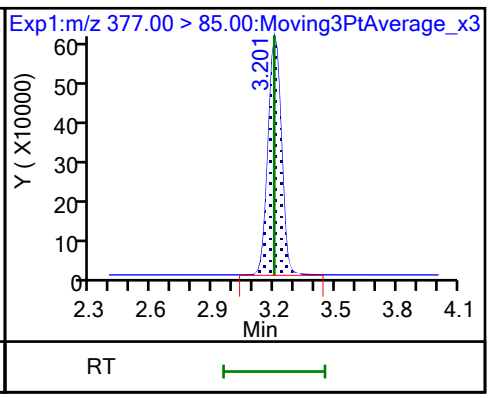
D 9 13C4 PFHpA



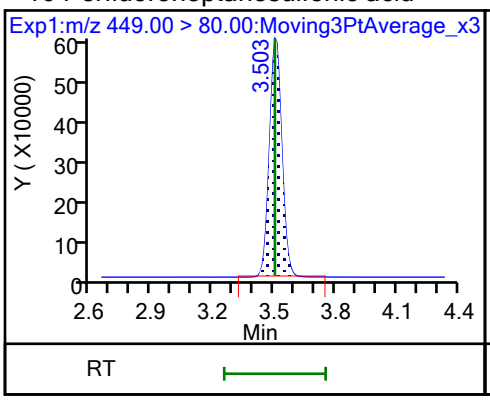
77 DONA



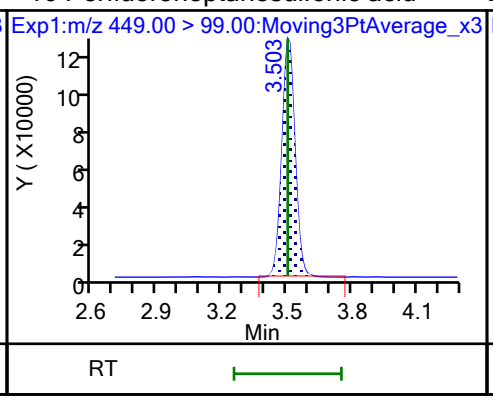
77 DONA



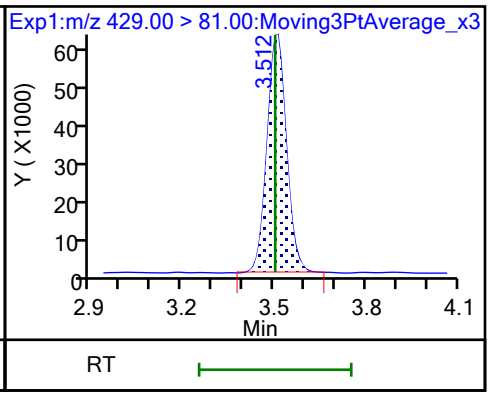
16 Perfluoroheptanesulfonic acid



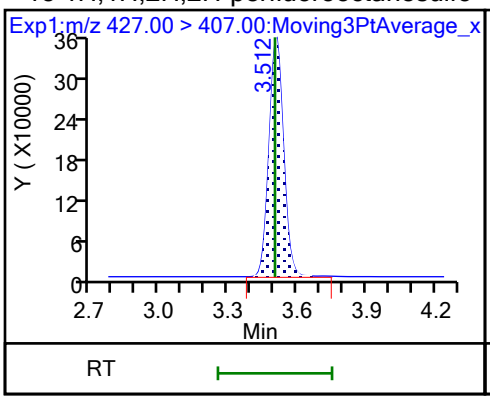
16 Perfluoroheptanesulfonic acid



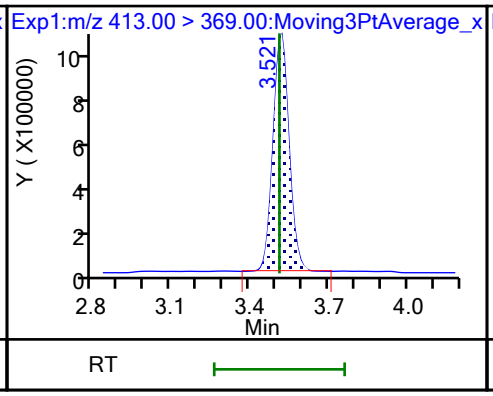
D 12 M2-6:2 FTS



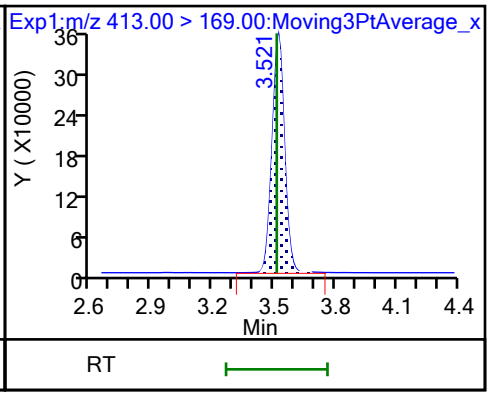
13 1H,1H,2H,2H-perfluorooctanesulfo



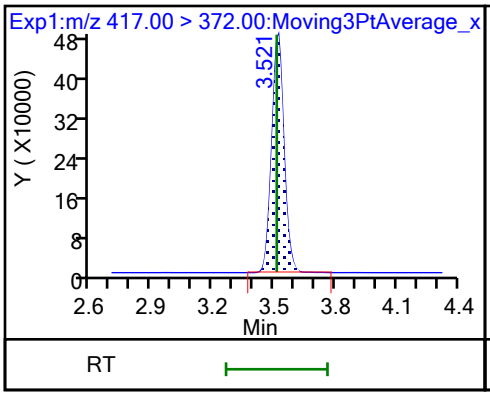
15 Perfluorooctanoic acid



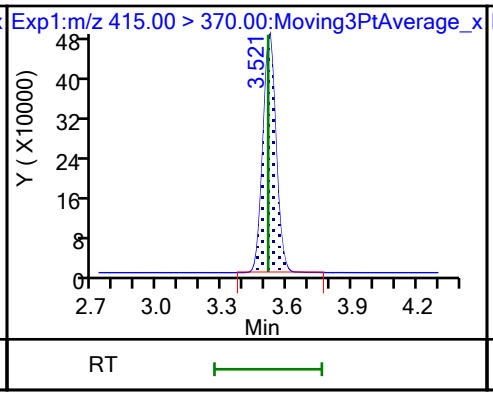
15 Perfluorooctanoic acid



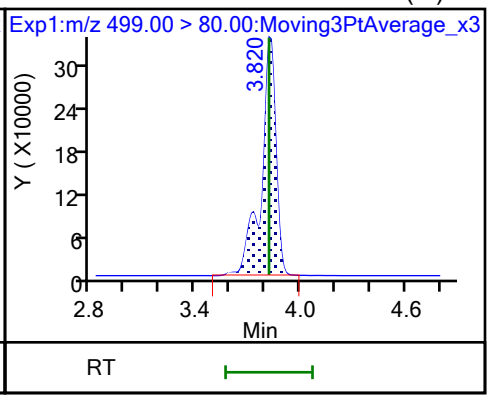
D 14 13C4 PFOA



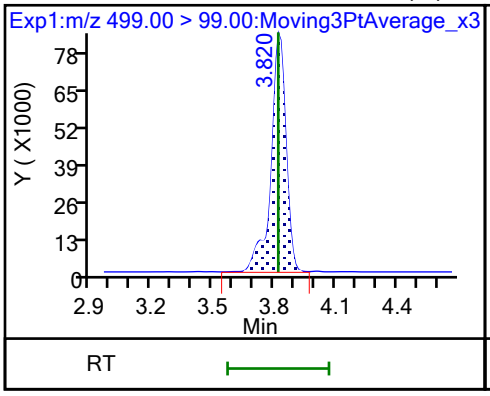
* 62 13C2 PFOA



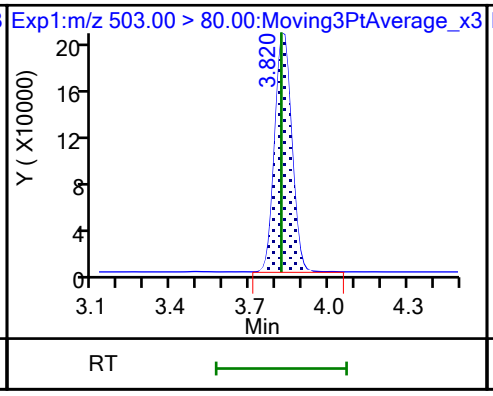
17 Perfluorooctanesulfonic acid (M)



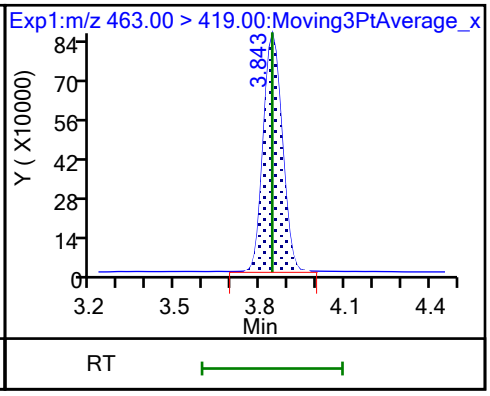
17 Perfluorooctanesulfonic acid (M)



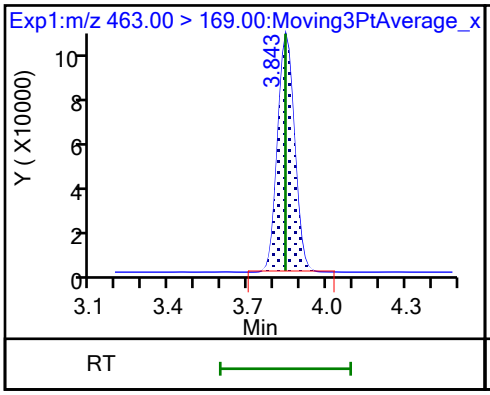
D 18 13C4 PFOS



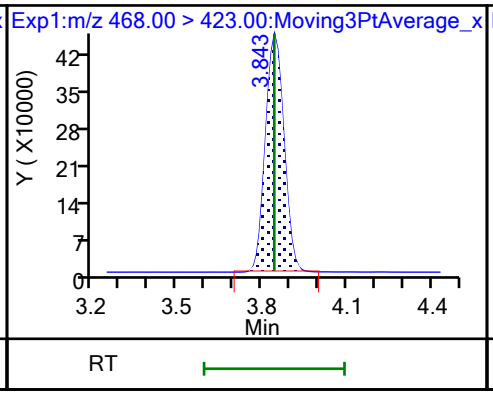
20 Perfluorononanoic acid



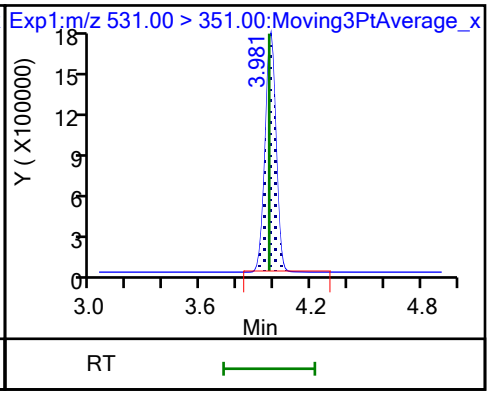
20 Perfluorononanoic acid



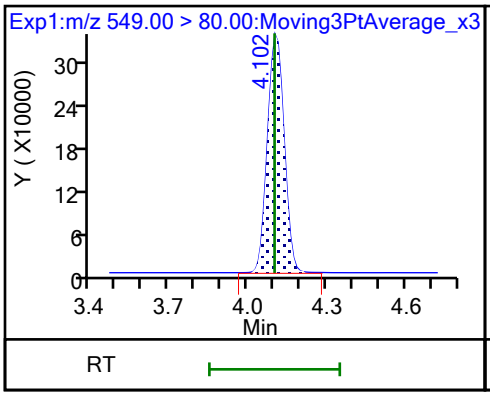
D 19 13C5 PFNA



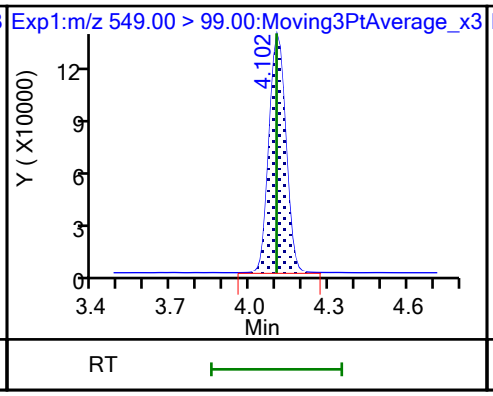
69 9-Chlorohexadecafluoro-3-oxanona



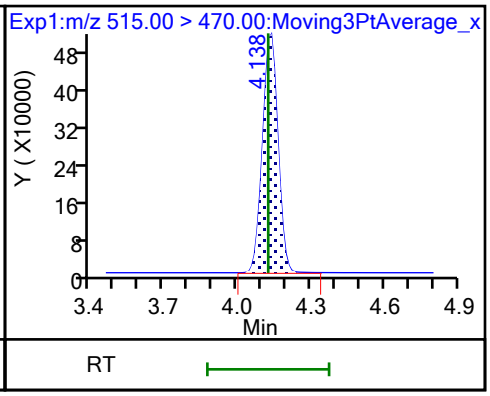
68 Perfluorononanesulfonic acid



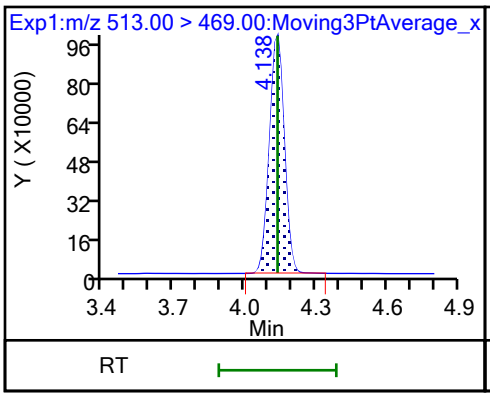
68 Perfluorononanesulfonic acid



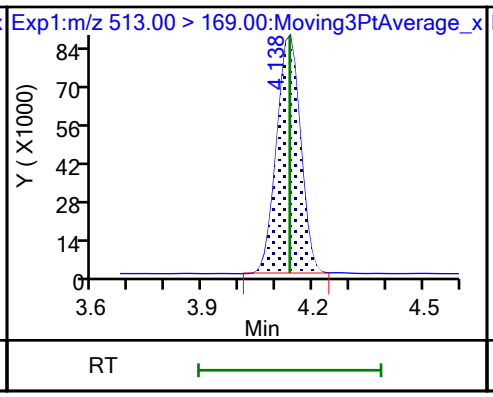
D 23 13C2 PFDA



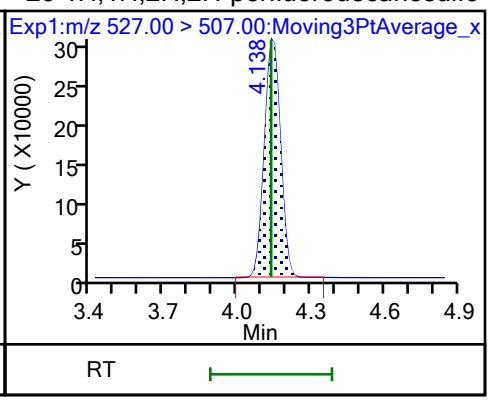
24 Perfluorodecanoic acid



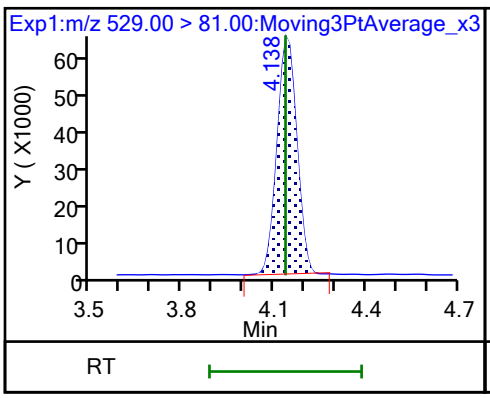
24 Perfluorodecanoic acid



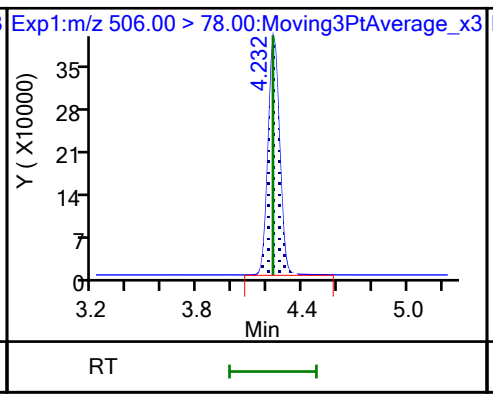
25 1H,1H,2H,2H-perfluorodecanesulfo



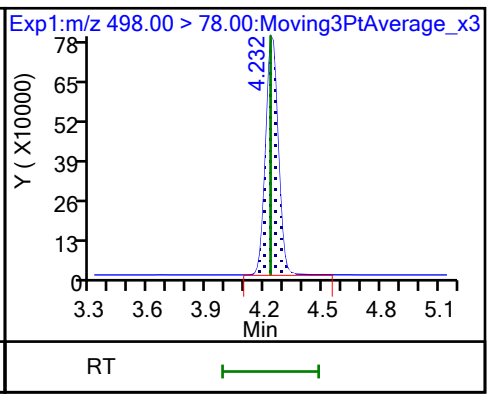
D 26 M2-8:2 FTS



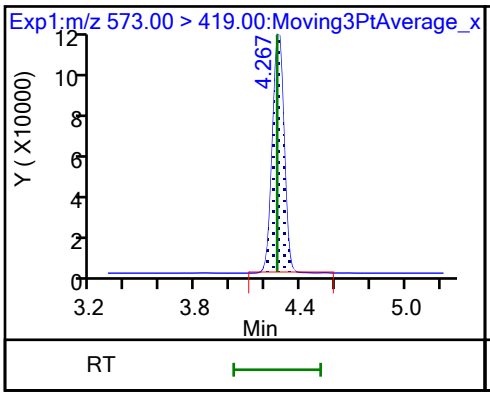
D 21 13C8 FOSA



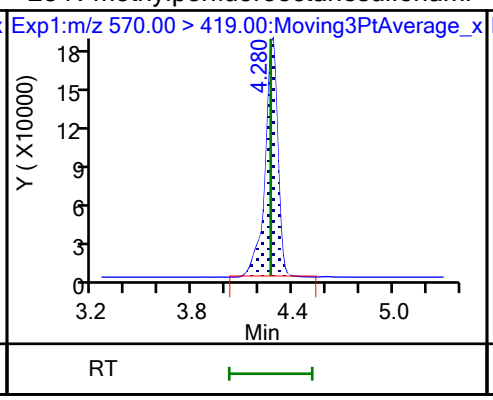
22 Perfluorooctanesulfonamide



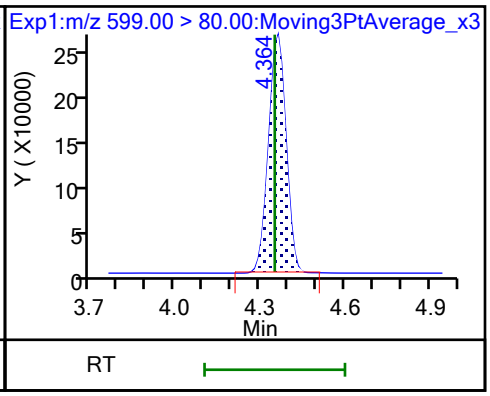
D 27 d3-NMeFOSAA



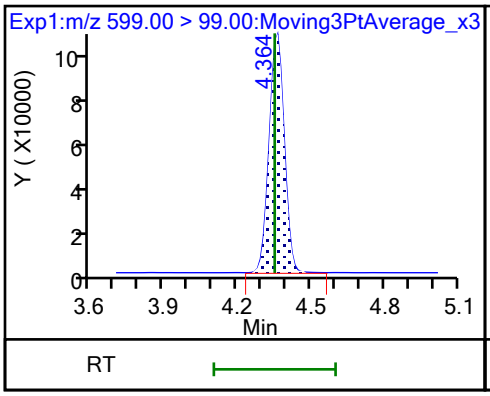
28 N-methylperfluorooctanesulfonami



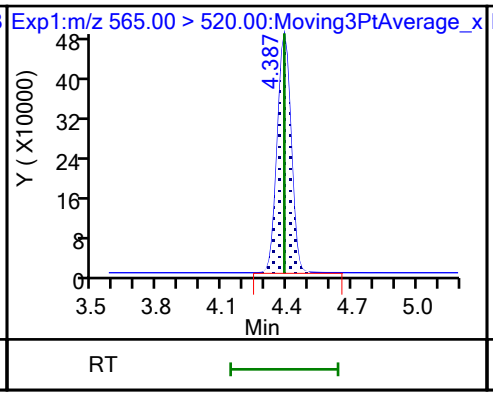
29 Perfluorodecanesulfonic acid



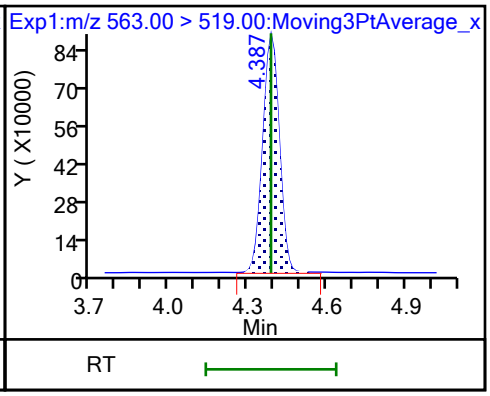
29 Perfluorodecanesulfonic acid



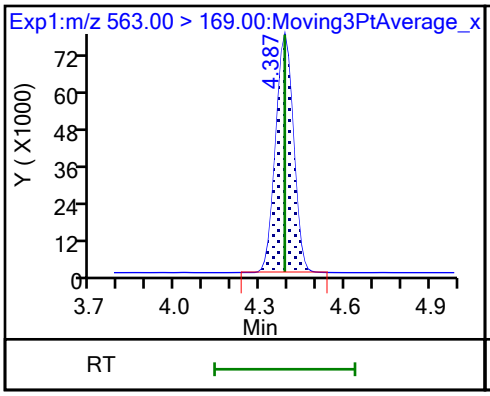
D 30 13C2 PFUnA



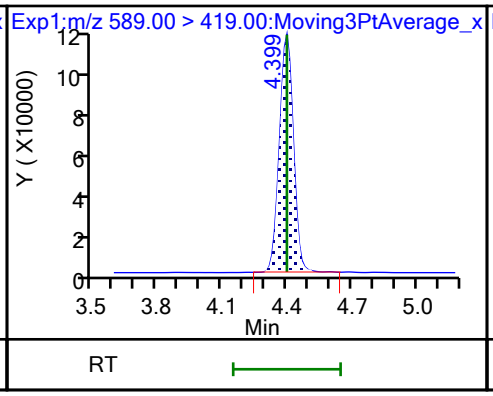
31 Perfluoroundecanoic acid



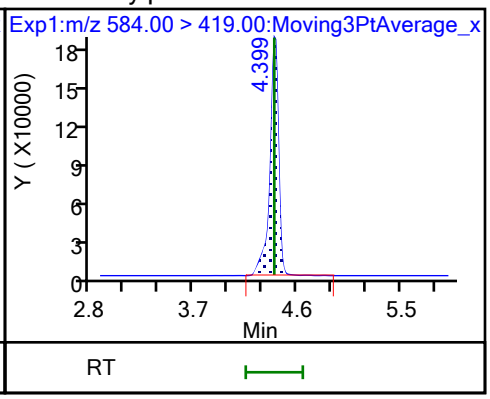
31 Perfluoroundecanoic acid



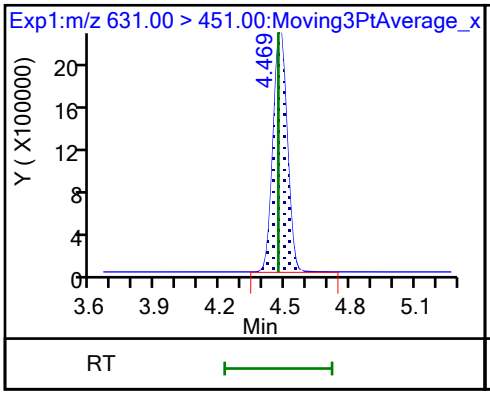
D 32 d5-NEtFOSAA



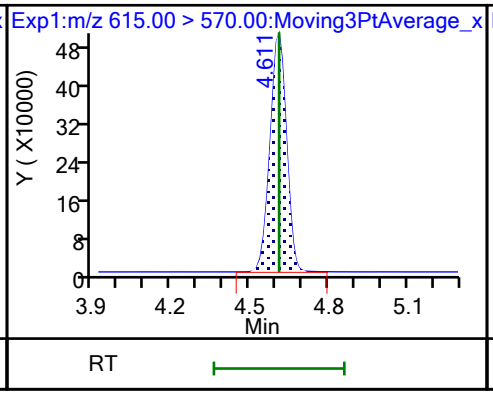
33 N-ethylperfluorooctanesulfonamid



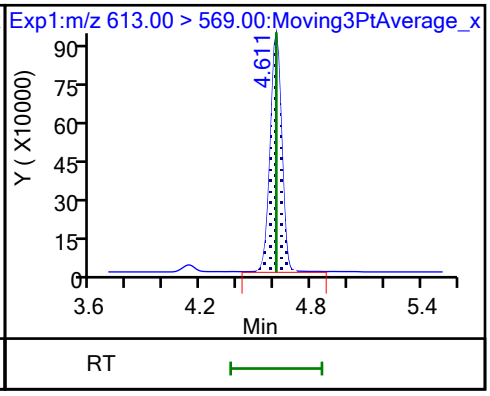
66 11-Chloroeicosafluoro-3-oxaundec



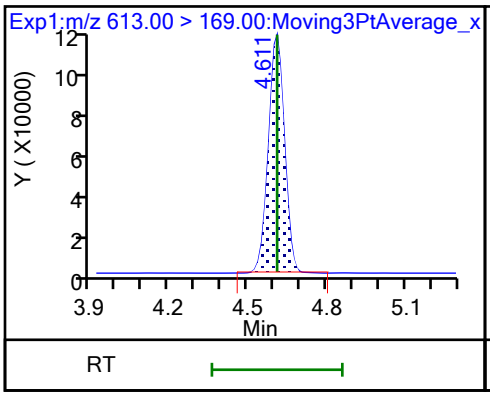
D 36 13C2 PFDoA



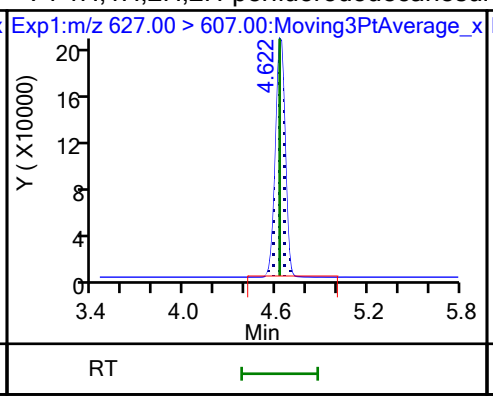
37 Perfluorododecanoic acid



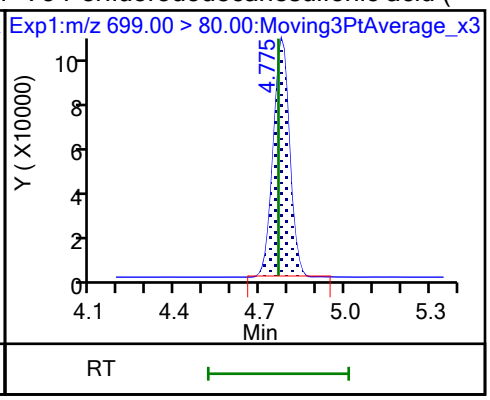
37 Perfluorododecanoic acid



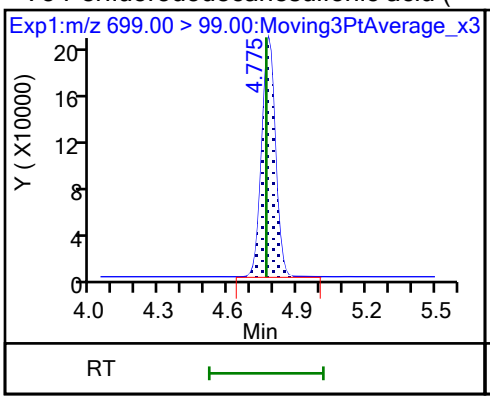
74 1H,1H,2H,2H-perfluorododecanesul



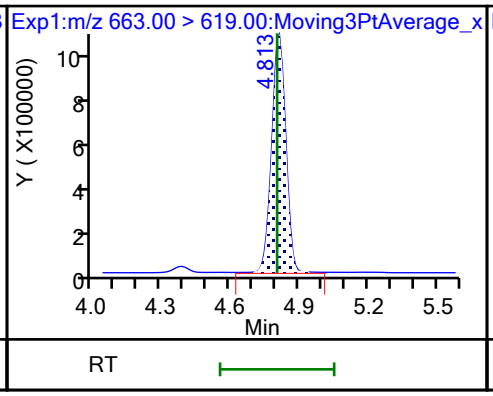
75 Perfluorododecanesulfonic acid (



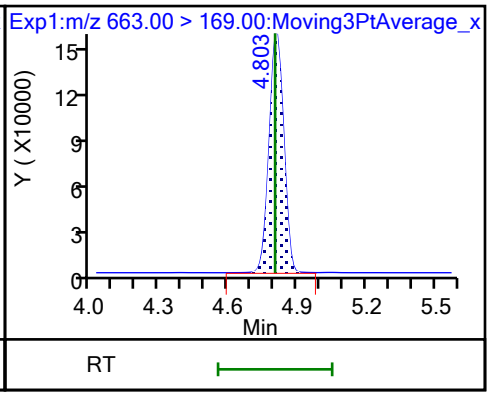
75 Perfluorododecanesulfonic acid (



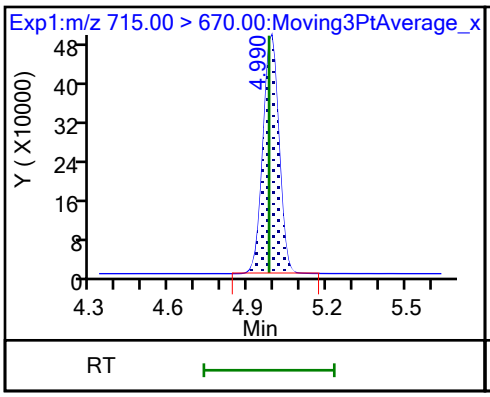
41 Perfluorotridecanoic acid



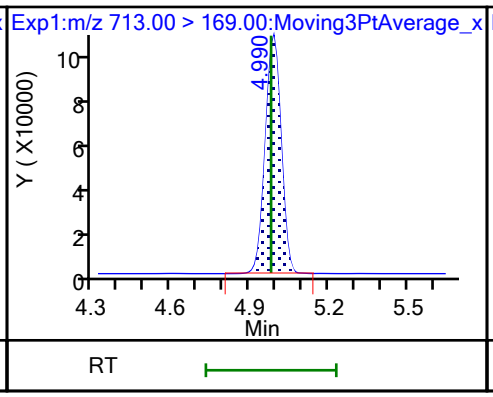
41 Perfluorotridecanoic acid



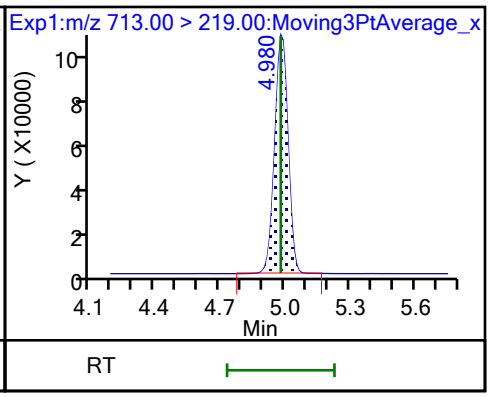
D 43 13C2 PFTeDA



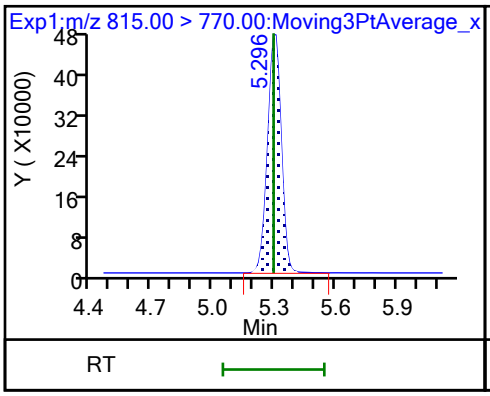
42 Perfluorotetradecanoic acid



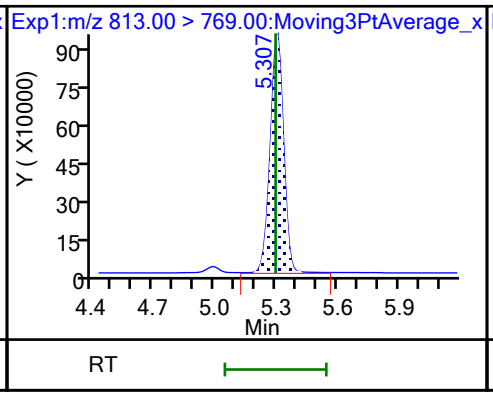
42 Perfluorotetradecanoic acid



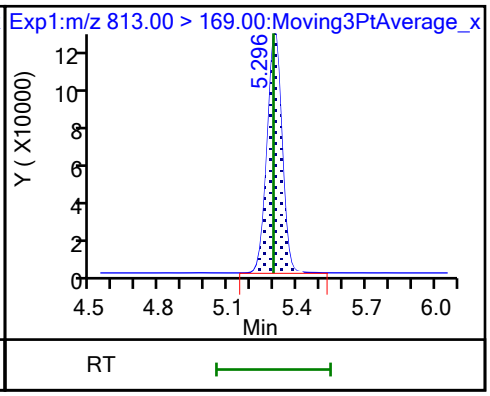
D 44 13C2 PFHxDA



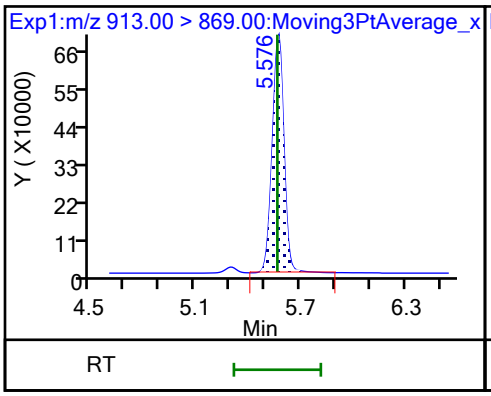
45 Perfluorohexadecanoic acid



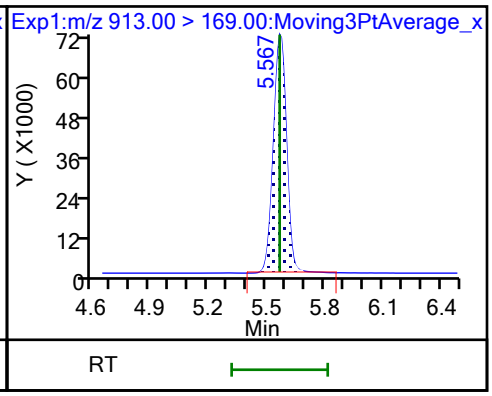
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/20 Calibration Date: 10/27/2023 12:43

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E20.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9041		0.959	1.00	-4.1	30.0
Perfluoropentanoic acid	AveID	1.079	1.033		0.957	1.00	-4.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.062		0.843	0.887	-4.9	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.413		0.942	0.937	0.5	
Perfluorohexanoic acid	AveID	1.100	0.9876		0.897	1.00	-10.3	
Perfluoropentanesulfonic acid	AveID	1.306	1.319		0.951	0.941	1.0	
HFPODA	AveID	1.001	1.009		1.01	1.00	0.8	
Perfluoroheptanoic acid	AveID	1.121	1.100		0.981	1.00	-1.9	
Perfluorohexanesulfonic acid	AveID	1.107	1.020		0.843	0.914	-7.8	
DONA	AveID	5.754	5.218		0.857	0.945	-9.3	
Perfluoroheptanesulfonic acid	AveID	1.445	1.396		0.920	0.953	-3.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.667		0.928	0.951	-2.4	
Perfluorooctanoic acid	AveID	1.065	1.015		0.953	1.00	-4.7	
Perfluorooctanesulfonic acid	AveID	1.166	1.064		0.847	0.928	-8.8	
Perfluorononanoic acid	AveID	0.9800	0.9104		0.929	1.00	-7.1	
9Cl-PF3ONS	AveID	3.569	3.780		0.988	0.933	5.9	
Perfluorononanesulfonic acid	AveID	0.8874	0.8051		0.873	0.962	-9.3	
Perfluorodecanoic acid	AveID	0.999	0.9361		0.937	1.00	-6.3	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.272		0.991	0.960	3.2	
Perfluorooctanesulfonamide	AveID	0.9539	0.9895		1.04	1.00	3.7	
NMeFOSAA	AveID	0.9074	0.8914		0.982	1.00	-1.8	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6446		0.911	0.965	-5.6	
Perfluoroundecanoic acid	AveID	1.031	0.9547		0.926	1.00	-7.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9272		0.927	1.00	-7.3	
11Cl-PF3OUdS	AveID	5.474	5.635		0.971	0.943	2.9	
Perfluorododecanoic acid	AveID	1.018	0.8678		0.853	1.00	-14.7	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.367		1.00	0.964	3.9	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2168		0.907	0.968	-6.3	
Perfluorotridecanoic acid	AveID	1.070	0.999		0.934	1.00	-6.6	
Perfluorotetradecanoic acid	AveID	0.1118	0.0943		0.844	1.00	-15.6	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9622		0.962	1.00	-3.8	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.6682		0.856	1.00	-14.4	
13C4 PFBA	Ave	0.9917	1.074		1.35	1.25	8.3	
13C5 PFPeA	Ave	0.7696	0.7457		1.21	1.25	-3.1	
13C3 PFBS	Ave	1.041	1.030		1.15	1.16	-1.0	
M2-4:2 FTS	Ave	0.1204	0.1102		1.07	1.17	-8.5	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Lab Sample ID: CCV 200-196839/20 Calibration Date: 10/27/2023 12:43

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E20.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7648		1.22	1.25	-2.3	
13C3 HFPO-DA	Ave	0.1516	0.1415		1.17	1.25	-6.6	
13C4 PFHpA	Ave	0.8590	0.8493		1.24	1.25	-1.1	50.0
18O2 PFHxS	Ave	0.7464	0.7438		1.18	1.18	-0.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1508		1.15	1.19	-2.8	
13C4 PFOA	Ave	0.9731	1.004		1.29	1.25	3.2	50.0
13C4 PFOS	Ave	0.4742	0.4694		1.18	1.20	-1.0	50.0
13C5 PFNA	Ave	1.059	1.042		1.23	1.25	-1.6	50.0
13C2 PFDA	Ave	1.109	1.146		1.29	1.25	3.3	
M2-8:2 FTS	Ave	0.1744	0.1630		1.12	1.20	-6.5	
13C8 FOSA	Ave	0.9462	0.8760		1.16	1.25	-7.4	
d3-NMeFOSAA	Ave	0.2650	0.2614		1.23	1.25	-1.4	
13C2 PFUnA	Ave	1.047	1.057		1.26	1.25	1.0	
d5-NEtFOSAA	Ave	0.2552	0.2548		1.25	1.25	-0.1	
13C2 PFDoA	Ave	1.064	1.118		1.31	1.25	5.1	
13C2 PFTeDA	Ave	1.059	1.048		1.24	1.25	-1.0	
13C2 PFHxDA	Ave	1.221	1.144		1.17	1.25	-6.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E20.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 12:43:38 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057578-020 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:14 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:50:06
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.131	-0.001	0.605	2204919	1.35		108	3964	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	1594857	0.9590		95.9	116	
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1531447	1.21		96.9	2045	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.000	1265841	0.9574		95.7	36.3	
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.701	1968183	1.15		99.0	193254	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.000	1594724	0.8433	Target=2.06	95.1	1826	
298.90 > 99.00	2.467	2.467	0.0	1.000	782586		2.04(1.03-3.09)		375	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	578769	0.9417		100	2503	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	211306	1.07		91.5	83.9	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1570679	1.22		97.7	5154	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	1241010	0.8975	Target=14.12	89.7	199	
313.00 > 119.00	2.797	2.797	0.0	1.000	88644		14.00(7.06-21.17)		112	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.888	1517239	0.9507	Target=2.72	101	3998	
349.00 > 99.00	2.810	2.797	0.013	0.888	527385		2.88(1.36-4.09)		372	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.897	0.011	1.000	234684	1.01		101	2026	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	290650	1.17		93.4	1169	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.153	0.012	0.899	1445188	1.18		99.7	7001	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.165	3.153	0.012	1.000	1139884	0.8426	Target=3.32	92.2	2378	
399.00 > 99.00	3.165	3.153	0.012	1.000	347261		3.28(1.66-4.98)		387	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.165	0.0	1.000	1534898	0.9813	Target=4.17	98.1	339	
363.00 > 169.00	3.165	3.165	0.0	1.000	356359		4.31(2.09-6.26)		735	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.899	1744271	1.24		98.9	4880	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.835	3803371	0.8570	Target=3.33	90.7	3400	
377.00 > 85.00	3.199	3.199	0.0	0.835	1064066		3.57(1.66-4.99)		1908	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.914	1025780	0.9202	Target=4.83	96.6	5135	
449.00 > 99.00	3.511	3.502	0.009	0.917	201522		5.09(2.41-7.24)		701	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.502	0.009	0.997	294219	1.15		97.2	453	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.502	0.009	1.000	628327	0.9278		97.6	616	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.512	0.008	1.000	1675269	0.9532	Target=2.88	95.3	73.5	
413.00 > 169.00	3.520	3.512	0.008	1.000	586416		2.86(1.44-4.32)		1458	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.512	0.008	1.000	2062447	1.29		103	9322	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.512	0.008		2053835	1.25			5023	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.819	0.011	1.000	761753	0.8467	Target=4.24	91.2	1375	M
499.00 > 99.00	3.830	3.819	0.011	1.000	172758		4.41(2.12-6.37)		564	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.819	0.011	1.088	921711	1.18		99.0	3730	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.842	0.0	1.000	1559295	0.9289	Target=8.34	92.9	253	
463.00 > 169.00	3.842	3.842	0.0	1.000	187456		8.32(4.17-12.51)		1359	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.091	2141044	1.23		98.4	6812	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.971	0.010	1.039	2720375	0.9882		106	4171	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.101	0.011	1.074	597376	0.8728	Target=2.17	90.7	3030	
549.00 > 99.00	4.100	4.101	-0.001	1.070	252392		2.37(1.08-3.25)		1232	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.125	0.011	1.175	2352921	1.29		103	11397	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.136	0.0	1.000	1761988	0.9367	Target=11.44	93.7	564	
513.00 > 169.00	4.136	4.136	0.0	1.000	169559		10.39(5.72-17.16)		987	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.136	0.012	1.000	584133	0.99		103	3246	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.136	0.012	1.178	320667	1.12		93.5	1195	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.202	1799156	1.16		92.6	2488	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.230	0.012	1.003	1424140	1.04		104	3556	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.278	4.266	0.012	1.215	536832	1.23		98.6	1922	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.278	4.266	0.012	1.000	382825	0.9824		98.2	773	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.351	0.012	1.139	479765	0.9108	Target=2.37	94.4	2851	
599.00 > 99.00	4.363	4.351	0.012	1.139	189720		2.53(1.19-3.56)		857	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.246	2171560	1.26		101	7637	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.387	0.0	1.000	1658566	0.9263	Target=12.20	92.6	387	
563.00 > 169.00	4.387	4.387	0.0	1.000	144883		11.45(6.10-18.31)		2144	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.399	-0.001	1.249	523344	1.25		99.9	1166	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.410	4.399	0.011	1.003	388192	0.9270		92.7	2859	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.468	0.014	1.170	4098312	0.9708		103	5675	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.310	2295885	1.31		105	7373	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.610	0.0	1.000	1593964	0.8526	Target=8.47	85.3	108	
613.00 > 169.00	4.610	4.610	0.0	1.000	207780		7.67(4.23-12.70)		1478	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.621	0.011	1.117	352919	1.00		104	82229	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.764	0.010	1.246	161898	0.9068	Target=0.48	93.7	1283	
699.00 > 99.00	4.774	4.764	0.010	1.246	335779		0.48(0.24-0.72)		4560	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.812	4.803	0.009	1.044	1834938	0.9338	Target=6.41	93.4	106	
663.00 > 169.00	4.812	4.803	0.009	1.044	279037		6.58(3.21-9.62)		1570	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.417	2153010	1.24		99.0	6730	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.980	0.010	1.000	162470	0.8436	Target=0.87	84.4	1457	
713.00 > 219.00	4.990	4.980	0.010	1.000	192113		0.85(0.43-1.30)		2994	

Report Date: 27-Oct-2023 18:44:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E20.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.307	5.296	0.011	1.507	2349003	1.17		93.7	5381	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.307	5.296	0.011	1.000	1808259	0.9622	Target=7.89	96.2	130	
813.00 > 169.00	5.307	5.296	0.011	1.000	237609		7.61(3.94-11.83)		2641	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.576	5.567	0.009	1.051	1255624	0.8556	Target=9.39	85.6	112	
913.00 > 169.00	5.576	5.567	0.009	1.051	134433		9.34(4.69-14.08)		1074	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

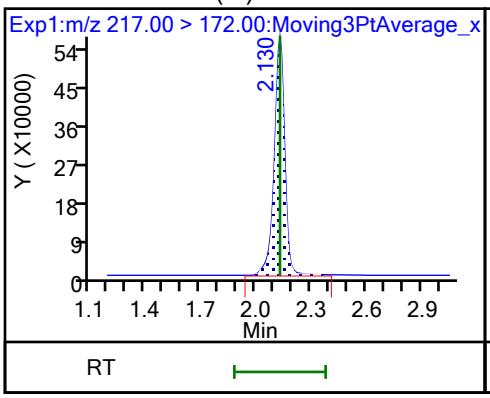
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:44:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

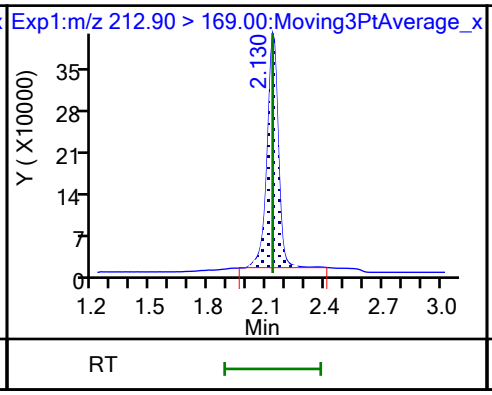
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E20.d
Injection Date: 27-Oct-2023 12:43:38 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

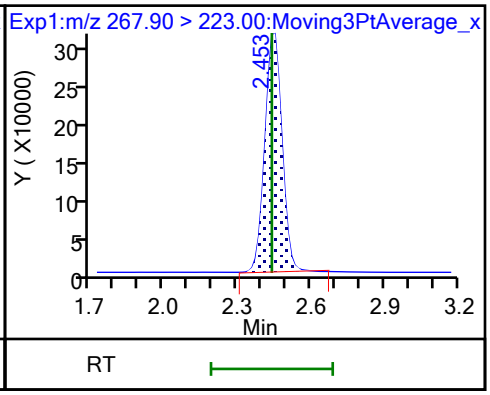
D 1 13C4 PFBA (M)



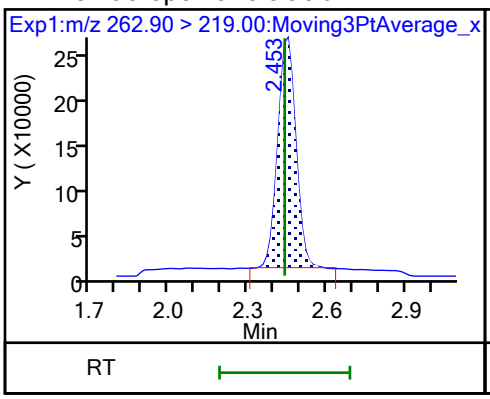
2 Perfluorobutanoic acid



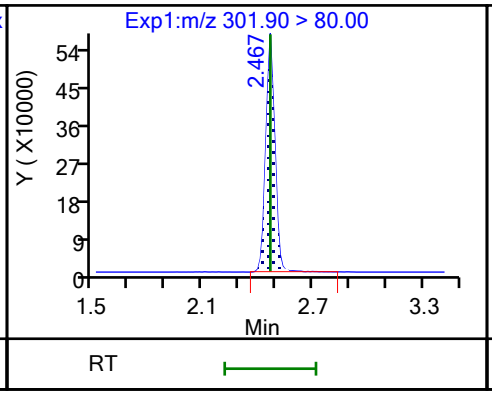
D 3 13C5 PFPeA



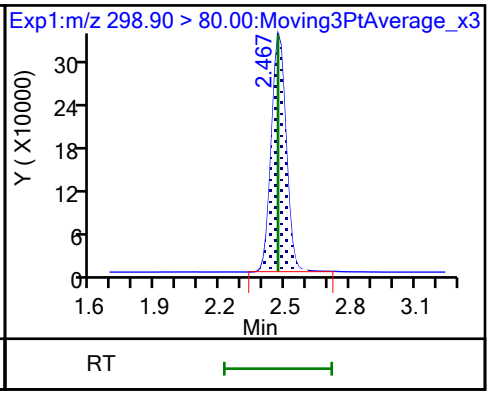
4 Perfluoropentanoic acid



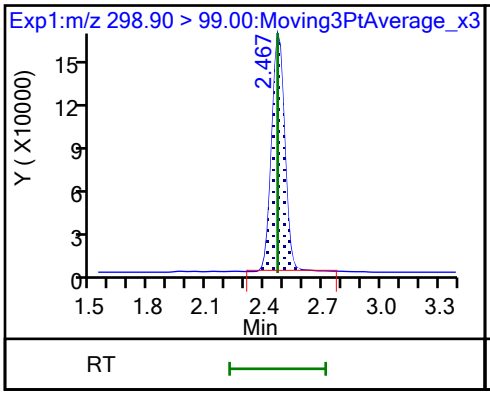
D 47 13C3 PFBS



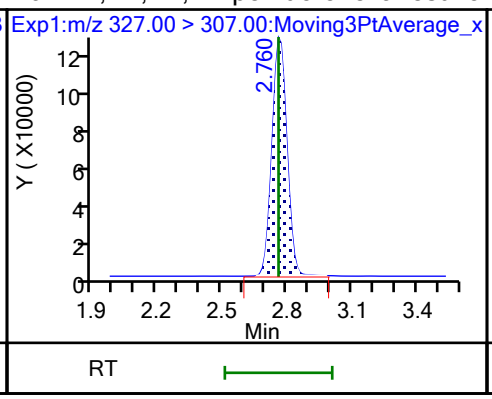
5 Perfluorobutanesulfonic acid



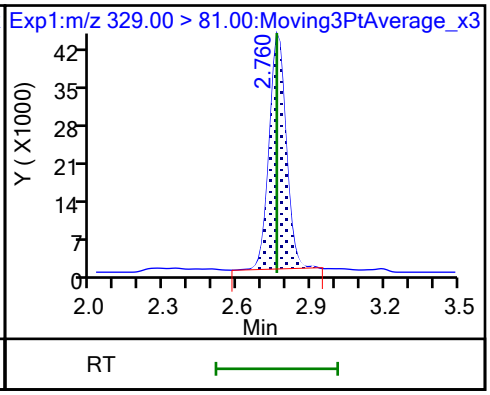
5 Perfluorobutanesulfonic acid



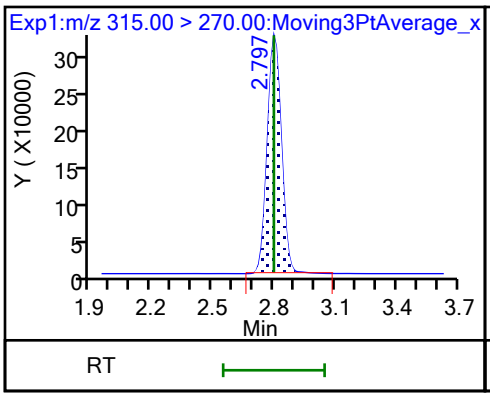
61 1H,1H,2H,2H-perfluorohexanesulfo



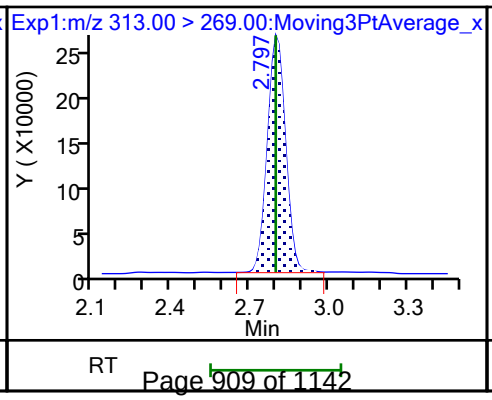
D 60 M2-4:2 FTS



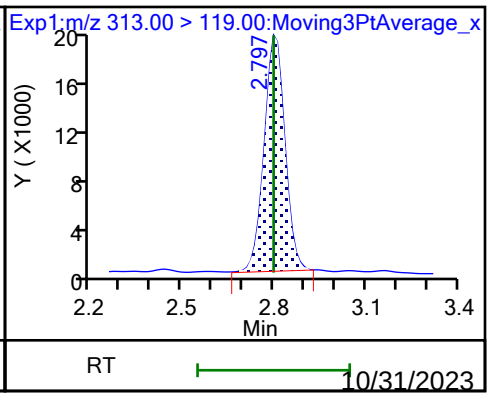
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

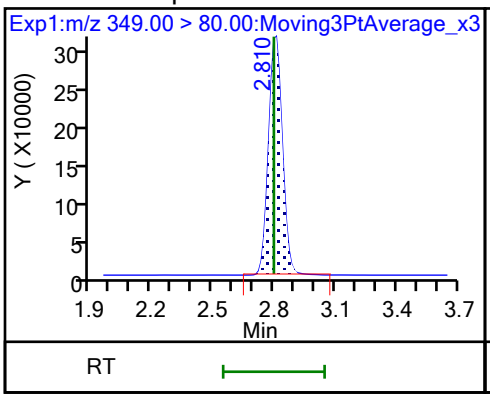


6 Perfluorohexanoic acid

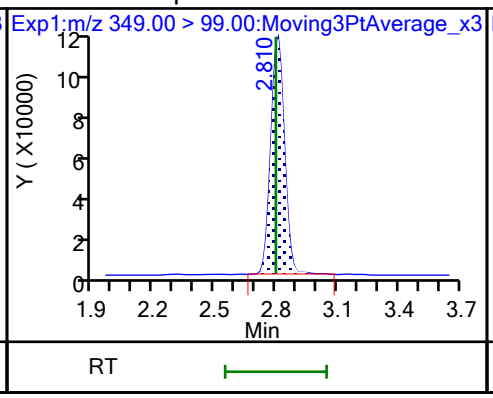


10/31/2023
10:17 AM

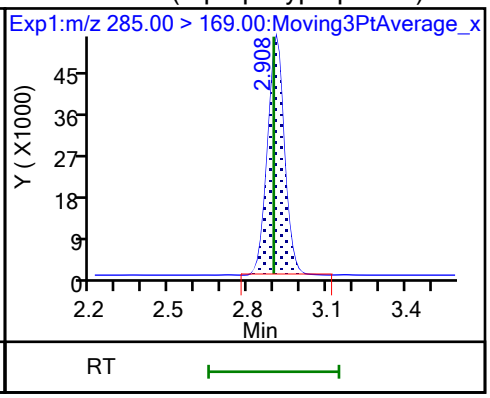
70 Perfluoropentanesulfonic acid



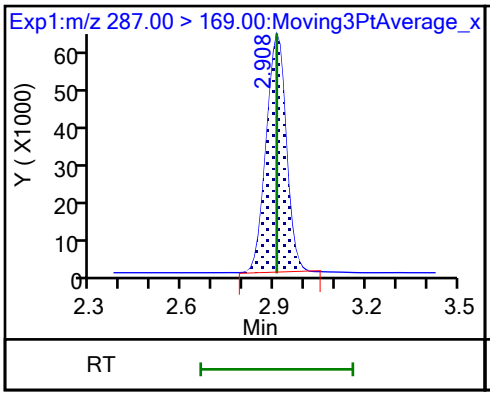
70 Perfluoropentanesulfonic acid



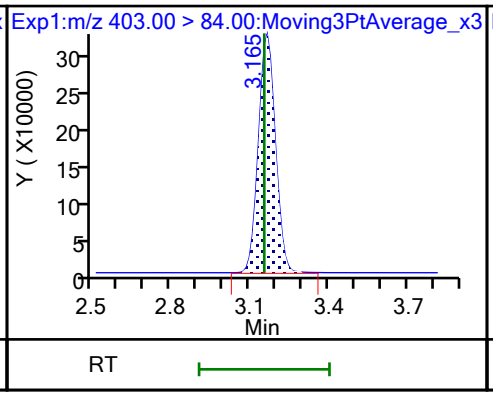
67 Perfluoro(2-propoxypropanoic) ac



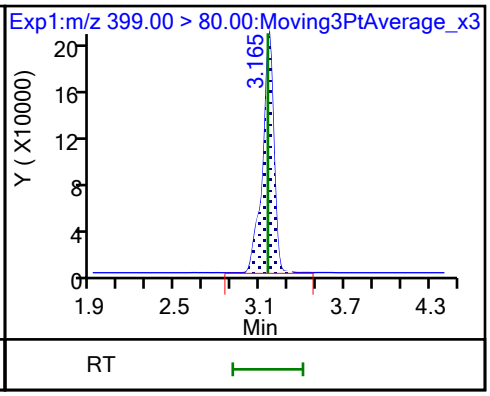
D 64 13C3 HFPO-DA



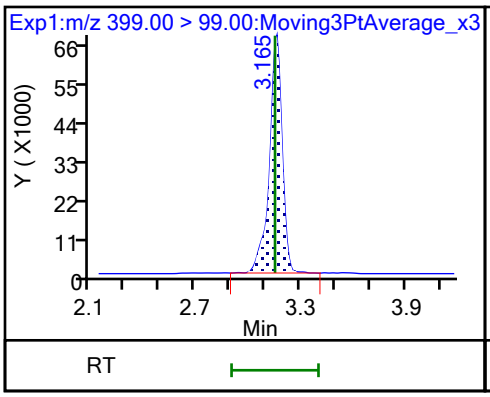
D 11 18O2 PFHxS



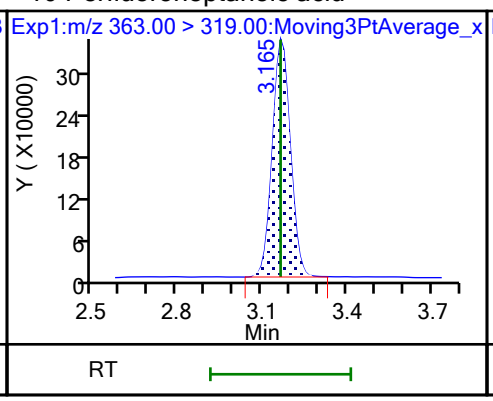
8 Perfluorohexanesulfonic acid



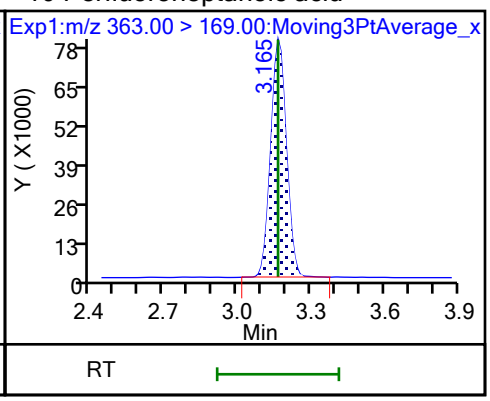
8 Perfluorohexanesulfonic acid



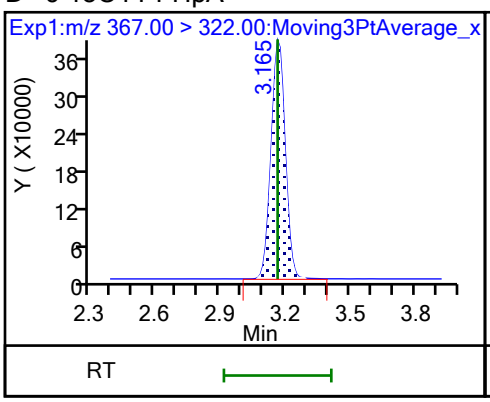
10 Perfluoroheptanoic acid



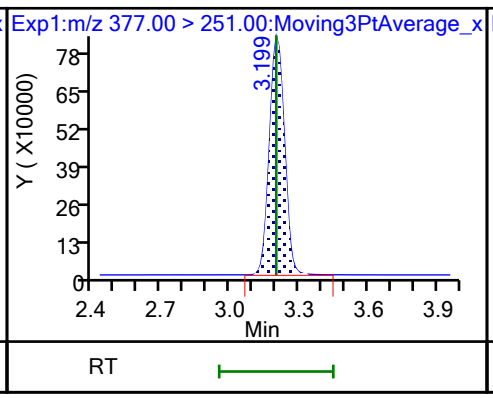
10 Perfluoroheptanoic acid



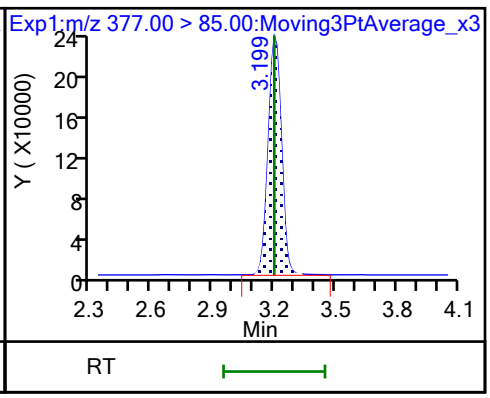
D 9 13C4 PFHpA



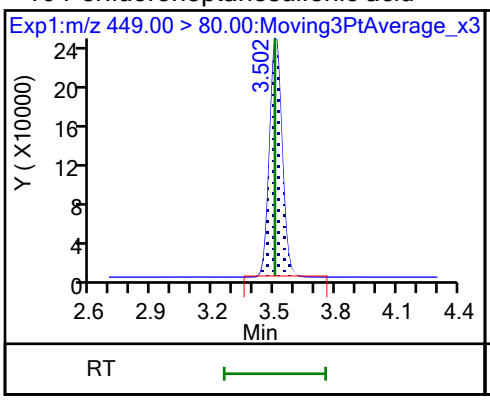
77 DONA



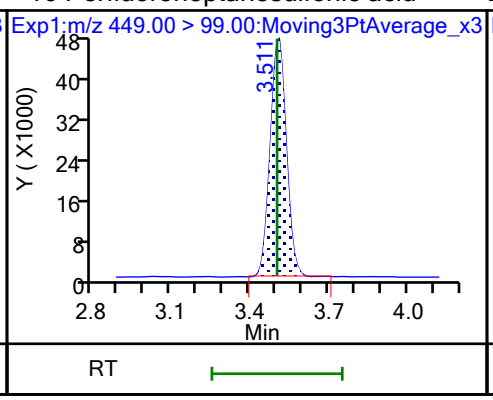
77 DONA



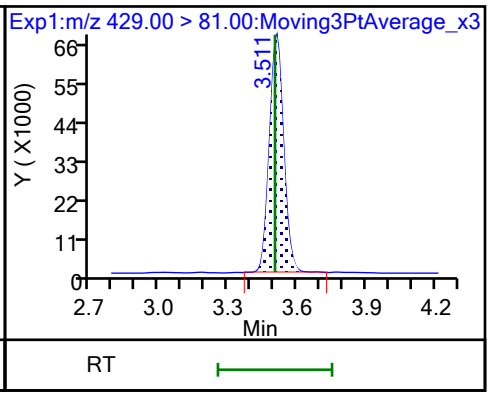
16 Perfluoroheptanesulfonic acid



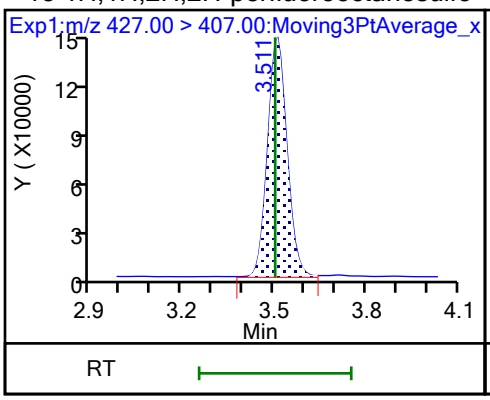
16 Perfluoroheptanesulfonic acid



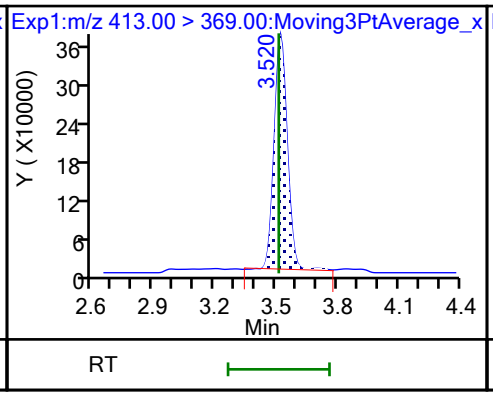
D 12 M2-6:2 FTS



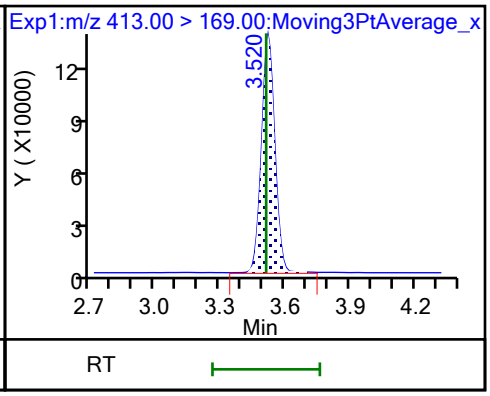
13 1H,1H,2H,2H-perfluorooctanesulfo



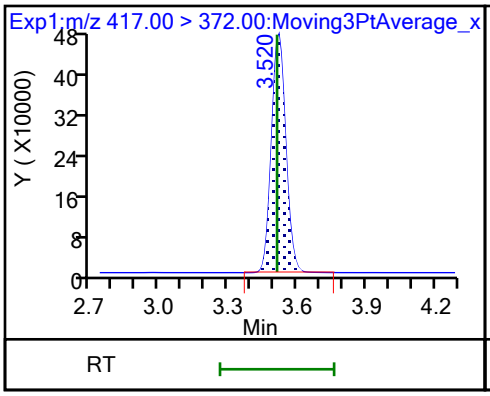
15 Perfluorooctanoic acid



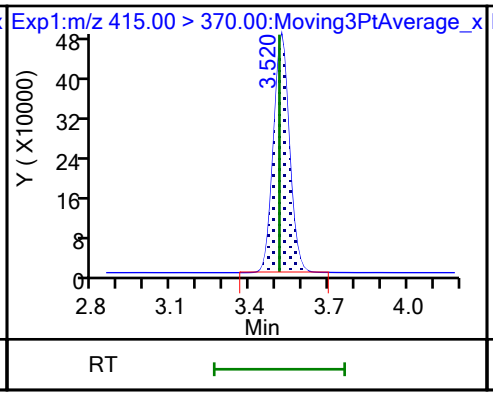
15 Perfluorooctanoic acid



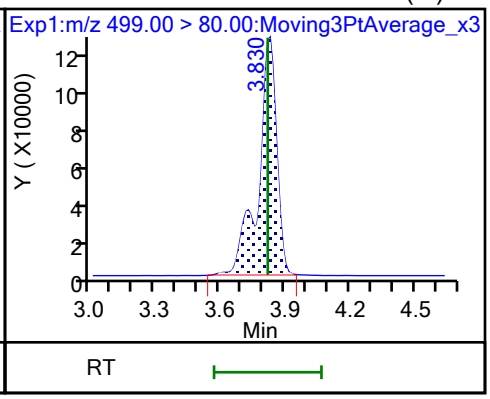
D 14 13C4 PFOA



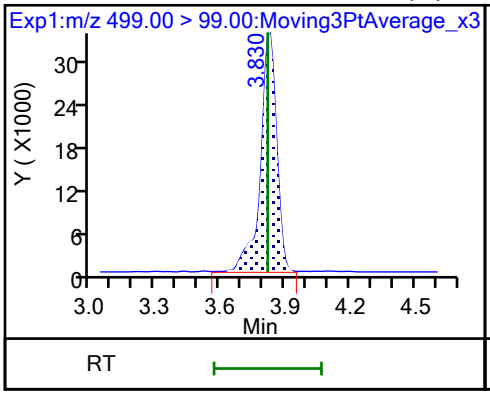
* 62 13C2 PFOA



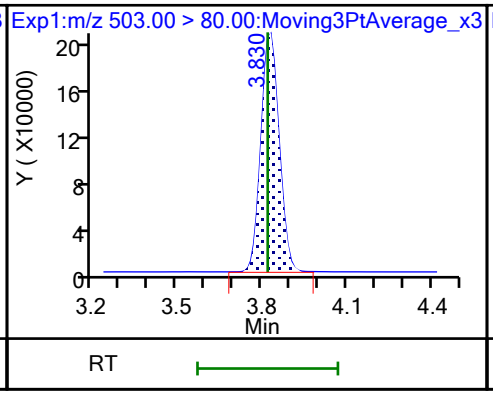
17 Perfluorooctanesulfonic acid (M)



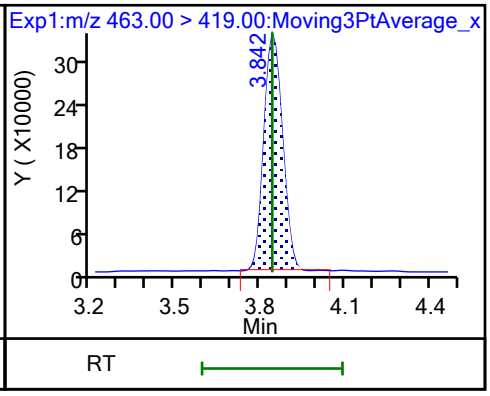
17 Perfluorooctanesulfonic acid (M)



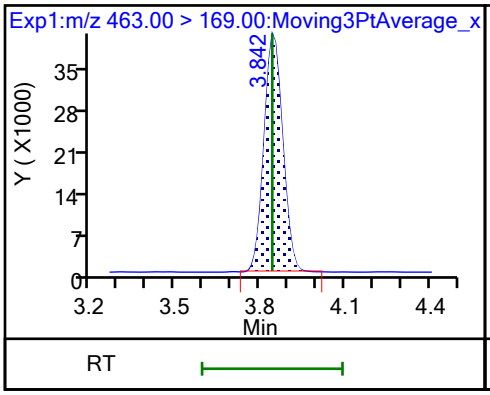
D 18 13C4 PFOS



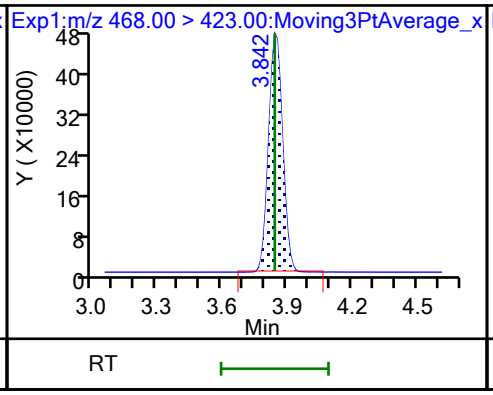
20 Perfluorononanoic acid



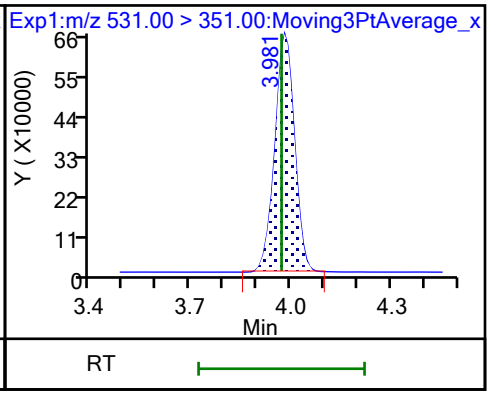
20 Perfluorononanoic acid



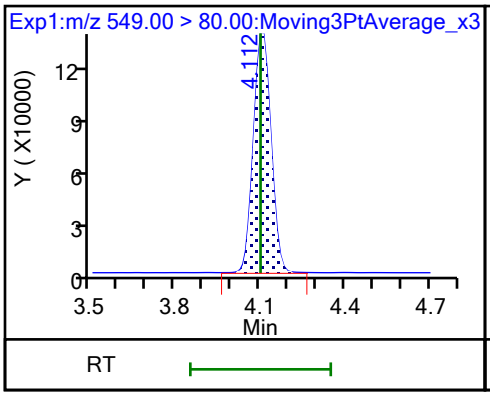
D 19 13C5 PFNA



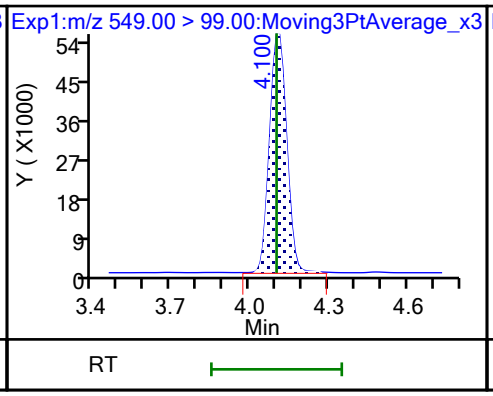
69 9-Chlorohexadecafluoro-3-oxanona (M)



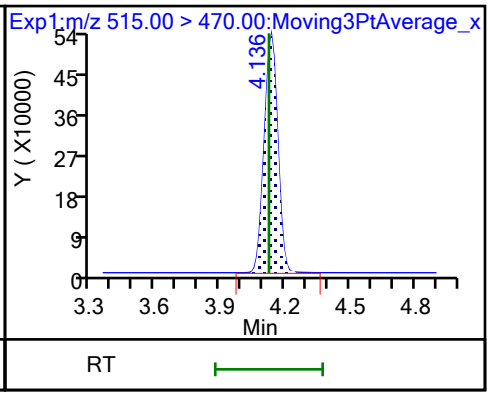
68 Perfluorononanesulfonic acid



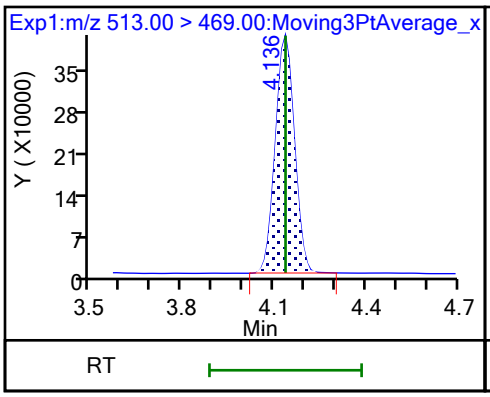
68 Perfluorononanesulfonic acid



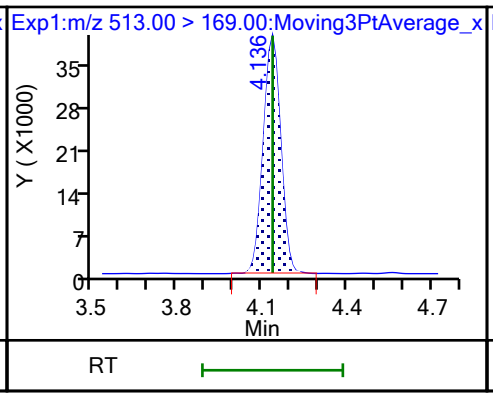
D 23 13C2 PFDA



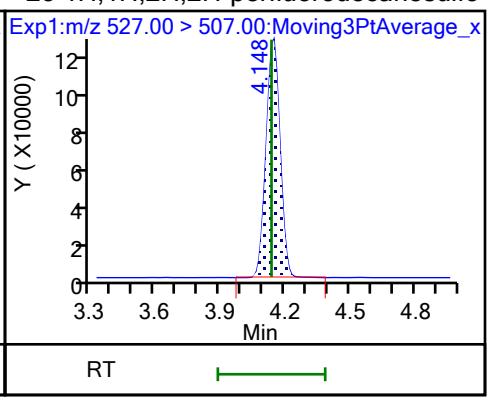
24 Perfluorodecanoic acid



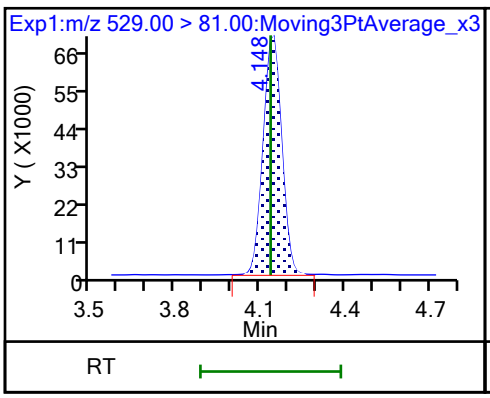
24 Perfluorodecanoic acid



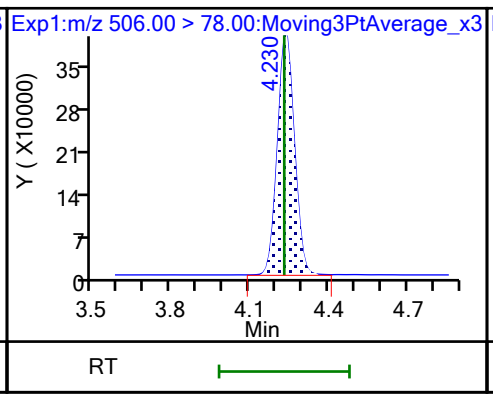
25 1H,1H,2H,2H-perfluorodecanesulfo



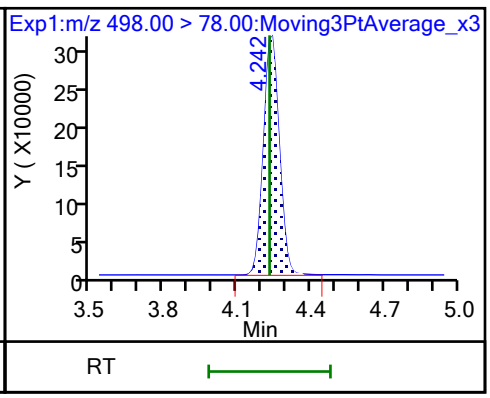
D 26 M2-8:2 FTS



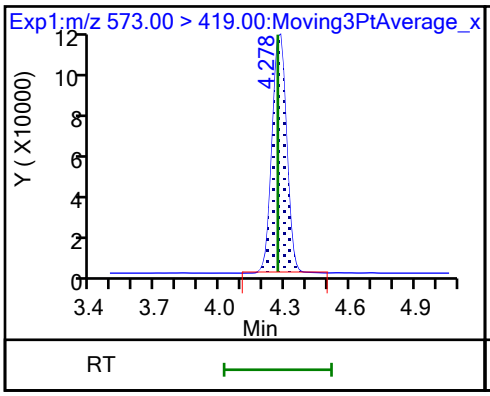
D 21 13C8 FOSA



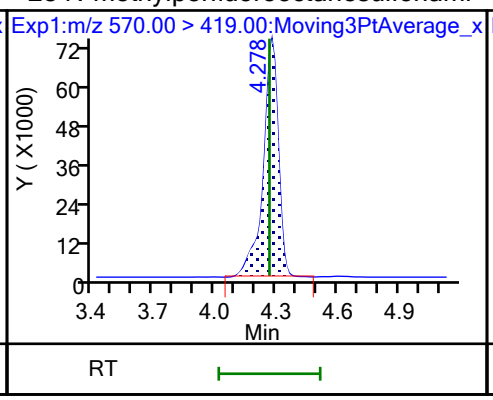
22 Perfluorooctanesulfonamide



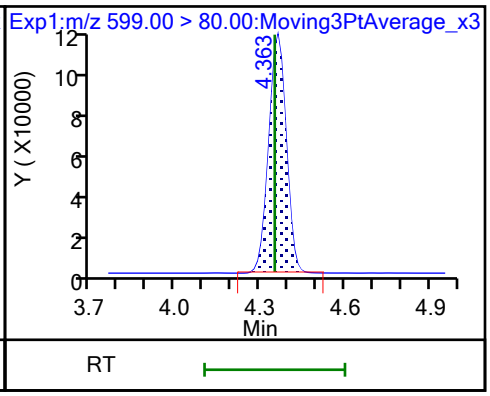
D 27 d3-NMeFOSAA



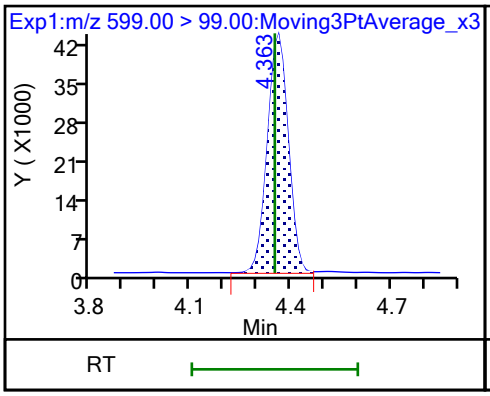
28 N-methylperfluorooctanesulfonami



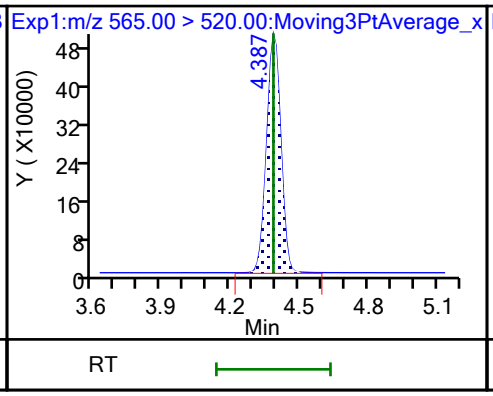
29 Perfluorodecanesulfonic acid



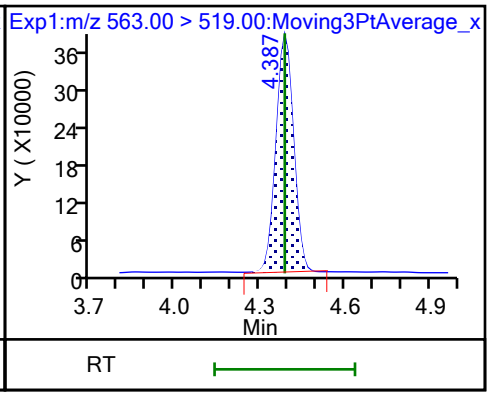
29 Perfluorodecanesulfonic acid



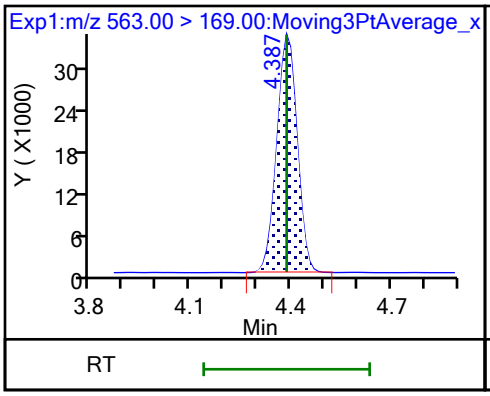
D 30 13C2 PFUnA



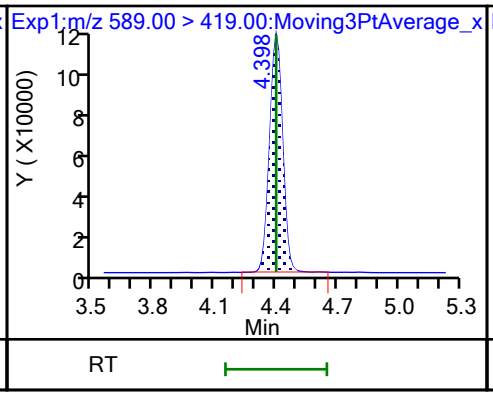
31 Perfluoroundecanoic acid



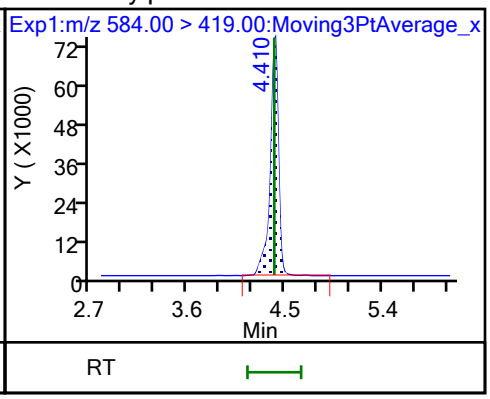
31 Perfluoroundecanoic acid



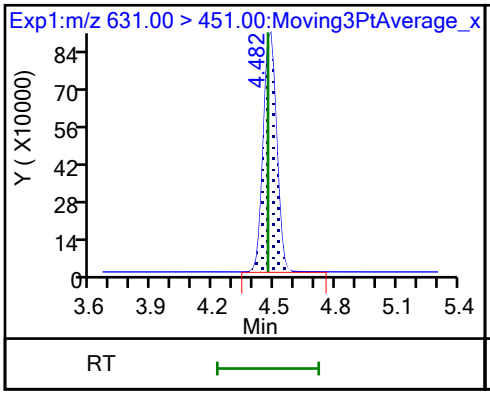
D 32 d5-NEtFOSAA



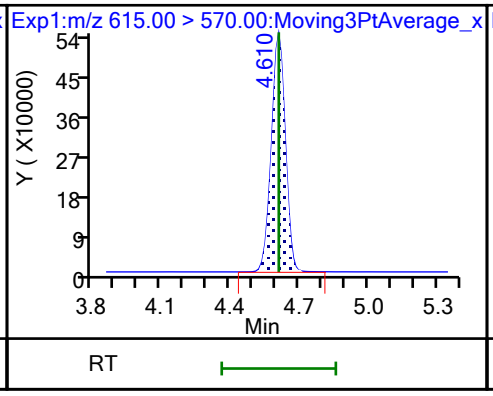
33 N-ethylperfluorooctanesulfonamid



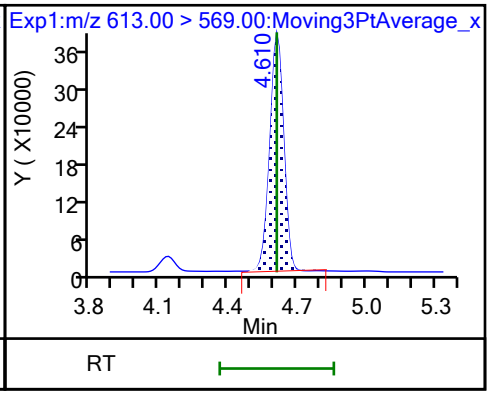
66 11-Chloroeicosafluoro-3-oxaundec



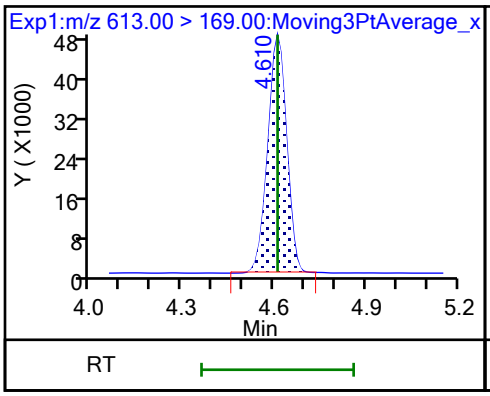
D 36 13C2 PFDoA



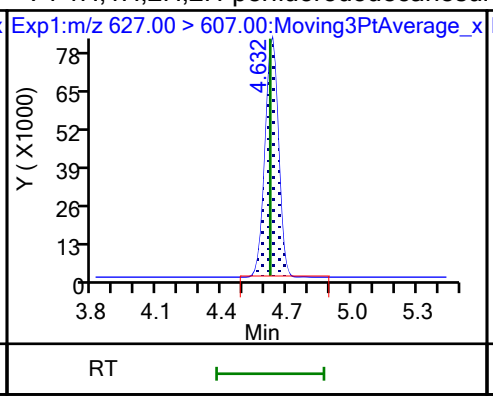
37 Perfluorododecanoic acid



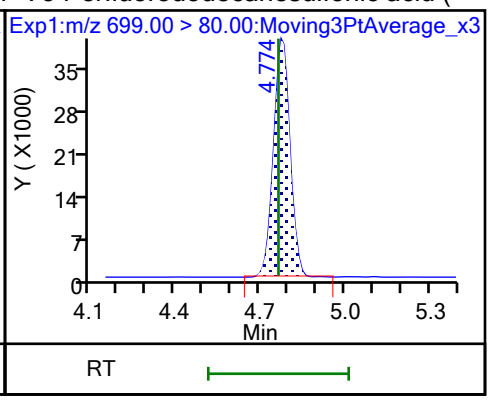
37 Perfluorododecanoic acid



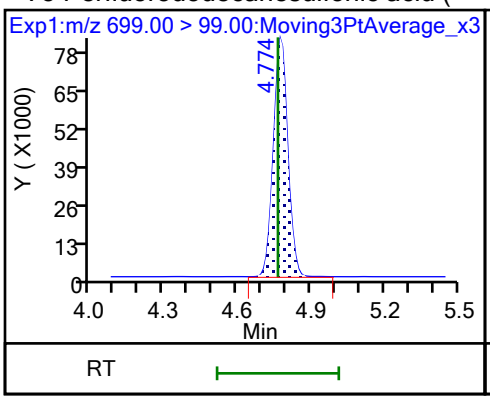
74 1H,1H,2H,2H-perfluorododecanesul



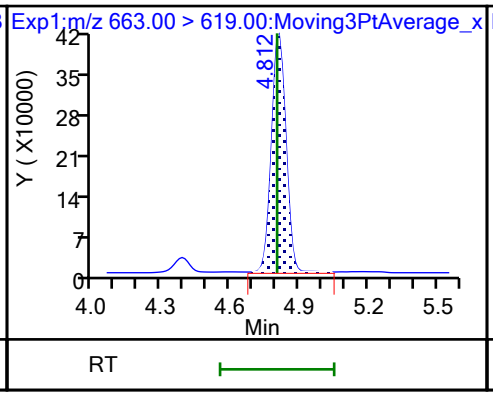
75 Perfluorododecanesulfonic acid (



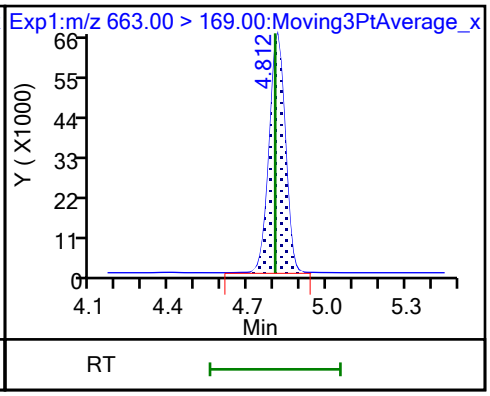
75 Perfluorododecanesulfonic acid (



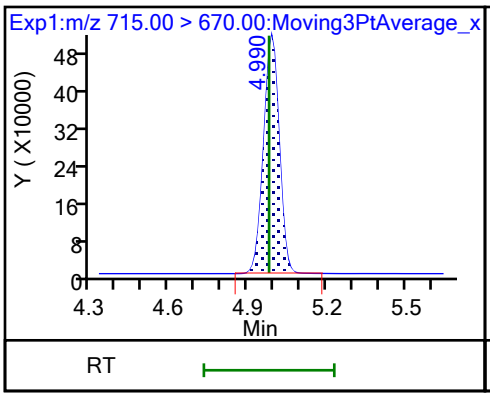
41 Perfluorotridecanoic acid



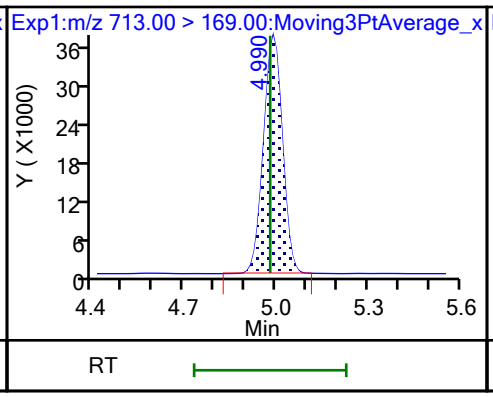
41 Perfluorotridecanoic acid



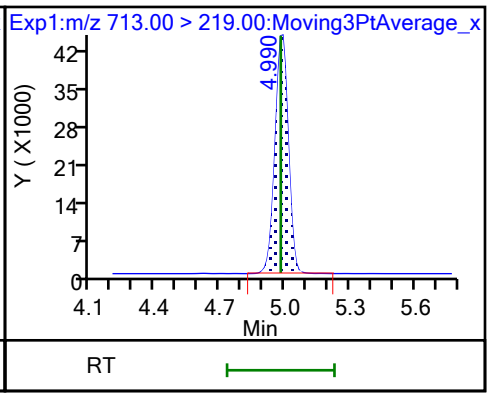
D 43 13C2 PFTeDA



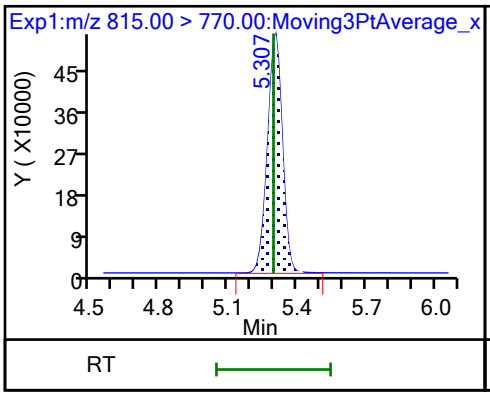
42 Perfluorotetradecanoic acid



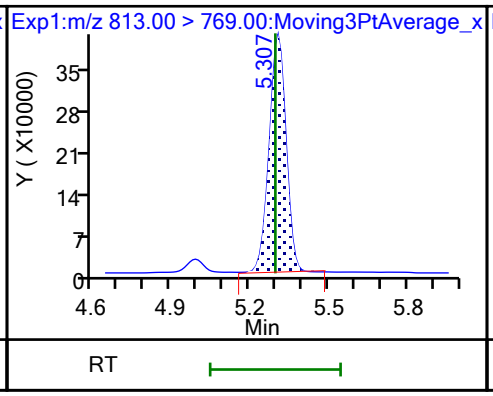
42 Perfluorotetradecanoic acid



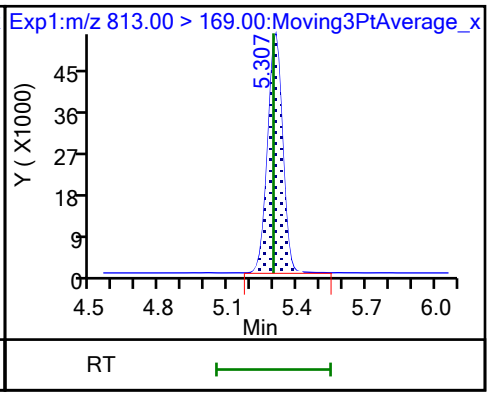
D 44 13C2 PFHxDA



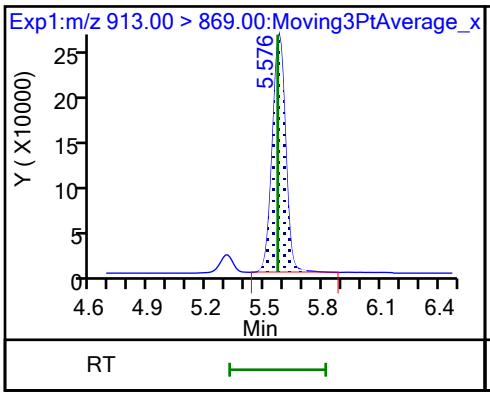
45 Perfluorohexadecanoic acid



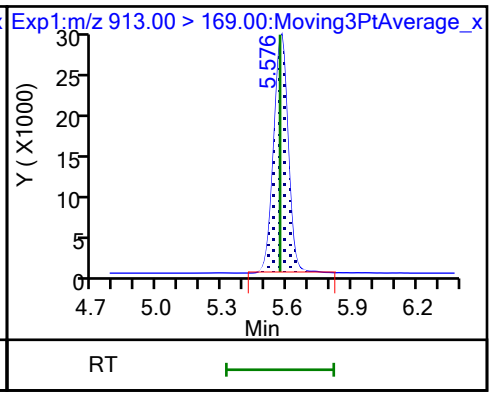
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196662/1-A

Matrix: Water | Lab File ID: PA231023E02.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 06:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196662/1-A

Matrix: Water | Lab File ID: PA231023E02.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 06:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	87		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	76		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	75		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	86		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	91		50-150
STL02280	M2-8:2 FTS	84		50-150
STL02255	13C3 HFPO-DA	84		50-150
STL00994	18O2 PFHxS	96		50-150
STL00993	13C2 PFHxA	94		50-150
STL00991	13C4 PFOS	96		50-150
STL00998	13C2 PFDoA	81		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	94		50-150
STL00990	13C4 PFOA	99		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Lims ID: MB 200-196662/1-A
Client ID:
Sample Type: MB
Inject. Date: 24-Oct-2023 06:13:48 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196662/1-A
Misc. Info.: 200-0057513-002 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:24:16
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.605	2218499	1.23		98.4	1715	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	40865	-0.0154			2.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1524653	1.09		87.1	1848	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.467	2.453	0.014	1.006	8272	0.006285			0.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1991055	1.05		90.4	114647	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	5097	0.002664	Target=2.06		6.1	M
298.90 > 99.00	2.467	2.467	0.0	1.000	2664		1.91(1.03-3.09)		1.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.000	892	0.001351			10.2	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	227009	1.04		88.7	134	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1680836	1.18		94.4	1450	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	3445	0.002328	Target=14.12		0.9	M
313.00 > 119.00	2.810	2.797	0.013	1.004	365		9.44(7.06-21.17)		0.6	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.908	-0.011	0.996	165	0.000714			3.2	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	288596	1.05		83.7	813	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1539088	1.13		95.8	8963	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	6499	0.004511	Target=3.32		17.4	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	1631		3.98(1.66-4.98)		1.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.188	3.168	0.020	1.007	1759	0.001020	Target=4.17		0.5	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	635		2.77(2.09-6.26)		2.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1922754	1.23		98.4	5618	
77 DONA										RM
377.00 > 251.00	3.199	3.203	-0.004	0.835	3702	0.000780	Target=3.33		2.7	RM
377.00 > 85.00	3.212	3.203	0.009	0.838	510		7.26(1.66-4.99)		1.1	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	1022	0.000858	Target=4.83		3.0	M
449.00 > 99.00	3.511	3.505	0.006	0.917	148		6.91(2.41-7.24)		0.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	306607	1.09		91.5	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.514	-0.012	0.997	455	0.000645			1.0	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.539	3.514	0.025	1.005	21366	0.0114	Target=2.88		0.8	M
413.00 > 169.00	3.530	3.514	0.016	1.003	5418		3.94(1.44-4.32)		9.1	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2195289	1.24		99.2	8550	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2274471	1.25			4528	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.842	3.822	0.020	1.003	2360	0.002455	Target=4.24		4.2	M
499.00 > 99.00	3.808	3.822	-0.014	0.994	478		4.94(2.12-6.37)		0.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	985039	1.14		95.5	5417	
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.845	0.009	1.095	2275520	1.18		94.5	6482	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	4.000	3.983	0.017	1.044	2158	0.000733			5.7	M
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.101	4.105	-0.004	1.070	702	0.000960	Target=2.17		12.4	RM
549.00 > 99.00	4.101	4.105	-0.004	1.070	136		5.16(1.08-3.25)		1.0	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2380397	1.18		94.4	8706	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	318966	1.01		83.9	854	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	384	0.000655			4.2	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.234	0.008	1.205	1608846	0.9345		74.8	2952	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.234	0.020	1.003	1458	0.001188			9.0	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.270	0.009	1.215	542582	1.13		90.0	1534	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.292	4.270	0.022	1.003	1404	0.003565			2.9	M
D 30 13C2 PFUnA										M
565.00 > 520.00	4.387	4.390	-0.003	1.246	2288986	1.20		96.1	4158	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.249	500007	1.08		86.2	992	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.411	4.401	0.010	1.003	1279	0.003197			5.1	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.473	-0.005	1.167	3530	0.000782			5.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	1963705	1.01		81.2	6216	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.610	4.613	-0.003	1.000	1980	0.001238	Target=8.47		0.2	RM
613.00 > 169.00	4.621	4.613	0.008	1.002	102		19.41(4.23-12.70)		1.8	M
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.610	4.624	-0.014	1.111	459	0.001309			10.9	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.982	0.008	1.417	1828212	0.9485		75.9	4845	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.292	0.004	1.504	2049087	0.9226		73.8	4536	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.292	0.004	1.000	4627	0.002822	Target=7.89		0.3	
813.00 > 169.00	5.296	5.292	0.004	1.000	676		6.84(3.94-11.83)		10.4	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

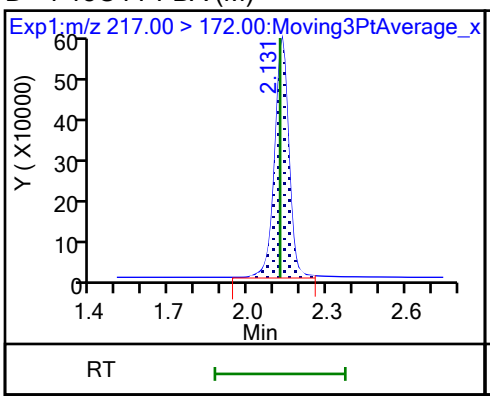
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:06 Chrom Revision: 2.3 18-Oct-2023 21:16:54

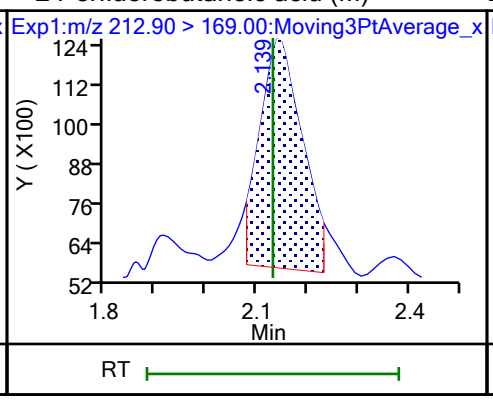
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

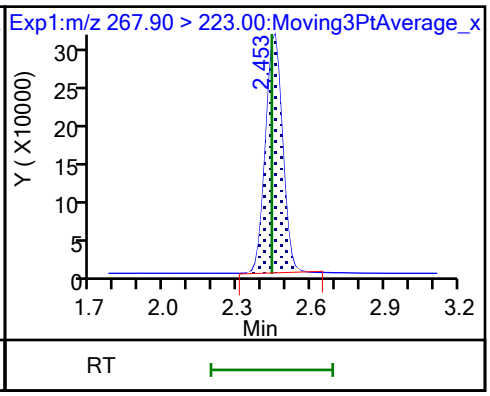
D 1 13C4 PFBA (M)



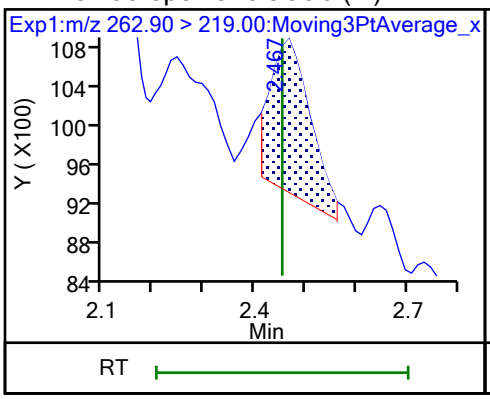
2 Perfluorobutanoic acid (M)



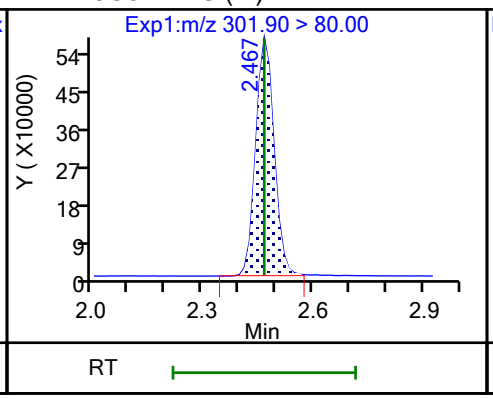
D 3 13C5 PFPeA



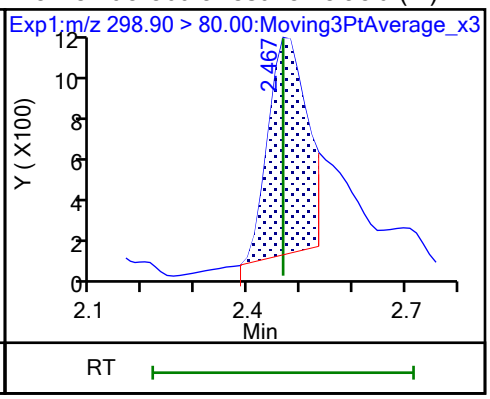
4 Perfluoropentanoic acid (M)



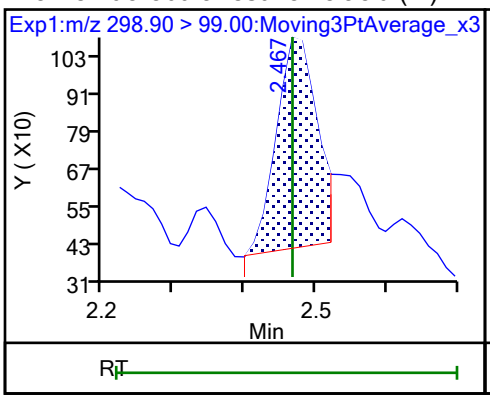
D 47 13C3 PFBS (M)



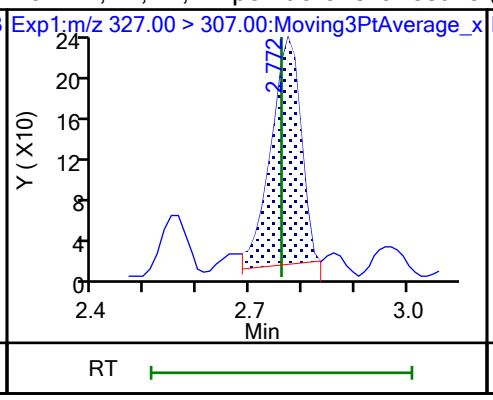
5 Perfluorobutanesulfonic acid (M)



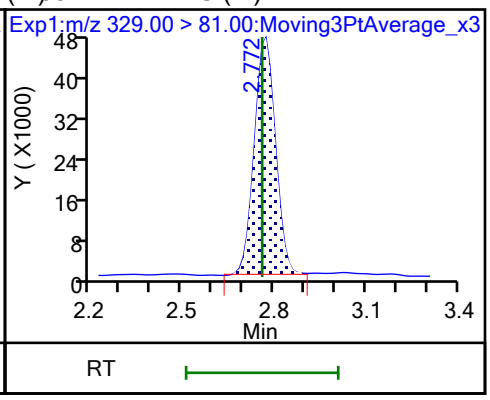
5 Perfluorobutanesulfonic acid (M)



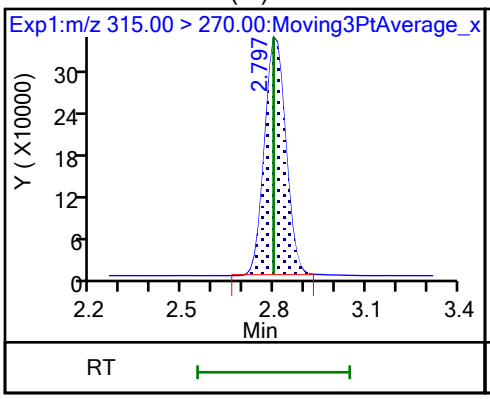
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



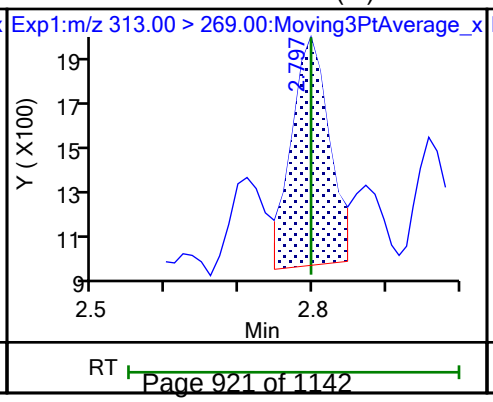
60 M2-4:2 FTS (M)



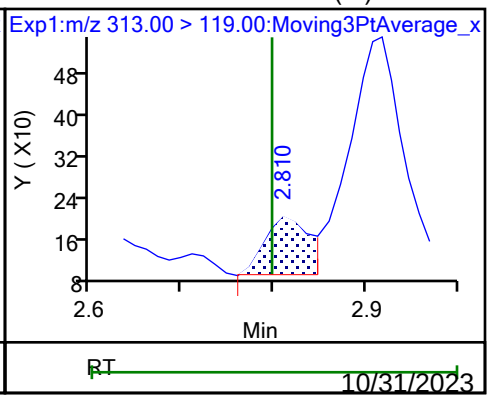
D 7 13C2 PFHxA (M)



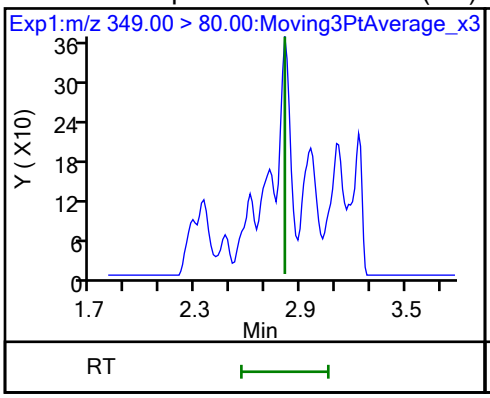
6 Perfluorohexanoic acid (M)



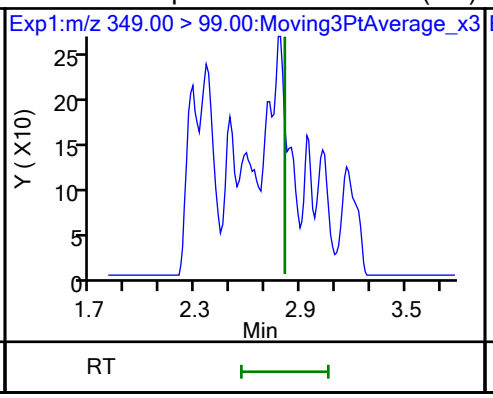
6 Perfluorohexanoic acid (M)



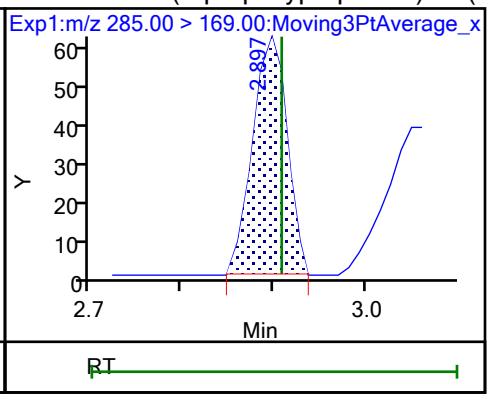
70 Perfluoropentanesulfonic acid (ND)



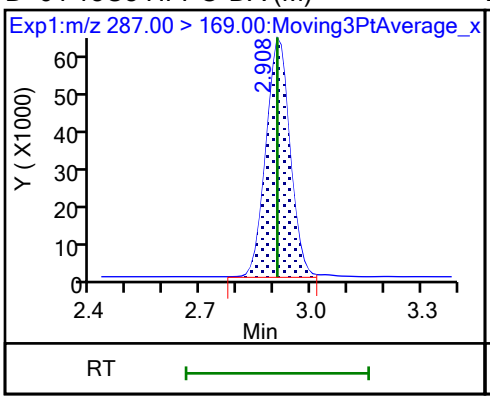
70 Perfluoropentanesulfonic acid (ND)



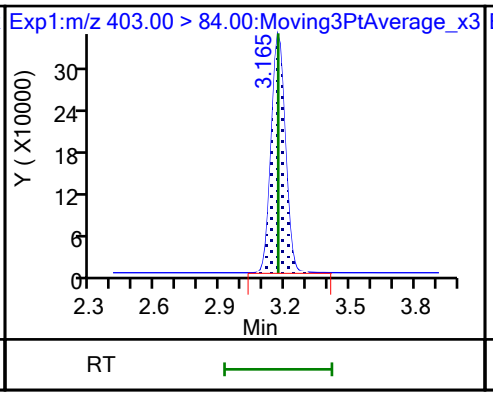
67 Perfluoro(2-propoxypropanoic) ac (M)



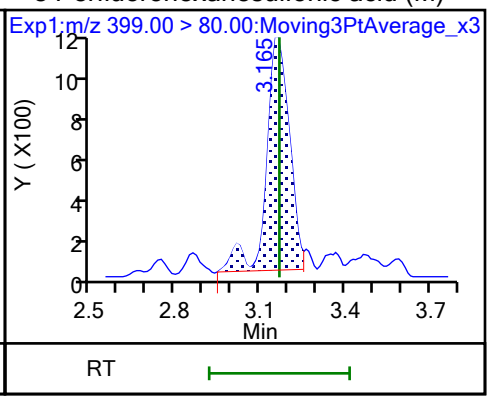
D 64 13C3 HFPO-DA (M)



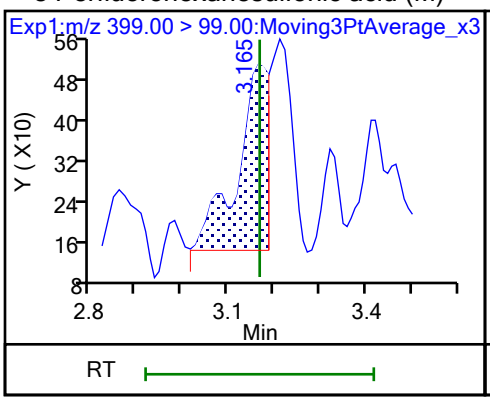
D 11 18O2 PFHxS



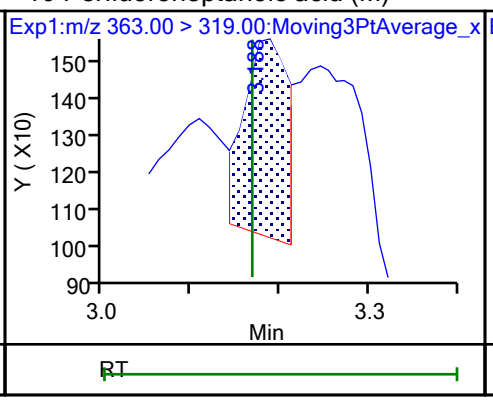
8 Perfluorohexanesulfonic acid (M)



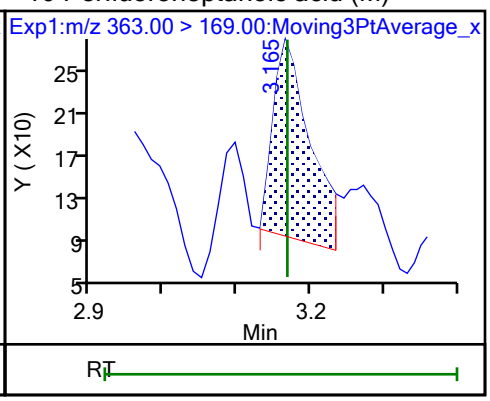
8 Perfluorohexanesulfonic acid (M)



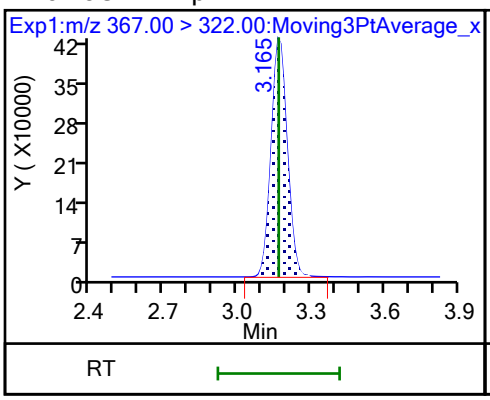
10 Perfluoroheptanoic acid (M)



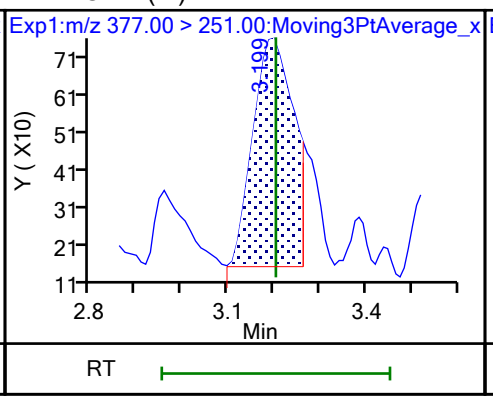
10 Perfluoroheptanoic acid (M)



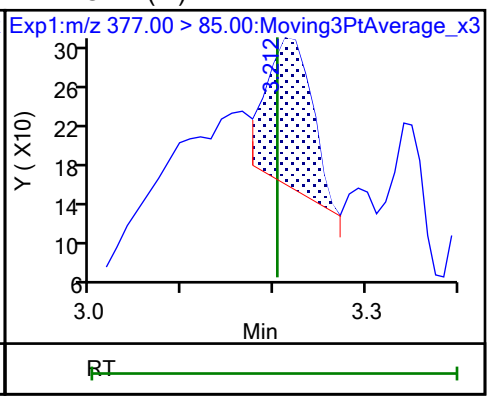
D 9 13C4 PFHpA



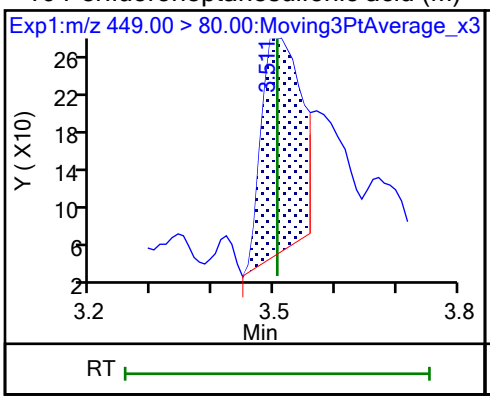
77 DONA (M)



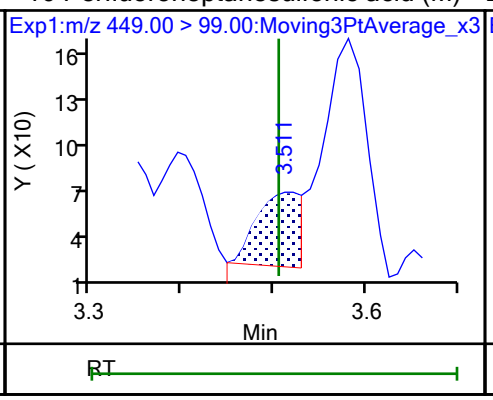
77 DONA (M)



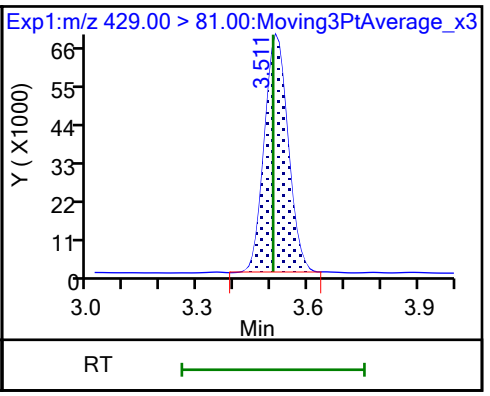
16 Perfluoroheptanesulfonic acid (M)



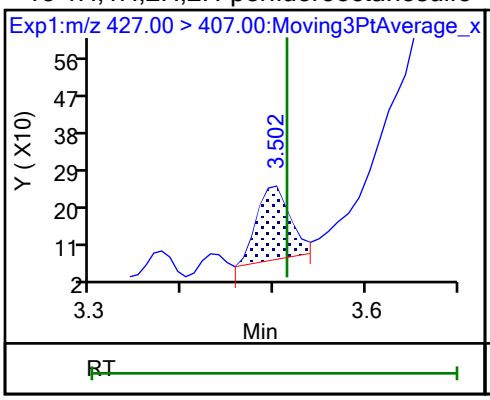
16 Perfluoroheptanesulfonic acid (M)



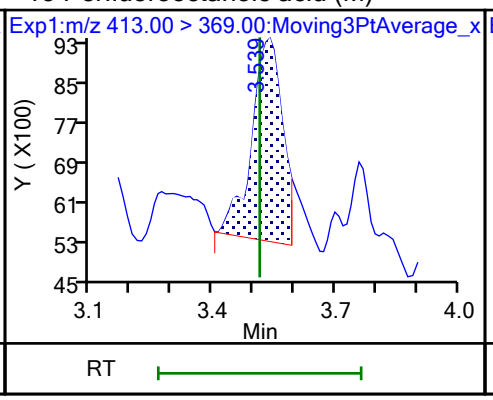
D 12 M2-6:2 FTS



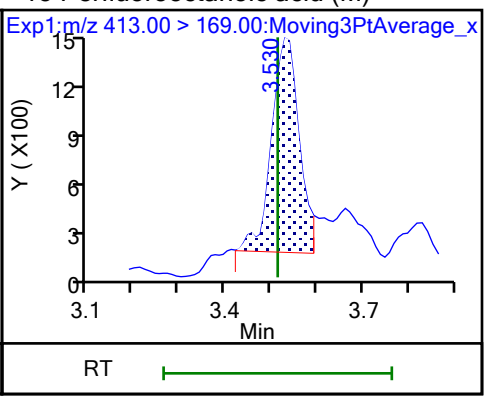
13 1H,1H,2H,2H-perfluorooctanesulfo



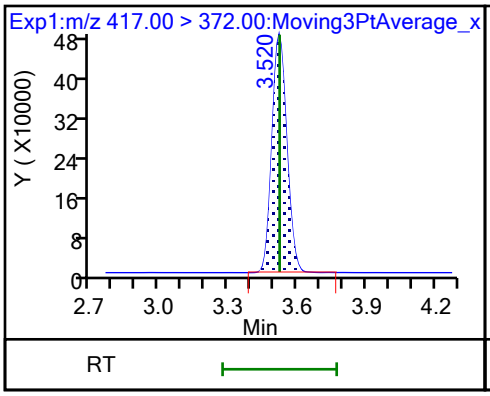
15 Perfluorooctanoic acid (M)



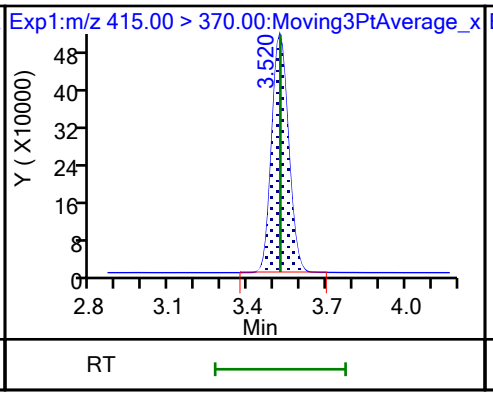
15 Perfluorooctanoic acid (M)



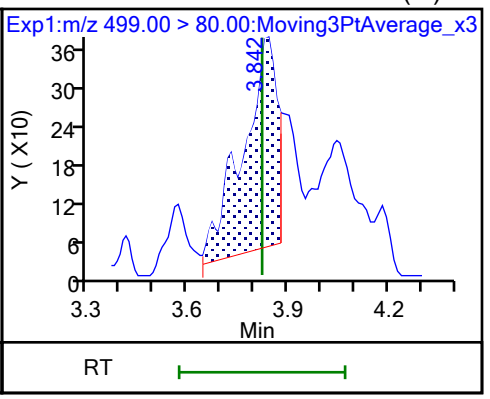
D 14 13C4 PFOA



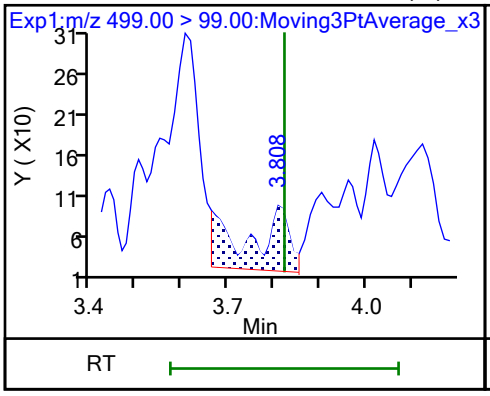
* 62 13C2 PFOA



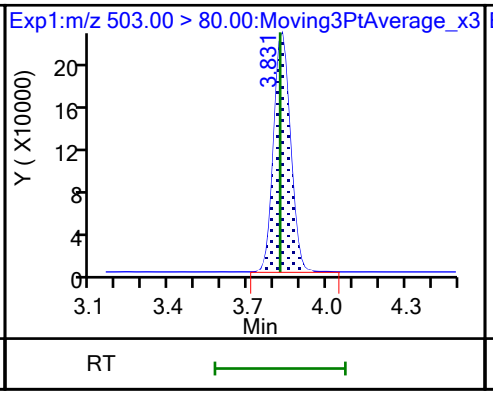
17 Perfluorooctanesulfonic acid (M)



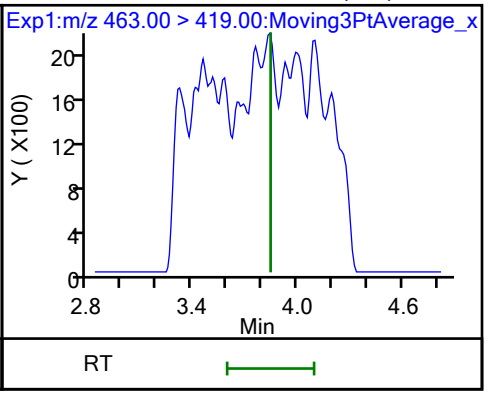
17 Perfluorooctanesulfonic acid (M)



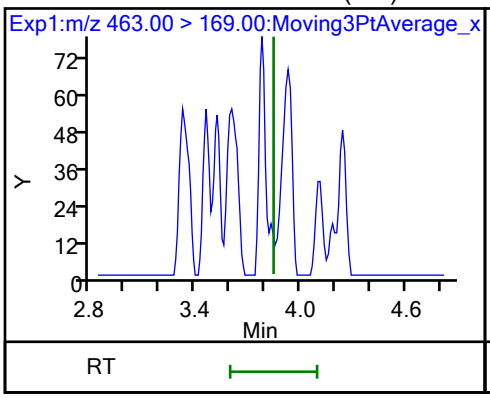
D 18 13C4 PFOS



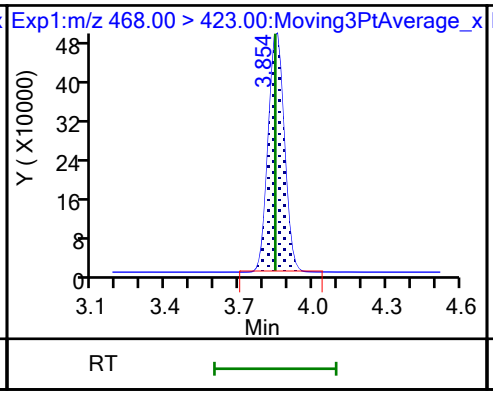
20 Perfluorononanoic acid (ND)



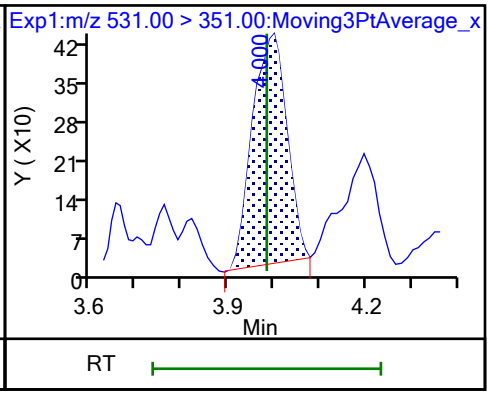
20 Perfluorononanoic acid (ND)



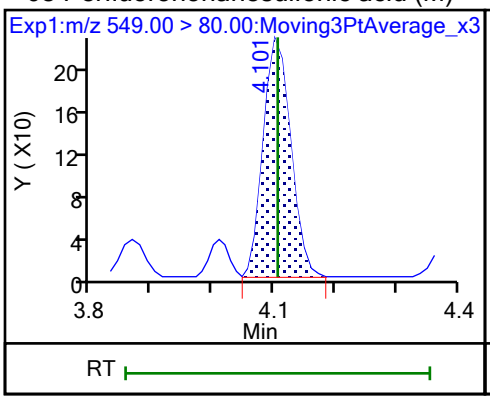
D 19 13C5 PFNA



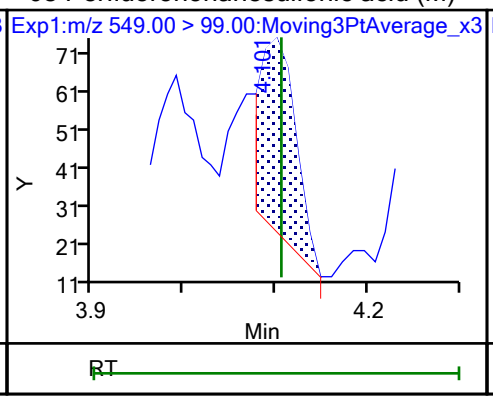
69 9-Chlorohexadecafluoro-3-oxanona (M)



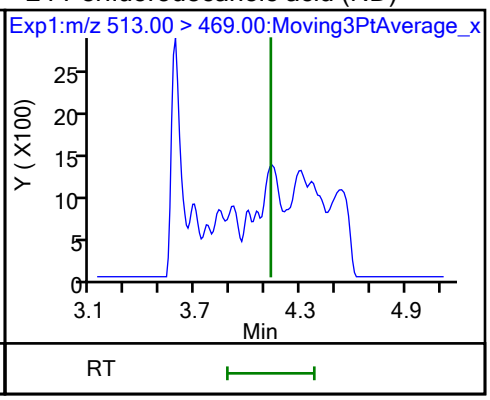
68 Perfluorononanesulfonic acid (M)



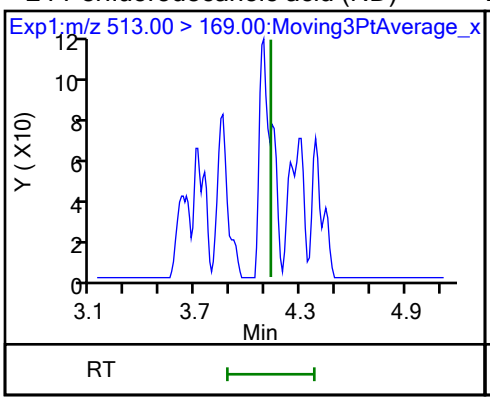
68 Perfluorononanesulfonic acid (M)



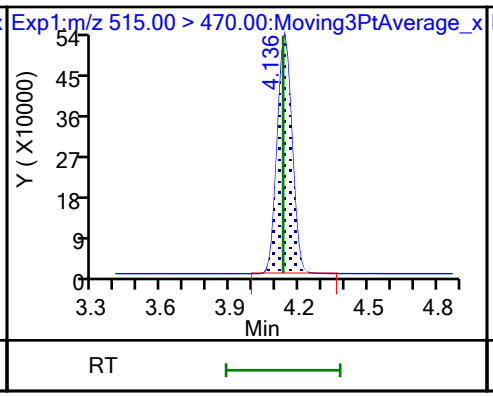
24 Perfluorodecanoic acid (ND)



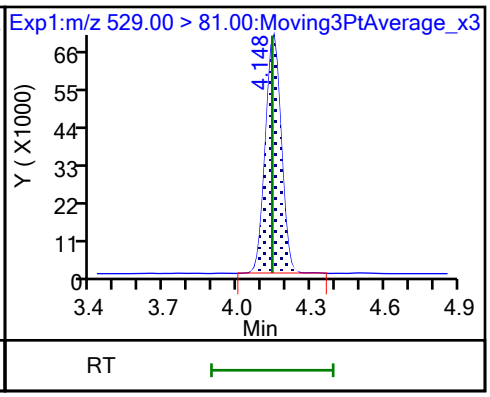
24 Perfluorodecanoic acid (ND)



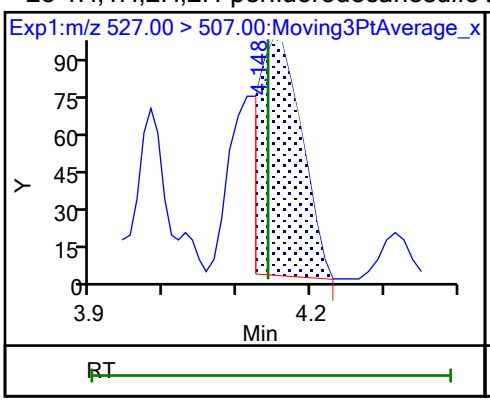
D 23 13C2 PFDA



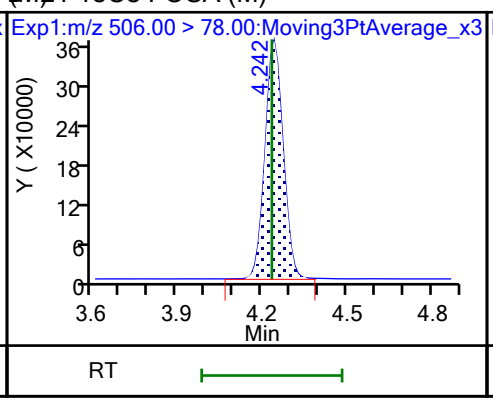
D 26 M2-8:2 FTS



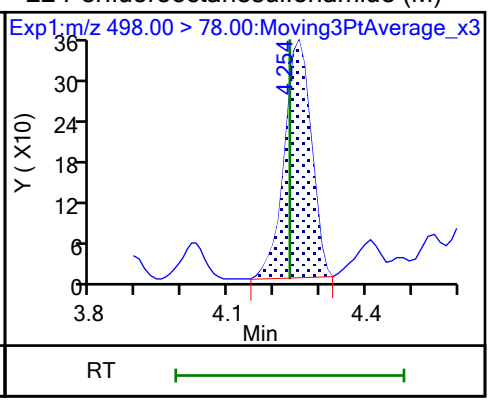
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



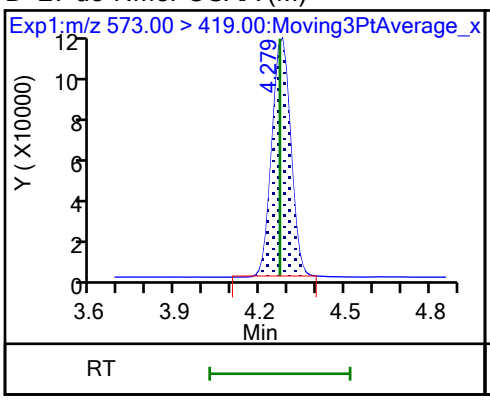
D 21 13C8 FOSA (M)



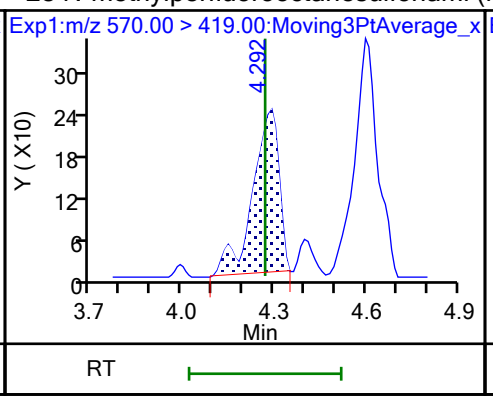
22 Perfluorooctanesulfonamide (M)



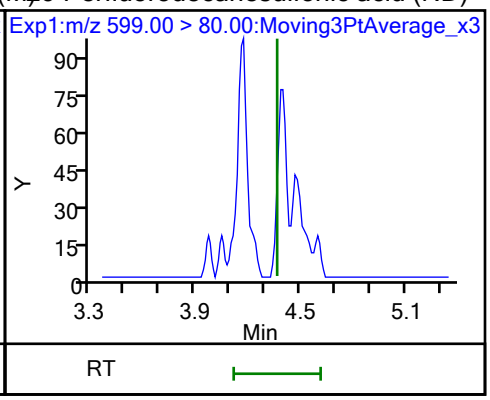
D 27 d3-NMeFOSAA (M)



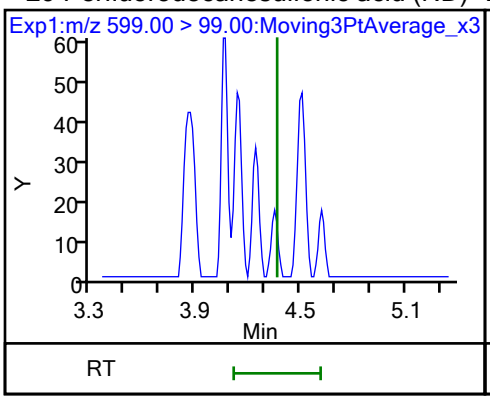
28 N-methylperfluorooctanesulfonami (M)



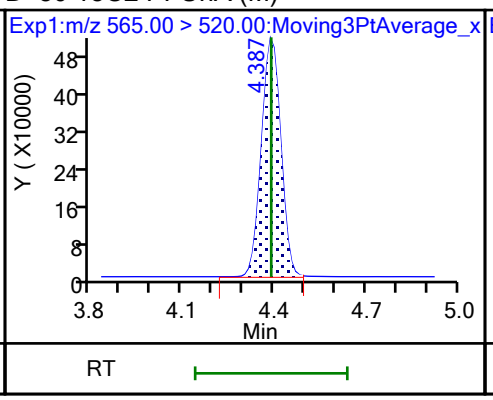
29 Perfluorodecanesulfonic acid (ND)



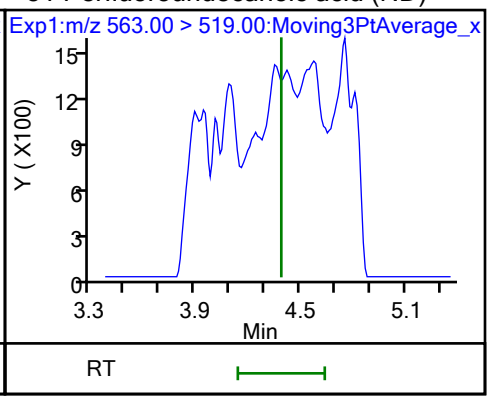
29 Perfluorodecanesulfonic acid (ND)



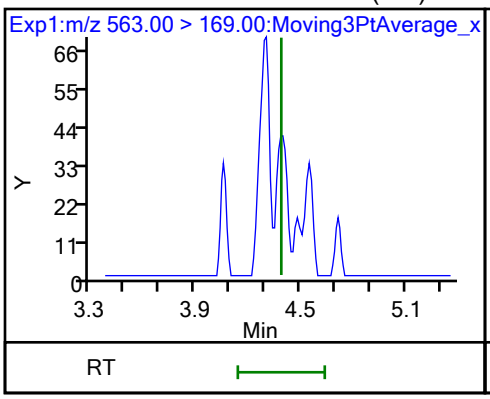
D 30 13C2 PFUnA (M)



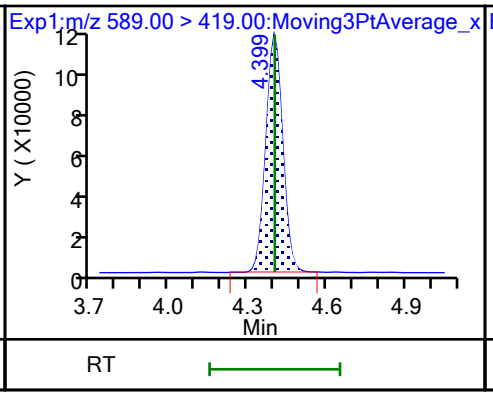
31 Perfluoroundecanoic acid (ND)



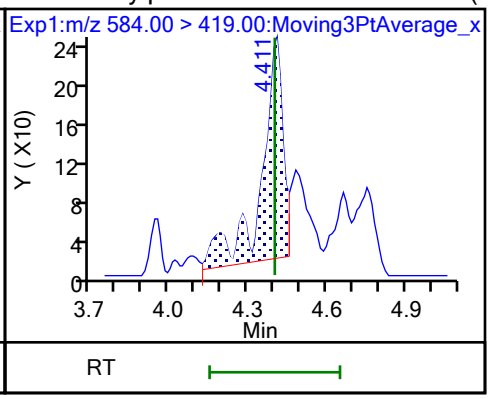
31 Perfluoroundecanoic acid (ND)



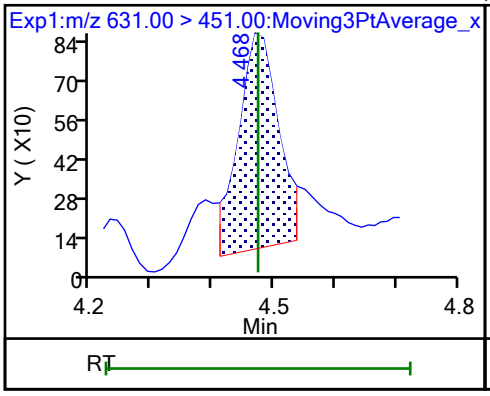
D 32 d5-NEtFOSAA



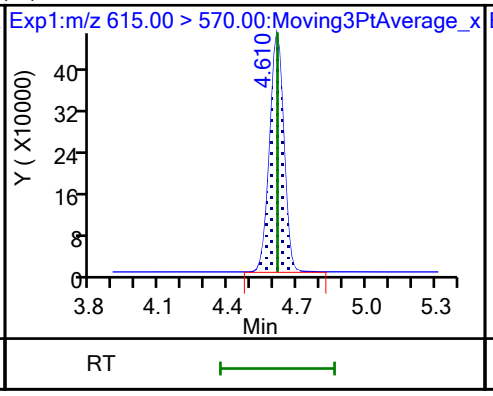
33 N-ethylperfluorooctanesulfonamid (M)



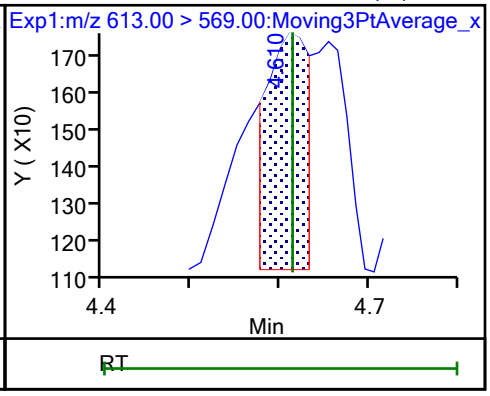
66 11-Chloroeicosafluoro-3-oxaundec (M)



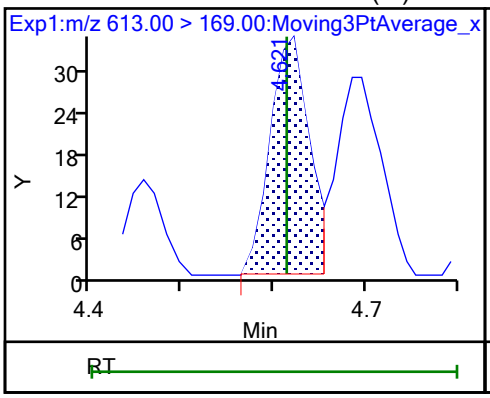
D 36 13C2 PFDoA



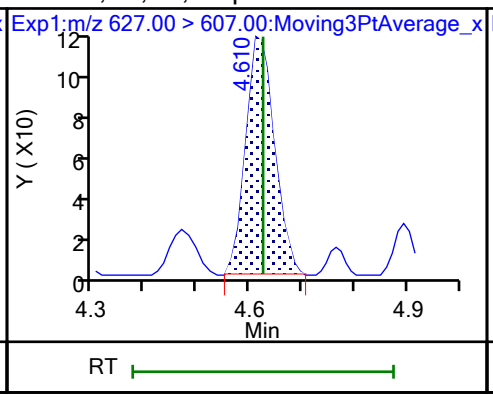
37 Perfluorododecanoic acid (M)



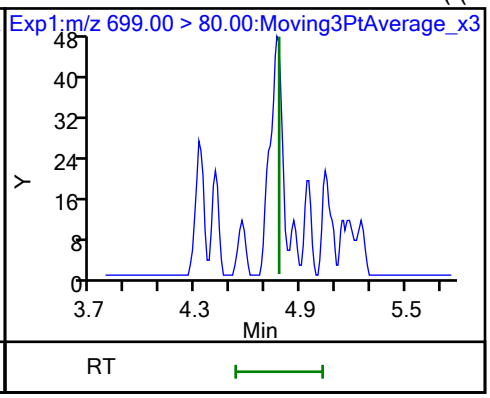
37 Perfluorododecanoic acid (M)



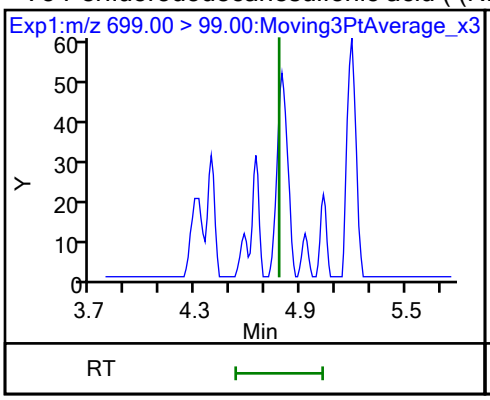
74 1H,1H,2H,2H-perfluorododecanesul



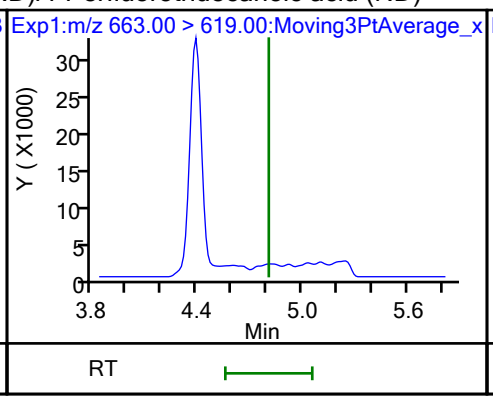
75 Perfluorododecanesulfonic acid ((ND)



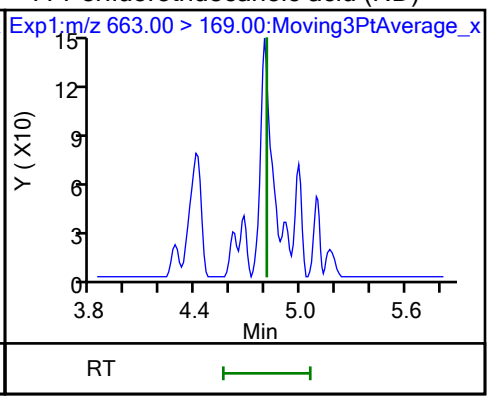
75 Perfluorododecanesulfonic acid ((ND)



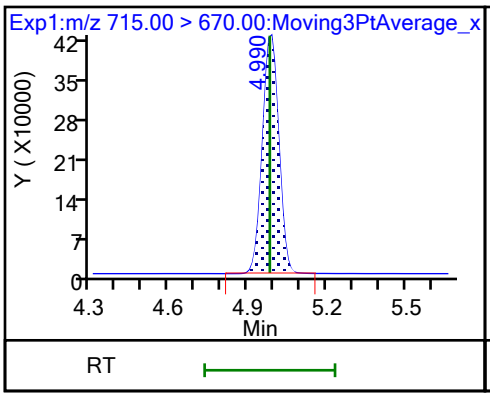
41 Perfluorotridecanoic acid (ND)



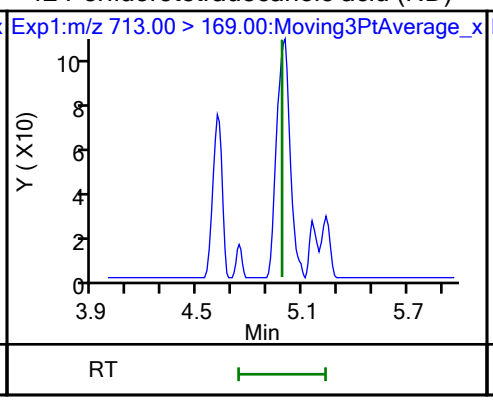
41 Perfluorotridecanoic acid (ND)



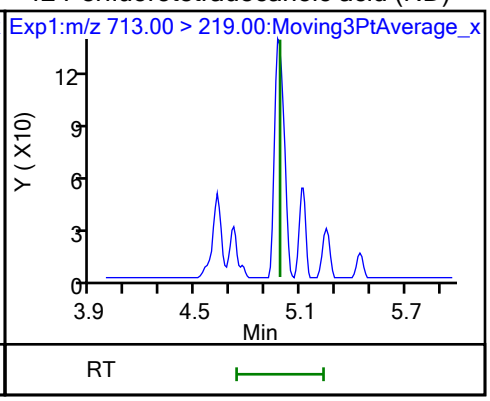
D 43 13C2 PFTeDA



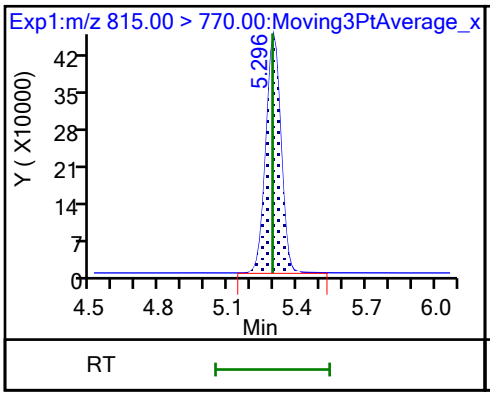
42 Perfluorotetradecanoic acid (ND)



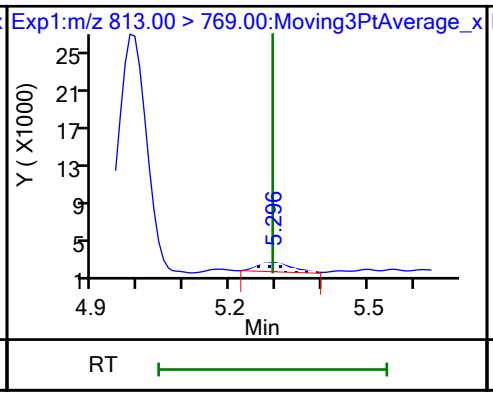
42 Perfluorotetradecanoic acid (ND)



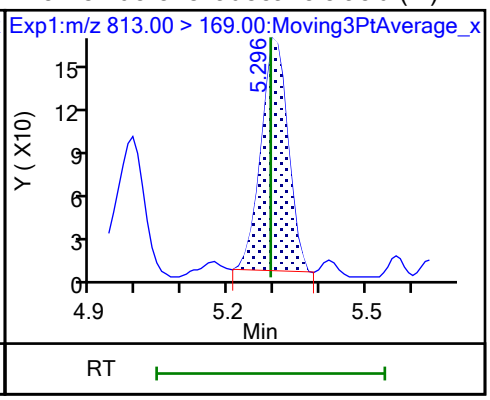
D 44 13C2 PFHxDA



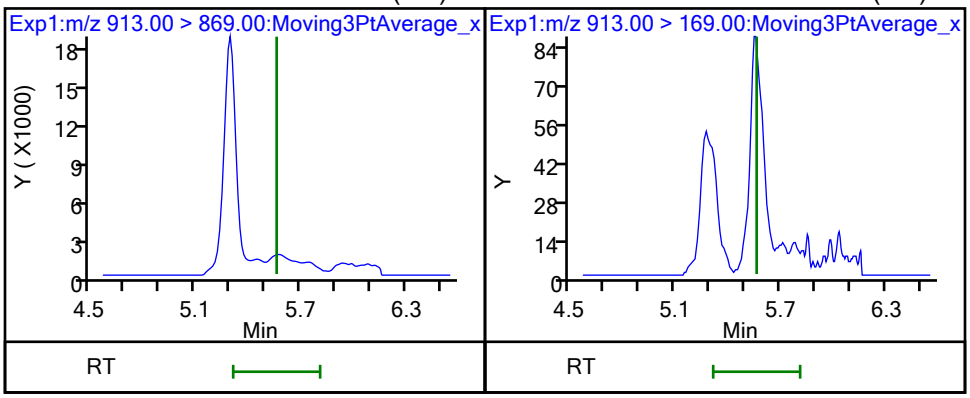
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

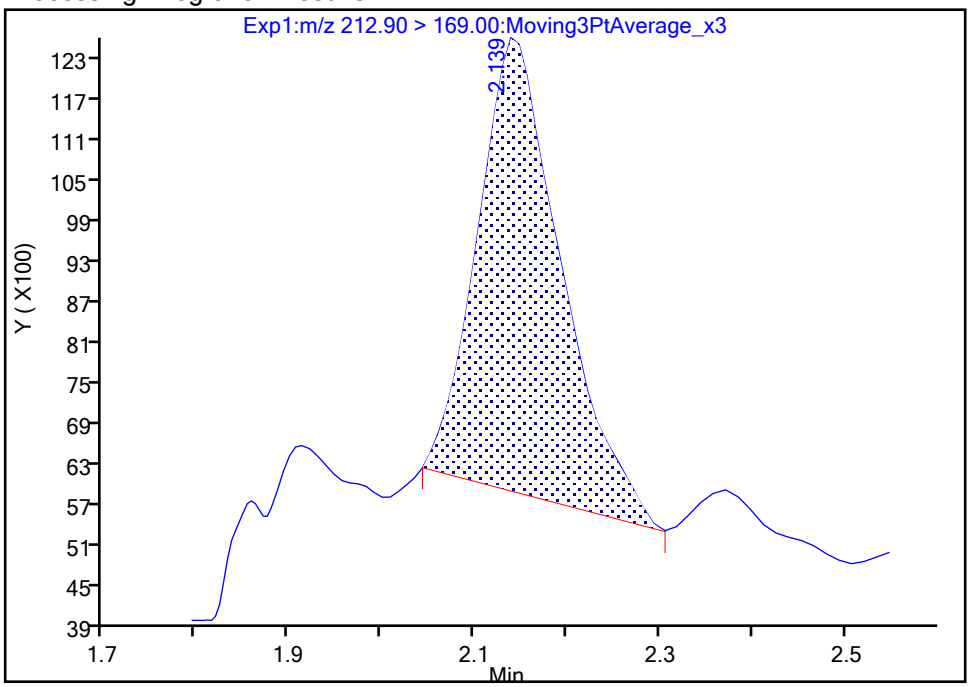
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

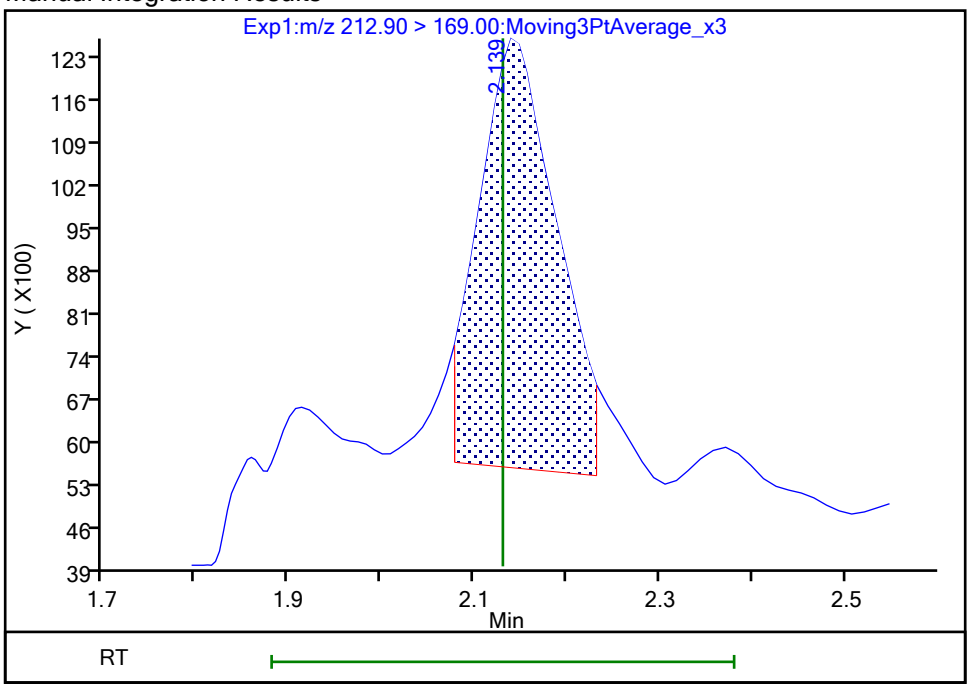
Processing Integration Results

RT: 2.14
Area: 42047
Amount: -0.014684
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 40865
Amount: -0.015421
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

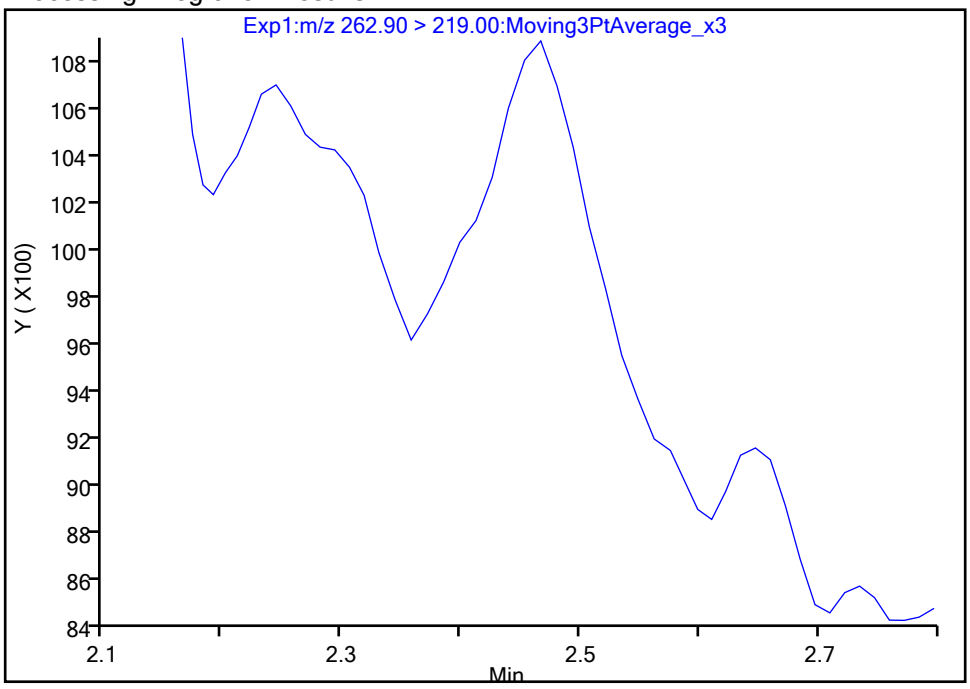
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

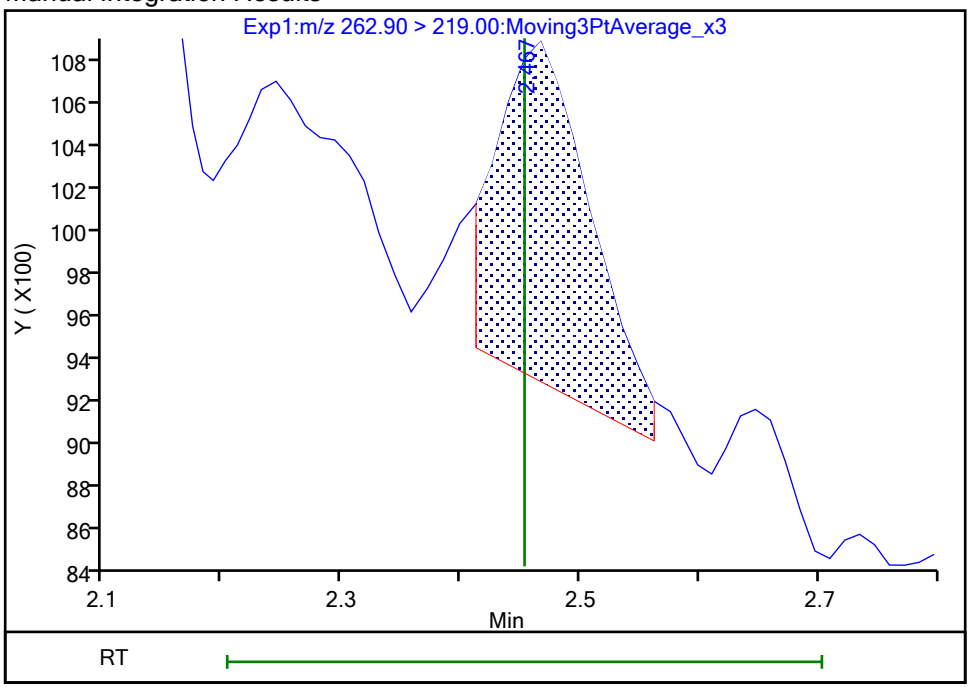
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 8272
Amount: 0.006285
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

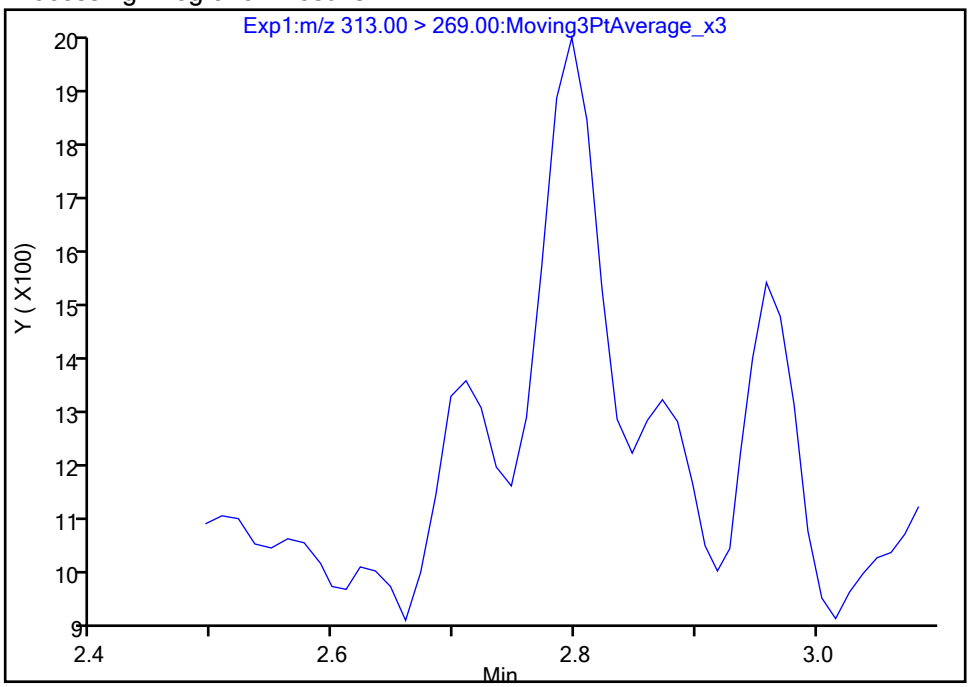
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

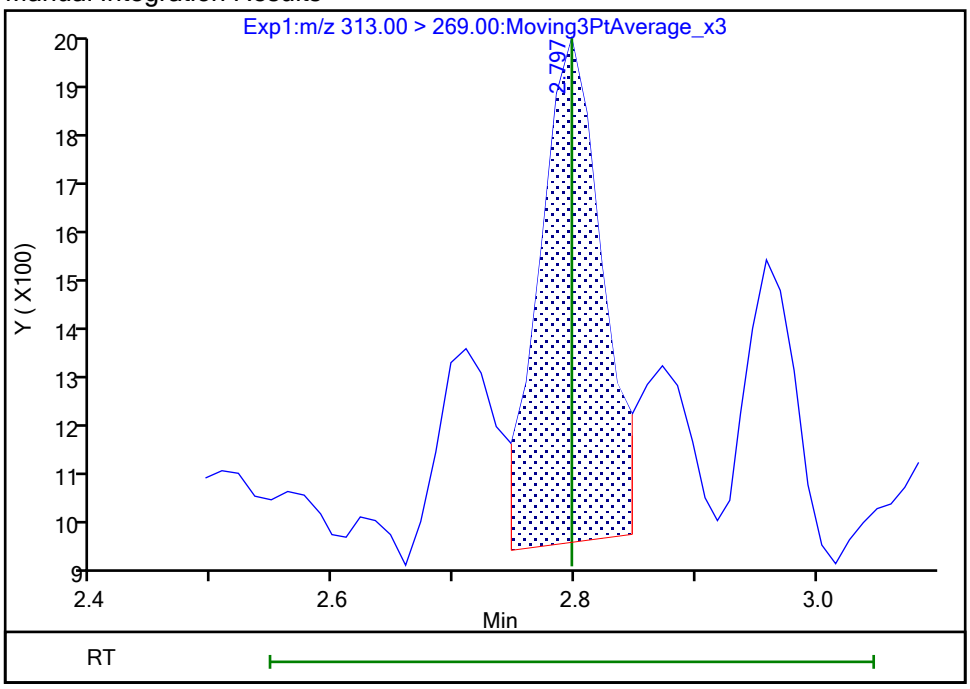
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 3445
Amount: 0.002328
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

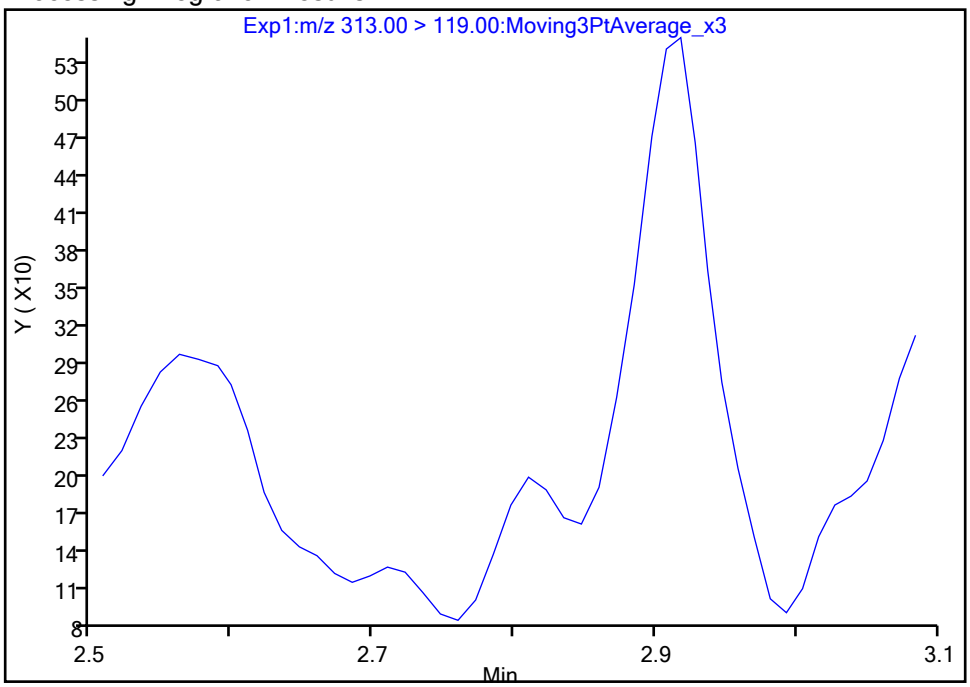
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

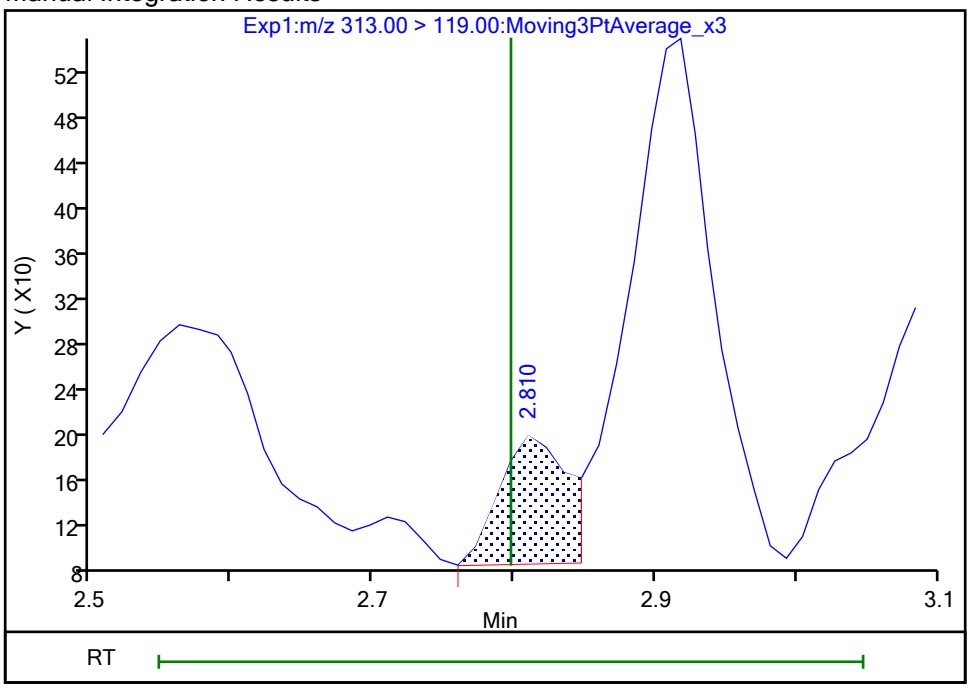
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.81
Area: 365
Amount: 0.002328
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

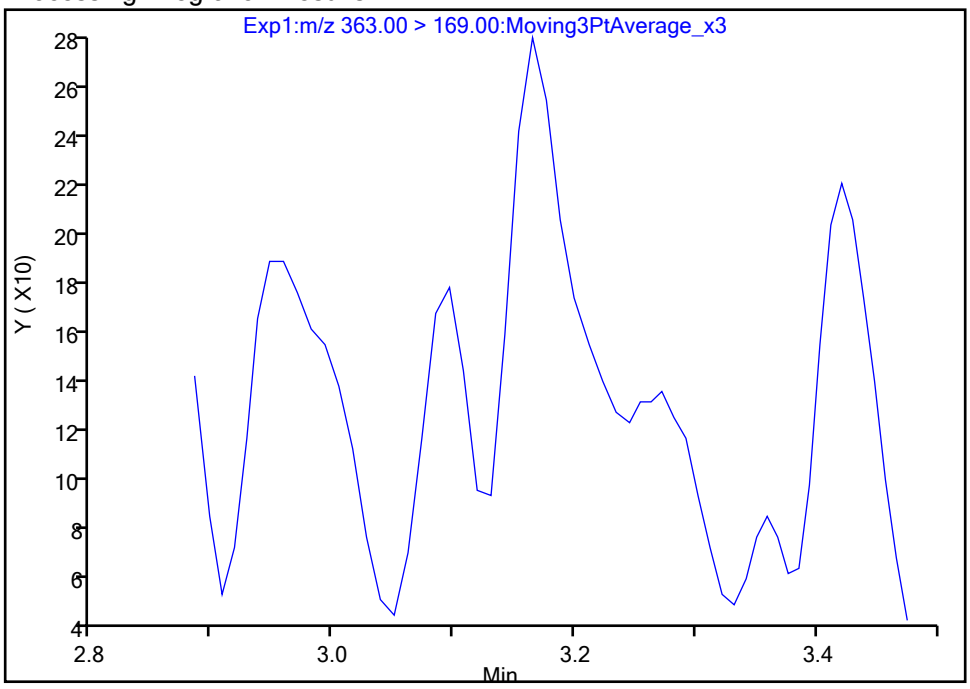
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

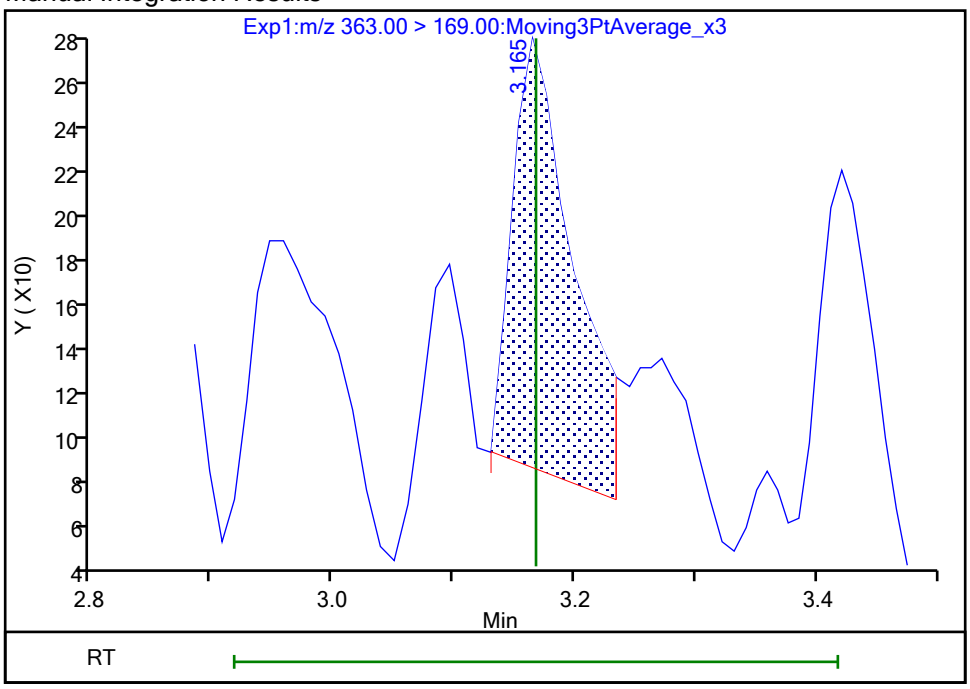
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 635
Amount: 0.001020
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:20:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

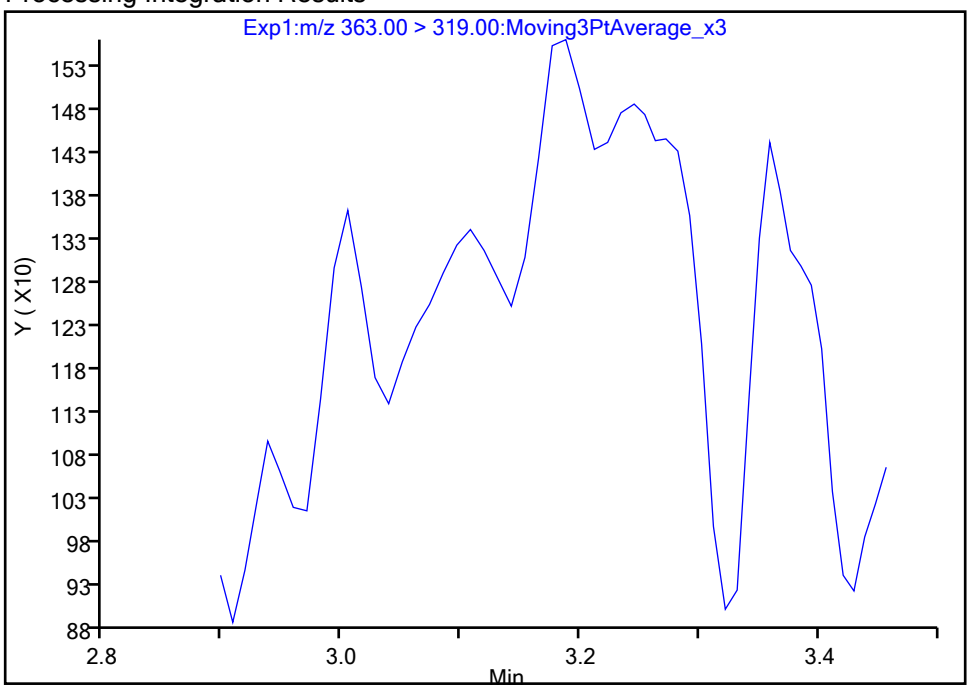
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

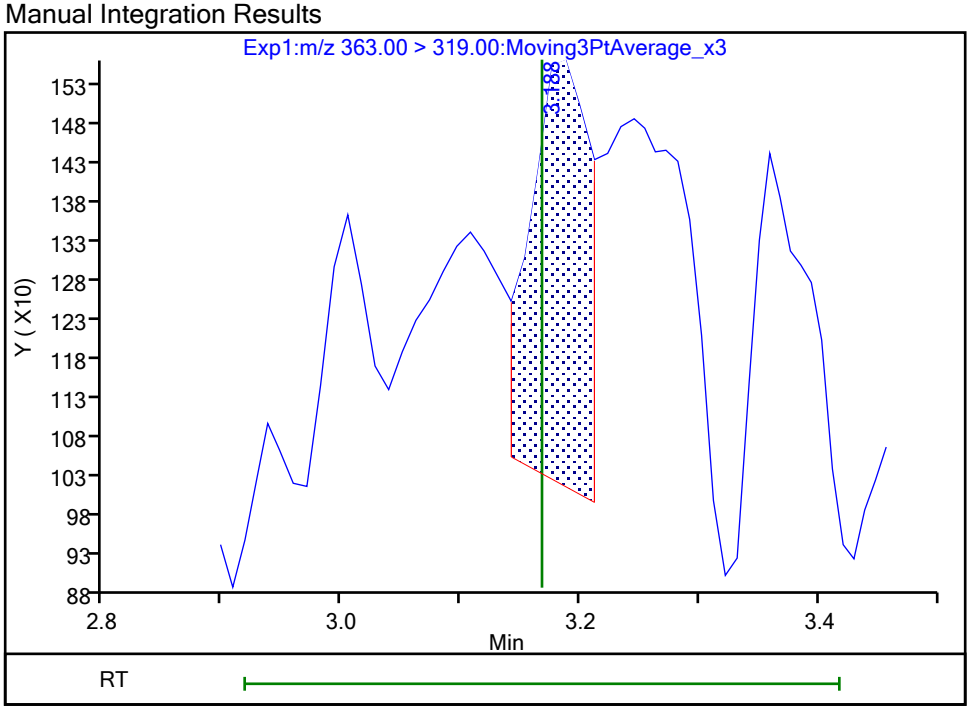
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.19
Area: 1759
Amount: 0.001020
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:20:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

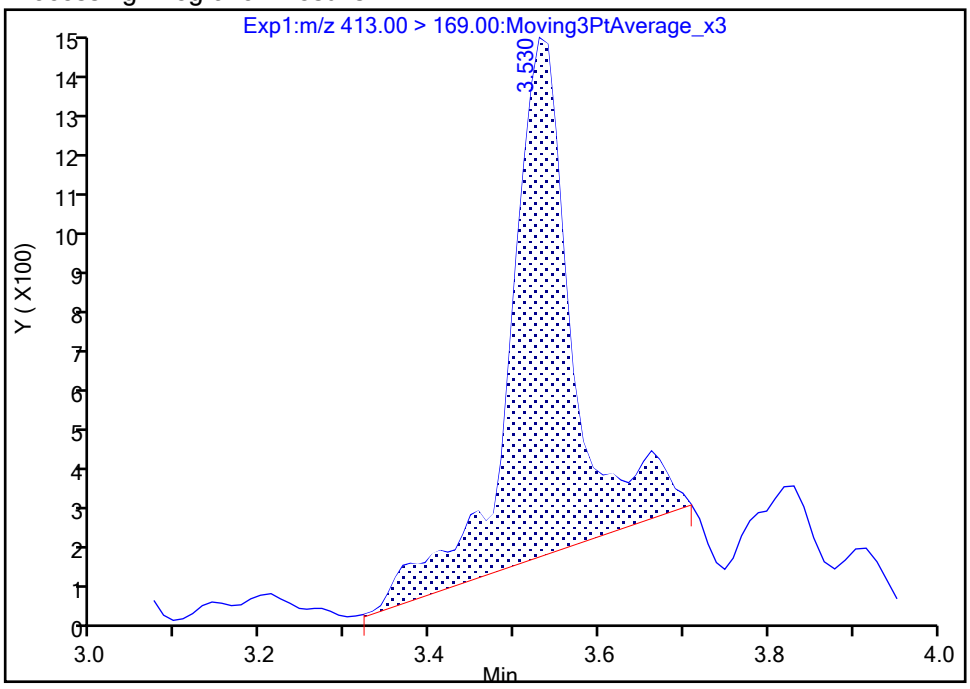
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

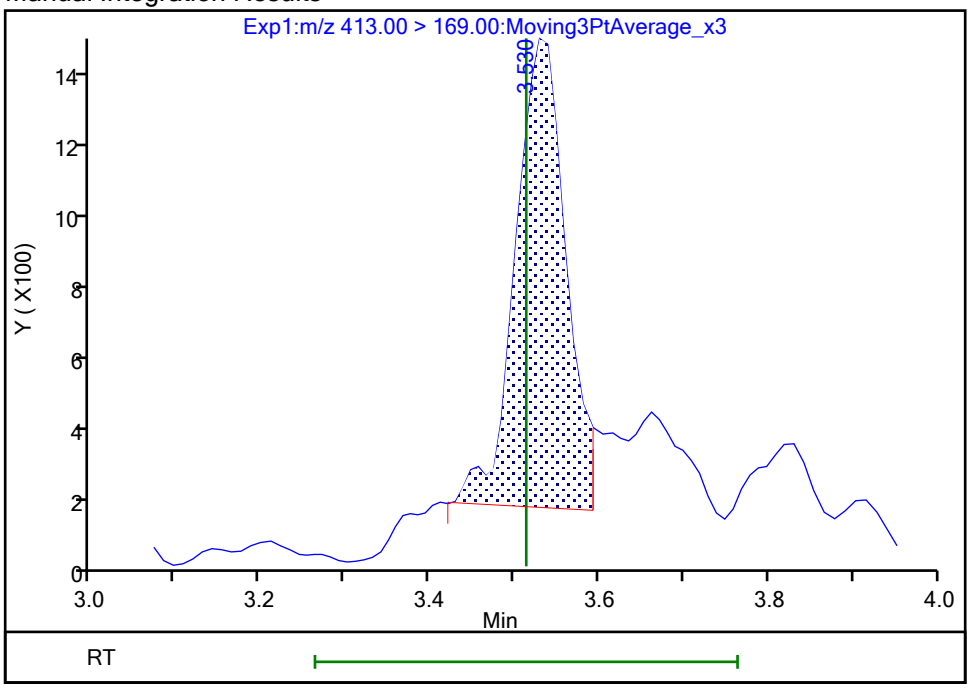
Processing Integration Results

RT: 3.53
Area: 6780
Amount: 0.012907
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 5418
Amount: 0.011422
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

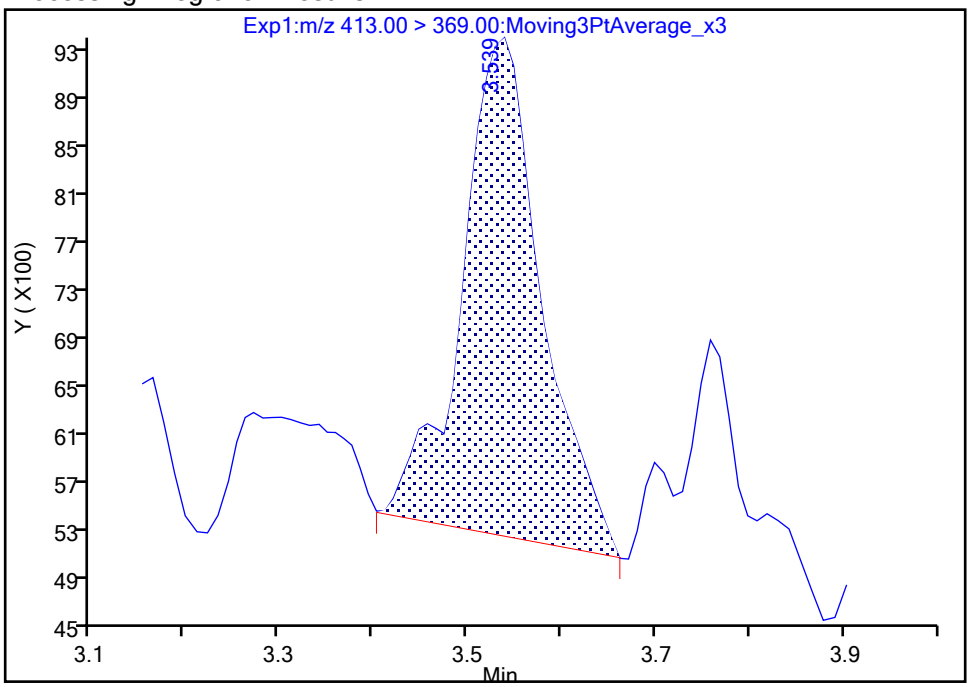
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

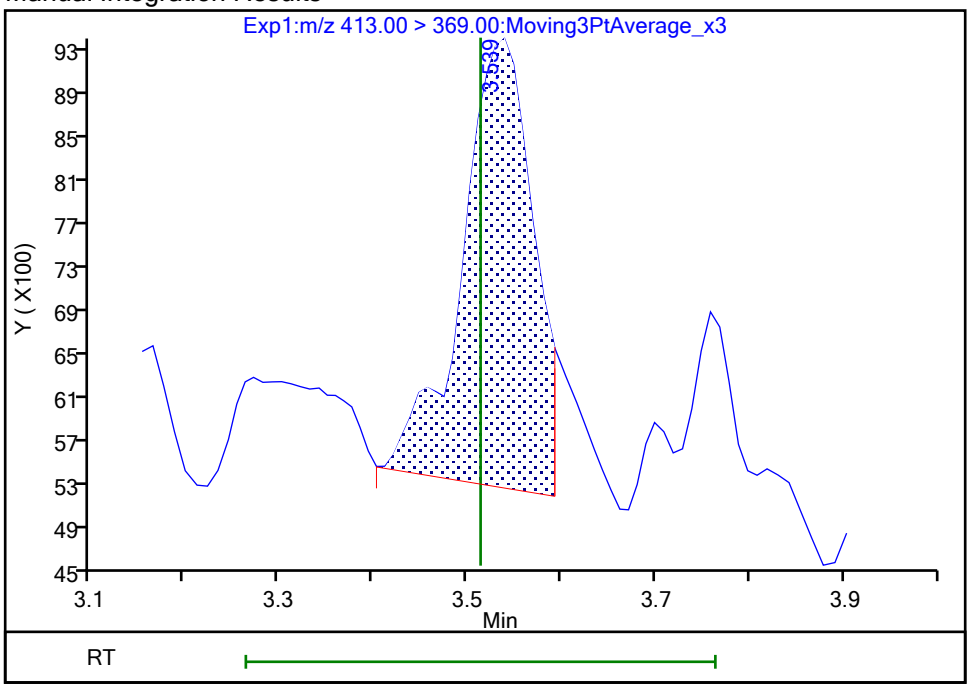
Processing Integration Results

RT: 3.54
Area: 24144
Amount: 0.012907
Amount Units: ng/ml



Manual Integration Results

RT: 3.54
Area: 21366
Amount: 0.011422
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

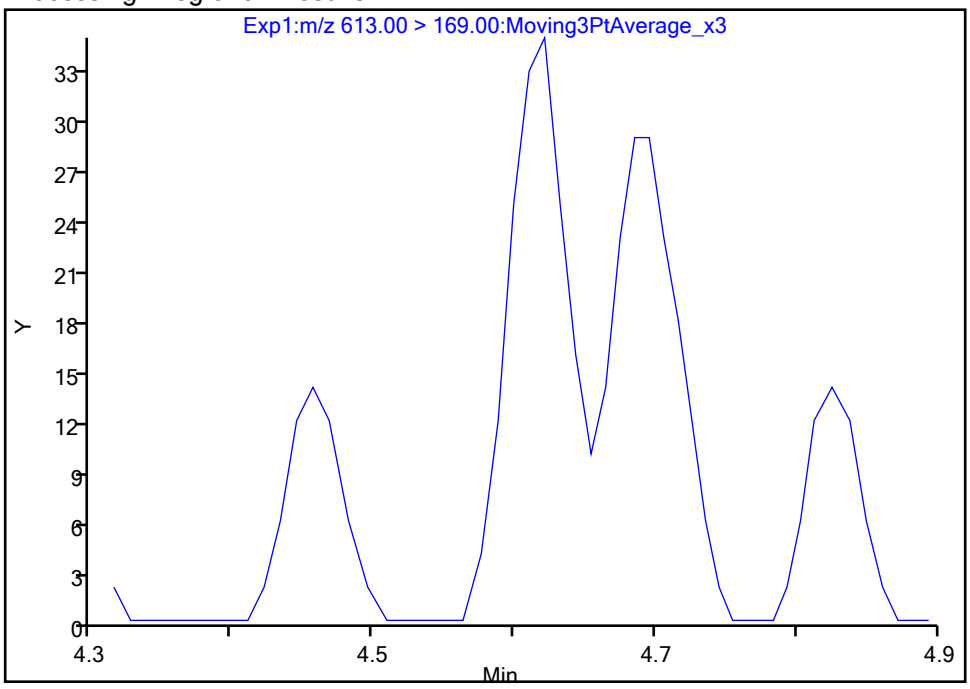
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

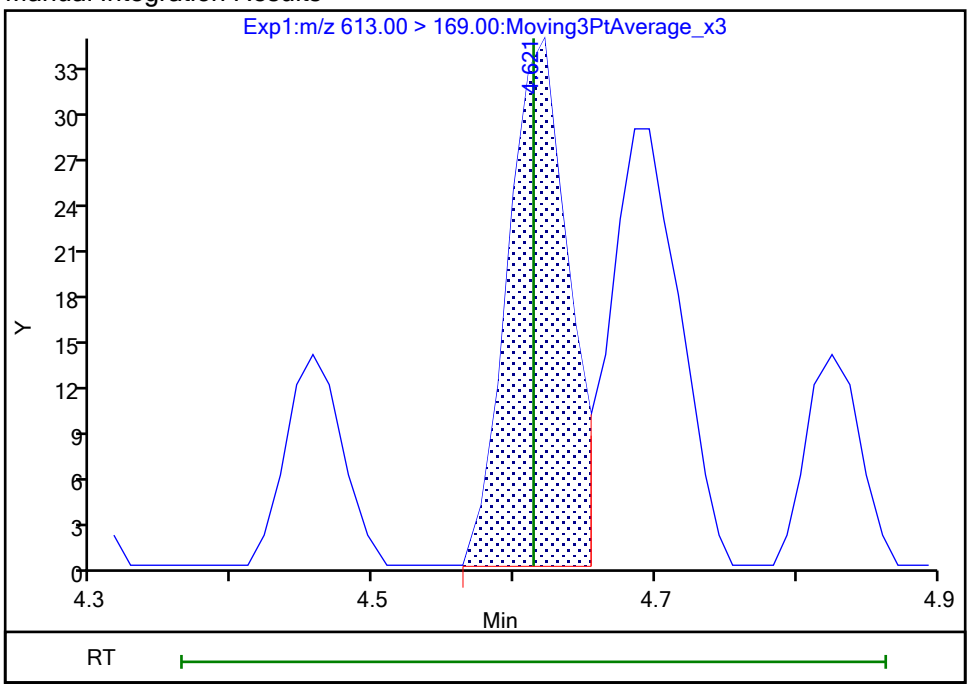
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 102
Amount: 0.001238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

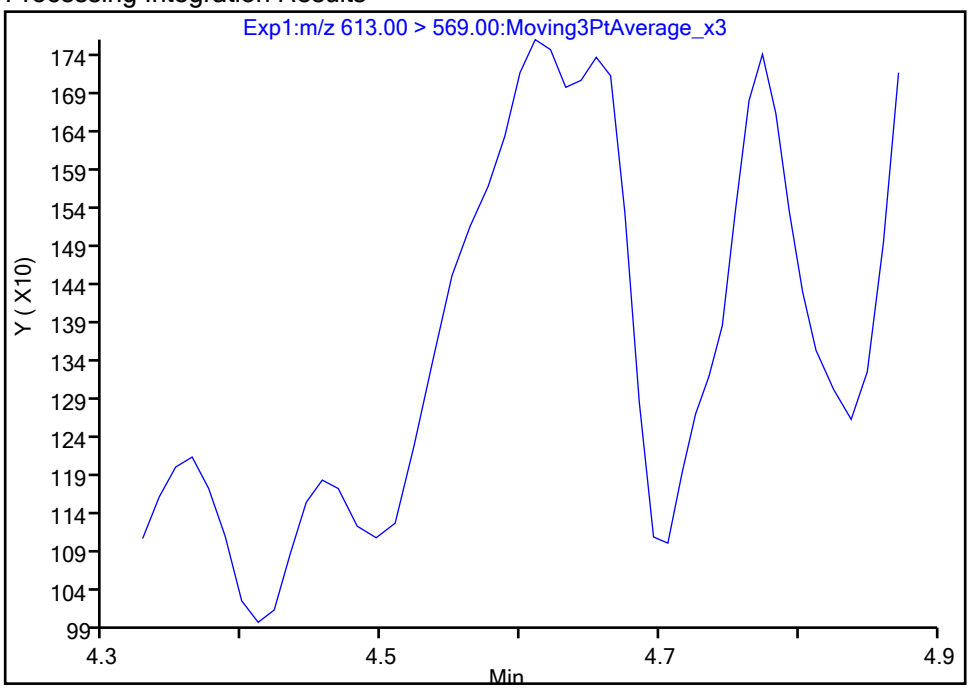
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

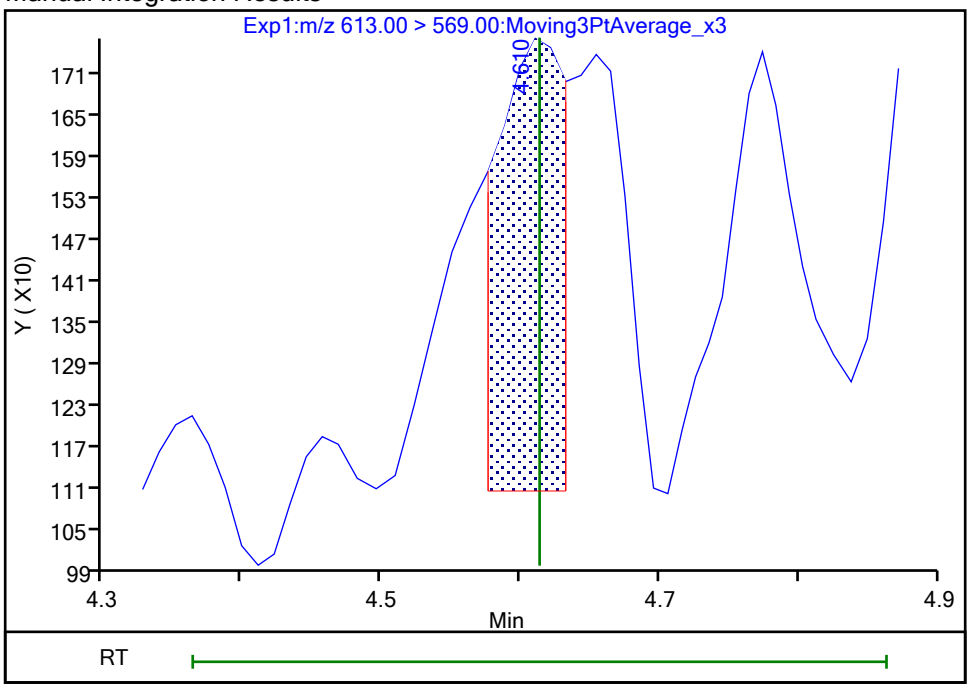
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 1980
Amount: 0.001238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

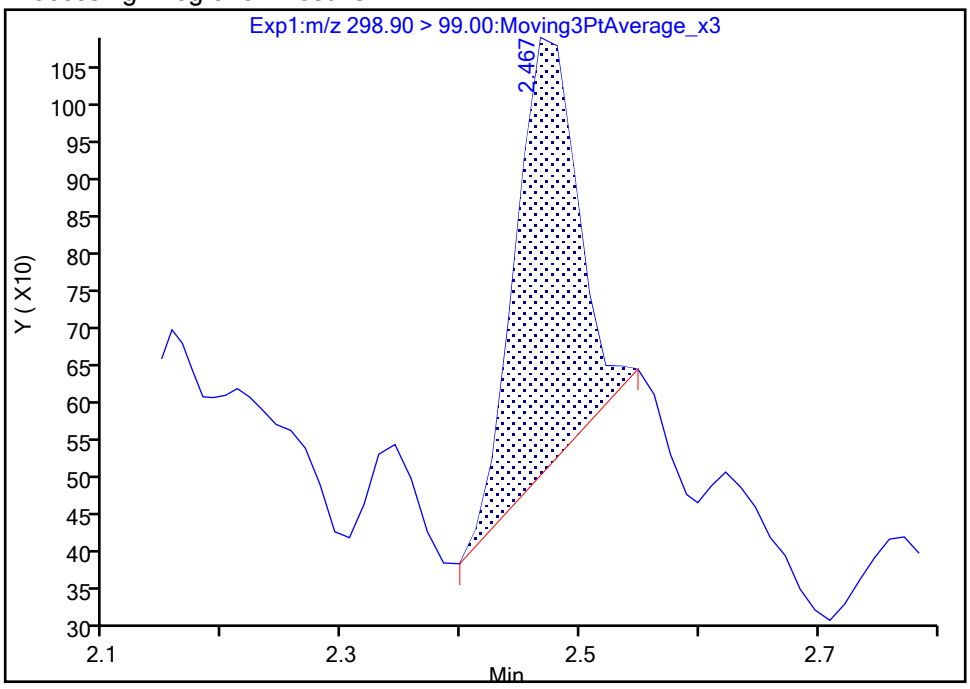
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

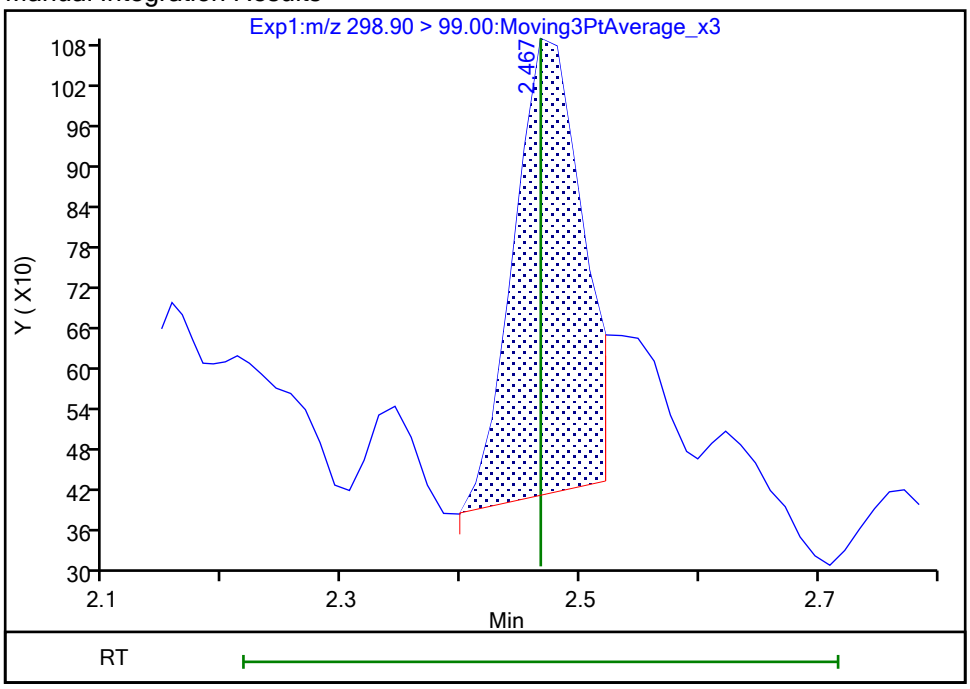
Processing Integration Results

RT: 2.47
Area: 2110
Amount: 0.002054
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2664
Amount: 0.002664
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

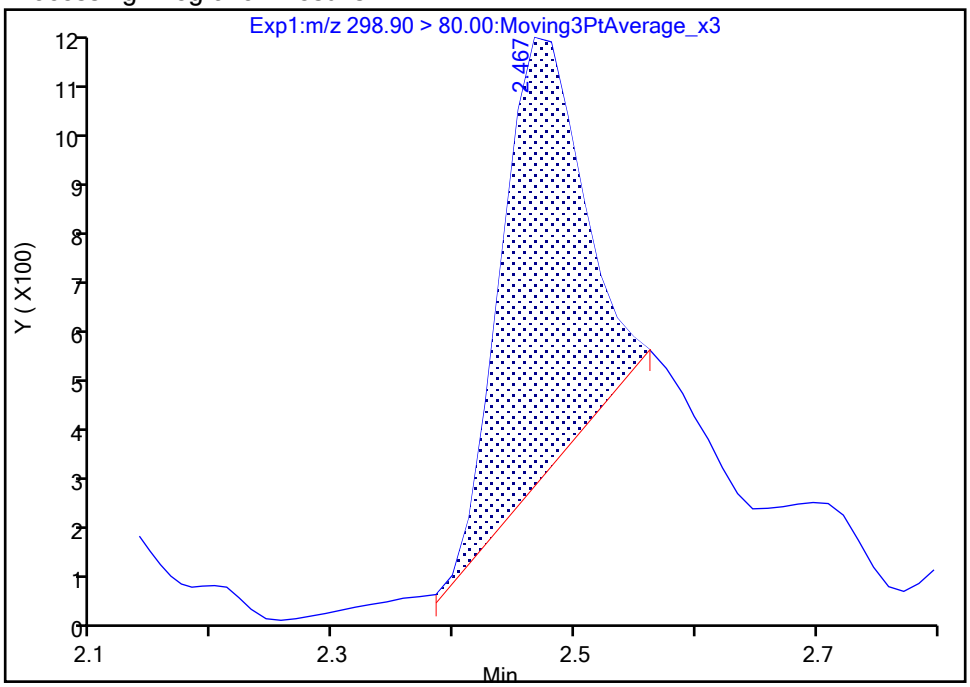
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

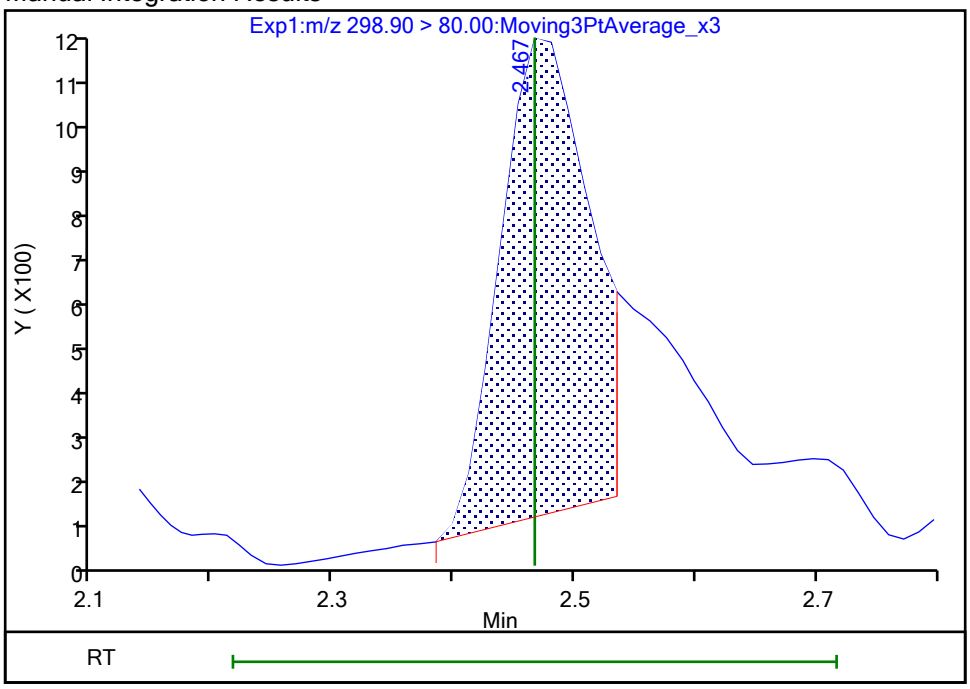
Processing Integration Results

RT: 2.47
Area: 3929
Amount: 0.002054
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 5097
Amount: 0.002664
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

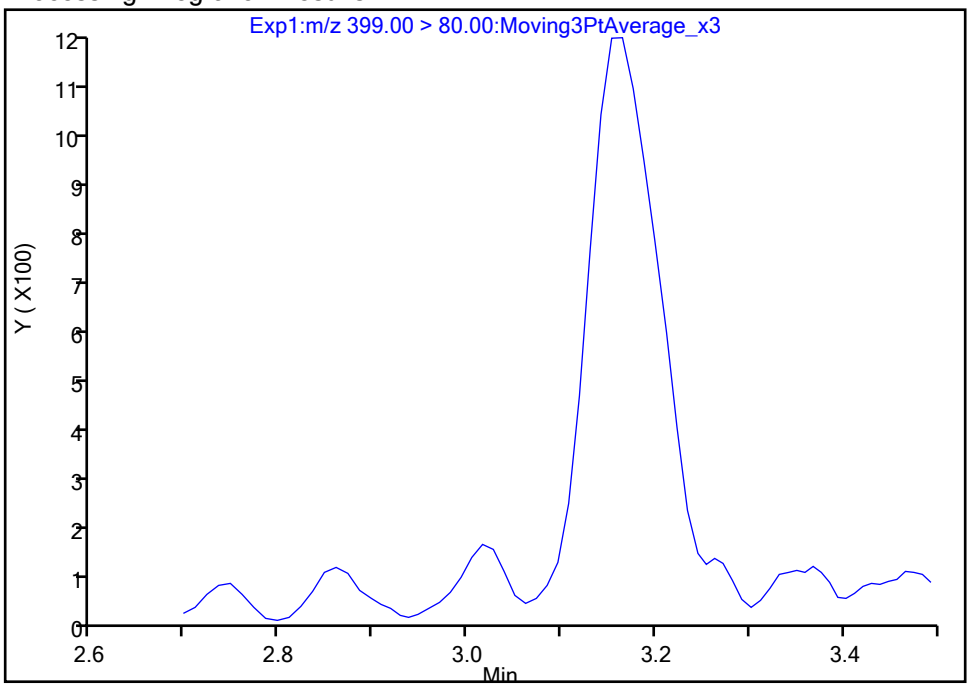
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

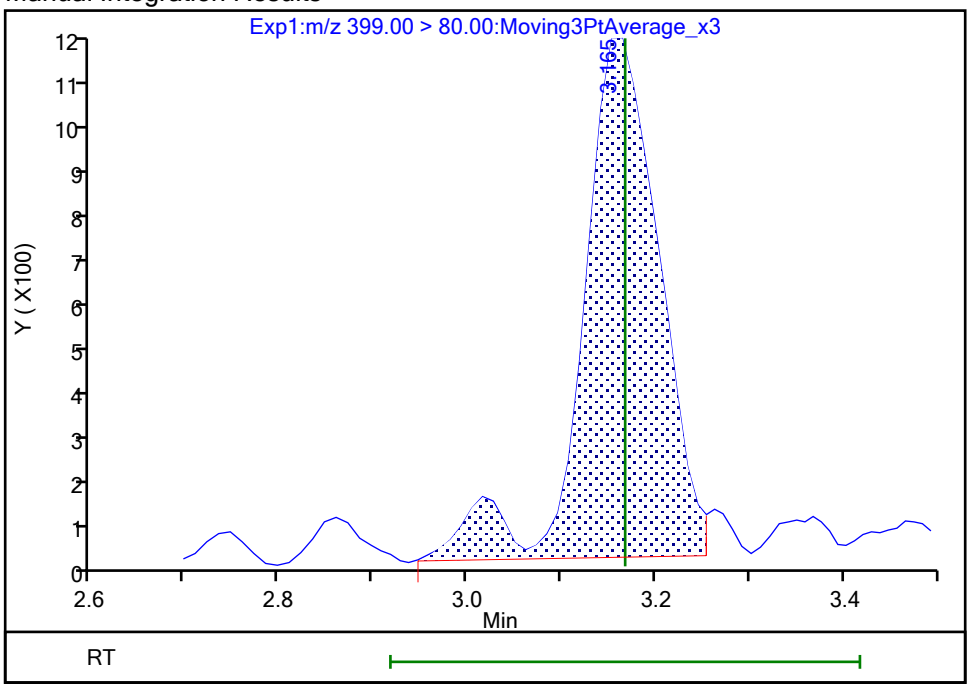
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 6499
Amount: 0.004511
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

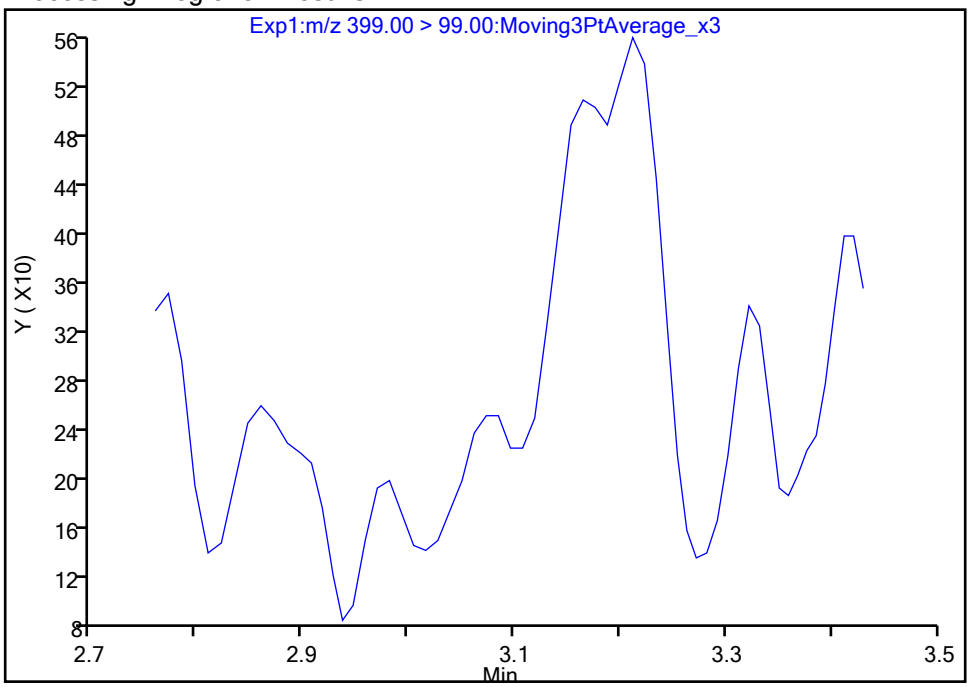
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

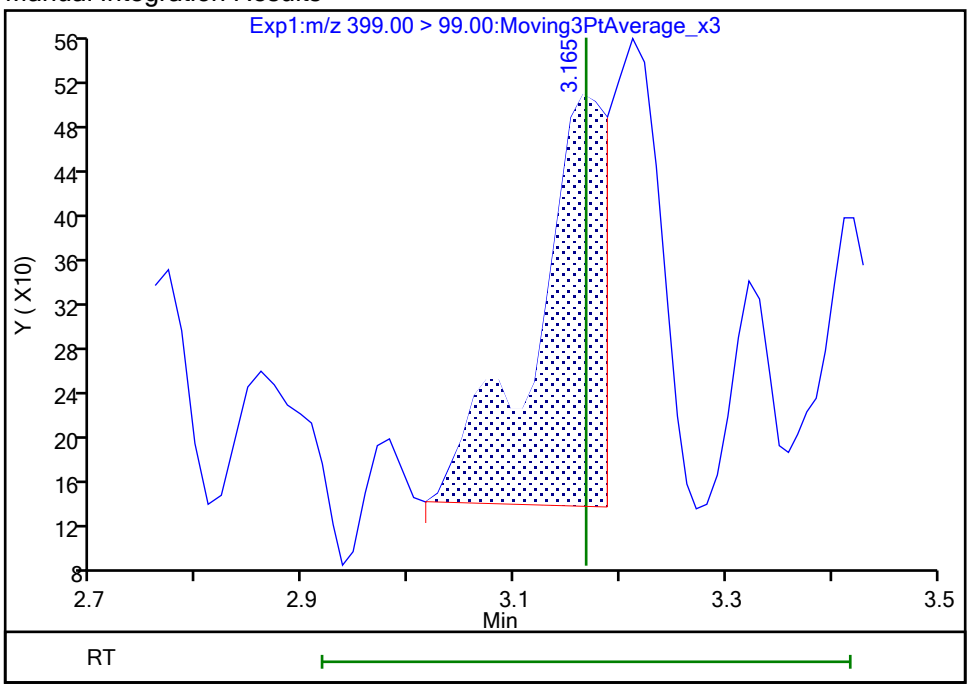
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 1631
Amount: 0.004511
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

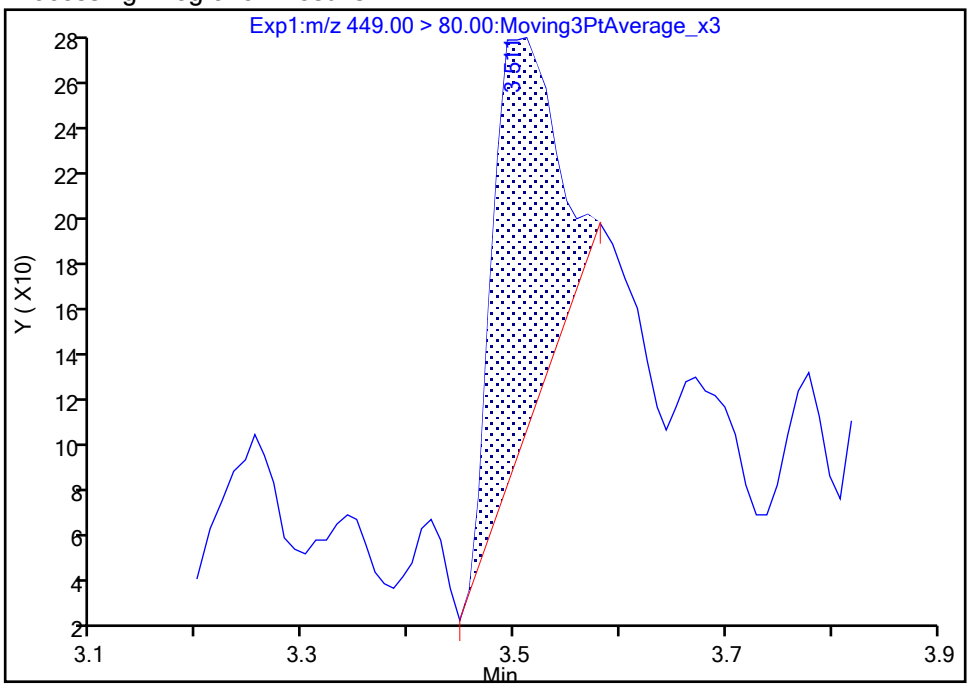
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

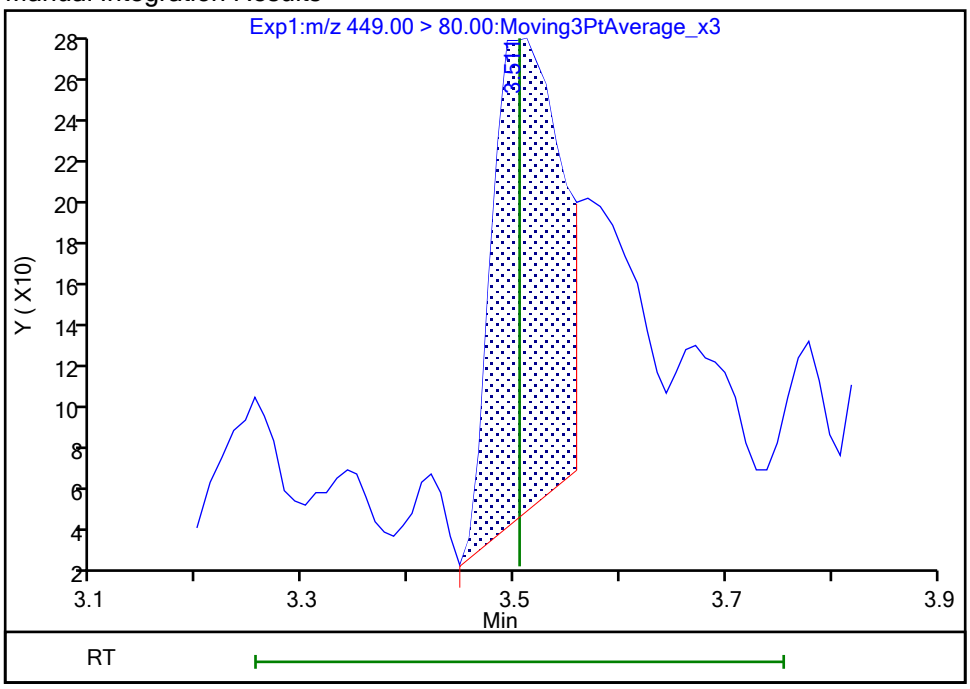
Processing Integration Results

RT: 3.51
Area: 719
Amount: 0.000604
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1022
Amount: 0.000858
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

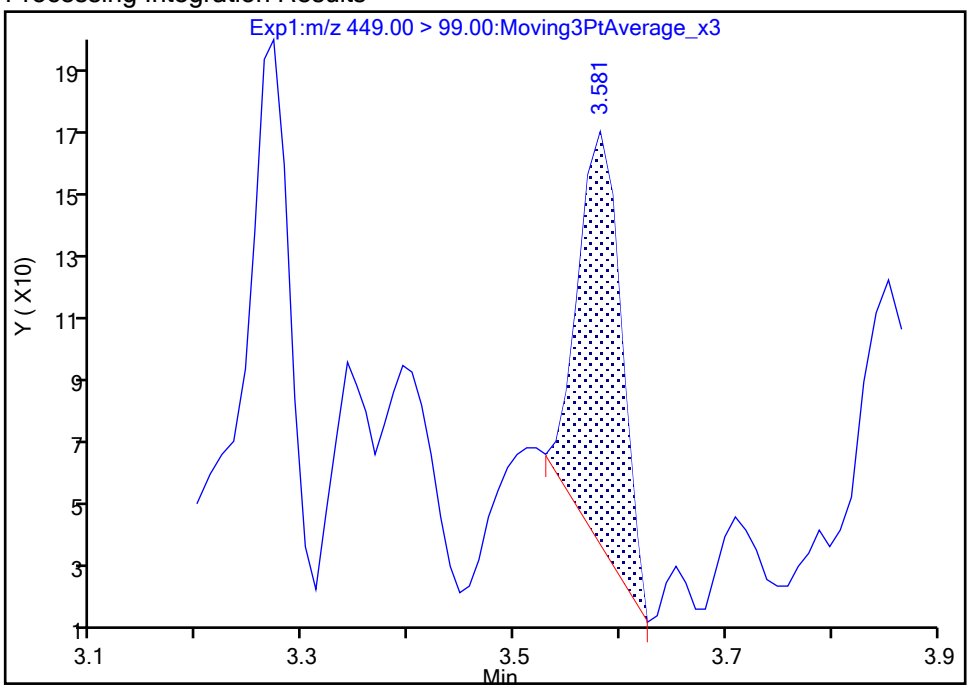
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

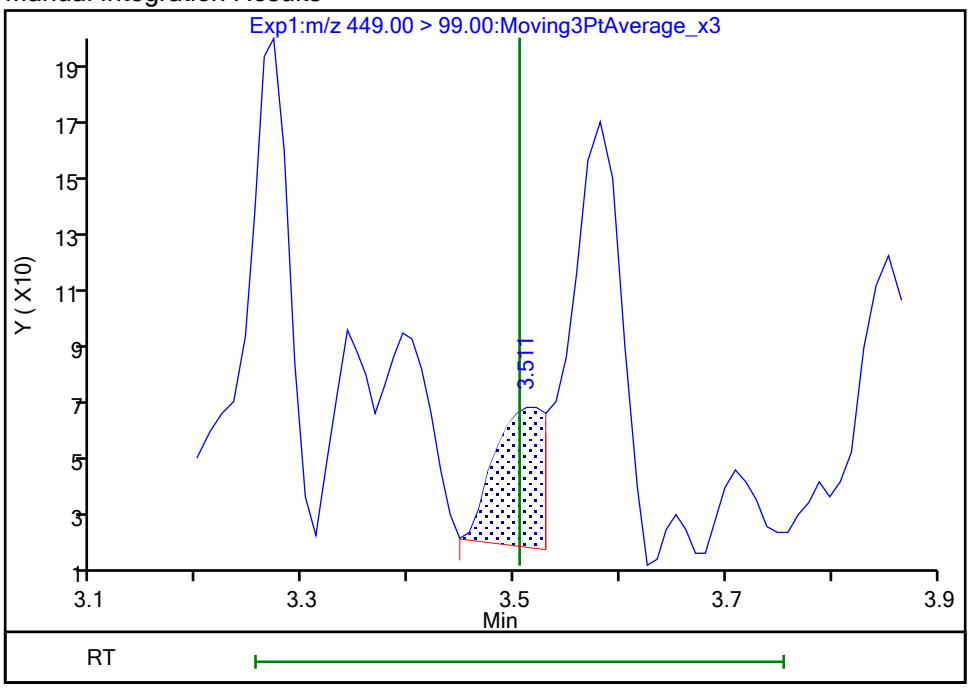
Processing Integration Results

RT: 3.58
Area: 356
Amount: 0.000604
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 148
Amount: 0.000858
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

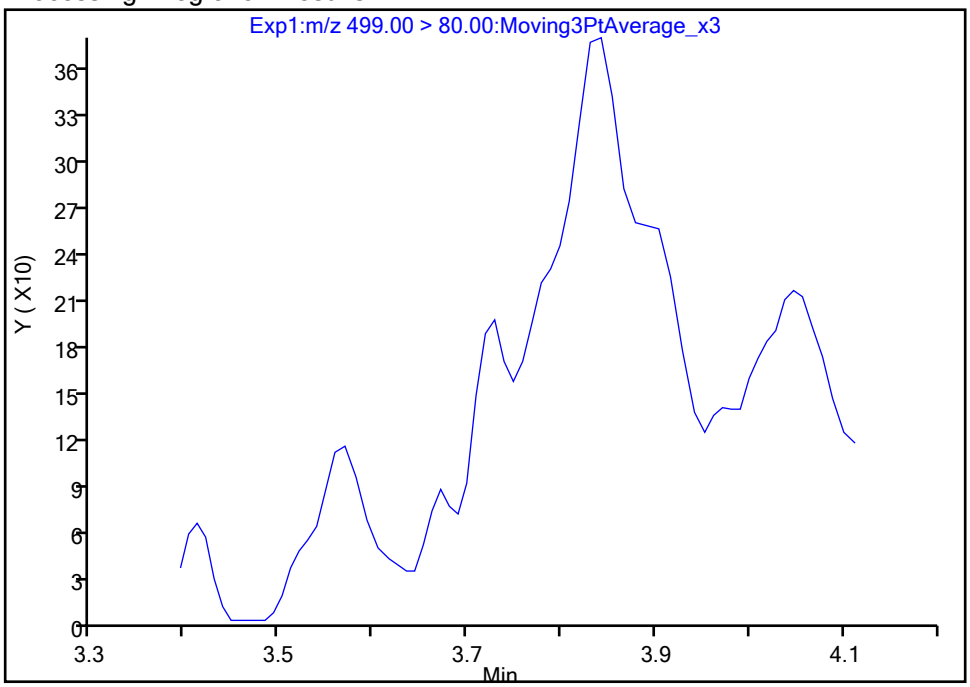
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

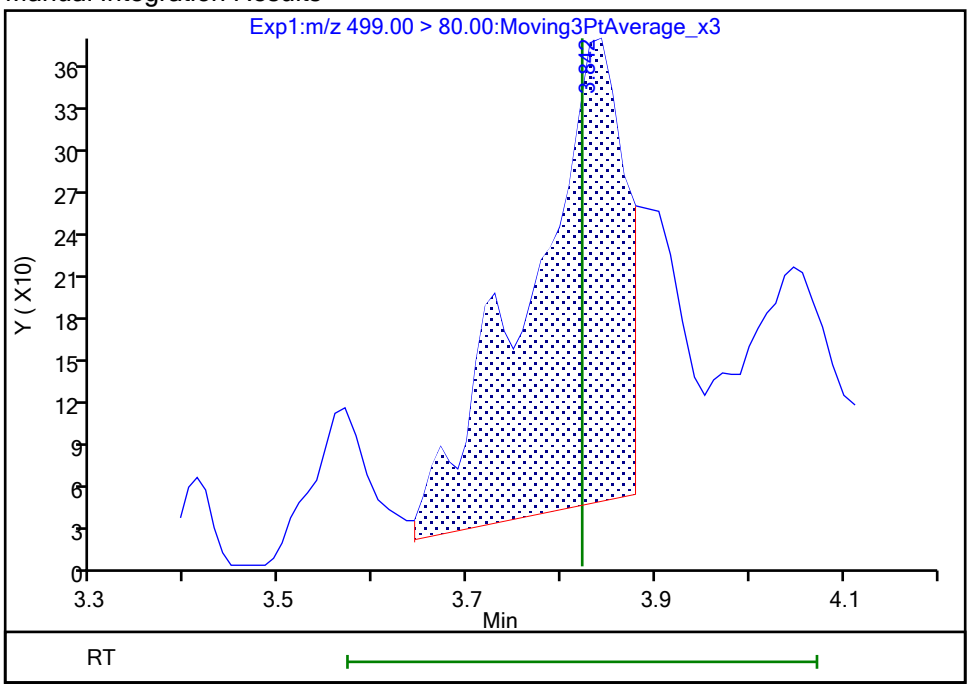
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 2360
Amount: 0.002455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

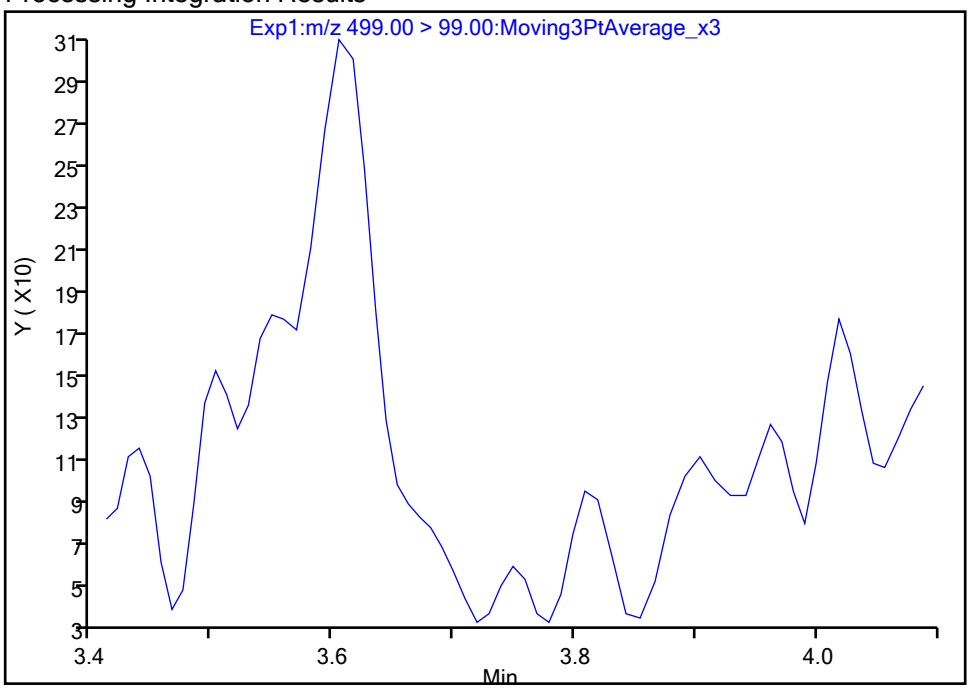
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

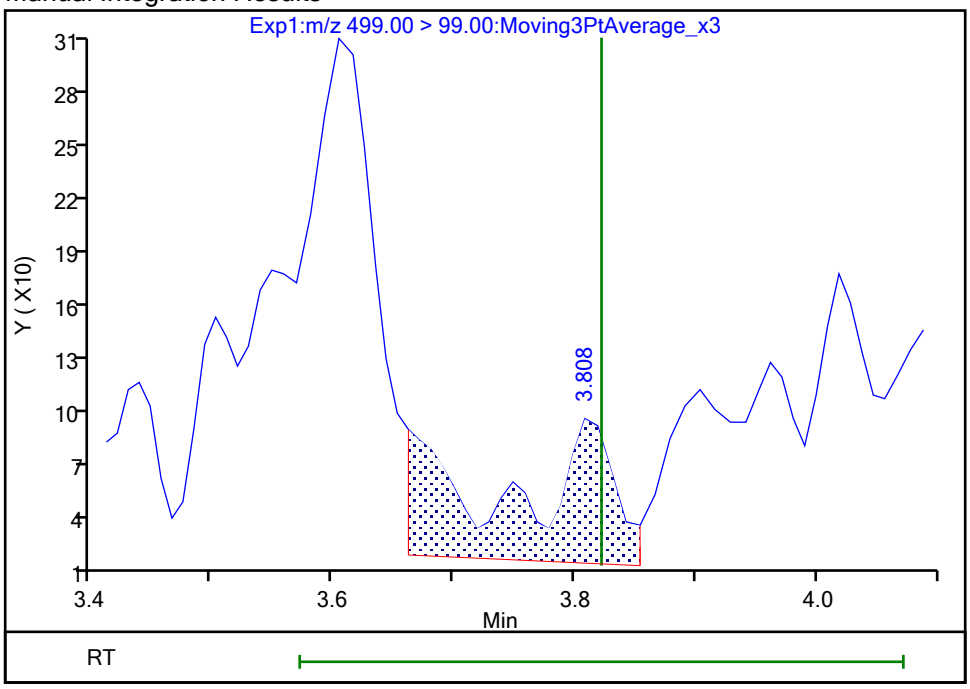
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.81
Area: 478
Amount: 0.002455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

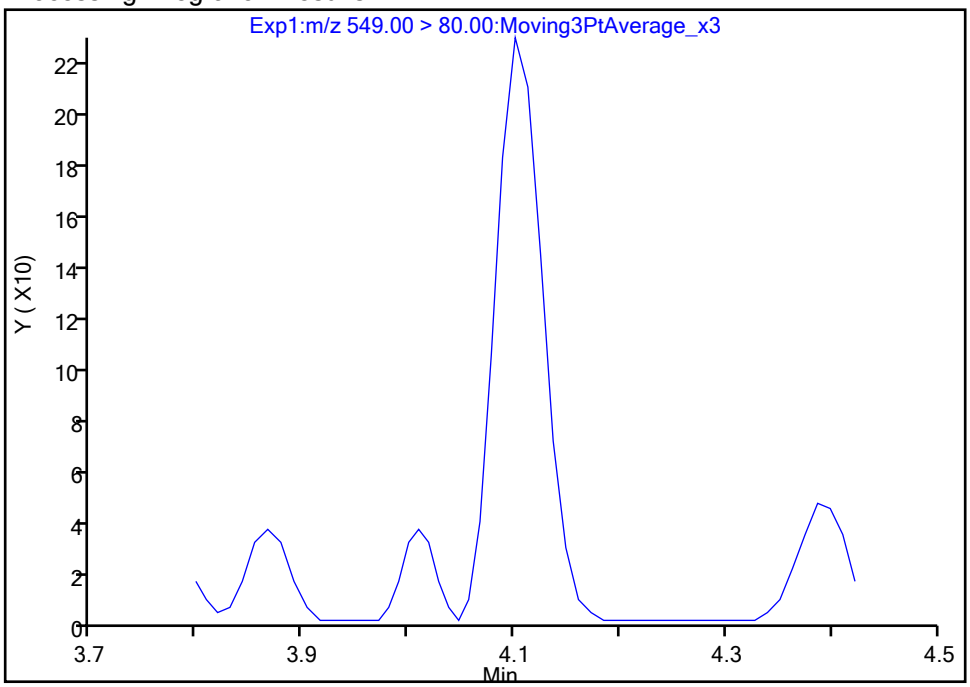
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

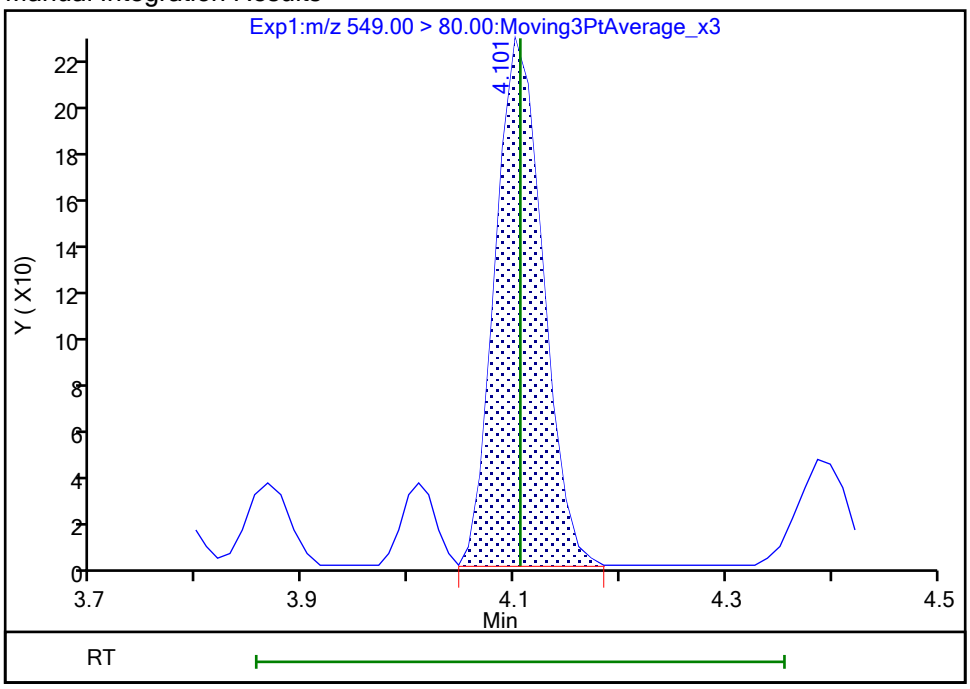
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 702
Amount: 0.000960
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

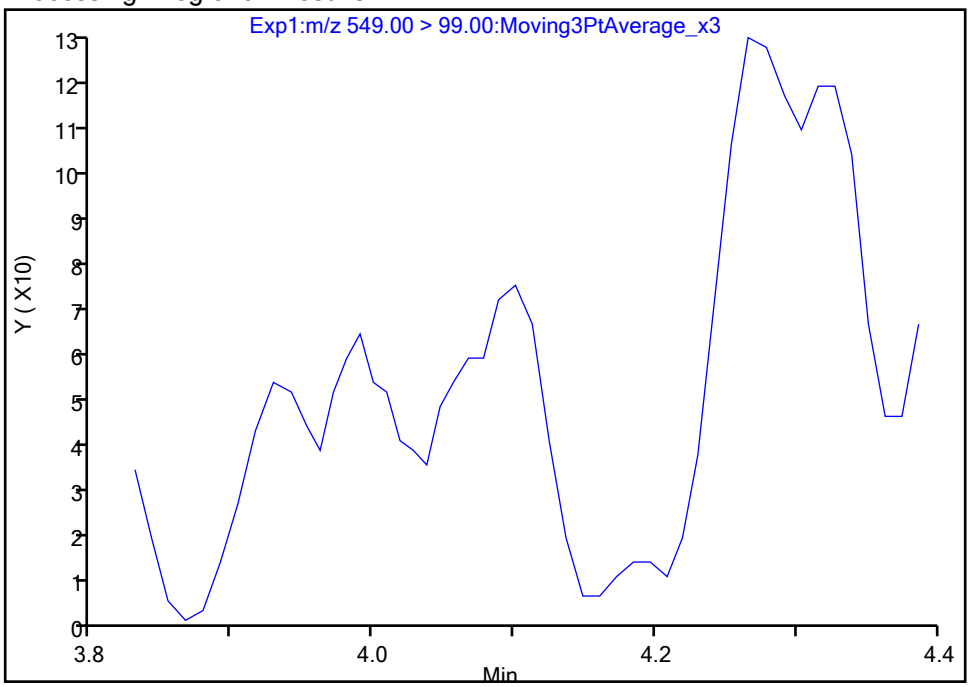
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

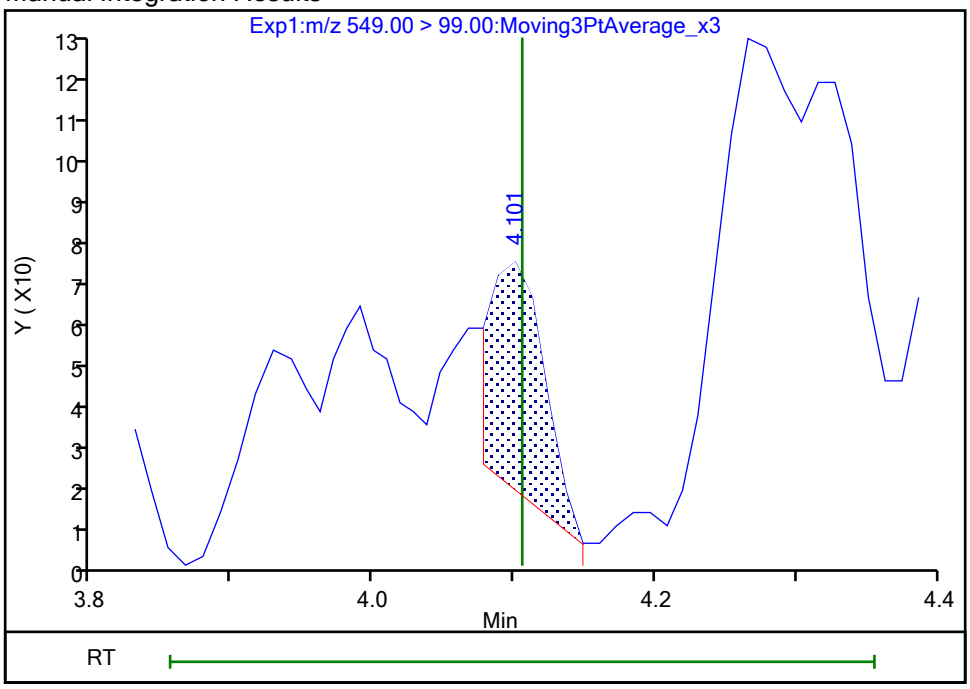
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 136
Amount: 0.000960
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

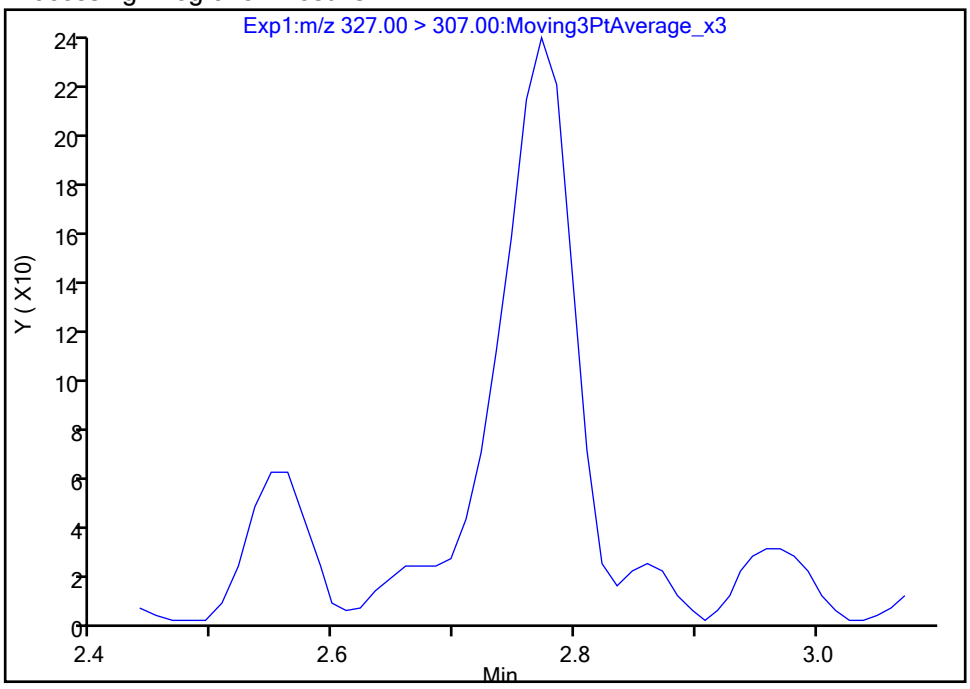
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

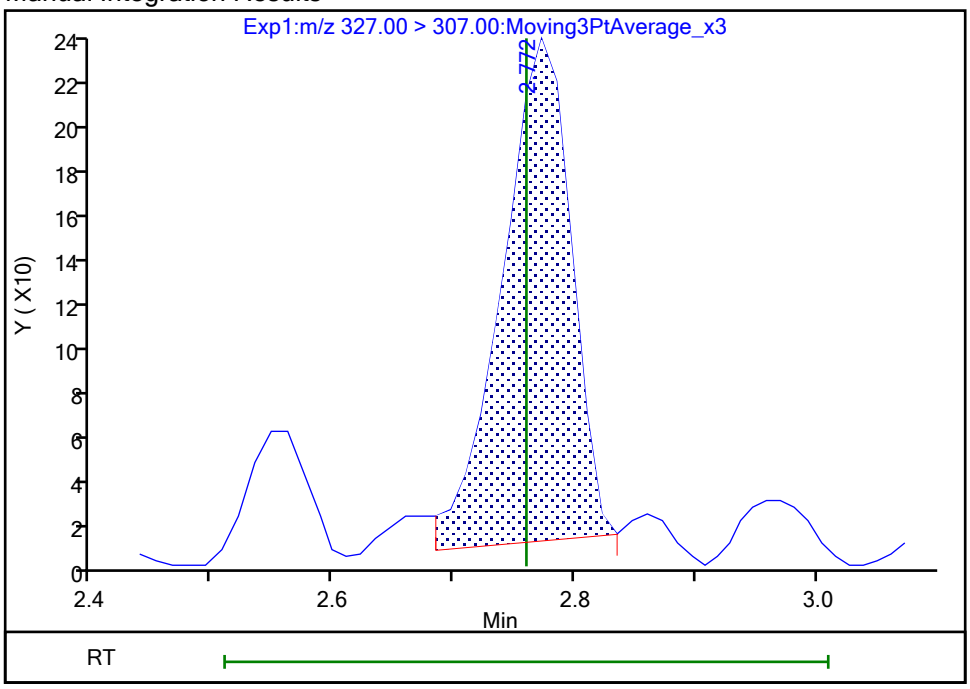
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 892
Amount: 0.001351
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:18:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

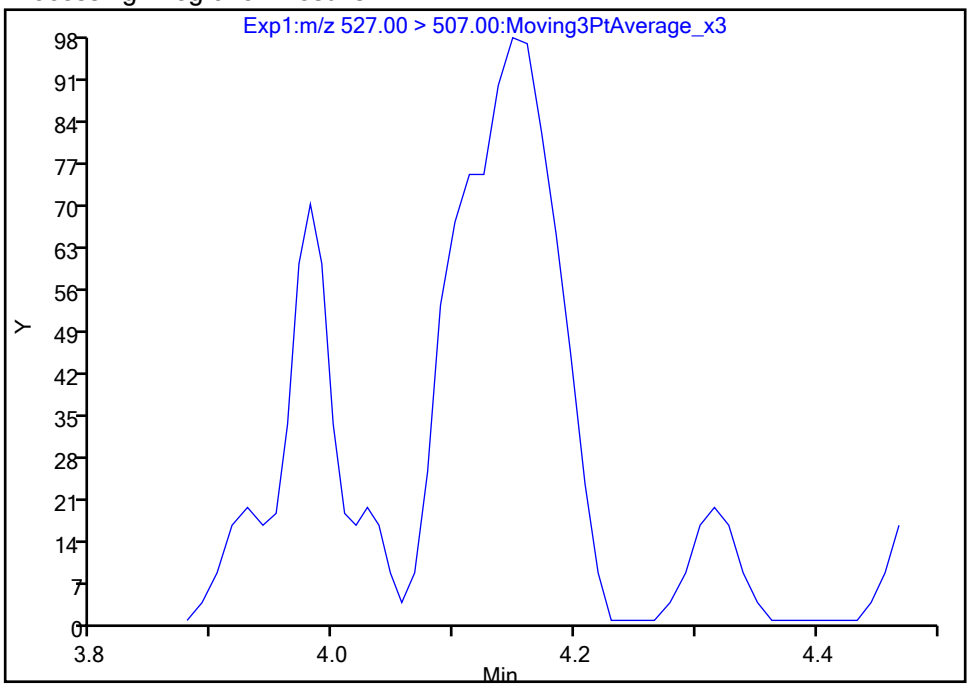
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

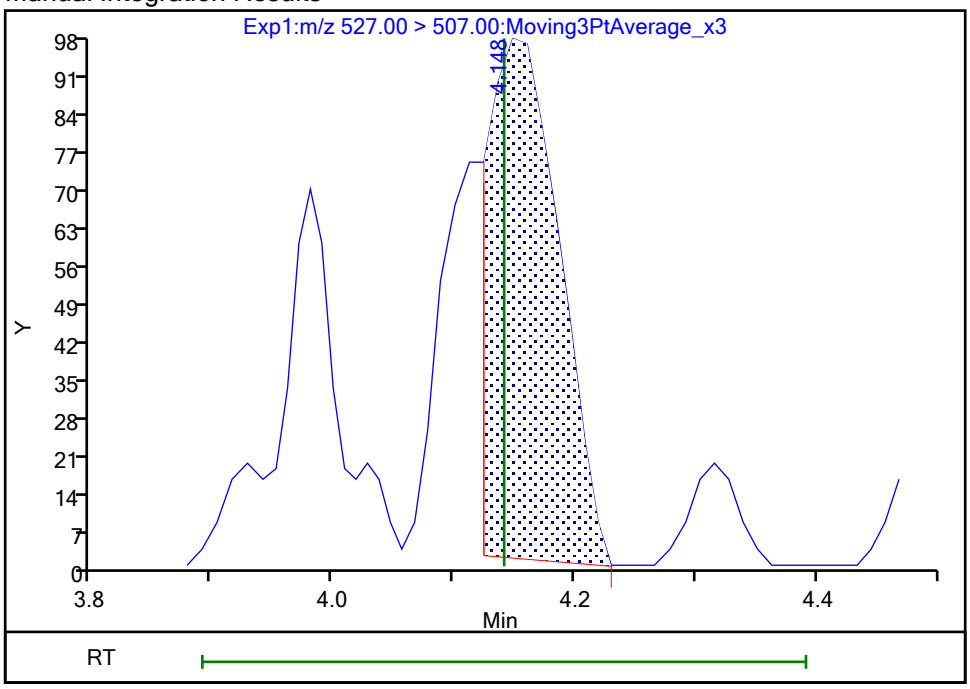
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 384
Amount: 0.000655
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

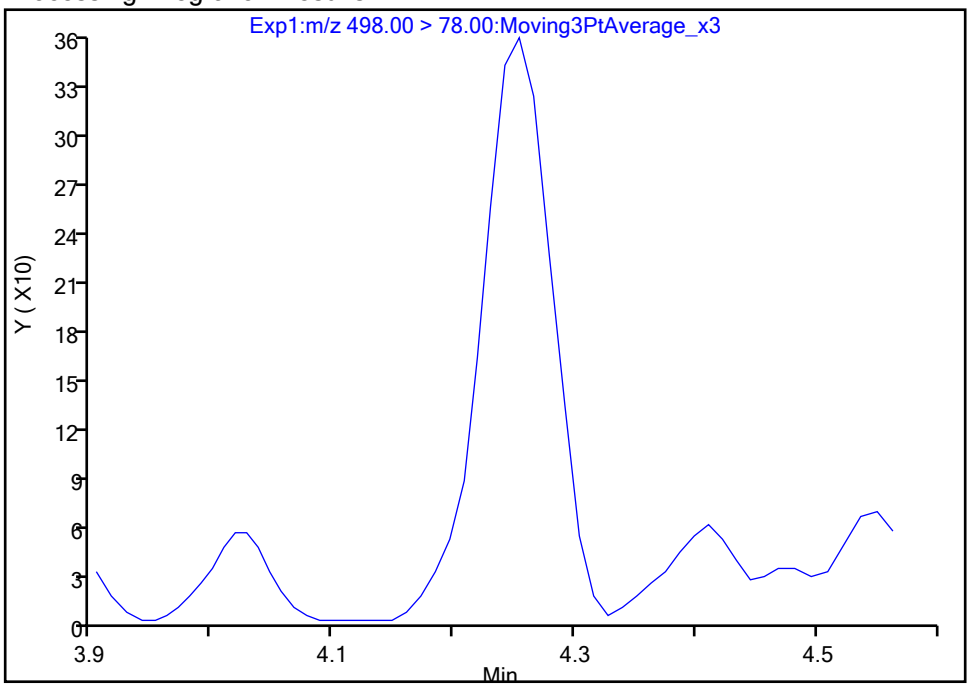
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

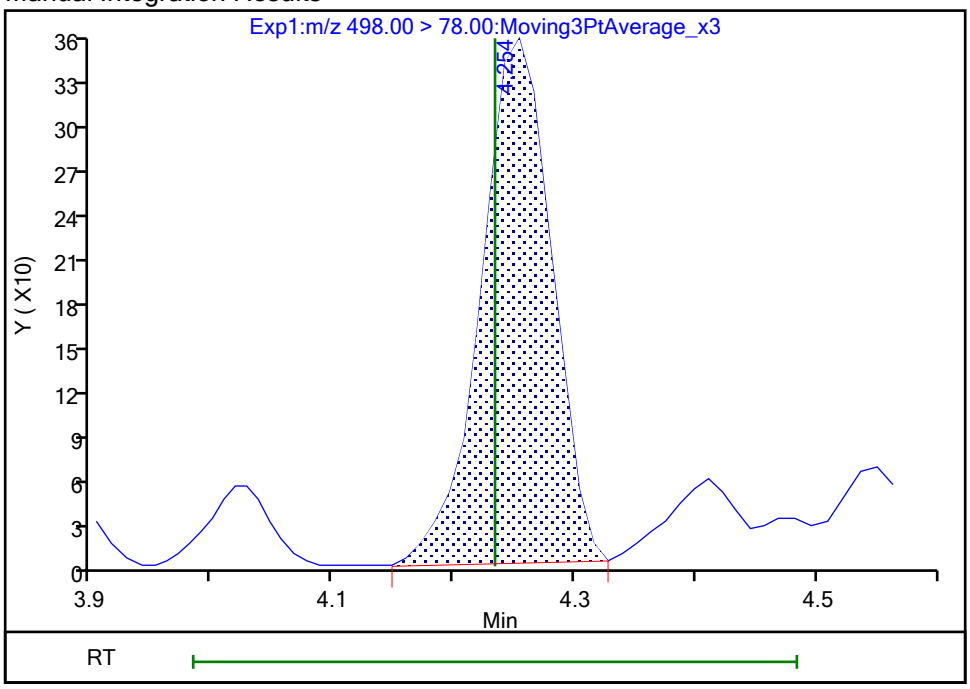
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 1458
Amount: 0.001188
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

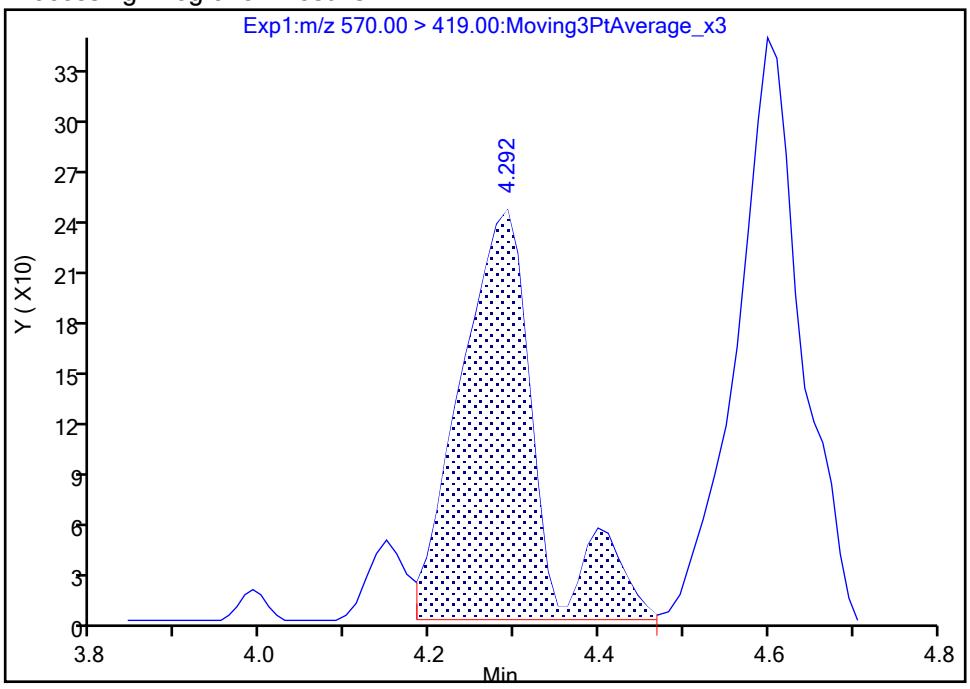
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

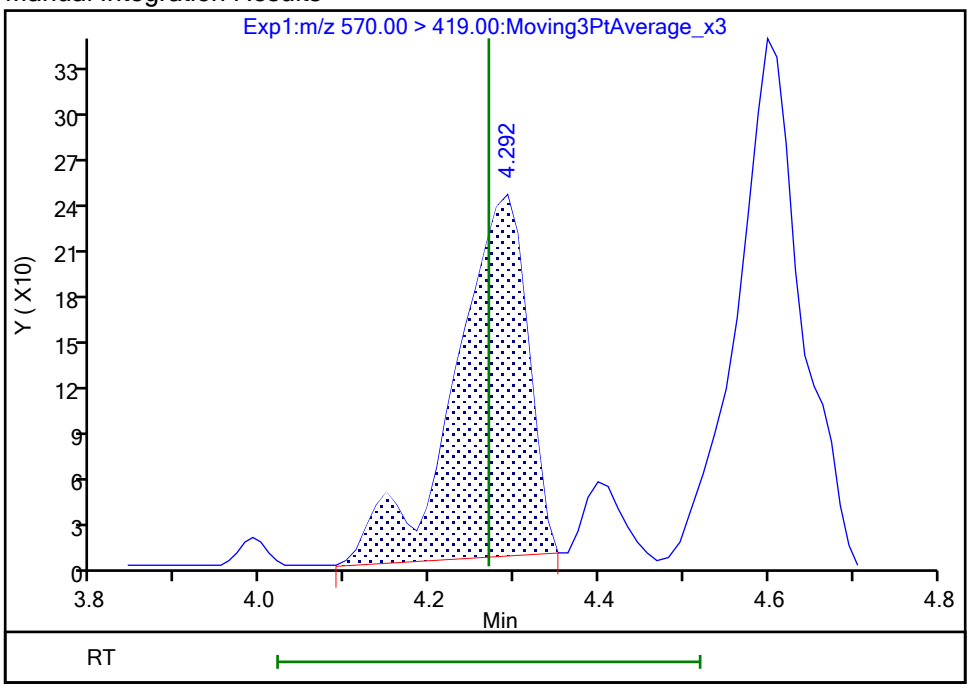
Processing Integration Results

RT: 4.29
Area: 1513
Amount: 0.003841
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 1404
Amount: 0.003565
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

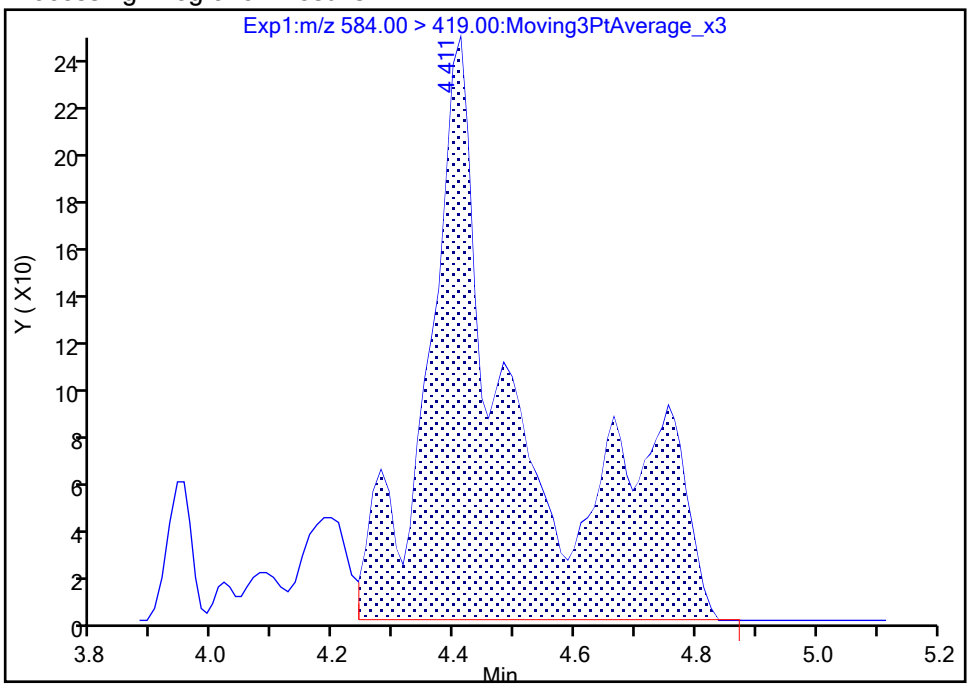
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

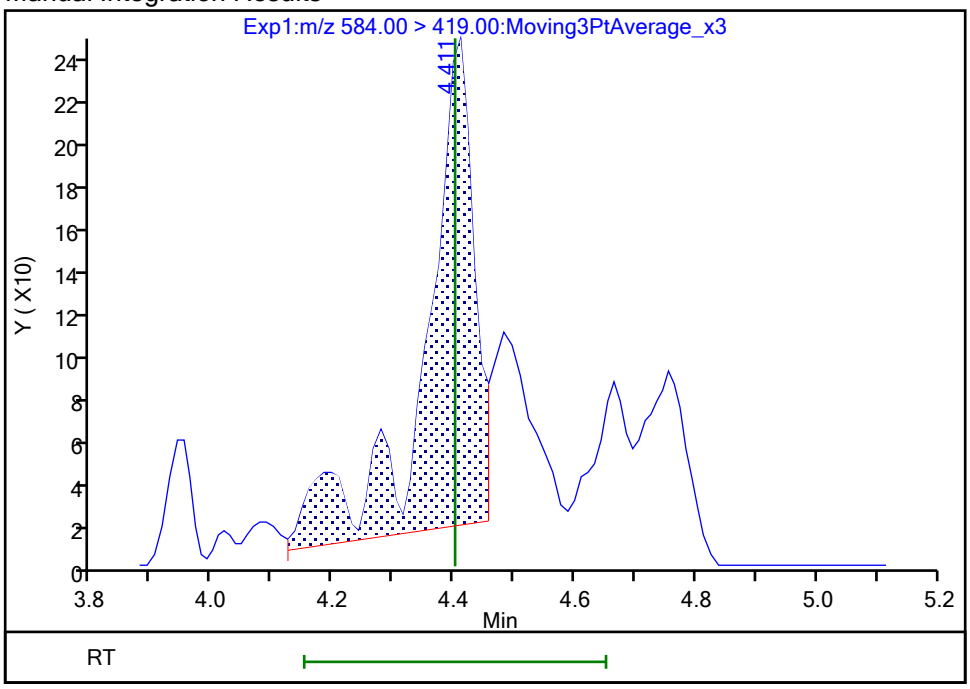
Processing Integration Results

RT: 4.41
Area: 2693
Amount: 0.006731
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1279
Amount: 0.003197
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

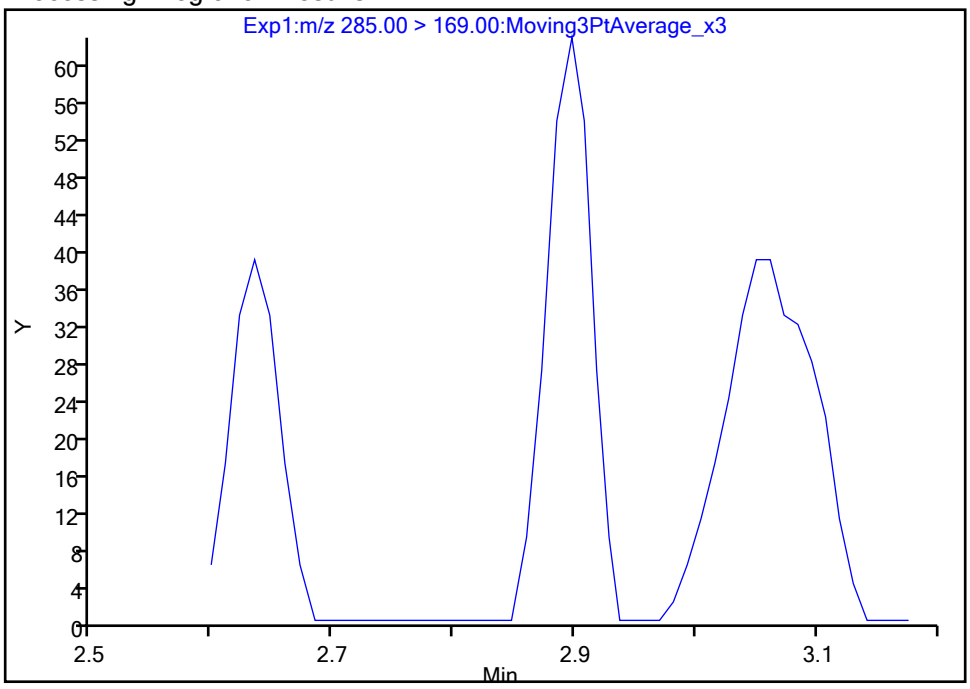
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

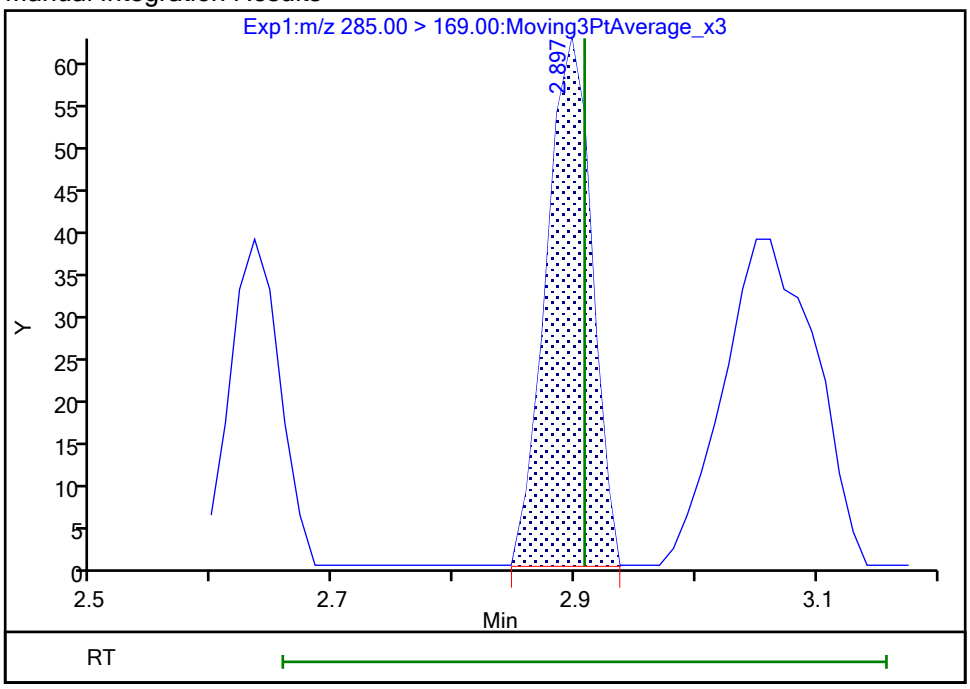
Not Detected
Expected RT: 2.91

Processing Integration Results



Manual Integration Results

RT: 2.90
Area: 165
Amount: 0.000714
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

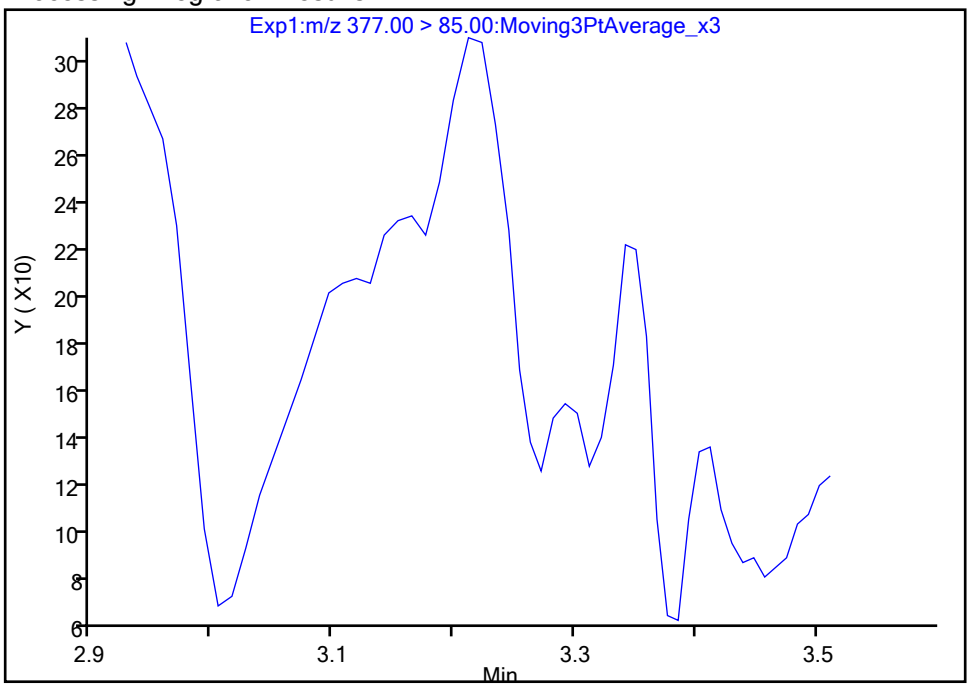
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

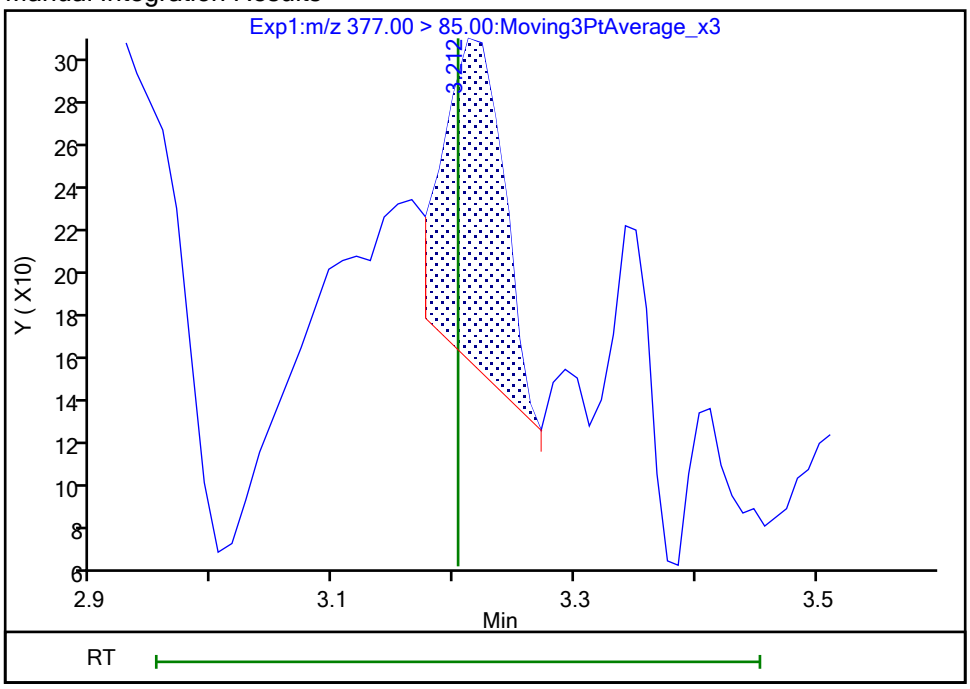
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 510
Amount: 0.000780
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

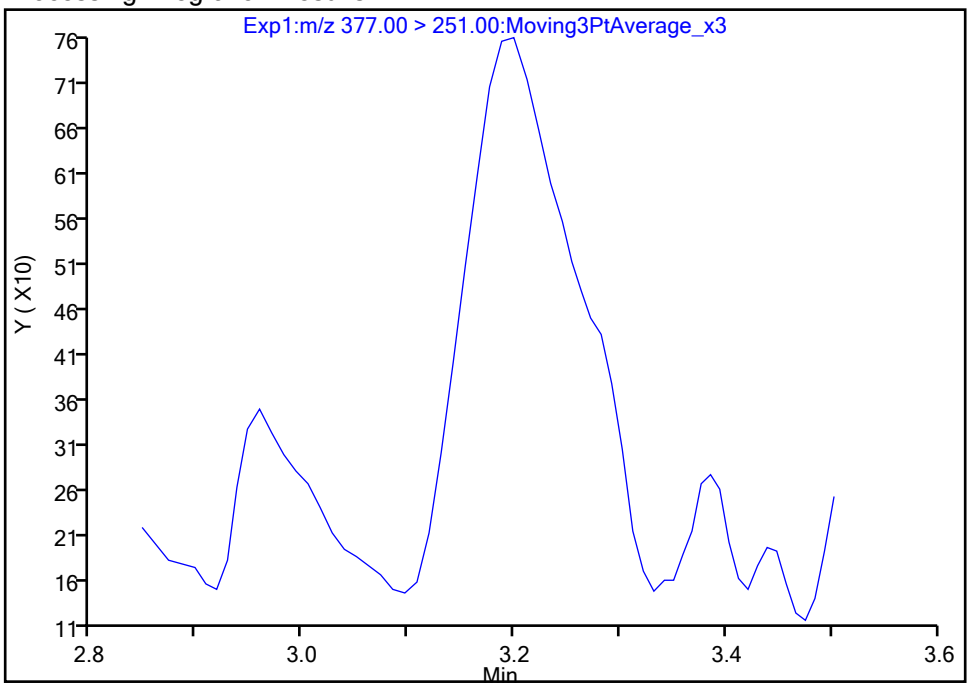
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

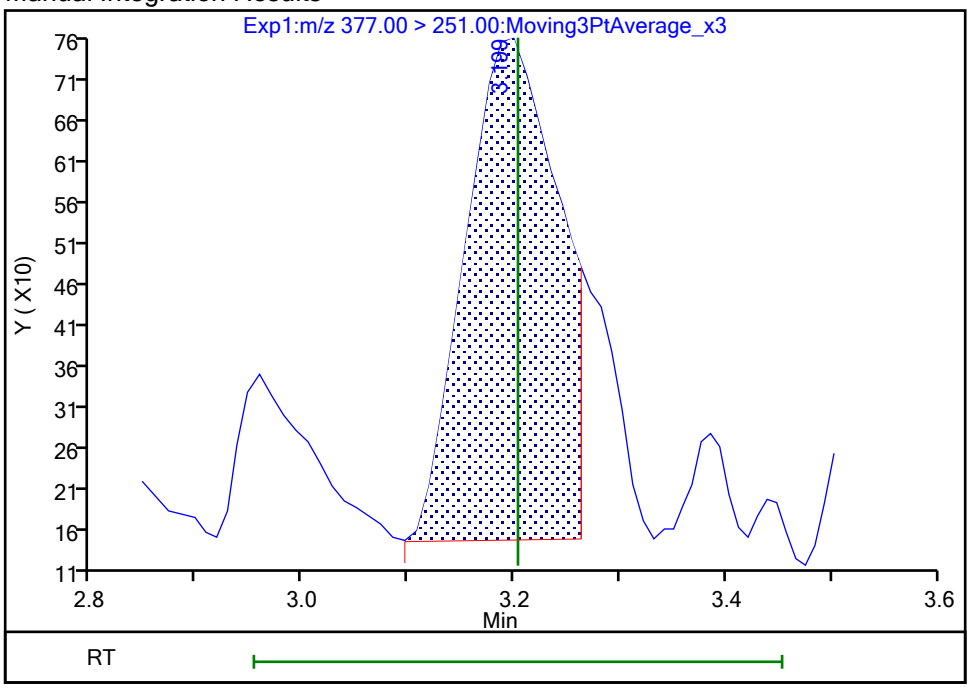
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 3702
Amount: 0.000780
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

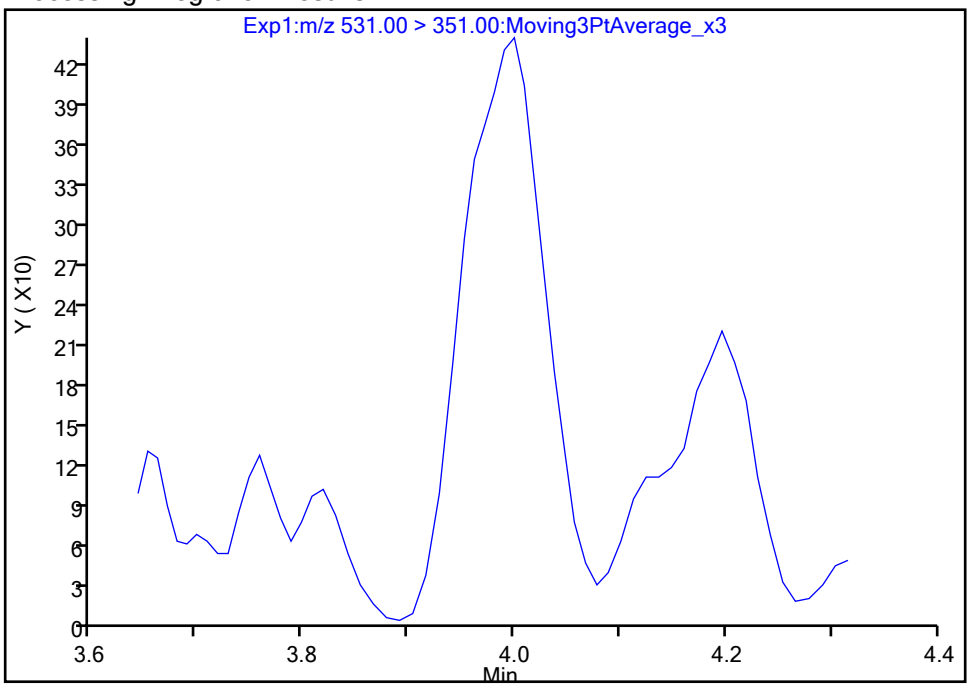
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

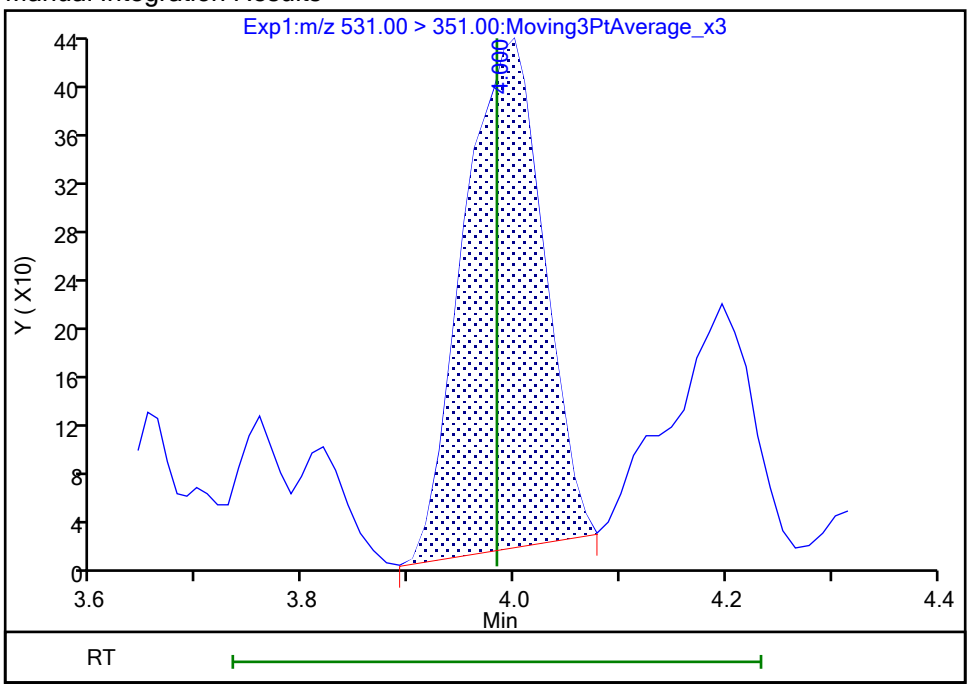
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 4.00
Area: 2158
Amount: 0.000733
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

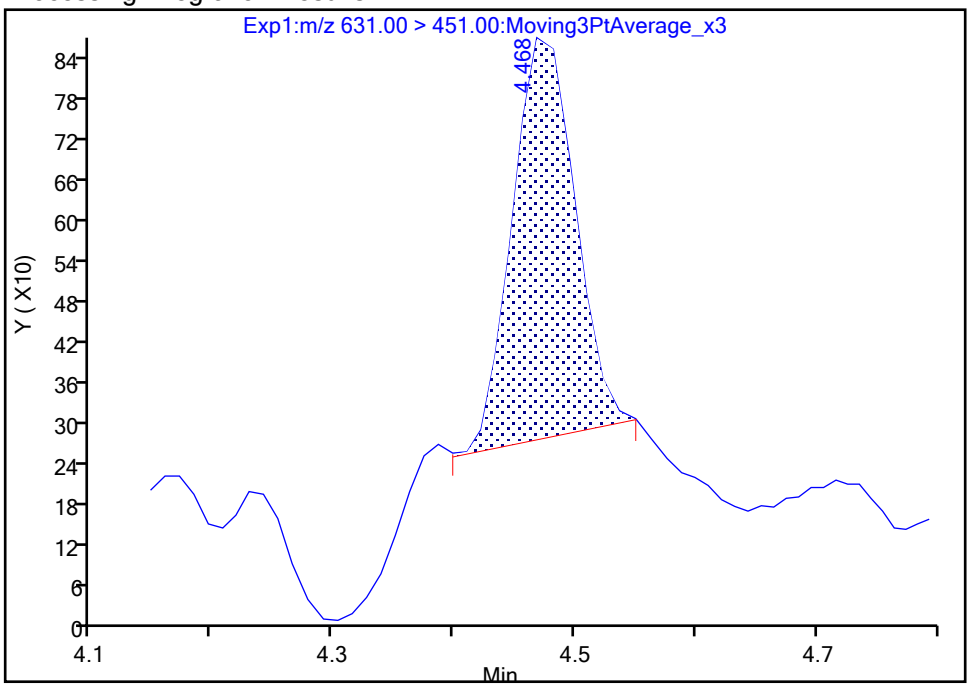
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

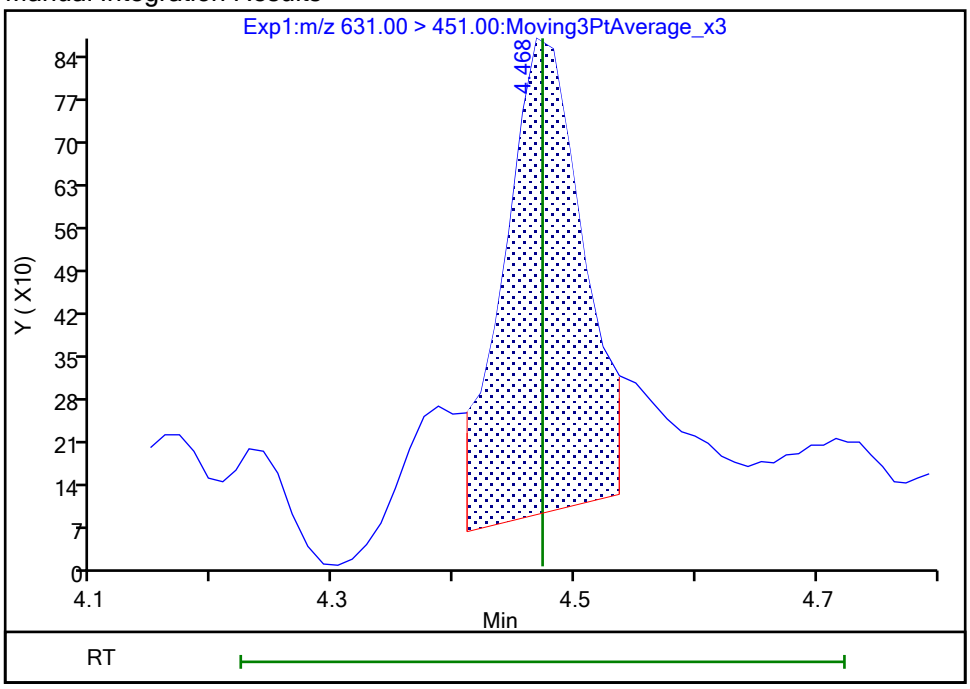
Processing Integration Results

RT: 4.47
Area: 2133
Amount: 0.000473
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 3530
Amount: 0.000782
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

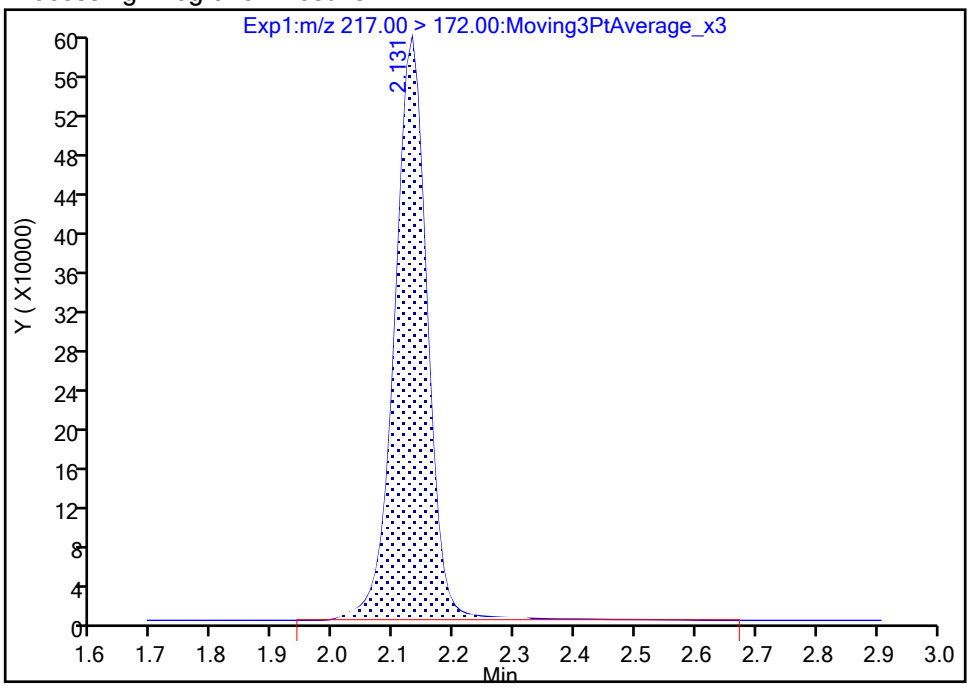
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

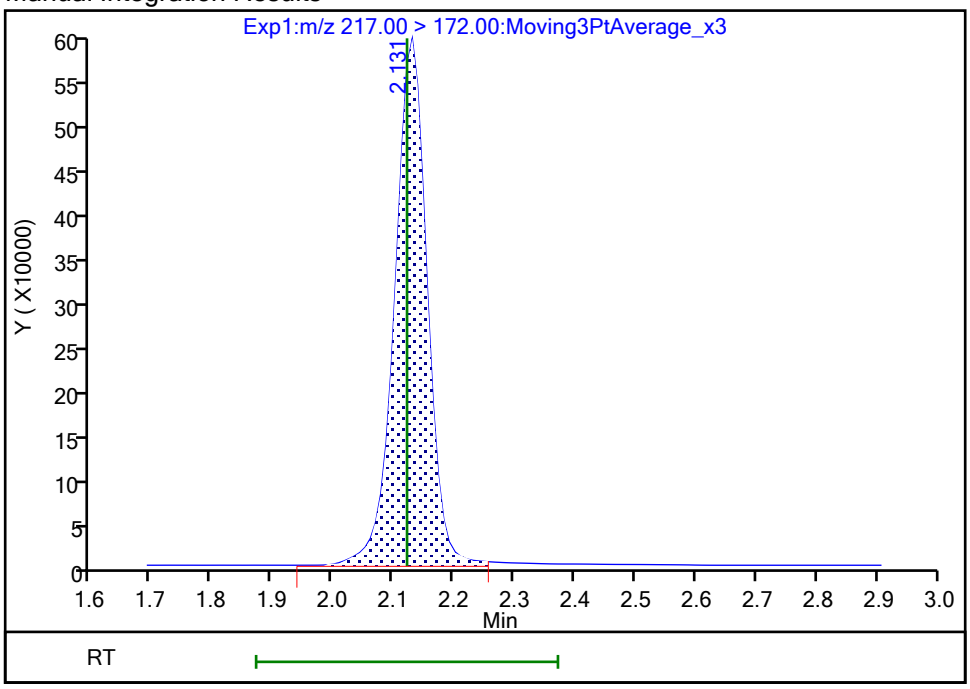
Processing Integration Results

RT: 2.13
Area: 2247536
Amount: 1.245576
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2218499
Amount: 1.229484
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

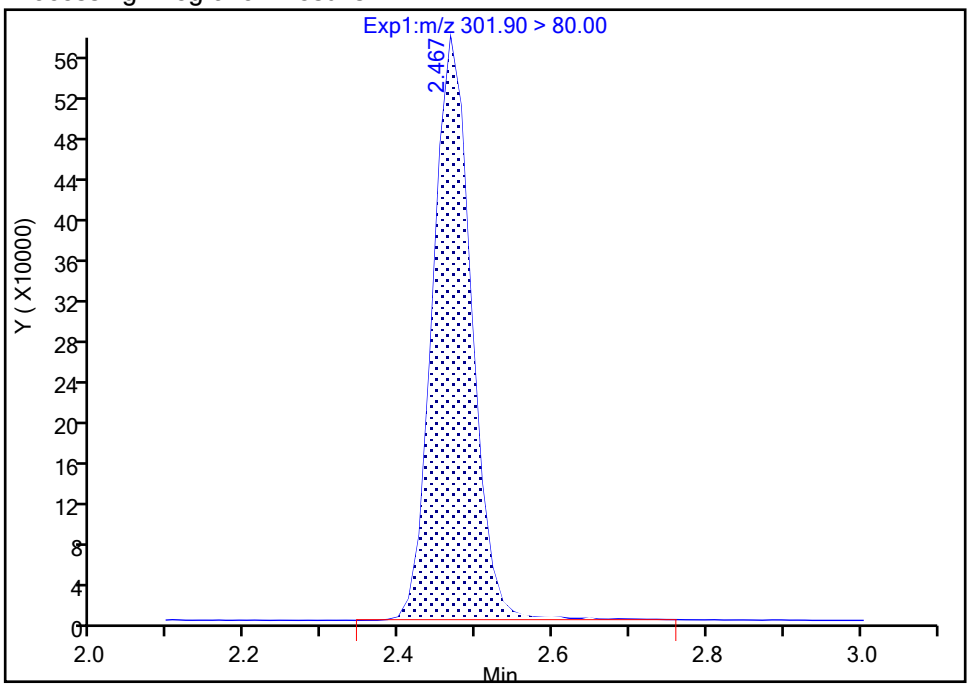
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

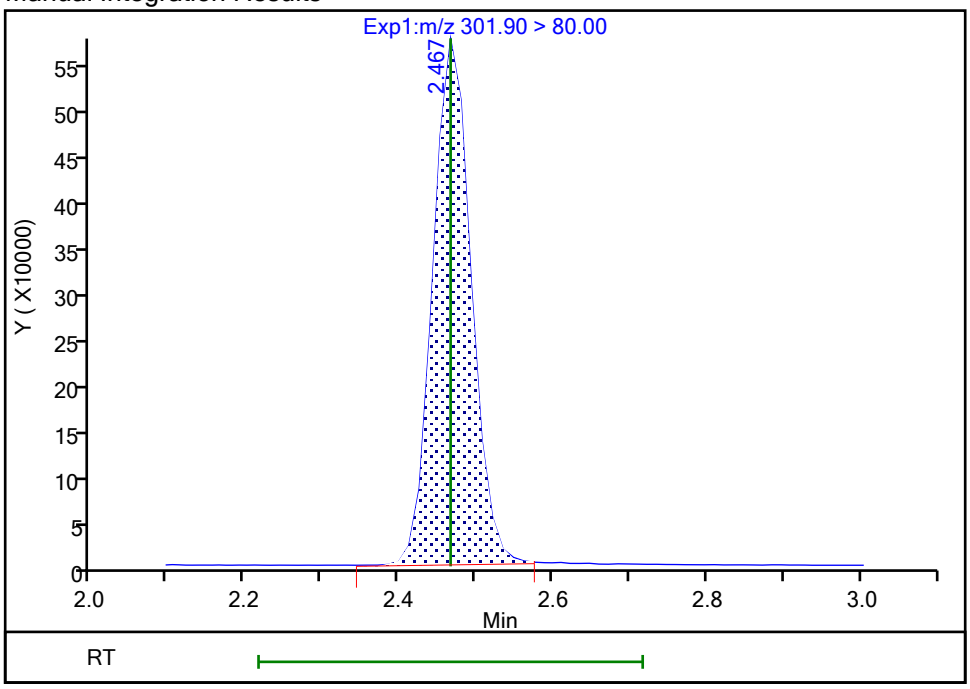
Processing Integration Results

RT: 2.47
Area: 2003376
Amount: 1.057298
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1991055
Amount: 1.050796
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

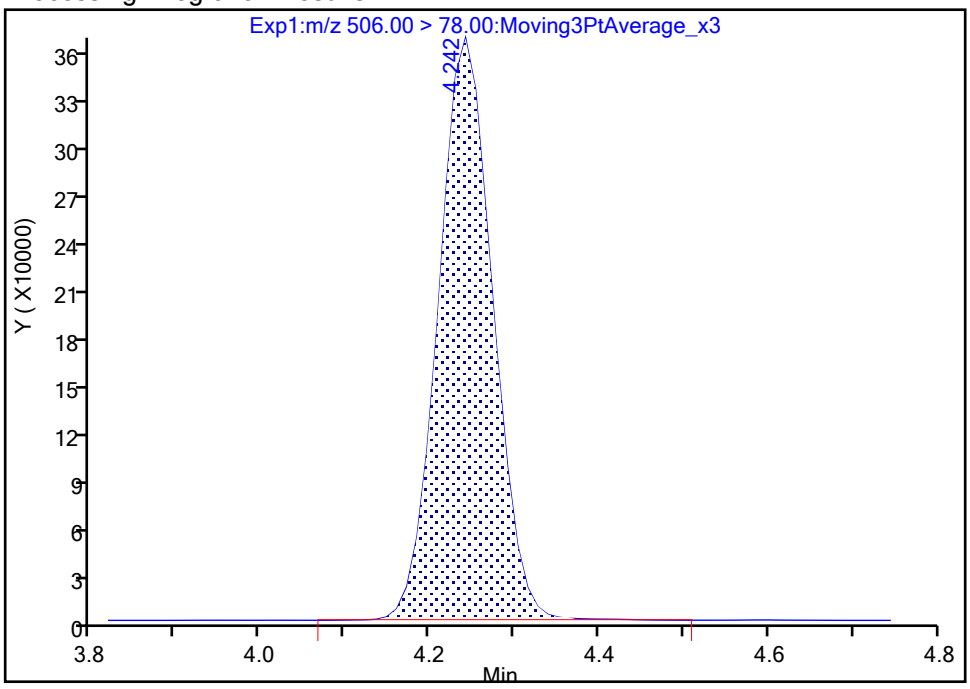
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

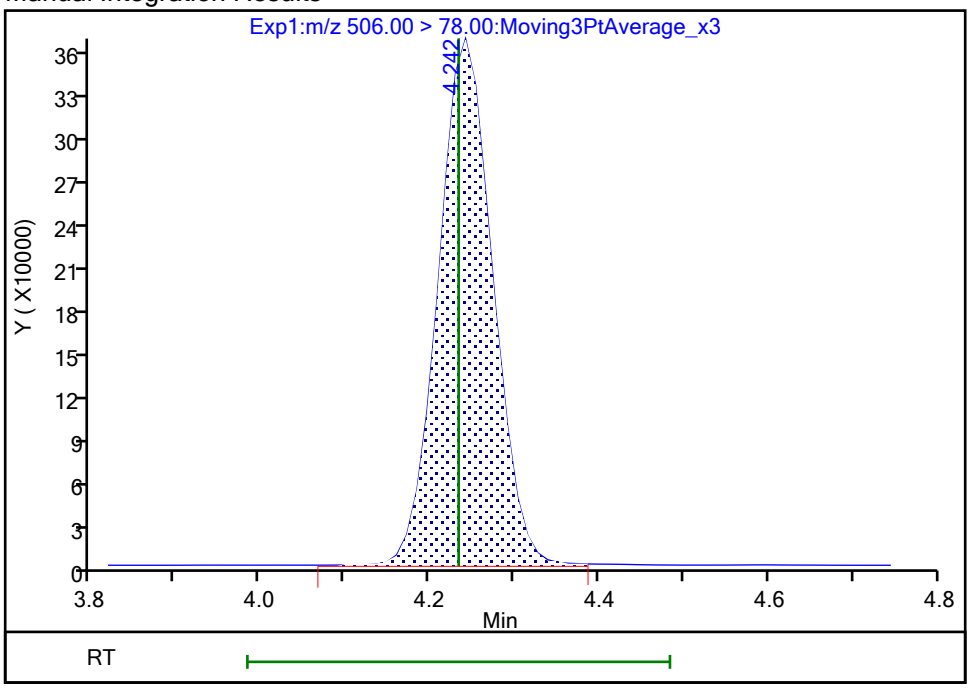
Processing Integration Results

RT: 4.24
Area: 1611205
Amount: 0.935824
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1608846
Amount: 0.934453
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

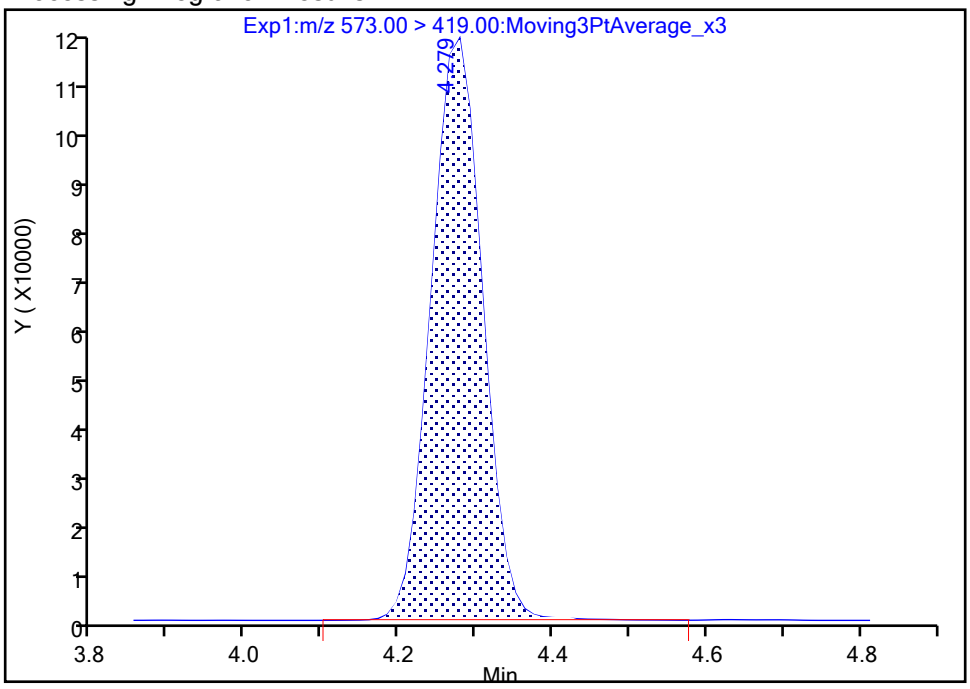
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

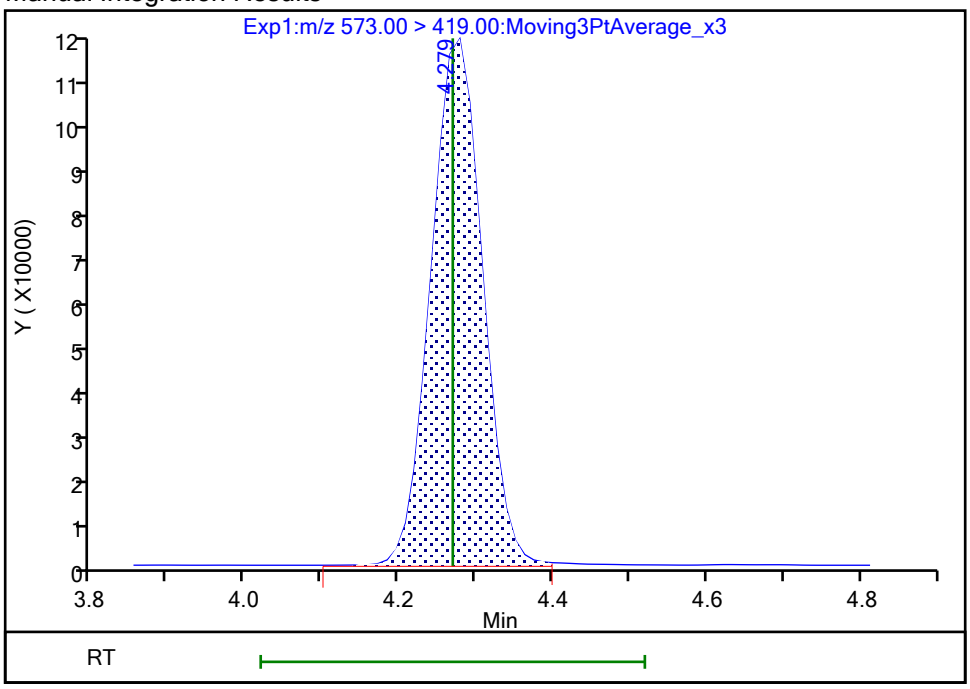
Processing Integration Results

RT: 4.28
Area: 544351
Amount: 1.128860
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 542582
Amount: 1.125192
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

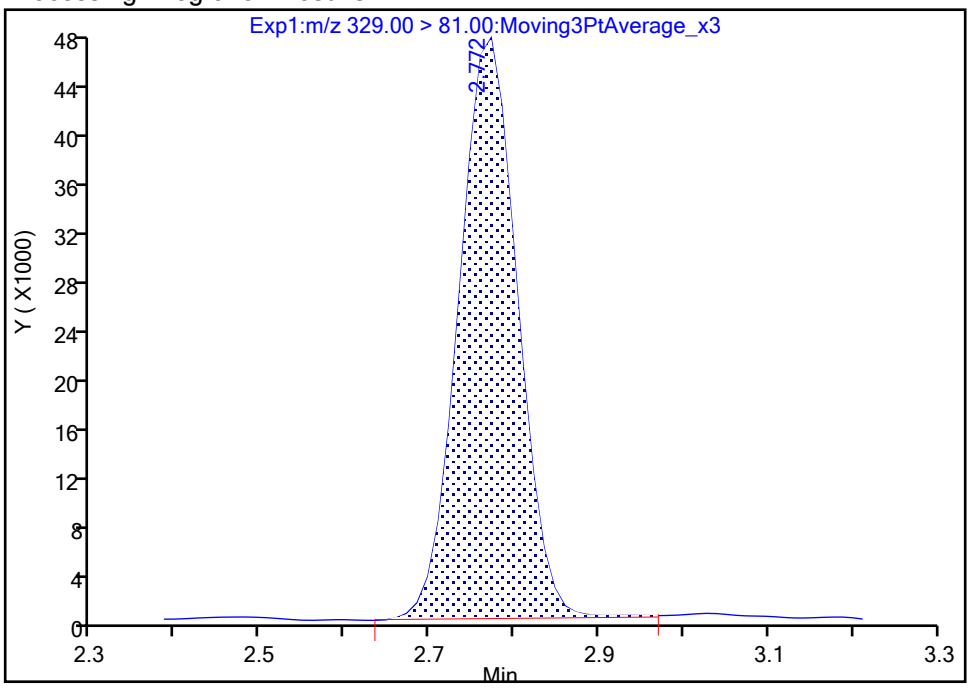
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

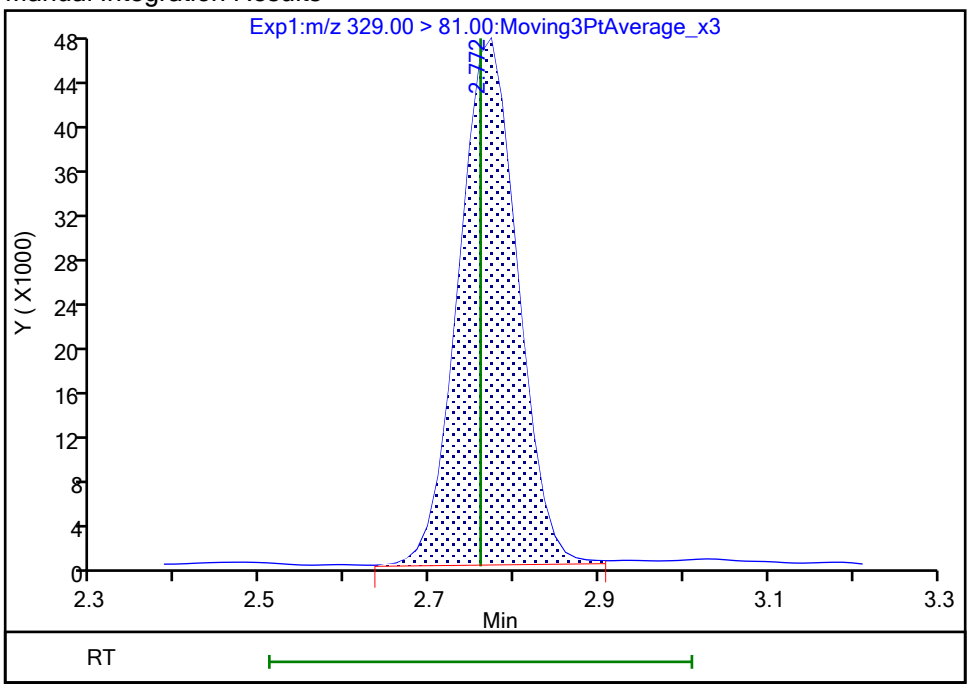
Processing Integration Results

RT: 2.77
Area: 226761
Amount: 1.034833
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 227009
Amount: 1.035965
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

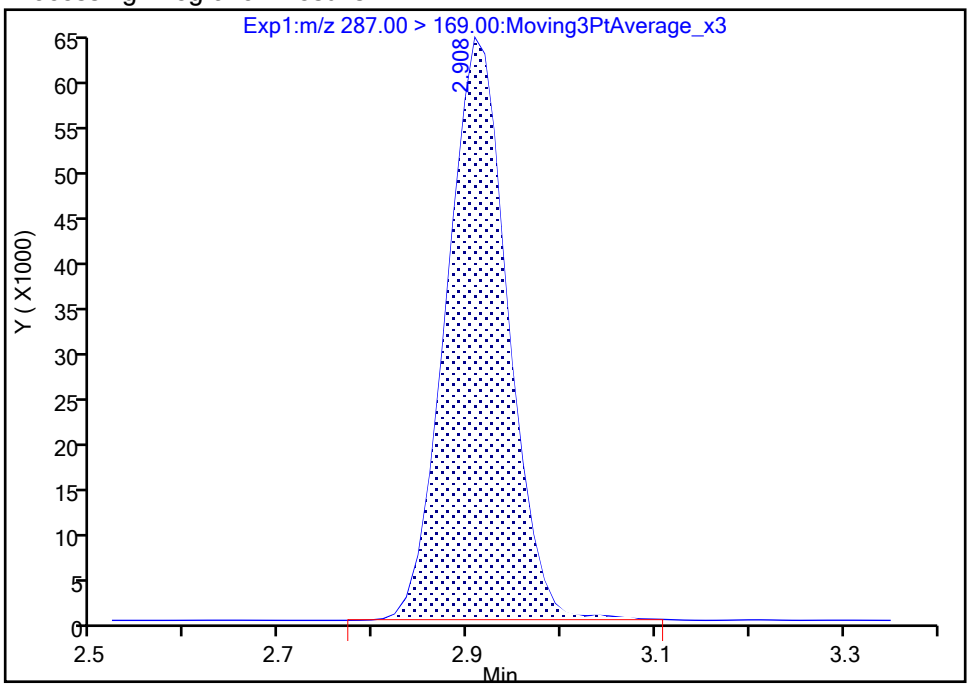
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

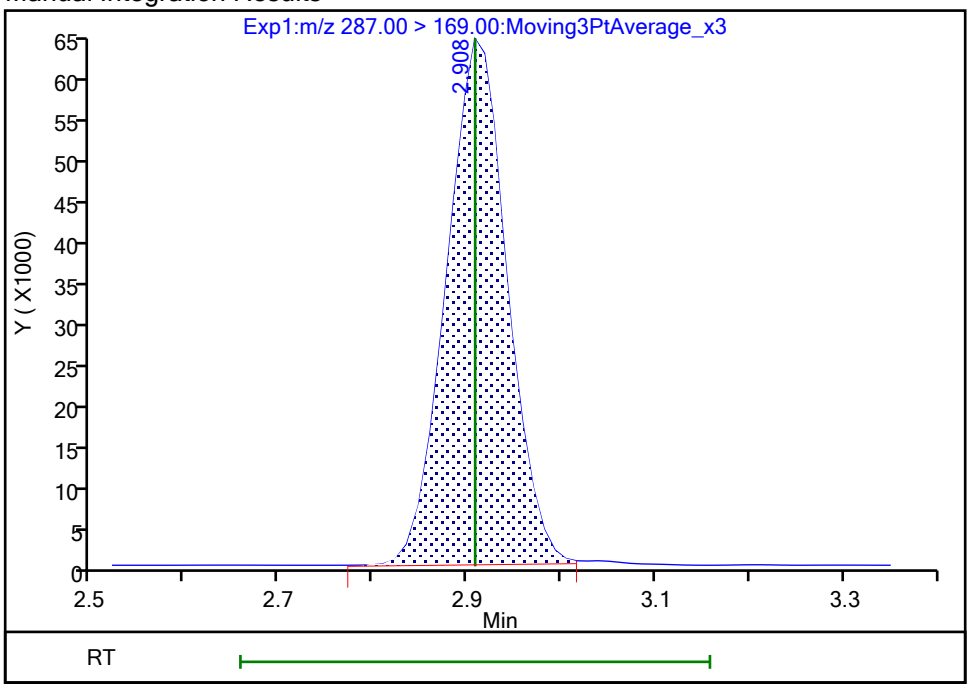
Processing Integration Results

RT: 2.91
Area: 289976
Amount: 1.051563
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 288596
Amount: 1.046558
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

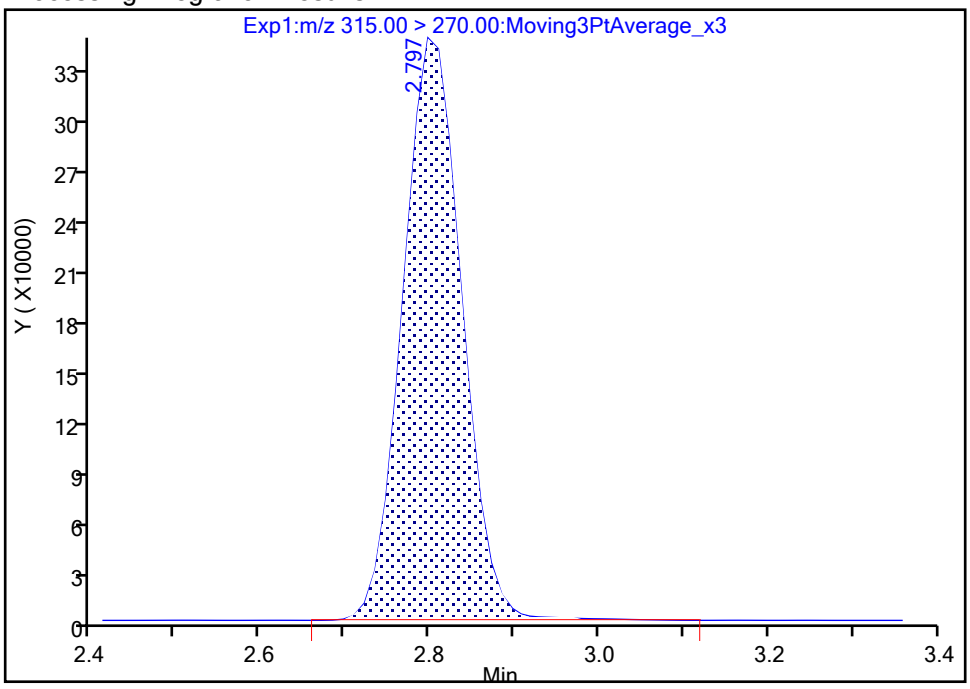
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

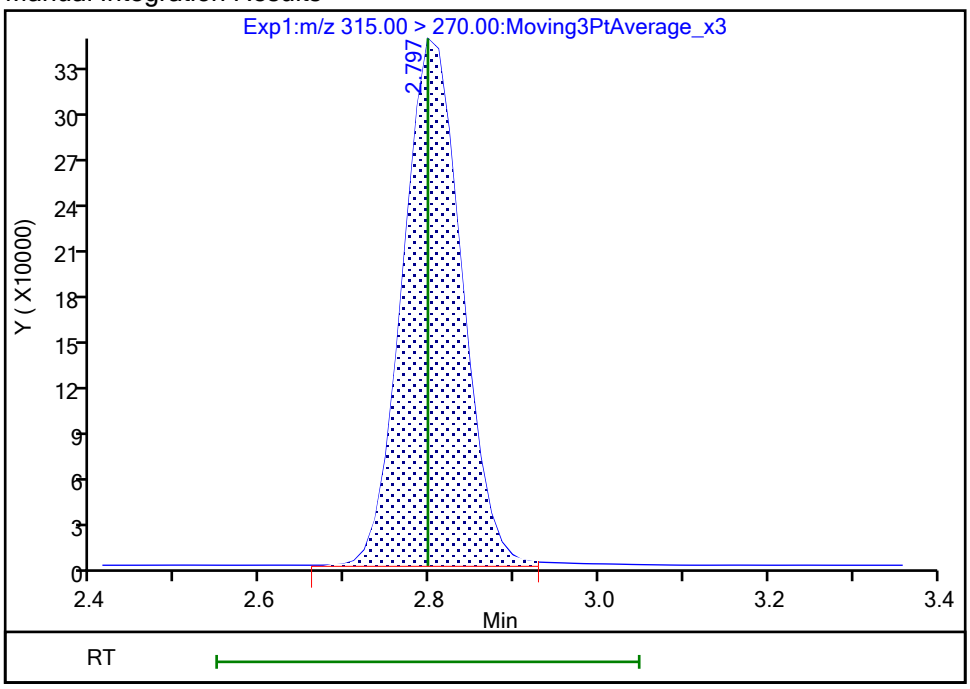
Processing Integration Results

RT: 2.80
Area: 1689498
Amount: 1.185908
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1680836
Amount: 1.179828
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

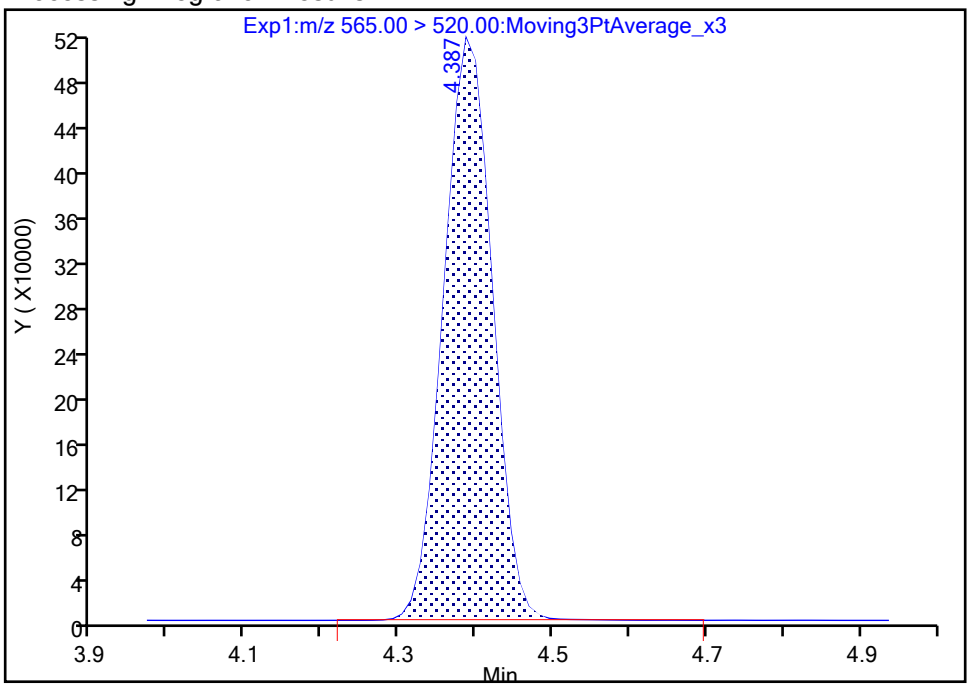
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

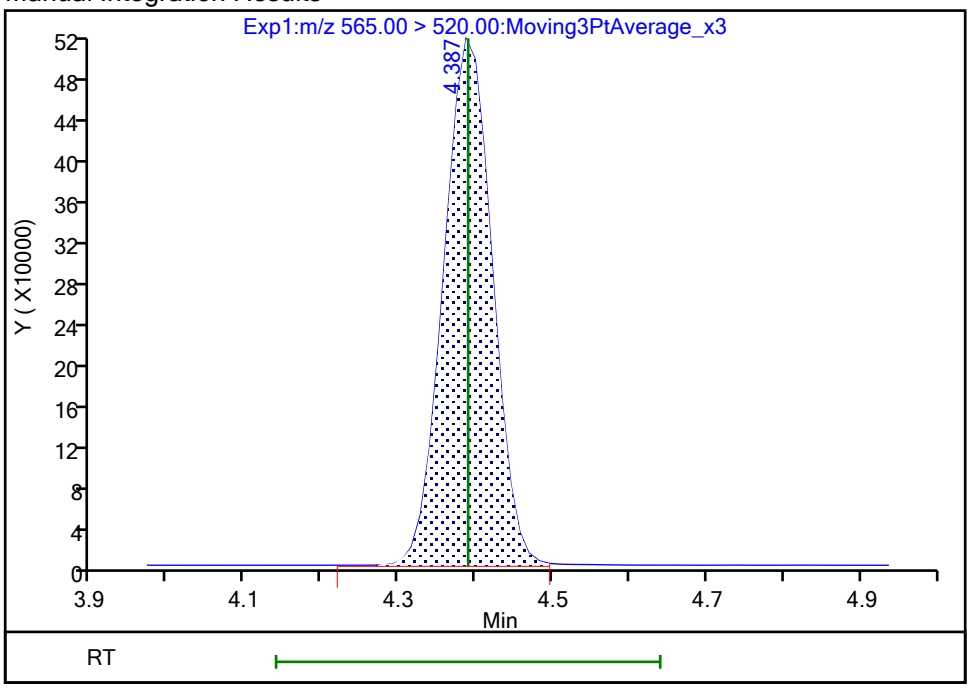
Processing Integration Results

RT: 4.39
Area: 2293274
Amount: 1.204072
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2288986
Amount: 1.201821
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196715/1-A

Matrix: Water | Lab File ID: PA231024A06.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/24/2023 09:04

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 18:40

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196715/1-A

Matrix: Water Lab File ID: PA231024A06.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 18:40

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	104		50-150
STL01893	13C5 PFPeA	93		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	82		50-150
STL02337	13C3 PFBS	103		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	93		50-150
STL02117	d5-NEtFOSAA	90		50-150
STL02395	M2-4:2 FTS	95		50-150
STL02279	M2-6:2 FTS	105		50-150
STL02280	M2-8:2 FTS	92		50-150
STL02255	13C3 HFPO-DA	91		50-150
STL00994	18O2 PFHxS	107		50-150
STL00993	13C2 PFHxA	102		50-150
STL00991	13C4 PFOS	105		50-150
STL00998	13C2 PFDoA	87		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	94		50-150
STL00990	13C4 PFOA	110		50-150
STL00997	13C2 PFUnA	87		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Lims ID: MB 200-196715/1-A
Client ID:
Sample Type: MB
Inject. Date: 24-Oct-2023 18:40:56 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196715/1-A
Misc. Info.: 200-0057538-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 12:42:32
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.130	0.0	0.605	2074876	1.30		104	1691	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.139	0.0	1.004	28884	-0.0216			1.9	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.453	-0.014	0.693	1437301	1.16		93.1	987	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.467	2.453	0.013	1.011	1683	0.001356			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.466	0.0	0.701	1994947	1.19		103	119122	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.466	0.014	1.006	4281	0.002234	Target=2.06		5.3	M
298.90 > 99.00	2.480	2.466	0.014	1.006	2491		1.72(1.03-3.09)		1.0	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	214687	1.11		95.2	150	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1593446	1.27		102	4040	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	275614	1.13		90.7	1651	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.899	1511673	1.26		107	5081	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	4667	0.003298	Target=3.32		19.7	M
399.00 > 99.00	3.165	3.166	-0.001	1.000	2054		2.27(1.66-4.98)		2.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.177	-0.012	0.899	1785647	1.30		104	12877	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.512	-0.001	0.997	310771	1.25		105	720	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.502	3.512	-0.010	0.997	154	0.000215			0.4	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.502	3.521	-0.019	0.995	5244	0.002856	Target=2.88		0.2	M
413.00 > 169.00	3.520	3.521	-0.001	1.000	1988		2.64(1.44-4.32)		3.1	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.521	-0.001	1.000	2154559	1.38		110	5077	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.521	-0.001		2004946	1.25			7429	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.832	-0.014	0.997	3086	0.003303	Target=4.24		4.7	M
499.00 > 99.00	3.866	3.832	0.034	1.009	838		3.68(2.12-6.37)		1.7	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.832	-0.002	1.088	957203	1.26		105	4647	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.844	-0.002	1.091	2231375	1.31		105	6442	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.990	3.981	0.009	1.042	287	0.000100			1.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.138	-0.002	1.175	2085177	1.17		93.8	13609	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.150	-0.002	1.178	308637	1.10		92.1	488	
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.244	-0.002	1.205	1590545	1.05		83.8	1886	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.244	0.010	1.003	1120	0.000923			9.1	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.281	-0.003	1.215	492552	1.16		92.7	946	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.278	4.281	-0.003	1.000	343	0.000959			2.7	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.388	-0.001	1.246	1817092	1.08		86.6	6371	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.400	-0.002	1.250	458646	1.12		89.6	1221	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.327	4.400	-0.073	0.984	698	0.001902			2.8	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.495	4.483	0.012	1.174	1123	0.000256			1.9	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.611	-0.001	1.310	1857270	1.09		87.1	6332	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.643	4.633	0.010	1.119	194	0.000572			3.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.991	-0.002	1.417	1732936	1.02		81.6	3776	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.297	-0.002	1.504	1966024	1.00		80.3	4580	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.308	-0.013	1.000	2404	0.001528	Target=7.89		0.2	
813.00 > 169.00	5.295	5.308	-0.013	1.000	301		7.99(3.94-11.83)		8.0	M

QC Flag Legend

Processing Flags

Review Flags

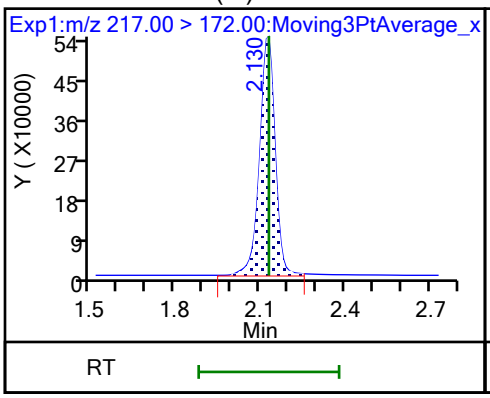
M - Manually Integrated

Report Date: 26-Oct-2023 14:48:52 Chrom Revision: 2.3 18-Oct-2023 21:16:54

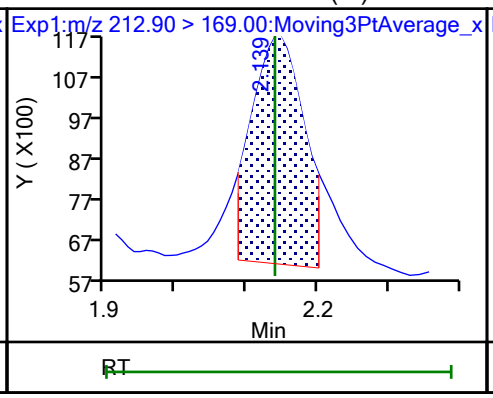
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

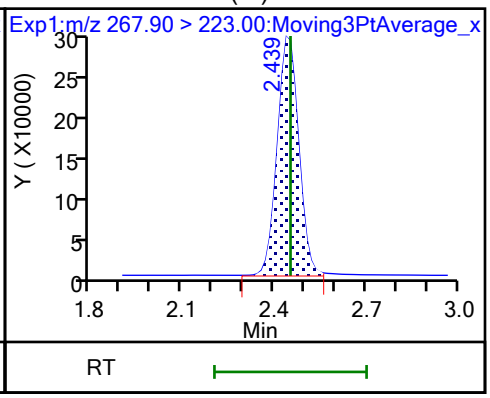
D 1 13C4 PFBA (M)



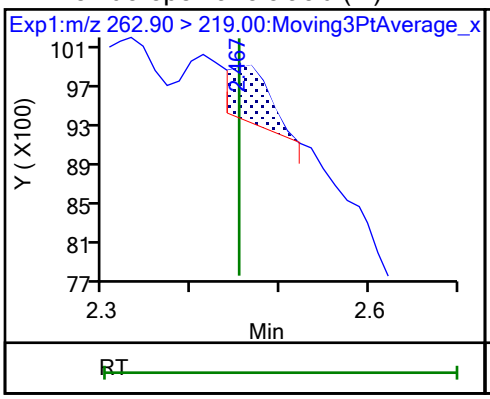
2 Perfluorobutanoic acid (M)



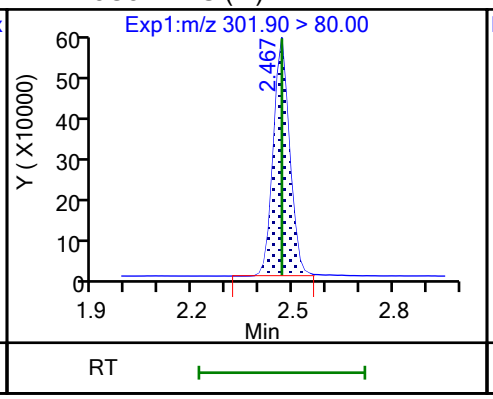
D 3 13C5 PFPeA (M)



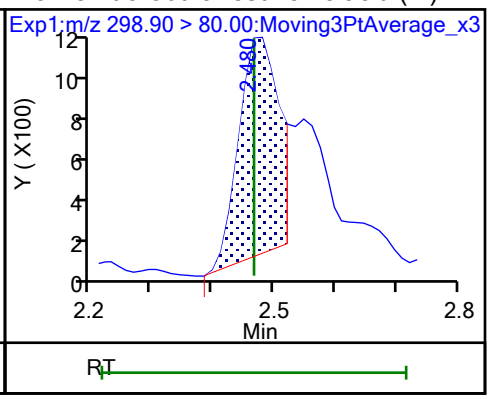
4 Perfluoropentanoic acid (M)



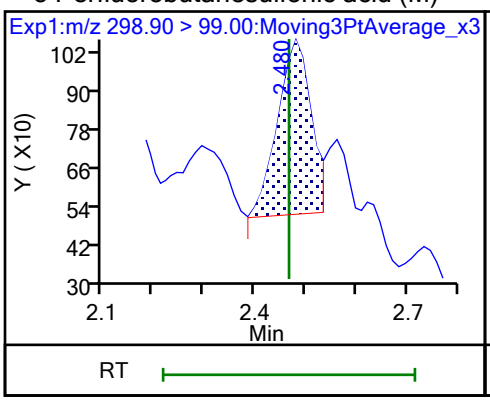
D 47 13C3 PFBS (M)



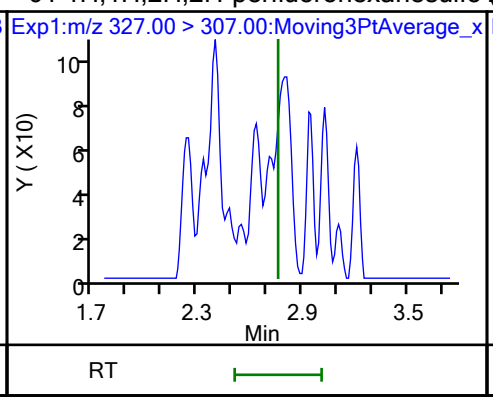
5 Perfluorobutanesulfonic acid (M)



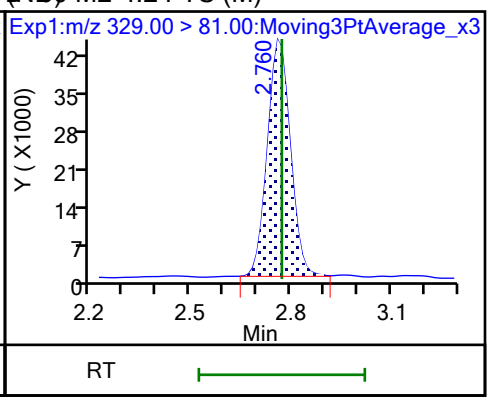
5 Perfluorobutanesulfonic acid (M)



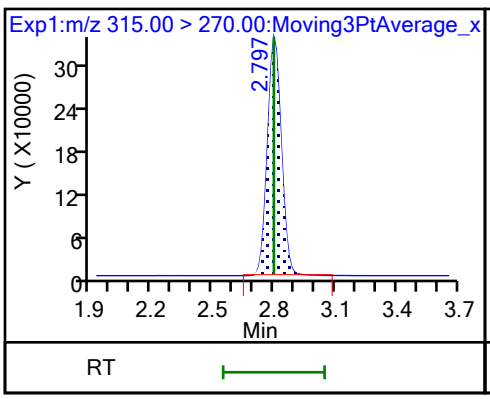
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



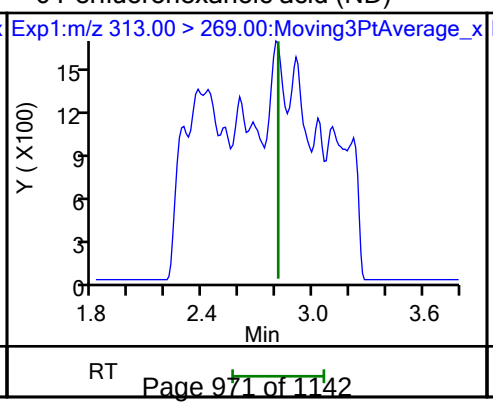
D 50 M2-4:2 FTS (M)



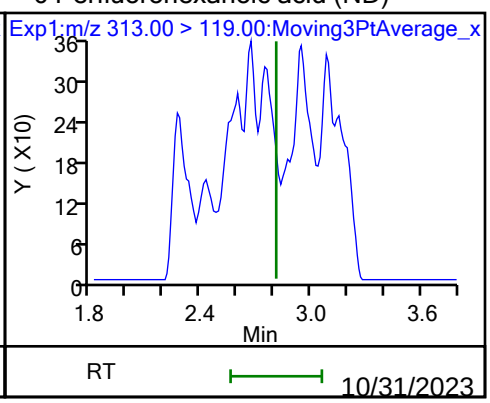
D 7 13C2 PFHxA



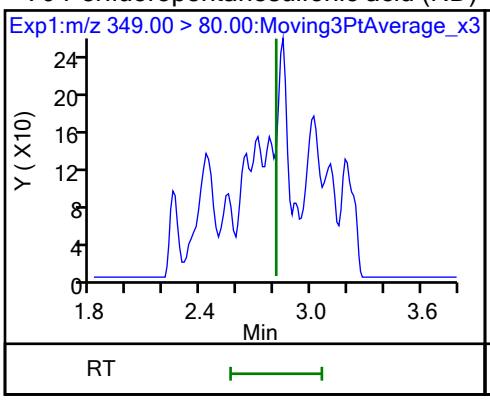
6 Perfluorohexanoic acid (ND)



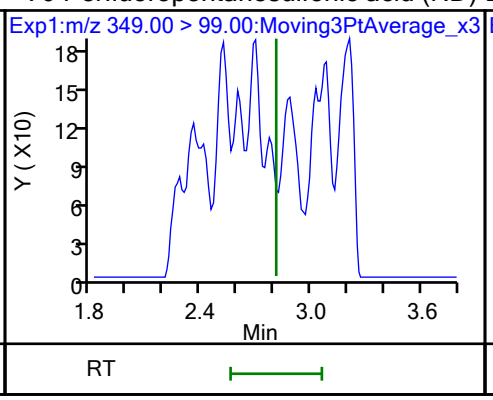
6 Perfluorohexanoic acid (ND)



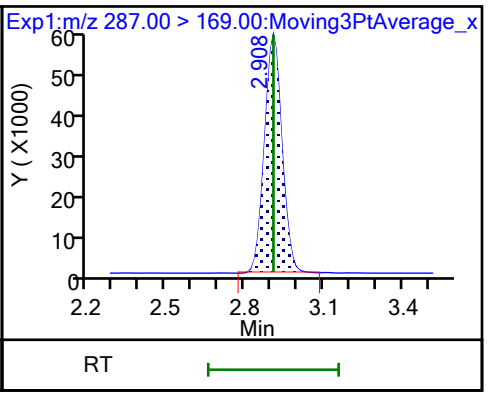
70 Perfluoropentanesulfonic acid (ND)



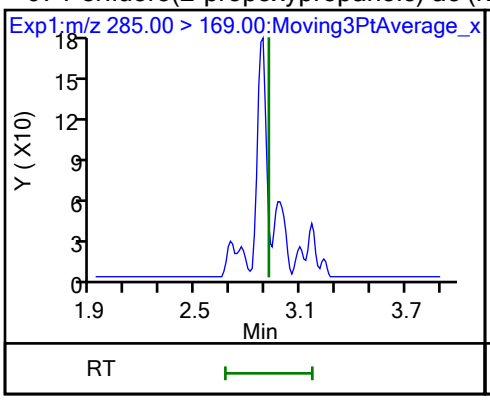
70 Perfluoropentanesulfonic acid (ND)



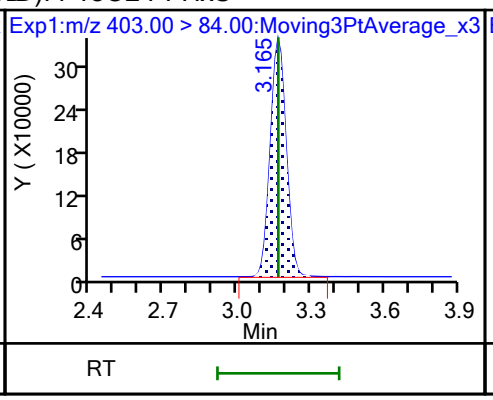
D 64 13C3 HFPO-DA



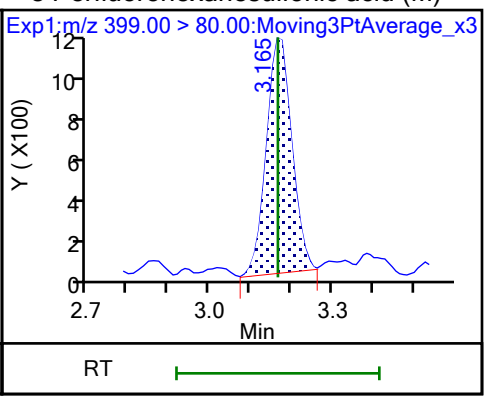
67 Perfluoro(2-propoxypropanoic) ac (ND)



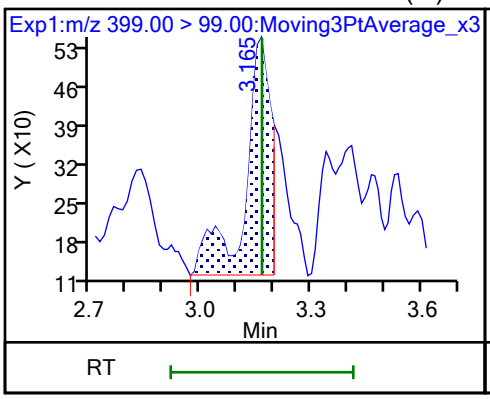
11 18O2 PFHxS



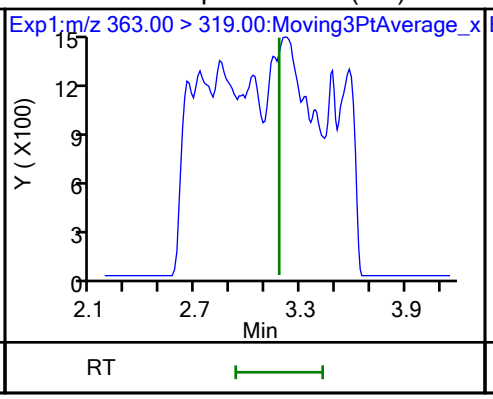
8 Perfluorohexanesulfonic acid (M)



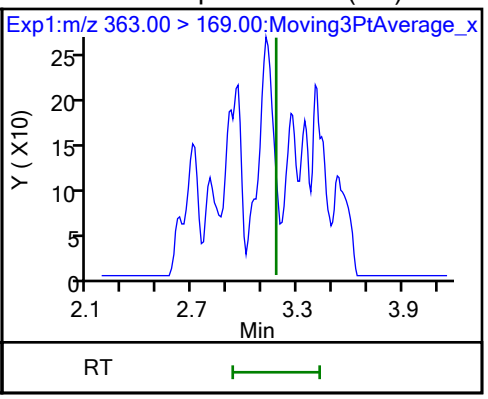
8 Perfluorohexanesulfonic acid (M)



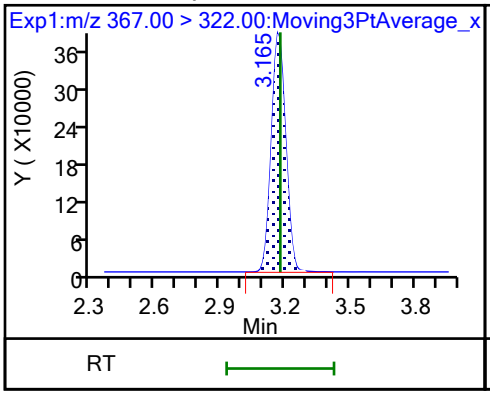
10 Perfluoroheptanoic acid (ND)



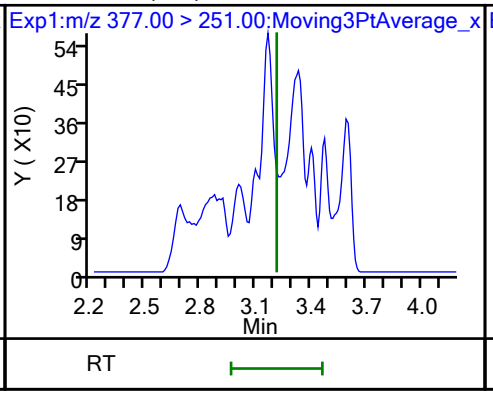
10 Perfluoroheptanoic acid (ND)



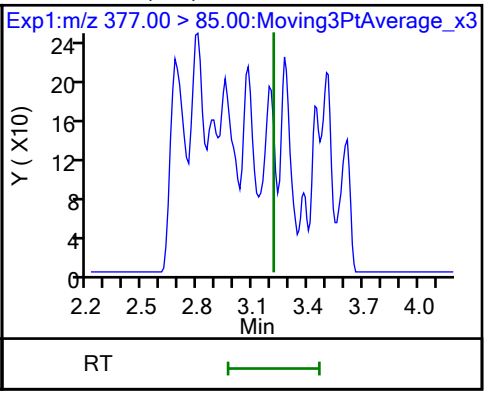
D 9 13C4 PFHpA



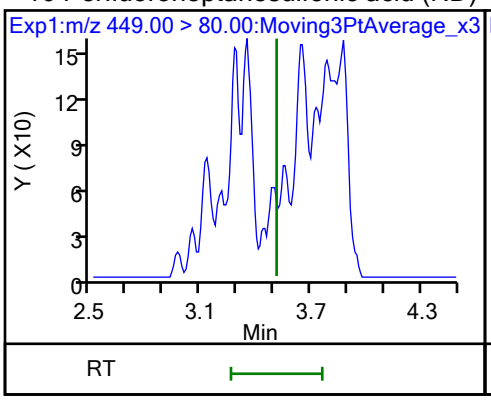
77 DONA (ND)



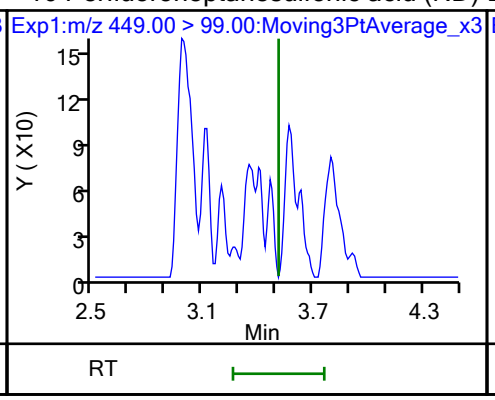
77 DONA (ND)



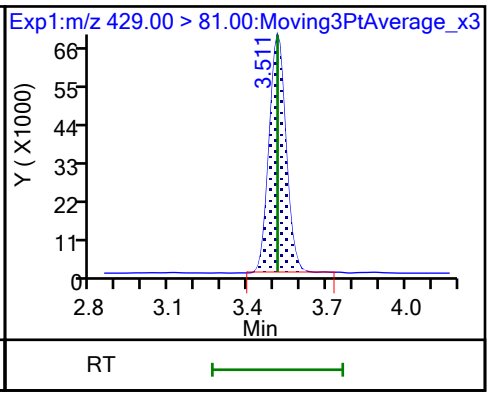
16 Perfluoroheptanesulfonic acid (ND)



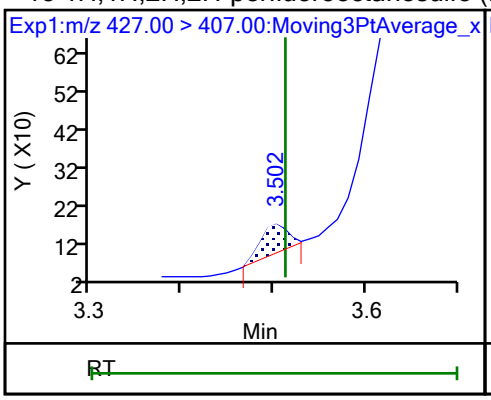
16 Perfluoroheptanesulfonic acid (ND)



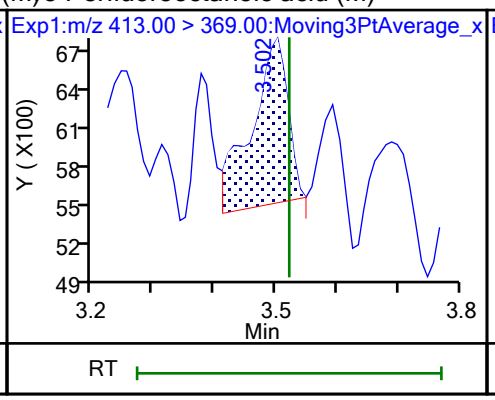
D 12 M2-6:2 FTS



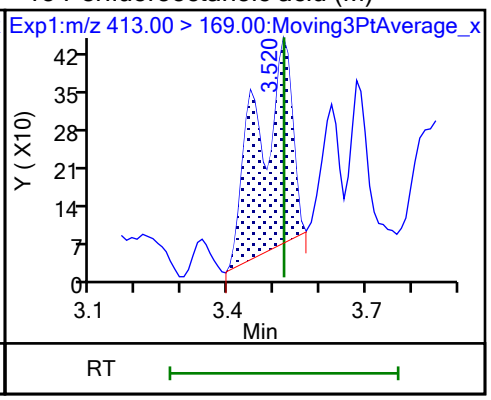
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



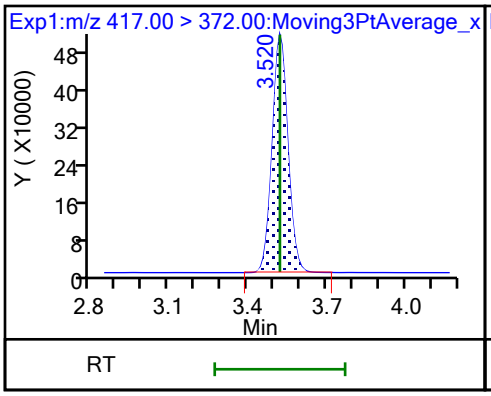
15 Perfluorooctanoic acid (M)



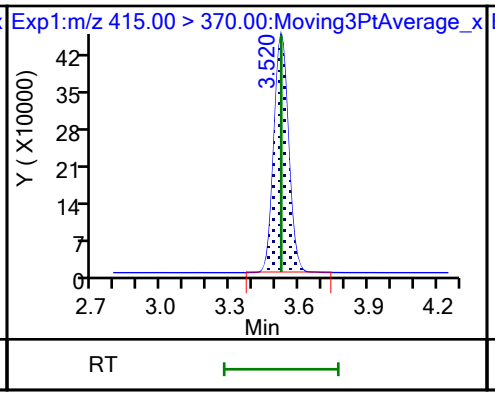
15 Perfluorooctanoic acid (M)



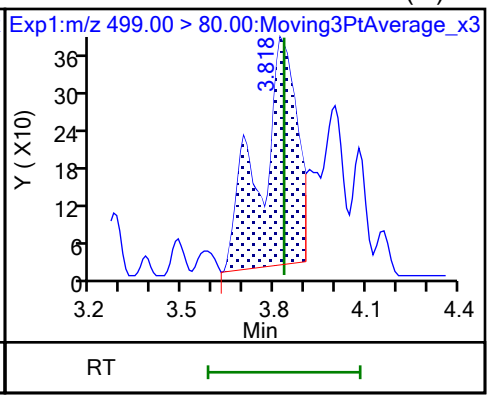
D 14 13C4 PFOA



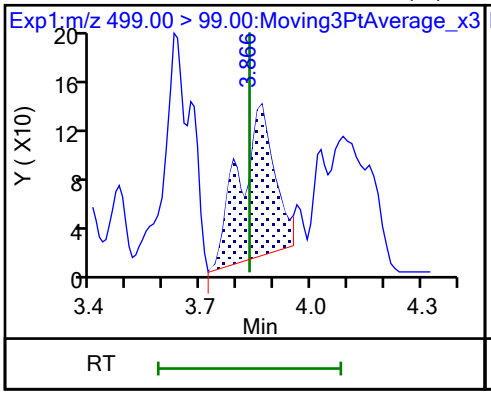
* 62 13C2 PFOA



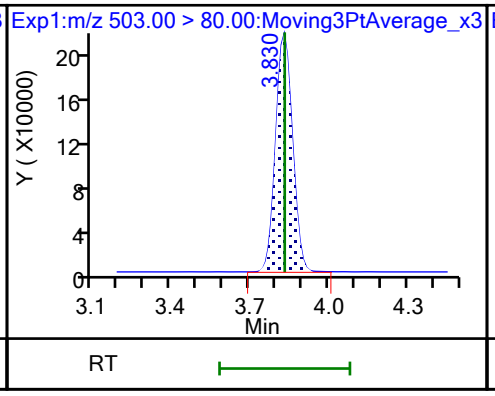
17 Perfluorooctanesulfonic acid (M)



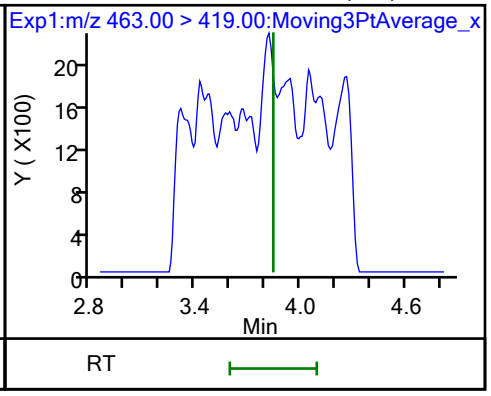
17 Perfluorooctanesulfonic acid (M)



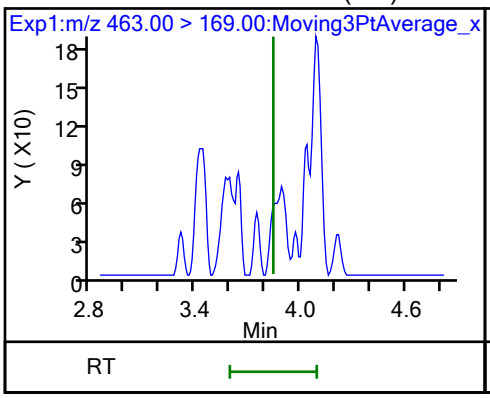
D 18 13C4 PFOS



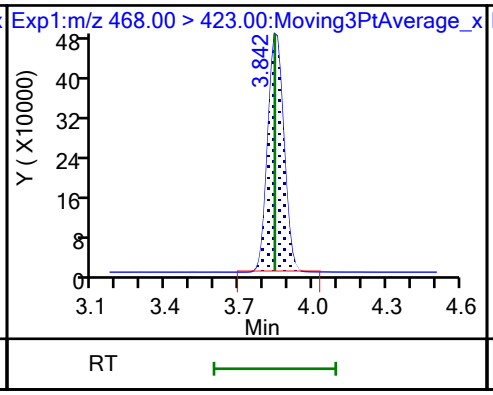
20 Perfluorononanoic acid (ND)



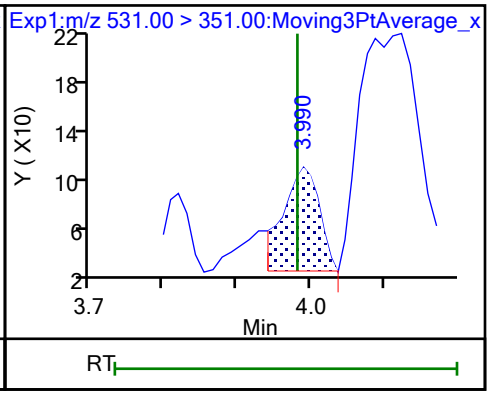
20 Perfluorononanoic acid (ND)



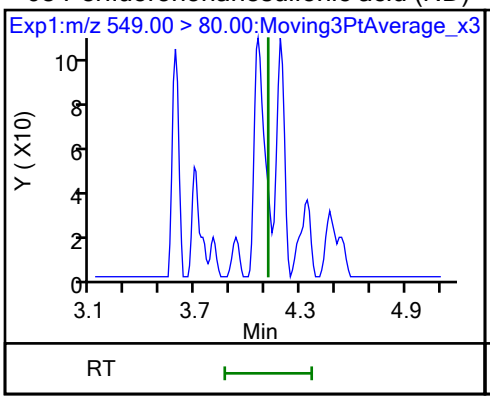
D 19 13C5 PFNA



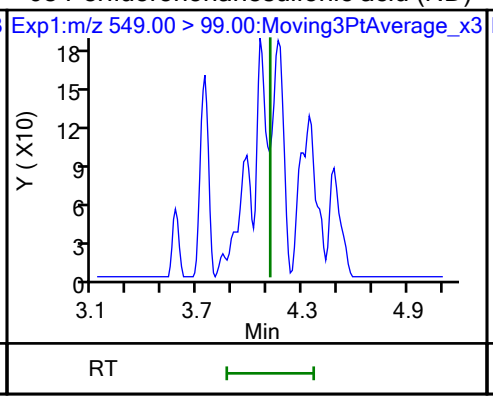
69 9-Chlorohexadecafluoro-3-oxanona (M)



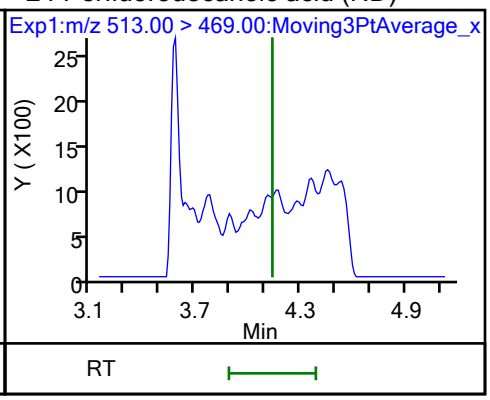
68 Perfluorononanesulfonic acid (ND)



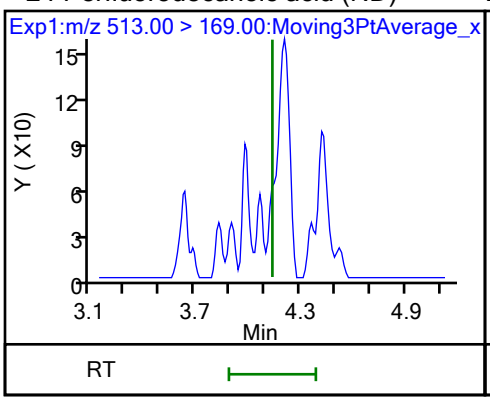
68 Perfluorononanesulfonic acid (ND)



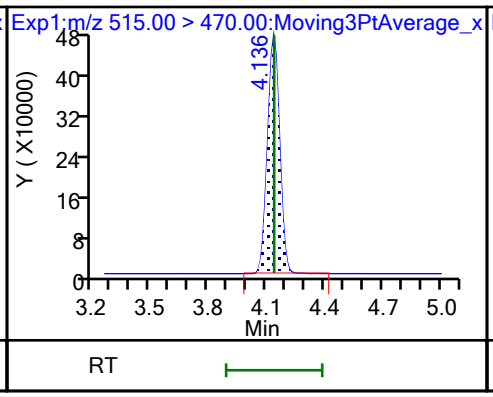
24 Perfluorodecanoic acid (ND)



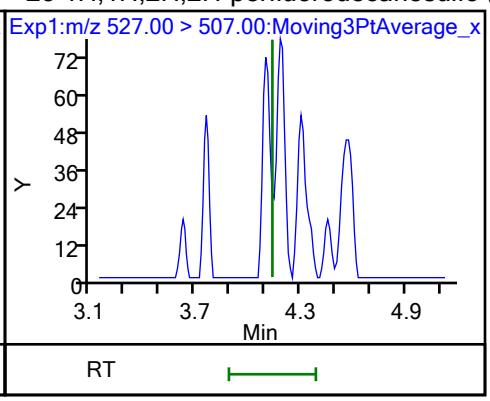
24 Perfluorodecanoic acid (ND)



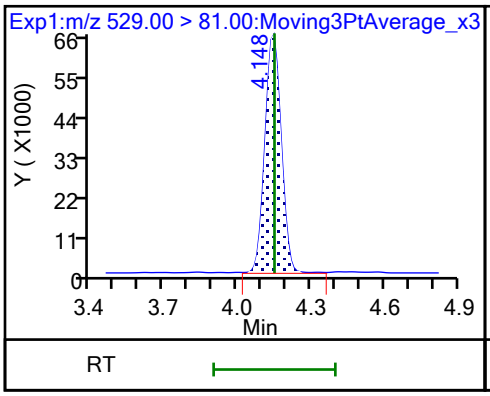
D 23 13C2 PFDA



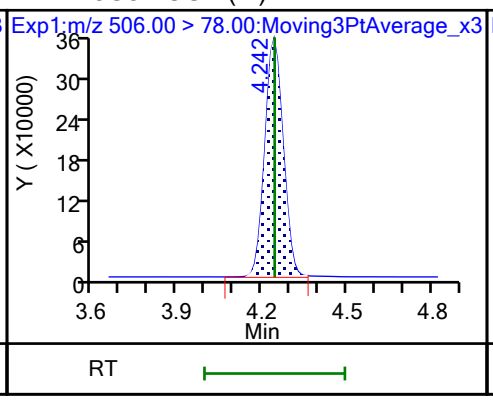
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



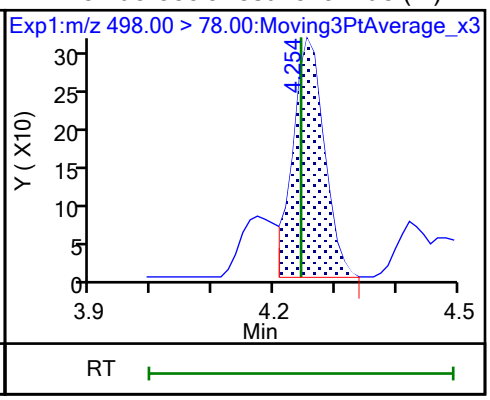
D 26 M2-8:2 FTS



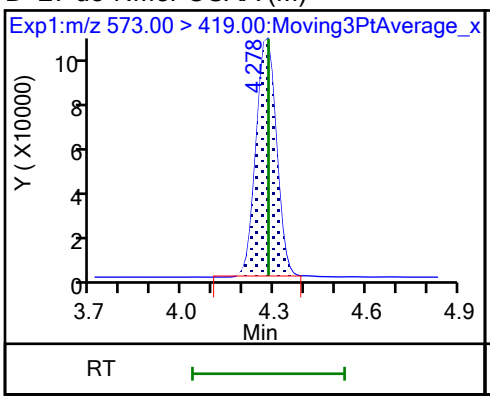
D 21 13C8 FOSA (M)



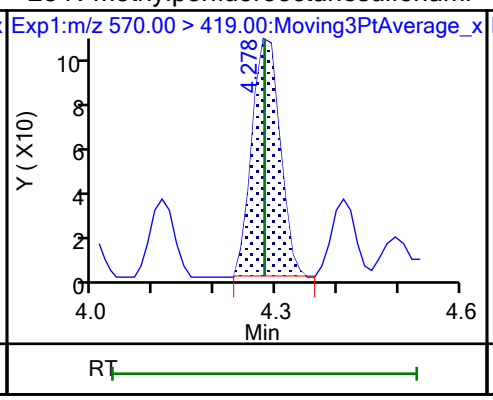
22 Perfluorooctanesulfonamide (M)



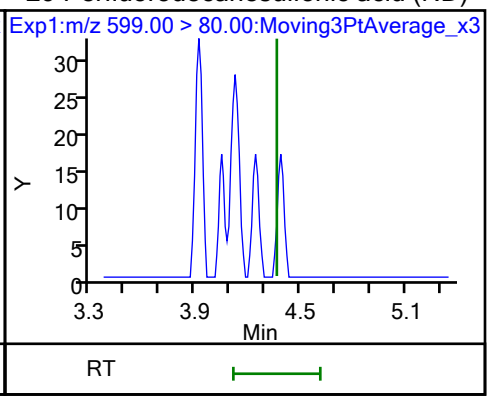
D 27 d3-NMeFOSAA (M)



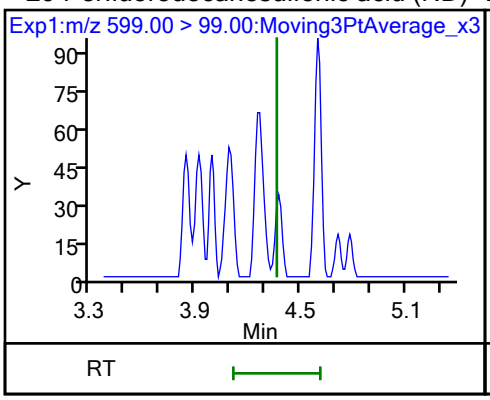
28 N-methylperfluorooctanesulfonami



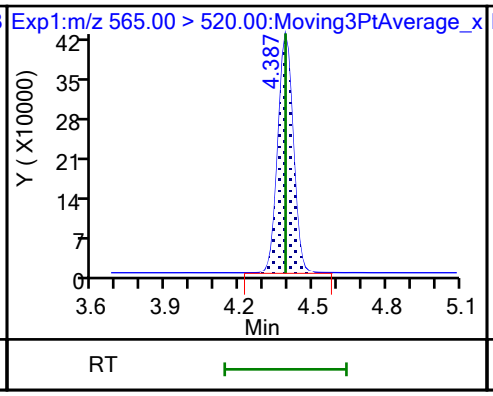
29 Perfluorodecanesulfonic acid (ND)



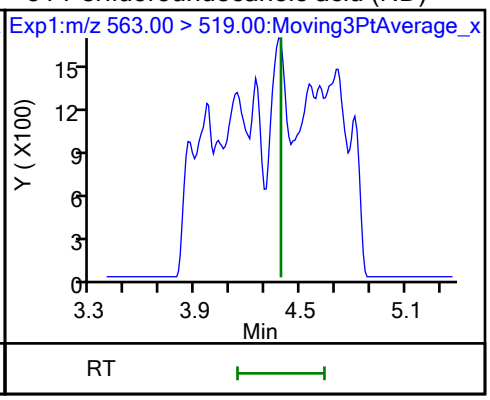
29 Perfluorodecanesulfonic acid (ND)



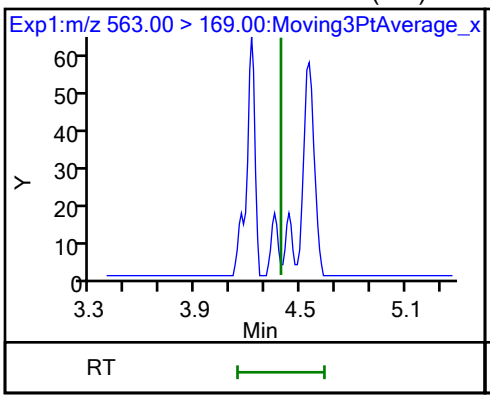
D 30 13C2 PFUnA



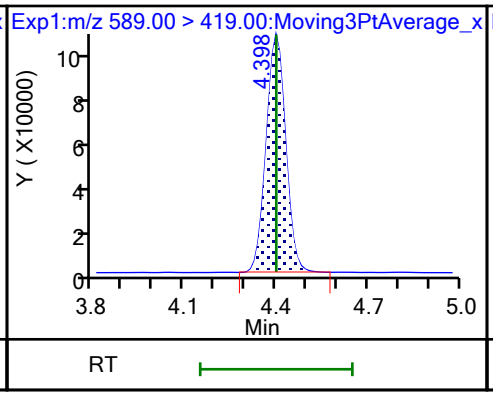
31 Perfluoroundecanoic acid (ND)



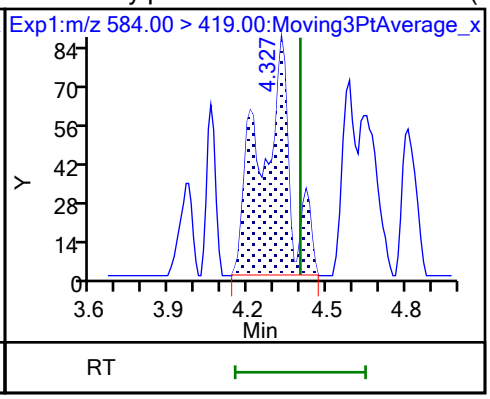
31 Perfluoroundecanoic acid (ND)



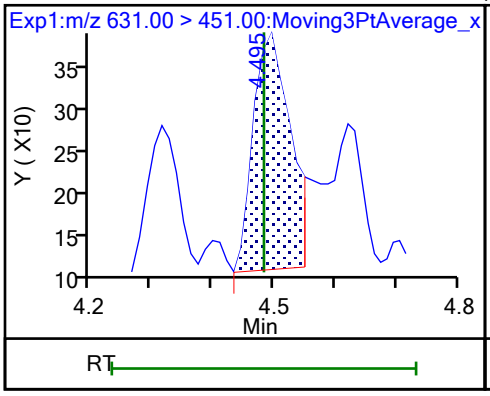
D 32 d5-NEtFOSAA



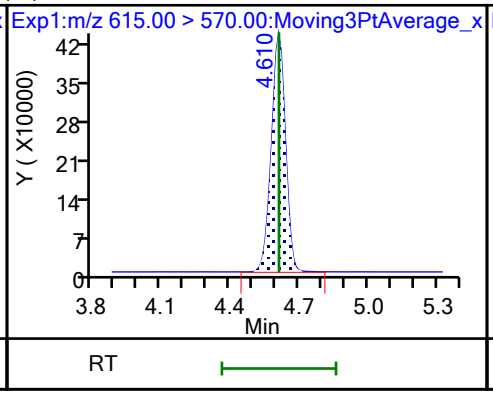
33 N-ethylperfluorooctanesulfonamid (M)



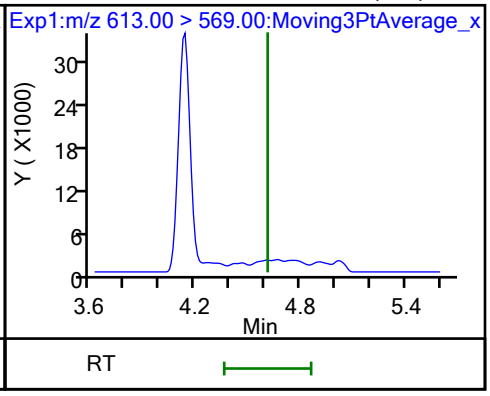
66 11-Chloroeicosafluoro-3-oxaundec (M)



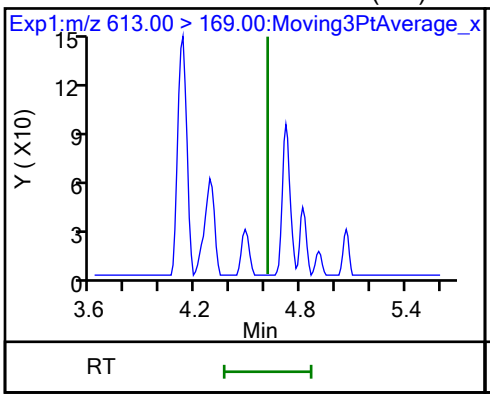
D 36 13C2 PFDoA



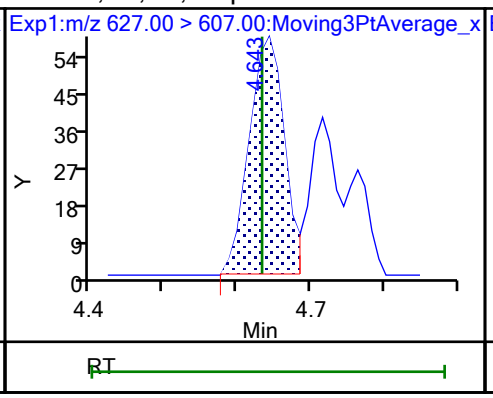
37 Perfluorododecanoic acid (ND)



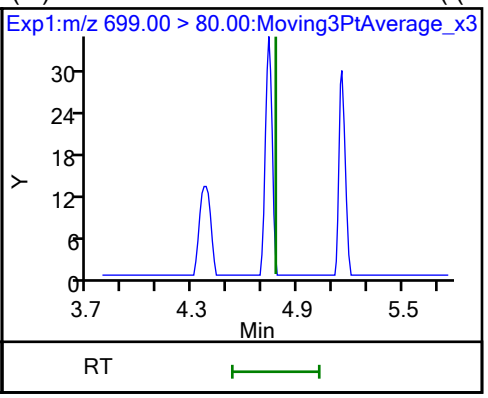
37 Perfluorododecanoic acid (ND)



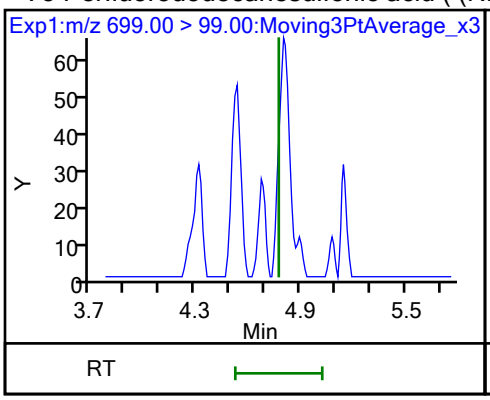
74 1H,1H,2H,2H-perfluorododecanesul (M)



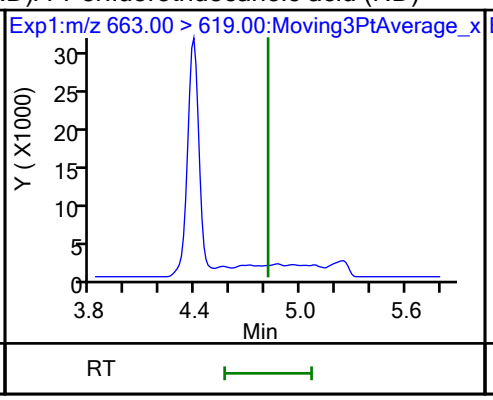
75 Perfluorododecanesulfonic acid ((ND)



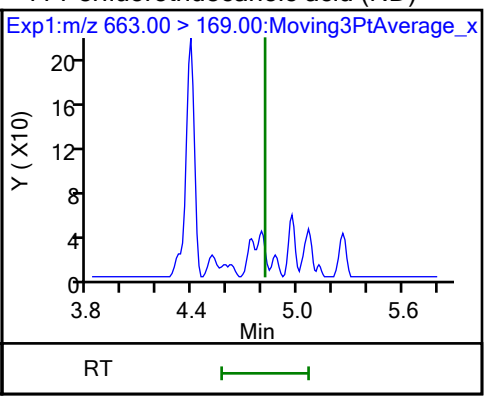
75 Perfluorododecanesulfonic acid ((ND)



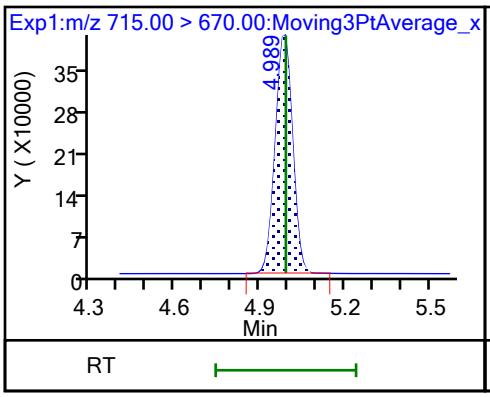
41 Perfluorotridecanoic acid (ND)



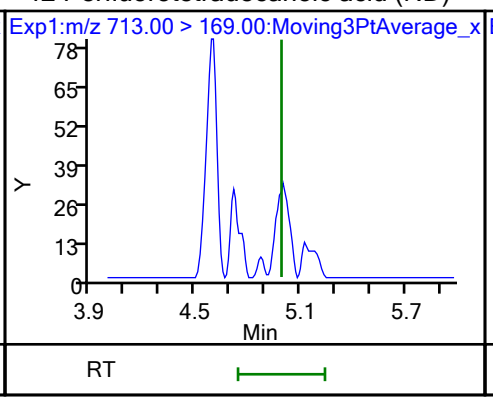
41 Perfluorotridecanoic acid (ND)



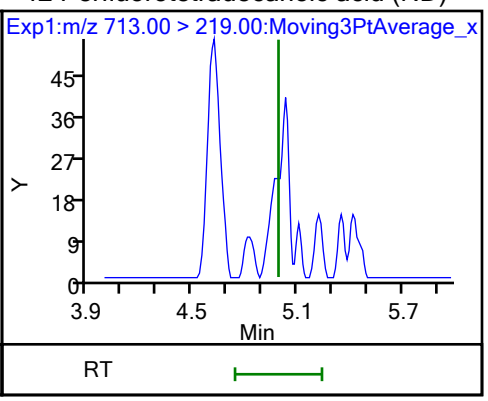
D 43 13C2 PFTeDA



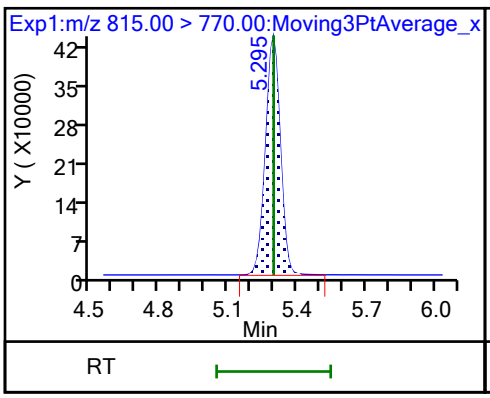
42 Perfluorotetradecanoic acid (ND)



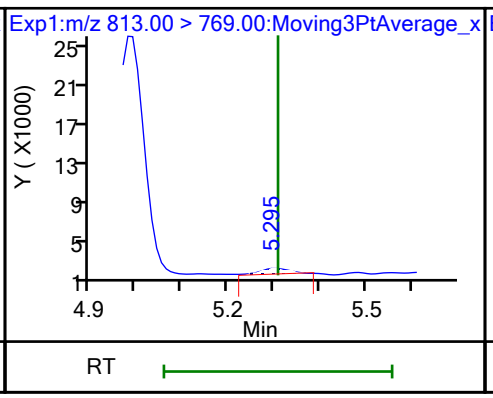
42 Perfluorotetradecanoic acid (ND)



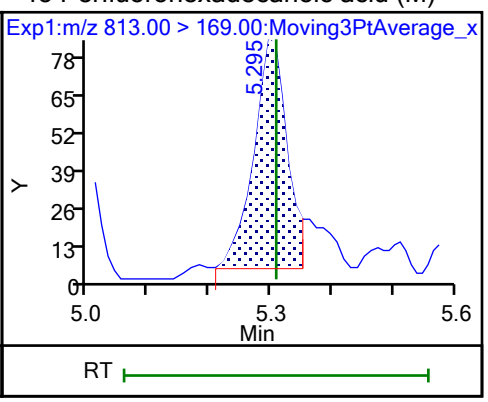
D 44 13C2 PFHxDA



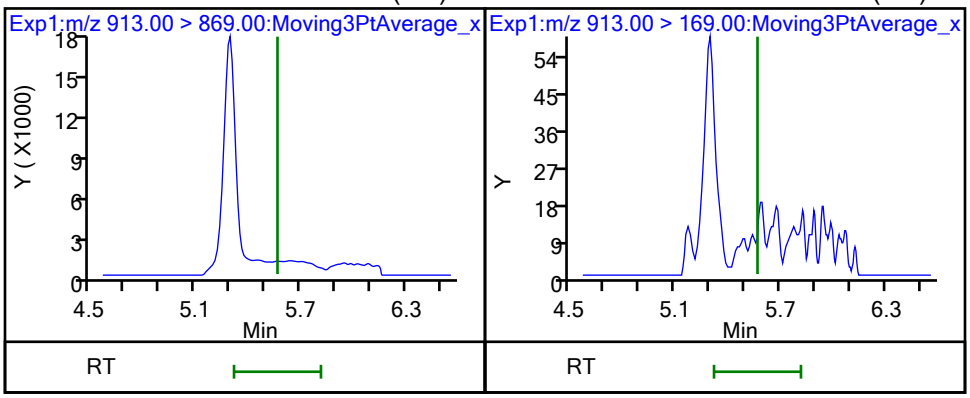
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

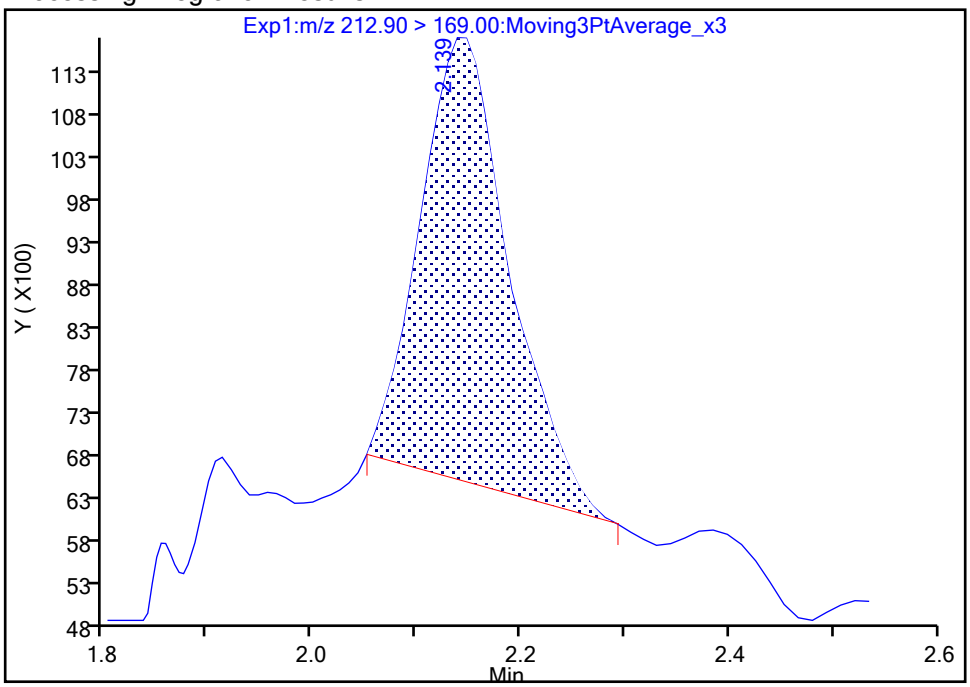
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

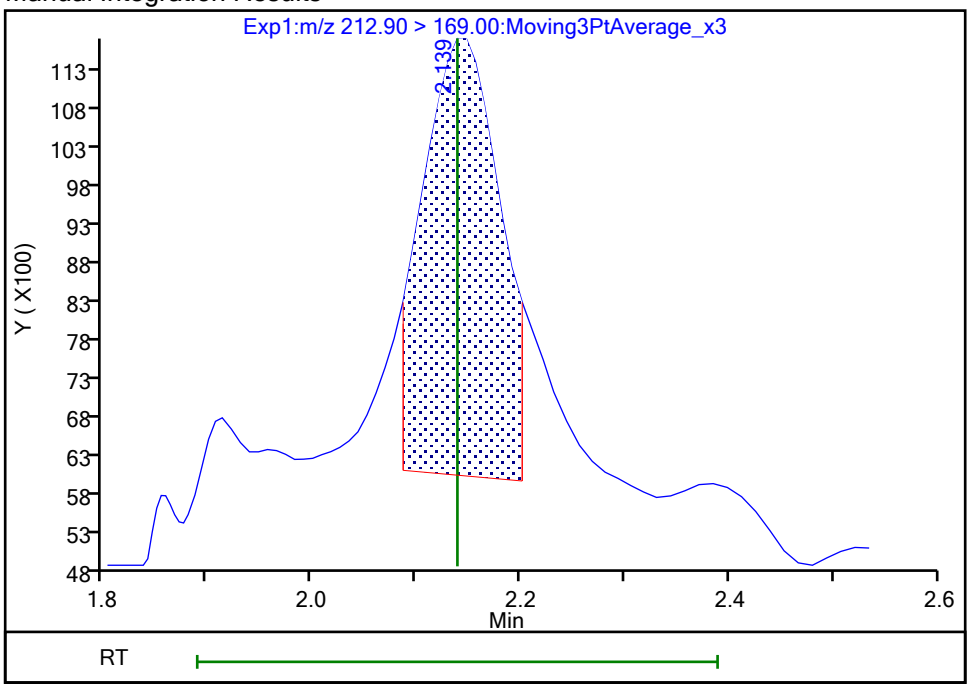
Processing Integration Results

RT: 2.14
Area: 30867
Amount: -0.020319
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 28884
Amount: -0.021640
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:39:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

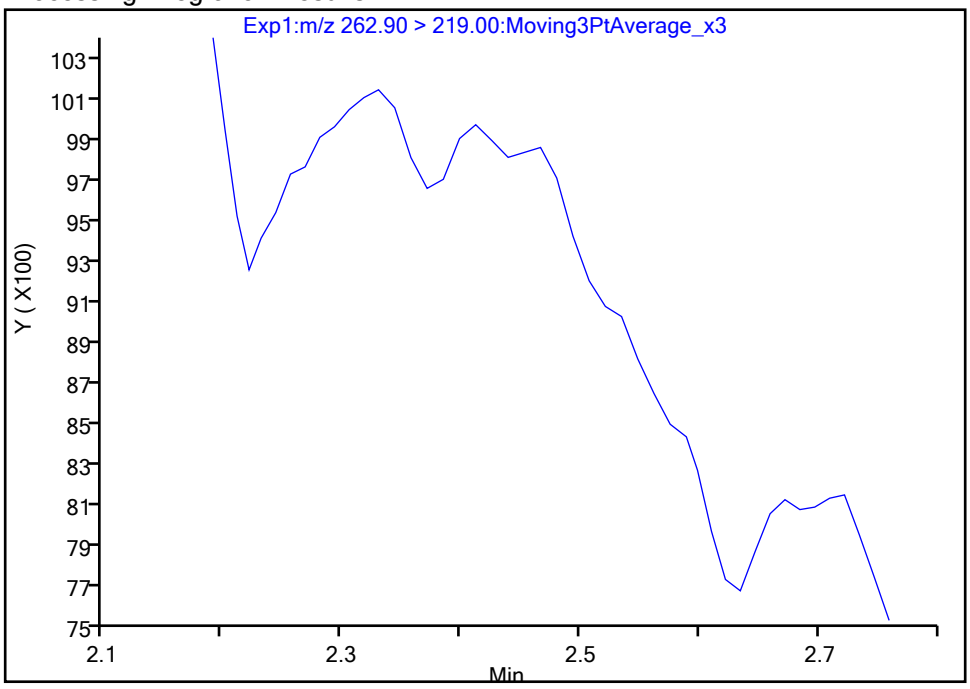
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

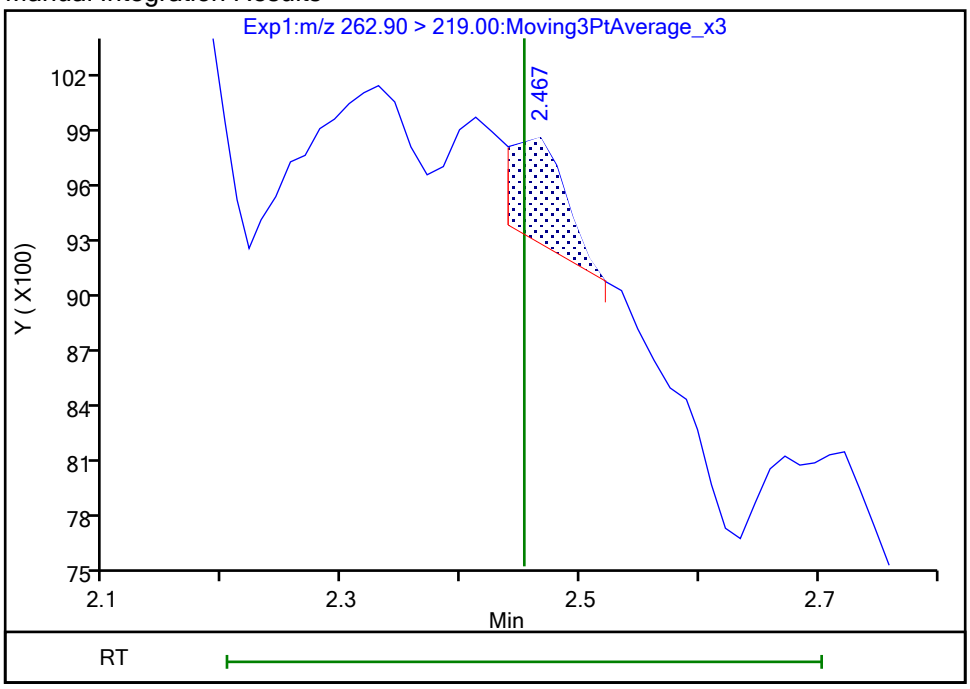
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 1683
Amount: 0.001356
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

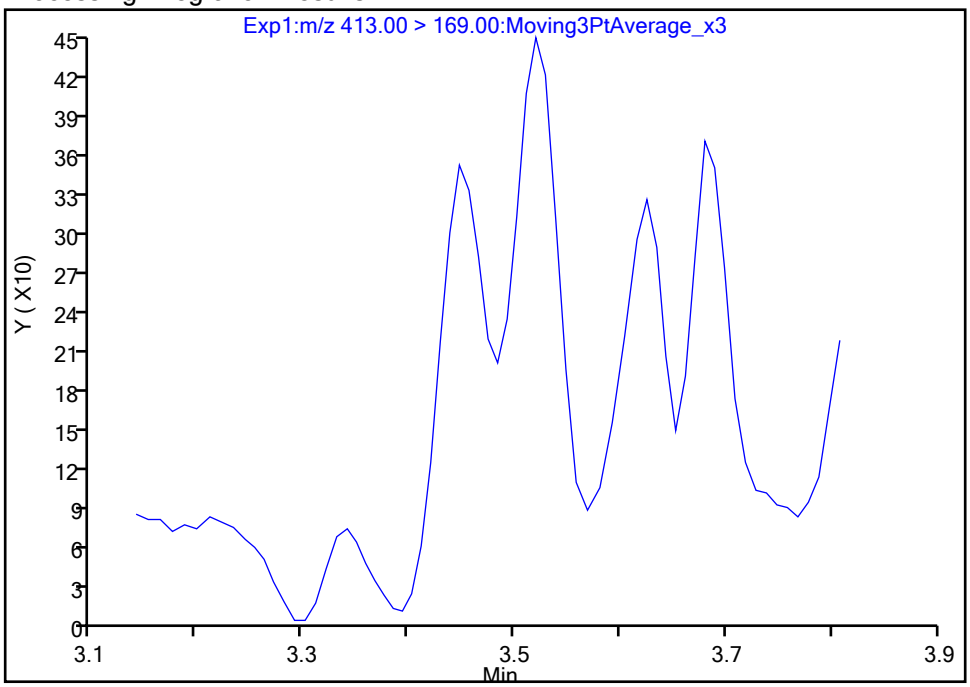
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

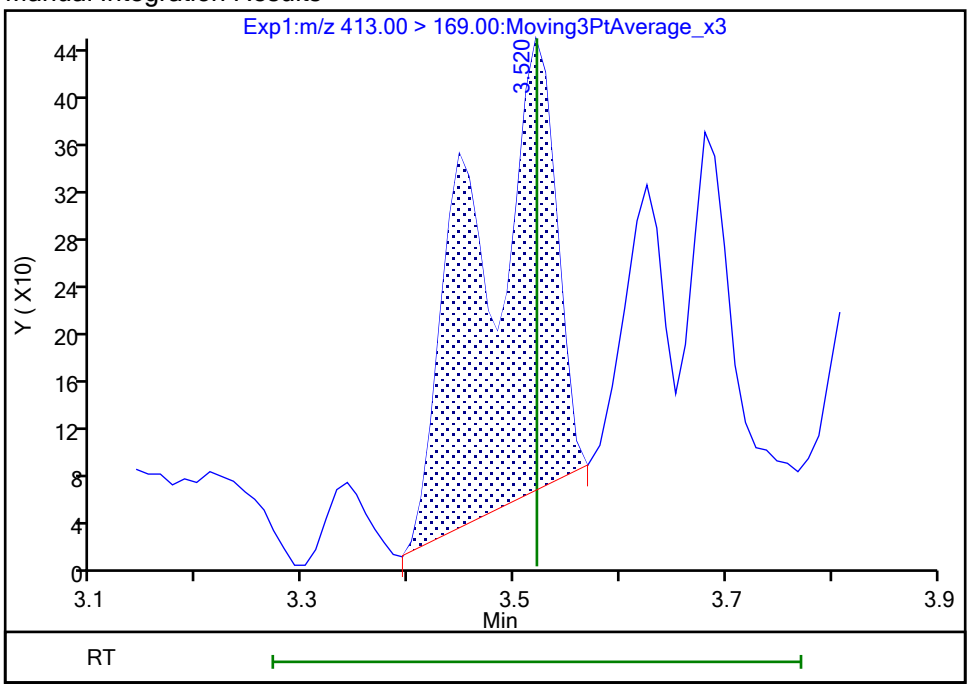
Not Detected
Expected RT: 3.52

Processing Integration Results



Manual Integration Results

RT: 3.52
Area: 1988
Amount: 0.002856
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

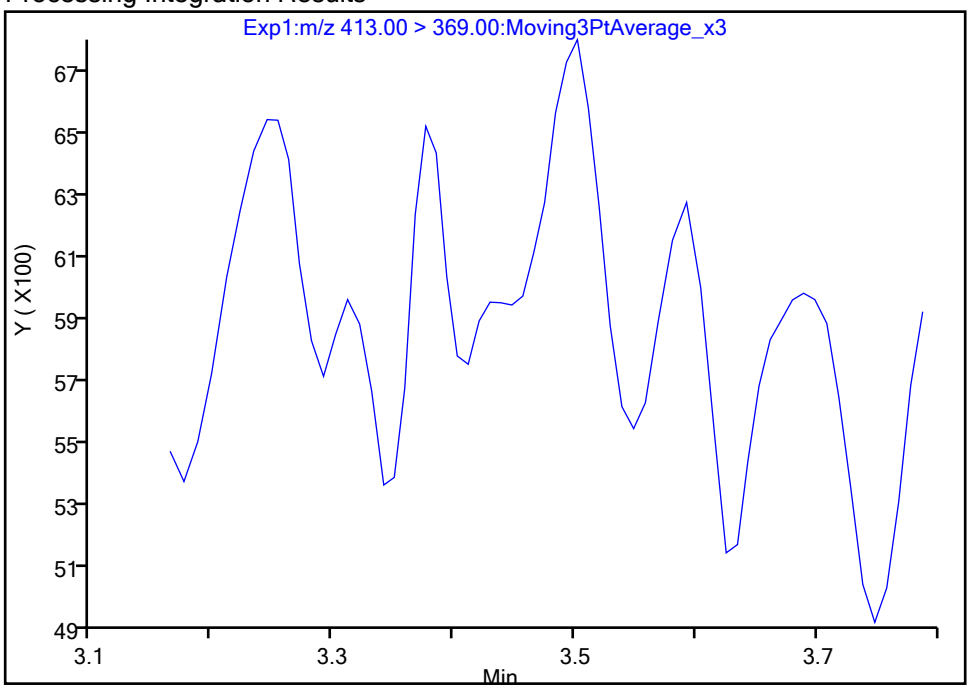
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

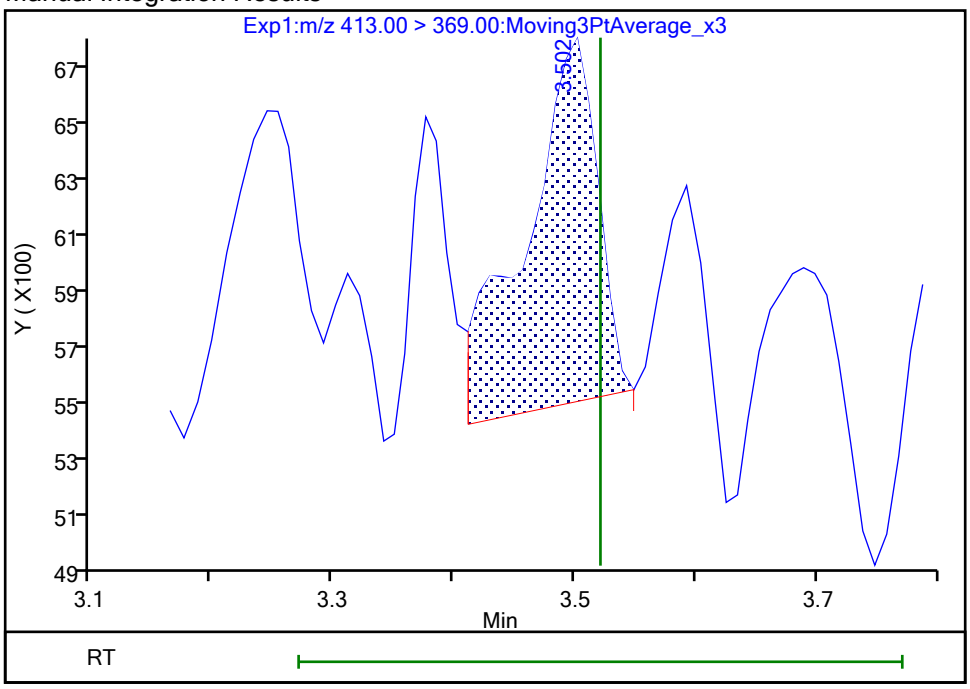
Not Detected
Expected RT: 3.52

Processing Integration Results



Manual Integration Results

RT: 3.50
Area: 5244
Amount: 0.002856
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

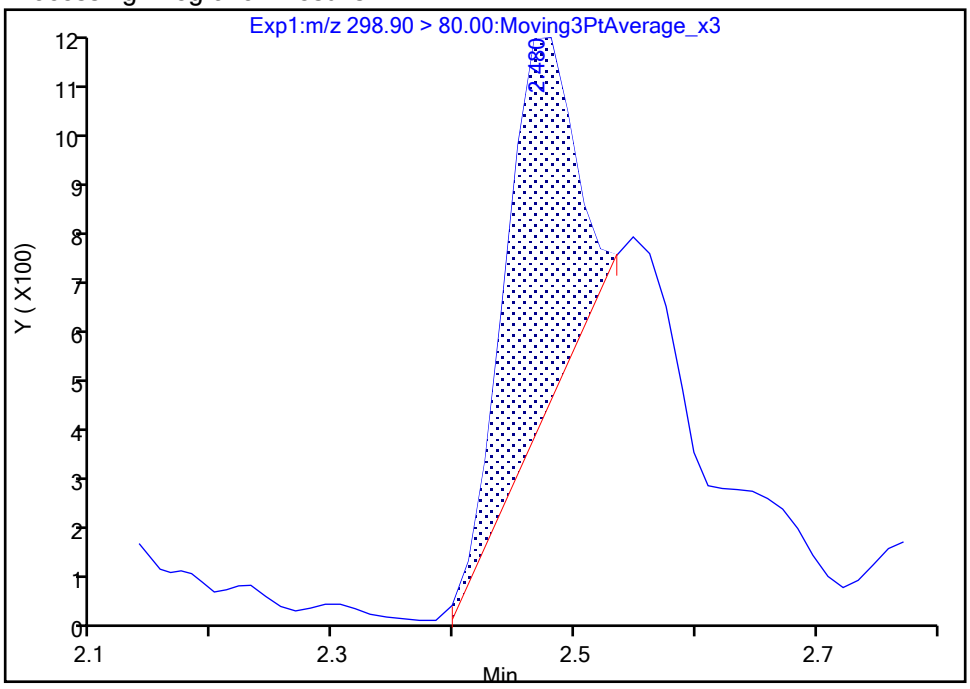
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

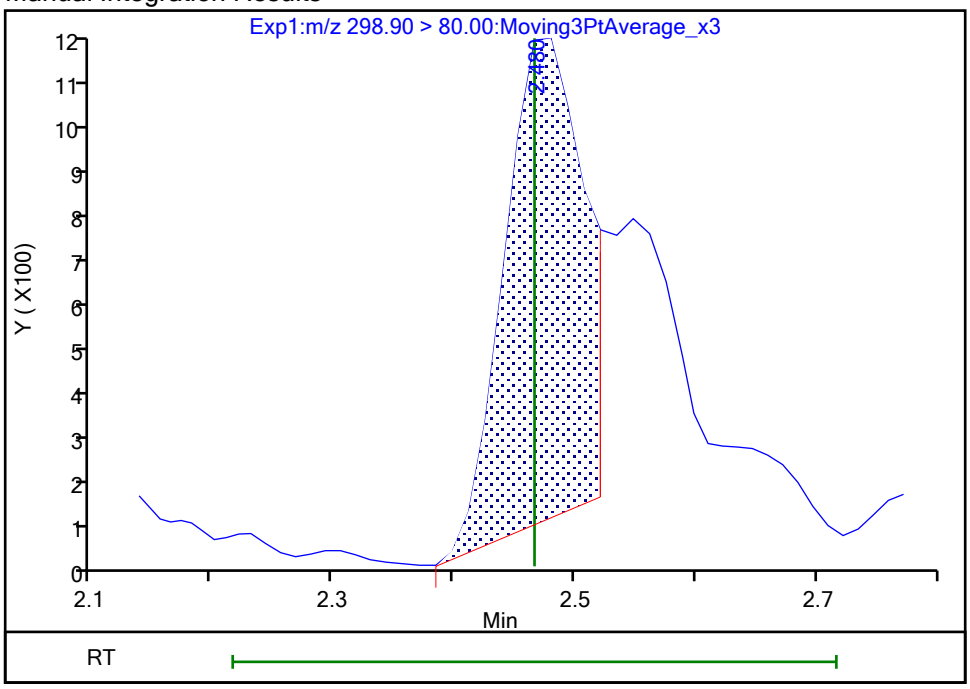
Processing Integration Results

RT: 2.48
Area: 2690
Amount: 0.001403
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 4281
Amount: 0.002234
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

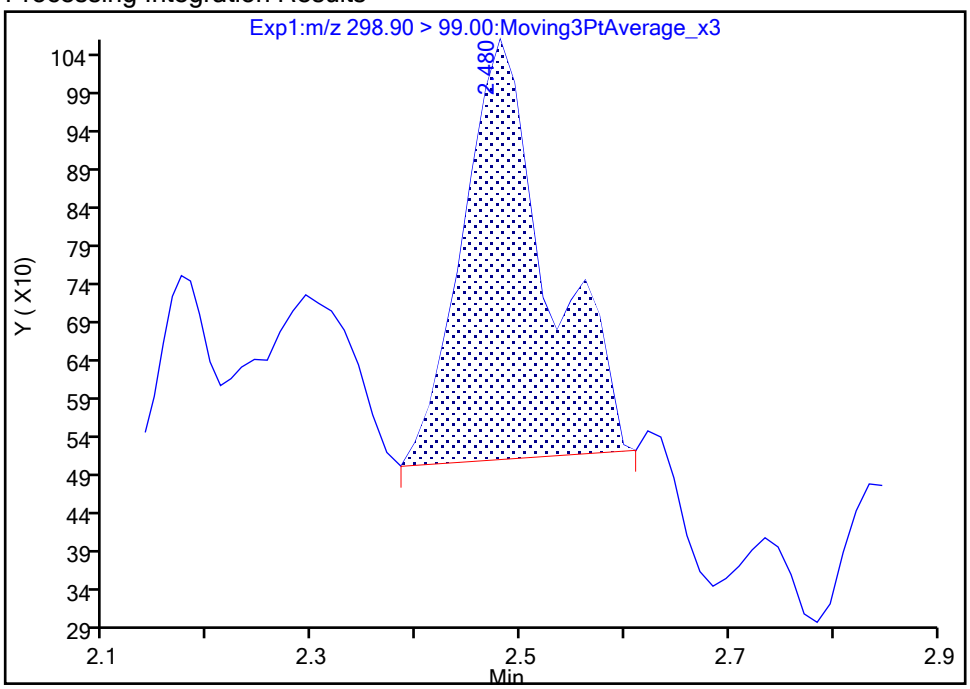
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

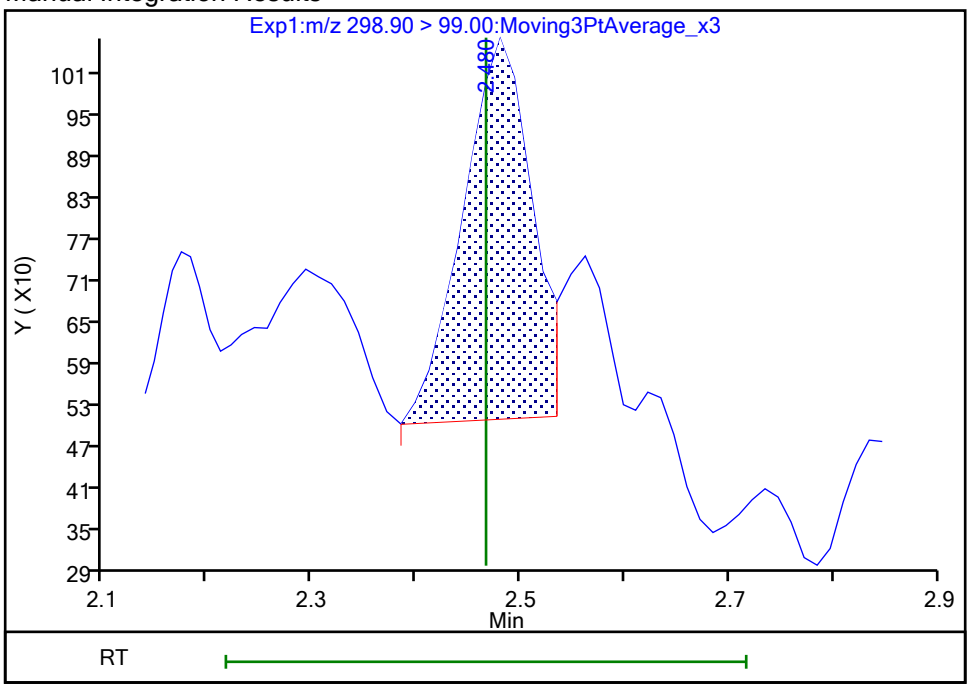
Processing Integration Results

RT: 2.48
Area: 3111
Amount: 0.001403
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 2491
Amount: 0.002234
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

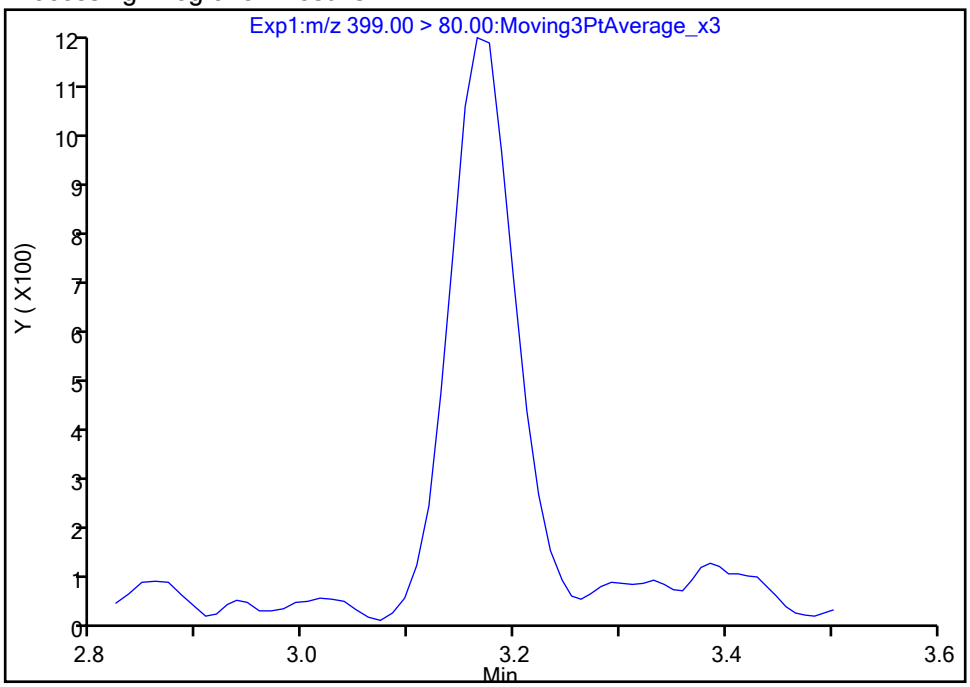
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

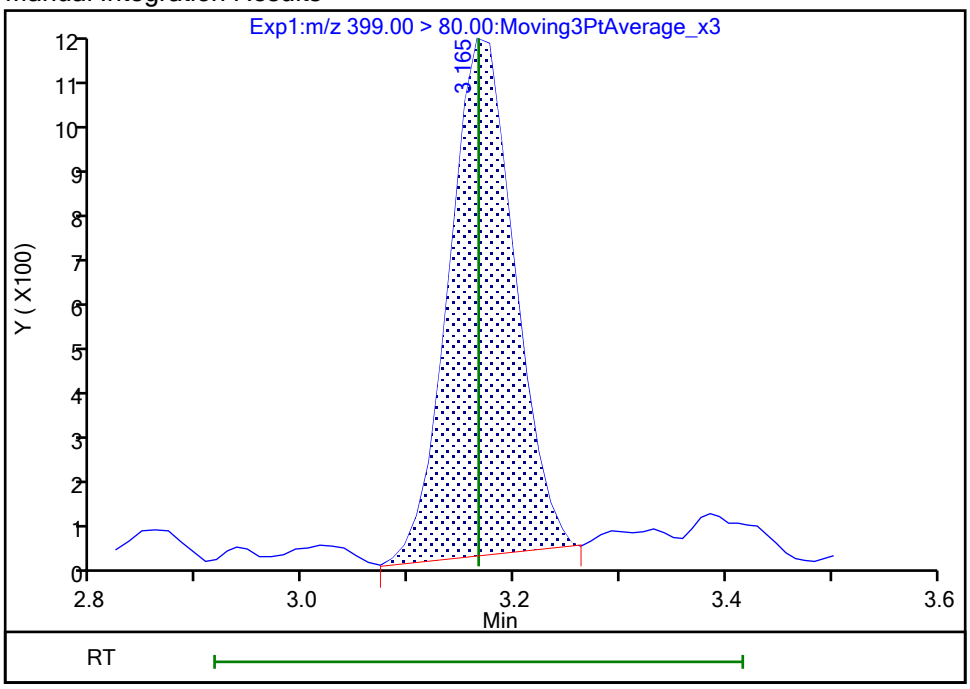
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 4667
Amount: 0.003298
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

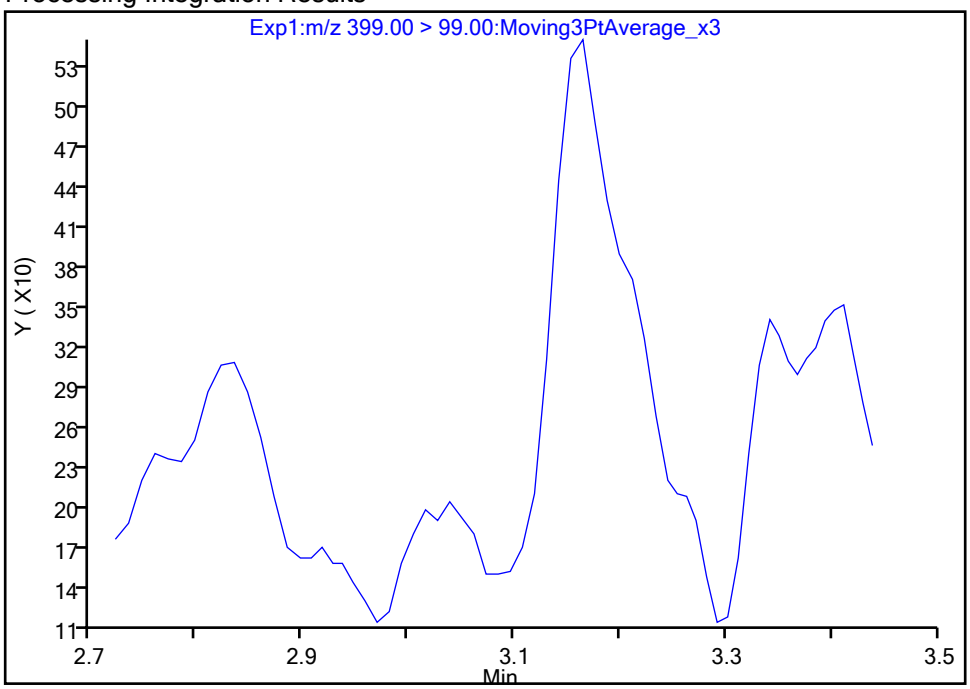
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

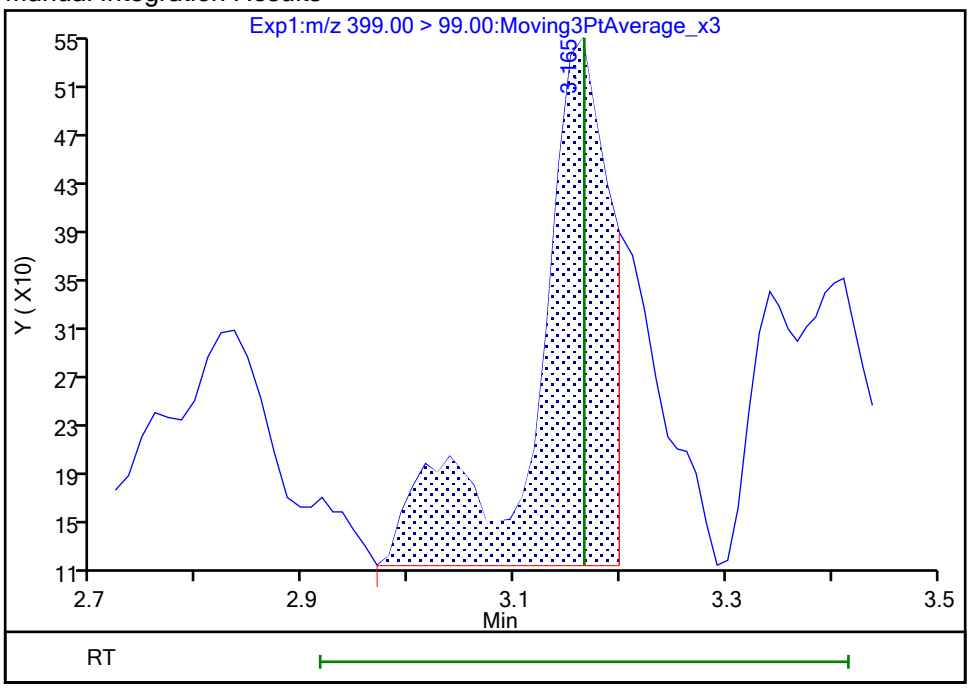
Processing Integration Results

Not Detected
Expected RT: 3.17



Manual Integration Results

RT: 3.16
Area: 2054
Amount: 0.003298
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

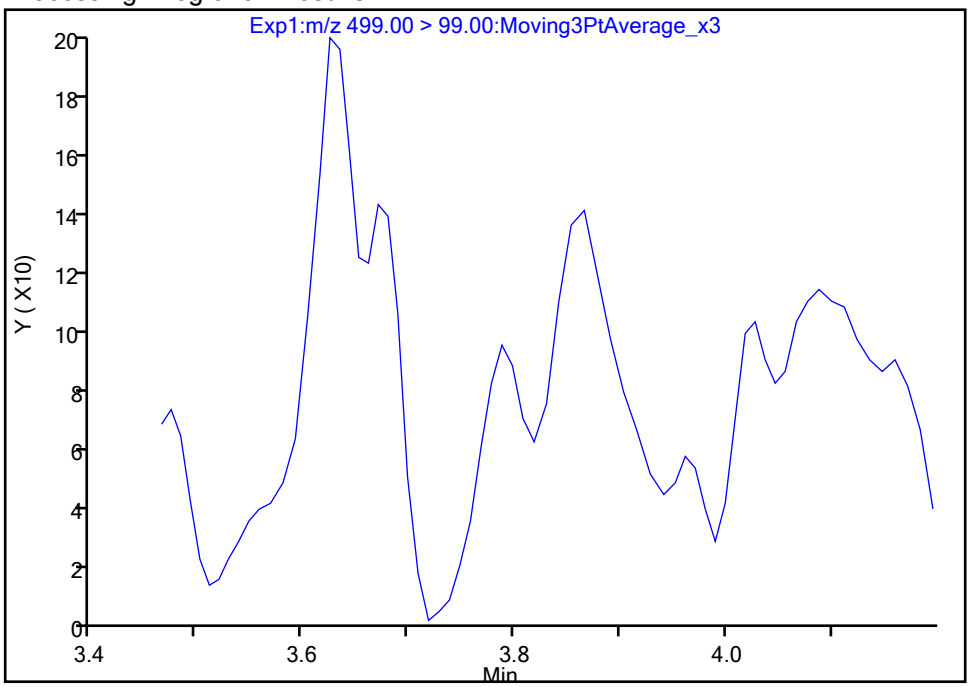
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

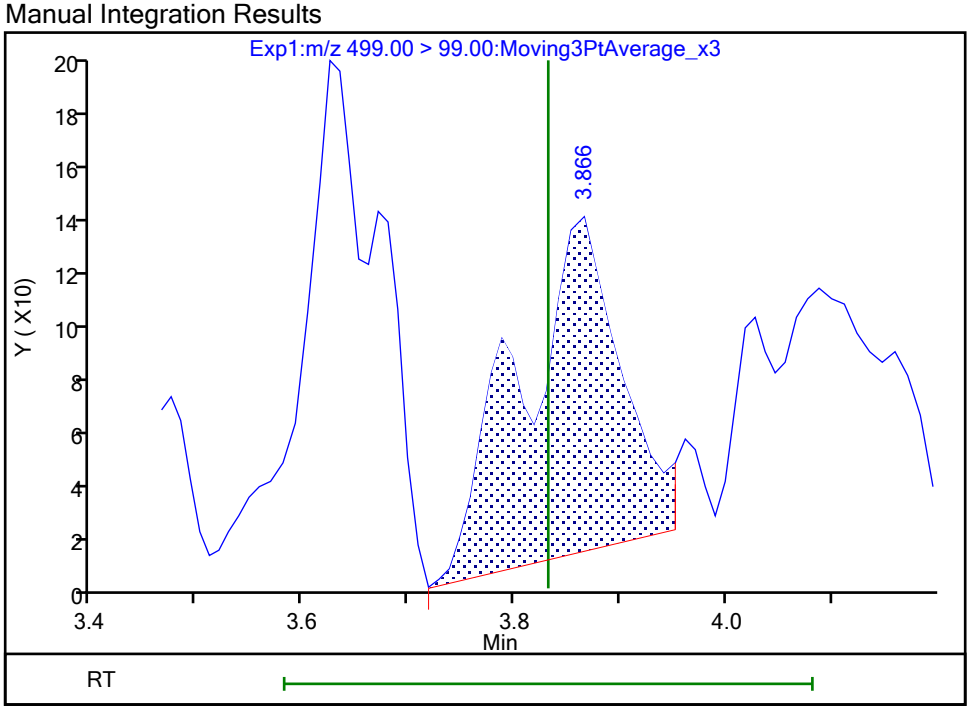
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.87
Area: 838
Amount: 0.003303
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:41:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

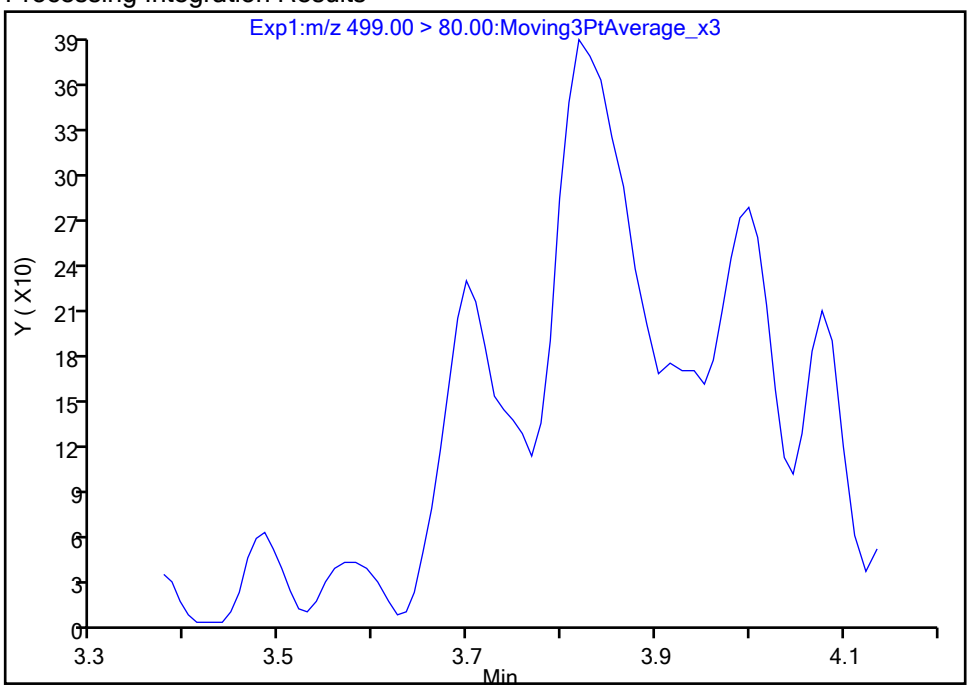
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

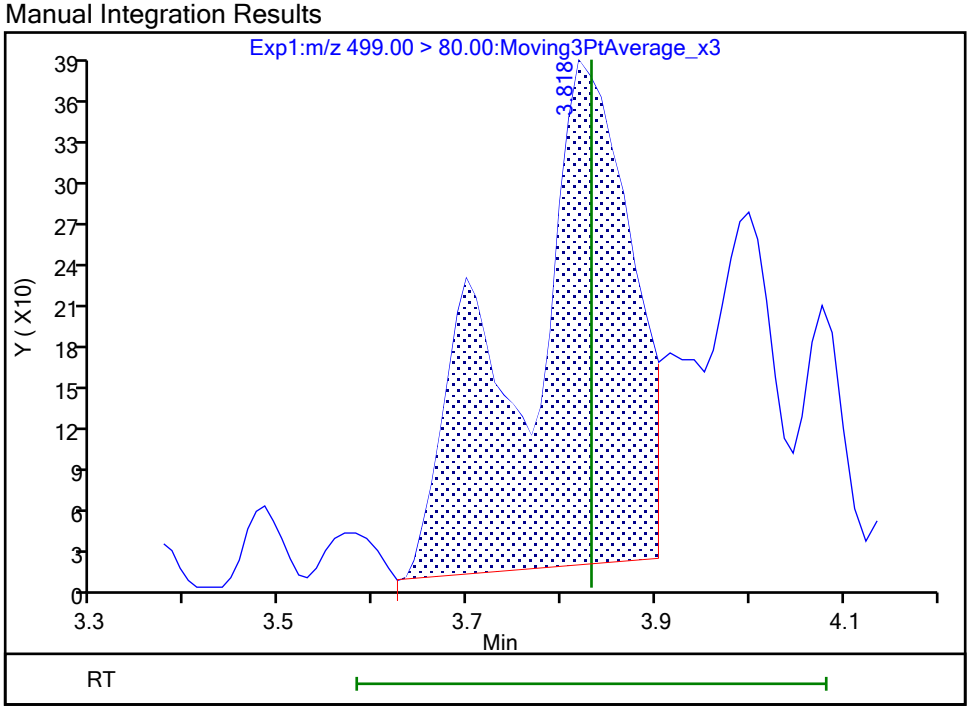
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.82
Area: 3086
Amount: 0.003303
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:41:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

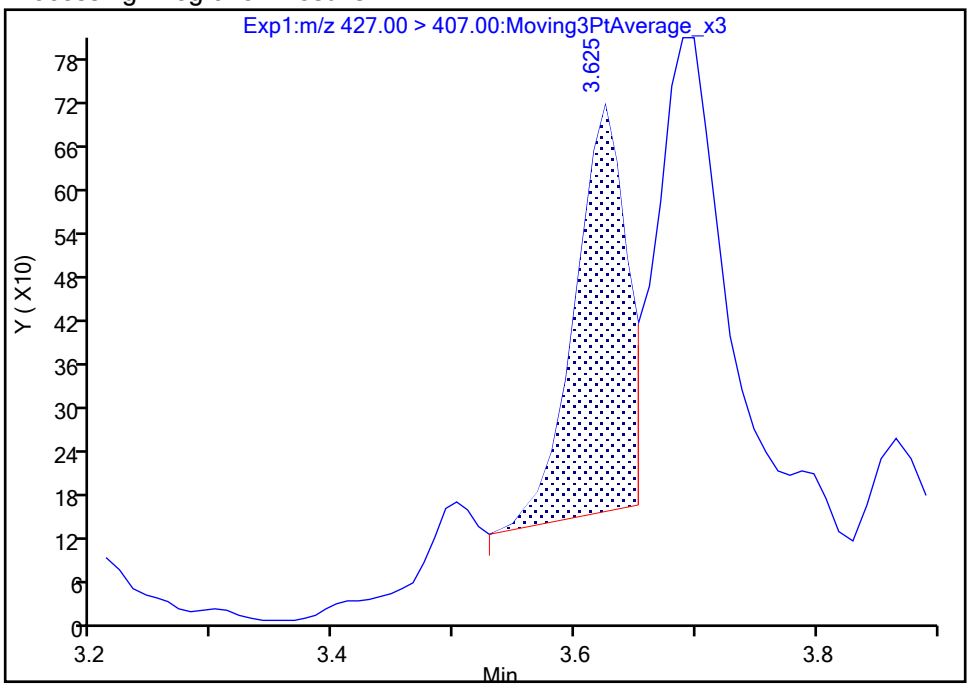
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

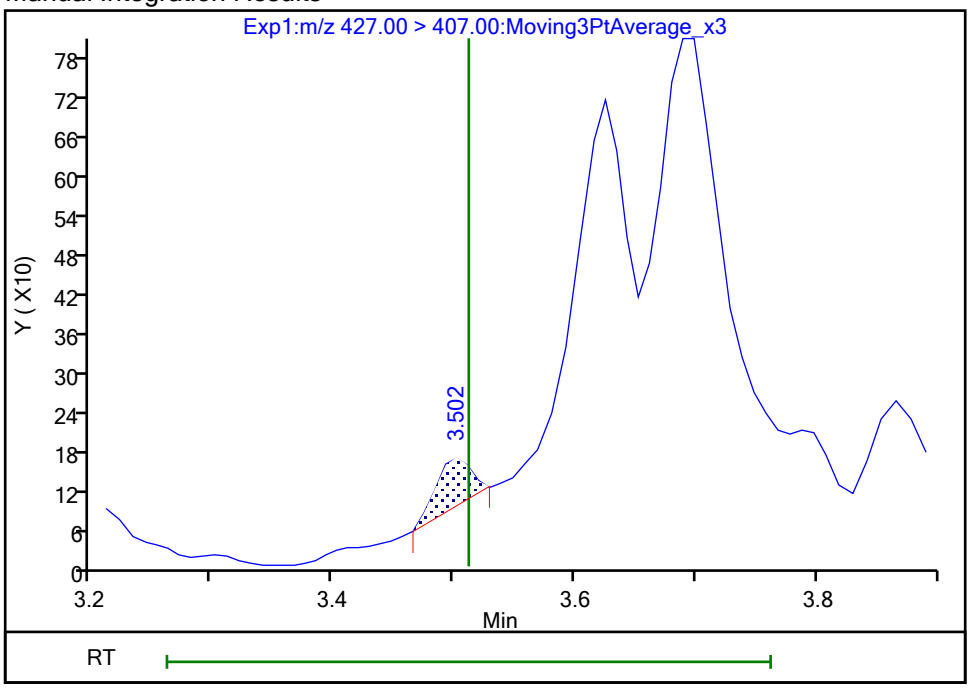
Processing Integration Results

RT: 3.63
Area: 1656
Amount: 0.002315
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 154
Amount: 0.000215
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:40:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

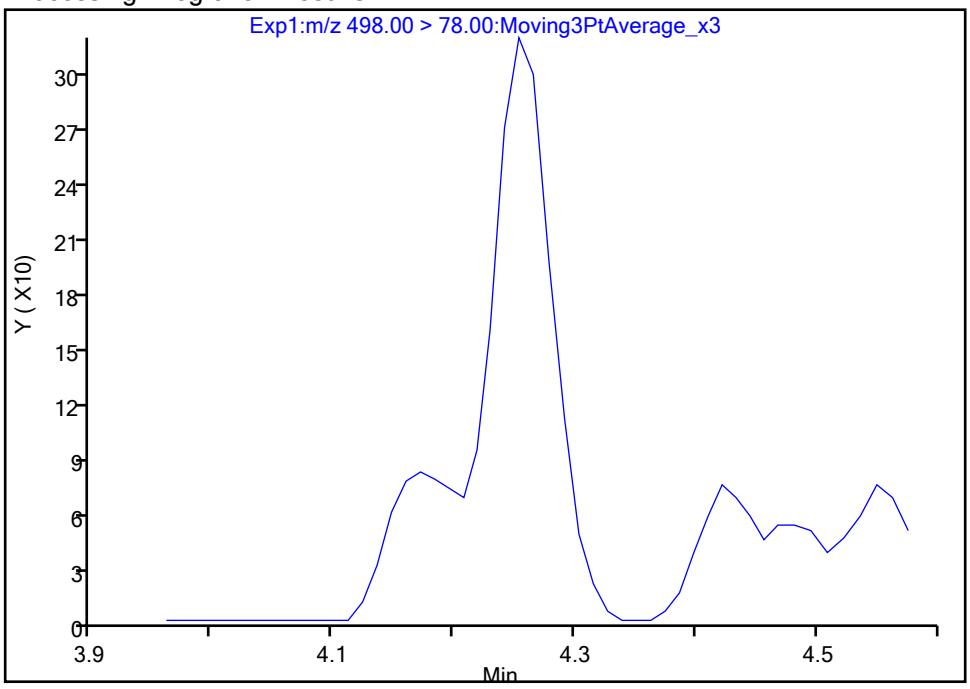
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

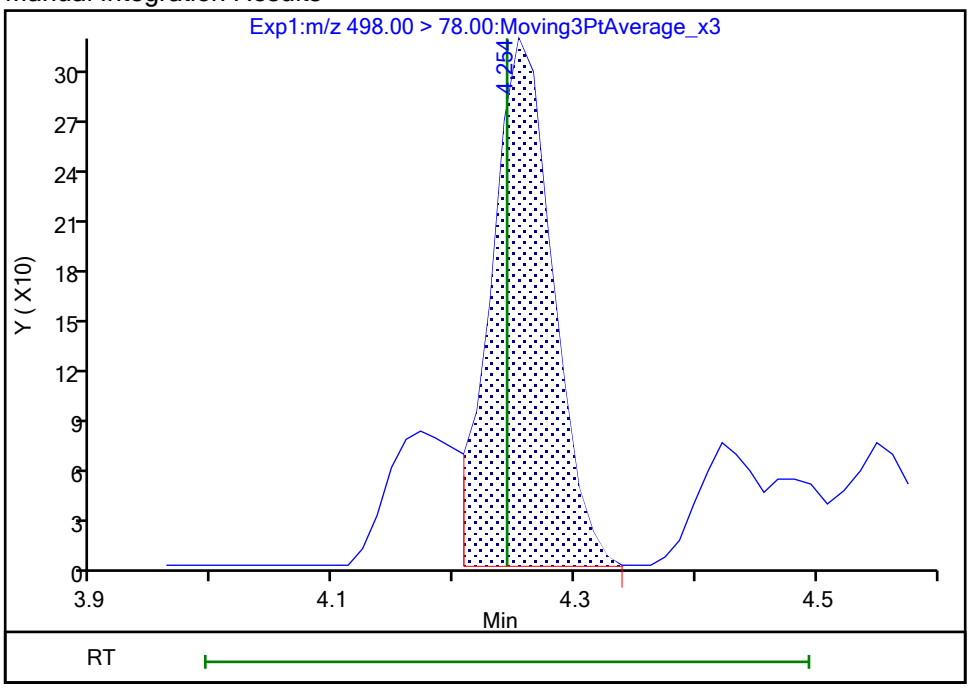
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 1120
Amount: 0.000923
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:41:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

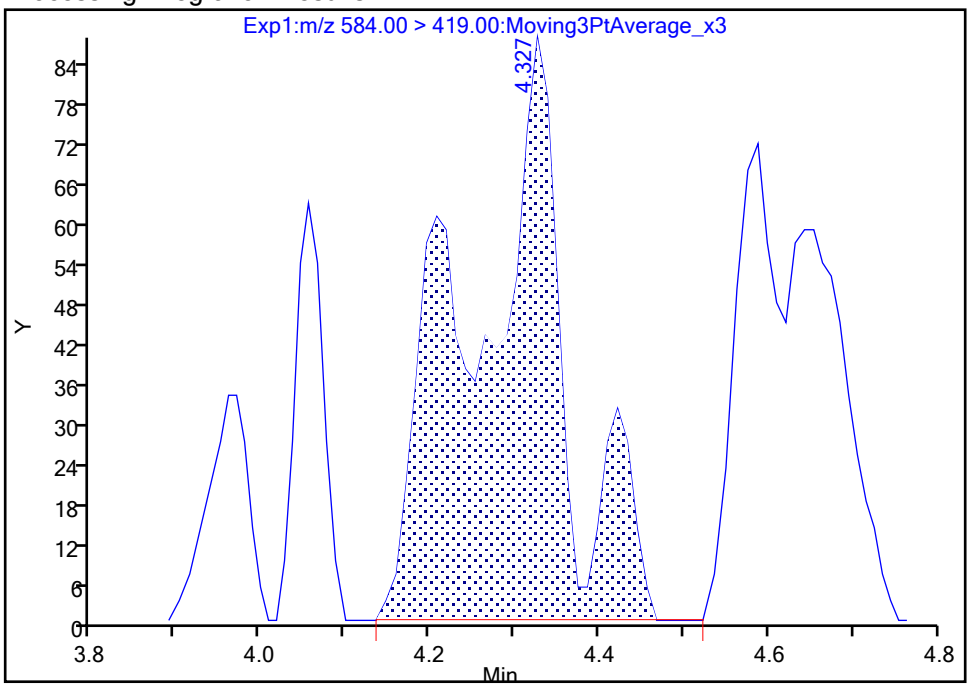
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

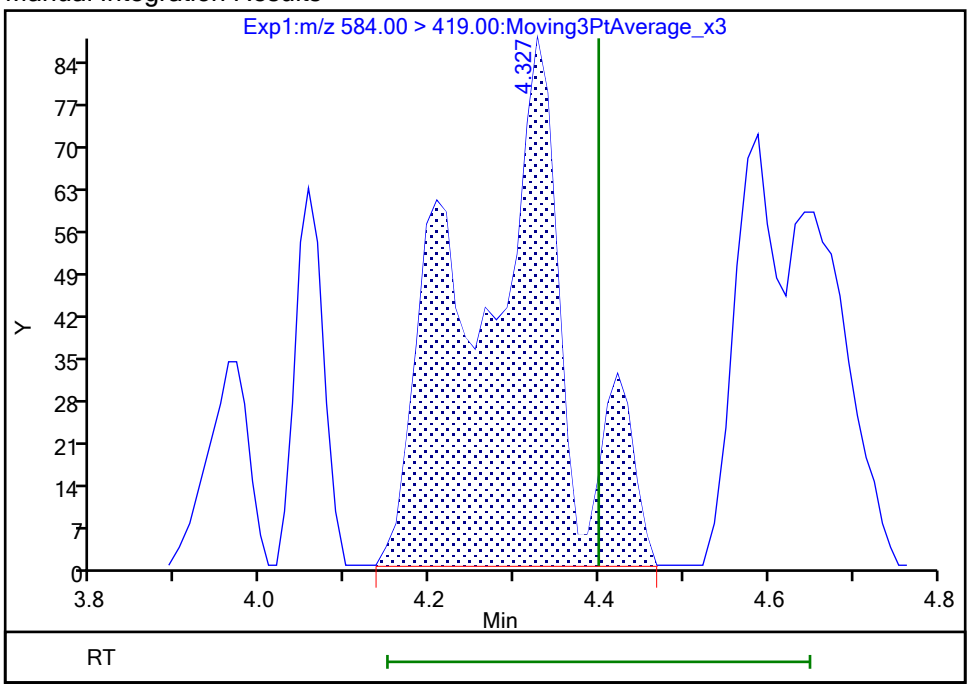
Processing Integration Results

RT: 4.33
Area: 698
Amount: 0.001902
Amount Units: ng/ml



Manual Integration Results

RT: 4.33
Area: 698
Amount: 0.001902
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:42:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

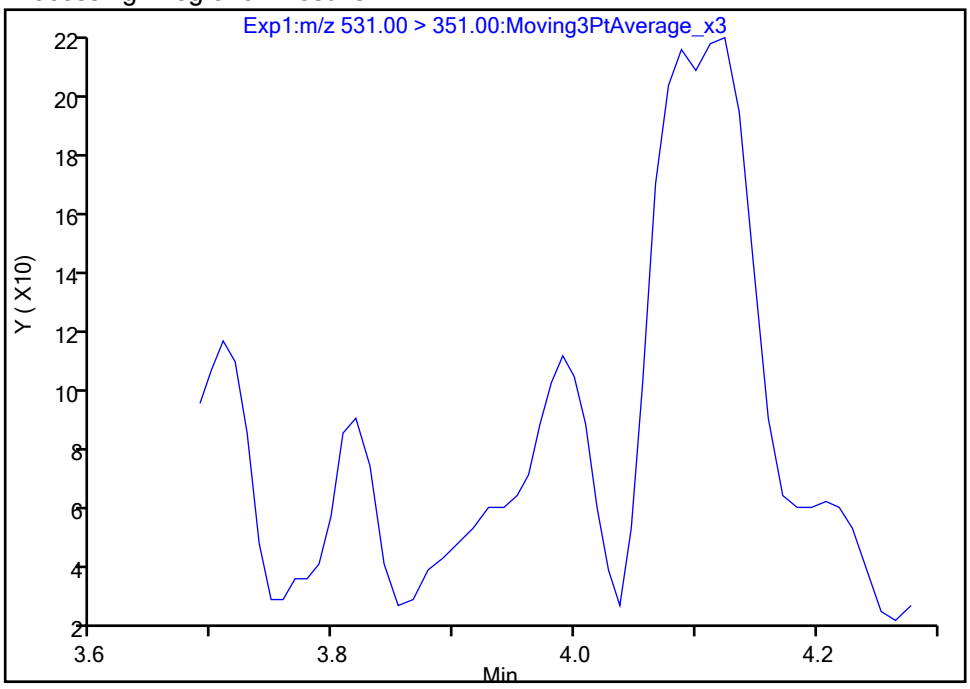
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

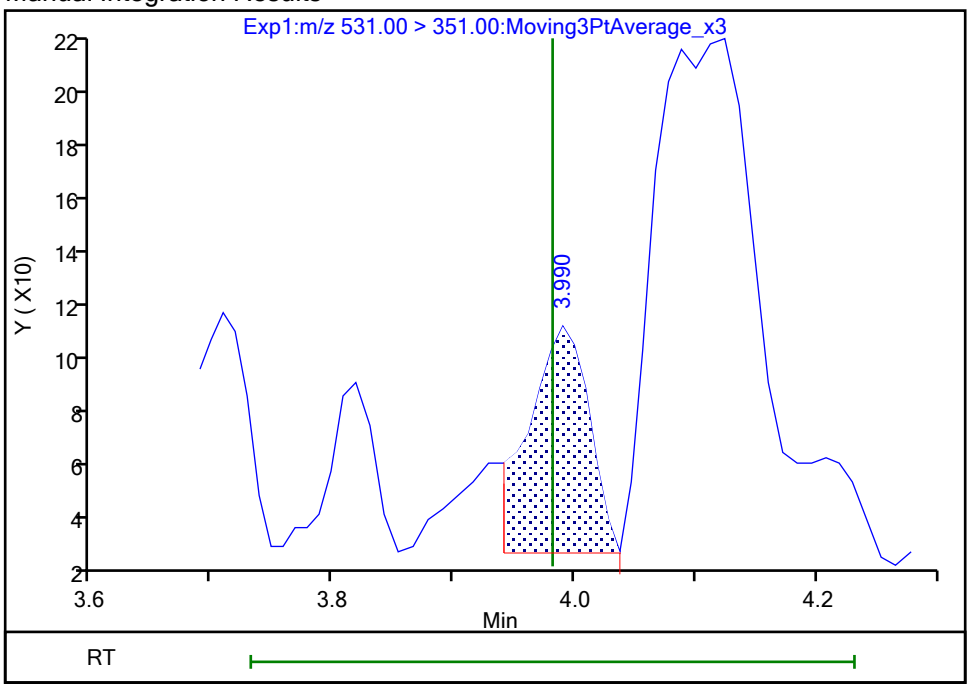
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 287
Amount: 0.000100
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:41:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

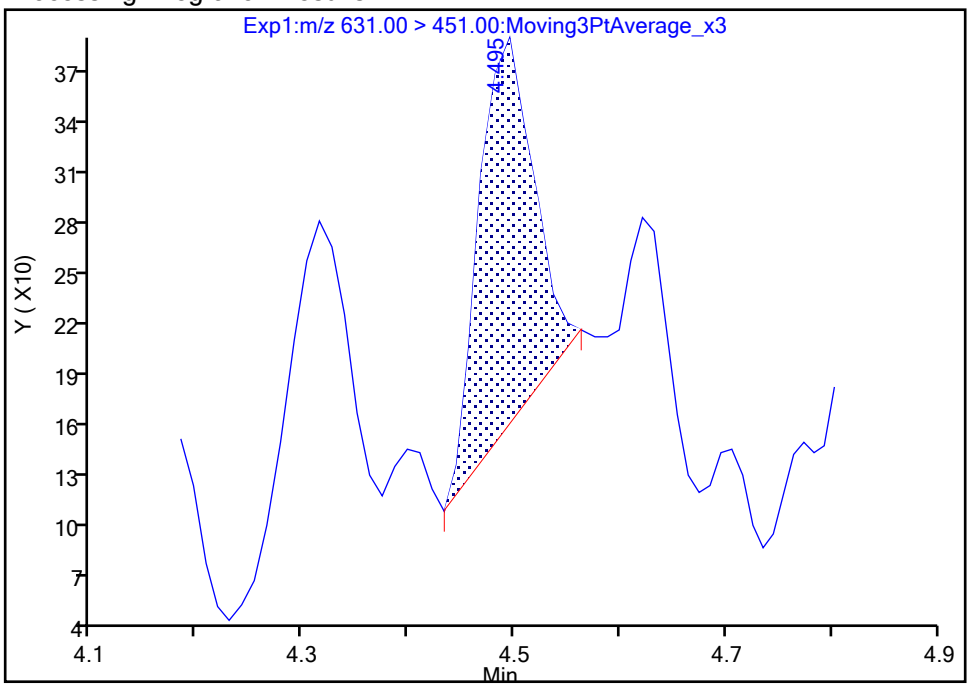
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

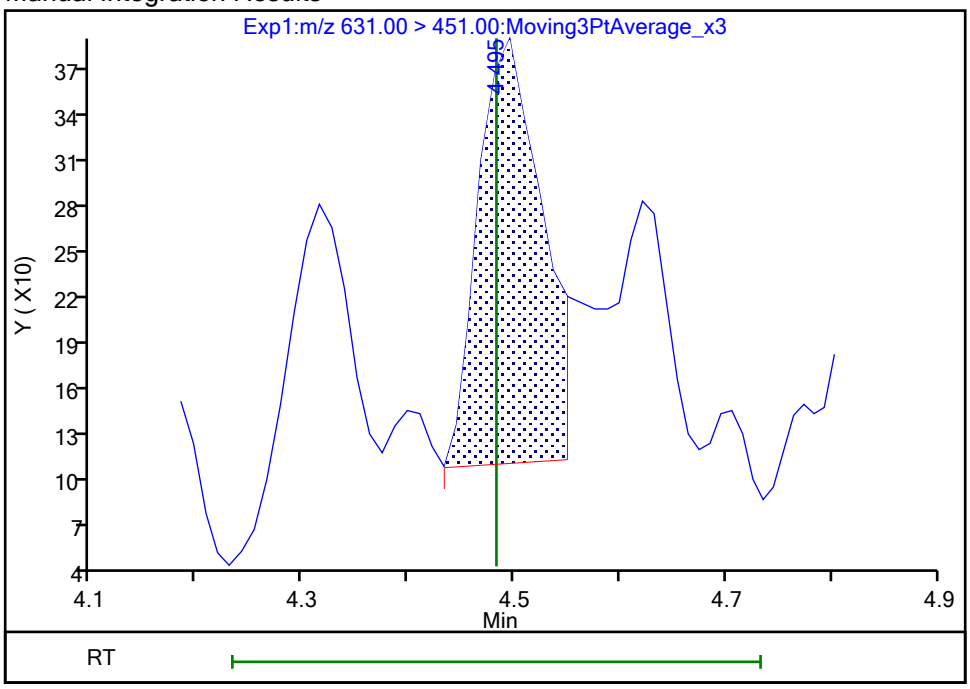
Processing Integration Results

RT: 4.50
Area: 817
Amount: 0.000186
Amount Units: ng/ml



Manual Integration Results

RT: 4.50
Area: 1123
Amount: 0.000256
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:42:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

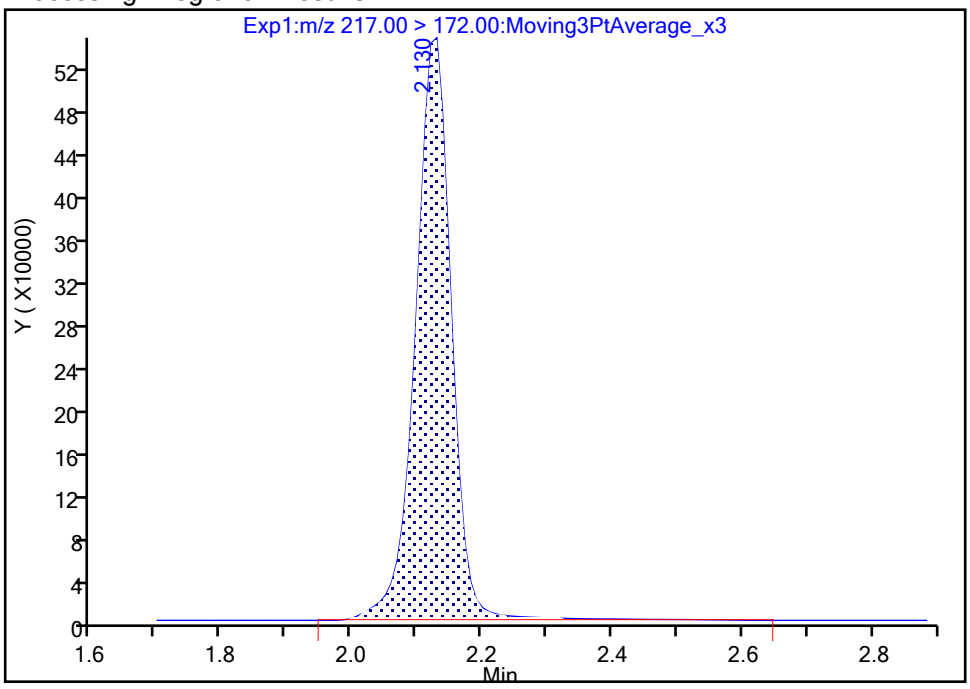
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

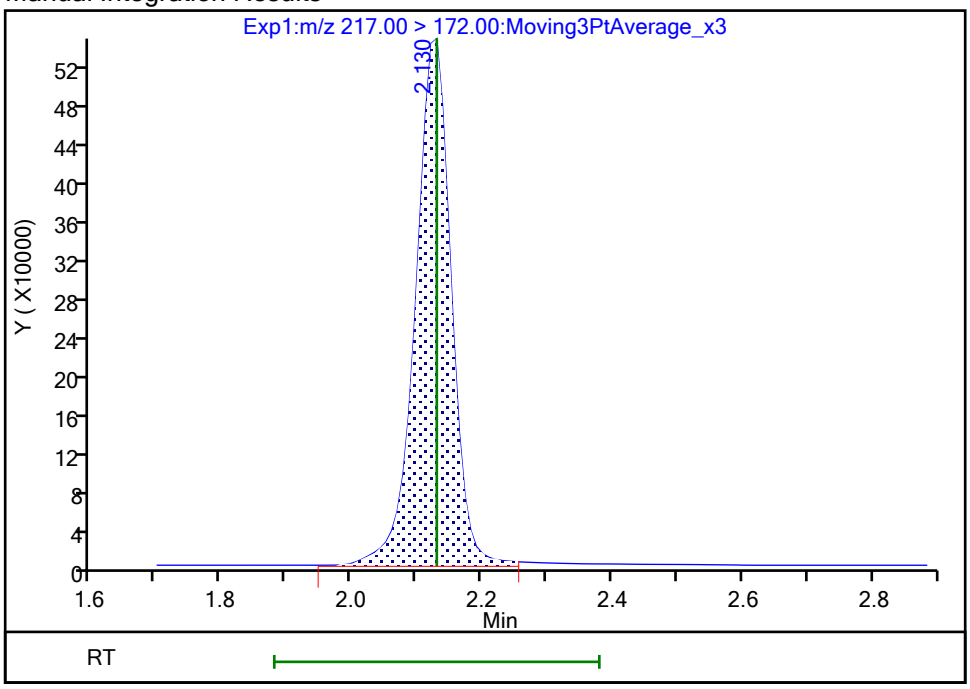
Processing Integration Results

RT: 2.13
Area: 2101674
Amount: 1.321316
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2074876
Amount: 1.304468
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 11:30:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

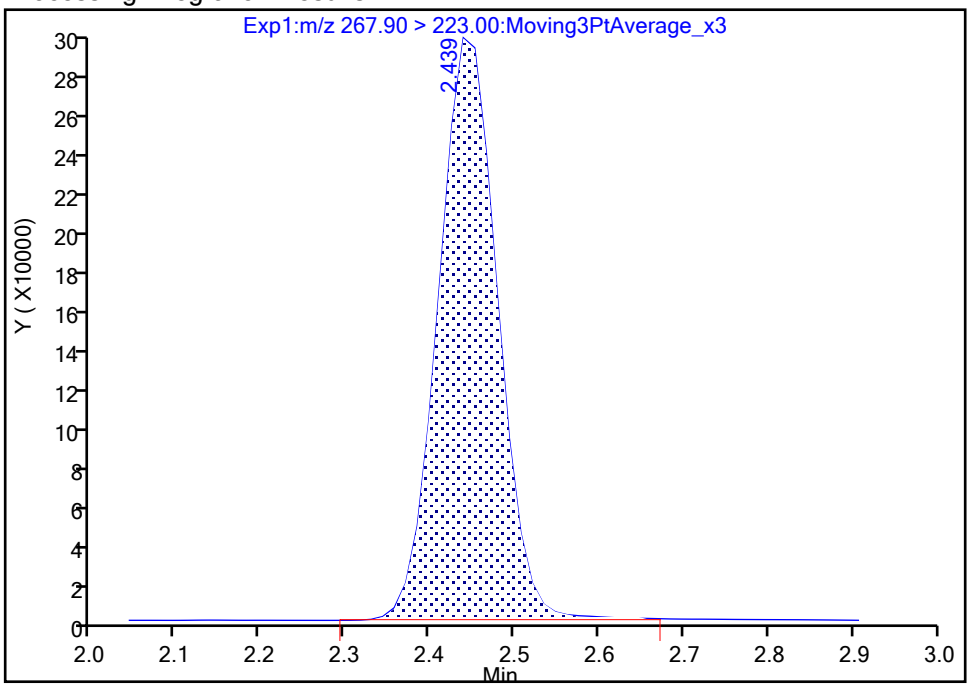
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d
Injection Date: 24-Oct-2023 18:40:56 Instrument ID: LC812
Lims ID: MB 200-196715/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

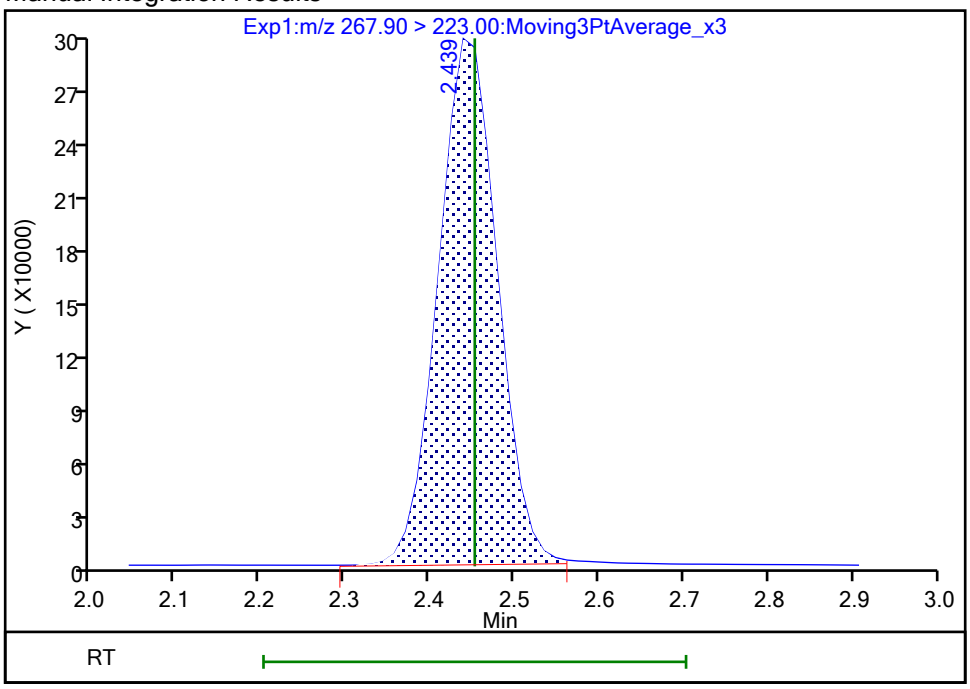
Processing Integration Results

RT: 2.44
Area: 1443025
Amount: 1.168968
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1437301
Amount: 1.164331
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 11:31:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

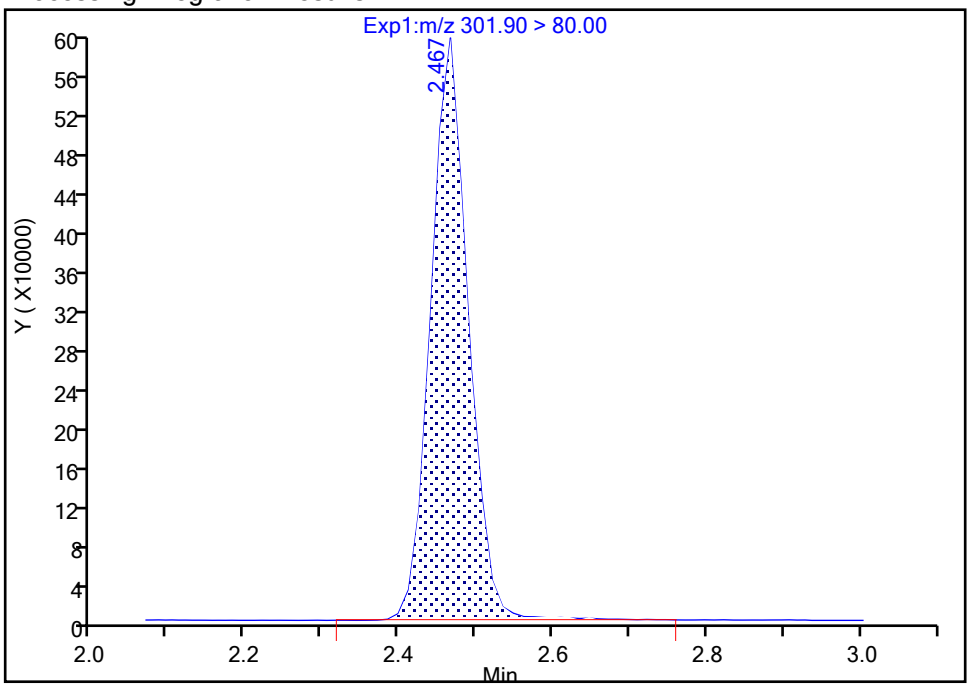
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

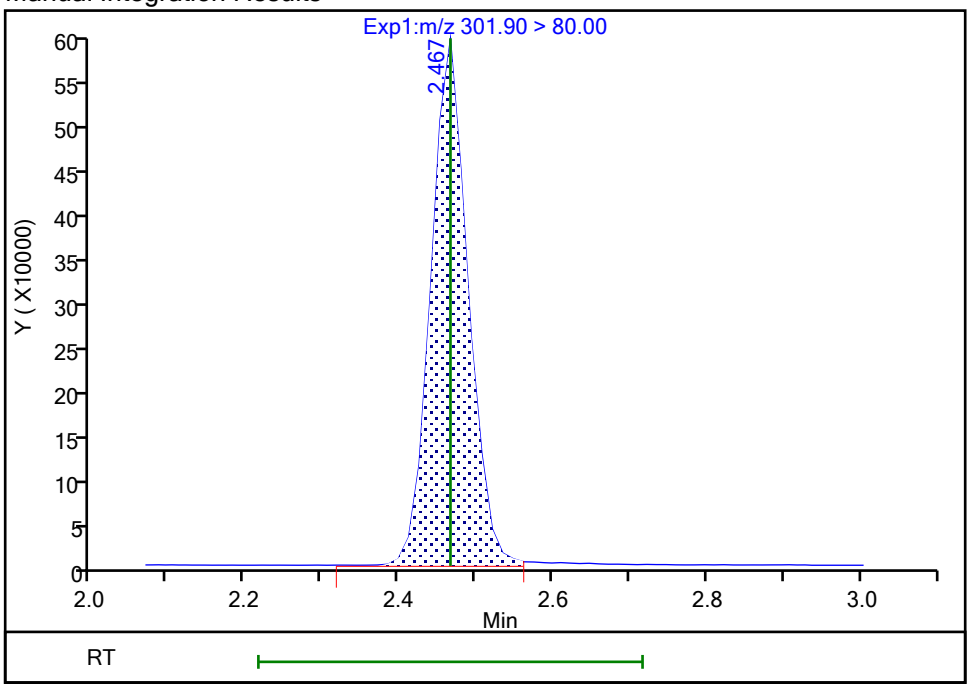
Processing Integration Results

RT: 2.47
Area: 2012104
Amount: 1.204657
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1994947
Amount: 1.194385
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 11:31:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

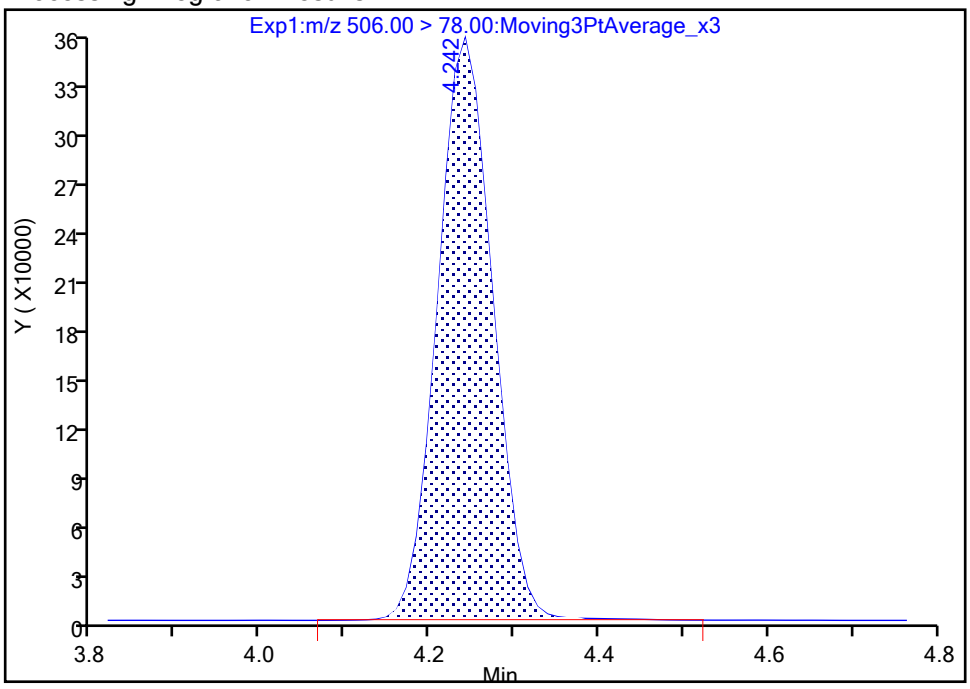
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

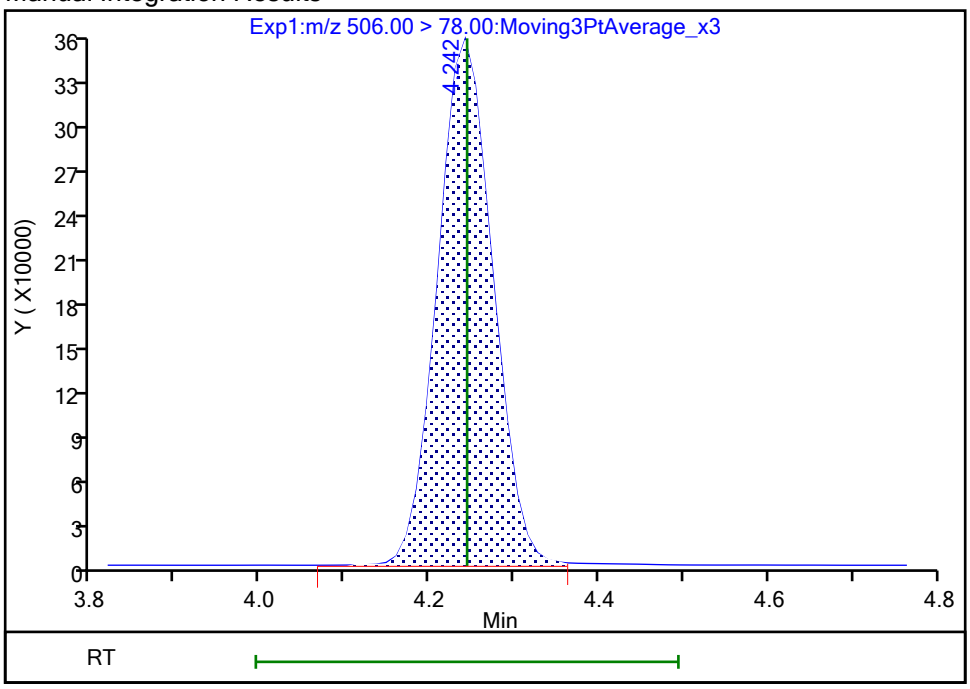
Processing Integration Results

RT: 4.24
Area: 1596209
Amount: 1.051745
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1590545
Amount: 1.048013
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 11:31:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

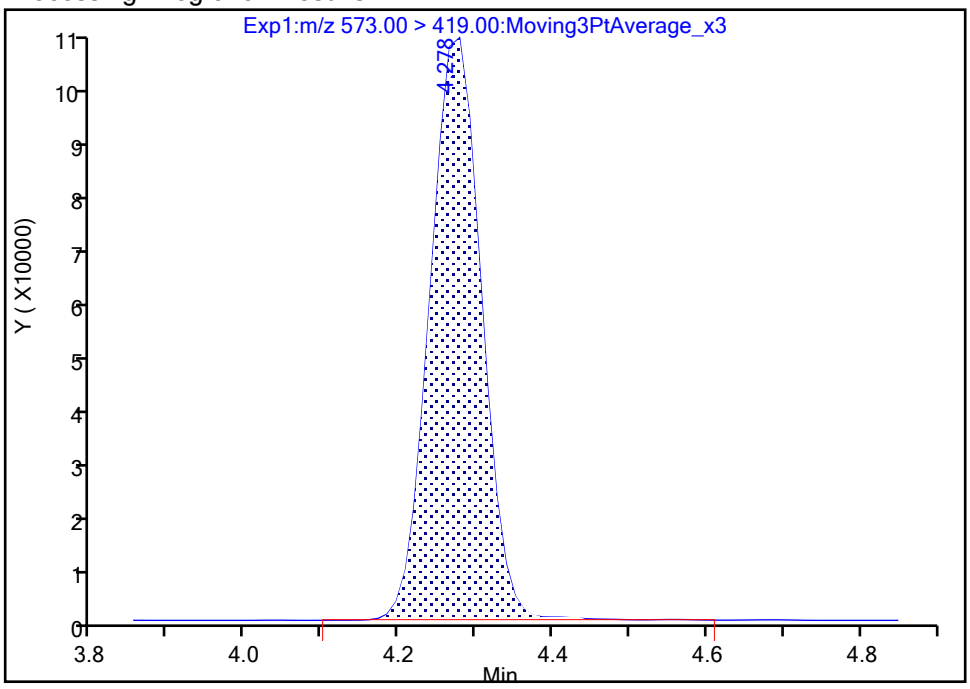
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

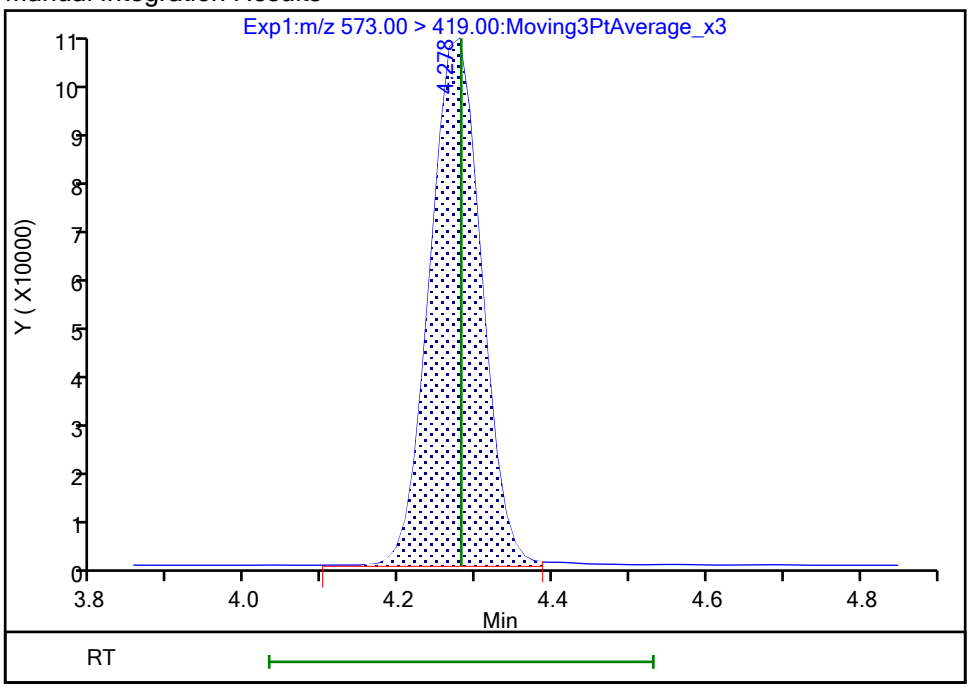
Processing Integration Results

RT: 4.28
Area: 495316
Amount: 1.165255
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 492552
Amount: 1.158753
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:39:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

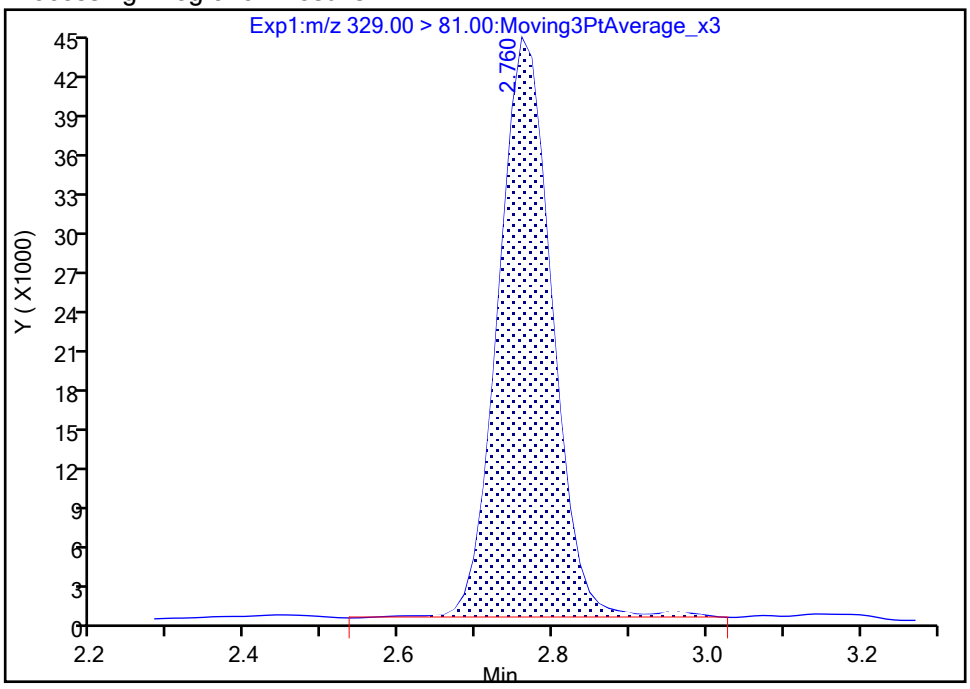
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A06.d				
Injection Date:	24-Oct-2023 18:40:56	Instrument ID:	LC812		
Lims ID:	MB 200-196715/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

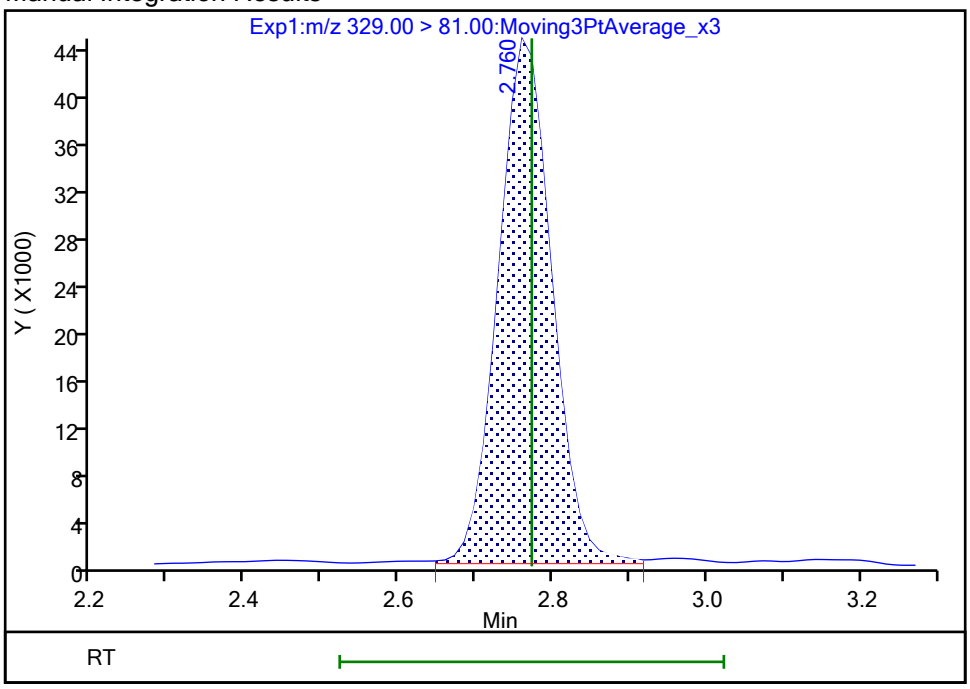
Processing Integration Results

RT: 2.76
Area: 217211
Amount: 1.124505
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 214687
Amount: 1.111439
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 11:31:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196662/2-A

Matrix: Water Lab File ID: PA231023E03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.92		5.00	1.20
2706-90-3	Perfluoropentanoic acid	38.61		2.00	0.68
307-24-4	Perfluorohexanoic acid	38.82		2.00	0.65
375-85-9	Perfluoroheptanoic acid	38.08		2.00	0.54
335-67-1	Perfluorooctanoic acid	38.29		2.00	0.76
375-95-1	Perfluorononanoic acid	39.45		2.00	0.49
335-76-2	Perfluorodecanoic acid	40.74		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	41.23		2.00	0.55
307-55-1	Perfluorododecanoic acid	34.71		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	36.45		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	37.66		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	34.30		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	36.85		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.99		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	38.15		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	35.07		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	34.32		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	35.69		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	37.98		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	38.54		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	41.65		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	40.08		2.00	0.92
2355-31-9	NMeFOSAA	39.24		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	37.52		5.00	1.60
13252-13-6	HFPODA	37.94		4.00	1.10
919005-14-4	DONA	37.16		2.00	0.42
756426-58-1	9Cl-PF3ONS	39.95		2.00	0.32
763051-92-9	11Cl-PF3OUdS	36.16		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196662/2-A

Matrix: Water Lab File ID: PA231023E03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	106		50-150
STL01893	13C5 PFPeA	99		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	89		50-150
STL02337	13C3 PFBS	101		50-150
STL01056	13C8 FOSA	91		50-150
STL02118	d3-NMeFOSAA	104		50-150
STL02117	d5-NEtFOSAA	105		50-150
STL02395	M2-4:2 FTS	95		50-150
STL02279	M2-6:2 FTS	98		50-150
STL02280	M2-8:2 FTS	95		50-150
STL02255	13C3 HFPO-DA	92		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	100		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	103		50-150
STL00995	13C5 PFNA	100		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Lims ID: LCS 200-196662/2-A
Client ID:
Sample Type: LCS
Inject. Date: 24-Oct-2023 06:22:00 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196662/2-A
Misc. Info.: 200-0057513-003 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:28:01
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2210490	1.32		106	1384	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.130	0.0	1.000	1621104	0.9729		97.3	155	
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.439	0.0	0.693	1604781	1.24		98.9	913	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1337240	0.9652		96.5	32.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	2052677	1.17		101	86380	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1691027	0.8574	Target=2.06	96.7	1010	M
298.90 > 99.00	2.467	2.467	0.0	1.000	823100		2.05(1.03-3.09)		322	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	620909	0.9496		101	1104	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	224796	1.11		94.8	144	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1648515	1.25		99.9	1138	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1408643	0.9706	Target=14.12	97.1	260	M
313.00 > 119.00	2.797	2.797	0.0	1.000	99602		14.14(7.06-21.17)		117	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1535898	0.9213	Target=2.72	97.9	1383	M
349.00 > 99.00	2.810	2.810	0.0	0.888	538165		2.85(1.36-4.09)		600	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	223128	0.9485		94.9	697	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	293691	1.15		91.9	866	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1509589	1.20		101	3340	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1200738	0.8497	Target=3.32	93.0	1991	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	368667		3.26(1.66-4.98)		377	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	1611834	0.9521	Target=4.17	95.2	345	
363.00 > 169.00	3.165	3.168	-0.003	1.000	390273		4.13(2.09-6.26)		751	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1887971	1.30		104	9840	
77 DONA										M
377.00 > 251.00	3.212	3.203	0.009	0.838	4324703	0.9289	Target=3.33	98.3	3320	M
377.00 > 85.00	3.199	3.203	-0.004	0.835	1168720		3.70(1.66-4.99)		1624	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.916	1115174	0.9537	Target=4.83	100	4561	
449.00 > 99.00	3.511	3.505	0.006	0.916	220273		5.06(2.41-7.24)		694	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	305803	1.17		98.4	798	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	678241	0.9636		101	755	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1758322	0.9574	Target=2.88	95.7	84.2	M
413.00 > 169.00	3.520	3.514	0.006	1.000	611265		2.88(1.44-4.32)		1200	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2155395	1.31		105	4264	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2108118	1.25			6741	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.822	0.009	1.000	827433	0.8768	Target=4.24	94.5	1669	M
499.00 > 99.00	3.831	3.822	0.009	1.000	185063		4.47(2.12-6.37)		562	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	966832	1.21		101	3112	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.845	-0.002	1.000	1732897	0.9862	Target=8.34	98.6	264	
463.00 > 169.00	3.855	3.845	0.010	1.003	191730		9.04(4.17-12.51)		1333	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.845	-0.002	1.092	2241175	1.25		100	5839	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.982	3.983	-0.001	1.039	2884334	1.00		107	6806	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.114	4.105	0.009	1.074	616050	0.8581	Target=2.17	89.2	4031	M
549.00 > 99.00	4.114	4.105	0.009	1.074	266166		2.31(1.08-3.25)		994	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.138	4.129	0.009	1.000	1832495	1.02	Target=11.44	102	555	
513.00 > 169.00	4.138	4.129	0.009	1.000	162362		11.29(5.72-17.16)		767	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.176	2250192	1.20		96.3	11680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.176	334239	1.14		94.9	880	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.150	4.141	0.009	1.003	639736	1.04		108	4894	
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.234	0.010	1.206	1815175	1.14		91.0	2264	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.234	0.010	1.000	1387971	1.00		100	2893	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.281	4.270	0.011	1.216	578440	1.29		104	1898	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.270	0.011	1.000	411947	0.9810		98.1	728	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.139	493016	0.8922	Target=2.37	92.5	4701	
599.00 > 99.00	4.364	4.366	-0.002	1.139	188440		2.62(1.19-3.56)		2137	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	2172059	1.23		98.4	8644	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	1845989	1.03	Target=12.20	103	421	
563.00 > 169.00	4.388	4.390	-0.002	1.000	154424		11.95(6.10-18.31)		1928	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.250	564638	1.31		105	1146	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	423778	0.9380		93.8	1362	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.473	0.010	1.170	4003039	0.9039		95.9	3816	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2304308	1.28		103	7595	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.613	-0.002	1.000	1628102	0.8677	Target=8.47	86.8	91.4	
613.00 > 169.00	4.611	4.613	-0.002	1.000	193027		8.43(4.23-12.70)		1648	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.633	4.624	0.009	1.120	353651	0.9628		99.9	4167	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.246	162419	0.8673	Target=0.48	89.6	1910	
699.00 > 99.00	4.775	4.777	-0.002	1.246	330066		0.49(0.24-0.72)		4748	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.042	1797107	0.9112	Target=6.41	91.1	94.2	M
663.00 > 169.00	4.804	4.806	-0.002	1.042	254755		7.05(3.21-9.62)		1261	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.984	4.982	0.002	1.416	1989484	1.11		89.1	4181	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.984	4.982	0.002	1.000	167560	0.9416	Target=0.87	94.2	2055	
713.00 > 219.00	4.984	4.982	0.002	1.000	177908		0.94(0.43-1.30)		2608	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.293	5.292	0.001	1.504	2249620	1.09		87.4	4847	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.304	5.292	0.012	1.002	1726643	0.9594	Target=7.89	95.9	99.0	
813.00 > 169.00	5.293	5.292	0.001	1.000	221983		7.78(3.94-11.83)		2114	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.564	5.563	0.001	1.051	1309148	0.9315	Target=9.39	93.2	129	M
913.00 > 169.00	5.555	5.563	-0.008	1.049	134944		9.70(4.69-14.08)		833	M

QC Flag Legend

Processing Flags

Review Flags

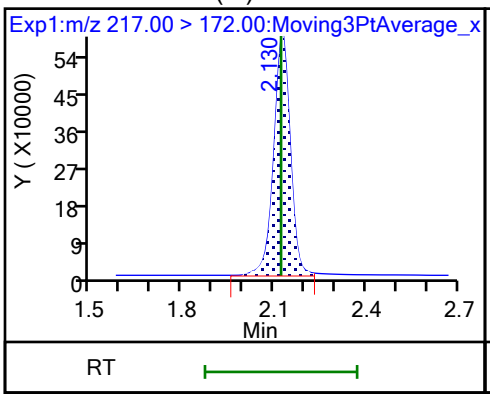
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:09 Chrom Revision: 2.3 18-Oct-2023 21:16:54

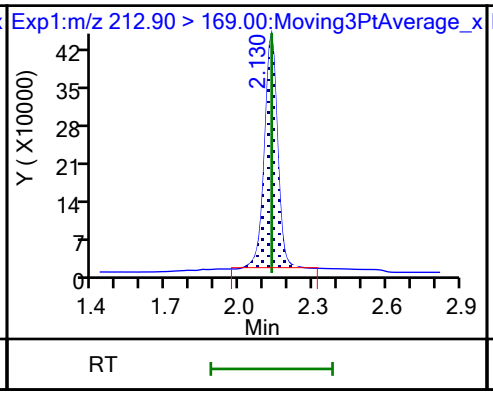
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

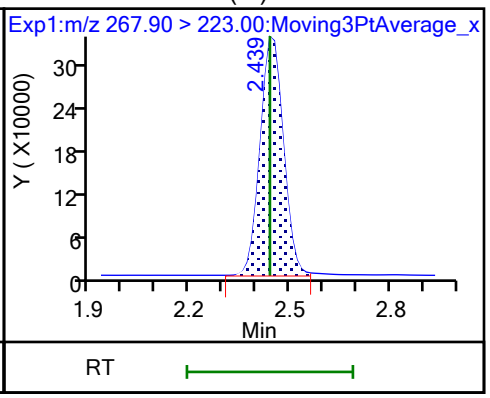
D 1 13C4 PFBA (M)



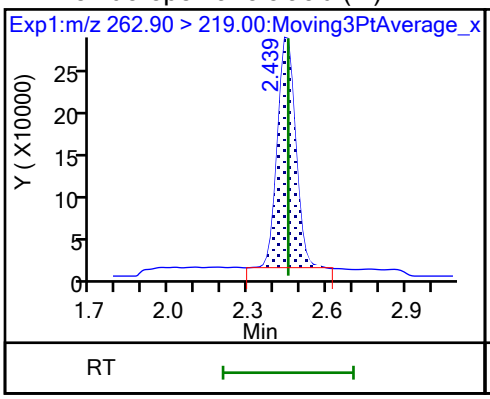
2 Perfluorobutanoic acid



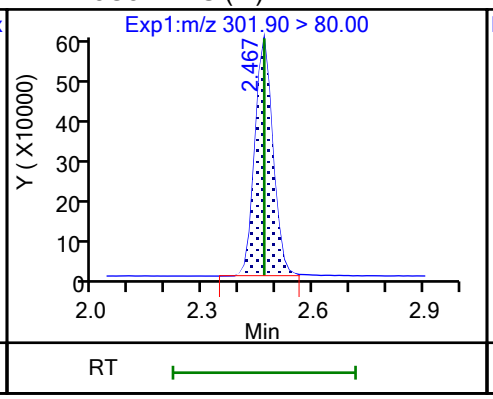
D 3 13C5 PFPeA (M)



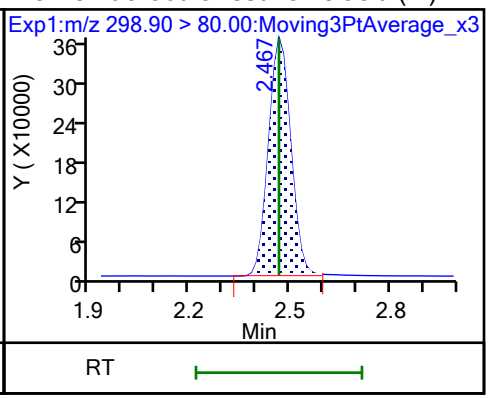
4 Perfluoropentanoic acid (M)



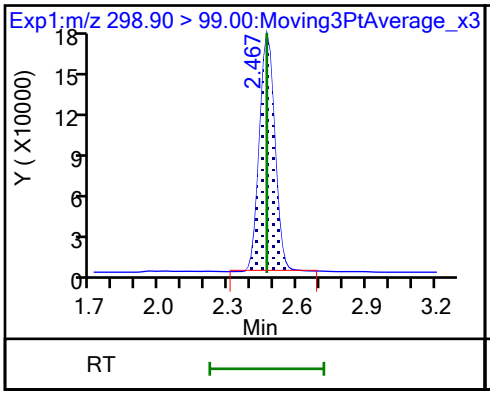
D 47 13C3 PFBS (M)



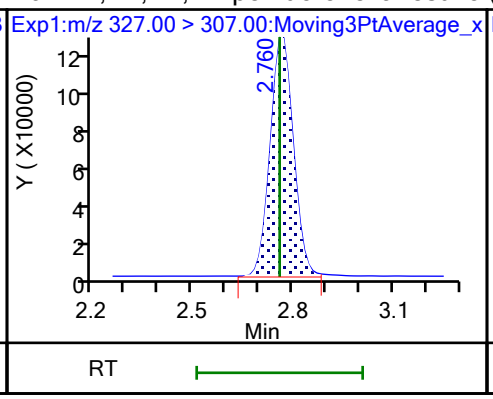
5 Perfluorobutanesulfonic acid (M)



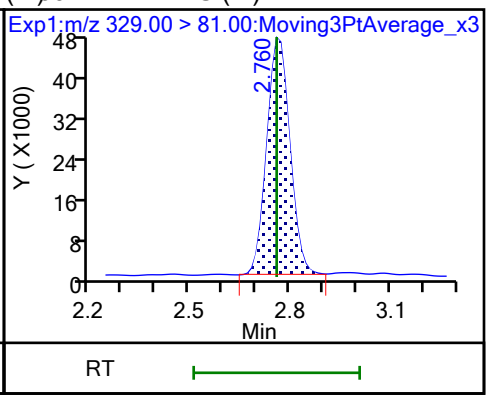
5 Perfluorobutanesulfonic acid



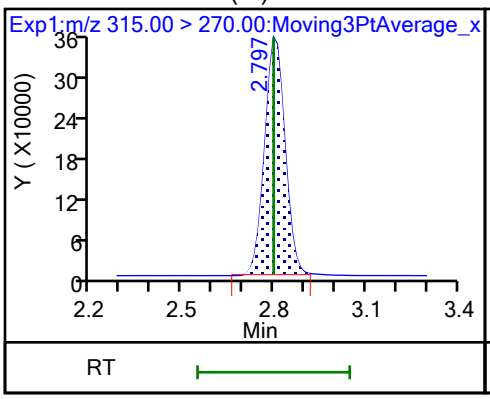
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



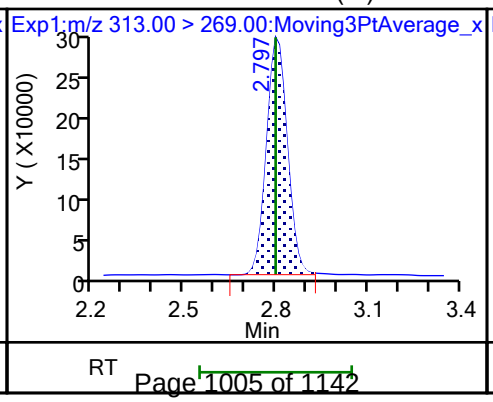
60 M2-4:2 FTS (M)



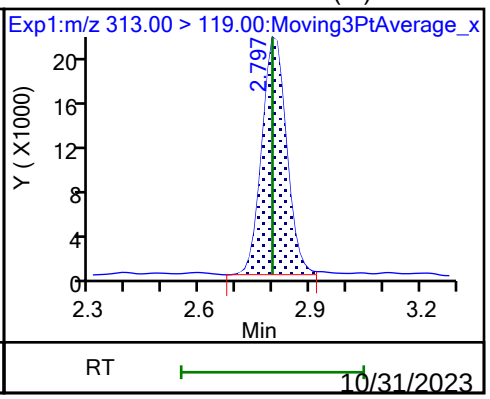
D 7 13C2 PFHxA (M)



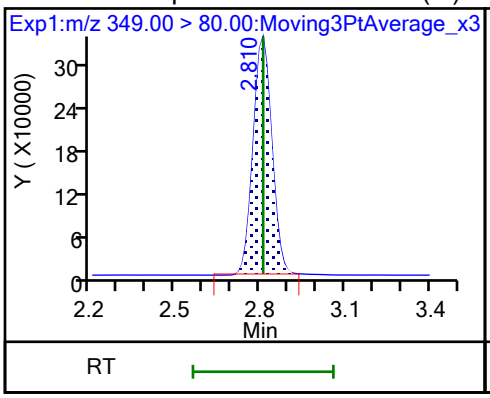
6 Perfluorohexanoic acid (M)



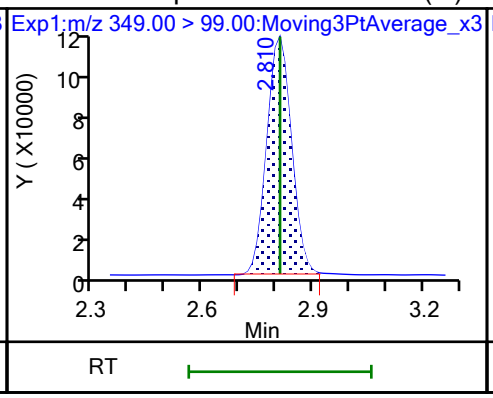
6 Perfluorohexanoic acid (M)



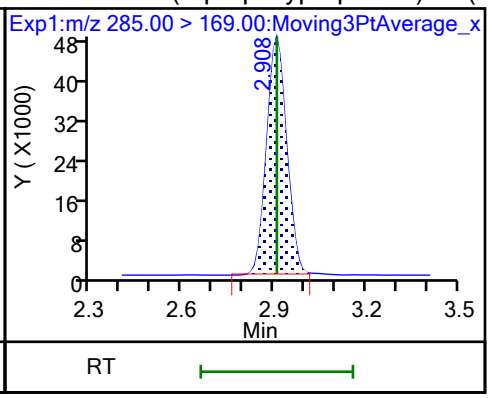
70 Perfluoropentanesulfonic acid (M)



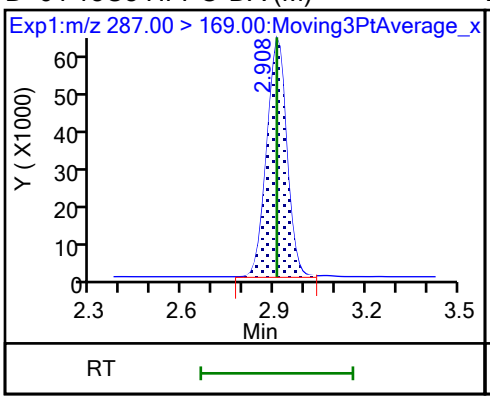
70 Perfluoropentanesulfonic acid (M)



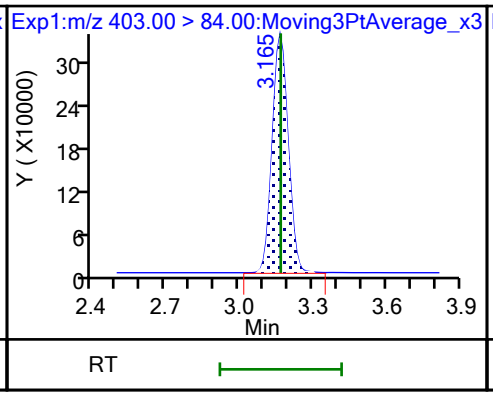
67 Perfluoro(2-propoxypropanoic) ac (M)



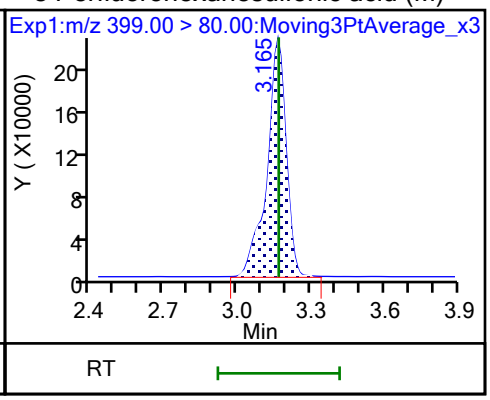
D 64 13C3 HFPO-DA (M)



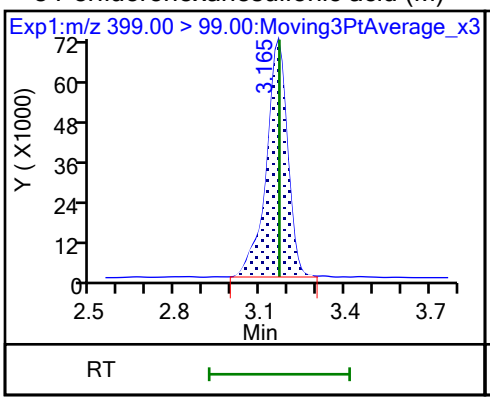
D 11 18O2 PFHxS



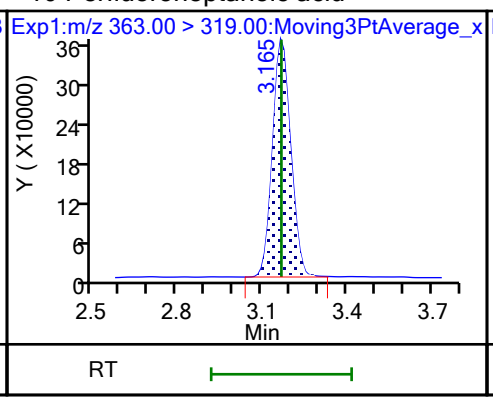
8 Perfluorohexanesulfonic acid (M)



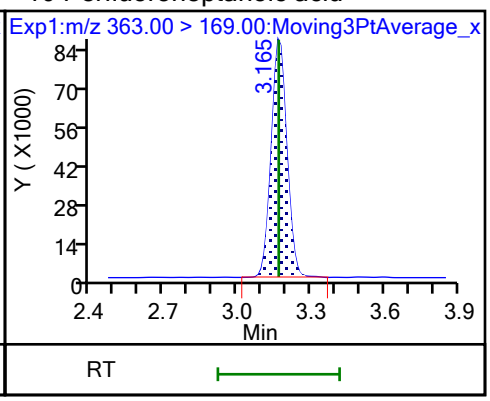
8 Perfluorohexanesulfonic acid (M)



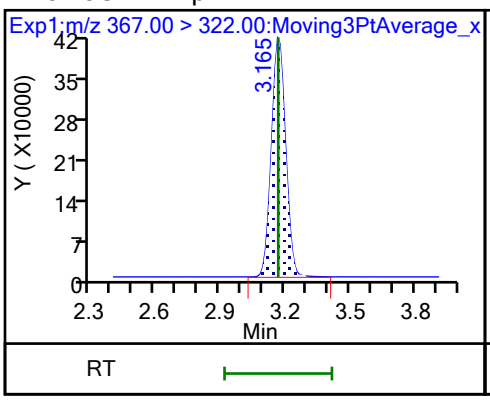
10 Perfluoroheptanoic acid



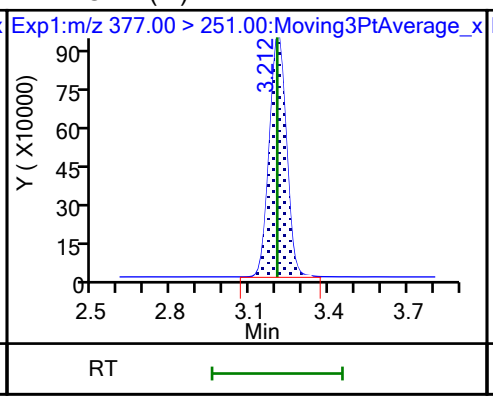
10 Perfluoroheptanoic acid



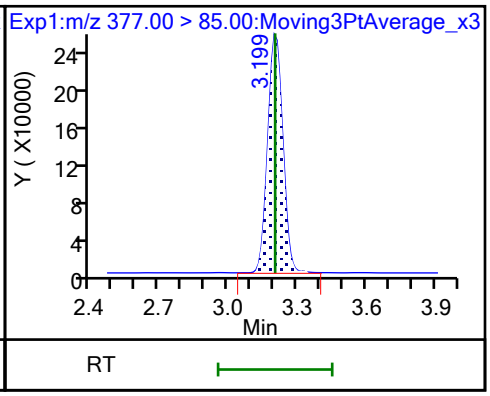
D 9 13C4 PFHpA



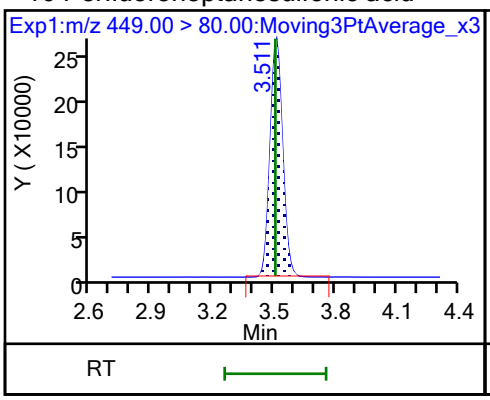
77 DONA (M)



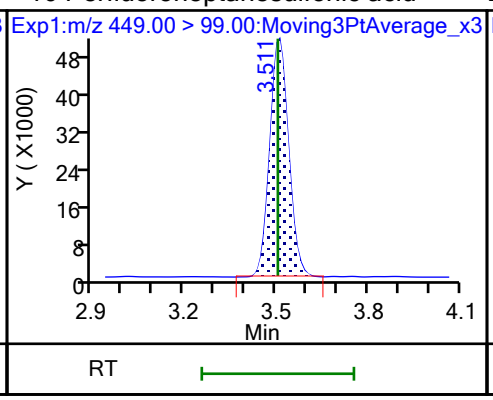
77 DONA



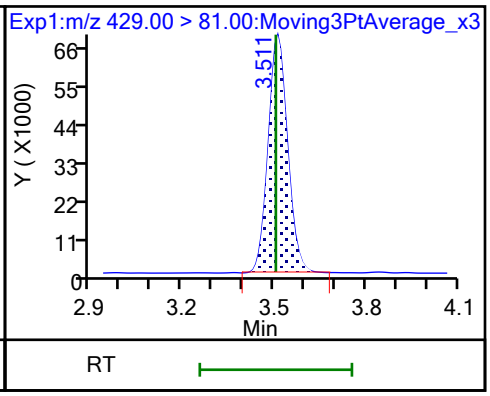
16 Perfluoroheptanesulfonic acid



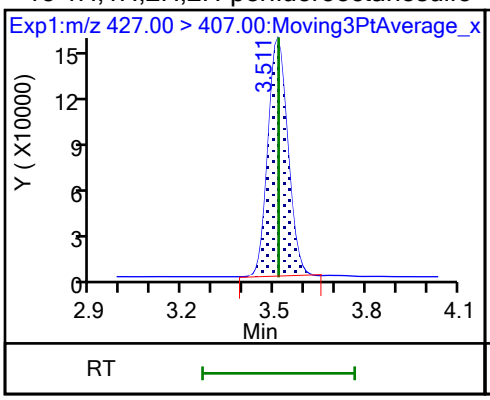
16 Perfluoroheptanesulfonic acid



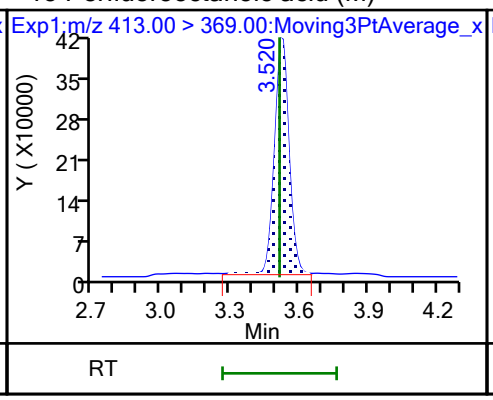
D 12 M2-6:2 FTS



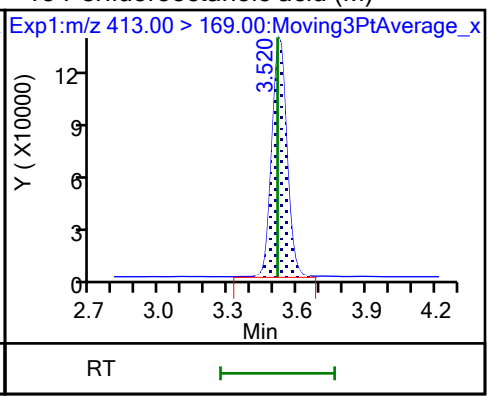
13 1H,1H,2H,2H-perfluorooctanesulfo



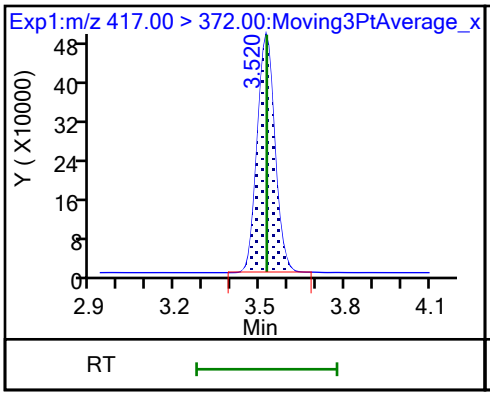
15 Perfluorooctanoic acid (M)



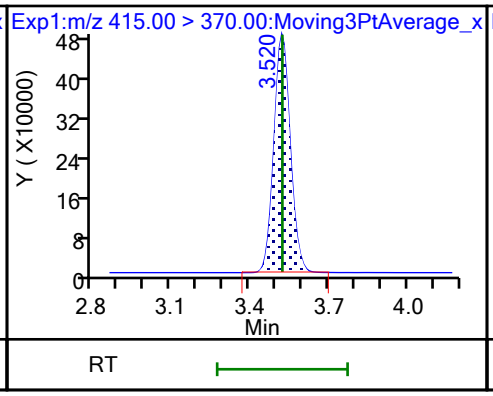
15 Perfluorooctanoic acid (M)



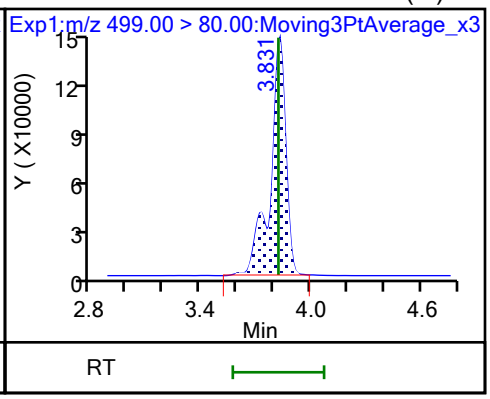
D 14 13C4 PFOA



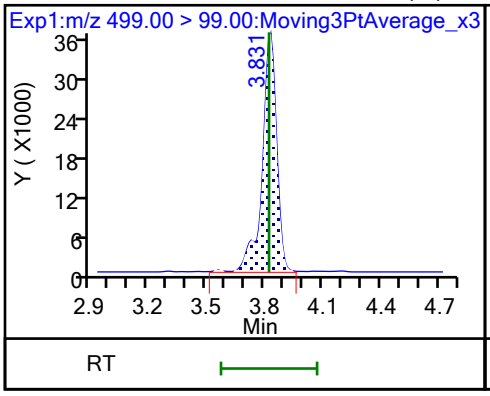
* 62 13C2 PFOA



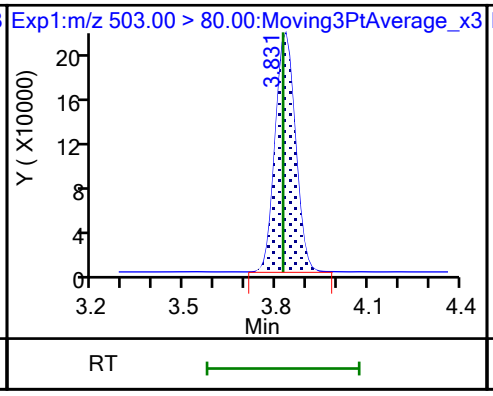
17 Perfluorooctanesulfonic acid (M)



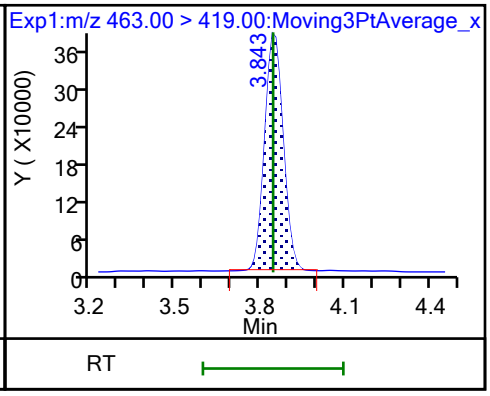
17 Perfluorooctanesulfonic acid (M)



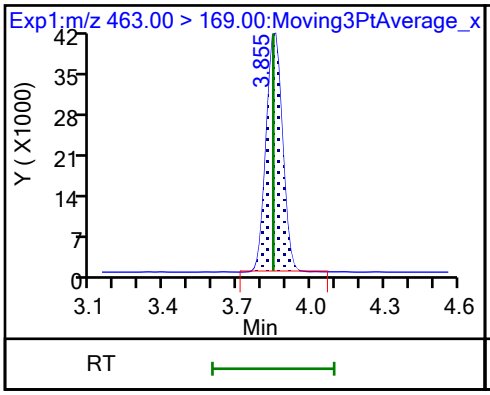
D 18 13C4 PFOS



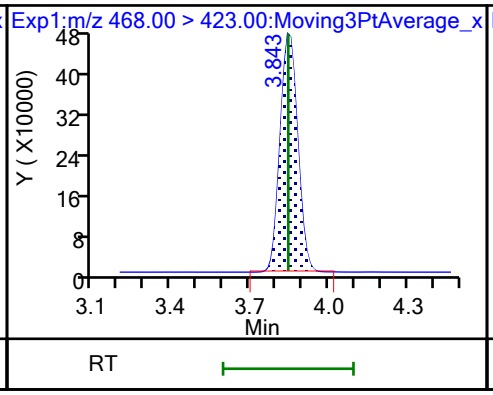
20 Perfluorononanoic acid



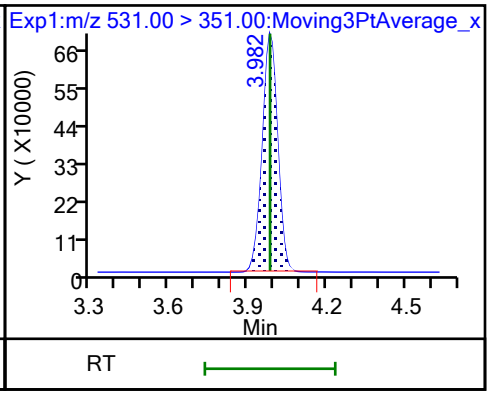
20 Perfluorononanoic acid



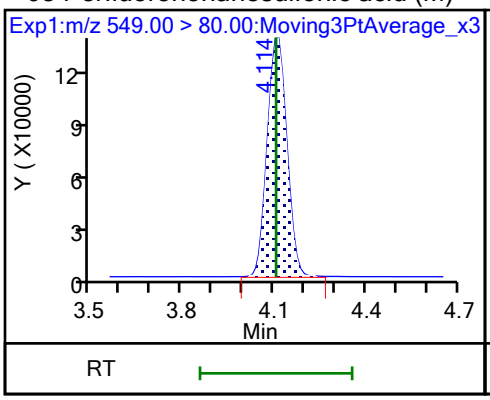
D 19 13C5 PFNA



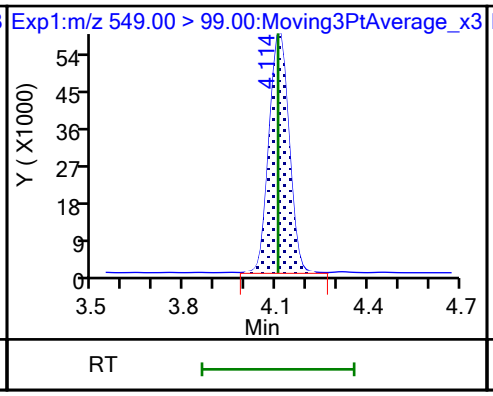
69 9-Chlorohexadecafluoro-3-oxanona



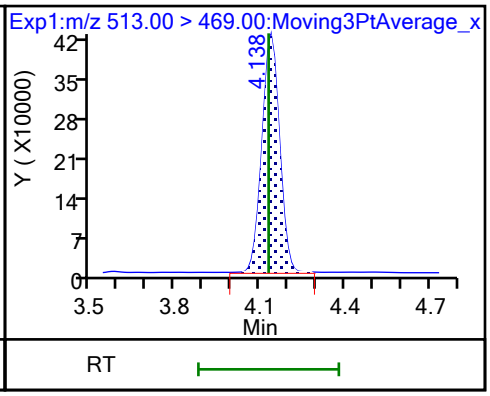
68 Perfluorononanesulfonic acid (M)



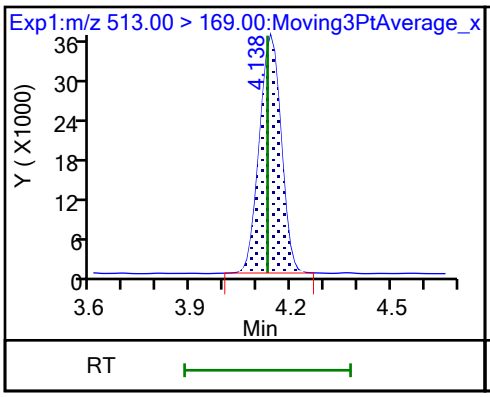
68 Perfluorononanesulfonic acid



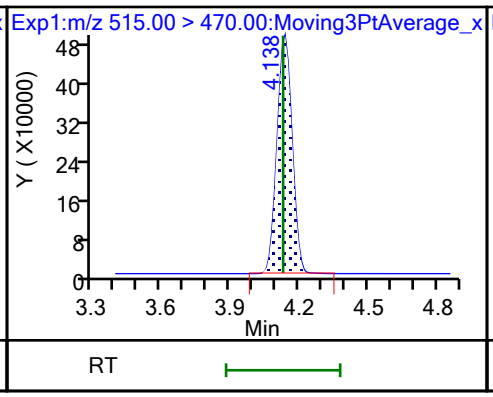
24 Perfluorodecanoic acid



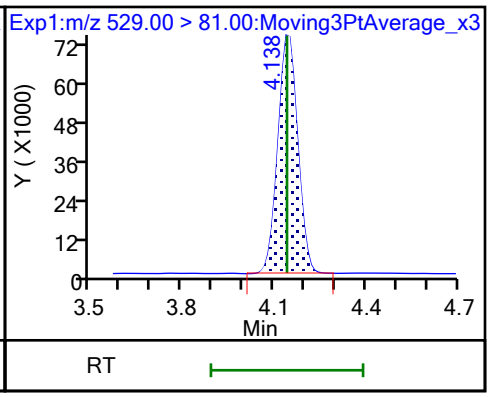
24 Perfluorodecanoic acid



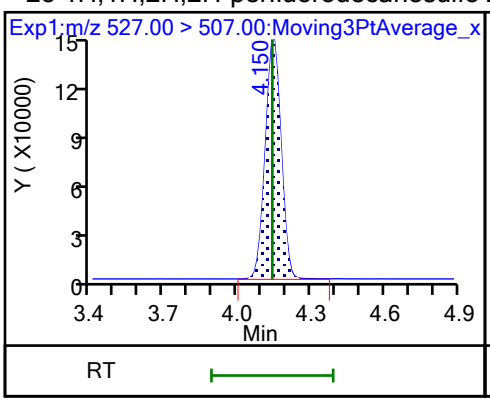
D 23 13C2 PFDA



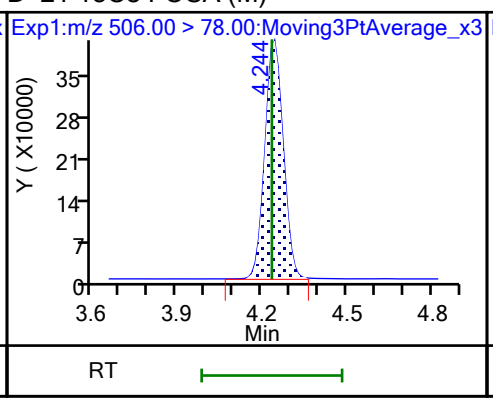
D 26 M2-8:2 FTS



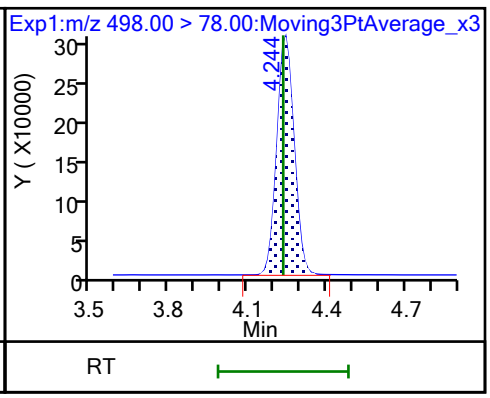
25 1H,1H,2H,2H-perfluorodecanesulfo



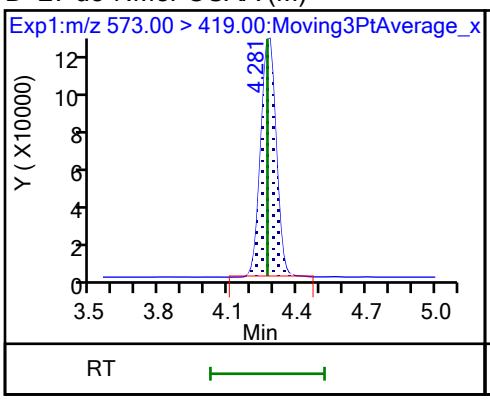
D 21 13C8 FOSA (M)



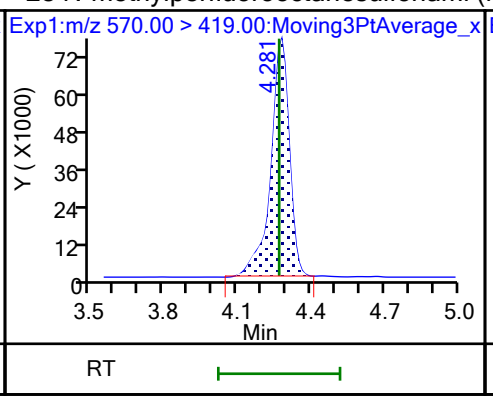
22 Perfluorooctanesulfonamide



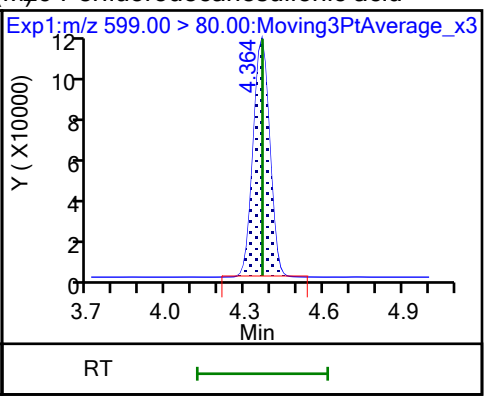
D 27 d3-NMeFOSAA (M)



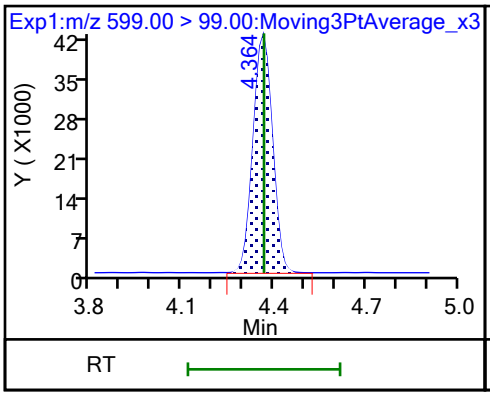
28 N-methylperfluorooctanesulfonami (M)



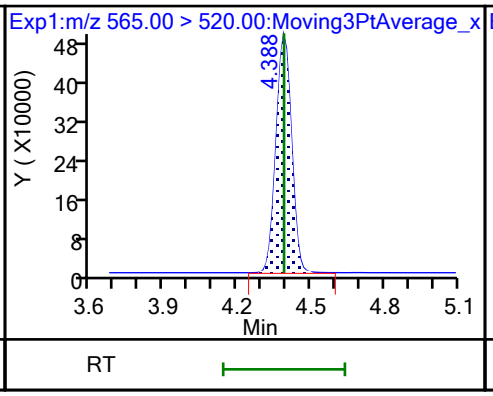
29 Perfluorodecanesulfonic acid



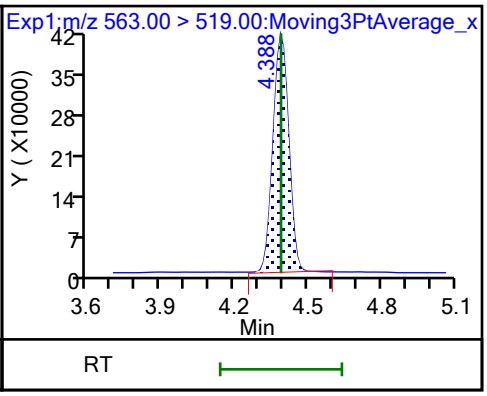
29 Perfluorodecanesulfonic acid



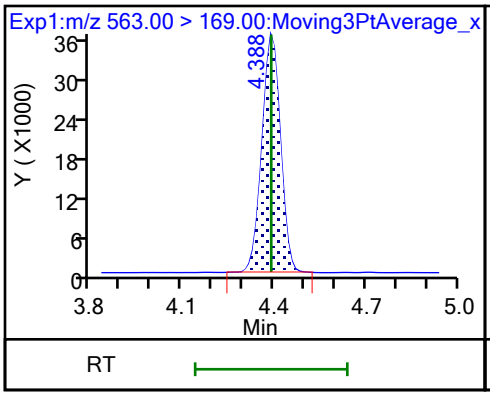
D 30 13C2 PFUnA



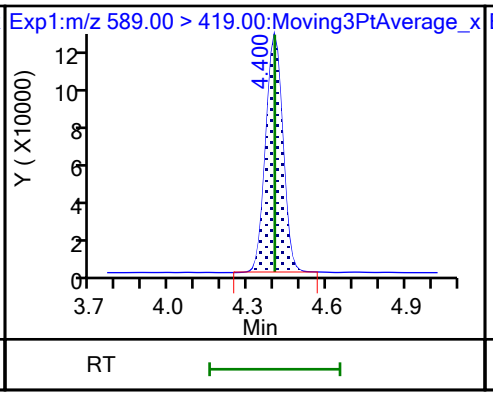
31 Perfluoroundecanoic acid



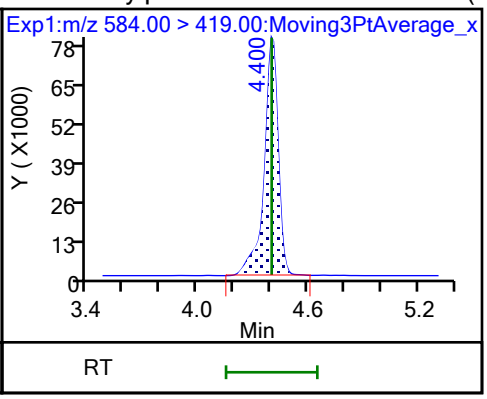
31 Perfluoroundecanoic acid



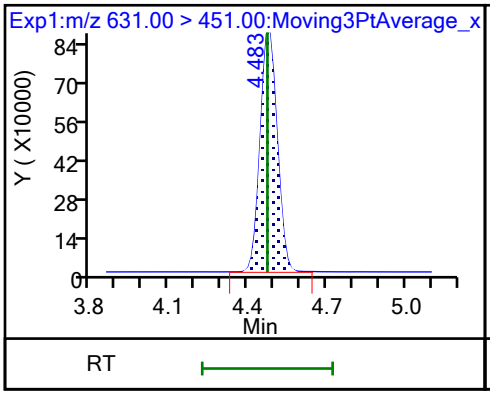
D 32 d5-NEtFOSAA



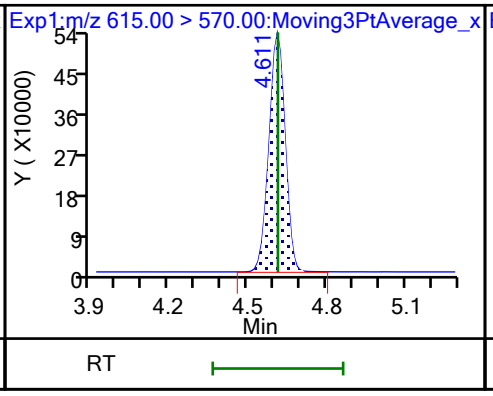
33 N-ethylperfluorooctanesulfonamid (M)



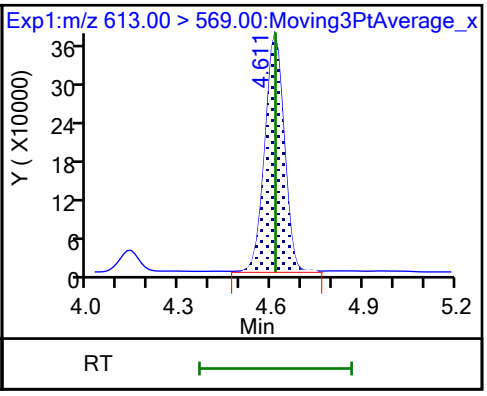
66 11-Chloroeicosafluoro-3-oxaundec



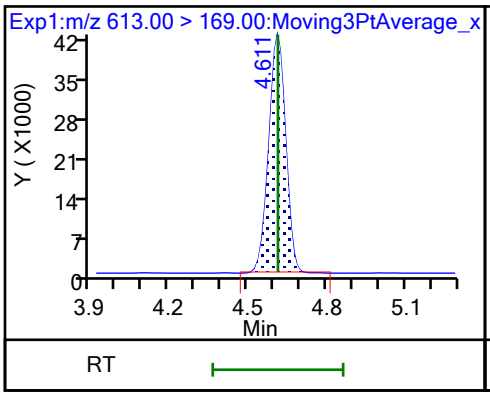
D 36 13C2 PFDoA



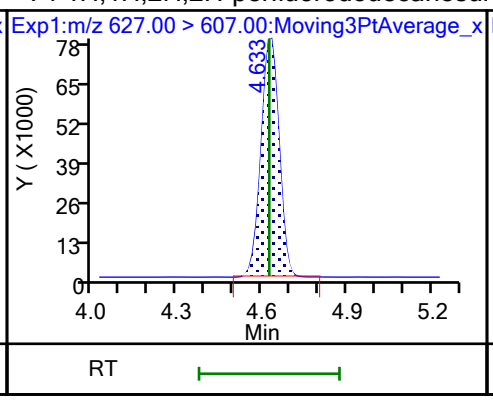
37 Perfluorododecanoic acid



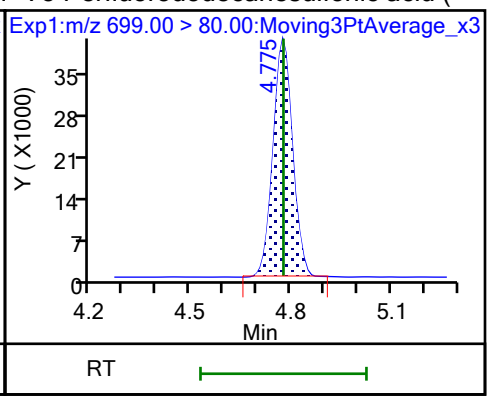
37 Perfluorododecanoic acid



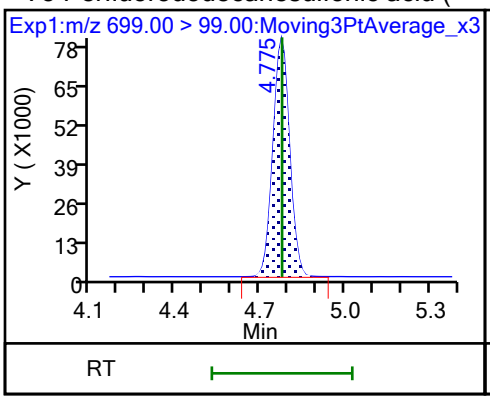
74 1H,1H,2H,2H-perfluorododecanesul



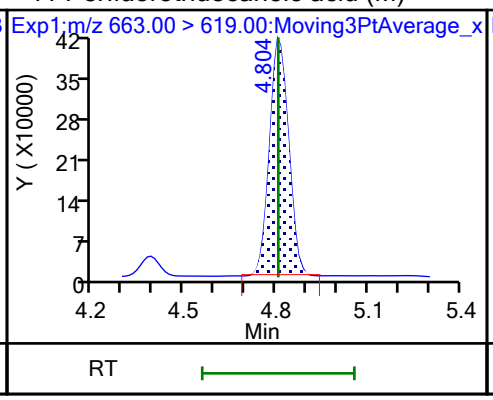
75 Perfluorododecanesulfonic acid (



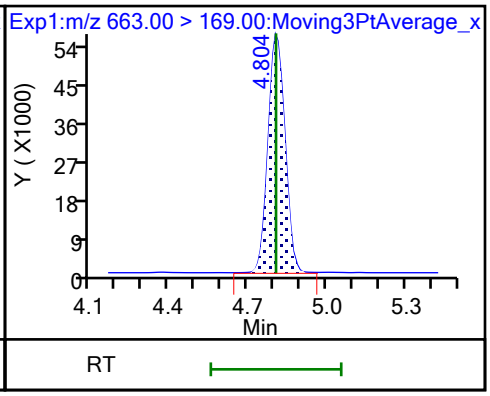
75 Perfluorododecanesulfonic acid (



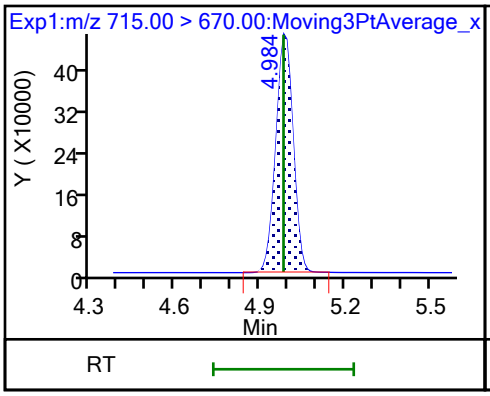
41 Perfluorotridecanoic acid (M)



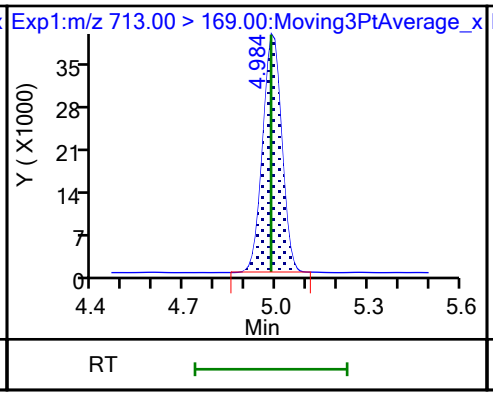
41 Perfluorotridecanoic acid



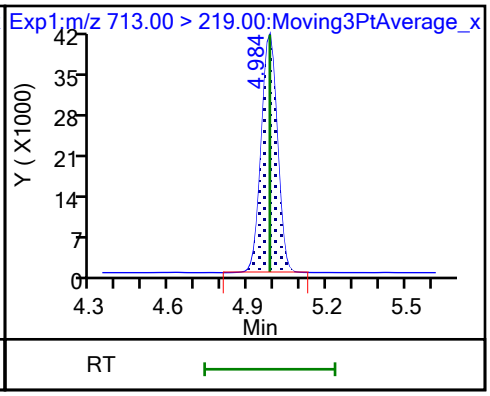
D 43 13C2 PFTeDA



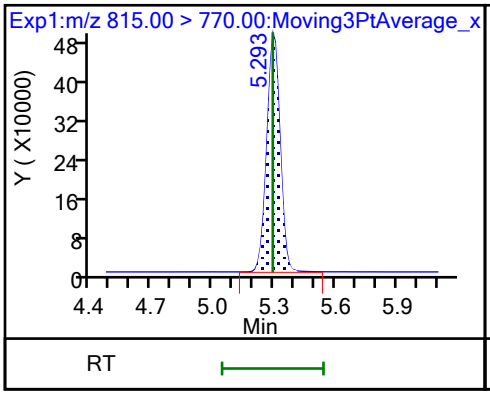
42 Perfluorotetradecanoic acid



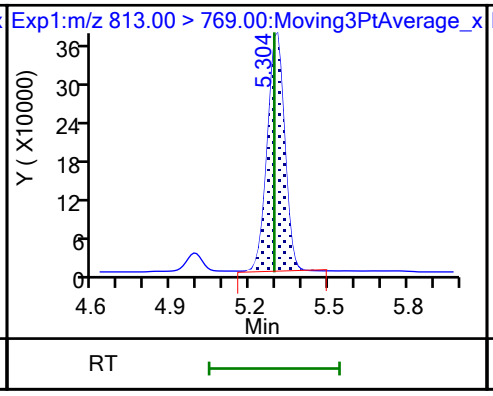
42 Perfluorotetradecanoic acid



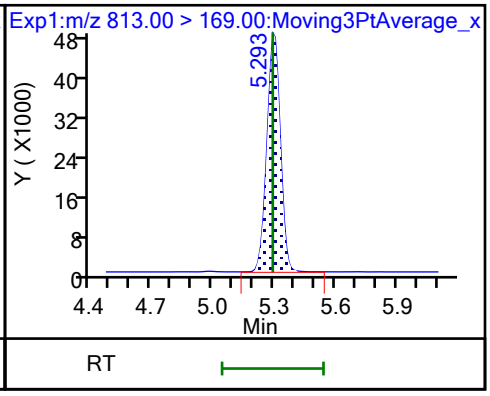
D 44 13C2 PFHxDA



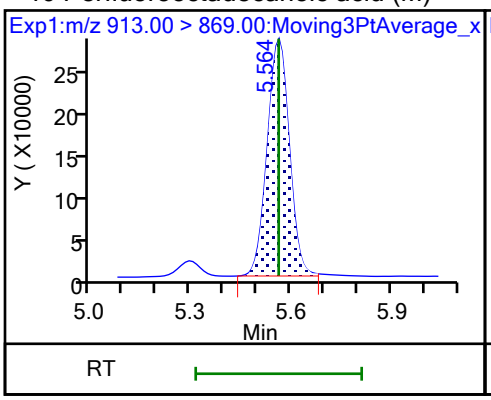
45 Perfluorohexadecanoic acid



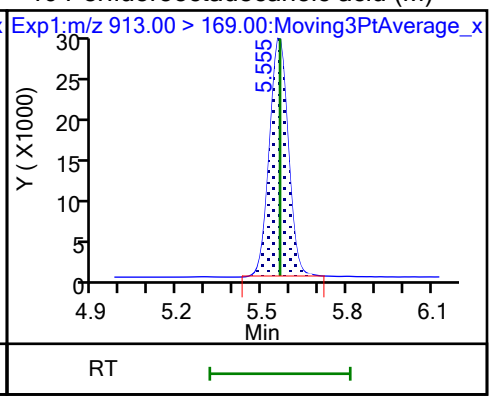
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

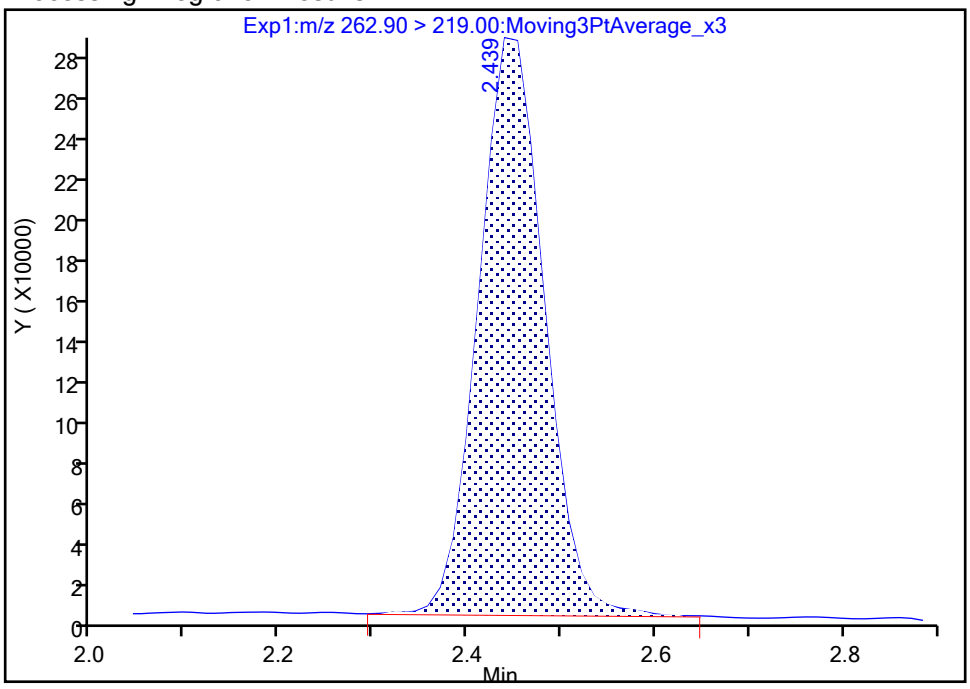
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

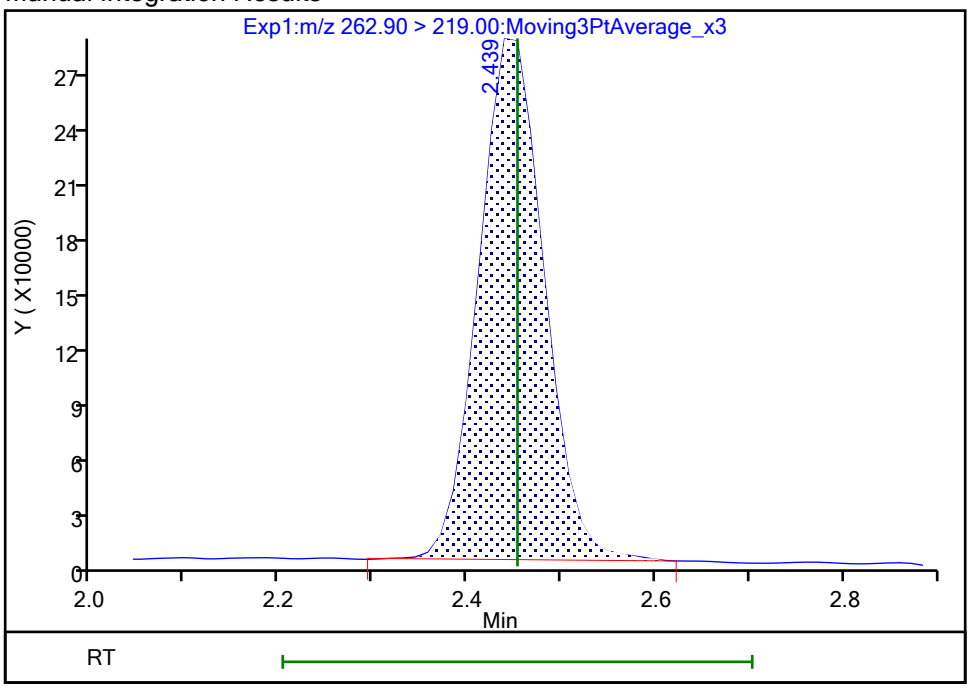
Processing Integration Results

RT: 2.44
Area: 1337470
Amount: 0.965392
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1337240
Amount: 0.965226
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

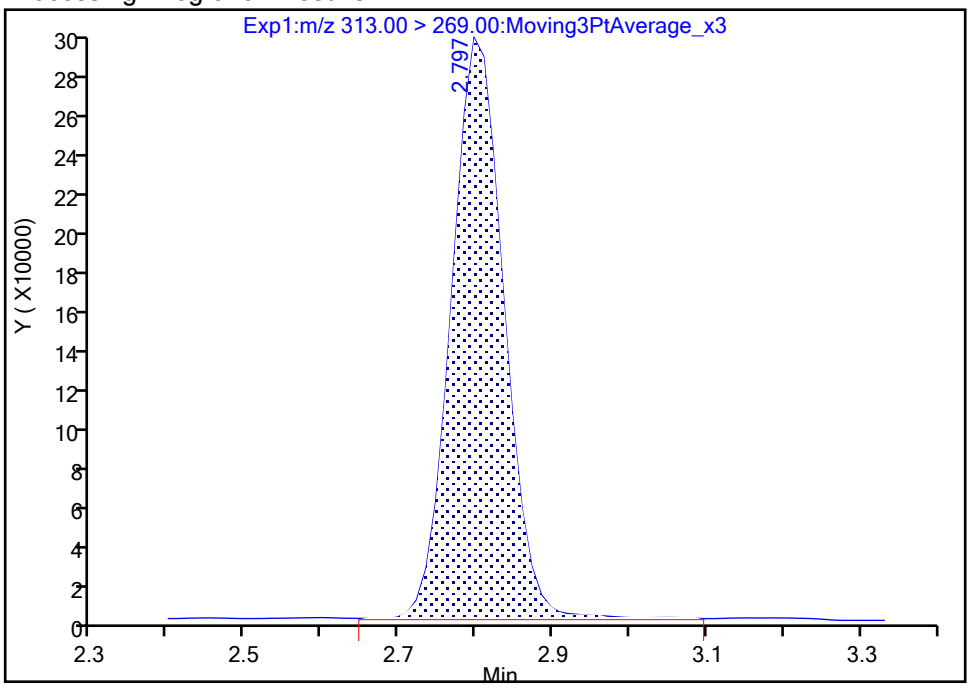
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

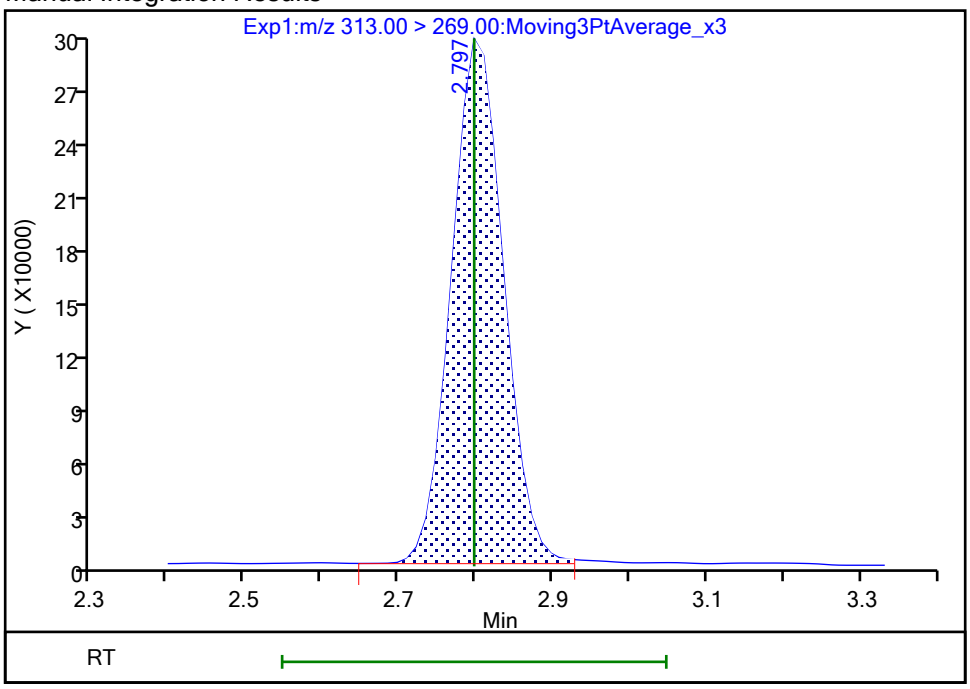
Processing Integration Results

RT: 2.80
Area: 1416915
Amount: 0.976311
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1408643
Amount: 0.970612
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

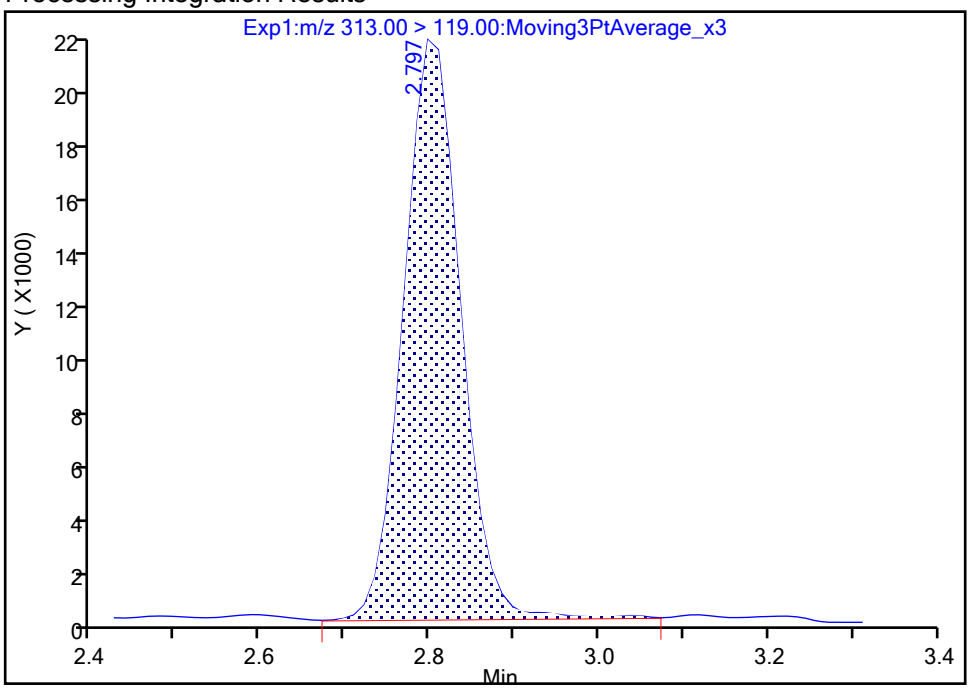
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

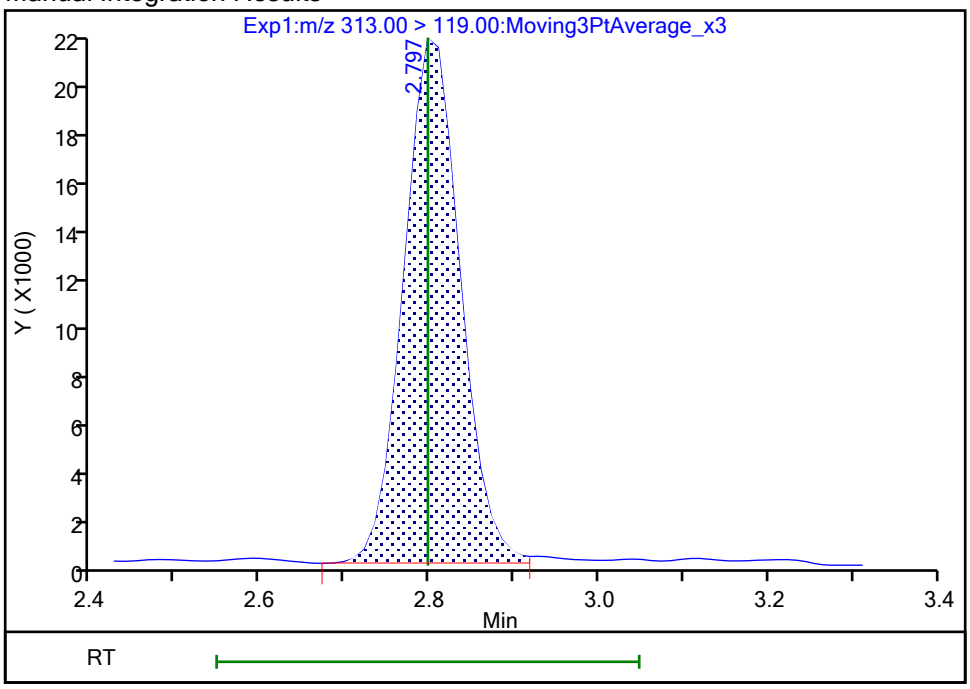
Processing Integration Results

RT: 2.80
Area: 100522
Amount: 0.976311
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 99602
Amount: 0.970612
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

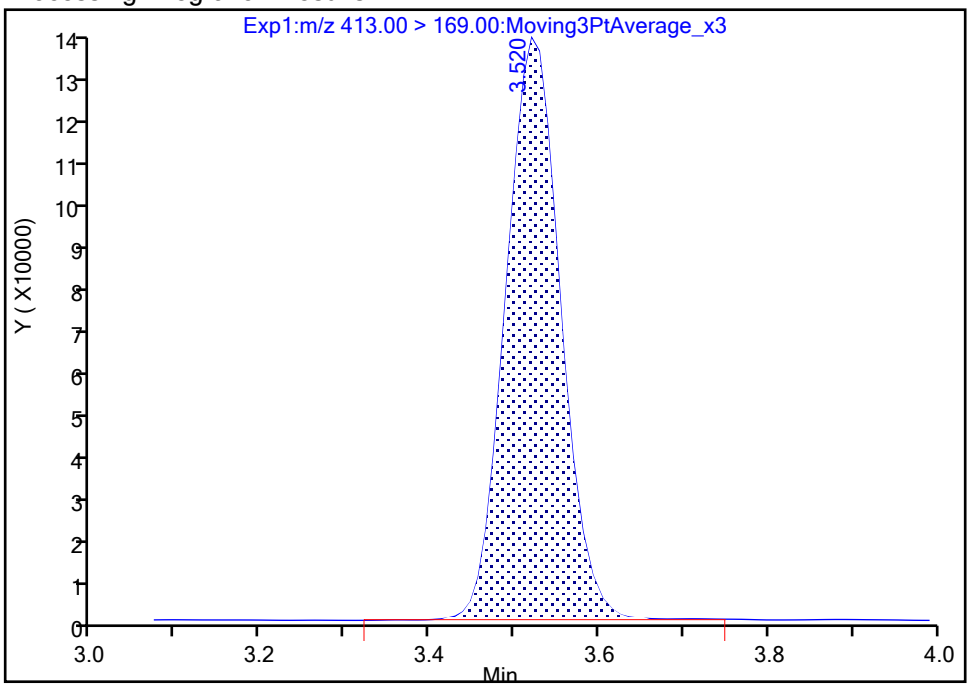
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

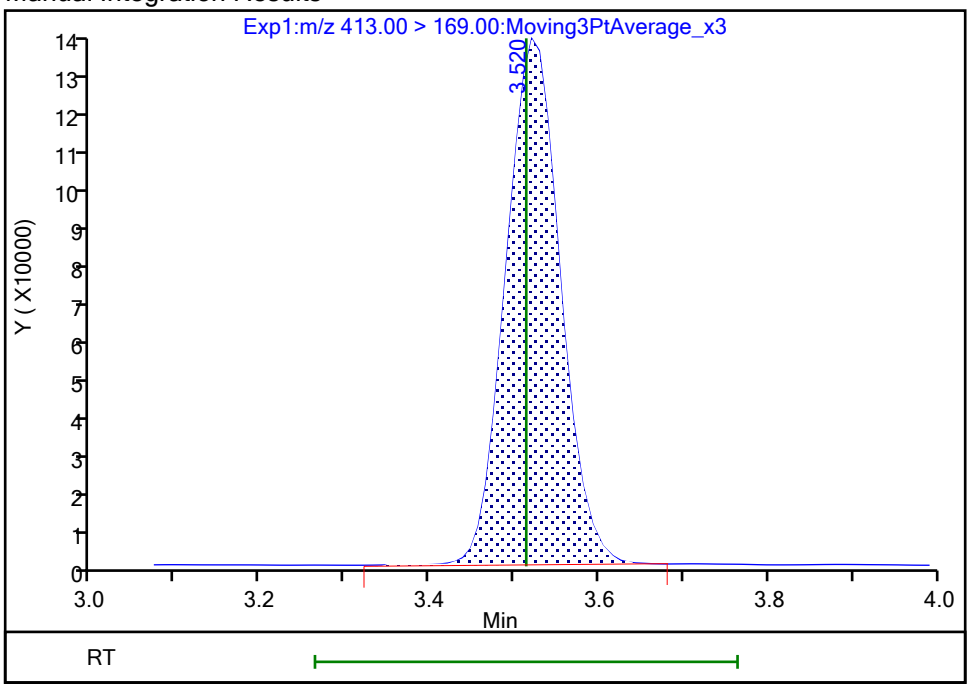
Processing Integration Results

RT: 3.52
Area: 609967
Amount: 0.952578
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 611265
Amount: 0.957360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

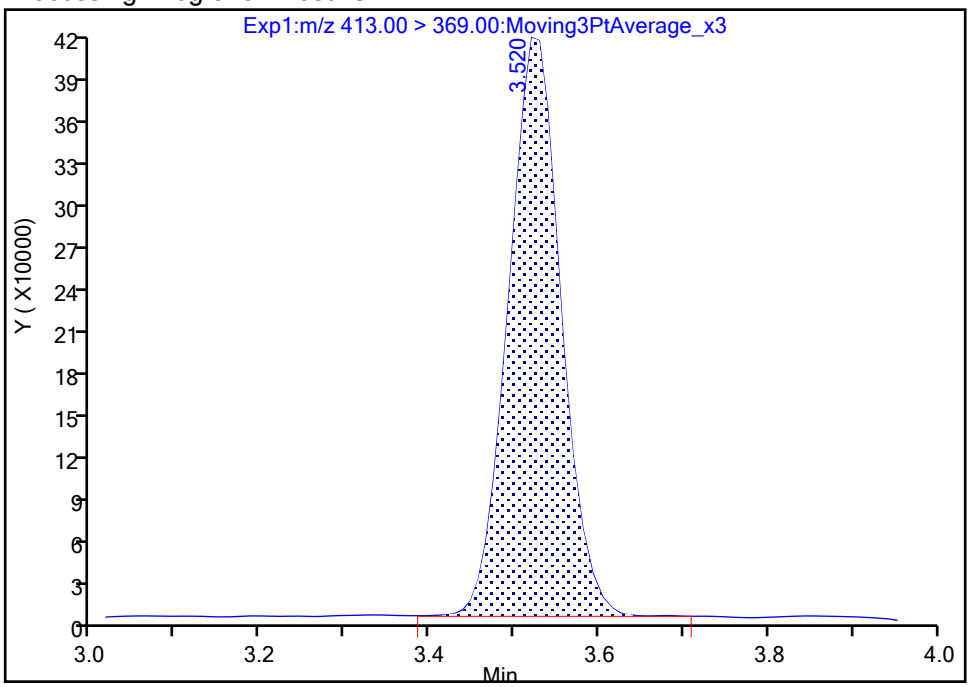
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

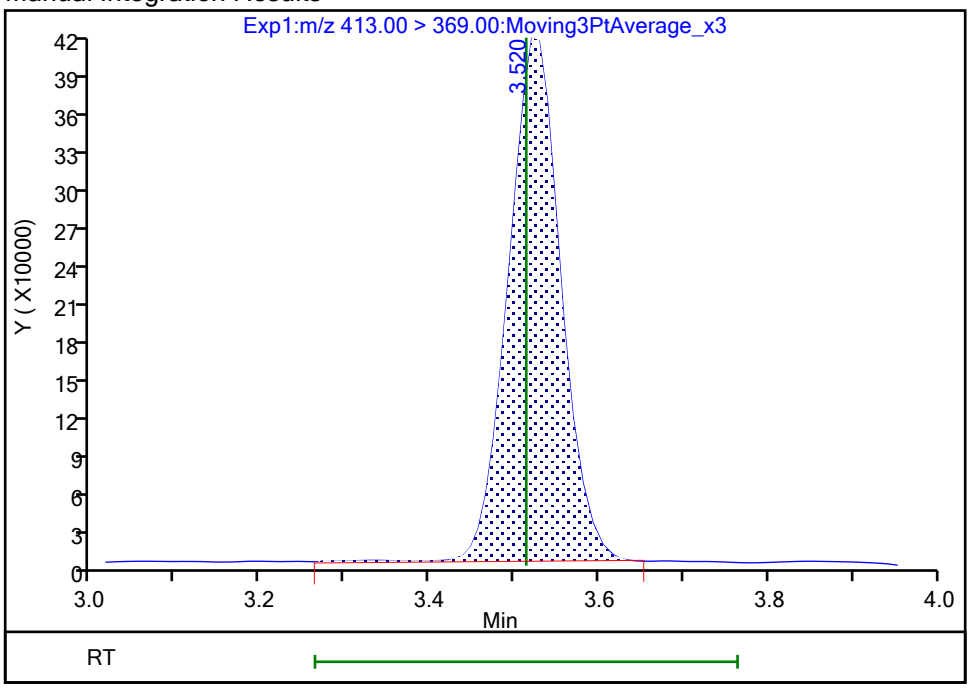
Processing Integration Results

RT: 3.52
Area: 1749540
Amount: 0.952578
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1758322
Amount: 0.957360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

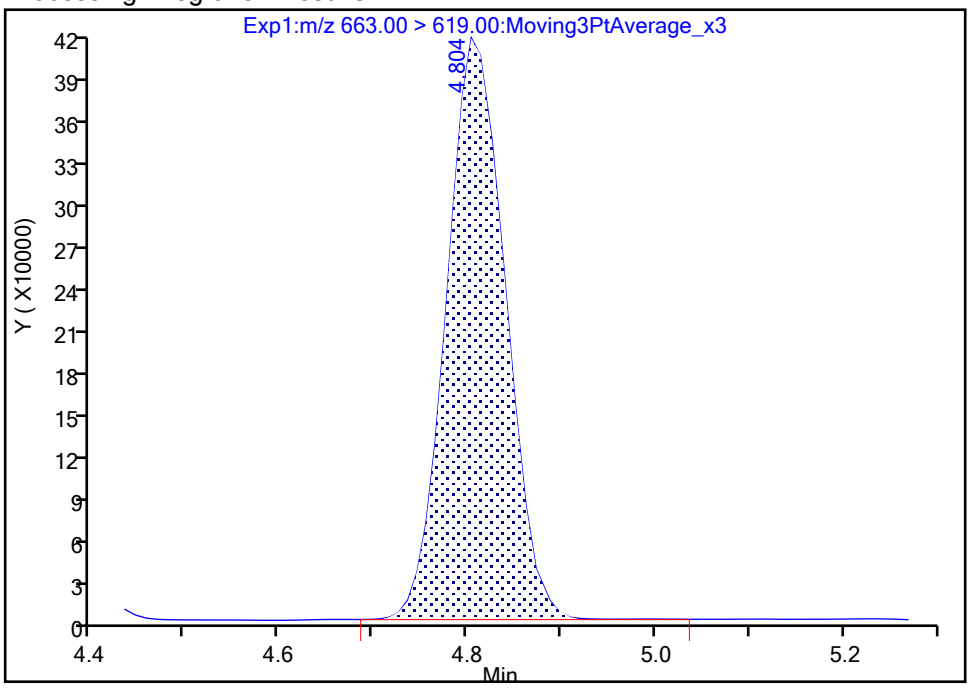
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

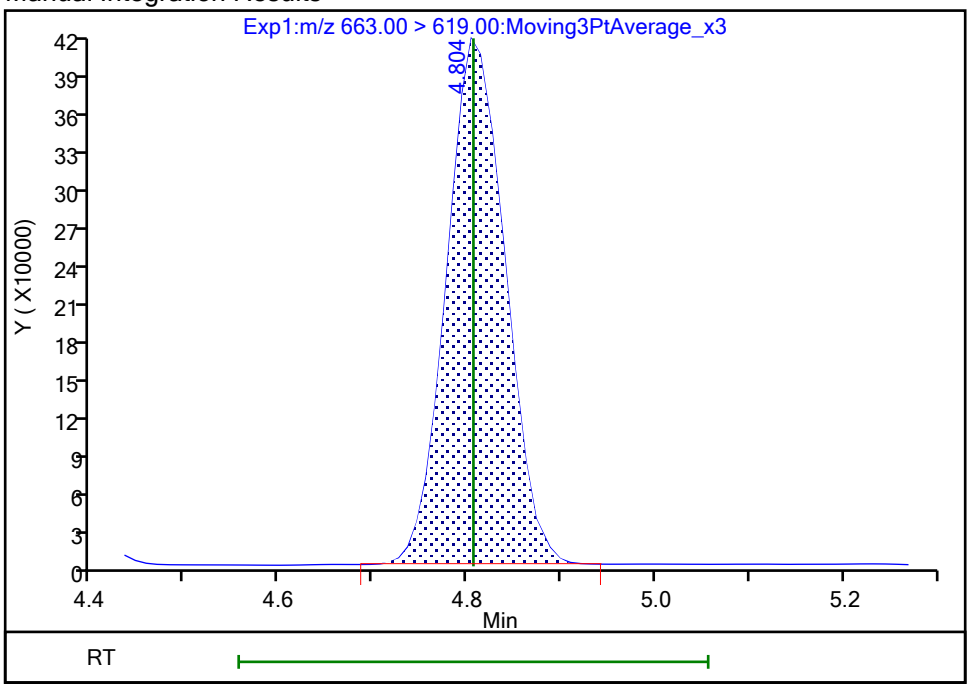
Processing Integration Results

RT: 4.80
Area: 1805234
Amount: 0.915367
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 1797107
Amount: 0.911246
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

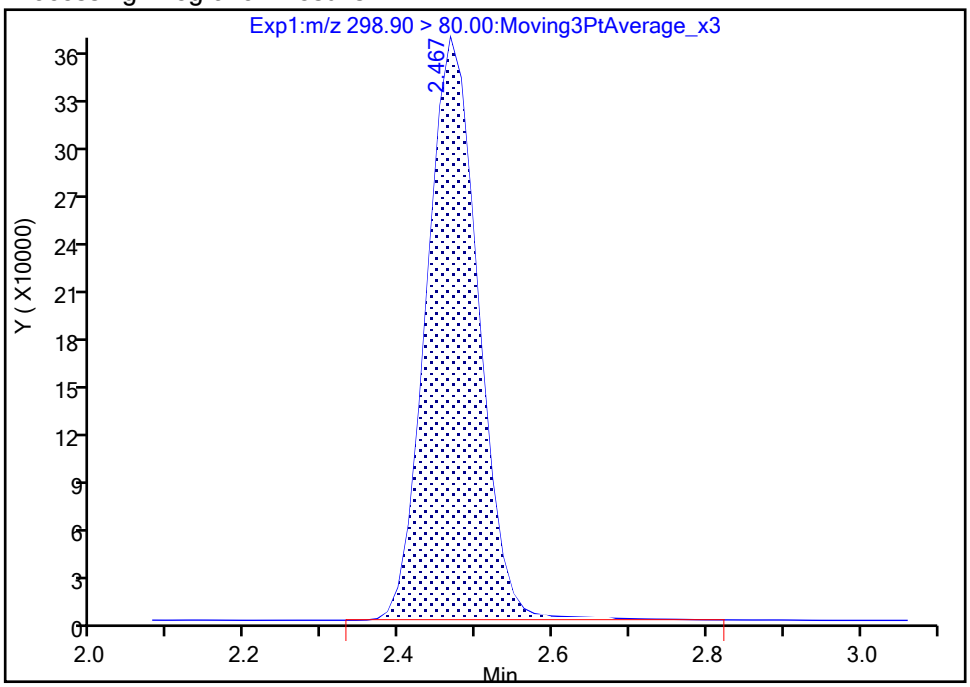
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

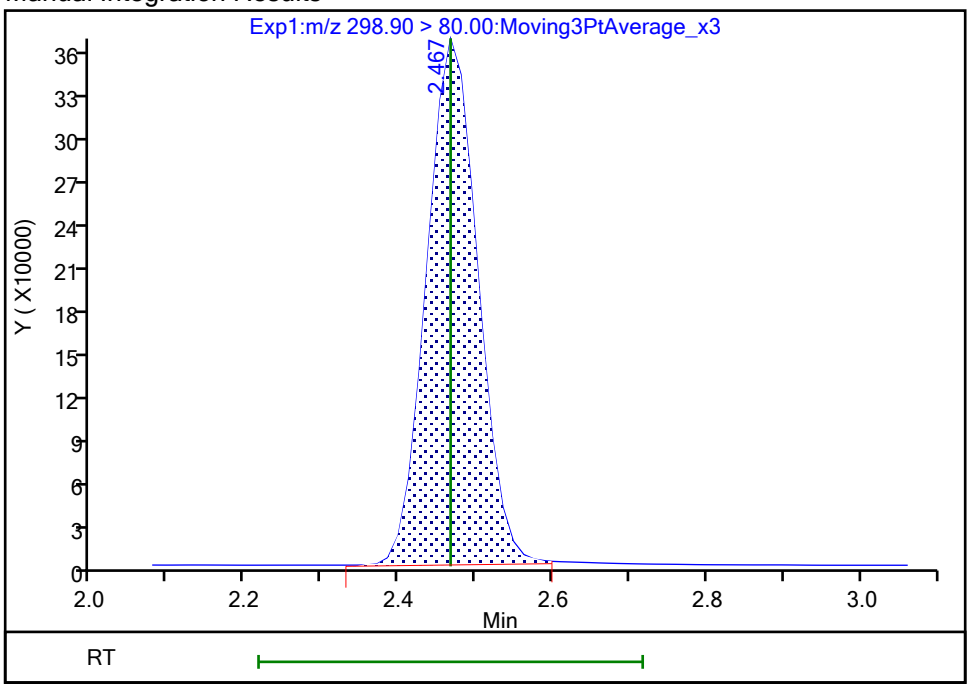
Processing Integration Results

RT: 2.47
Area: 1702974
Amount: 0.863503
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1691027
Amount: 0.857446
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

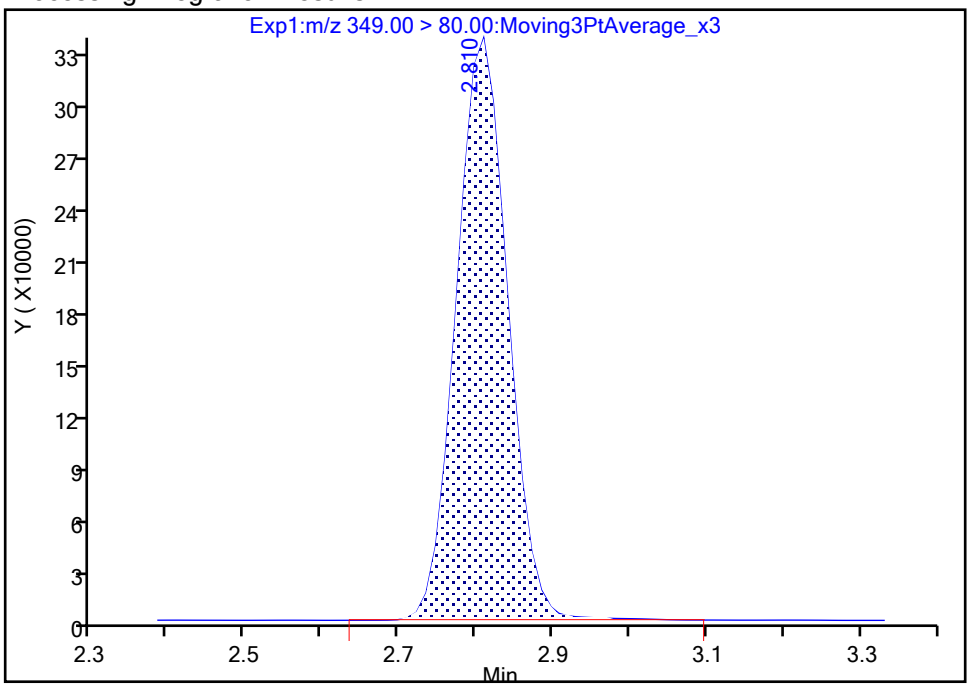
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

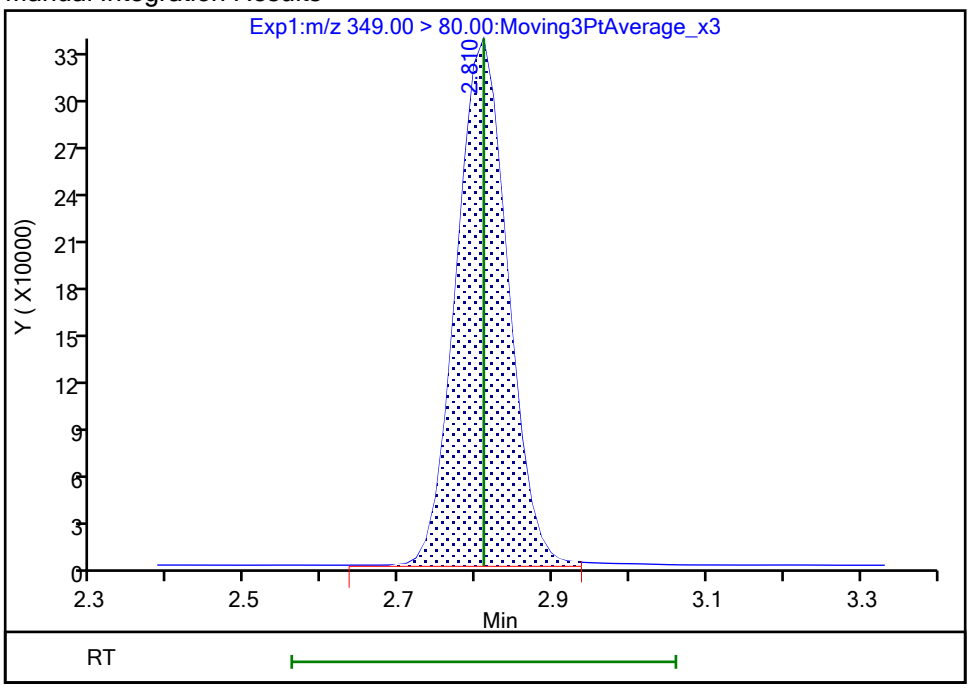
Processing Integration Results

RT: 2.81
Area: 1542101
Amount: 0.925009
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1535898
Amount: 0.921289
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

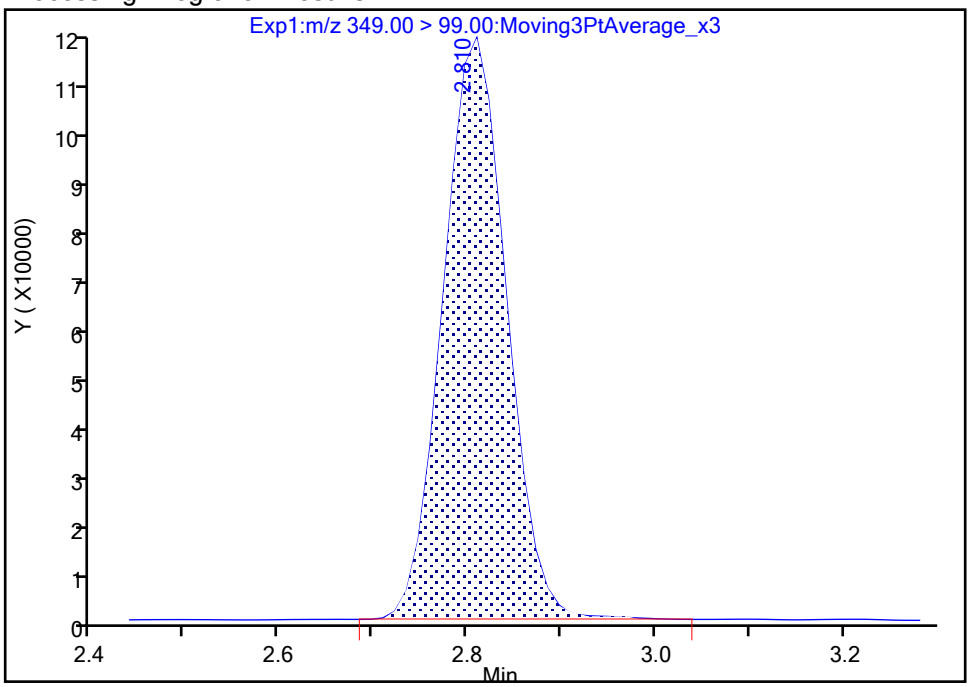
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

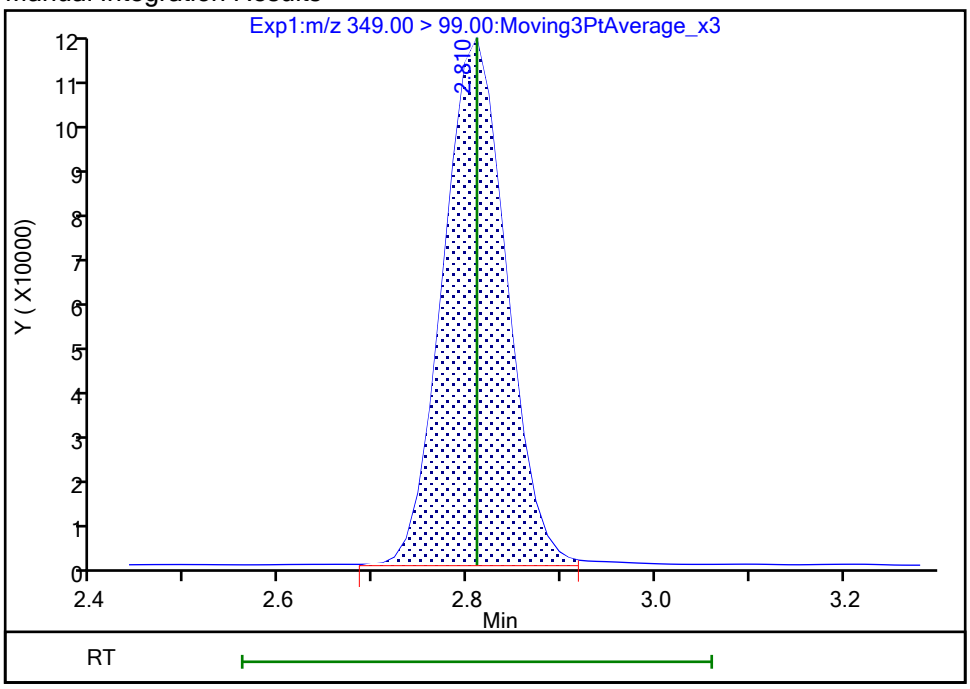
Processing Integration Results

RT: 2.81
Area: 540706
Amount: 0.925009
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 538165
Amount: 0.921289
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

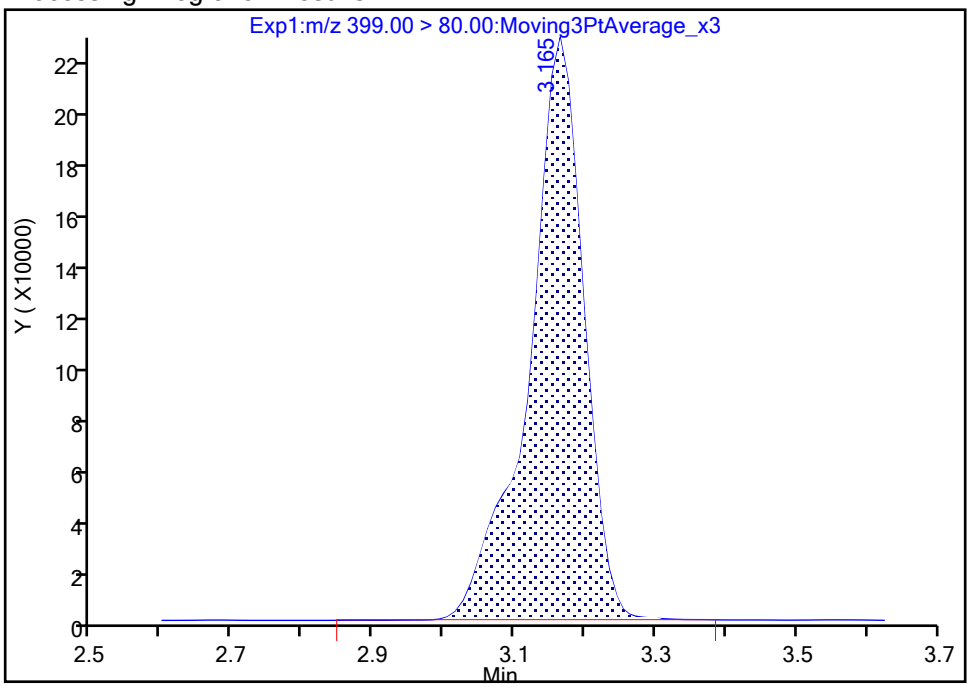
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

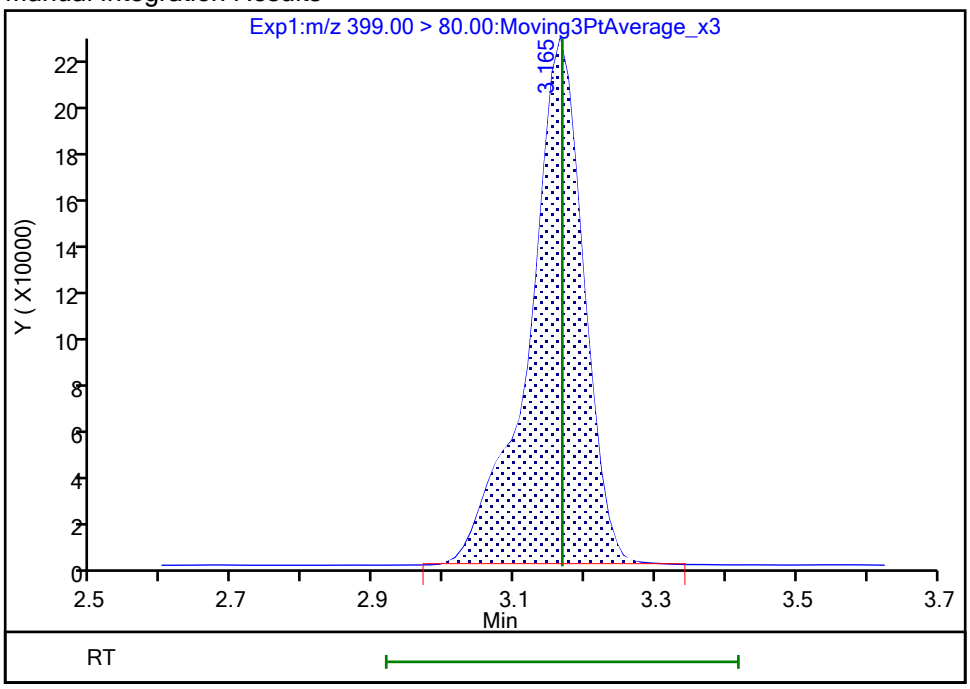
Processing Integration Results

RT: 3.16
Area: 1203394
Amount: 0.851549
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1200738
Amount: 0.849670
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

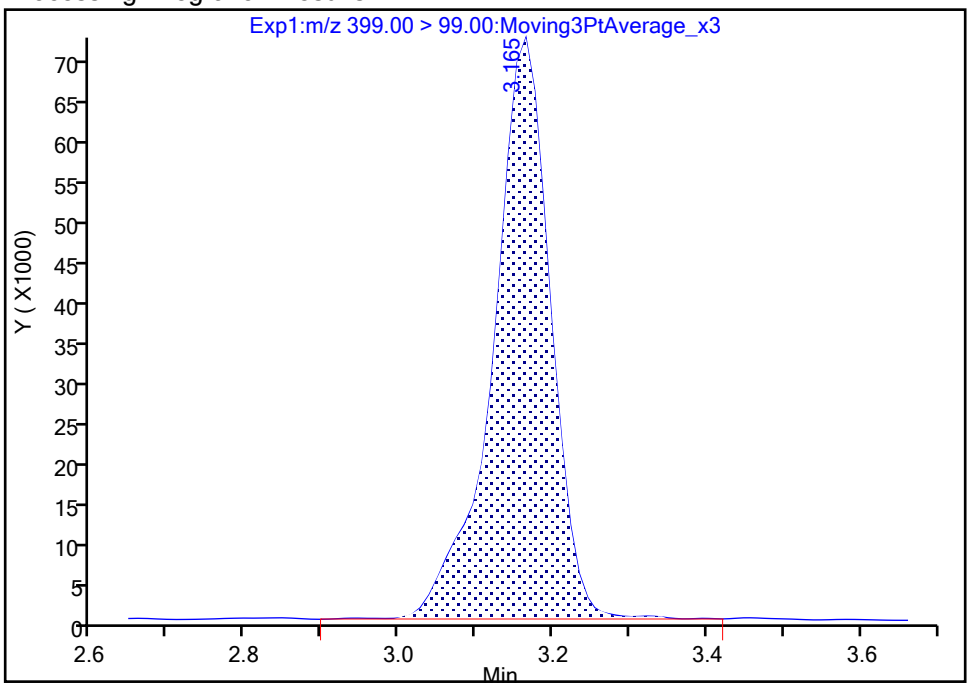
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

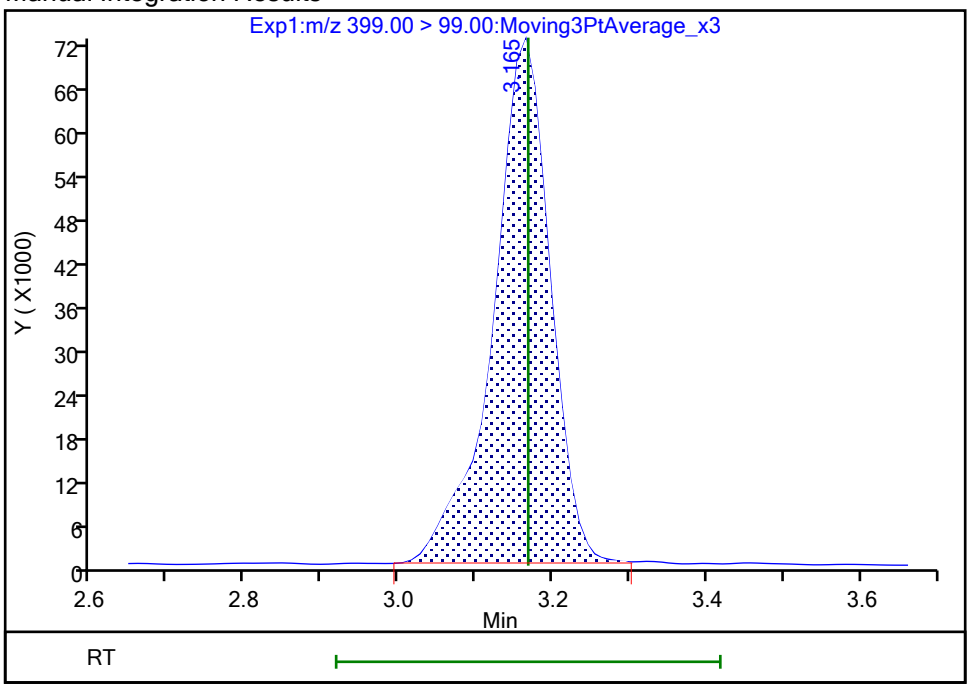
Processing Integration Results

RT: 3.16
Area: 373991
Amount: 0.851549
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 368667
Amount: 0.849670
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

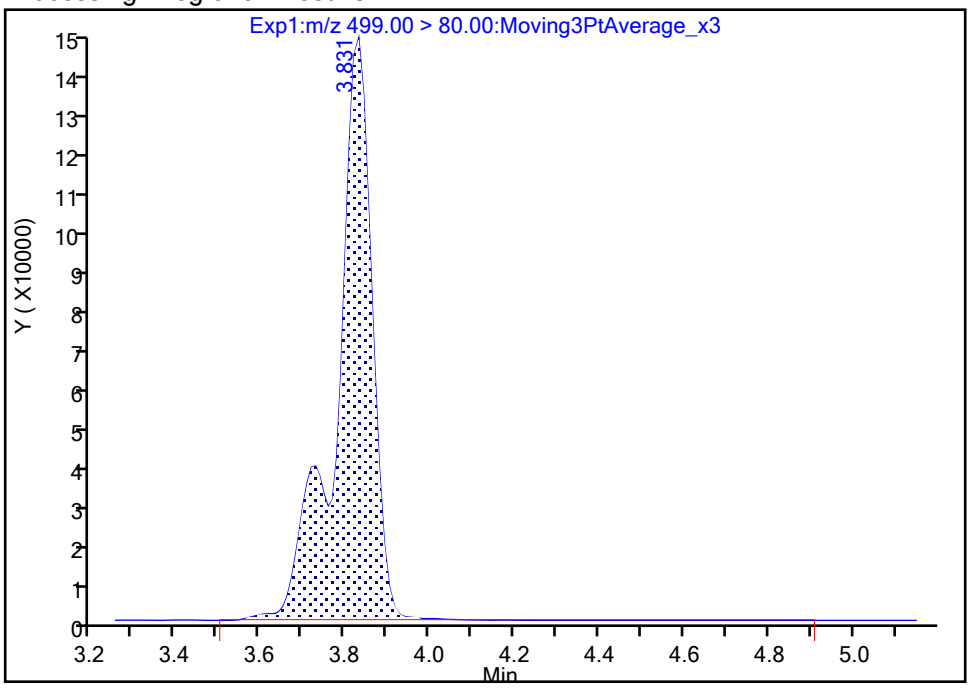
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

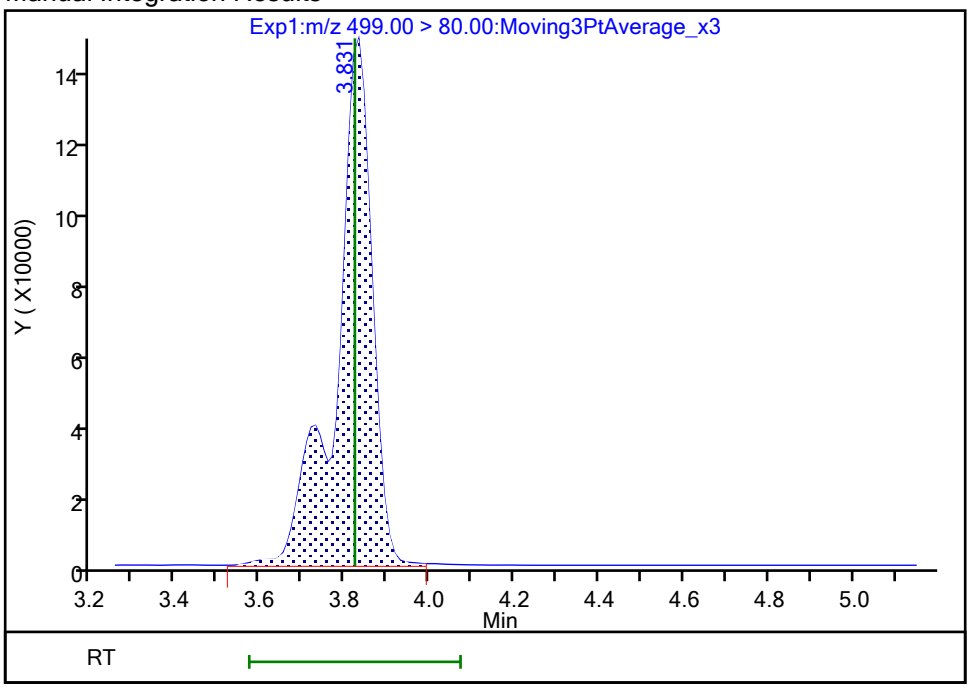
Processing Integration Results

RT: 3.83
Area: 830029
Amount: 0.879539
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 827433
Amount: 0.876788
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

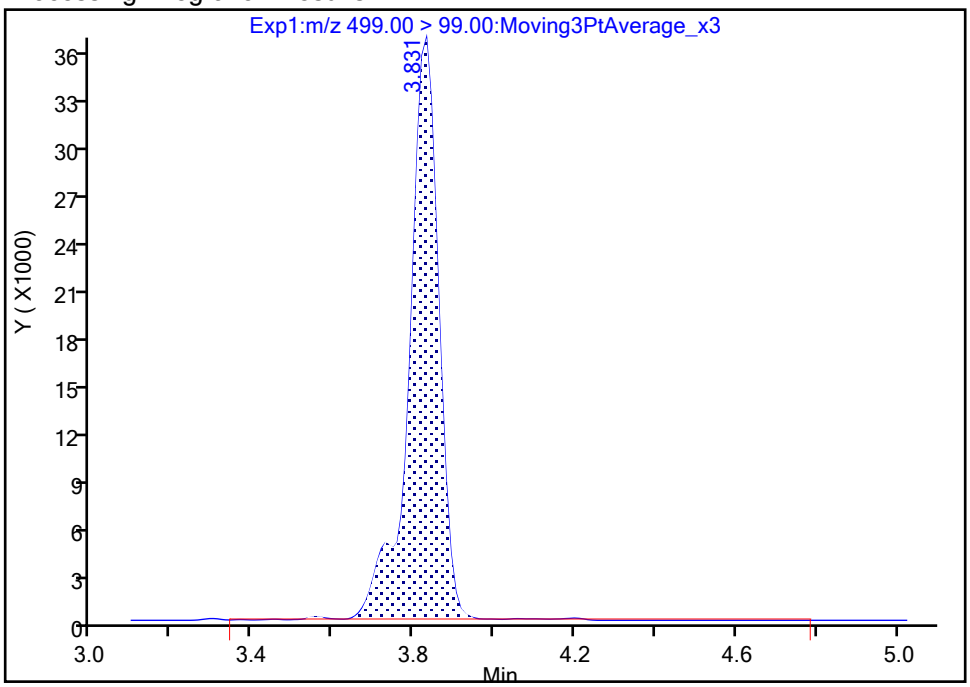
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

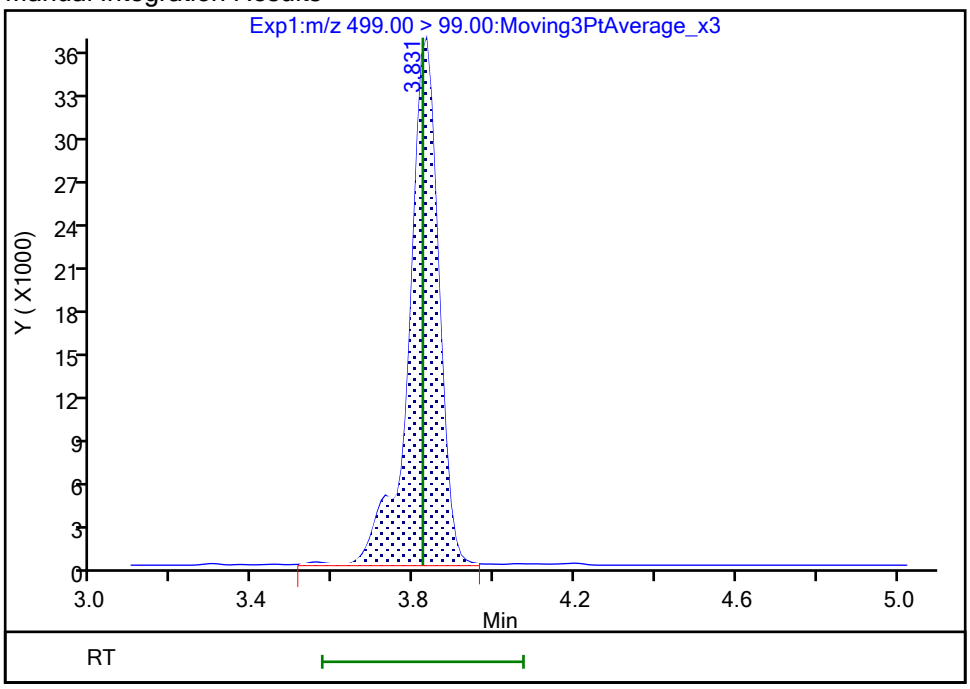
Processing Integration Results

RT: 3.83
Area: 188058
Amount: 0.879539
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 185063
Amount: 0.876788
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

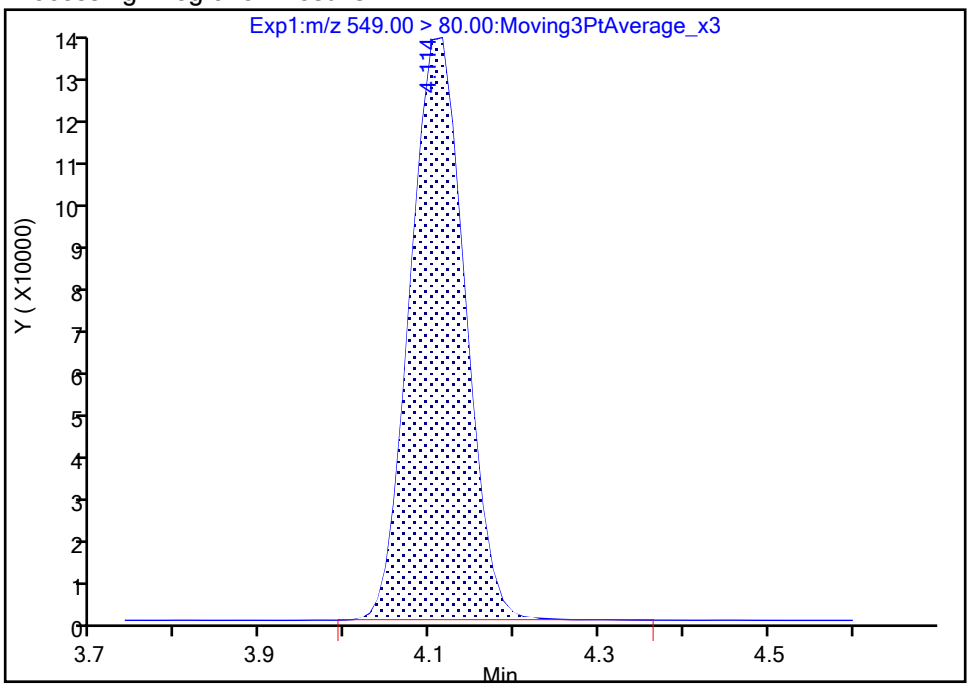
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

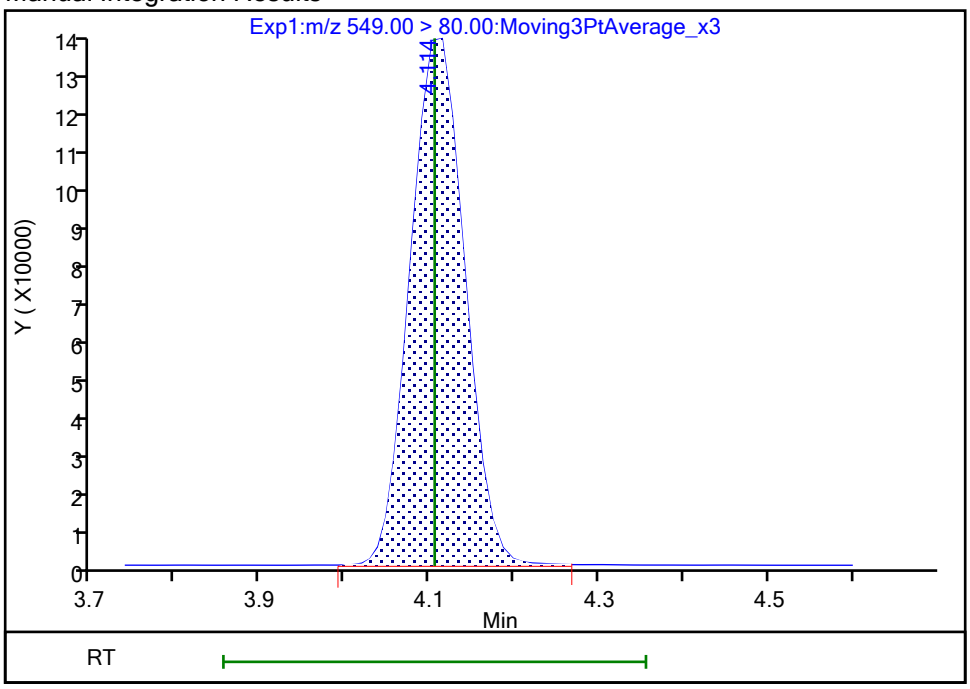
Processing Integration Results

RT: 4.11
Area: 616434
Amount: 0.858611
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 616050
Amount: 0.858076
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

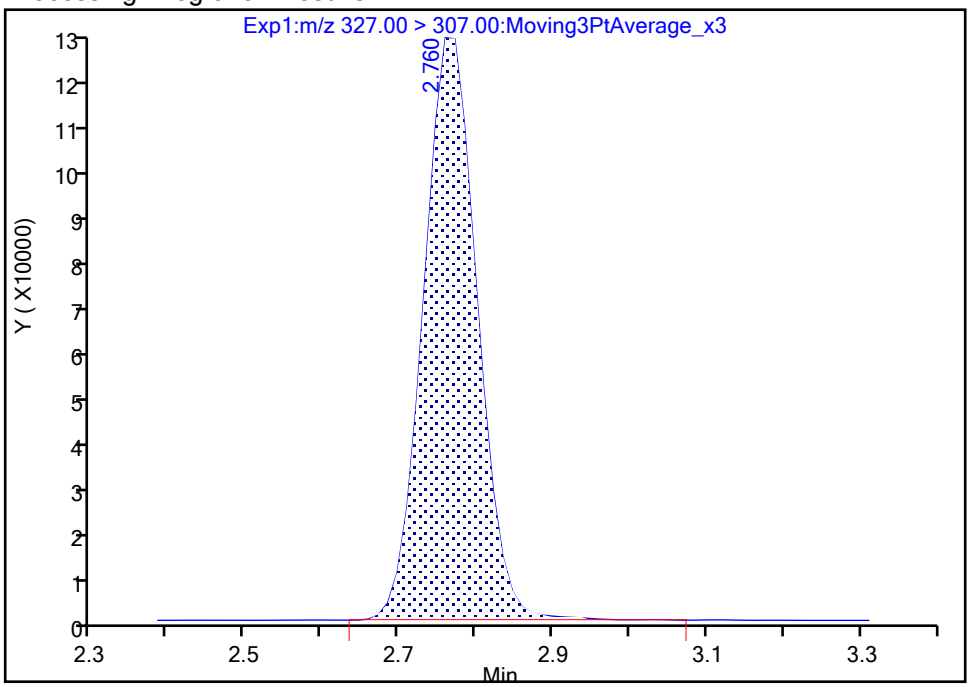
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

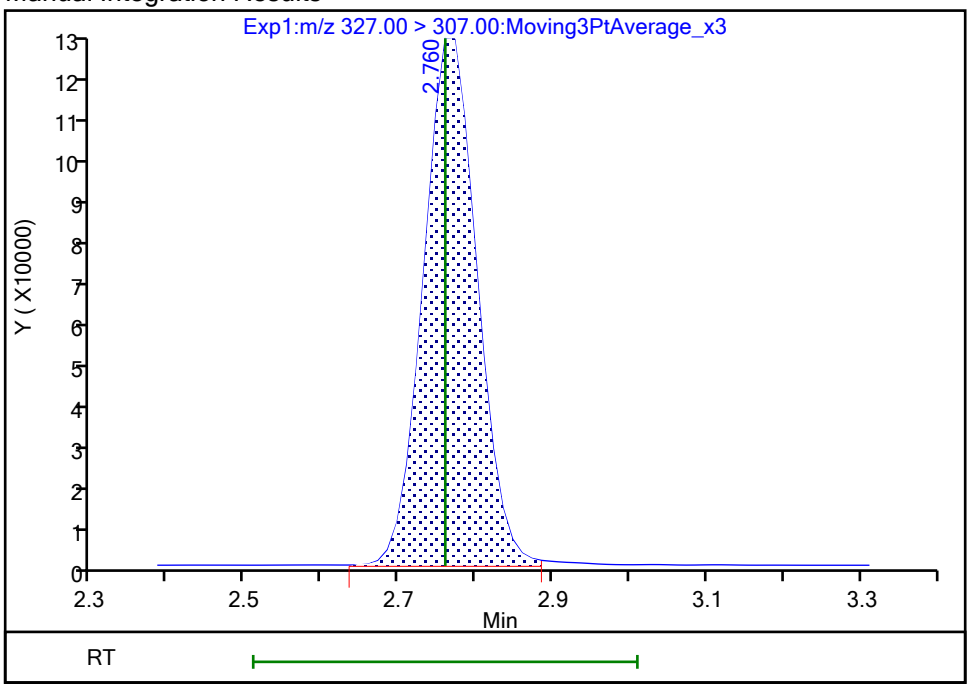
Processing Integration Results

RT: 2.76
Area: 624552
Amount: 0.955192
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 620909
Amount: 0.949620
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

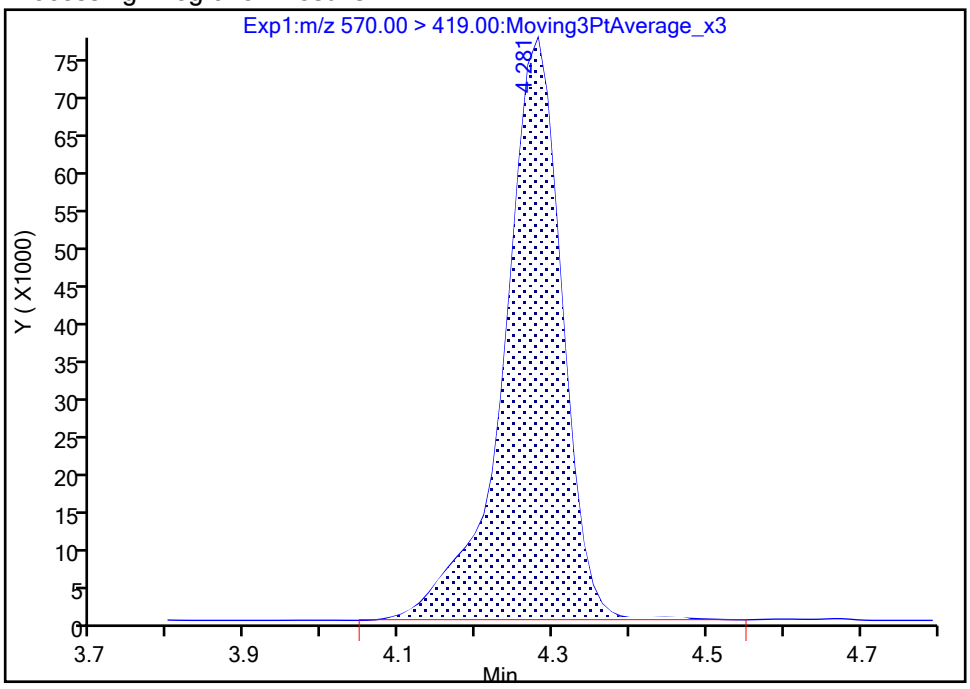
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

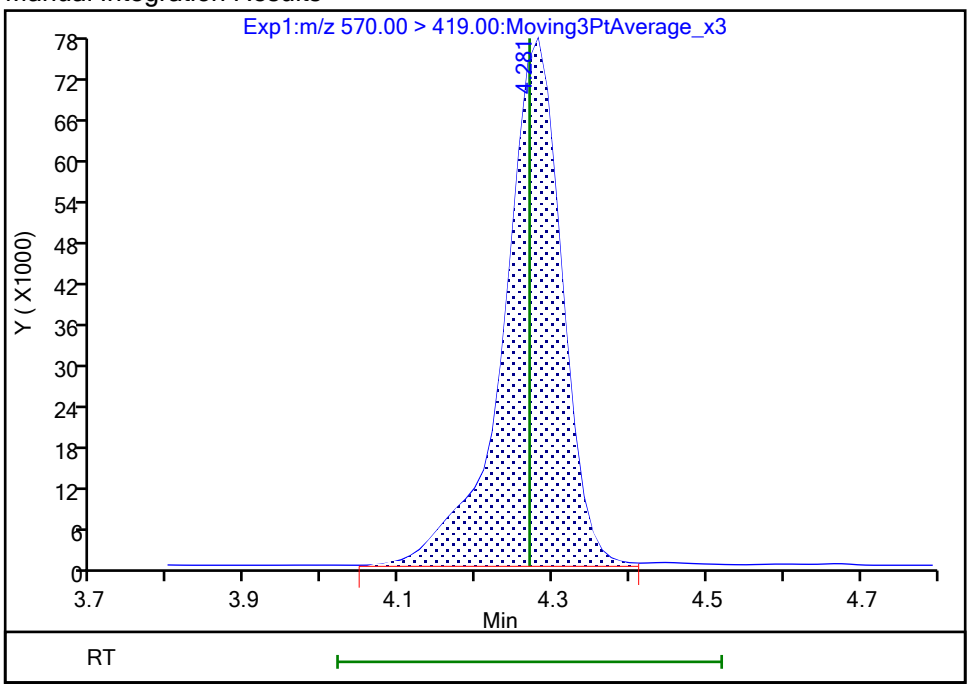
Processing Integration Results

RT: 4.28
Area: 414002
Amount: 0.985941
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 411947
Amount: 0.981047
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

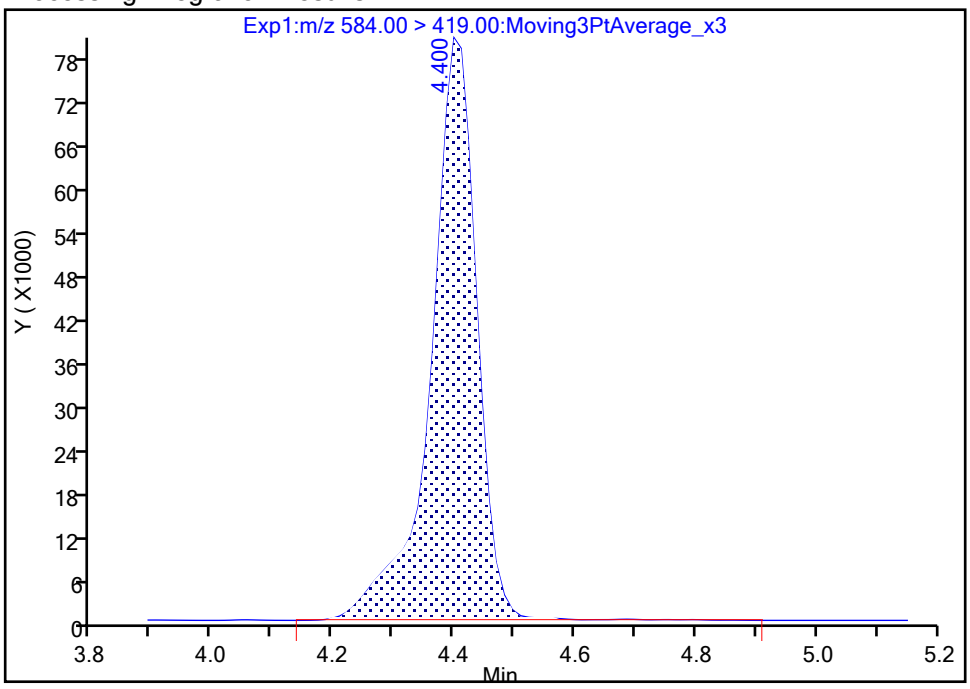
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

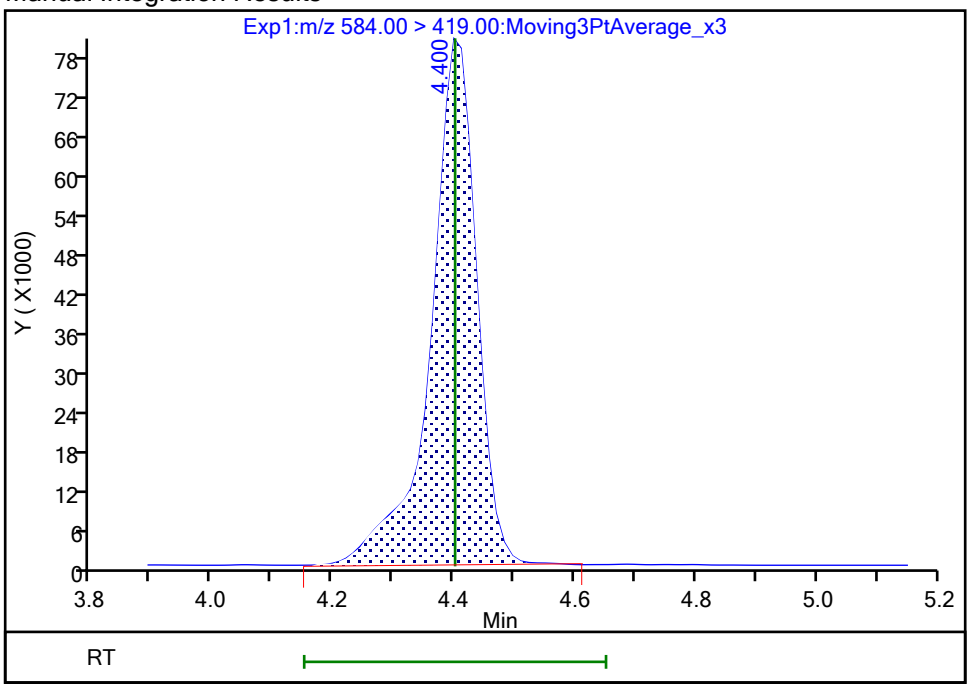
Processing Integration Results

RT: 4.40
Area: 426430
Amount: 0.943846
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 423778
Amount: 0.937976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

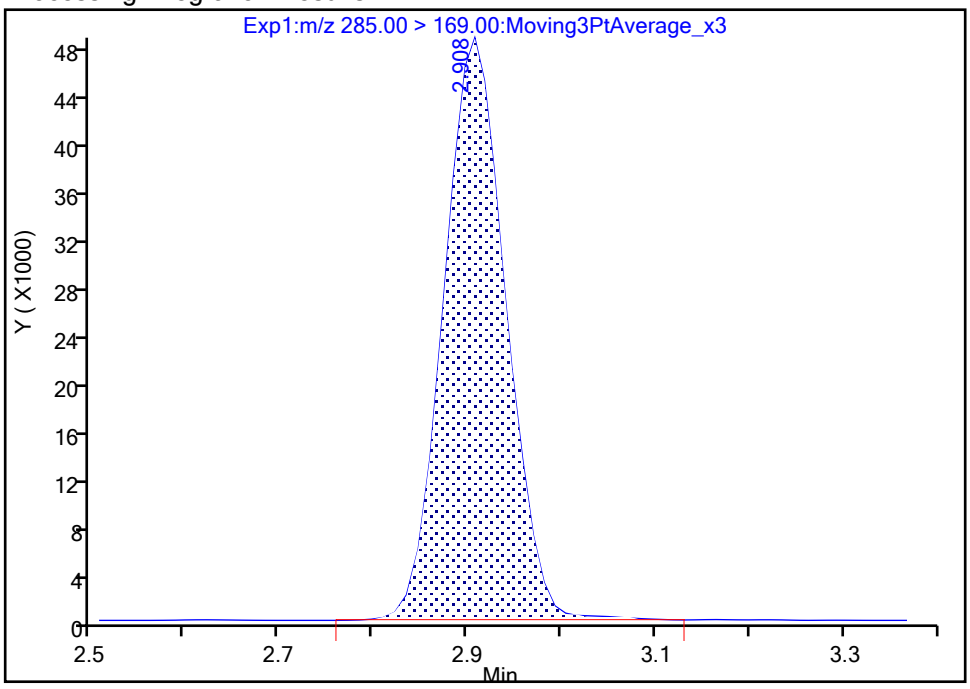
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

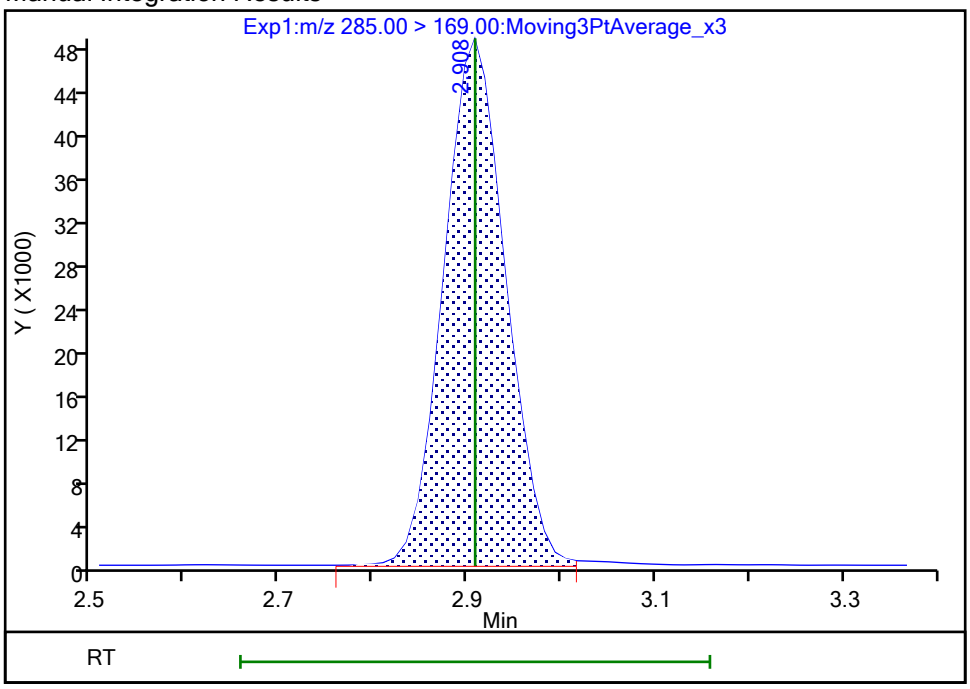
Processing Integration Results

RT: 2.91
Area: 224560
Amount: 0.954633
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 223128
Amount: 0.948545
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

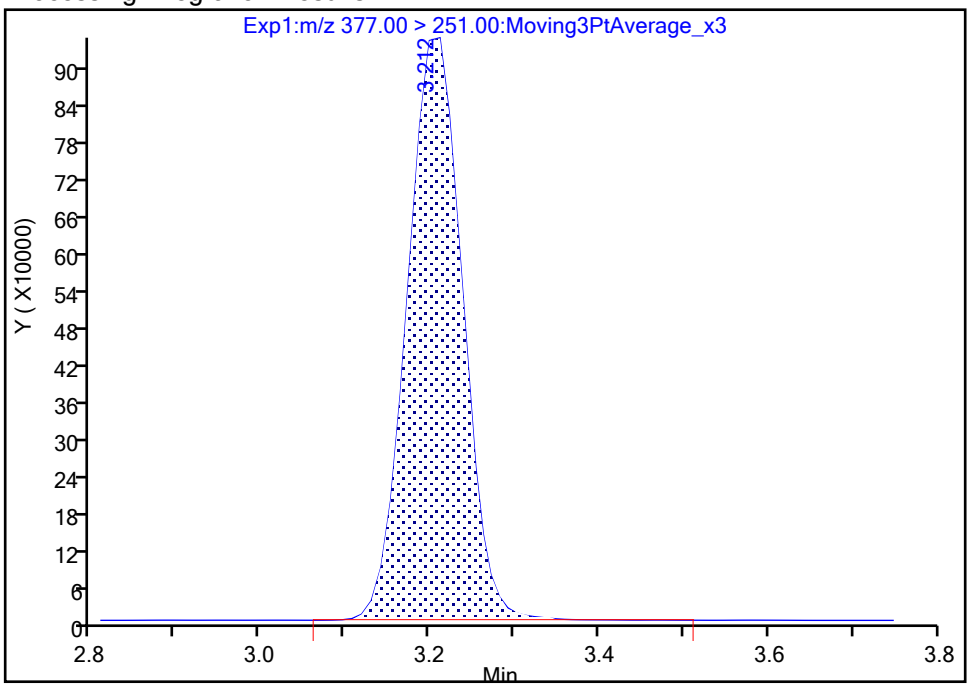
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

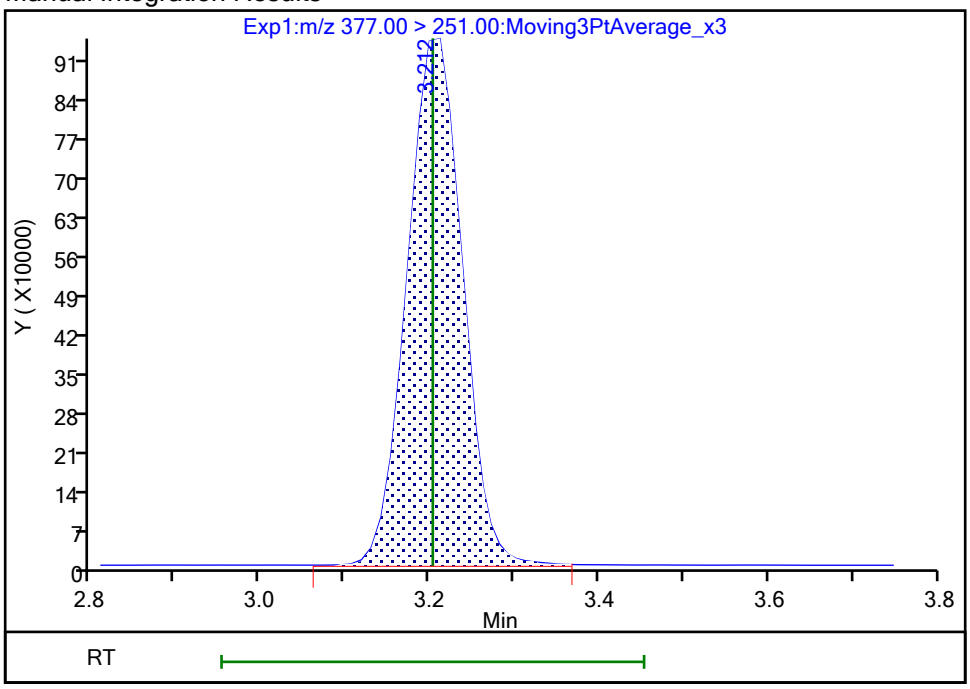
Processing Integration Results

RT: 3.21
Area: 4327875
Amount: 0.929621
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 4324703
Amount: 0.928940
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

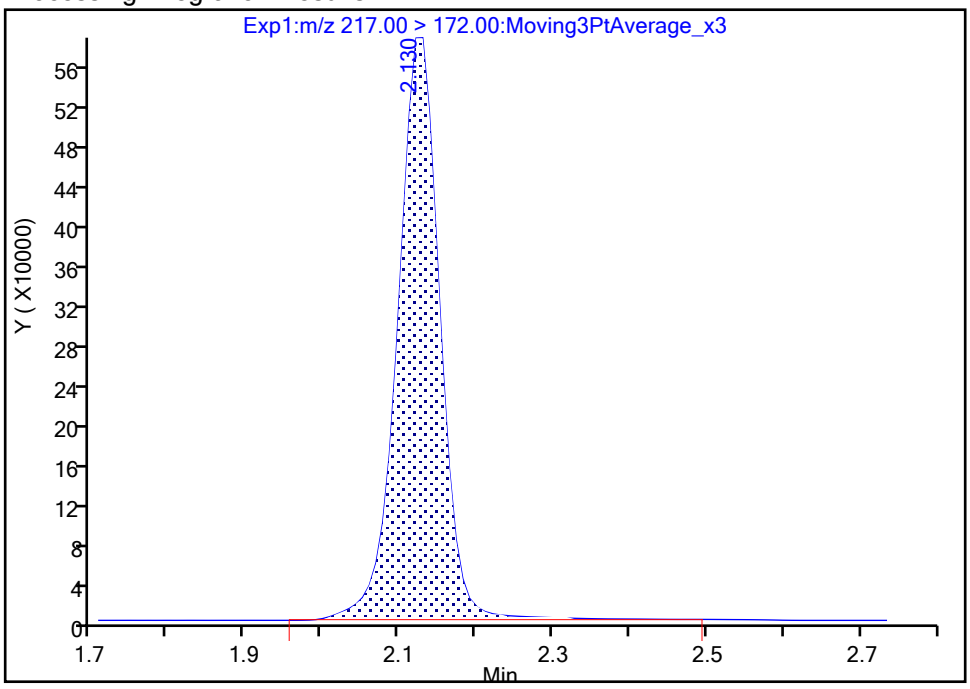
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

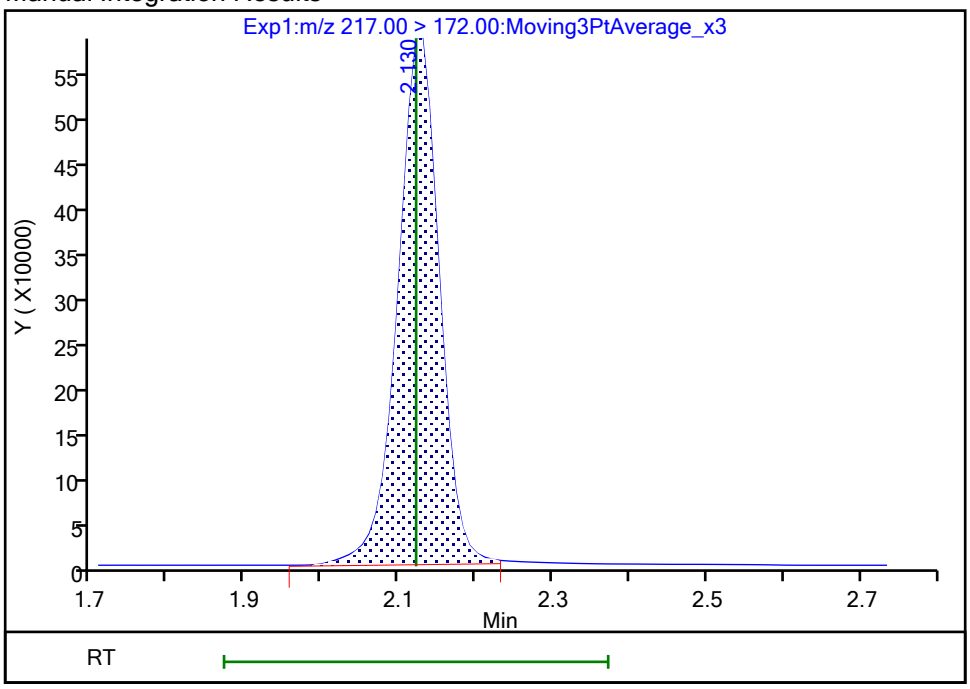
Processing Integration Results

RT: 2.13
Area: 2231192
Amount: 1.334093
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2210490
Amount: 1.321714
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

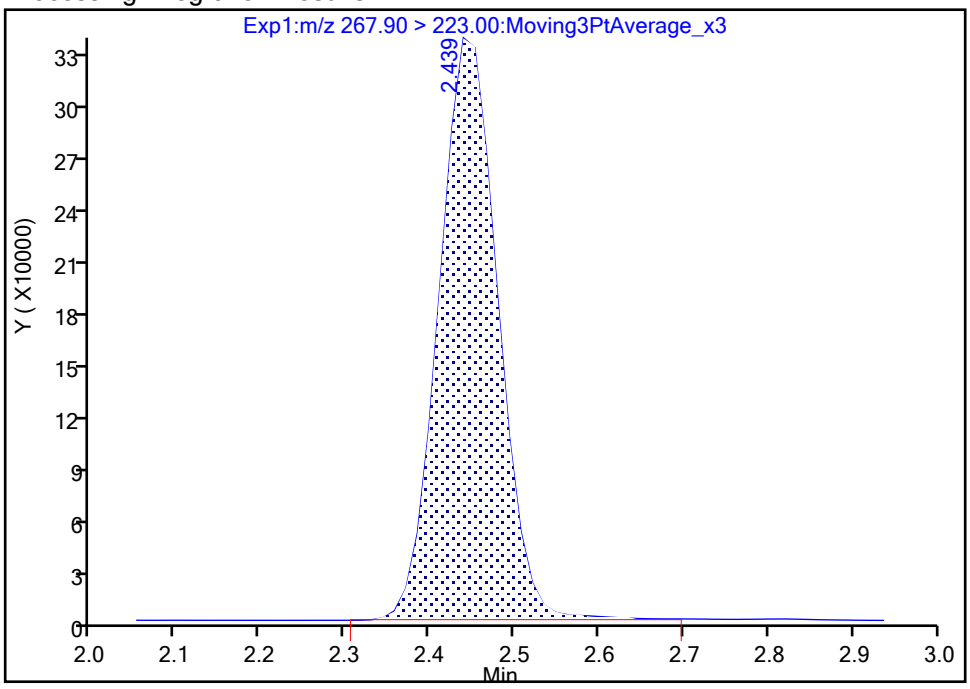
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

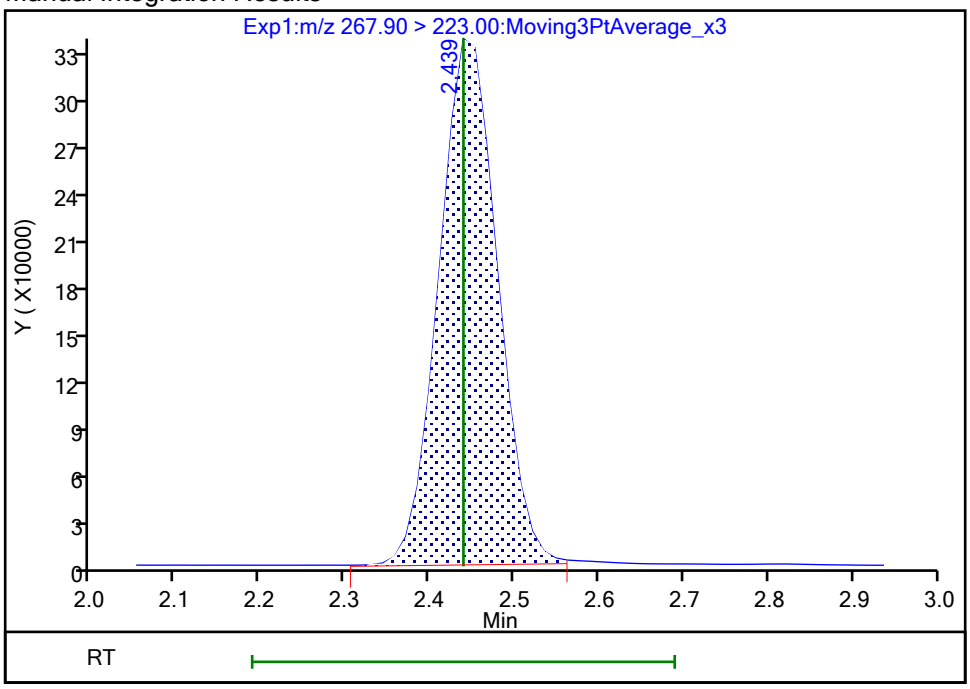
Processing Integration Results

RT: 2.44
Area: 1612648
Amount: 1.242442
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1604781
Amount: 1.236381
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

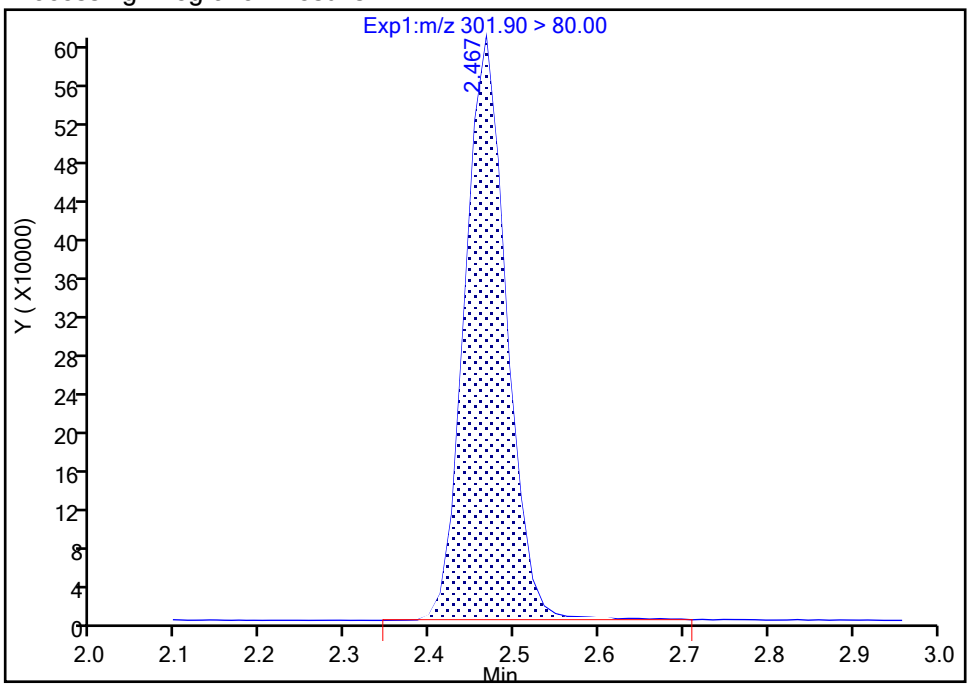
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

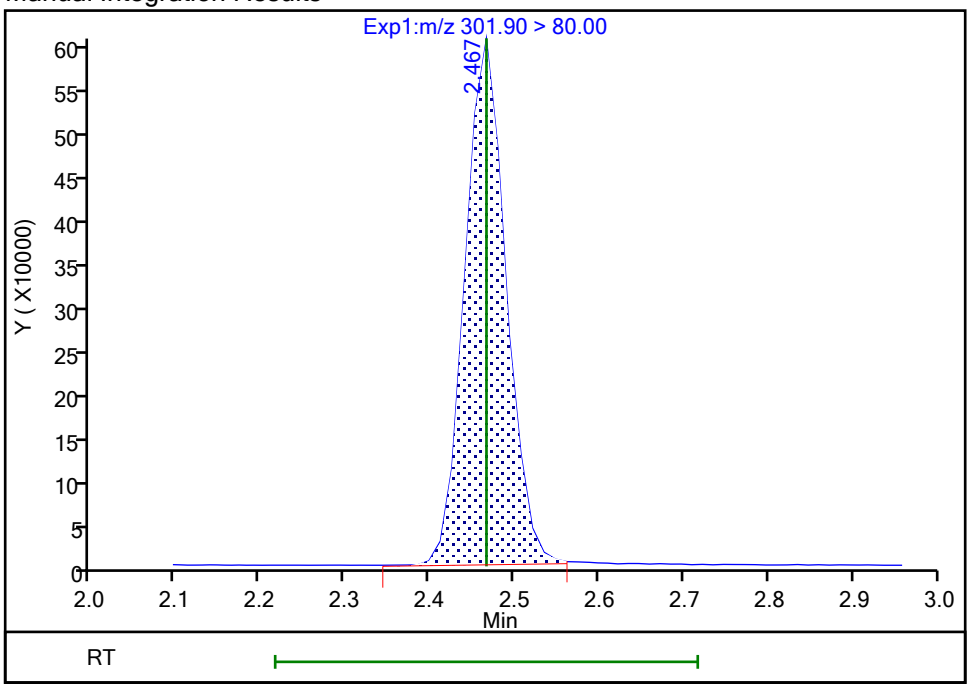
Processing Integration Results

RT: 2.47
Area: 2067564
Amount: 1.177280
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2052677
Amount: 1.168803
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

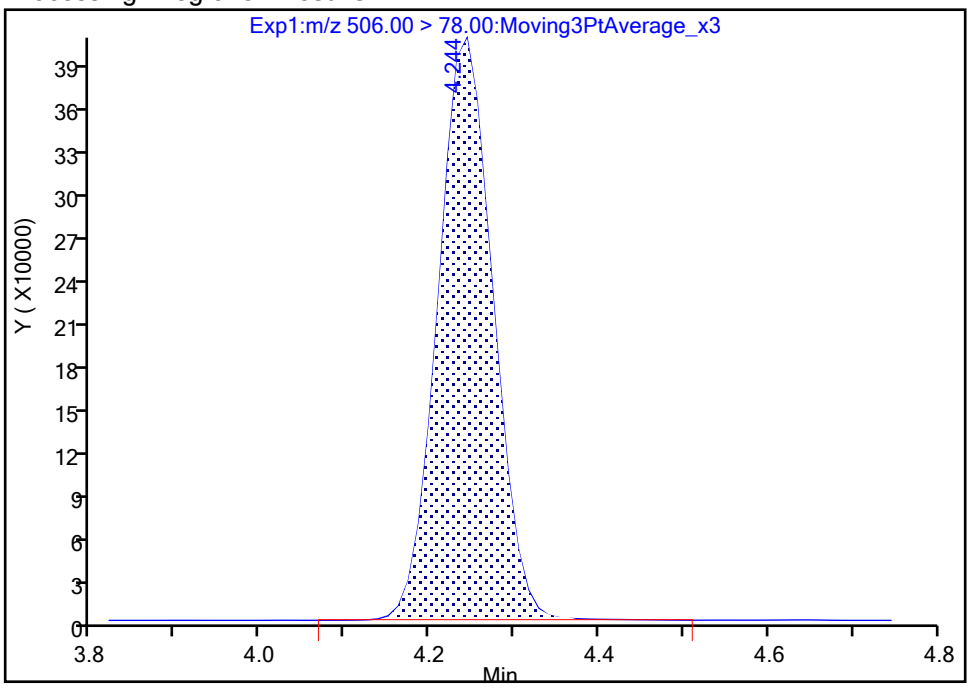
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

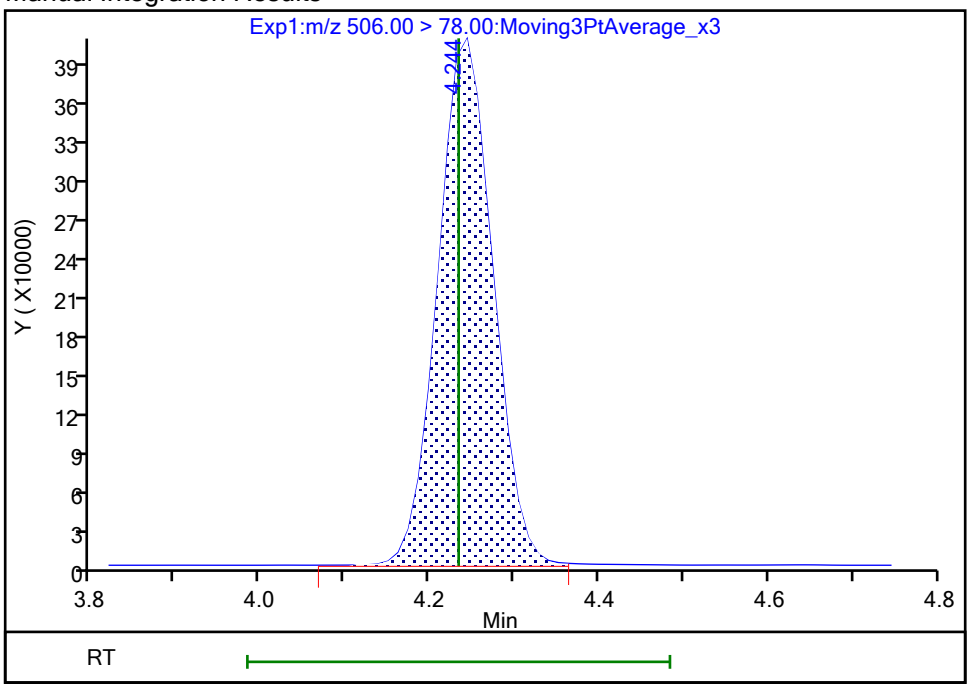
Processing Integration Results

RT: 4.24
Area: 1819229
Amount: 1.140029
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1815175
Amount: 1.137489
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

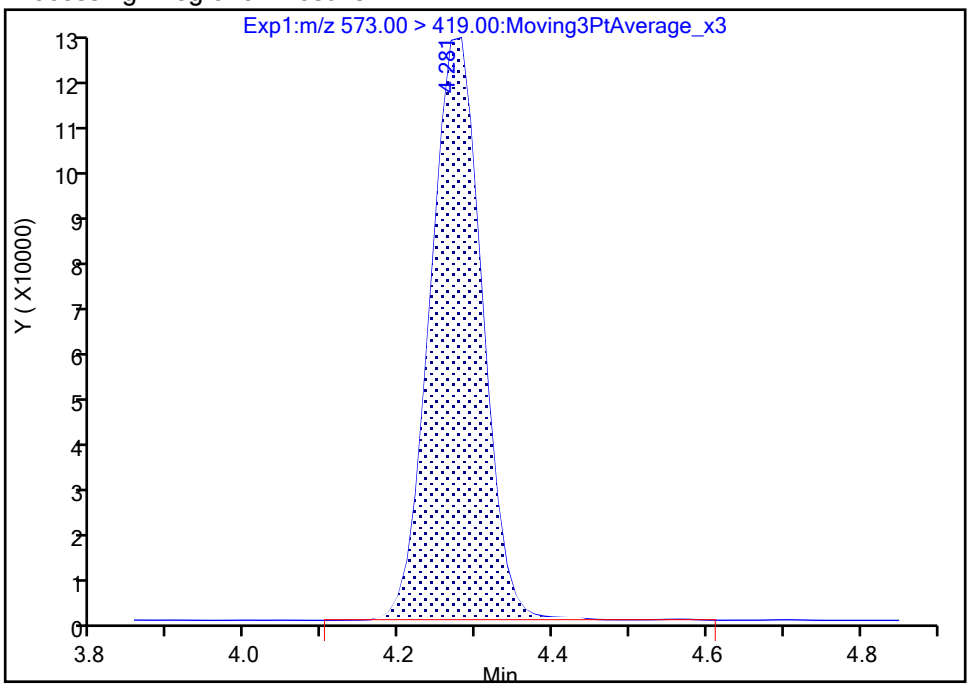
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

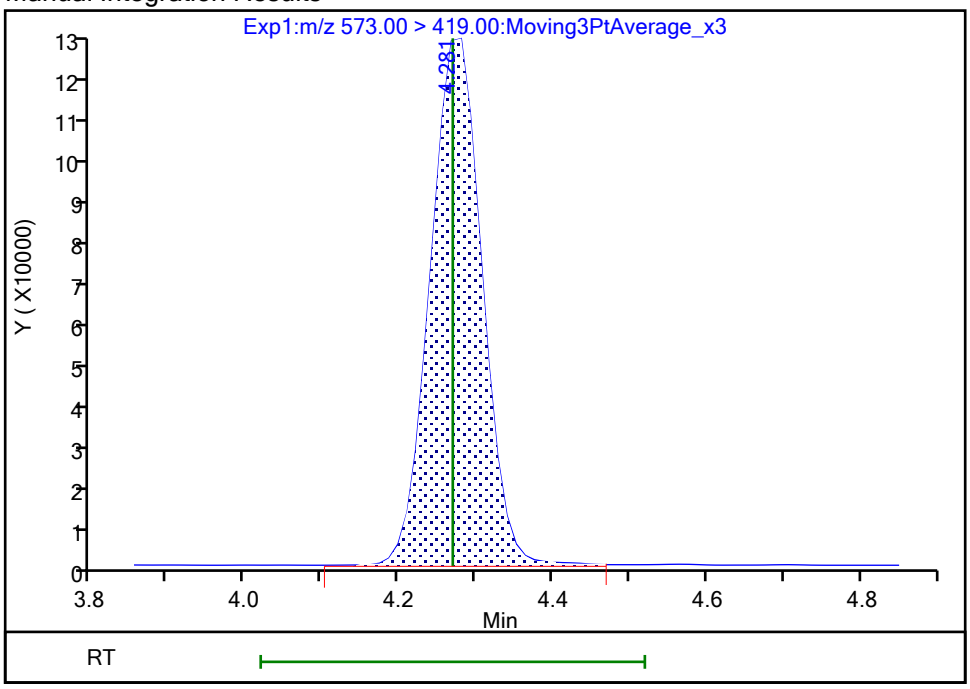
Processing Integration Results

RT: 4.28
Area: 579482
Amount: 1.296542
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 578440
Amount: 1.294210
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

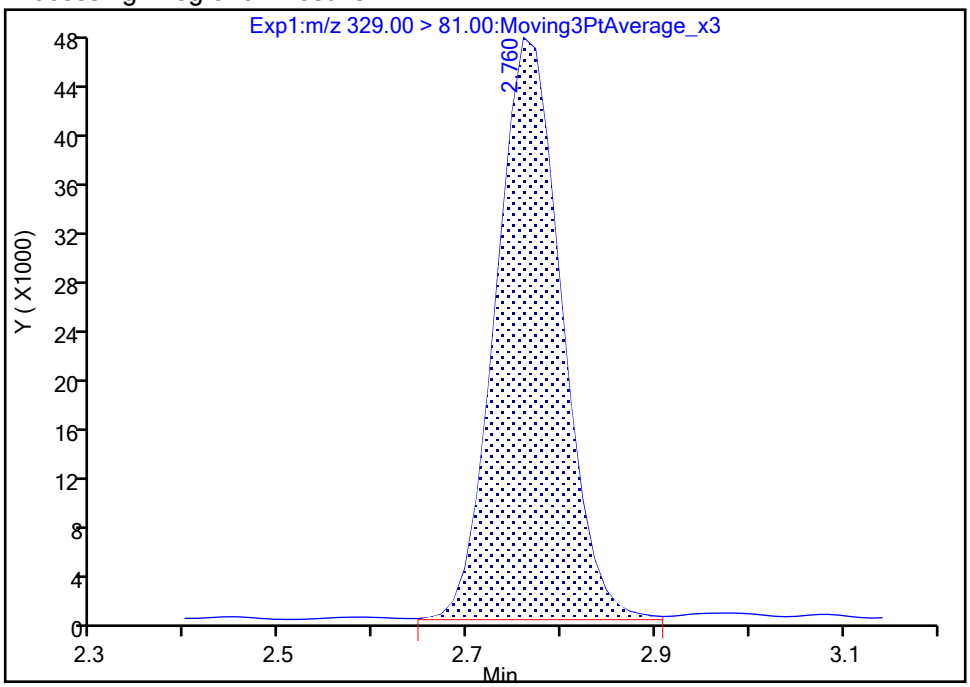
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

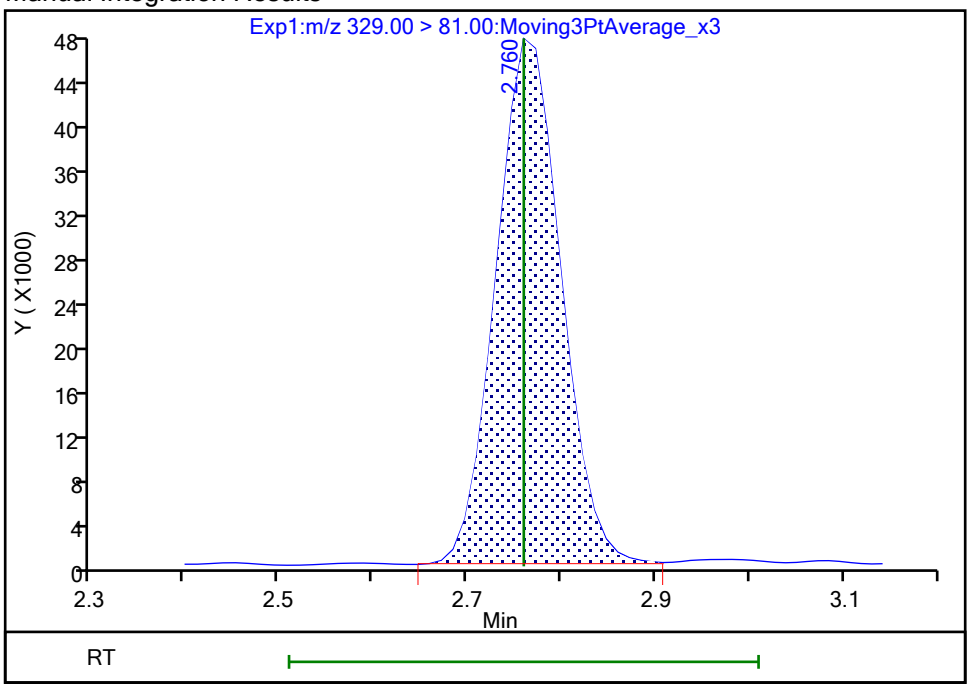
Processing Integration Results

RT: 2.76
Area: 227368
Amount: 1.119481
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 224796
Amount: 1.106818
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

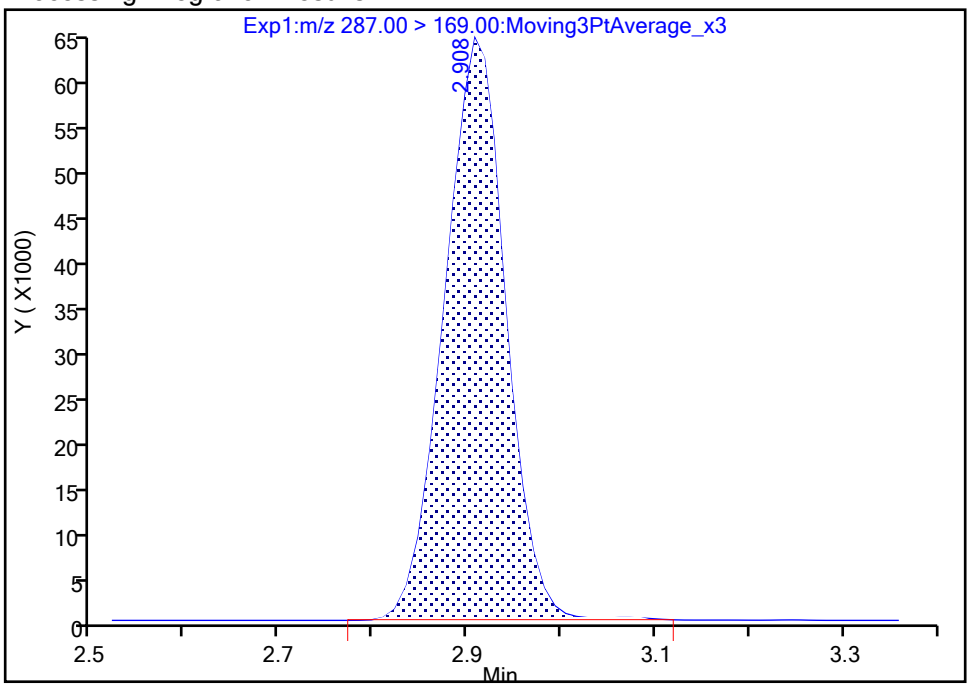
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

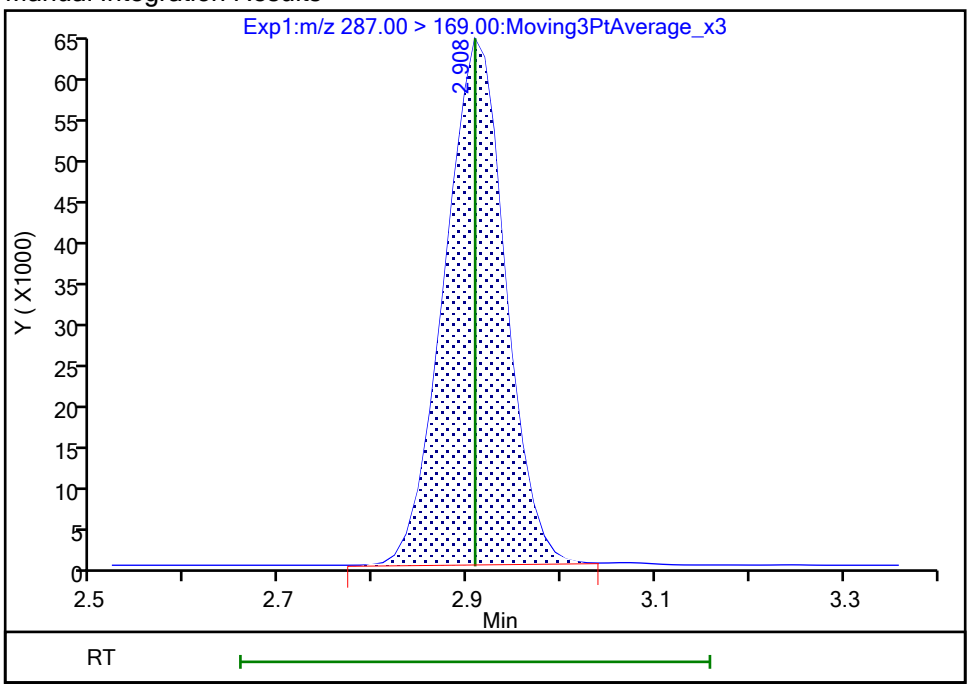
Processing Integration Results

RT: 2.91
Area: 294560
Amount: 1.152477
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 293691
Amount: 1.149077
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

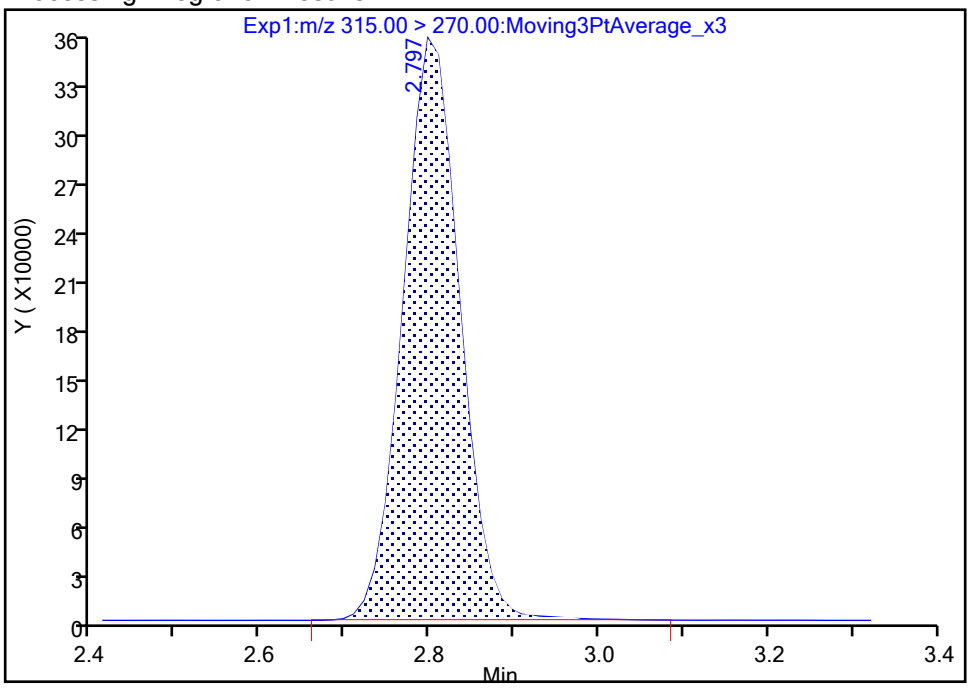
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

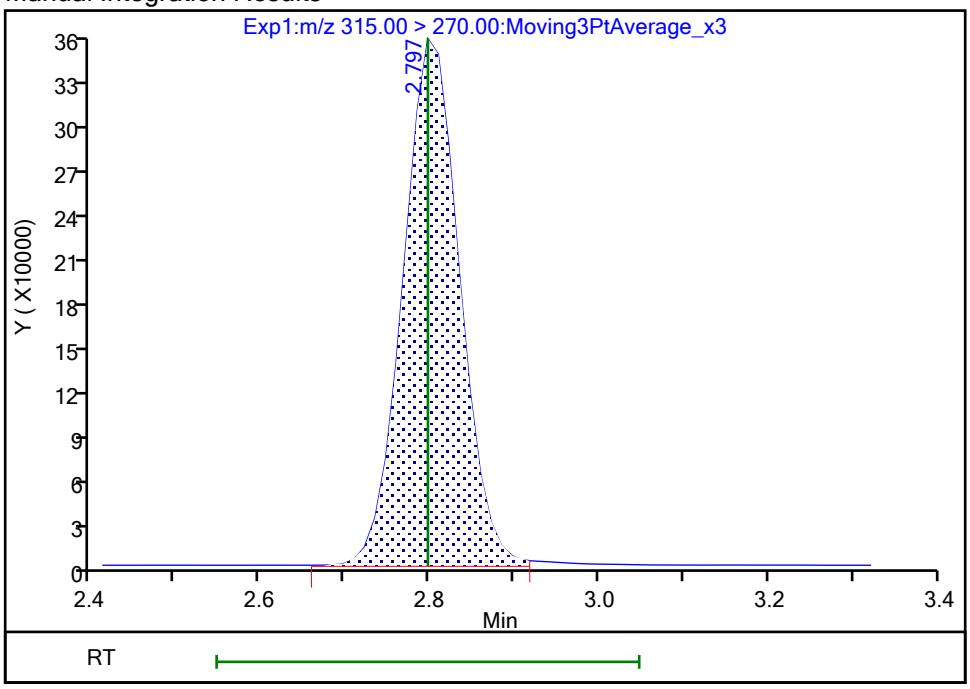
Processing Integration Results

RT: 2.80
Area: 1657807
Amount: 1.255489
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1648515
Amount: 1.248452
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196715/2-A

Matrix: Water Lab File ID: PA231024A07.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 18:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.95		5.00	1.20
2706-90-3	Perfluoropentanoic acid	41.84		2.00	0.68
307-24-4	Perfluorohexanoic acid	37.09		2.00	0.65
375-85-9	Perfluoroheptanoic acid	37.88		2.00	0.54
335-67-1	Perfluorooctanoic acid	39.15		2.00	0.76
375-95-1	Perfluorononanoic acid	36.82		2.00	0.49
335-76-2	Perfluorodecanoic acid	39.22		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	38.29		2.00	0.55
307-55-1	Perfluorododecanoic acid	36.04		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	36.04		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	35.93		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.09		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	36.71		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.99		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	36.59		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	33.91		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	34.18		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	31.18		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	39.17		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	37.95		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	40.47		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	36.21		2.00	0.92
2355-31-9	NMeFOSAA	37.49		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	36.29		5.00	1.60
13252-13-6	HFPODA	39.55		4.00	1.10
919005-14-4	DONA	34.93		2.00	0.42
756426-58-1	9Cl-PF3ONS	38.14		2.00	0.32
763051-92-9	11Cl-PF3OUdS	32.53		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196715/2-A

Matrix: Water Lab File ID: PA231024A07.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 18:49

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	96		50-150
STL02116	13C2 PFTeDA	84		50-150
STL02337	13C3 PFBS	96		50-150
STL01056	13C8 FOSA	80		50-150
STL02118	d3-NMeFOSAA	96		50-150
STL02117	d5-NEtFOSAA	95		50-150
STL02395	M2-4:2 FTS	92		50-150
STL02279	M2-6:2 FTS	97		50-150
STL02280	M2-8:2 FTS	93		50-150
STL02255	13C3 HFPO-DA	82		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	96		50-150
STL00991	13C4 PFOS	104		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	98		50-150
STL00996	13C2 PFDA	92		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	95		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Lims ID: LCS 200-196715/2-A
Client ID:
Sample Type: LCS
Inject. Date: 24-Oct-2023 18:49:07 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196715/2-A
Misc. Info.: 200-0057538-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 14:48:44 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: nampitakw Date: 25-Oct-2023 12:45:42
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.130	-0.008	0.603	2087102	1.22		97.9	1484	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.139	-0.009	1.004	1531897	0.9737		97.4	136	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1513993	1.14		91.5	2341	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1367307	1.05		105	35.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.466	-0.013	0.697	2001314	1.12		96.2	88996	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.466	0.0	1.006	1687006	0.8774	Target=2.06	98.9	980	M
298.90 > 99.00	2.466	2.466	0.0	1.006	831985		2.03(1.03-3.09)		323	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	635281	0.9791		104	3201	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	223067	1.08		92.3	144	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.795	1608621	1.20		95.6	7544	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1313065	0.9272	Target=14.12	92.7	240	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	96235		13.64(7.06-21.17)		97.0	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1551555	0.9177	Target=2.72	97.5	5000	
349.00 > 99.00	2.810	2.810	0.0	0.888	552436		2.81(1.36-4.09)		979	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.826	265803	1.02		81.6	1121	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.907	2.918	-0.011	1.000	210485	0.9887		98.9	2205	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.166	-0.001	0.899	1530971	1.19		101	6279	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.166	-0.001	1.000	1218004	0.8499	Target=3.32	93.0	1774	M
399.00 > 99.00	3.165	3.166	-0.001	1.000	375385		3.24(1.66-4.98)		359	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.177	-0.012	1.000	1508113	0.9471	Target=4.17	94.7	316	
363.00 > 169.00	3.165	3.177	-0.012	1.000	371765		4.06(2.09-6.26)		820	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.177	-0.012	0.899	1775805	1.20		96.2	11156	
77 DONA										
377.00 > 251.00	3.199	3.213	-0.014	0.835	4274092	0.8732	Target=3.33	92.4	3965	
377.00 > 85.00	3.199	3.213	-0.014	0.835	1171466		3.65(1.66-4.99)		1783	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.512	-0.010	0.914	1124473	0.9147	Target=4.83	96.0	2612	M
449.00 > 99.00	3.502	3.512	-0.010	0.914	226572		4.96(2.41-7.24)		600	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.512	-0.001	0.997	307573	1.15		97.1	587	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.512	-0.001	1.000	671606	0.9487		99.8	901	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.521	-0.001	1.000	1775349	0.9787	Target=2.88	97.9	82.6	M
413.00 > 169.00	3.520	3.521	-0.001	1.000	564676		3.14(1.44-4.32)		829	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.521	-0.001	1.000	2128817	1.27		102	7495	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.521	-0.001		2148845	1.25			7962	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.832	-0.002	1.000	841142	0.8478	Target=4.24	91.4	1302	M
499.00 > 99.00	3.818	3.832	-0.014	0.997	191568		4.39(2.12-6.37)		567	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.832	-0.002	1.088	1016498	1.25		104	4578	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.844	-0.002	1.000	1608985	0.9205	Target=8.34	92.1	227	
463.00 > 169.00	3.842	3.844	-0.002	1.000	191969		8.38(4.17-12.51)		977	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.844	-0.002	1.091	2229380	1.22		98.0	4870	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.980	3.981	-0.001	1.039	2894515	0.9534		102	13292	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.100	4.114	-0.014	1.070	645077	0.8546	Target=2.17	88.8	2866	
549.00 > 99.00	4.100	4.114	-0.014	1.070	271970		2.37(1.08-3.25)		776	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.138	-0.002	1.000	1712711	0.9804	Target=11.44	98.0	456	
513.00 > 169.00	4.136	4.138	-0.002	1.000	157830		10.85(5.72-17.16)		592	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.138	-0.002	1.175	2185121	1.15		91.7	6160	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.138	0.010	1.000	620005	1.01		105	4532	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.150	-0.002	1.178	333364	1.11		92.9	705	M
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.244	-0.003	1.205	1624170	1.00		79.9	3706	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.241	4.244	-0.003	1.000	1121876	0.9052		90.5	2958	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.281	-0.016	1.212	546146	1.20		95.9	2666	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.281	-0.003	1.003	371542	0.9371		93.7	724	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.364	-0.001	1.139	452794	0.7794	Target=2.37	80.8	3855	
599.00 > 99.00	4.363	4.364	-0.001	1.139	194014		2.33(1.19-3.56)		1790	M
D 30 13C2 PFUnA										M
565.00 > 520.00	4.386	4.388	-0.002	1.246	2126732	1.18		94.6	3227	M
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.386	4.388	-0.002	1.000	1678416	0.9572	Target=12.20	95.7	383	
563.00 > 169.00	4.386	4.388	-0.002	1.000	140294		11.96(6.10-18.31)		974	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.400	-0.002	1.249	523129	1.19		95.4	1119	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.400	-0.002	1.000	379801	0.9073		90.7	793	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.483	-0.015	1.167	3786758	0.8133		86.2	4291	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.611	-0.001	1.310	2120944	1.16		92.8	4960	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.611	-0.001	1.000	1556093	0.9010	Target=8.47	90.1	83.9	
613.00 > 169.00	4.610	4.611	-0.001	1.000	193488		8.04(4.23-12.70)		978	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.633	-0.012	1.114	345100	0.9420		97.7	3960	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.775	-0.001	1.246	151142	0.7676	Target=0.48	79.3	1470	
699.00 > 99.00	4.774	4.775	-0.001	1.246	316965		0.48(0.24-0.72)		2856	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.814	-0.011	1.042	1635493	0.9010	Target=6.41	90.1	88.4	M
663.00 > 169.00	4.803	4.814	-0.011	1.042	244390		6.69(3.21-9.62)		1330	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.991	-0.012	1.414	1907360	1.05		83.8	5522	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.991	-0.012	1.000	153240	0.8982	Target=0.87	89.8	1832	
713.00 > 219.00	4.979	4.991	-0.012	1.000	170948		0.90(0.43-1.30)		2708	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.297	-0.002	1.504	2127834	1.01		81.1	4562	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.308	-0.013	1.000	1608896	0.9451	Target=7.89	94.5	105	M
813.00 > 169.00	5.295	5.308	-0.013	1.000	197872		8.13(3.94-11.83)		2155	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.557	5.568	-0.011	1.049	1215352	0.9143	Target=9.39	91.4	123	M
913.00 > 169.00	5.557	5.568	-0.011	1.049	126527		9.61(4.69-14.08)		834	

QC Flag Legend

Processing Flags

Review Flags

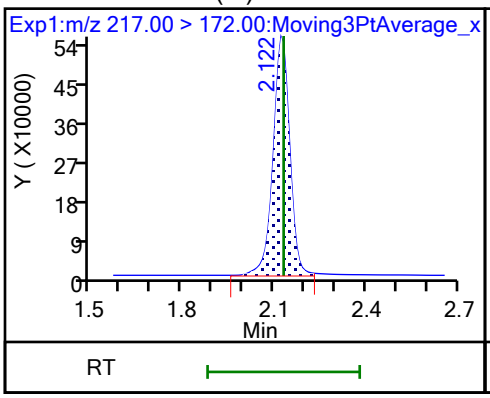
M - Manually Integrated

Report Date: 26-Oct-2023 14:48:57 Chrom Revision: 2.3 18-Oct-2023 21:16:54

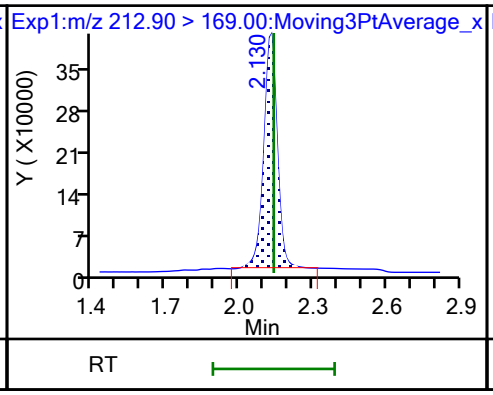
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

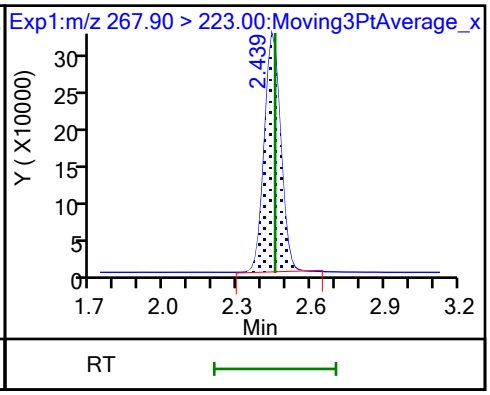
D 1 13C4 PFBA (M)



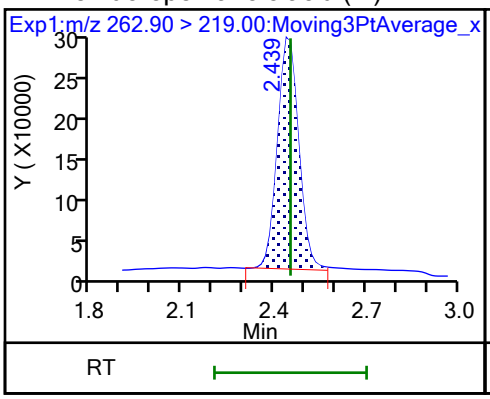
2 Perfluorobutanoic acid



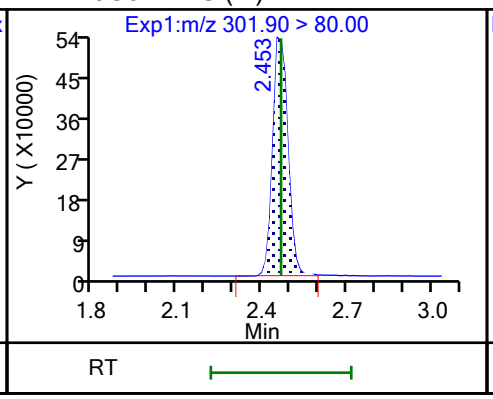
D 3 13C5 PFPeA



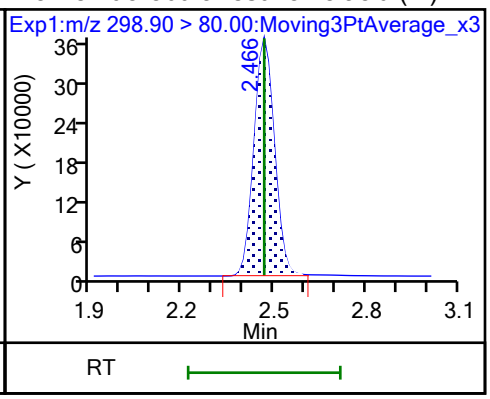
4 Perfluoropentanoic acid (M)



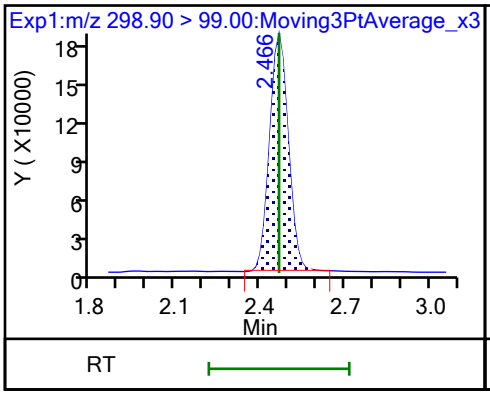
D 47 13C3 PFBS (M)



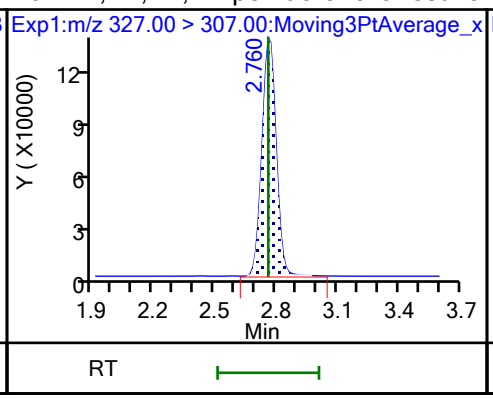
5 Perfluorobutanesulfonic acid (M)



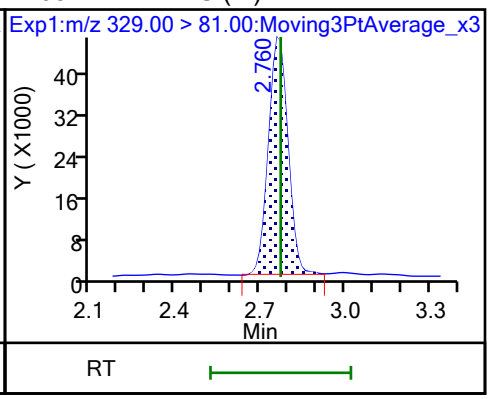
5 Perfluorobutanesulfonic acid



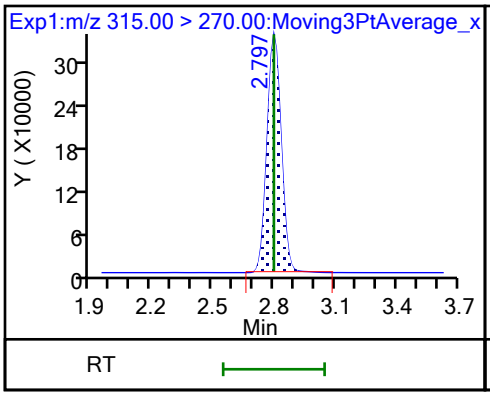
61 1H,1H,2H,2H-perfluorohexanesulfo



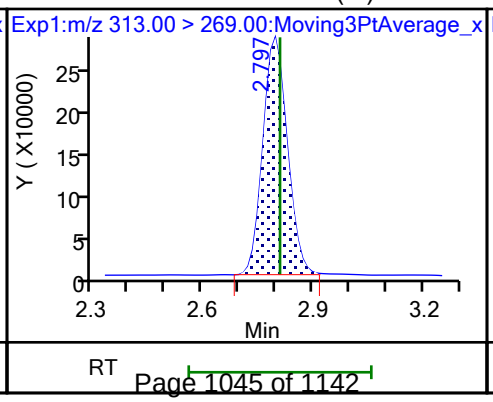
D 60 M2-4:2 FTS (M)



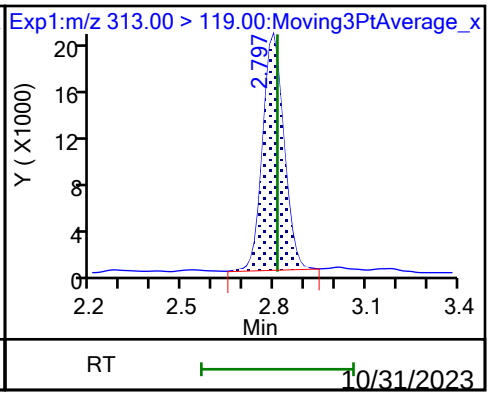
D 7 13C2 PFHxA



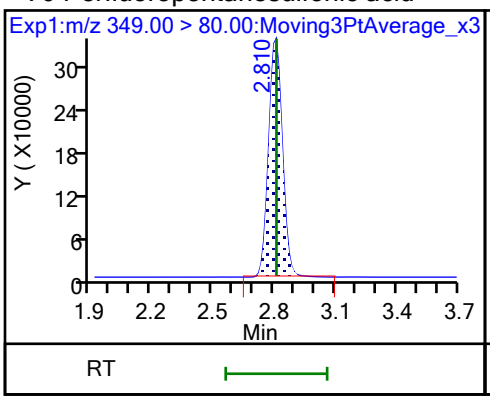
6 Perfluorohexanoic acid (M)



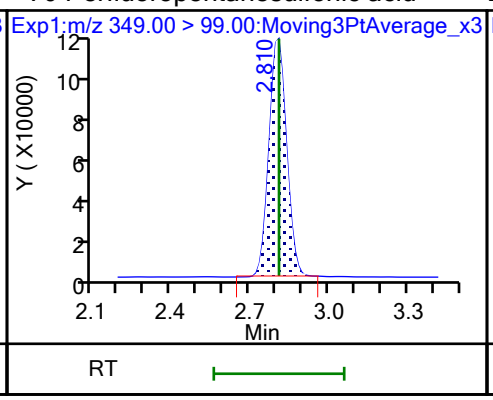
6 Perfluorohexanoic acid



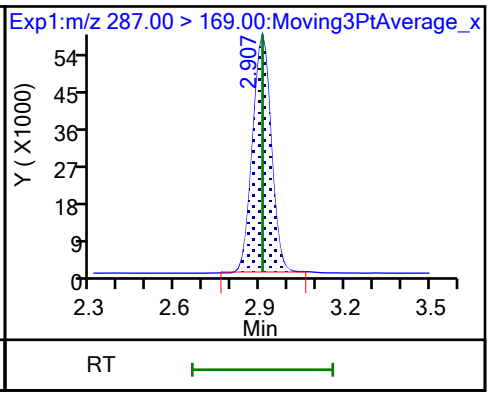
70 Perfluoropentanesulfonic acid



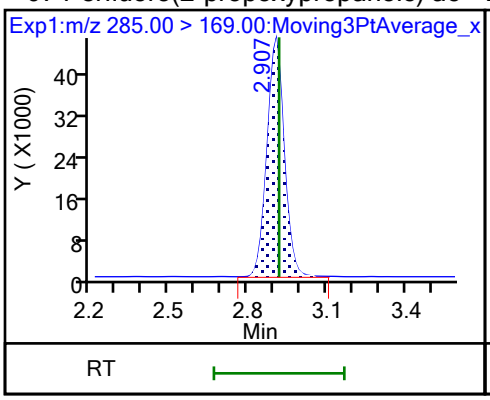
70 Perfluoropentanesulfonic acid



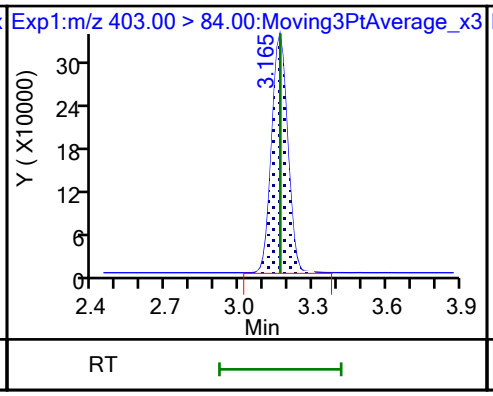
D 64 13C3 HFPO-DA



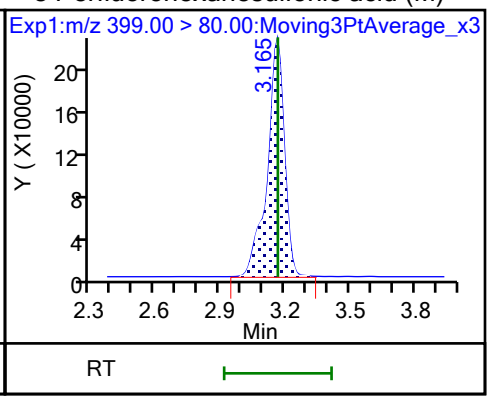
67 Perfluoro(2-propoxypropanoic) ac



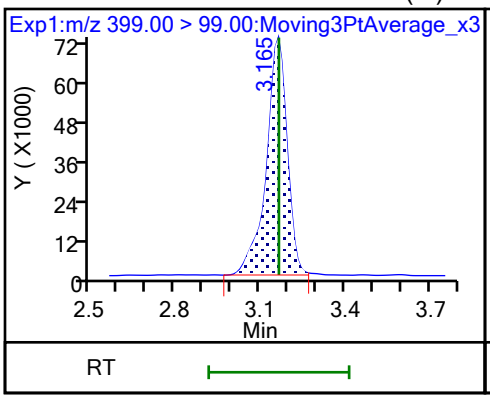
D 11 18O2 PFHxS



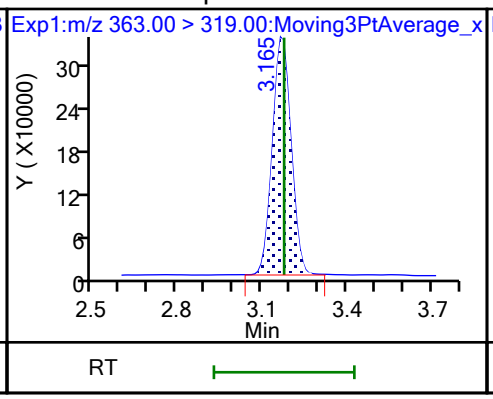
8 Perfluorohexanesulfonic acid (M)



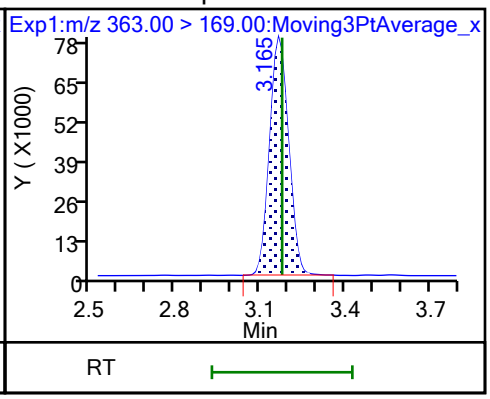
8 Perfluorohexanesulfonic acid (M)



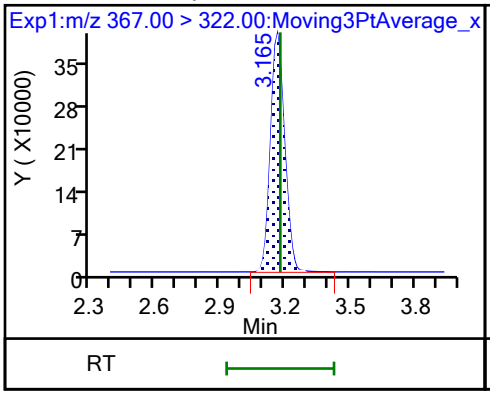
10 Perfluoroheptanoic acid



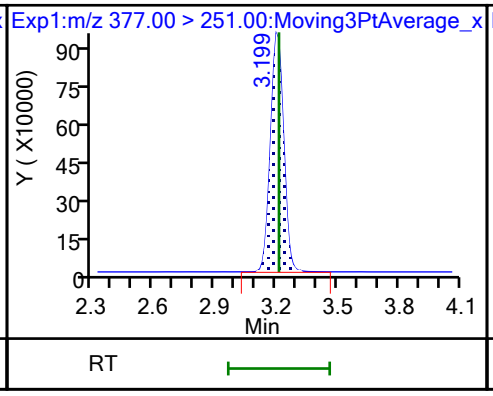
10 Perfluoroheptanoic acid



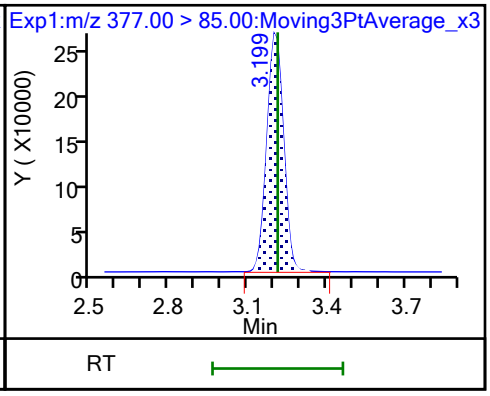
D 9 13C4 PFHpA



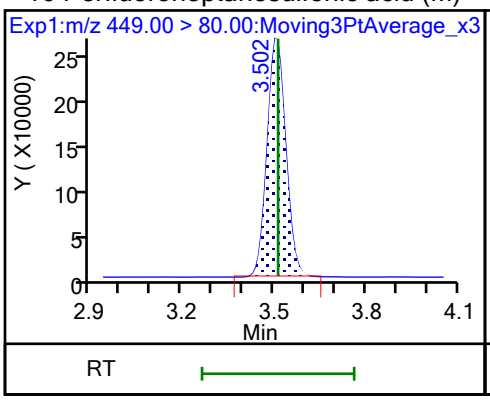
77 DONA



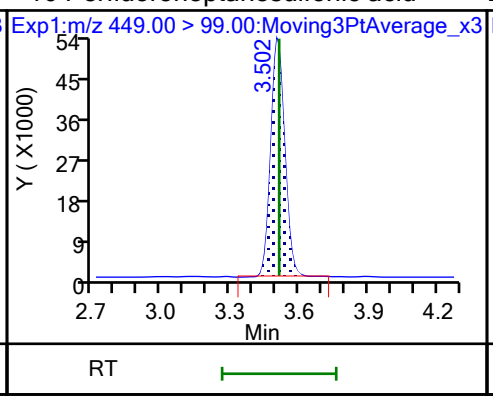
77 DONA



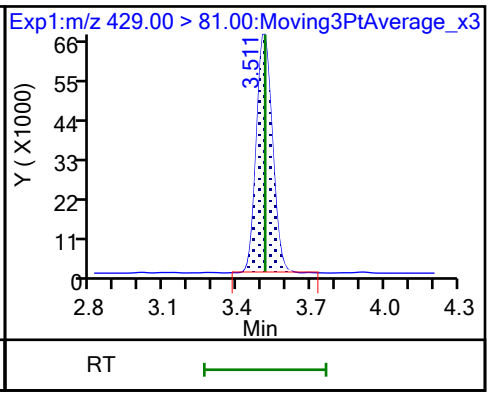
16 Perfluoroheptanesulfonic acid (M)



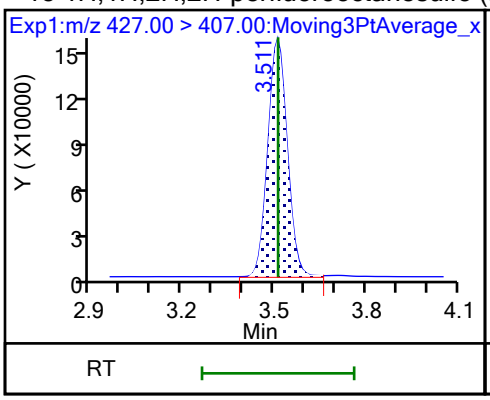
16 Perfluoroheptanesulfonic acid



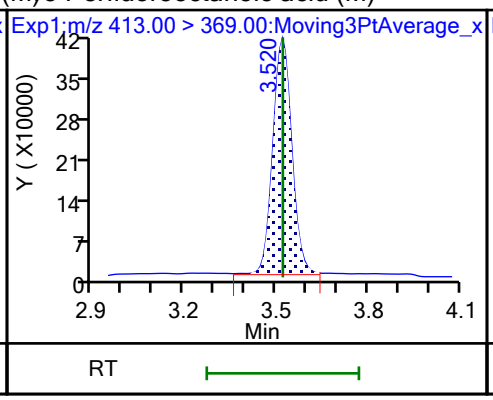
D 12 M2-6:2 FTS



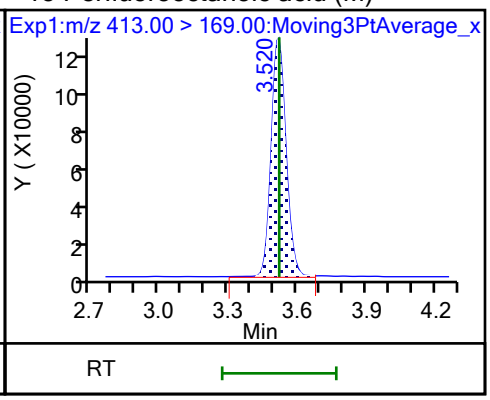
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



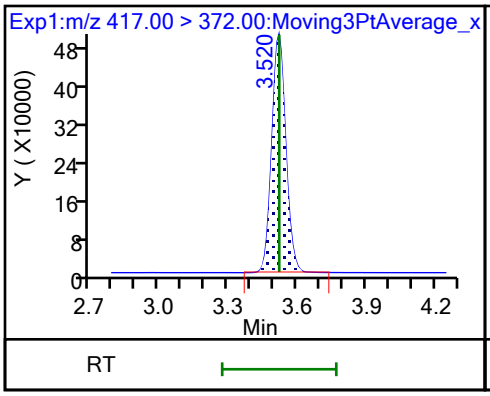
15 Perfluorooctanoic acid (M)



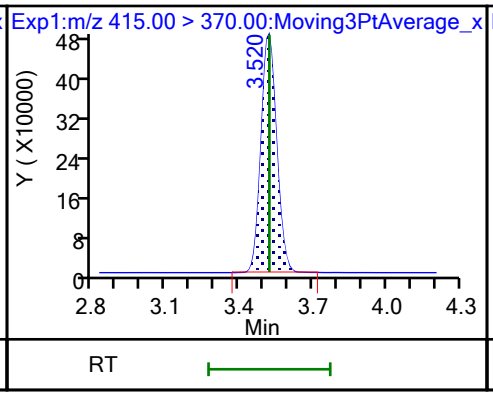
15 Perfluorooctanoic acid (M)



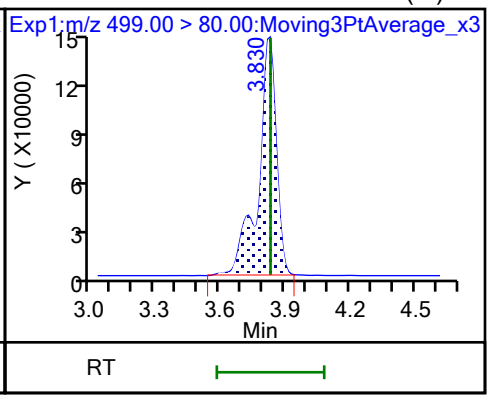
D 14 13C4 PFOA



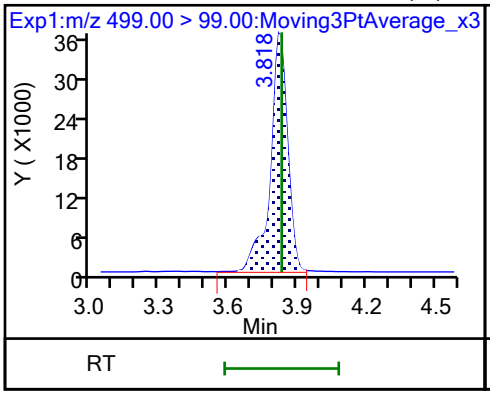
* 62 13C2 PFOA



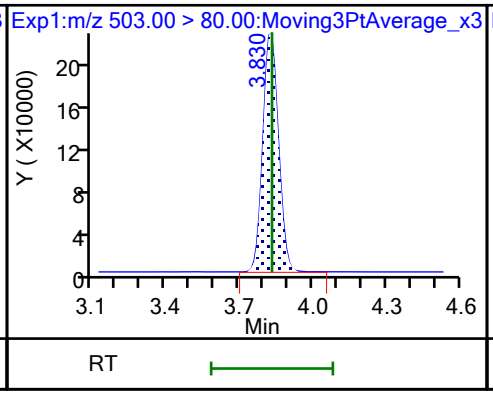
17 Perfluorooctanesulfonic acid (M)



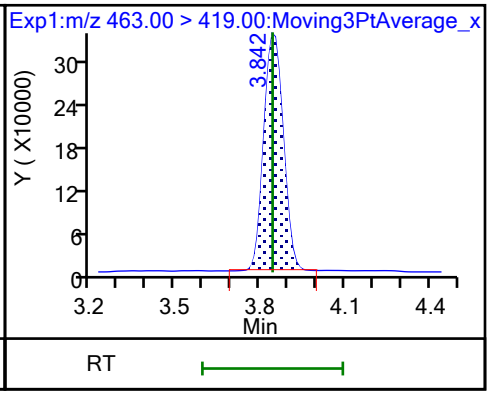
17 Perfluorooctanesulfonic acid (M)



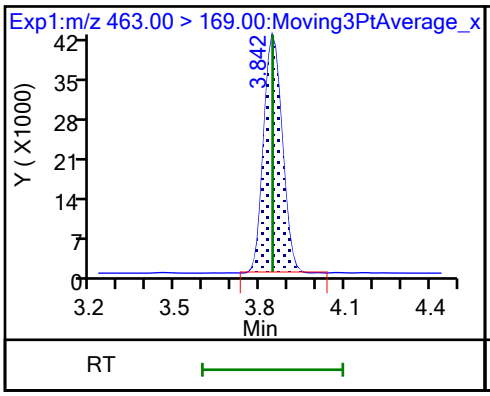
D 18 13C4 PFOS



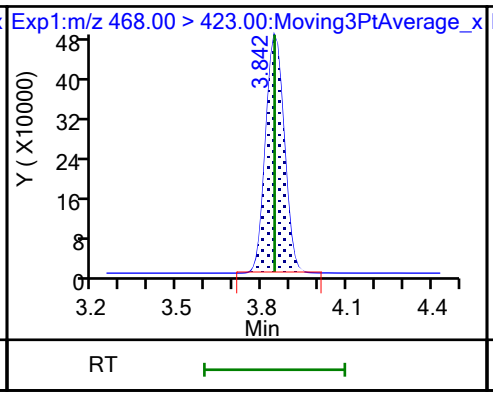
20 Perfluorononanoic acid



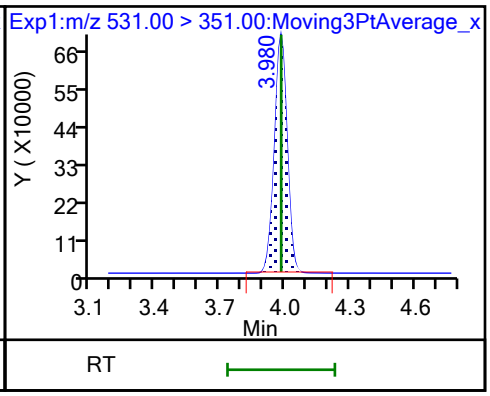
20 Perfluorononanoic acid



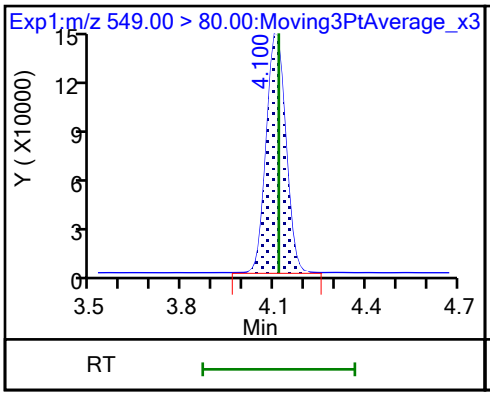
D 19 13C5 PFNA



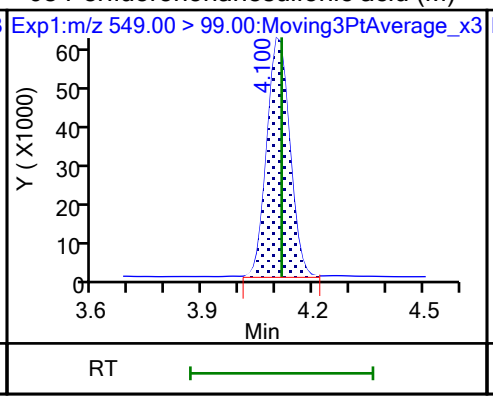
69 9-Chlorohexadecafluoro-3-oxanona



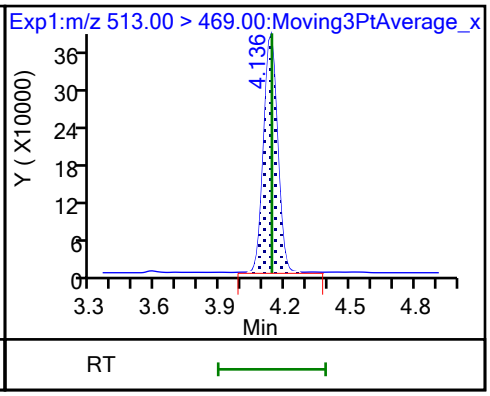
68 Perfluorononanesulfonic acid



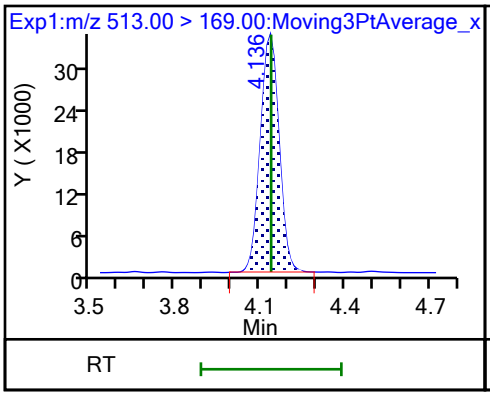
68 Perfluorononanesulfonic acid (M)



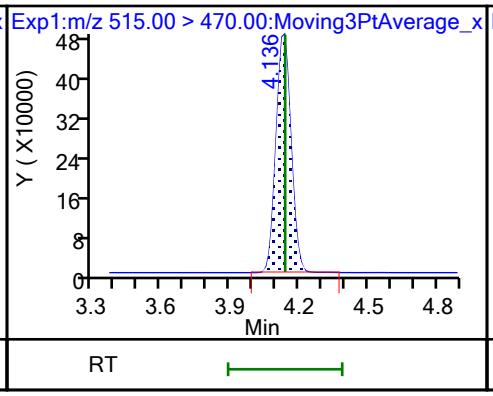
24 Perfluorodecanoic acid



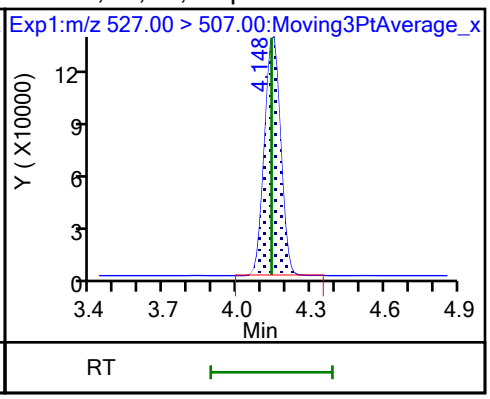
24 Perfluorodecanoic acid



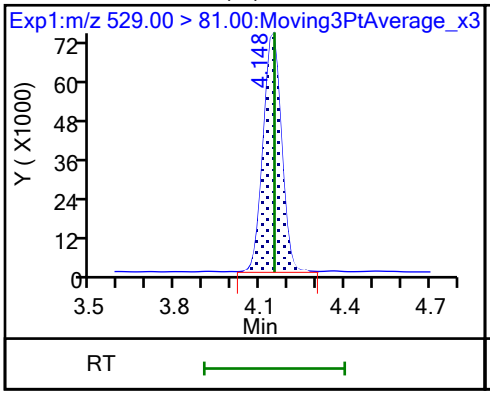
D 23 13C2 PFDA



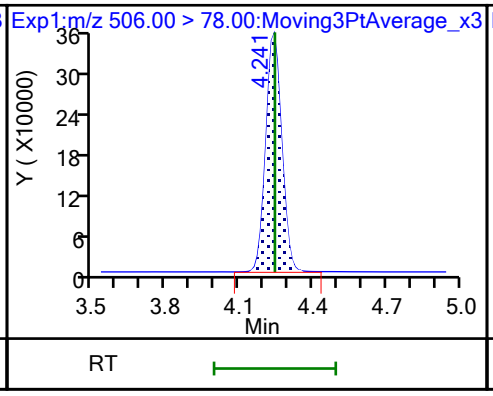
25 1H,1H,2H,2H-perfluorodecanesulfo



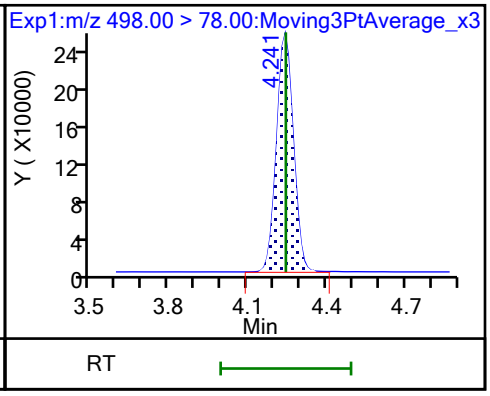
D 26 M2-8:2 FTS (M)



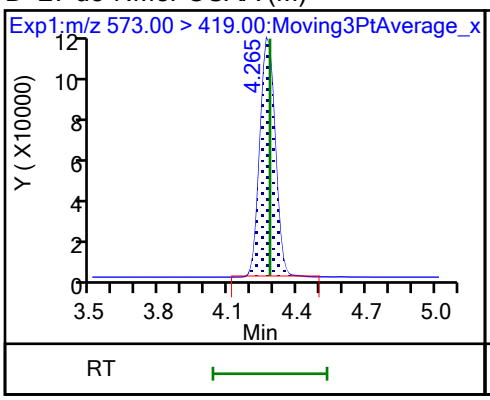
D 21 13C8 FOSA



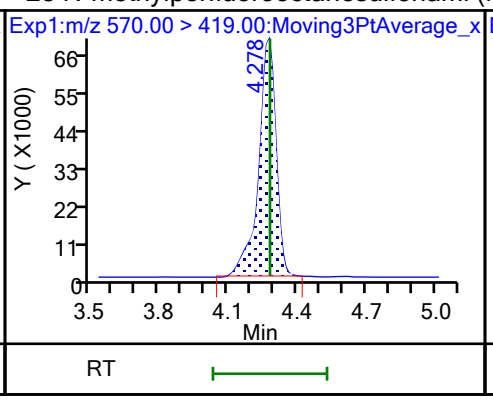
22 Perfluorooctanesulfonamide



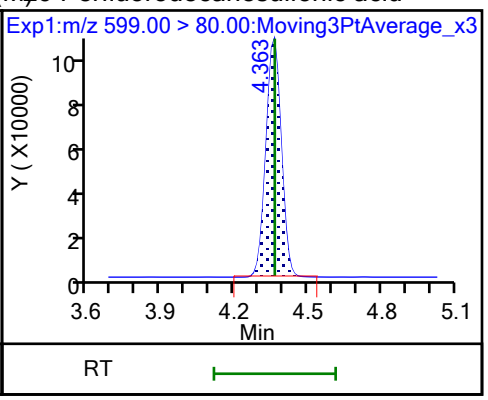
D 27 d3-NMeFOSAA (M)



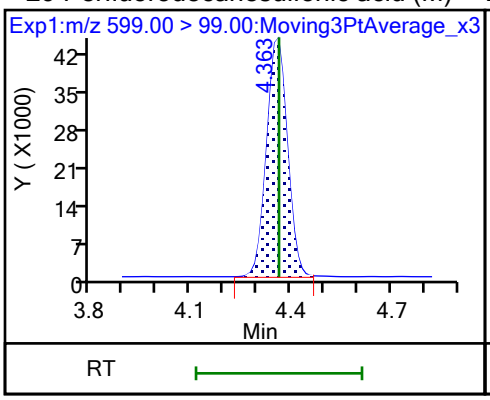
28 N-methylperfluorooctanesulfonami (M)



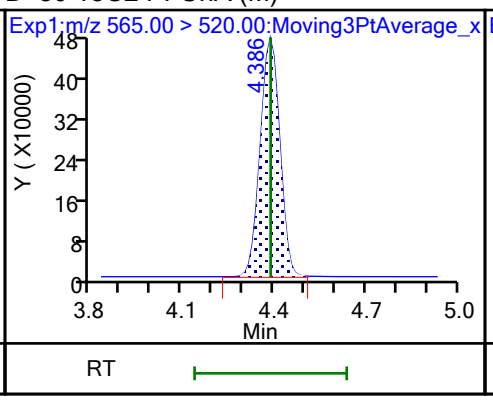
29 Perfluorodecanesulfonic acid



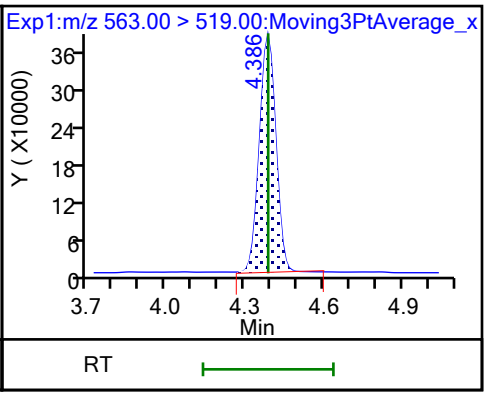
29 Perfluorodecanesulfonic acid (M)



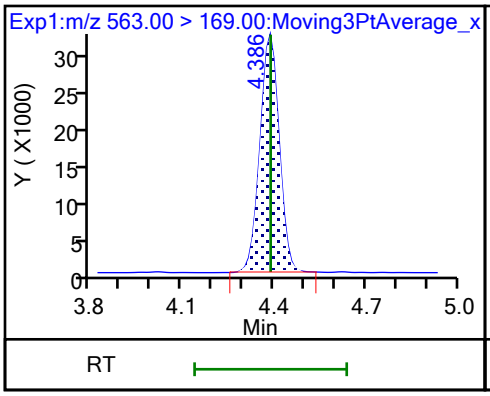
D 30 13C2 PFUnA (M)



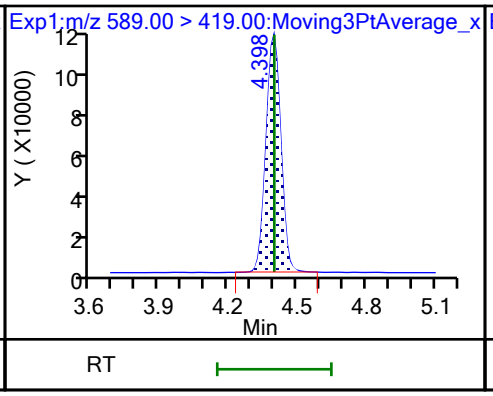
31 Perfluoroundecanoic acid



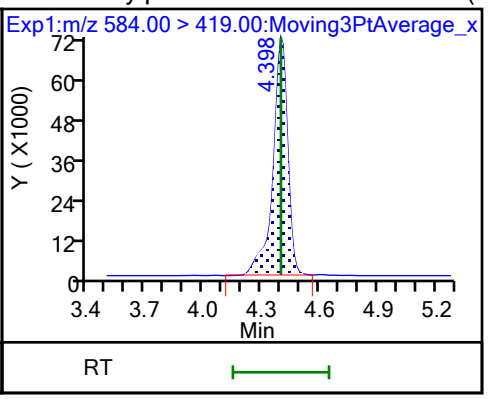
31 Perfluoroundecanoic acid



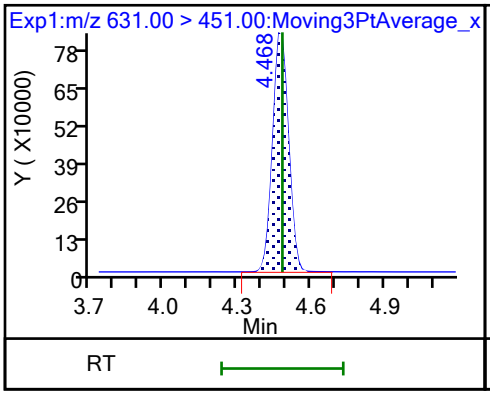
D 32 d5-NEtFOSAA



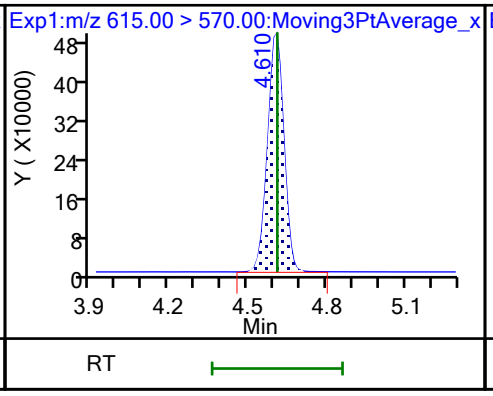
33 N-ethylperfluorooctanesulfonamid (M)



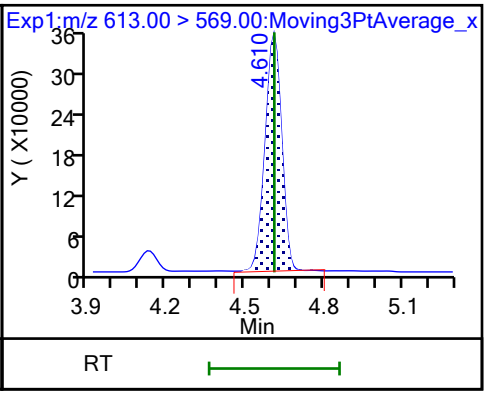
66 11-Chloroeicosafluoro-3-oxaundec



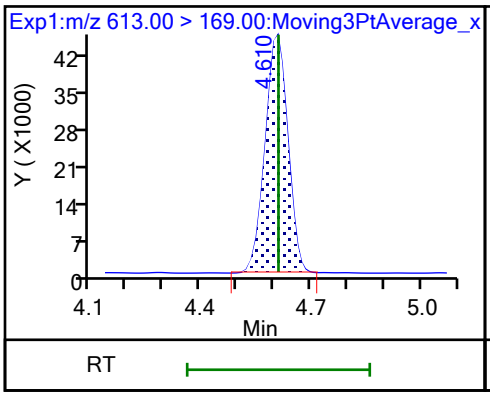
D 36 13C2 PFDoA



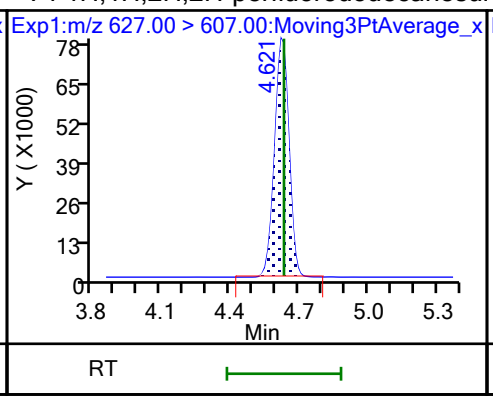
37 Perfluorododecanoic acid



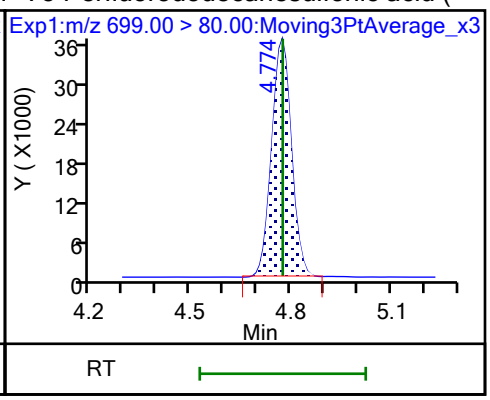
37 Perfluorododecanoic acid



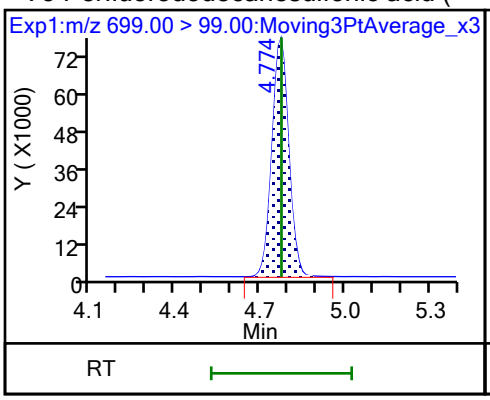
74 1H,1H,2H,2H-perfluorododecanesul



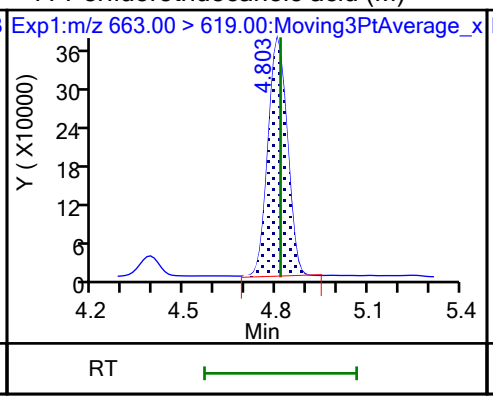
75 Perfluorododecanesulfonic acid (



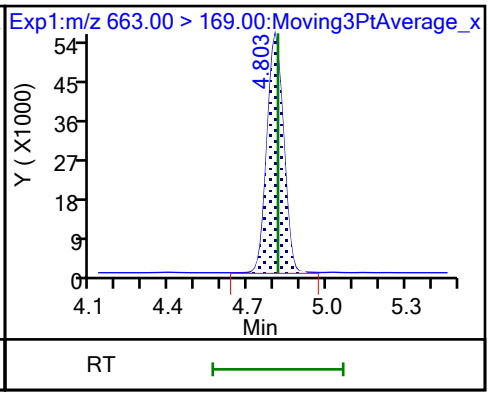
75 Perfluorododecanesulfonic acid (



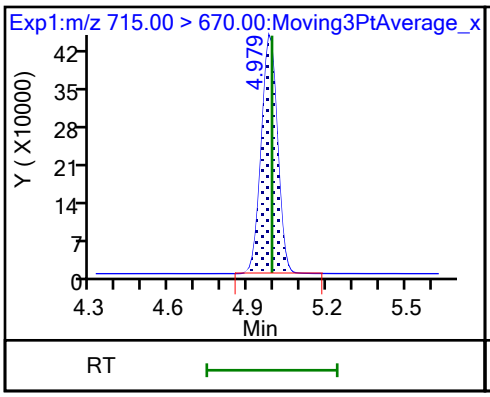
41 Perfluorotridecanoic acid (M)



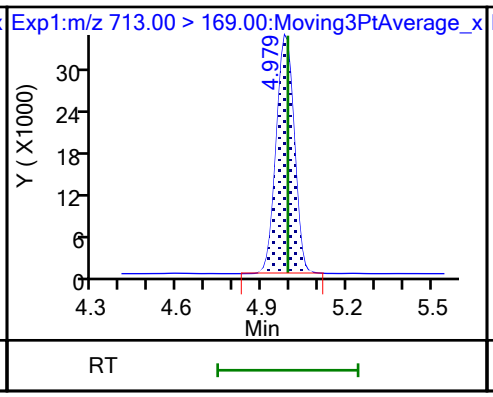
41 Perfluorotridecanoic acid



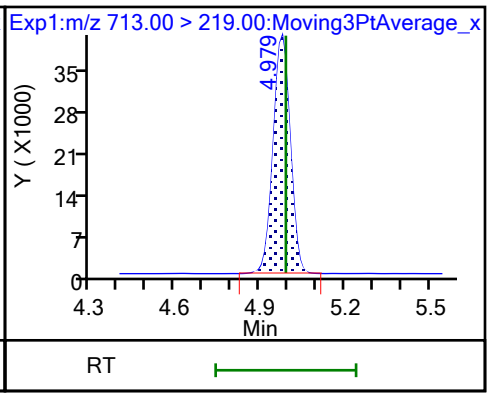
D 43 13C2 PFTeDA



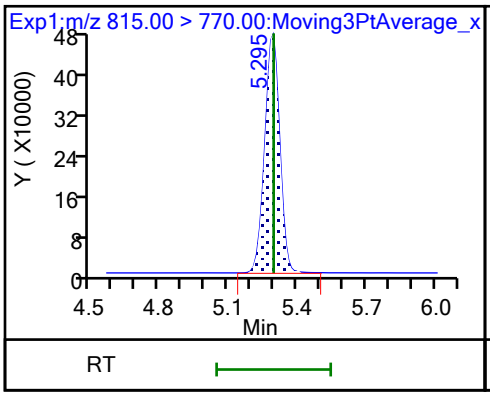
42 Perfluorotetradecanoic acid



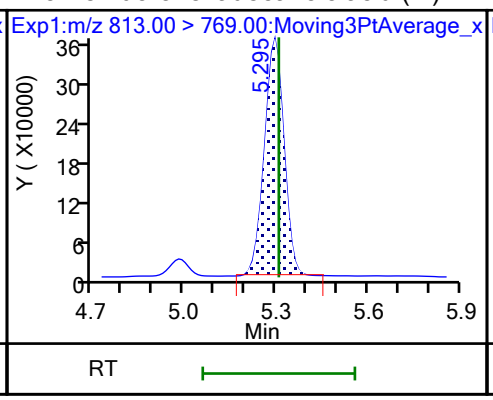
42 Perfluorotetradecanoic acid



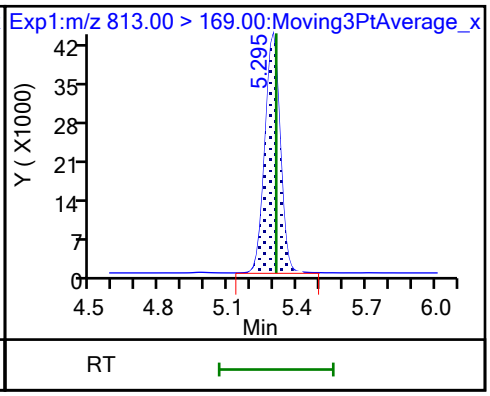
D 44 13C2 PFHxDA



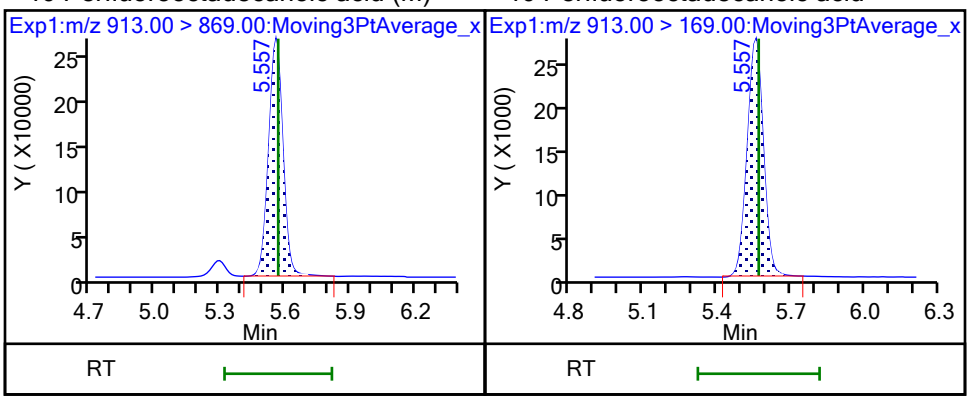
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

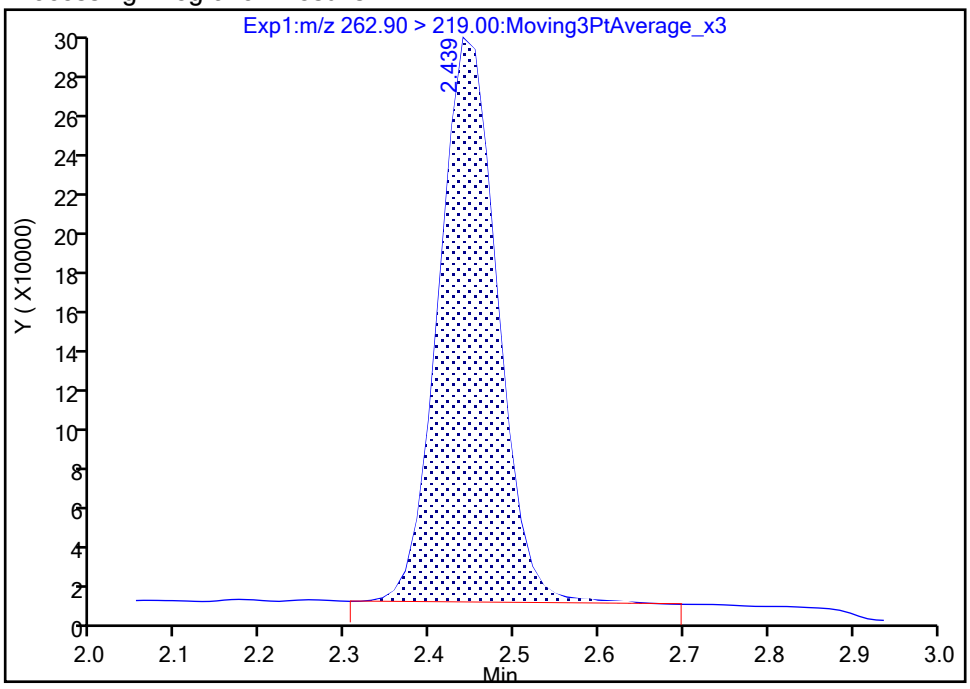
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

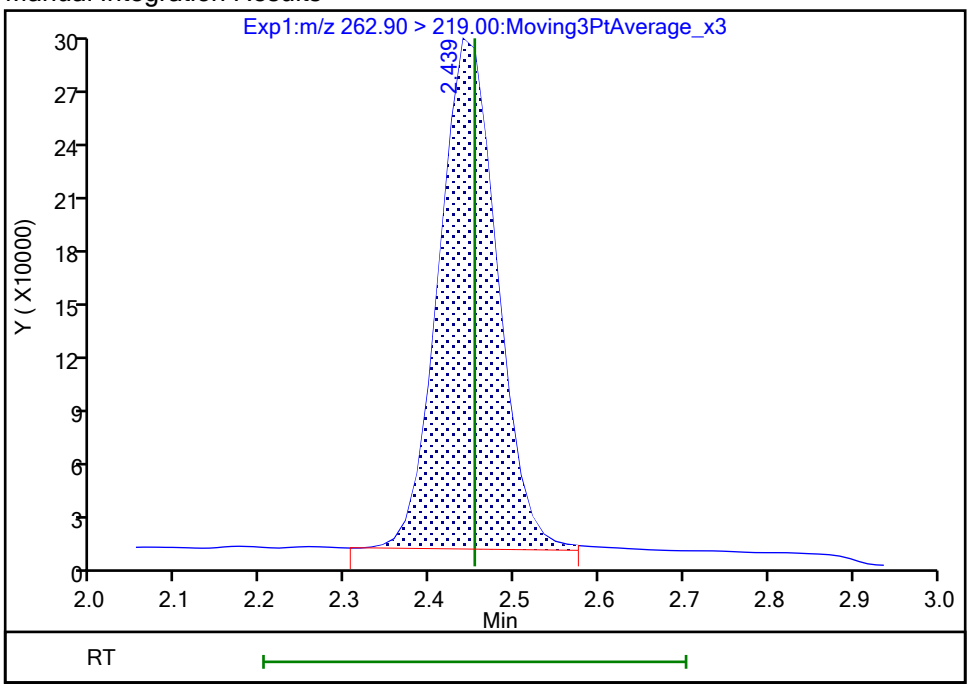
Processing Integration Results

RT: 2.44
Area: 1374566
Amount: 1.051665
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1367307
Amount: 1.046111
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

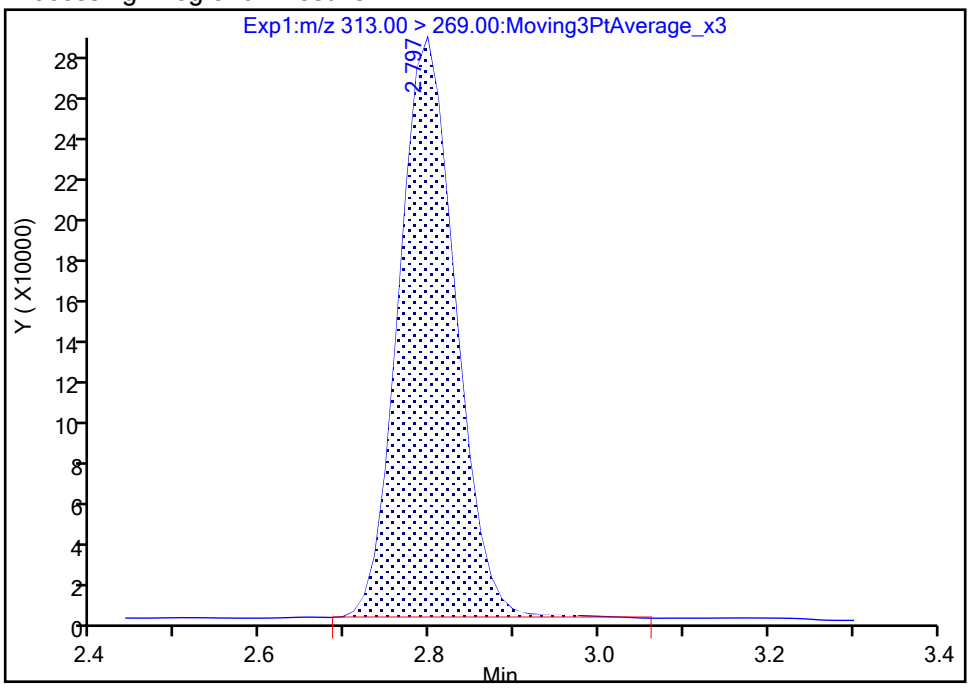
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

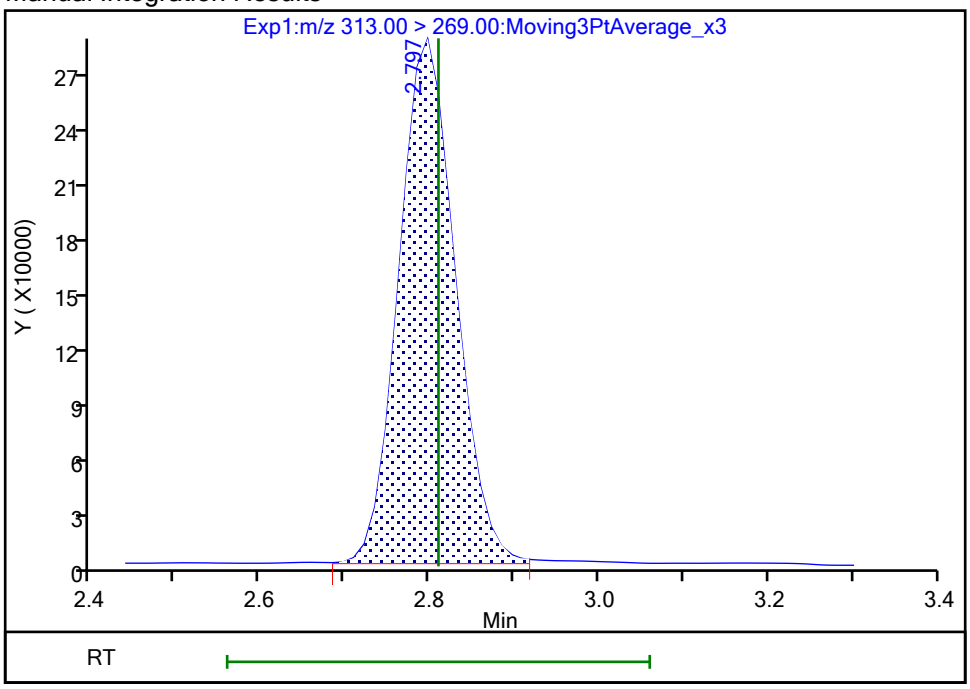
Processing Integration Results

RT: 2.80
Area: 1321091
Amount: 0.932860
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1313065
Amount: 0.927193
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

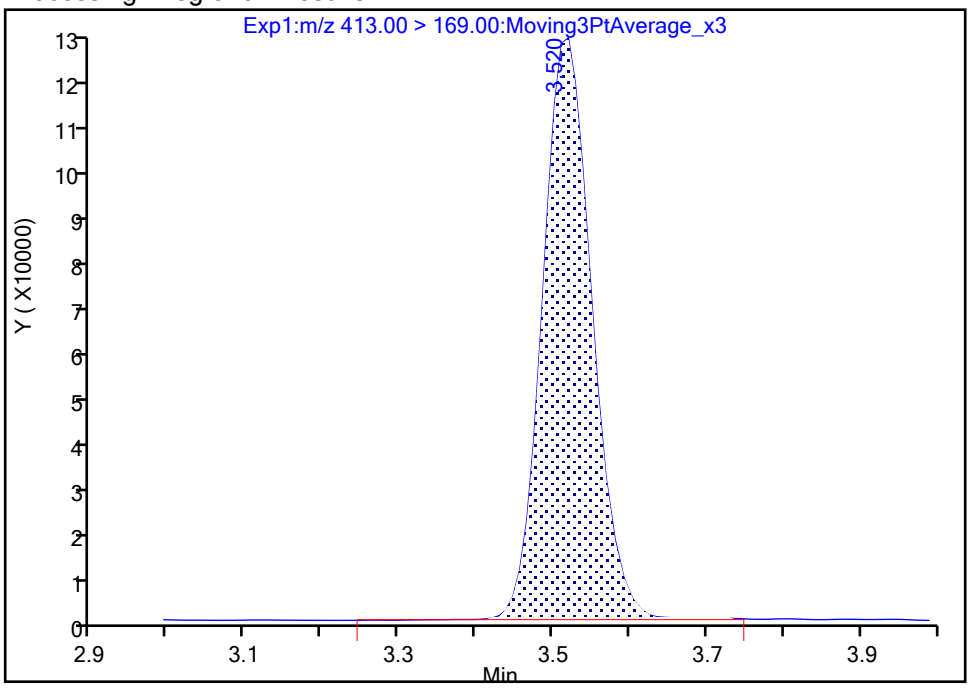
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

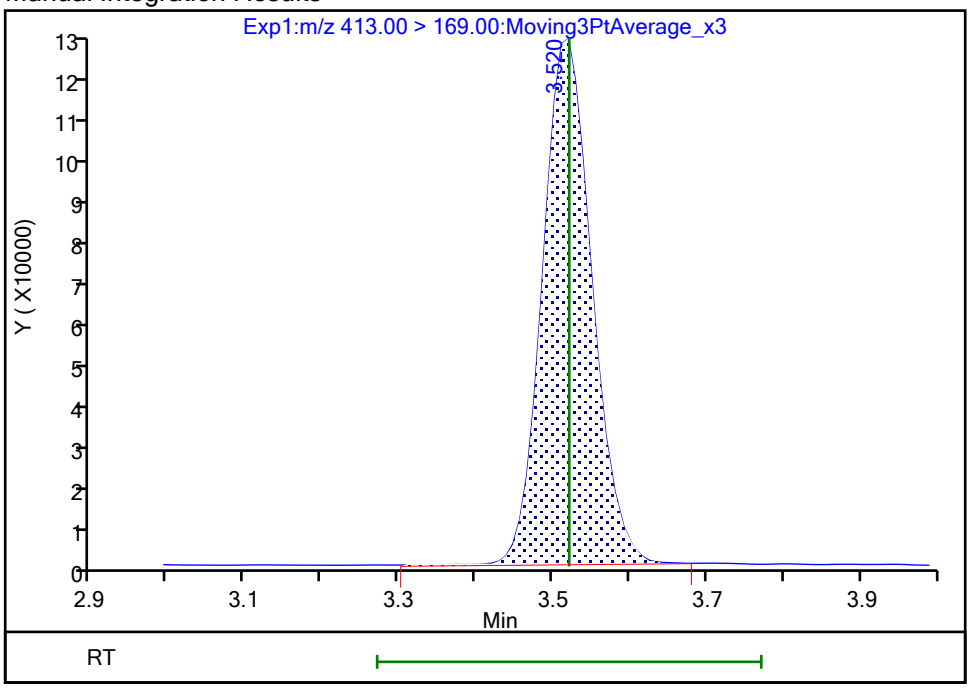
Processing Integration Results

RT: 3.52
Area: 564254
Amount: 0.975829
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 564676
Amount: 0.978699
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

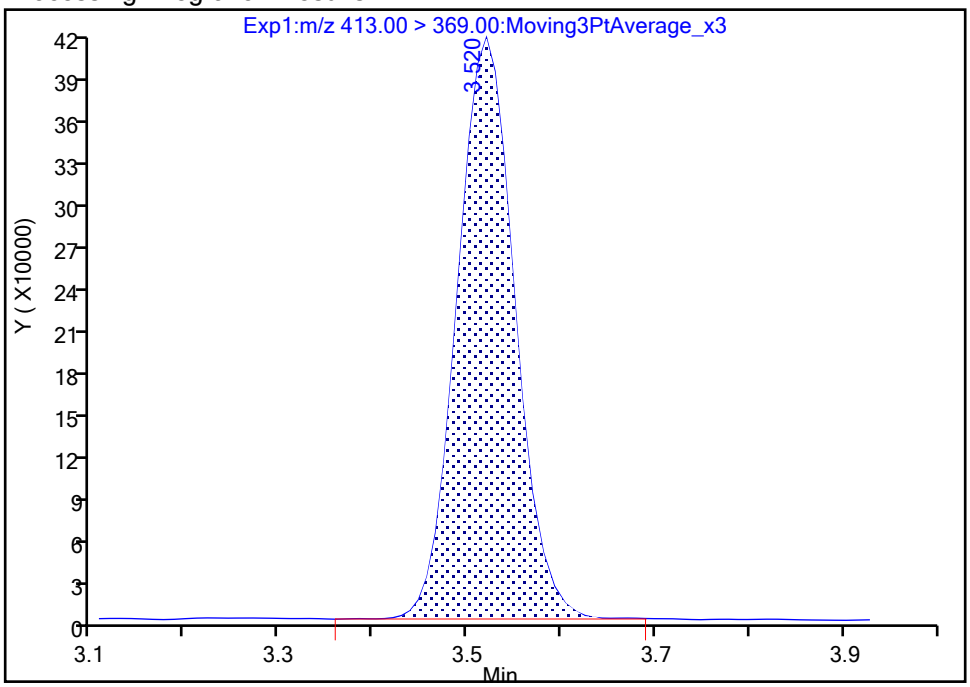
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

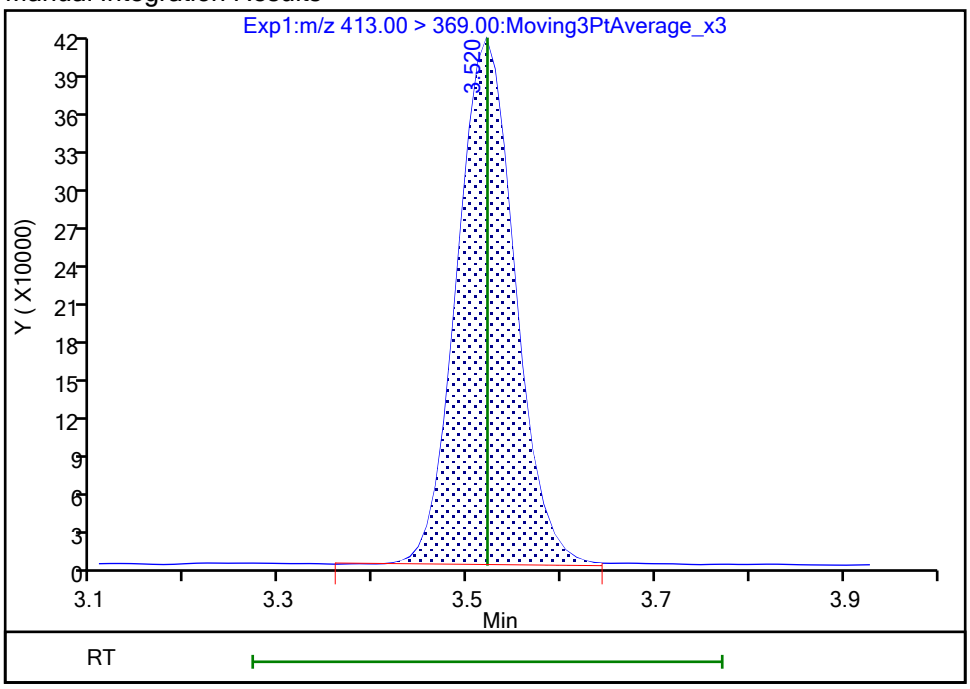
Processing Integration Results

RT: 3.52
Area: 1770144
Amount: 0.975829
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1775349
Amount: 0.978699
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

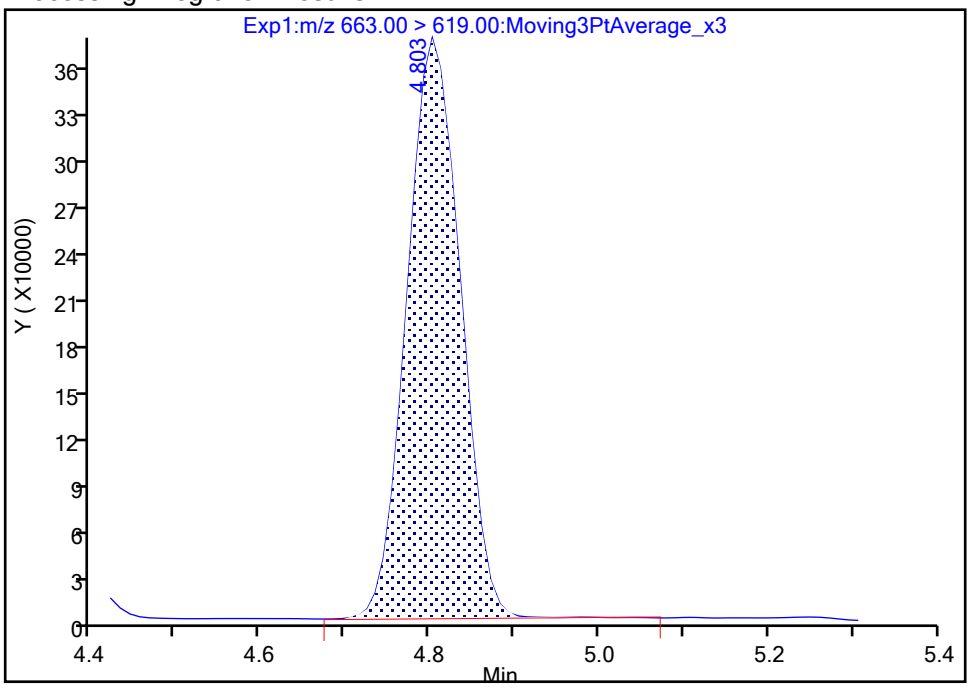
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

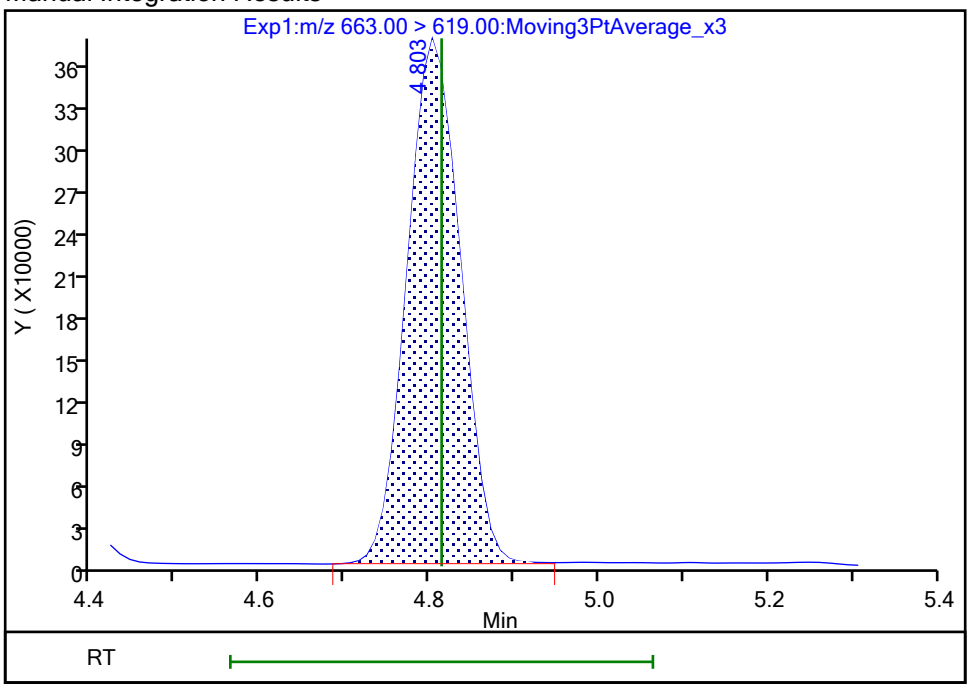
Processing Integration Results

RT: 4.80
Area: 1644721
Amount: 0.906078
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 1635493
Amount: 0.900994
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:45:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

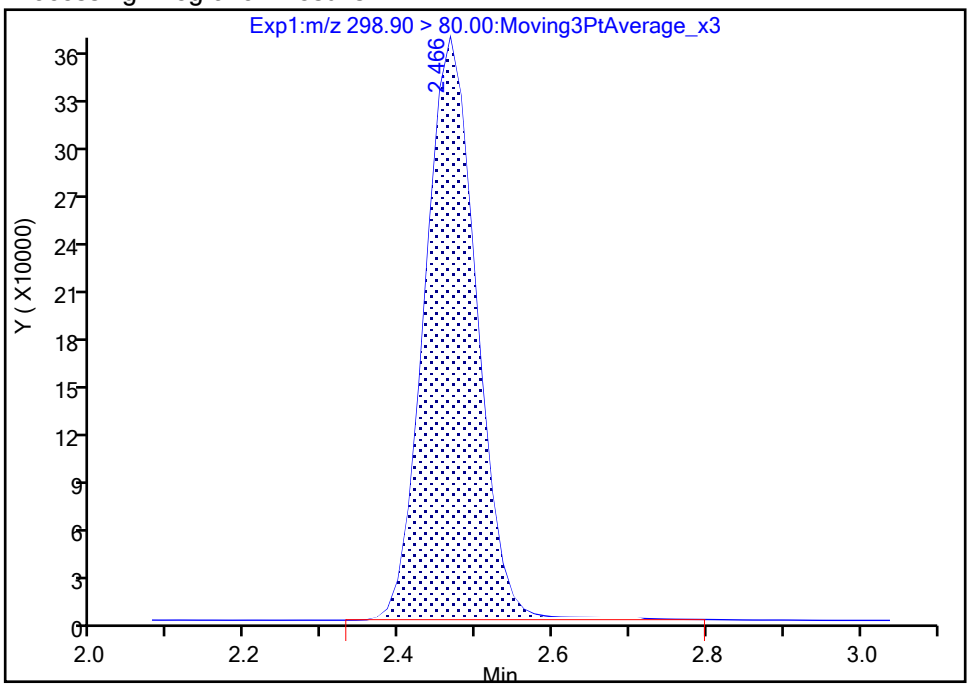
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

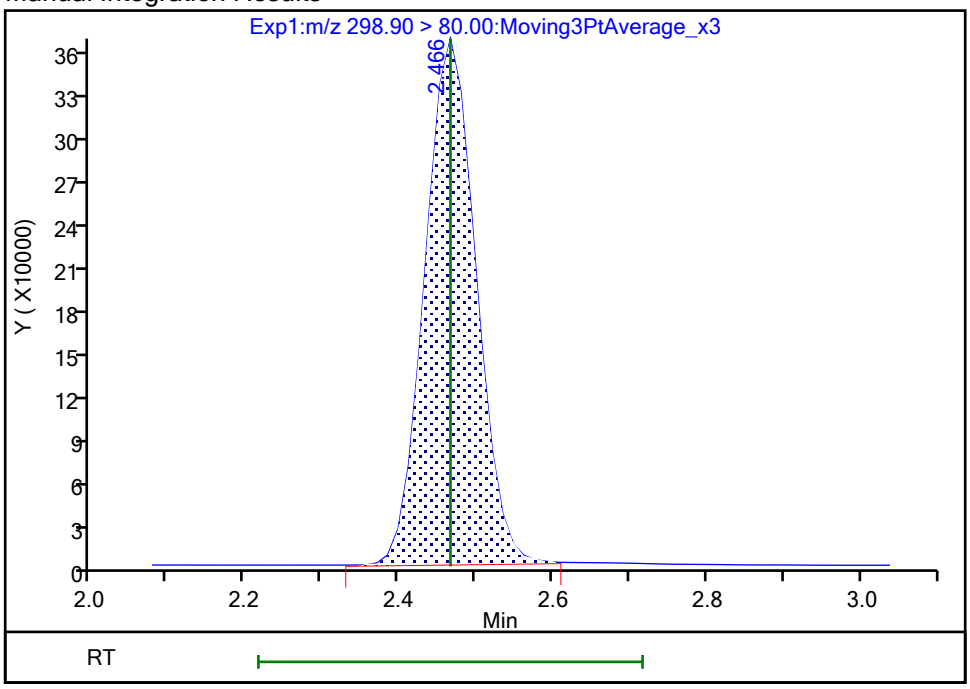
Processing Integration Results

RT: 2.47
Area: 1696076
Amount: 0.882077
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1687006
Amount: 0.877360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

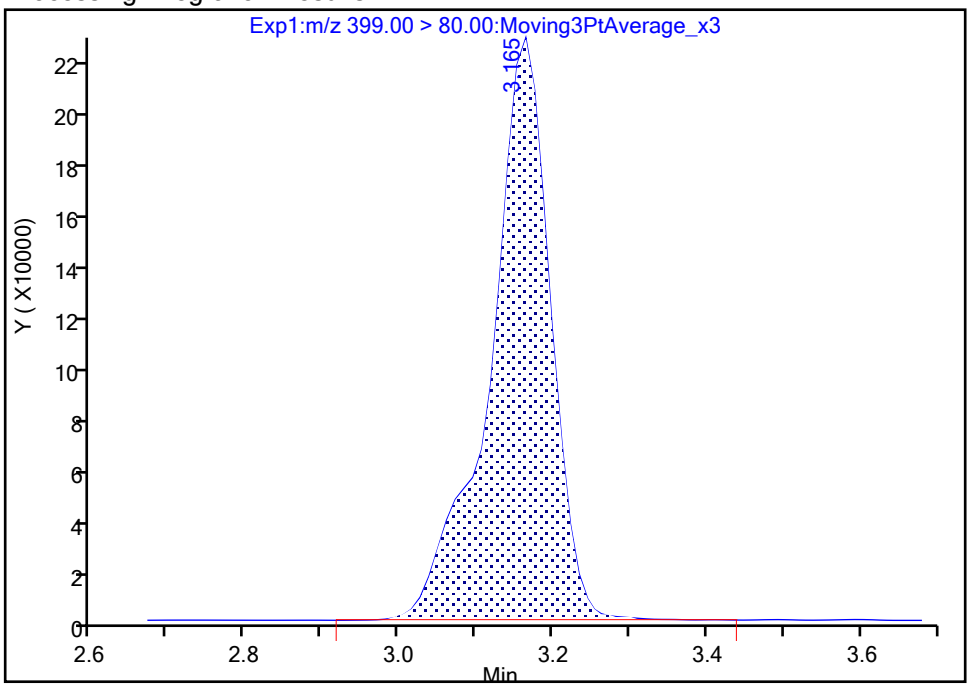
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

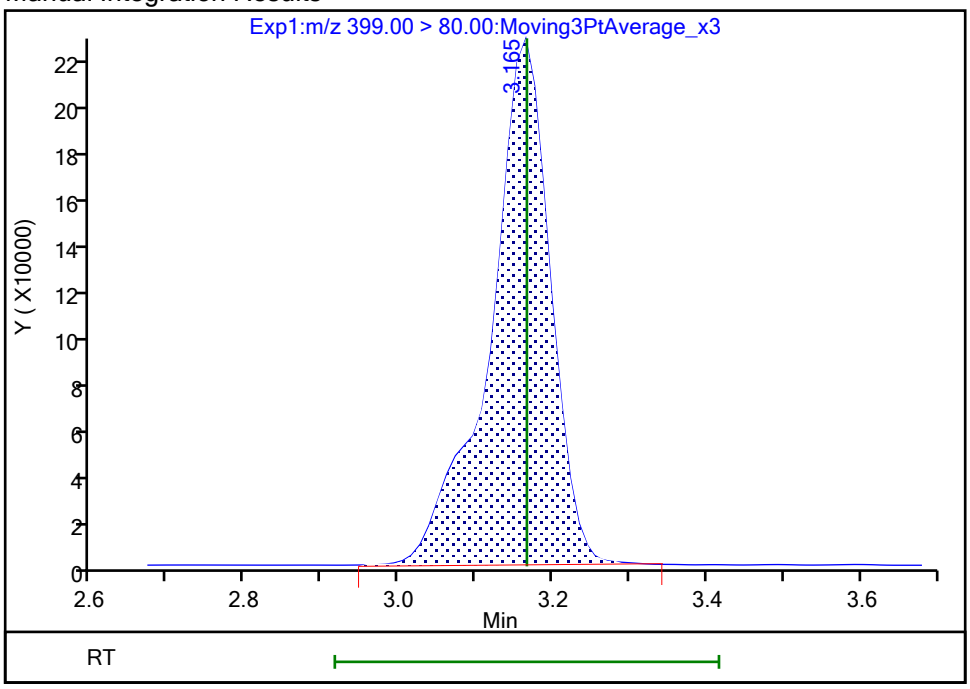
Processing Integration Results

RT: 3.16
Area: 1222725
Amount: 0.853144
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1218004
Amount: 0.849850
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

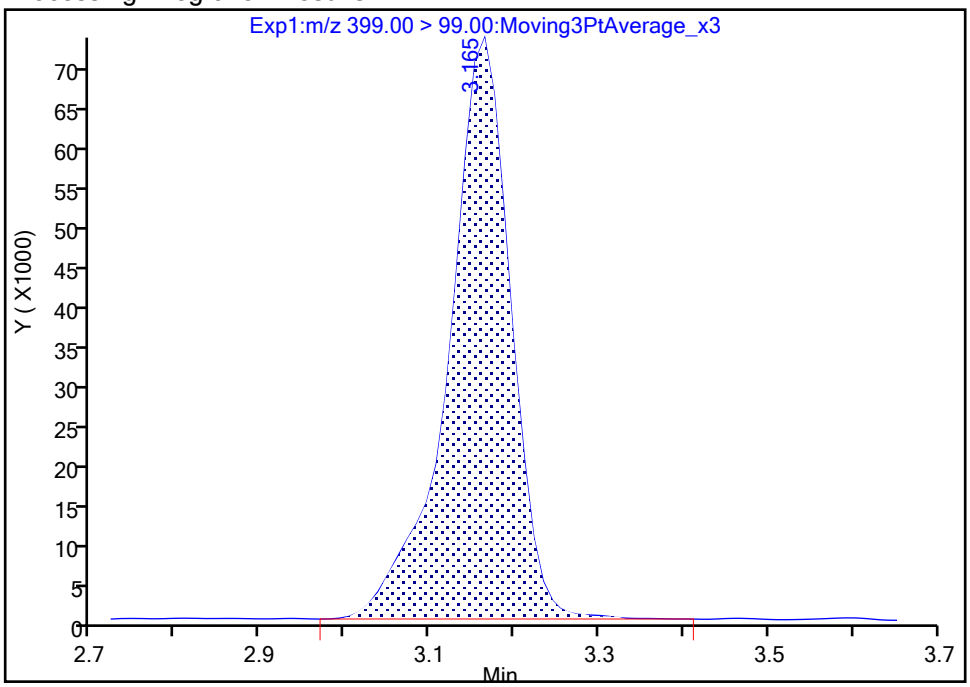
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

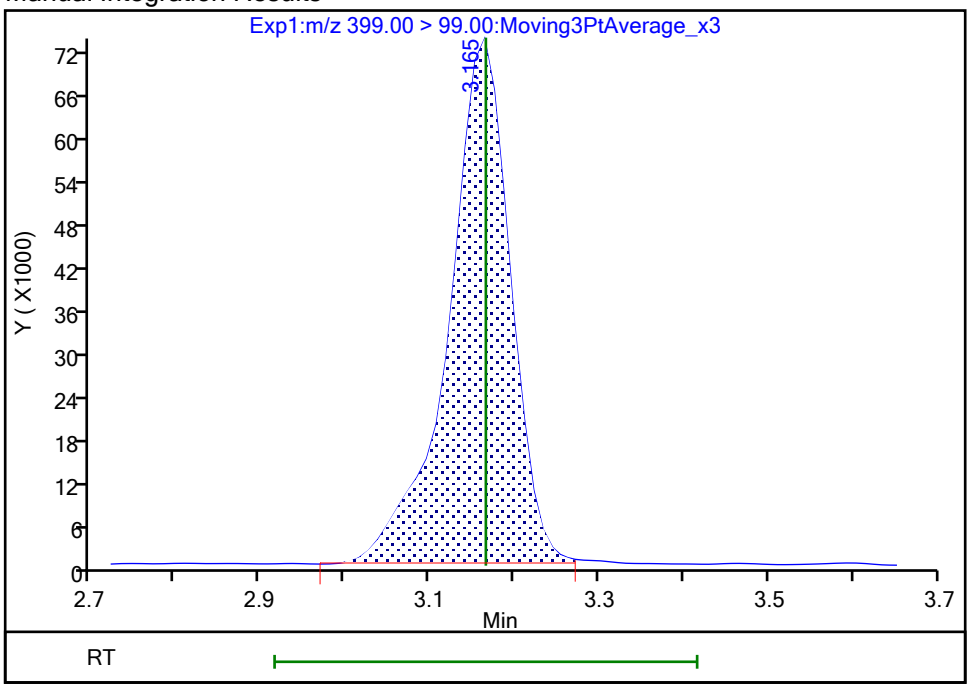
Processing Integration Results

RT: 3.16
Area: 377075
Amount: 0.853144
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 375385
Amount: 0.849850
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

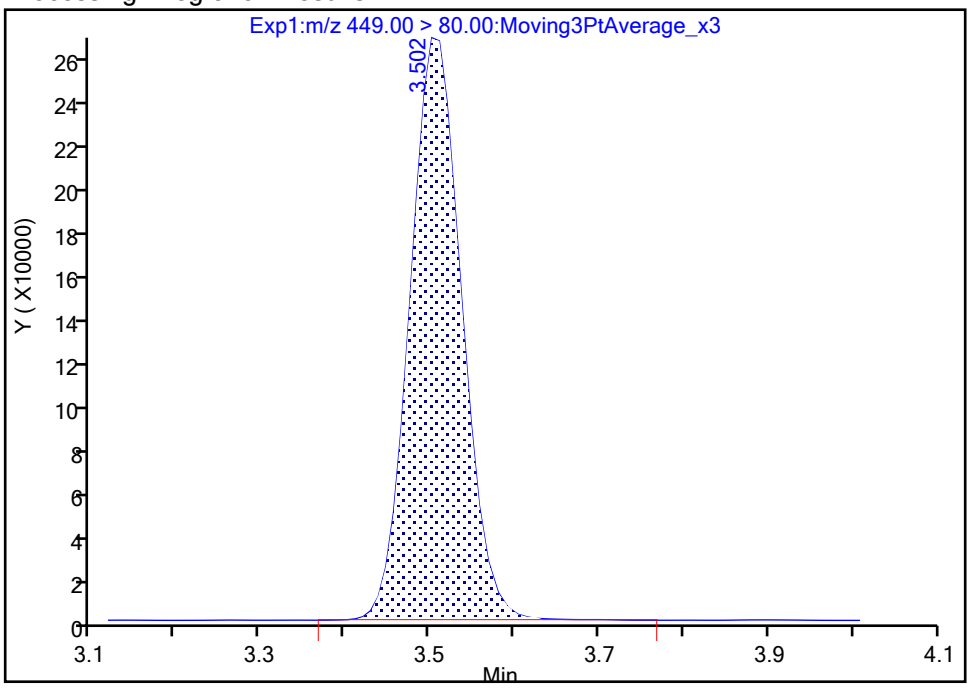
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

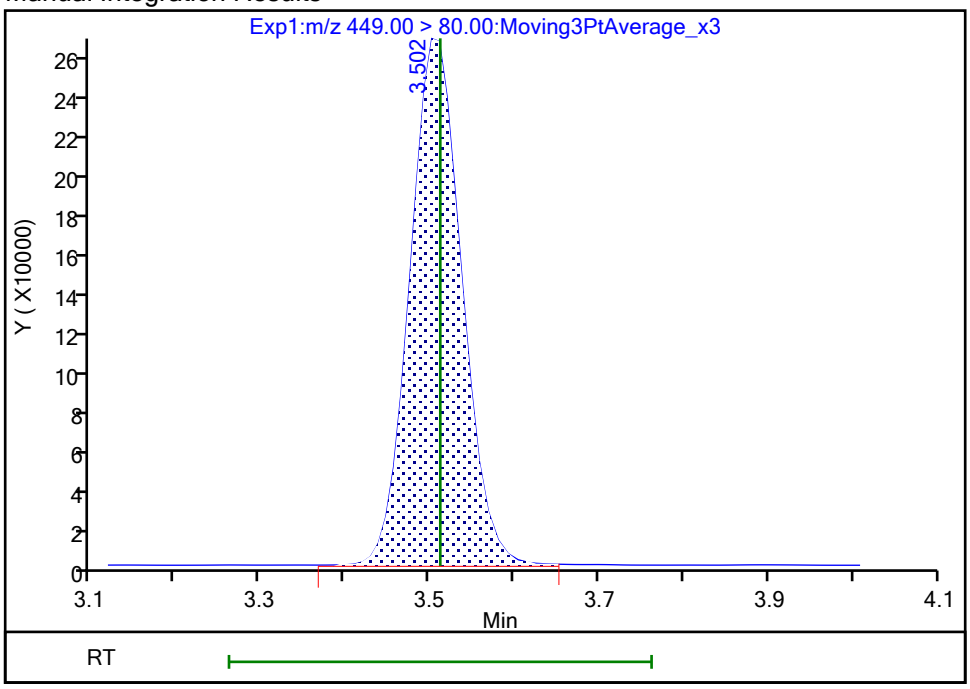
Processing Integration Results

RT: 3.50
Area: 1125768
Amount: 0.915751
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 1124473
Amount: 0.914697
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

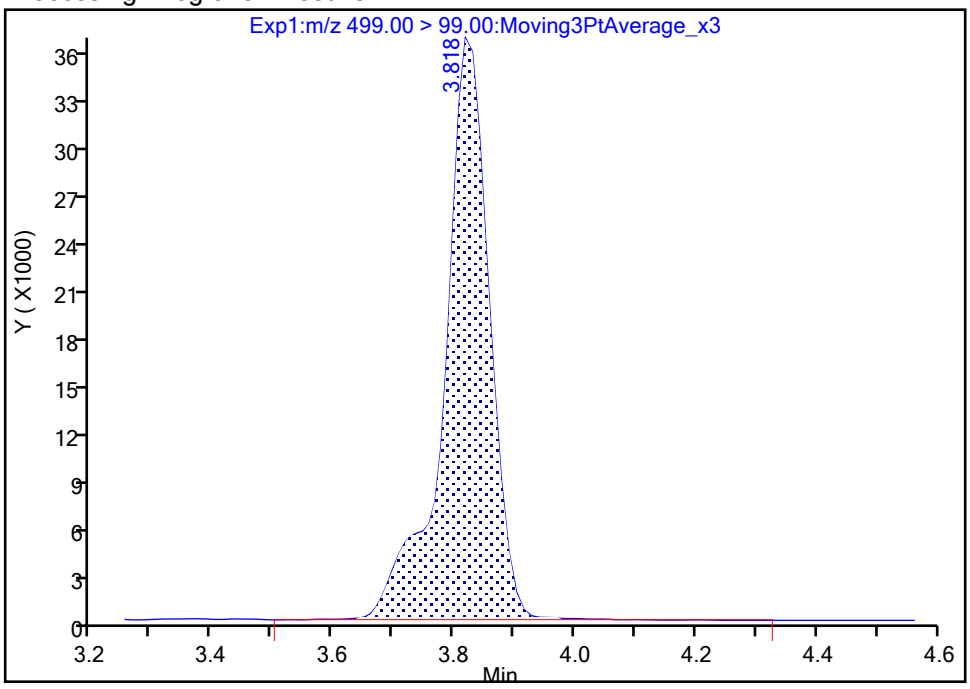
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

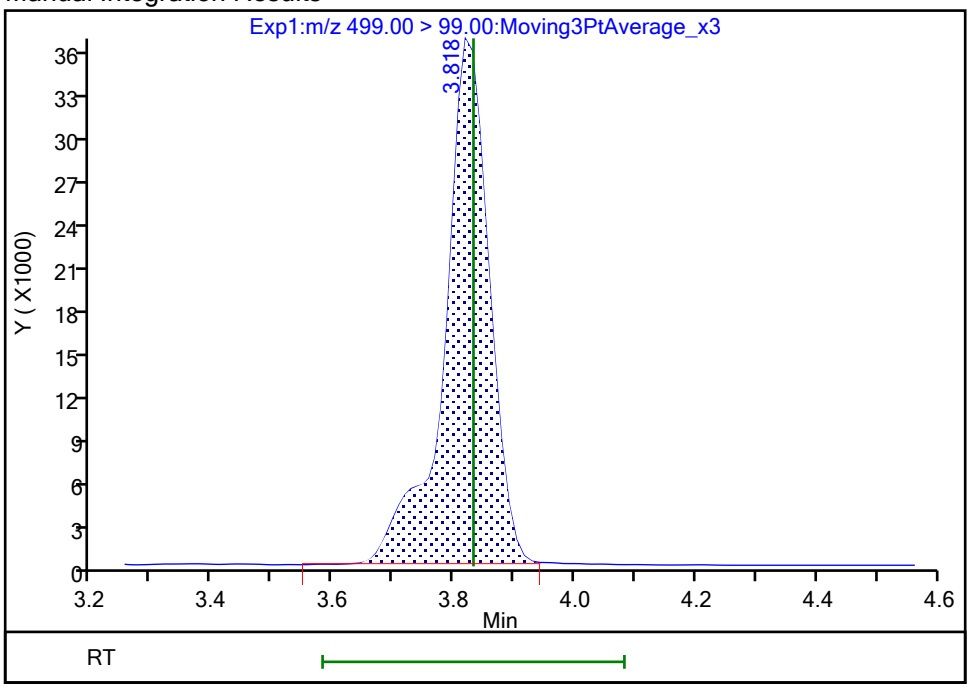
Processing Integration Results

RT: 3.82
Area: 193787
Amount: 0.853170
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 191568
Amount: 0.847765
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

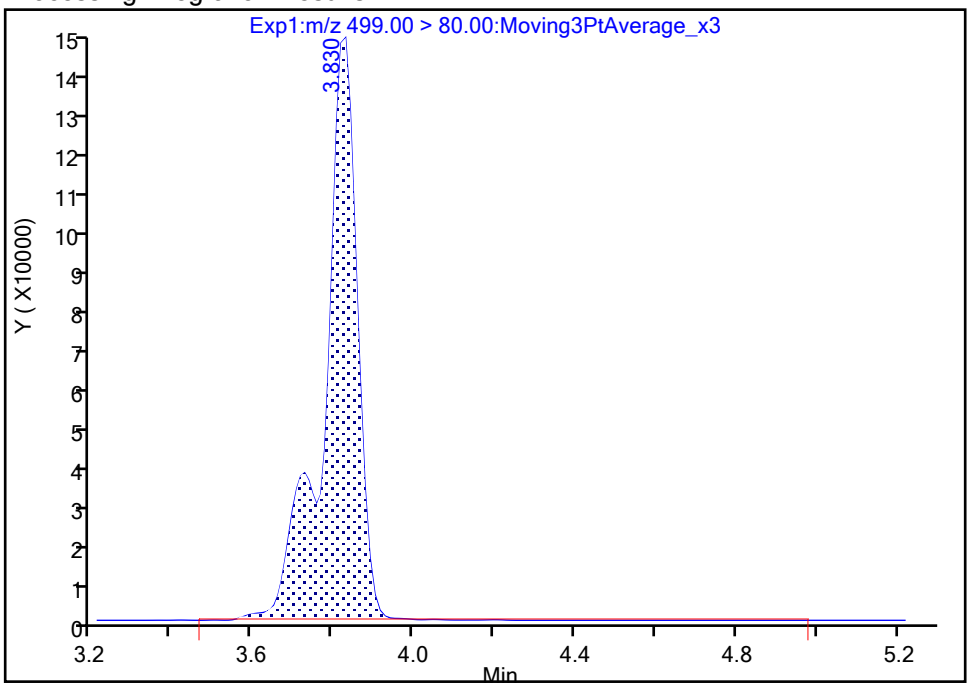
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

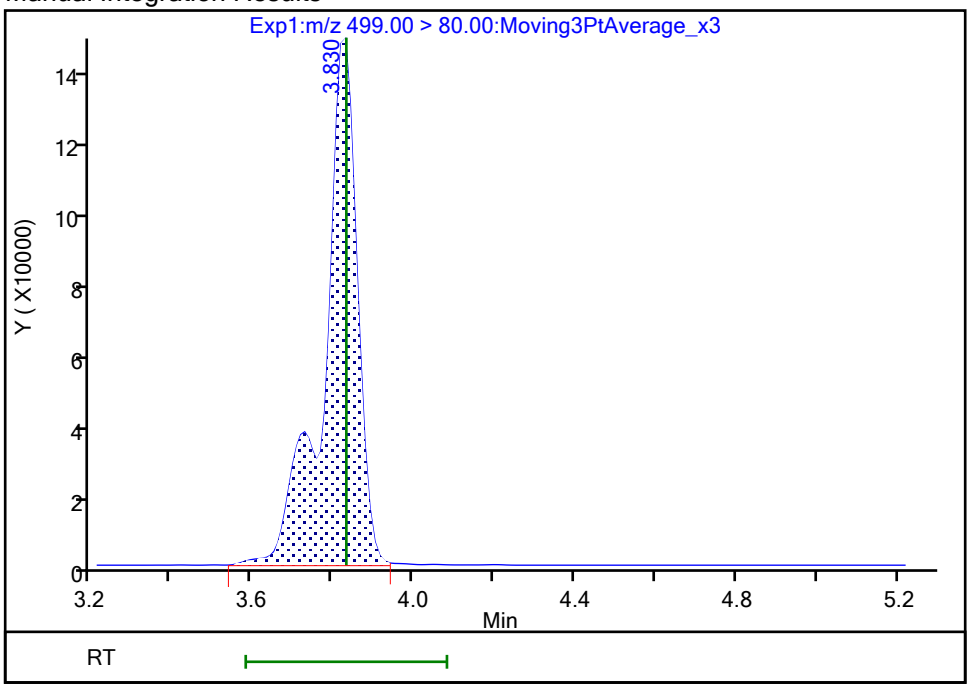
Processing Integration Results

RT: 3.83
Area: 846504
Amount: 0.853170
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 841142
Amount: 0.847765
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

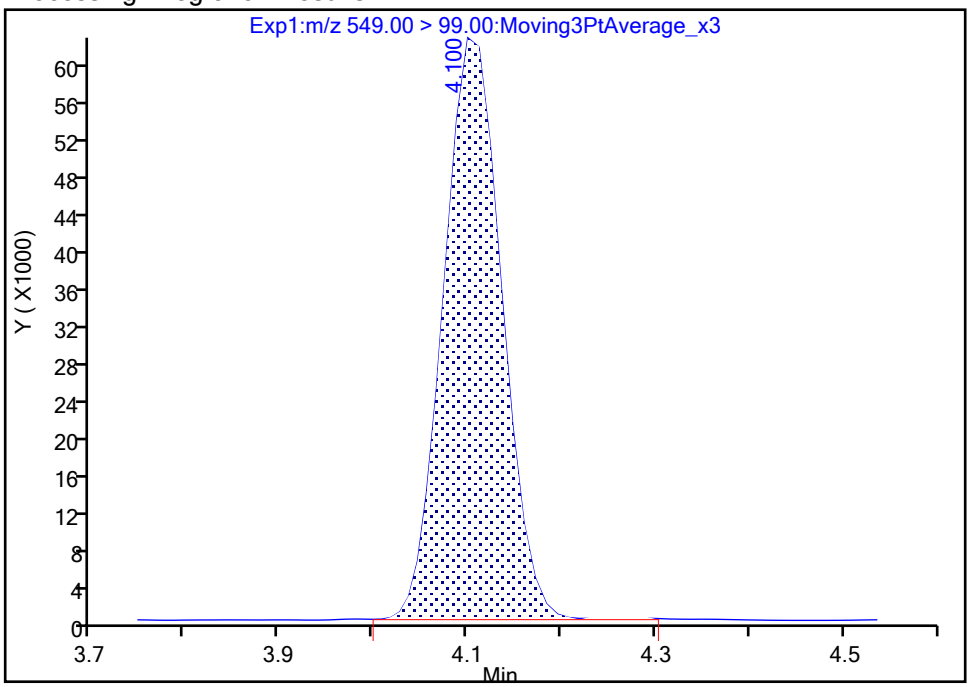
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

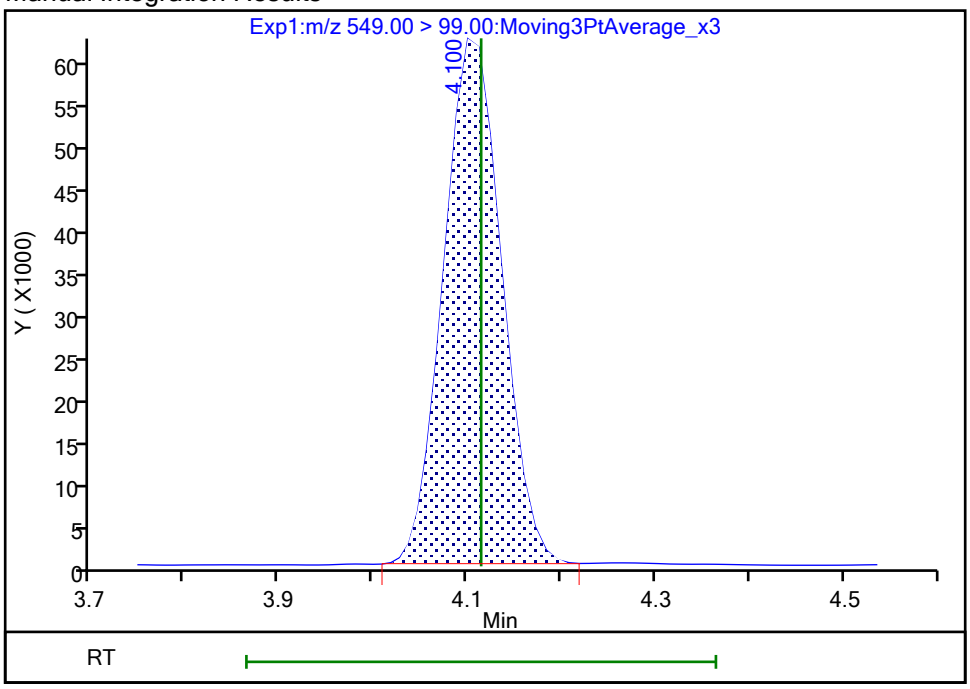
Processing Integration Results

RT: 4.10
Area: 271933
Amount: 0.854606
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 271970
Amount: 0.854606
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:45:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

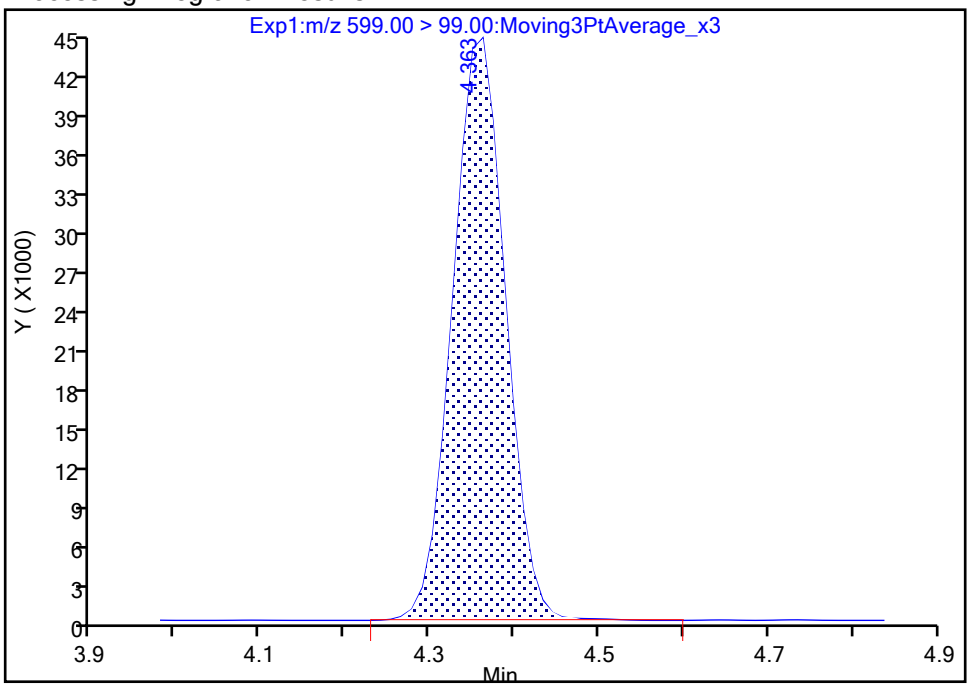
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

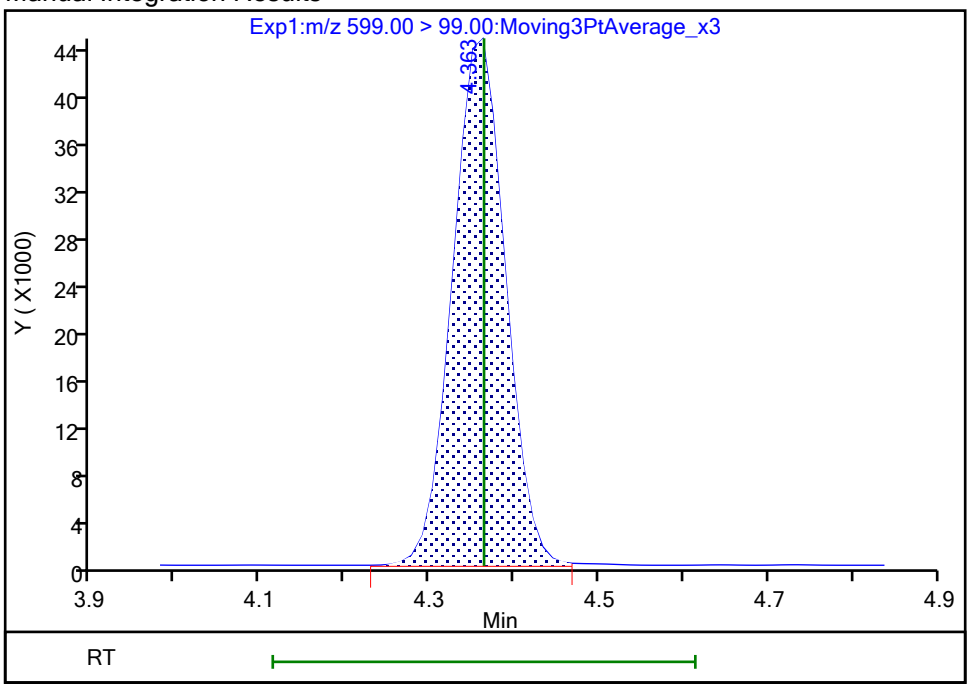
Processing Integration Results

RT: 4.36
Area: 194454
Amount: 0.779418
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 194014
Amount: 0.779418
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:45:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

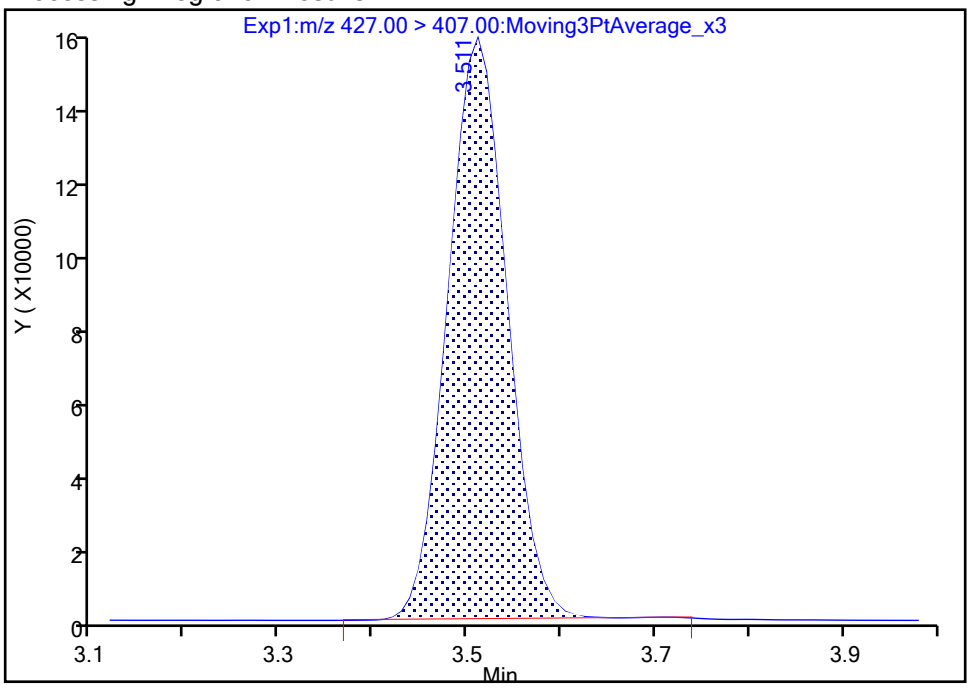
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

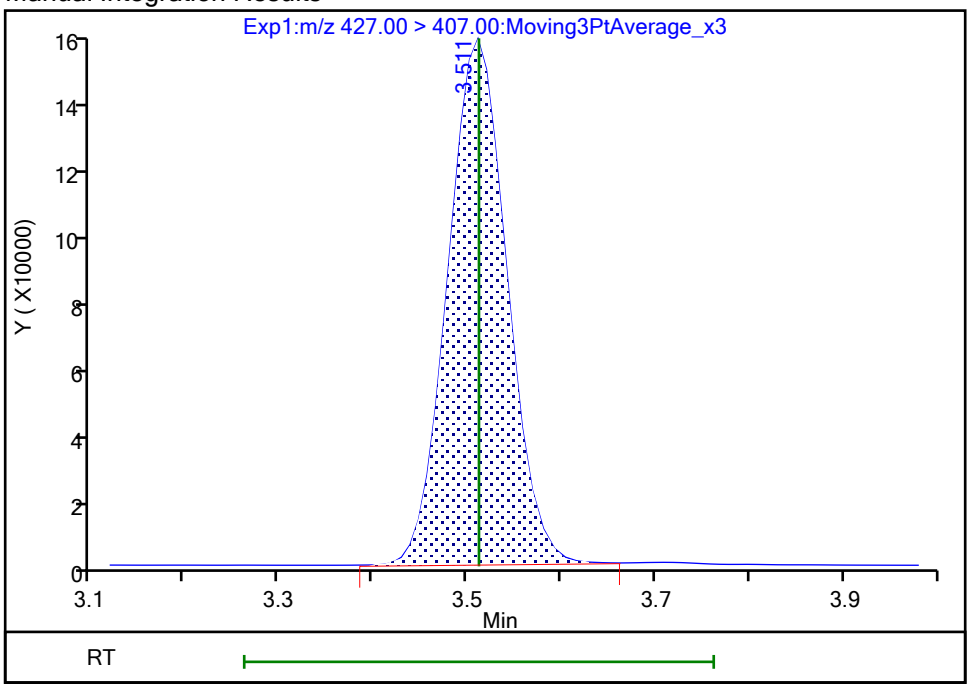
Processing Integration Results

RT: 3.51
Area: 670271
Amount: 0.946806
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 671606
Amount: 0.948692
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:44:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

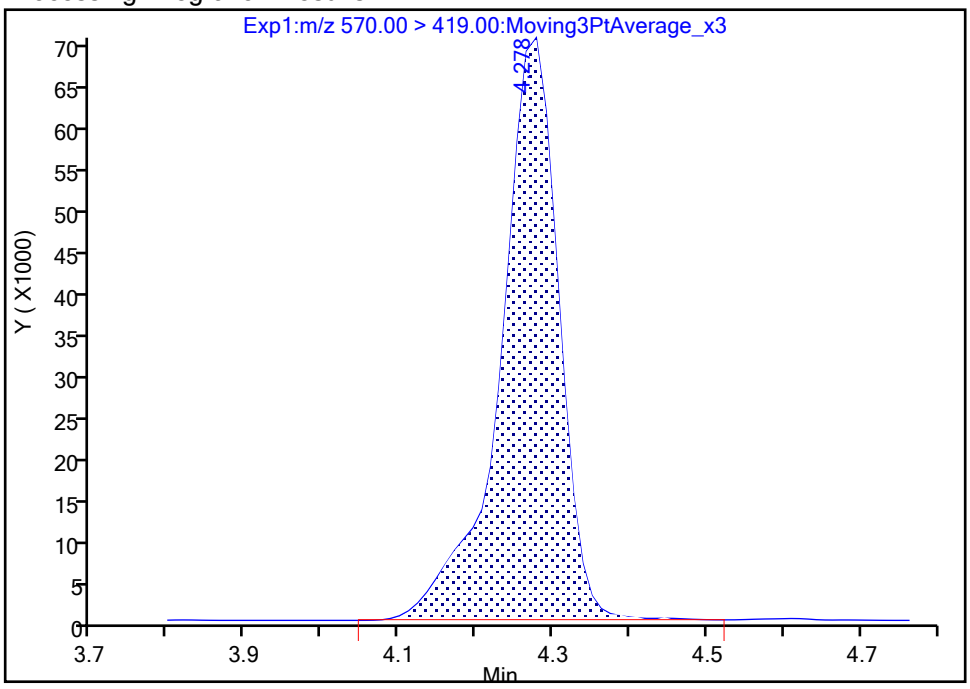
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

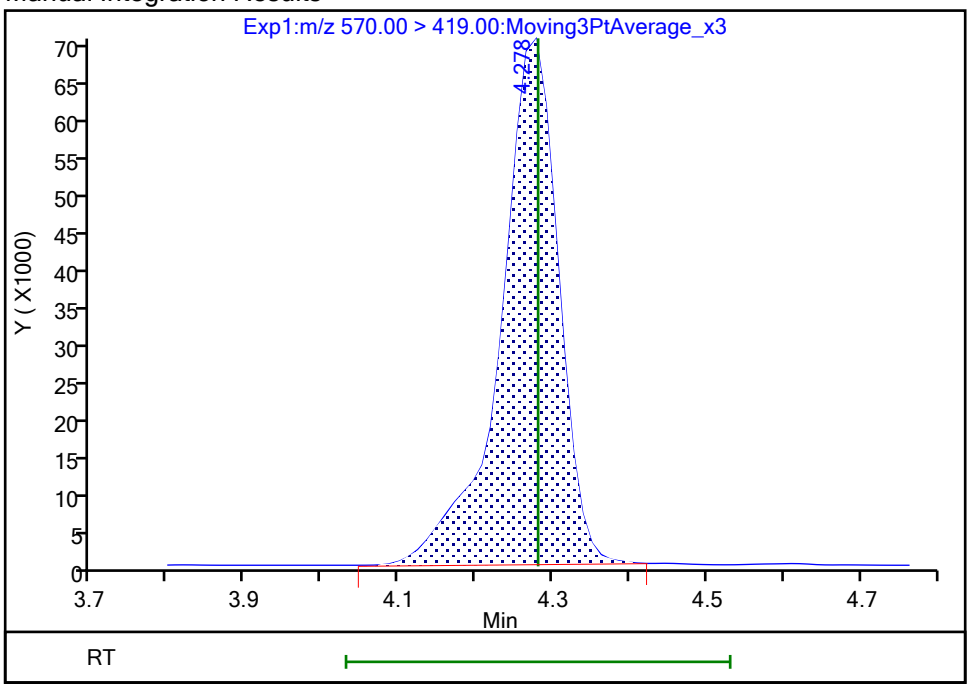
Processing Integration Results

RT: 4.28
Area: 372661
Amount: 0.939966
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 371542
Amount: 0.937143
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:45:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

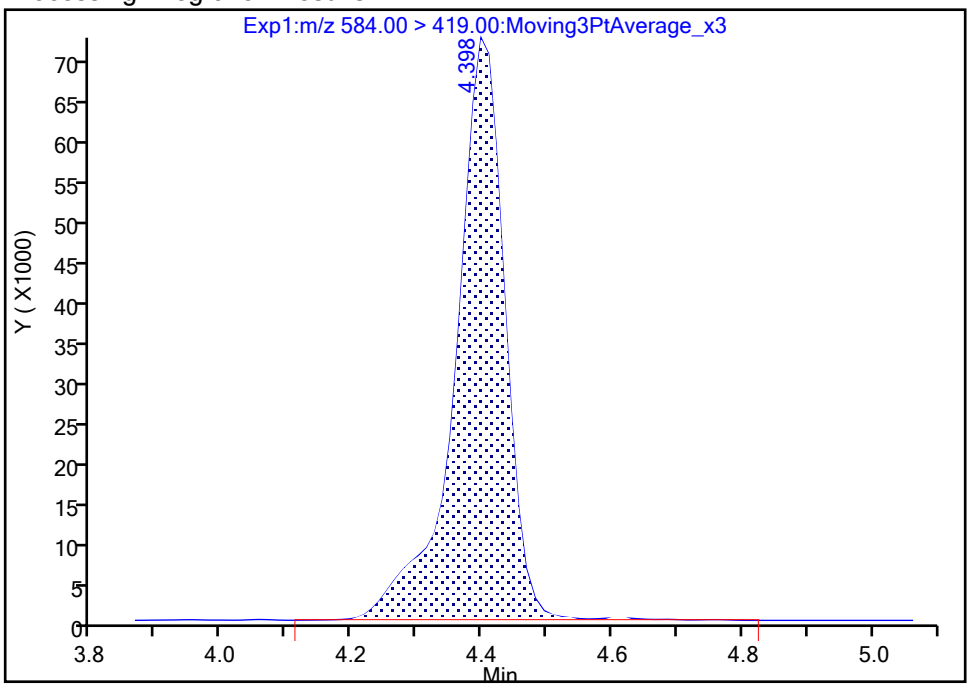
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

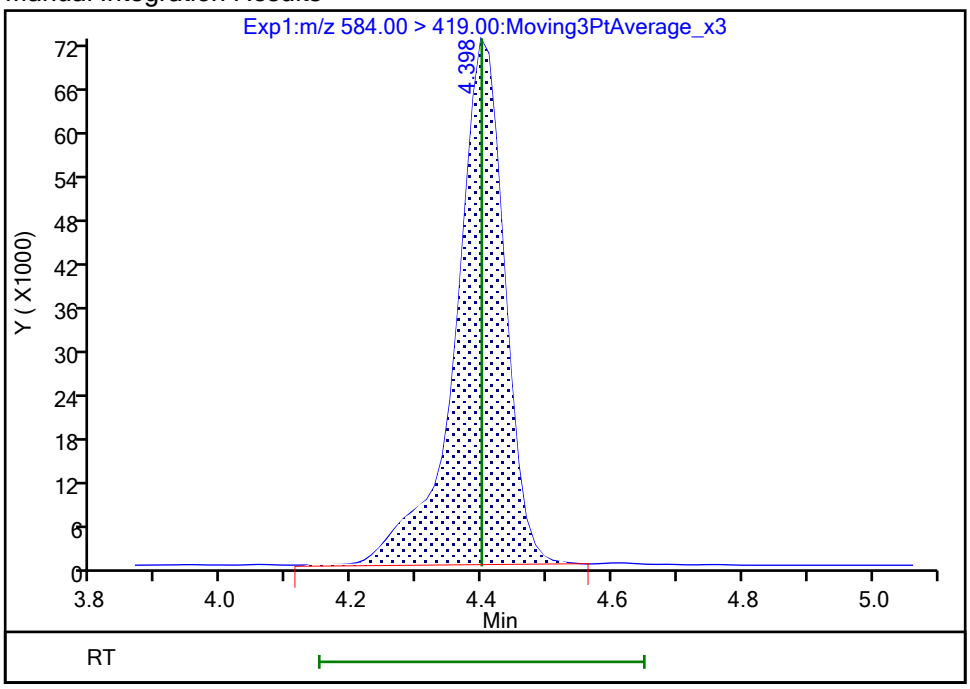
Processing Integration Results

RT: 4.40
Area: 384408
Amount: 0.918348
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 379801
Amount: 0.907342
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:45:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

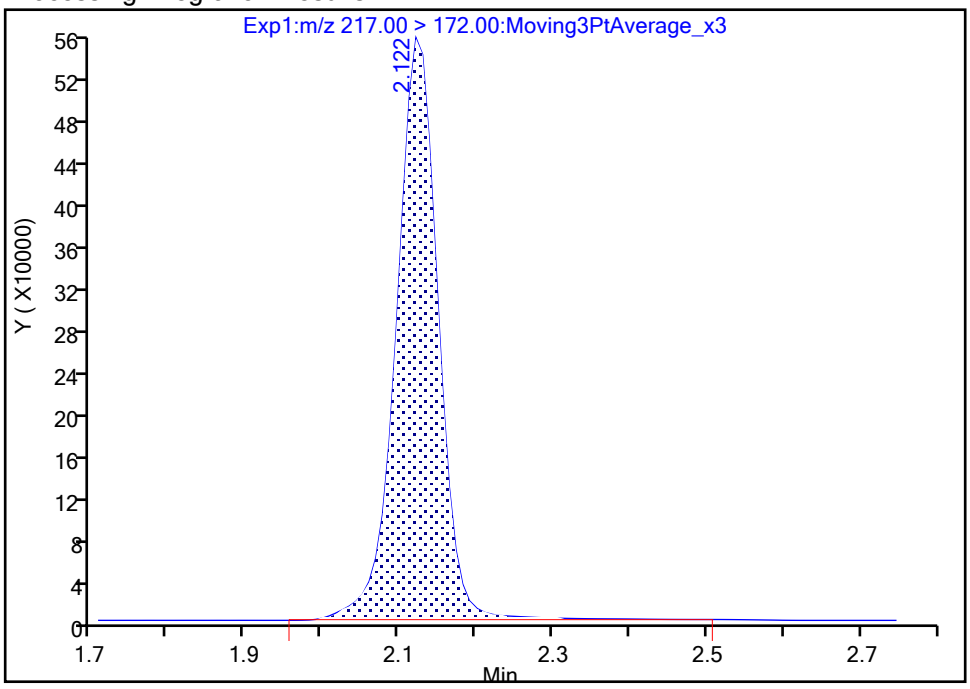
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

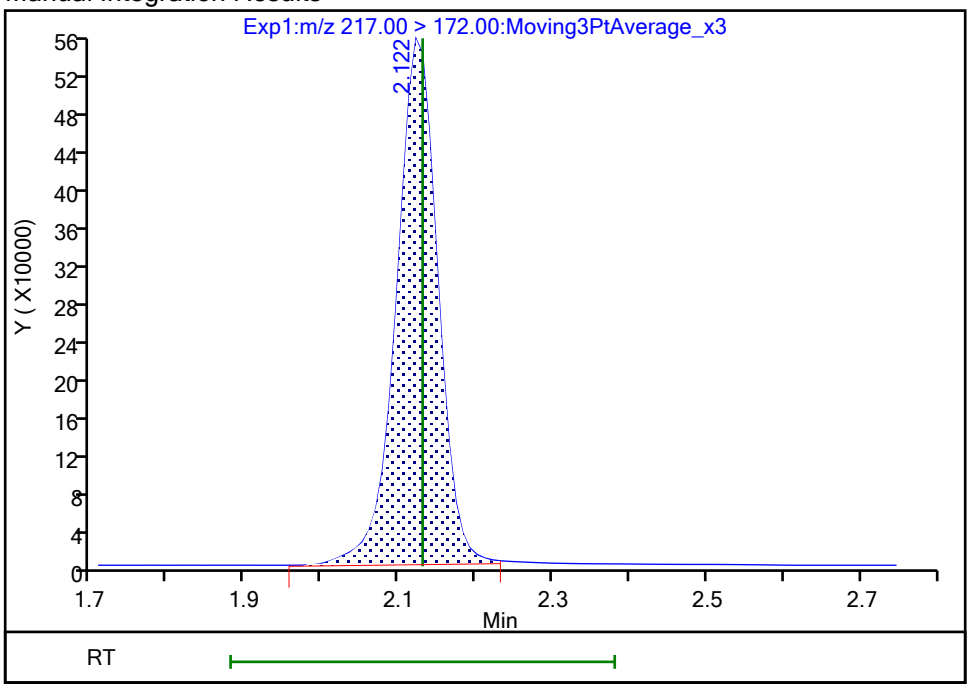
Processing Integration Results

RT: 2.12
Area: 2105966
Amount: 1.235351
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2087102
Amount: 1.224285
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:42:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

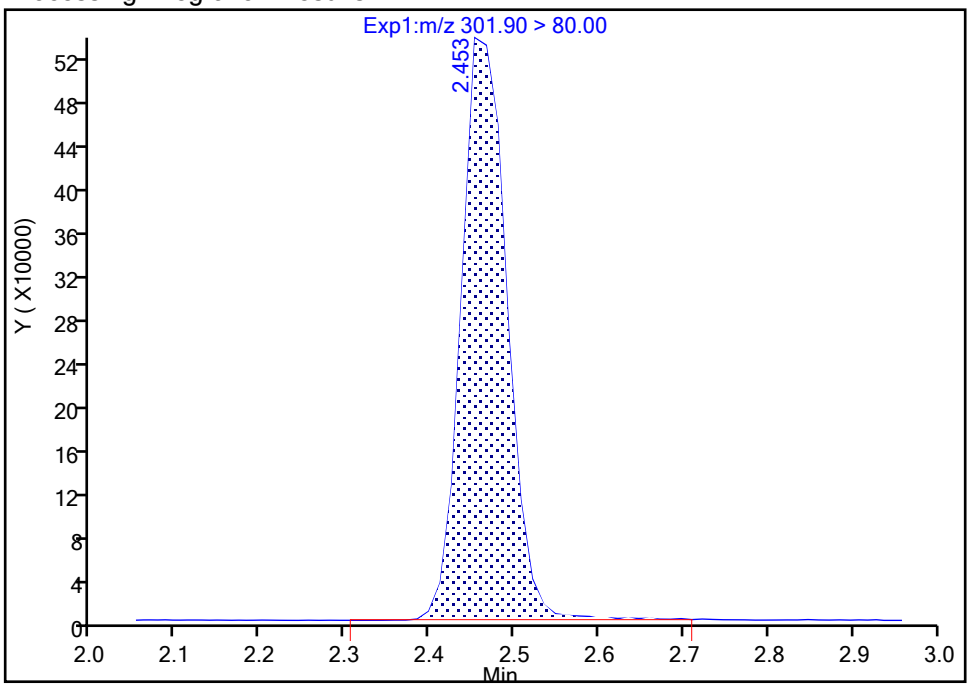
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

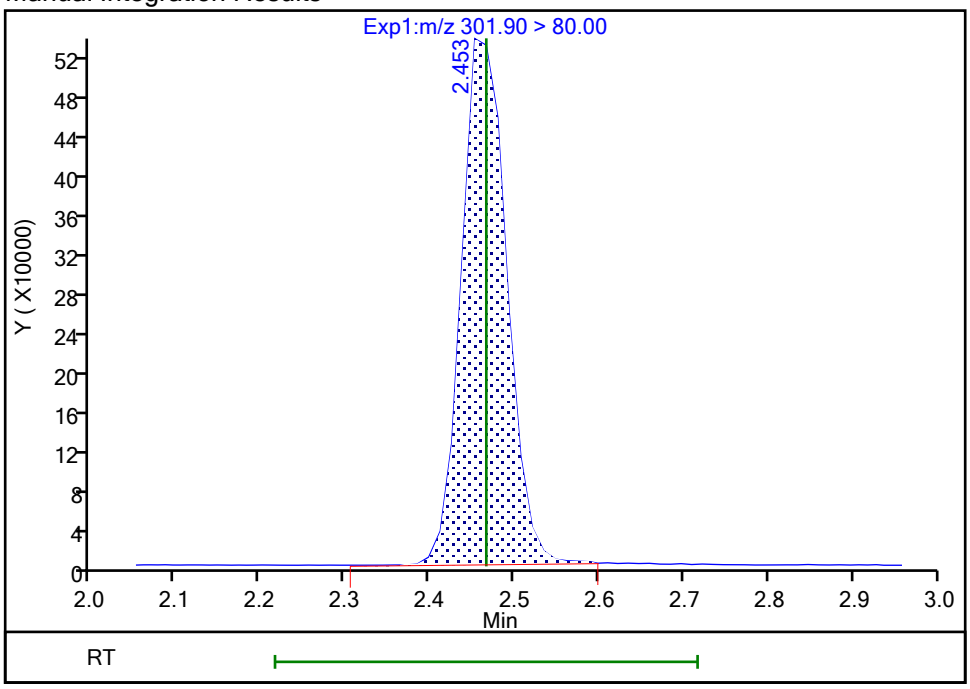
Processing Integration Results

RT: 2.45
Area: 2008434
Amount: 1.121936
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 2001314
Amount: 1.117959
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:42:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

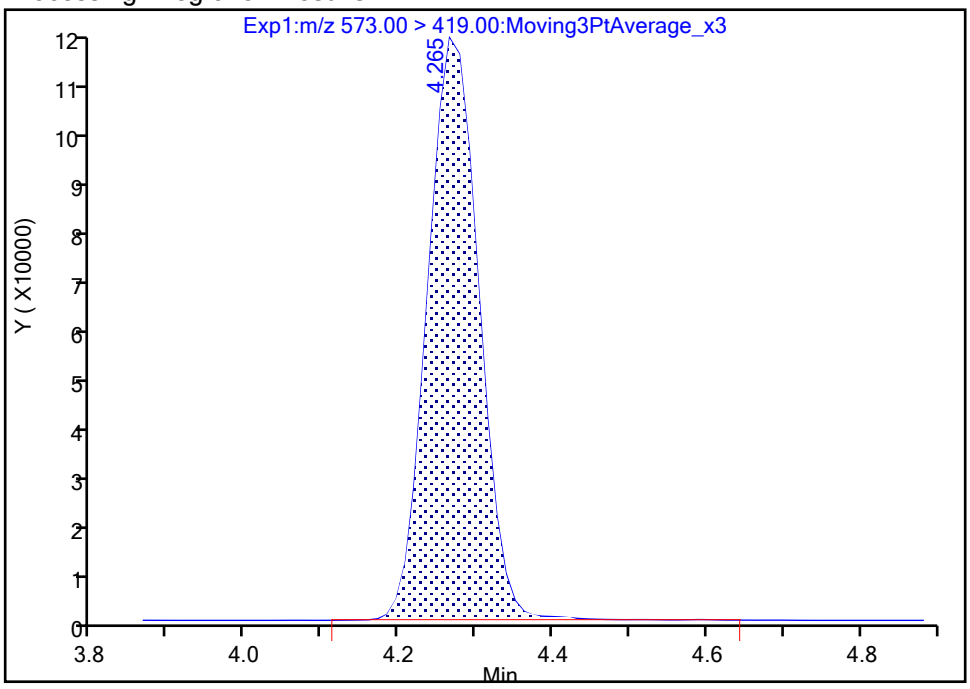
Data File: \\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d
Injection Date: 24-Oct-2023 18:49:07 Instrument ID: LC812
Lims ID: LCS 200-196715/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

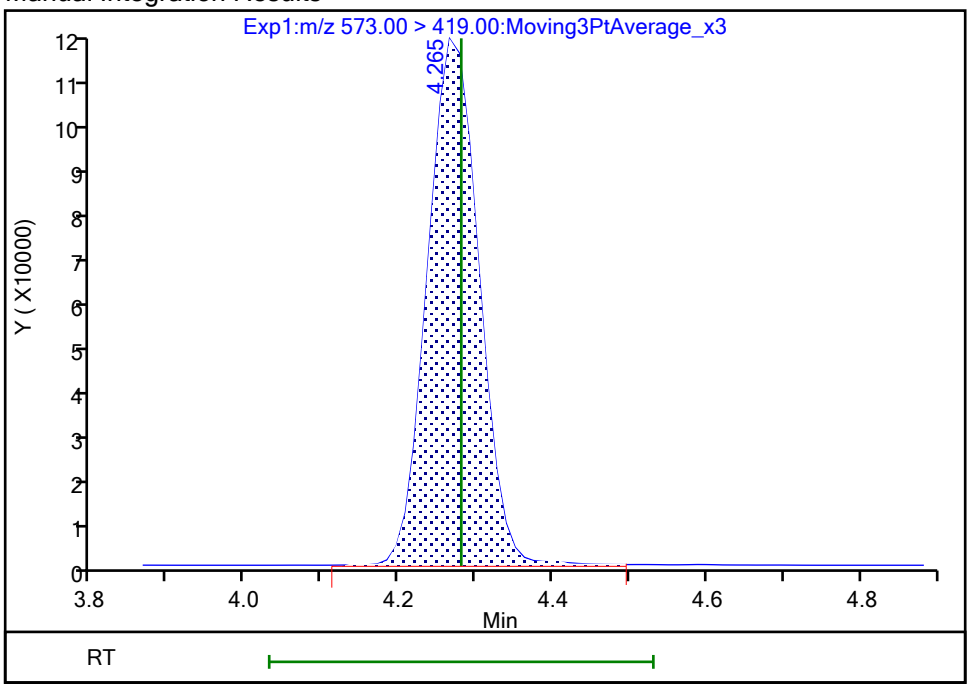
Processing Integration Results

RT: 4.27
Area: 546806
Amount: 1.200244
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 546146
Amount: 1.198796
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

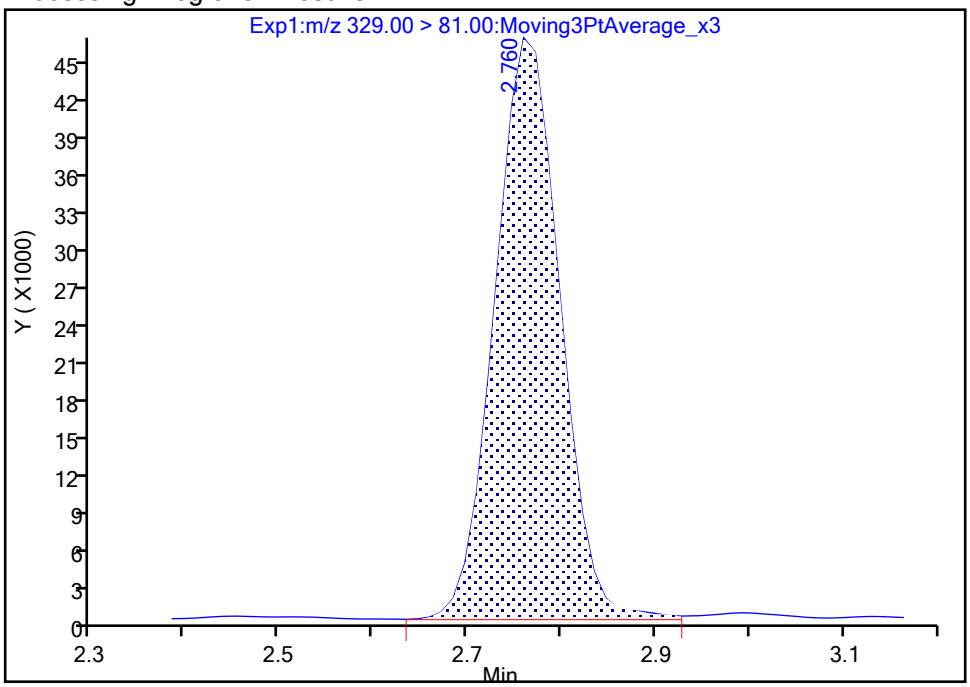
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

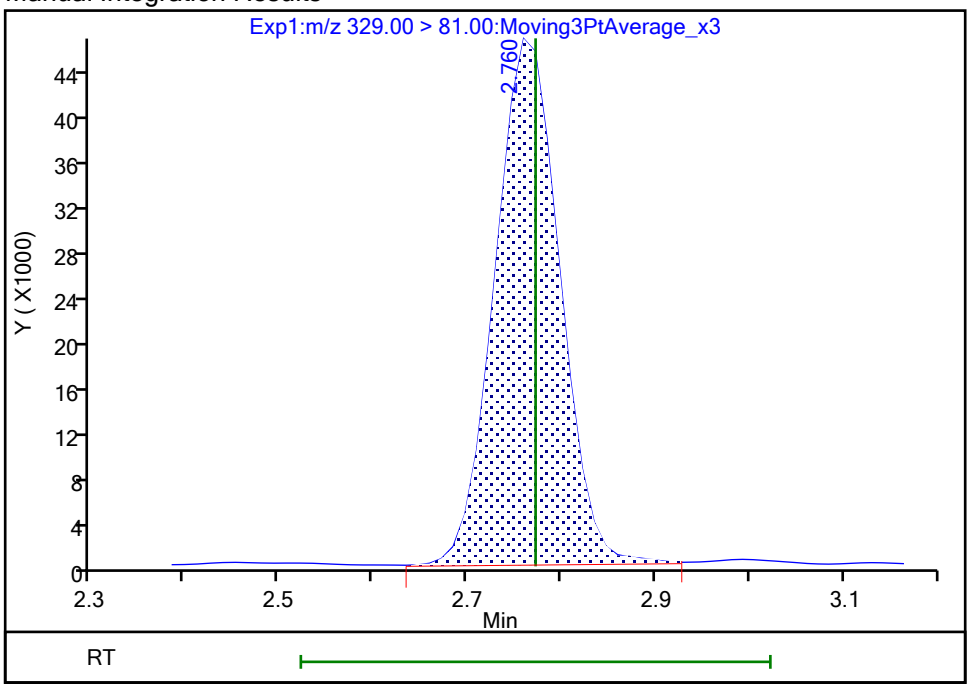
Processing Integration Results

RT: 2.76
Area: 224376
Amount: 1.083811
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 223067
Amount: 1.077488
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:42:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

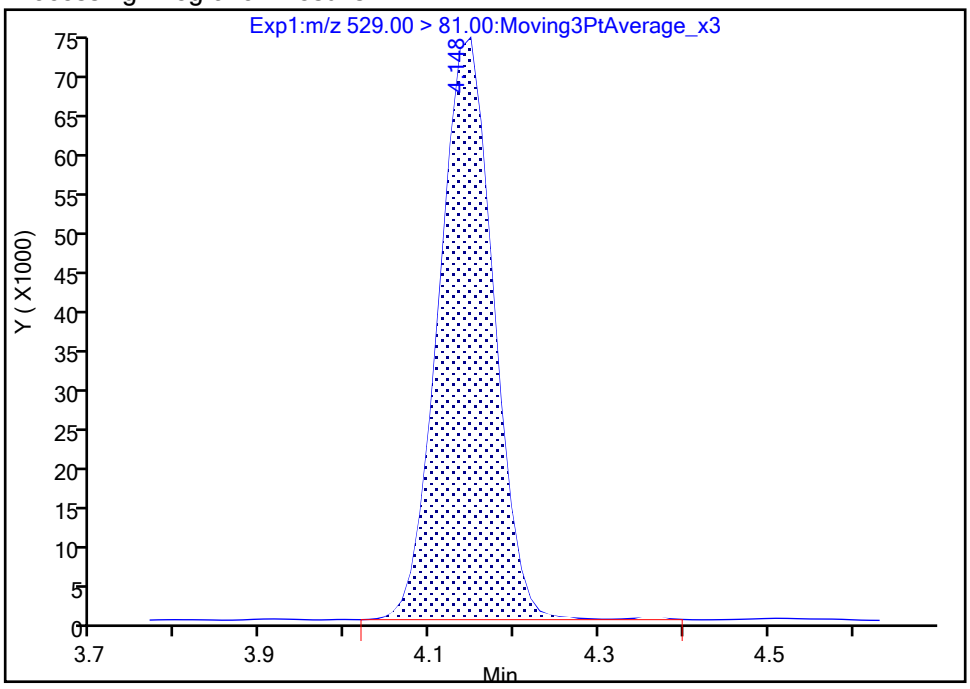
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

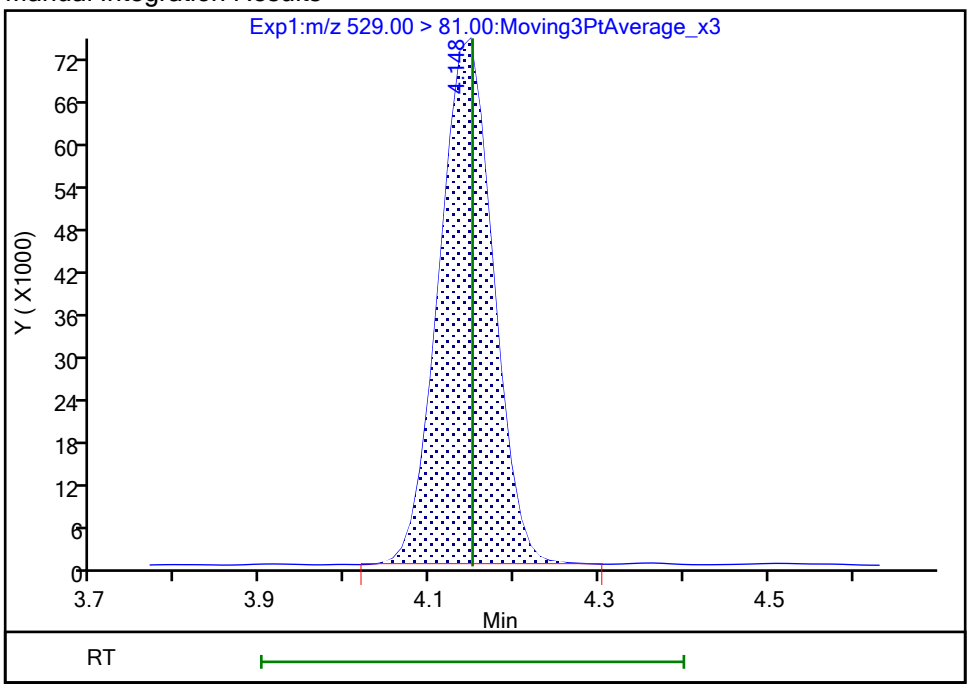
Processing Integration Results

RT: 4.15
Area: 333984
Amount: 1.114018
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 333364
Amount: 1.111950
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

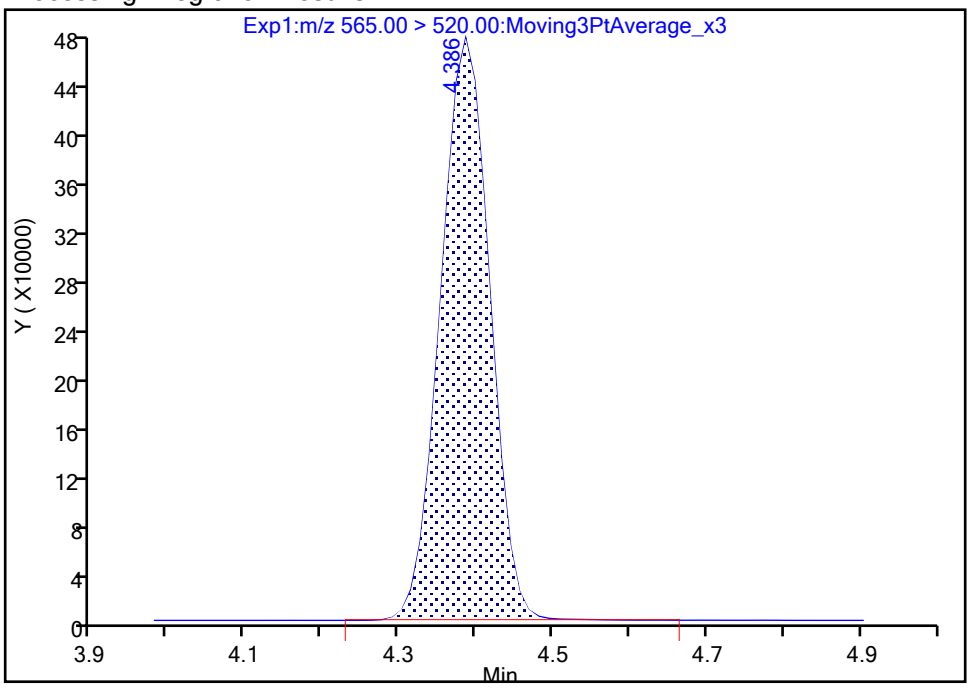
Data File:	\\chromfs\Burlington\ChromData\LC812\20231024-57538.b\PA231024A07.d				
Injection Date:	24-Oct-2023 18:49:07	Instrument ID:	LC812		
Lims ID:	LCS 200-196715/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

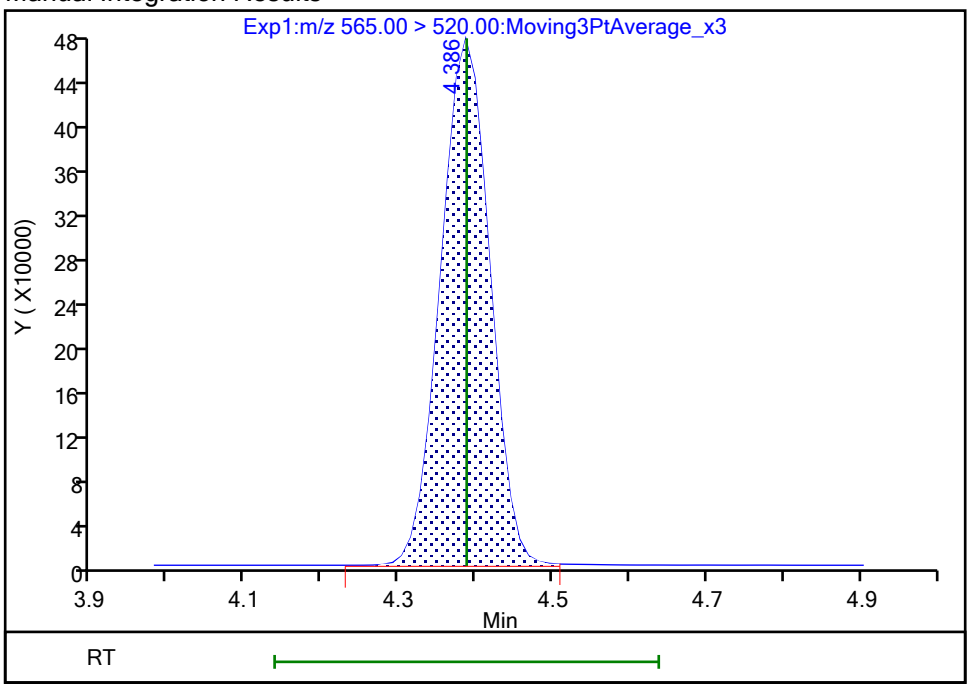
Processing Integration Results

RT: 4.39
Area: 2129898
Amount: 1.183670
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2126732
Amount: 1.181911
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 12:43:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196662/3-A

Matrix: Water Lab File ID: PA231023E04.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:30

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.50		5.00	1.20
2706-90-3	Perfluoropentanoic acid	41.85		2.00	0.68
307-24-4	Perfluorohexanoic acid	38.27		2.00	0.65
375-85-9	Perfluoroheptanoic acid	41.74		2.00	0.54
335-67-1	Perfluorooctanoic acid	38.60		2.00	0.76
375-95-1	Perfluorononanoic acid	37.70		2.00	0.49
335-76-2	Perfluorodecanoic acid	39.12		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	37.31		2.00	0.55
307-55-1	Perfluorododecanoic acid	36.54		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	38.38		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	36.00		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.80		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	37.61		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.58		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	36.16		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	34.58		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	33.84		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	29.91		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	37.18		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	38.79		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	40.14		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	41.50		2.00	0.92
2355-31-9	NMeFOSAA	38.55		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	38.11		5.00	1.60
13252-13-6	HFPODA	39.70		4.00	1.10
919005-14-4	DONA	36.02		2.00	0.42
756426-58-1	9Cl-PF3ONS	37.73		2.00	0.32
763051-92-9	11Cl-PF3OUdS	31.91		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196662/3-A

Matrix: Water Lab File ID: PA231023E04.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:30

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	96		50-150
STL01893	13C5 PFPeA	88		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	75		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	78		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	90		50-150
STL02280	M2-8:2 FTS	87		50-150
STL02255	13C3 HFPO-DA	84		50-150
STL00994	18O2 PFHxS	96		50-150
STL00993	13C2 PFHxA	91		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	81		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	92		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	89		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Lims ID: LCSD 200-196662/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 24-Oct-2023 06:30:12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196662/3-A
Misc. Info.: 200-0057513-004 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:34:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2232775	1.20		96.2	1603	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1620568	0.9624		96.2	150	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1588181	1.10		88.2	1821	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1434518	1.05		105	36.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	2035999	1.04		89.8	85679	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1750536	0.8949	Target=2.06	101	992	M
298.90 > 99.00	2.467	2.467	0.0	1.000	854629		2.05(1.03-3.09)		275	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.772	2.760	0.012	1.000	635906	0.9296		99.2	4160	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.788	235178	1.04		89.4	163	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1666733	1.14		91.0	972	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1404008	0.9568	Target=14.12	95.7	281	M
313.00 > 119.00	2.810	2.797	0.013	1.004	99465		14.12(7.06-21.17)		99.8	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1638714	0.9402	Target=2.72	99.9	3225	
349.00 > 99.00	2.810	2.810	0.0	0.888	577518		2.84(1.36-4.09)		1418	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	0.996	236047	0.99		99.3	1502	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.908	0.010	0.829	296919	1.05		83.7	2289	
D 11 18O2 PFHxS										M
403.00 > 84.00	3.165	3.168	-0.003	0.899	1578167	1.13		95.5	1668	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1240291	0.8395	Target=3.32	91.9	1864	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	380691		3.26(1.66-4.98)		347	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	0.996	1750442	1.04	Target=4.17	104	395	M
363.00 > 169.00	3.176	3.168	0.008	1.000	416123		4.21(2.09-6.26)		811	
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.168	0.008	0.902	1870526	1.16		93.1	6206	
77 DONA										M
377.00 > 251.00	3.212	3.203	0.009	0.838	4450733	0.9004	Target=3.33	95.3	3095	M
377.00 > 85.00	3.212	3.203	0.009	0.838	1251184		3.56(1.66-4.99)		1721	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.917	1122183	0.9039	Target=4.83	94.8	2416	
449.00 > 99.00	3.511	3.505	0.006	0.917	230693		4.86(2.41-7.24)		722	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	308777	1.06		89.5	624	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	689268	0.9698		102	894	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1877921	0.9649	Target=2.88	96.5	83.7	M
413.00 > 169.00	3.520	3.514	0.006	1.000	677681		2.77(1.44-4.32)		1025	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2283896	1.25		100	5162	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2340056	1.25			7186	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	866301	0.8646	Target=4.24	93.2	1898	M
499.00 > 99.00	3.830	3.822	0.008	1.000	189203		4.58(2.12-6.37)		508	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	1026531	1.16		96.8	3306	
20 Perfluorononanoic acid										
463.00 > 419.00	3.854	3.845	0.009	1.000	1742867	0.9424	Target=8.34	94.2	263	
463.00 > 169.00	3.854	3.845	0.009	1.000	213694		8.16(4.17-12.51)		1994	
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.845	0.009	1.095	2358813	1.19		95.2	8084	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.983	-0.002	1.039	2892092	0.9433		101	3879	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.105	0.007	1.074	644969	0.8461	Target=2.17	88.0	3724	
549.00 > 99.00	4.112	4.105	0.007	1.074	267219		2.41(1.08-3.25)		751	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1871420	0.9780	Target=11.44	97.8	460	
513.00 > 169.00	4.136	4.129	0.007	1.000	177378		10.55(5.72-17.16)		1453	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										M
515.00 > 470.00	4.136	4.129	0.007	1.175	2393361	1.15		92.2	6375	M
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.141	0.007	1.178	340609	1.04		87.1	638	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	628322	1.00		105	1970	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1720044	0.9710		77.7	3880	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.234	0.008	1.000	1361930	1.04		104	2313	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.270	0.009	1.215	556670	1.12		89.8	1144	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.270	0.009	1.000	389460	0.9638		96.4	625	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	438673	0.7477	Target=2.37	77.5	3047	
599.00 > 99.00	4.363	4.366	-0.003	1.139	181878		2.41(1.19-3.56)		1315	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.399	4.390	0.009	1.250	2170032	1.11		88.6	7619	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.399	4.390	0.009	1.000	1668957	0.9328	Target=12.20	93.3	414	
563.00 > 169.00	4.387	4.390	-0.003	0.997	151423		11.02(6.10-18.31)		1235	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	526238	1.10		88.1	1387	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.401	0.009	1.003	401206	0.9528		95.3	855	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.486	4.473	0.013	1.171	3750355	0.7976		84.6	4821	
D 36 13C2 PFDoA										M
615.00 > 570.00	4.613	4.613	0.0	1.310	2017017	1.01		81.0	3176	M
37 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.613	0.0	1.000	1500448	0.9136	Target=8.47	91.4	83.1	
613.00 > 169.00	4.613	4.613	0.0	1.000	189405		7.92(4.23-12.70)		1456	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.635	4.624	0.011	1.117	332029	0.8870		92.0	4687	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.777	4.777	0.0	1.247	152046	0.7647	Target=0.48	79.0	2212	
699.00 > 99.00	4.777	4.777	0.0	1.247	296047		0.51(0.24-0.72)		4002	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.806	4.806	0.0	1.042	1656362	0.9595	Target=6.41	96.0	86.3	
663.00 > 169.00	4.806	4.806	0.0	1.042	248944		6.65(3.21-9.62)		1424	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.993	4.982	0.011	1.418	1858814	0.9373		75.0	5419	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.993	4.982	0.011	1.000	149638	0.9000	Target=0.87	90.0	1384	
713.00 > 219.00	4.982	4.982	0.0	0.998	170346		0.88(0.43-1.30)		1778	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.303	5.292	0.011	1.506	2056672	0.9001		72.0	5145	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.303	5.292	0.011	1.000	1730943	1.05	Target=7.89	105	112	M
813.00 > 169.00	5.303	5.292	0.011	1.000	217602		7.95(3.94-11.83)		2393	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.563	0.0	1.049	1290368	1.00	Target=9.39	100	134	M
913.00 > 169.00	5.563	5.563	0.0	1.049	138534		9.31(4.69-14.08)		893	

QC Flag Legend

Processing Flags

Review Flags

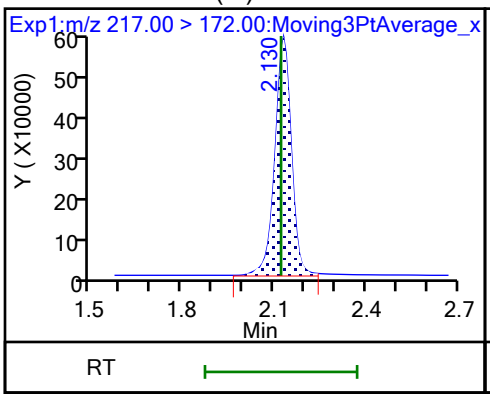
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:13 Chrom Revision: 2.3 18-Oct-2023 21:16:54

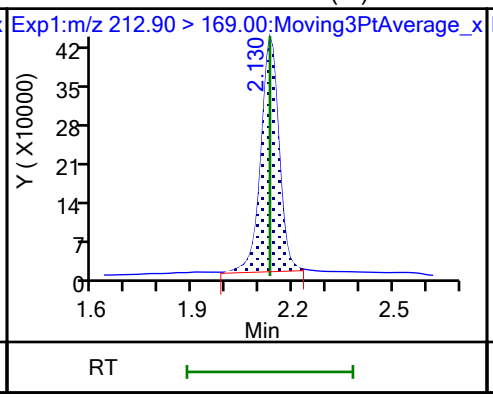
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

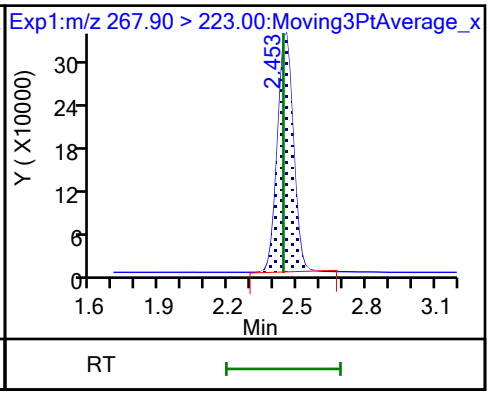
D 1 13C4 PFBA (M)



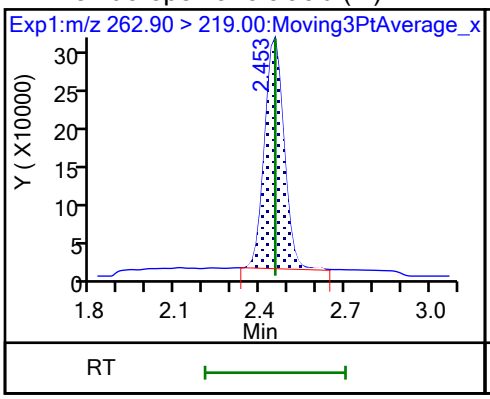
2 Perfluorobutanoic acid (M)



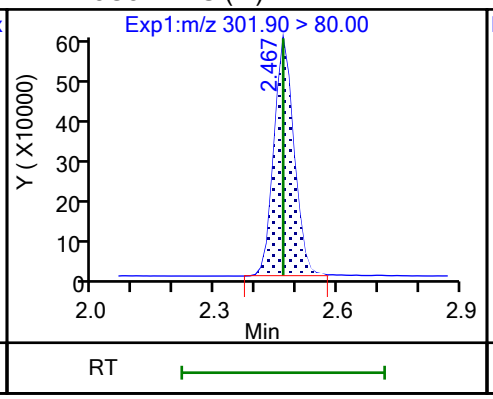
D 3 13C5 PFPeA



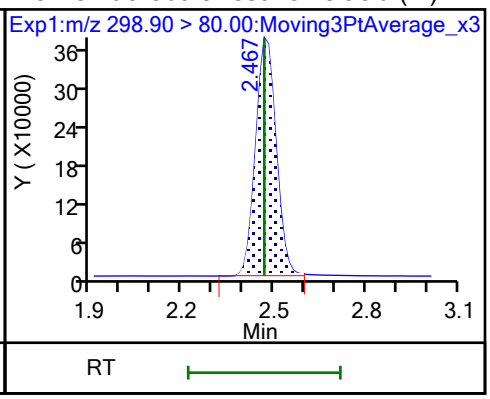
4 Perfluoropentanoic acid (M)



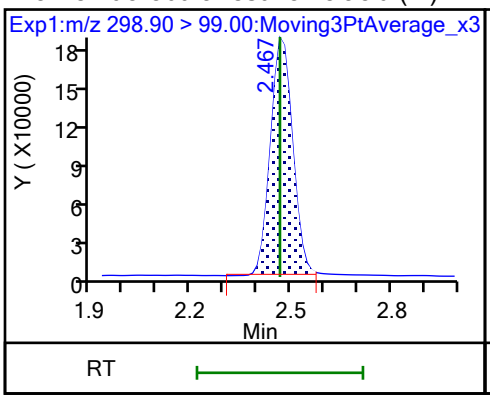
D 47 13C3 PFBS (M)



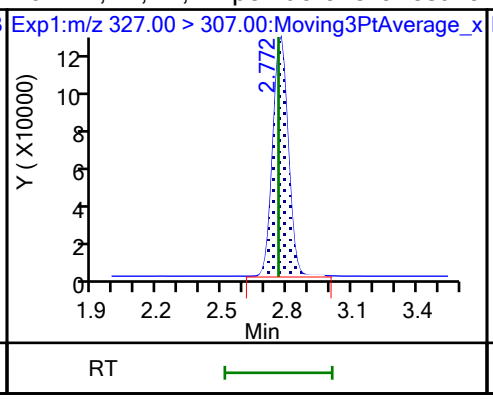
5 Perfluorobutanesulfonic acid (M)



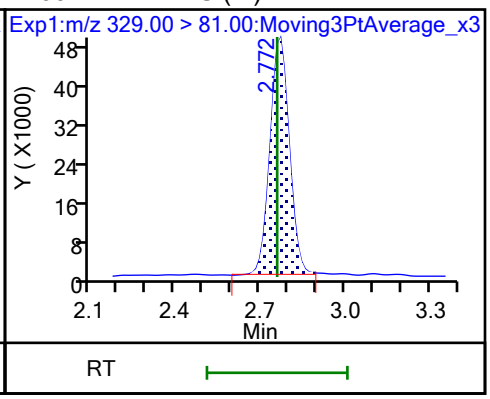
5 Perfluorobutanesulfonic acid (M)



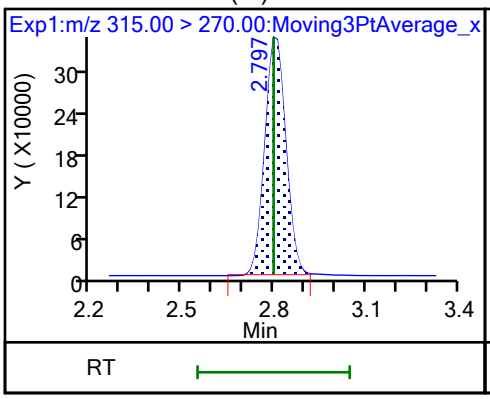
61 1H,1H,2H,2H-perfluorohexanesulfo



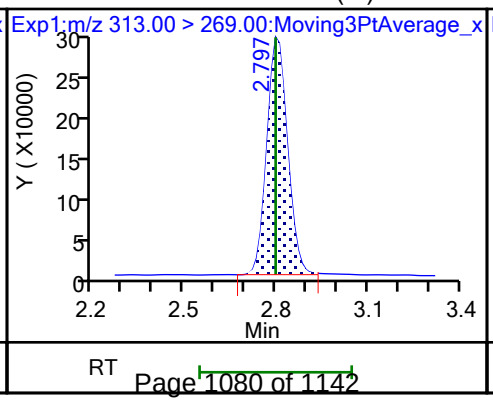
D 60 M2-4:2 FTS (M)



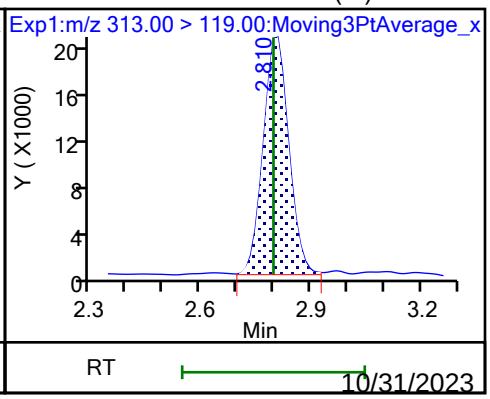
D 7 13C2 PFHxA (M)



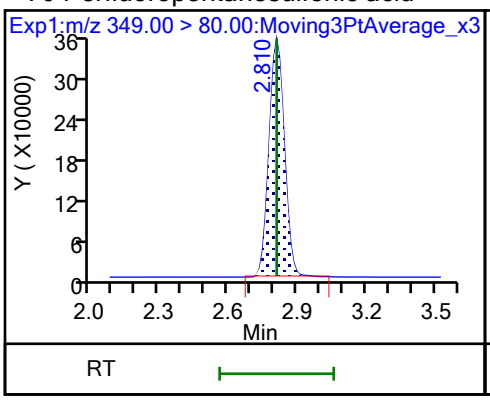
6 Perfluorohexanoic acid (M)



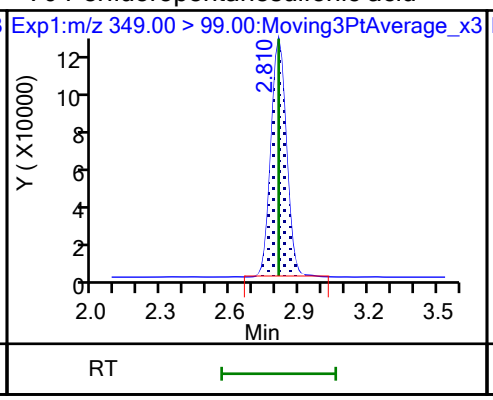
6 Perfluorohexanoic acid (M)



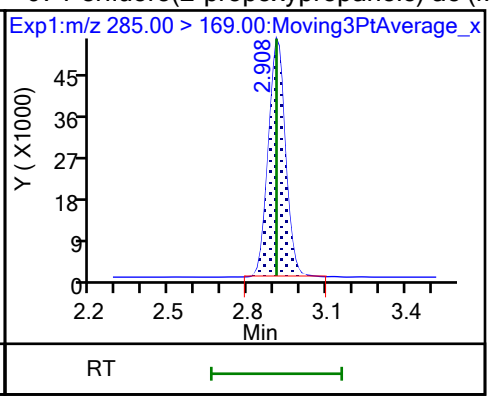
70 Perfluoropentanesulfonic acid



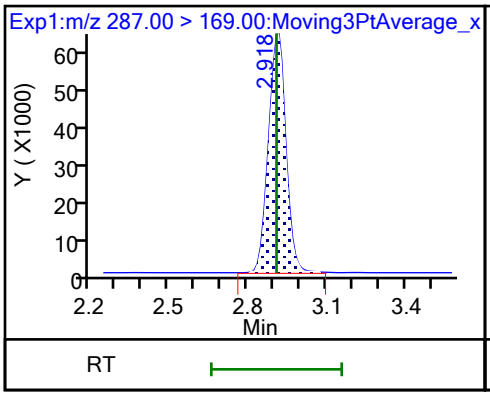
70 Perfluoropentanesulfonic acid



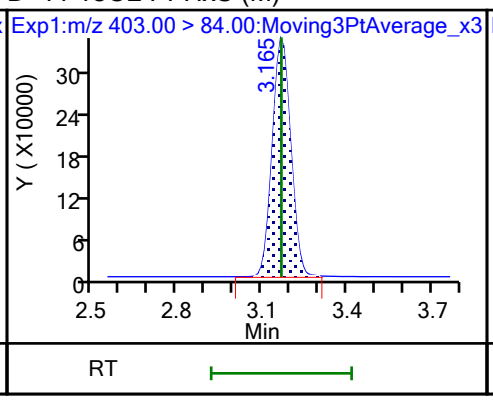
67 Perfluoro(2-propoxypropanoic) ac (M)



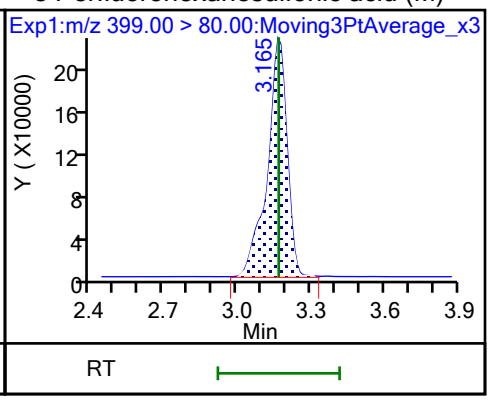
D 64 13C3 HFPO-DA



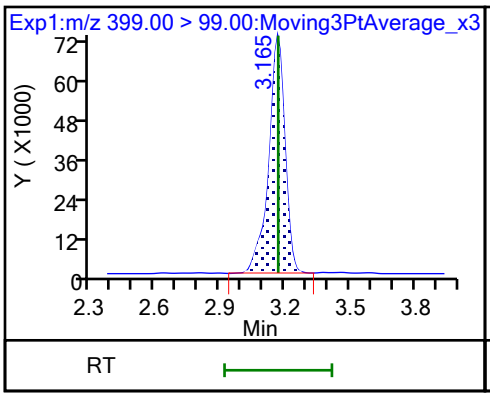
D 11 18O2 PFHxS (M)



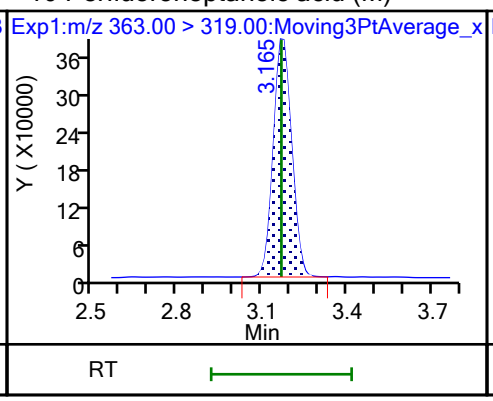
8 Perfluorohexanesulfonic acid (M)



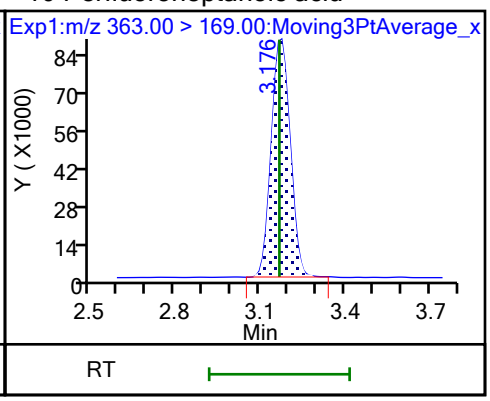
8 Perfluorohexanesulfonic acid



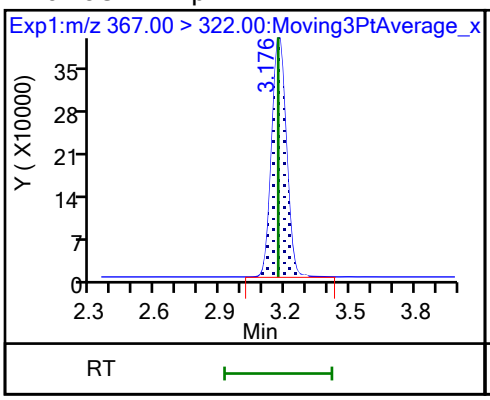
10 Perfluoroheptanoic acid (M)



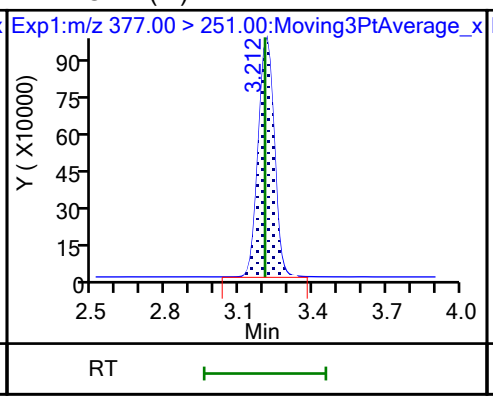
10 Perfluoroheptanoic acid



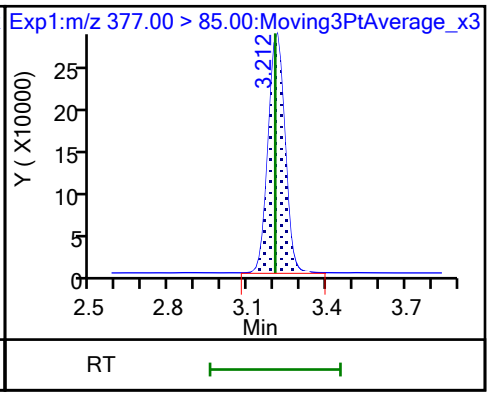
D 9 13C4 PFHpA



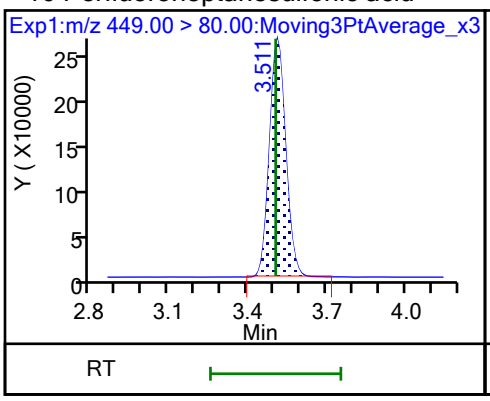
77 DONA (M)



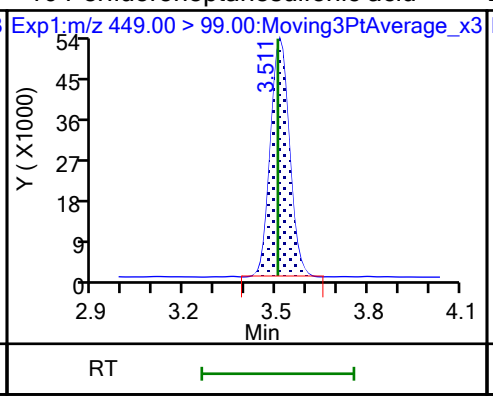
77 DONA



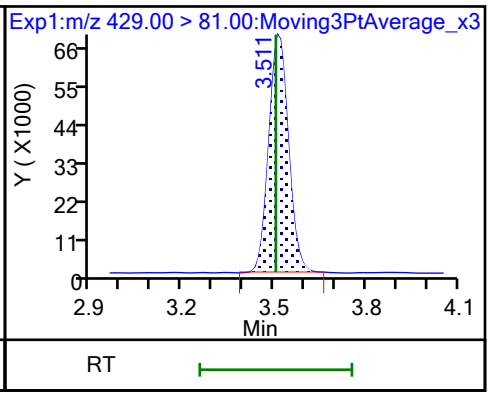
16 Perfluoroheptanesulfonic acid



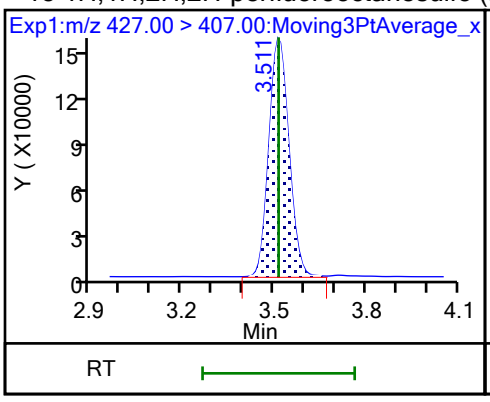
16 Perfluoroheptanesulfonic acid



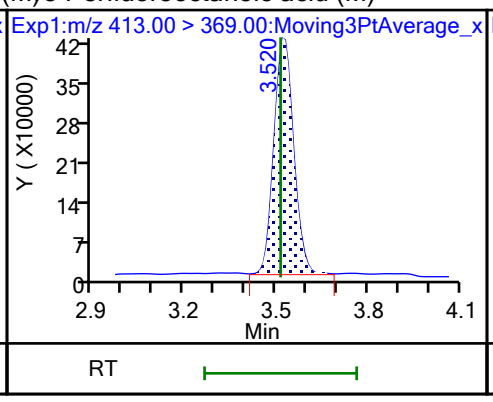
D 12 M2-6:2 FTS



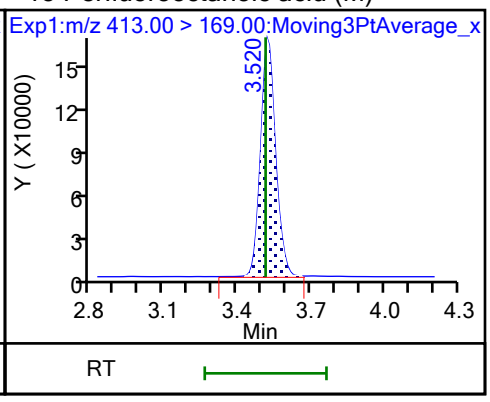
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



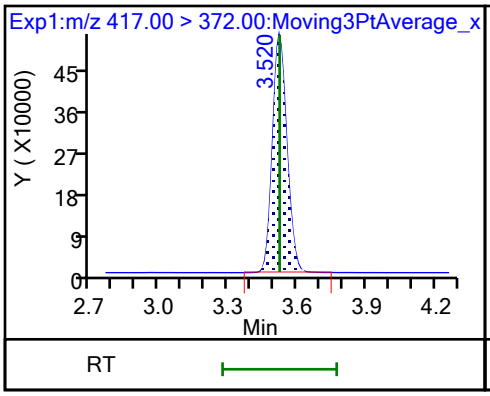
15 Perfluorooctanoic acid (M)



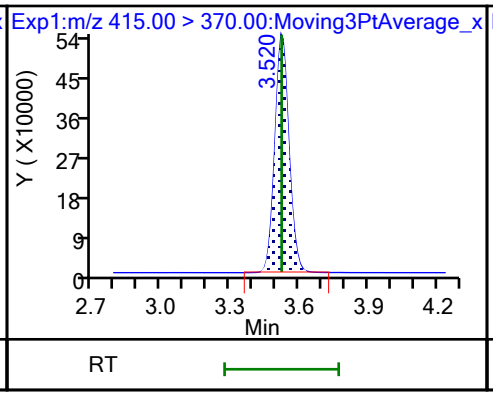
15 Perfluorooctanoic acid (M)



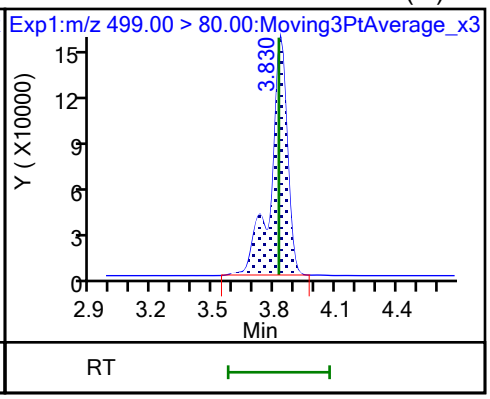
D 14 13C4 PFOA



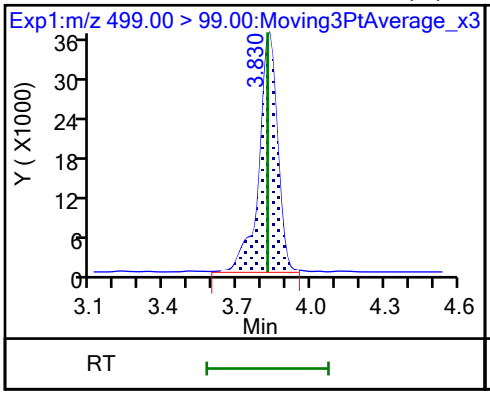
* 62 13C2 PFOA



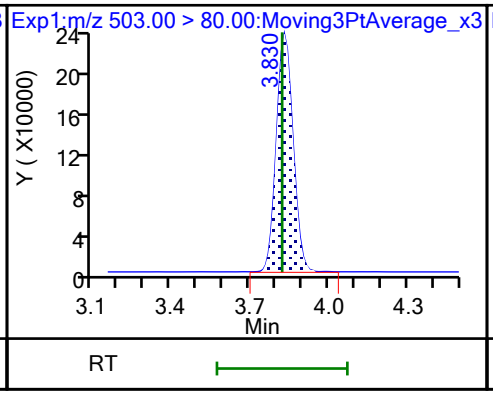
17 Perfluorooctanesulfonic acid (M)



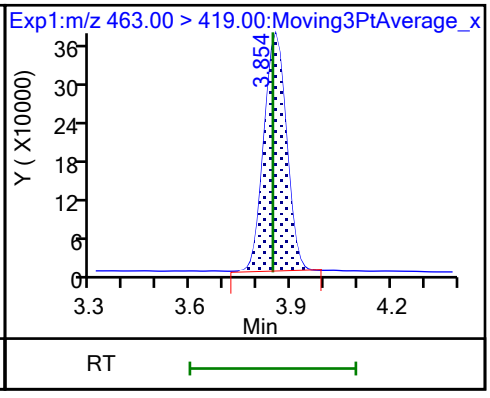
17 Perfluorooctanesulfonic acid (M)



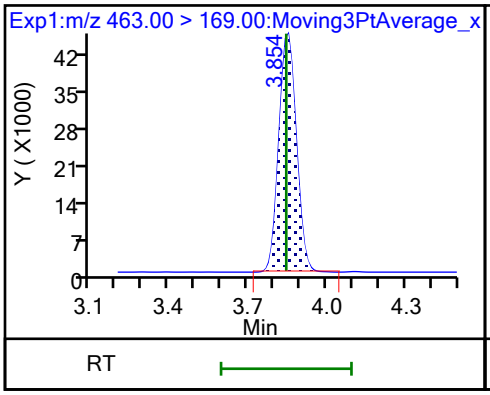
D 18 13C4 PFOS



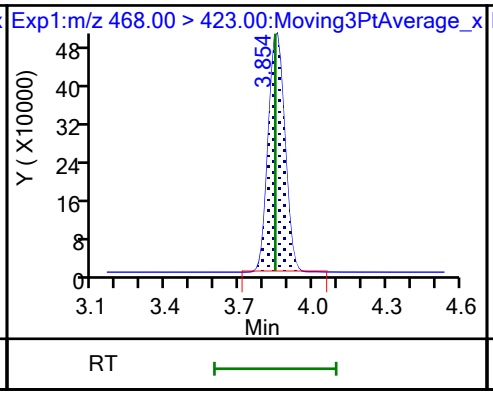
20 Perfluorononanoic acid



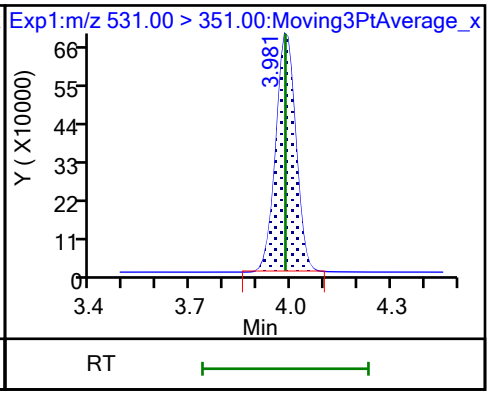
20 Perfluorononanoic acid



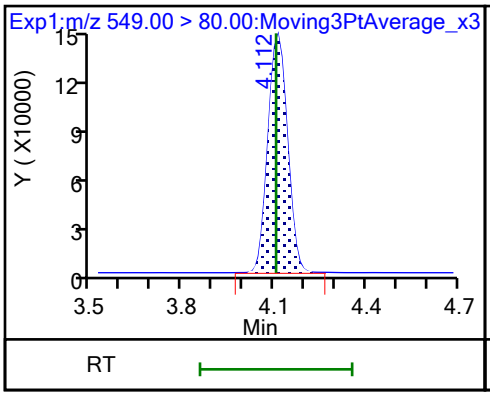
D 19 13C5 PFNA



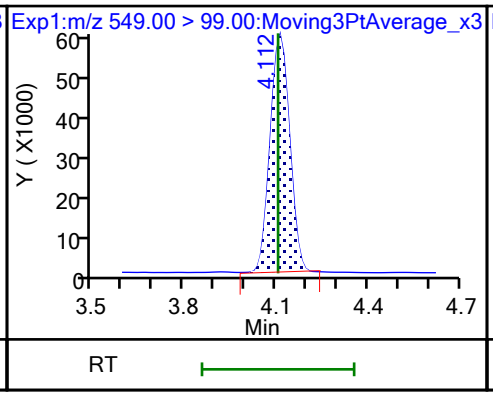
69 9-Chlorohexadecafluoro-3-oxanona (M)



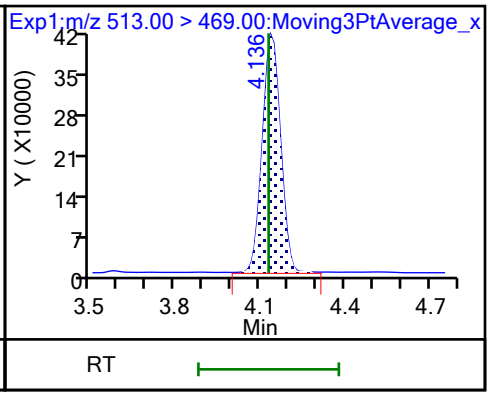
68 Perfluorononanesulfonic acid



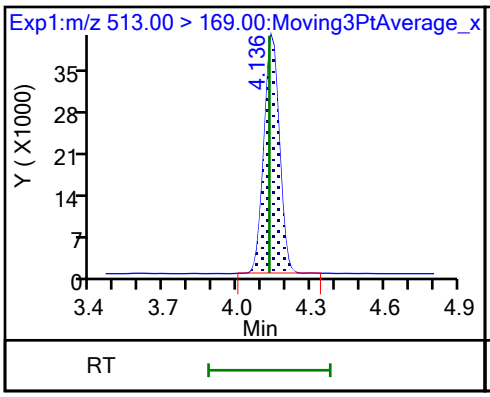
68 Perfluorononanesulfonic acid



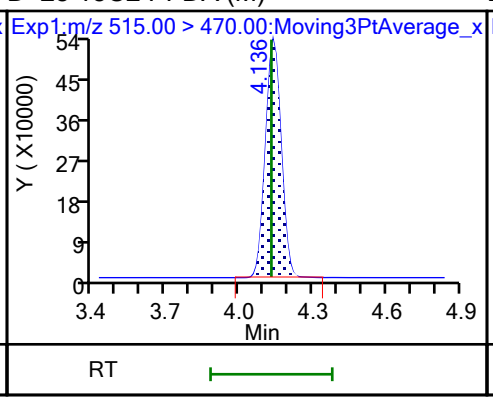
24 Perfluorodecanoic acid



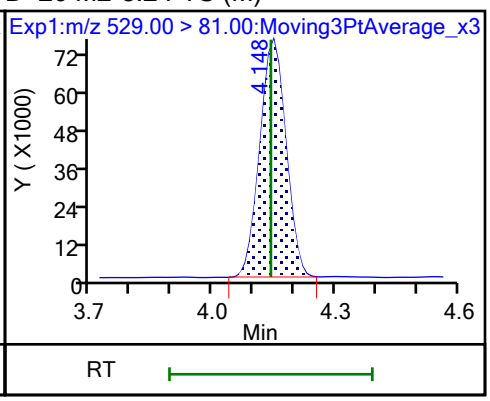
24 Perfluorodecanoic acid



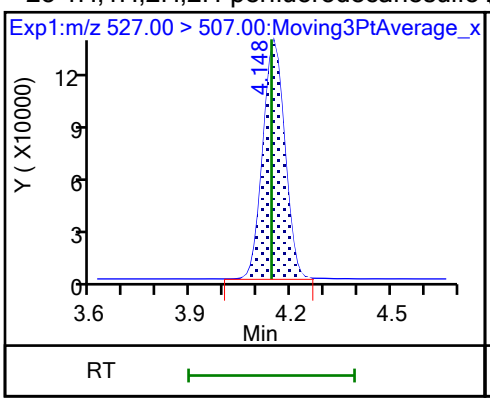
D 23 13C2 PFDA (M)



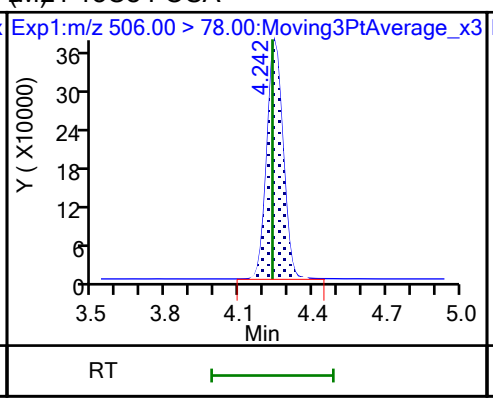
D 26 M2-8:2 FTS (M)



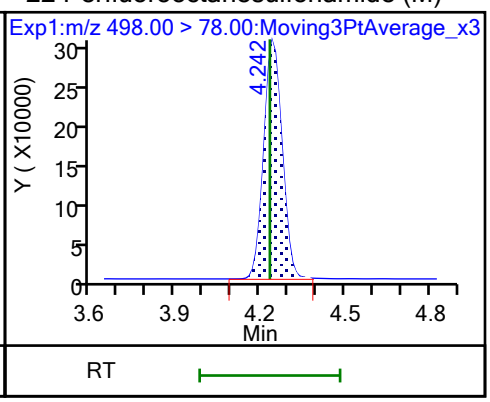
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



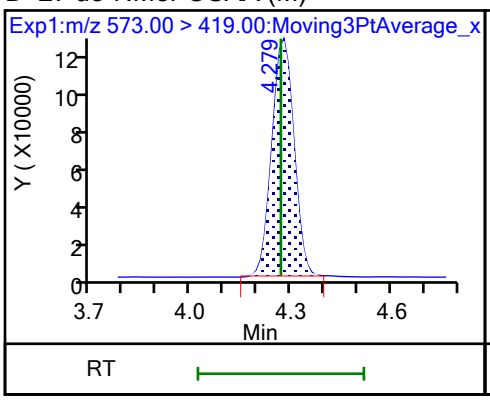
D 21 13C8 FOSA



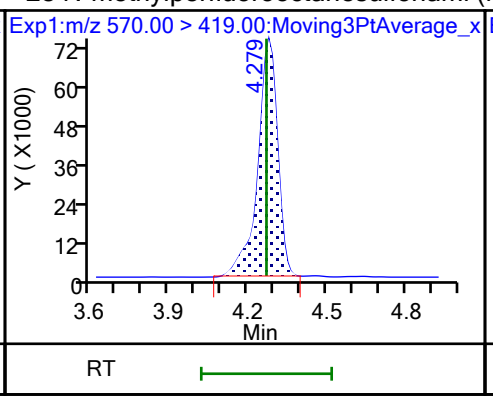
22 Perfluorooctanesulfonamide (M)



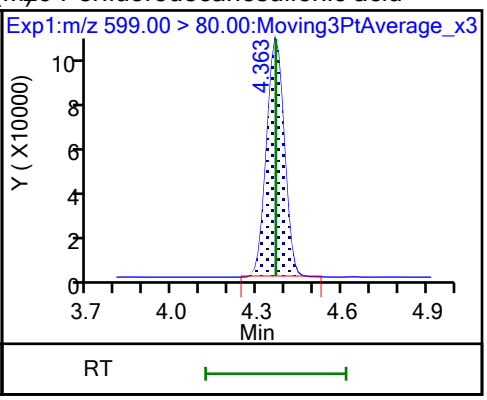
D 27 d3-NMeFOSAA (M)



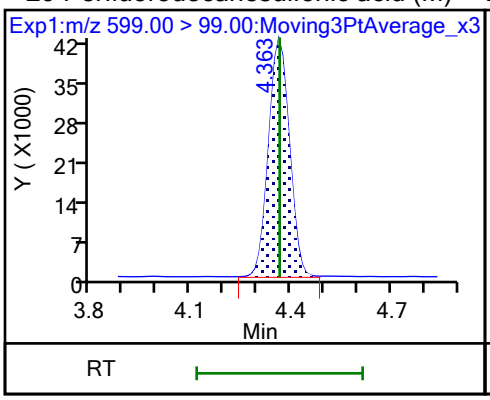
28 N-methylperfluorooctanesulfonami (M)



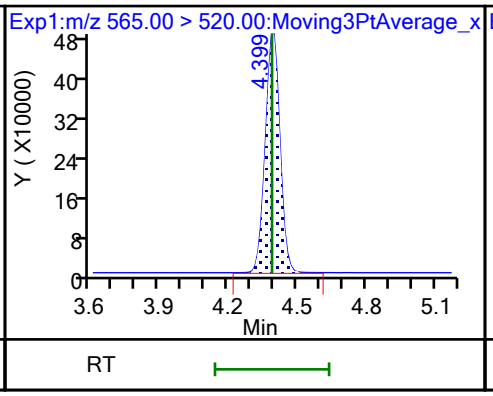
29 Perfluorodecanesulfonic acid



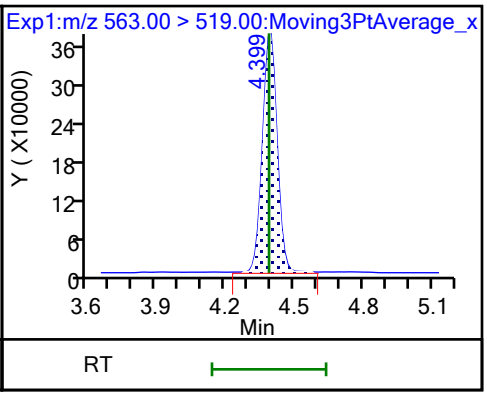
29 Perfluorodecanesulfonic acid (M)



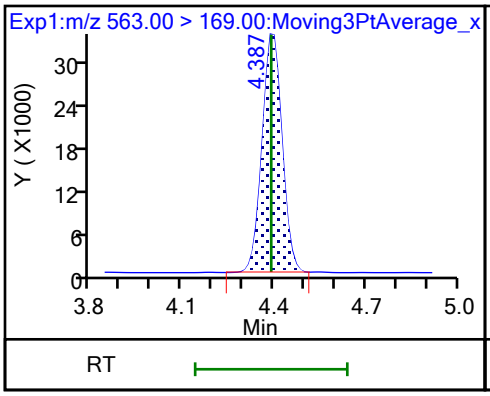
D 30 13C2 PFUnA



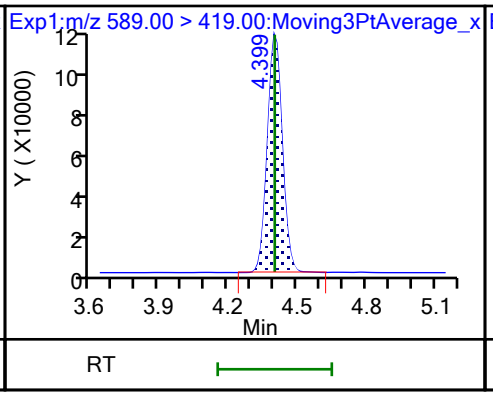
31 Perfluoroundecanoic acid



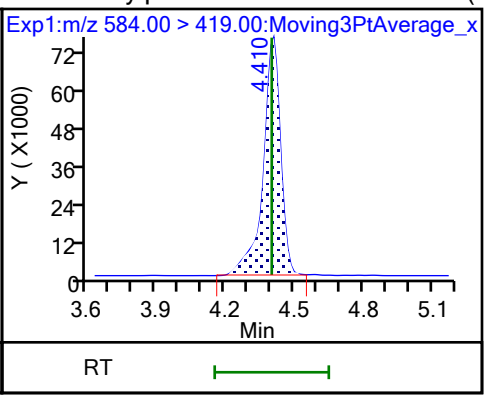
31 Perfluoroundecanoic acid



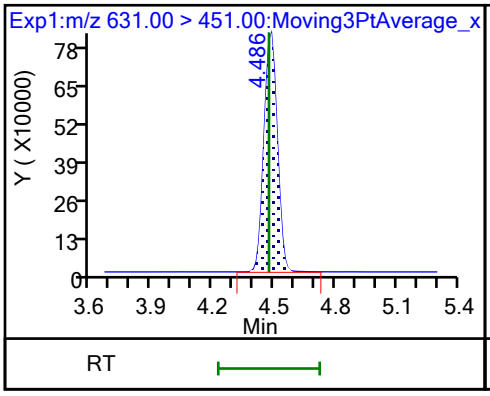
D 32 d5-NEtFOSAA



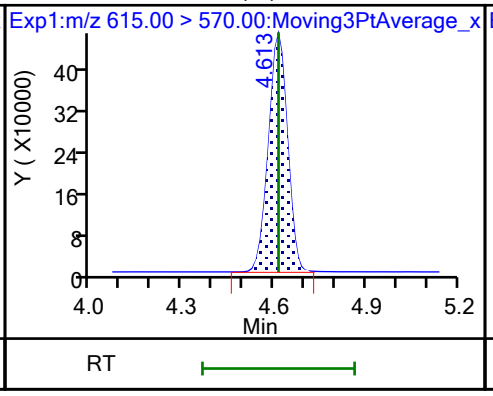
33 N-ethylperfluorooctanesulfonamid (M)



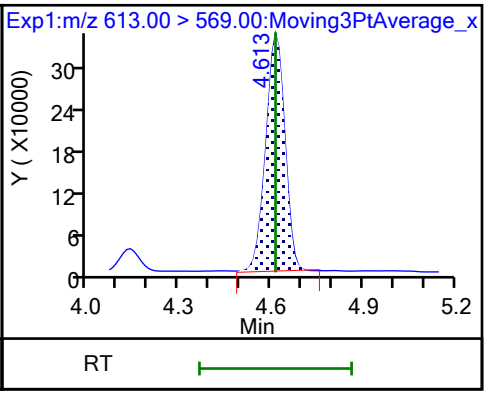
66 11-Chloroeicosafluoro-3-oxaundec



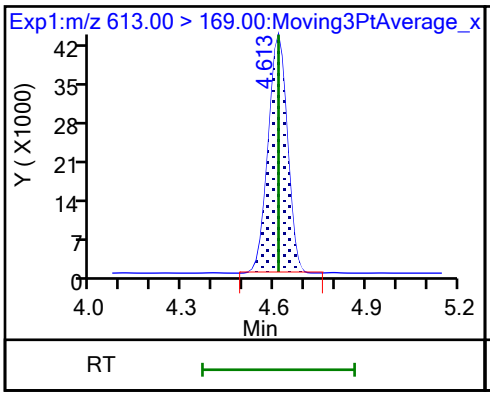
D 36 13C2 PFDoA (M)



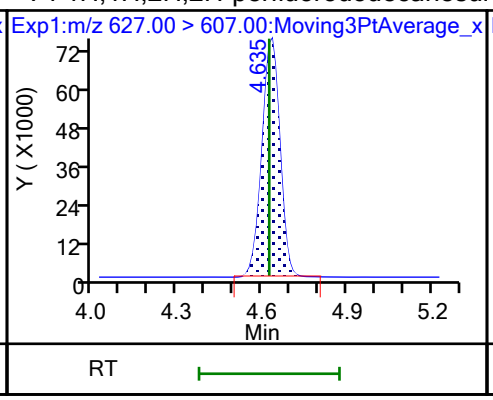
37 Perfluorododecanoic acid



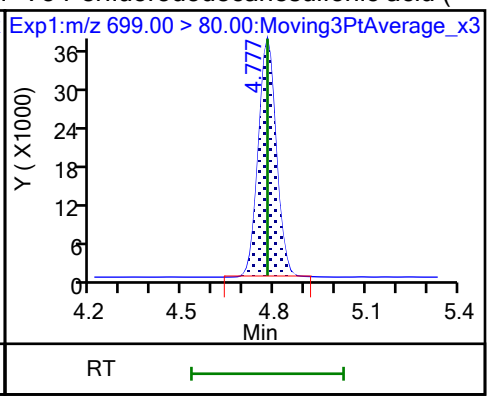
37 Perfluorododecanoic acid



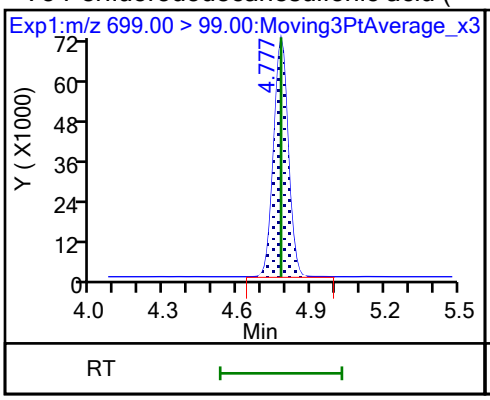
74 1H,1H,2H,2H-perfluorododecanesul



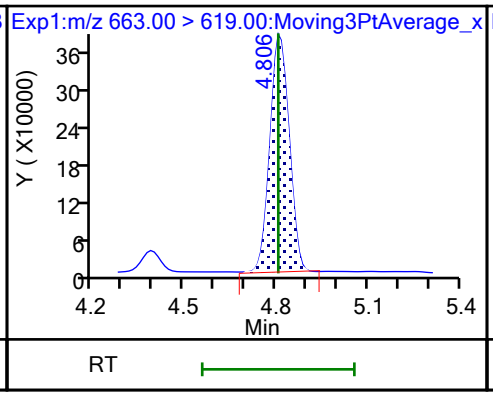
75 Perfluorododecanesulfonic acid (



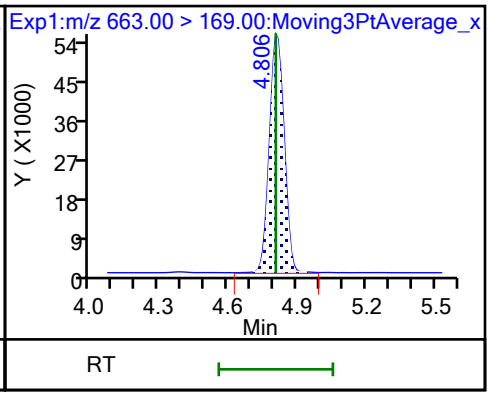
75 Perfluorododecanesulfonic acid (



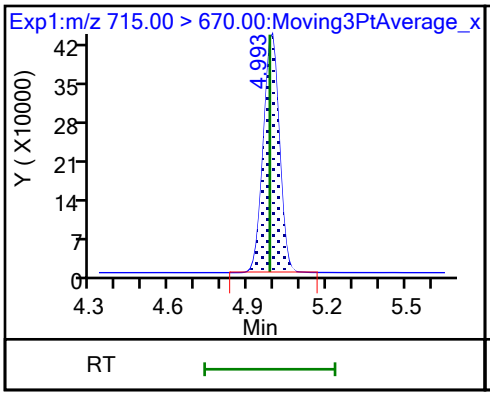
41 Perfluorotridecanoic acid



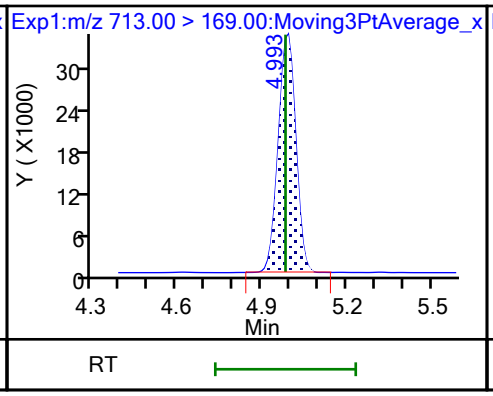
41 Perfluorotridecanoic acid



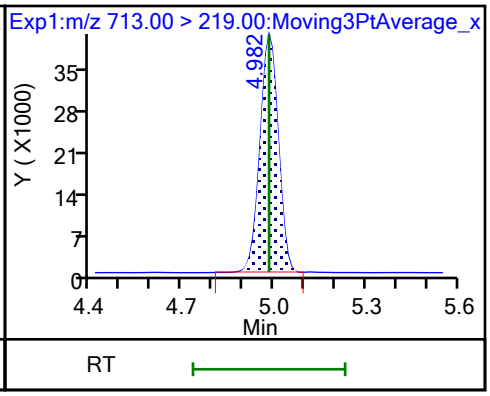
D 43 13C2 PFTeDA



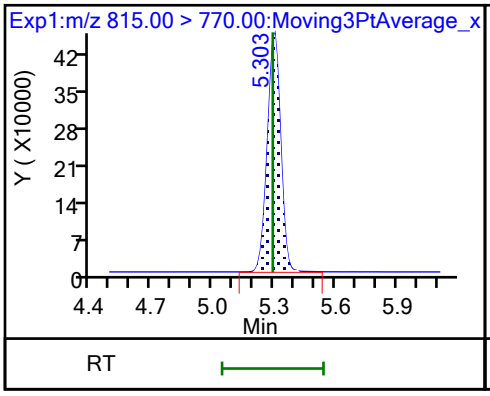
42 Perfluorotetradecanoic acid



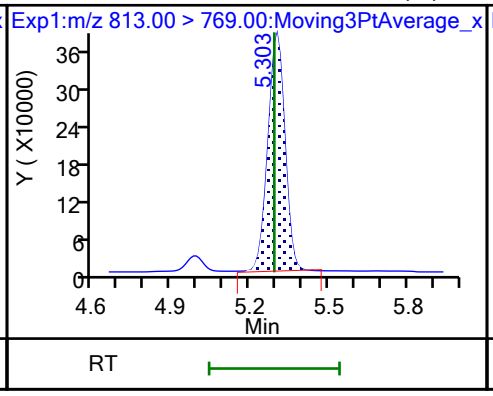
42 Perfluorotetradecanoic acid



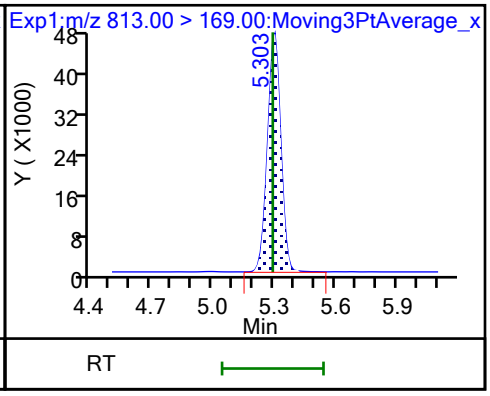
D 44 13C2 PFHxDA



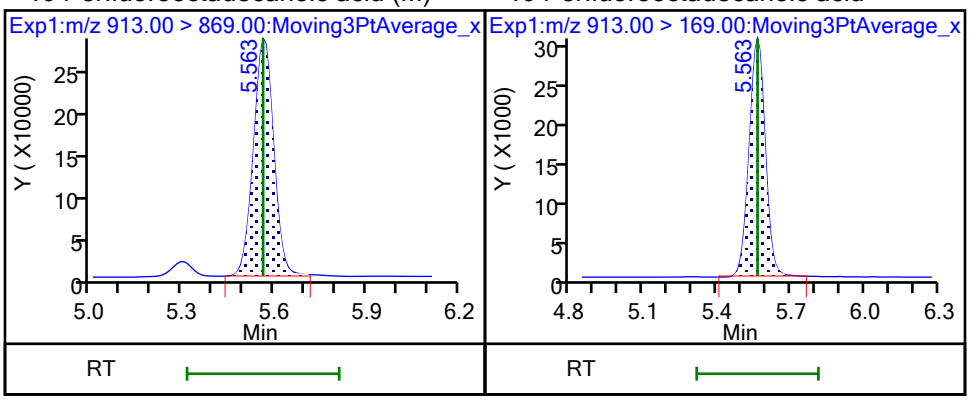
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

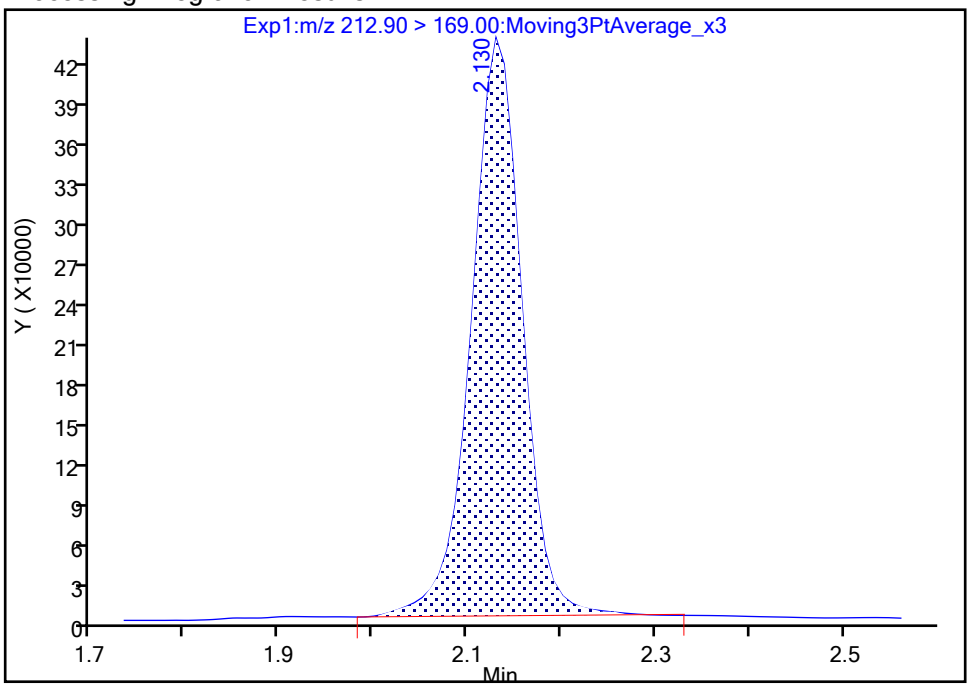
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

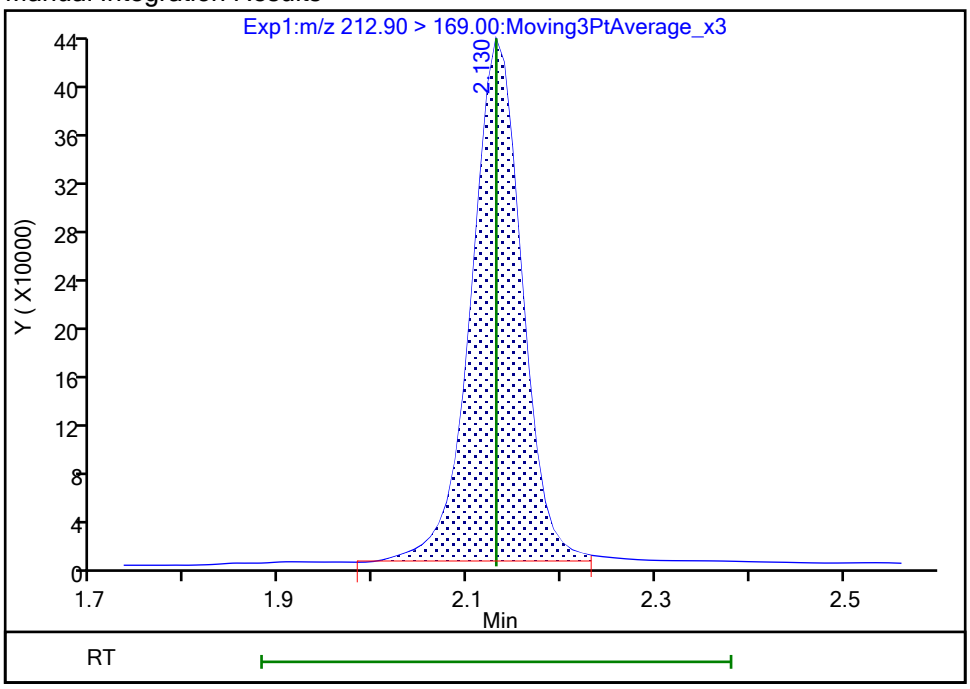
Processing Integration Results

RT: 2.13
Area: 1629754
Amount: 0.968114
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1620568
Amount: 0.962427
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

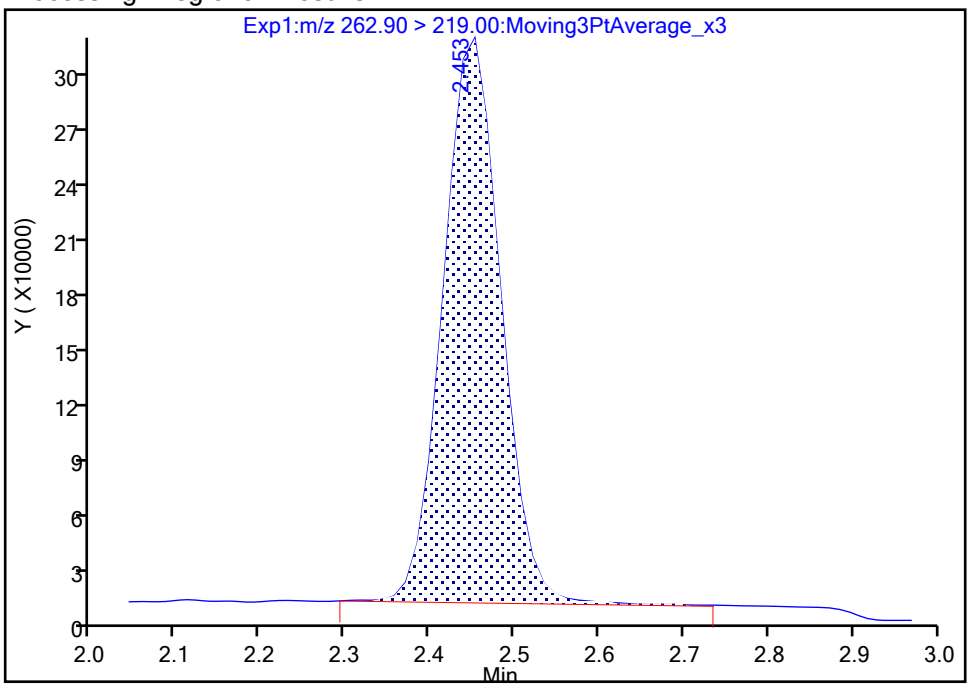
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

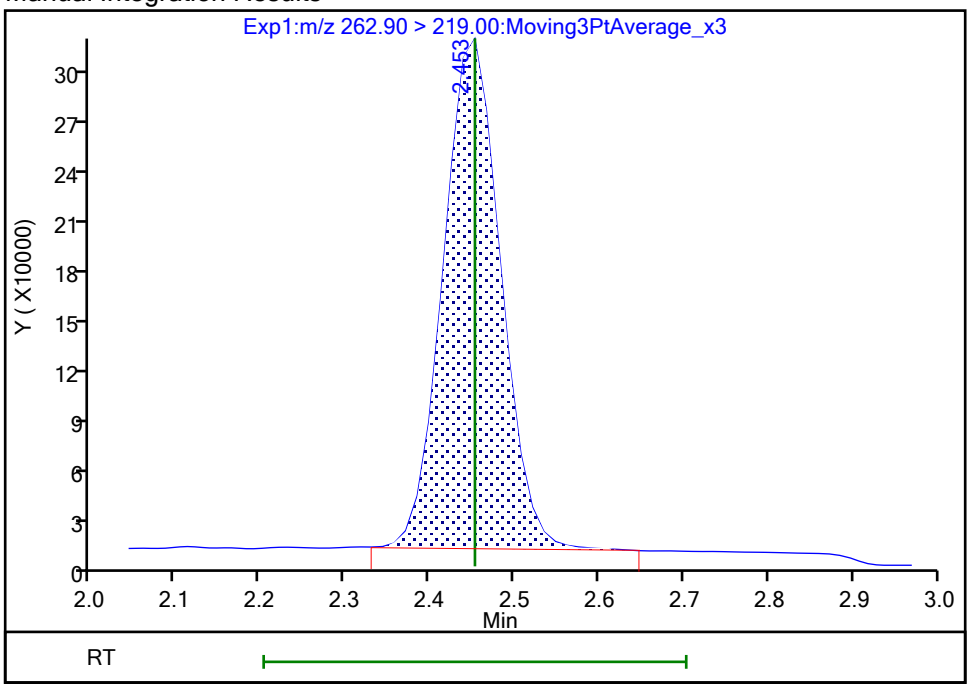
Processing Integration Results

RT: 2.45
Area: 1441999
Amount: 1.051721
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1434518
Amount: 1.046265
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

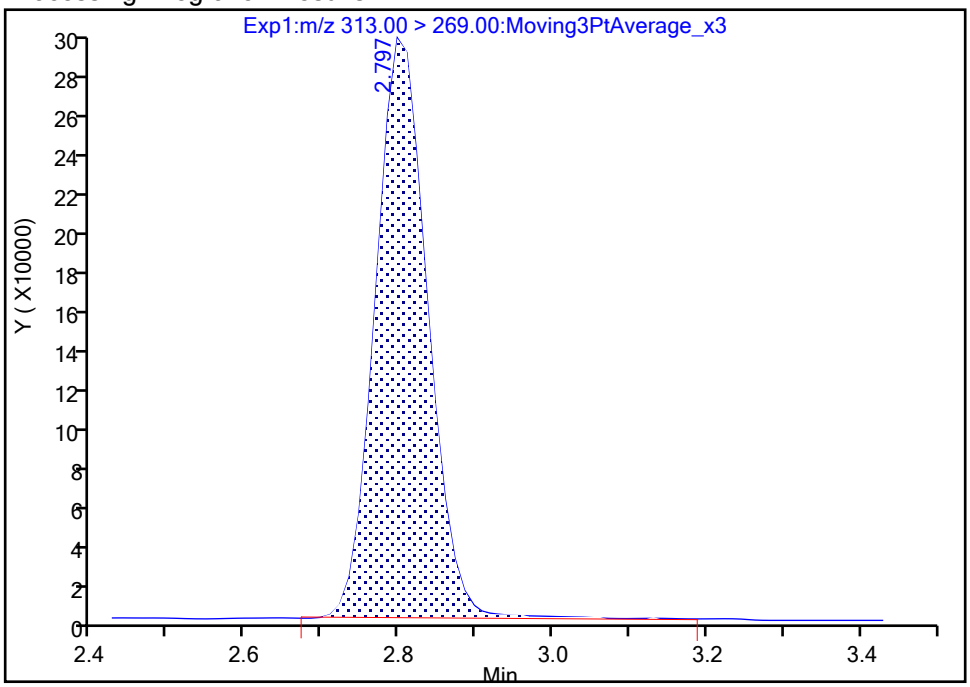
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

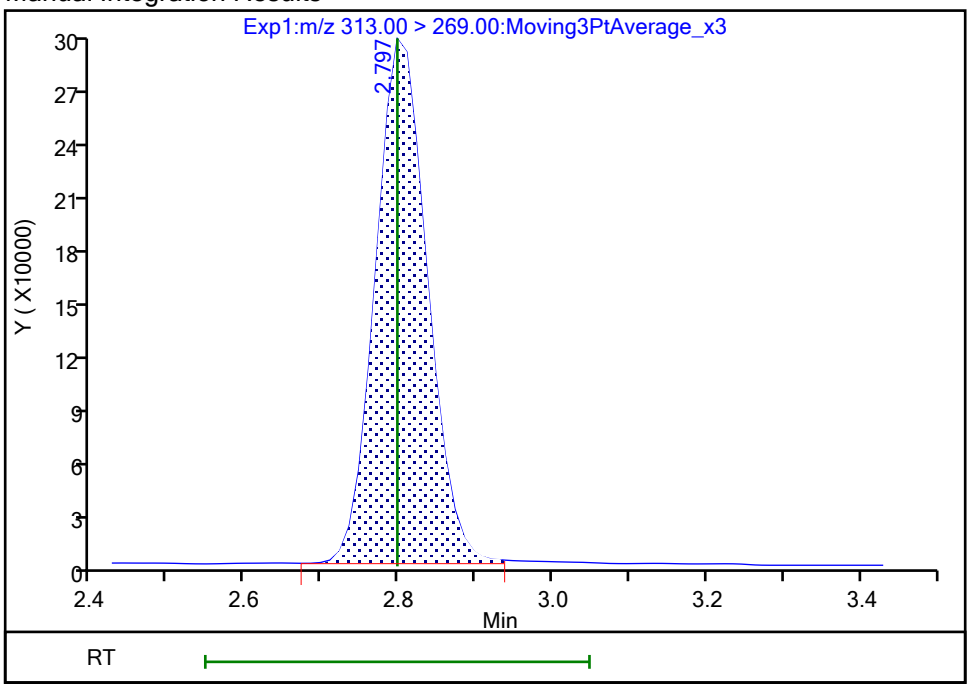
Processing Integration Results

RT: 2.80
Area: 1413832
Amount: 0.963539
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1404008
Amount: 0.956844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

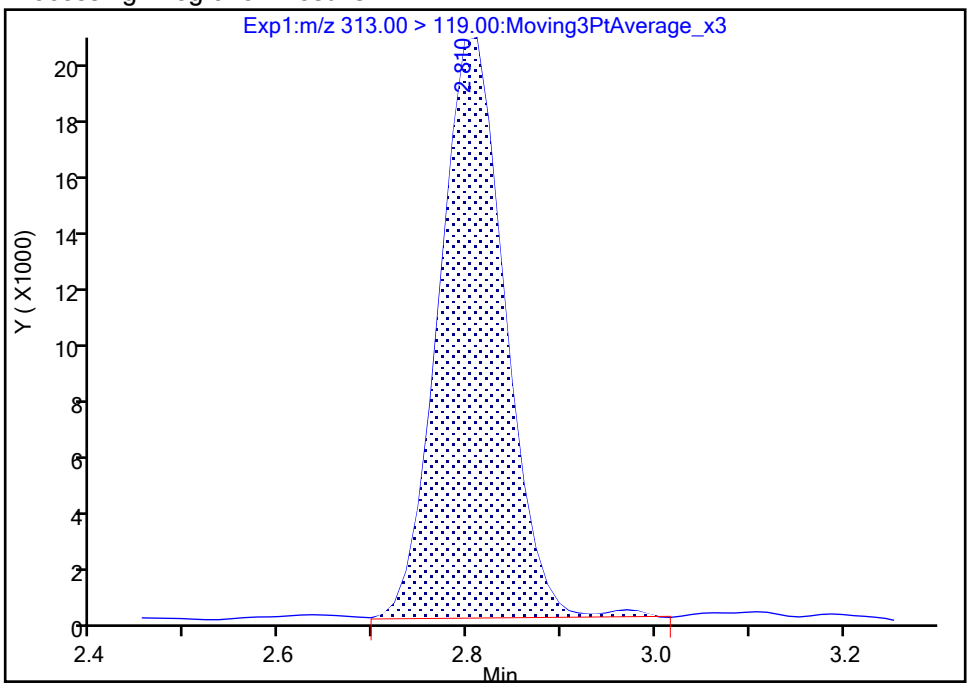
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

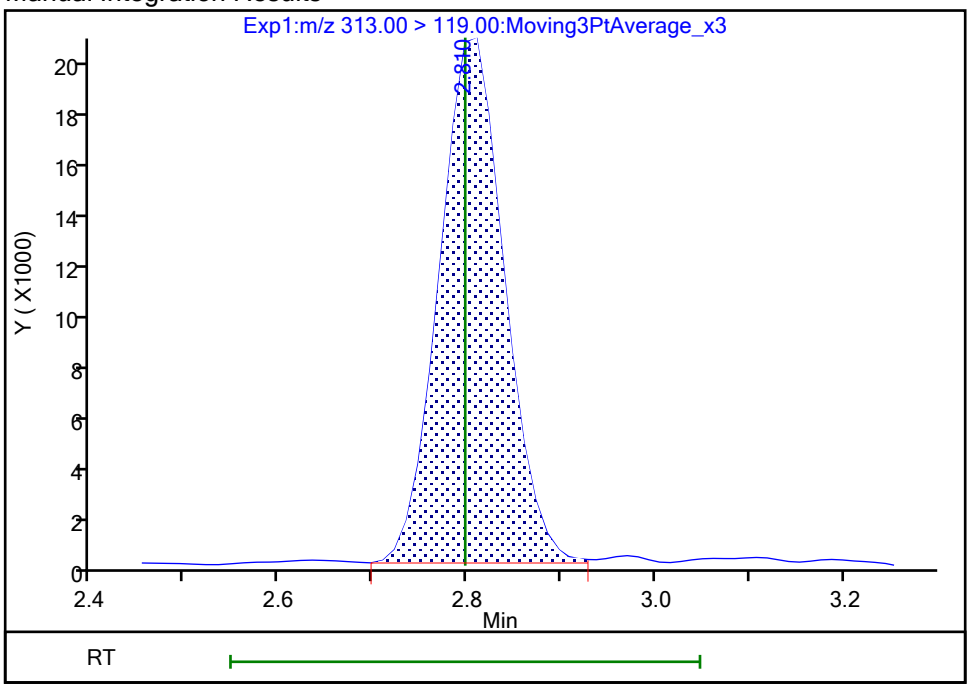
Processing Integration Results

RT: 2.81
Area: 100256
Amount: 0.963539
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 99465
Amount: 0.956844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

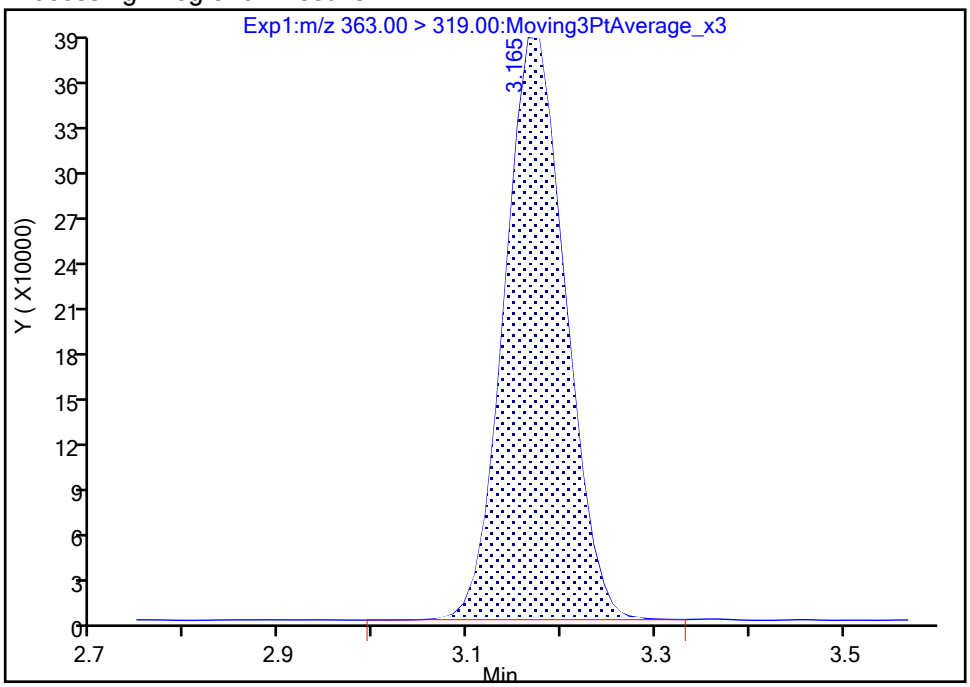
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

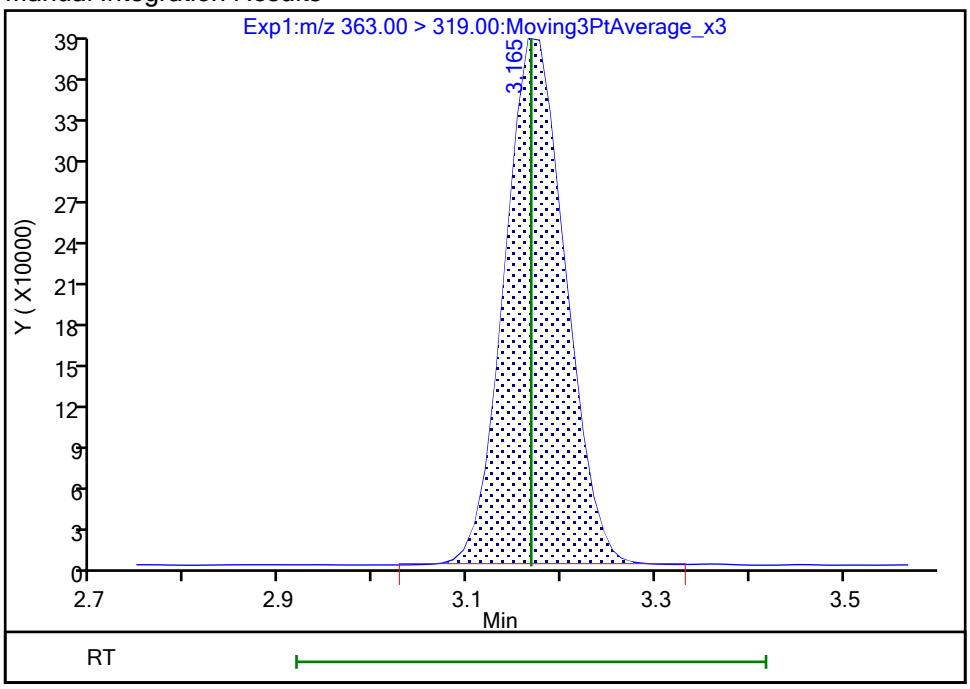
Processing Integration Results

RT: 3.16
Area: 1755340
Amount: 1.046517
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1750442
Amount: 1.043597
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

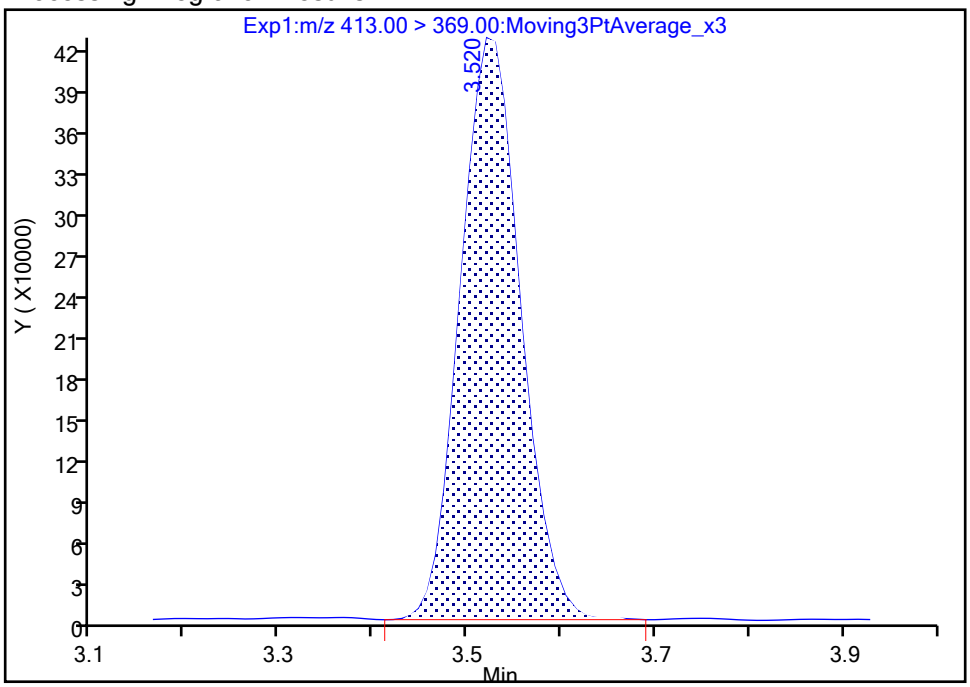
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

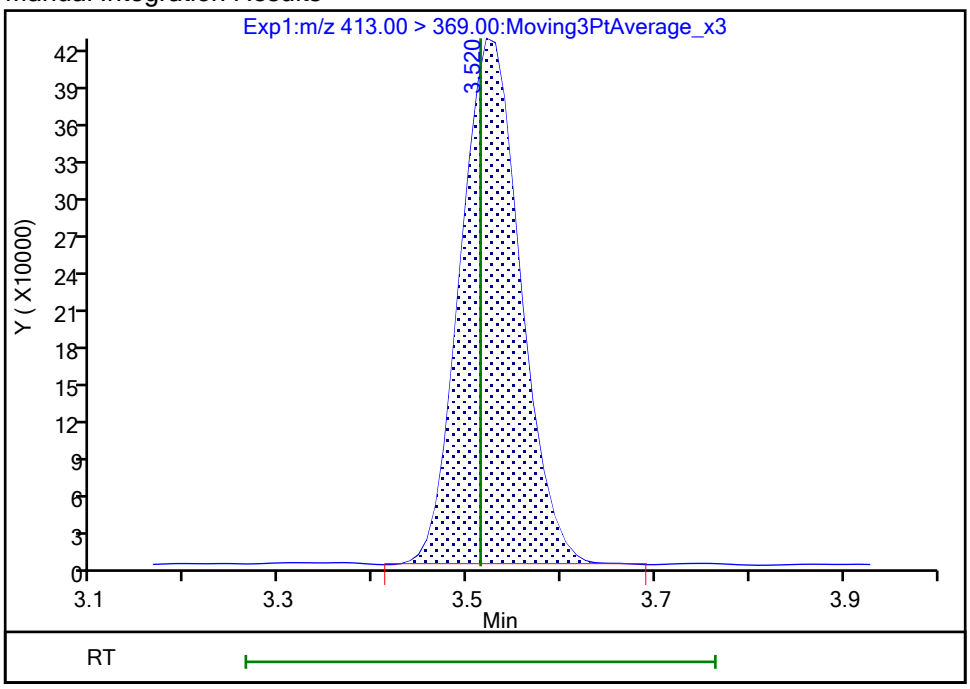
Processing Integration Results

RT: 3.52
Area: 1880890
Amount: 0.966475
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1877921
Amount: 0.964949
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

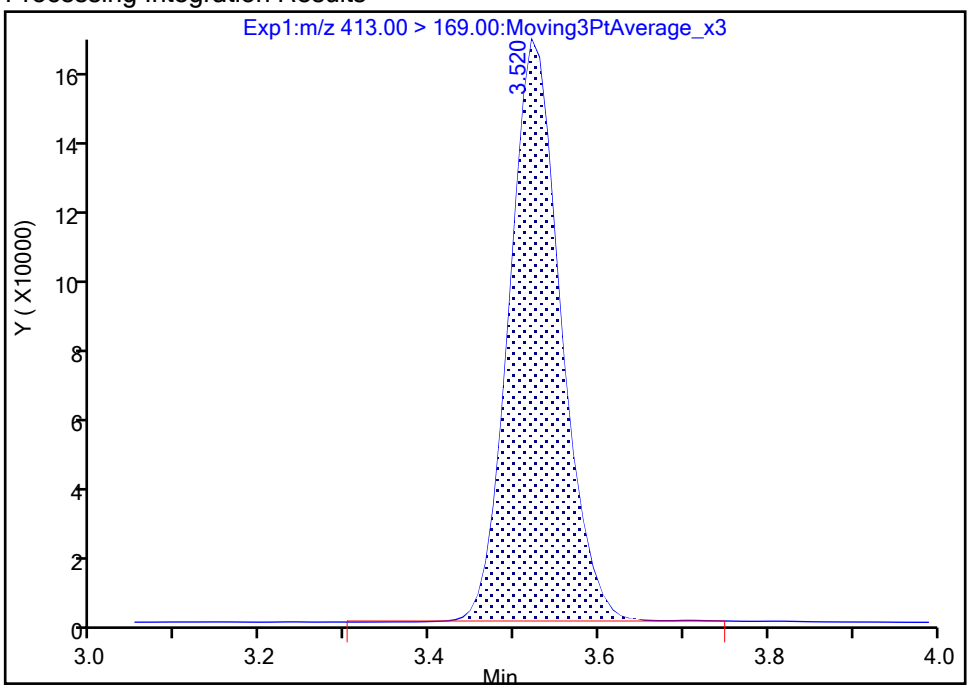
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

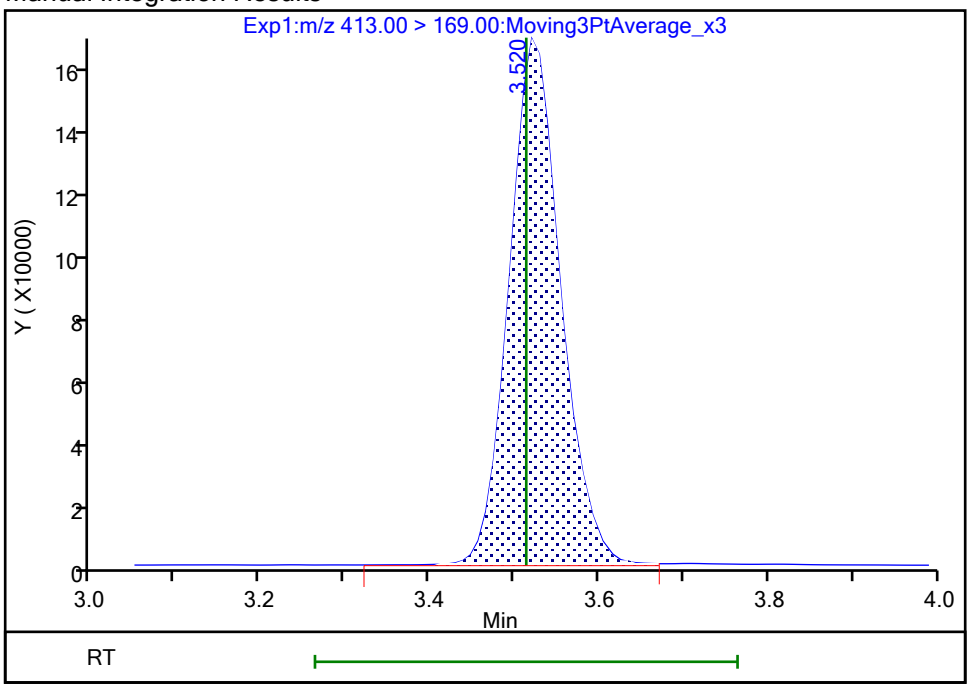
Processing Integration Results

RT: 3.52
Area: 677440
Amount: 0.966475
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 677681
Amount: 0.964949
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

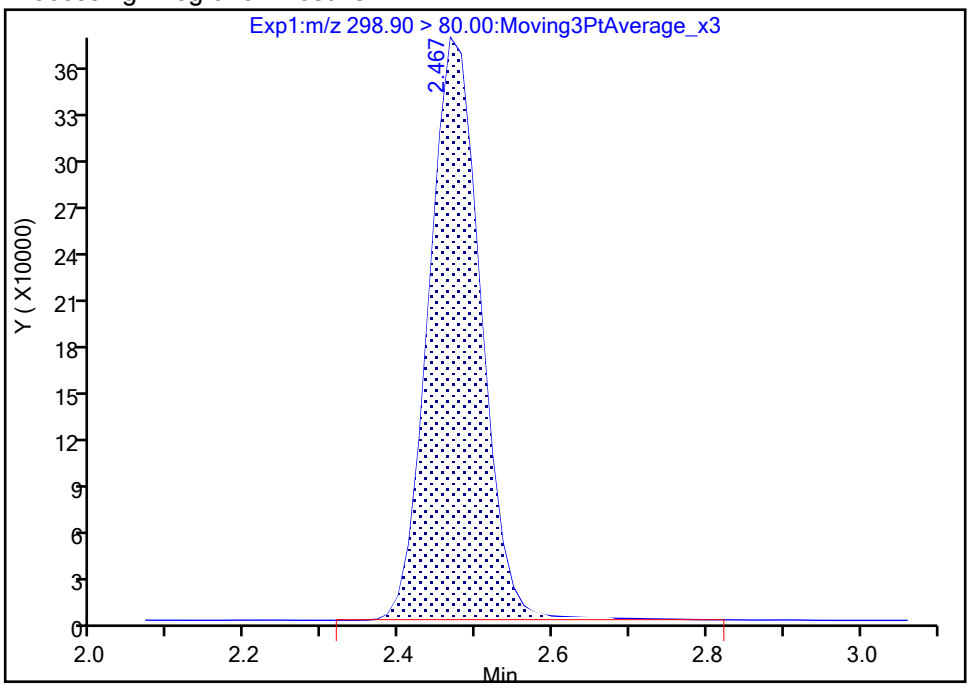
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

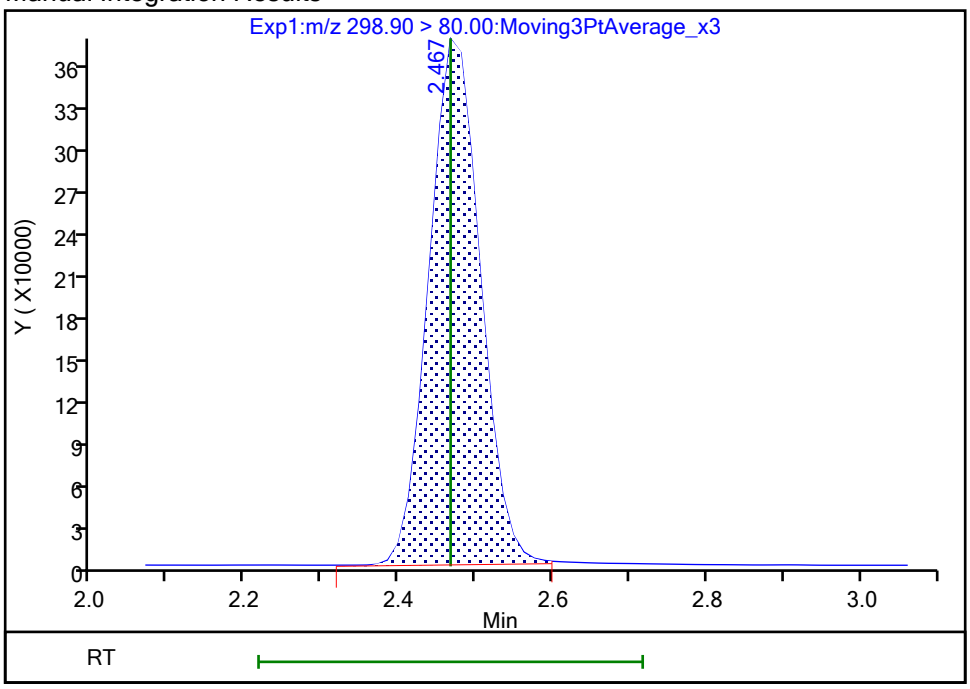
Processing Integration Results

RT: 2.47
Area: 1762566
Amount: 0.901041
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1750536
Amount: 0.894891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

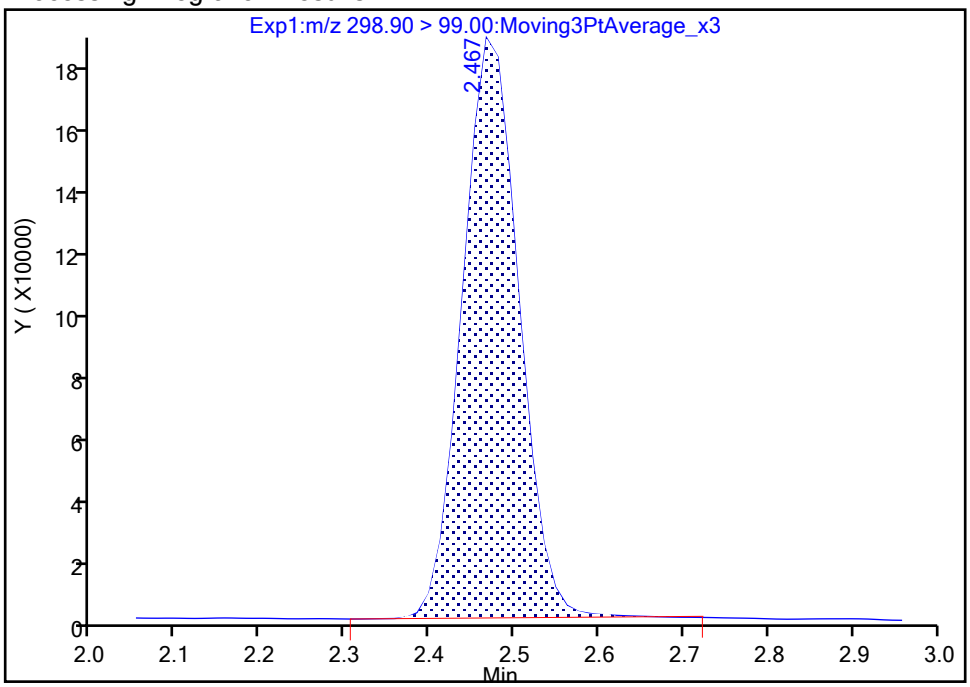
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

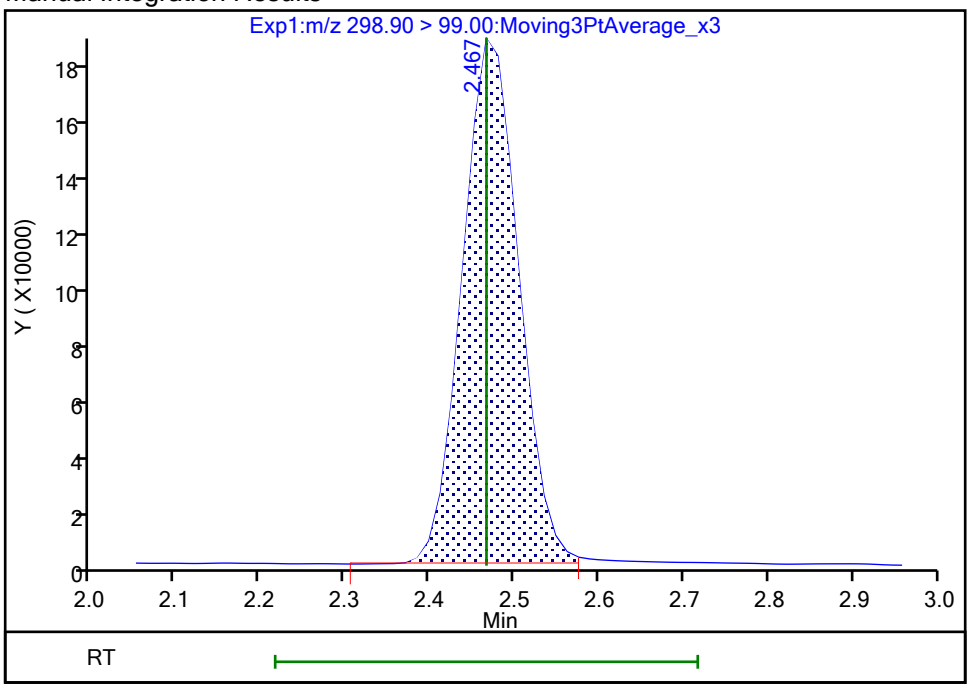
Processing Integration Results

RT: 2.47
Area: 859952
Amount: 0.901041
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 854629
Amount: 0.894891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

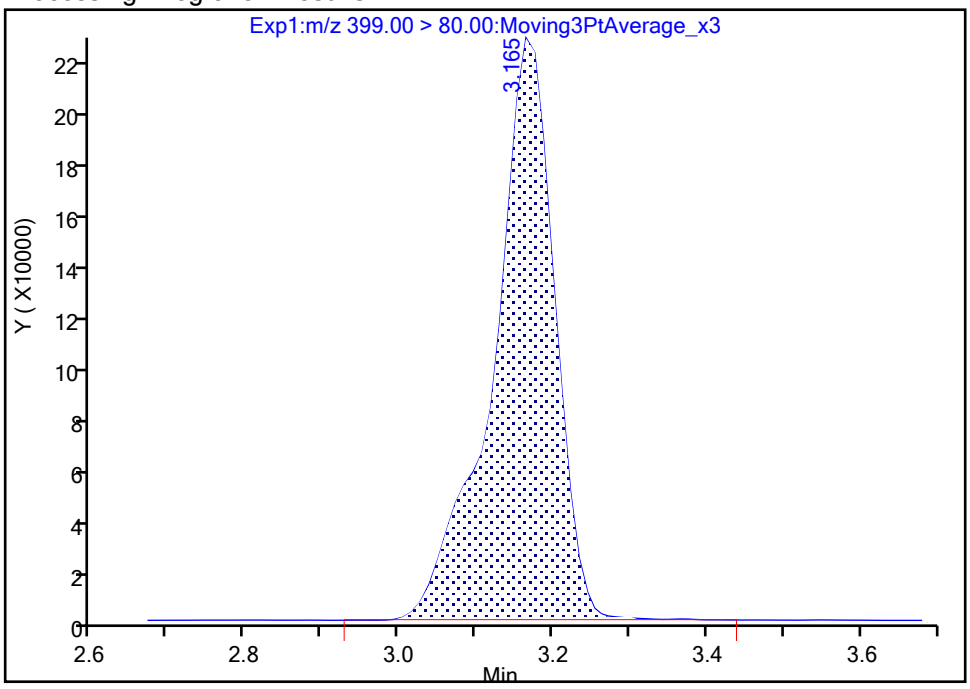
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

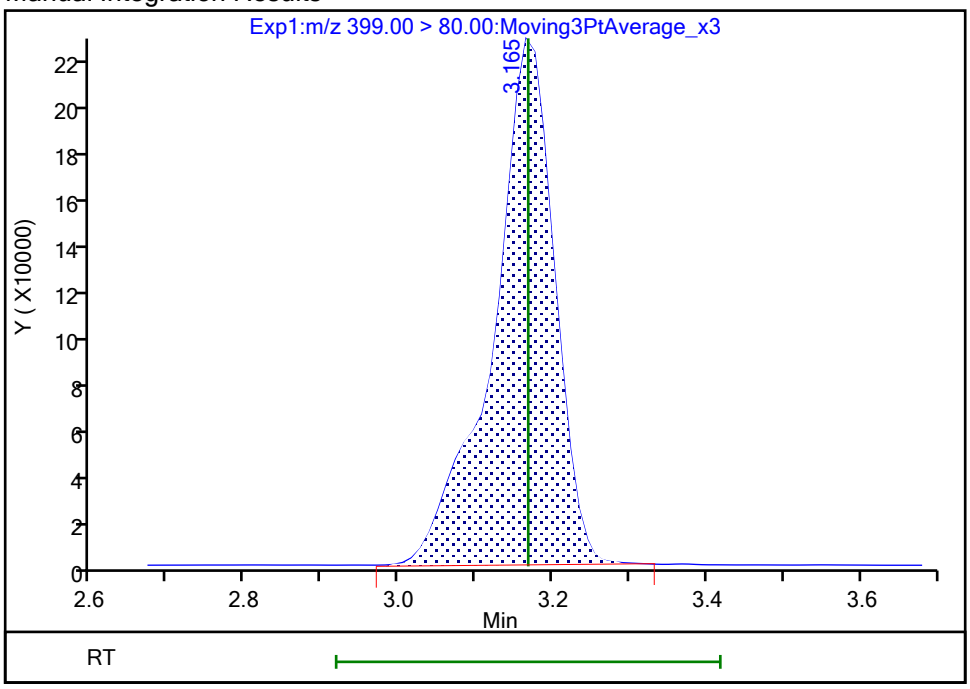
Processing Integration Results

RT: 3.16
Area: 1245555
Amount: 0.843084
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1240291
Amount: 0.839521
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

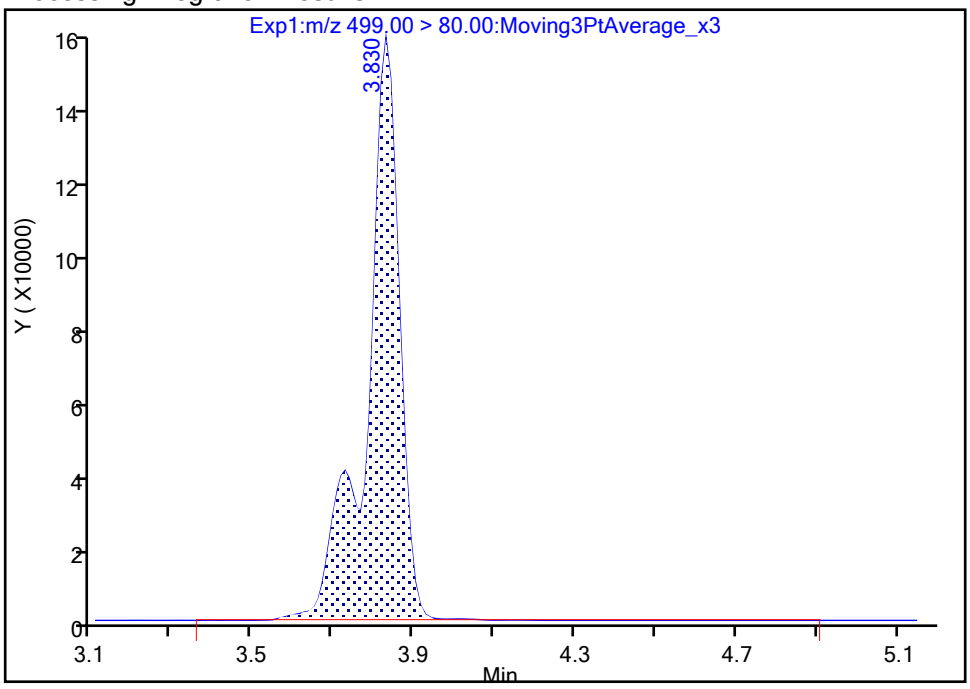
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

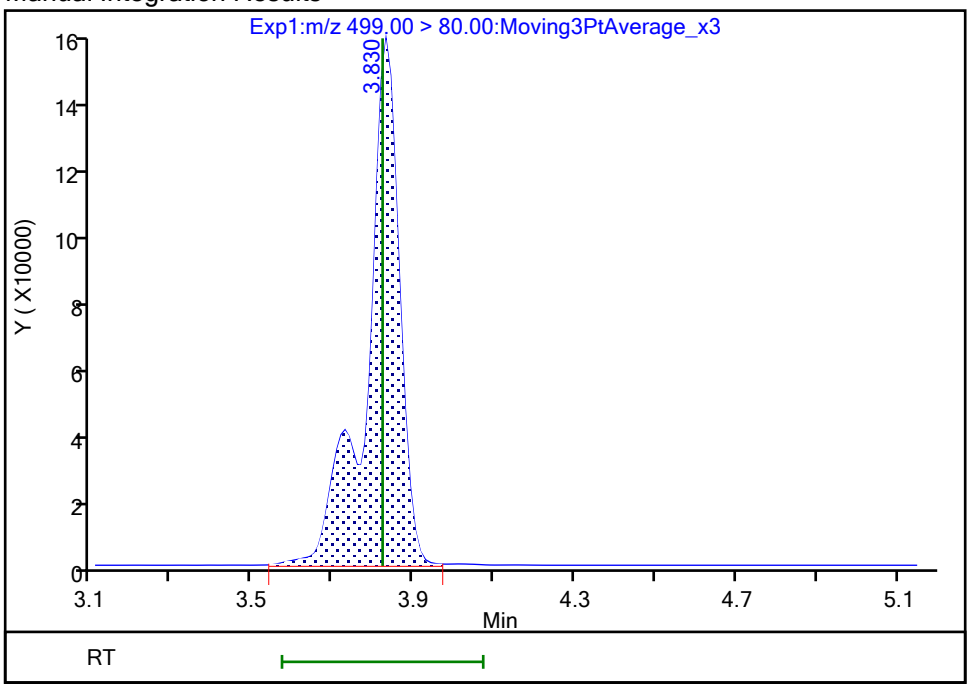
Processing Integration Results

RT: 3.83
Area: 869912
Amount: 0.868193
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 866301
Amount: 0.864589
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

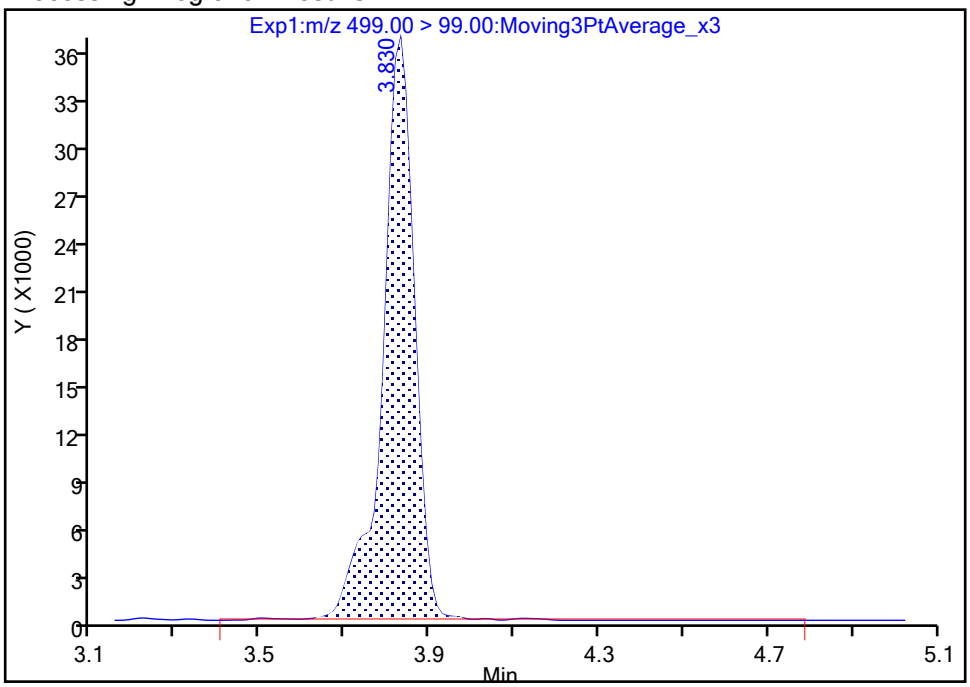
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

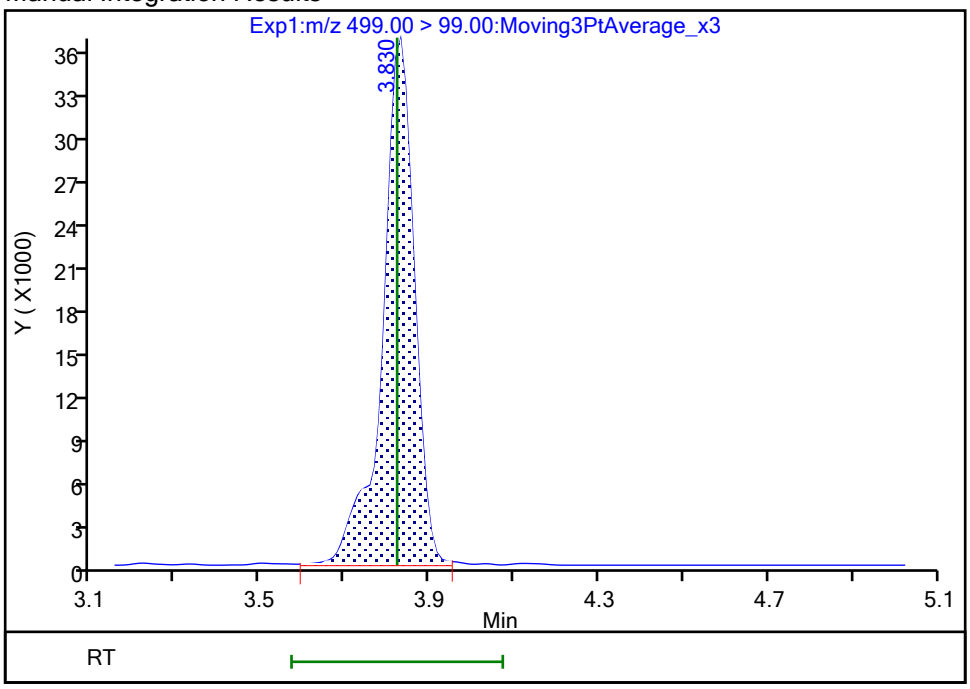
Processing Integration Results

RT: 3.83
Area: 191662
Amount: 0.868193
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 189203
Amount: 0.864589
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

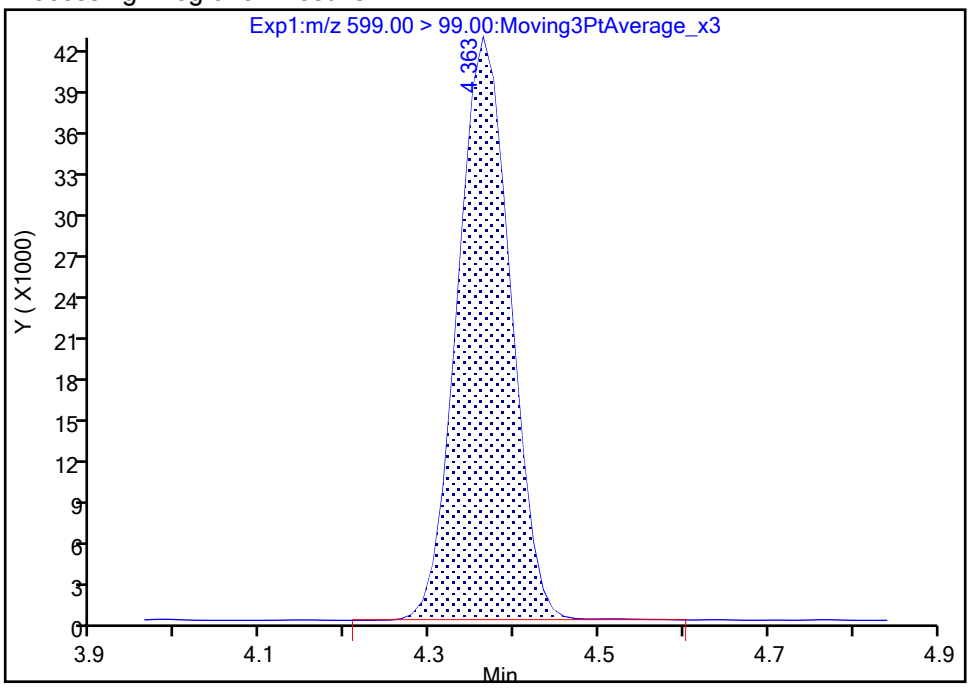
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

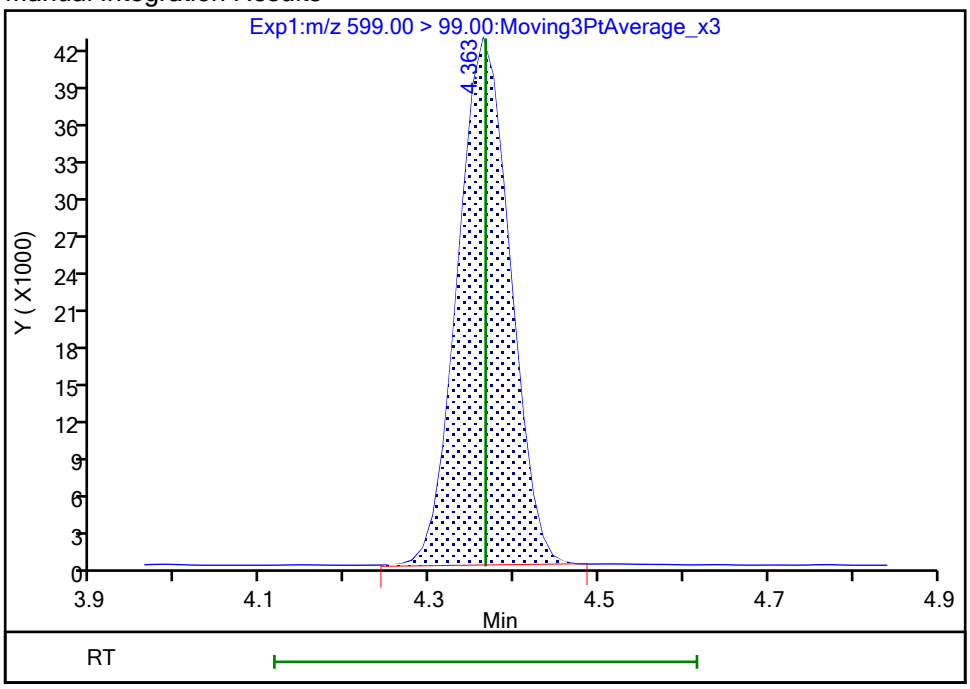
Processing Integration Results

RT: 4.36
Area: 183177
Amount: 0.747731
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 181878
Amount: 0.747731
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

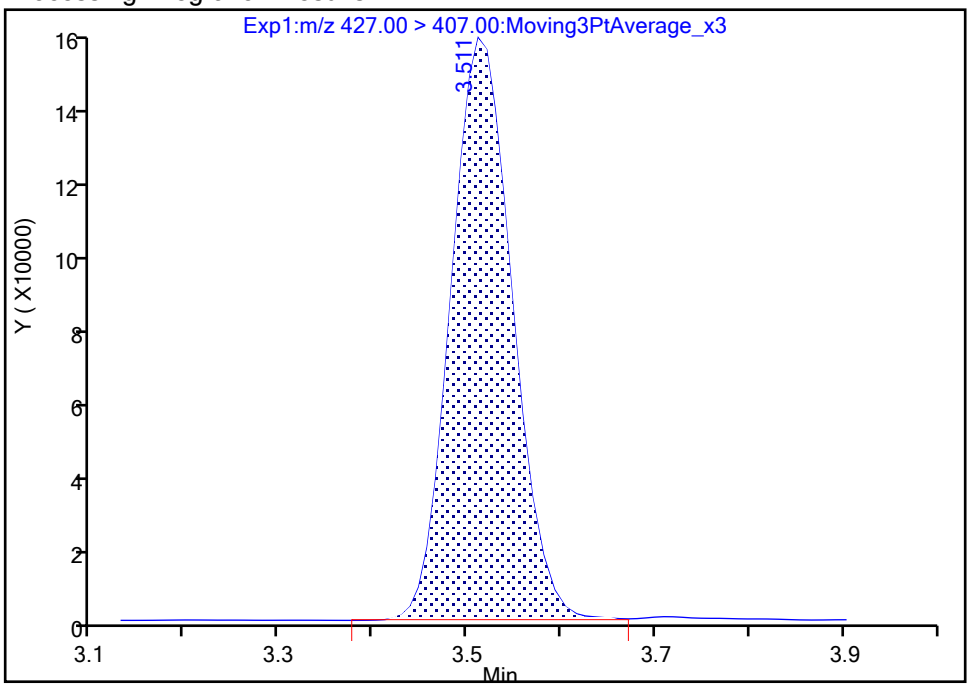
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

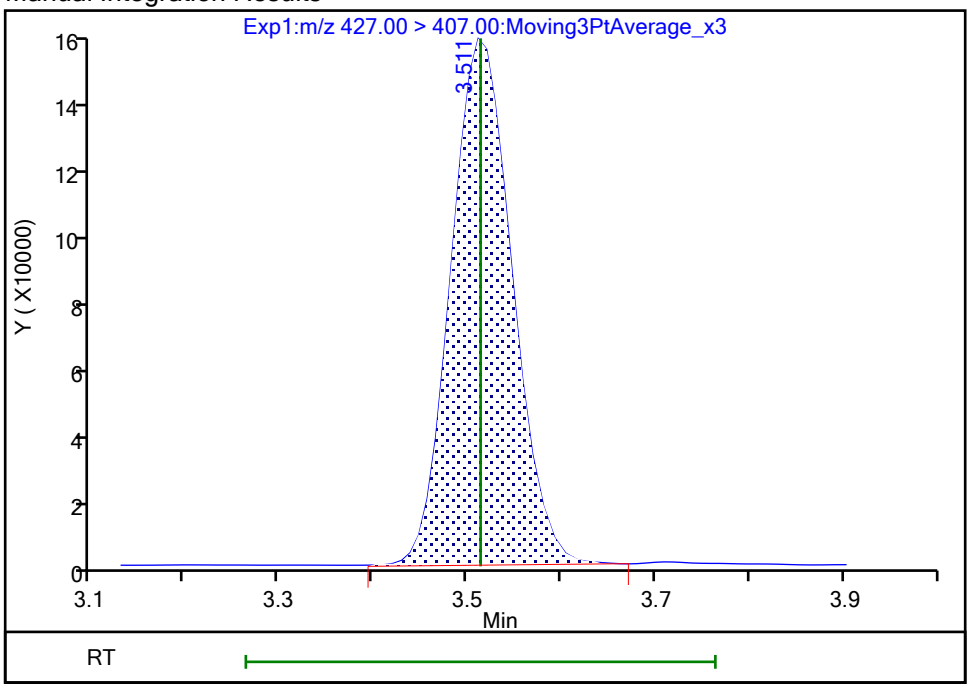
Processing Integration Results

RT: 3.51
Area: 692685
Amount: 0.974652
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 689268
Amount: 0.969844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

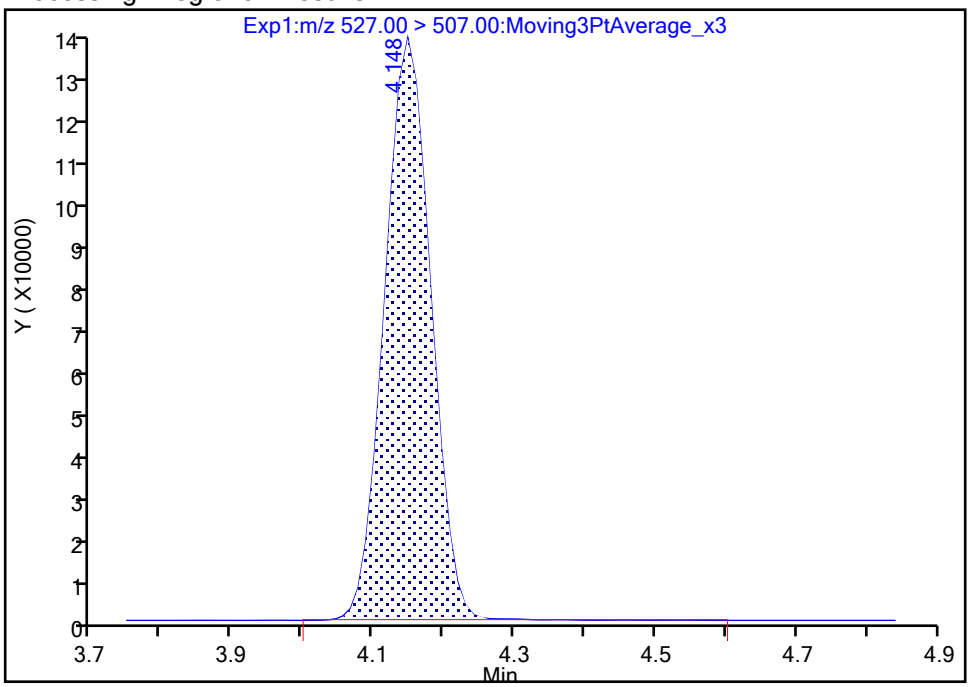
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

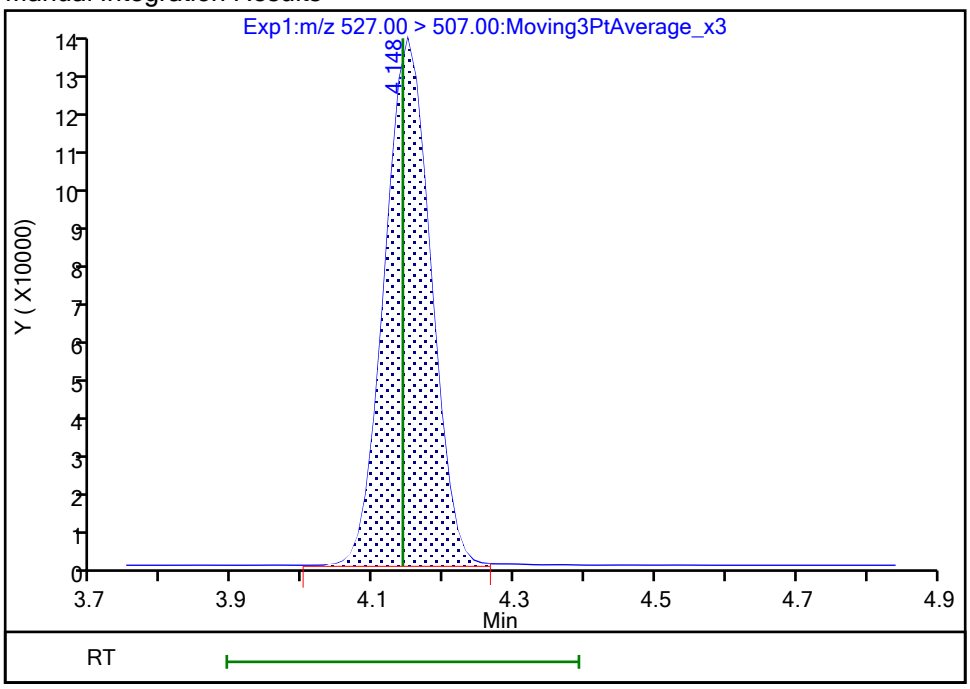
Processing Integration Results

RT: 4.15
Area: 630338
Amount: 1.006650
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 628322
Amount: 1.003430
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

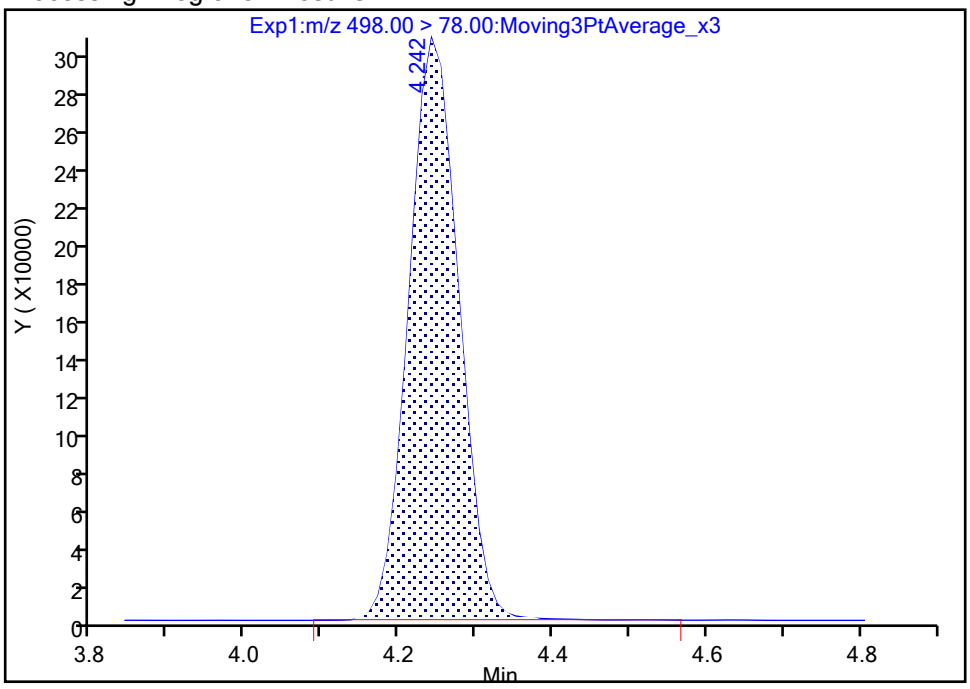
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

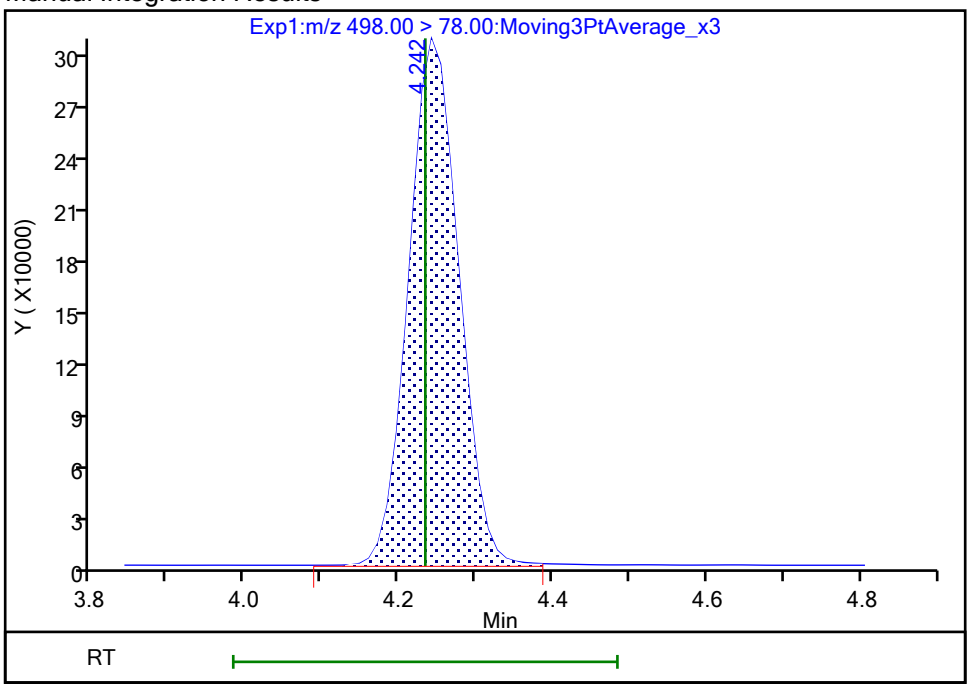
Processing Integration Results

RT: 4.24
Area: 1364908
Amount: 1.039887
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1361930
Amount: 1.037619
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

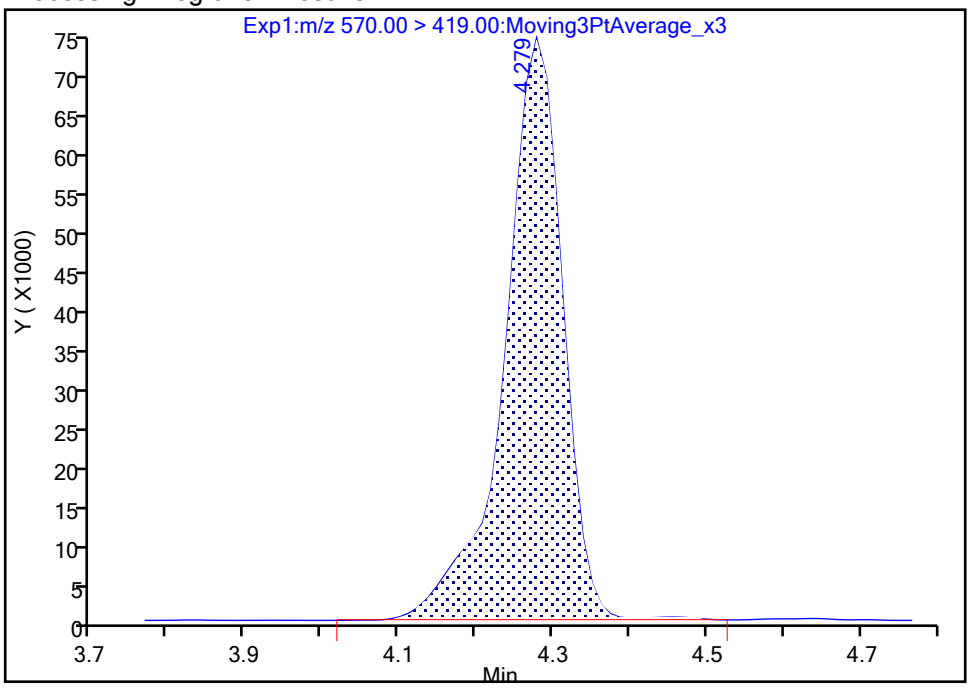
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

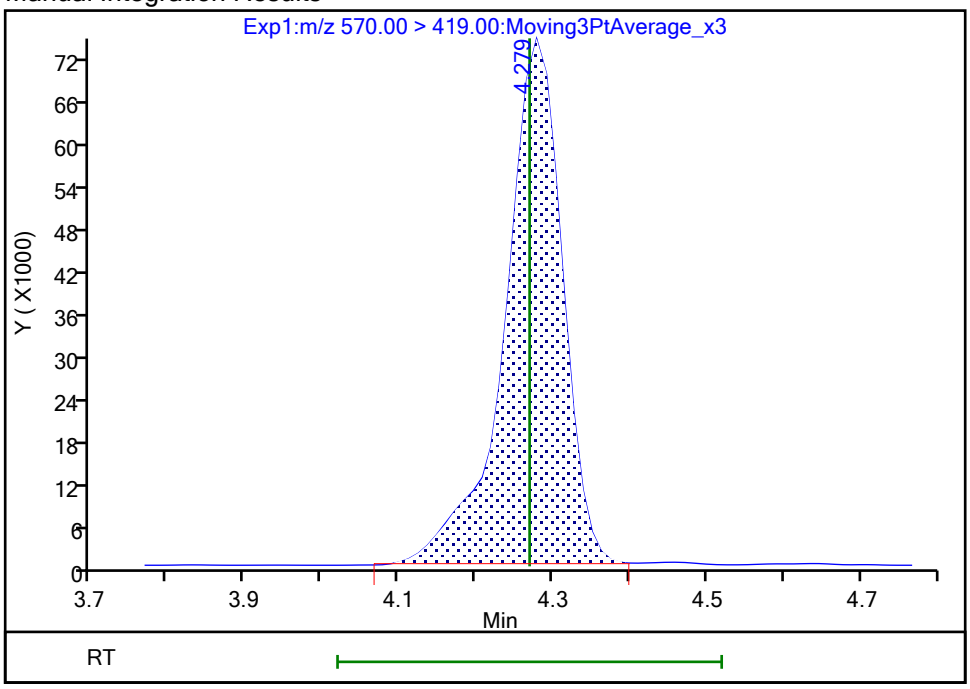
Processing Integration Results

RT: 4.28
Area: 395263
Amount: 0.978127
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 389460
Amount: 0.963767
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

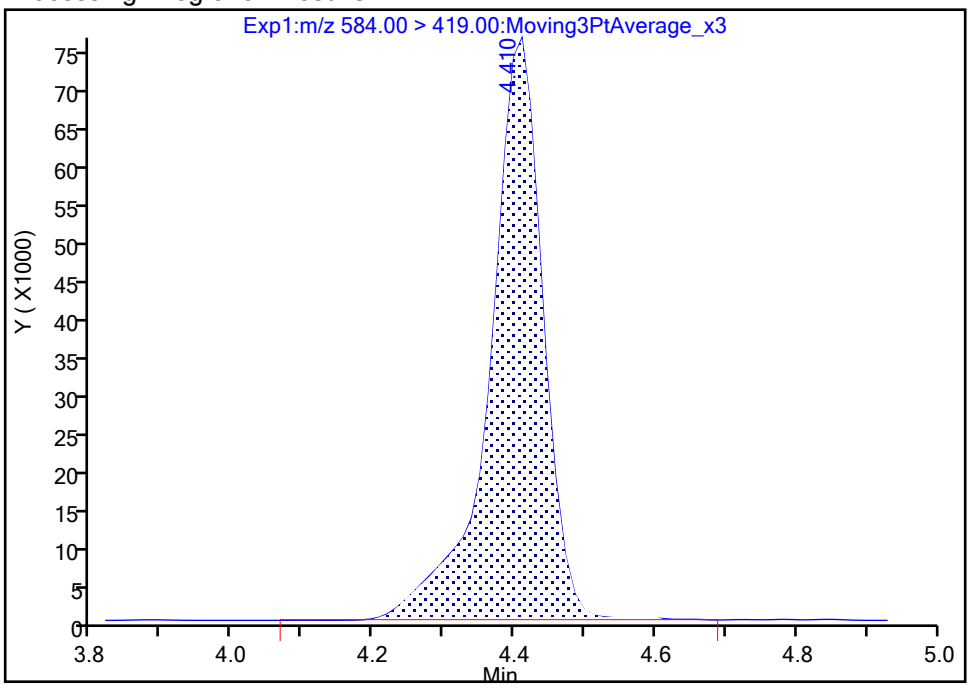
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

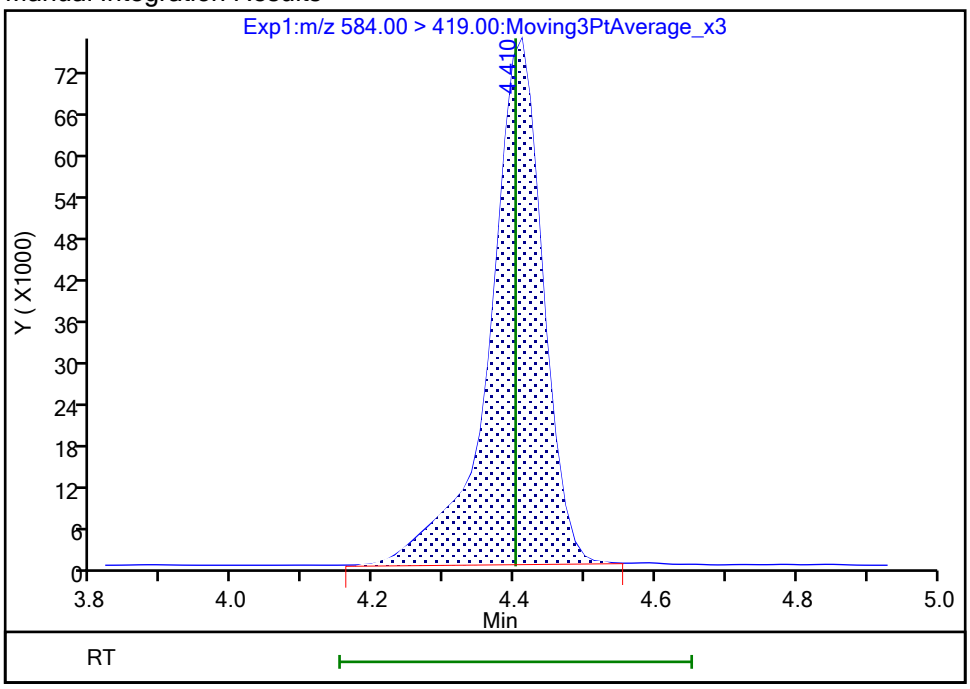
Processing Integration Results

RT: 4.41
Area: 402746
Amount: 0.956473
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 401206
Amount: 0.952815
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

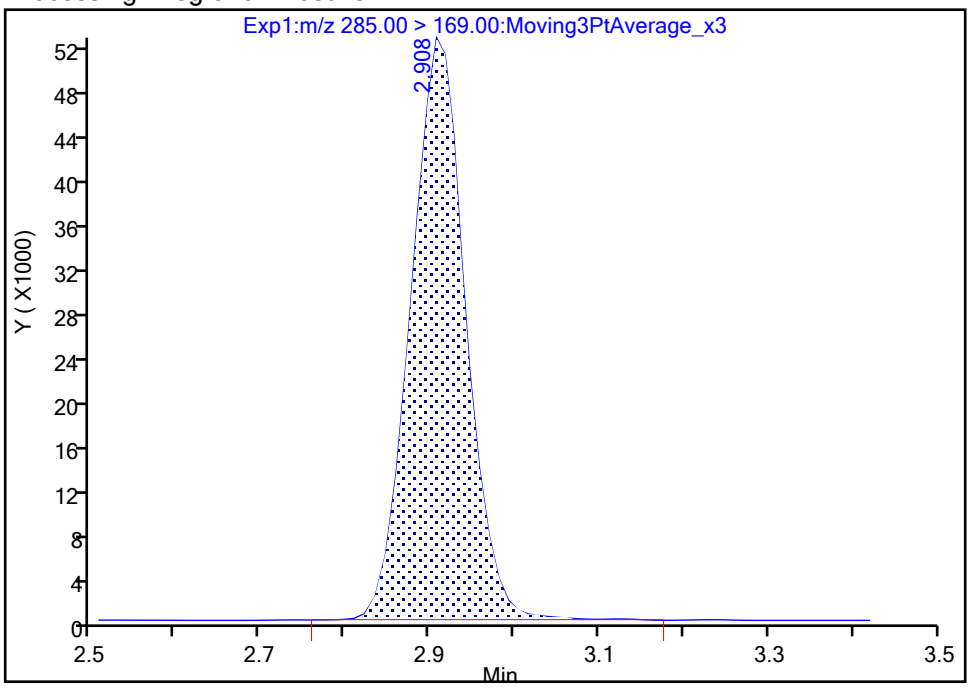
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

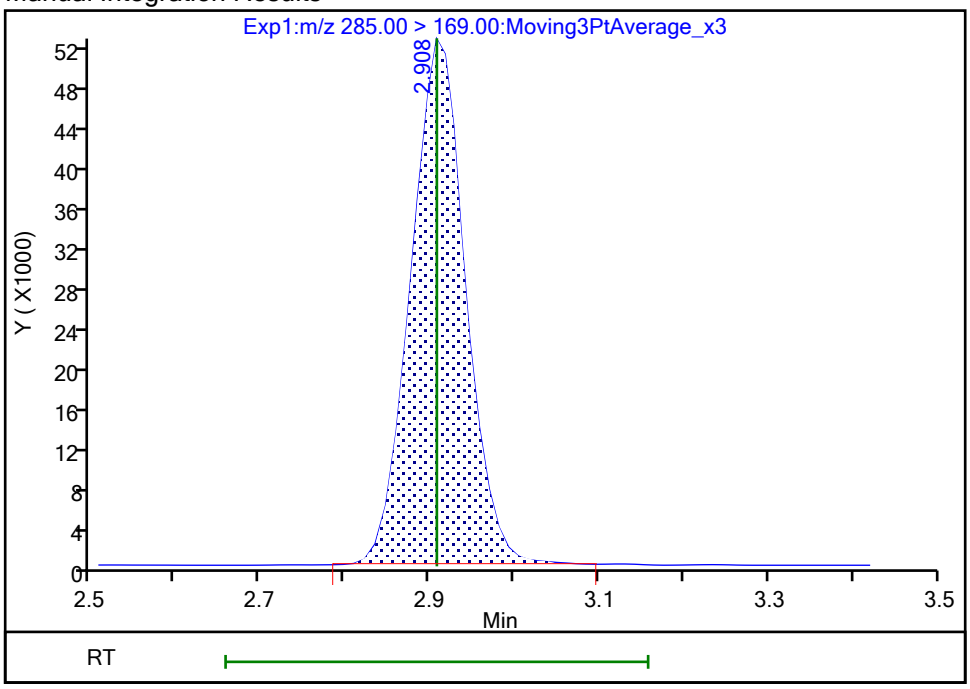
Processing Integration Results

RT: 2.91
Area: 237903
Amount: 1.000360
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 236047
Amount: 0.992556
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:31:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

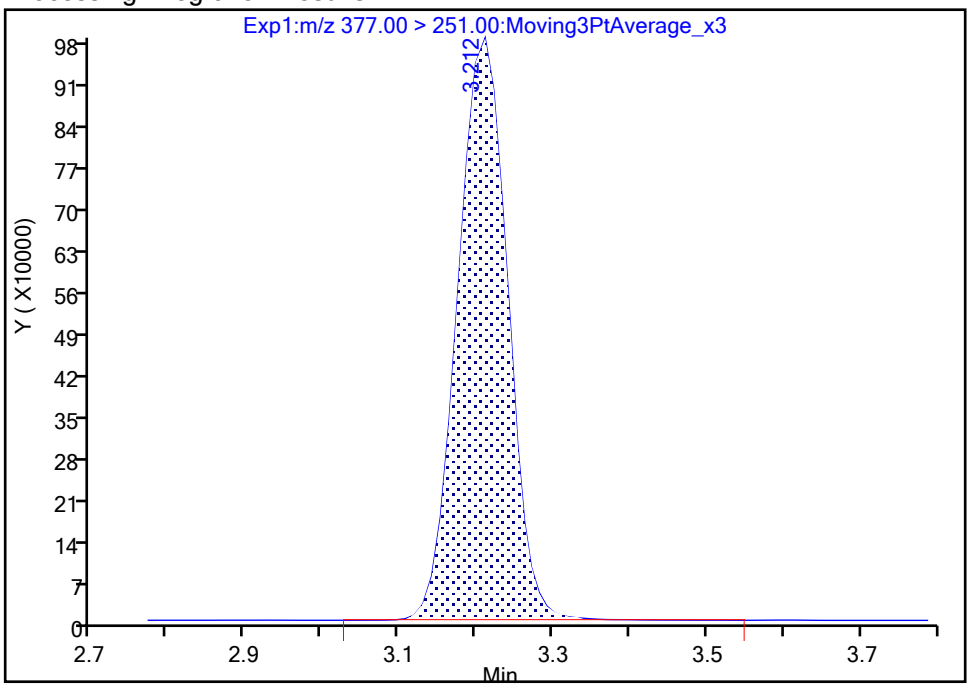
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

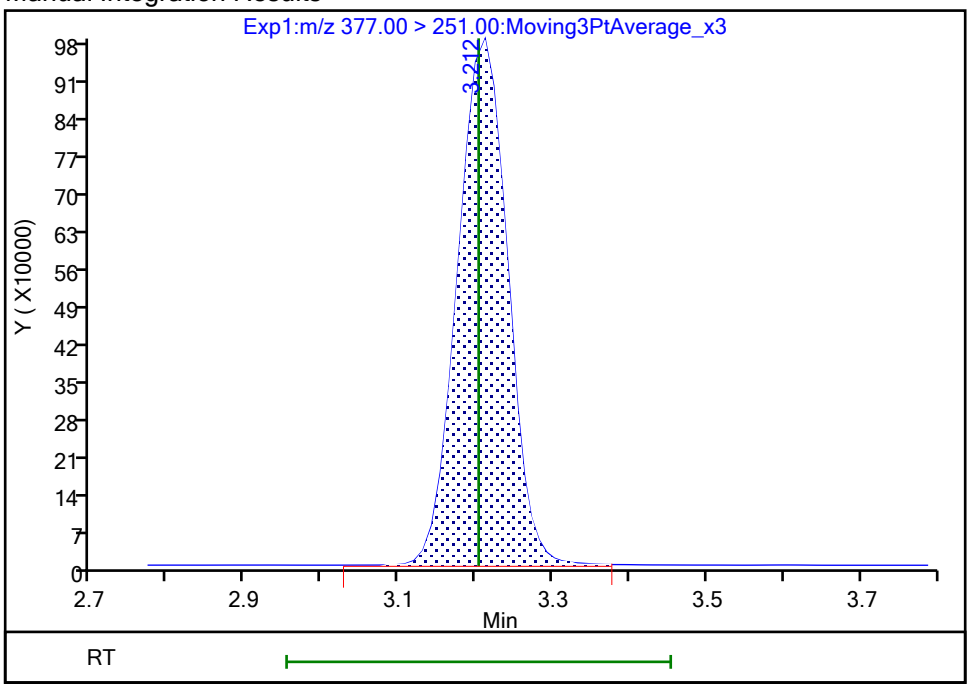
Processing Integration Results

RT: 3.21
Area: 4454990
Amount: 0.901275
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 4450733
Amount: 0.900413
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

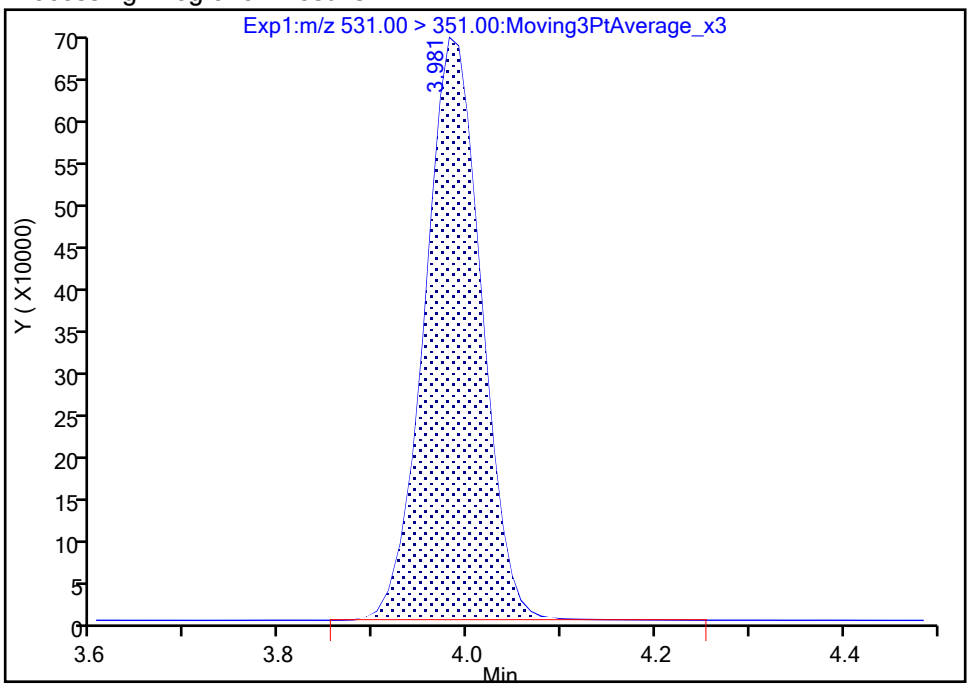
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

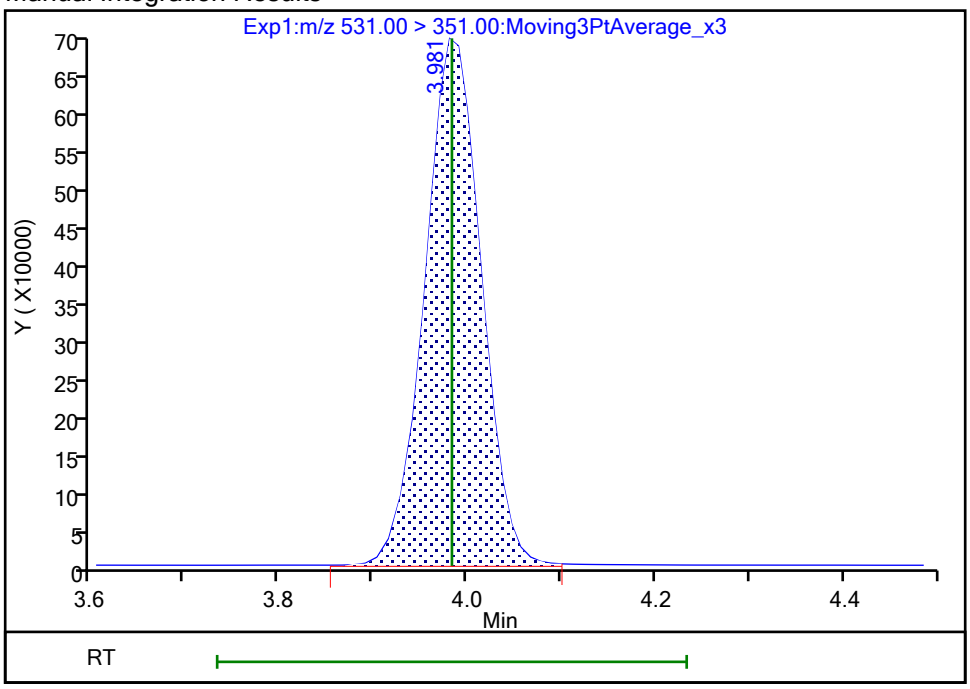
Processing Integration Results

RT: 3.98
Area: 2896923
Amount: 0.944858
Amount Units: ng/ml



Manual Integration Results

RT: 3.98
Area: 2892092
Amount: 0.943282
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

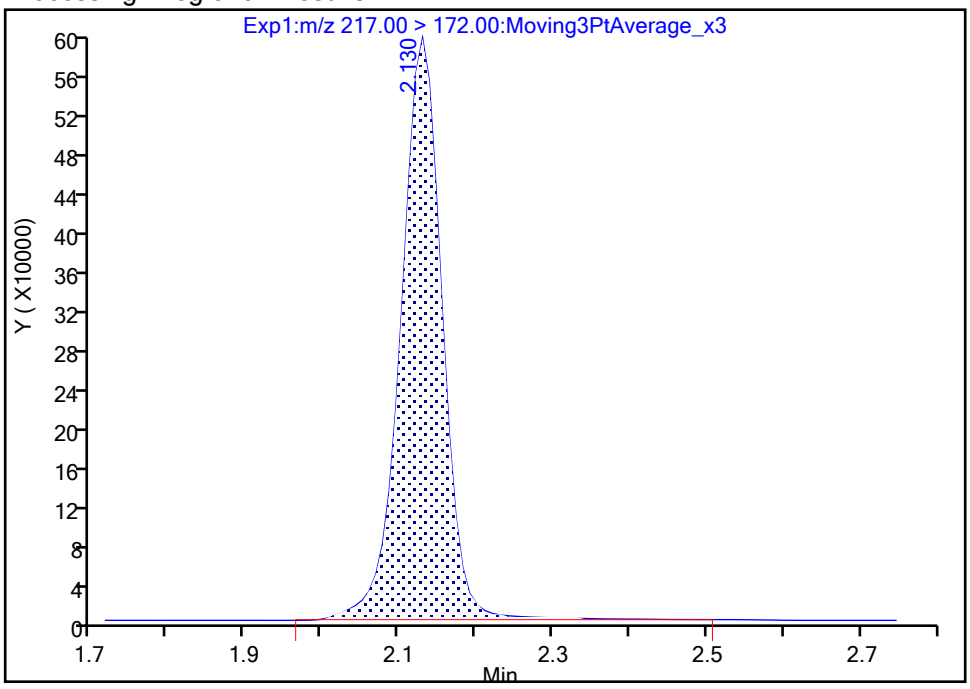
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

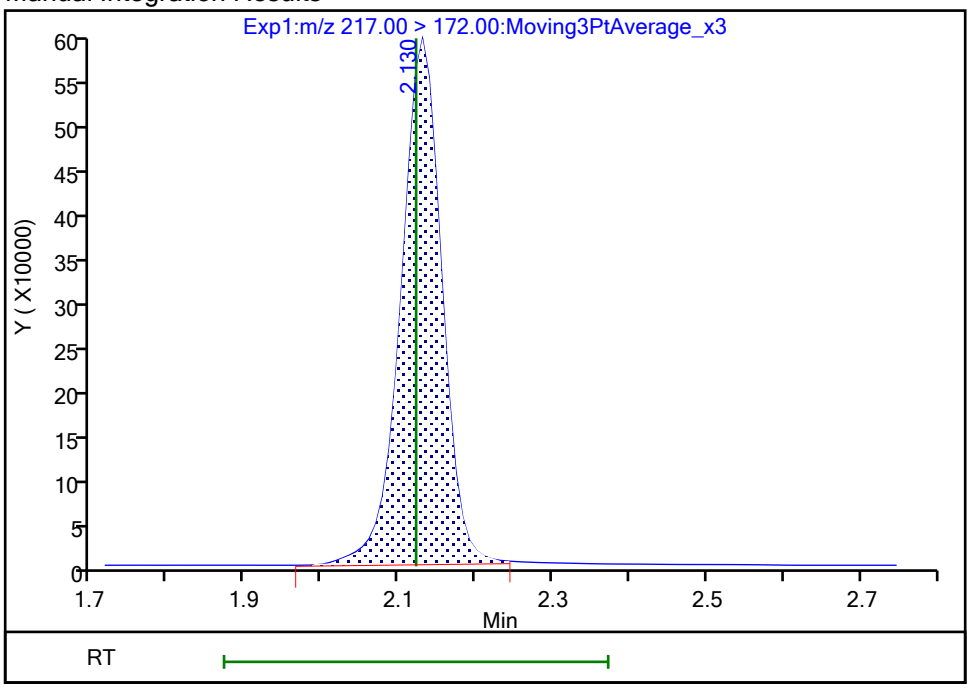
Processing Integration Results

RT: 2.13
Area: 2252319
Amount: 1.213242
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2232775
Amount: 1.202715
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:28:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

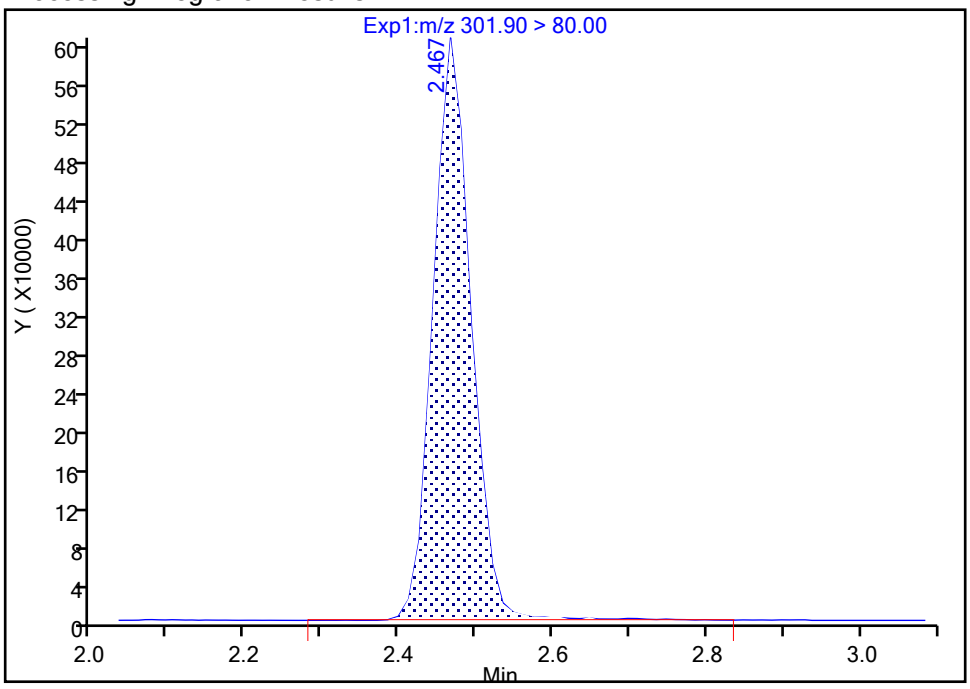
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

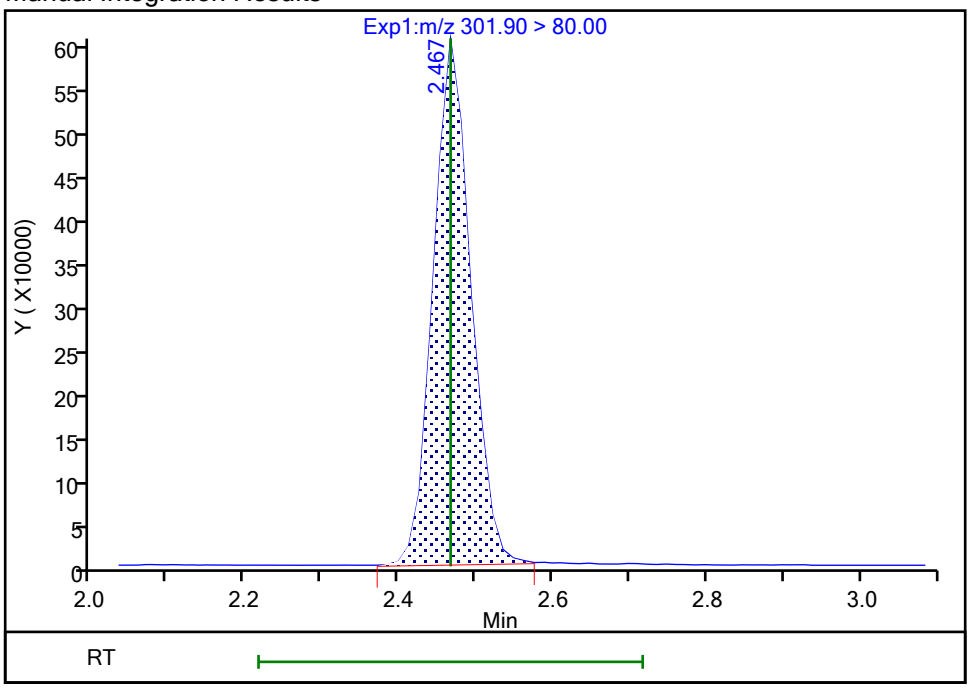
Processing Integration Results

RT: 2.47
Area: 2059607
Amount: 1.056510
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2035999
Amount: 1.044400
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:28:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

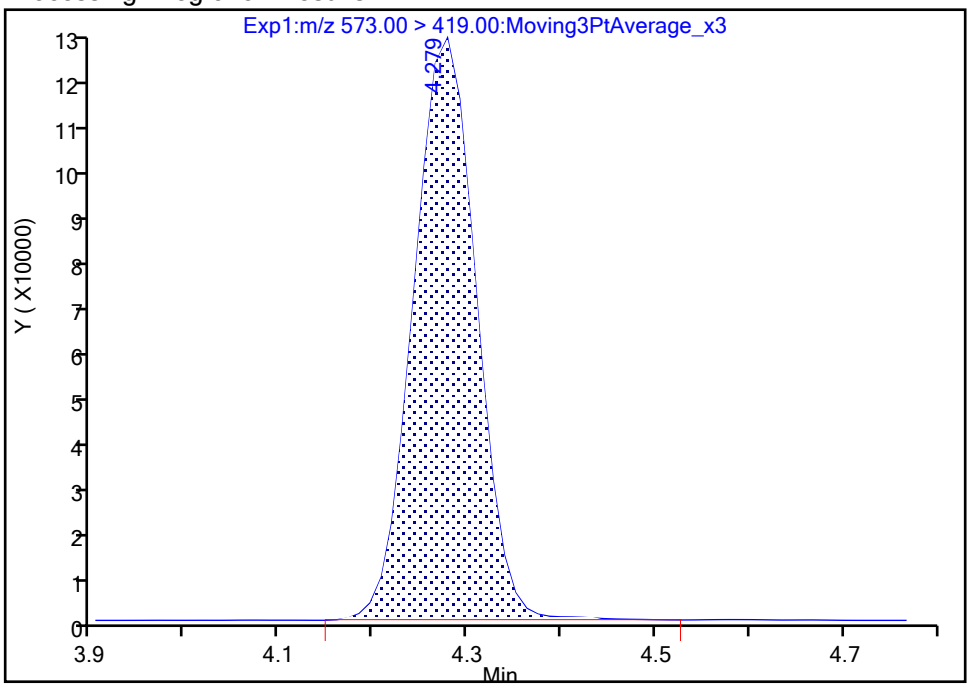
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

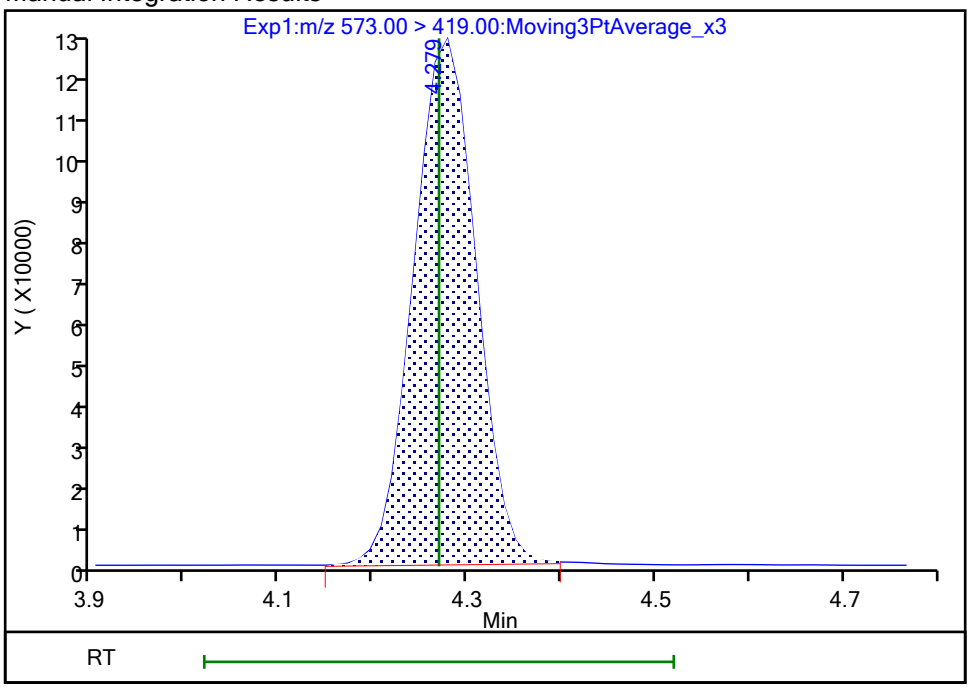
Processing Integration Results

RT: 4.28
Area: 558740
Amount: 1.126225
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 556670
Amount: 1.122052
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

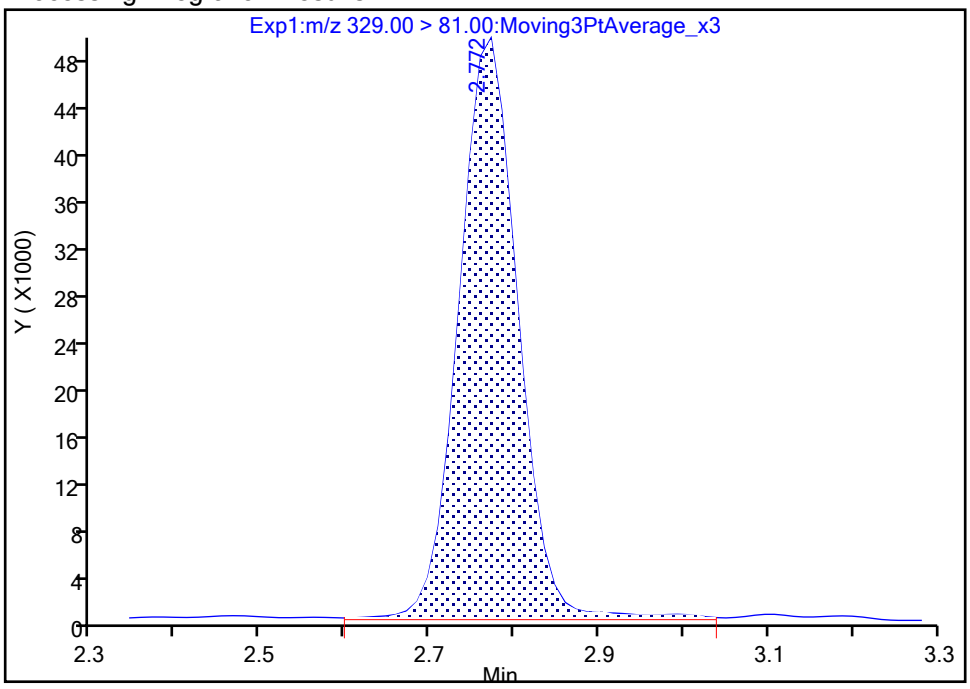
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

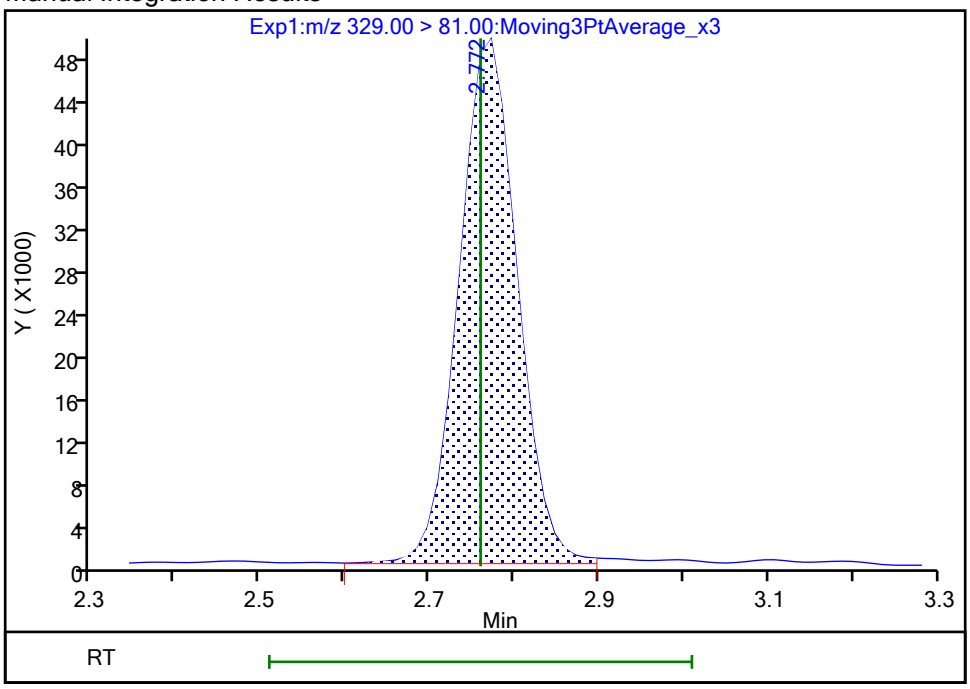
Processing Integration Results

RT: 2.77
Area: 240257
Amount: 1.065693
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 235178
Amount: 1.043165
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

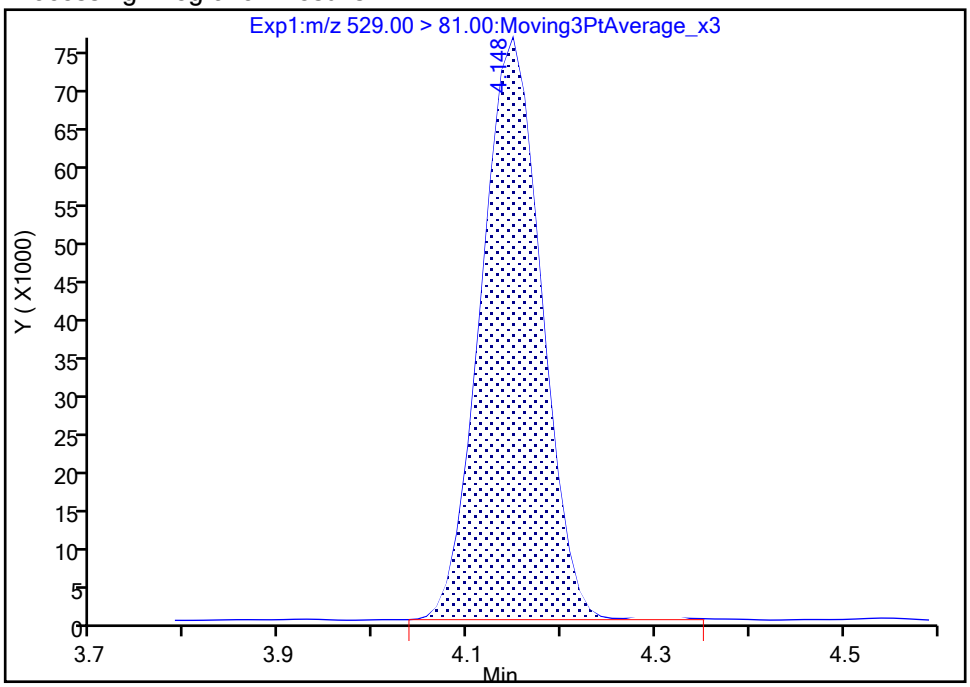
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

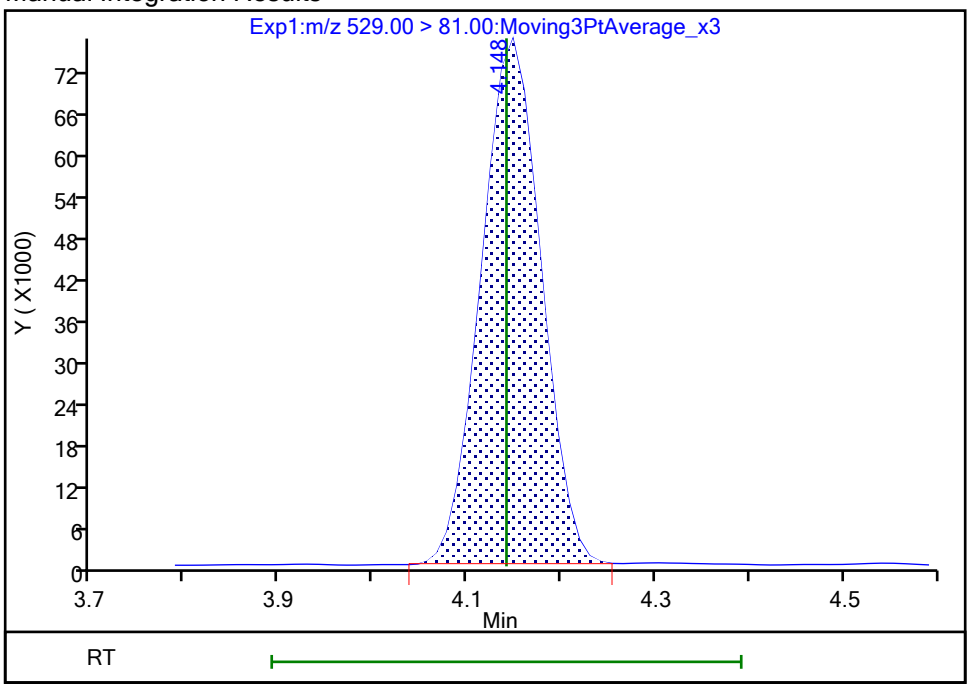
Processing Integration Results

RT: 4.15
Area: 341138
Amount: 1.044902
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 340609
Amount: 1.043281
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

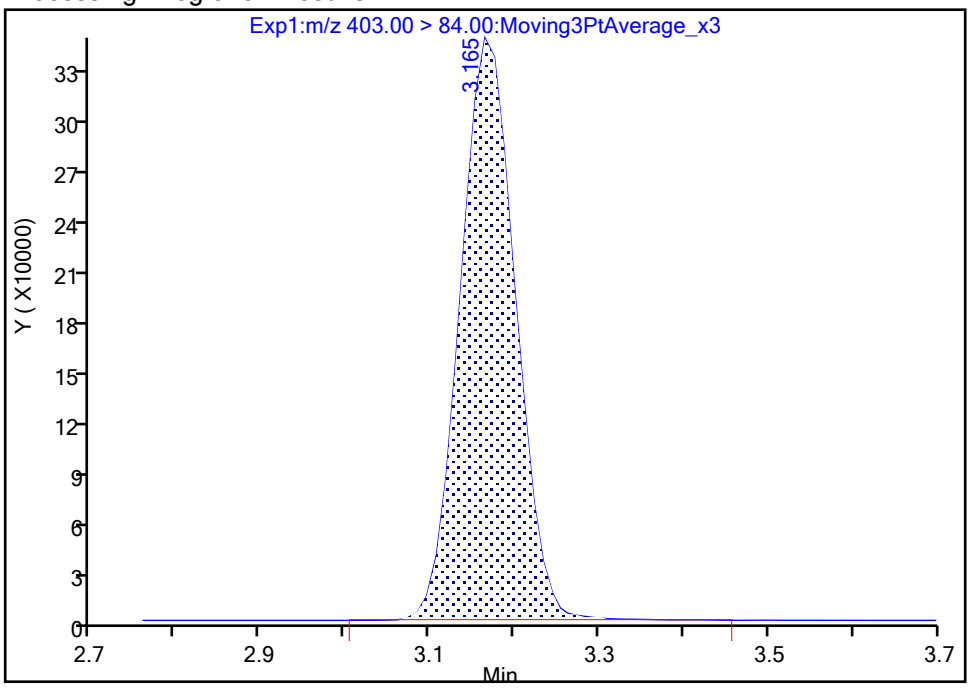
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 11 18O2 PFHxS, CAS: STL00994

Signal: 1

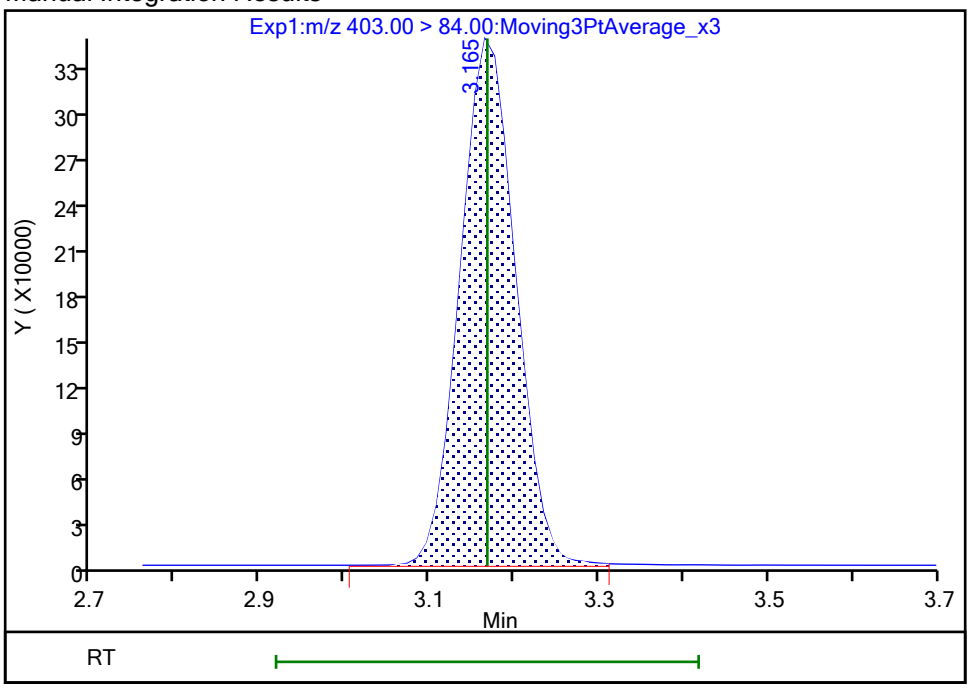
Processing Integration Results

RT: 3.16
Area: 1581275
Amount: 1.131658
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1578167
Amount: 1.129434
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

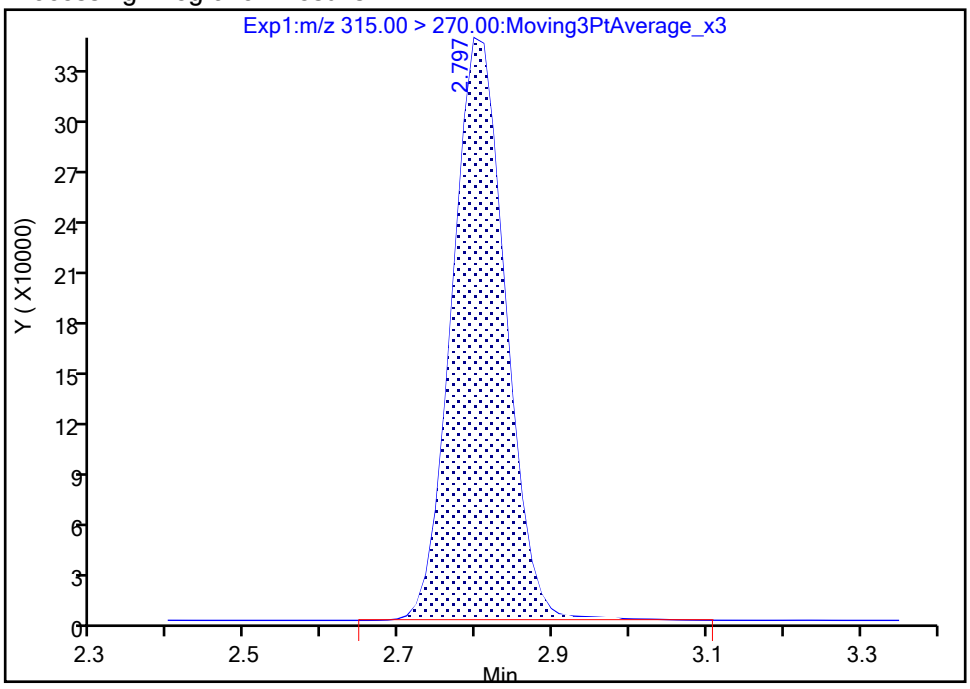
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

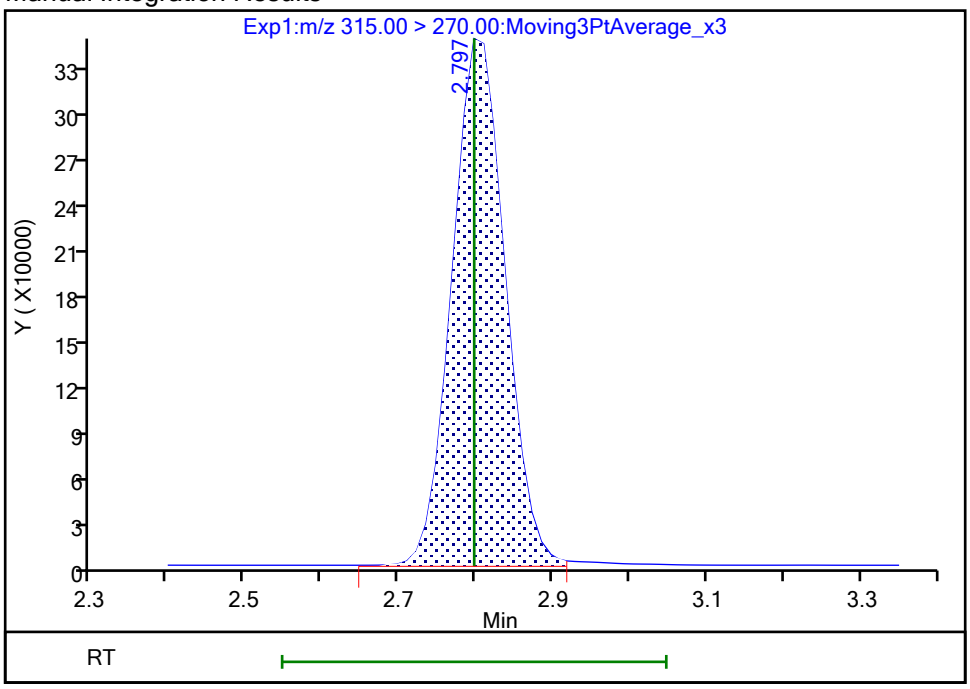
Processing Integration Results

RT: 2.80
Area: 1677839
Amount: 1.144716
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1666733
Amount: 1.137139
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

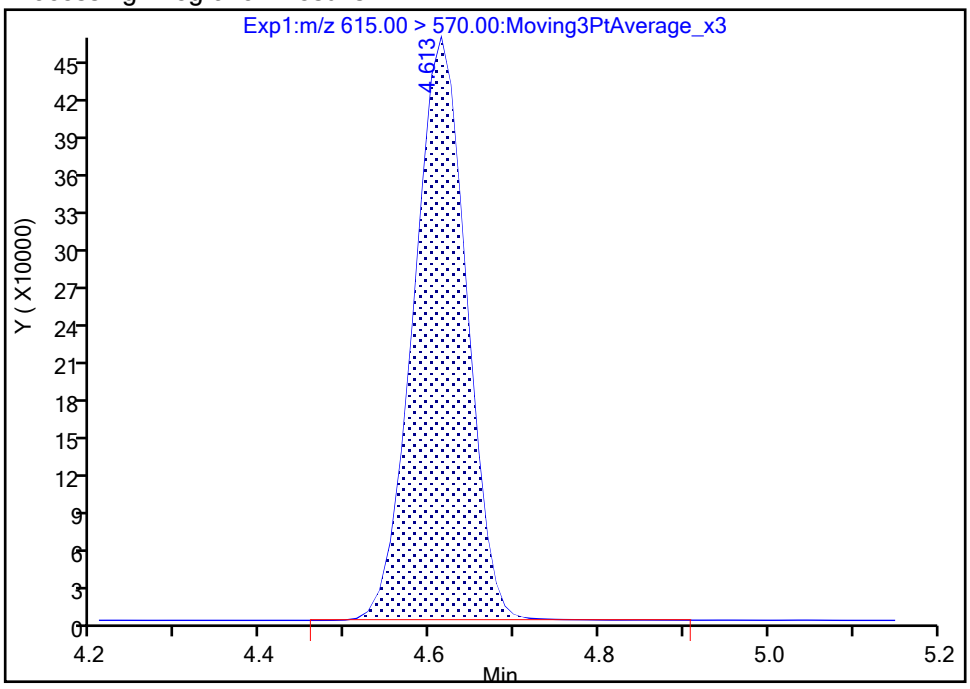
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

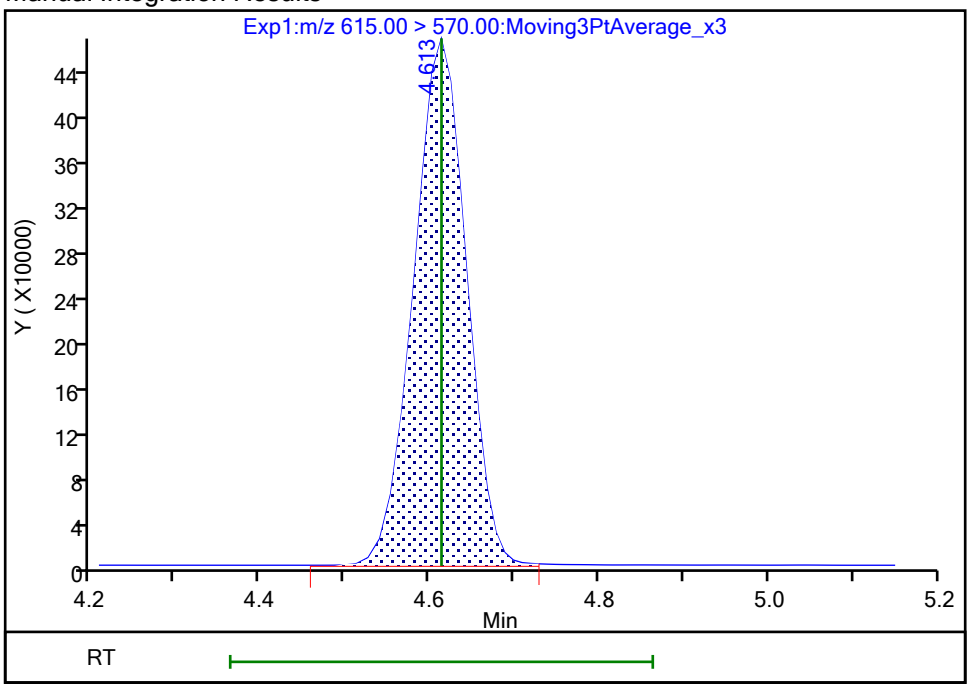
Processing Integration Results

RT: 4.61
Area: 2020128
Amount: 1.014319
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 2017017
Amount: 1.012757
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

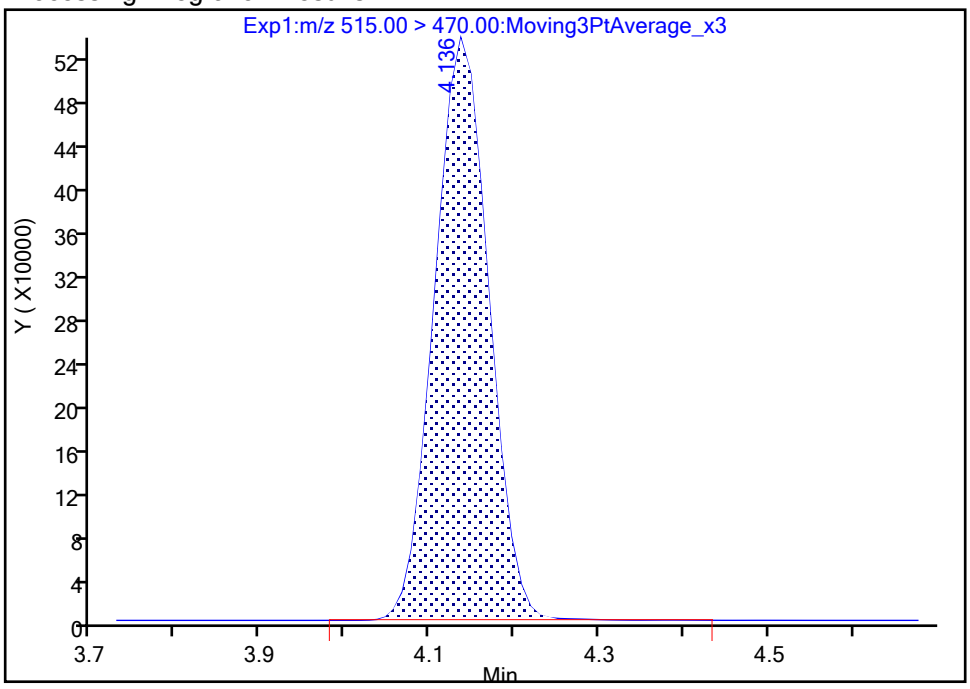
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 23 13C2 PFDA, CAS: STL00996

Signal: 1

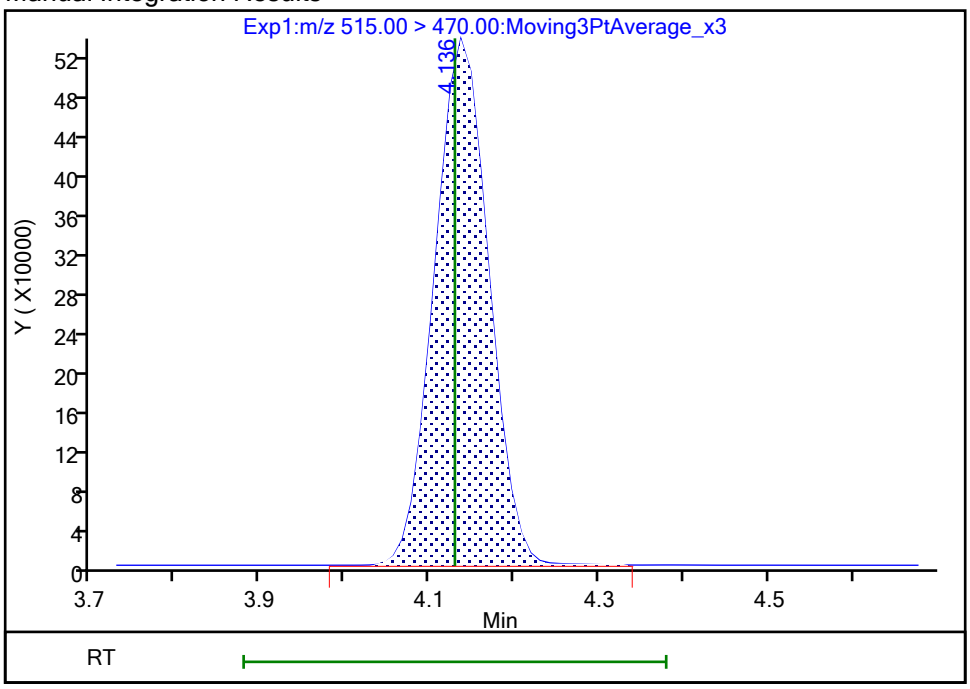
Processing Integration Results

RT: 4.14
Area: 2394137
Amount: 1.153339
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2393361
Amount: 1.152965
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 MS Lab Sample ID: 460-290517-8 MS

Matrix: Water Lab File ID: PA231024A10.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:21

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 307(mL) Date Analyzed: 10/24/2023 19:13

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	60.97		4.07	0.98
2706-90-3	Perfluoropentanoic acid	64.09		1.63	0.55
307-24-4	Perfluorohexanoic acid	57.13		1.63	0.53
375-85-9	Perfluoroheptanoic acid	47.71		1.63	0.44
335-67-1	Perfluorooctanoic acid	79.21		1.63	0.62
375-95-1	Perfluorononanoic acid	41.80		1.63	0.40
335-76-2	Perfluorodecanoic acid	30.34		1.63	0.37
2058-94-8	Perfluoroundecanoic acid	29.37		1.63	0.45
307-55-1	Perfluorododecanoic acid	29.23		1.63	0.40
72629-94-8	Perfluorotridecanoic acid	29.50		1.63	0.39
376-06-7	Perfluorotetradecanoic acid	32.01		1.63	0.52
375-73-5	Perfluorobutanesulfonic acid	37.02		1.63	0.50
2706-91-4	Perfluoropentanesulfonic acid	36.55		1.63	0.41
355-46-4	Perfluorohexanesulfonic acid	54.82		1.63	0.45
375-92-8	Perfluoroheptanesulfonic acid	31.28		1.63	0.33
1763-23-1	Perfluorooctanesulfonic acid	87.90		1.63	0.69
68259-12-1	Perfluorononanesulfonic acid	26.62		1.63	0.33
335-77-3	Perfluorodecanesulfonic acid	27.59		1.63	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	32.57		1.63	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	32.24		4.07	1.06
39108-34-4	8:2 Fluorotelomer sulfonic acid	33.71		1.63	0.63
754-91-6	Perfluorooctanesulfonamide	30.50		1.63	0.75
2355-31-9	NMeFOSAA	31.21		4.07	1.55
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	30.30		4.07	1.30
13252-13-6	HFPODA	33.33		3.26	0.90
919005-14-4	DONA	26.91		1.63	0.34
756426-58-1	9Cl-PF3ONS	30.23		1.63	0.26
763051-92-9	11Cl-PF3OUdS	30.05		1.63	0.71

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 MS Lab Sample ID: 460-290517-8 MS

Matrix: Water Lab File ID: PA231024A10.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:21

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 307(mL) Date Analyzed: 10/24/2023 19:13

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	79		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	95		50-150
STL02116	13C2 PFTeDA	96		50-150
STL02337	13C3 PFBS	97		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	99		50-150
STL02117	d5-NEtFOSAA	104		50-150
STL02395	M2-4:2 FTS	92		50-150
STL02279	M2-6:2 FTS	102		50-150
STL02280	M2-8:2 FTS	97		50-150
STL02255	13C3 HFPO-DA	95		50-150

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 MSD | Lab Sample ID: 460-290517-8 MSD

Matrix: Water | Lab File ID: PA231024A11.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 14:21

Extraction Method: 3535 | Date Extracted: 10/24/2023 09:04

Sample wt/vol: 308.8(mL) | Date Analyzed: 10/24/2023 19:21

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	63.17		4.05	0.97
2706-90-3	Perfluoropentanoic acid	62.69		1.62	0.55
307-24-4	Perfluorohexanoic acid	61.20		1.62	0.53
375-85-9	Perfluoroheptanoic acid	49.55		1.62	0.44
335-67-1	Perfluorooctanoic acid	75.97		1.62	0.62
375-95-1	Perfluorononanoic acid	38.90		1.62	0.40
335-76-2	Perfluorodecanoic acid	32.21		1.62	0.37
2058-94-8	Perfluoroundecanoic acid	32.97		1.62	0.45
307-55-1	Perfluorododecanoic acid	31.63		1.62	0.40
72629-94-8	Perfluorotridecanoic acid	29.45		1.62	0.39
376-06-7	Perfluorotetradecanoic acid	29.13		1.62	0.52
375-73-5	Perfluorobutanesulfonic acid	37.74		1.62	0.50
2706-91-4	Perfluoropentanesulfonic acid	36.88		1.62	0.40
355-46-4	Perfluorohexanesulfonic acid	55.57		1.62	0.45
375-92-8	Perfluoroheptanesulfonic acid	32.41		1.62	0.33
1763-23-1	Perfluorooctanesulfonic acid	91.28		1.62	0.69
68259-12-1	Perfluorononanesulfonic acid	28.08		1.62	0.32
335-77-3	Perfluorodecanesulfonic acid	28.12		1.62	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	33.15		1.62	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	32.82		4.05	1.05
39108-34-4	8:2 Fluorotelomer sulfonic acid	33.87		1.62	0.62
754-91-6	Perfluorooctanesulfonamide	32.38		1.62	0.74
2355-31-9	NMeFOSAA	34.70		4.05	1.54
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	32.01		4.05	1.30
13252-13-6	HFPODA	39.00		3.24	0.89
919005-14-4	DONA	27.45		1.62	0.34
756426-58-1	9Cl-PF3ONS	31.94		1.62	0.26
763051-92-9	11Cl-PF3OUdS	29.89		1.62	0.70

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Client Sample ID: MW34R-101623-1421-12 MSD Lab Sample ID: 460-290517-8 MSD

Matrix: Water Lab File ID: PA231024A11.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 14:21

Extraction Method: 3535 Date Extracted: 10/24/2023 09:04

Sample wt/vol: 308.8(mL) Date Analyzed: 10/24/2023 19:21

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196739 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	79		50-150
STL01893	13C5 PFPeA	91		50-150
STL01892	13C4 PFHpA	101		50-150
STL02116	13C2 PFTeDA	100		50-150
STL02337	13C3 PFBS	98		50-150
STL01056	13C8 FOSA	84		50-150
STL02118	d3-NMeFOSAA	98		50-150
STL02117	d5-NEtFOSAA	104		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	107		50-150
STL02280	M2-8:2 FTS	98		50-150
STL02255	13C3 HFPO-DA	86		50-150

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 07/26/2023 16:44

Analysis Batch Number: 193912 End Date: 07/26/2023 18:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:08	1		C-18 4.6(mm)
IC 200-193912/5		07/26/2023 17:16	1	PA230726ICAL05.d	C-18 4.6(mm)
IC 200-193912/6		07/26/2023 17:25	1	PA230726ICAL06.d	C-18 4.6(mm)
IC 200-193912/7		07/26/2023 17:33	1	PA230726ICAL07.d	C-18 4.6(mm)
ICISAV 200-193912/8		07/26/2023 17:41	1	PA230726ICAL08.d	C-18 4.6(mm)
IC 200-193912/9		07/26/2023 17:49	1	PA230726ICAL09.d	C-18 4.6(mm)
IC 200-193912/10		07/26/2023 17:57	1	PA230726ICAL10.d	C-18 4.6(mm)
IC 200-193912/11		07/26/2023 18:05	1	PA230726ICAL11.d	C-18 4.6(mm)
ICB 200-193912/12		07/26/2023 18:13	1	PA230726ICAL12.d	C-18 4.6(mm)
ICV 200-193912/13		07/26/2023 18:22	1	PA230726ICAL13.d	C-18 4.6(mm)
ZZZZZ		07/26/2023 18:30	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 10/23/2023 15:31

Analysis Batch Number: 196686 End Date: 10/23/2023 19:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/23/2023 15:31	1		C-18 4.6(mm)
CCB 200-196686/4		10/23/2023 15:39	1	PA231023A04.d	C-18 4.6(mm)
CCVLIS 200-196686/5		10/23/2023 15:47	1	PA231023A05.d	C-18 4.6(mm)
ZZZZZ		10/23/2023 15:55	10		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:03	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:11	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:20	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:28	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:36	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:09	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:17	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:25	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:33	1		C-18 4.6(mm)
CCV 200-196686/19		10/23/2023 17:41	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:49	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:58	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:06	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:14	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:22	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:30	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:38	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:47	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:55	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:03	1		C-18 4.6(mm)
CCV 200-196686/30		10/23/2023 19:11	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:19	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:27	1		C-18 4.6(mm)
CCV 200-196686/33		10/23/2023 19:36	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 10/24/2023 06:05

Analysis Batch Number: 196692 End Date: 10/24/2023 09:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196692/1		10/24/2023 06:05	1	PA231023E01.d	C-18 4.6(mm)
MB 200-196662/1-A		10/24/2023 06:13	1	PA231023E02.d	C-18 4.6(mm)
LCS 200-196662/2-A		10/24/2023 06:22	1	PA231023E03.d	C-18 4.6(mm)
LCSD 200-196662/3-A		10/24/2023 06:30	1	PA231023E04.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 06:38	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 06:46	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 06:54	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:02	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:11	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:19	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:27	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:35	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:43	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:52	1		C-18 4.6(mm)
CCV 200-196692/15		10/24/2023 08:00	1	PA231023E15.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 08:08	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 08:16	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 08:24	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 08:32	1		C-18 4.6(mm)
460-290517-1	1000-101623-0002	10/24/2023 08:41	1	PA231023E20.d	C-18 4.6(mm)
460-290517-2	1000-101623-0003	10/24/2023 08:49	1	PA231023E21.d	C-18 4.6(mm)
460-290517-3	1000-101623-0004	10/24/2023 08:57	1	PA231023E22.d	C-18 4.6(mm)
460-290517-4	MW2-101623-0951-10	10/24/2023 09:05	1	PA231023E23.d	C-18 4.6(mm)
460-290517-5	MW3-101623-1046-9	10/24/2023 09:13	1	PA231023E24.d	C-18 4.6(mm)
460-290517-6	MW4-101623-1156-11.5	10/24/2023 09:22	1	PA231023E25.d	C-18 4.6(mm)
CCV 200-196692/26		10/24/2023 09:30	1	PA231023E26.d	C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 10/24/2023 18:00

Analysis Batch Number: 196739 End Date: 10/24/2023 21:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/24/2023 18:00	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 18:08	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 18:16	1		C-18 4.6(mm)
CCB 200-196739/4		10/24/2023 18:24	1	PA231024A04.d	C-18 4.6(mm)
CCVLIS 200-196739/5		10/24/2023 18:32	1	PA231024A05.d	C-18 4.6(mm)
MB 200-196715/1-A		10/24/2023 18:40	1	PA231024A06.d	C-18 4.6(mm)
LCS 200-196715/2-A		10/24/2023 18:49	1	PA231024A07.d	C-18 4.6(mm)
460-290517-7	MW15-101623-1325-7	10/24/2023 18:57	1	PA231024A08.d	C-18 4.6(mm)
460-290517-8	MW34R-101623-1421-12	10/24/2023 19:05	1	PA231024A09.d	C-18 4.6(mm)
460-290517-8 MS	MW34R-101623-1421-12 MS	10/24/2023 19:13	1	PA231024A10.d	C-18 4.6(mm)
460-290517-8 MSD	MW34R-101623-1421-12 MSD	10/24/2023 19:21	1	PA231024A11.d	C-18 4.6(mm)
460-290517-9	MW16A-101623-0926-20	10/24/2023 19:29	1	PA231024A12.d	C-18 4.6(mm)
460-290517-10	MW16C-101623-1026-120	10/24/2023 19:38	1	PA231024A13.d	C-18 4.6(mm)
460-290517-11	MW93-101623-1206-30	10/24/2023 19:46	1	PA231024A14.d	C-18 4.6(mm)
460-290517-12	MW93A-101623-1311-65	10/24/2023 19:54	1	PA231024A15.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 20:02	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 20:10	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 20:18	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 20:27	1		C-18 4.6(mm)
CCV 200-196739/20		10/24/2023 20:35	1	PA231024A20.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 20:43	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 20:51	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 20:59	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 21:07	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 21:16	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 21:24	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 21:32	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 21:40	1		C-18 4.6(mm)
CCV 200-196739/29		10/24/2023 21:48	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 10/26/2023 20:30

Analysis Batch Number: 196833 End Date: 10/27/2023 00:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/26/2023 20:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:39	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:47	1		C-18 4.6(mm)
CCB 200-196833/4		10/26/2023 20:55	1	PA231026A04.d	C-18 4.6(mm)
CCVLIS 200-196833/5		10/26/2023 21:03	1	PA231026A05.d	C-18 4.6(mm)
ZZZZZ		10/26/2023 21:11	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:19	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:28	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:36	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:44	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:52	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:00	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:08	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:17	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:25	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:33	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:41	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:49	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:57	1		C-18 4.6(mm)
CCV 200-196833/20		10/26/2023 23:05	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:14	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:22	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:38	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:46	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:54	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:03	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:11	1		C-18 4.6(mm)
CCV 200-196833/29		10/27/2023 00:19	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Instrument ID: LC812 Start Date: 10/27/2023 10:08

Analysis Batch Number: 196839 End Date: 10/27/2023 12:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196839/1		10/27/2023 10:08	1	PA231026E01.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 10:16	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:24	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:32	5		C-18 4.6(mm)
460-290517-4 DL	MW2-101623-0951-10 DL	10/27/2023 10:40	5	PA231026E05.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 10:49	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:57	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:05	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:13	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:21	10		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:29	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:38	2		C-18 4.6(mm)
CCV 200-196839/13		10/27/2023 11:46	1	PA231026E13.d	C-18 4.6(mm)
460-290517-10 DL	MW16C-101623-1026-120 DL	10/27/2023 11:54	2	PA231026E14.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 12:02	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:10	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:19	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:27	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:35	1		C-18 4.6(mm)
CCV 200-196839/20		10/27/2023 12:43	1	PA231026E20.d	C-18 4.6(mm)

537 (modified)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LCPFAS28NCICV 00014	PFAS23NClC7 00001	PFAS32NCBLK20 00025	PFAS32NCIC1 00015	PFAS32NCIC2 00014
IC 200-193912/5		537 (modified)		1 mL				100 uL	
IC 200-193912/6		537 (modified)		1 mL					100 uL
IC 200-193912/7		537 (modified)		1 mL					
ICISAV 200-193912/8		537 (modified)		1 mL					
IC 200-193912/9		537 (modified)		1 mL					
IC 200-193912/10		537 (modified)		1 mL					
IC 200-193912/11		537 (modified)		1 mL		100 uL			
ICB 200-193912/12		537 (modified)		1 mL			100 uL		
ICV 200-193912/13		537 (modified)		1 mL	100 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS32NCIC3 00016	PFAS32NCIC4 00042	PFAS32NCIC5 00035	PFAS32NCIC6 00014		
IC 200-193912/5		537 (modified)							
IC 200-193912/6		537 (modified)							
IC 200-193912/7		537 (modified)		100 uL					
ICISAV 200-193912/8		537 (modified)			100 uL				
IC 200-193912/9		537 (modified)				100 uL			
IC 200-193912/10		537 (modified)					100 uL		
IC 200-193912/11		537 (modified)							
ICB 200-193912/12		537 (modified)							
ICV 200-193912/13		537 (modified)							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196662 Batch Start Date: 10/23/23 07:41 Batch Analyst: Kaplan, Matthew L

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196662/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196662/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
LCSD 200-196662/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
460-290517-A-1	1000-101623-0002	3535, 537 (modified)	T	309.26 g	27.75 g	281.5 mL	10 mL		100 uL
460-290517-A-2	1000-101623-0003	3535, 537 (modified)	T	319.33 g	27.80 g	291.5 mL	10 mL		100 uL
460-290517-A-3	1000-101623-0004	3535, 537 (modified)	T	309.39 g	27.51 g	281.9 mL	10 mL		100 uL
460-290517-B-4	MW2-101623-0951-10	3535, 537 (modified)	T	326.15 g	27.77 g	298.4 mL	10 mL		100 uL
460-290517-B-5	MW3-101623-1046-9	3535, 537 (modified)	T	326.50 g	27.64 g	298.9 mL	10 mL		100 uL
460-290517-B-6	MW4-101623-1156-11.5	3535, 537 (modified)	T	321.45 g	28.02 g	293.4 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196662/1		3535, 537 (modified)		100 uL					
LCS 200-196662/2		3535, 537 (modified)		100 uL					
LCSD 200-196662/3		3535, 537 (modified)		100 uL					
460-290517-A-1	1000-101623-0002	3535, 537 (modified)	T	100 uL					
460-290517-A-2	1000-101623-0003	3535, 537 (modified)	T	100 uL					
460-290517-A-3	1000-101623-0004	3535, 537 (modified)	T	100 uL					
460-290517-B-4	MW2-101623-0951-10	3535, 537 (modified)	T	100 uL					
460-290517-B-5	MW3-101623-1046-9	3535, 537 (modified)	T	100 uL					
460-290517-B-6	MW4-101623-1156-11.5	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196662 Batch Start Date: 10/23/23 07:41 Batch Analyst: Kaplan, Matthew L

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	MLK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196686 Batch Start Date: 10/23/23 15:31 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196686/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196686/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196715 Batch Start Date: 10/24/23 09:04 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196715/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196715/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
460-290517-B-7	MW15-101623-1325-7	3535, 537 (modified)	T	318.33 g	27.46 g	290.9 mL	10 mL		100 uL
460-290517-B-8	MW34R-101623-1421-12	3535, 537 (modified)	T	331.95 g	27.60 g	304.4 mL	10 mL		100 uL
460-290517-B-8 MS	MW34R-101623-1421-12	3535, 537 (modified)	T	334.38 g	27.36 g	307 mL	10 mL	25 uL	100 uL
460-290517-B-8 MSD	MW34R-101623-1421-12	3535, 537 (modified)	T	336.24 g	27.41 g	308.8 mL	10 mL	25 uL	100 uL
460-290517-B-9	MW16A-101623-0926-20	3535, 537 (modified)	T	314.48 g	27.75 g	286.7 mL	10 mL		100 uL
460-290517-B-10	MW16C-101623-1026-120	3535, 537 (modified)	T	314.77 g	27.49 g	287.3 mL	10 mL		100 uL
460-290517-B-11	MW93-101623-1206-30	3535, 537 (modified)	T	313.90 g	27.62 g	286.3 mL	10 mL		100 uL
460-290517-A-12	MW93A-101623-1311-65	3535, 537 (modified)	T	313.49 g	27.64 g	285.9 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196715/1		3535, 537 (modified)		100 uL					
LCS 200-196715/2		3535, 537 (modified)		100 uL					
460-290517-B-7	MW15-101623-1325-7	3535, 537 (modified)	T	100 uL					
460-290517-B-8	MW34R-101623-1421-12	3535, 537 (modified)	T	100 uL					
460-290517-B-8 MS	MW34R-101623-1421-12	3535, 537 (modified)	T	100 uL					
460-290517-B-8 MSD	MW34R-101623-1421-12	3535, 537 (modified)	T	100 uL					
460-290517-B-9	MW16A-101623-0926-20	3535, 537 (modified)	T	100 uL					
460-290517-B-10	MW16C-101623-1026-120	3535, 537 (modified)	T	100 uL					
460-290517-B-11	MW93-101623-1206-30	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196715 Batch Start Date: 10/24/23 09:04 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
460-290517-A-12	MW93A-101623-1311-65	3535, 537 (modified)	T	100 uL					

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	KFW
Analyst ID - Spike Witness Analyst	MJW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290517-1

SDG No.:

Batch Number: 196833 Batch Start Date: 10/26/23 20:30 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196833/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196833/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

Chain of Custody Record

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

10/31/2023 10:17 AM

Regulatory Program. ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Project Manager Dimitri Quafisi
Email DQuafisi@haleyaldrich.com
Tel/Fax:

Client Contact	Site Contact:	Date: 10/16/23	COC No:
Haley & Aldrich	Lab Contact:	Carrier:	1 of 1 COCs
65 Rockside Rd, Suite 200			Sampler: EST Associates
Cleveland, OH 44131			For Lab Use Only:
216.706.1314			Walk-in Client:
216.739.0560			Lab Sampling:
Job #:			Job / SDG No.
Site: Racer Ewing			
Lab Project # 46013839			

Analysis Turnaround Time
☐ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below
☐ 2 weeks
☑ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (537 1M)	290517 Sample Specific Notes.
1000-101623-0002	10/16/23	1105		AQ	2			X	1
1000-101623-0003	10/16/23	—		GW	2			X	2
1000-101623-00-4	10/16/23	1430		AQ	1			X	3
MW2-101623-0951-10	10/16/23	951		GW	2			X	4
MW3-101623-1046-9	10/16/23	1046		GW	2			X	5
MW4-101623-1156-11.5	10/16/23	1156		GW	2			X	6
MW15-101623-1325-7	10/16/23	1325		GW	2			X	7
MW34R-101623-1421-12	10/16/23	1421		GW	6			X	MS/MSD 8
MW16A-101623-0926-20	10/16/23	926		GW	2			X	9
MW16C-101623-1026-120	10/16/23	1026		GW	2			X	10
MW93-101623-1206-30	10/16/23	1206		GW	2			X	11
MW93A-101623-1311-65	10/16/23	1311		GW	2			X	12

460-290517 Chain of Custody

Page 1136 of 1142

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: Dissolved Metals field filtered

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd. 4.0 Corr'd. 4.5		Therm ID No.: 10
Relinquished by:	Company: EST	Date/Time: 10/16/23	Received by:	Company: ETA	Date/Time: 10/16/23 1630
Relinquished by:	Company: ETA	Date/Time: 10/16 1645	Received in Laboratory by:	Company: ETA	Date/Time: 10/16

ETA 10/16 1900 EET/N 10/16 1900

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 290517

Number of Coolers: 1

IR Gun #: 10

Cooler Temperatures

	RAW	CORRECTED
Cooler #1:	4.3 °C	4.5 °C
Cooler #2:	°C	°C
Cooler #3:	°C	°C
Cooler #4:	°C	°C
Cooler #5:	°C	°C
Cooler #6:	°C	°C
Cooler #7:	°C	°C
Cooler #8:	°C	°C
Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: PG Date: 10/16/23

10/31/2023 10:17 AM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

460-290517 Chain of Custody

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Tempe, Kristyn L	COC No: 460-69535 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New Jersey	Job #: 460-290517-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/26/2023		
City: South Burlington	TAT Requested (days):		
State, Zip: VT, 05403			
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:		
Email	WO #:		
Project Name: Racer, Ewing/Trenton	Project #: 46010893		
Site	SSOW#:		

Preservation Codes:
A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
1000-101623-0002 (460-290517-1)	10/16/23	11 05 Eastern		Water			X	2	
1000-101623-0003 (460-290517-2)	10/16/23	Eastern		Water			X	2	
1000-101623-0004 (460-290517-3)	10/16/23	14 30 Eastern		Water			X	1	
MW2-101623-0951-10 (460-290517-4)	10/16/23	09:51 Eastern		Water			X	2	
MW3-101623-1046-9 (460-290517-5)	10/16/23	10.46 Eastern		Water			X	2	
MW4-101623-1156-11 5 (460-290517-6)	10/16/23	11:56 Eastern		Water			X	2	
MW15-101623-1325-7 (460-290517-7)	10/16/23	13.25 Eastern		Water			X	2	
MW34R-101623-1421-12 (460-290517-8)	10/16/23	14 21 Eastern		Water			X	2	
MW34R-101623-1421-12 (460-290517-8MS)	10/16/23	14.21 Eastern	MS	Water			X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		10/18/23 1900	EET BL		10/19/23 0950	ETA BUR
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

Page 11 of 11
10/20/2023 10:17 AM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Tempe, Kristyn L	Carrier Tracking No(s)	COC No: 460-69535.2
Client Contact: Shipping/Receiving	Phone	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290517-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/26/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer, Ewing/Trenton	Project #: 46010893			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW34R-101623-1421-12 (460-290517-8MSD)	10/16/23	14 21 Eastern	MSD	Water			X	2	
MW16A-101623-0926-20 (460-290517-9)	10/16/23	09:26 Eastern		Water			X	2	
MW16C-101623-1026-120 (460-290517-10)	10/16/23	10:26 Eastern		Water			X	2	
MW93-101623-1206-30 (460-290517-11)	10/16/23	12:06 Eastern		Water			X	2	
MW93A-101623-1311-65 (460-290517-12)	10/16/23	13 11 Eastern		Water			X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/18/23 1900	EEL		10/19/23 0950	ETA Burl
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Page 139 of 144
10/20/2023 10:17 AM

RT 916 FZ 915 1 10:30

Part # 159469-434 MTWL PO...

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 47.75 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: S460-174268
PO: YES

FedEx Express

E

J233023051201uv

1 of 2
TRK# 0201 6553 1010 3254
MASTER

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

Part # 159469-434 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 40.85 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: S460-174268
PO: YES

FedEx Express

E

J233023051201uv

2 of 2
MPS# 0263 6553 1010 3265
Mstr# 6553 1010 3254 0201

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290517-1

Login Number: 290517
List Number: 1
Creator: Scully, Ryan J

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290517-1

Login Number: 290517
List Number: 2
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington
List Creation: 10/19/23 03:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1969961, 9962
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4ºC, 1.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 11/1/2023 12:01 PM

JOB DESCRIPTION

Racer, Ewing/Trenton

JOB NUMBER

460-290543-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
11/1/2023 12:01 PM

Authorized for release by
Warleny M Infante, Project Management Assistant I
Warleny.Infante@et.eurofinsus.com
Designee for
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 5

- Report Narrative 5
- Sample Summary 7
- Detection Summary 8
- Method Summary 11
- Client Sample Results 12
- Isotope Dilution Summary 24
- QC Sample Results 26
- Definitions 30
- QC Association 31
- Chronicle 32
- Certification Summary 34

Organic Sample Data 35

- LCMS 35
  - Method PFC IDA 35
    - Method PFC IDA QC Summary 36
    - Method PFC IDA Sample Data 49
    - Standards Data 476
      - Method PFC IDA ICAL Data 476
      - Method PFC IDA CCAL Data 593
    - Raw QC Data 710
      - Method PFC IDA Blank Data 710
      - Method PFC IDA LCS/LCSD Data 747
    - Method PFC IDA Run Logs 805
    - Method PFC IDA Prep Data 810

Table of Contents

Subcontracted Data 815
Shipping and Receiving Documents 816
Client Chain of Custody 817
Sample Receipt Checklist 822

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing/Trenton

Report Number: 460-290543-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/17/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Samples MW84R-101723-0906-29 (460-290543-1), MW84AR-101723-1011-75 (460-290543-2), MW77-101723-1131-20 (460-290543-3), SW1-101723-1210 (460-290543-4), MW6-101723-0917-10 (460-290543-5), MW7-101723-1052-13 (460-290543-6), MW11-101723-1212-25.5 (460-290543-7), SW4-101723-0940 (460-290543-8), 1000-101723-0002 (460-290543-9) and 1000-101723-0004 (460-290543-10) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC-IDA - 537 (modified). The samples were prepared on 10/25/2023 and analyzed on 10/25/2023 and 10/30/2023.

Perfluorododecanoic acid and Perfluorotridecanoic acid were detected in method blank MB 200-196761/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample MW84AR-101723-1011-75 (460-290543-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196761.

The “I” qualifier associated with sample MW7-101723-1052-13 (460-290543-6) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

Results for sample MW84AR-101723-1011-75 (460-290543-2) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

No other difficulties were encountered during the PFAS analysis.

All quality control parameters were within the acceptance limits.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Edison

Client: Haley & Aldrich, Inc.

Project Location: Racer, Ewing/Trenton

Project Number: 460-290543-1

Laboratory Sample ID(s):

Sampling Date(s):

List DKQP Methods Used:

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑Yes ☐No
1A	Were the method specified handling, preservation, and holding time requirements met?	☐Yes ☐No ☑ See case narrative
1B	*EPH Method:* Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	☐Yes ☐No ☑N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	☐Yes ☐No ☑ See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	☑Yes ☐No ☐N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☑Yes ☐No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	☐Yes ☐No ☑ See case narrative
	b) Were these reporting limits met?	☐Yes ☐No ☐N/A ☑ See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑Yes ☐No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	☐Yes ☑No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290543-1	MW84R-101723-0906-29	Water	10/17/23 09:06	10/17/23 19:00
460-290543-2	MW84AR-101723-1011-75	Water	10/17/23 10:11	10/17/23 19:00
460-290543-3	MW77-101723-1131-20	Water	10/17/23 11:31	10/17/23 19:00
460-290543-4	SW1-101723-1210	Water	10/17/23 12:10	10/17/23 19:00
460-290543-5	MW6-101723-0917-10	Water	10/17/23 09:17	10/17/23 19:00
460-290543-6	MW7-101723-1052-13	Water	10/17/23 10:52	10/17/23 19:00
460-290543-7	MW11-101723-1212-25.5	Water	10/17/23 12:12	10/17/23 19:00
460-290543-8	SW4-101723-0940	Water	10/17/23 09:40	10/17/23 19:00
460-290543-9	1000-101723-0002	Water	10/17/23 12:31	10/17/23 19:00
460-290543-10	1000-101723-0004	Water	10/17/23 12:40	10/17/23 19:00

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Client Sample ID: MW84R-101723-0906-29 — Lab Sample ID: 460-290543-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	8.28		3.97	0.95	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	6.44		1.59	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	9.67		1.59	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	4.86		1.59	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	19.0		1.59	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.60		1.59	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.87	J	1.59	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	2.77		1.59	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	2.59		1.59	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	15.1		1.59	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	6.85		1.59	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	556		1.59	0.67	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW84AR-101723-1011-75 — Lab Sample ID: 460-290543-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	9.79		3.95	0.95	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	7.87		1.58	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	21.2		1.58	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	9.59		1.58	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	39.5		1.58	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.39	J	1.58	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	11.2		1.58	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	15.8		1.58	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	64.3		1.58	0.43	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	27.5		1.58	0.32	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid - DL	1130	D	3.16	1.34	ng/L	2		537 (modified)	Total/NA

Client Sample ID: MW77-101723-1131-20 — Lab Sample ID: 460-290543-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	6.42		4.01	0.96	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	9.33		1.60	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	8.32		1.60	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	3.67		1.60	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	9.09		1.60	0.61	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.39	J	1.60	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	4.53		1.60	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.59	J	1.60	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	2.26		1.60	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.49	J	1.60	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	44.9		1.60	0.68	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SW1-101723-1210 — Lab Sample ID: 460-290543-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	30.5		4.03	0.97	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	64.7		1.61	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	44.4		1.61	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	17.3		1.61	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	10.4		1.61	0.61	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.79		1.61	0.40	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW1-101723-1210 (Continued) — Lab Sample ID: 460-290543-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorodecanoic acid	0.39	J	1.61	0.37	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	16.0		1.61	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	12.2		1.61	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	57.6		1.61	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	2.20		1.61	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	109		1.61	0.69	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	15.7		4.03	1.05	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	3.34		1.61	0.62	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW6-101723-0917-10 — Lab Sample ID: 460-290543-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	14.2		4.36	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	12.7		1.74	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	8.30		1.74	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	7.67		1.74	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	20.1		1.74	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	5.59		1.74	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.51	J	1.74	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	1.72	J	1.74	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	1.82		1.74	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	8.90		1.74	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	3.12		1.74	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	694		1.74	0.74	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW7-101723-1052-13 — Lab Sample ID: 460-290543-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	12.1		4.28	1.03	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	8.52		1.71	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	5.90		1.71	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	4.97		1.71	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	15.4		1.71	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	4.97		1.71	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	1.14	J	1.71	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.39		1.71	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	3.31	I	1.71	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	15.1	I	1.71	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	4.80	I	1.71	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	420		1.71	0.73	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW11-101723-1212-25.5 — Lab Sample ID: 460-290543-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	15.9		4.25	1.02	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	8.50		1.70	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	8.46		1.70	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	6.05		1.70	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	13.2		1.70	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.87		1.70	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.49	J	1.70	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	3.32		1.70	0.53	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW11-101723-1212-25.5 (Continued) — Lab Sample ID: 460-290543-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanesulfonic acid	2.25		1.70	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	7.80		1.70	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	2.66		1.70	0.35	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	207		1.70	0.72	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SW4-101723-0940 — Lab Sample ID: 460-290543-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	23.2		4.20	1.01	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	40.0		1.68	0.57	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	33.9		1.68	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	15.8		1.68	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	16.3		1.68	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.88		1.68	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.86	J	1.68	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	11.8		1.68	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	10.0		1.68	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	49.2		1.68	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	3.27		1.68	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	204		1.68	0.71	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	5.76		4.20	1.09	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	1.32	J	1.68	0.65	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 1000-101723-0002 — Lab Sample ID: 460-290543-9

No Detections.

Client Sample ID: 1000-101723-0004 — Lab Sample ID: 460-290543-10

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET BUR
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: MW84R-101723-0906-29

Date Collected: 10/17/23 09:06
Date Received: 10/17/23 19:00

Lab Sample ID: 460-290543-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**8.28**		3.97	0.95	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluoropentanoic acid	**6.44**		1.59	0.54	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorohexanoic acid	**9.67**		1.59	0.52	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluoroheptanoic acid	**4.86**		1.59	0.43	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorooctanoic acid	**19.0**		1.59	0.60	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorononanoic acid	**1.60**		1.59	0.39	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorodecanoic acid	**0.87**	**J**	1.59	0.36	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluoroundecanoic acid	1.59	U	1.59	0.44	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorododecanoic acid	1.59	U	1.59	0.39	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorotridecanoic acid	1.59	U	1.59	0.38	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorotetradecanoic acid	1.59	U	1.59	0.51	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorobutanesulfonic acid	**2.77**		1.59	0.49	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluoropentanesulfonic acid	**2.59**		1.59	0.40	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorohexanesulfonic acid	**15.1**		1.59	0.44	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluoroheptanesulfonic acid	**6.85**		1.59	0.33	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorooctanesulfonic acid	**556**		1.59	0.67	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorononanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorodecanesulfonic acid	1.59	U	1.59	0.32	ng/L		10/25/23 10:43	10/25/23 20:27	1
4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43	ng/L		10/25/23 10:43	10/25/23 20:27	1
6:2 Fluorotelomer sulfonic acid	3.97	U	3.97	1.03	ng/L		10/25/23 10:43	10/25/23 20:27	1
8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61	ng/L		10/25/23 10:43	10/25/23 20:27	1
Perfluorooctanesulfonamide	1.59	U	1.59	0.73	ng/L		10/25/23 10:43	10/25/23 20:27	1
NMeFOSAA	3.97	U	3.97	1.51	ng/L		10/25/23 10:43	10/25/23 20:27	1
N-ethylperfluorooctanesulfonamidoacetic acid	3.97	U	3.97	1.27	ng/L		10/25/23 10:43	10/25/23 20:27	1
HFPODA	3.17	U	3.17	0.87	ng/L		10/25/23 10:43	10/25/23 20:27	1
DONA	1.59	U	1.59	0.33	ng/L		10/25/23 10:43	10/25/23 20:27	1
9Cl-PF3ONS	1.59	U	1.59	0.25	ng/L		10/25/23 10:43	10/25/23 20:27	1
11Cl-PF3OUdS	1.59	U	1.59	0.69	ng/L		10/25/23 10:43	10/25/23 20:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*80*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C5 PFPeA	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C4 PFHpA	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C2 PFTeDA	*90*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C3 PFBS	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C8 FOSA	*72*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
d5-NEtFOSAA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
M2-4:2 FTS	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
M2-6:2 FTS	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
M2-8:2 FTS	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C3 HFPO-DA	*90*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
18O2 PFHxS	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C2 PFHxA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C4 PFOS	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C2 PFDoA	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C5 PFNA	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C2 PFDA	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*
13C4 PFOA	*104*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:27*	*1*

Client Sample ID: MW84R-101723-0906-29
Lab Sample ID: 460-290543-1
Date Collected: 10/17/23 09:06
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	98		50 - 150	10/25/23 10:43	10/25/23 20:27	1

Client Sample ID: MW84AR-101723-1011-75
Lab Sample ID: 460-290543-2
Date Collected: 10/17/23 10:11
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**9.79**		3.95	0.95	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluoropentanoic acid	**7.87**		1.58	0.54	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorohexanoic acid	**21.2**		1.58	0.51	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluoroheptanoic acid	**9.59**		1.58	0.43	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorooctanoic acid	**39.5**		1.58	0.60	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorononanoic acid	**1.39**	**J**	1.58	0.39	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorodecanoic acid	1.58	U	1.58	0.36	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluoroundecanoic acid	1.58	U	1.58	0.43	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorododecanoic acid	1.58	U	1.58	0.39	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorotridecanoic acid	1.58	U	1.58	0.38	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorotetradecanoic acid	1.58	U	1.58	0.51	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorobutanesulfonic acid	**11.2**		1.58	0.49	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluoropentanesulfonic acid	**15.8**		1.58	0.39	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorohexanesulfonic acid	**64.3**		1.58	0.43	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluoroheptanesulfonic acid	**27.5**		1.58	0.32	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorononanesulfonic acid	1.58	U	1.58	0.32	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorodecanesulfonic acid	1.58	U	1.58	0.32	ng/L		10/25/23 10:43	10/25/23 20:35	1
4:2 Fluorotelomer sulfonic acid	1.58	U	1.58	0.43	ng/L		10/25/23 10:43	10/25/23 20:35	1
6:2 Fluorotelomer sulfonic acid	3.95	U	3.95	1.03	ng/L		10/25/23 10:43	10/25/23 20:35	1
8:2 Fluorotelomer sulfonic acid	1.58	U	1.58	0.61	ng/L		10/25/23 10:43	10/25/23 20:35	1
Perfluorooctanesulfonamide	1.58	U	1.58	0.73	ng/L		10/25/23 10:43	10/25/23 20:35	1
NMeFOSAA	3.95	U	3.95	1.50	ng/L		10/25/23 10:43	10/25/23 20:35	1
N-ethylperfluorooctanesulfonamidoacetic acid	3.95	U	3.95	1.26	ng/L		10/25/23 10:43	10/25/23 20:35	1
HFPODA	3.16	U	3.16	0.87	ng/L		10/25/23 10:43	10/25/23 20:35	1
DONA	1.58	U	1.58	0.33	ng/L		10/25/23 10:43	10/25/23 20:35	1
9Cl-PF3ONS	1.58	U	1.58	0.25	ng/L		10/25/23 10:43	10/25/23 20:35	1
11Cl-PF3OUdS	1.58	U	1.58	0.69	ng/L		10/25/23 10:43	10/25/23 20:35	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	87		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C5 PFPeA	91		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C4 PFHpA	96		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C2 PFTeDA	97		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C3 PFBS	99		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C8 FOSA	82		50 - 150	10/25/23 10:43	10/25/23 20:35	1
d3-NMeFOSAA	103		50 - 150	10/25/23 10:43	10/25/23 20:35	1
d5-NEtFOSAA	107		50 - 150	10/25/23 10:43	10/25/23 20:35	1
M2-4:2 FTS	108		50 - 150	10/25/23 10:43	10/25/23 20:35	1
M2-6:2 FTS	108		50 - 150	10/25/23 10:43	10/25/23 20:35	1
M2-8:2 FTS	106		50 - 150	10/25/23 10:43	10/25/23 20:35	1
13C3 HFPO-DA	90		50 - 150	10/25/23 10:43	10/25/23 20:35	1
18O2 PFHxS	101		50 - 150	10/25/23 10:43	10/25/23 20:35	1

Client Sample ID: MW84AR-101723-1011-75
Lab Sample ID: 460-290543-2
Date Collected: 10/17/23 10:11
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFHxA	*91*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C4 PFOS	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C2 PFDoA	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C5 PFNA	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C2 PFDA	*109*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C4 PFOA	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*
13C2 PFUnA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:35*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**1130**	**D**	3.16	1.34	ng/L		10/25/23 10:43	10/30/23 17:50	2

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*89*		*50 - 150*	*10/25/23 10:43*	*10/30/23 17:50*	*2*

Client Sample ID: MW77-101723-1131-20
Lab Sample ID: 460-290543-3
Date Collected: 10/17/23 11:31
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**6.42**		4.01	0.96	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluoropentanoic acid	**9.33**		1.60	0.54	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorohexanoic acid	**8.32**		1.60	0.52	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluoroheptanoic acid	**3.67**		1.60	0.43	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorooctanoic acid	**9.09**		1.60	0.61	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorononanoic acid	**1.39**	**J**	1.60	0.39	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorodecanoic acid	1.60	U	1.60	0.37	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluoroundecanoic acid	1.60	U	1.60	0.44	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorododecanoic acid	1.60	U	1.60	0.39	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorotridecanoic acid	1.60	U	1.60	0.38	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorotetradecanoic acid	1.60	U	1.60	0.51	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorobutanesulfonic acid	**4.53**		1.60	0.50	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluoropentanesulfonic acid	**0.59**	**J**	1.60	0.40	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorohexanesulfonic acid	**2.26**		1.60	0.44	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluoroheptanesulfonic acid	**0.49**	**J**	1.60	0.33	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorooctanesulfonic acid	**44.9**		1.60	0.68	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorononanesulfonic acid	1.60	U	1.60	0.32	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorodecanesulfonic acid	1.60	U	1.60	0.32	ng/L		10/25/23 10:43	10/25/23 20:43	1
4:2 Fluorotelomer sulfonic acid	1.60	U	1.60	0.43	ng/L		10/25/23 10:43	10/25/23 20:43	1
6:2 Fluorotelomer sulfonic acid	4.01	U	4.01	1.04	ng/L		10/25/23 10:43	10/25/23 20:43	1
8:2 Fluorotelomer sulfonic acid	1.60	U	1.60	0.62	ng/L		10/25/23 10:43	10/25/23 20:43	1
Perfluorooctanesulfonamide	1.60	U	1.60	0.74	ng/L		10/25/23 10:43	10/25/23 20:43	1
NMeFOSAA	4.01	U	4.01	1.52	ng/L		10/25/23 10:43	10/25/23 20:43	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.01	U	4.01	1.28	ng/L		10/25/23 10:43	10/25/23 20:43	1
HFPODA	3.20	U	3.20	0.88	ng/L		10/25/23 10:43	10/25/23 20:43	1
DONA	1.60	U	1.60	0.34	ng/L		10/25/23 10:43	10/25/23 20:43	1
9Cl-PF3ONS	1.60	U	1.60	0.26	ng/L		10/25/23 10:43	10/25/23 20:43	1
11Cl-PF3OUdS	1.60	U	1.60	0.70	ng/L		10/25/23 10:43	10/25/23 20:43	1

Client Sample ID: MW77-101723-1131-20
Lab Sample ID: 460-290543-3

Date Collected: 10/17/23 11:31
Matrix: Water
Date Received: 10/17/23 19:00

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C5 PFPeA	*101*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C4 PFHpA	*111*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C3 PFBS	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C8 FOSA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
d3-NMeFOSAA	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
d5-NEtFOSAA	*101*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
M2-4:2 FTS	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
M2-6:2 FTS	*110*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
M2-8:2 FTS	*101*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C3 HFPO-DA	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
18O2 PFHxS	*112*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C2 PFHxA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C4 PFOS	*114*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C2 PFDoA	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C5 PFNA	*104*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C2 PFDA	*104*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C4 PFOA	*107*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*
13C2 PFUnA	*108*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:43*	*1*

Client Sample ID: SW1-101723-1210
Lab Sample ID: 460-290543-4

Date Collected: 10/17/23 12:10
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**30.5**		4.03	0.97	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluoropentanoic acid	**64.7**		1.61	0.55	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorohexanoic acid	**44.4**		1.61	0.52	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluoroheptanoic acid	**17.3**		1.61	0.44	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorooctanoic acid	**10.4**		1.61	0.61	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorononanoic acid	**1.79**		1.61	0.40	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorodecanoic acid	**0.39**	**J**	1.61	0.37	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluoroundecanoic acid	1.61	U	1.61	0.44	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorododecanoic acid	1.61	U	1.61	0.40	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorotridecanoic acid	1.61	U	1.61	0.39	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorotetradecanoic acid	1.61	U	1.61	0.52	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorobutanesulfonic acid	**16.0**		1.61	0.50	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluoropentanesulfonic acid	**12.2**		1.61	0.40	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorohexanesulfonic acid	**57.6**		1.61	0.44	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluoroheptanesulfonic acid	**2.20**		1.61	0.33	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorooctanesulfonic acid	**109**		1.61	0.69	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorononanesulfonic acid	1.61	U	1.61	0.32	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorodecanesulfonic acid	1.61	U	1.61	0.32	ng/L		10/25/23 10:43	10/25/23 20:51	1
4:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.44	ng/L		10/25/23 10:43	10/25/23 20:51	1
6:2 Fluorotelomer sulfonic acid	**15.7**		4.03	1.05	ng/L		10/25/23 10:43	10/25/23 20:51	1
8:2 Fluorotelomer sulfonic acid	**3.34**		1.61	0.62	ng/L		10/25/23 10:43	10/25/23 20:51	1
Perfluorooctanesulfonamide	1.61	U	1.61	0.74	ng/L		10/25/23 10:43	10/25/23 20:51	1
NMeFOSAA	4.03	U	4.03	1.53	ng/L		10/25/23 10:43	10/25/23 20:51	1

Client Sample ID: SW1-101723-1210

Lab Sample ID: 460-290543-4

Date Collected: 10/17/23 12:10
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid	4.03	U	4.03	1.29	ng/L		10/25/23 10:43	10/25/23 20:51	1
HFPODA	3.23	U	3.23	0.89	ng/L		10/25/23 10:43	10/25/23 20:51	1
DONA	1.61	U	1.61	0.34	ng/L		10/25/23 10:43	10/25/23 20:51	1
9Cl-PF3ONS	1.61	U	1.61	0.26	ng/L		10/25/23 10:43	10/25/23 20:51	1
11Cl-PF3OUdS	1.61	U	1.61	0.70	ng/L		10/25/23 10:43	10/25/23 20:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C5 PFPeA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C4 PFHpA	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C3 PFBS	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C8 FOSA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
d3-NMeFOSAA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
d5-NEtFOSAA	*101*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
M2-4:2 FTS	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
M2-6:2 FTS	*107*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
M2-8:2 FTS	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C3 HFPO-DA	*87*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
18O2 PFHxS	*108*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C2 PFHxA	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C4 PFOS	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C2 PFDoA	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C5 PFNA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C2 PFDA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C4 PFOA	*109*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*
13C2 PFUnA	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 20:51*	*1*

Client Sample ID: MW6-101723-0917-10

Lab Sample ID: 460-290543-5

Date Collected: 10/17/23 09:17
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**14.2**		4.36	1.05	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluoropentanoic acid	**12.7**		1.74	0.59	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorohexanoic acid	**8.30**		1.74	0.57	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluoroheptanoic acid	**7.67**		1.74	0.47	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorooctanoic acid	**20.1**		1.74	0.66	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorononanoic acid	**5.59**		1.74	0.43	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorodecanoic acid	**0.51**	**J**	1.74	0.40	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluoroundecanoic acid	1.74	U	1.74	0.48	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorododecanoic acid	1.74	U	1.74	0.43	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorotridecanoic acid	1.74	U	1.74	0.42	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorotetradecanoic acid	1.74	U	1.74	0.56	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorobutanesulfonic acid	**1.72**	**J**	1.74	0.54	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluoropentanesulfonic acid	**1.82**		1.74	0.44	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorohexanesulfonic acid	**8.90**		1.74	0.48	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluoroheptanesulfonic acid	**3.12**		1.74	0.36	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorooctanesulfonic acid	**694**		1.74	0.74	ng/L		10/25/23 10:43	10/25/23 21:00	1

Client Sample ID: MW6-101723-0917-10
Lab Sample ID: 460-290543-5

Date Collected: 10/17/23 09:17
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorodecanesulfonic acid	1.74	U	1.74	0.35	ng/L		10/25/23 10:43	10/25/23 21:00	1
4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47	ng/L		10/25/23 10:43	10/25/23 21:00	1
6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13	ng/L		10/25/23 10:43	10/25/23 21:00	1
8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67	ng/L		10/25/23 10:43	10/25/23 21:00	1
Perfluorooctanesulfonamide	1.74	U	1.74	0.80	ng/L		10/25/23 10:43	10/25/23 21:00	1
NMeFOSAA	4.36	U	4.36	1.66	ng/L		10/25/23 10:43	10/25/23 21:00	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.39	ng/L		10/25/23 10:43	10/25/23 21:00	1
HFPODA	3.49	U	3.49	0.96	ng/L		10/25/23 10:43	10/25/23 21:00	1
DONA	1.74	U	1.74	0.37	ng/L		10/25/23 10:43	10/25/23 21:00	1
9Cl-PF3ONS	1.74	U	1.74	0.28	ng/L		10/25/23 10:43	10/25/23 21:00	1
11Cl-PF3OUdS	1.74	U	1.74	0.76	ng/L		10/25/23 10:43	10/25/23 21:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*64*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C5 PFPeA	*86*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C4 PFHpA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C2 PFTeDA	*84*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C3 PFBS	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C8 FOSA	*82*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
d3-NMeFOSAA	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
d5-NEtFOSAA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
M2-4:2 FTS	*111*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
M2-6:2 FTS	*119*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
M2-8:2 FTS	*107*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C3 HFPO-DA	*83*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
18O2 PFHxS	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C2 PFHxA	*86*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C4 PFOS	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C2 PFDoA	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C5 PFNA	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C2 PFDA	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C4 PFOA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*
13C2 PFUnA	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:00*	*1*

Client Sample ID: MW7-101723-1052-13
Lab Sample ID: 460-290543-6

Date Collected: 10/17/23 10:52
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**12.1**		4.28	1.03	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluoropentanoic acid	**8.52**		1.71	0.58	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorohexanoic acid	**5.90**		1.71	0.56	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluoroheptanoic acid	**4.97**		1.71	0.46	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorooctanoic acid	**15.4**		1.71	0.65	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorononanoic acid	**4.97**		1.71	0.42	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorodecanoic acid	**1.14**	**J**	1.71	0.39	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluoroundecanoic acid	1.71	U	1.71	0.47	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorododecanoic acid	1.71	U	1.71	0.42	ng/L		10/25/23 10:43	10/25/23 21:08	1

Client Sample ID: MW7-101723-1052-13

Lab Sample ID: 460-290543-6

Date Collected: 10/17/23 10:52
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid	1.71	U	1.71	0.41	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorotetradecanoic acid	1.71	U	1.71	0.55	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorobutanesulfonic acid	**3.39**		1.71	0.53	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluoropentanesulfonic acid	**3.31**	**I**	1.71	0.43	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorohexanesulfonic acid	**15.1**	**I**	1.71	0.47	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluoroheptanesulfonic acid	**4.80**	**I**	1.71	0.35	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorooctanesulfonic acid	**420**		1.71	0.73	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorononanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorodecanesulfonic acid	1.71	U	1.71	0.34	ng/L		10/25/23 10:43	10/25/23 21:08	1
4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46	ng/L		10/25/23 10:43	10/25/23 21:08	1
6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11	ng/L		10/25/23 10:43	10/25/23 21:08	1
8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66	ng/L		10/25/23 10:43	10/25/23 21:08	1
Perfluorooctanesulfonamide	1.71	U	1.71	0.79	ng/L		10/25/23 10:43	10/25/23 21:08	1
NMeFOSAA	4.28	U	4.28	1.63	ng/L		10/25/23 10:43	10/25/23 21:08	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37	ng/L		10/25/23 10:43	10/25/23 21:08	1
HFPODA	3.43	U	3.43	0.94	ng/L		10/25/23 10:43	10/25/23 21:08	1
DONA	1.71	U	1.71	0.36	ng/L		10/25/23 10:43	10/25/23 21:08	1
9Cl-PF3ONS	1.71	U	1.71	0.27	ng/L		10/25/23 10:43	10/25/23 21:08	1
11Cl-PF3OUdS	1.71	U	1.71	0.75	ng/L		10/25/23 10:43	10/25/23 21:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*50*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C5 PFPeA	*82*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C4 PFHpA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C2 PFTeDA	*72*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C3 PFBS	*91*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C8 FOSA	*72*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
d5-NEtFOSAA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
M2-4:2 FTS	*116*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
M2-6:2 FTS	*111*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
M2-8:2 FTS	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C3 HFPO-DA	*88*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
18O2 PFHxS	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C2 PFHxA	*86*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C4 PFOS	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C2 PFDoA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C5 PFNA	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C2 PFDA	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C4 PFOA	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*
13C2 PFUnA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:08*	*1*

Client Sample ID: MW11-101723-1212-25.5

Lab Sample ID: 460-290543-7

Date Collected: 10/17/23 12:12
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**15.9**		4.25	1.02	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluoropentanoic acid	**8.50**		1.70	0.58	ng/L		10/25/23 10:43	10/25/23 21:16	1

Client Sample ID: MW11-101723-1212-25.5

Date Collected: 10/17/23 12:12
Date Received: 10/17/23 19:00

Lab Sample ID: 460-290543-7

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**8.46**		1.70	0.55	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluoroheptanoic acid	**6.05**		1.70	0.46	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorooctanoic acid	**13.2**		1.70	0.65	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorononanoic acid	**2.87**		1.70	0.42	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorodecanoic acid	**0.49**	**J**	1.70	0.39	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluoroundecanoic acid	1.70	U	1.70	0.47	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorododecanoic acid	1.70	U	1.70	0.42	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorotridecanoic acid	1.70	U	1.70	0.41	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorotetradecanoic acid	1.70	U	1.70	0.54	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorobutanesulfonic acid	**3.32**		1.70	0.53	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluoropentanesulfonic acid	**2.25**		1.70	0.42	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorohexanesulfonic acid	**7.80**		1.70	0.47	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluoroheptanesulfonic acid	**2.66**		1.70	0.35	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorooctanesulfonic acid	**207**		1.70	0.72	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorononanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorodecanesulfonic acid	1.70	U	1.70	0.34	ng/L		10/25/23 10:43	10/25/23 21:16	1
4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46	ng/L		10/25/23 10:43	10/25/23 21:16	1
6:2 Fluorotelomer sulfonic acid	4.25	U	4.25	1.10	ng/L		10/25/23 10:43	10/25/23 21:16	1
8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.65	ng/L		10/25/23 10:43	10/25/23 21:16	1
Perfluorooctanesulfonamide	1.70	U	1.70	0.78	ng/L		10/25/23 10:43	10/25/23 21:16	1
NMeFOSAA	4.25	U	4.25	1.61	ng/L		10/25/23 10:43	10/25/23 21:16	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.25	U	4.25	1.36	ng/L		10/25/23 10:43	10/25/23 21:16	1
HFPODA	3.40	U	3.40	0.93	ng/L		10/25/23 10:43	10/25/23 21:16	1
DONA	1.70	U	1.70	0.36	ng/L		10/25/23 10:43	10/25/23 21:16	1
9Cl-PF3ONS	1.70	U	1.70	0.27	ng/L		10/25/23 10:43	10/25/23 21:16	1
11Cl-PF3OUdS	1.70	U	1.70	0.74	ng/L		10/25/23 10:43	10/25/23 21:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*57*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C5 PFPeA	*76*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C4 PFHpA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C2 PFTeDA	*82*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C8 FOSA	*81*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
d3-NMeFOSAA	*79*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
d5-NEtFOSAA	*82*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
M2-4:2 FTS	*94*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
M2-6:2 FTS	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
M2-8:2 FTS	*81*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C3 HFPO-DA	*87*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
18O2 PFHxS	*97*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C2 PFHxA	*85*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C4 PFOS	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C2 PFDoA	*88*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C5 PFNA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C2 PFDA	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C4 PFOA	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*
13C2 PFUnA	*83*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:16*	*1*

Client Sample ID: SW4-101723-0940

Date Collected: 10/17/23 09:40
Date Received: 10/17/23 19:00

Lab Sample ID: 460-290543-8

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**23.2**		4.20	1.01	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluoropentanoic acid	**40.0**		1.68	0.57	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorohexanoic acid	**33.9**		1.68	0.55	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluoroheptanoic acid	**15.8**		1.68	0.45	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorooctanoic acid	**16.3**		1.68	0.64	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorononanoic acid	**2.88**		1.68	0.41	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorodecanoic acid	**0.86**	**J**	1.68	0.39	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluoroundecanoic acid	1.68	U	1.68	0.46	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorododecanoic acid	1.68	U	1.68	0.41	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorotridecanoic acid	1.68	U	1.68	0.40	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorotetradecanoic acid	1.68	U	1.68	0.54	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorobutanesulfonic acid	**11.8**		1.68	0.52	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluoropentanesulfonic acid	**10.0**		1.68	0.42	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorohexanesulfonic acid	**49.2**		1.68	0.46	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluoroheptanesulfonic acid	**3.27**		1.68	0.34	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorooctanesulfonic acid	**204**		1.68	0.71	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorononanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorodecanesulfonic acid	1.68	U	1.68	0.34	ng/L		10/25/23 10:43	10/25/23 21:24	1
4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45	ng/L		10/25/23 10:43	10/25/23 21:24	1
6:2 Fluorotelomer sulfonic acid	**5.76**		4.20	1.09	ng/L		10/25/23 10:43	10/25/23 21:24	1
8:2 Fluorotelomer sulfonic acid	**1.32**	**J**	1.68	0.65	ng/L		10/25/23 10:43	10/25/23 21:24	1
Perfluorooctanesulfonamide	1.68	U	1.68	0.77	ng/L		10/25/23 10:43	10/25/23 21:24	1
NMeFOSAA	4.20	U	4.20	1.60	ng/L		10/25/23 10:43	10/25/23 21:24	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.20	U	4.20	1.34	ng/L		10/25/23 10:43	10/25/23 21:24	1
HFPODA	3.36	U	3.36	0.92	ng/L		10/25/23 10:43	10/25/23 21:24	1
DONA	1.68	U	1.68	0.35	ng/L		10/25/23 10:43	10/25/23 21:24	1
9Cl-PF3ONS	1.68	U	1.68	0.27	ng/L		10/25/23 10:43	10/25/23 21:24	1
11Cl-PF3OUdS	1.68	U	1.68	0.73	ng/L		10/25/23 10:43	10/25/23 21:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C5 PFPeA	*91*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C4 PFHpA	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C2 PFTeDA	*82*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C3 PFBS	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C8 FOSA	*87*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
M2-4:2 FTS	*94*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
M2-6:2 FTS	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
M2-8:2 FTS	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C3 HFPO-DA	*86*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
18O2 PFHxS	*98*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C2 PFHxA	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C4 PFOS	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C2 PFDoA	*95*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C5 PFNA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C2 PFDA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*
13C4 PFOA	*102*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:24*	*1*

Client Sample ID: SW4-101723-0940

Lab Sample ID: 460-290543-8

Date Collected: 10/17/23 09:40

Matrix: Water

Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	93		50 - 150	10/25/23 10:43	10/25/23 21:24	1

Client Sample ID: 1000-101723-0002

Lab Sample ID: 460-290543-9

Date Collected: 10/17/23 12:31

Matrix: Water

Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.29	U	4.29	1.03	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluoropentanoic acid	1.72	U	1.72	0.58	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorohexanoic acid	1.72	U	1.72	0.56	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluoroheptanoic acid	1.72	U	1.72	0.46	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorooctanoic acid	1.72	U	1.72	0.65	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorononanoic acid	1.72	U	1.72	0.42	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorodecanoic acid	1.72	U	1.72	0.39	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluoroundecanoic acid	1.72	U	1.72	0.47	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorododecanoic acid	1.72	U	1.72	0.42	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorotridecanoic acid	1.72	U	1.72	0.41	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorotetradecanoic acid	1.72	U	1.72	0.55	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorobutanesulfonic acid	1.72	U	1.72	0.53	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluoropentanesulfonic acid	1.72	U	1.72	0.43	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorohexanesulfonic acid	1.72	U	1.72	0.47	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluoroheptanesulfonic acid	1.72	U	1.72	0.35	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorooctanesulfonic acid	1.72	U	1.72	0.73	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorononanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorodecanesulfonic acid	1.72	U	1.72	0.34	ng/L		10/25/23 10:43	10/25/23 21:32	1
4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46	ng/L		10/25/23 10:43	10/25/23 21:32	1
6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11	ng/L		10/25/23 10:43	10/25/23 21:32	1
8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66	ng/L		10/25/23 10:43	10/25/23 21:32	1
Perfluorooctanesulfonamide	1.72	U	1.72	0.79	ng/L		10/25/23 10:43	10/25/23 21:32	1
NMeFOSAA	4.29	U	4.29	1.63	ng/L		10/25/23 10:43	10/25/23 21:32	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37	ng/L		10/25/23 10:43	10/25/23 21:32	1
HFPODA	3.43	U	3.43	0.94	ng/L		10/25/23 10:43	10/25/23 21:32	1
DONA	1.72	U	1.72	0.36	ng/L		10/25/23 10:43	10/25/23 21:32	1
9Cl-PF3ONS	1.72	U	1.72	0.27	ng/L		10/25/23 10:43	10/25/23 21:32	1
11Cl-PF3OUdS	1.72	U	1.72	0.75	ng/L		10/25/23 10:43	10/25/23 21:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	101		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C5 PFPeA	101		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C4 PFHpA	103		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C2 PFTeDA	84		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C3 PFBS	102		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C8 FOSA	85		50 - 150	10/25/23 10:43	10/25/23 21:32	1
d3-NMeFOSAA	92		50 - 150	10/25/23 10:43	10/25/23 21:32	1
d5-NEtFOSAA	90		50 - 150	10/25/23 10:43	10/25/23 21:32	1
M2-4:2 FTS	96		50 - 150	10/25/23 10:43	10/25/23 21:32	1
M2-6:2 FTS	104		50 - 150	10/25/23 10:43	10/25/23 21:32	1
M2-8:2 FTS	94		50 - 150	10/25/23 10:43	10/25/23 21:32	1
13C3 HFPO-DA	90		50 - 150	10/25/23 10:43	10/25/23 21:32	1

Client Sample ID: 1000-101723-0002
Lab Sample ID: 460-290543-9
Date Collected: 10/17/23 12:31
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C2 PFHxA	*100*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C4 PFOS	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C2 PFDoA	*92*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C5 PFNA	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C2 PFDA	*99*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C4 PFOA	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*
13C2 PFUnA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:32*	*1*

Client Sample ID: 1000-101723-0004
Lab Sample ID: 460-290543-10
Date Collected: 10/17/23 12:40
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.40	U	4.40	1.06	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluoropentanoic acid	1.76	U	1.76	0.60	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorohexanoic acid	1.76	U	1.76	0.57	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluoroheptanoic acid	1.76	U	1.76	0.48	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorooctanoic acid	1.76	U	1.76	0.67	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorononanoic acid	1.76	U	1.76	0.43	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorodecanoic acid	1.76	U	1.76	0.41	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluoroundecanoic acid	1.76	U	1.76	0.48	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorododecanoic acid	1.76	U	1.76	0.43	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorotridecanoic acid	1.76	U	1.76	0.42	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorotetradecanoic acid	1.76	U	1.76	0.56	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorobutanesulfonic acid	1.76	U	1.76	0.55	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluoropentanesulfonic acid	1.76	U	1.76	0.44	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorohexanesulfonic acid	1.76	U	1.76	0.48	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluoroheptanesulfonic acid	1.76	U	1.76	0.36	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorooctanesulfonic acid	1.76	U	1.76	0.75	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorononanesulfonic acid	1.76	U	1.76	0.35	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorodecanesulfonic acid	1.76	U	1.76	0.35	ng/L		10/25/23 10:43	10/25/23 21:40	1
4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.48	ng/L		10/25/23 10:43	10/25/23 21:40	1
6:2 Fluorotelomer sulfonic acid	4.40	U	4.40	1.15	ng/L		10/25/23 10:43	10/25/23 21:40	1
8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68	ng/L		10/25/23 10:43	10/25/23 21:40	1
Perfluorooctanesulfonamide	1.76	U	1.76	0.81	ng/L		10/25/23 10:43	10/25/23 21:40	1
NMeFOSAA	4.40	U	4.40	1.67	ng/L		10/25/23 10:43	10/25/23 21:40	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.40	U	4.40	1.41	ng/L		10/25/23 10:43	10/25/23 21:40	1
HFPODA	3.52	U	3.52	0.97	ng/L		10/25/23 10:43	10/25/23 21:40	1
DONA	1.76	U	1.76	0.37	ng/L		10/25/23 10:43	10/25/23 21:40	1
9Cl-PF3ONS	1.76	U	1.76	0.28	ng/L		10/25/23 10:43	10/25/23 21:40	1
11Cl-PF3OUdS	1.76	U	1.76	0.77	ng/L		10/25/23 10:43	10/25/23 21:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:40*	*1*
13C5 PFPeA	*101*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:40*	*1*
13C4 PFHpA	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:40*	*1*
13C2 PFTeDA	*85*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:40*	*1*
13C3 PFBS	*103*		*50 - 150*	*10/25/23 10:43*	*10/25/23 21:40*	*1*

Client Sample ID: 1000-101723-0004
Lab Sample ID: 460-290543-10

Date Collected: 10/17/23 12:40
Matrix: Water
Date Received: 10/17/23 19:00

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	83		50 - 150	10/25/23 10:43	10/25/23 21:40	1
d3-NMeFOSAA	91		50 - 150	10/25/23 10:43	10/25/23 21:40	1
d5-NEtFOSAA	89		50 - 150	10/25/23 10:43	10/25/23 21:40	1
M2-4:2 FTS	95		50 - 150	10/25/23 10:43	10/25/23 21:40	1
M2-6:2 FTS	102		50 - 150	10/25/23 10:43	10/25/23 21:40	1
M2-8:2 FTS	97		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C3 HFPO-DA	85		50 - 150	10/25/23 10:43	10/25/23 21:40	1
18O2 PFHxS	110		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C2 PFHxA	99		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C4 PFOS	109		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C2 PFDoA	94		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C5 PFNA	111		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C2 PFDA	97		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C4 PFOA	103		50 - 150	10/25/23 10:43	10/25/23 21:40	1
13C2 PFUnA	94		50 - 150	10/25/23 10:43	10/25/23 21:40	1

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	C4PFHA	PFTDA	C3PFBS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290543-1	MW84R-101723-0906-29	80	95	98	90	97	72	92	103
460-290543-2	MW84AR-101723-1011-75	87	91	96	97	99	82	103	107
460-290543-2 - DL	MW84AR-101723-1011-75								
460-290543-3	MW77-101723-1131-20	102	101	111	92	105	92	100	101
460-290543-4	SW1-101723-1210	100	96	99	92	103	93	96	101
460-290543-5	MW6-101723-0917-10	64	86	93	84	95	82	100	103
460-290543-6	MW7-101723-1052-13	50	82	92	72	91	72	89	92
460-290543-7	MW11-101723-1212-25.5	57	76	93	82	90	81	79	82
460-290543-8	SW4-101723-0940	87	91	89	82	93	87	92	88
460-290543-9	1000-101723-0002	101	101	103	84	102	85	92	90
460-290543-10	1000-101723-0004	103	101	103	85	103	83	91	89
LCS 200-196761/2-A	Lab Control Sample	112	104	105	88	99	79	98	97
LCSD 200-196761/3-A	Lab Control Sample Dup	105	95	105	86	98	73	100	98
MB 200-196761/1-A	Method Blank	119	113	112	89	114	86	105	96

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	PFHxS	PFHxA	PFOS	PFDoA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290543-1	MW84R-101723-0906-29	100	106	100	90	102	93	99	98
460-290543-2	MW84AR-101723-1011-75	108	108	106	90	101	91	97	105
460-290543-2 - DL	MW84AR-101723-1011-75							89	
460-290543-3	MW77-101723-1131-20	99	110	101	97	112	103	114	105
460-290543-4	SW1-101723-1210	98	107	92	87	108	97	105	102
460-290543-5	MW6-101723-0917-10	111	119	107	83	98	86	98	99
460-290543-6	MW7-101723-1052-13	116	111	99	88	98	86	95	93
460-290543-7	MW11-101723-1212-25.5	94	102	81	87	97	85	89	88
460-290543-8	SW4-101723-0940	94	96	92	86	98	89	95	95
460-290543-9	1000-101723-0002	96	104	94	90	106	100	106	92
460-290543-10	1000-101723-0004	95	102	97	85	110	99	109	94
LCS 200-196761/2-A	Lab Control Sample	101	103	94	93	106	103	106	91
LCSD 200-196761/3-A	Lab Control Sample Dup	93	97	94	98	104	110	100	93
MB 200-196761/1-A	Method Blank	106	116	106	106	118	113	120	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFNA	PFDA	PFOA	PFUnA				
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)				
460-290543-1	MW84R-101723-0906-29	95	99	104	98				
460-290543-2	MW84AR-101723-1011-75	97	109	98	103				
460-290543-2 - DL	MW84AR-101723-1011-75								
460-290543-3	MW77-101723-1131-20	104	104	107	108				
460-290543-4	SW1-101723-1210	96	96	109	102				
460-290543-5	MW6-101723-0917-10	97	97	92	98				
460-290543-6	MW7-101723-1052-13	95	99	102	96				
460-290543-7	MW11-101723-1212-25.5	96	89	95	83				
460-290543-8	SW4-101723-0940	92	93	102	93				
460-290543-9	1000-101723-0002	105	99	105	96				
460-290543-10	1000-101723-0004	111	97	103	94				
LCS 200-196761/2-A	Lab Control Sample	102	99	111	95				
LCSD 200-196761/3-A	Lab Control Sample Dup	106	97	109	100				
MB 200-196761/1-A	Method Blank	120	111	112	96				

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
PFHxS = 18O2 PFHxS
PFHxA = 13C2 PFHxA
PFOS = 13C4 PFOS
PFDoA = 13C2 PFDoA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFOA = 13C4 PFOA
PFUnA = 13C2 PFUnA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-196761/1-A
Matrix: Water
Analysis Batch: 196791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorododecanoic acid	0.540	J	2.00	0.49	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorotridecanoic acid	0.504	J	2.00	0.48	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/25/23 10:43	10/25/23 18:33	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/25/23 10:43	10/25/23 18:33	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/25/23 10:43	10/25/23 18:33	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/25/23 10:43	10/25/23 18:33	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/25/23 10:43	10/25/23 18:33	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/25/23 10:43	10/25/23 18:33	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/25/23 10:43	10/25/23 18:33	1
HFPODA	4.00	U	4.00	1.10	ng/L		10/25/23 10:43	10/25/23 18:33	1
DONA	2.00	U	2.00	0.42	ng/L		10/25/23 10:43	10/25/23 18:33	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/25/23 10:43	10/25/23 18:33	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/25/23 10:43	10/25/23 18:33	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*119*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C5 PFPeA	*113*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C4 PFHpA	*112*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C2 PFTeDA	*89*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C3 PFBS	*114*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C8 FOSA	*86*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
d3-NMeFOSAA	*105*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
d5-NEtFOSAA	*96*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
M2-4:2 FTS	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
M2-6:2 FTS	*116*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
M2-8:2 FTS	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C3 HFPO-DA	*106*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
18O2 PFHxS	*118*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C2 PFHxA	*113*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C4 PFOS	*120*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C2 PFDoA	*93*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C5 PFNA	*120*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*
13C2 PFDA	*111*		*50 - 150*	*10/25/23 10:43*	*10/25/23 18:33*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196761/1-A
Matrix: Water
Analysis Batch: 196791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196761

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	112		50 - 150	10/25/23 10:43	10/25/23 18:33	1
13C2 PFUnA	96		50 - 150	10/25/23 10:43	10/25/23 18:33	1

Lab Sample ID: LCS 200-196761/2-A
Matrix: Water
Analysis Batch: 196791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	80.0	73.72		ng/L		92	70 - 130
Perfluoropentanoic acid	80.0	72.90		ng/L		91	70 - 130
Perfluorohexanoic acid	80.0	73.08		ng/L		91	70 - 130
Perfluoroheptanoic acid	80.0	67.13		ng/L		84	70 - 130
Perfluorooctanoic acid	80.0	68.67		ng/L		86	70 - 130
Perfluorononanoic acid	80.0	73.70		ng/L		92	70 - 130
Perfluorodecanoic acid	80.0	74.74		ng/L		93	70 - 130
Perfluoroundecanoic acid	80.0	75.69		ng/L		95	70 - 130
Perfluorododecanoic acid	80.0	69.68		ng/L		87	70 - 130
Perfluorotridecanoic acid	80.0	72.05		ng/L		90	70 - 130
Perfluorotetradecanoic acid	80.0	69.92		ng/L		87	70 - 130
Perfluorobutanesulfonic acid	71.0	67.92		ng/L		96	70 - 130
Perfluoropentanesulfonic acid	75.3	72.50		ng/L		96	70 - 130
Perfluorohexanesulfonic acid	73.1	64.50		ng/L		88	70 - 130
Perfluoroheptanesulfonic acid	76.2	71.25		ng/L		93	70 - 130
Perfluorooctanesulfonic acid	74.2	66.09		ng/L		89	70 - 130
Perfluorononanesulfonic acid	77.0	67.87		ng/L		88	70 - 130
Perfluorodecanesulfonic acid	77.2	63.49		ng/L		82	70 - 130
4:2 Fluorotelomer sulfonic acid	75.0	71.54		ng/L		95	70 - 130
6:2 Fluorotelomer sulfonic acid	76.1	71.54		ng/L		94	60 - 140
8:2 Fluorotelomer sulfonic acid	76.8	78.17		ng/L		102	70 - 130
Perfluorooctanesulfonamide	80.0	78.81		ng/L		99	70 - 130
NMeFOSAA	80.0	74.00		ng/L		92	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	68.74		ng/L		86	70 - 130
HFPODA	80.0	72.46		ng/L		91	60 - 140
DONA	75.6	67.90		ng/L		90	70 - 130
9Cl-PF3ONS	74.6	75.54		ng/L		101	70 - 130
11Cl-PF3OUdS	75.4	68.26		ng/L		90	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	112		50 - 150
13C5 PFPeA	104		50 - 150
13C4 PFHpA	105		50 - 150
13C2 PFTeDA	88		50 - 150
13C3 PFBS	99		50 - 150
13C8 FOSA	79		50 - 150
d3-NMeFOSAA	98		50 - 150
d5-NEtFOSAA	97		50 - 150
M2-4:2 FTS	101		50 - 150
M2-6:2 FTS	103		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196761/2-A
Matrix: Water
Analysis Batch: 196791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196761

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-8:2 FTS	94		50 - 150
13C3 HFPO-DA	93		50 - 150
18O2 PFHxS	106		50 - 150
13C2 PFHxA	103		50 - 150
13C4 PFOS	106		50 - 150
13C2 PFDoA	91		50 - 150
13C5 PFNA	102		50 - 150
13C2 PFDA	99		50 - 150
13C4 PFOA	111		50 - 150
13C2 PFUnA	95		50 - 150

Lab Sample ID: LCSD 200-196761/3-A
Matrix: Water
Analysis Batch: 196839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196761

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			80.0	76.51		ng/L		96	70 - 130	4	30
Perfluoropentanoic acid			80.0	75.64		ng/L		95	70 - 130	4	30
Perfluorohexanoic acid			80.0	66.59		ng/L		83	70 - 130	9	30
Perfluoroheptanoic acid			80.0	80.16		ng/L		100	70 - 130	18	30
Perfluorooctanoic acid			80.0	72.20		ng/L		90	70 - 130	5	30
Perfluorononanoic acid			80.0	73.31		ng/L		92	70 - 130	1	30
Perfluorodecanoic acid			80.0	79.80		ng/L		100	70 - 130	7	30
Perfluoroundecanoic acid			80.0	73.50		ng/L		92	70 - 130	3	30
Perfluorododecanoic acid			80.0	68.56		ng/L		86	70 - 130	2	30
Perfluorotridecanoic acid			80.0	67.94		ng/L		85	70 - 130	6	30
Perfluorotetradecanoic acid			80.0	69.30		ng/L		87	70 - 130	1	30
Perfluorobutanesulfonic acid			71.0	68.15		ng/L		96	70 - 130	0	30
Perfluoropentanesulfonic acid			75.3	71.30		ng/L		95	70 - 130	2	30
Perfluorohexanesulfonic acid			73.1	64.36		ng/L		88	70 - 130	0	30
Perfluoroheptanesulfonic acid			76.2	72.89		ng/L		96	70 - 130	2	30
Perfluorooctanesulfonic acid			74.2	68.91		ng/L		93	70 - 130	4	30
Perfluorononanesulfonic acid			77.0	67.99		ng/L		88	70 - 130	0	30
Perfluorodecanesulfonic acid			77.2	62.50		ng/L		81	70 - 130	2	30
4:2 Fluorotelomer sulfonic acid			75.0	72.18		ng/L		96	70 - 130	1	30
6:2 Fluorotelomer sulfonic acid			76.1	73.12		ng/L		96	60 - 140	2	30
8:2 Fluorotelomer sulfonic acid			76.8	80.78		ng/L		105	70 - 130	3	30
Perfluorooctanesulfonamide			80.0	74.20		ng/L		93	70 - 130	6	30
NMeFOSAA			80.0	76.11		ng/L		95	70 - 130	3	30
N-ethylperfluorooctanesulfonamidoacetic acid			80.0	71.23		ng/L		89	70 - 130	4	30
HFPODA			80.0	68.85		ng/L		86	60 - 140	5	30
DONA			75.6	75.56		ng/L		100	70 - 130	11	30
9Cl-PF3ONS			74.6	78.71		ng/L		105	70 - 130	4	30
11Cl-PF3OUdS			75.4	69.37		ng/L		92	60 - 140	2	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	105		50 - 150
13C5 PFPeA	95		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196761/3-A
Matrix: Water
Analysis Batch: 196839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196761

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	105		50 - 150
13C2 PFTeDA	86		50 - 150
13C3 PFBS	98		50 - 150
13C8 FOSA	73		50 - 150
d3-NMeFOSAA	100		50 - 150
d5-NEtFOSAA	98		50 - 150
M2-4:2 FTS	93		50 - 150
M2-6:2 FTS	97		50 - 150
M2-8:2 FTS	94		50 - 150
13C3 HFPO-DA	98		50 - 150
18O2 PFHxS	104		50 - 150
13C2 PFHxA	110		50 - 150
13C4 PFOS	100		50 - 150
13C2 PFDoA	93		50 - 150
13C5 PFNA	106		50 - 150
13C2 PFDA	97		50 - 150
13C4 PFOA	109		50 - 150
13C2 PFUnA	100		50 - 150

Qualifiers

LCMS

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 196761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290543-1	MW84R-101723-0906-29	Total/NA	Water	3535	
460-290543-2 - DL	MW84AR-101723-1011-75	Total/NA	Water	3535	
460-290543-2	MW84AR-101723-1011-75	Total/NA	Water	3535	
460-290543-3	MW77-101723-1131-20	Total/NA	Water	3535	
460-290543-4	SW1-101723-1210	Total/NA	Water	3535	
460-290543-5	MW6-101723-0917-10	Total/NA	Water	3535	
460-290543-6	MW7-101723-1052-13	Total/NA	Water	3535	
460-290543-7	MW11-101723-1212-25.5	Total/NA	Water	3535	
460-290543-8	SW4-101723-0940	Total/NA	Water	3535	
460-290543-9	1000-101723-0002	Total/NA	Water	3535	
460-290543-10	1000-101723-0004	Total/NA	Water	3535	
MB 200-196761/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196761/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196761/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 196791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290543-1	MW84R-101723-0906-29	Total/NA	Water	537 (modified)	196761
460-290543-2	MW84AR-101723-1011-75	Total/NA	Water	537 (modified)	196761
460-290543-3	MW77-101723-1131-20	Total/NA	Water	537 (modified)	196761
460-290543-4	SW1-101723-1210	Total/NA	Water	537 (modified)	196761
460-290543-5	MW6-101723-0917-10	Total/NA	Water	537 (modified)	196761
460-290543-6	MW7-101723-1052-13	Total/NA	Water	537 (modified)	196761
460-290543-7	MW11-101723-1212-25.5	Total/NA	Water	537 (modified)	196761
460-290543-8	SW4-101723-0940	Total/NA	Water	537 (modified)	196761
460-290543-9	1000-101723-0002	Total/NA	Water	537 (modified)	196761
460-290543-10	1000-101723-0004	Total/NA	Water	537 (modified)	196761
MB 200-196761/1-A	Method Blank	Total/NA	Water	537 (modified)	196761
LCS 200-196761/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196761

Analysis Batch: 196839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 200-196761/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196761

Analysis Batch: 196924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290543-2 - DL	MW84AR-101723-1011-75	Total/NA	Water	537 (modified)	196761

Client Sample ID: MW84R-101723-0906-29
Lab Sample ID: 460-290543-1
Date Collected: 10/17/23 09:06
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 20:27

Client Sample ID: MW84AR-101723-1011-75
Lab Sample ID: 460-290543-2
Date Collected: 10/17/23 10:11
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 20:35
Total/NA	Prep	3535	DL		196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)	DL	2	196924	BWC	EET BUR	10/30/23 17:50

Client Sample ID: MW77-101723-1131-20
Lab Sample ID: 460-290543-3
Date Collected: 10/17/23 11:31
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 20:43

Client Sample ID: SW1-101723-1210
Lab Sample ID: 460-290543-4
Date Collected: 10/17/23 12:10
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 20:51

Client Sample ID: MW6-101723-0917-10
Lab Sample ID: 460-290543-5
Date Collected: 10/17/23 09:17
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:00

Client Sample ID: MW7-101723-1052-13
Lab Sample ID: 460-290543-6
Date Collected: 10/17/23 10:52
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:08

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing/Trenton

Job ID: 460-290543-1

Client Sample ID: MW11-101723-1212-25.5

Lab Sample ID: 460-290543-7

Date Collected: 10/17/23 12:12
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:16

Client Sample ID: SW4-101723-0940

Lab Sample ID: 460-290543-8

Date Collected: 10/17/23 09:40
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:24

Client Sample ID: 1000-101723-0002

Lab Sample ID: 460-290543-9

Date Collected: 10/17/23 12:31
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:32

Client Sample ID: 1000-101723-0004

Lab Sample ID: 460-290543-10

Date Collected: 10/17/23 12:40
Matrix: Water
Date Received: 10/17/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196761	KFW	EET BUR	10/25/23 10:43
Total/NA	Analysis	537 (modified)		1	196791	BWC	EET BUR	10/25/23 21:40

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Job ID: 460-290543-1
Project/Site: Racer, Ewing/Trenton

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-23
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-24
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399140830	08-31-24

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
MW84R-101723-0906-29	460-290543-1	80	95	97	100	93	90	98	102
MW84AR-101723-1011-75	460-290543-2	87	91	99	108	91	90	96	101
MW77-101723-1131-20	460-290543-3	102	101	105	99	103	97	111	112
SW1-101723-1210	460-290543-4	100	96	103	98	97	87	99	108
MW6-101723-0917-10	460-290543-5	64	86	95	111	86	83	93	98
MW7-101723-1052-13	460-290543-6	50	82	91	116	86	88	92	98
MW11-101723-1212-25.5	460-290543-7	57	76	90	94	85	87	93	97
SW4-101723-0940	460-290543-8	87	91	93	94	89	86	89	98
1000-101723-0002	460-290543-9	101	101	102	96	100	90	103	106
1000-101723-0004	460-290543-10	103	101	103	95	99	85	103	110
	MB 200-196761/1-A	119	113	114	106	113	106	112	118
	LCS 200-196761/2-A	112	104	99	101	103	93	105	106
	LCSD 200-196761/3-A	105	95	98	93	110	98	105	104

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #
MW84R-101723-0906-29	460-290543-1	106	104	99	95	99	100	72	92
MW84AR-101723-1011-75	460-290543-2	108	98	97	97	109	106	82	103
MW77-101723-1131-20	460-290543-3	110	107	114	104	104	101	92	100
SW1-101723-1210	460-290543-4	107	109	105	96	96	92	93	96
MW6-101723-0917-10	460-290543-5	119	92	98	97	97	107	82	100
MW7-101723-1052-13	460-290543-6	111	102	95	95	99	99	72	89
MW11-101723-1212-25.5	460-290543-7	102	95	89	96	89	81	81	79
SW4-101723-0940	460-290543-8	96	102	95	92	93	92	87	92
1000-101723-0002	460-290543-9	104	105	106	105	99	94	85	92
1000-101723-0004	460-290543-10	102	103	109	111	97	97	83	91
	MB 200-196761/1-A	116	112	120	120	111	106	86	105
	LCS 200-196761/2-A	103	111	106	102	99	94	79	98
	LCSD 200-196761/3-A	97	109	100	106	97	94	73	100

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
MW84R-101723-0906-29	460-290543-1	98	103	98	90
MW84AR-101723-1011-75	460-290543-2	103	107	105	97
MW77-101723-1131-20	460-290543-3	108	101	105	92
SW1-101723-1210	460-290543-4	102	101	102	92
MW6-101723-0917-10	460-290543-5	98	103	99	84
MW7-101723-1052-13	460-290543-6	96	92	93	72
MW11-101723-1212-25.5	460-290543-7	83	82	88	82
SW4-101723-0940	460-290543-8	93	88	95	82
1000-101723-0002	460-290543-9	96	90	92	84
1000-101723-0004	460-290543-10	94	89	94	85
	MB 200-196761/1-A	96	96	93	89
	LCS 200-196761/2-A	95	97	91	88
	LCSD 200-196761/3-A	100	98	93	86

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFOS #
MW84AR-101723-1011 -75 DL	460-290543-2 DL	89

	QC LIMITS
PFOS = 13C4 PFOS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231025A07.d

Lab ID: LCS 200-196761/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	73.72	92	70-130	
Perfluoropentanoic acid	80.0	72.90	91	70-130	
Perfluorohexanoic acid	80.0	73.08	91	70-130	
Perfluoroheptanoic acid	80.0	67.13	84	70-130	
Perfluorooctanoic acid	80.0	68.67	86	70-130	
Perfluorononanoic acid	80.0	73.70	92	70-130	
Perfluorodecanoic acid	80.0	74.74	93	70-130	
Perfluoroundecanoic acid	80.0	75.69	95	70-130	
Perfluorododecanoic acid	80.0	69.68	87	70-130	
Perfluorotridecanoic acid	80.0	72.05	90	70-130	
Perfluorotetradecanoic acid	80.0	69.92	87	70-130	
Perfluorobutanesulfonic acid	71.0	67.92	96	70-130	
Perfluoropentanesulfonic acid	75.3	72.50	96	70-130	
Perfluorohexanesulfonic acid	73.1	64.50	88	70-130	
Perfluoroheptanesulfonic acid	76.2	71.25	93	70-130	
Perfluorooctanesulfonic acid	74.2	66.09	89	70-130	
Perfluorononanesulfonic acid	77.0	67.87	88	70-130	
Perfluorodecanesulfonic acid	77.2	63.49	82	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	71.54	95	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	71.54	94	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	78.17	102	70-130	
Perfluorooctanesulfonamide	80.0	78.81	99	70-130	
NMeFOSAA	80.0	74.00	92	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	68.74	86	70-130	
HFPODA	80.0	72.46	91	60-140	
DONA	75.6	67.90	90	70-130	
9Cl-PF3ONS	74.6	75.54	101	70-130	
11Cl-PF3OUdS	75.4	68.26	90	60-140	
13C4 PFBA	50.0	55.92	112	50-150	
13C5 PFPeA	50.0	51.97	104	50-150	
13C4 PFHpA	50.0	52.64	105	50-150	
13C2 PFTeDA	50.0	44.04	88	50-150	
13C3 PFBS	46.5	46.10	99	50-150	
13C8 FOSA	50.0	39.55	79	50-150	
d3-NMeFOSAA	50.0	49.14	98	50-150	
d5-NEtFOSAA	50.0	48.73	97	50-150	
M2-4:2 FTS	46.7	47.04	101	50-150	
M2-6:2 FTS	47.5	48.70	103	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231025A07.d

Lab ID: LCS 200-196761/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	44.90	94	50-150	
13C3 HFPO-DA	50.0	46.67	93	50-150	
18O2 PFHxS	47.3	50.26	106	50-150	
13C2 PFHxA	50.0	51.29	103	50-150	
13C4 PFOS	47.8	50.45	106	50-150	
13C2 PFDoA	50.0	45.64	91	50-150	
13C5 PFNA	50.0	51.24	102	50-150	
13C2 PFDA	50.0	49.52	99	50-150	
13C4 PFOA	50.0	55.28	111	50-150	
13C2 PFUnA	50.0	47.64	95	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231026E06.d

Lab ID: LCSD 200-196761/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	80.0	76.51	96	4	30	70-130	
Perfluoropentanoic acid	80.0	75.64	95	4	30	70-130	
Perfluorohexanoic acid	80.0	66.59	83	9	30	70-130	
Perfluoroheptanoic acid	80.0	80.16	100	18	30	70-130	
Perfluorooctanoic acid	80.0	72.20	90	5	30	70-130	
Perfluorononanoic acid	80.0	73.31	92	1	30	70-130	
Perfluorodecanoic acid	80.0	79.80	100	7	30	70-130	
Perfluoroundecanoic acid	80.0	73.50	92	3	30	70-130	
Perfluorododecanoic acid	80.0	68.56	86	2	30	70-130	
Perfluorotridecanoic acid	80.0	67.94	85	6	30	70-130	
Perfluorotetradecanoic acid	80.0	69.30	87	1	30	70-130	
Perfluorobutanesulfonic acid	71.0	68.15	96	0	30	70-130	
Perfluoropentanesulfonic acid	75.3	71.30	95	2	30	70-130	
Perfluorohexanesulfonic acid	73.1	64.36	88	0	30	70-130	
Perfluoroheptanesulfonic acid	76.2	72.89	96	2	30	70-130	
Perfluorooctanesulfonic acid	74.2	68.91	93	4	30	70-130	
Perfluorononanesulfonic acid	77.0	67.99	88	0	30	70-130	
Perfluorodecanesulfonic acid	77.2	62.50	81	2	30	70-130	
4:2 Fluorotelomer sulfonic acid	75.0	72.18	96	1	30	70-130	
6:2 Fluorotelomer sulfonic acid	76.1	73.12	96	2	30	60-140	
8:2 Fluorotelomer sulfonic acid	76.8	80.78	105	3	30	70-130	
Perfluorooctanesulfonamide	80.0	74.20	93	6	30	70-130	
NMeFOSAA	80.0	76.11	95	3	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	80.0	71.23	89	4	30	70-130	
HFPODA	80.0	68.85	86	5	30	60-140	
DONA	75.6	75.56	100	11	30	70-130	
9Cl-PF3ONS	74.6	78.71	105	4	30	70-130	
11Cl-PF3OUdS	75.4	69.37	92	2	30	60-140	
13C4 PFBA	50.0	52.41	105			50-150	
13C5 PFPeA	50.0	47.72	95			50-150	
13C4 PFHpA	50.0	52.25	105			50-150	
13C2 PFTeDA	50.0	43.17	86			50-150	
13C3 PFBS	46.5	45.77	98			50-150	
13C8 FOSA	50.0	36.54	73			50-150	
d3-NMeFOSAA	50.0	49.96	100			50-150	
d5-NEtFOSAA	50.0	48.76	98			50-150	
M2-4:2 FTS	46.7	43.56	93			50-150	
M2-6:2 FTS	47.5	46.29	97			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231026E06.d

Lab ID: LCSD 200-196761/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	44.80	94			50-150	
13C3 HFPO-DA	50.0	49.21	98			50-150	
18O2 PFHxS	47.3	49.23	104			50-150	
13C2 PFHxA	50.0	54.99	110			50-150	
13C4 PFOS	47.8	47.95	100			50-150	
13C2 PFDoA	50.0	46.64	93			50-150	
13C5 PFNA	50.0	53.02	106			50-150	
13C2 PFDA	50.0	48.49	97			50-150	
13C4 PFOA	50.0	54.48	109			50-150	
13C2 PFUnA	50.0	49.96	100			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab File ID: PA231025A06.d Lab Sample ID: MB 200-196761/1-A

Matrix: Water Date Extracted: 10/25/2023 10:43

Instrument ID: LC812 Date Analyzed: 10/25/2023 18:33

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196761/2-A	PA231025A07.d	10/25/2023 18:41
MW84R-101723-0906-29	460-290543-1	PA231025A20.d	10/25/2023 20:27
MW84AR-101723-1011-75	460-290543-2	PA231025A21.d	10/25/2023 20:35
MW77-101723-1131-20	460-290543-3	PA231025A22.d	10/25/2023 20:43
SW1-101723-1210	460-290543-4	PA231025A23.d	10/25/2023 20:51
MW6-101723-0917-10	460-290543-5	PA231025A24.d	10/25/2023 21:00
MW7-101723-1052-13	460-290543-6	PA231025A25.d	10/25/2023 21:08
MW11-101723-1212-25.5	460-290543-7	PA231025A26.d	10/25/2023 21:16
SW4-101723-0940	460-290543-8	PA231025A27.d	10/25/2023 21:24
1000-101723-0002	460-290543-9	PA231025A28.d	10/25/2023 21:32
1000-101723-0004	460-290543-10	PA231025A29.d	10/25/2023 21:40
	LCSD 200-196761/3-A	PA231026E06.d	10/27/2023 10:49
MW84AR-101723-1011-75 DL	460-290543-2 DL	PA231030A07.d	10/30/2023 17:50

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument I LC812 Calibration Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.6(mm) Calibration End Date: 07/26/2023 18:05

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		1938034	3.46				
UPPER LIMIT		2907051	3.66				
LOWER LIMIT		969017	3.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-193912/12		2117259	3.46				
ICV 200-193912/13		2099437	3.47				
CCB 200-196791/4		2007376	3.52				
CCVLIS 200-196791/5		1904259	3.53				
CCB 200-196833/4		2022263	3.50				
CCVLIS 200-196833/5		1978630	3.51				
CCB 200-196924/4		2130216	3.50				
CCVLIS 200-196924/5		2209073	3.51				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Sample No.: CCVLIS 200-196791/5 Date Analyzed: 10/25/2023 18:24

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231025A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		1904259	3.53				
UPPER LIMIT		2856389	3.73				
LOWER LIMIT		952130	3.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-196761/1-A		1769197	3.52				
LCS 200-196761/2-A		1952822	3.52				
CCV 200-196791/19		1973110	3.52				
460-290543-1	MW84R-101723-0906-29	1702438	3.52				
460-290543-2	MW84AR-101723-1011-75	1677736	3.52				
460-290543-3	MW77-101723-1131-20	1760054	3.52				
460-290543-4	SW1-101723-1210	1869131	3.52				
460-290543-5	MW6-101723-0917-10	1748336	3.52				
460-290543-6	MW7-101723-1052-13	1707015	3.52				
460-290543-7	MW11-101723-1212-25.5	1846725	3.53				
460-290543-8	SW4-101723-0940	1955927	3.51				
460-290543-9	1000-101723-0002	1947923	3.53				
460-290543-10	1000-101723-0004	1926459	3.52				
CCV 200-196791/32		1939704	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Sample No.: CCVLIS 200-196833/5 Date Analyzed: 10/26/2023 21:03

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231026A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		1978630	3.51				
UPPER LIMIT		2967945	3.71				
LOWER LIMIT		989315	3.31				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196839/1		2098703	3.52				
LCSD 200-196761/3-A		2047567	3.51				
CCV 200-196839/13		2069548	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Sample No.: CCVLIS 200-196924/5 Date Analyzed: 10/30/2023 17:34

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231030A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2209073	3.51				
UPPER LIMIT		3313610	3.71				
LOWER LIMIT		1104537	3.31				
LAB SAMPLE ID	CLIENT SAMPLE ID						
460-290543-2 DL	MW84AR-101723-1011-75 DL	937478*3	3.51				
CCV 200-196924/19		2048519	3.51				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW84R-101723-0906-29 | Lab Sample ID: 460-290543-1

Matrix: Water | Lab File ID: PA231025A20.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 09:06

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 315.2(mL) | Date Analyzed: 10/25/2023 20:27

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	8.28		3.97	0.95
2706-90-3	Perfluoropentanoic acid	6.44		1.59	0.54
307-24-4	Perfluorohexanoic acid	9.67		1.59	0.52
375-85-9	Perfluoroheptanoic acid	4.86		1.59	0.43
335-67-1	Perfluorooctanoic acid	19.0		1.59	0.60
375-95-1	Perfluorononanoic acid	1.60		1.59	0.39
335-76-2	Perfluorodecanoic acid	0.87	J	1.59	0.36
2058-94-8	Perfluoroundecanoic acid	1.59	U	1.59	0.44
307-55-1	Perfluorododecanoic acid	1.59	U	1.59	0.39
72629-94-8	Perfluorotridecanoic acid	1.59	U	1.59	0.38
376-06-7	Perfluorotetradecanoic acid	1.59	U	1.59	0.51
375-73-5	Perfluorobutanesulfonic acid	2.77		1.59	0.49
2706-91-4	Perfluoropentanesulfonic acid	2.59		1.59	0.40
355-46-4	Perfluorohexanesulfonic acid	15.1		1.59	0.44
375-92-8	Perfluoroheptanesulfonic acid	6.85		1.59	0.33
1763-23-1	Perfluorooctanesulfonic acid	556		1.59	0.67
68259-12-1	Perfluorononanesulfonic acid	1.59	U	1.59	0.32
335-77-3	Perfluorodecanesulfonic acid	1.59	U	1.59	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	3.97	U	3.97	1.03
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.59	U	1.59	0.61
754-91-6	Perfluorooctanesulfonamide	1.59	U	1.59	0.73
2355-31-9	NMeFOSAA	3.97	U	3.97	1.51
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	3.97	U	3.97	1.27
13252-13-6	HFPODA	3.17	U	3.17	0.87
919005-14-4	DONA	1.59	U	1.59	0.33
756426-58-1	9Cl-PF3ONS	1.59	U	1.59	0.25
763051-92-9	11Cl-PF3OUdS	1.59	U	1.59	0.69

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW84R-101723-0906-29 Lab Sample ID: 460-290543-1

Matrix: Water Lab File ID: PA231025A20.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 09:06

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 315.2(mL) Date Analyzed: 10/25/2023 20:27

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	80		50-150
STL01893	13C5 PFPeA	95		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	90		50-150
STL02337	13C3 PFBS	97		50-150
STL01056	13C8 FOSA	72		50-150
STL02118	d3-NMeFOSAA	92		50-150
STL02117	d5-NEtFOSAA	103		50-150
STL02395	M2-4:2 FTS	100		50-150
STL02279	M2-6:2 FTS	106		50-150
STL02280	M2-8:2 FTS	100		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	102		50-150
STL00993	13C2 PFHxA	93		50-150
STL00991	13C4 PFOS	99		50-150
STL00998	13C2 PFDoA	98		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	104		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d
Lims ID: 460-290543-A-1-A
Client ID: MW84R-101723-0906-29
Sample Type: Client
Inject. Date: 25-Oct-2023 20:27:27 ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-1-A
Misc. Info.: 200-0057556-020 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 12:52:12
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	1343810	0.99		79.6	906	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	293450	0.2610			10.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1246686	1.19		95.1	287	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	218331	0.2029			0.8	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.701	1601742	1.13		97.2	20124	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	134192	0.0872	Target=2.06		1.7	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	64250		2.09(1.03-3.09)		4.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.757	2.772	-0.015	1.000	1062	0.001909			1.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.772	-0.015	0.783	191238	1.17		99.9	8.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.810	-0.015	0.794	1238974	1.16		93.0	2117	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.795	2.810	-0.015	1.000	332495	0.3048	Target=14.12		2.0	
313.00 > 119.00	2.795	2.810	-0.015	1.000	22546		14.75(7.06-21.17)		5.5	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.807	2.810	-0.003	0.888	110532	0.0816	Target=2.72		3.1	M
349.00 > 99.00	2.795	2.810	-0.015	0.884	47279		2.34(1.36-4.09)		7.6	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.918	-0.013	0.825	233268	1.13		90.4	1555	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.915	2.918	-0.003	1.004	3530	0.0189			31.7	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.176	-0.014	0.899	1226074	1.21		102	4014	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.176	-0.014	1.000	545504	0.4753	Target=3.32		43.1	M
399.00 > 99.00	3.162	3.176	-0.014	1.000	210019		2.60(1.66-4.98)		73.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.176	-0.014	1.000	197908	0.1533	Target=4.17		2.6	M
363.00 > 169.00	3.174	3.176	-0.002	1.004	49587		3.99(2.09-6.26)		30.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.176	-0.014	0.899	1439308	1.23		98.4	3963	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.501	3.511	-0.010	0.915	199897	0.2159	Target=4.83		12.2	M
449.00 > 99.00	3.501	3.511	-0.010	0.915	60313		3.31(2.41-7.24)		12.9	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.510	3.511	-0.001	0.997	266675	1.26		106	39.9	M
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.501	3.520	-0.019	0.997	3242	0.005282			4.2	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.519	3.529	-0.010	1.000	875438	0.5980	Target=2.88		11.2	M
413.00 > 169.00	3.519	3.529	-0.010	1.000	299076		2.93(1.44-4.32)		196	M
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.529	-0.010	1.000	1717893	1.30		104	2889	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.529	-0.010		1702438	1.25			3865	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.825	3.830	-0.005	1.000	13099704	17.5	Target=4.24		1326	M
499.00 > 99.00	3.814	3.830	-0.016	0.997	3762826		3.48(2.12-6.37)		1578	M
D 18 13C4 PFOS										
503.00 > 80.00	3.825	3.830	-0.005	1.087	765574	1.19		99.2	179	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.848	3.854	-0.006	1.000	67770	0.0505	Target=8.34		2.3	M
463.00 > 169.00	3.848	3.854	-0.006	1.000	5716		11.86(4.17-12.51)		8.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.848	3.854	-0.006	1.094	1711905	1.19		95.0	2080	
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.109	4.112	-0.004	1.074	3565	0.006271	Target=2.17		1.3	RM
549.00 > 99.00	4.097	4.112	-0.015	1.071	4944		0.72(1.08-3.25)		3.7	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.132	4.148	-0.016	1.000	41172	0.0276	Target=11.44		2.8	M
513.00 > 169.00	4.132	4.148	-0.016	1.000	4199		9.81(5.72-17.16)		10.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.148	-0.016	1.174	1868666	1.24		99.0	4682	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.148	-0.004	1.000	2414	0.004622			21.3	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.148	-0.004	1.178	284110	1.20		99.9	130	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.242	-0.005	1.204	1157756	0.8984		71.9	3188	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.274	4.278	-0.004	1.214	412944	1.14		91.5	977	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.287	4.291	-0.004	1.003	860	0.002869			2.9	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.370	4.375	-0.005	1.143	1659	0.003792	Target=2.37		1.7	M
599.00 > 99.00	4.358	4.375	-0.017	1.139	1055		1.57(1.19-3.56)		4.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.398	-0.016	1.245	1742836	1.22		97.8	9126	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.398	-0.016	1.000	13811	0.009611	Target=12.20		2.0	M
563.00 > 169.00	4.394	4.398	-0.004	1.003	2174		6.35(6.10-18.31)		9.0	M
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.394	4.410	-0.016	1.249	446016	1.28		103	734	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.406	4.410	-0.004	1.003	5303	0.0149			8.4	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.477	4.482	-0.005	1.171	2501	0.000713			7.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.621	-0.015	1.309	1766290	1.22		97.5	4760	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.989	-0.002	1.417	1615424	1.12		89.6	4884	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.998	4.989	0.009	1.002	185	0.001280	Target=0.87		5.6	M
713.00 > 219.00	4.966	4.989	-0.023	0.996	185		1.00(0.43-1.30)		3.7	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

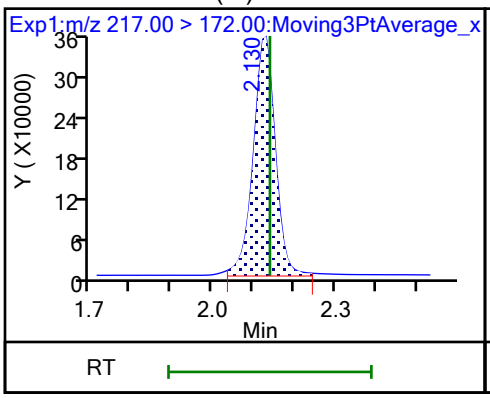
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54

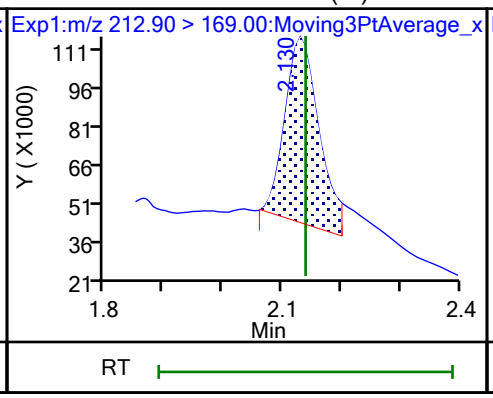
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d
Injection Date: 25-Oct-2023 20:27:27 Instrument ID: LC812
Lims ID: 460-290543-A-1-A Lab Sample ID: 200-290543-1
Client ID: MW84R-101723-0906-29
Operator ID: LC812user ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

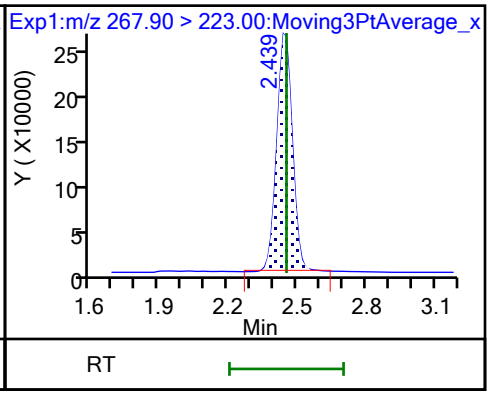
D 1 13C4 PFBA (M)



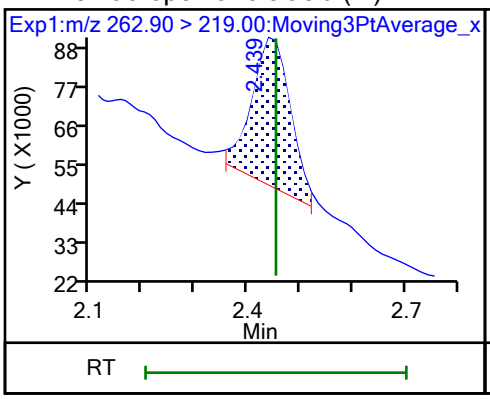
2 Perfluorobutanoic acid (M)



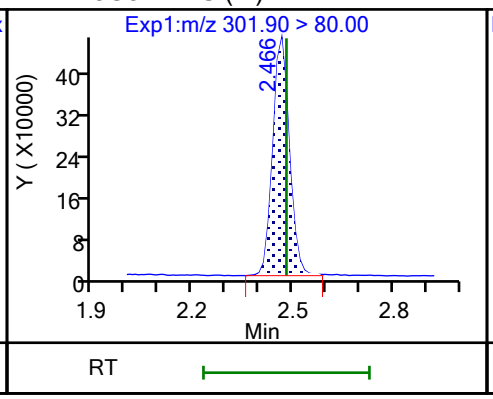
D 3 13C5 PFPeA



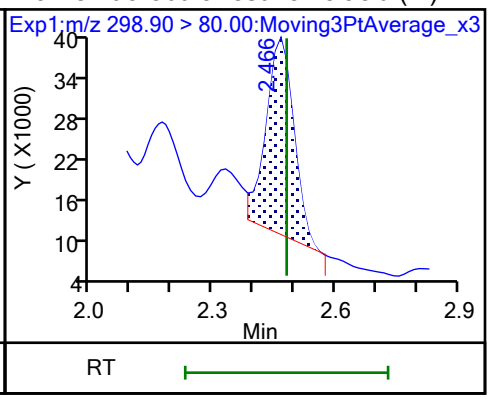
4 Perfluoropentanoic acid (M)



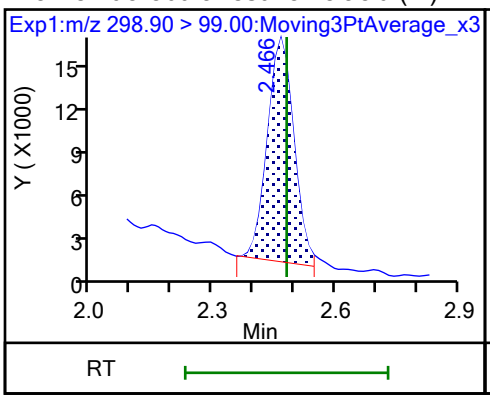
D 47 13C3 PFBS (M)



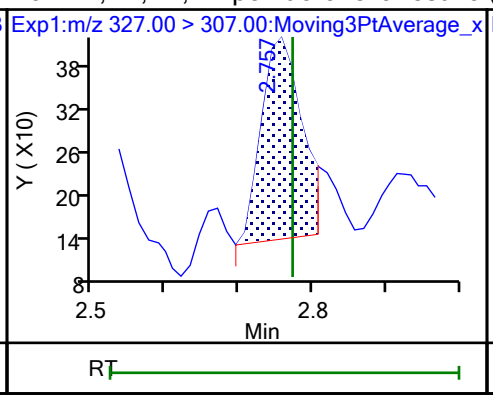
5 Perfluorobutanesulfonic acid (M)



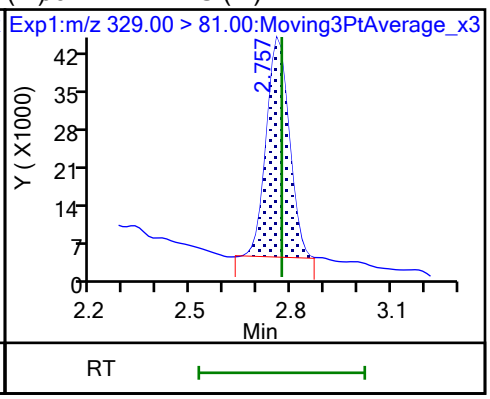
5 Perfluorobutanesulfonic acid (M)



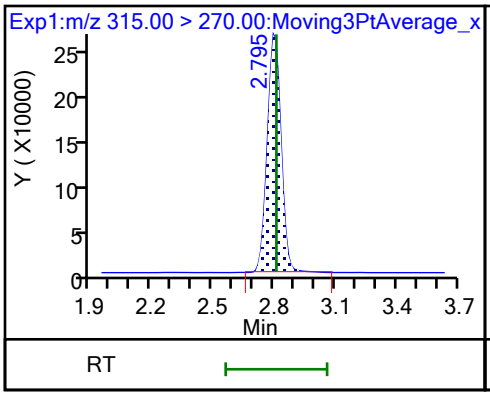
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



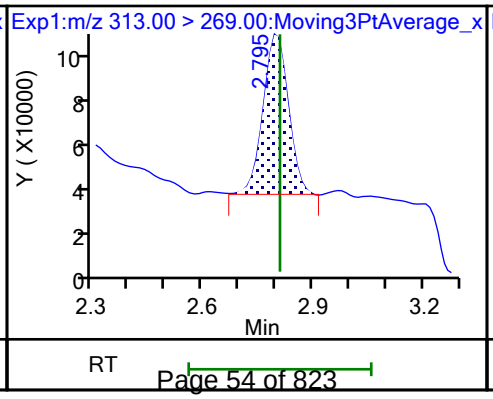
60 M2-4:2 FTS (M)



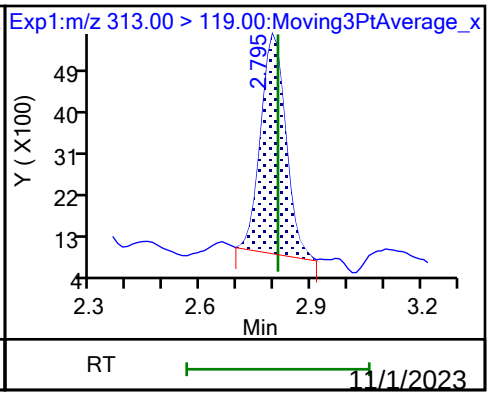
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

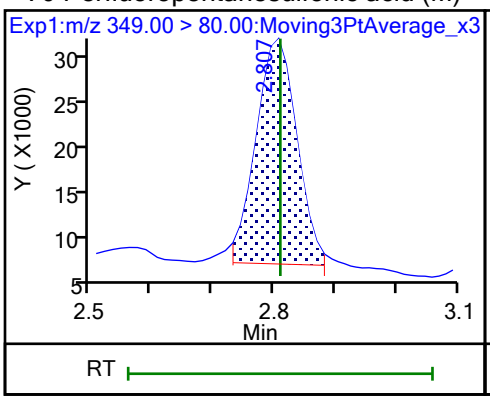


6 Perfluorohexanoic acid

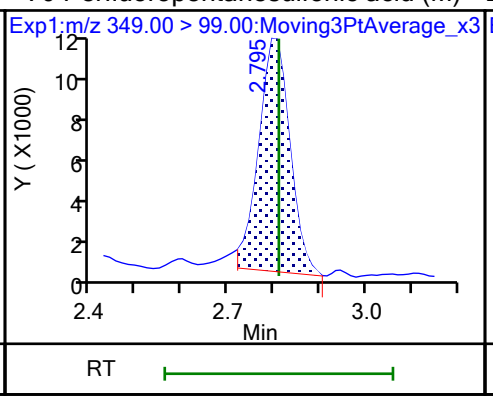


11/1/2023
12:01 PM

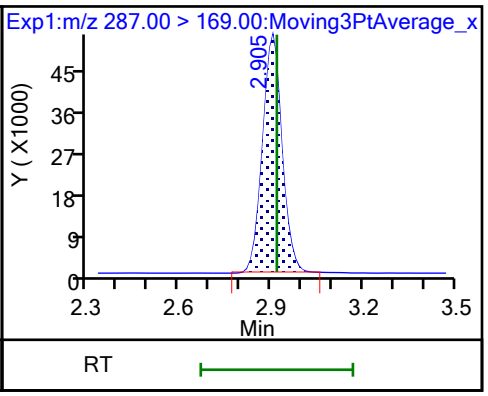
70 Perfluoropentanesulfonic acid (M)



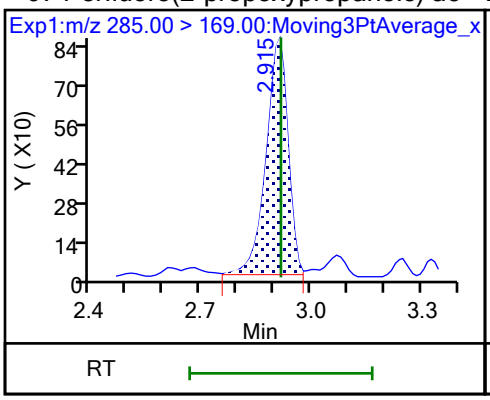
70 Perfluoropentanesulfonic acid (M)



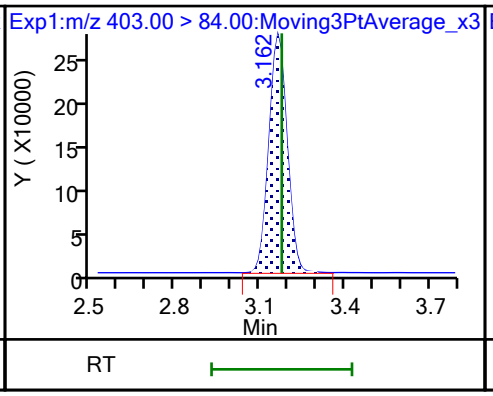
D 64 13C3 HFPO-DA



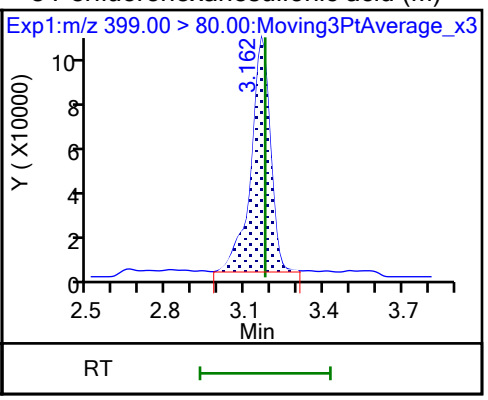
67 Perfluoro(2-propoxypropanoic) ac



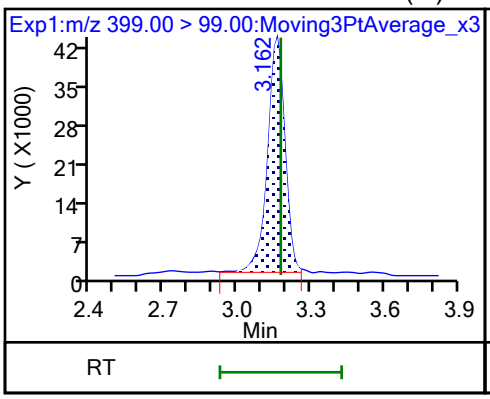
D 11 18O2 PFHxS



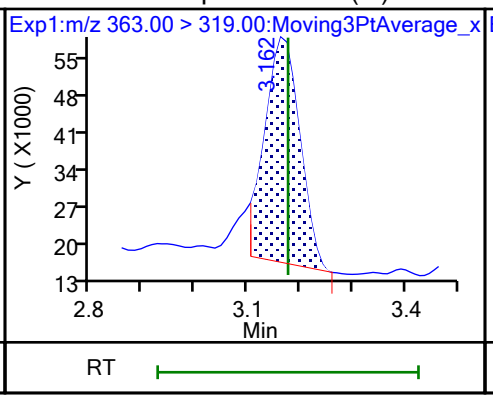
8 Perfluorohexanesulfonic acid (M)



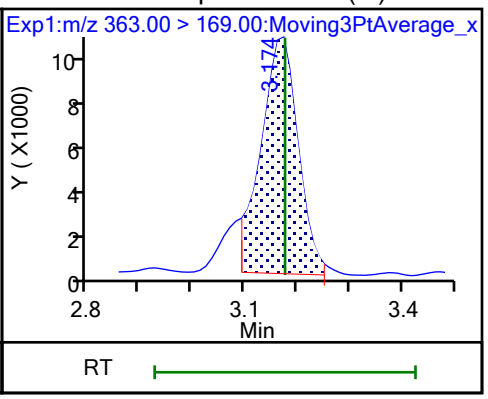
8 Perfluorohexanesulfonic acid (M)



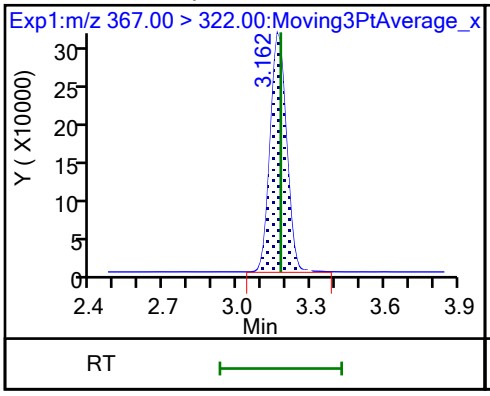
10 Perfluoroheptanoic acid (M)



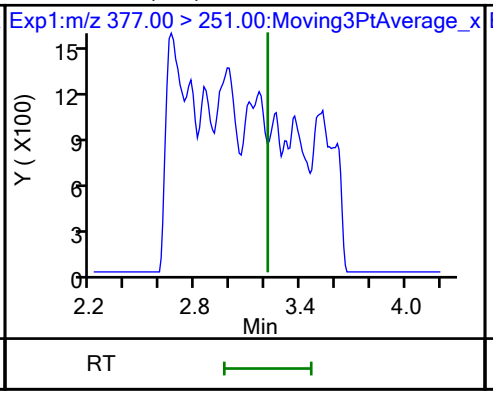
10 Perfluoroheptanoic acid (M)



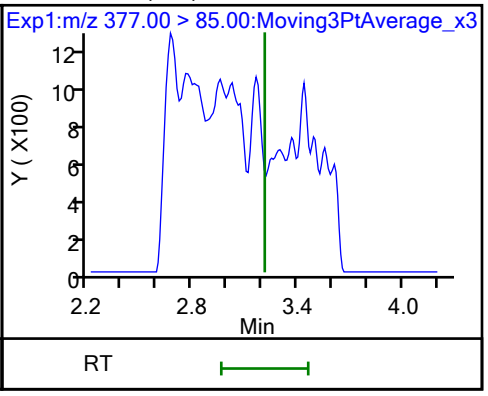
D 9 13C4 PFHpA



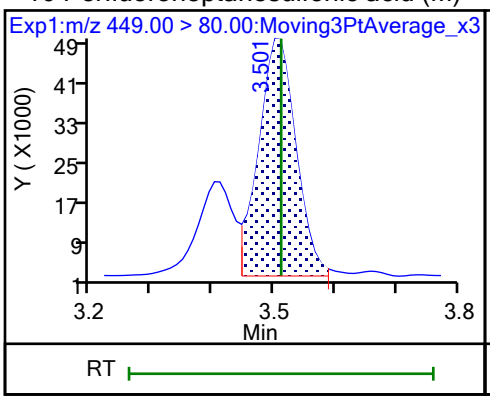
77 DONA (ND)



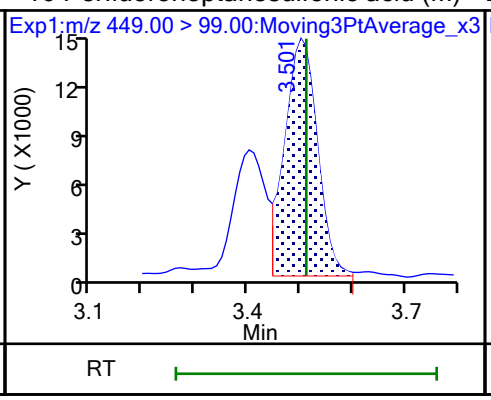
77 DONA (ND)



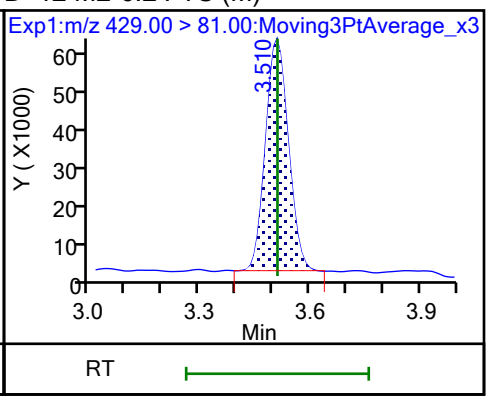
16 Perfluoroheptanesulfonic acid (M)



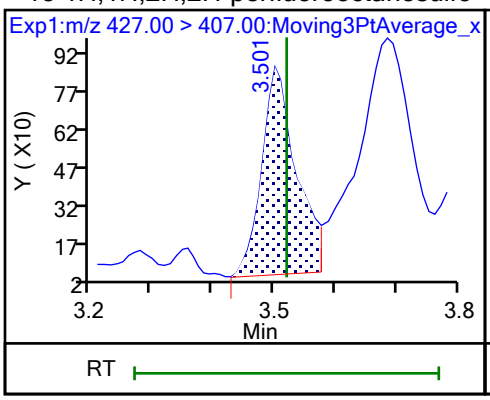
16 Perfluoroheptanesulfonic acid (M)



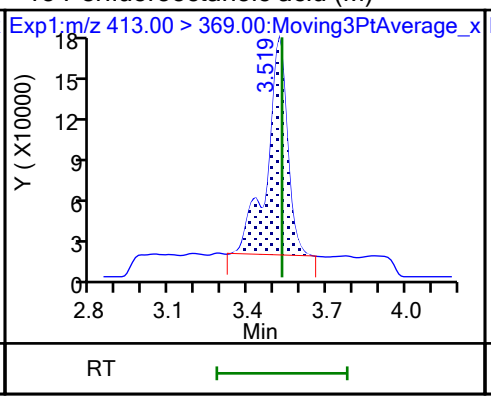
D 12 M2-6:2 FTS (M)



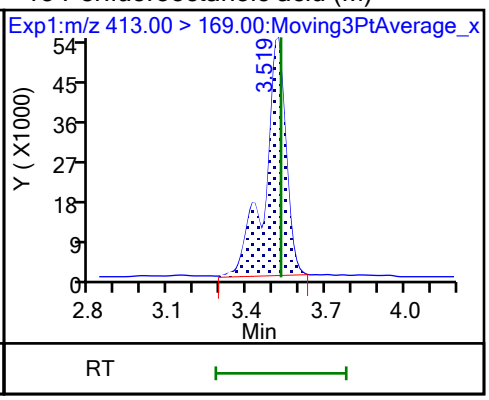
13 1H,1H,2H,2H-perfluorooctanesulfo



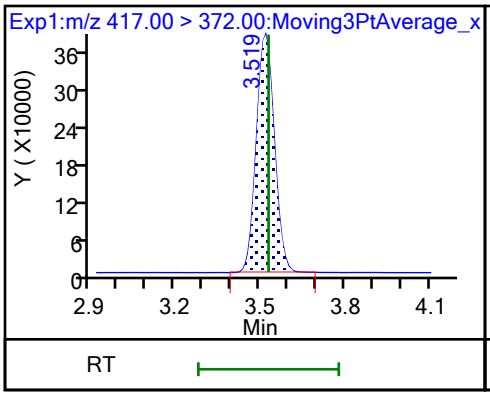
15 Perfluorooctanoic acid (M)



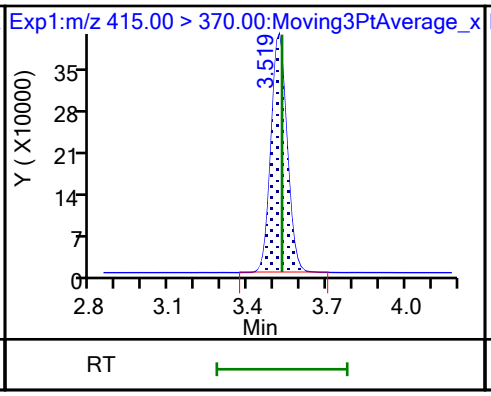
15 Perfluorooctanoic acid (M)



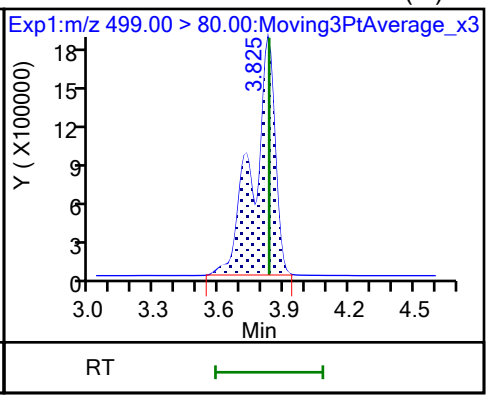
D 14 13C4 PFOA



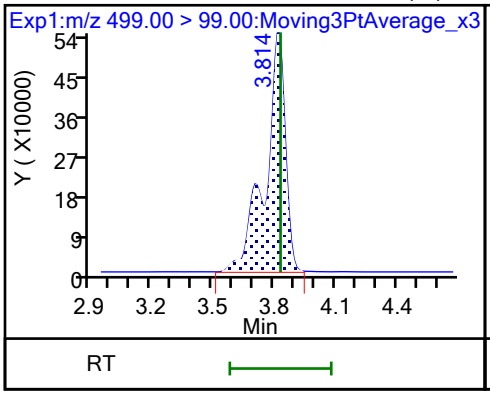
* 62 13C2 PFOA



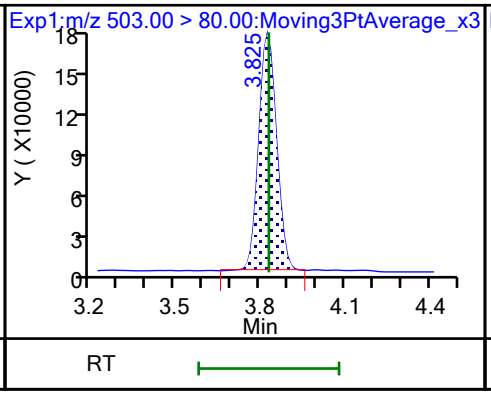
17 Perfluorooctanesulfonic acid (M)



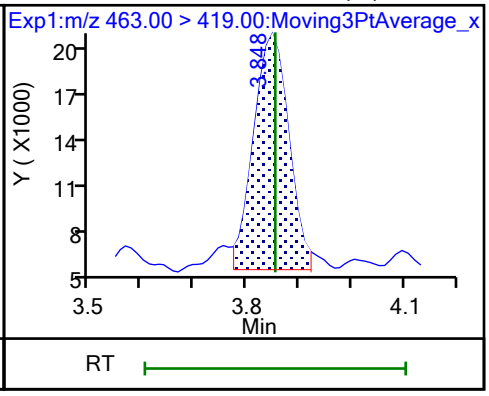
17 Perfluorooctanesulfonic acid (M)



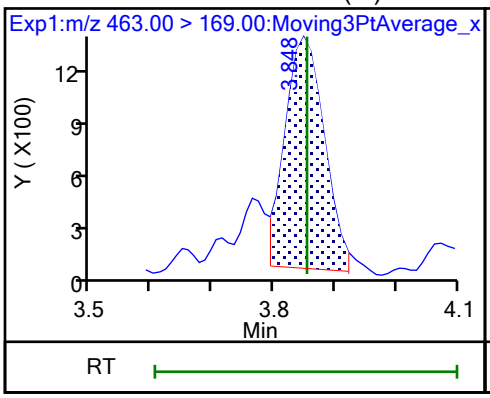
D 18 13C4 PFOS



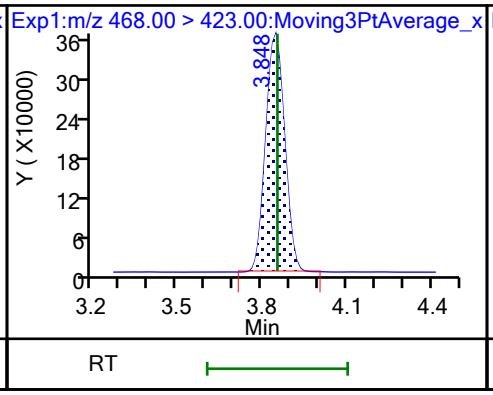
20 Perfluorononanoic acid (M)



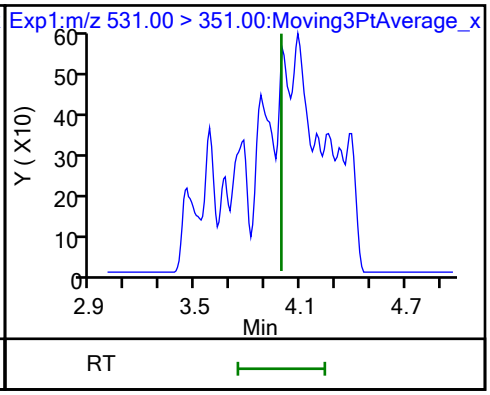
20 Perfluorononanoic acid (M)



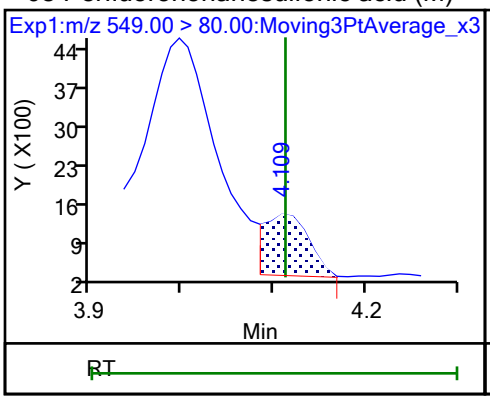
D 19 13C5 PFNA



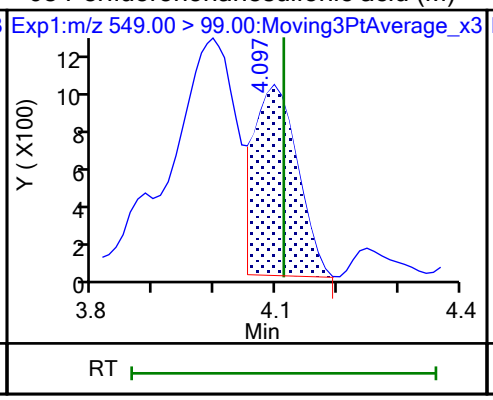
69 9-Chlorohexadecafluoro-3-oxanona (ND)



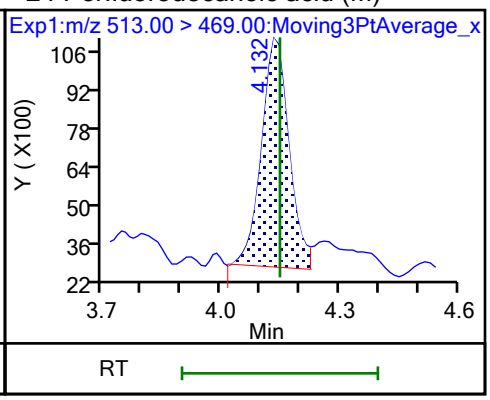
68 Perfluorononanesulfonic acid (M)



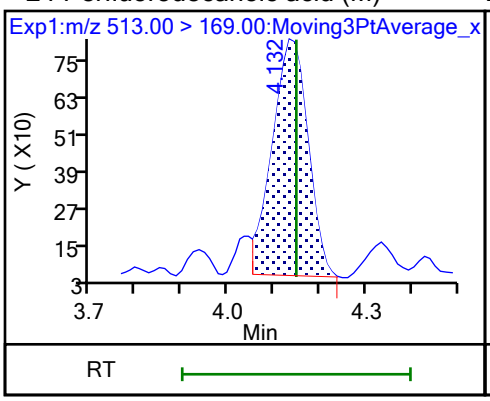
68 Perfluorononanesulfonic acid (M)



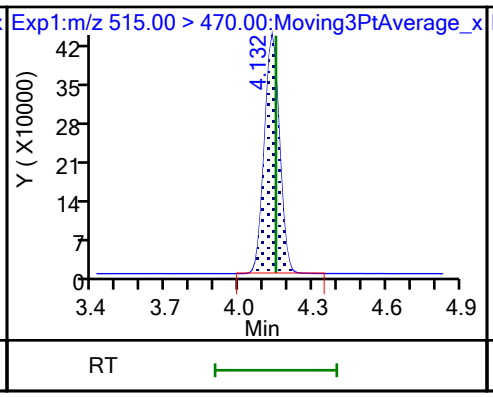
24 Perfluorodecanoic acid (M)



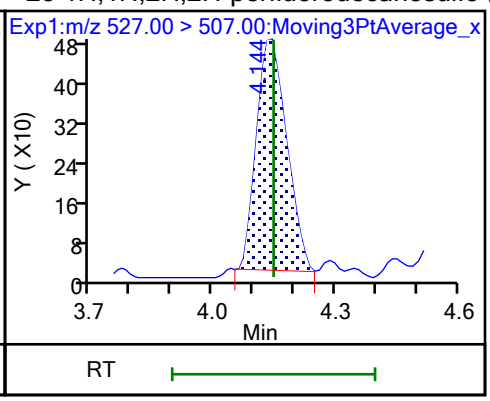
24 Perfluorodecanoic acid (M)



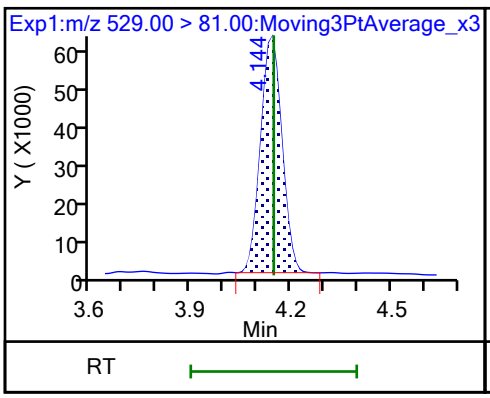
D 23 13C2 PFDA



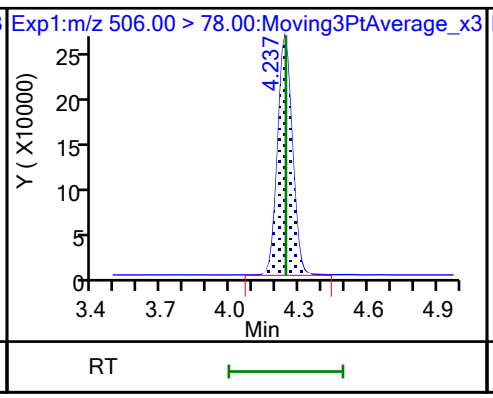
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



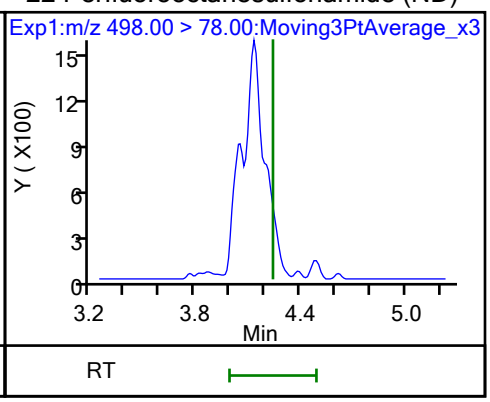
D 26 M2-8:2 FTS



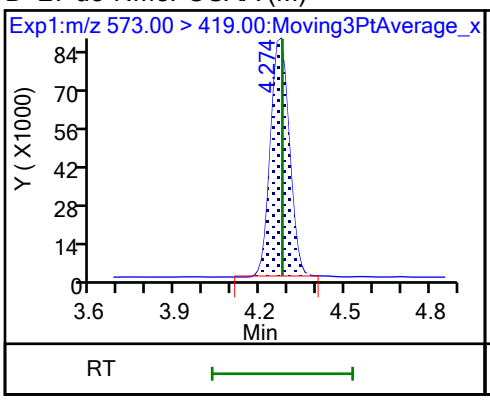
D 21 13C8 FOSA



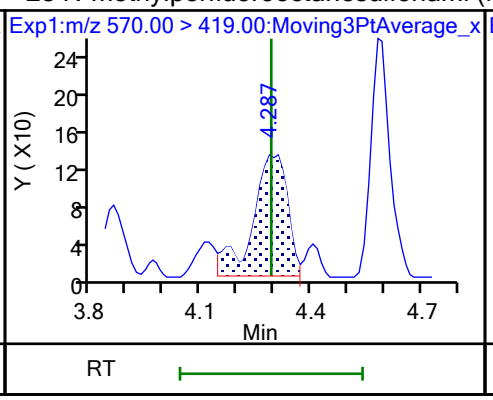
22 Perfluorooctanesulfonamide (ND)



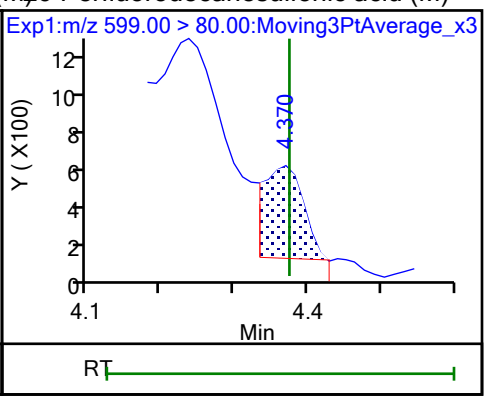
D 27 d3-NMeFOSAA (M)



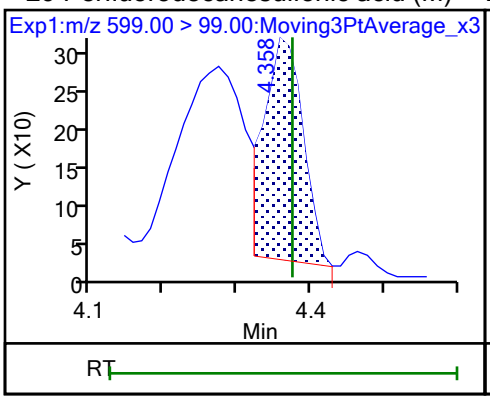
28 N-methylperfluorooctanesulfonami (M)



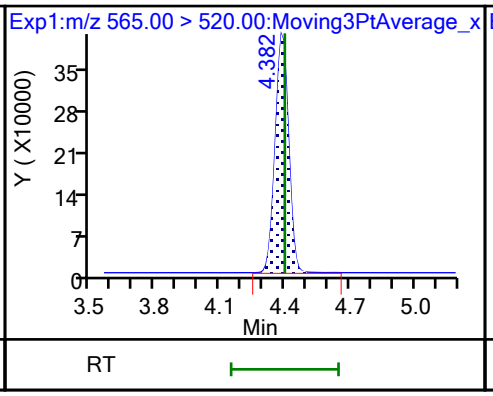
29 Perfluorodecanesulfonic acid (M)



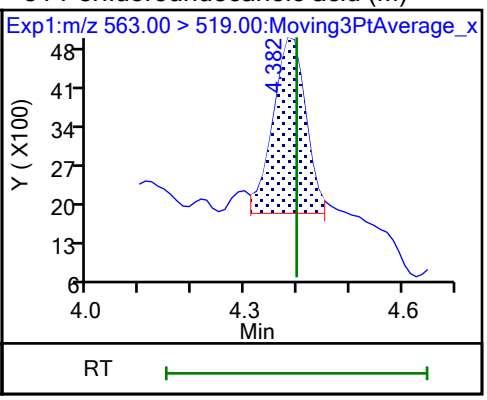
29 Perfluorodecanesulfonic acid (M)



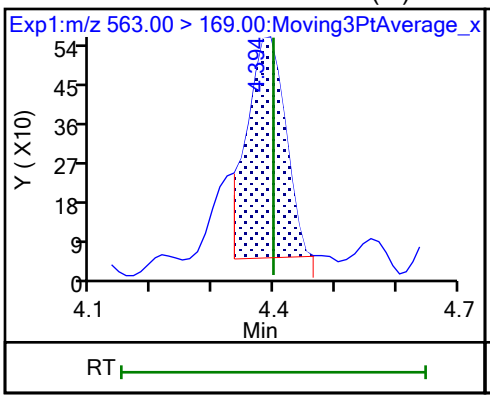
D 30 13C2 PFUnA



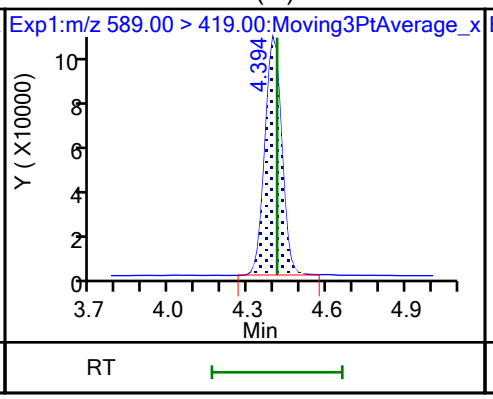
31 Perfluoroundecanoic acid (M)



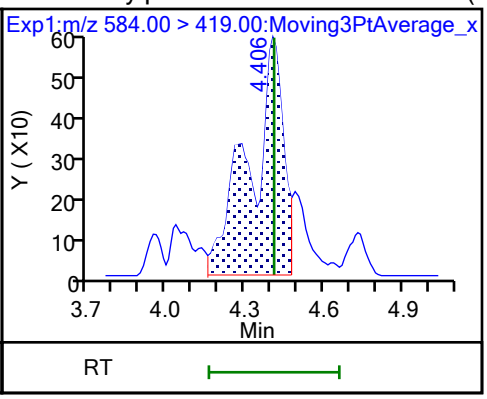
31 Perfluoroundecanoic acid (M)



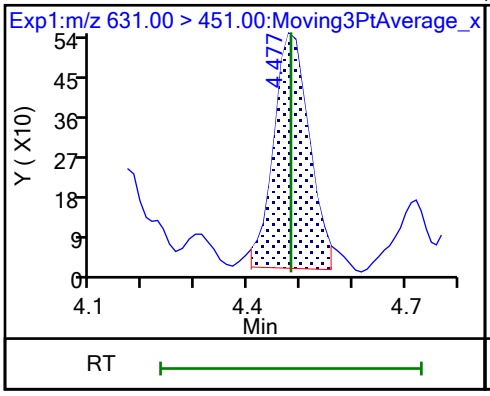
D 32 d5-NEtFOSAA (M)



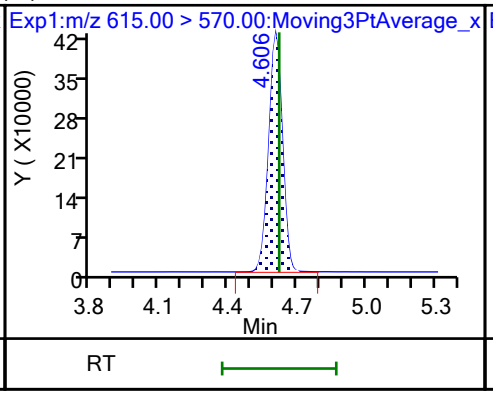
33 N-ethylperfluorooctanesulfonamid (M)



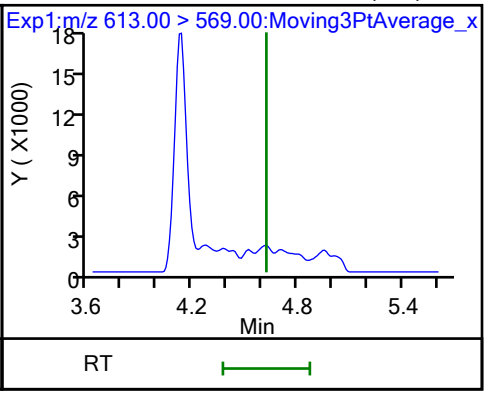
66 11-Chloroeicosafluoro-3-oxaundec (M)



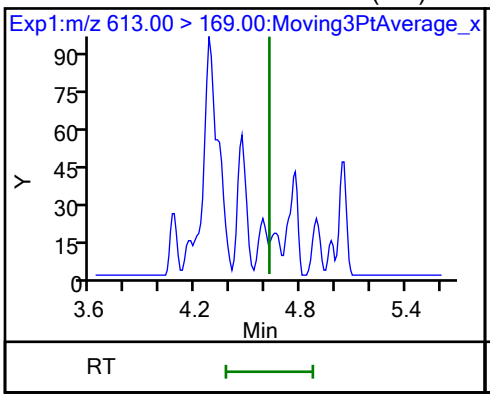
D 36 13C2 PFDoA



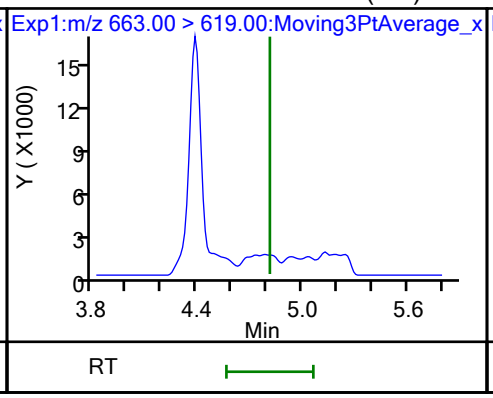
37 Perfluorododecanoic acid (ND)



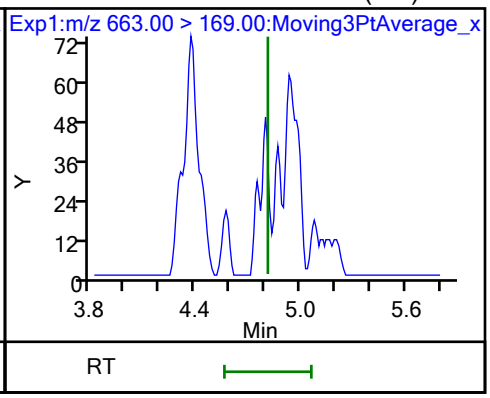
37 Perfluorododecanoic acid (ND)



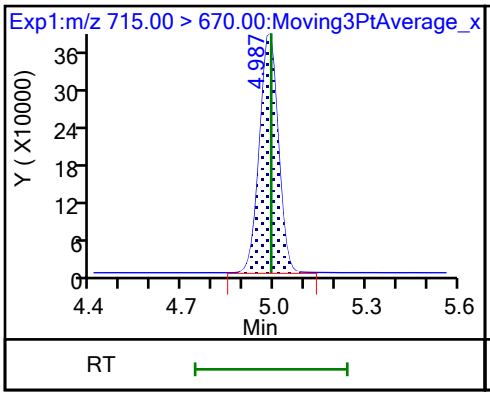
41 Perfluorotridecanoic acid (ND)



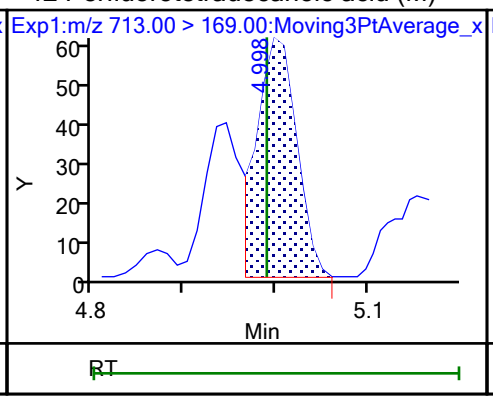
41 Perfluorotridecanoic acid (ND)



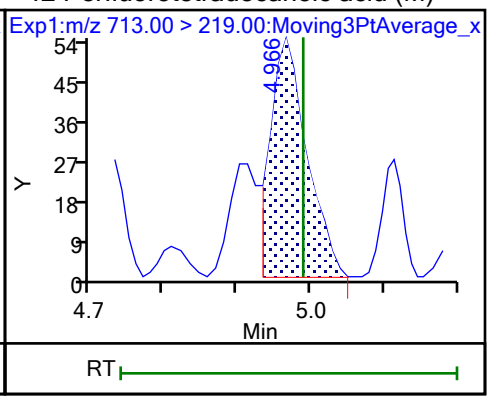
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

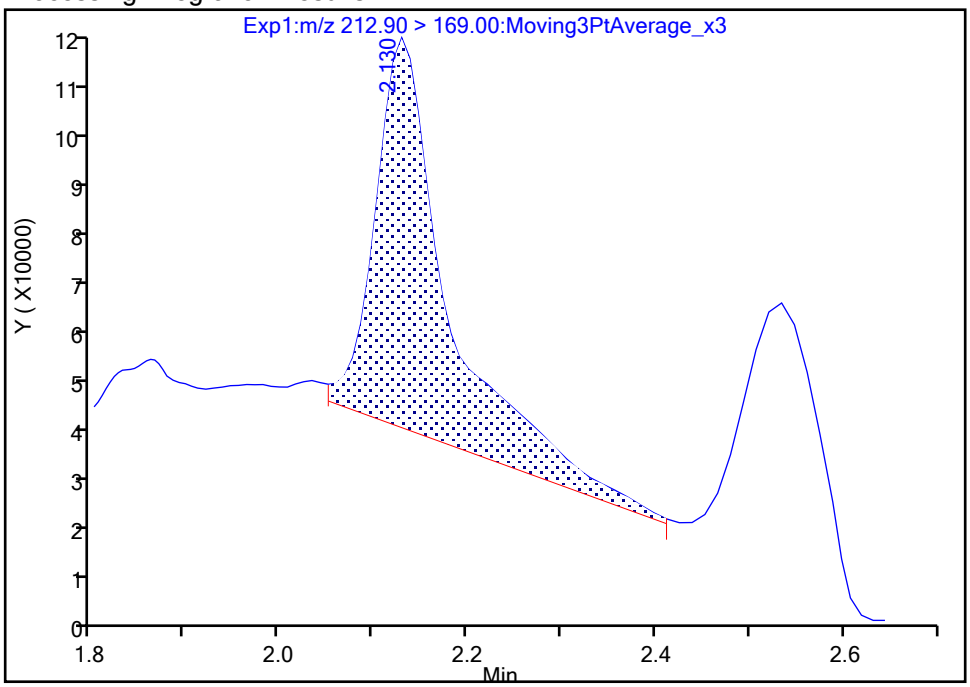
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

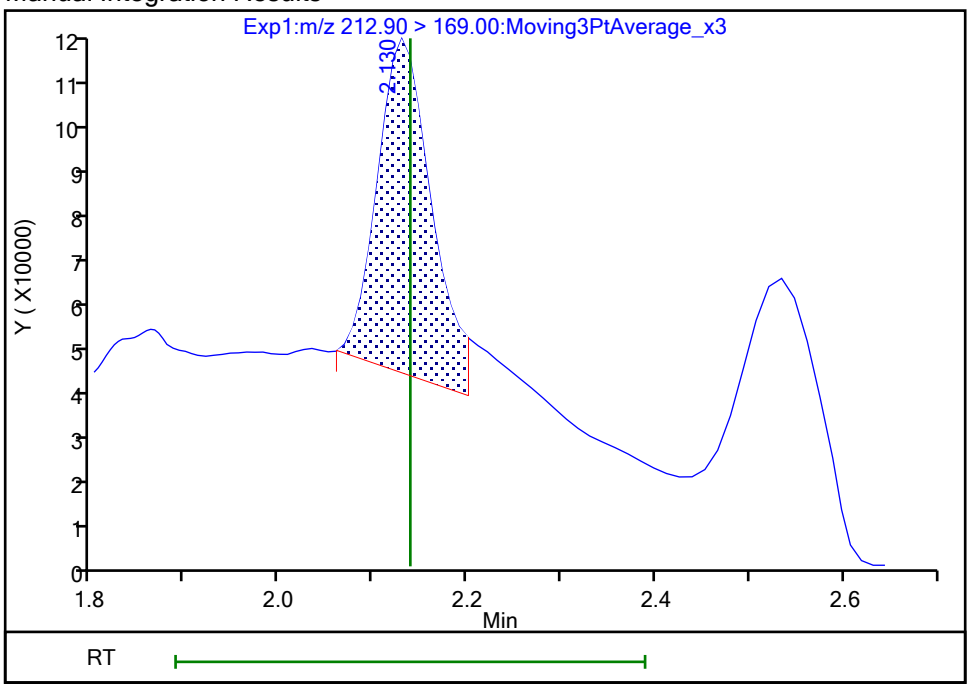
Processing Integration Results

RT: 2.13
Area: 416043
Amount: 0.387086
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 293450
Amount: 0.260979
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

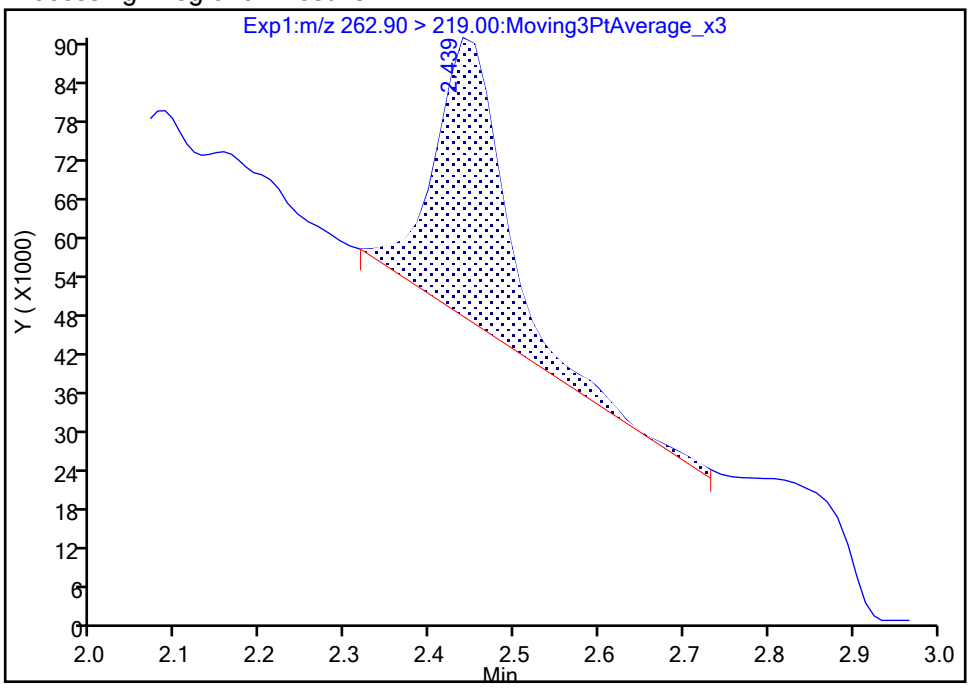
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

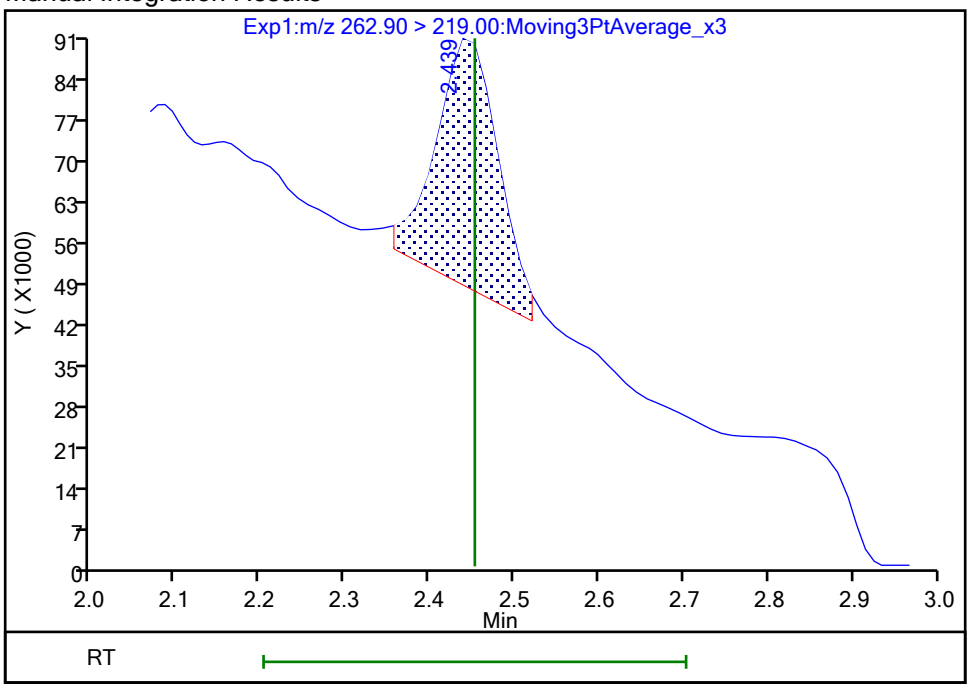
Processing Integration Results

RT: 2.44
Area: 253791
Amount: 0.235806
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 218331
Amount: 0.202859
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

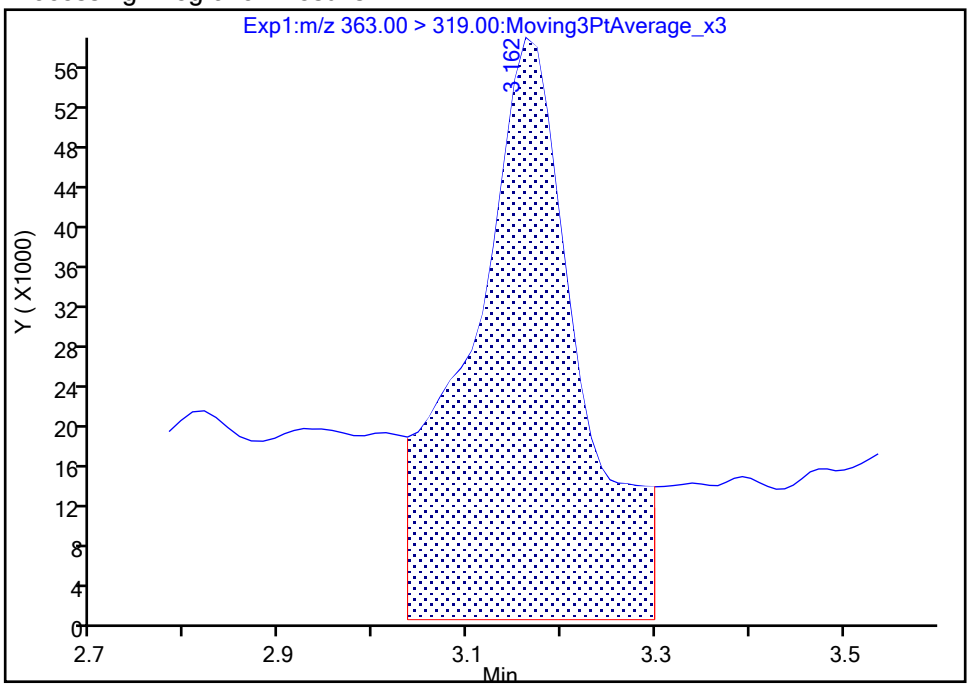
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

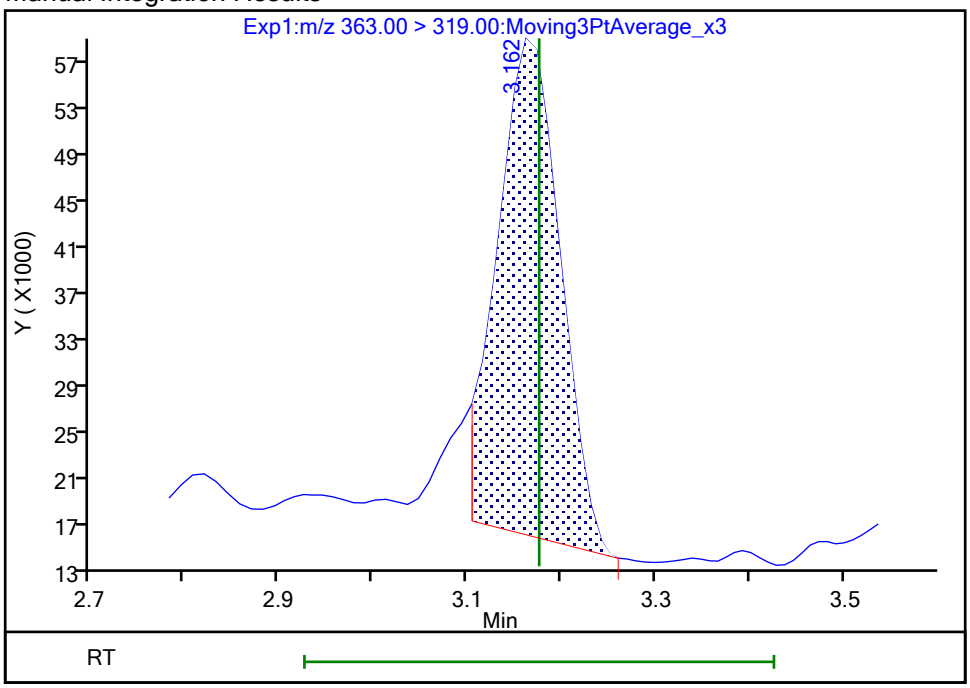
Processing Integration Results

RT: 3.16
Area: 464544
Amount: 0.359933
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 197908
Amount: 0.153341
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:47:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

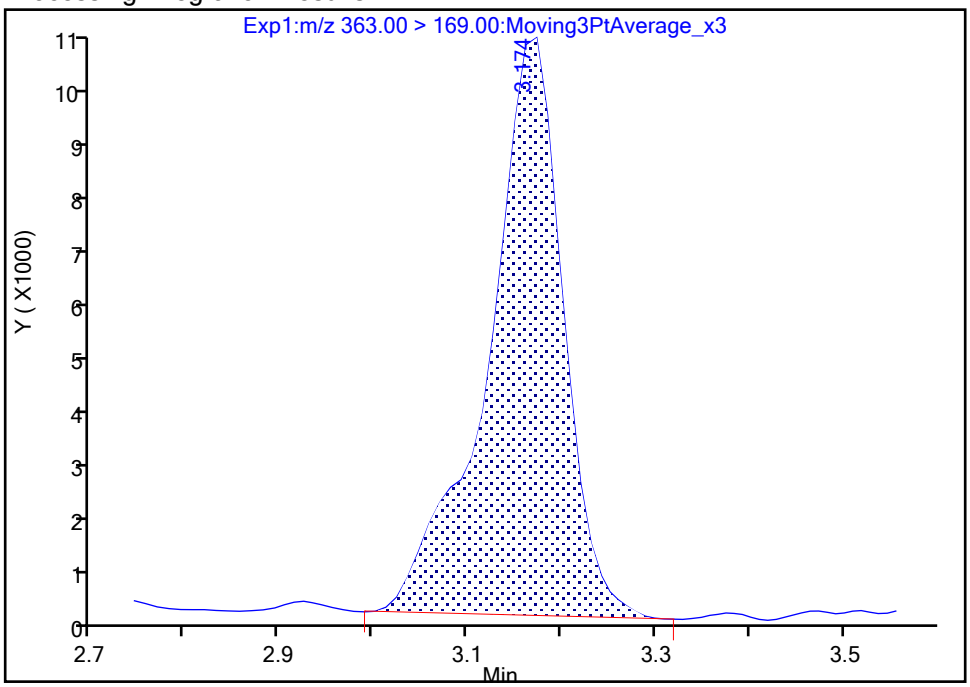
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

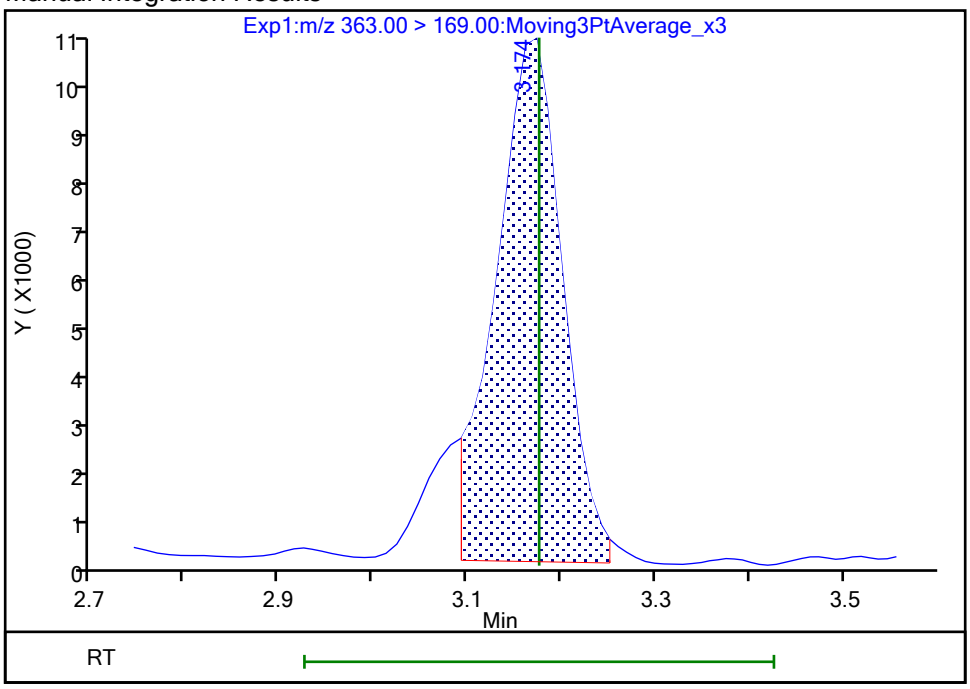
Processing Integration Results

RT: 3.17
Area: 56258
Amount: 0.359933
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 49587
Amount: 0.153341
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:47:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

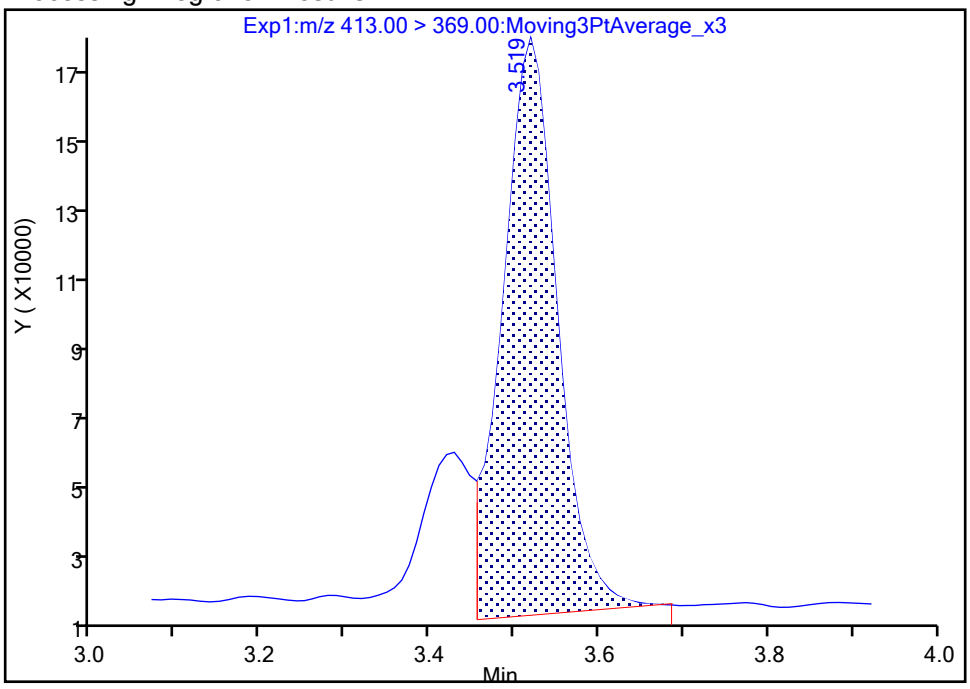
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

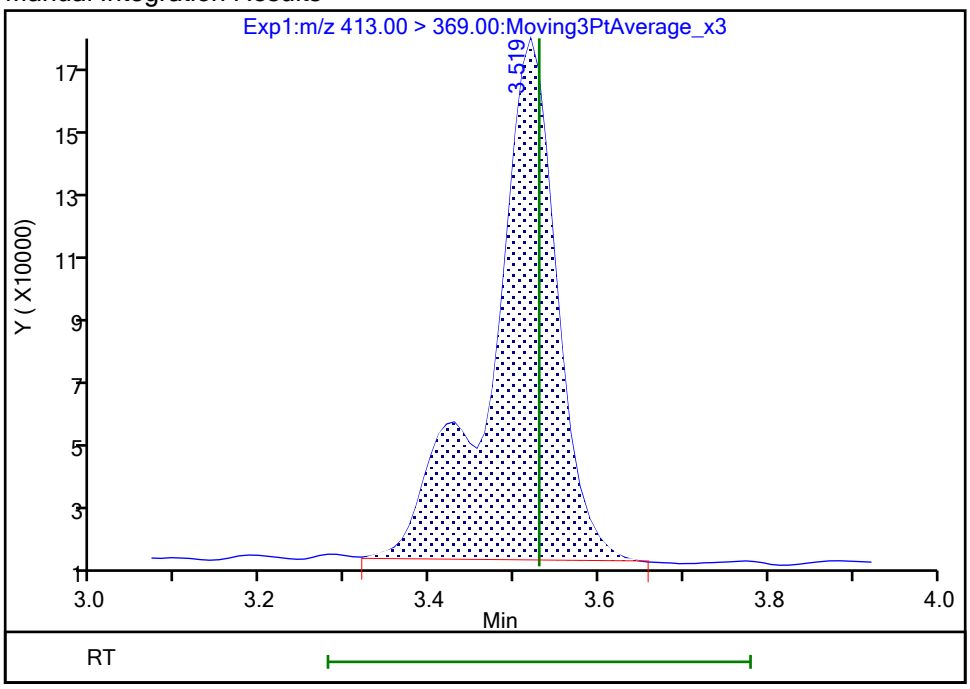
Processing Integration Results

RT: 3.52
Area: 748090
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 875438
Amount: 0.598044
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:48:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

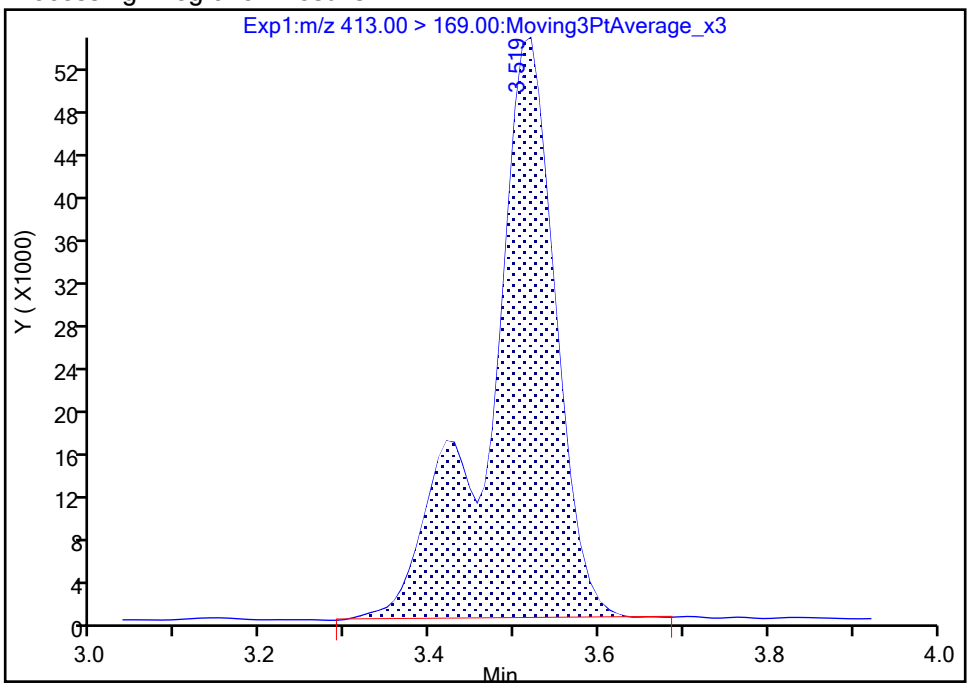
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

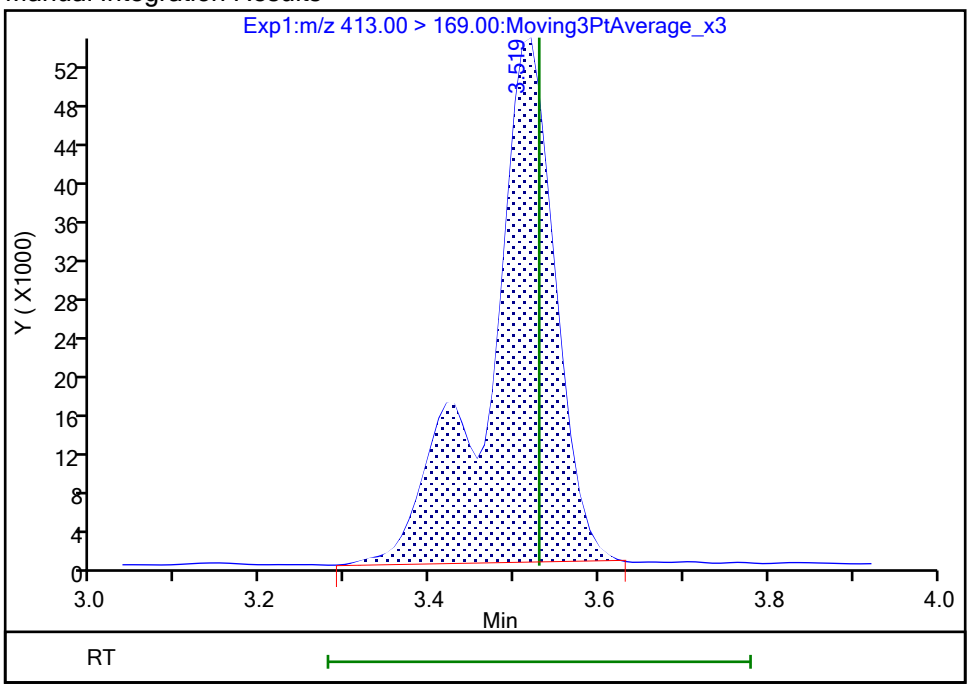
Processing Integration Results

RT: 3.52
Area: 300643
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 299076
Amount: 0.598044
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:48:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

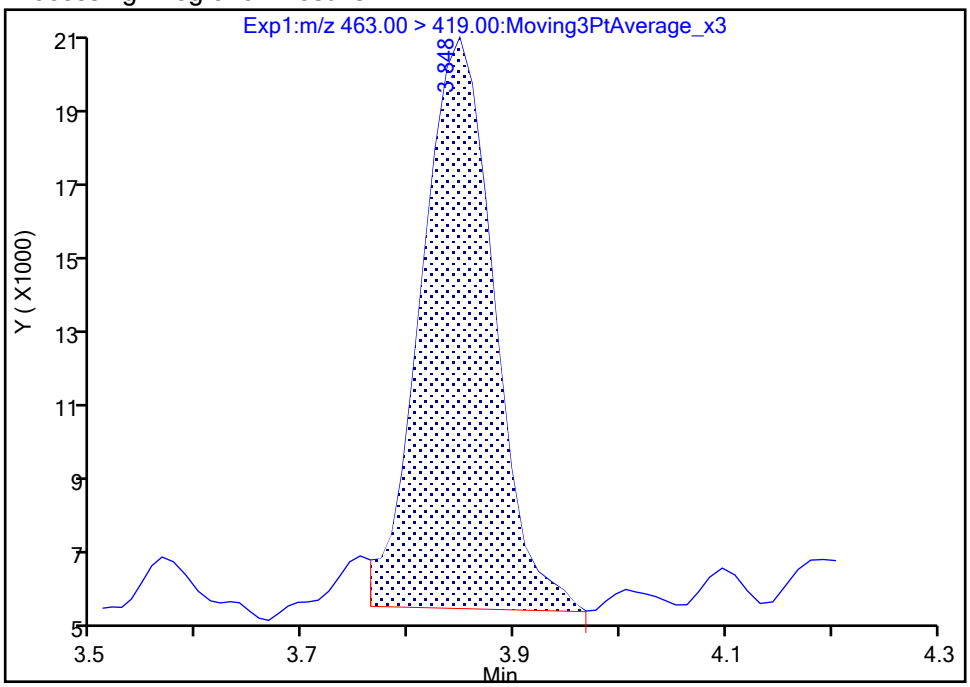
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

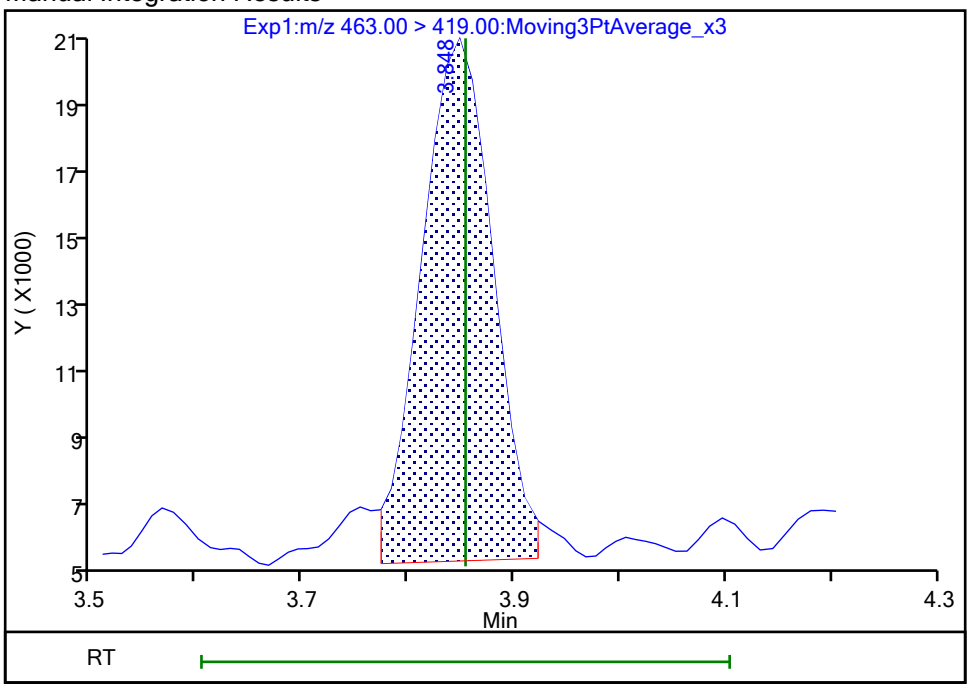
Processing Integration Results

RT: 3.85
Area: 68519
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 67770
Amount: 0.050492
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:49:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

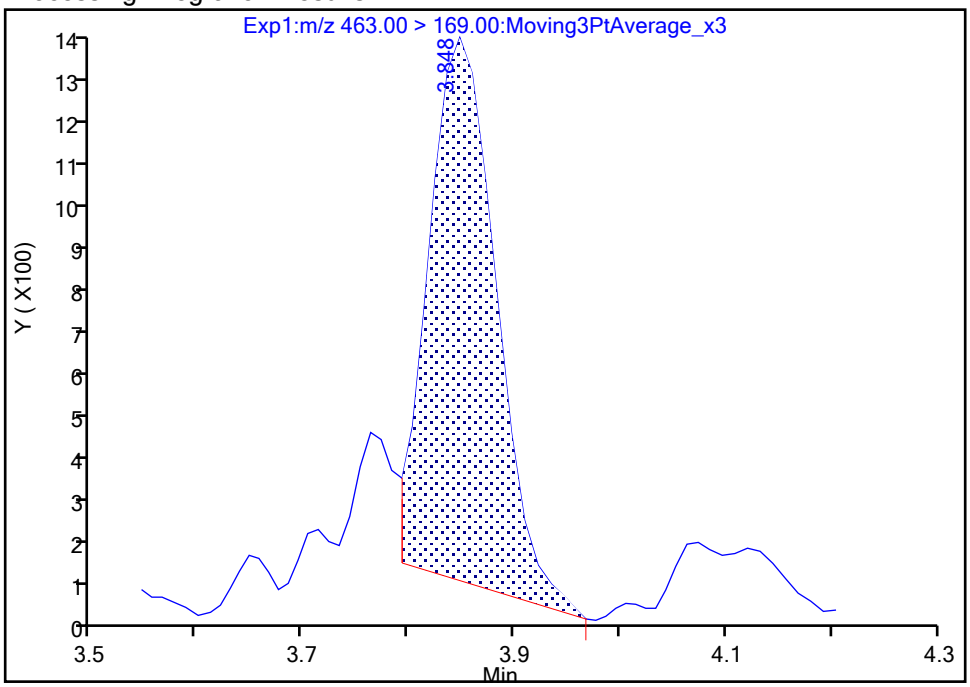
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

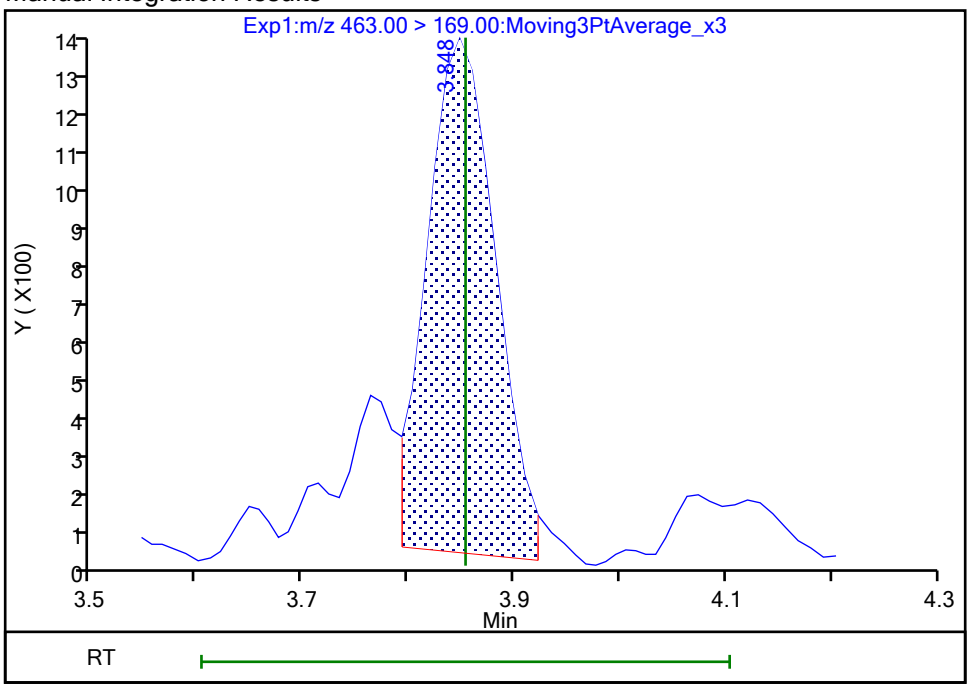
Processing Integration Results

RT: 3.85
Area: 5440
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 5716
Amount: 0.050492
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:49:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

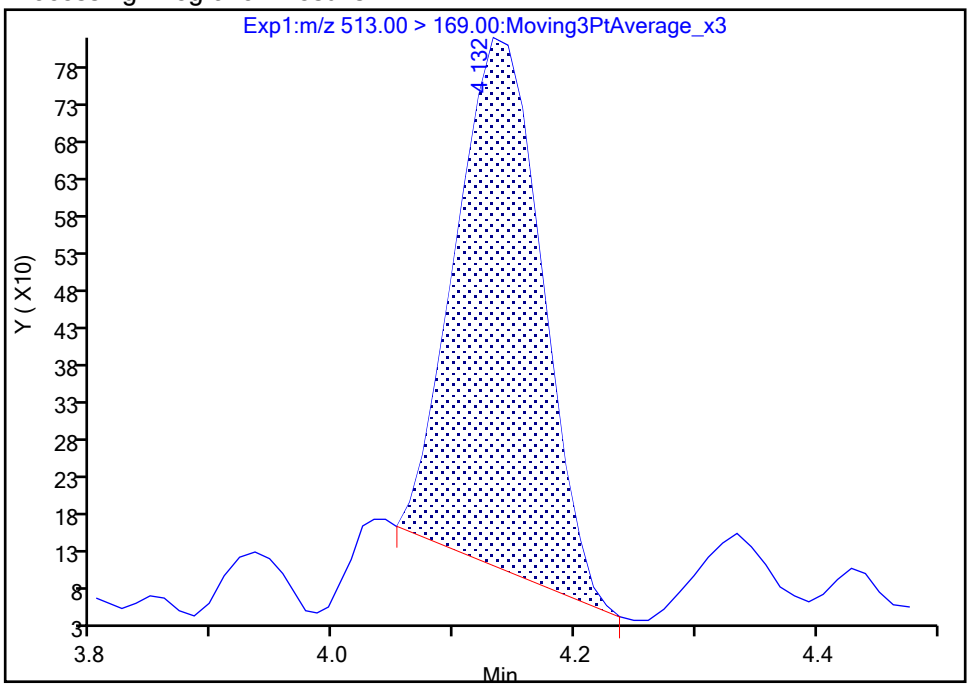
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

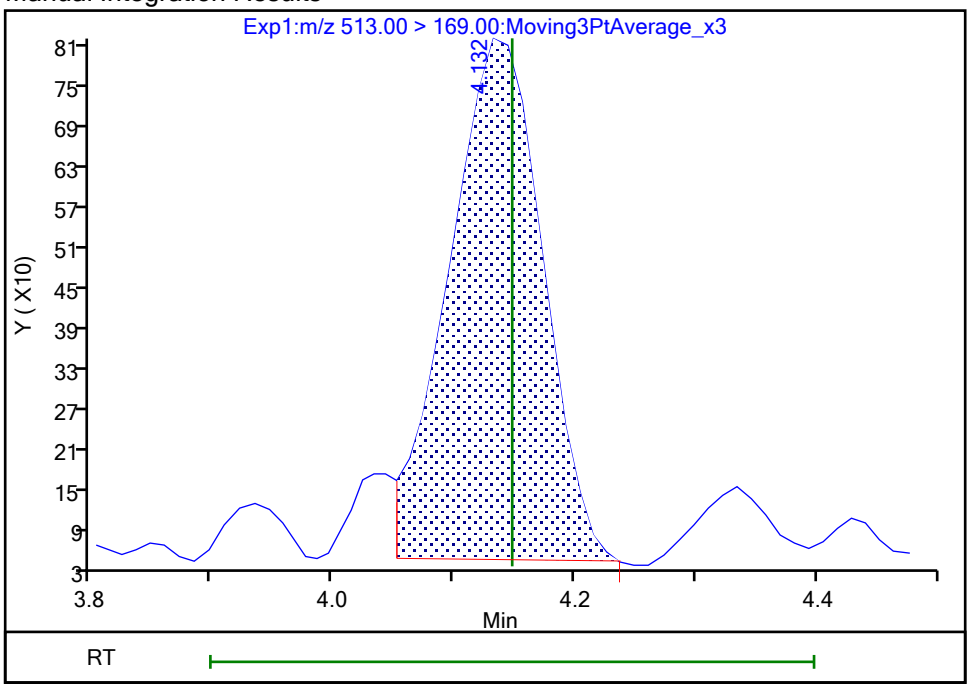
Processing Integration Results

RT: 4.13
Area: 3554
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 4199
Amount: 0.027559
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

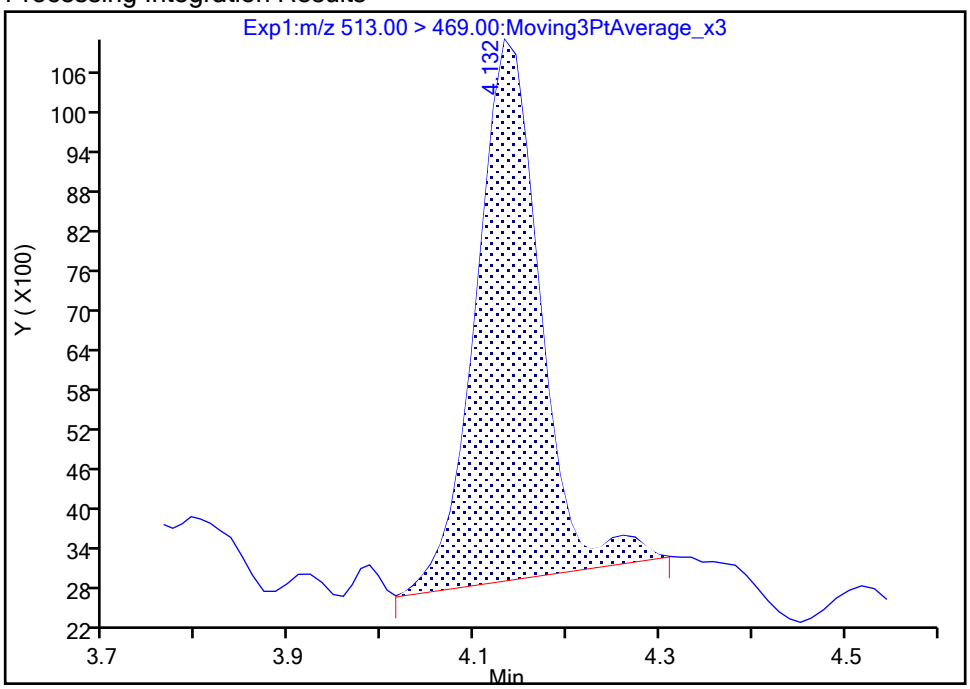
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

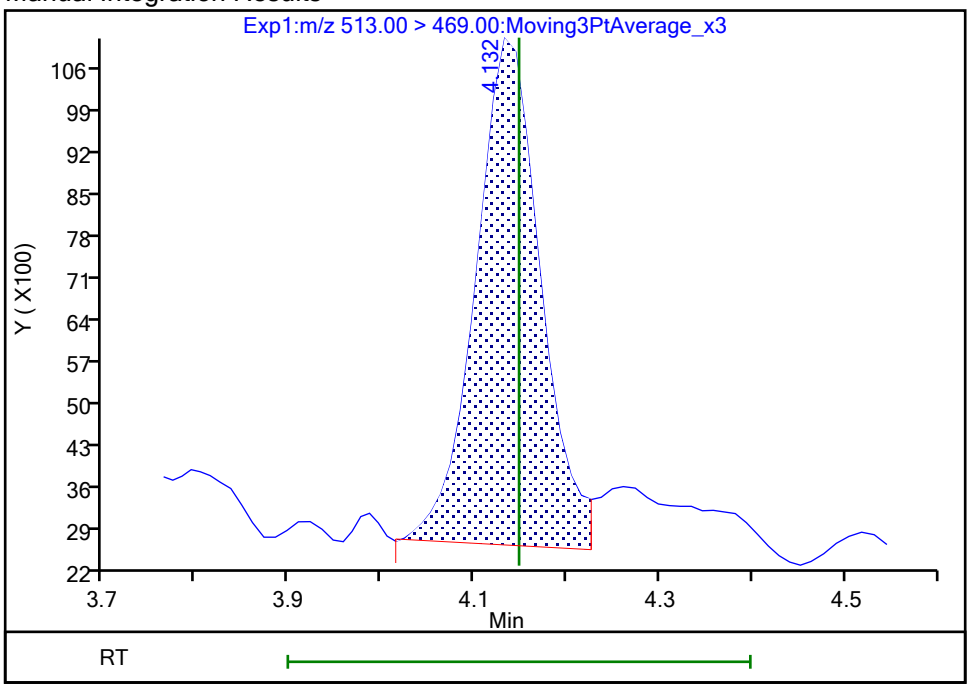
Processing Integration Results

RT: 4.13
Area: 39032
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 41172
Amount: 0.027559
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:38:06 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

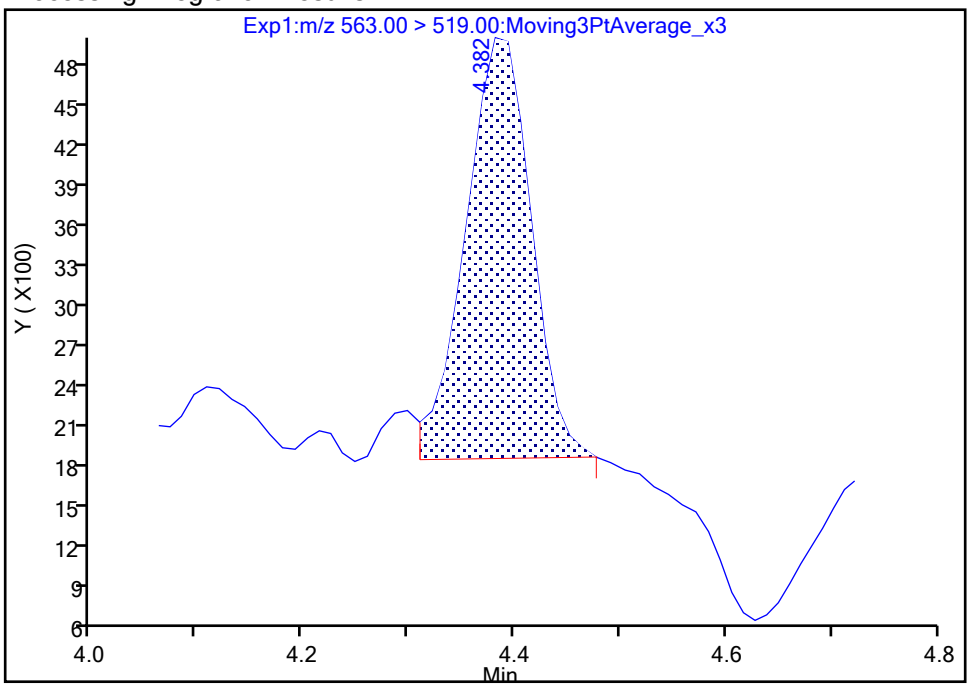
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

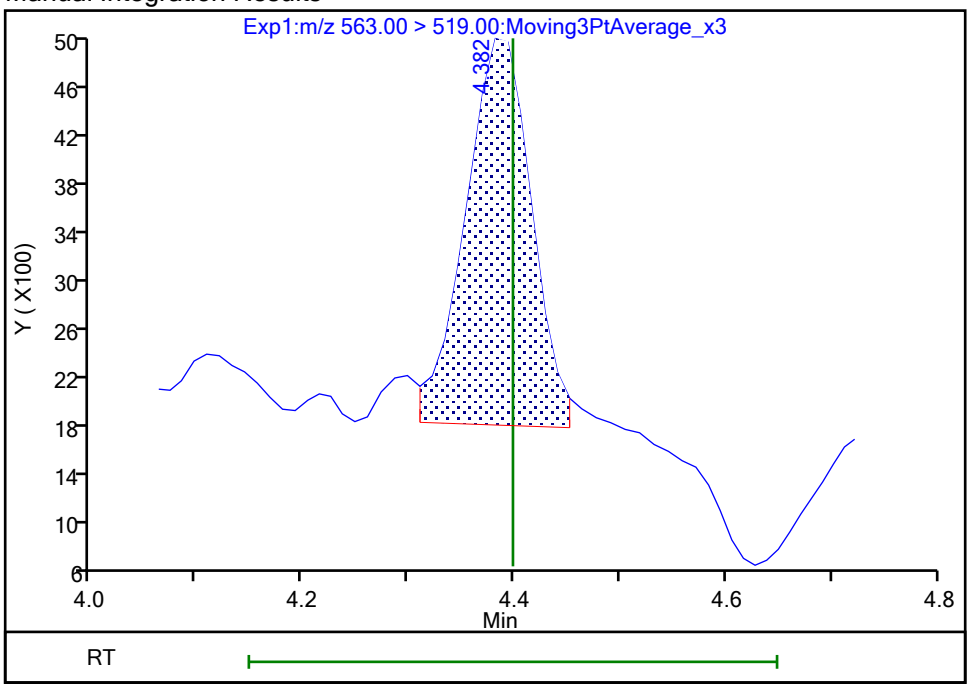
Processing Integration Results

RT: 4.38
Area: 13494
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.38
Area: 13811
Amount: 0.009611
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:51:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

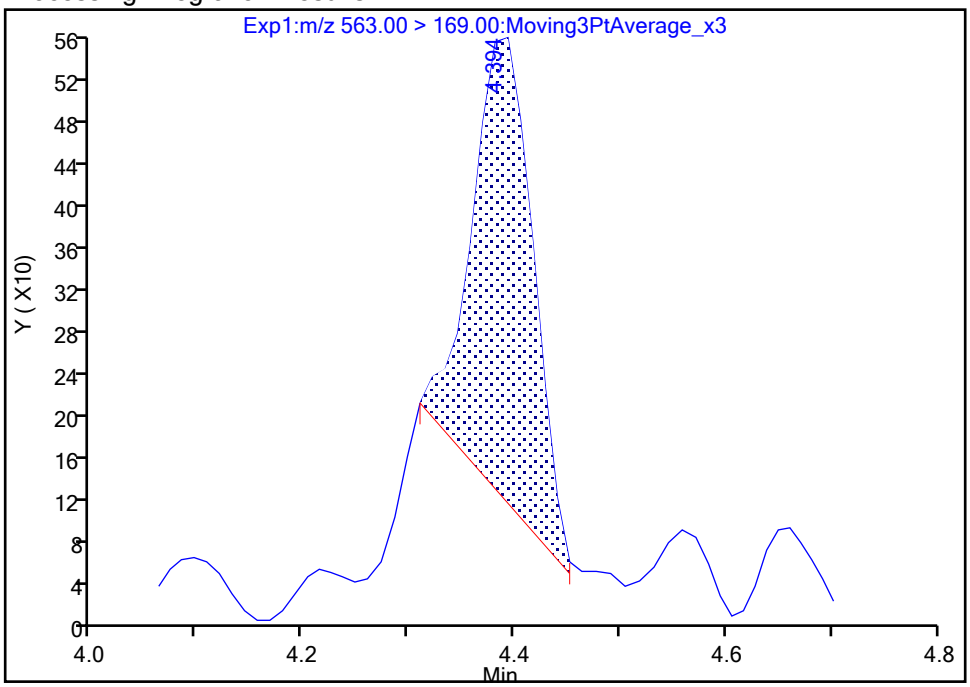
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

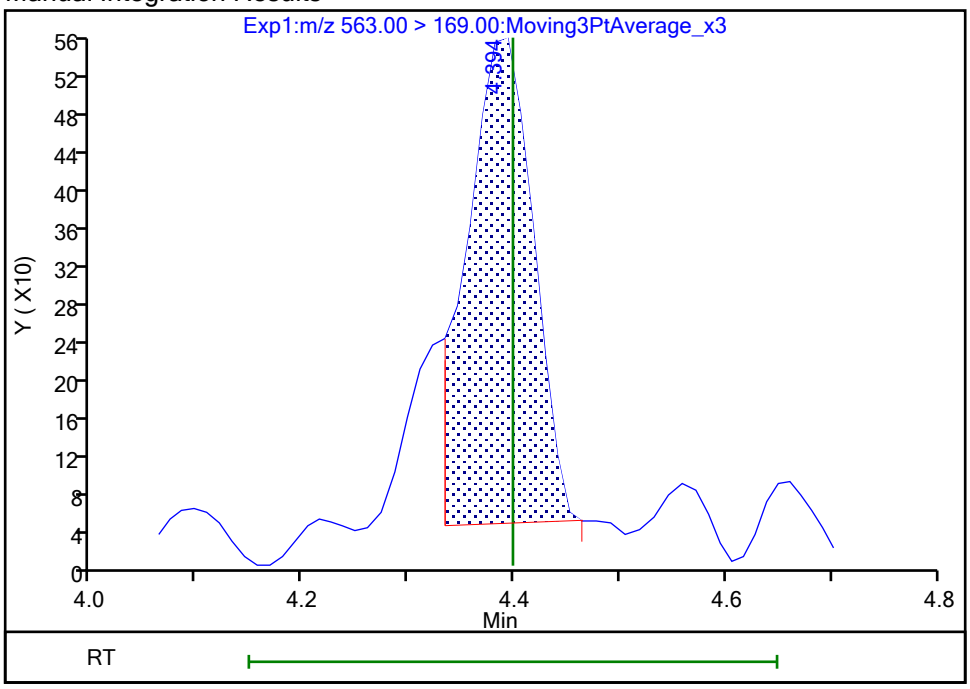
Processing Integration Results

RT: 4.39
Area: 1743
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2174
Amount: 0.009611
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:51:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

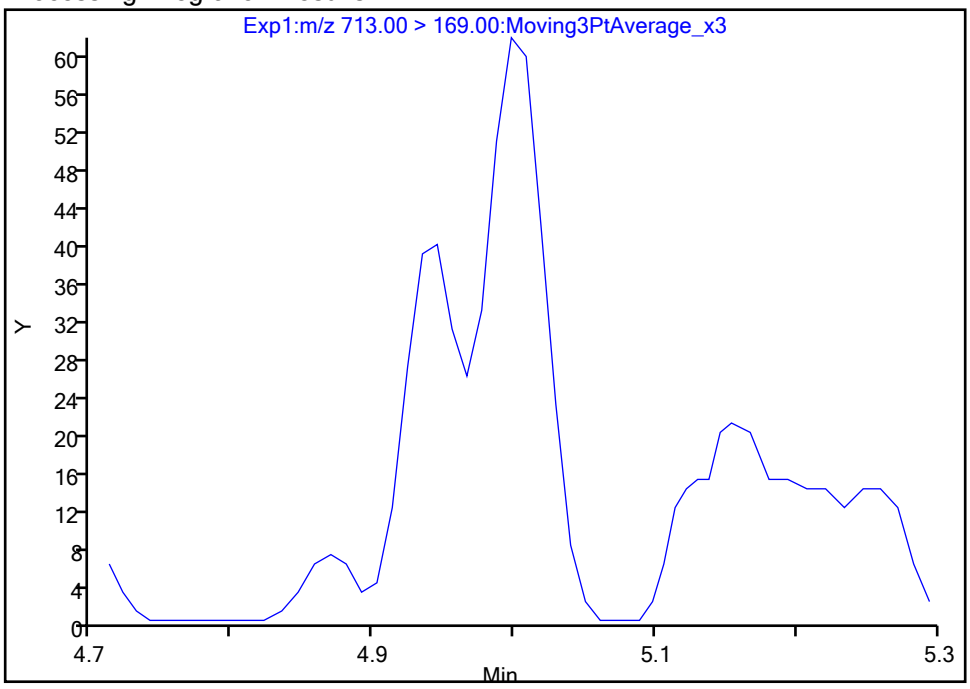
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

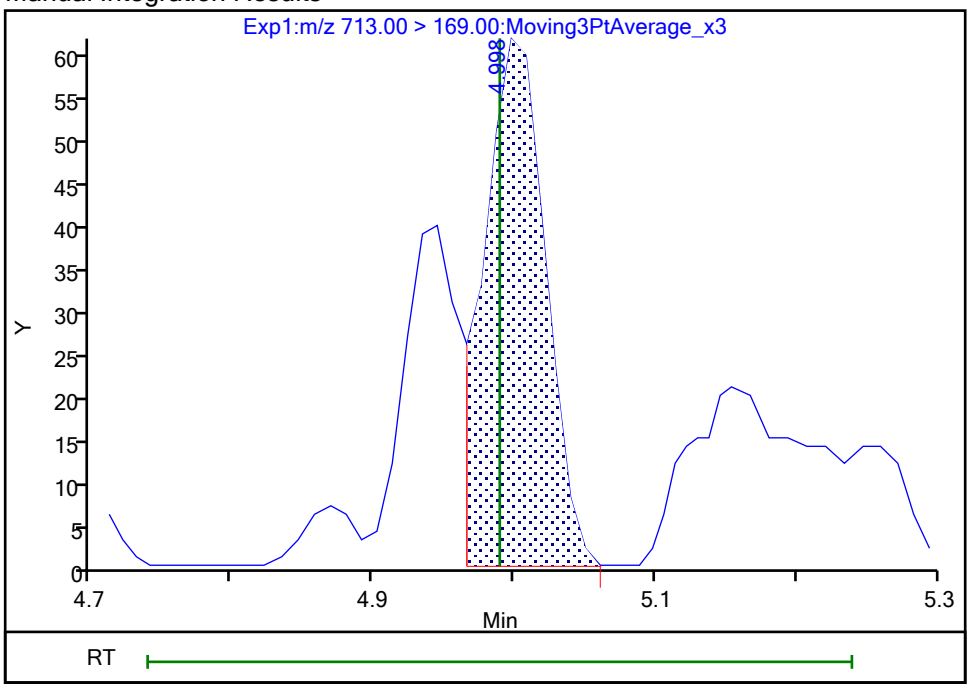
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 5.00
Area: 185
Amount: 0.001280
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:52:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

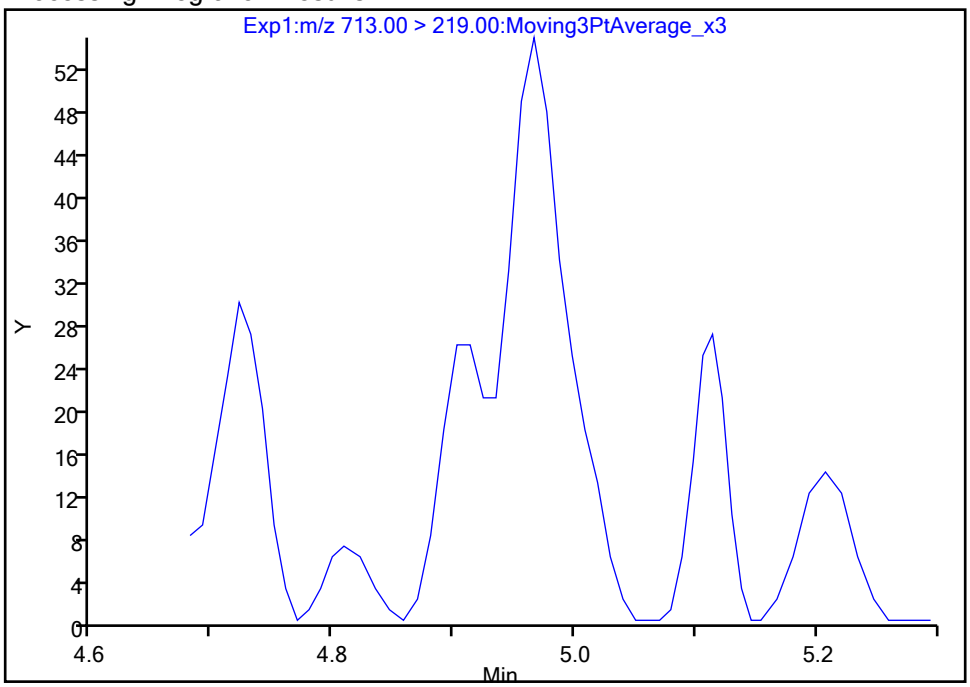
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

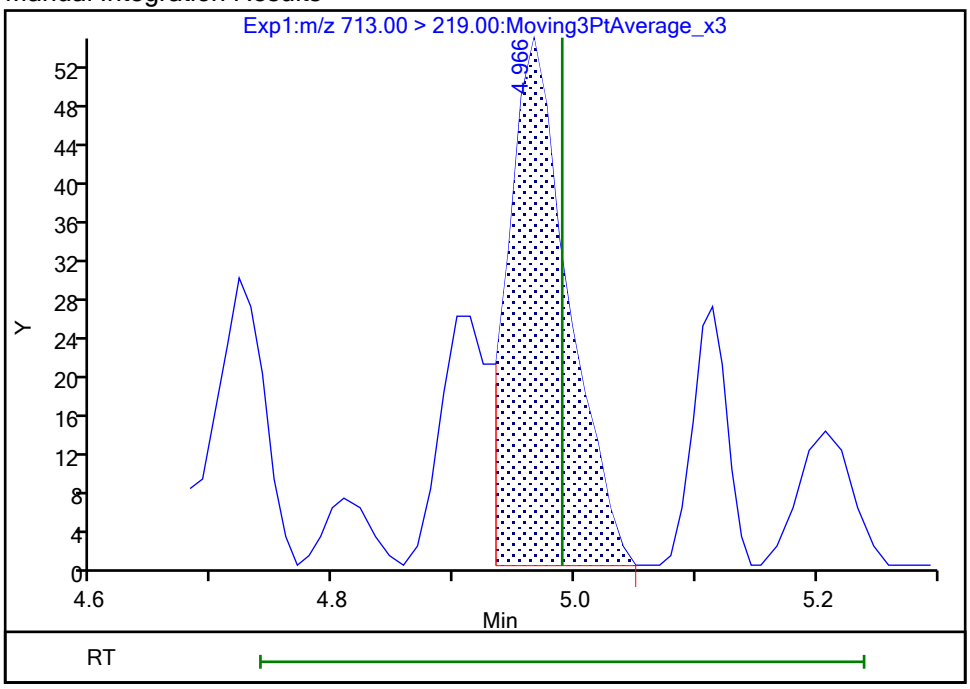
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 185
Amount: 0.001280
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:52:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

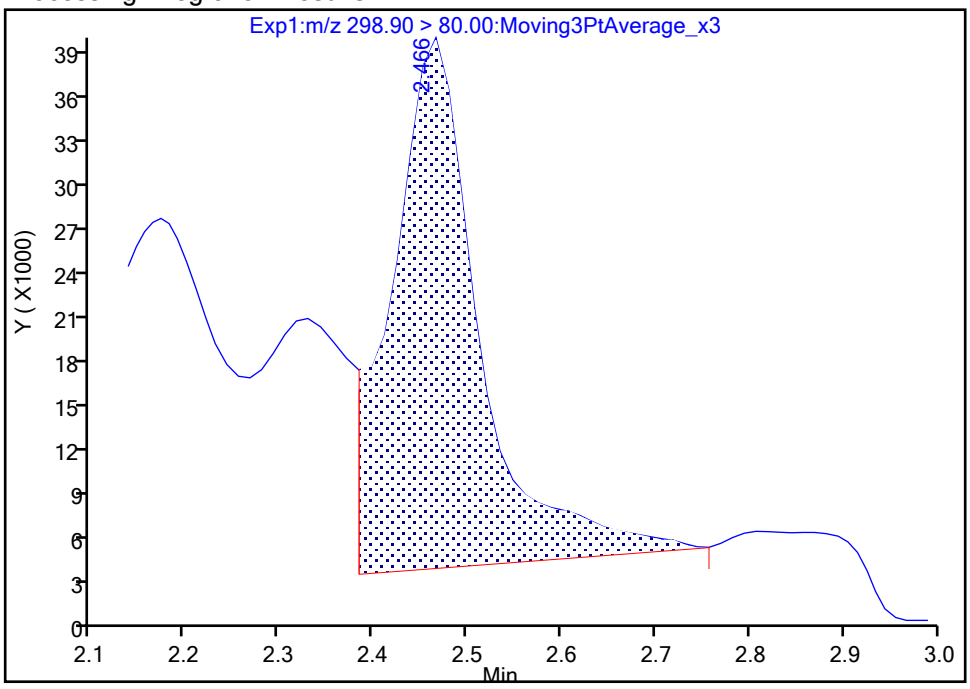
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

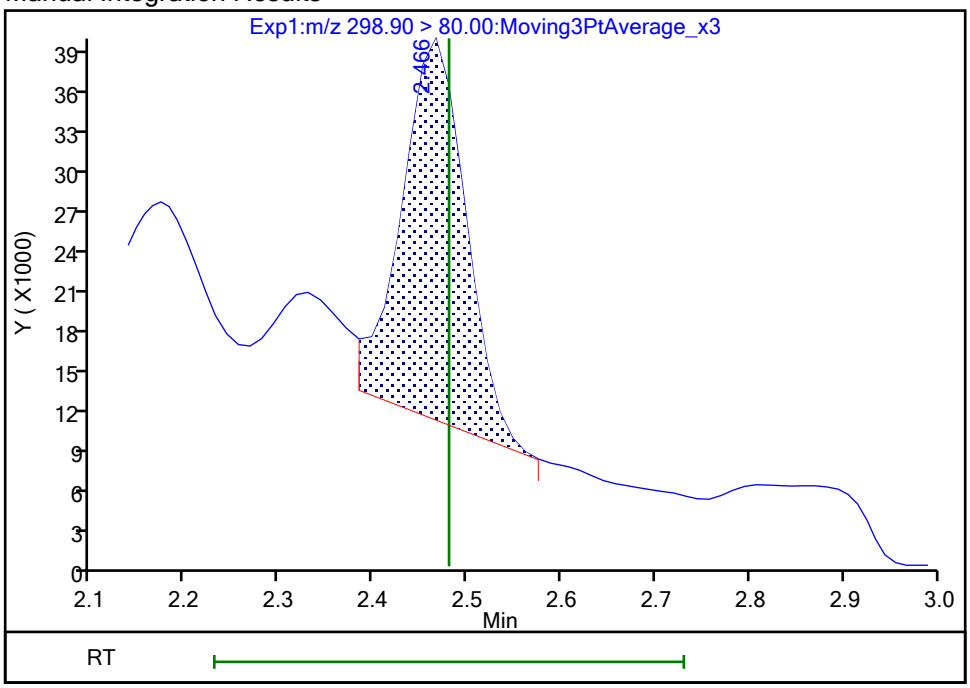
Processing Integration Results

RT: 2.47
Area: 231597
Amount: 0.150493
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 134192
Amount: 0.087199
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:46:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

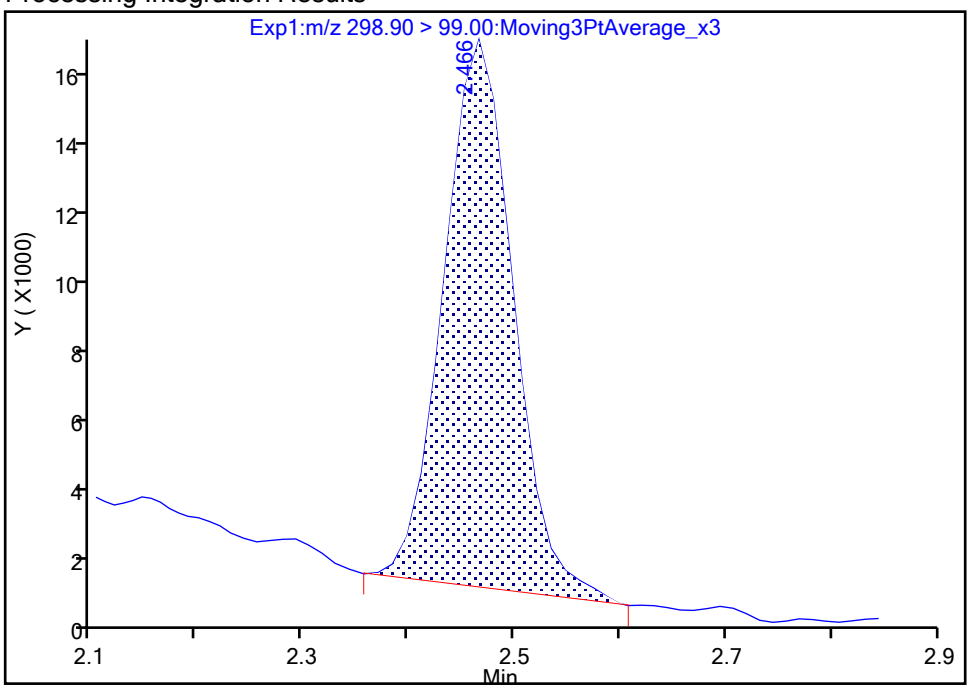
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

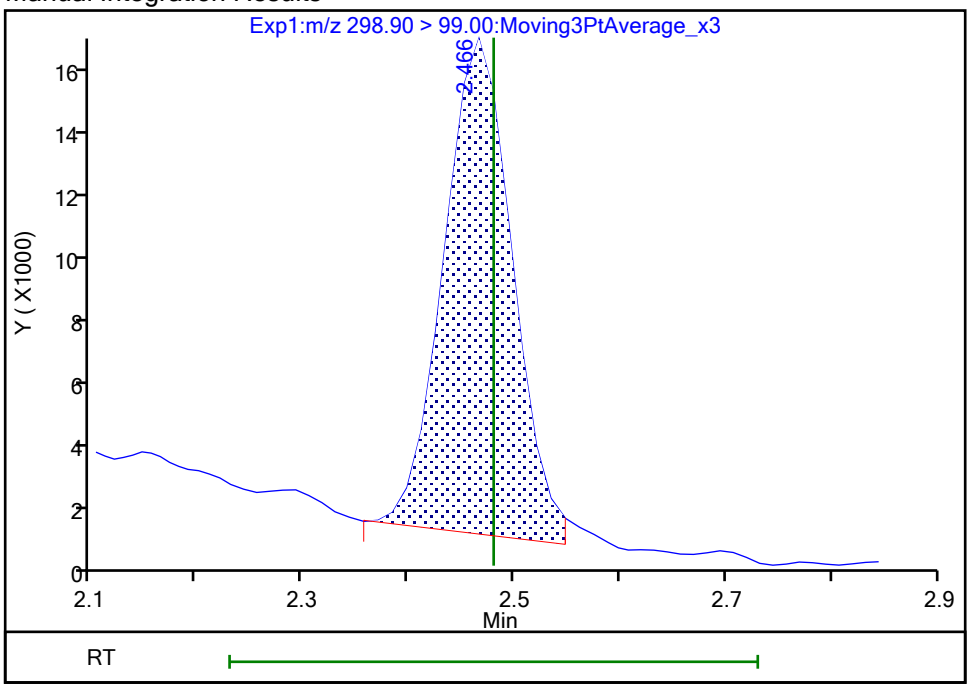
Processing Integration Results

RT: 2.47
Area: 65394
Amount: 0.150493
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 64250
Amount: 0.087199
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:46:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

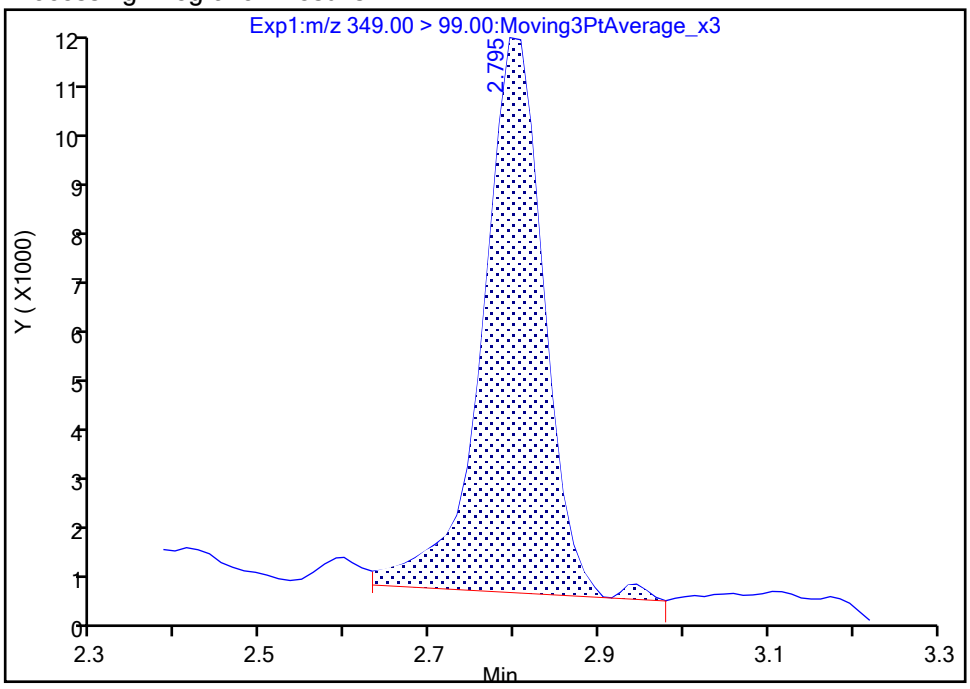
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

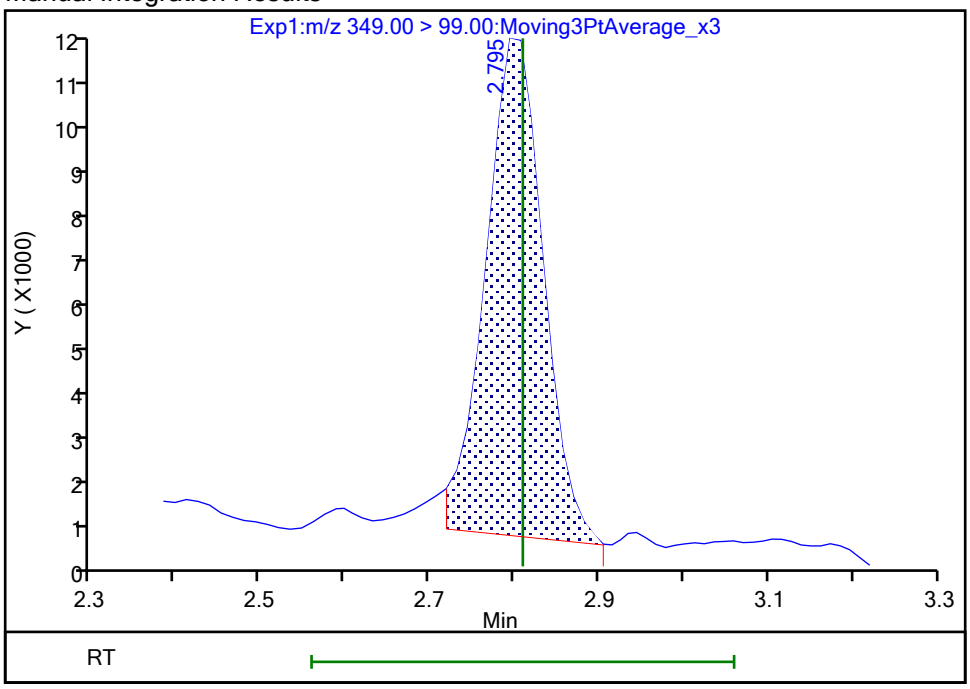
Processing Integration Results

RT: 2.79
Area: 51586
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 47279
Amount: 0.081633
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:46:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

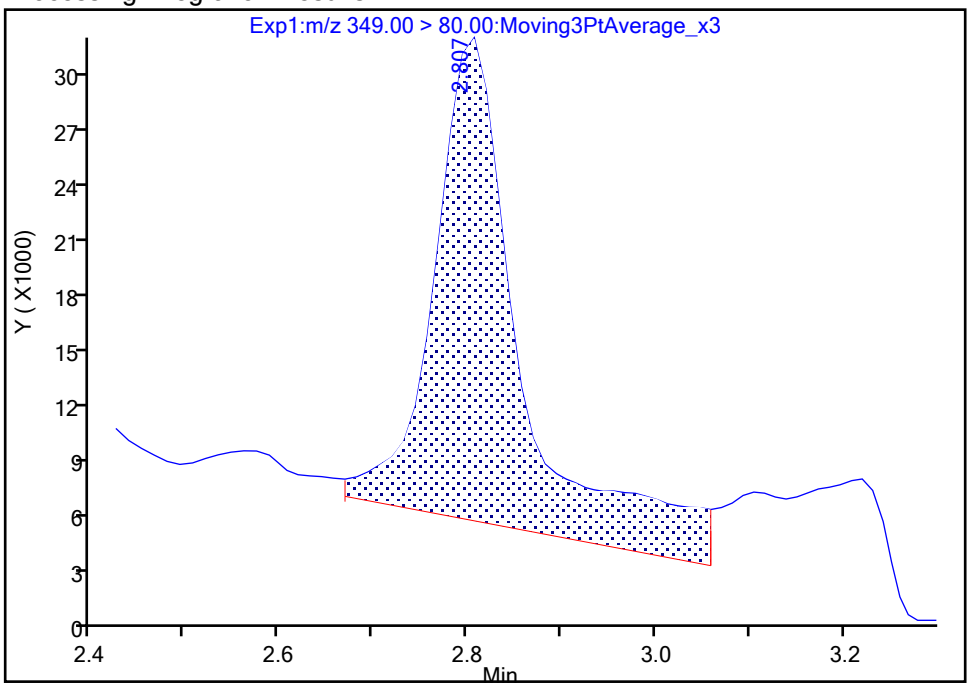
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

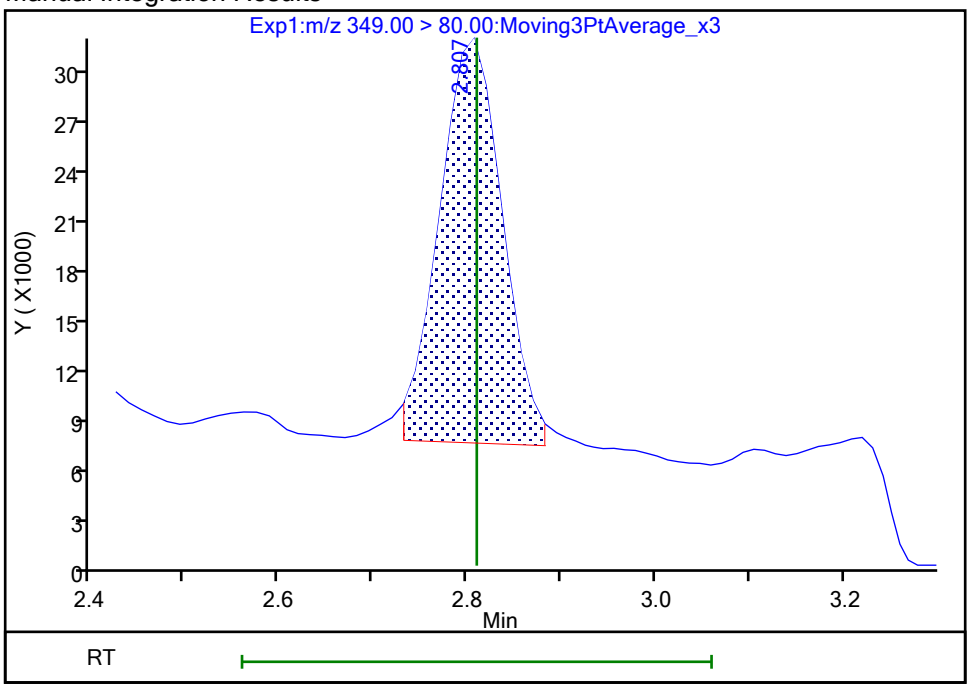
Processing Integration Results

RT: 2.81
Area: 167200
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 110532
Amount: 0.081633
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:46:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

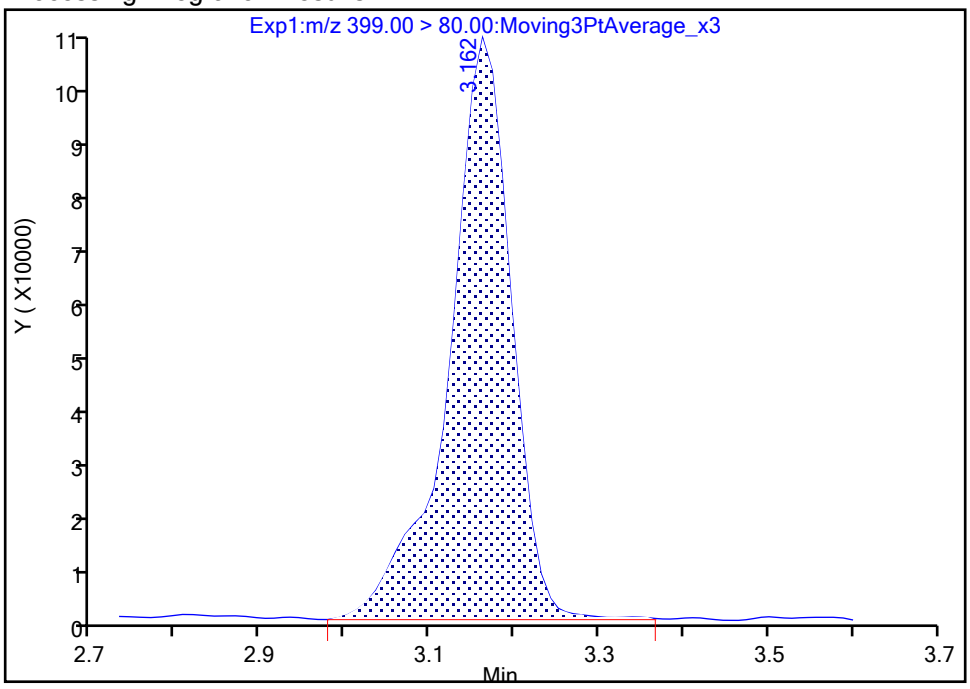
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

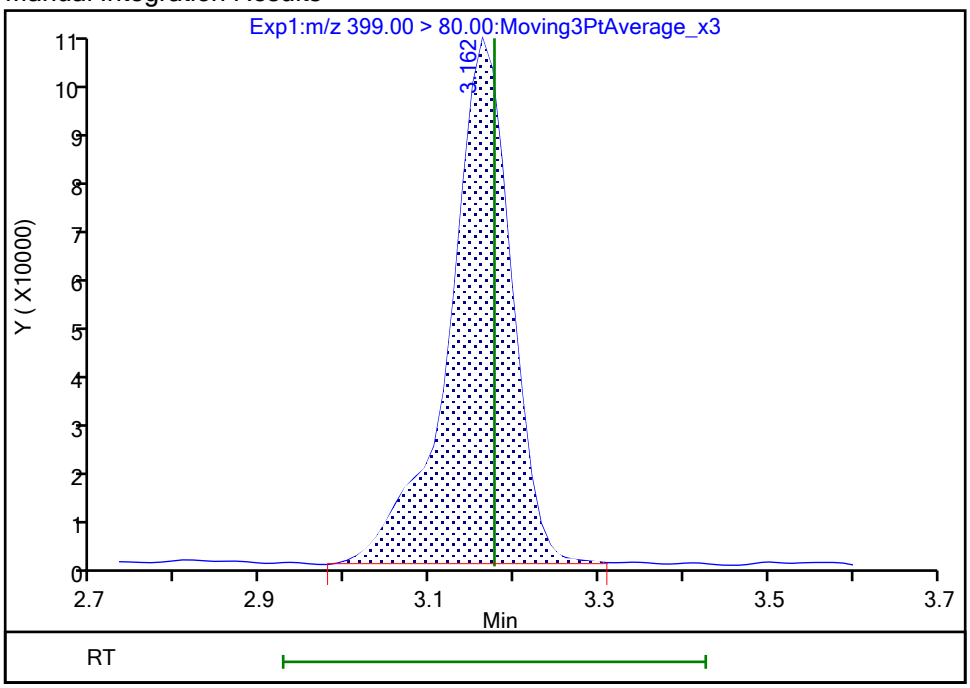
Processing Integration Results

RT: 3.16
Area: 548296
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 545504
Amount: 0.475272
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:47:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

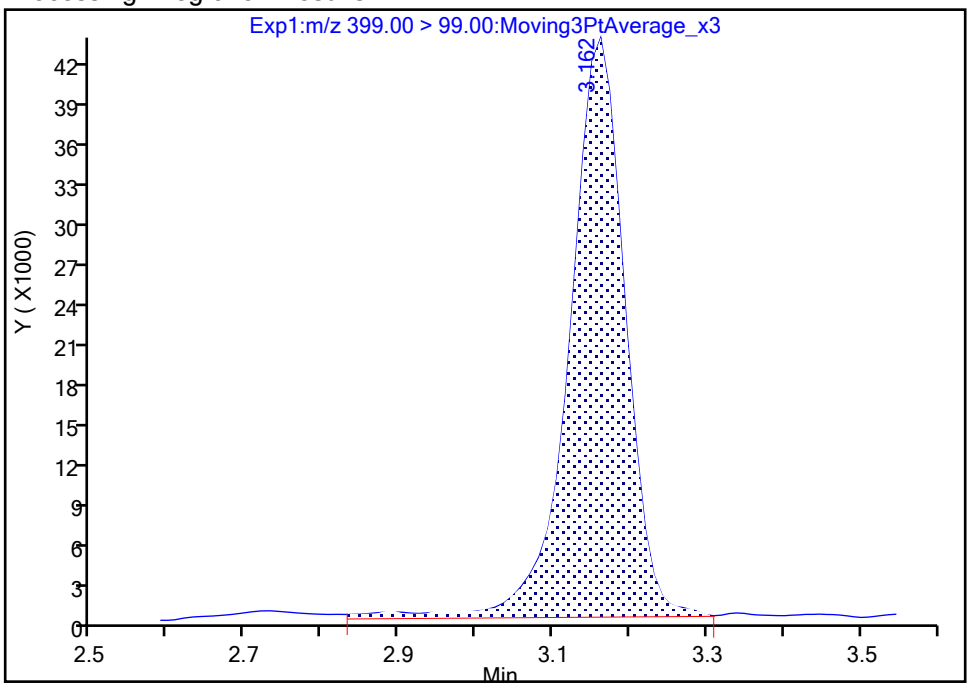
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

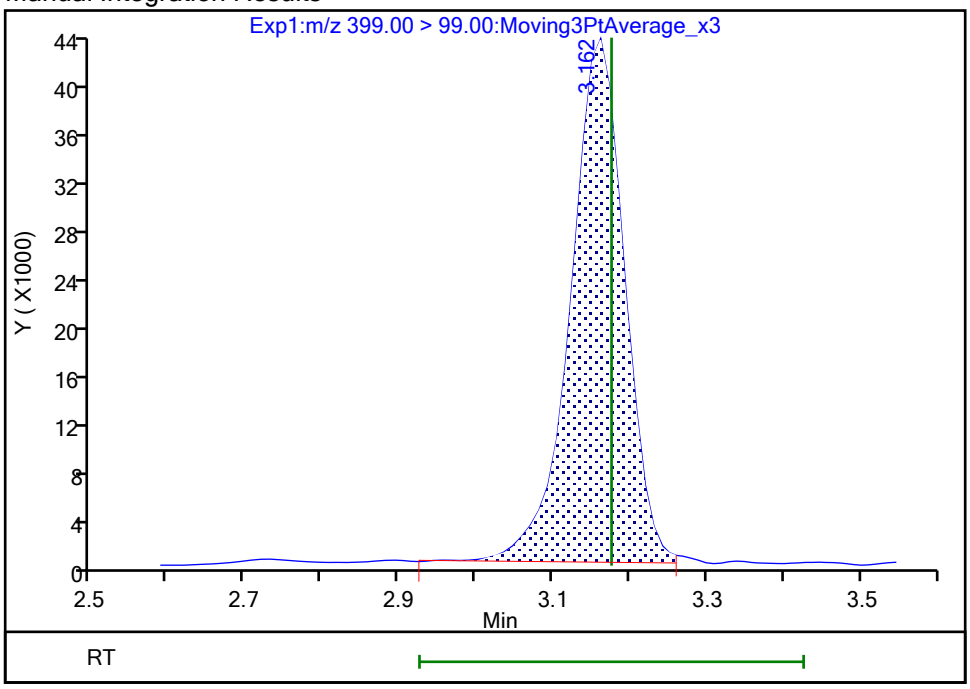
Processing Integration Results

RT: 3.16
Area: 218896
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 210019
Amount: 0.475272
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:47:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

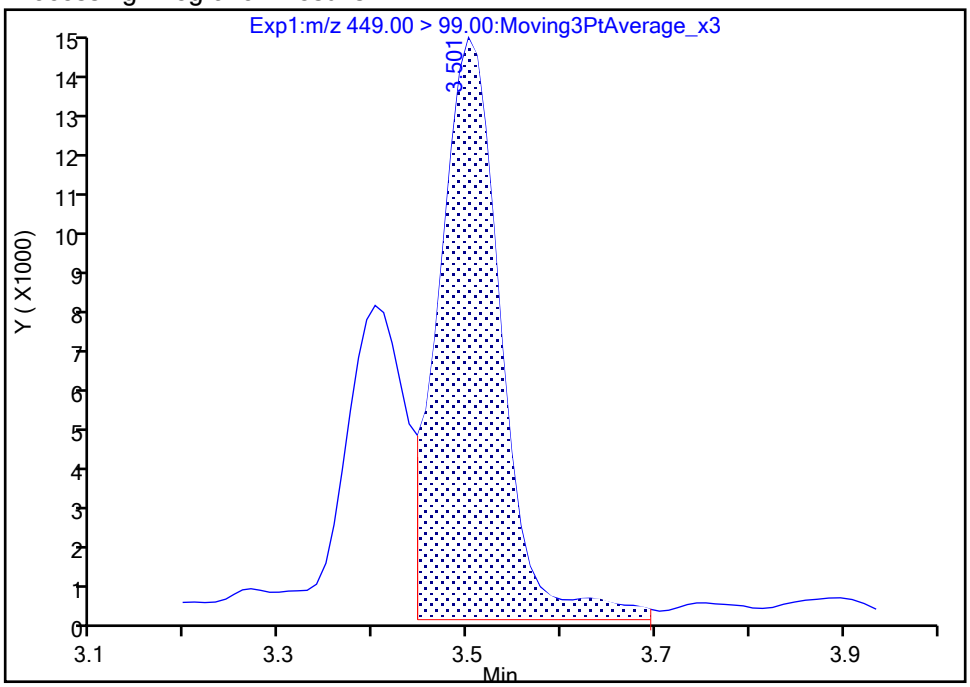
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

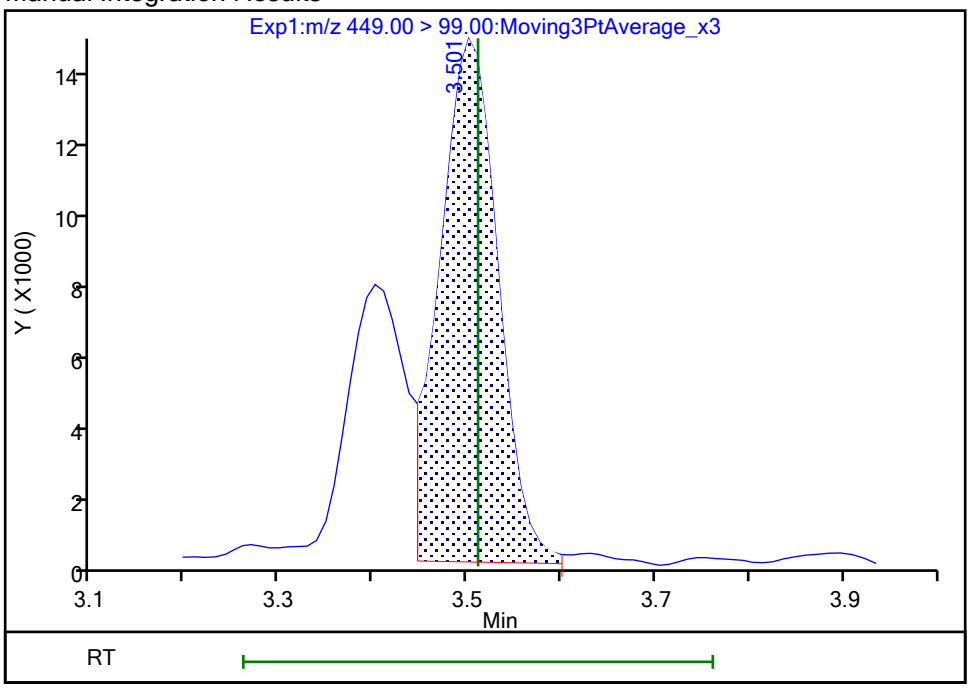
Processing Integration Results

RT: 3.50
Area: 65507
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 60313
Amount: 0.215901
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:37:29 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

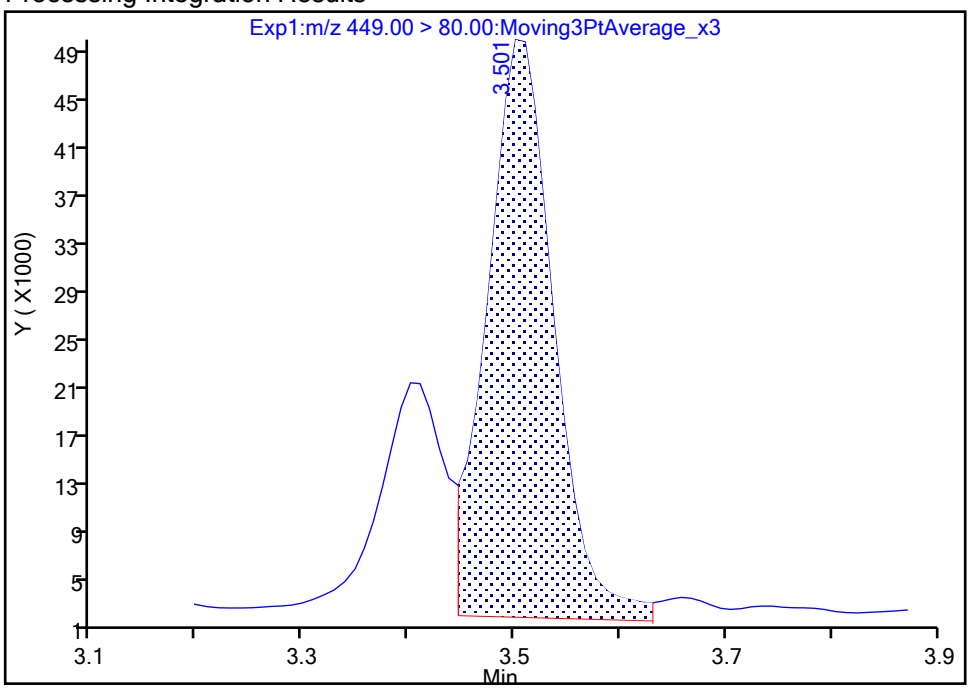
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

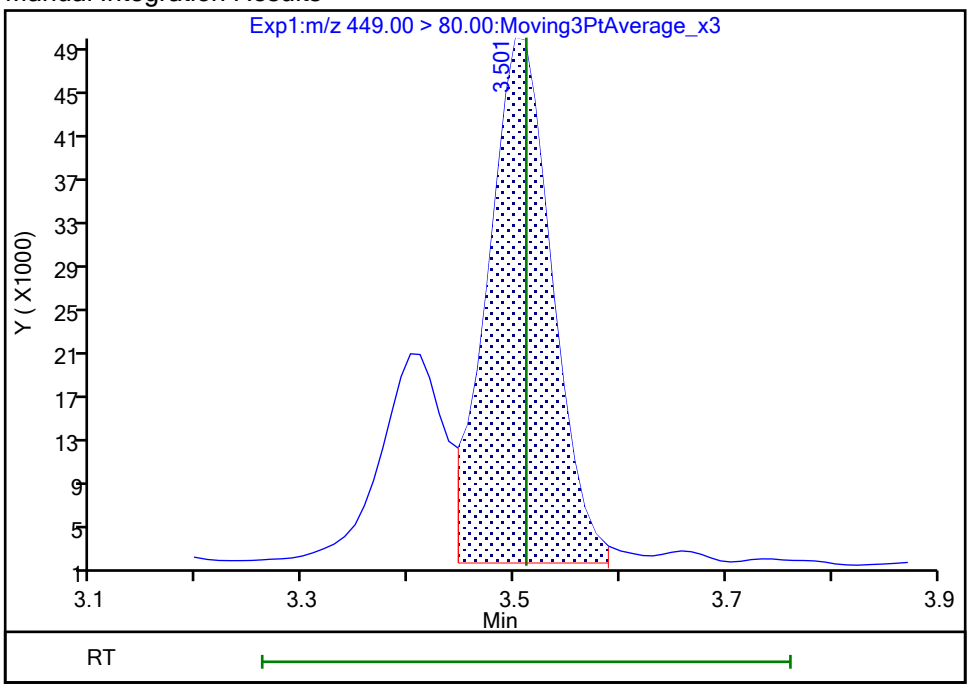
Processing Integration Results

RT: 3.50
Area: 210025
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 199897
Amount: 0.215901
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:37:41 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

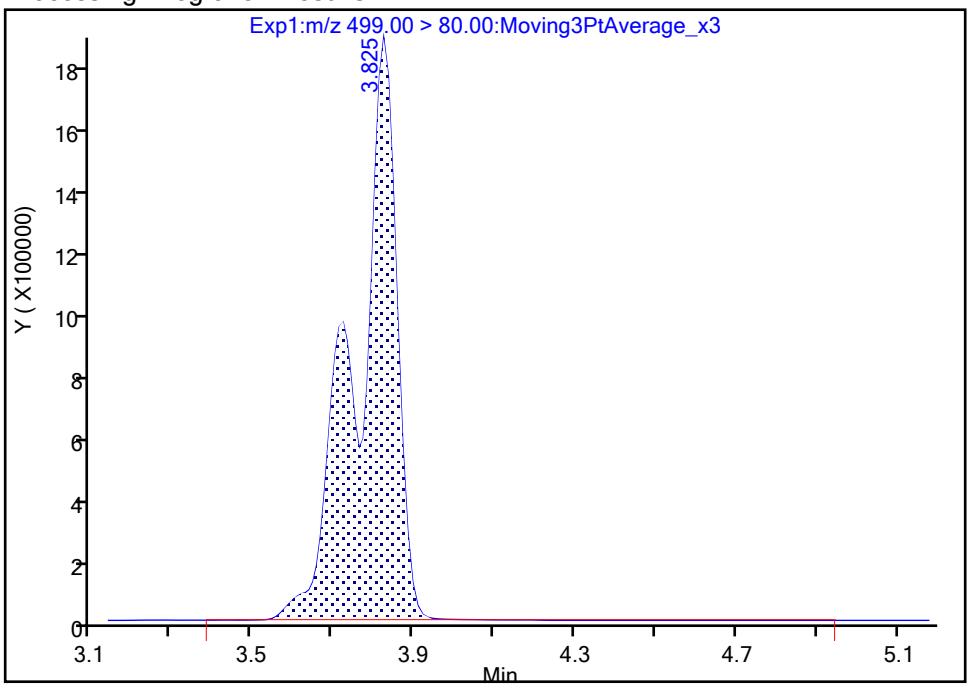
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

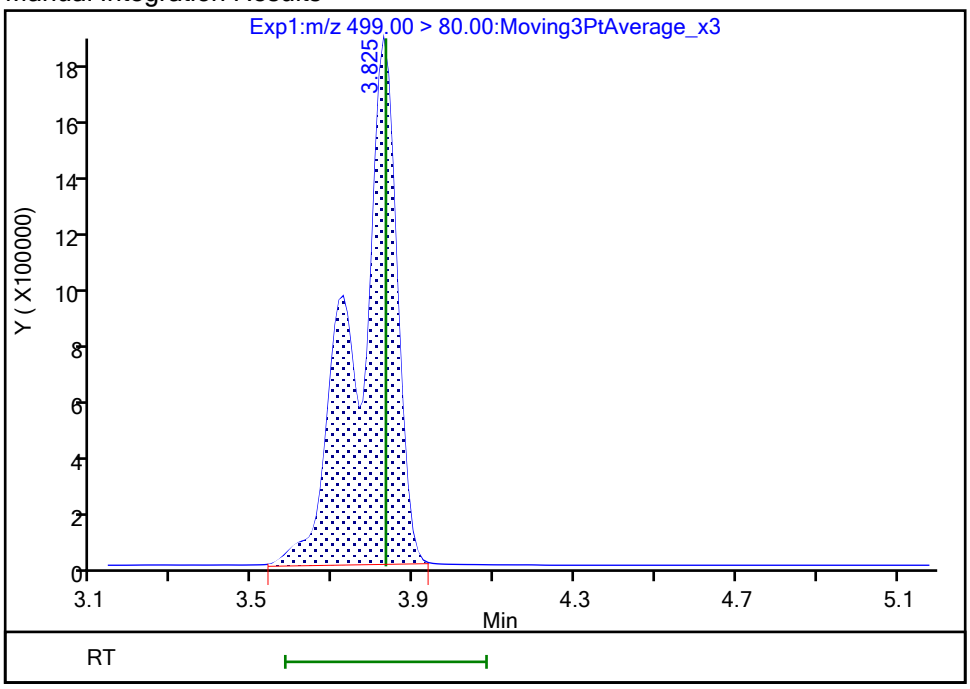
Processing Integration Results

RT: 3.82
Area: 13175583
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 13099704
Amount: 17.530212
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:49:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

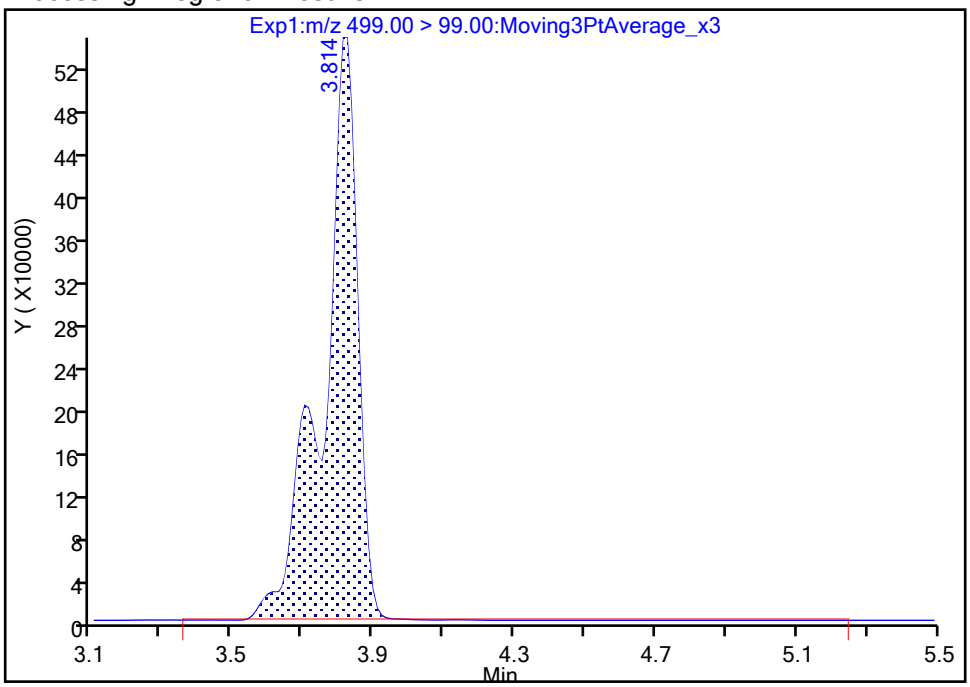
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

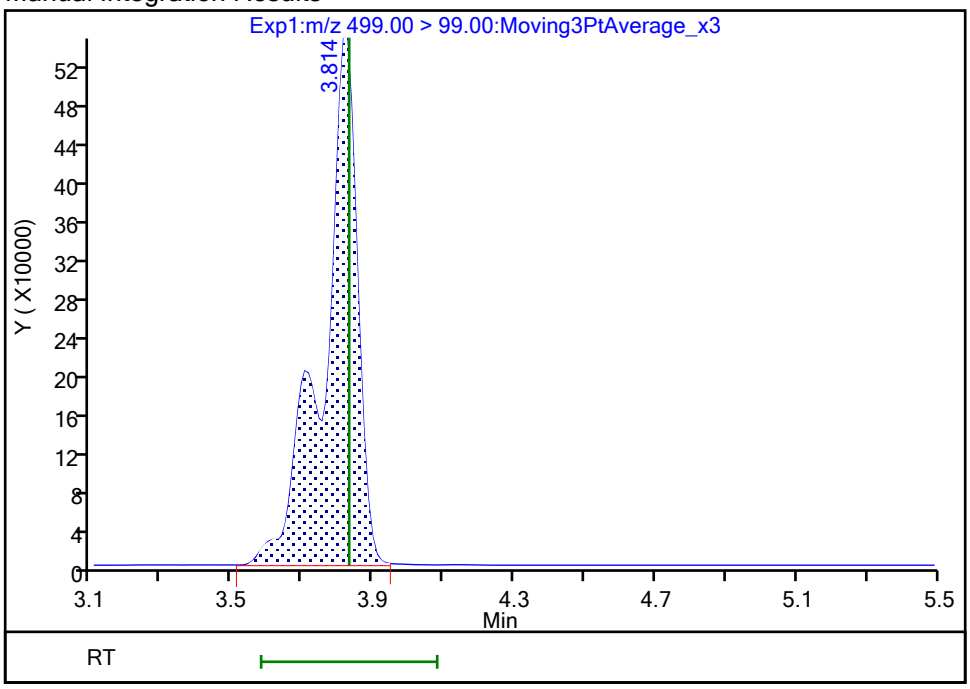
Processing Integration Results

RT: 3.81
Area: 3779750
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 3762826
Amount: 17.530212
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:49:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

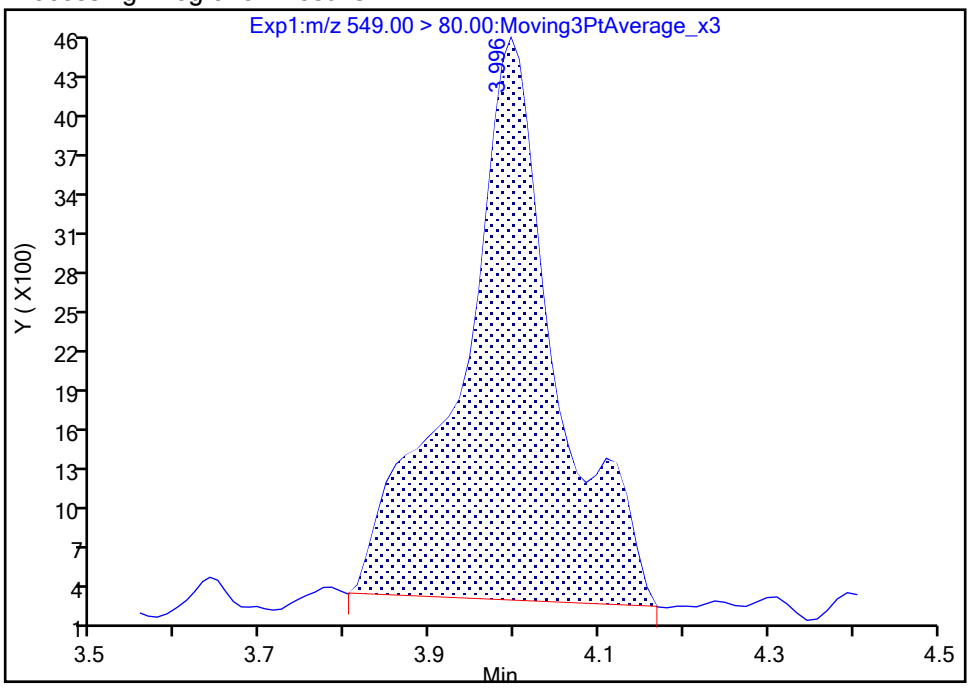
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

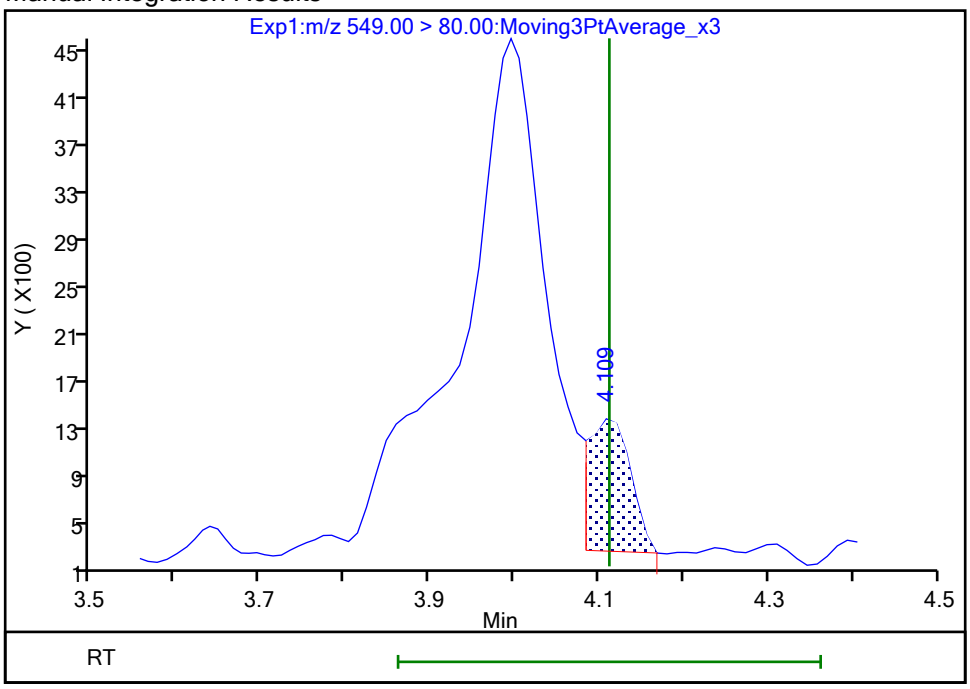
Processing Integration Results

RT: 4.00
Area: 33095
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 3565
Amount: 0.006271
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

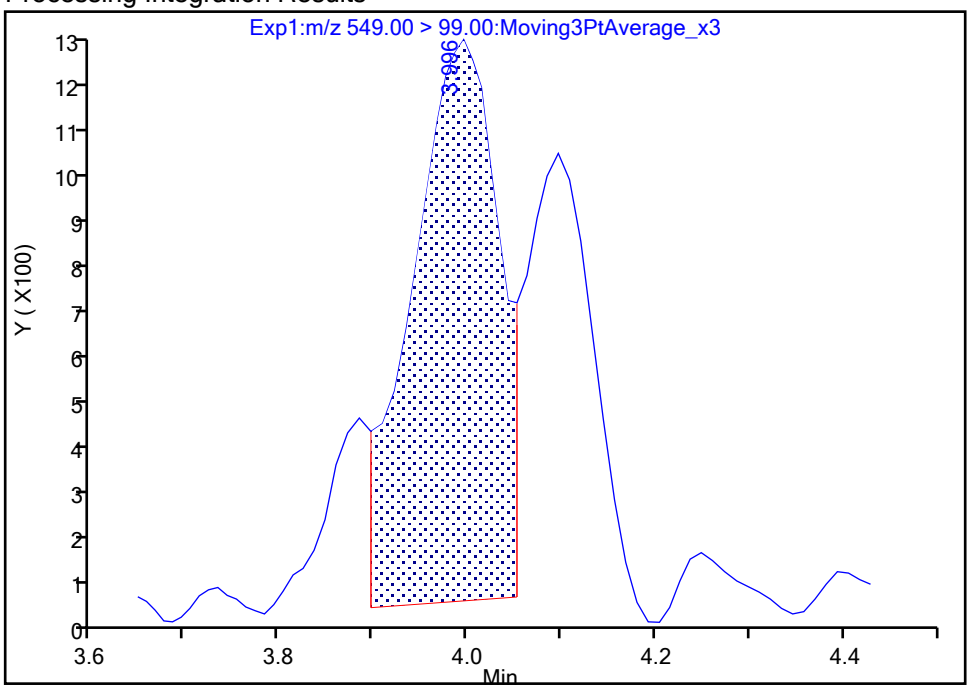
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

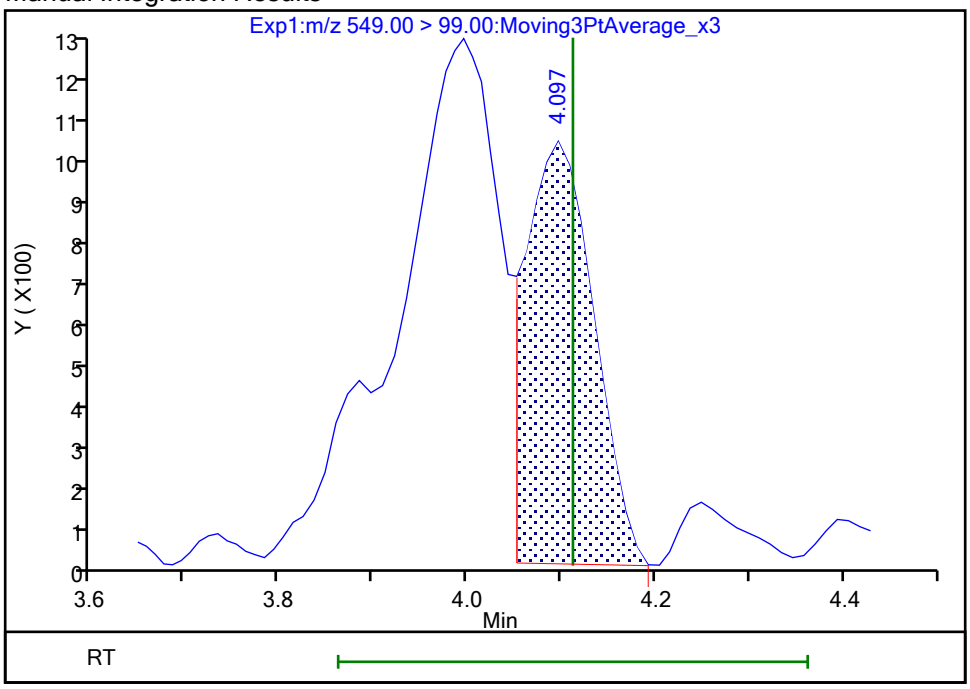
Processing Integration Results

RT: 4.00
Area: 7725
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 4944
Amount: 0.006271
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

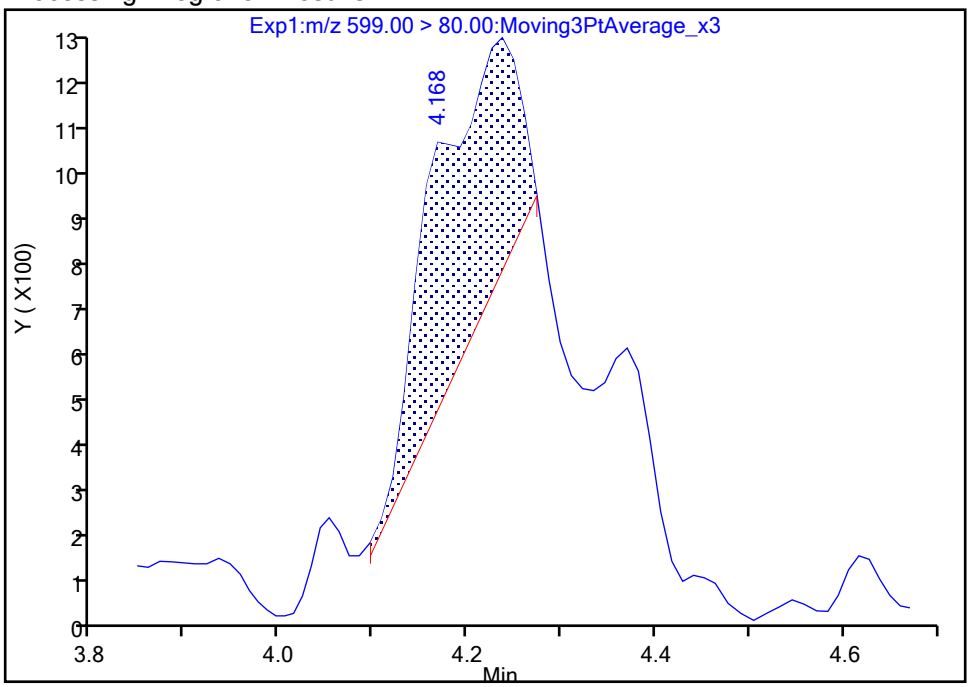
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

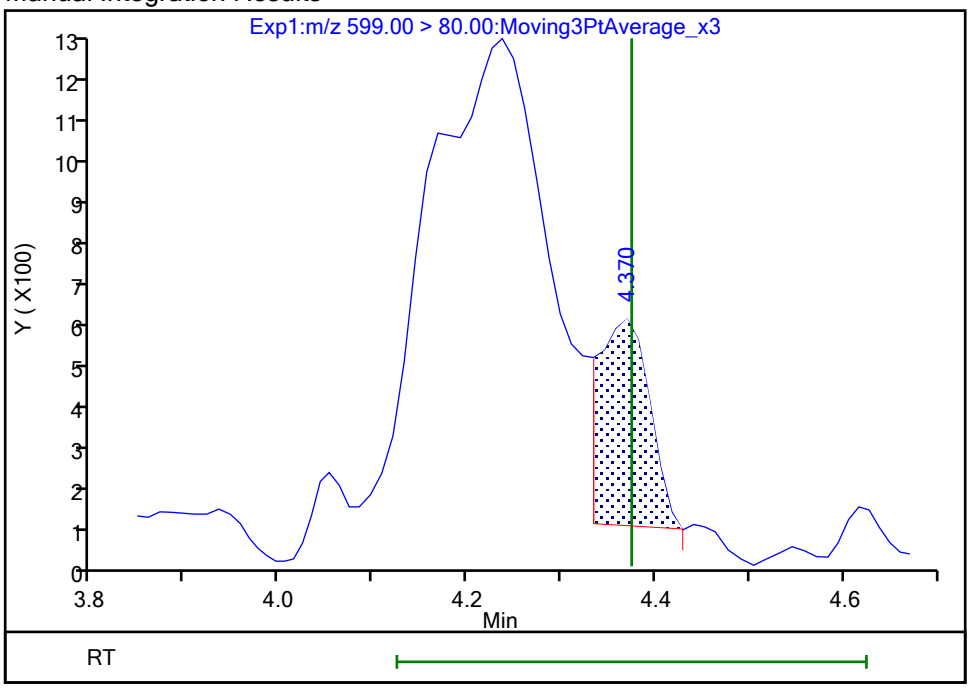
Processing Integration Results

RT: 4.17
Area: 3487
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 1659
Amount: 0.003792
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

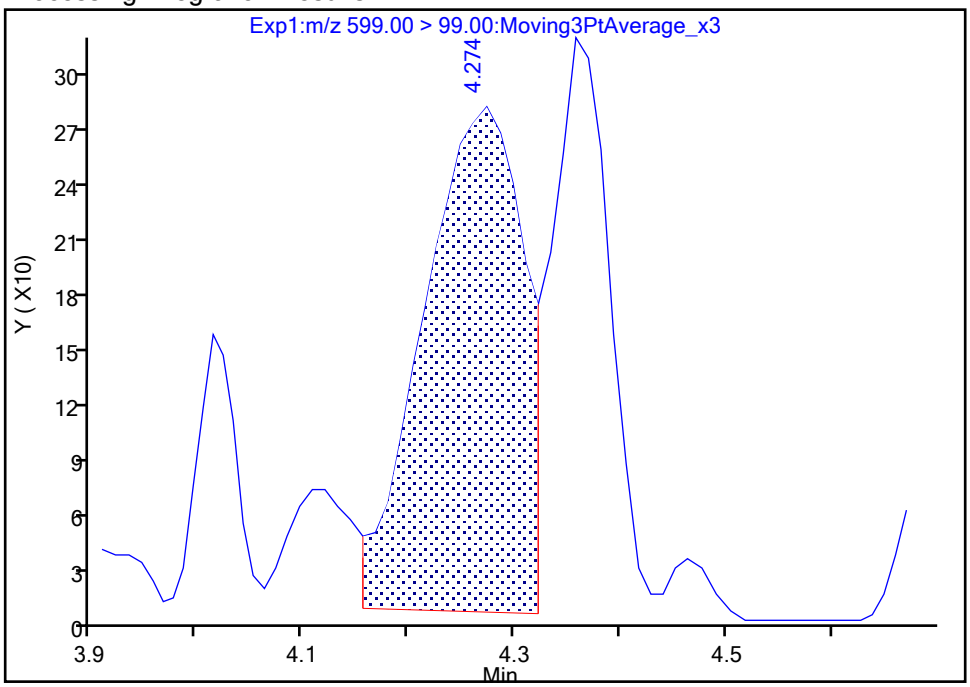
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

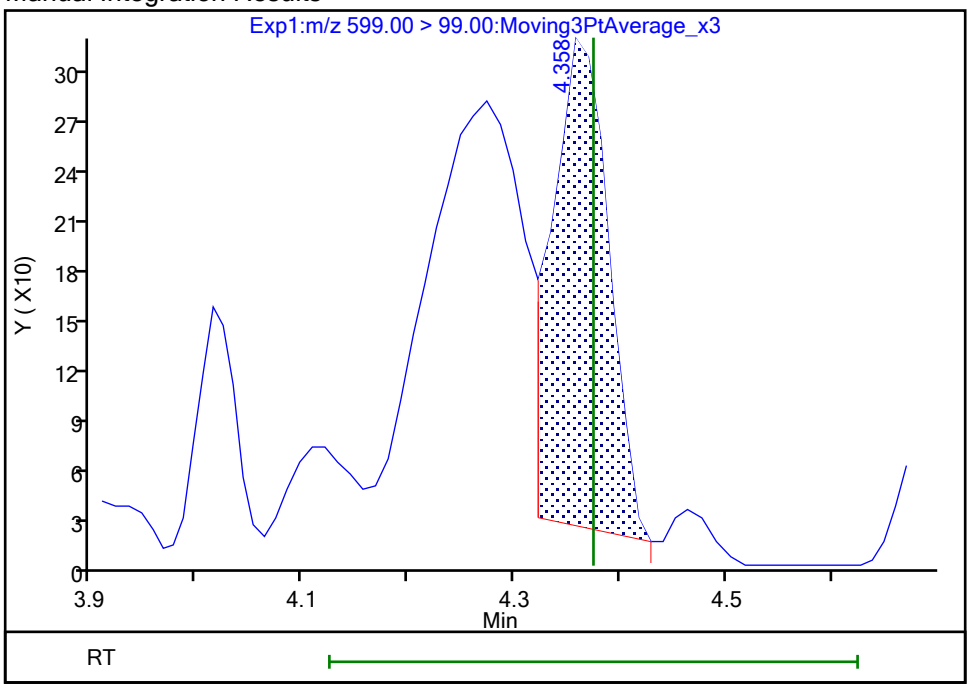
Processing Integration Results

RT: 4.27
Area: 1761
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 1055
Amount: 0.003792
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

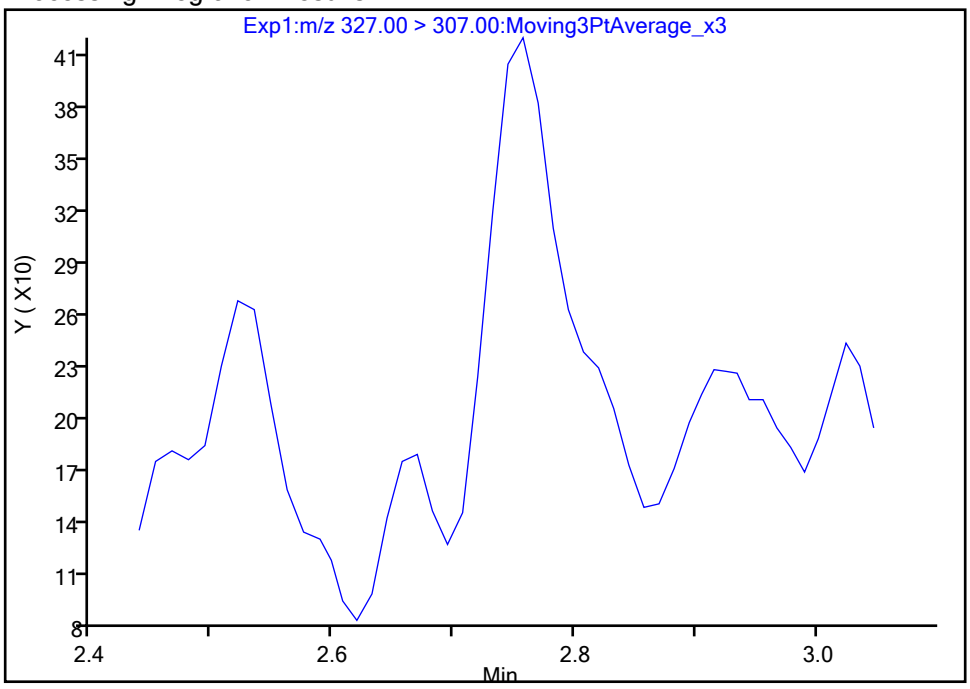
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

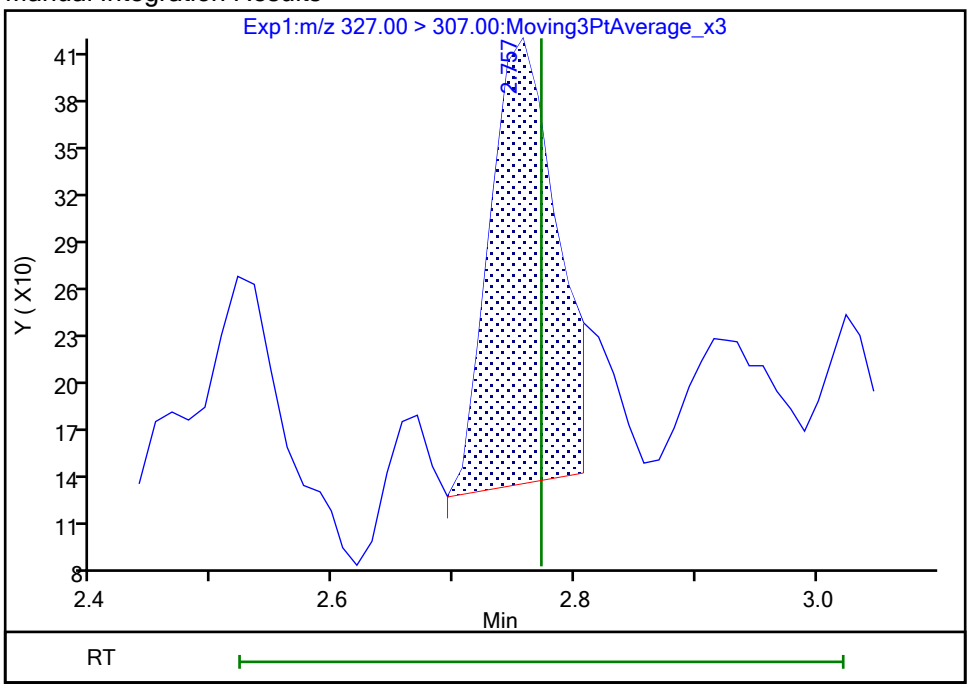
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 1062
Amount: 0.001909
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:46:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

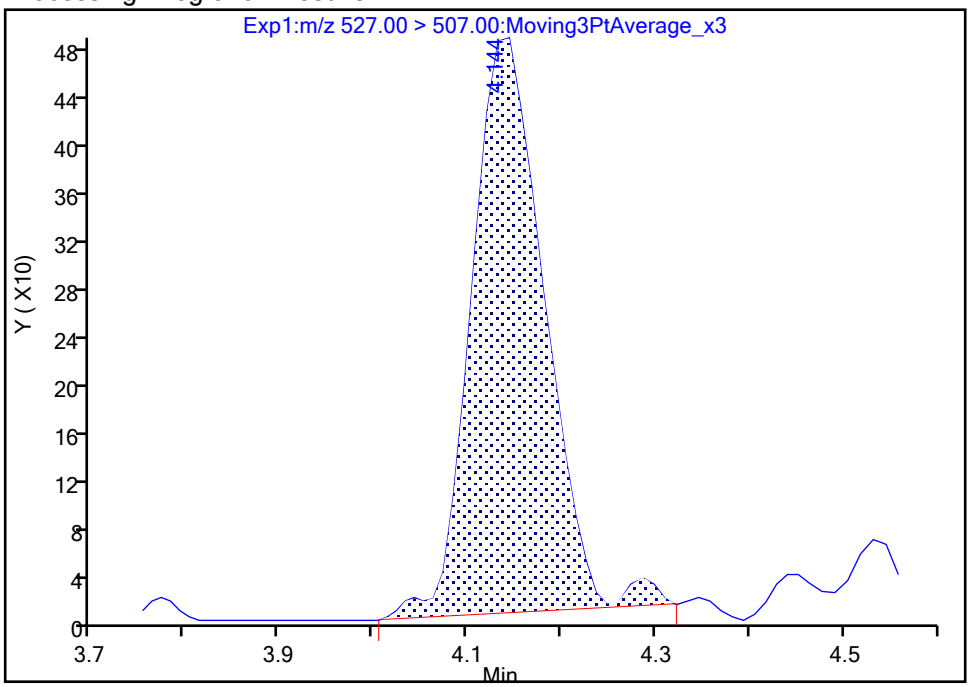
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

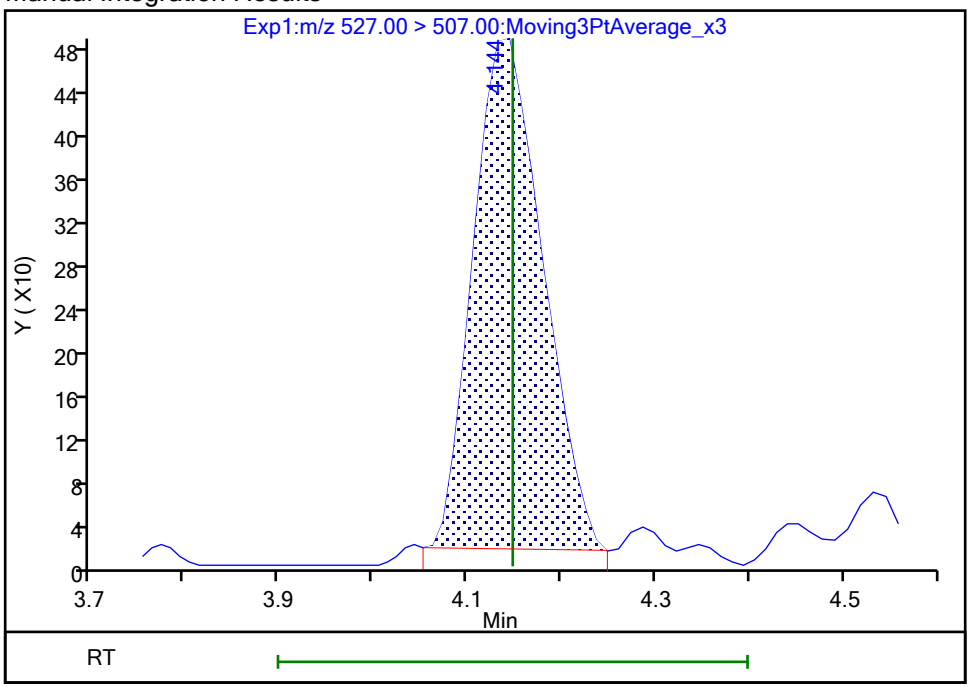
Processing Integration Results

RT: 4.14
Area: 2596
Amount: 0.004970
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2414
Amount: 0.004622
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

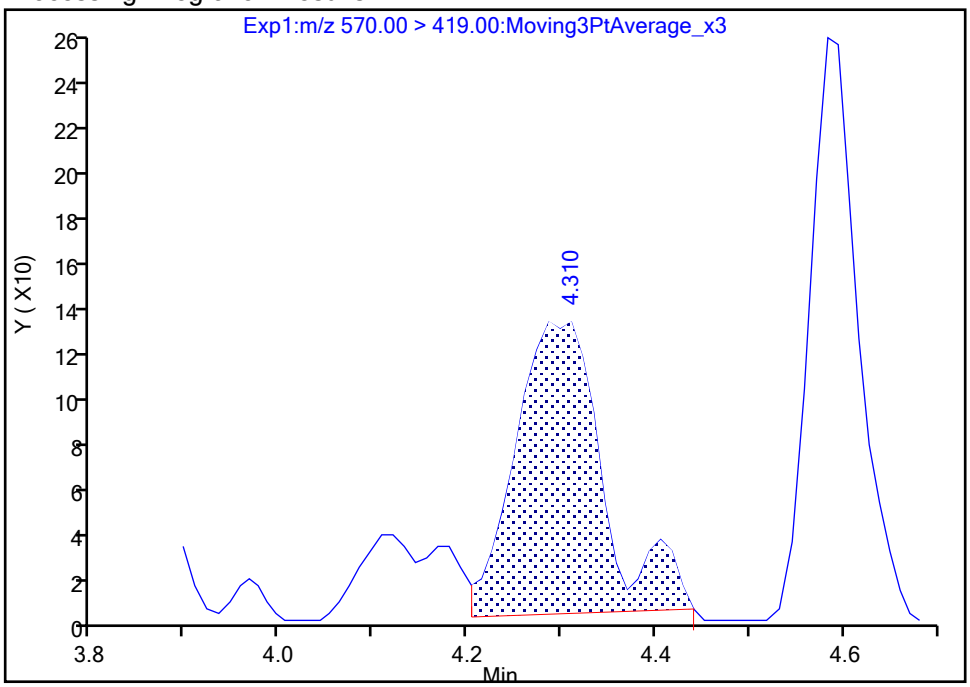
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

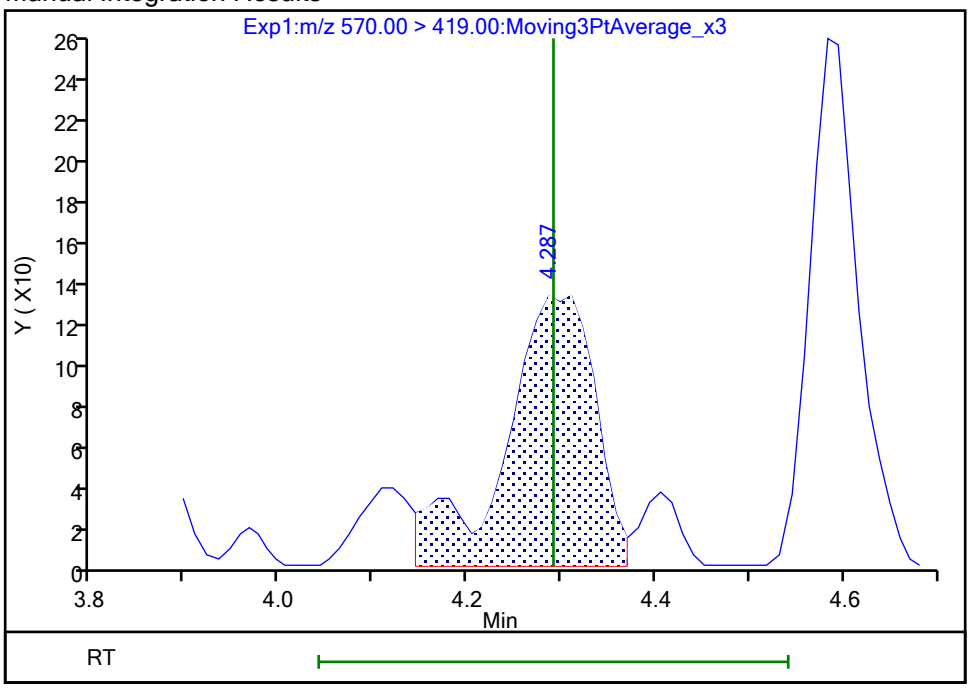
Processing Integration Results

RT: 4.31
Area: 812
Amount: 0.002709
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 860
Amount: 0.002869
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:50:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

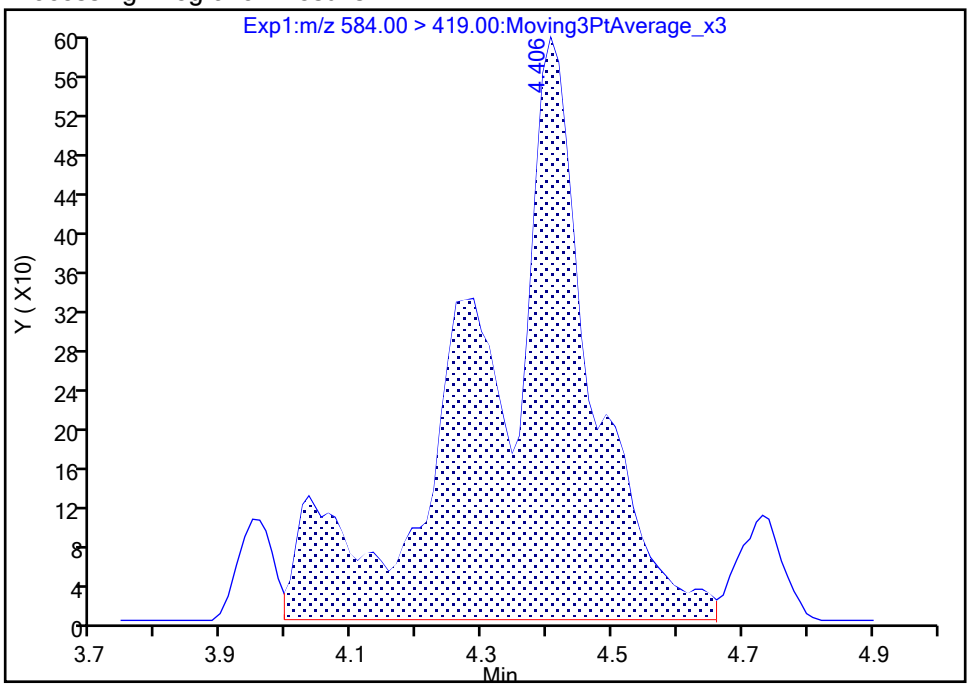
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

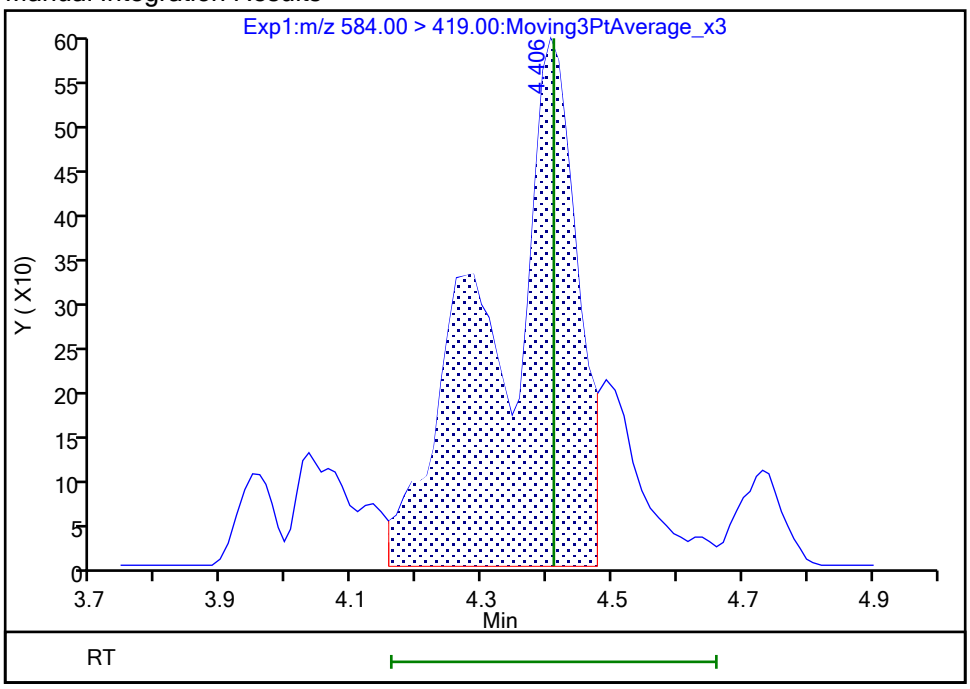
Processing Integration Results

RT: 4.41
Area: 7074
Amount: 0.019822
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 5303
Amount: 0.014859
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:51:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

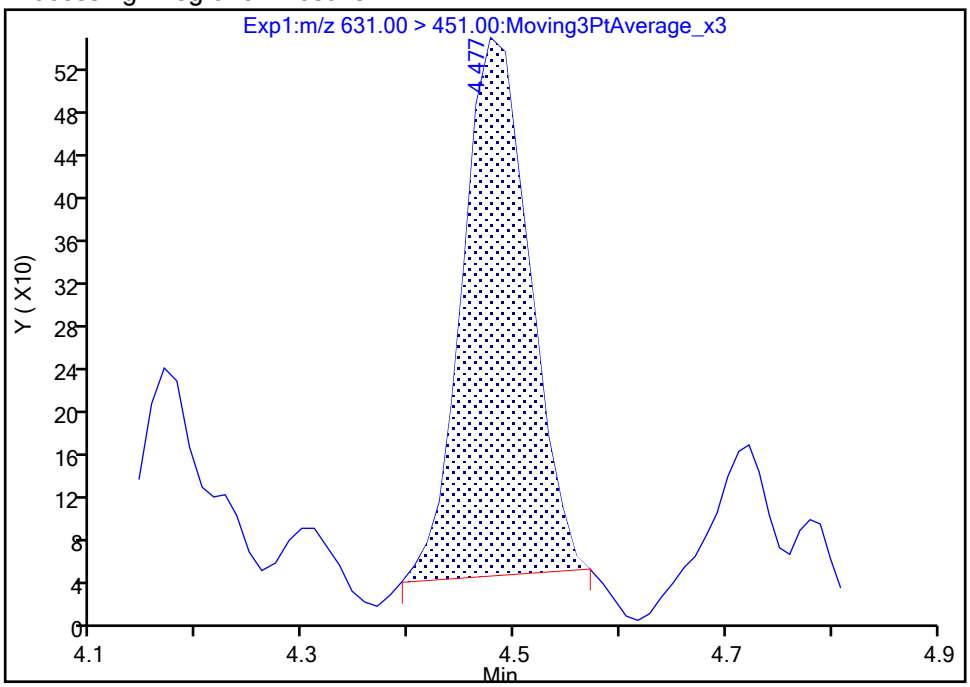
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

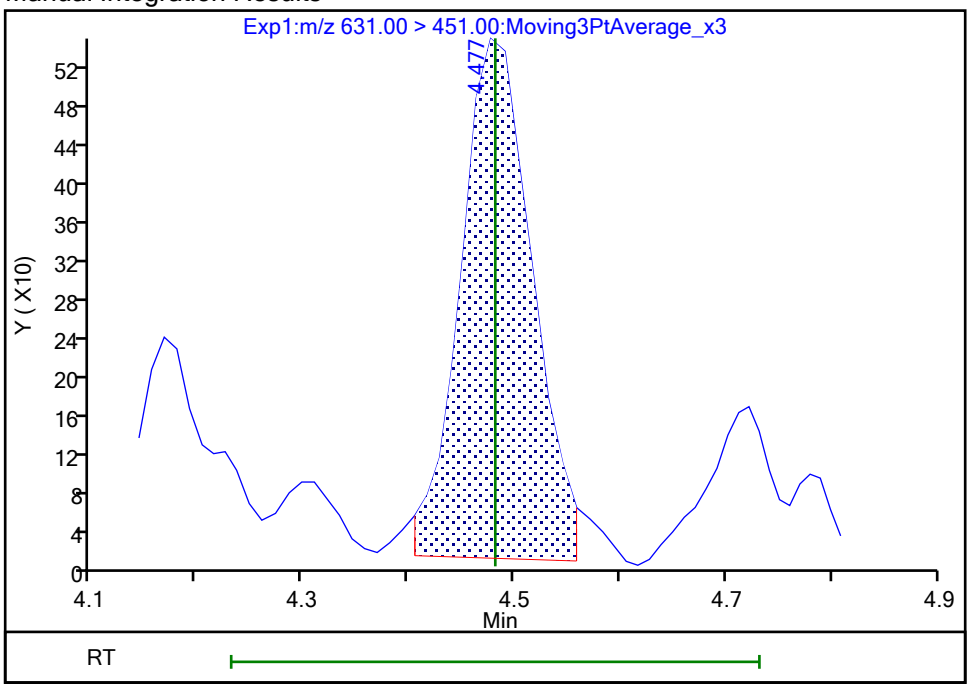
Processing Integration Results

RT: 4.48
Area: 2194
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 2501
Amount: 0.000713
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:51:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

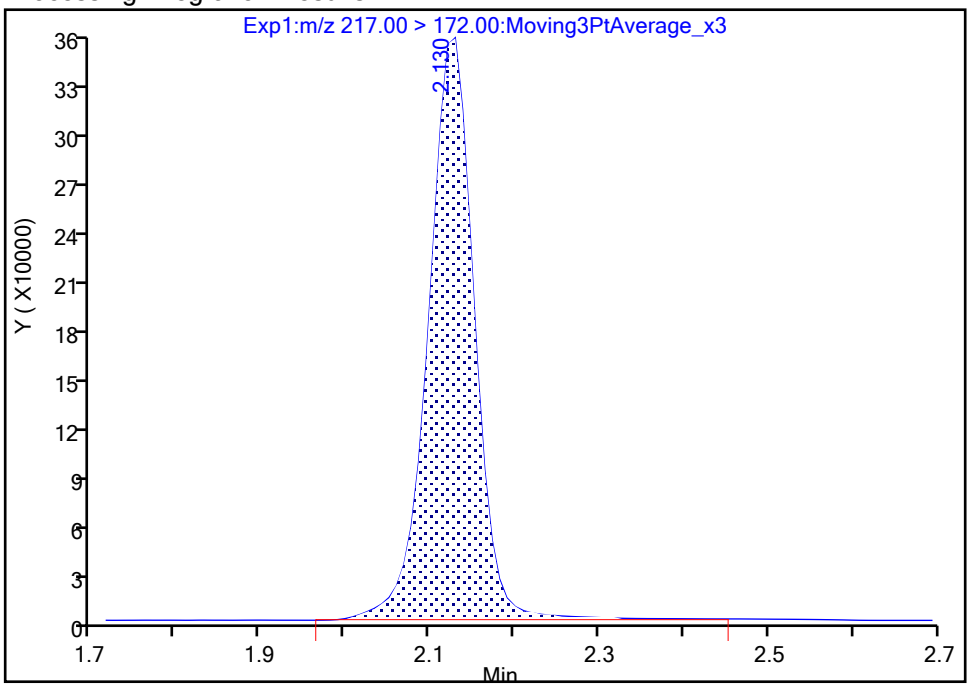
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

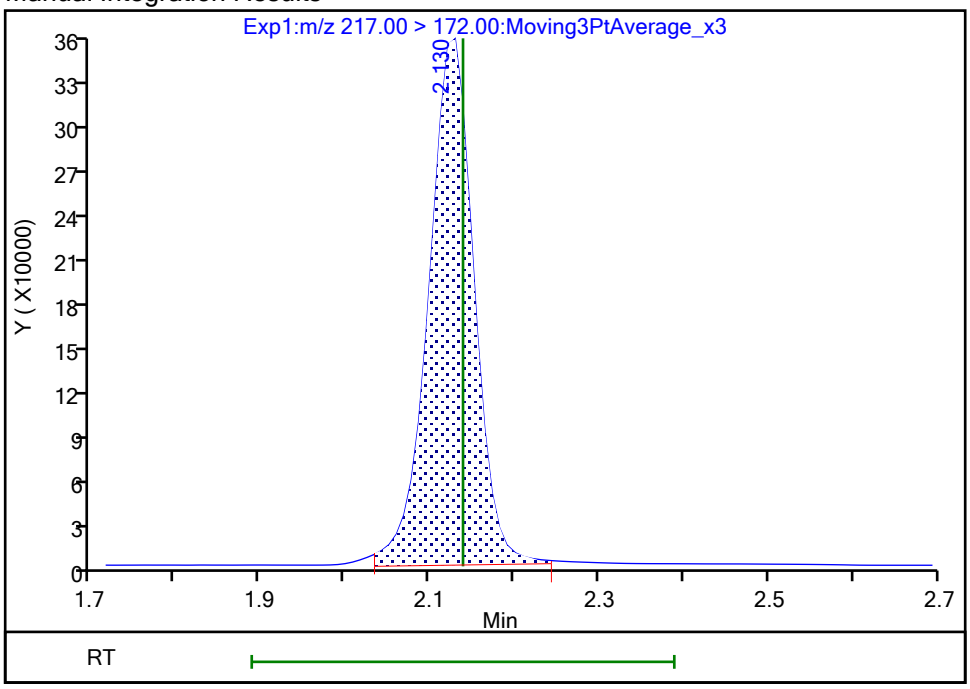
Processing Integration Results

RT: 2.13
Area: 1359640
Amount: 1.006692
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1343810
Amount: 0.994971
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:44:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

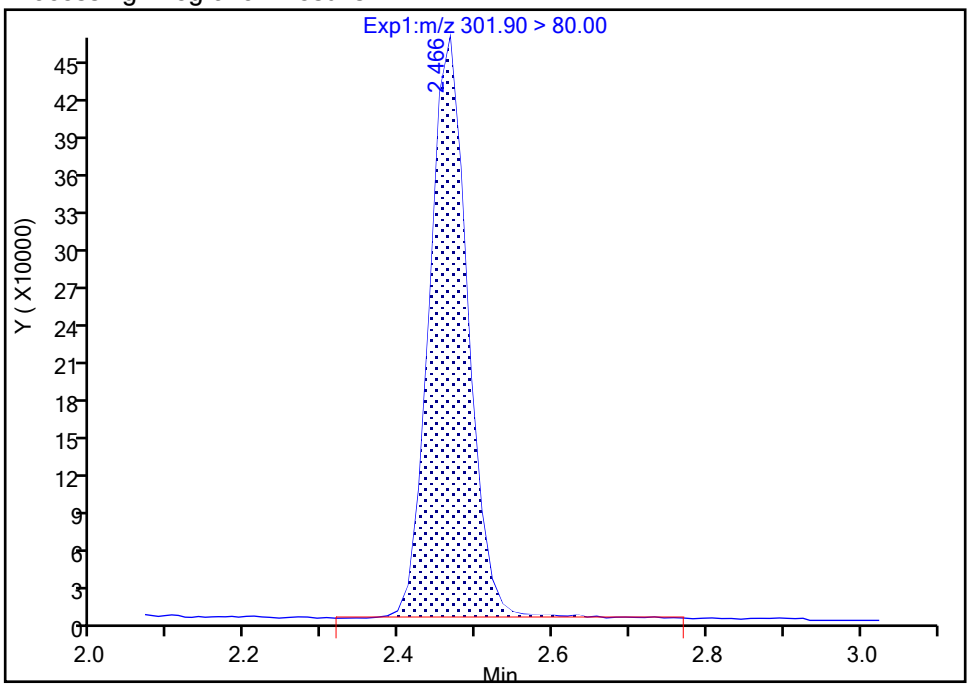
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

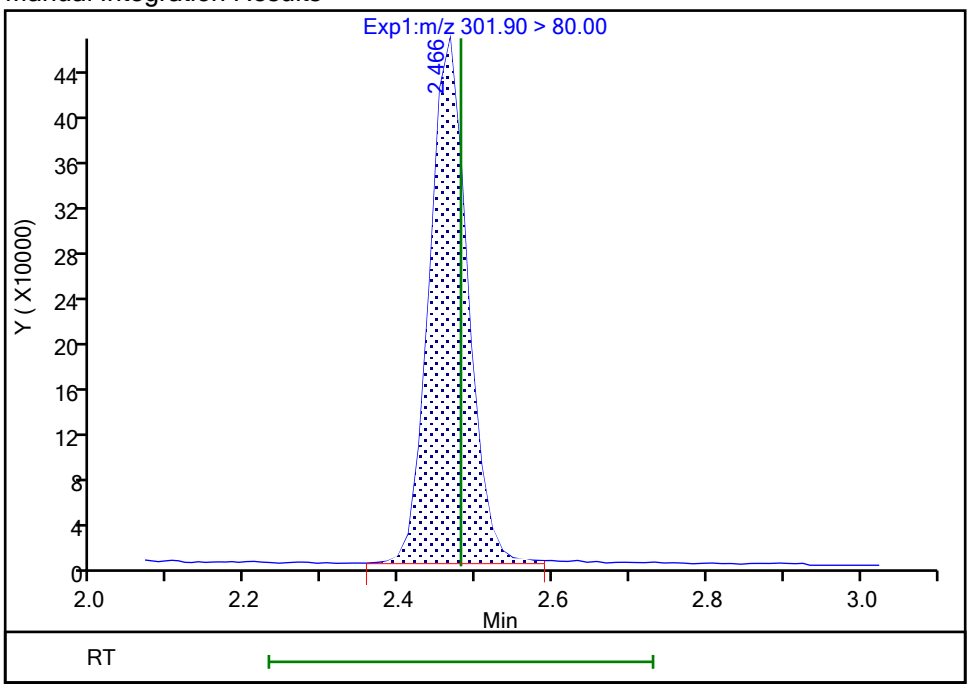
Processing Integration Results

RT: 2.47
Area: 1612781
Amount: 1.137155
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1601742
Amount: 1.129371
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:44:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

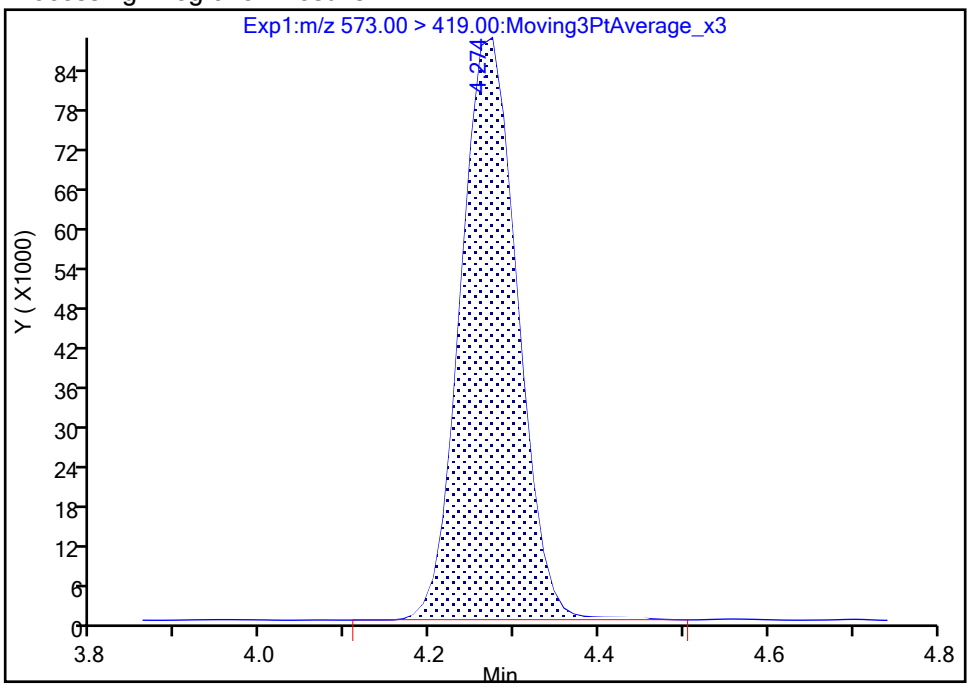
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

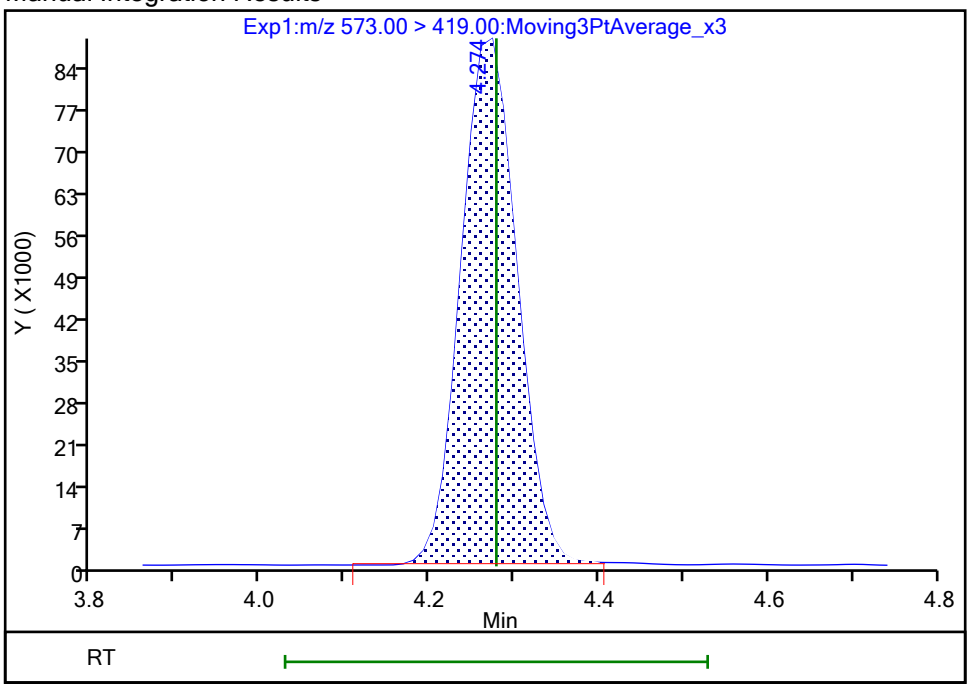
Processing Integration Results

RT: 4.27
Area: 414208
Amount: 1.147595
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 412944
Amount: 1.144093
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

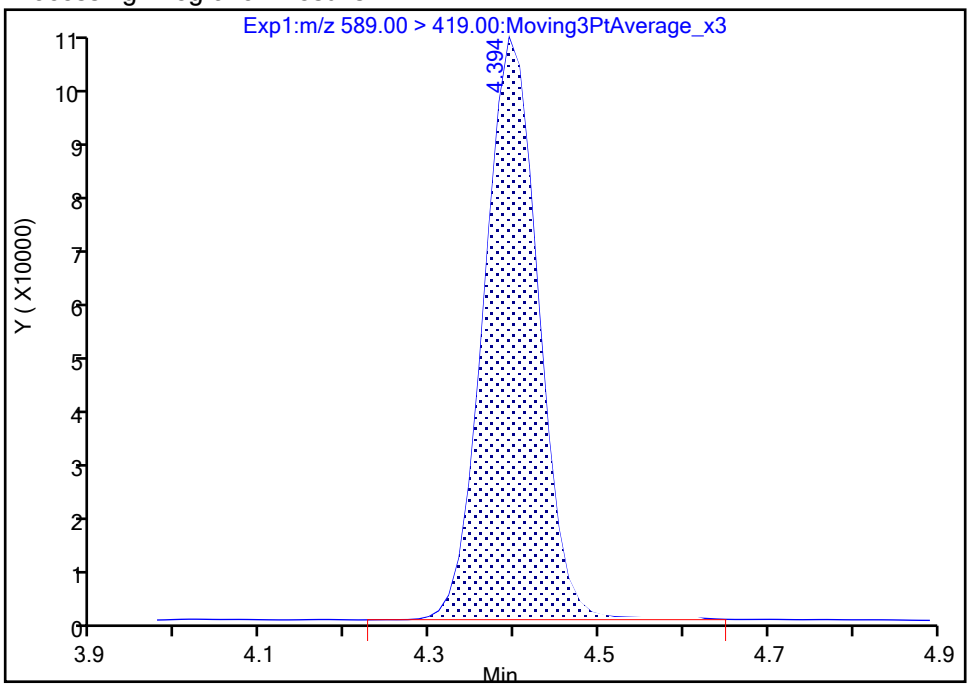
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

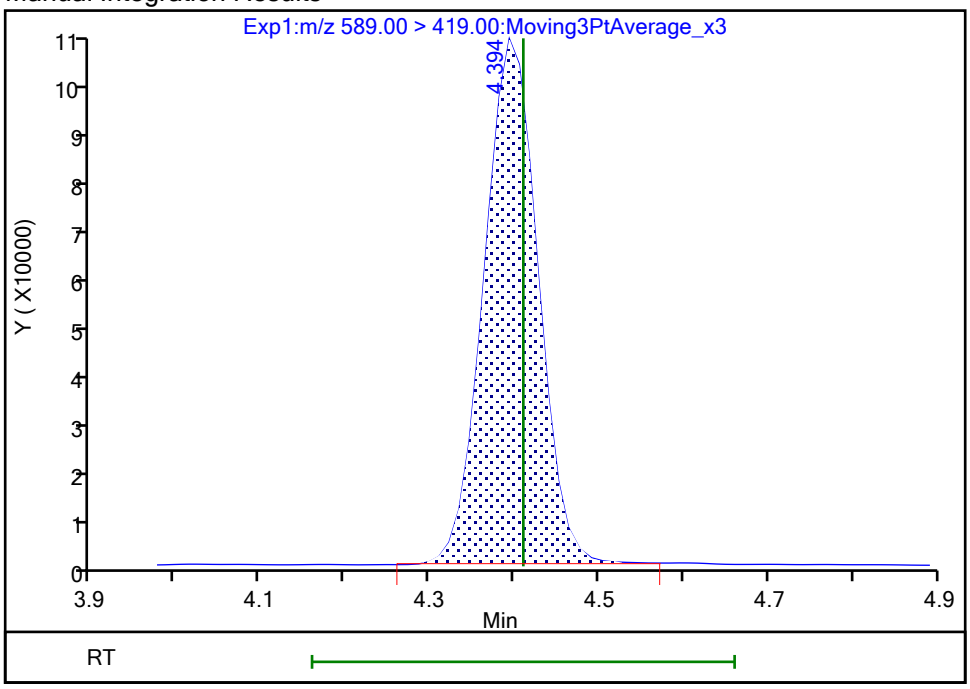
Processing Integration Results

RT: 4.39
Area: 449524
Amount: 1.293460
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 446016
Amount: 1.283367
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

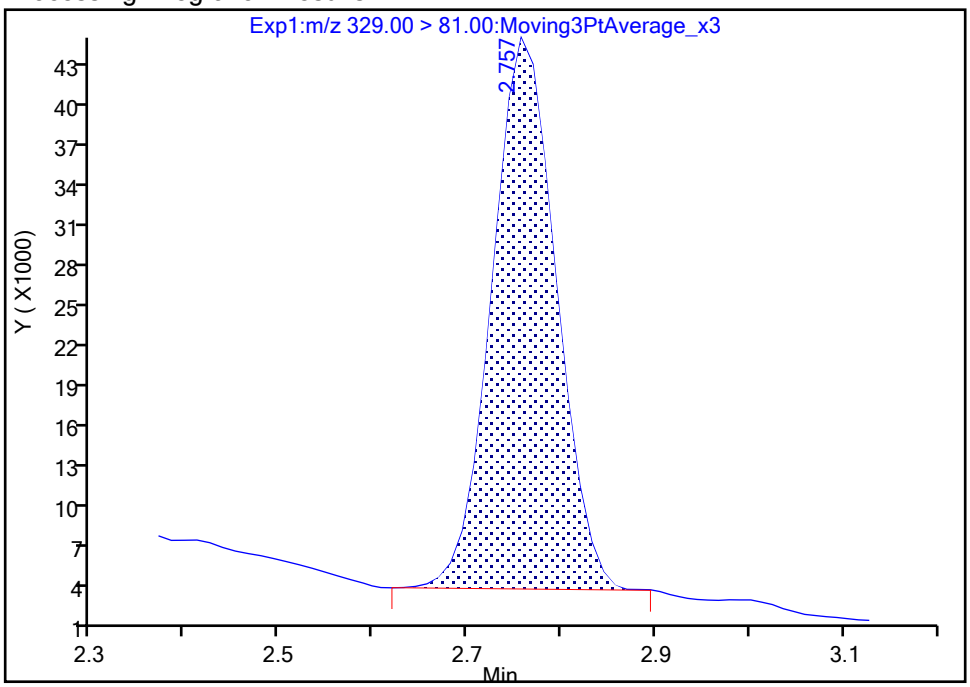
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

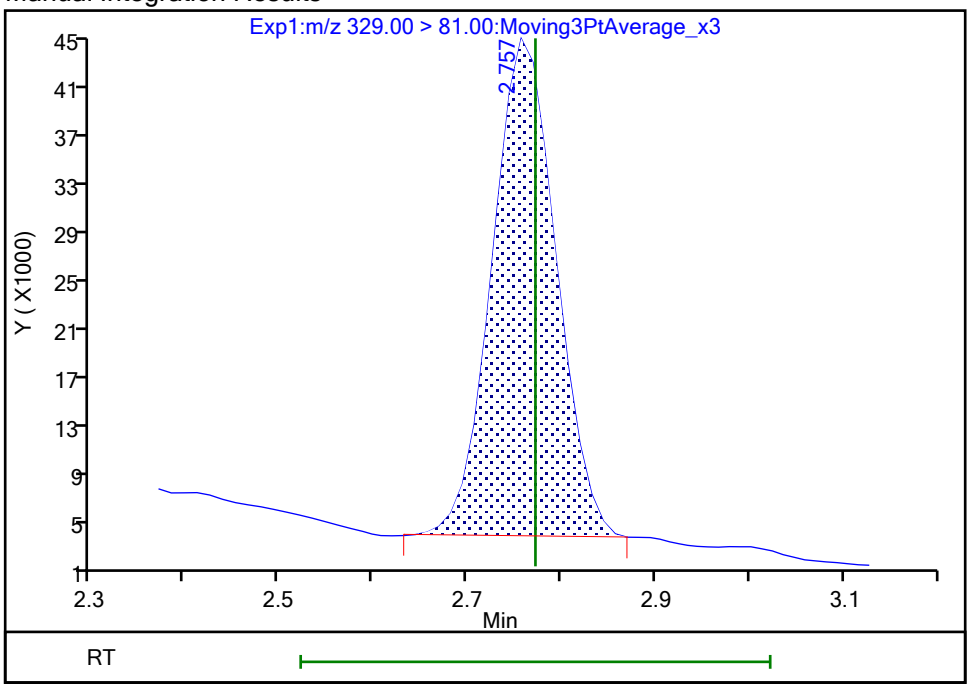
Processing Integration Results

RT: 2.76
Area: 191589
Amount: 1.168104
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 191238
Amount: 1.165964
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

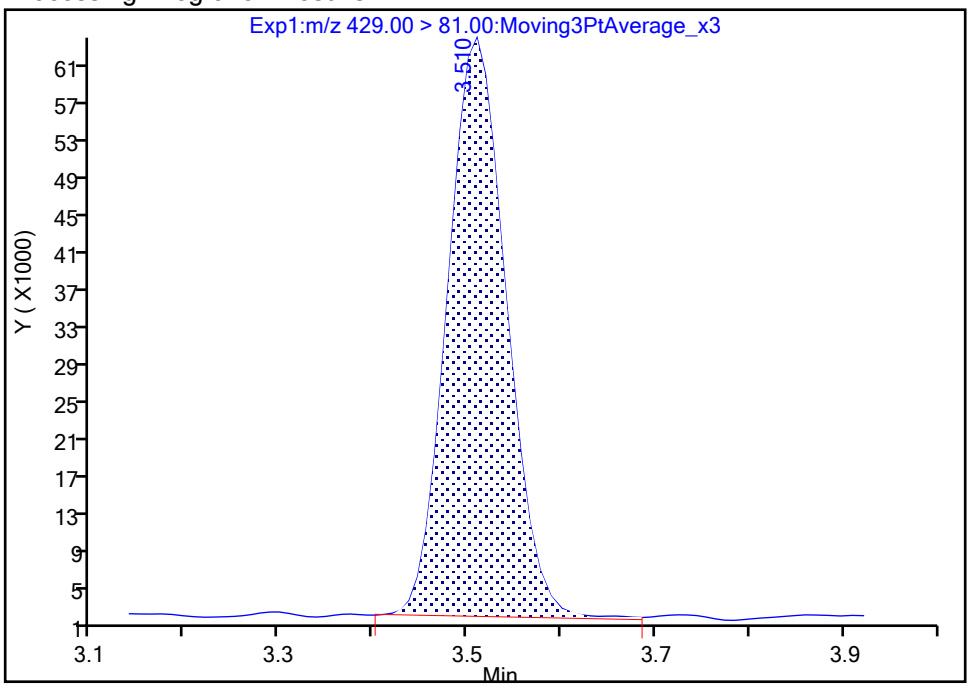
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A20.d				
Injection Date:	25-Oct-2023 20:27:27	Instrument ID:	LC812		
Lims ID:	460-290543-A-1-A	Lab Sample ID:	200-290543-1		
Client ID:	MW84R-101723-0906-29				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	20
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

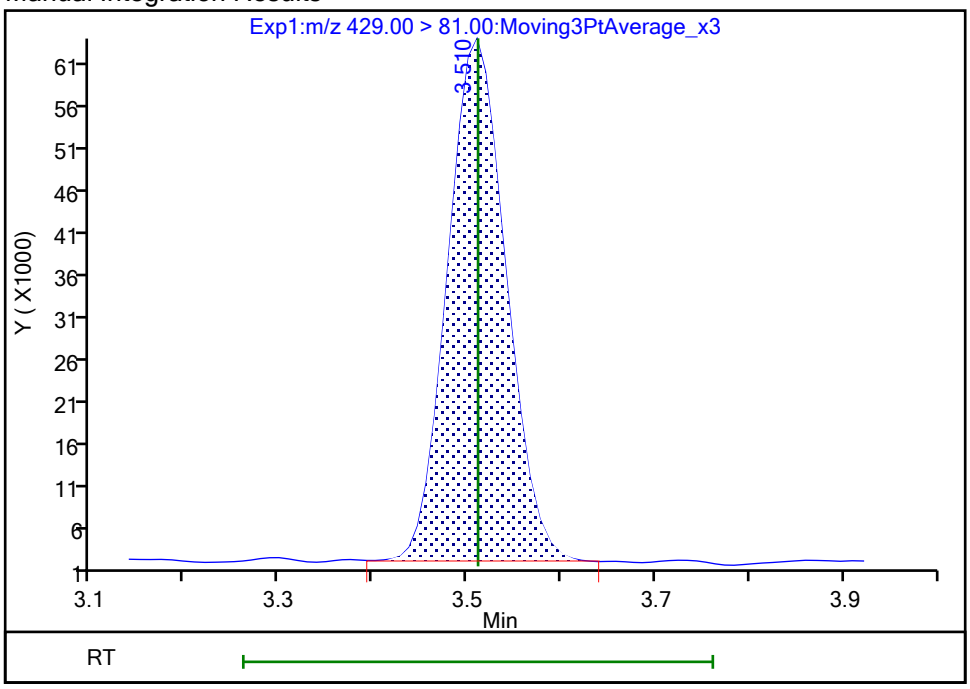
Processing Integration Results

RT: 3.51
Area: 268872
Amount: 1.272784
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 266675
Amount: 1.262384
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 12:45:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW84AR-101723-1011-75 | Lab Sample ID: 460-290543-2

Matrix: Water | Lab File ID: PA231025A21.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 10:11

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 316.5(mL) | Date Analyzed: 10/25/2023 20:35

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	9.79		3.95	0.95
2706-90-3	Perfluoropentanoic acid	7.87		1.58	0.54
307-24-4	Perfluorohexanoic acid	21.2		1.58	0.51
375-85-9	Perfluoroheptanoic acid	9.59		1.58	0.43
335-67-1	Perfluorooctanoic acid	39.5		1.58	0.60
375-95-1	Perfluorononanoic acid	1.39	J	1.58	0.39
335-76-2	Perfluorodecanoic acid	1.58	U	1.58	0.36
2058-94-8	Perfluoroundecanoic acid	1.58	U	1.58	0.43
307-55-1	Perfluorododecanoic acid	1.58	U	1.58	0.39
72629-94-8	Perfluorotridecanoic acid	1.58	U	1.58	0.38
376-06-7	Perfluorotetradecanoic acid	1.58	U	1.58	0.51
375-73-5	Perfluorobutanesulfonic acid	11.2		1.58	0.49
2706-91-4	Perfluoropentanesulfonic acid	15.8		1.58	0.39
355-46-4	Perfluorohexanesulfonic acid	64.3		1.58	0.43
375-92-8	Perfluoroheptanesulfonic acid	27.5		1.58	0.32
68259-12-1	Perfluorononanesulfonic acid	1.58	U	1.58	0.32
335-77-3	Perfluorodecanesulfonic acid	1.58	U	1.58	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.58	U	1.58	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	3.95	U	3.95	1.03
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.58	U	1.58	0.61
754-91-6	Perfluorooctanesulfonamide	1.58	U	1.58	0.73
2355-31-9	NMeFOSAA	3.95	U	3.95	1.50
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	3.95	U	3.95	1.26
13252-13-6	HFPODA	3.16	U	3.16	0.87
919005-14-4	DONA	1.58	U	1.58	0.33
756426-58-1	9Cl-PF3ONS	1.58	U	1.58	0.25
763051-92-9	11Cl-PF3OUdS	1.58	U	1.58	0.69

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW84AR-101723-1011-75 Lab Sample ID: 460-290543-2

Matrix: Water Lab File ID: PA231025A21.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 10:11

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 316.5(mL) Date Analyzed: 10/25/2023 20:35

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		50-150
STL01893	13C5 PFPeA	91		50-150
STL01892	13C4 PFHpA	96		50-150
STL02116	13C2 PFTeDA	97		50-150
STL02337	13C3 PFBS	99		50-150
STL01056	13C8 FOSA	82		50-150
STL02118	d3-NMeFOSAA	103		50-150
STL02117	d5-NEtFOSAA	107		50-150
STL02395	M2-4:2 FTS	108		50-150
STL02279	M2-6:2 FTS	108		50-150
STL02280	M2-8:2 FTS	106		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	91		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	105		50-150
STL00995	13C5 PFNA	97		50-150
STL00996	13C2 PFDA	109		50-150
STL00990	13C4 PFOA	98		50-150
STL00997	13C2 PFUnA	103		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d
Lims ID: 460-290543-A-2-A
Client ID: MW84AR-101723-1011-75
Sample Type: Client
Inject. Date: 25-Oct-2023 20:35:36 ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-2-A
Misc. Info.: 200-0057556-021 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 13:50:56
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	1441375	1.08		86.6	824	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	365602	0.3097			11.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1172633	1.14		90.8	287	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	252064	0.2490			1.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.701	1607649	1.15		98.9	19007	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	548626	0.3552	Target=2.06		8.3	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	292756		1.87(1.03-3.09)		19.7	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	203365	1.26		108	10.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1201440	1.14		91.5	3122	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	710776	0.6720	Target=14.12		5.9	M
313.00 > 119.00	2.810	2.810	0.0	1.004	46780		15.19(7.06-21.17)		12.3	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	663909	0.5006	Target=2.72		16.8	M
349.00 > 99.00	2.810	2.810	0.0	0.888	325477		2.04(1.36-4.09)		48.4	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	228021	1.12		89.7	937	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.004	1581	0.008657			15.0	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1200925	1.20		101	3529	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	2288223	2.04	Target=3.32		173	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	980312		2.33(1.66-4.98)		176	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.176	-0.011	1.000	377956	0.3035	Target=4.17		6.0	M
363.00 > 169.00	3.165	3.176	-0.011	1.000	107476		3.52(2.09-6.26)		36.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1388810	1.20		96.4	3630	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.511	0.0	0.917	775494	0.8698	Target=4.83		22.5	M
449.00 > 99.00	3.502	3.511	-0.009	0.914	226559		3.42(2.41-7.24)		16.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	266738	1.28		108	43.0	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.529	3.520	0.009	1.005	5352	0.008717			4.0	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.000	1702691	1.25	Target=2.88		25.3	M
413.00 > 169.00	3.520	3.529	-0.009	1.000	559896		3.04(1.44-4.32)		352	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1598218	1.22		97.9	4703	
* 62 13C2 PFOA										M
415.00 > 370.00	3.520	3.529	-0.009		1677736	1.25			3836	M
17 Perfluorooctanesulfonic acid										EM
499.00 > 80.00	3.830	3.830	0.0	1.000	24327749	33.8	Target=4.24		1789	EM
499.00 > 99.00	3.819	3.830	-0.011	0.997	7753605		3.14(2.12-6.37)		1987	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.088	737197	1.16		96.9	184	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.854	-0.012	0.997	59463	0.0441	Target=8.34		2.3	M
463.00 > 169.00	3.854	3.854	0.0	1.000	5573		10.67(4.17-12.51)		4.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.854	0.0	1.095	1721405	1.21		96.9	2302	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.124	4.148	-0.024	0.997	14063	0.008659	Target=11.44		1.2	M
513.00 > 169.00	4.136	4.148	-0.012	1.000	1151		12.22(5.72-17.16)		3.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	2031539	1.37		109	8482	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.148	-0.012	0.997	1870	0.003426			18.5	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	296882	1.27		106	171	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1301903	1.03		82.0	3393	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.242	0.0	1.000	1289	0.001297			6.3	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.278	0.0	1.215	456769	1.28		103	1122	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.196	4.291	-0.095	0.981	562	0.001695			1.9	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.375	4.375	0.0	1.142	444	0.001054	Target=2.37		1.2	M
599.00 > 99.00	4.375	4.375	0.0	1.142	336		1.32(1.19-3.56)		1.7	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.398	-0.012	1.246	1806417	1.29		103	8788	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.249	456379	1.33		107	1027	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	1881626	1.32		105	7621	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.417	1725743	1.21		97.1	5741	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.969	4.989	-0.020	0.996	429	0.002779	Target=0.87		11.1	RM
713.00 > 219.00	4.979	4.989	-0.010	0.998	160		2.68(0.43-1.30)		4.0	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

E - Exceeded Maximum Amount

Review Flags

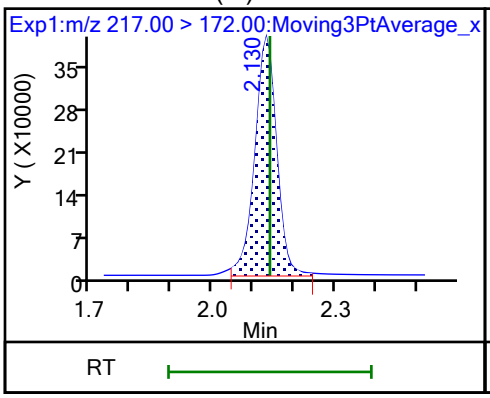
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:23 Chrom Revision: 2.3 18-Oct-2023 21:16:54

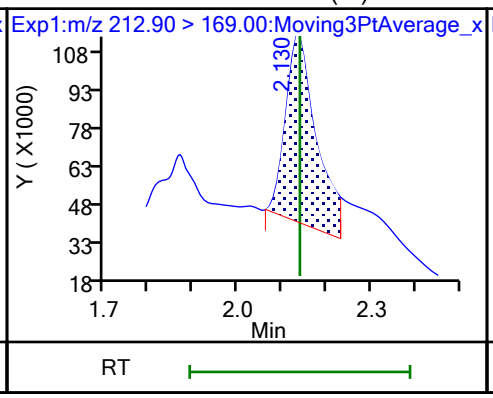
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d
Injection Date: 25-Oct-2023 20:35:36 Instrument ID: LC812
Lims ID: 460-290543-A-2-A Lab Sample ID: 200-290543-2
Client ID: MW84AR-101723-1011-75
Operator ID: LC812user ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

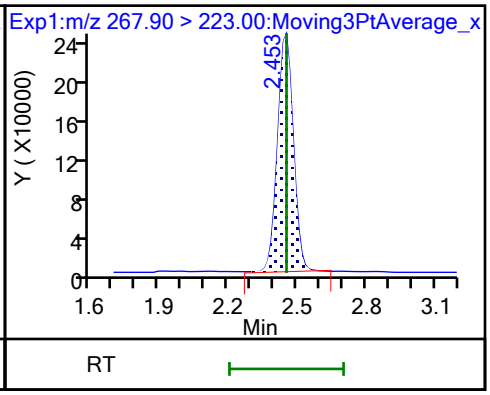
D 1 13C4 PFBA (M)



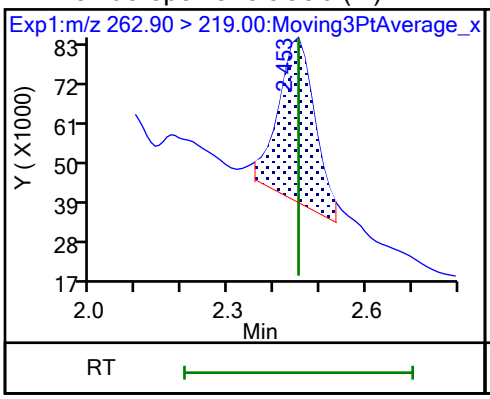
2 Perfluorobutanoic acid (M)



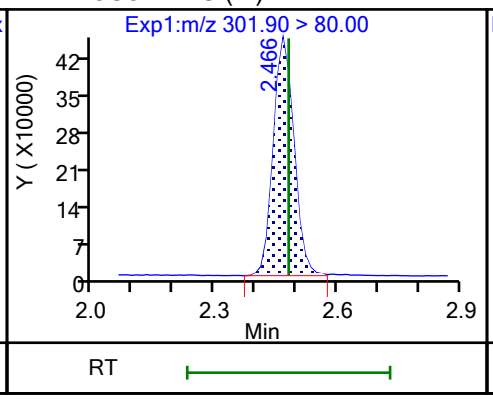
D 3 13C5 PFPeA



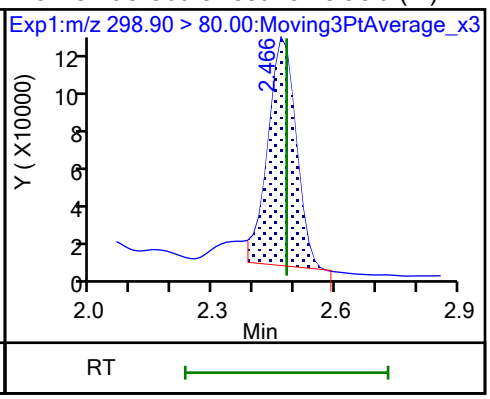
4 Perfluoropentanoic acid (M)



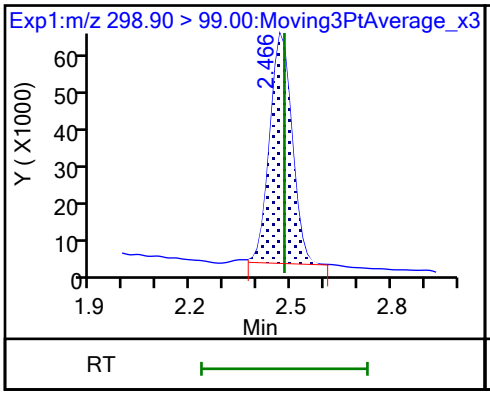
D 47 13C3 PFBS (M)



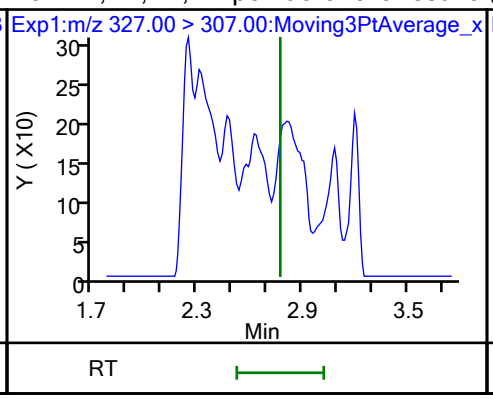
5 Perfluorobutanesulfonic acid (M)



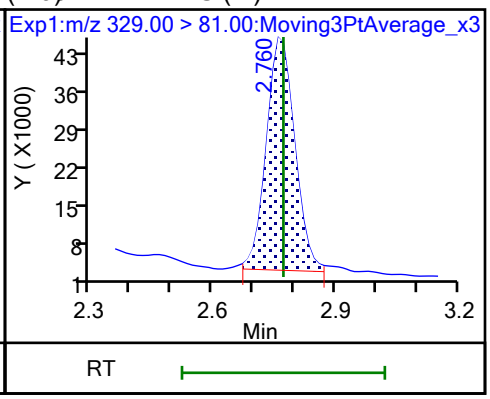
5 Perfluorobutanesulfonic acid



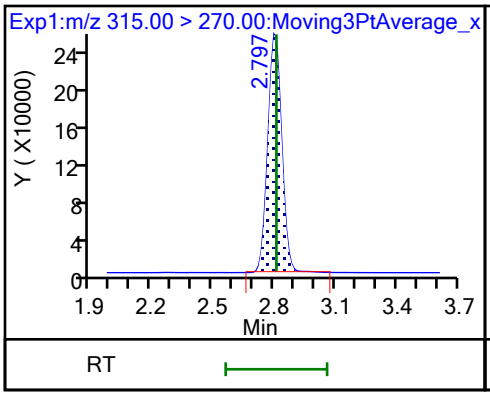
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



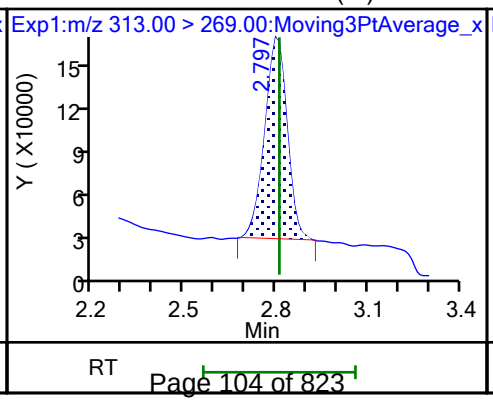
D 80 M2-4:2 FTS (M)



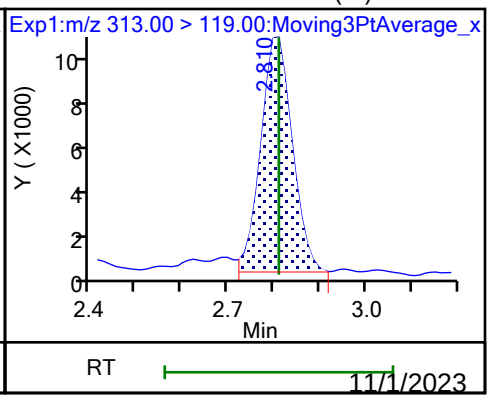
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

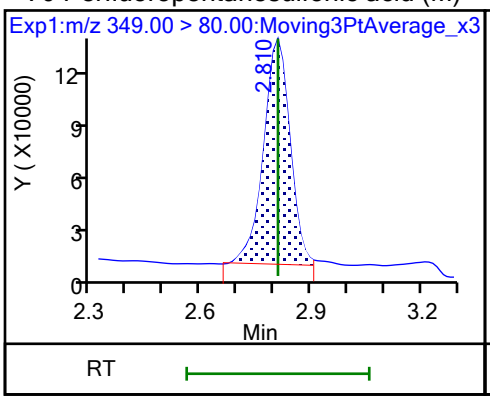


6 Perfluorohexanoic acid (M)

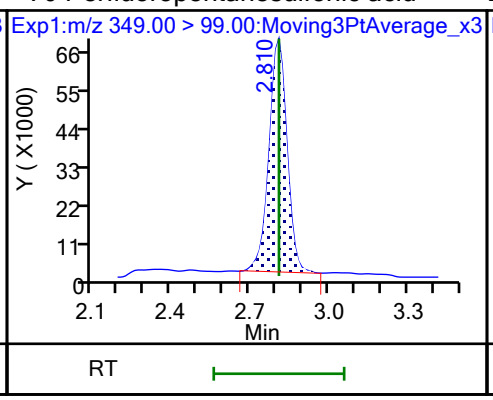


11/1/2023
12:01 PM

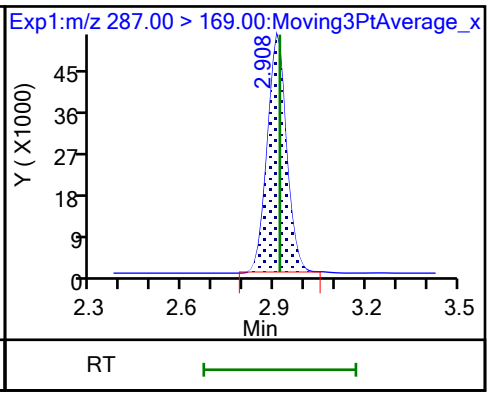
70 Perfluoropentanesulfonic acid (M)



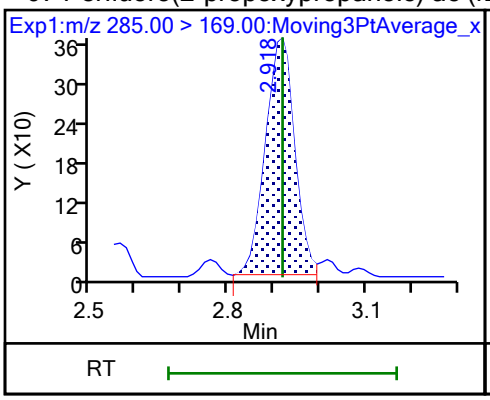
70 Perfluoropentanesulfonic acid



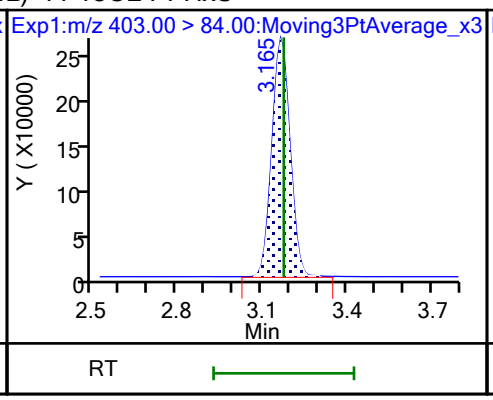
D 64 13C3 HFPO-DA



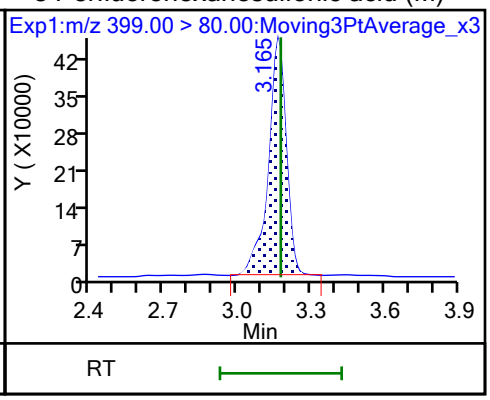
67 Perfluoro(2-propoxypropanoic) ac (M)



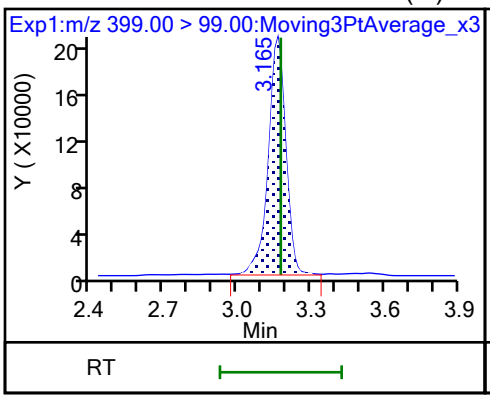
D 11 18O2 PFHxS



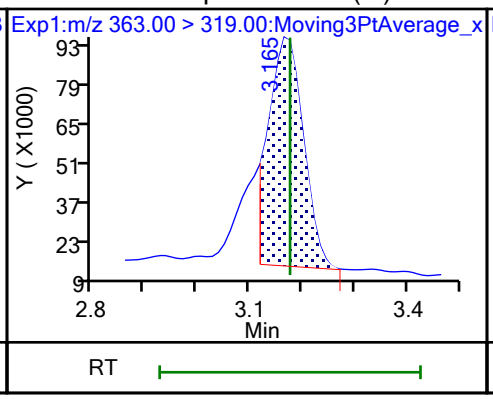
8 Perfluorohexanesulfonic acid (M)



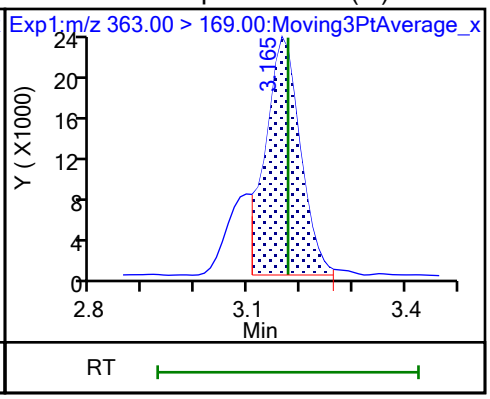
8 Perfluorohexanesulfonic acid (M)



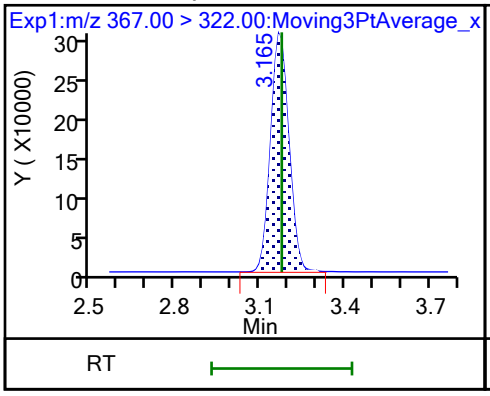
10 Perfluoroheptanoic acid (M)



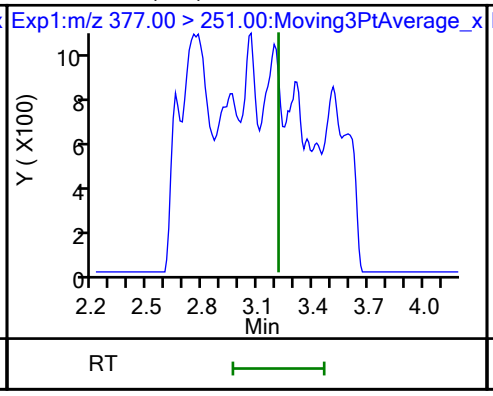
10 Perfluoroheptanoic acid (M)



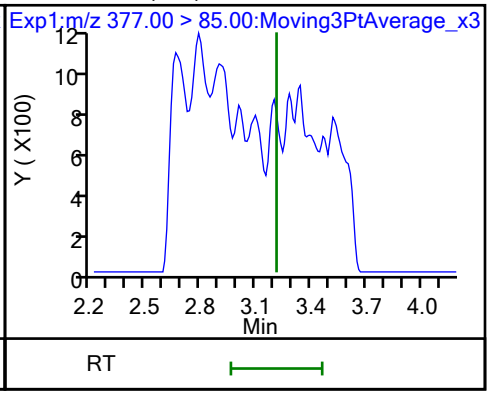
D 9 13C4 PFHpA



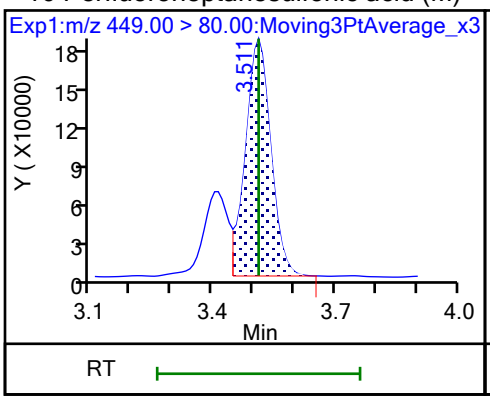
77 DONA (ND)



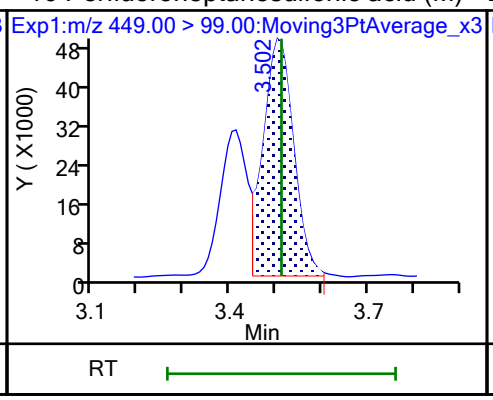
77 DONA (ND)



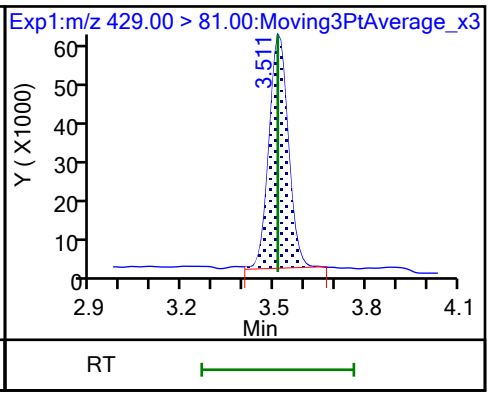
16 Perfluoroheptanesulfonic acid (M)



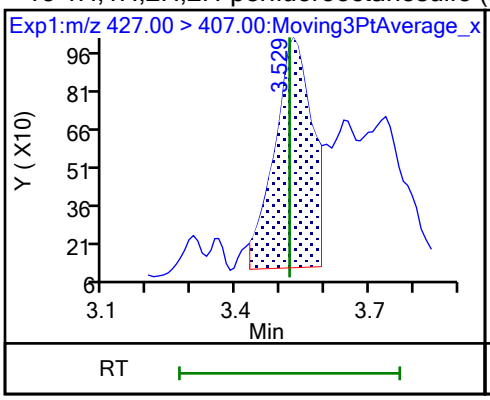
16 Perfluoroheptanesulfonic acid (M)



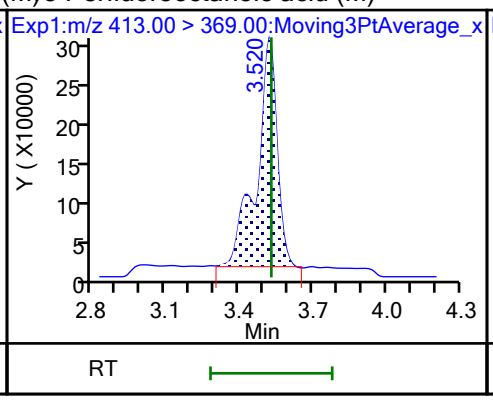
D 12 M2-6:2 FTS



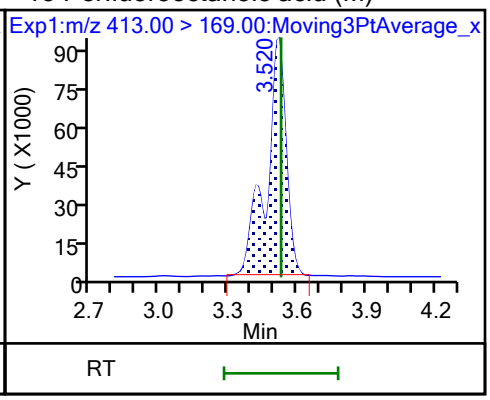
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



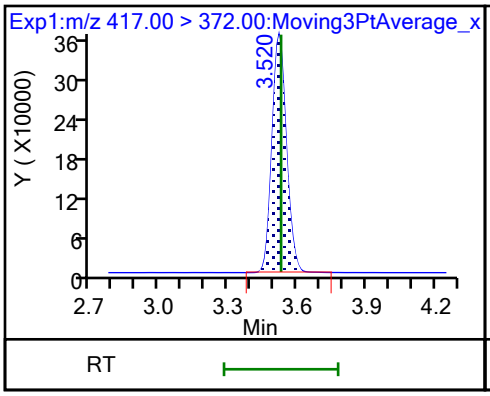
15 Perfluorooctanoic acid (M)



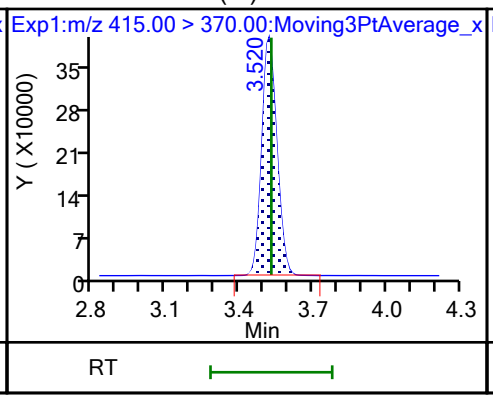
15 Perfluorooctanoic acid (M)



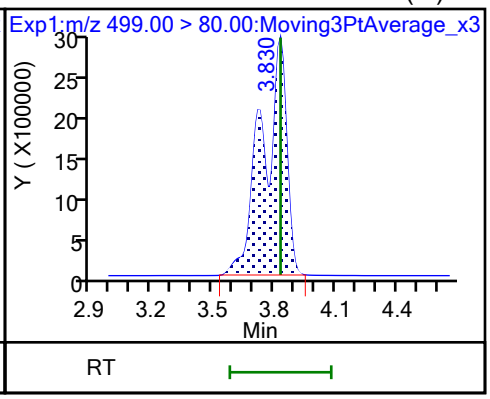
D 14 13C4 PFOA



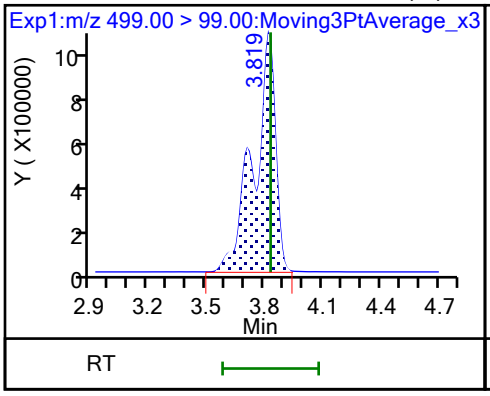
* 62 13C2 PFOA (M)



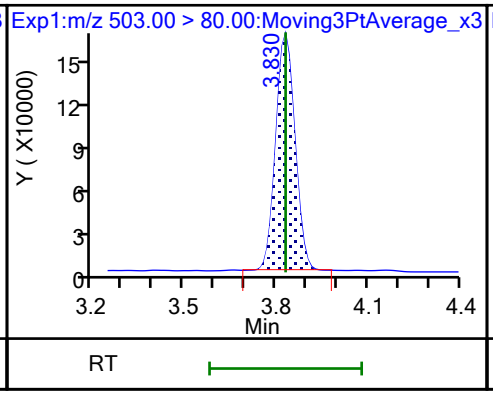
17 Perfluorooctanesulfonic acid (M)



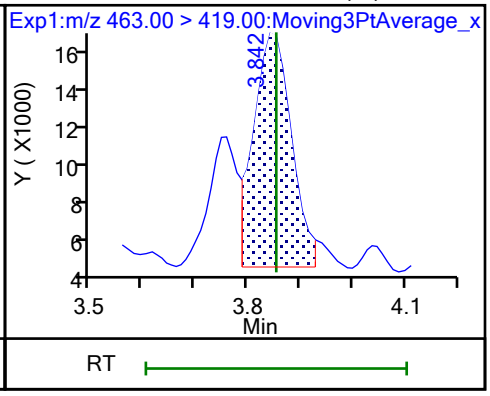
17 Perfluorooctanesulfonic acid (M)



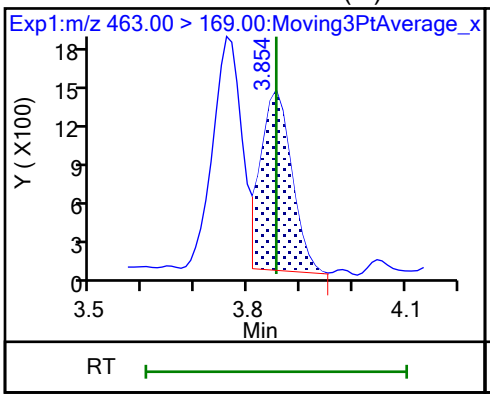
D 18 13C4 PFOS



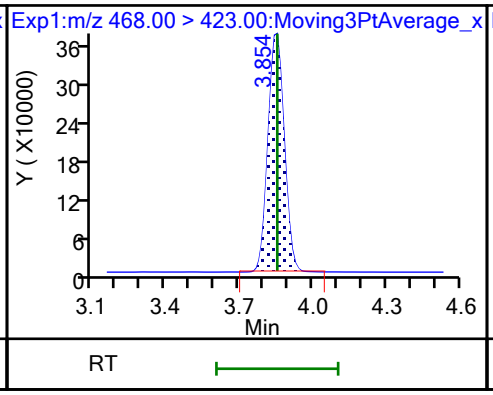
20 Perfluorononanoic acid (M)



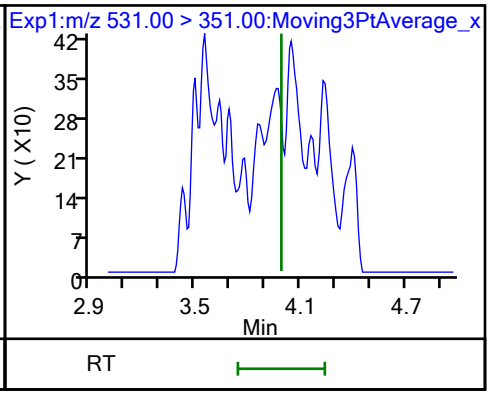
20 Perfluorononanoic acid (M)



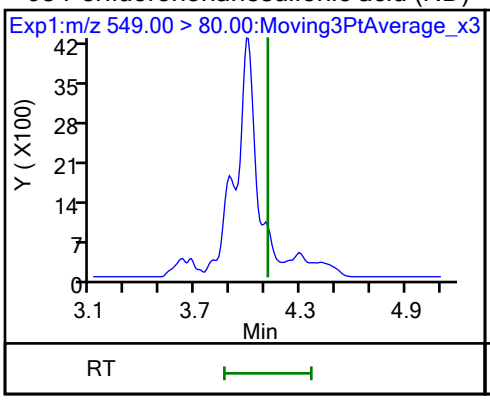
D 19 13C5 PFNA



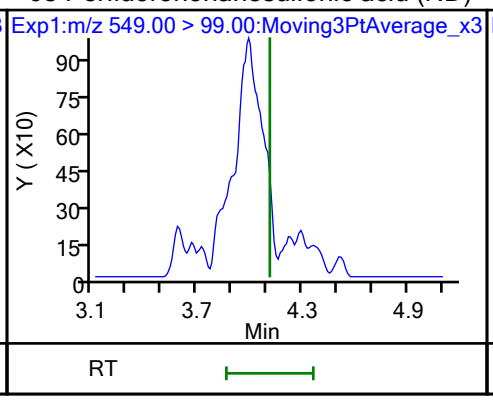
69 9-Chlorohexadecafluoro-3-oxanona (ND)



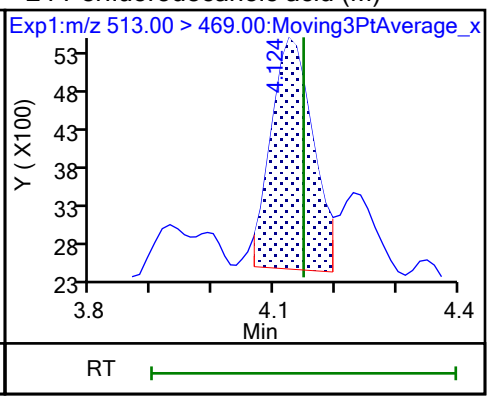
68 Perfluorononanesulfonic acid (ND)



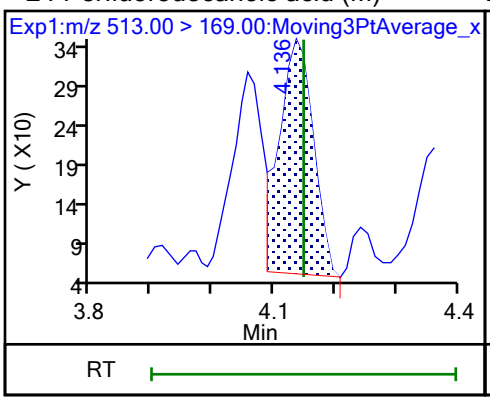
68 Perfluorononanesulfonic acid (ND)



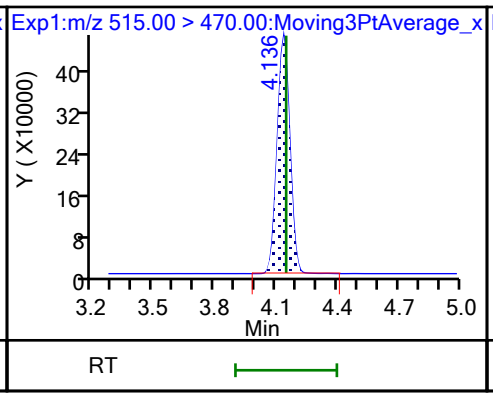
24 Perfluorodecanoic acid (M)



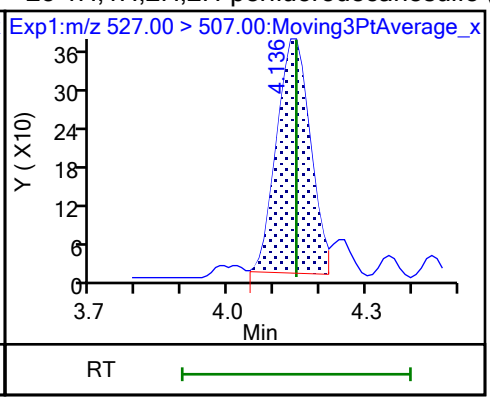
24 Perfluorodecanoic acid (M)



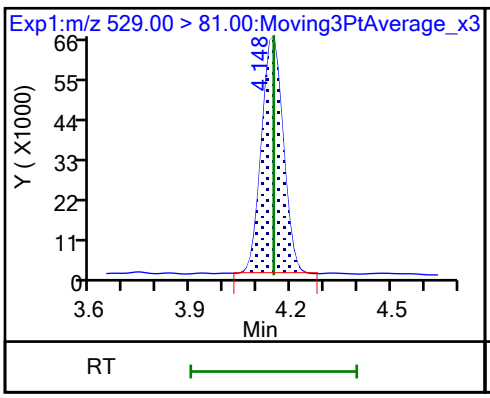
D 23 13C2 PFDA



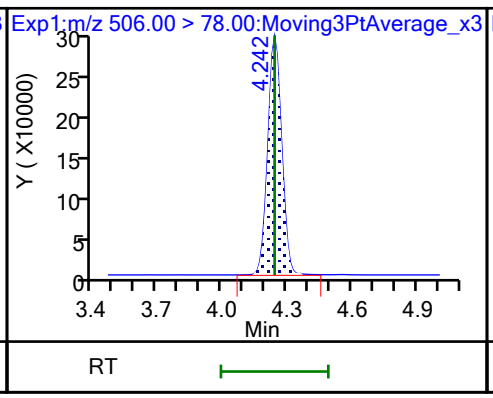
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



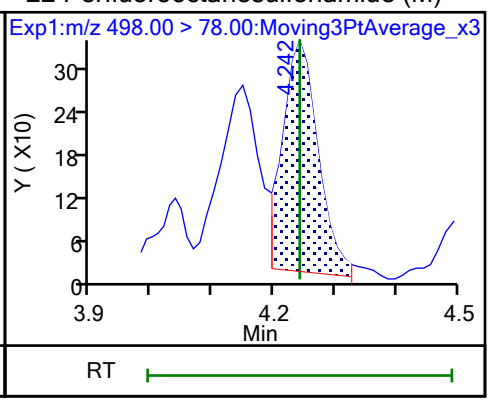
D 26 M2-8:2 FTS



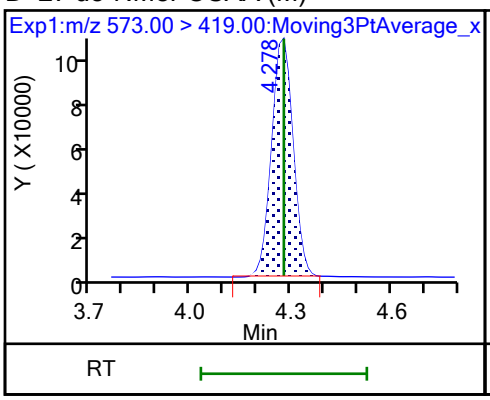
D 21 13C8 FOSA



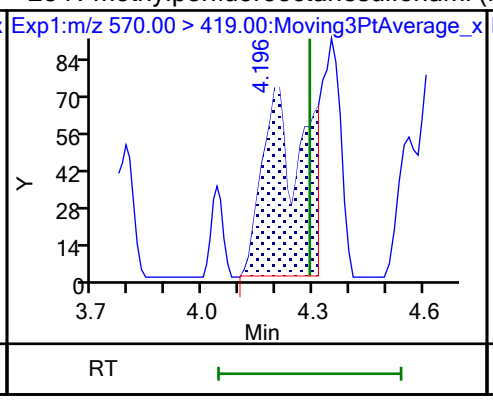
22 Perfluorooctanesulfonamide (M)



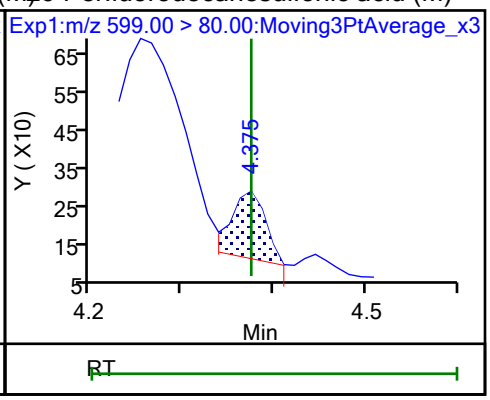
D 27 d3-NMeFOSAA (M)



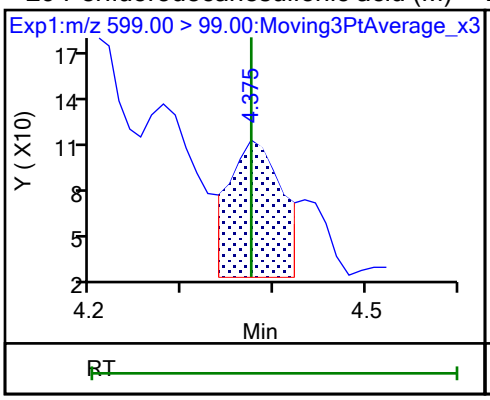
28 N-methylperfluorooctanesulfonami (M)



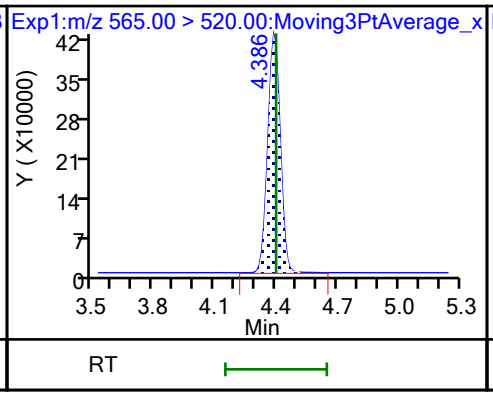
29 Perfluorodecanesulfonic acid (M)



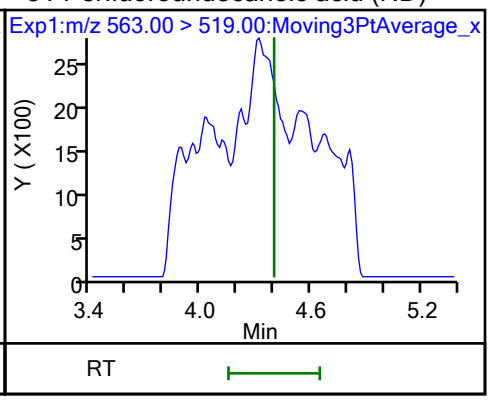
29 Perfluorodecanesulfonic acid (M)



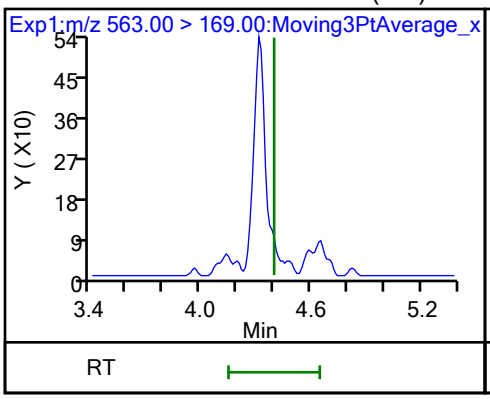
D 30 13C2 PFUnA



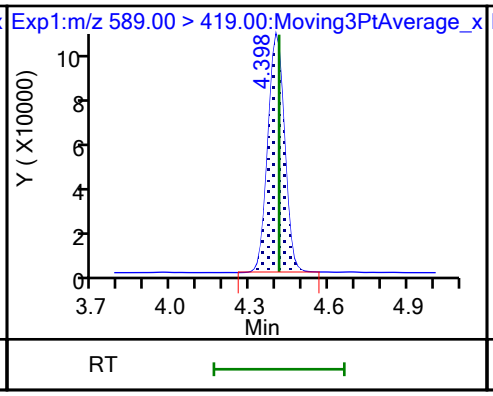
31 Perfluoroundecanoic acid (ND)



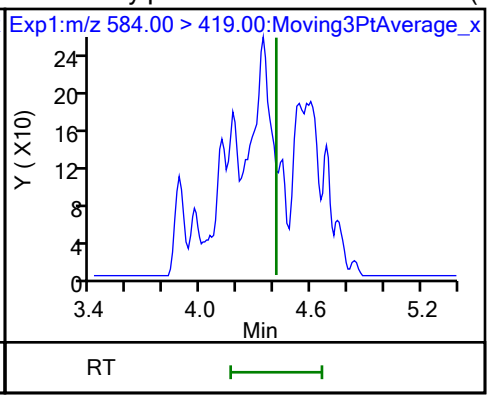
31 Perfluoroundecanoic acid (ND)



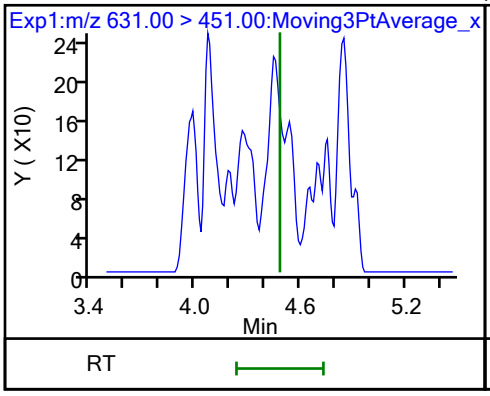
D 32 d5-NEtFOSAA



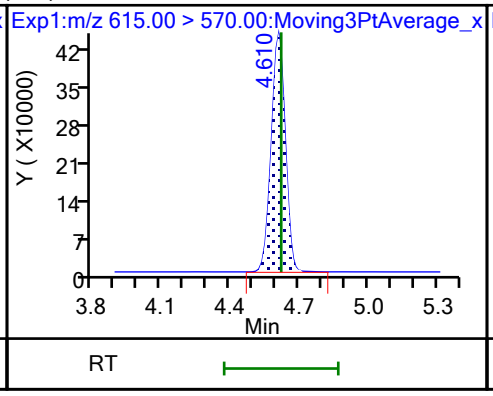
33 N-ethylperfluorooctanesulfonamid (ND)



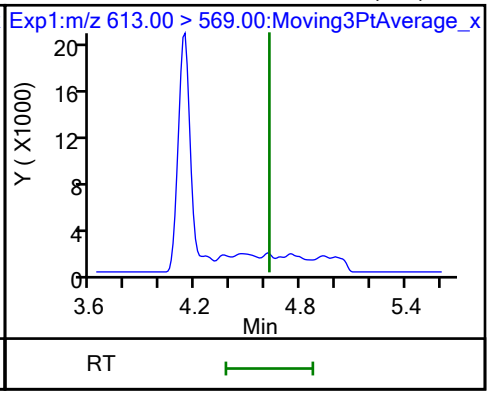
66 11-Chloroeicosafluoro-3-oxaundec (ND)



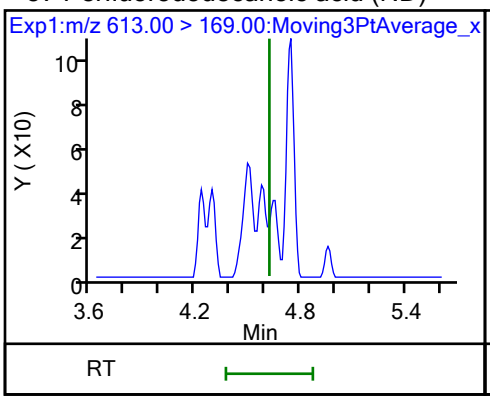
D 36 13C2 PFDoA



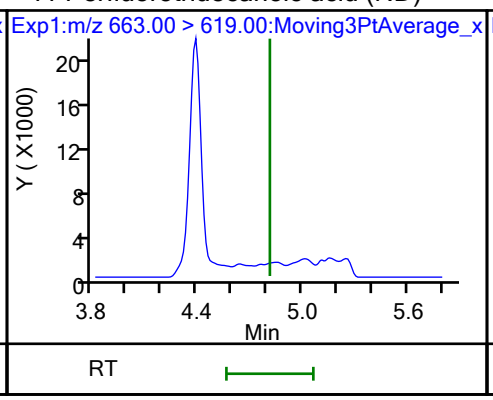
37 Perfluorododecanoic acid (ND)



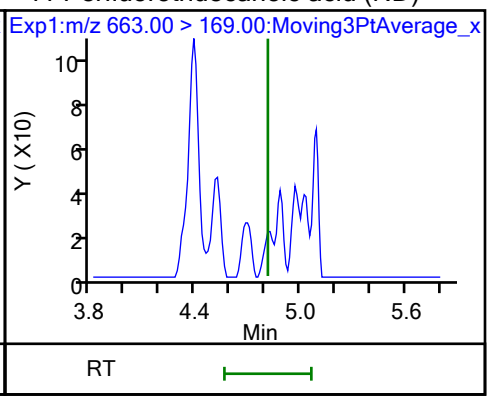
37 Perfluorododecanoic acid (ND)



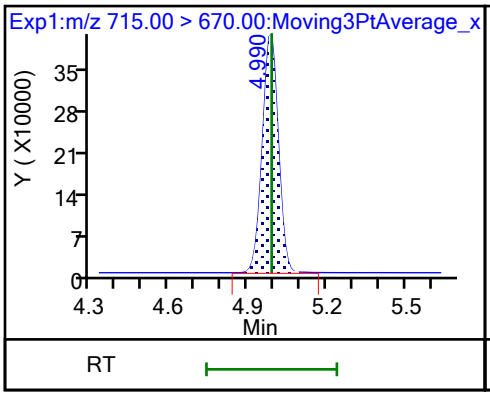
41 Perfluorotridecanoic acid (ND)



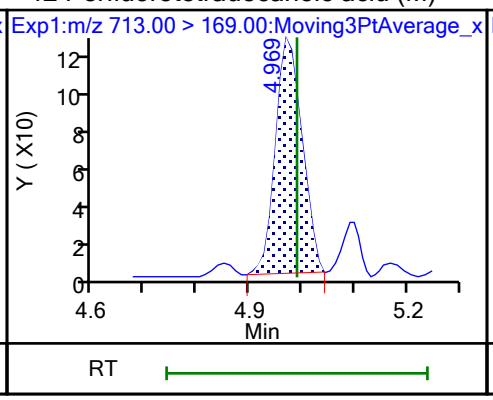
41 Perfluorotridecanoic acid (ND)



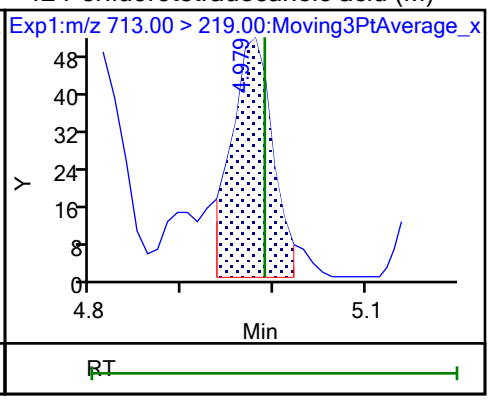
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

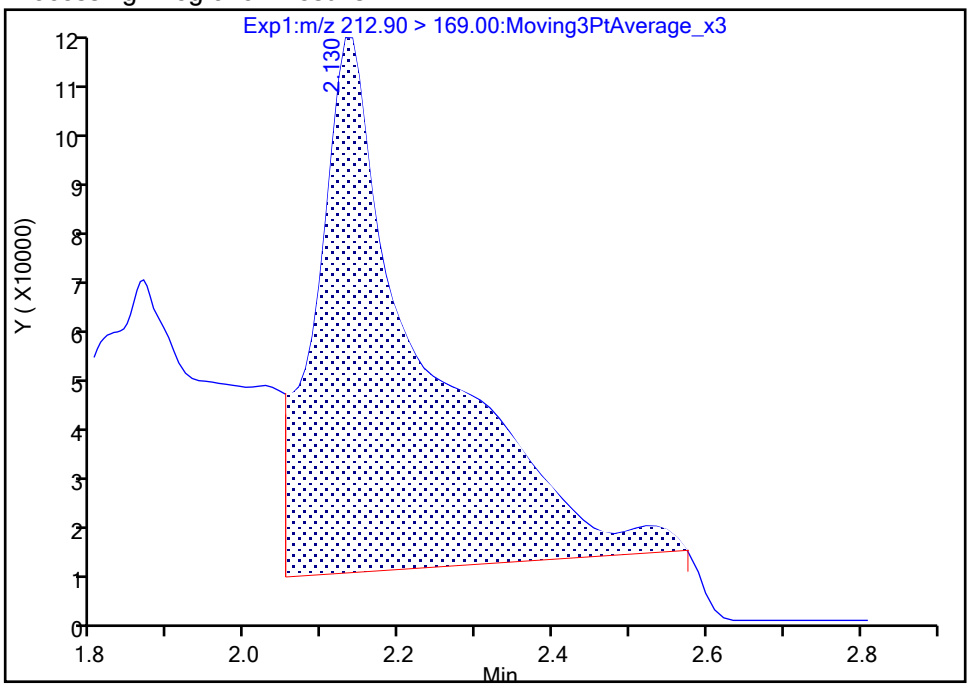
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

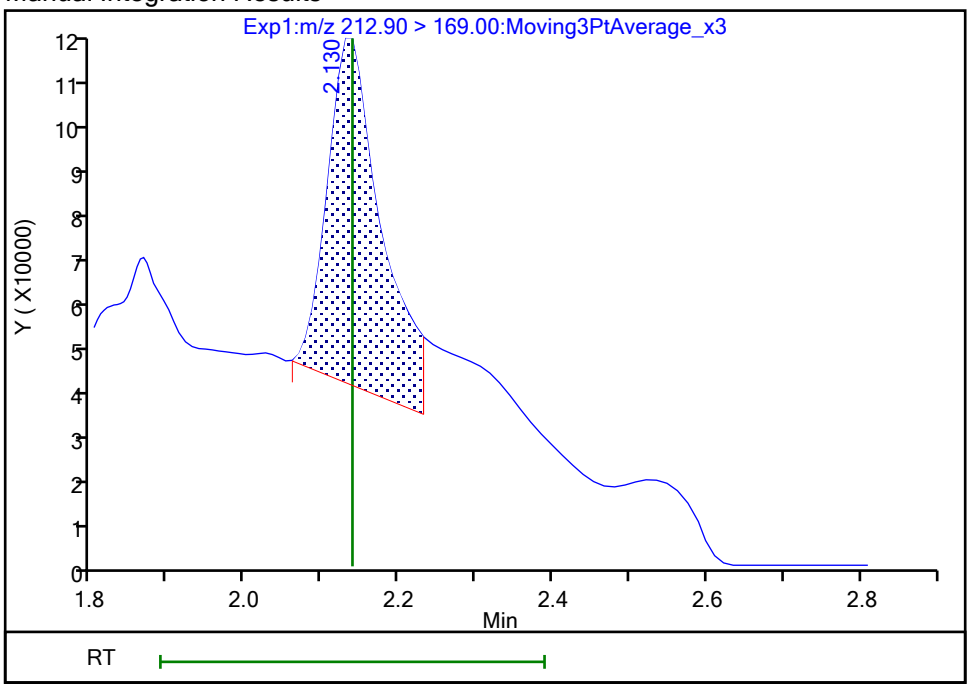
Processing Integration Results

RT: 2.13
Area: 1032454
Amount: 0.949280
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 365602
Amount: 0.309743
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:44:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

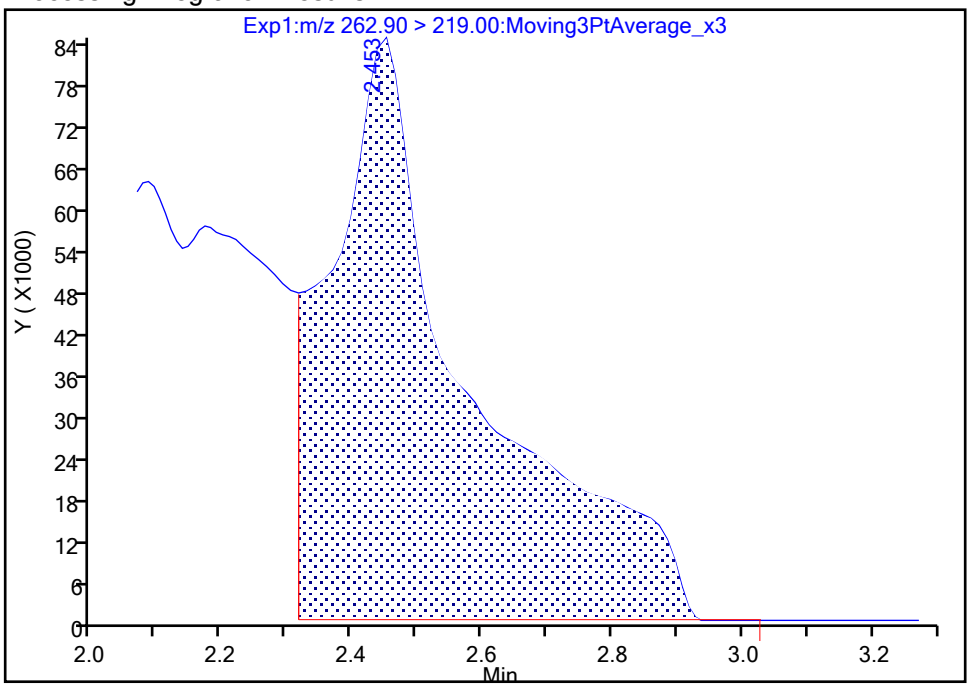
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

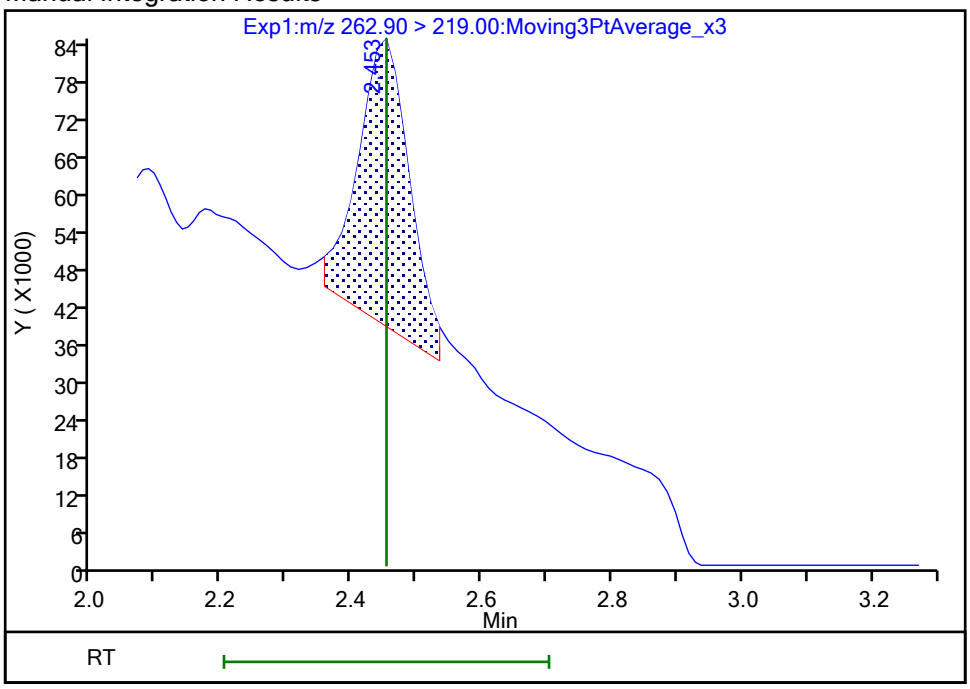
Processing Integration Results

RT: 2.45
Area: 1279772
Amount: 1.264172
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 252064
Amount: 0.248991
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:44:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

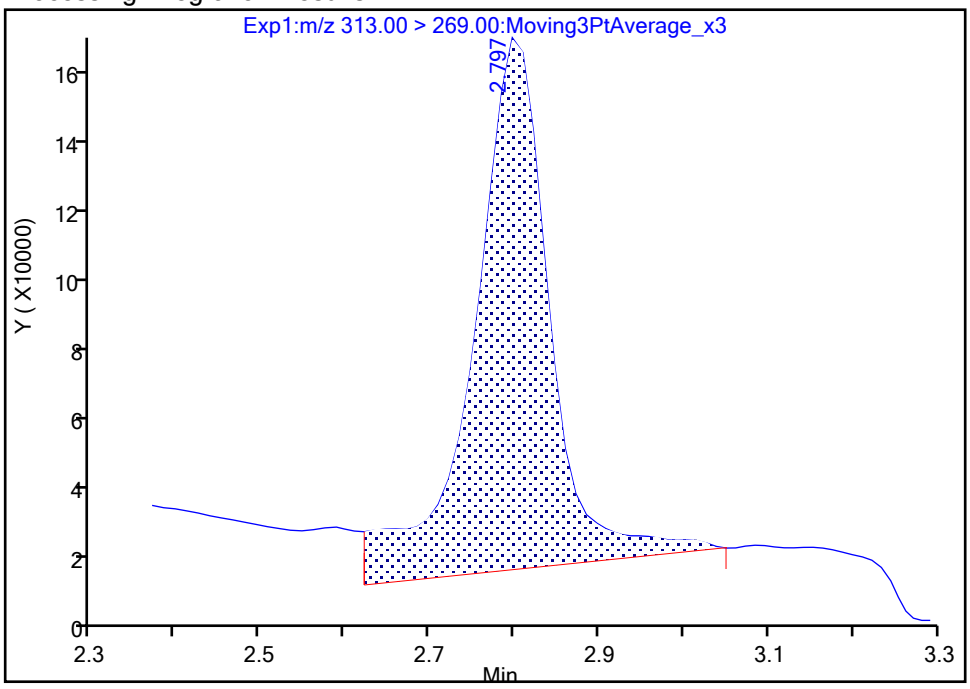
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

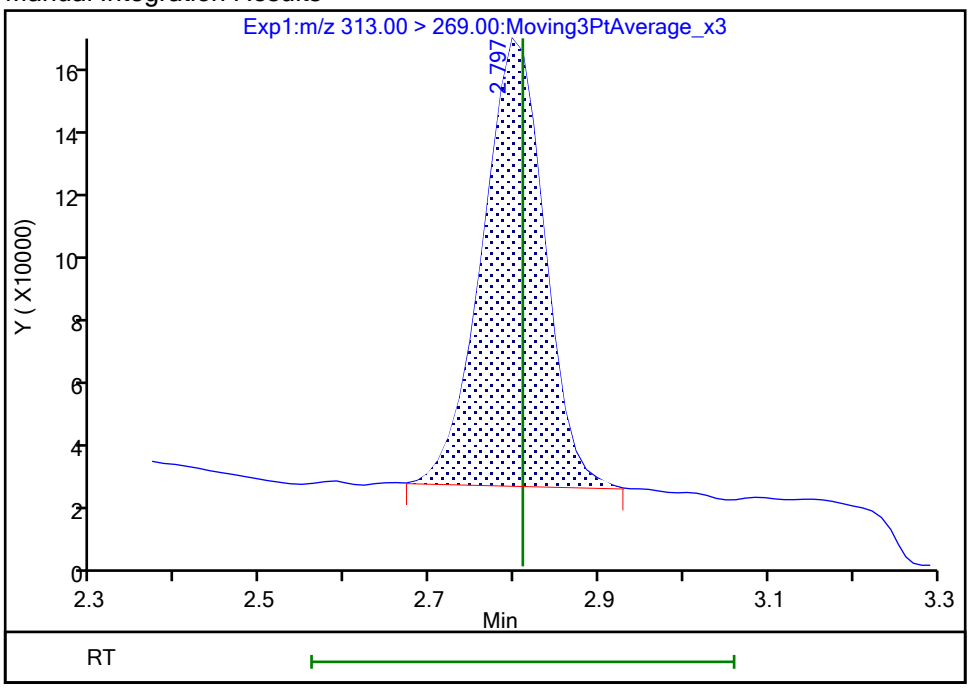
Processing Integration Results

RT: 2.80
Area: 943584
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 710776
Amount: 0.671998
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:44:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

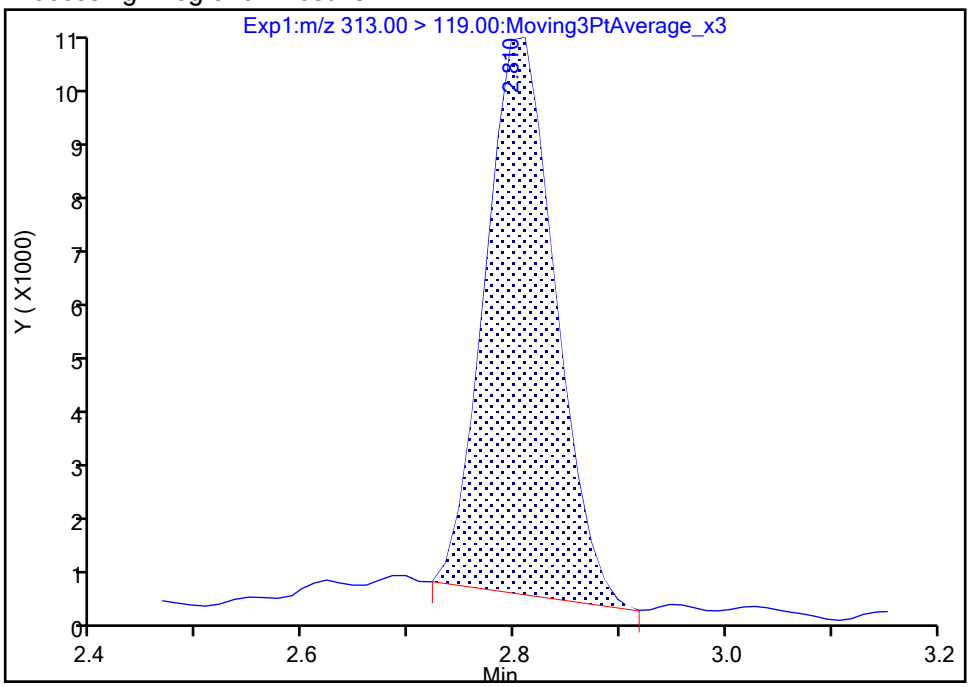
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

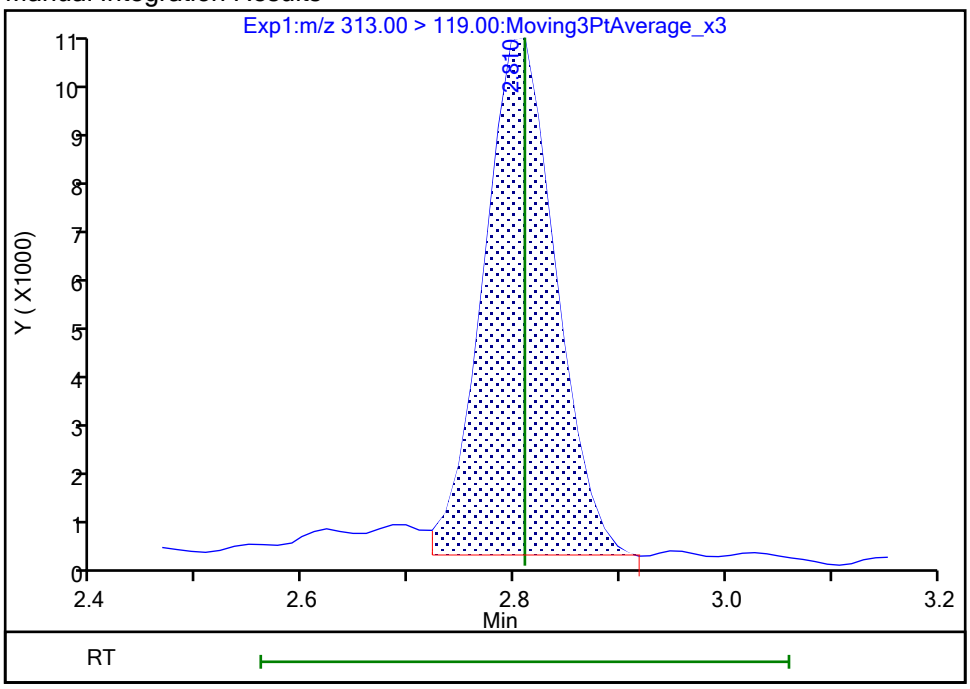
Processing Integration Results

RT: 2.81
Area: 44367
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 46780
Amount: 0.671998
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:39:48 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

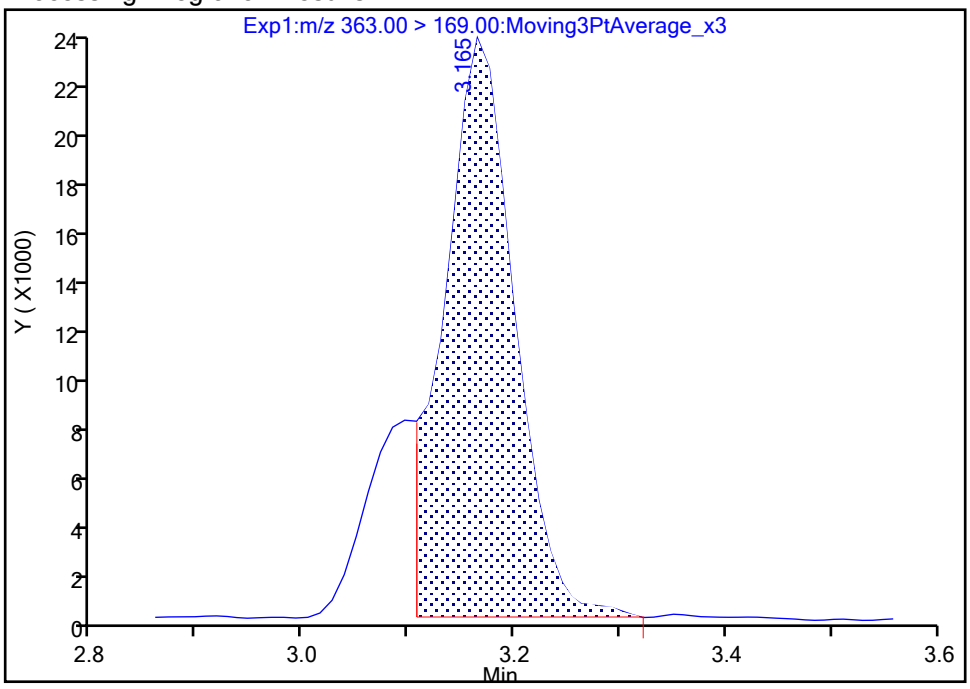
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

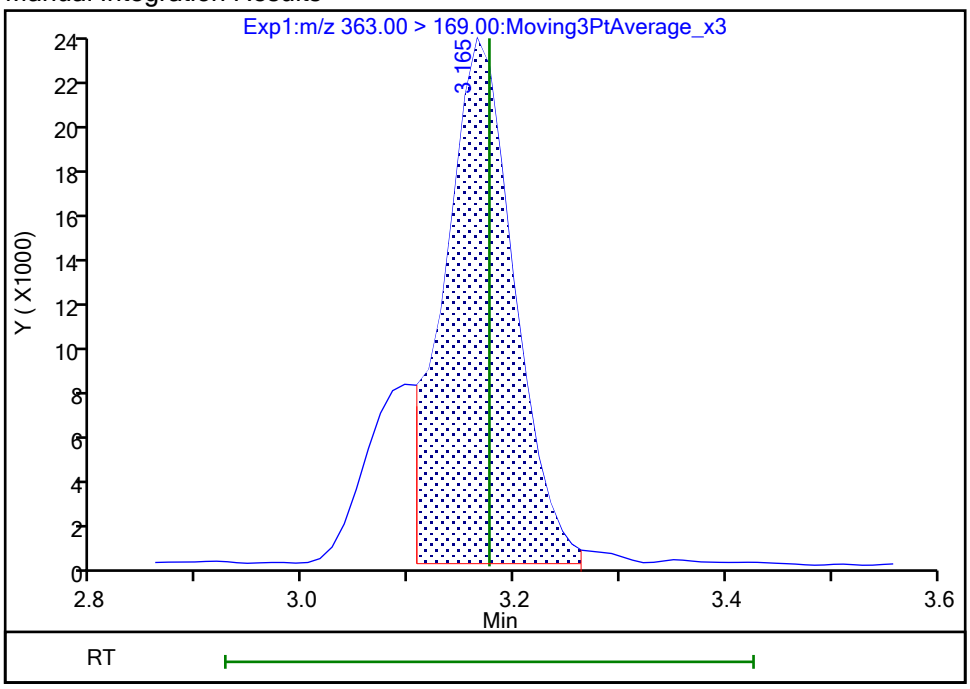
Processing Integration Results

RT: 3.16
Area: 108677
Amount: 0.435175
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 107476
Amount: 0.303492
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:46:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

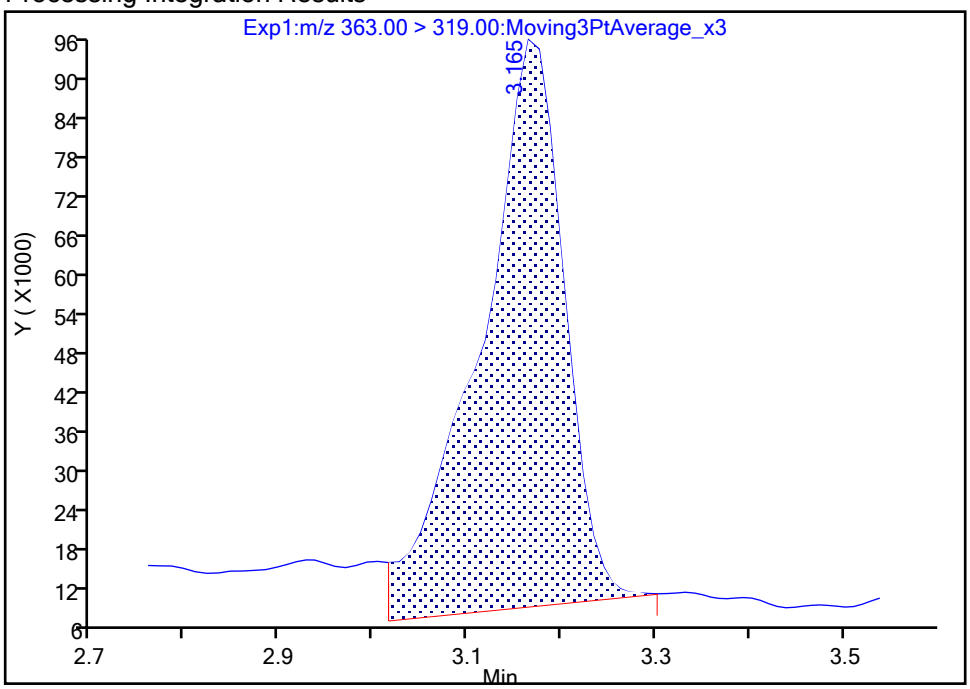
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

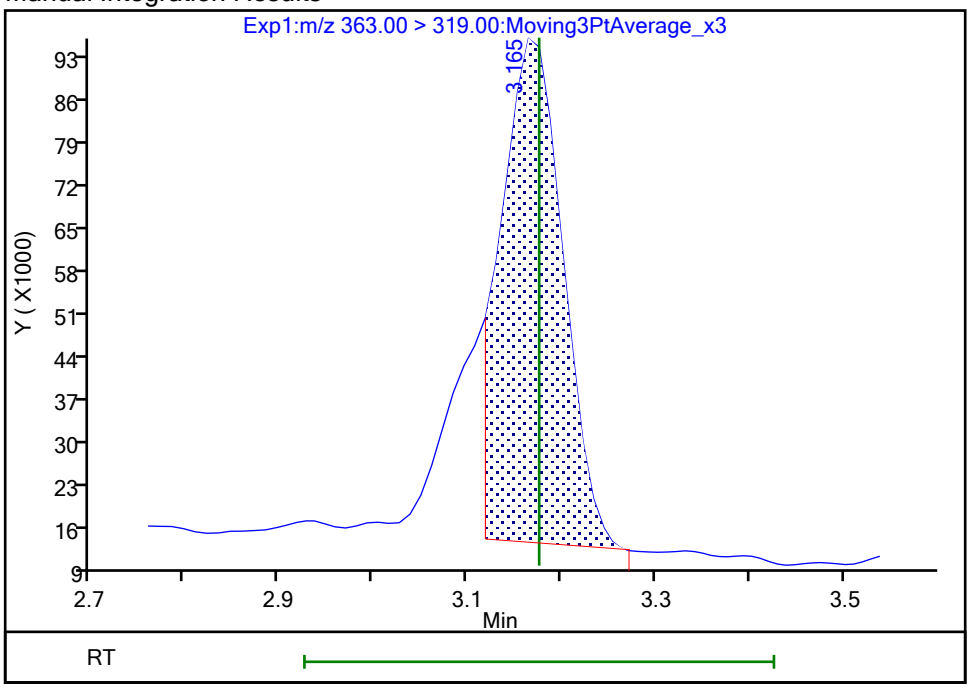
Processing Integration Results

RT: 3.16
Area: 541949
Amount: 0.435175
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 377956
Amount: 0.303492
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:46:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

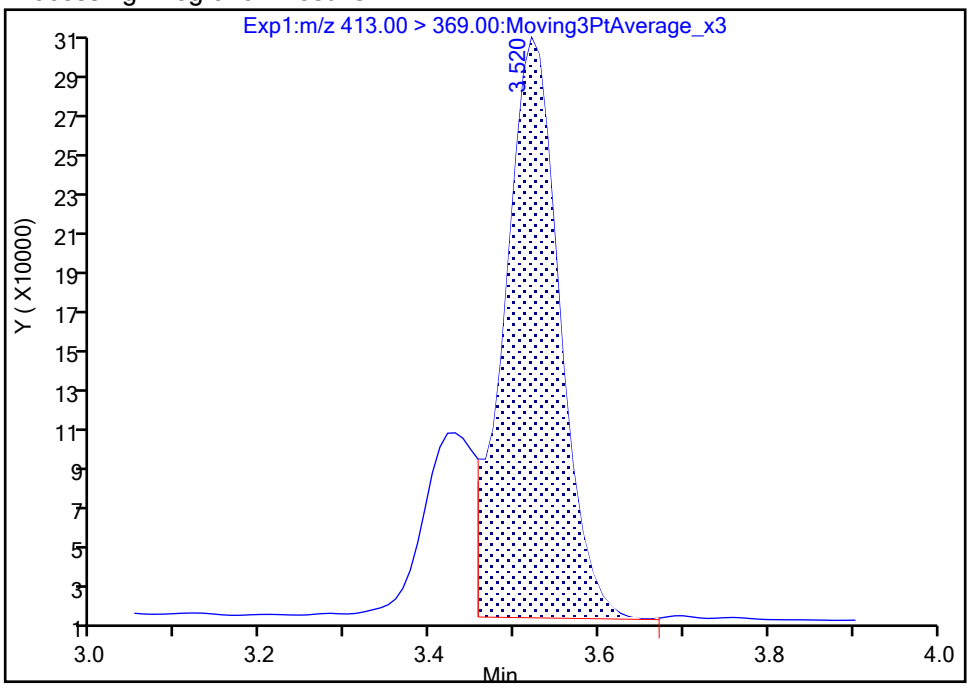
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

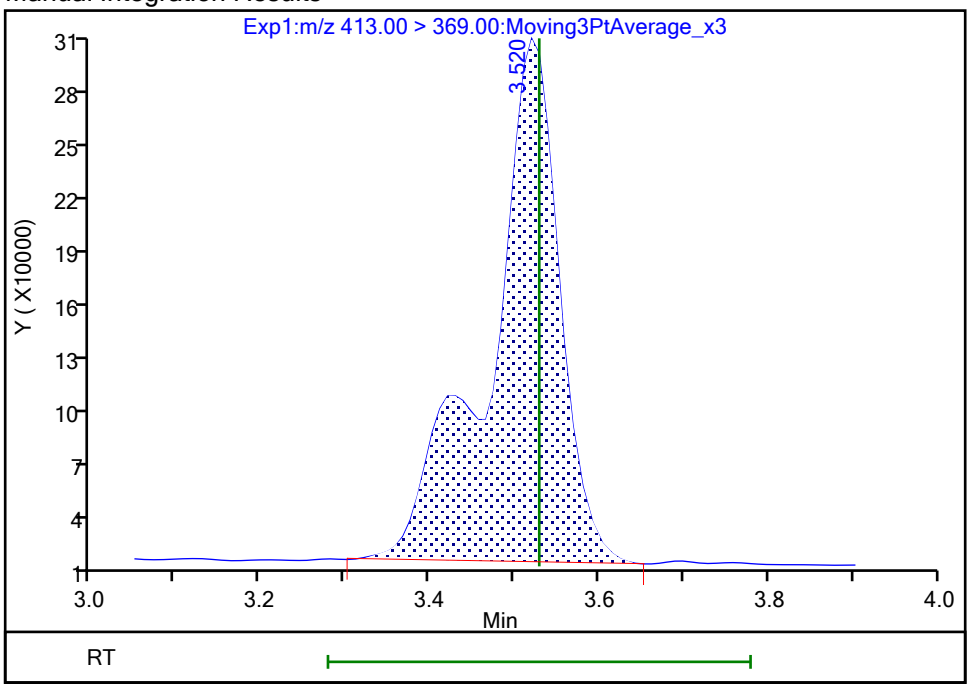
Processing Integration Results

RT: 3.52
Area: 1327571
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1702691
Amount: 1.250269
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:47:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

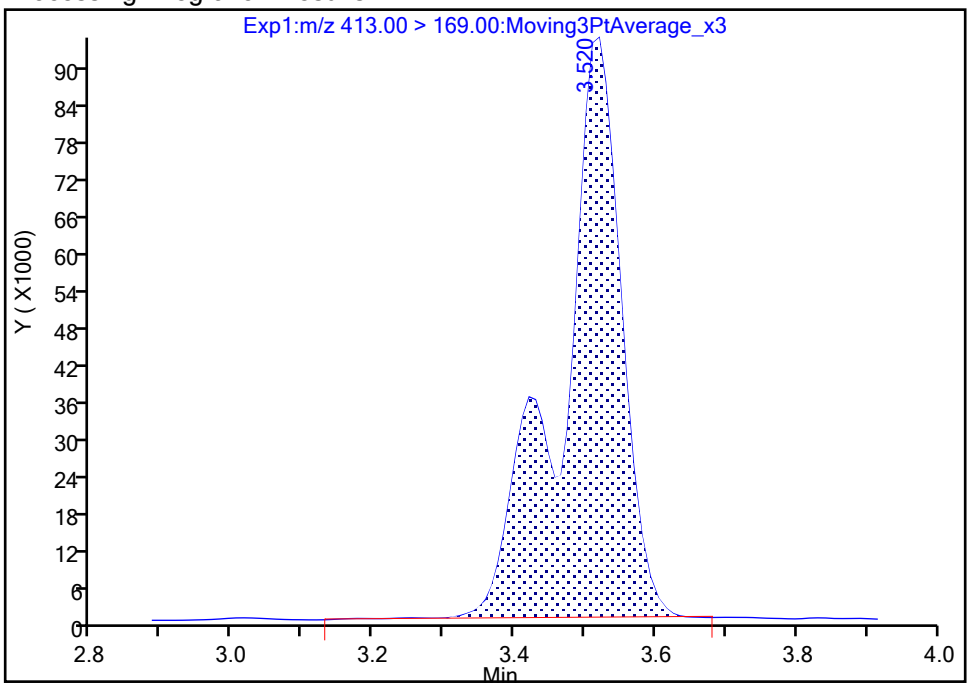
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

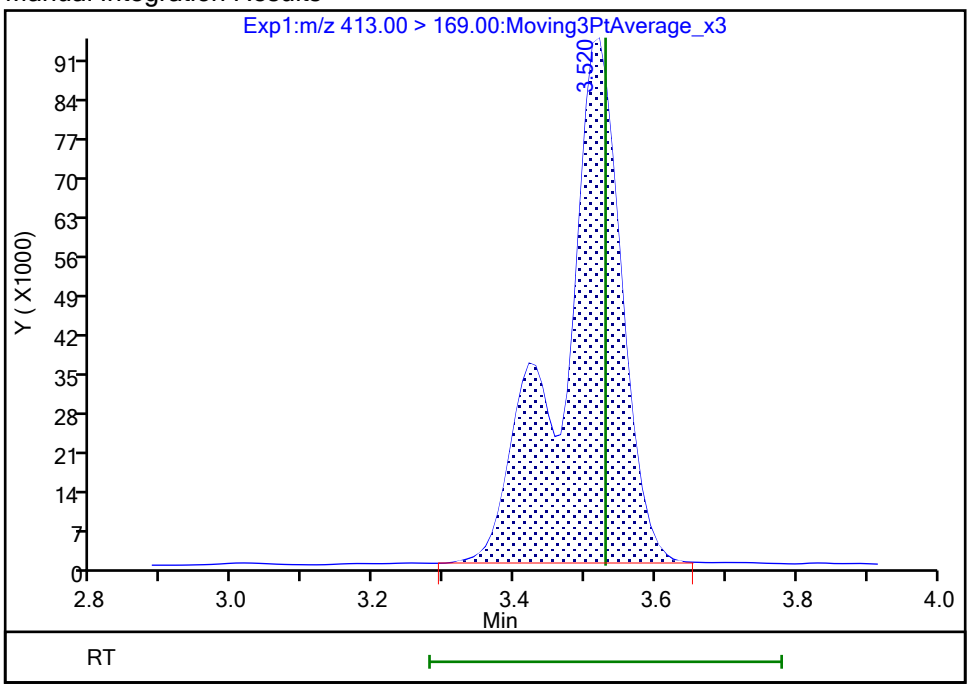
Processing Integration Results

RT: 3.52
Area: 563981
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 559896
Amount: 1.250269
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:47:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

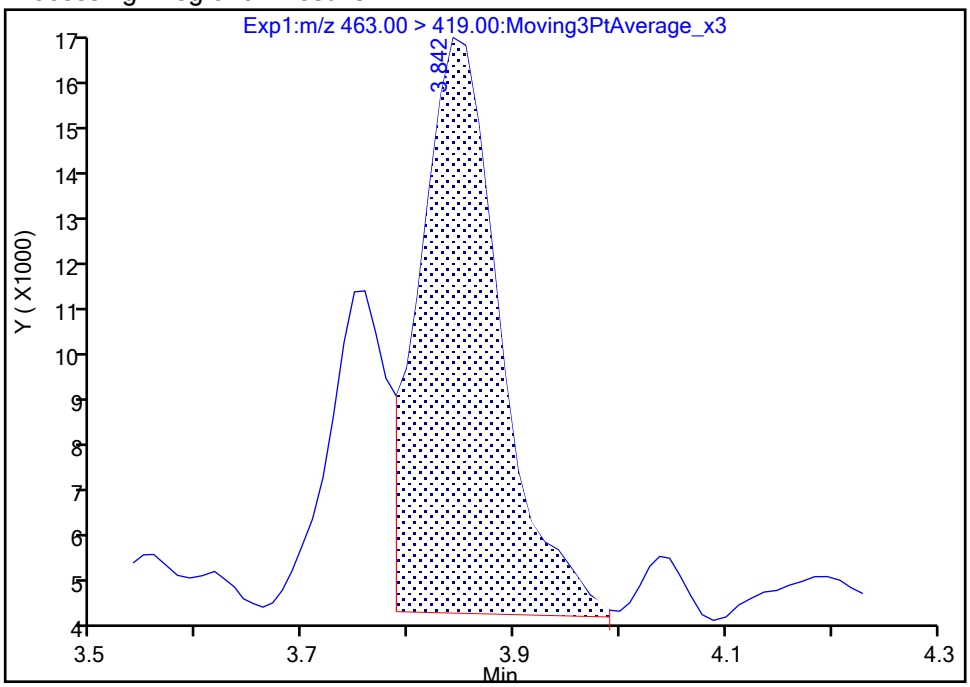
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

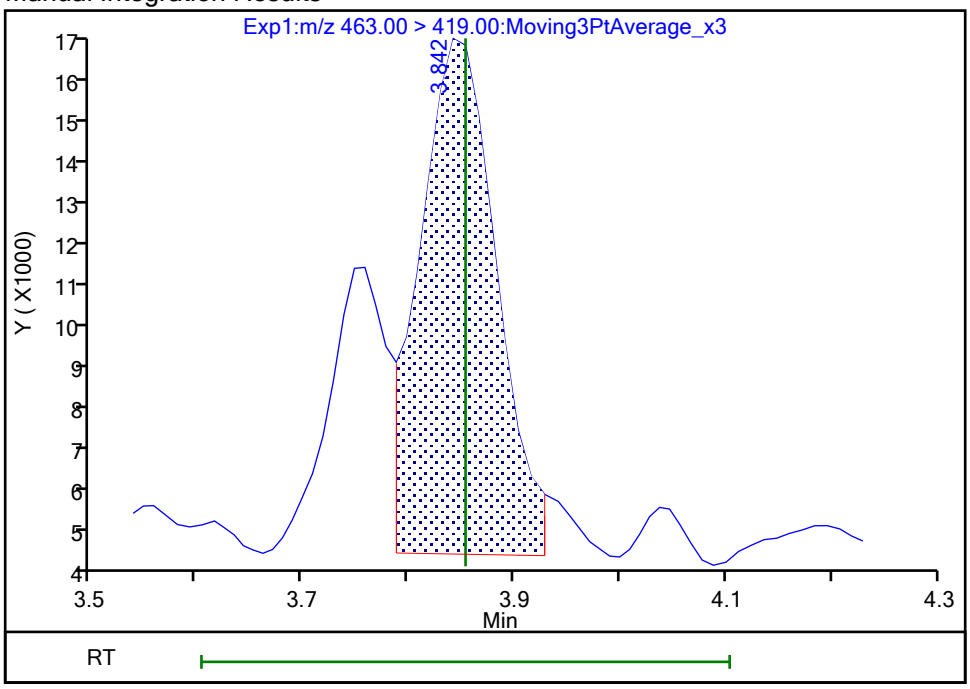
Processing Integration Results

RT: 3.84
Area: 63342
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 59463
Amount: 0.044058
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:48:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

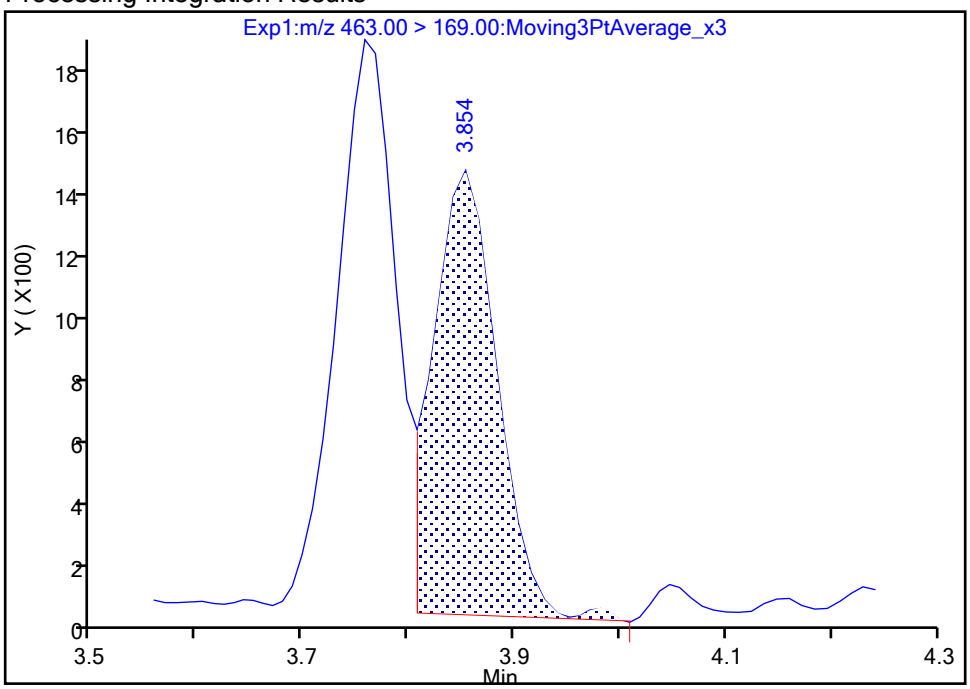
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

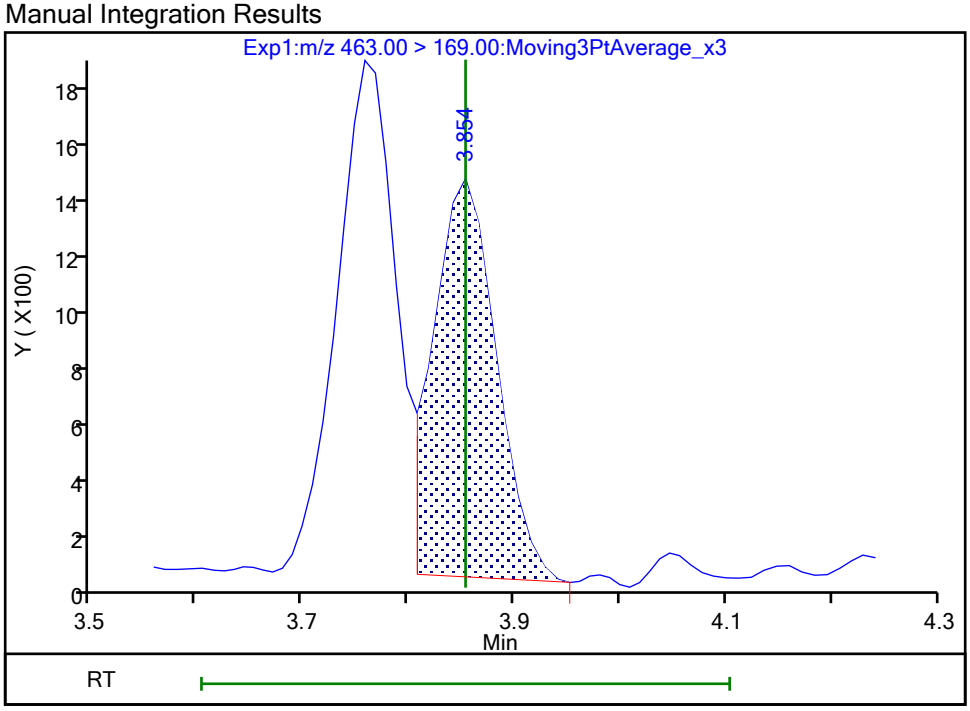
Processing Integration Results

RT: 3.85
Area: 5728
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 5573
Amount: 0.044058
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:48:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

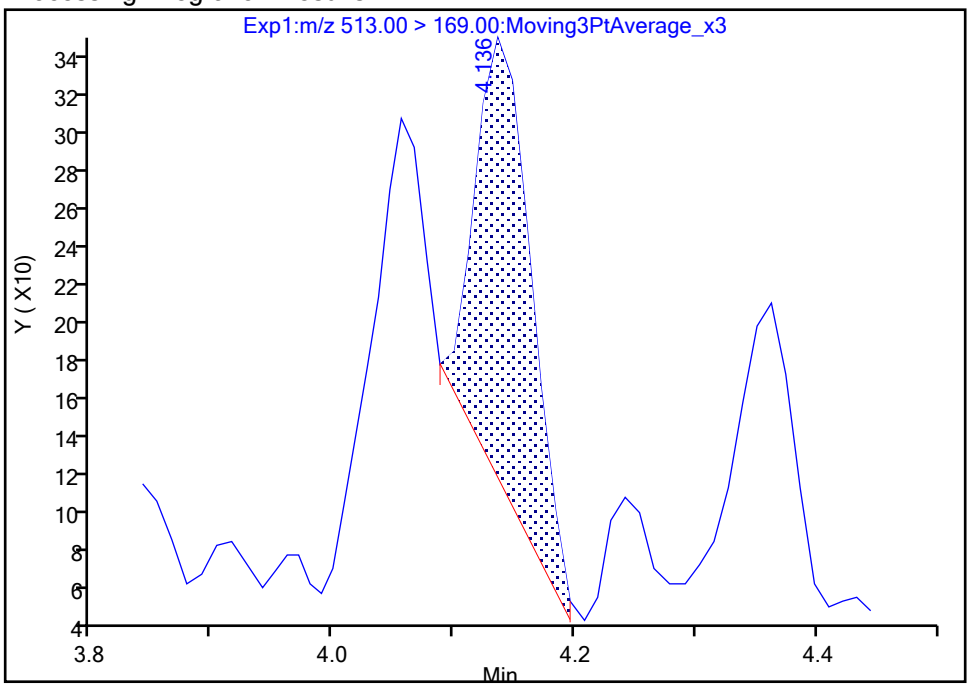
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

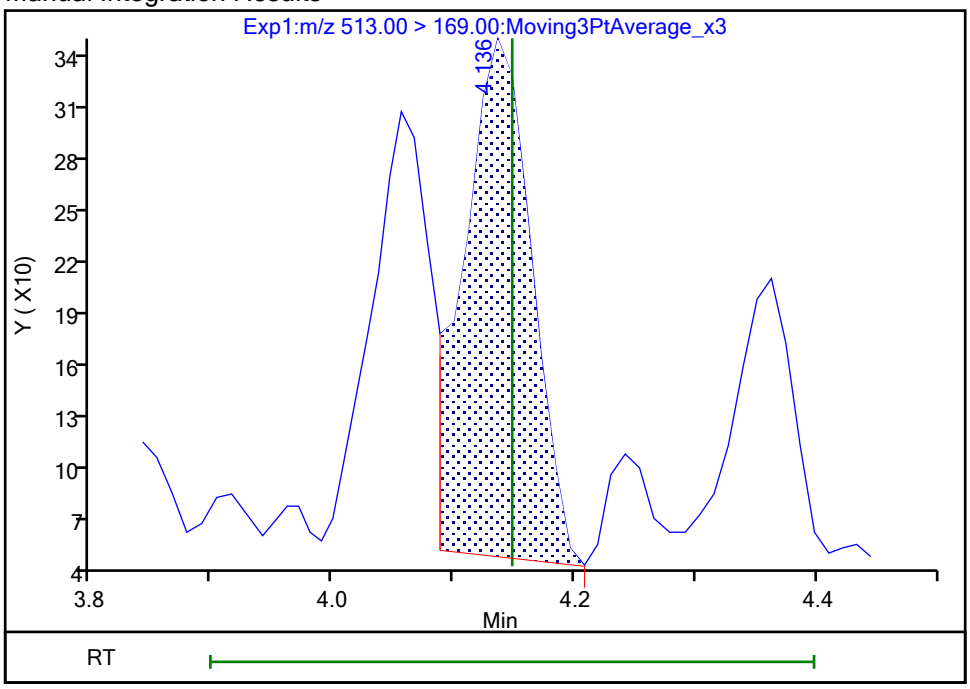
Processing Integration Results

RT: 4.14
Area: 749
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1151
Amount: 0.008659
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:49:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

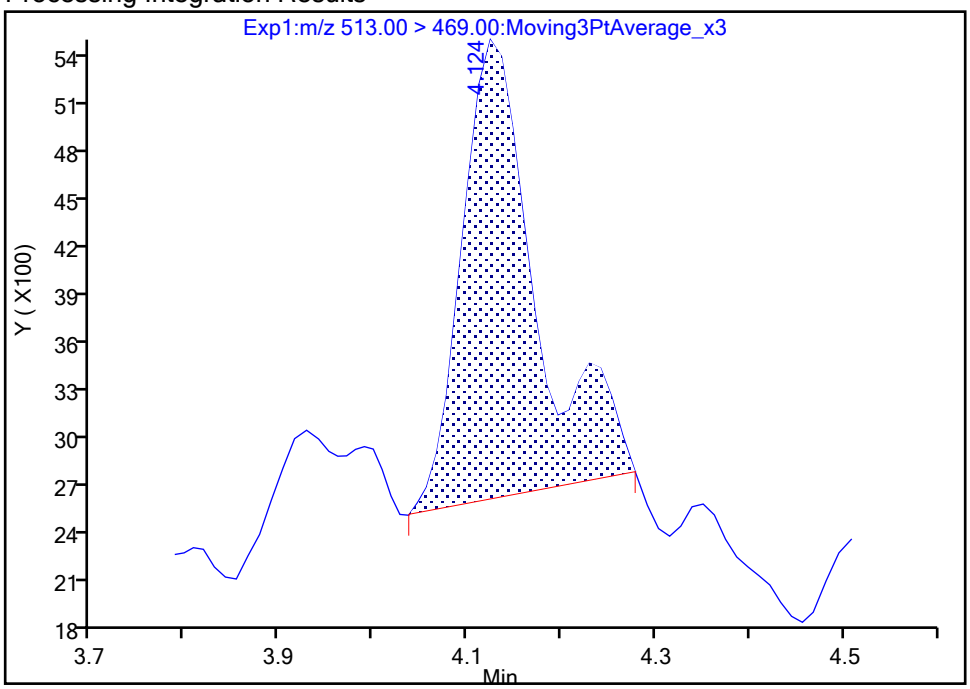
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

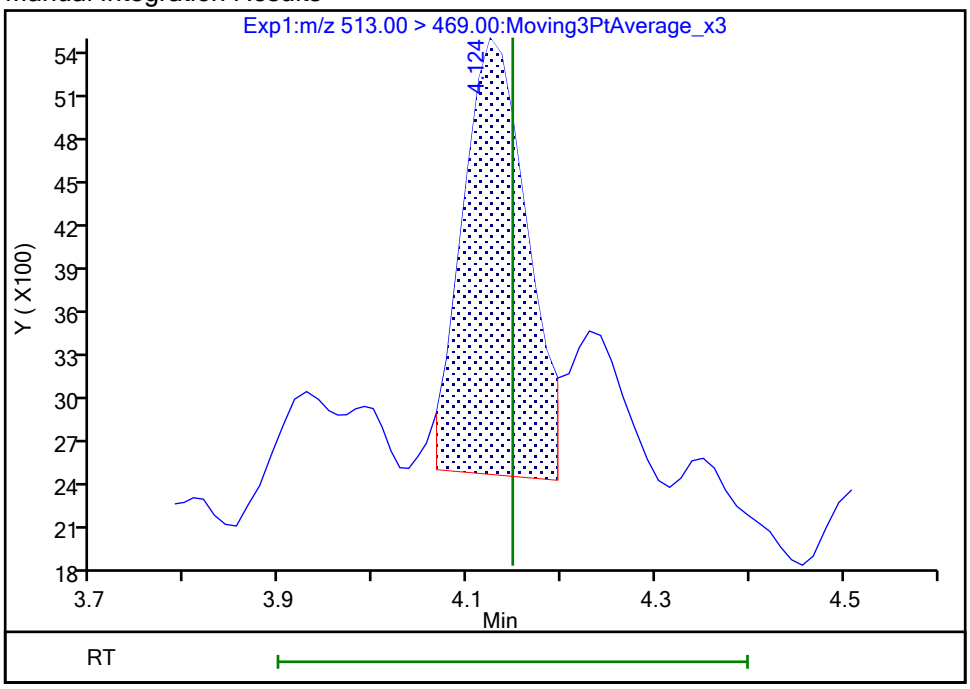
Processing Integration Results

RT: 4.12
Area: 15540
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 14063
Amount: 0.008659
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:49:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

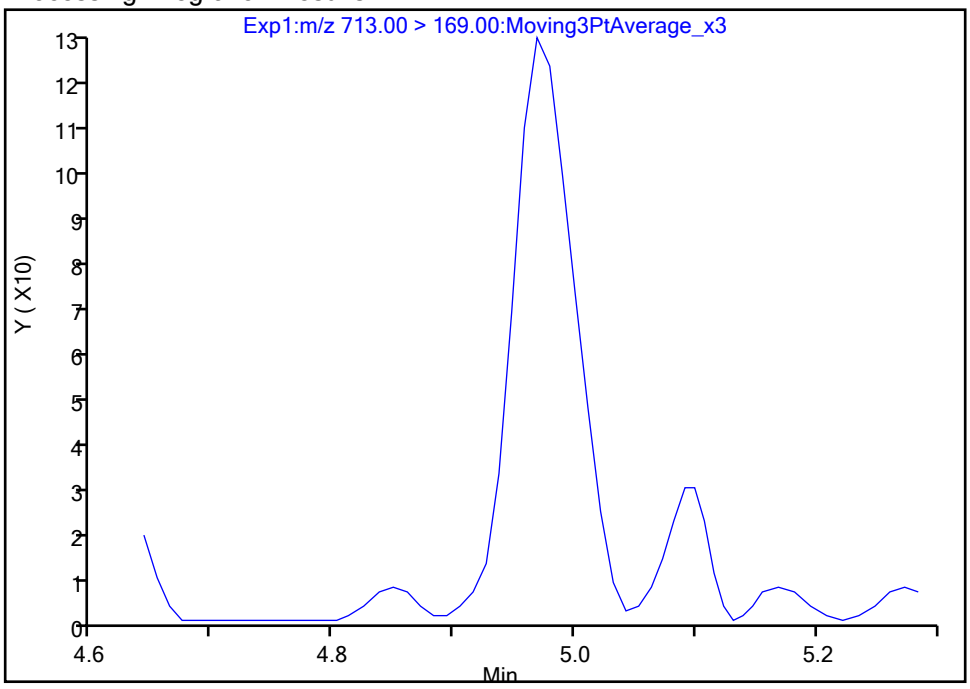
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

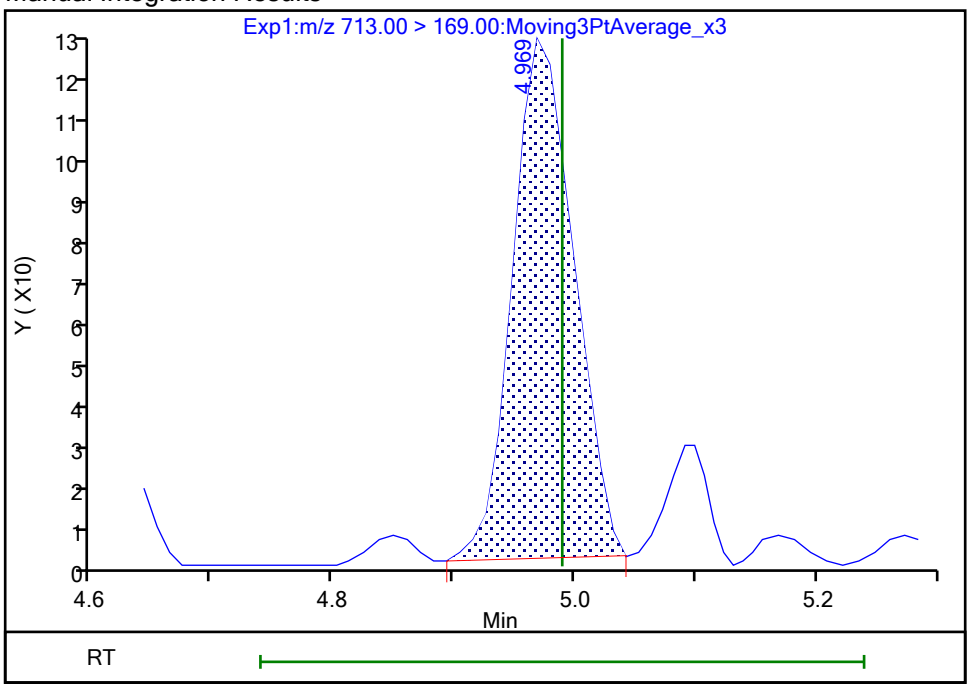
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 429
Amount: 0.002779
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:50:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

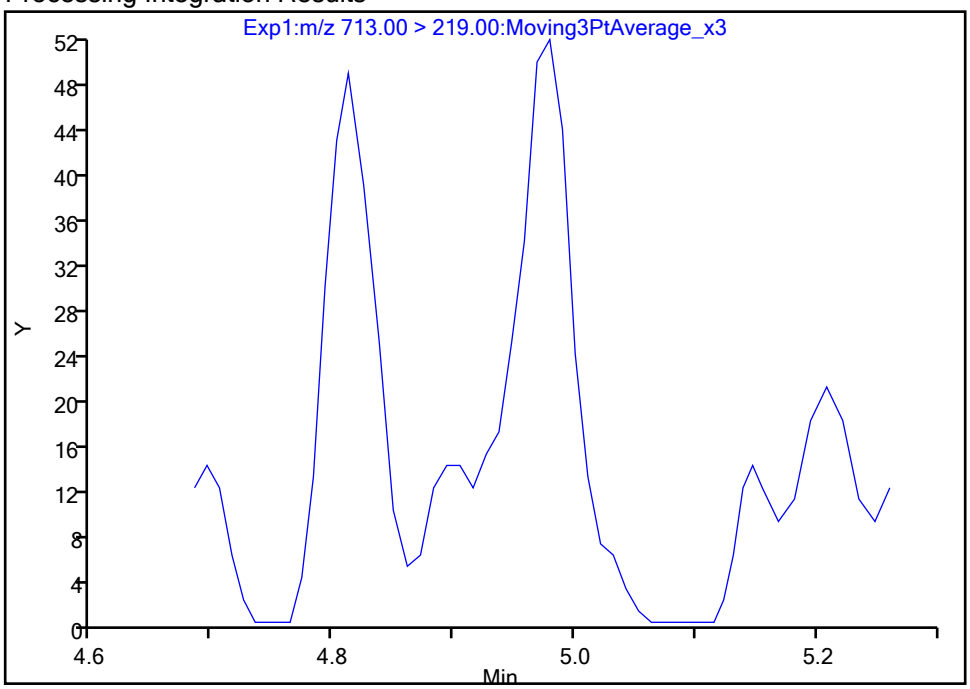
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

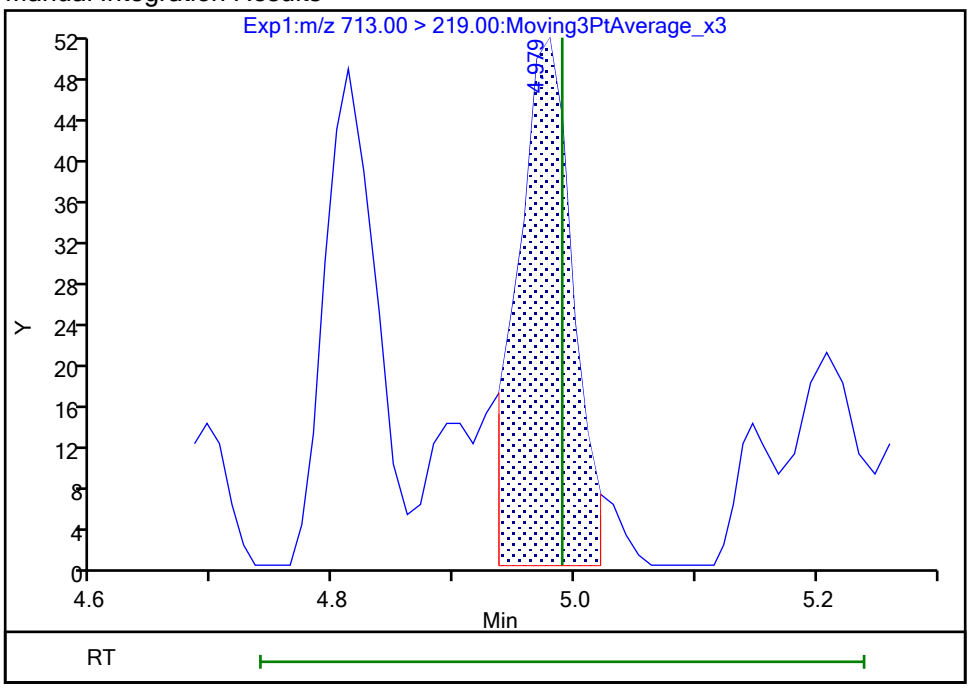
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 160
Amount: 0.002779
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:50:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

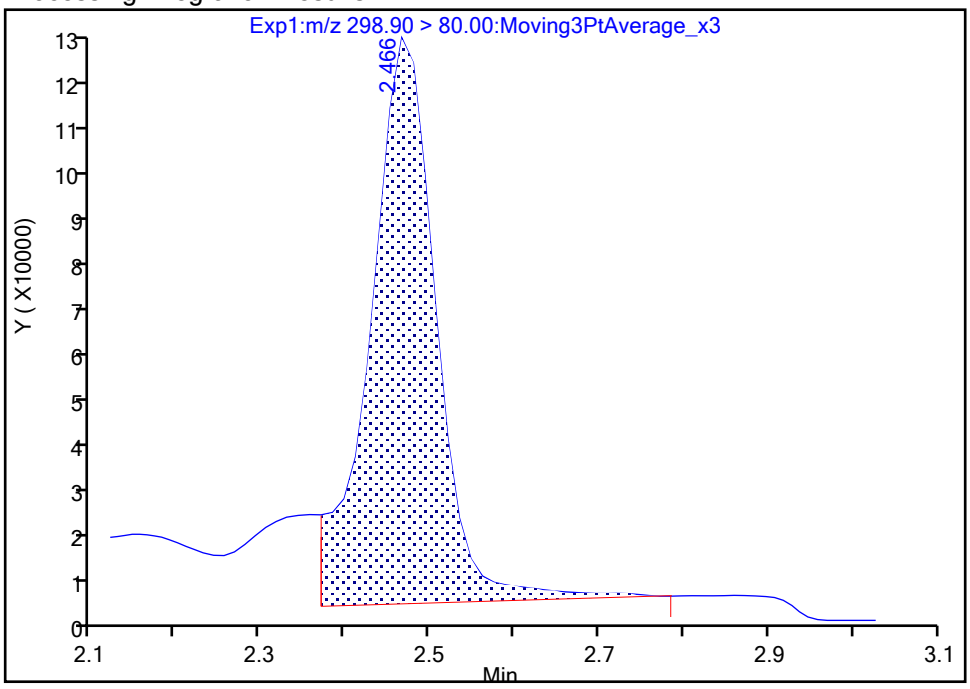
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

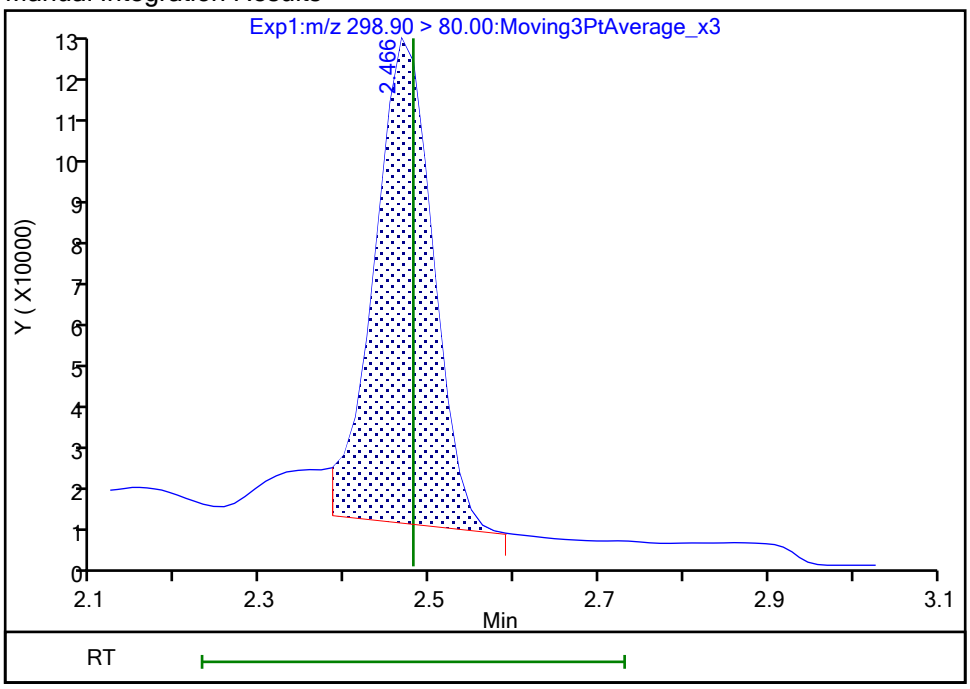
Processing Integration Results

RT: 2.47
Area: 656047
Amount: 0.424737
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 548626
Amount: 0.355191
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:44:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

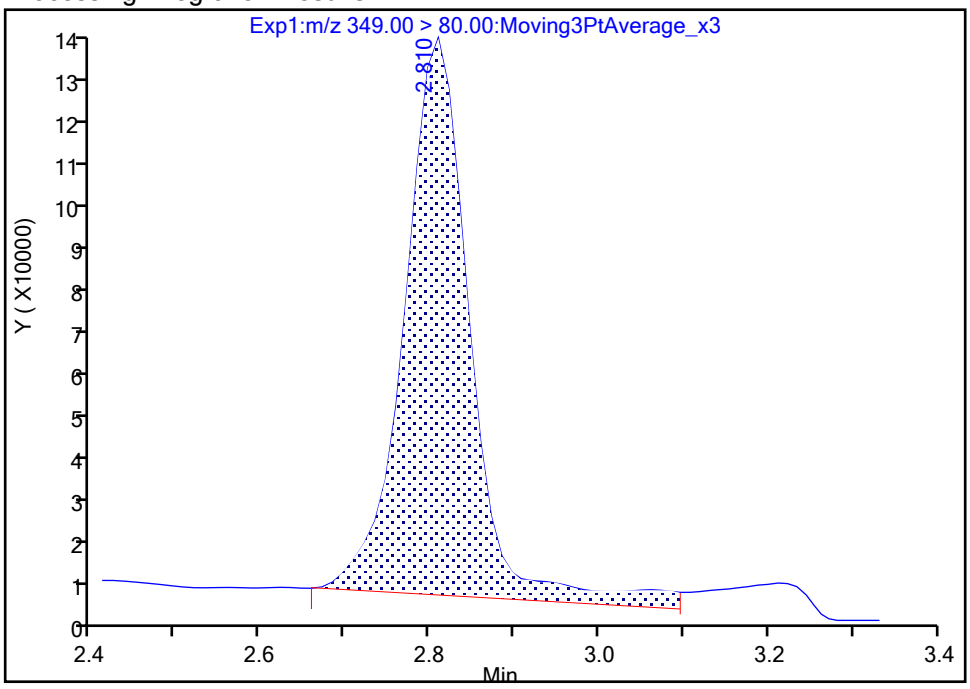
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

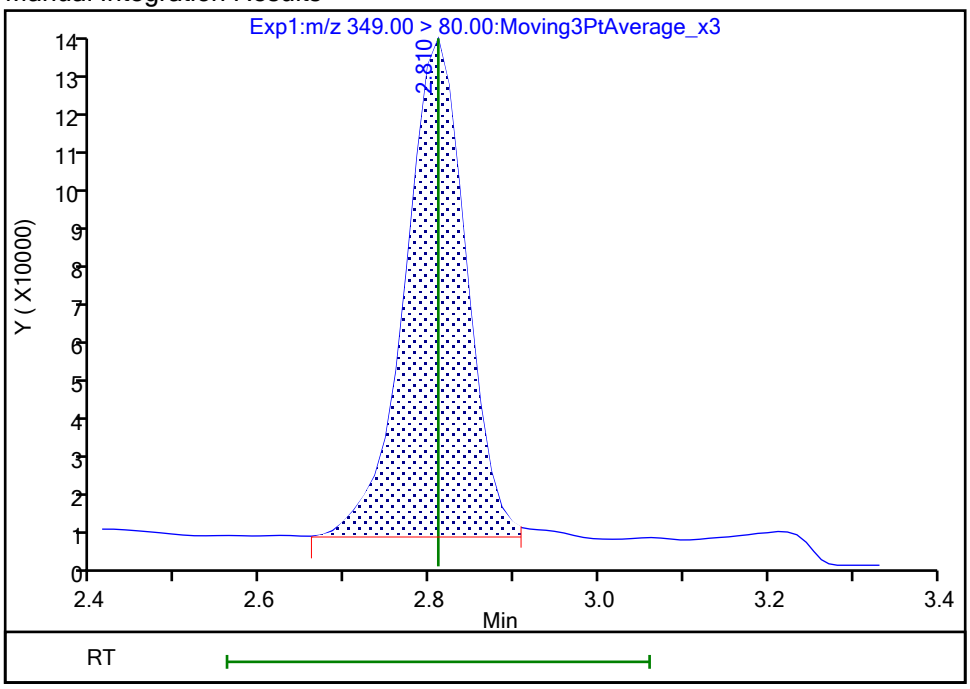
Processing Integration Results

RT: 2.81
Area: 724244
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 663909
Amount: 0.500593
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:45:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

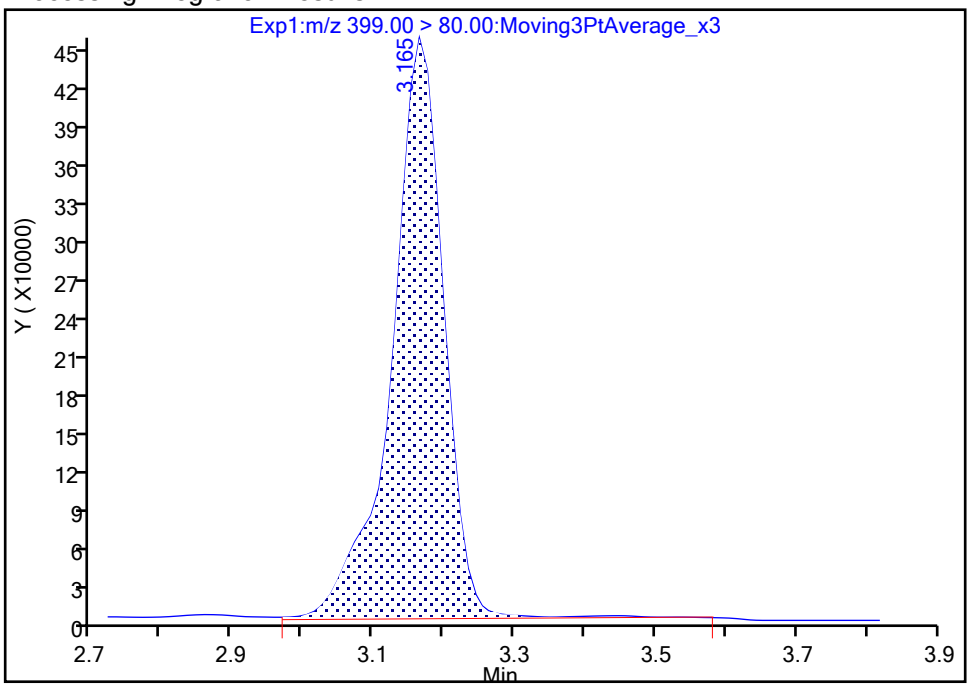
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

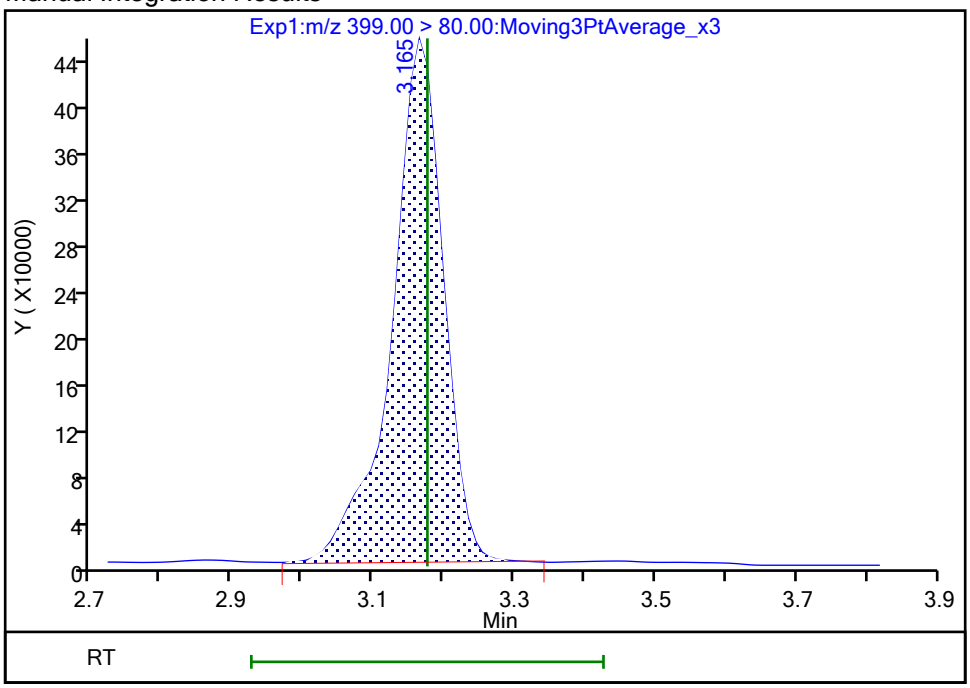
Processing Integration Results

RT: 3.16
Area: 2330924
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2288223
Amount: 2.035369
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:46:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

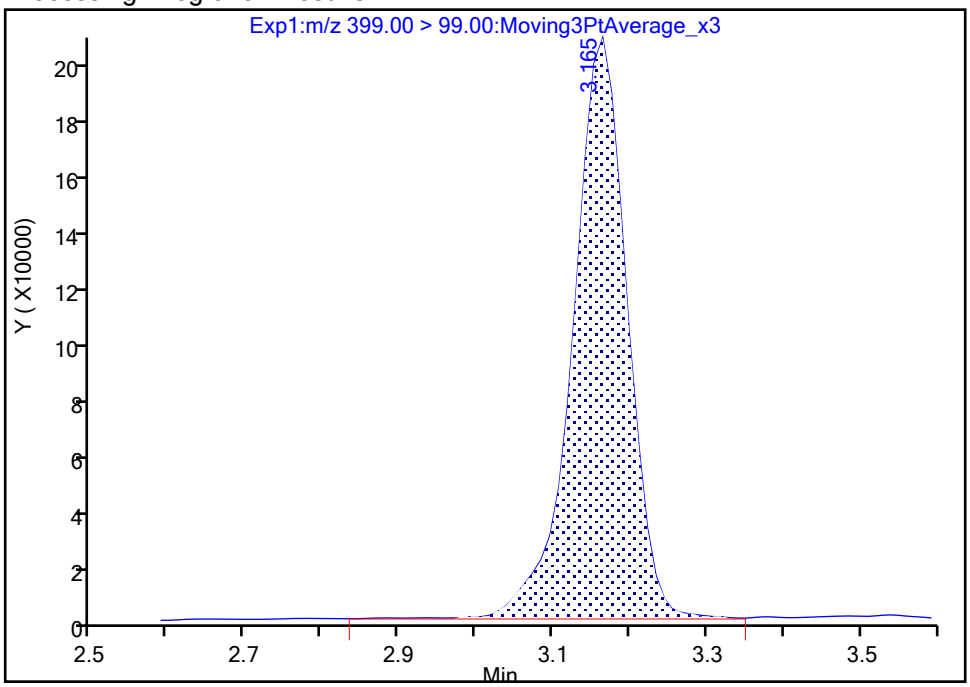
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

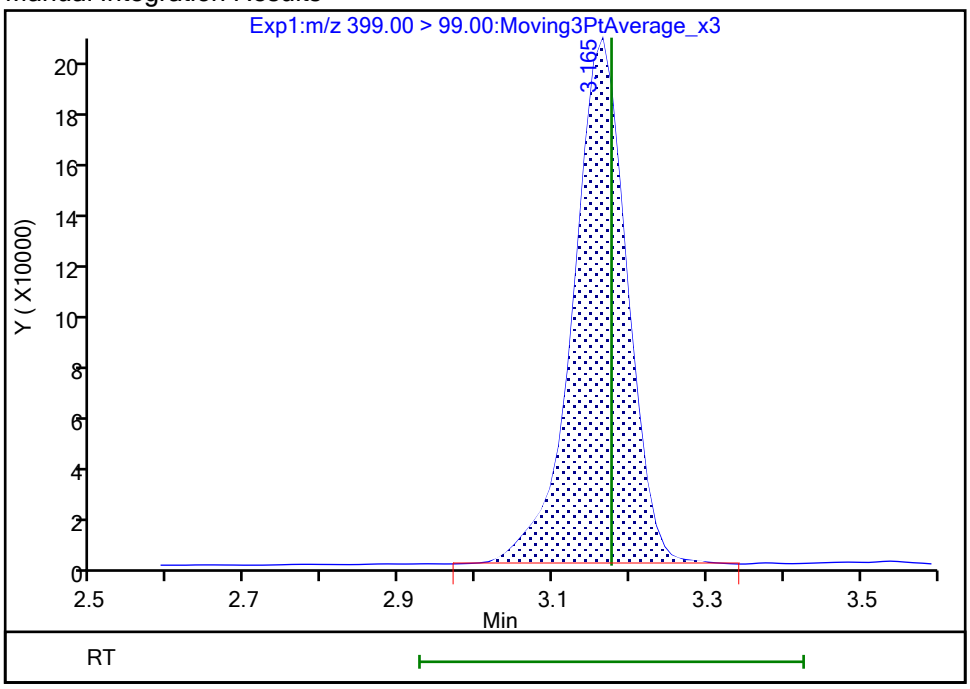
Processing Integration Results

RT: 3.16
Area: 996130
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 980312
Amount: 2.035369
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:46:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

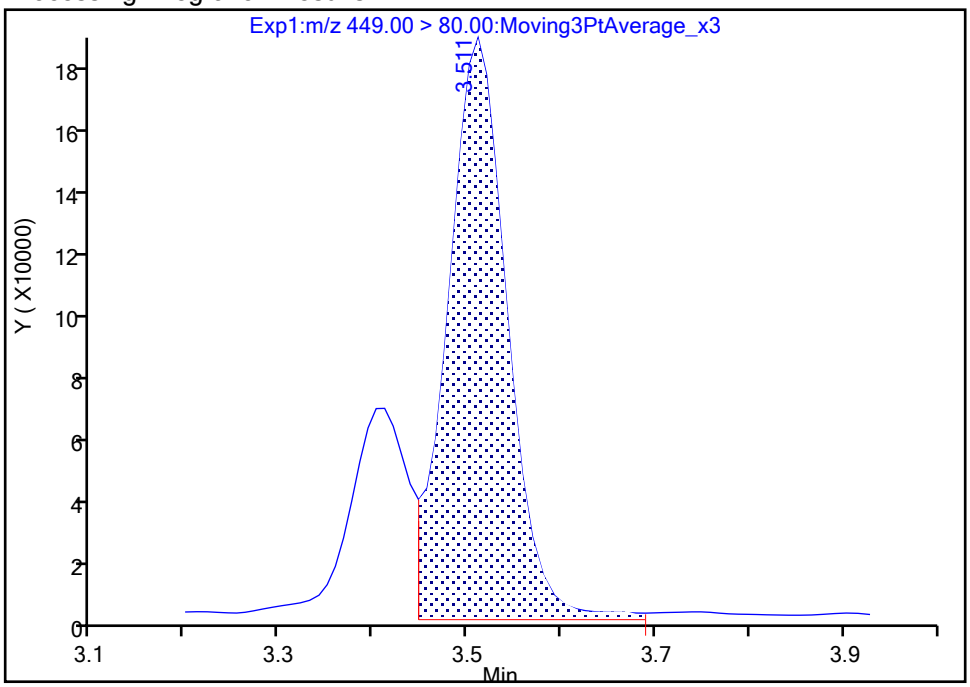
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

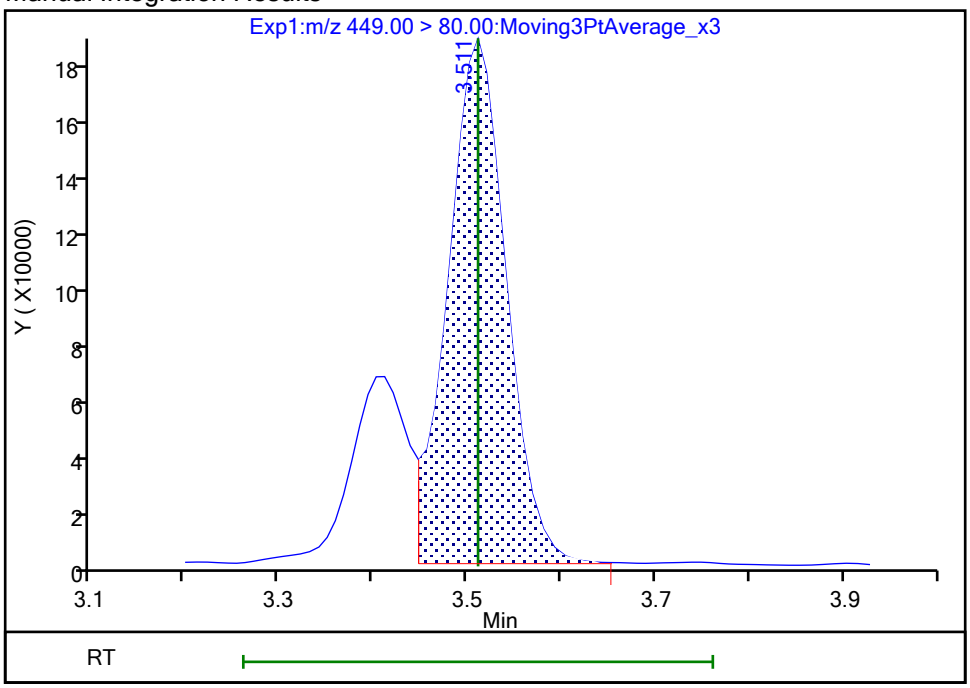
Processing Integration Results

RT: 3.51
Area: 811661
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 775494
Amount: 0.869821
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:47:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

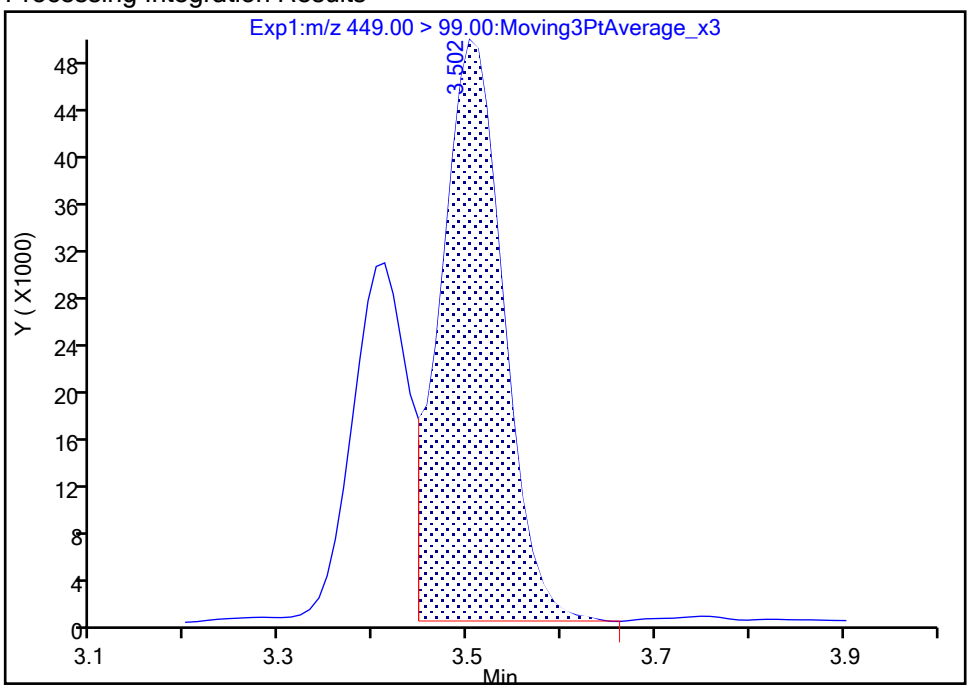
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

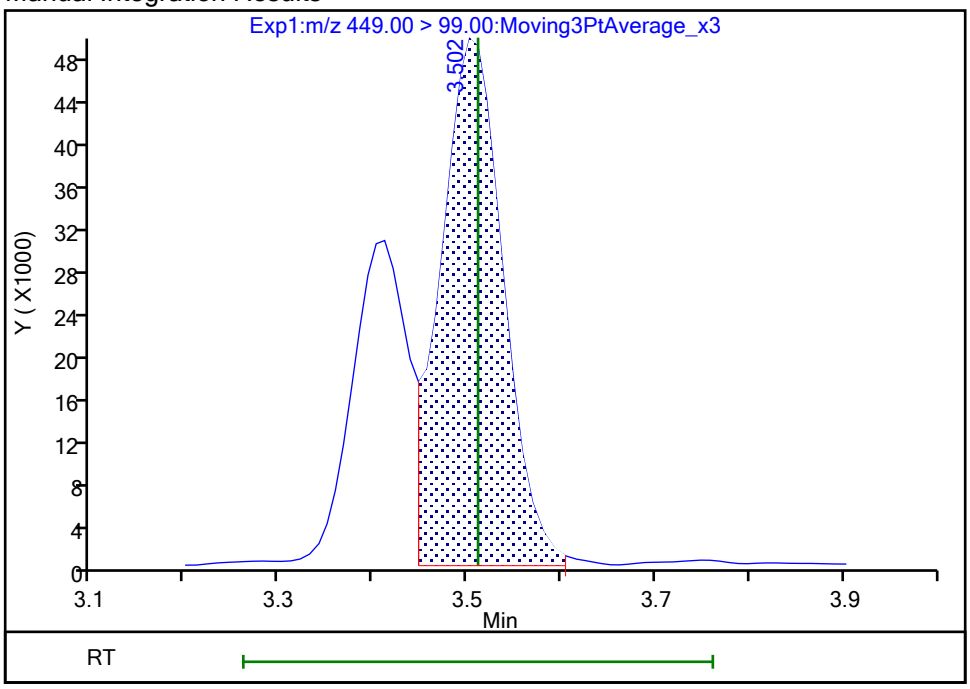
Processing Integration Results

RT: 3.50
Area: 227936
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 226559
Amount: 0.869821
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:47:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

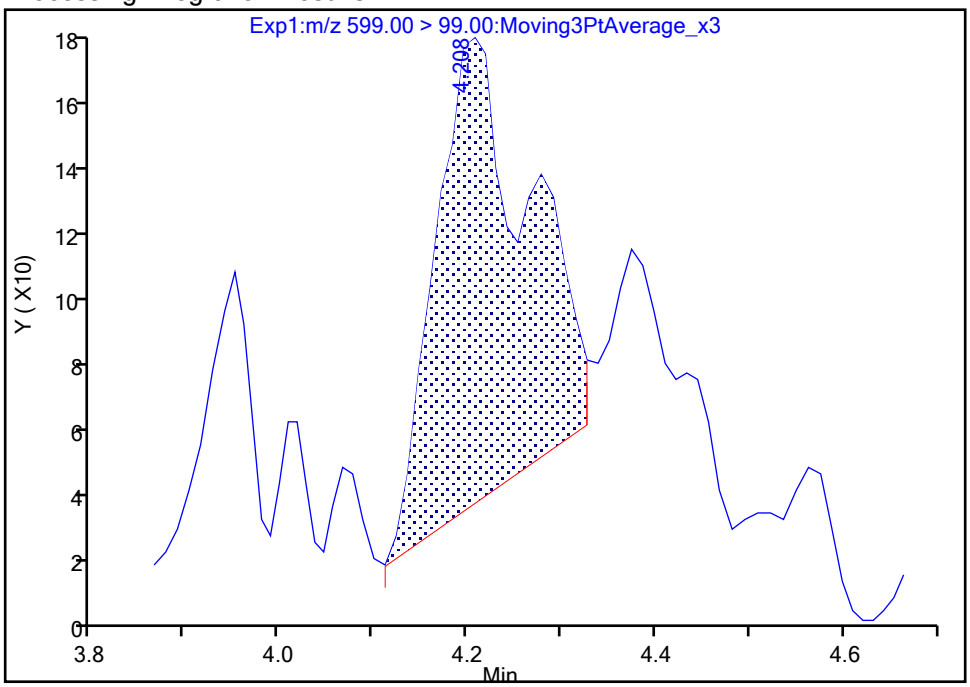
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

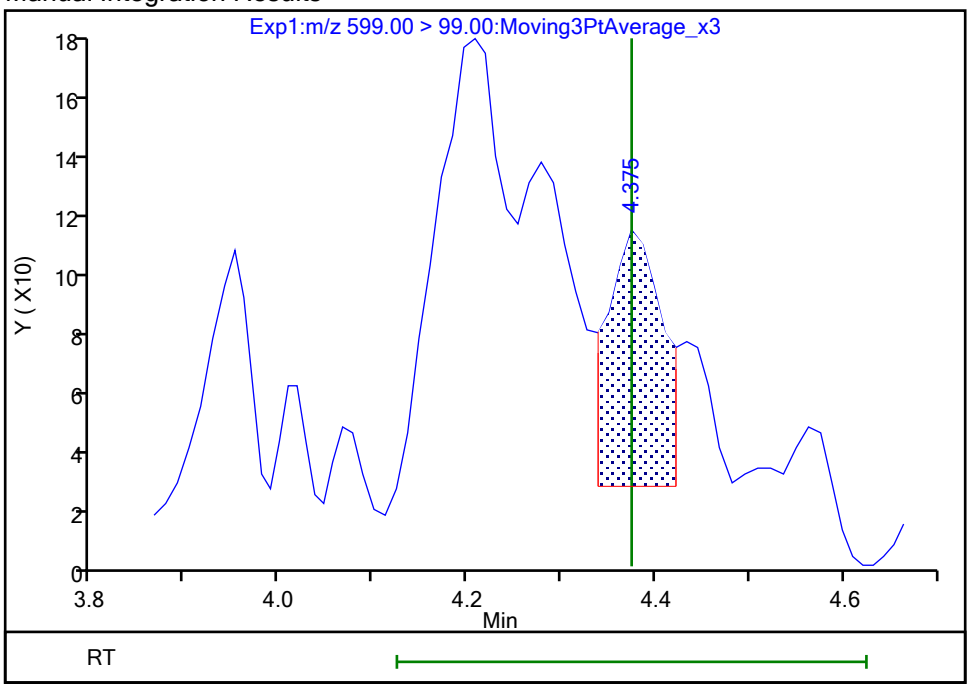
Processing Integration Results

RT: 4.21
Area: 989
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 336
Amount: 0.001054
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:50:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

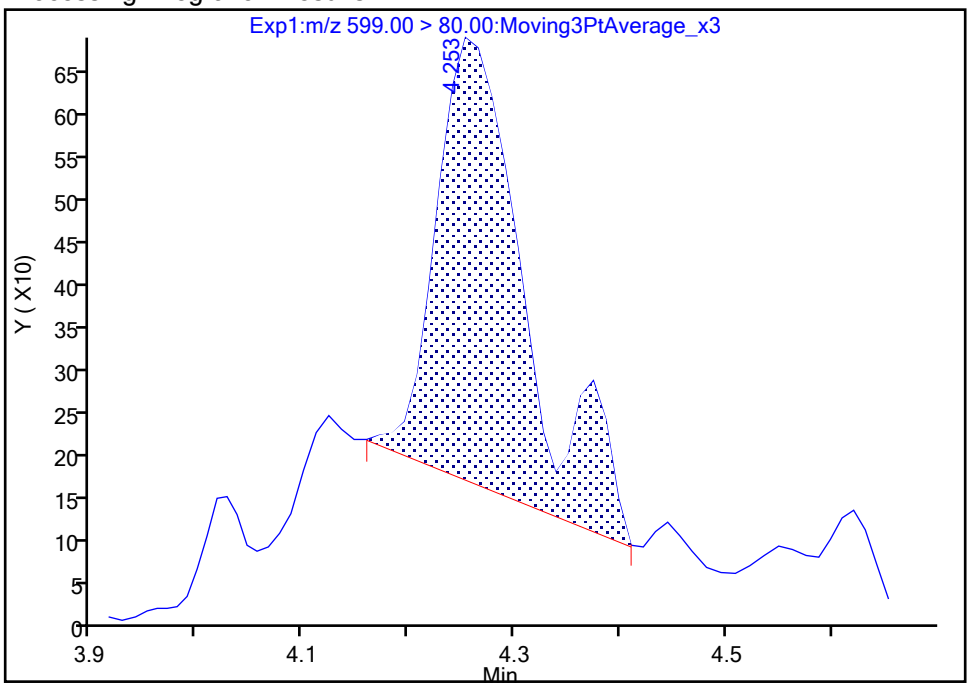
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

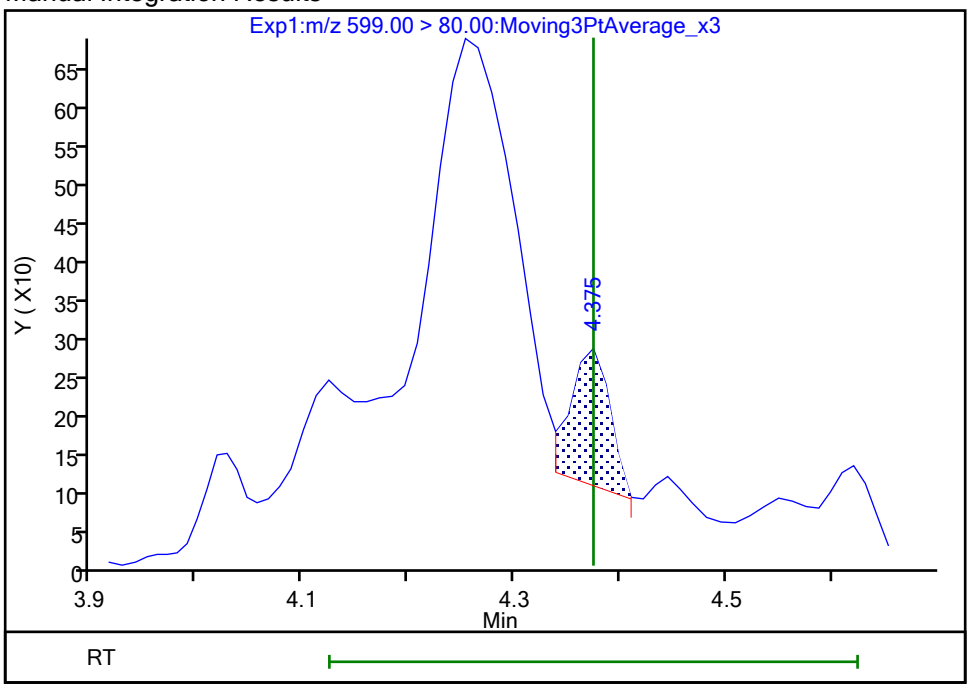
Processing Integration Results

RT: 4.25
Area: 3085
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.37
Area: 444
Amount: 0.001054
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:50:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

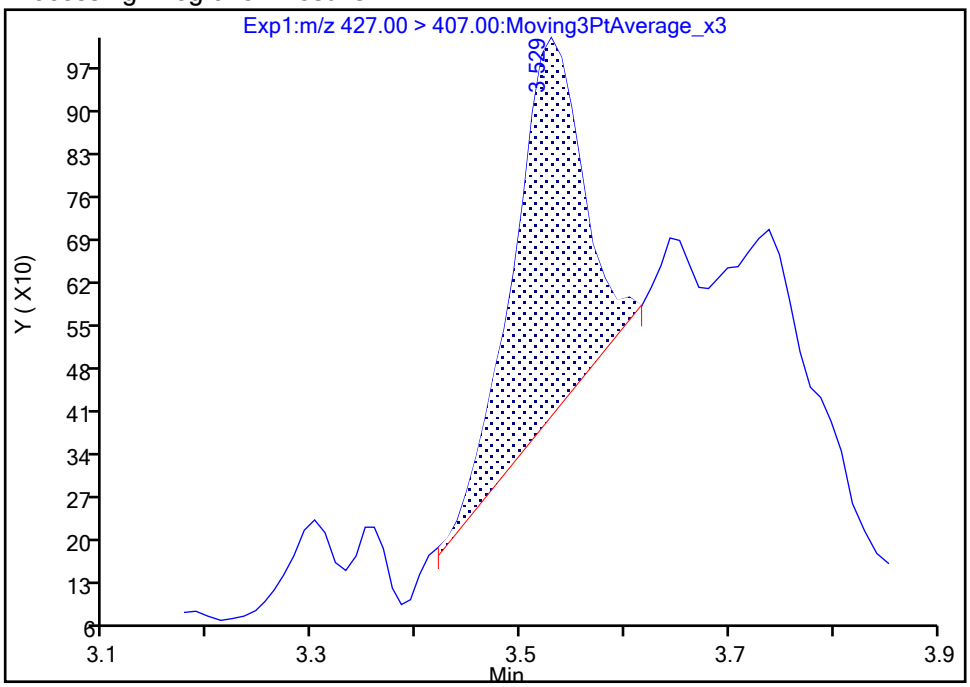
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

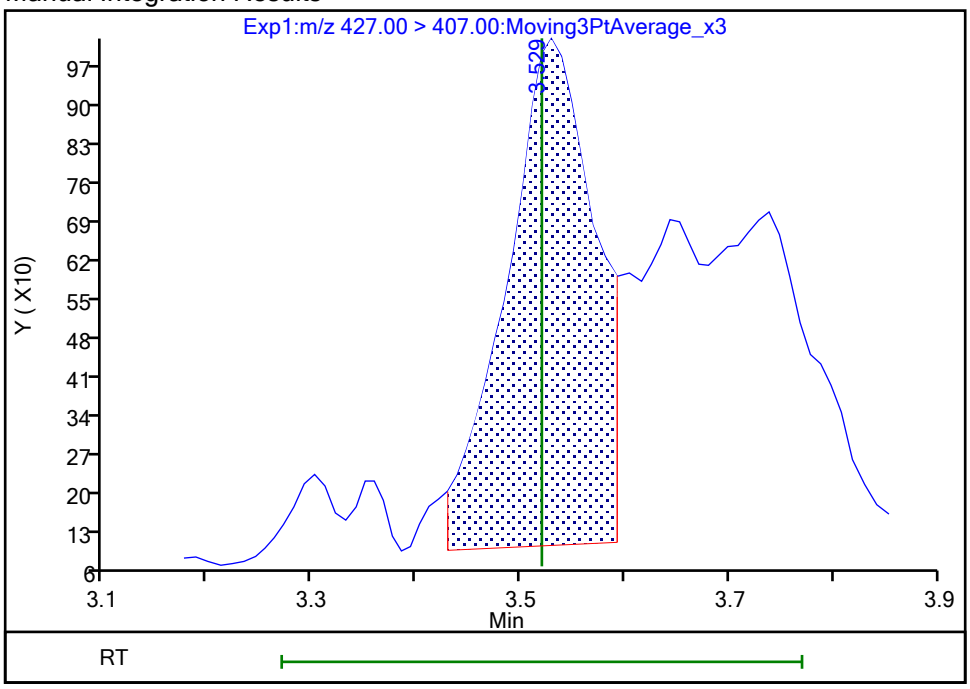
Processing Integration Results

RT: 3.53
Area: 2867
Amount: 0.004670
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 5352
Amount: 0.008717
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:47:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

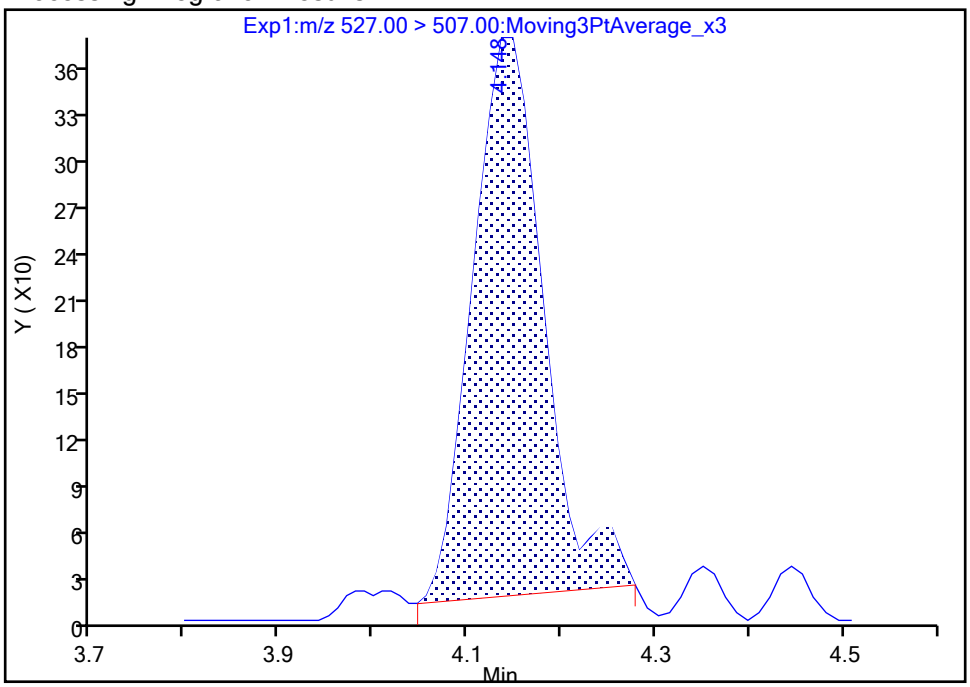
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

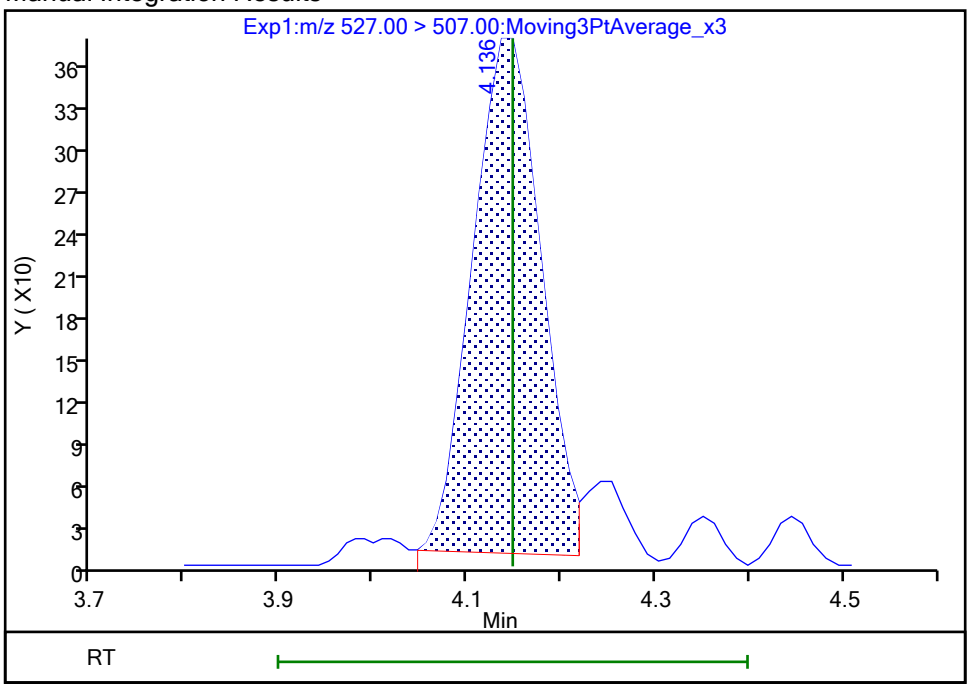
Processing Integration Results

RT: 4.15
Area: 1898
Amount: 0.003478
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1870
Amount: 0.003426
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:49:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

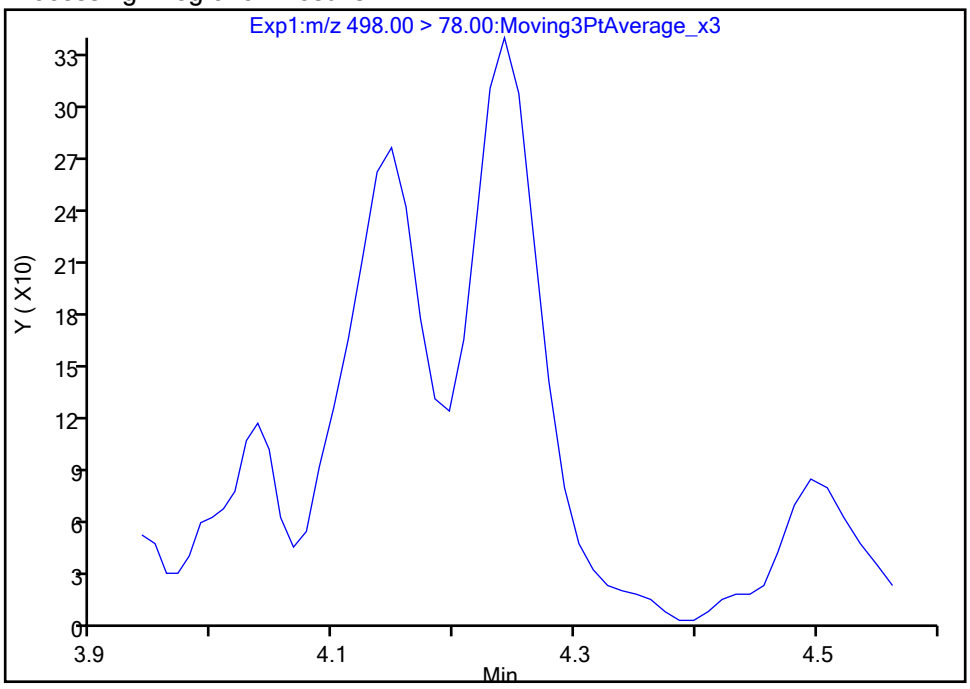
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

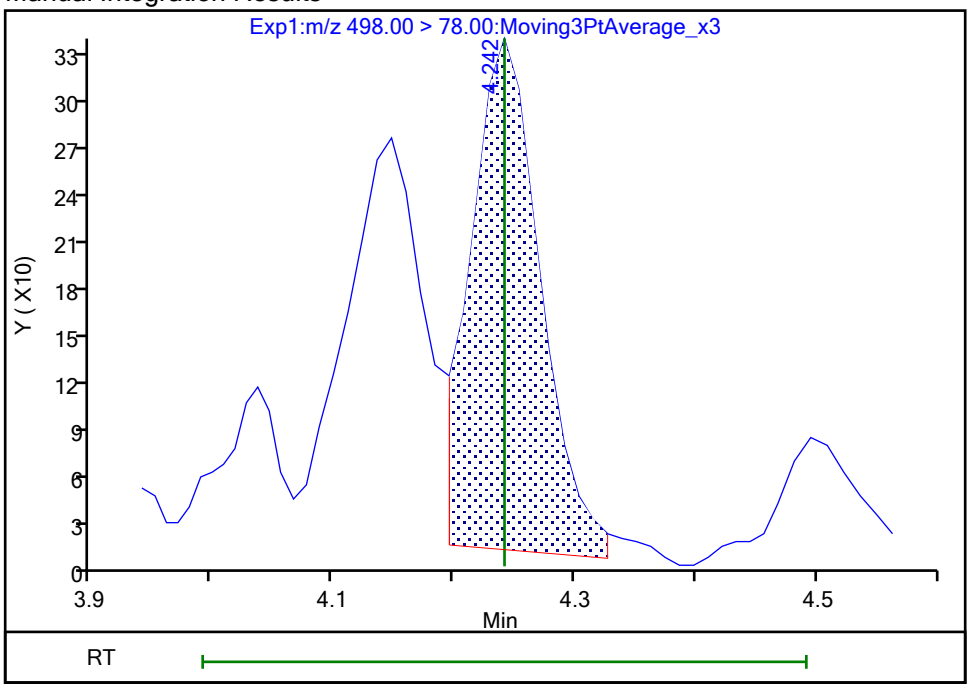
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1289
Amount: 0.001297
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:49:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

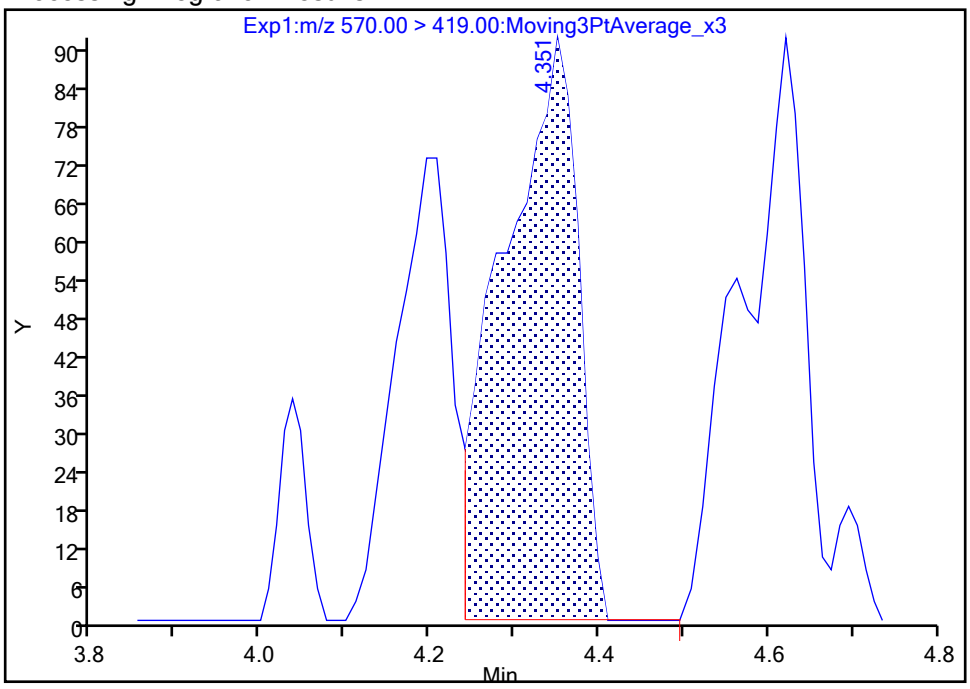
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

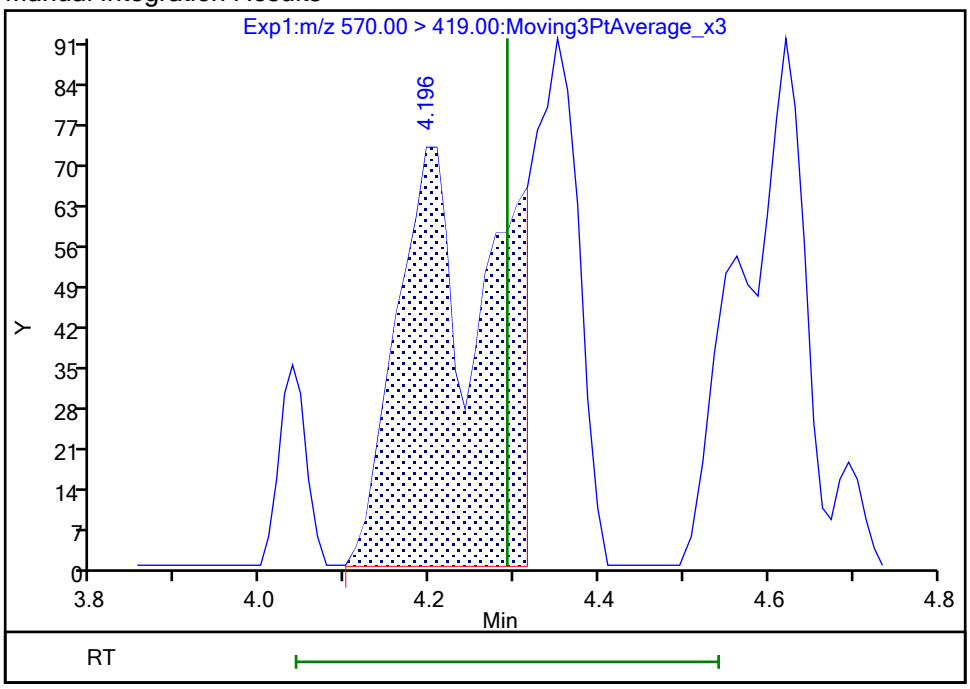
Processing Integration Results

RT: 4.35
Area: 563
Amount: 0.001698
Amount Units: ng/ml



Manual Integration Results

RT: 4.20
Area: 562
Amount: 0.001695
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:49:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

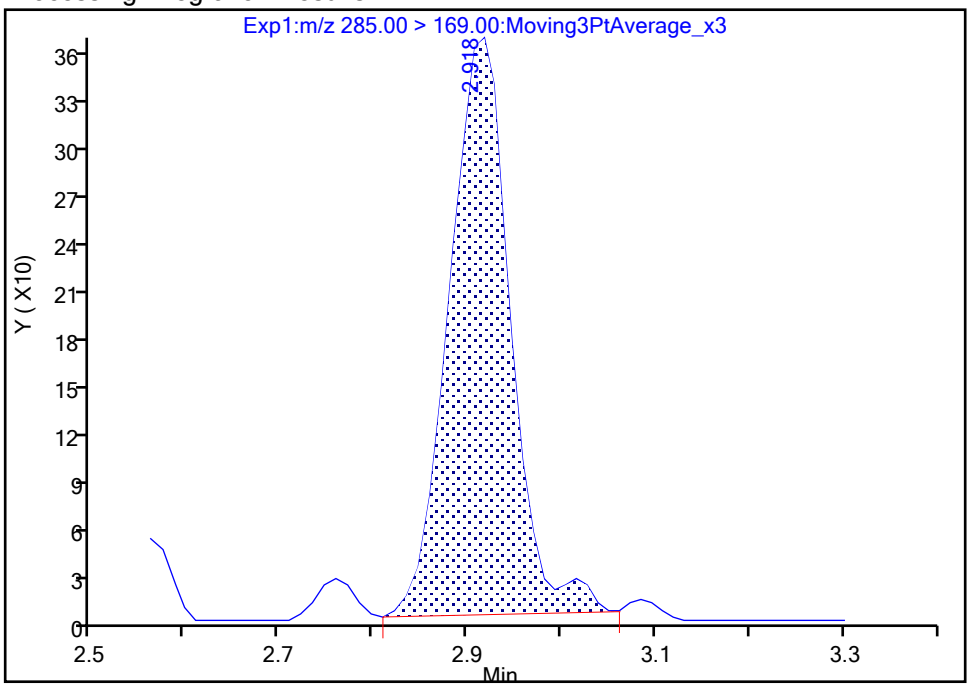
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

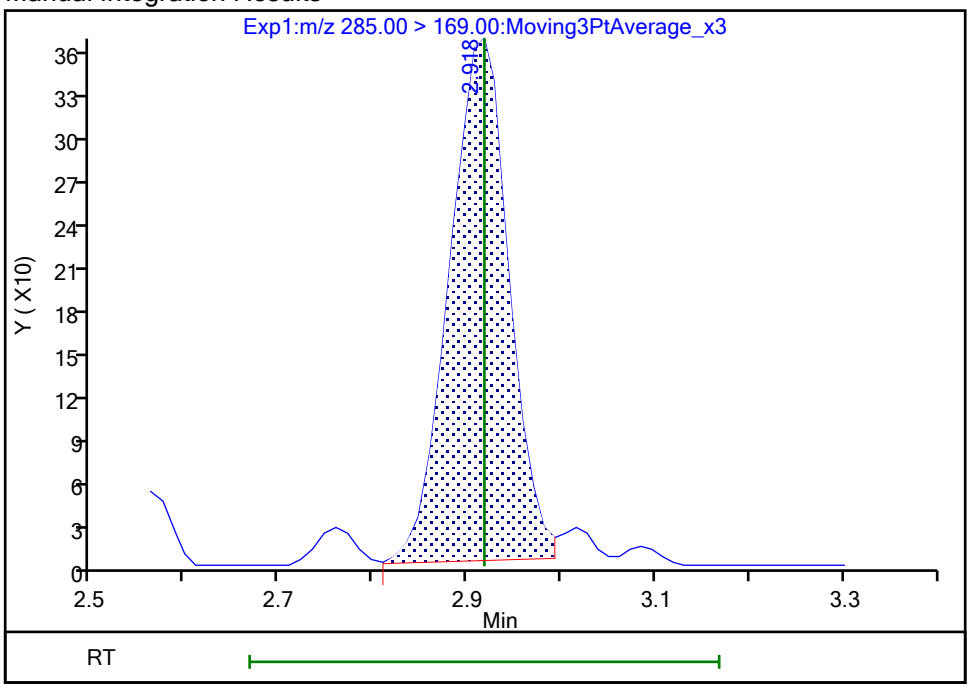
Processing Integration Results

RT: 2.92
Area: 1622
Amount: 0.008881
Amount Units: ng/ml



Manual Integration Results

RT: 2.92
Area: 1581
Amount: 0.008657
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:45:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

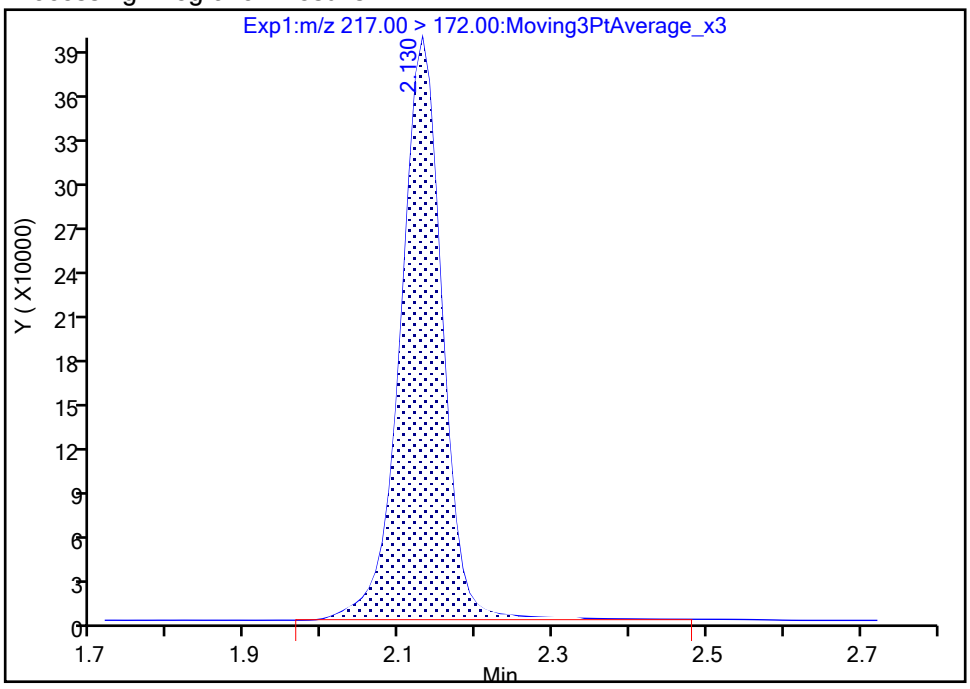
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

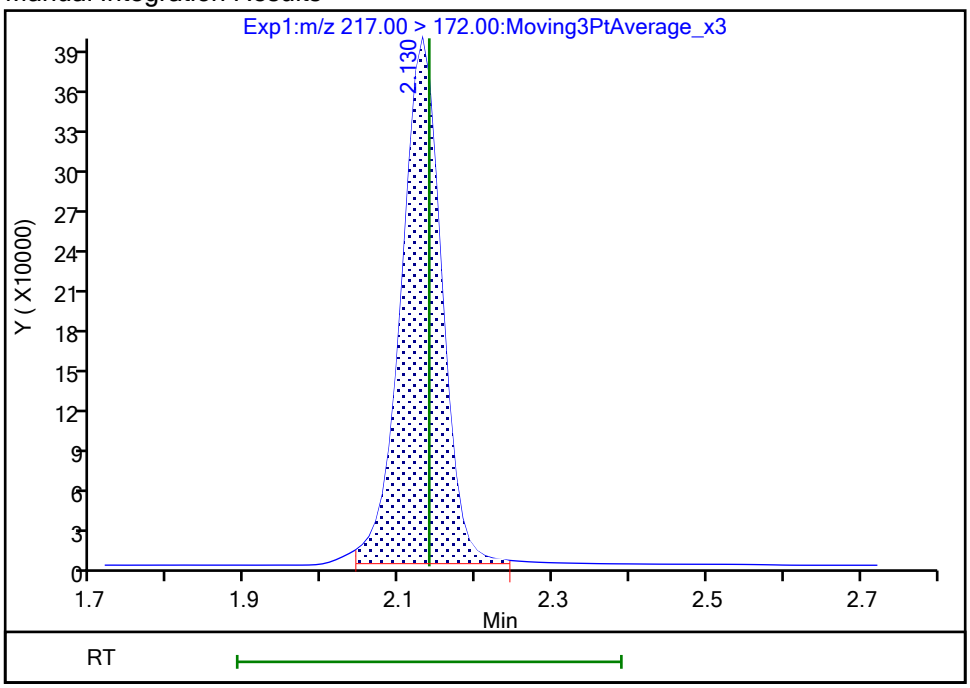
Processing Integration Results

RT: 2.13
Area: 1467935
Amount: 1.102796
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1441375
Amount: 1.082922
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:36:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

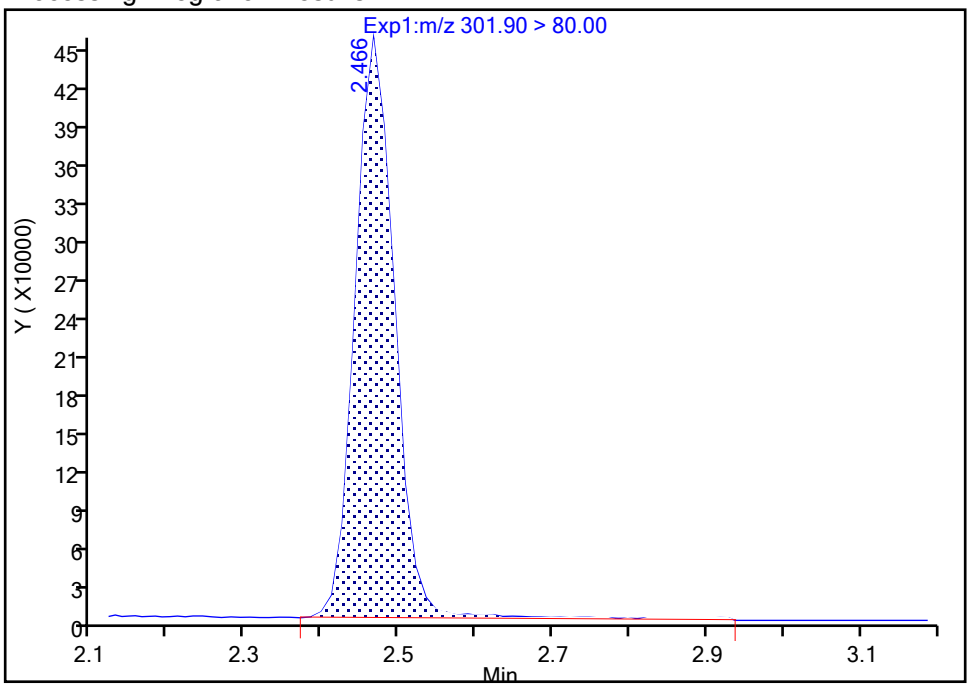
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

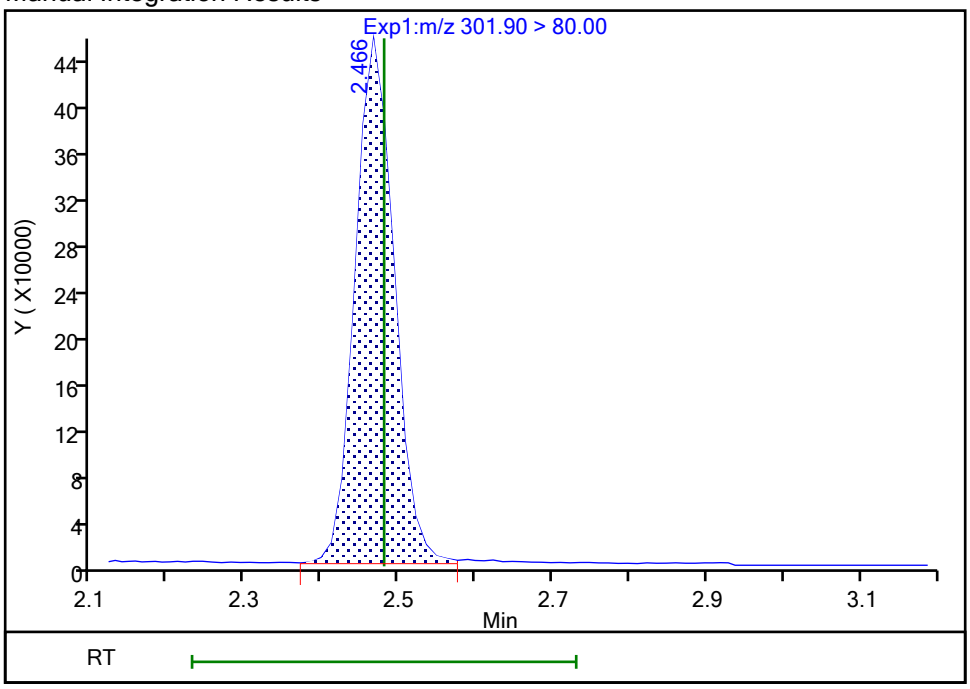
Processing Integration Results

RT: 2.47
Area: 1647473
Amount: 1.178632
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1607649
Amount: 1.150226
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:36:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

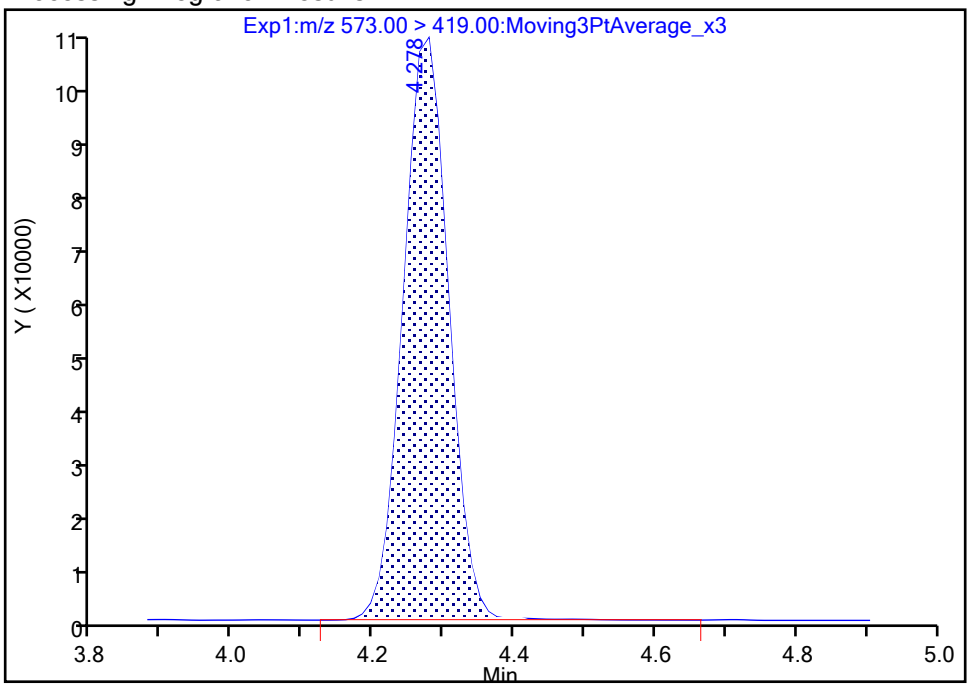
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

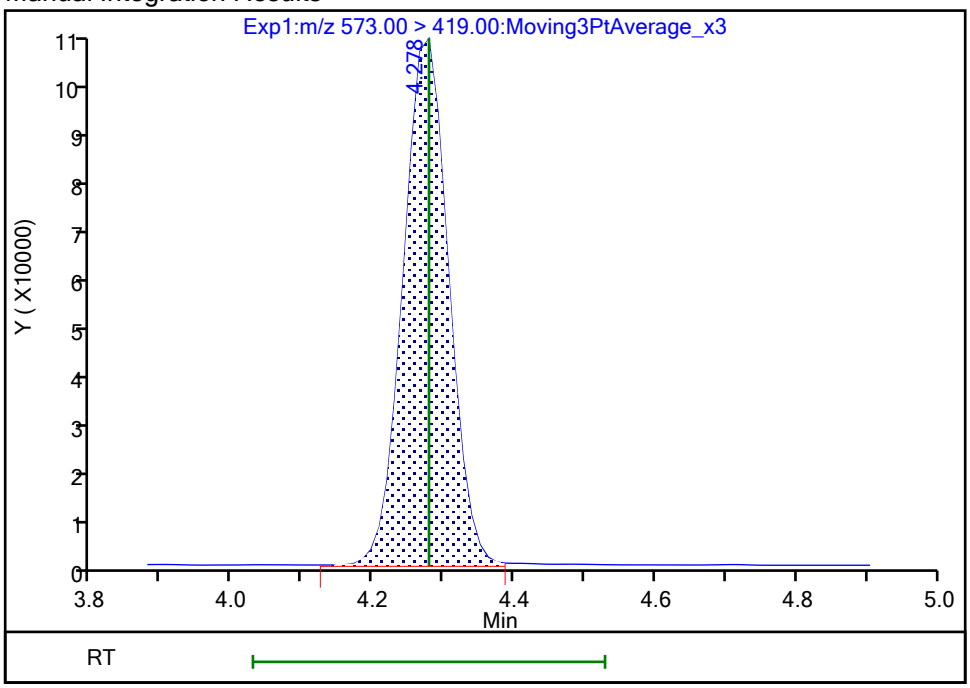
Processing Integration Results

RT: 4.28
Area: 458583
Amount: 1.289151
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 456769
Amount: 1.284146
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:37:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

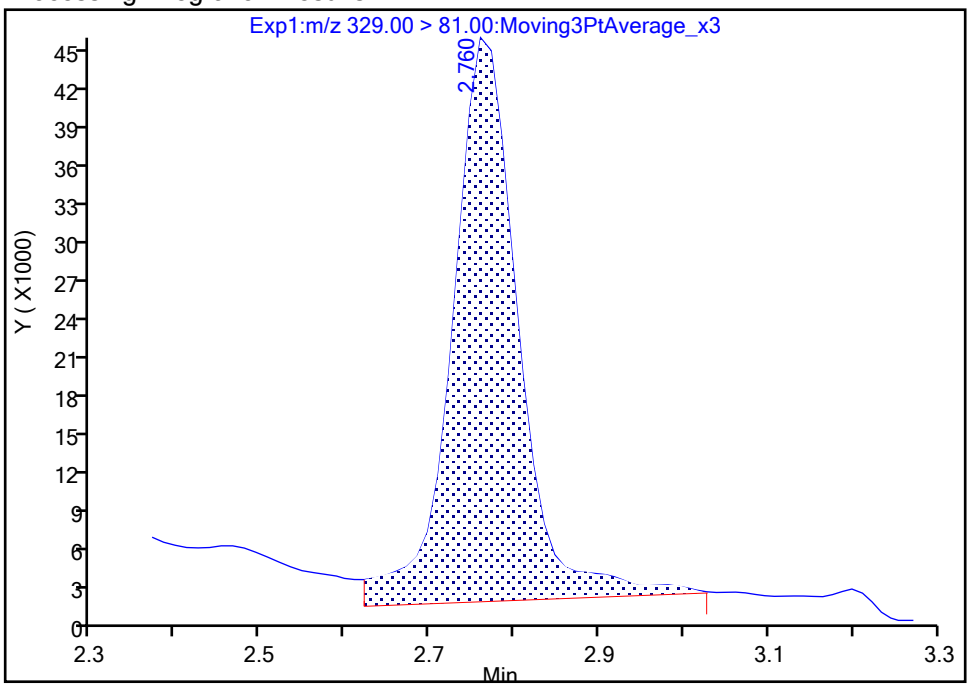
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

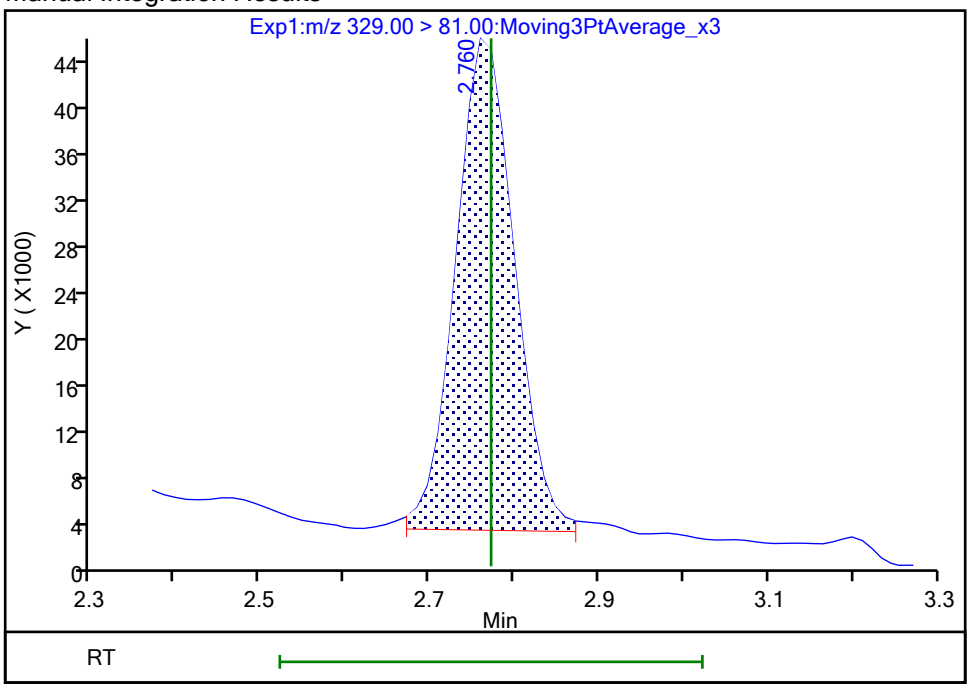
Processing Integration Results

RT: 2.76
Area: 235736
Amount: 1.458319
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 203365
Amount: 1.258157
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:36:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

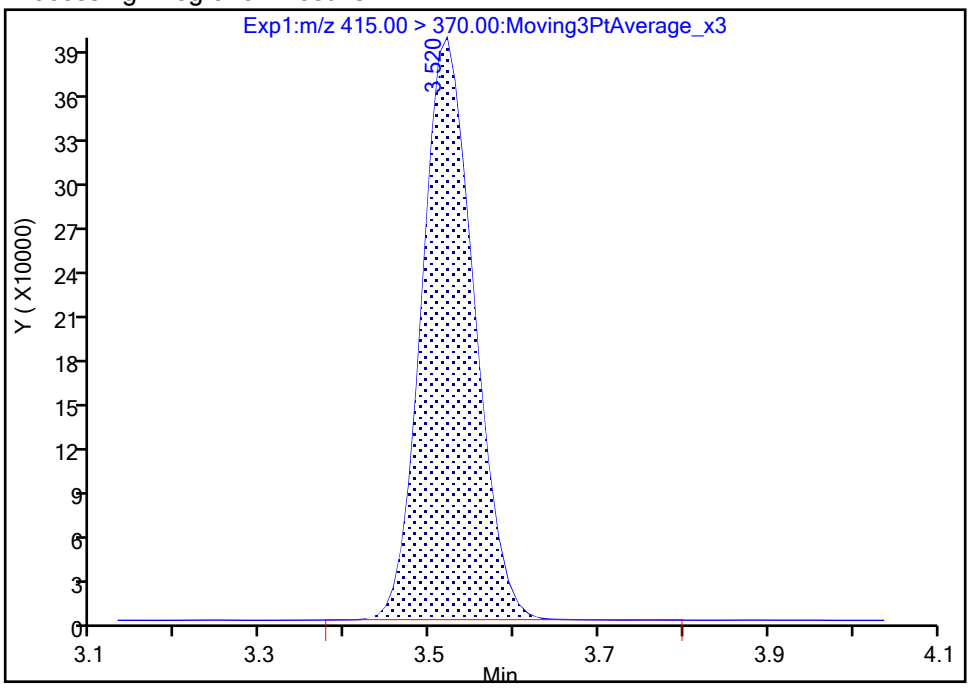
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A21.d				
Injection Date:	25-Oct-2023 20:35:36	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	21
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

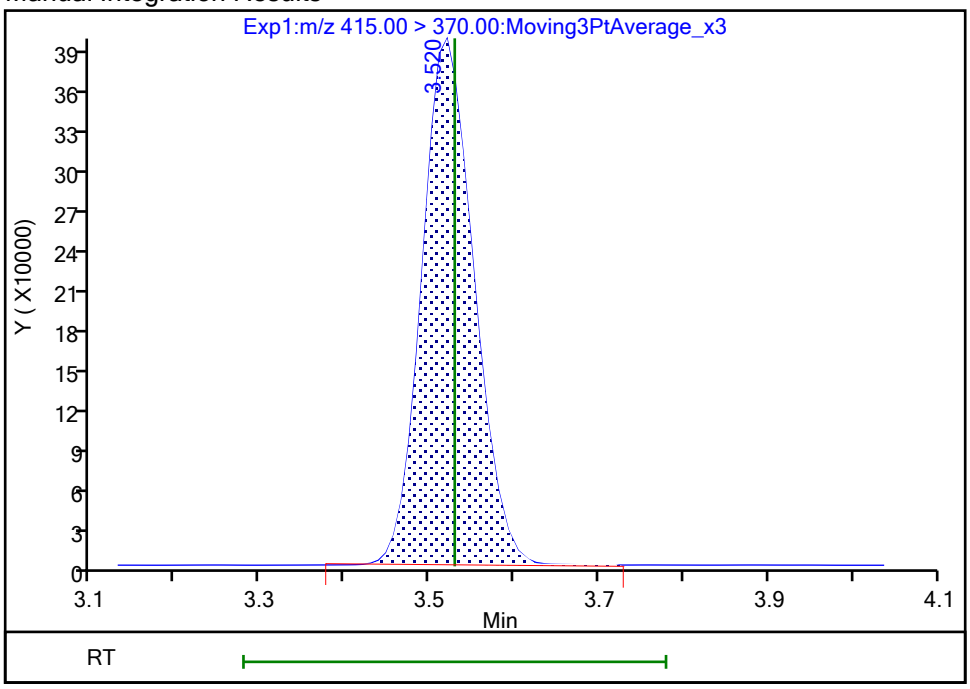
Processing Integration Results

RT: 3.52
Area: 1677860
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1677736
Amount: 1.250000
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:37:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW84AR-101723-1011-75 DL Lab Sample ID: 460-290543-2 DL

Matrix: Water Lab File ID: PA231030A07.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 10:11

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 316.5(mL) Date Analyzed: 10/30/2023 17:50

Con. Extract Vol.: 10(mL) Dilution Factor: 2

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196924 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1763-23-1	Perfluorooctanesulfonic acid	1130	D	3.16	1.34

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00991	13C4 PFOS	89		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A07.d
Lims ID: 460-290543-A-2-A
Client ID: MW84AR-101723-1011-75
Sample Type: Client
Inject. Date: 30-Oct-2023 17:50:20 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 2.0000
Sample Info: 460-290543-A-2-A
Misc. Info.: 200-0057602-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 31-Oct-2023 13:59:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1640

First Level Reviewer: SJ4N Date: 31-Oct-2023 12:35:33
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.122	2.122	0.0	0.604	902357	0.6066		97.1	2197	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.122	2.131	-0.009	1.000	738077	0.5245			16.5	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	675536	0.5852		93.6	276	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	260220	0.2231			0.8	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.702	831945	0.5326		91.6	12683	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	401440	0.2511	Target=2.06		8.8	
298.90 > 99.00	2.466	2.467	-0.001	1.000	151505		2.65(1.03-3.09)		14.7	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.759	2.760	-0.001	0.786	121416	0.6722		115	9.1	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	669504	0.5701		91.2	1542	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	527229	0.4473	Target=14.12		7.2	
313.00 > 119.00	2.797	2.797	0.0	1.000	31927		16.51(7.06-21.17)		14.2	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	394529	0.2817	Target=2.72		18.0	
349.00 > 99.00	2.797	2.797	0.0	0.887	184740		2.14(1.36-4.09)		47.0	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.897	0.0	0.825	130424	0.5737		91.8	1254	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.897	2.908	-0.011	1.000	800	0.003829			13.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	634029	0.5663		95.8	3205	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.153	3.153	0.0	1.000	1233432	1.04	Target=3.32		158	
399.00 > 99.00	3.153	3.153	0.0	1.000	527316		2.34(1.66-4.98)		149	
10 Perfluoroheptanoic acid										R
363.00 > 319.00	3.153	3.165	-0.012	1.000	342380	0.2319	Target=4.17		6.2	R
363.00 > 169.00	3.165	3.165	0.0	1.004	54474		6.29(2.09-6.26)		26.0	
D 9 13C4 PFHpA										
367.00 > 322.00	3.153	3.165	-0.012	0.898	823331	0.6390		102	3427	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.917	420776	0.4612	Target=4.83		21.3	
449.00 > 99.00	3.493	3.502	-0.009	0.915	116662		3.61(2.41-7.24)		15.2	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	140125	0.6023		101	39.5	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	19620	0.0304			19.7	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.511	3.511	0.0	1.000	728136	0.4960	Target=2.88		11.8	
413.00 > 169.00	3.511	3.511	0.0	1.000	316618		2.30(1.44-4.32)		288	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.511	0.0	1.000	861355	0.5901		94.4	1756	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.511	0.0		937478	0.6250			3378	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.820	-0.002	1.000	13161144	17.9	Target=4.24		2140	M
499.00 > 99.00	3.808	3.820	-0.012	0.997	4112277		3.20(2.12-6.37)		2336	M
D 18 13C4 PFOS										M
503.00 > 80.00	3.818	3.820	-0.002	1.088	377199	0.5303		88.8	162	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.831	0.011	1.003	29250	0.0198	Target=8.34		1.6	
463.00 > 169.00	3.830	3.831	-0.001	1.000	4868		6.01(4.17-12.51)		6.3	
D 19 13C5 PFNA										
468.00 > 423.00	3.830	3.831	-0.001	1.091	940489	0.5921		94.7	1836	
68 Perfluorononanesulfonic acid										R
549.00 > 80.00	3.980	4.103	-0.122	1.042	11610	0.0207	Target=2.17		12.8	R
549.00 > 99.00	3.952	4.103	-0.150	1.035	719		16.15(1.08-3.25)		1.5	
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.126	-0.002	1.175	1064850	0.6402		102	5849	
24 Perfluorodecanoic acid										R
513.00 > 469.00	4.124	4.126	-0.002	1.000	5186	0.003046	Target=11.44		0.8	R
513.00 > 169.00	4.124	4.126	-0.002	1.000	966		5.37(5.72-17.16)		3.1	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.124	4.138	-0.014	0.997	8223	0.0153			44.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.138	-0.002	1.178	145704	0.5570		93.0	119	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.232	-0.002	1.205	704808	0.4966		79.5	2267	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.256	0.009	1.215	227323	0.5719		91.5	1423	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.351	4.268	0.083	1.020	569	0.001724			3.4	
D 30 13C2 PFUnA										
565.00 > 520.00	4.374	4.376	-0.002	1.246	944525	0.6016		96.3	4135	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.386	4.388	-0.002	1.249	229135	0.5986		95.8	593	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.339	4.388	-0.049	0.989	2461	0.006711			3.4	
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.600	-0.001	1.310	1077205	0.6750		108	4070	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.968	4.970	-0.002	1.415	936816	0.5896		94.3	2894	

QC Flag Legend

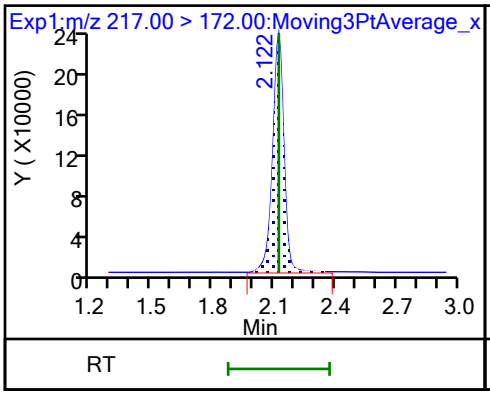
Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Report Date: 31-Oct-2023 14:00:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54

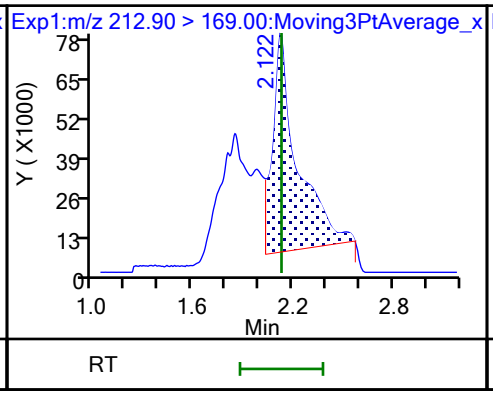
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A07.d
Injection Date: 30-Oct-2023 17:50:20 Instrument ID: LC812
Lims ID: 460-290543-A-2-A Lab Sample ID: 200-290543-2
Client ID: MW84AR-101723-1011-75
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 2.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

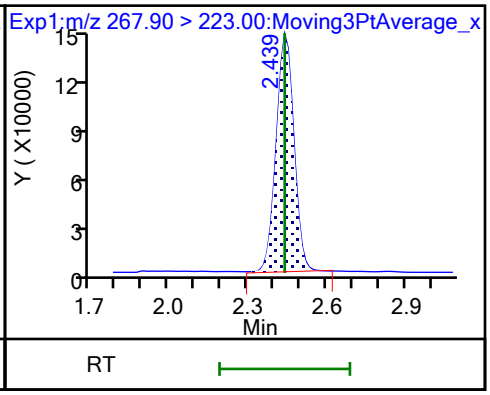
D 1 13C4 PFBA



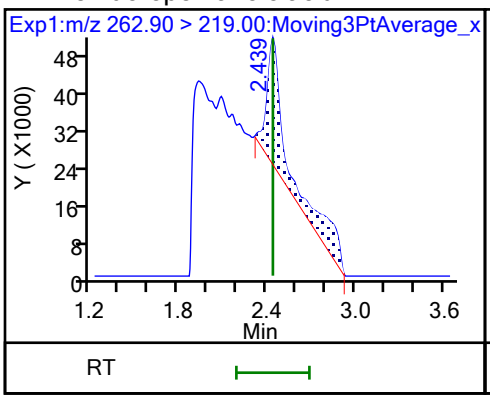
2 Perfluorobutanoic acid



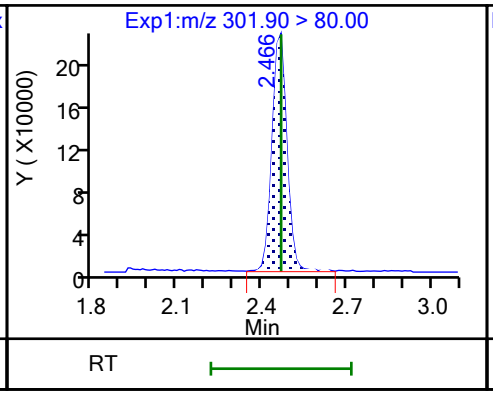
D 3 13C5 PFPeA



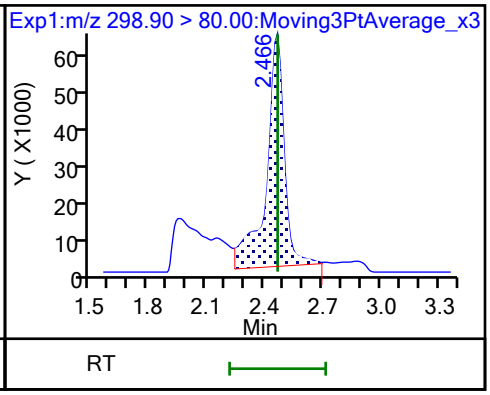
4 Perfluoropentanoic acid



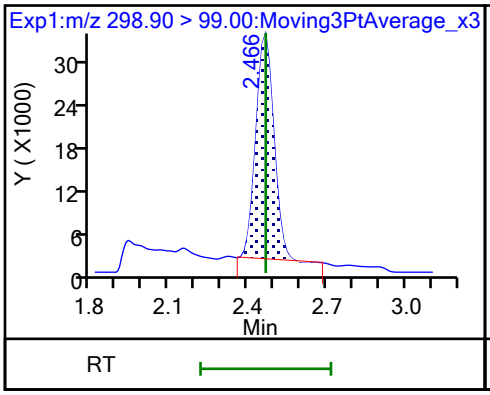
D 47 13C3 PFBS



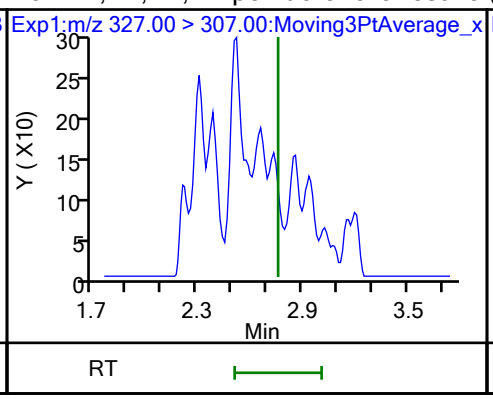
5 Perfluorobutanesulfonic acid



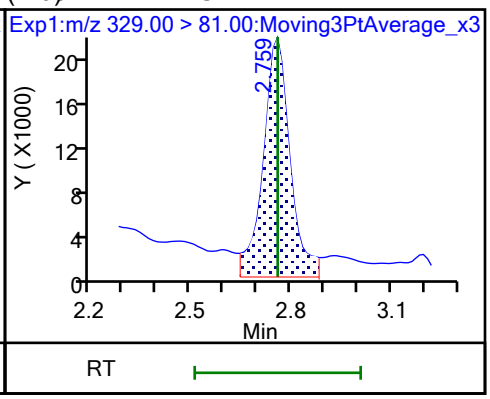
5 Perfluorobutanesulfonic acid



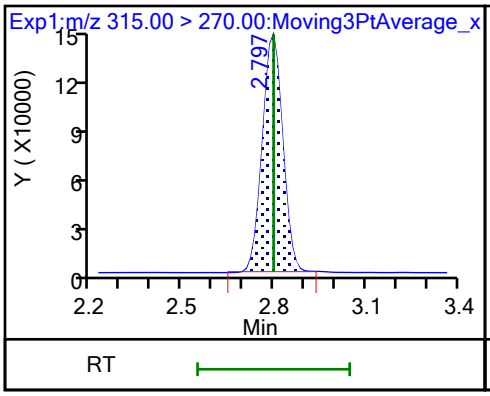
61 1H,1H,2H,2H-perfluorohexanesulfo (DNU)



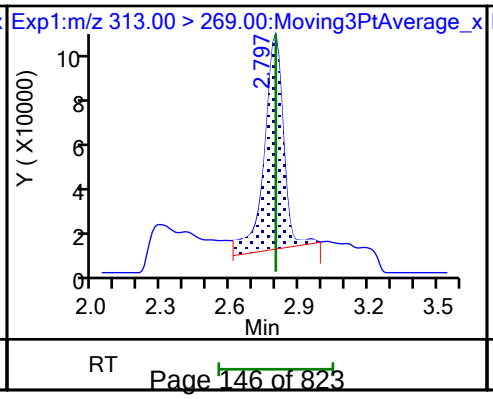
D 50 M2-4:2 FTS



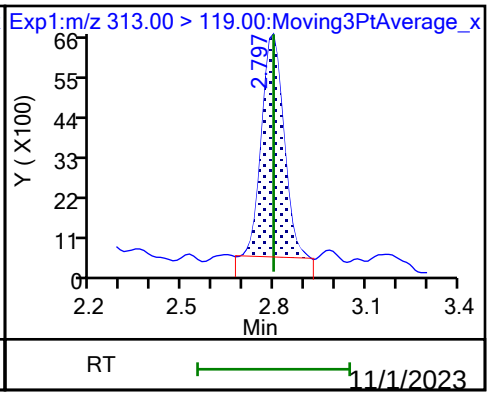
D 7 13C2 PFHxA



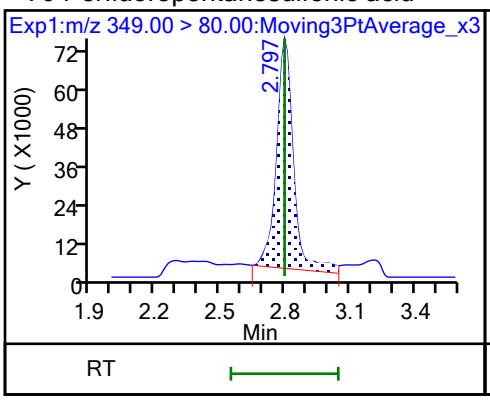
6 Perfluorohexanoic acid



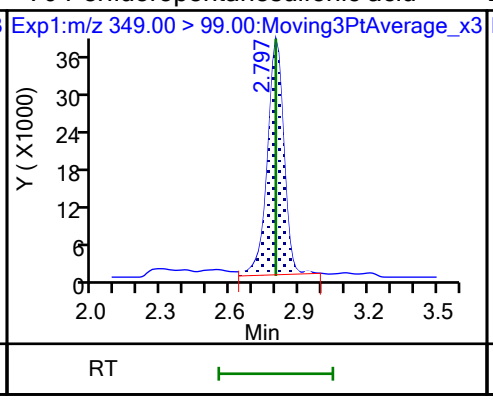
6 Perfluorohexanoic acid



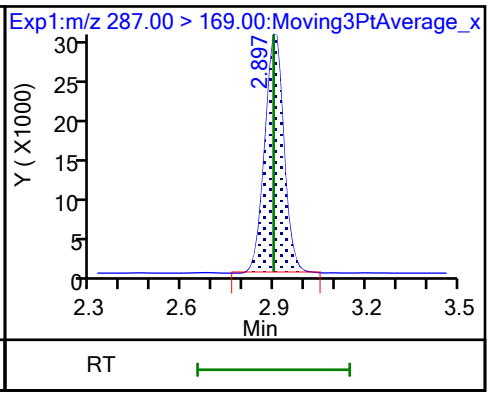
70 Perfluoropentanesulfonic acid



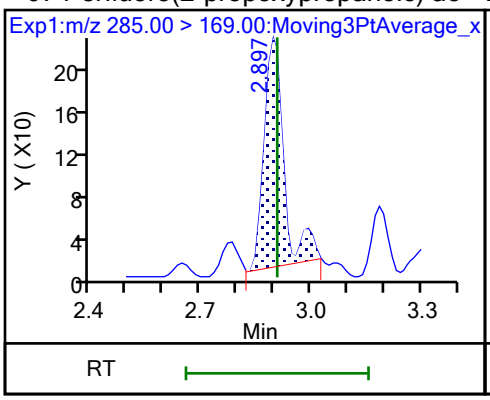
70 Perfluoropentanesulfonic acid



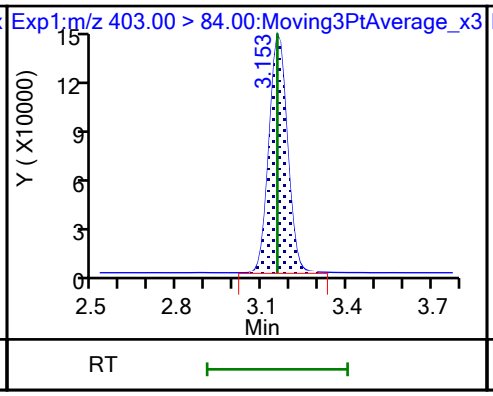
D 64 13C3 HFPO-DA



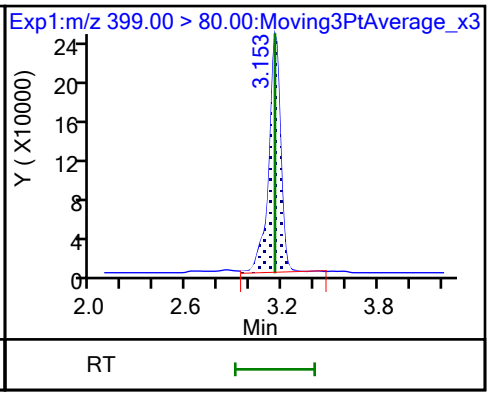
67 Perfluoro(2-propoxypropanoic) ac



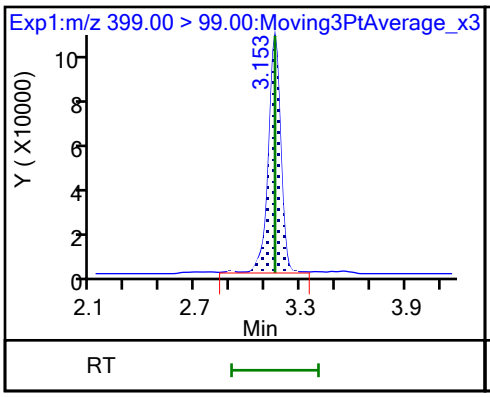
D 11 18O2 PFHxS



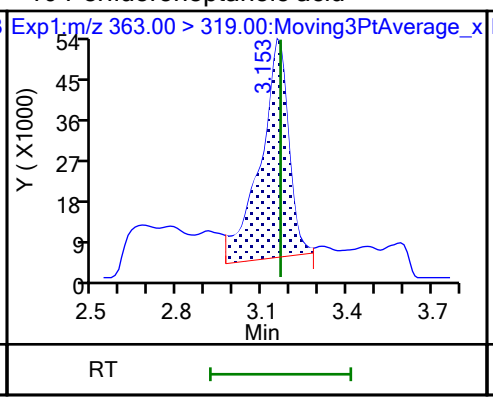
8 Perfluorohexanesulfonic acid



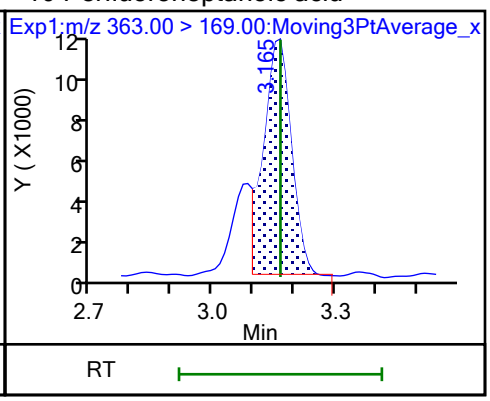
8 Perfluorohexanesulfonic acid



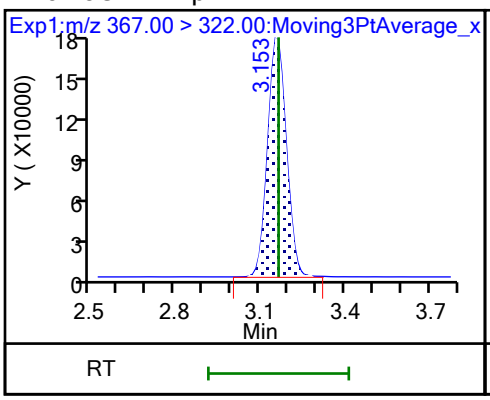
10 Perfluoroheptanoic acid



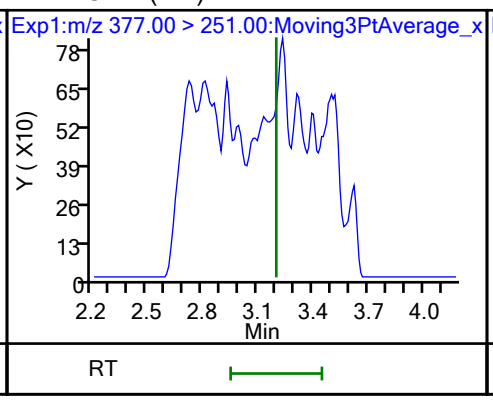
10 Perfluoroheptanoic acid



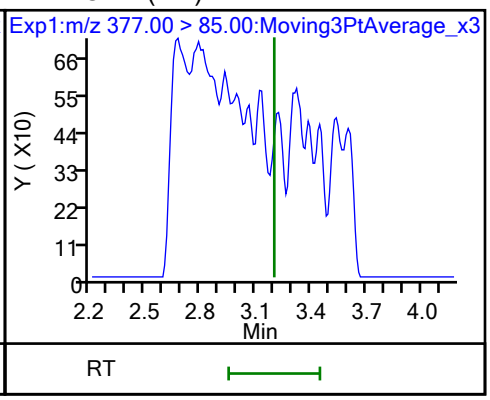
D 9 13C4 PFHpA



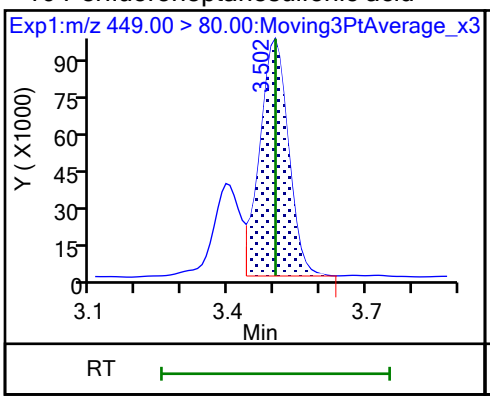
77 DONA (ND)



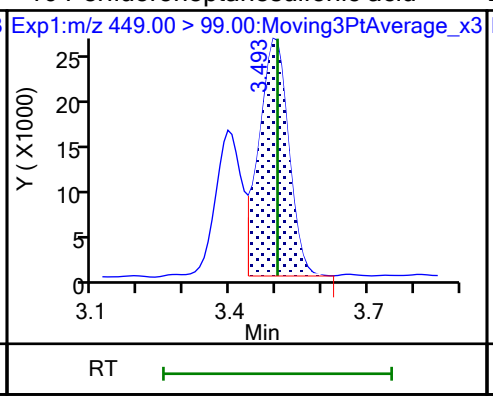
77 DONA (ND)



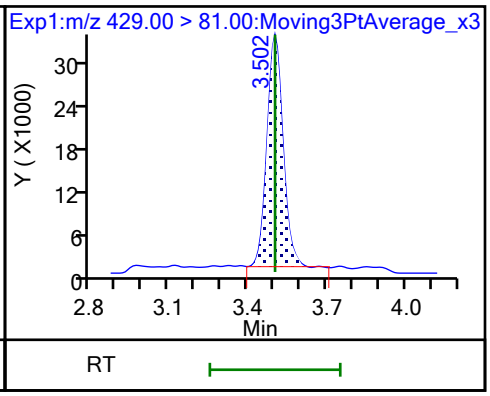
16 Perfluoroheptanesulfonic acid



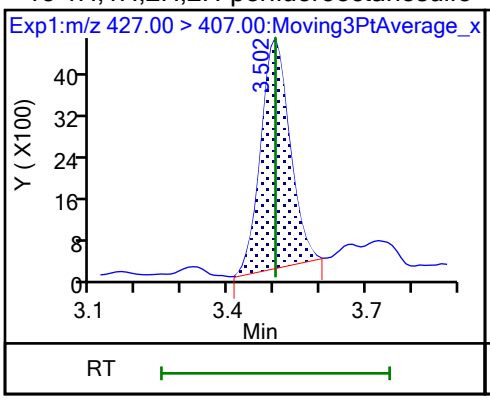
16 Perfluoroheptanesulfonic acid



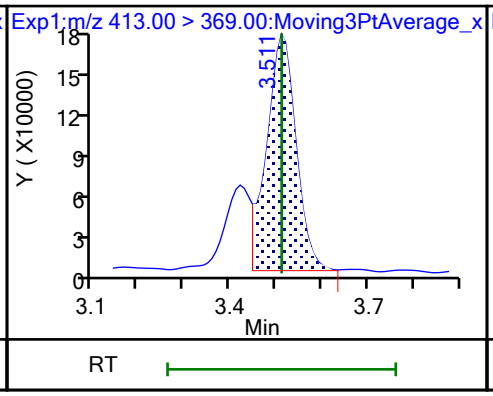
D 12 M2-6:2 FTS



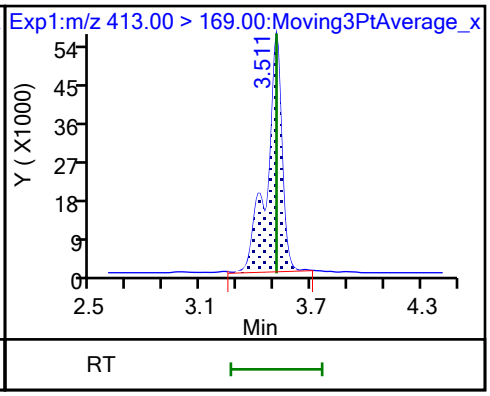
13 1H,1H,2H,2H-perfluorooctanesulfo



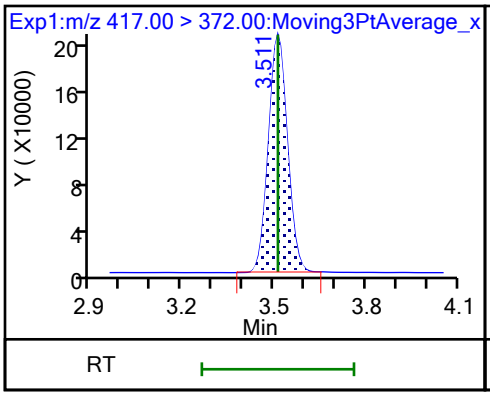
15 Perfluorooctanoic acid



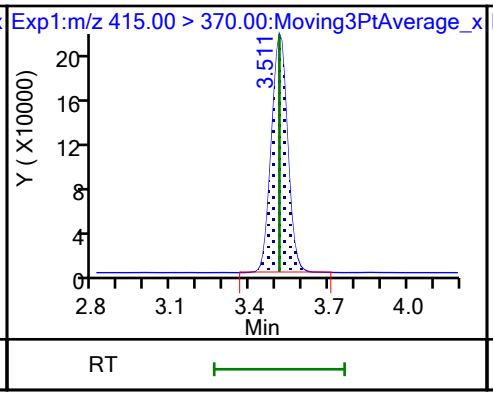
15 Perfluorooctanoic acid



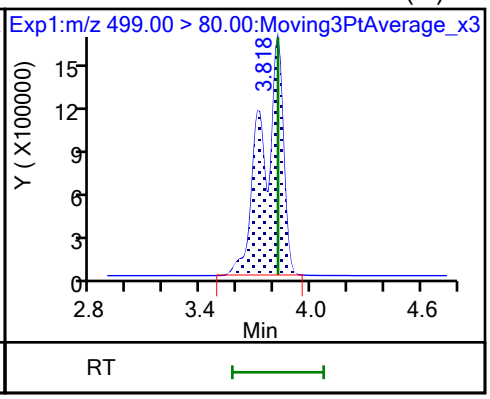
D 14 13C4 PFOA



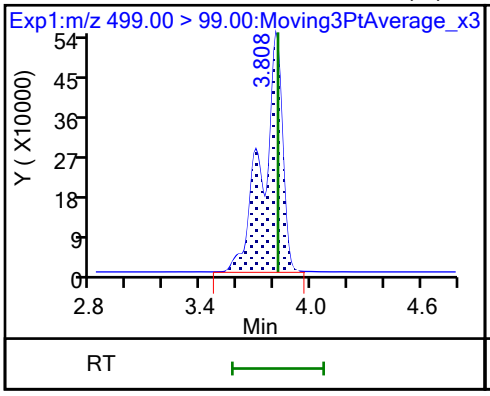
* 62 13C2 PFOA



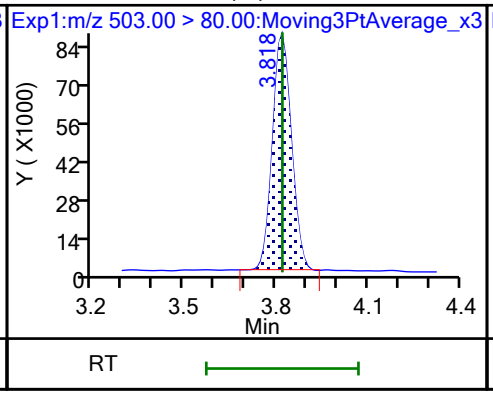
17 Perfluorooctanesulfonic acid (M)



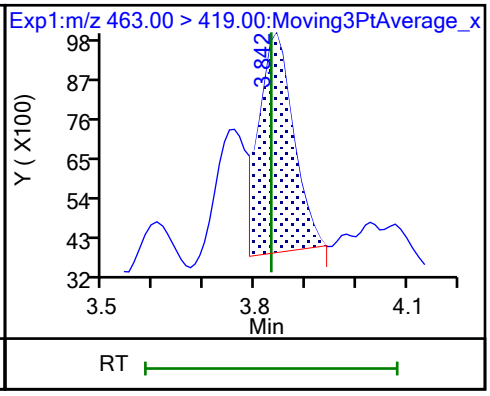
17 Perfluorooctanesulfonic acid (M)



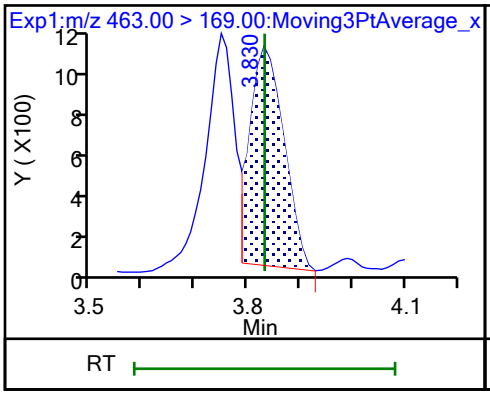
D 18 13C4 PFOS (M)



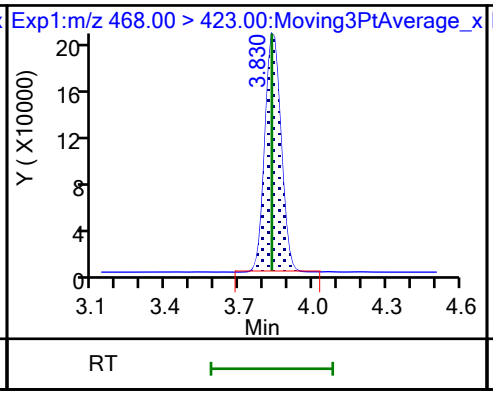
20 Perfluorononanoic acid



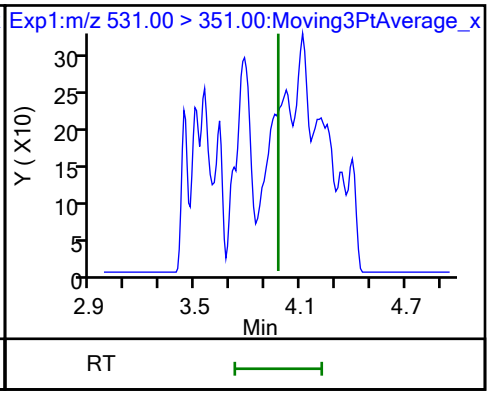
20 Perfluorononanoic acid



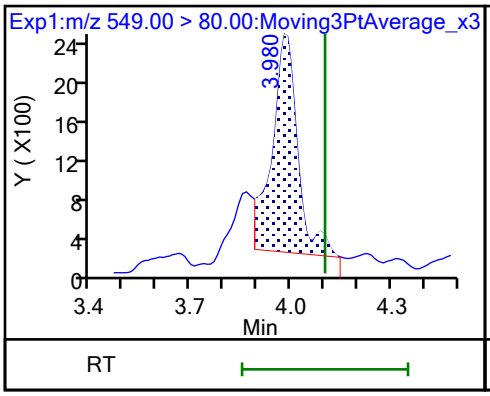
D 19 13C5 PFNA



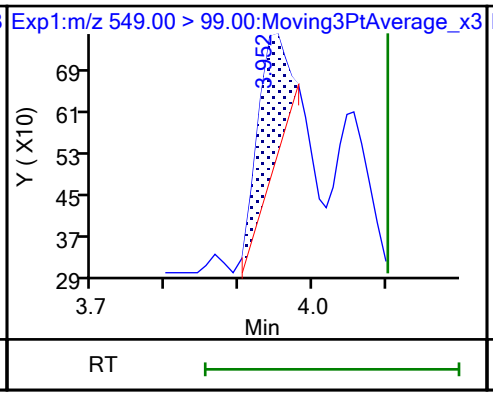
69 9-Chlorohexadecafluoro-3-oxanona (ND)



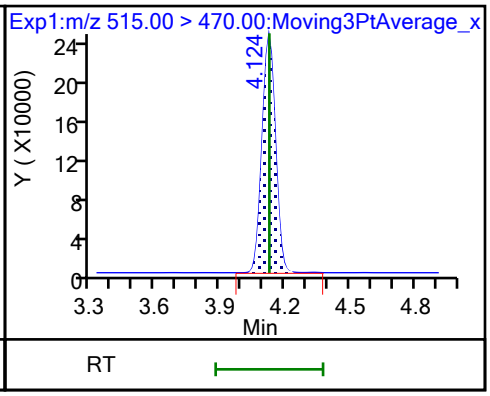
68 Perfluorononanesulfonic acid



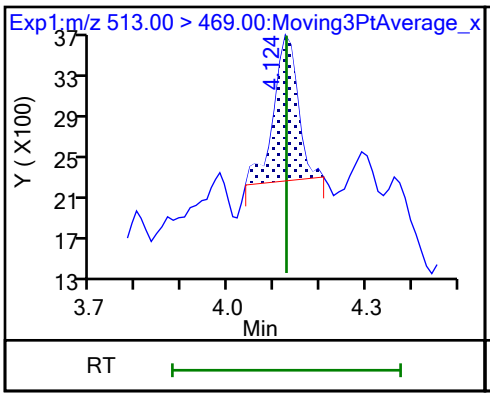
68 Perfluorononanesulfonic acid



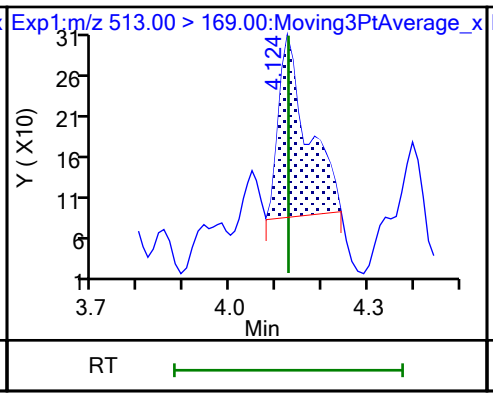
D 23 13C2 PFDA



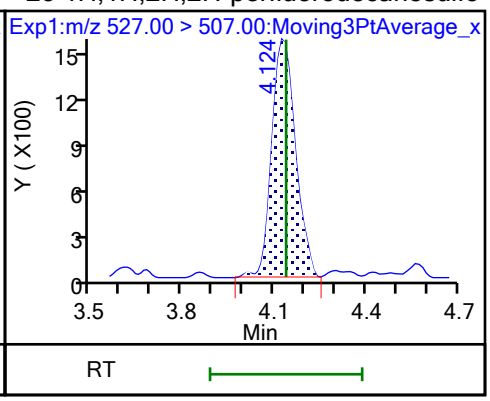
24 Perfluorodecanoic acid



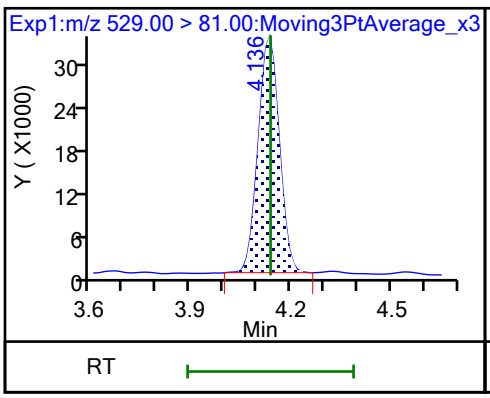
24 Perfluorodecanoic acid



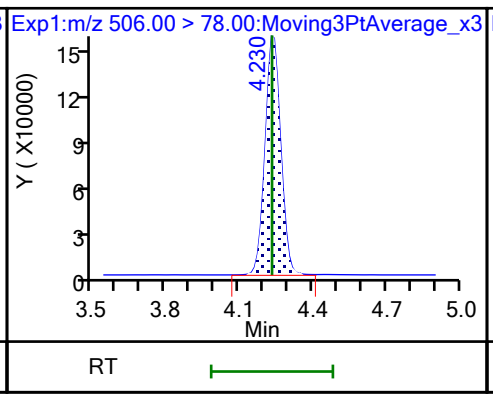
25 1H,1H,2H,2H-perfluorodecanesulfo



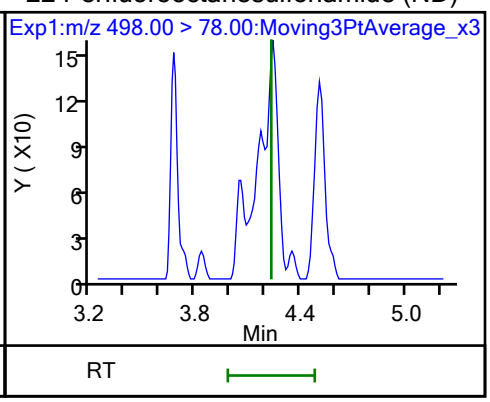
D 26 M2-8:2 FTS



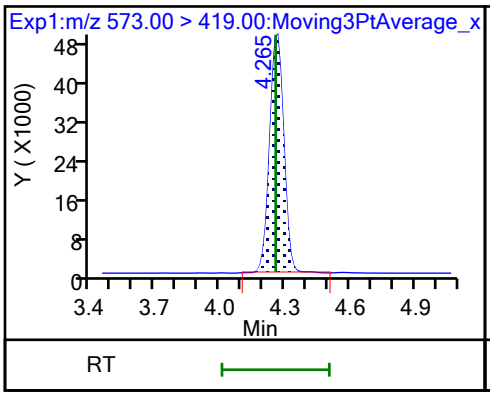
D 21 13C8 FOSA



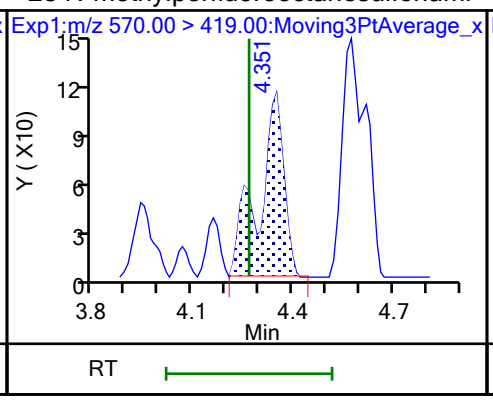
22 Perfluorooctanesulfonamide (ND)



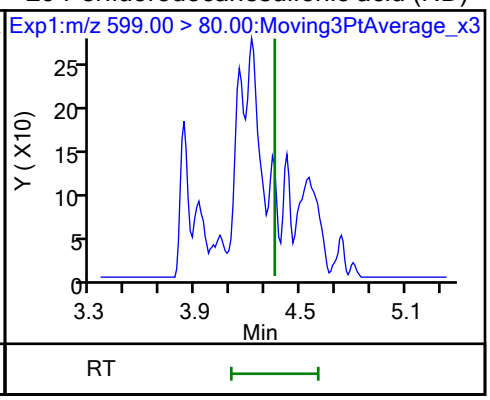
D 27 d3-NMeFOSAA



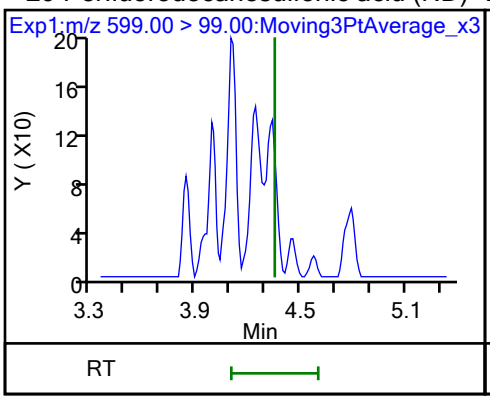
28 N-methylperfluorooctanesulfonami



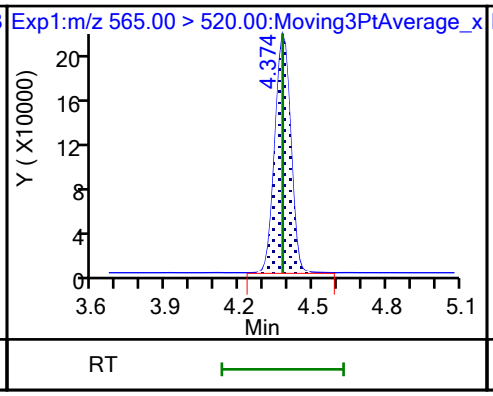
29 Perfluorodecanesulfonic acid (ND)



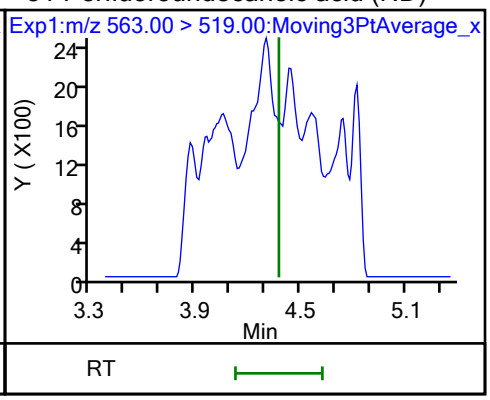
29 Perfluorodecanesulfonic acid (ND)



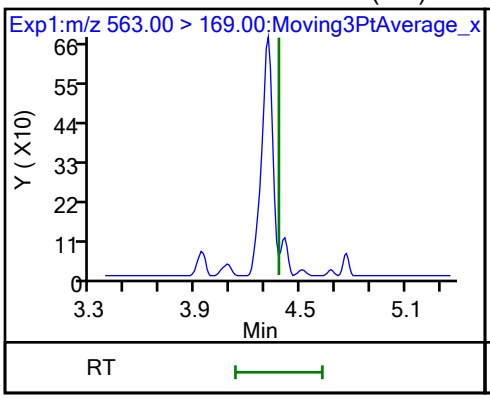
D 30 13C2 PFUnA



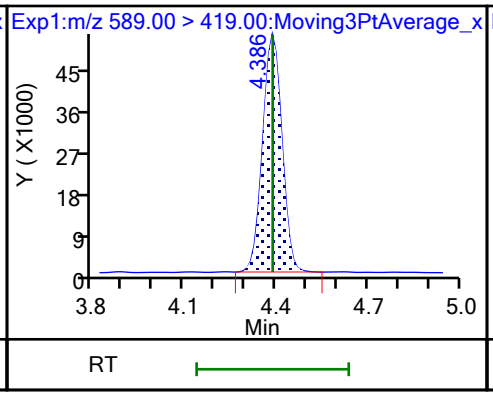
31 Perfluoroundecanoic acid (ND)



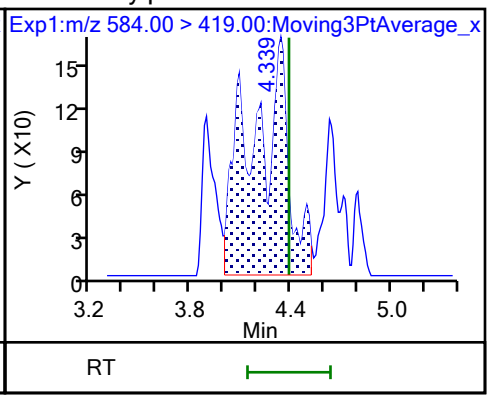
31 Perfluoroundecanoic acid (ND)



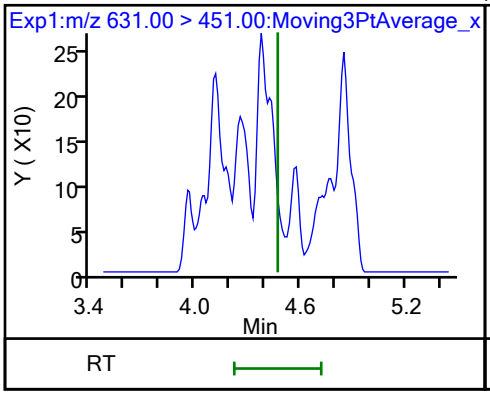
D 32 d5-NEtFOSAA



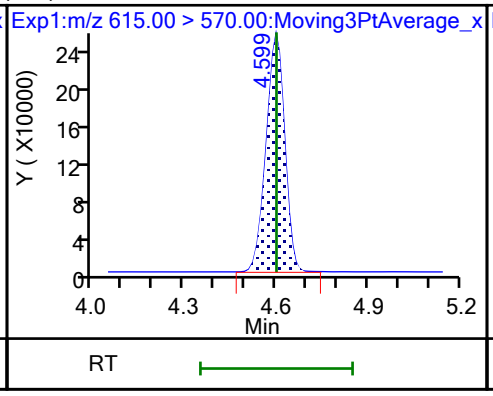
33 N-ethylperfluorooctanesulfonamid



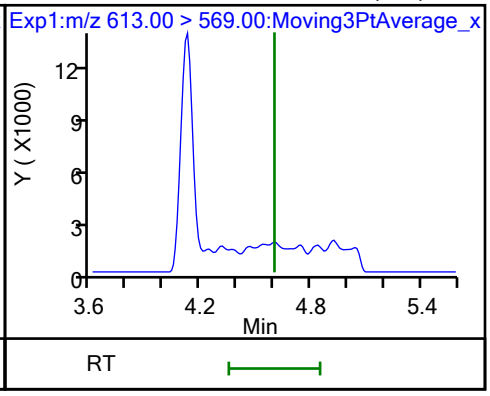
66 11-Chloroeicosafluoro-3-oxaundec (ND)



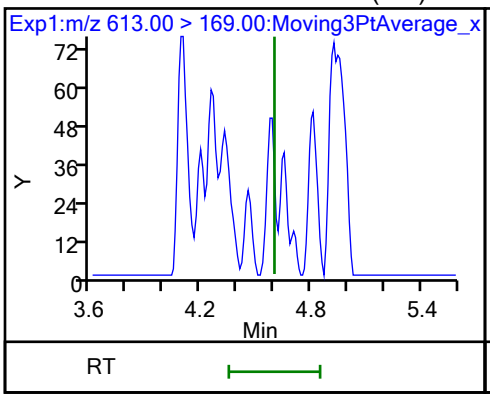
D 36 13C2 PFDoA



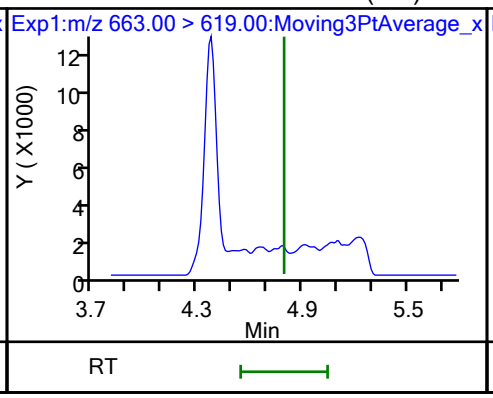
37 Perfluorododecanoic acid (ND)



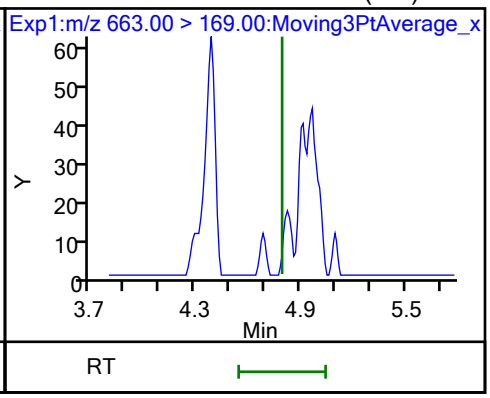
37 Perfluorododecanoic acid (ND)



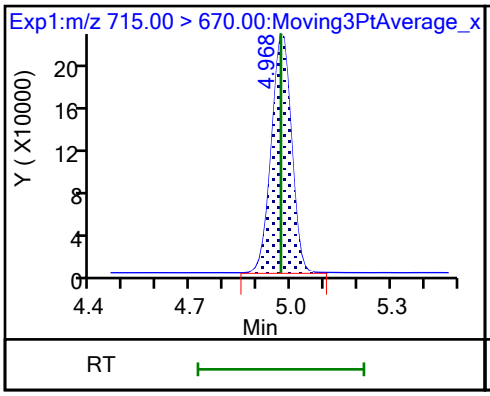
41 Perfluorotridecanoic acid (ND)



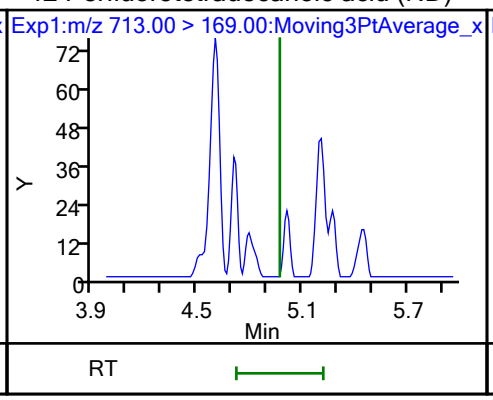
41 Perfluorotridecanoic acid (ND)



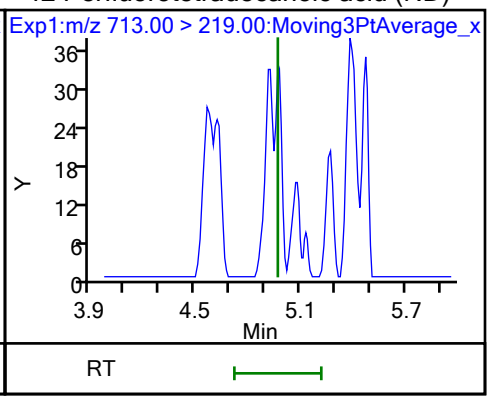
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

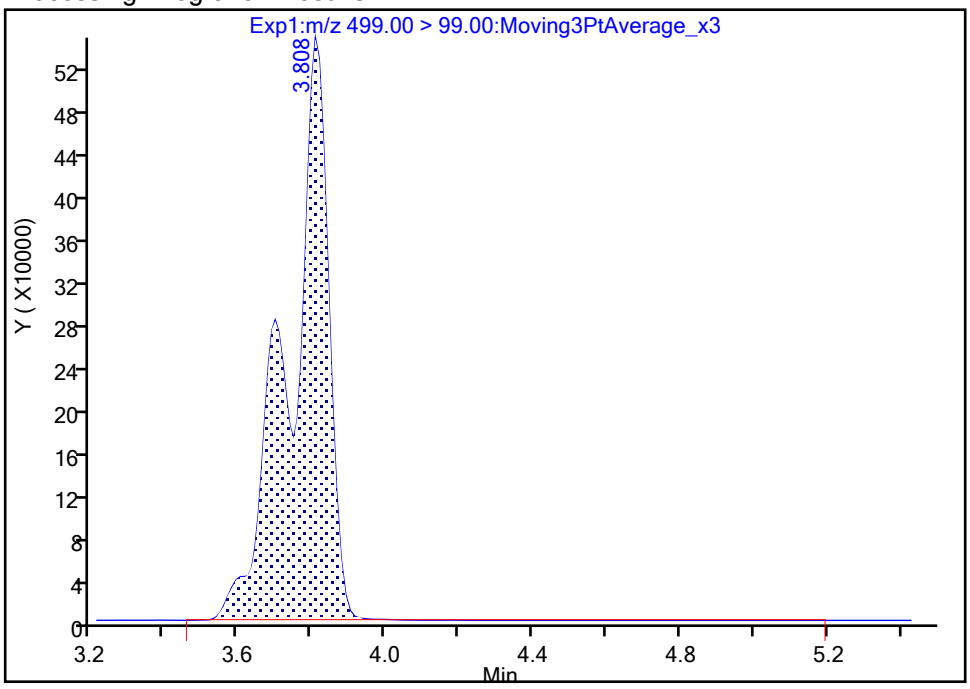
Data File:	\\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A07.d				
Injection Date:	30-Oct-2023 17:50:20	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	2.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

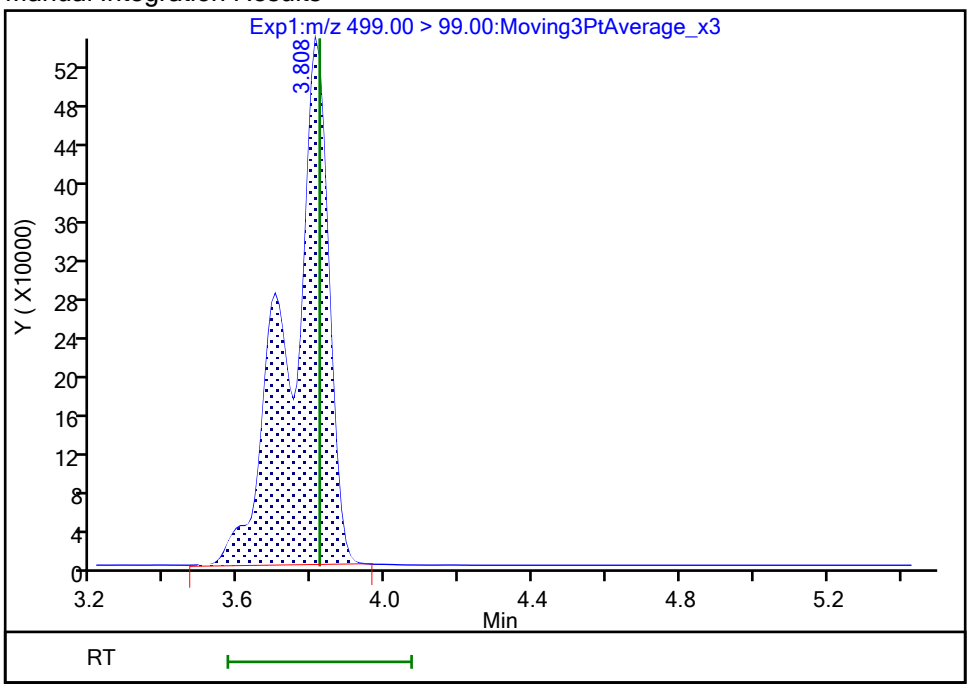
Processing Integration Results

RT: 3.81
Area: 4125644
Amount: 17.933544
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 4112277
Amount: 17.873350
Amount Units: ng/ml



Reviewer: SJ4N, 31-Oct-2023 12:29:25 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

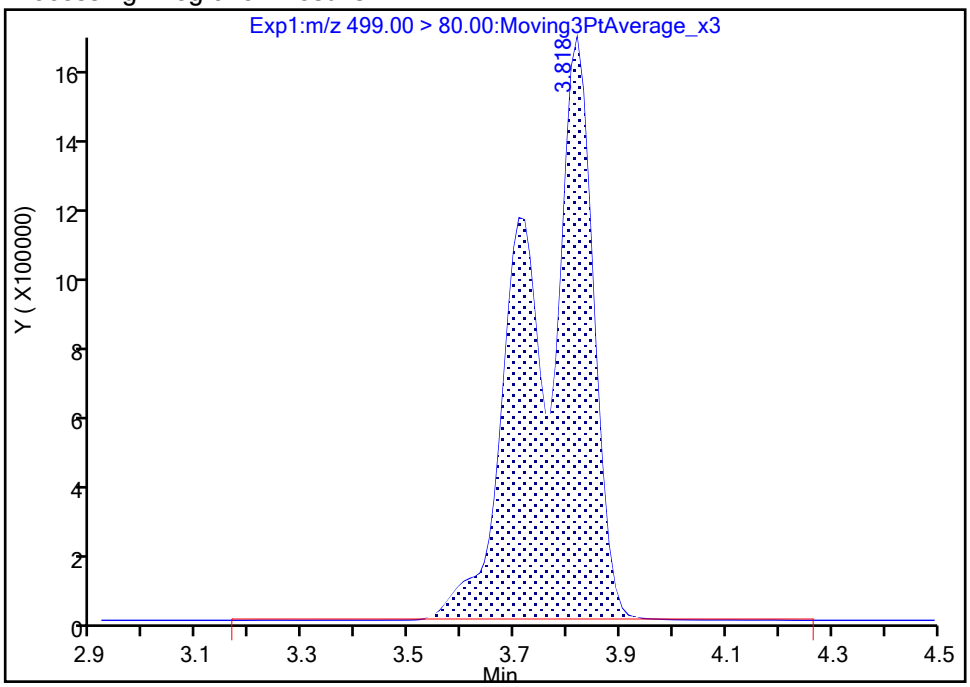
Data File:	\\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A07.d				
Injection Date:	30-Oct-2023 17:50:20	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	2.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

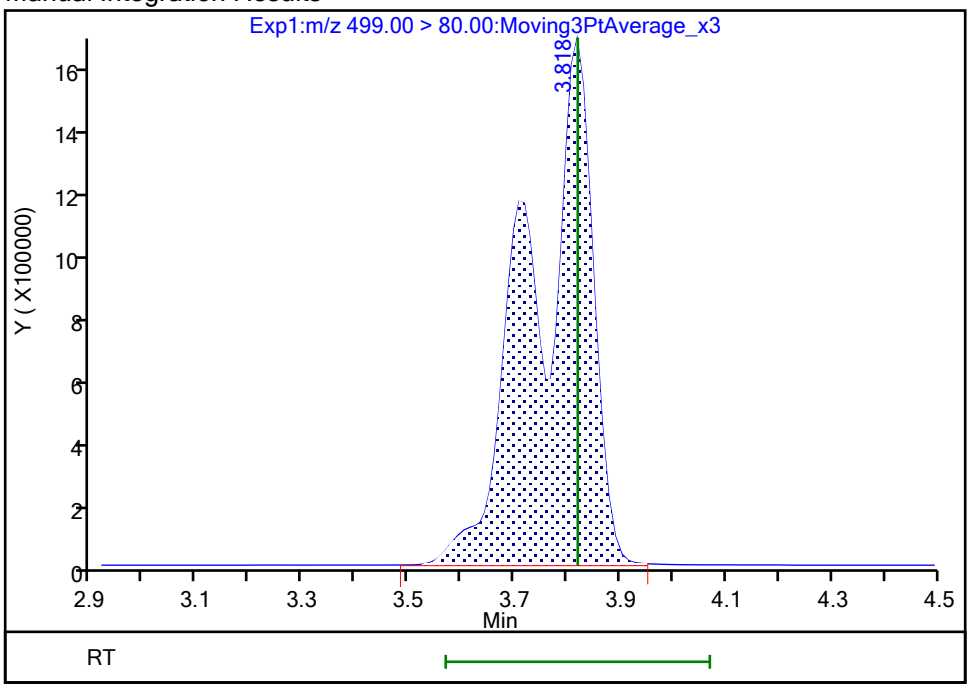
Processing Integration Results

RT: 3.82
Area: 13220557
Amount: 17.933544
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 13161144
Amount: 17.873350
Amount Units: ng/ml



Reviewer: SJ4N, 31-Oct-2023 12:29:45 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

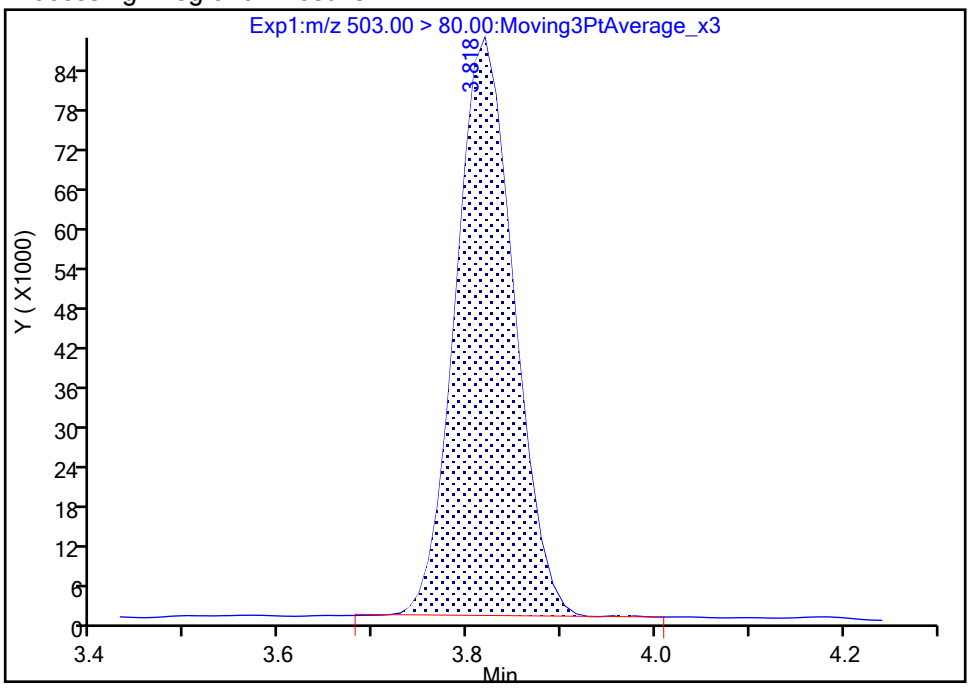
Data File:	\\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A07.d				
Injection Date:	30-Oct-2023 17:50:20	Instrument ID:	LC812		
Lims ID:	460-290543-A-2-A	Lab Sample ID:	200-290543-2		
Client ID:	MW84AR-101723-1011-75				
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	2.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 18 13C4 PFOS, CAS: STL00991

Signal: 1

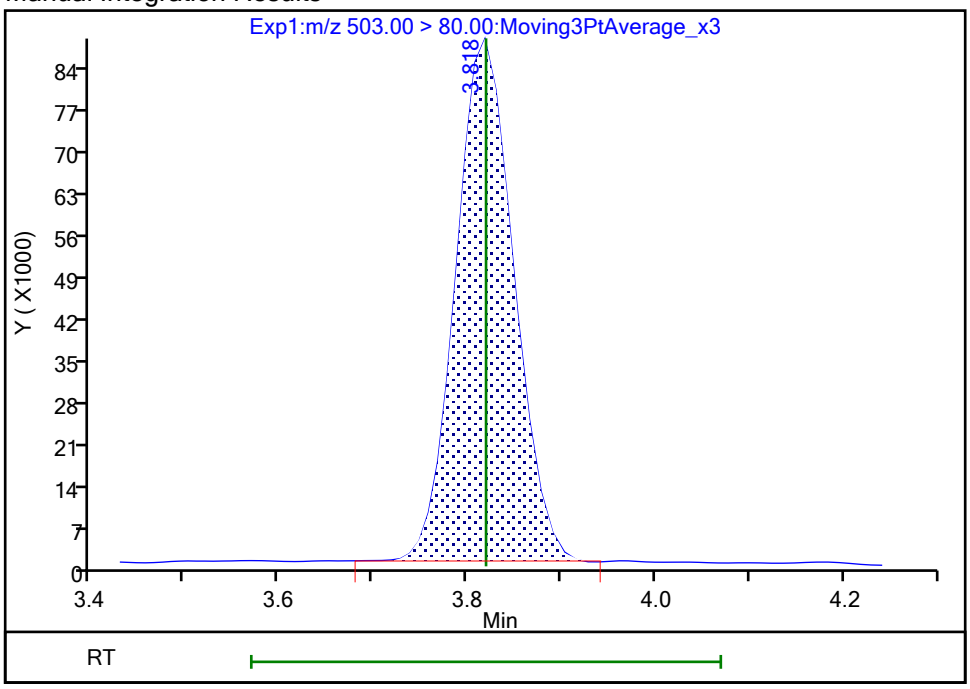
Processing Integration Results

RT: 3.82
Area: 377630
Amount: 0.530931
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 377199
Amount: 0.530325
Amount Units: ng/ml



Reviewer: SJ4N, 31-Oct-2023 12:35:23 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW77-101723-1131-20 | Lab Sample ID: 460-290543-3

Matrix: Water | Lab File ID: PA231025A22.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 11:31

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 312.1(mL) | Date Analyzed: 10/25/2023 20:43

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	6.42		4.01	0.96
2706-90-3	Perfluoropentanoic acid	9.33		1.60	0.54
307-24-4	Perfluorohexanoic acid	8.32		1.60	0.52
375-85-9	Perfluoroheptanoic acid	3.67		1.60	0.43
335-67-1	Perfluorooctanoic acid	9.09		1.60	0.61
375-95-1	Perfluorononanoic acid	1.39	J	1.60	0.39
335-76-2	Perfluorodecanoic acid	1.60	U	1.60	0.37
2058-94-8	Perfluoroundecanoic acid	1.60	U	1.60	0.44
307-55-1	Perfluorododecanoic acid	1.60	U	1.60	0.39
72629-94-8	Perfluorotridecanoic acid	1.60	U	1.60	0.38
376-06-7	Perfluorotetradecanoic acid	1.60	U	1.60	0.51
375-73-5	Perfluorobutanesulfonic acid	4.53		1.60	0.50
2706-91-4	Perfluoropentanesulfonic acid	0.59	J	1.60	0.40
355-46-4	Perfluorohexanesulfonic acid	2.26		1.60	0.44
375-92-8	Perfluoroheptanesulfonic acid	0.49	J	1.60	0.33
1763-23-1	Perfluorooctanesulfonic acid	44.9		1.60	0.68
68259-12-1	Perfluorononanesulfonic acid	1.60	U	1.60	0.32
335-77-3	Perfluorodecanesulfonic acid	1.60	U	1.60	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.60	U	1.60	0.43
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.01	U	4.01	1.04
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.60	U	1.60	0.62
754-91-6	Perfluorooctanesulfonamide	1.60	U	1.60	0.74
2355-31-9	NMeFOSAA	4.01	U	4.01	1.52
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.01	U	4.01	1.28
13252-13-6	HFPODA	3.20	U	3.20	0.88
919005-14-4	DONA	1.60	U	1.60	0.34
756426-58-1	9Cl-PF3ONS	1.60	U	1.60	0.26
763051-92-9	11Cl-PF3OUdS	1.60	U	1.60	0.70

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW77-101723-1131-20 Lab Sample ID: 460-290543-3

Matrix: Water Lab File ID: PA231025A22.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 11:31

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 312.1(mL) Date Analyzed: 10/25/2023 20:43

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	101		50-150
STL01892	13C4 PFHpA	111		50-150
STL02116	13C2 PFTeDA	92		50-150
STL02337	13C3 PFBS	105		50-150
STL01056	13C8 FOSA	92		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	101		50-150
STL02395	M2-4:2 FTS	99		50-150
STL02279	M2-6:2 FTS	110		50-150
STL02280	M2-8:2 FTS	101		50-150
STL02255	13C3 HFPO-DA	97		50-150
STL00994	18O2 PFHxS	112		50-150
STL00993	13C2 PFHxA	103		50-150
STL00991	13C4 PFOS	114		50-150
STL00998	13C2 PFDoA	105		50-150
STL00995	13C5 PFNA	104		50-150
STL00996	13C2 PFDA	104		50-150
STL00990	13C4 PFOA	107		50-150
STL00997	13C2 PFUnA	108		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d
Lims ID: 460-290543-A-3-A
Client ID: MW77-101723-1131-20
Sample Type: Client
Inject. Date: 25-Oct-2023 20:43:44 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-3-A
Misc. Info.: 200-0057556-022 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:03:25
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.139	-0.017	0.603	1783537	1.28		102	972	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.004	311209	0.2003			20.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1370594	1.26		101	704	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	344714	0.2913			3.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.701	1788936	1.22		105	28367	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.480	-0.013	1.000	242737	0.1412	Target=2.06		13.6	M
298.90 > 99.00	2.467	2.480	-0.013	1.000	118449		2.05(1.03-3.09)		15.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	195552	1.15		98.8	25.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1425761	1.29		103	3845	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	325879	0.2596	Target=14.12		9.9	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	27332		11.92(7.06-21.17)		15.4	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	28395	0.0185	Target=2.72		3.7	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	10171		2.79(1.36-4.09)		3.7	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	258255	1.21		96.8	2754	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.918	-0.021	0.996	1645	0.007953			8.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1392795	1.33		112	9137	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	92034	0.0706	Target=3.32		27.8	M
399.00 > 99.00	3.153	3.176	-0.023	0.996	31209		2.95(1.66-4.98)		17.7	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.176	-0.011	1.000	172664	0.1144	Target=4.17		9.3	M
363.00 > 169.00	3.165	3.176	-0.011	1.000	45322		3.81(2.09-6.26)		72.3	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1683081	1.39		111	6562	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.511	-0.009	0.917	16784	0.0153	Target=4.83		7.6	M
449.00 > 99.00	3.502	3.511	-0.009	0.917	4068		4.13(2.41-7.24)		3.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	284692	1.30		110	172	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.493	3.520	-0.027	0.995	1472	0.002246			3.2	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.003	442438	0.2837	Target=2.88		13.0	M
413.00 > 169.00	3.520	3.529	-0.009	1.003	180774		2.45(1.44-4.32)		212	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.529	-0.018	0.997	1830507	1.34		107	4073	
* 62 13C2 PFOA										M
415.00 > 370.00	3.520	3.529	-0.009		1760054	1.25			5650	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.830	-0.011	1.000	1240479	1.40	Target=4.24		800	M
499.00 > 99.00	3.819	3.830	-0.011	1.000	362060		3.43(2.12-6.37)		461	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.830	-0.011	1.085	907412	1.36		114	1231	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.854	-0.012	1.000	66112	0.0435	Target=8.34		6.3	M
463.00 > 169.00	3.830	3.854	-0.024	0.997	6629		9.97(4.17-12.51)		17.5	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.854	-0.012	1.091	1940005	1.30		104	4354	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.990	3.990	0.0	1.045	758	0.000280			2.4	M
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.088	4.112	-0.024	1.071	1931	0.002866	Target=2.17		2.7	RM
549.00 > 99.00	4.088	4.112	-0.024	1.071	2113		0.91(1.08-3.25)		4.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	2031264	1.30		104	9498	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.148	-0.012	0.997	1005	0.001849			9.2	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	295616	1.20		101	427	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1536501	1.15		92.3	3461	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.242	0.0	1.000	1566	0.001336			5.7	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.278	-0.013	1.212	468531	1.26		100	1232	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.291	4.291	0.0	1.006	314	0.000923			1.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.398	-0.011	1.246	1980608	1.34		108	7228	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.249	451959	1.26		101	1113	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.387	4.410	-0.023	0.997	802	0.002218			3.7	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	1958964	1.31		105	7907	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.989	-0.010	1.414	1714013	1.15		91.9	5142	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.989	4.989	0.0	1.002	230	0.001500	Target=0.87		4.5	M
713.00 > 219.00	4.979	4.989	-0.010	1.000	280		0.82(0.43-1.30)		3.7	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

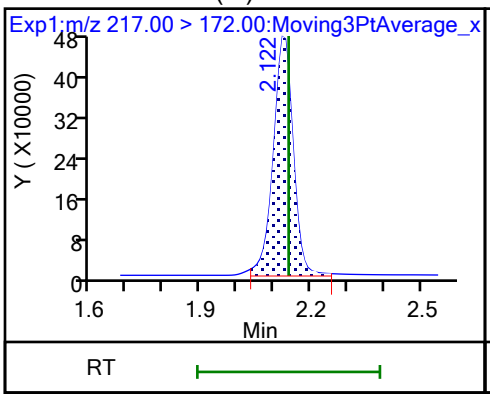
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:28 Chrom Revision: 2.3 18-Oct-2023 21:16:54

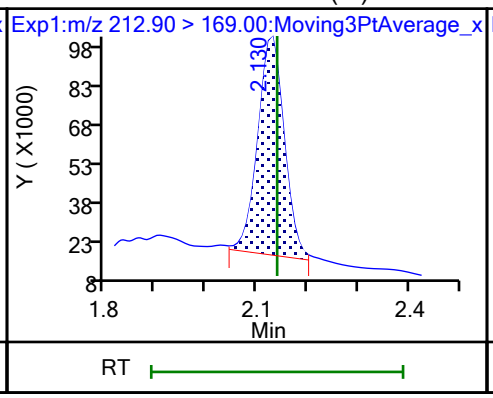
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d
Injection Date: 25-Oct-2023 20:43:44 Instrument ID: LC812
Lims ID: 460-290543-A-3-A Lab Sample ID: 200-290543-3
Client ID: MW77-101723-1131-20
Operator ID: LC812user ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

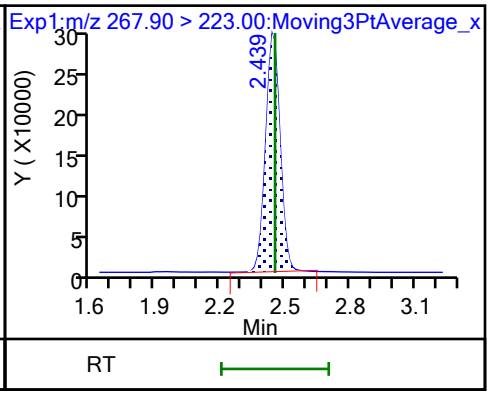
D 1 13C4 PFBA (M)



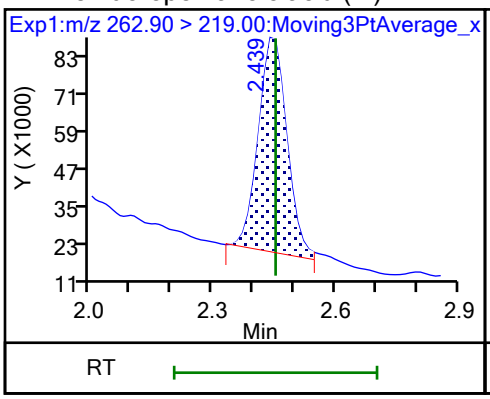
2 Perfluorobutanoic acid (M)



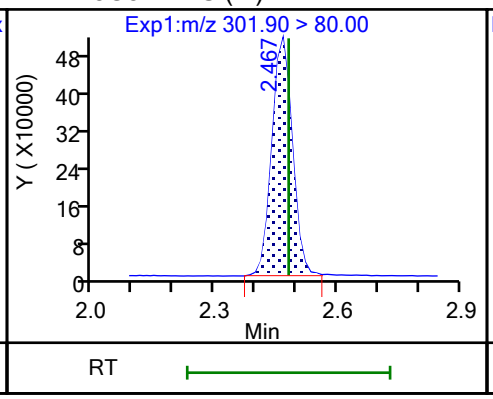
D 3 13C5 PFPeA



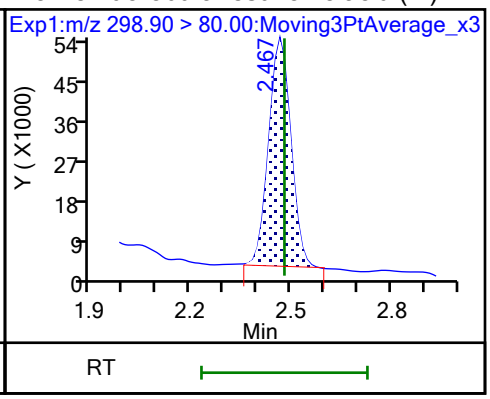
4 Perfluoropentanoic acid (M)



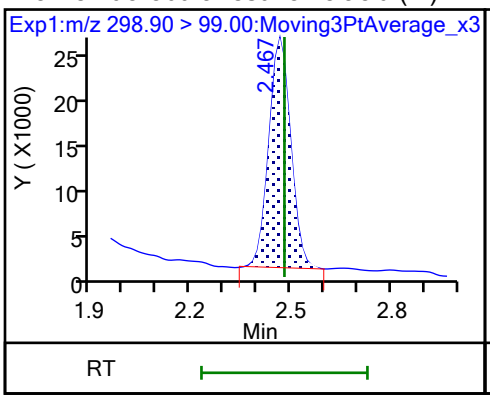
D 47 13C3 PFBS (M)



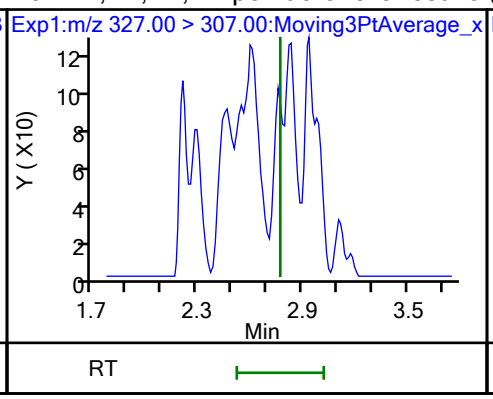
5 Perfluorobutanesulfonic acid (M)



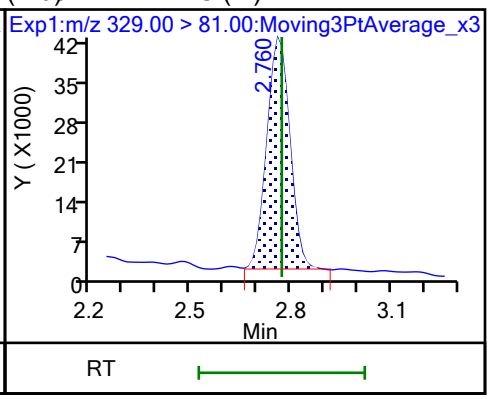
5 Perfluorobutanesulfonic acid (M)



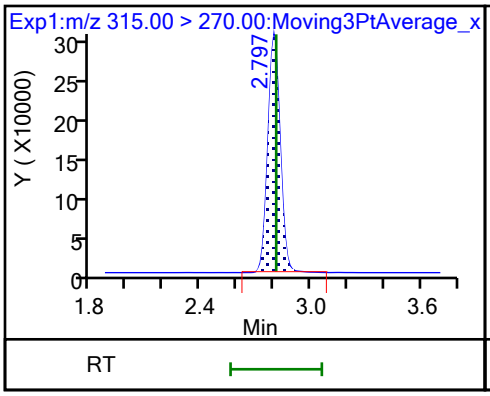
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



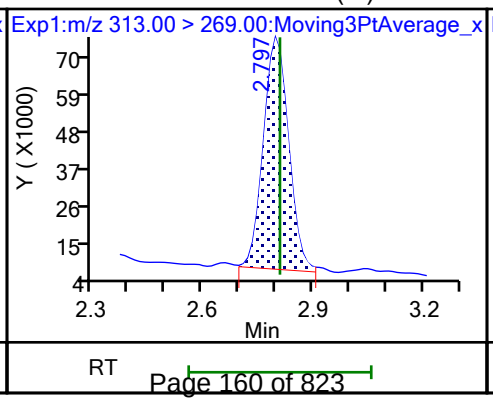
D 60 M2-4:2 FTS (M)



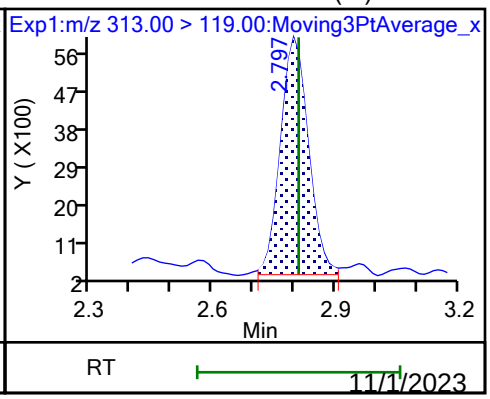
D 7 13C2 PFHxA



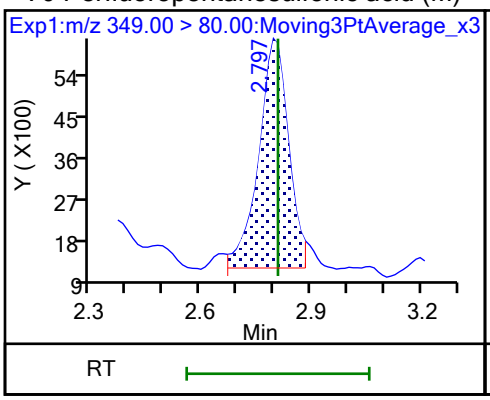
6 Perfluorohexanoic acid (M)



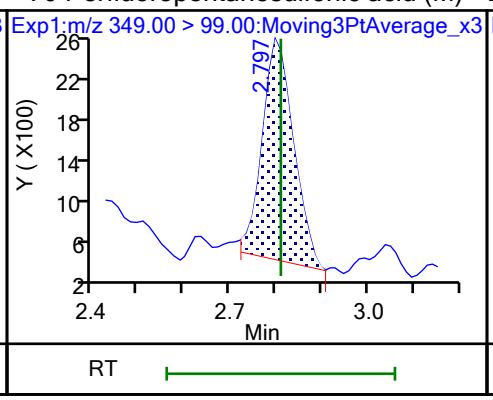
6 Perfluorohexanoic acid (M)



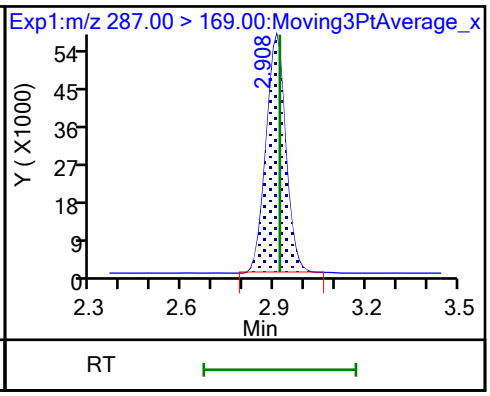
70 Perfluoropentanesulfonic acid (M)



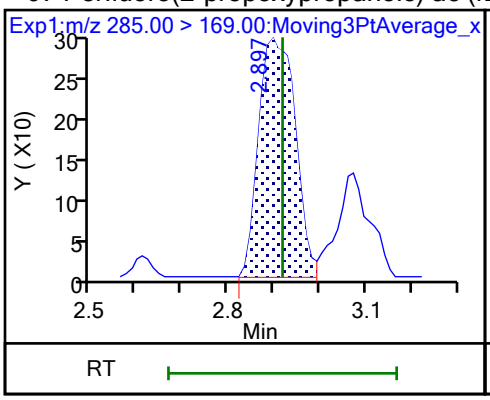
70 Perfluoropentanesulfonic acid (M)



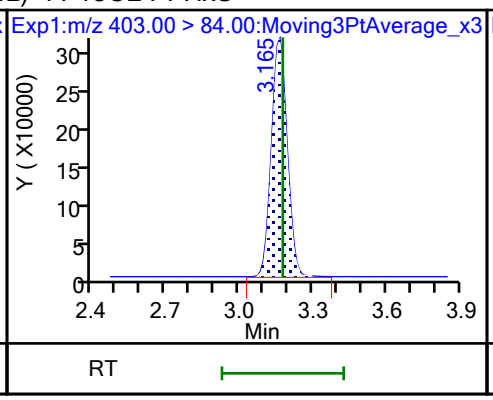
D 64 13C3 HFPO-DA



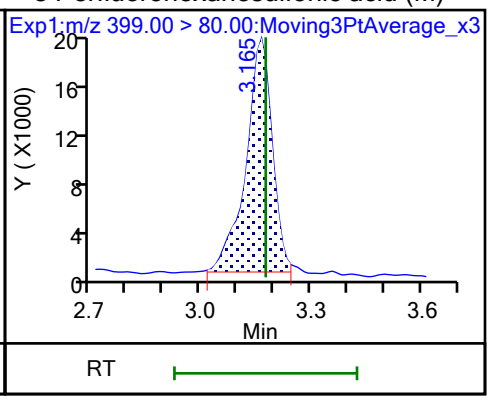
67 Perfluoro(2-propoxypropanoic) ac (M)



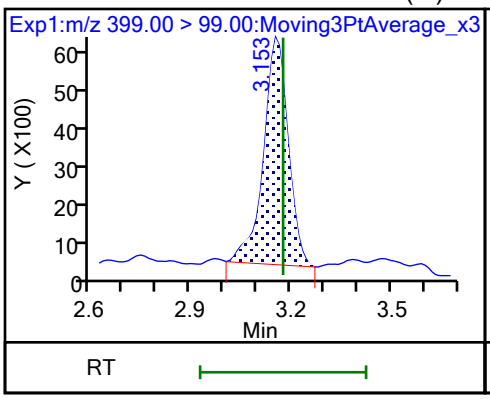
D 11 18O2 PFHxS



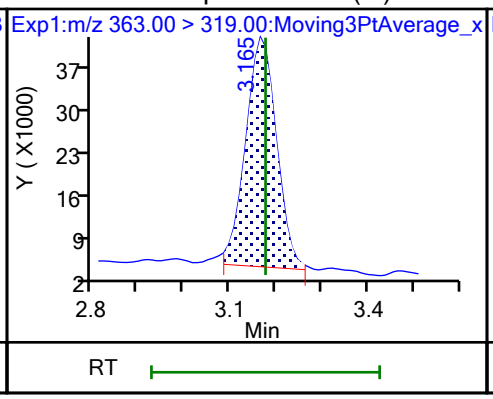
8 Perfluorohexanesulfonic acid (M)



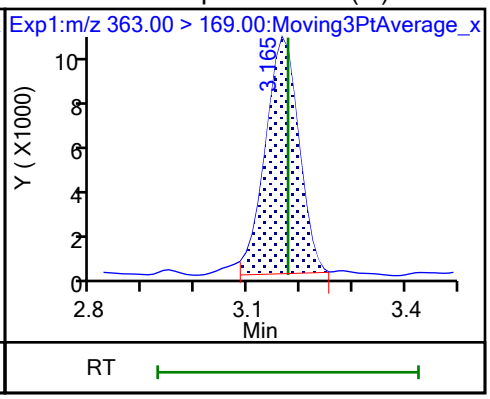
8 Perfluorohexanesulfonic acid (M)



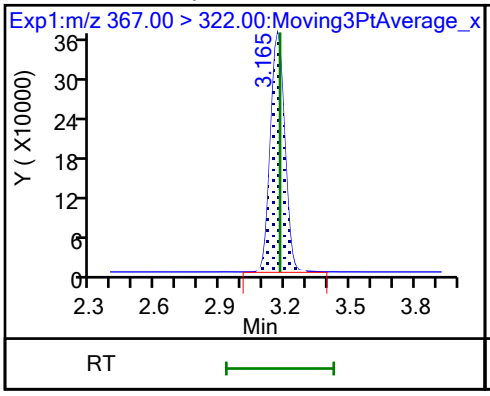
10 Perfluoroheptanoic acid (M)



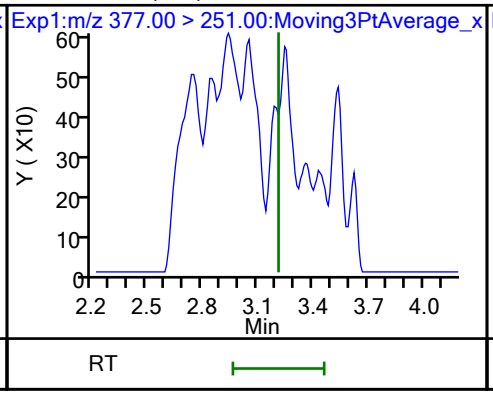
10 Perfluoroheptanoic acid (M)



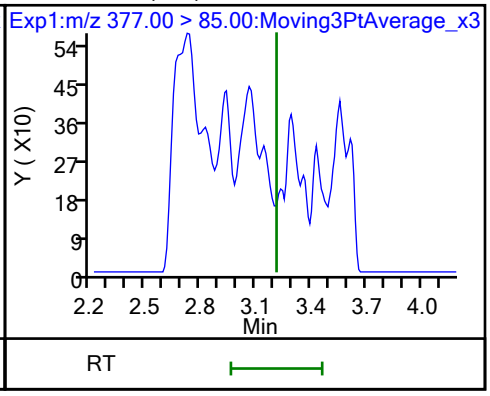
D 9 13C4 PFHpA



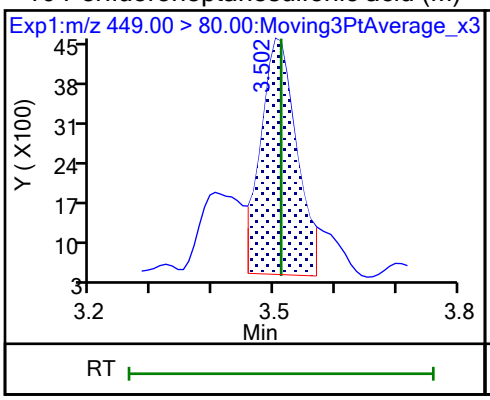
77 DONA (ND)



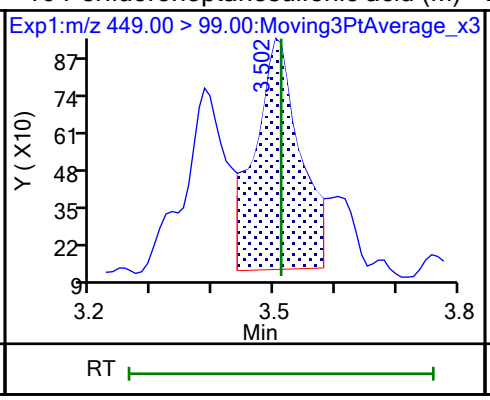
77 DONA (ND)



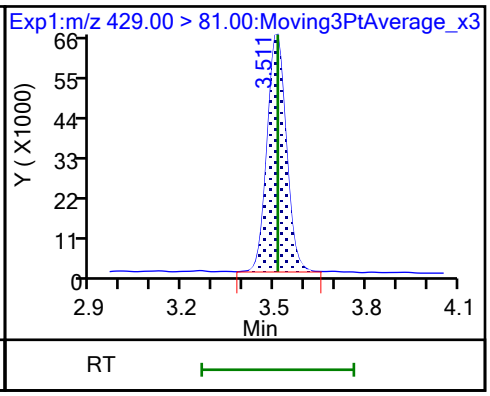
16 Perfluoroheptanesulfonic acid (M)



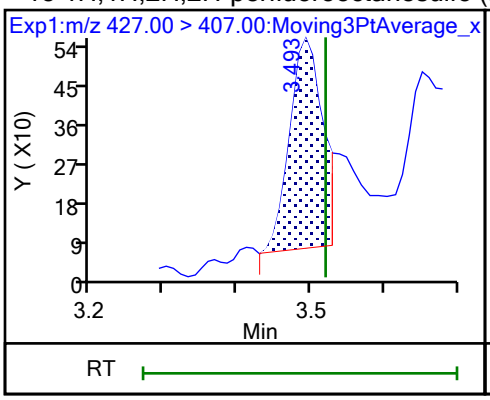
16 Perfluoroheptanesulfonic acid (M)



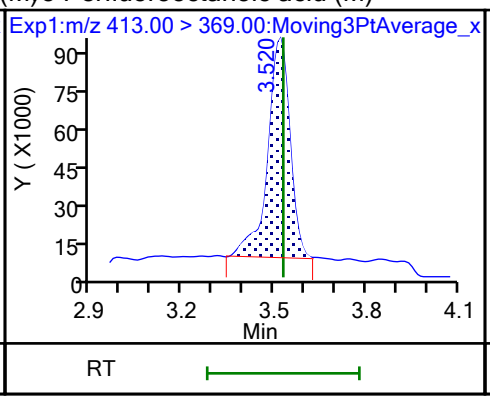
D 12 M2-6:2 FTS



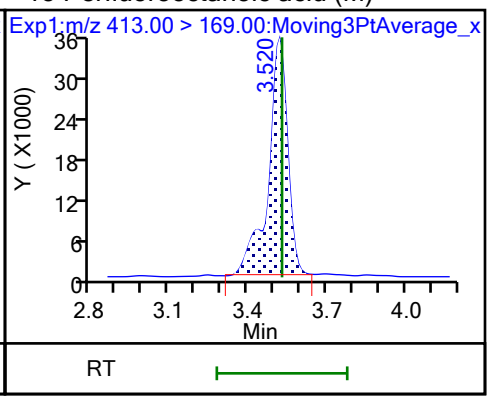
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



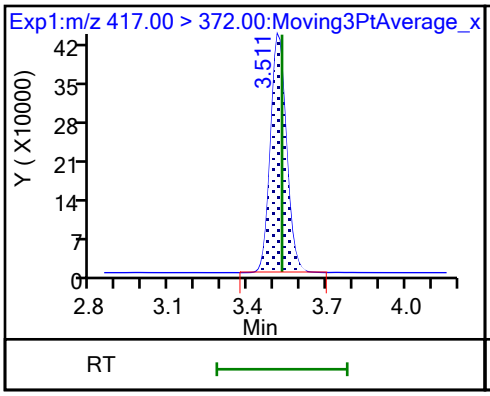
15 Perfluorooctanoic acid (M)



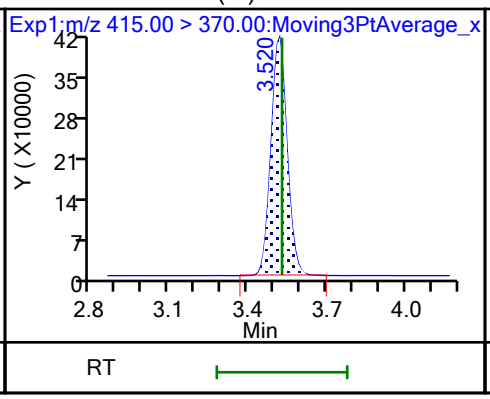
15 Perfluorooctanoic acid (M)



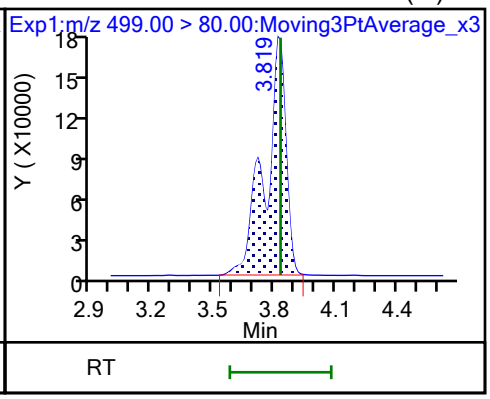
D 14 13C4 PFOA



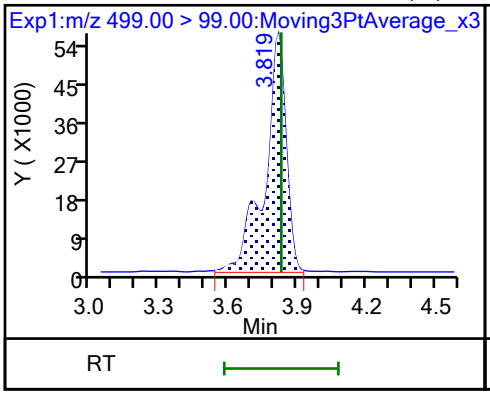
* 62 13C2 PFOA (M)



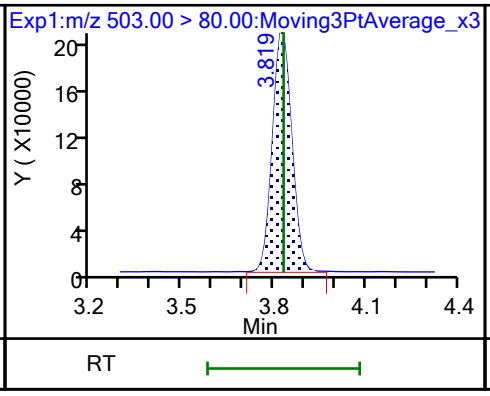
17 Perfluorooctanesulfonic acid (M)



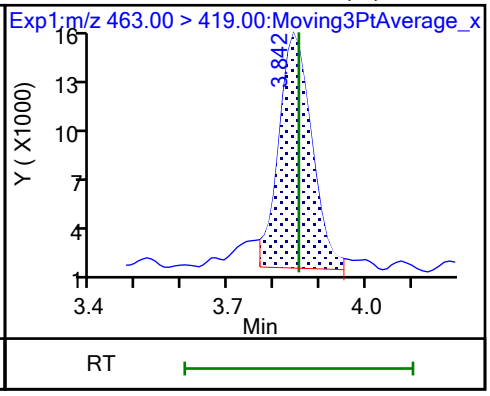
17 Perfluorooctanesulfonic acid (M)



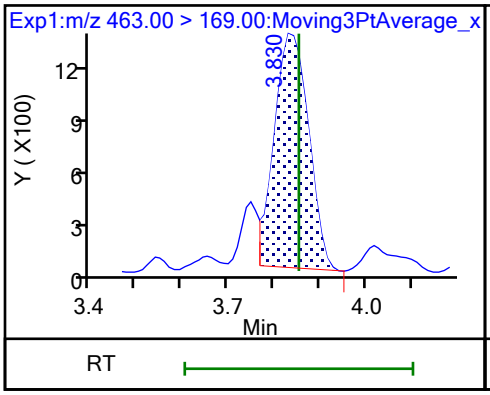
D 18 13C4 PFOS



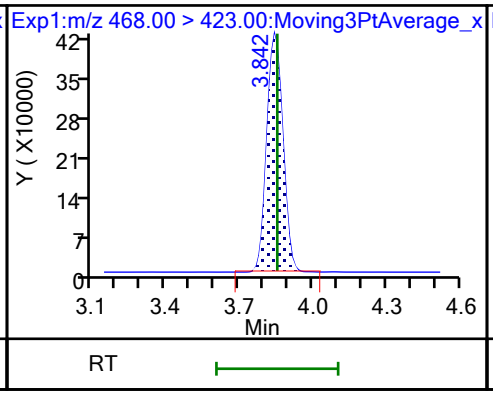
20 Perfluorononanoic acid (M)



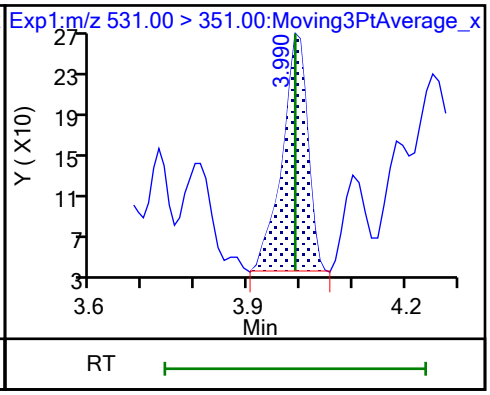
20 Perfluorononanoic acid



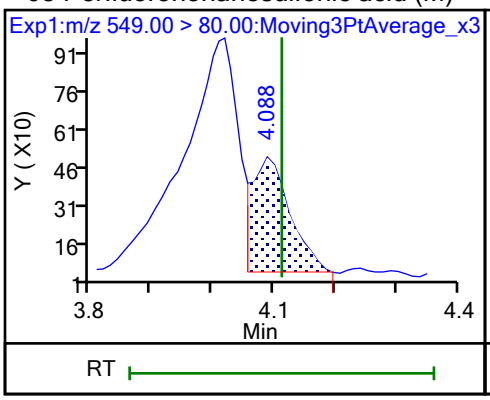
D 19 13C5 PFNA



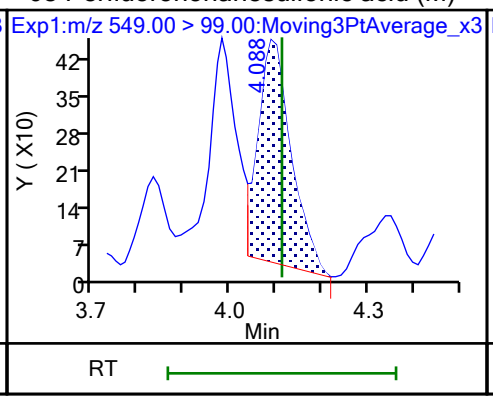
69 9-Chlorohexadecafluoro-3-oxanona (M)



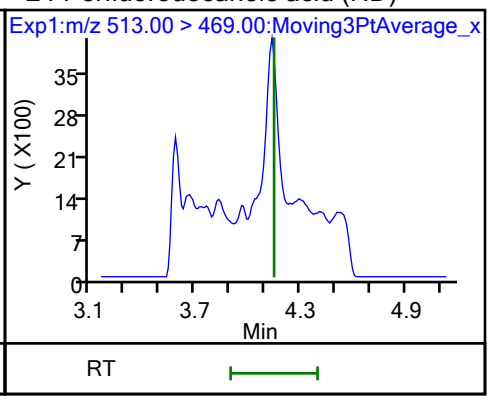
68 Perfluorononanesulfonic acid (M)



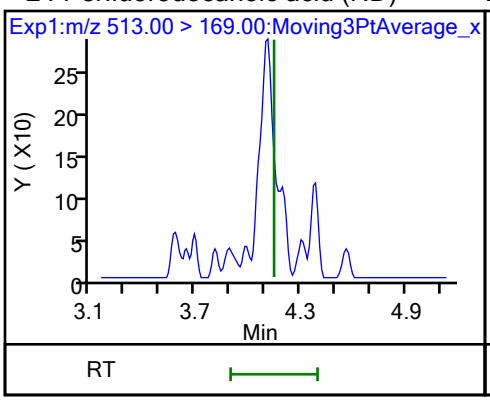
68 Perfluorononanesulfonic acid (M)



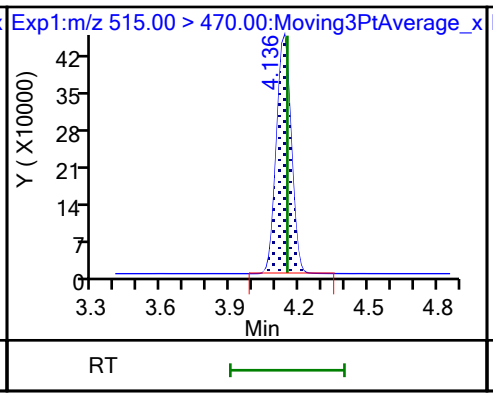
24 Perfluorodecanoic acid (ND)



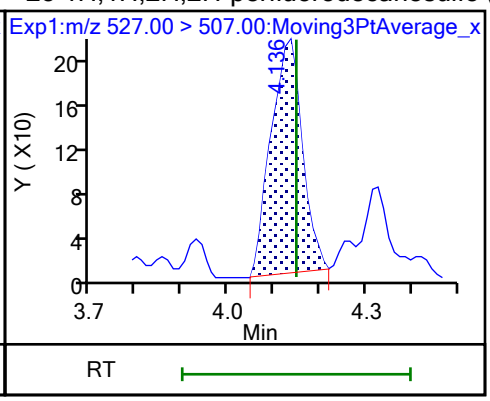
24 Perfluorodecanoic acid (ND)



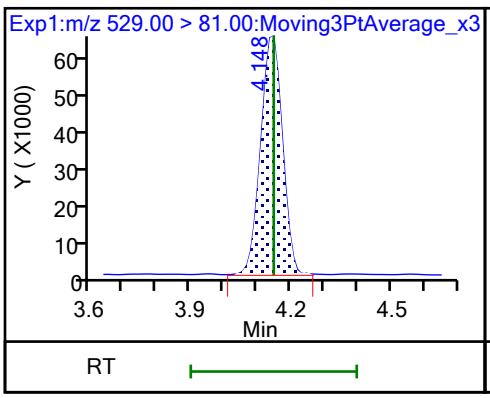
D 23 13C2 PFDA



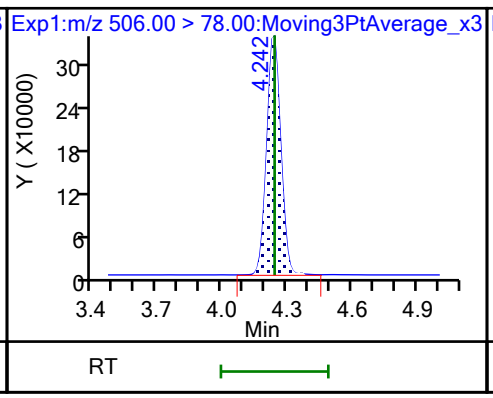
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



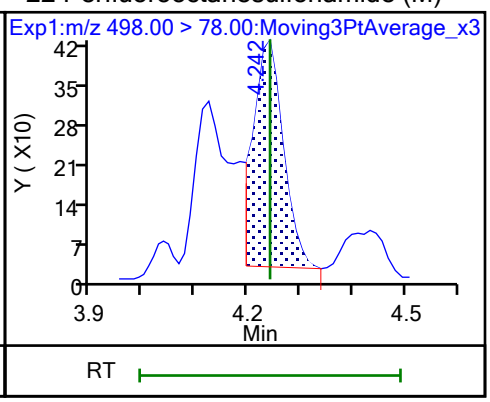
D 26 M2-8:2 FTS



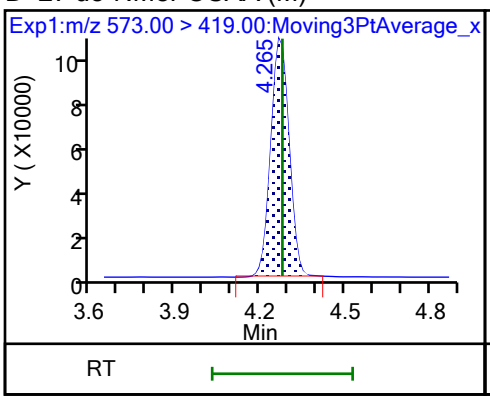
D 21 13C8 FOSA



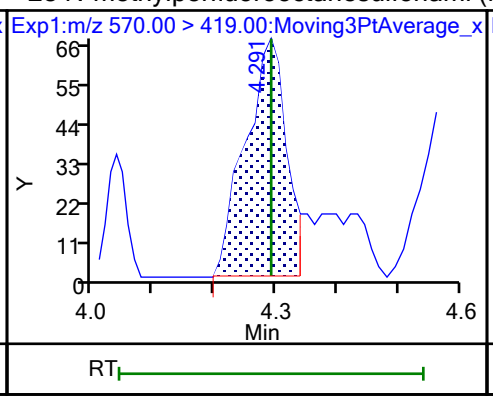
22 Perfluorooctanesulfonamide (M)



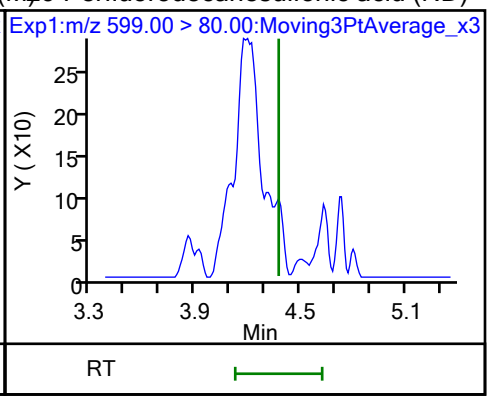
D 27 d3-NMeFOSAA (M)



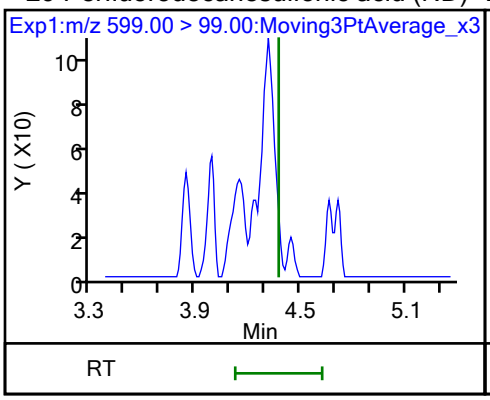
28 N-methylperfluorooctanesulfonami (M)



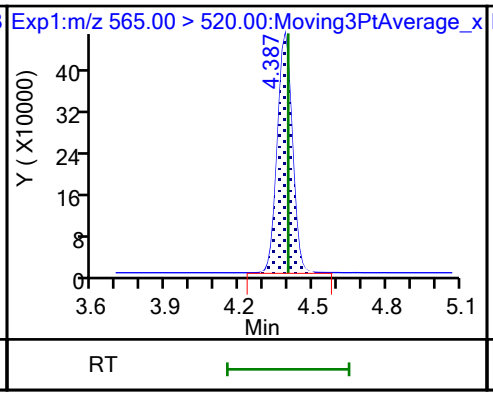
29 Perfluorodecanesulfonic acid (ND)



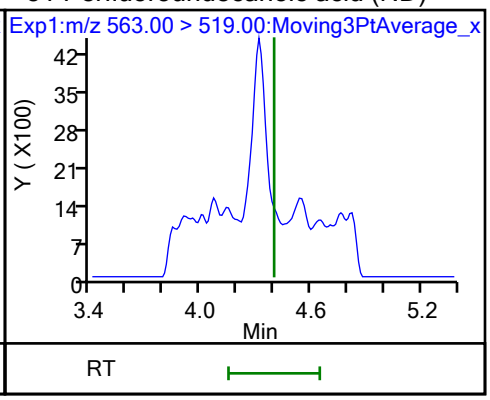
29 Perfluorodecanesulfonic acid (ND)



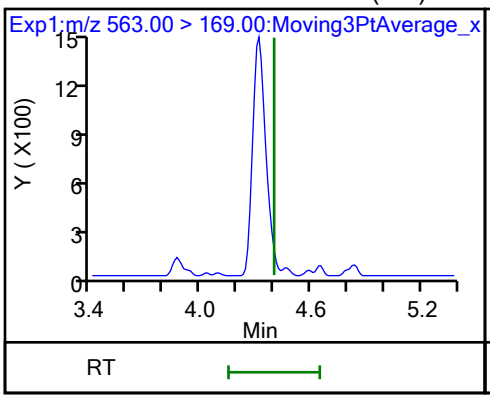
D 30 13C2 PFUnA



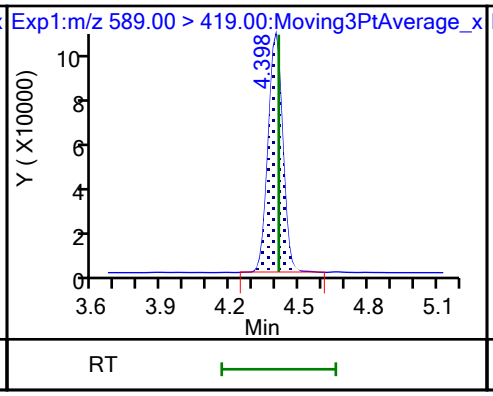
31 Perfluoroundecanoic acid (ND)



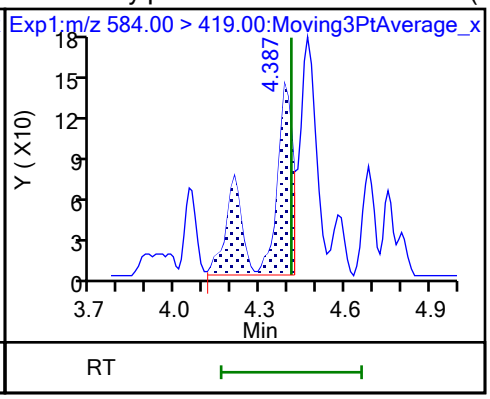
31 Perfluoroundecanoic acid (ND)



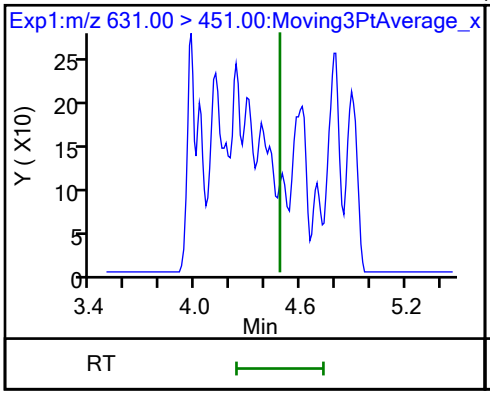
D 32 d5-NEtFOSAA



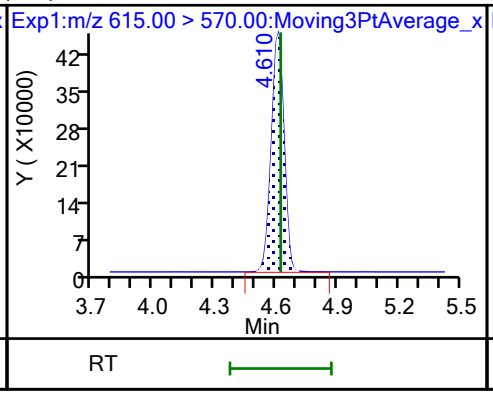
33 N-ethylperfluorooctanesulfonamid (M)



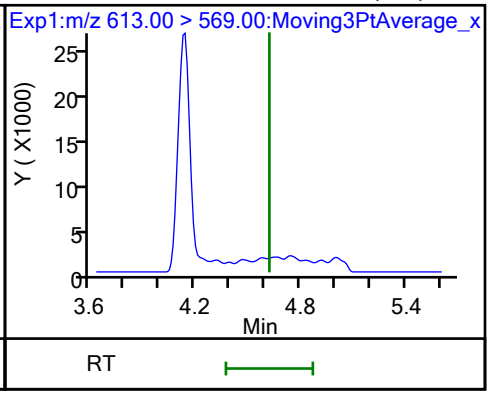
66 11-Chloroeicosafluoro-3-oxaundec (ND)



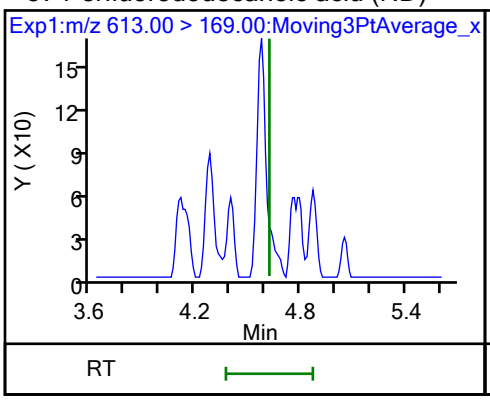
D 36 13C2 PFDoA



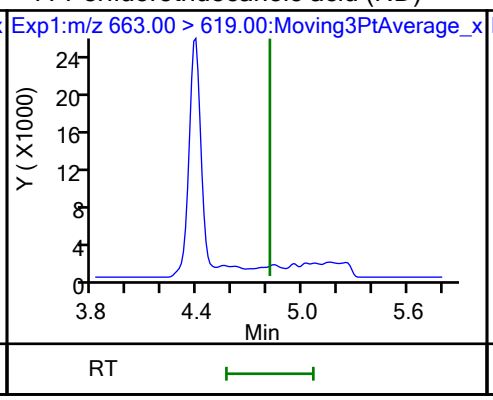
37 Perfluorododecanoic acid (ND)



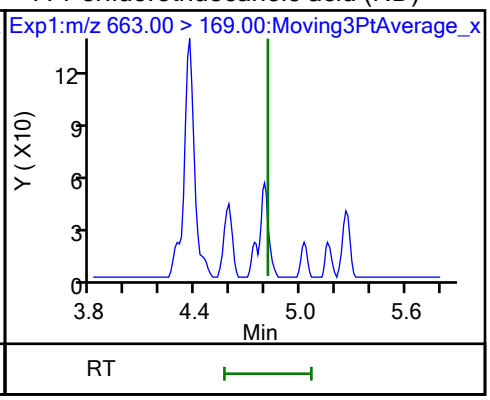
37 Perfluorododecanoic acid (ND)



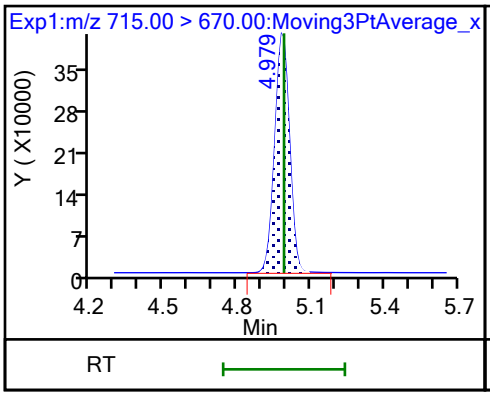
41 Perfluorotridecanoic acid (ND)



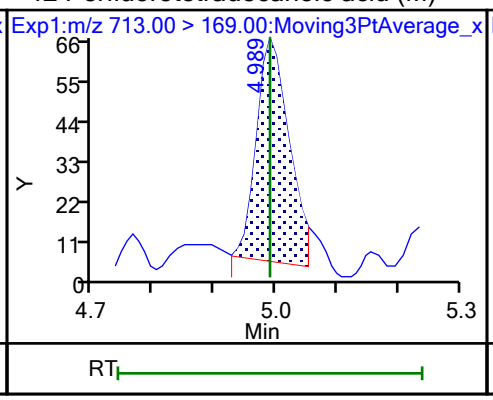
41 Perfluorotridecanoic acid (ND)



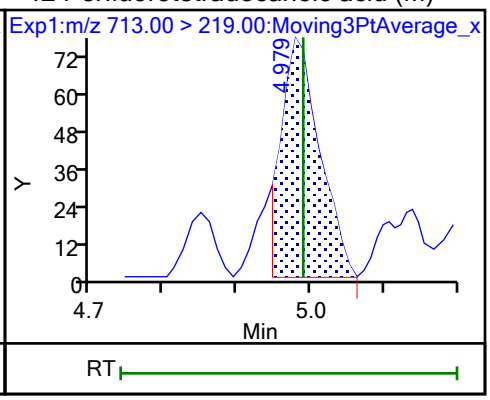
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

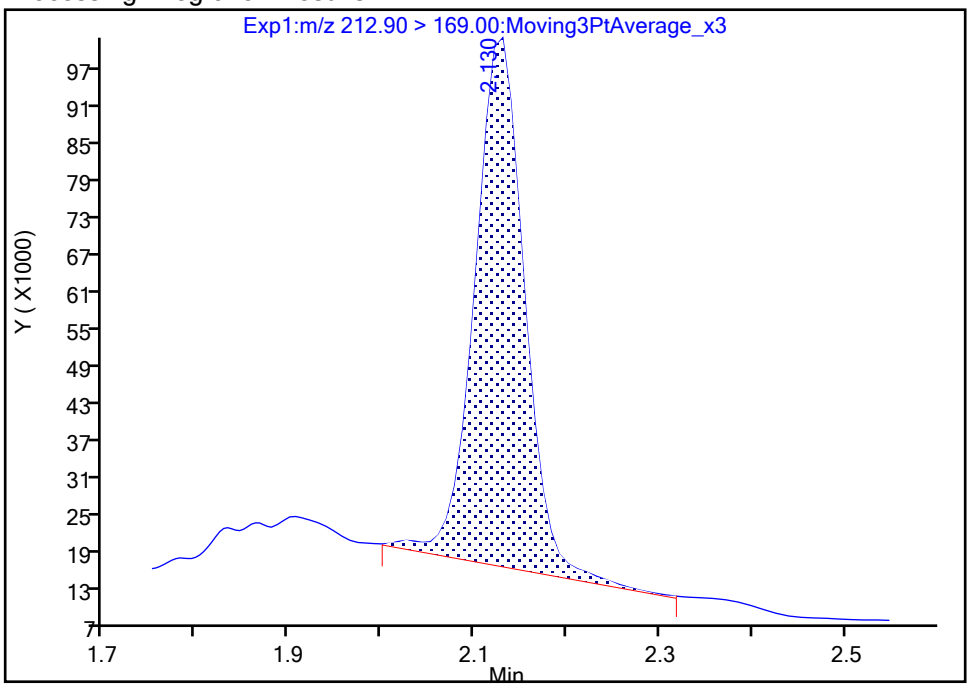
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

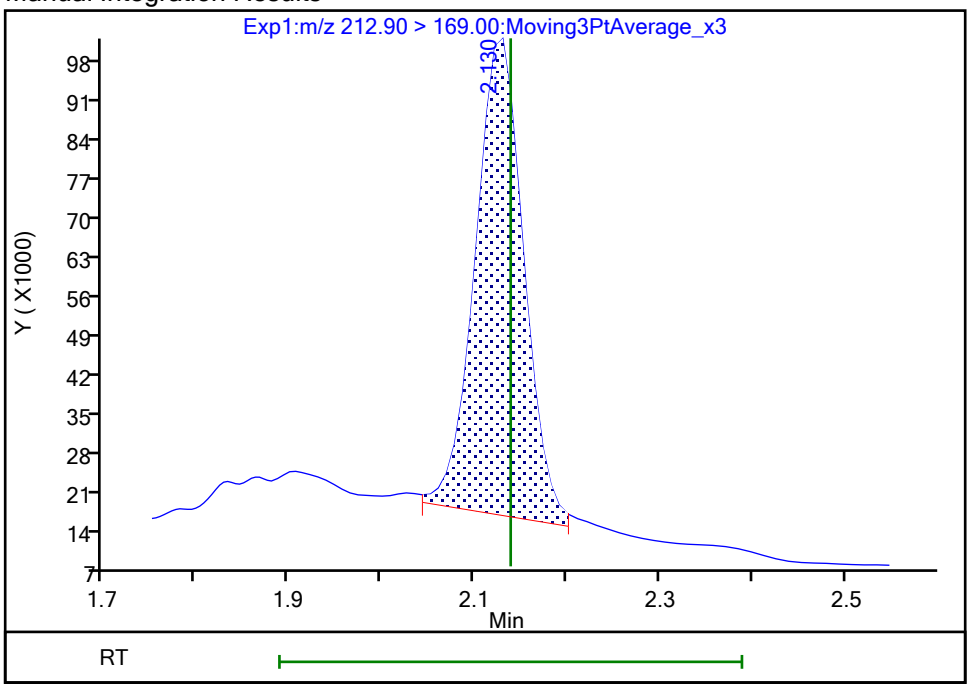
Processing Integration Results

RT: 2.13
Area: 321232
Amount: 0.208088
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 311209
Amount: 0.200320
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:57:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

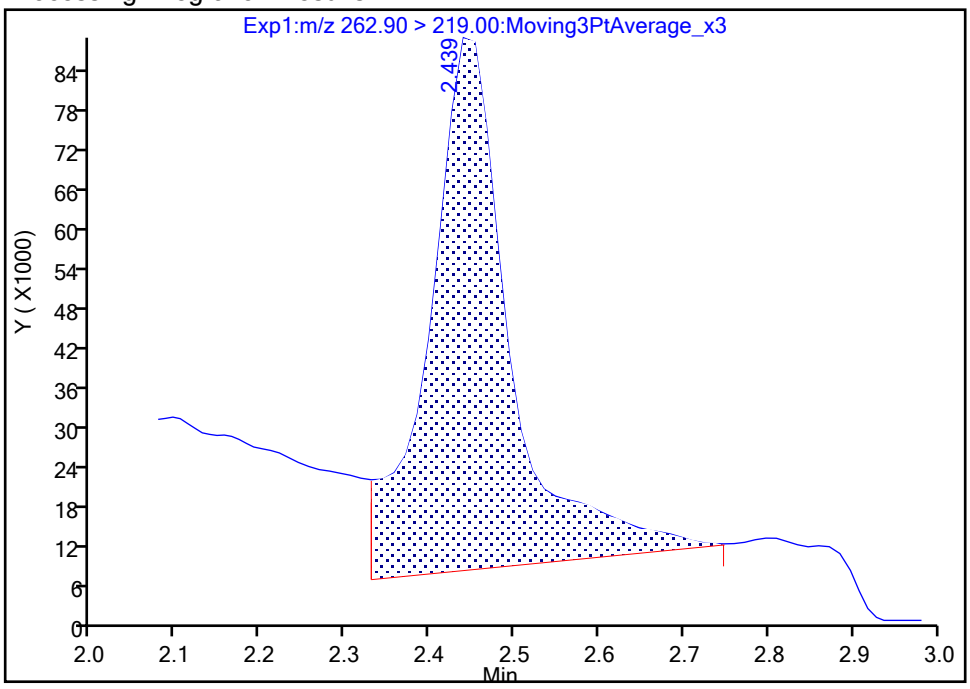
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

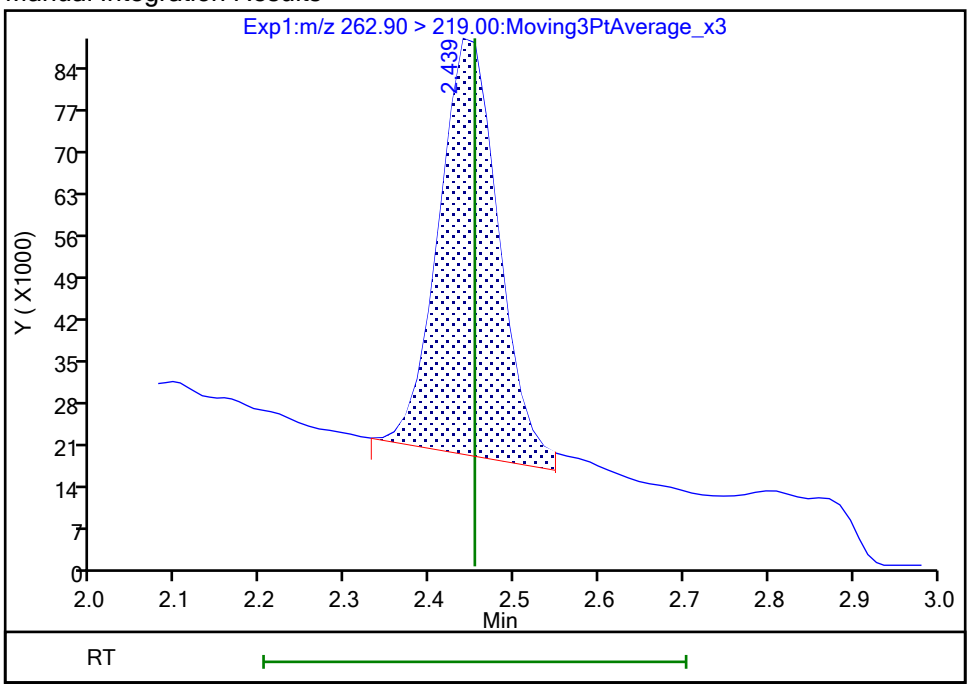
Processing Integration Results

RT: 2.44
Area: 543569
Amount: 0.459390
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 344714
Amount: 0.291330
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:57:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

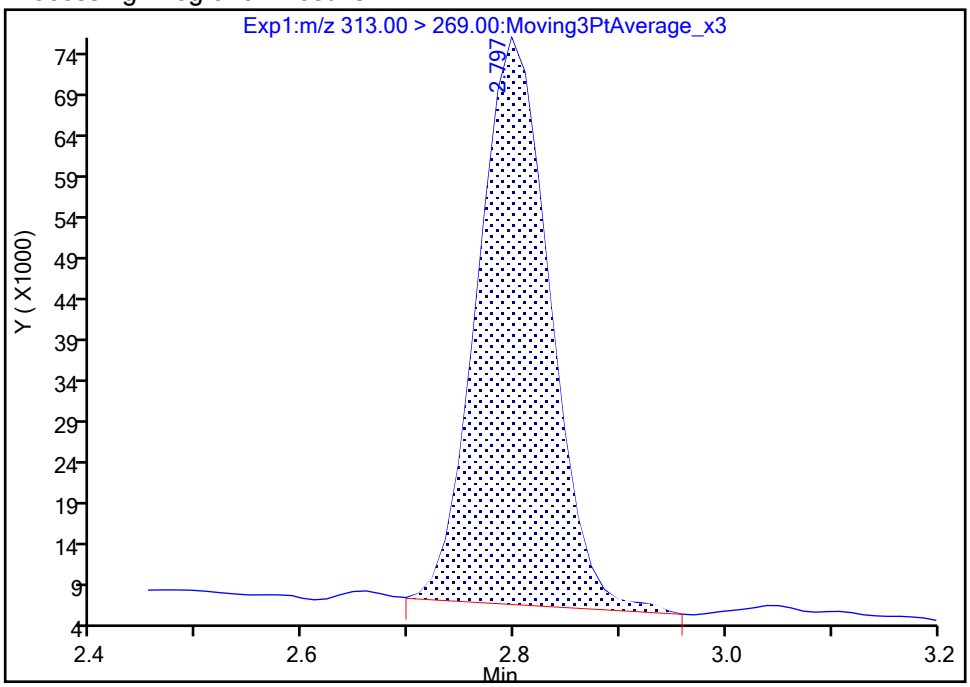
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

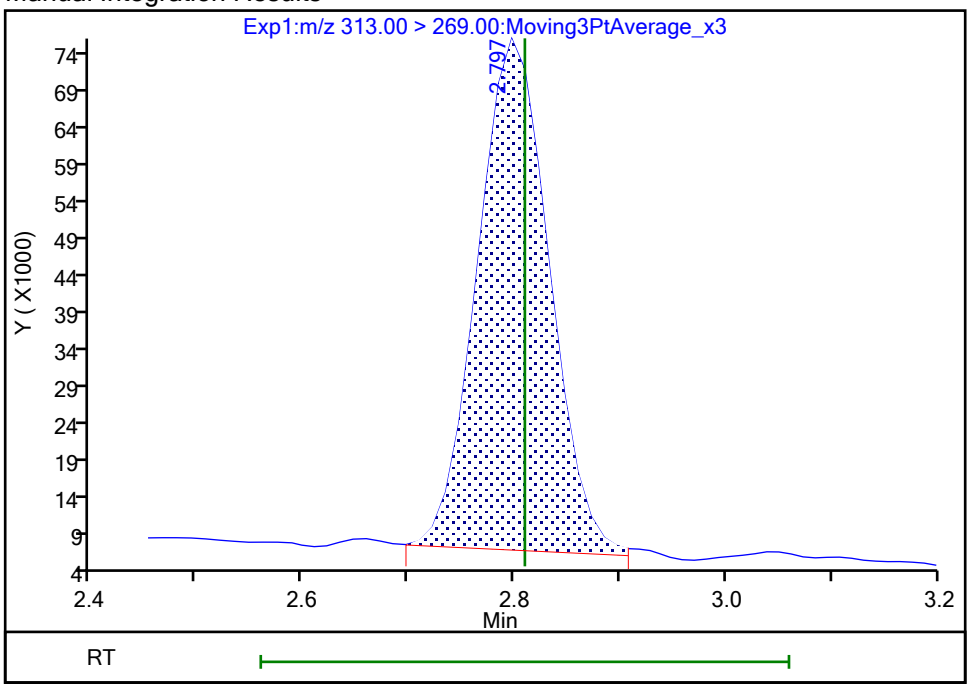
Processing Integration Results

RT: 2.80
Area: 328383
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 325879
Amount: 0.259625
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

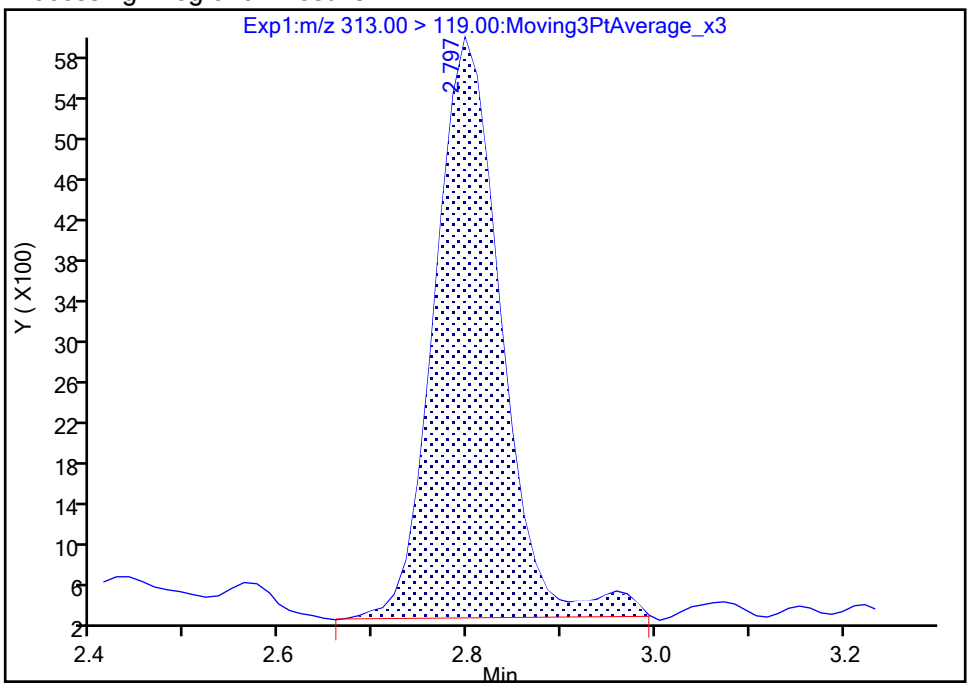
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

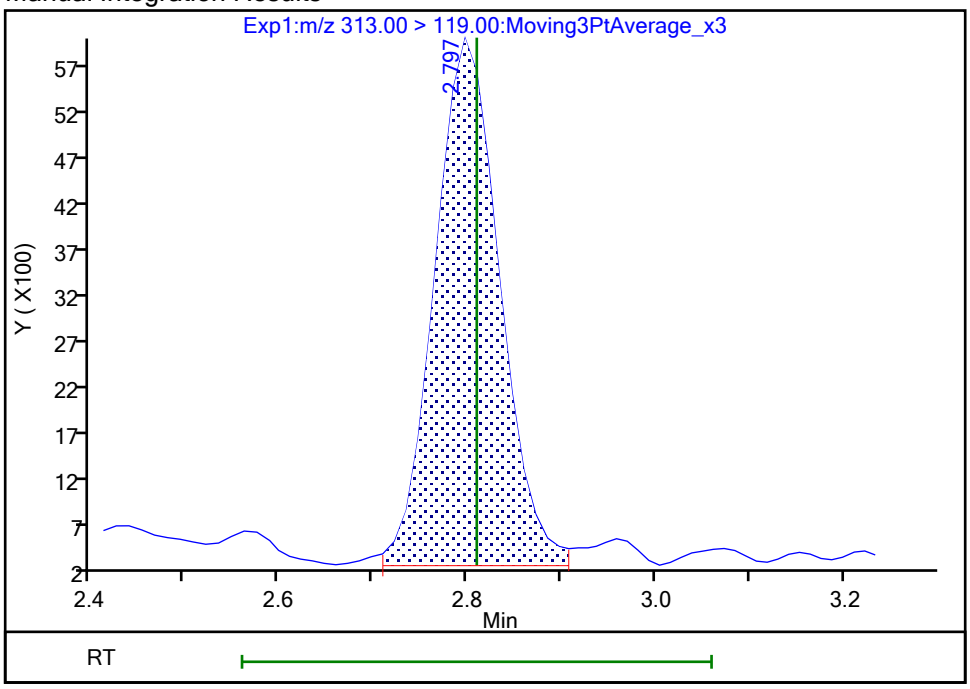
Processing Integration Results

RT: 2.80
Area: 28030
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 27332
Amount: 0.259625
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

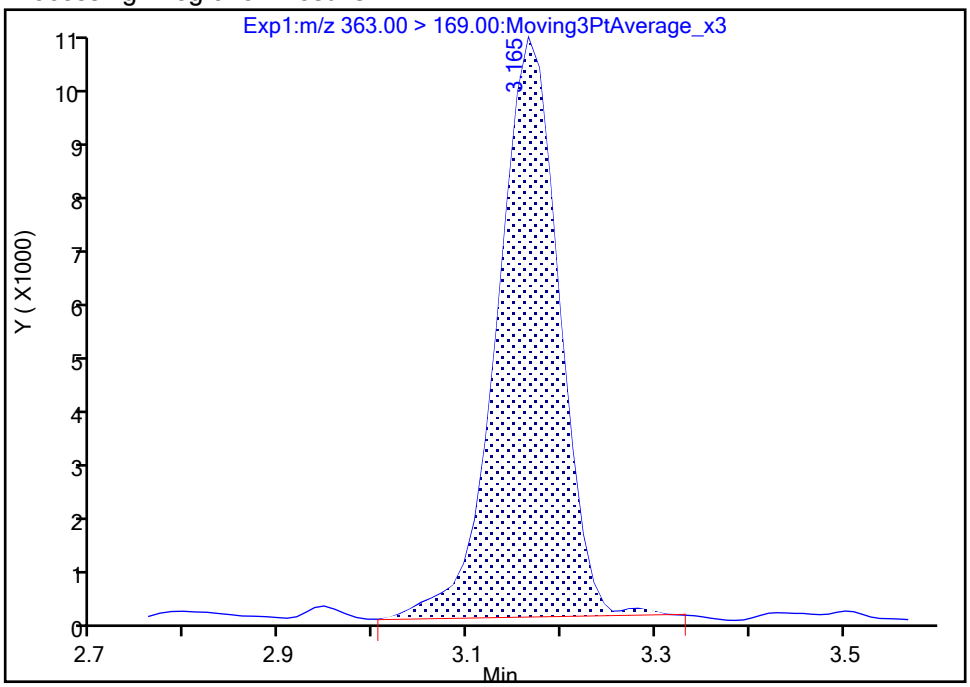
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

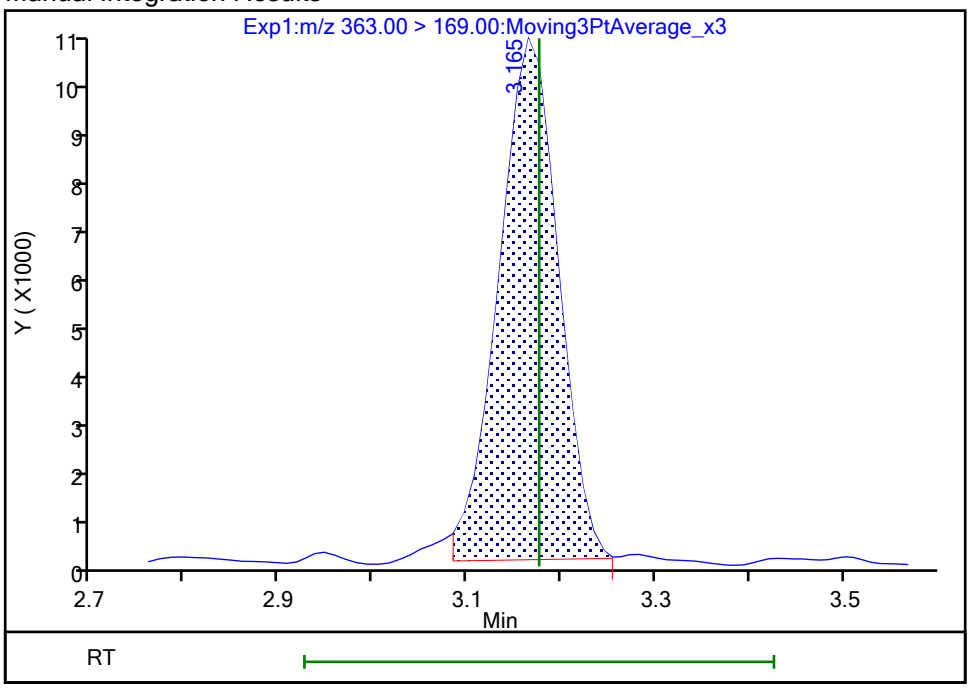
Processing Integration Results

RT: 3.16
Area: 47380
Amount: 0.134112
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 45322
Amount: 0.114405
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

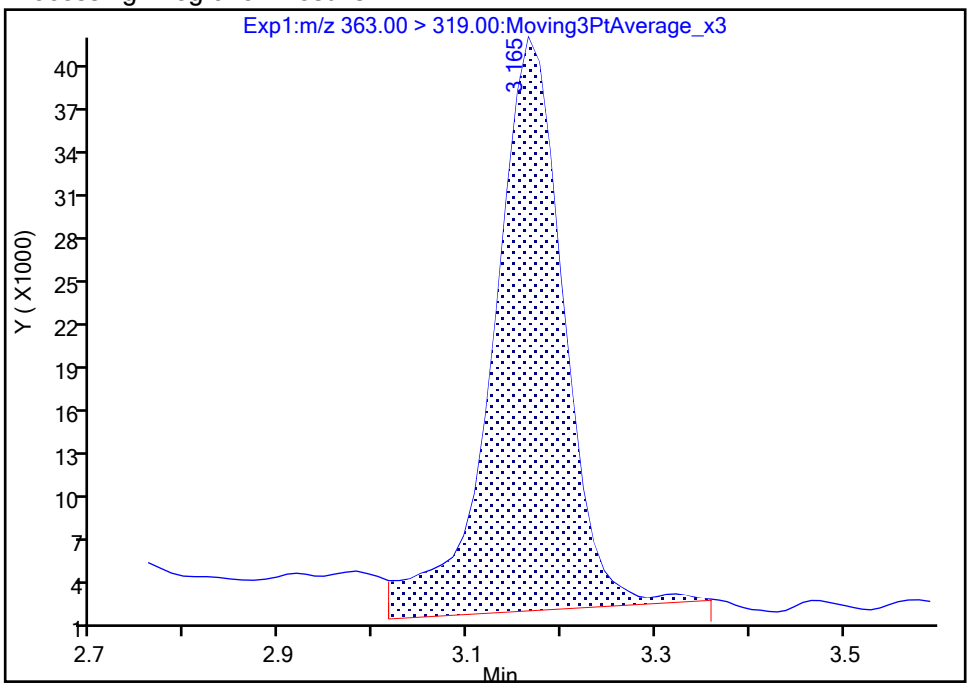
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

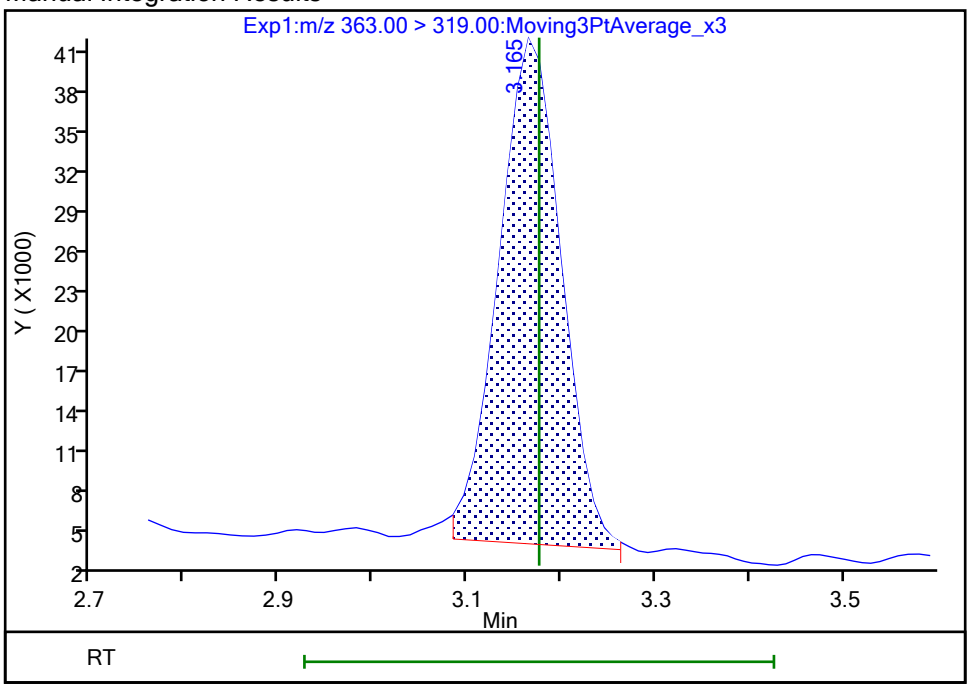
Processing Integration Results

RT: 3.16
Area: 202406
Amount: 0.134112
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 172664
Amount: 0.114405
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

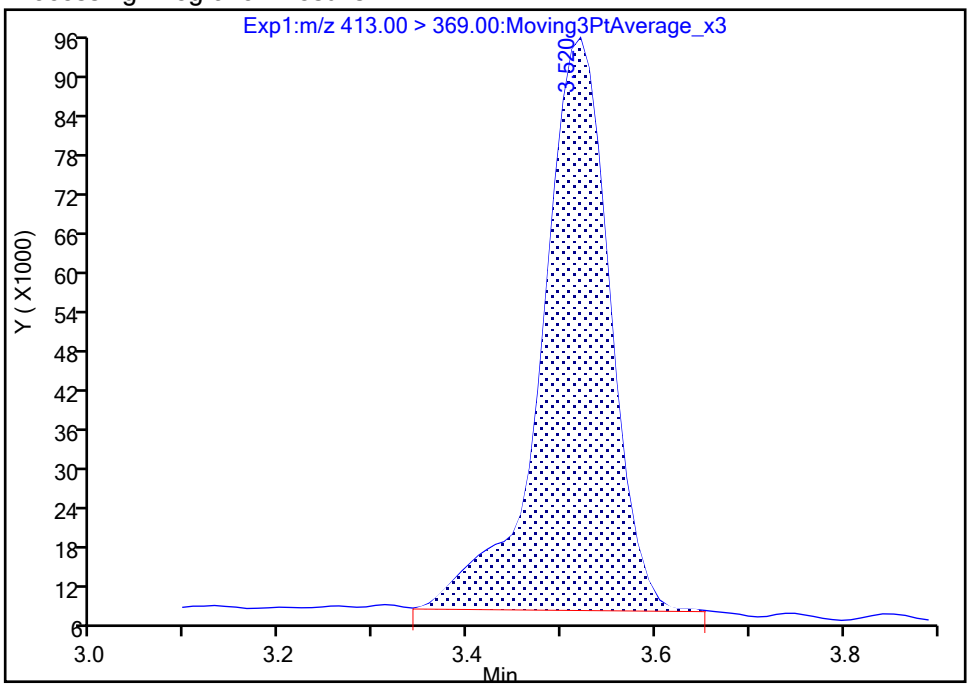
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

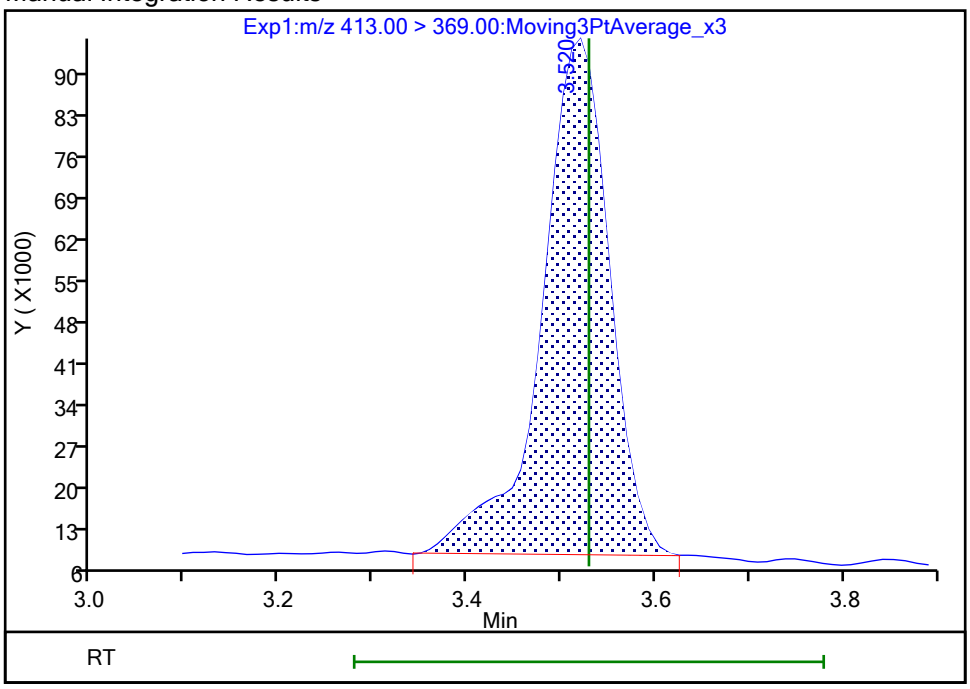
Processing Integration Results

RT: 3.52
Area: 443766
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 442438
Amount: 0.283651
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

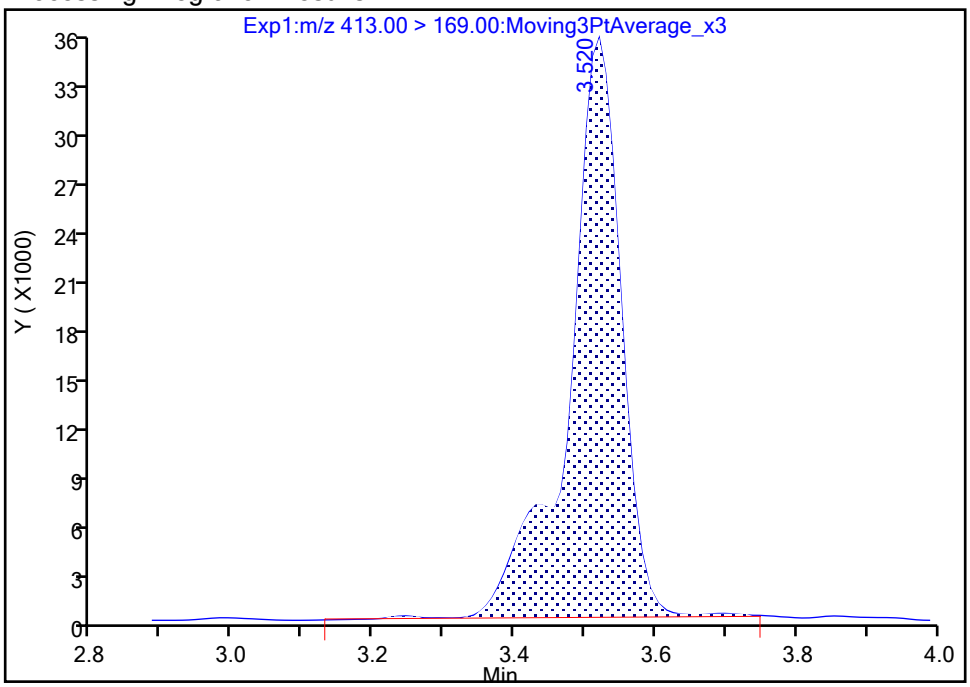
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

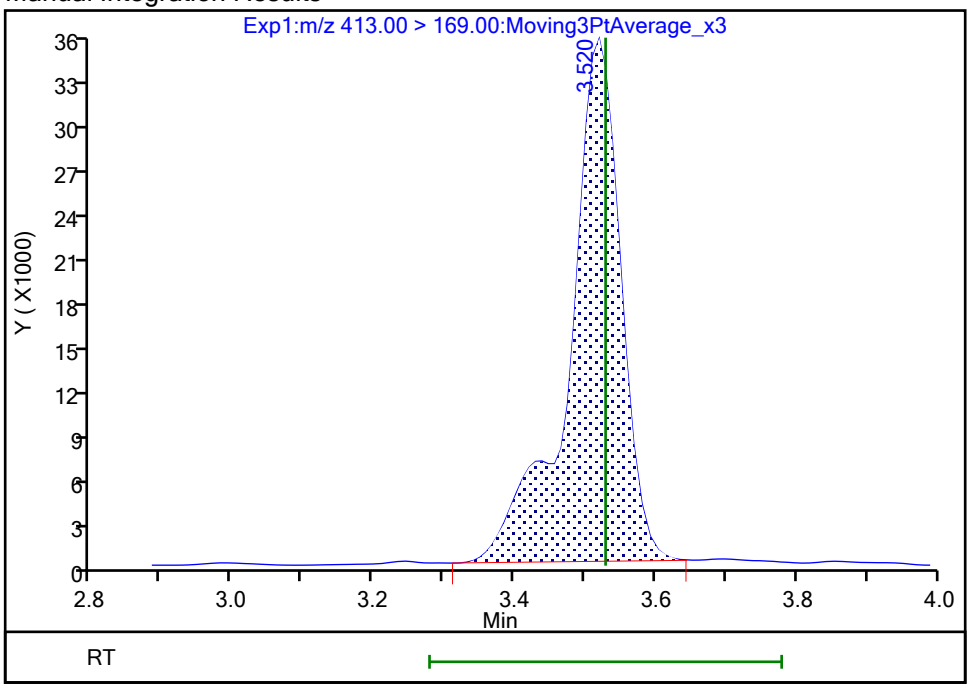
Processing Integration Results

RT: 3.52
Area: 183400
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 180774
Amount: 0.283651
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

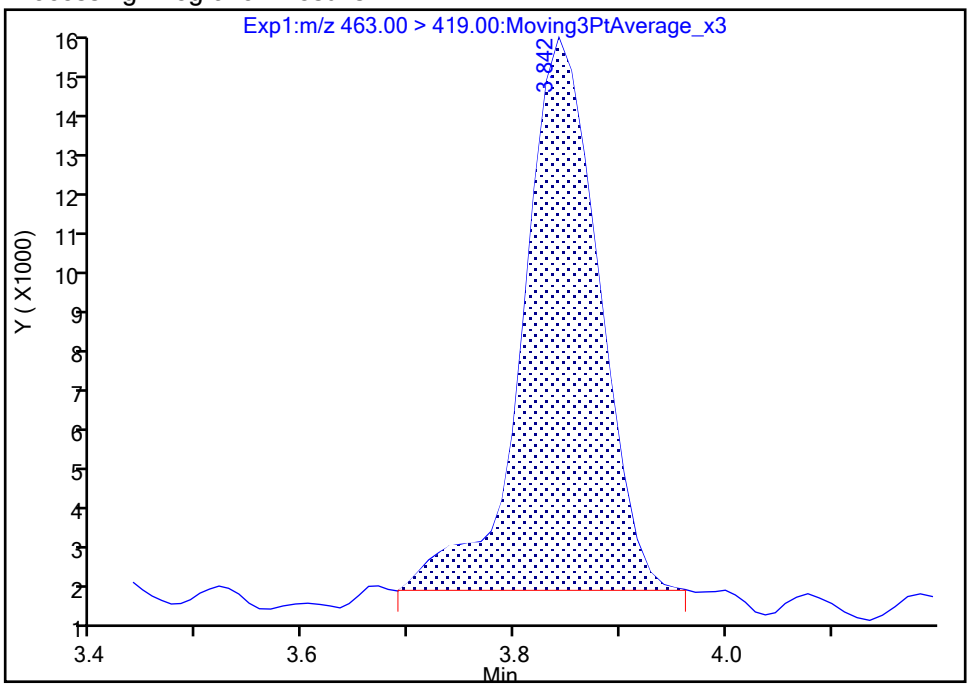
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

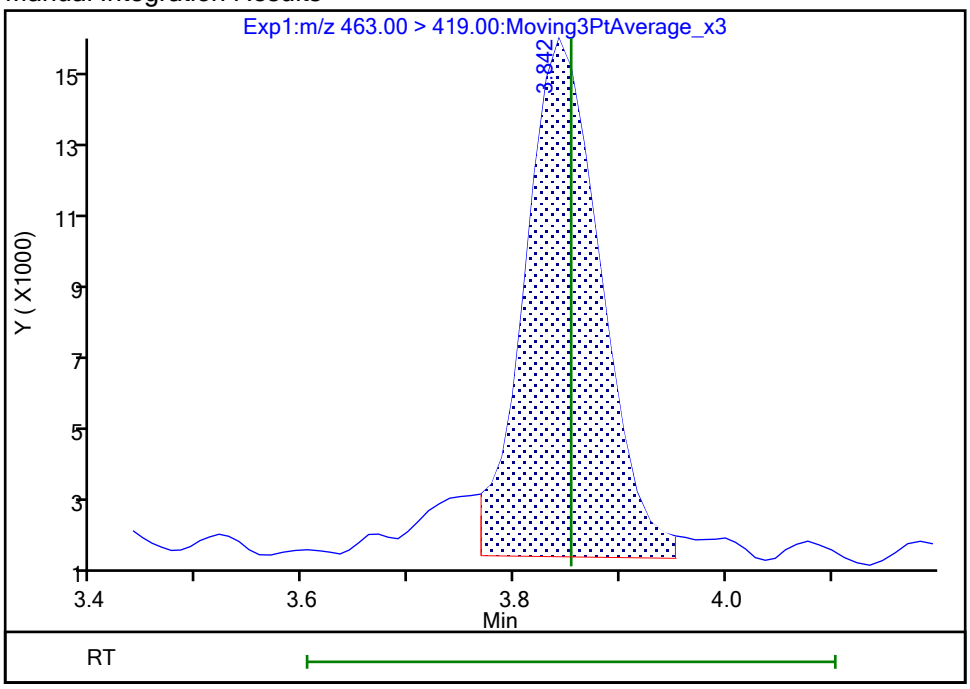
Processing Integration Results

RT: 3.84
Area: 64181
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 66112
Amount: 0.043465
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:01:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

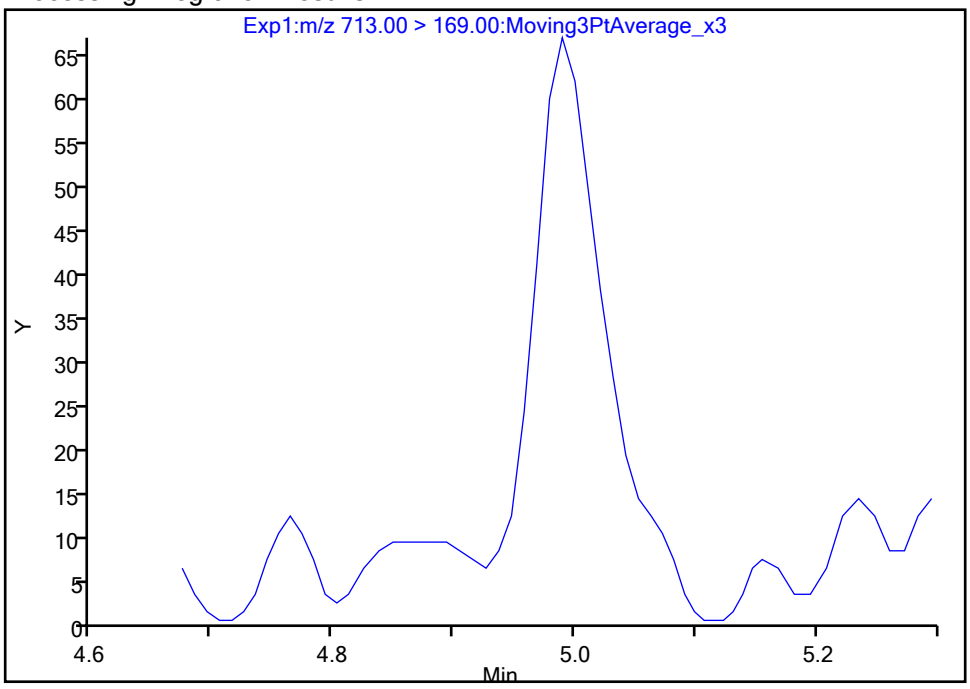
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

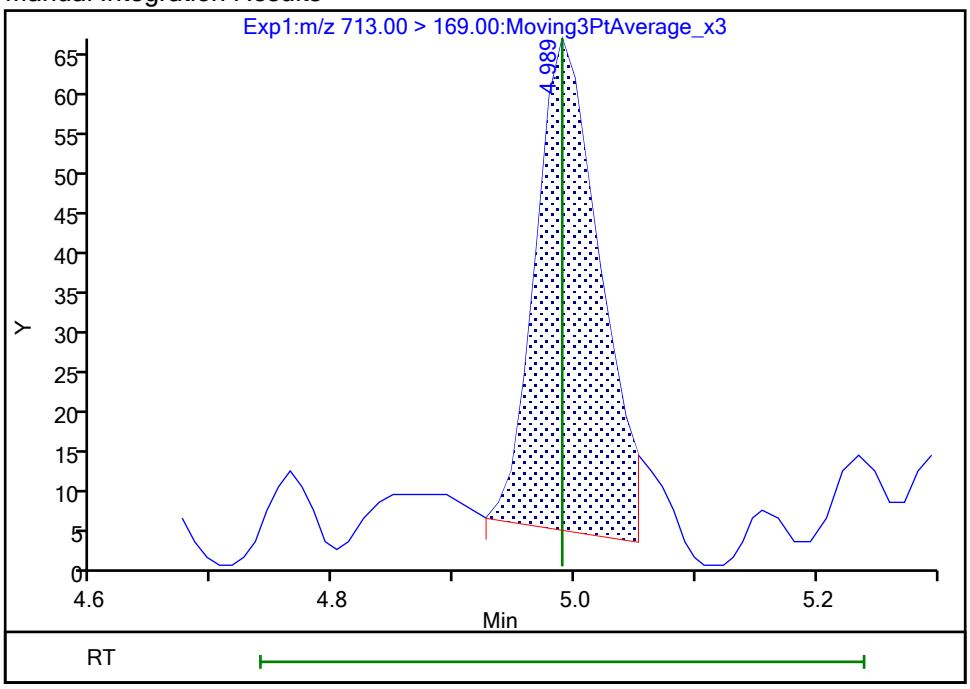
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 230
Amount: 0.001500
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:03:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

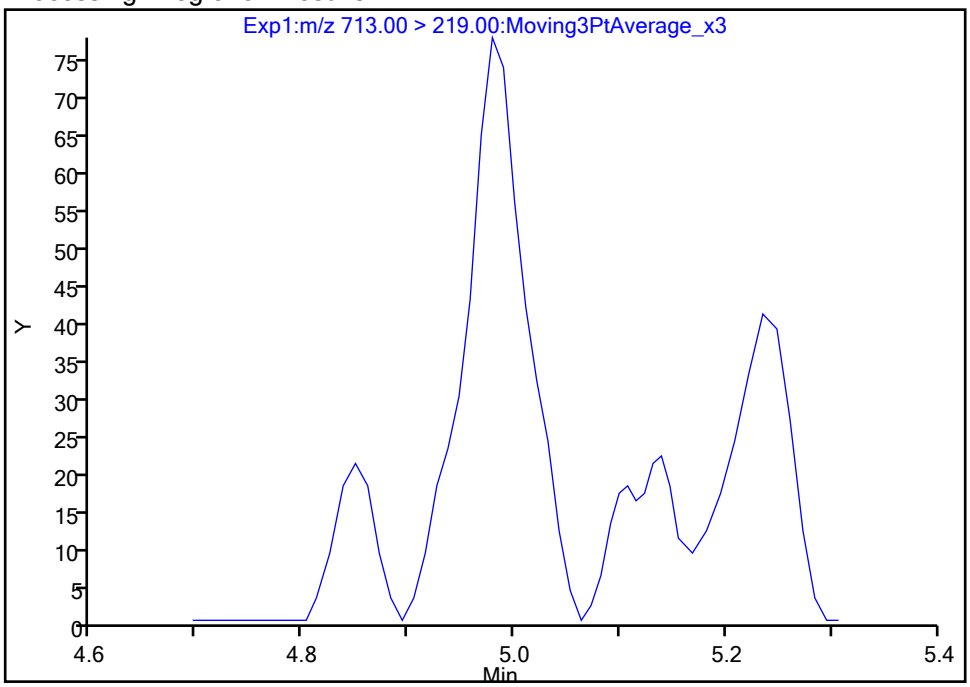
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

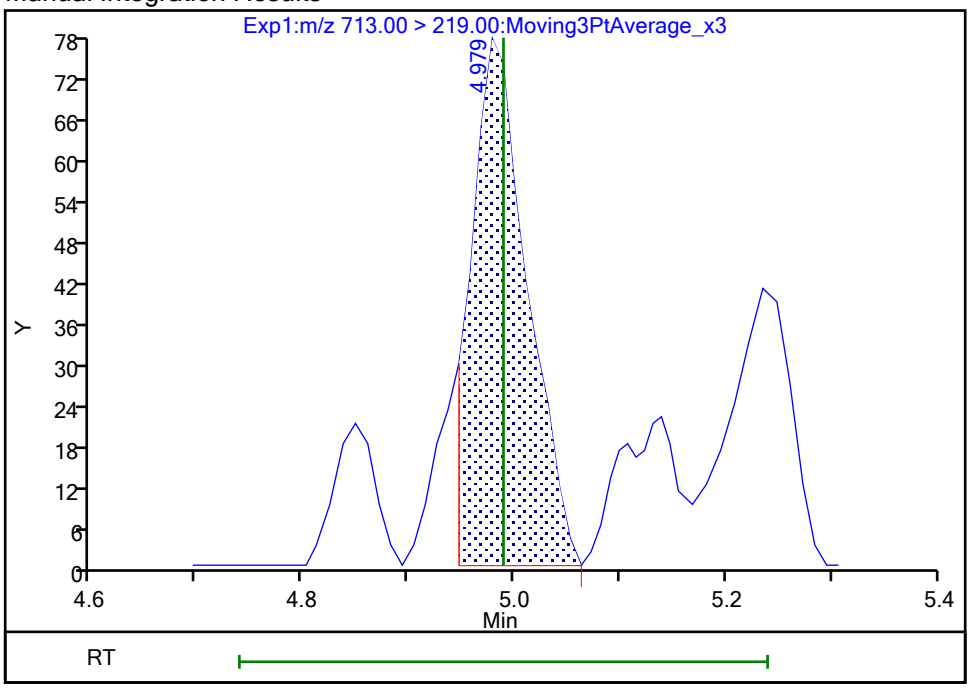
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 280
Amount: 0.001500
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:03:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

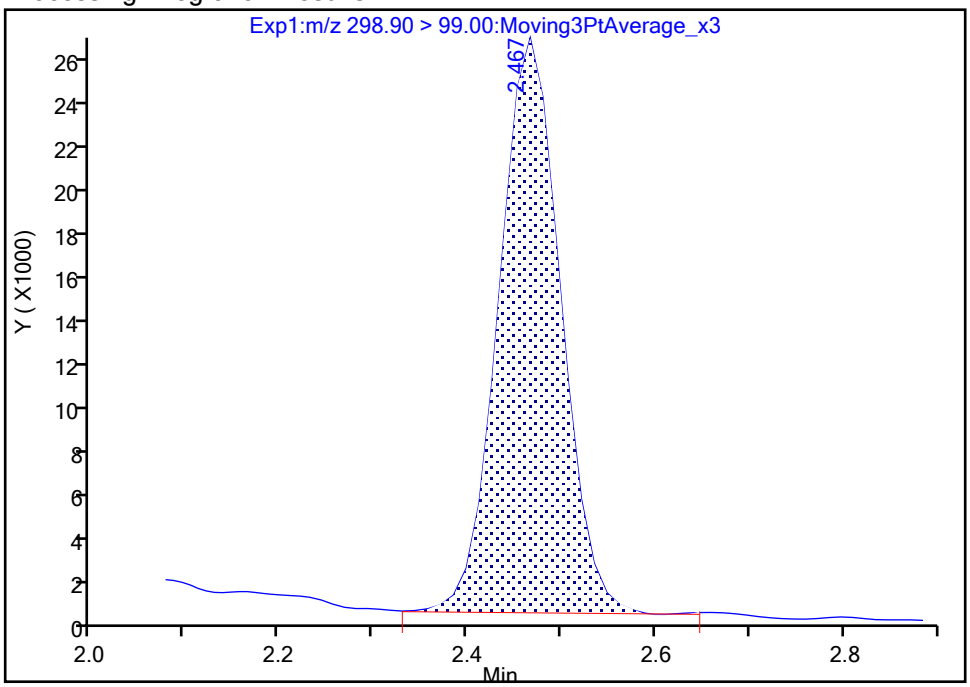
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

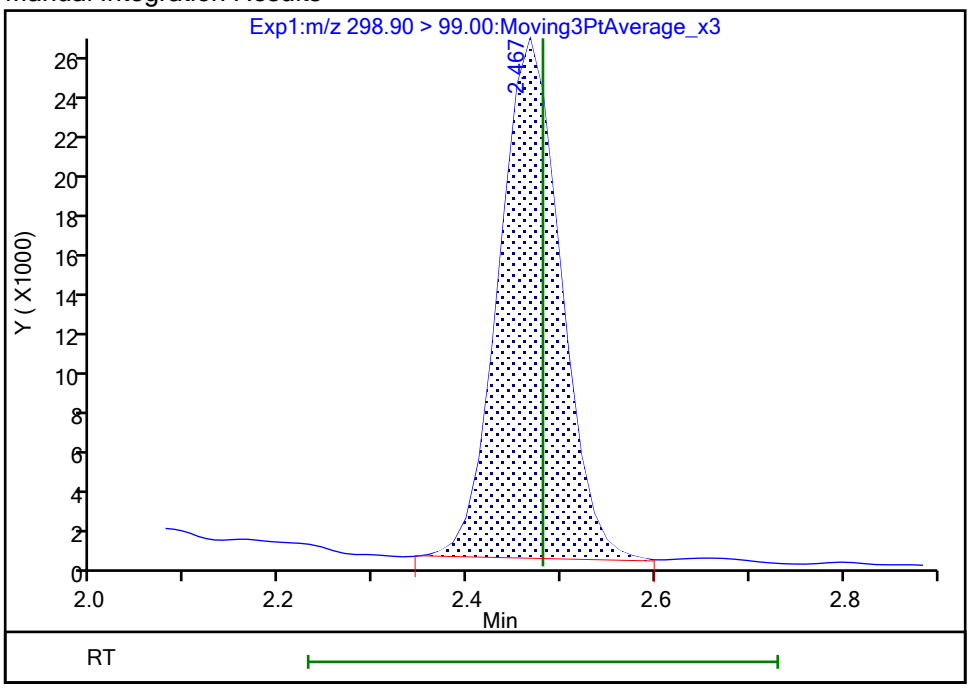
Processing Integration Results

RT: 2.47
Area: 118877
Amount: 0.140911
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 118449
Amount: 0.141227
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

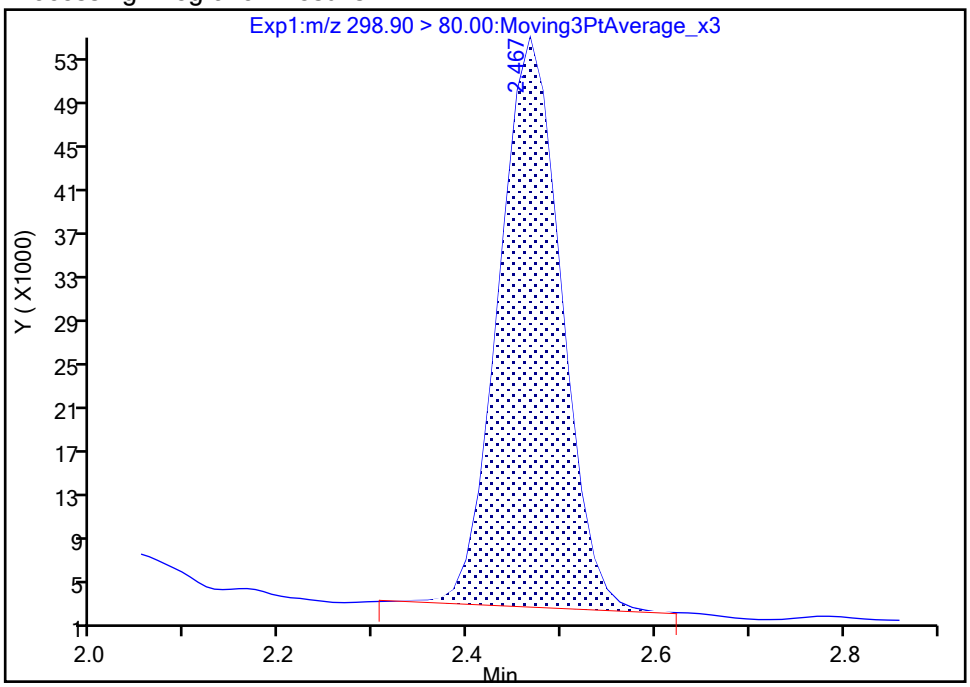
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

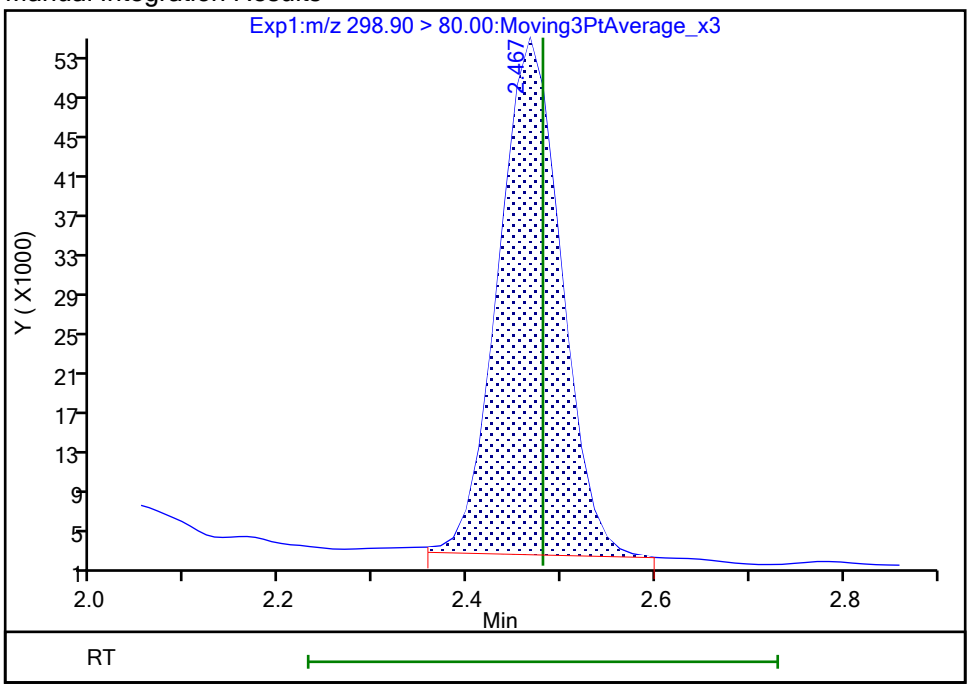
Processing Integration Results

RT: 2.47
Area: 242194
Amount: 0.140911
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 242737
Amount: 0.141227
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

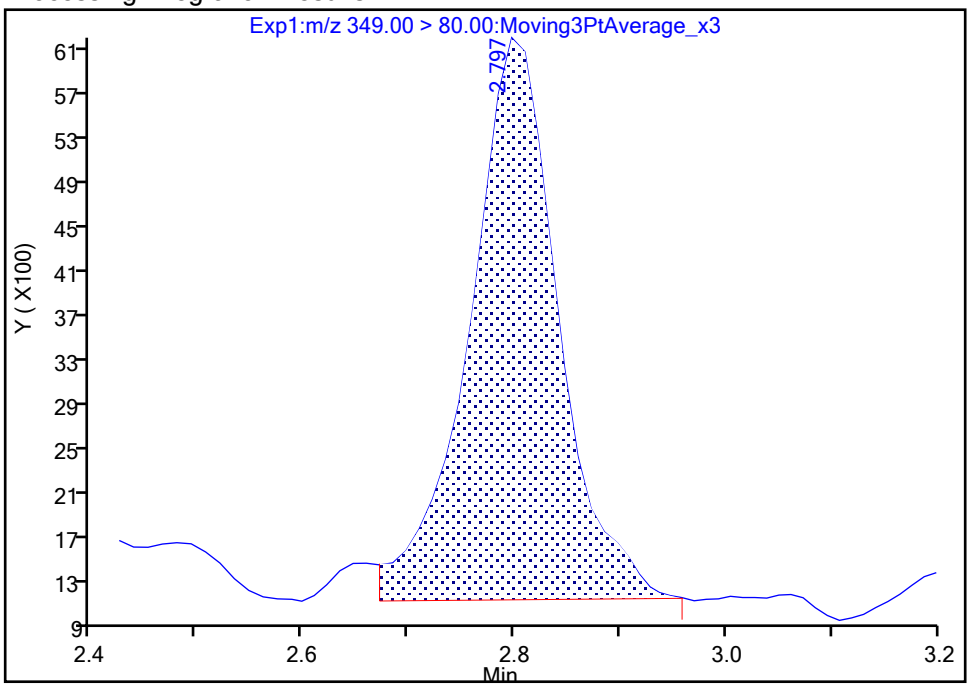
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

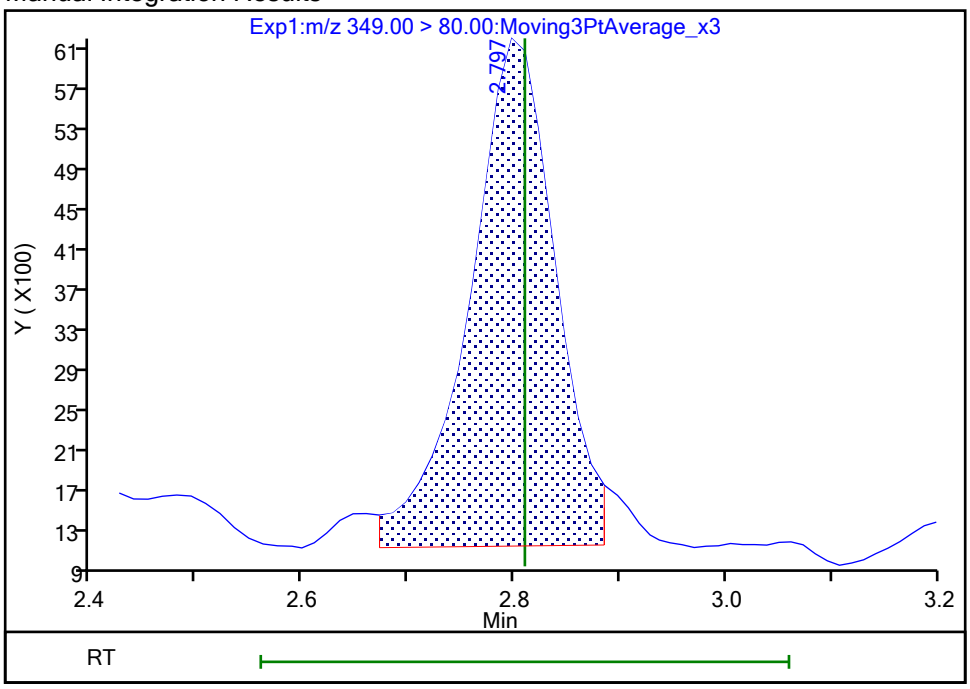
Processing Integration Results

RT: 2.80
Area: 29415
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 28395
Amount: 0.018461
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

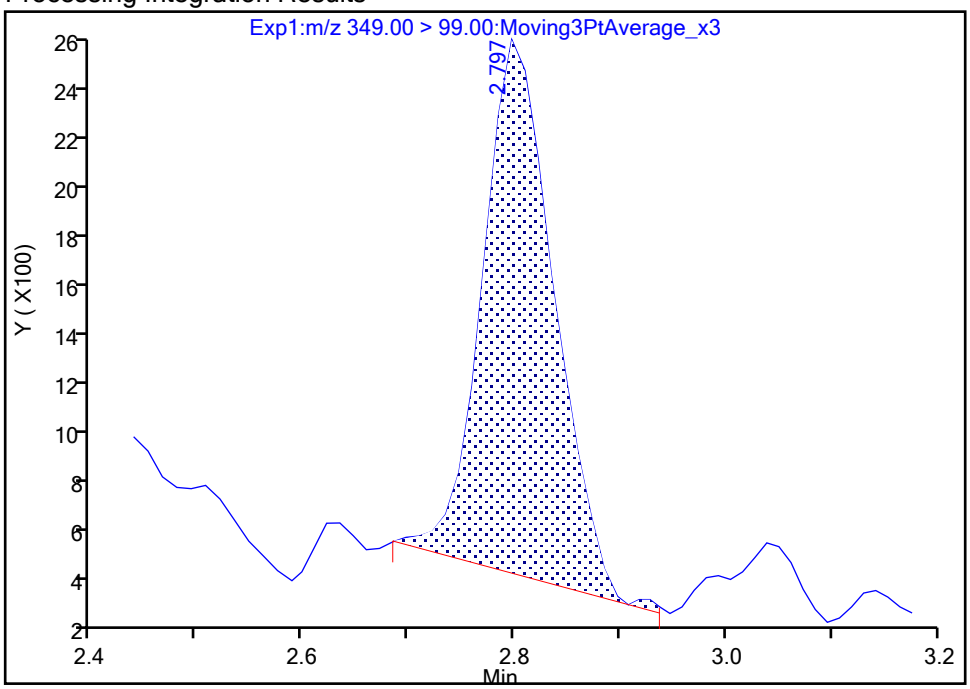
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

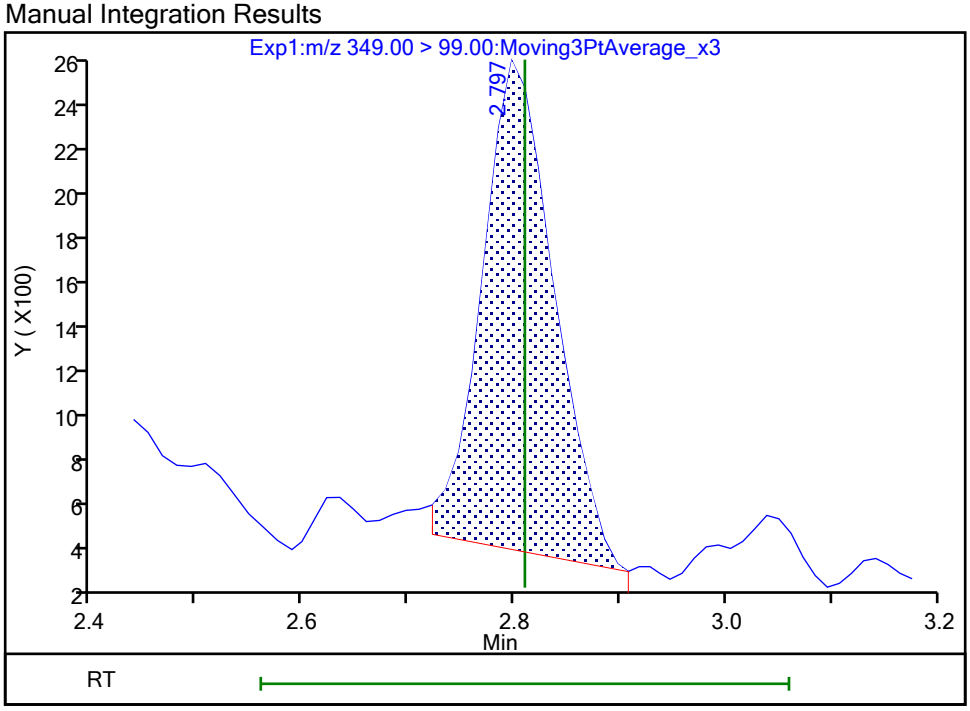
Processing Integration Results

RT: 2.80
Area: 10092
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 10171
Amount: 0.018461
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:58:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

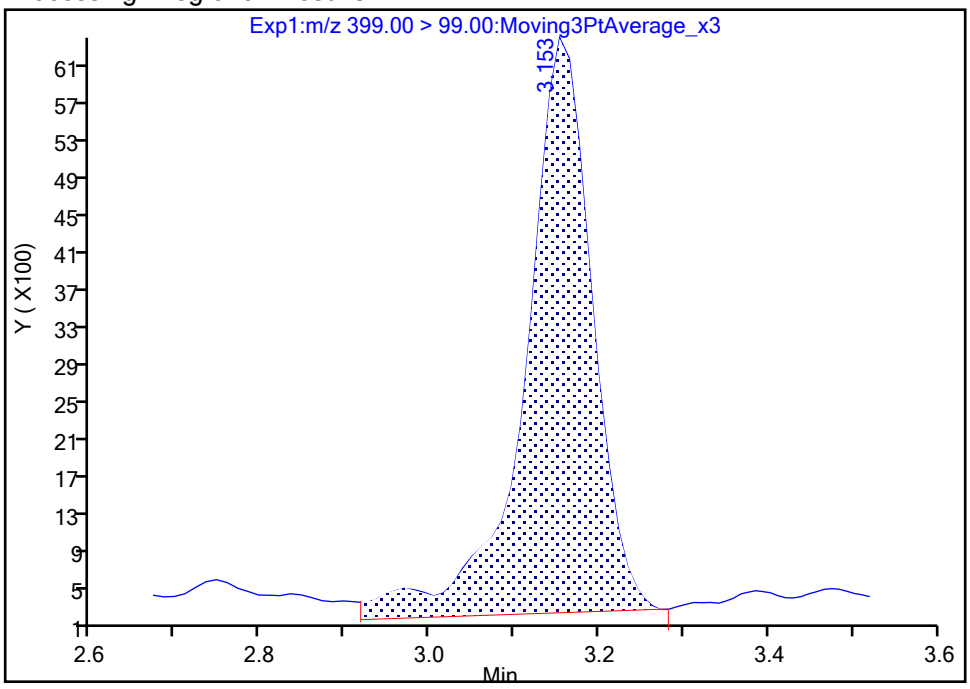
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

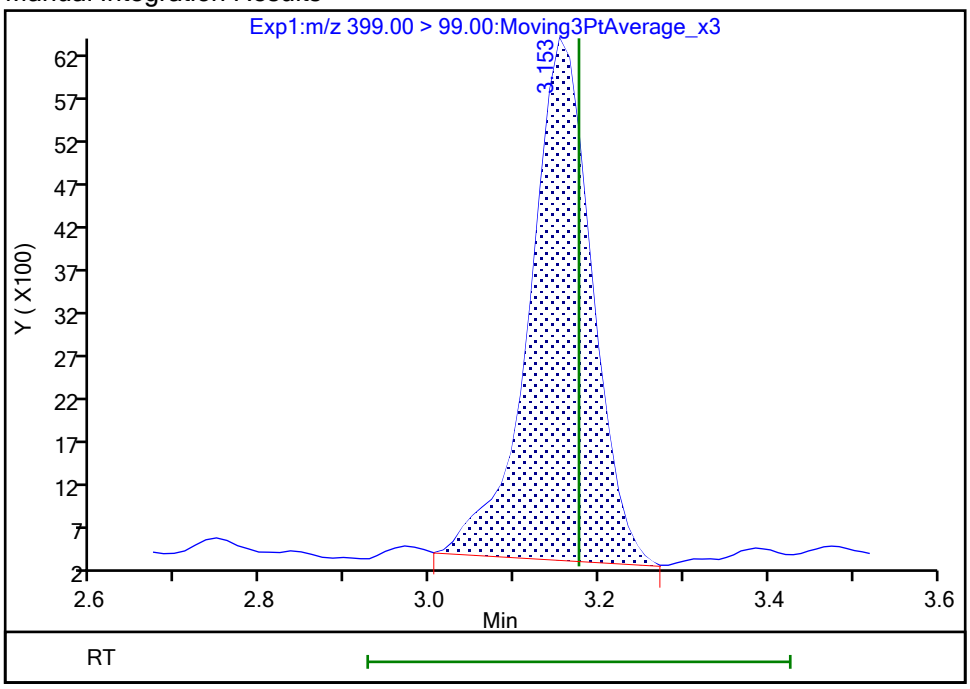
Processing Integration Results

RT: 3.15
Area: 34510
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 31209
Amount: 0.070587
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:59:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

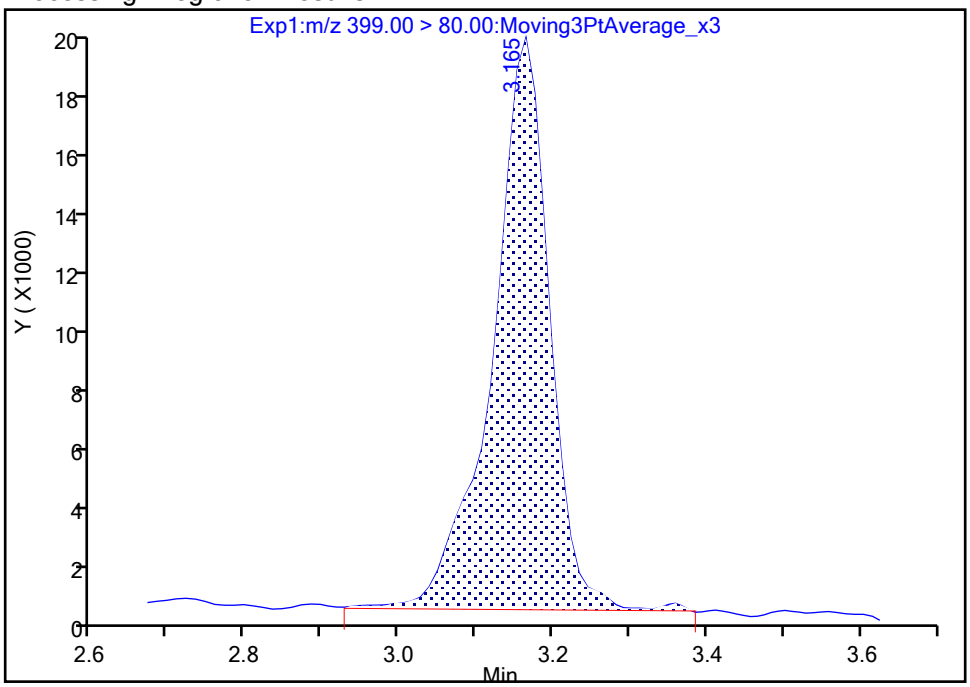
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

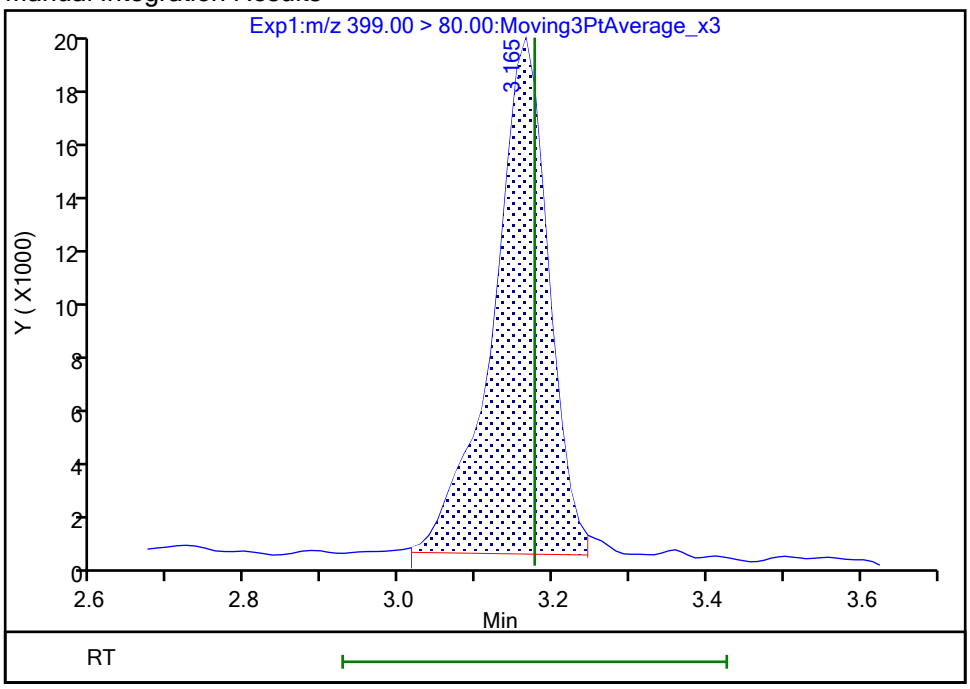
Processing Integration Results

RT: 3.16
Area: 95328
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 92034
Amount: 0.070587
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:59:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

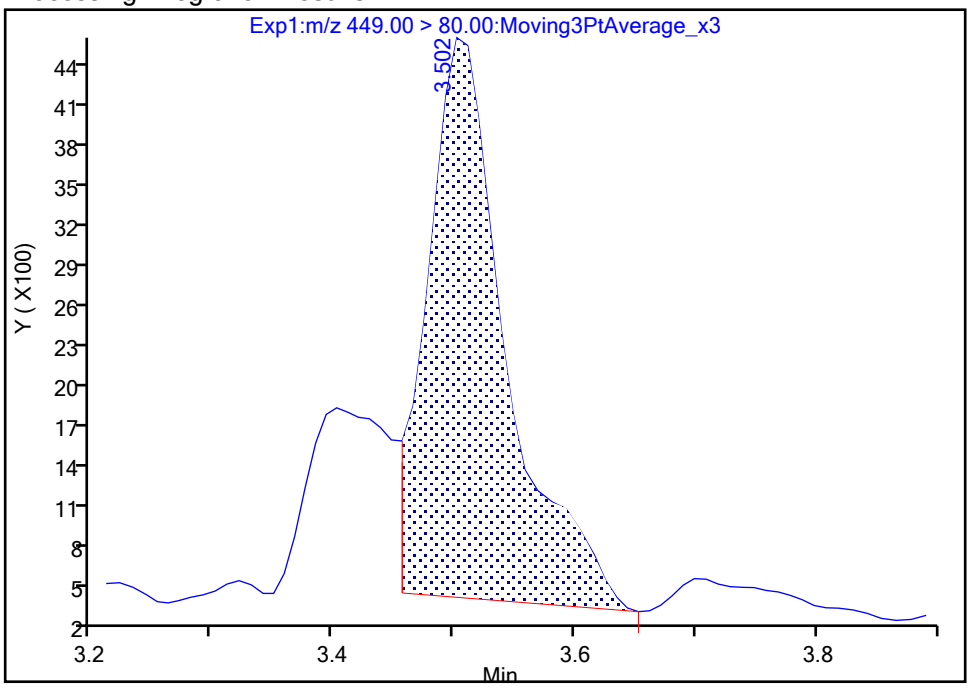
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

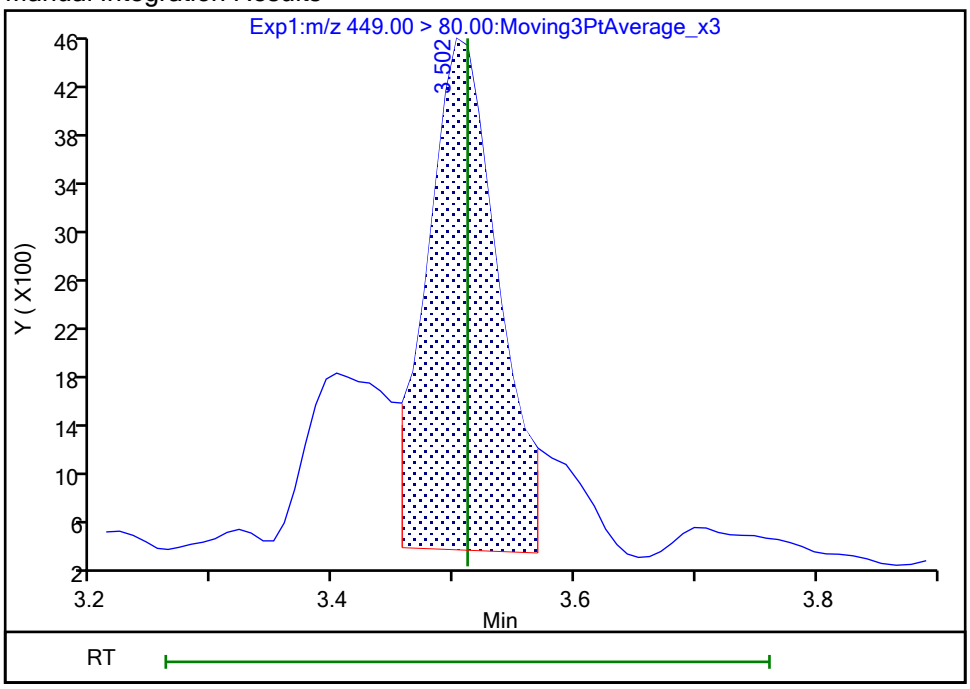
Processing Integration Results

RT: 3.50
Area: 18628
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 16784
Amount: 0.015294
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

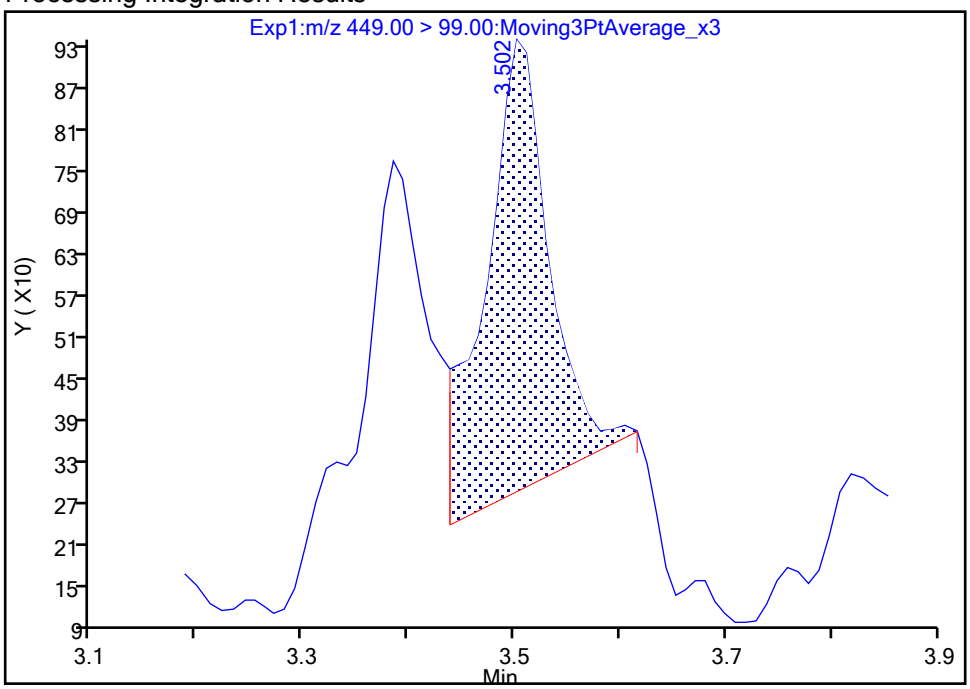
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

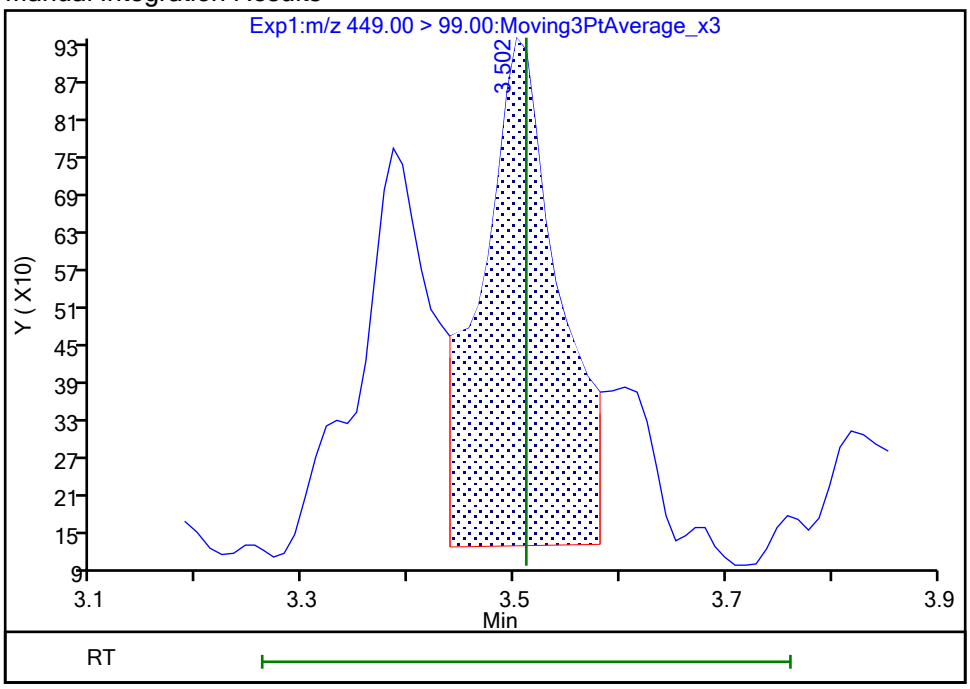
Processing Integration Results

RT: 3.50
Area: 2710
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 4068
Amount: 0.015294
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

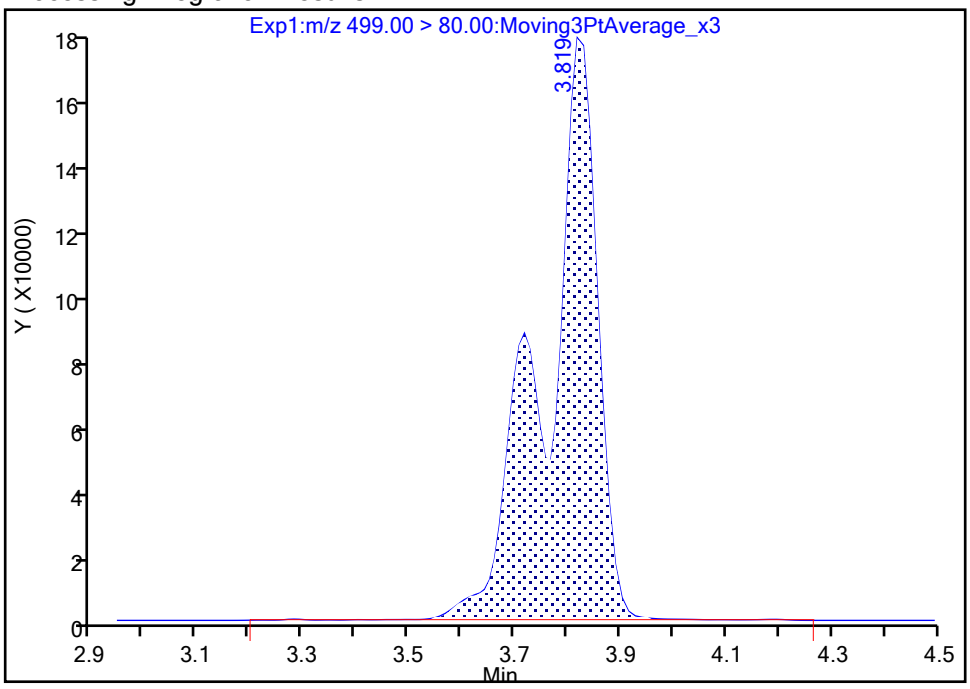
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

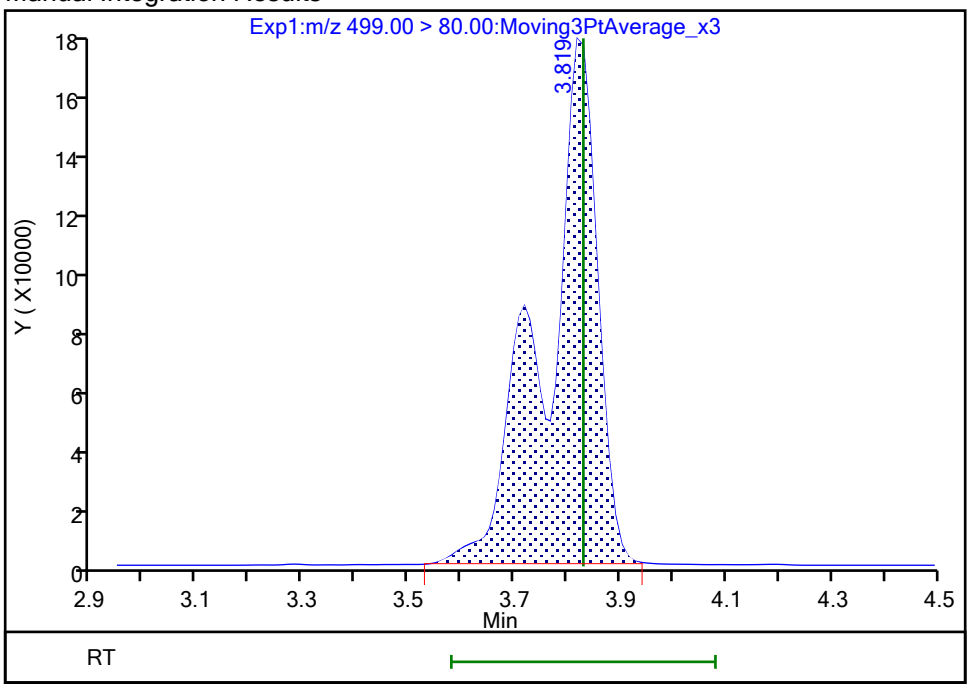
Processing Integration Results

RT: 3.82
Area: 1251162
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1240479
Amount: 1.400547
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:01:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

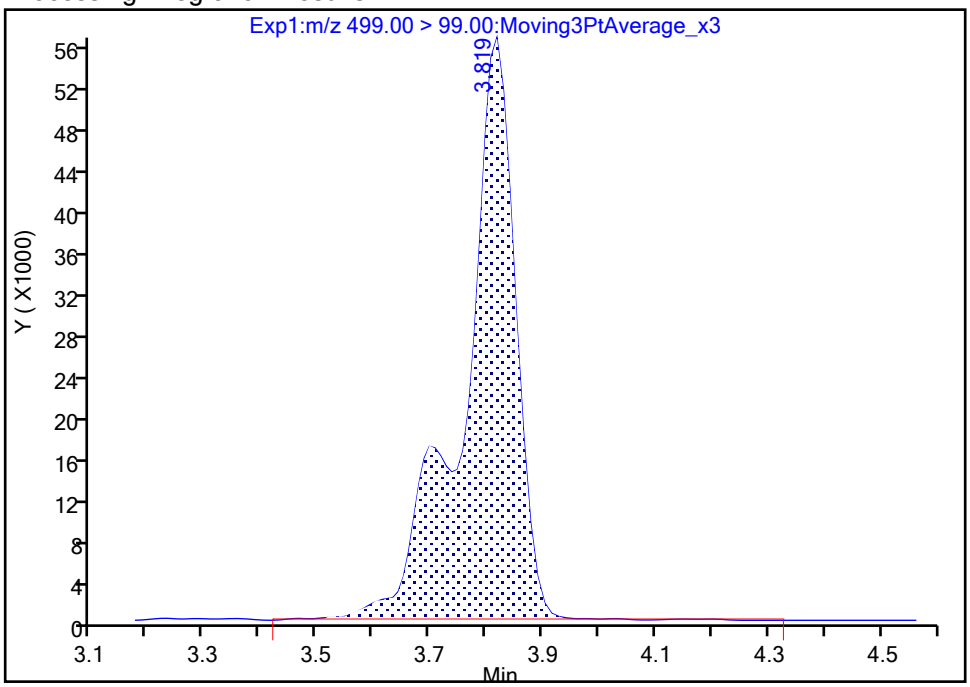
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

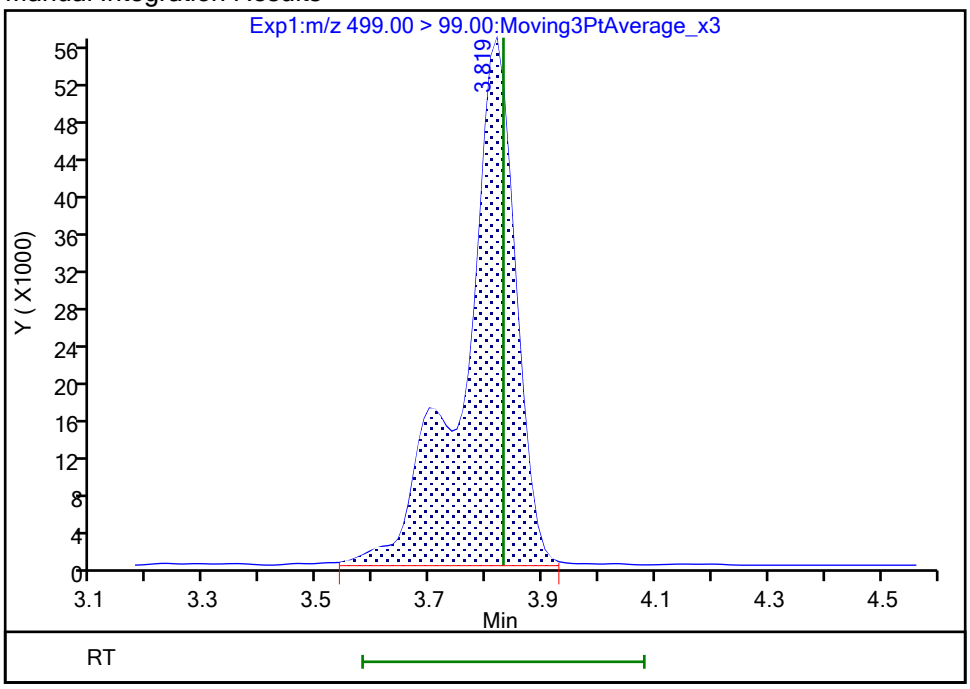
Processing Integration Results

RT: 3.82
Area: 365835
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 362060
Amount: 1.400547
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:01:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

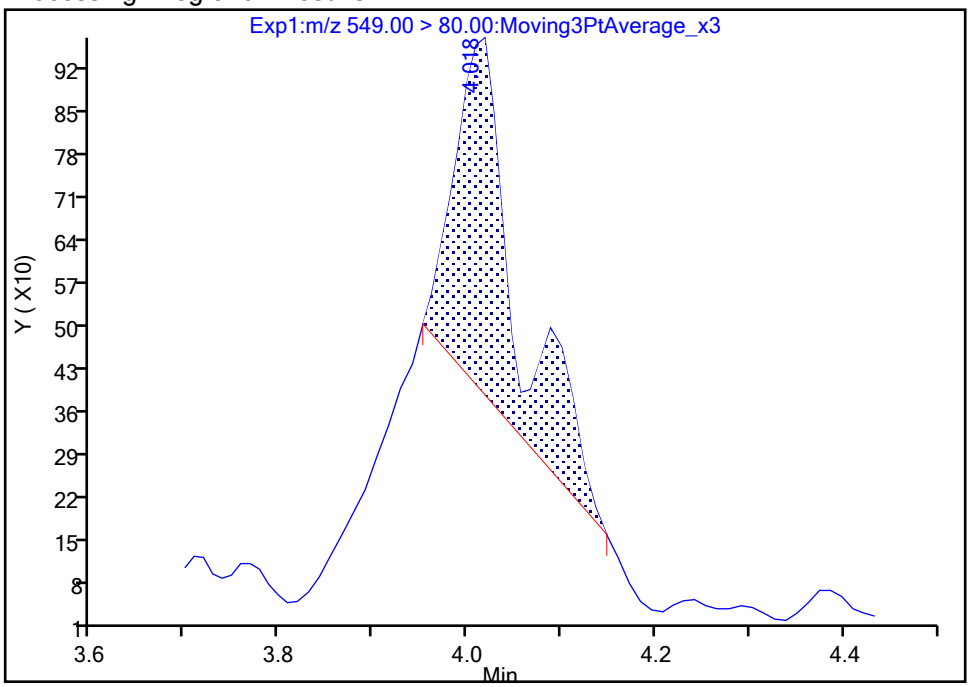
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

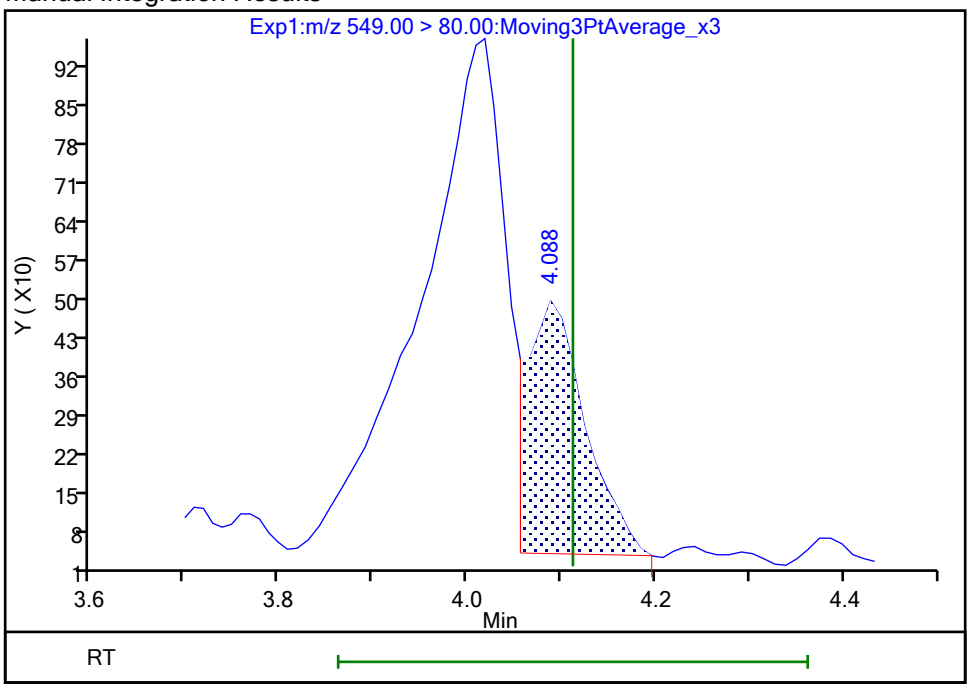
Processing Integration Results

RT: 4.02
Area: 2646
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 1931
Amount: 0.002866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:02:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

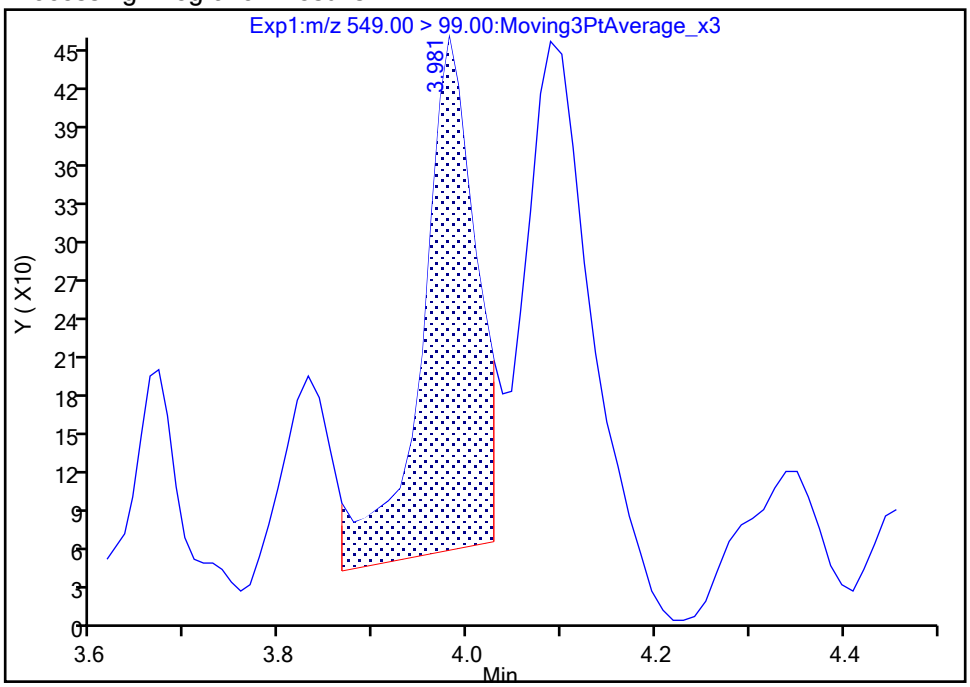
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

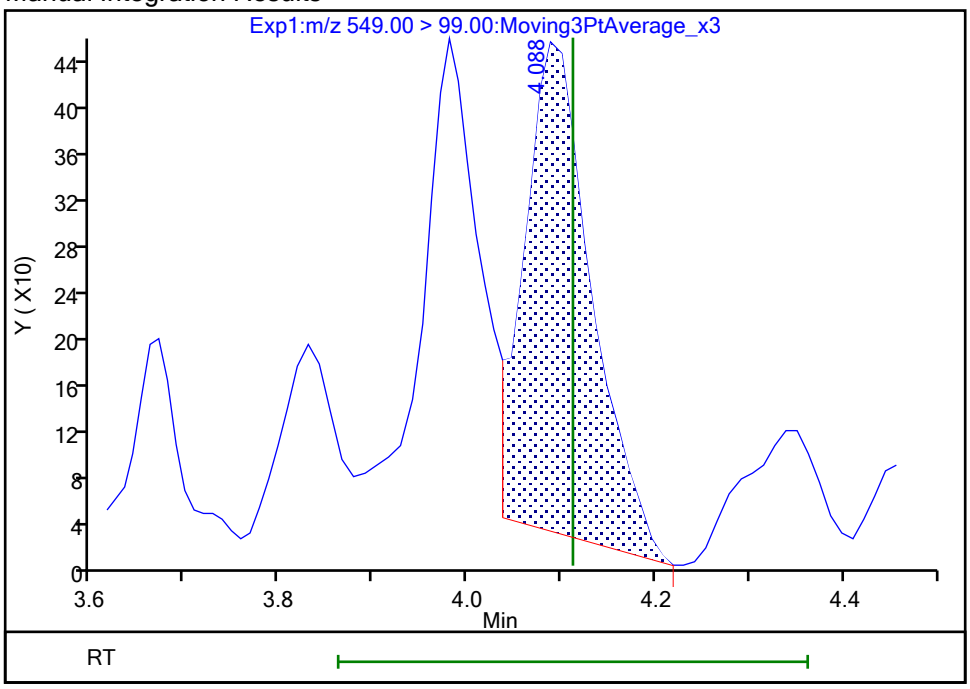
Processing Integration Results

RT: 3.98
Area: 1589
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.09
Area: 2113
Amount: 0.002866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:02:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

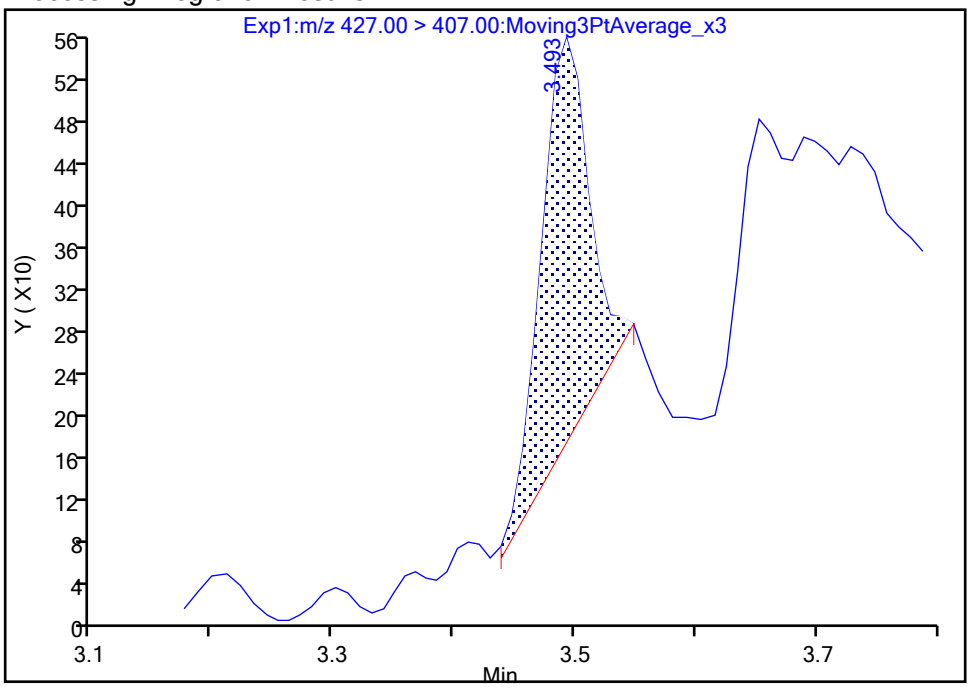
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

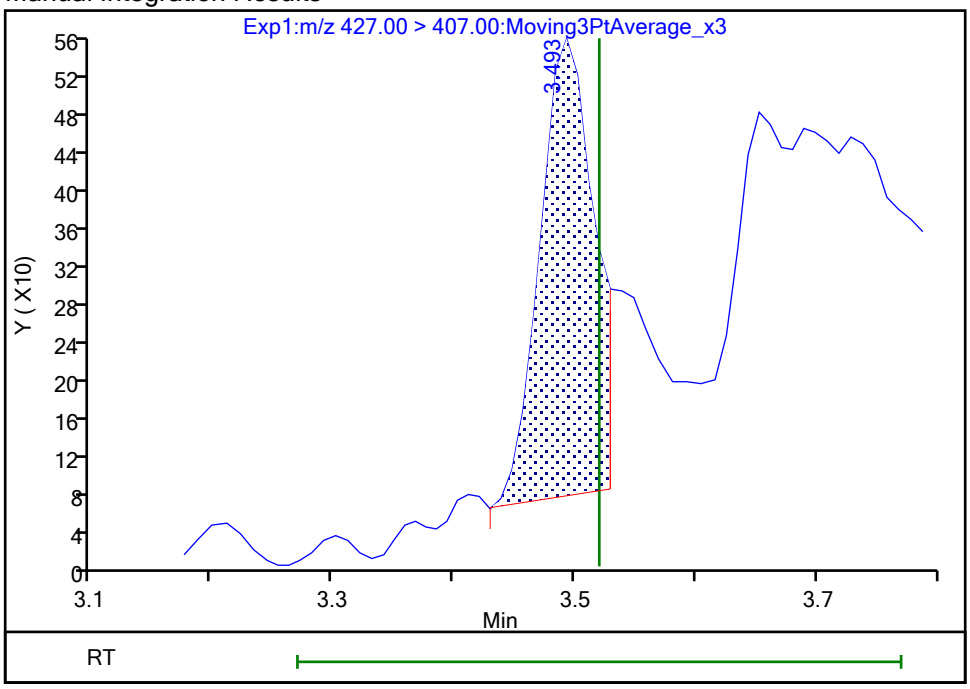
Processing Integration Results

RT: 3.49
Area: 1065
Amount: 0.001625
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 1472
Amount: 0.002246
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:00:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

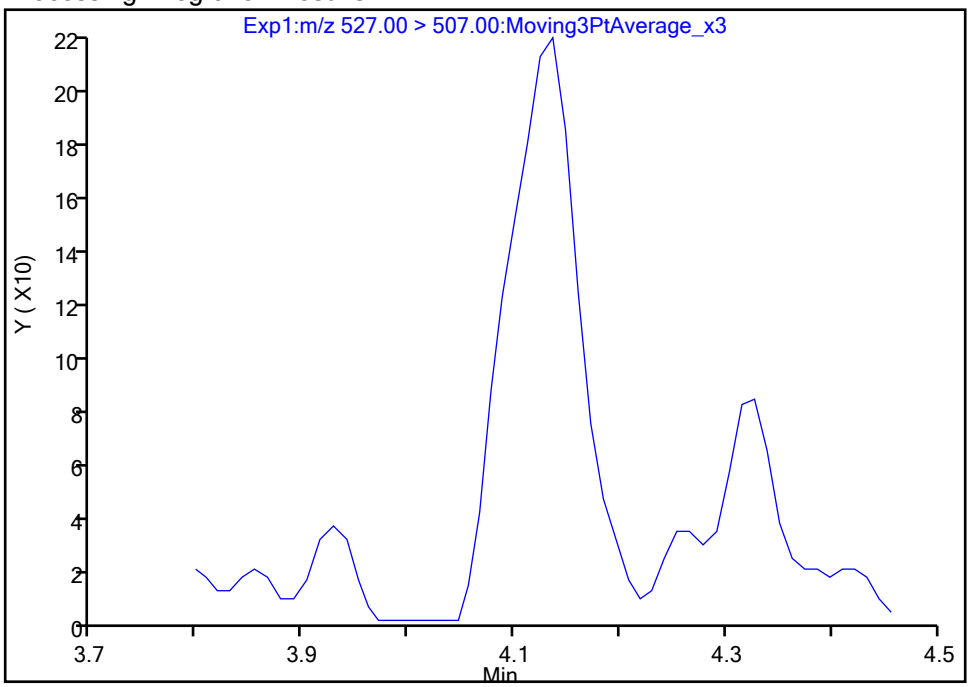
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

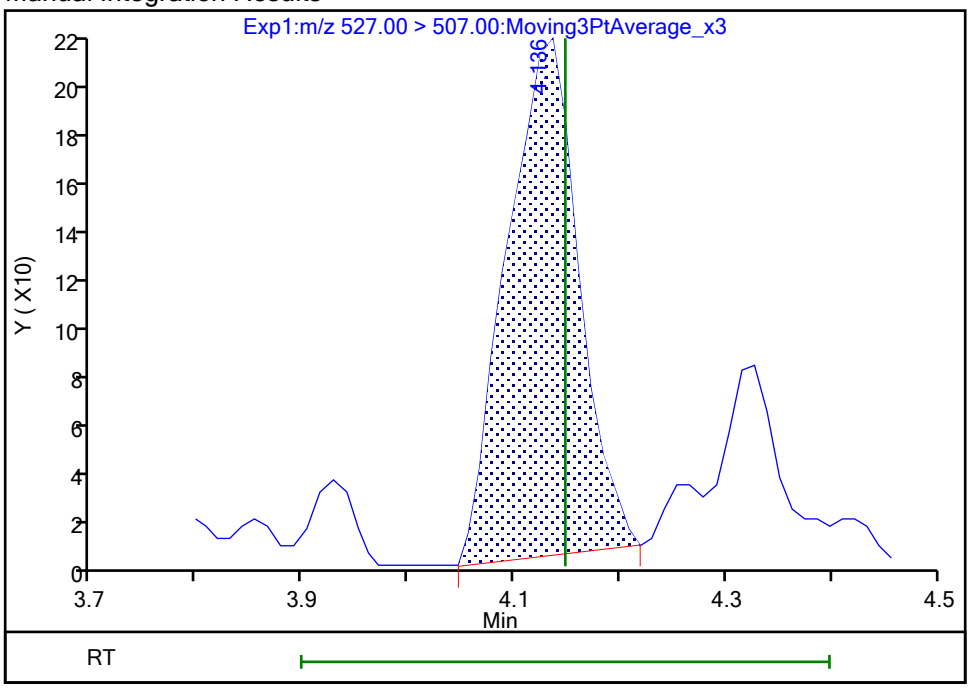
Not Detected
Expected RT: 4.15

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 1005
Amount: 0.001849
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:02:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

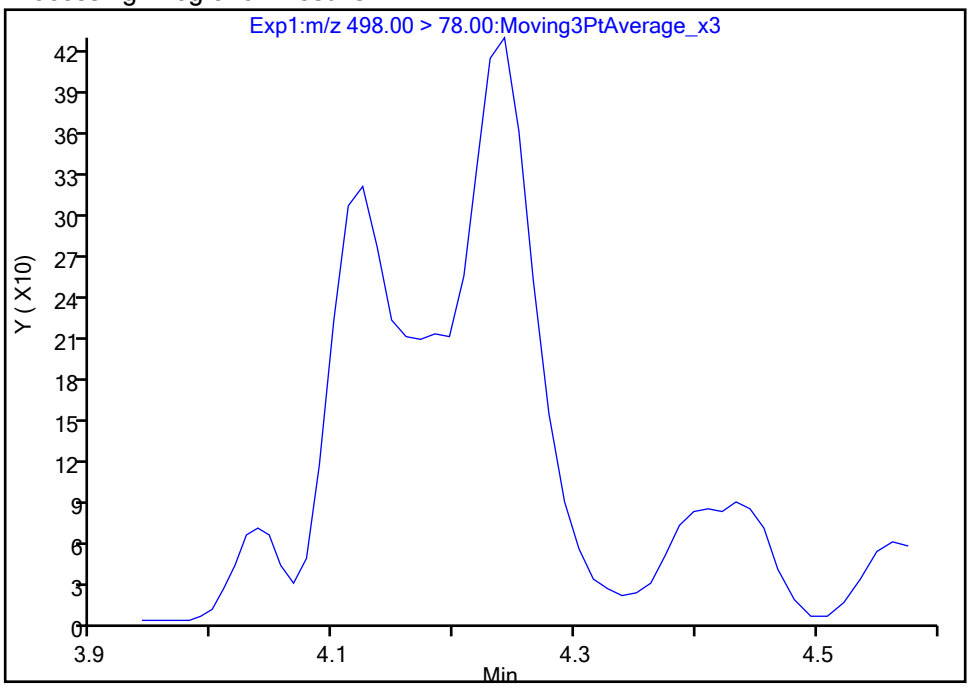
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

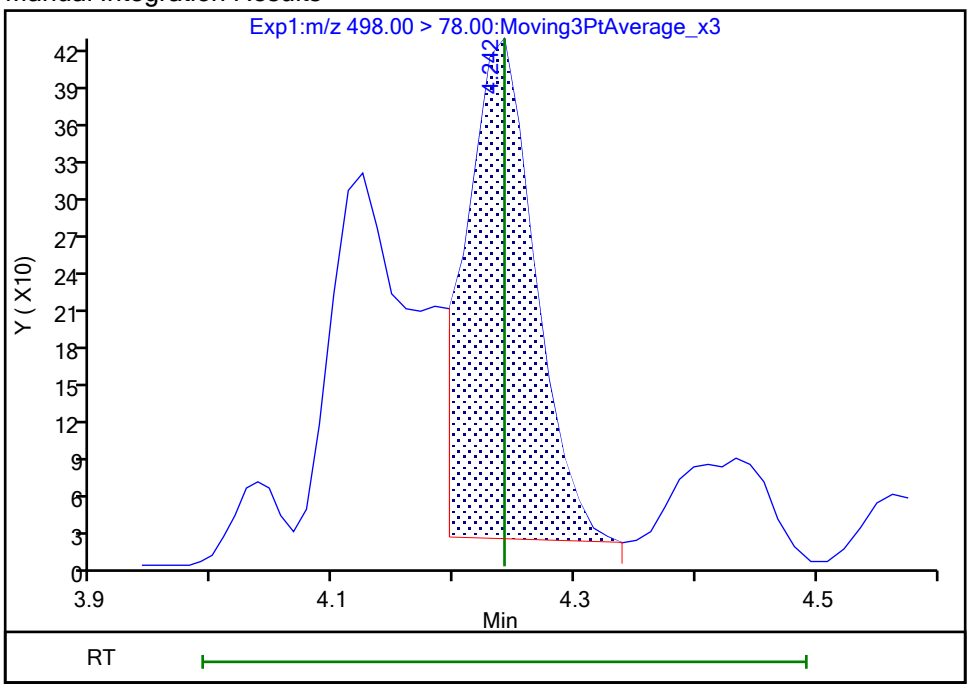
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1566
Amount: 0.001336
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:02:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

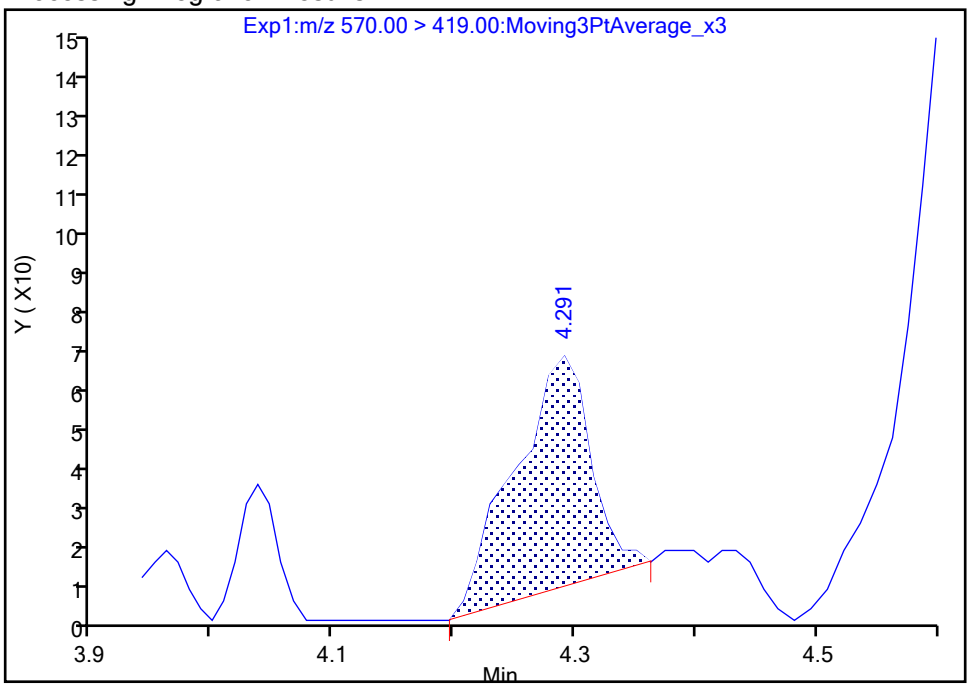
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

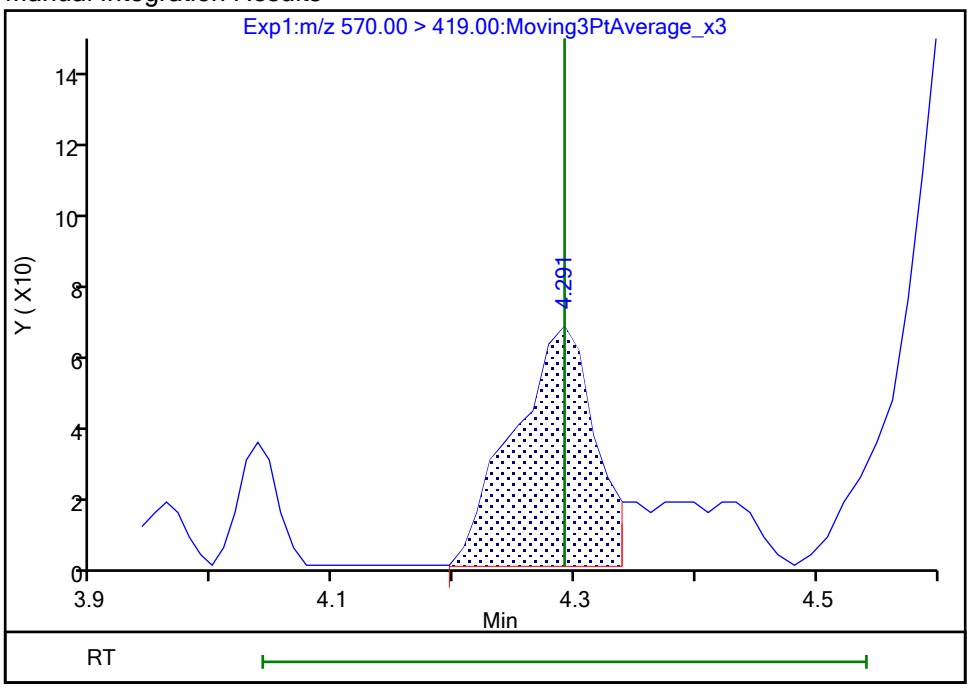
Processing Integration Results

RT: 4.29
Area: 263
Amount: 0.000773
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 314
Amount: 0.000923
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:02:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

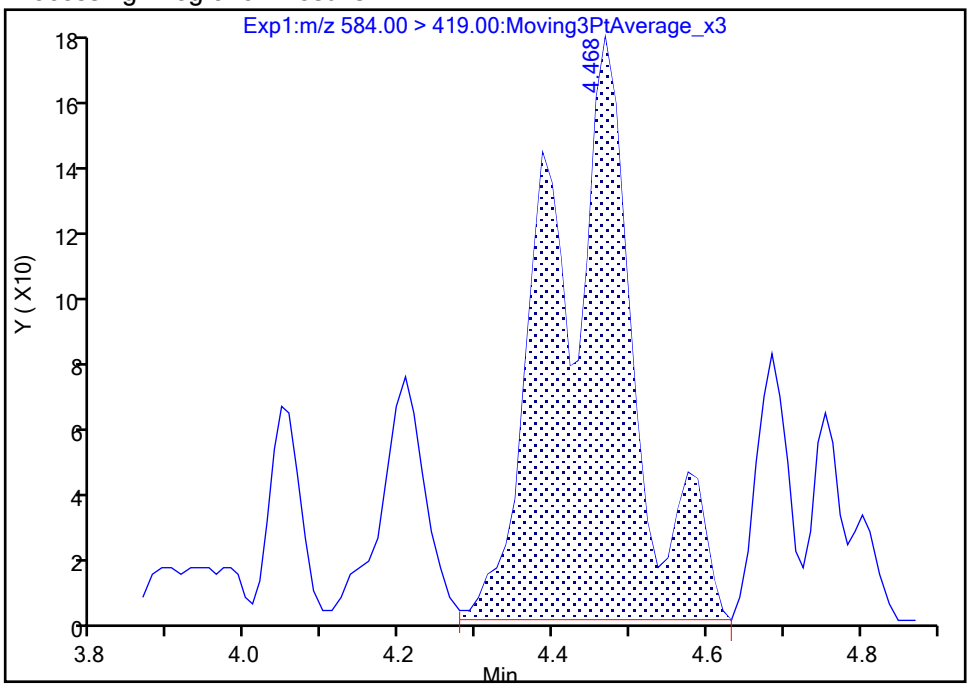
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

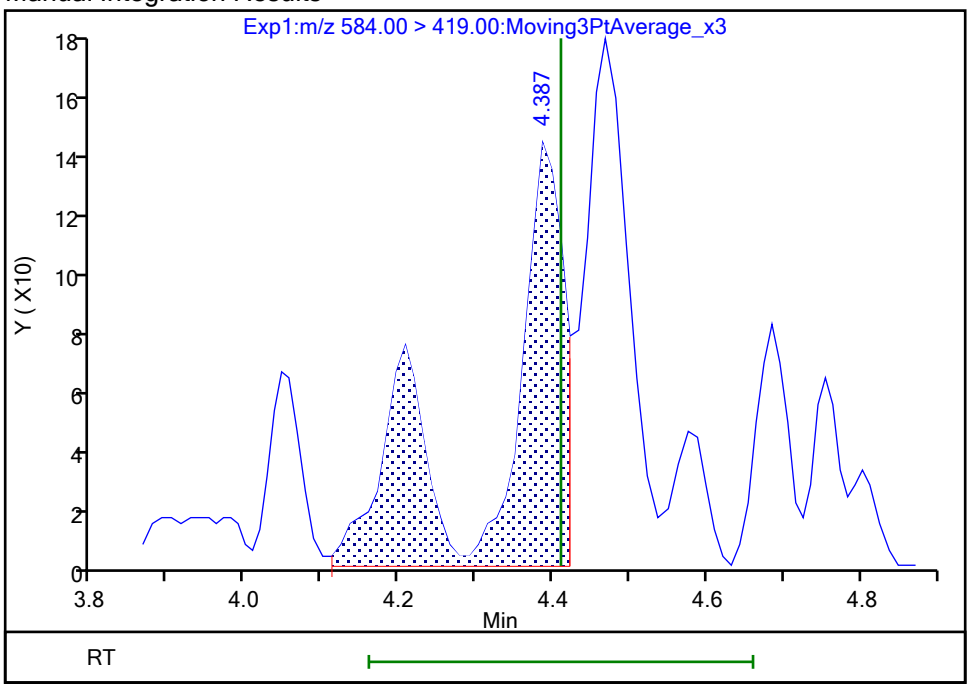
Processing Integration Results

RT: 4.47
Area: 1345
Amount: 0.003719
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 802
Amount: 0.002218
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:03:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

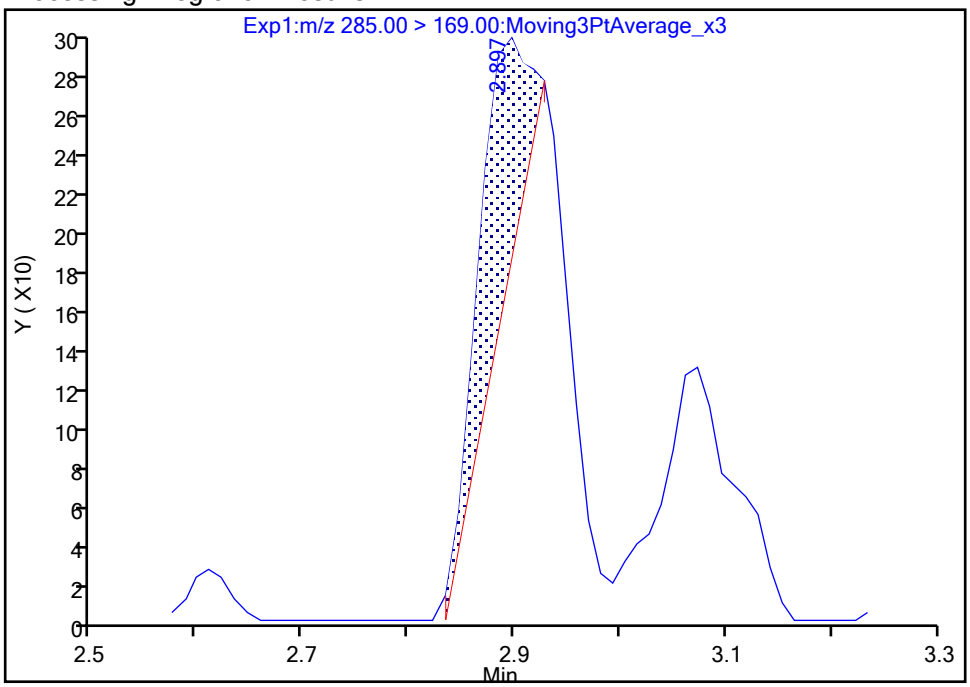
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

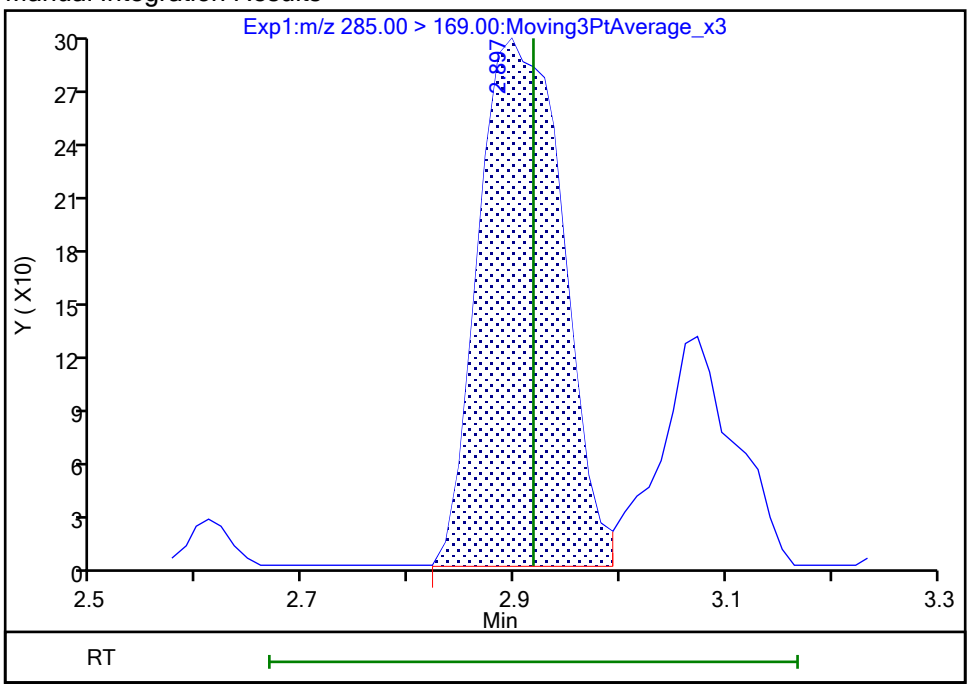
Processing Integration Results

RT: 2.90
Area: 406
Amount: 0.001963
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 1645
Amount: 0.007953
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:59:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

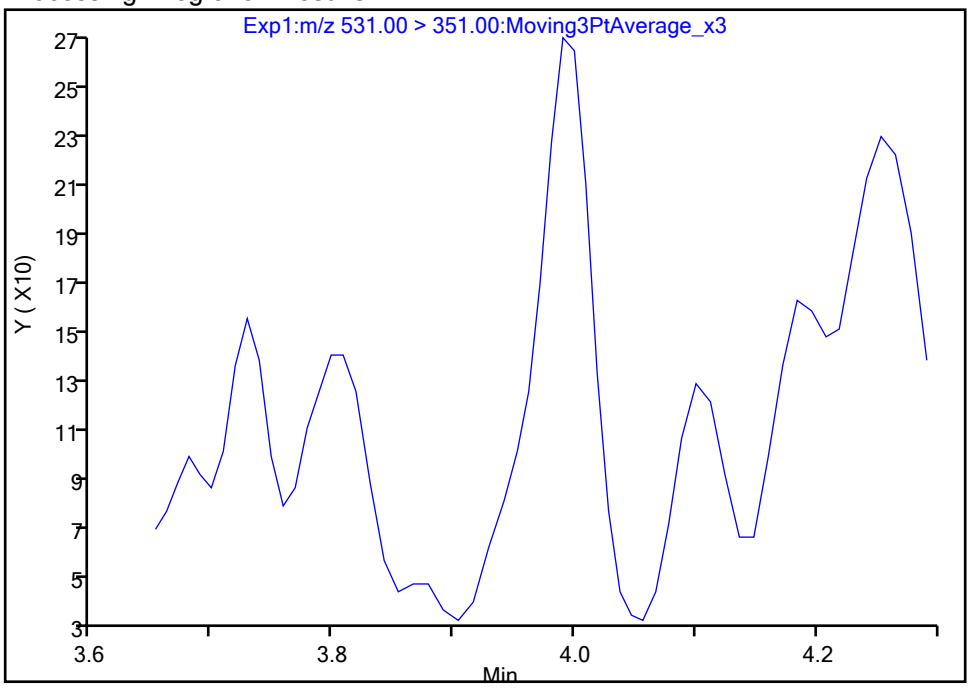
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

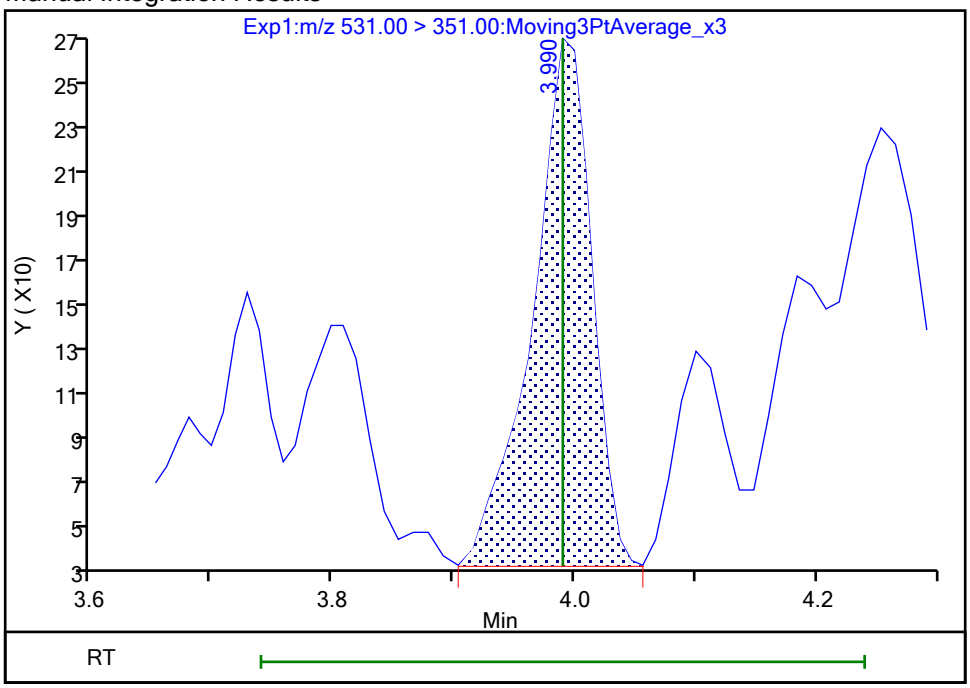
Not Detected
Expected RT: 3.99

Processing Integration Results



Manual Integration Results

RT: 3.99
Area: 758
Amount: 0.000280
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:01:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

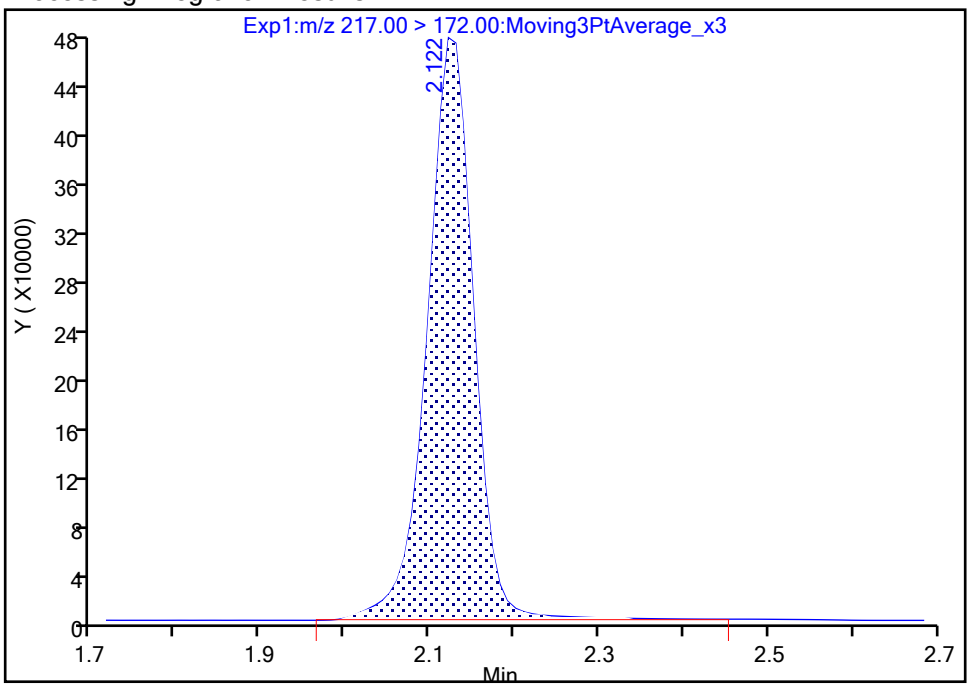
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

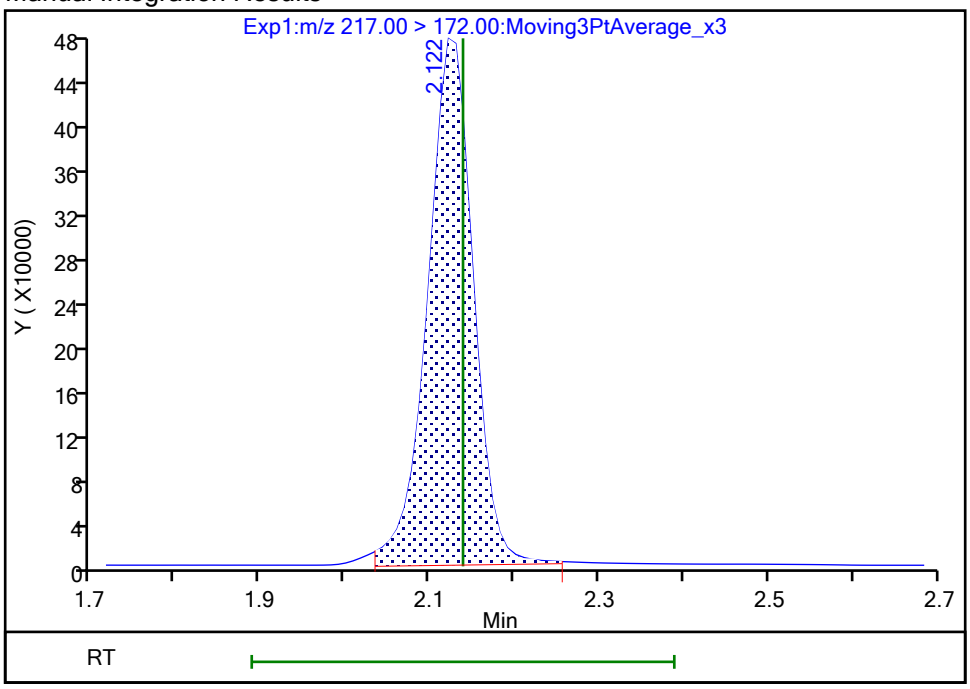
Processing Integration Results

RT: 2.12
Area: 1808326
Amount: 1.293474
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1783537
Amount: 1.277321
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:52:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

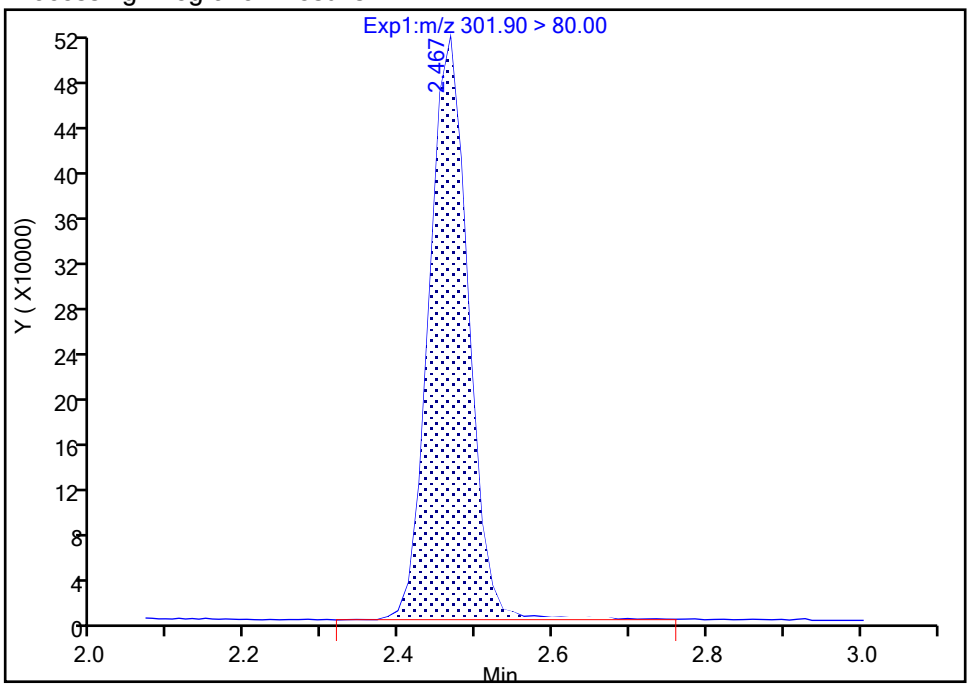
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

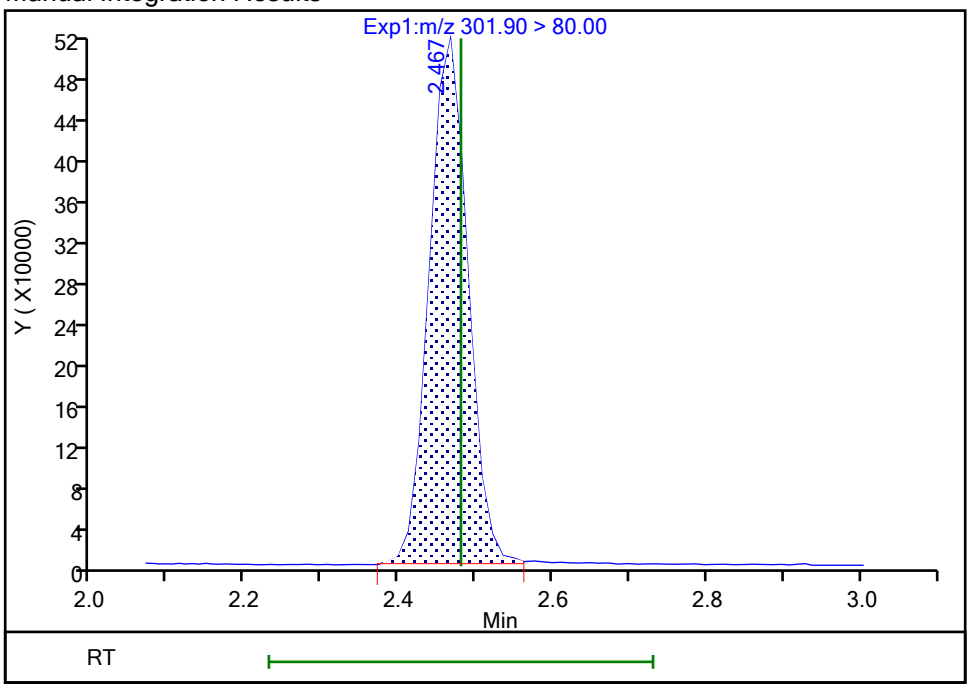
Processing Integration Results

RT: 2.47
Area: 1804565
Amount: 1.229207
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1788936
Amount: 1.220069
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:52:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

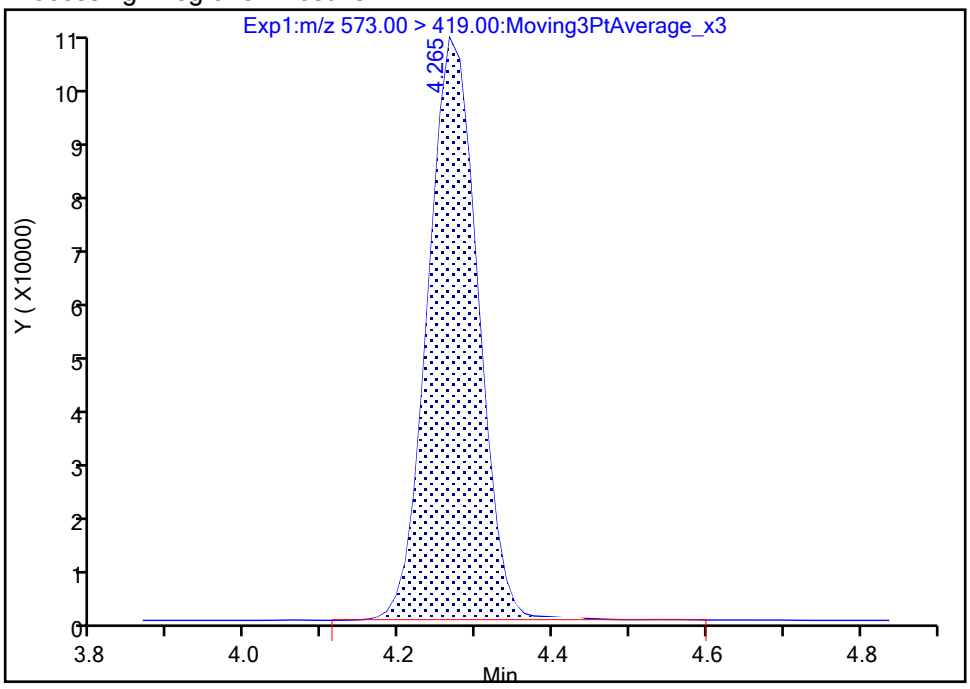
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

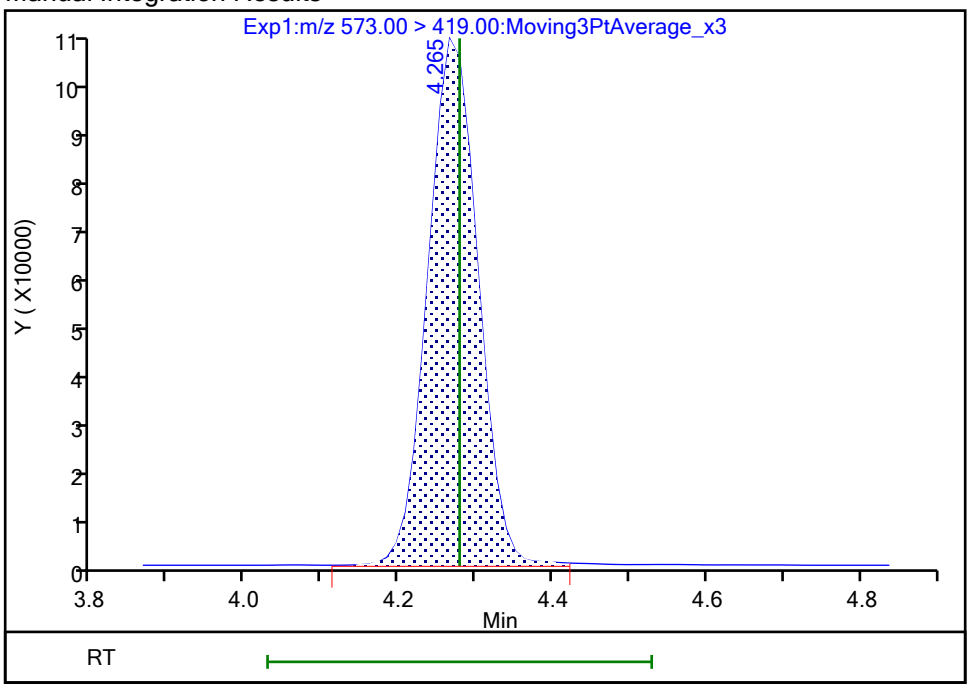
Processing Integration Results

RT: 4.27
Area: 469917
Amount: 1.257765
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 468531
Amount: 1.255607
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:52:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

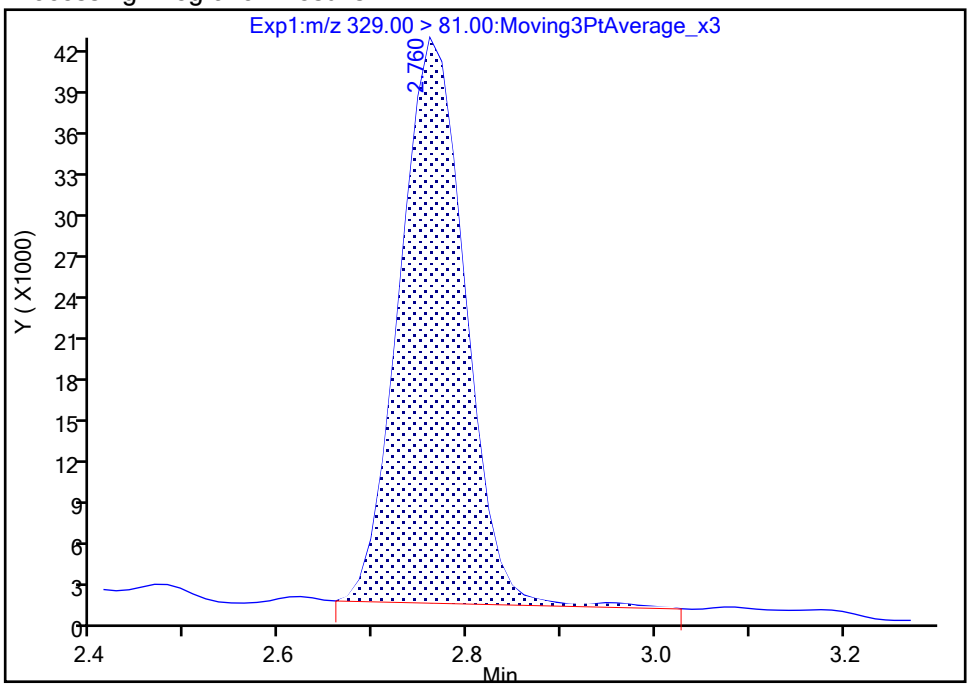
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

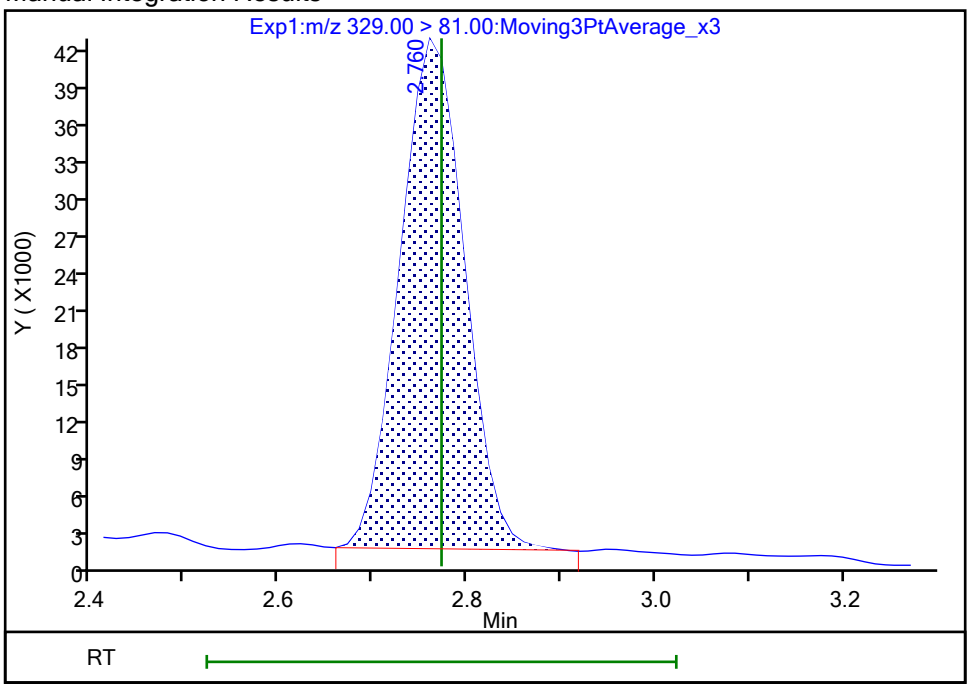
Processing Integration Results

RT: 2.76
Area: 197542
Amount: 1.163533
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 195552
Amount: 1.153237
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:52:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

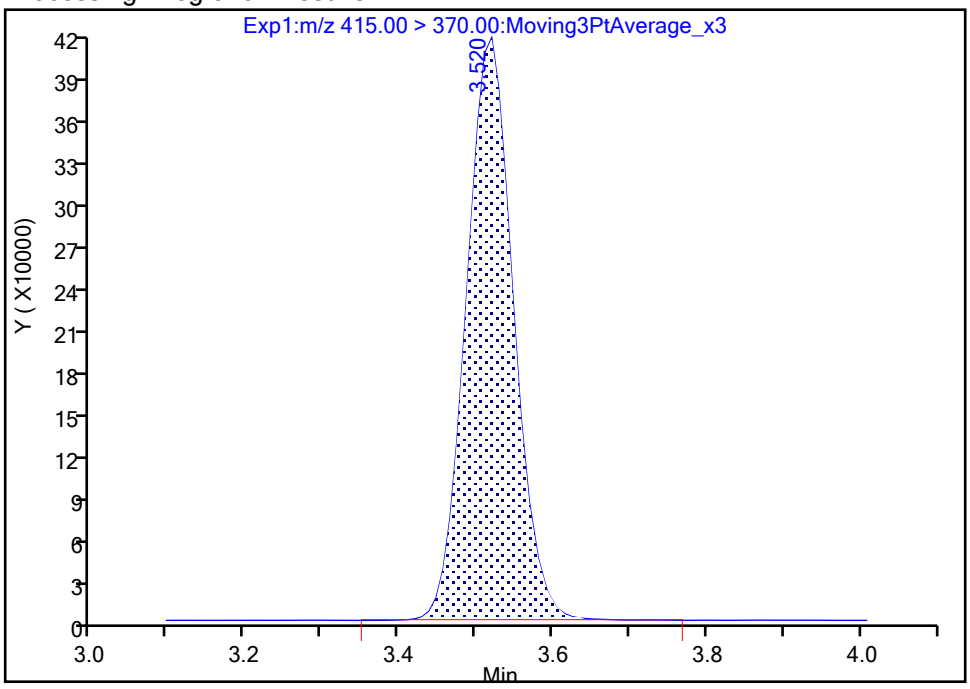
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A22.d				
Injection Date:	25-Oct-2023 20:43:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-3-A	Lab Sample ID:	200-290543-3		
Client ID:	MW77-101723-1131-20				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	22
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

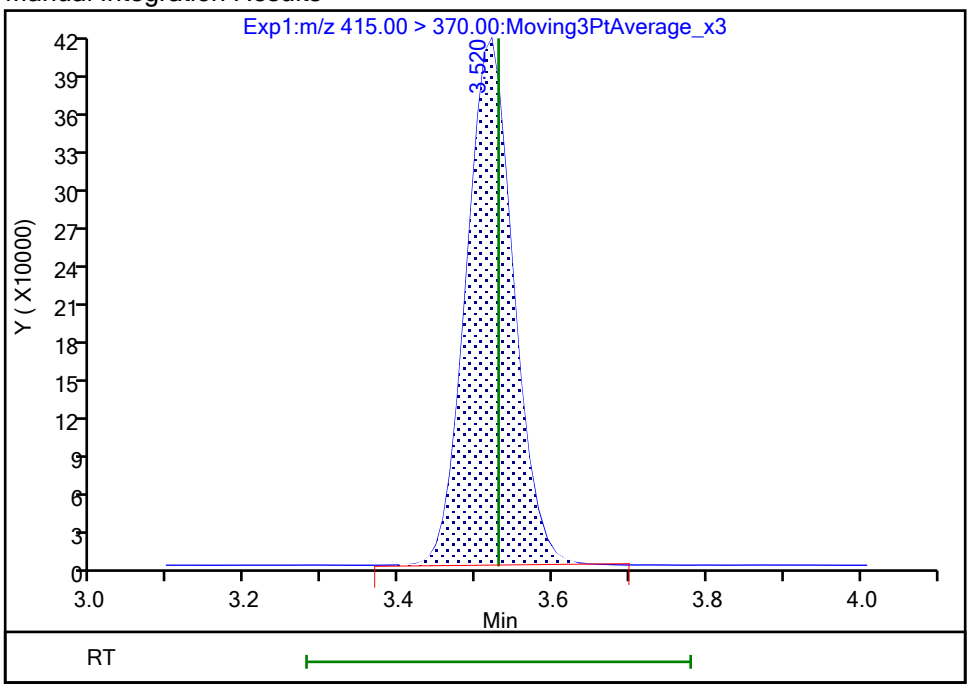
Processing Integration Results

RT: 3.52
Area: 1762232
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1760054
Amount: 1.250000
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 13:52:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: SW1-101723-1210 | Lab Sample ID: 460-290543-4

Matrix: Water | Lab File ID: PA231025A23.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 12:10

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 309.8(mL) | Date Analyzed: 10/25/2023 20:51

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	30.5		4.03	0.97
2706-90-3	Perfluoropentanoic acid	64.7		1.61	0.55
307-24-4	Perfluorohexanoic acid	44.4		1.61	0.52
375-85-9	Perfluoroheptanoic acid	17.3		1.61	0.44
335-67-1	Perfluorooctanoic acid	10.4		1.61	0.61
375-95-1	Perfluorononanoic acid	1.79		1.61	0.40
335-76-2	Perfluorodecanoic acid	0.39	J	1.61	0.37
2058-94-8	Perfluoroundecanoic acid	1.61	U	1.61	0.44
307-55-1	Perfluorododecanoic acid	1.61	U	1.61	0.40
72629-94-8	Perfluorotridecanoic acid	1.61	U	1.61	0.39
376-06-7	Perfluorotetradecanoic acid	1.61	U	1.61	0.52
375-73-5	Perfluorobutanesulfonic acid	16.0		1.61	0.50
2706-91-4	Perfluoropentanesulfonic acid	12.2		1.61	0.40
355-46-4	Perfluorohexanesulfonic acid	57.6		1.61	0.44
375-92-8	Perfluoroheptanesulfonic acid	2.20		1.61	0.33
1763-23-1	Perfluorooctanesulfonic acid	109		1.61	0.69
68259-12-1	Perfluorononanesulfonic acid	1.61	U	1.61	0.32
335-77-3	Perfluorodecanesulfonic acid	1.61	U	1.61	0.32
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.61	U	1.61	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	15.7		4.03	1.05
39108-34-4	8:2 Fluorotelomer sulfonic acid	3.34		1.61	0.62
754-91-6	Perfluorooctanesulfonamide	1.61	U	1.61	0.74
2355-31-9	NMeFOSAA	4.03	U	4.03	1.53
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.03	U	4.03	1.29
13252-13-6	HFPODA	3.23	U	3.23	0.89
919005-14-4	DONA	1.61	U	1.61	0.34
756426-58-1	9Cl-PF3ONS	1.61	U	1.61	0.26
763051-92-9	11Cl-PF3OUdS	1.61	U	1.61	0.70

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: SW1-101723-1210 Lab Sample ID: 460-290543-4

Matrix: Water Lab File ID: PA231025A23.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 12:10

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 309.8(mL) Date Analyzed: 10/25/2023 20:51

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	100		50-150
STL01893	13C5 PFPeA	96		50-150
STL01892	13C4 PFHpA	99		50-150
STL02116	13C2 PFTeDA	92		50-150
STL02337	13C3 PFBS	103		50-150
STL01056	13C8 FOSA	93		50-150
STL02118	d3-NMeFOSAA	96		50-150
STL02117	d5-NEtFOSAA	101		50-150
STL02395	M2-4:2 FTS	98		50-150
STL02279	M2-6:2 FTS	107		50-150
STL02280	M2-8:2 FTS	92		50-150
STL02255	13C3 HFPO-DA	87		50-150
STL00994	18O2 PFHxS	108		50-150
STL00993	13C2 PFHxA	97		50-150
STL00991	13C4 PFOS	105		50-150
STL00998	13C2 PFDoA	102		50-150
STL00995	13C5 PFNA	96		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	109		50-150
STL00997	13C2 PFUnA	102		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d
Lims ID: 460-290543-A-4-A
Client ID: SW1-101723-1210
Sample Type: Client
Inject. Date: 25-Oct-2023 20:51:55 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-4-A
Misc. Info.: 200-0057556-023 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:11:31
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	1861188	1.26		100	776	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	1327110	0.9448			105	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1381871	1.20		96.1	1271	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	2391434	2.00			41.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.701	1868743	1.20		103	50421	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	891541	0.4966	Target=2.06		124	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	478881		1.86(1.03-3.09)		106	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.772	-0.012	0.995	2221	0.003698			10.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.788	206467	1.15		98.2	39.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1419113	1.21		97.0	5328	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1719129	1.38	Target=14.12		123	M
313.00 > 119.00	2.810	2.810	0.0	1.004	110950		15.49(7.06-21.17)		79.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	595525	0.3791	Target=2.72		126	M
349.00 > 99.00	2.810	2.810	0.0	0.888	215036		2.77(1.36-4.09)		102	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.918	0.0	0.829	247103	1.09		87.2	1147	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.918	-0.021	0.993	1017	0.005139			9.3	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1422485	1.27		108	6404	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	2375458	1.78	Target=3.32		1152	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	694525		3.42(1.66-4.98)		465	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.176	0.0	1.000	762418	0.5350	Target=4.17		79.1	M
363.00 > 169.00	3.176	3.176	0.0	1.000	191693		3.98(2.09-6.26)		311	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.176	0.0	0.902	1589217	1.24		99.0	7339	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.511	0.0	0.917	73730	0.0683	Target=4.83		24.7	M
449.00 > 99.00	3.511	3.511	0.0	0.917	16408		4.49(2.41-7.24)		23.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	294218	1.27		107	271	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.520	-0.009	1.000	330378	0.4879			441	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.000	543332	0.3220	Target=2.88		21.5	M
413.00 > 169.00	3.520	3.529	-0.009	1.000	206004		2.64(1.44-4.32)		317	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1980507	1.36		109	7759	
* 62 13C2 PFOA										M
415.00 > 370.00	3.520	3.529	-0.009		1869131	1.25			5078	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.830	0.0	1.000	2934608	3.37	Target=4.24		2184	M
499.00 > 99.00	3.830	3.830	0.0	1.000	722709		4.06(2.12-6.37)		1048	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.088	892995	1.26		105	1907	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.854	0.0	1.003	83121	0.0555	Target=8.34		11.9	M
463.00 > 169.00	3.854	3.854	0.0	1.003	9097		9.14(4.17-12.51)		46.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.854	-0.012	1.091	1908539	1.21		96.4	6800	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.990	-0.019	1.037	610	0.000229			1.5	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.148	-0.012	1.000	19330	0.0122	Target=11.44		4.7	
513.00 > 169.00	4.148	4.148	0.0	1.003	1496		12.92(5.72-17.16)		7.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	1981807	1.20		95.6	7306	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.148	0.0	1.000	54567	0.1035			444	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	286886	1.10		91.9	689	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1642512	1.16		92.9	4983	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.242	-0.012	0.997	15061	0.0120			11.4	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.278	0.0	1.215	473080	1.19		95.5	1362	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.398	-0.011	1.246	2001104	1.28		102	8489	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.410	-0.012	1.250	480129	1.26		101	1290	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.327	4.410	-0.083	0.984	563	0.001465			3.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	2027267	1.27		102	8143	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.417	1823426	1.15		92.1	5797	

QC Flag Legend

Processing Flags

Review Flags

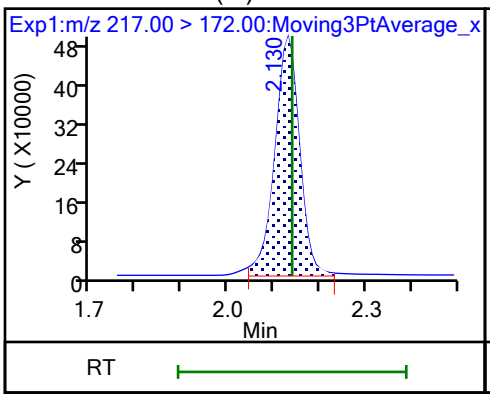
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:33 Chrom Revision: 2.3 18-Oct-2023 21:16:54

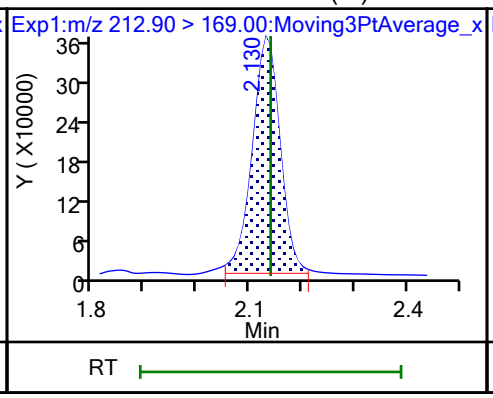
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d
Injection Date: 25-Oct-2023 20:51:55 Instrument ID: LC812
Lims ID: 460-290543-A-4-A Lab Sample ID: 200-290543-4
Client ID: SW1-101723-1210
Operator ID: LC812user ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

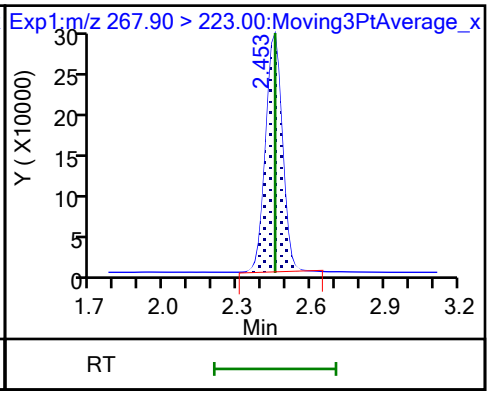
D 1 13C4 PFBA (M)



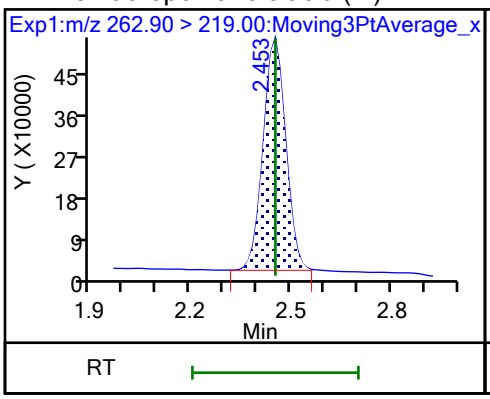
2 Perfluorobutanoic acid (M)



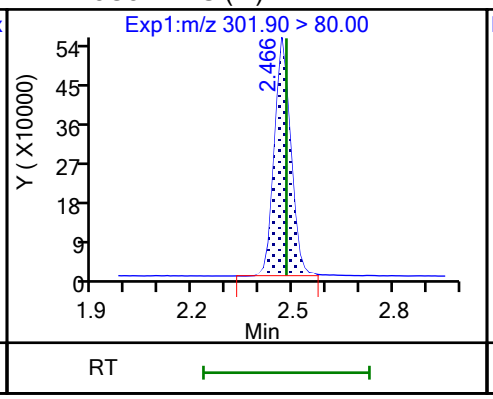
D 3 13C5 PFPeA



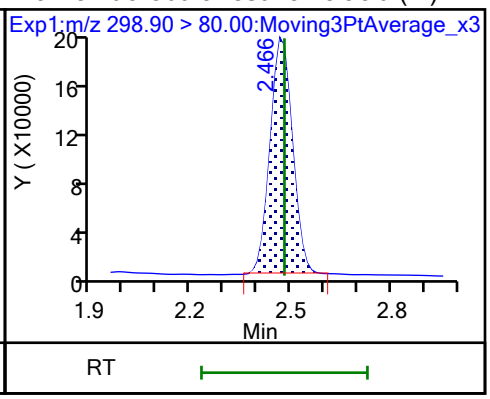
4 Perfluoropentanoic acid (M)



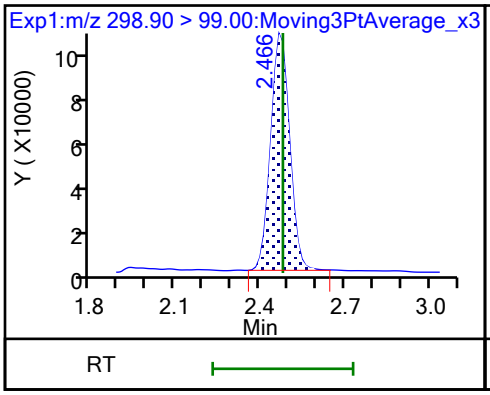
D 47 13C3 PFBS (M)



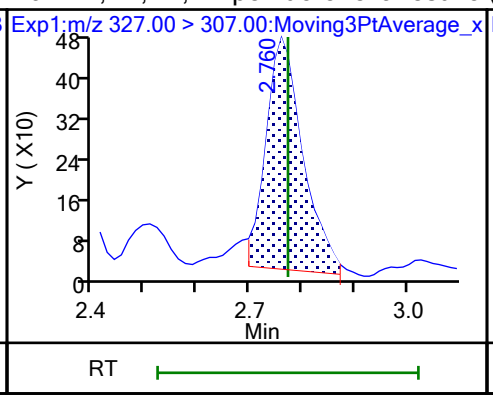
5 Perfluorobutanesulfonic acid (M)



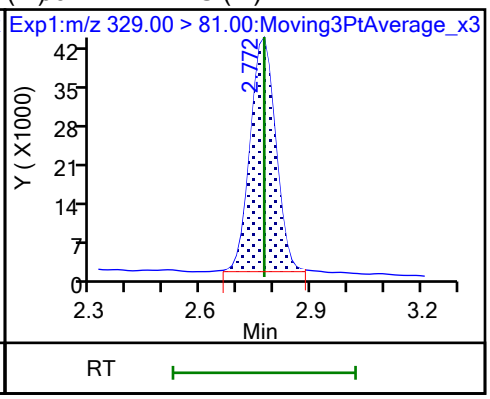
5 Perfluorobutanesulfonic acid



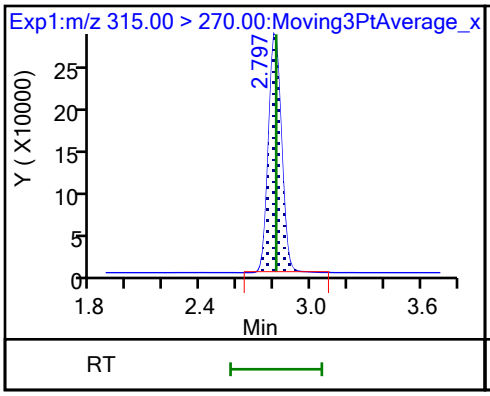
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



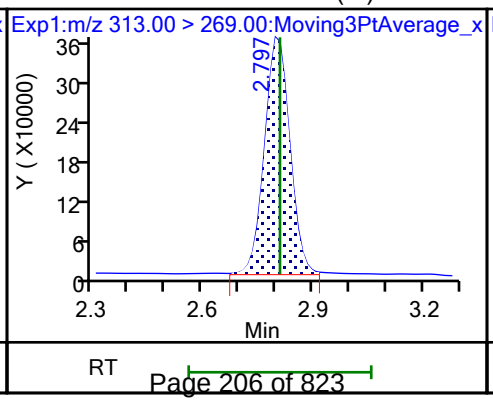
60 M2-4:2 FTS (M)



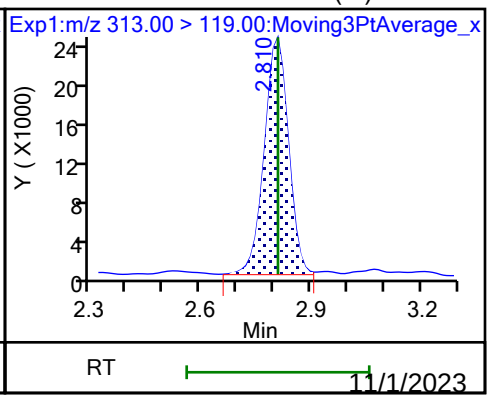
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

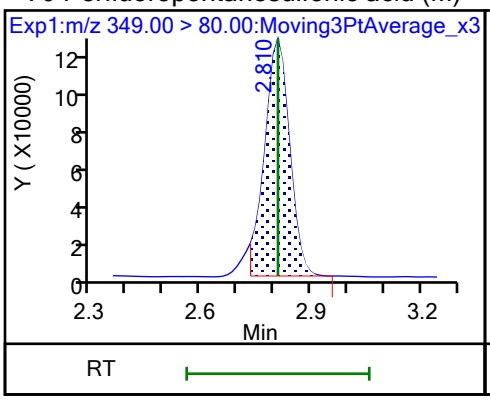


6 Perfluorohexanoic acid (M)

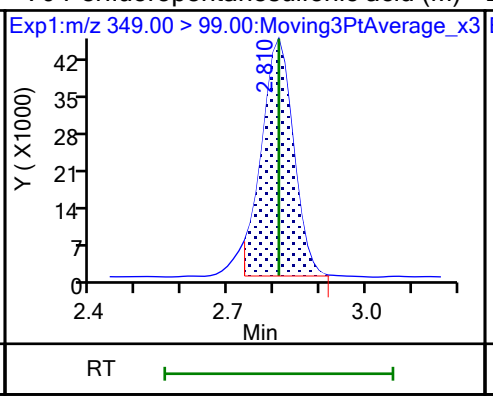


11/1/2023
12:01 PM

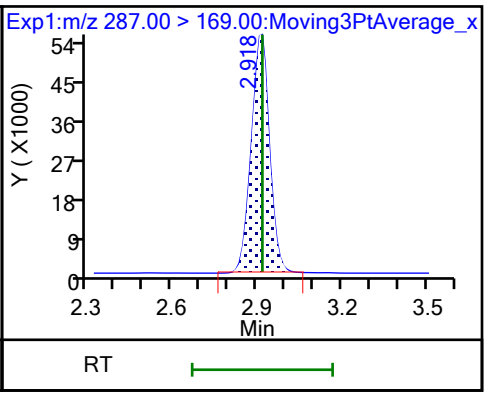
70 Perfluoropentanesulfonic acid (M)



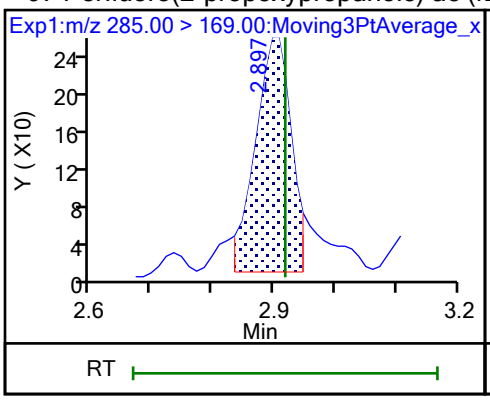
70 Perfluoropentanesulfonic acid (M)



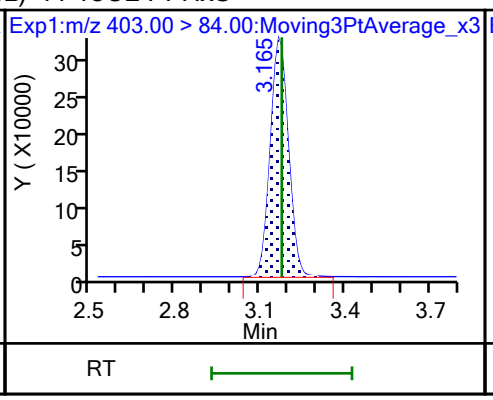
D 64 13C3 HFPO-DA



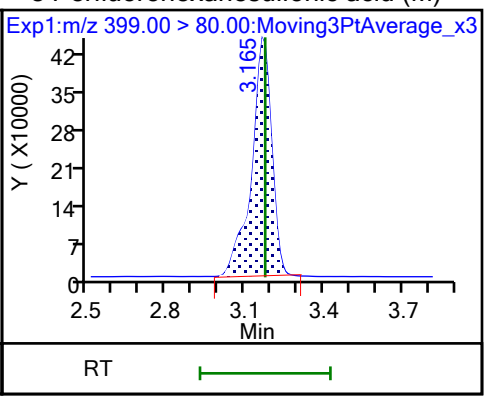
67 Perfluoro(2-propoxypropanoic) ac (M)



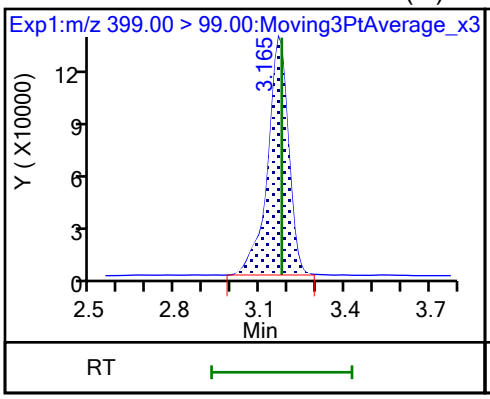
D 11 18O2 PFHxS



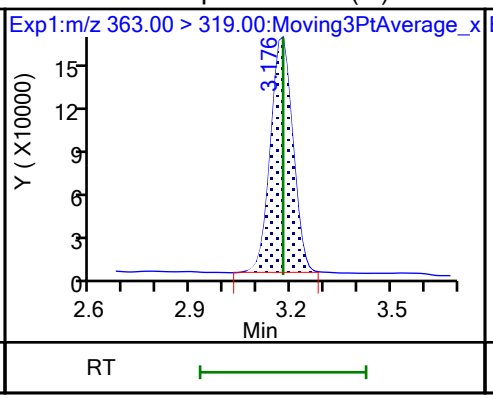
8 Perfluorohexanesulfonic acid (M)



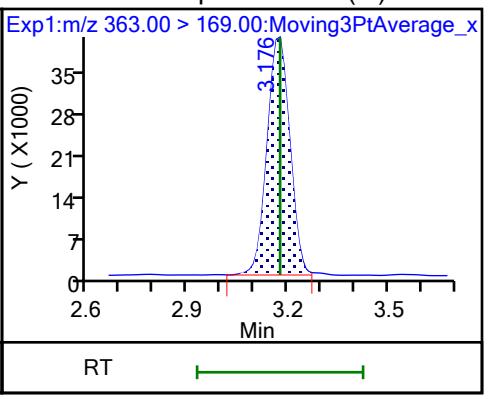
8 Perfluorohexanesulfonic acid (M)



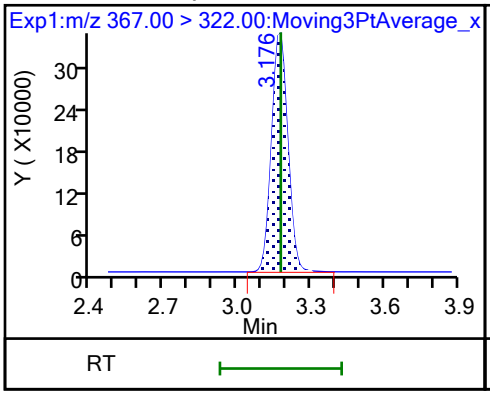
10 Perfluoroheptanoic acid (M)



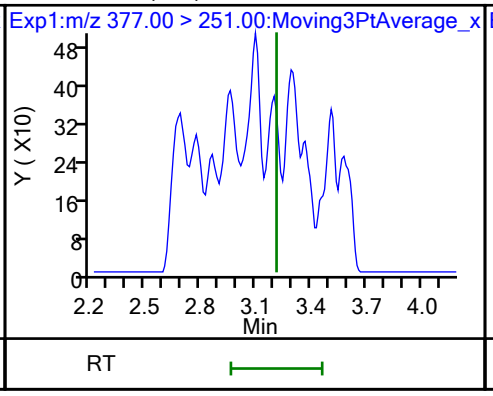
10 Perfluoroheptanoic acid (M)



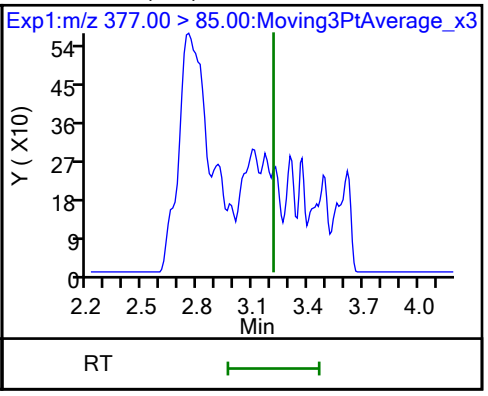
D 9 13C4 PFHpA



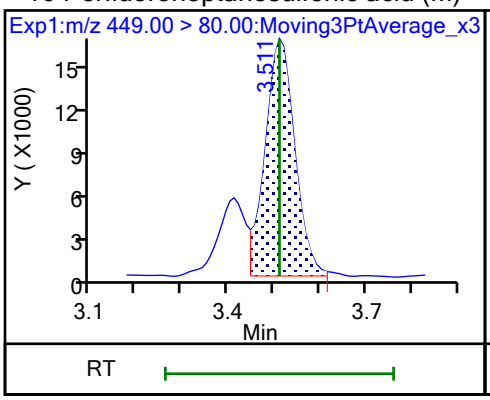
77 DONA (ND)



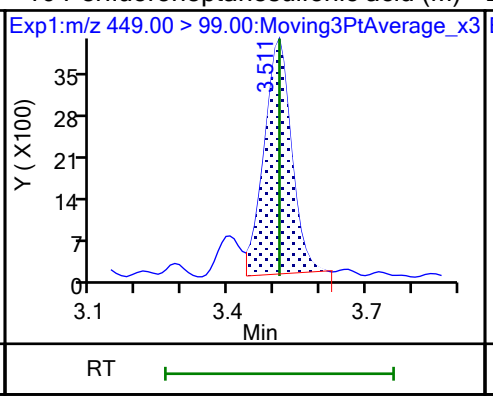
77 DONA (ND)



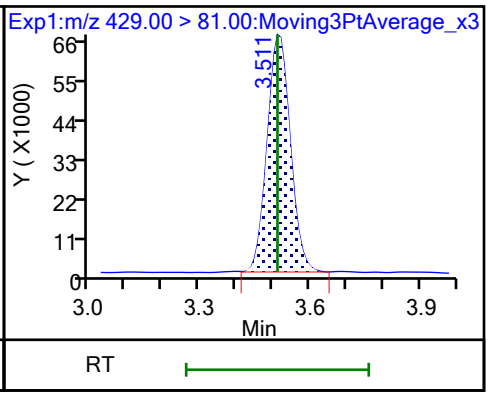
16 Perfluoroheptanesulfonic acid (M)



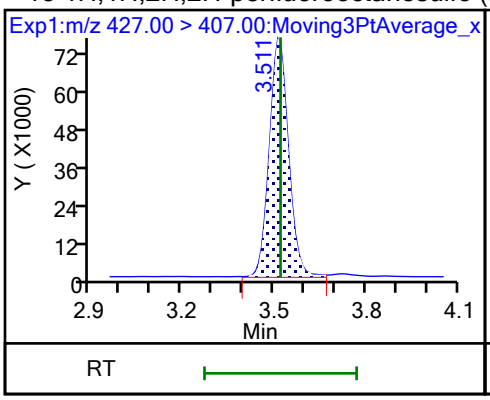
16 Perfluoroheptanesulfonic acid (M)



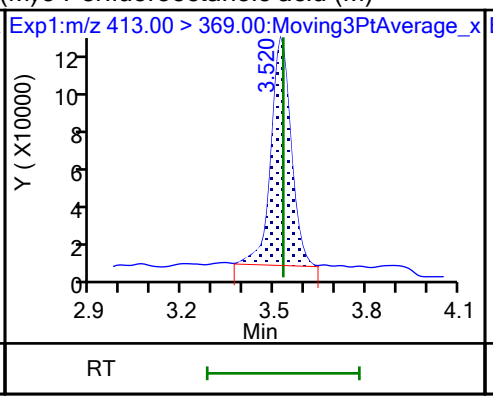
D 12 M2-6:2 FTS



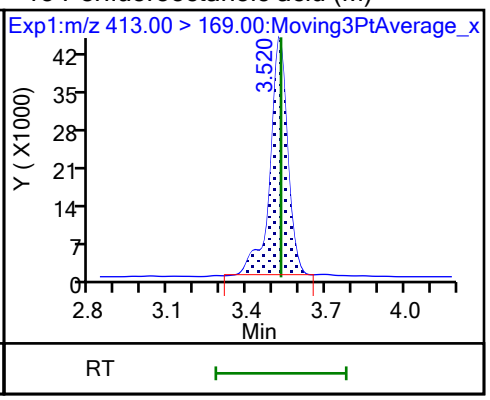
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



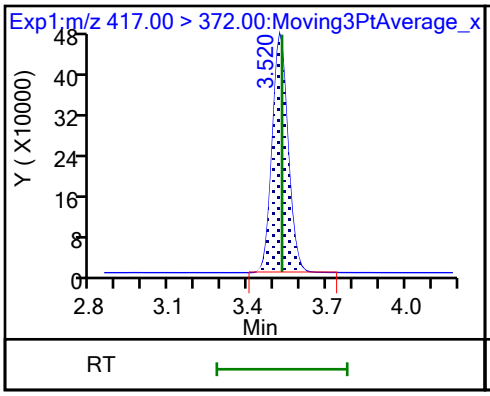
15 Perfluorooctanoic acid (M)



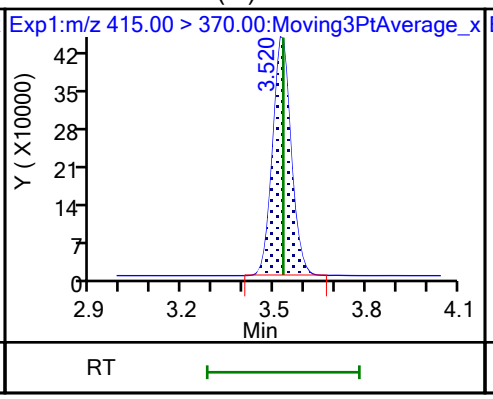
15 Perfluorooctanoic acid (M)



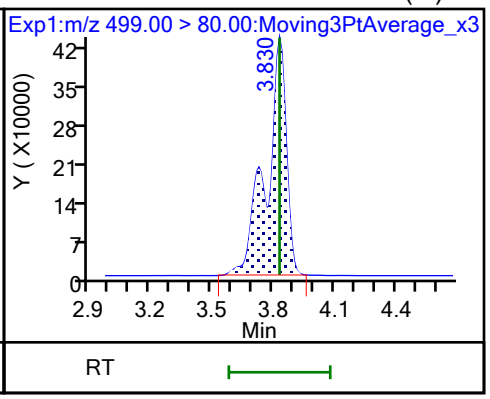
D 14 13C4 PFOA



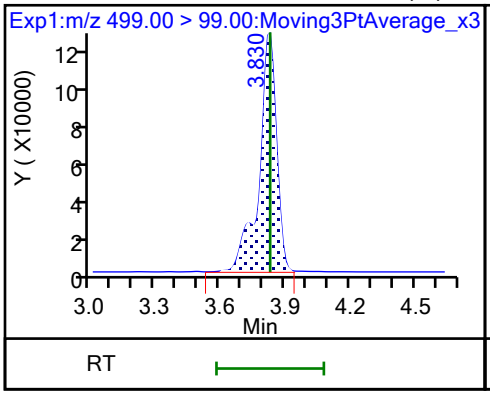
* 62 13C2 PFOA (M)



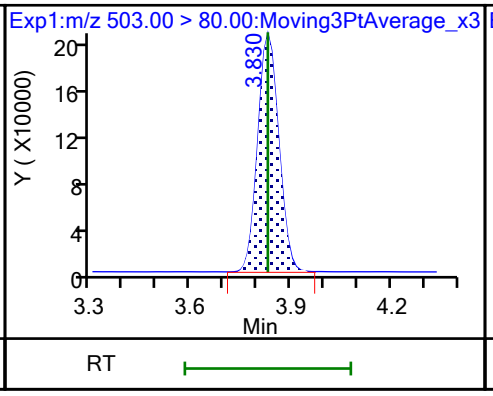
17 Perfluorooctanesulfonic acid (M)



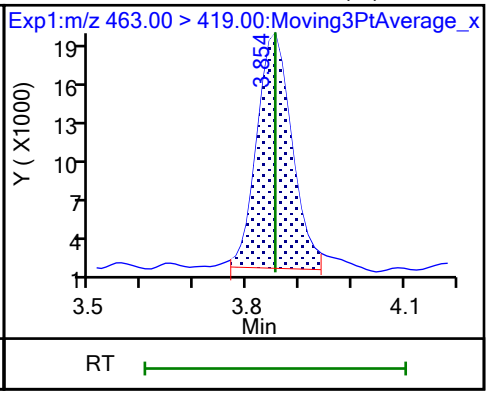
17 Perfluorooctanesulfonic acid (M)



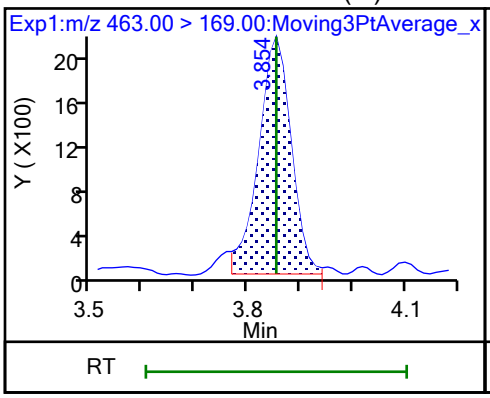
D 18 13C4 PFOS



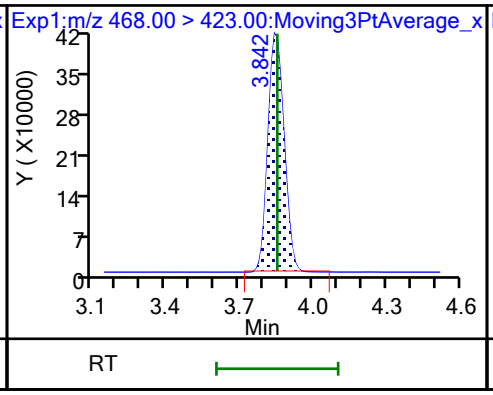
20 Perfluorononanoic acid (M)



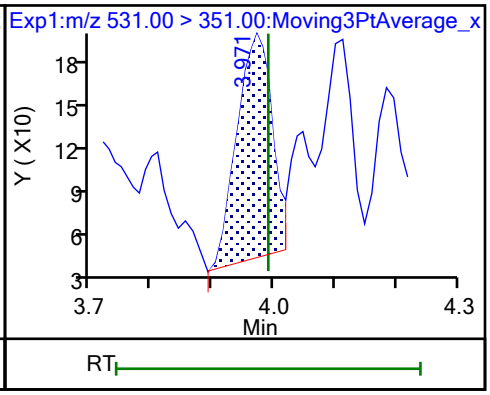
20 Perfluorononanoic acid (M)



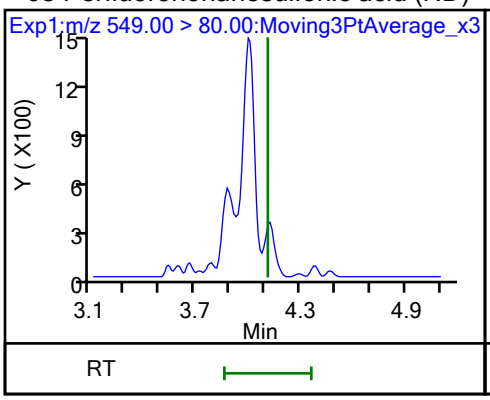
D 19 13C5 PFNA



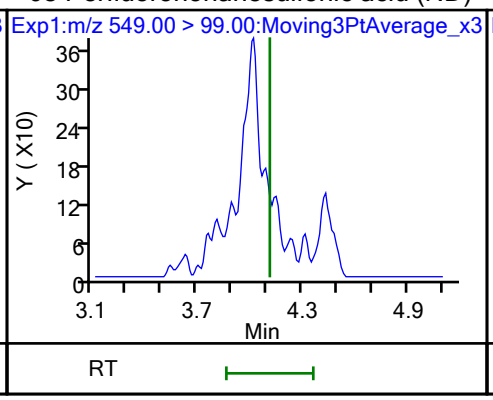
69 9-Chlorohexadecafluoro-3-oxanona (M)



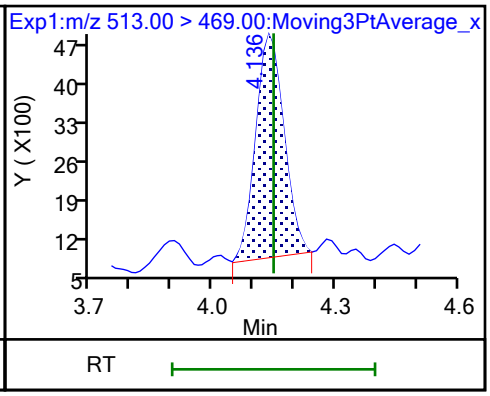
68 Perfluorononanesulfonic acid (ND)



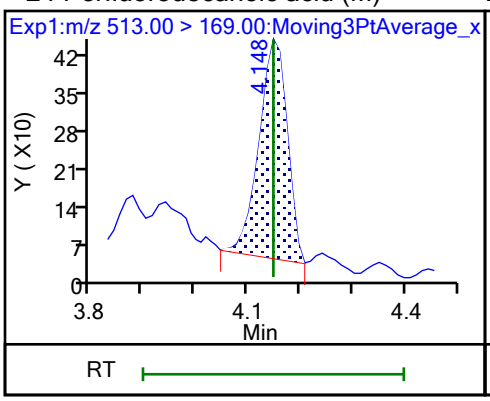
68 Perfluorononanesulfonic acid (ND)



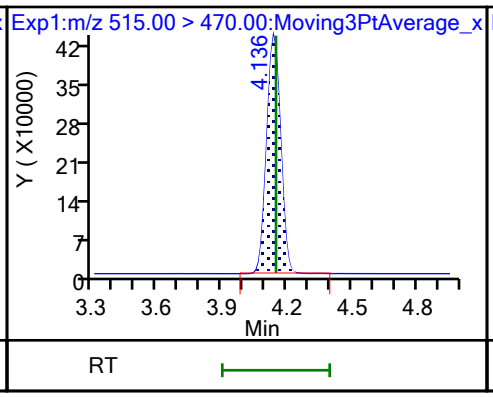
24 Perfluorodecanoic acid



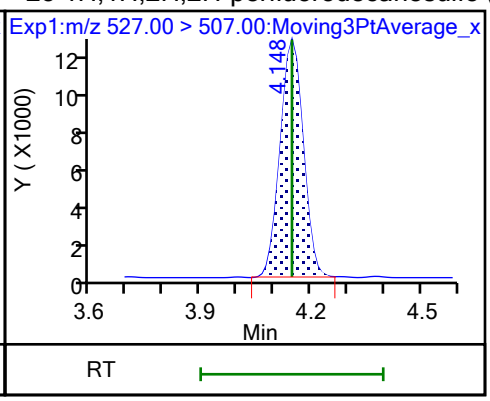
24 Perfluorodecanoic acid (M)



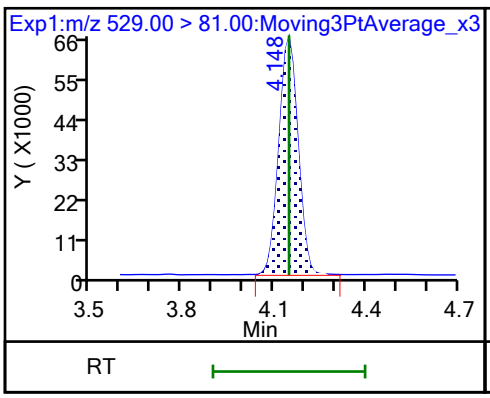
D 23 13C2 PFDA



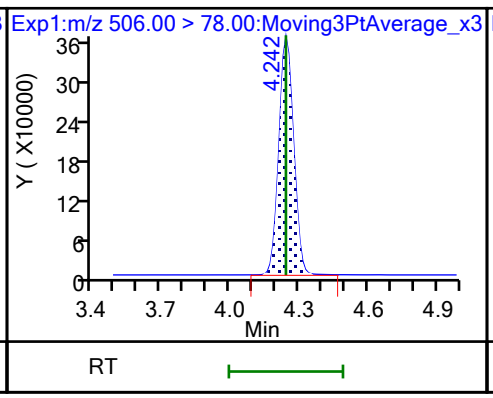
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



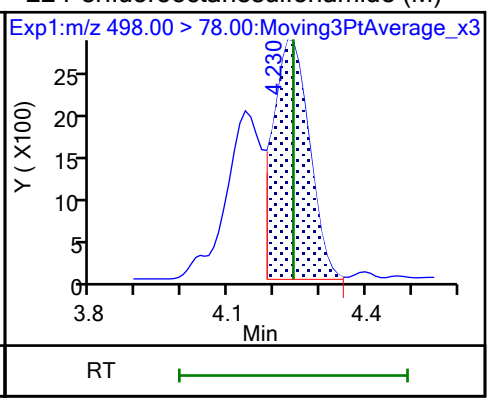
D 26 M2-8:2 FTS



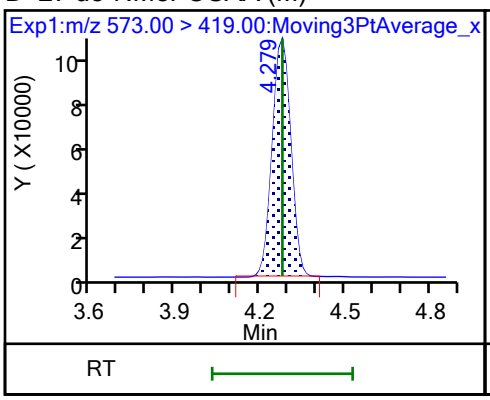
D 21 13C8 FOSA



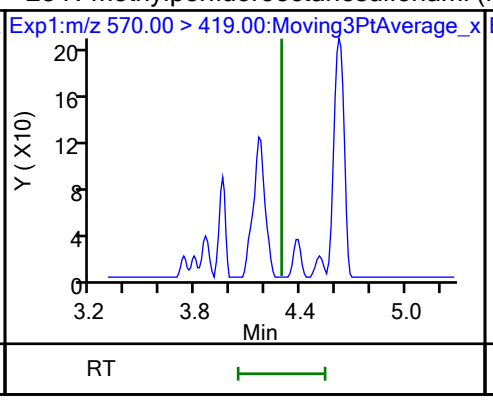
22 Perfluorooctanesulfonamide (M)



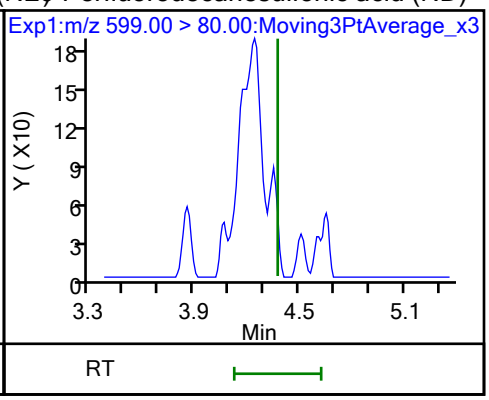
D 27 d3-NMeFOSAA (M)



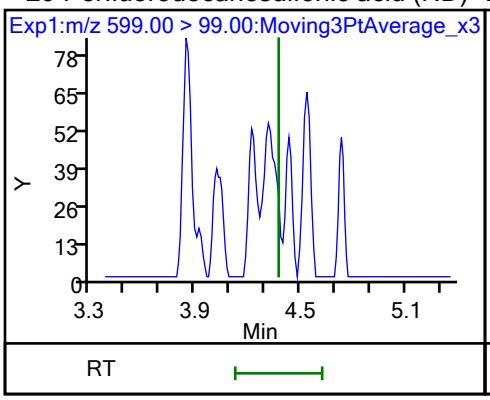
28 N-methylperfluorooctanesulfonami (ND)



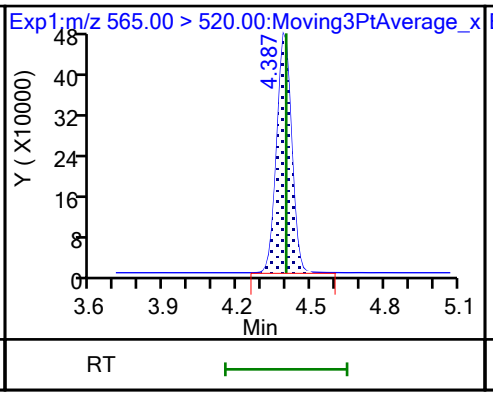
29 Perfluorodecanesulfonic acid (ND)



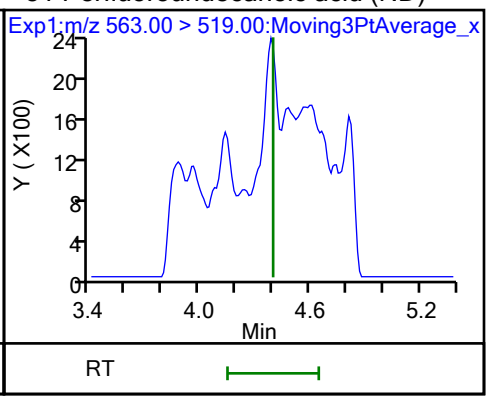
29 Perfluorodecanesulfonic acid (ND)



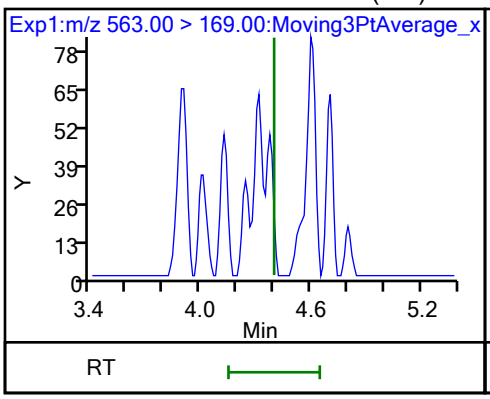
D 30 13C2 PFUnA



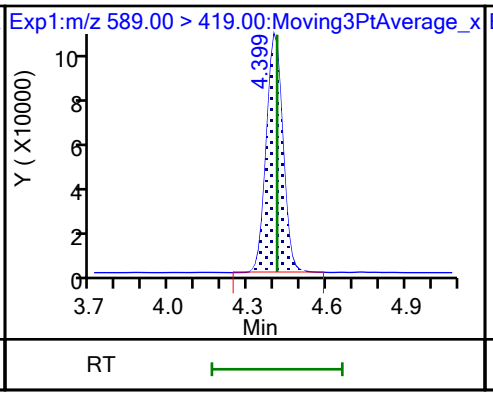
31 Perfluoroundecanoic acid (ND)



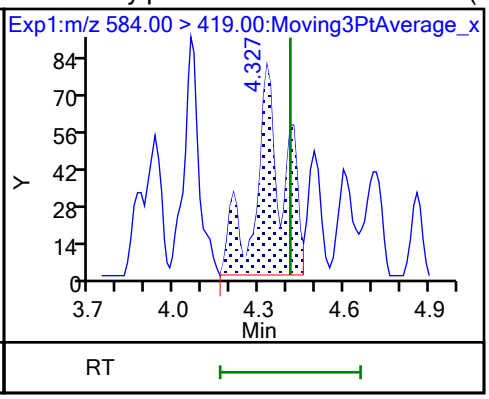
31 Perfluoroundecanoic acid (ND)



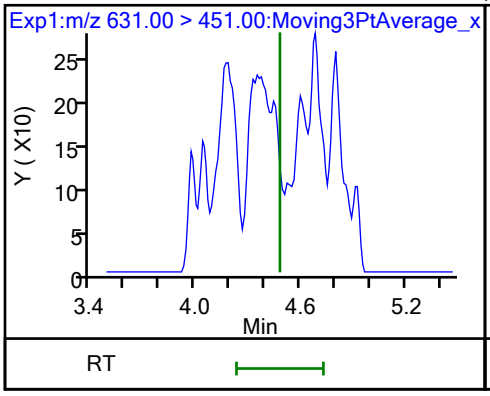
D 32 d5-NEtFOSAA



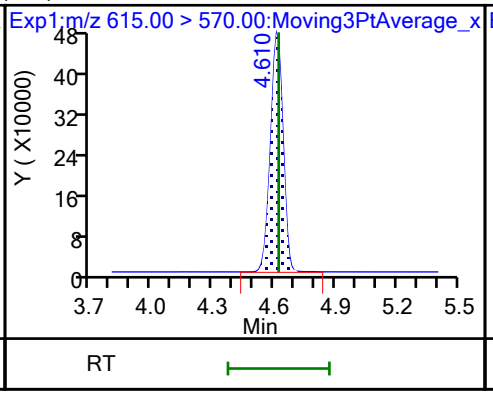
33 N-ethylperfluorooctanesulfonamid (M)



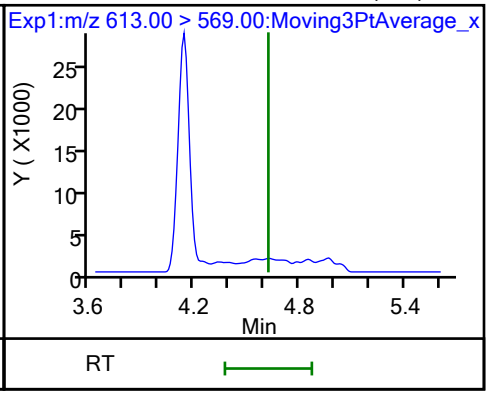
66 11-Chloroeicosafluoro-3-oxaundec (ND)



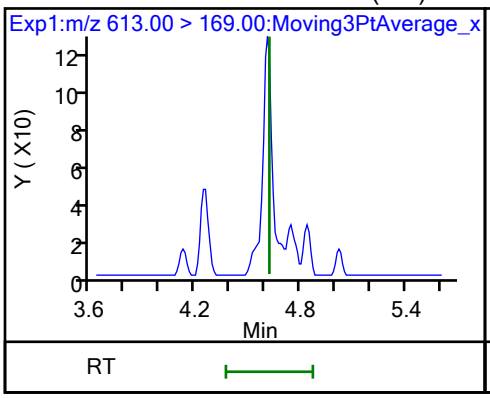
D 36 13C2 PFDoA



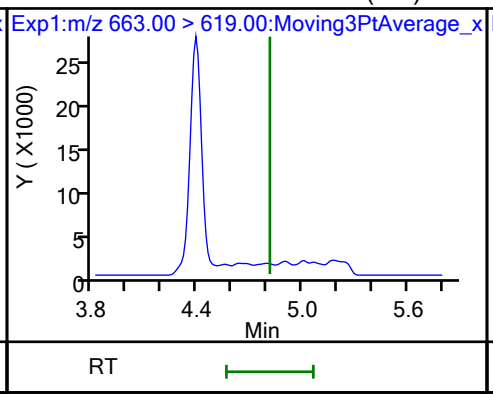
37 Perfluorododecanoic acid (ND)



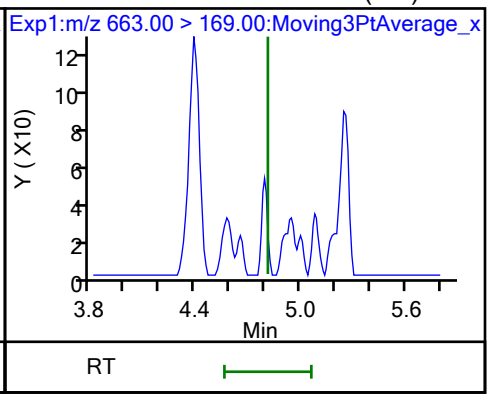
37 Perfluorododecanoic acid (ND)



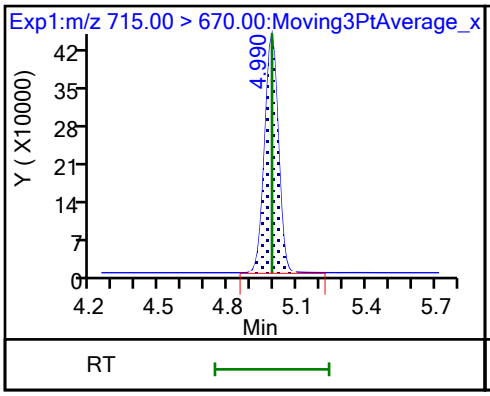
41 Perfluorotridecanoic acid (ND)



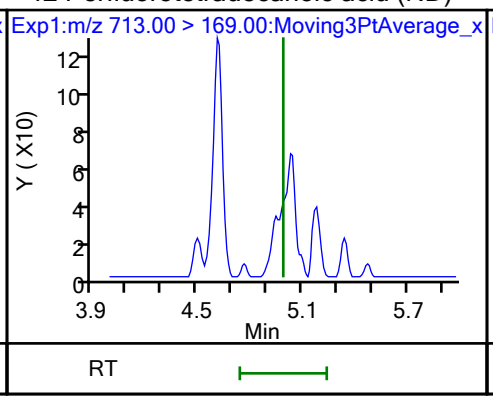
41 Perfluorotridecanoic acid (ND)



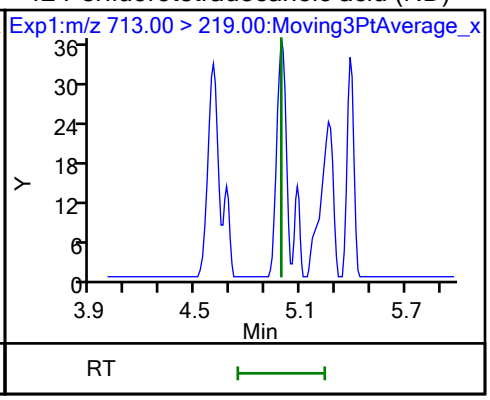
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

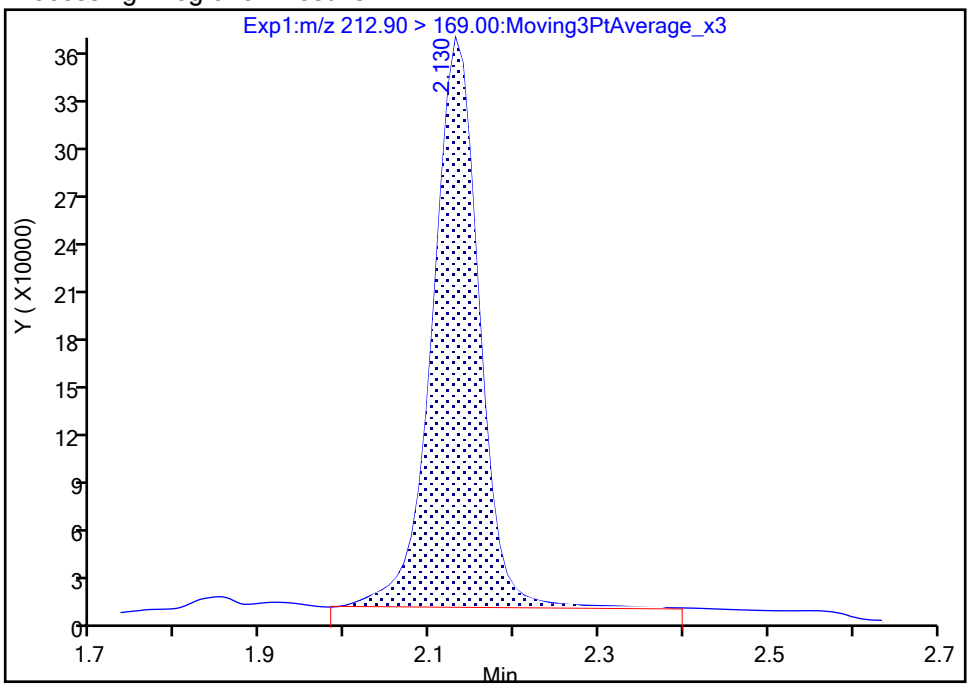
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

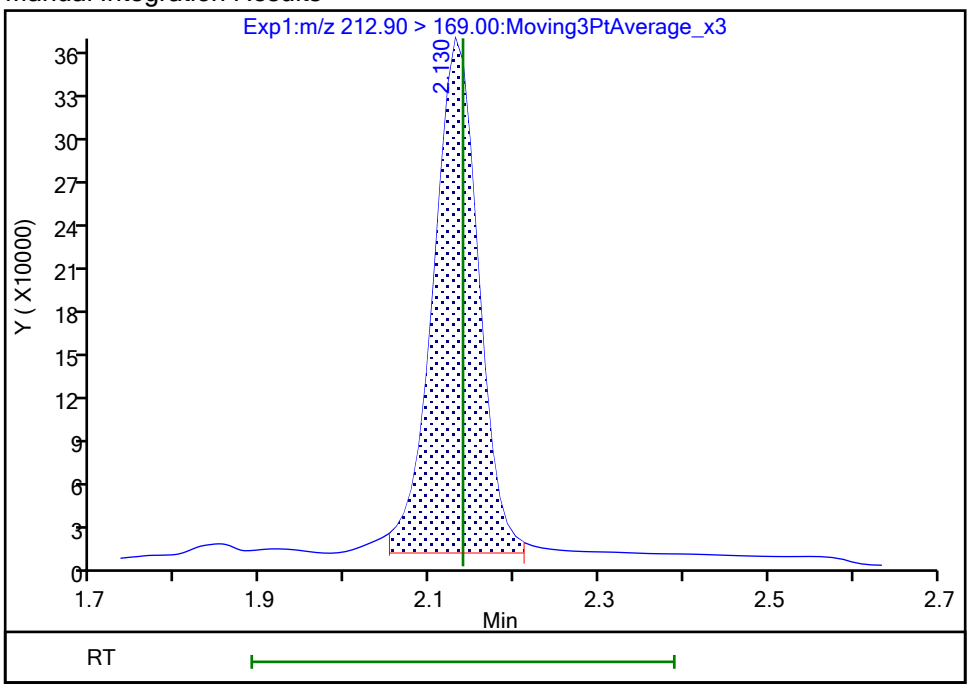
Processing Integration Results

RT: 2.13
Area: 1374129
Amount: 0.979704
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1327110
Amount: 0.944782
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

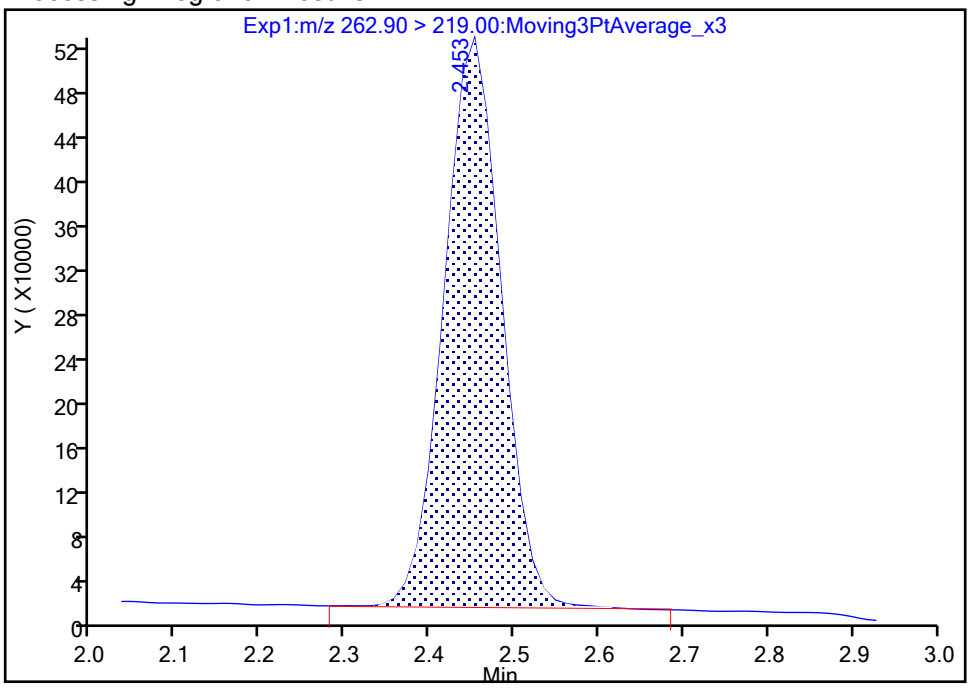
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

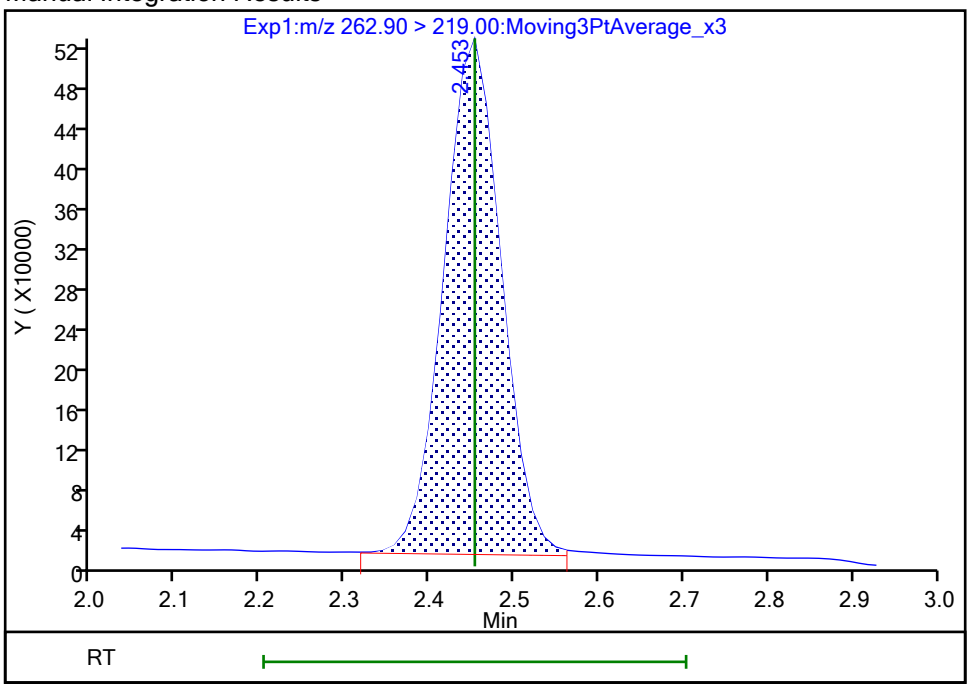
Processing Integration Results

RT: 2.45
Area: 2405400
Amount: 2.016301
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 2391434
Amount: 2.004594
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

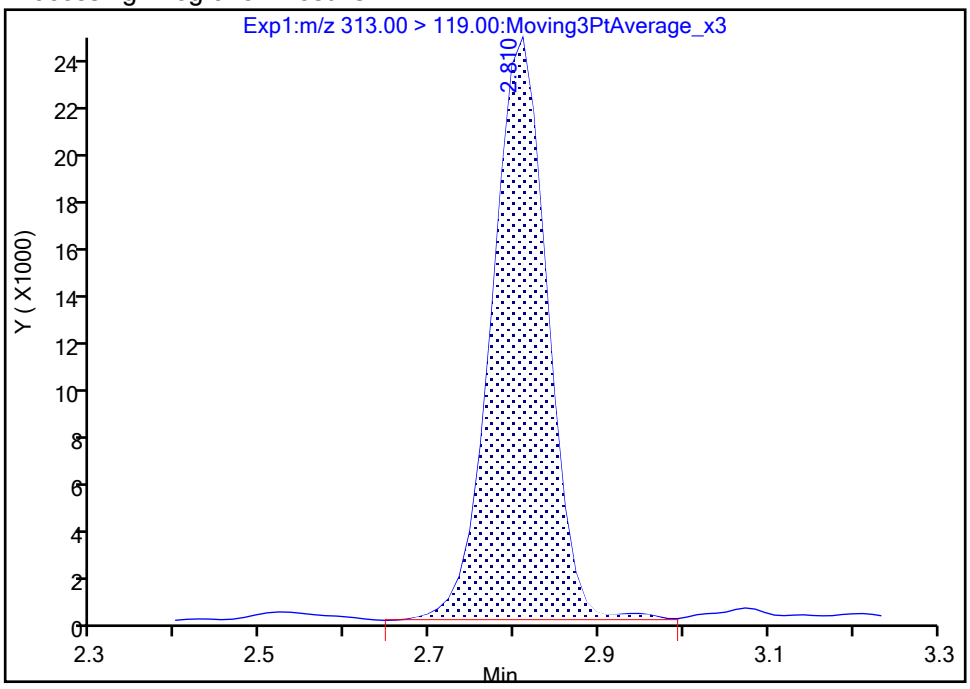
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

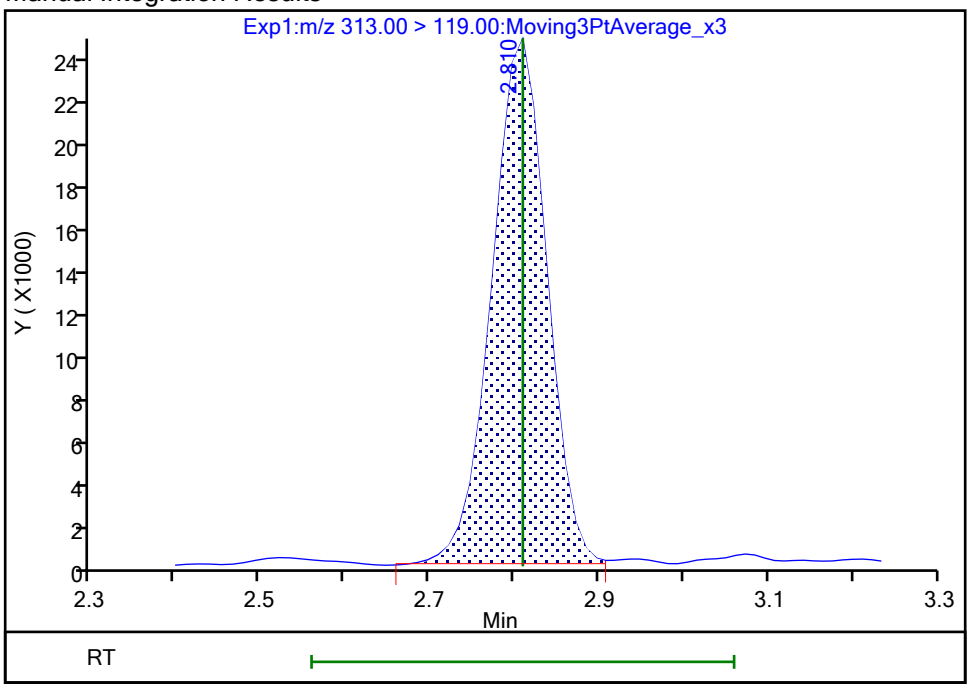
Processing Integration Results

RT: 2.81
Area: 111832
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 110950
Amount: 1.376033
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

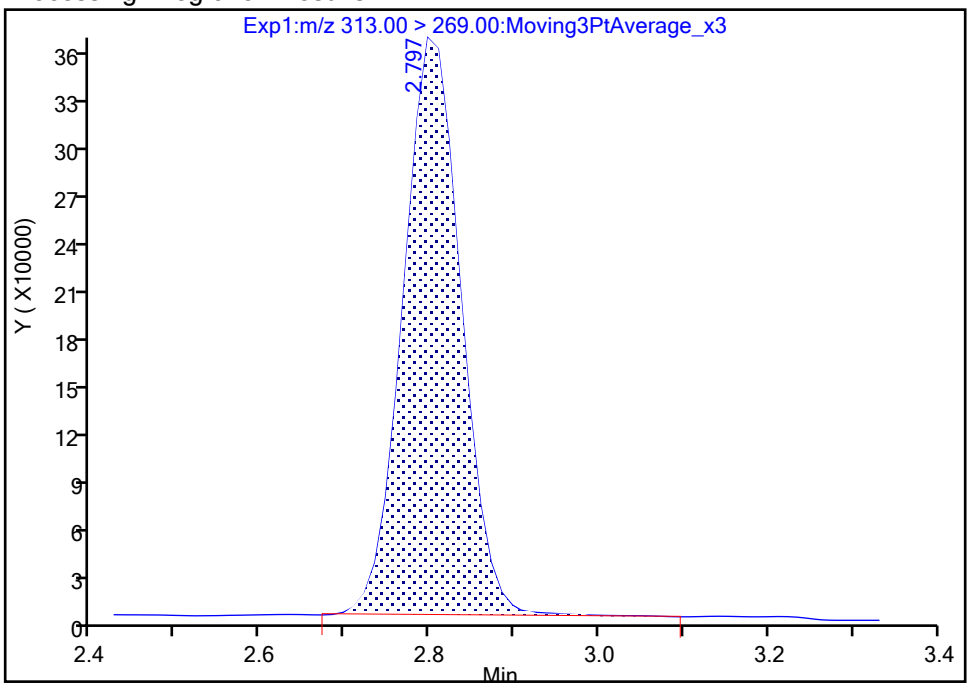
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

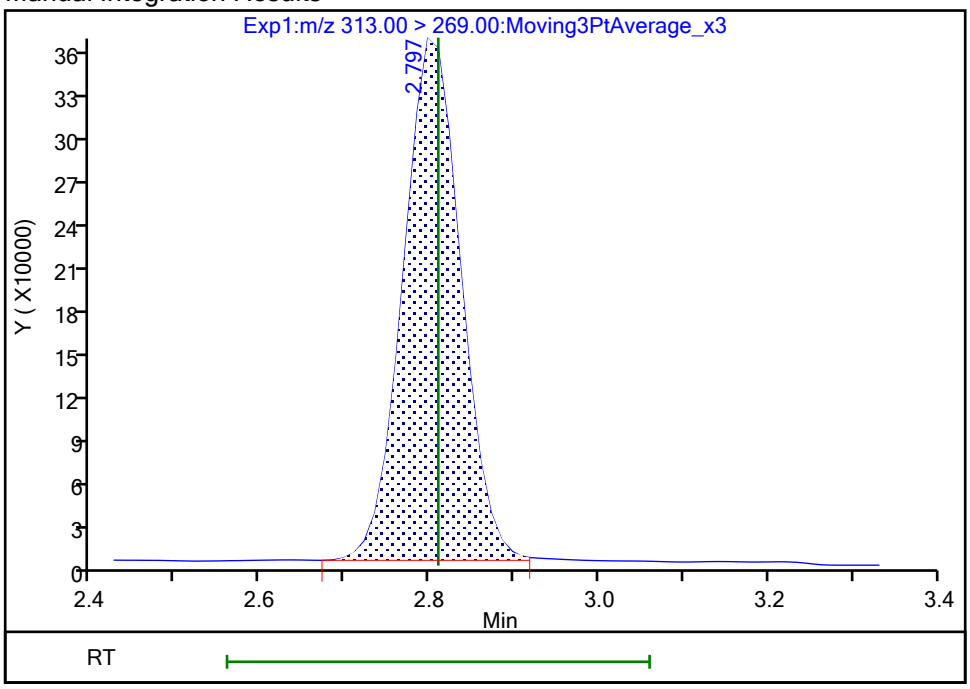
Processing Integration Results

RT: 2.80
Area: 1731932
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1719129
Amount: 1.376033
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:49 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

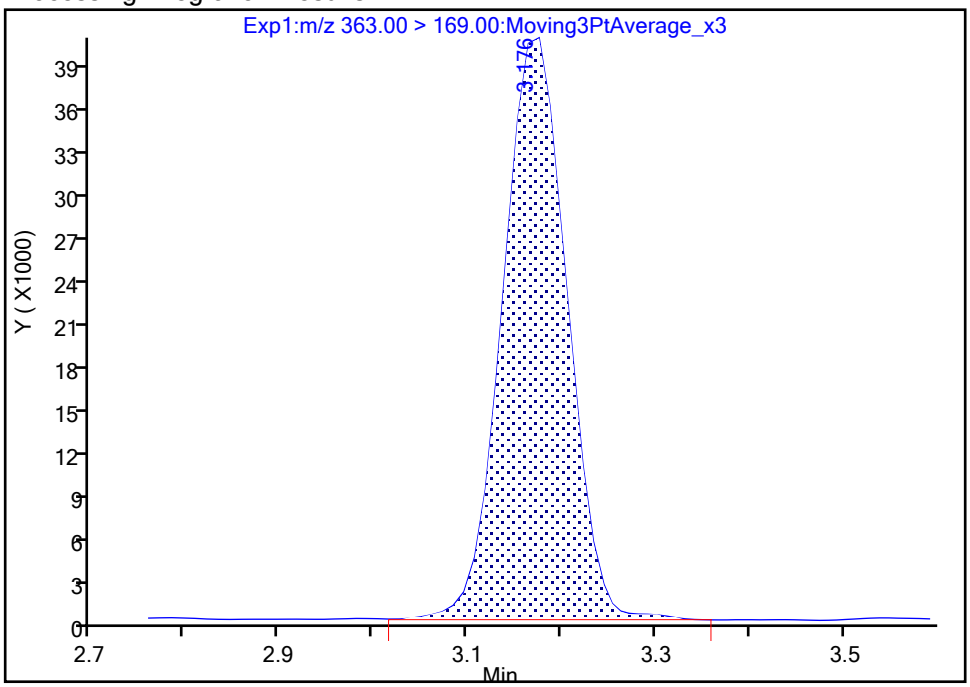
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

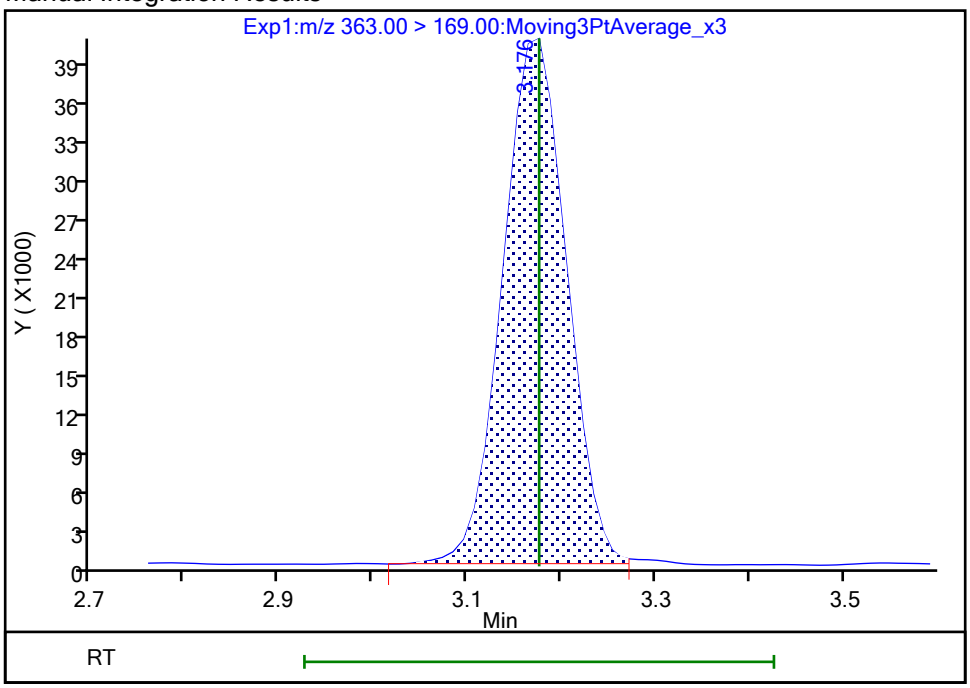
Processing Integration Results

RT: 3.18
Area: 192775
Amount: 0.533139
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 191693
Amount: 0.535006
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

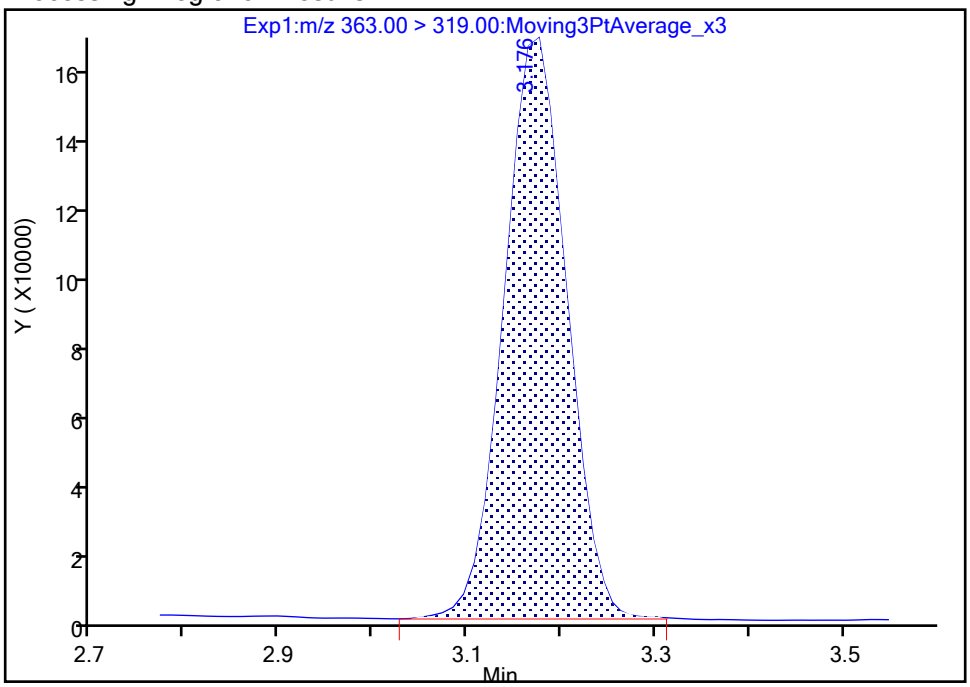
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

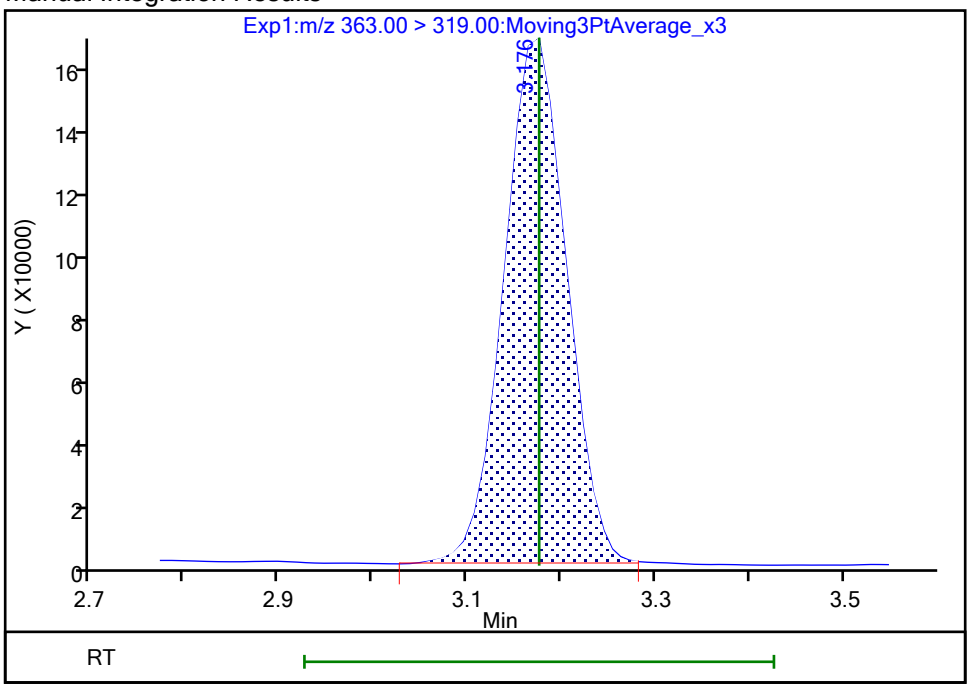
Processing Integration Results

RT: 3.18
Area: 759757
Amount: 0.533139
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 762418
Amount: 0.535006
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

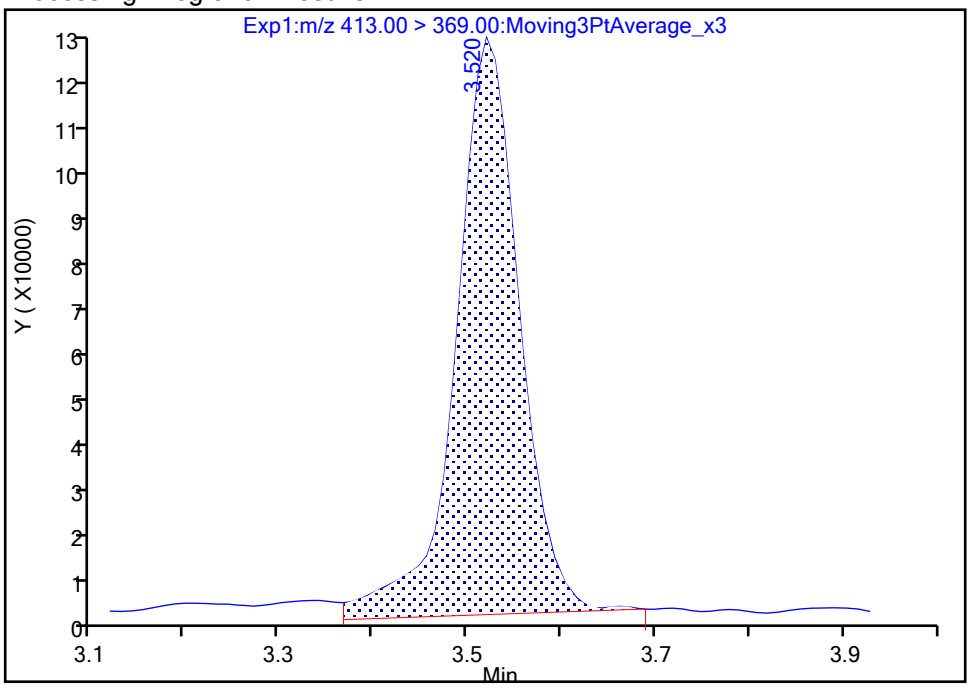
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

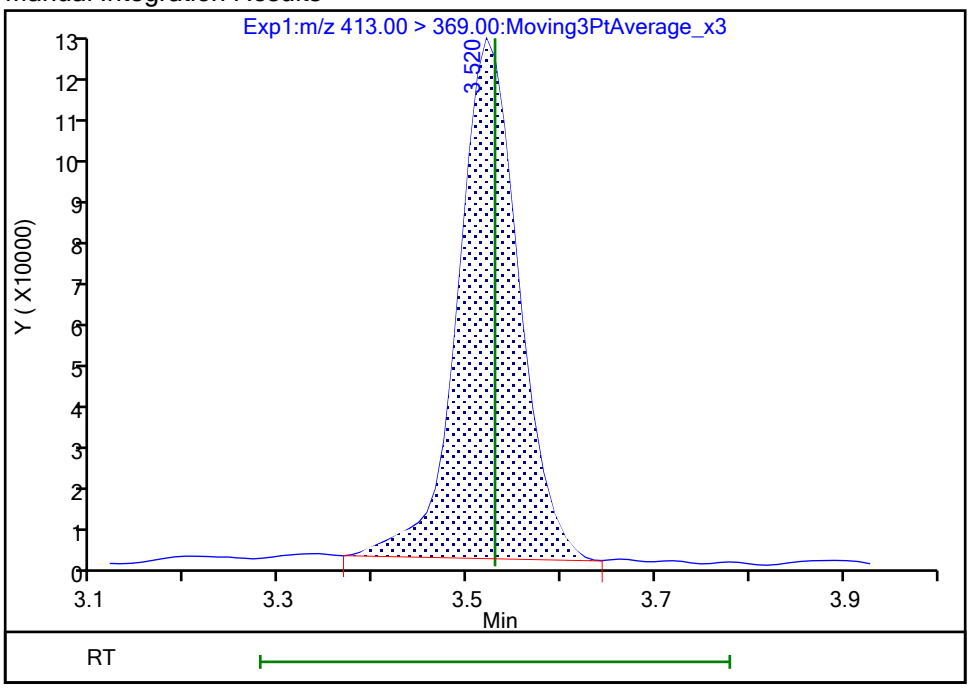
Processing Integration Results

RT: 3.52
Area: 580781
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 543332
Amount: 0.321953
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

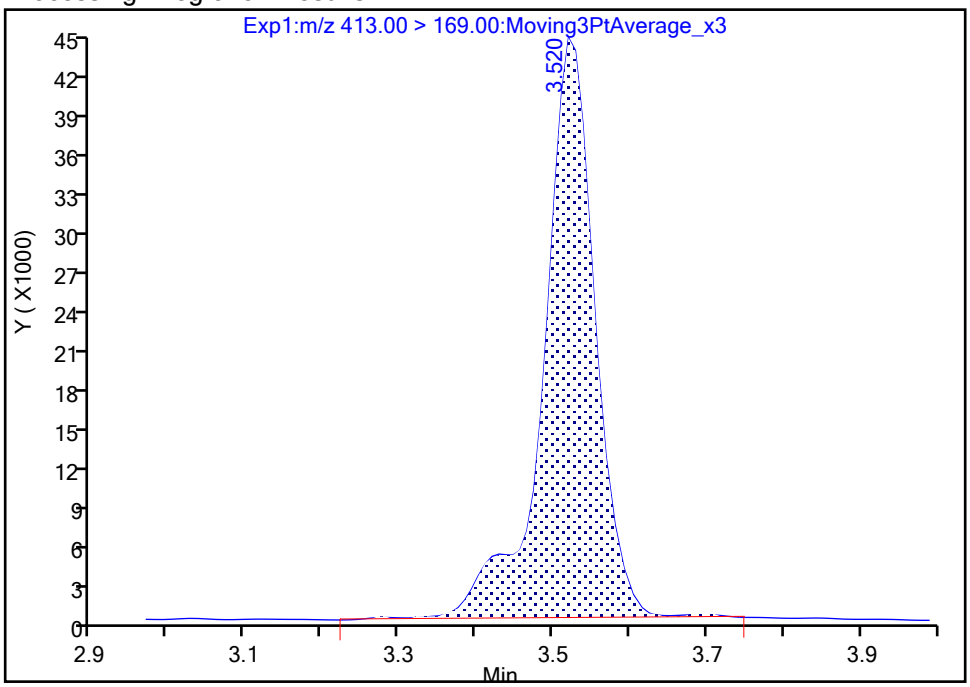
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

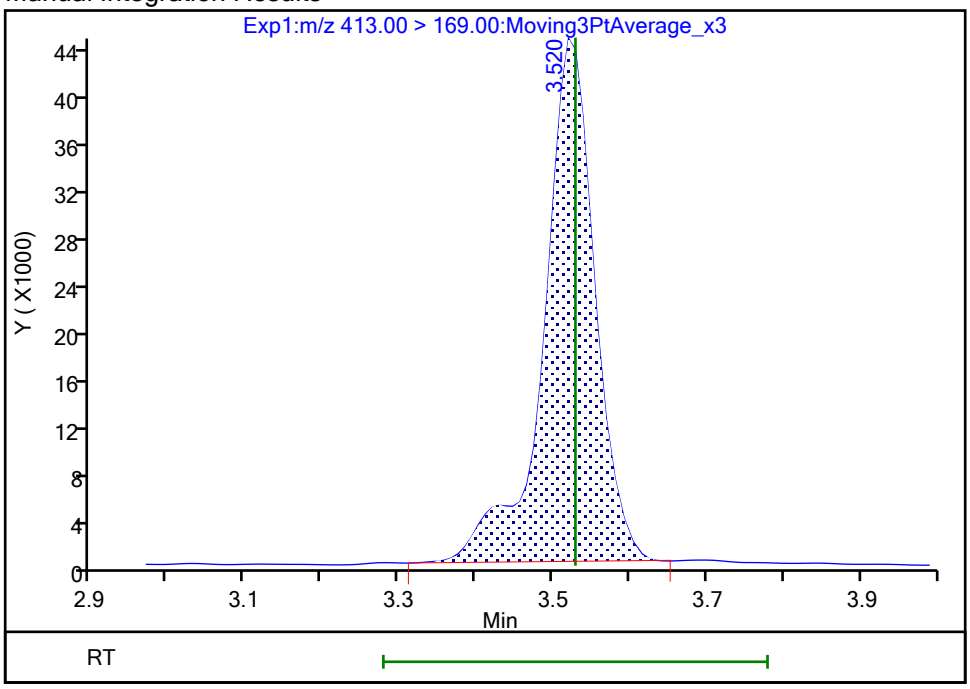
Processing Integration Results

RT: 3.52
Area: 210381
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 206004
Amount: 0.321953
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

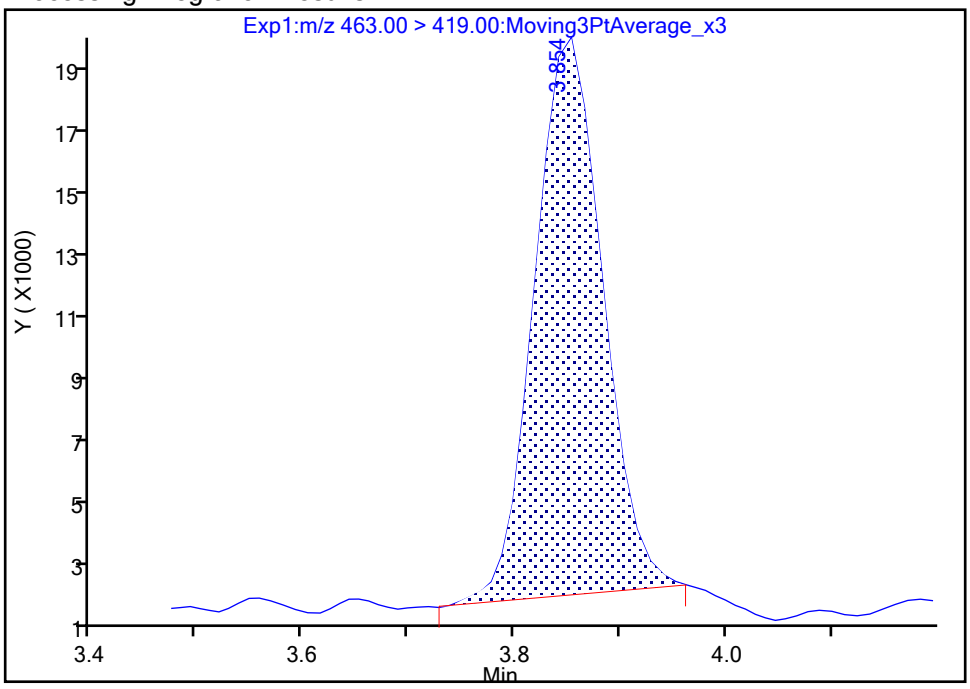
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

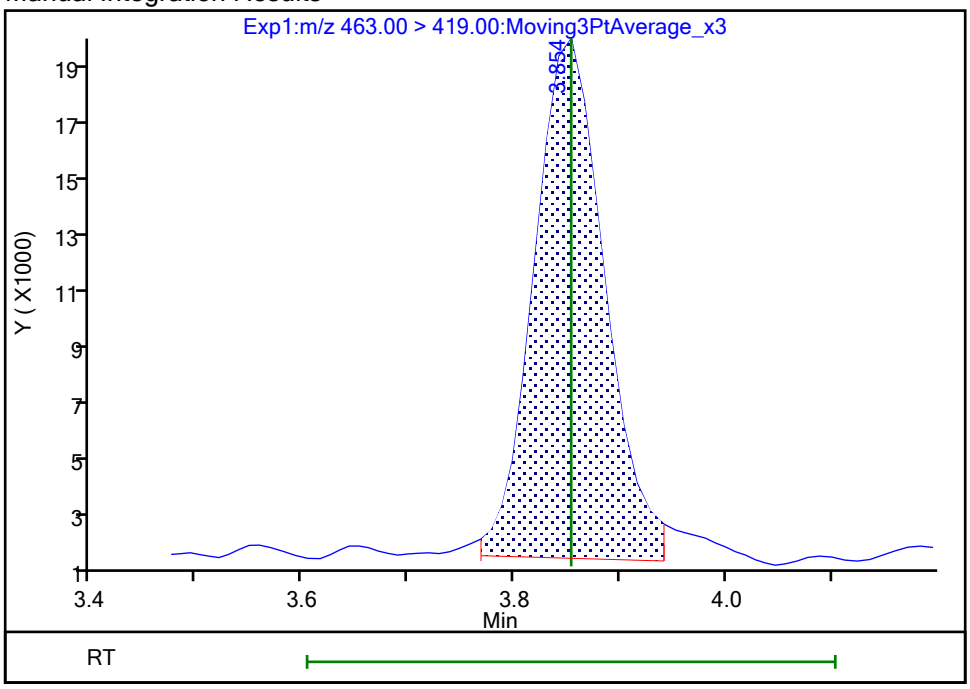
Processing Integration Results

RT: 3.85
Area: 78006
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 83121
Amount: 0.055548
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:10:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

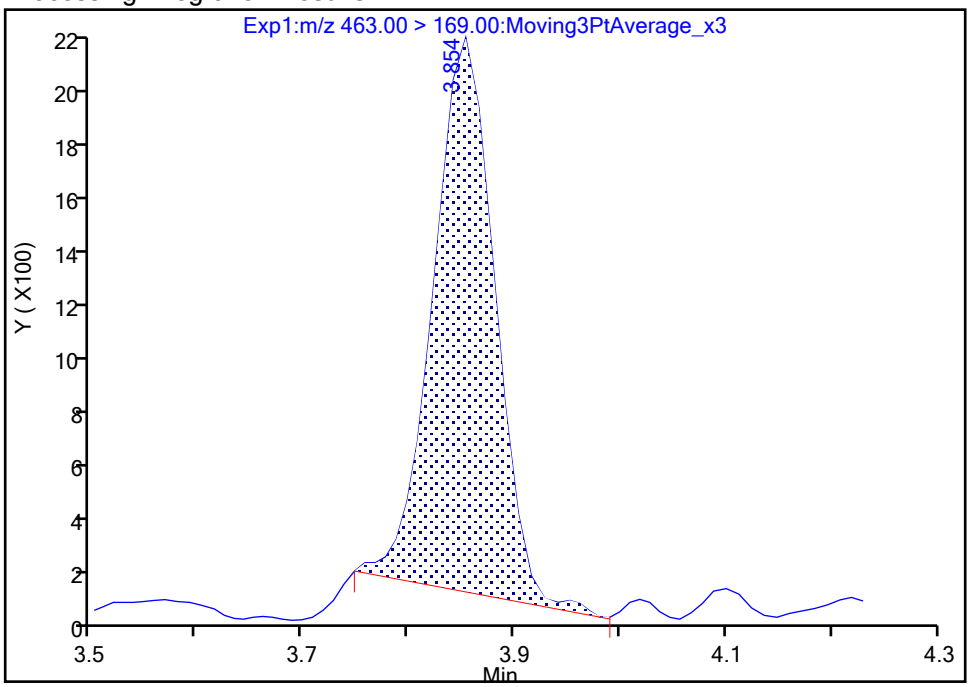
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

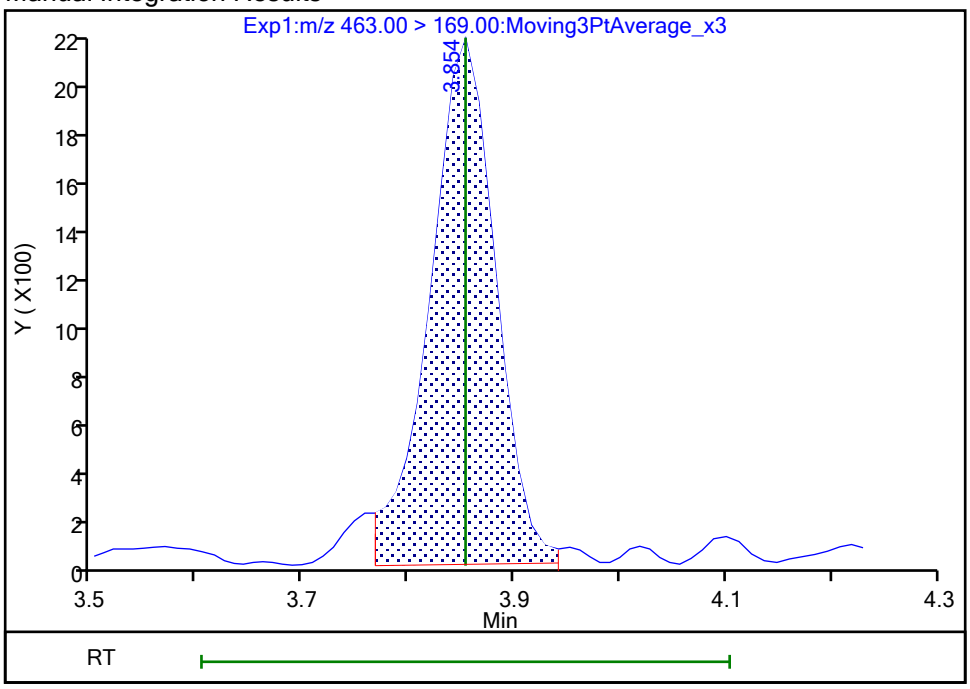
Processing Integration Results

RT: 3.85
Area: 8204
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 9097
Amount: 0.055548
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:10:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

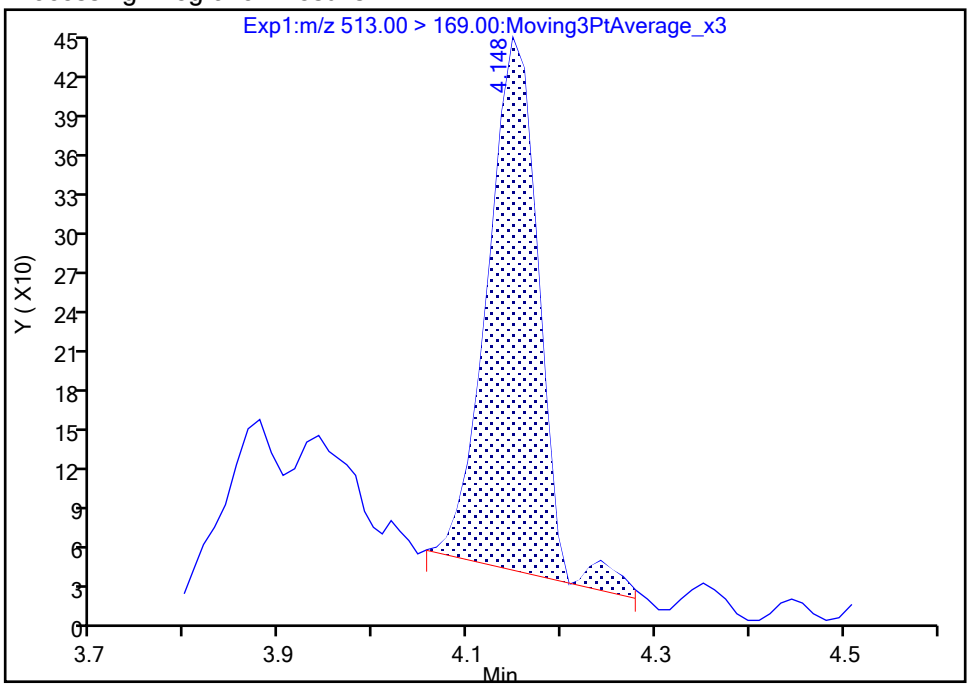
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

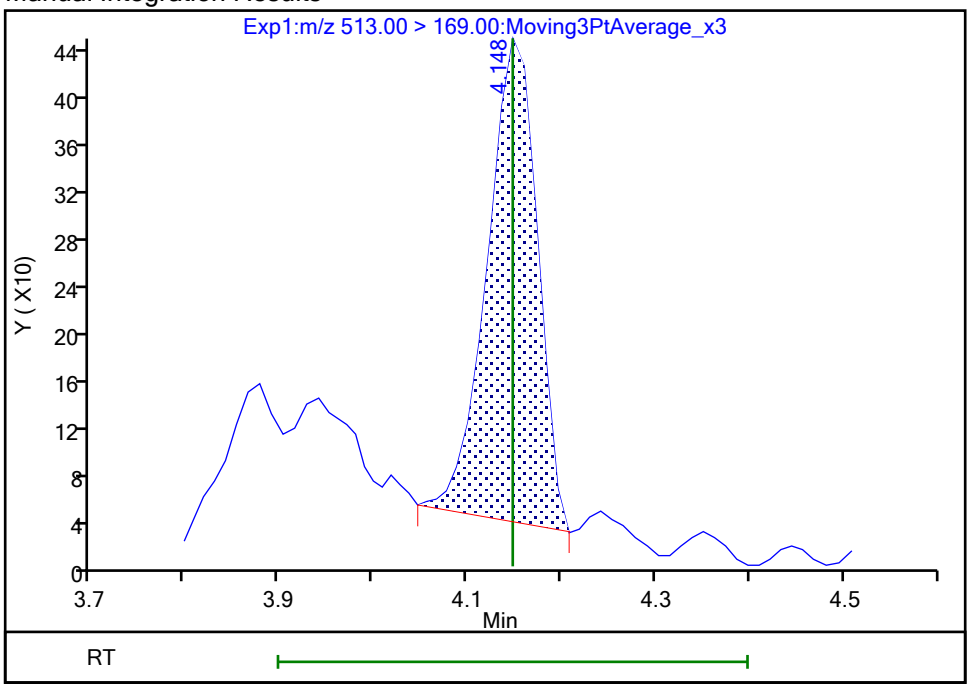
Processing Integration Results

RT: 4.15
Area: 1528
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 1496
Amount: 0.012200
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:11:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

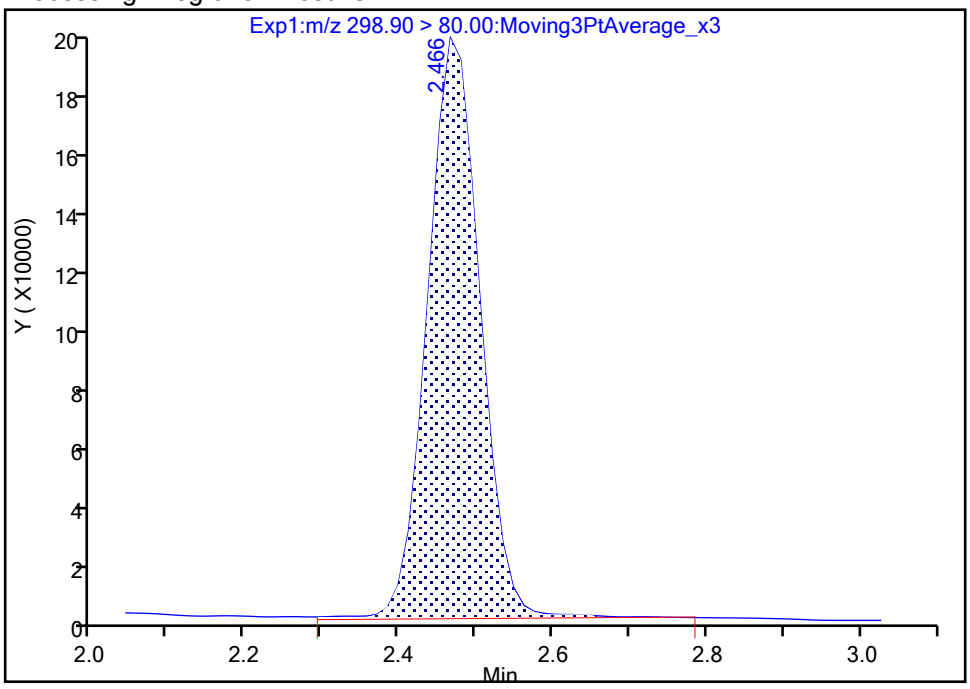
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

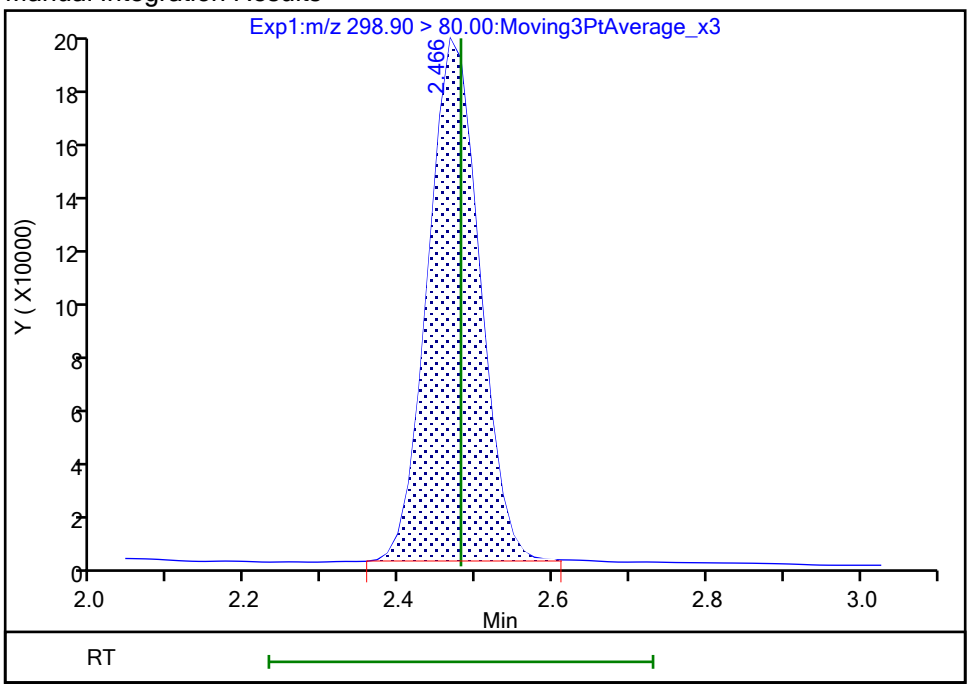
Processing Integration Results

RT: 2.47
Area: 916492
Amount: 0.510453
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 891541
Amount: 0.496556
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

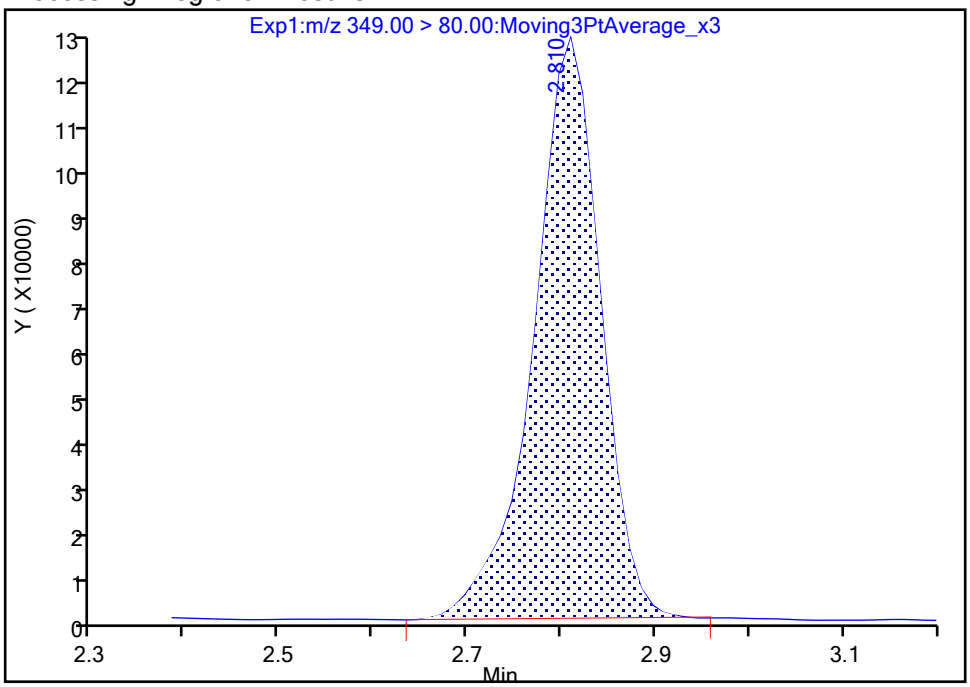
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

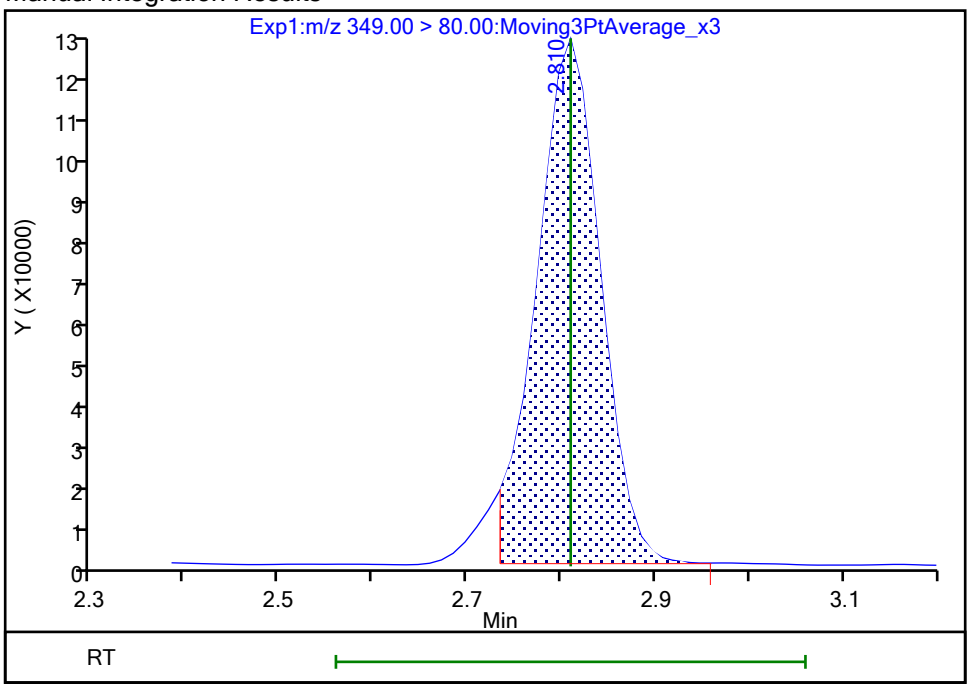
Processing Integration Results

RT: 2.81
Area: 626029
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 595525
Amount: 0.379092
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

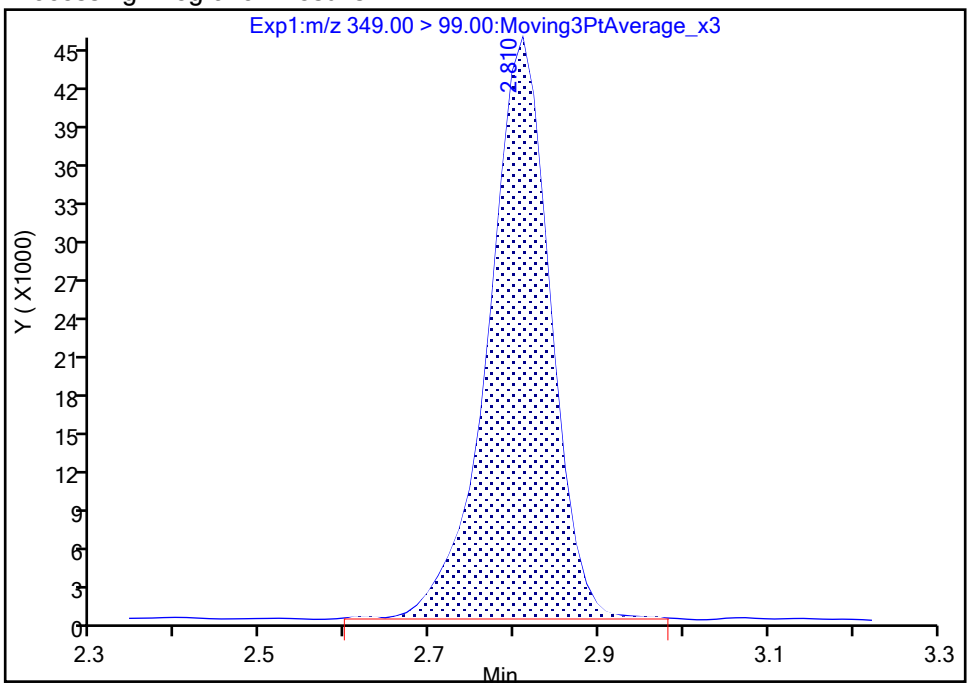
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

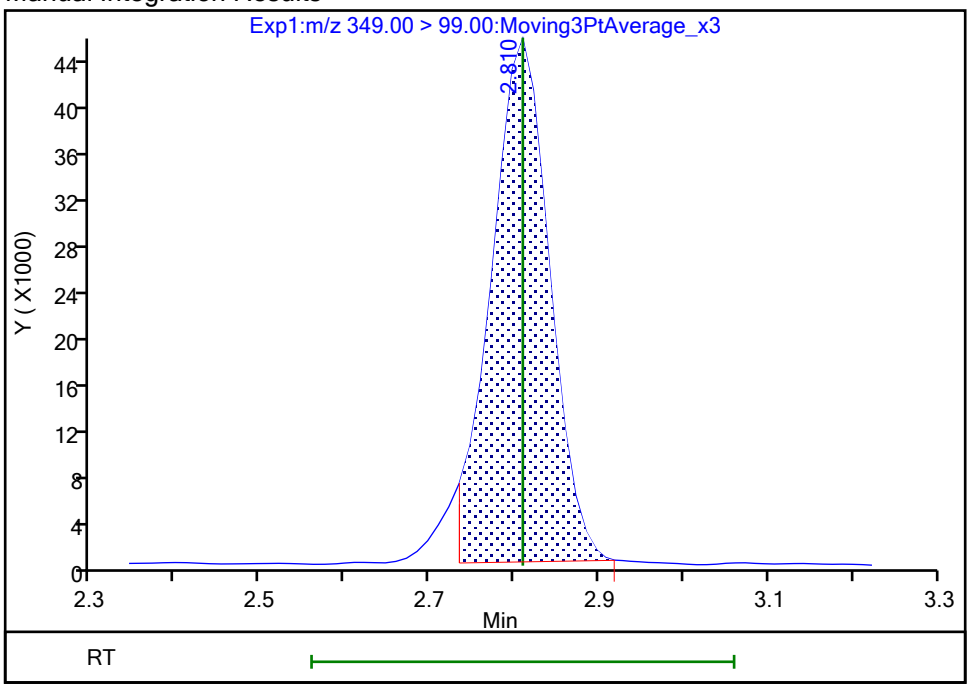
Processing Integration Results

RT: 2.81
Area: 228854
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 215036
Amount: 0.379092
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

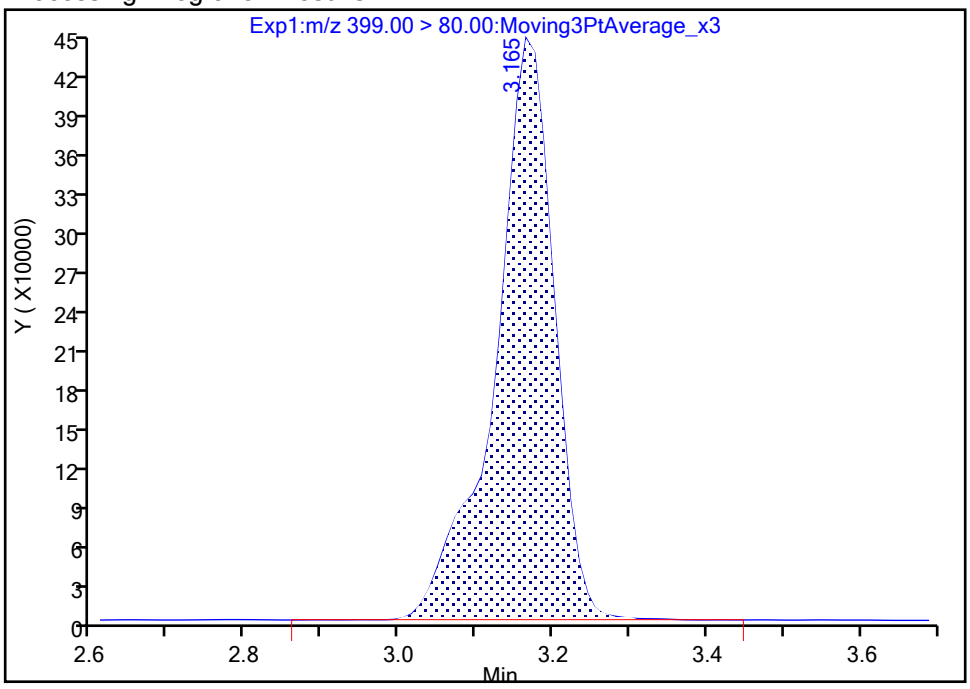
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

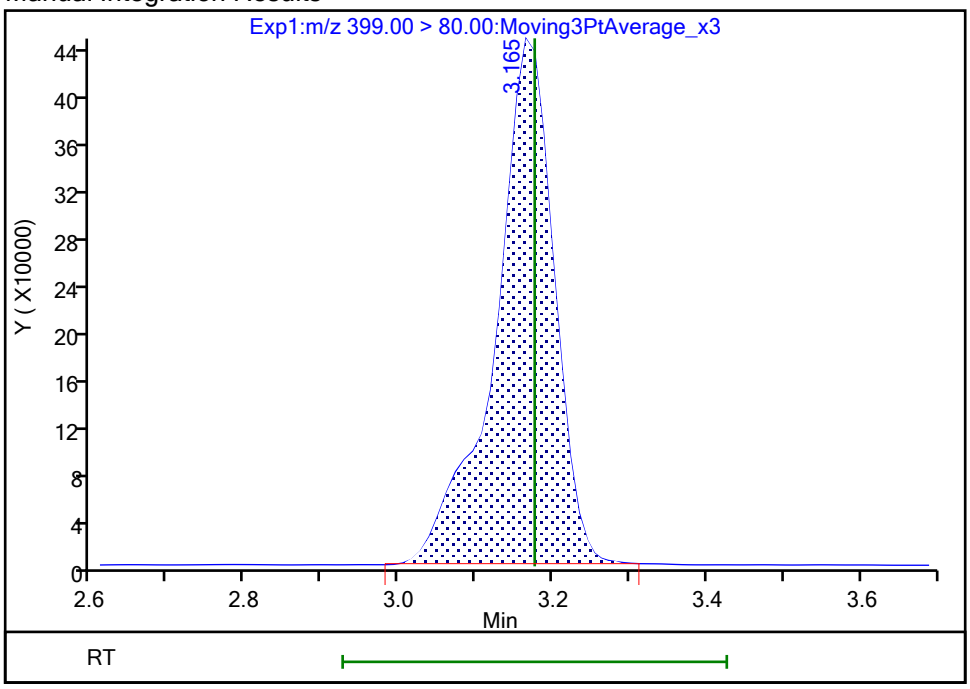
Processing Integration Results

RT: 3.16
Area: 2391340
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2375458
Amount: 1.783858
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

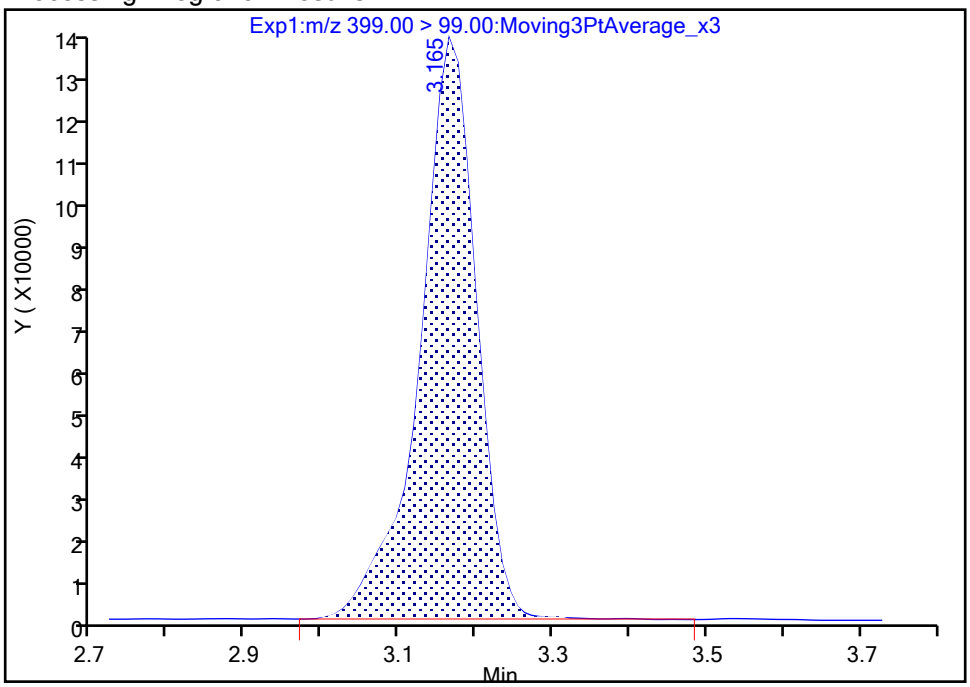
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

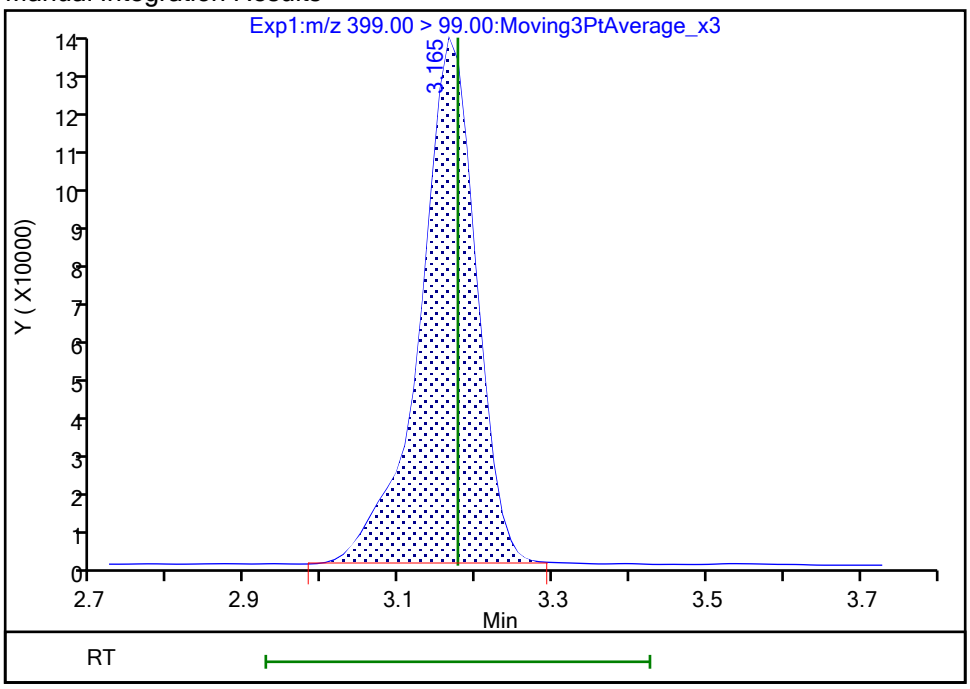
Processing Integration Results

RT: 3.16
Area: 697652
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 694525
Amount: 1.783858
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

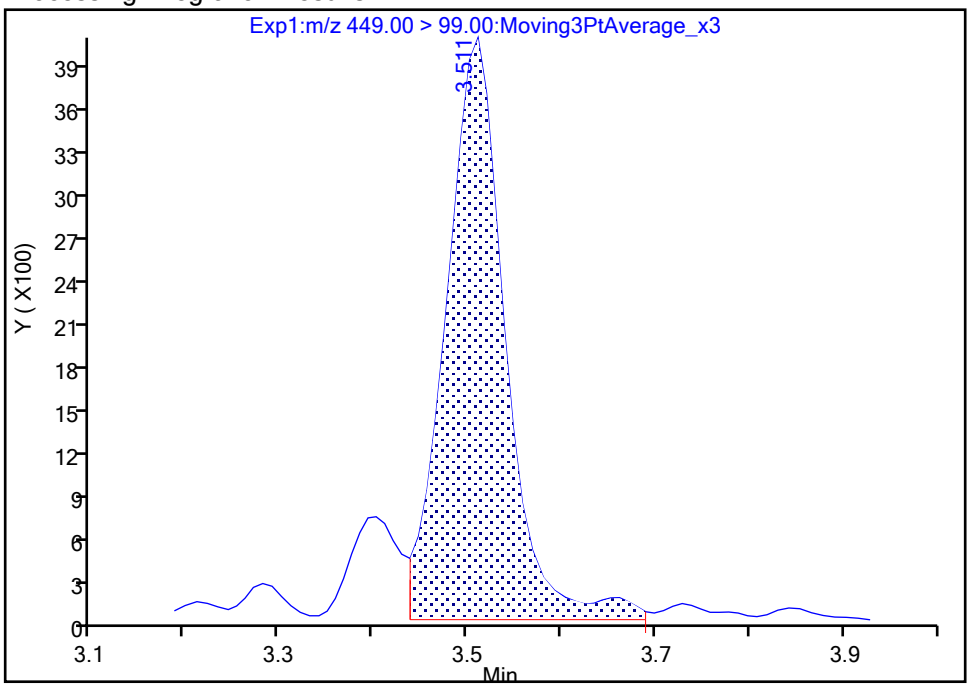
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

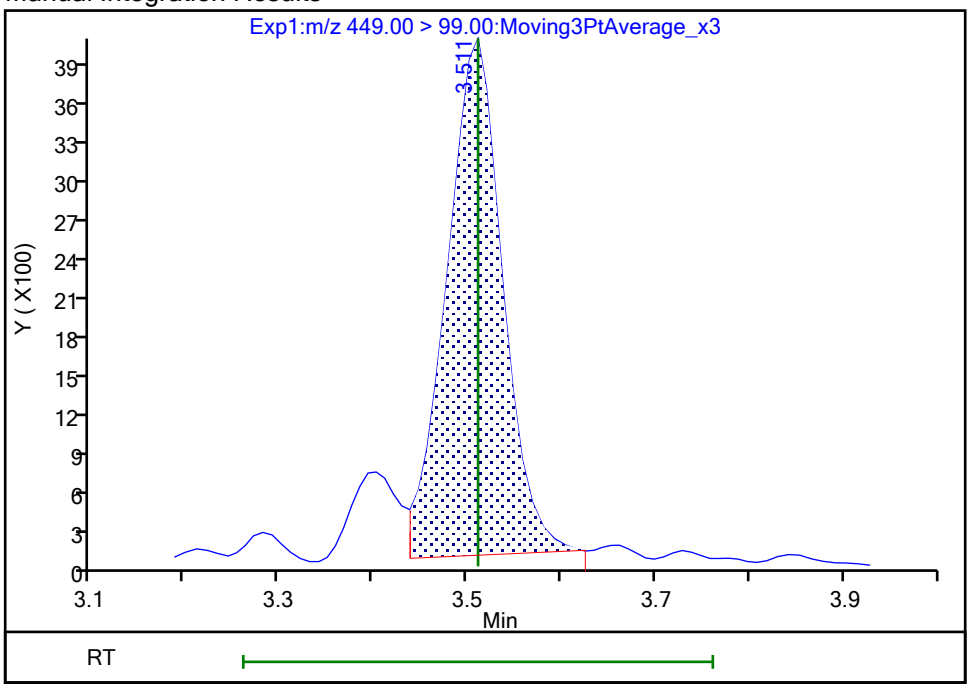
Processing Integration Results

RT: 3.51
Area: 17798
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 16408
Amount: 0.068270
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

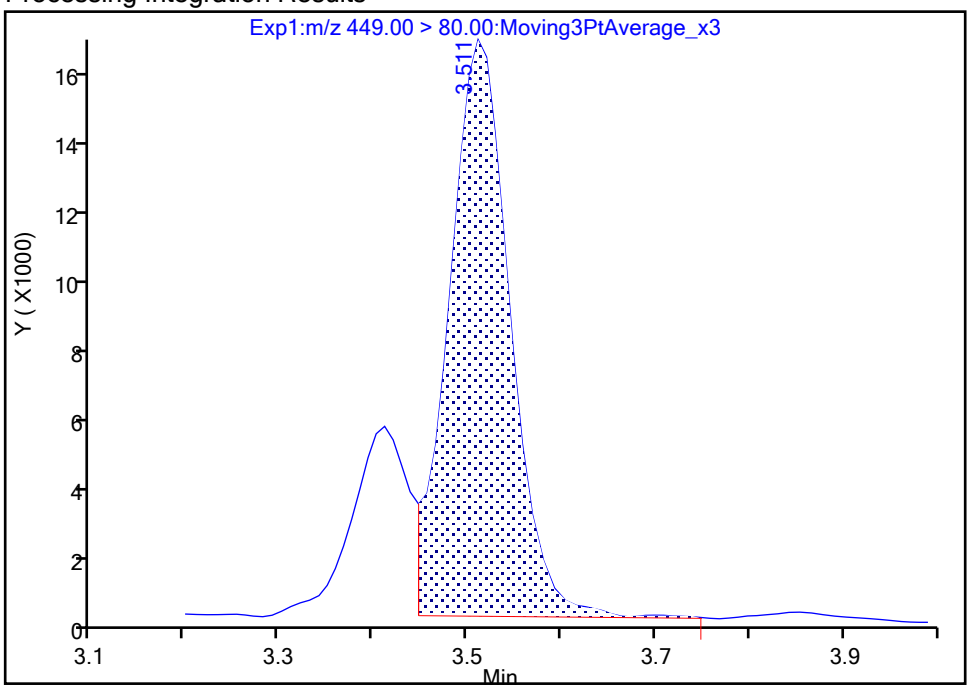
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

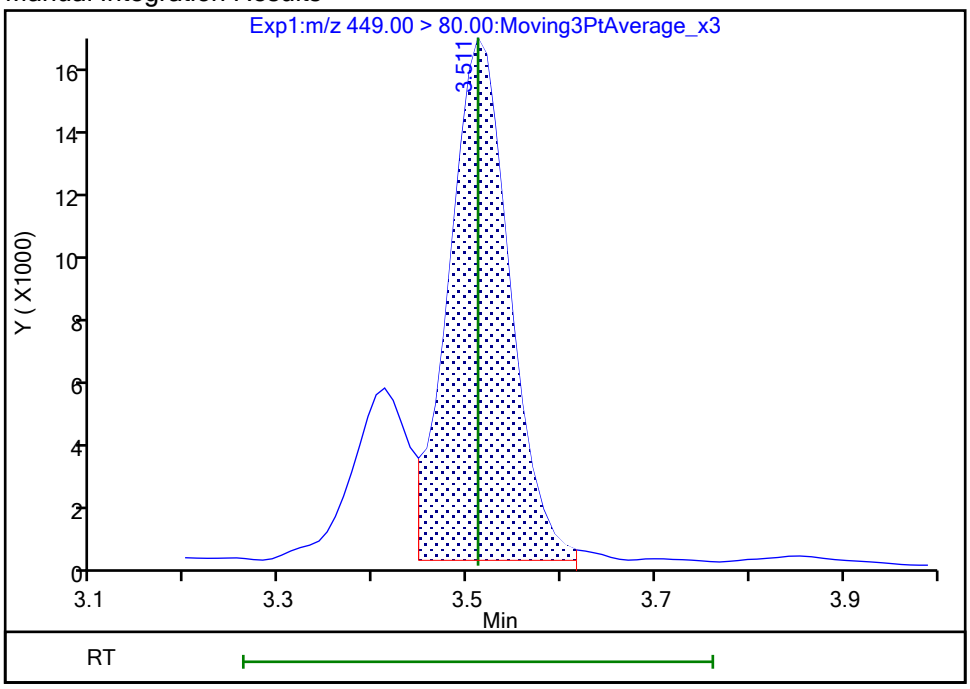
Processing Integration Results

RT: 3.51
Area: 74633
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 73730
Amount: 0.068270
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

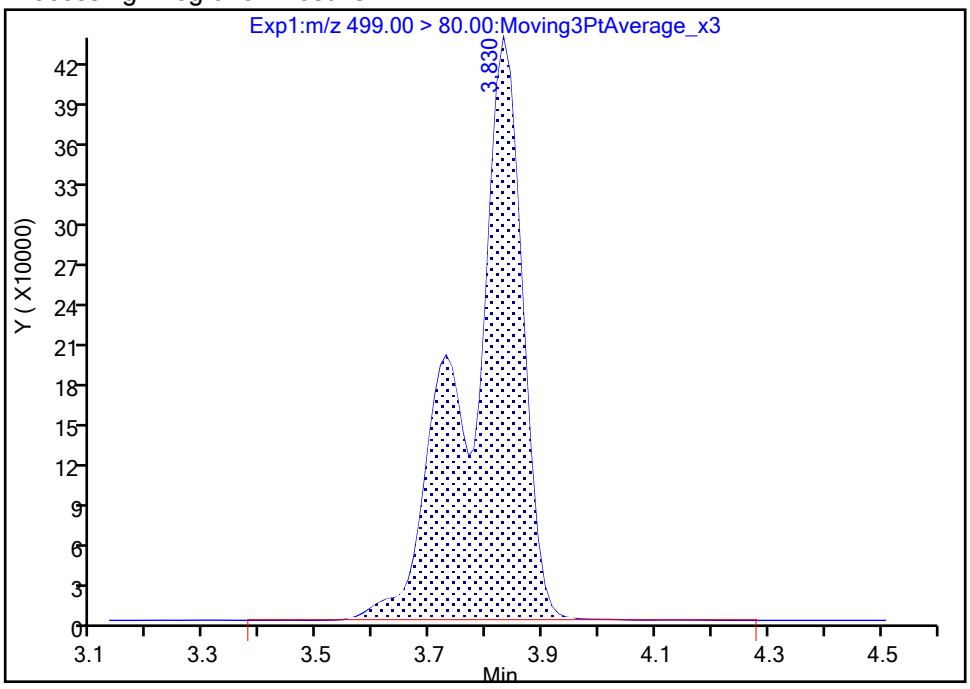
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

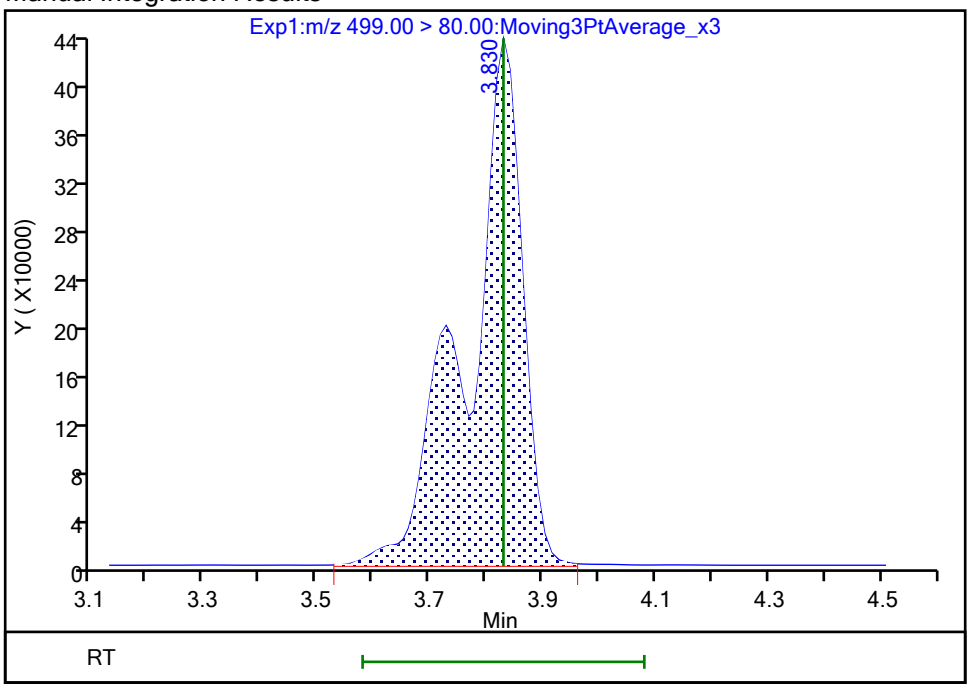
Processing Integration Results

RT: 3.83
Area: 2943368
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 2934608
Amount: 3.366774
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

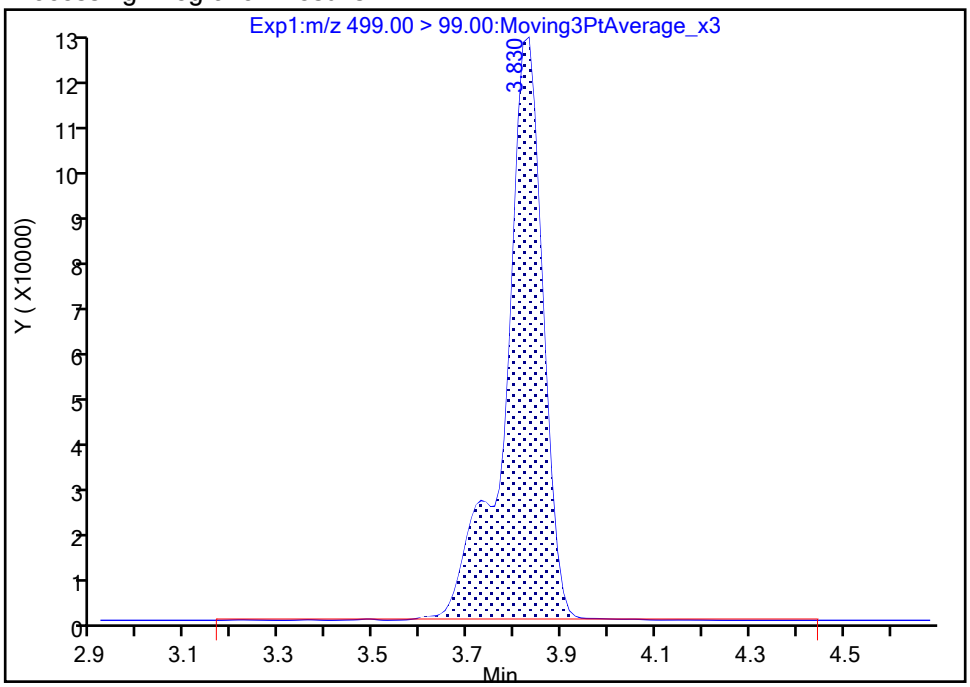
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

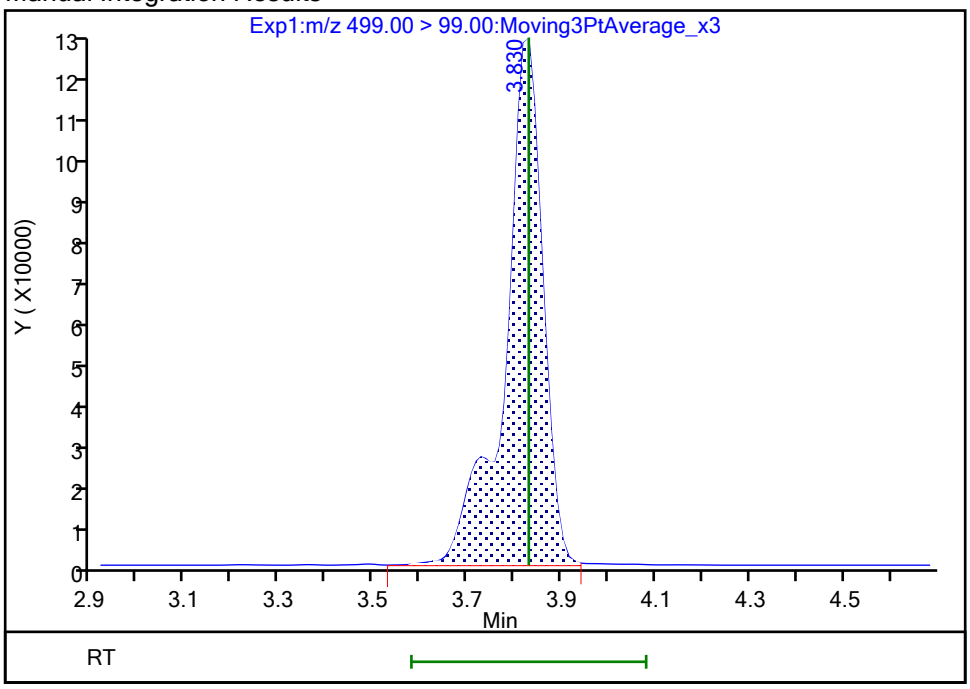
Processing Integration Results

RT: 3.83
Area: 728401
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 722709
Amount: 3.366774
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:10:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

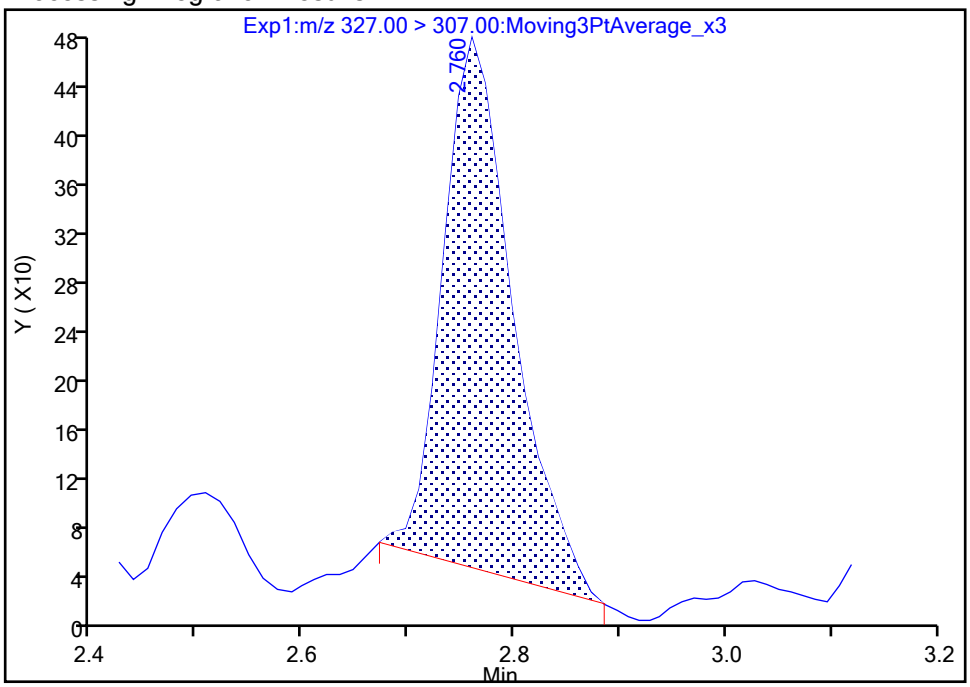
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

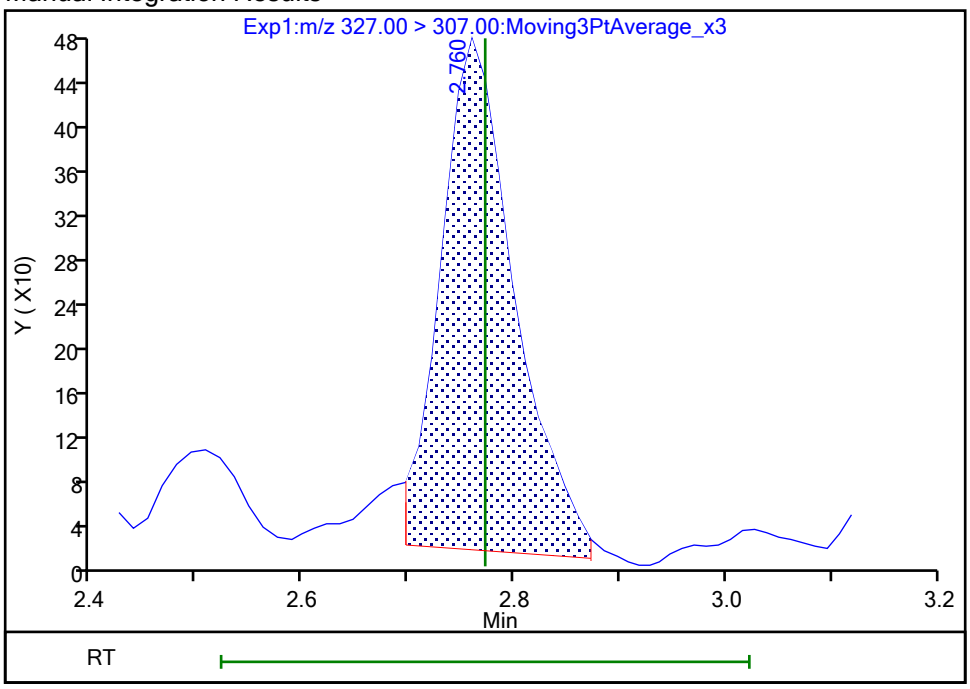
Processing Integration Results

RT: 2.76
Area: 1975
Amount: 0.003289
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 2221
Amount: 0.003698
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:07:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

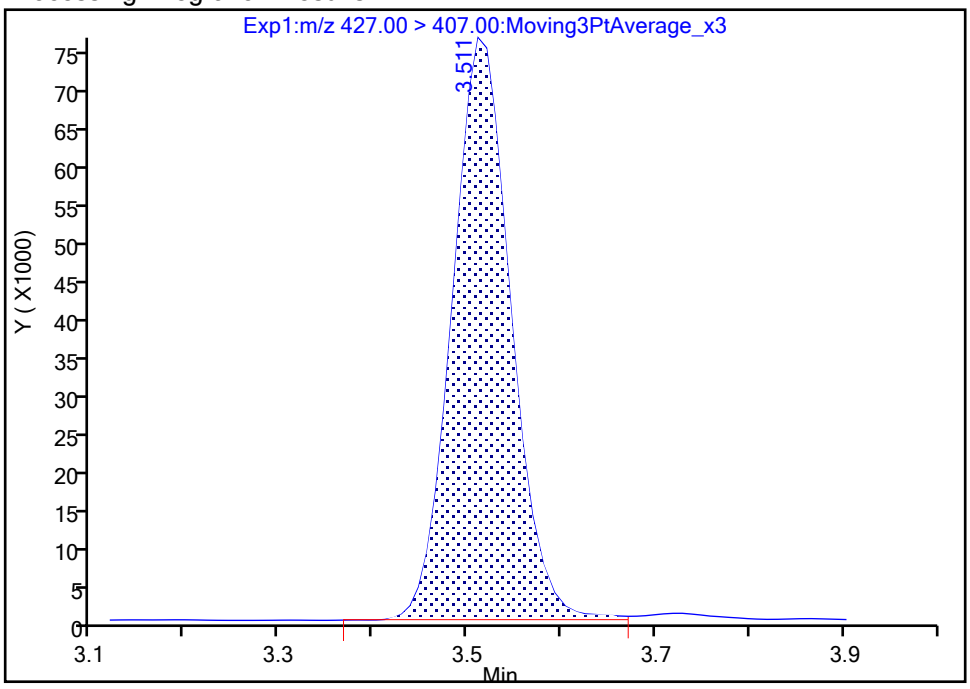
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

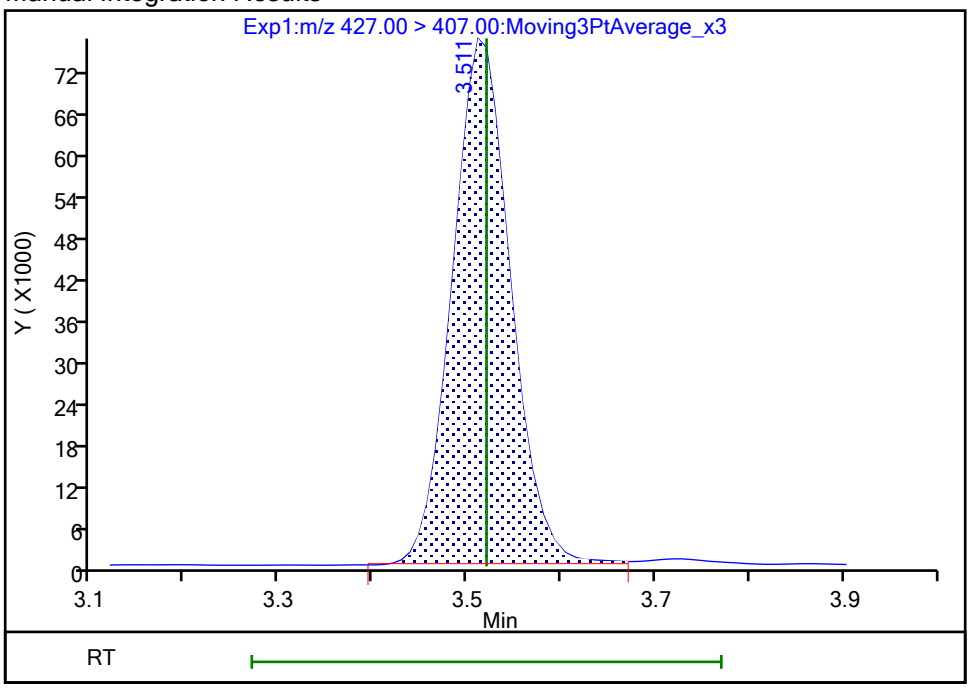
Processing Integration Results

RT: 3.51
Area: 330776
Amount: 0.488454
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 330378
Amount: 0.487866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:09:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

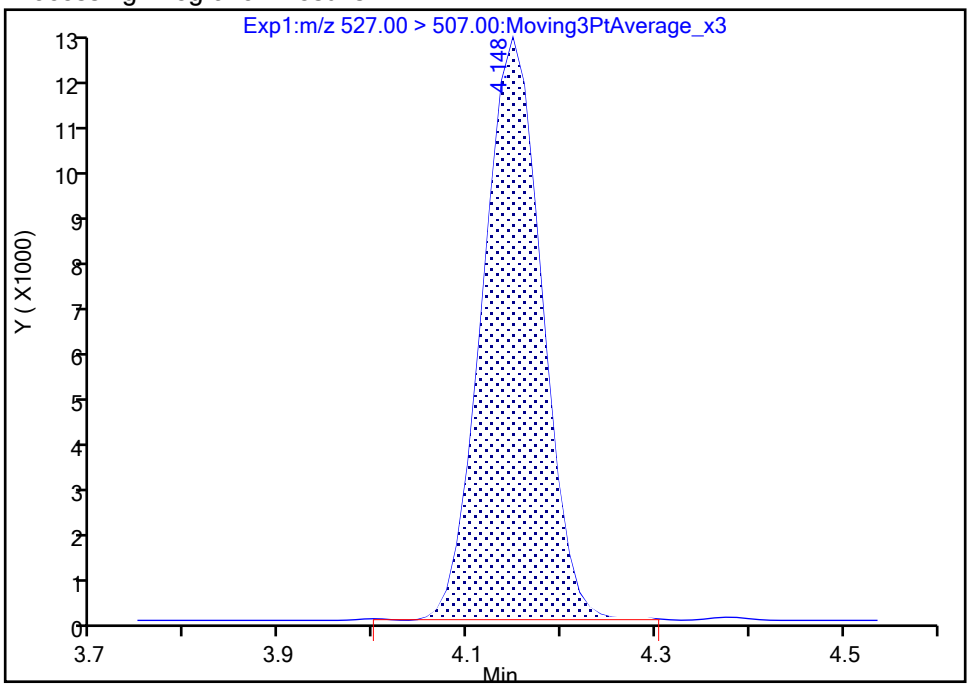
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

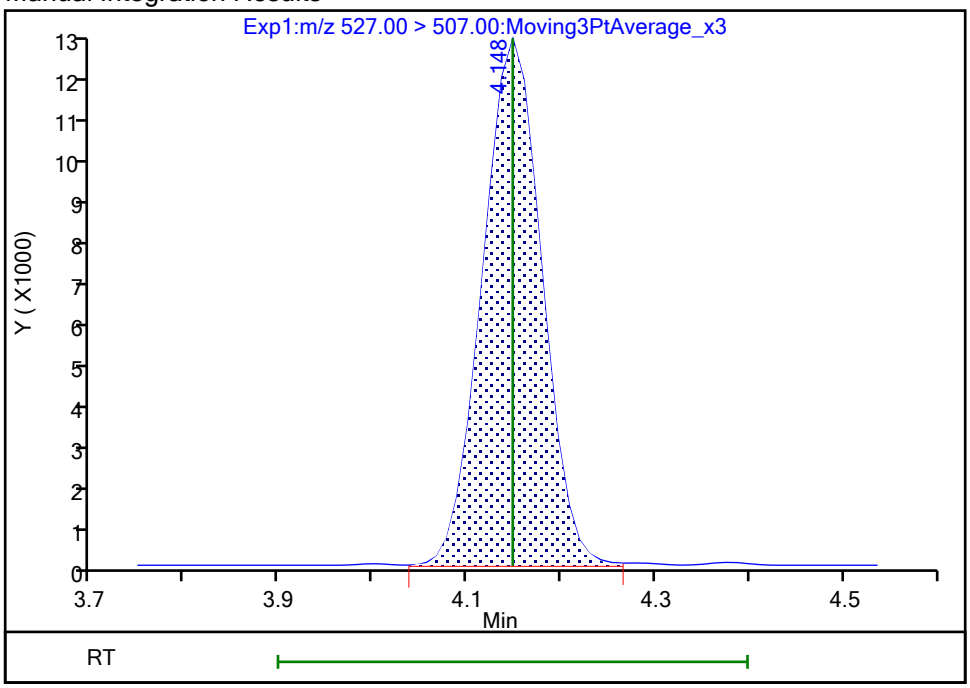
Processing Integration Results

RT: 4.15
Area: 54471
Amount: 0.103280
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 54567
Amount: 0.103462
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:11:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

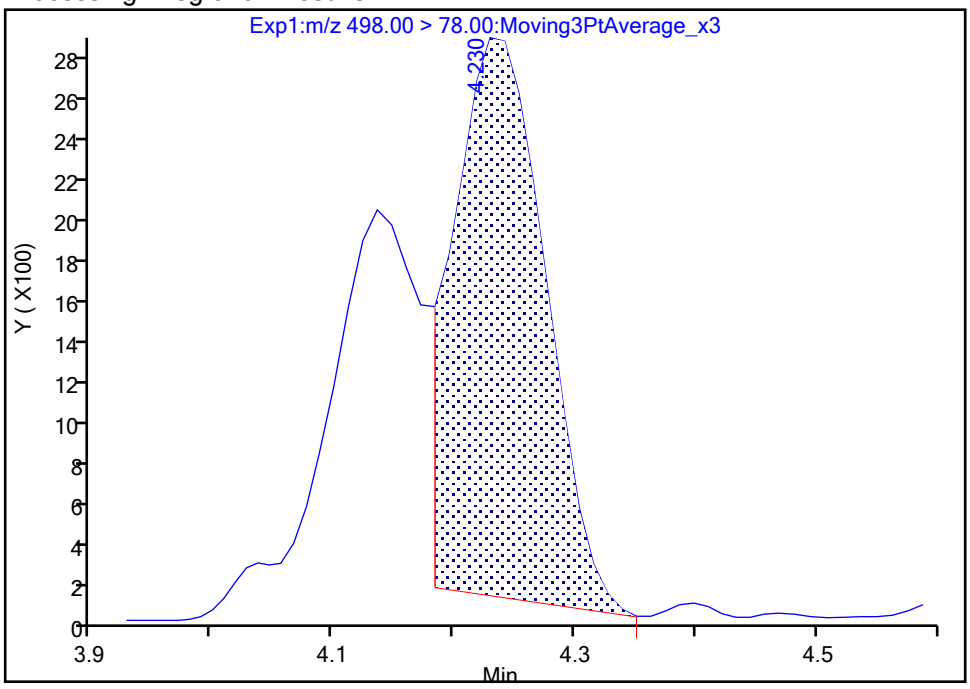
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

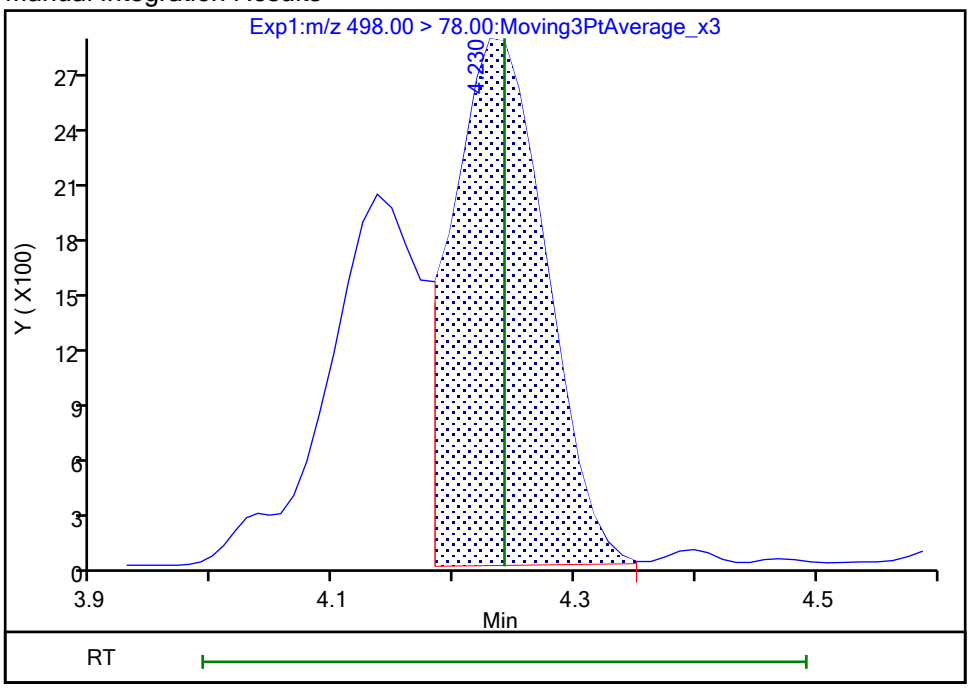
Processing Integration Results

RT: 4.23
Area: 14210
Amount: 0.011337
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 15061
Amount: 0.012016
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:42:20 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

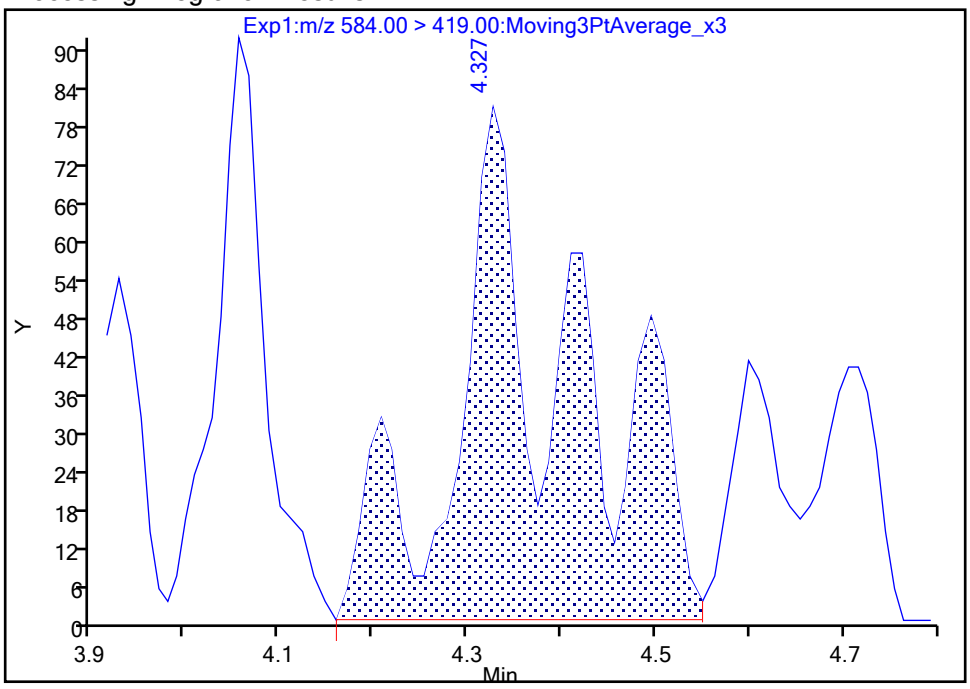
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

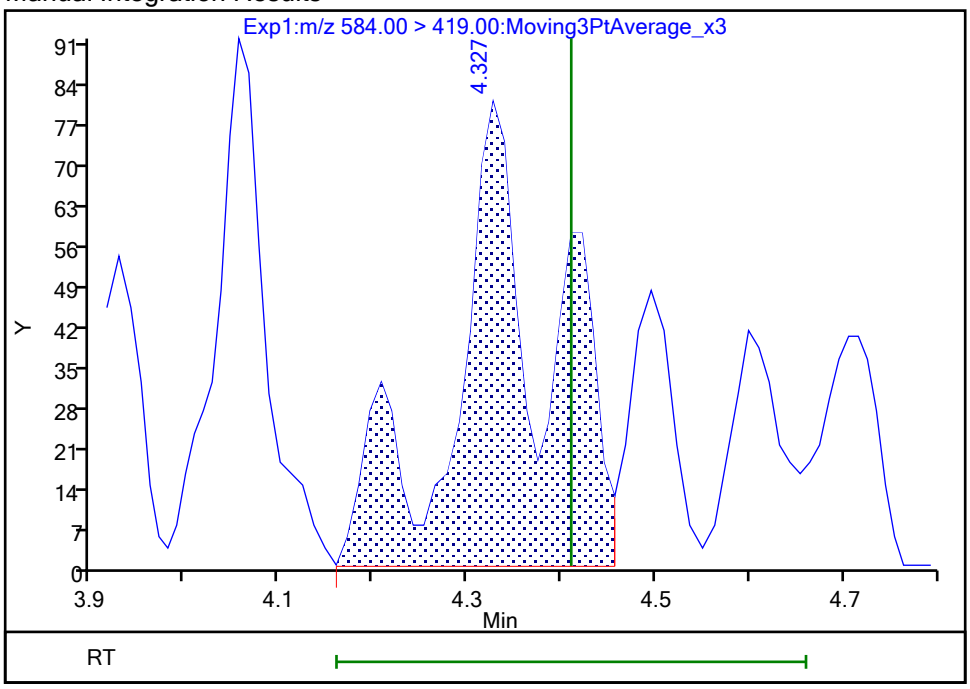
Processing Integration Results

RT: 4.33
Area: 714
Amount: 0.001859
Amount Units: ng/ml



Manual Integration Results

RT: 4.33
Area: 563
Amount: 0.001465
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:11:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

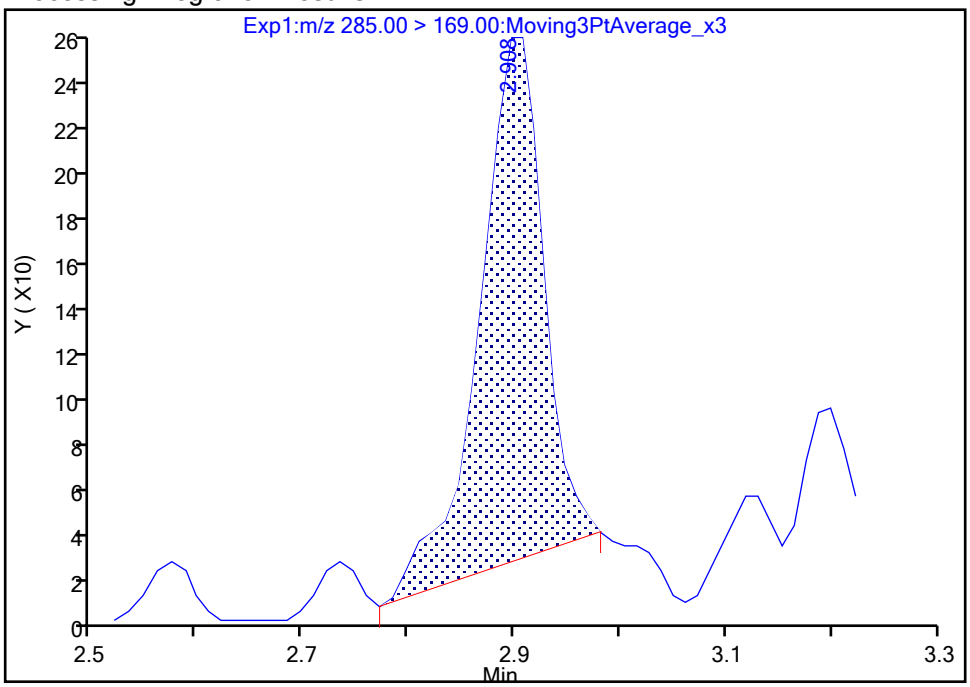
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

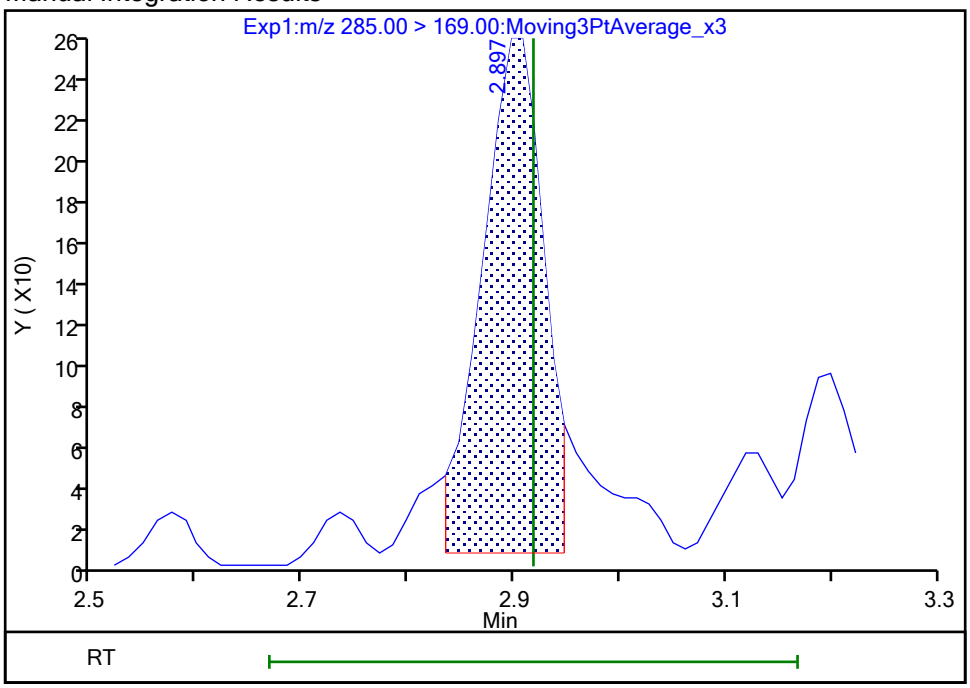
Processing Integration Results

RT: 2.91
Area: 979
Amount: 0.004947
Amount Units: ng/ml



Manual Integration Results

RT: 2.90
Area: 1017
Amount: 0.005139
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:08:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

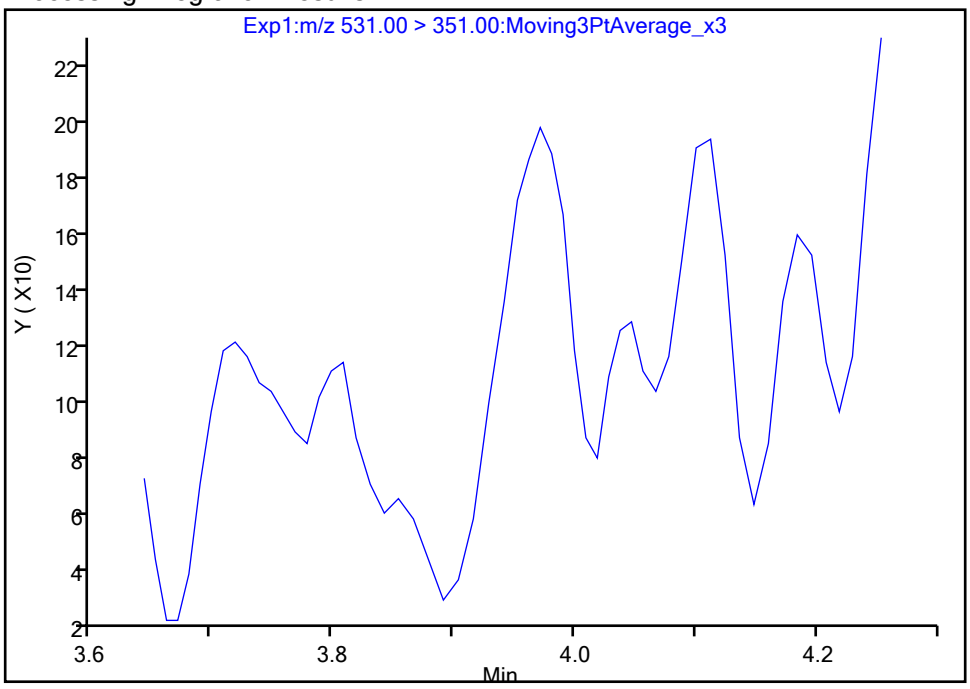
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

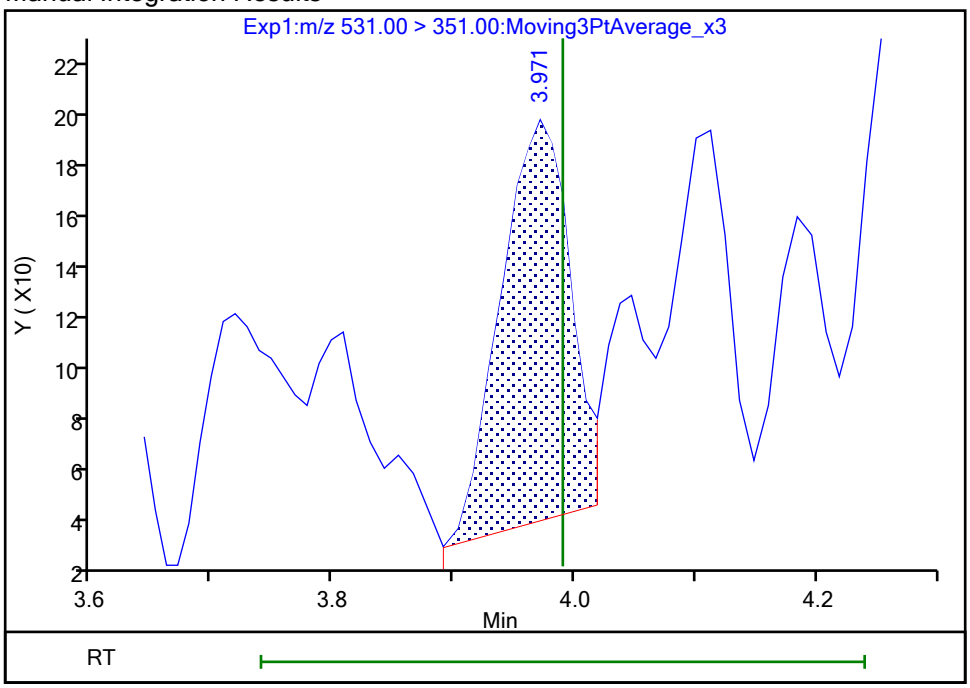
Not Detected
Expected RT: 3.99

Processing Integration Results



Manual Integration Results

RT: 3.97
Area: 610
Amount: 0.000229
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:10:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

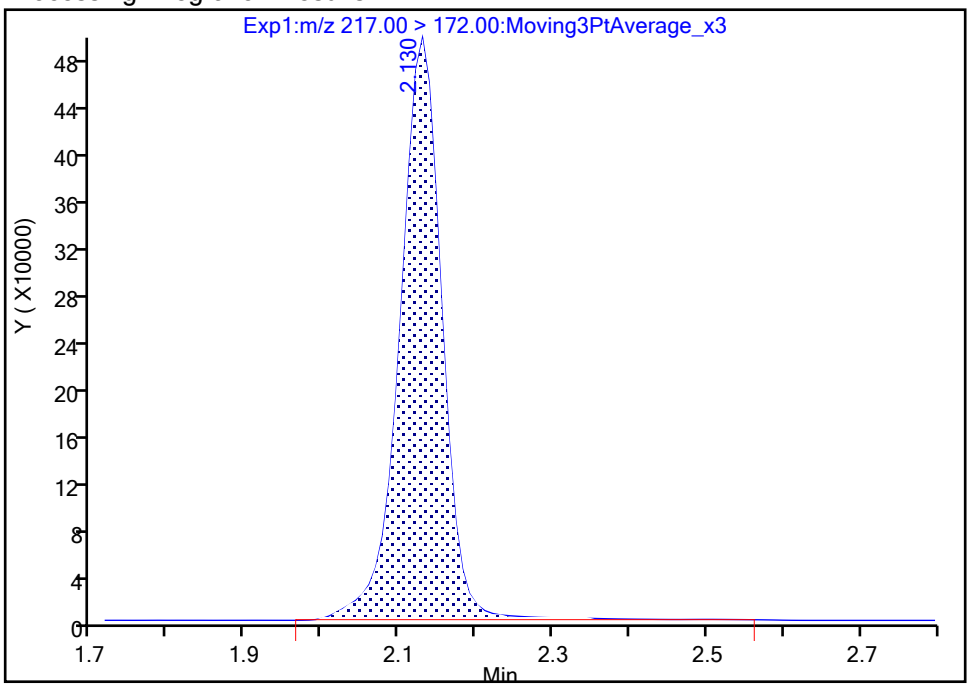
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

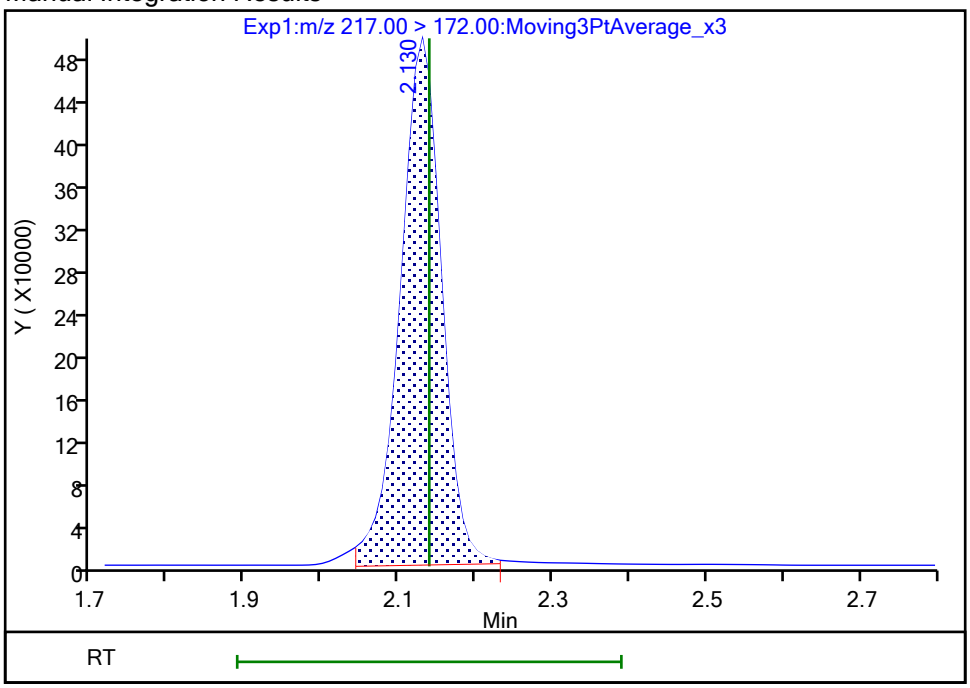
Processing Integration Results

RT: 2.13
Area: 1907022
Amount: 1.282823
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1861188
Amount: 1.255147
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:04:32 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

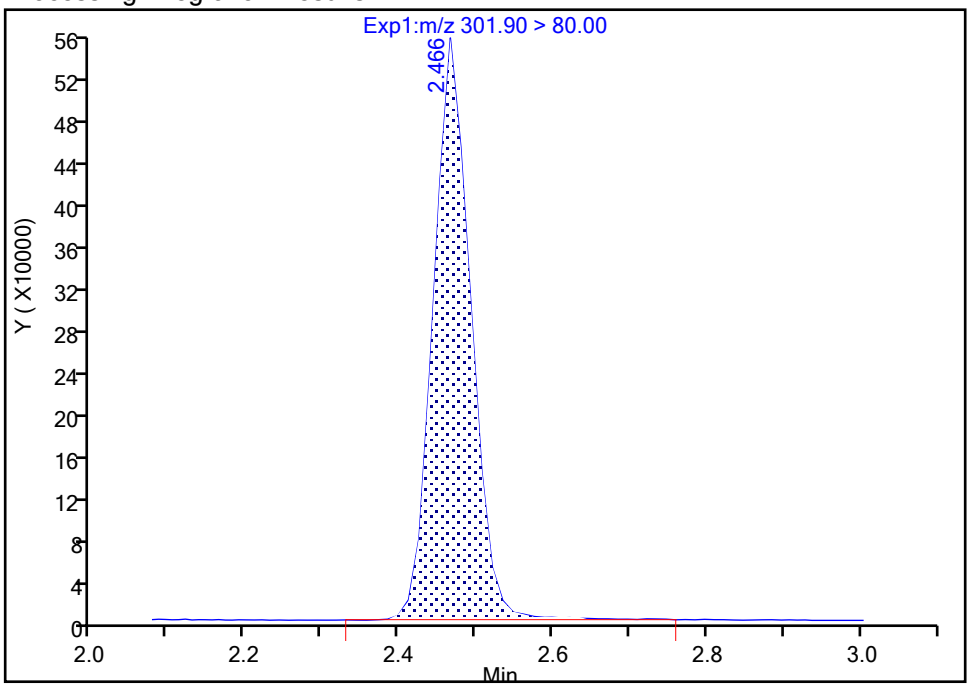
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

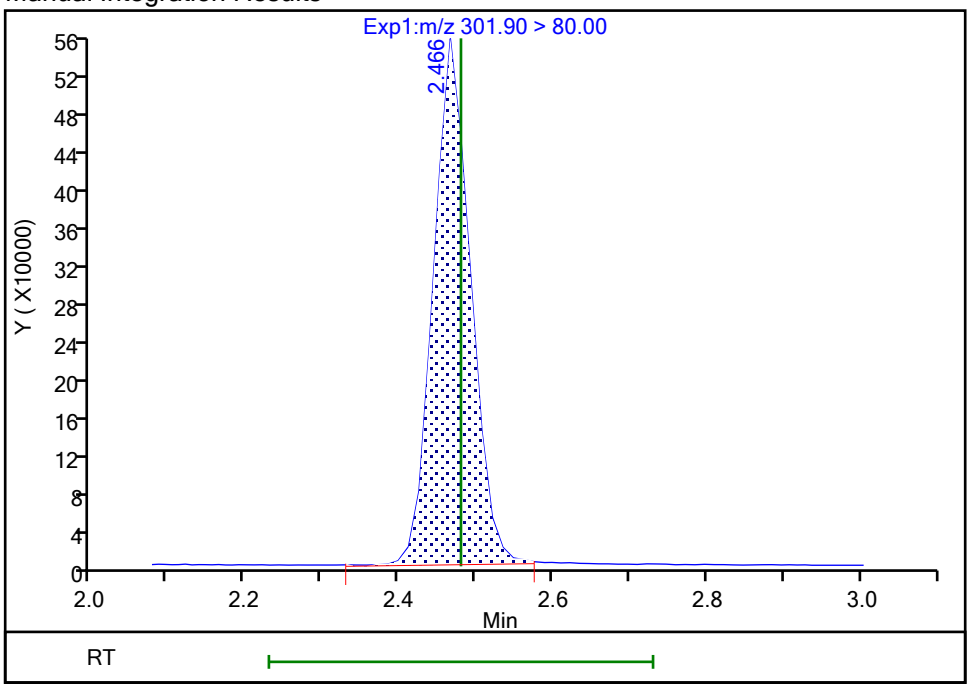
Processing Integration Results

RT: 2.47
Area: 1883484
Amount: 1.206548
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1868743
Amount: 1.200122
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:04:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

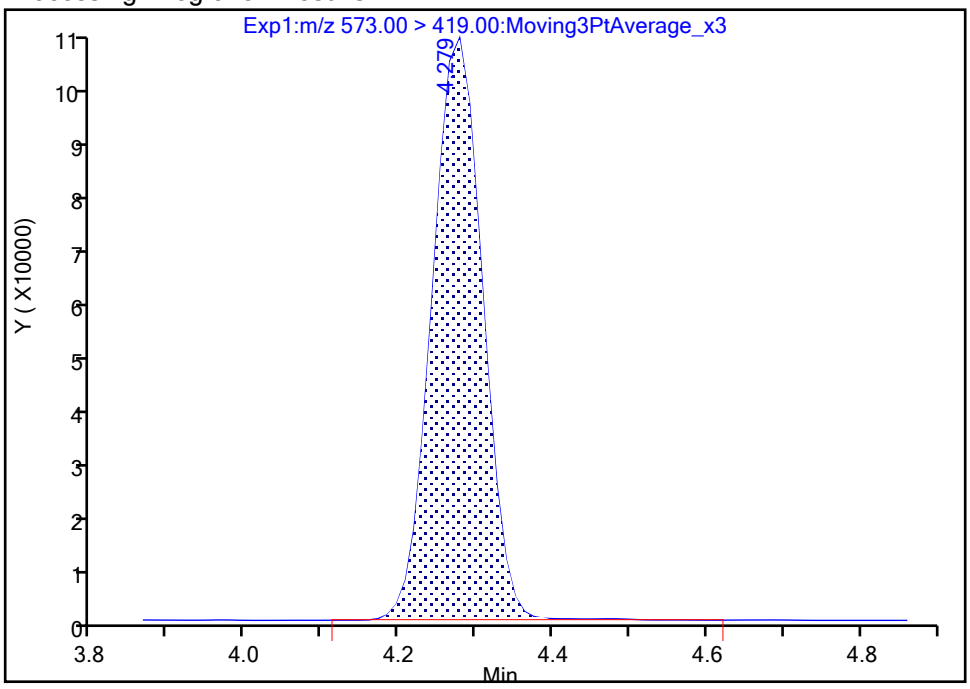
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

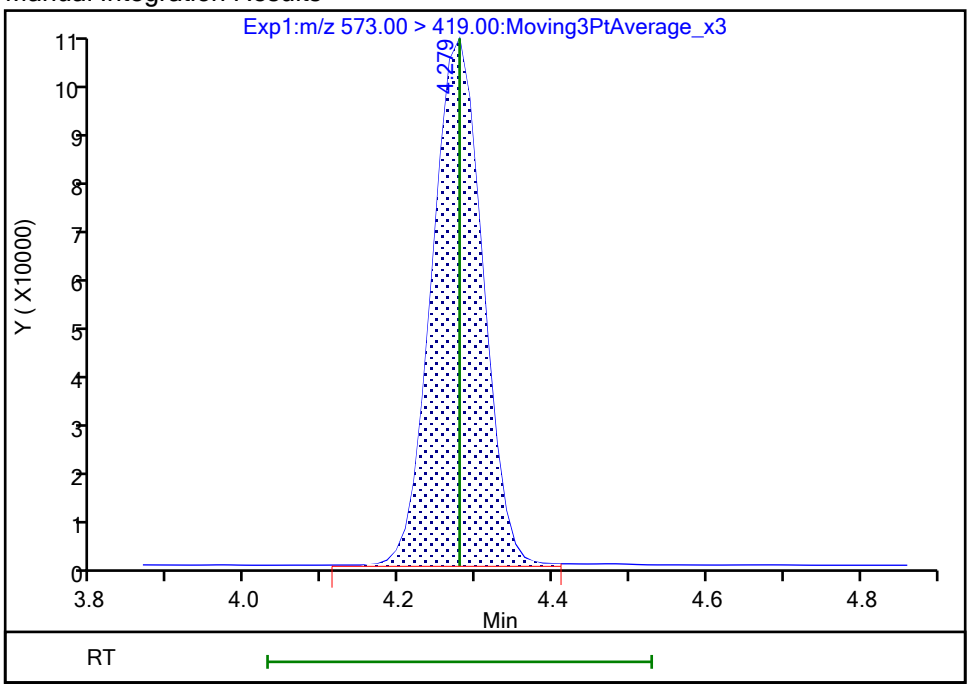
Processing Integration Results

RT: 4.28
Area: 474586
Amount: 1.194603
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 473080
Amount: 1.193813
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:05:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

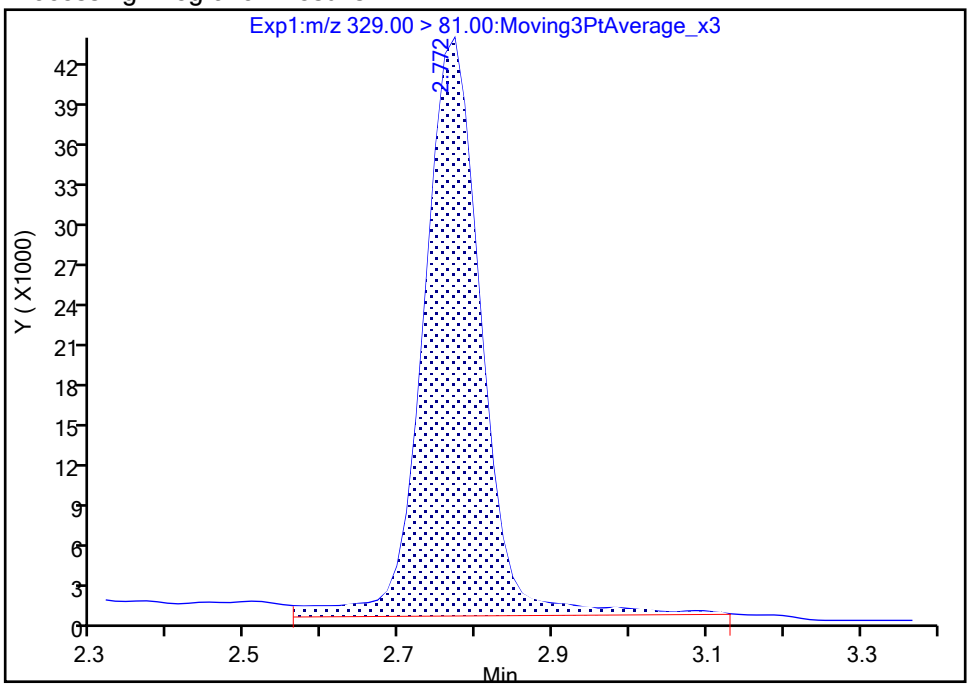
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

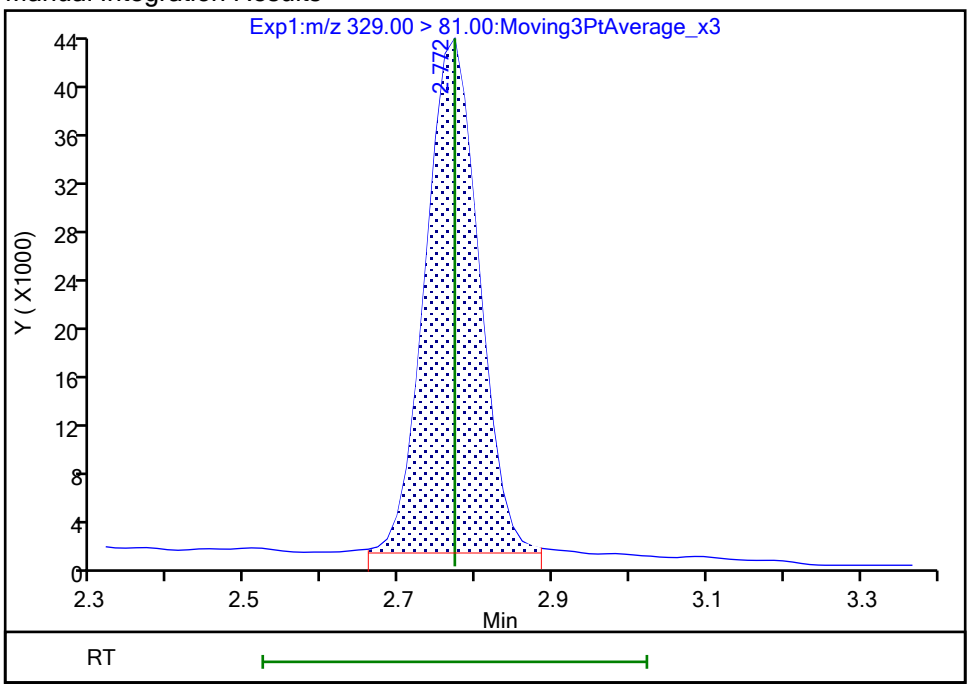
Processing Integration Results

RT: 2.77
Area: 228064
Amount: 1.263300
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 206467
Amount: 1.146551
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:04:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

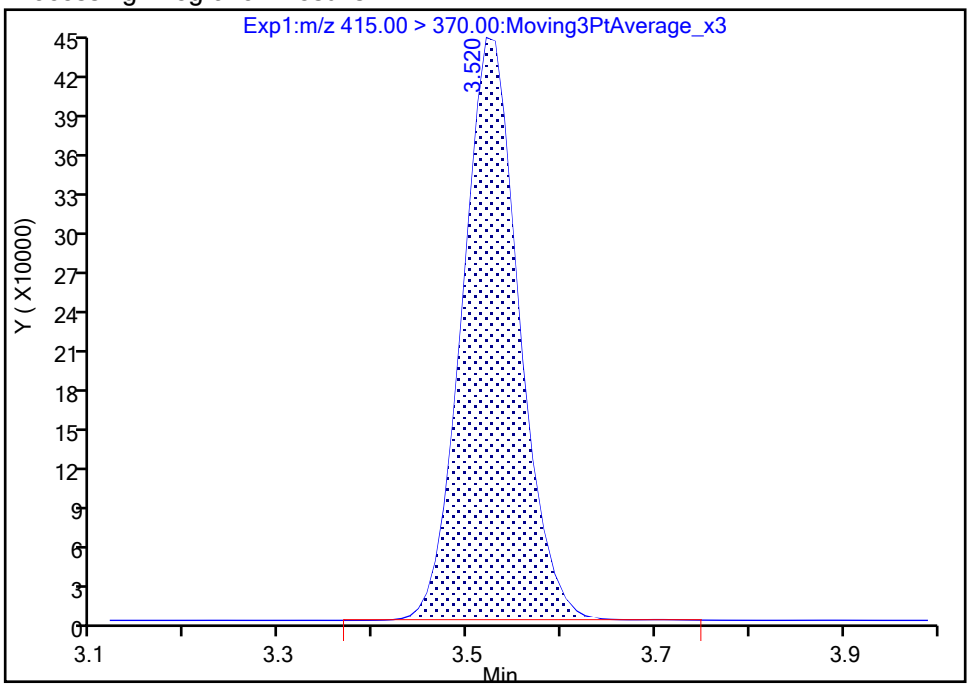
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A23.d				
Injection Date:	25-Oct-2023 20:51:55	Instrument ID:	LC812		
Lims ID:	460-290543-A-4-A	Lab Sample ID:	200-290543-4		
Client ID:	SW1-101723-1210				
Operator ID:	LC812user	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

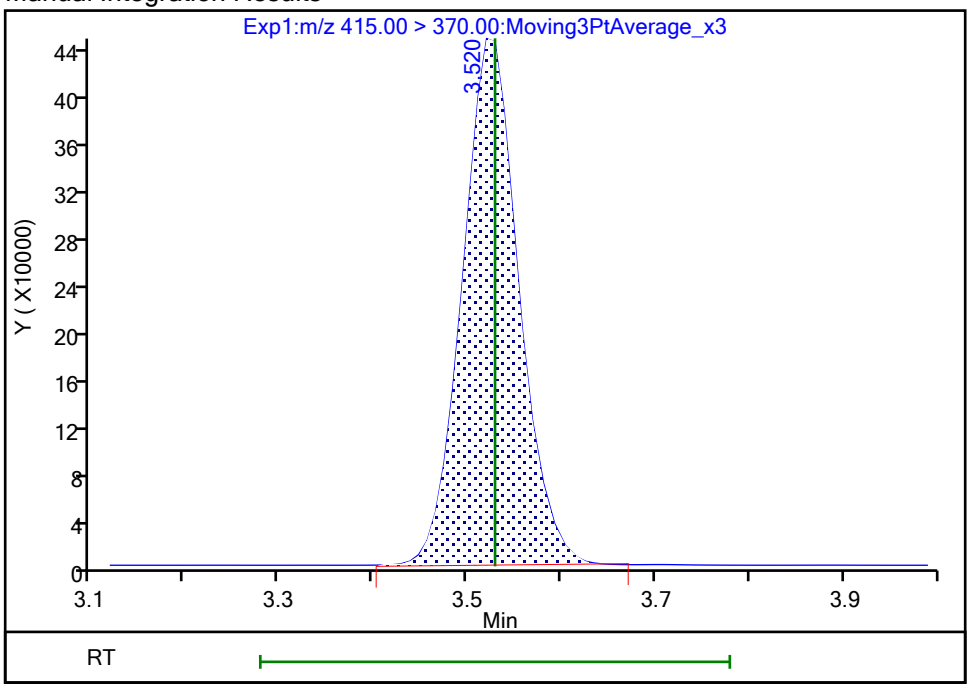
Processing Integration Results

RT: 3.52
Area: 1873841
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1869131
Amount: 1.250000
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:05:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW6-101723-0917-10 | Lab Sample ID: 460-290543-5

Matrix: Water | Lab File ID: PA231025A24.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 09:17

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 286.9(mL) | Date Analyzed: 10/25/2023 21:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	14.2		4.36	1.05
2706-90-3	Perfluoropentanoic acid	12.7		1.74	0.59
307-24-4	Perfluorohexanoic acid	8.30		1.74	0.57
375-85-9	Perfluoroheptanoic acid	7.67		1.74	0.47
335-67-1	Perfluorooctanoic acid	20.1		1.74	0.66
375-95-1	Perfluorononanoic acid	5.59		1.74	0.43
335-76-2	Perfluorodecanoic acid	0.51	J	1.74	0.40
2058-94-8	Perfluoroundecanoic acid	1.74	U	1.74	0.48
307-55-1	Perfluorododecanoic acid	1.74	U	1.74	0.43
72629-94-8	Perfluorotridecanoic acid	1.74	U	1.74	0.42
376-06-7	Perfluorotetradecanoic acid	1.74	U	1.74	0.56
375-73-5	Perfluorobutanesulfonic acid	1.72	J	1.74	0.54
2706-91-4	Perfluoropentanesulfonic acid	1.82		1.74	0.44
355-46-4	Perfluorohexanesulfonic acid	8.90		1.74	0.48
375-92-8	Perfluoroheptanesulfonic acid	3.12		1.74	0.36
1763-23-1	Perfluorooctanesulfonic acid	694		1.74	0.74
68259-12-1	Perfluorononanesulfonic acid	1.74	U	1.74	0.35
335-77-3	Perfluorodecanesulfonic acid	1.74	U	1.74	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.36	U	4.36	1.13
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.74	U	1.74	0.67
754-91-6	Perfluorooctanesulfonamide	1.74	U	1.74	0.80
2355-31-9	NMeFOSAA	4.36	U	4.36	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.36	U	4.36	1.39
13252-13-6	HFPODA	3.49	U	3.49	0.96
919005-14-4	DONA	1.74	U	1.74	0.37
756426-58-1	9Cl-PF3ONS	1.74	U	1.74	0.28
763051-92-9	11Cl-PF3OUdS	1.74	U	1.74	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW6-101723-0917-10 Lab Sample ID: 460-290543-5

Matrix: Water Lab File ID: PA231025A24.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 09:17

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 286.9(mL) Date Analyzed: 10/25/2023 21:00

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	64		50-150
STL01893	13C5 PFPeA	86		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	84		50-150
STL02337	13C3 PFBS	95		50-150
STL01056	13C8 FOSA	82		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	103		50-150
STL02395	M2-4:2 FTS	111		50-150
STL02279	M2-6:2 FTS	119		50-150
STL02280	M2-8:2 FTS	107		50-150
STL02255	13C3 HFPO-DA	83		50-150
STL00994	18O2 PFHxS	98		50-150
STL00993	13C2 PFHxA	86		50-150
STL00991	13C4 PFOS	98		50-150
STL00998	13C2 PFDoA	99		50-150
STL00995	13C5 PFNA	97		50-150
STL00996	13C2 PFDA	97		50-150
STL00990	13C4 PFOA	92		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d
Lims ID: 460-290543-B-5-A
Client ID: MW6-101723-0917-10
Sample Type: Client
Inject. Date: 25-Oct-2023 21:00:05 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-B-5-A
Misc. Info.: 200-0057556-024 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:19:41
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.139	-0.017	0.603	1117927	0.8060		64.5	636	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.139	-0.017	1.000	363521	0.4086			6.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.453	-0.014	0.693	1153146	1.07		85.7	188	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	363080	0.3647			0.5	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.480	-0.027	0.697	1608599	1.10		95.0	10854	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.006	76070	0.0492	Target=2.06		0.6	M
298.90 > 99.00	2.466	2.480	-0.014	1.006	46554		1.63(1.03-3.09)		1.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.757	2.772	-0.015	1.000	1503	0.002375			1.0	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.772	-0.015	0.783	217533	1.29		111	8.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.810	-0.015	0.794	1177910	1.08		86.1	1460	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.795	2.810	-0.015	1.000	246995	0.2382	Target=14.12		1.3	M
313.00 > 119.00	2.807	2.810	-0.003	1.004	17975		13.74(7.06-21.17)		3.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.807	2.810	-0.003	0.888	69307	0.0521	Target=2.72		1.6	M
349.00 > 99.00	2.795	2.810	-0.015	0.884	33213		2.09(1.36-4.09)		3.1	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.918	-0.013	0.826	219060	1.03		82.7	2872	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.905	2.918	-0.013	1.000	4589	0.0262			34.9	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.176	-0.014	0.899	1203743	1.15		97.5	4052	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.176	-0.014	1.000	287621	0.2552	Target=3.32		16.7	M
399.00 > 99.00	3.162	3.176	-0.014	1.000	167162		1.72(1.66-4.98)		37.9	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.176	-0.014	1.000	275725	0.2199	Target=4.17		4.0	M
363.00 > 169.00	3.162	3.176	-0.014	1.000	69634		3.96(2.09-6.26)		37.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.176	-0.014	0.899	1397991	1.16		93.1	3486	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.510	3.511	-0.001	0.918	84261	0.0896	Target=4.83		6.5	M
449.00 > 99.00	3.501	3.511	-0.010	0.915	31883		2.64(2.41-7.24)		5.9	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.510	3.511	-0.001	0.997	305927	1.41		119	38.3	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.510	3.520	-0.010	1.000	4748	0.006743			4.6	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.519	3.529	-0.010	1.000	765821	0.5764	Target=2.88		13.3	M
413.00 > 169.00	3.519	3.529	-0.010	1.000	275797		2.78(1.44-4.32)		155	M
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.529	-0.010	1.000	1559196	1.15		91.6	3111	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.529	-0.010		1748336	1.25			2635	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.825	3.830	-0.005	1.000	15101052	19.9	Target=4.24		1853	M
499.00 > 99.00	3.825	3.830	-0.005	1.000	4098708		3.68(2.12-6.37)		1453	M
D 18 13C4 PFOS										
503.00 > 80.00	3.825	3.830	-0.005	1.087	777491	1.17		98.1	177	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.836	3.854	-0.018	1.000	225671	0.1604	Target=8.34		10.1	M
463.00 > 169.00	3.848	3.854	-0.006	1.003	27308		8.26(4.17-12.51)		36.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.854	-0.018	1.090	1794452	1.21		96.9	2067	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.132	4.148	-0.016	1.000	22135	0.0147	Target=11.44		1.8	M
513.00 > 169.00	4.132	4.148	-0.016	1.000	2851		7.76(5.72-17.16)		7.7	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.148	-0.016	1.174	1878656	1.21		96.9	5530	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.132	4.148	-0.016	0.997	1418	0.002469			15.6	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.148	-0.004	1.178	312384	1.28		107	144	
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.242	-0.005	1.204	1348942	1.02		81.5	4260	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.237	4.242	-0.005	1.000	3476	0.003377			16.4	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.274	4.278	-0.004	1.214	464965	1.25		100	889	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.144	4.291	-0.147	0.970	664	0.001967			2.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.398	-0.016	1.245	1786060	1.22		97.6	9851	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.394	4.410	-0.016	1.249	457350	1.28		103	1112	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.406	4.410	-0.004	1.003	1753	0.004790			2.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.621	-0.015	1.309	1833277	1.23		98.6	9469	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.989	-0.002	1.417	1560570	1.05		84.3	5687	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	5.008	4.989	0.019	1.004	239	0.001712	Target=0.87		3.1	M
713.00 > 219.00	4.977	4.989	-0.012	0.998	402		0.59(0.43-1.30)		5.9	M

QC Flag Legend

Processing Flags

Review Flags

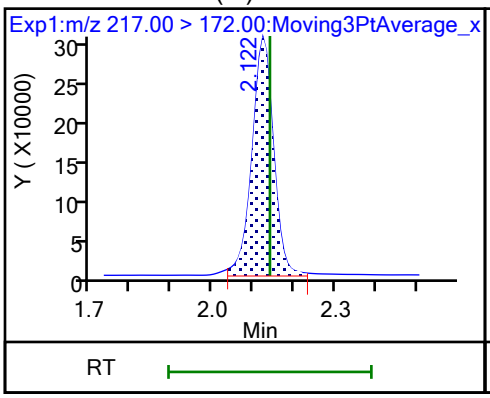
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:37 Chrom Revision: 2.3 18-Oct-2023 21:16:54

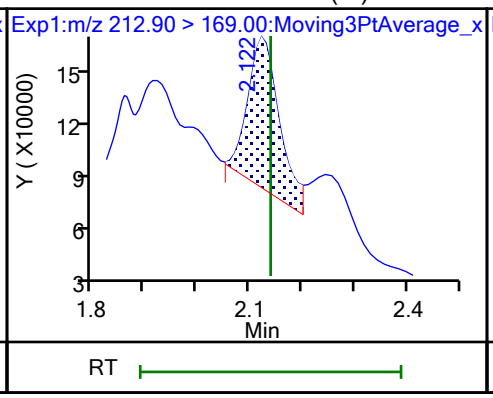
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d
Injection Date: 25-Oct-2023 21:00:05 Instrument ID: LC812
Lims ID: 460-290543-B-5-A Lab Sample ID: 200-290543-5
Client ID: MW6-101723-0917-10
Operator ID: LC812user ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

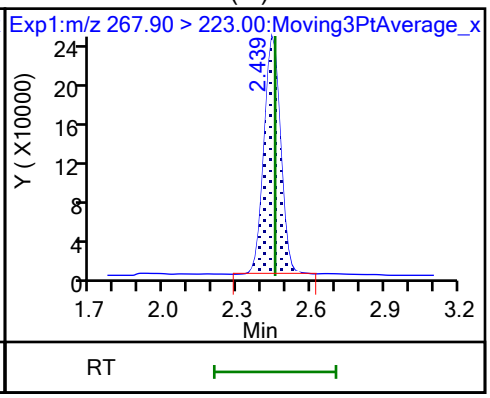
D 1 13C4 PFBA (M)



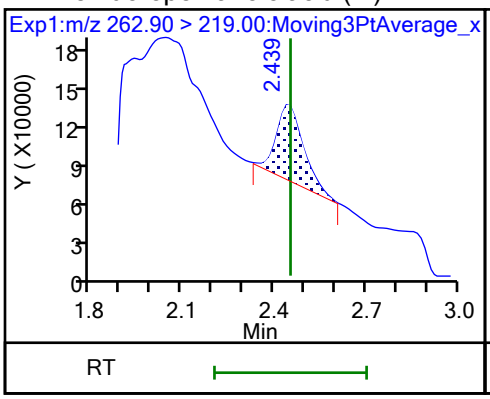
2 Perfluorobutanoic acid (M)



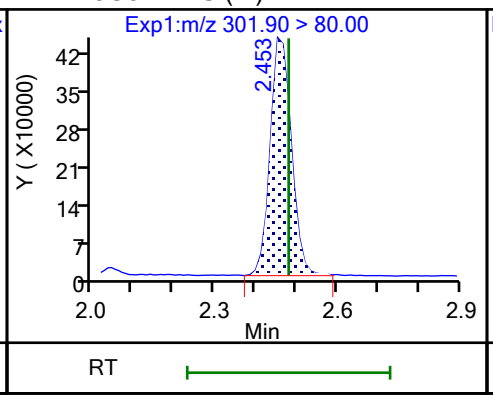
D 3 13C5 PFPeA (M)



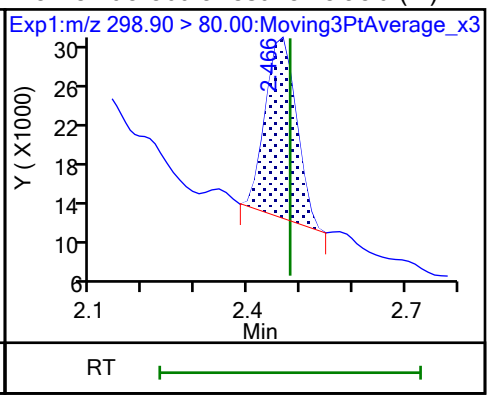
4 Perfluoropentanoic acid (M)



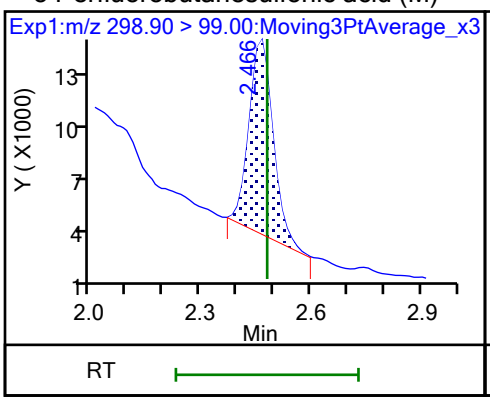
D 47 13C3 PFBS (M)



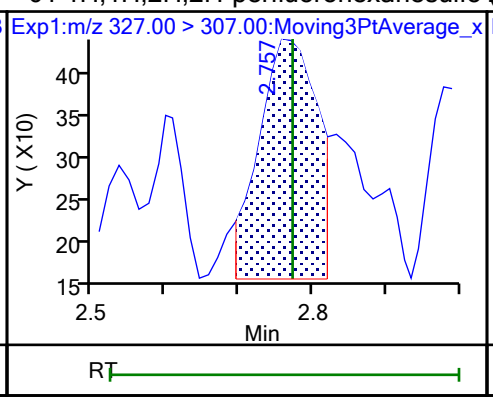
5 Perfluorobutanesulfonic acid (M)



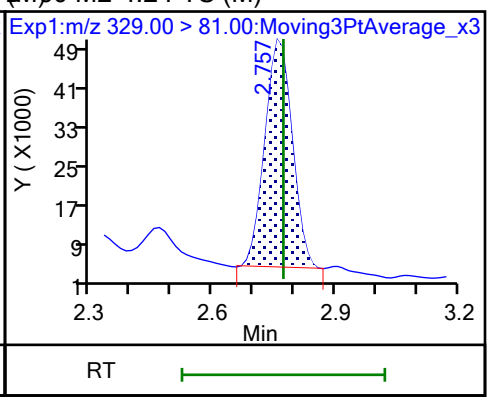
5 Perfluorobutanesulfonic acid (M)



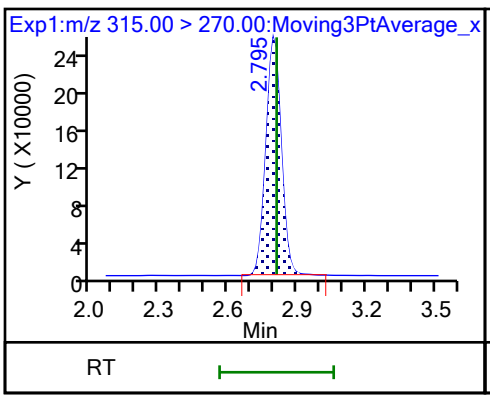
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



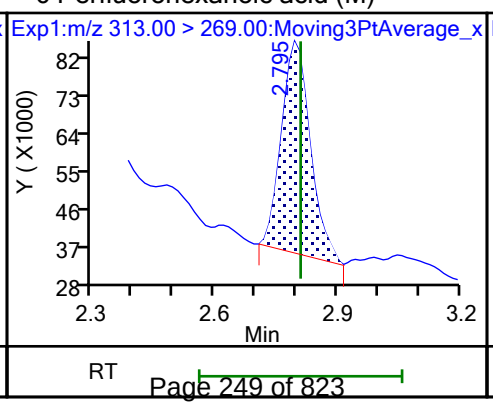
60 M2-4:2 FTS (M)



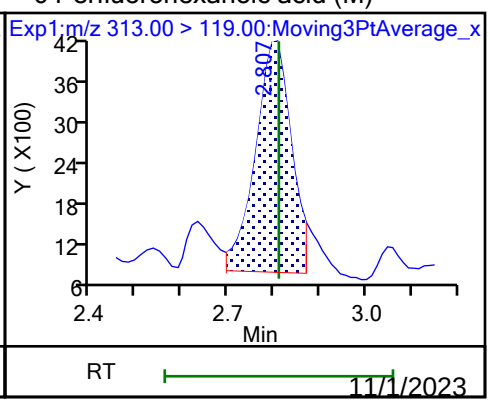
D 7 13C2 PFHxA



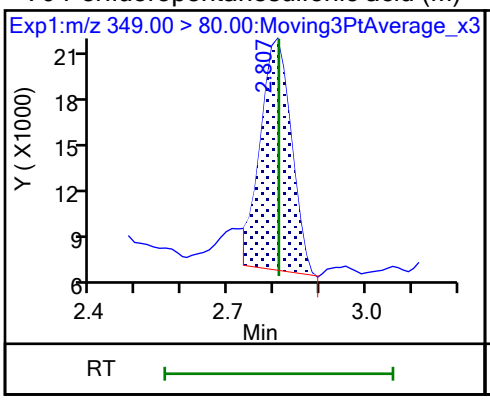
6 Perfluorohexanoic acid (M)



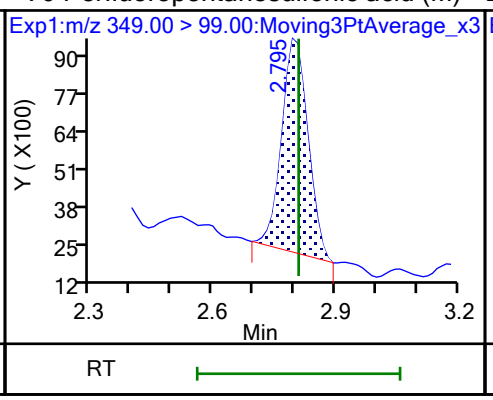
6 Perfluorohexanoic acid (M)



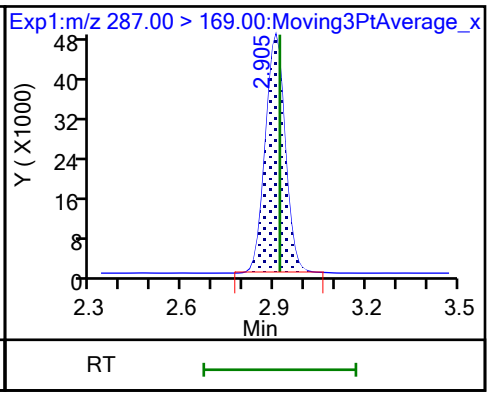
70 Perfluoropentanesulfonic acid (M)



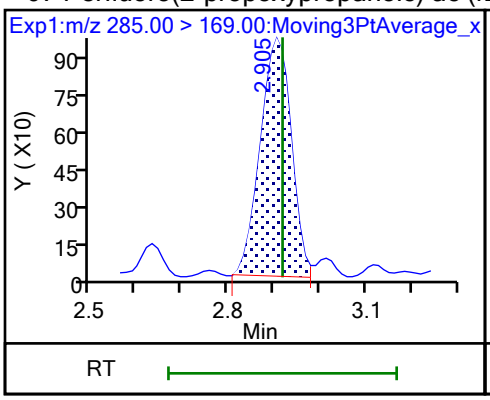
70 Perfluoropentanesulfonic acid (M)



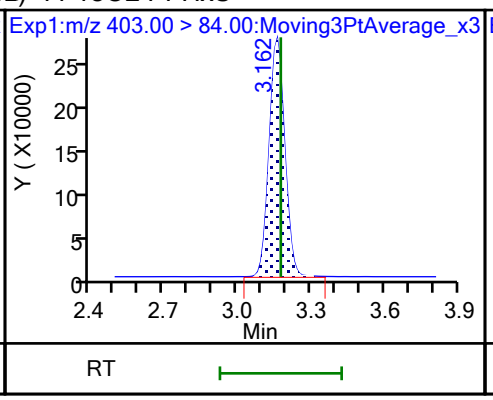
D 64 13C3 HFPO-DA



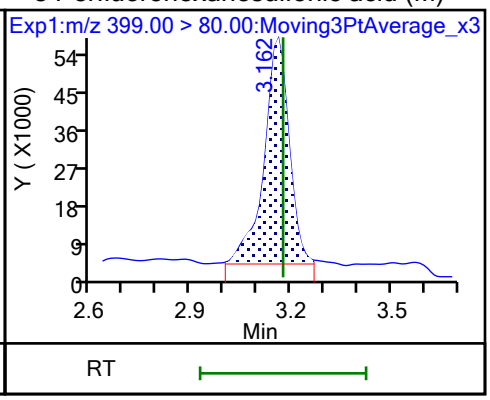
67 Perfluoro(2-propoxypropanoic) ac (M)



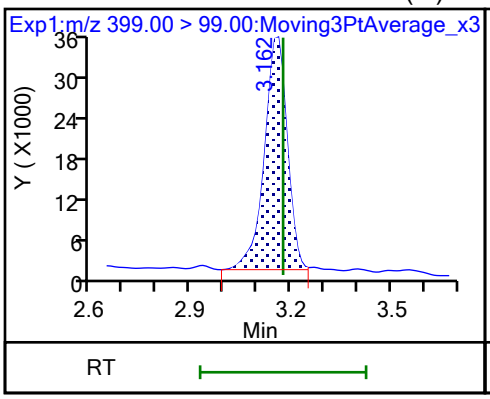
D 11 18O2 PFHxS



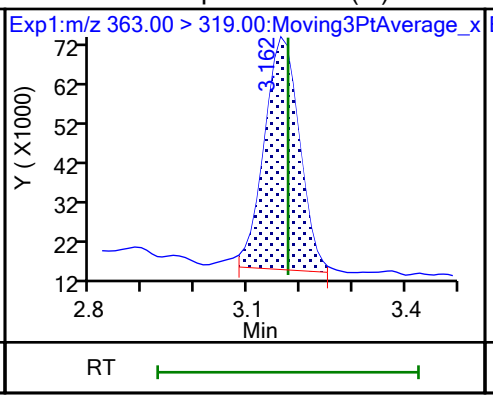
8 Perfluorohexanesulfonic acid (M)



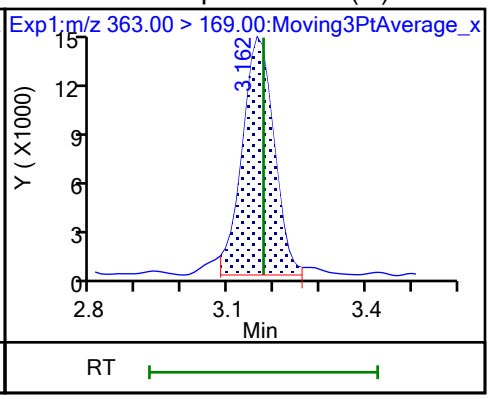
8 Perfluorohexanesulfonic acid (M)



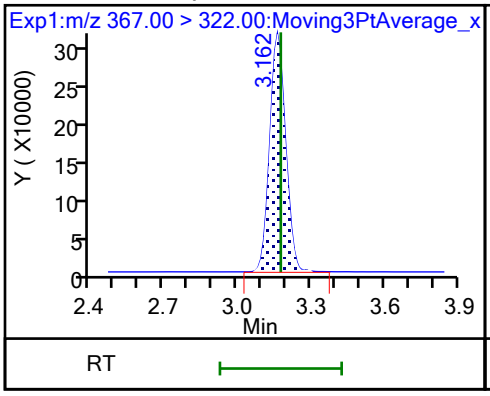
10 Perfluoroheptanoic acid (M)



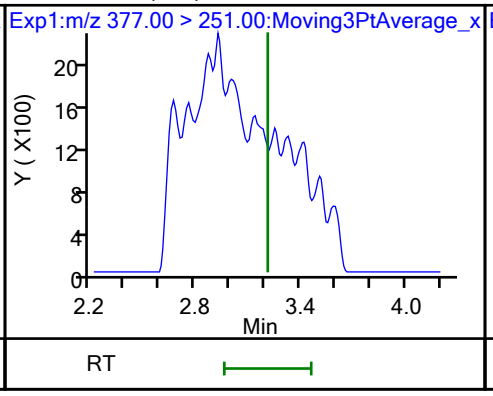
10 Perfluoroheptanoic acid (M)



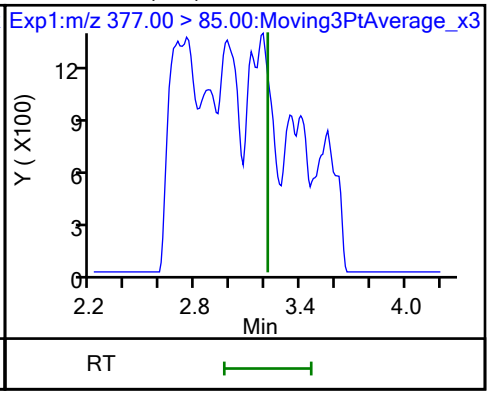
D 9 13C4 PFHpA



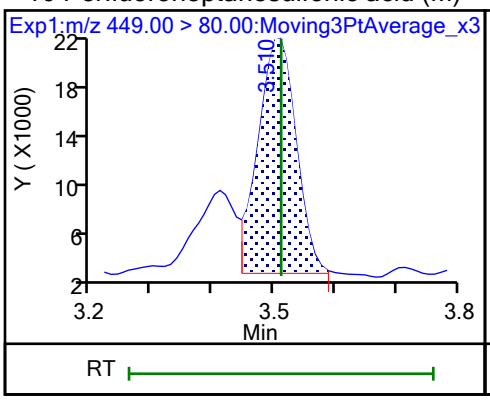
77 DONA (ND)



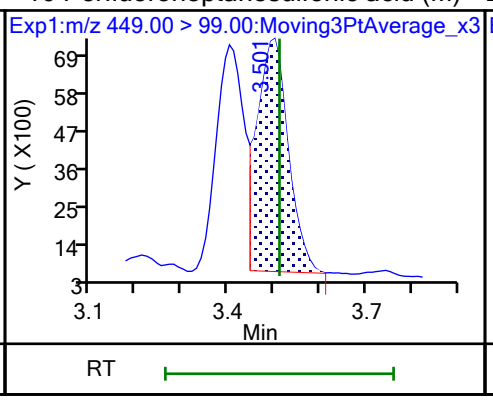
77 DONA (ND)



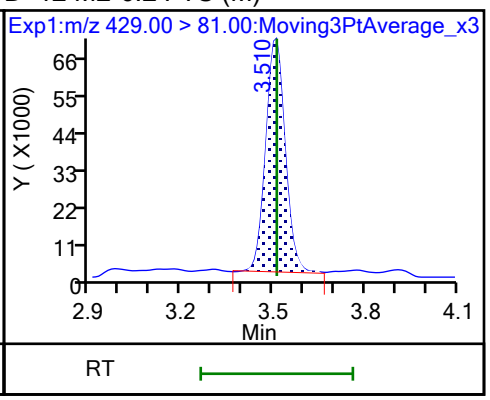
16 Perfluoroheptanesulfonic acid (M)



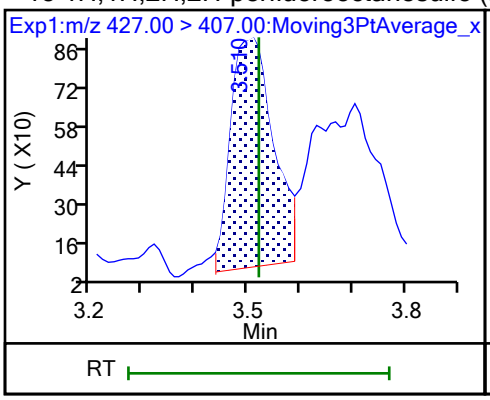
16 Perfluoroheptanesulfonic acid (M)



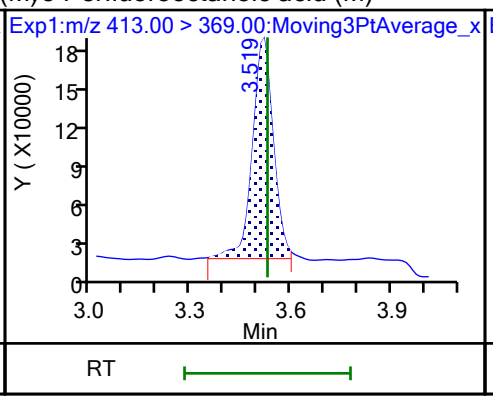
D 12 M2-6:2 FTS (M)



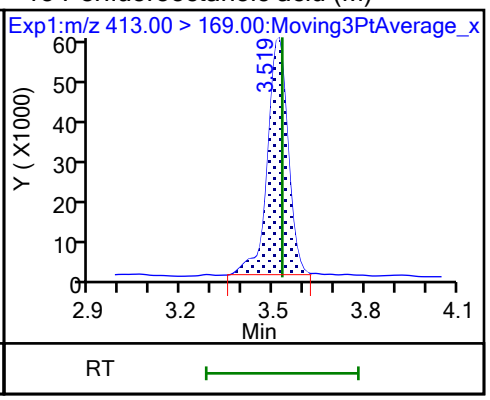
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



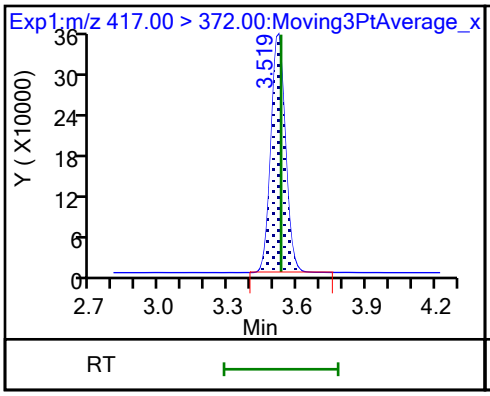
15 Perfluorooctanoic acid (M)



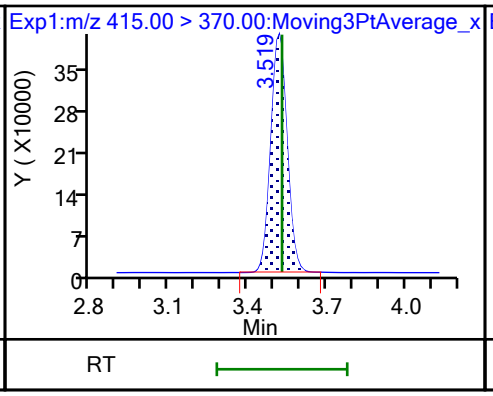
15 Perfluorooctanoic acid (M)



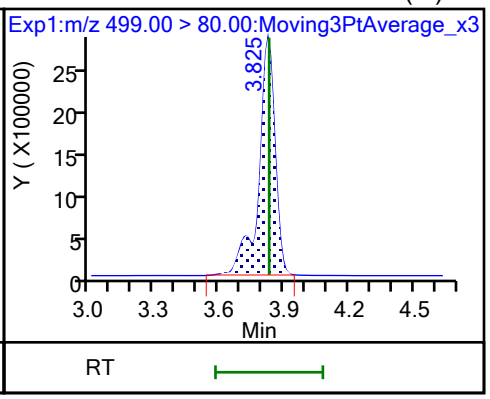
D 14 13C4 PFOA



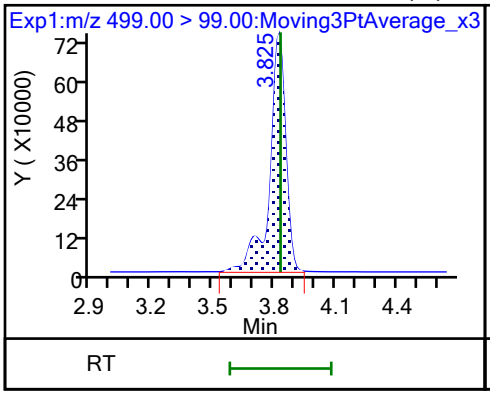
* 62 13C2 PFOA



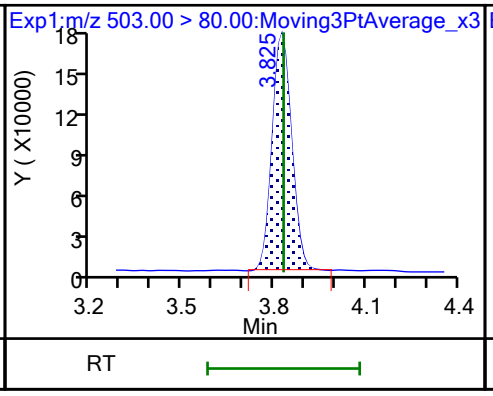
17 Perfluorooctanesulfonic acid (M)



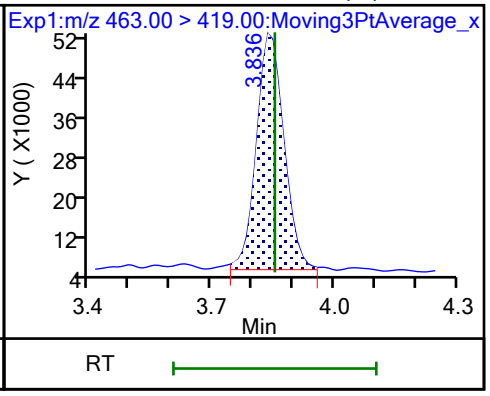
17 Perfluorooctanesulfonic acid (M)



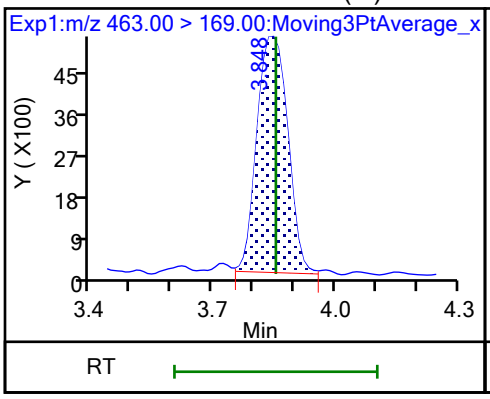
D 18 13C4 PFOS



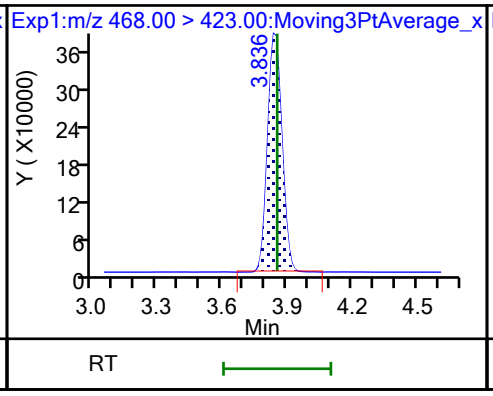
20 Perfluorononanoic acid (M)



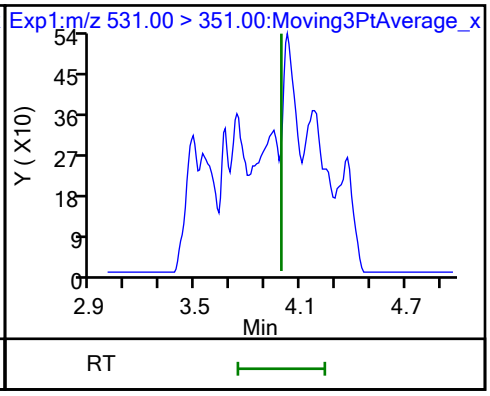
20 Perfluorononanoic acid (M)



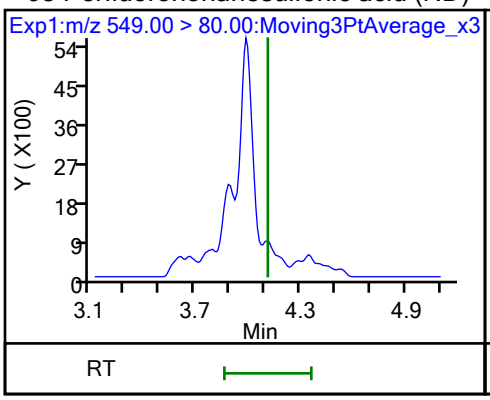
D 19 13C5 PFNA



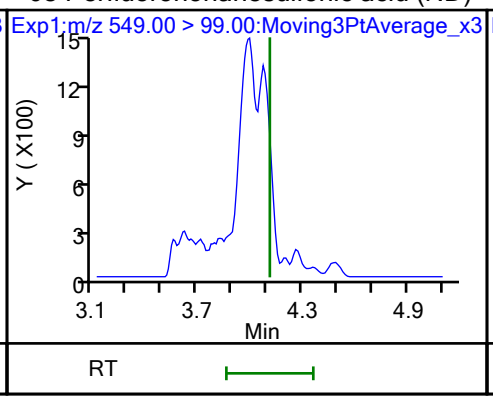
69 9-Chlorohexadecafluoro-3-oxanona (ND)



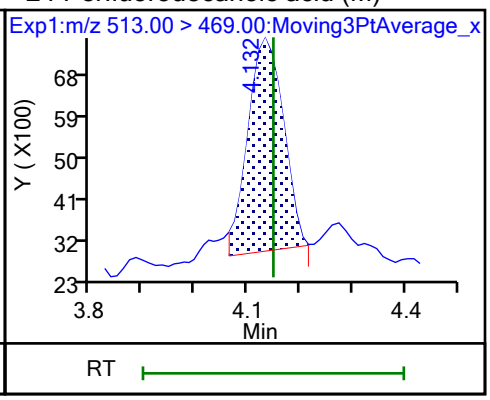
68 Perfluorononanesulfonic acid (ND)



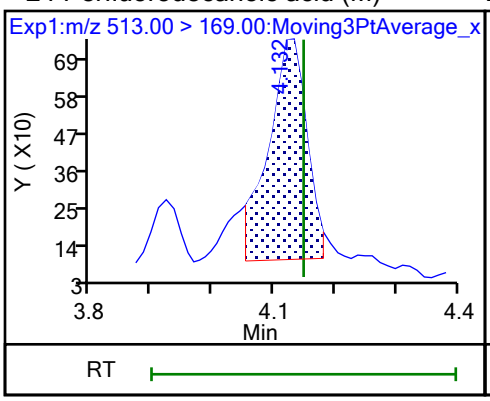
68 Perfluorononanesulfonic acid (ND)



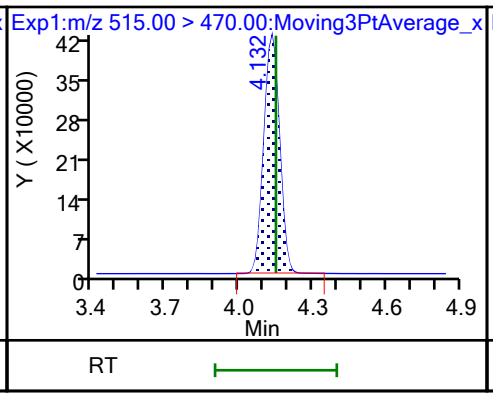
24 Perfluorodecanoic acid (M)



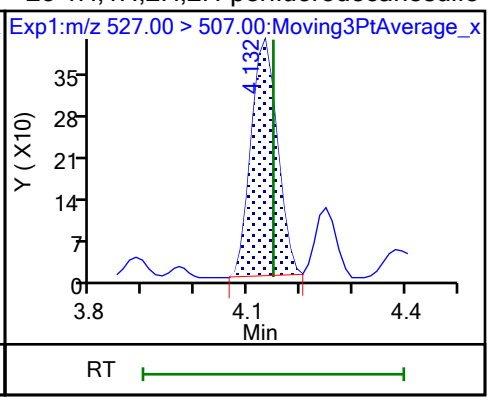
24 Perfluorodecanoic acid (M)



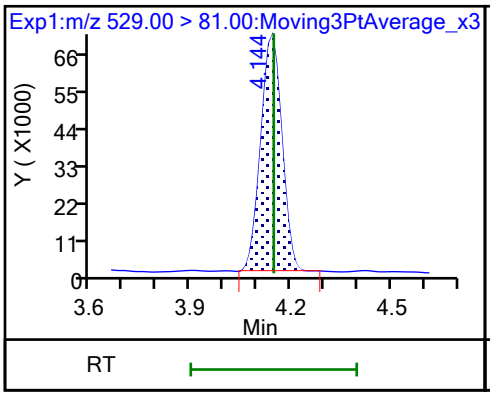
D 23 13C2 PFDA



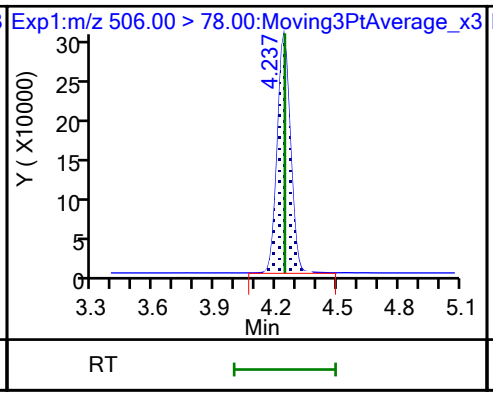
25 1H,1H,2H,2H-perfluorodecanesulfo



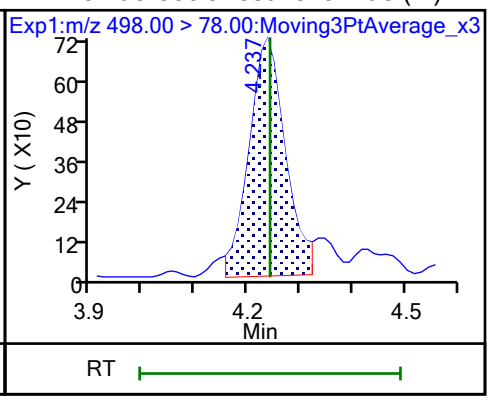
D 26 M2-8:2 FTS



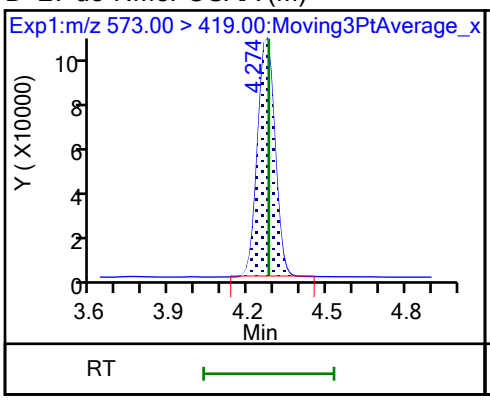
D 21 13C8 FOSA



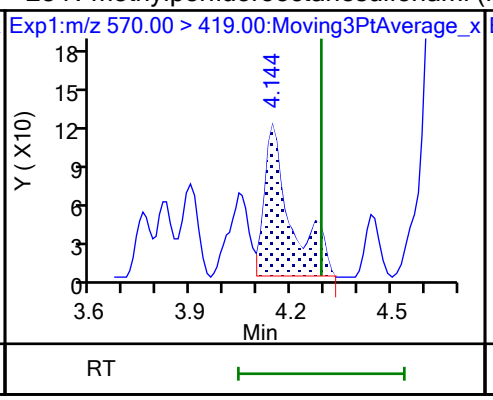
22 Perfluorooctanesulfonamide (M)



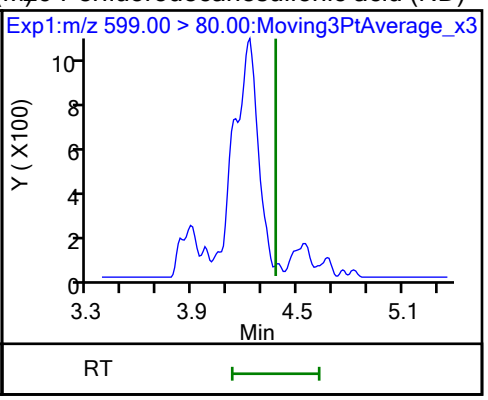
D 27 d3-NMeFOSAA (M)



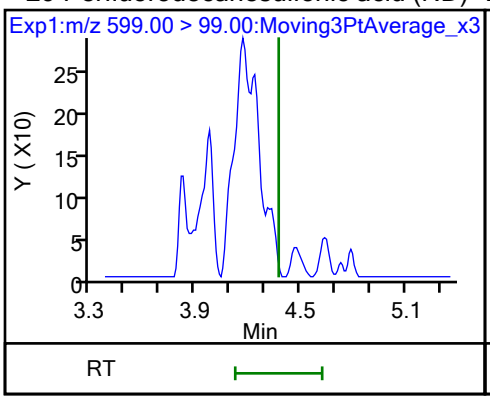
28 N-methylperfluorooctanesulfonami (M)



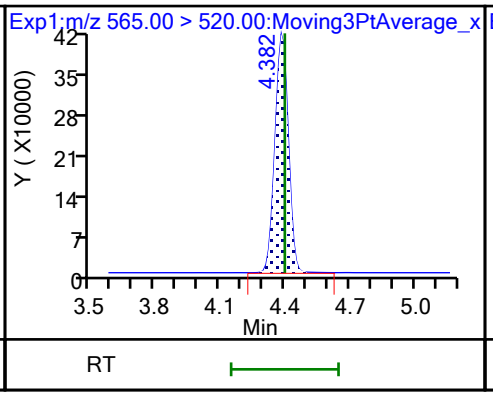
29 Perfluorodecanesulfonic acid (ND)



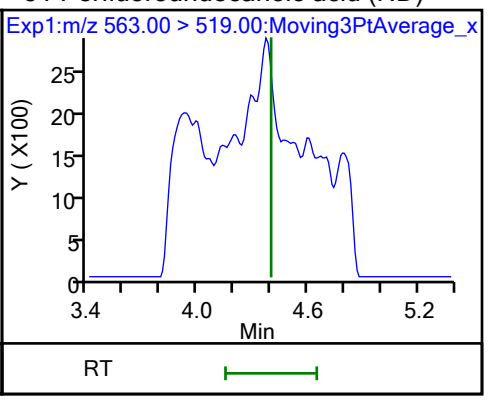
29 Perfluorodecanesulfonic acid (ND)



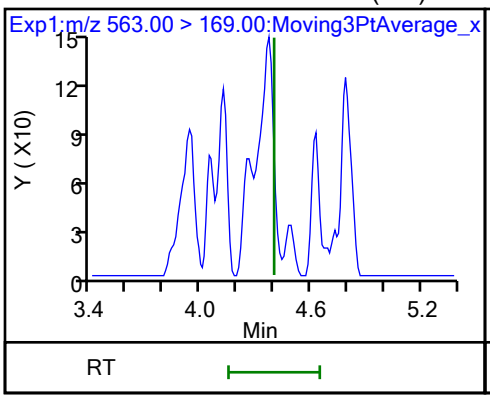
D 30 13C2 PFUnA



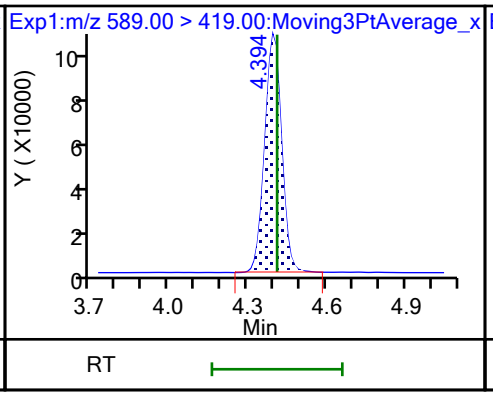
31 Perfluoroundecanoic acid (ND)



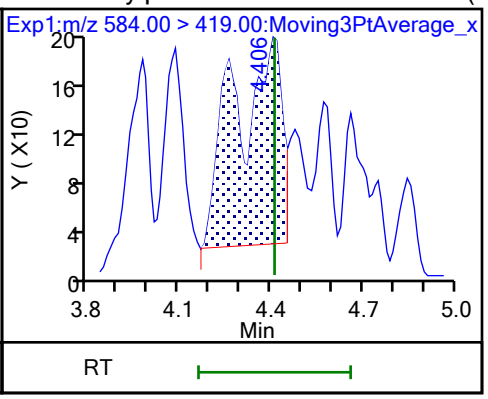
31 Perfluoroundecanoic acid (ND)



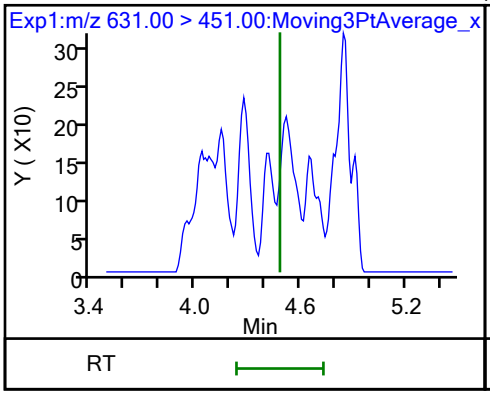
D 32 d5-NEtFOSAA



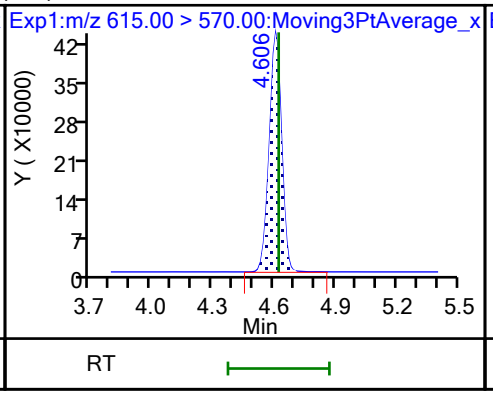
33 N-ethylperfluorooctanesulfonamid (M)



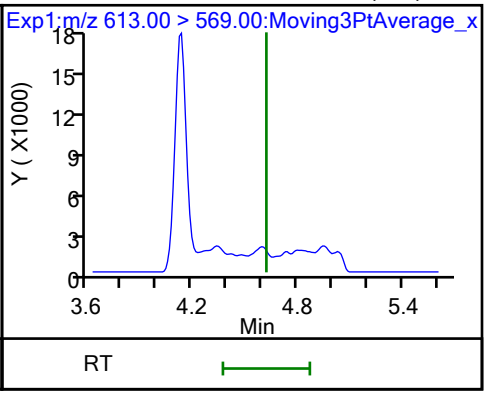
66 11-Chloroeicosafluoro-3-oxaundec (ND)



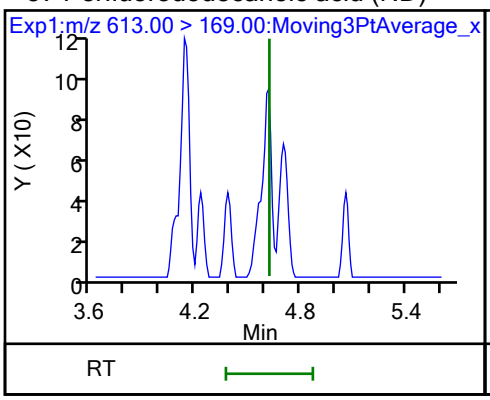
D 36 13C2 PFDoA



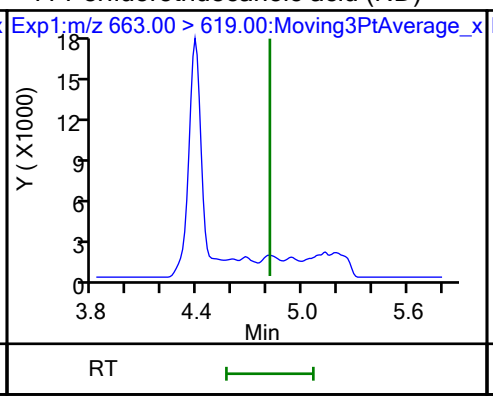
37 Perfluorododecanoic acid (ND)



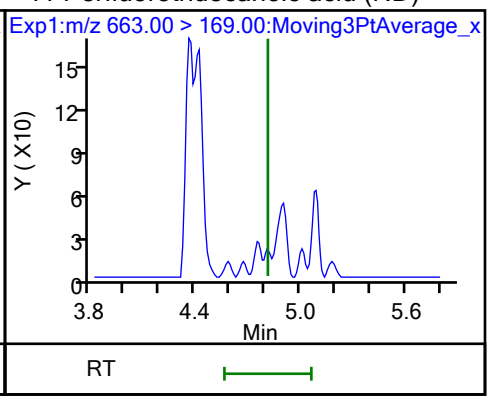
37 Perfluorododecanoic acid (ND)



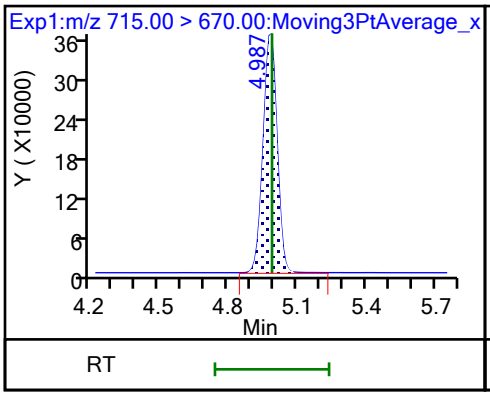
41 Perfluorotridecanoic acid (ND)



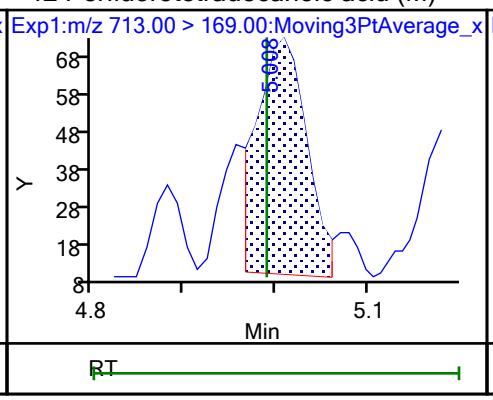
41 Perfluorotridecanoic acid (ND)



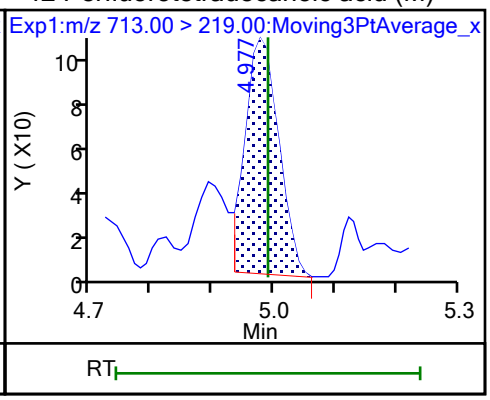
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

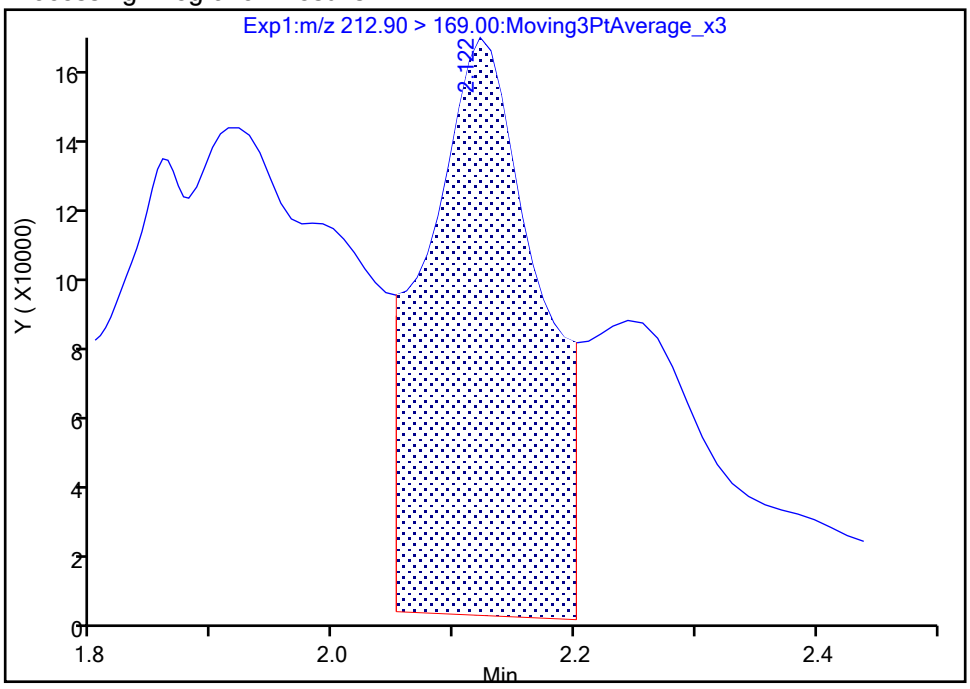
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

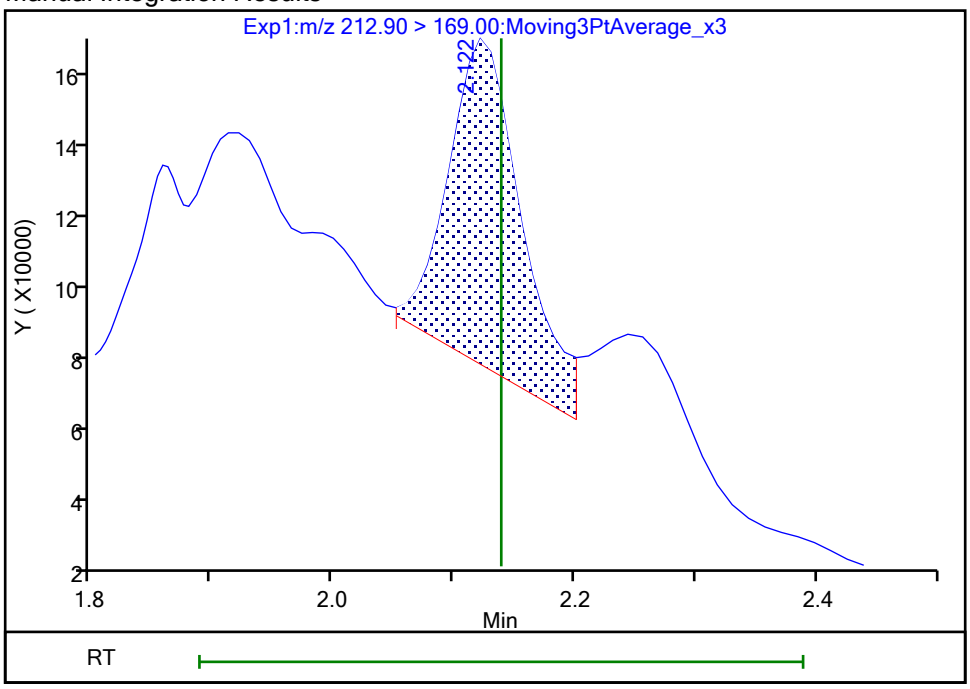
Processing Integration Results

RT: 2.12
Area: 1021831
Amount: 1.222627
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 363521
Amount: 0.408616
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:43:26 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

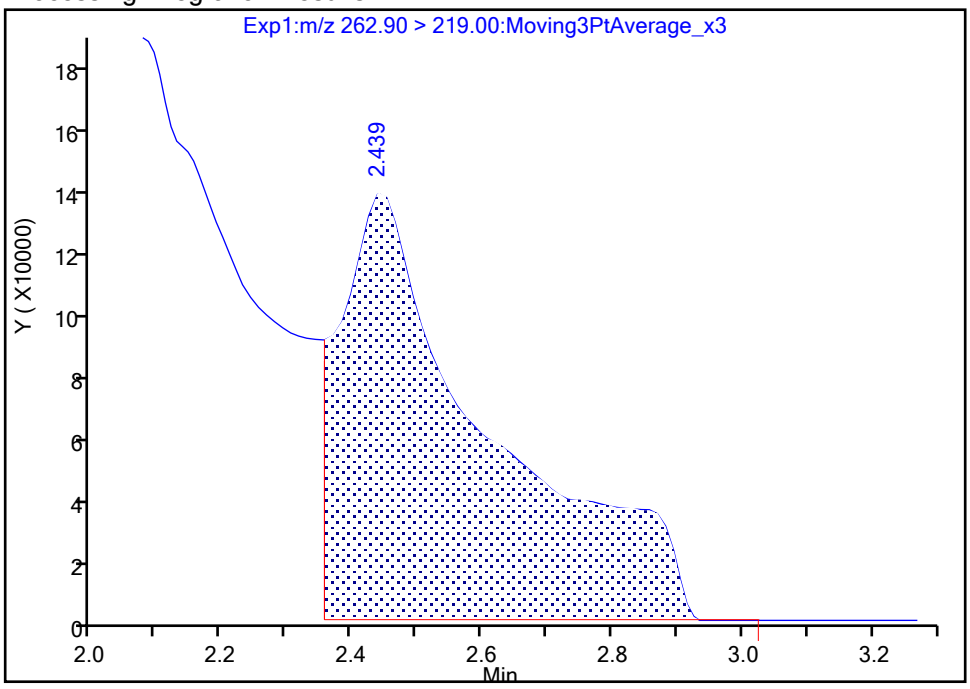
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

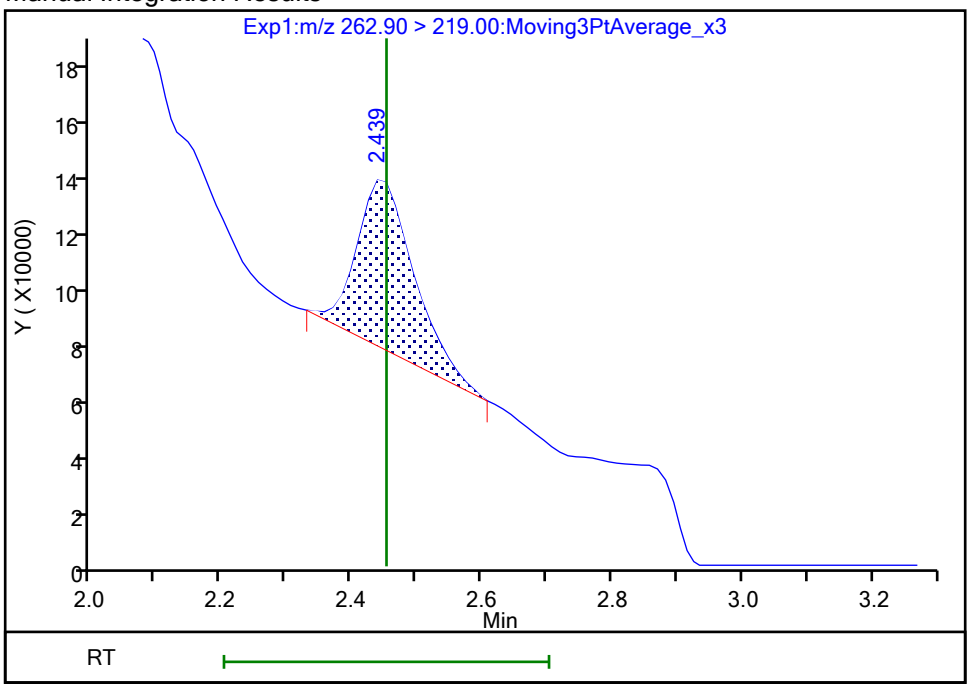
Processing Integration Results

RT: 2.44
Area: 2169246
Amount: 2.179015
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 363080
Amount: 0.364715
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:13:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

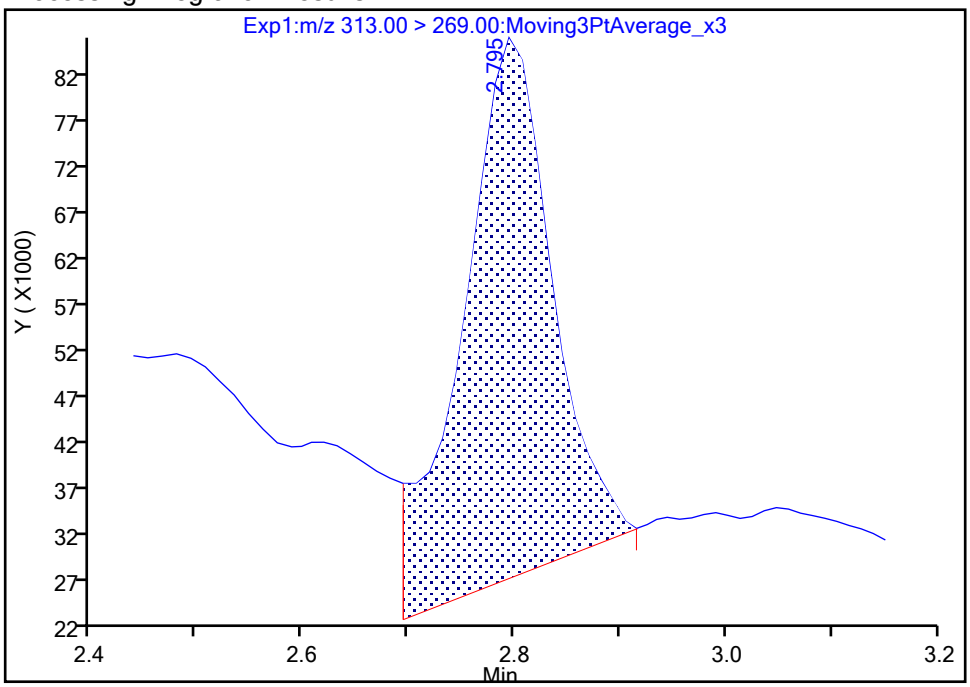
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

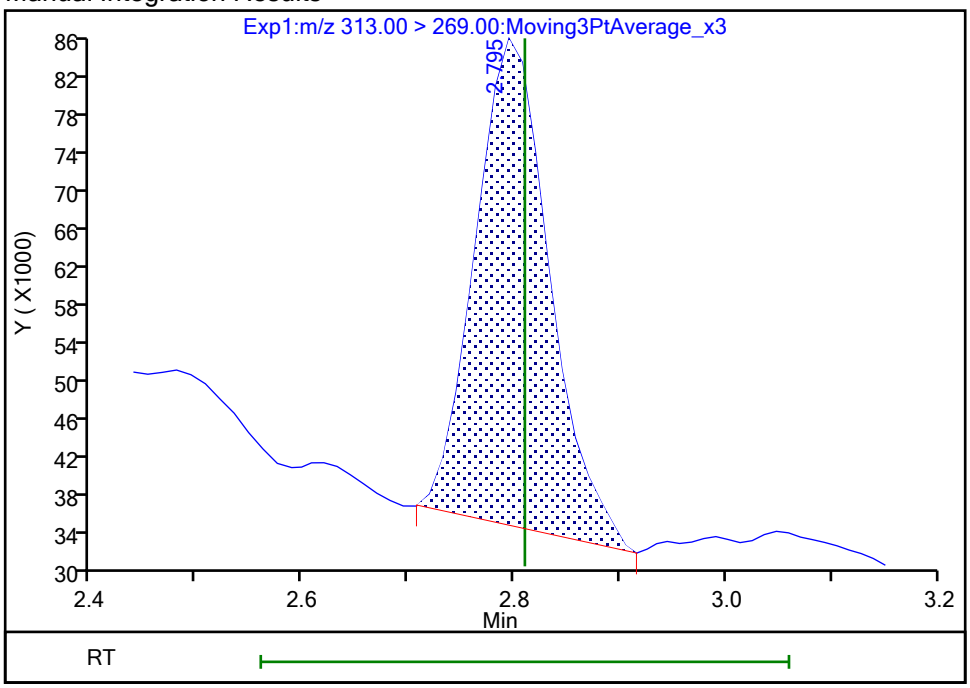
Processing Integration Results

RT: 2.79
Area: 346731
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 246995
Amount: 0.238184
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

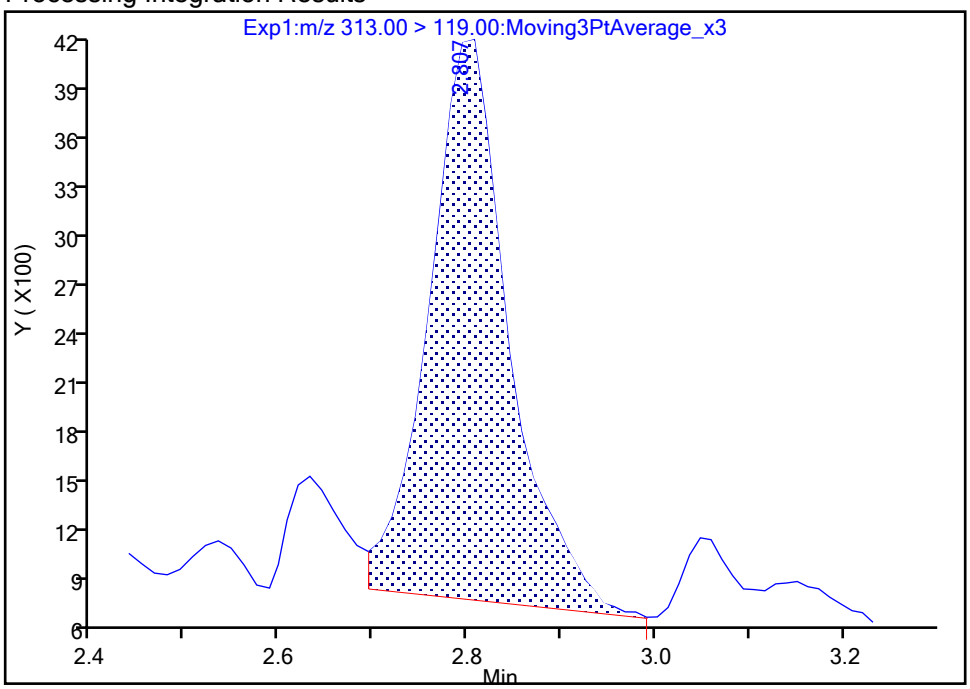
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

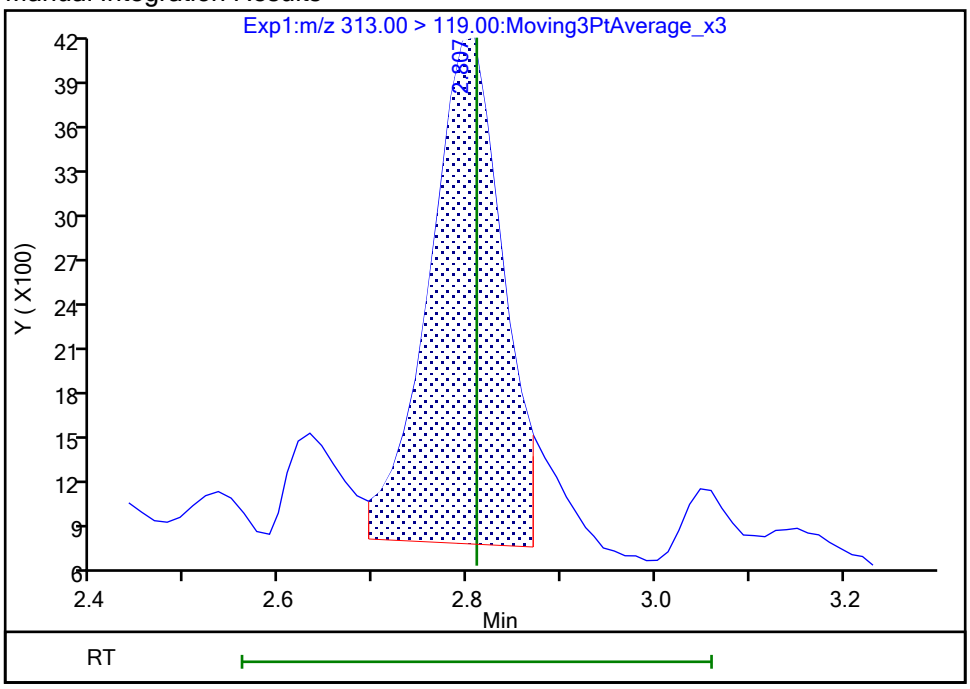
Processing Integration Results

RT: 2.81
Area: 19683
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 17975
Amount: 0.238184
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

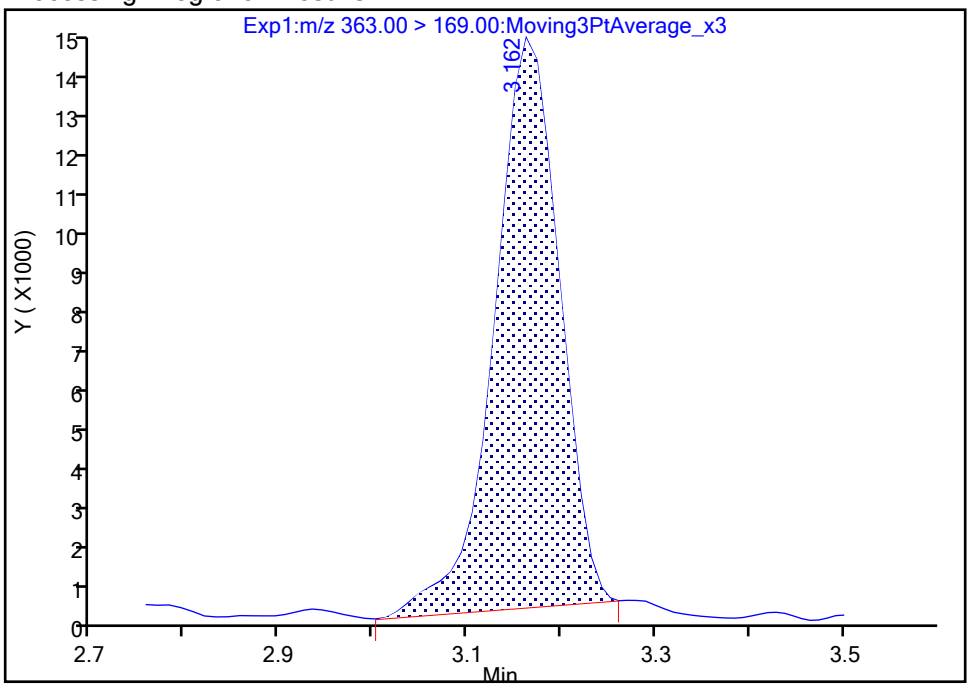
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

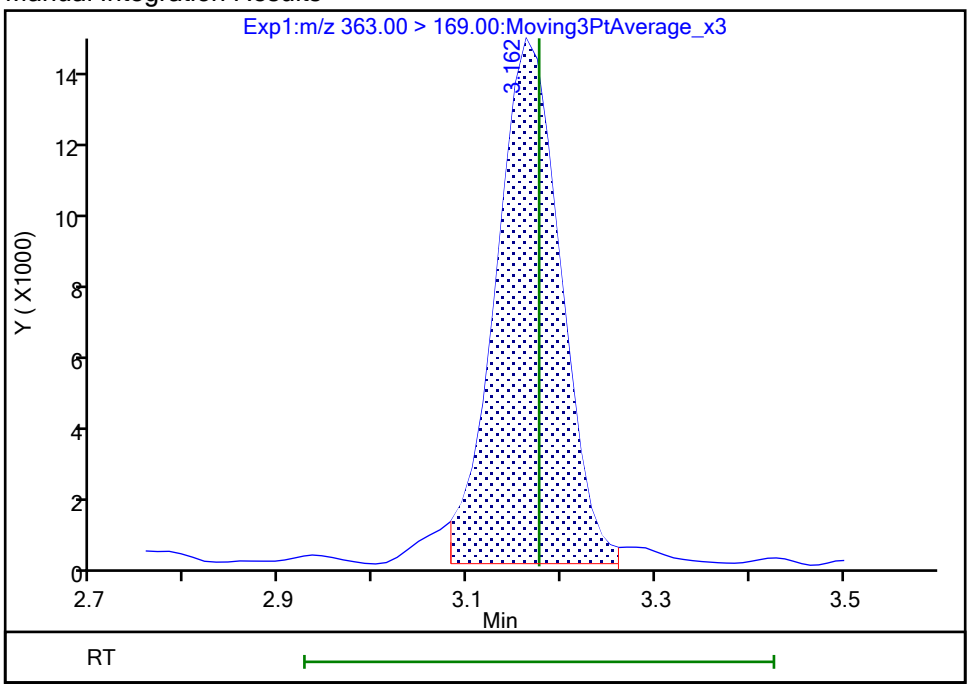
Processing Integration Results

RT: 3.16
Area: 68670
Amount: 0.432728
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 69634
Amount: 0.219948
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:01 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

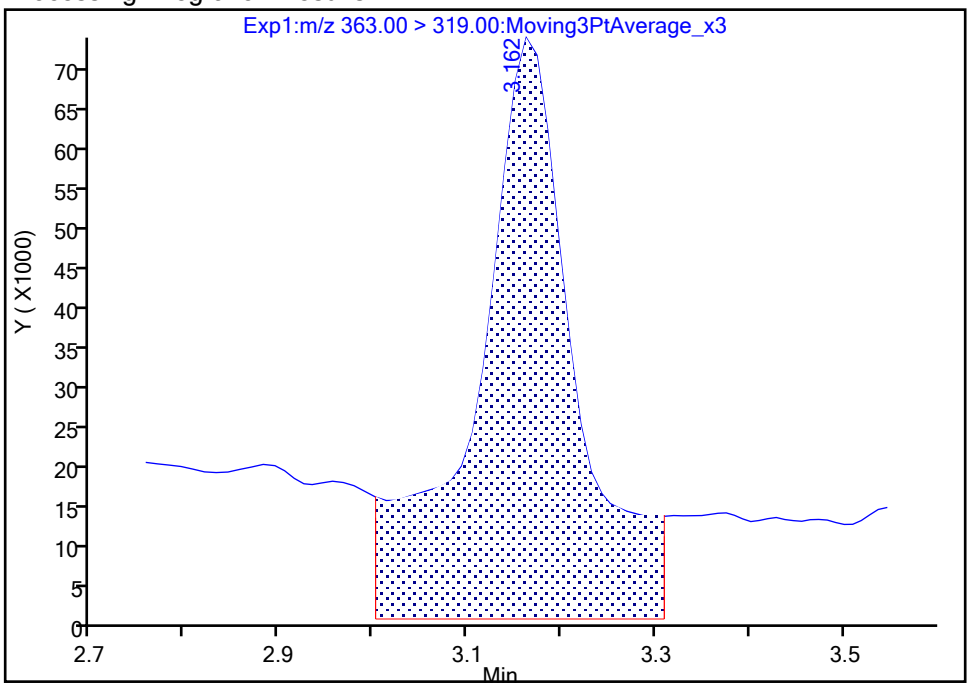
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

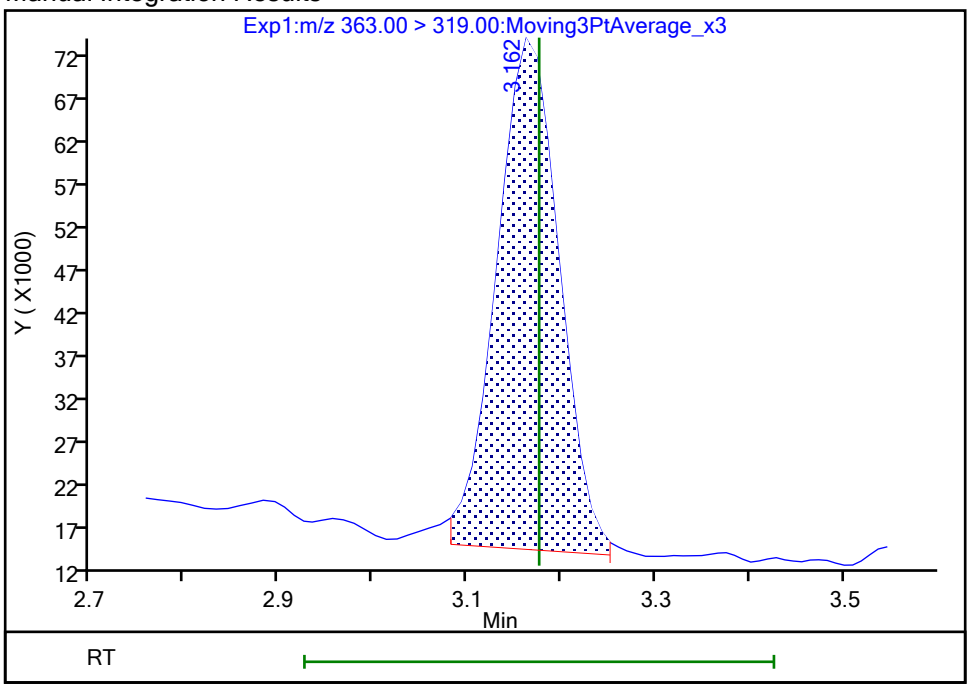
Processing Integration Results

RT: 3.16
Area: 542463
Amount: 0.432728
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 275725
Amount: 0.219948
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

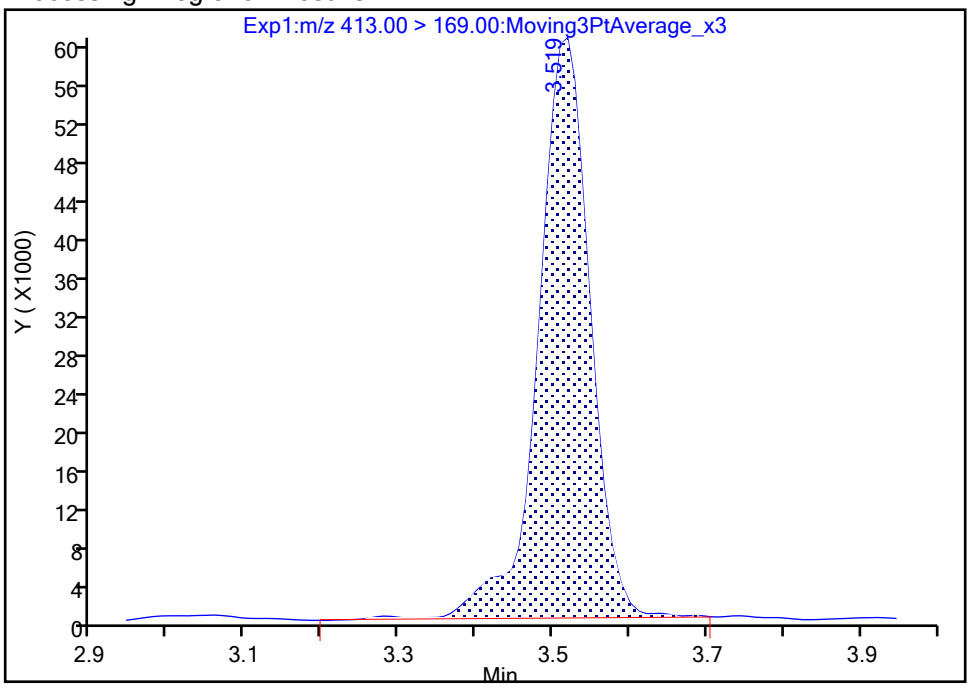
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

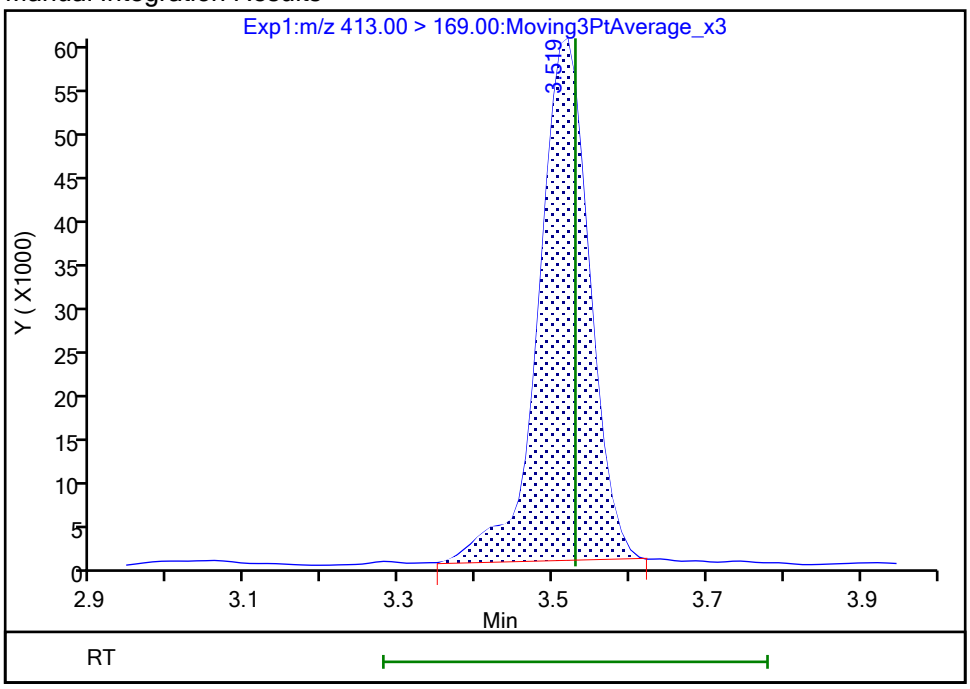
Processing Integration Results

RT: 3.52
Area: 282809
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 275797
Amount: 0.576408
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

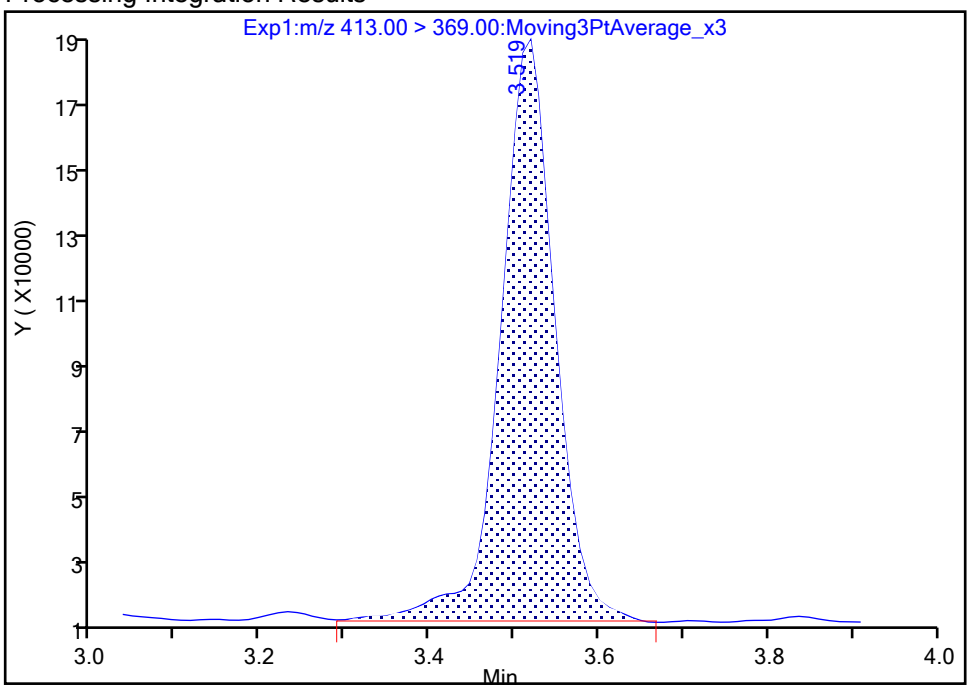
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

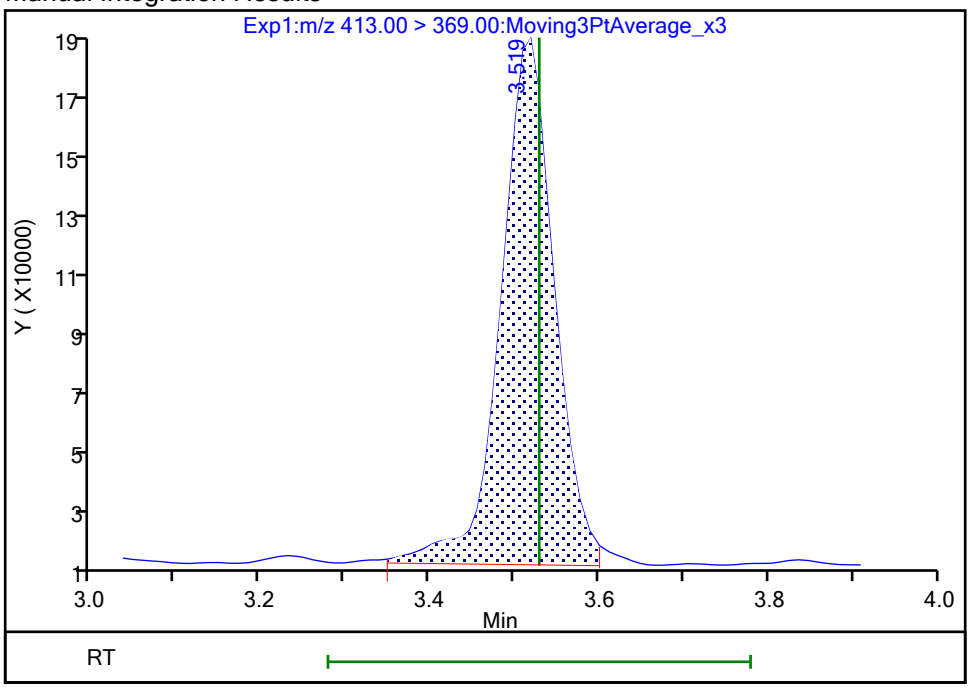
Processing Integration Results

RT: 3.52
Area: 780999
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 765821
Amount: 0.576408
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:16:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

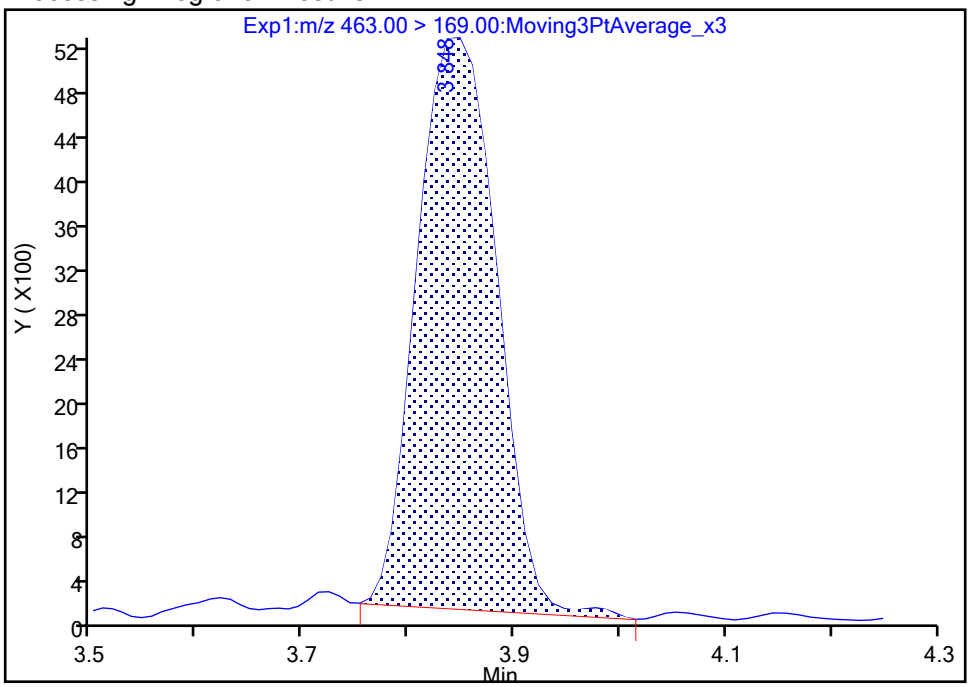
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

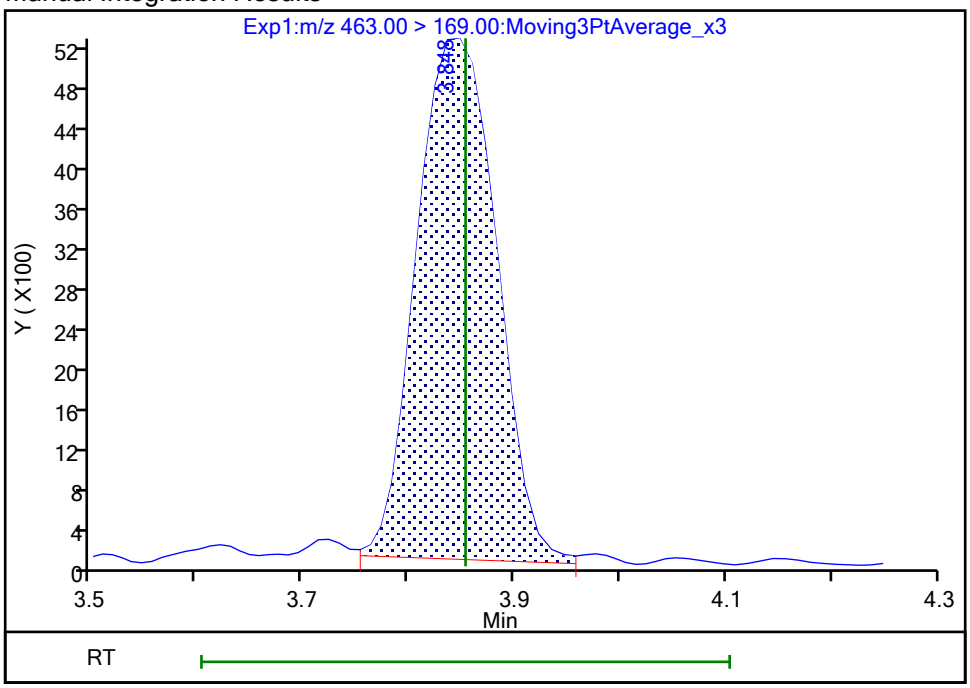
Processing Integration Results

RT: 3.85
Area: 26955
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 27308
Amount: 0.160401
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

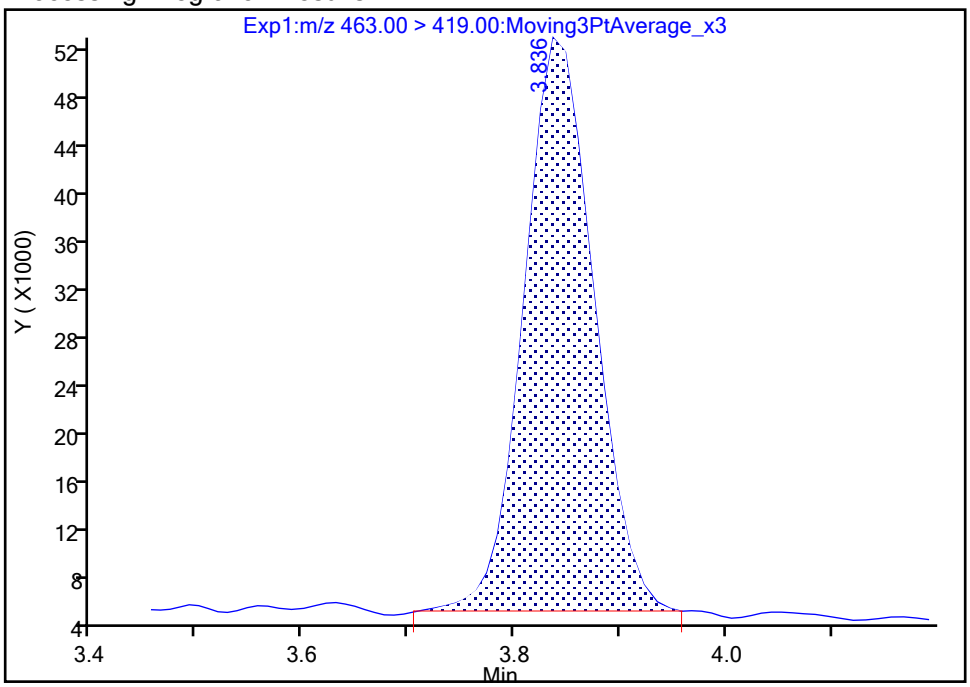
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

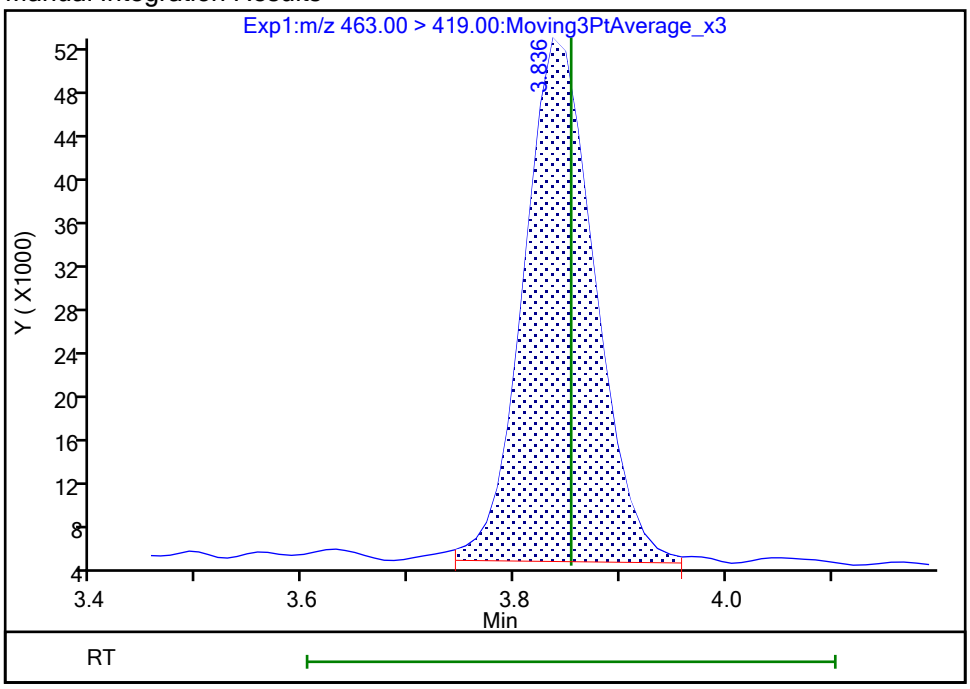
Processing Integration Results

RT: 3.84
Area: 221093
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 225671
Amount: 0.160401
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

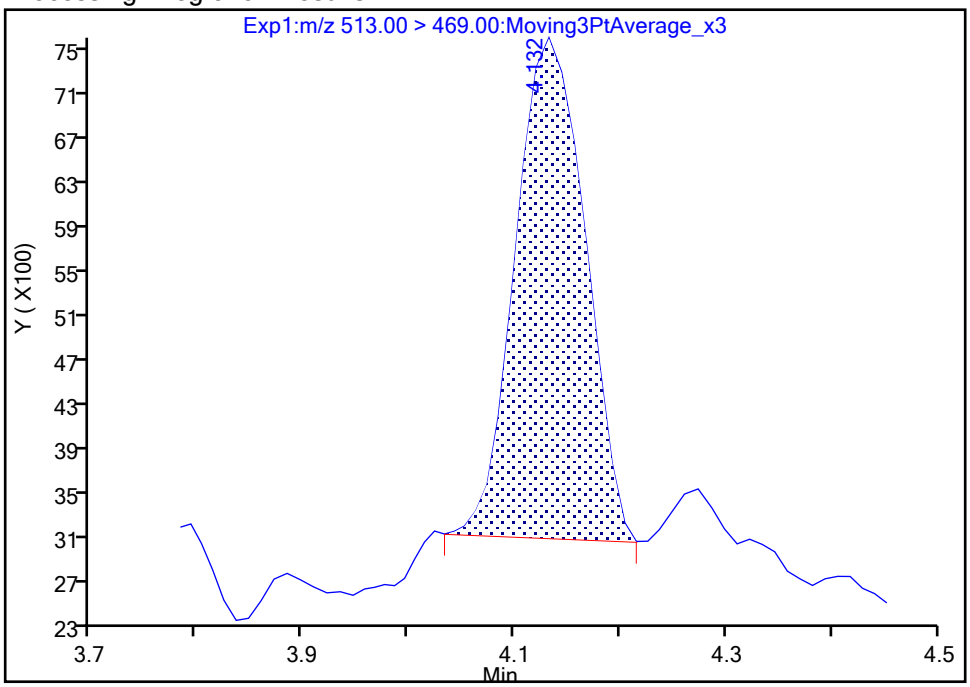
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

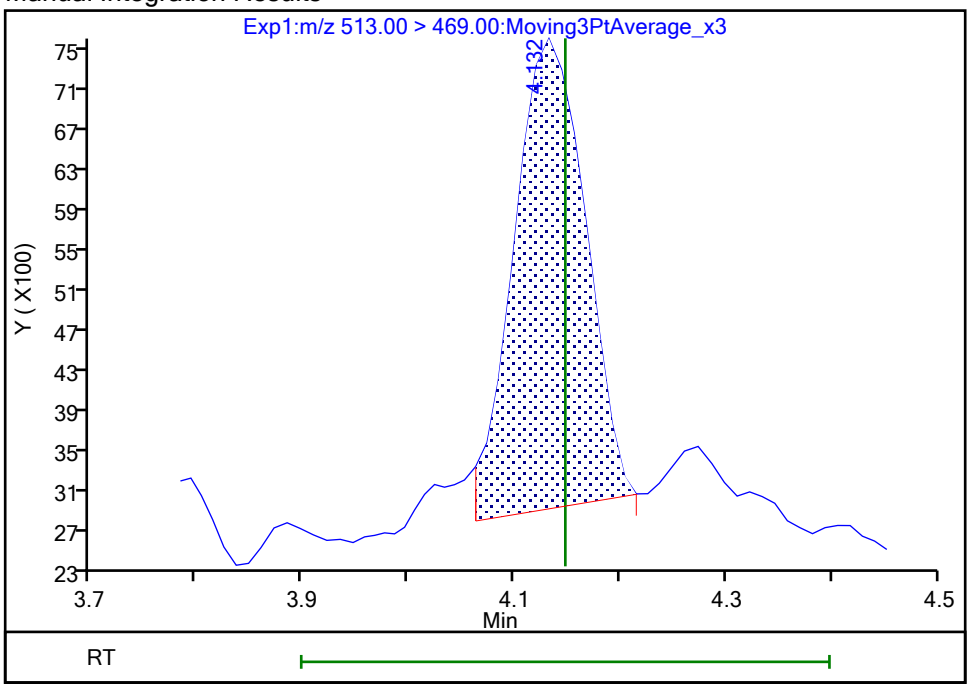
Processing Integration Results

RT: 4.13
Area: 20792
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 22135
Amount: 0.014737
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

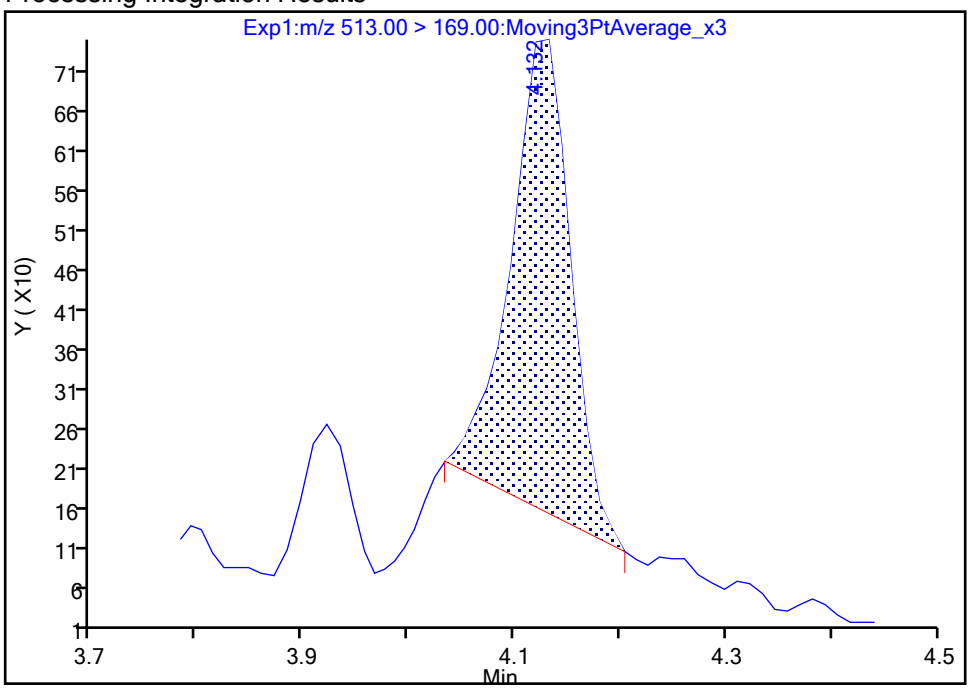
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

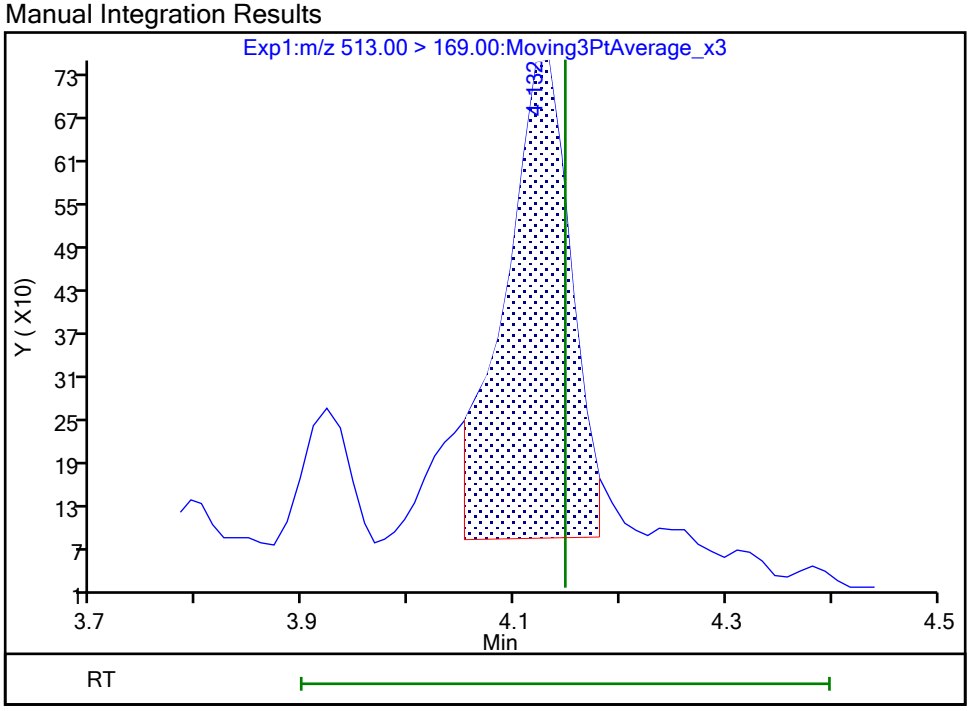
Processing Integration Results

RT: 4.13
Area: 2321
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 2851
Amount: 0.014737
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

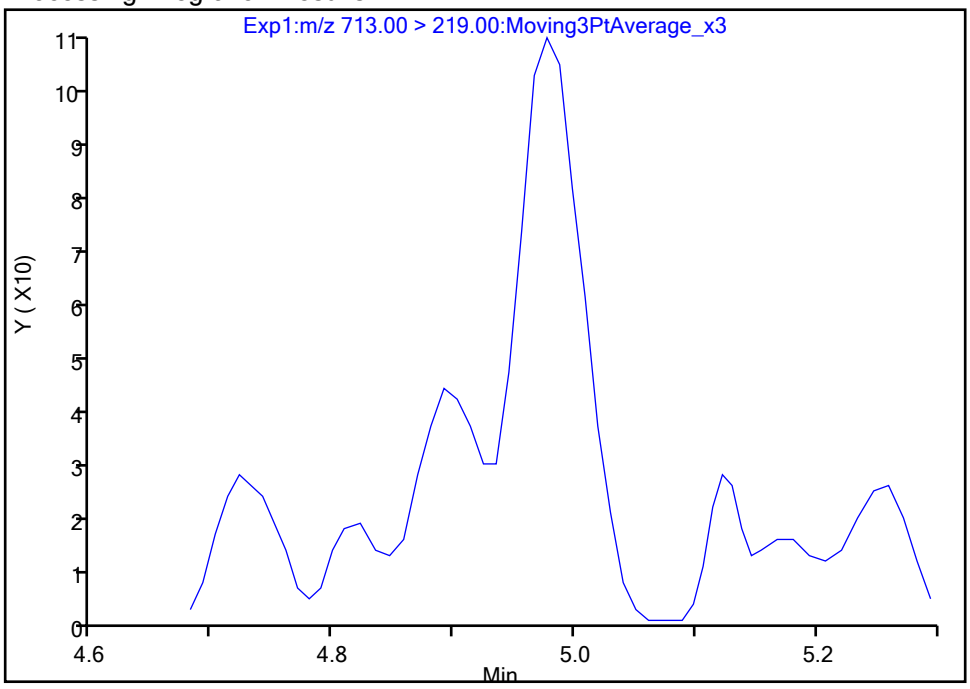
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

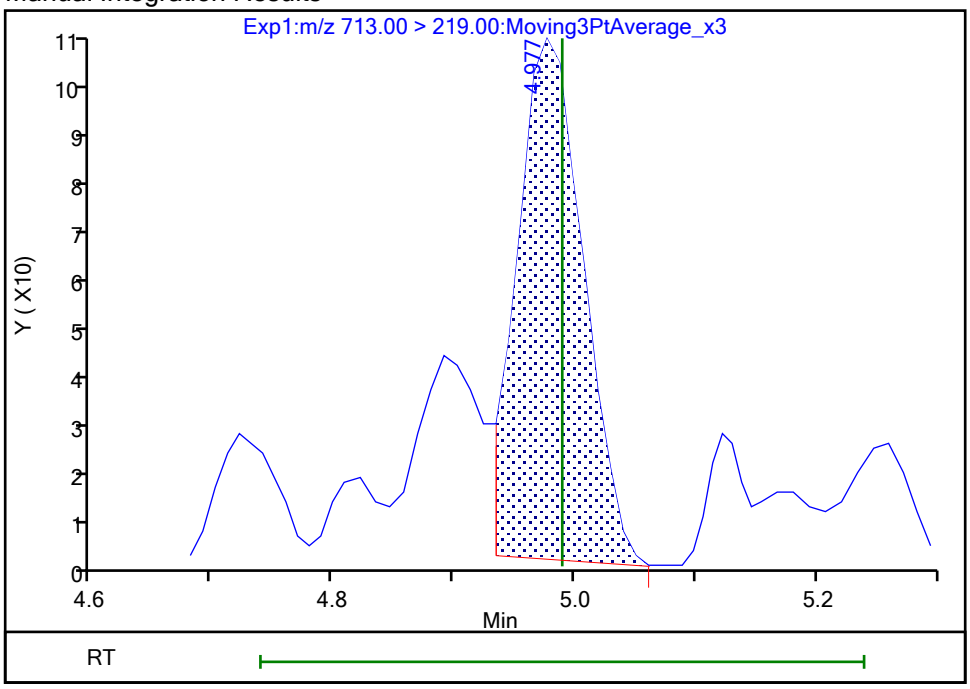
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 402
Amount: 0.001712
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:19:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

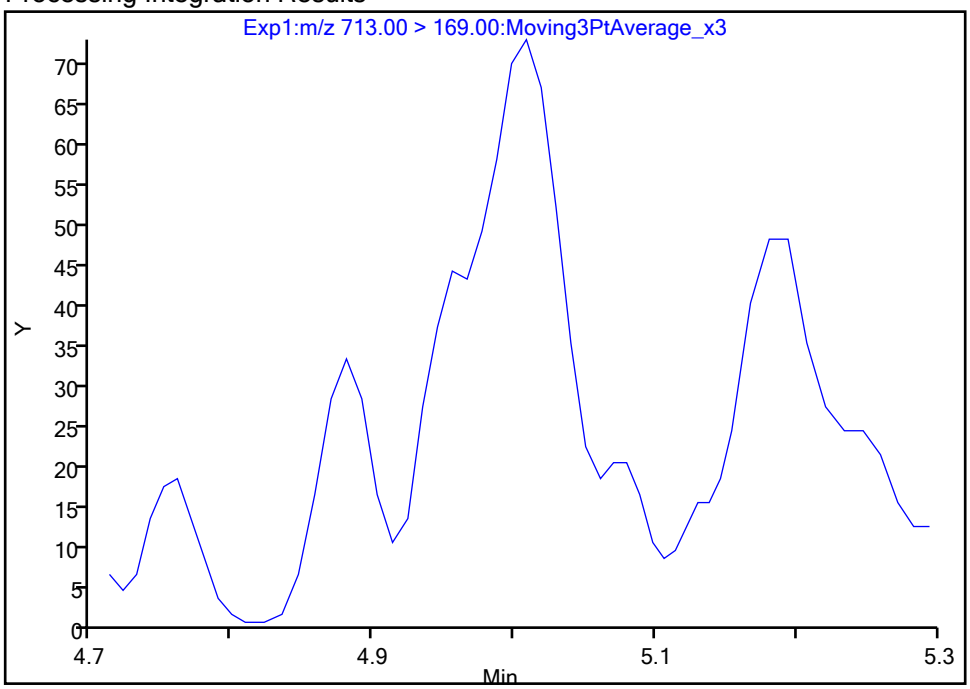
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

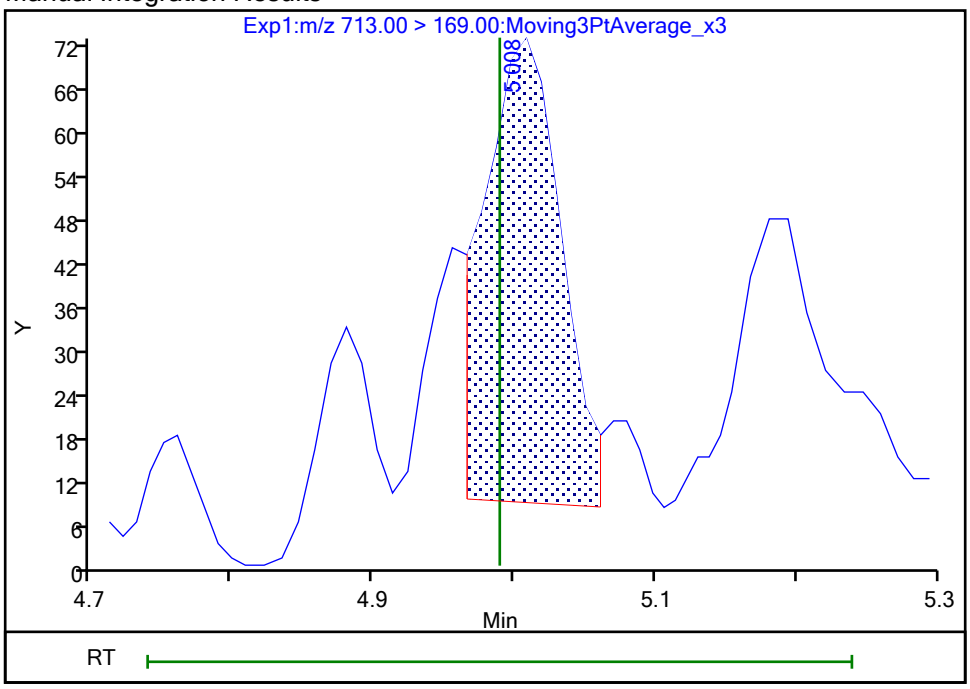
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 5.01
Area: 239
Amount: 0.001712
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:19:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

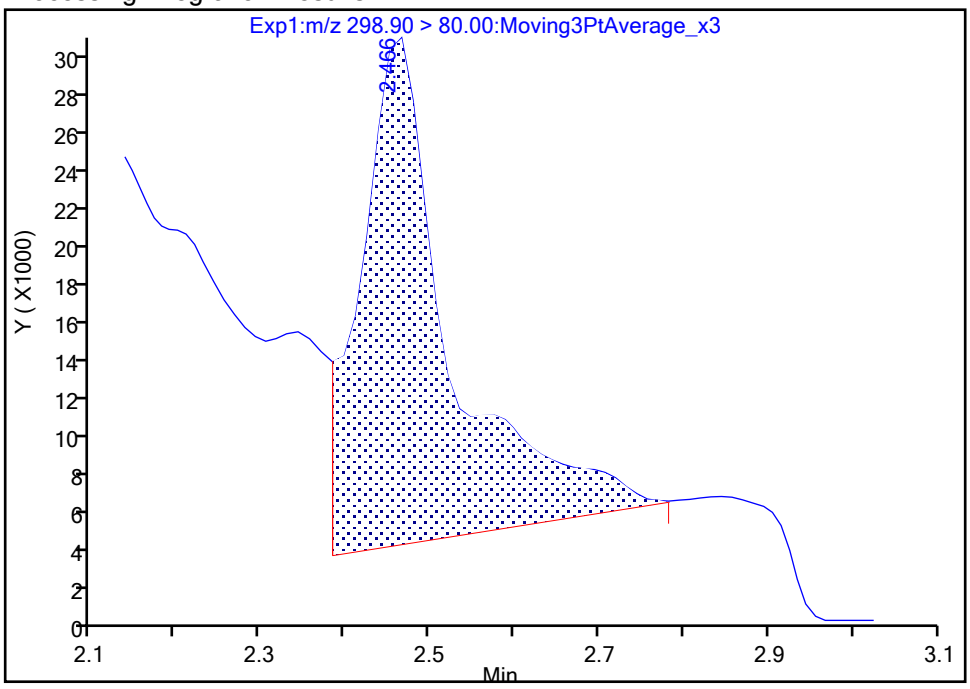
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

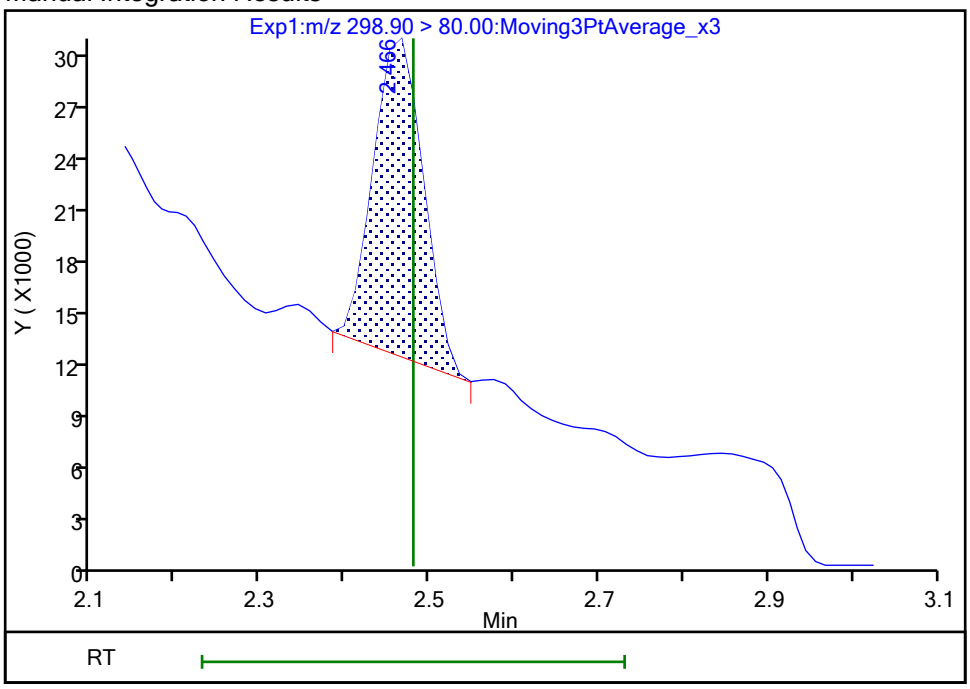
Processing Integration Results

RT: 2.47
Area: 197658
Amount: 0.127892
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 76070
Amount: 0.049220
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:13:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

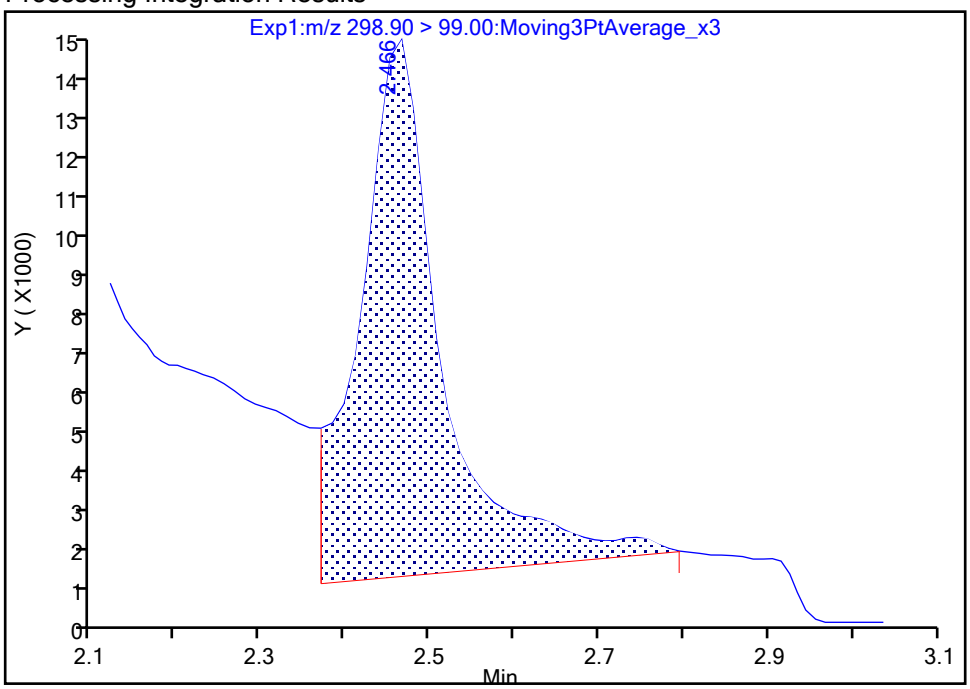
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

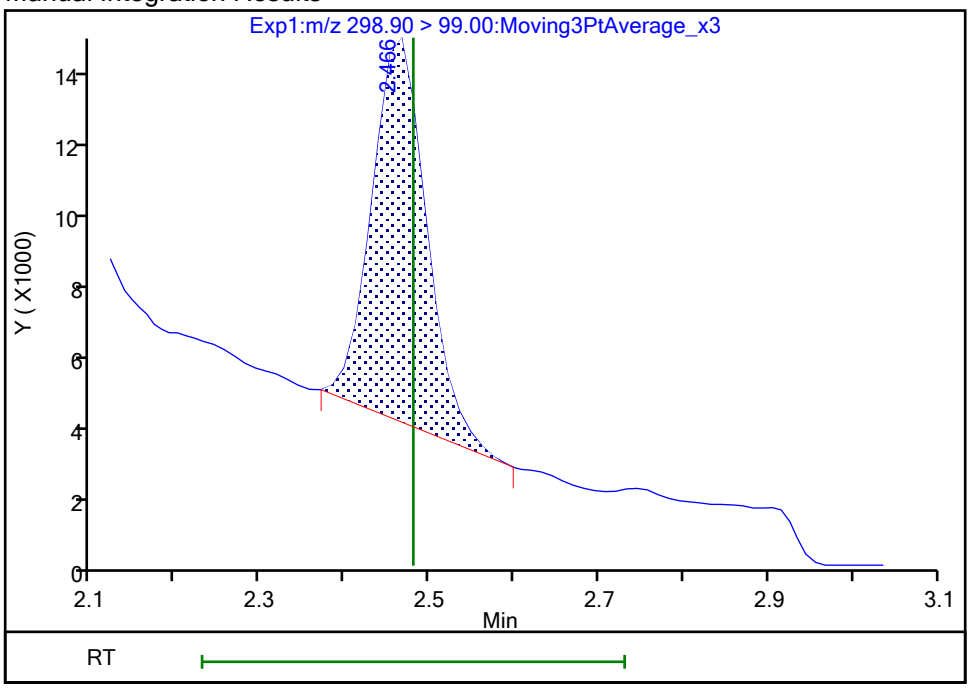
Processing Integration Results

RT: 2.47
Area: 88333
Amount: 0.127892
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 46554
Amount: 0.049220
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:13:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

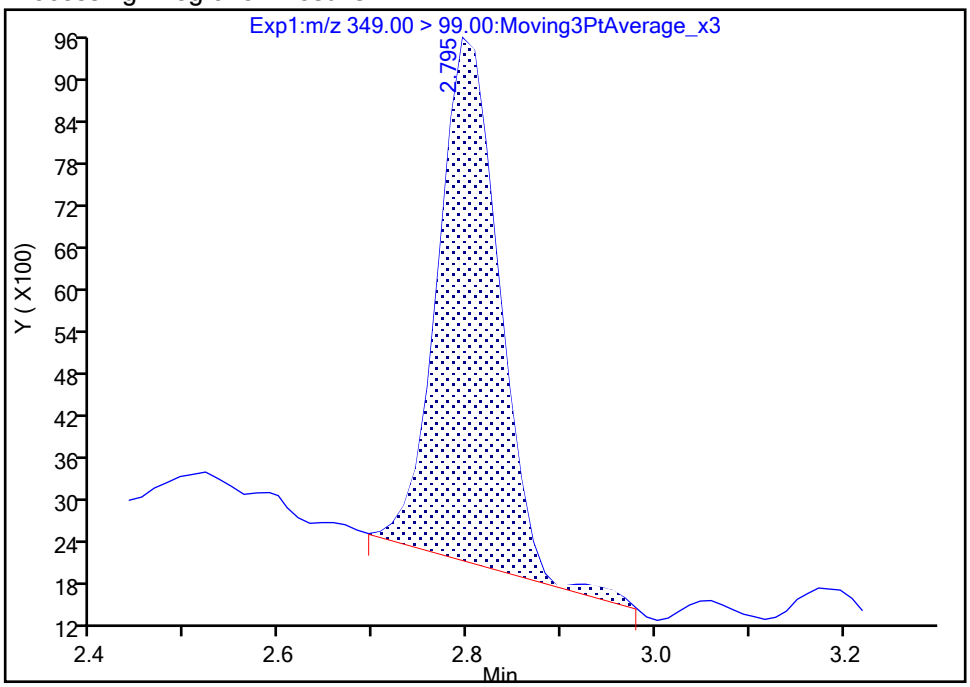
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

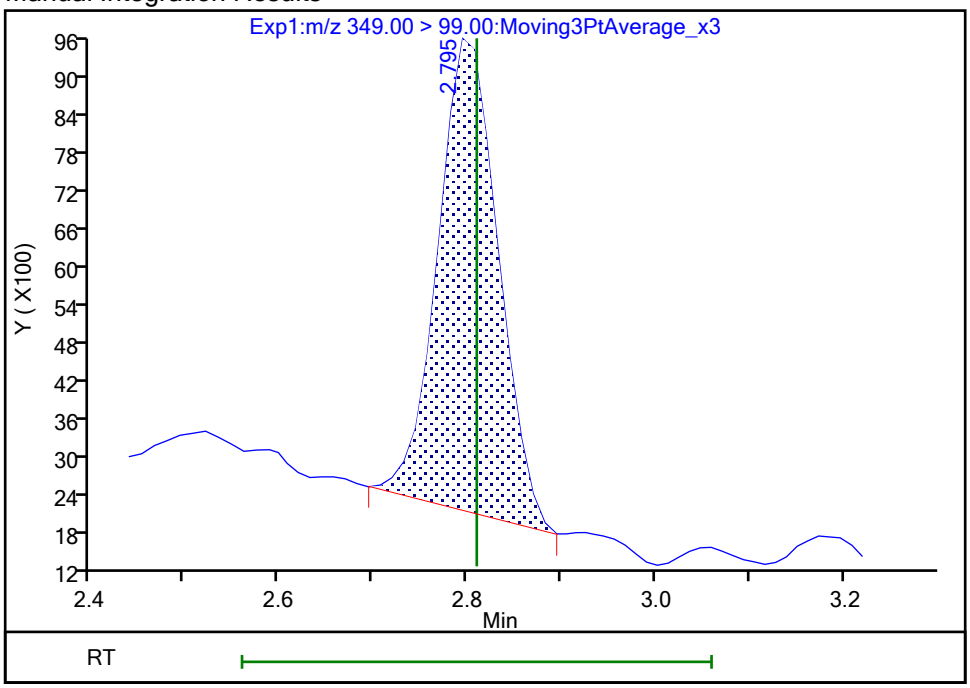
Processing Integration Results

RT: 2.79
Area: 33726
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 33213
Amount: 0.052136
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

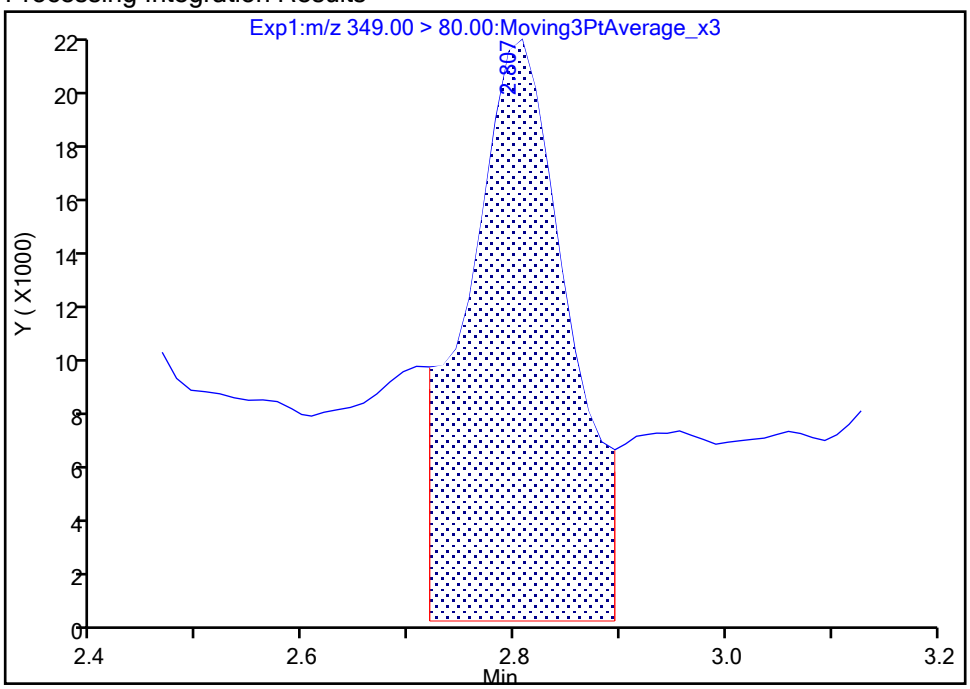
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

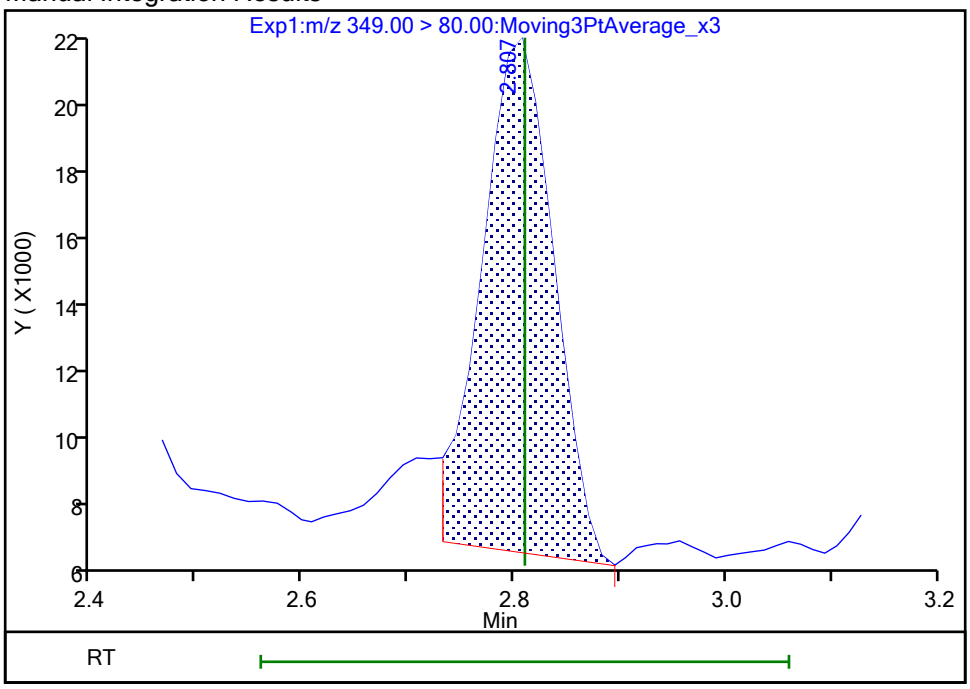
Processing Integration Results

RT: 2.81
Area: 141558
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 69307
Amount: 0.052136
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

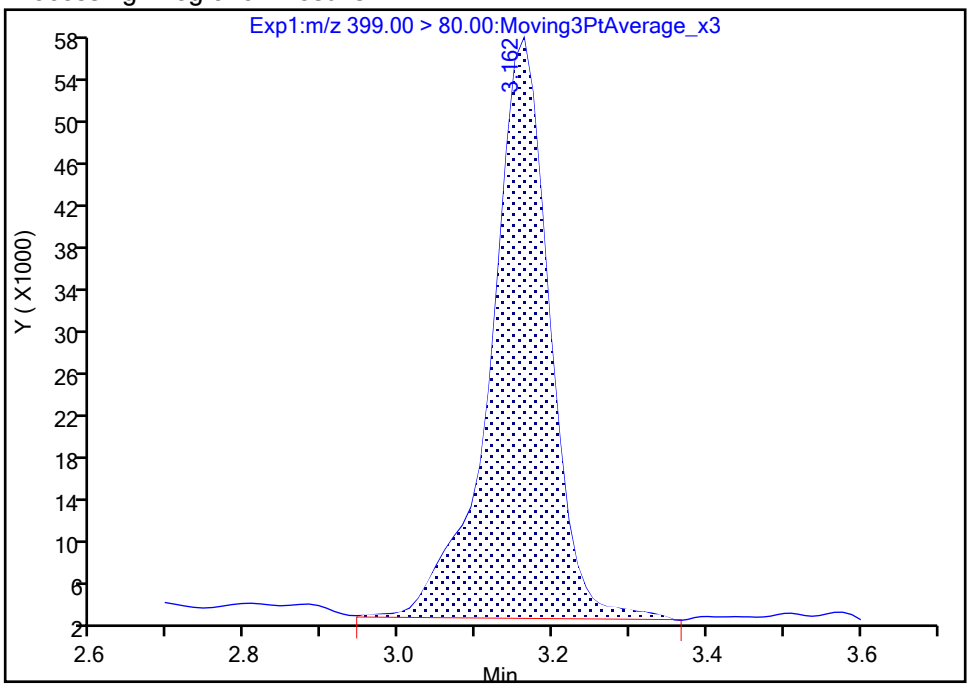
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

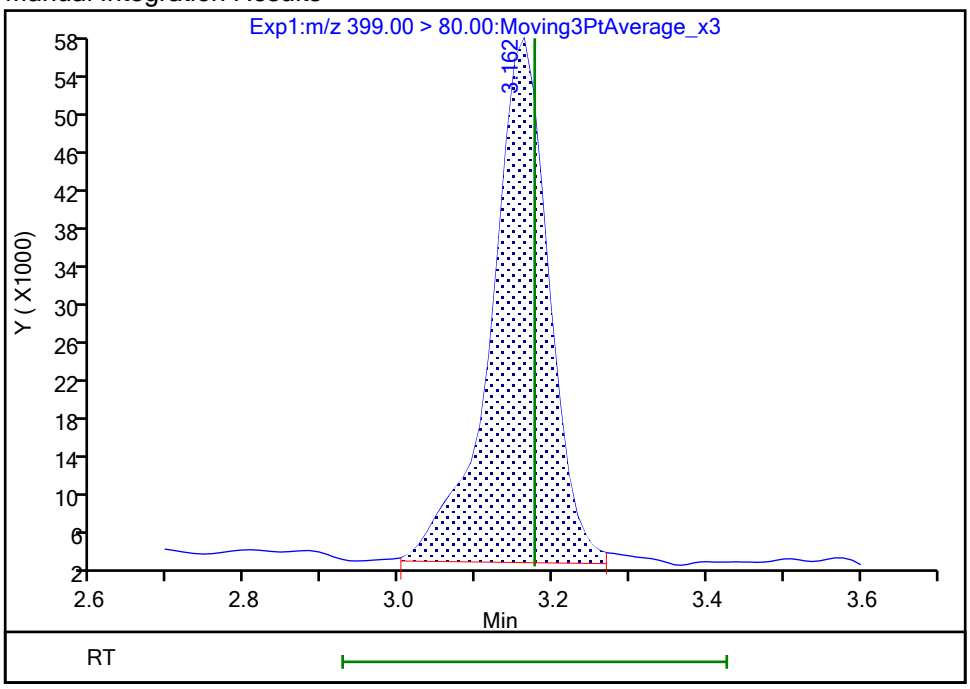
Processing Integration Results

RT: 3.16
Area: 292113
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 287621
Amount: 0.255239
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

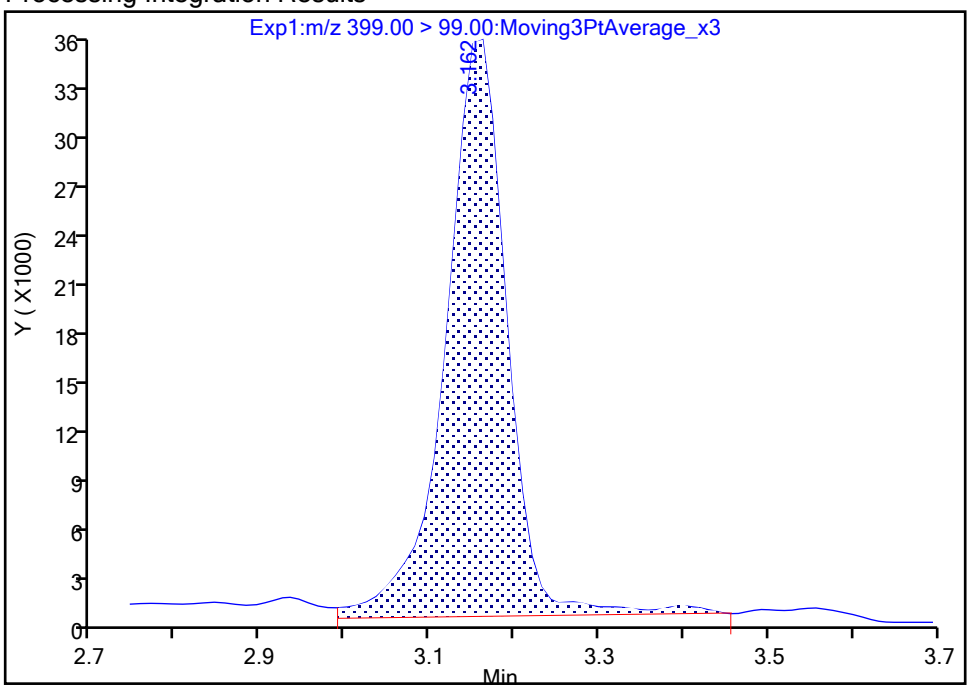
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

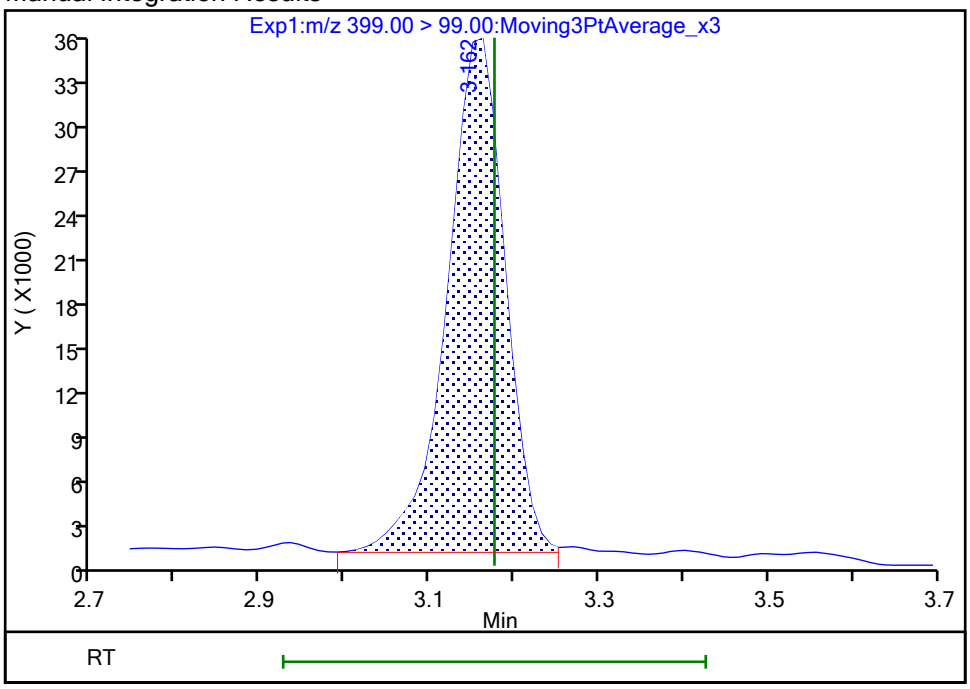
Processing Integration Results

RT: 3.16
Area: 180627
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 167162
Amount: 0.255239
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

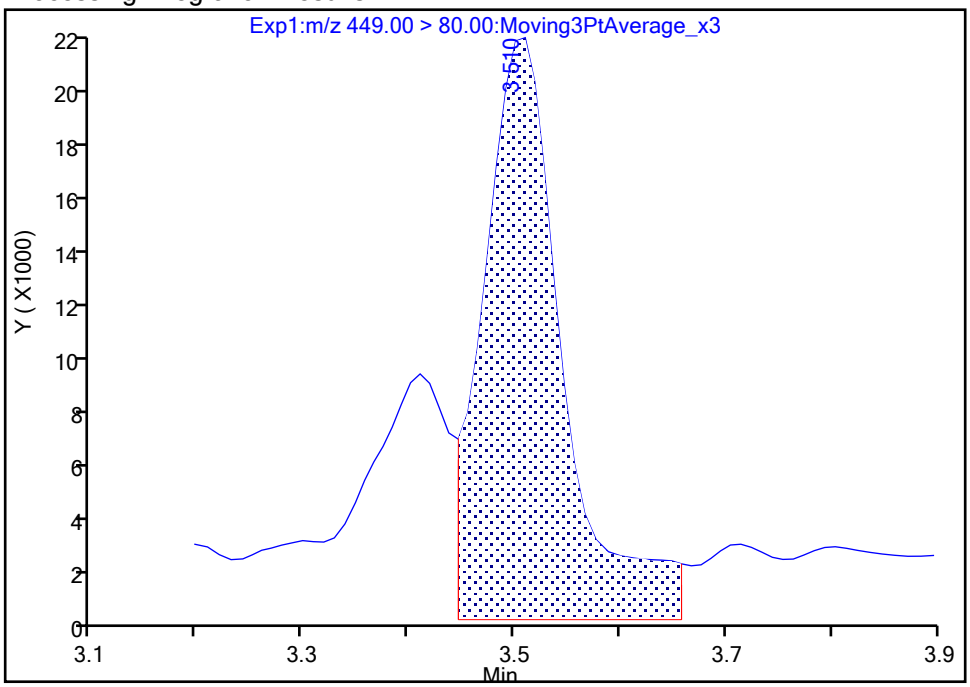
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

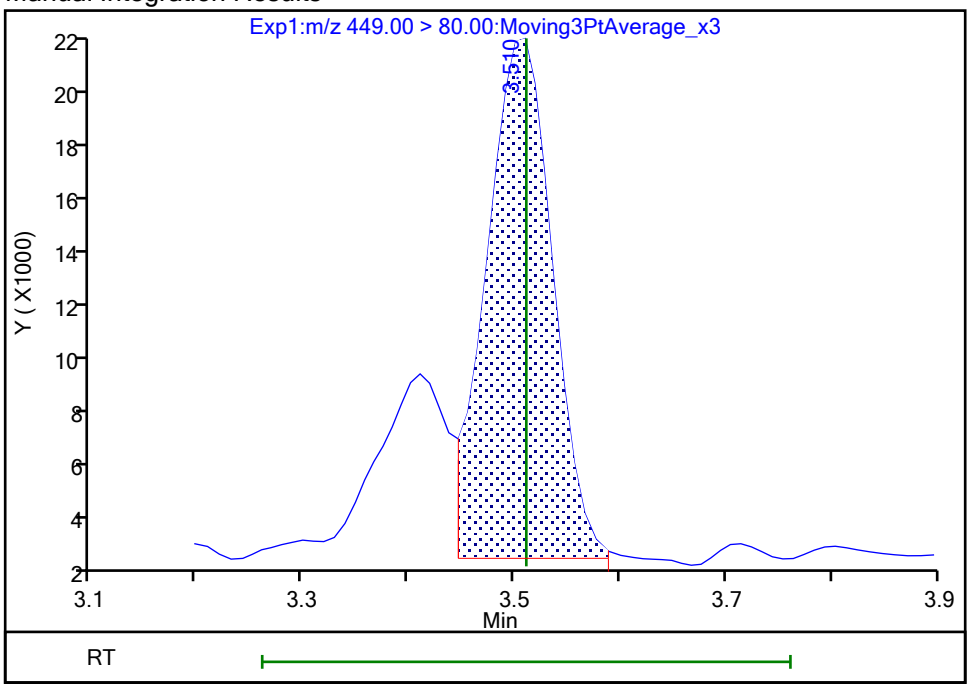
Processing Integration Results

RT: 3.51
Area: 113412
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 84261
Amount: 0.089612
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

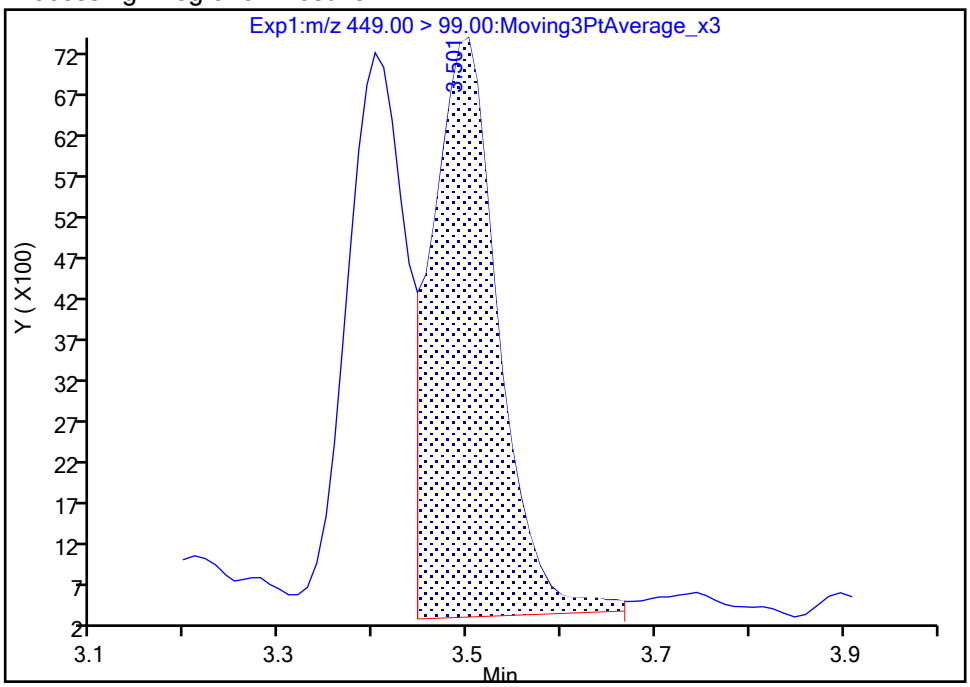
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

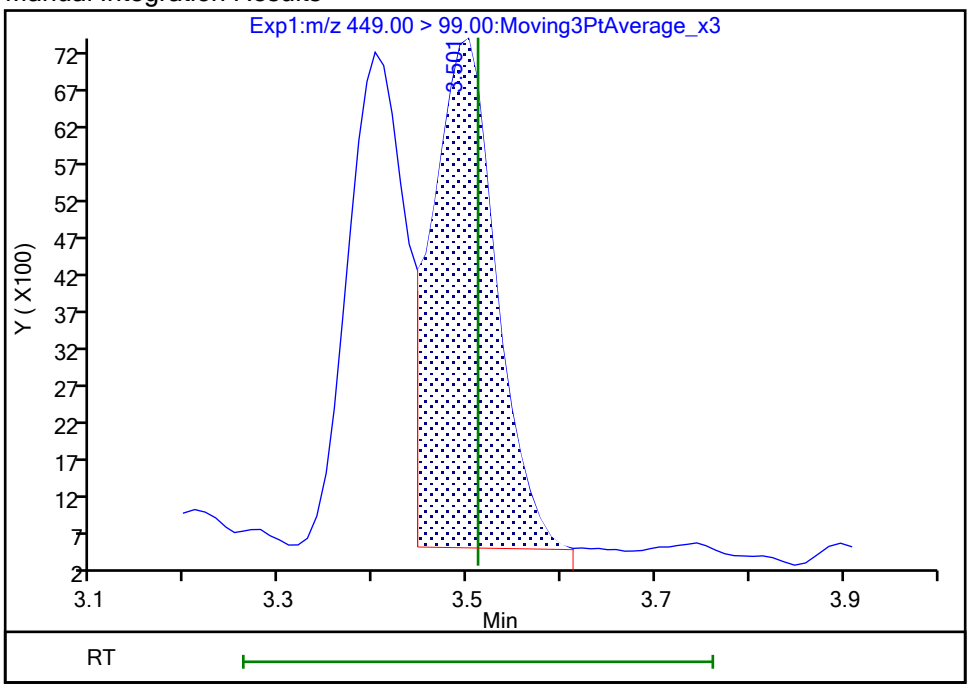
Processing Integration Results

RT: 3.50
Area: 34861
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 31883
Amount: 0.089612
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

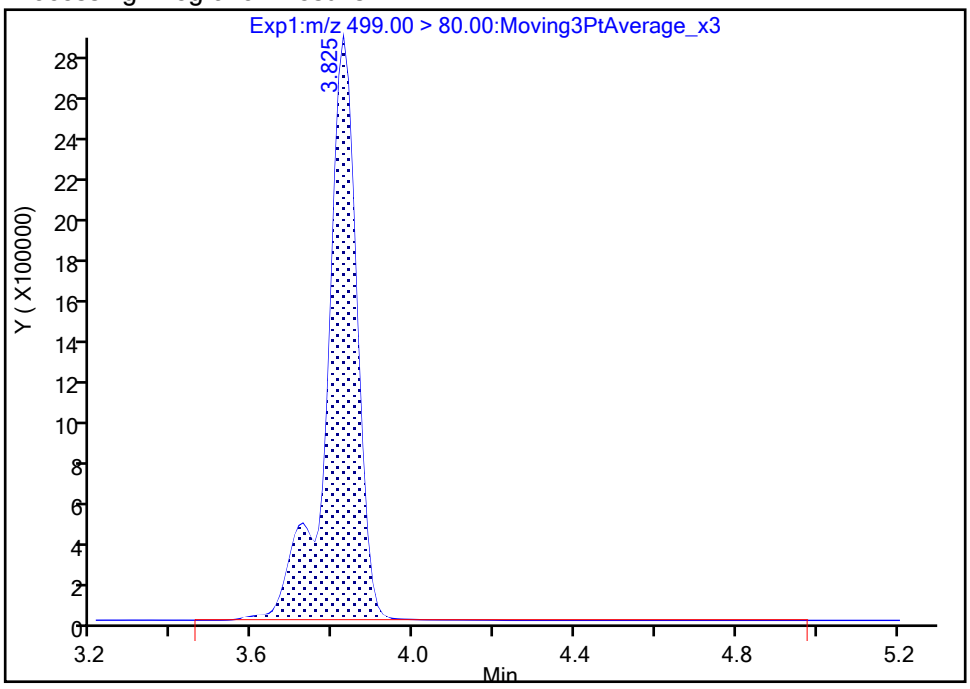
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

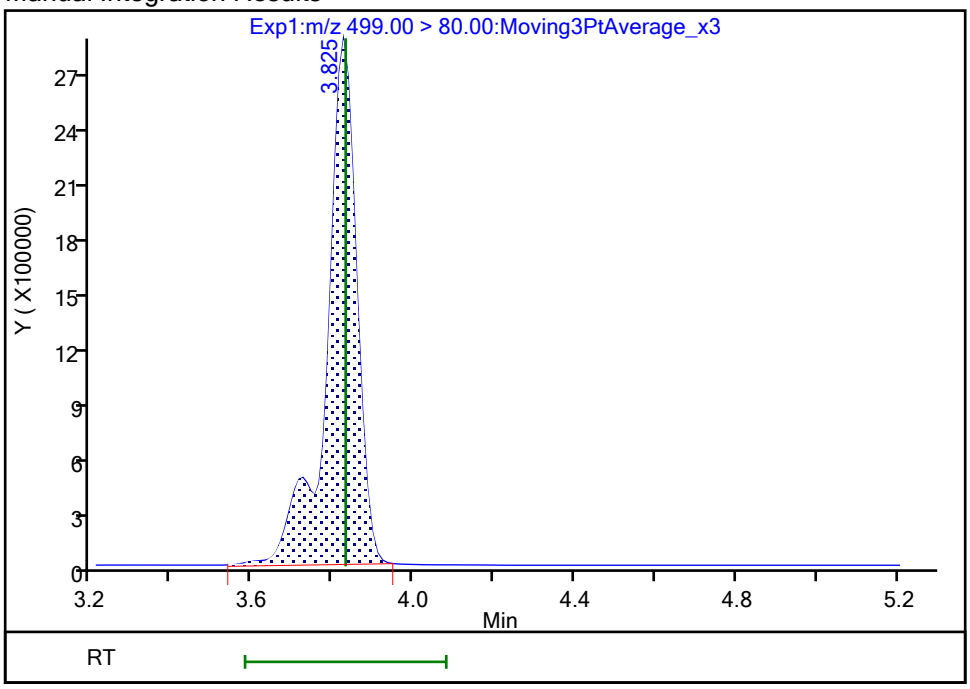
Processing Integration Results

RT: 3.82
Area: 15182748
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 15101052
Amount: 19.898699
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:16:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

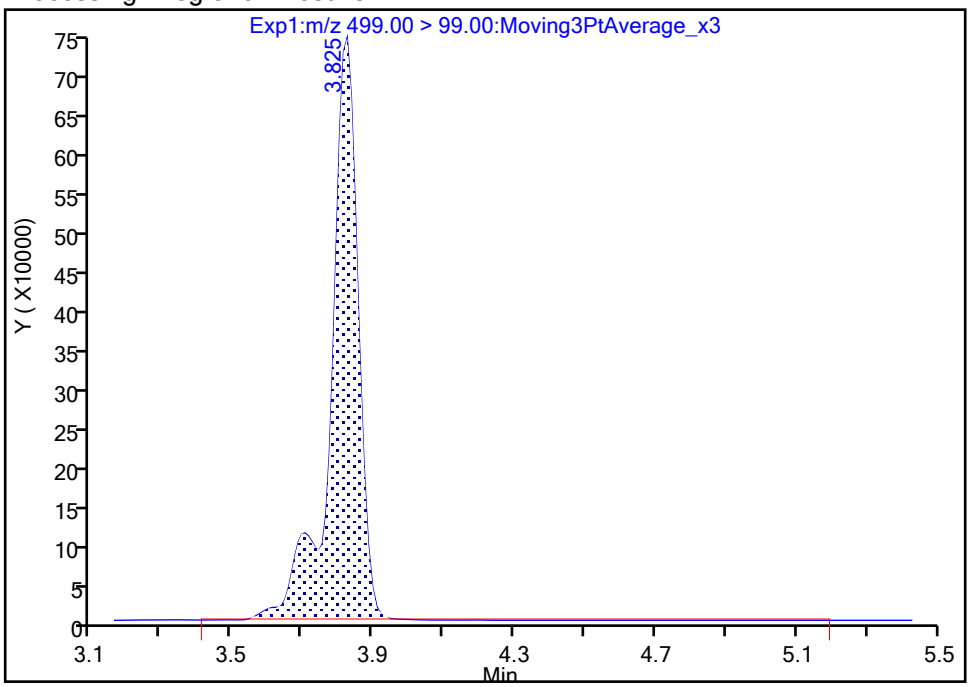
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

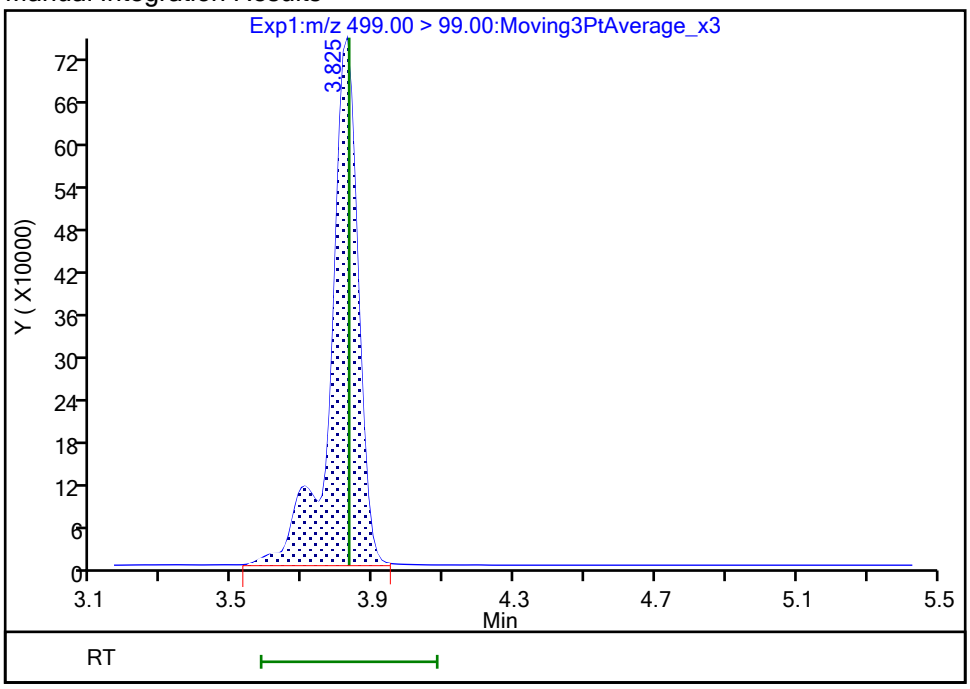
Processing Integration Results

RT: 3.82
Area: 4121652
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 4098708
Amount: 19.898699
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:16:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

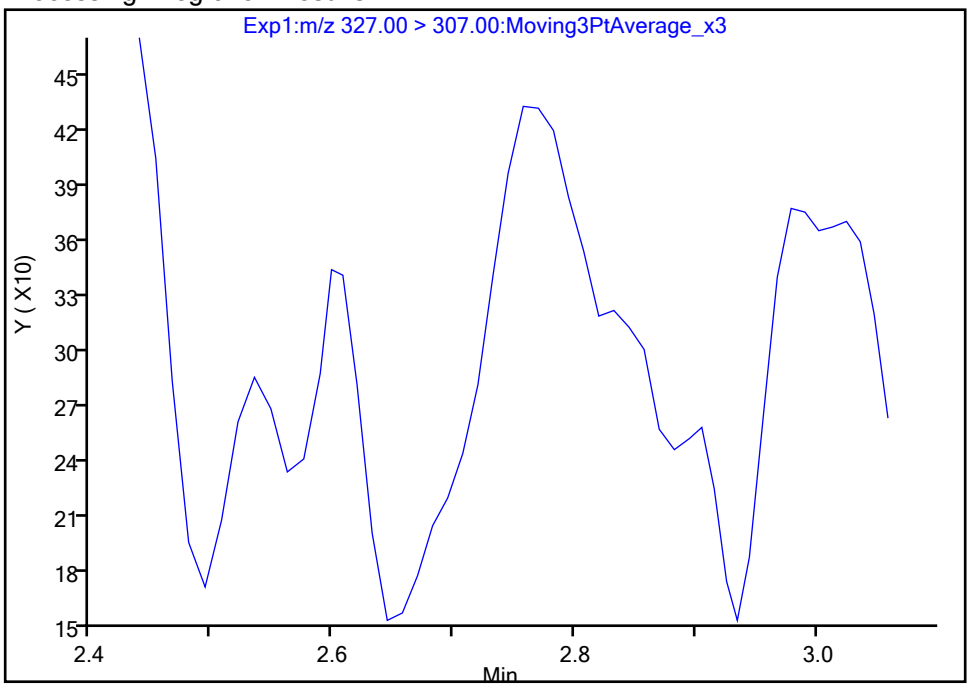
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

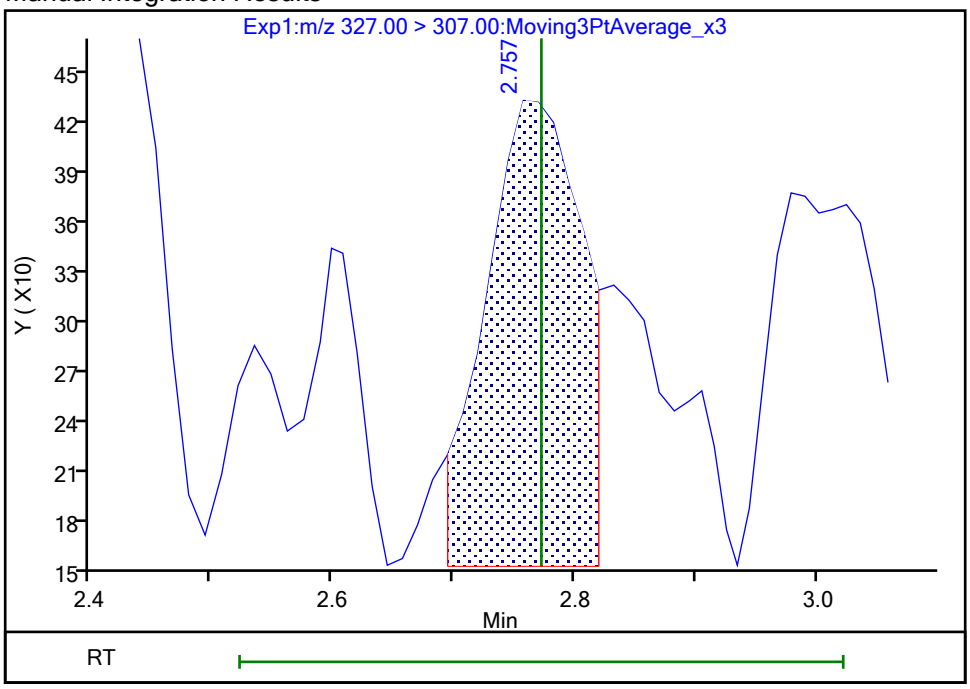
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 1503
Amount: 0.002375
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:13:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

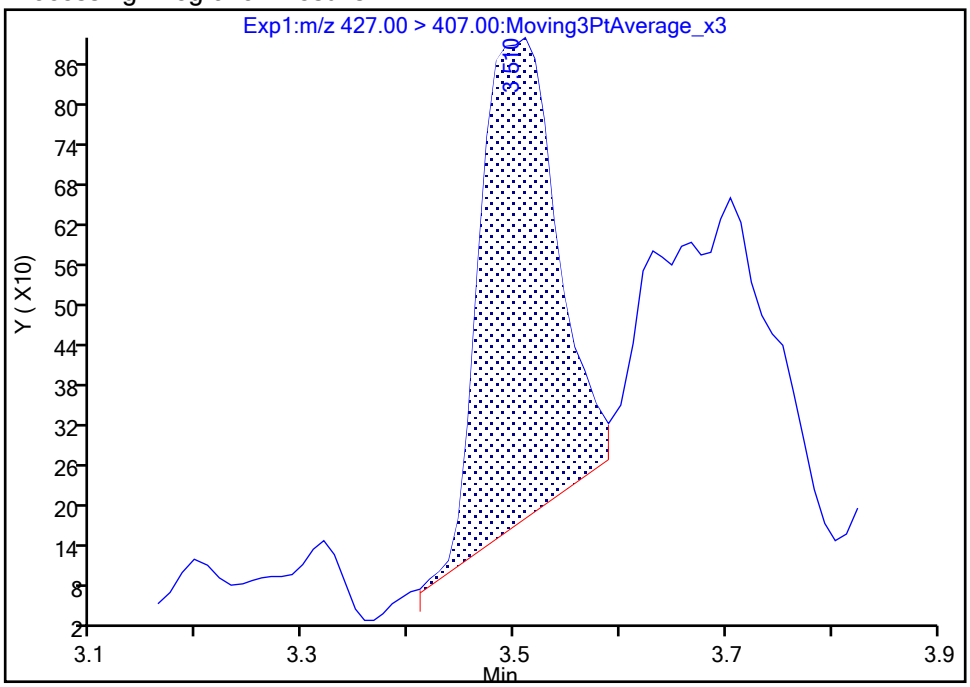
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

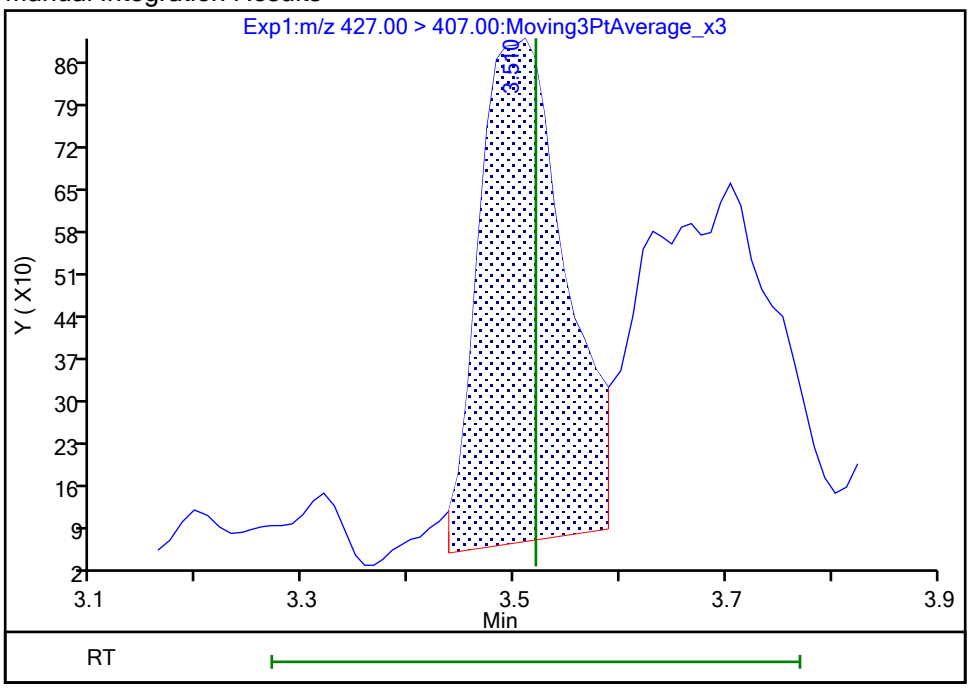
Processing Integration Results

RT: 3.51
Area: 3704
Amount: 0.005260
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 4748
Amount: 0.006743
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:15:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

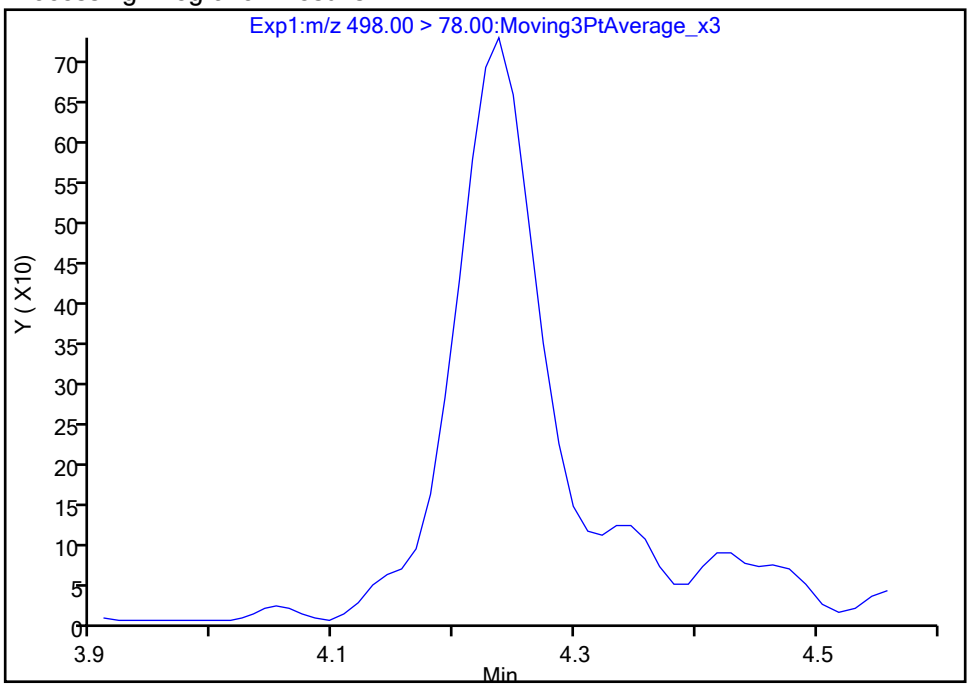
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

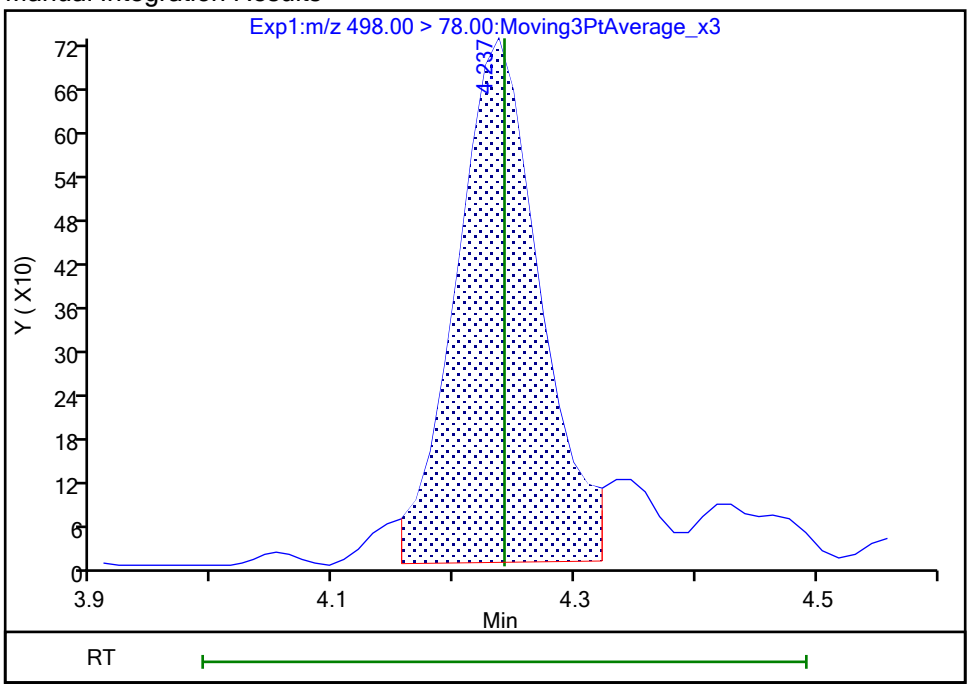
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 3476
Amount: 0.003377
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

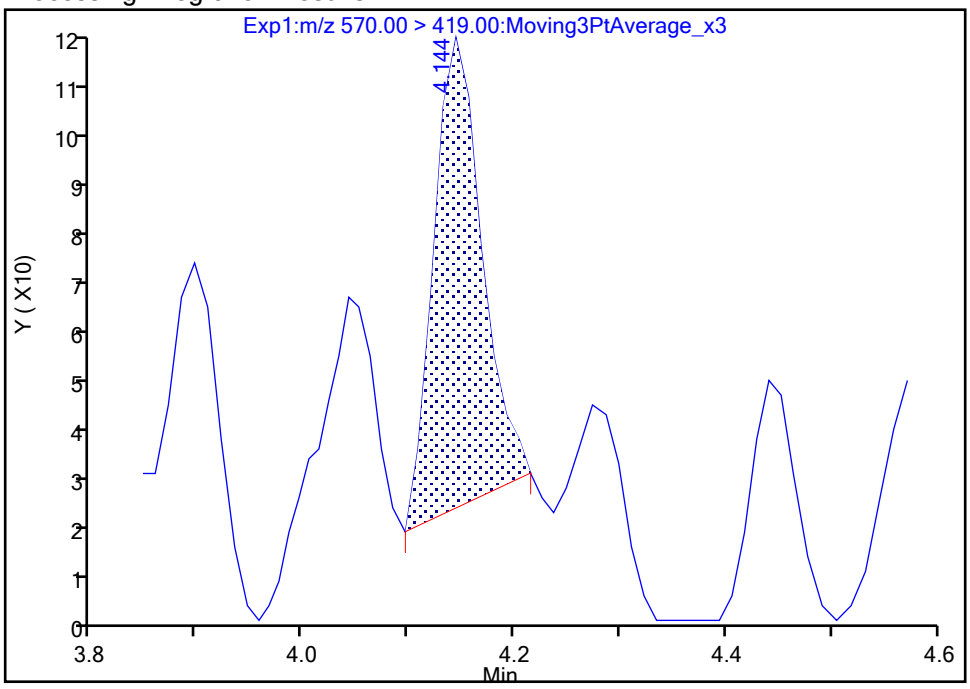
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

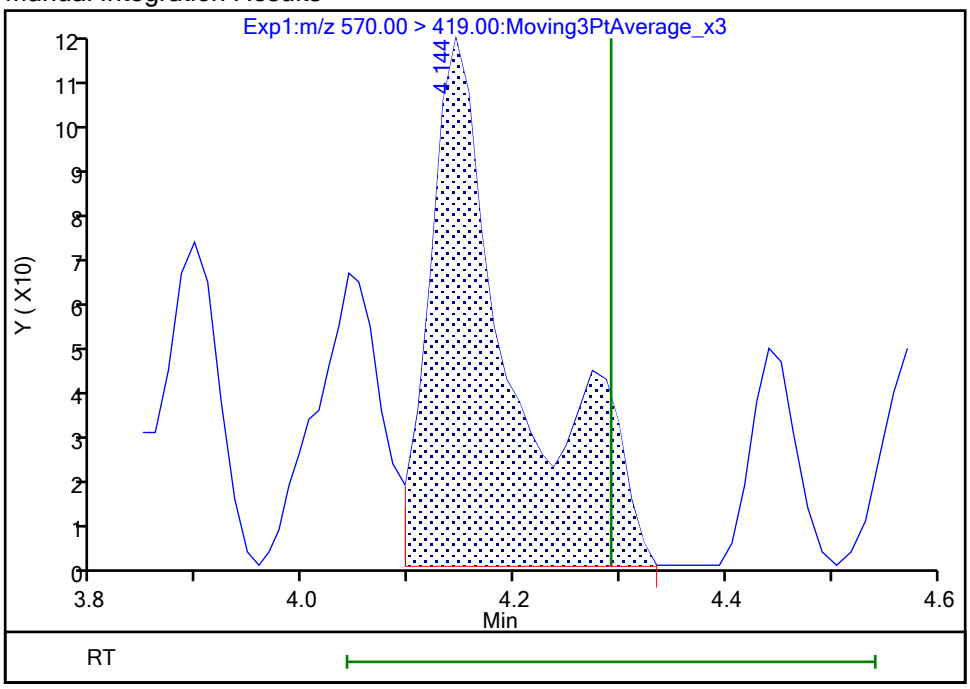
Processing Integration Results

RT: 4.14
Area: 304
Amount: 0.000901
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 664
Amount: 0.001967
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:18:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

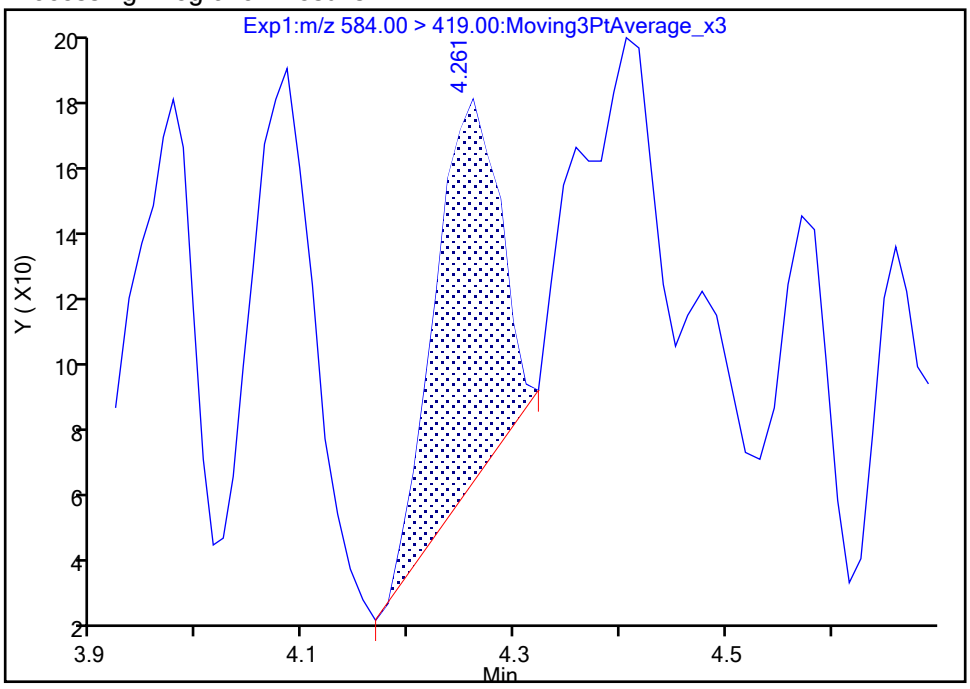
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

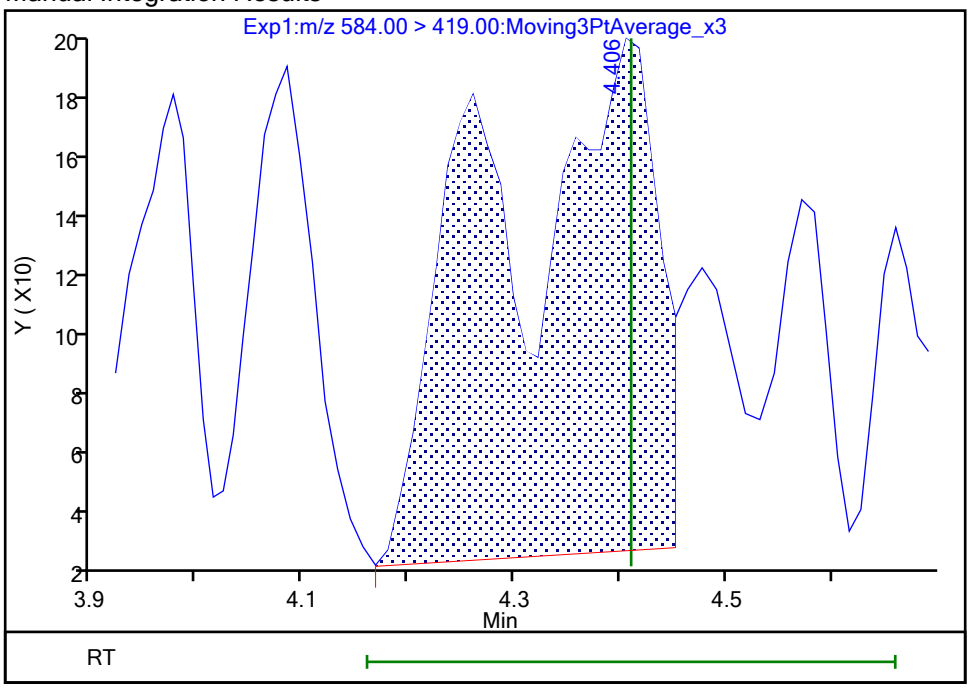
Processing Integration Results

RT: 4.26
Area: 484
Amount: 0.001323
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1753
Amount: 0.004790
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:19:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

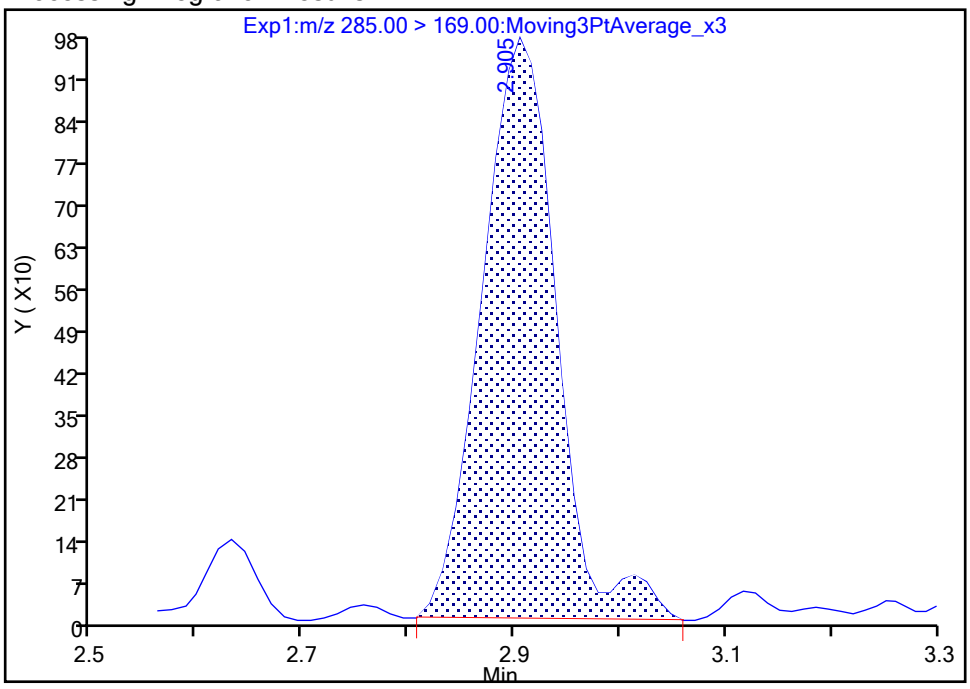
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

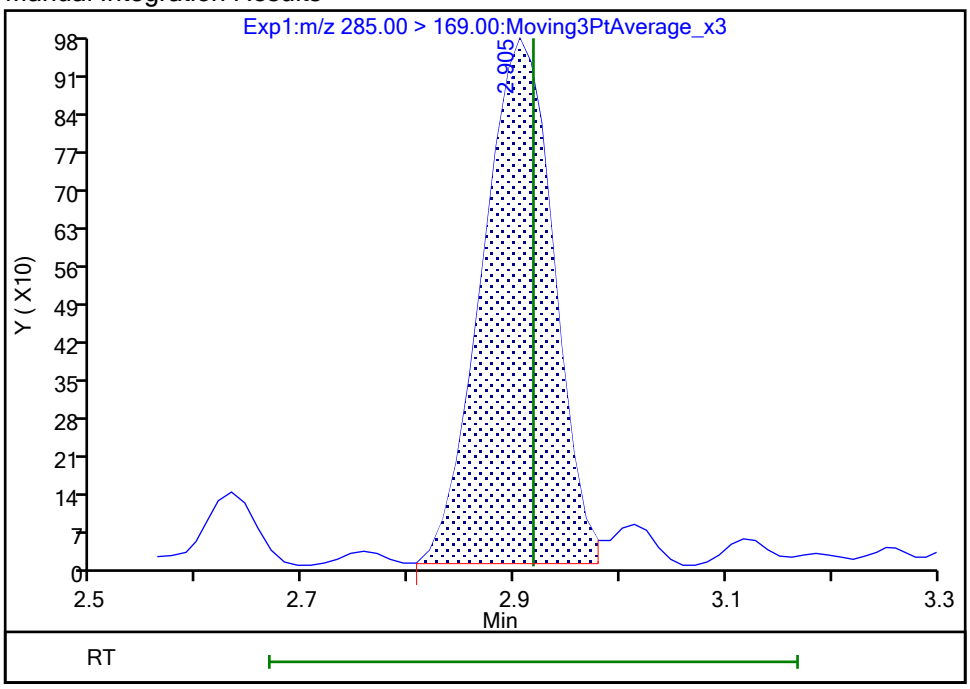
Processing Integration Results

RT: 2.91
Area: 4812
Amount: 0.027426
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 4589
Amount: 0.026155
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:14:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

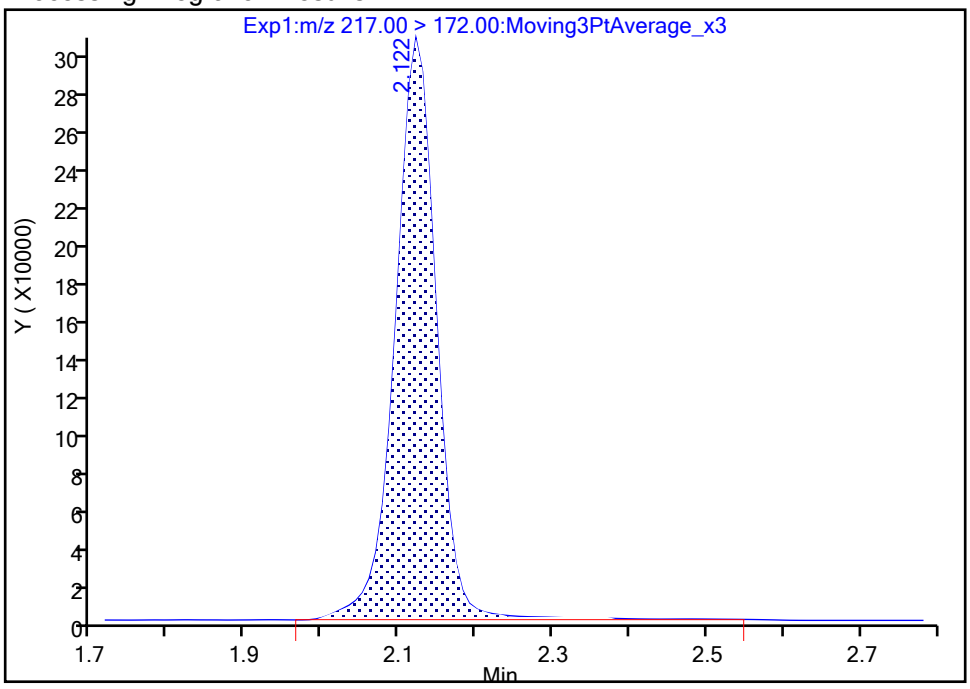
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

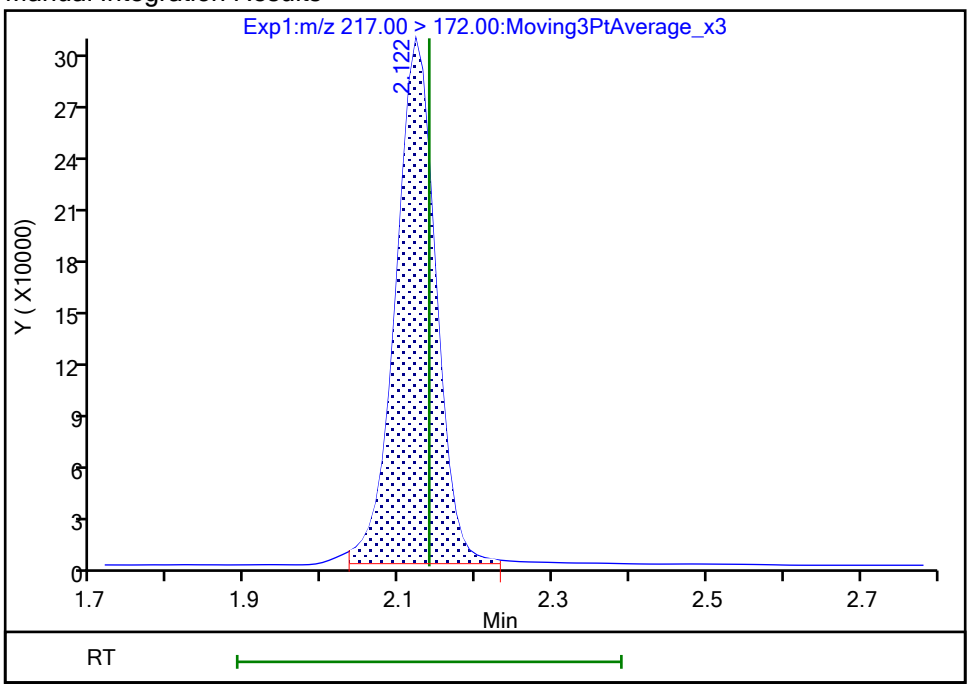
Processing Integration Results

RT: 2.12
Area: 1140988
Amount: 0.822622
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1117927
Amount: 0.805995
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:12:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

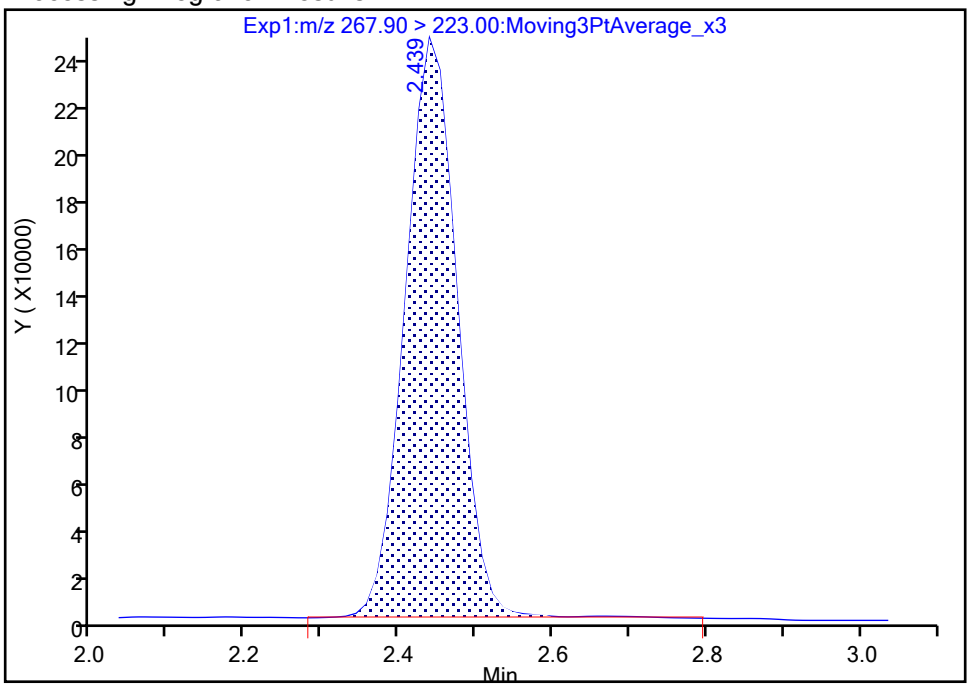
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

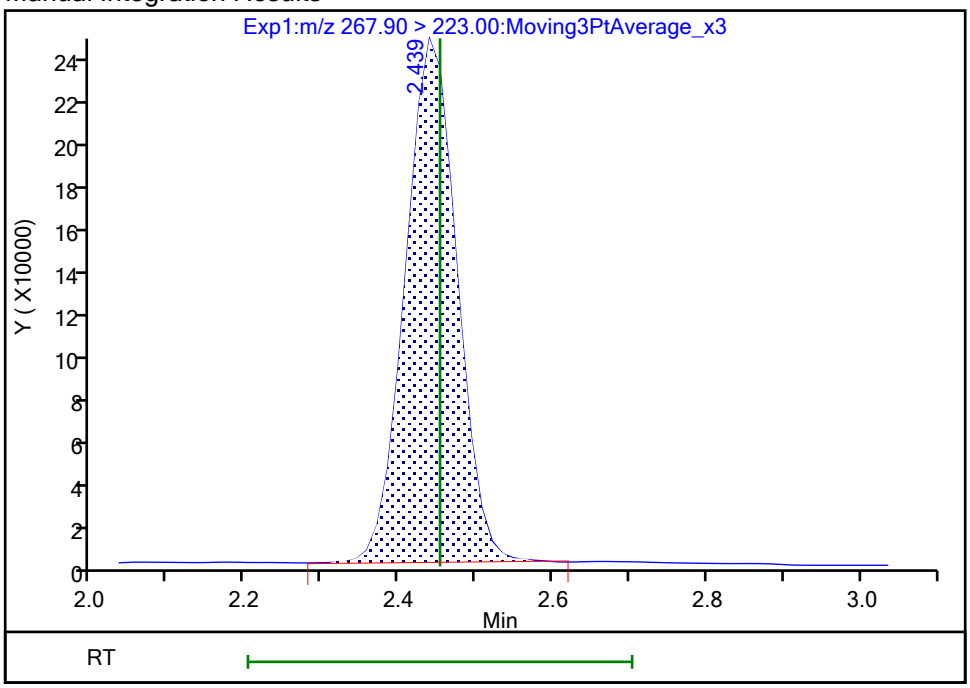
Processing Integration Results

RT: 2.44
Area: 1163560
Amount: 1.080925
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1153146
Amount: 1.071250
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:12:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

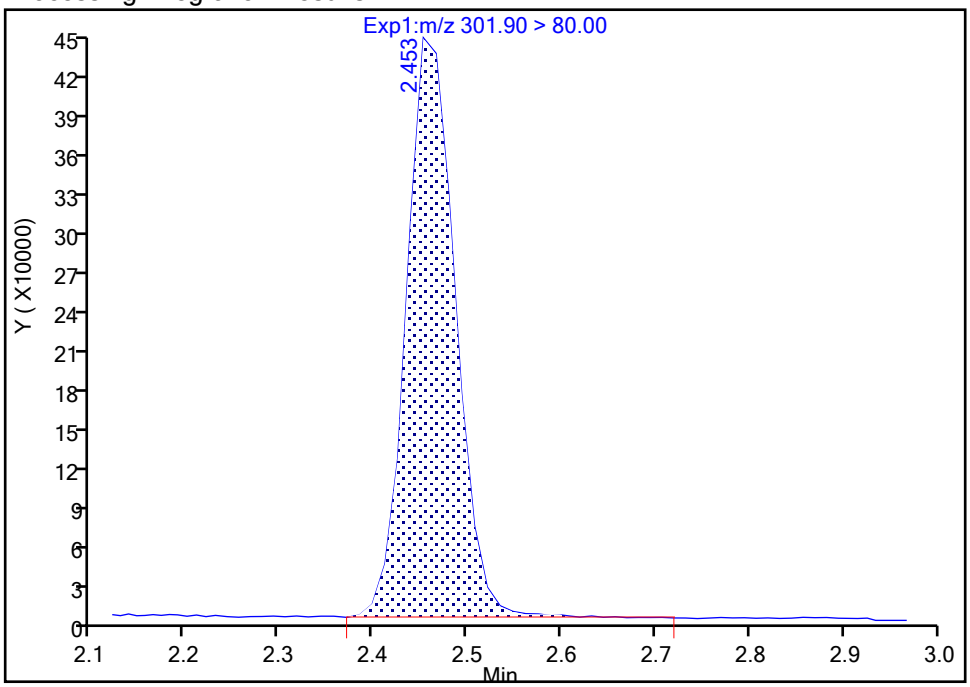
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

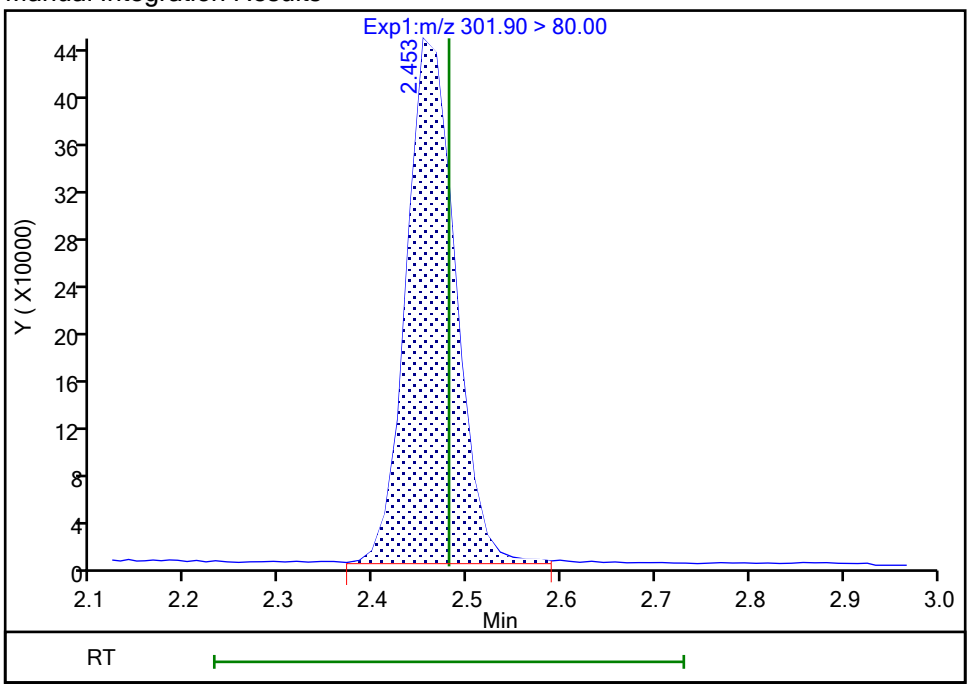
Processing Integration Results

RT: 2.45
Area: 1614627
Amount: 1.108569
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1608599
Amount: 1.104431
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:12:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

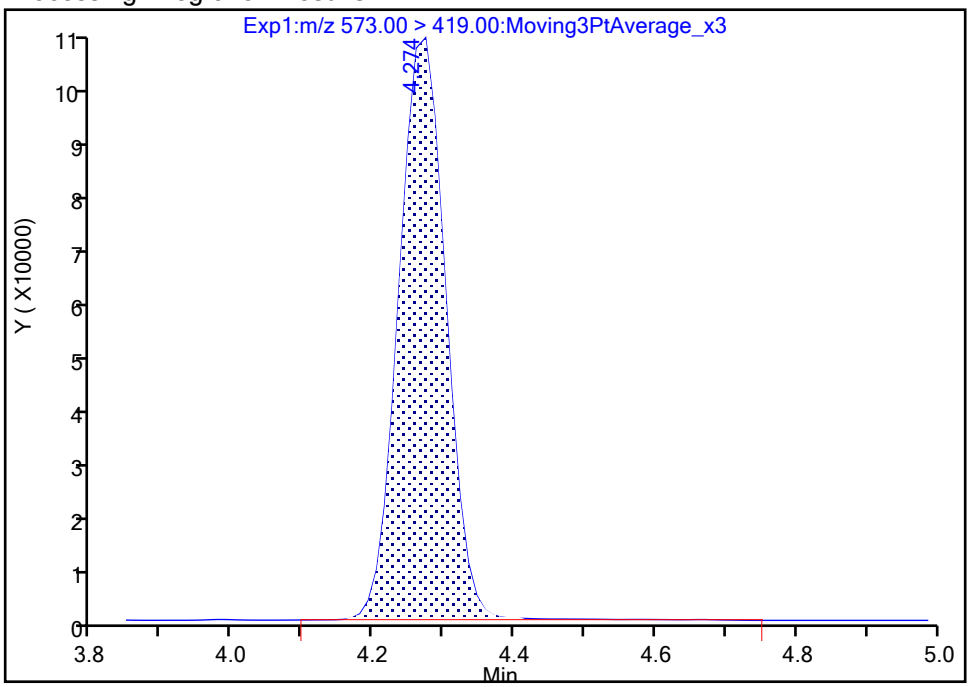
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

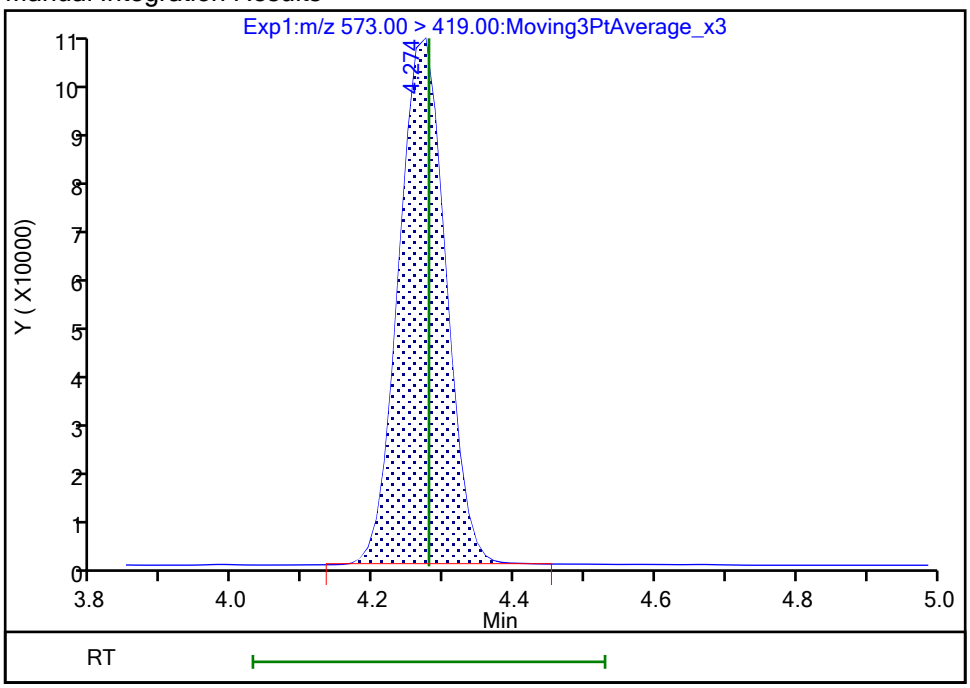
Processing Integration Results

RT: 4.27
Area: 469374
Amount: 1.266297
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 464965
Amount: 1.254402
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:13:12 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

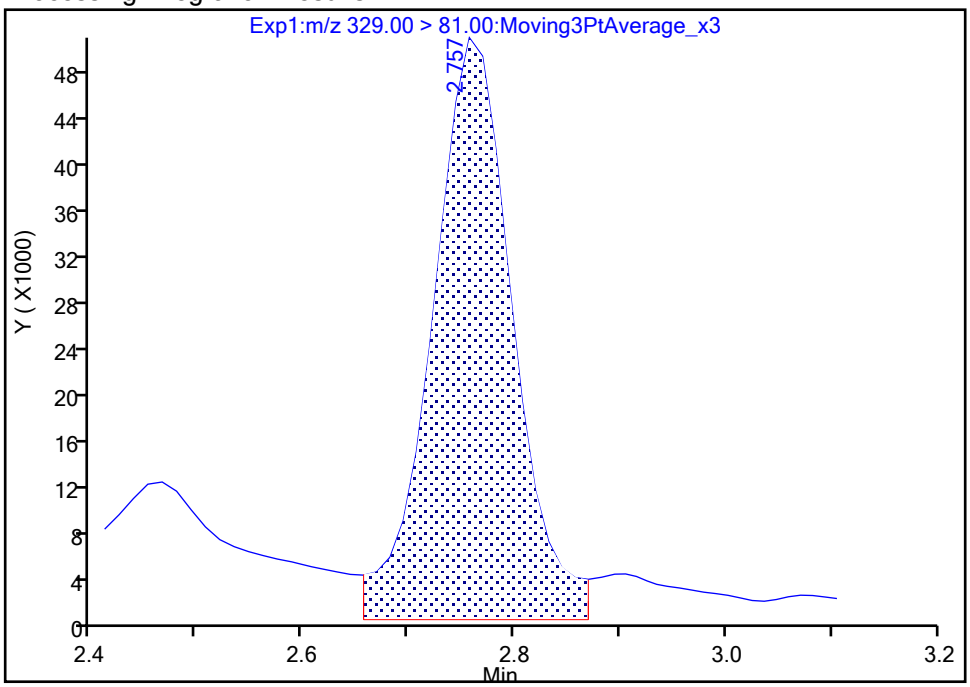
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

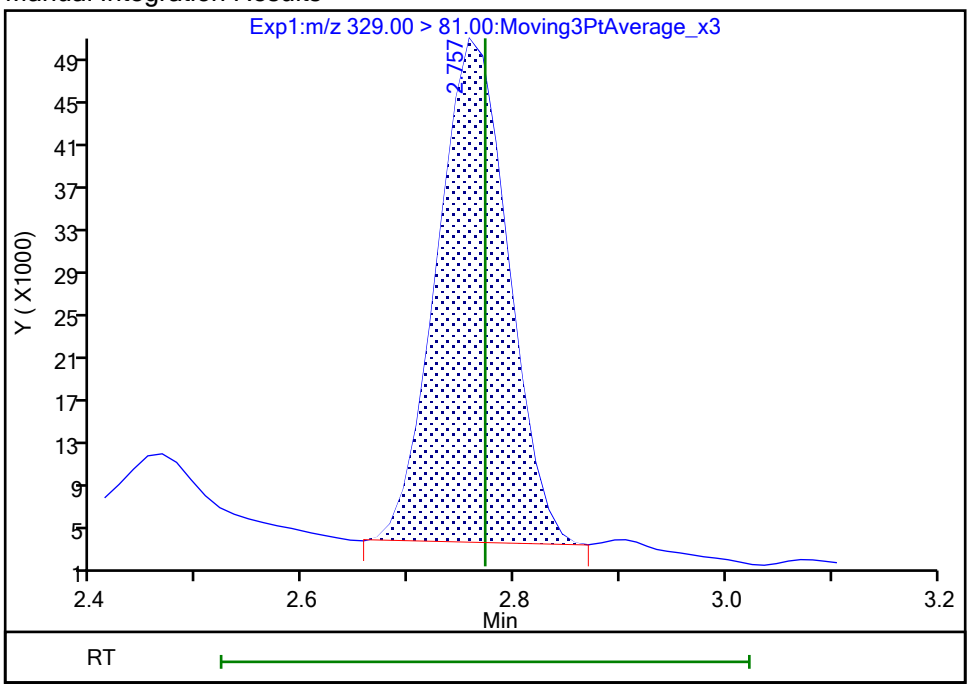
Processing Integration Results

RT: 2.76
Area: 264868
Amount: 1.572487
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 217533
Amount: 1.291465
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:12:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

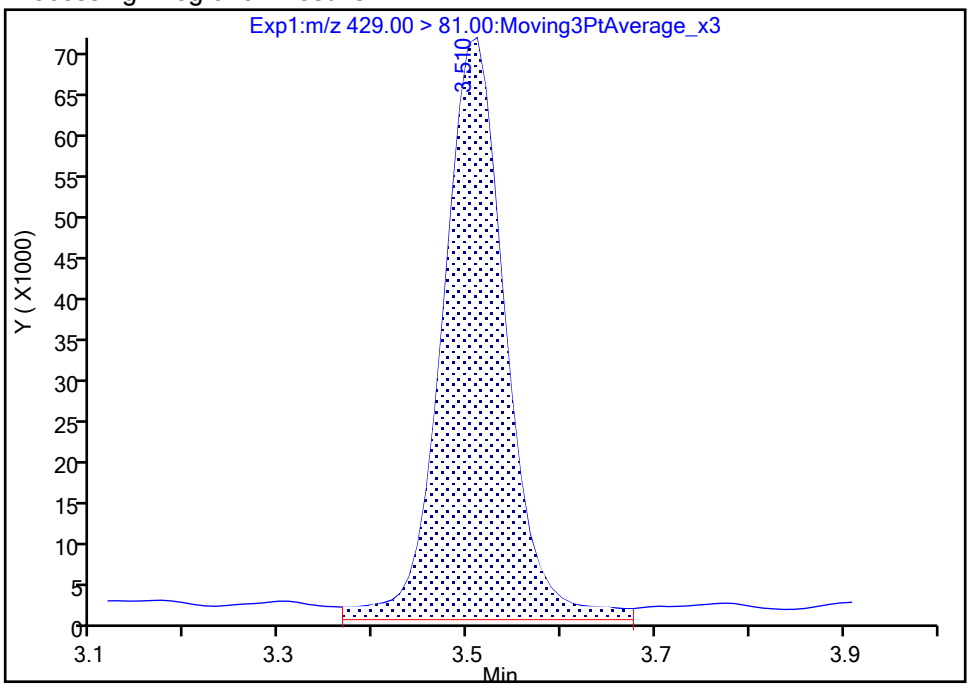
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A24.d				
Injection Date:	25-Oct-2023 21:00:05	Instrument ID:	LC812		
Lims ID:	460-290543-B-5-A	Lab Sample ID:	200-290543-5		
Client ID:	MW6-101723-0917-10				
Operator ID:	LC812user	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

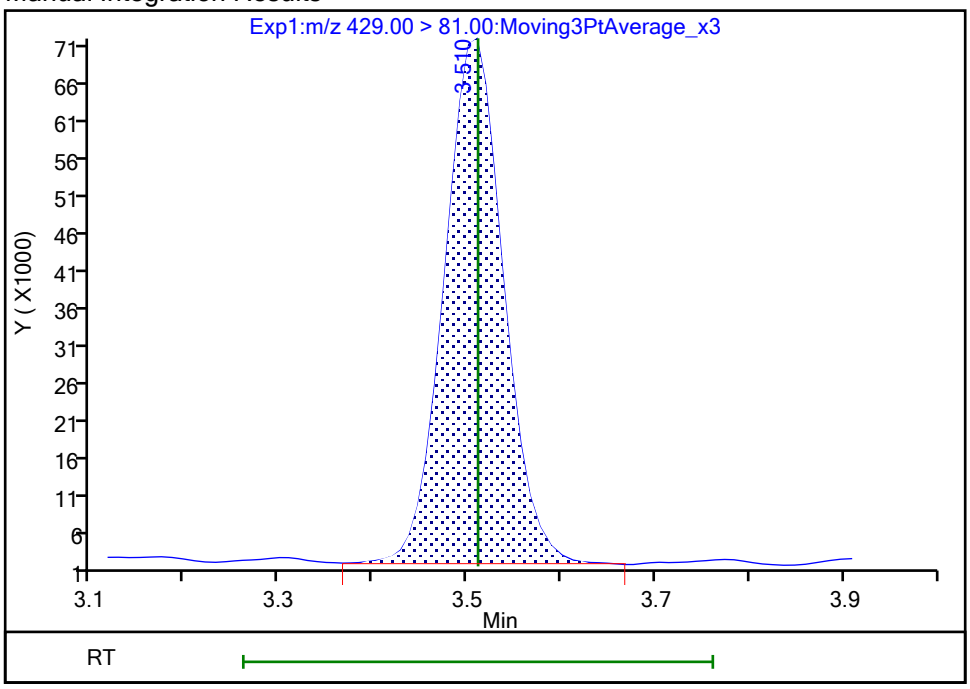
Processing Integration Results

RT: 3.51
Area: 334194
Amount: 1.540473
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 305927
Amount: 1.410176
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:12:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW7-101723-1052-13 | Lab Sample ID: 460-290543-6

Matrix: Water | Lab File ID: PA231025A25.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 10:52

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 291.8(mL) | Date Analyzed: 10/25/2023 21:08

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	12.1		4.28	1.03
2706-90-3	Perfluoropentanoic acid	8.52		1.71	0.58
307-24-4	Perfluorohexanoic acid	5.90		1.71	0.56
375-85-9	Perfluoroheptanoic acid	4.97		1.71	0.46
335-67-1	Perfluorooctanoic acid	15.4		1.71	0.65
375-95-1	Perfluorononanoic acid	4.97		1.71	0.42
335-76-2	Perfluorodecanoic acid	1.14	J	1.71	0.39
2058-94-8	Perfluoroundecanoic acid	1.71	U	1.71	0.47
307-55-1	Perfluorododecanoic acid	1.71	U	1.71	0.42
72629-94-8	Perfluorotridecanoic acid	1.71	U	1.71	0.41
376-06-7	Perfluorotetradecanoic acid	1.71	U	1.71	0.55
375-73-5	Perfluorobutanesulfonic acid	3.39		1.71	0.53
2706-91-4	Perfluoropentanesulfonic acid	3.31	I	1.71	0.43
355-46-4	Perfluorohexanesulfonic acid	15.1	I	1.71	0.47
375-92-8	Perfluoroheptanesulfonic acid	4.80	I	1.71	0.35
1763-23-1	Perfluorooctanesulfonic acid	420		1.71	0.73
68259-12-1	Perfluorononanesulfonic acid	1.71	U	1.71	0.34
335-77-3	Perfluorodecanesulfonic acid	1.71	U	1.71	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.28	U	4.28	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.71	U	1.71	0.66
754-91-6	Perfluorooctanesulfonamide	1.71	U	1.71	0.79
2355-31-9	NMeFOSAA	4.28	U	4.28	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.28	U	4.28	1.37
13252-13-6	HFPODA	3.43	U	3.43	0.94
919005-14-4	DONA	1.71	U	1.71	0.36
756426-58-1	9Cl-PF3ONS	1.71	U	1.71	0.27
763051-92-9	11Cl-PF3OUdS	1.71	U	1.71	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW7-101723-1052-13 Lab Sample ID: 460-290543-6

Matrix: Water Lab File ID: PA231025A25.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 10:52

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 291.8(mL) Date Analyzed: 10/25/2023 21:08

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	50		50-150
STL01893	13C5 PFPeA	82		50-150
STL01892	13C4 PFHpA	92		50-150
STL02116	13C2 PFTeDA	72		50-150
STL02337	13C3 PFBS	91		50-150
STL01056	13C8 FOSA	72		50-150
STL02118	d3-NMeFOSAA	89		50-150
STL02117	d5-NEtFOSAA	92		50-150
STL02395	M2-4:2 FTS	116		50-150
STL02279	M2-6:2 FTS	111		50-150
STL02280	M2-8:2 FTS	99		50-150
STL02255	13C3 HFPO-DA	88		50-150
STL00994	18O2 PFHxS	98		50-150
STL00993	13C2 PFHxA	86		50-150
STL00991	13C4 PFOS	95		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d
Lims ID: 460-290543-B-6-A
Client ID: MW7-101723-1052-13
Sample Type: Client
Inject. Date: 25-Oct-2023 21:08:15 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-B-6-A
Misc. Info.: 200-0057556-025 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:26:39
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	854264	0.6308		50.5	418	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	242624	0.3517			3.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1073576	1.02		81.7	184	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	230474	0.2487			0.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.701	1505088	1.06		91.0	3646	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	142966	0.0989	Target=2.06		1.3	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	76584		1.87(1.03-3.09)		3.0	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	221957	1.35		116	9.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1152988	1.08		86.3	1574	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	174901	0.1723	Target=14.12		1.1	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	13834		12.64(7.06-21.17)		2.8	
70 Perfluoropentanesulfonic acid										RM
349.00 > 80.00	2.797	2.810	-0.013	0.884	126500	0.0967	Target=2.72		2.1	RM
349.00 > 99.00	2.797	2.810	-0.013	0.884	108267		1.17(1.36-4.09)		9.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	228097	1.10		88.2	1798	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.918	-0.010	1.000	2493	0.0136			15.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1184255	1.16		98.3	3752	
8 Perfluorohexanesulfonic acid										RM
399.00 > 80.00	3.165	3.176	-0.011	1.000	487603	0.4398	Target=3.32		22.2	RM
399.00 > 99.00	3.153	3.176	-0.023	0.996	393228		1.24(1.66-4.98)		91.0	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.176	-0.011	1.000	174653	0.1451	Target=4.17		2.9	M
363.00 > 169.00	3.165	3.176	-0.011	1.000	47992		3.64(2.09-6.26)		24.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1342203	1.14		91.5	3085	
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	3.502	3.511	-0.009	0.917	124811	0.1401	Target=4.83		5.7	RM
449.00 > 99.00	3.493	3.511	-0.018	0.915	55903		2.23(2.41-7.24)		7.4	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.511	3.511	0.0	0.997	279144	1.32		111	28.0	M
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.520	-0.018	0.997	620	0.000965			1.2	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.000	649185	0.4497	Target=2.88		11.3	M
413.00 > 169.00	3.520	3.529	-0.009	1.000	229482		2.83(1.44-4.32)		105	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1694166	1.27		102	3447	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.529	-0.009		1707015	1.25			2902	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.830	-0.011	1.000	8805875	12.2	Target=4.24		716	M
499.00 > 99.00	3.819	3.830	-0.011	1.000	3033514		2.90(2.12-6.37)		716	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.830	-0.011	1.085	736785	1.14		95.2	104	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.854	-0.012	1.000	194636	0.1450	Target=8.34		9.4	M
463.00 > 169.00	3.842	3.854	-0.012	1.000	20343		9.57(4.17-12.51)		18.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.854	-0.012	1.091	1711739	1.18		94.7	2230	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.124	4.148	-0.024	1.000	49672	0.0331	Target=11.44		4.2	M
513.00 > 169.00	4.124	4.148	-0.024	1.000	4968		10.00(5.72-17.16)		10.0	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.148	-0.024	1.172	1875822	1.24		99.1	6936	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.148	-0.012	1.000	1487	0.002872			14.9	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.148	-0.012	1.175	281632	1.18		98.8	112	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1164312	0.9011		72.1	3096	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.242	-0.012	0.997	2735	0.003078			4.5	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.278	-0.013	1.212	403398	1.11		89.2	955	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.303	4.291	0.012	1.009	339	0.001158			2.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.398	-0.012	1.246	1707455	1.19		95.6	5500	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.249	399077	1.15		91.6	595	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.410	-0.012	1.000	2024	0.006338			3.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	1690930	1.16		93.1	5412	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.989	-0.010	1.414	1301697	0.8998		72.0	4108	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	5.000	4.989	0.011	1.004	120	0.001031	Target=0.87		2.4	M
713.00 > 219.00	4.989	4.989	0.0	1.002	217		0.55(0.43-1.30)		5.9	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

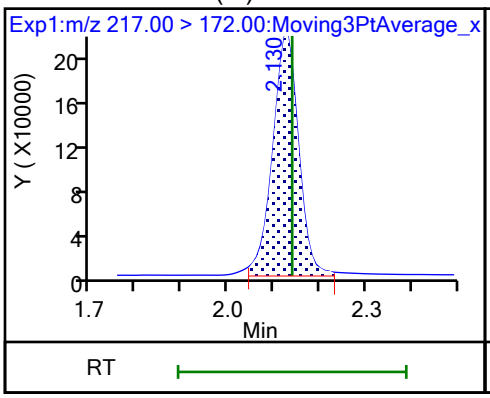
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:43 Chrom Revision: 2.3 18-Oct-2023 21:16:54

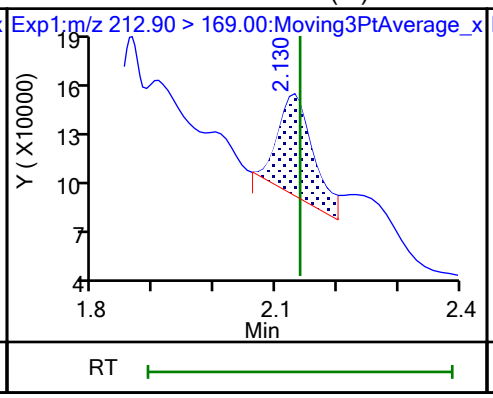
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d
Injection Date: 25-Oct-2023 21:08:15 Instrument ID: LC812
Lims ID: 460-290543-B-6-A Lab Sample ID: 200-290543-6
Client ID: MW7-101723-1052-13
Operator ID: LC812user ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

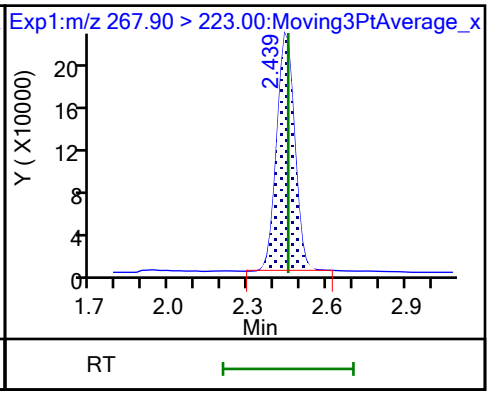
D 1 13C4 PFBA (M)



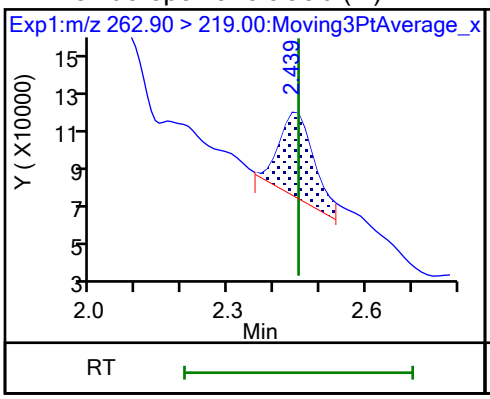
2 Perfluorobutanoic acid (M)



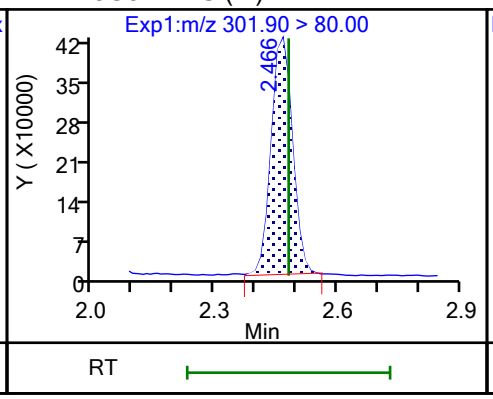
D 3 13C5 PFPeA



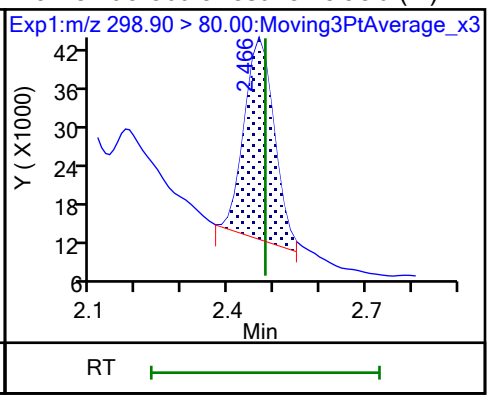
4 Perfluoropentanoic acid (M)



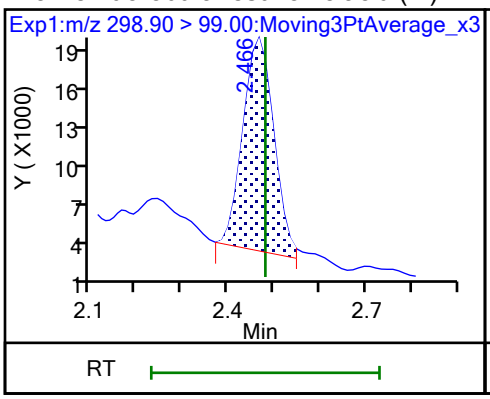
D 47 13C3 PFBS (M)



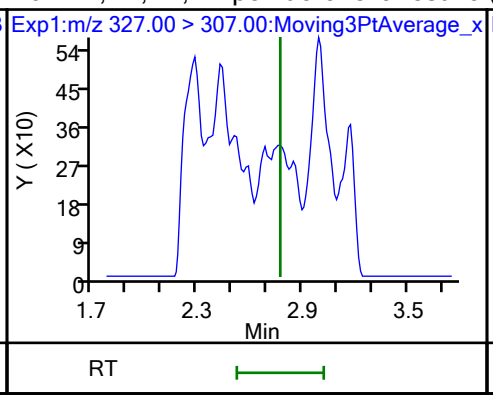
5 Perfluorobutanesulfonic acid (M)



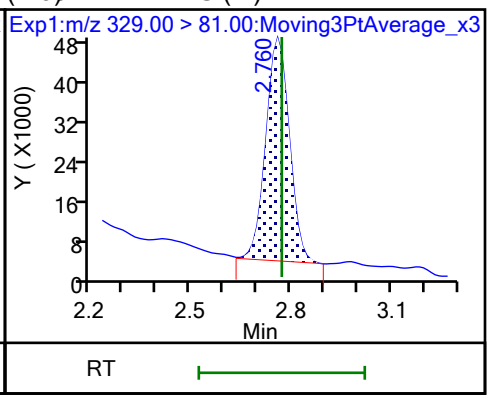
5 Perfluorobutanesulfonic acid (M)



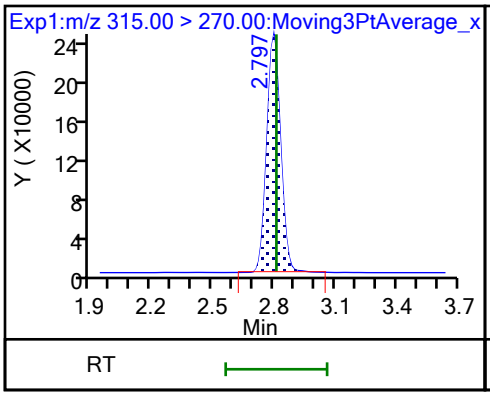
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



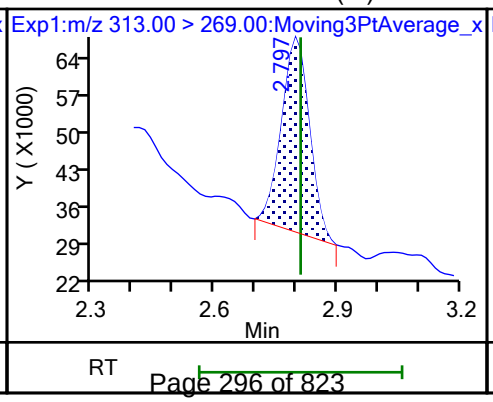
D 80 M2-4:2 FTS (M)



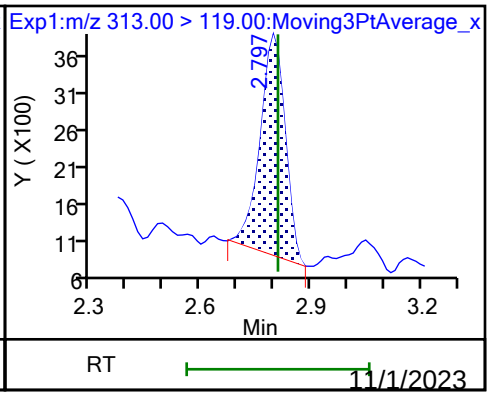
D 7 13C2 PFHxA



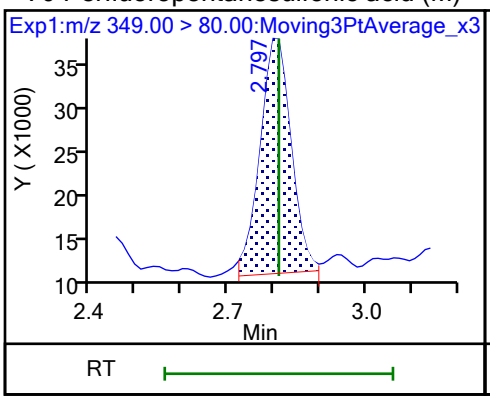
6 Perfluorohexanoic acid (M)



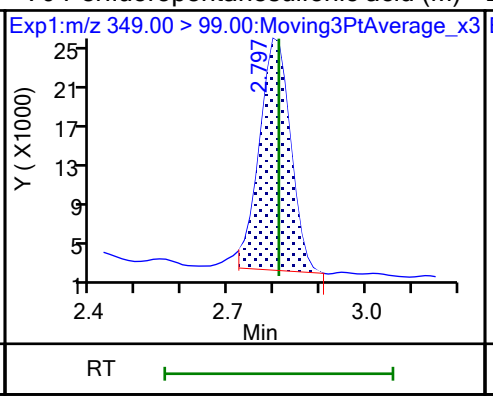
6 Perfluorohexanoic acid



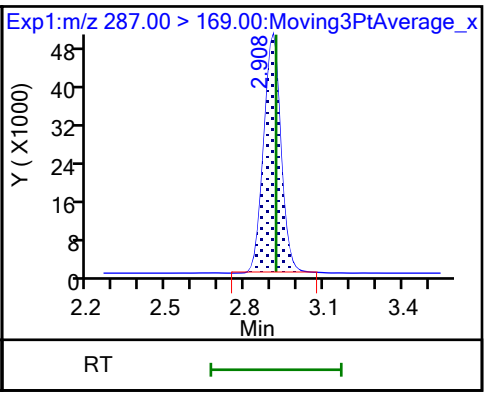
70 Perfluoropentanesulfonic acid (M)



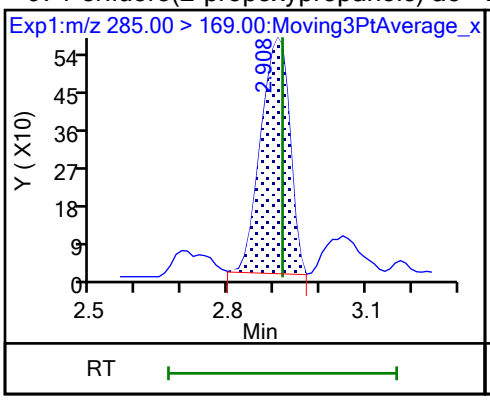
70 Perfluoropentanesulfonic acid (M)



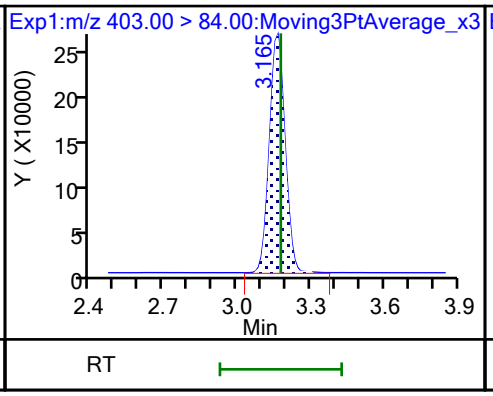
D 64 13C3 HFPO-DA



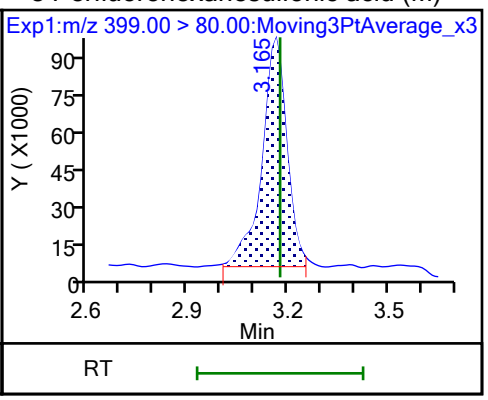
67 Perfluoro(2-propoxypropanoic) ac



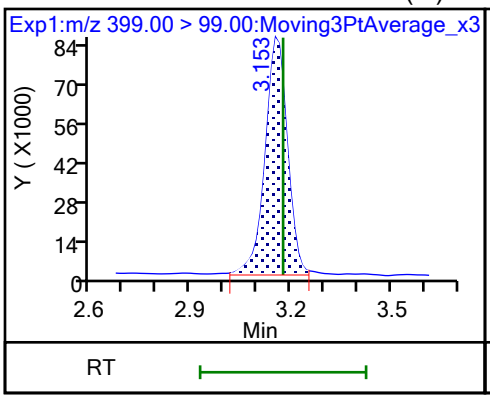
D 11 18O2 PFHxS



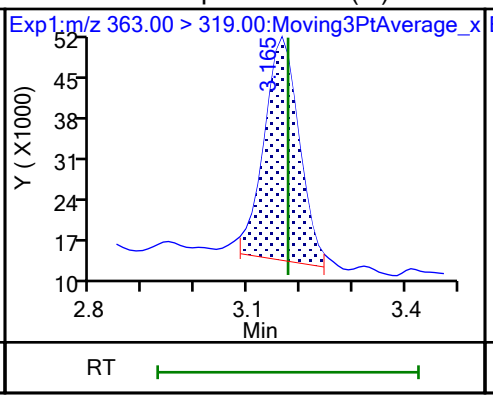
8 Perfluorohexanesulfonic acid (M)



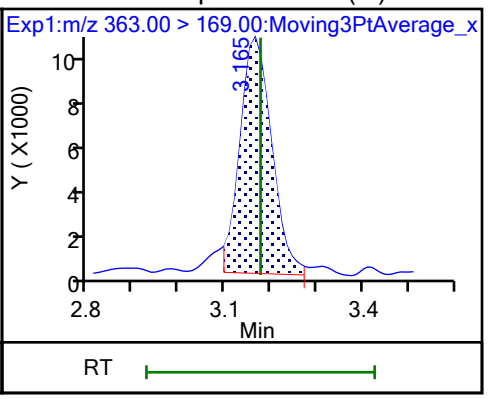
8 Perfluorohexanesulfonic acid (M)



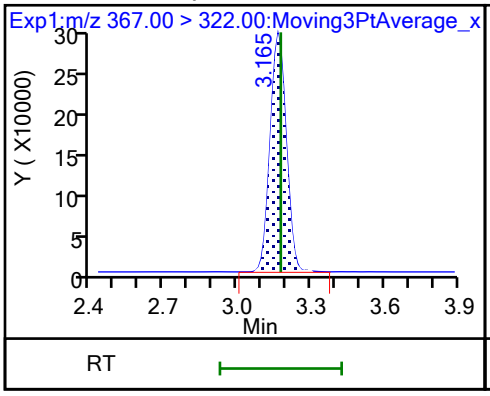
10 Perfluoroheptanoic acid (M)



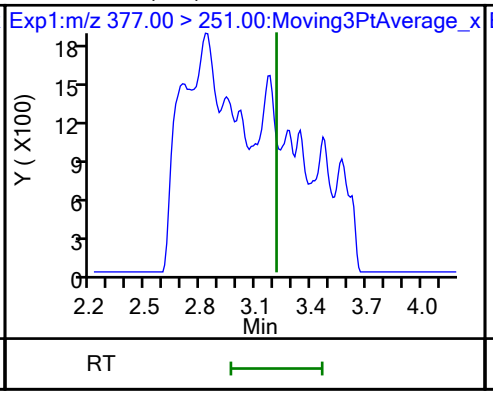
10 Perfluoroheptanoic acid (M)



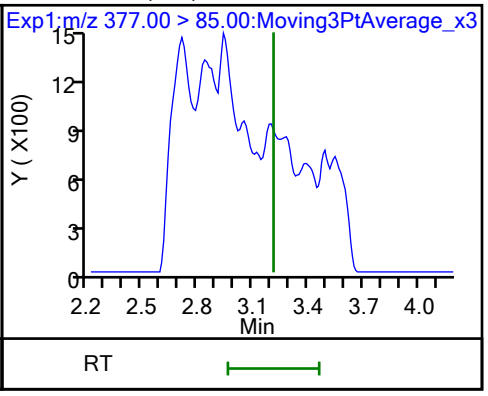
D 9 13C4 PFHpA



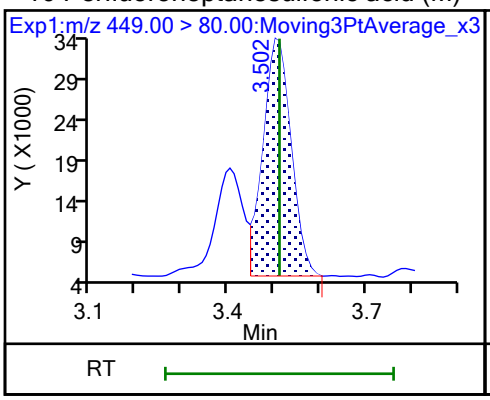
77 DONA (ND)



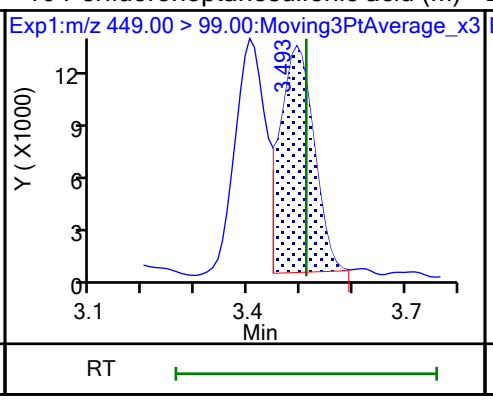
77 DONA (ND)



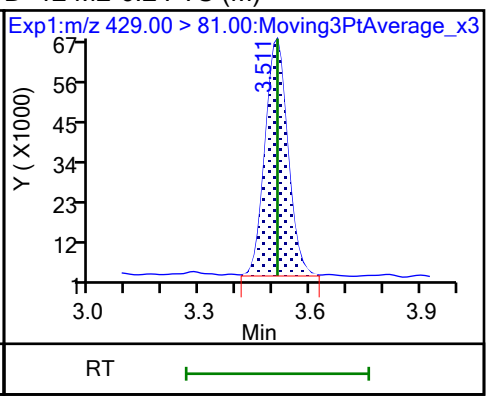
16 Perfluoroheptanesulfonic acid (M)



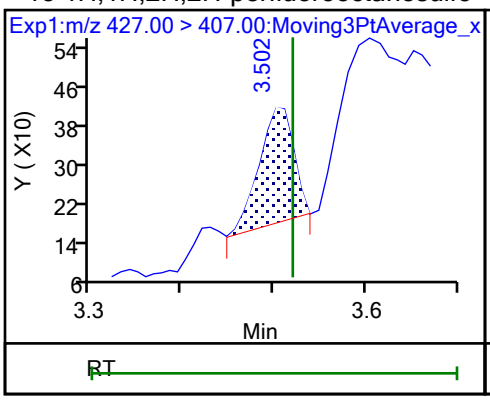
16 Perfluoroheptanesulfonic acid (M)



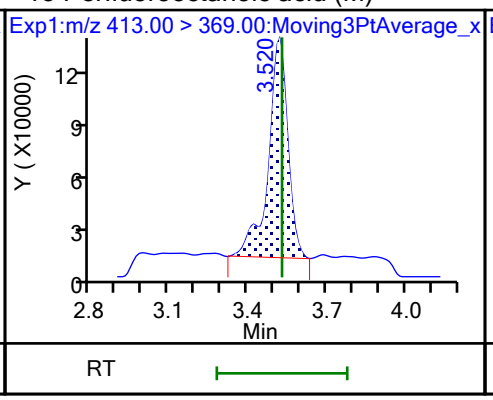
D 12 M2-6:2 FTS (M)



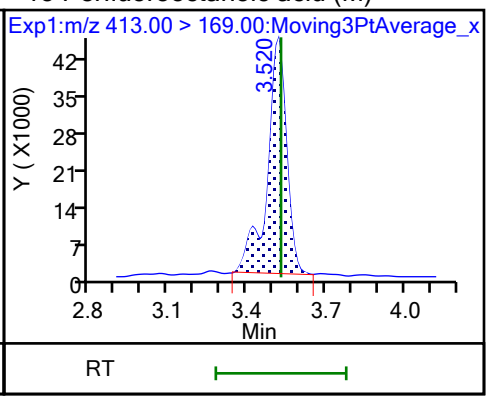
13 1H,1H,2H,2H-perfluorooctanesulfo



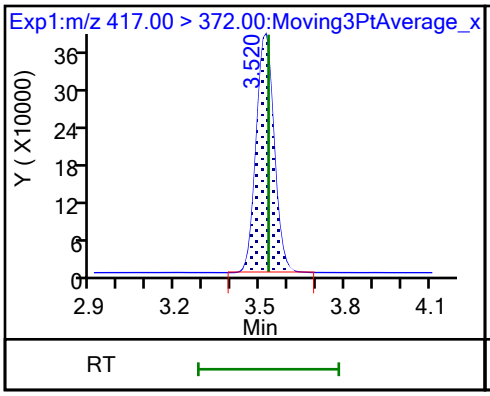
15 Perfluorooctanoic acid (M)



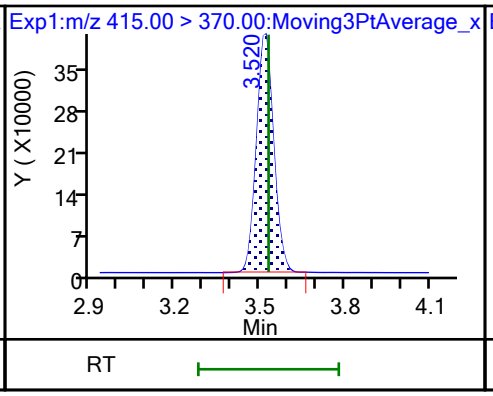
15 Perfluorooctanoic acid (M)



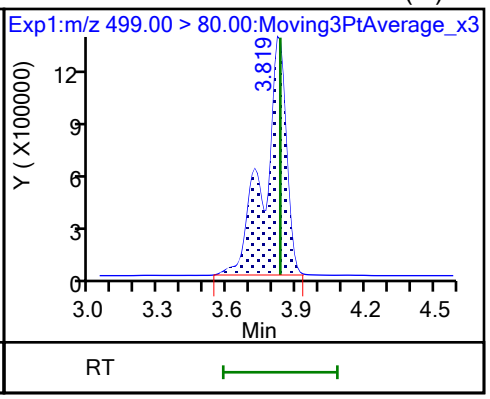
D 14 13C4 PFOA



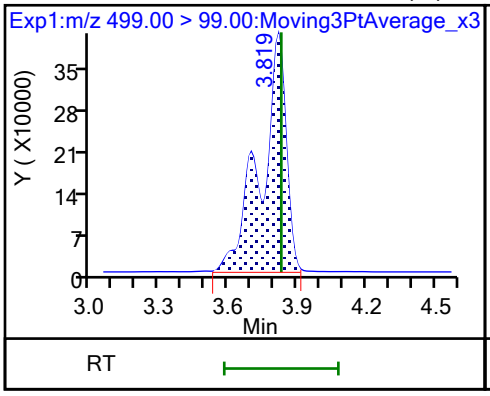
* 62 13C2 PFOA



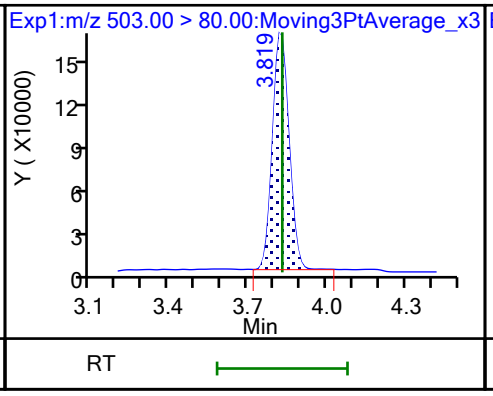
17 Perfluorooctanesulfonic acid (M)



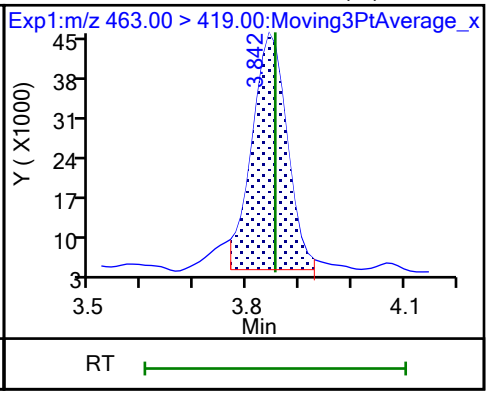
17 Perfluorooctanesulfonic acid (M)



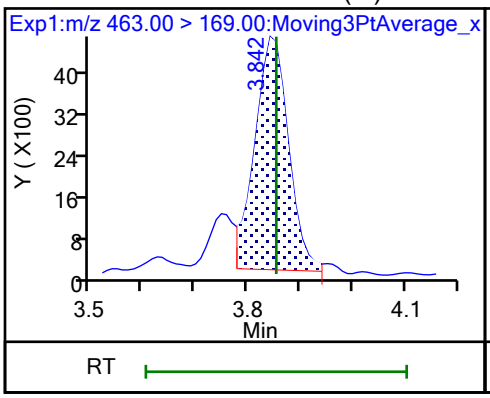
D 18 13C4 PFOS



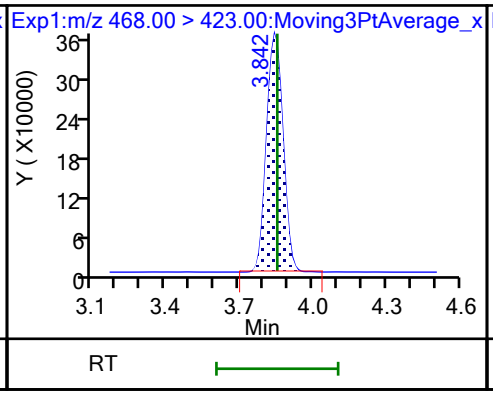
20 Perfluorononanoic acid (M)



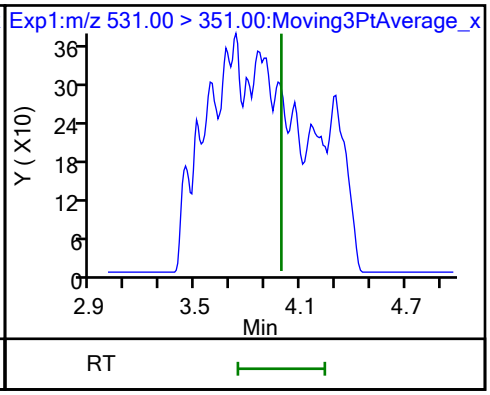
20 Perfluorononanoic acid (M)



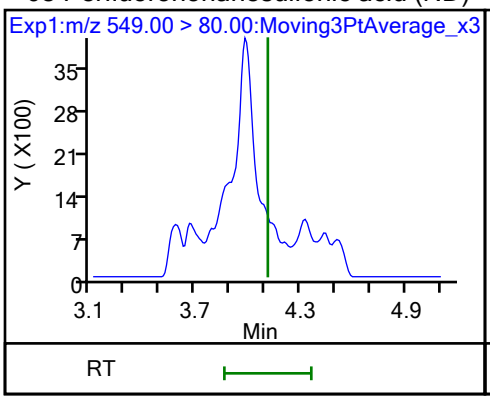
D 19 13C5 PFNA



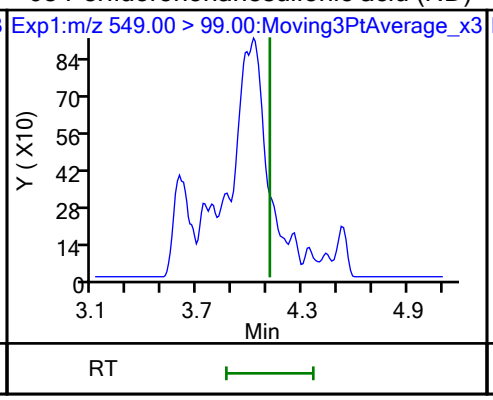
69 9-Chlorohexadecafluoro-3-oxanona (ND)



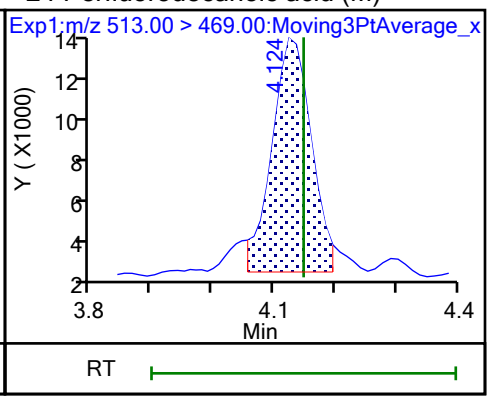
68 Perfluorononanesulfonic acid (ND)



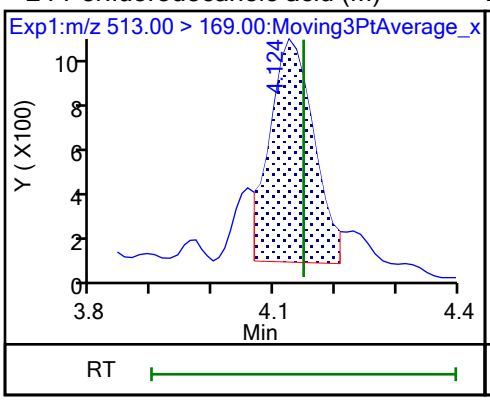
68 Perfluorononanesulfonic acid (ND)



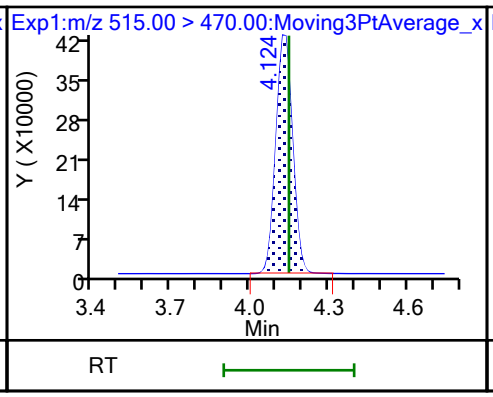
24 Perfluorodecanoic acid (M)



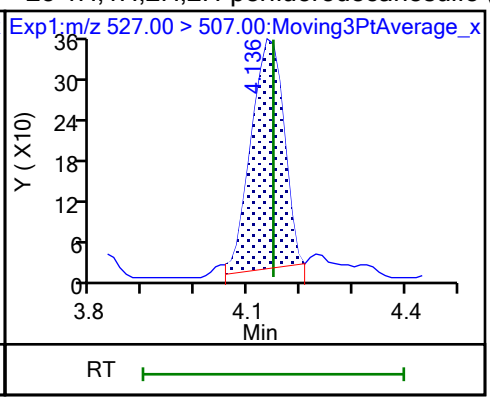
24 Perfluorodecanoic acid (M)



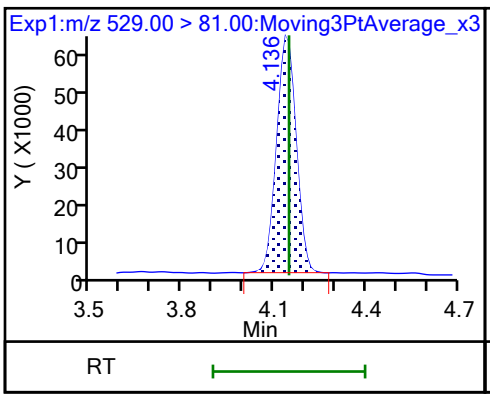
D 23 13C2 PFDA



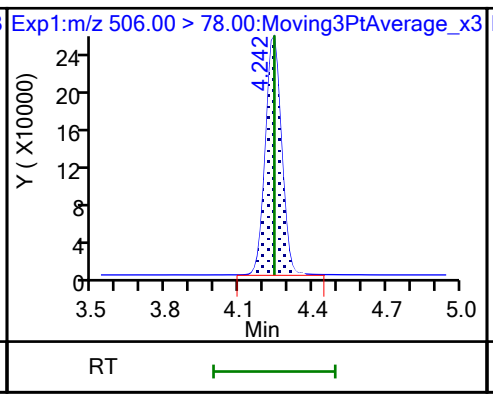
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



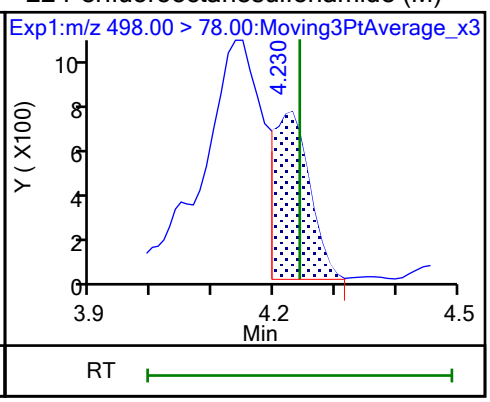
D 26 M2-8:2 FTS



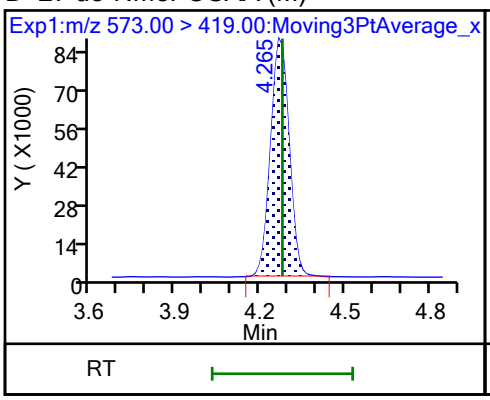
D 21 13C8 FOSA



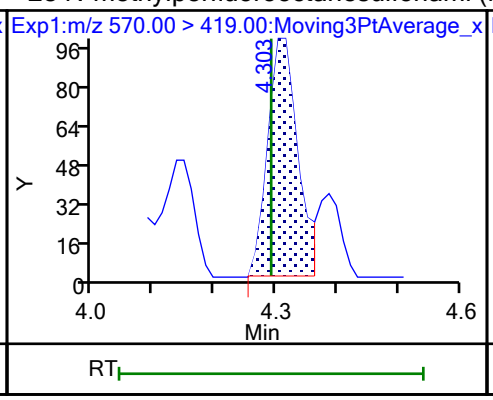
22 Perfluorooctanesulfonamide (M)



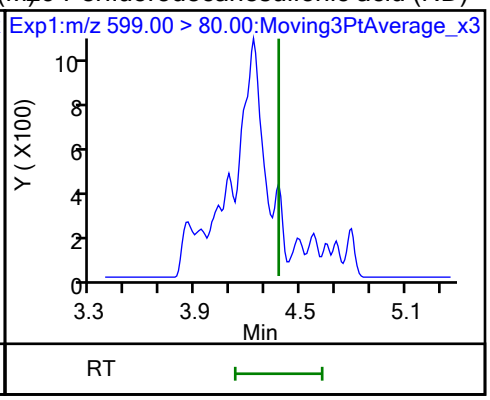
D 27 d3-NMeFOSAA (M)



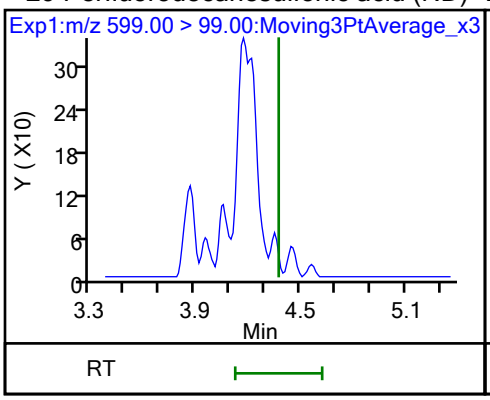
28 N-methylperfluorooctanesulfonami (M)



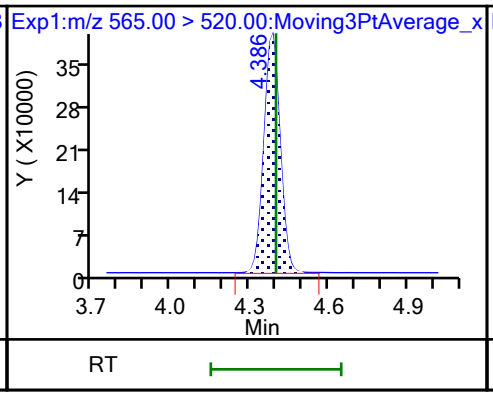
29 Perfluorodecanesulfonic acid (ND)



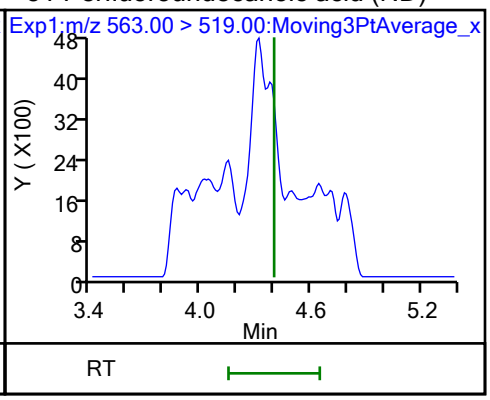
29 Perfluorodecanesulfonic acid (ND)



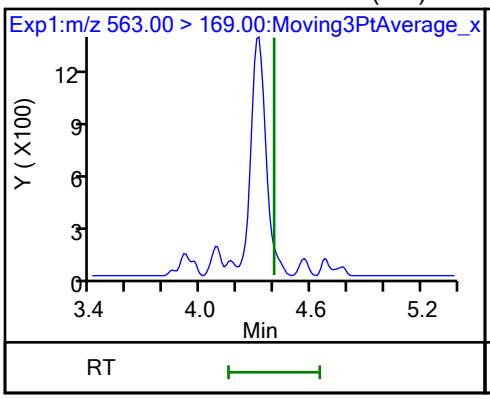
D 30 13C2 PFUnA



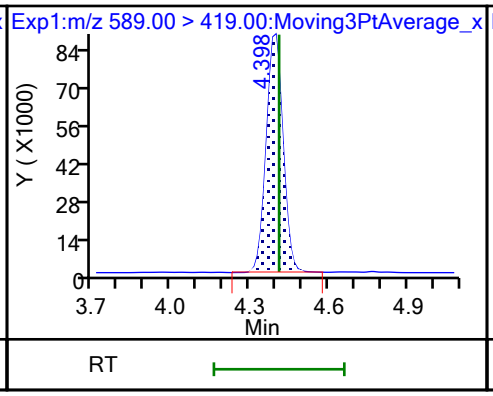
31 Perfluoroundecanoic acid (ND)



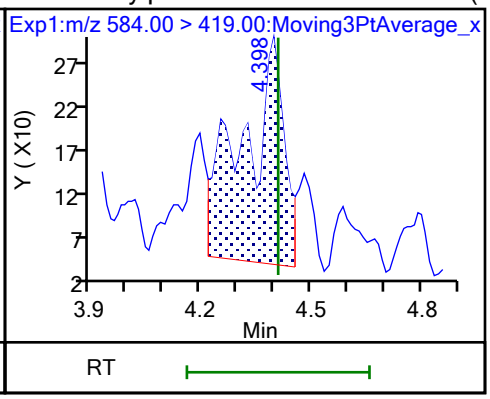
31 Perfluoroundecanoic acid (ND)



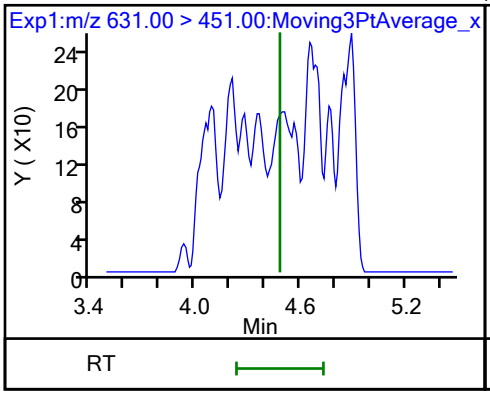
D 32 d5-NEtFOSAA



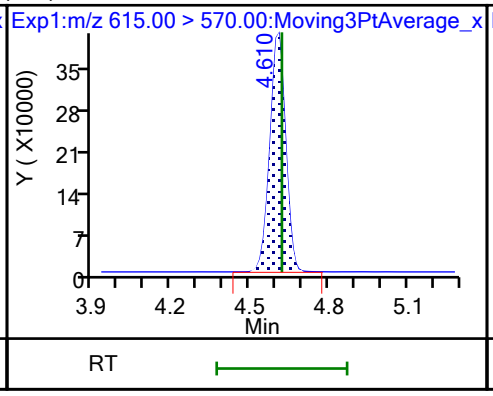
33 N-ethylperfluorooctanesulfonamid (M)



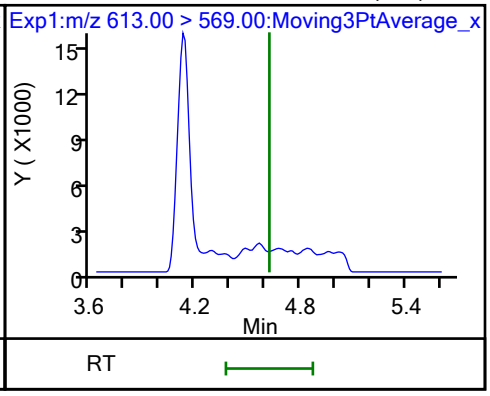
66 11-Chloroeicosafluoro-3-oxaundec (ND)



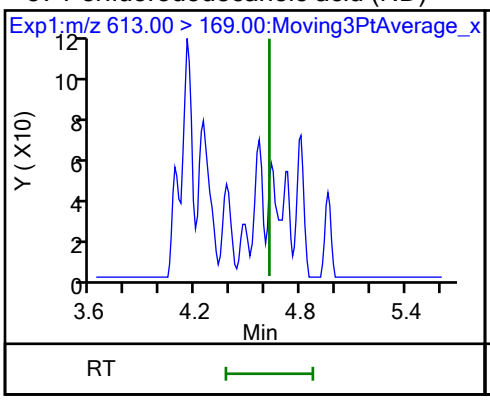
D 36 13C2 PFDoA



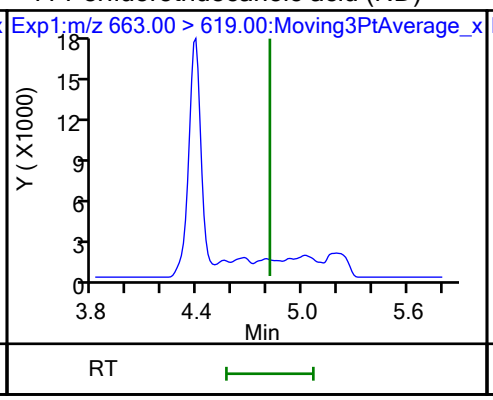
37 Perfluorododecanoic acid (ND)



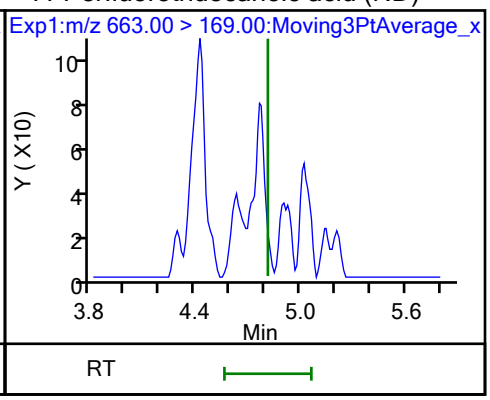
37 Perfluorododecanoic acid (ND)



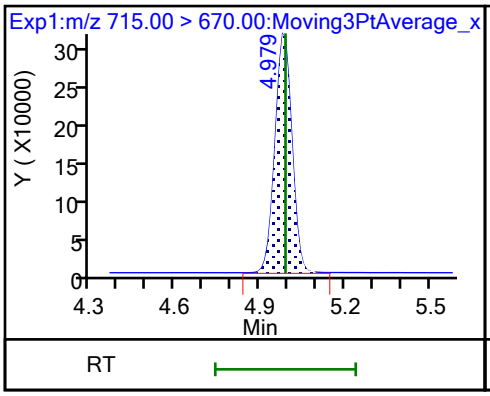
41 Perfluorotridecanoic acid (ND)



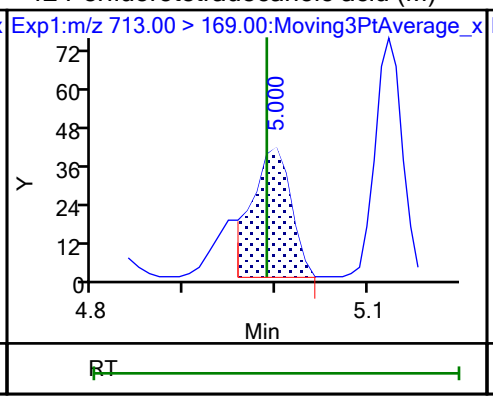
41 Perfluorotridecanoic acid (ND)



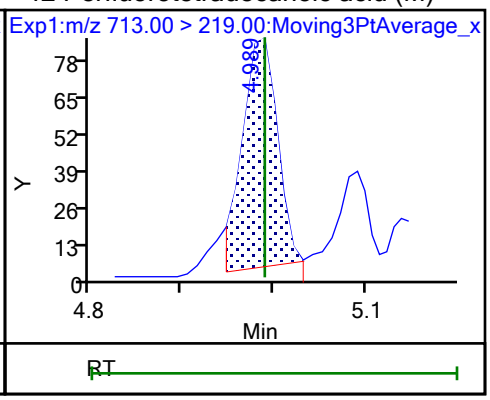
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

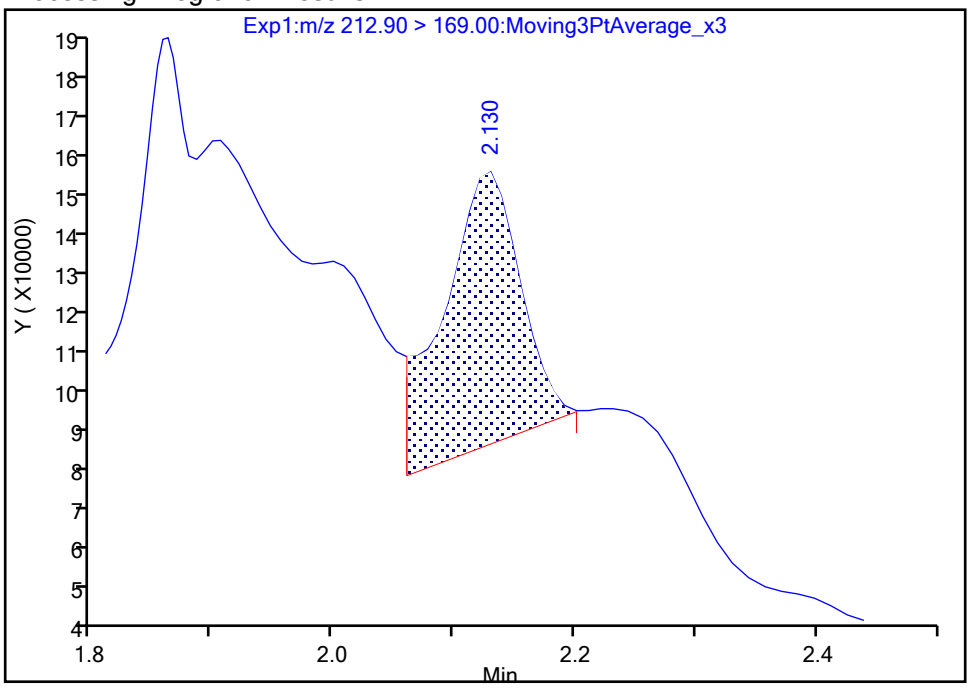
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

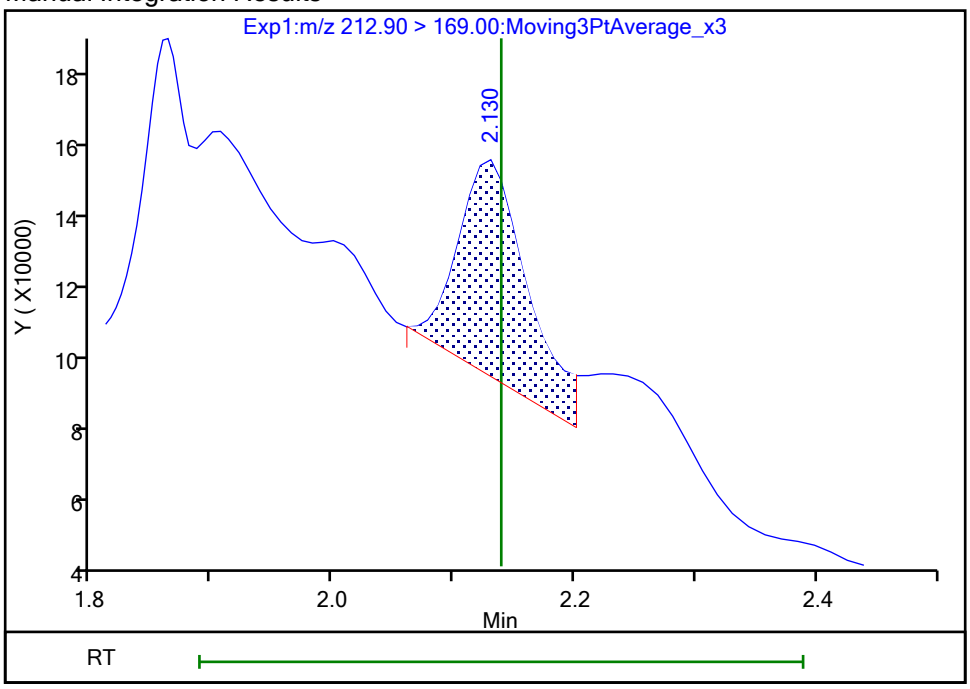
Processing Integration Results

RT: 2.13
Area: 307857
Amount: 0.457278
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 242624
Amount: 0.351720
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:48:09 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

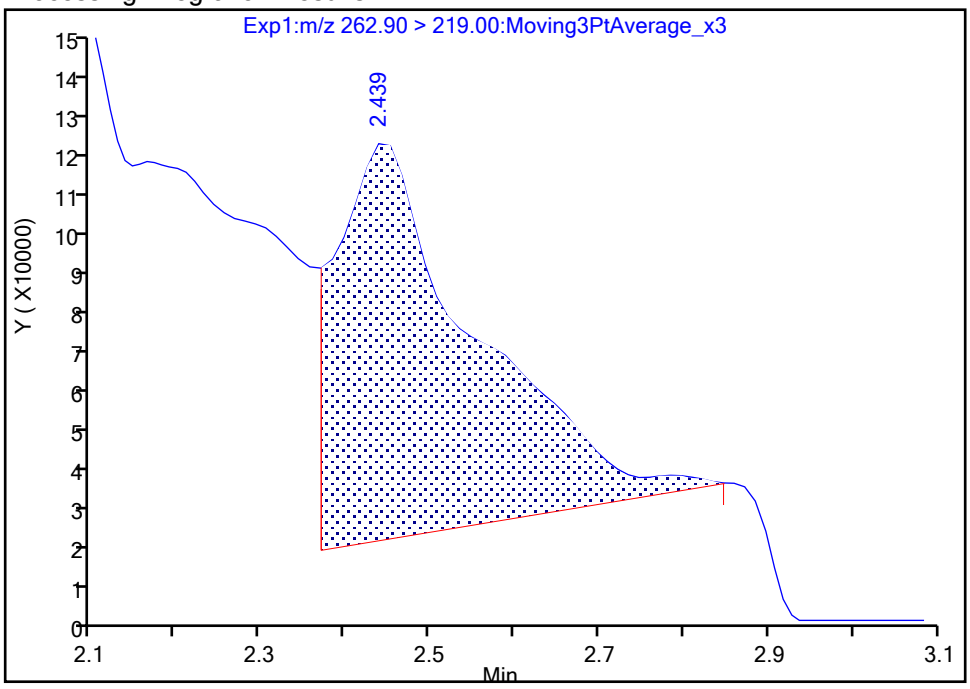
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

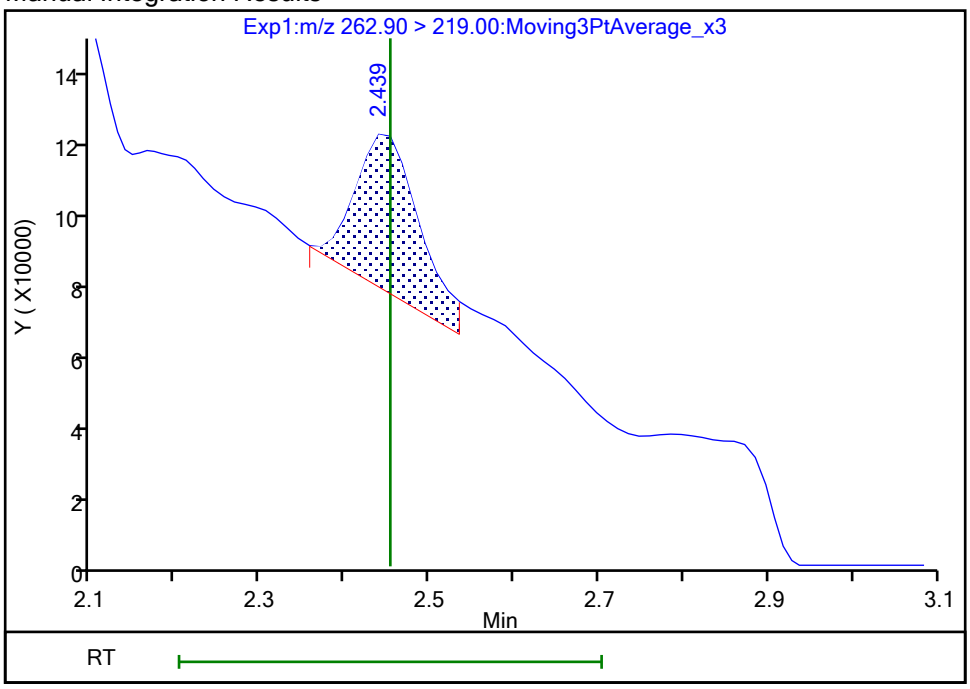
Processing Integration Results

RT: 2.44
Area: 1139157
Amount: 1.229098
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 230474
Amount: 0.248671
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:48:28 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

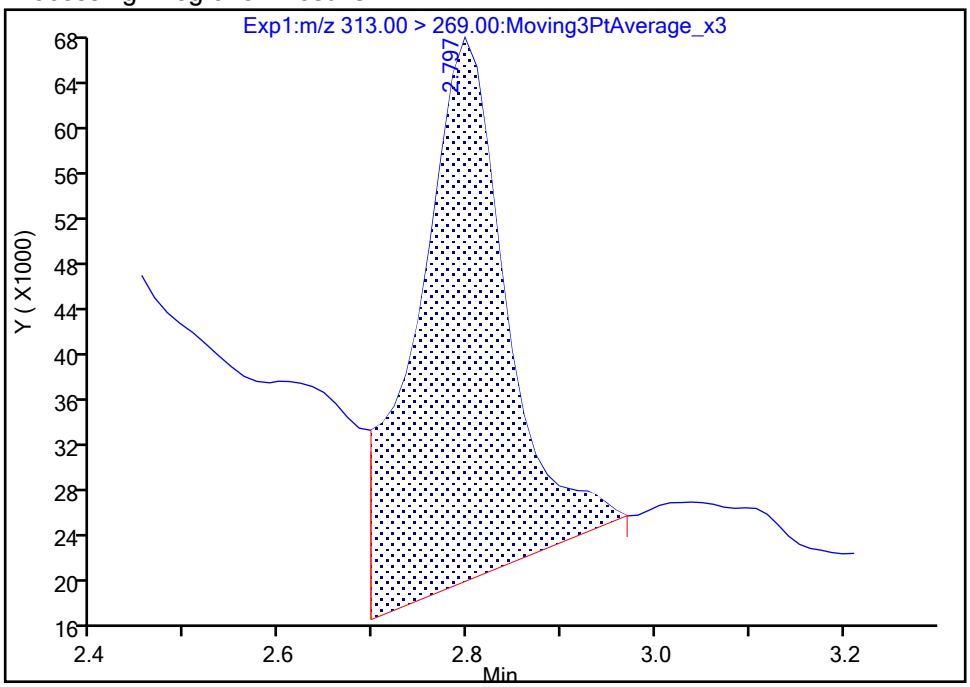
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

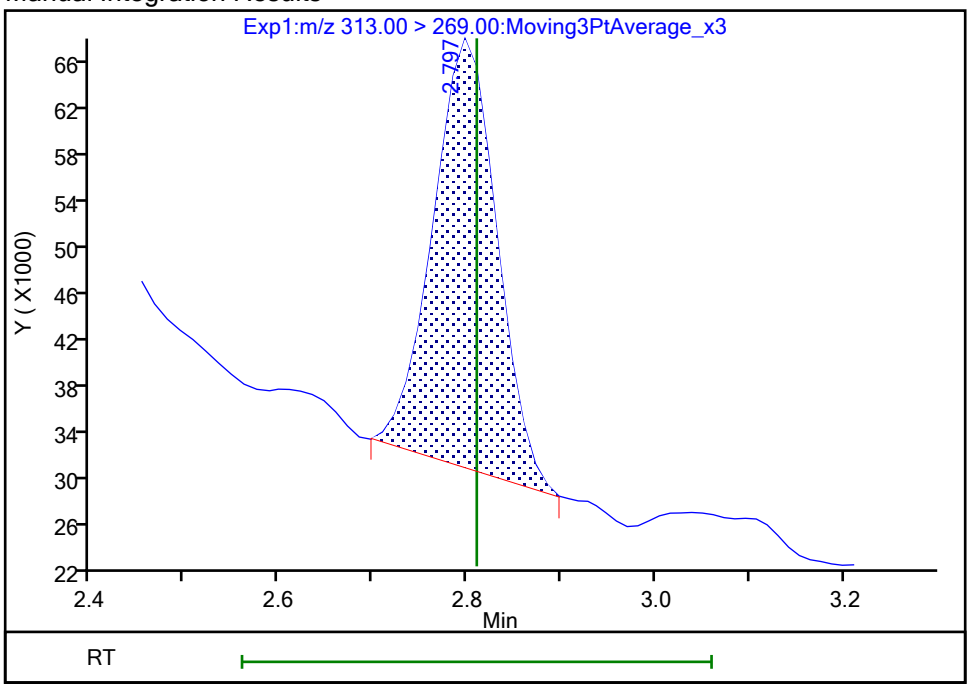
Processing Integration Results

RT: 2.80
Area: 317198
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 174901
Amount: 0.172308
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:21:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

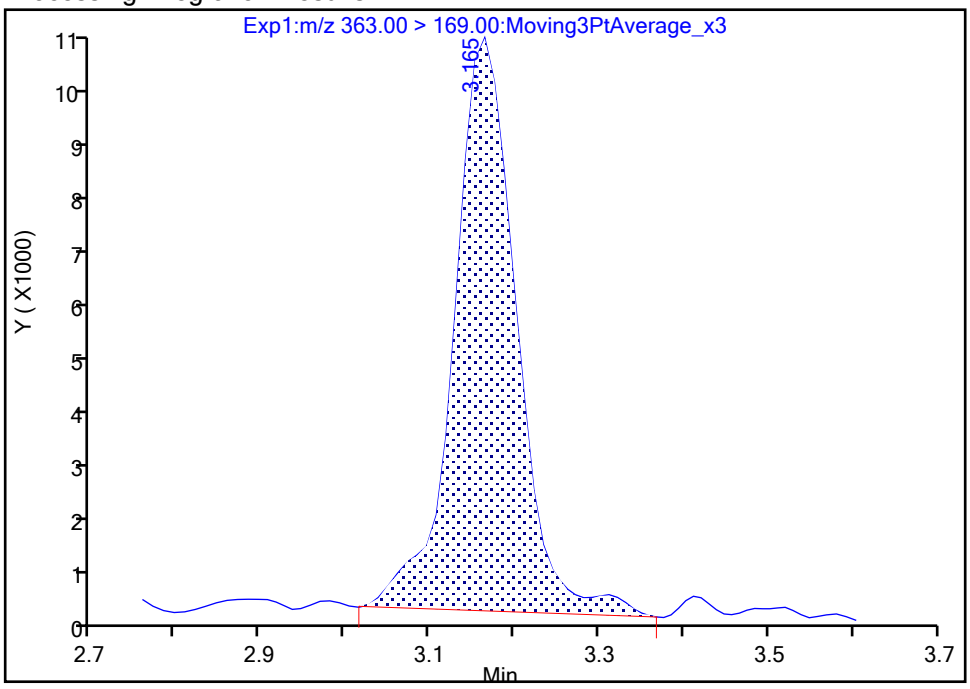
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

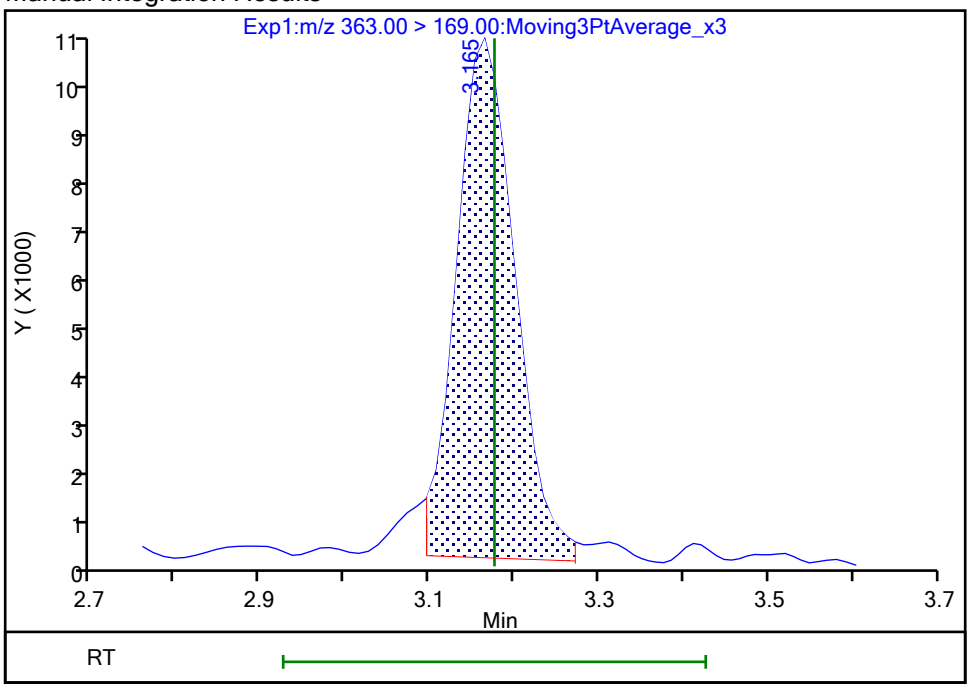
Processing Integration Results

RT: 3.16
Area: 51748
Amount: 0.229137
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 47992
Amount: 0.145113
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

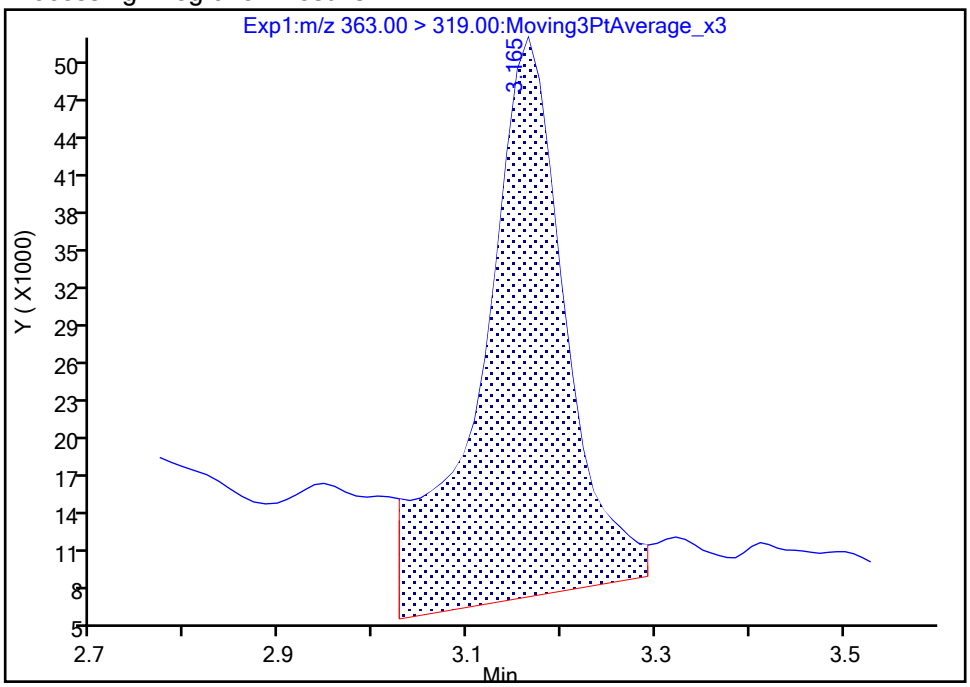
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

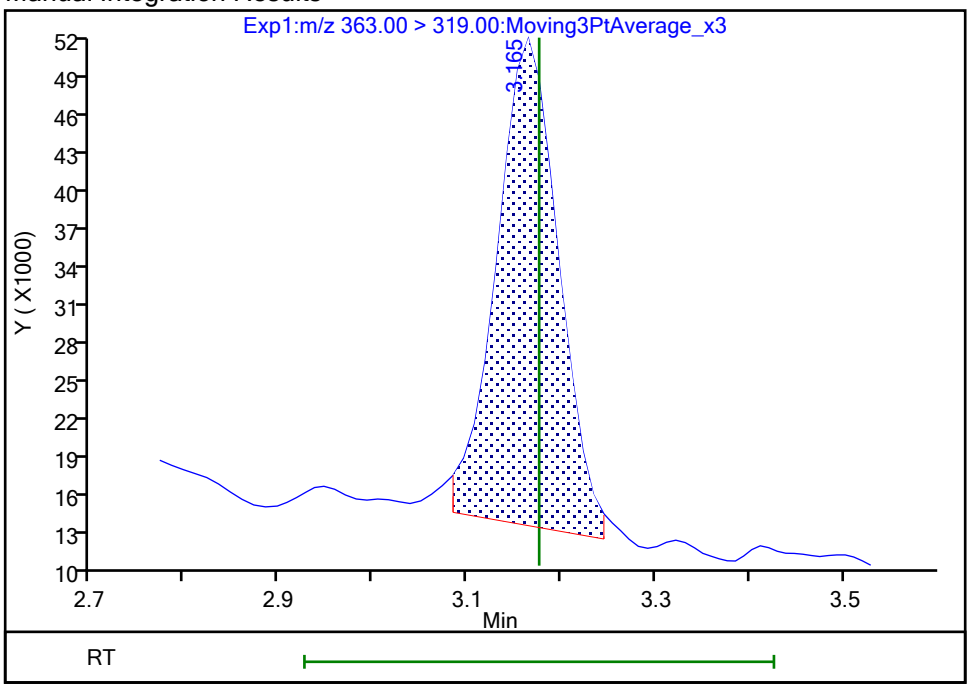
Processing Integration Results

RT: 3.16
Area: 275781
Amount: 0.229137
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 174653
Amount: 0.145113
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

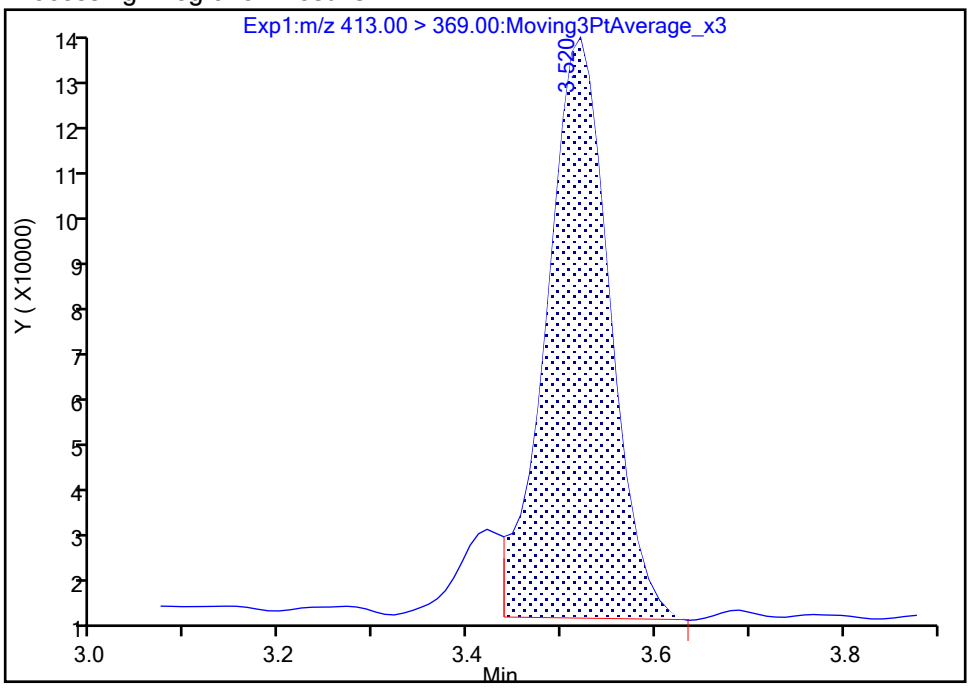
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

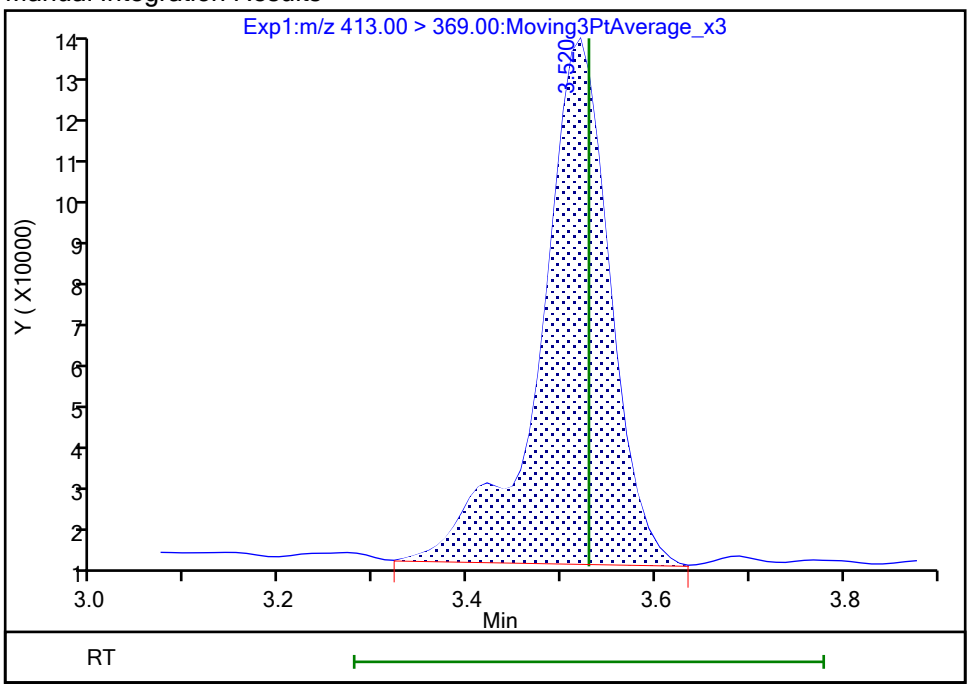
Processing Integration Results

RT: 3.52
Area: 586655
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 649185
Amount: 0.449693
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:23:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

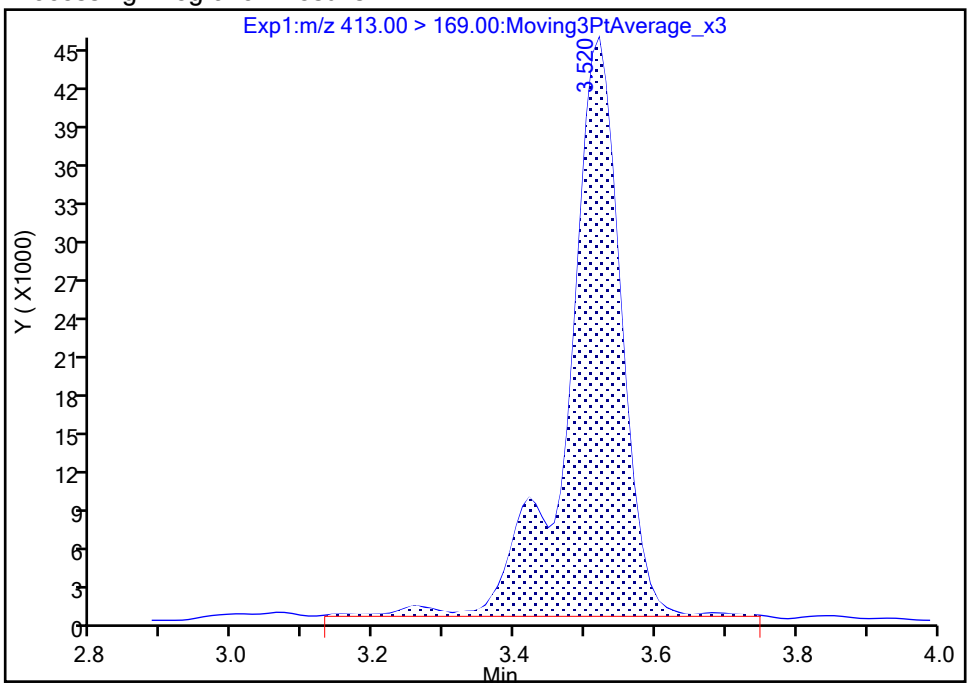
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

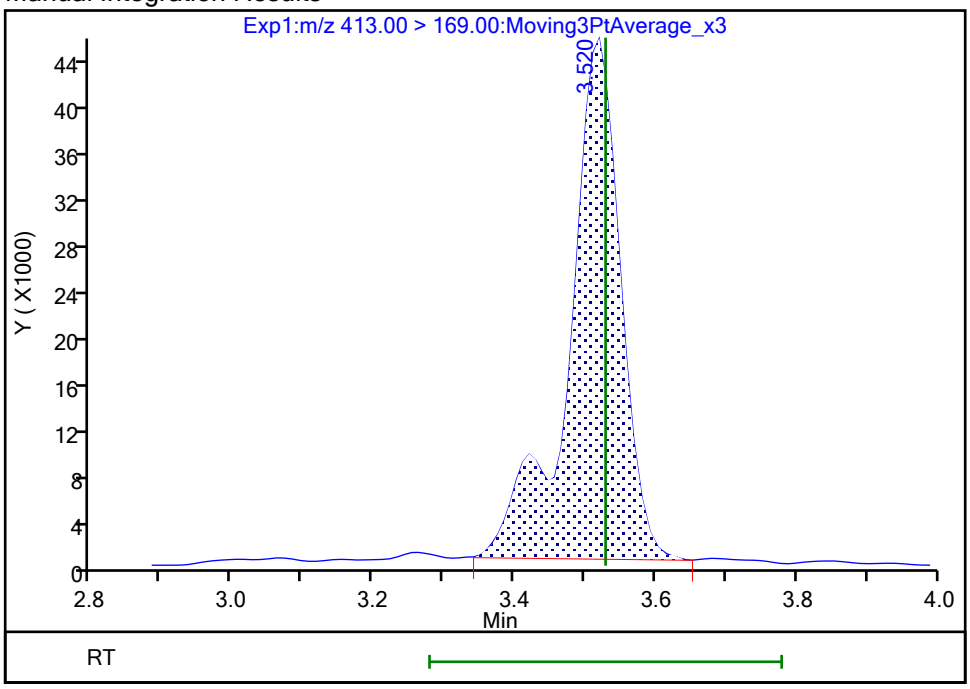
Processing Integration Results

RT: 3.52
Area: 236713
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 229482
Amount: 0.449693
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:23:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

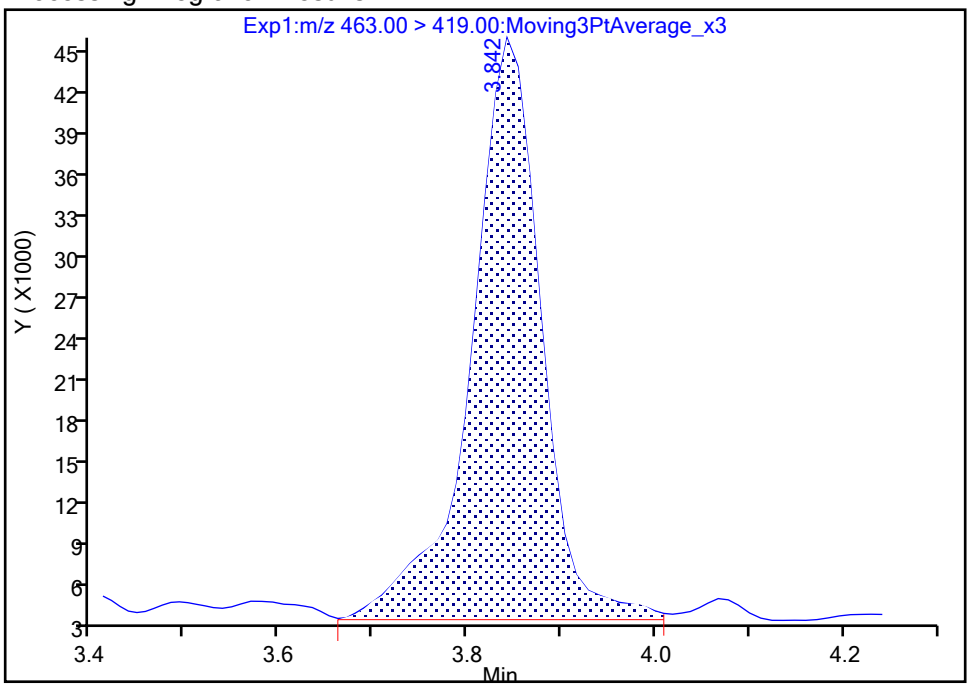
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

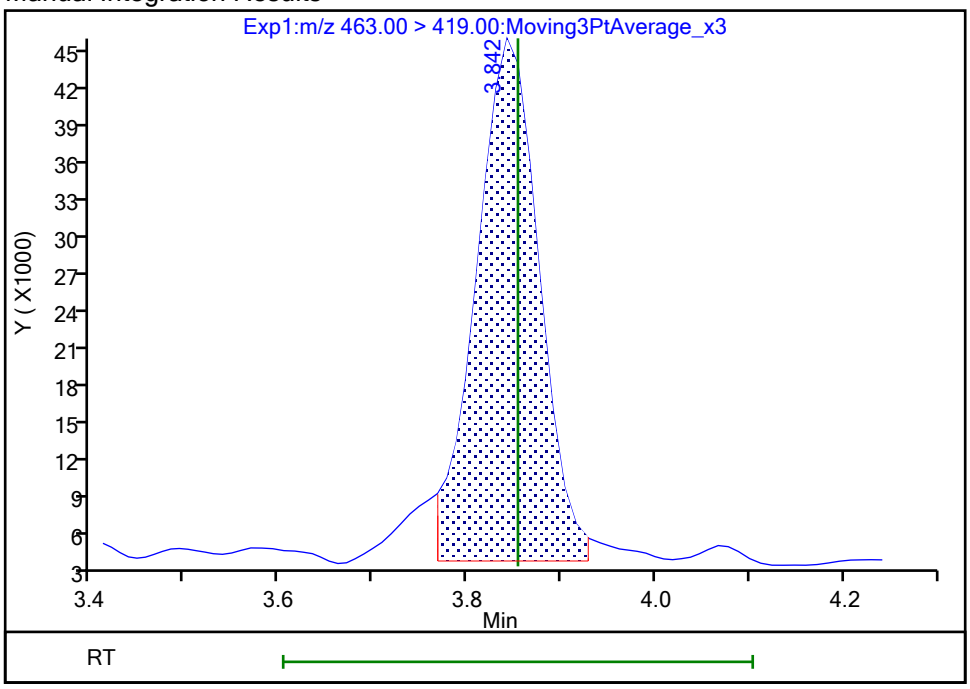
Processing Integration Results

RT: 3.84
Area: 218557
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 194636
Amount: 0.145027
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:24:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

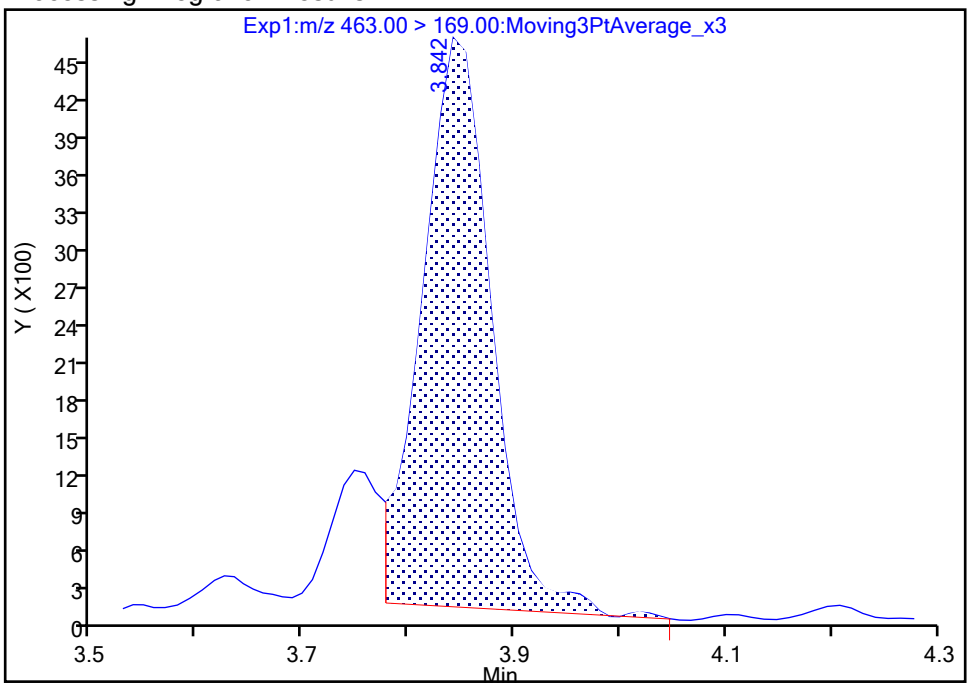
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

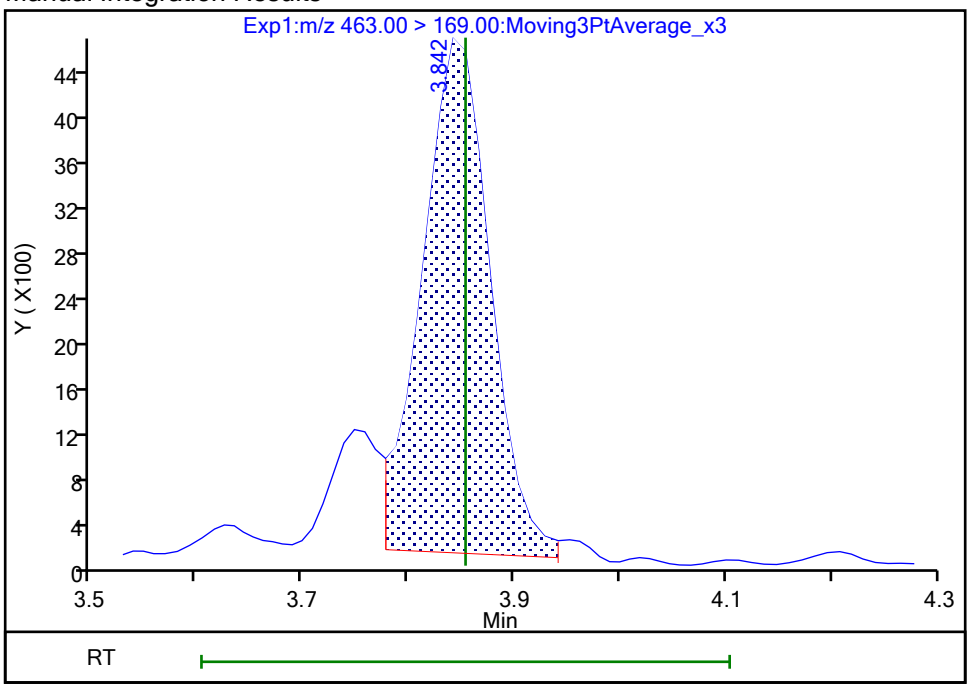
Processing Integration Results

RT: 3.84
Area: 20815
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 20343
Amount: 0.145027
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:24:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

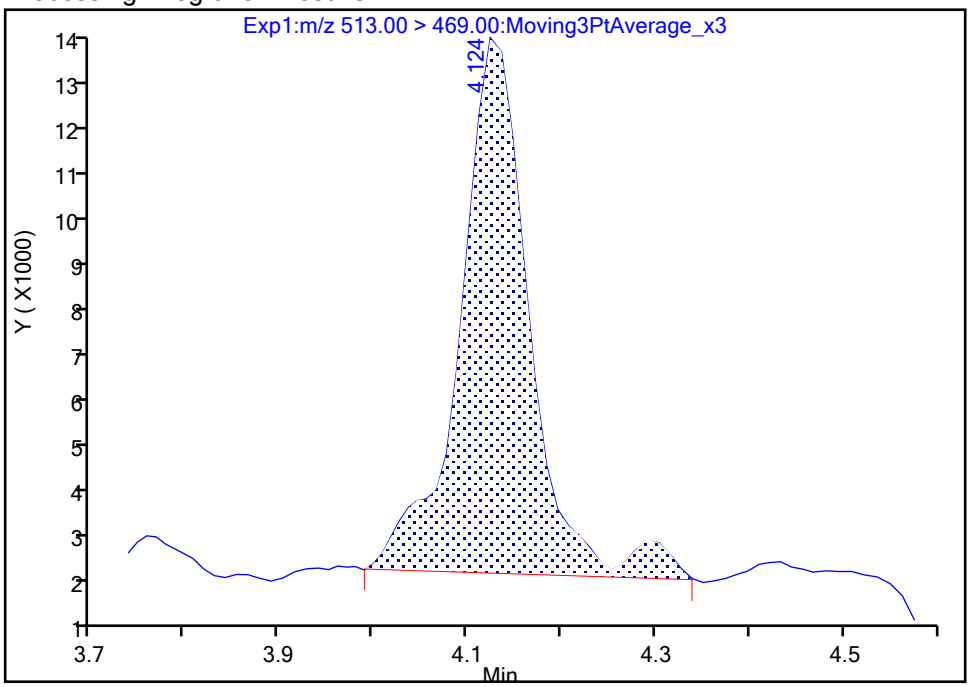
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

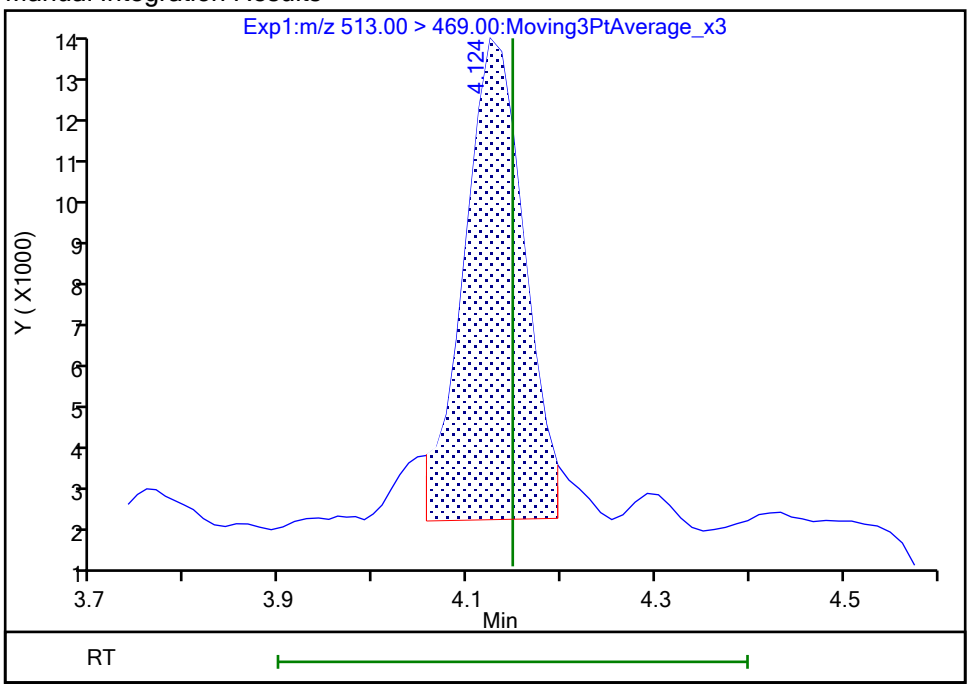
Processing Integration Results

RT: 4.12
Area: 58315
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 49672
Amount: 0.033122
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:25:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

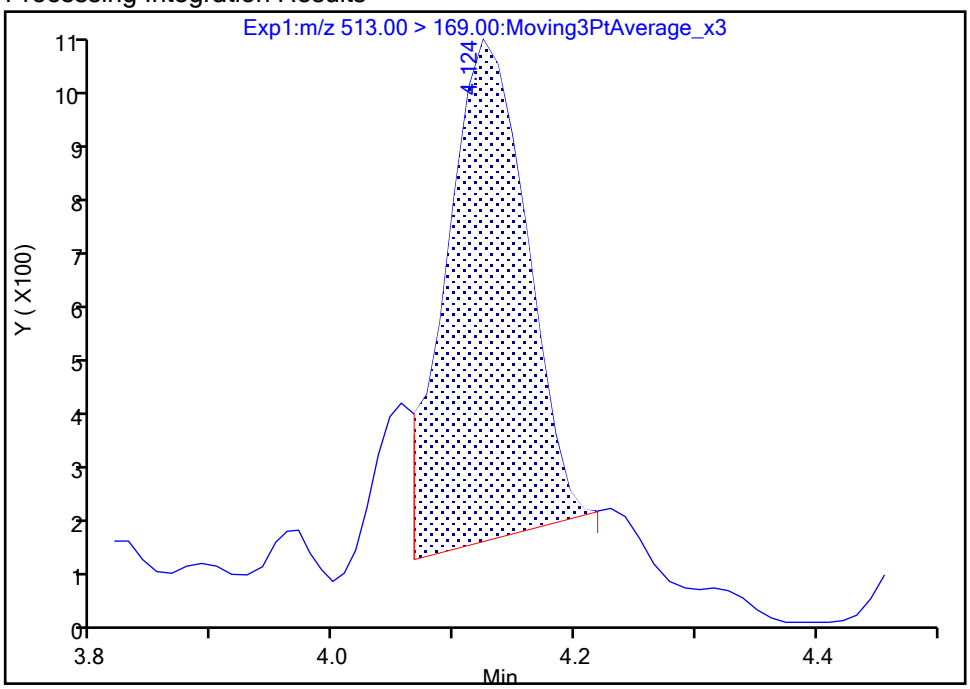
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

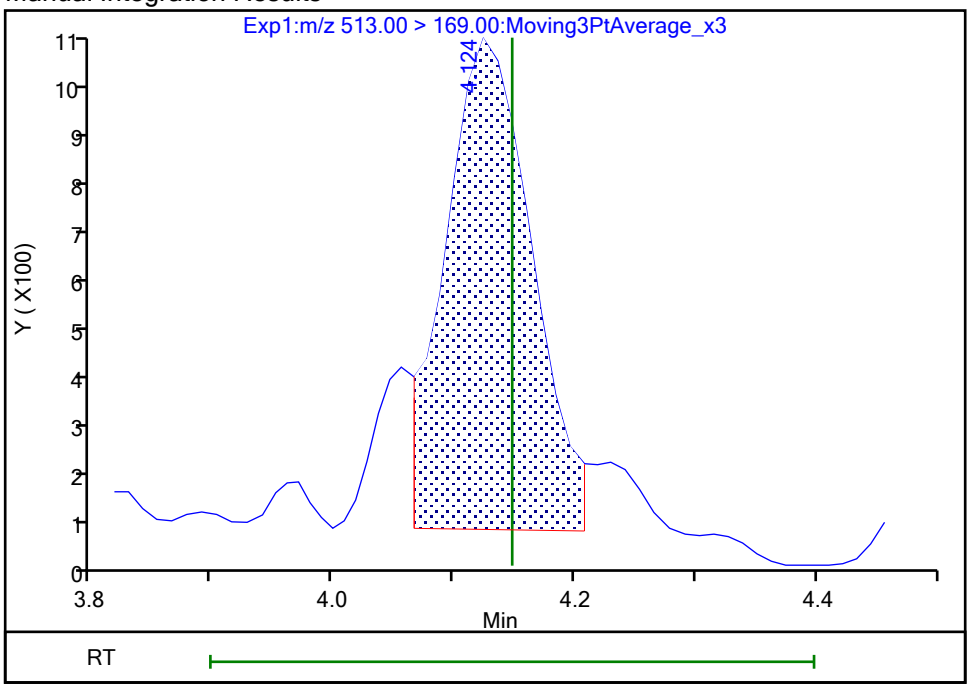
Processing Integration Results

RT: 4.12
Area: 4247
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 4968
Amount: 0.033122
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:25:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

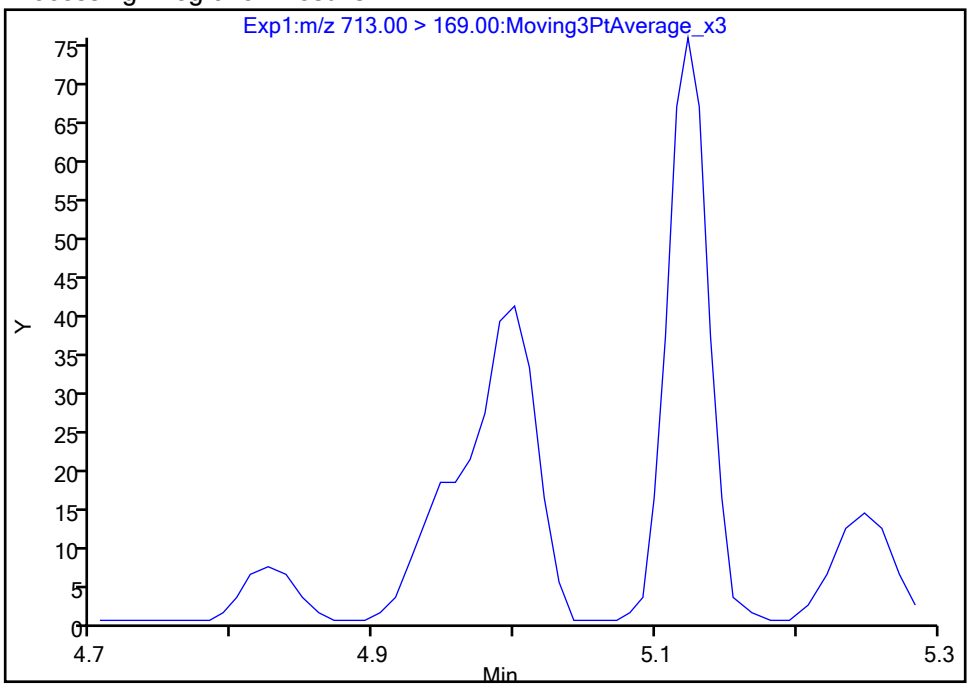
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

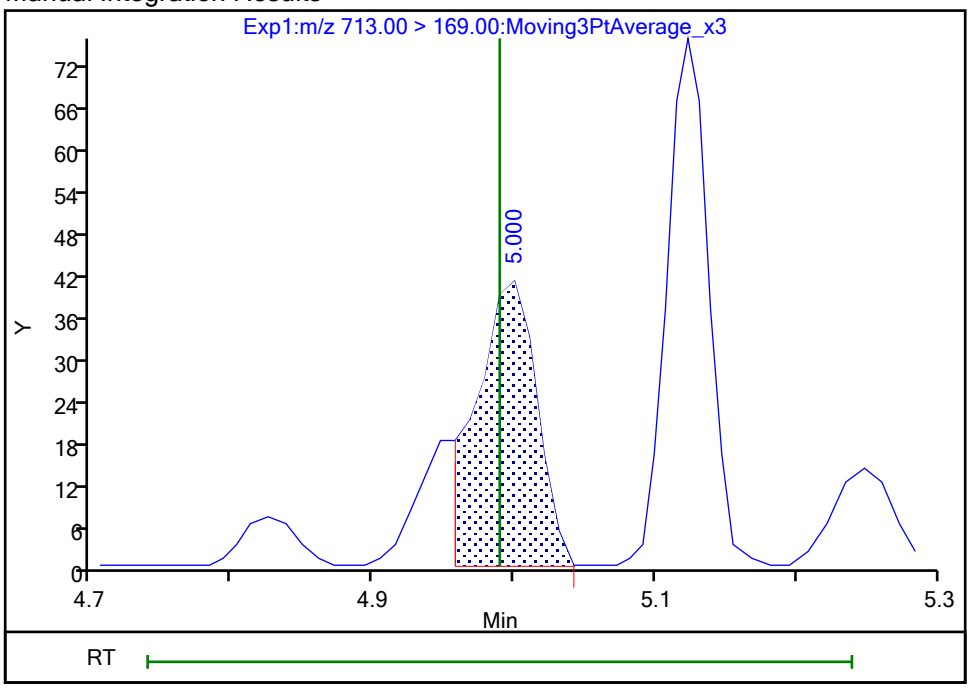
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 5.00
Area: 120
Amount: 0.001031
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:26:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

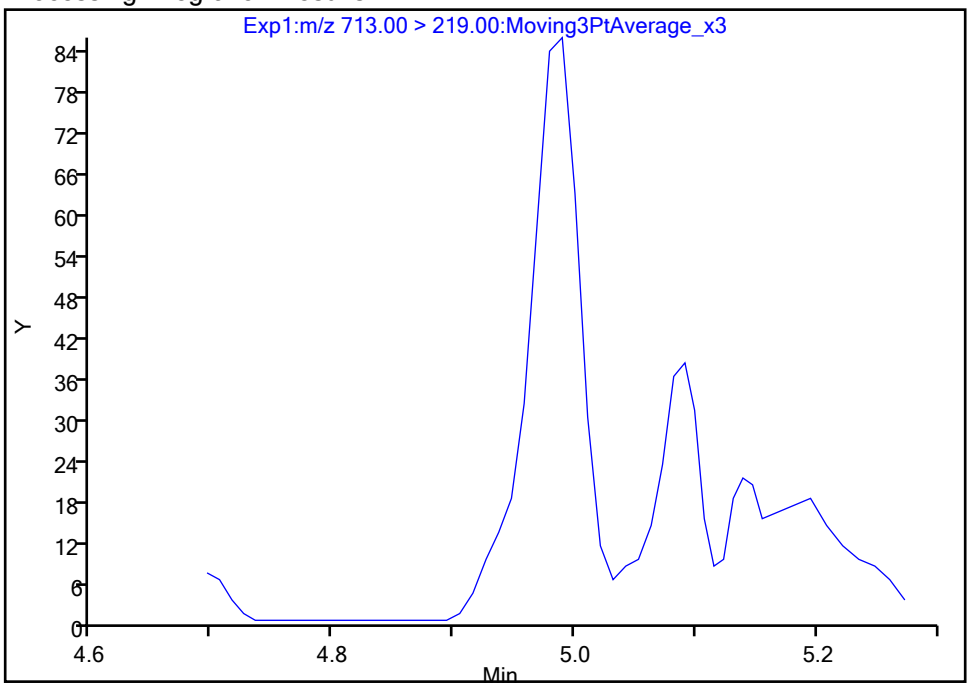
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

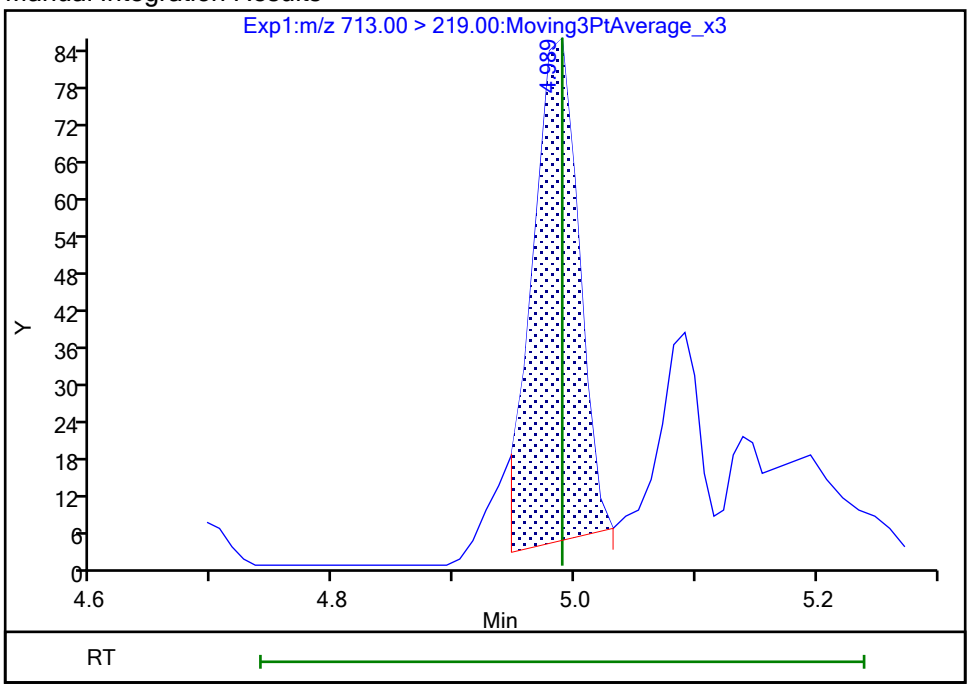
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 217
Amount: 0.001031
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:26:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

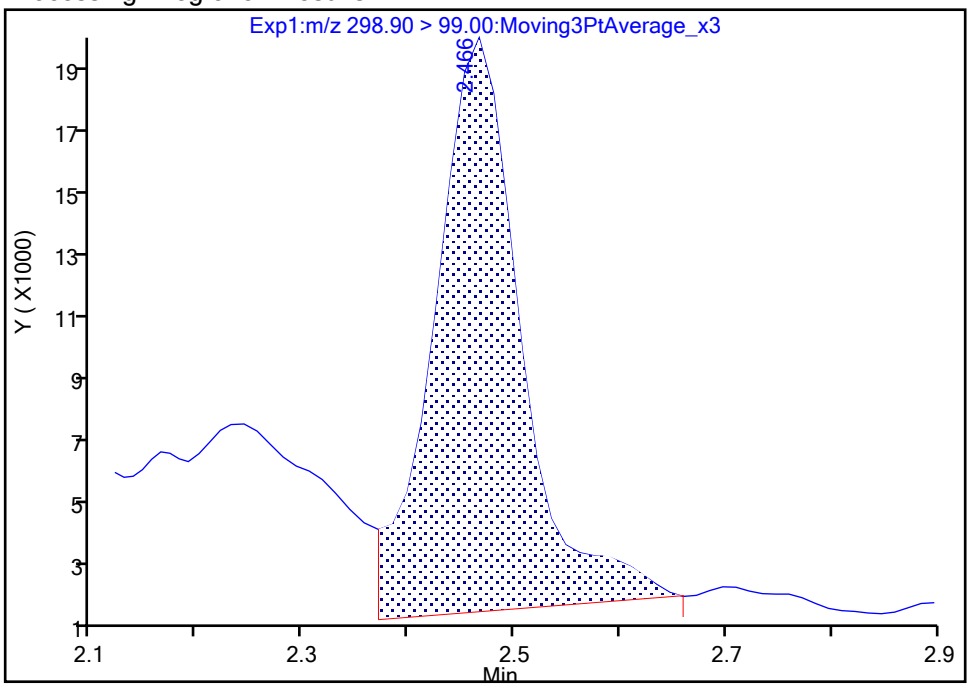
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

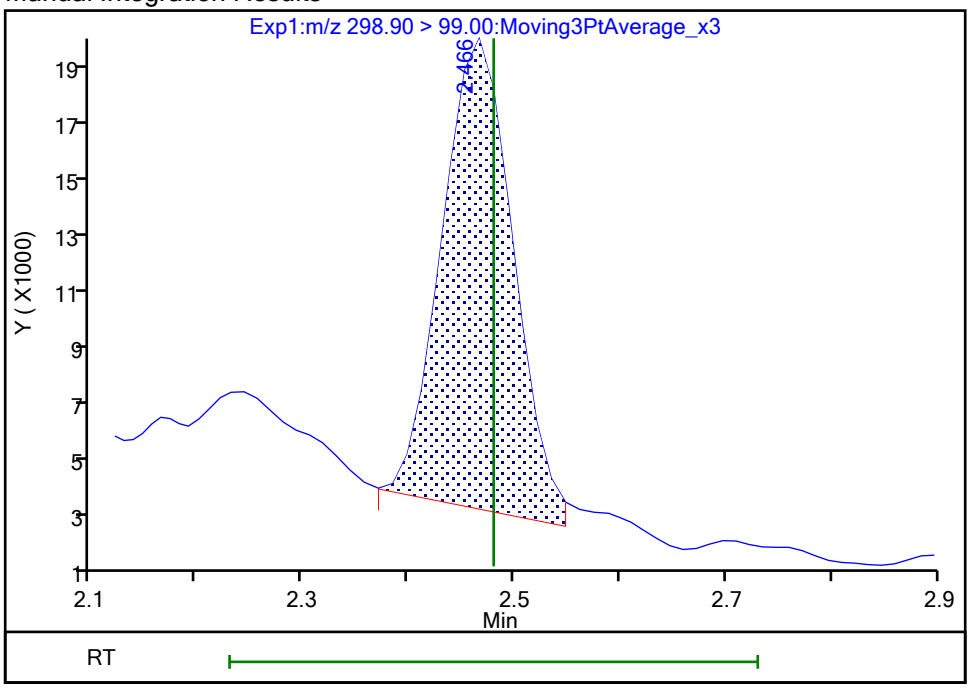
Processing Integration Results

RT: 2.47
Area: 104921
Amount: 0.262237
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 76584
Amount: 0.098866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:21:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

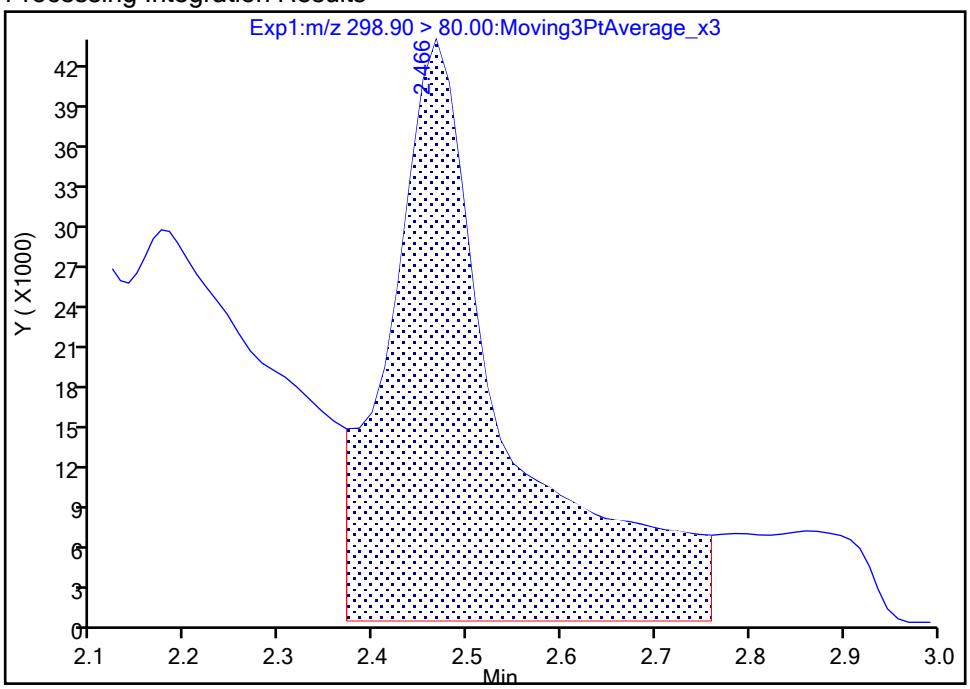
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

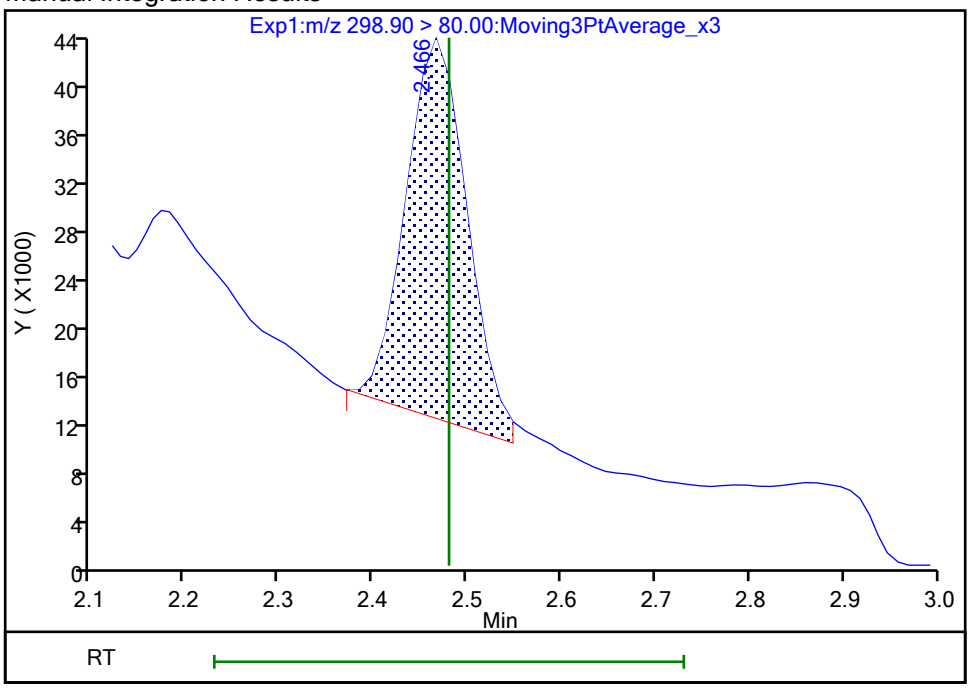
Processing Integration Results

RT: 2.47
Area: 379209
Amount: 0.262237
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 142966
Amount: 0.098866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:21:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

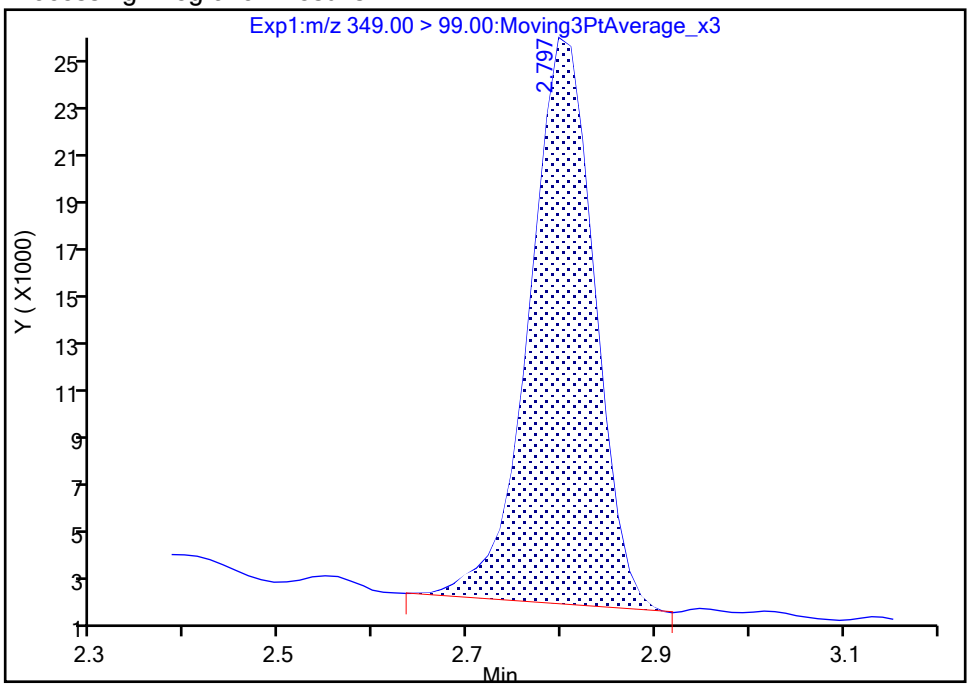
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

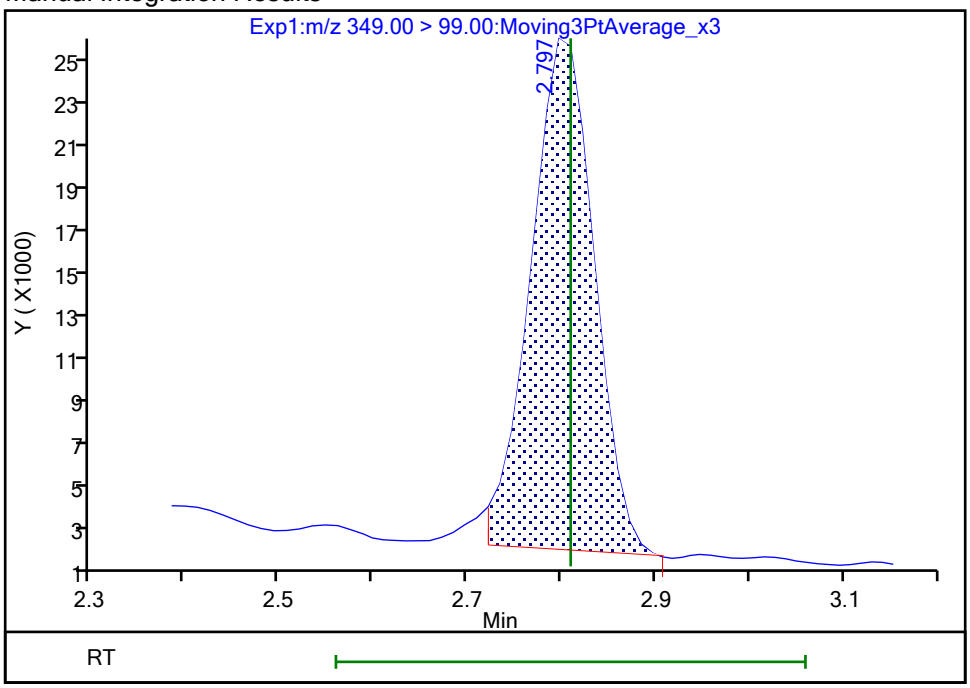
Processing Integration Results

RT: 2.80
Area: 111720
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 108267
Amount: 0.096725
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:21:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

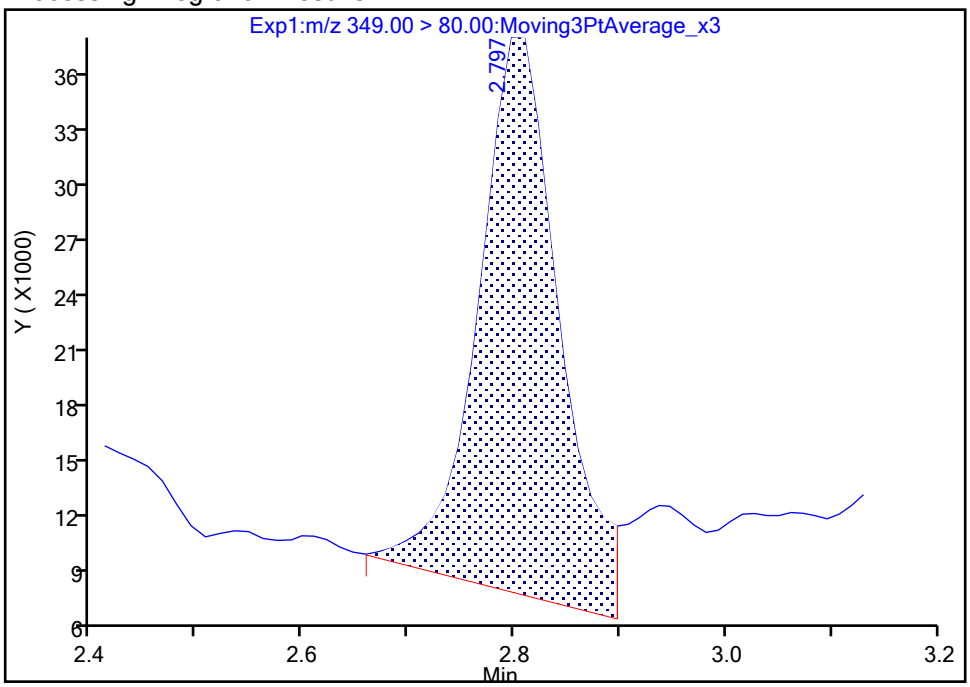
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

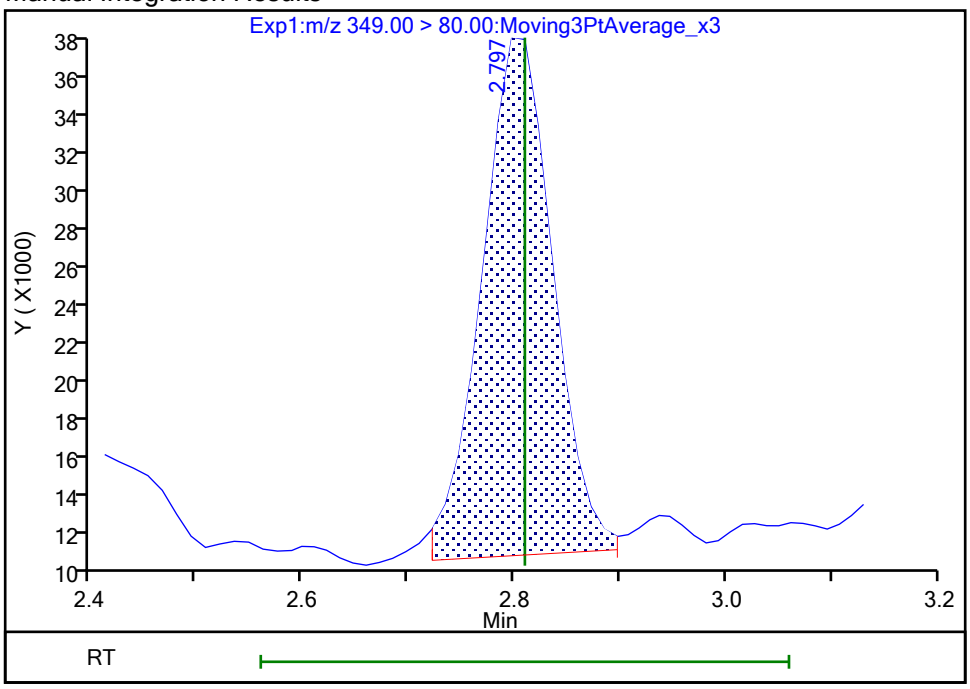
Processing Integration Results

RT: 2.80
Area: 159700
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 126500
Amount: 0.096725
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:21:58 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

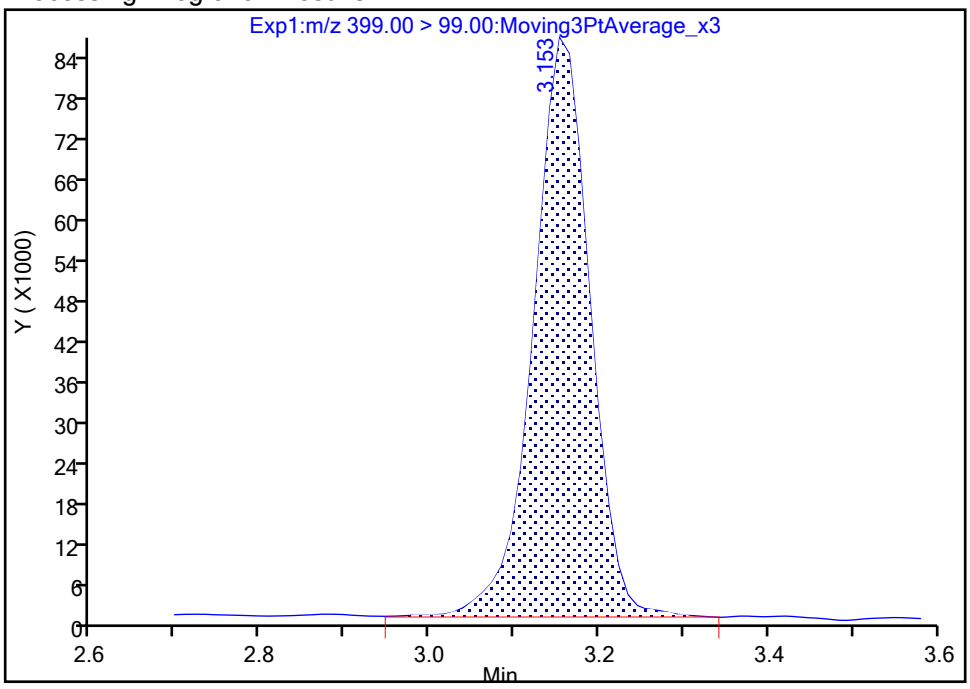
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

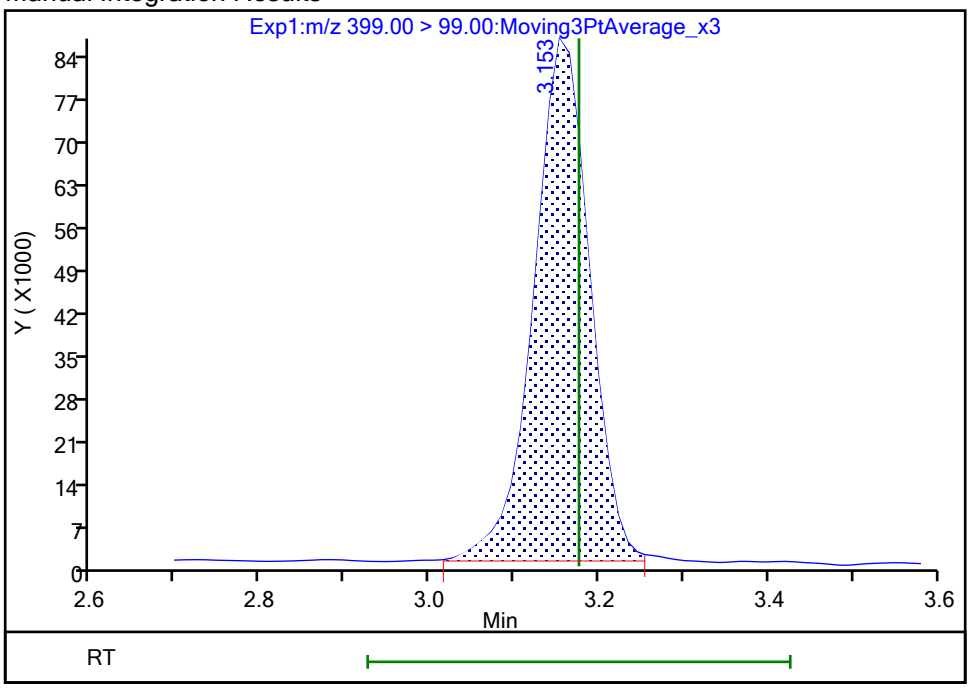
Processing Integration Results

RT: 3.15
Area: 396472
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 393228
Amount: 0.439827
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

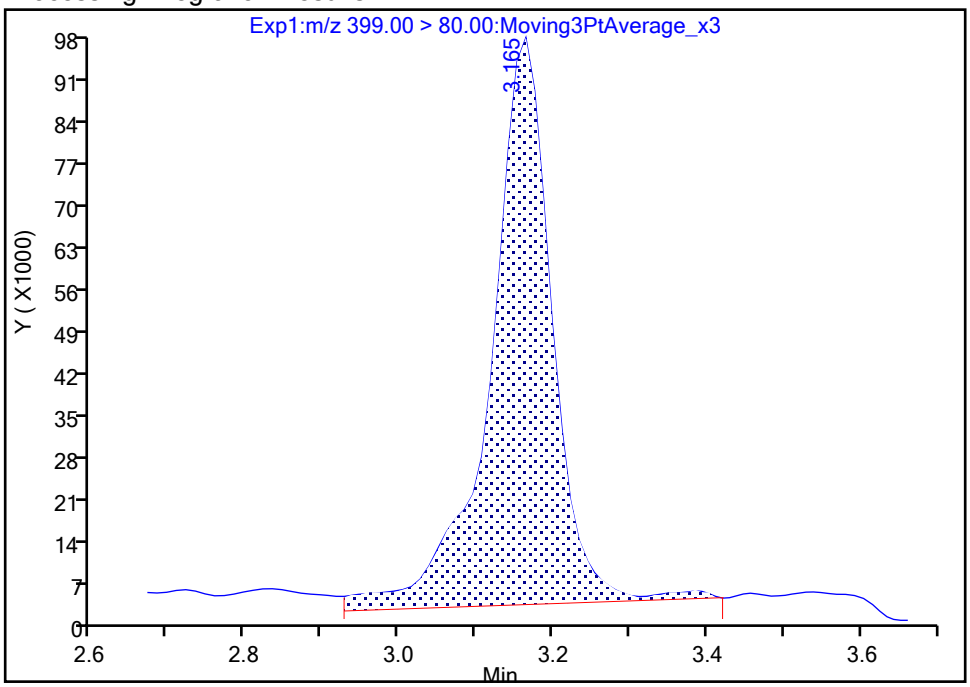
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

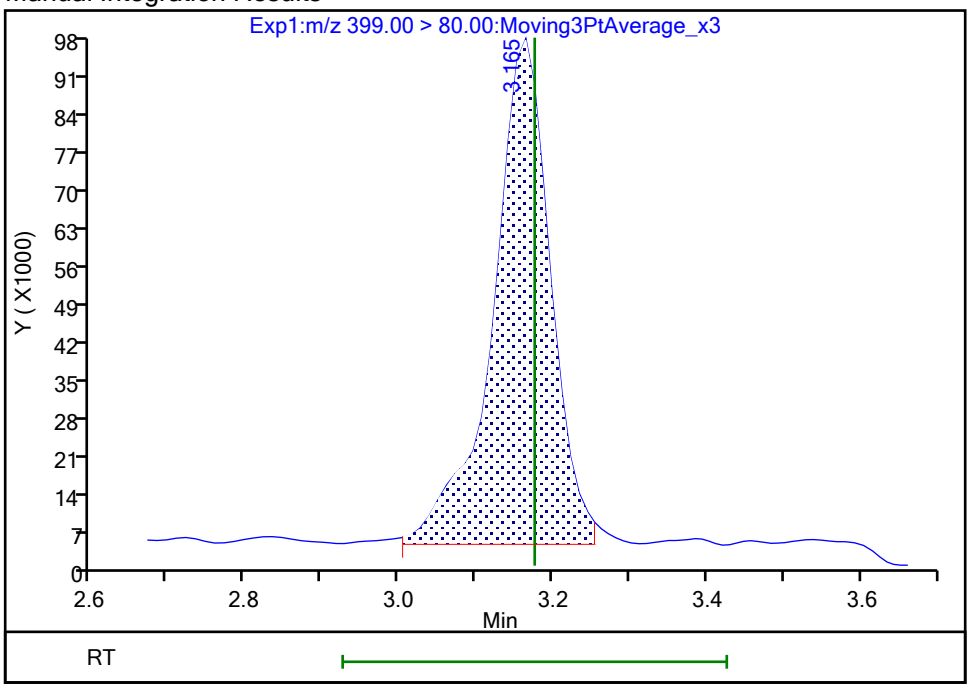
Processing Integration Results

RT: 3.16
Area: 537531
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 487603
Amount: 0.439827
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

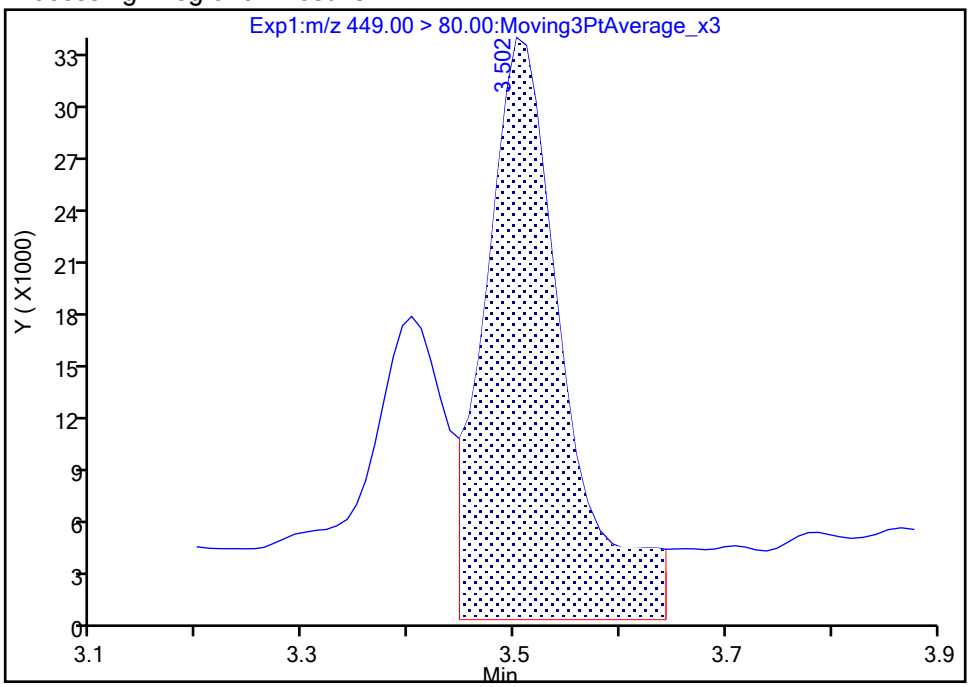
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

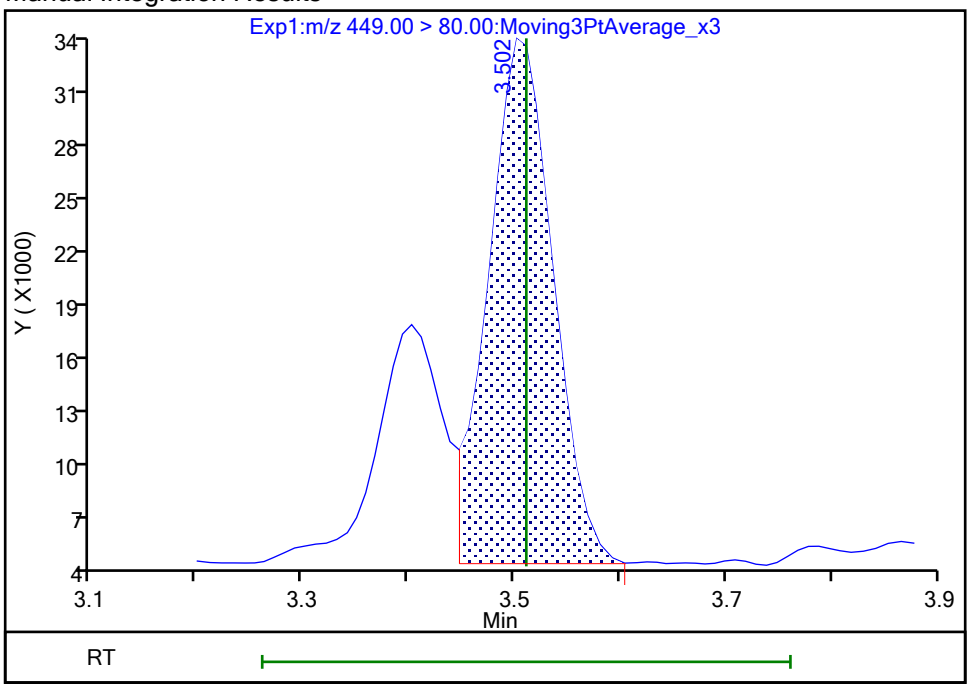
Processing Integration Results

RT: 3.50
Area: 173466
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 124811
Amount: 0.140071
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

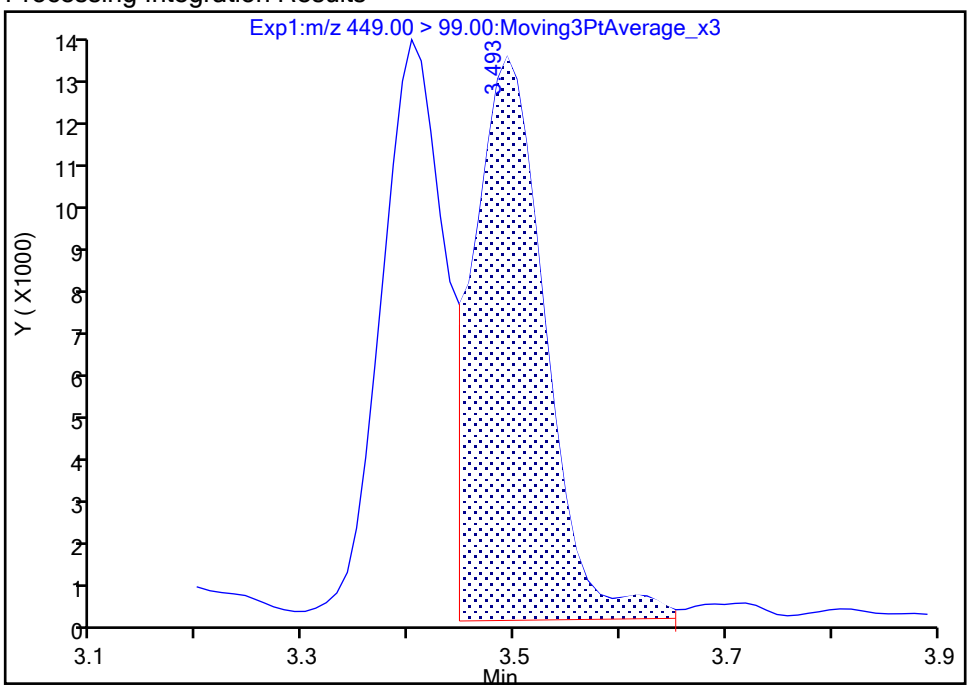
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

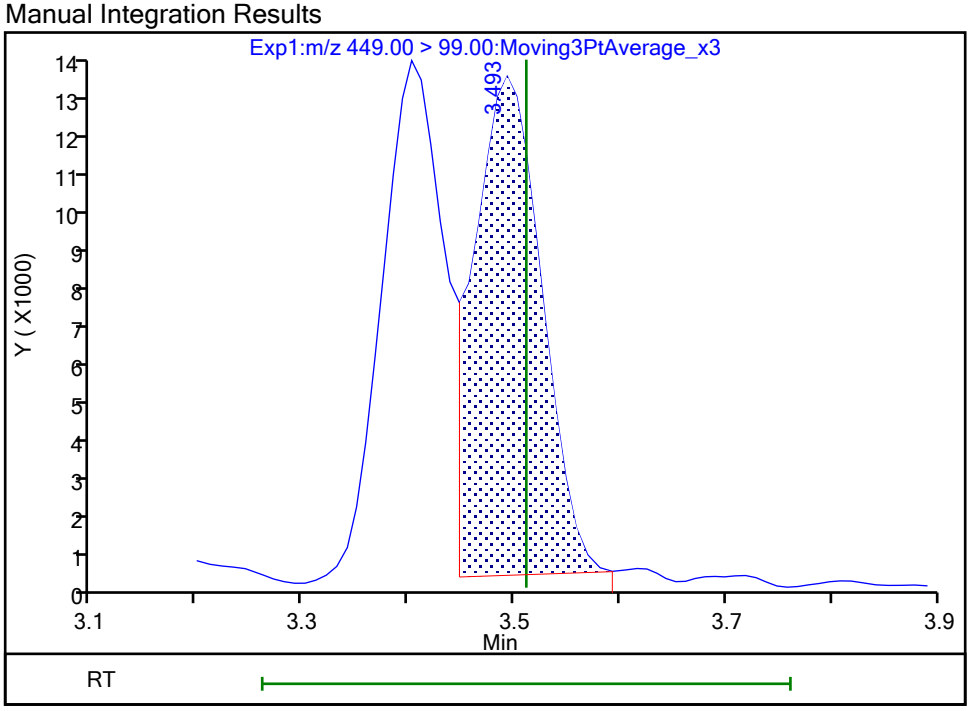
Processing Integration Results

RT: 3.49
Area: 61527
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 55903
Amount: 0.140071
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:22:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

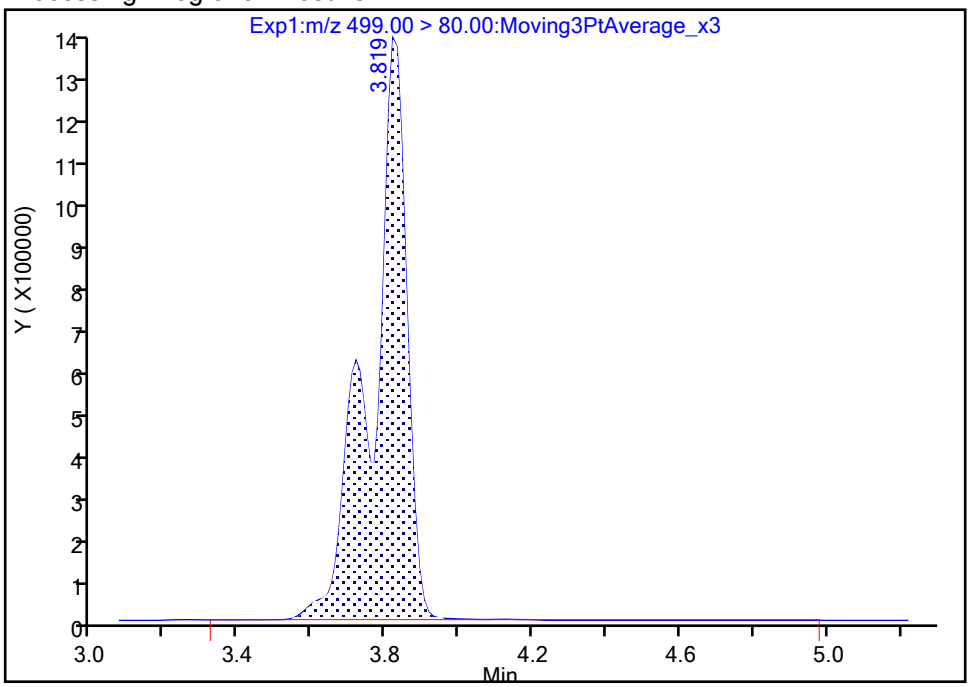
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

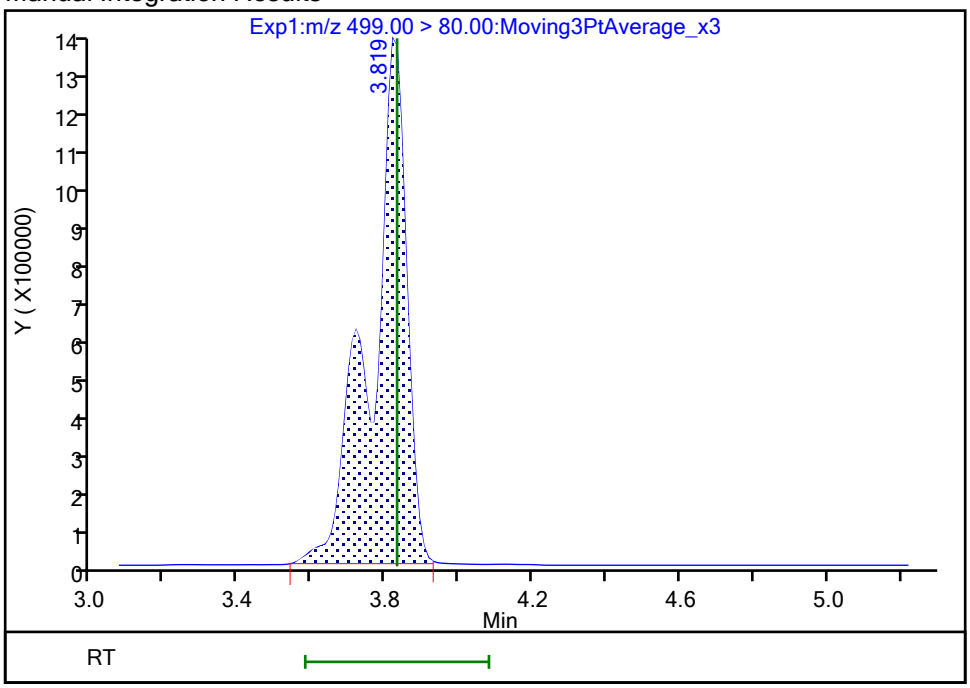
Processing Integration Results

RT: 3.82
Area: 8912973
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 8805875
Amount: 12.244600
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:24:22 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

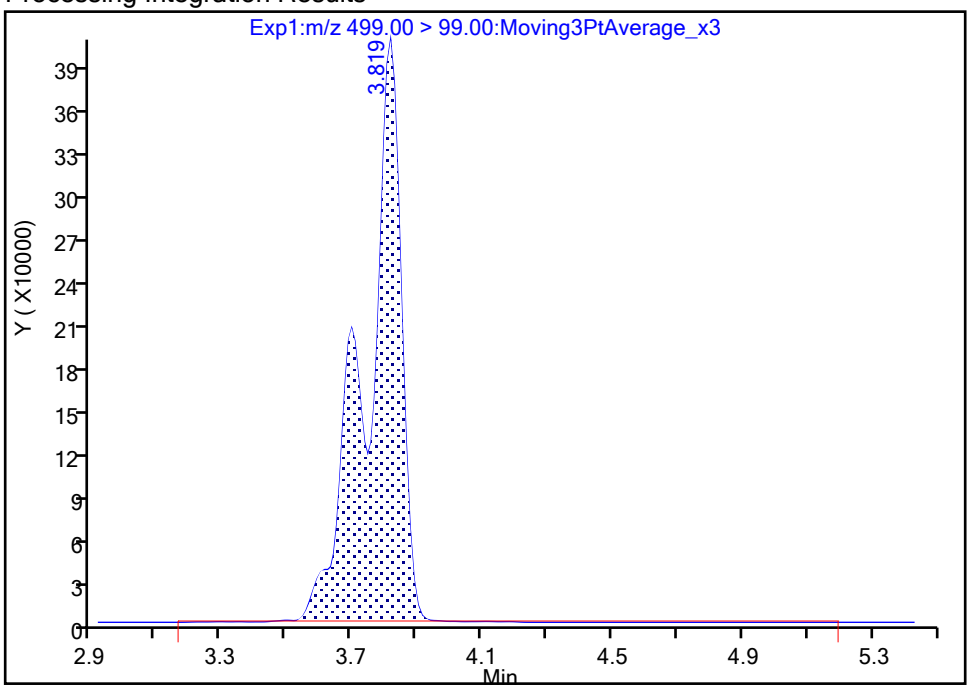
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

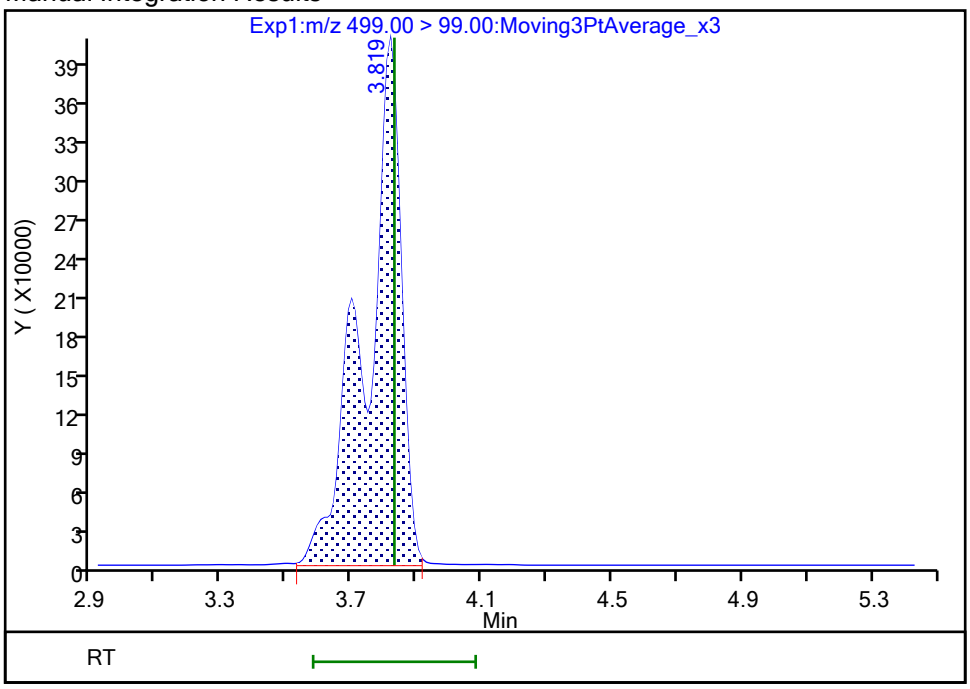
Processing Integration Results

RT: 3.82
Area: 3066799
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 3033514
Amount: 12.244600
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:24:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

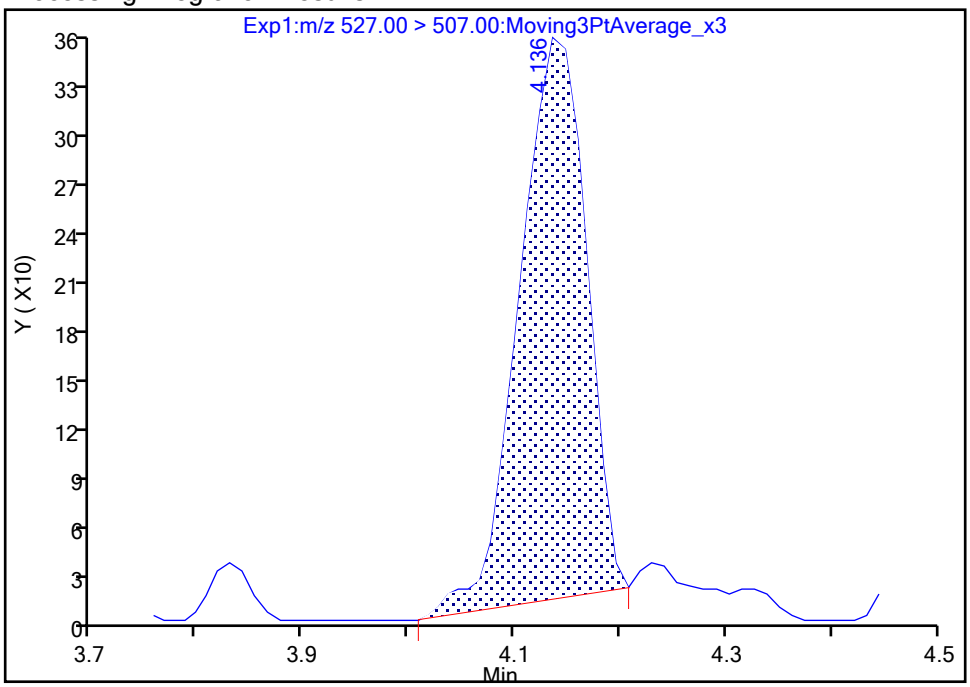
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

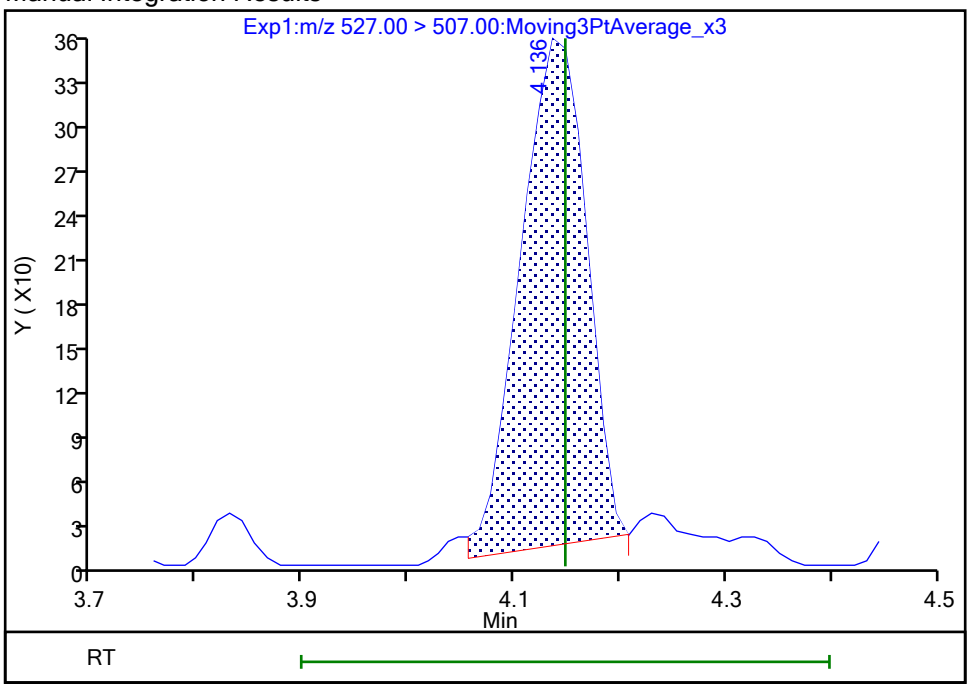
Processing Integration Results

RT: 4.14
Area: 1509
Amount: 0.002915
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1487
Amount: 0.002872
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:25:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

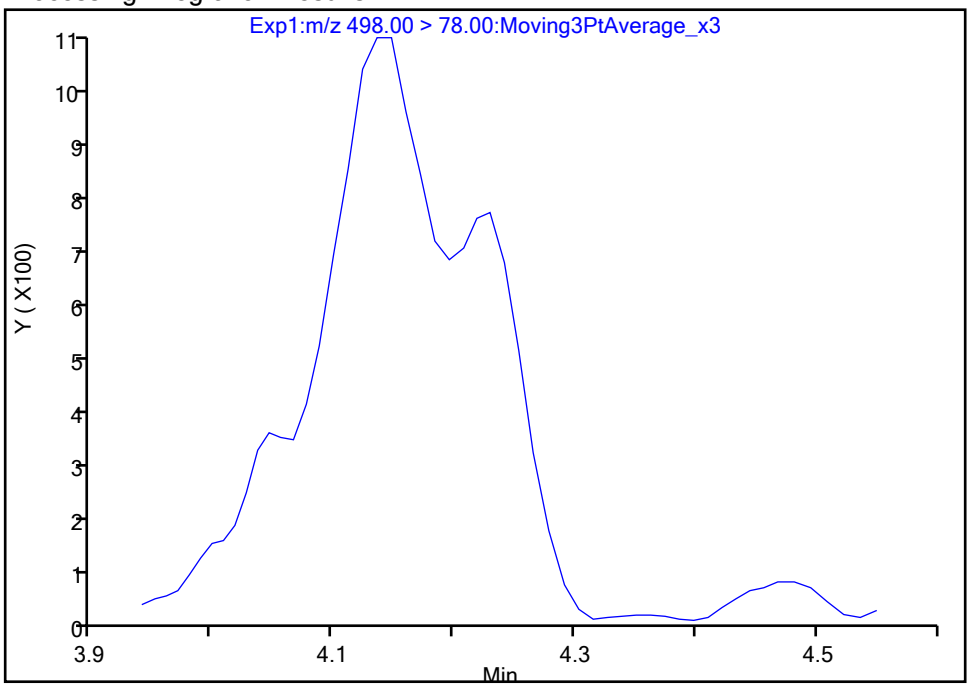
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

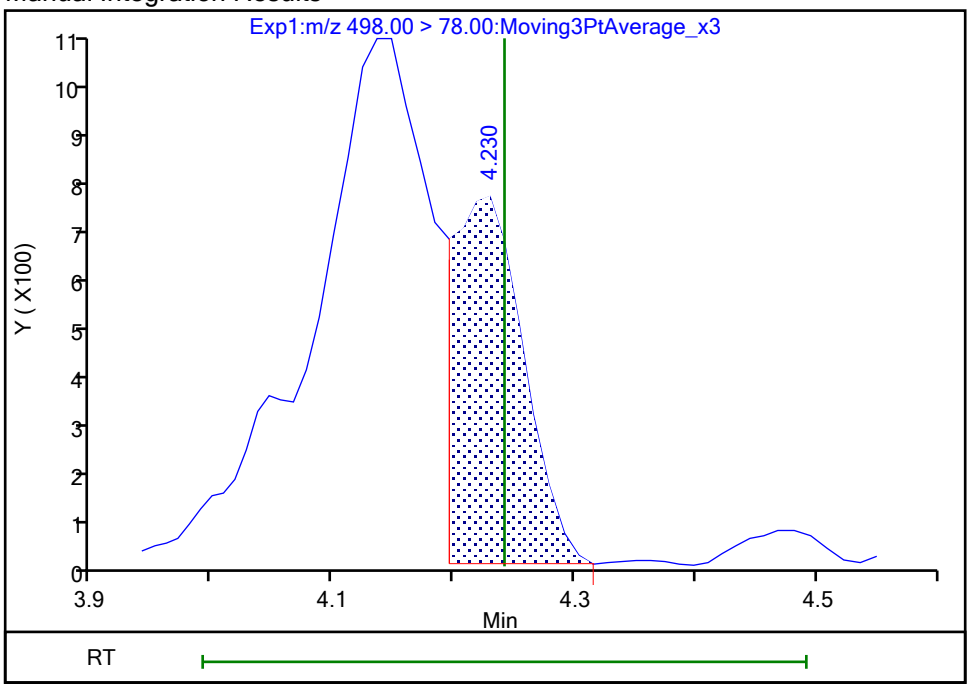
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 2735
Amount: 0.003078
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:25:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

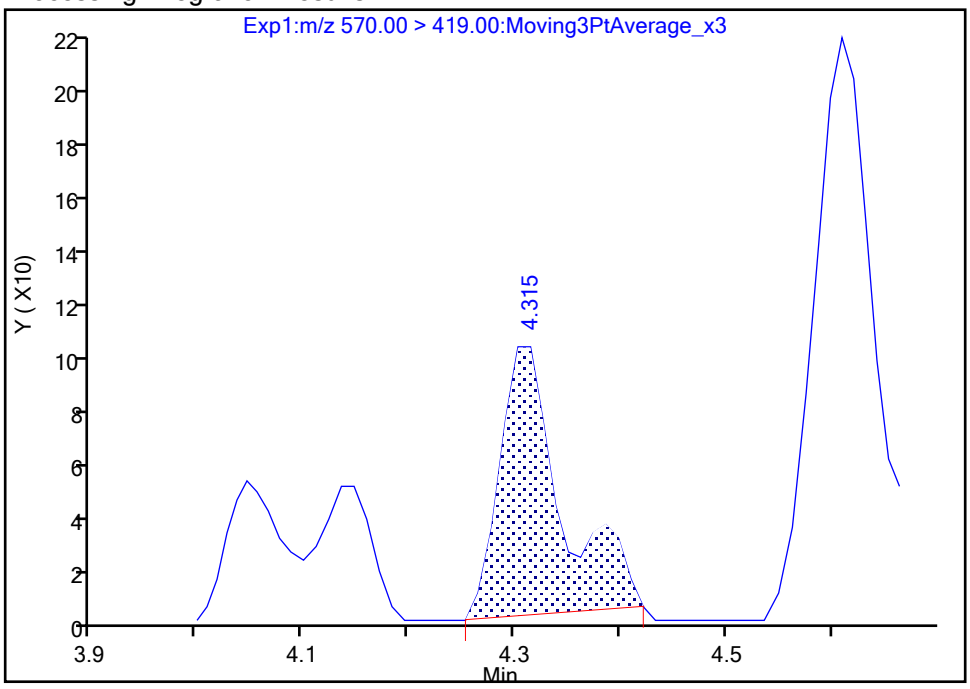
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

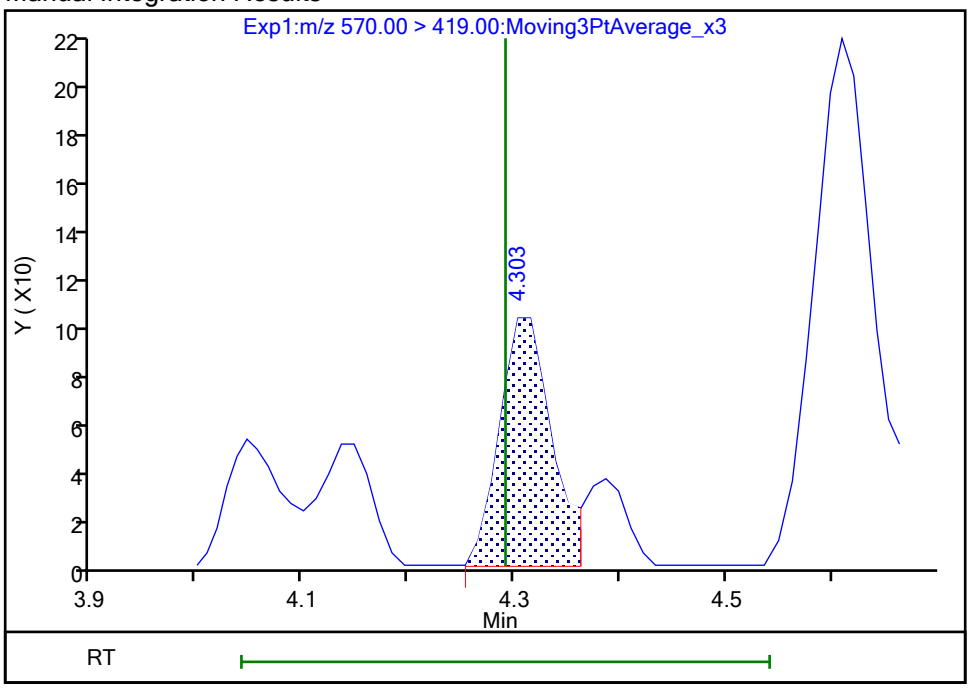
Processing Integration Results

RT: 4.32
Area: 403
Amount: 0.001376
Amount Units: ng/ml



Manual Integration Results

RT: 4.30
Area: 339
Amount: 0.001158
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:25:47 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

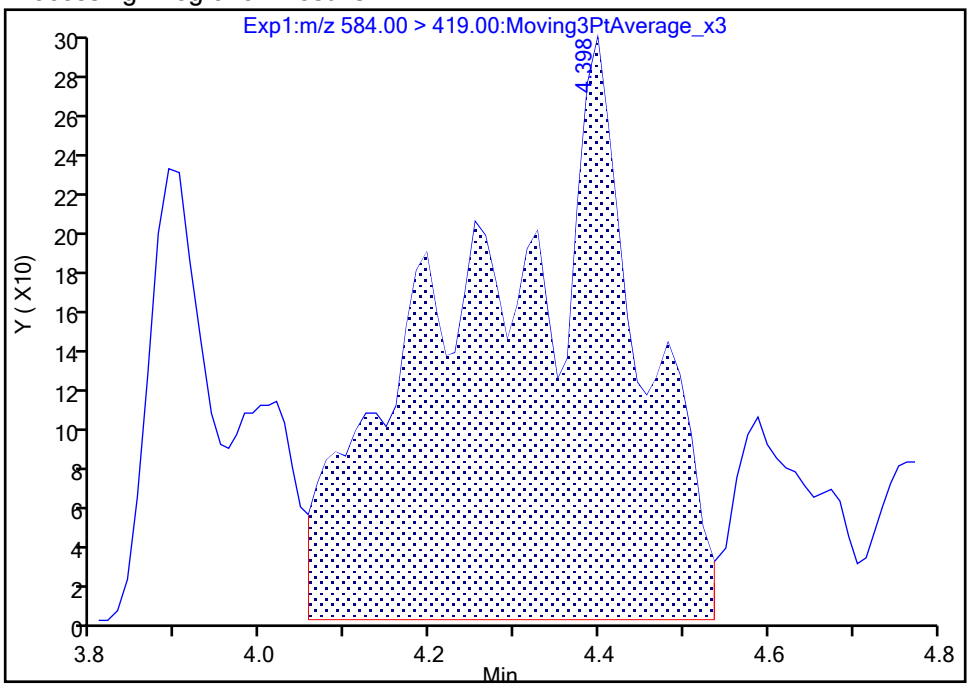
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

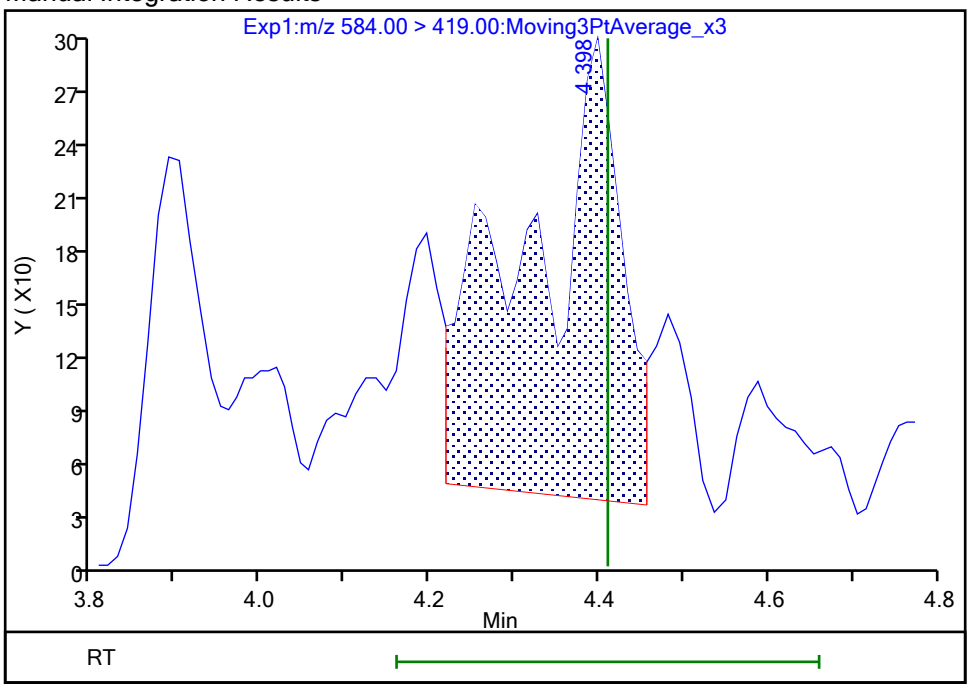
Processing Integration Results

RT: 4.40
Area: 4205
Amount: 0.013168
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 2024
Amount: 0.006338
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:26:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

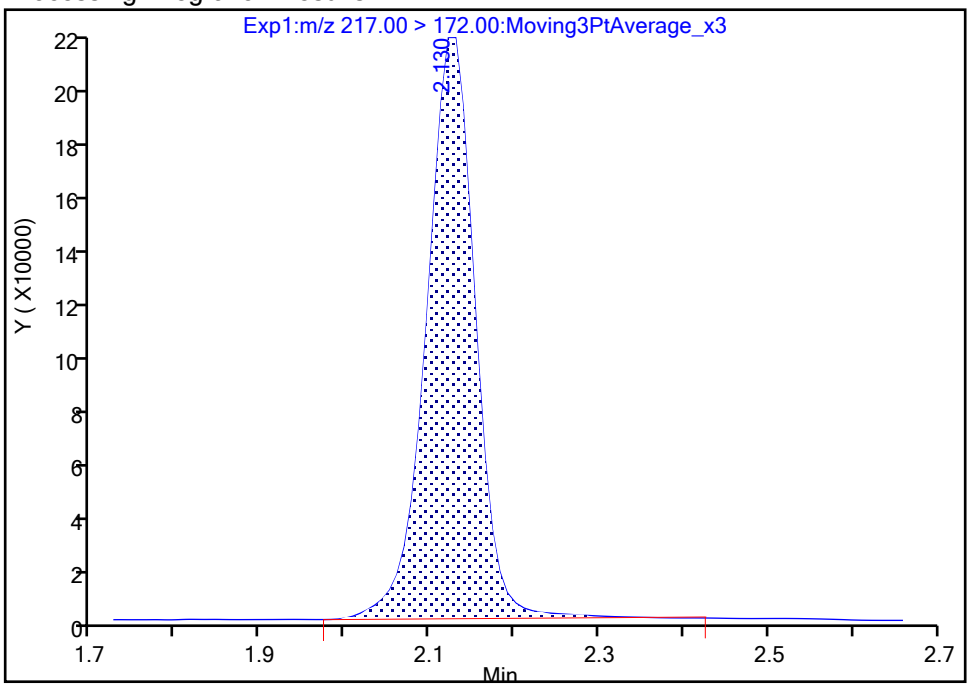
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

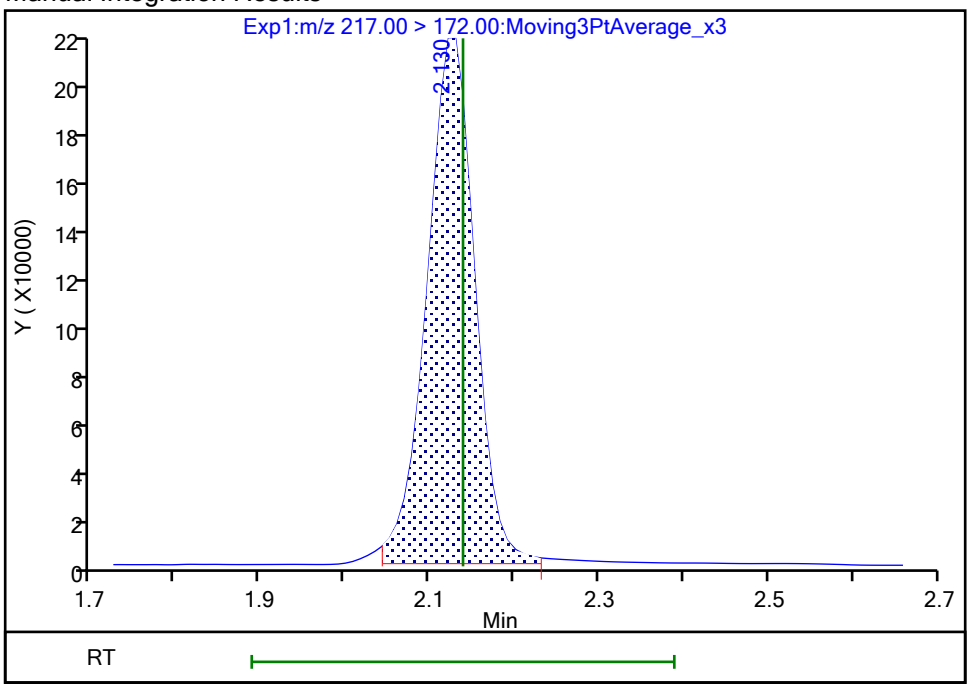
Processing Integration Results

RT: 2.13
Area: 871783
Amount: 0.643747
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 854264
Amount: 0.630810
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:20:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

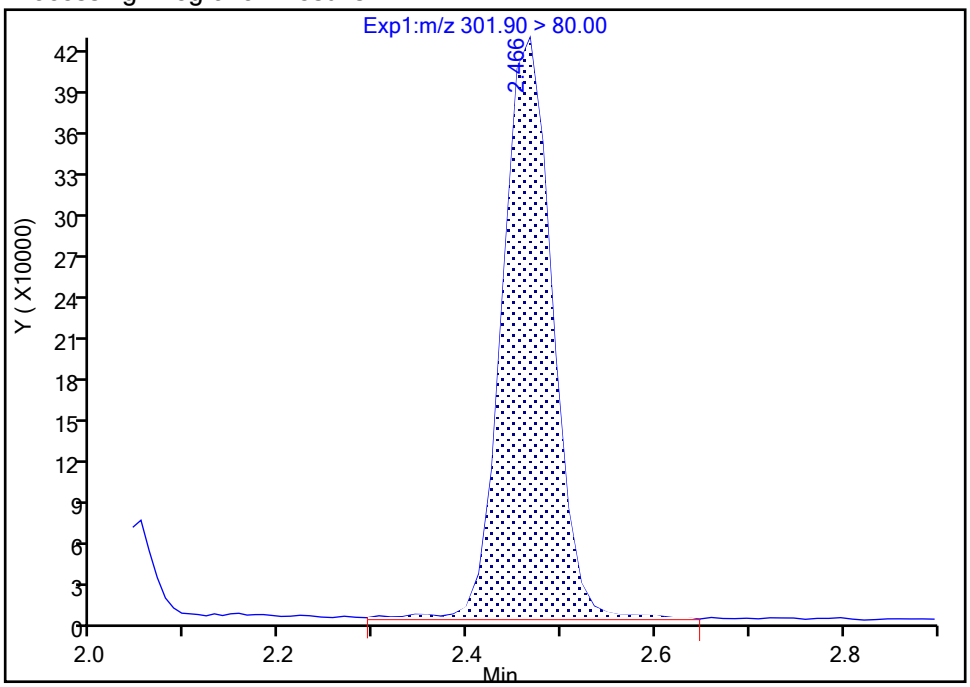
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

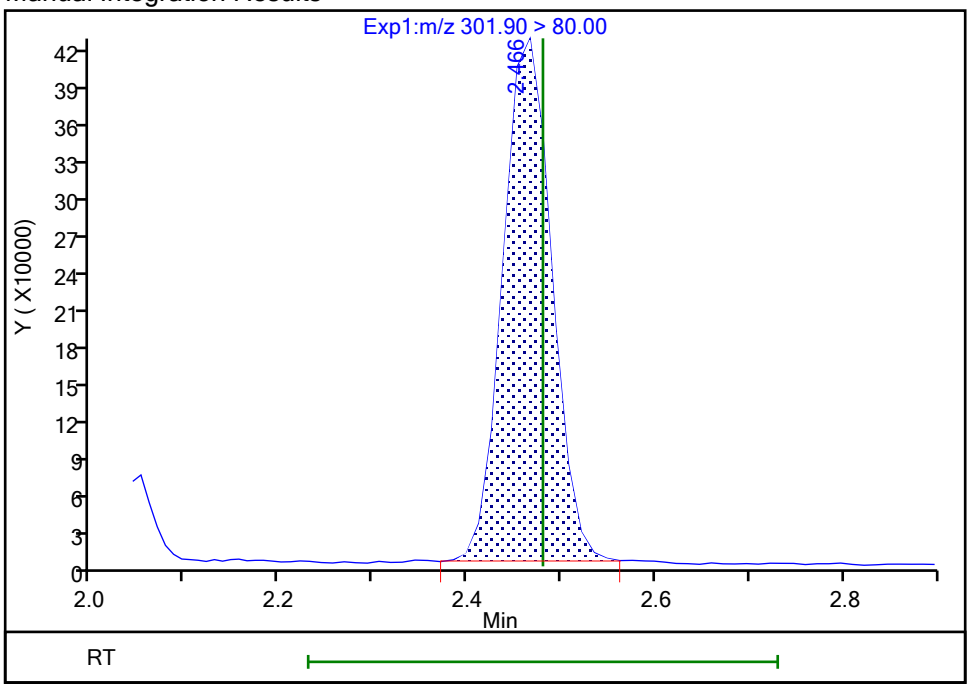
Processing Integration Results

RT: 2.47
Area: 1564456
Amount: 1.100124
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1505088
Amount: 1.058376
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:20:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

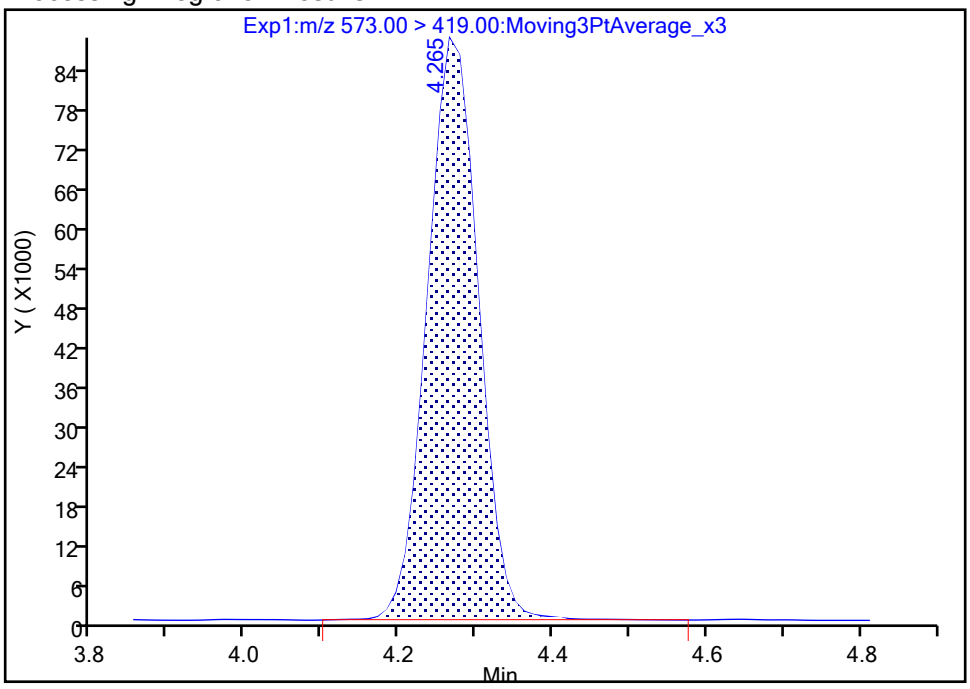
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

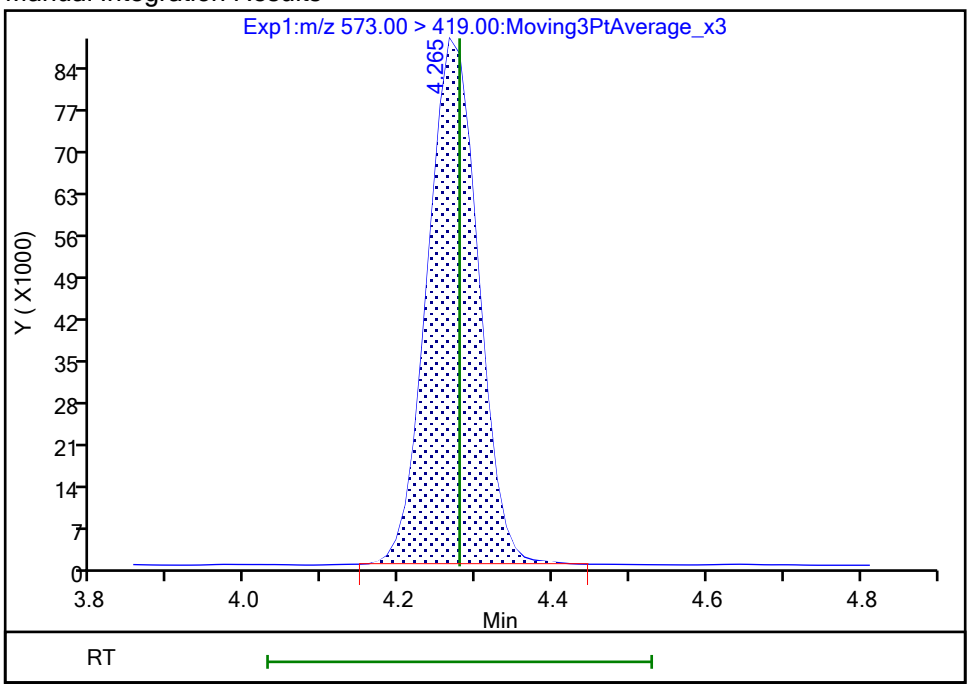
Processing Integration Results

RT: 4.27
Area: 406186
Amount: 1.122352
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 403398
Amount: 1.114648
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:20:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

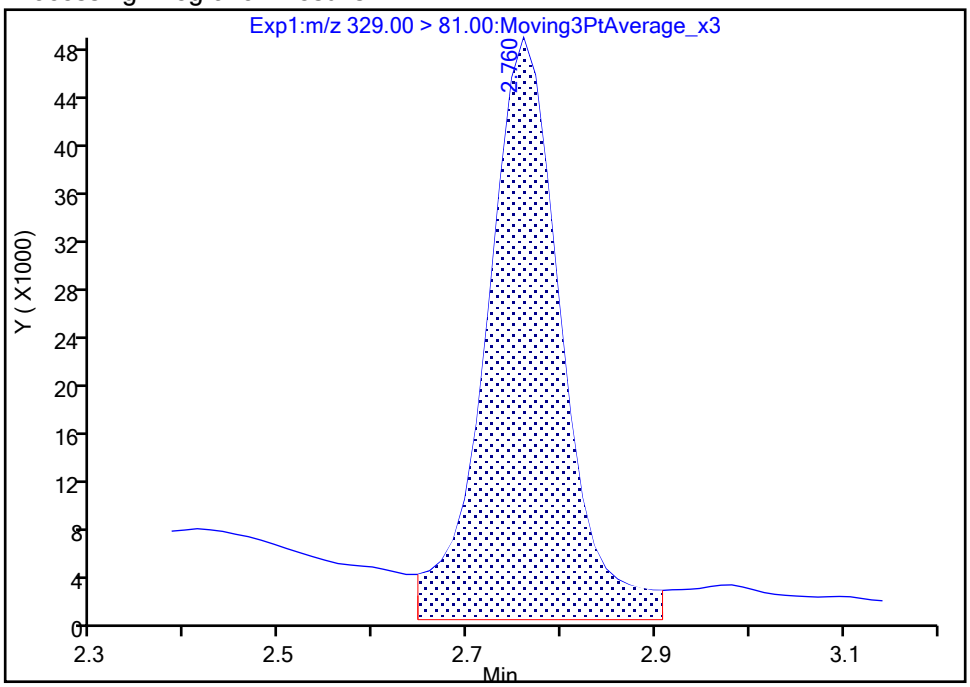
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

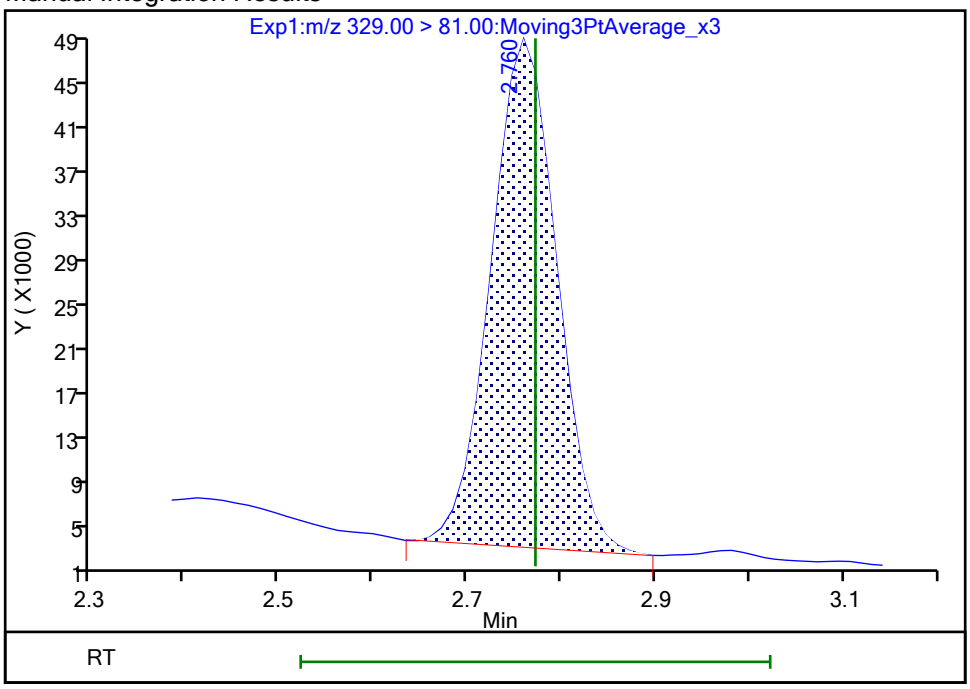
Processing Integration Results

RT: 2.76
Area: 270704
Amount: 1.646037
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 221957
Amount: 1.349627
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:20:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

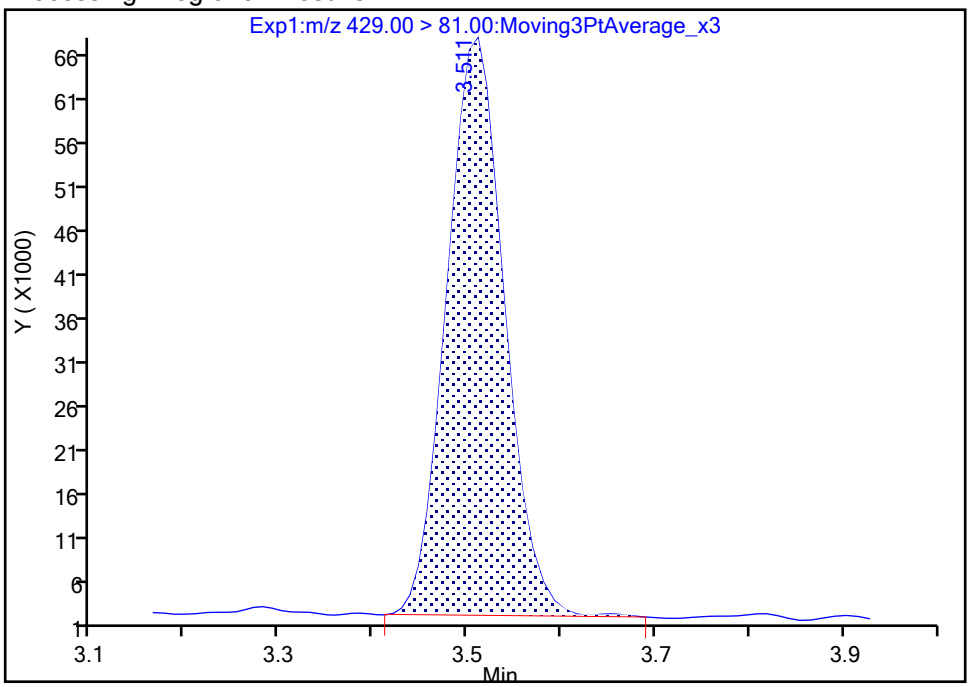
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A25.d				
Injection Date:	25-Oct-2023 21:08:15	Instrument ID:	LC812		
Lims ID:	460-290543-B-6-A	Lab Sample ID:	200-290543-6		
Client ID:	MW7-101723-1052-13				
Operator ID:	LC812user	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

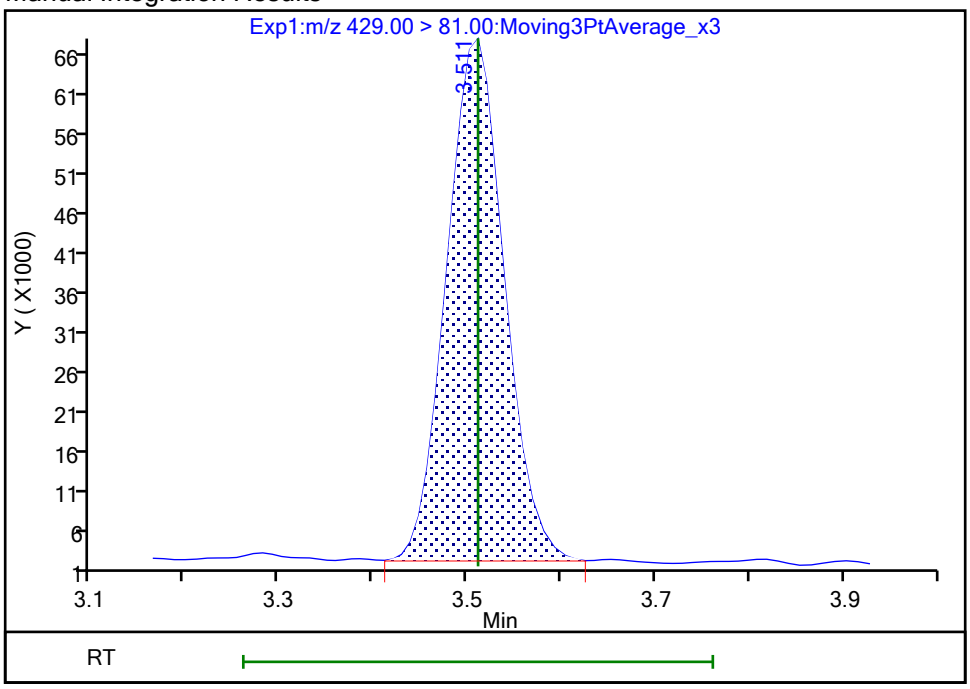
Processing Integration Results

RT: 3.51
Area: 280795
Amount: 1.325661
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 279144
Amount: 1.317866
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:20:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW11-101723-1212-25.5 | Lab Sample ID: 460-290543-7

Matrix: Water | Lab File ID: PA231025A26.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 12:12

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 294.4(mL) | Date Analyzed: 10/25/2023 21:16

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	15.9		4.25	1.02
2706-90-3	Perfluoropentanoic acid	8.50		1.70	0.58
307-24-4	Perfluorohexanoic acid	8.46		1.70	0.55
375-85-9	Perfluoroheptanoic acid	6.05		1.70	0.46
335-67-1	Perfluorooctanoic acid	13.2		1.70	0.65
375-95-1	Perfluorononanoic acid	2.87		1.70	0.42
335-76-2	Perfluorodecanoic acid	0.49	J	1.70	0.39
2058-94-8	Perfluoroundecanoic acid	1.70	U	1.70	0.47
307-55-1	Perfluorododecanoic acid	1.70	U	1.70	0.42
72629-94-8	Perfluorotridecanoic acid	1.70	U	1.70	0.41
376-06-7	Perfluorotetradecanoic acid	1.70	U	1.70	0.54
375-73-5	Perfluorobutanesulfonic acid	3.32		1.70	0.53
2706-91-4	Perfluoropentanesulfonic acid	2.25		1.70	0.42
355-46-4	Perfluorohexanesulfonic acid	7.80		1.70	0.47
375-92-8	Perfluoroheptanesulfonic acid	2.66		1.70	0.35
1763-23-1	Perfluorooctanesulfonic acid	207		1.70	0.72
68259-12-1	Perfluorononanesulfonic acid	1.70	U	1.70	0.34
335-77-3	Perfluorodecanesulfonic acid	1.70	U	1.70	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.25	U	4.25	1.10
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.70	U	1.70	0.65
754-91-6	Perfluorooctanesulfonamide	1.70	U	1.70	0.78
2355-31-9	NMeFOSAA	4.25	U	4.25	1.61
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.25	U	4.25	1.36
13252-13-6	HFPODA	3.40	U	3.40	0.93
919005-14-4	DONA	1.70	U	1.70	0.36
756426-58-1	9Cl-PF3ONS	1.70	U	1.70	0.27
763051-92-9	11Cl-PF3OUdS	1.70	U	1.70	0.74

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: MW11-101723-1212-25.5 Lab Sample ID: 460-290543-7

Matrix: Water Lab File ID: PA231025A26.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 12:12

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 294.4(mL) Date Analyzed: 10/25/2023 21:16

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	57		50-150
STL01893	13C5 PFPeA	76		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	82		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	81		50-150
STL02118	d3-NMeFOSAA	79		50-150
STL02117	d5-NEtFOSAA	82		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	102		50-150
STL02280	M2-8:2 FTS	81		50-150
STL02255	13C3 HFPO-DA	87		50-150
STL00994	18O2 PFHxS	97		50-150
STL00993	13C2 PFHxA	85		50-150
STL00991	13C4 PFOS	89		50-150
STL00998	13C2 PFDoA	88		50-150
STL00995	13C5 PFNA	96		50-150
STL00996	13C2 PFDA	89		50-150
STL00990	13C4 PFOA	95		50-150
STL00997	13C2 PFUnA	83		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d
Lims ID: 460-290543-B-7-A
Client ID: MW11-101723-1212-25.5
Sample Type: Client
Inject. Date: 25-Oct-2023 21:16:25 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-B-7-A
Misc. Info.: 200-0057556-026 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:34:37
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.604	1050715	0.7172		57.4	706	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	387533	0.4690			25.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.695	1082233	0.9518		76.1	279	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	233898	0.2503			1.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.699	1604723	1.04		89.7	14607	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.480	-0.013	1.000	150743	0.0978	Target=2.06		2.5	M
298.90 > 99.00	2.467	2.480	-0.013	1.000	77809		1.94(1.03-3.09)		3.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.786	194290	1.09		93.5	1.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.810	2.810	0.0	0.796	1235663	1.07		85.5	2019	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.810	0.0	1.000	270868	0.2490	Target=14.12		2.2	M
313.00 > 119.00	2.810	2.810	0.0	1.000	15118		17.92(7.06-21.17)		2.9	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	92798	0.0662	Target=2.72		3.4	M
349.00 > 99.00	2.810	2.810	0.0	0.888	44624		2.08(1.36-4.09)		5.1	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.824	243890	1.09		87.1	2543	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.918	-0.010	1.000	841	0.004305			9.8	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.897	1268433	1.15		97.3	4382	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	272567	0.2295	Target=3.32		22.9	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	116551		2.34(1.66-4.98)		34.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.176	0.0	1.000	236132	0.1781	Target=4.17		4.0	M
363.00 > 169.00	3.176	3.176	0.0	1.000	55582		4.25(2.09-6.26)		41.9	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.176	0.0	0.900	1478789	1.17		93.2	4326	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.511	0.0	0.917	70884	0.0783	Target=4.83		8.3	M
449.00 > 99.00	3.511	3.511	0.0	0.917	23387		3.03(2.41-7.24)		7.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.995	277502	1.21		102	32.5	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.000	563123	0.3881	Target=2.88		9.5	M
413.00 > 169.00	3.529	3.529	0.0	1.003	192995		2.92(1.44-4.32)		159	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	0.997	1702939	1.18		94.8	2878	
* 62 13C2 PFOA										
415.00 > 370.00	3.529	3.529	0.0		1846725	1.25			4231	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.830	0.0	1.000	4452669	6.09	Target=4.24		1040	M
499.00 > 99.00	3.830	3.830	0.0	1.000	1363518		3.27(2.12-6.37)		796	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.085	748681	1.07		89.4	362	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.854	0.0	1.000	124715	0.0846	Target=8.34		5.8	
463.00 > 169.00	3.854	3.854	0.0	1.000	13676		9.12(4.17-12.51)		27.7	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.854	0.0	1.092	1879849	1.20		96.1	3058	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.136	4.148	-0.012	1.000	21186	0.0146	Target=11.44		2.4	M
513.00 > 169.00	4.136	4.148	-0.012	1.000	2389		8.87(5.72-17.16)		8.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.172	1819410	1.11		88.8	8512	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.160	4.148	0.012	1.003	1035	0.002262			10.9	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.175	248893	0.9660		80.7	213	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.202	1408204	1.01		80.6	5405	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.278	0.0	1.212	384517	0.9821		78.6	1200	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.278	4.291	-0.013	1.000	245	0.000878			1.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 30 13C2 PFUnA										
565.00 > 520.00	4.398	4.398	0.0	1.246	1600388	1.03		82.8	4844	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.246	387179	1.03		82.2	797	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.410	-0.012	1.000	745	0.002405			2.7	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.482	4.482	0.0	1.170	465	0.000136			1.0	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.621	4.621	0.0	1.309	1734919	1.10		88.3	4522	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.414	1598807	1.02		81.7	4443	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	5.000	4.989	0.011	1.002	264	0.001846	Target=0.87		2.1	M
713.00 > 219.00	4.990	4.989	0.001	1.000	224		1.18(0.43-1.30)		3.2	M

QC Flag Legend

Processing Flags

Review Flags

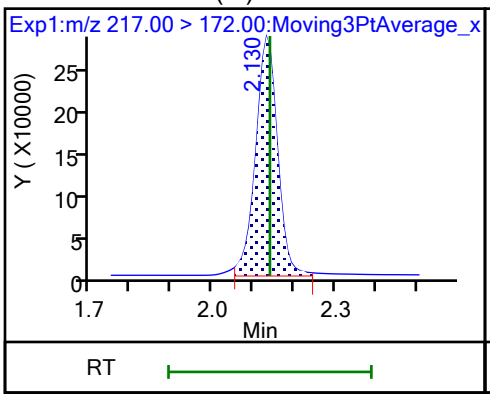
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:47 Chrom Revision: 2.3 18-Oct-2023 21:16:54

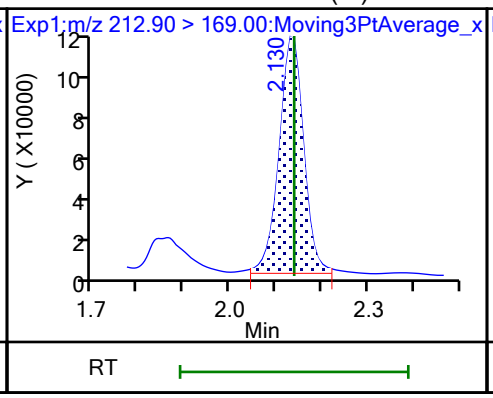
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d
Injection Date: 25-Oct-2023 21:16:25 Instrument ID: LC812
Lims ID: 460-290543-B-7-A Lab Sample ID: 200-290543-7
Client ID: MW11-101723-1212-25.5
Operator ID: LC812user ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

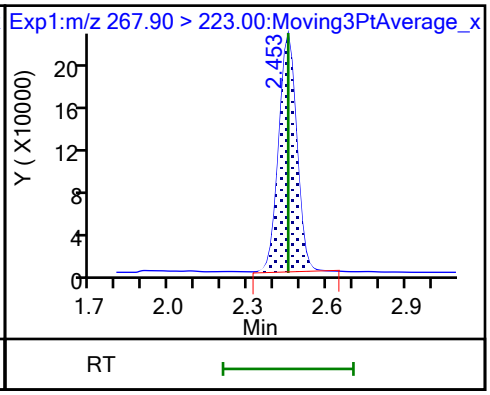
D 1 13C4 PFBA (M)



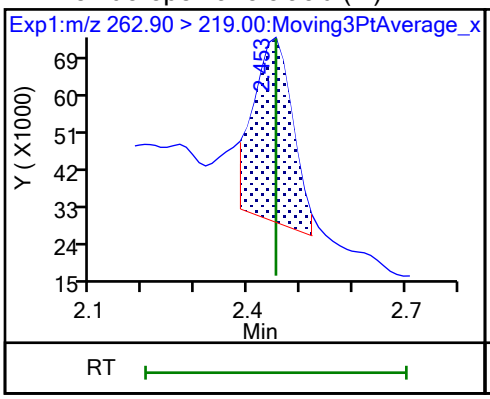
2 Perfluorobutanoic acid (M)



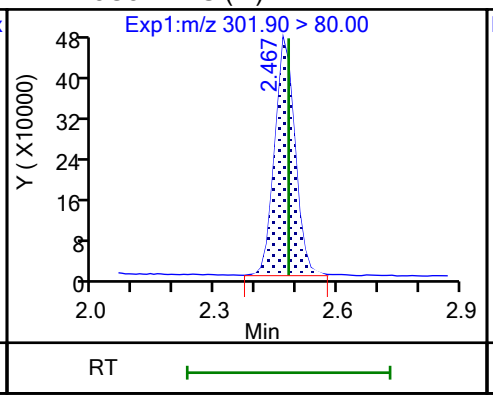
D 3 13C5 PFPeA



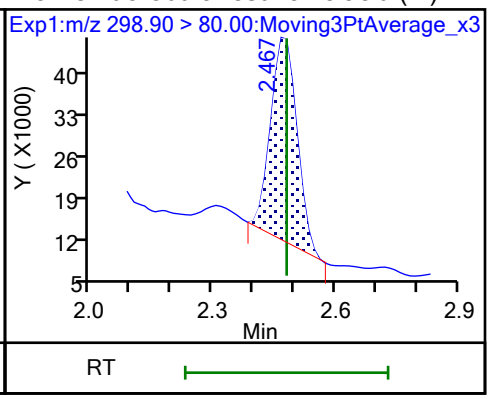
4 Perfluoropentanoic acid (M)



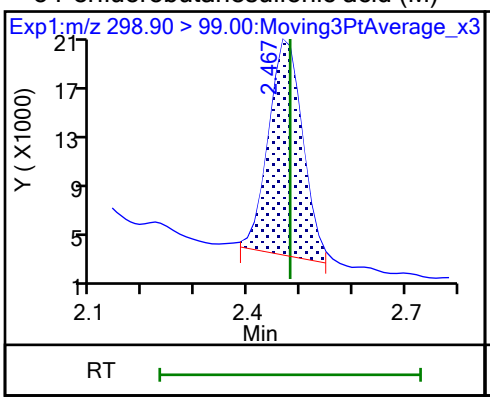
D 47 13C3 PFBS (M)



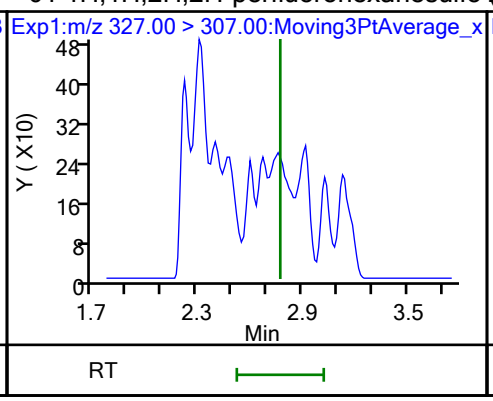
5 Perfluorobutanesulfonic acid (M)



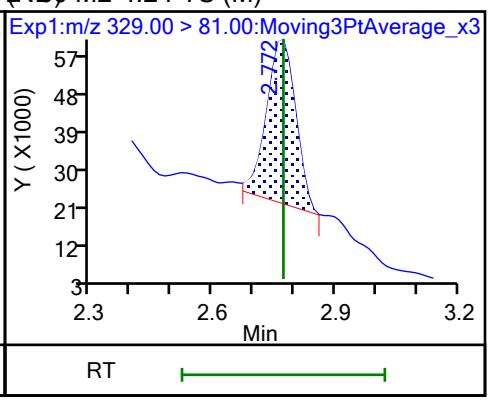
5 Perfluorobutanesulfonic acid (M)



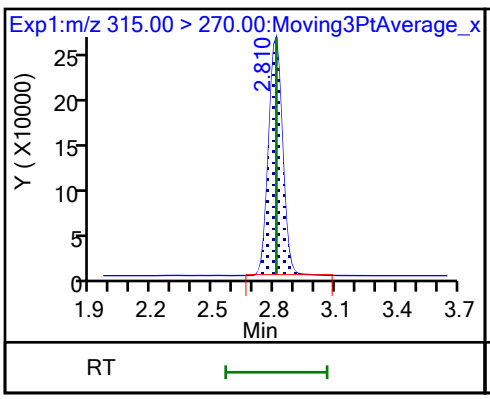
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



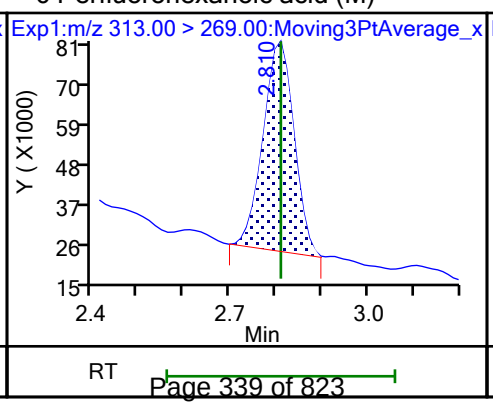
D 80 M2-4:2 FTS (M)



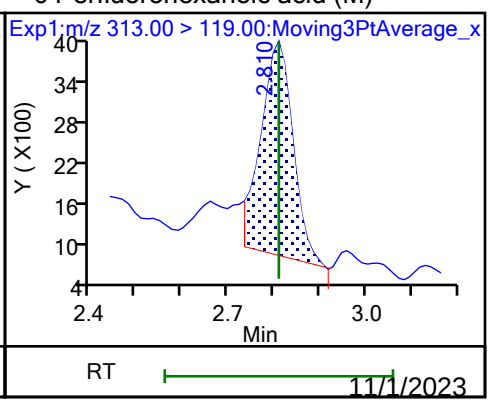
D 7 13C2 PFHxA



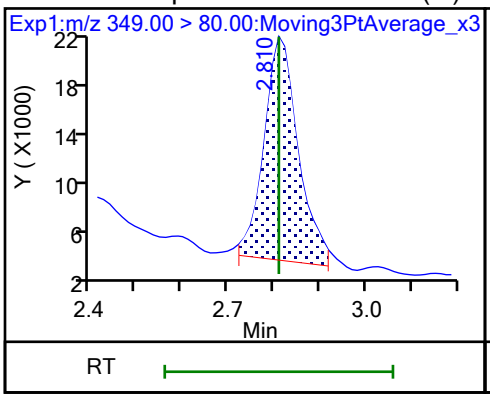
6 Perfluorohexanoic acid (M)



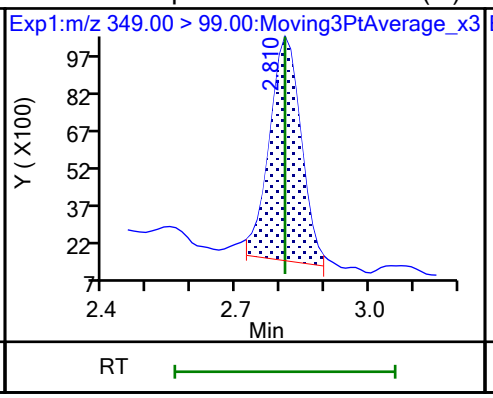
6 Perfluorohexanoic acid (M)



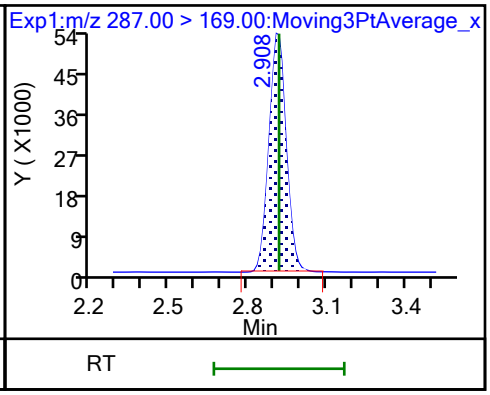
70 Perfluoropentanesulfonic acid (M)



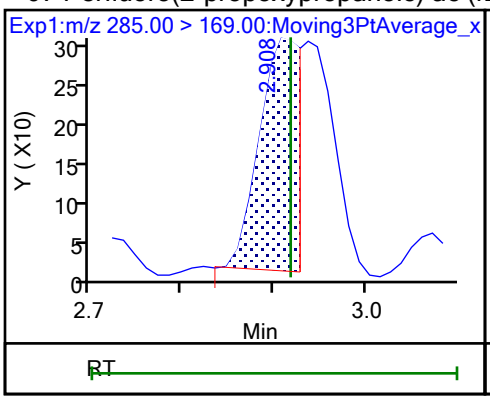
70 Perfluoropentanesulfonic acid (M)



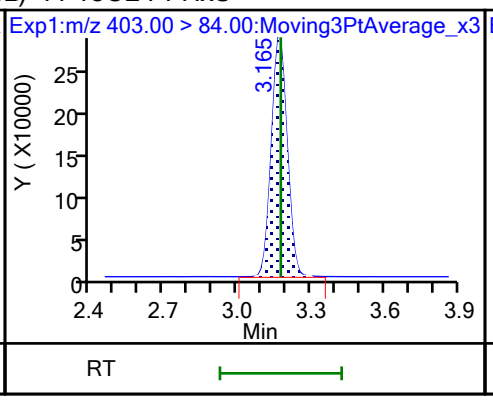
D 64 13C3 HFPO-DA



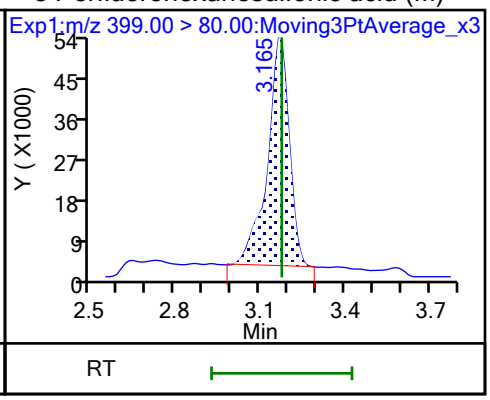
67 Perfluoro(2-propoxypropanoic) ac (M)



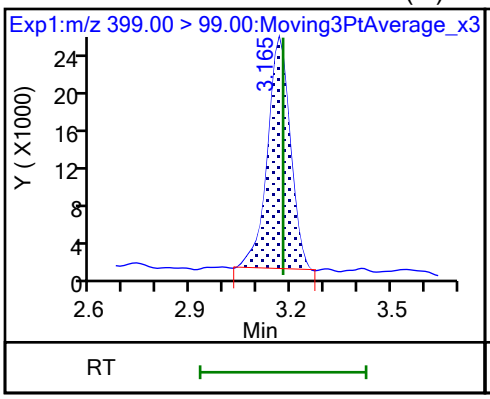
D 11 18O2 PFHxS



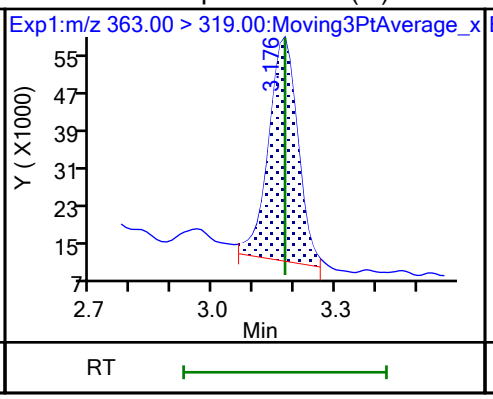
8 Perfluorohexanesulfonic acid (M)



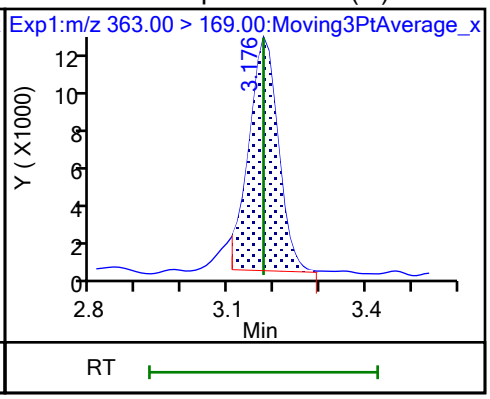
8 Perfluorohexanesulfonic acid (M)



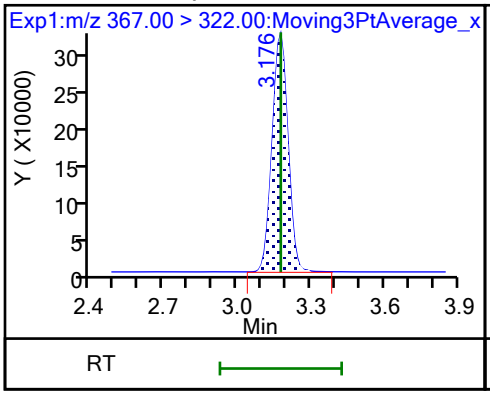
10 Perfluoroheptanoic acid (M)



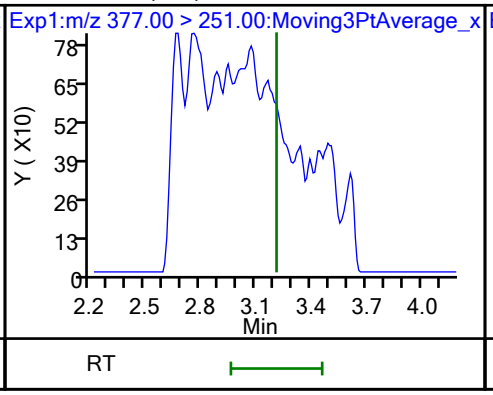
10 Perfluoroheptanoic acid (M)



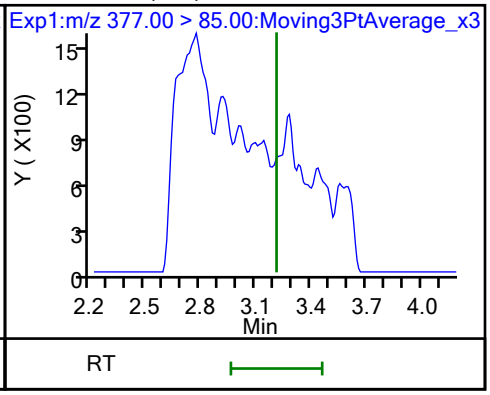
D 9 13C4 PFHpA



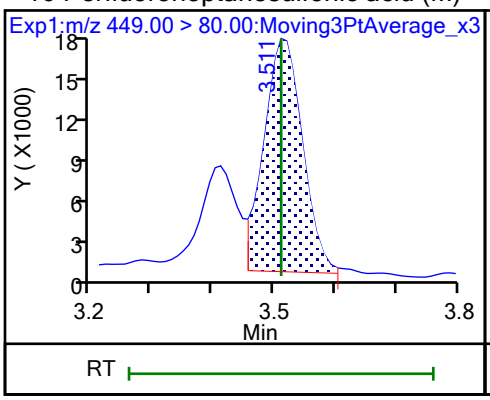
77 DONA (ND)



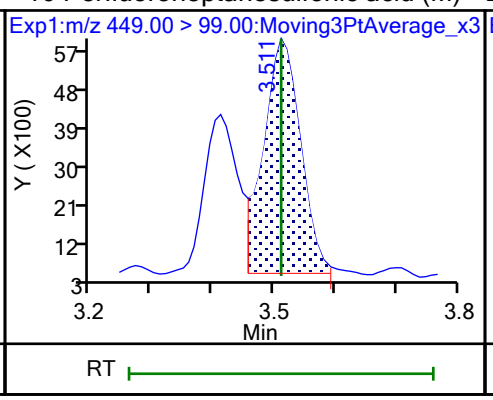
77 DONA (ND)



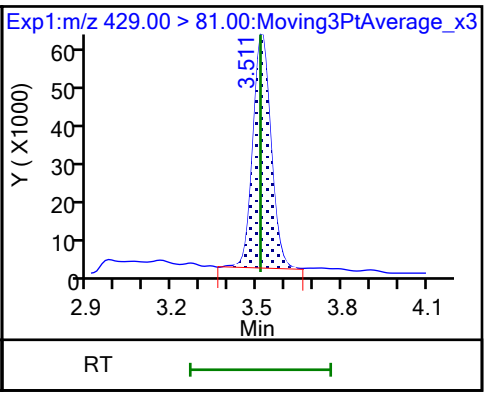
16 Perfluoroheptanesulfonic acid (M)



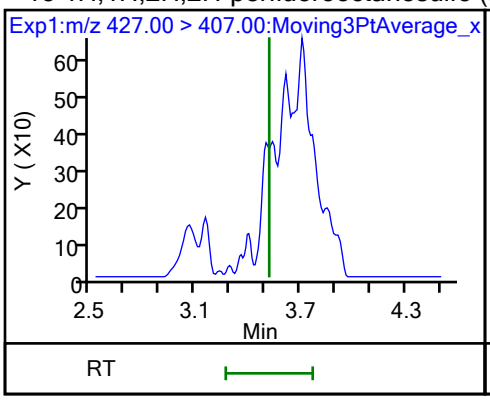
16 Perfluoroheptanesulfonic acid (M)



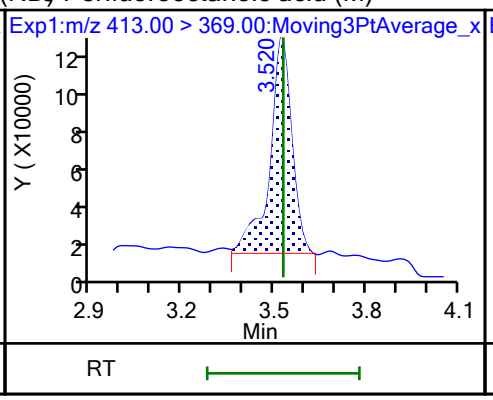
D 12 M2-6:2 FTS



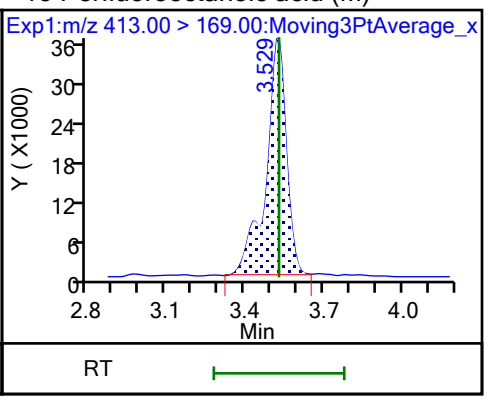
13 1H,1H,2H,2H-perfluorooctanesulfo (NDS)



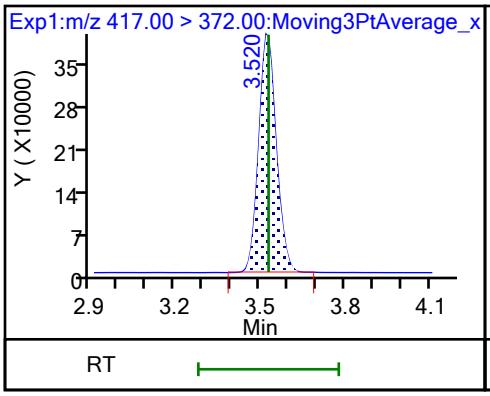
D 15 Perfluorooctanoic acid (M)



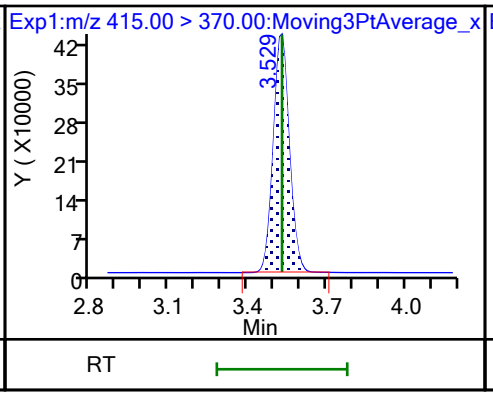
15 Perfluorooctanoic acid (M)



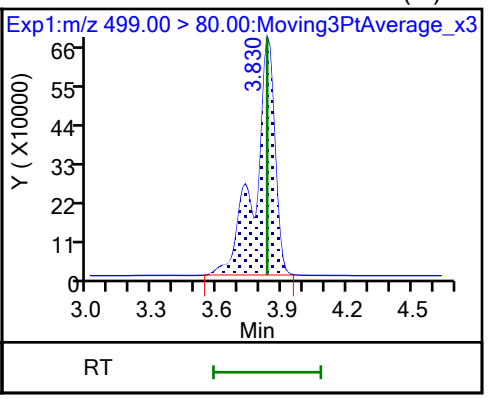
D 14 13C4 PFOA



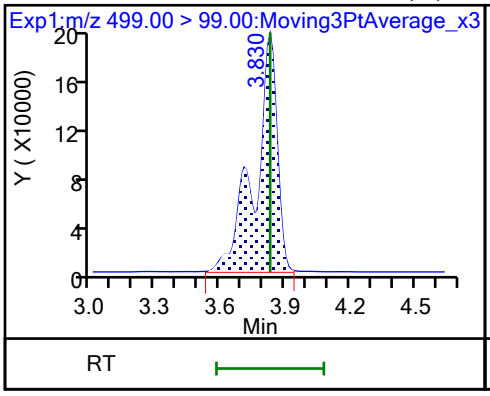
* 62 13C2 PFOA



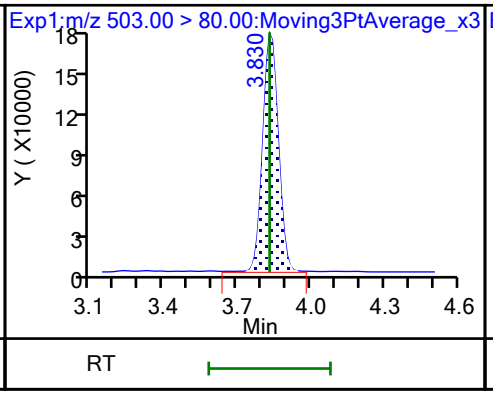
17 Perfluorooctanesulfonic acid (M)



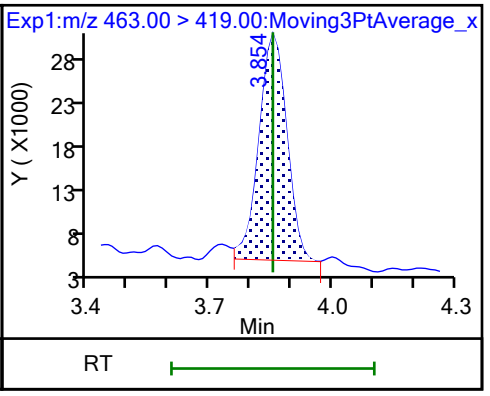
17 Perfluorooctanesulfonic acid (M)



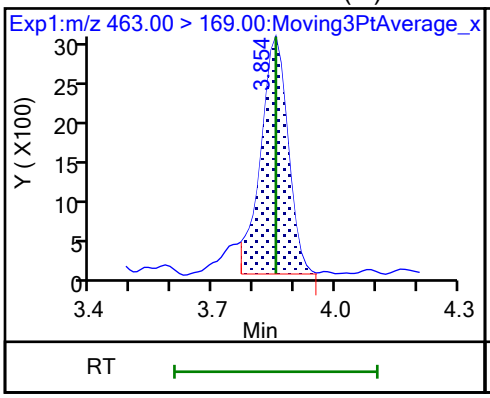
D 18 13C4 PFOS



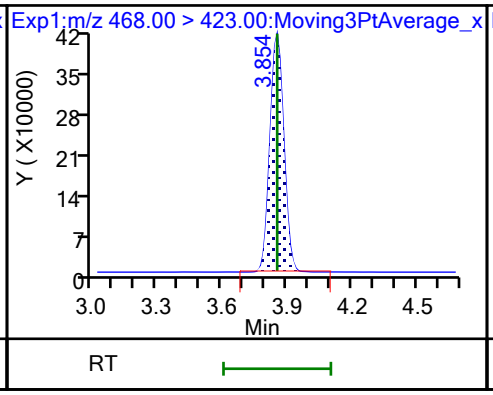
20 Perfluorononanoic acid



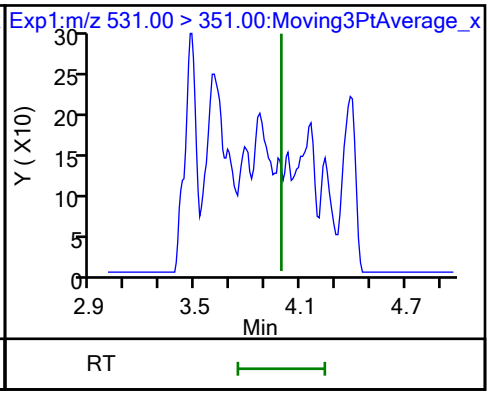
20 Perfluorononanoic acid (M)



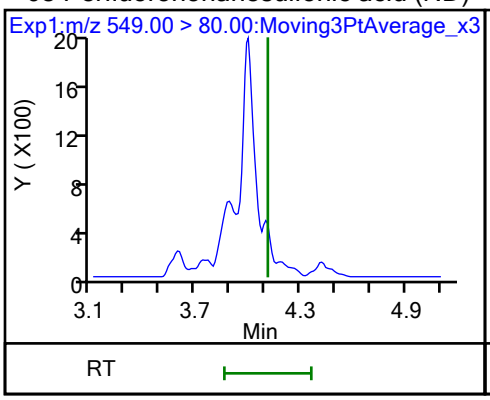
D 19 13C5 PFNA



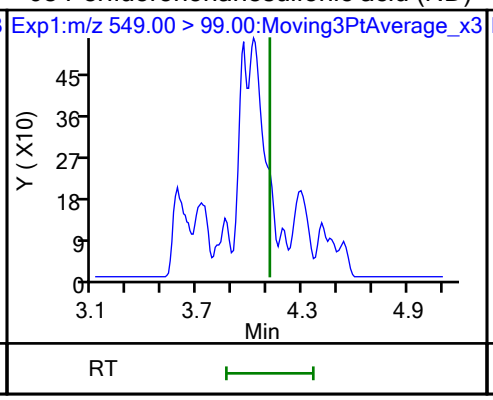
69 9-Chlorohexadecafluoro-3-oxanona (ND)



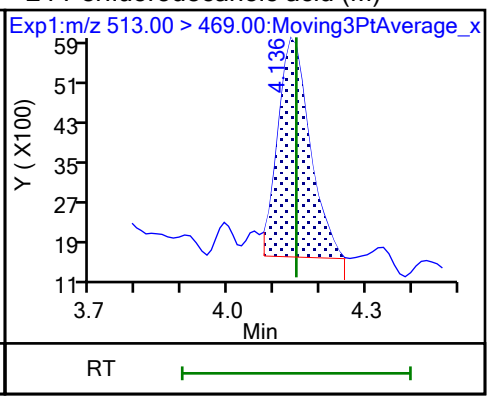
68 Perfluorononanesulfonic acid (ND)



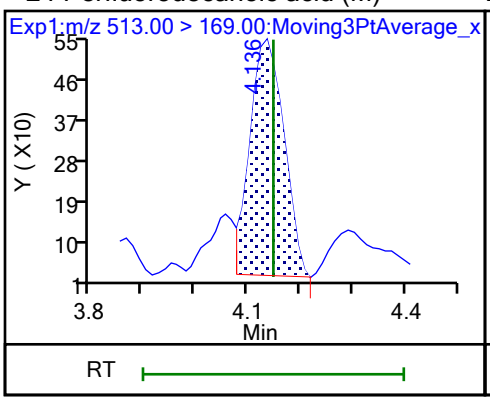
68 Perfluorononanesulfonic acid (ND)



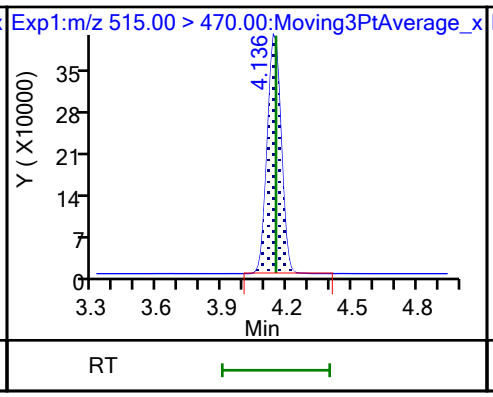
24 Perfluorodecanoic acid (M)



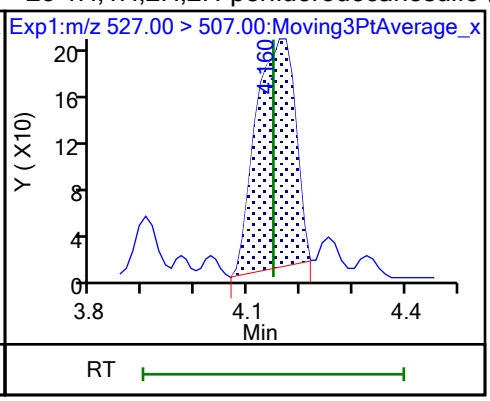
24 Perfluorodecanoic acid (M)



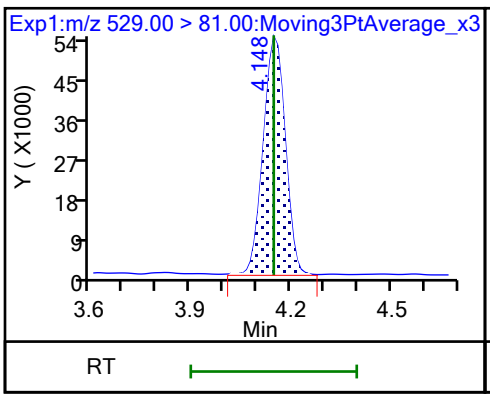
D 23 13C2 PFDA



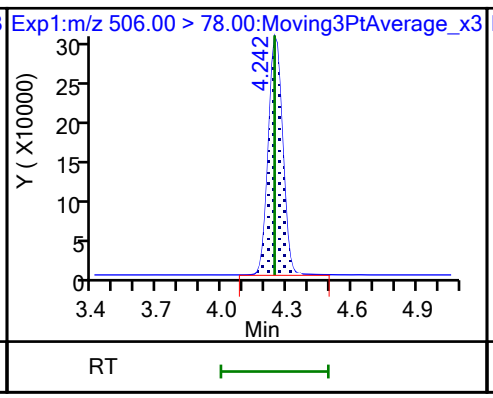
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



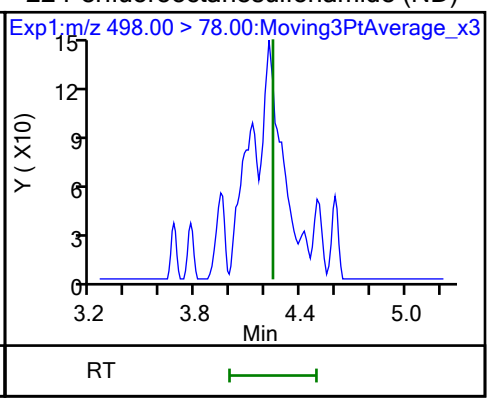
D 26 M2-8:2 FTS



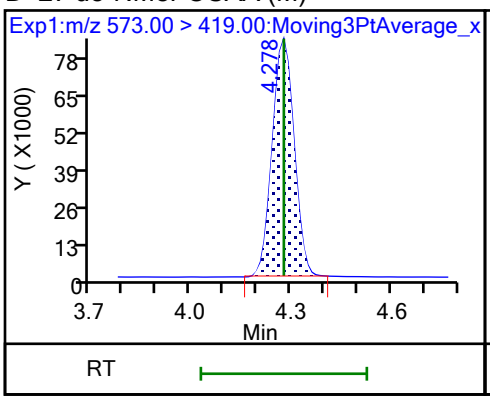
D 21 13C8 FOSA



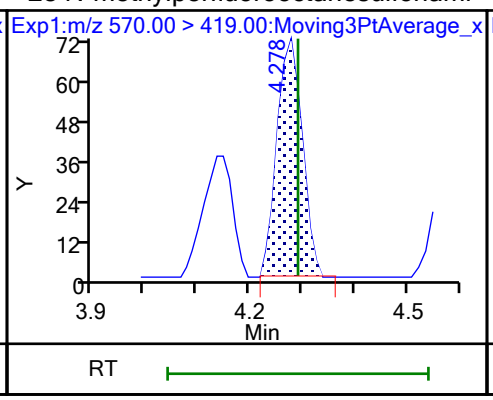
22 Perfluorooctanesulfonamide (ND)



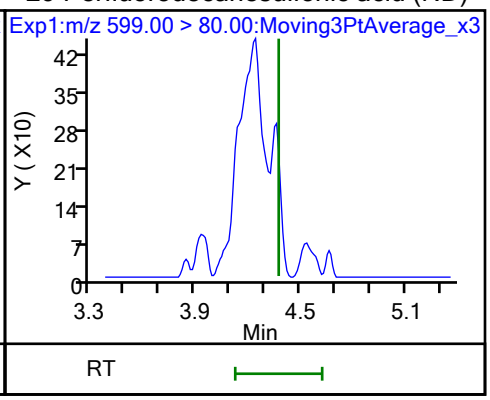
D 27 d3-NMeFOSAA (M)



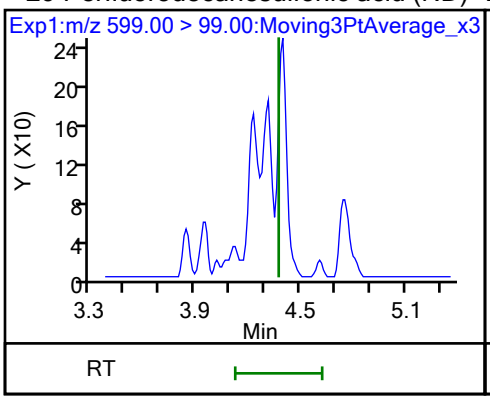
28 N-methylperfluorooctanesulfonami



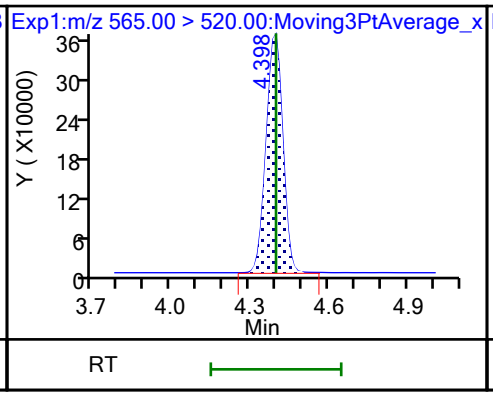
29 Perfluorodecanesulfonic acid (ND)



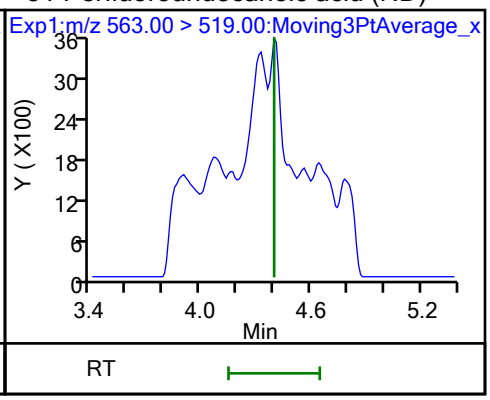
29 Perfluorodecanesulfonic acid (ND)



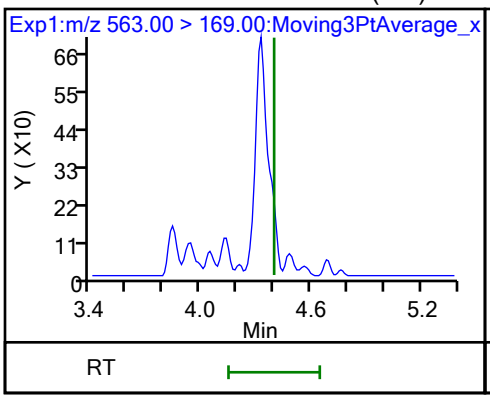
D 30 13C2 PFUnA



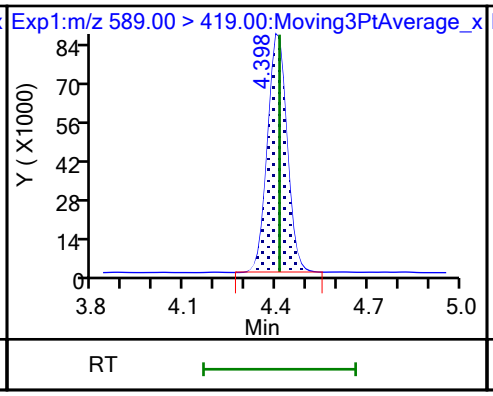
31 Perfluoroundecanoic acid (ND)



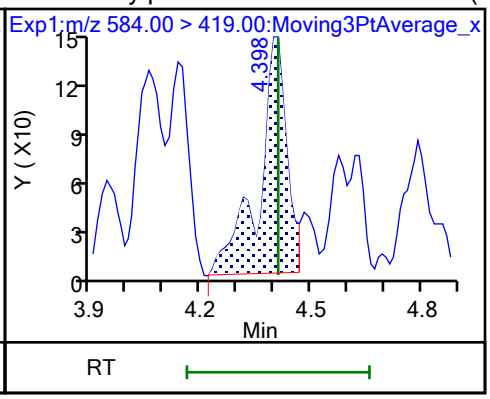
31 Perfluoroundecanoic acid (ND)



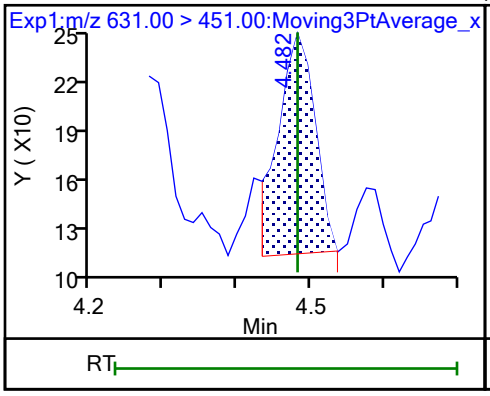
D 32 d5-NEtFOSAA



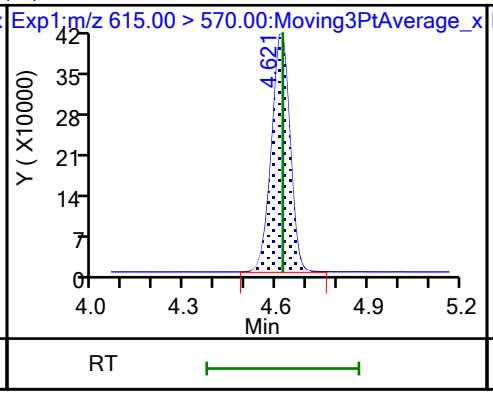
33 N-ethylperfluorooctanesulfonamid (M)



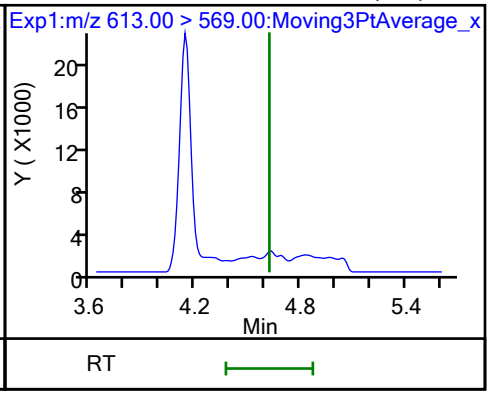
66 11-Chloroeicosafluoro-3-oxaundec (M)



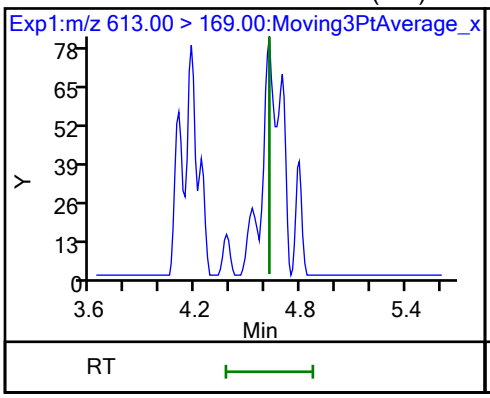
D 36 13C2 PFDoA



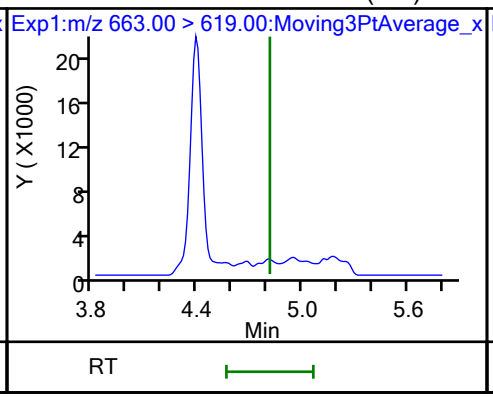
37 Perfluorododecanoic acid (ND)



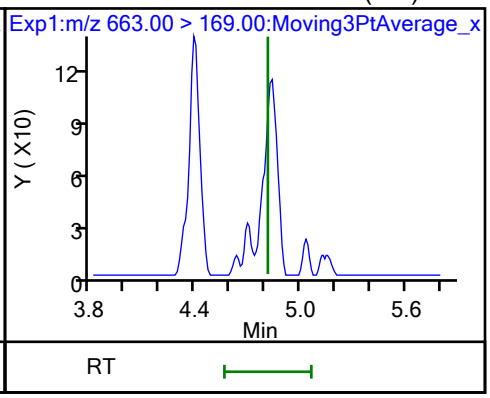
37 Perfluorododecanoic acid (ND)



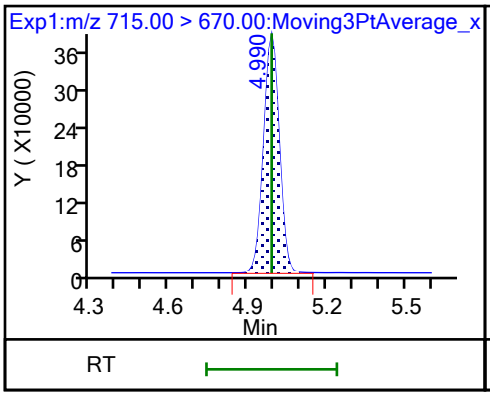
41 Perfluorotridecanoic acid (ND)



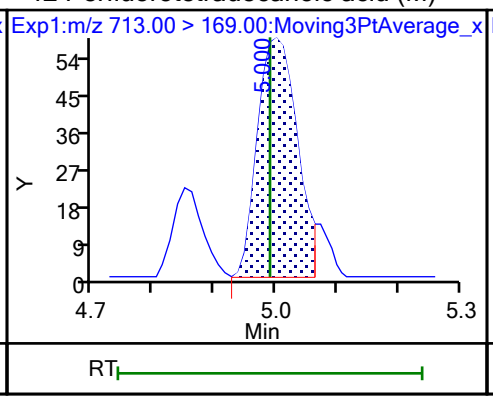
41 Perfluorotridecanoic acid (ND)



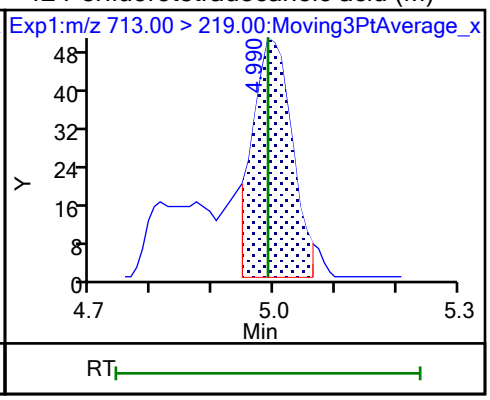
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

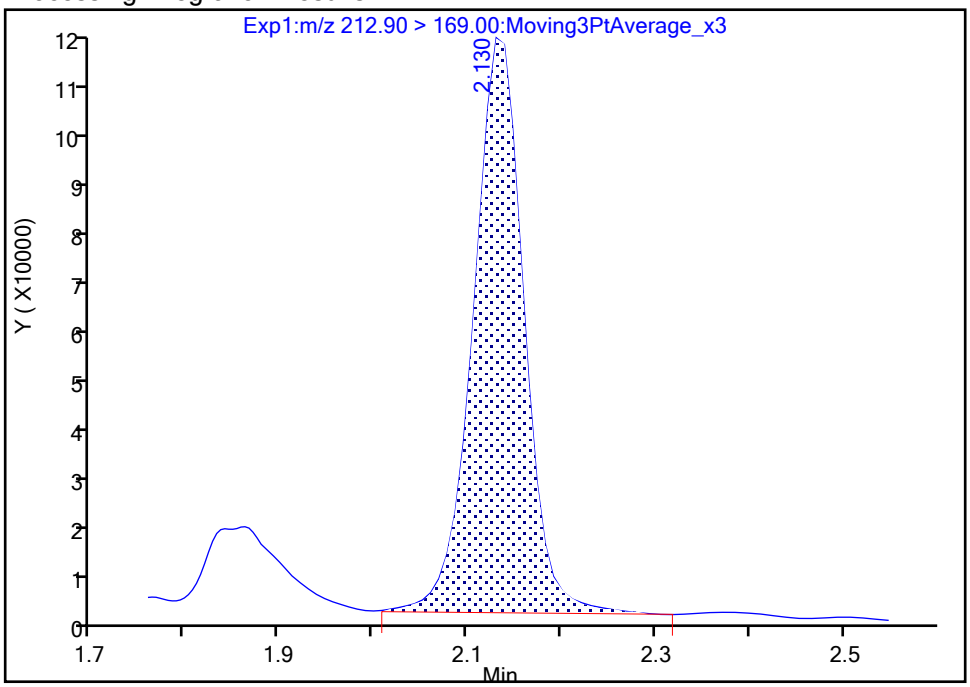
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

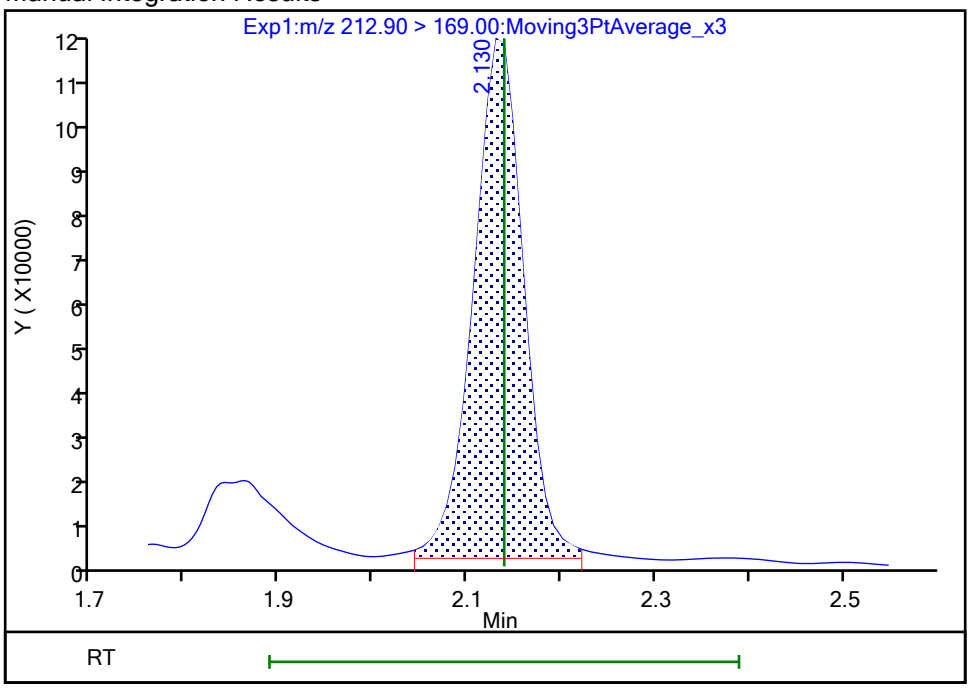
Processing Integration Results

RT: 2.13
Area: 391546
Amount: 0.474239
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 387533
Amount: 0.468960
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:28:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

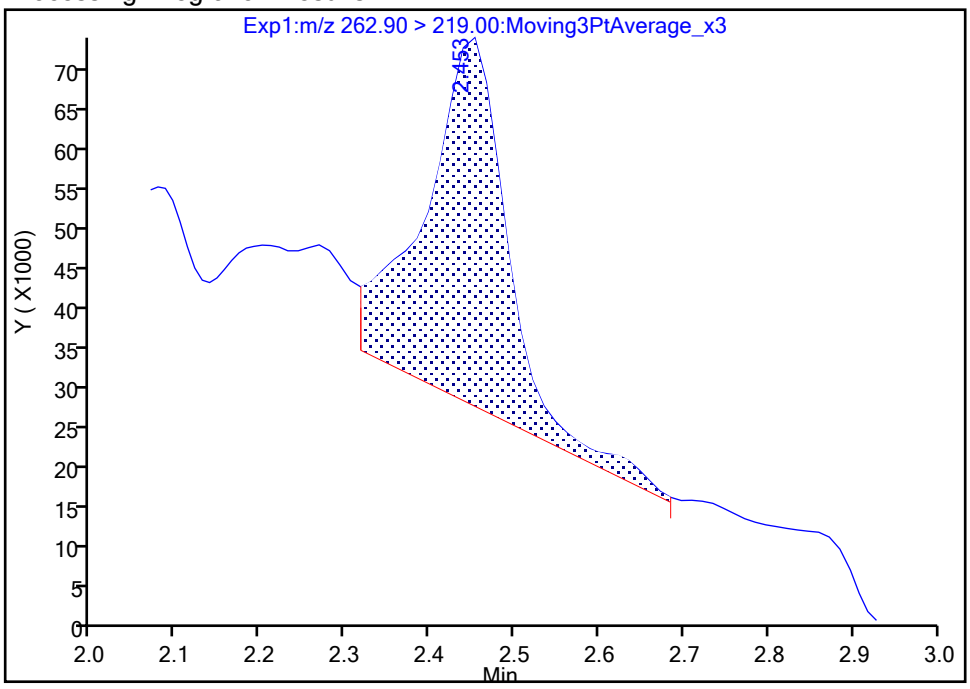
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

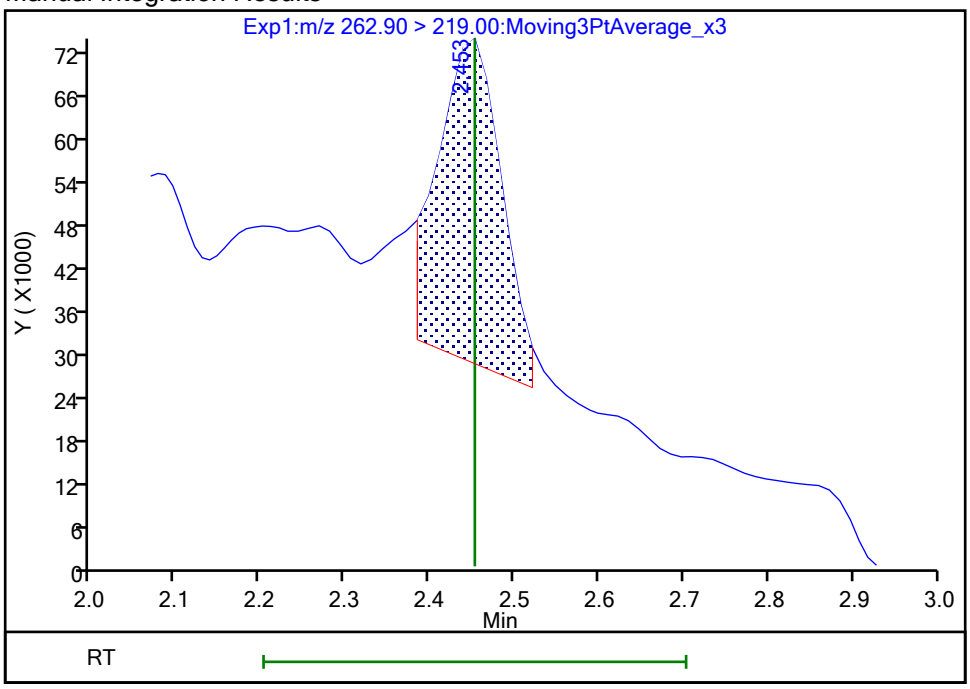
Processing Integration Results

RT: 2.45
Area: 313591
Amount: 0.335644
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 233898
Amount: 0.250346
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:28:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

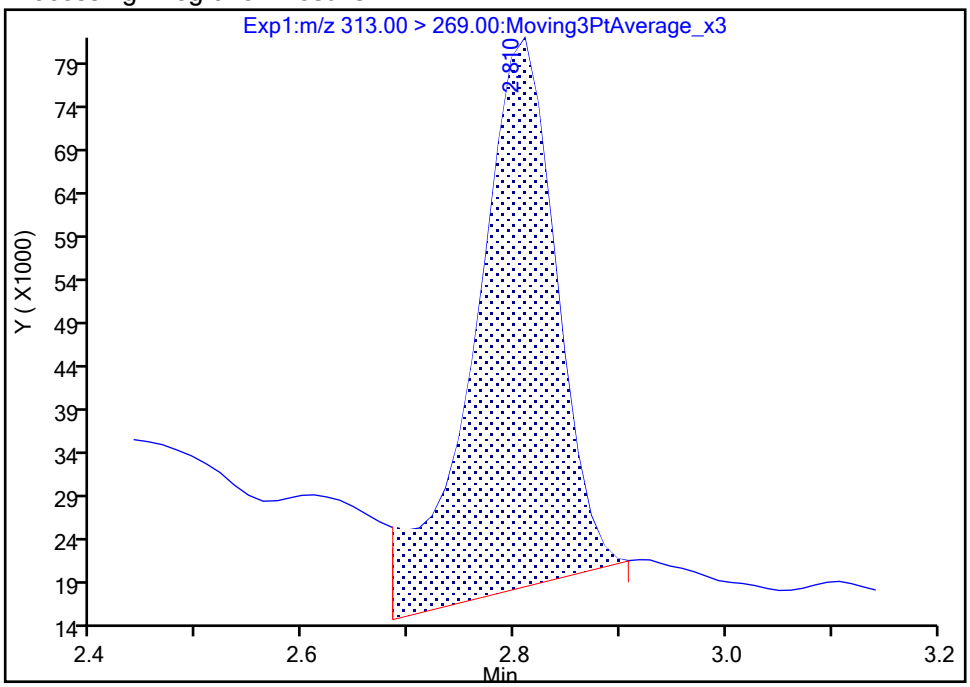
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

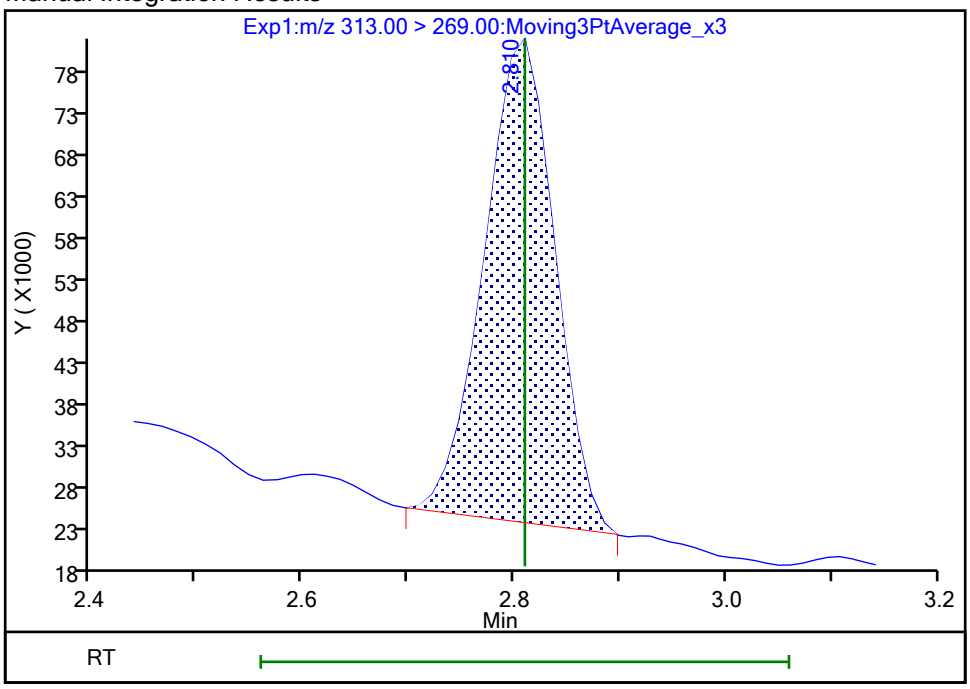
Processing Integration Results

RT: 2.81
Area: 341561
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 270868
Amount: 0.248998
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:29:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

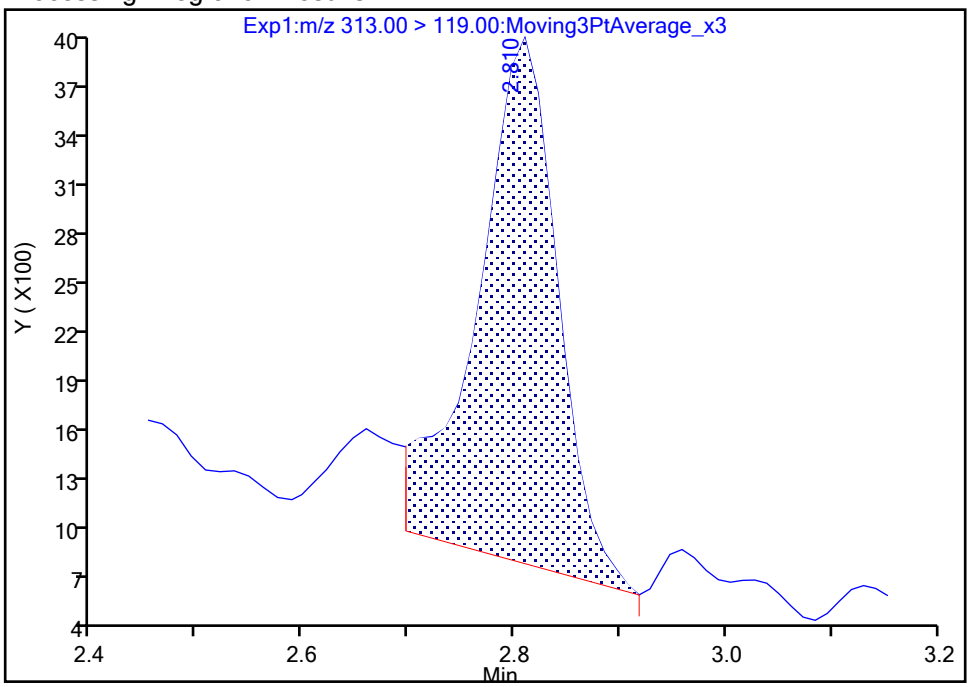
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

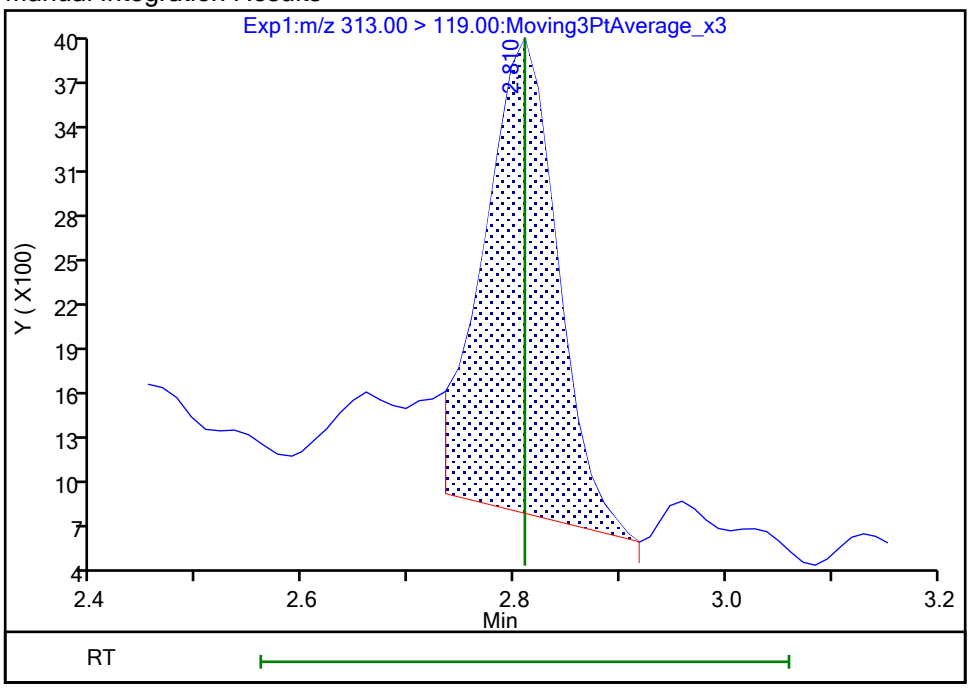
Processing Integration Results

RT: 2.81
Area: 16488
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 15118
Amount: 0.248998
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:49:40 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

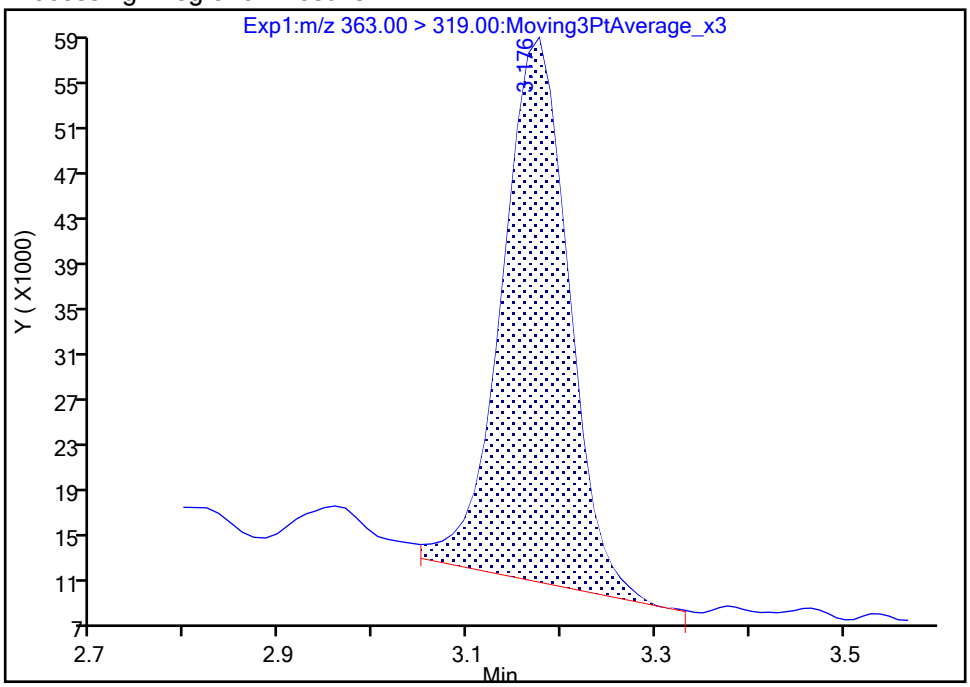
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

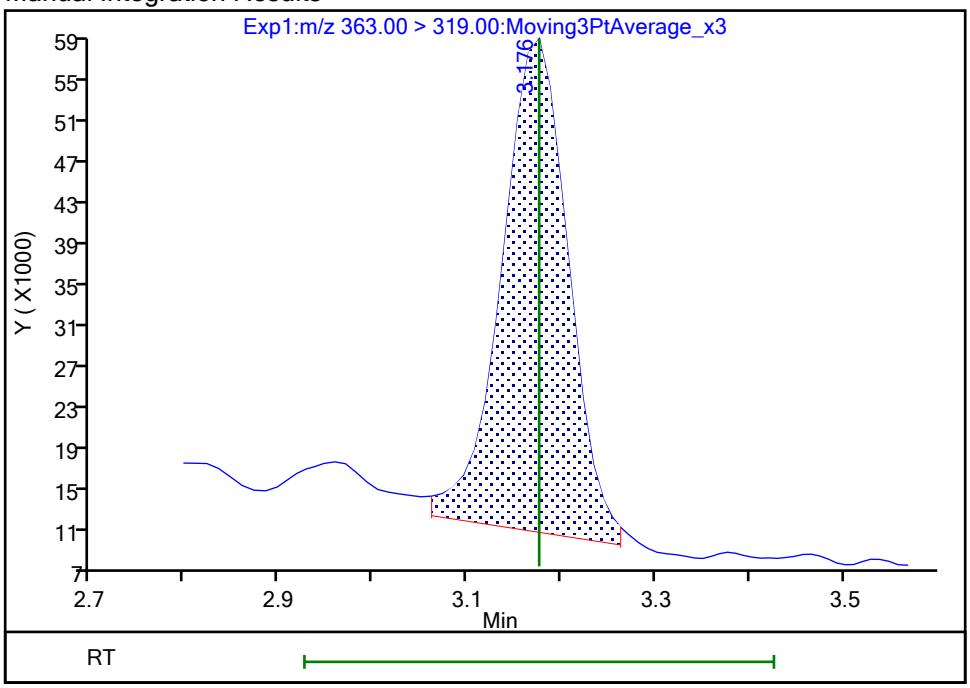
Processing Integration Results

RT: 3.18
Area: 235630
Amount: 0.177694
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 236132
Amount: 0.178073
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

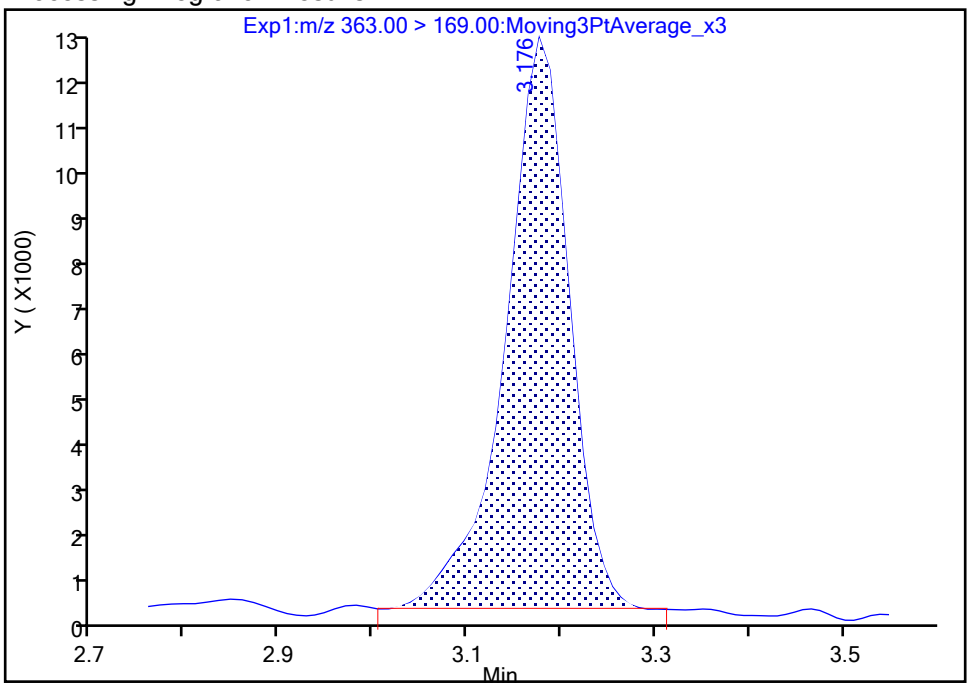
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

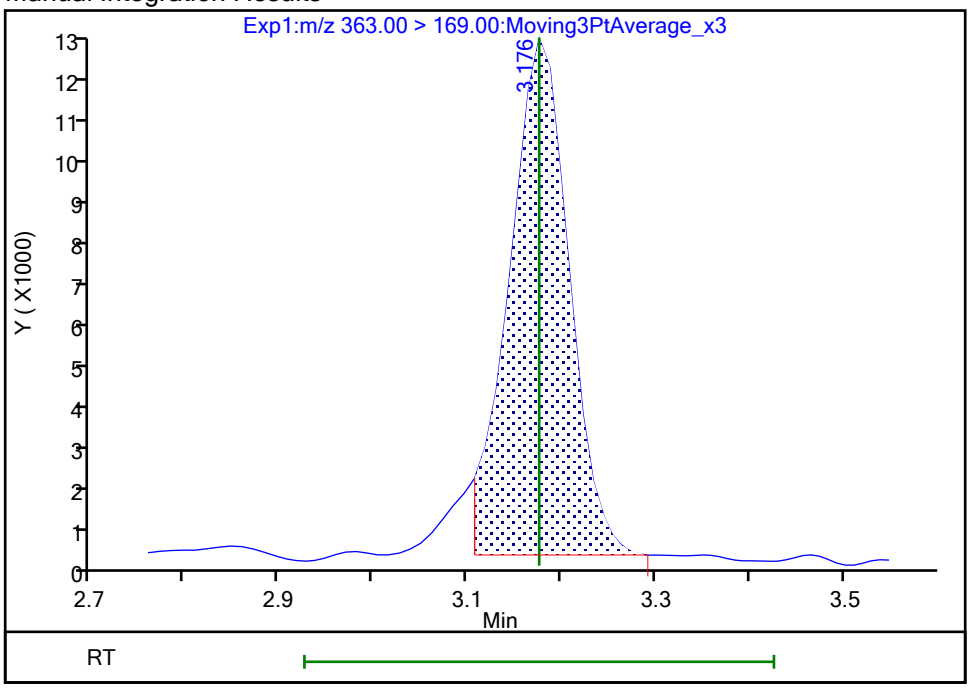
Processing Integration Results

RT: 3.18
Area: 59404
Amount: 0.177694
Amount Units: ng/ml



Manual Integration Results

RT: 3.18
Area: 55582
Amount: 0.178073
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

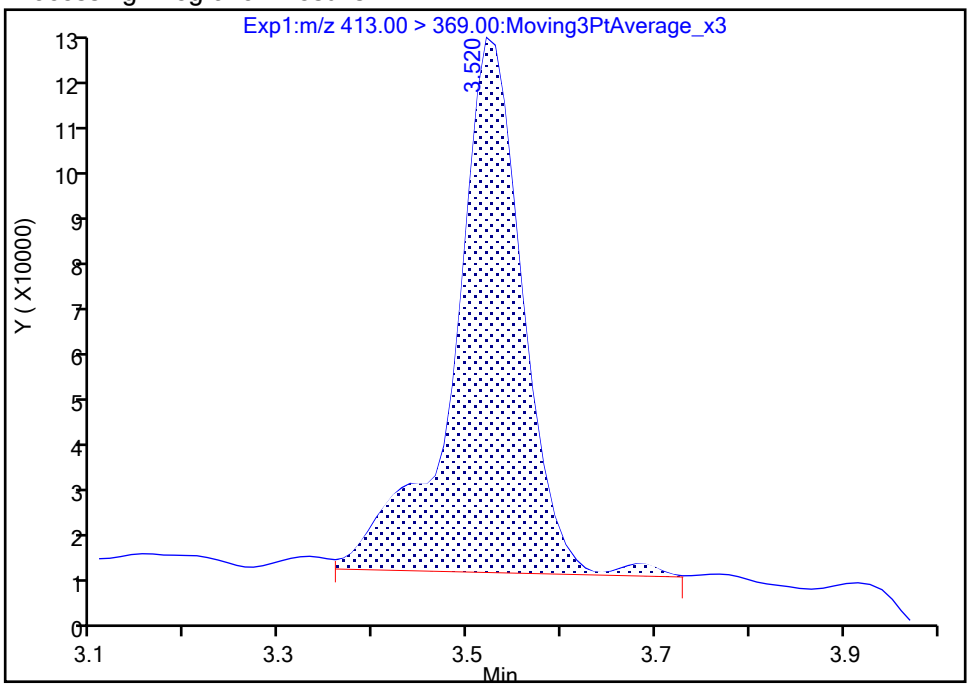
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

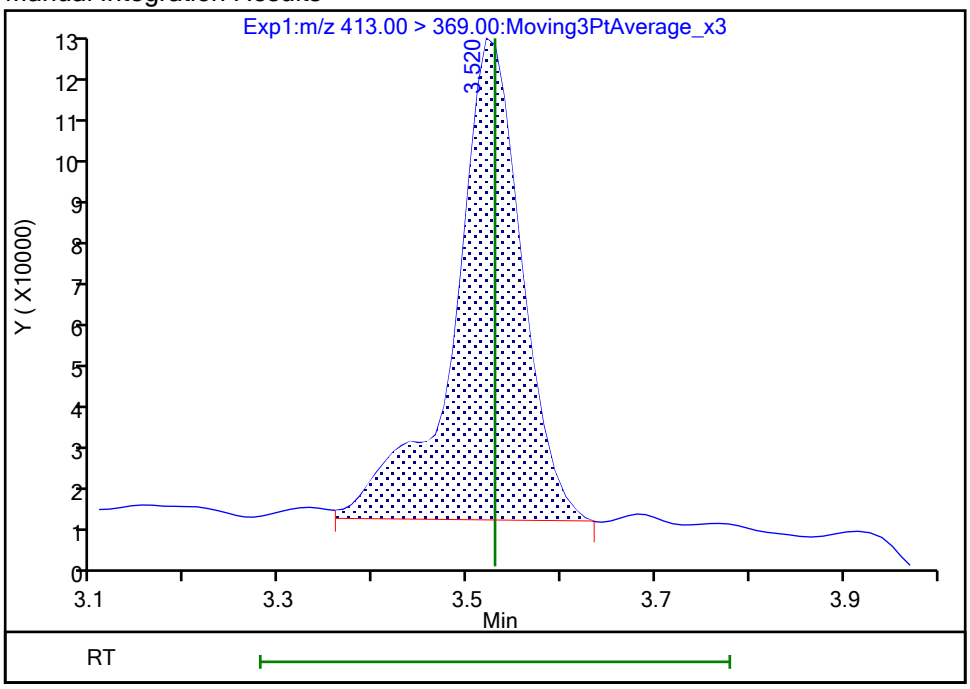
Processing Integration Results

RT: 3.52
Area: 573807
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 563123
Amount: 0.388068
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:31:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

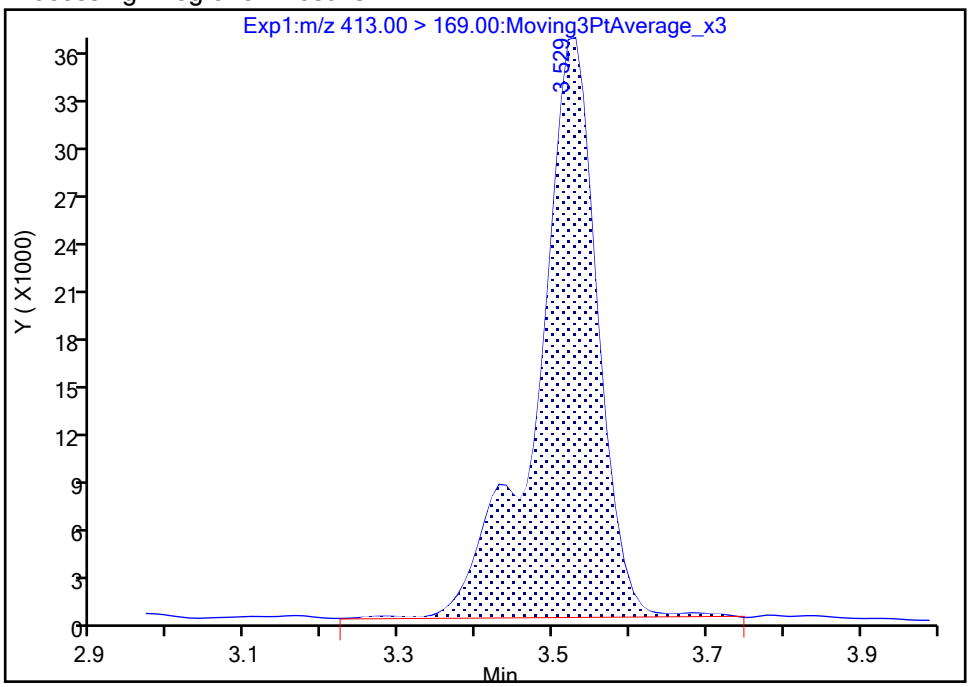
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

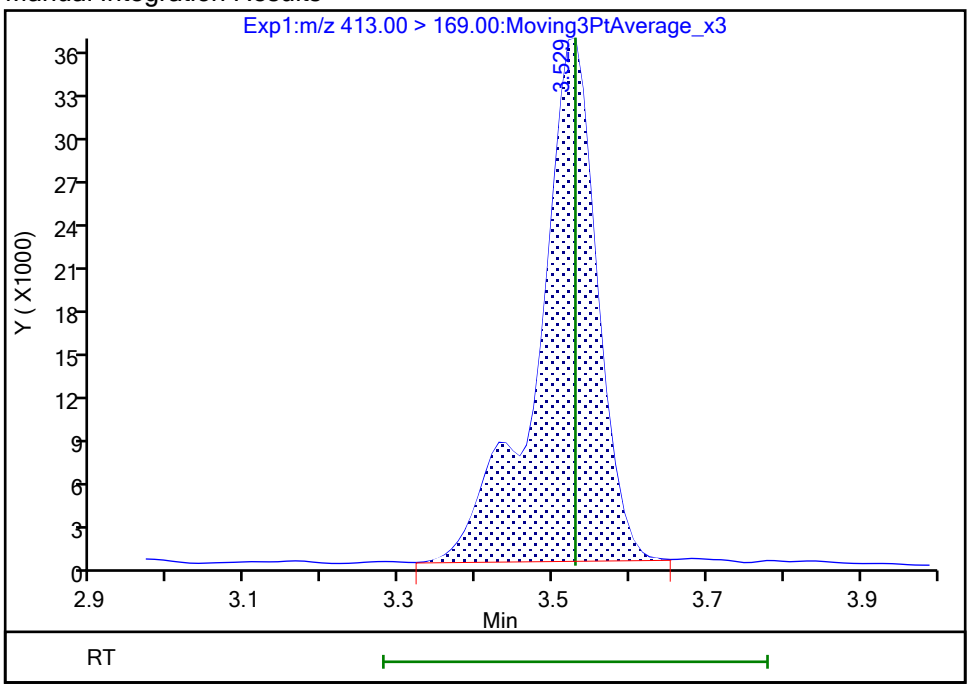
Processing Integration Results

RT: 3.53
Area: 197372
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 192995
Amount: 0.388068
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:31:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

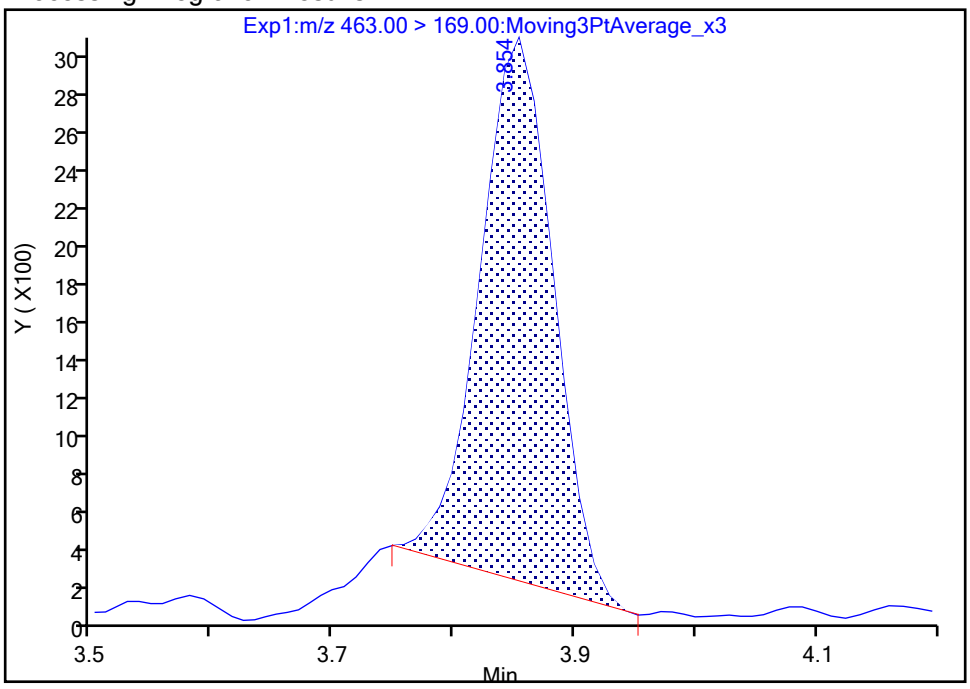
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

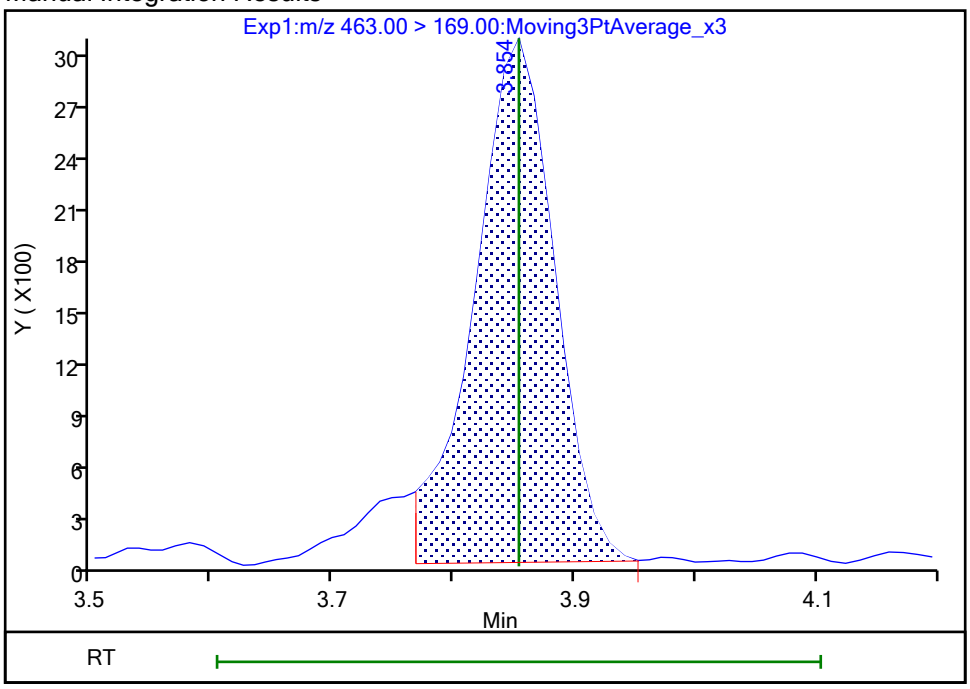
Processing Integration Results

RT: 3.85
Area: 11848
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 13676
Amount: 0.084617
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:32:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

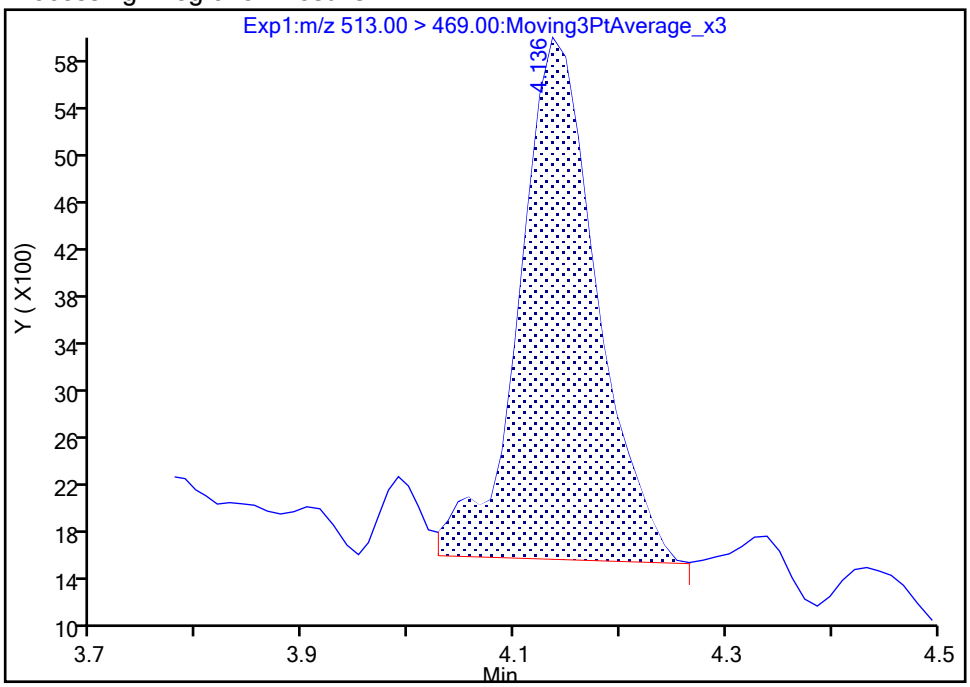
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

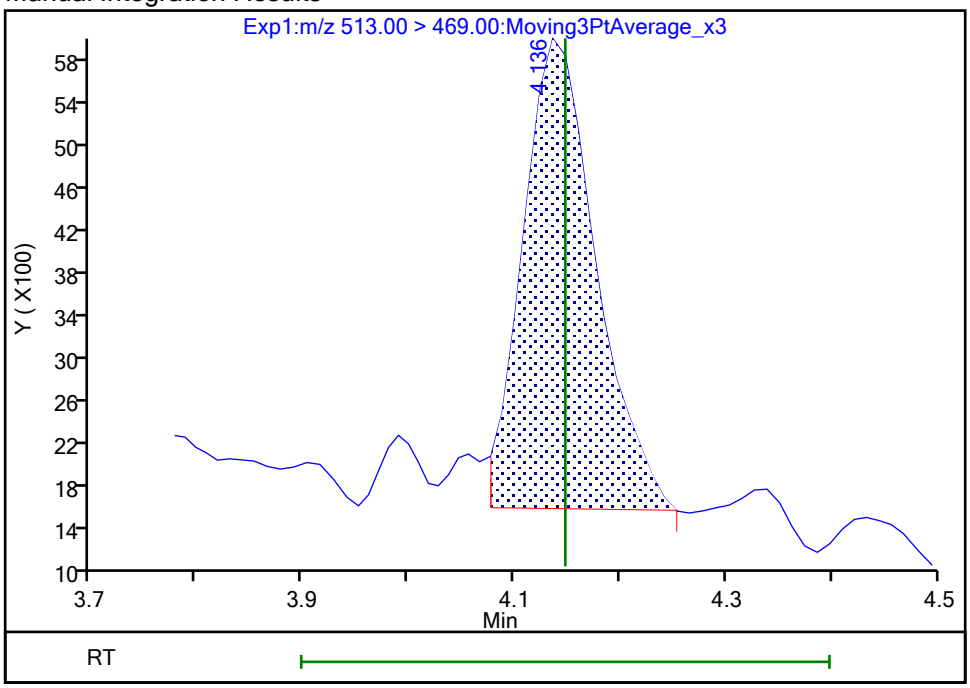
Processing Integration Results

RT: 4.14
Area: 22557
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 21186
Amount: 0.014565
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:33:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

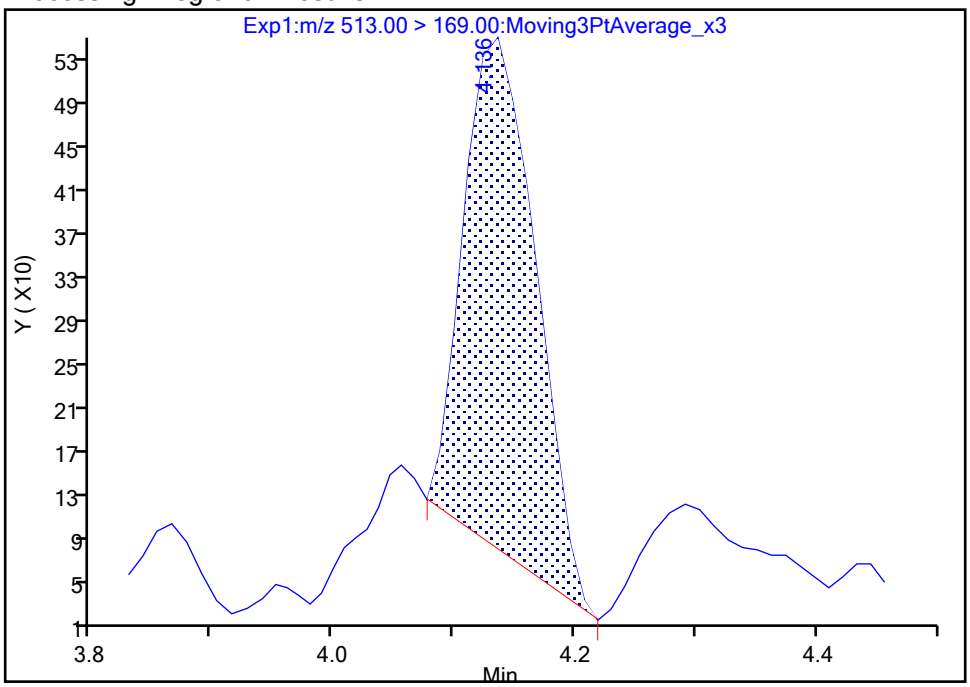
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

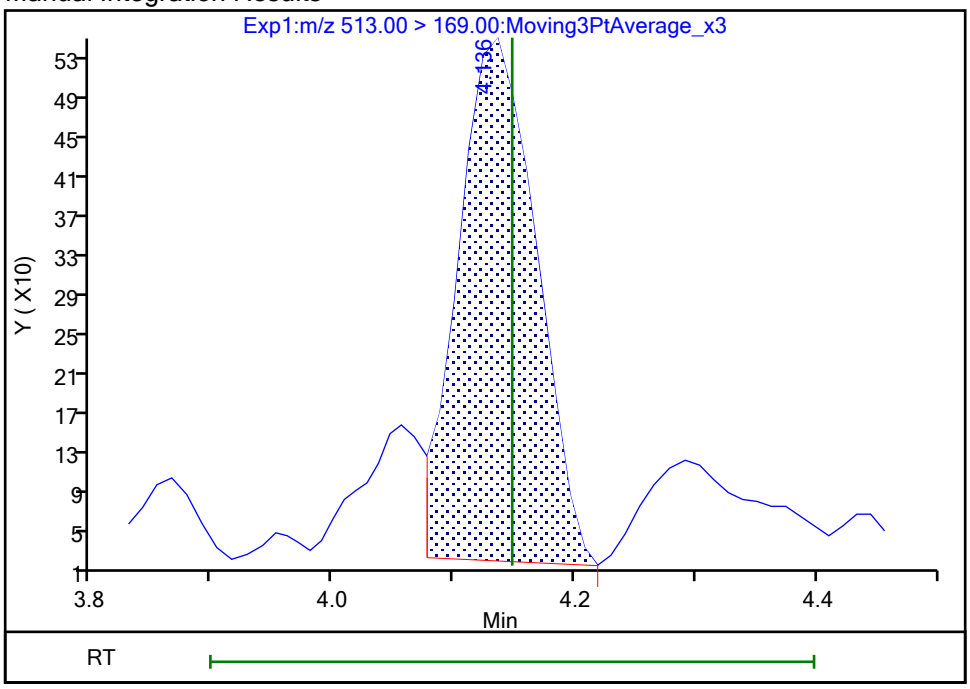
Processing Integration Results

RT: 4.14
Area: 1956
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2389
Amount: 0.014565
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:33:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

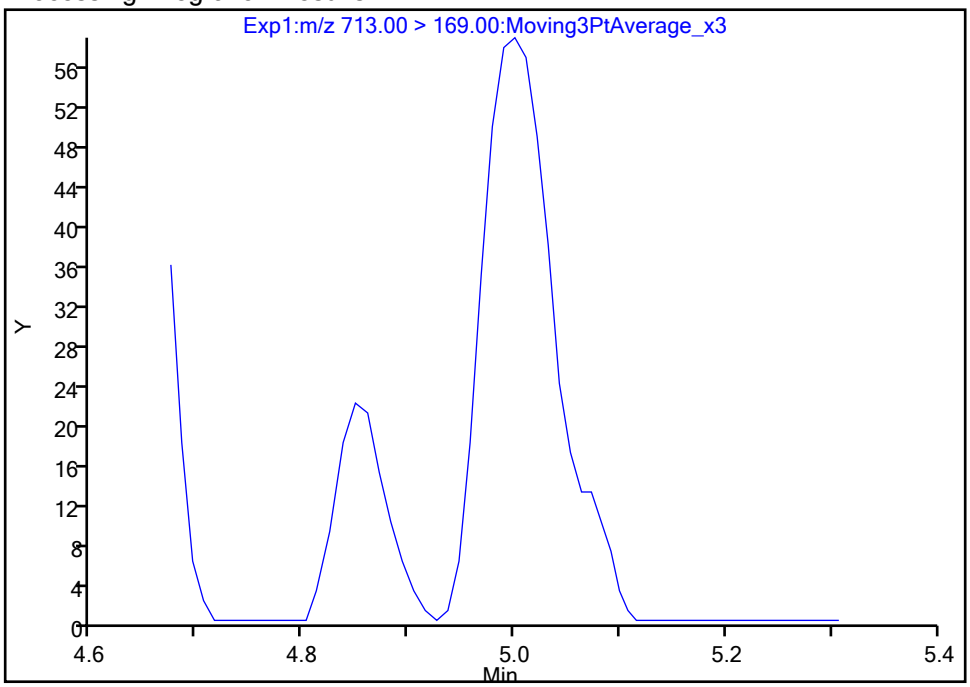
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

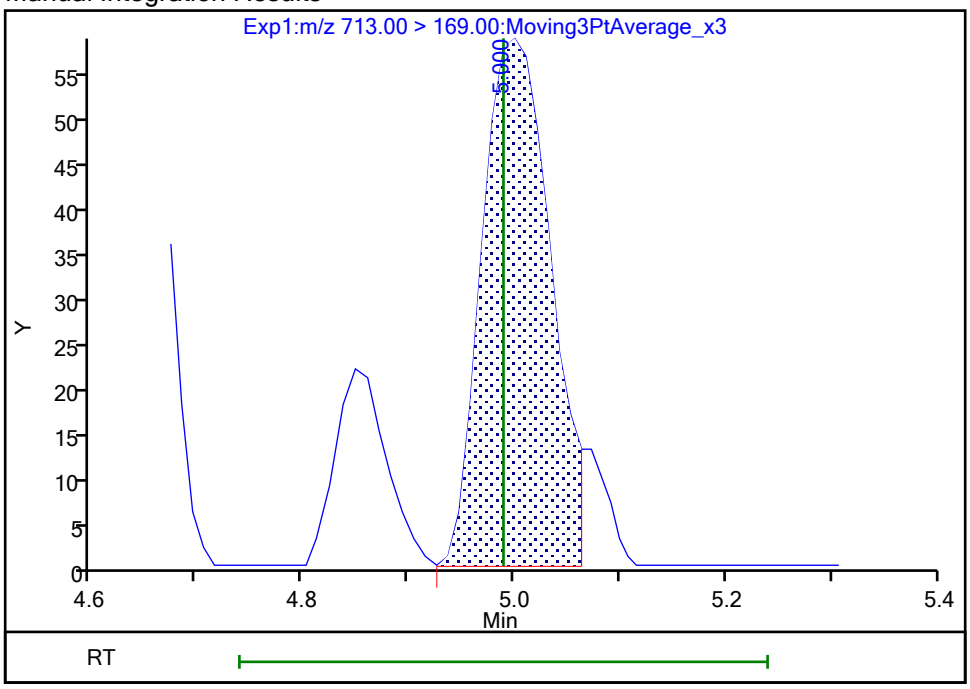
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 5.00
Area: 264
Amount: 0.001846
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:34:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

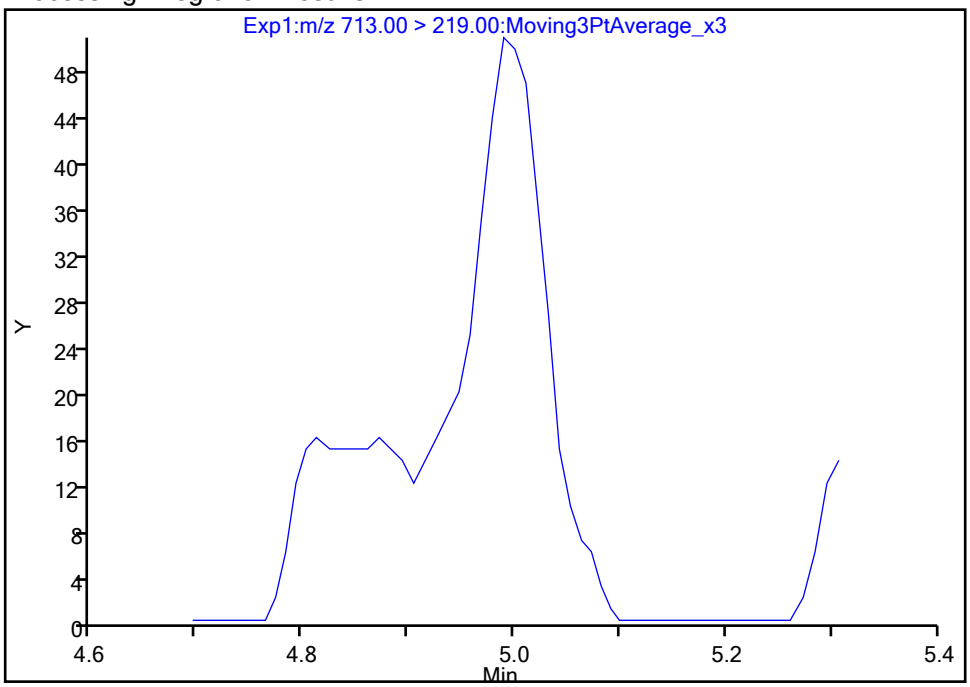
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

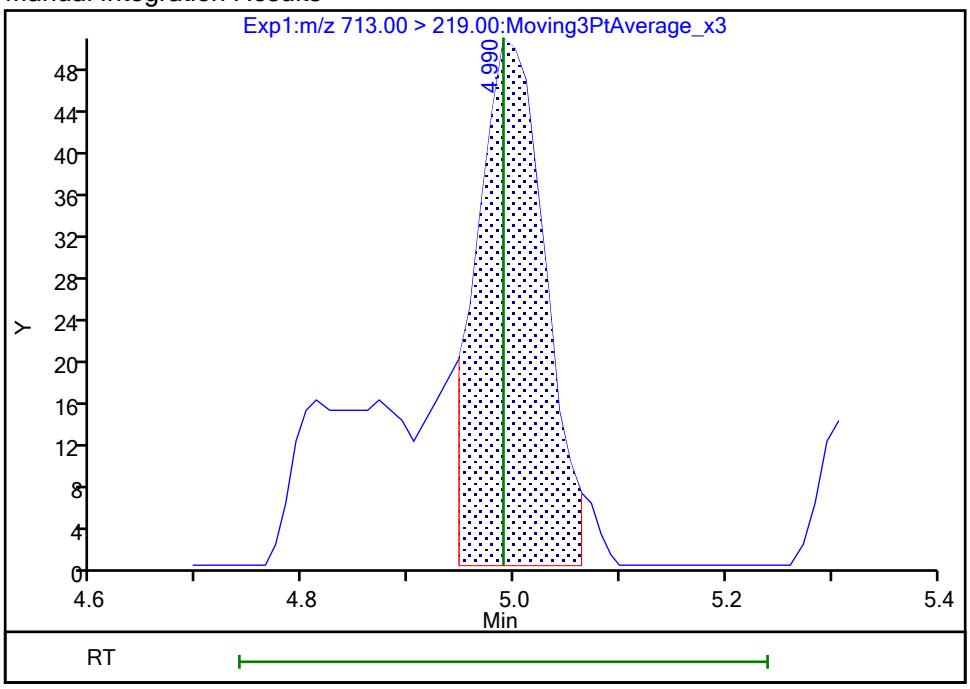
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 224
Amount: 0.001846
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:34:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

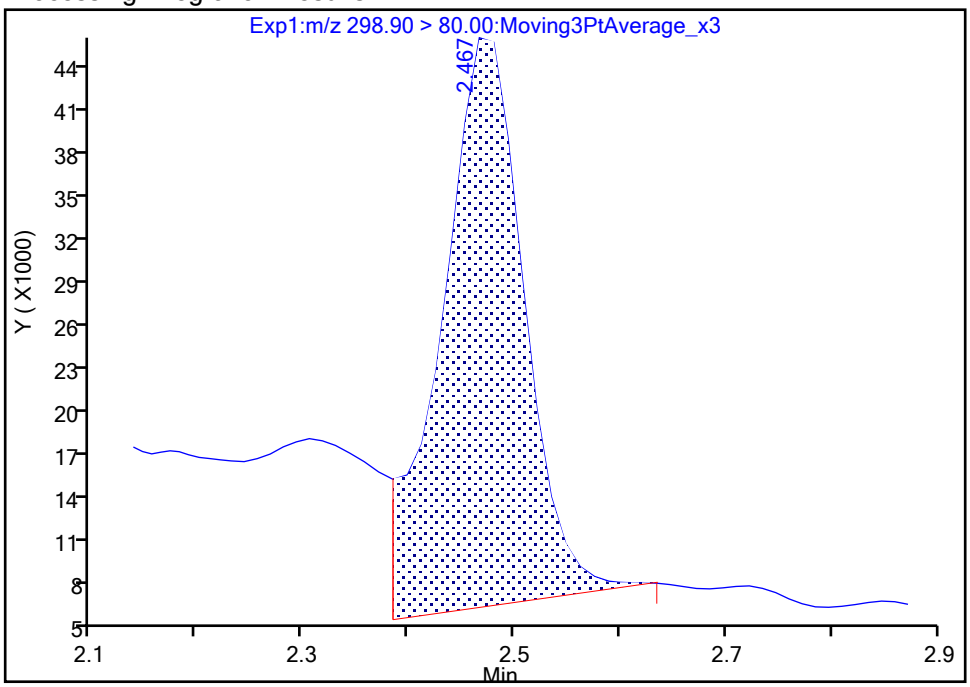
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

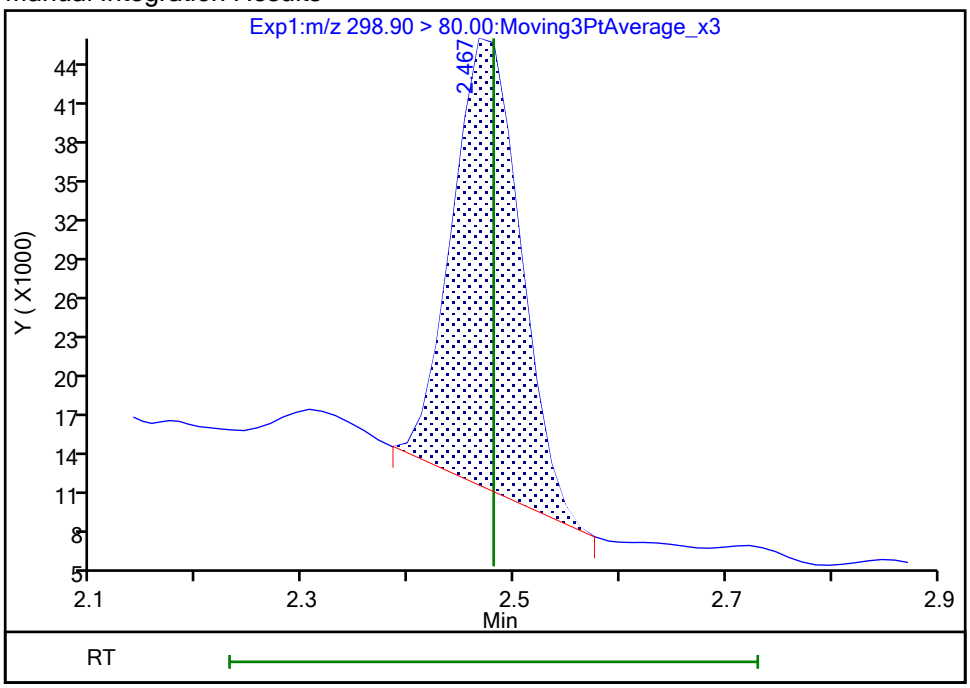
Processing Integration Results

RT: 2.47
Area: 213801
Amount: 0.138671
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 150743
Amount: 0.097772
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:28:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

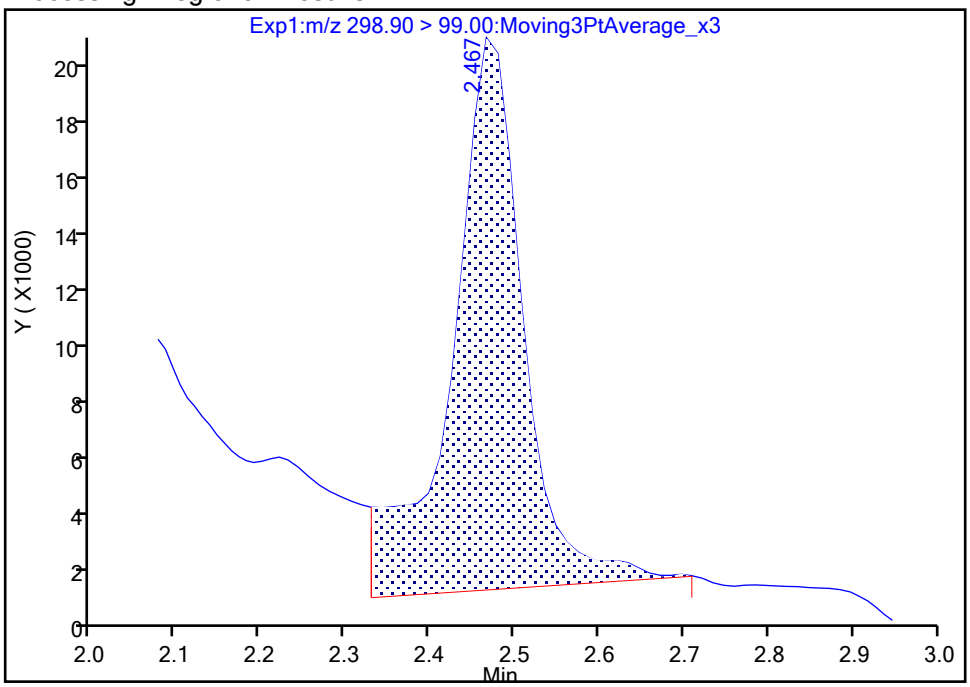
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

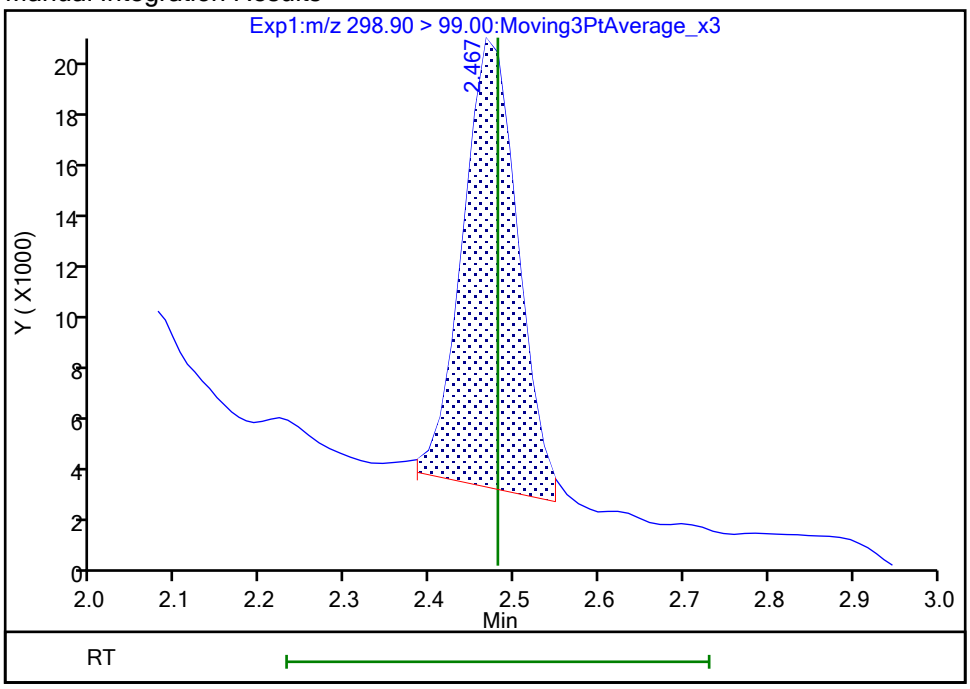
Processing Integration Results

RT: 2.47
Area: 113260
Amount: 0.138671
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 77809
Amount: 0.097772
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:28:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

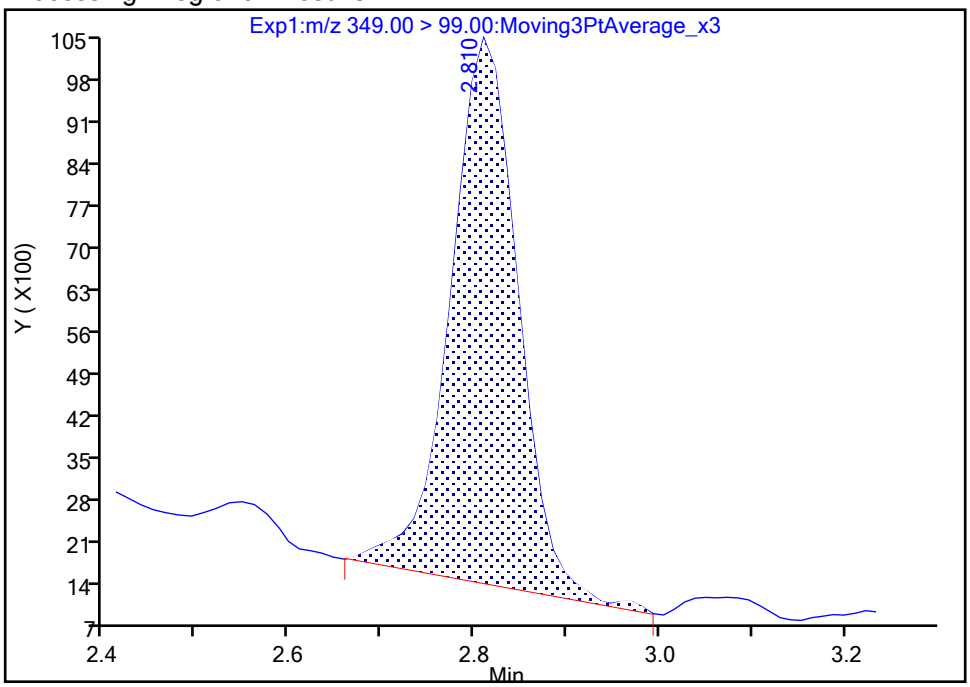
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

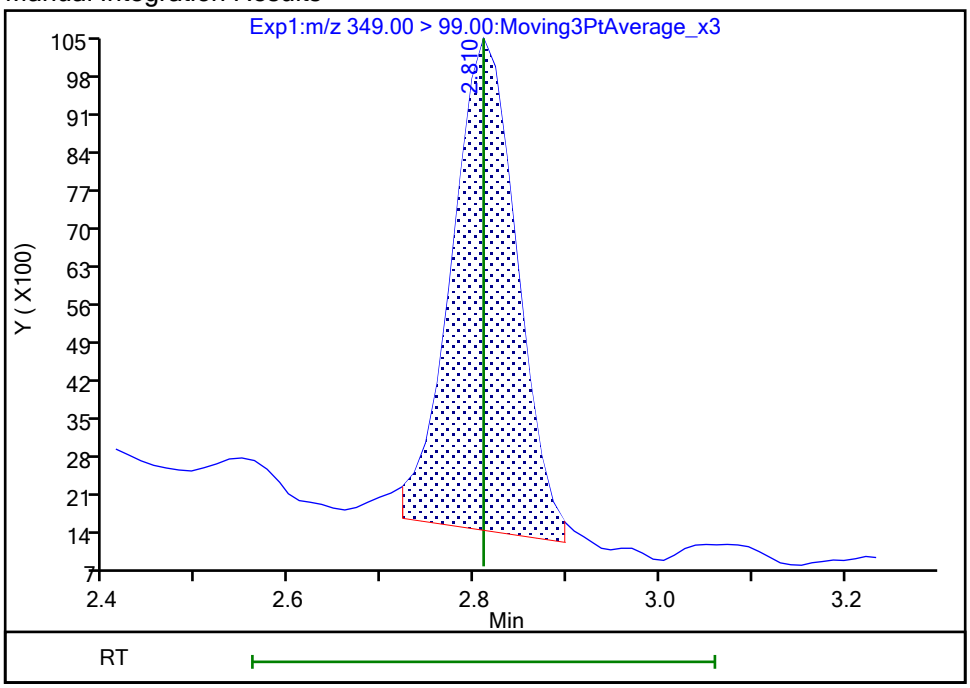
Processing Integration Results

RT: 2.81
Area: 46900
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 44624
Amount: 0.066247
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:29:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

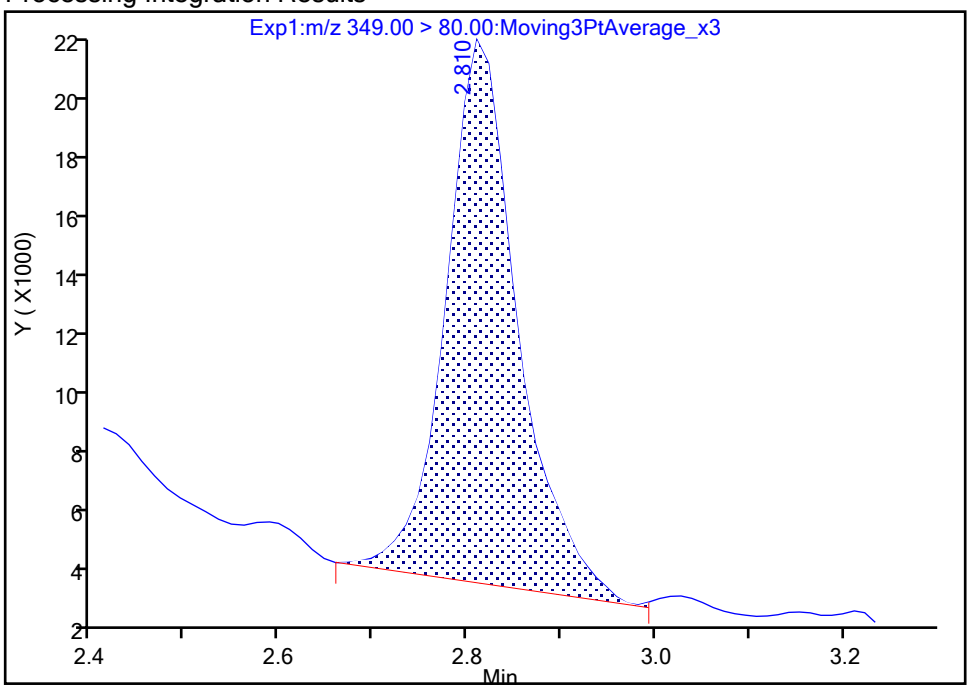
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

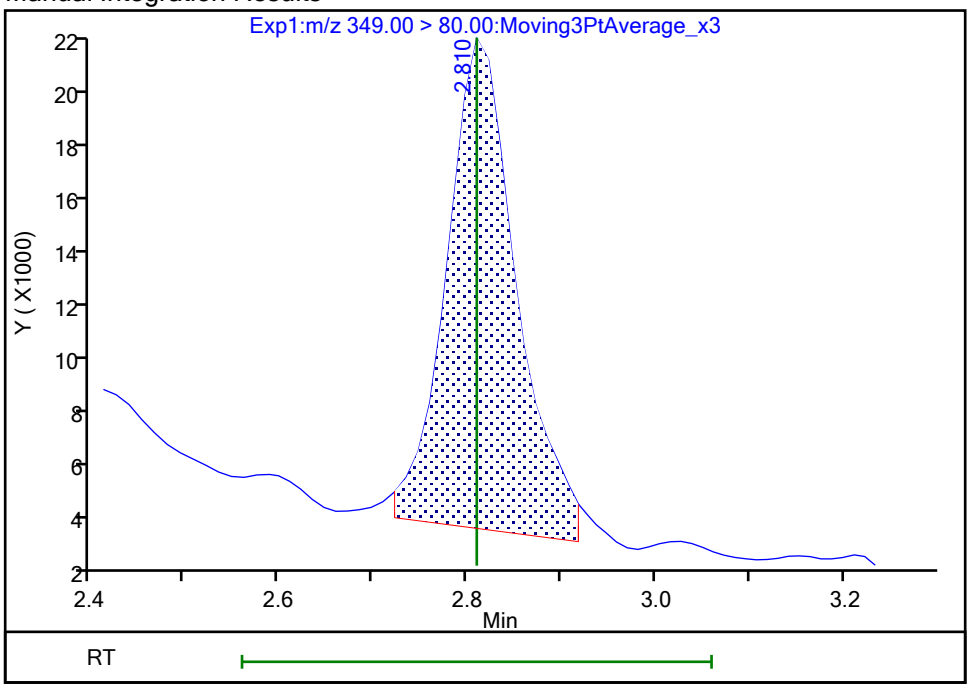
Processing Integration Results

RT: 2.81
Area: 96619
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 92798
Amount: 0.066247
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:29:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

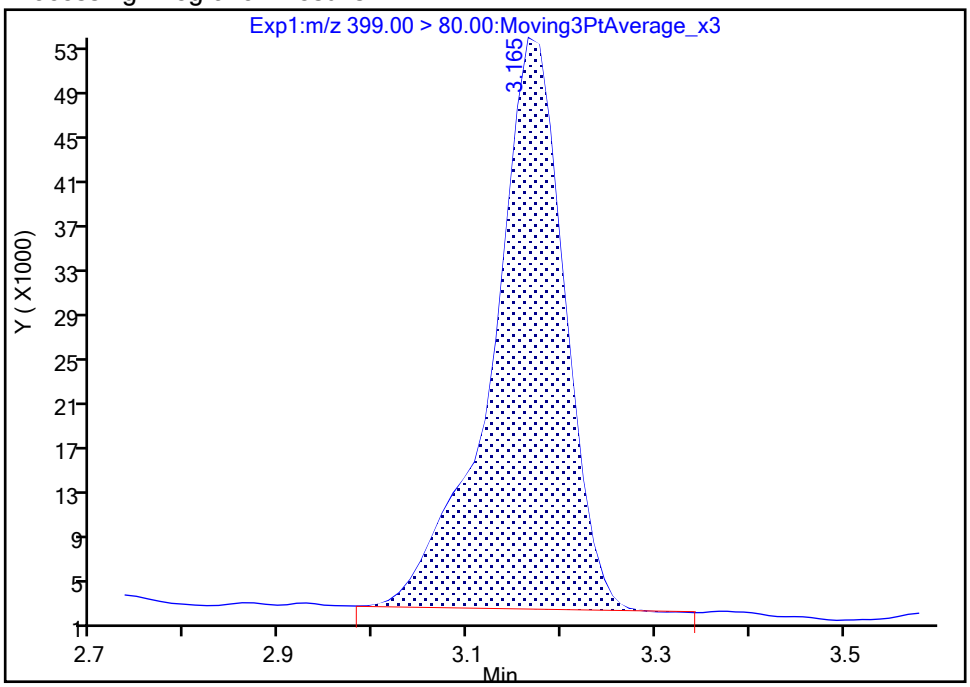
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

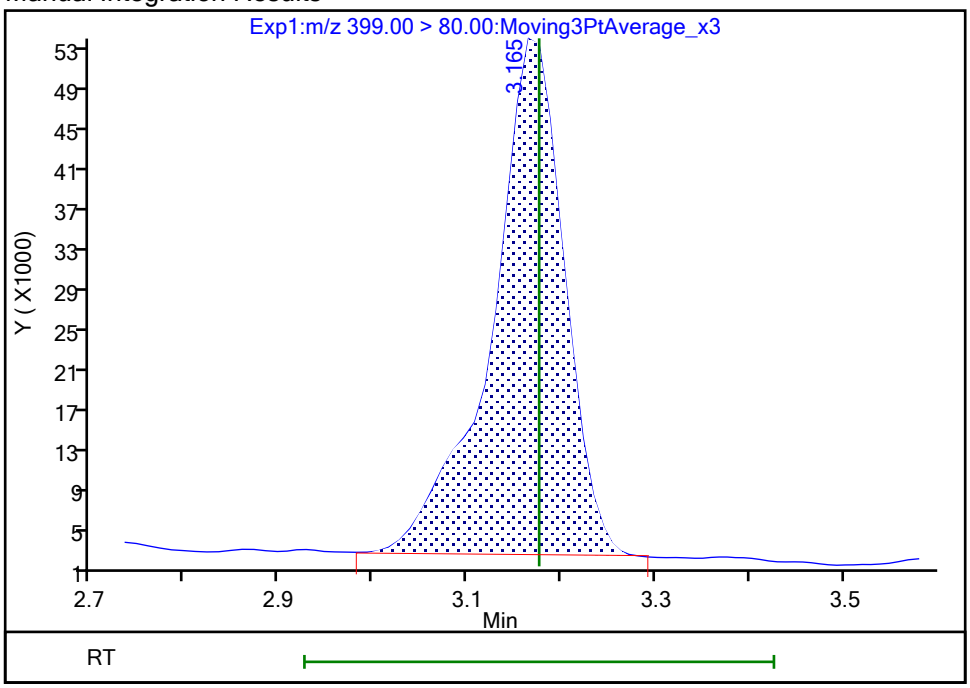
Processing Integration Results

RT: 3.16
Area: 273073
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 272567
Amount: 0.229544
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

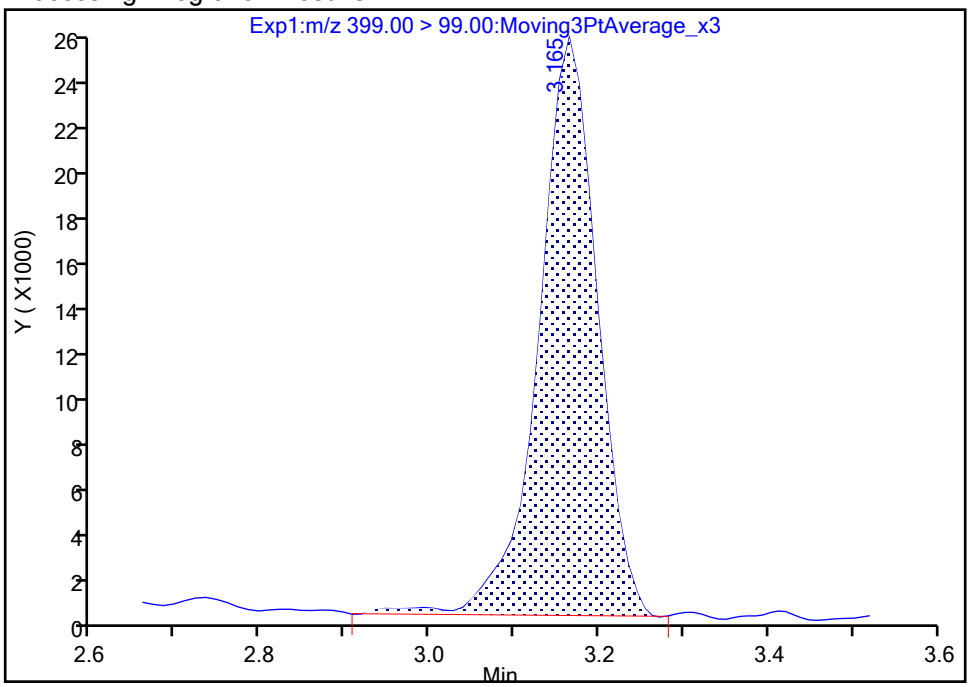
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

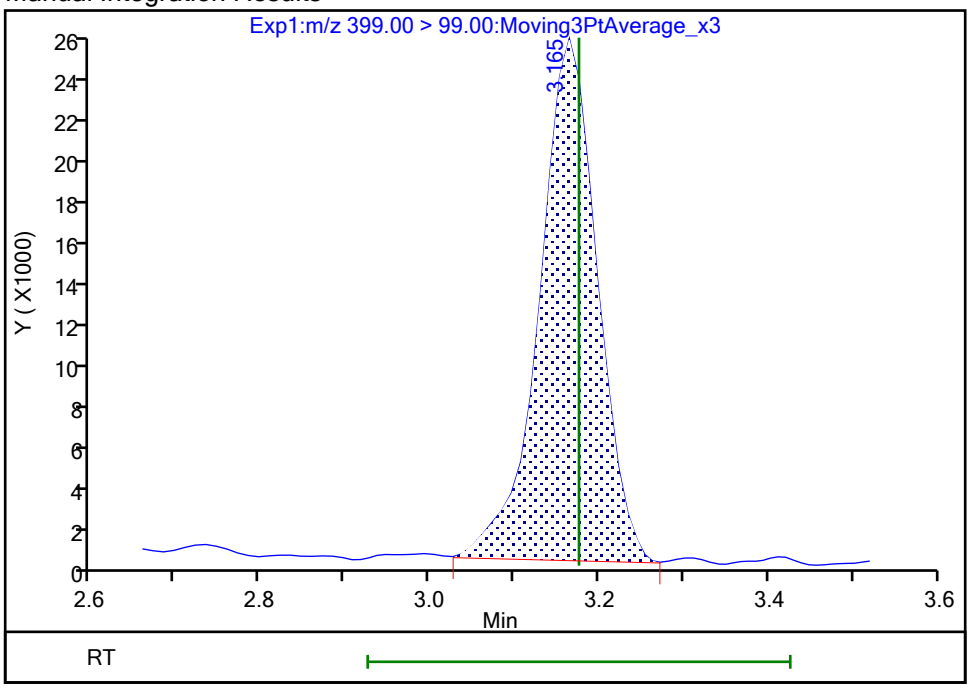
Processing Integration Results

RT: 3.16
Area: 119460
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 116551
Amount: 0.229544
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

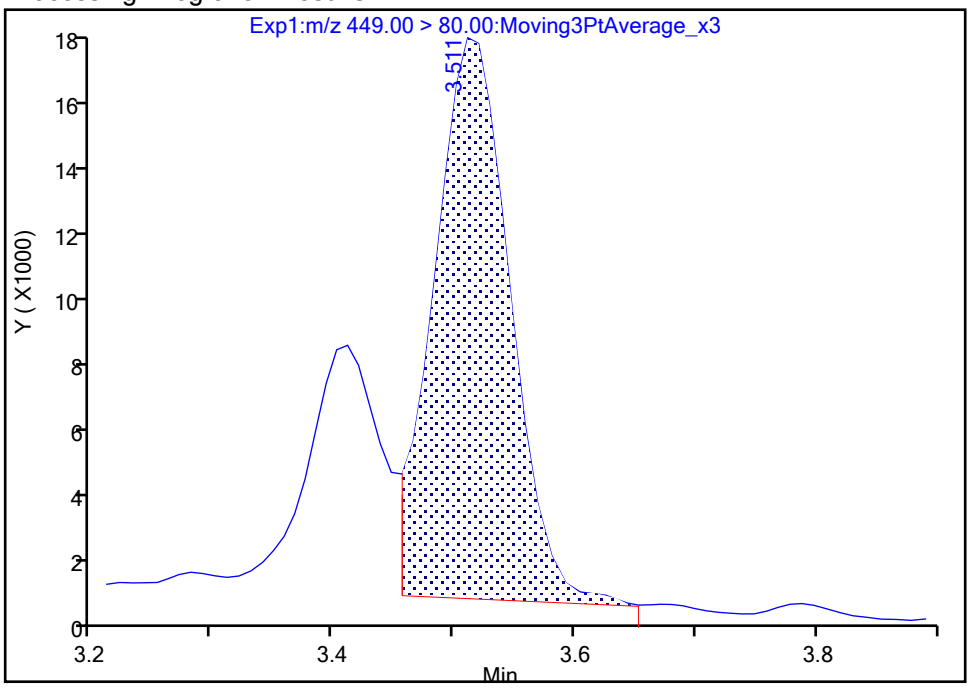
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

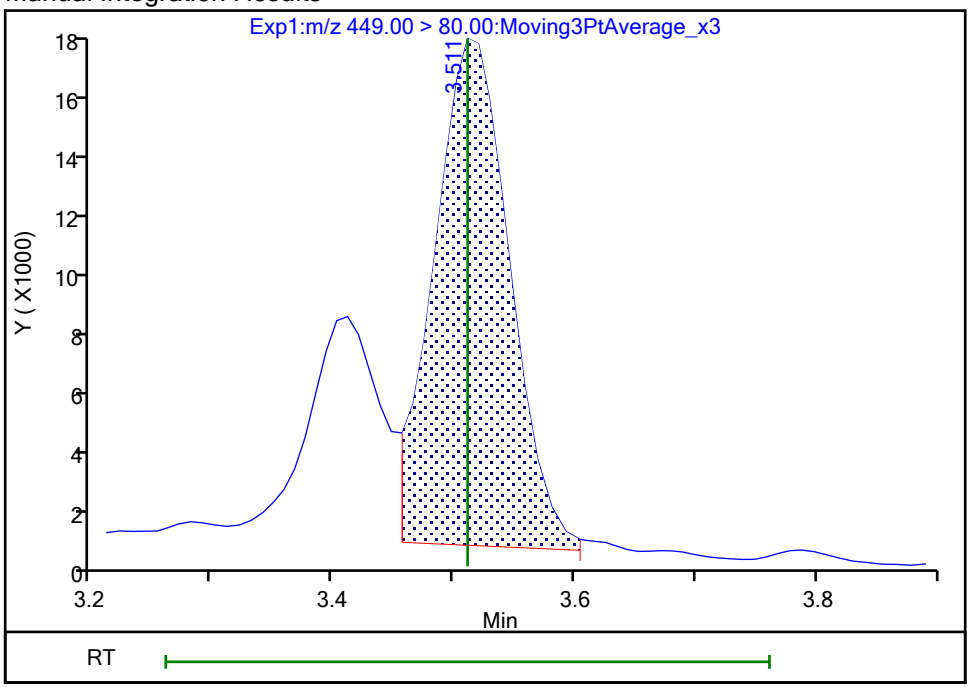
Processing Integration Results

RT: 3.51
Area: 71410
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 70884
Amount: 0.078286
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

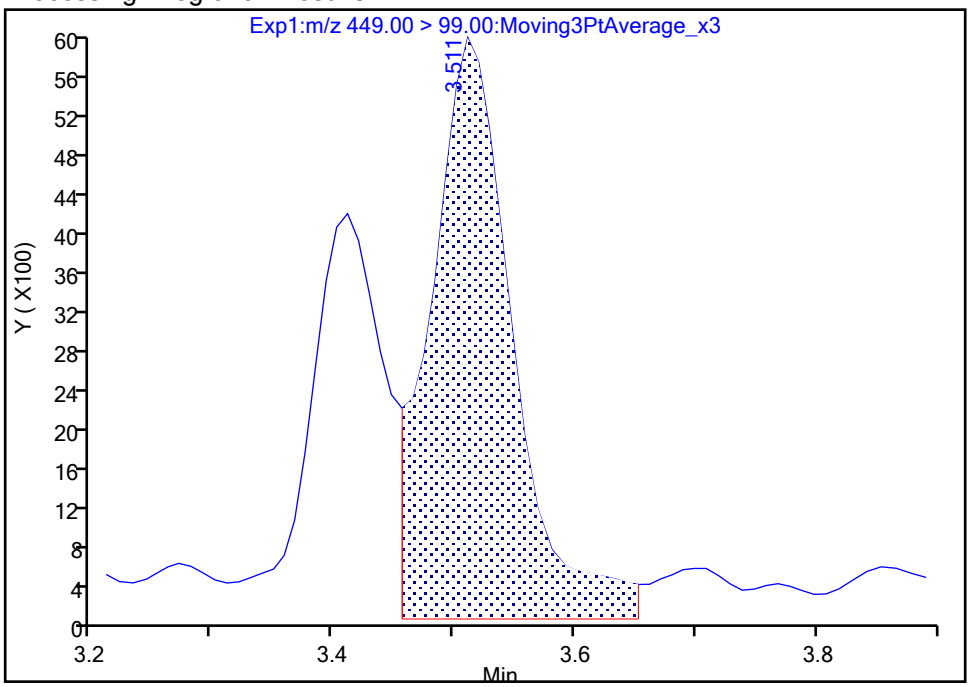
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

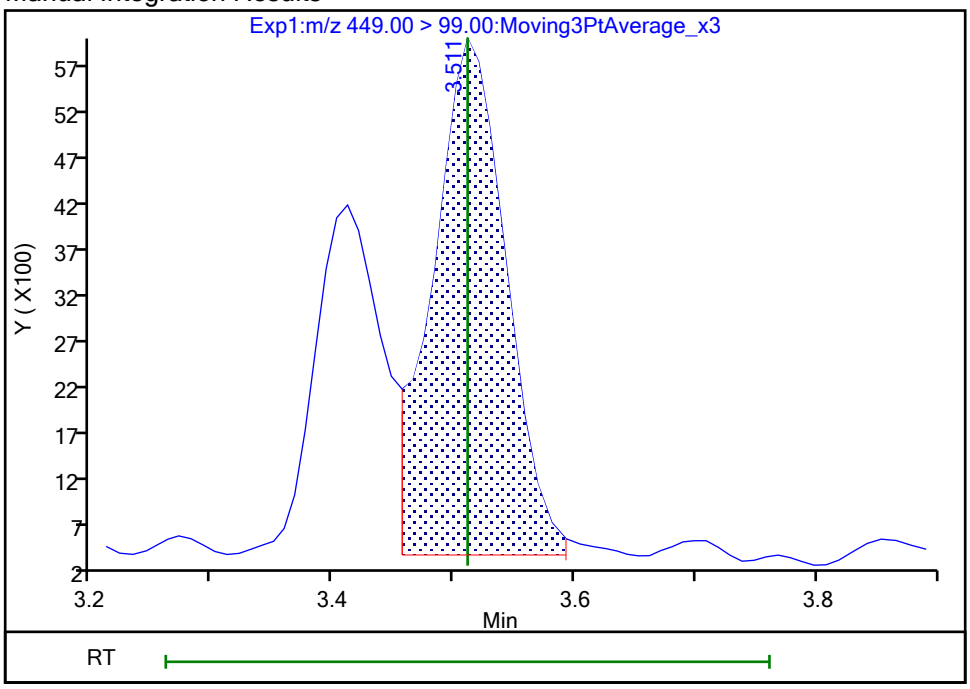
Processing Integration Results

RT: 3.51
Area: 28080
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 23387
Amount: 0.078286
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:30:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

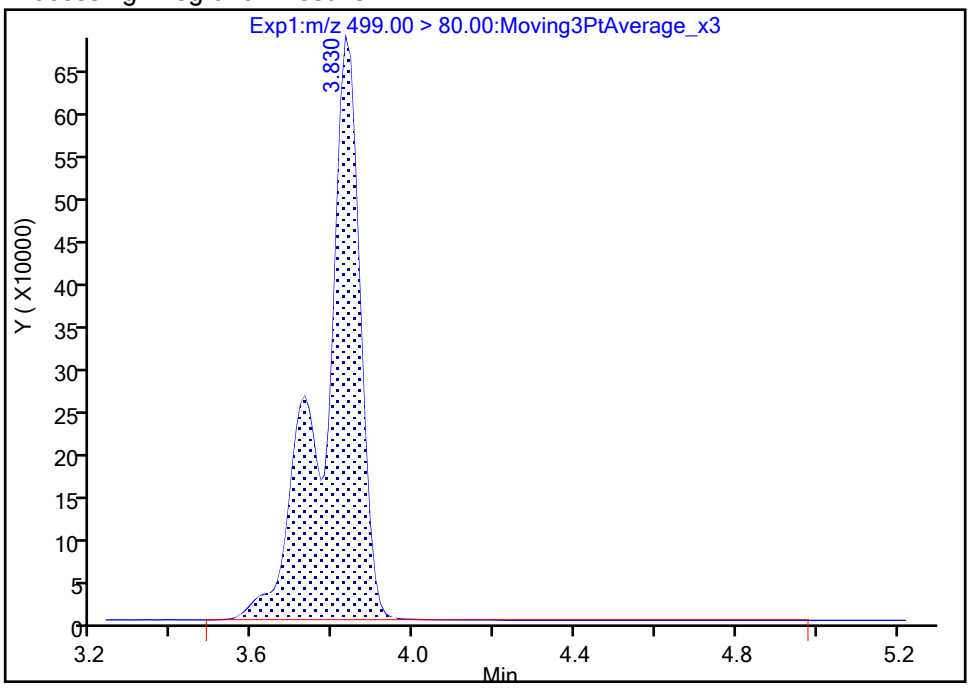
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

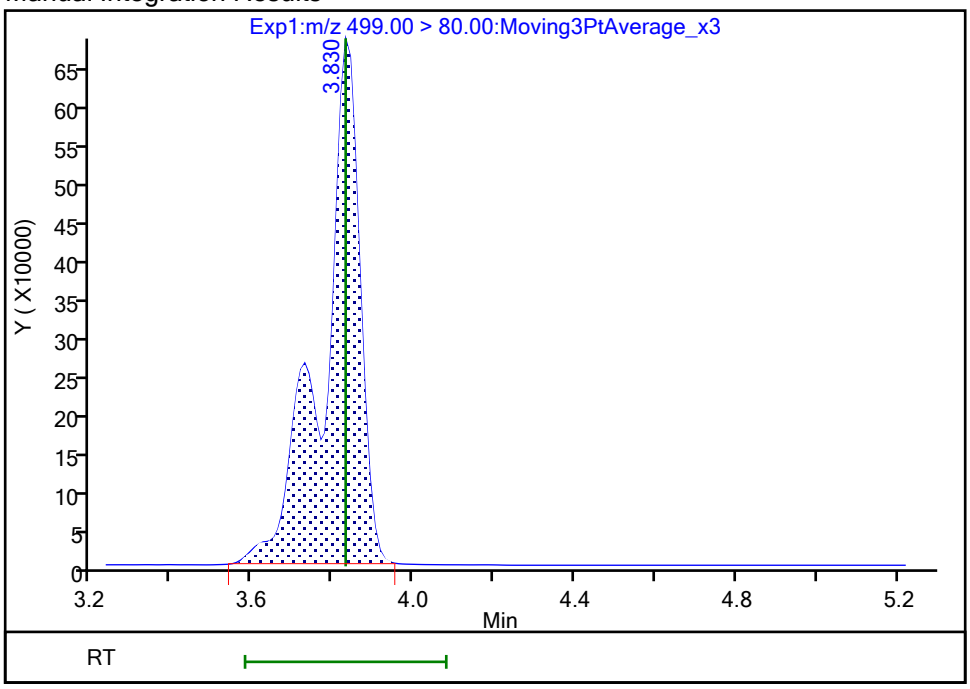
Processing Integration Results

RT: 3.83
Area: 4480954
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 4452669
Amount: 6.093074
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:32:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

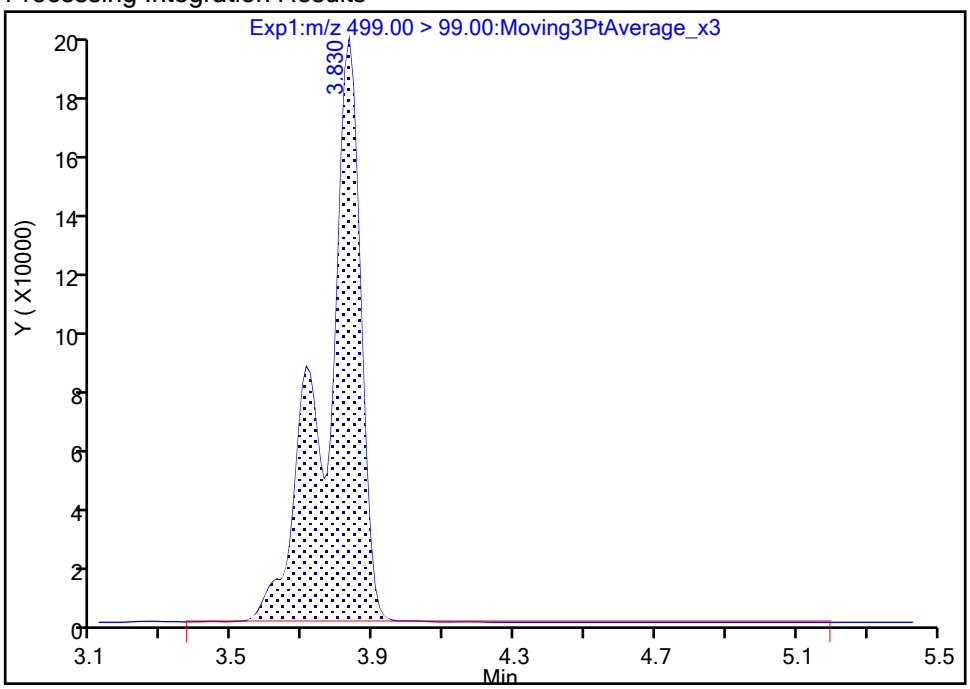
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

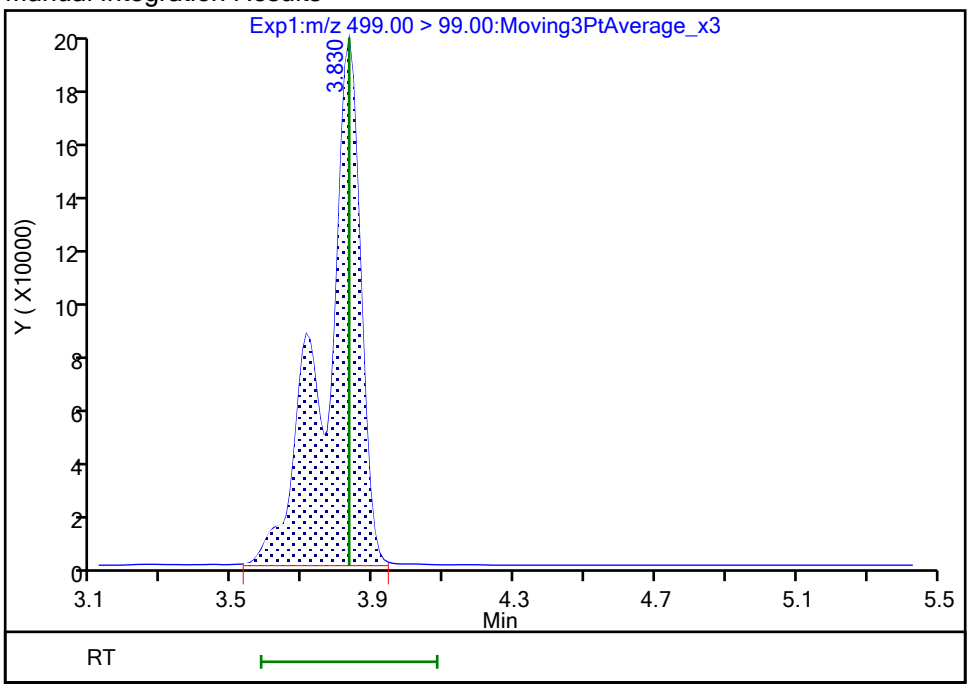
Processing Integration Results

RT: 3.83
Area: 1374097
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 1363518
Amount: 6.093074
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:32:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

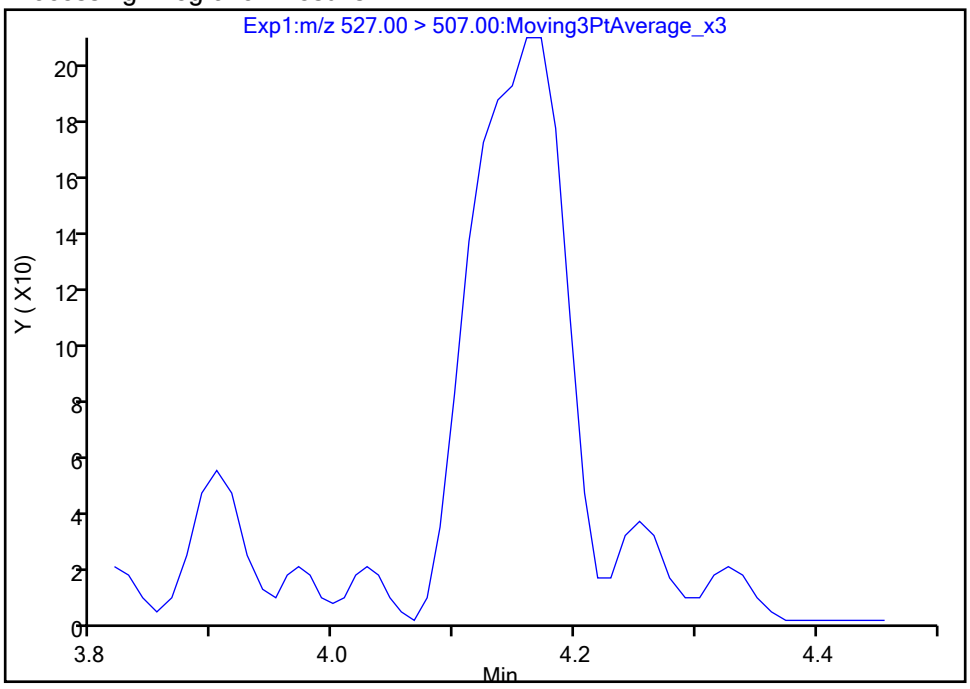
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

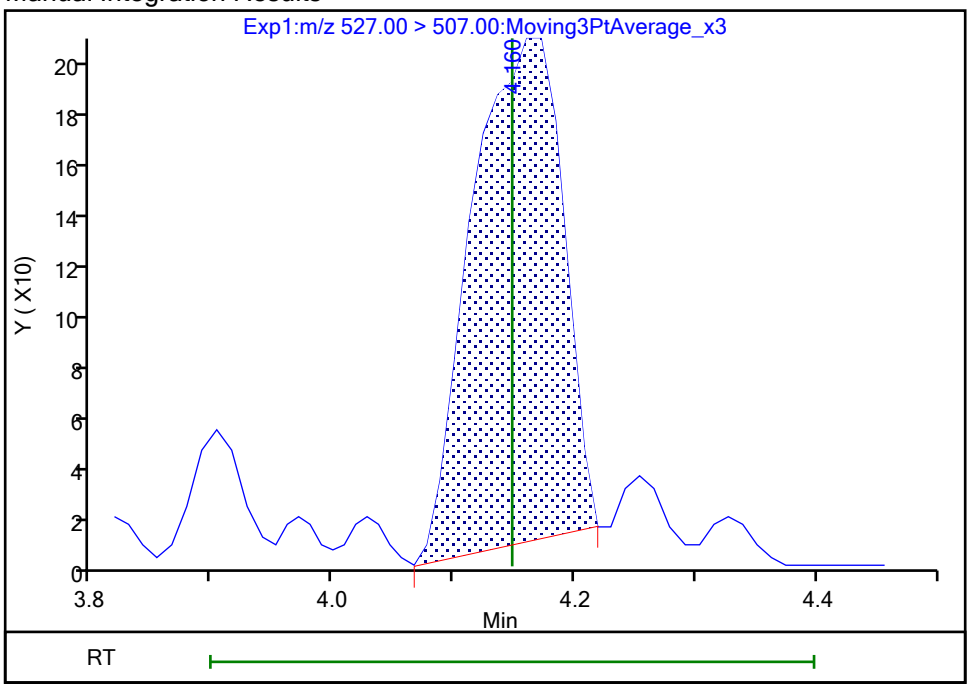
Not Detected
Expected RT: 4.15

Processing Integration Results



Manual Integration Results

RT: 4.16
Area: 1035
Amount: 0.002262
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:33:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

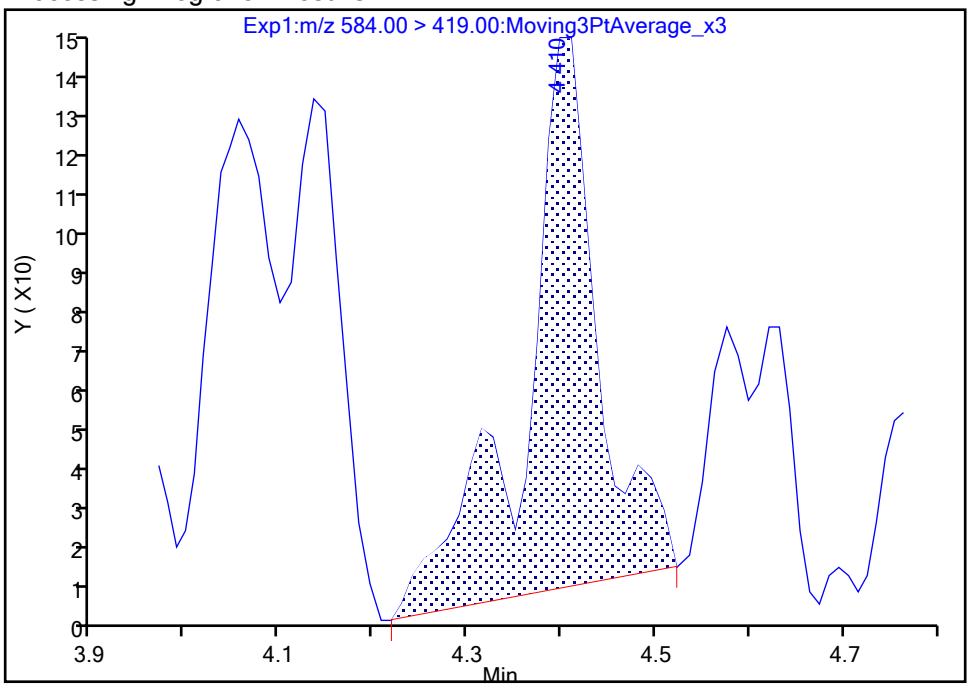
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

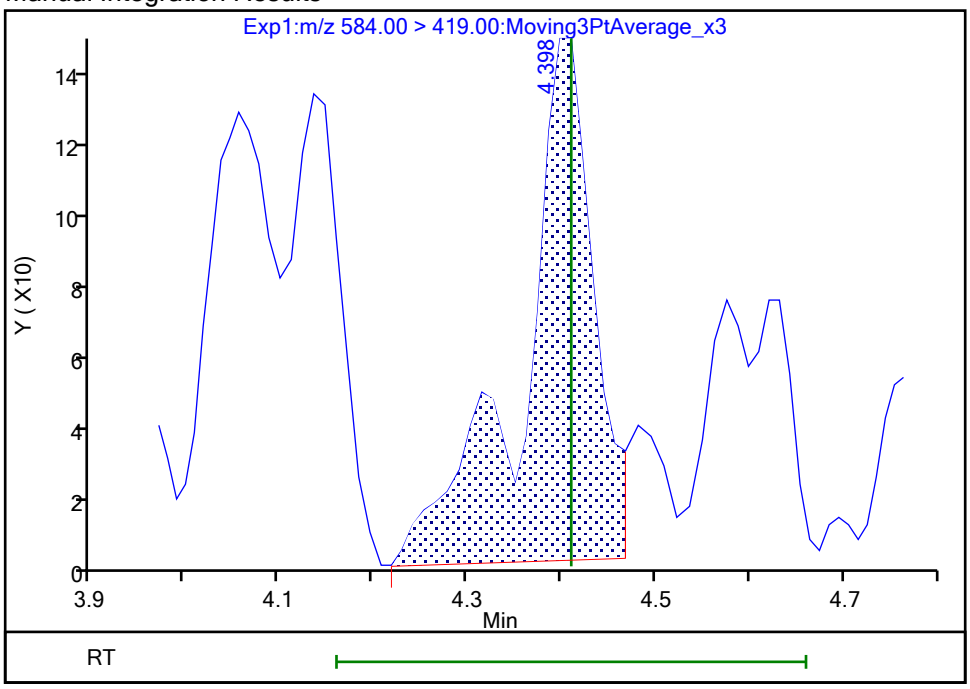
Processing Integration Results

RT: 4.41
Area: 741
Amount: 0.002392
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 745
Amount: 0.002405
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:33:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

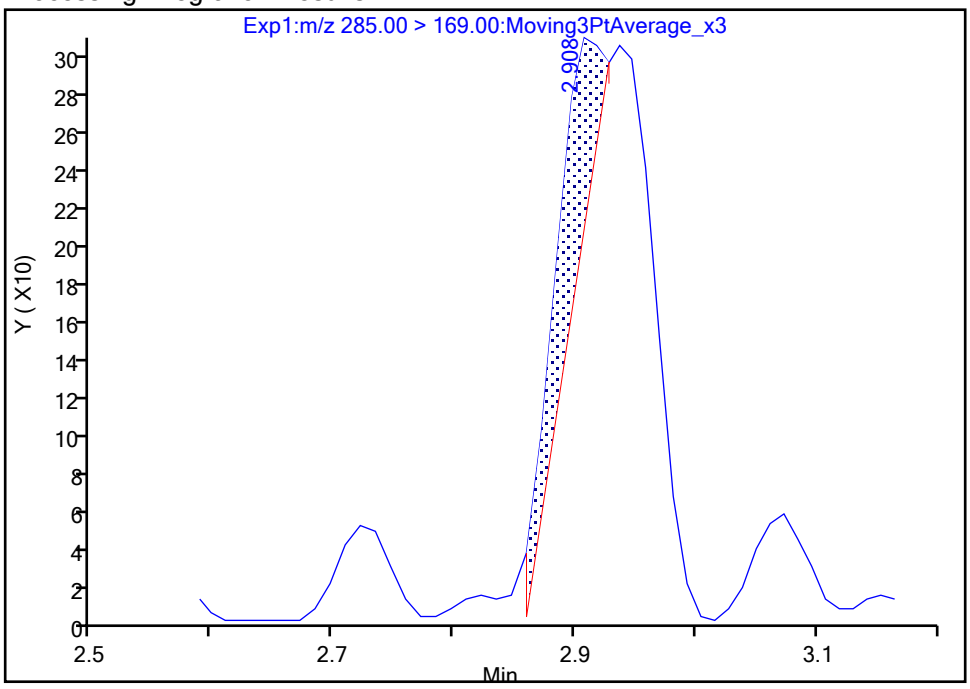
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

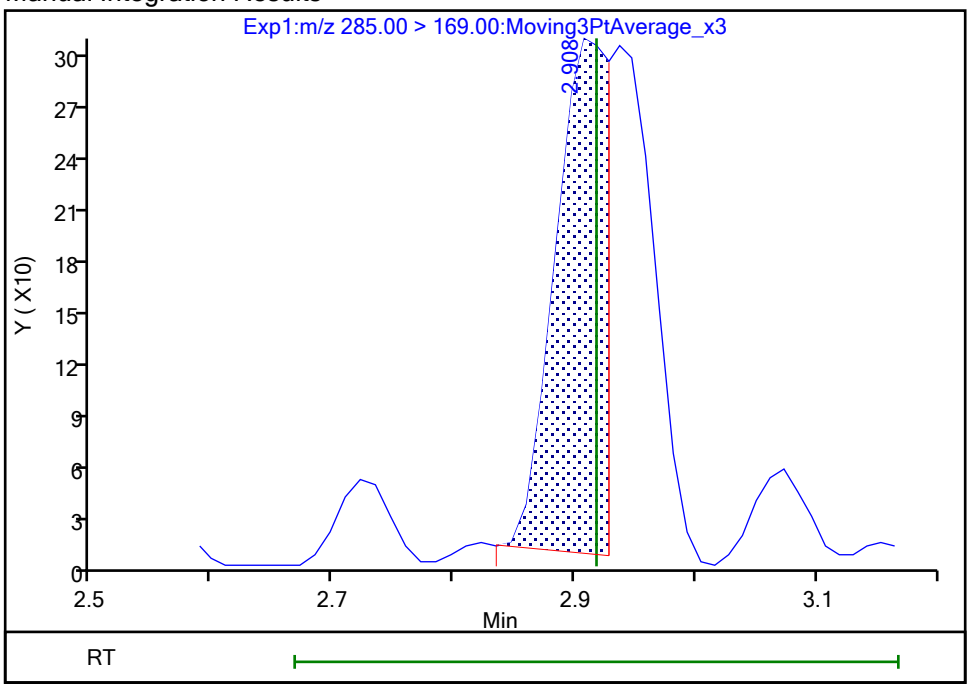
Processing Integration Results

RT: 2.91
Area: 273
Amount: 0.001398
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 841
Amount: 0.004305
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:29:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

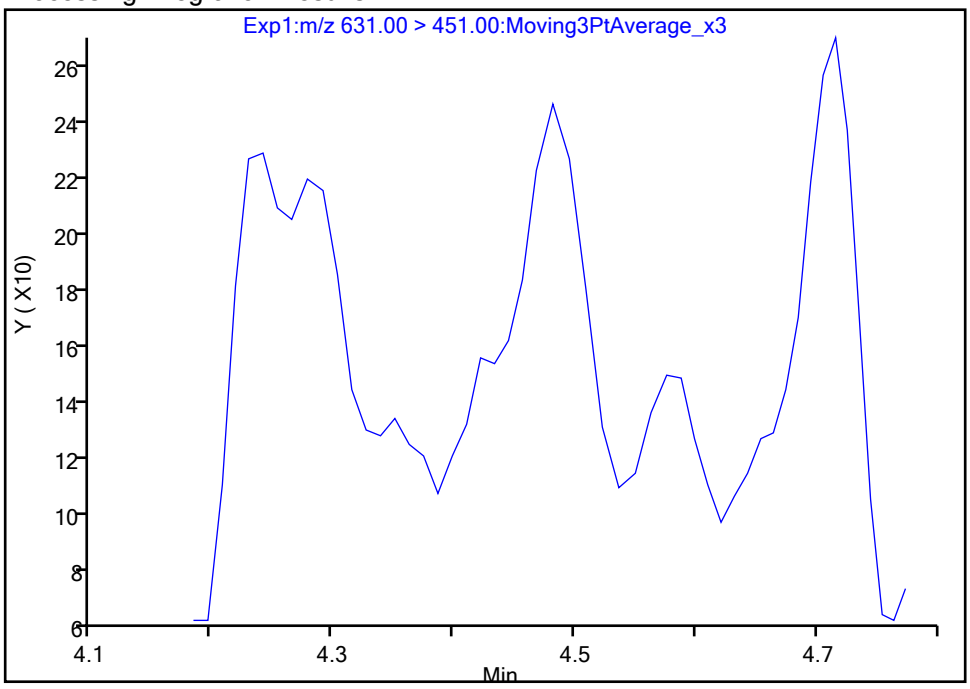
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

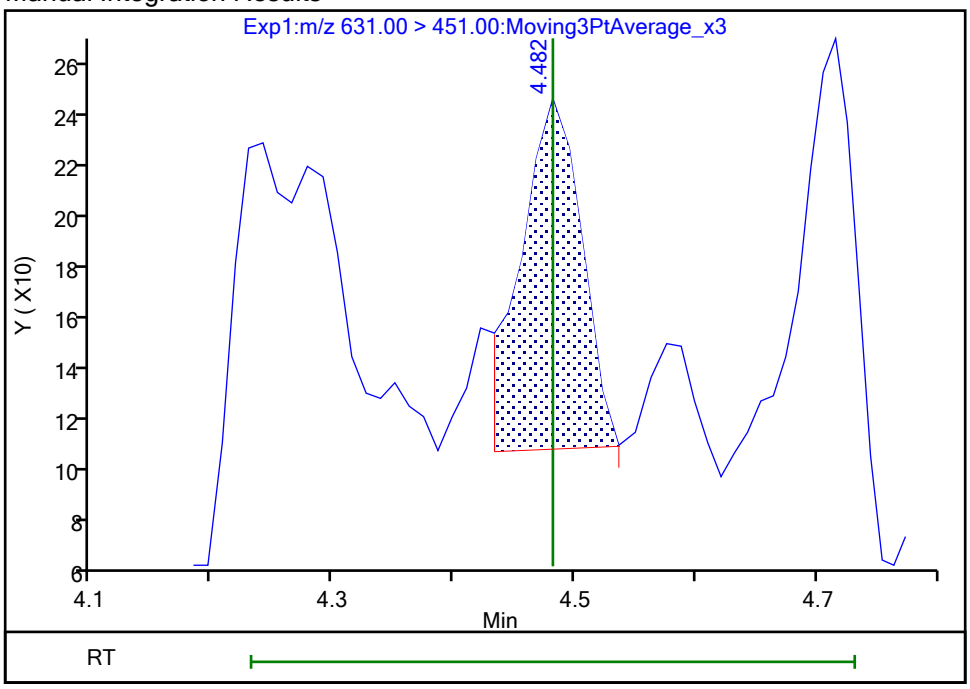
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.48
Area: 465
Amount: 0.000136
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:34:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

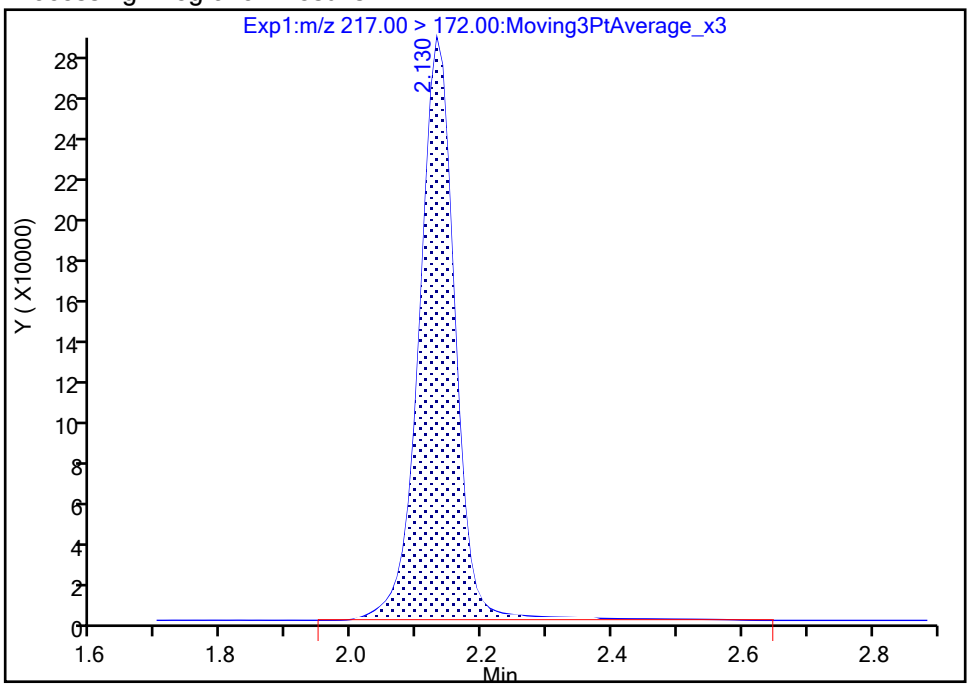
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

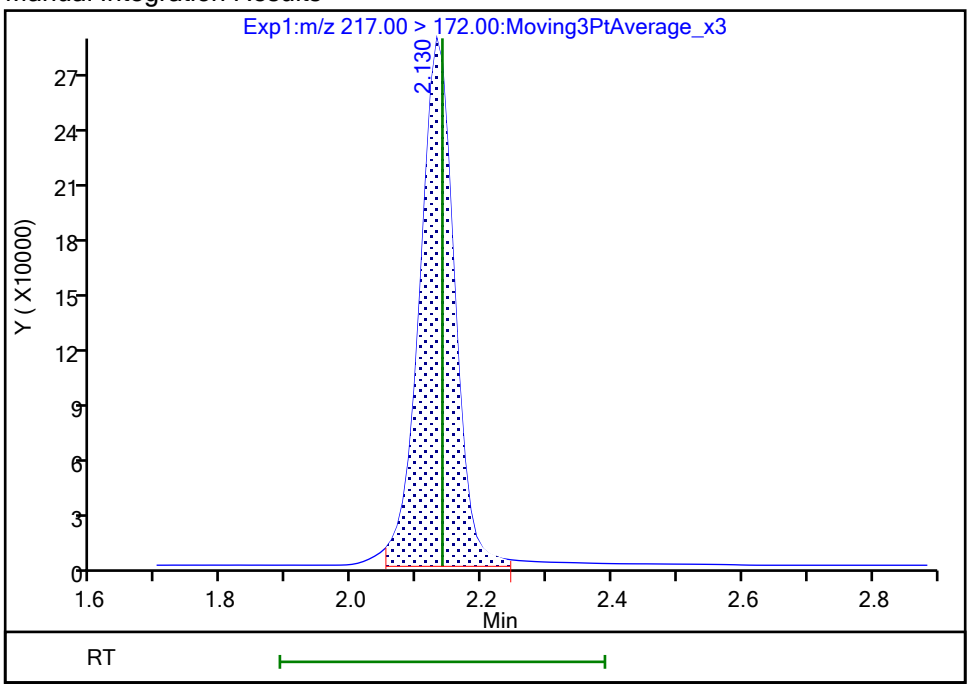
Processing Integration Results

RT: 2.13
Area: 1084769
Amount: 0.740421
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1050715
Amount: 0.717177
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:27:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

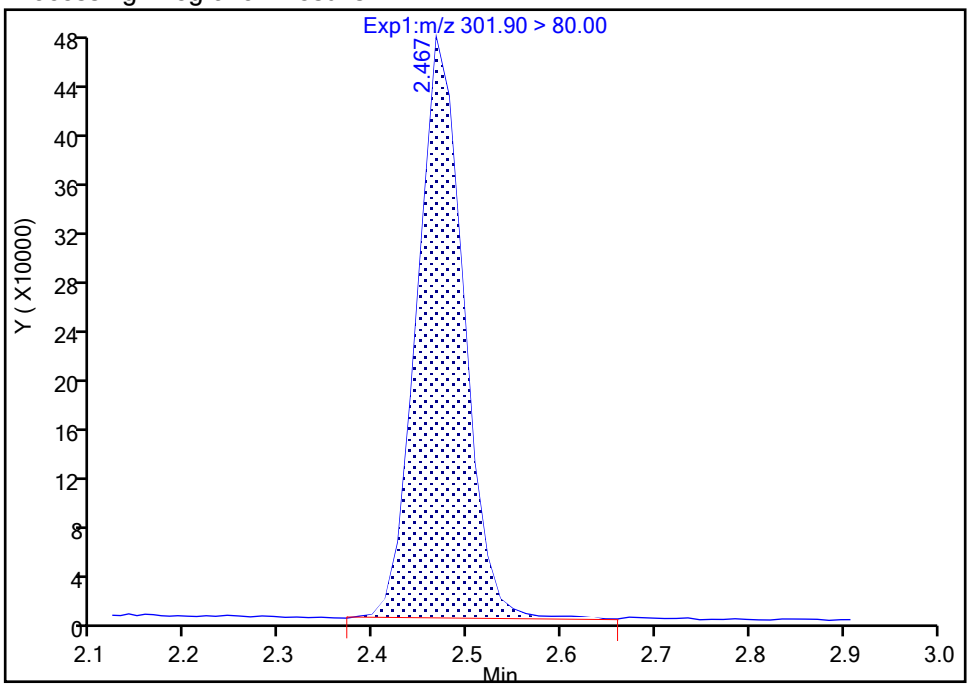
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

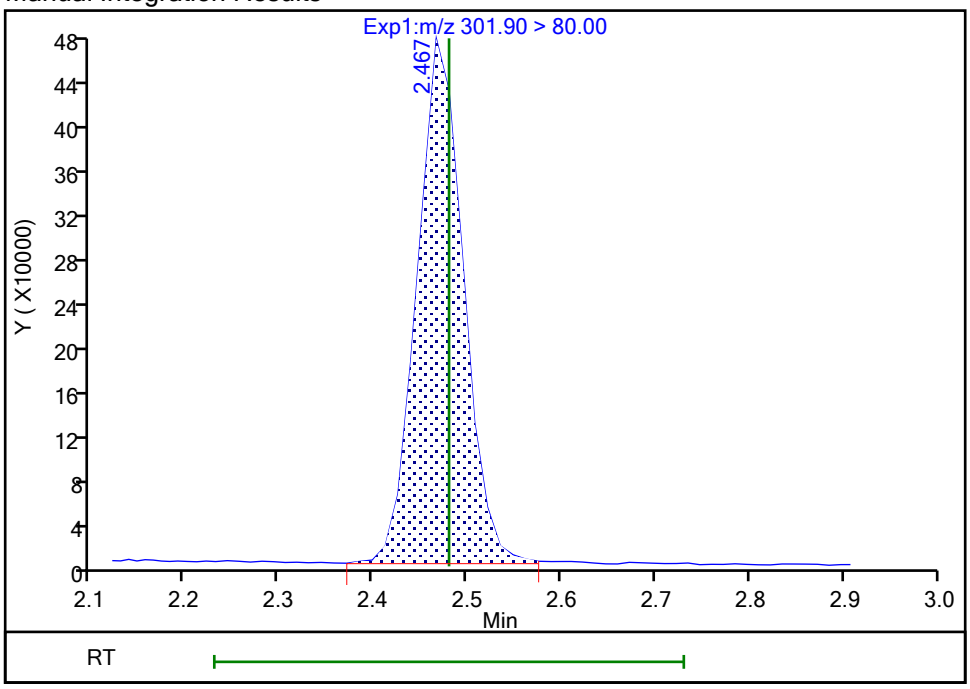
Processing Integration Results

RT: 2.47
Area: 1611516
Amount: 1.047485
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1604723
Amount: 1.043070
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:27:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

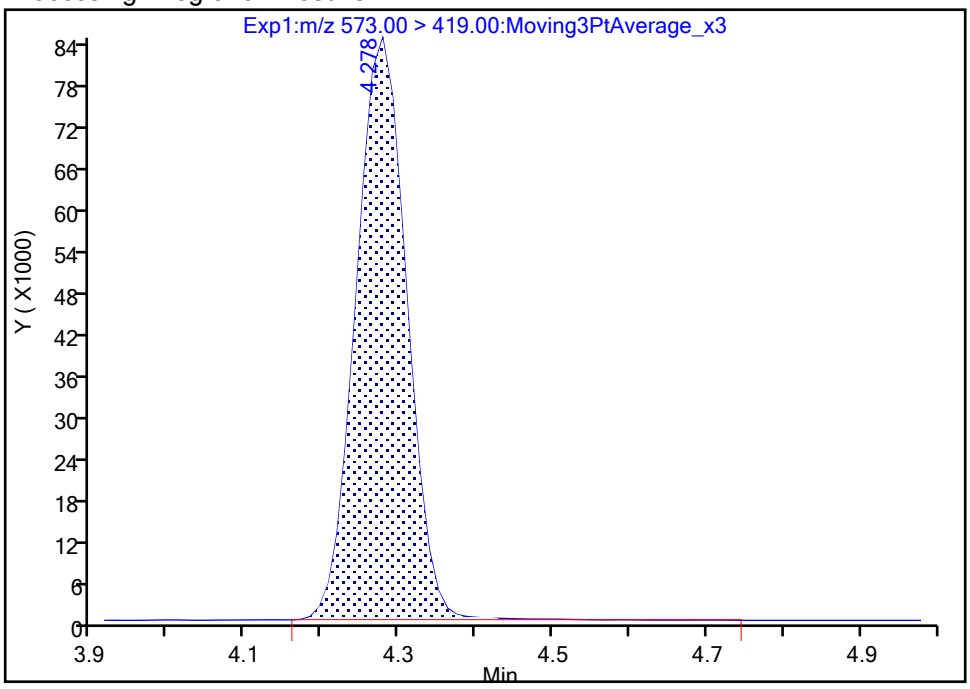
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

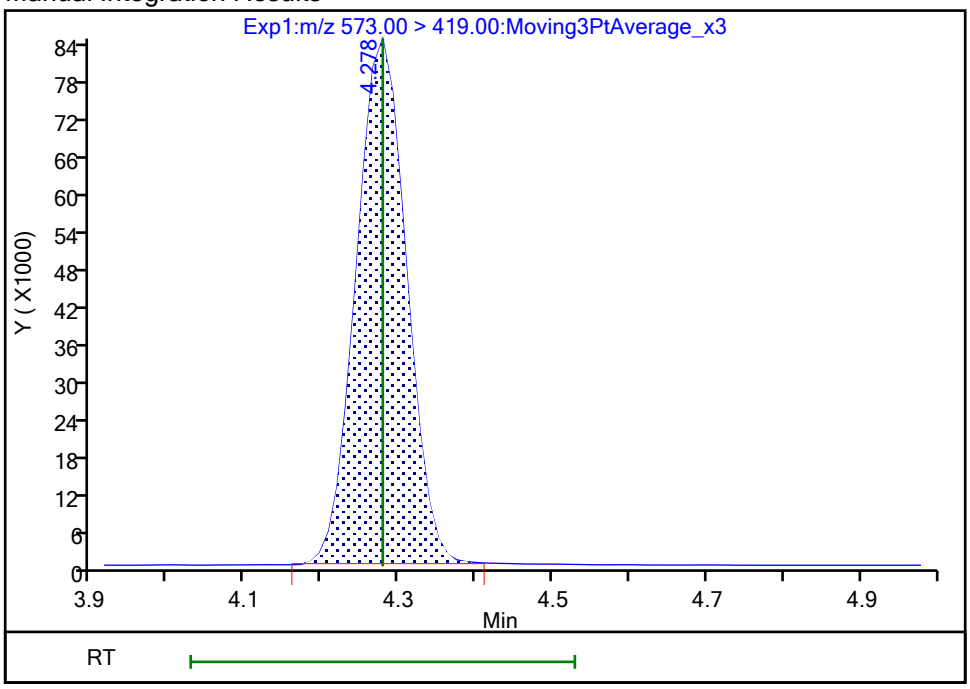
Processing Integration Results

RT: 4.28
Area: 386324
Amount: 0.986713
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 384517
Amount: 0.982098
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:28:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

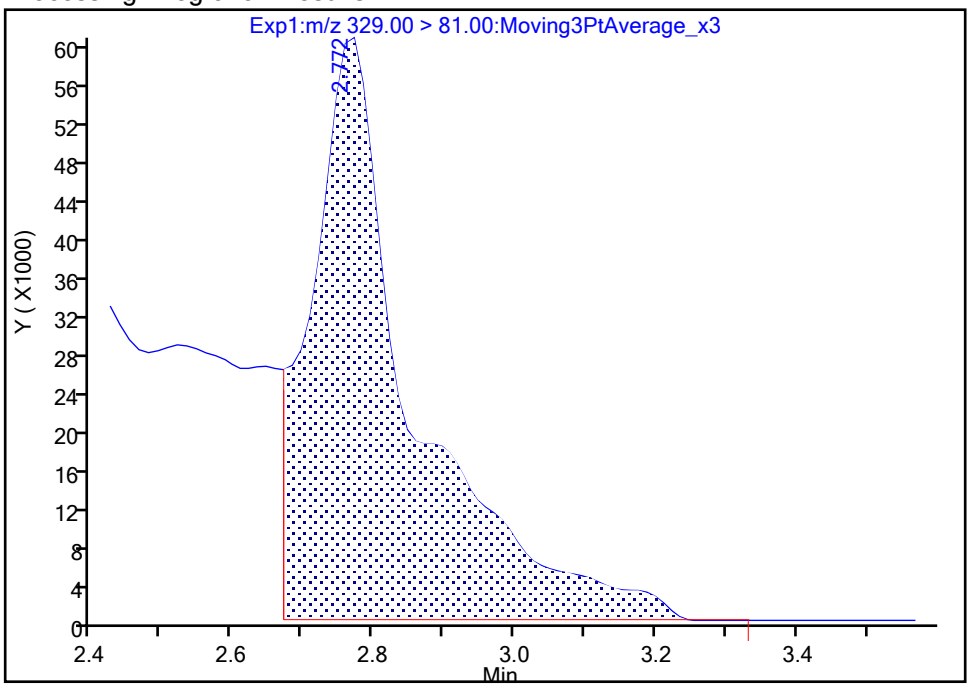
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A26.d				
Injection Date:	25-Oct-2023 21:16:25	Instrument ID:	LC812		
Lims ID:	460-290543-B-7-A	Lab Sample ID:	200-290543-7		
Client ID:	MW11-101723-1212-25.5				
Operator ID:	LC812user	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

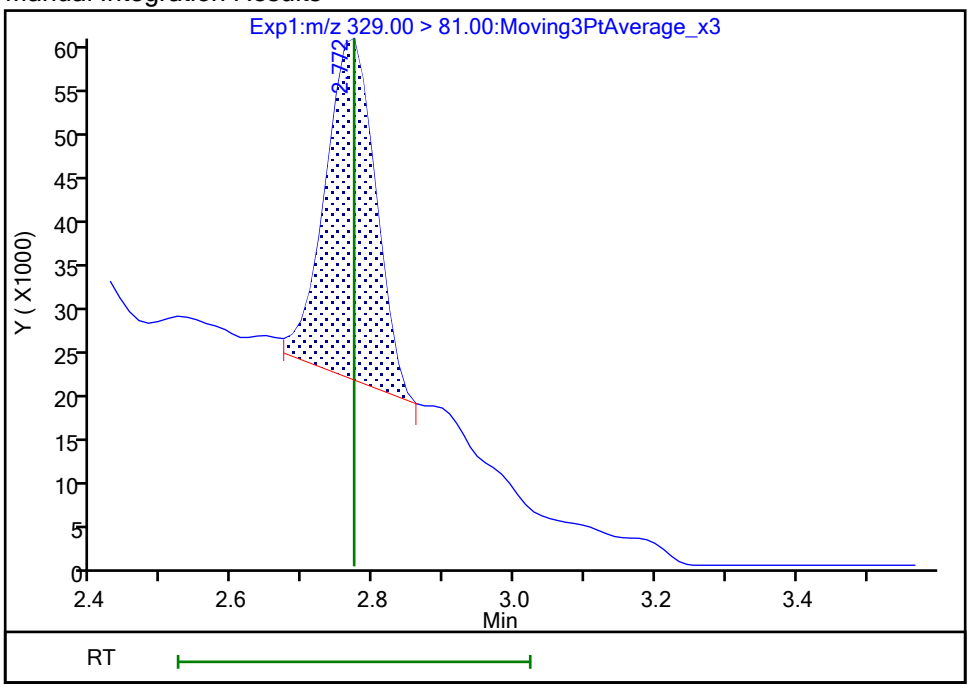
Processing Integration Results

RT: 2.77
Area: 615438
Amount: 3.459111
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 194290
Amount: 1.092020
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:27:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: SW4-101723-0940 | Lab Sample ID: 460-290543-8

Matrix: Water | Lab File ID: PA231025A27.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 09:40

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 297.4(mL) | Date Analyzed: 10/25/2023 21:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	23.2		4.20	1.01
2706-90-3	Perfluoropentanoic acid	40.0		1.68	0.57
307-24-4	Perfluorohexanoic acid	33.9		1.68	0.55
375-85-9	Perfluoroheptanoic acid	15.8		1.68	0.45
335-67-1	Perfluorooctanoic acid	16.3		1.68	0.64
375-95-1	Perfluorononanoic acid	2.88		1.68	0.41
335-76-2	Perfluorodecanoic acid	0.86	J	1.68	0.39
2058-94-8	Perfluoroundecanoic acid	1.68	U	1.68	0.46
307-55-1	Perfluorododecanoic acid	1.68	U	1.68	0.41
72629-94-8	Perfluorotridecanoic acid	1.68	U	1.68	0.40
376-06-7	Perfluorotetradecanoic acid	1.68	U	1.68	0.54
375-73-5	Perfluorobutanesulfonic acid	11.8		1.68	0.52
2706-91-4	Perfluoropentanesulfonic acid	10.0		1.68	0.42
355-46-4	Perfluorohexanesulfonic acid	49.2		1.68	0.46
375-92-8	Perfluoroheptanesulfonic acid	3.27		1.68	0.34
1763-23-1	Perfluorooctanesulfonic acid	204		1.68	0.71
68259-12-1	Perfluorononanesulfonic acid	1.68	U	1.68	0.34
335-77-3	Perfluorodecanesulfonic acid	1.68	U	1.68	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.68	U	1.68	0.45
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.76		4.20	1.09
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.32	J	1.68	0.65
754-91-6	Perfluorooctanesulfonamide	1.68	U	1.68	0.77
2355-31-9	NMeFOSAA	4.20	U	4.20	1.60
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.20	U	4.20	1.34
13252-13-6	HFPODA	3.36	U	3.36	0.92
919005-14-4	DONA	1.68	U	1.68	0.35
756426-58-1	9Cl-PF3ONS	1.68	U	1.68	0.27
763051-92-9	11Cl-PF3OUdS	1.68	U	1.68	0.73

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: SW4-101723-0940 Lab Sample ID: 460-290543-8

Matrix: Water Lab File ID: PA231025A27.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 09:40

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 297.4(mL) Date Analyzed: 10/25/2023 21:24

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		50-150
STL01893	13C5 PFPeA	91		50-150
STL01892	13C4 PFHpA	89		50-150
STL02116	13C2 PFTeDA	82		50-150
STL02337	13C3 PFBS	93		50-150
STL01056	13C8 FOSA	87		50-150
STL02118	d3-NMeFOSAA	92		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	94		50-150
STL02279	M2-6:2 FTS	96		50-150
STL02280	M2-8:2 FTS	92		50-150
STL02255	13C3 HFPO-DA	86		50-150
STL00994	18O2 PFHxS	98		50-150
STL00993	13C2 PFHxA	89		50-150
STL00991	13C4 PFOS	95		50-150
STL00998	13C2 PFDoA	95		50-150
STL00995	13C5 PFNA	92		50-150
STL00996	13C2 PFDA	93		50-150
STL00990	13C4 PFOA	102		50-150
STL00997	13C2 PFUnA	93		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d
Lims ID: 460-290543-A-8-A
Client ID: SW4-101723-0940
Sample Type: Client
Inject. Date: 25-Oct-2023 21:24:35 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-8-A
Misc. Info.: 200-0057556-027 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:45:00
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.139	-0.017	0.604	1681666	1.08		86.7	798	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.122	2.139	-0.017	1.000	889430	0.6902			54.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.695	1370288	1.14		91.0	604	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1406326	1.19			9.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.702	1754387	1.08		92.6	28700	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	593741	0.3522	Target=2.06		20.9	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	297705		1.99(1.03-3.09)		28.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.772	0.0	1.005	989	0.001645			1.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.786	206709	1.10		94.0	12.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.796	1366104	1.12		89.2	3065	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1213188	1.01	Target=14.12		21.4	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	79504		15.26(7.06-21.17)		33.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.884	446163	0.2988	Target=2.72		27.8	M
349.00 > 99.00	2.797	2.810	-0.013	0.884	156615		2.85(1.36-4.09)		34.1	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.918	-0.010	0.828	255132	1.08		86.1	742	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.918	-0.010	1.000	2036	0.0100			16.4	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.176	-0.010	0.901	1351879	1.16		97.9	7622	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.176	-0.010	1.000	1850266	1.46	Target=3.32		285	M
399.00 > 99.00	3.155	3.176	-0.021	0.996	539093		3.43(1.66-4.98)		236	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.176	-0.010	1.000	631899	0.4703	Target=4.17		21.3	M
363.00 > 169.00	3.166	3.176	-0.010	1.000	141712		4.46(2.09-6.26)		118	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.176	-0.010	0.901	1498354	1.11		89.2	5083	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.511	-0.008	0.917	99137	0.0973	Target=4.83		14.5	M
449.00 > 99.00	3.503	3.511	-0.008	0.917	22584		4.39(2.41-7.24)		9.7	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.511	-0.008	0.997	276385	1.14		95.9	80.8	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.503	3.520	-0.017	1.000	108931	0.1712			181	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.529	-0.017	1.000	802206	0.4860	Target=2.88		20.1	M
413.00 > 169.00	3.512	3.529	-0.017	1.000	326600		2.46(1.44-4.32)		271	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.529	-0.017	1.000	1937165	1.27		102	10185	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.529	-0.017		1955927	1.25			6339	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.830	-0.010	1.000	4986330	6.06	Target=4.24		1325	M
499.00 > 99.00	3.820	3.830	-0.010	1.000	1384774		3.60(2.12-6.37)		1267	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.830	-0.010	1.088	842334	1.14		95.0	586	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.844	3.854	-0.010	1.000	128129	0.0856	Target=8.34		9.4	M
463.00 > 169.00	3.844	3.854	-0.010	1.000	16392		7.82(4.17-12.51)		36.7	
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.854	-0.010	1.094	1909402	1.15		92.2	6362	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.126	4.148	-0.022	1.000	41116	0.0256	Target=11.44		6.9	M
513.00 > 169.00	4.126	4.148	-0.022	1.000	3695		11.13(5.72-17.16)		13.2	M
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.148	-0.022	1.175	2012470	1.16		92.8	5183	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.138	4.148	-0.010	1.000	21562	0.0392			157	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.148	-0.010	1.178	299132	1.10		91.5	315	
D 21 13C8 FOSA										M
506.00 > 78.00	4.232	4.242	-0.010	1.205	1607339	1.09		86.8	5312	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.221	4.242	-0.021	0.997	5037	0.004107			5.1	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.278	-0.010	1.215	474409	1.14		91.5	1682	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.291	-0.023	1.000	240	0.000697			1.4	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.364	4.375	-0.011	1.142	1162	0.002414	Target=2.37		2.4	M
599.00 > 99.00	4.376	4.375	0.001	1.145	506		2.30(1.19-3.56)		3.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.398	-0.010	1.249	1909692	1.17		93.3	7339	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.410	-0.022	1.249	438147	1.10		87.8	812	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.388	4.410	-0.022	1.000	903	0.002576			2.9	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.621	-0.021	1.310	1970826	1.18		94.7	8354	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.989	-0.009	1.418	1705649	1.03		82.3	4615	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.989	-0.009	1.000	414	0.002713	Target=0.87		9.4	M
713.00 > 219.00	5.001	4.989	0.012	1.004	373		1.11(0.43-1.30)		5.1	M

QC Flag Legend

Processing Flags

Review Flags

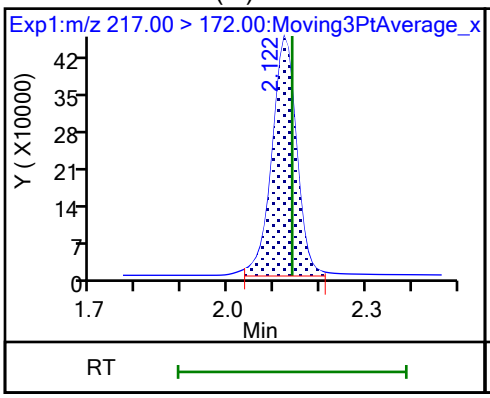
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:53 Chrom Revision: 2.3 18-Oct-2023 21:16:54

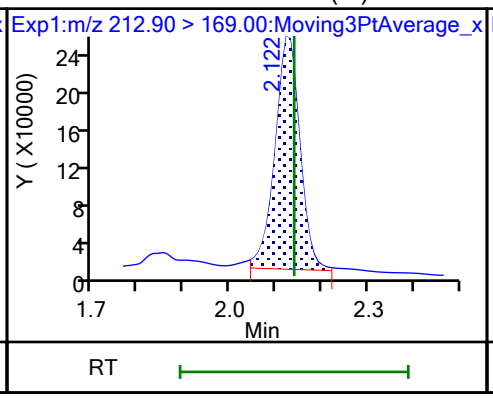
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d
Injection Date: 25-Oct-2023 21:24:35 Instrument ID: LC812
Lims ID: 460-290543-A-8-A Lab Sample ID: 200-290543-8
Client ID: SW4-101723-0940
Operator ID: LC812user ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

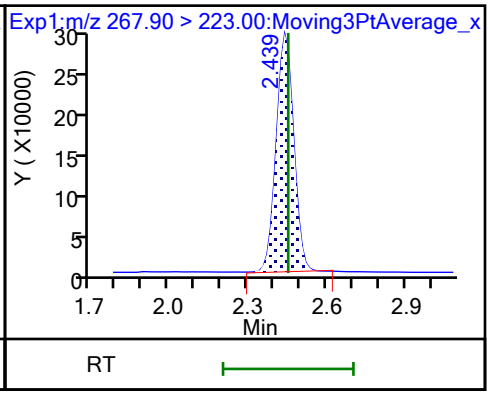
D 1 13C4 PFBA (M)



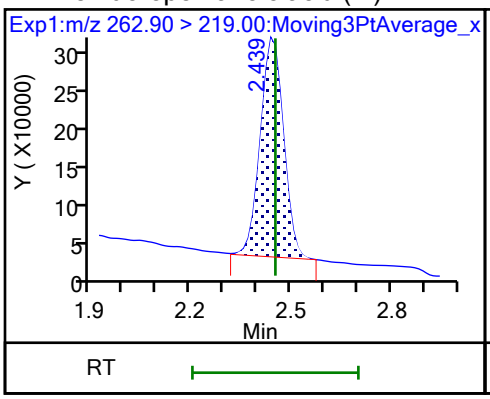
2 Perfluorobutanoic acid (M)



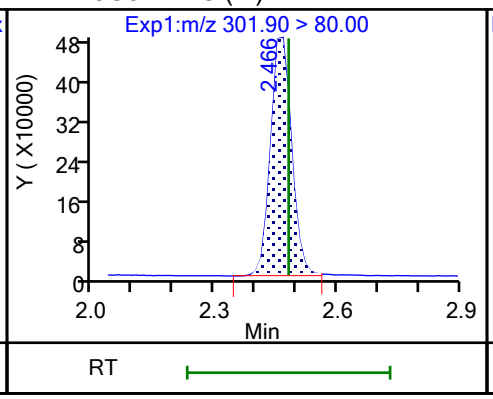
D 3 13C5 PFPeA



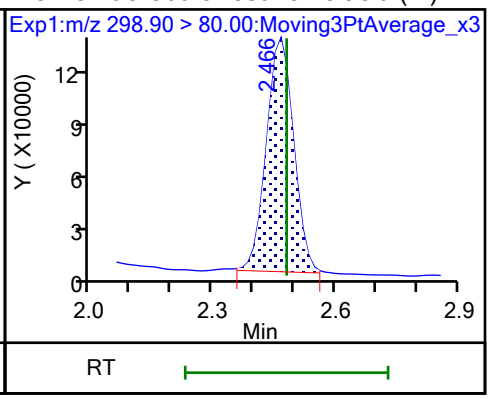
4 Perfluoropentanoic acid (M)



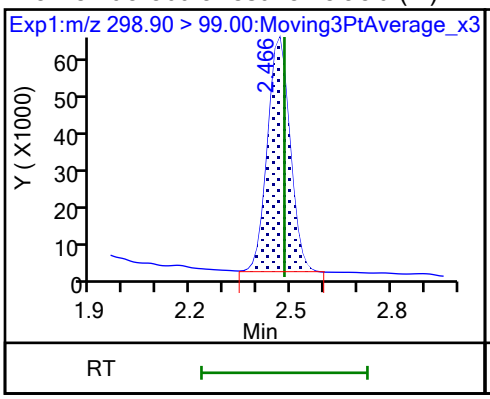
D 47 13C3 PFBS (M)



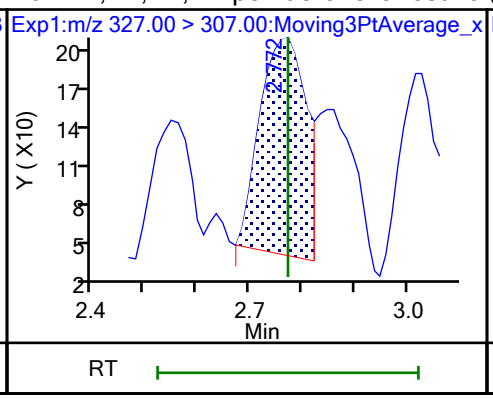
5 Perfluorobutanesulfonic acid (M)



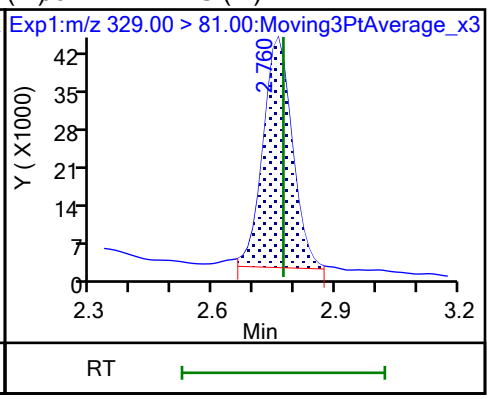
5 Perfluorobutanesulfonic acid (M)



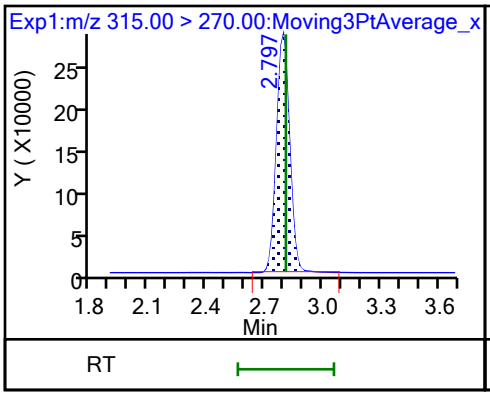
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



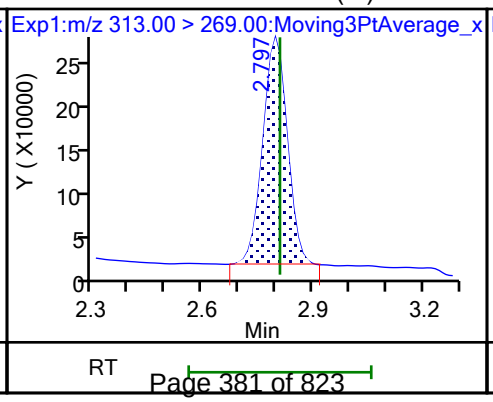
60 M2-4:2 FTS (M)



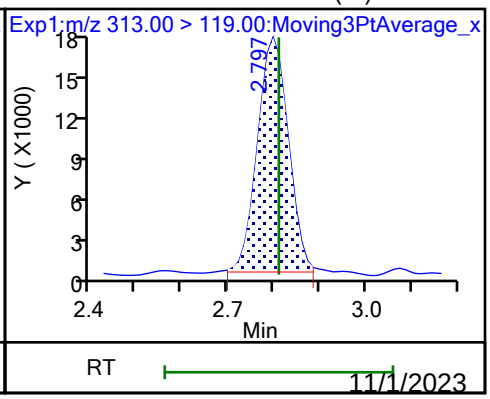
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

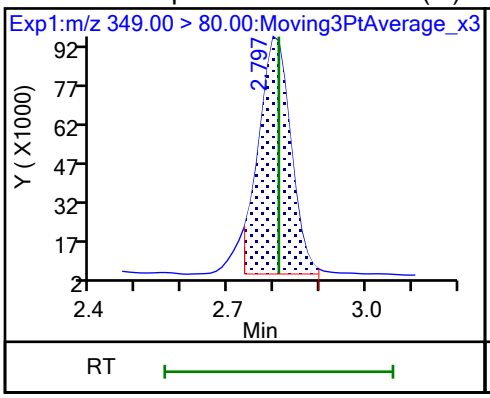


6 Perfluorohexanoic acid (M)

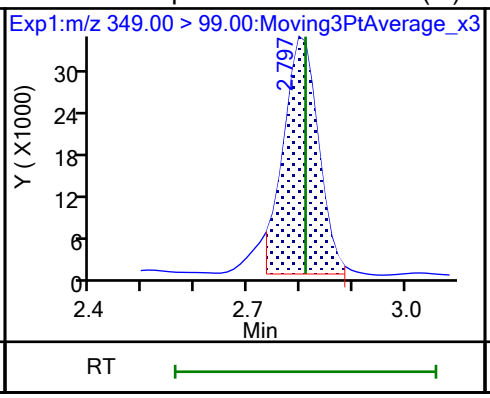


11/1/2023
12:01 PM

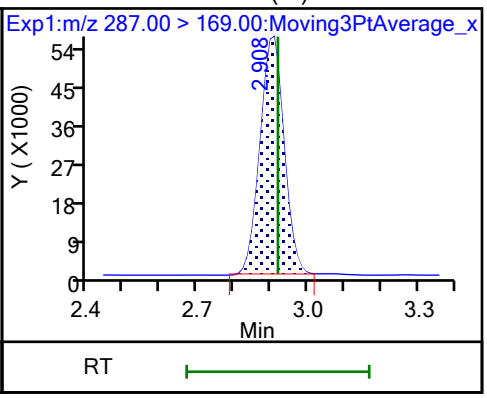
70 Perfluoropentanesulfonic acid (M)



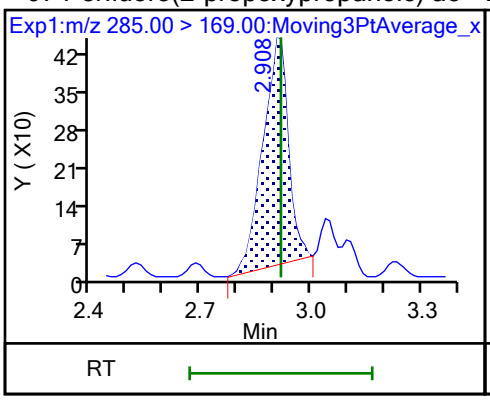
70 Perfluoropentanesulfonic acid (M)



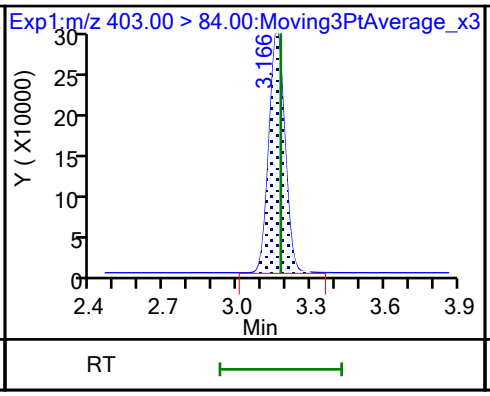
D 64 13C3 HFPO-DA (M)



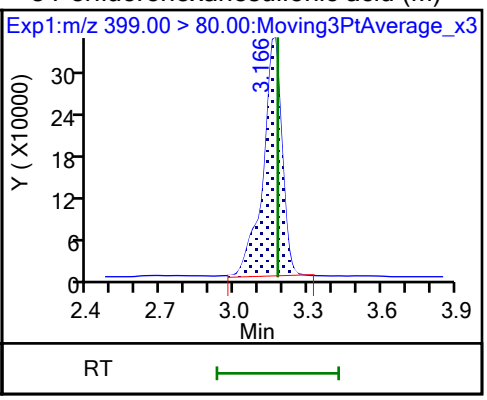
67 Perfluoro(2-propoxypropanoic) ac



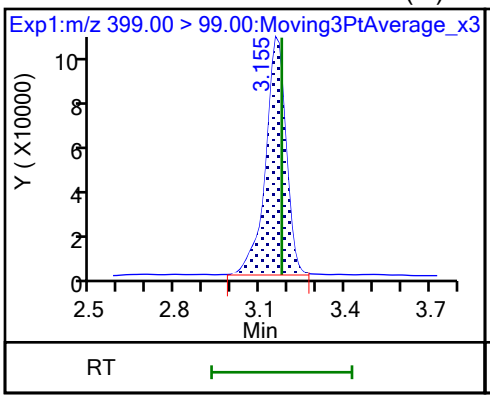
D 11 18O2 PFHxS



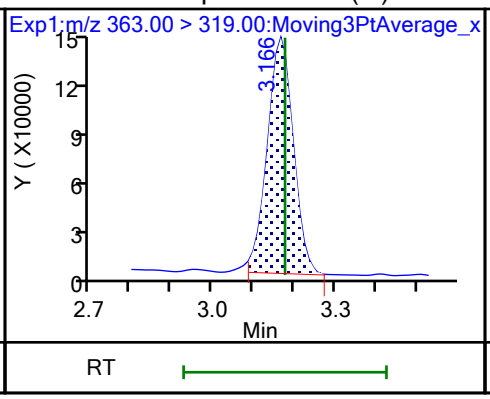
8 Perfluorohexanesulfonic acid (M)



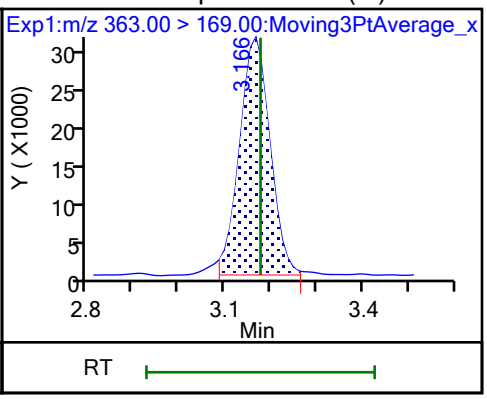
8 Perfluorohexanesulfonic acid (M)



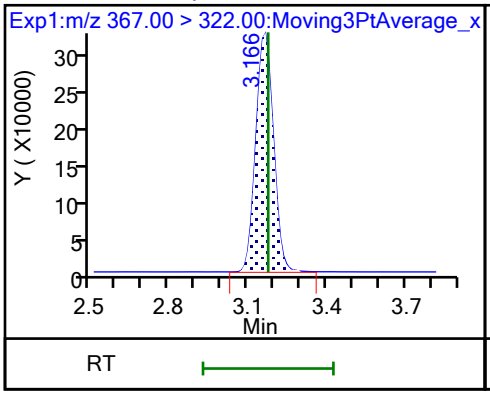
10 Perfluoroheptanoic acid (M)



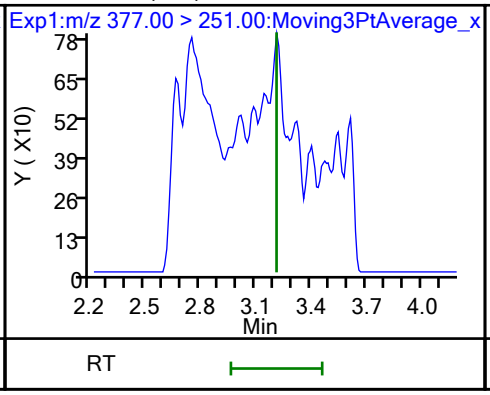
10 Perfluoroheptanoic acid (M)



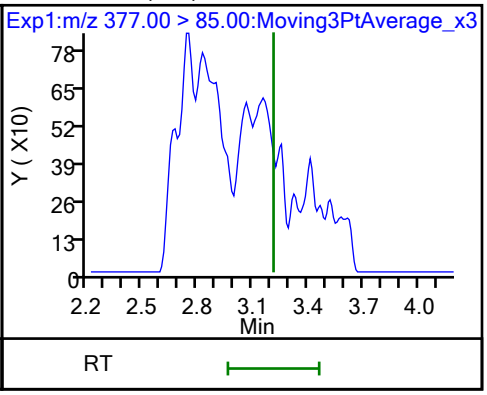
D 9 13C4 PFHpA



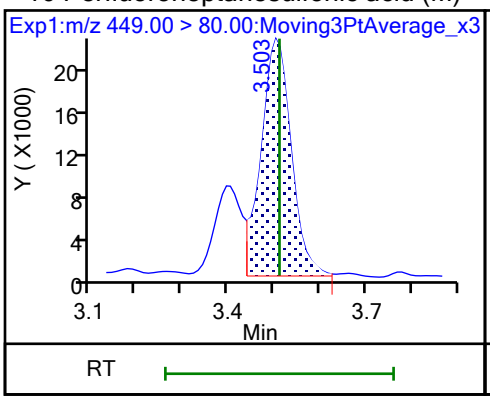
77 DONA (ND)



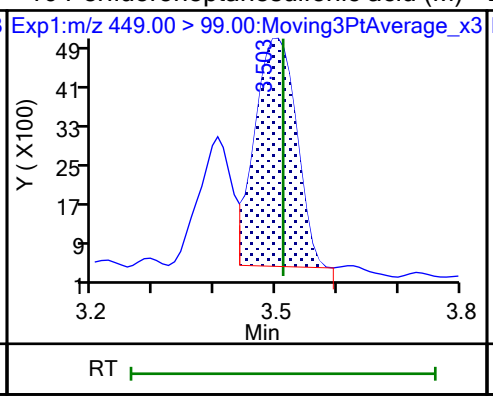
77 DONA (ND)



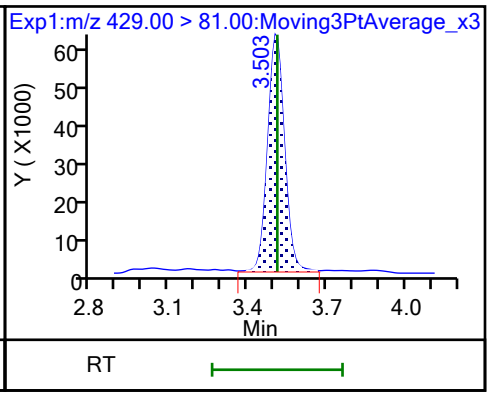
16 Perfluoroheptanesulfonic acid (M)



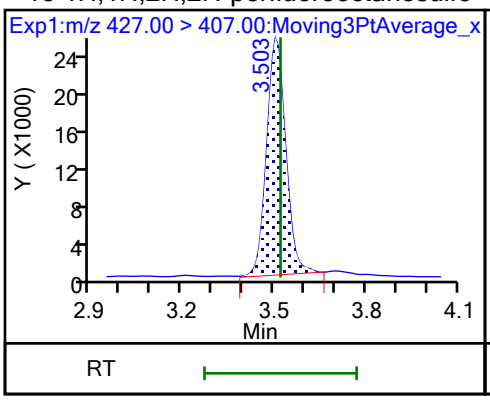
16 Perfluoroheptanesulfonic acid (M)



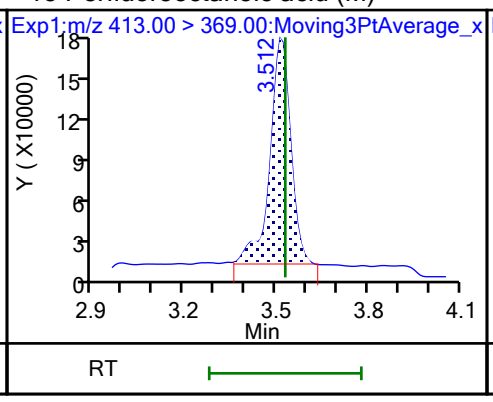
D 12 M2-6:2 FTS



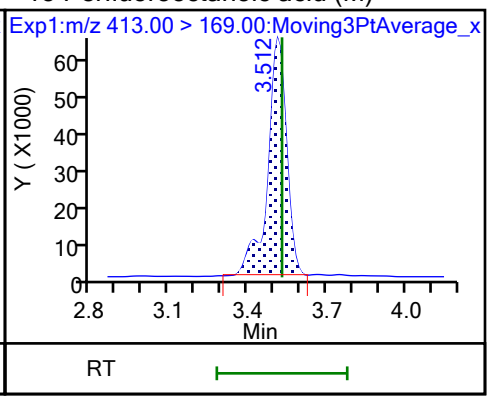
13 1H,1H,2H,2H-perfluorooctanesulfo



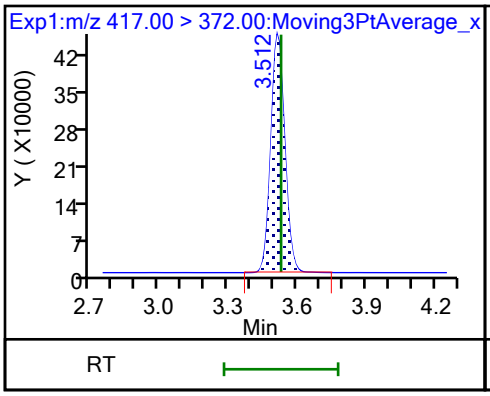
15 Perfluorooctanoic acid (M)



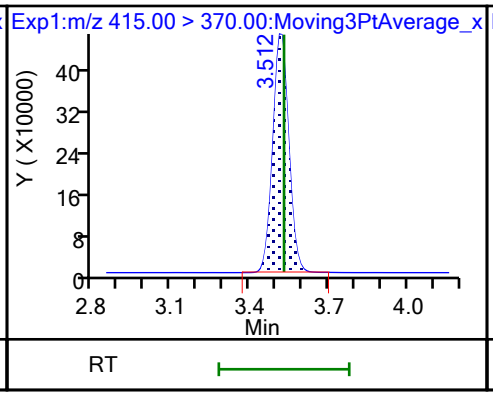
15 Perfluorooctanoic acid (M)



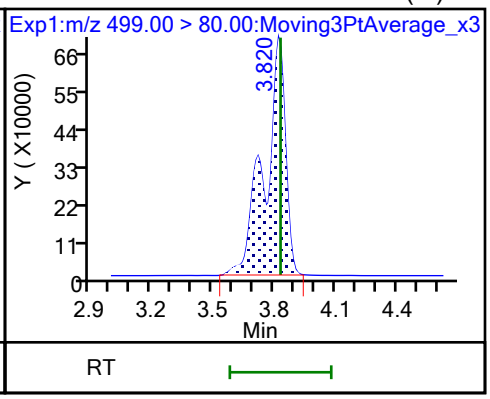
D 14 13C4 PFOA



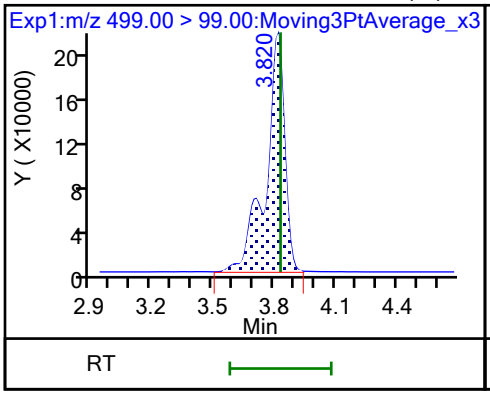
* 62 13C2 PFOA



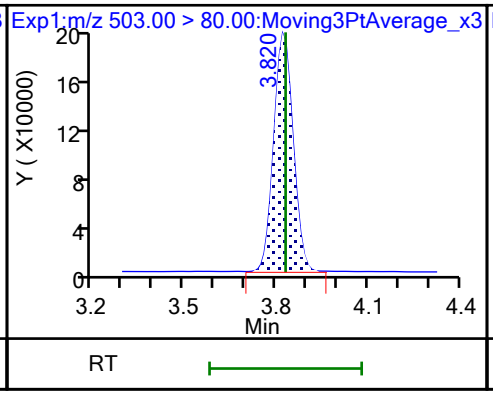
17 Perfluorooctanesulfonic acid (M)



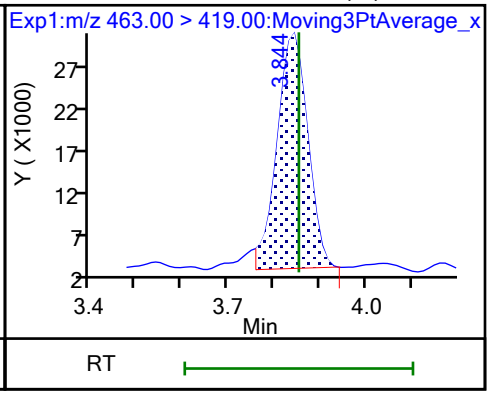
17 Perfluorooctanesulfonic acid (M)



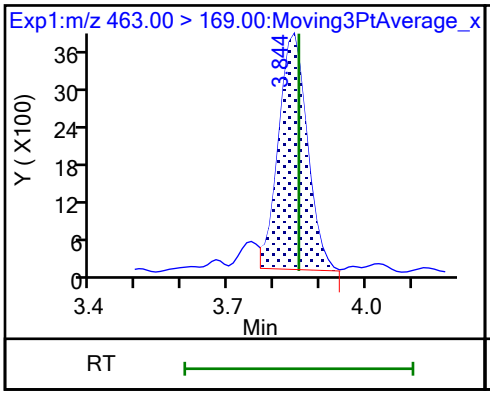
D 18 13C4 PFOS



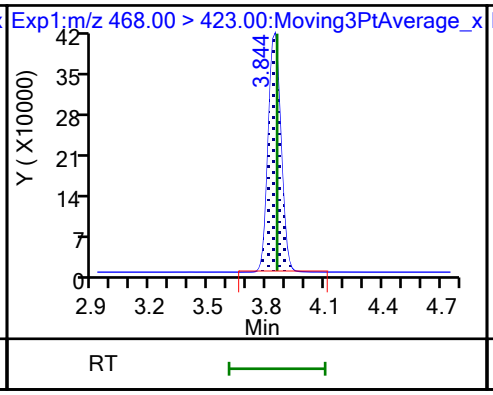
20 Perfluorononanoic acid (M)



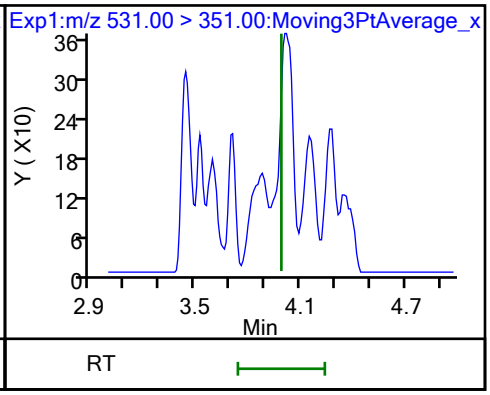
20 Perfluorononanoic acid



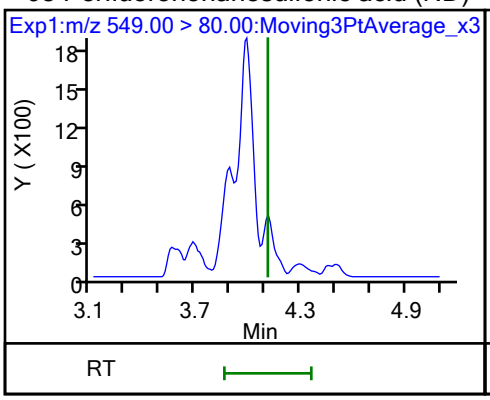
D 19 13C5 PFNA



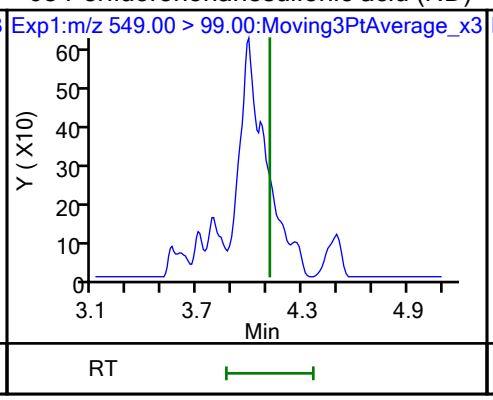
69 9-Chlorohexadecafluoro-3-oxanona (ND)



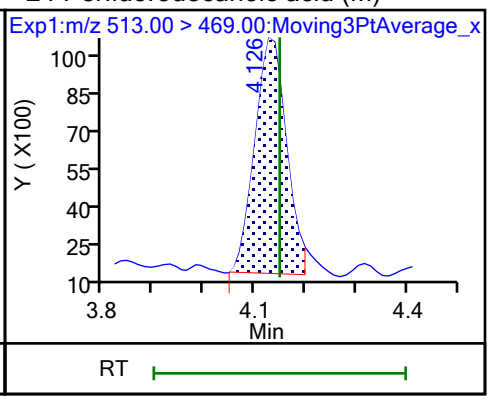
68 Perfluorononanesulfonic acid (ND)



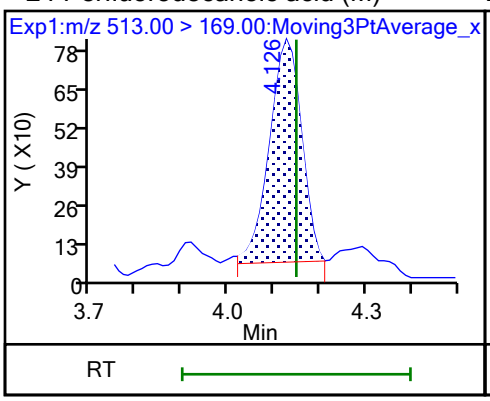
68 Perfluorononanesulfonic acid (ND)



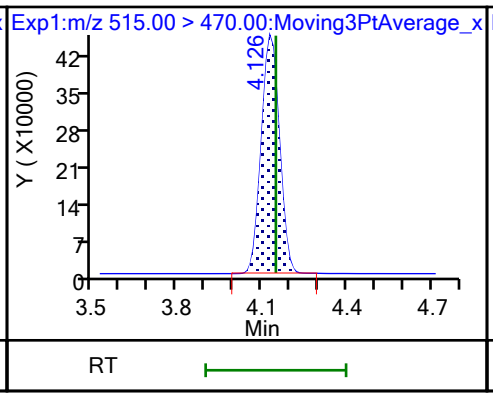
24 Perfluorodecanoic acid (M)



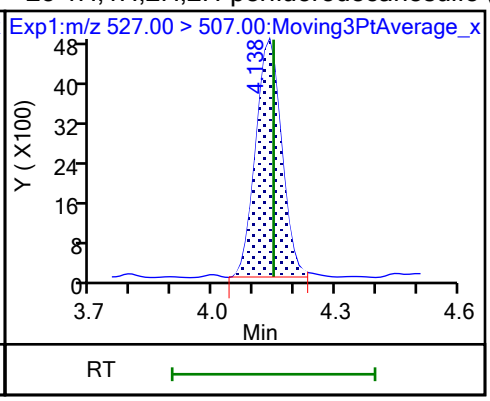
24 Perfluorodecanoic acid (M)



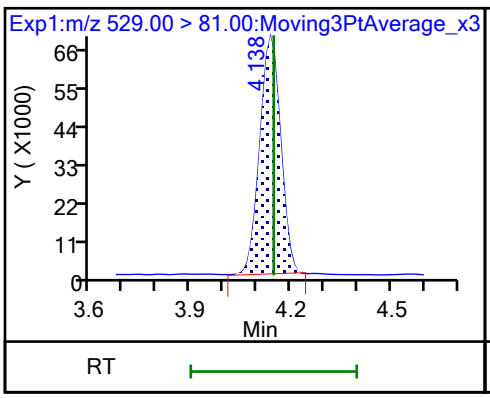
D 23 13C2 PFDA



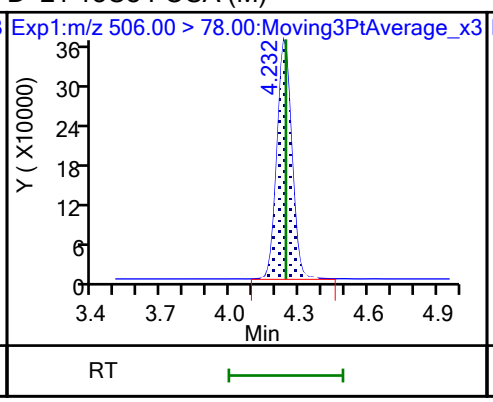
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



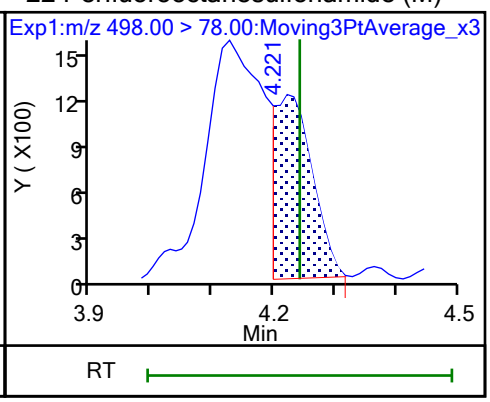
D 26 M2-8:2 FTS



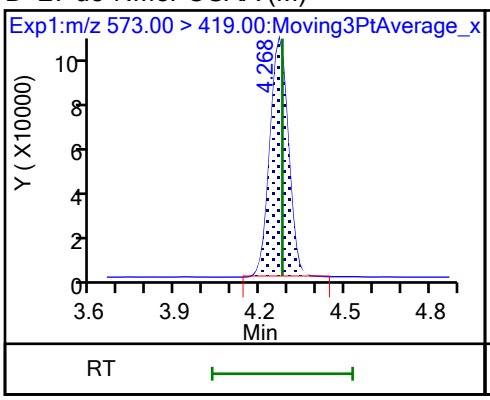
D 21 13C8 FOSA (M)



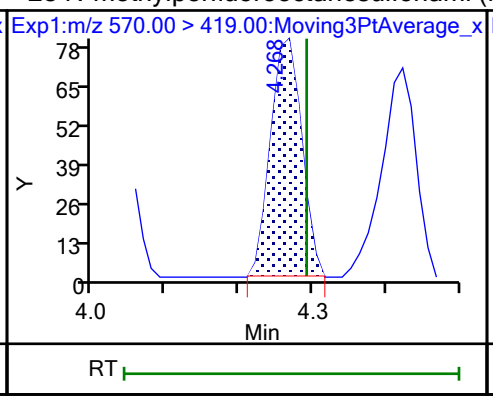
22 Perfluorooctanesulfonamide (M)



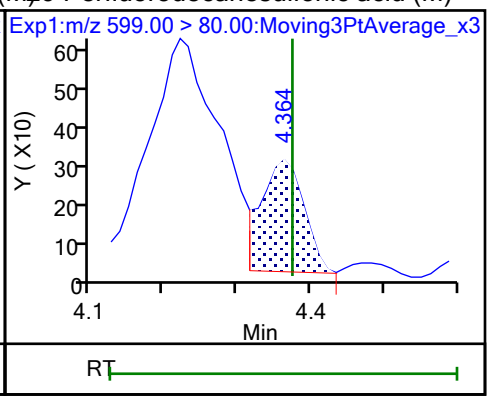
D 27 d3-NMeFOSAA (M)



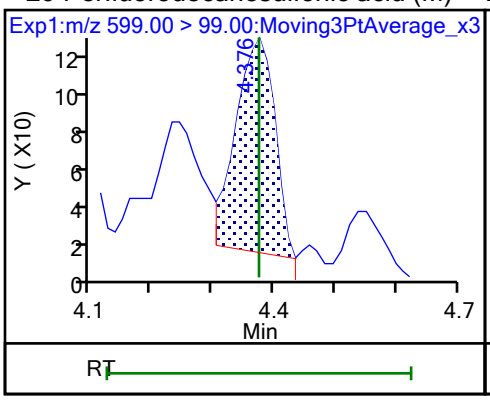
28 N-methylperfluorooctanesulfonami (M)



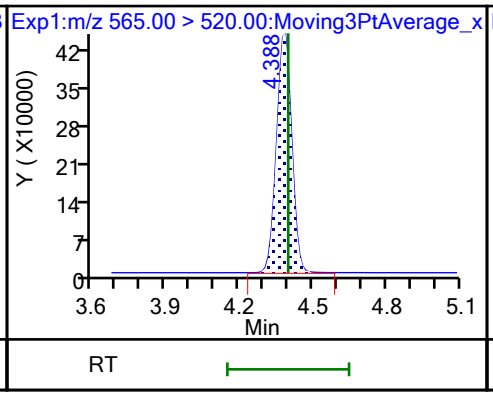
29 Perfluorodecanesulfonic acid (M)



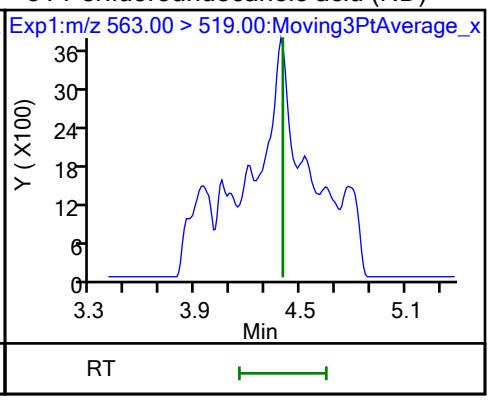
29 Perfluorodecanesulfonic acid (M)



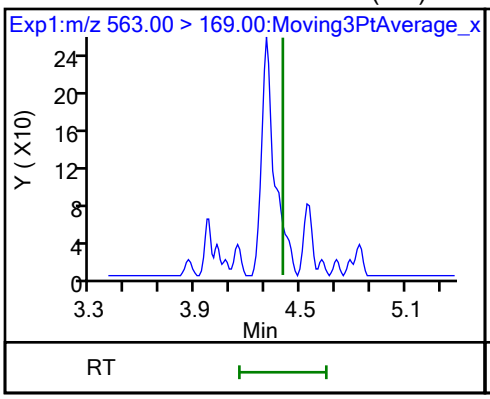
D 30 13C2 PFUnA



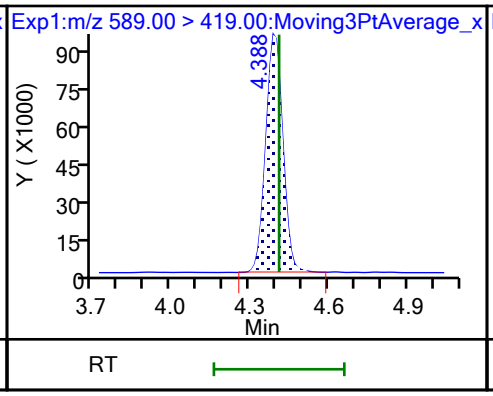
31 Perfluoroundecanoic acid (ND)



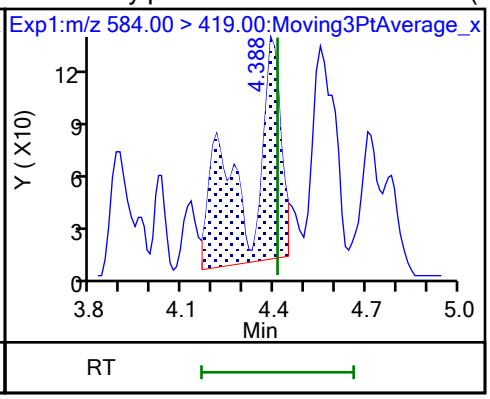
31 Perfluoroundecanoic acid (ND)



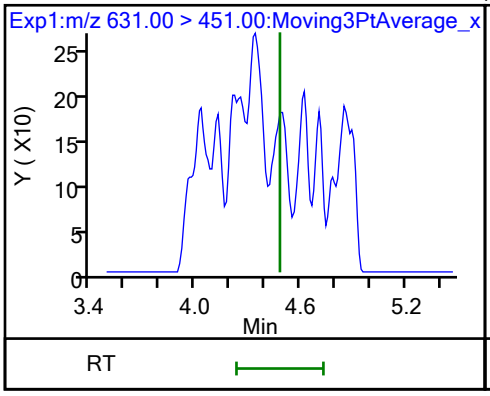
D 32 d5-NEtFOSAA



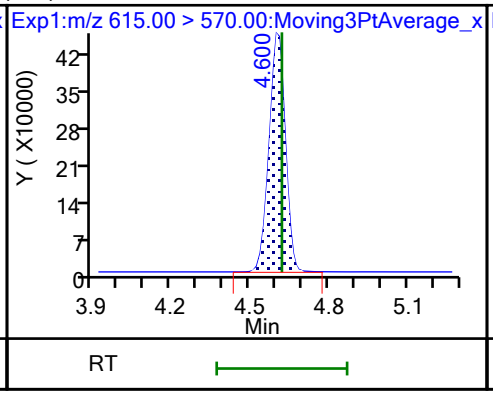
33 N-ethylperfluorooctanesulfonamid (M)



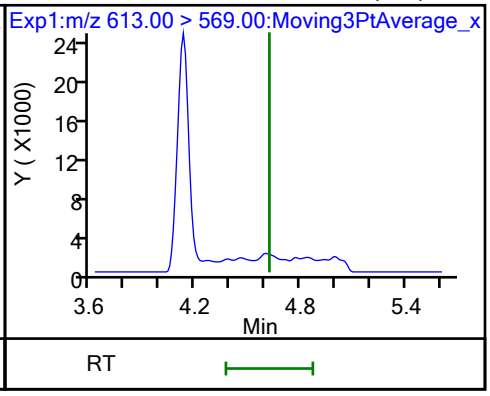
66 11-Chloroeicosafluoro-3-oxaundec (ND)



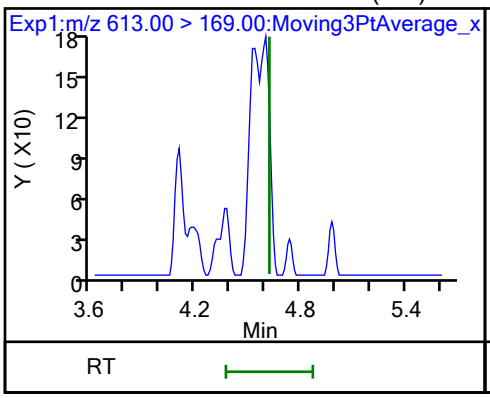
D 36 13C2 PFDoA



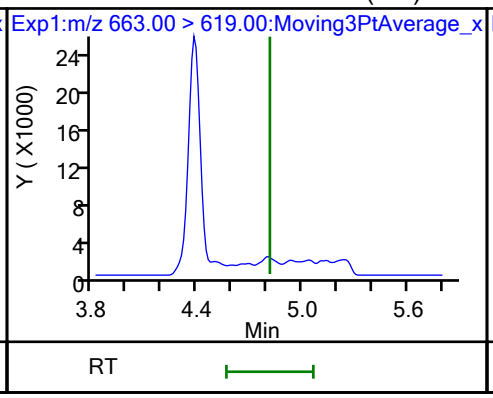
37 Perfluorododecanoic acid (ND)



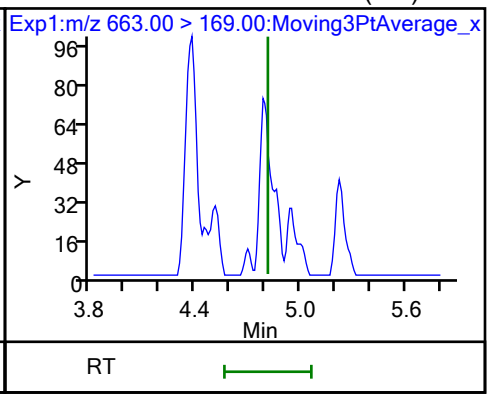
37 Perfluorododecanoic acid (ND)



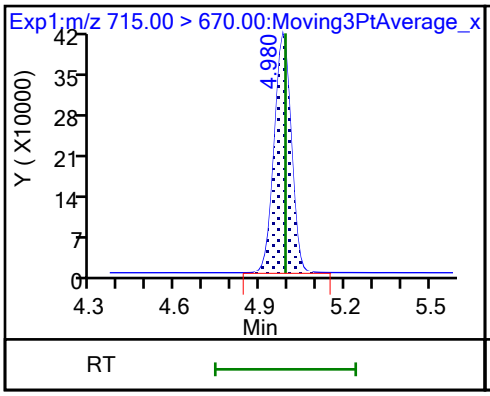
41 Perfluorotridecanoic acid (ND)



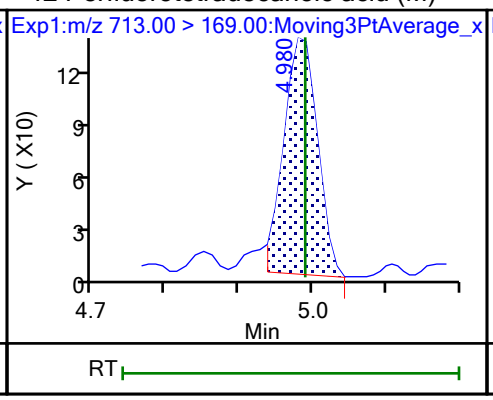
41 Perfluorotridecanoic acid (ND)



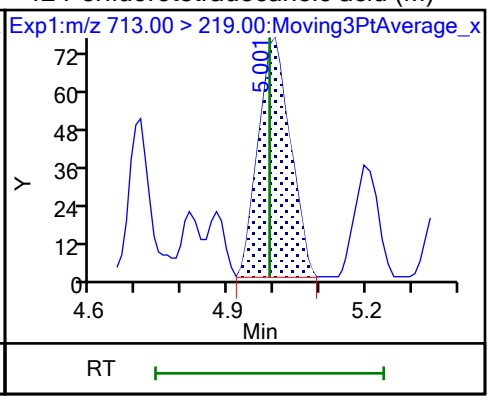
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

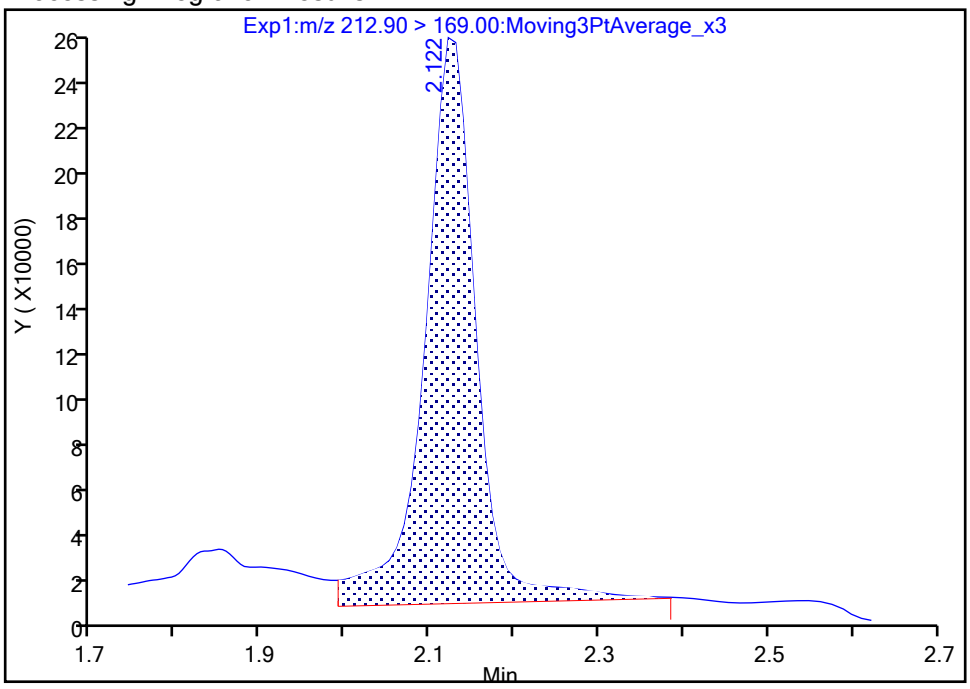
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

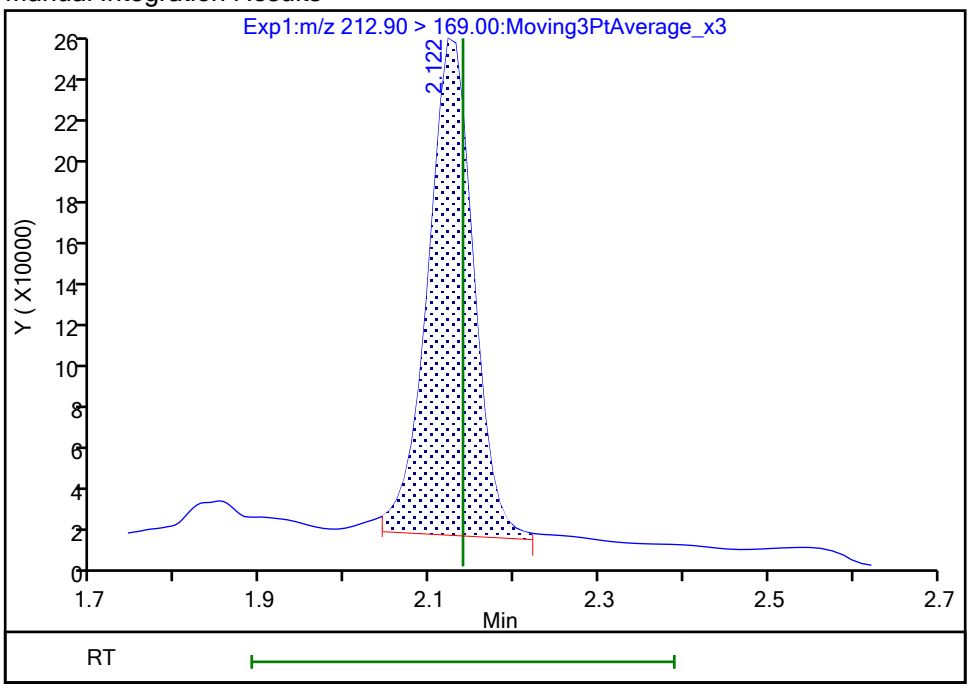
Processing Integration Results

RT: 2.12
Area: 1031020
Amount: 0.806618
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 889430
Amount: 0.690230
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

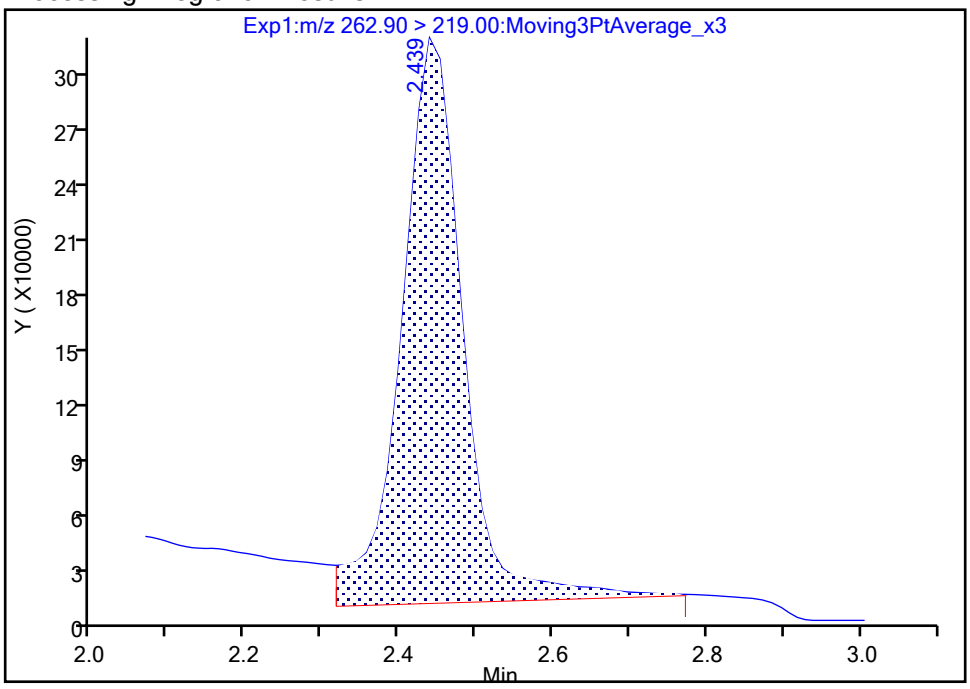
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

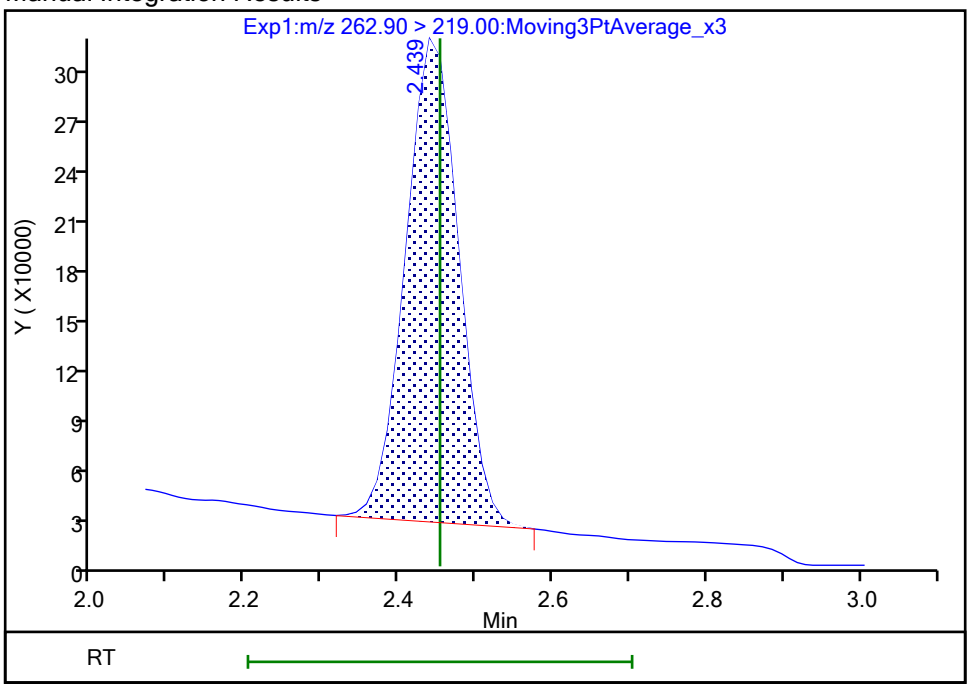
Processing Integration Results

RT: 2.44
Area: 1719729
Amount: 1.453730
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1406326
Amount: 1.188803
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

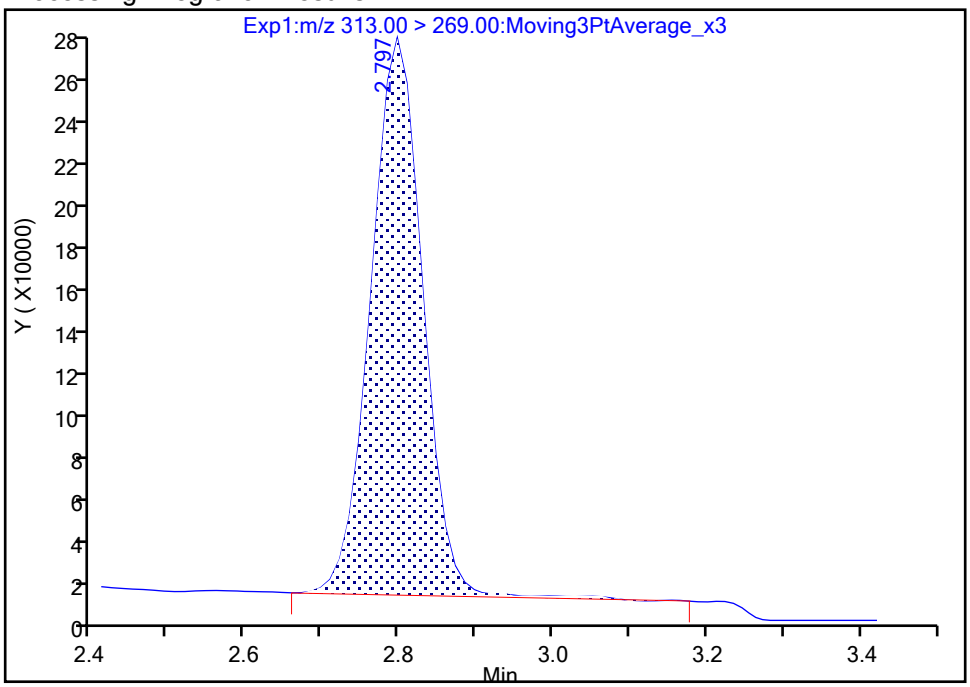
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

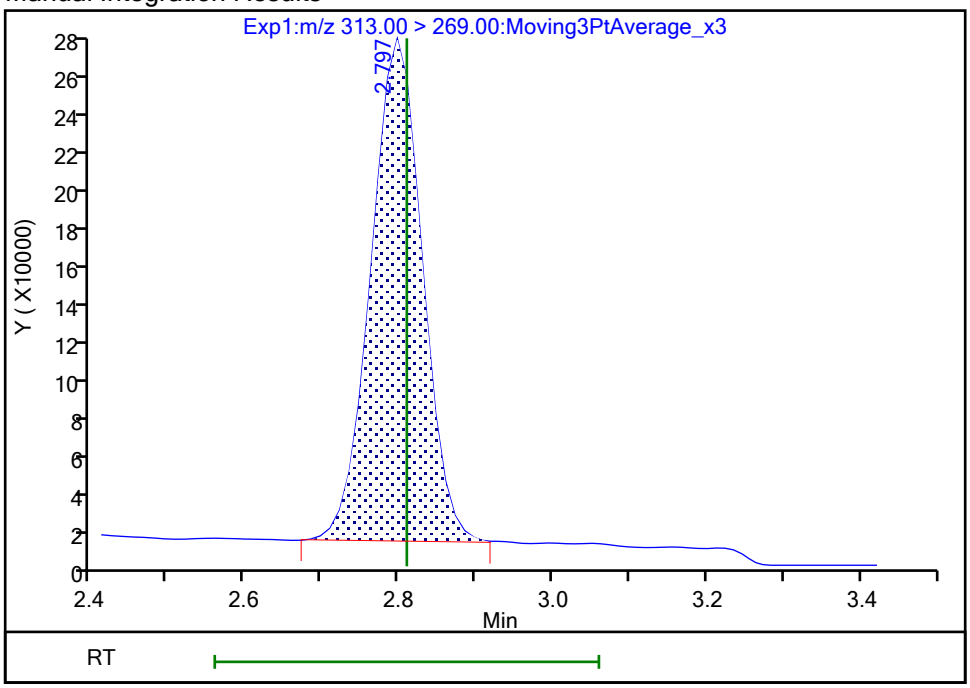
Processing Integration Results

RT: 2.80
Area: 1241466
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1213188
Amount: 1.008746
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

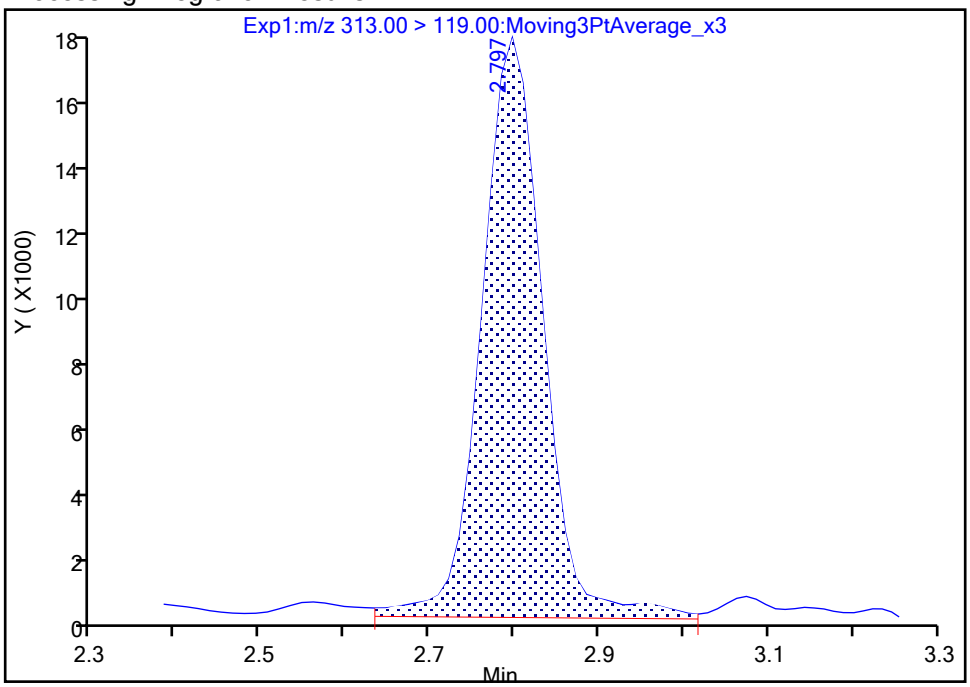
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

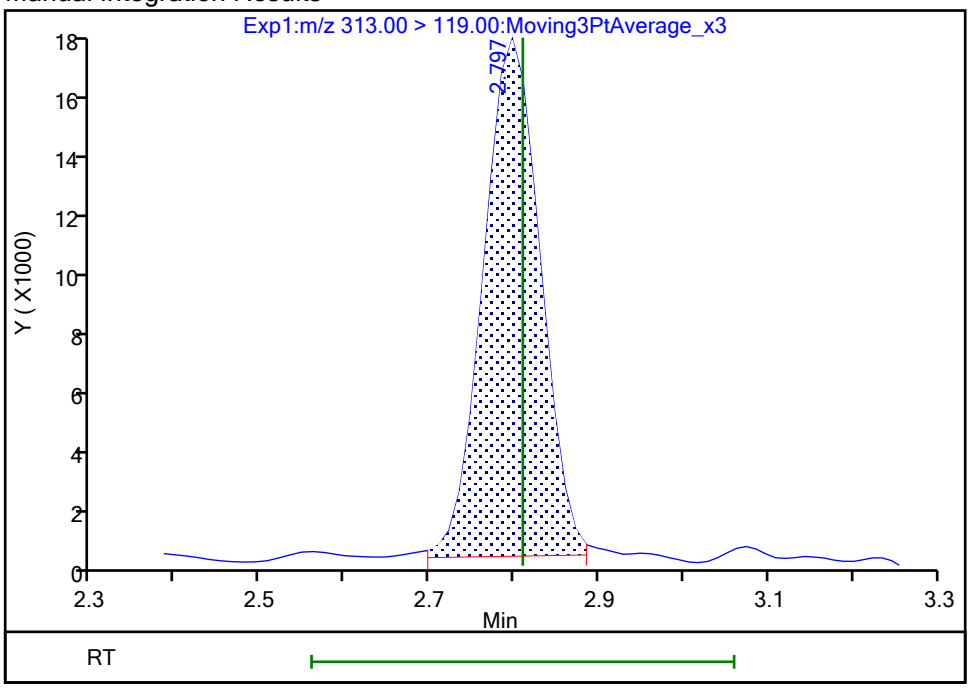
Processing Integration Results

RT: 2.80
Area: 87814
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 79504
Amount: 1.008746
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

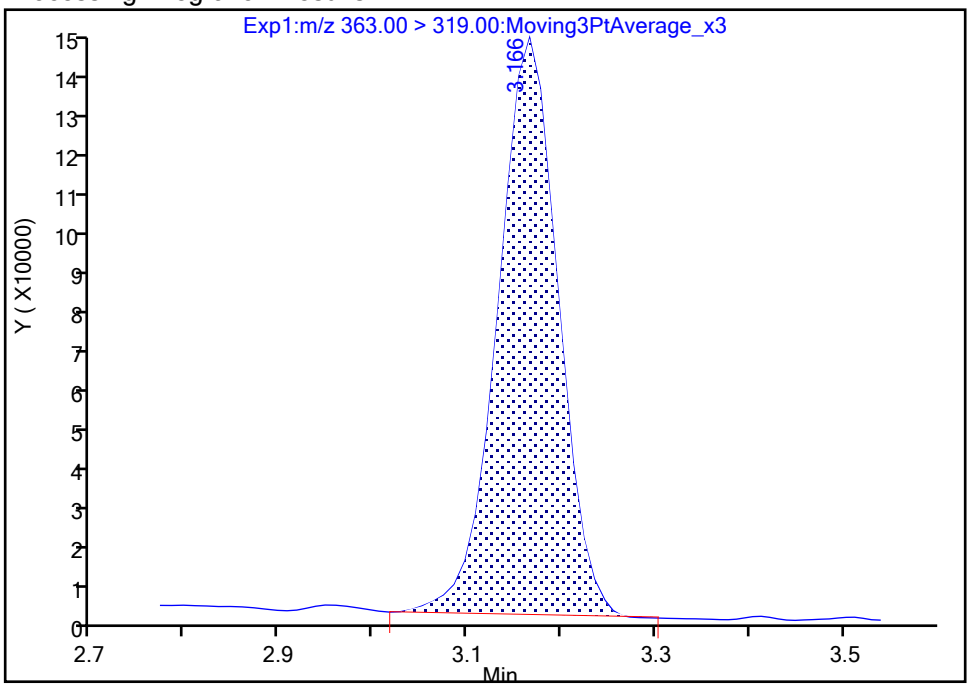
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

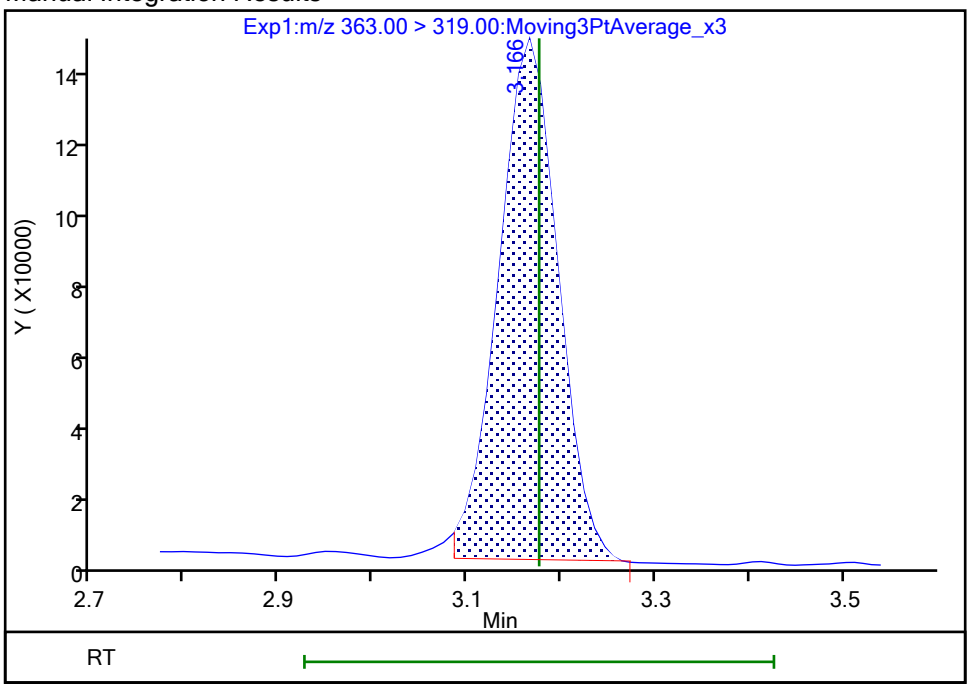
Processing Integration Results

RT: 3.17
Area: 643351
Amount: 0.478831
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 631899
Amount: 0.470308
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:40:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

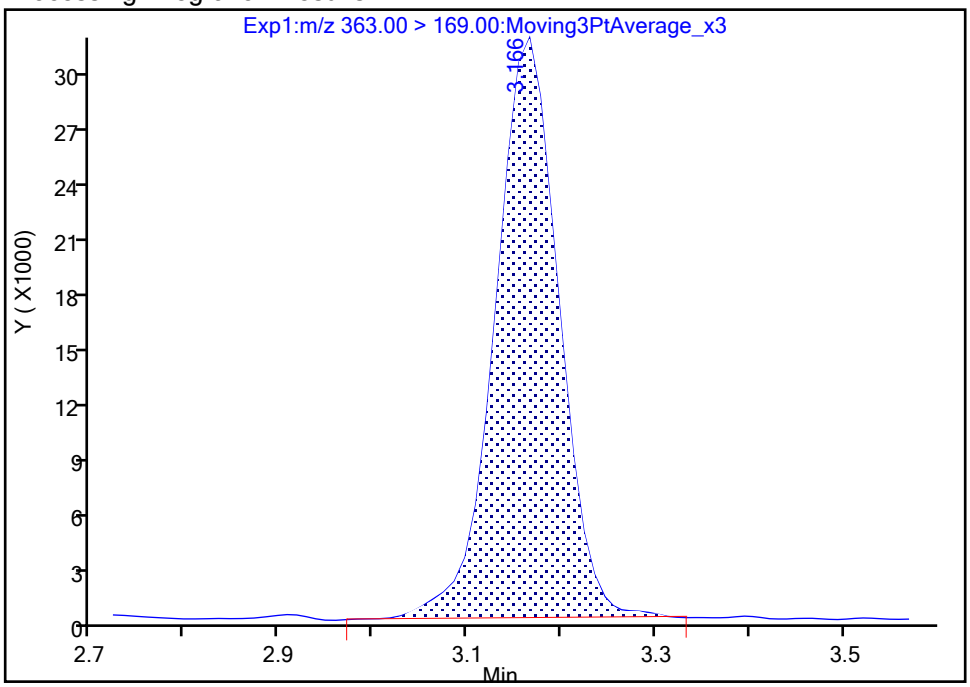
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

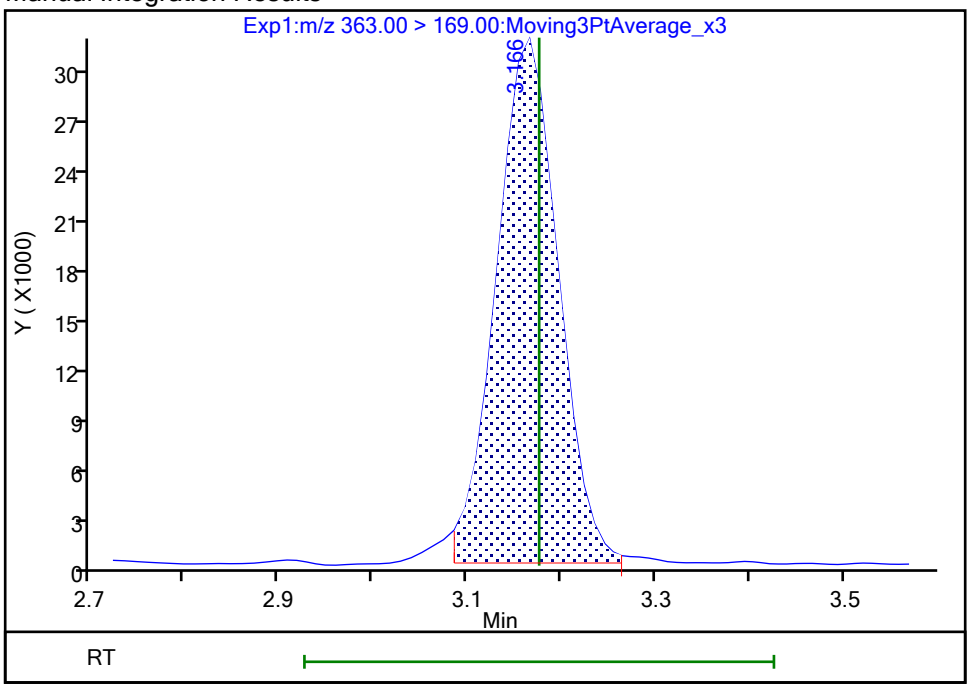
Processing Integration Results

RT: 3.17
Area: 146286
Amount: 0.478831
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 141712
Amount: 0.470308
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:40:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

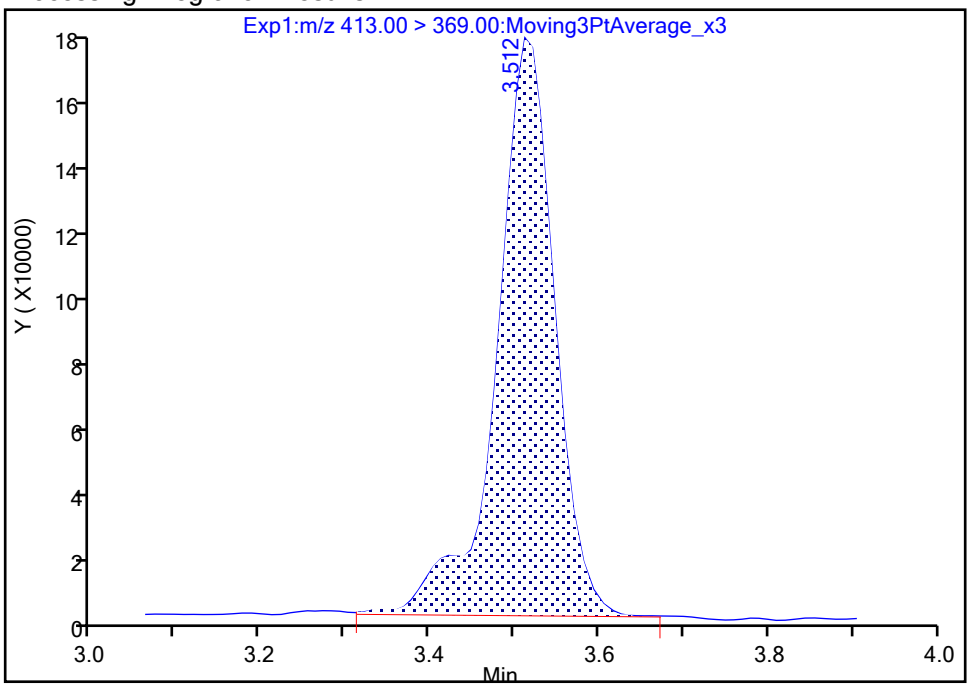
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

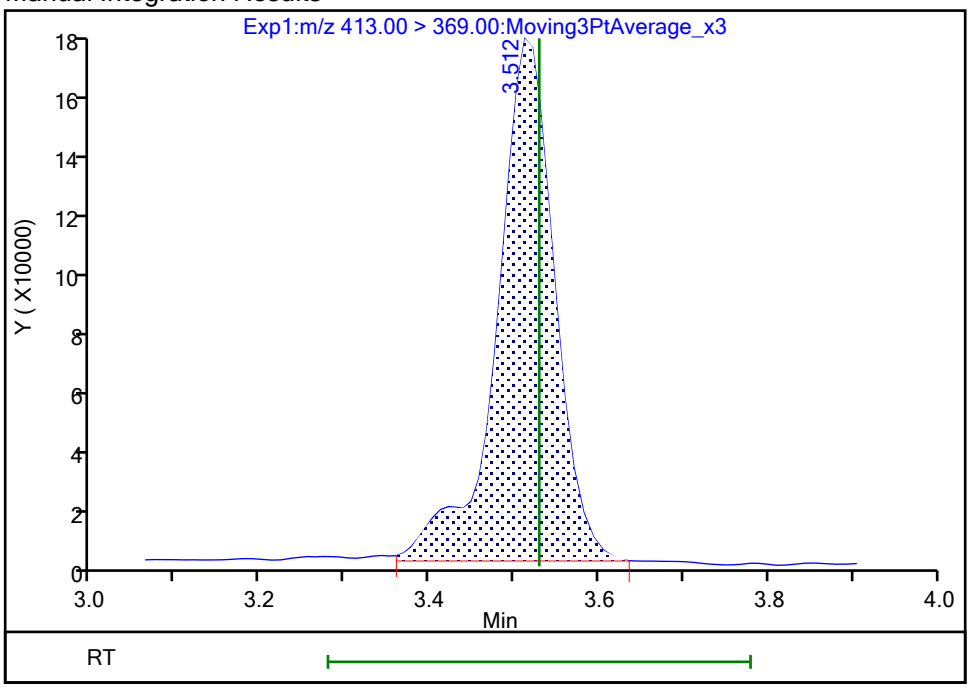
Processing Integration Results

RT: 3.51
Area: 807771
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 802206
Amount: 0.485985
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:41:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

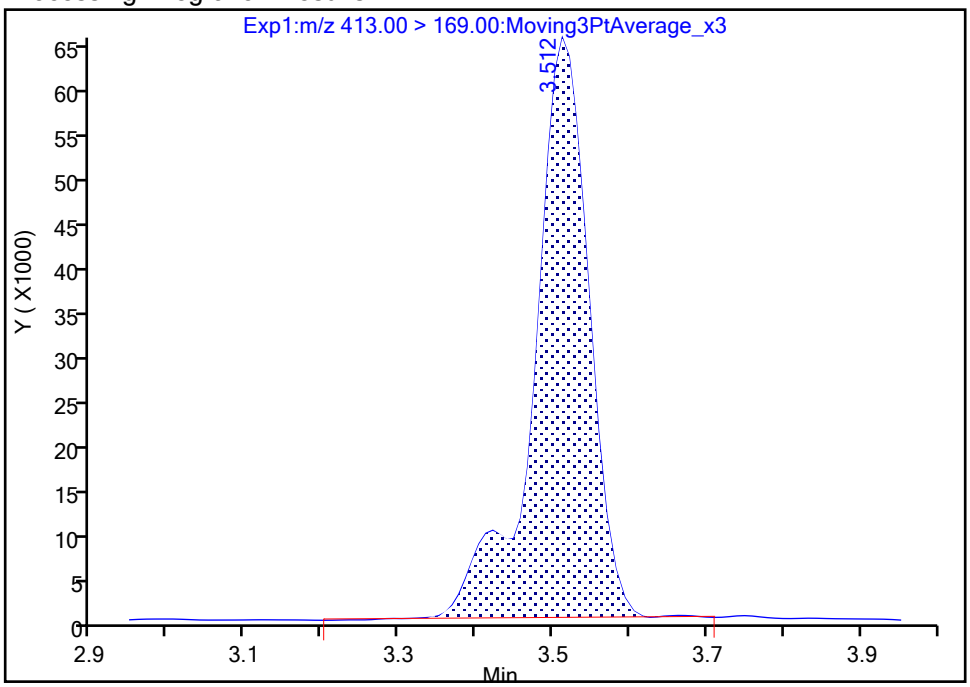
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

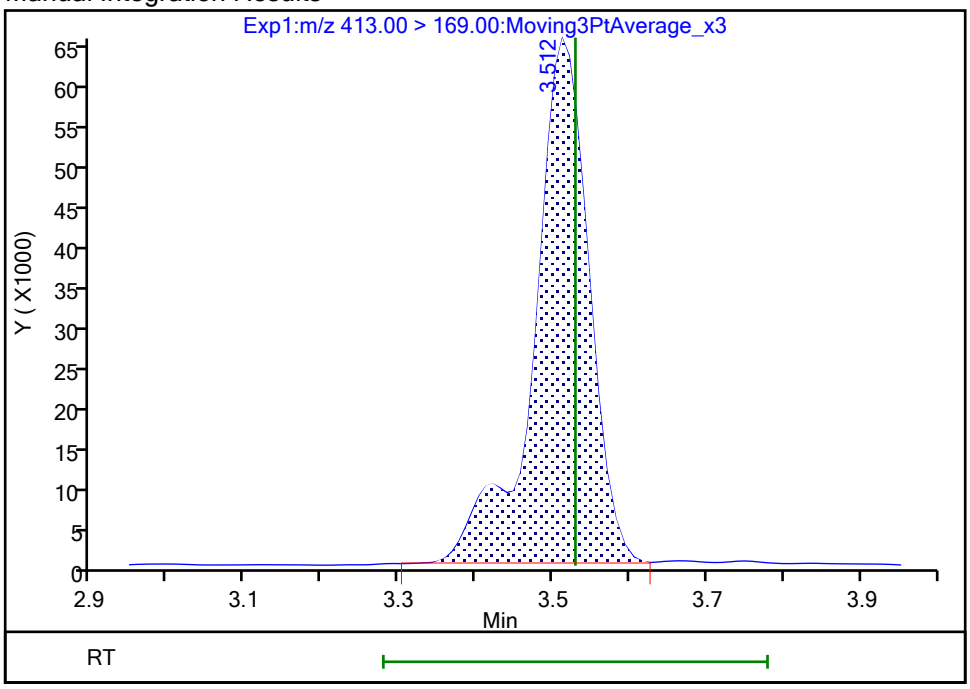
Processing Integration Results

RT: 3.51
Area: 329528
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 326600
Amount: 0.485985
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:41:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

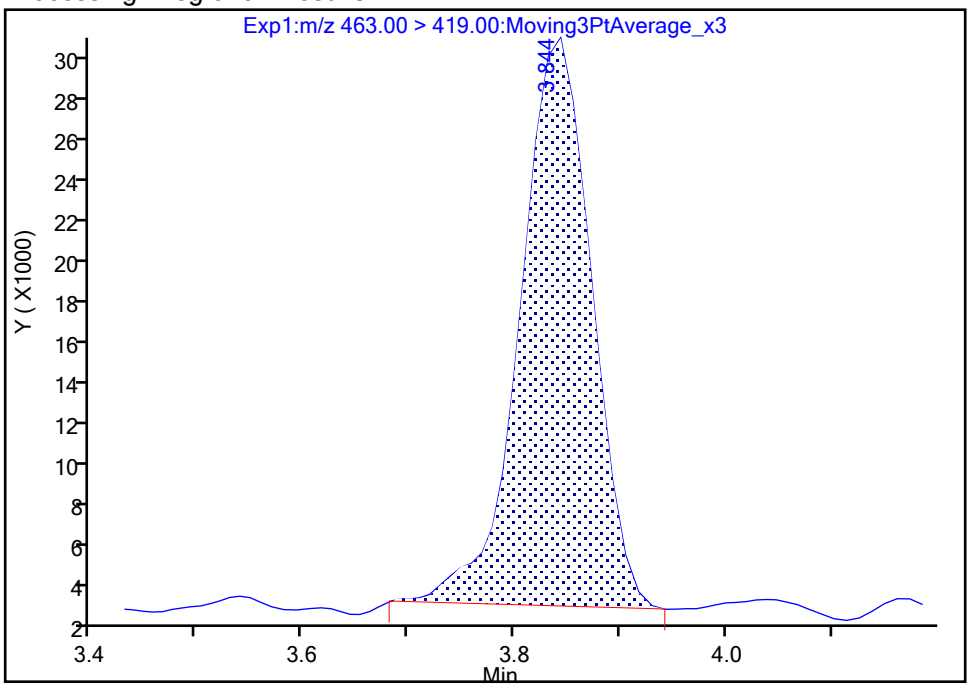
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

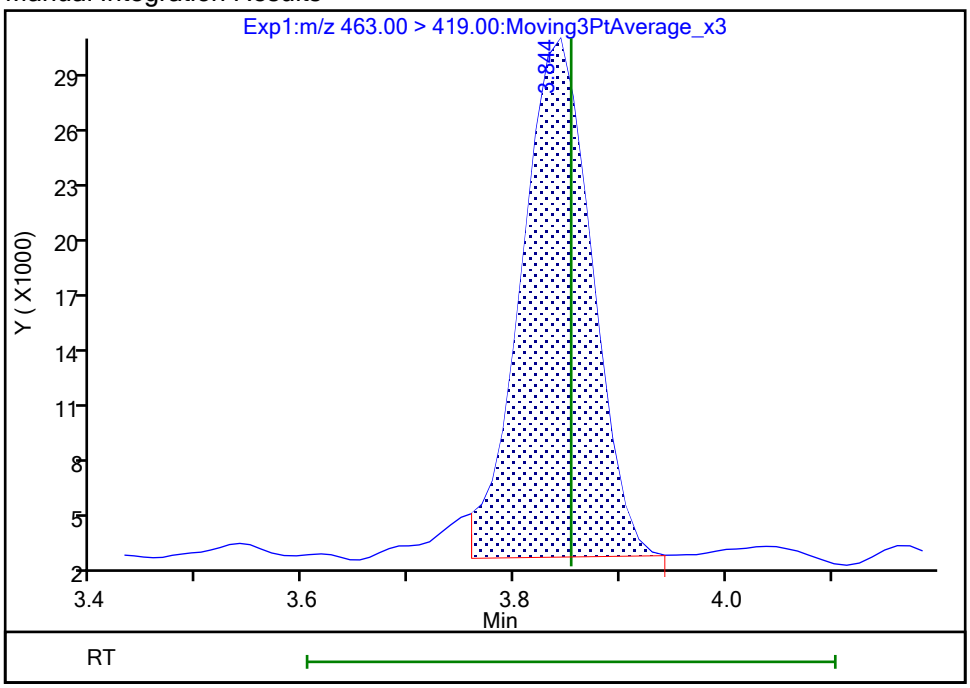
Processing Integration Results

RT: 3.84
Area: 129447
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 128129
Amount: 0.085588
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:43:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

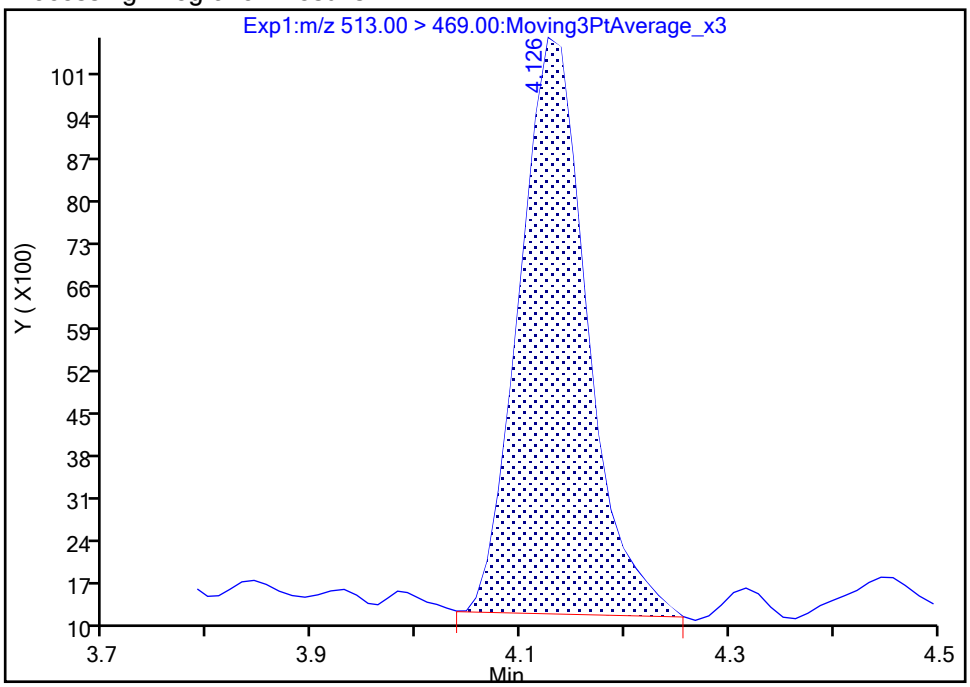
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

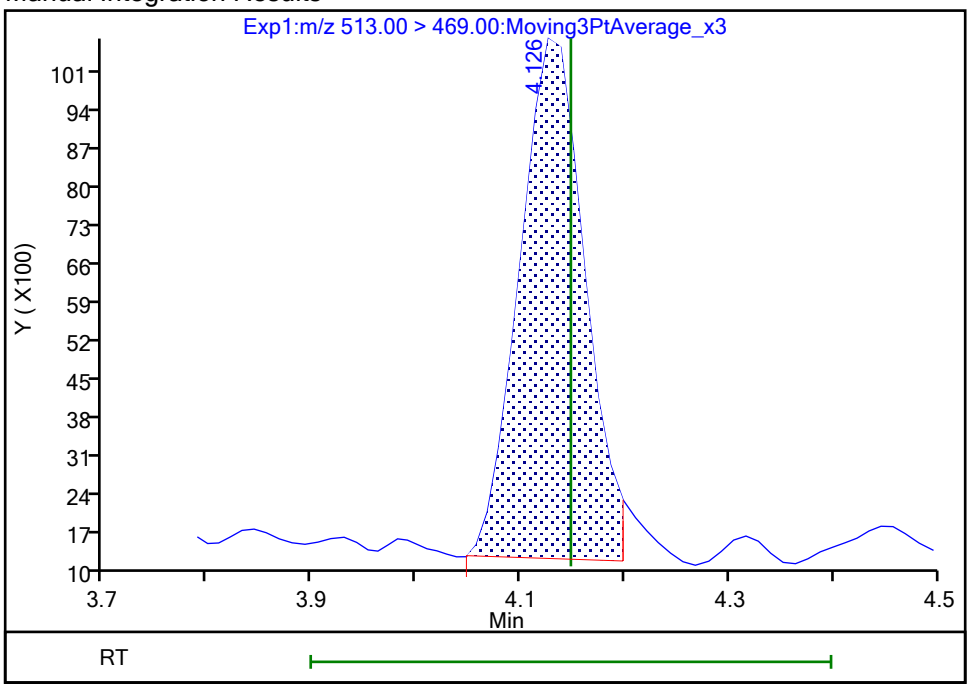
Processing Integration Results

RT: 4.13
Area: 42779
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 41116
Amount: 0.025555
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:43:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

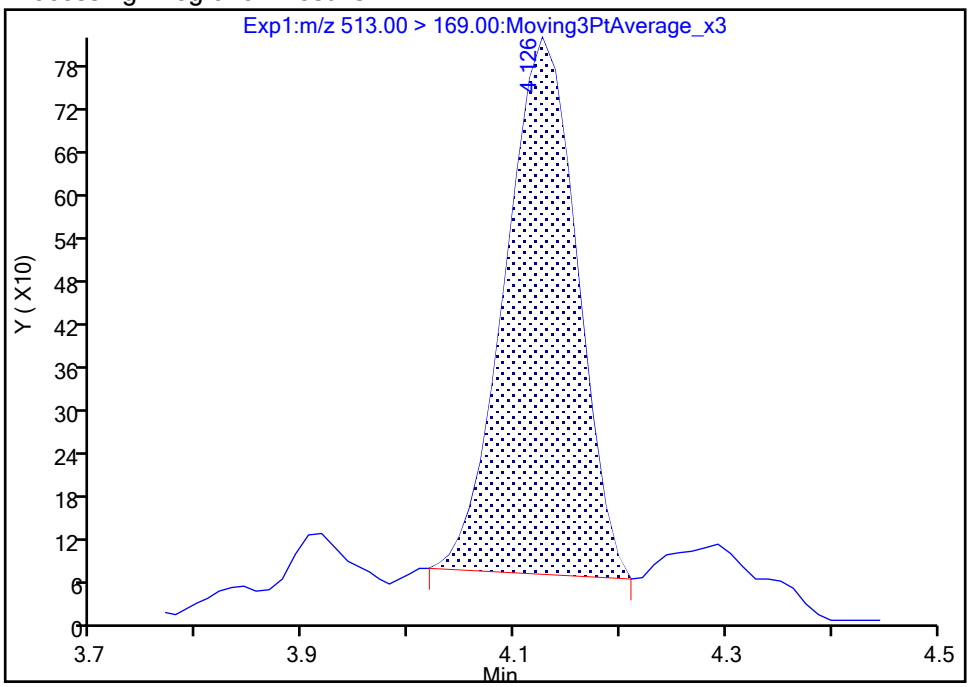
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

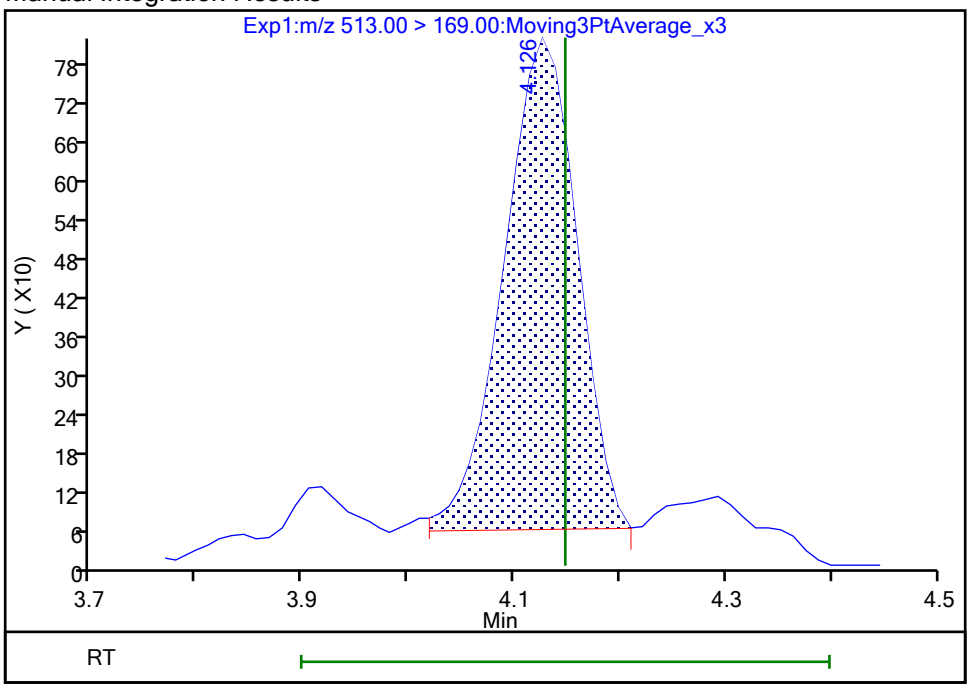
Processing Integration Results

RT: 4.13
Area: 3575
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 3695
Amount: 0.025555
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:43:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

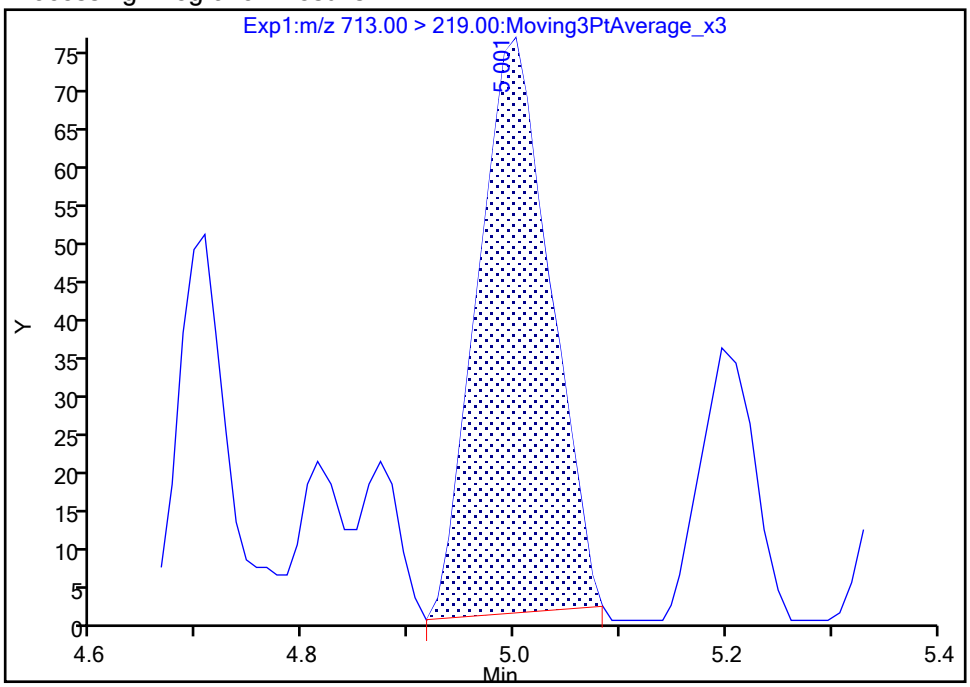
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

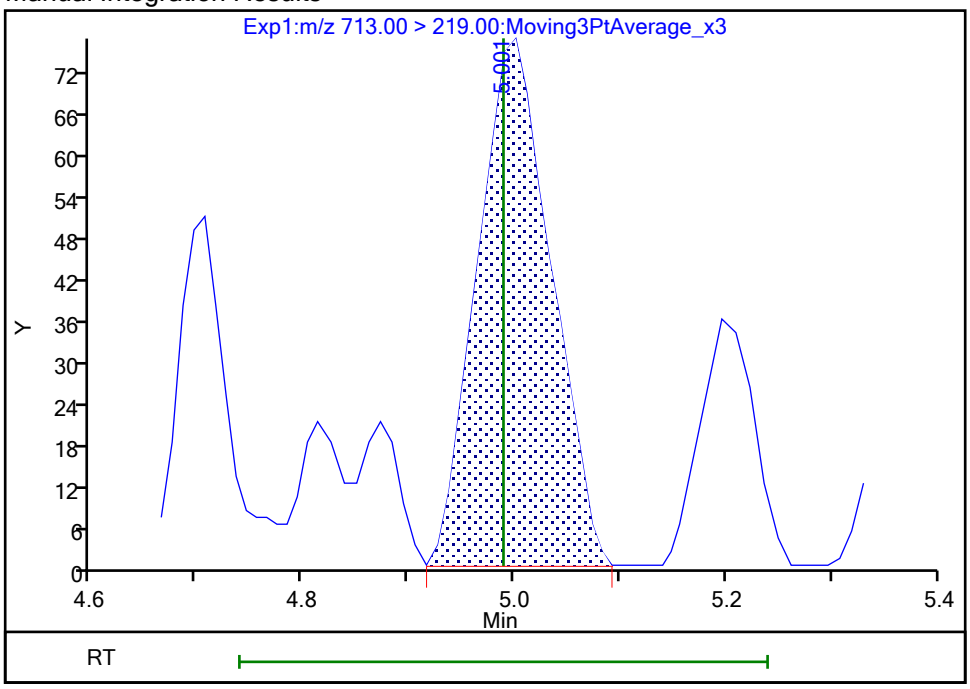
Processing Integration Results

RT: 5.00
Area: 363
Amount: 0.002635
Amount Units: ng/ml



Manual Integration Results

RT: 5.00
Area: 373
Amount: 0.002713
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:44:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

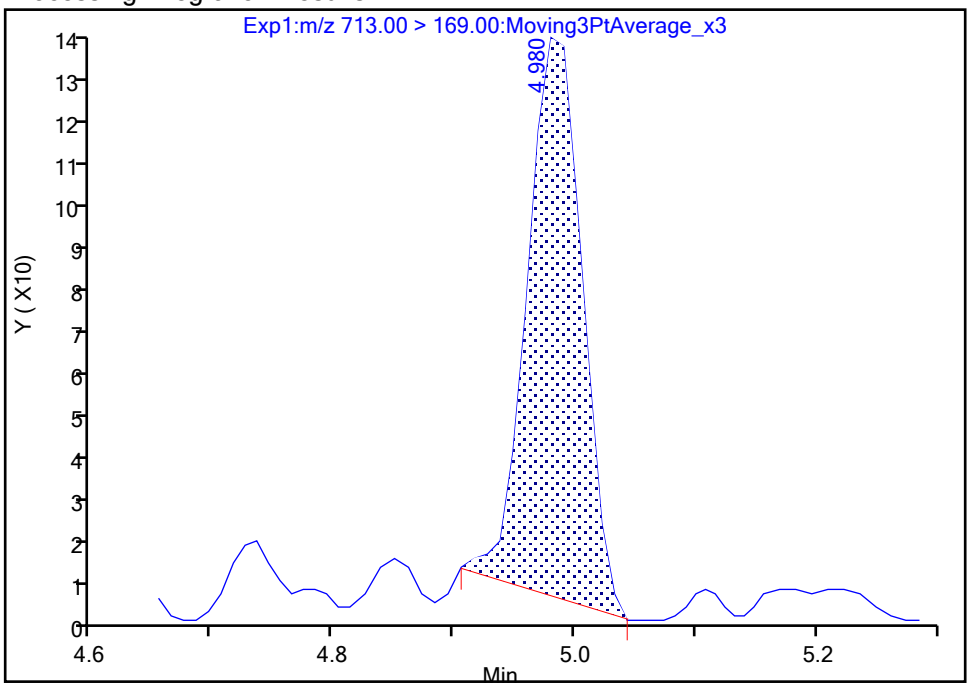
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

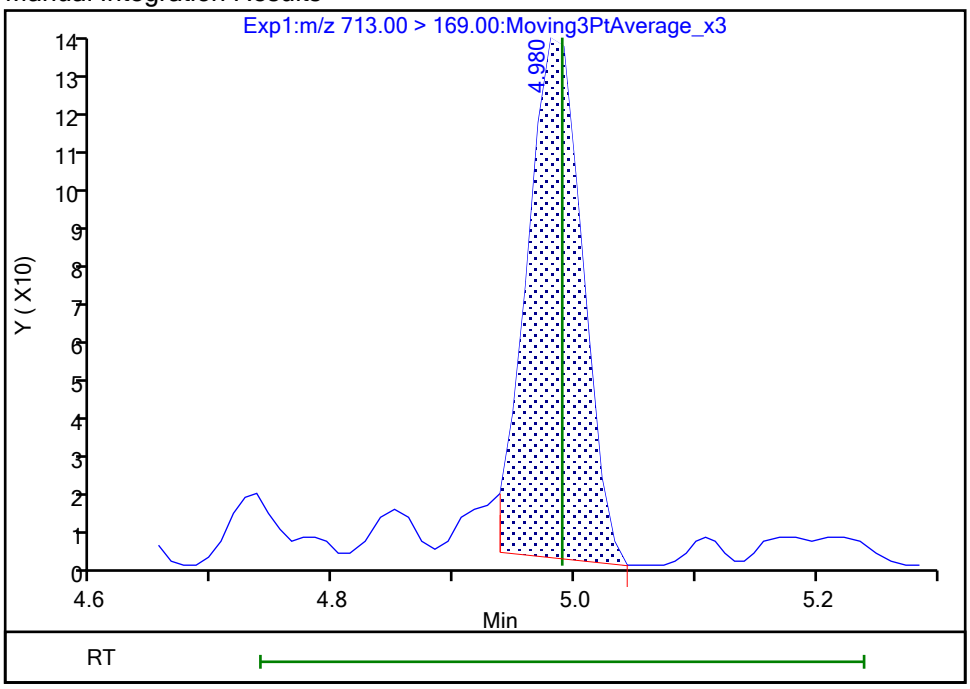
Processing Integration Results

RT: 4.98
Area: 402
Amount: 0.002635
Amount Units: ng/ml



Manual Integration Results

RT: 4.98
Area: 414
Amount: 0.002713
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:44:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

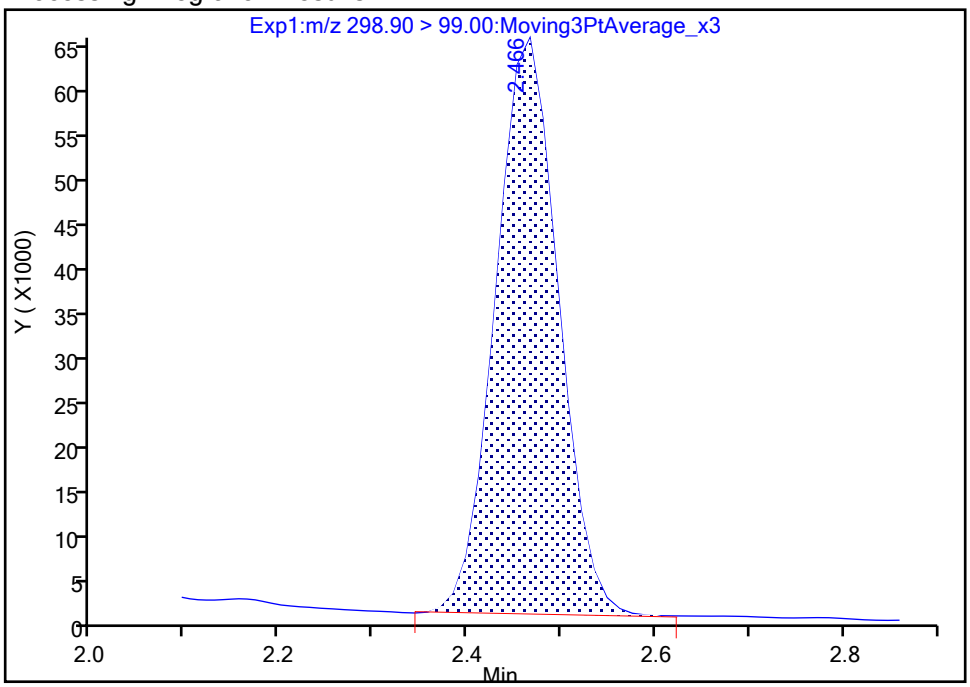
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

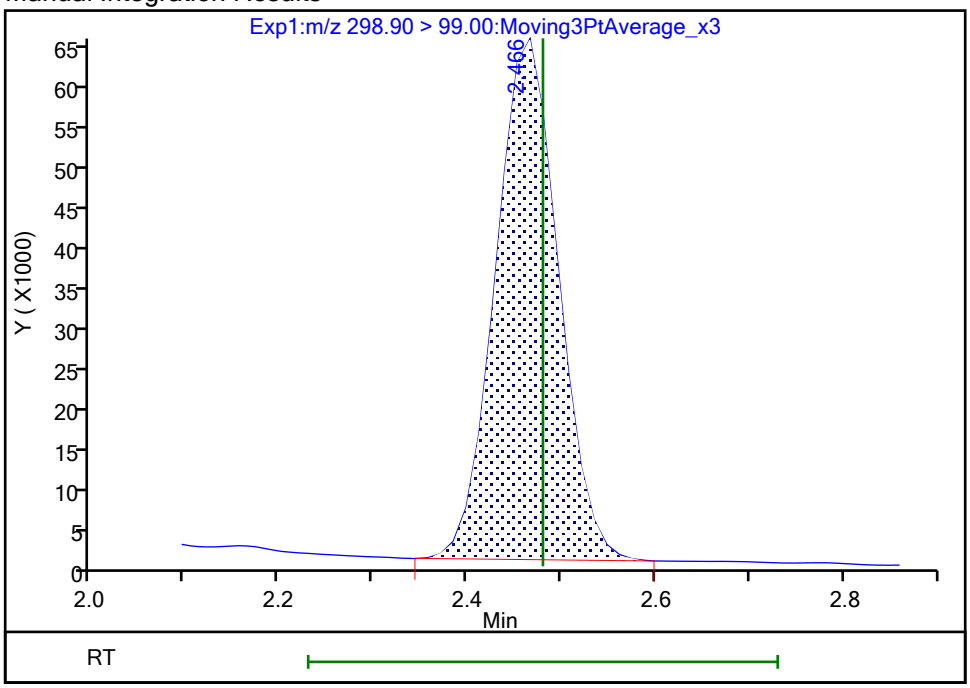
Processing Integration Results

RT: 2.47
Area: 297733
Amount: 0.381255
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 297705
Amount: 0.352248
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

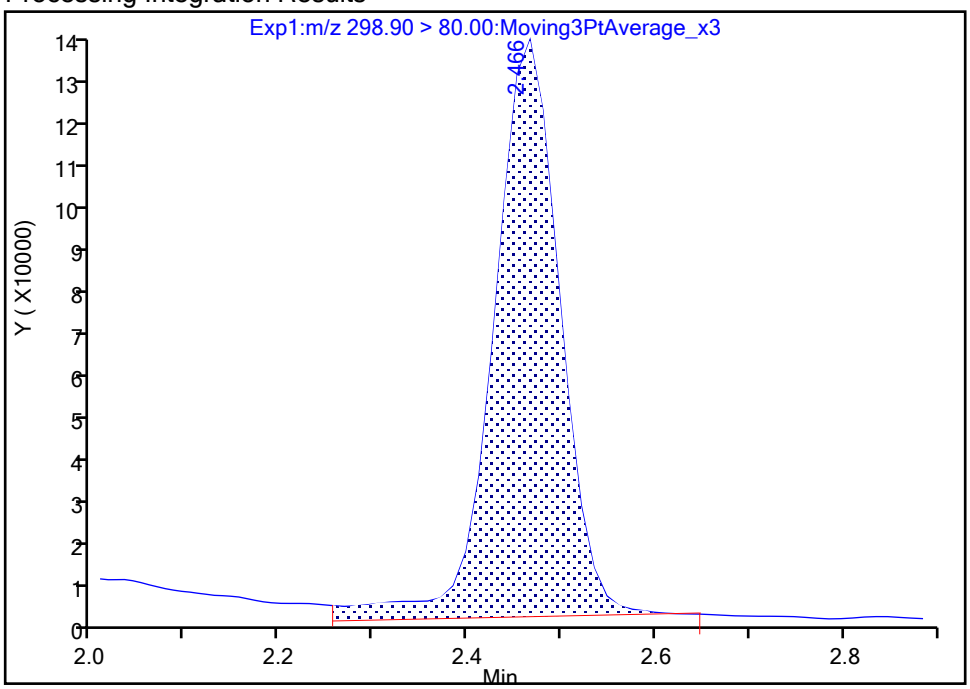
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

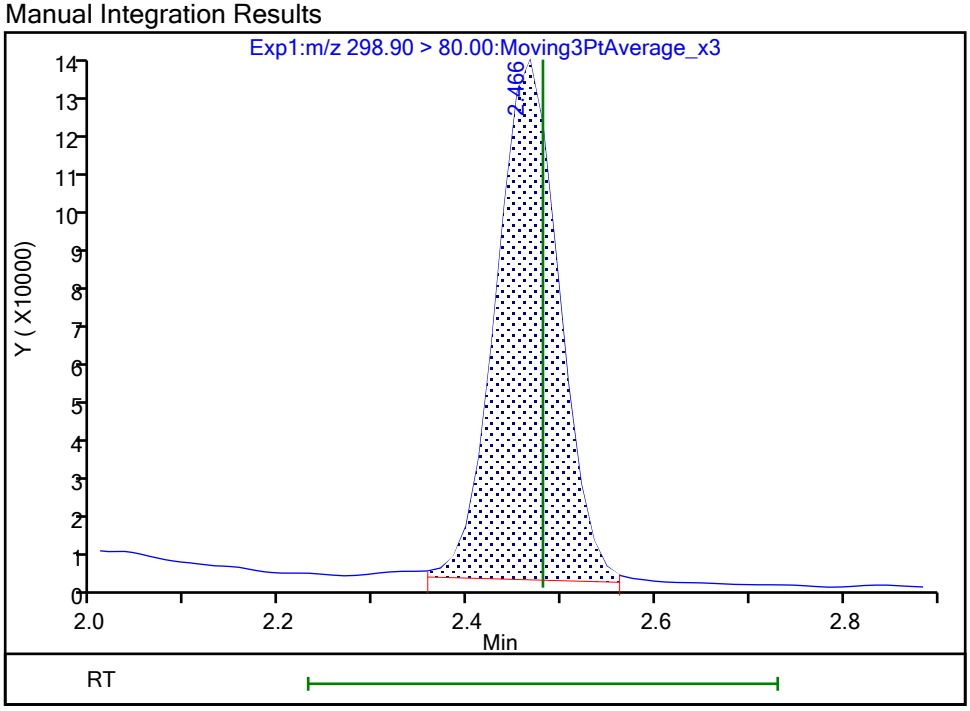
Processing Integration Results

RT: 2.47
Area: 642635
Amount: 0.381255
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 593741
Amount: 0.352248
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

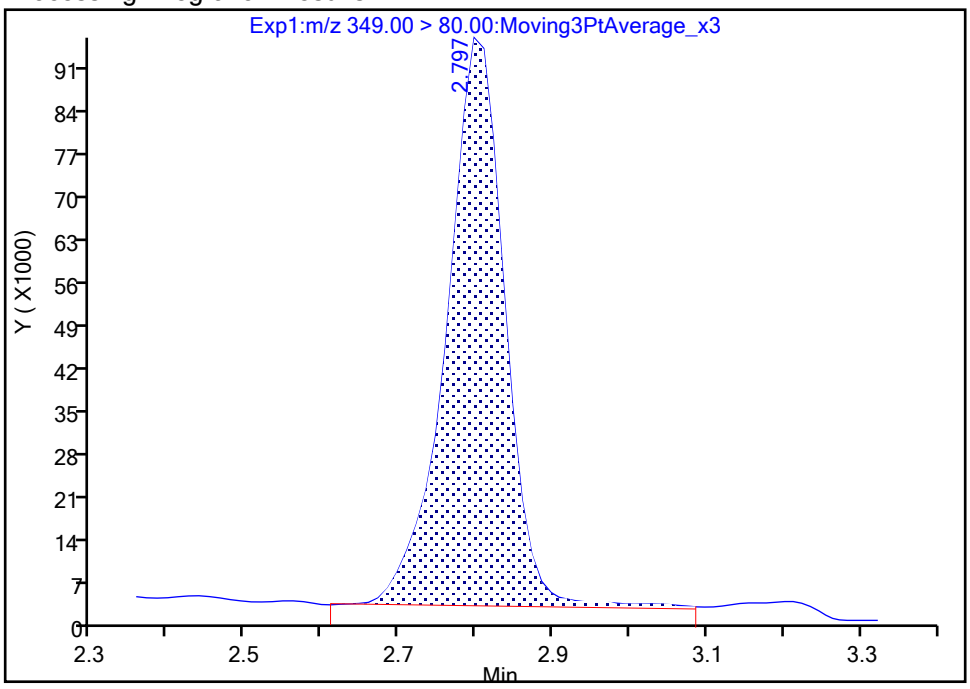
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

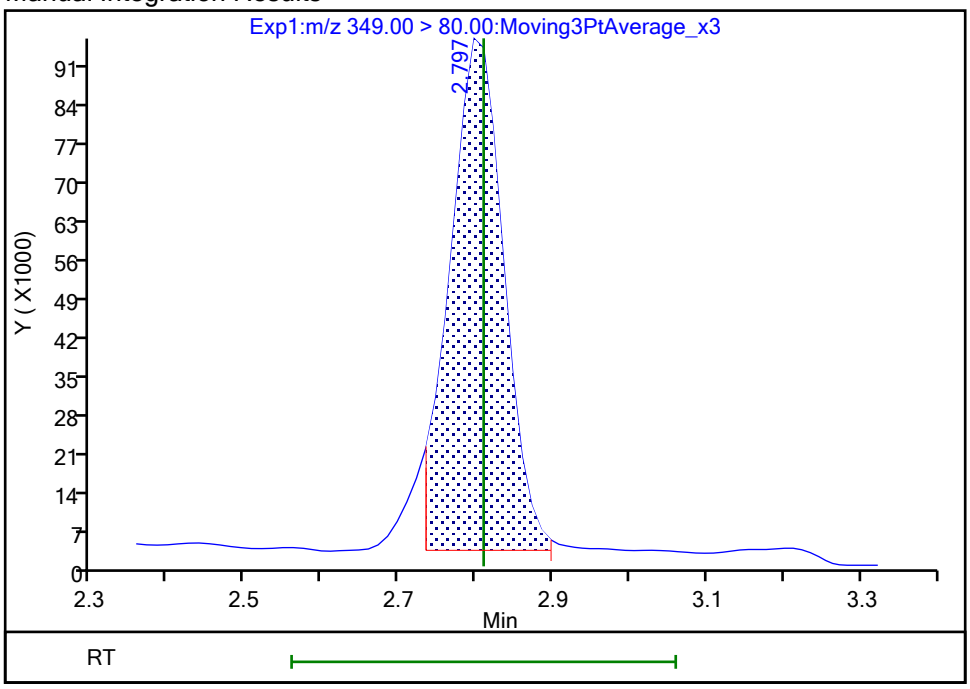
Processing Integration Results

RT: 2.80
Area: 494699
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 446163
Amount: 0.298846
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:39:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

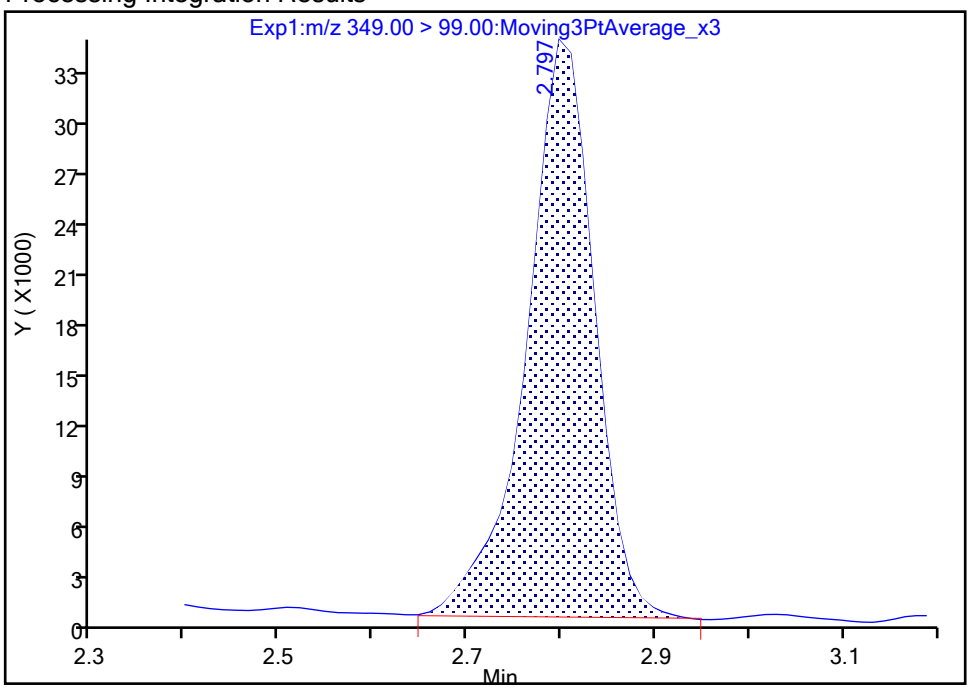
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

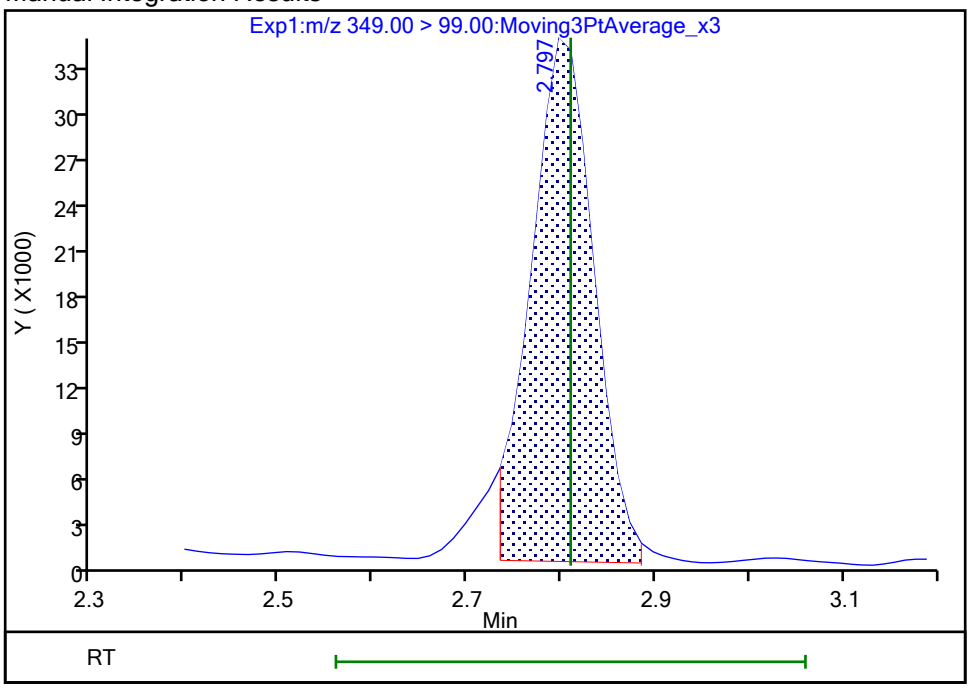
Processing Integration Results

RT: 2.80
Area: 169495
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 156615
Amount: 0.298846
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:39:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

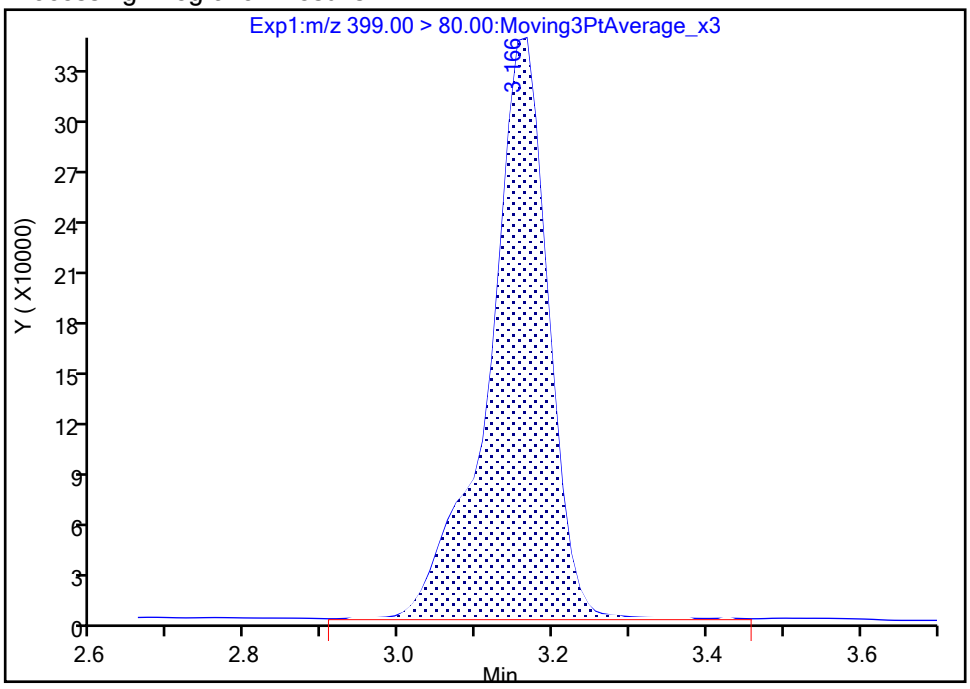
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

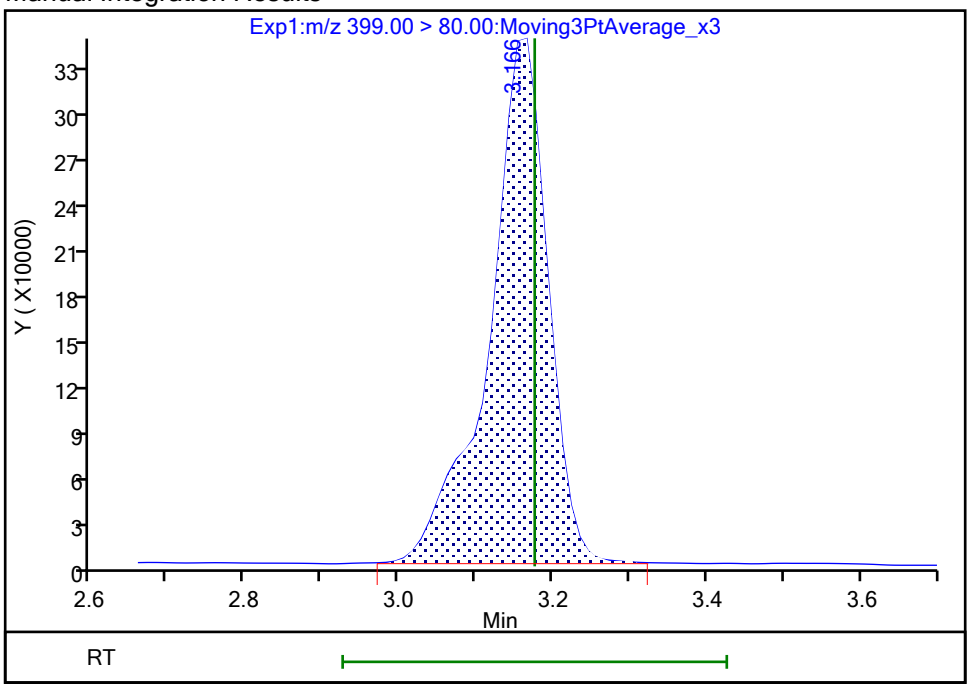
Processing Integration Results

RT: 3.17
Area: 1856001
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1850266
Amount: 1.462033
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:40:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

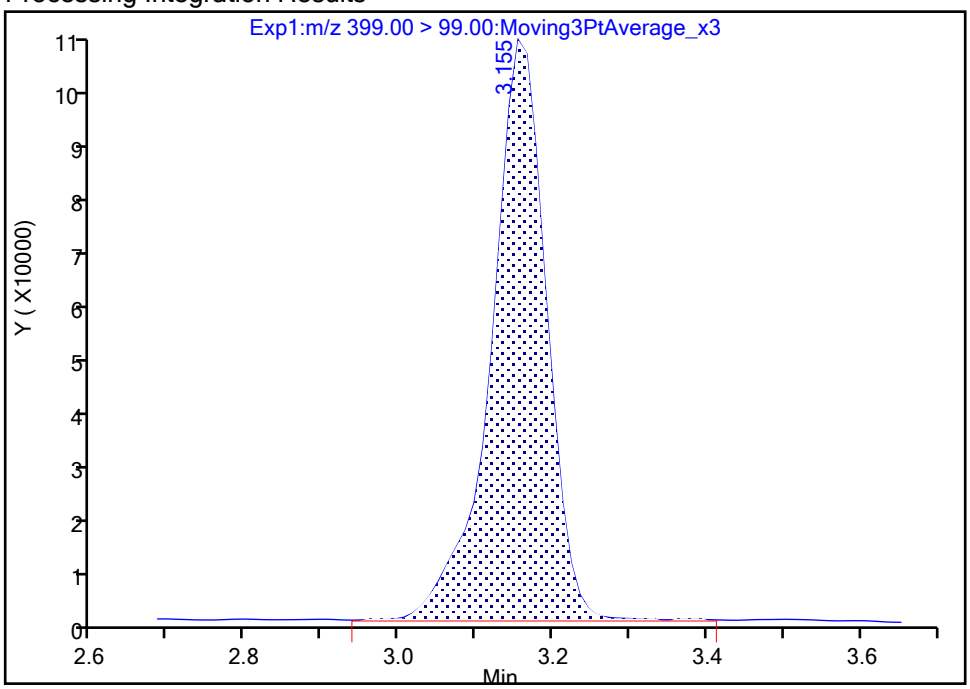
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

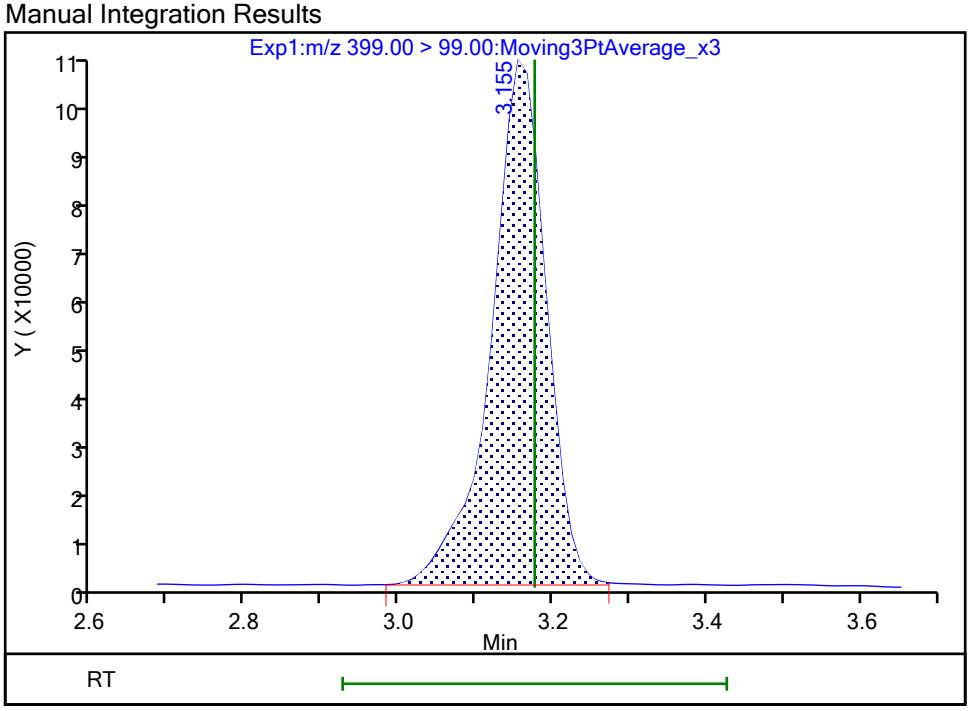
Processing Integration Results

RT: 3.15
Area: 541999
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 539093
Amount: 1.462033
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:40:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

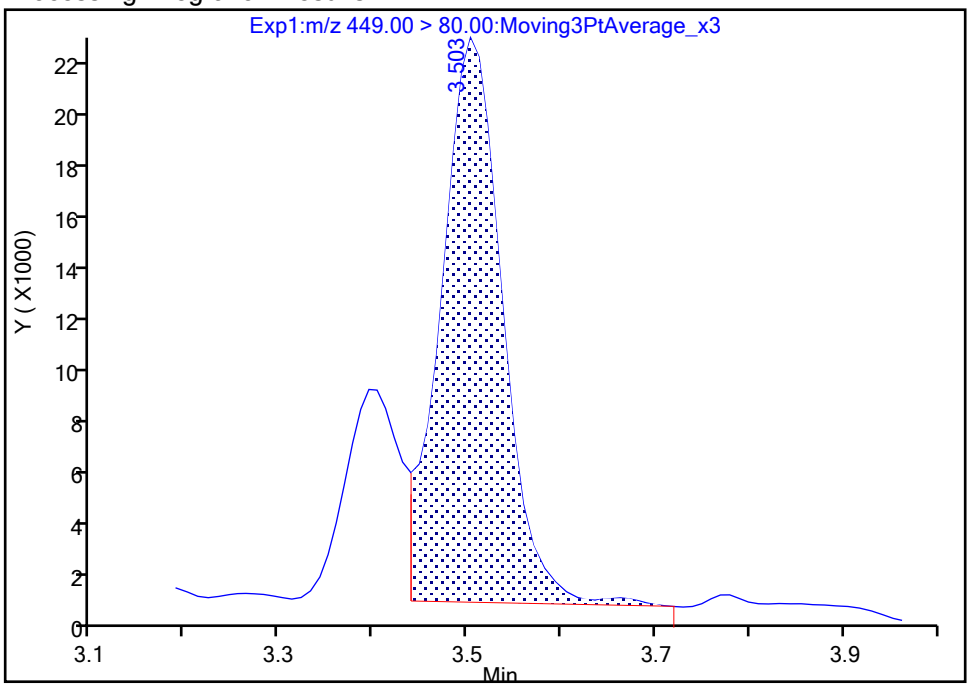
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

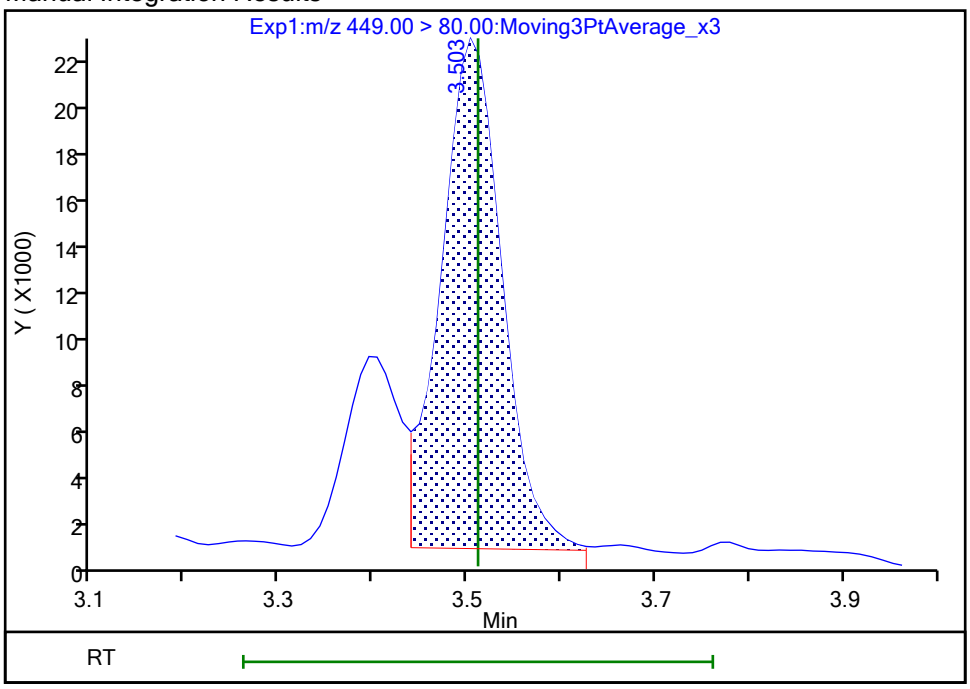
Processing Integration Results

RT: 3.50
Area: 99746
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 99137
Amount: 0.097316
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:41:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

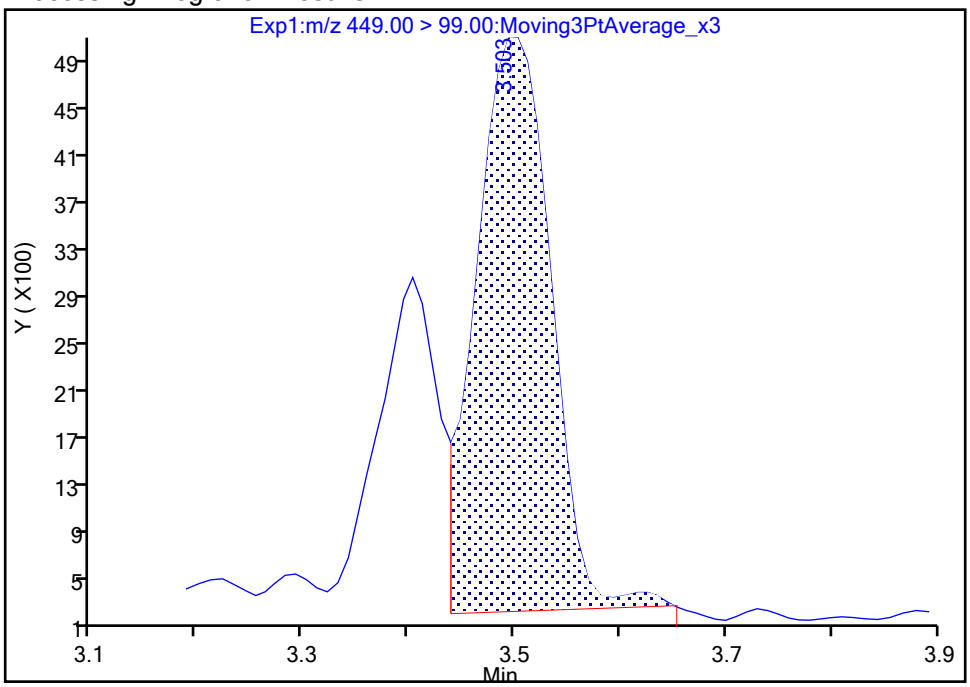
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

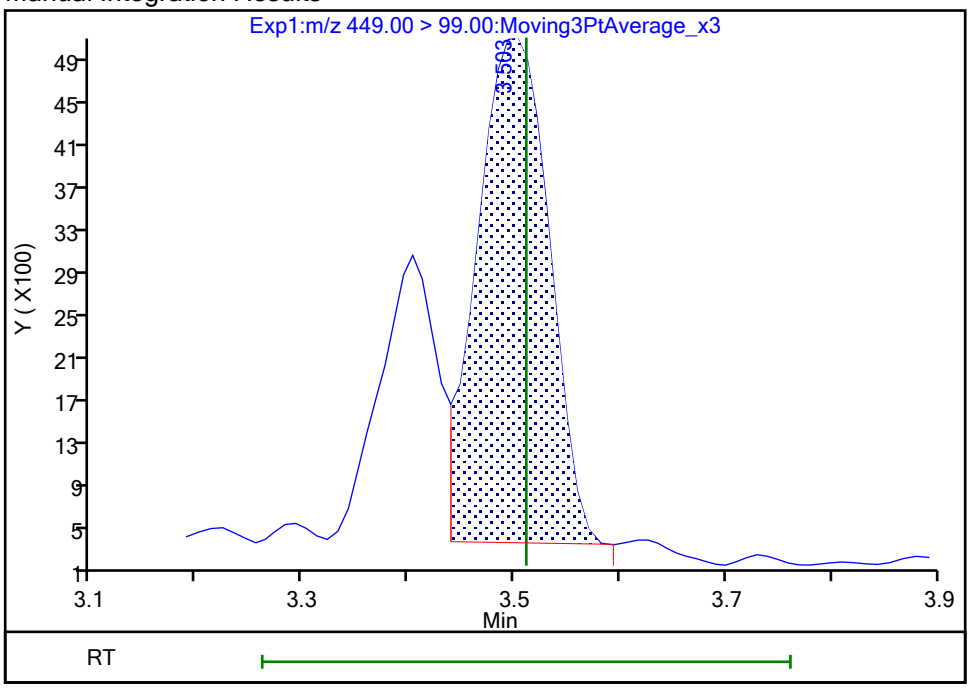
Processing Integration Results

RT: 3.50
Area: 24163
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 22584
Amount: 0.097316
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:41:15 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

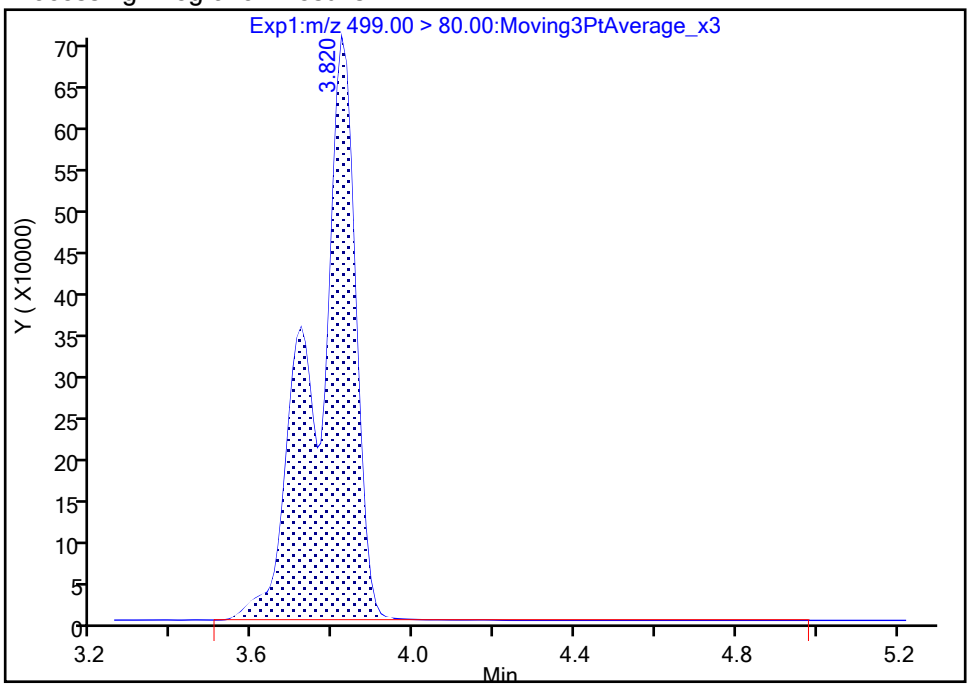
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

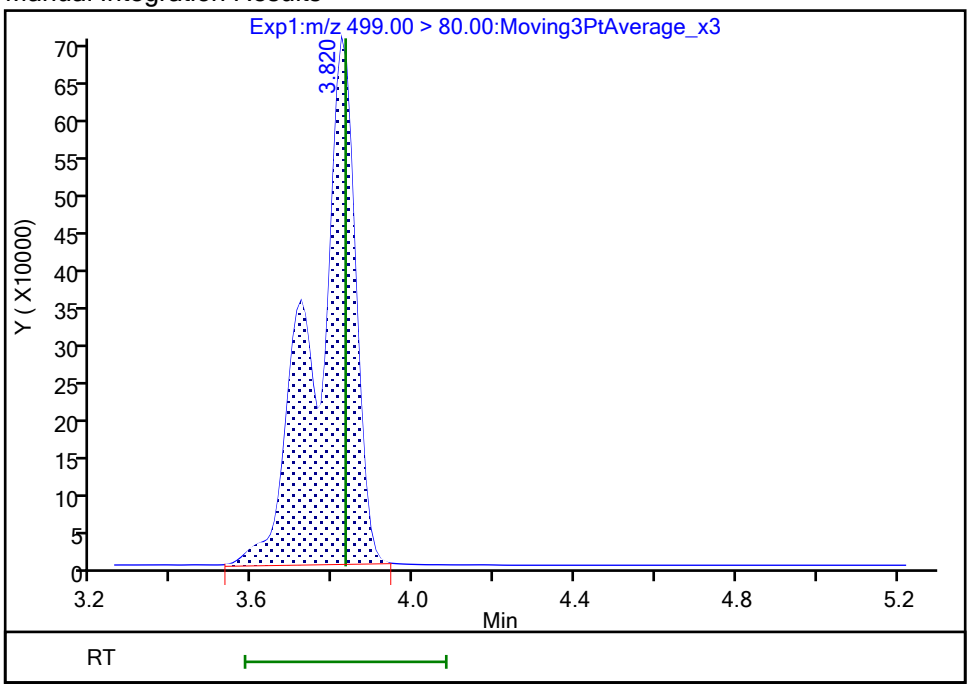
Processing Integration Results

RT: 3.82
Area: 5010565
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 4986330
Amount: 6.064703
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:42:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

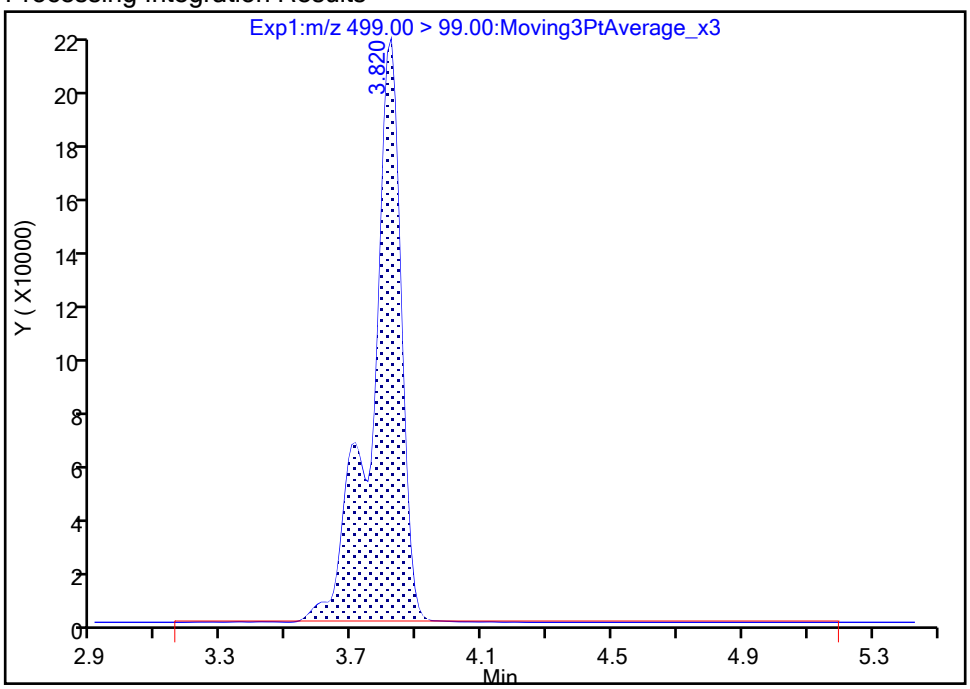
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

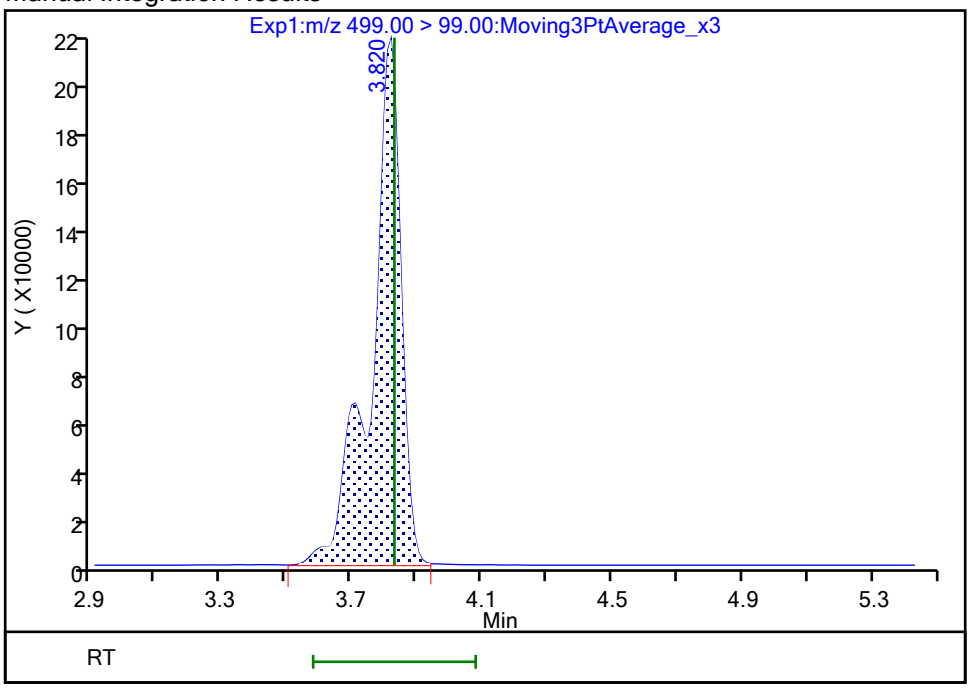
Processing Integration Results

RT: 3.82
Area: 1393069
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1384774
Amount: 6.064703
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:42:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

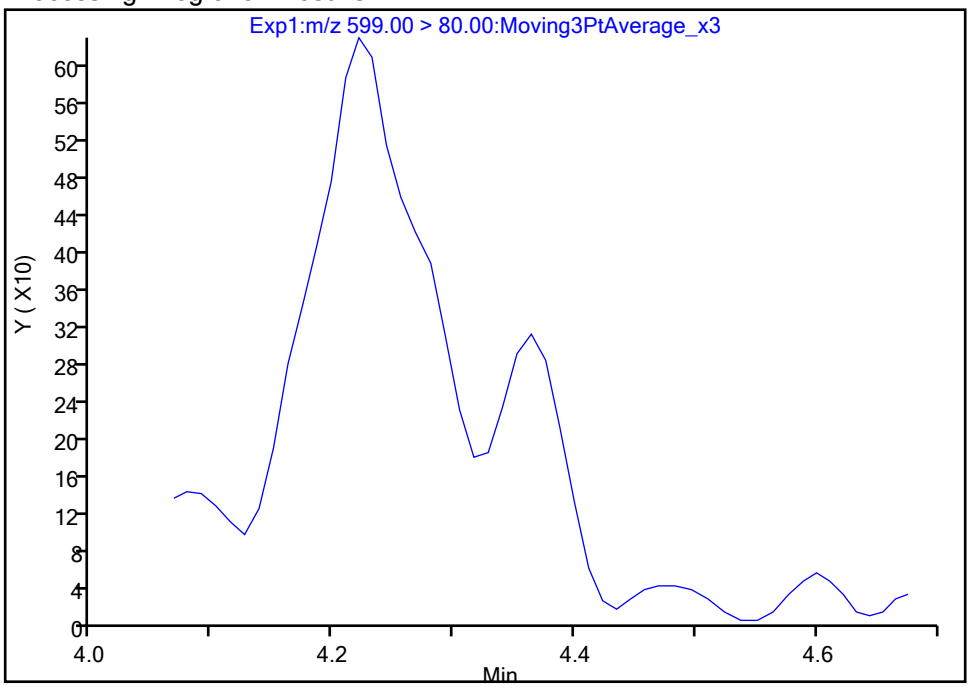
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

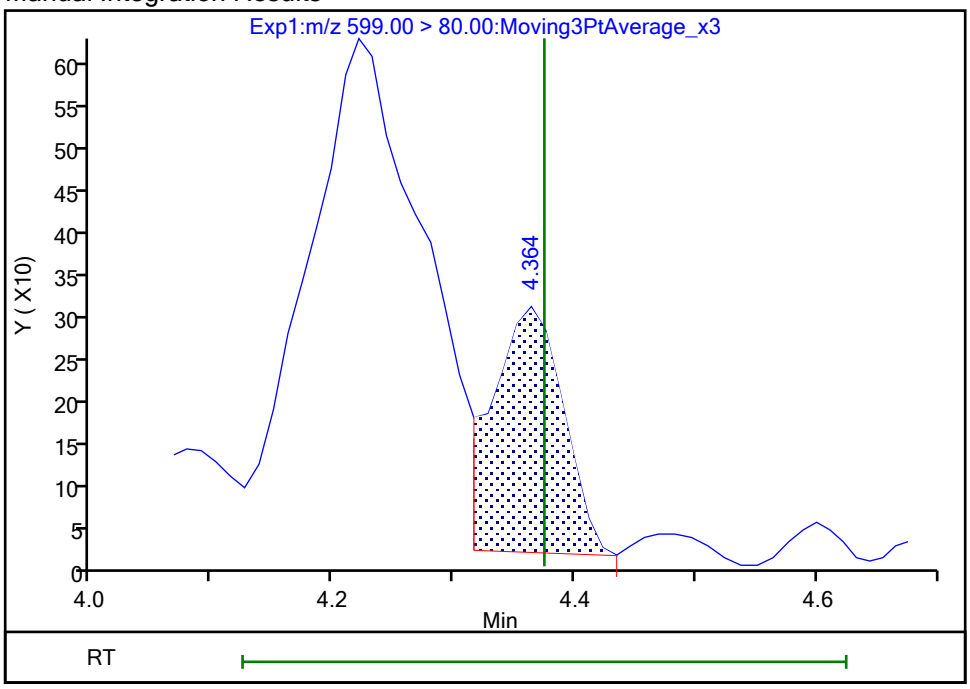
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 1162
Amount: 0.002414
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:44:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

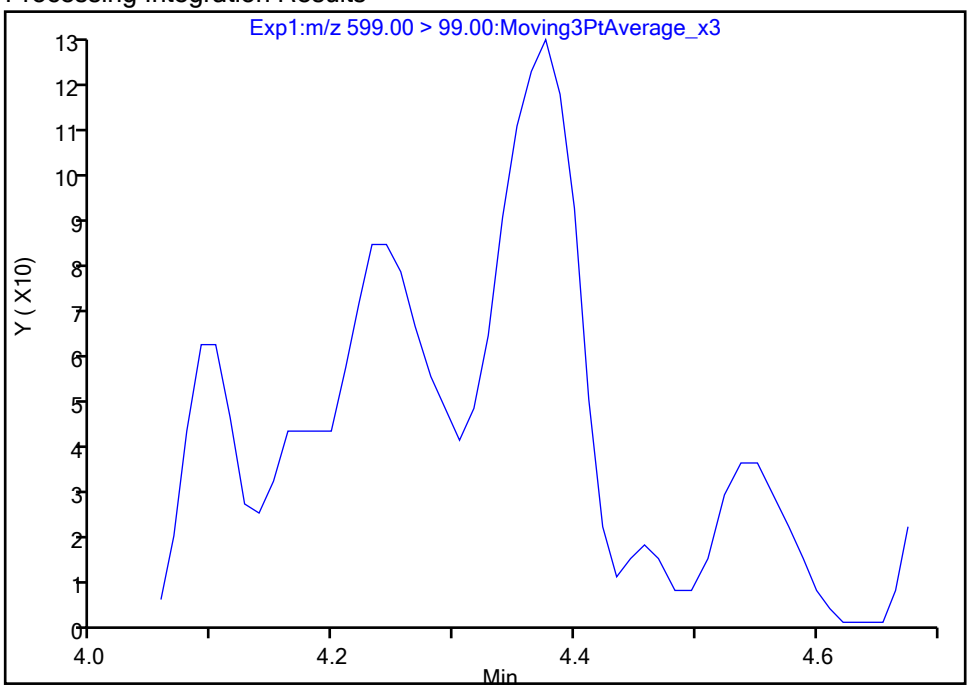
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

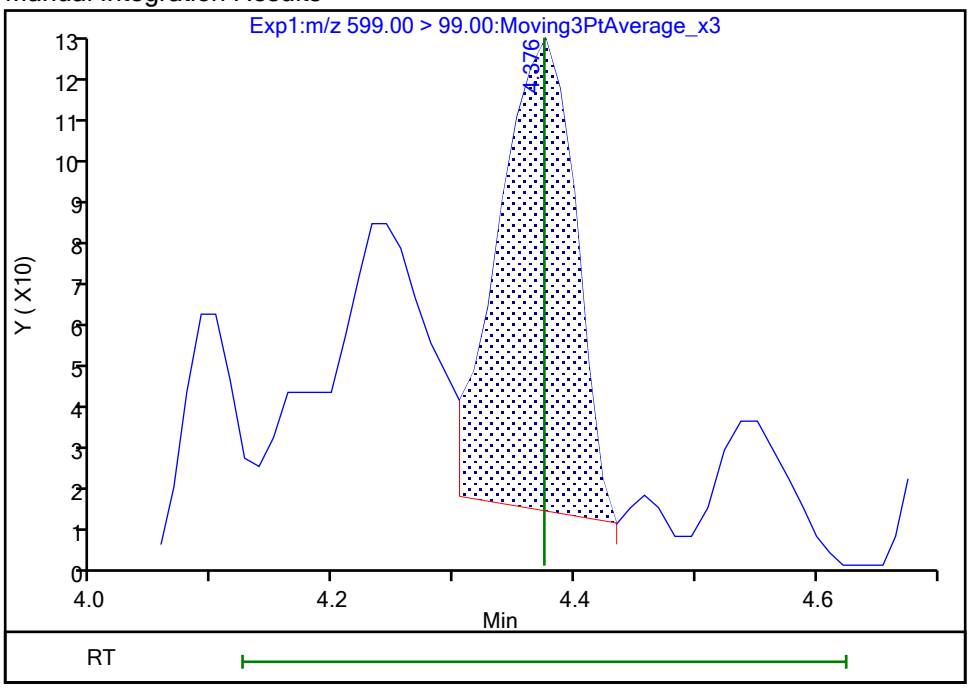
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 506
Amount: 0.002414
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:44:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

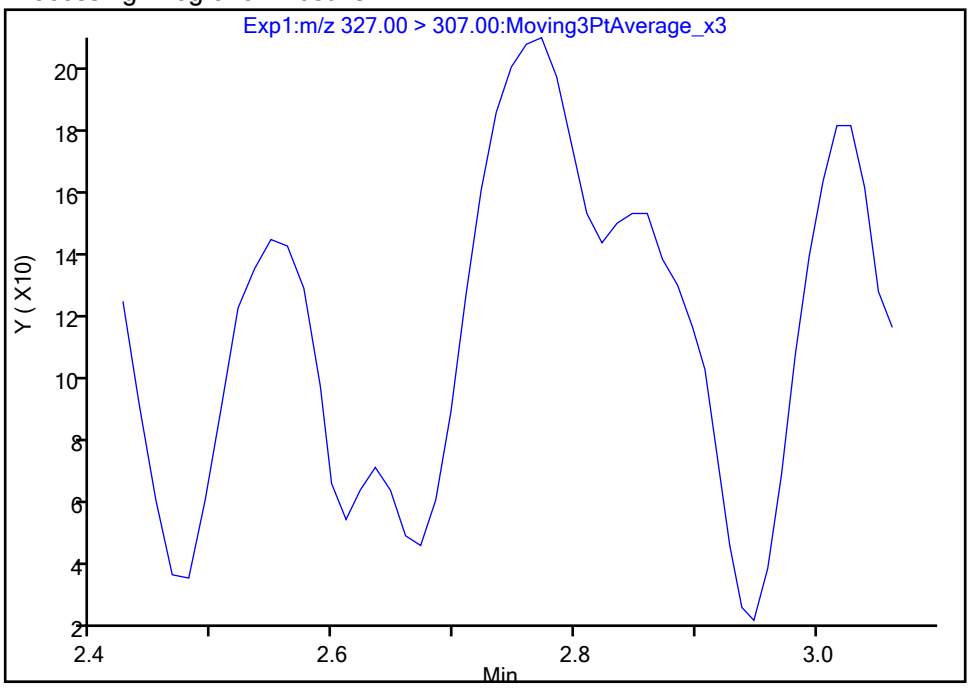
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

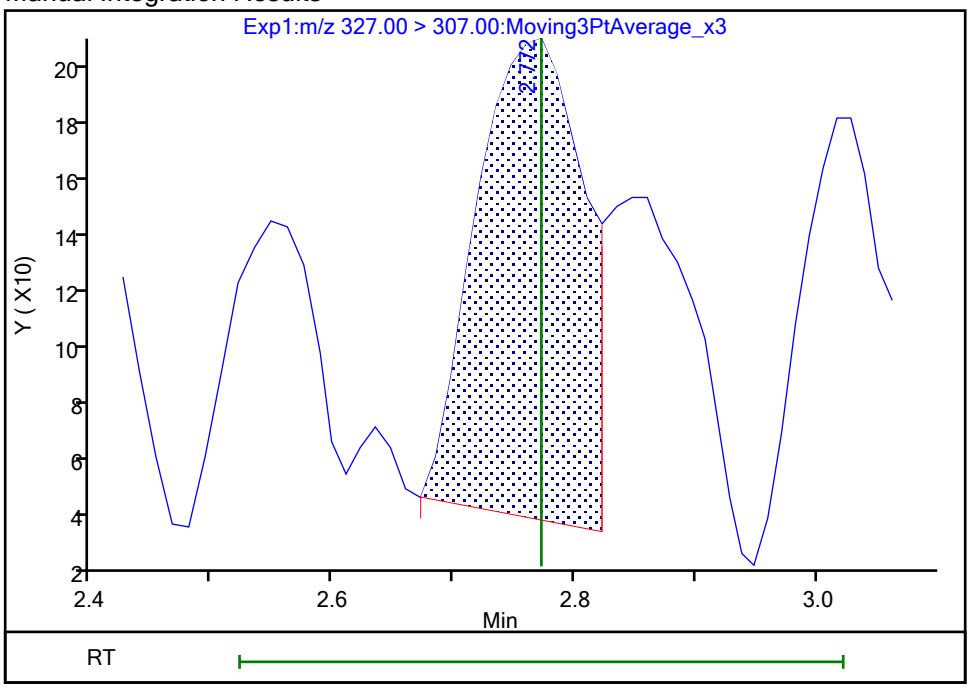
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 989
Amount: 0.001645
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:38:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

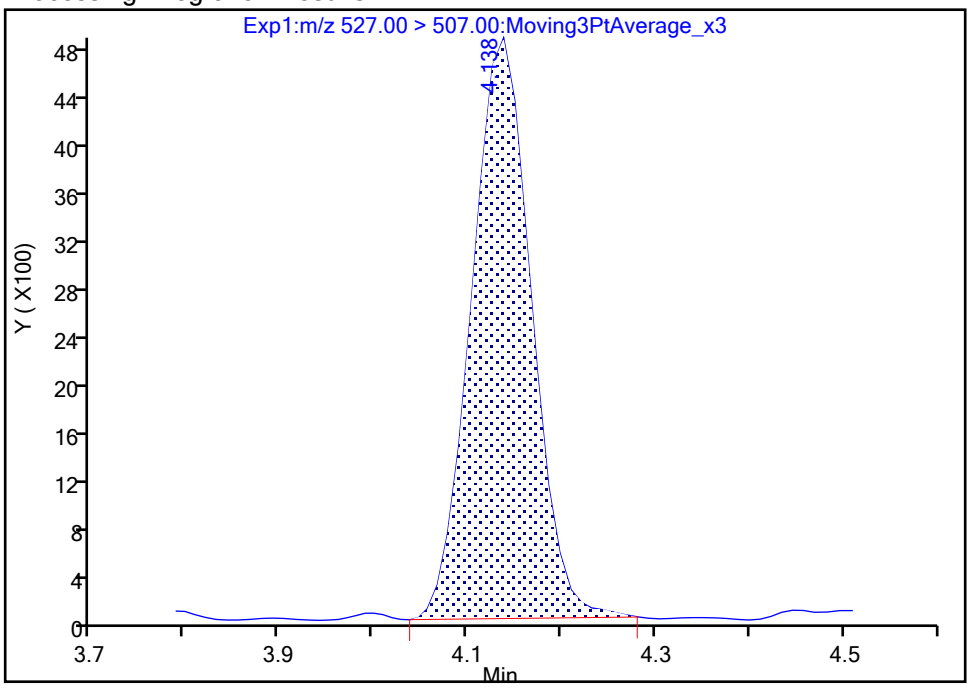
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

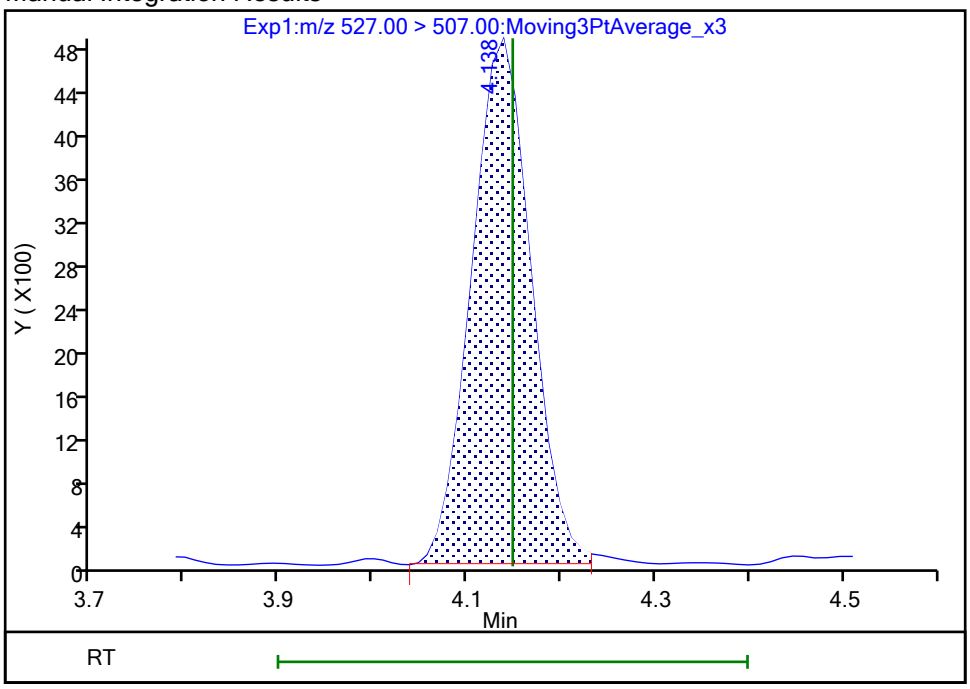
Processing Integration Results

RT: 4.14
Area: 21591
Amount: 0.039262
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 21562
Amount: 0.039209
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:43:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

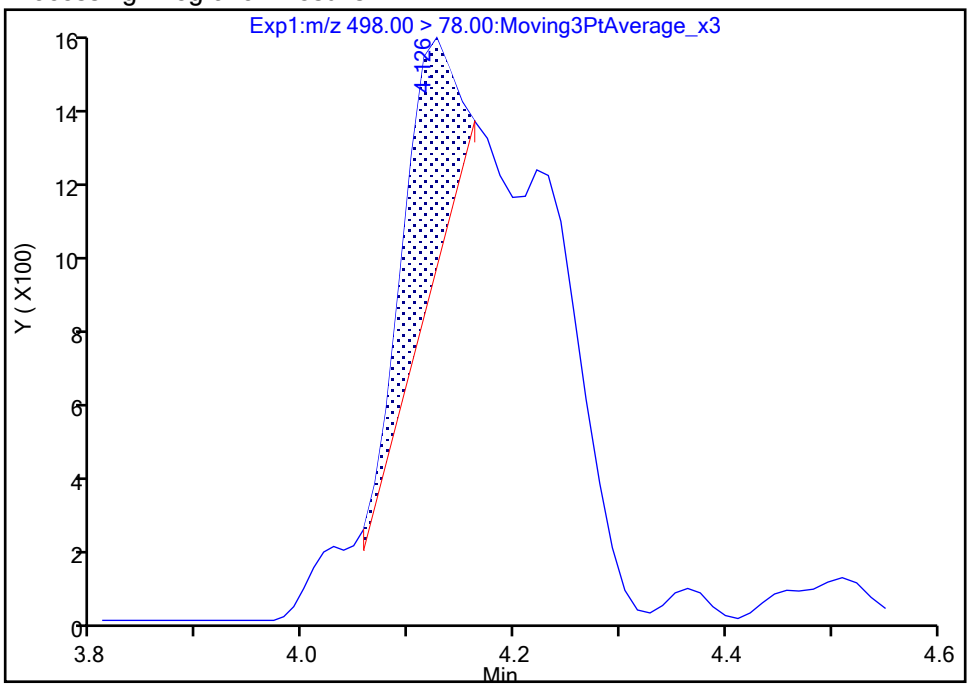
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

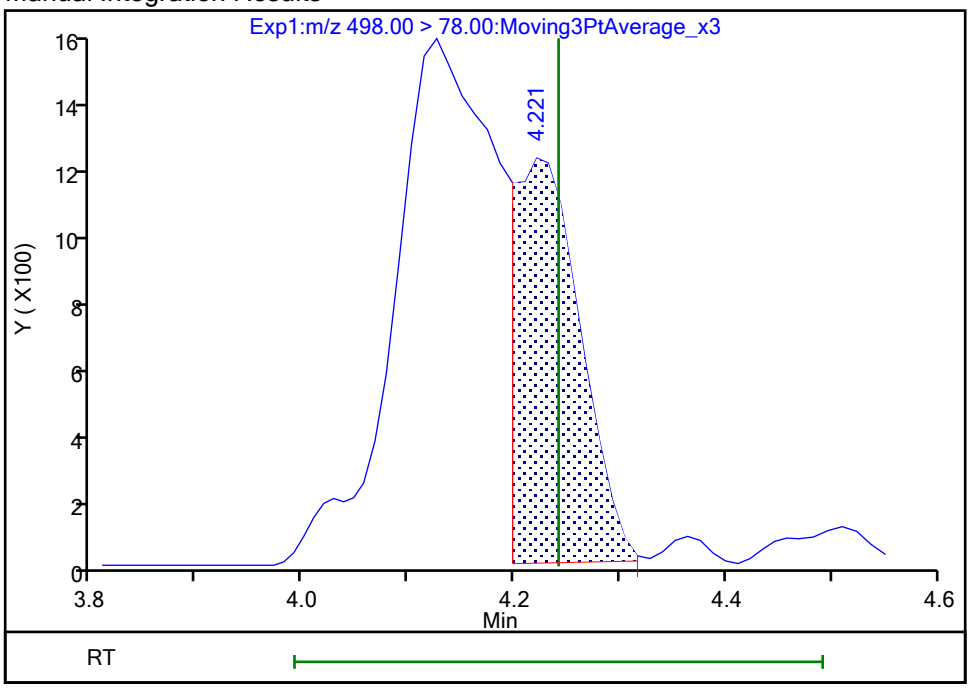
Processing Integration Results

RT: 4.13
Area: 2182
Amount: 0.001779
Amount Units: ng/ml



Manual Integration Results

RT: 4.22
Area: 5037
Amount: 0.004107
Amount Units: ng/ml



Reviewer: SJ4N, 26-Oct-2023 16:51:29 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

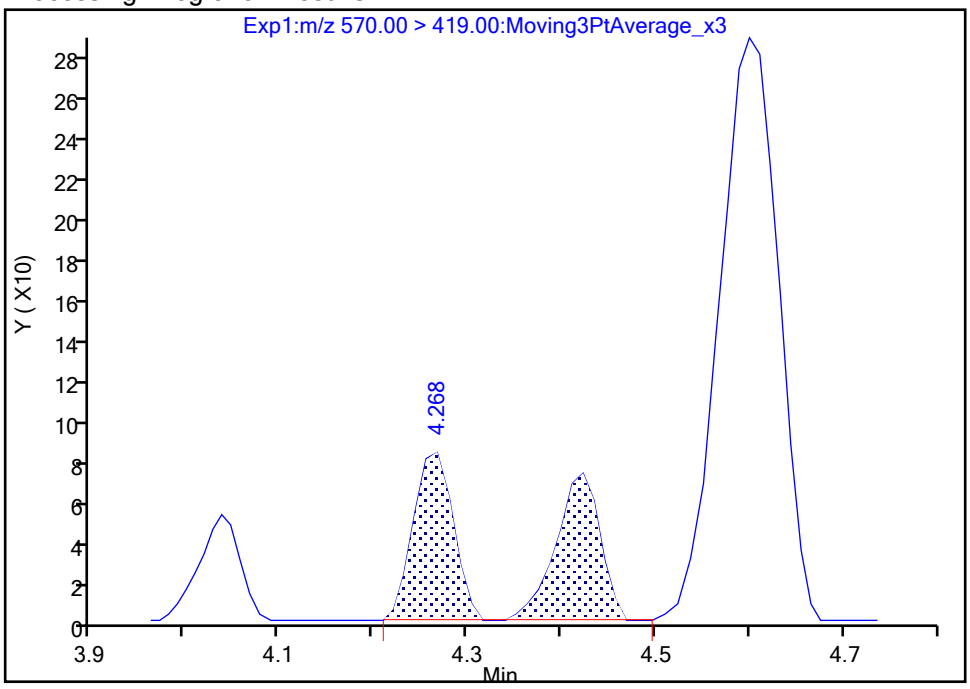
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

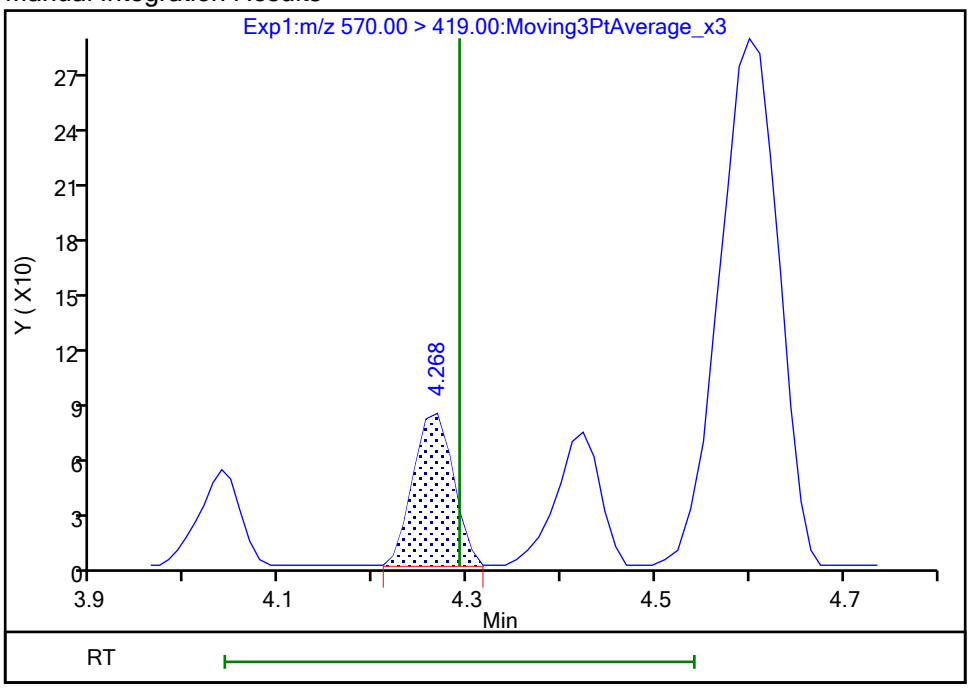
Processing Integration Results

RT: 4.27
Area: 472
Amount: 0.001371
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 240
Amount: 0.000697
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:43:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

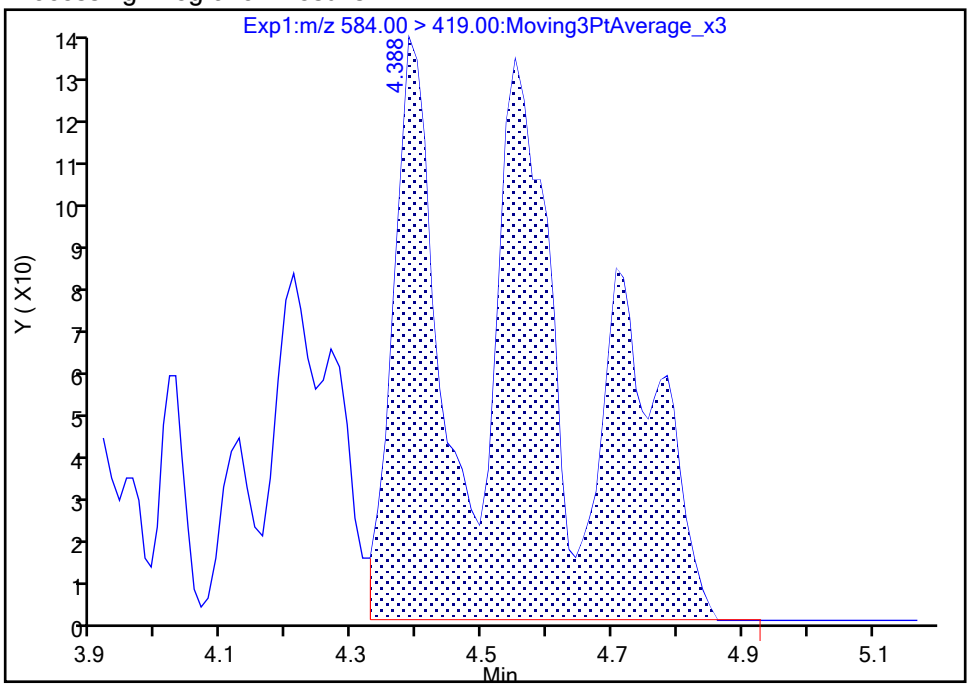
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

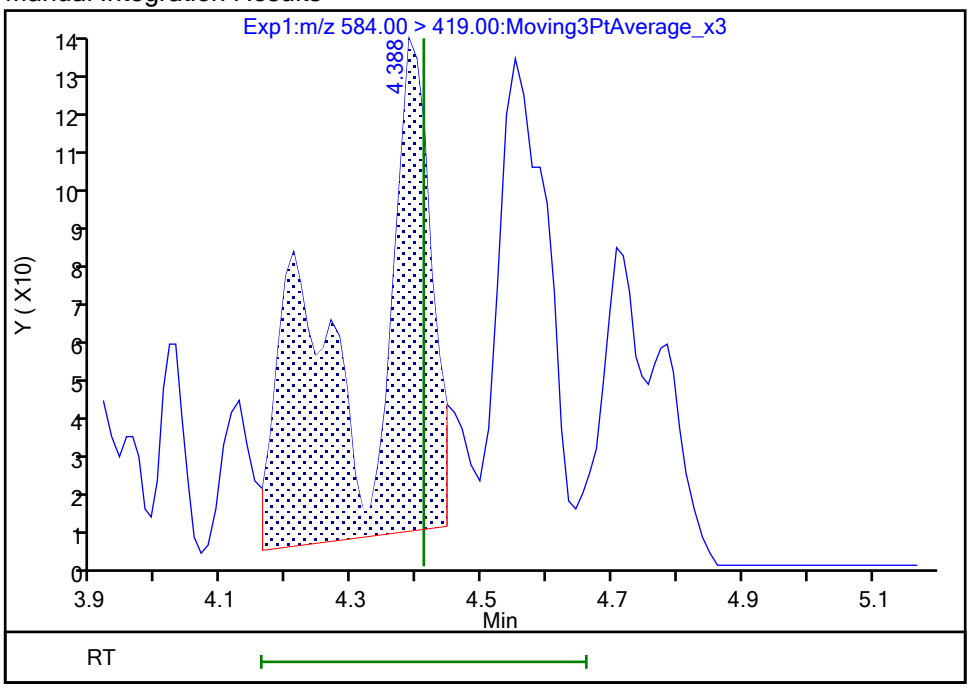
Processing Integration Results

RT: 4.39
Area: 1798
Amount: 0.005129
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 903
Amount: 0.002576
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:44:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

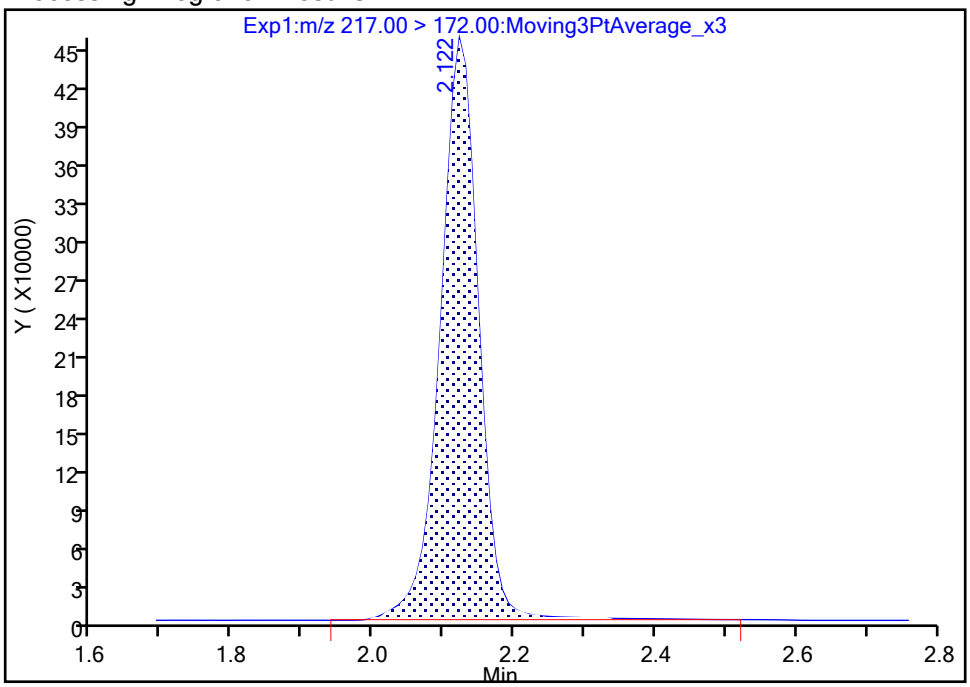
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

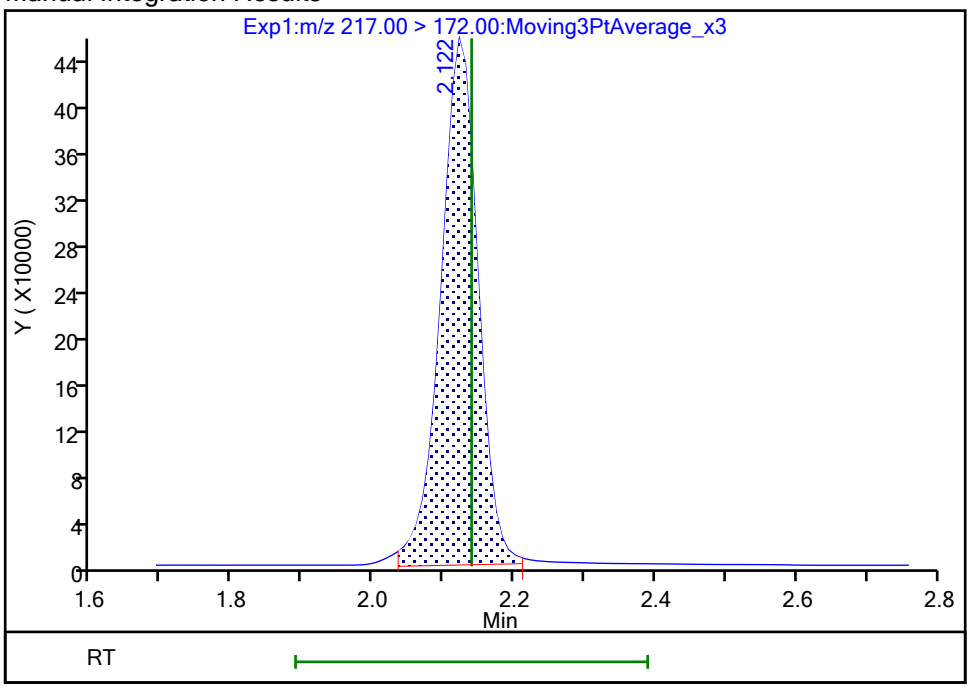
Processing Integration Results

RT: 2.12
Area: 1719324
Amount: 1.108024
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 1681666
Amount: 1.083755
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

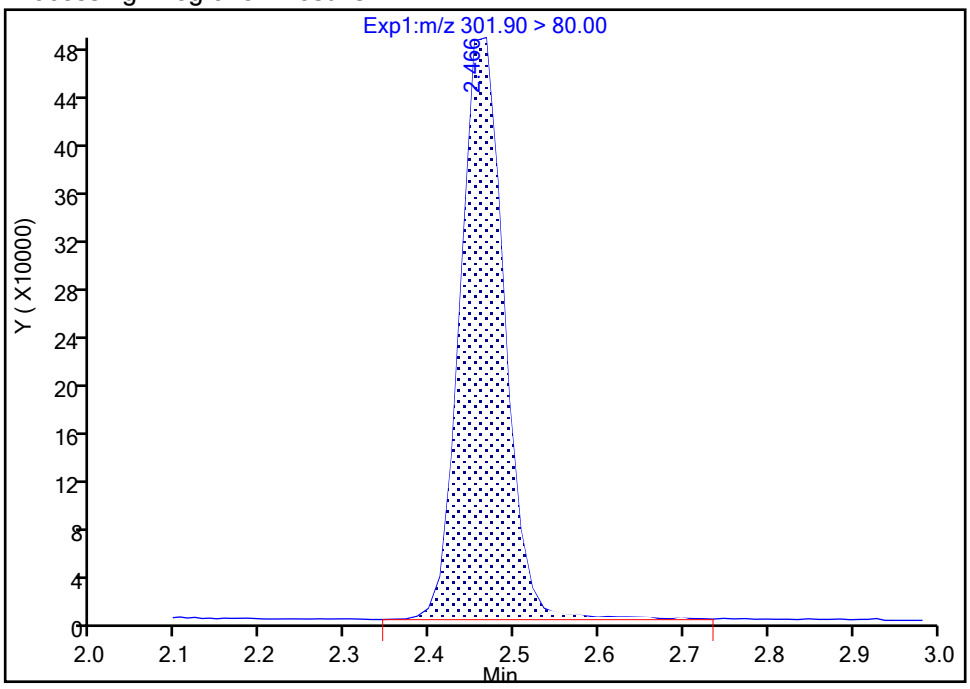
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

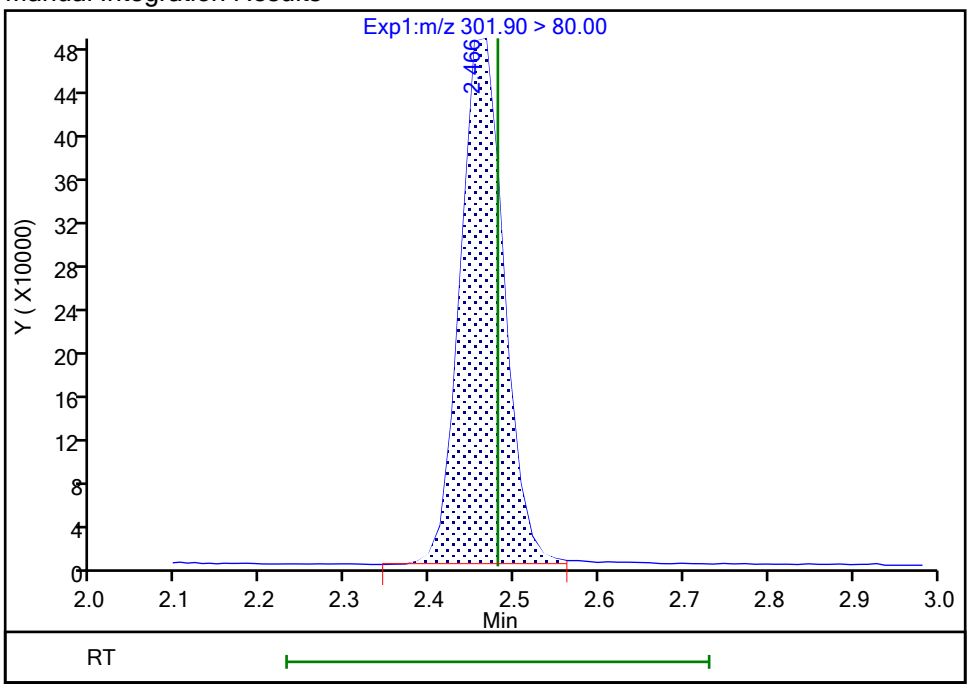
Processing Integration Results

RT: 2.47
Area: 1769701
Amount: 1.086082
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1754387
Amount: 1.076684
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

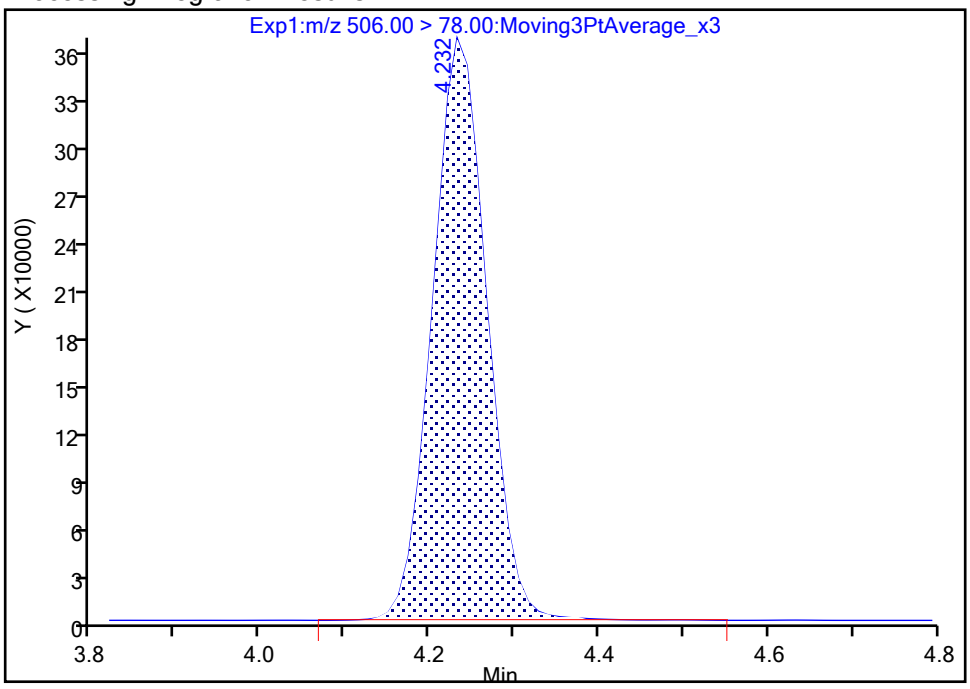
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

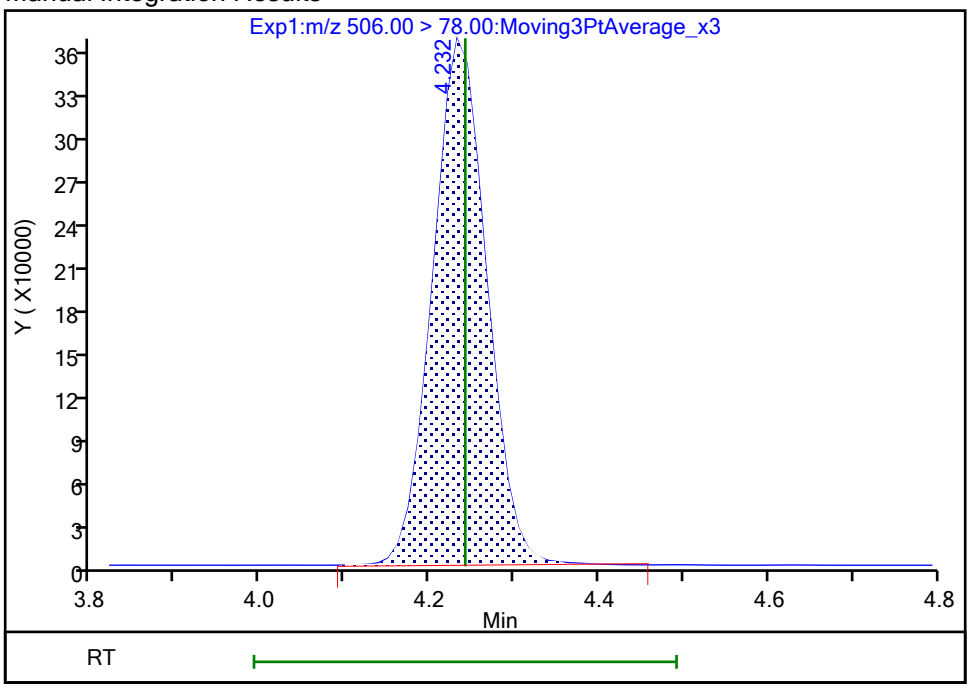
Processing Integration Results

RT: 4.23
Area: 1611771
Amount: 1.088615
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 1607339
Amount: 1.085621
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

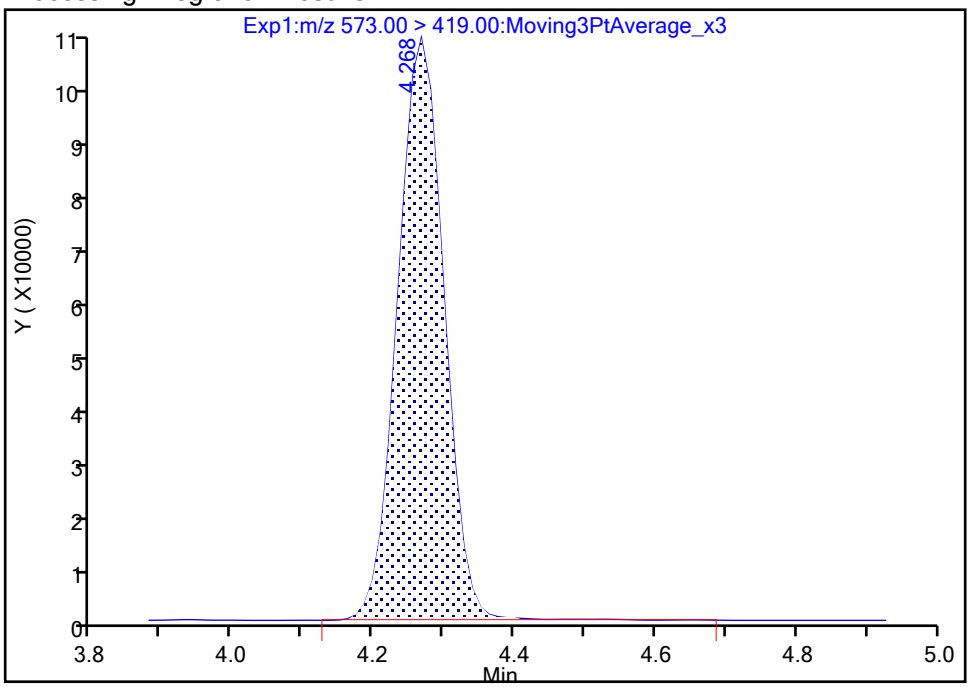
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

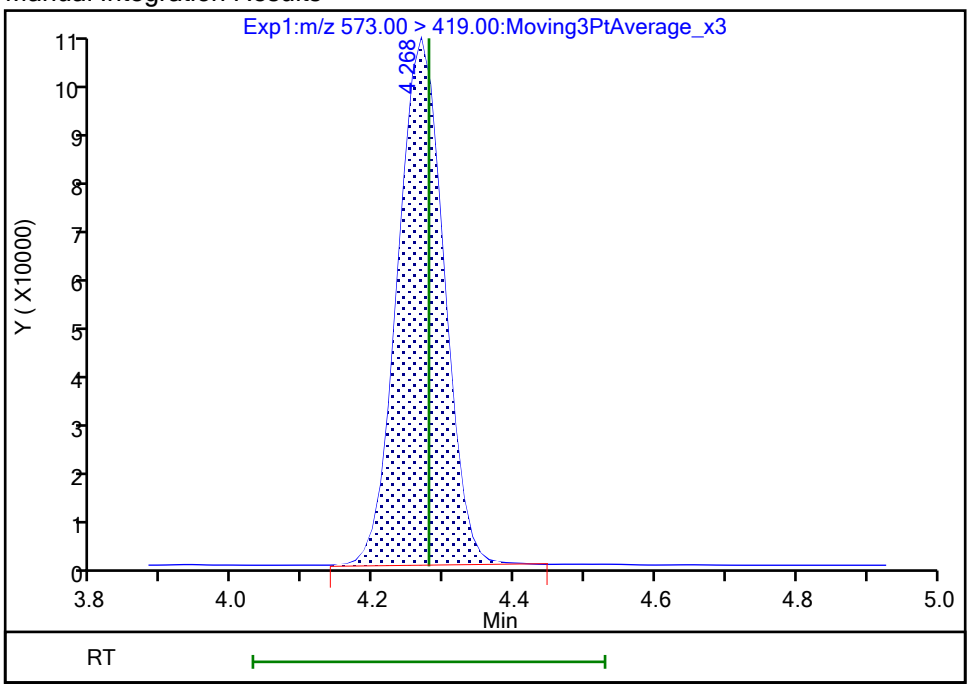
Processing Integration Results

RT: 4.27
Area: 477217
Amount: 1.150813
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 474409
Amount: 1.144041
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

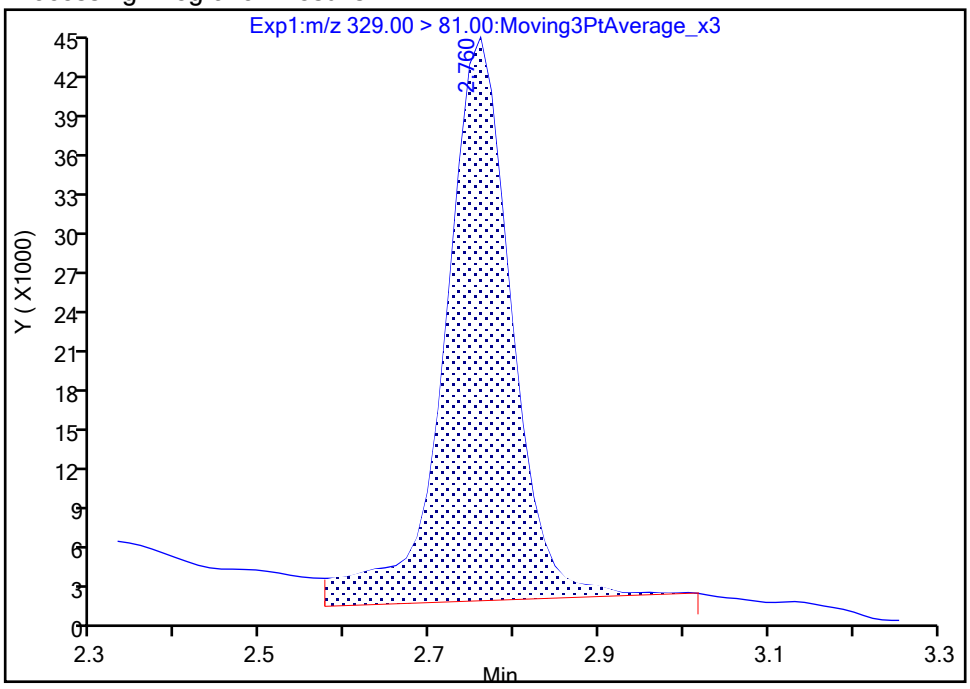
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

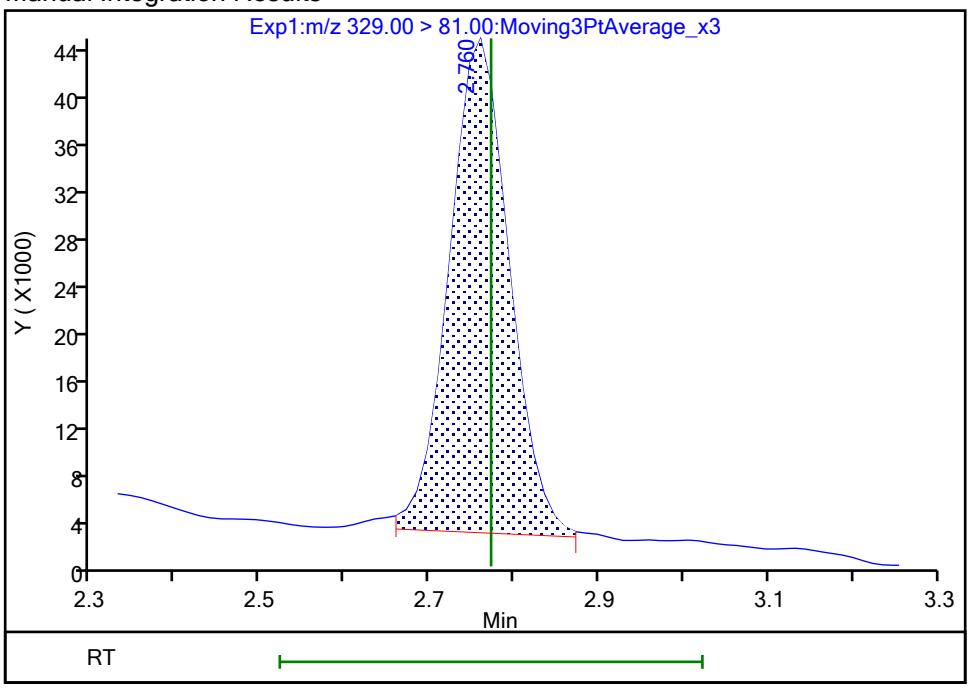
Processing Integration Results

RT: 2.76
Area: 237356
Amount: 1.259592
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 206709
Amount: 1.096956
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:19 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

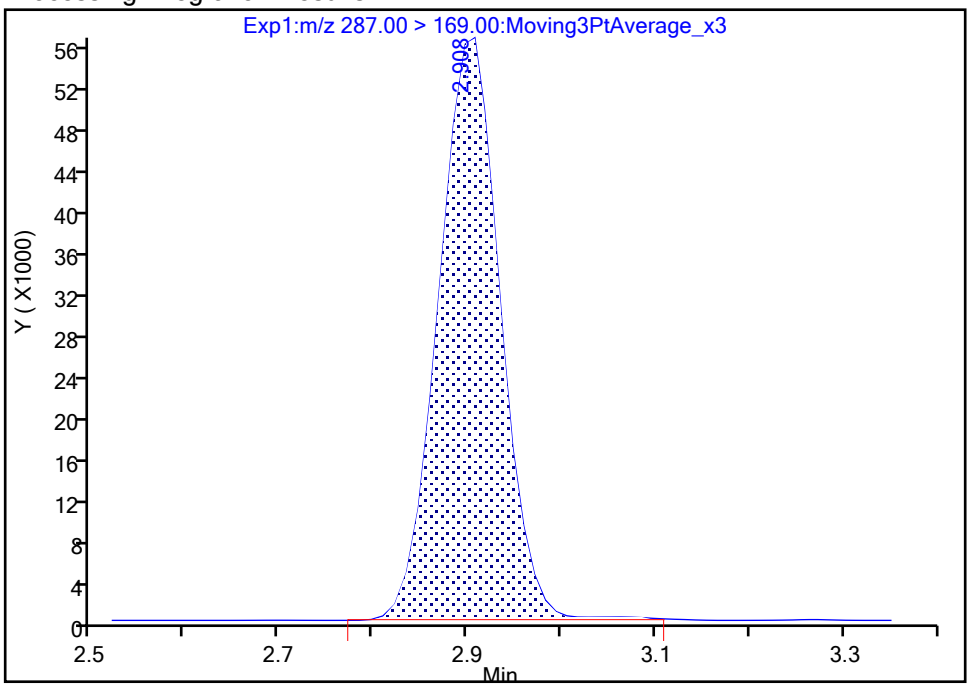
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A27.d				
Injection Date:	25-Oct-2023 21:24:35	Instrument ID:	LC812		
Lims ID:	460-290543-A-8-A	Lab Sample ID:	200-290543-8		
Client ID:	SW4-101723-0940				
Operator ID:	LC812user	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

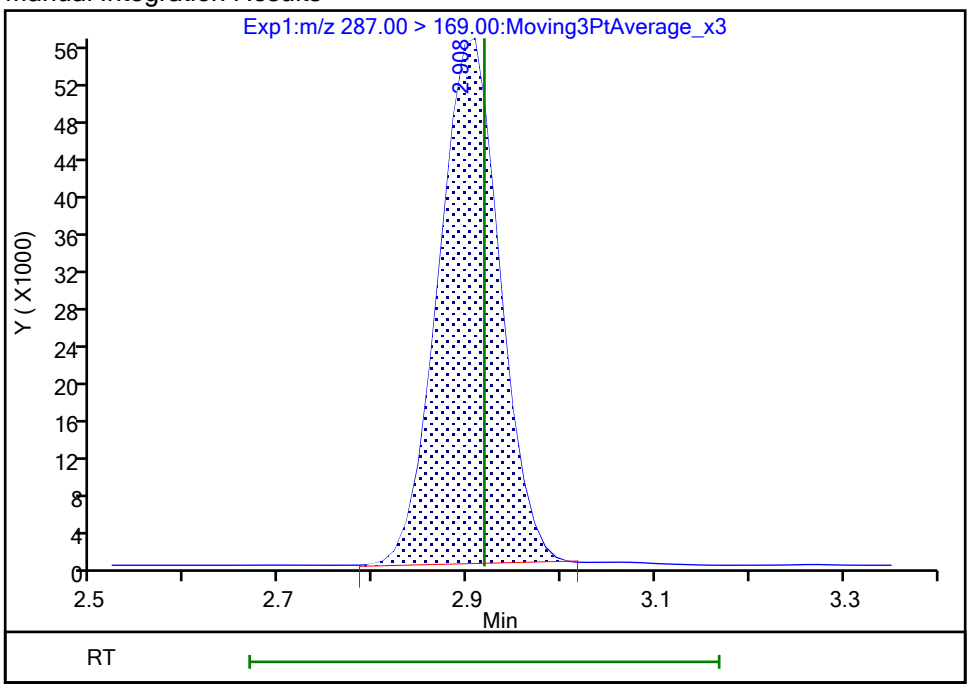
Processing Integration Results

RT: 2.91
Area: 257509
Amount: 1.085909
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 255132
Amount: 1.075885
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:37:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: 1000-101723-0002 | Lab Sample ID: 460-290543-9

Matrix: Water | Lab File ID: PA231025A28.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 12:31

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 291.5(mL) | Date Analyzed: 10/25/2023 21:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.29	U	4.29	1.03
2706-90-3	Perfluoropentanoic acid	1.72	U	1.72	0.58
307-24-4	Perfluorohexanoic acid	1.72	U	1.72	0.56
375-85-9	Perfluoroheptanoic acid	1.72	U	1.72	0.46
335-67-1	Perfluorooctanoic acid	1.72	U	1.72	0.65
375-95-1	Perfluorononanoic acid	1.72	U	1.72	0.42
335-76-2	Perfluorodecanoic acid	1.72	U	1.72	0.39
2058-94-8	Perfluoroundecanoic acid	1.72	U	1.72	0.47
307-55-1	Perfluorododecanoic acid	1.72	U	1.72	0.42
72629-94-8	Perfluorotridecanoic acid	1.72	U	1.72	0.41
376-06-7	Perfluorotetradecanoic acid	1.72	U	1.72	0.55
375-73-5	Perfluorobutanesulfonic acid	1.72	U	1.72	0.53
2706-91-4	Perfluoropentanesulfonic acid	1.72	U	1.72	0.43
355-46-4	Perfluorohexanesulfonic acid	1.72	U	1.72	0.47
375-92-8	Perfluoroheptanesulfonic acid	1.72	U	1.72	0.35
1763-23-1	Perfluorooctanesulfonic acid	1.72	U	1.72	0.73
68259-12-1	Perfluorononanesulfonic acid	1.72	U	1.72	0.34
335-77-3	Perfluorodecanesulfonic acid	1.72	U	1.72	0.34
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.46
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.29	U	4.29	1.11
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.72	U	1.72	0.66
754-91-6	Perfluorooctanesulfonamide	1.72	U	1.72	0.79
2355-31-9	NMeFOSAA	4.29	U	4.29	1.63
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.29	U	4.29	1.37
13252-13-6	HFPODA	3.43	U	3.43	0.94
919005-14-4	DONA	1.72	U	1.72	0.36
756426-58-1	9Cl-PF3ONS	1.72	U	1.72	0.27
763051-92-9	11Cl-PF3OUdS	1.72	U	1.72	0.75

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: 1000-101723-0002 Lab Sample ID: 460-290543-9

Matrix: Water Lab File ID: PA231025A28.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 12:31

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 291.5(mL) Date Analyzed: 10/25/2023 21:32

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	101		50-150
STL01893	13C5 PFPeA	101		50-150
STL01892	13C4 PFHpA	103		50-150
STL02116	13C2 PFTeDA	84		50-150
STL02337	13C3 PFBS	102		50-150
STL01056	13C8 FOSA	85		50-150
STL02118	d3-NMeFOSAA	92		50-150
STL02117	d5-NEtFOSAA	90		50-150
STL02395	M2-4:2 FTS	96		50-150
STL02279	M2-6:2 FTS	104		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	90		50-150
STL00994	18O2 PFHxS	106		50-150
STL00993	13C2 PFHxA	100		50-150
STL00991	13C4 PFOS	106		50-150
STL00998	13C2 PFDoA	92		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d
Lims ID: 460-290543-A-9-A
Client ID: 1000-101723-0002
Sample Type: Client
Inject. Date: 25-Oct-2023 21:32:44 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-9-A
Misc. Info.: 200-0057556-028 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:49:33
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.604	1952223	1.26		101	657	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.139	0.0	1.004	29964	-0.0197			2.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.695	1508956	1.26		101	1573	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	0.994	12298	0.009440			0.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.699	1919708	1.18		102	110077	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.480	0.0	1.006	8103	0.004393	Target=2.06		8.1	M
298.90 > 99.00	2.494	2.480	0.014	1.011	4988		1.62(1.03-3.09)		1.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.772	0.0	1.000	331	0.000543			2.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.785	209637	1.12		95.7	154	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.793	1530277	1.25		100	6668	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.918	0.0	0.827	264493	1.12		89.6	2329	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.000	133	0.000628			1.7	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.897	1463688	1.26		106	6439	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.176	3.176	0.0	1.004	5114	0.003732	Target=3.32		19.1	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	1604		3.19(1.66-4.98)		1.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.176	0.0	0.900	1722829	1.29		103	10078	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.995	298658	1.24		104	812	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.520	-0.009	1.000	1372	0.001996			1.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	0.997	1980919	1.31		105	5446	
* 62 13C2 PFOA										
415.00 > 370.00	3.529	3.529	0.0		1947923	1.25			7102	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.854	3.830	0.024	1.006	3744	0.004084	Target=4.24		8.0	M
499.00 > 99.00	3.748	3.830	-0.082	0.979	1083		3.46(2.12-6.37)		1.2	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.085	939198	1.27		106	5207	
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.854	0.0	1.092	2157183	1.31		105	18026	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.172	2146237	1.24		99.4	10938	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.160	4.148	0.012	1.003	819	0.001452				M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.175	306911	1.13		94.3	1030	
D 21 13C8 FOSA										
506.00 > 78.00	4.241	4.242	-0.001	1.202	1571753	1.07		85.3	3753	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.253	4.242	0.011	1.003	430	0.000359			4.5	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.278	0.0	1.212	475193	1.15		92.1	1649	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.398	4.398	0.0	1.246	1956229	1.20		95.9	9978	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.246	446235	1.12		89.8	921	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.410	-0.012	1.000	677	0.001896			2.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.306	1916194	1.16		92.5	6449	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.989	0.0	1.414	1723458	1.04		83.5	5549	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	5.010	4.989	0.021	1.004	174	0.001129	Target=0.87		3.7	RM
713.00 > 219.00	4.979	4.989	-0.010	0.998	102		1.71(0.43-1.30)		3.3	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

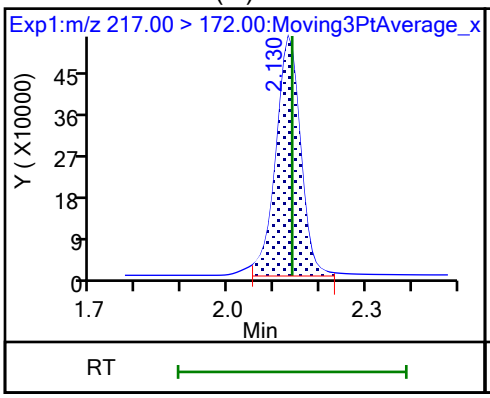
M - Manually Integrated

Report Date: 26-Oct-2023 16:55:58 Chrom Revision: 2.3 18-Oct-2023 21:16:54

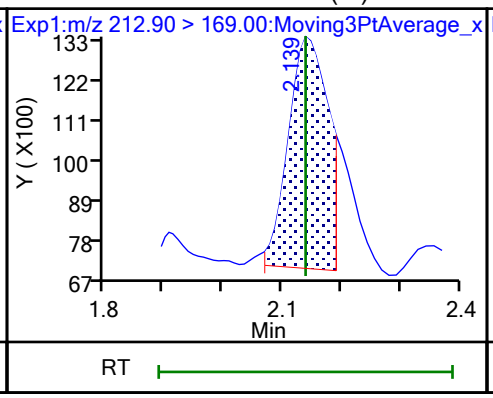
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d
Injection Date: 25-Oct-2023 21:32:44 Instrument ID: LC812
Lims ID: 460-290543-A-9-A Lab Sample ID: 200-290543-9
Client ID: 1000-101723-0002
Operator ID: LC812user ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

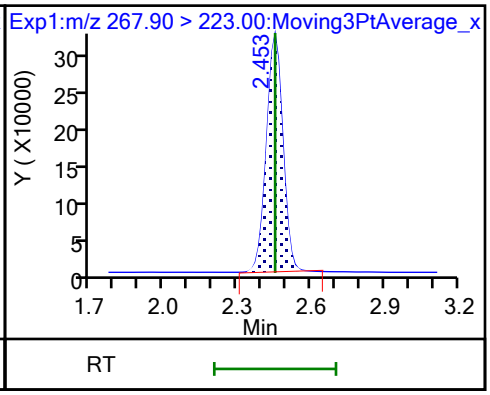
D 1 13C4 PFBA (M)



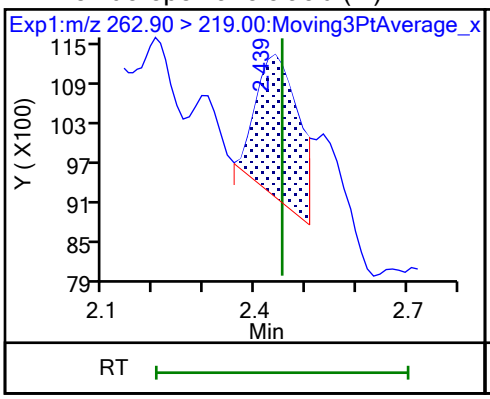
2 Perfluorobutanoic acid (M)



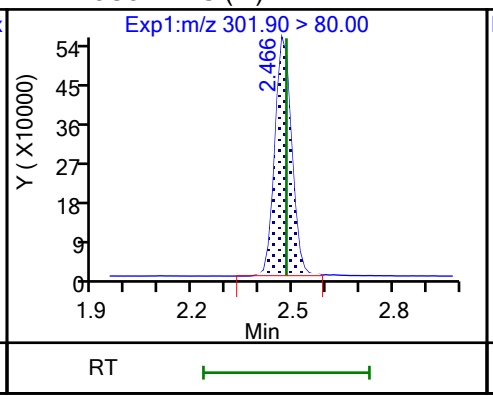
D 3 13C5 PFPeA



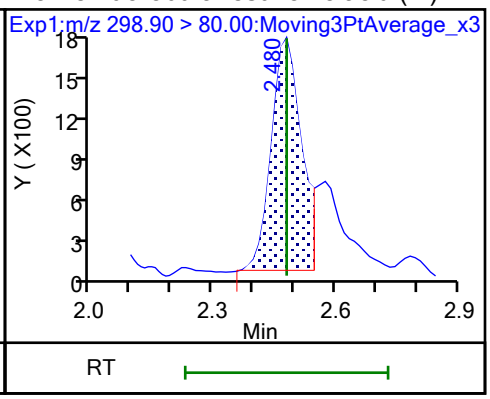
4 Perfluoropentanoic acid (M)



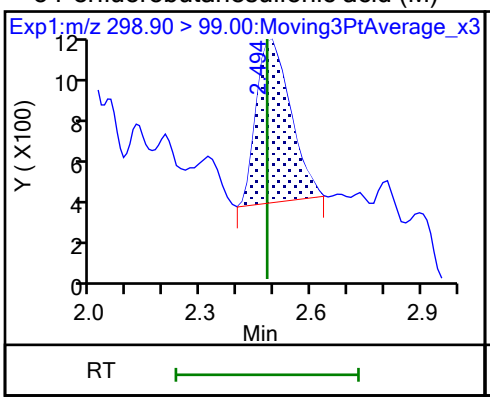
D 47 13C3 PFBS (M)



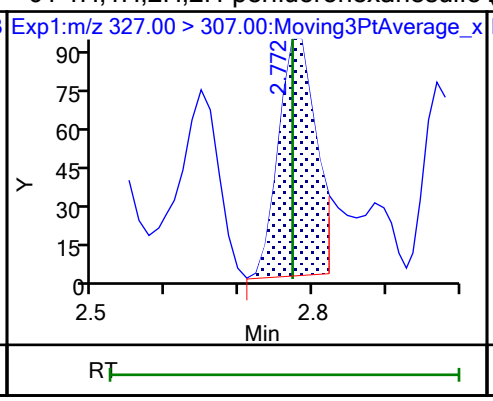
5 Perfluorobutanesulfonic acid (M)



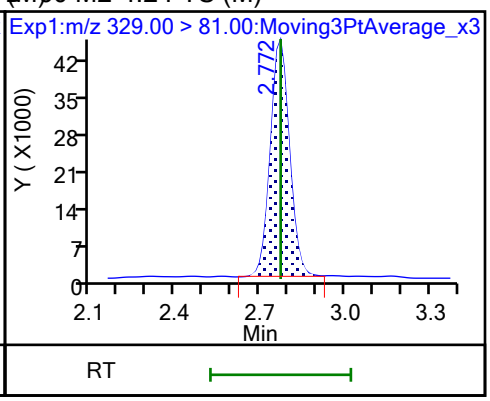
5 Perfluorobutanesulfonic acid (M)



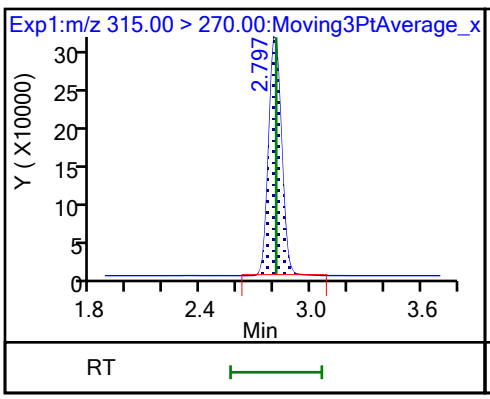
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



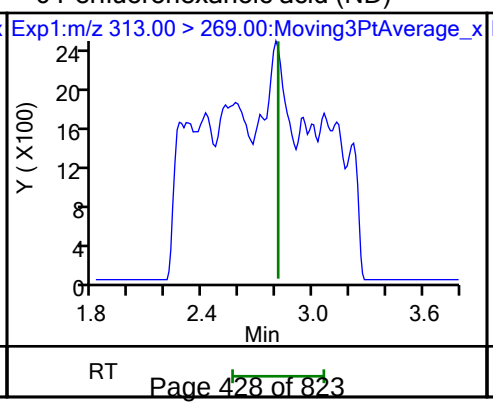
60 M2-4:2 FTS (M)



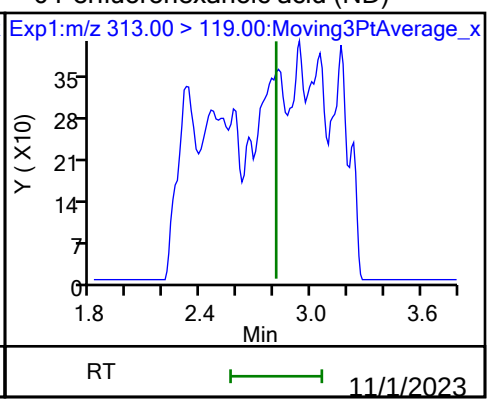
D 7 13C2 PFHxA



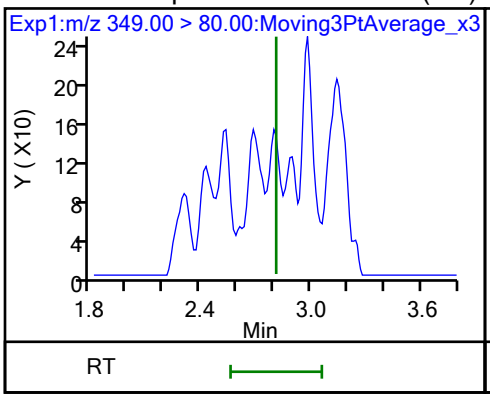
6 Perfluorohexanoic acid (ND)



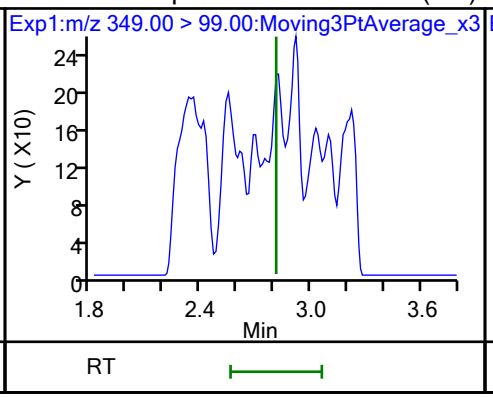
6 Perfluorohexanoic acid (ND)



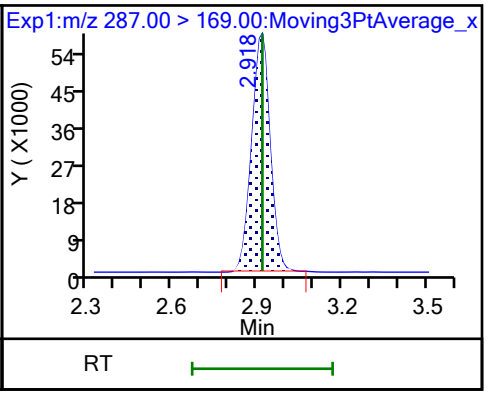
70 Perfluoropentanesulfonic acid (ND)



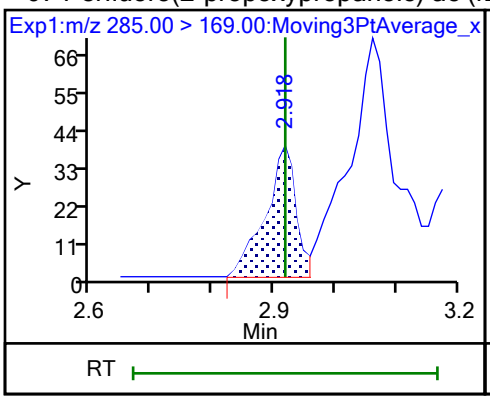
70 Perfluoropentanesulfonic acid (ND)



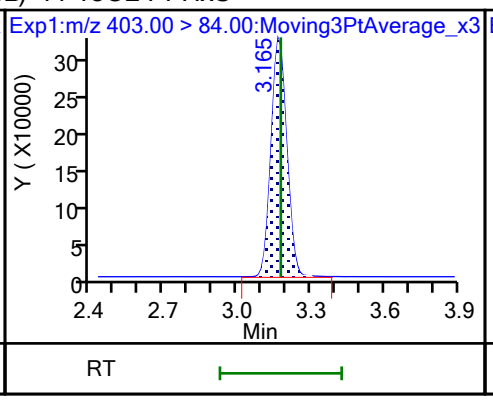
D 64 13C3 HFPO-DA



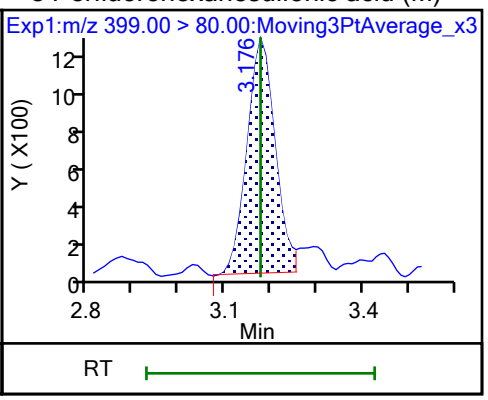
67 Perfluoro(2-propoxypropanoic) ac (ND)



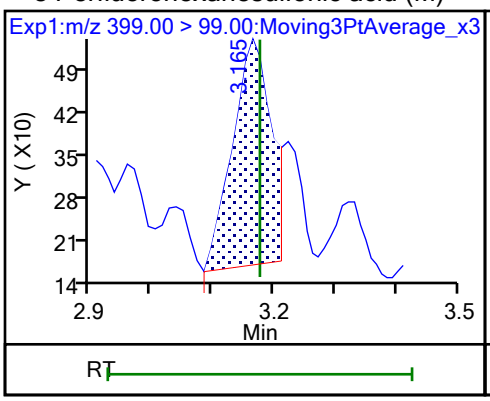
D 11 18O2 PFHxS



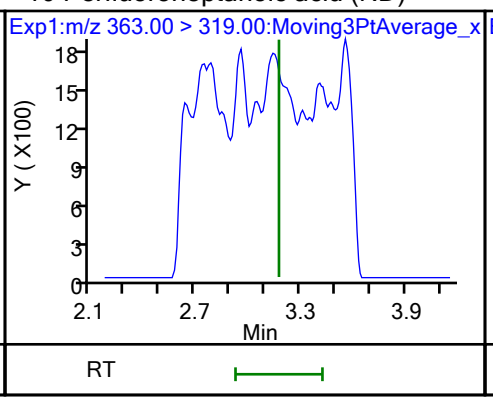
8 Perfluorohexanesulfonic acid (M)



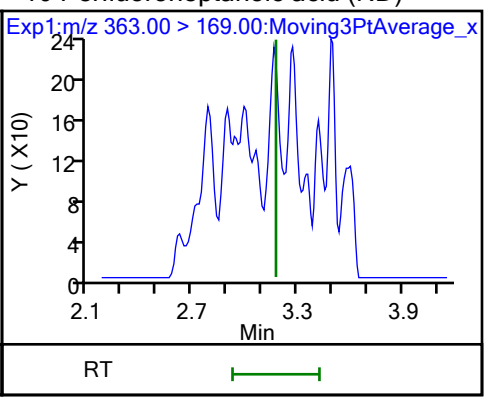
8 Perfluorohexanesulfonic acid (M)



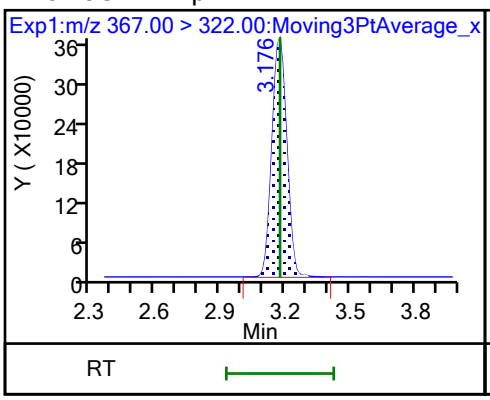
10 Perfluoroheptanoic acid (ND)



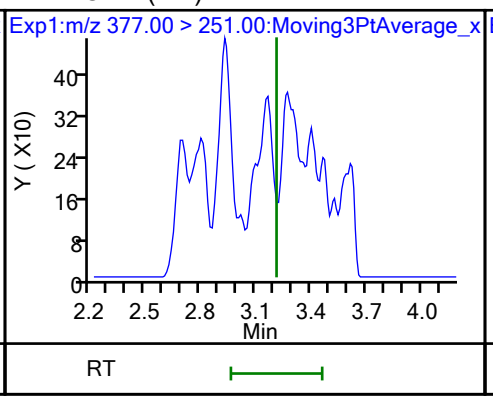
10 Perfluoroheptanoic acid (ND)



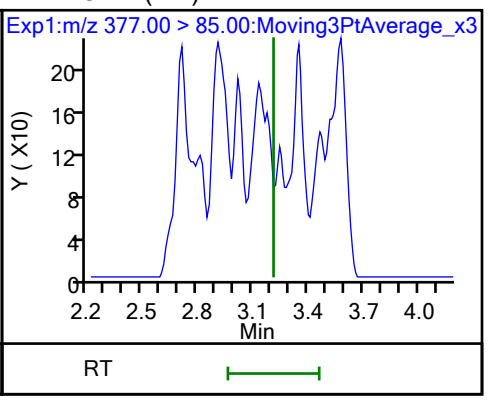
D 9 13C4 PFHpA



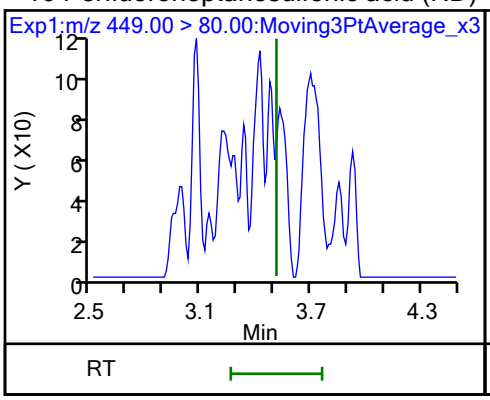
77 DONA (ND)



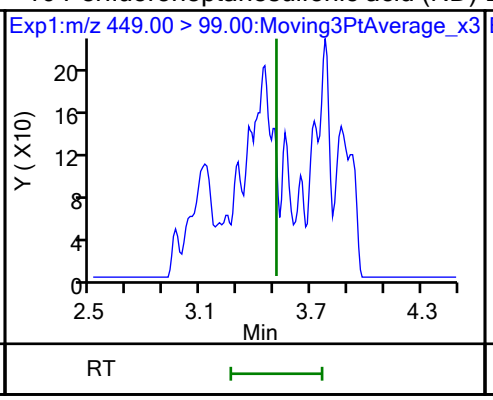
77 DONA (ND)



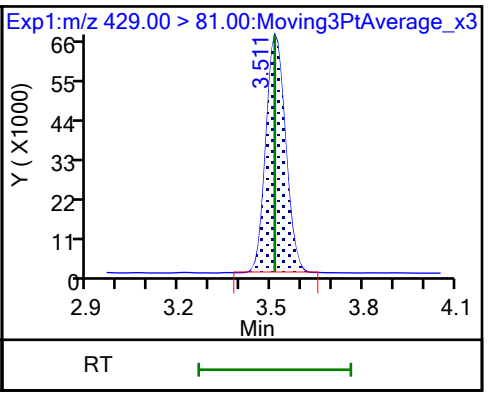
16 Perfluoroheptanesulfonic acid (ND)



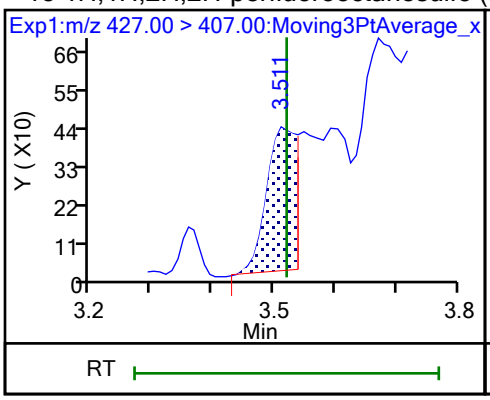
16 Perfluoroheptanesulfonic acid (ND)



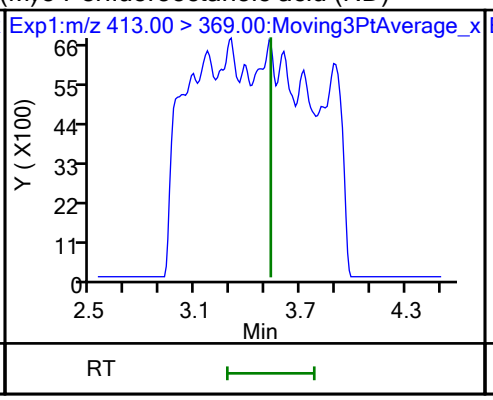
D 12 M2-6:2 FTS



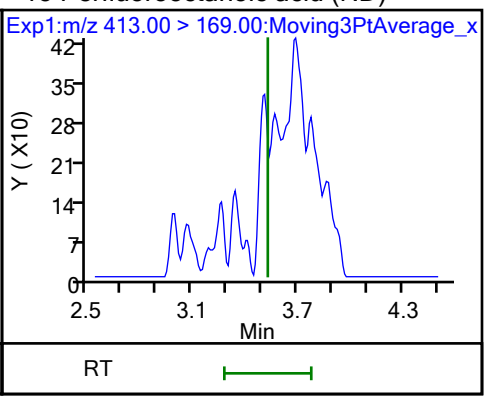
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



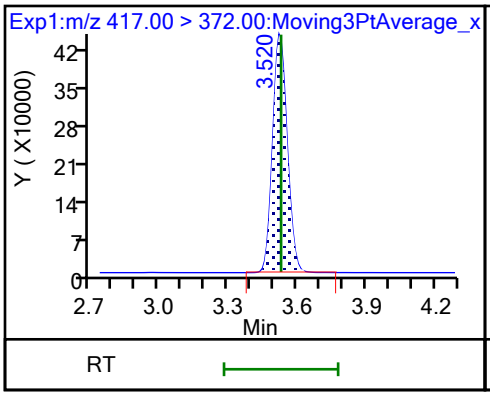
15 Perfluorooctanoic acid (ND)



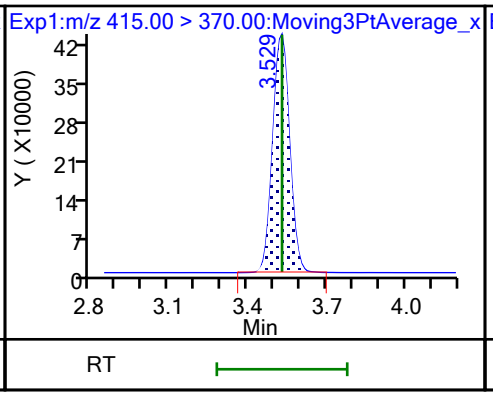
15 Perfluorooctanoic acid (ND)



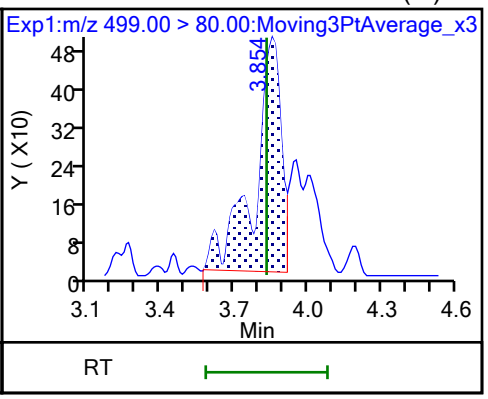
D 14 13C4 PFOA



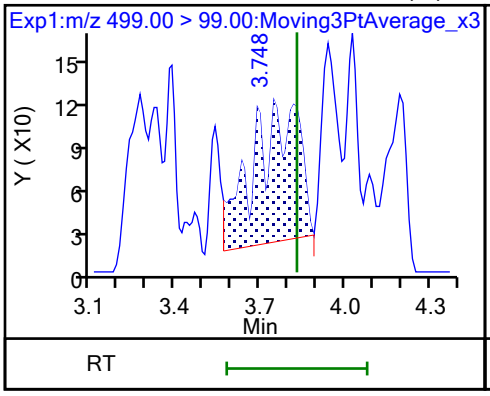
* 62 13C2 PFOA



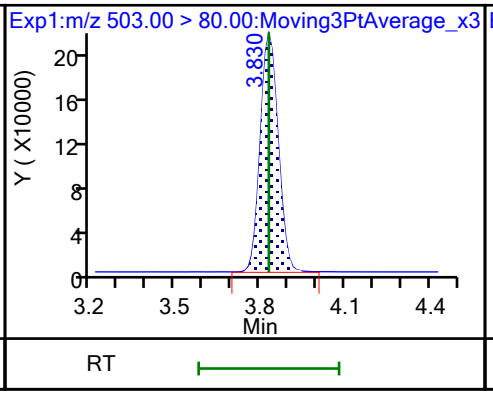
17 Perfluorooctanesulfonic acid (M)



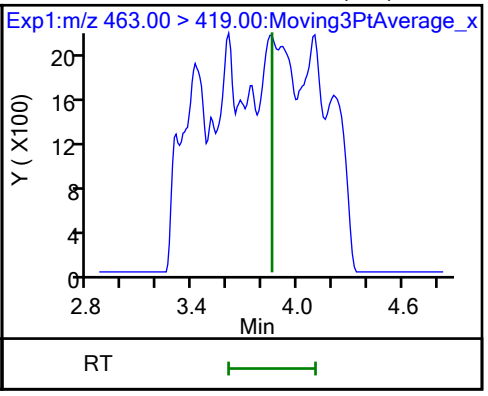
17 Perfluorooctanesulfonic acid (M)



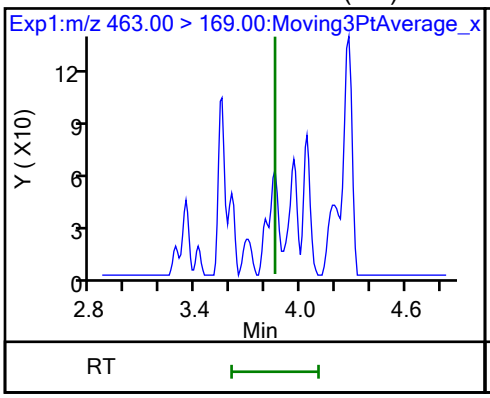
D 18 13C4 PFOS



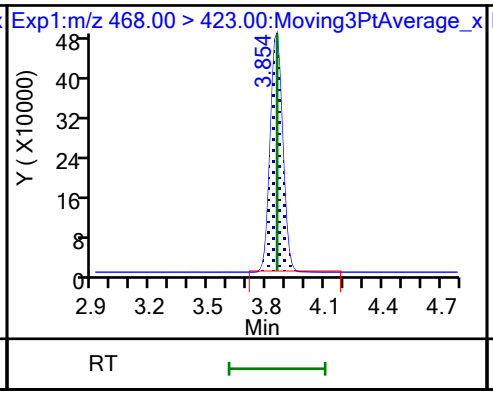
20 Perfluorononanoic acid (ND)



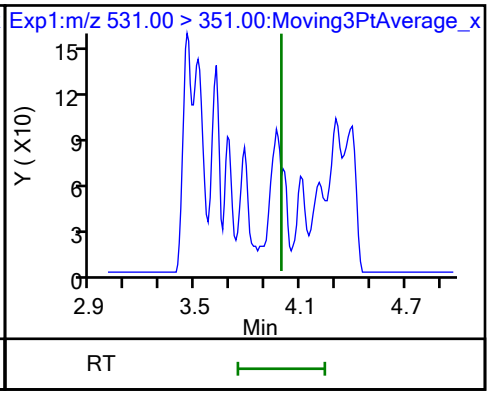
20 Perfluorononanoic acid (ND)



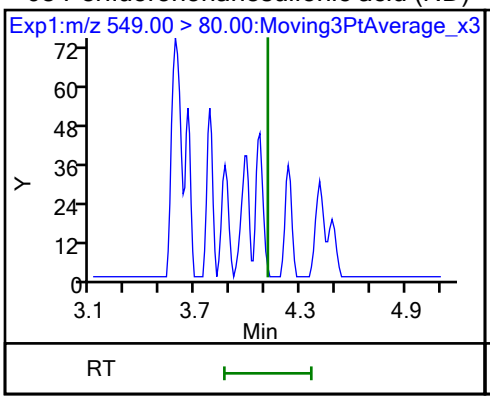
D 19 13C5 PFNA



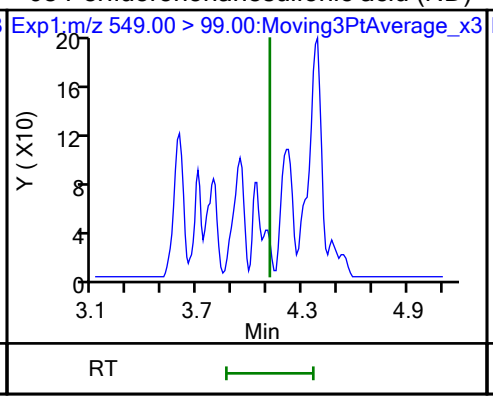
69 9-Chlorohexadecafluoro-3-oxanona (ND)



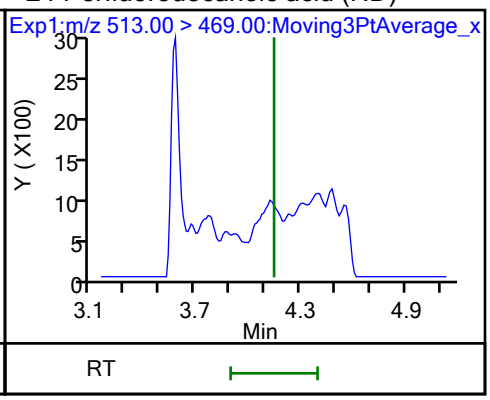
68 Perfluorononanesulfonic acid (ND)



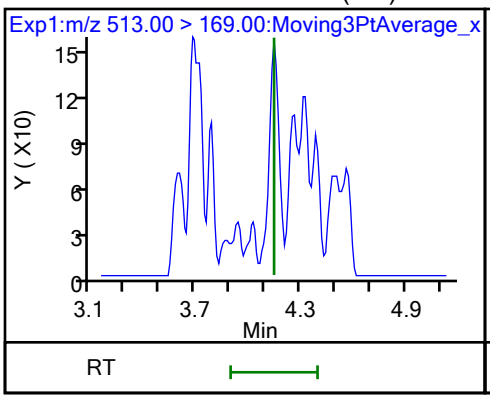
68 Perfluorononanesulfonic acid (ND)



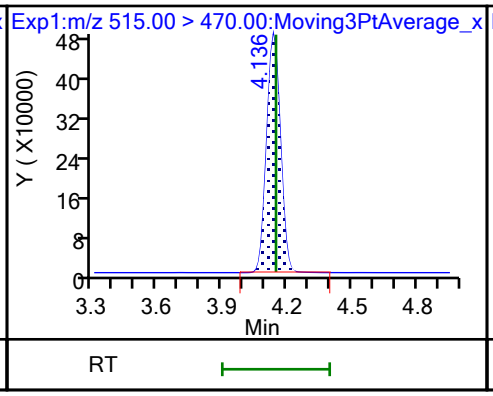
24 Perfluorodecanoic acid (ND)



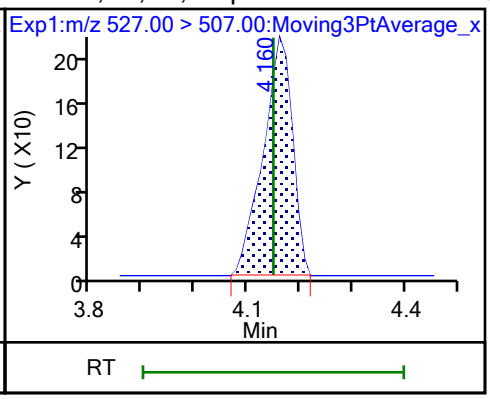
24 Perfluorodecanoic acid (ND)



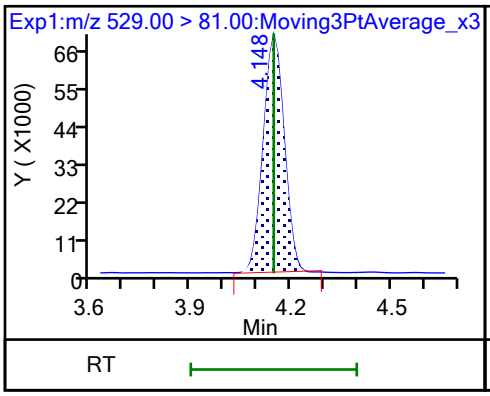
D 23 13C2 PFDA



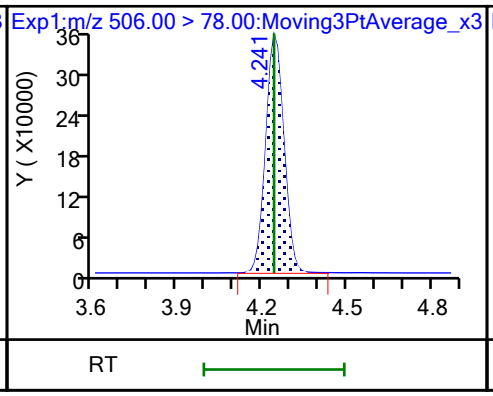
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



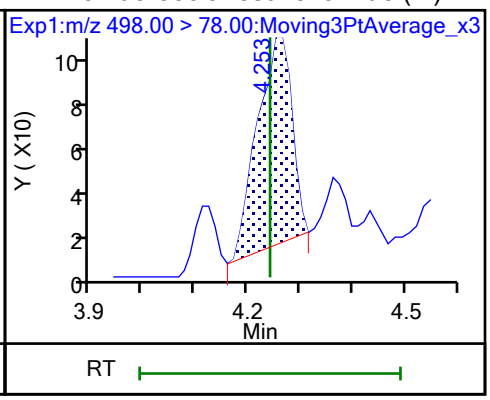
D 26 M2-8:2 FTS



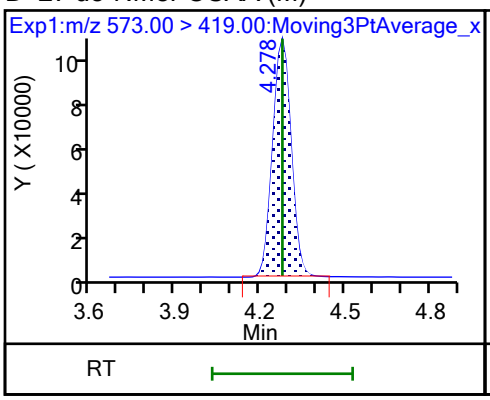
D 21 13C8 FOSA



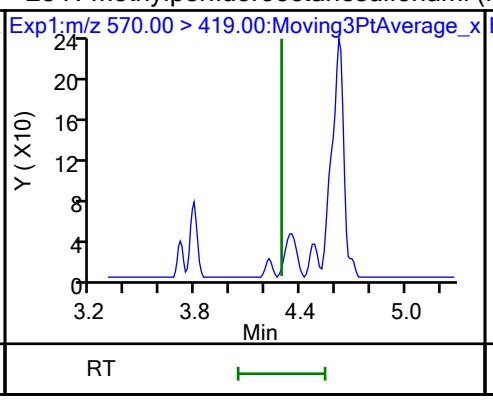
22 Perfluorooctanesulfonamide (M)



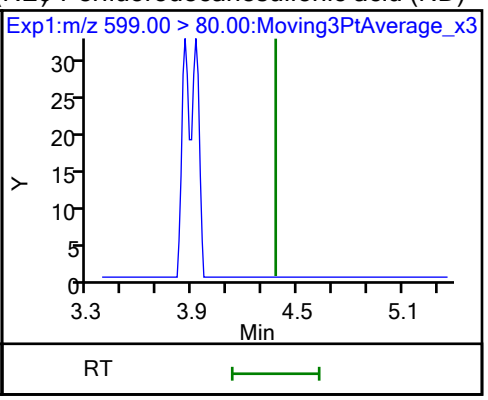
D 27 d3-NMeFOSAA (M)



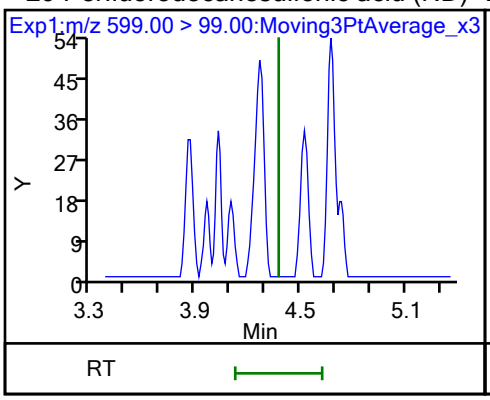
28 N-methylperfluorooctanesulfonami (ND)



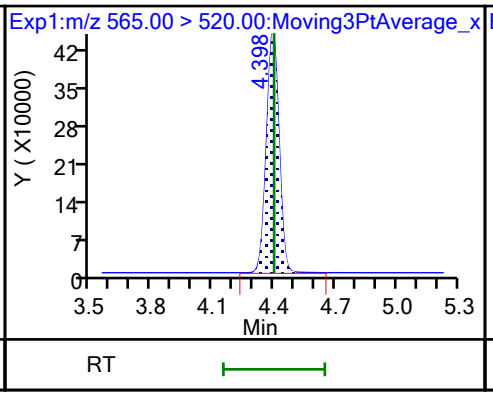
29 Perfluorodecanesulfonic acid (ND)



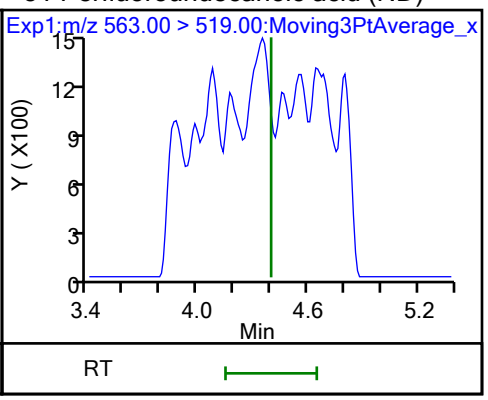
29 Perfluorodecanesulfonic acid (ND)



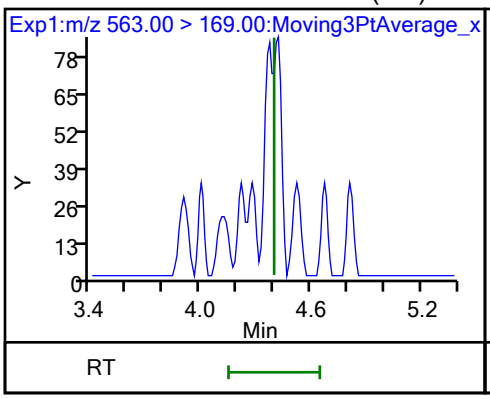
D 30 13C2 PFUnA



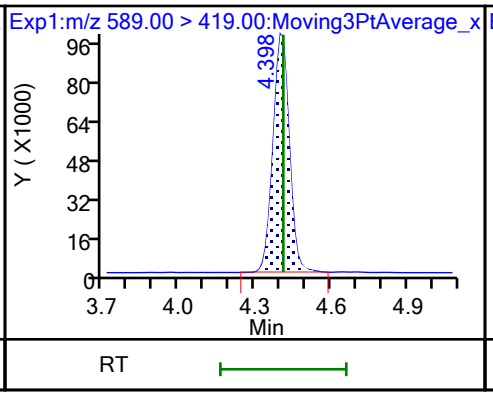
31 Perfluoroundecanoic acid (ND)



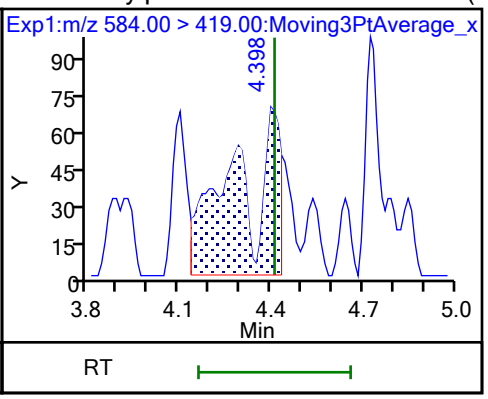
31 Perfluoroundecanoic acid (ND)



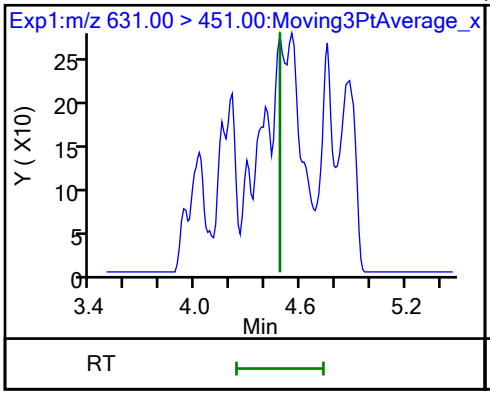
D 32 d5-NEtFOSAA



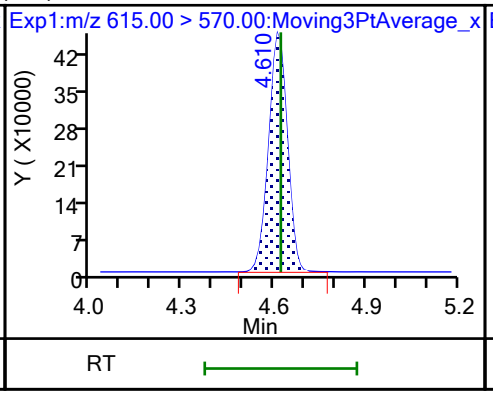
33 N-ethylperfluorooctanesulfonamid (M)



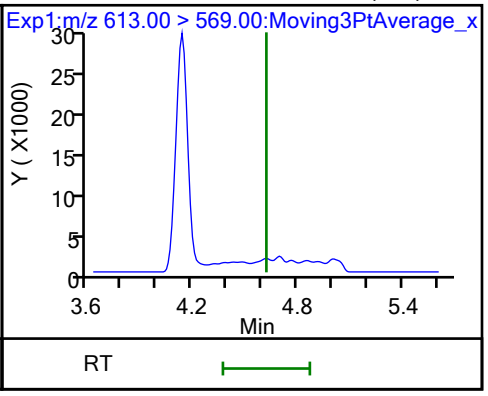
66 11-Chloroeicosafluoro-3-oxaundec (ND)



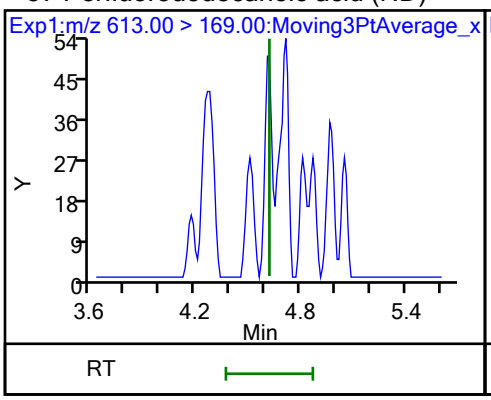
D 36 13C2 PFDoA



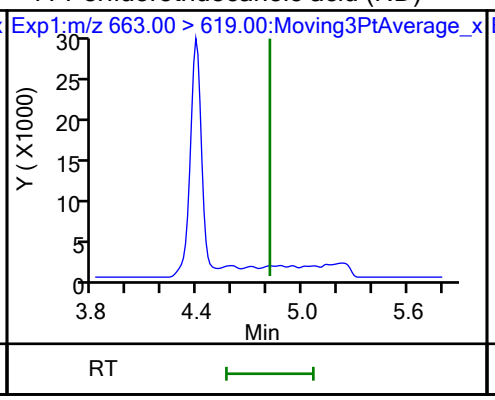
37 Perfluorododecanoic acid (ND)



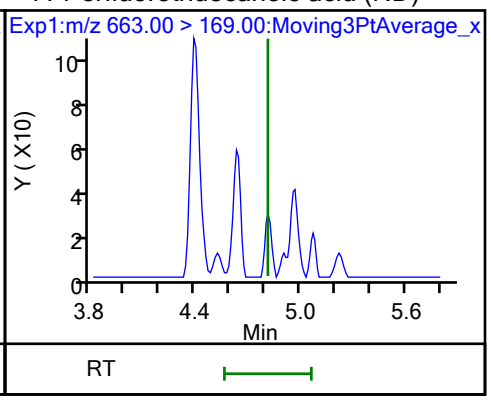
37 Perfluorododecanoic acid (ND)



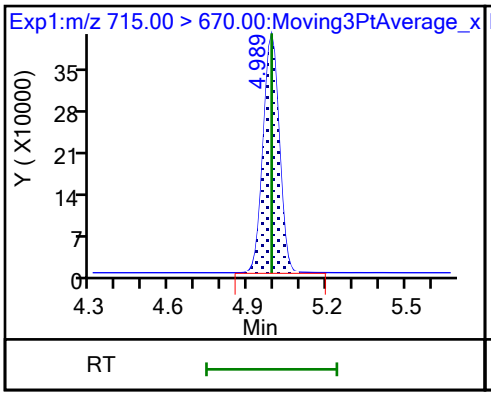
41 Perfluorotridecanoic acid (ND)



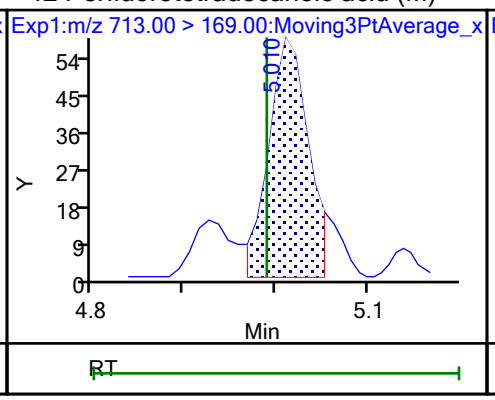
41 Perfluorotridecanoic acid (ND)



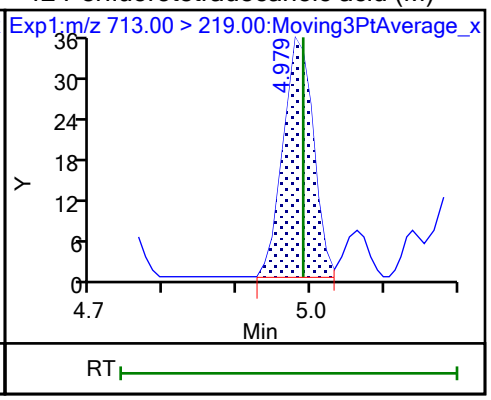
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

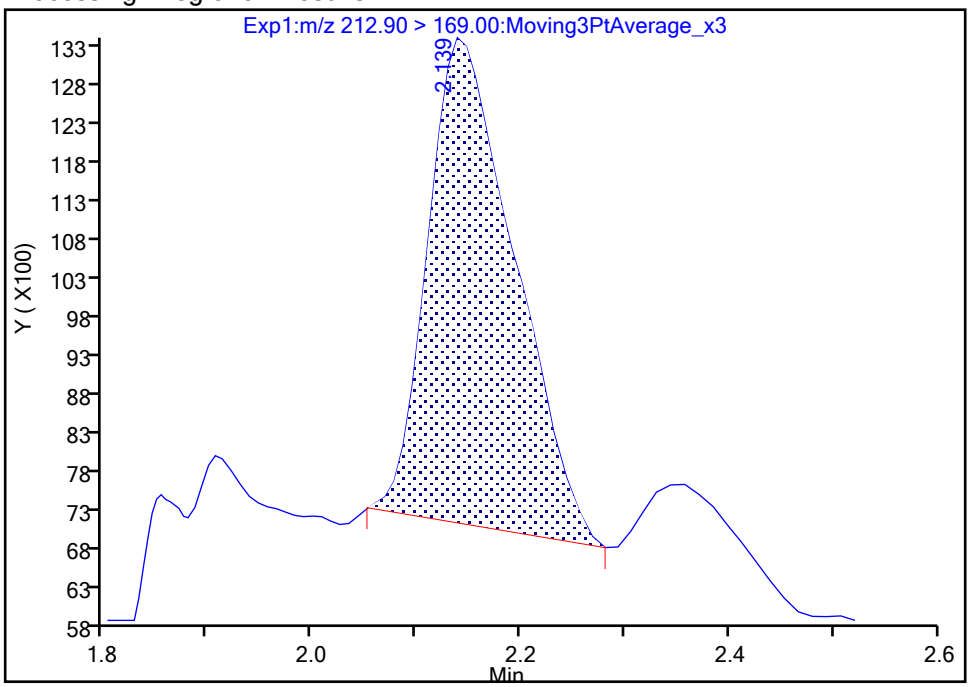
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

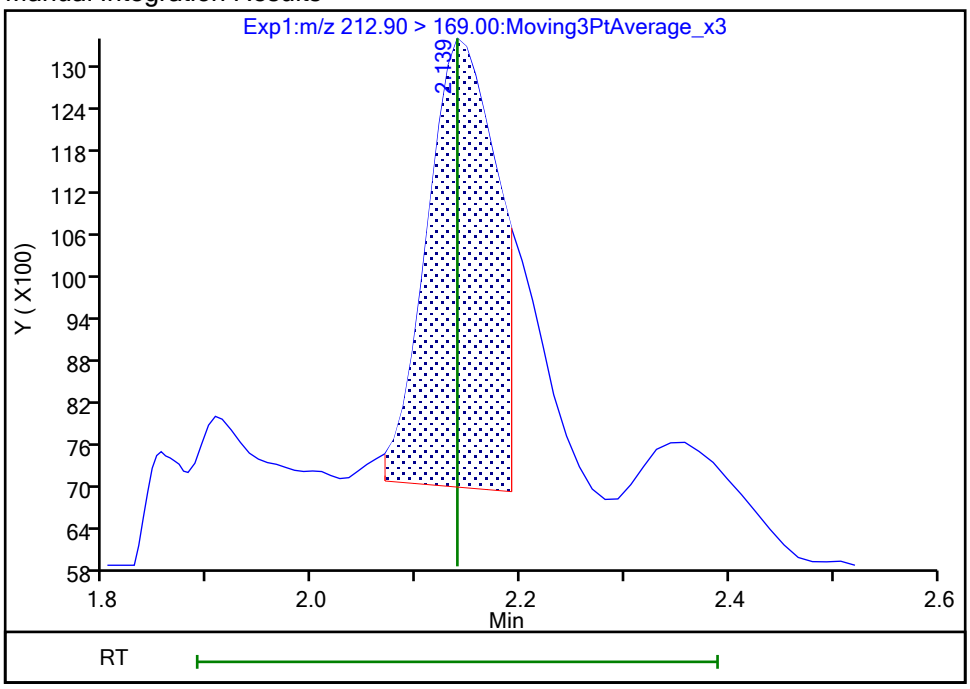
Processing Integration Results

RT: 2.14
Area: 36801
Amount: -0.014826
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 29964
Amount: -0.019667
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:46:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

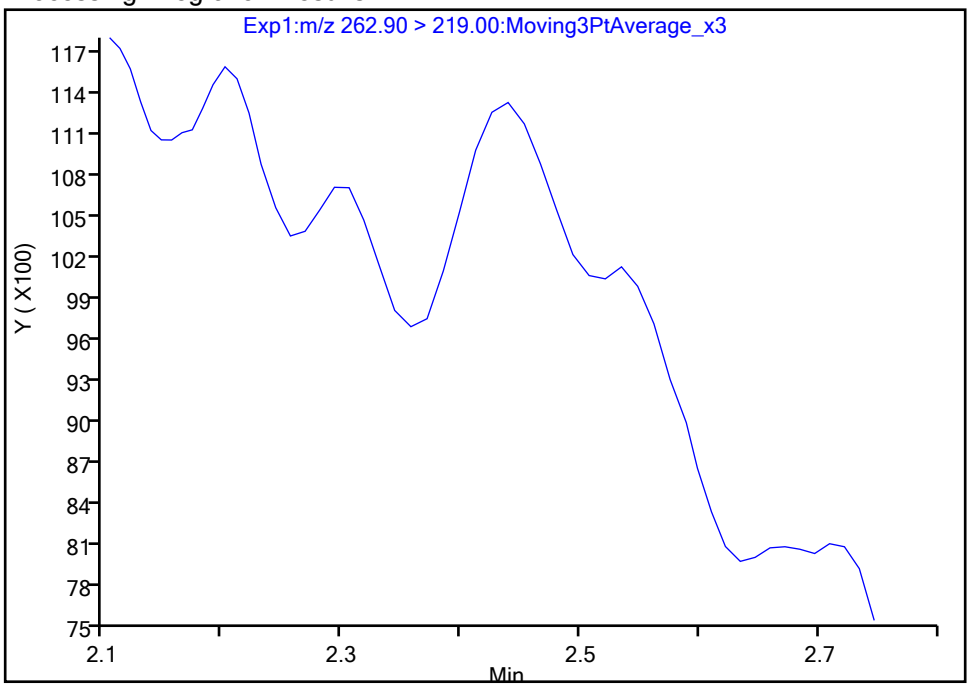
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

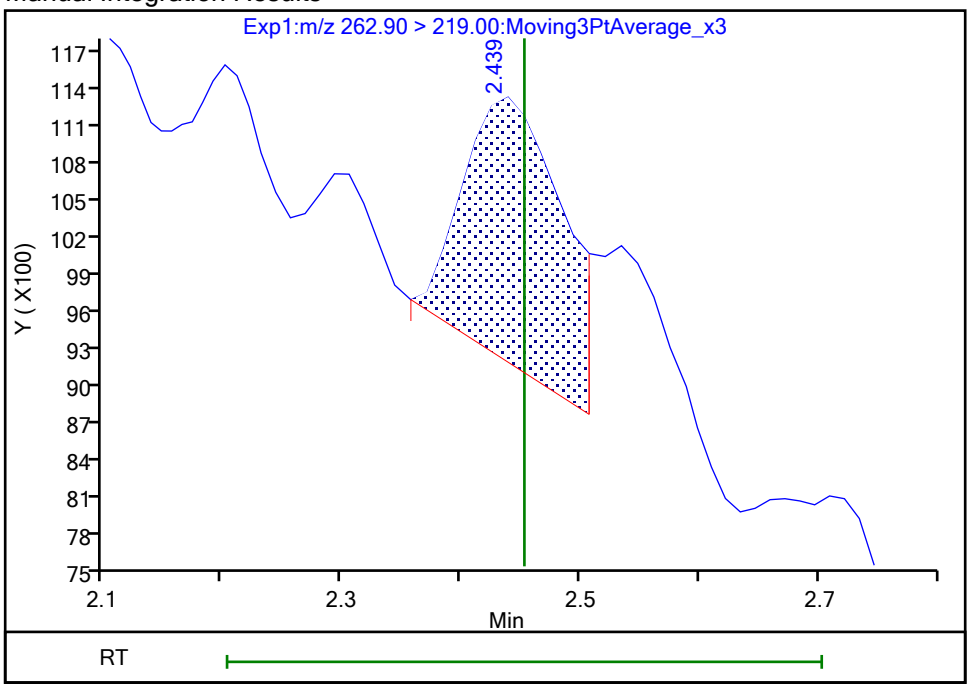
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.44
Area: 12298
Amount: 0.009440
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:46:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

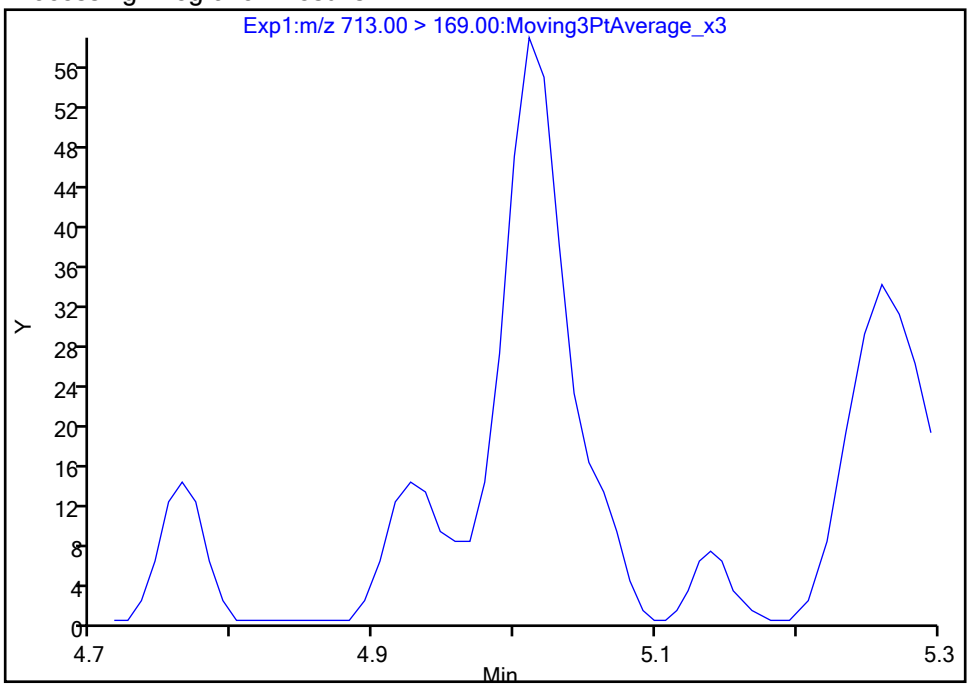
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

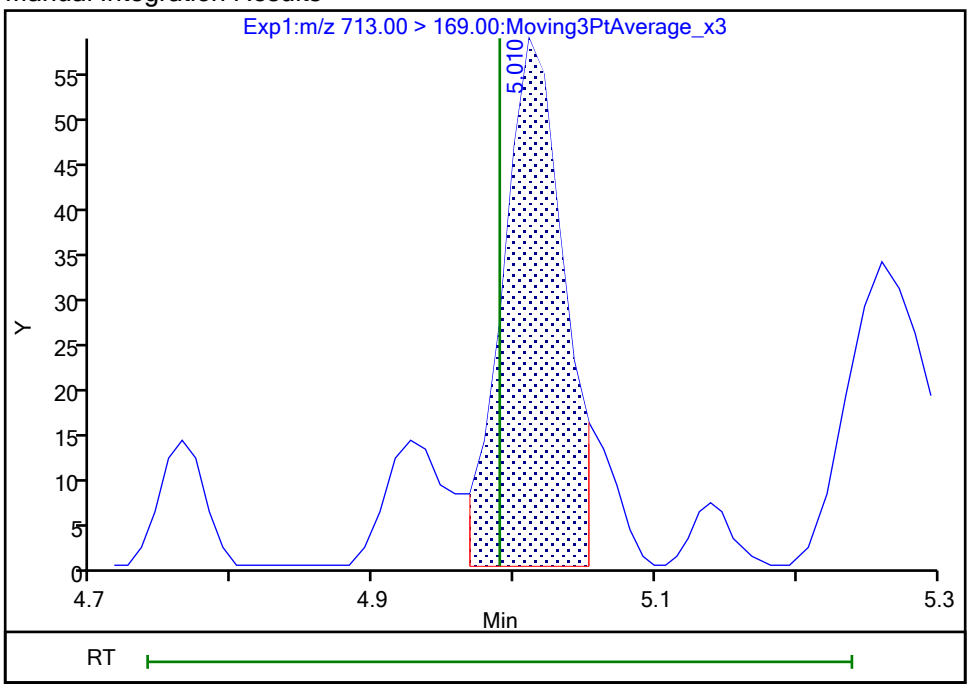
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 5.01
Area: 174
Amount: 0.001129
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:49:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

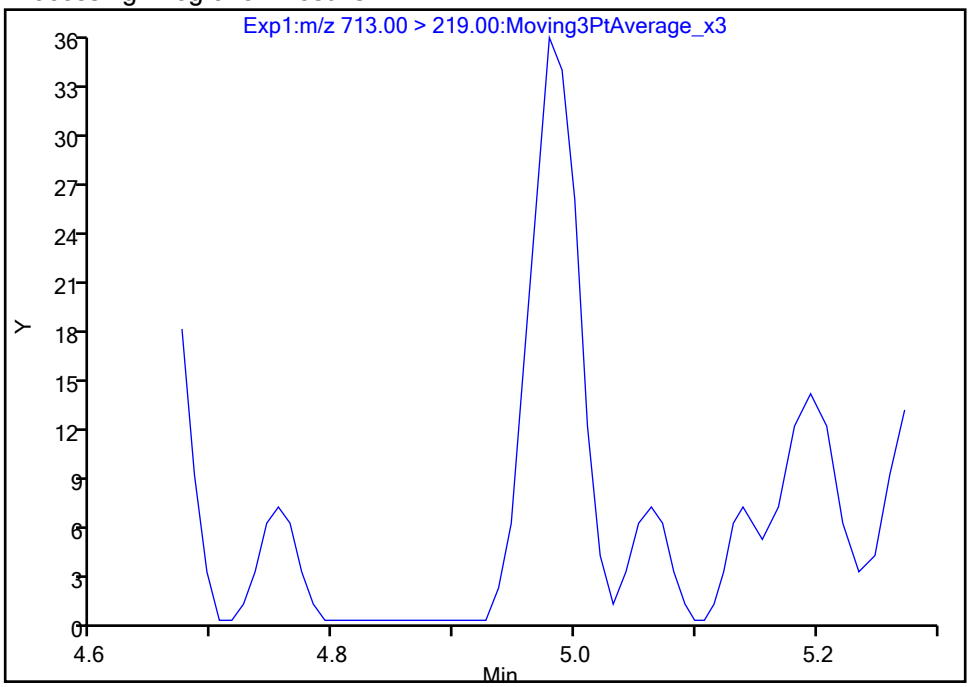
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

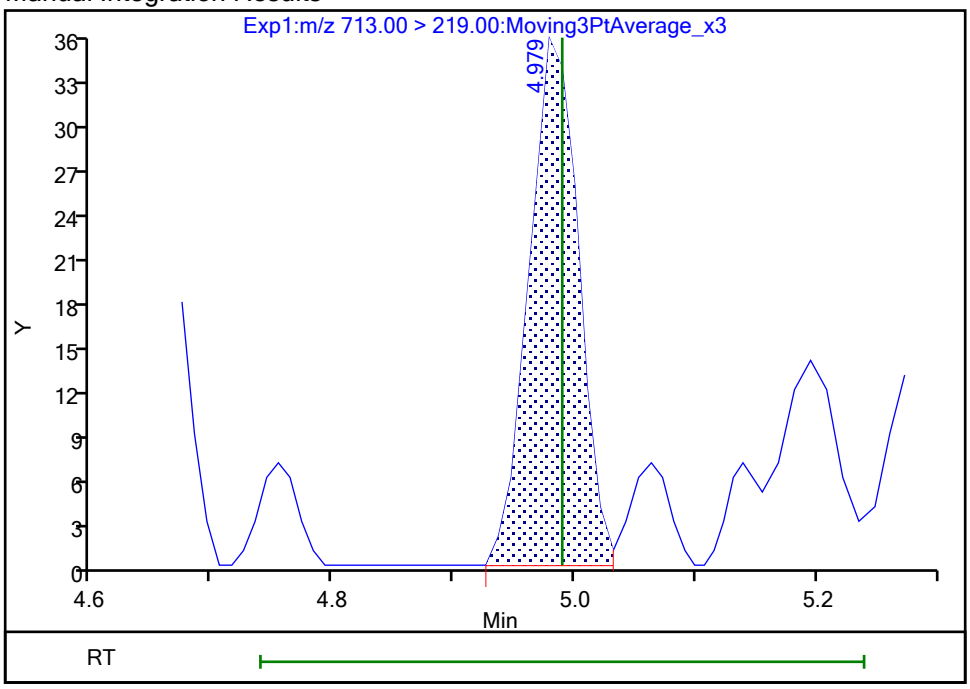
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 102
Amount: 0.001129
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:49:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

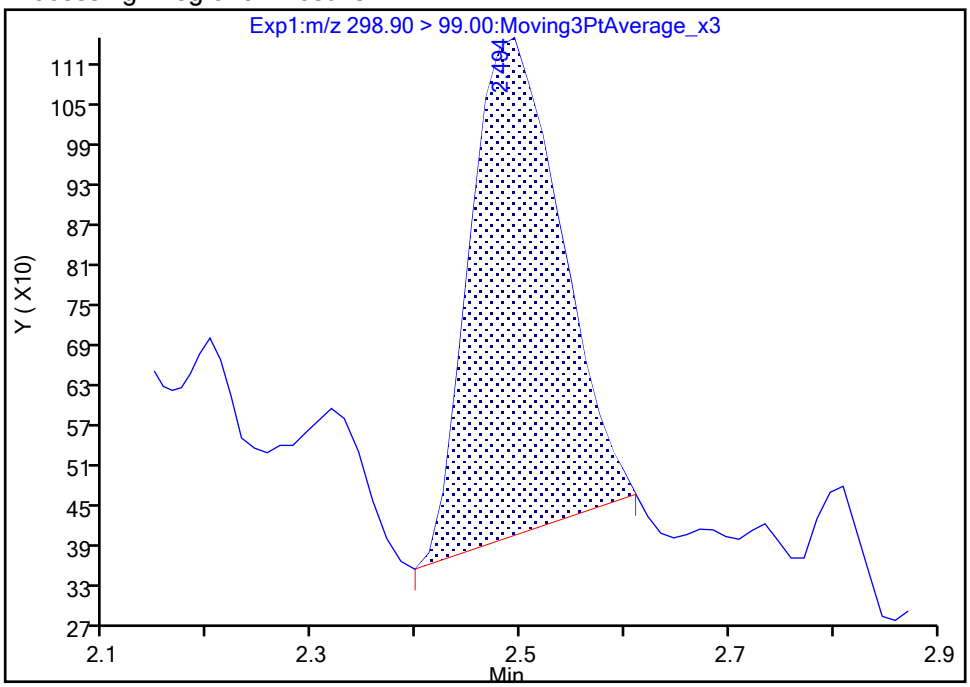
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

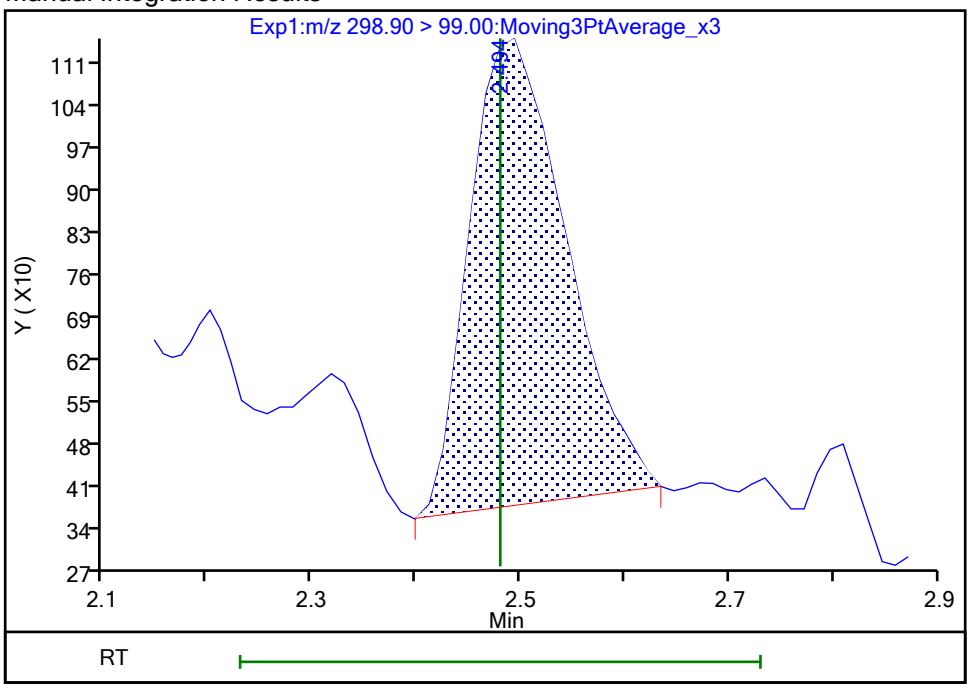
Processing Integration Results

RT: 2.49
Area: 4535
Amount: 0.004760
Amount Units: ng/ml



Manual Integration Results

RT: 2.49
Area: 4988
Amount: 0.004393
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

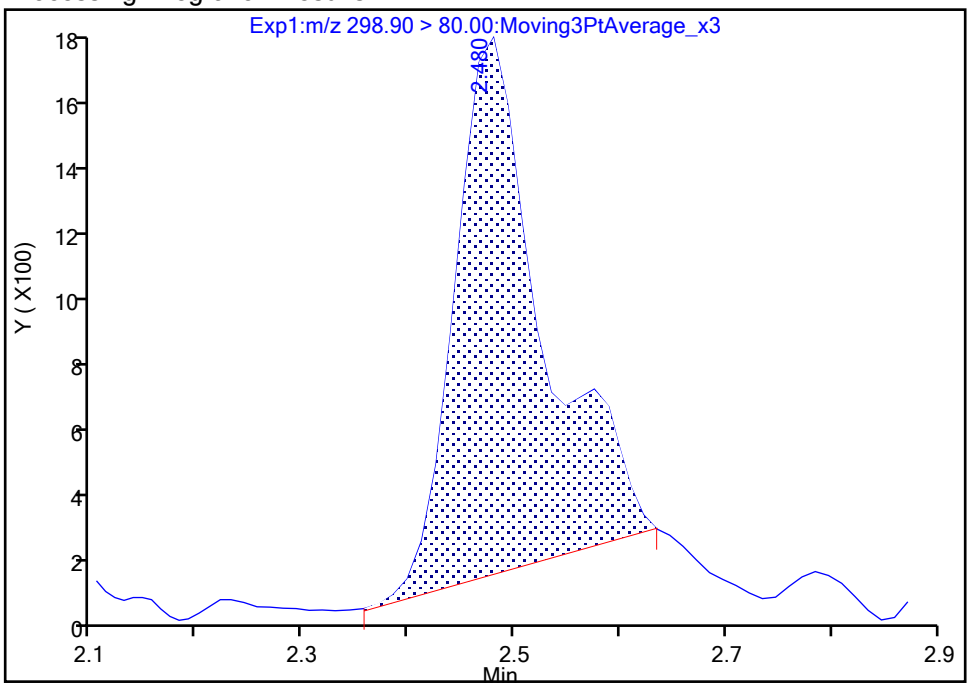
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

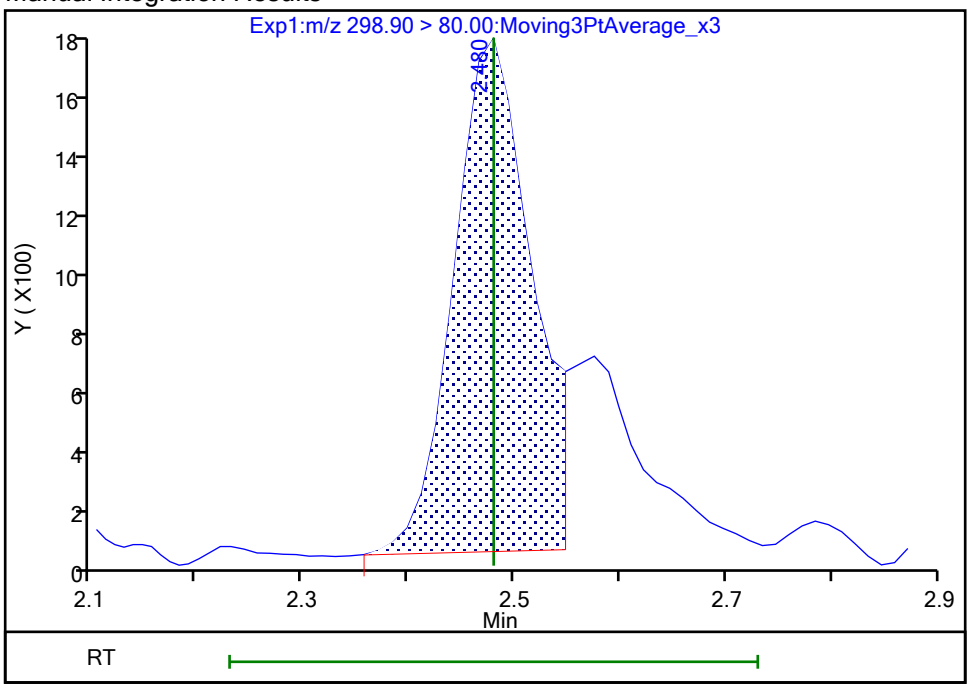
Processing Integration Results

RT: 2.48
Area: 8779
Amount: 0.004760
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 8103
Amount: 0.004393
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

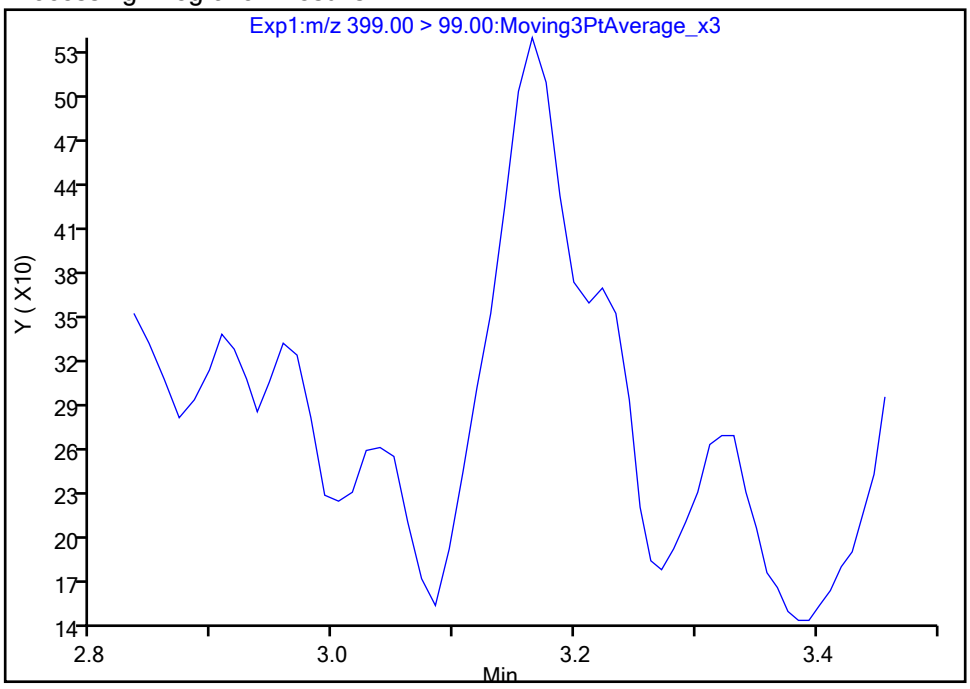
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

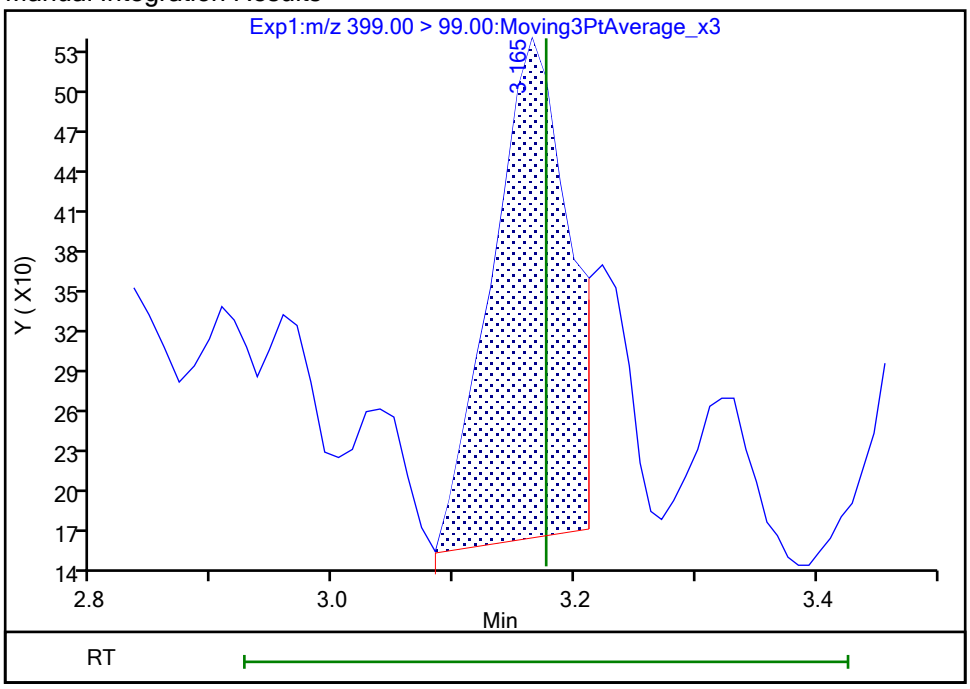
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 1604
Amount: 0.003732
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

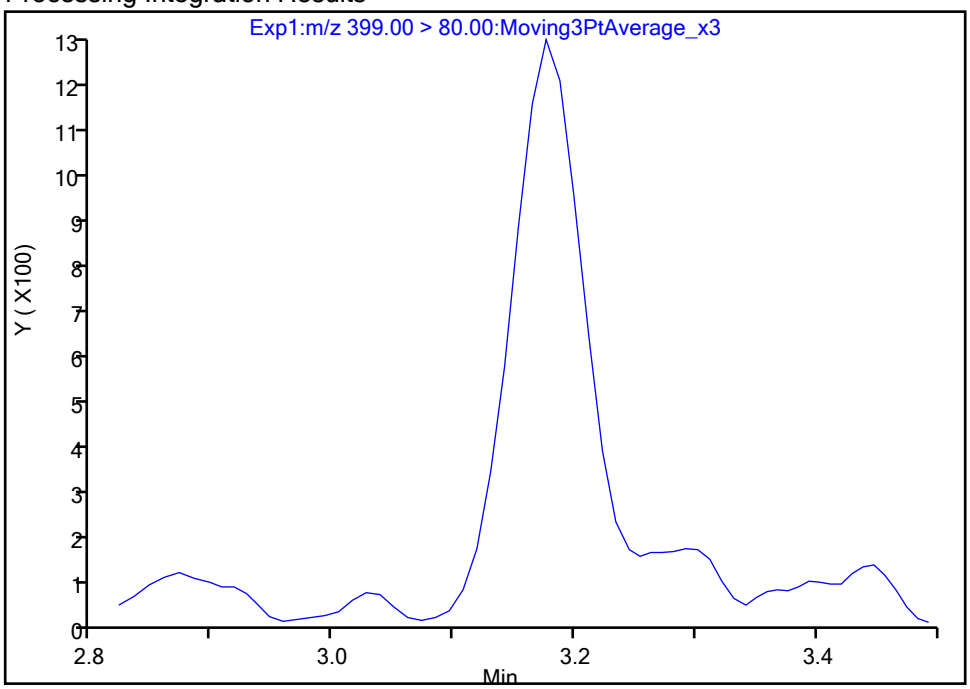
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

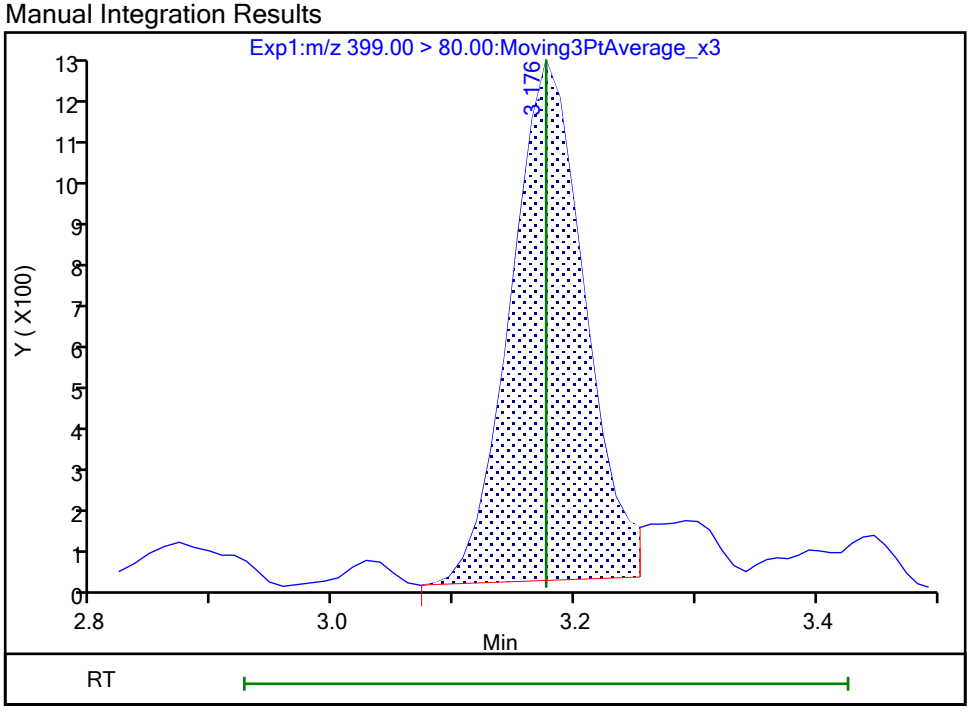
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.18
Area: 5114
Amount: 0.003732
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

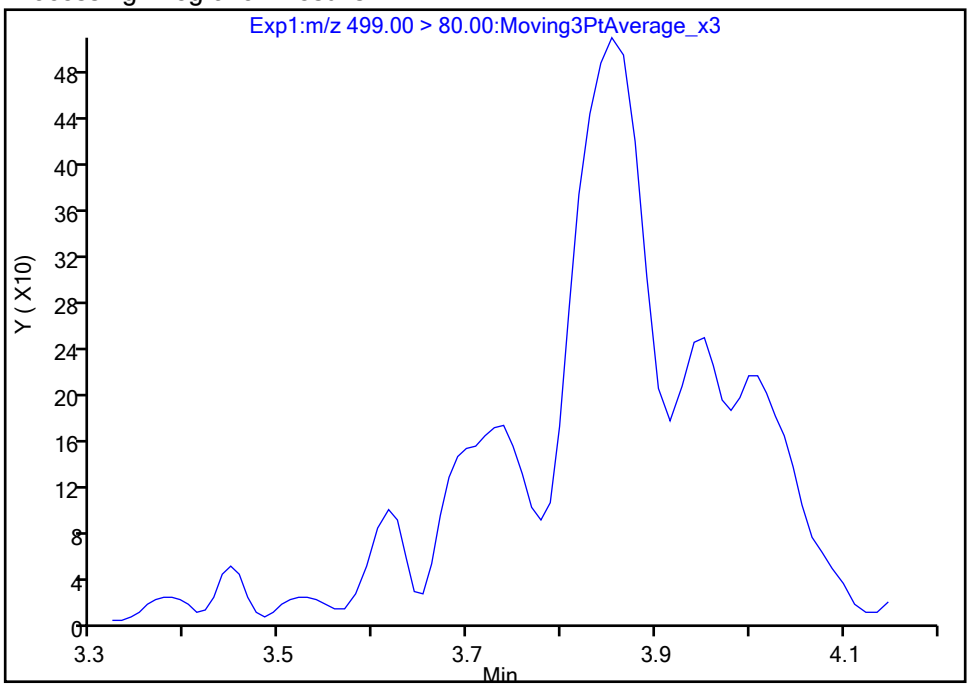
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

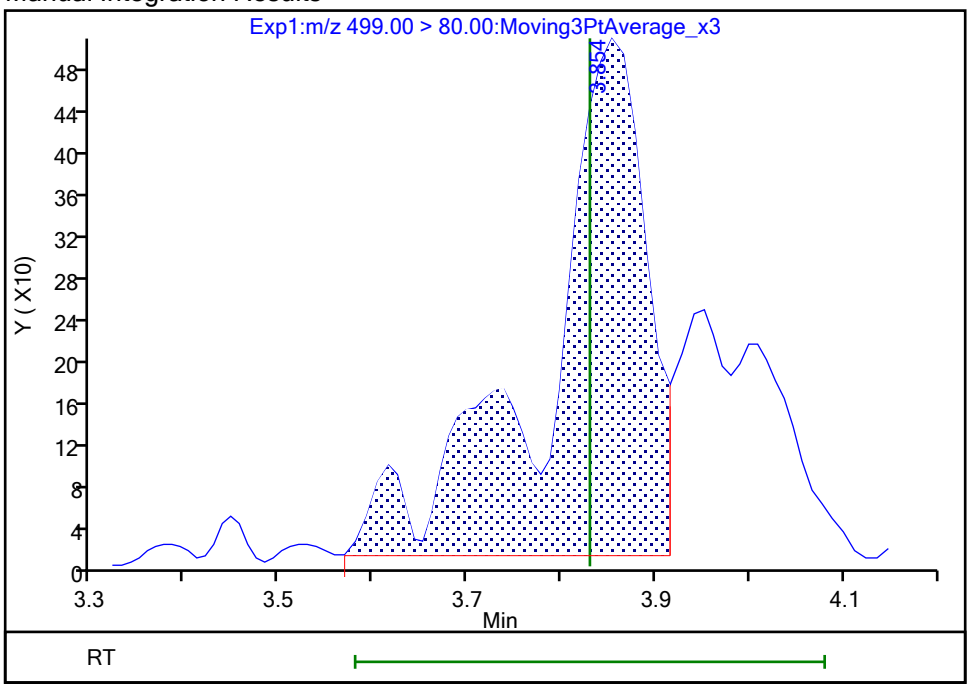
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.85
Area: 3744
Amount: 0.004084
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:48:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

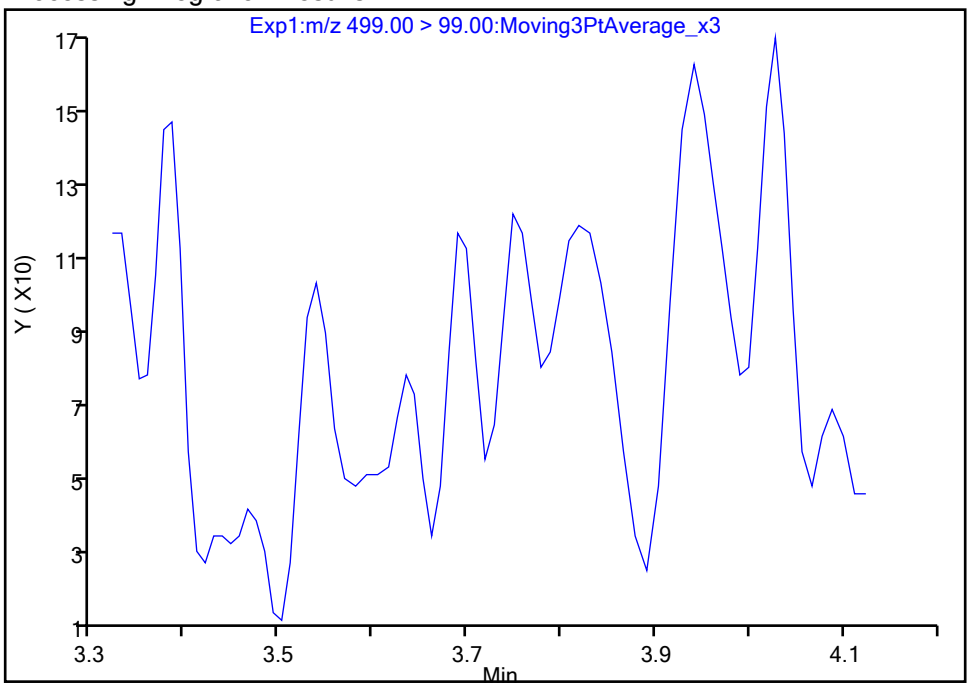
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

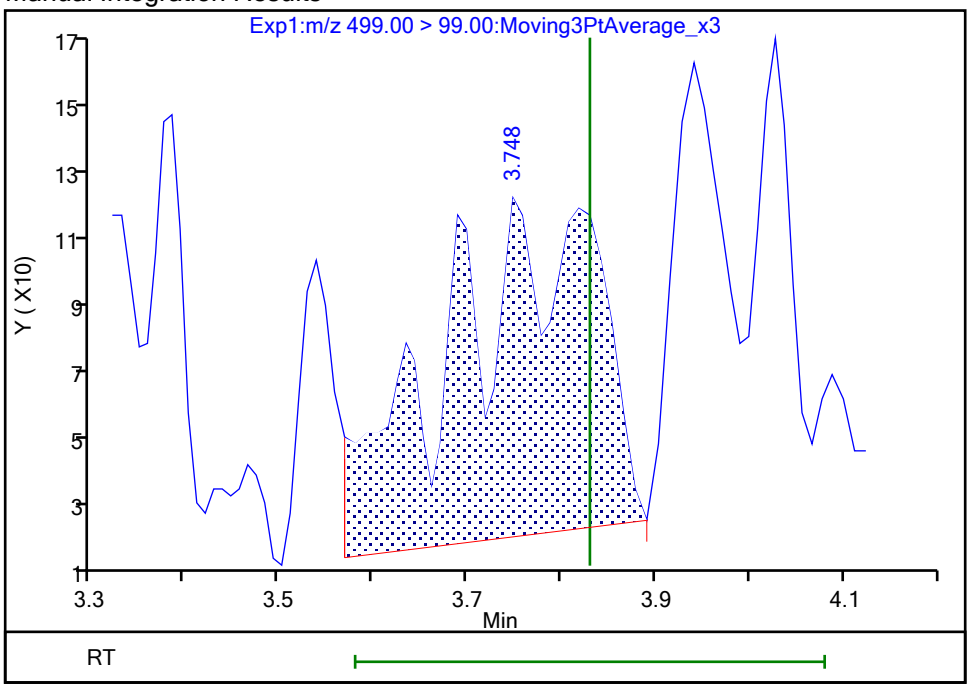
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 1083
Amount: 0.004084
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:48:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

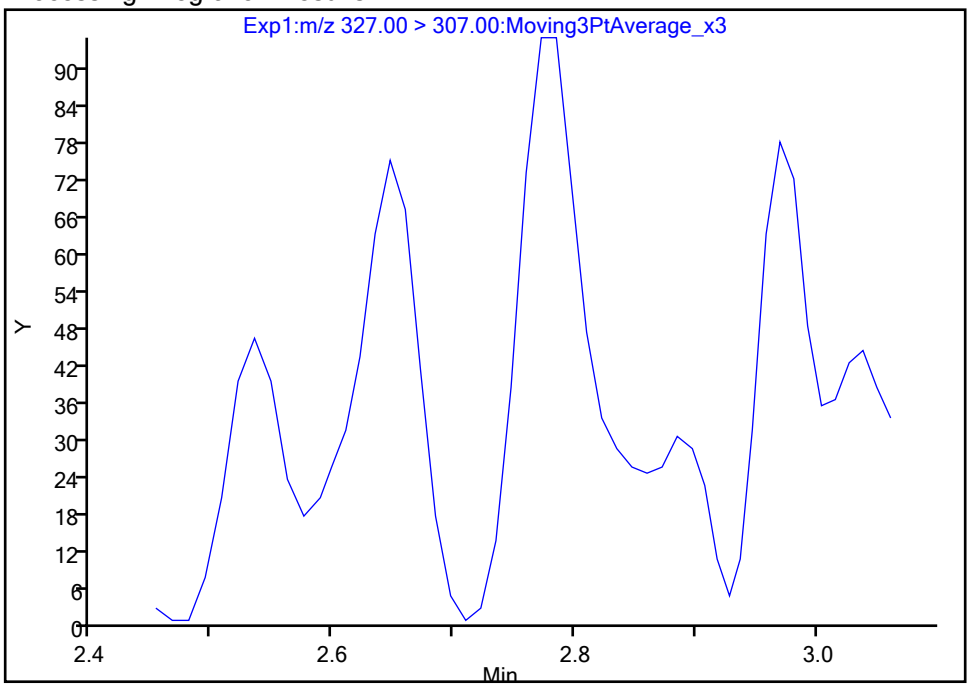
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

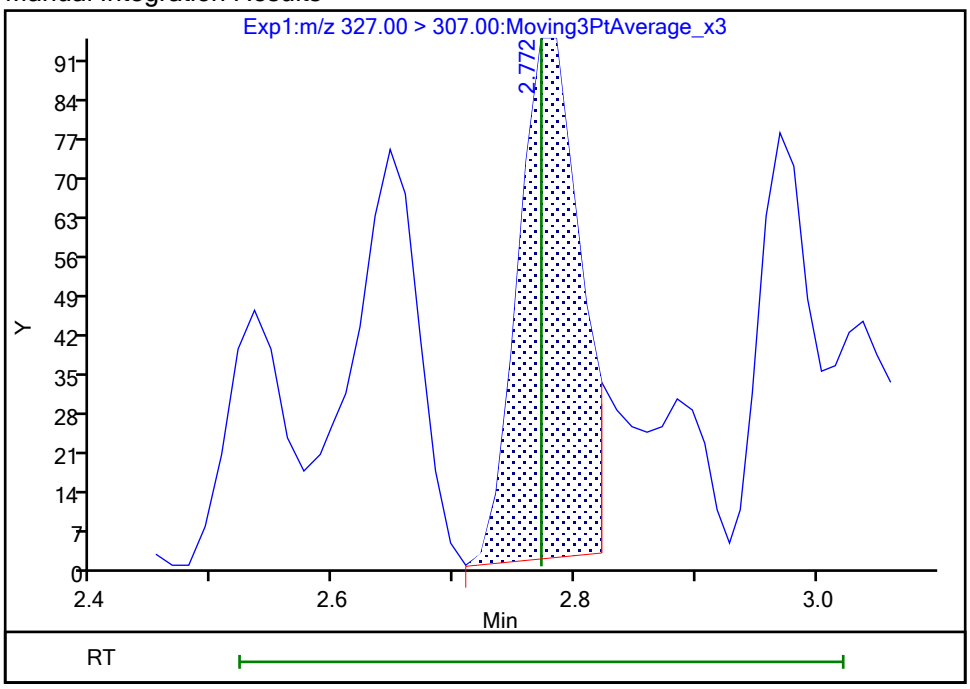
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 331
Amount: 0.000543
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

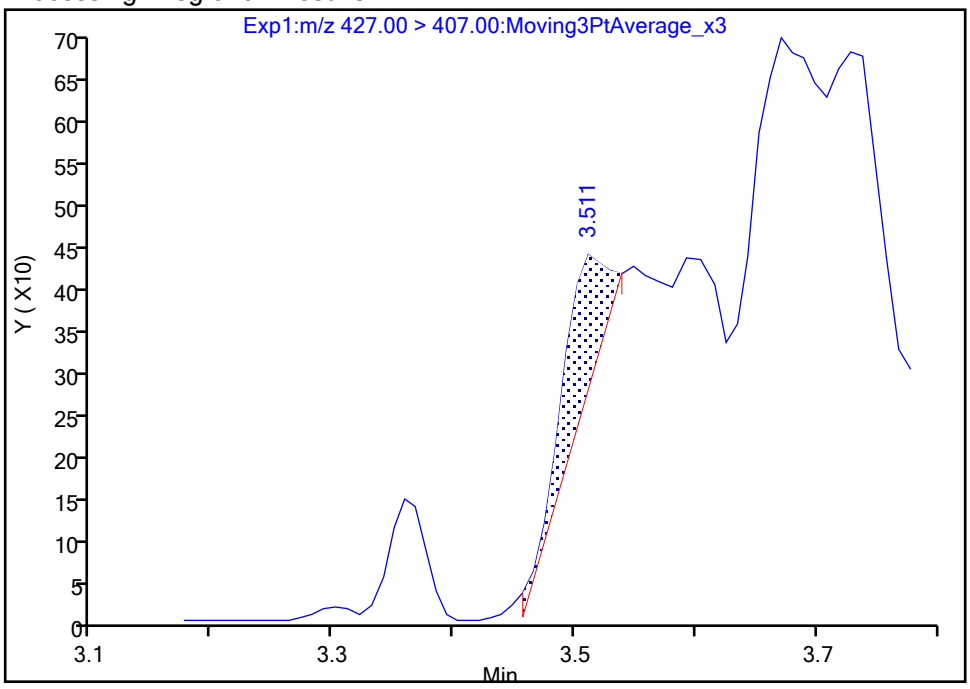
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

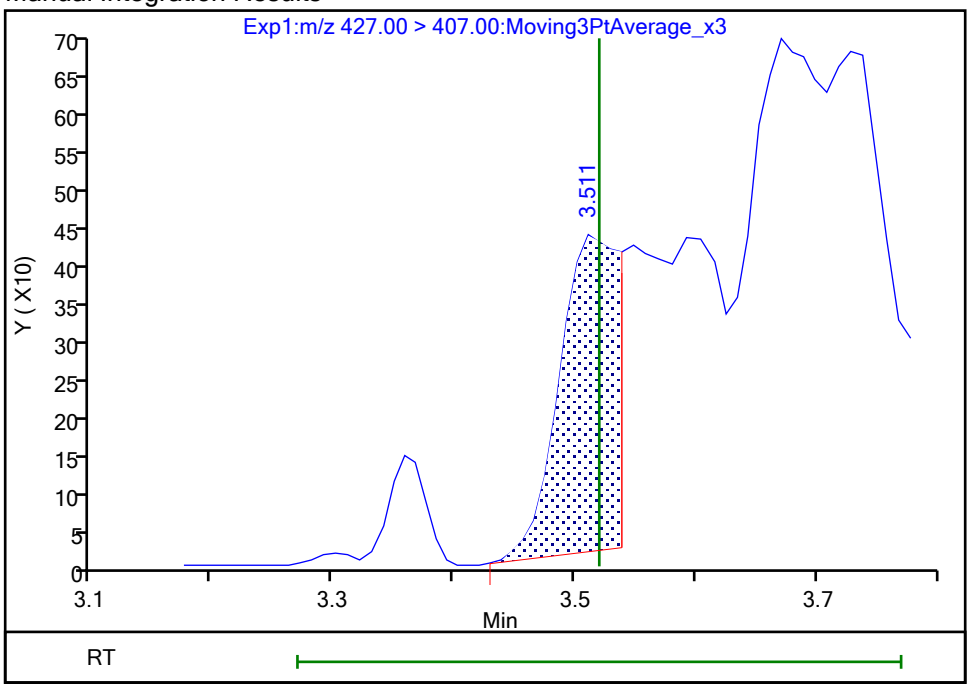
Processing Integration Results

RT: 3.51
Area: 407
Amount: 0.000592
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1372
Amount: 0.001996
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:48:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

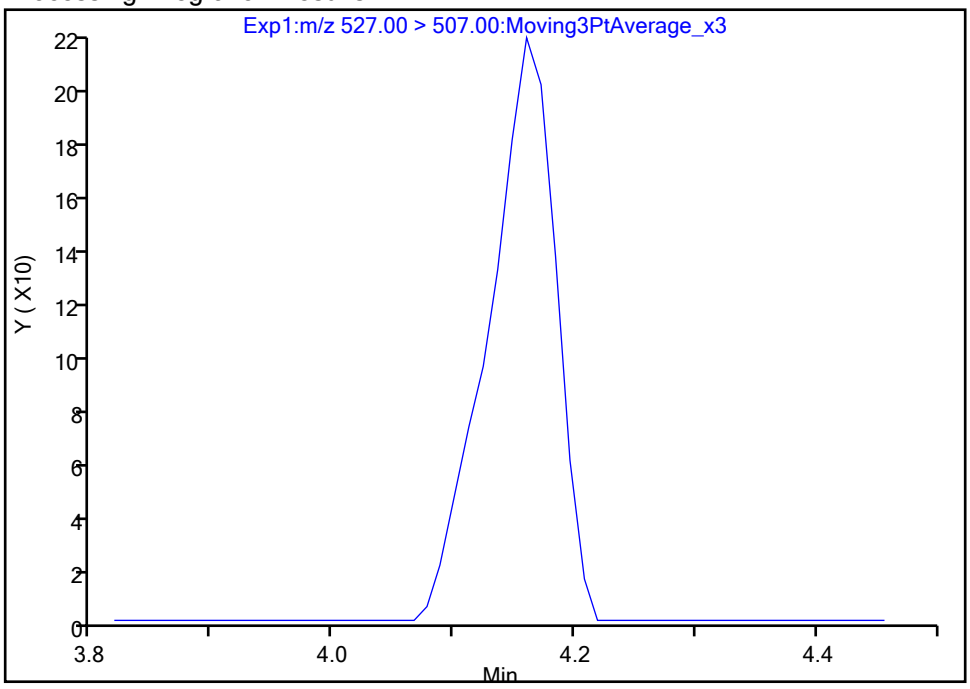
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

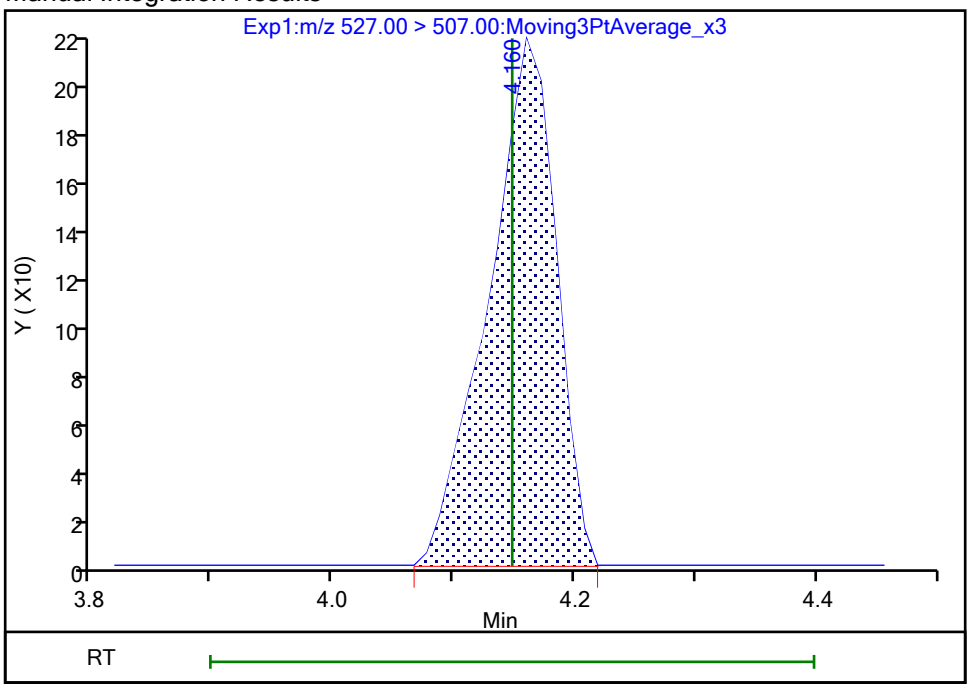
Not Detected
Expected RT: 4.15

Processing Integration Results



Manual Integration Results

RT: 4.16
Area: 819
Amount: 0.001452
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:48:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

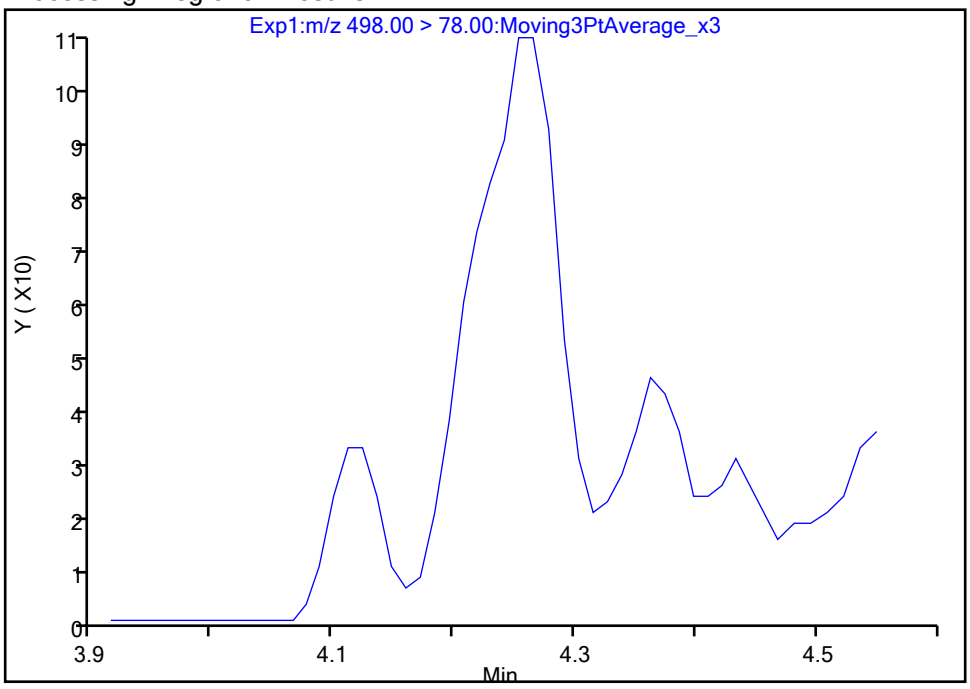
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

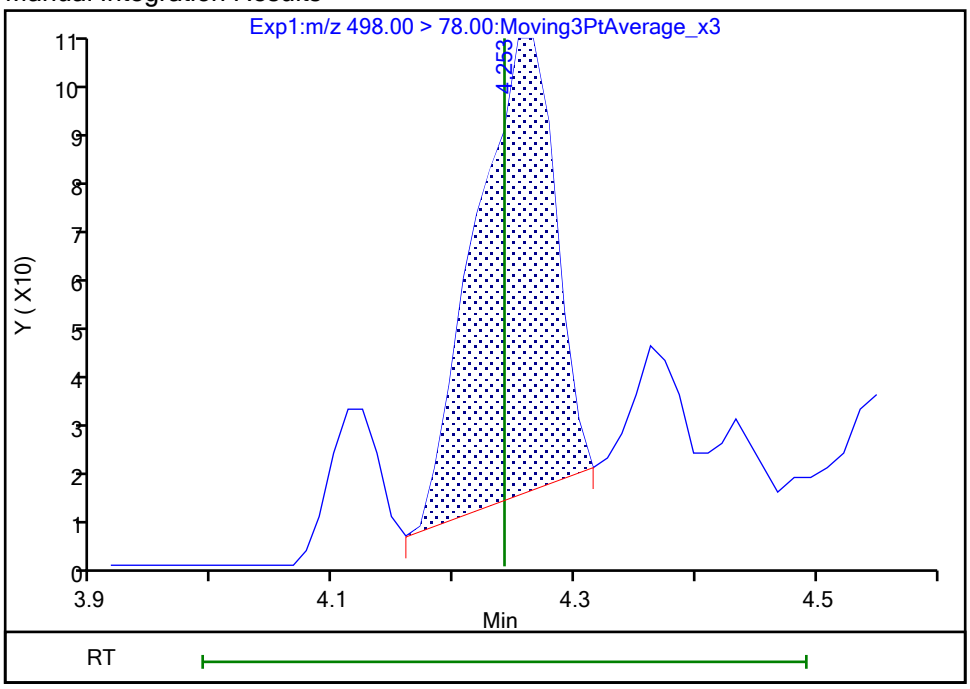
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 430
Amount: 0.000359
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:48:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

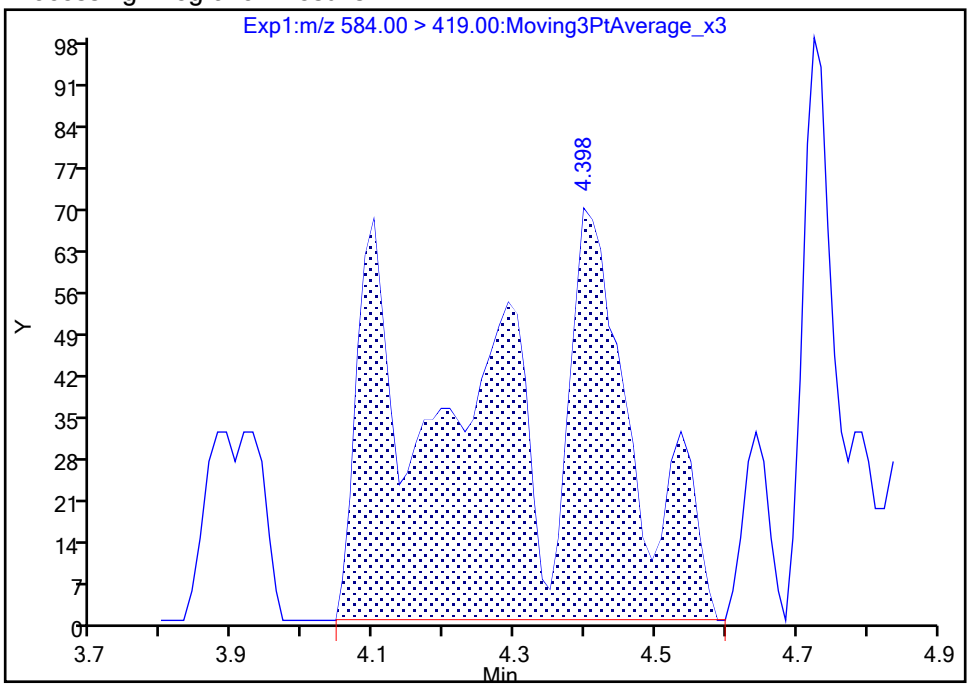
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

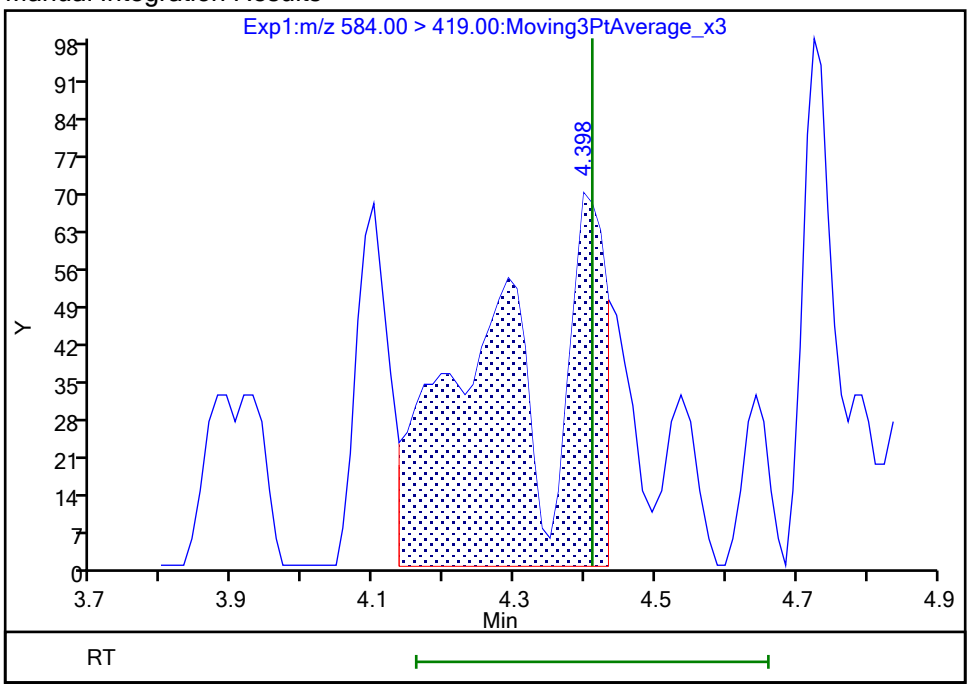
Processing Integration Results

RT: 4.40
Area: 1101
Amount: 0.003084
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 677
Amount: 0.001896
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:49:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

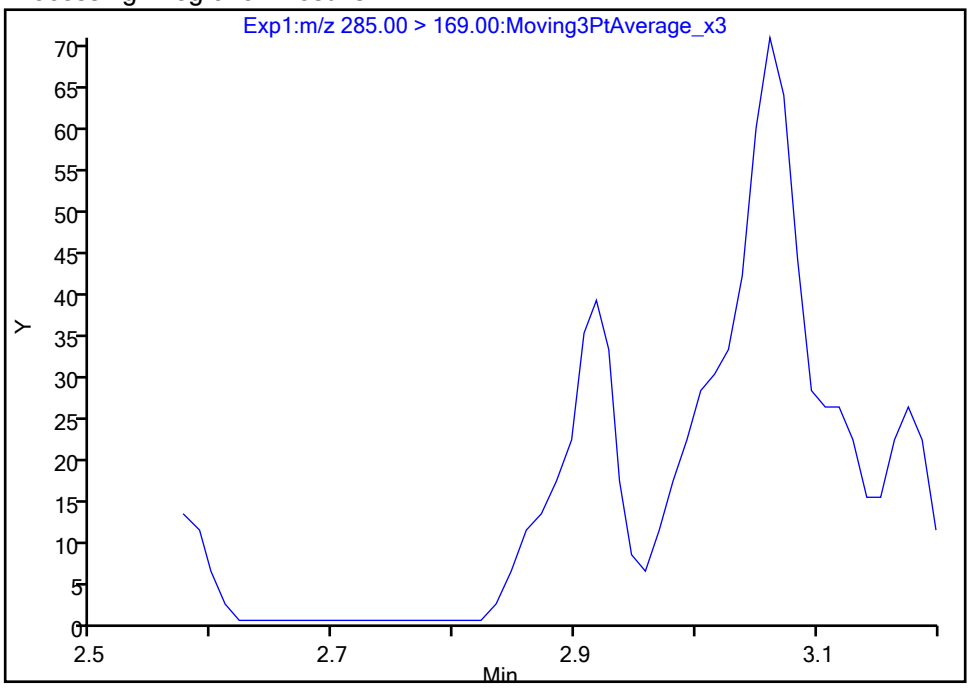
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

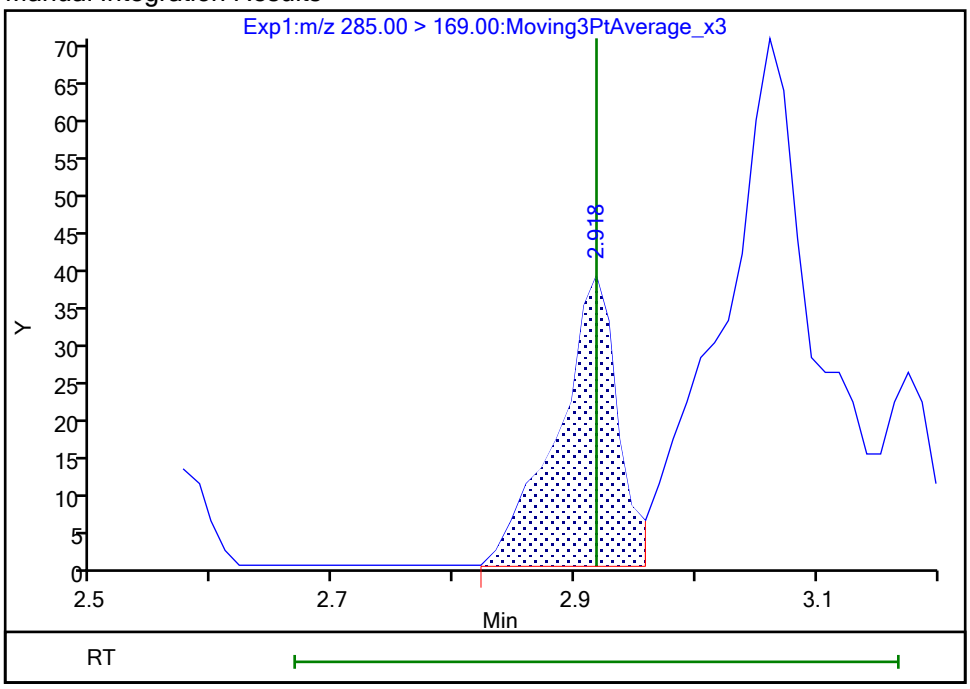
Not Detected
Expected RT: 2.92

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 133
Amount: 0.000628
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:47:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

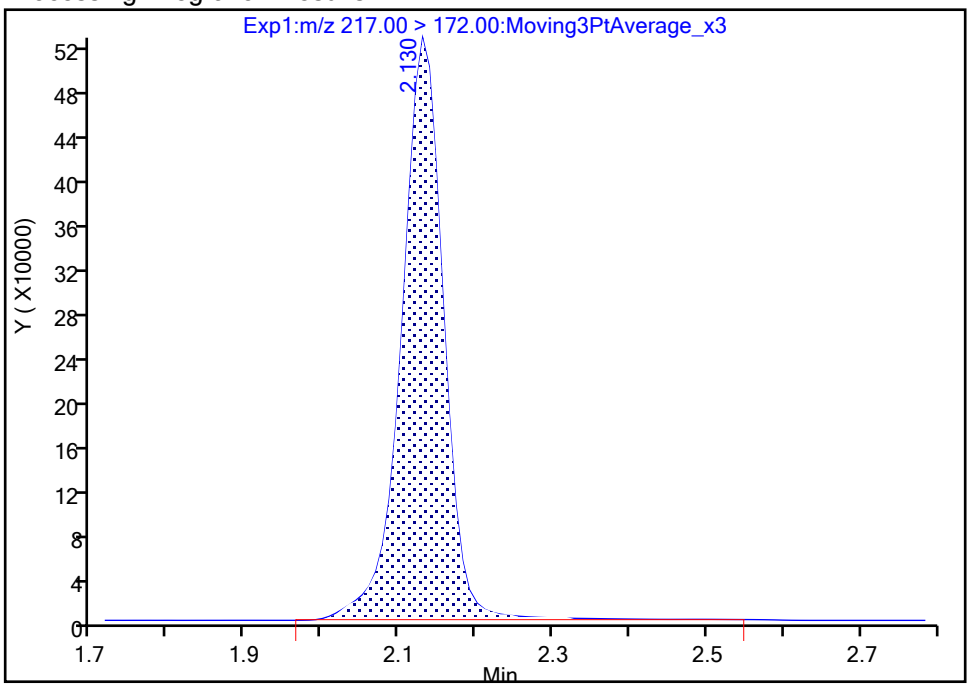
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

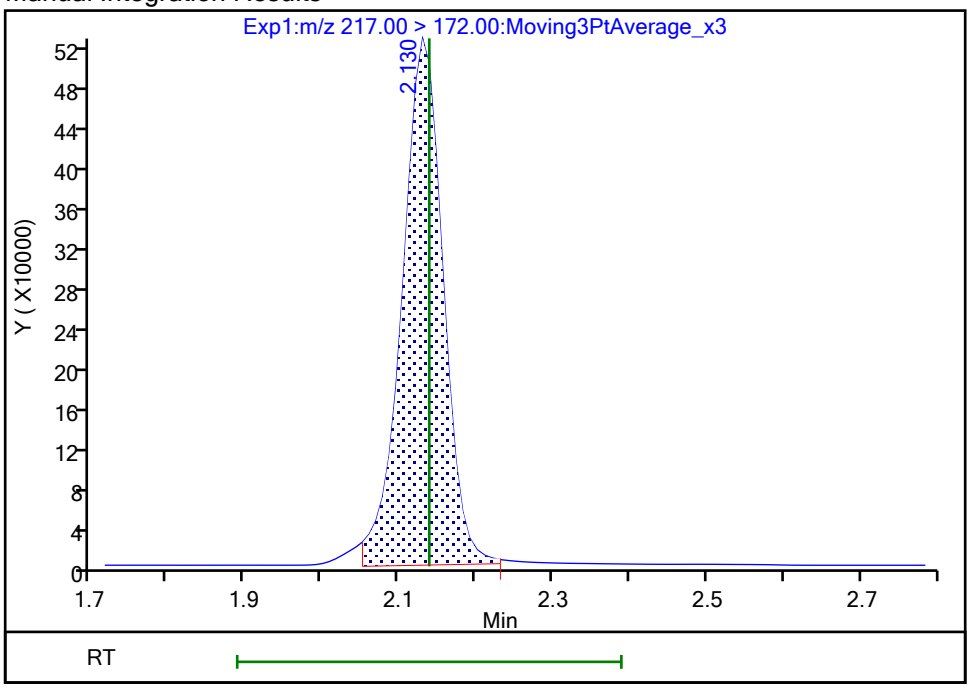
Processing Integration Results

RT: 2.13
Area: 2008547
Amount: 1.299733
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1952223
Amount: 1.263286
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:45:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

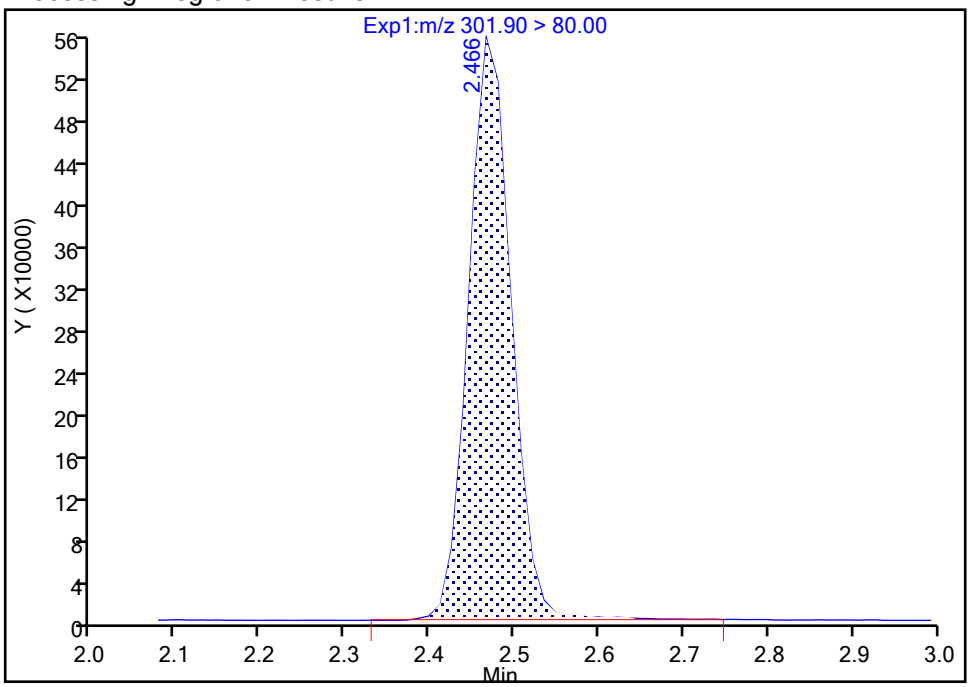
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

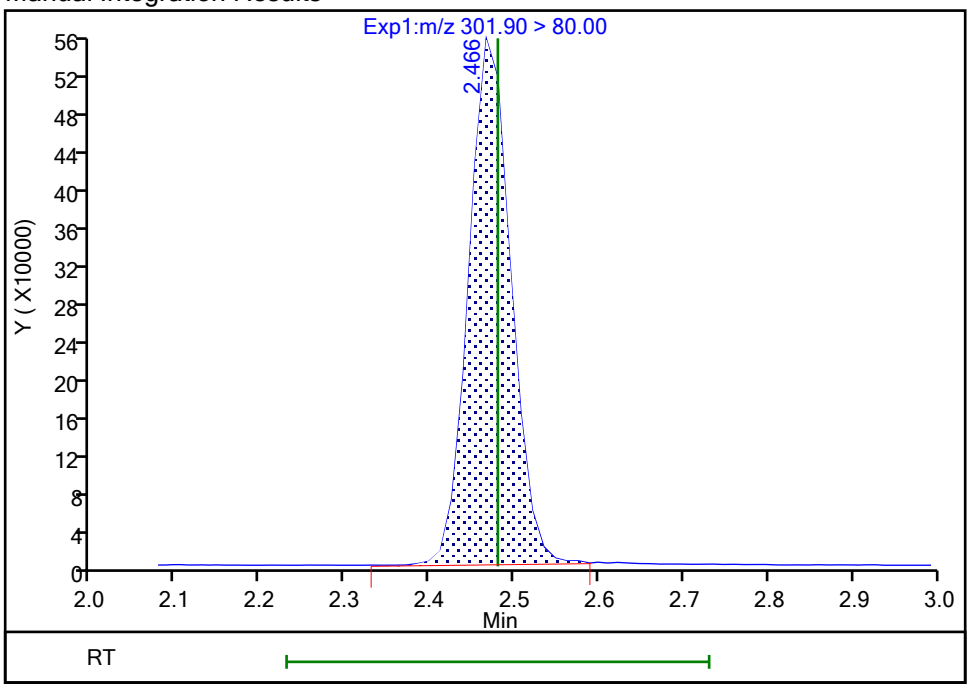
Processing Integration Results

RT: 2.47
Area: 1929822
Amount: 1.189217
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1919708
Amount: 1.182984
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:45:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

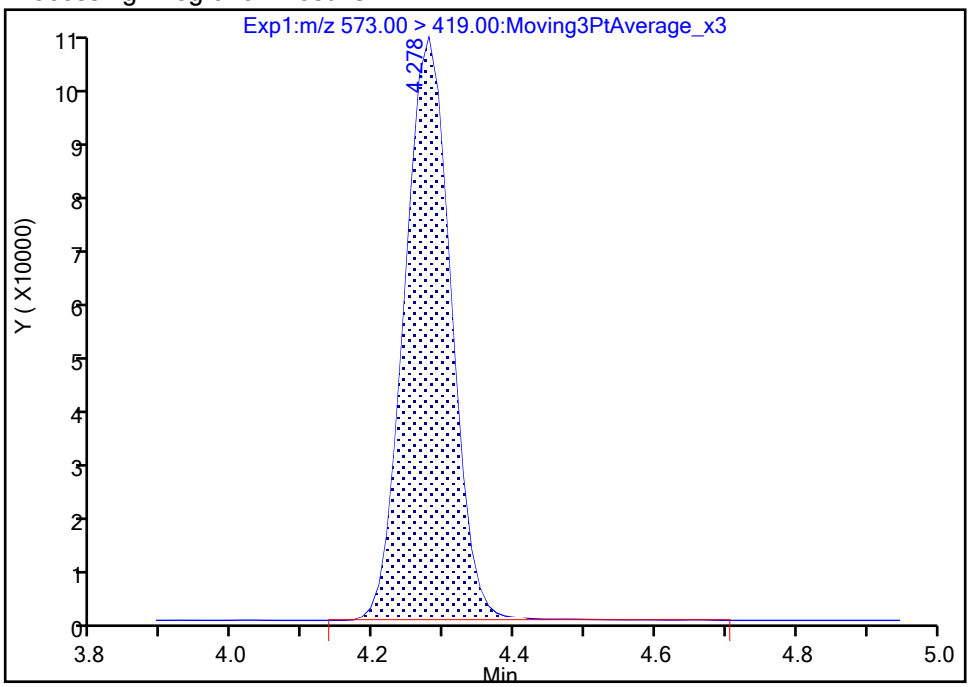
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

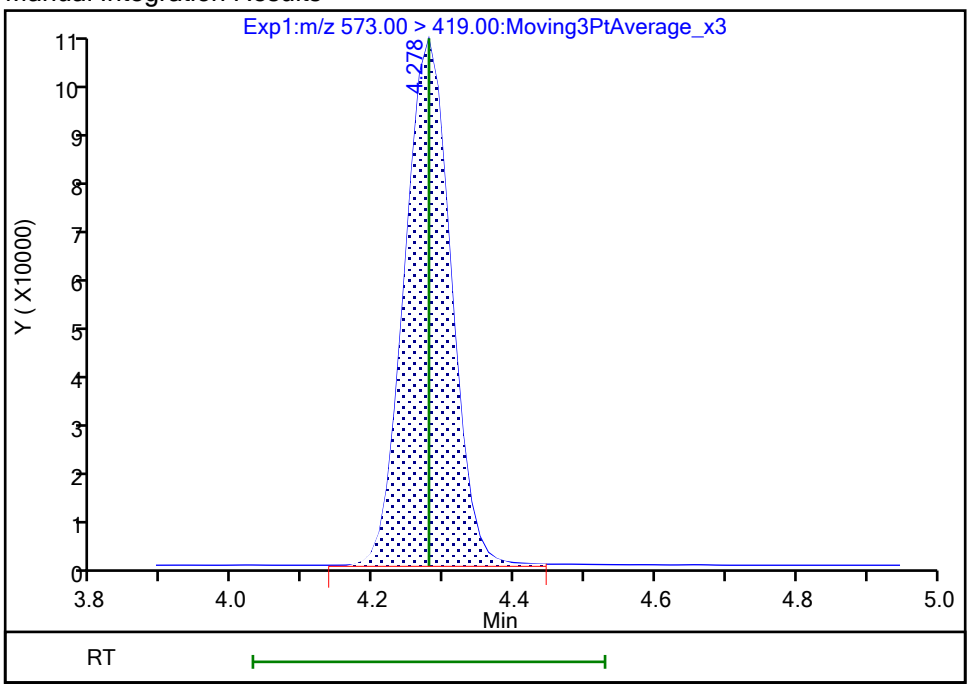
Processing Integration Results

RT: 4.28
Area: 476997
Amount: 1.155009
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 475193
Amount: 1.150641
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:46:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

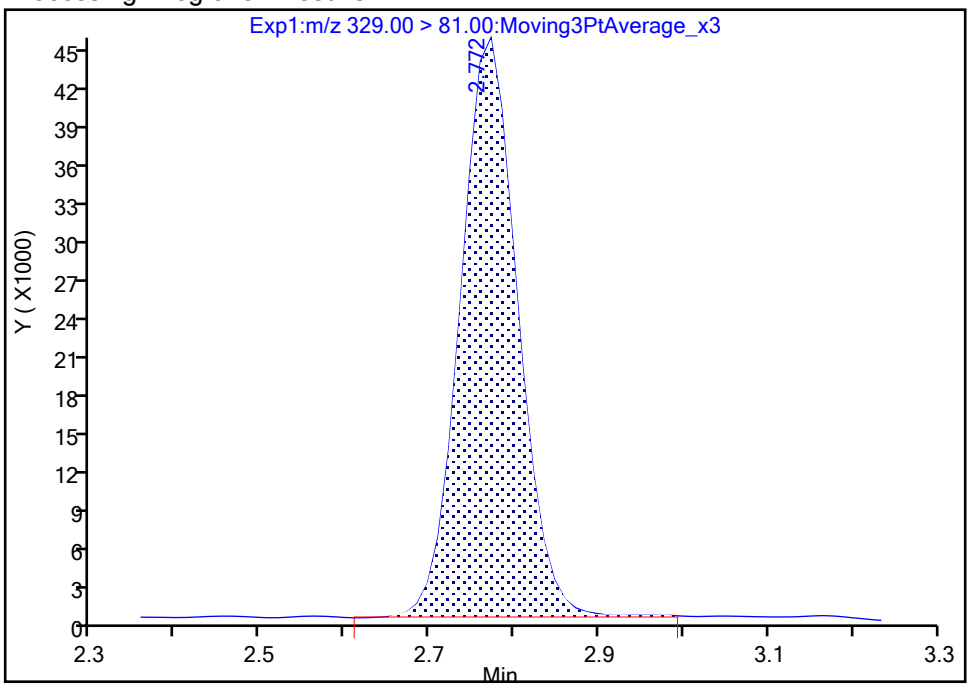
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A28.d				
Injection Date:	25-Oct-2023 21:32:44	Instrument ID:	LC812		
Lims ID:	460-290543-A-9-A	Lab Sample ID:	200-290543-9		
Client ID:	1000-101723-0002				
Operator ID:	LC812user	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

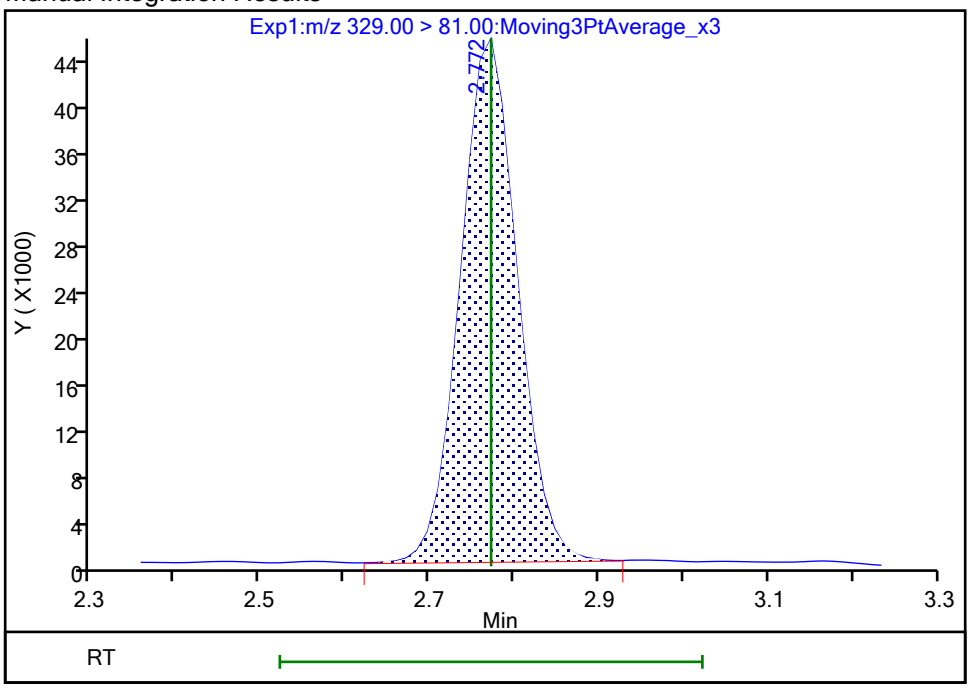
Processing Integration Results

RT: 2.77
Area: 211054
Amount: 1.124616
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 209637
Amount: 1.117065
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:45:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: 1000-101723-0004 | Lab Sample ID: 460-290543-10

Matrix: Water | Lab File ID: PA231025A29.d

Analysis Method: 537 (modified) | Date Collected: 10/17/2023 12:40

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 283.8(mL) | Date Analyzed: 10/25/2023 21:40

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.40	U	4.40	1.06
2706-90-3	Perfluoropentanoic acid	1.76	U	1.76	0.60
307-24-4	Perfluorohexanoic acid	1.76	U	1.76	0.57
375-85-9	Perfluoroheptanoic acid	1.76	U	1.76	0.48
335-67-1	Perfluorooctanoic acid	1.76	U	1.76	0.67
375-95-1	Perfluorononanoic acid	1.76	U	1.76	0.43
335-76-2	Perfluorodecanoic acid	1.76	U	1.76	0.41
2058-94-8	Perfluoroundecanoic acid	1.76	U	1.76	0.48
307-55-1	Perfluorododecanoic acid	1.76	U	1.76	0.43
72629-94-8	Perfluorotridecanoic acid	1.76	U	1.76	0.42
376-06-7	Perfluorotetradecanoic acid	1.76	U	1.76	0.56
375-73-5	Perfluorobutanesulfonic acid	1.76	U	1.76	0.55
2706-91-4	Perfluoropentanesulfonic acid	1.76	U	1.76	0.44
355-46-4	Perfluorohexanesulfonic acid	1.76	U	1.76	0.48
375-92-8	Perfluoroheptanesulfonic acid	1.76	U	1.76	0.36
1763-23-1	Perfluorooctanesulfonic acid	1.76	U	1.76	0.75
68259-12-1	Perfluorononanesulfonic acid	1.76	U	1.76	0.35
335-77-3	Perfluorodecanesulfonic acid	1.76	U	1.76	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.48
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.40	U	4.40	1.15
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.76	U	1.76	0.68
754-91-6	Perfluorooctanesulfonamide	1.76	U	1.76	0.81
2355-31-9	NMeFOSAA	4.40	U	4.40	1.67
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.40	U	4.40	1.41
13252-13-6	HFPODA	3.52	U	3.52	0.97
919005-14-4	DONA	1.76	U	1.76	0.37
756426-58-1	9Cl-PF3ONS	1.76	U	1.76	0.28
763051-92-9	11Cl-PF3OUdS	1.76	U	1.76	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: 1000-101723-0004 Lab Sample ID: 460-290543-10

Matrix: Water Lab File ID: PA231025A29.d

Analysis Method: 537 (modified) Date Collected: 10/17/2023 12:40

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 283.8(mL) Date Analyzed: 10/25/2023 21:40

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		50-150
STL01893	13C5 PFPeA	101		50-150
STL01892	13C4 PFHpA	103		50-150
STL02116	13C2 PFTeDA	85		50-150
STL02337	13C3 PFBS	103		50-150
STL01056	13C8 FOSA	83		50-150
STL02118	d3-NMeFOSAA	91		50-150
STL02117	d5-NEtFOSAA	89		50-150
STL02395	M2-4:2 FTS	95		50-150
STL02279	M2-6:2 FTS	102		50-150
STL02280	M2-8:2 FTS	97		50-150
STL02255	13C3 HFPO-DA	85		50-150
STL00994	18O2 PFHxS	110		50-150
STL00993	13C2 PFHxA	99		50-150
STL00991	13C4 PFOS	109		50-150
STL00998	13C2 PFDoA	94		50-150
STL00995	13C5 PFNA	111		50-150
STL00996	13C2 PFDA	97		50-150
STL00990	13C4 PFOA	103		50-150
STL00997	13C2 PFUnA	94		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d
Lims ID: 460-290543-A-10-A
Client ID: 1000-101723-0004
Sample Type: Client
Inject. Date: 25-Oct-2023 21:40:53 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290543-A-10-A
Misc. Info.: 200-0057556-029 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 14:56:10
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	1966417	1.29		103	747	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.139	2.139	0.0	1.004	34994	-0.0163			2.0	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1503263	1.27		101	1444	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.701	1924648	1.20		103	135644	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.480	-0.013	1.000	7962	0.004306	Target=2.06		7.6	M
298.90 > 99.00	2.467	2.480	-0.013	1.000	5540		1.44(1.03-3.09)		1.7	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.772	-0.012	0.784	205292	1.11		94.7	136	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1492355	1.24		98.9	5513	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	248593	1.06		85.1	1111	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1492119	1.30		110	5580	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.154	3.176	-0.022	0.996	6222	0.004454	Target=3.32		24.6	M
399.00 > 99.00	3.154	3.176	-0.022	0.996	3015		2.06(1.66-4.98)		2.5	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.176	-0.011	1.000	3315	0.002159	Target=4.17		0.7	M
363.00 > 169.00	3.176	3.176	0.0	1.004	714		4.64(2.09-6.26)		2.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1712404	1.29		103	6099	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	290700	1.22		102	623	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.520	3.520	0.0	1.003	677	0.001012			1.1	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1935144	1.29		103	7679	
* 62 13C2 PFOA										M
415.00 > 370.00	3.520	3.529	-0.009		1926459	1.25			5211	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.088	955721	1.31		109	4109	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.854	-0.012	1.091	2273609	1.39		111	11484	
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	2075743	1.21		97.2	8534	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.160	4.148	0.012	1.003	379	0.000663			4.8	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	311151	1.16		96.7	766	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1513308	1.04		83.0	4667	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.242	-0.012	0.997	352	0.000305			3.0	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.278	0.001	1.215	465611	1.14		91.2	2938	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.398	-0.011	1.246	1898414	1.18		94.1	8214	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.410	-0.011	1.249	435392	1.11		88.6	900	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.327	4.410	-0.083	0.984	702	0.002015			5.7	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	1930813	1.18		94.2	6370	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.417	1725385	1.06		84.5	5037	

QC Flag Legend

Processing Flags

Review Flags

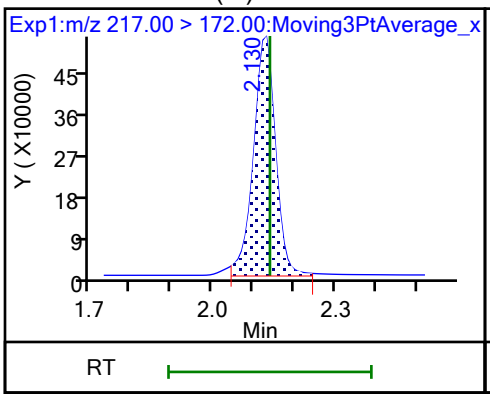
M - Manually Integrated

Report Date: 26-Oct-2023 16:56:02 Chrom Revision: 2.3 18-Oct-2023 21:16:54

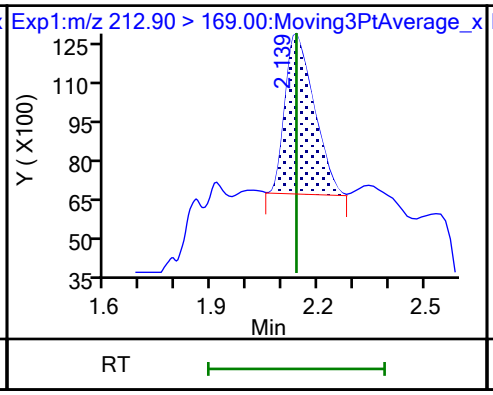
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d
Injection Date: 25-Oct-2023 21:40:53 Instrument ID: LC812
Lims ID: 460-290543-A-10-A Lab Sample ID: 200-290543-10
Client ID: 1000-101723-0004
Operator ID: LC812user ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

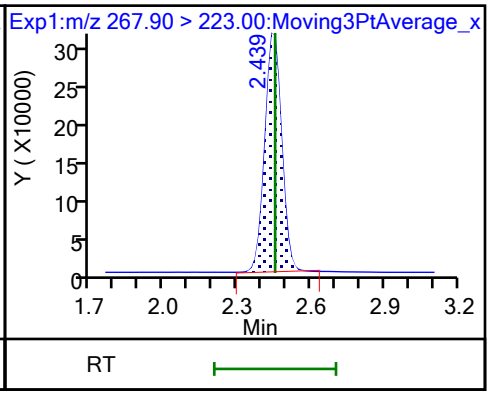
D 1 13C4 PFBA (M)



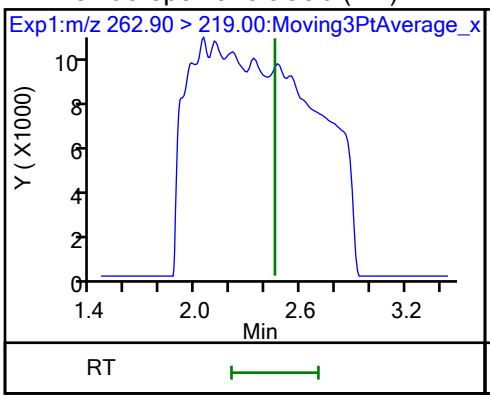
2 Perfluorobutanoic acid



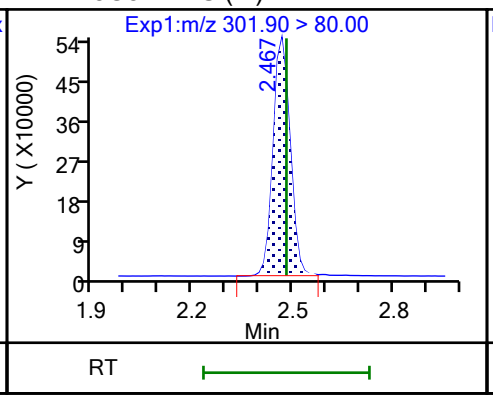
D 3 13C5 PFPeA



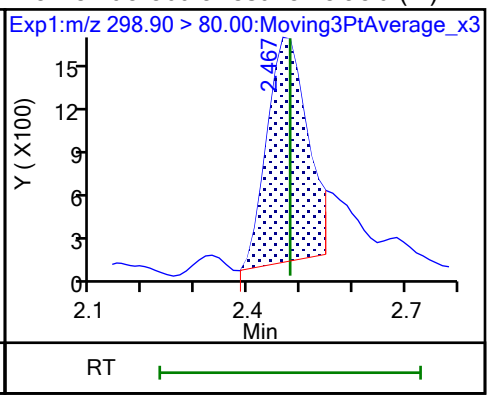
4 Perfluoropentanoic acid (ND)



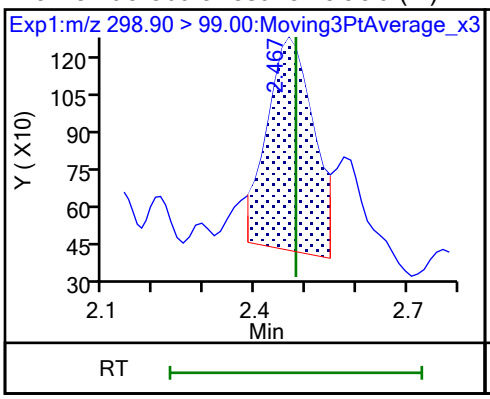
D 47 13C3 PFBS (M)



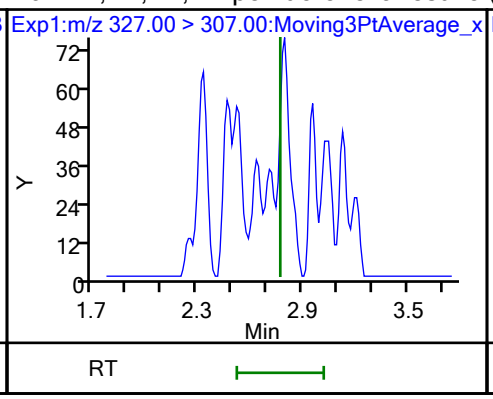
5 Perfluorobutanesulfonic acid (M)



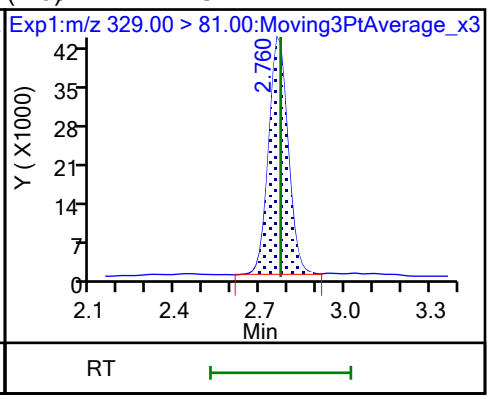
5 Perfluorobutanesulfonic acid (M)



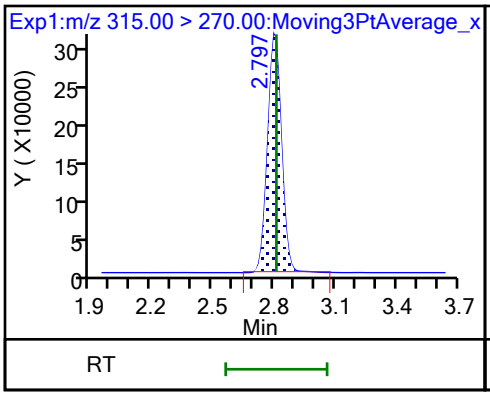
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



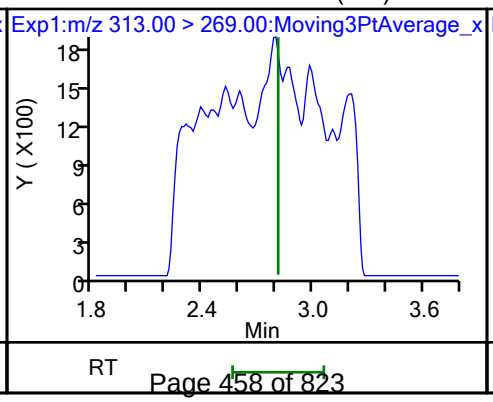
D 50 M2-4:2 FTS



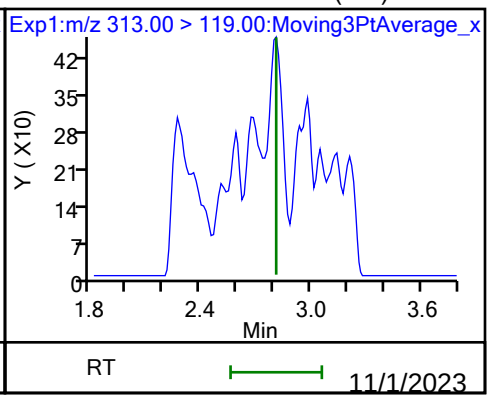
D 7 13C2 PFHxA



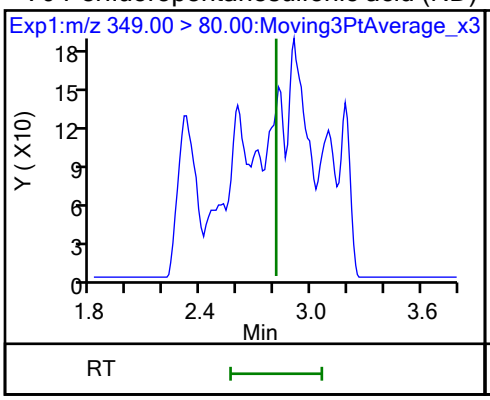
6 Perfluorohexanoic acid (ND)



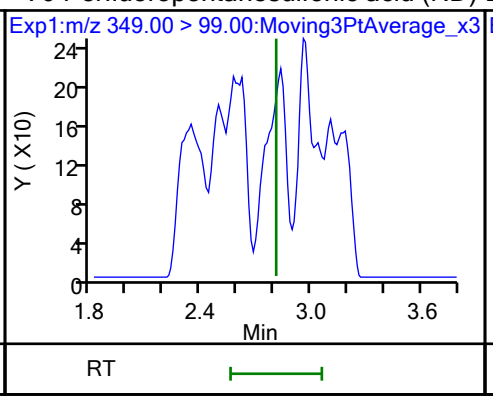
6 Perfluorohexanoic acid (ND)

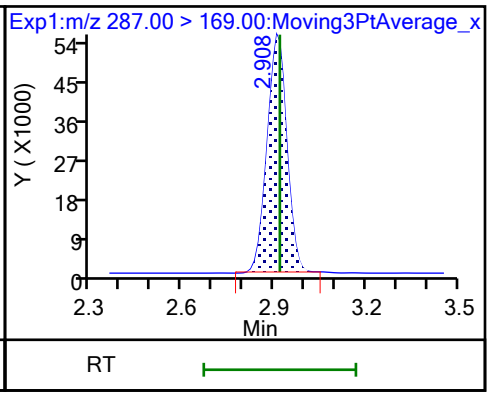


70 Perfluoropentanesulfonic acid (ND)

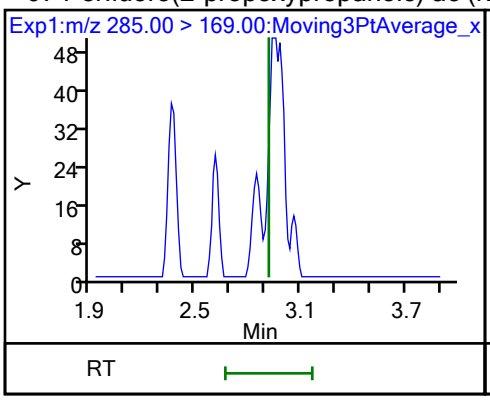


70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA

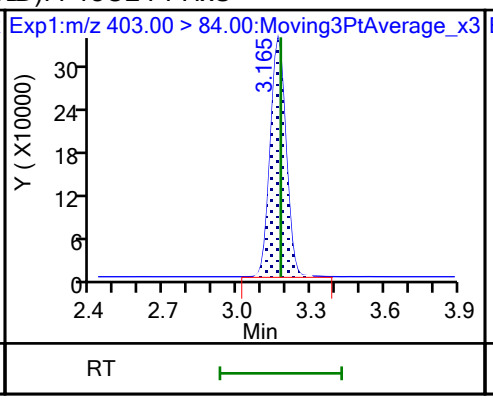




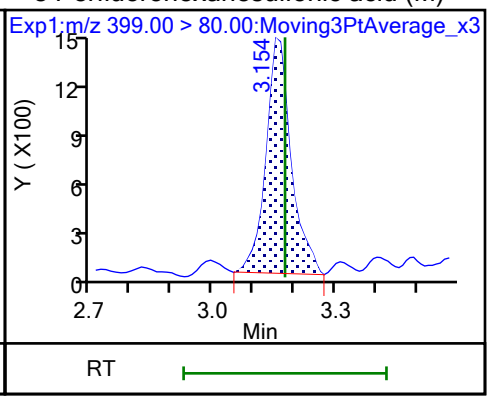
67 Perfluoro(2-propoxypropanoic) ac (ND)



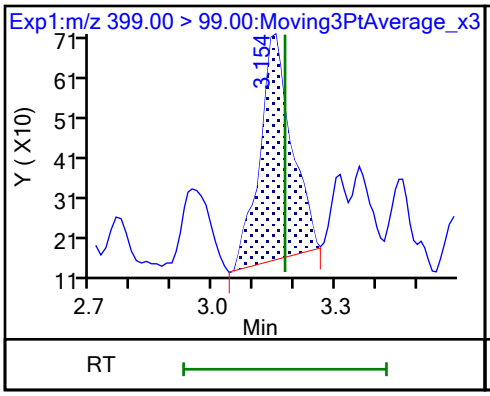
D 11 18O2 PFHxS



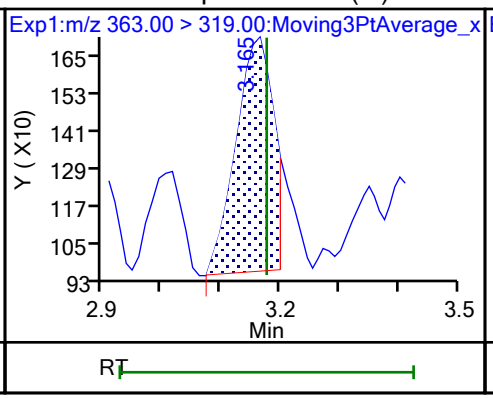
8 Perfluorohexanesulfonic acid (M)



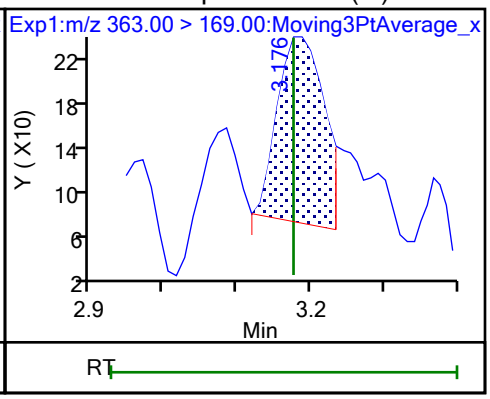
8 Perfluorohexanesulfonic acid



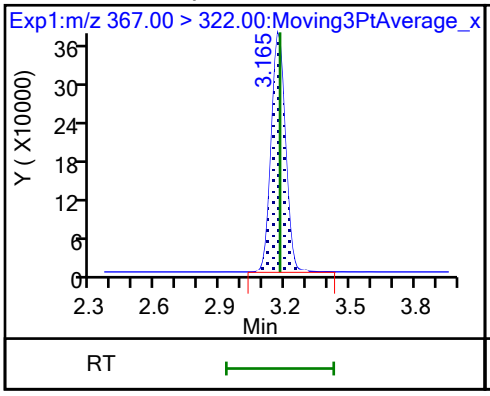
10 Perfluoroheptanoic acid (M)



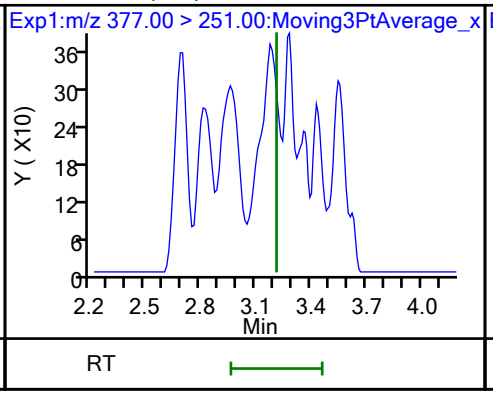
10 Perfluoroheptanoic acid (M)



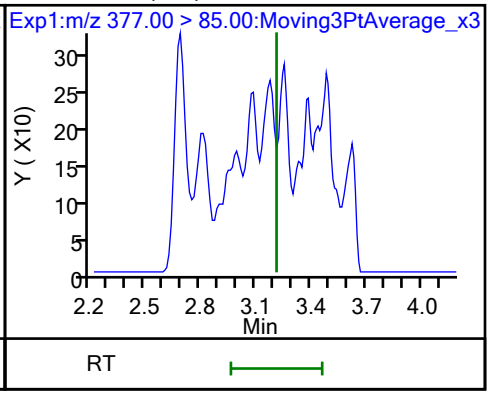
D 9 13C4 PFHpA



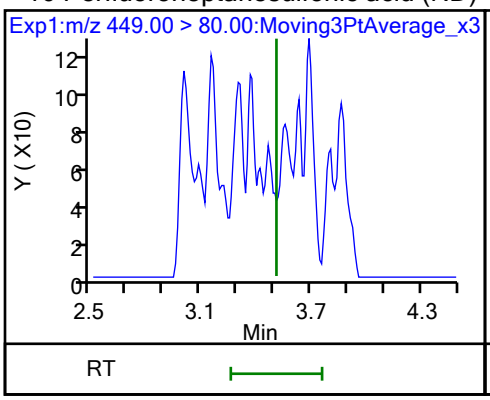
77 DONA (ND)



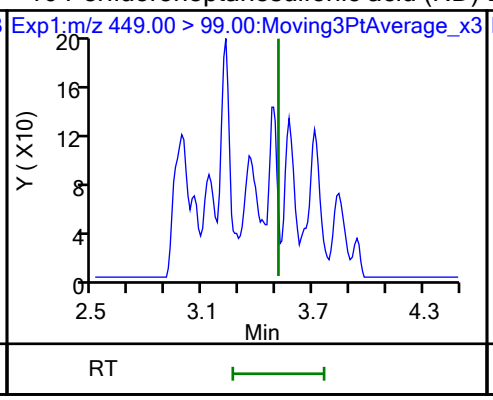
77 DONA (ND)



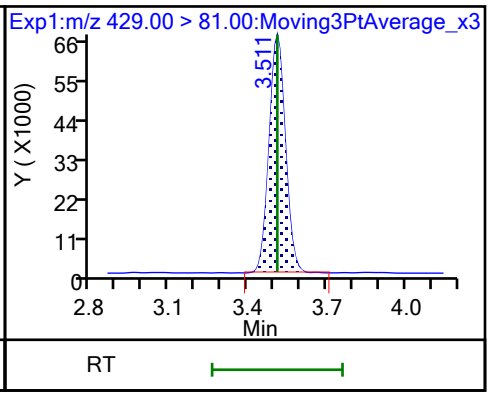
16 Perfluoroheptanesulfonic acid (ND)



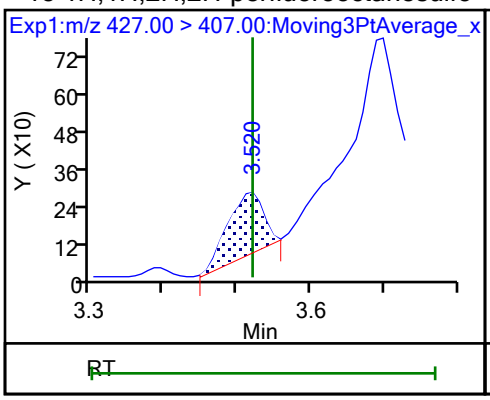
16 Perfluoroheptanesulfonic acid (ND)



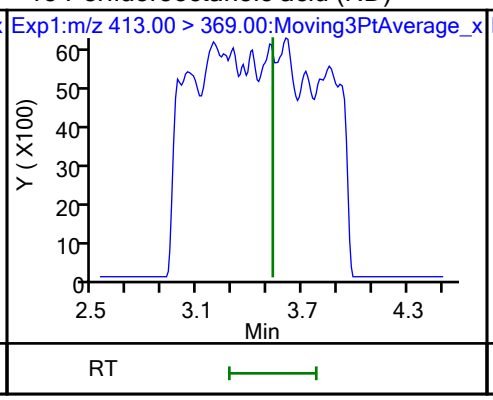
D 12 M2-6:2 FTS



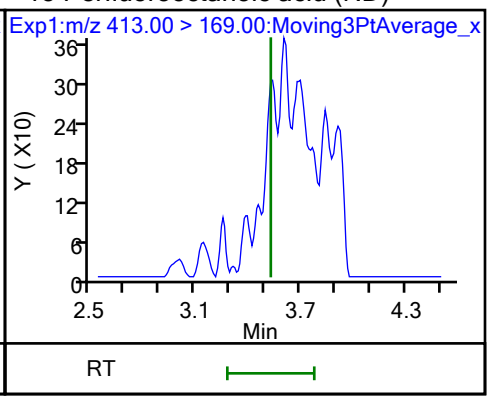
13 1H,1H,2H,2H-perfluorooctanesulfo



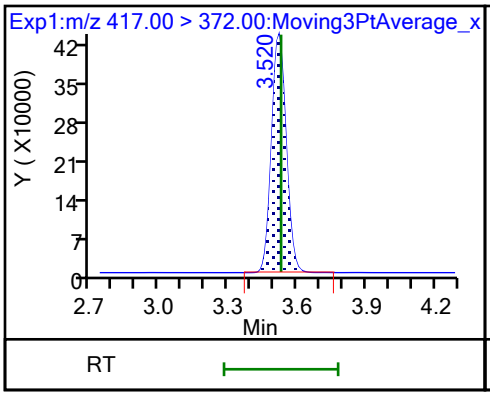
15 Perfluorooctanoic acid (ND)



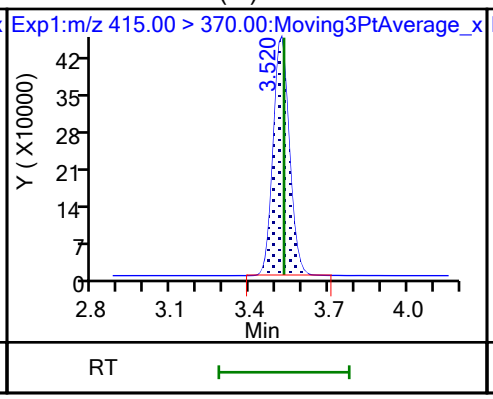
15 Perfluorooctanoic acid (ND)



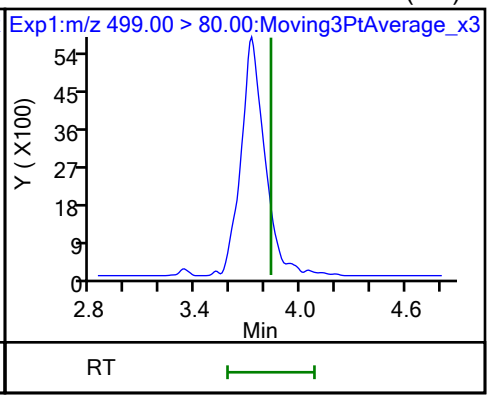
D 14 13C4 PFOA



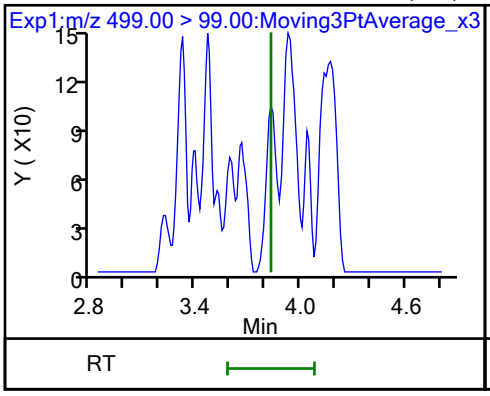
* 62 13C2 PFOA (M)



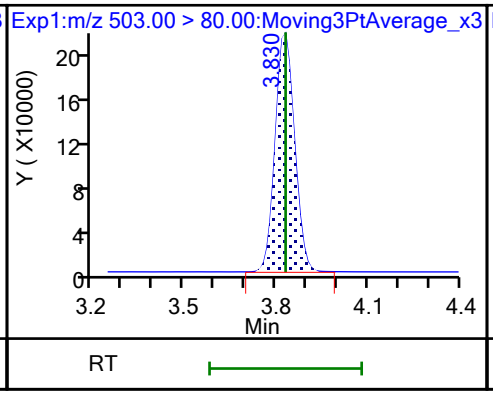
17 Perfluorooctanesulfonic acid (ND)



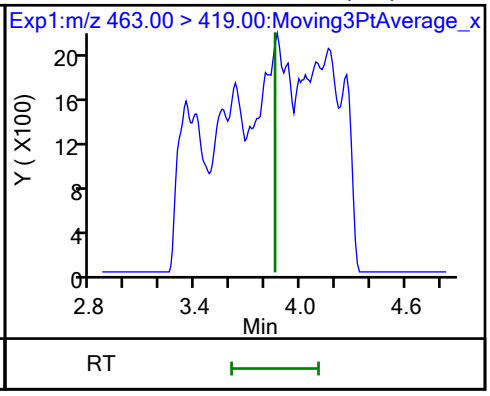
17 Perfluorooctanesulfonic acid (ND)



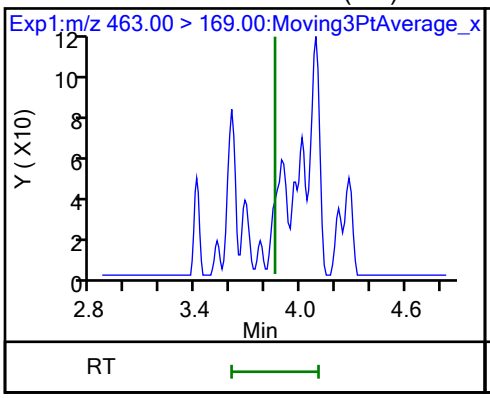
D 18 13C4 PFOS



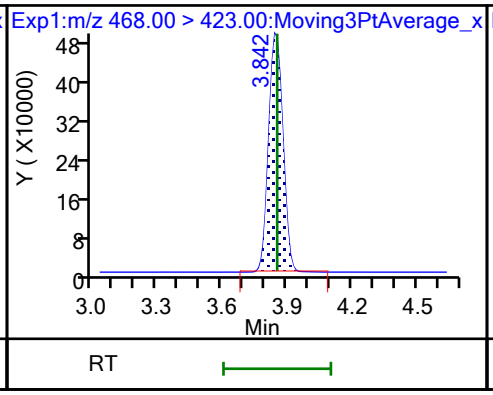
20 Perfluorononanoic acid (ND)



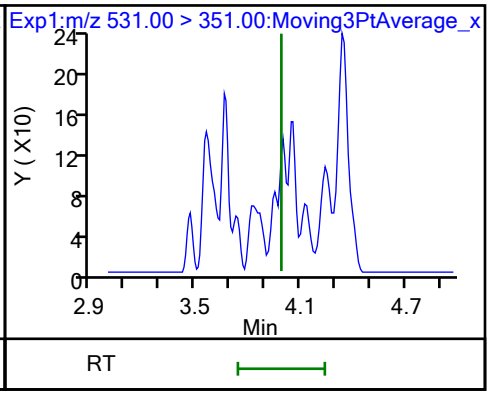
20 Perfluorononanoic acid (ND)



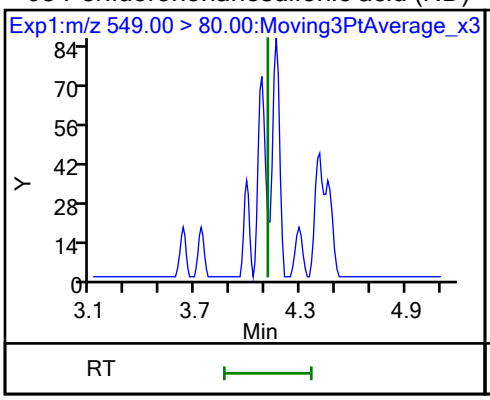
D 19 13C5 PFNA



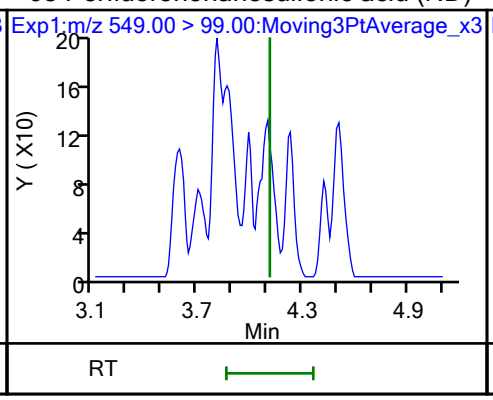
69 9-Chlorohexadecafluoro-3-oxanona (ND)



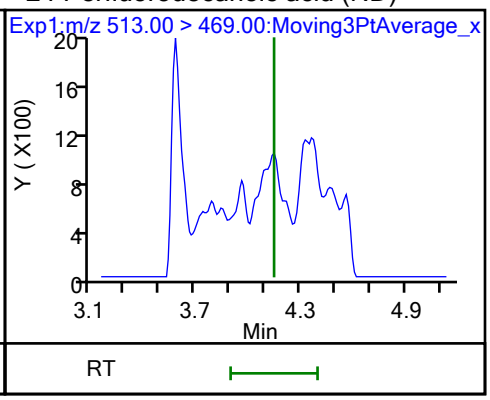
68 Perfluorononanesulfonic acid (ND)



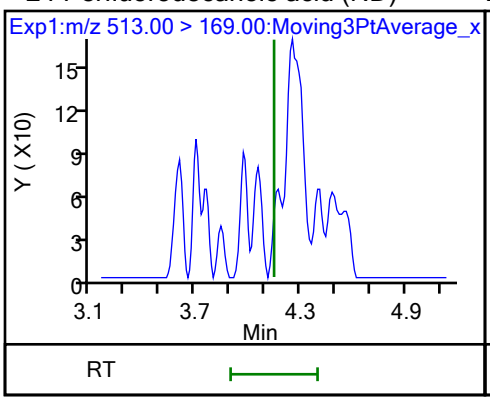
68 Perfluorononanesulfonic acid (ND)



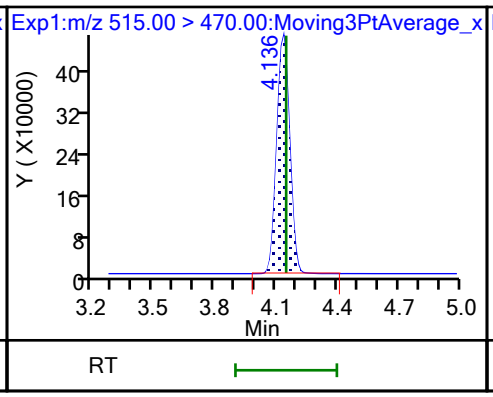
24 Perfluorodecanoic acid (ND)



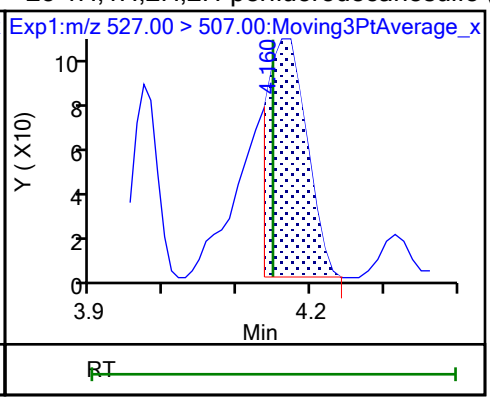
24 Perfluorodecanoic acid (ND)



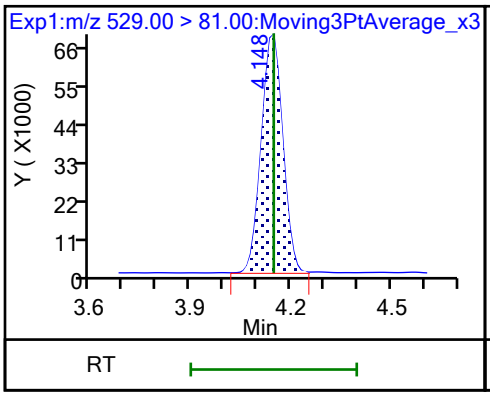
D 23 13C2 PFDA



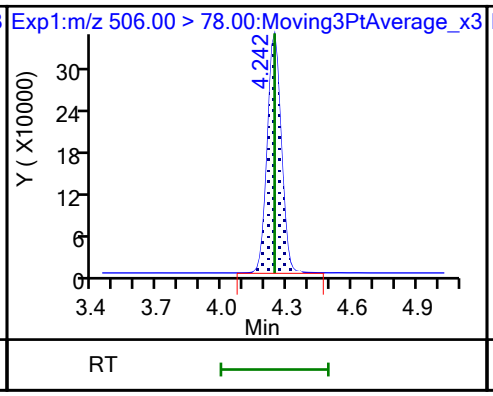
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



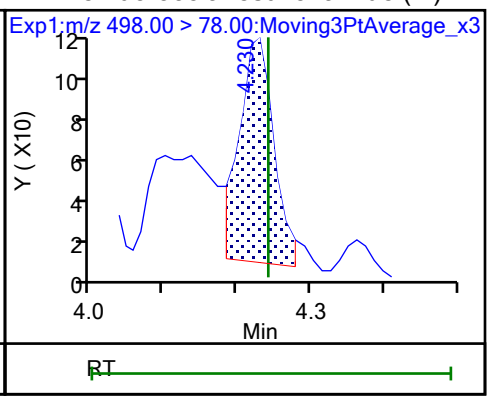
D 26 M2-8:2 FTS



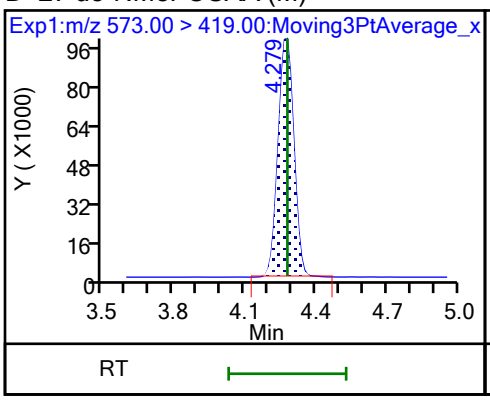
D 21 13C8 FOSA



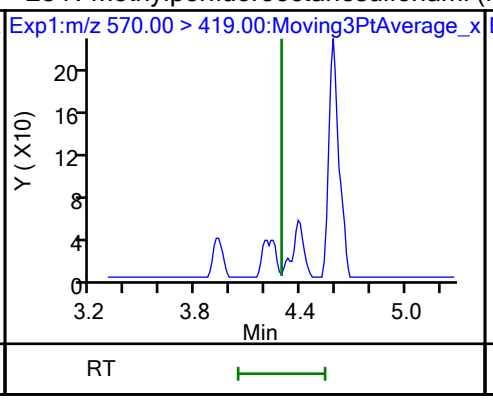
22 Perfluorooctanesulfonamide (M)



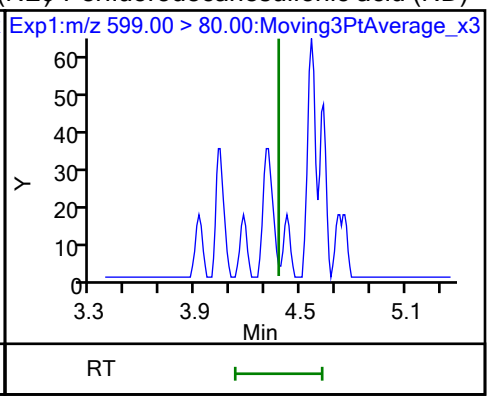
D 27 d3-NMeFOSAA (M)



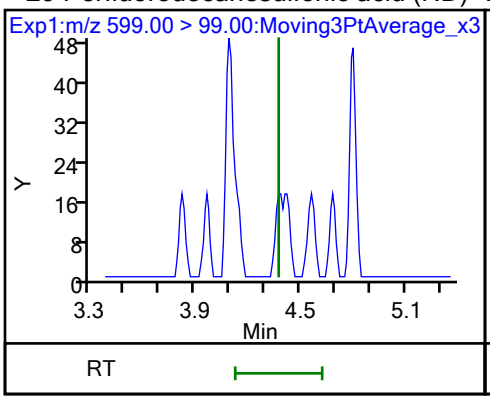
28 N-methylperfluorooctanesulfonami (ND)



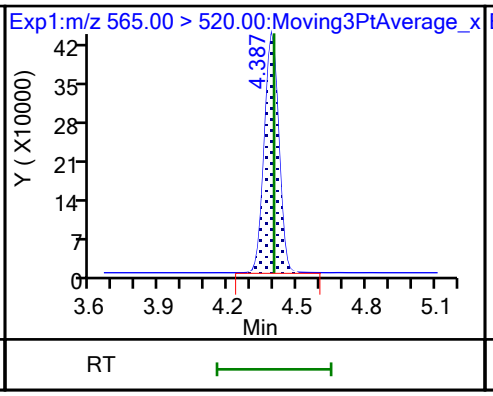
29 Perfluorodecanesulfonic acid (ND)



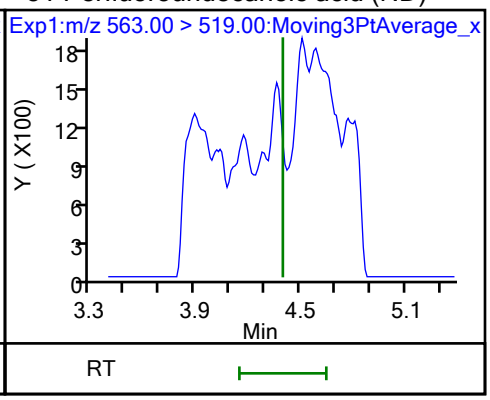
29 Perfluorodecanesulfonic acid (ND)



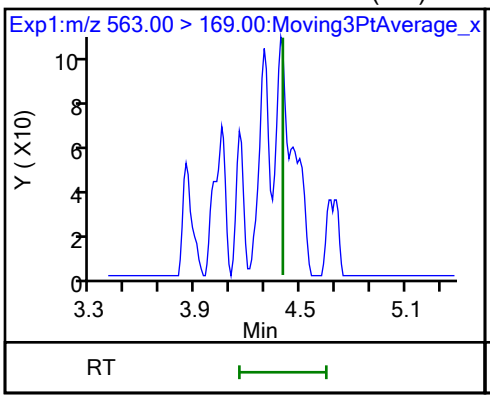
D 30 13C2 PFUnA



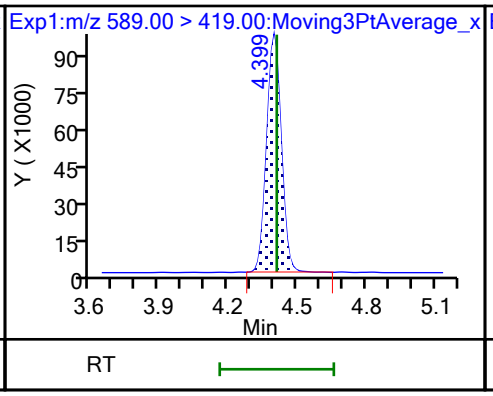
31 Perfluoroundecanoic acid (ND)



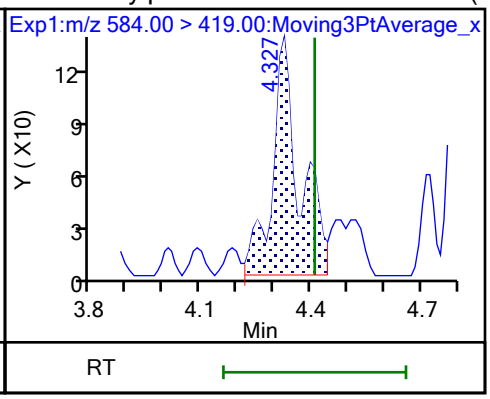
31 Perfluoroundecanoic acid (ND)



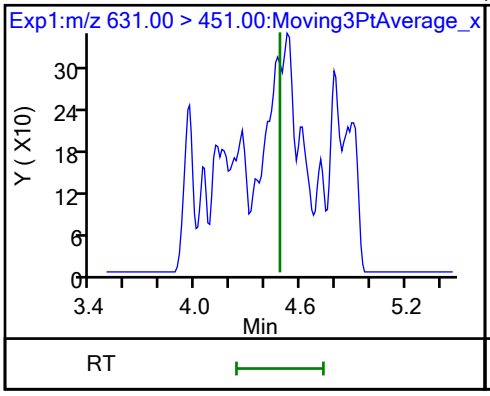
D 32 d5-NEtFOSAA



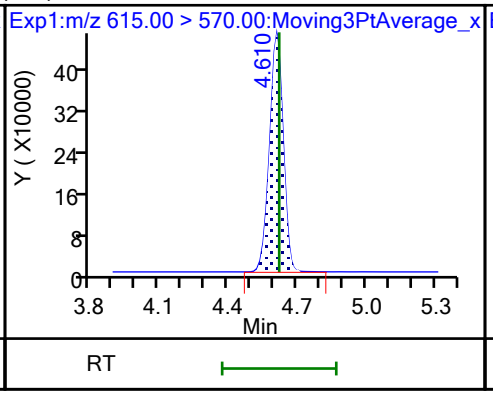
33 N-ethylperfluorooctanesulfonamid (M)



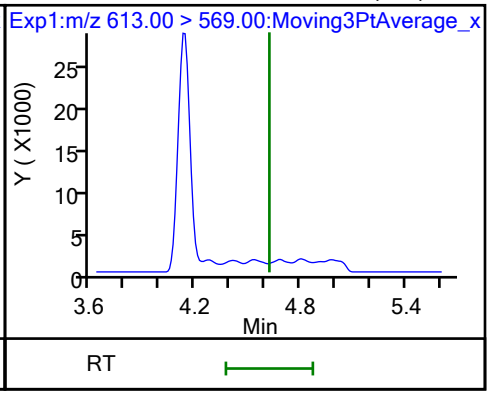
66 11-Chloroeicosafluoro-3-oxaundec (ND)



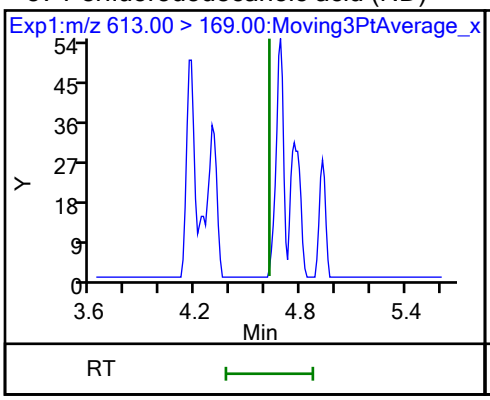
D 36 13C2 PFDoA



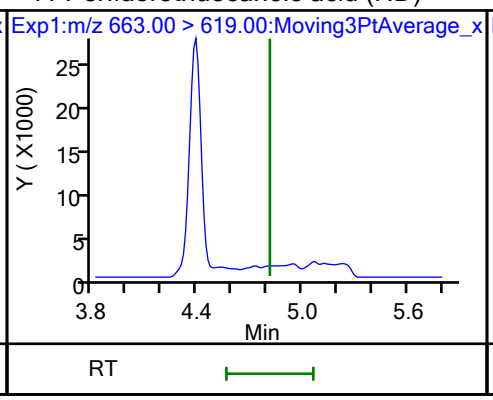
37 Perfluorododecanoic acid (ND)



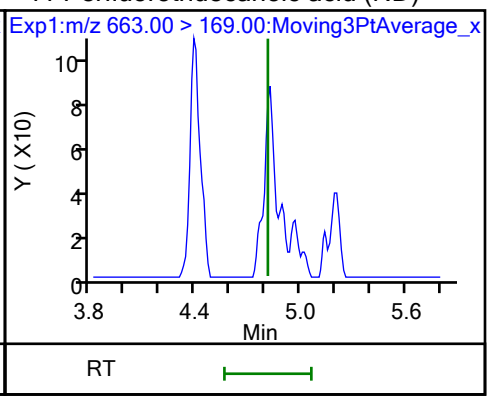
37 Perfluorododecanoic acid (ND)



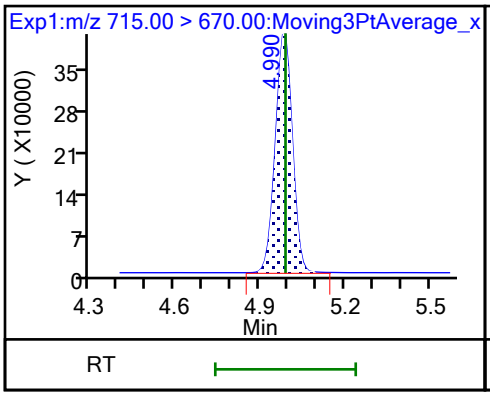
41 Perfluorotridecanoic acid (ND)



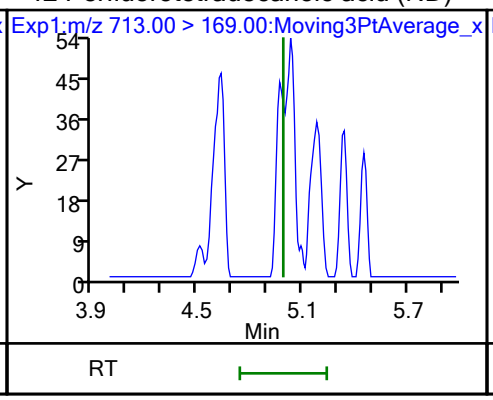
41 Perfluorotridecanoic acid (ND)



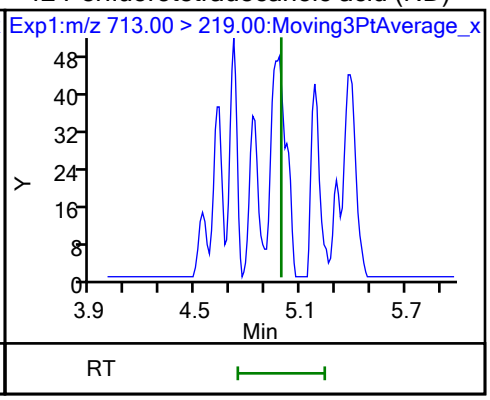
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

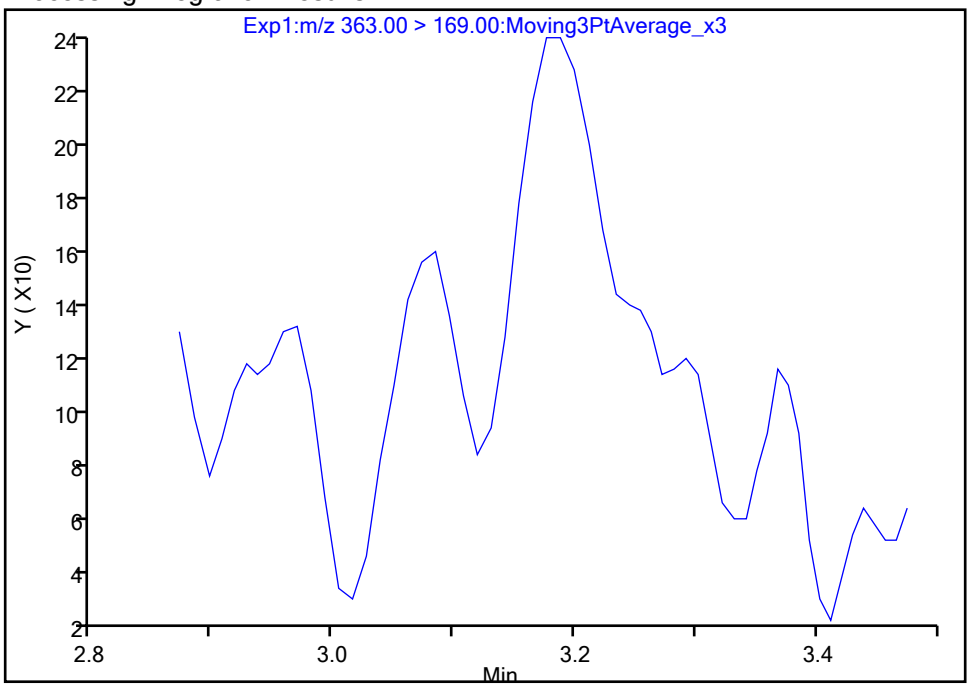
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

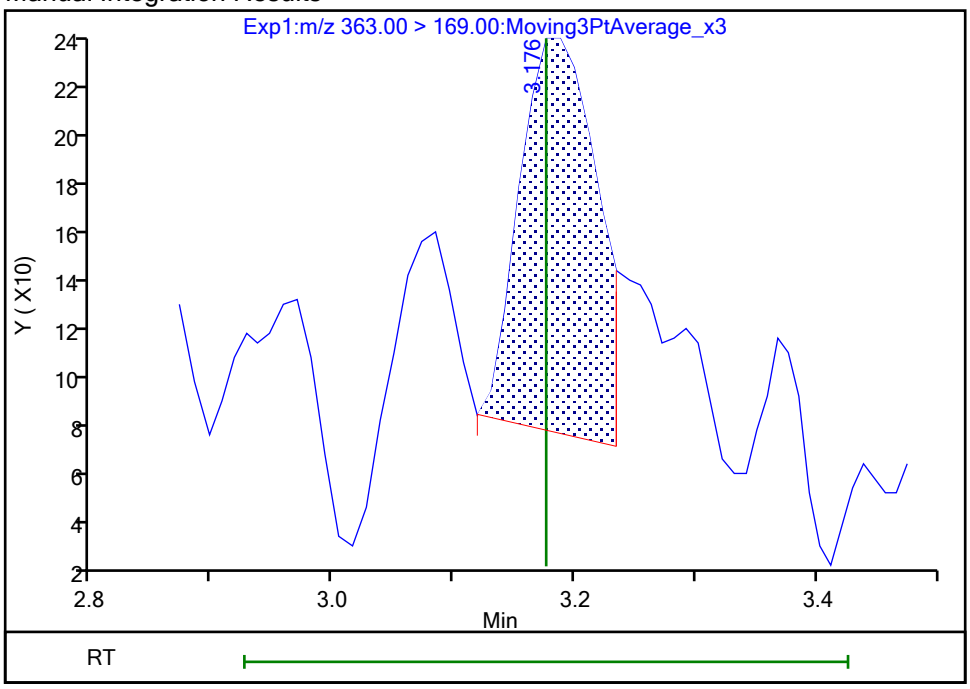
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.18
Area: 714
Amount: 0.002159
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:54:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

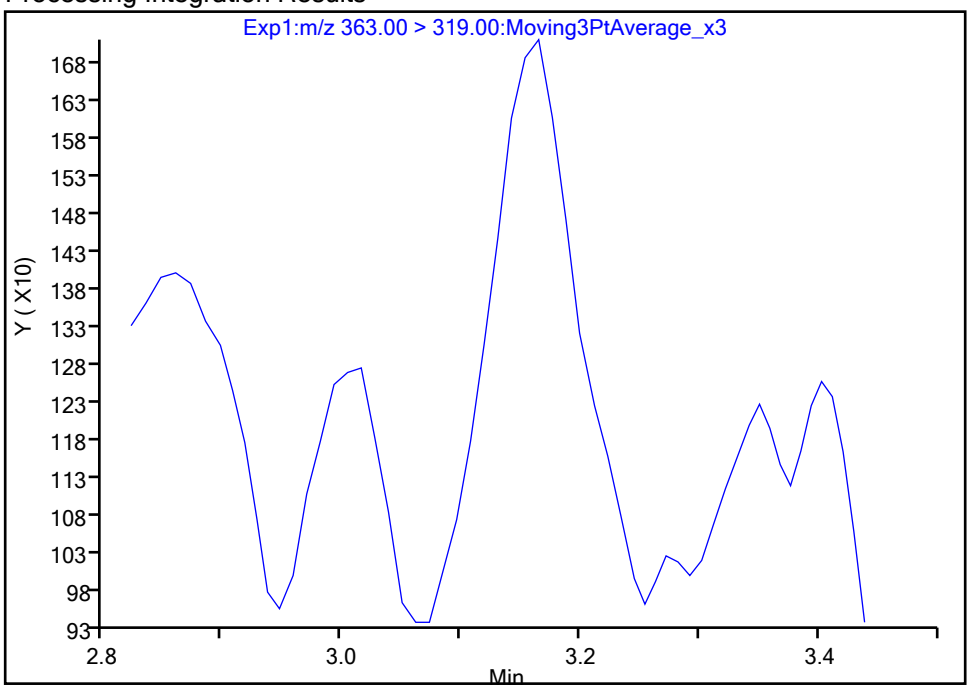
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

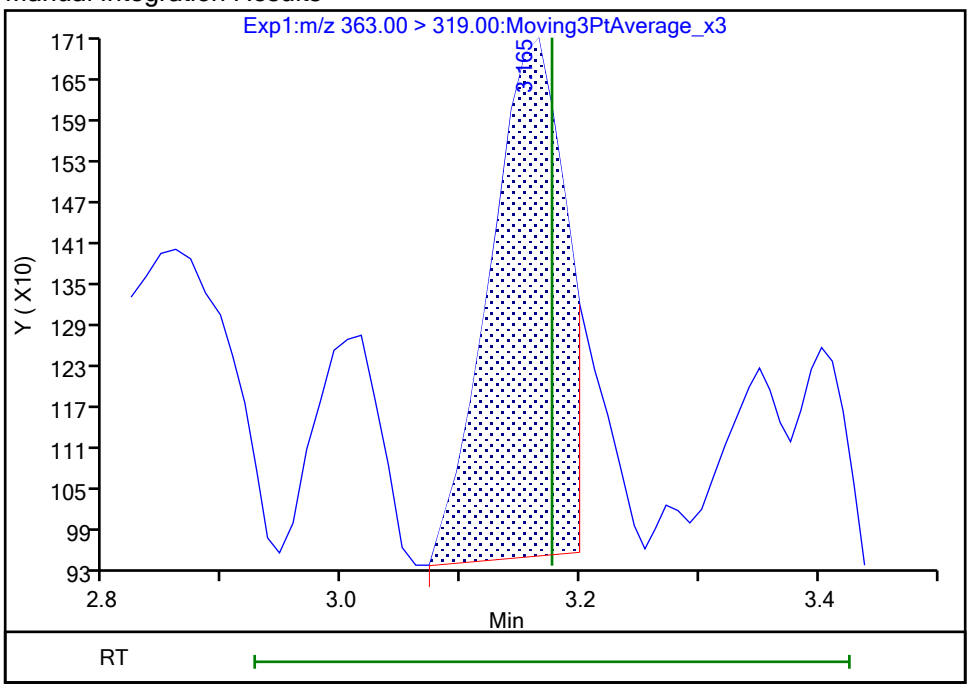
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 3315
Amount: 0.002159
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:54:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

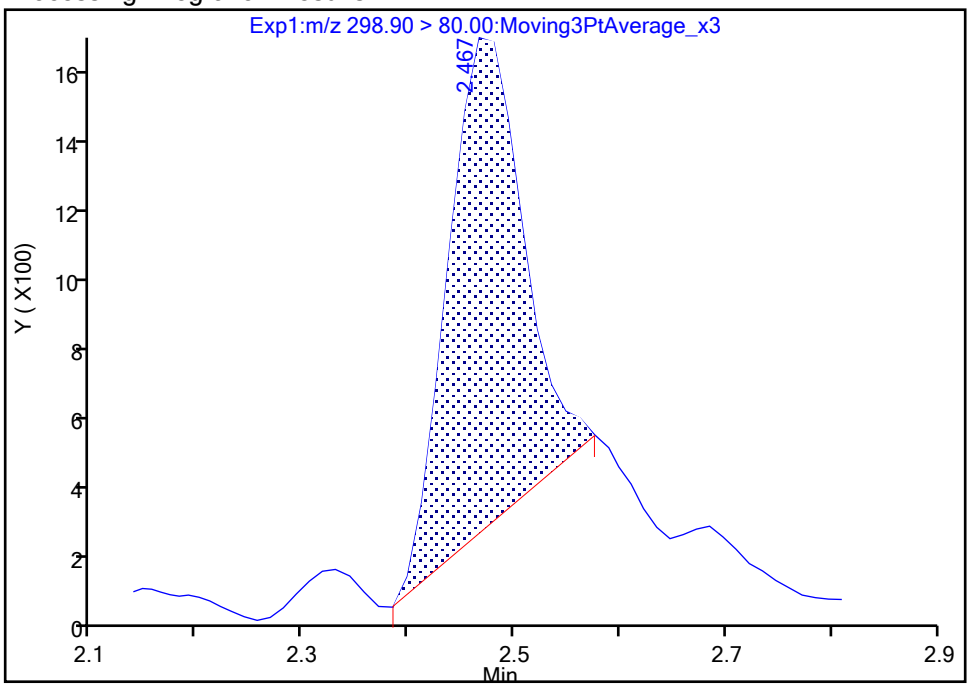
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

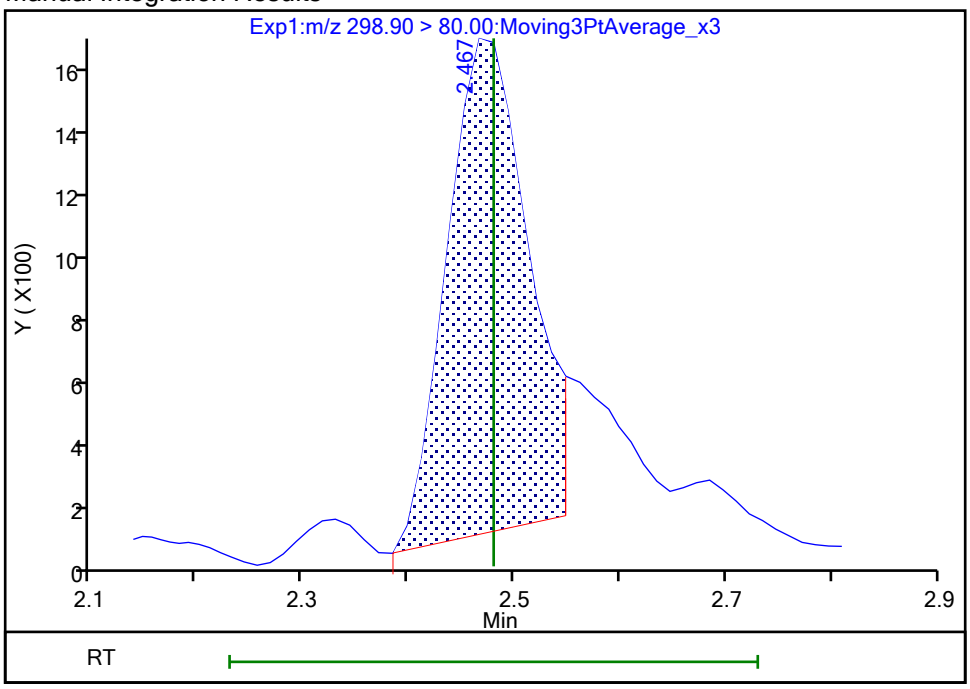
Processing Integration Results

RT: 2.47
Area: 6674
Amount: 0.003609
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 7962
Amount: 0.004306
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:53:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

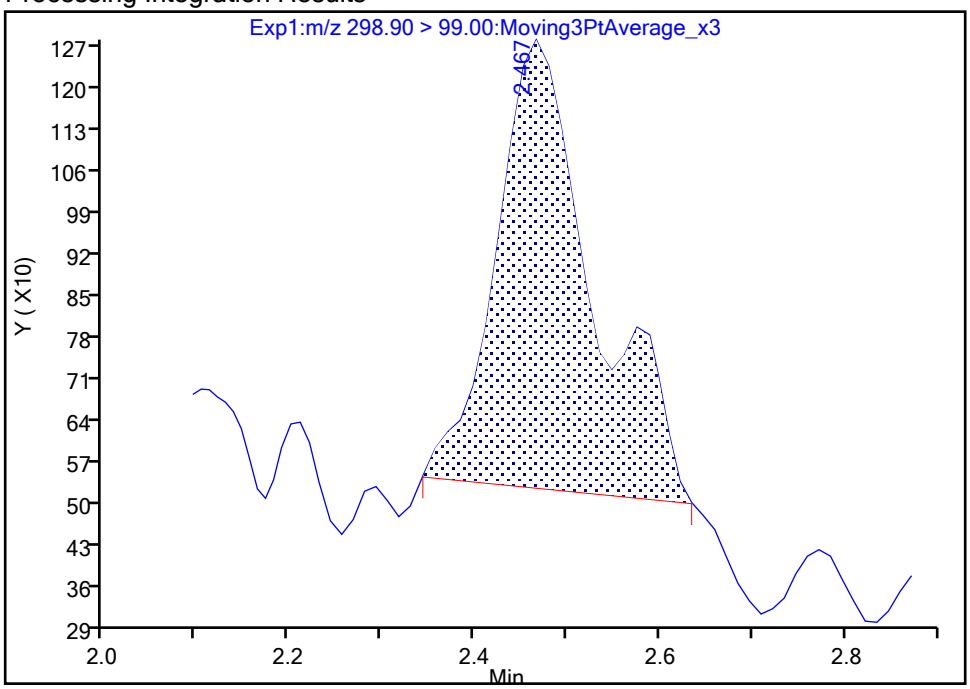
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

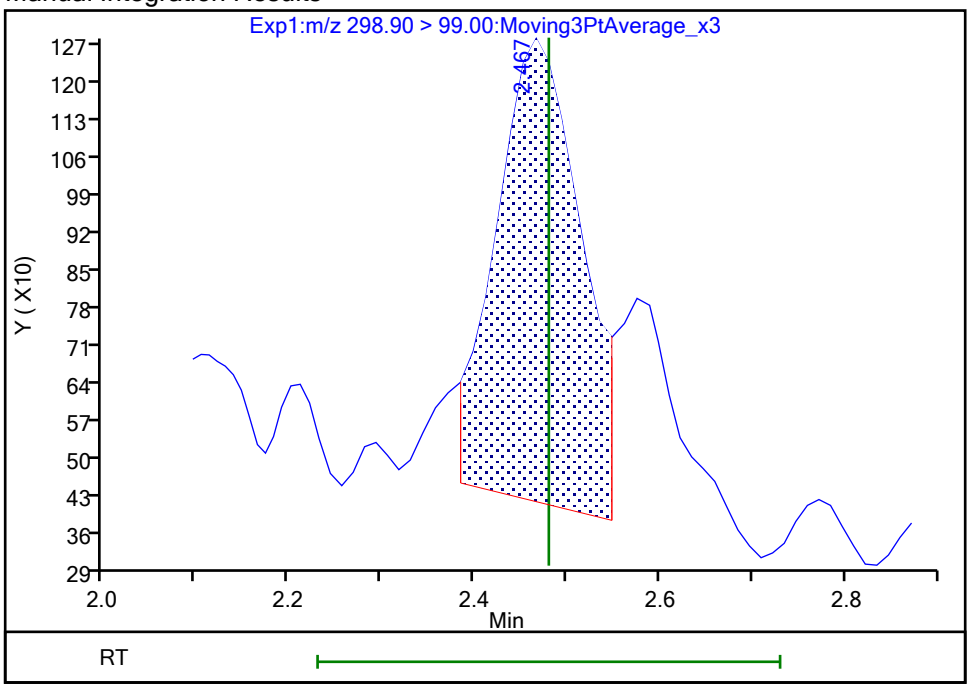
Processing Integration Results

RT: 2.47
Area: 5537
Amount: 0.003609
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 5540
Amount: 0.004306
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:53:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

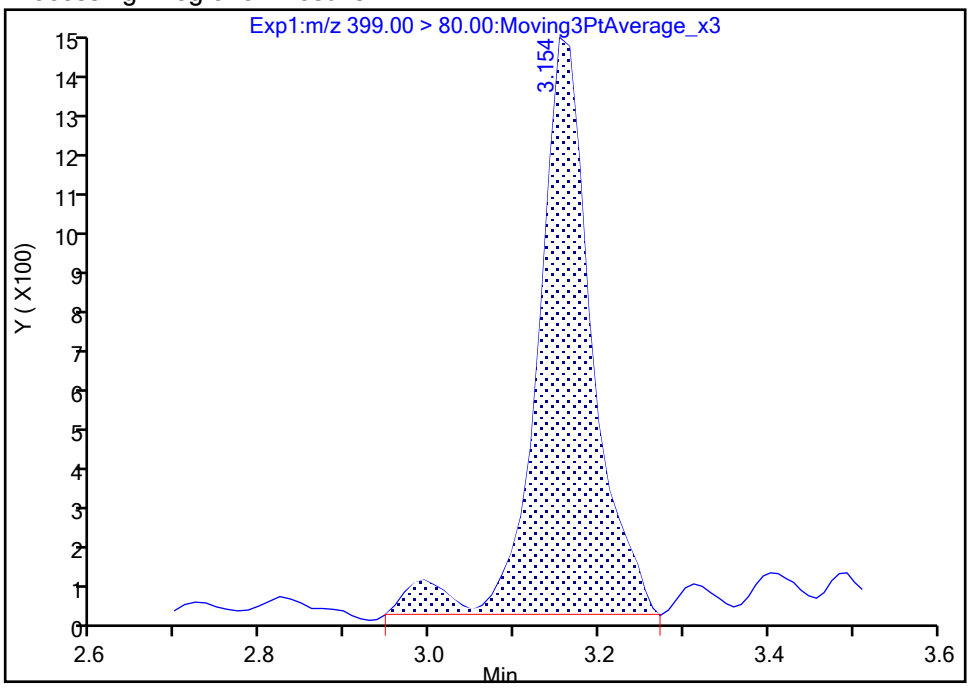
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

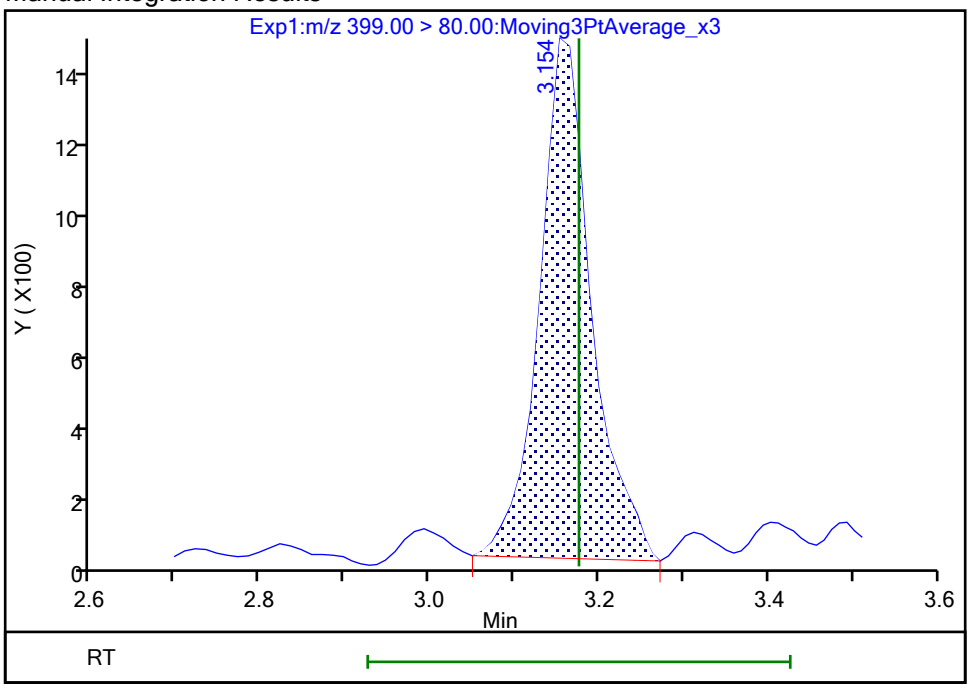
Processing Integration Results

RT: 3.15
Area: 6623
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 6222
Amount: 0.004454
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:54:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

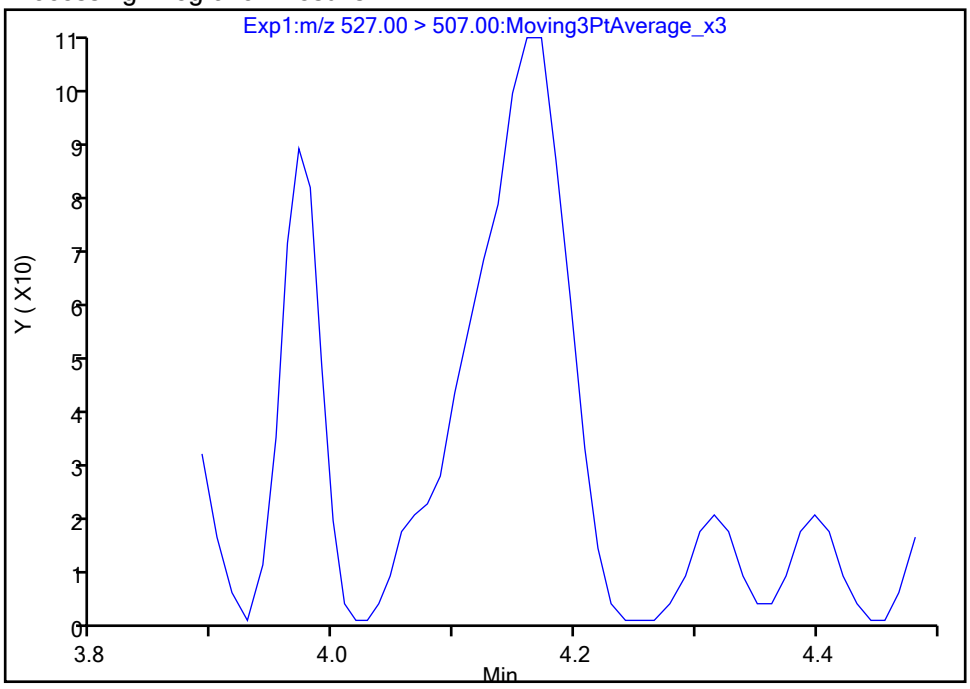
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

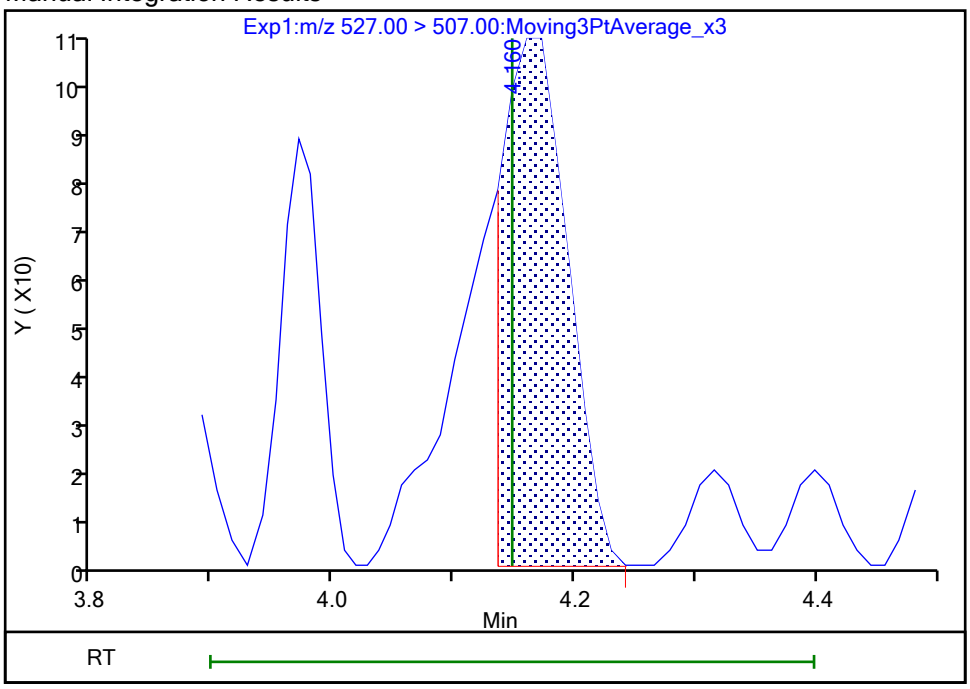
Processing Integration Results

Not Detected
Expected RT: 4.15



Manual Integration Results

RT: 4.16
Area: 379
Amount: 0.000663
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:55:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

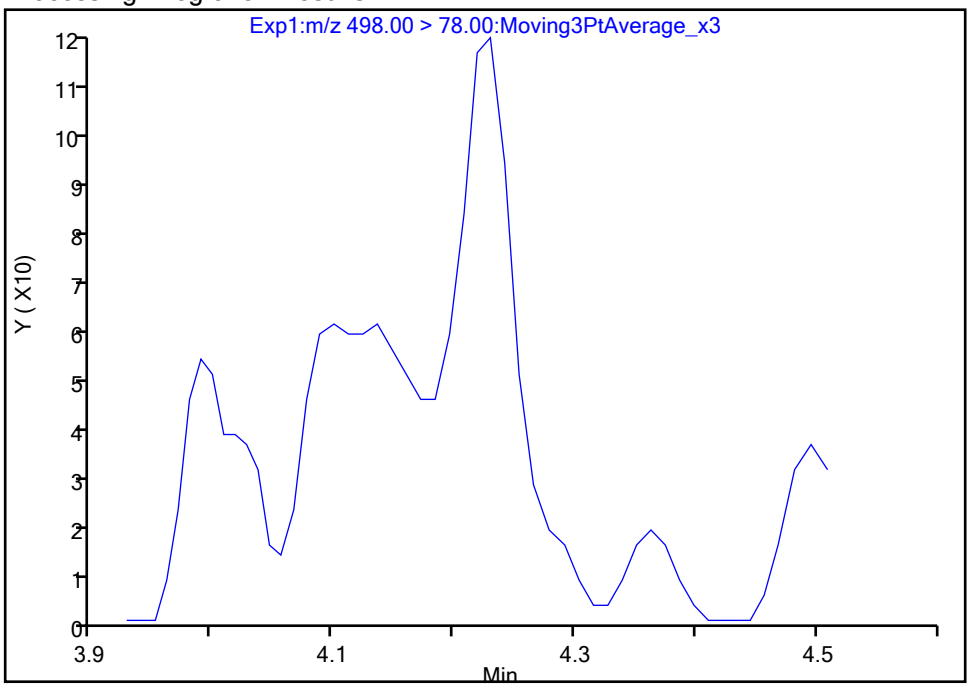
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

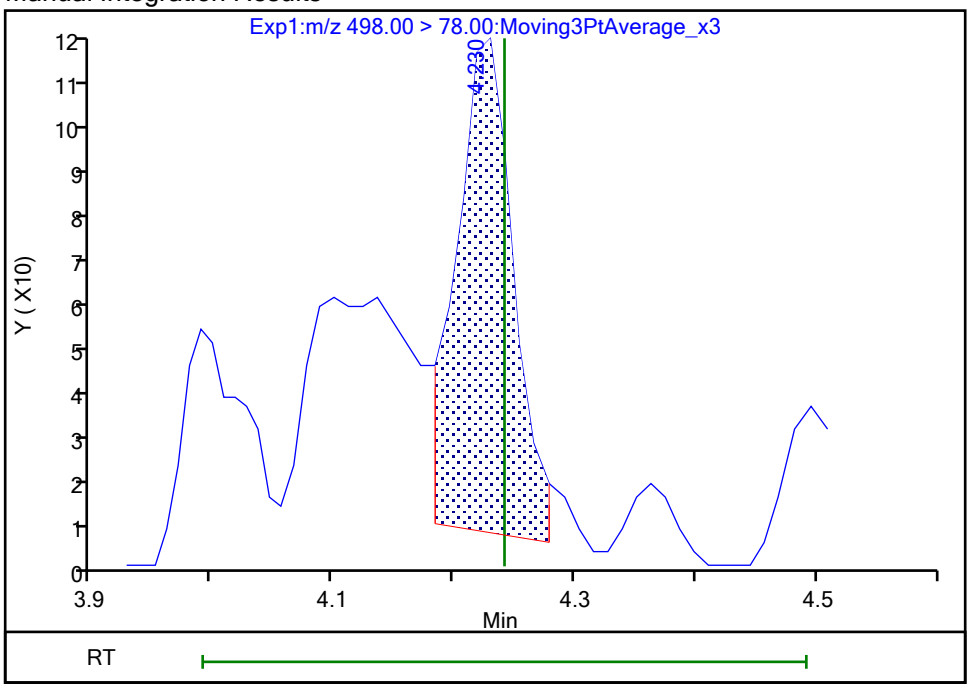
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 352
Amount: 0.000305
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:55:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

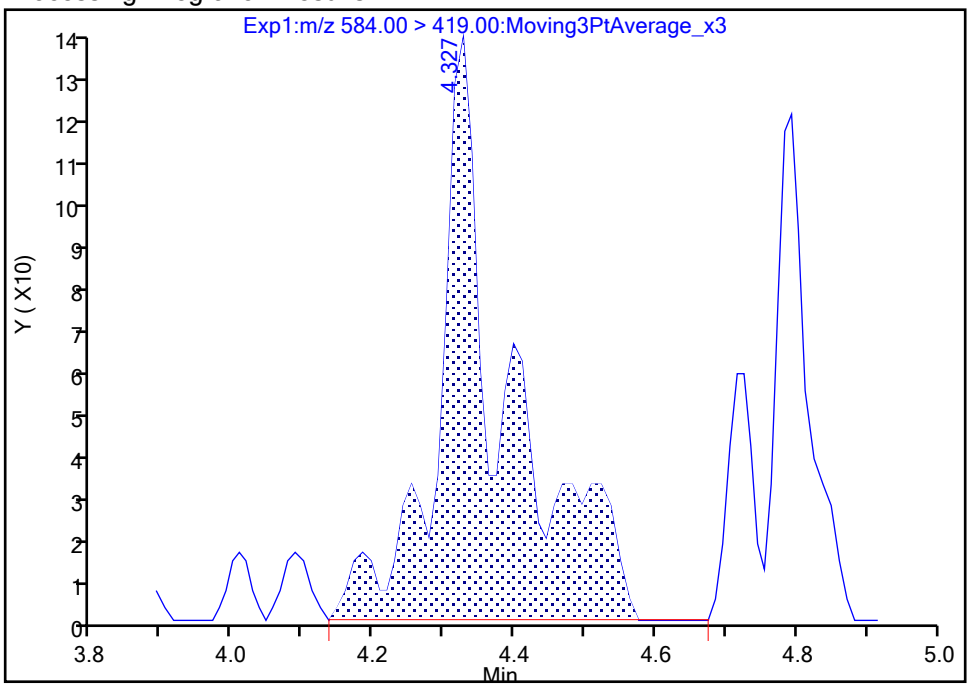
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

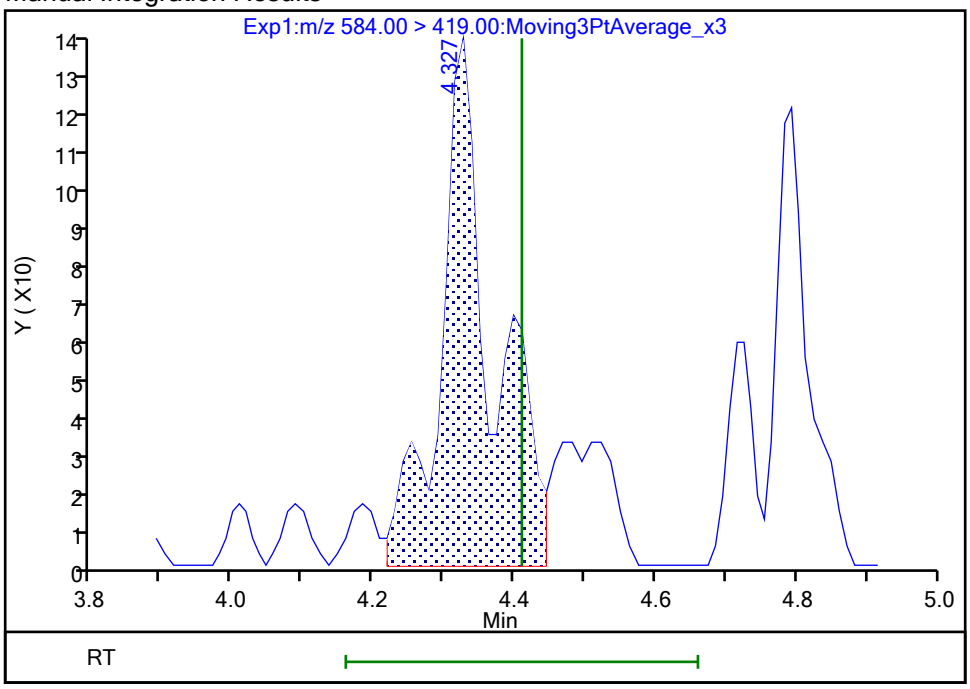
Processing Integration Results

RT: 4.33
Area: 936
Amount: 0.002687
Amount Units: ng/ml



Manual Integration Results

RT: 4.33
Area: 702
Amount: 0.002015
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:56:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

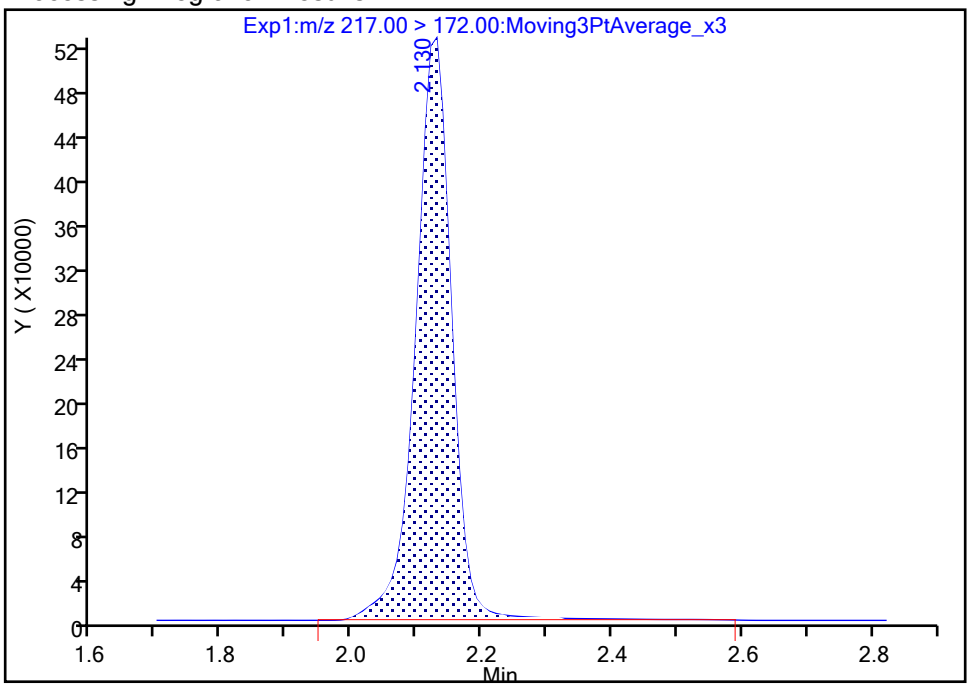
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

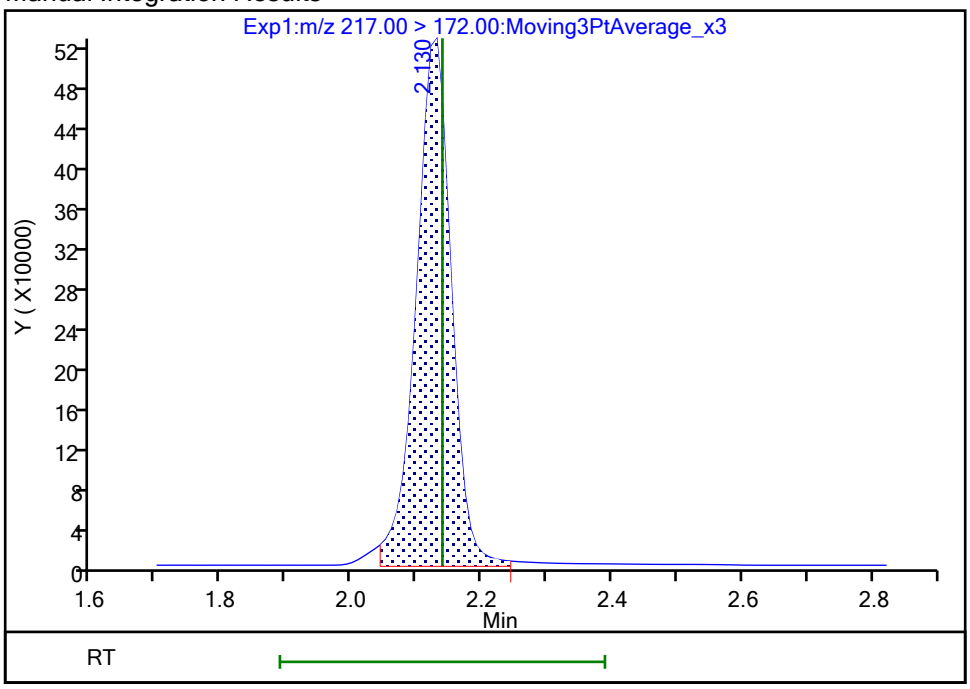
Processing Integration Results

RT: 2.13
Area: 2020641
Amount: 1.319499
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1966417
Amount: 1.286648
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:52:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

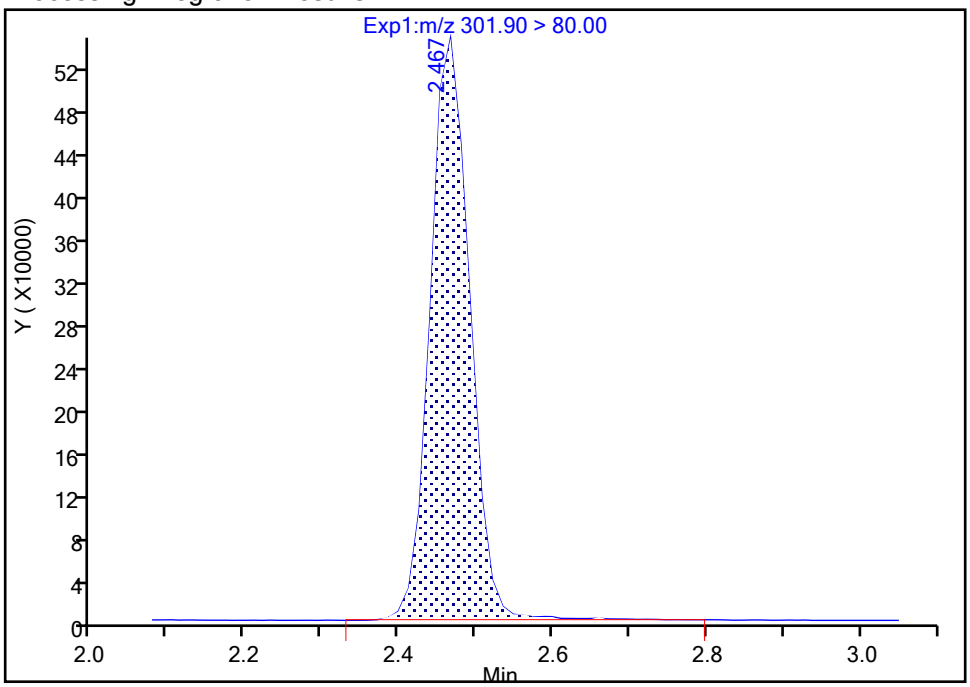
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

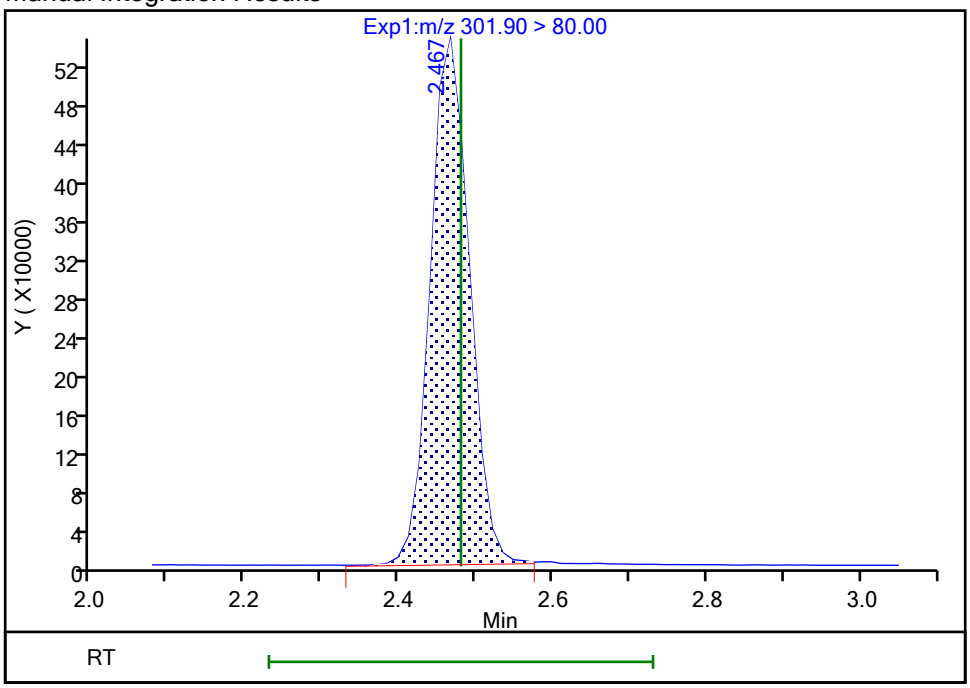
Processing Integration Results

RT: 2.47
Area: 1938641
Amount: 1.205560
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1924648
Amount: 1.199243
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:52:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

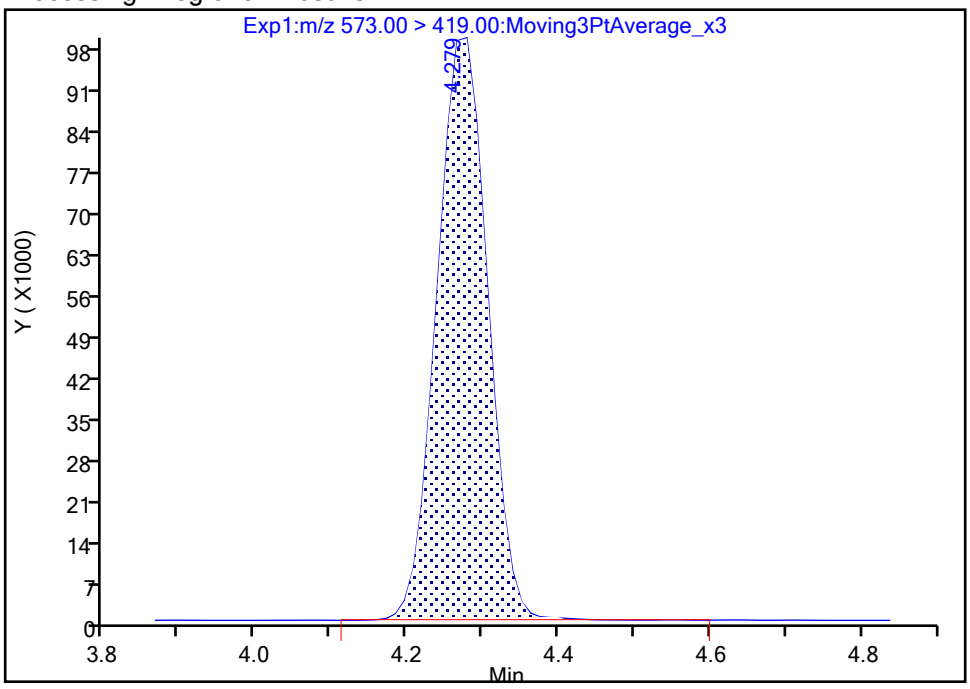
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

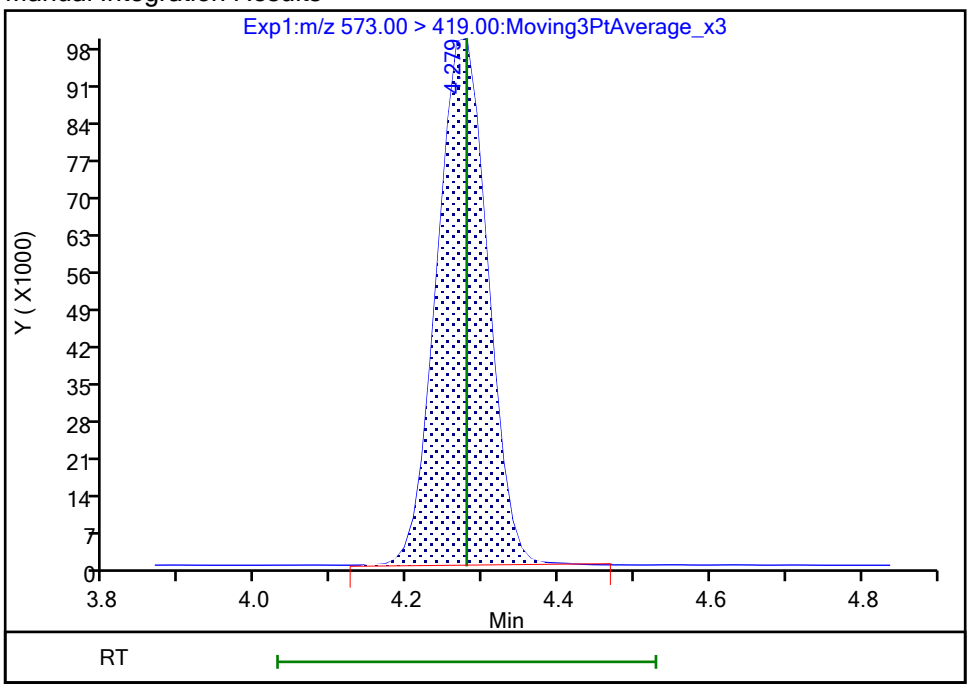
Processing Integration Results

RT: 4.28
Area: 466407
Amount: 1.139679
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 465611
Amount: 1.140000
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:52:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

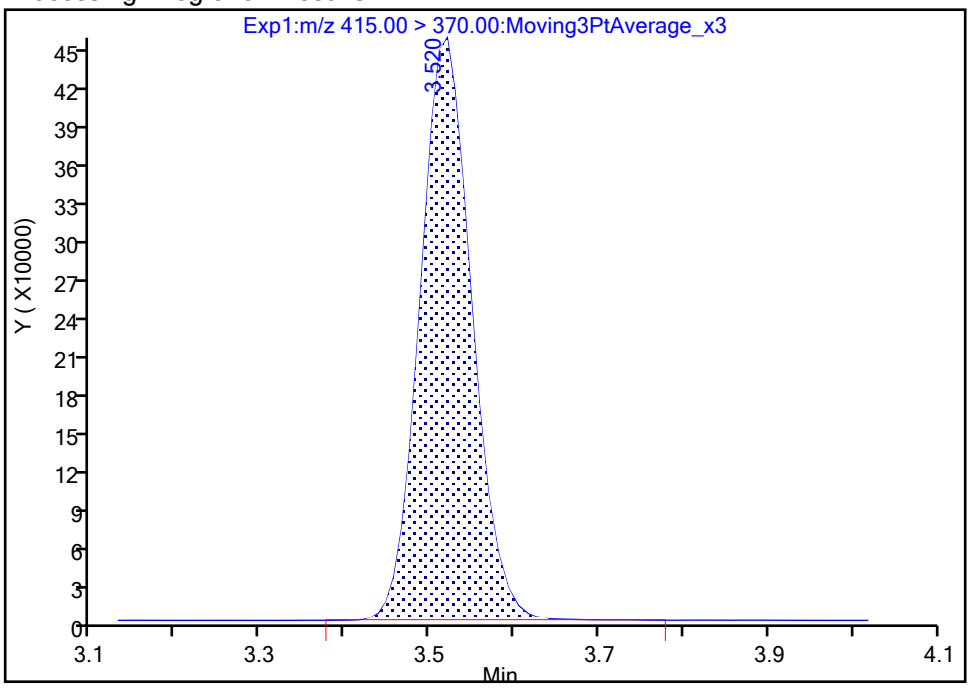
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A29.d				
Injection Date:	25-Oct-2023 21:40:53	Instrument ID:	LC812		
Lims ID:	460-290543-A-10-A	Lab Sample ID:	200-290543-10		
Client ID:	1000-101723-0004				
Operator ID:	LC812user	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

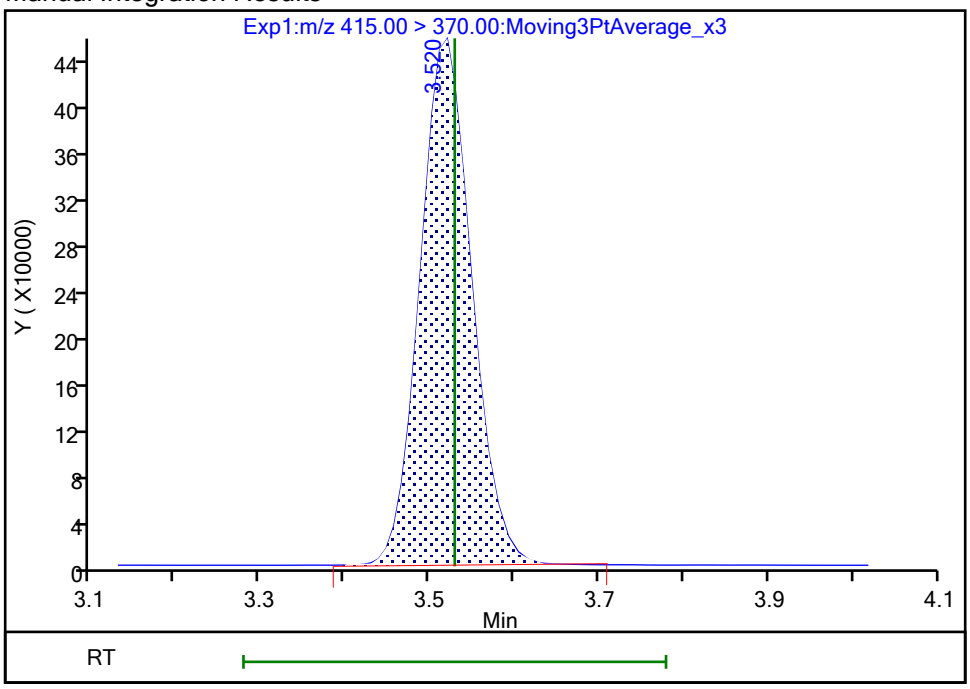
Processing Integration Results

RT: 3.52
Area: 1930297
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1926459
Amount: 1.250000
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 14:53:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290543-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.6524 0.9526	1.2498 0.8290	1.0107	0.9321	0.9433	L2ID	0.0370	0.9043							0.9970		0.9900
Perfluoropentanoic acid	0.9814 1.1023	1.2167 0.9980	1.0808	1.1330	1.0416	AveID		1.0791				7.6		20.0			
Perfluorobutanesulfonic acid	1.1612 1.1003	1.1884 0.9103	1.1783	1.1604	1.1195	AveID		1.1169				8.6		20.0			
4:2 Fluorotelomer sulfonic acid	3.4184 3.3656	3.9768 3.1033	3.3451	3.2188	3.3429	AveID		3.3958				8.2		20.0			
Perfluorohexanoic acid	1.1882 1.0691	1.1566 1.0070	1.1410	1.0537	1.0877	AveID		1.1005				5.8		20.0			
Perfluoropentanesulfonic acid	1.4845 1.2935	1.4521 1.1291	1.2900	1.2829	1.2091	AveID		1.3059				9.6		20.0			
HFPODA	0.9814 0.9865	1.0329 1.0173	1.0323	0.9948	0.9631	AveID		1.0012				2.7		20.0			
Perfluorohexanesulfonic acid	1.2928 1.0776	1.1776 1.0324	1.0608	1.0404	1.0673	AveID		1.1070				8.6		20.0			
Perfluoroheptanoic acid	1.2326 1.1236	1.2826 0.9928	1.0542	1.0768	1.0835	AveID		1.1209				9.1		20.0			
DONA	6.2912 5.4323	5.8563 +++++	5.6532	5.8591	5.4332	AveID		5.7542				5.6		20.0			
Perfluoroheptanesulfonic acid	1.5386 1.5214	1.4429 1.3749	1.4126	1.3983	1.4277	AveID		1.4452				4.3		20.0			
6:2 Fluorotelomer sulfonic acid	3.0797 2.6772	2.9248 2.3586	2.8187	2.5735	2.6999	AveID		2.7332				8.6		20.0			
Perfluorooctanoic acid	1.2162 0.9982	1.1278 1.0173	1.0470	1.0322	1.0174	AveID		1.0651				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290543-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid	1.2942 1.1749	1.2075 1.1201	1.1227	1.1283	1.1172	AveID		1.1664				5.6		20.0			
Perfluorononanoic acid	1.0909 0.9315	1.0135 0.8900	0.9991	0.9692	0.9662	AveID		0.9800				6.5		20.0			
9Cl-PF3ONS	4.1020 3.5800	3.6236 2.9351	3.5909	3.5582	3.5944	AveID		3.5692				9.5		20.0			
Perfluorononanesulfonic acid	0.9328 0.9318	0.8683 0.8687	0.8784	0.8769	0.8548	AveID		0.8874				3.6		20.0			
Perfluorodecanoic acid	1.0281 0.9602	1.0154 0.8863	1.0541	1.0439	1.0074	AveID		0.9994				5.8		20.0			
8:2 Fluorotelomer sulfonic acid	2.4547 2.0072	2.6137 1.8970	2.2575	2.0908	2.0894	AveID		2.2015				11.6		20.0			
Perfluorooctanesulfonamide	1.0228 0.9436	0.9703 0.8970	0.9494	0.9521	0.9419	AveID		0.9539				4.0		20.0			
NMeFOSAA	0.9443 0.8812	0.9804 0.8681	0.9111	0.8934	0.8734	AveID		0.9074				4.6		20.0			
Perfluorodecanesulfonic acid	0.7041 0.7196	0.6658 0.6468	0.6593	0.6839	0.7012	AveID		0.6830				3.9		20.0			
Perfluoroundecanoic acid	1.0537 0.9843	1.1393 0.9061	1.0315	1.0530	1.0465	AveID		1.0306				6.9		20.0			
N-ethylperfluorooctanesulfonamidoacetic acid	1.2597 0.9339	1.0412 0.9751	0.9527	0.9331	0.9057	AveID		1.0002				12.2		20.0			
11Cl-PF3OUdS	6.1952 4.9604	5.5951 +++++	5.4392	5.5008	5.1507	AveID		5.4735				7.8		20.0			
Perfluorododecanoic acid	1.1479 1.0203	1.0537 0.8606	1.0533	0.9749	1.0139	AveID		1.0178				8.6		20.0			
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	1.4856 1.2641	1.3967 1.2755	1.3186	1.2286	1.2426	AveID		1.3160				7.1		20.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2394 0.2329	0.2672 0.2134	0.2319	0.2233	0.2121	AveID		0.2315				8.1		20.0			
Perfluorotridecanoic acid	1.2114 1.0324	1.0619 0.8831	1.1223	1.0731	1.1045	AveID		1.0698				9.4		20.0			
Perfluorotetradecanoic acid	0.1299 0.1049	0.1180 0.1087	0.1103	0.1048	0.1060	AveID		0.1118				8.2		20.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.1830 0.9749	1.1040 0.8219	0.9746	0.9651	0.9768	AveID		1.0000				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290543-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoro-n-octadecanoic acid (PFODA)	0.8629 0.7648	0.8634 0.6721	0.7865	0.8020	0.7147	AveI n		0.7809				9.1		20.0			
13C4 PFBA	1.0672 0.9509	0.9641 0.9862	0.9676	0.9942	1.0117	Ave		0.9917				3.9		50.0			
13C5 PFPeA	0.8654 0.7385	0.7296 0.7399	0.7610	0.7877	0.7652	Ave		0.7696				6.1		50.0			
13C3 PFBS	1.0756 1.0192	0.9876 1.1612	0.9549	1.0294	1.0615	Ave		1.0413				6.4		50.0			
M2-4:2 FTS	0.1343 0.1194	0.1086 0.1243	0.1164	0.1216	0.1185	Ave		0.1204				6.5		50.0			
13C2 PFHxA	0.8778 0.7694	0.7838 0.7387	0.7436	0.7956	0.7718	Ave		0.7830				5.9		50.0			
13C3 HFPO-DA	0.1643 0.1519	0.1501 0.1535	0.1409	0.1528	0.1474	Ave		0.1516				4.7		50.0			
18O2 PFHxS	0.7448 0.7507	0.6904 0.8129	0.7226	0.7607	0.7427	Ave		0.7464				5.0		50.0			
13C4 PFHpA	0.8886 0.8385	0.8151 0.8749	0.8445	0.8653	0.8858	Ave		0.8590				3.2		50.0			
M2-6:2 FTS	0.1544 0.1505	0.1511 0.1604	0.1460	0.1626	0.1607	Ave		0.1551				4.0		50.0			
13C4 PFOA	0.9601 0.9669	0.9919 0.9091	0.9657	0.9965	1.0218	Ave		0.9731				3.7		50.0			
13C4 PFOS	0.4674 0.4580	0.4521 0.5077	0.4662	0.4873	0.4807	Ave		0.4742				4.0		50.0			
13C5 PFNA	1.1059 1.0804	0.9837 1.0672	1.0142	1.1040	1.0572	Ave		1.0590				4.3		50.0			
13C2 PFDA	1.1803 1.1318	1.0494 1.1115	1.0411	1.0951	1.1528	Ave		1.1089				4.6		50.0			
M2-8:2 FTS	0.1812 0.1848	0.1605 0.1855	0.1573	0.1785	0.1730	Ave		0.1744				6.5		50.0			
13C8 FOSA	0.8923 0.9862	0.9301 0.9872	0.9041	0.9724	0.9514	Ave		0.9462				4.1		50.0			
d3-NMeFOSAA	0.2790 0.2660	0.2549 0.2833	0.2456	0.2672	0.2590	Ave		0.2650				5.0		50.0			
13C2 PFUnA	1.1562 1.0399	0.9889 1.0045	1.0013	1.0578	1.0784	Ave		1.0467				5.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290543-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
d5-NEtFOSAA	0.2684 0.2609	0.2442 0.2414	0.2482	0.2513	0.2718	Ave		0.2552				4.7		50.0			
13C2 PFDoA	1.0873 1.0291	1.0666 1.1188	1.0211	1.0940	1.0303	Ave		1.0639				3.6		50.0			
13C2 PFTeDA	1.0903 1.0729	1.0314 1.0760	1.0078	1.0703	1.0665	Ave		1.0593				2.7		50.0			
13C2 PFHxDA	1.3133 1.1726	1.1714 1.2858	1.1658	1.2481	1.1872	Ave		1.2206				5.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290543-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid		L2ID	148954 12675387	192635 29150051	774804	1439078	3820872	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanoic acid		AveID	71742 11390973	141937 26331175	651716	1385943	3191311	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorobutanesulfonic acid		AveID	93584 13919716	166434 33432260	790713	1645342	4220392	0.0444 8.87	0.0887 22.2	0.444	0.887	2.22
4:2 Fluorotelomer sulfonic acid		AveID	36330 5267048	64699 12889559	288946	569311	1486720	0.0469 9.37	0.0937 23.4	0.469	0.937	2.34
Perfluorohexanoic acid		AveID	88105 11510430	144941 26521589	672203	1301870	3361171	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanesulfonic acid		AveID	87889 12787110	150824 30796216	694967	1426185	3383549	0.0471 9.41	0.0941 23.5	0.471	0.941	2.35
HFPODA		AveID	13619 2096317	24788 5568235	115257	235976	568553	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorohexanesulfonic acid		AveID	74343 10346652	118807 27349473	555092	1123331	2901162	0.0457 9.14	0.0914 22.9	0.457	0.914	2.29
Perfluoroheptanoic acid		AveID	92528 13183148	167142 30971904	705383	1446925	3843212	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
DONA		AveID	234702 32898209	400019 +++++	1973200	4190396	9881253	0.0473 9.45	0.0945 +++++	0.473	0.945	2.36
Perfluoroheptanesulfonic acid		AveID	57887 9291673	99394 23718890	497245	1008539	2618603	0.0477 9.53	0.0953 23.8	0.477	0.953	2.38
6:2 Fluorotelomer sulfonic acid		AveID	38205 5360896	67191 12827492	310157	618135	1652144	0.0476 9.51	0.0951 23.8	0.476	0.951	2.38
Perfluorooctanoic acid		AveID	98642 13504480	178853 32974345	801060	1597361	4162515	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorooctanesulfonic acid		AveID	47415 6987392	80998 18816206	384806	792430	1995347	0.0464 9.28	0.0928 23.2	0.464	0.928	2.32
Perfluorononanoic acid		AveID	101909 14082035	159396 33868175	802848	1661649	4090183	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
9Cl-PF3ONS		AveID	151088	244371	1237458	2512476	6453976	0.0467	0.0933	0.467	0.933	2.33

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290543-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21405197	49573864				9.33	23.3			
Perfluorononanesulfonic acid		AveID	35424 5744699	60375 15127922	312103	638462	1582540	0.0481 9.62	0.0962 24.1	0.481	0.962	2.41
Perfluorodecanoic acid		AveID	102502 15207258	170377 35125264	869526	1775242	4650088	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
8:2 Fluorotelomer sulfonic acid		AveID	36060 4983035	64388 12048759	270156	556332	1389051	0.0480 9.60	0.0960 24.0	0.480	0.960	2.40
Perfluorooctanesulfonamide		AveID	77087 13020569	144294 31572610	680067	1437750	3587757	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
NMeFOSAA		AveID	22256 3280076	39956 8770277	177278	370720	905881	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorodecanesulfonic acid		AveID	26824 4450137	46440 11299421	234996	499466	1302171	0.0483 9.65	0.0965 24.1	0.483	0.965	2.41
Perfluoroundecanoic acid		AveID	102917 14323125	180134 32455800	818335	1729770	4518784	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	28562 3409503	40651 8392085	187350	364226	985607	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
11Cl-PF3OUdS		AveID	230633 29976782	381367 +++++	1894487	3925775	9347621	0.0472 9.43	0.0943 +++++	0.472	0.943	2.36
Perfluorododecanoic acid		AveID	105433 14693173	179683 34331936	852163	1656352	4182445	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)		AveID	21915 3151402	34552 8134970	158460	328276	829529	0.0482 9.64	0.0964 24.1	0.482	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	9148 1445002	18698 3739893	82920	163618	395113	0.0484 9.68	0.0968 24.2	0.484	0.968	2.42
Perfluorotridecanoic acid		AveID	111264 14866529	181083 35226779	907955	1823052	4556433	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorotetradecanoic acid		AveID	11967 1575221	19454 4171778	88102	174160	452708	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		AveID	131230 15997184	206767 37681202	900190	1870661	4643411	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	95729 12548221	161712 30813591	726427	1554372	3397685	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
13C4 PFBA	13PFOA	Ave	2253572 1663241	1926725 1758198	1916527	1929850	2025338	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 460-290543-1 | Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 | GC Column: C-18 | ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 | Calibration End Date: 07/26/2023 18:05 | Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C5 PFPeA	13PFOA	Ave	1827623 1291692	1458161 1319141	1507442	1529086	1531883	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 PFBS	13PFOA	Ave	2112456 1657995	1835537 1925353	1758991	1858340	1976378	1.16 1.16	1.16 1.16	1.16	1.16	1.16
M2-4:2 FTS	13PFOA	Ave	264843 194992	202715 207012	215257	220382	221658	1.17 1.17	1.17 1.17	1.17	1.17	1.17
13C2 PFHxA	13PFOA	Ave	1853797 1345799	1566461 1316912	1472867	1544435	1545081	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 HFPO-DA	13PFOA	Ave	346930 265620	299977 273677	279126	296521	295164	1.25 1.25	1.25 1.25	1.25	1.25	1.25
18O2 PFHxS	13PFOA	Ave	1487994 1242233	1305238 1370941	1353967	1396957	1406672	1.18 1.18	1.18 1.18	1.18	1.18	1.18
13C4 PFHpA	13PFOA	Ave	1876608 1466571	1628956 1559821	1672833	1679653	1773444	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-6:2 FTS	13PFOA	Ave	309808 250039	286854 271643	274798	299923	305639	1.19 1.19	1.19 1.19	1.19	1.19	1.19
13C4 PFOA	13PFOA	Ave	2027588 1691186	1982384 1620734	1912820	1934463	2045642	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C4 PFOS	13PFOA	Ave	943517 765818	863764 865311	882764	904398	919926	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C5 PFNA	13PFOA	Ave	2335475 1889768	1965971 1902682	2008931	2143126	2116548	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDA	13PFOA	Ave	2492424 1979736	2097344 1981566	2062234	2125756	2307904	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	13PFOA	Ave	366485 309678	307295 316911	298552	331913	331708	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C8 FOSA	13PFOA	Ave	1884229 1724931	1858847 1759972	1790735	1887535	1904586	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290543-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d3-NMeFOSAA	13PFOA	Ave	589245 465286	509447 505130	486461	518688	518571	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFUnA	13PFOA	Ave	2441700 1818926	1976379 1790927	1983358	2053330	2158999	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d5-NEtFOSAA	13PFOA	Ave	566846 456350	488020 430319	491633	487913	544137	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDoA	13PFOA	Ave	2296115 1800020	2131572 1994604	2022512	2123640	2062631	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	13PFOA	Ave	2302510 1876594	2061289 1918275	1996289	2077683	2135161	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFHxDA	13PFOA	Ave	2773326 2051028	2341179 2292454	2309121	2422773	2376838	1.25 1.25	1.25 1.25	1.25	1.25	1.25

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Jul-2023 17:16:50 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 1
Misc. Info.: 200-0056441-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:27:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.112	2.103	0.009	0.616	2253572	1.35		108	1147	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.120	2.112	0.008	1.004	148954	0.0505		101	7.7	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.704	1827623	1.41		112	783	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.411	2.411	0.0	1.000	71742	0.0455		90.9	3.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.708	2112456	1.20		103	64154	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	93584	0.0461	Target=2.07	104	18.4	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	42190		2.22(1.04-3.11)	104	8.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.693	2.694	-0.001	0.786	264843	1.30		111	103	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.693	2.694	-0.001	1.000	36330	0.0472		101	404	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.797	1853797	1.40		112	1419	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	88105	0.0540	Target=14.29	108	11.4	M
313.00 > 119.00	2.718	2.731	-0.013	0.995	5337		16.51(7.15-21.44)	108	3.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.896	87889	0.0535	Target=2.78	114	123	M
349.00 > 99.00	2.731	2.731	0.0	0.896	29458		2.98(1.39-4.17)	114	37.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.806	2.844	-0.038	0.819	346930	1.36		108	1501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.806	2.844	-0.038	1.000	13619	0.0490		98.0	101	
D 11 18O2 PFHxS										
403.00 > 84.00	3.046	3.092	-0.046	0.889	1487994	1.18		99.8	3478	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.046	3.092	-0.046	1.000	74343	0.0534	Target=3.23	117	116	M
399.00 > 99.00	3.046	3.092	-0.046	1.000	22455		3.31(1.62-4.84)	117	14.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.058	3.104	-0.046	1.000	92528	0.0550	Target=4.11	110	17.1	M
363.00 > 169.00	3.058	3.104	-0.046	1.000	21986		4.21(2.06-6.17)	110	17.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.058	3.104	-0.046	0.892	1876608	1.29		103	5156	
77 DONA										
377.00 > 251.00	3.092	3.138	-0.046	0.824	234702	0.0517	Target=3.28	109	257	
377.00 > 85.00	3.092	3.138	-0.046	0.824	72544		3.24(1.64-4.92)	109	83.1	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.408	3.446	-0.038	0.908	57887	0.0507	Target=4.71	106	138	
449.00 > 99.00	3.408	3.446	-0.038	0.908	11640		4.97(2.36-7.07)	106	22.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.417	3.446	-0.029	0.997	309808	1.18		99.6	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.417	3.446	-0.029	1.000	38205	0.0536		113	138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.426	3.464	-0.038	1.000	98642	0.0571	Target=2.90	114	6.8	M
413.00 > 169.00	3.426	3.464	-0.038	1.000	31899		3.09(1.45-4.35)	114	28.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.426	3.464	-0.038	1.000	2027588	1.23		98.7	5902	
* 62 13C2 PFOA										
415.00 > 370.00	3.426	3.464	-0.038		2111765	1.25			5485	
D 18 13C4 PFOS										
503.00 > 80.00	3.754	3.783	-0.029	1.096	943517	1.18		98.6	4119	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.754	3.783	-0.029	1.000	47415	0.0515	Target=4.11	111	65.8	M
499.00 > 99.00	3.754	3.783	-0.029	1.000	11529		4.11(2.05-6.16)	111	16.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.774	3.793	-0.019	1.101	2335475	1.31		104	6410	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.774	3.803	-0.029	1.000	101909	0.0557	Target=8.48	111	17.9	M
463.00 > 169.00	3.764	3.803	-0.039	0.997	10750		9.48(4.24-12.72)	111	35.9	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.922	3.947	-0.025	1.045	151088	0.0536		115	288	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.063	4.074	-0.011	1.082	35424	0.0506	Target=2.17	105	275	M
549.00 > 99.00	4.063	4.074	-0.011	1.082	15853		2.23(1.08-3.25)	105	31.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.084	4.108	-0.024	1.192	2492424	1.33		106	10504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.084	4.108	-0.024	1.000	102502	0.0514	Target=10.55	103	25.3	
513.00 > 169.00	4.084	4.108	-0.024	1.000	10265		9.99(5.27-15.82)	103	39.8	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.096	4.108	-0.012	1.196	366485	1.24		104	569	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.096	4.120	-0.024	1.000	36060	0.0535		112	260	M
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.224	1884229	1.18		94.3	3520	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	77087	0.0536		107	320	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.237	4.249	-0.012	1.237	589245	1.32		105	1006	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.260	-0.011	1.003	22256	0.0520		104	39.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.334	4.346	-0.012	1.155	26824	0.0497	Target=2.28	103	168	
599.00 > 99.00	4.334	4.346	-0.012	1.155	12867		2.08(1.14-3.42)	103	59.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.275	2441700	1.38		110	9527	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.000	102917	0.0511	Target=11.30	102	27.7	
563.00 > 169.00	4.370	4.382	-0.012	1.000	10486		9.81(5.65-16.96)	102	73.6	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.382	4.393	-0.011	1.279	566846	1.31		105	864	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.382	4.393	-0.011	1.000	28562	0.0630		126	124	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.189	230633	0.0534		113	329	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.344	2296115	1.28		102	6831	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	105433	0.0564	Target=8.15	113	10.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	13359		7.89(4.07-12.22)	113	79.9	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.130	21915	0.0544		113	524	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.780	4.779	0.001	1.273	9148	0.0501	Target=0.50	103	110	M
699.00 > 99.00	4.780	4.779	0.001	1.273	18434		0.50(0.25-0.75)	103	160	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	111264	0.0566	Target=6.61	113	12.0	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	15139		7.35(3.31-9.92)	113	149	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.459	2302510	1.29		103	7005	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.002	11967	0.0581	Target=0.96	116	150	
713.00 > 219.00	4.998	5.008	-0.010	1.000	11422		1.05(0.48-1.44)	116	211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	131230	0.0591	Target=7.69	118	14.7	
813.00 > 169.00	5.328	5.328	0.0	1.000	16433		7.99(3.85-11.54)	118	172	
D 44 13C2 PFHxDA										M
815.00 > 770.00	5.328	5.328	0.0	1.555	2773326	1.34		108	1764	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.620	5.611	0.009	1.055	95729	0.0553	Target=9.13	111	15.3	M
913.00 > 169.00	5.620	5.611	0.009	1.055	9904		9.67(4.56-13.69)	111	101	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

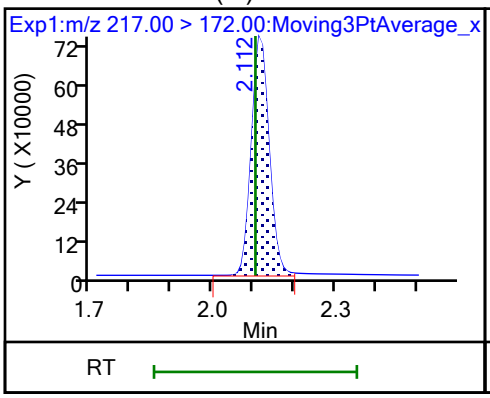
PFAS32NCIC1_00015 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:37 Chrom Revision: 2.3 19-Jul-2023 18:28:48

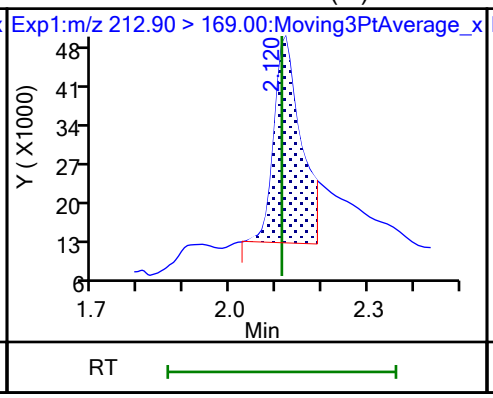
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Injection Date: 26-Jul-2023 17:16:50 Instrument ID: LC812
Lims ID: IC 1
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

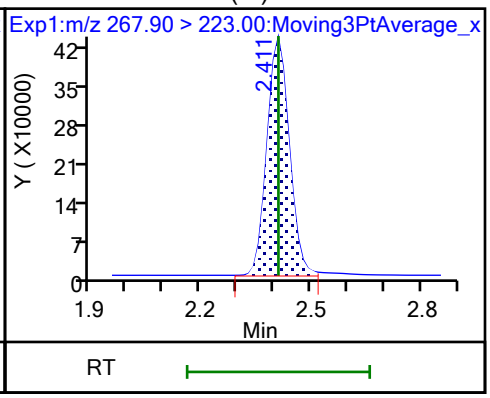
D 1 13C4 PFBA (M)



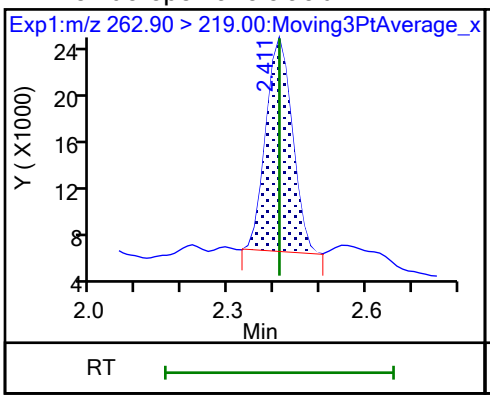
2 Perfluorobutanoic acid (M)



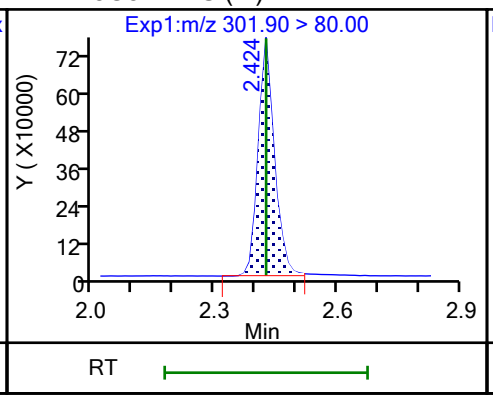
D 3 13C5 PFPeA (M)



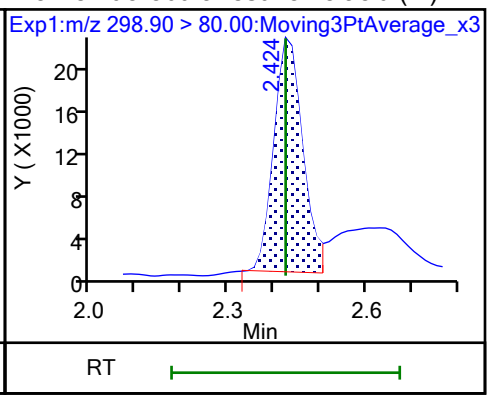
4 Perfluoropentanoic acid



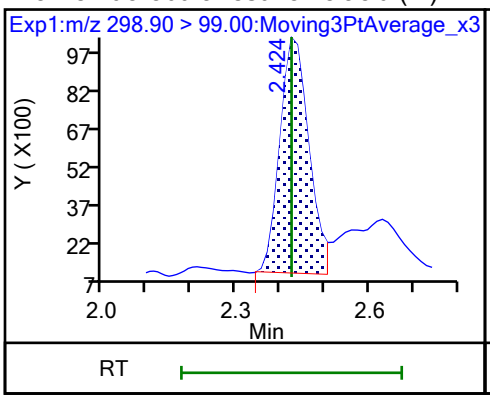
D 47 13C3 PFBS (M)



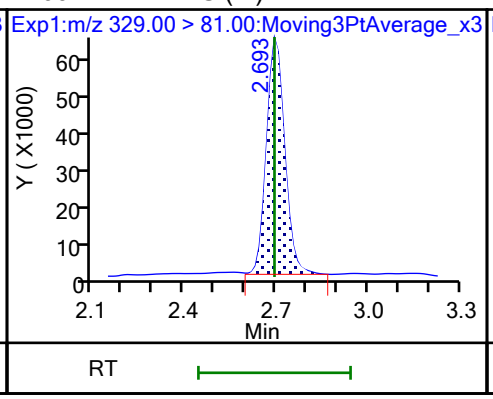
5 Perfluorobutanesulfonic acid (M)



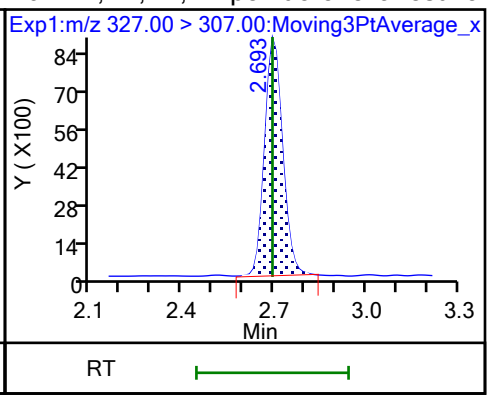
5 Perfluorobutanesulfonic acid (M)



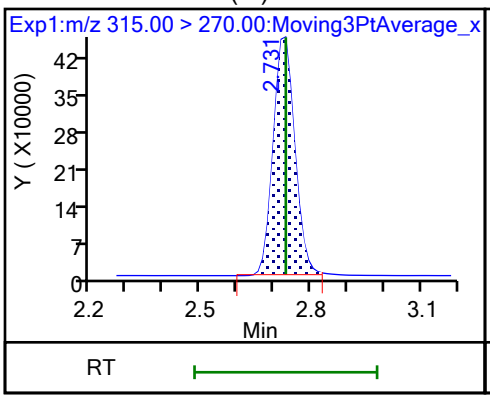
D 60 M2-4:2 FTS (M)



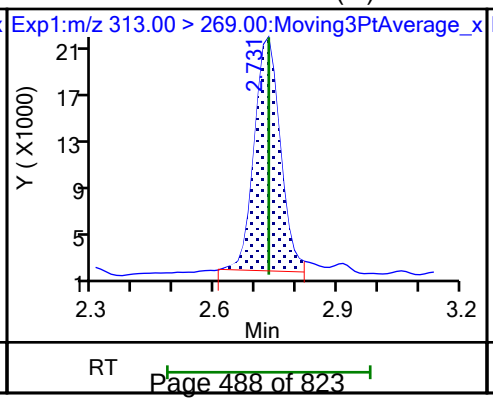
61 1H,1H,2H,2H-perfluorohexanesulfo



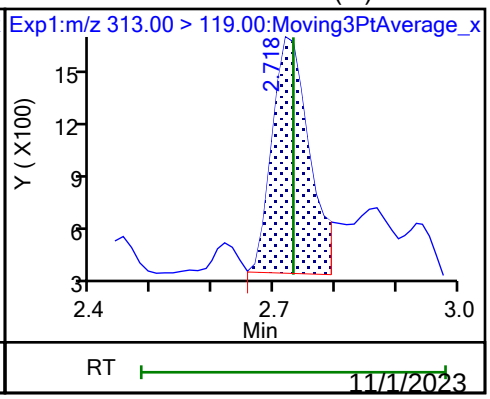
D 7 13C2 PFHxA (M)



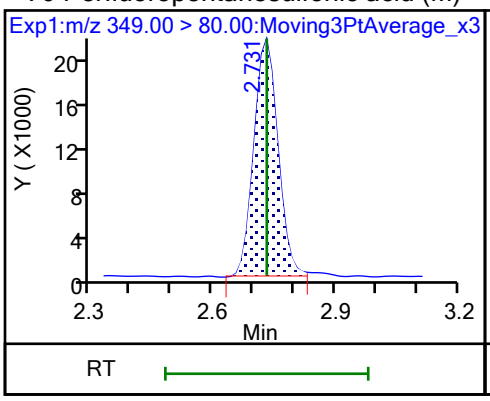
6 Perfluorohexanoic acid (M)



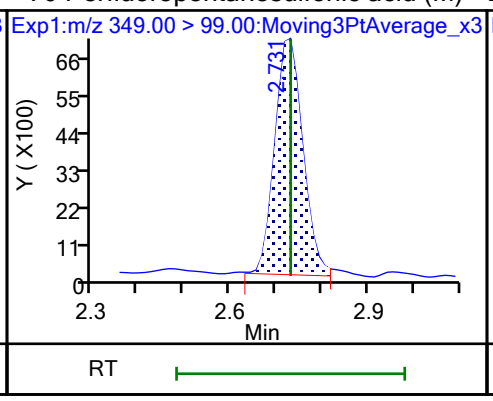
6 Perfluorohexanoic acid (M)



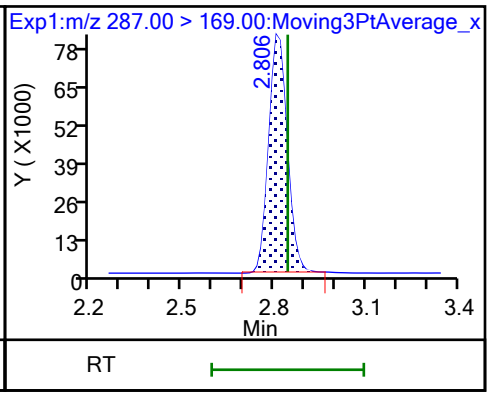
70 Perfluoropentanesulfonic acid (M)



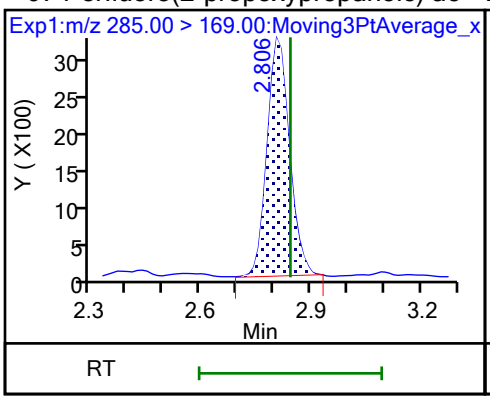
70 Perfluoropentanesulfonic acid (M)



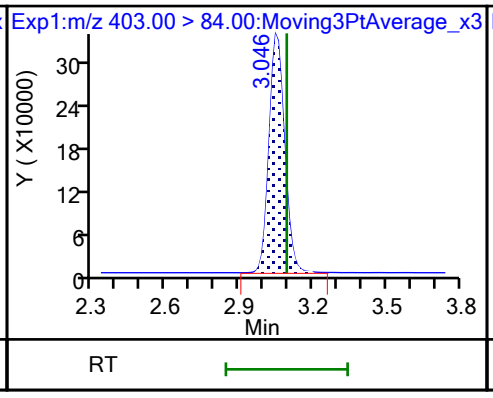
D 64 13C3 HFPO-DA



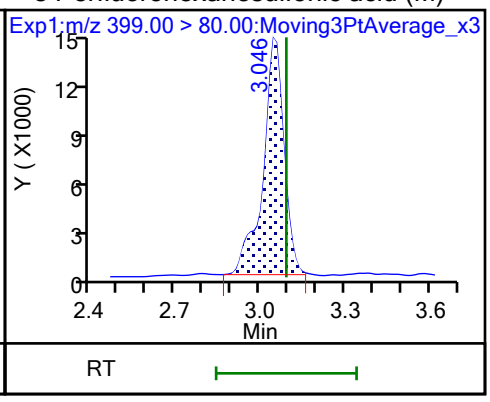
67 Perfluoro(2-propoxypropanoic) ac



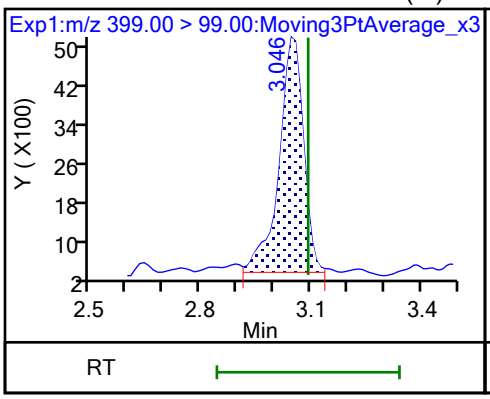
D 11 18O2 PFHxS



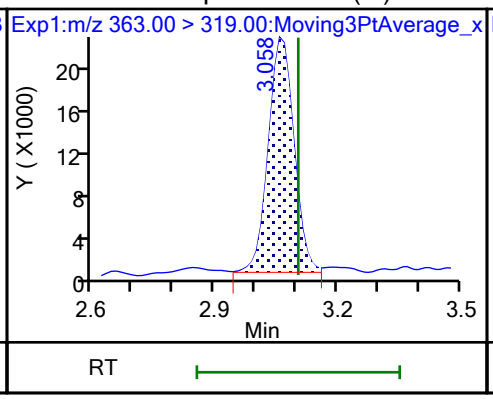
8 Perfluorohexanesulfonic acid (M)



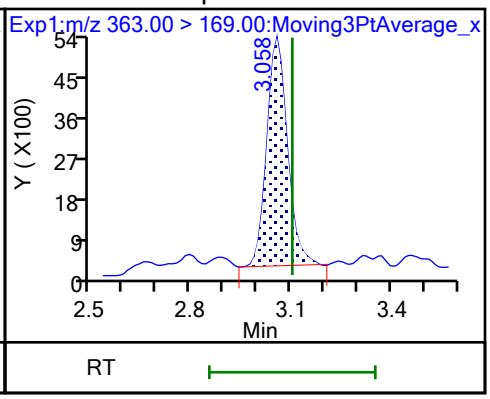
8 Perfluorohexanesulfonic acid (M)



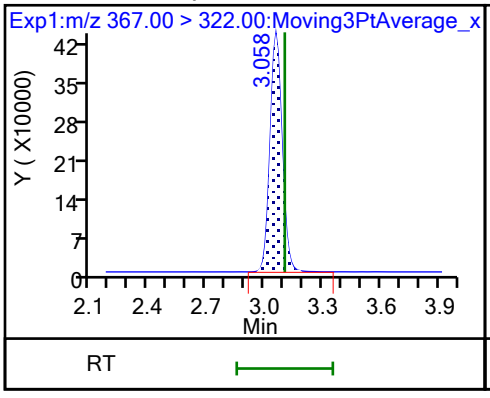
10 Perfluoroheptanoic acid (M)



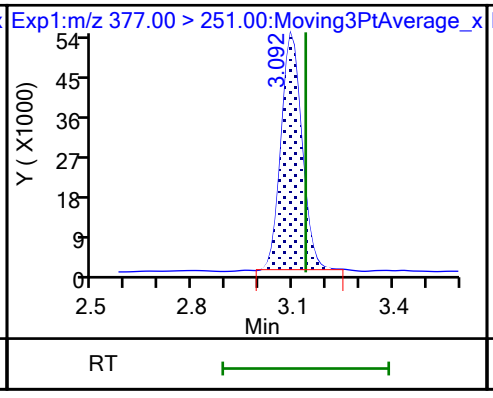
10 Perfluoroheptanoic acid



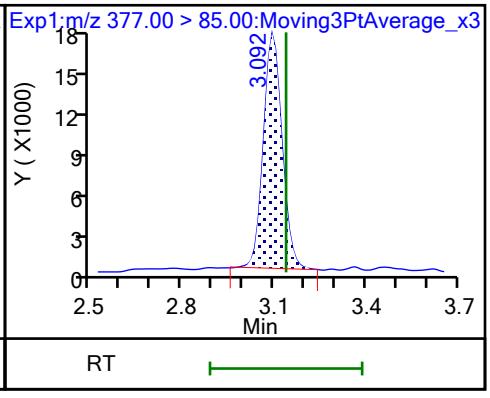
D 9 13C4 PFHpA



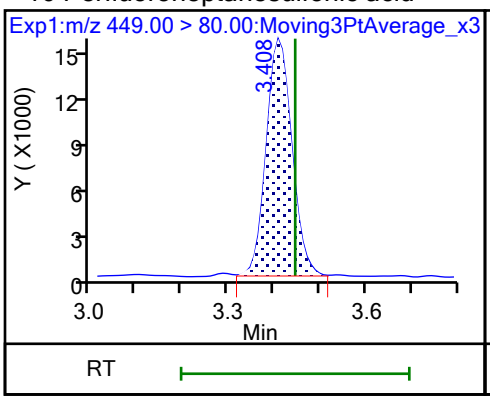
77 DONA



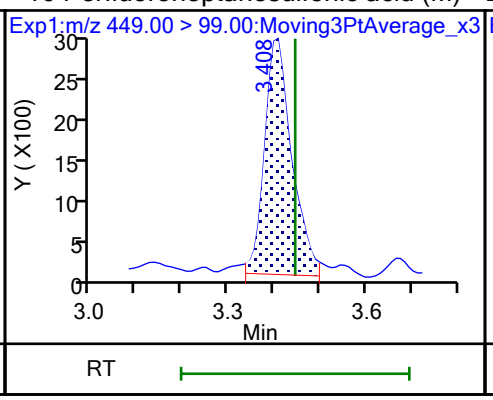
77 DONA



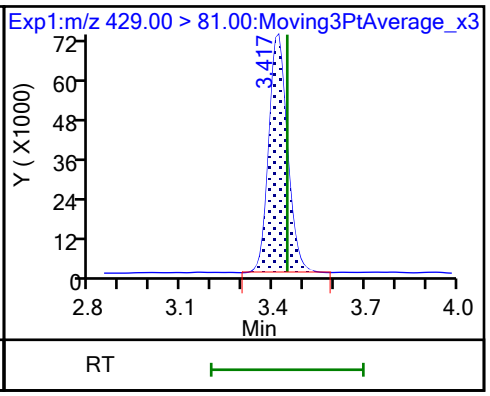
16 Perfluoroheptanesulfonic acid



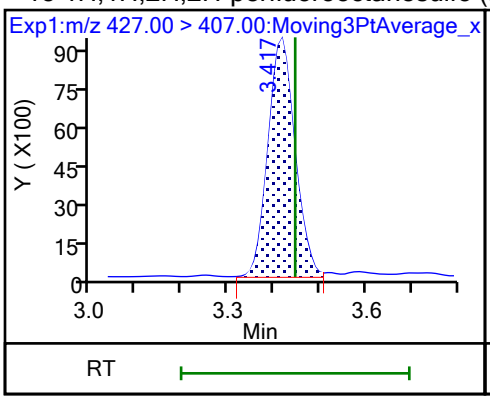
16 Perfluoroheptanesulfonic acid (M)



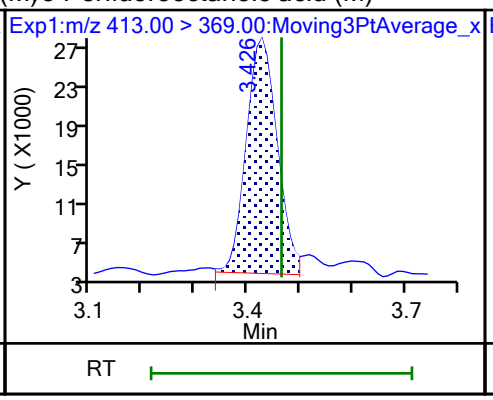
D 12 M2-6:2 FTS



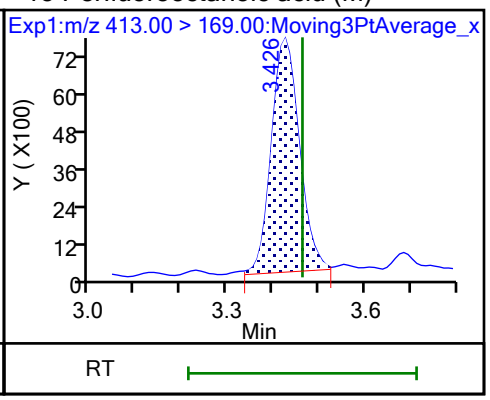
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



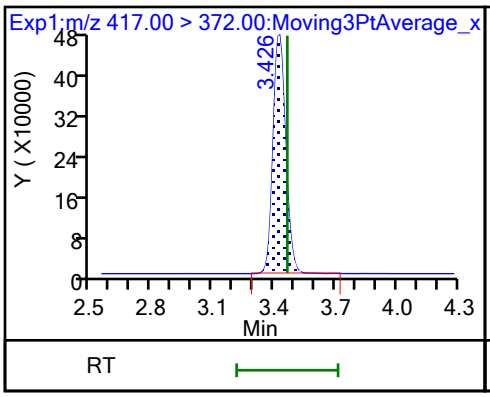
15 Perfluorooctanoic acid (M)



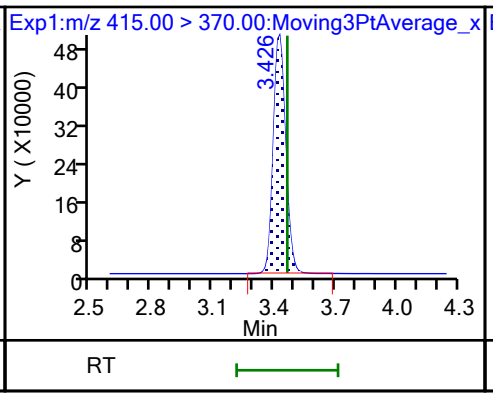
15 Perfluorooctanoic acid (M)



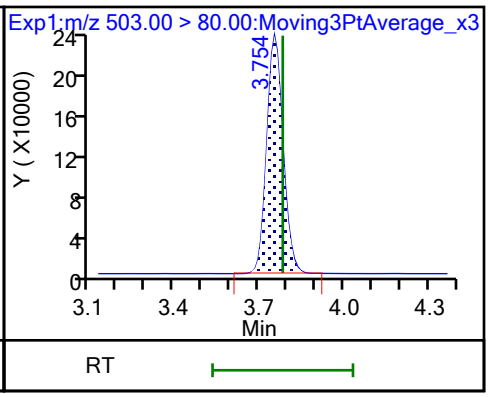
D 14 13C4 PFOA



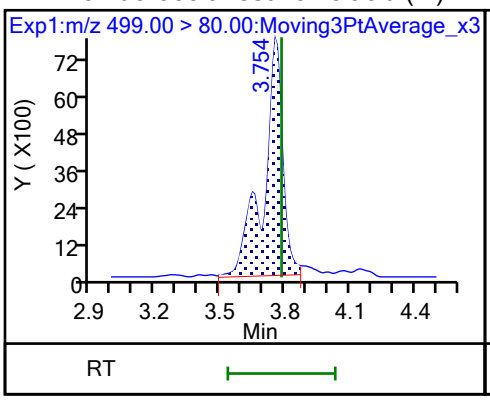
* 62 13C2 PFOA



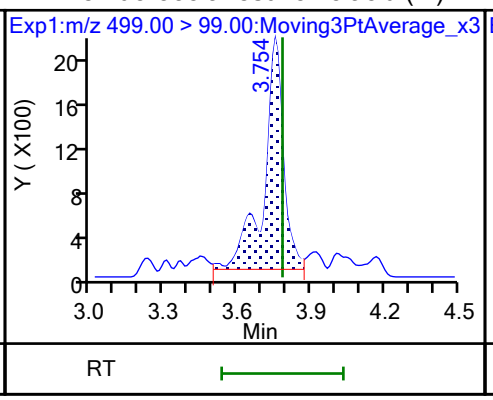
D 18 13C4 PFOS



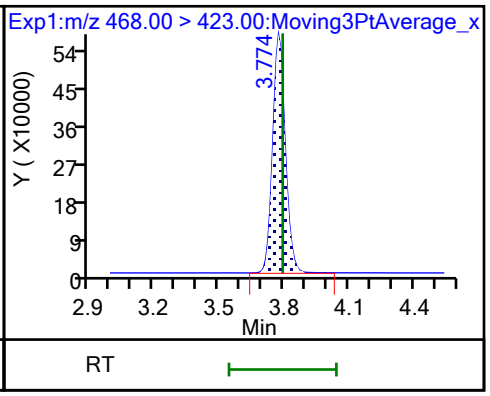
17 Perfluorooctanesulfonic acid (M)



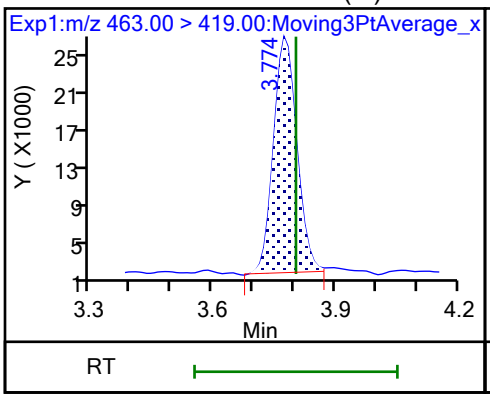
17 Perfluorooctanesulfonic acid (M)



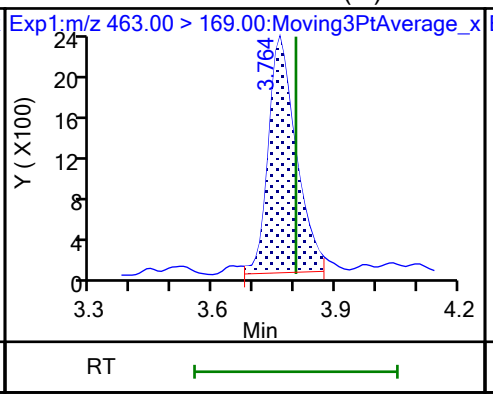
D 19 13C5 PFNA



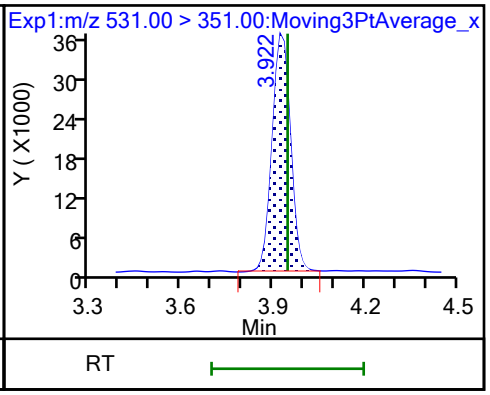
20 Perfluorononanoic acid (M)



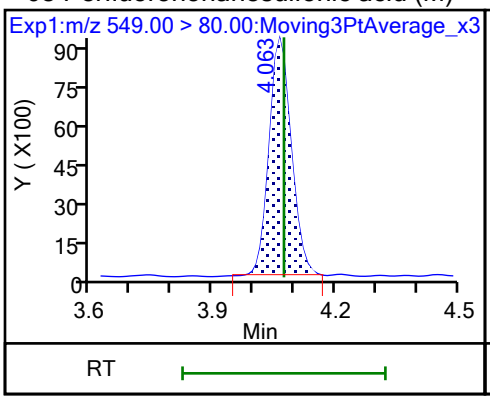
20 Perfluorononanoic acid (M)



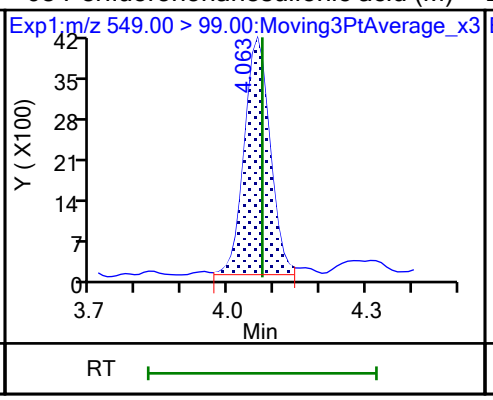
69 9-Chlorohexadecafluoro-3-oxanona



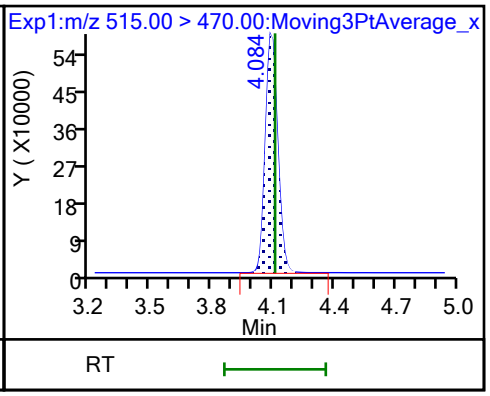
68 Perfluorononanesulfonic acid (M)



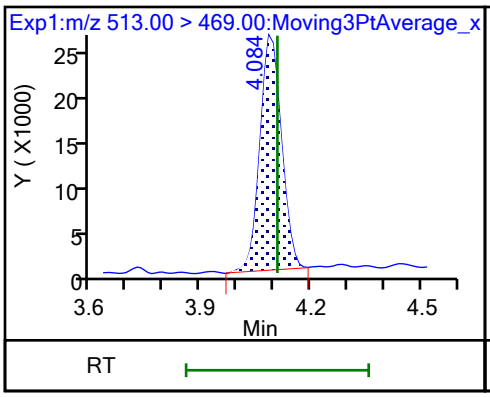
68 Perfluorononanesulfonic acid (M)



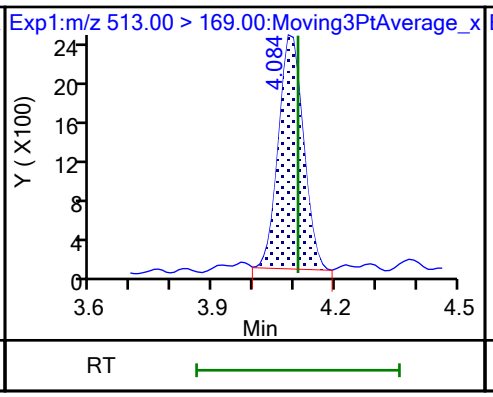
D 23 13C2 PFDA



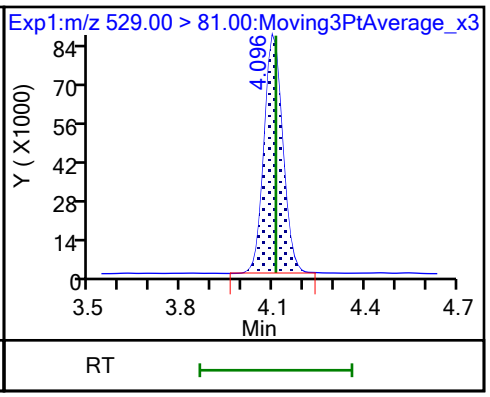
24 Perfluorodecanoic acid



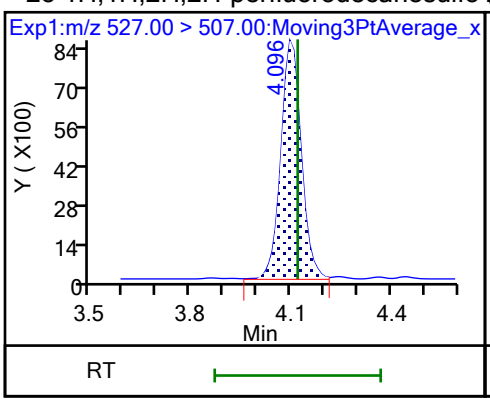
24 Perfluorodecanoic acid



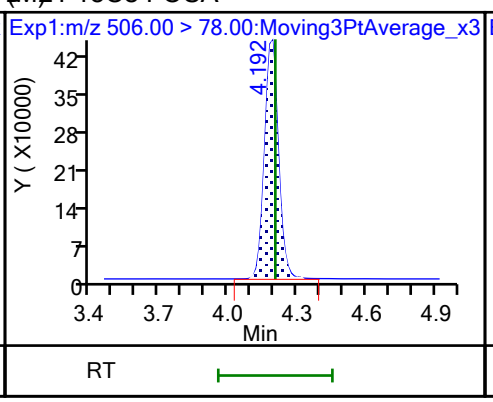
D 26 M2-8:2 FTS



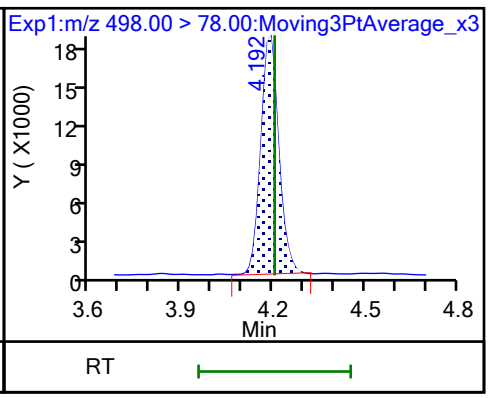
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



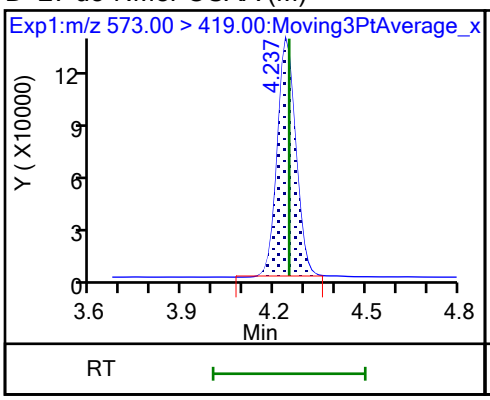
D 21 13C8 FOSA



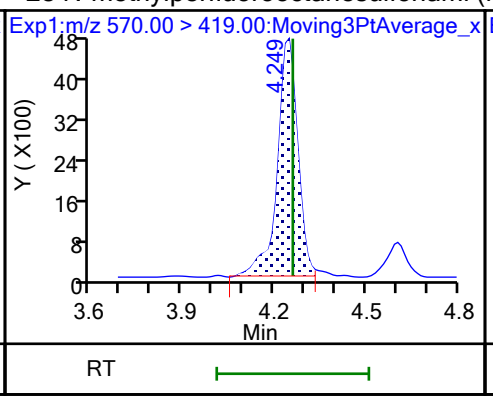
22 Perfluorooctanesulfonamide



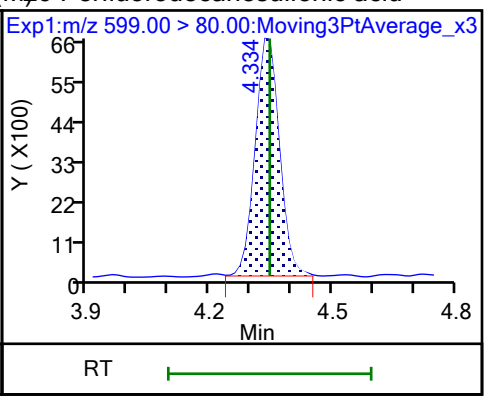
D 27 d3-NMeFOSAA (M)



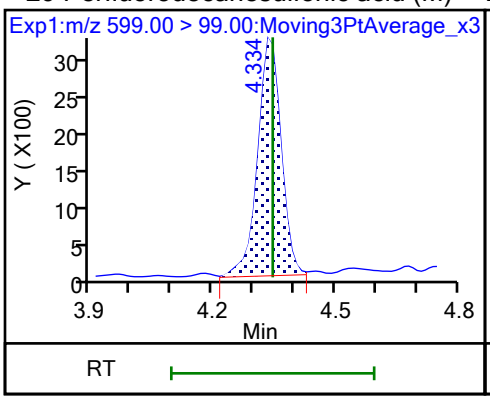
28 N-methylperfluorooctanesulfonami (M)



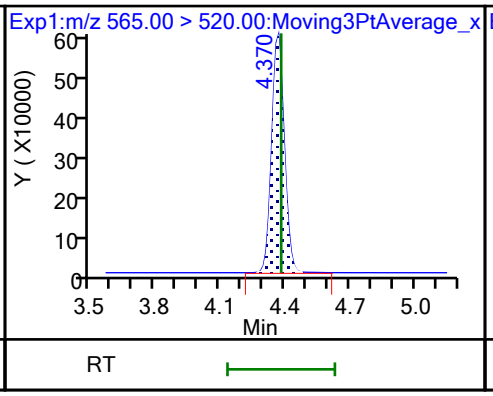
29 Perfluorodecanesulfonic acid



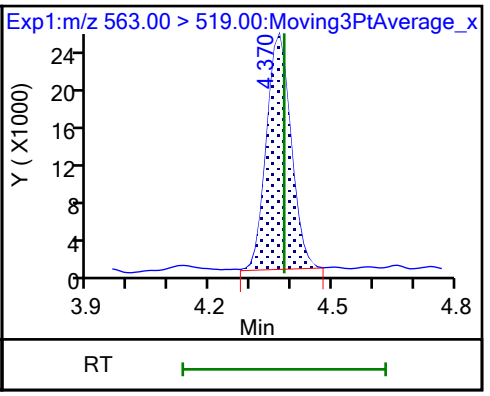
29 Perfluorodecanesulfonic acid (M)



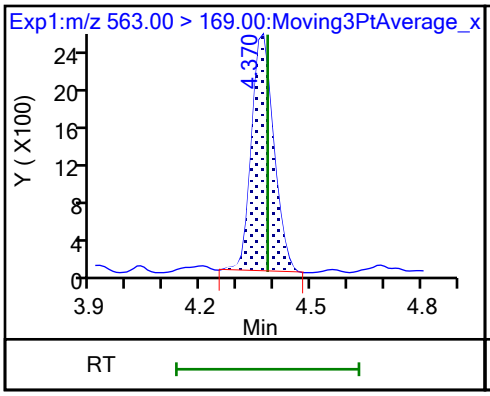
D 30 13C2 PFUnA



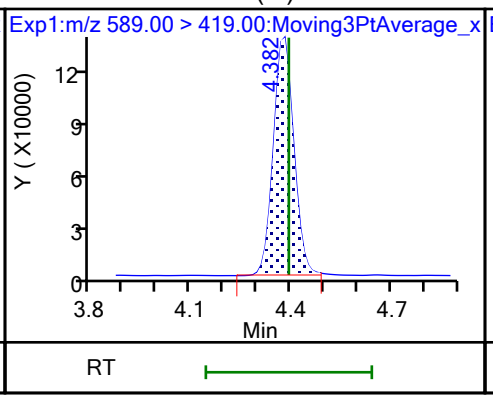
31 Perfluoroundecanoic acid



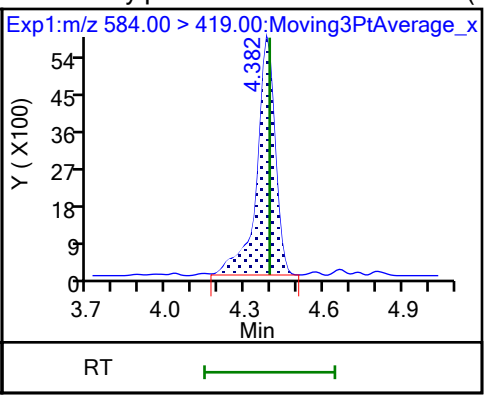
31 Perfluoroundecanoic acid



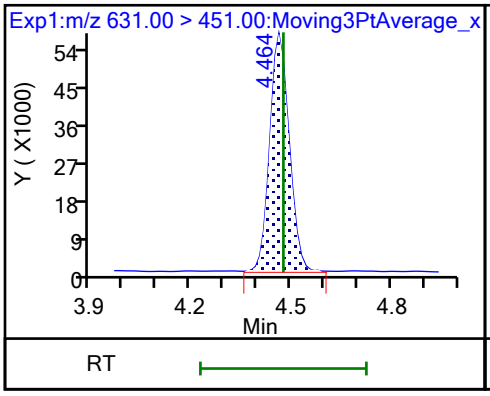
D 32 d5-NEtFOSAA (M)



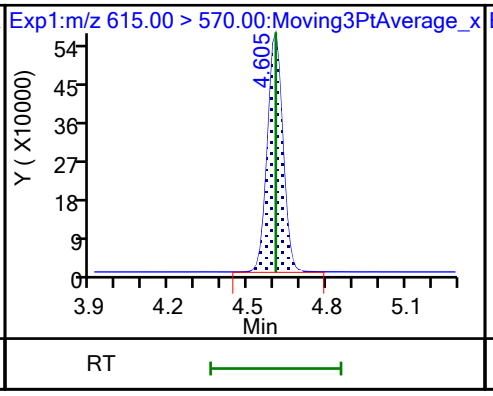
33 N-ethylperfluorooctanesulfonamid (M)



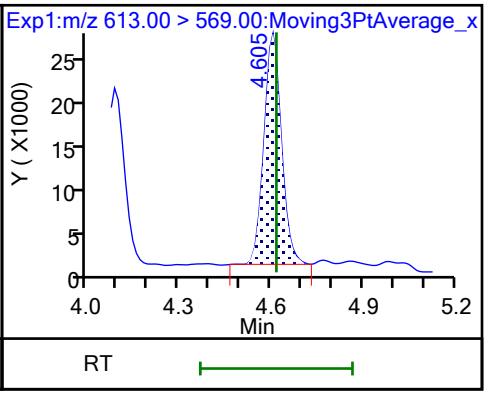
66 11-Chloroeicosafluoro-3-oxaundec



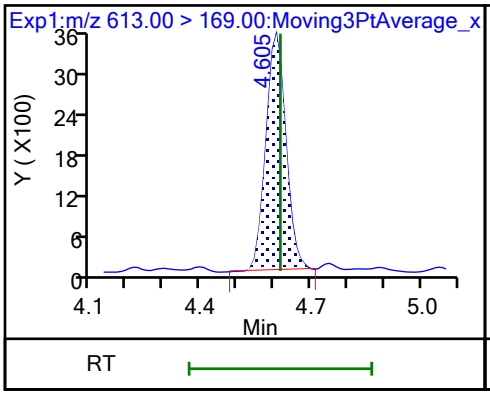
D 36 13C2 PFDoA



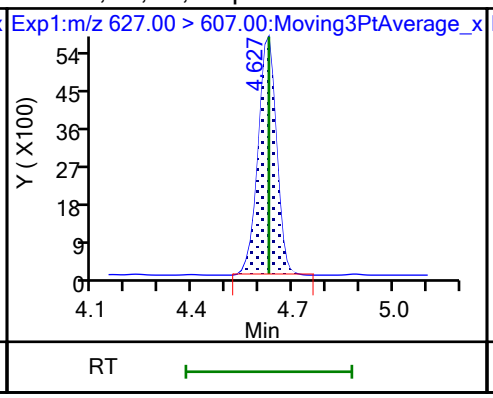
37 Perfluorododecanoic acid



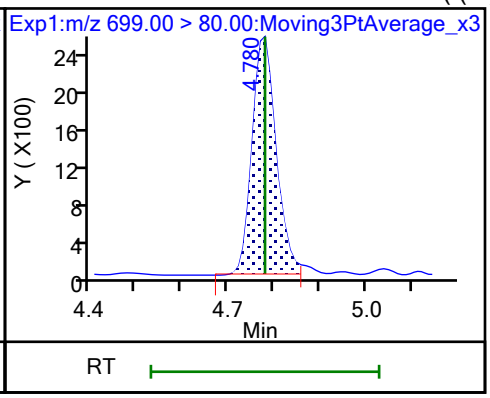
37 Perfluorododecanoic acid



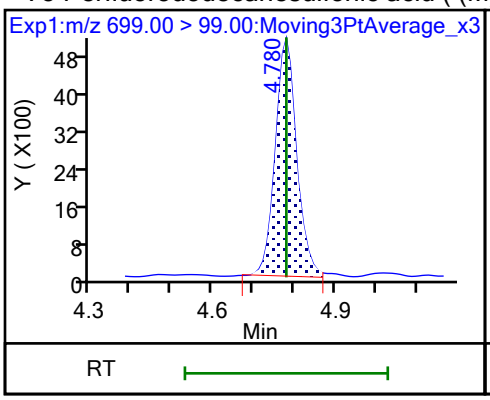
74 1H,1H,2H,2H-perfluorododecanesul



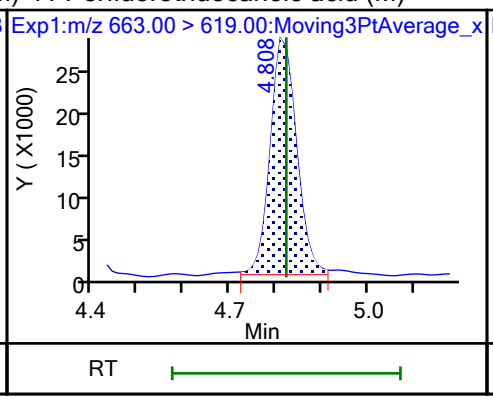
75 Perfluorododecanesulfonic acid ((M)



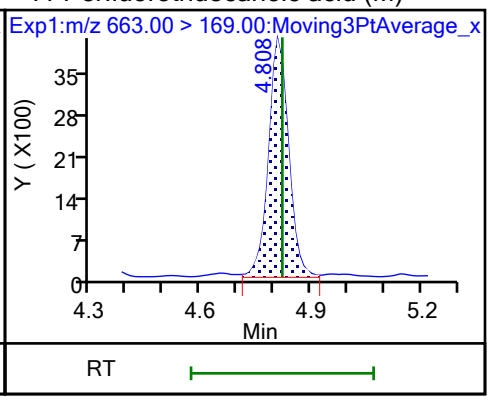
75 Perfluorododecanesulfonic acid ((M)



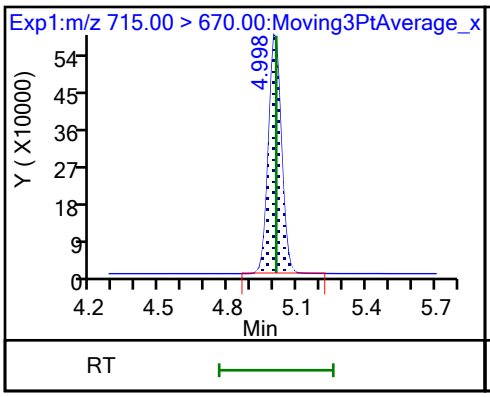
41 Perfluorotridecanoic acid (M)



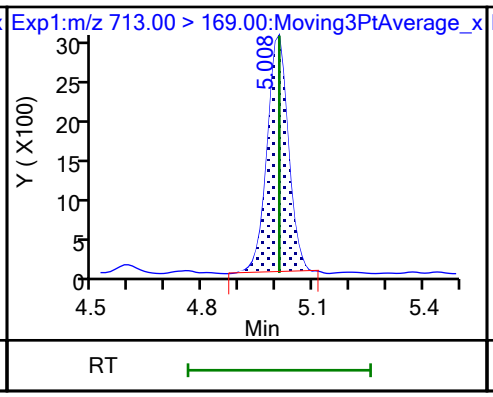
41 Perfluorotridecanoic acid (M)



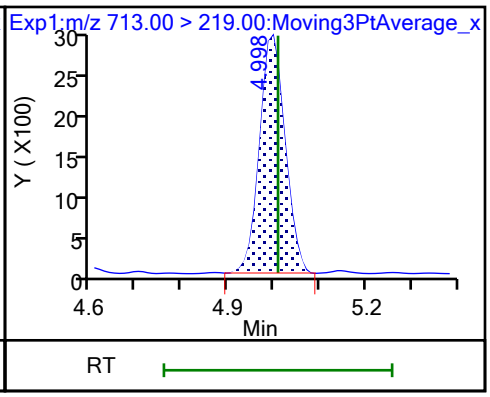
D 43 13C2 PFTeDA



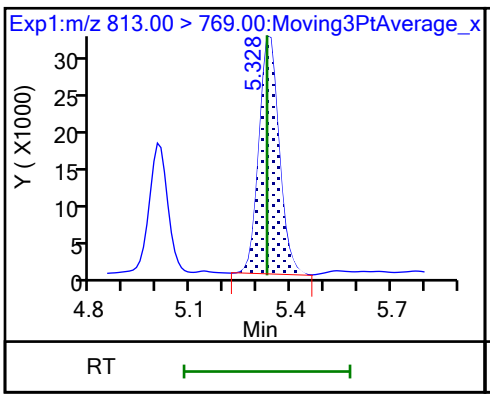
42 Perfluorotetradecanoic acid



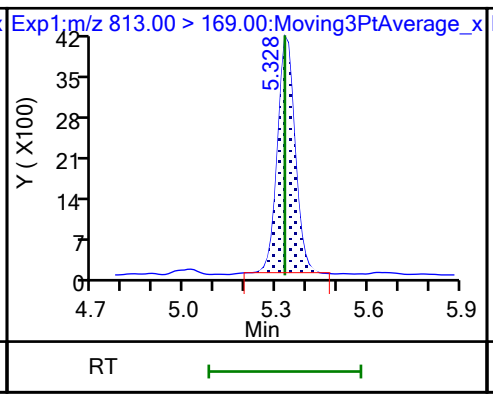
42 Perfluorotetradecanoic acid



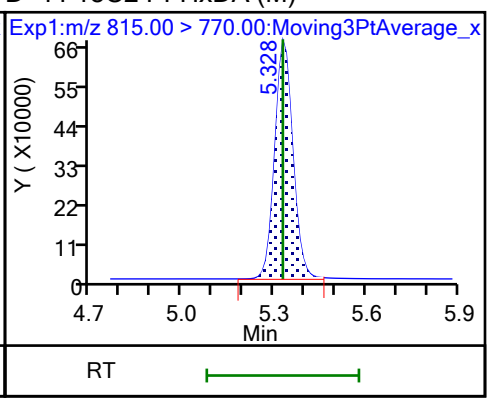
45 Perfluorohexadecanoic acid



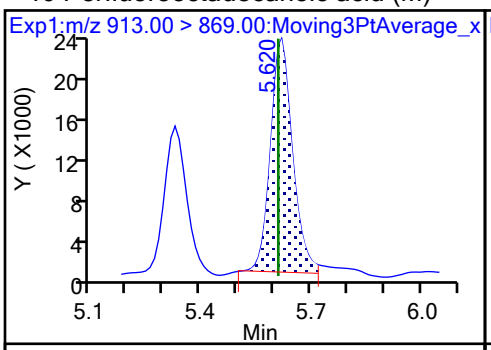
45 Perfluorohexadecanoic acid



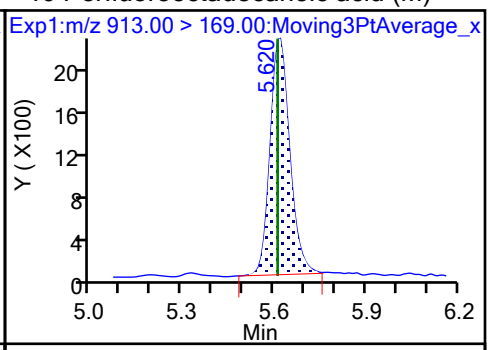
D 44 13C2 PFHxDA (M)



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Jul-2023 17:25:00 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 200-0056441-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:42 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:45:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	1926725	1.22		97.2	993	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	192635	0.0973		97.3	11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1458161	1.19		94.8	648	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	141937	0.1128		113	6.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.699	1835537	1.10		94.8	58282	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	166434	0.0944	Target=2.07	106	35.5	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	85051		1.96(1.04-3.11)	106	17.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	202715	1.05		90.2	72.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.718	2.694	0.024	1.000	64699	0.1097		117	613	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1566461	1.25		100	1391	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	144941	0.1051	Target=14.29	105	19.0	M
313.00 > 119.00	2.755	2.731	0.024	1.000	10821		13.39(7.15-21.44)	105	7.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.755	2.731	0.024	0.885	150824	0.1046	Target=2.78	111	211	M
349.00 > 99.00	2.755	2.731	0.024	0.885	53128		2.84(1.39-4.17)	111	51.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.826	299977	1.24		99.0	1628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.868	2.844	0.024	1.000	24788	0.1032		103	273	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1305238	1.09		92.5	2984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	118807	0.0972	Target=3.23	106	250	M
399.00 > 99.00	3.114	3.092	0.022	1.000	38530		3.08(1.62-4.84)	106	21.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.126	3.104	0.022	1.004	167142	0.1144	Target=4.11	114	33.0	M
363.00 > 169.00	3.126	3.104	0.022	1.004	38992		4.29(2.06-6.17)	114	33.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1628956	1.19		94.9	4384	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	400019	0.0962	Target=3.28	102	466	
377.00 > 85.00	3.160	3.138	0.022	0.835	118017		3.39(1.64-4.92)	102	143	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.461	3.446	0.015	0.915	99394	0.0951	Target=4.71	99.8	250	
449.00 > 99.00	3.461	3.446	0.015	0.915	23637		4.21(2.36-7.07)	99.8	50.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	286854	1.16		97.4	368	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.470	3.446	0.024	1.003	67191	0.1018		107	230	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.470	3.464	0.006	1.000	178853	0.1059	Target=2.90	106	14.0	M
413.00 > 169.00	3.479	3.464	0.015	1.003	59442		3.01(1.45-4.35)	106	72.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	1982384	1.27		102	5935	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		1998562	1.25			4141	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	863764	1.14		95.3	3395	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	80998	0.0961	Target=4.11	104	153	M
499.00 > 99.00	3.783	3.783	0.0	1.000	22759		3.56(2.05-6.16)	104	37.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1965971	1.16		92.9	4371	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.803	3.803	0.0	1.000	159396	0.1034	Target=8.48	103	30.7	
463.00 > 169.00	3.803	3.803	0.0	1.000	20785		7.67(4.24-12.72)	103	124	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.046	244371	0.0947		102	482	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.084	4.074	0.010	1.080	60375	0.0941	Target=2.17	97.8	490	
549.00 > 99.00	4.074	4.074	0.0	1.077	30462		1.98(1.08-3.25)	97.8	79.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2097344	1.18		94.6	8331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.108	4.108	0.0	1.000	170377	0.1016	Target=10.55	102	41.1	M
513.00 > 169.00	4.108	4.108	0.0	1.000	16328		10.43(5.27-15.82)	102	43.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	307295	1.10		92.0	634	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	64388	0.1140		119	478	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1858847	1.23		98.3	3368	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	144294	0.1017		102	567	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	509447	1.20		96.2	2611	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.260	0.001	1.003	39956	0.1080		108	67.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.346	0.0	1.149	46440	0.0941	Target=2.28	97.5	269	
599.00 > 99.00	4.346	4.346	0.0	1.149	23477		1.98(1.14-3.42)	97.5	80.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.263	1976379	1.18		94.5	7486	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.382	0.0	1.000	180134	0.1105	Target=11.30	111	48.4	
563.00 > 169.00	4.382	4.382	0.0	1.000	13744		13.11(5.65-16.96)	111	83.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	488020	1.20		95.7	1048	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	40651	0.1041		104	155	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	381367	0.0964		102	559	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	2131572	1.25		100	9591	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.616	-0.011	1.000	179683	0.1035	Target=8.15	104	19.1	M
613.00 > 169.00	4.605	4.616	-0.011	1.000	22765		7.89(4.07-12.22)	104	200	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.627	4.627	0.0	1.123	34552	0.1023		106	582	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	18698	0.1118	Target=0.50	115	275	
699.00 > 99.00	4.780	4.779	0.001	1.263	34305		0.55(0.25-0.75)	115	396	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	181083	0.0993	Target=6.61	99.3	22.2	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	27094		6.68(3.31-9.92)	99.3	218	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2061289	1.22		97.4	7140	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	19454	0.1055	Target=0.96	106	217	
713.00 > 219.00	4.998	5.008	-0.010	1.000	19131		1.02(0.48-1.44)	106	242	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	206767	0.1104	Target=7.69	110	24.0	
813.00 > 169.00	5.328	5.328	0.0	1.000	26550		7.79(3.85-11.54)	110	351	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.535	2341179	1.20		96.0	5506	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	161712	0.1106	Target=9.13	111	27.0	M
913.00 > 169.00	5.611	5.611	0.0	1.053	16958		9.54(4.56-13.69)	111	117	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

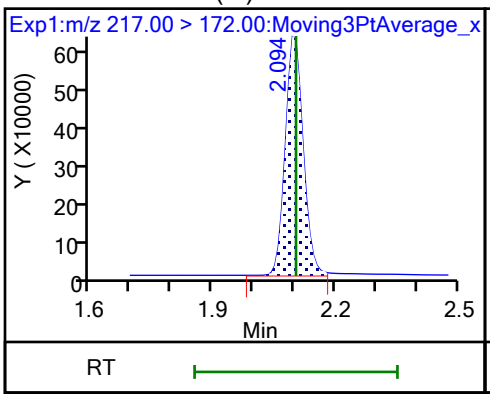
PFAS32NCIC2_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:44 Chrom Revision: 2.3 19-Jul-2023 18:28:48

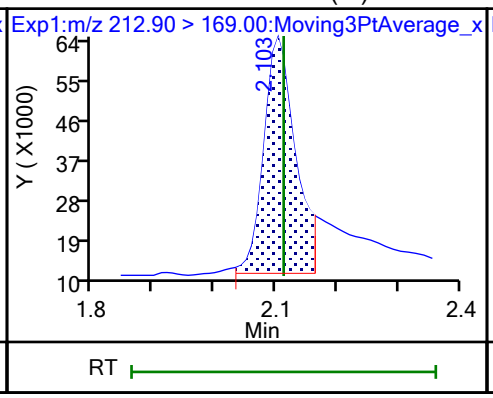
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Injection Date: 26-Jul-2023 17:25:00 Instrument ID: LC812
Lims ID: IC 2
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

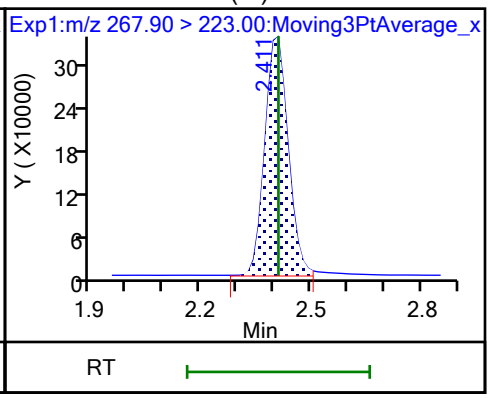
D 1 13C4 PFBA (M)



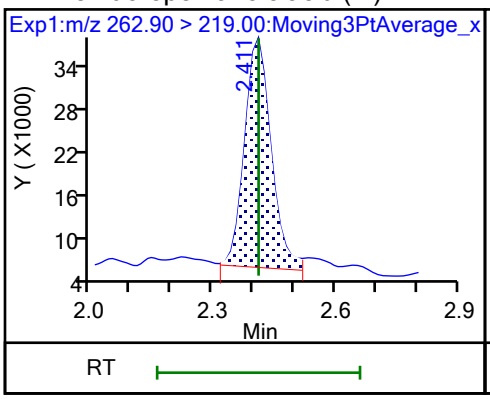
2 Perfluorobutanoic acid (M)



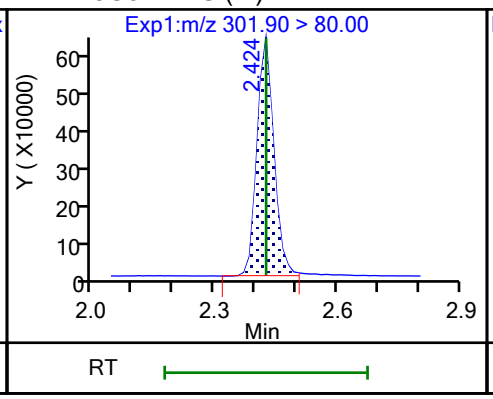
D 3 13C5 PFPeA (M)



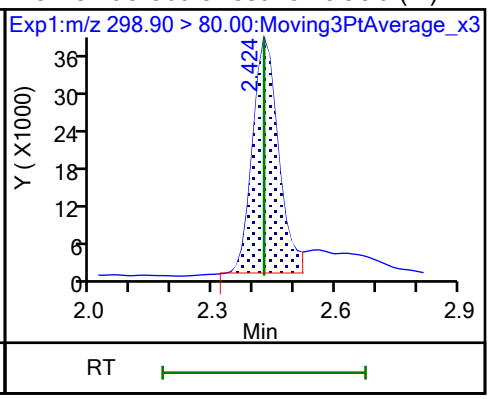
4 Perfluoropentanoic acid (M)



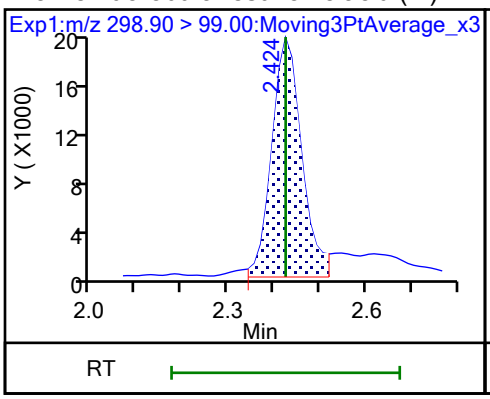
D 47 13C3 PFBS (M)



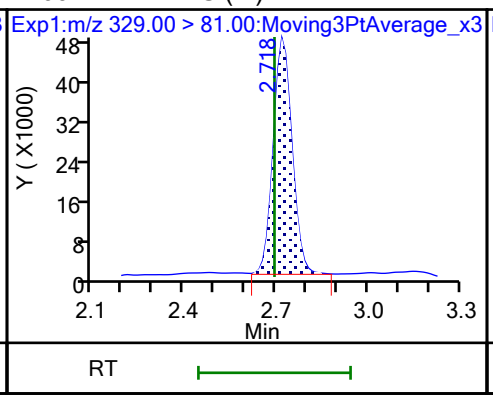
5 Perfluorobutanesulfonic acid (M)



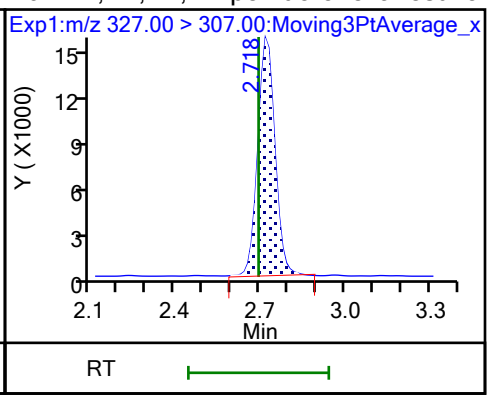
5 Perfluorobutanesulfonic acid (M)



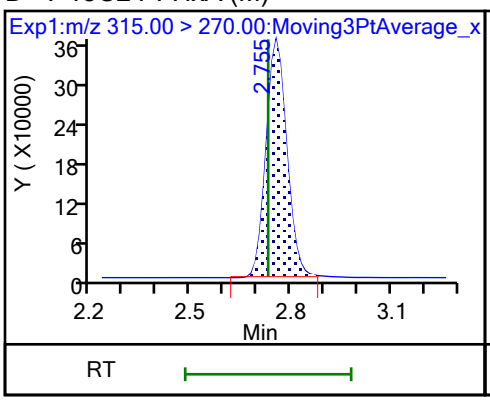
D 60 M2-4:2 FTS (M)



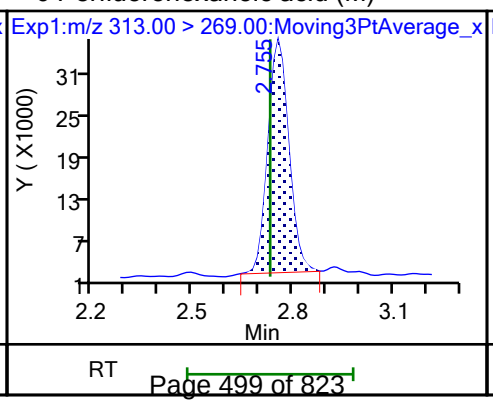
61 1H,1H,2H,2H-perfluorohexanesulfo



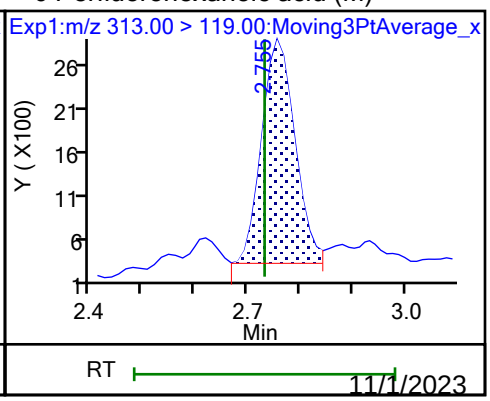
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

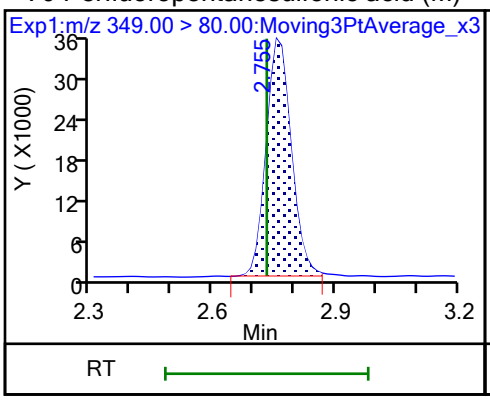


6 Perfluorohexanoic acid (M)

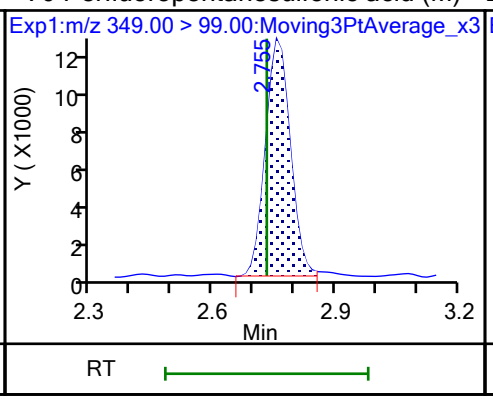


11/1/2023
12:01 PM

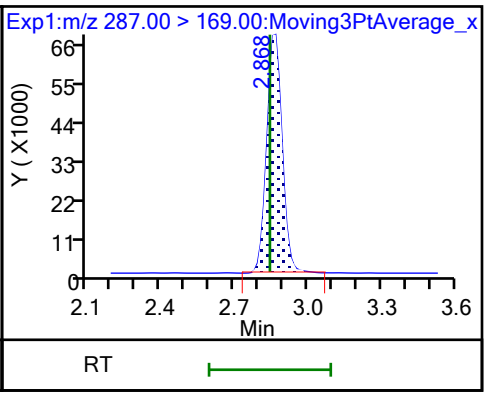
70 Perfluoropentanesulfonic acid (M)



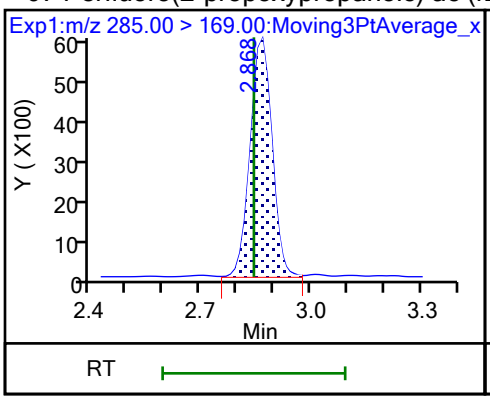
70 Perfluoropentanesulfonic acid (M)



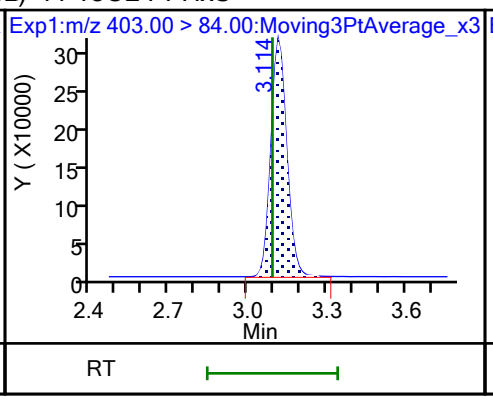
D 64 13C3 HFPO-DA



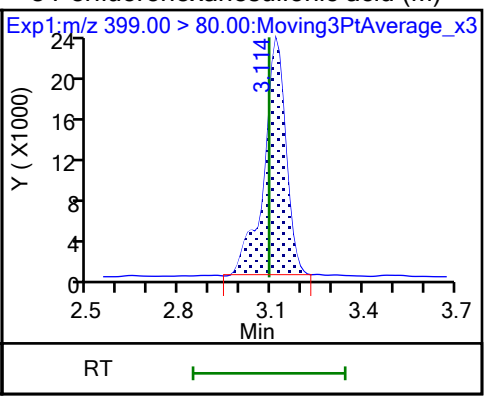
67 Perfluoro(2-propoxypropanoic) ac (M)



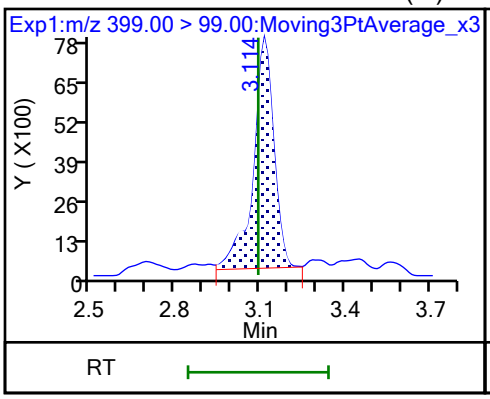
D 11 18O2 PFHxS



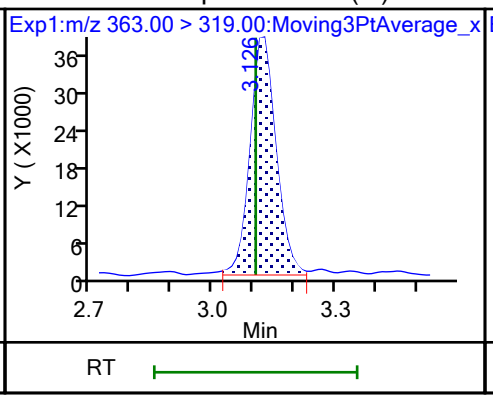
8 Perfluorohexanesulfonic acid (M)



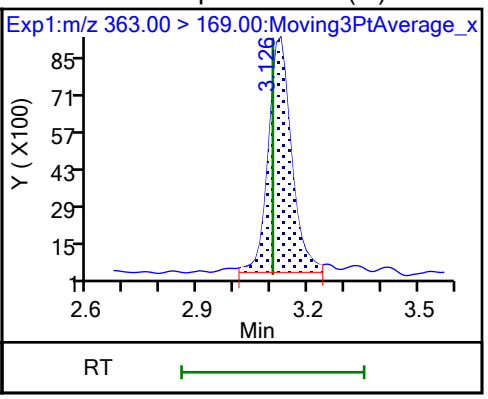
8 Perfluorohexanesulfonic acid (M)



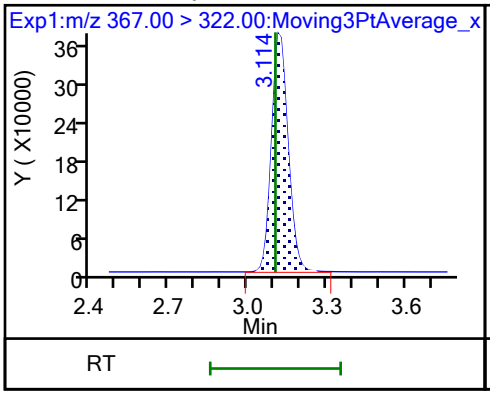
10 Perfluoroheptanoic acid (M)



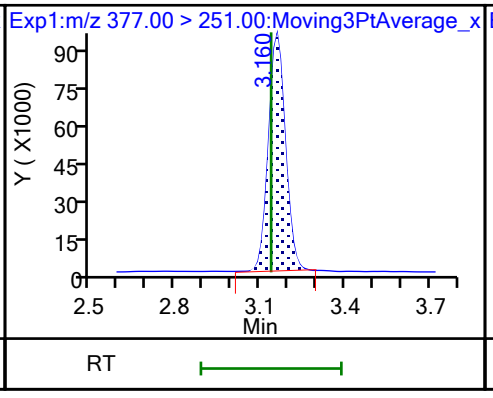
10 Perfluoroheptanoic acid (M)



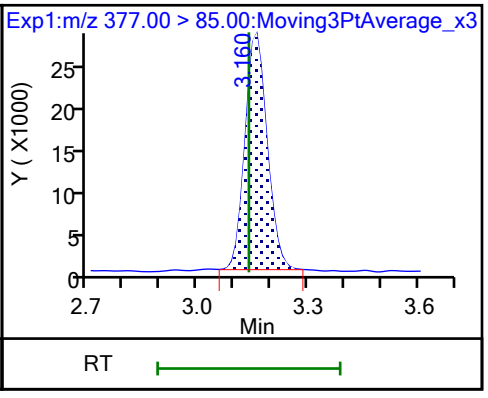
D 9 13C4 PFHpA



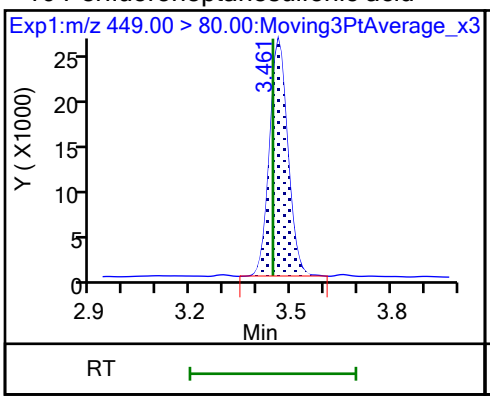
77 DONA



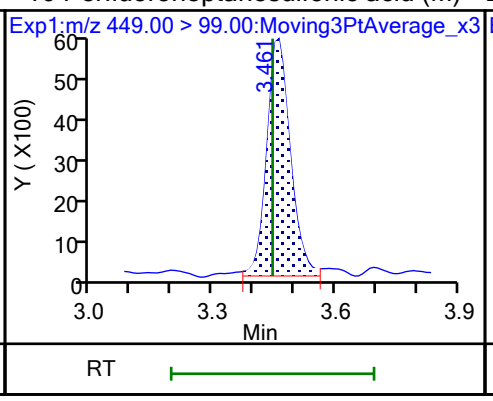
77 DONA



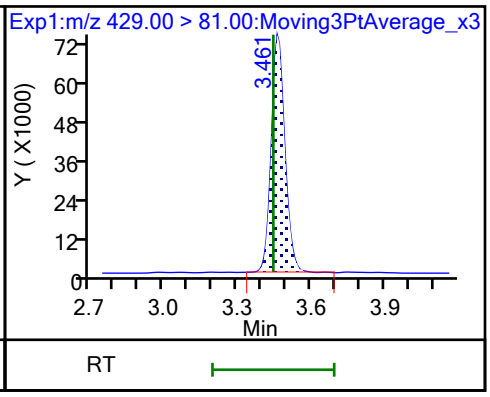
16 Perfluoroheptanesulfonic acid



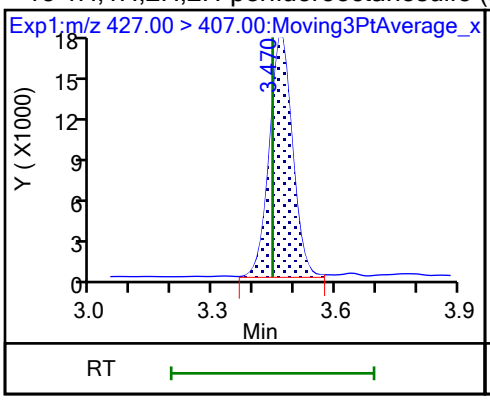
16 Perfluoroheptanesulfonic acid (M)



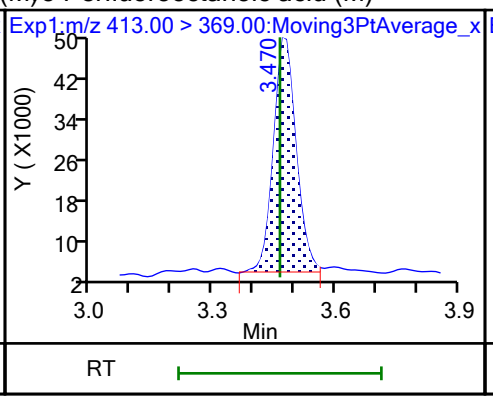
D 12 M2-6:2 FTS



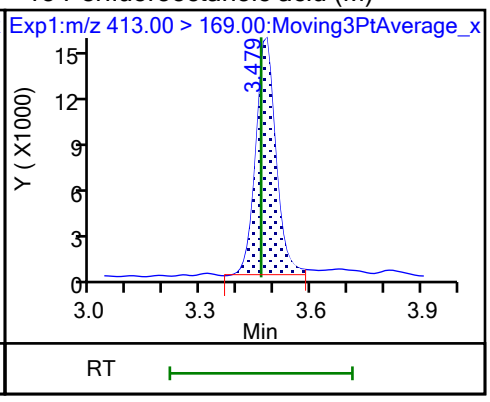
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



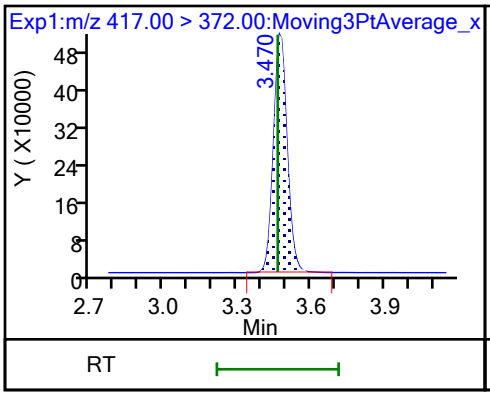
15 Perfluorooctanoic acid (M)



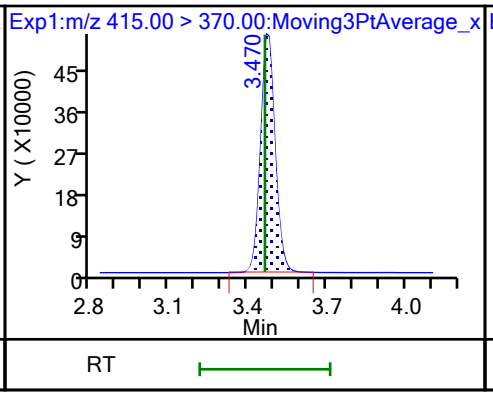
15 Perfluorooctanoic acid (M)



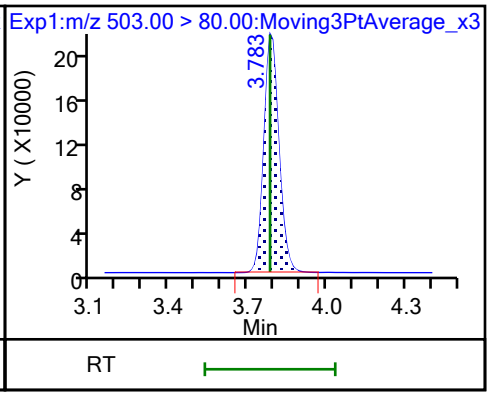
D 14 13C4 PFOA



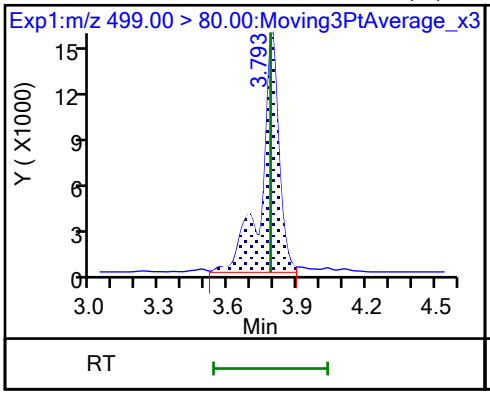
* 62 13C2 PFOA



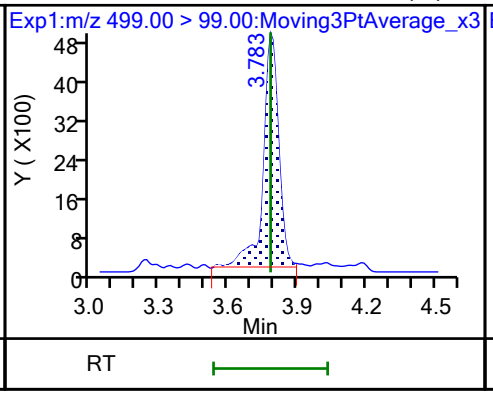
D 18 13C4 PFOS



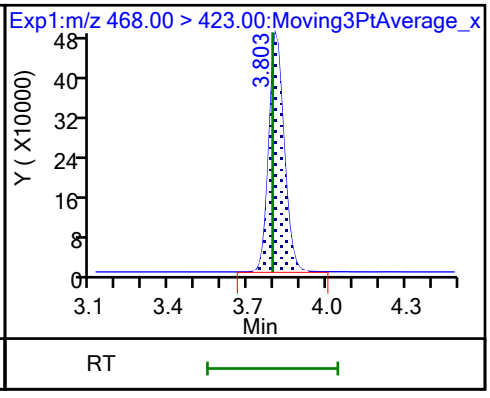
17 Perfluorooctanesulfonic acid (M)



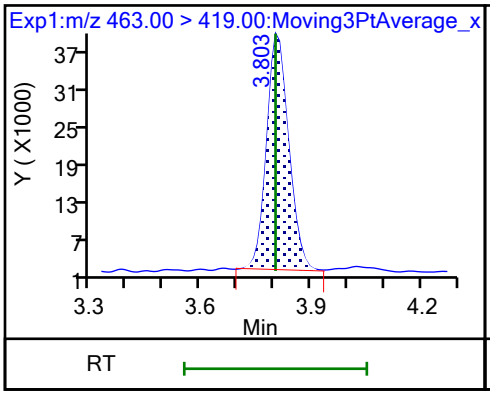
17 Perfluorooctanesulfonic acid (M)



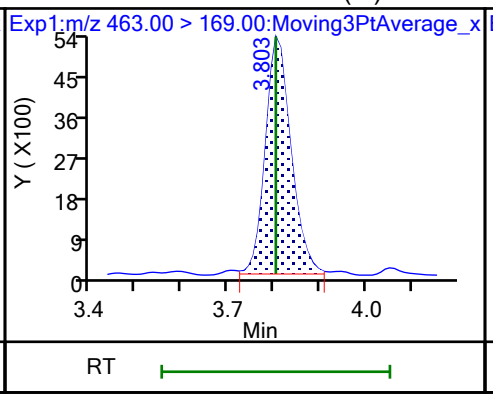
D 19 13C5 PFNA



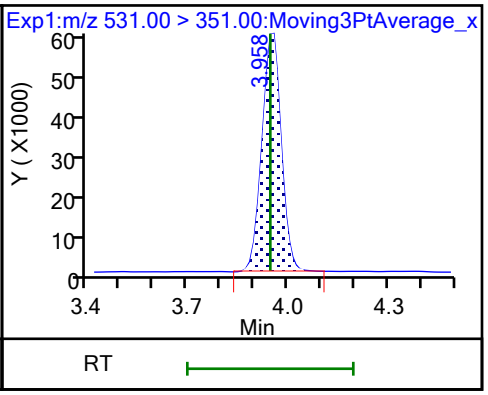
20 Perfluorononanoic acid



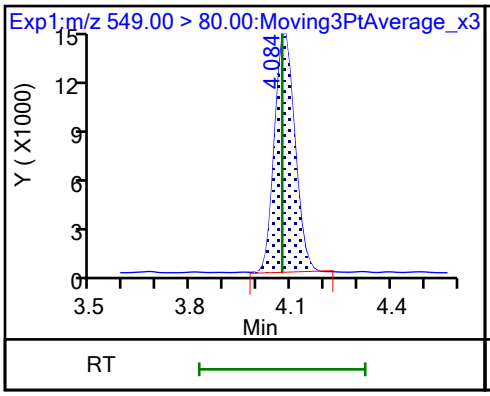
20 Perfluorononanoic acid (M)



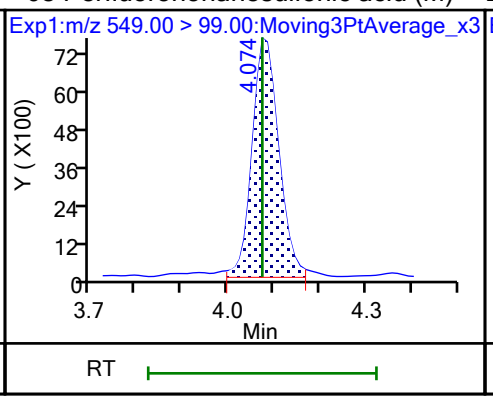
69 9-Chlorohexadecafluoro-3-oxanona



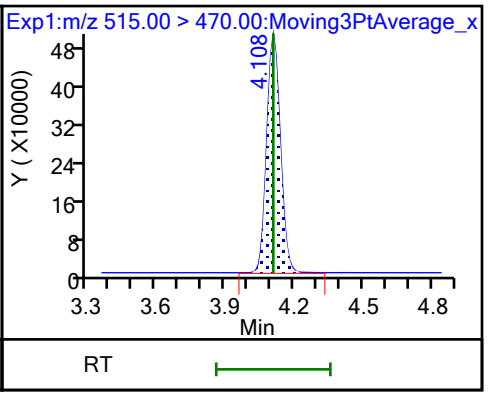
68 Perfluorononanesulfonic acid



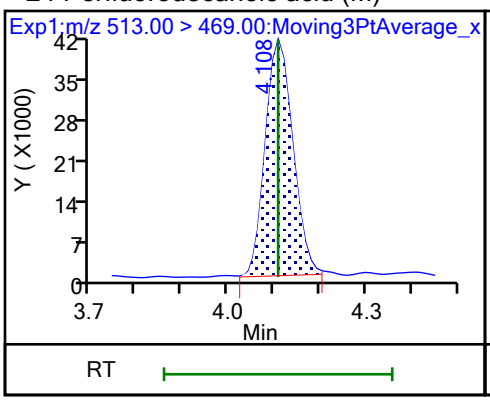
68 Perfluorononanesulfonic acid (M)



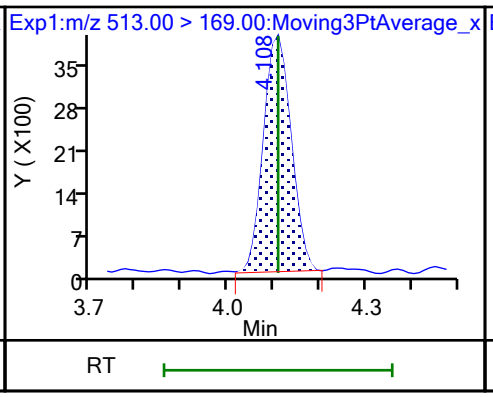
D 23 13C2 PFDA



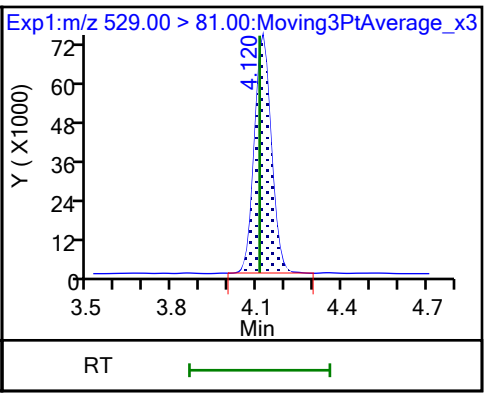
24 Perfluorodecanoic acid (M)



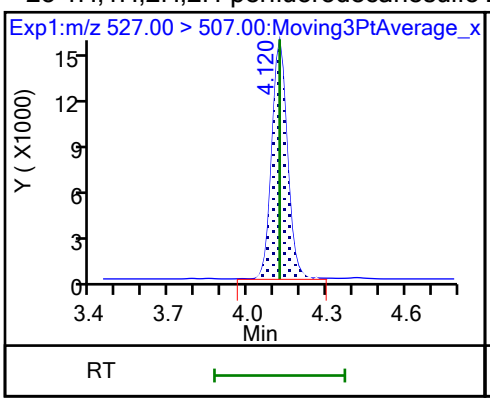
24 Perfluorodecanoic acid



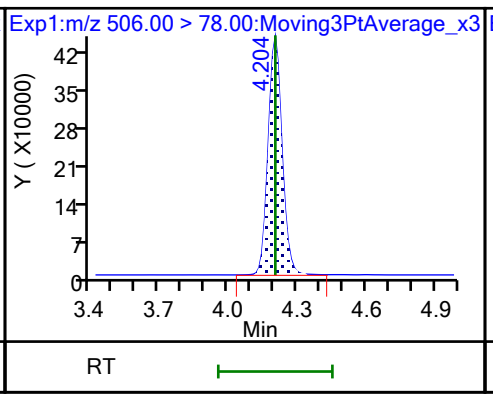
D 26 M2-8:2 FTS



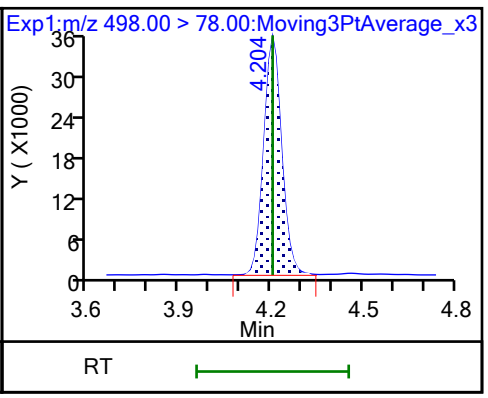
25 1H,1H,2H,2H-perfluorodecanesulfo



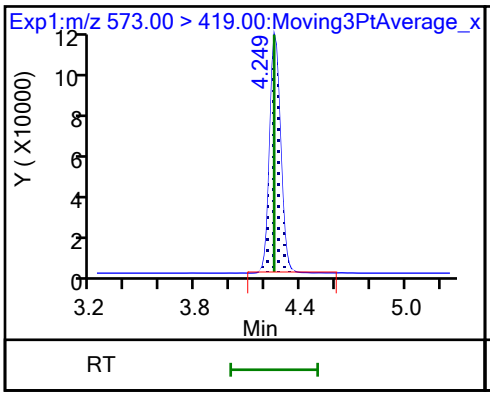
D 21 13C8 FOSA



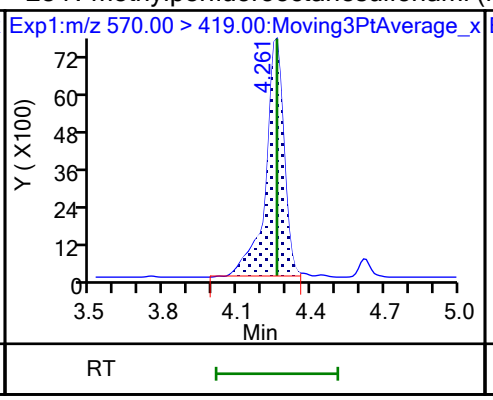
22 Perfluorooctanesulfonamide



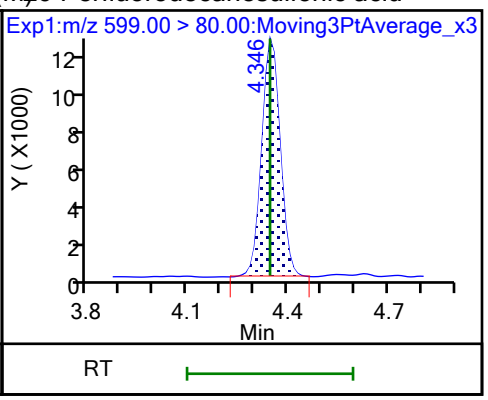
D 27 d3-NMeFOSAA



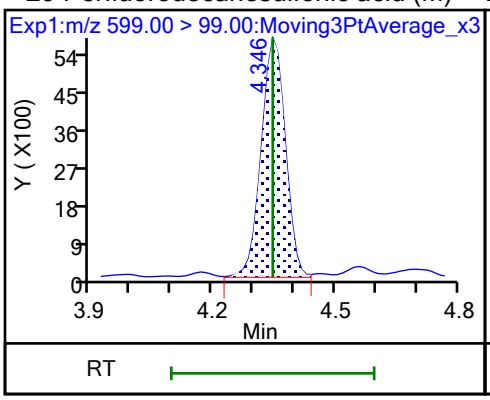
28 N-methylperfluorooctanesulfonami (M)



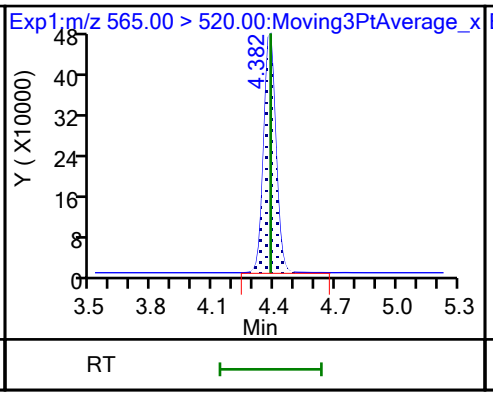
29 Perfluorodecanesulfonic acid



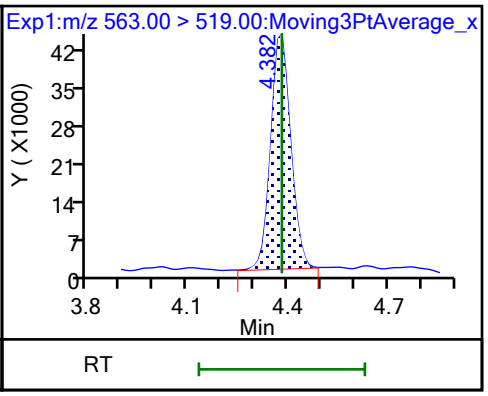
29 Perfluorodecanesulfonic acid (M)



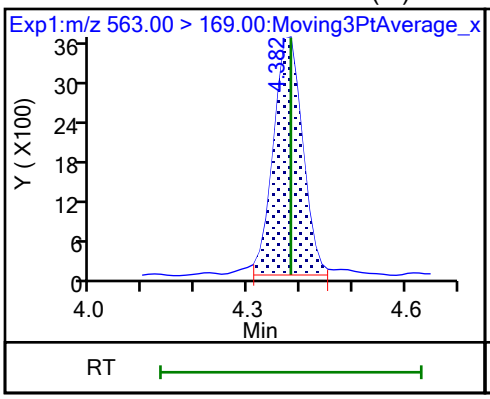
D 30 13C2 PFUnA



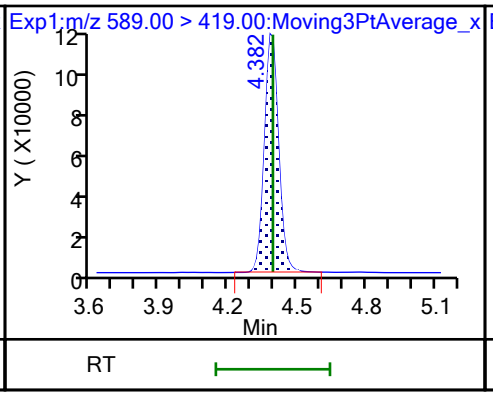
31 Perfluoroundecanoic acid



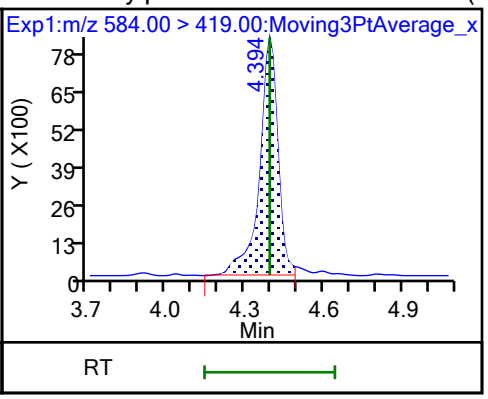
31 Perfluoroundecanoic acid (M)



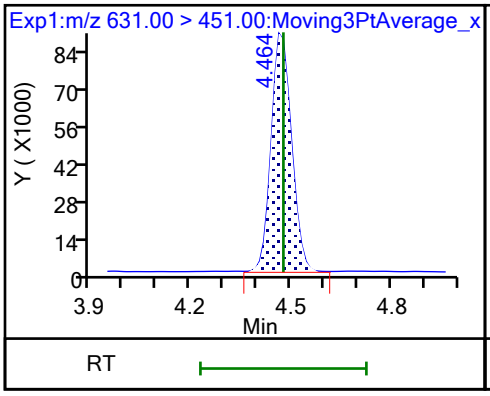
D 32 d5-NEtFOSAA



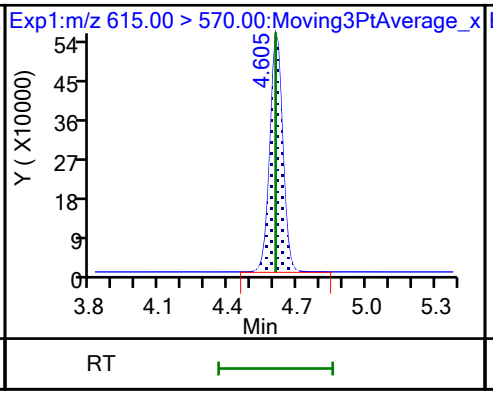
33 N-ethylperfluorooctanesulfonamid (M)



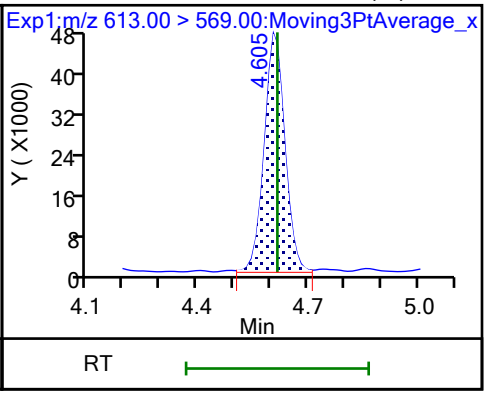
66 11-Chloroeicosafluoro-3-oxaundec



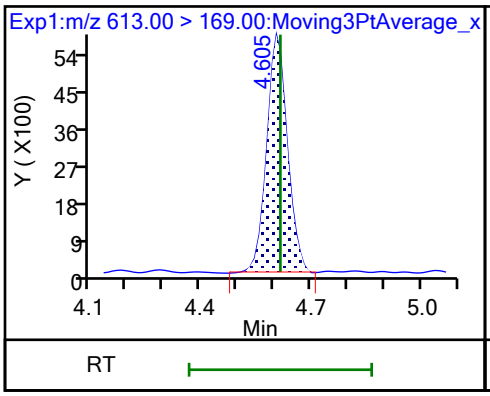
D 36 13C2 PFDoA



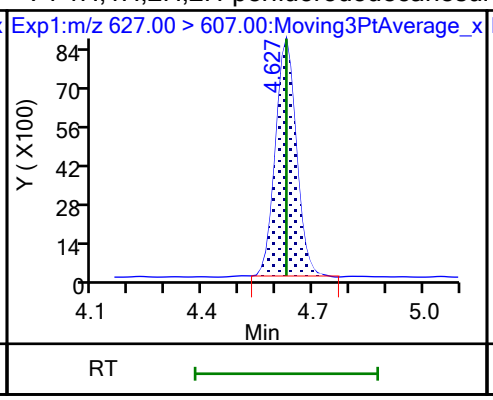
37 Perfluorododecanoic acid (M)



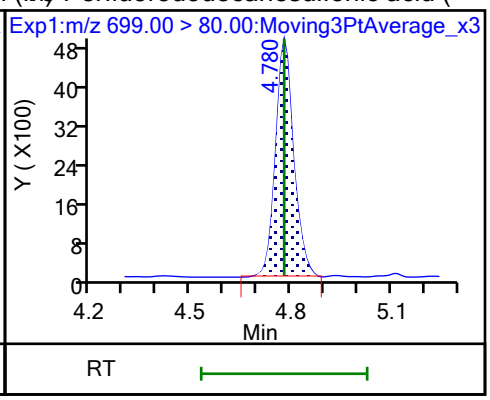
37 Perfluorododecanoic acid



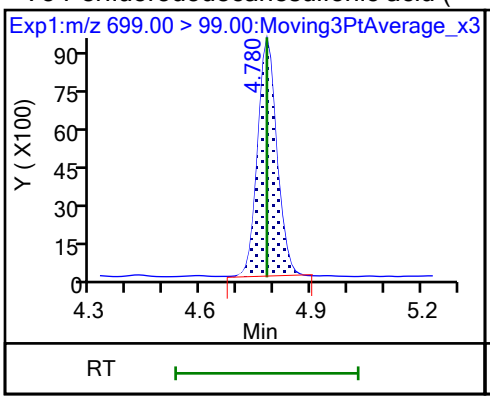
74 1H,1H,2H,2H-perfluorododecanesul (M)



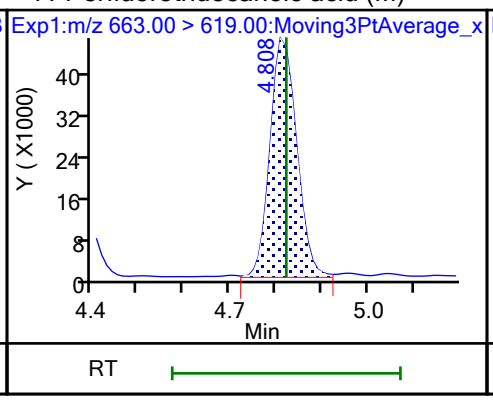
75 Perfluorododecanesulfonic acid (



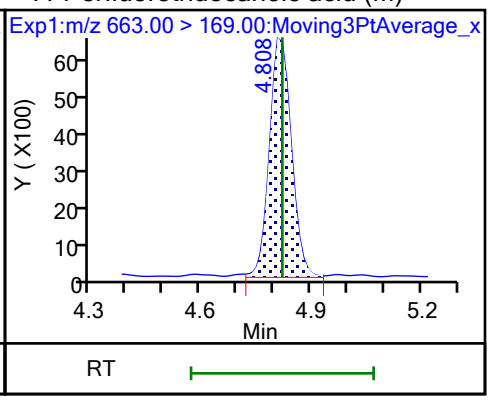
75 Perfluorododecanesulfonic acid (



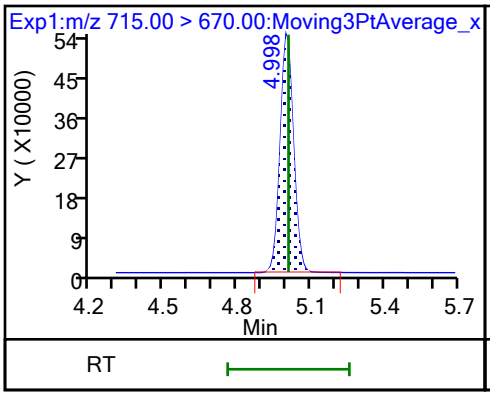
41 Perfluorotridecanoic acid (M)



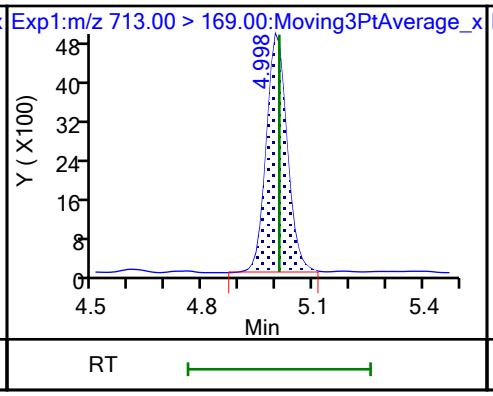
41 Perfluorotridecanoic acid (M)



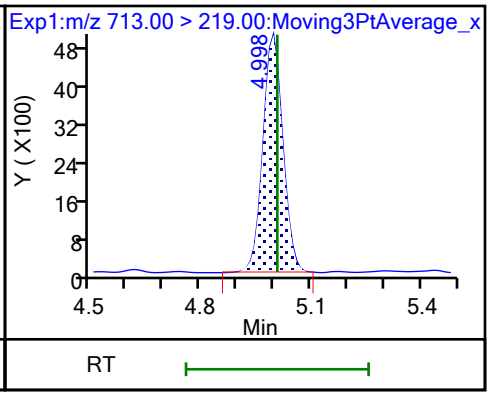
D 43 13C2 PFTeDA



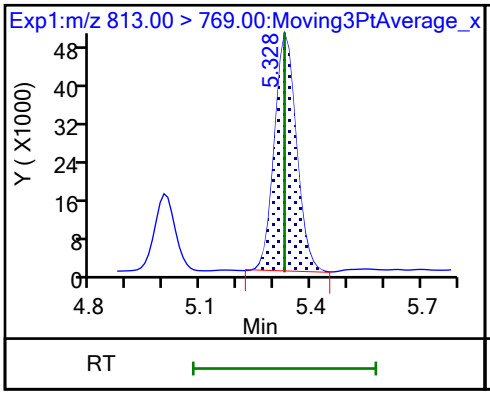
42 Perfluorotetradecanoic acid



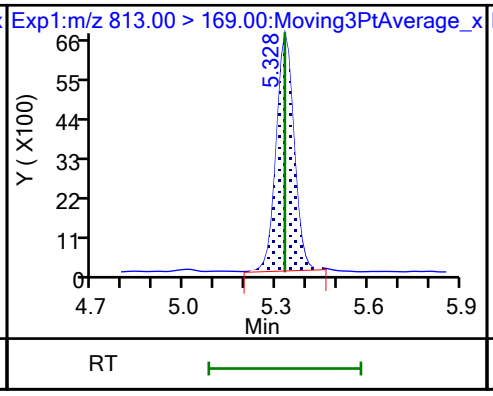
42 Perfluorotetradecanoic acid



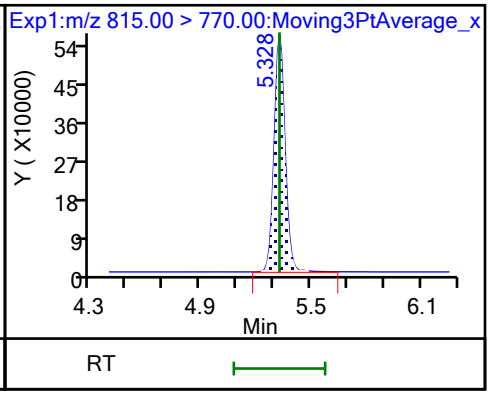
45 Perfluorohexadecanoic acid



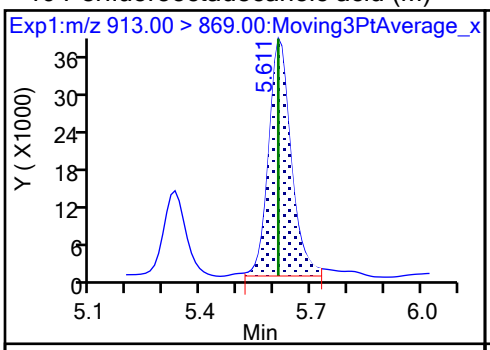
45 Perfluorohexadecanoic acid



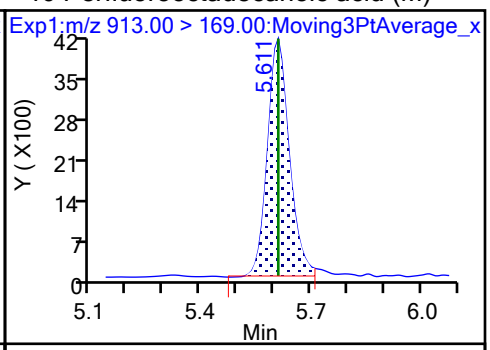
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Jul-2023 17:33:10 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 200-0056441-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:49 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:49:59
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.602	1916527	1.22		97.6	1037	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	774804	0.5180		104	49.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.693	1507442	1.24		98.9	854	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	651716	0.5008		100	28.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.697	1758991	1.07		91.7	56488	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	790713	0.4679	Target=2.07	105	143	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	376898		2.10(1.04-3.11)	105	75.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.781	215257	1.13		96.6	77.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	288946	0.4615		98.5	883	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.755	2.731	0.024	0.792	1472867	1.19		95.0	3850	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	672203	0.5184	Target=14.29	104	87.4	
313.00 > 119.00	2.755	2.731	0.024	1.000	43102		15.60(7.15-21.44)	104	30.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	694967	0.4648	Target=2.78	98.8	1051	
349.00 > 99.00	2.755	2.731	0.024	0.885	242262		2.87(1.39-4.17)	98.8	272	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.824	279126	1.16		93.0	2331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	0.996	115257	0.5155		103	712	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.895	1353967	1.14		96.8	3822	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	555092	0.4379	Target=3.23	95.8	787	M
399.00 > 99.00	3.114	3.092	0.022	1.000	169403		3.28(1.62-4.84)	95.8	113	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.126	3.104	0.022	1.004	705383	0.4702	Target=4.11	94.0	148	
363.00 > 169.00	3.114	3.104	0.010	1.000	172971		4.08(2.06-6.17)	94.0	135	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.895	1672833	1.23		98.3	4178	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	1973200	0.4642	Target=3.28	98.2	2579	
377.00 > 85.00	3.160	3.138	0.022	0.835	597494		3.30(1.64-4.92)	98.2	814	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.461	3.446	0.015	0.915	497245	0.4658	Target=4.71	97.7	1145	
449.00 > 99.00	3.461	3.446	0.015	0.915	101764		4.89(2.36-7.07)	97.7	193	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.995	274798	1.12		94.2	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	310157	0.4904		103	795	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.479	3.464	0.015	1.003	801060	0.4915	Target=2.90	98.3	61.0	
413.00 > 169.00	3.479	3.464	0.015	1.003	274444		2.92(1.45-4.35)	98.3	334	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	0.997	1912820	1.24		99.2	5100	
* 62 13C2 PFOA										
415.00 > 370.00	3.479	3.464	0.015		1980756	1.25			7103	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.087	882764	1.17		98.3	3627	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	384806	0.4466	Target=4.11	96.2	673	M
499.00 > 99.00	3.793	3.783	0.010	1.003	97181		3.96(2.05-6.16)	96.2	140	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.093	2008931	1.20		95.8	5719	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	802848	0.5097	Target=8.48	102	153	
463.00 > 169.00	3.803	3.803	0.0	1.000	92789		8.65(4.24-12.72)	102	535	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	1237458	0.4693		101	2329	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.080	312103	0.4761	Target=2.17	99.0	1622	
549.00 > 99.00	4.084	4.074	0.010	1.080	140337		2.22(1.08-3.25)	99.0	373	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.181	2062234	1.17		93.9	9314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	869526	0.5274	Target=10.55	105	223	
513.00 > 169.00	4.108	4.108	0.0	1.000	81818		10.63(5.27-15.82)	105	203	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.184	298552	1.08		90.2	633	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	270156	0.4922		103	2104	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.208	1790735	1.19		95.5	3553	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	680067	0.4977		99.5	1708	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.248	4.249	-0.001	1.221	486461	1.16		92.7	1692	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.248	4.260	-0.012	1.000	177278	0.5020		100	343	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	234996	0.4658	Target=2.28	96.5	994	
599.00 > 99.00	4.346	4.346	0.0	1.149	102960		2.28(1.14-3.42)	96.5	384	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.382	-0.001	1.259	1983358	1.20		95.7	15111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.382	-0.001	1.000	818335	0.5004	Target=11.30	100	237	
563.00 > 169.00	4.381	4.382	-0.001	1.000	76353		10.72(5.65-16.96)	100	564	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.381	4.393	-0.012	1.259	491633	1.22		97.3	1018	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.003	187350	0.4763		95.3	408	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	1894487	0.4685		99.4	2418	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.324	2022512	1.20		96.0	6242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	852163	0.5175	Target=8.15	103	86.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	100190		8.51(4.07-12.22)	103	964	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	158460	0.4830		100	1667	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	82920	0.4849	Target=0.50	100	1359	
699.00 > 99.00	4.779	4.779	0.0	1.263	159027		0.52(0.25-0.75)	100	1291	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	907955	0.5245	Target=6.61	105	105	
663.00 > 169.00	4.808	4.822	-0.014	1.044	136886		6.63(3.31-9.92)	105	771	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.994	5.008	-0.014	1.435	1996289	1.19		95.1	6980	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.994	5.008	-0.014	1.000	88102	0.4934	Target=0.96	98.7	1397	
713.00 > 219.00	4.994	5.008	-0.014	1.000	92762		0.95(0.48-1.44)	98.7	896	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.326	5.328	-0.002	1.000	900190	0.4873	Target=7.69	97.5	97.8	
813.00 > 169.00	5.326	5.328	-0.002	1.000	120909		7.45(3.85-11.54)	97.5	1116	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.326	5.328	-0.002	1.531	2309121	1.19		95.5	3874	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.609	5.611	-0.002	1.053	726427	0.5036	Target=9.13	101	95.3	M
913.00 > 169.00	5.600	5.611	-0.011	1.051	78986		9.20(4.56-13.69)	101	265	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

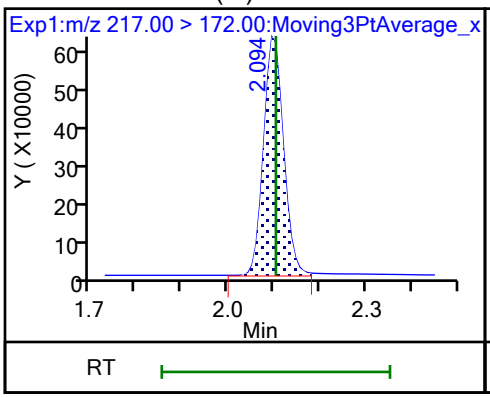
PFAS32NCIC3_00016 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:50 Chrom Revision: 2.3 19-Jul-2023 18:28:48

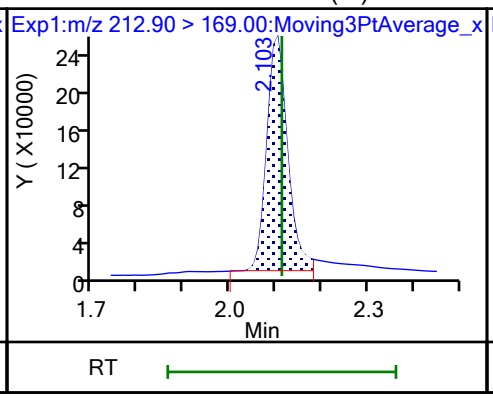
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Injection Date: 26-Jul-2023 17:33:10 Instrument ID: LC812
Lims ID: IC 3
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

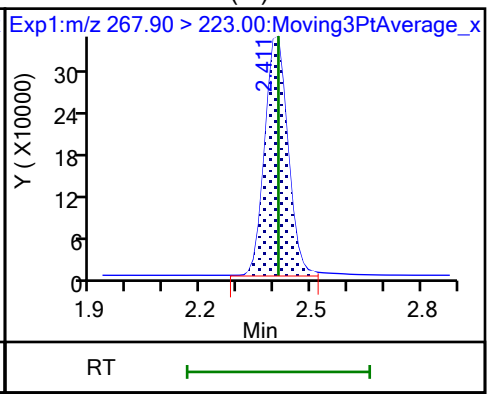
D 1 13C4 PFBA (M)



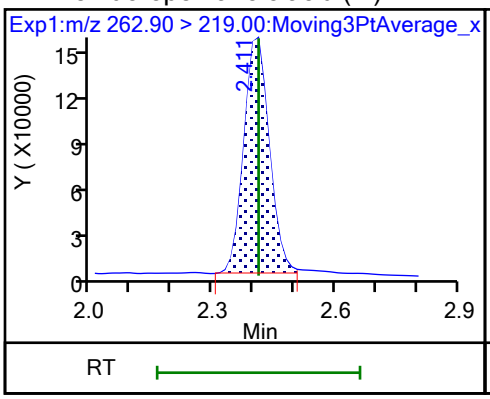
2 Perfluorobutanoic acid (M)



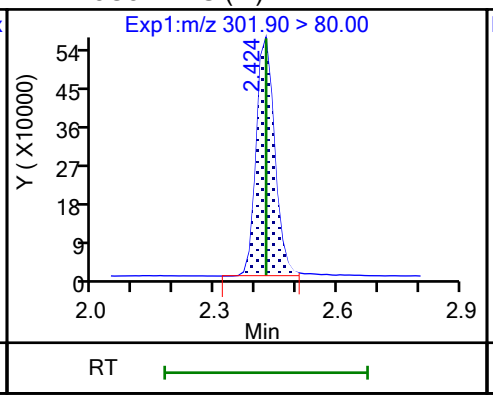
D 3 13C5 PFPeA (M)



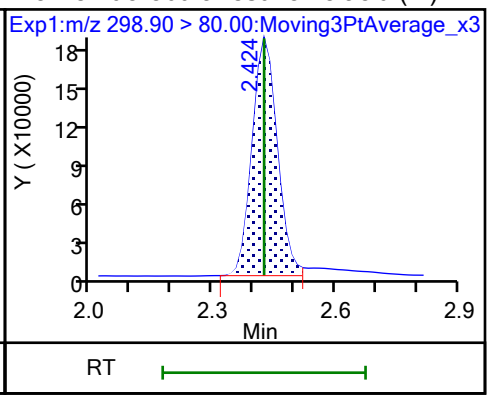
4 Perfluoropentanoic acid (M)



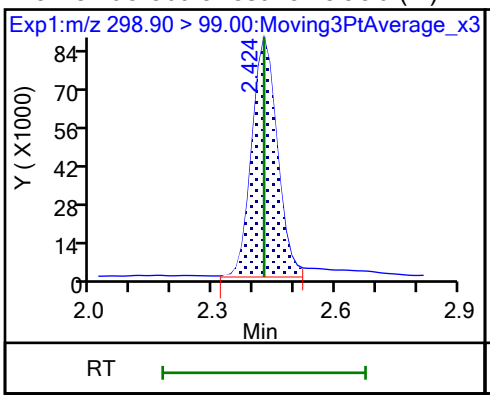
D 47 13C3 PFBS (M)



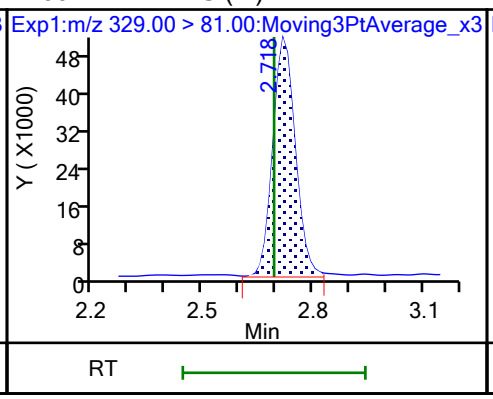
5 Perfluorobutanesulfonic acid (M)



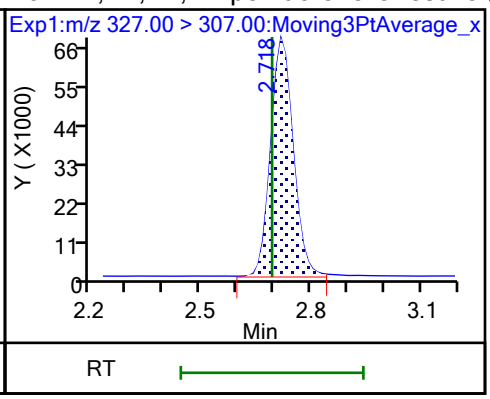
5 Perfluorobutanesulfonic acid (M)



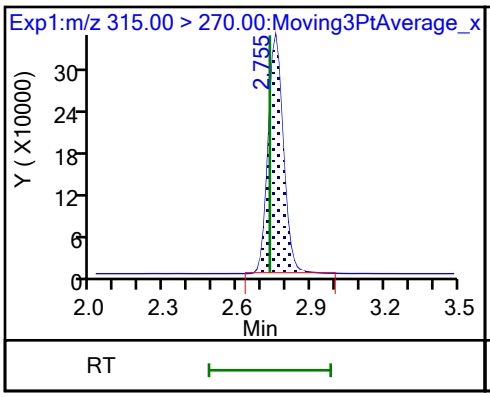
D 60 M2-4:2 FTS (M)



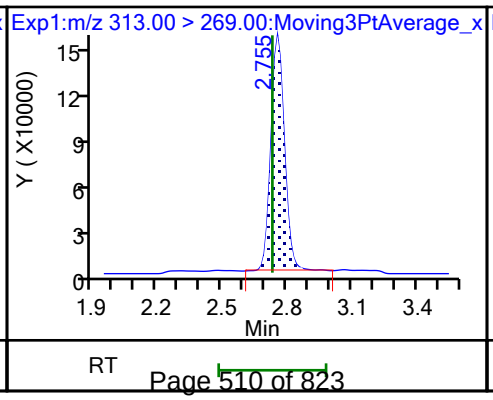
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



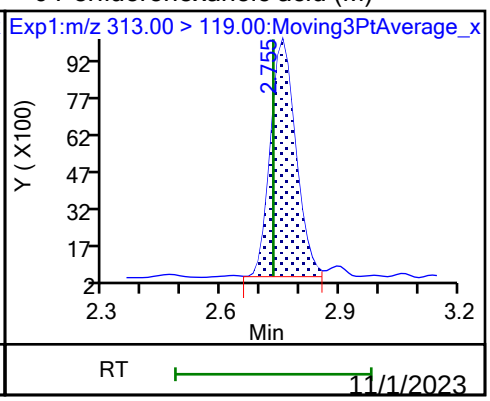
D 7 13C2 PFHxA



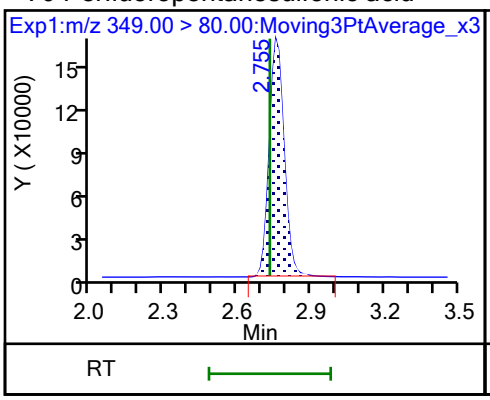
6 Perfluorohexanoic acid



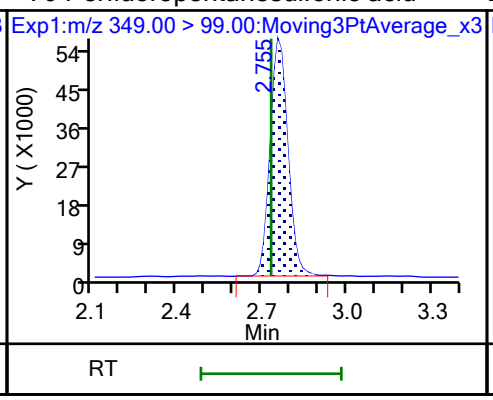
6 Perfluorohexanoic acid (M)



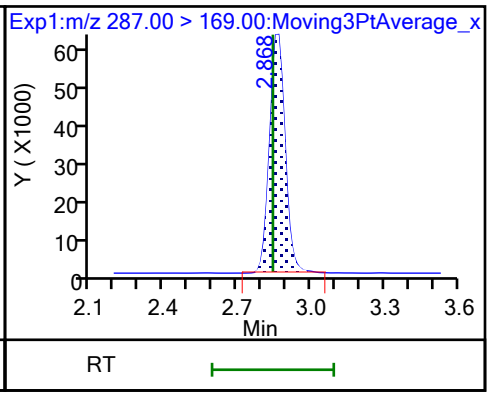
70 Perfluoropentanesulfonic acid



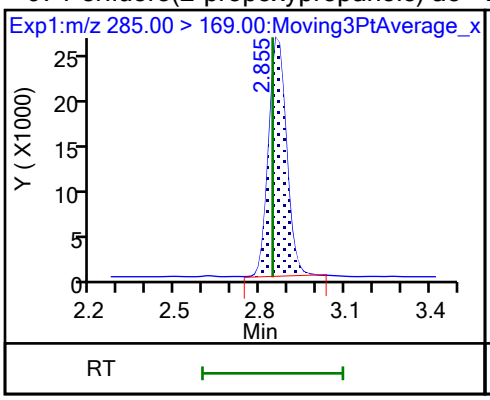
70 Perfluoropentanesulfonic acid



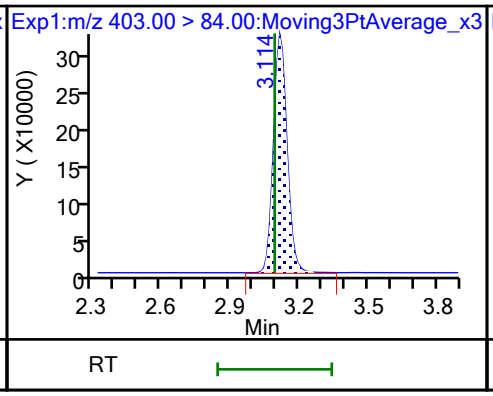
D 64 13C3 HFPO-DA



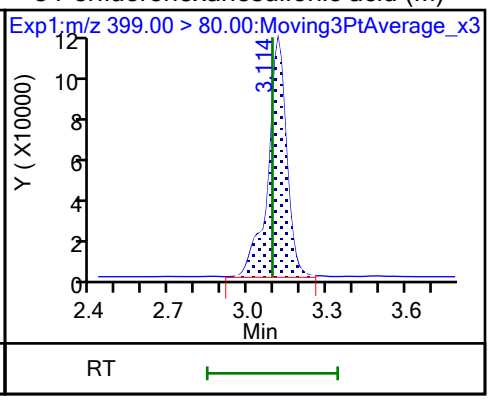
67 Perfluoro(2-propoxypropanoic) ac



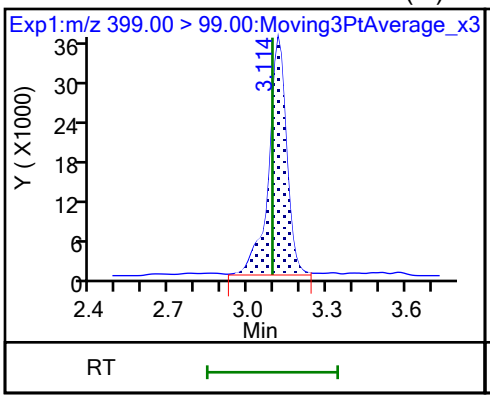
D 11 18O2 PFHxS



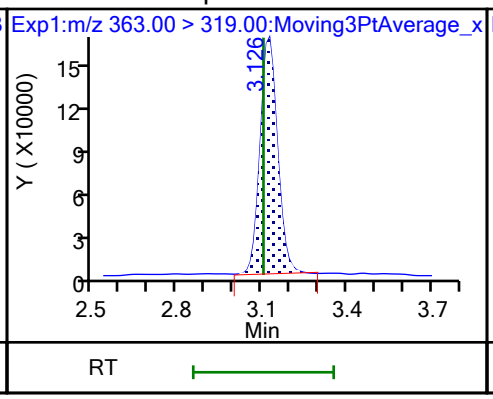
8 Perfluorohexanesulfonic acid (M)



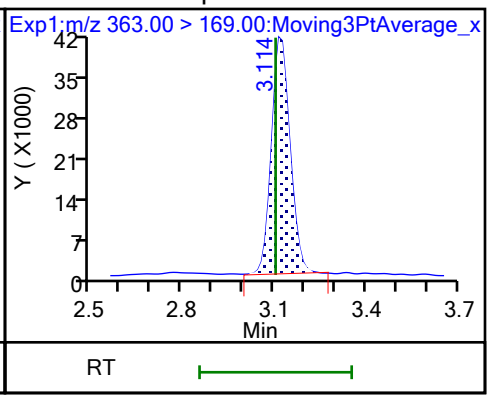
8 Perfluorohexanesulfonic acid (M)



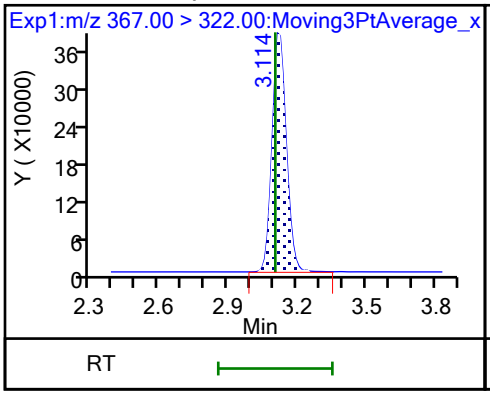
10 Perfluoroheptanoic acid



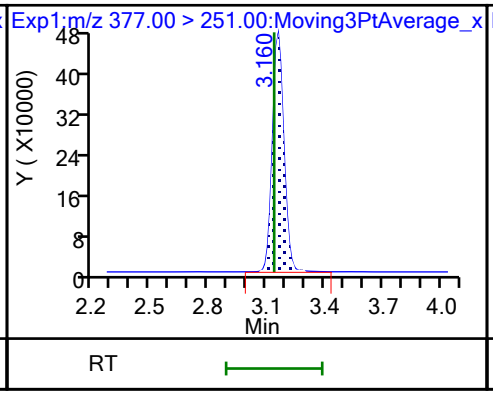
10 Perfluoroheptanoic acid



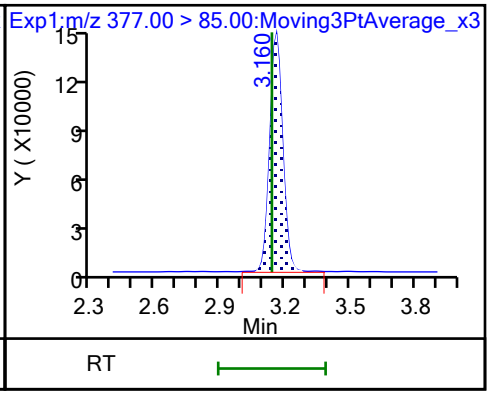
D 9 13C4 PFHpA



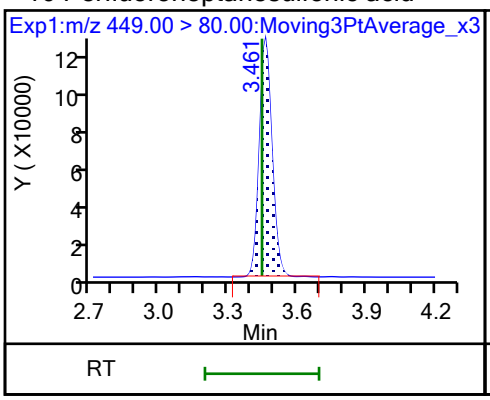
77 DONA



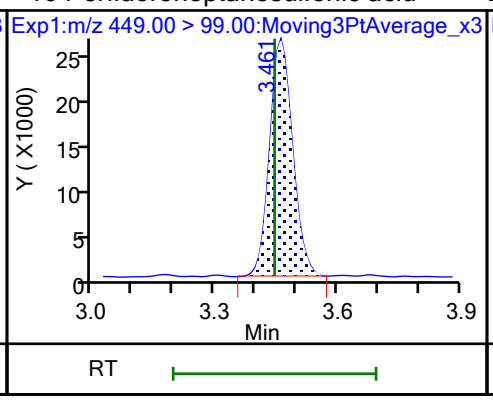
77 DONA



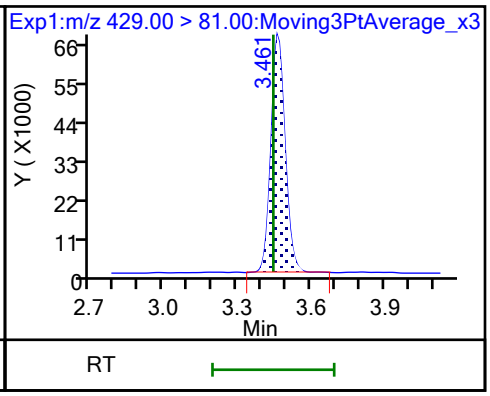
16 Perfluoroheptanesulfonic acid



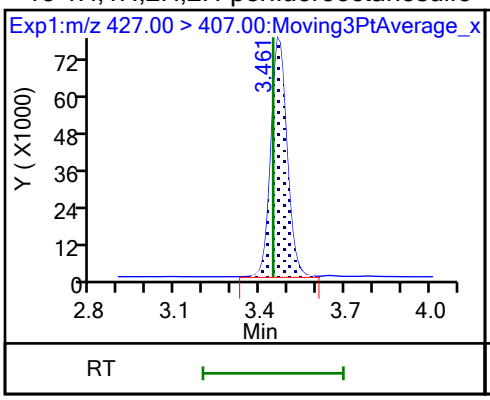
16 Perfluoroheptanesulfonic acid



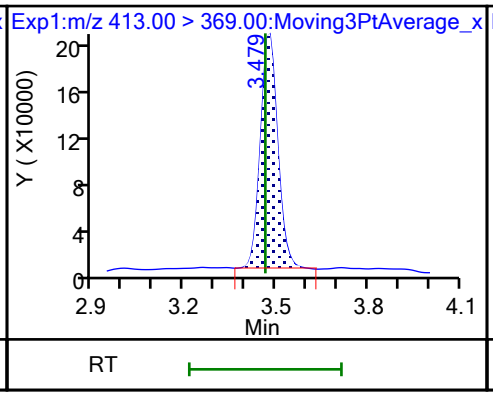
D 12 M2-6:2 FTS



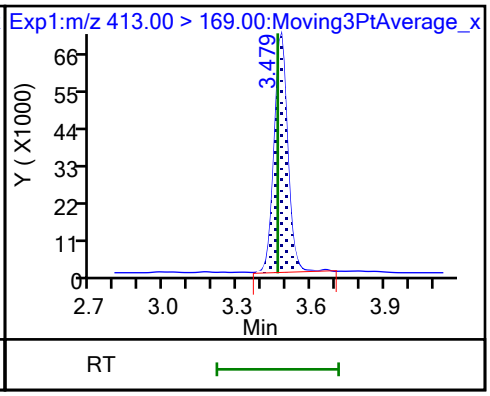
13 1H,1H,2H,2H-perfluorooctanesulfo



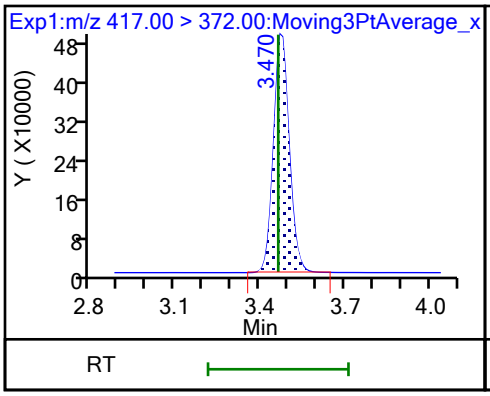
15 Perfluorooctanoic acid



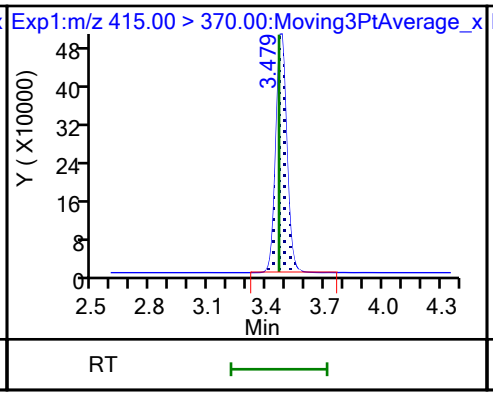
15 Perfluorooctanoic acid



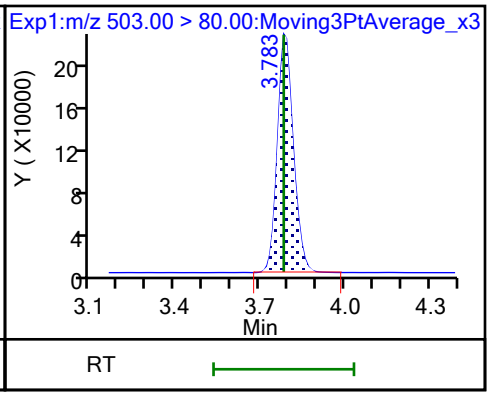
D 14 13C4 PFOA



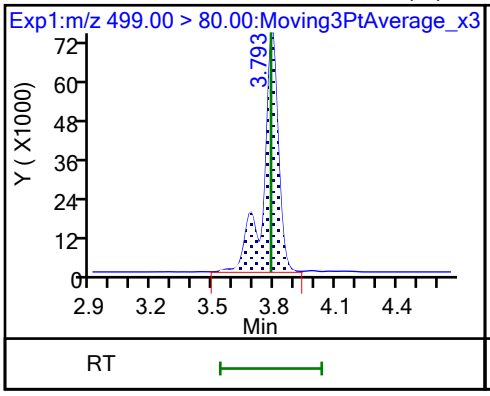
* 62 13C2 PFOA



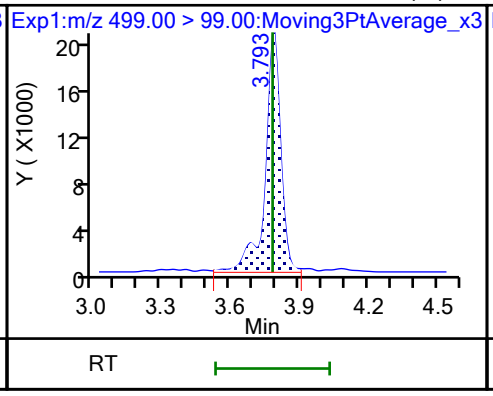
D 18 13C4 PFOS



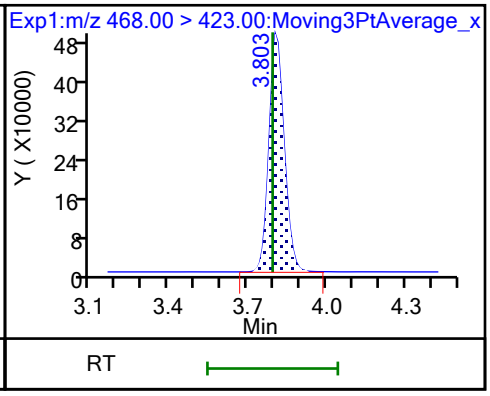
17 Perfluorooctanesulfonic acid (M)



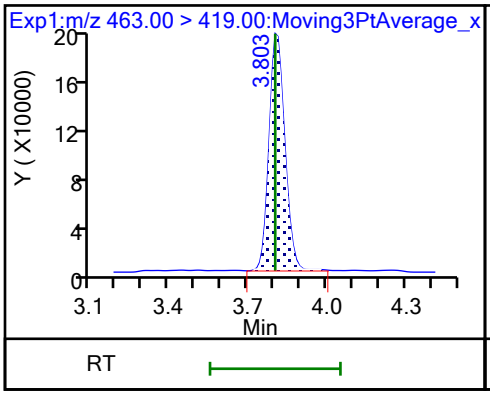
17 Perfluorooctanesulfonic acid (M)



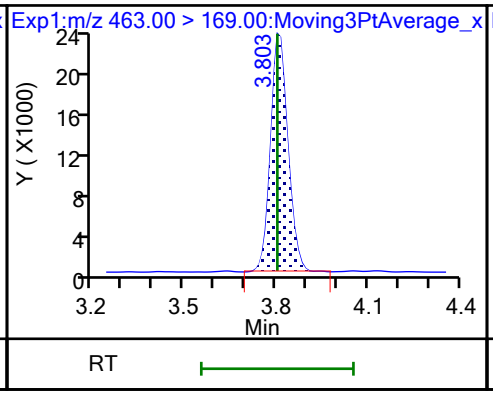
D 19 13C5 PFNA



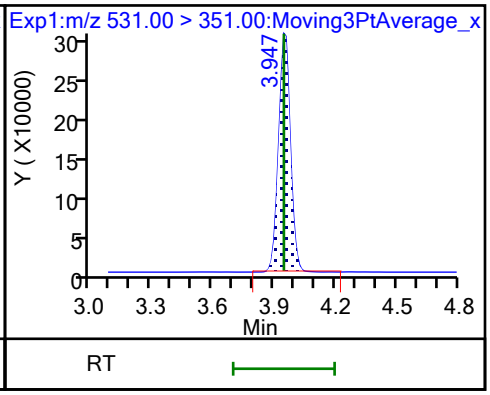
20 Perfluorononanoic acid



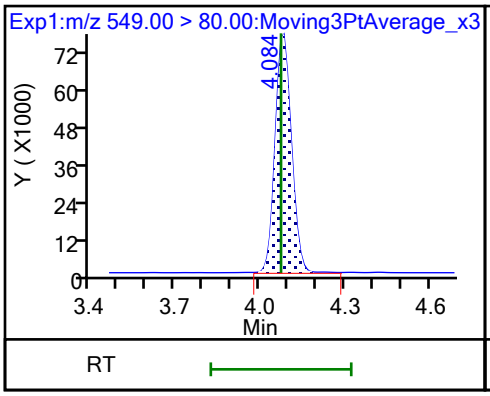
20 Perfluorononanoic acid



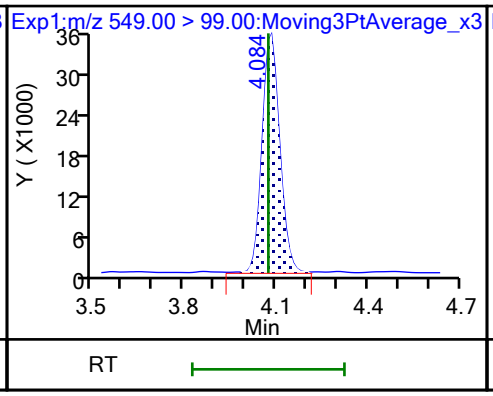
69 9-Chlorohexadecafluoro-3-oxanona



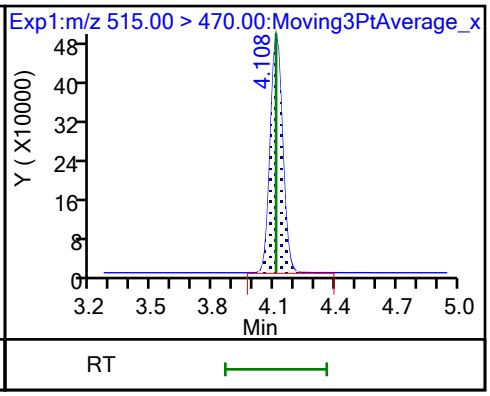
68 Perfluorononanesulfonic acid



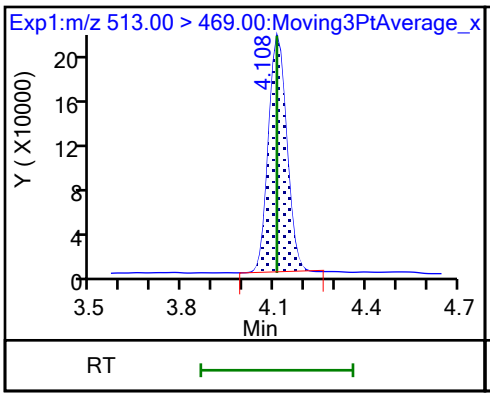
68 Perfluorononanesulfonic acid



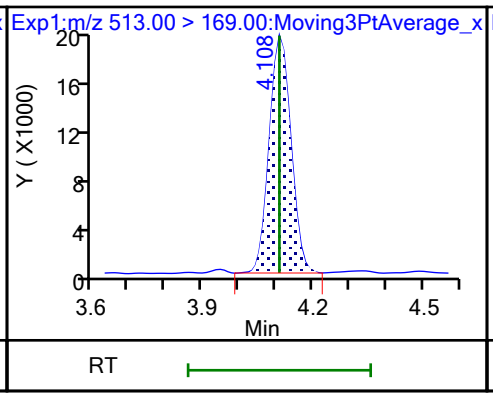
D 23 13C2 PFDA



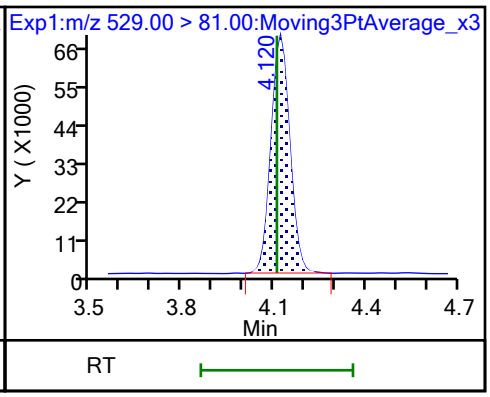
24 Perfluorodecanoic acid



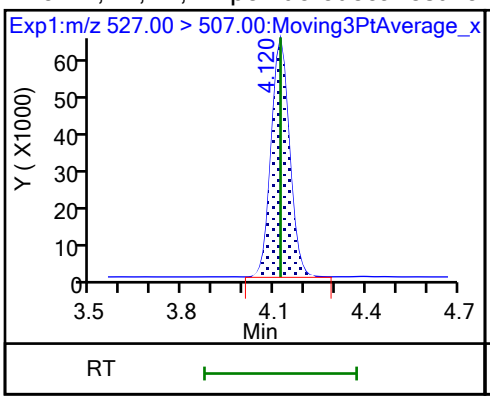
24 Perfluorodecanoic acid



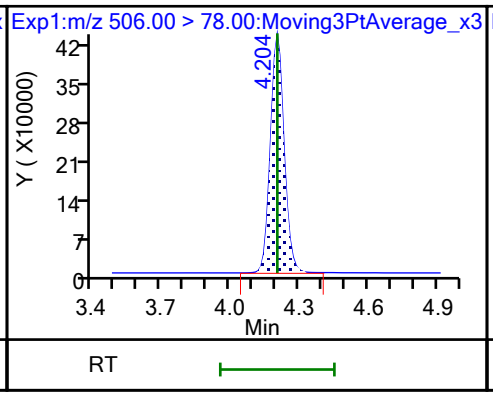
D 26 M2-8:2 FTS



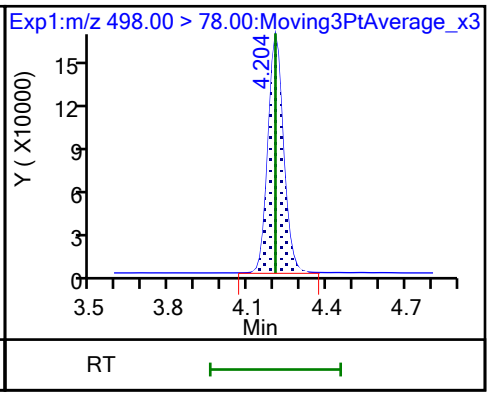
25 1H,1H,2H,2H-perfluorodecanesulfo



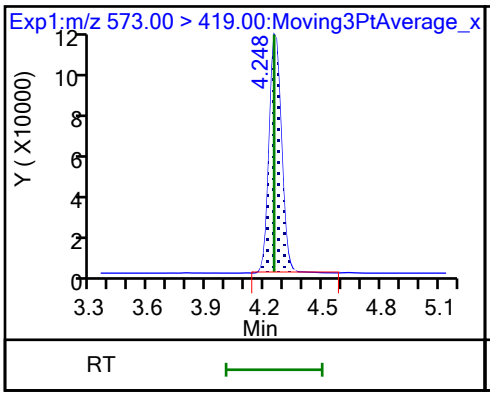
D 21 13C8 FOSA



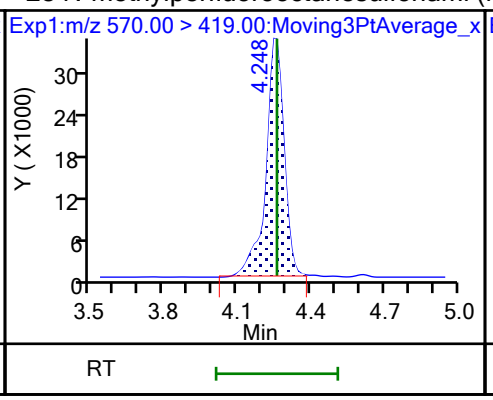
22 Perfluorooctanesulfonamide



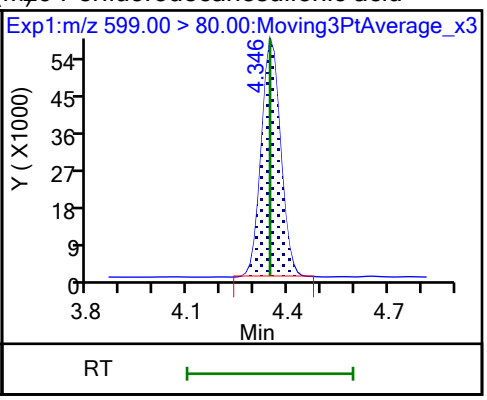
D 27 d3-NMeFOSAA



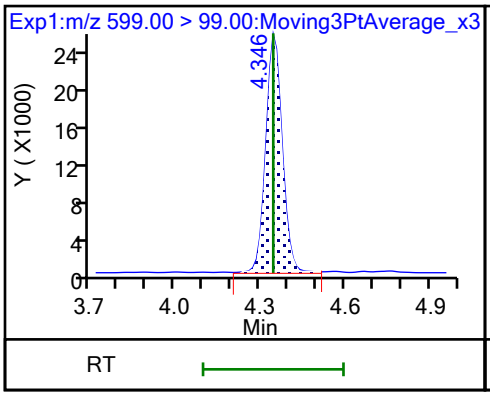
28 N-methylperfluorooctanesulfonami (M)



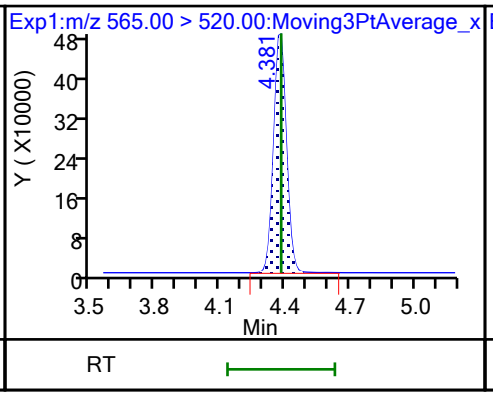
29 Perfluorodecanesulfonic acid



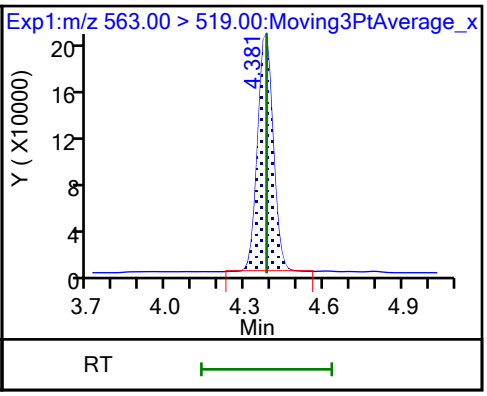
29 Perfluorodecanesulfonic acid



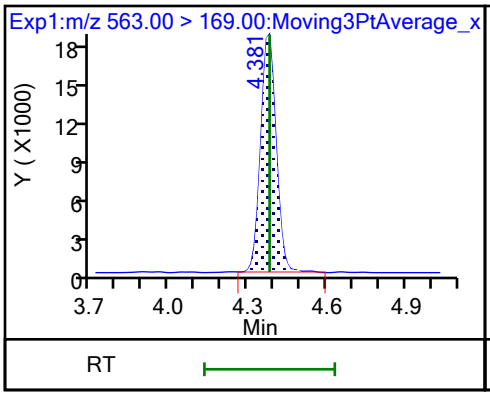
D 30 13C2 PFUnA



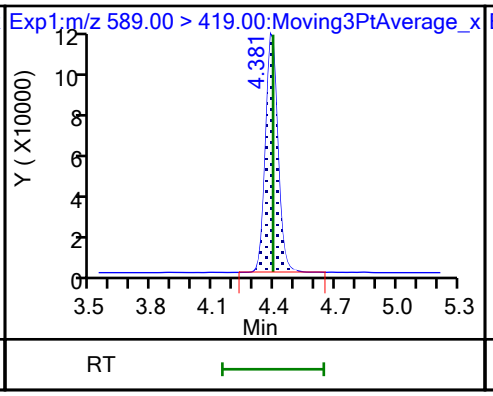
31 Perfluoroundecanoic acid



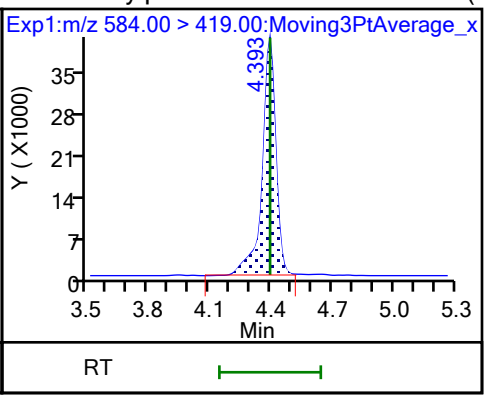
31 Perfluoroundecanoic acid



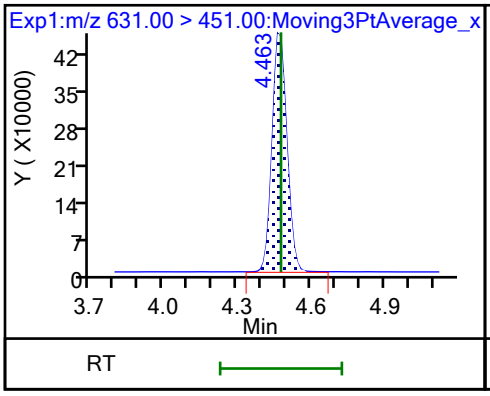
D 32 d5-NEtFOSAA



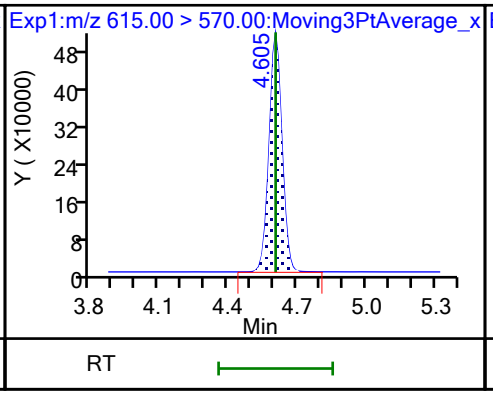
33 N-ethylperfluorooctanesulfonamid (M)



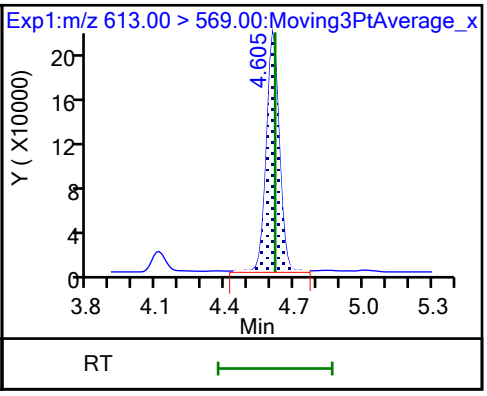
66 11-Chloroeicosafluoro-3-oxaundec



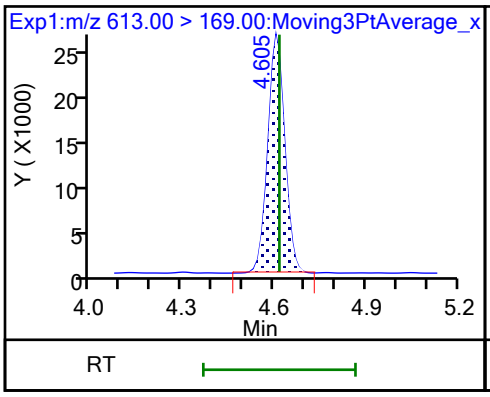
D 36 13C2 PFDoA



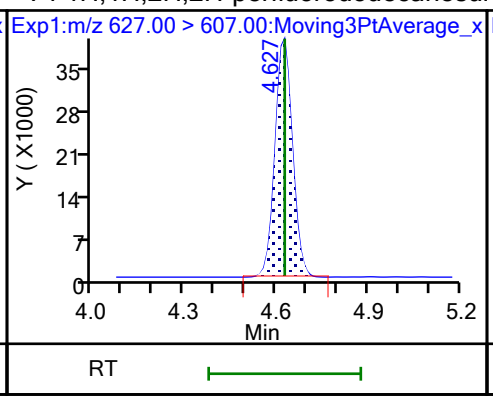
37 Perfluorododecanoic acid



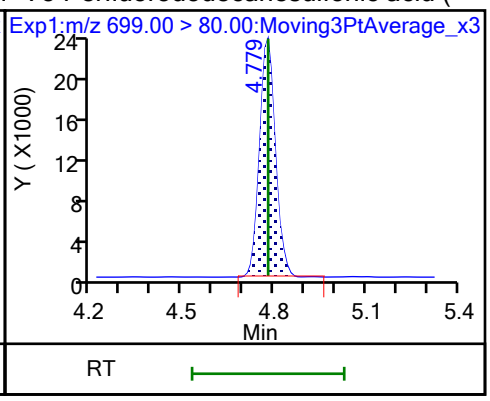
37 Perfluorododecanoic acid



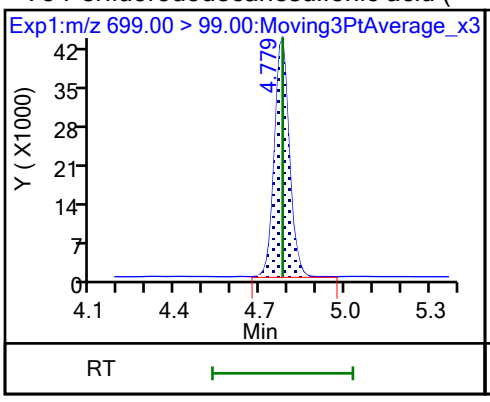
74 1H,1H,2H,2H-perfluorododecanesul



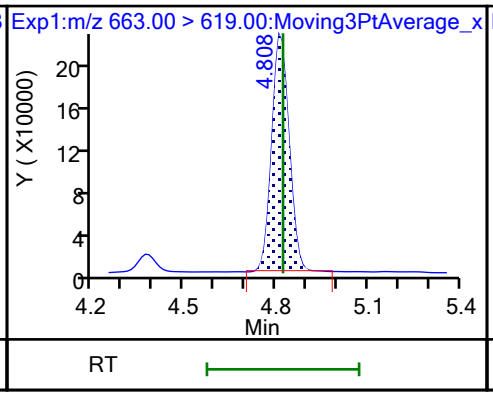
75 Perfluorododecanesulfonic acid (



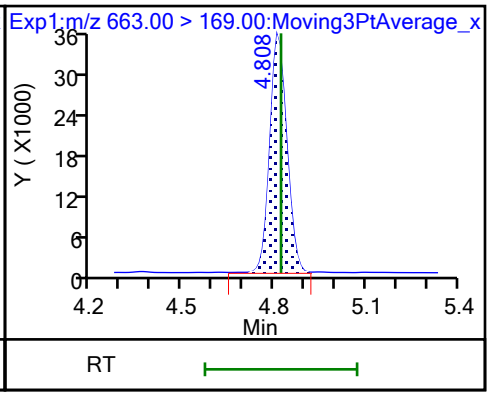
75 Perfluorododecanesulfonic acid (



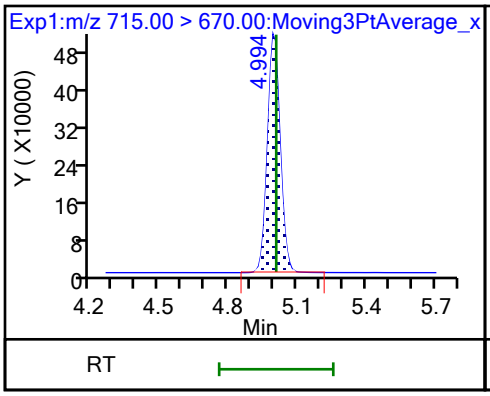
41 Perfluorotridecanoic acid



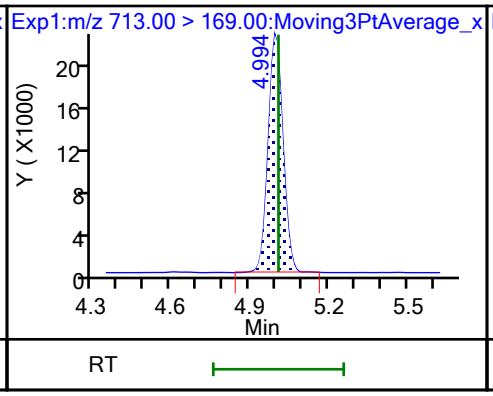
41 Perfluorotridecanoic acid



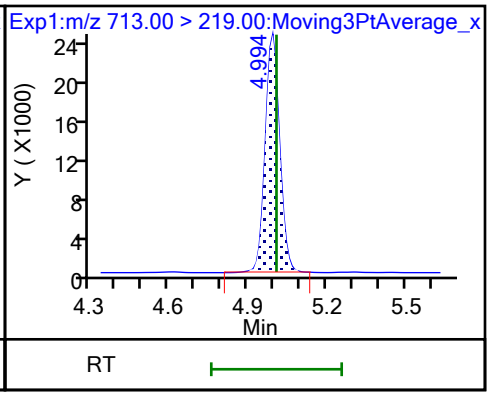
D 43 13C2 PFTeDA



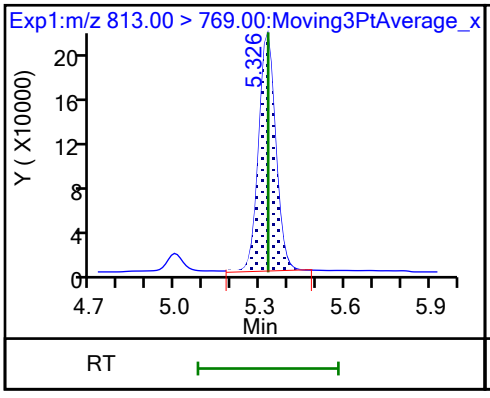
42 Perfluorotetradecanoic acid



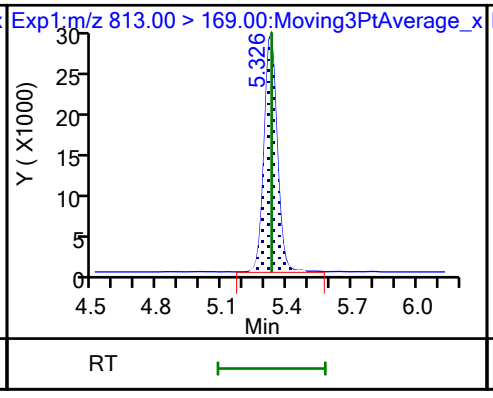
42 Perfluorotetradecanoic acid



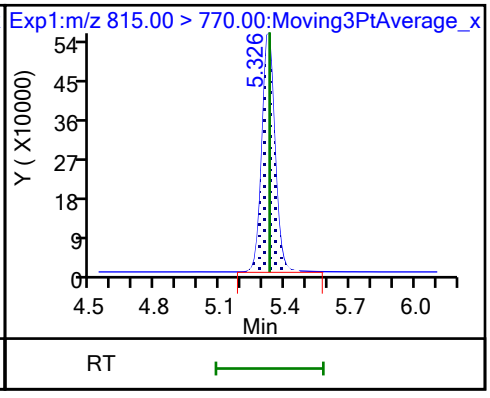
45 Perfluorohexadecanoic acid



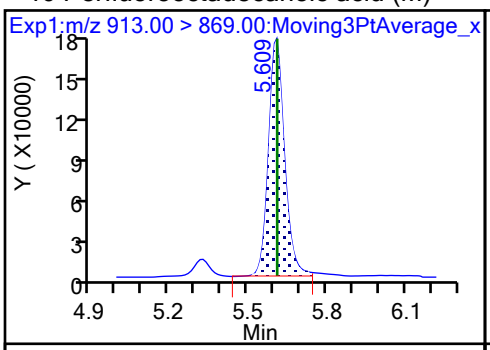
45 Perfluorohexadecanoic acid



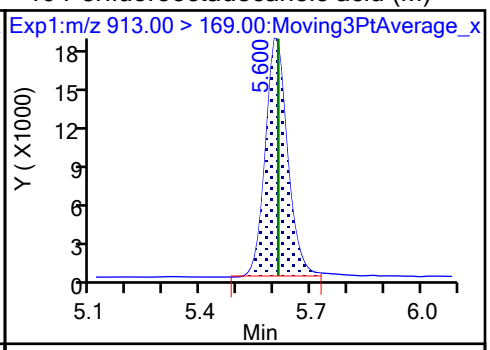
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Lims ID: ICISAV
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 26-Jul-2023 17:41:18 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICISAV
Misc. Info.: 200-0056441-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:28 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:44:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.607	1929850	1.25		100	852	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.112	2.112	0.0	1.004	1439078	0.9899		99.0	94.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.696	1529086	1.28		102	548	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1385943	1.05		105	60.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.425	2.425	0.0	0.700	1858340	1.15		98.8	53325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.425	2.425	0.0	1.000	1645342	0.9215	Target=2.07	104	208	M
298.90 > 99.00	2.425	2.425	0.0	1.000	798559		2.06(1.04-3.11)	104	141	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.694	2.694	0.0	0.778	220382	1.18		101	73.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.694	2.694	0.0	1.000	569311	0.8881		94.8	567	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.789	1544435	1.27		102	502	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	1301870	0.9575	Target=14.29	95.7	137	M
313.00 > 119.00	2.731	2.731	0.0	1.000	92229		14.12(7.15-21.44)	95.7	50.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.883	1426185	0.9245	Target=2.78	98.2	453	M
349.00 > 99.00	2.731	2.731	0.0	0.883	523421		2.72(1.39-4.17)	98.2	329	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.844	2.844	0.0	0.821	296521	1.26		101	448	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.844	2.844	0.0	1.000	235976	0.99		99.4	561	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.092	3.092	0.0	1.000	1123331	0.8590	Target=3.23	94.0	519	M
399.00 > 99.00	3.092	3.092	0.0	1.000	338365		3.32(1.62-4.84)	94.0	154	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.092	3.092	0.0	0.893	1396957	1.21		102	6682	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.104	3.104	0.0	1.000	1446925	0.9607	Target=4.11	96.1	215	M
363.00 > 169.00	3.104	3.104	0.0	1.000	346831		4.17(2.06-6.17)	96.1	225	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.104	3.104	0.0	0.896	1679653	1.26		101	737	M
77 DONA										
377.00 > 251.00	3.138	3.138	0.0	0.830	4190396	0.9622	Target=3.28	102	3717	
377.00 > 85.00	3.138	3.138	0.0	0.830	1260116		3.33(1.64-4.92)	102	1390	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.446	3.446	0.0	0.911	1008539	0.9221	Target=4.71	96.8	1714	
449.00 > 99.00	3.446	3.446	0.0	0.911	208912		4.83(2.36-7.07)	96.8	432	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.446	0.0	0.995	299923	1.25		105	422	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.446	3.446	0.0	1.000	618135	0.8954		94.2	1663	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.464	3.464	0.0	1.000	1597361	0.9691	Target=2.90	96.9	122	
413.00 > 169.00	3.464	3.464	0.0	1.000	554295		2.88(1.45-4.35)	96.9	502	M
D 14 13C4 PFOA										
417.00 > 372.00	3.464	3.464	0.0	1.000	1934463	1.28		102	3978	
* 62 13C2 PFOA										
415.00 > 370.00	3.464	3.464	0.0		1941206	1.25			4649	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.092	904398	1.23		103	2576	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	792430	0.8977	Target=4.11	96.7	1005	M
499.00 > 99.00	3.783	3.783	0.0	1.000	186696		4.24(2.05-6.16)	96.7	256	M
D 19 13C5 PFNA										
468.00 > 423.00	3.793	3.793	0.0	1.095	2143126	1.30		104	7977	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.003	1661649	0.9889	Target=8.48	98.9	305	
463.00 > 169.00	3.803	3.803	0.0	1.003	199241		8.34(4.24-12.72)	98.9	1189	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	2512476	0.9301		99.7	3906	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	638462	0.9507	Target=2.17	98.8	2935	
549.00 > 99.00	4.074	4.074	0.0	1.077	294408		2.17(1.08-3.25)	98.8	552	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.186	2125756	1.23		98.8	9272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	1775242	1.04	Target=10.55	104	474	
513.00 > 169.00	4.108	4.108	0.0	1.000	155159		11.44(5.27-15.82)	104	563	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.186	331913	1.23		102	577	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	556332	0.9117		95.0	3162	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.214	1887535	1.28		103	3920	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1437750	1.00		99.8	2735	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.227	518688	1.26		101	1367	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.260	0.0	1.003	370720	0.9846		98.5	480	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	499466	0.9663	Target=2.28	100	1659	
599.00 > 99.00	4.346	4.346	0.0	1.149	210609		2.37(1.14-3.42)	100	596	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	1729770	1.02	Target=11.30	102	492	
563.00 > 169.00	4.370	4.382	-0.012	0.997	141730		12.20(5.65-16.96)	102	888	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.265	2053330	1.26		101	9003	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.393	4.393	0.0	1.268	487913	1.23		98.5	834	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.000	364226	0.9329		93.3	589	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.477	0.0	1.183	3925775	0.9477		100	4259	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.330	2123640	1.29		103	8948	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.616	4.616	0.0	1.002	1656352	0.9579	Target=8.15	95.8	155	
613.00 > 169.00	4.616	4.616	0.0	1.002	195564		8.47(4.07-12.22)	95.8	1566	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.126	328276	0.9000		93.4	3601	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	163618	0.9340	Target=0.50	96.5	1669	
699.00 > 99.00	4.779	4.779	0.0	1.263	340004		0.48(0.25-0.75)	96.5	2126	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.822	4.822	0.0	1.047	1823052	1.00	Target=6.61	100	159	
663.00 > 169.00	4.822	4.822	0.0	1.047	284386		6.41(3.31-9.92)	100	1889	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.008	5.008	0.0	1.446	2077683	1.26		101	7096	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.000	174160	0.9371	Target=0.96	93.7	2069	
713.00 > 219.00	4.997	5.008	-0.011	0.998	200239		0.87(0.48-1.44)	93.7	2335	

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48
Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.538	2422773	1.28		102	5274	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	1870661	0.9651	Target=7.69	96.5	189	
813.00 > 169.00	5.328	5.328	0.0	1.000	237159		7.89(3.85-11.54)	96.5	1188	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	1554372	1.03	Target=9.13	103	171	M
913.00 > 169.00	5.611	5.611	0.0	1.053	165585		9.39(4.56-13.69)	103	338	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

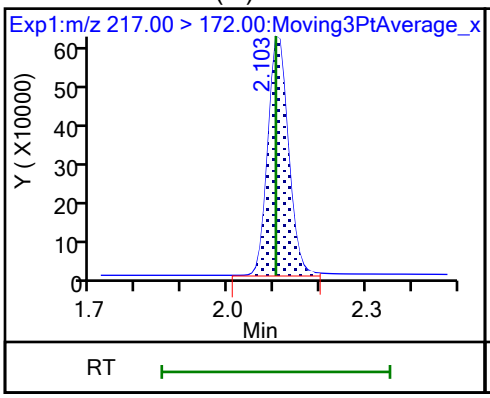
PFAS32NCIC4_00042 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48

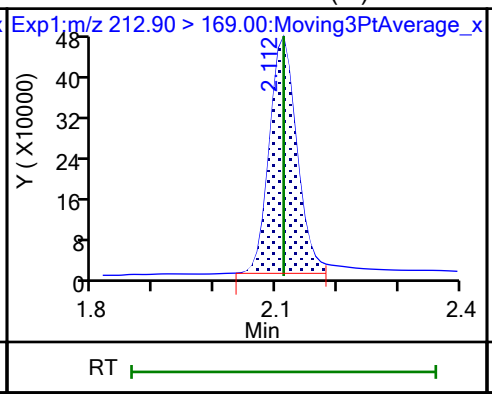
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Injection Date: 26-Jul-2023 17:41:18 Instrument ID: LC812
Lims ID: ICISAV
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

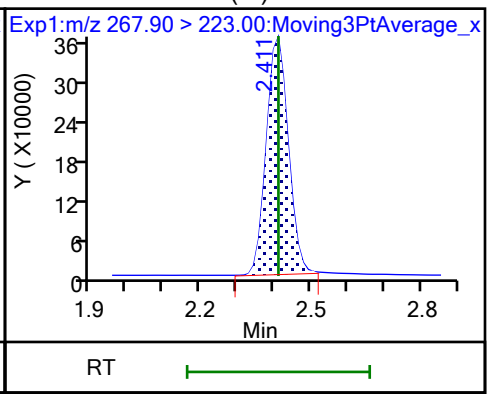
D 1 13C4 PFBA (M)



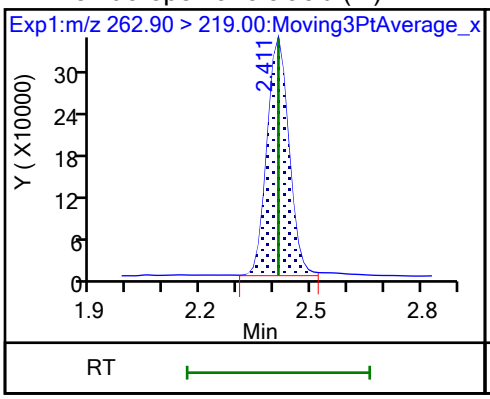
2 Perfluorobutanoic acid (M)



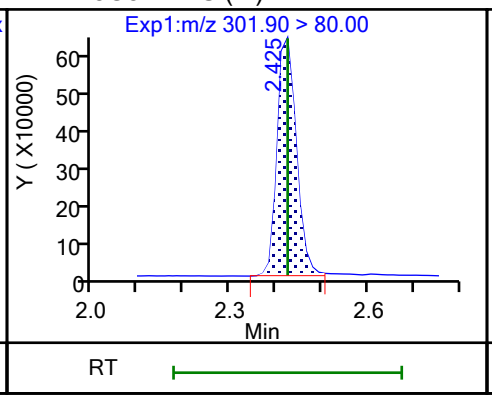
D 3 13C5 PFPeA (M)



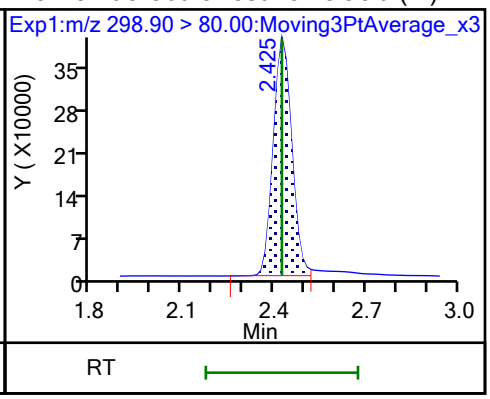
4 Perfluoropentanoic acid (M)



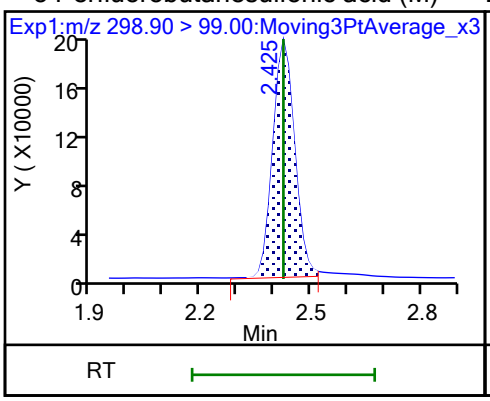
D 47 13C3 PFBS (M)



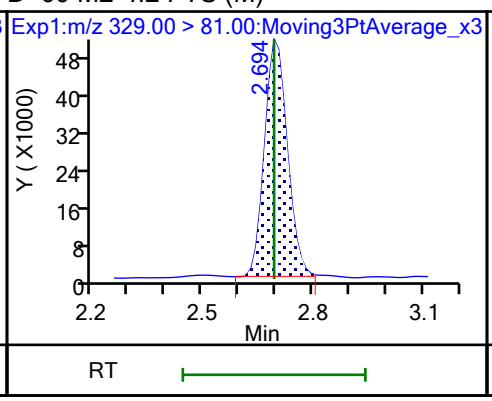
5 Perfluorobutanesulfonic acid (M)



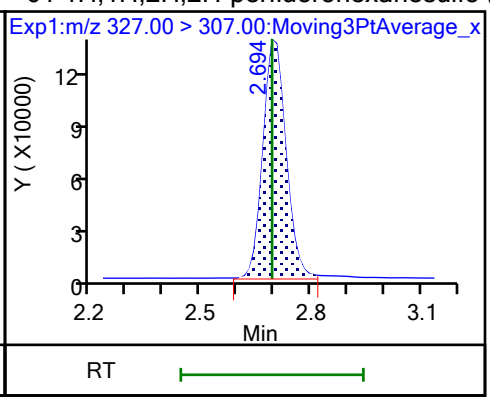
5 Perfluorobutanesulfonic acid (M)



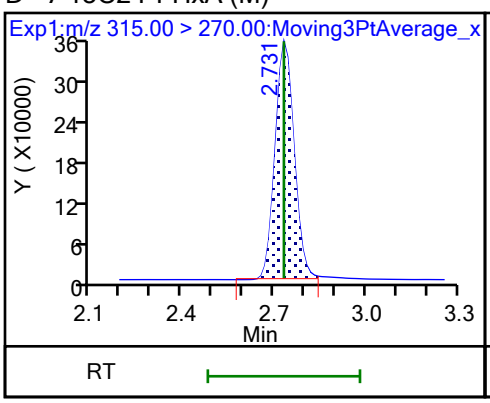
D 60 M2-4:2 FTS (M)



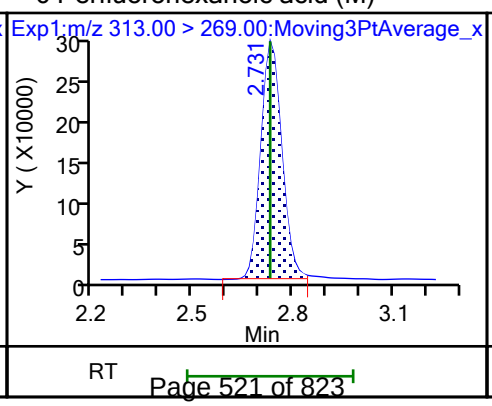
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



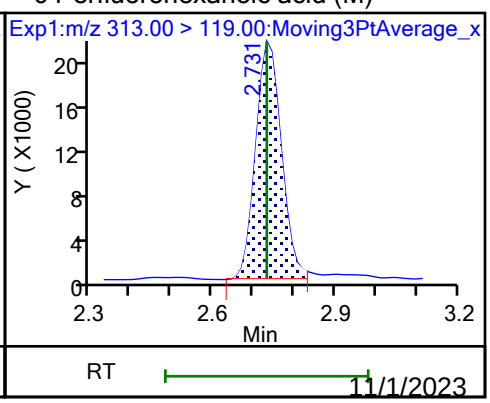
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

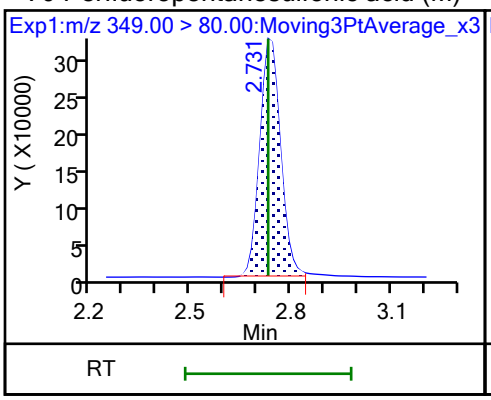


6 Perfluorohexanoic acid (M)

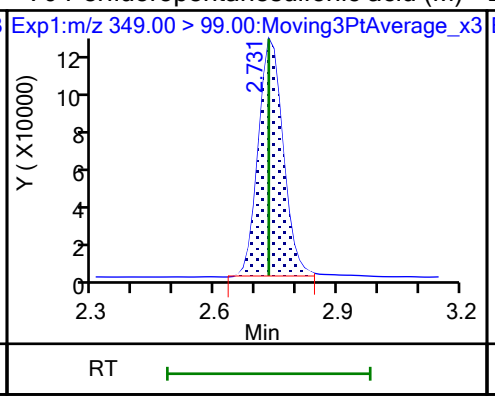


11/1/2023
12:01 PM

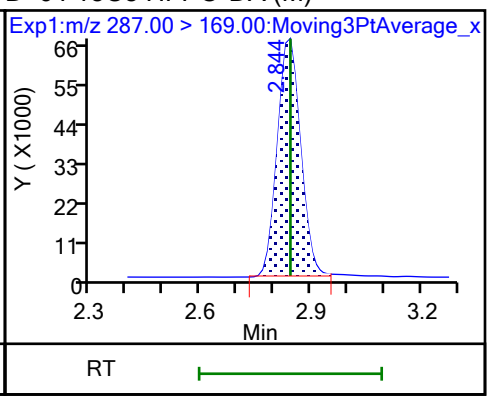
70 Perfluoropentanesulfonic acid (M)



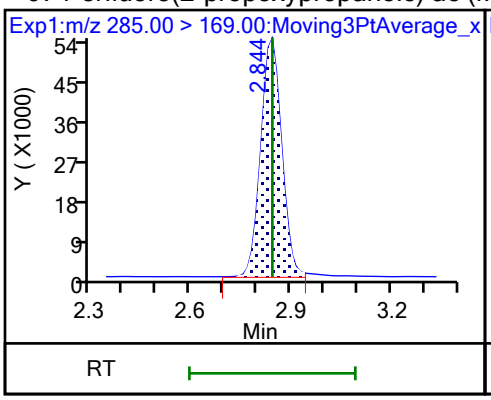
70 Perfluoropentanesulfonic acid (M)



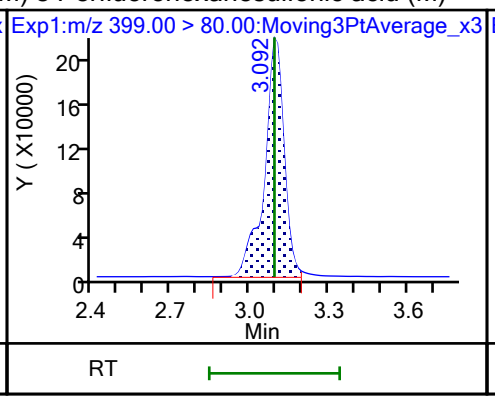
D 64 13C3 HFPO-DA (M)



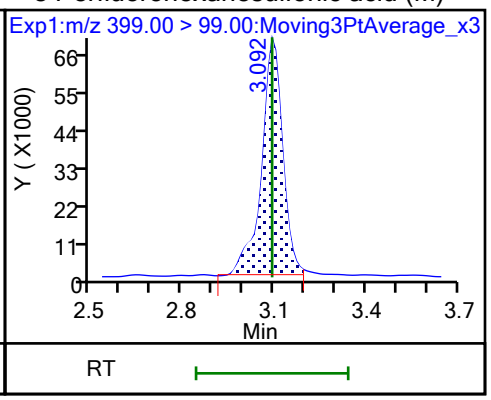
67 Perfluoro(2-propoxypropanoic) ac (M)



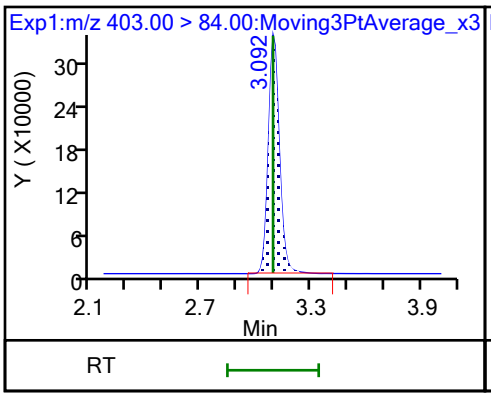
8 Perfluorohexanesulfonic acid (M)



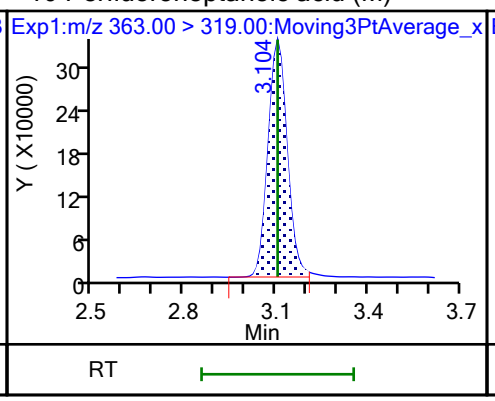
8 Perfluorohexanesulfonic acid (M)



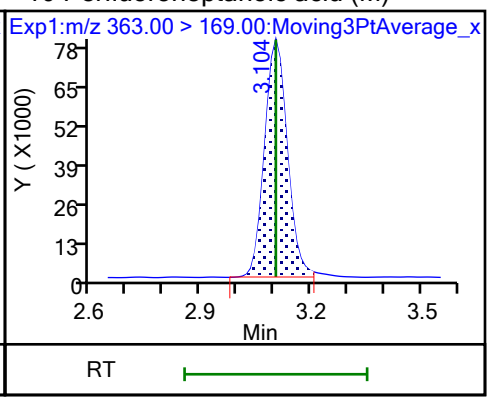
D 11 18O2 PFHxS



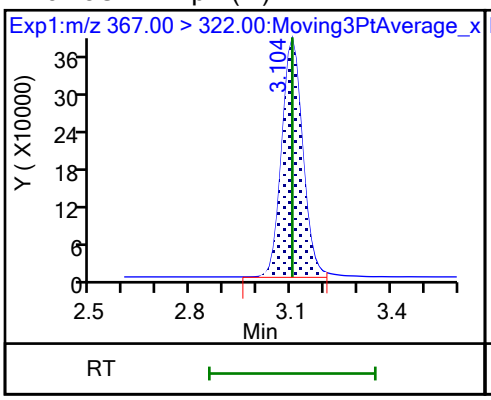
10 Perfluoroheptanoic acid (M)



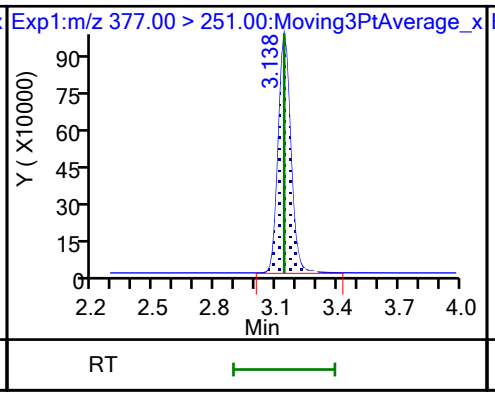
10 Perfluoroheptanoic acid (M)



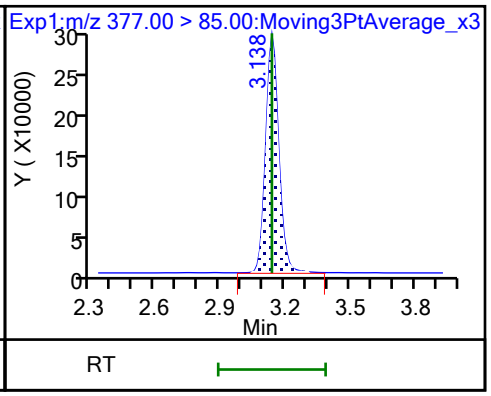
D 9 13C4 PFHpA (M)



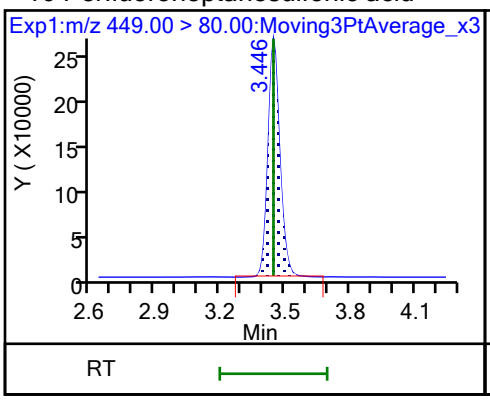
77 DONA



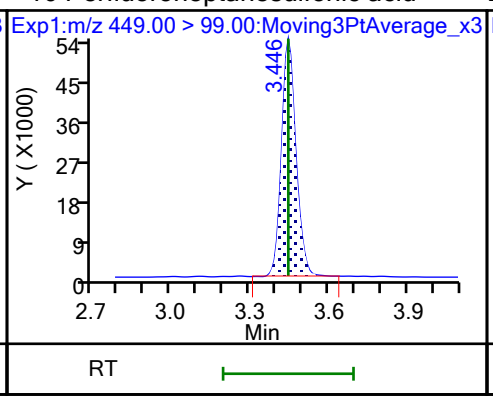
77 DONA



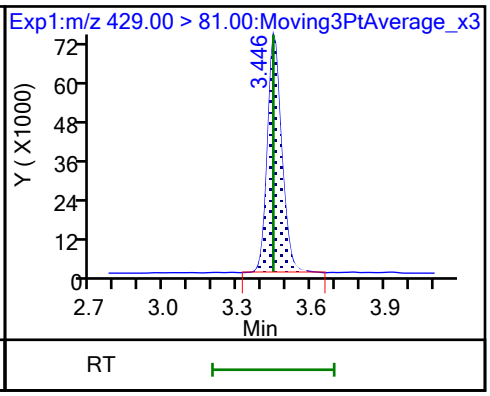
16 Perfluoroheptanesulfonic acid



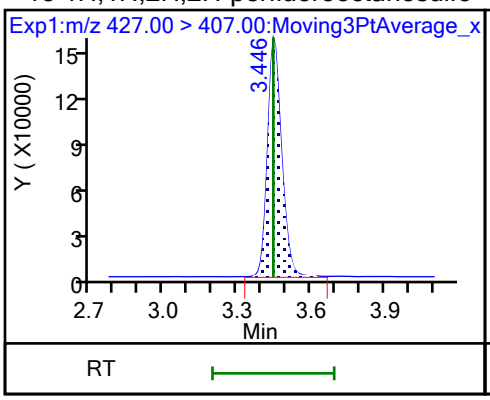
16 Perfluoroheptanesulfonic acid



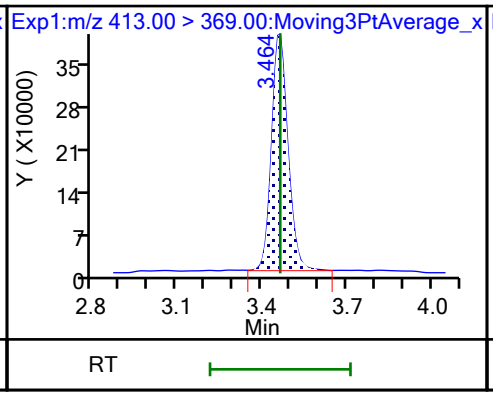
D 12 M2-6:2 FTS



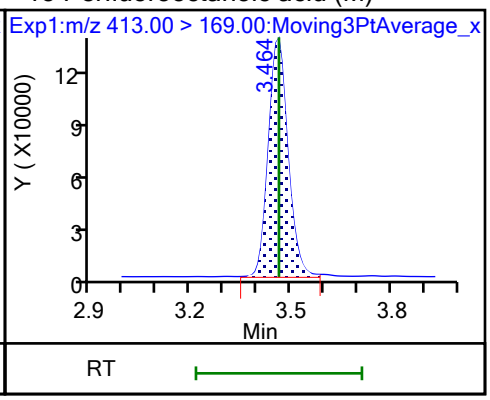
13 1H,1H,2H,2H-perfluorooctanesulfo



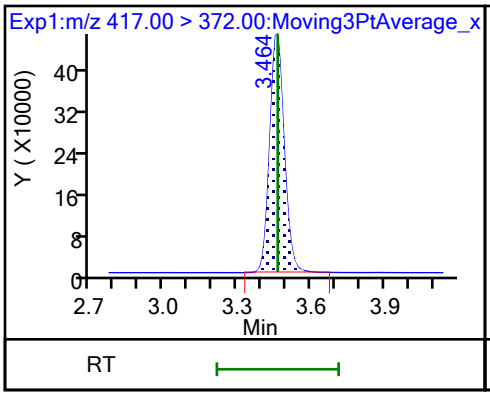
15 Perfluorooctanoic acid



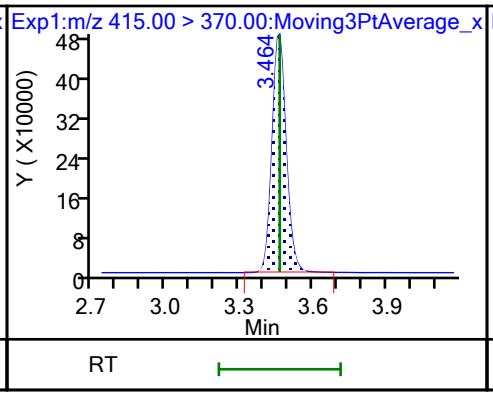
15 Perfluorooctanoic acid (M)



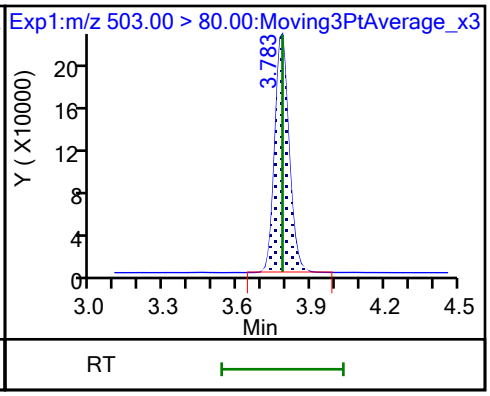
D 14 13C4 PFOA



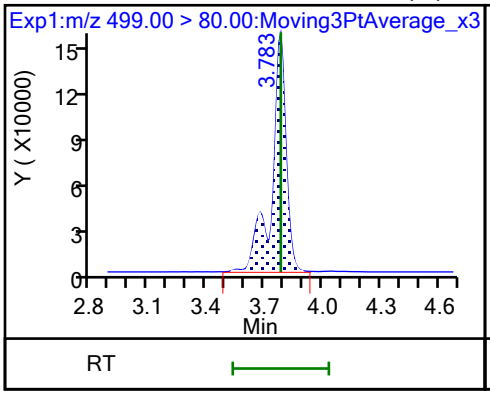
* 62 13C2 PFOA



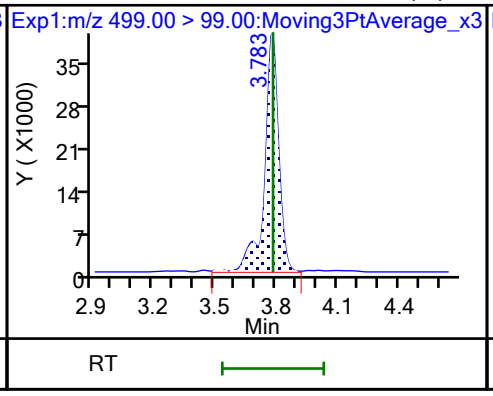
D 18 13C4 PFOS



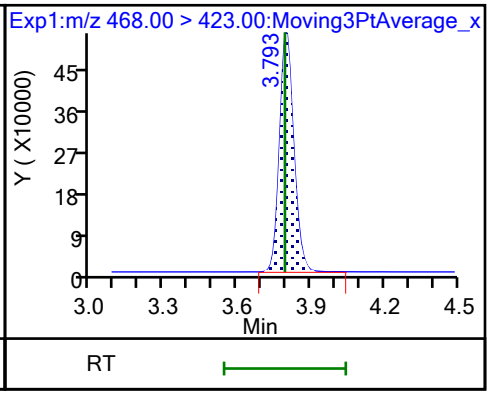
17 Perfluorooctanesulfonic acid (M)



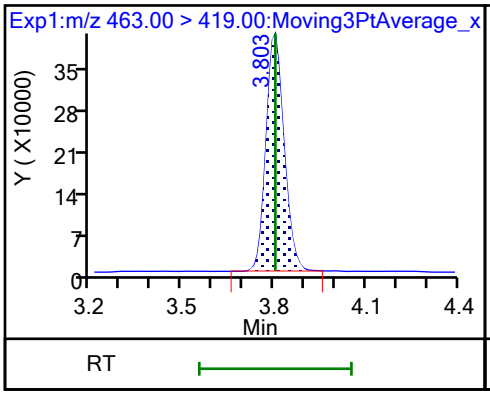
17 Perfluorooctanesulfonic acid (M)



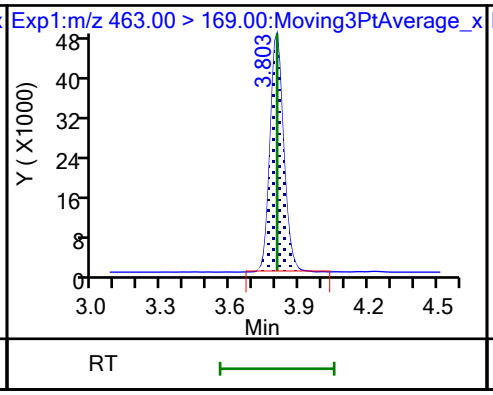
D 19 13C5 PFNA



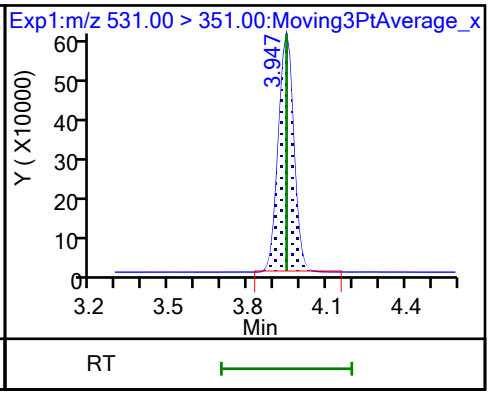
20 Perfluorononanoic acid



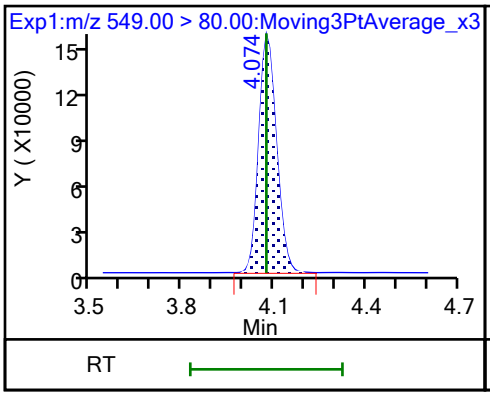
20 Perfluorononanoic acid



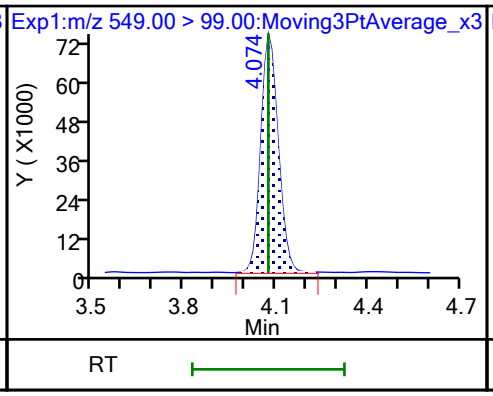
69 9-Chlorohexadecafluoro-3-oxanona



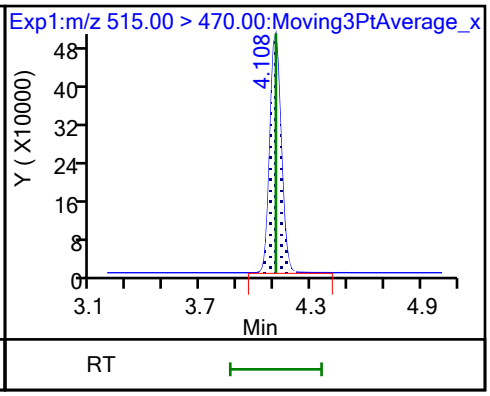
68 Perfluorononanesulfonic acid



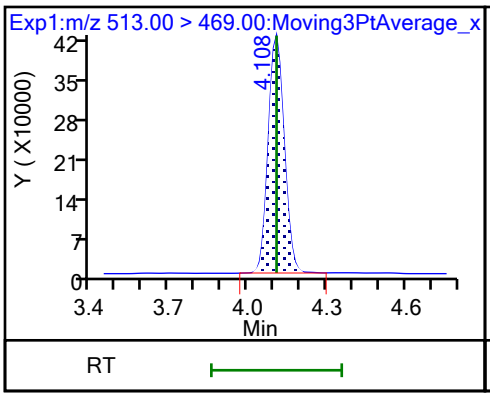
68 Perfluorononanesulfonic acid



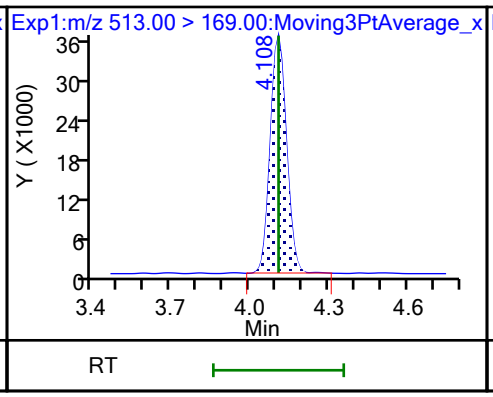
D 23 13C2 PFDA



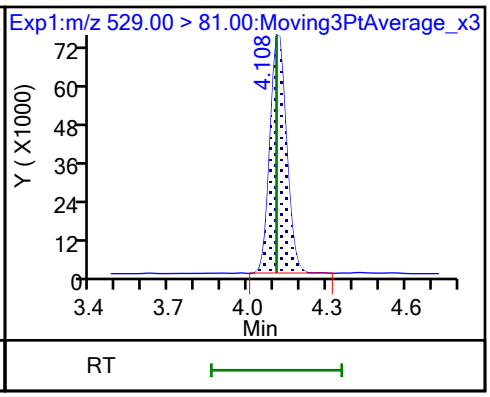
24 Perfluorodecanoic acid



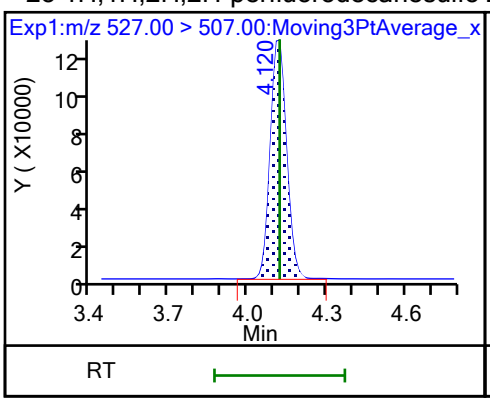
24 Perfluorodecanoic acid



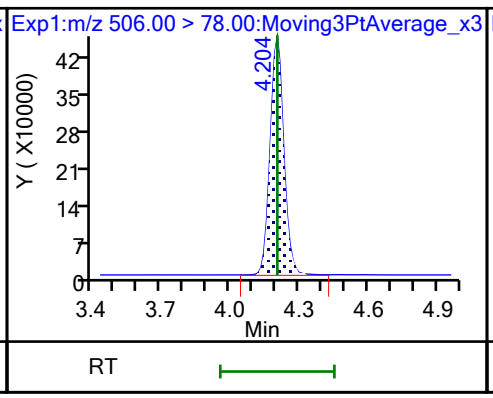
D 26 M2-8:2 FTS



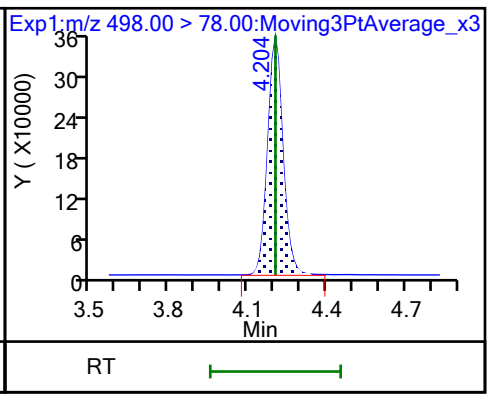
25 1H,1H,2H,2H-perfluorodecanesulfo



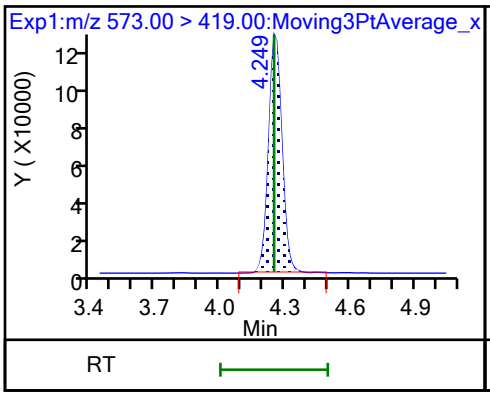
D 21 13C8 FOSA



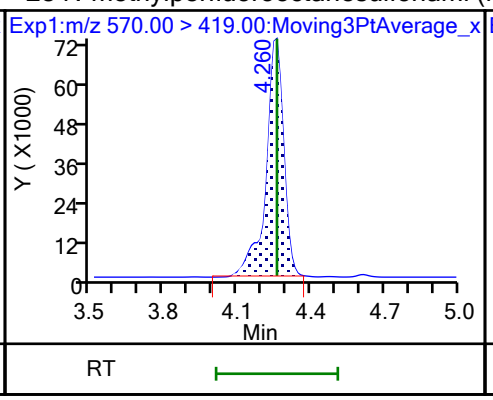
22 Perfluorooctanesulfonamide



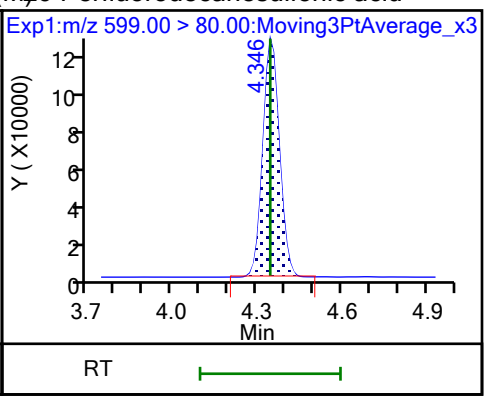
D 27 d3-NMeFOSAA



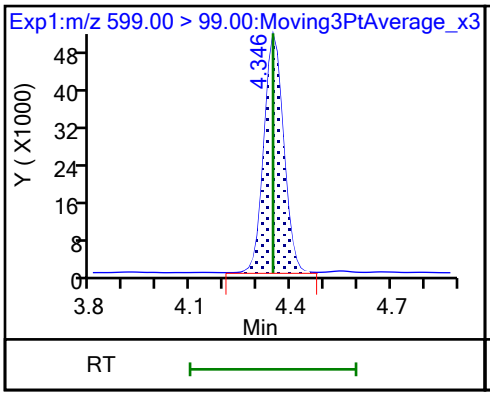
28 N-methylperfluorooctanesulfonami (M)



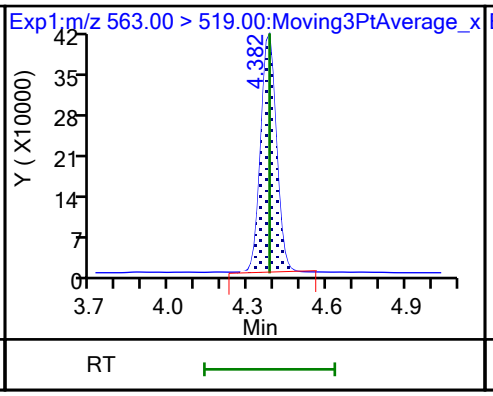
29 Perfluorodecanesulfonic acid



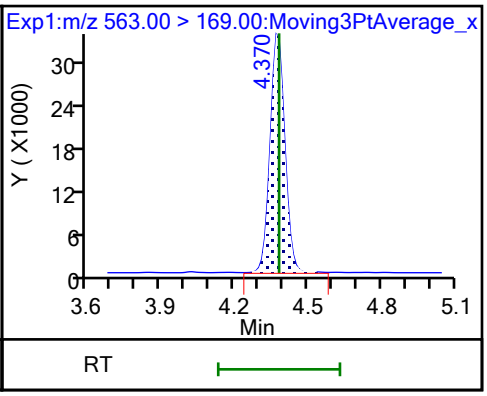
29 Perfluorodecanesulfonic acid



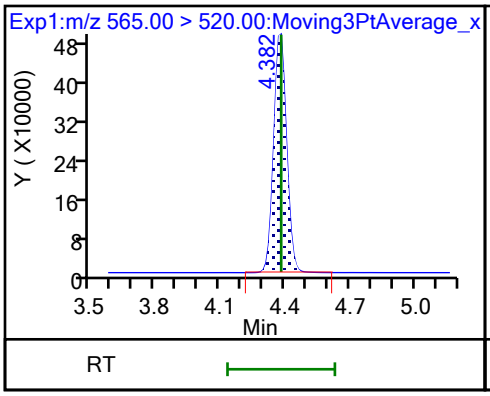
31 Perfluoroundecanoic acid



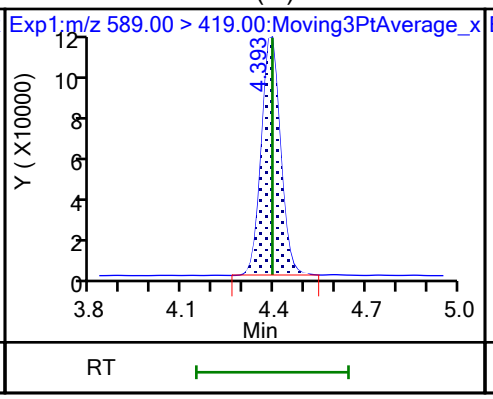
31 Perfluoroundecanoic acid



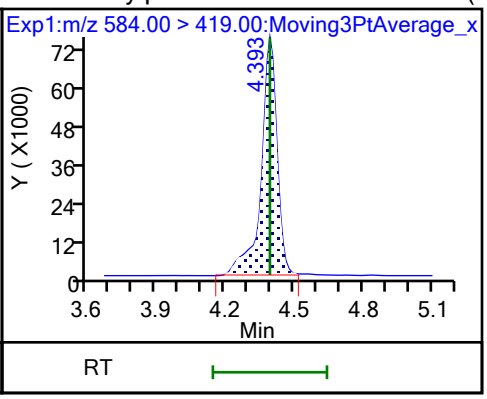
D 30 13C2 PFUnA



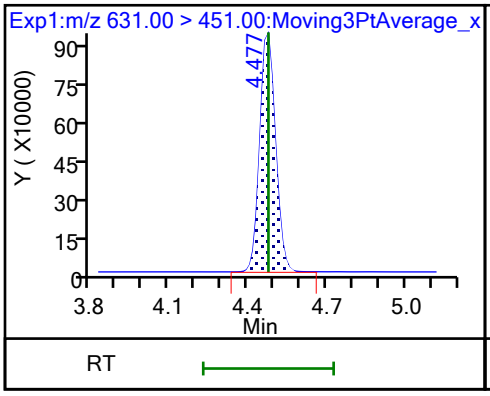
D 32 d5-NEtFOSAA (M)



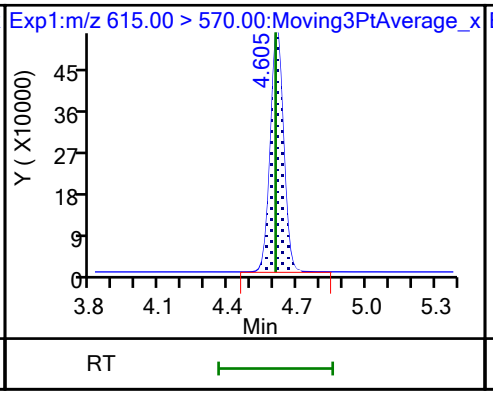
33 N-ethylperfluorooctanesulfonamid (M)



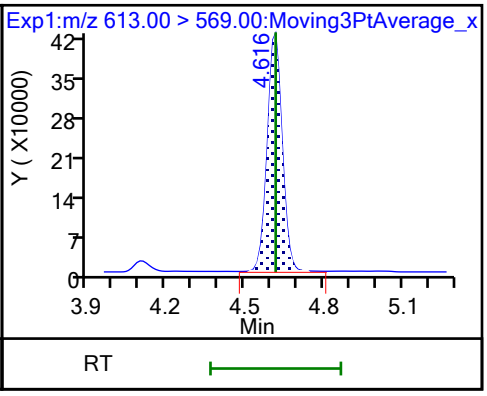
66 11-Chloroeicosafluoro-3-oxaundec



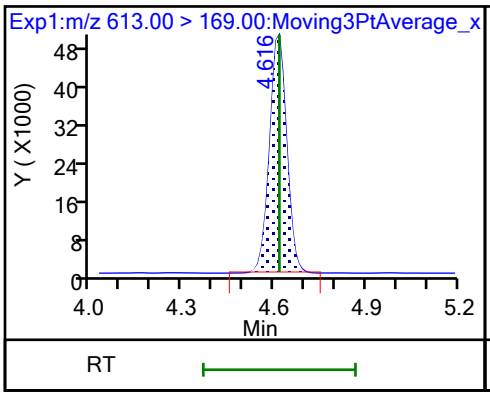
D 36 13C2 PFDoA



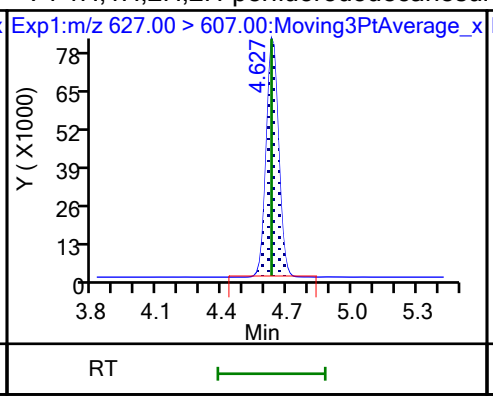
37 Perfluorododecanoic acid



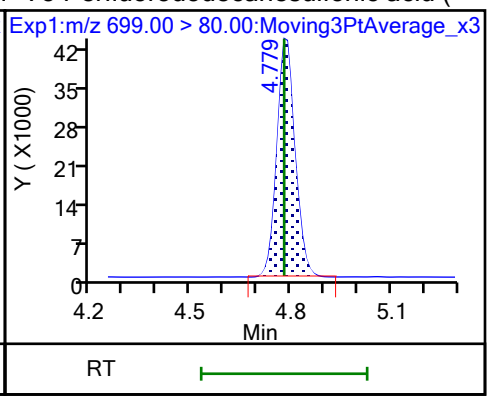
37 Perfluorododecanoic acid



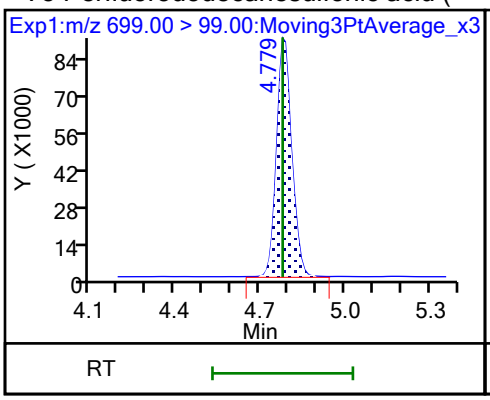
74 1H,1H,2H,2H-perfluorododecanesul



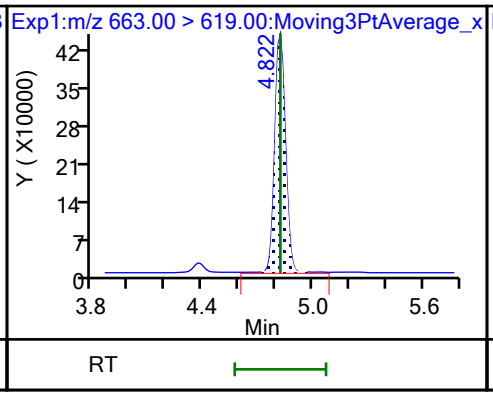
75 Perfluorododecanesulfonic acid (



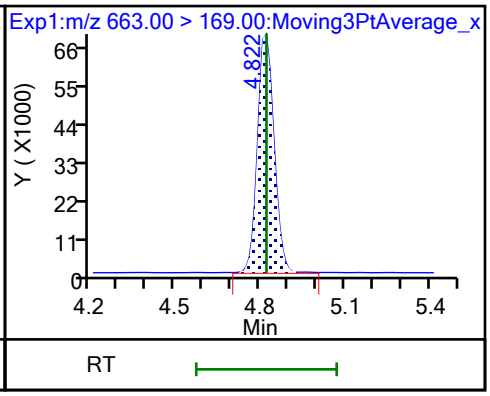
75 Perfluorododecanesulfonic acid (



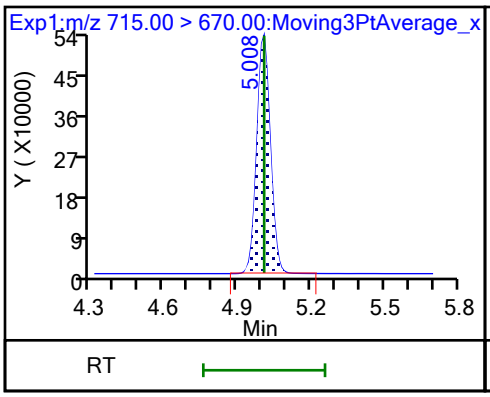
41 Perfluorotridecanoic acid



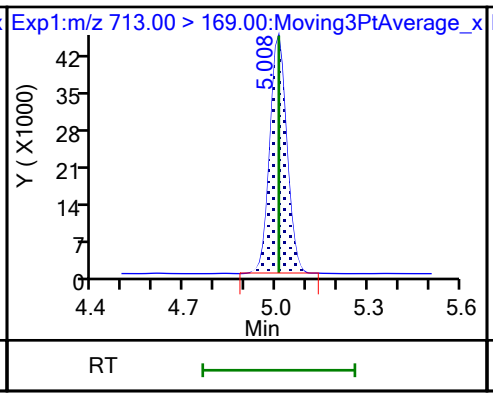
41 Perfluorotridecanoic acid



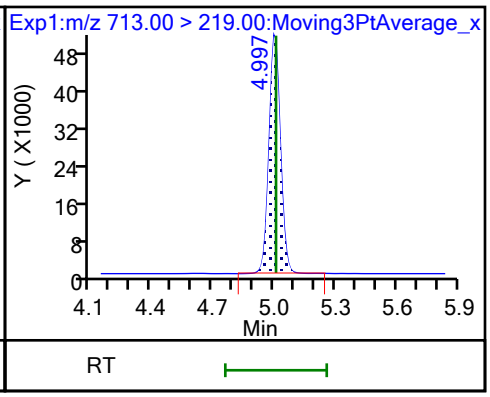
D 43 13C2 PFTeDA



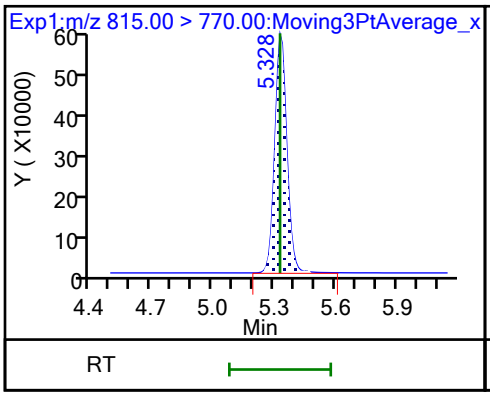
42 Perfluorotetradecanoic acid



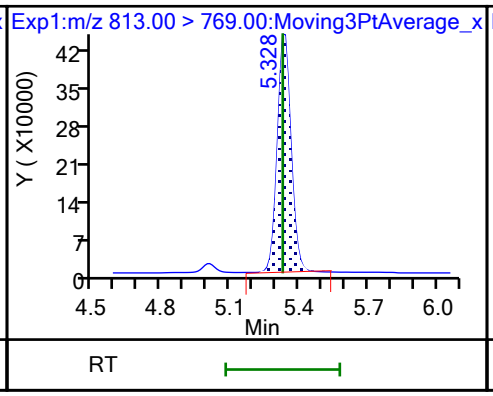
42 Perfluorotetradecanoic acid



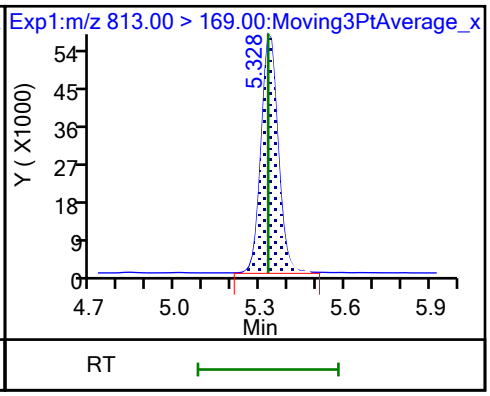
D 44 13C2 PFHxDA



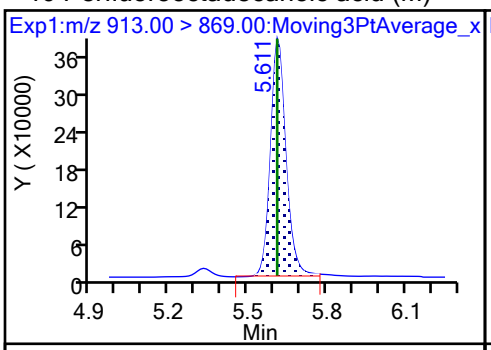
45 Perfluorohexadecanoic acid



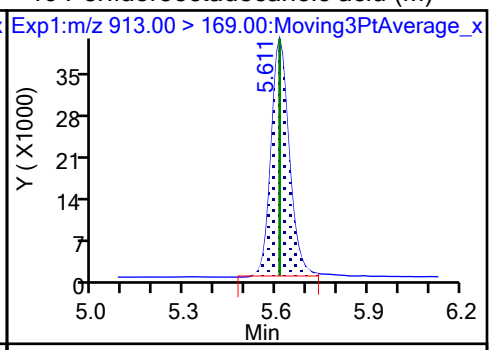
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Jul-2023 17:49:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 5
Misc. Info.: 200-0056441-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:56 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:04:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	2025338	1.28		102	885	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	3820872	2.57		103	264	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1531883	1.24		99.4	493	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	3191311	2.41		96.5	120	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1976378	1.19		102	60670	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	4220392	2.22	Target=2.07	100	362	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	1966405		2.15(1.04-3.11)	100	237	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.780	221658	1.15		98.4	76.5	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.719	2.694	0.025	1.005	1486720	2.31		98.4	503	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.790	1545081	1.23		98.6	491	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.756	2.731	0.025	1.005	3361171	2.47	Target=14.29	98.8	262	M
313.00 > 119.00	2.744	2.731	0.013	1.000	242572		13.86(7.15-21.44)	98.8	132	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	3383549	2.18	Target=2.78	92.6	480	M
349.00 > 99.00	2.756	2.731	0.025	0.885	1222931		2.77(1.39-4.17)	92.6	414	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.856	2.844	0.012	0.823	295164	1.22		97.3	301	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	568553	2.40		96.2	587	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.115	3.092	0.023	0.897	1406672	1.18		99.5	777	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.115	3.092	0.023	1.000	2901162	2.20	Target=3.23	96.4	1836	M
399.00 > 99.00	3.115	3.092	0.023	1.000	881531		3.29(1.62-4.84)	96.4	477	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	3843212	2.42	Target=4.11	96.7	693	
363.00 > 169.00	3.115	3.104	0.011	1.000	912116		4.21(2.06-6.17)	96.7	744	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.897	1773444	1.29		103	6393	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.832	9881253	2.23	Target=3.28	94.4	5501	
377.00 > 85.00	3.150	3.138	0.012	0.832	2882143		3.43(1.64-4.92)	94.4	2174	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.453	3.446	0.007	0.913	2618603	2.35	Target=4.71	98.8	7174	
449.00 > 99.00	3.453	3.446	0.007	0.913	550605		4.76(2.36-7.07)	98.8	949	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	305639	1.23		104	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	1652144	2.35		98.8	5134	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.471	3.464	0.007	1.000	4162515	2.39	Target=2.90	95.5	331	
413.00 > 169.00	3.471	3.464	0.007	1.000	1483061		2.81(1.45-4.35)	95.5	1671	
D 14 13C4 PFOA										
417.00 > 372.00	3.471	3.464	0.007	1.000	2045642	1.31		105	7037	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		2001977	1.25			5933	
D 18 13C4 PFOS										
503.00 > 80.00	3.784	3.783	0.001	1.090	919926	1.21		101	2583	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.784	3.783	0.001	1.000	1995347	2.22	Target=4.11	95.8	1944	M
499.00 > 99.00	3.784	3.783	0.001	1.000	459970		4.34(2.05-6.16)	95.8	606	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2116548	1.25		99.8	6446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	4090183	2.46	Target=8.48	98.6	745	
463.00 > 169.00	3.803	3.803	0.0	1.000	474097		8.63(4.24-12.72)	98.6	2866	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	6453976	2.35		101	11165	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	1582540	2.32	Target=2.17	96.3	4256	
549.00 > 99.00	4.074	4.074	0.0	1.077	738106		2.14(1.08-3.25)	96.3	2145	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2307904	1.30		104	5432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	4650088	2.52	Target=10.55	101	1254	
513.00 > 169.00	4.108	4.108	0.0	1.000	427287		10.88(5.27-15.82)	101	1132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	331708	1.19		99.2	445	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	1389051	2.28		94.9	12042	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1904586	1.26		101	11251	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	3587757	2.47		98.7	5778	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.249	4.249	0.0	1.224	518571	1.22		97.7	719	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	905881	2.41		96.3	1138	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	1302171	2.48	Target=2.28	103	3082	
599.00 > 99.00	4.346	4.346	0.0	1.149	526351		2.47(1.14-3.42)	103	2245	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2158999	1.29		103	6427	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.003	4518784	2.54	Target=11.30	102	1338	
563.00 > 169.00	4.370	4.382	-0.012	1.000	385480		11.72(5.65-16.96)	102	1987	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	544137	1.33		107	1362	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	985607	2.26		90.5	993	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	9347621	2.22		94.1	9361	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.605	0.001	1.327	2062631	1.21		96.8	7038	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.606	4.616	-0.010	1.000	4182445	2.49	Target=8.15	99.6	410	
613.00 > 169.00	4.606	4.616	-0.010	1.000	492816		8.49(4.07-12.22)	99.6	2697	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.628	4.627	0.001	1.123	829529	2.28		94.4	4461	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	395113	2.22	Target=0.50	91.6	5811	
699.00 > 99.00	4.770	4.779	-0.009	1.261	796739		0.50(0.25-0.75)	91.6	3768	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.044	4556433	2.58	Target=6.61	103	378	
663.00 > 169.00	4.809	4.822	-0.013	1.044	675409		6.75(3.31-9.92)	103	3752	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2135161	1.26		101	5547	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	452708	2.37	Target=0.96	94.8	4679	
713.00 > 219.00	4.987	5.008	-0.021	0.998	484354		0.93(0.48-1.44)	94.8	3347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.317	5.328	-0.011	1.000	4643411	2.44	Target=7.69	97.7	433	
813.00 > 169.00	5.317	5.328	-0.011	1.000	592603		7.84(3.85-11.54)	97.7	1734	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2376838	1.22		97.3	4400	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	3397685	2.29	Target=9.13	91.5	226	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	378101		8.99(4.56-13.69)	91.5	321	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

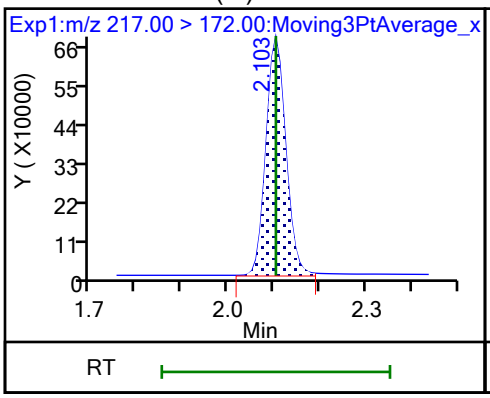
PFAS32NCIC5_00035 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:57 Chrom Revision: 2.3 19-Jul-2023 18:28:48

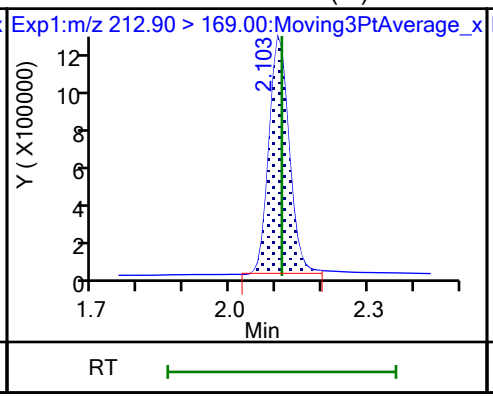
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Injection Date: 26-Jul-2023 17:49:28 Instrument ID: LC812
Lims ID: IC 5
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

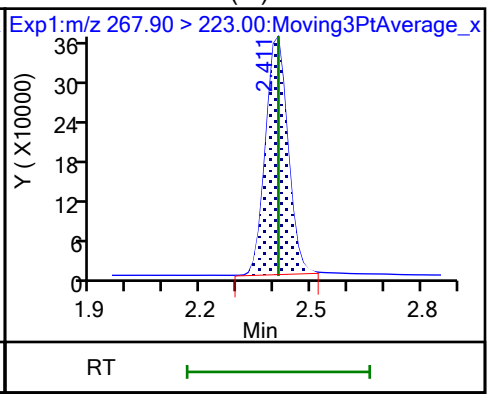
D 1 13C4 PFBA (M)



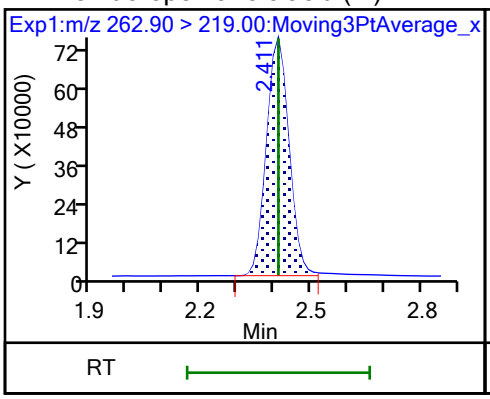
2 Perfluorobutanoic acid (M)



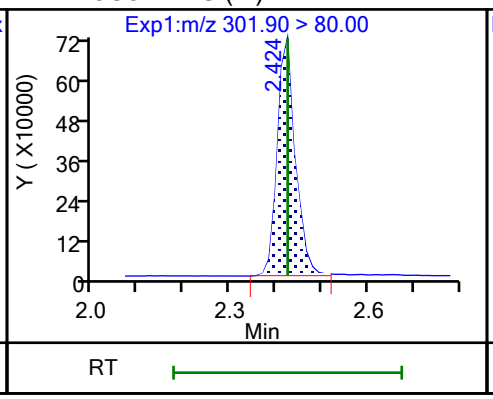
D 3 13C5 PFPeA (M)



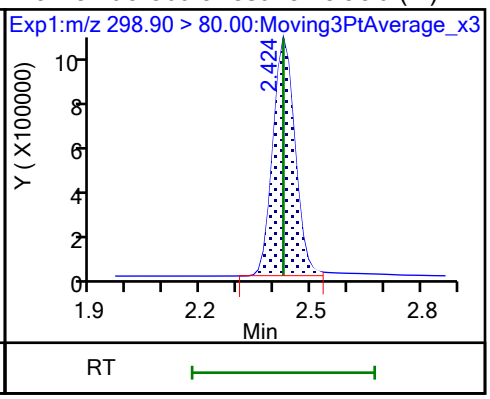
4 Perfluoropentanoic acid (M)



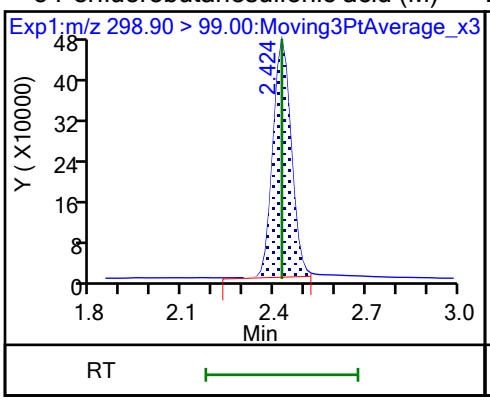
D 47 13C3 PFBS (M)



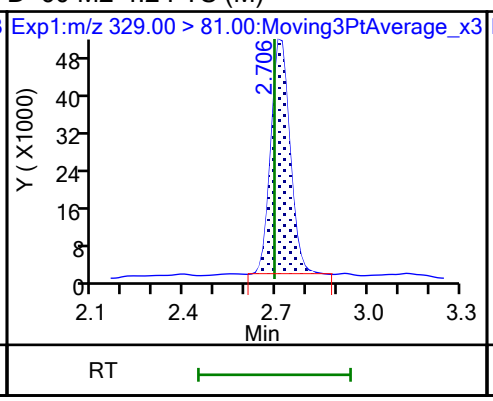
5 Perfluorobutanesulfonic acid (M)



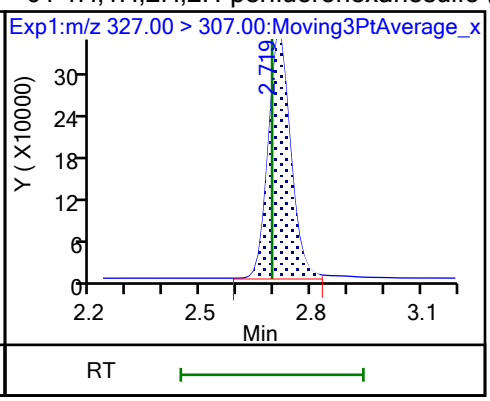
5 Perfluorobutanesulfonic acid (M)



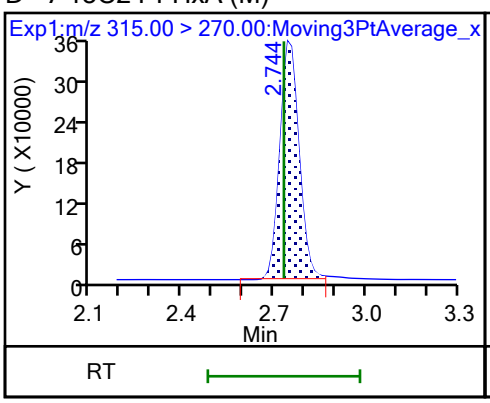
D 60 M2-4:2 FTS (M)



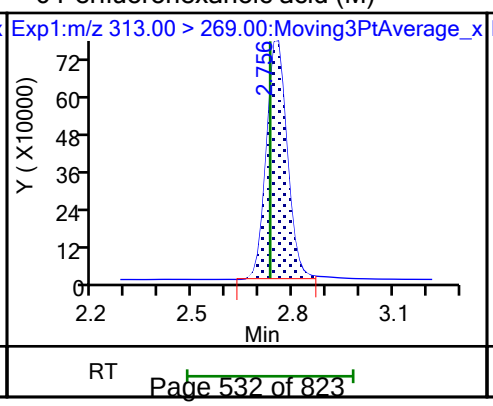
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



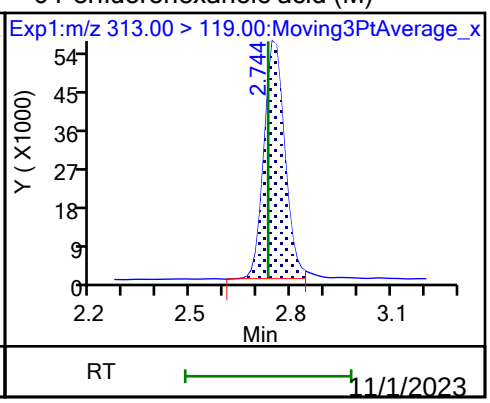
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

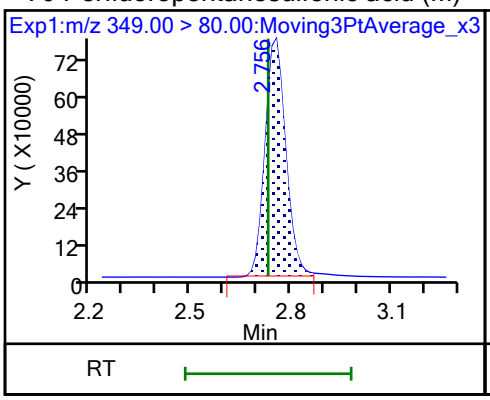


6 Perfluorohexanoic acid (M)

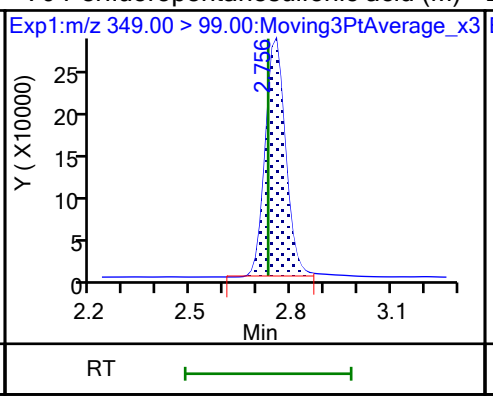


11/1/2023
12:01 PM

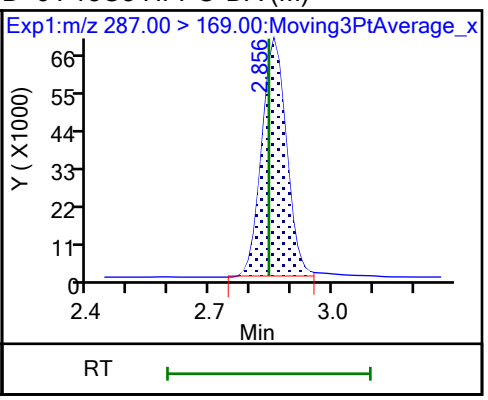
70 Perfluoropentanesulfonic acid (M)



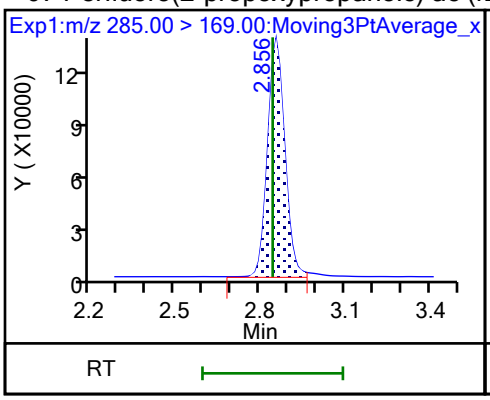
70 Perfluoropentanesulfonic acid (M)



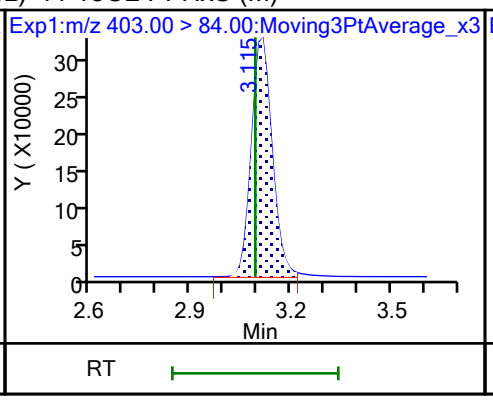
D 64 13C3 HFPO-DA (M)



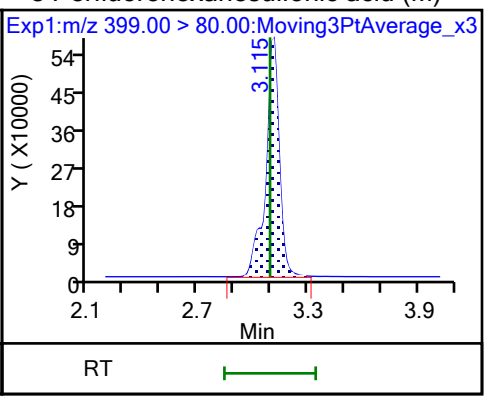
67 Perfluoro(2-propoxypropanoic) ac (M)



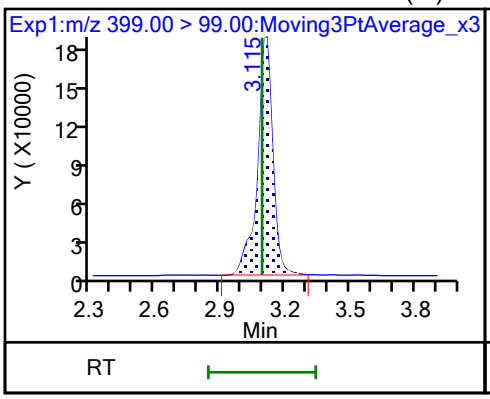
D 11 18O2 PFHxS (M)



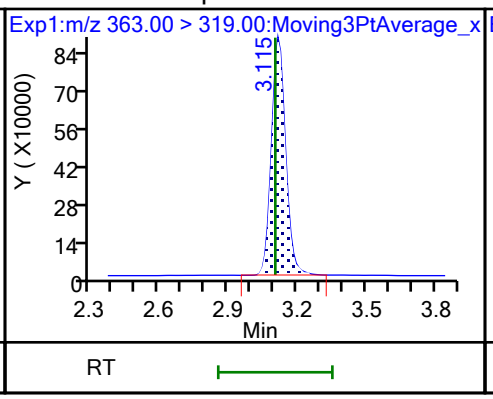
8 Perfluorohexanesulfonic acid (M)



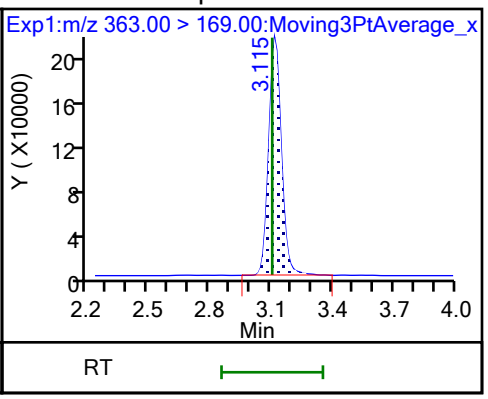
8 Perfluorohexanesulfonic acid (M)



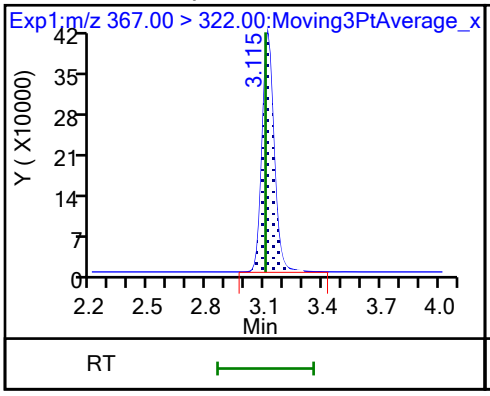
10 Perfluoroheptanoic acid



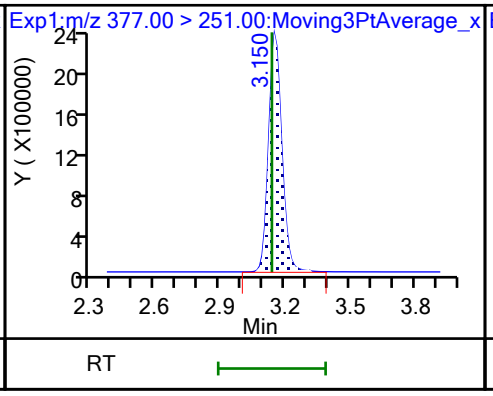
10 Perfluoroheptanoic acid



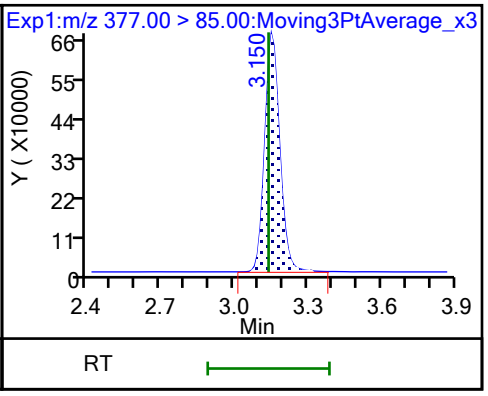
D 9 13C4 PFHpA



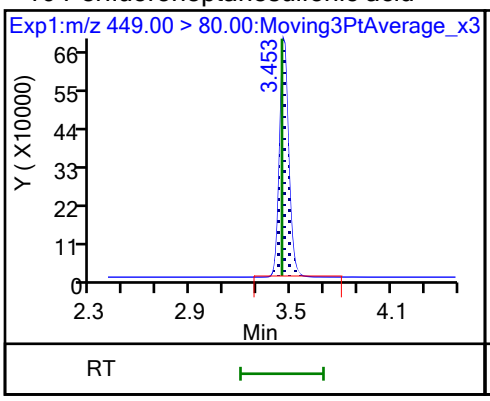
77 DONA



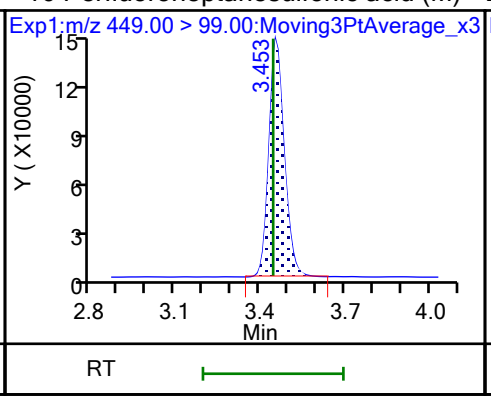
77 DONA



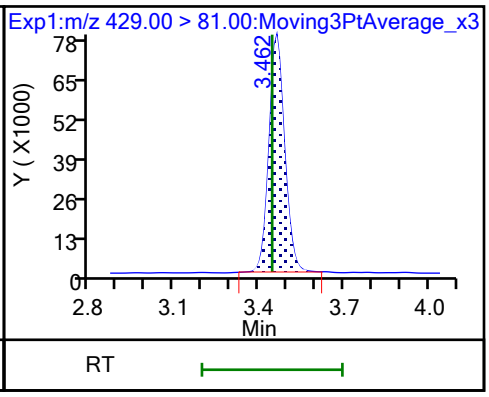
16 Perfluoroheptanesulfonic acid



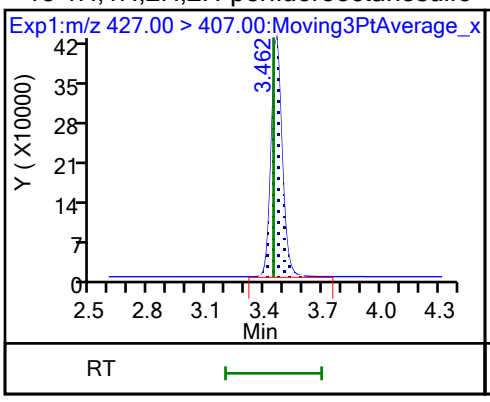
16 Perfluoroheptanesulfonic acid (M)



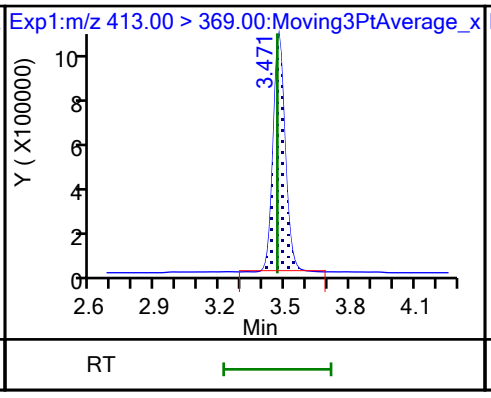
D 12 M2-6:2 FTS



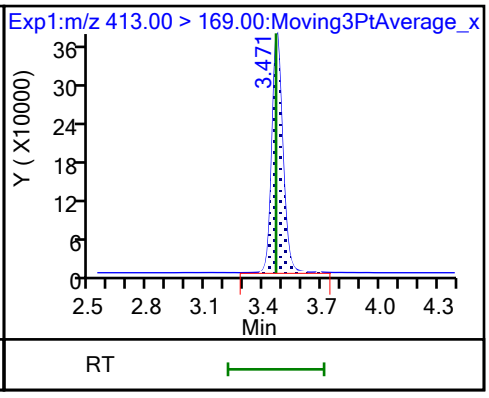
13 1H,1H,2H,2H-perfluorooctanesulfo



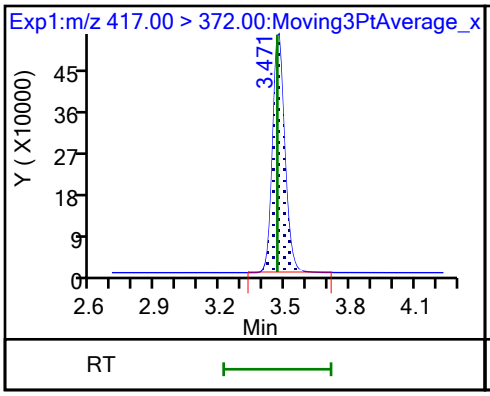
15 Perfluorooctanoic acid



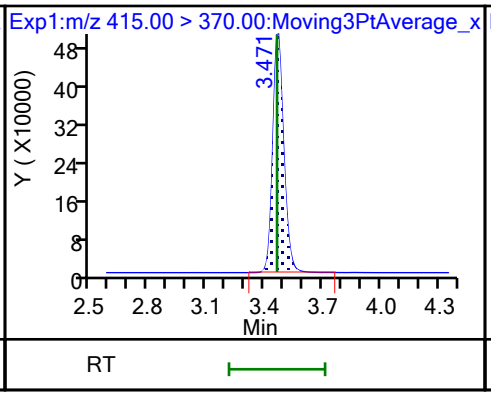
15 Perfluorooctanoic acid



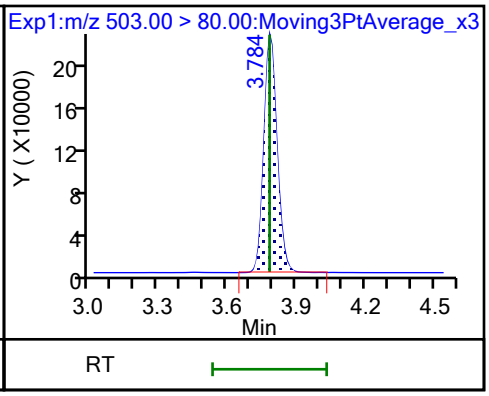
D 14 13C4 PFOA



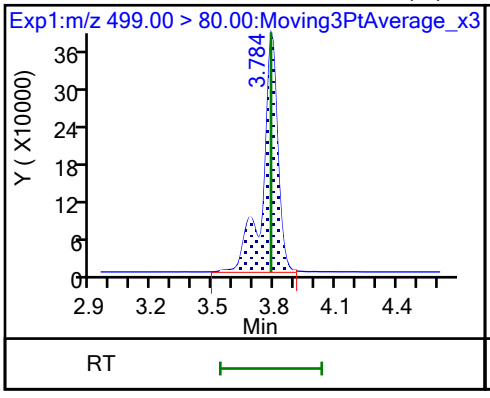
* 62 13C2 PFOA



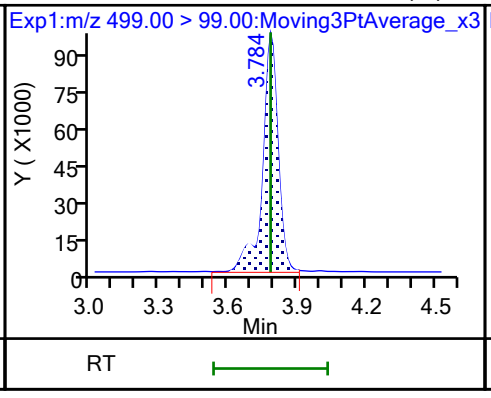
D 18 13C4 PFOS



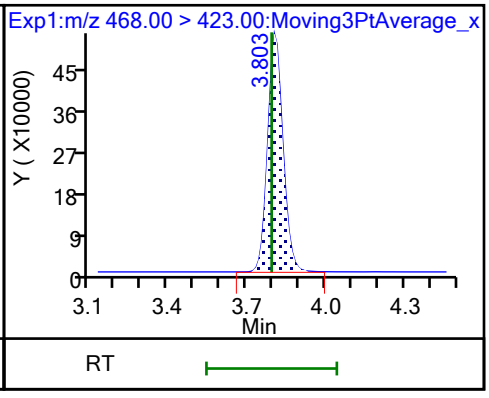
17 Perfluorooctanesulfonic acid (M)



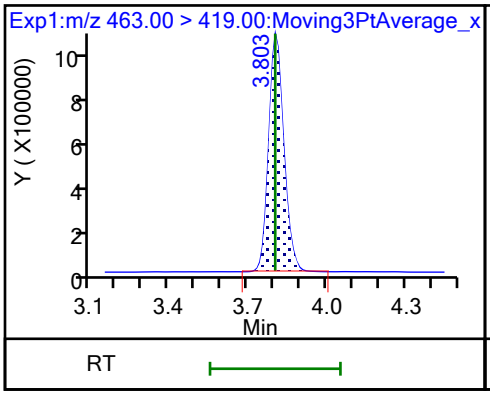
17 Perfluorooctanesulfonic acid (M)



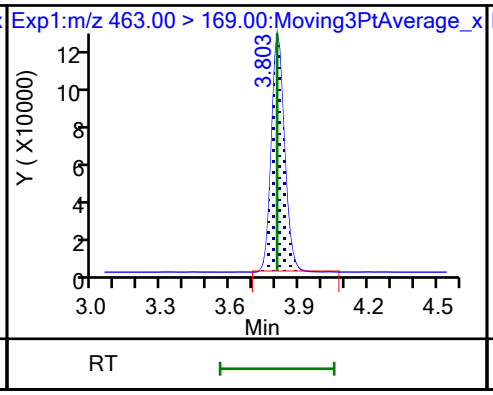
D 19 13C5 PFNA



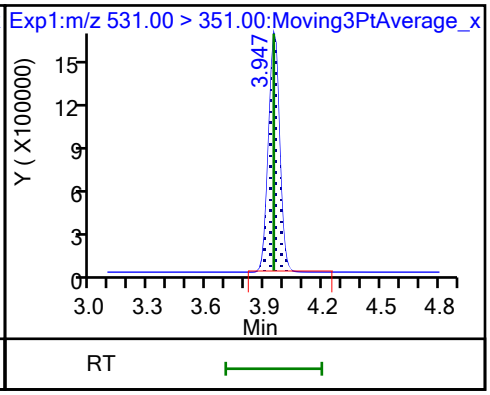
20 Perfluorononanoic acid



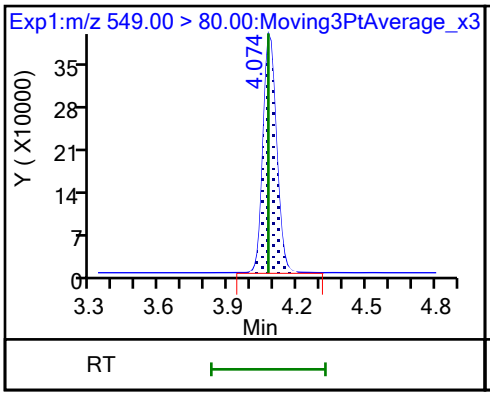
20 Perfluorononanoic acid



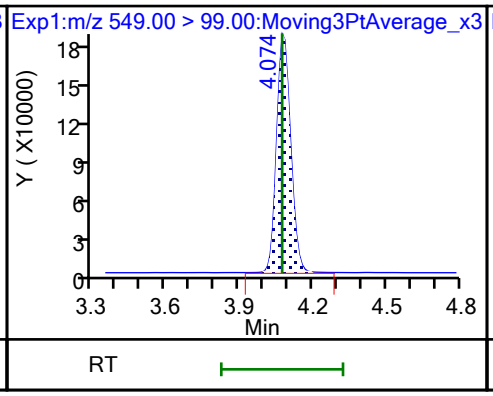
69 9-Chlorohexadecafluoro-3-oxanona



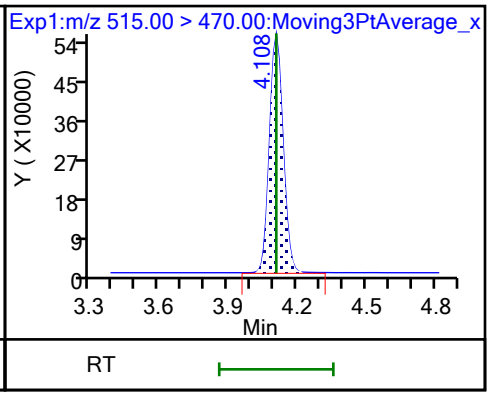
68 Perfluorononanesulfonic acid



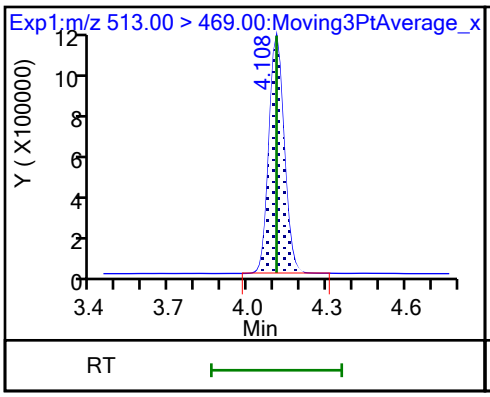
68 Perfluorononanesulfonic acid



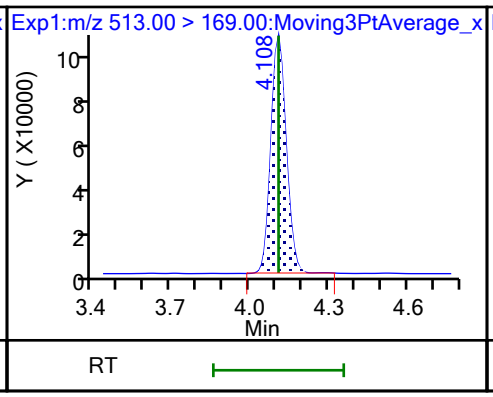
D 23 13C2 PFDA



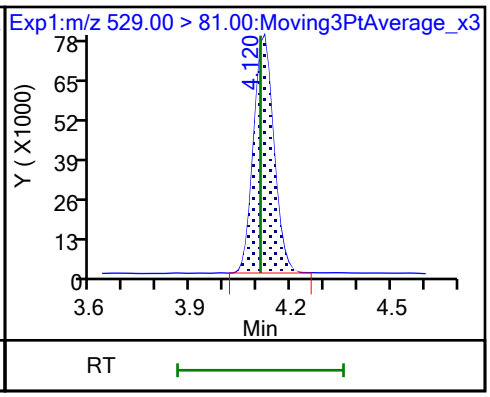
24 Perfluorodecanoic acid



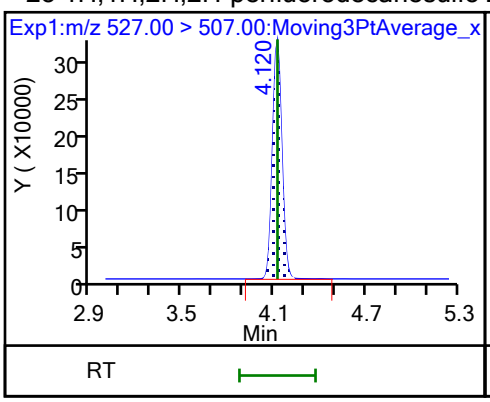
24 Perfluorodecanoic acid



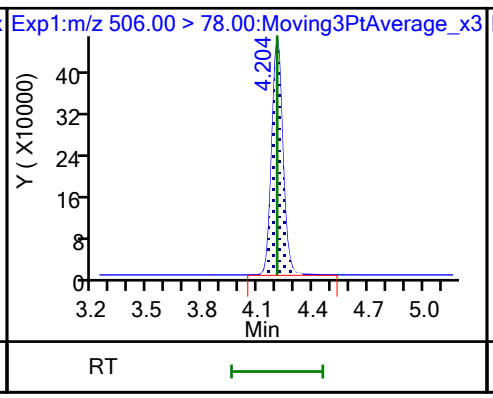
D 26 M2-8:2 FTS



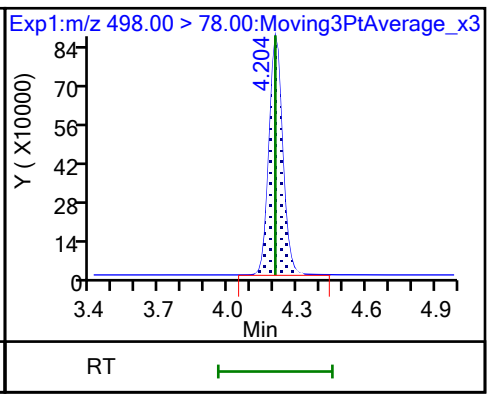
25 1H,1H,2H,2H-perfluorodecanesulfo



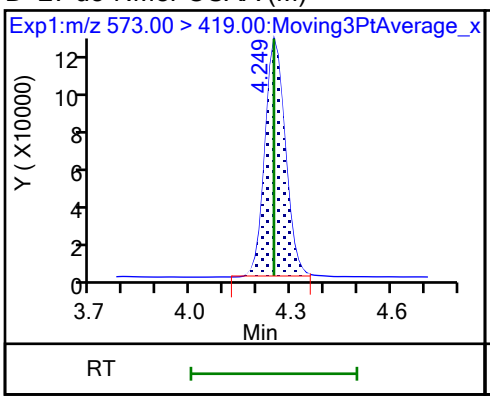
D 21 13C8 FOSA



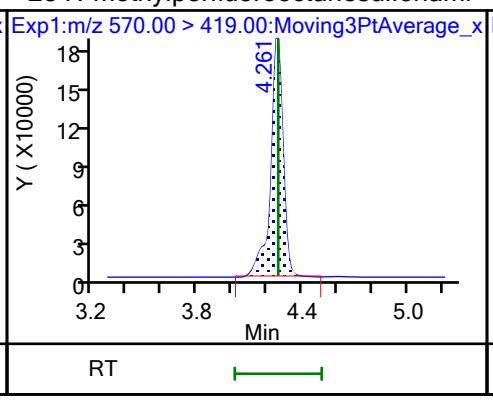
22 Perfluorooctanesulfonamide



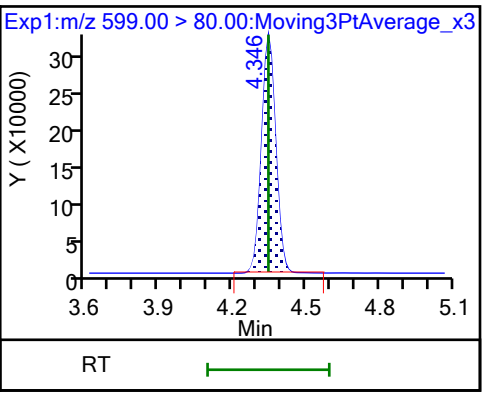
D 27 d3-NMeFOSAA (M)



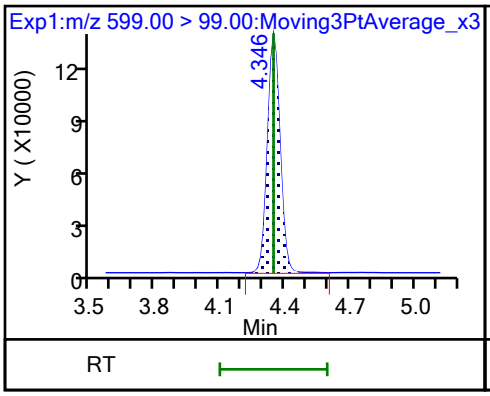
28 N-methylperfluorooctanesulfonami



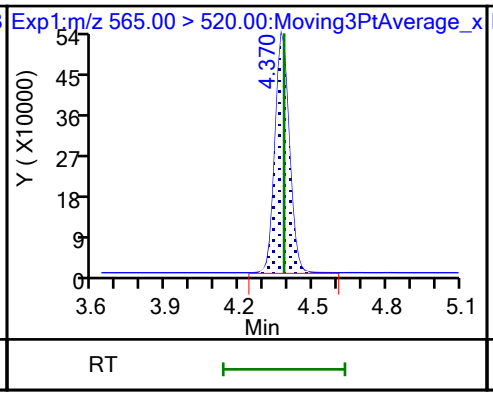
29 Perfluorodecanesulfonic acid



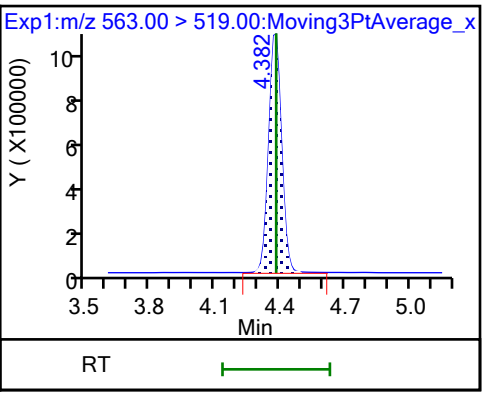
29 Perfluorodecanesulfonic acid



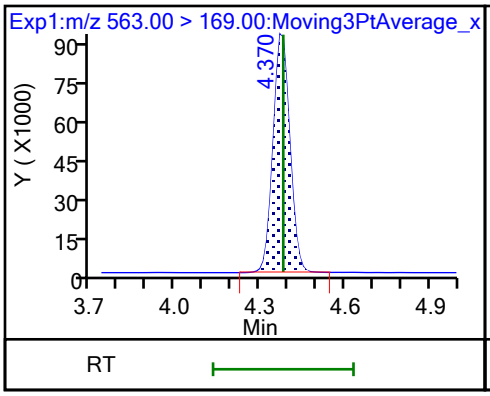
D 30 13C2 PFUnA



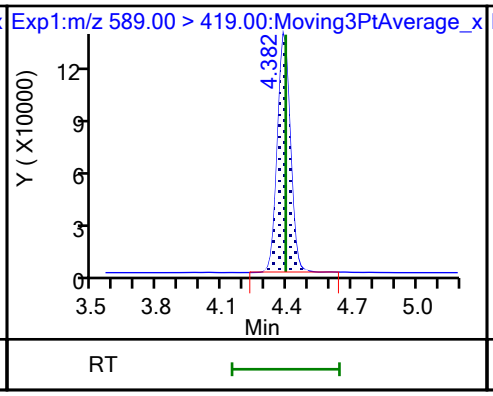
31 Perfluoroundecanoic acid



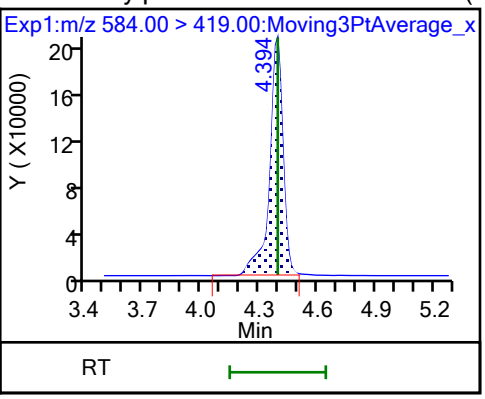
31 Perfluoroundecanoic acid



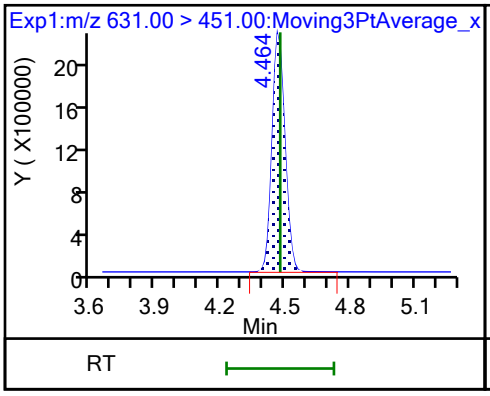
D 32 d5-NEtFOSAA



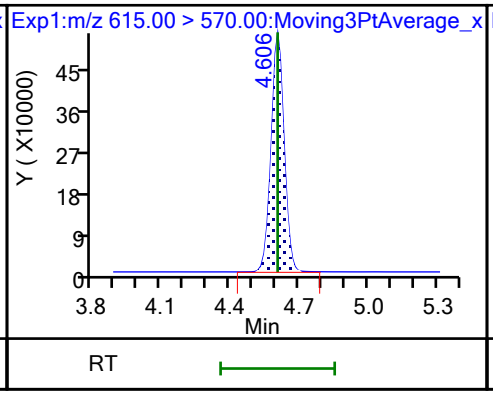
33 N-ethylperfluorooctanesulfonamid (M)



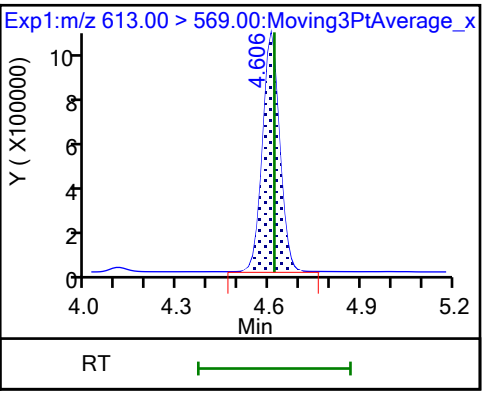
66 11-Chloroeicosafluoro-3-oxaundec



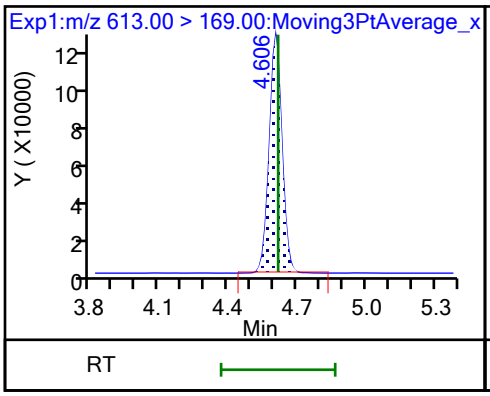
D 36 13C2 PFDoA



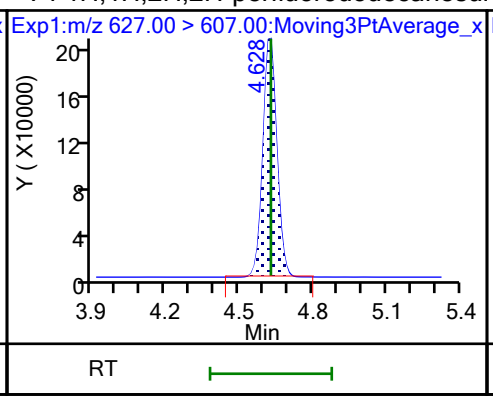
37 Perfluorododecanoic acid



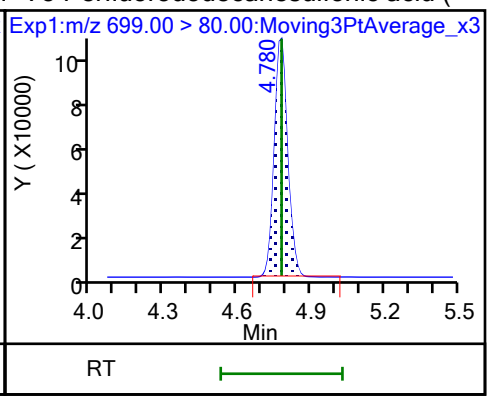
37 Perfluorododecanoic acid



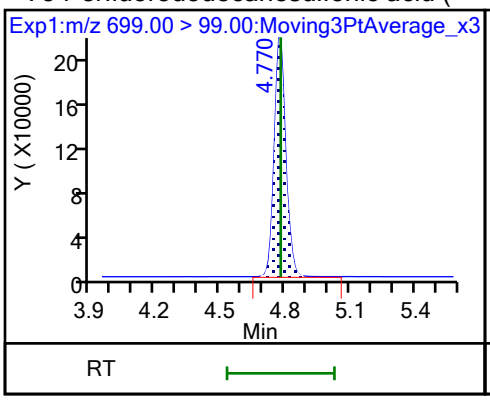
74 1H,1H,2H,2H-perfluorododecanesul



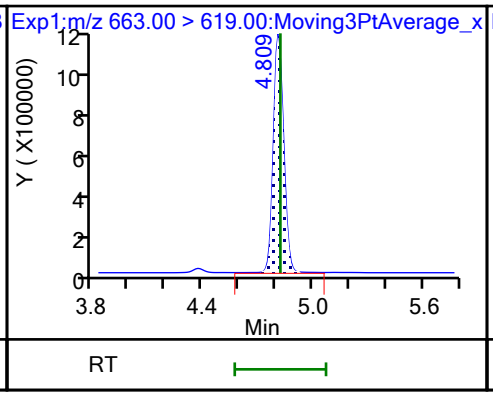
75 Perfluorododecanesulfonic acid (



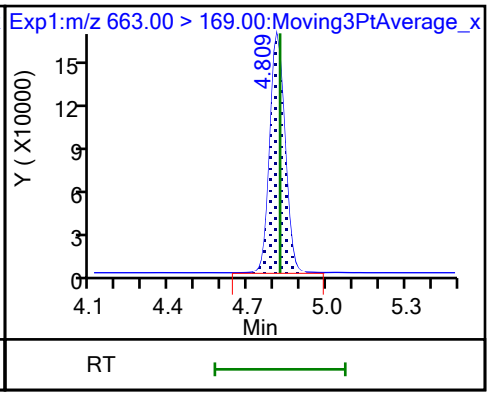
75 Perfluorododecanesulfonic acid (



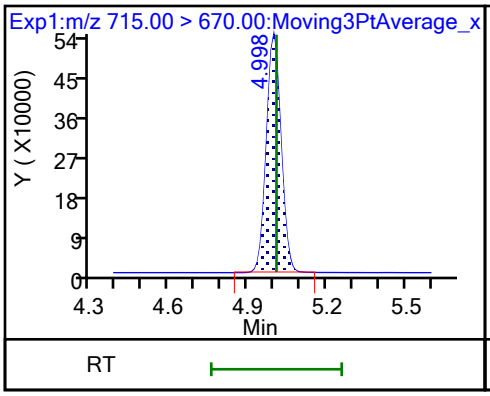
41 Perfluorotridecanoic acid



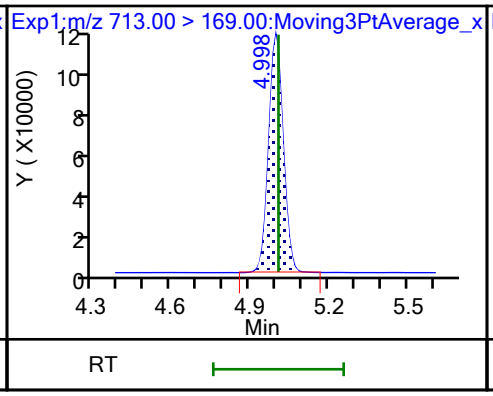
41 Perfluorotridecanoic acid



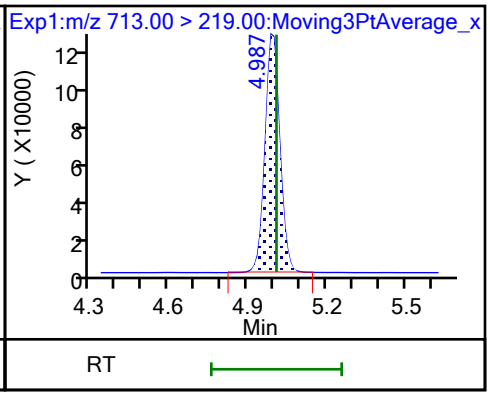
D 43 13C2 PFTeDA



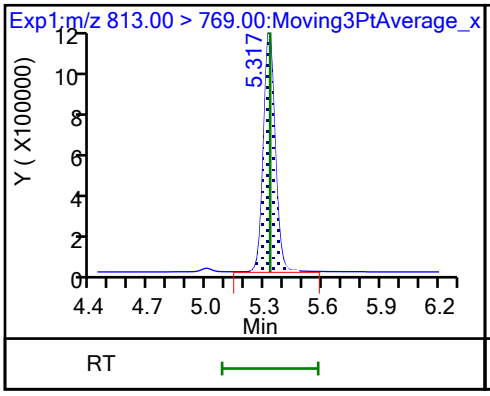
42 Perfluorotetradecanoic acid



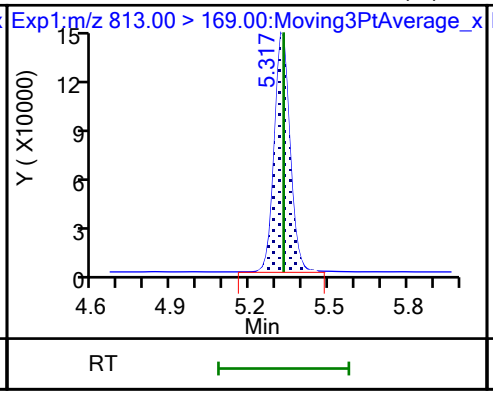
42 Perfluorotetradecanoic acid



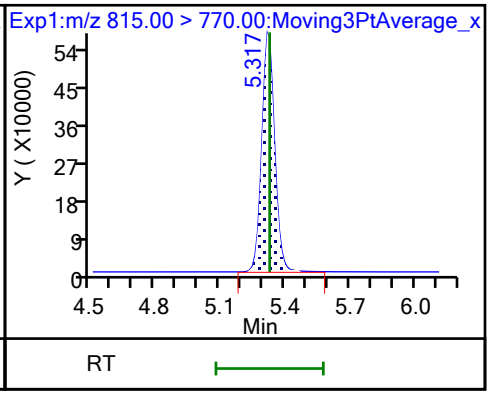
45 Perfluorohexadecanoic acid



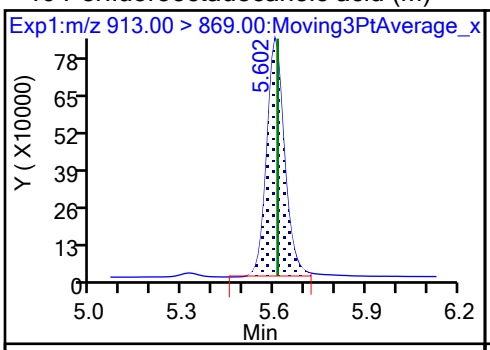
45 Perfluorohexadecanoic acid (M)



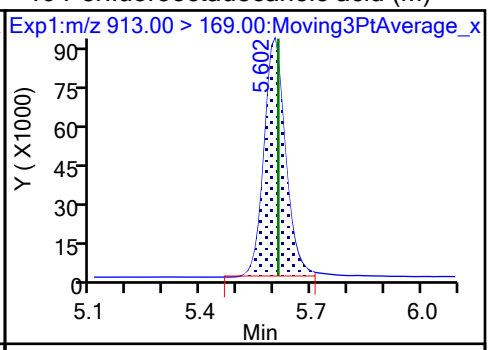
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Jul-2023 17:57:38 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 200-0056441-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:11:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	1663241	1.20		95.9	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	12675387	10.5		105	832	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1291692	1.20		96.0	717	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	11390973	10.2		102	344	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1657995	1.14		97.9	71060	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	13919716	8.74	Target=2.07	98.5	587	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	6698425		2.08(1.04-3.11)	98.5	540	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	194992	1.16		99.1	74.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	5267048	9.29		99.1	971	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.756	2.731	0.025	0.794	1345799	1.23		98.3	1043	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.756	2.731	0.025	1.000	11510430	9.72	Target=14.29	97.2	1512	
313.00 > 119.00	2.756	2.731	0.025	1.000	852173		13.51(7.15-21.44)	97.2	531	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.768	2.731	0.037	0.889	12787110	9.32	Target=2.78	99.1	25077	
349.00 > 99.00	2.756	2.731	0.025	0.885	4667101		2.74(1.39-4.17)	99.1	3572	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.869	2.844	0.025	0.826	265620	1.25		100	1509	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.869	2.844	0.025	1.000	2096317	9.85		98.5	8124	
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.897	1242233	1.19		101	4445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	10346652	8.90	Target=3.23	97.3	5752	
399.00 > 99.00	3.115	3.092	0.023	1.000	3264172		3.17(1.62-4.84)	97.3	1903	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.127	3.104	0.023	1.000	13183148	10.0	Target=4.11	100	2397	
363.00 > 169.00	3.127	3.104	0.023	1.000	3246220		4.06(2.06-6.17)	100	2137	
D 9 13C4 PFHpA										
367.00 > 322.00	3.127	3.104	0.023	0.901	1466571	1.22		97.6	3939	
77 DONA										
377.00 > 251.00	3.161	3.138	0.023	0.833	32898209	8.92	Target=3.28	94.4	23285	
377.00 > 85.00	3.161	3.138	0.023	0.833	10971378		3.00(1.64-4.92)	94.4	8094	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.462	3.446	0.016	0.913	9291673	10.0	Target=4.71	105	9326	
449.00 > 99.00	3.462	3.446	0.016	0.913	1923167		4.83(2.36-7.07)	105	2597	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	250039	1.15		97.0	319	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	5360896	9.32		98.0	3149	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.480	3.464	0.016	1.000	13504480	9.37	Target=2.90	93.7	1069	
413.00 > 169.00	3.480	3.464	0.016	1.000	4762707		2.84(1.45-4.35)	93.7	6332	
D 14 13C4 PFOA										
417.00 > 372.00	3.480	3.464	0.016	1.003	1691186	1.24		99.4	4091	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		1749133	1.25			3853	
D 18 13C4 PFOS										
503.00 > 80.00	3.793	3.783	0.010	1.093	765818	1.15		96.6	1062	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.000	6987392	9.35	Target=4.11	101	3645	M
499.00 > 99.00	3.783	3.783	0.0	0.997	1609293		4.34(2.05-6.16)	101	1686	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1889768	1.28		102	5845	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	14082035	9.50	Target=8.48	95.0	2121	
463.00 > 169.00	3.814	3.803	0.011	1.003	1663440		8.47(4.24-12.72)	95.0	6569	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.043	21405197	9.36		100	14512	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.077	5744699	10.1	Target=2.17	105	9927	
549.00 > 99.00	4.084	4.074	0.010	1.077	2540483		2.26(1.08-3.25)	105	4161	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	1979736	1.28		102	4717	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	15207258	9.61	Target=10.55	96.1	3130	
513.00 > 169.00	4.108	4.108	0.0	1.000	1435944		10.59(5.27-15.82)	96.1	3360	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	309678	1.27		106	551	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	4983035	8.75		91.2	118767	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1724931	1.30		104	4594	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	13020569	9.89		98.9	8748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	465286	1.25		100	354	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	3280076	9.71		97.1	1965	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.146	4450137	10.2	Target=2.28	105	9388	
599.00 > 99.00	4.346	4.346	0.0	1.146	1850008		2.41(1.14-3.42)	105	4976	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.262	1818926	1.24		99.3	12538	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	14323125	9.55	Target=11.30	95.5	3667	
563.00 > 169.00	4.382	4.382	0.0	1.000	1240618		11.55(5.65-16.96)	95.5	7177	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	456350	1.28		102	1074	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.394	4.393	0.001	1.003	3409503	9.34		93.4	39384	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.177	29976782	8.55		90.6	25762	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	1800020	1.21		96.7	6856	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	14693173	10.0	Target=8.15	100	1405	
613.00 > 169.00	4.605	4.616	-0.011	1.000	1710081		8.59(4.07-12.22)	100	10412	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	3151402	9.26		96.1	16125	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.260	1445002	9.74	Target=0.50	101	8185	
699.00 > 99.00	4.780	4.779	0.001	1.260	2914789		0.50(0.25-0.75)	101	8974	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	14866529	9.65	Target=6.61	96.5	1279	
663.00 > 169.00	4.808	4.822	-0.014	1.044	2252925		6.60(3.31-9.92)	96.5	4587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	1876594	1.27		101	6427	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.997	5.008	-0.011	1.000	1575221	9.38	Target=0.96	93.8	6626	
713.00 > 219.00	4.997	5.008	-0.011	1.000	1663605		0.95(0.48-1.44)	93.8	6338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.002	15997184	9.75	Target=7.69	97.5	1329	
813.00 > 169.00	5.317	5.328	-0.011	1.000	2021184		7.91(3.85-11.54)	97.5	3771	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2051028	1.20		96.1	4731	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	12548221	9.79	Target=9.13	97.9	379	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	1429786		8.78(4.56-13.69)	97.9	466	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

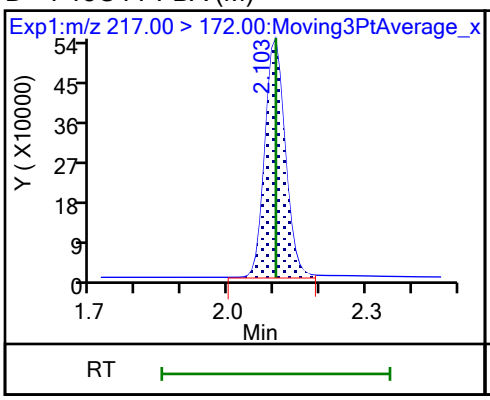
PFAS32NCIC6_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:03 Chrom Revision: 2.3 19-Jul-2023 18:28:48

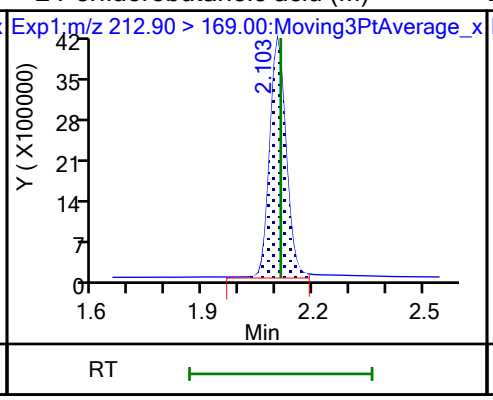
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Injection Date: 26-Jul-2023 17:57:38 Instrument ID: LC812
Lims ID: IC 6
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

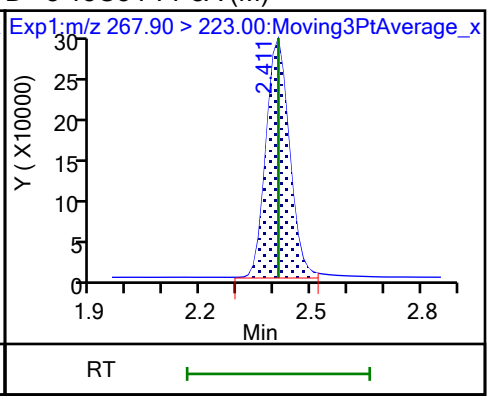
D 1 13C4 PFBA (M)



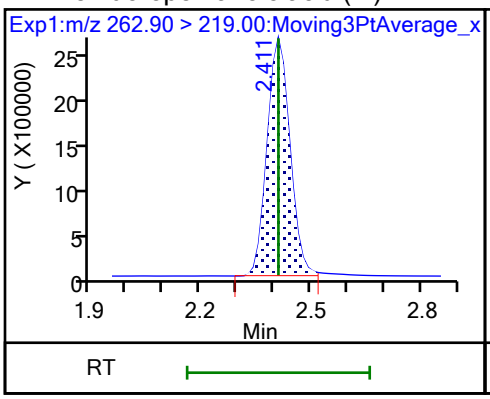
2 Perfluorobutanoic acid (M)



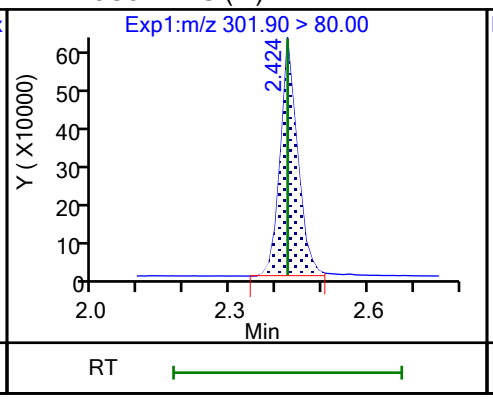
D 3 13C5 PFPeA (M)



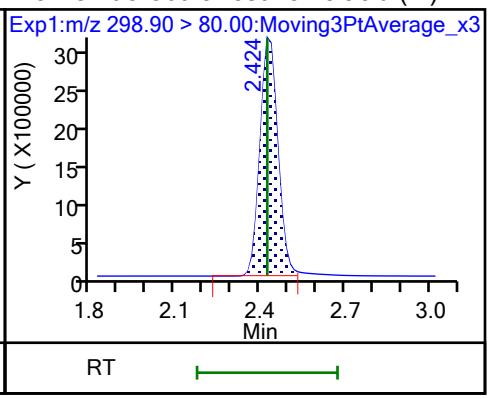
4 Perfluoropentanoic acid (M)



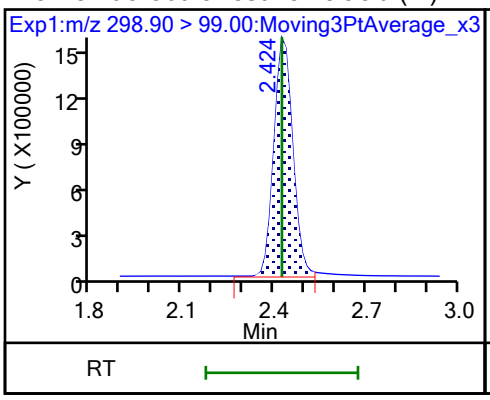
D 47 13C3 PFBS (M)



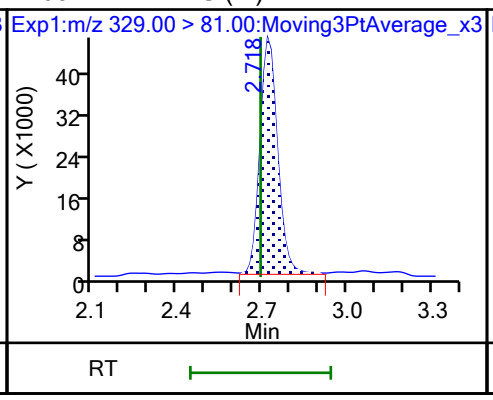
5 Perfluorobutanesulfonic acid (M)



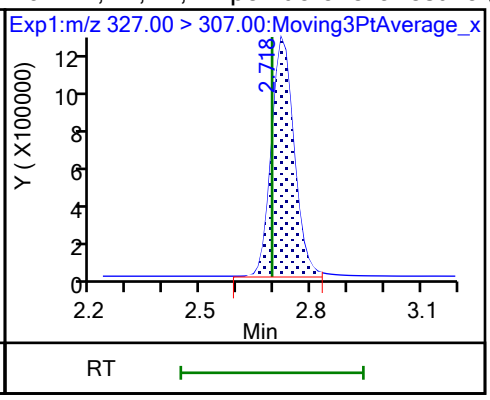
5 Perfluorobutanesulfonic acid (M)



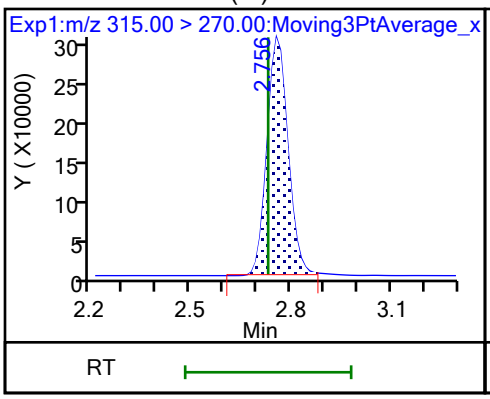
D 60 M2-4:2 FTS (M)



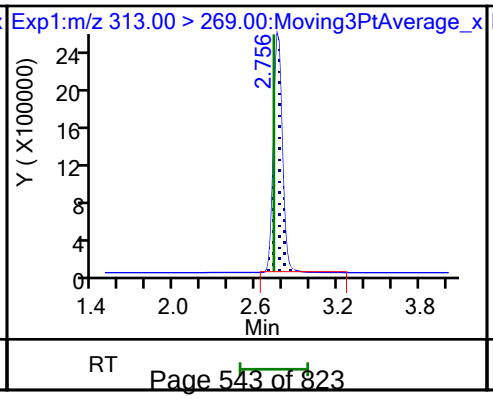
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



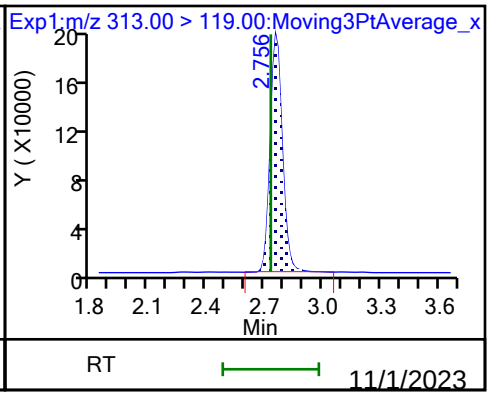
D 7 13C2 PFHxA (M)



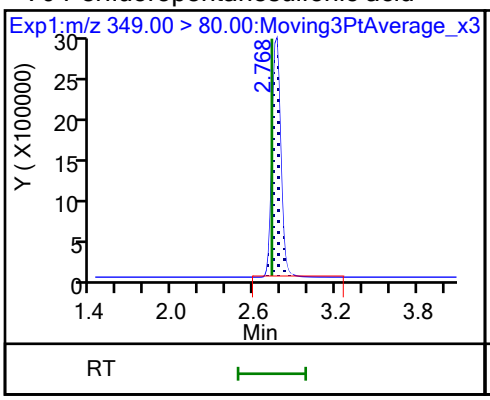
6 Perfluorohexanoic acid



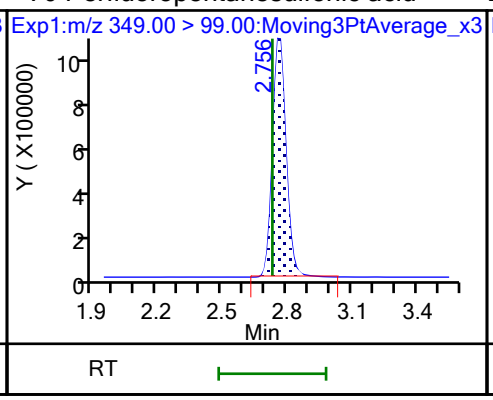
6 Perfluorohexanoic acid



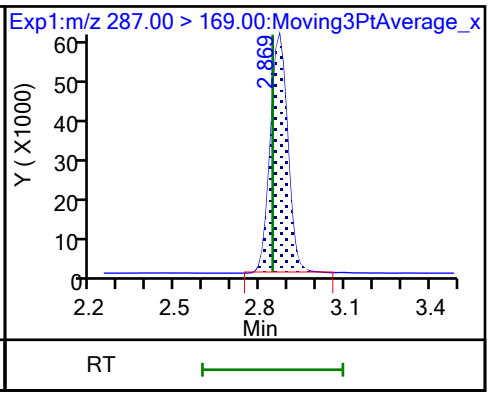
70 Perfluoropentanesulfonic acid



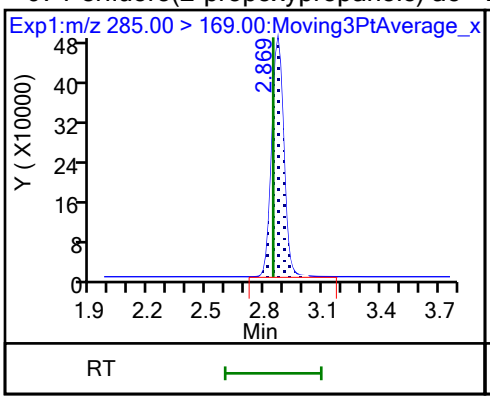
70 Perfluoropentanesulfonic acid



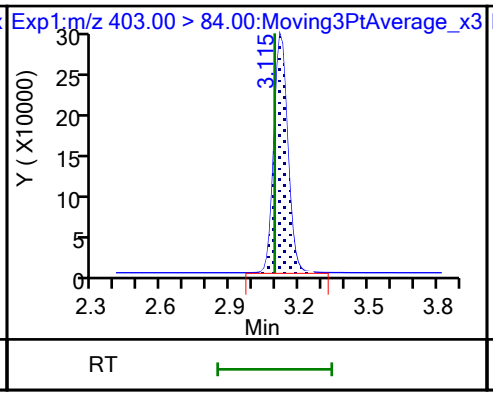
D 64 13C3 HFPO-DA



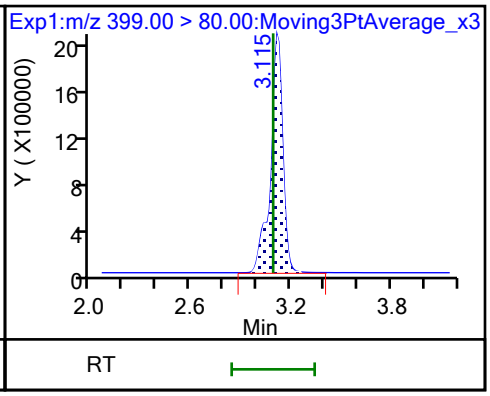
67 Perfluoro(2-propoxypropanoic) ac



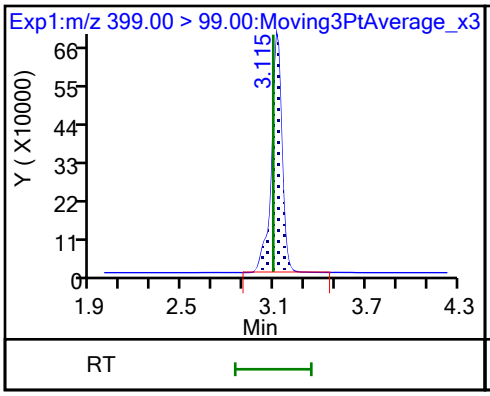
D 11 18O2 PFHxS



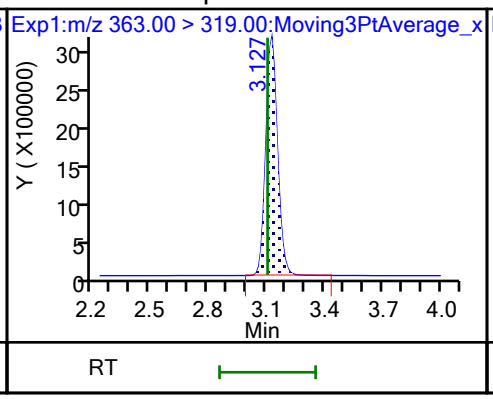
8 Perfluorohexanesulfonic acid



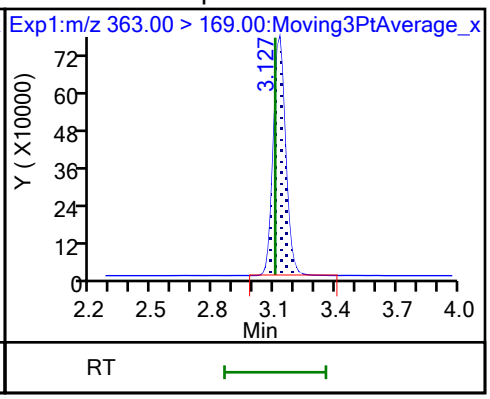
8 Perfluorohexanesulfonic acid



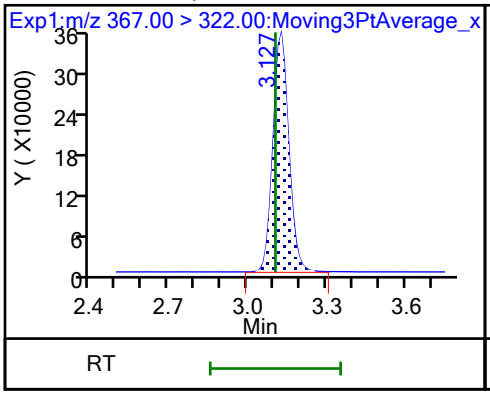
10 Perfluoroheptanoic acid



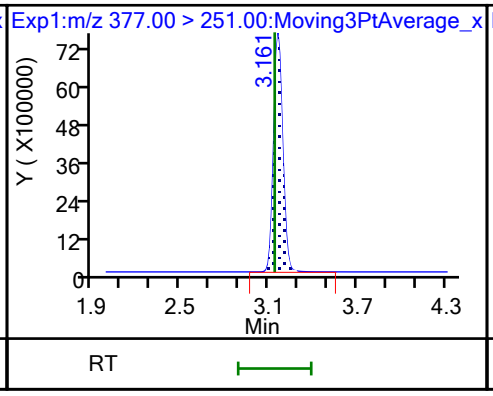
10 Perfluoroheptanoic acid



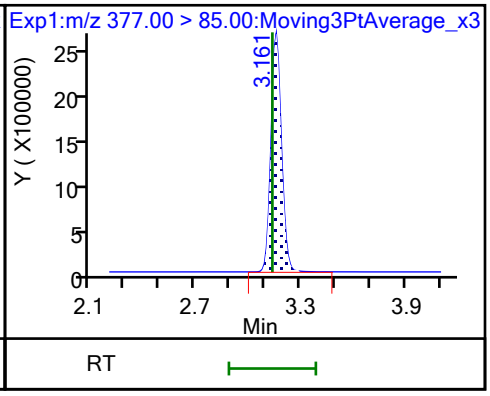
D 9 13C4 PFHpA



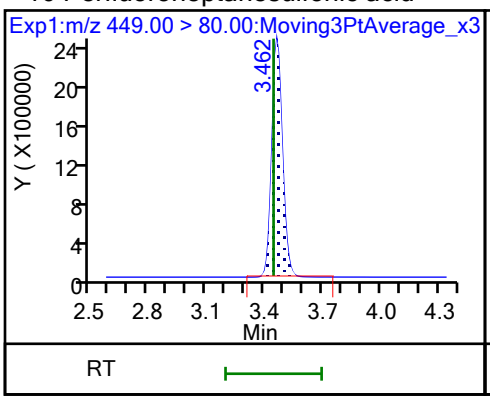
77 DONA



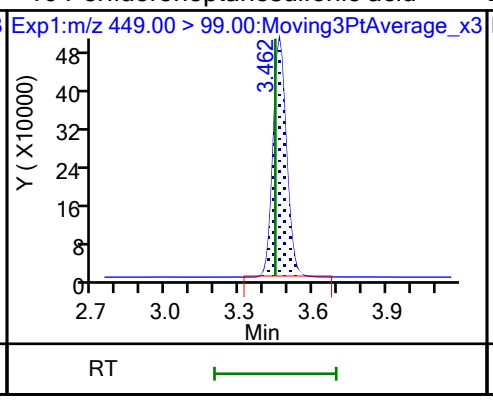
77 DONA



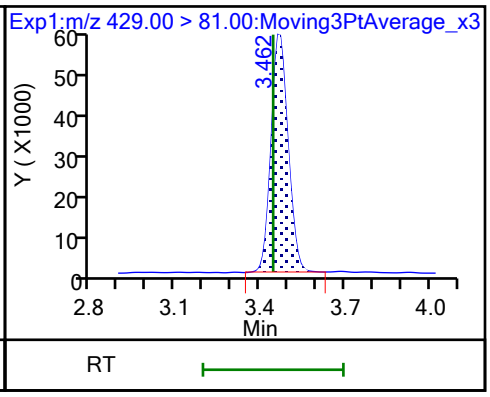
16 Perfluoroheptanesulfonic acid



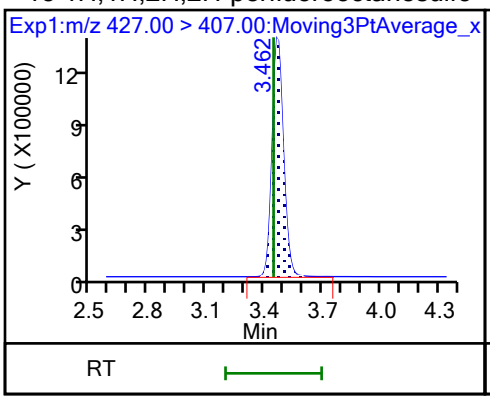
16 Perfluoroheptanesulfonic acid



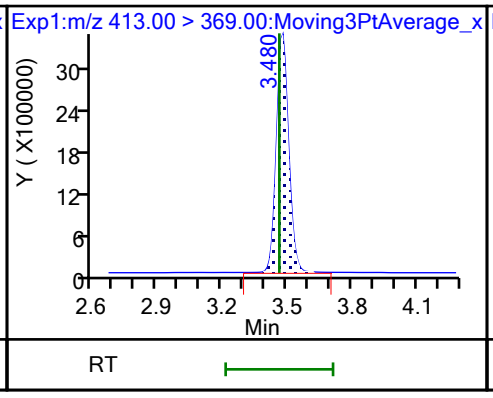
D 12 M2-6:2 FTS



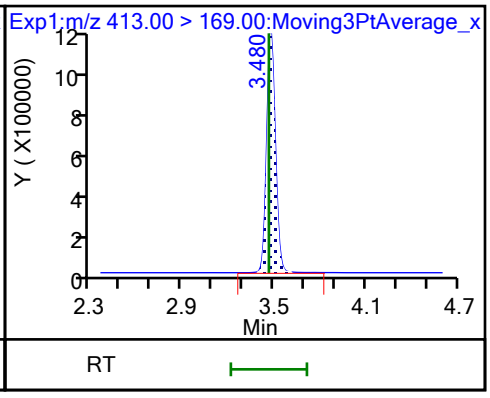
13 1H,1H,2H,2H-perfluorooctanesulfo



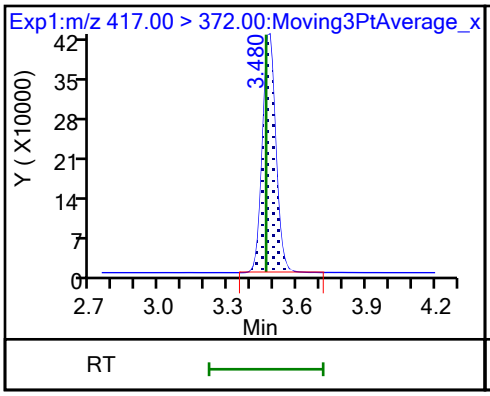
15 Perfluorooctanoic acid



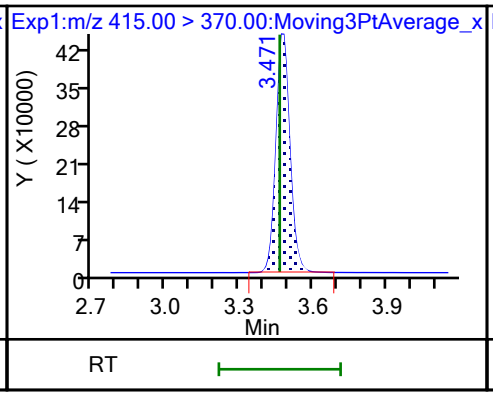
15 Perfluorooctanoic acid



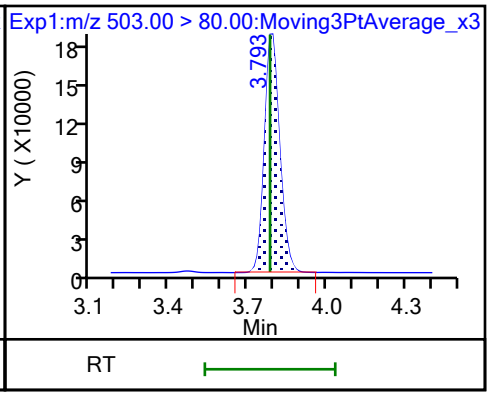
D 14 13C4 PFOA



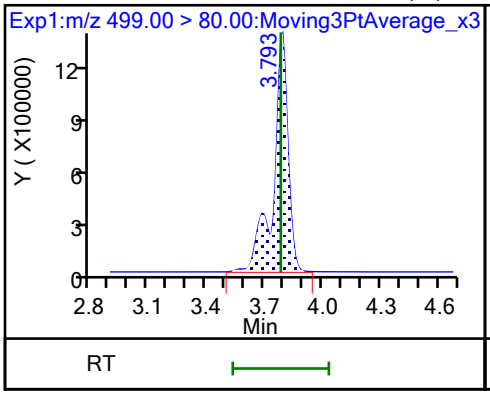
* 62 13C2 PFOA



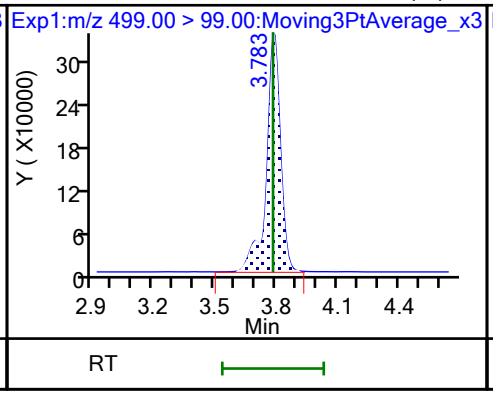
D 18 13C4 PFOS



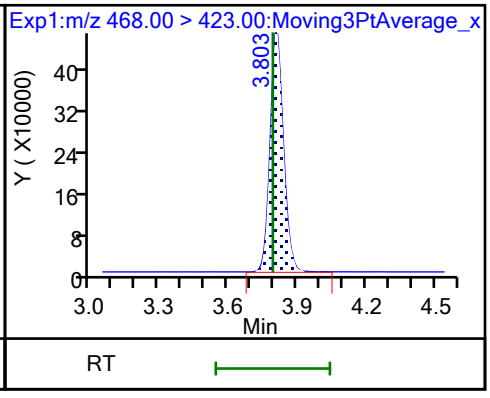
17 Perfluorooctanesulfonic acid (M)



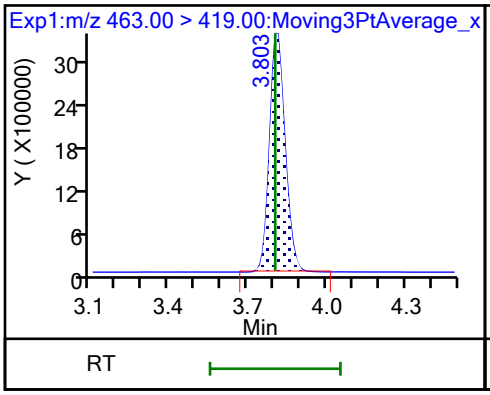
17 Perfluorooctanesulfonic acid (M)



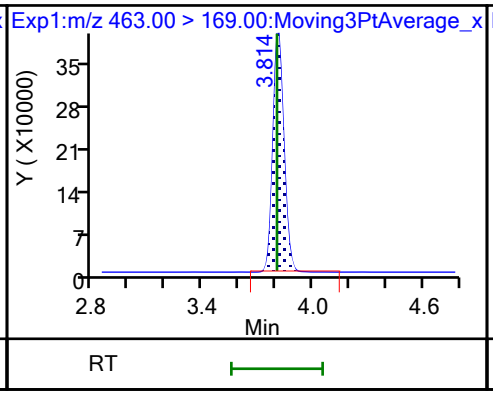
D 19 13C5 PFNA



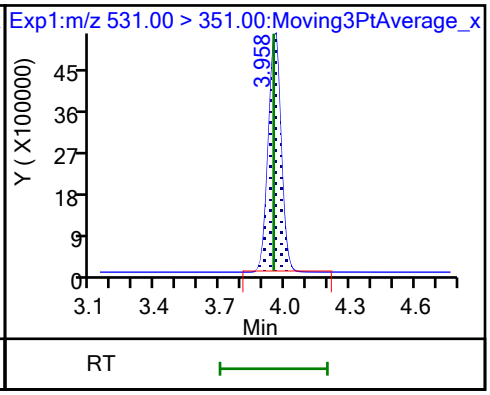
20 Perfluorononanoic acid



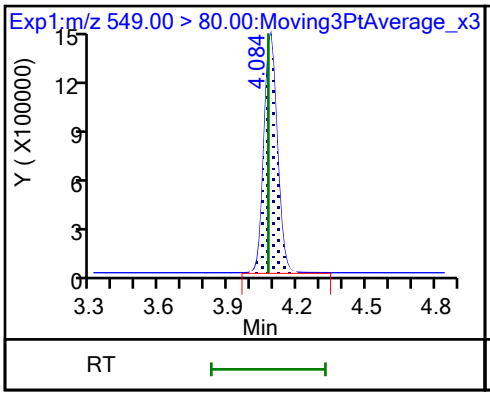
20 Perfluorononanoic acid



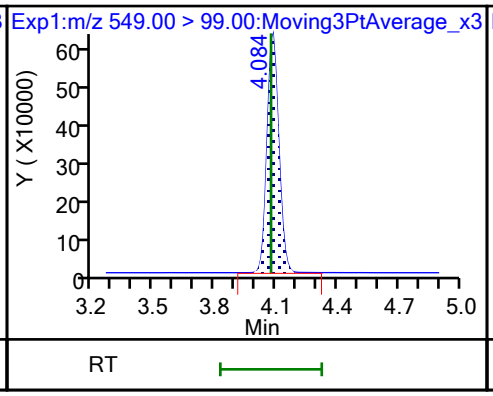
69 9-Chlorohexadecafluoro-3-oxanona



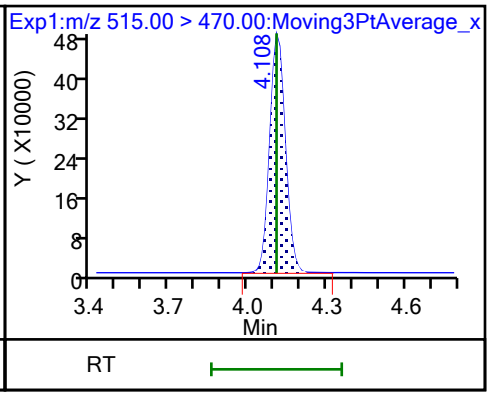
68 Perfluorononanesulfonic acid



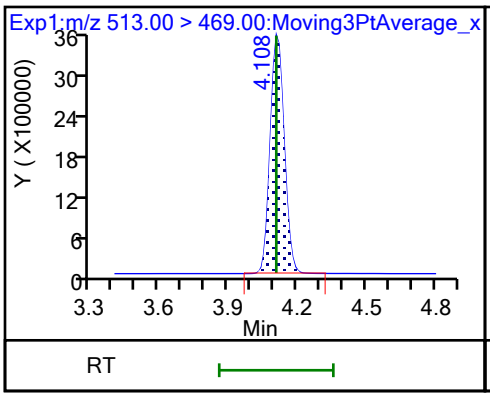
68 Perfluorononanesulfonic acid



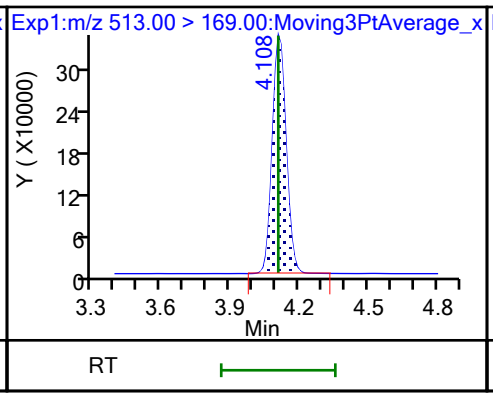
D 23 13C2 PFDA



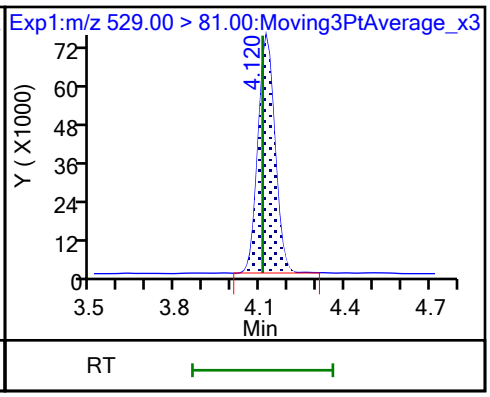
24 Perfluorodecanoic acid



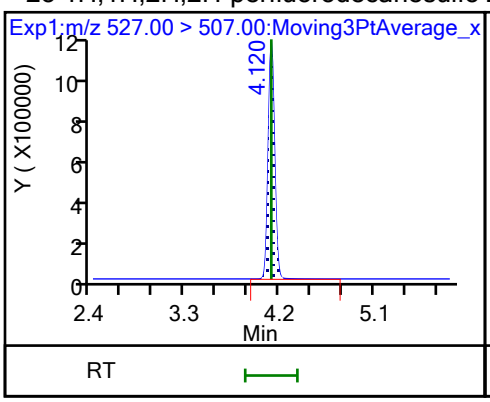
24 Perfluorodecanoic acid



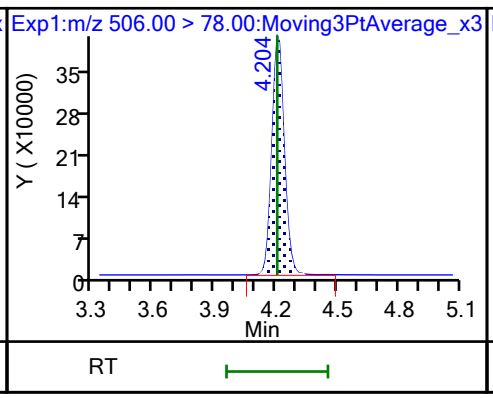
D 26 M2-8:2 FTS



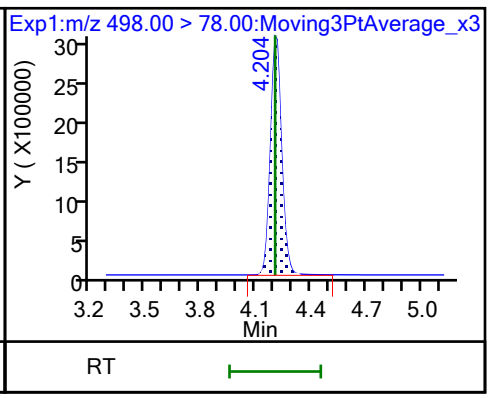
25 1H,1H,2H,2H-perfluorodecanesulfo



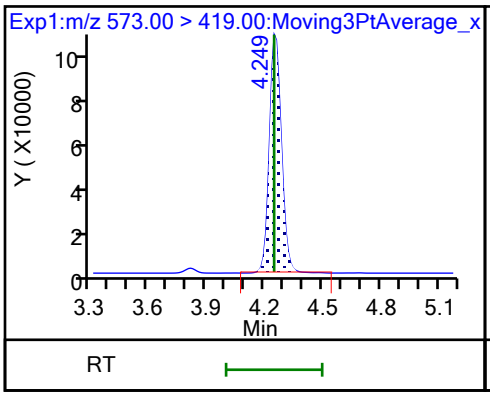
D 21 13C8 FOSA



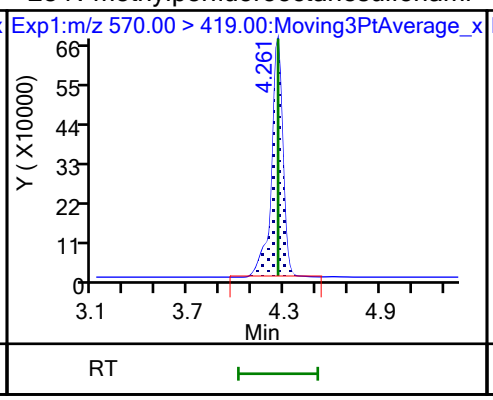
22 Perfluorooctanesulfonamide



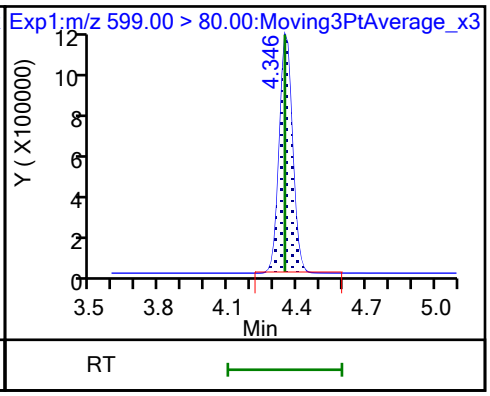
D 27 d3-NMeFOSAA



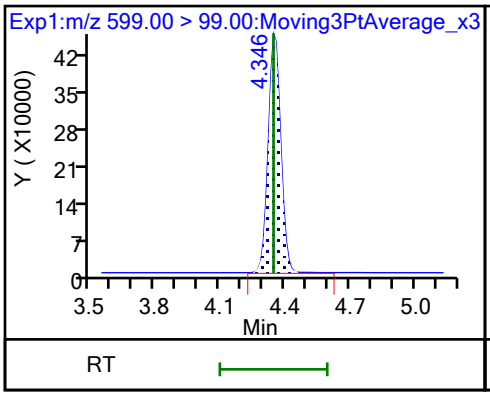
28 N-methylperfluorooctanesulfonami



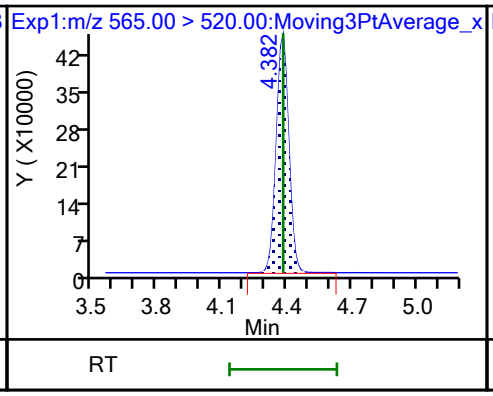
29 Perfluorodecanesulfonic acid



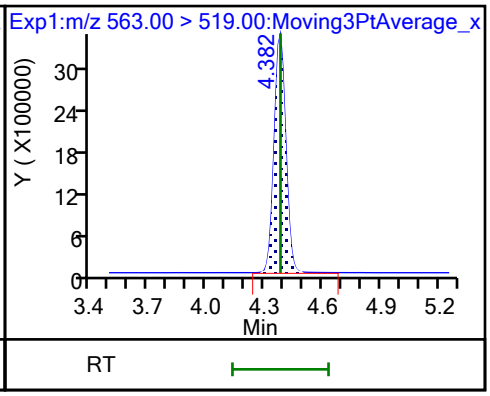
29 Perfluorodecanesulfonic acid



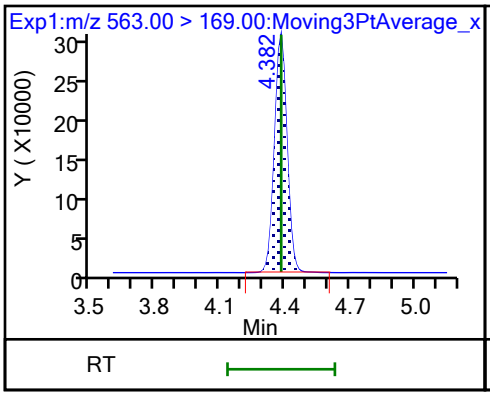
D 30 13C2 PFUnA



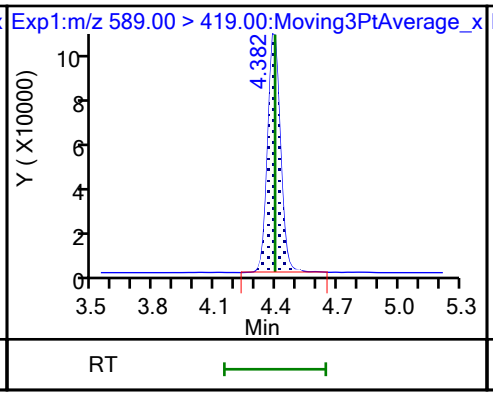
31 Perfluoroundecanoic acid



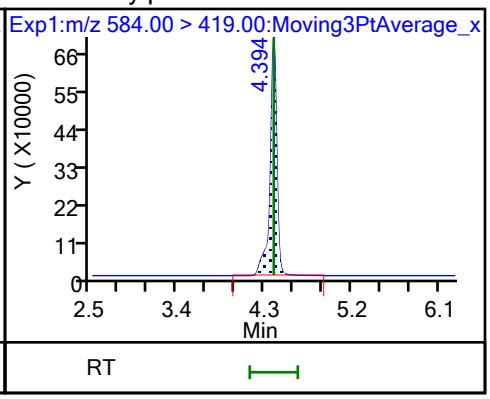
31 Perfluoroundecanoic acid



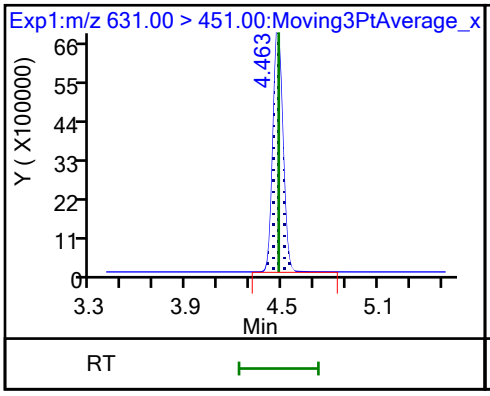
D 32 d5-NEtFOSAA



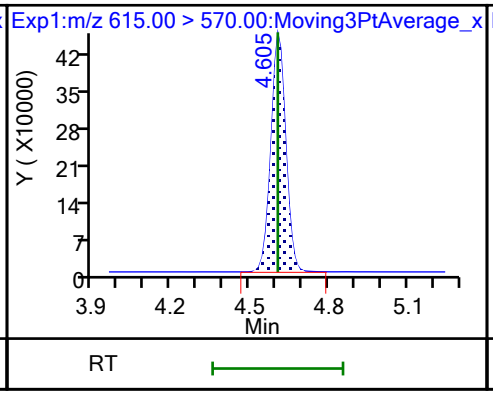
33 N-ethylperfluorooctanesulfonamid



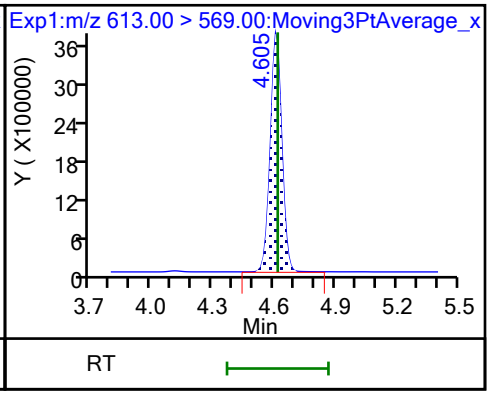
66 11-Chloroeicosafluoro-3-oxaundec



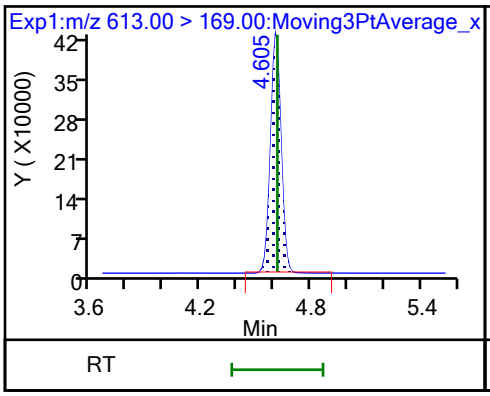
D 36 13C2 PFDoA



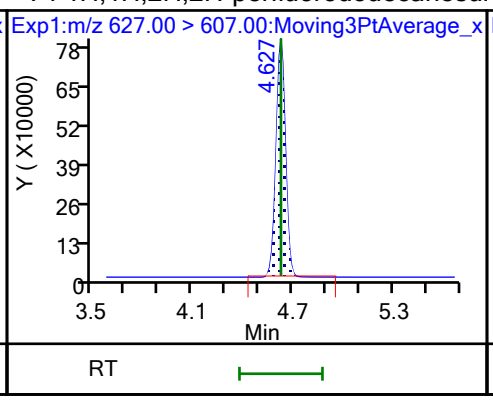
37 Perfluorododecanoic acid



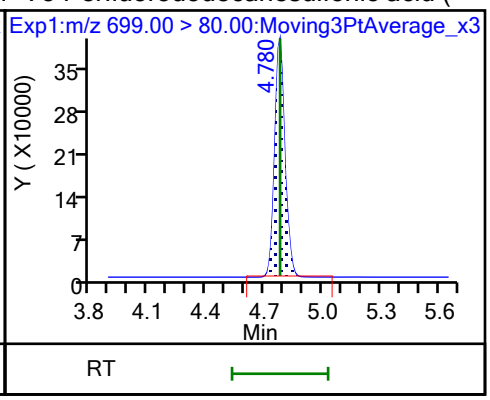
37 Perfluorododecanoic acid



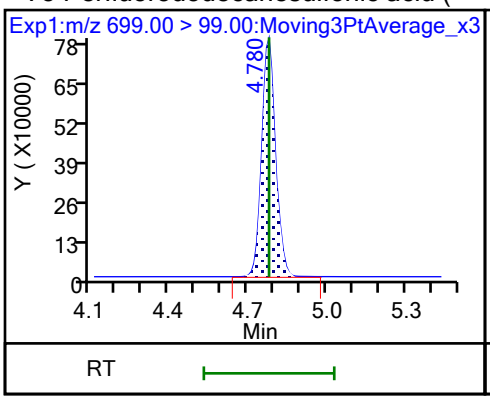
74 1H,1H,2H,2H-perfluorododecanesul



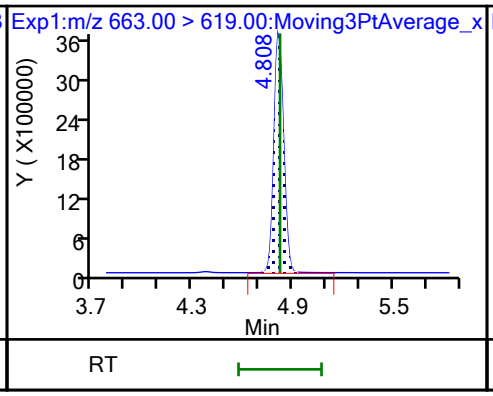
75 Perfluorododecanesulfonic acid (



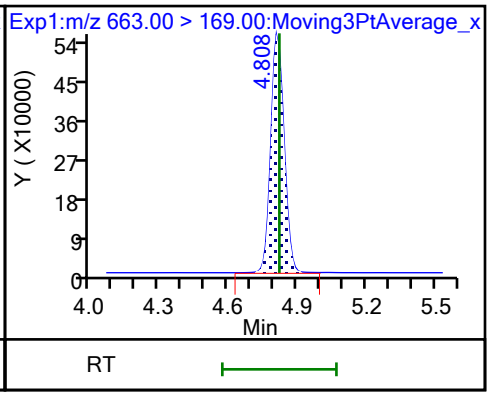
75 Perfluorododecanesulfonic acid (



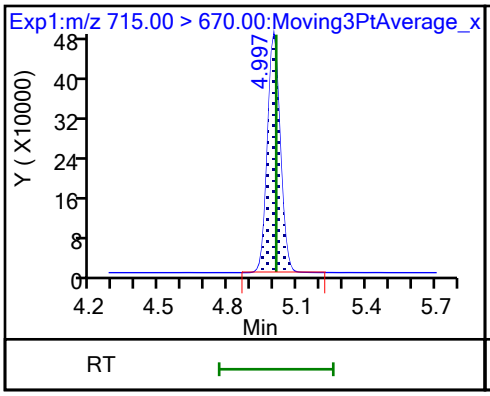
41 Perfluorotridecanoic acid



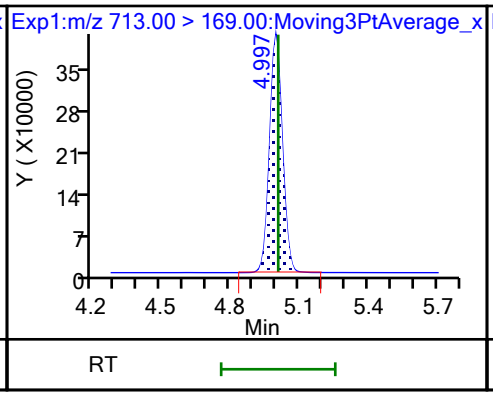
41 Perfluorotridecanoic acid



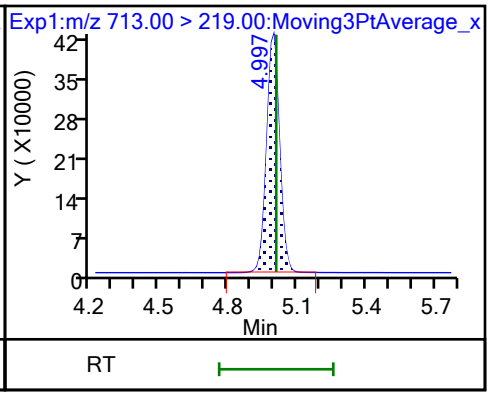
D 43 13C2 PFTeDA



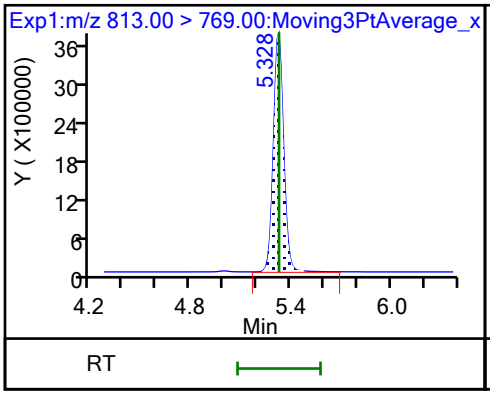
42 Perfluorotetradecanoic acid



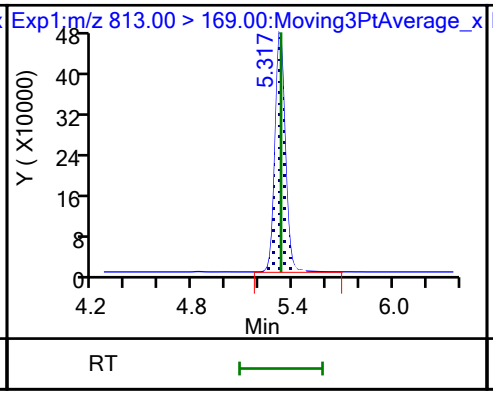
42 Perfluorotetradecanoic acid



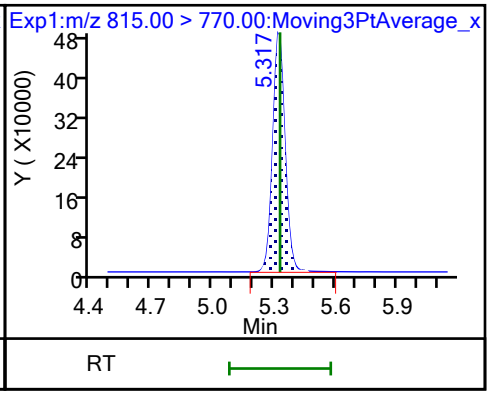
45 Perfluorohexadecanoic acid



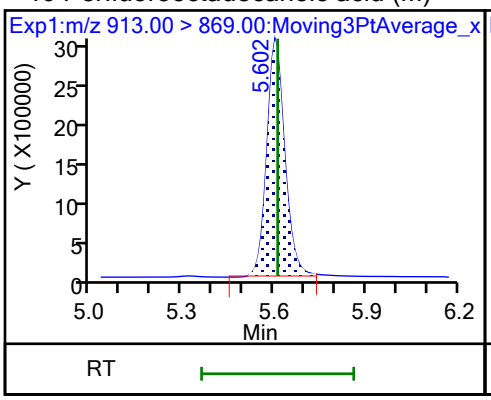
45 Perfluorohexadecanoic acid



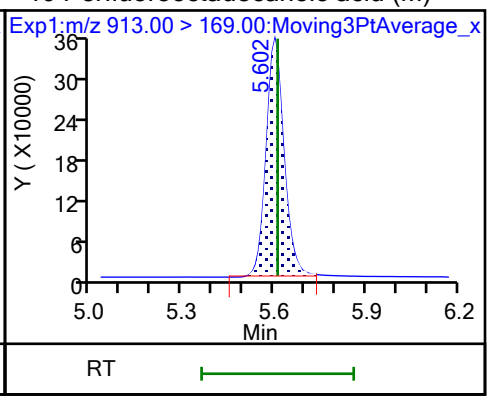
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Jul-2023 18:05:46 ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 200-0056441-011 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:07 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:17:02
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.606	1758198	1.24		99.4	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	29150051	22.9		91.5	1625	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.397	2.411	-0.014	0.694	1319141	1.20		96.1	720	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.397	2.411	-0.014	1.000	26331175	23.1		92.5	419	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.698	1925353	1.30		112	70151	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.411	2.425	-0.014	1.000	33432260	18.1	Target=2.07	81.5	580	M
298.90 > 99.00	2.411	2.425	-0.014	1.000	17197877		1.94(1.04-3.11)	81.5	556	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.784	207012	1.21		103	77.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.706	2.694	0.012	1.000	12889559	21.4		91.4	85591	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.794	1316912	1.18		94.3	776	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.744	2.731	0.013	1.000	26521589	22.9	Target=14.29	91.5	753	M
313.00 > 119.00	2.744	2.731	0.013	1.000	2031245		13.06(7.15-21.44)	91.5	678	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	30796216	20.3	Target=2.78	86.5	1048	M
349.00 > 99.00	2.756	2.731	0.025	0.885	12222657		2.52(1.39-4.17)	86.5	1012	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.856	2.844	0.012	0.827	273677	1.27		101	1285	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	5568235	25.4		102	6439	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.902	1370941	1.29		109	2166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	27349473	21.3	Target=3.23	93.3	7764	
399.00 > 99.00	3.115	3.092	0.023	1.000	8658987		3.16(1.62-4.84)	93.3	7018	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	30971904	22.1	Target=4.11	88.6	5231	
363.00 > 169.00	3.115	3.104	0.011	1.000	8208481		3.77(2.06-6.17)	88.6	4733	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.902	1559821	1.27		102	3648	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.837	68369017	16.4	Target=3.28	69.5	79642	
377.00 > 85.00	3.150	3.138	0.012	0.837	26772118		2.55(1.64-4.92)	69.5	10230	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.435	3.446	-0.011	0.913	23718890	22.7	Target=4.71	95.1	34545	
449.00 > 99.00	3.435	3.446	-0.011	0.913	5261248		4.51(2.36-7.07)	95.1	8032	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.444	3.446	-0.002	0.997	271643	1.23		103	338	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.444	3.446	-0.002	1.000	12827492	20.5		86.3	1734	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.453	3.464	-0.011	1.000	32974345	23.9	Target=2.90	95.5	2249	
413.00 > 169.00	3.453	3.464	-0.011	1.000	11969902		2.75(1.45-4.35)	95.5	9272	
D 14 13C4 PFOA										
417.00 > 372.00	3.453	3.464	-0.011	1.000	1620734	1.17		93.4	5069	
* 62 13C2 PFOA										
415.00 > 370.00	3.453	3.464	-0.011		1782839	1.25			3950	
D 18 13C4 PFOS										
503.00 > 80.00	3.764	3.783	-0.019	1.090	865311	1.28		107	633	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.764	3.783	-0.019	1.000	18816206	22.3	Target=4.11	96.0	9491	M
499.00 > 99.00	3.764	3.783	-0.019	1.000	4470828		4.21(2.05-6.16)	96.0	4135	M
D 19 13C5 PFNA										
468.00 > 423.00	3.794	3.793	0.001	1.098	1902682	1.26		101	3585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.784	3.803	-0.019	0.997	33868175	22.7	Target=8.48	90.8	4295	
463.00 > 169.00	3.794	3.803	-0.009	1.000	4166541		8.13(4.24-12.72)	90.8	5885	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.935	3.947	-0.012	1.045	49573864	19.2		82.2	122080	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.063	4.074	-0.011	1.080	15127922	23.5	Target=2.17	97.9	34897	
549.00 > 99.00	4.063	4.074	-0.011	1.080	7013195		2.16(1.08-3.25)	97.9	11531	
D 23 13C2 PFDA										
515.00 > 470.00	4.097	4.108	-0.011	1.186	1981566	1.25		100	6749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.097	4.108	-0.011	1.000	35125264	22.2	Target=10.55	88.7	8430	
513.00 > 169.00	4.097	4.108	-0.011	1.000	3557829		9.87(5.27-15.82)	88.7	7050	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.109	4.108	0.001	1.190	316911	1.27		106	810	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.109	4.120	-0.011	1.000	12048759	20.7		86.2	64543	
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.214	1759972	1.30		104	4229	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	31572610	23.5		94.0	87074	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.237	4.249	-0.012	1.227	505130	1.34		107	228	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.237	4.260	-0.023	1.000	8770277	23.9		95.7	2253	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.334	4.346	-0.012	1.152	11299421	22.8	Target=2.28	94.7	10546	
599.00 > 99.00	4.334	4.346	-0.012	1.152	4799204		2.35(1.14-3.42)	94.7	10362	
D 30 13C2 PFUnA										
565.00 > 520.00	4.358	4.382	-0.024	1.262	1790927	1.20		96.0	5216	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.003	32455800	22.0	Target=11.30	87.9	7502	
563.00 > 169.00	4.370	4.382	-0.012	1.003	3240672		10.02(5.65-16.96)	87.9	10679	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.370	4.393	-0.023	1.265	430319	1.18		94.6	987	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.003	8392085	24.4		97.5	27196	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.186	64636051	16.3		69.2	118442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.595	4.605	-0.010	1.330	1994604	1.31		105	5976	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.595	4.616	-0.021	1.000	34331936	21.1	Target=8.15	84.6	1991	
613.00 > 169.00	4.595	4.616	-0.021	1.000	4769328		7.20(4.07-12.22)	84.6	22673	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.627	-0.010	1.124	8134970	23.4		96.9	121535	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.267	3739893	22.3	Target=0.50	92.2	19469	
699.00 > 99.00	4.770	4.779	-0.009	1.267	7697869		0.49(0.25-0.75)	92.2	16871	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.047	35226779	20.6	Target=6.61	82.5	2165	
663.00 > 169.00	4.809	4.822	-0.013	1.047	5990766		5.88(3.31-9.92)	82.5	4583	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.447	1918275	1.27		102	5387	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	4171778	24.3	Target=0.96	97.2	14200	
713.00 > 219.00	4.987	5.008	-0.021	0.998	4312498		0.97(0.48-1.44)	97.2	10053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	37681202	20.5	Target=7.69	82.2	1953	
813.00 > 169.00	5.317	5.328	-0.011	1.000	5392503		6.99(3.85-11.54)	82.2	4998	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.540	2292454	1.32		105	5350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	30813591	21.5	Target=9.13	86.1	331	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	3700392		8.33(4.56-13.69)	86.1	382	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

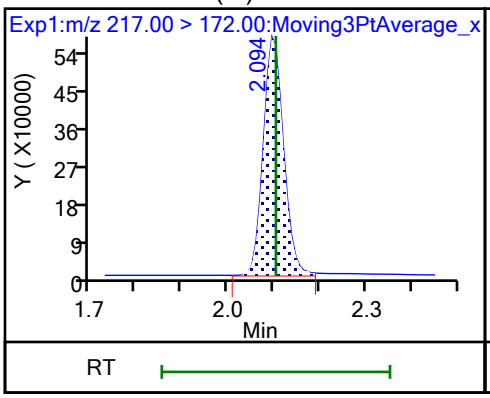
PFAS23NCIC7_00001 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:08 Chrom Revision: 2.3 19-Jul-2023 18:28:48

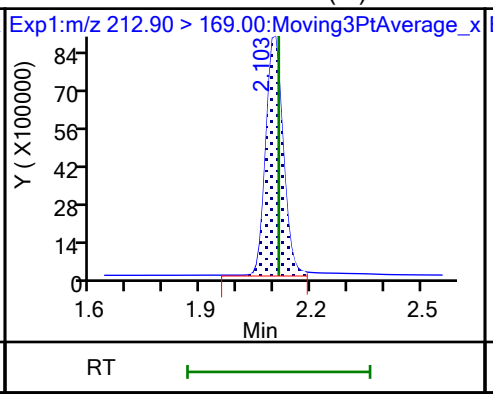
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Injection Date: 26-Jul-2023 18:05:46 Instrument ID: LC812
Lims ID: IC 7
Client ID:
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

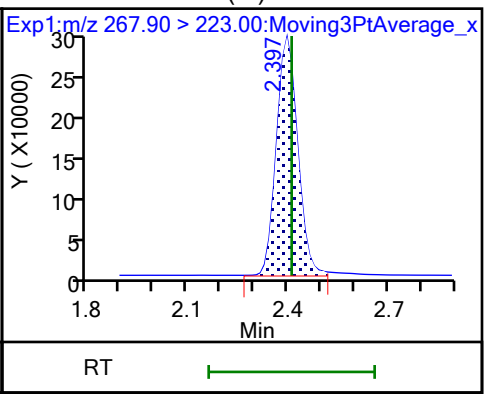
D 1 13C4 PFBA (M)



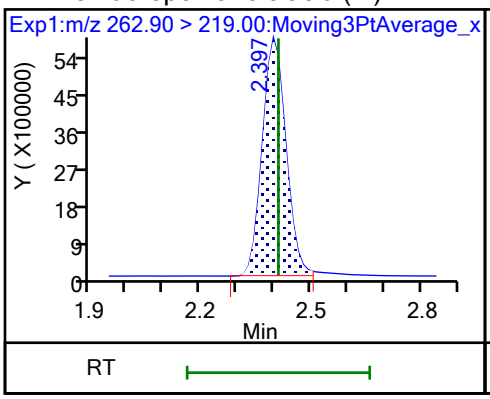
2 Perfluorobutanoic acid (M)



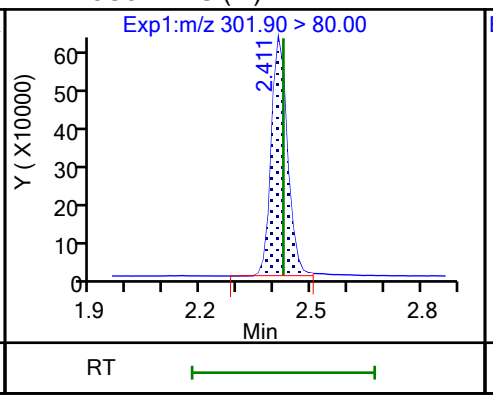
D 3 13C5 PFPeA (M)



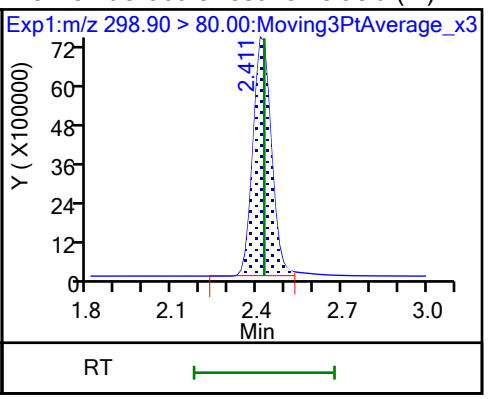
4 Perfluoropentanoic acid (M)



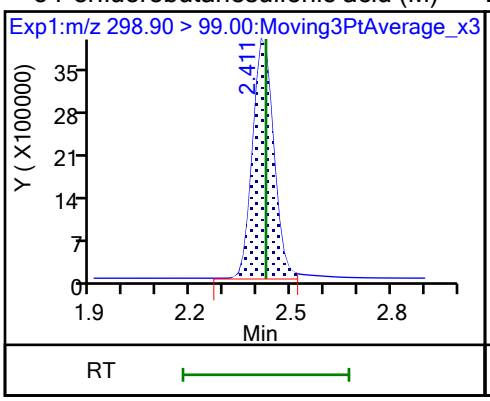
D 47 13C3 PFBS (M)



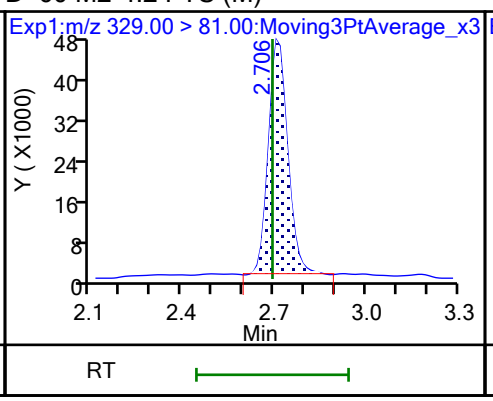
5 Perfluorobutanesulfonic acid (M)



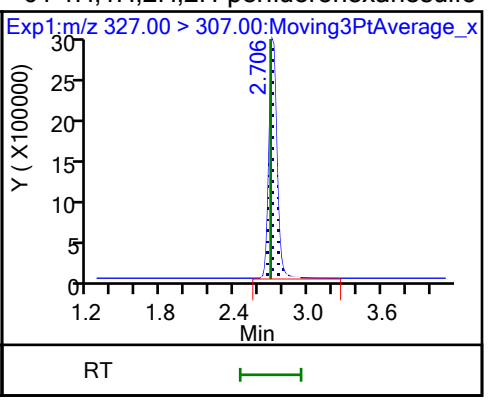
5 Perfluorobutanesulfonic acid (M)



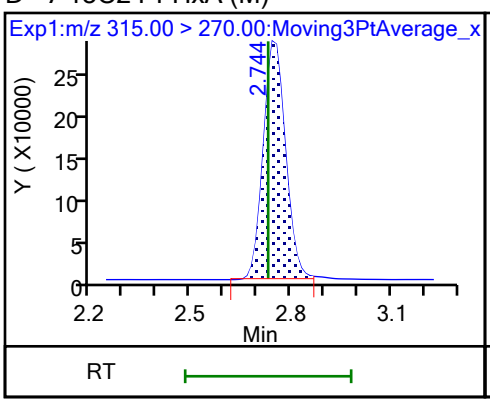
D 60 M2-4:2 FTS (M)



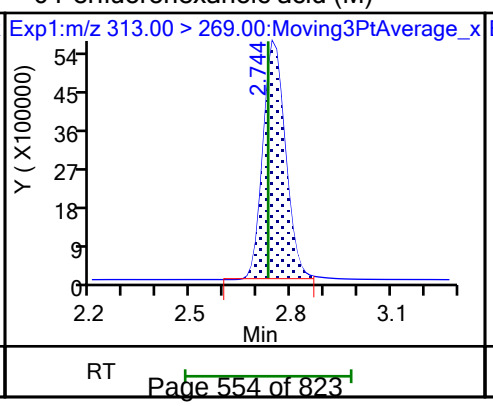
61 1H,1H,2H,2H-perfluorohexanesulfo



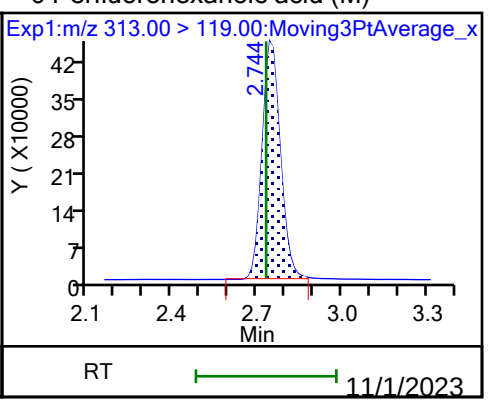
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

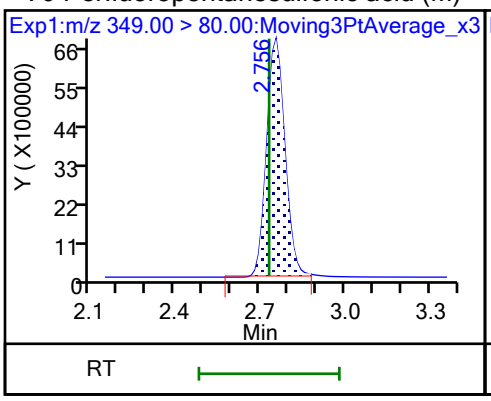


6 Perfluorohexanoic acid (M)

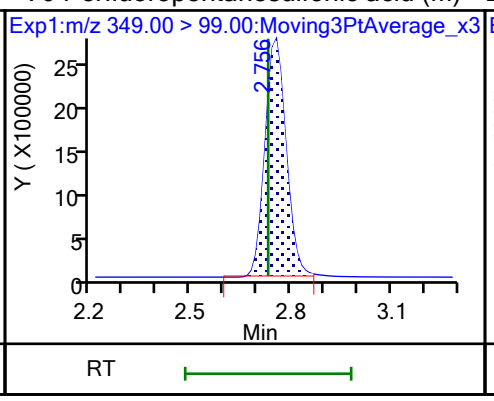


11/1/2023
12:01 PM

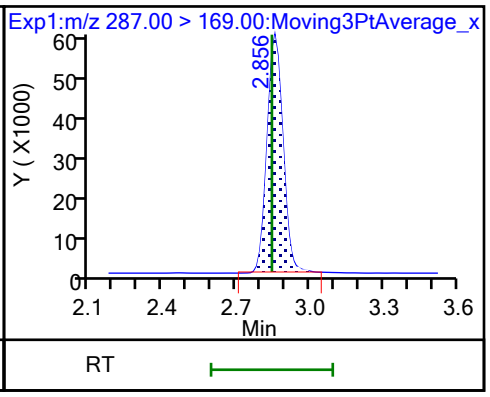
70 Perfluoropentanesulfonic acid (M)



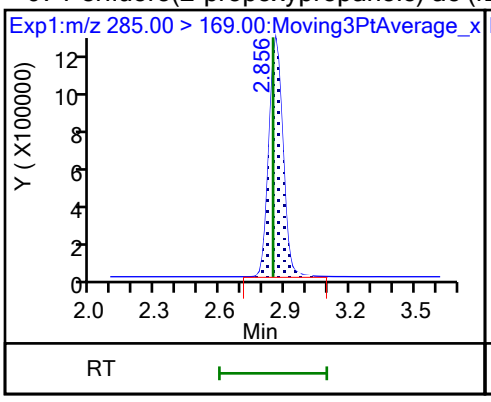
70 Perfluoropentanesulfonic acid (M)



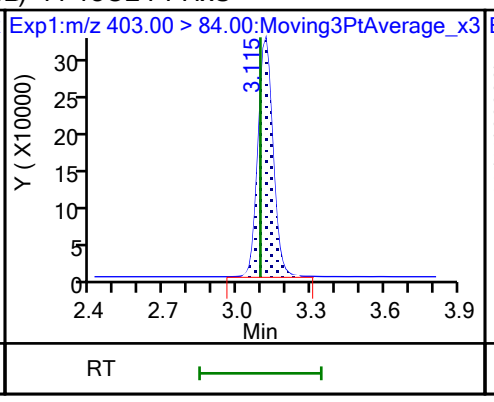
D 64 13C3 HFPO-DA



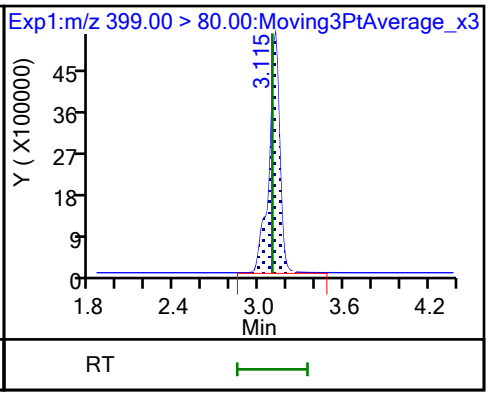
67 Perfluoro(2-propoxypropanoic) ac (M)



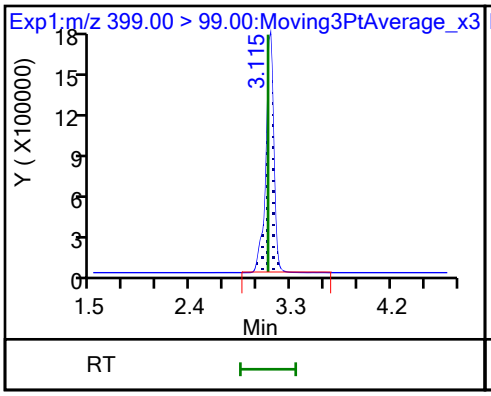
D 11 18O2 PFHxS



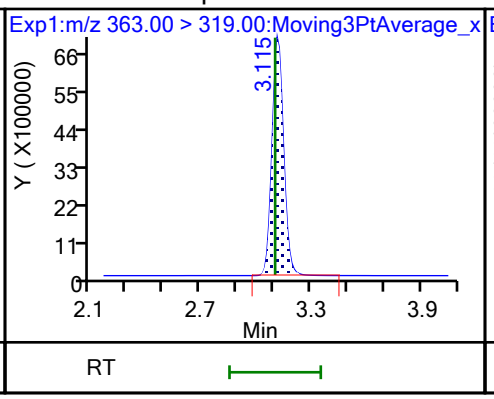
8 Perfluorohexanesulfonic acid



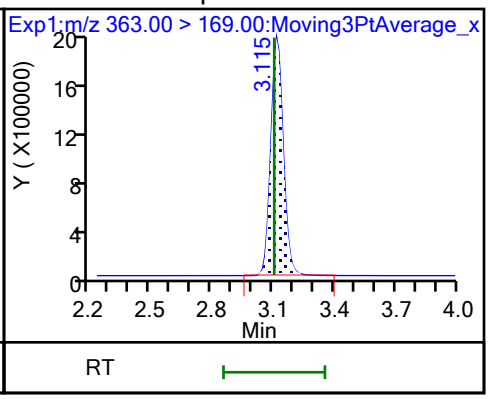
8 Perfluorohexanesulfonic acid



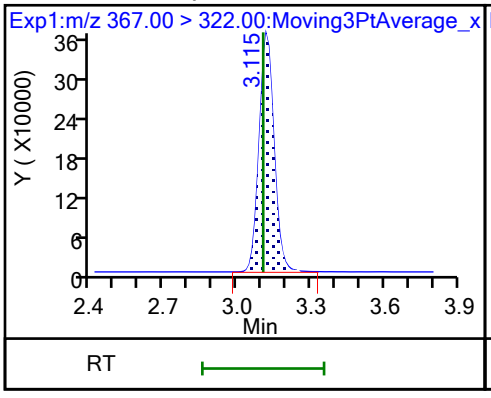
10 Perfluoroheptanoic acid



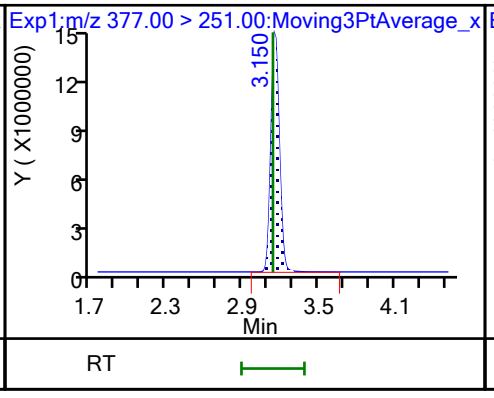
10 Perfluoroheptanoic acid



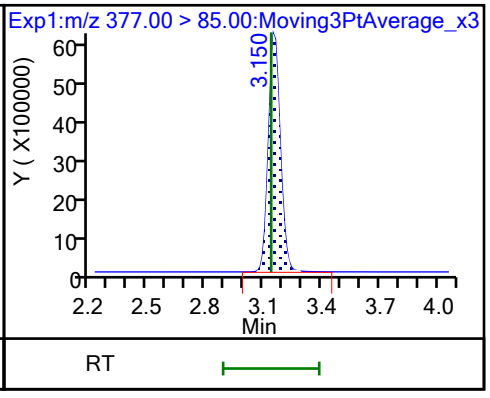
D 9 13C4 PFHpA



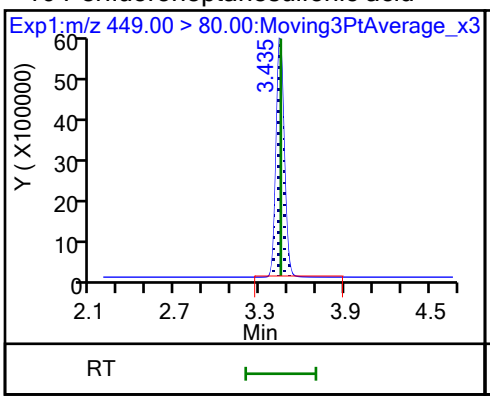
77 DONA



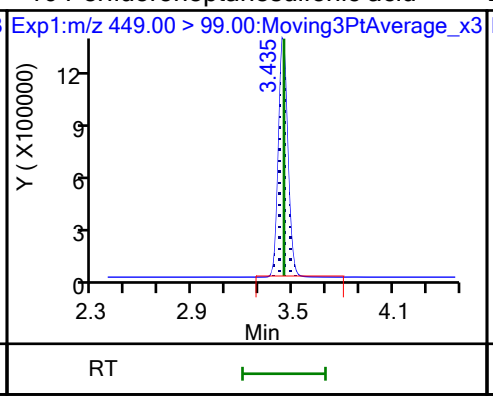
77 DONA



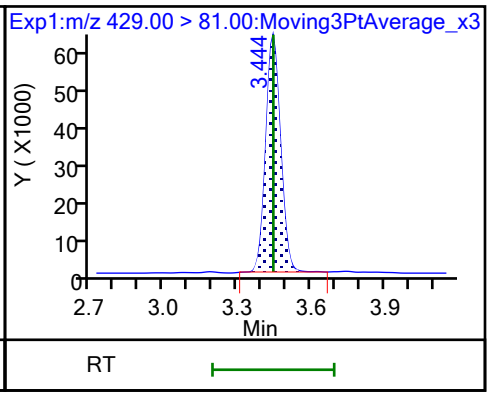
16 Perfluoroheptanesulfonic acid



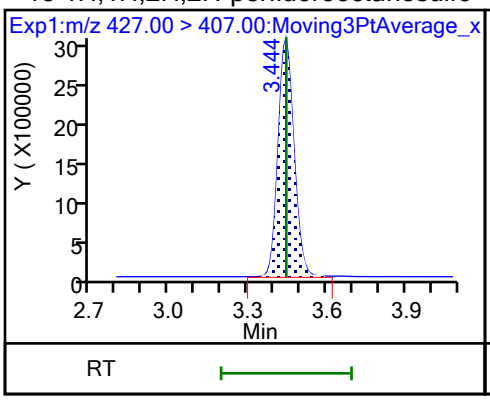
16 Perfluoroheptanesulfonic acid



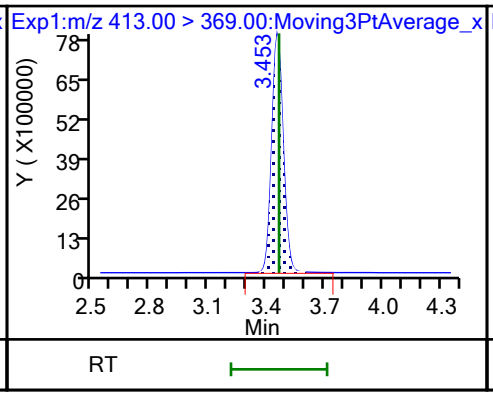
D 12 M2-6:2 FTS



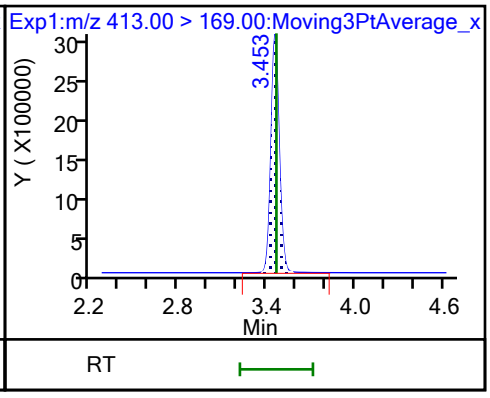
13 1H,1H,2H,2H-perfluorooctanesulfo



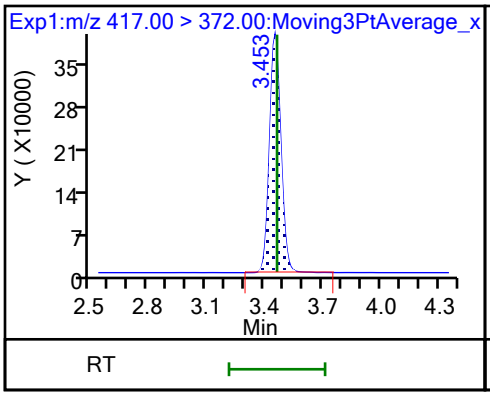
15 Perfluorooctanoic acid



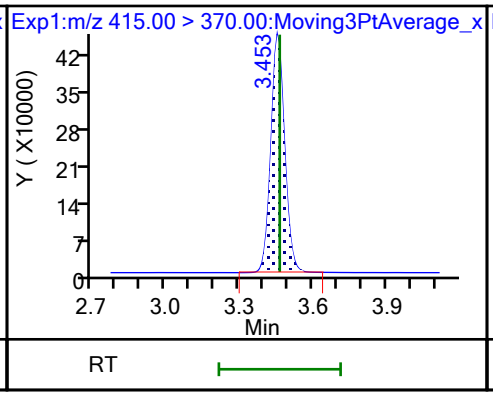
15 Perfluorooctanoic acid



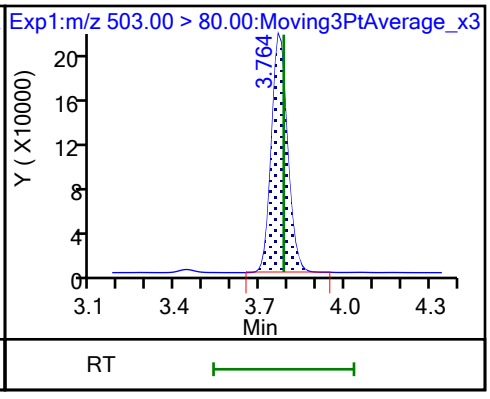
D 14 13C4 PFOA



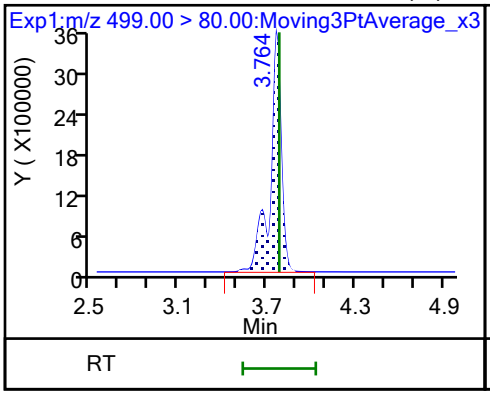
* 62 13C2 PFOA



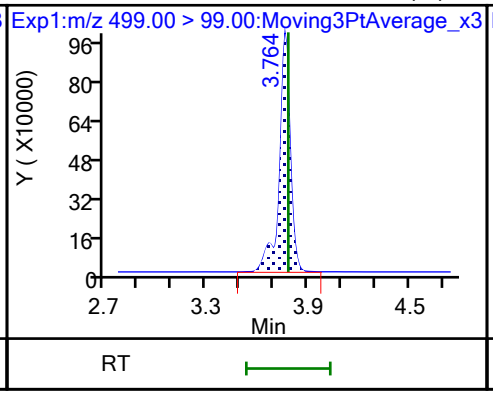
D 18 13C4 PFOS



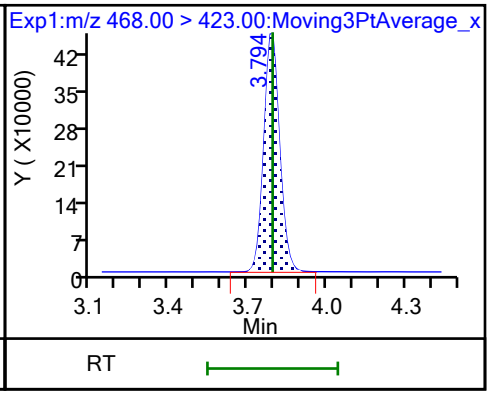
17 Perfluorooctanesulfonic acid (M)



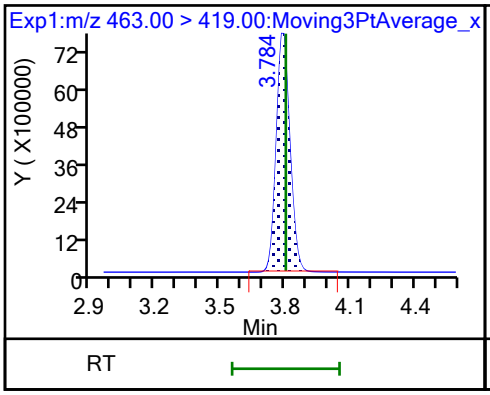
17 Perfluorooctanesulfonic acid (M)



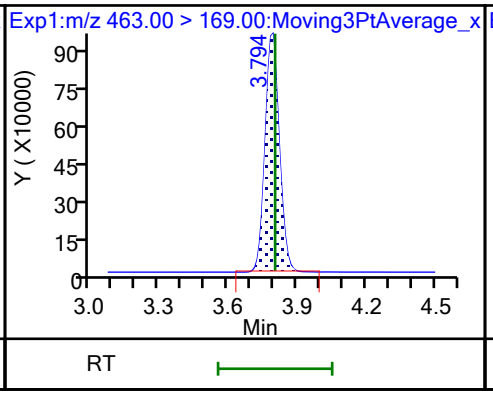
D 19 13C5 PFNA



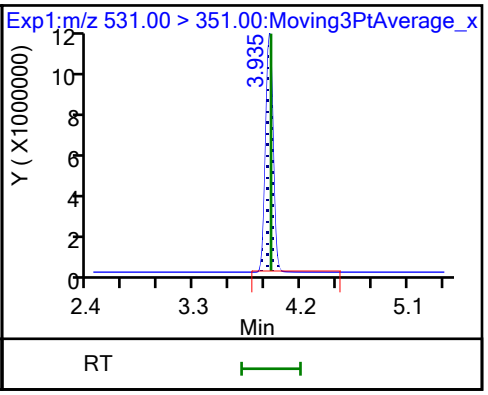
20 Perfluorononanoic acid



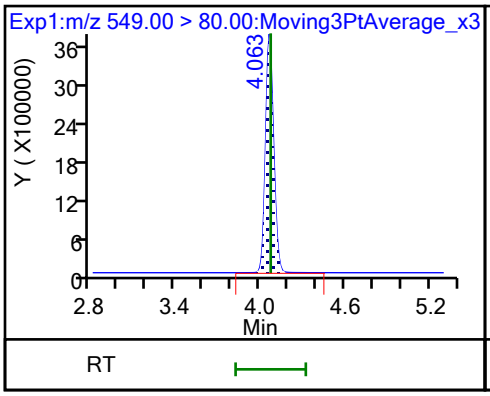
20 Perfluorononanoic acid



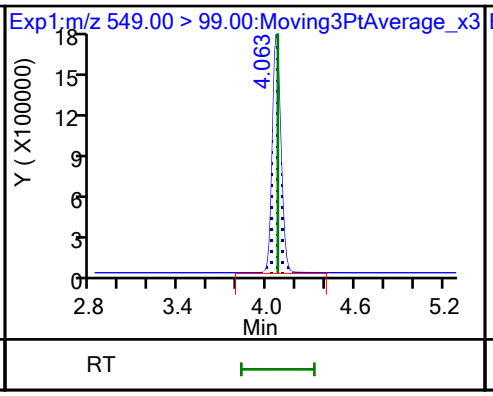
69 9-Chlorohexadecafluoro-3-oxanona



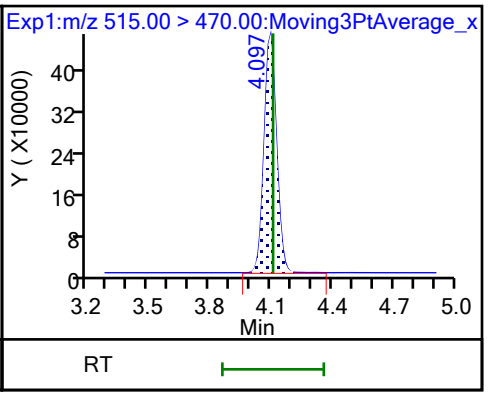
68 Perfluorononanesulfonic acid



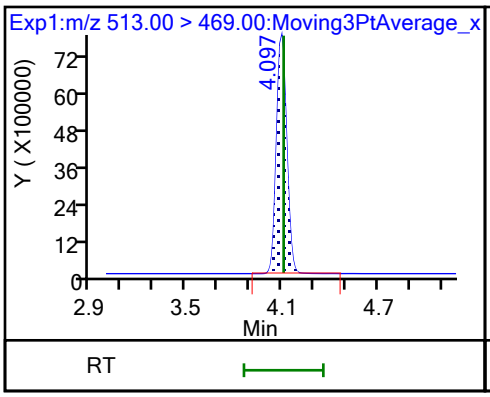
68 Perfluorononanesulfonic acid



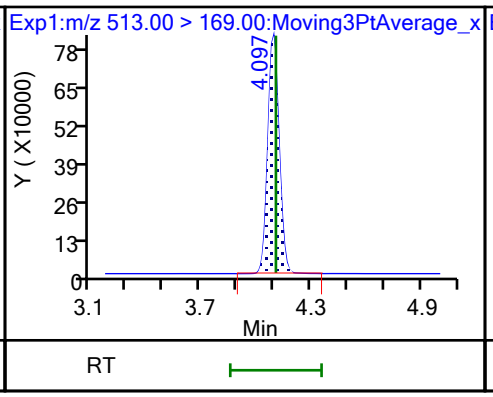
D 23 13C2 PFDA



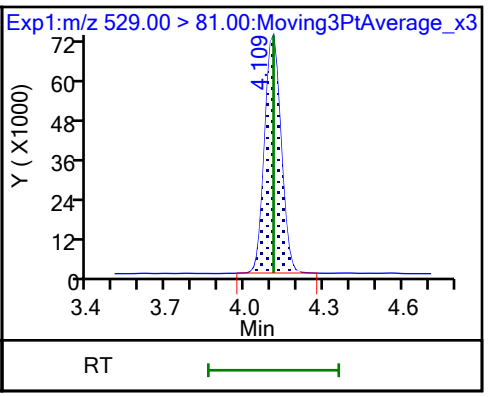
24 Perfluorodecanoic acid



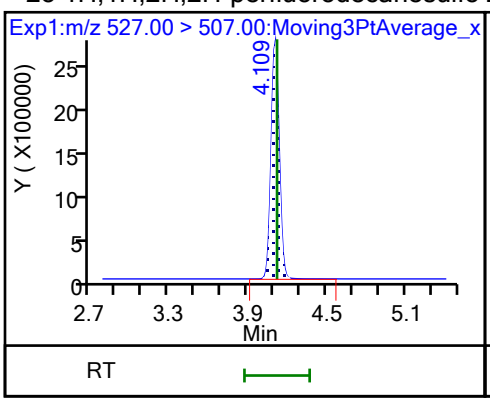
24 Perfluorodecanoic acid



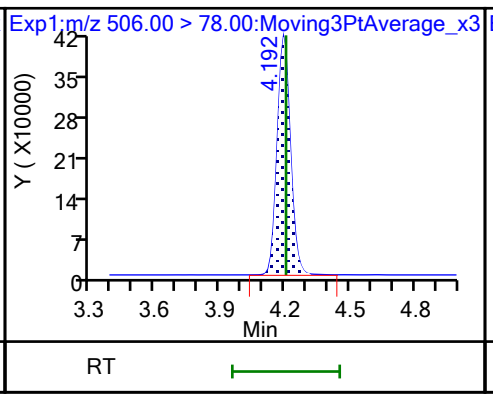
D 26 M2-8:2 FTS



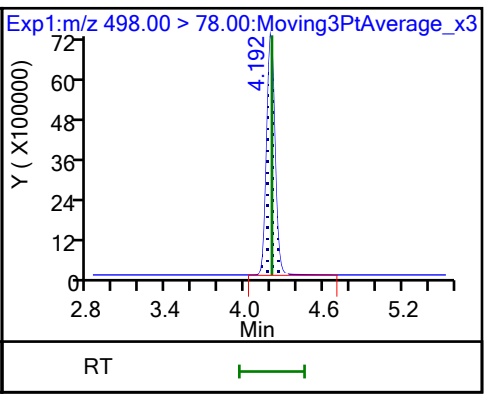
25 1H,1H,2H,2H-perfluorodecanesulfo



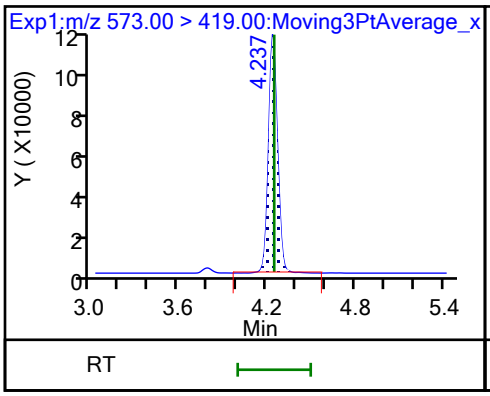
D 21 13C8 FOSA



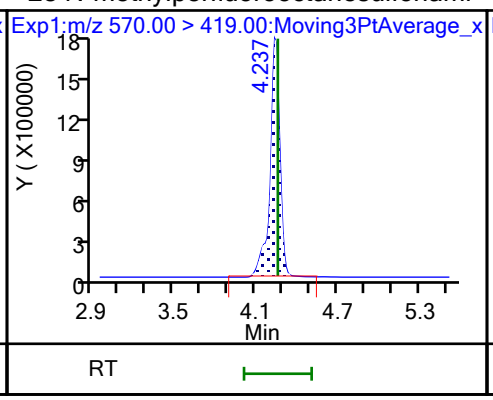
22 Perfluorooctanesulfonamide



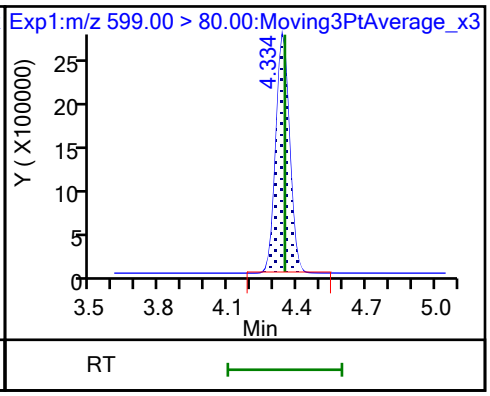
D 27 d3-NMeFOSAA



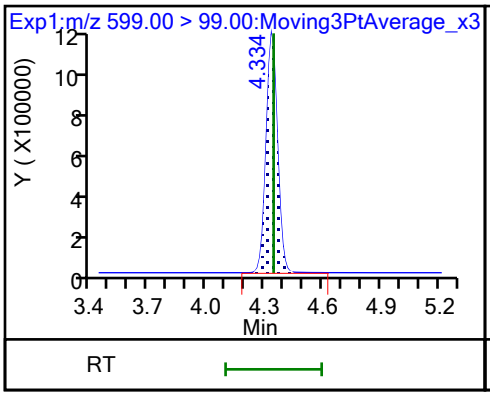
28 N-methylperfluorooctanesulfonami



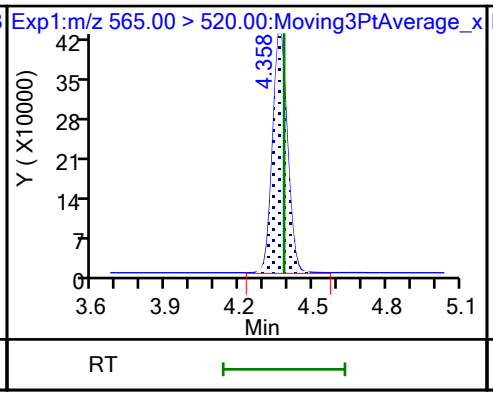
29 Perfluorodecanesulfonic acid



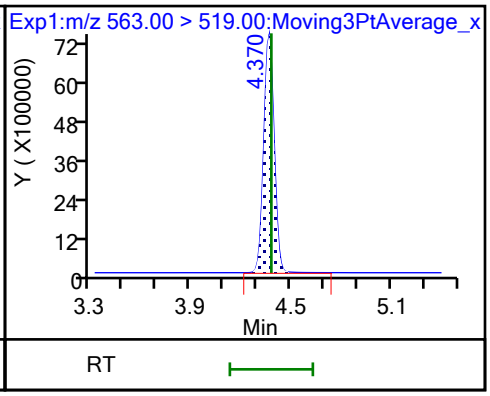
29 Perfluorodecanesulfonic acid



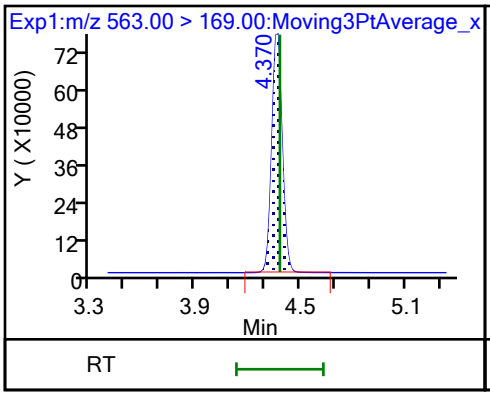
D 30 13C2 PFUnA



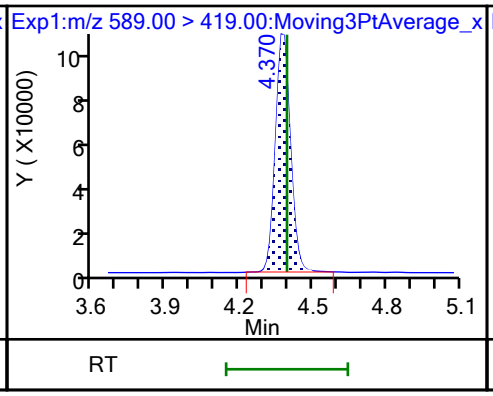
31 Perfluoroundecanoic acid



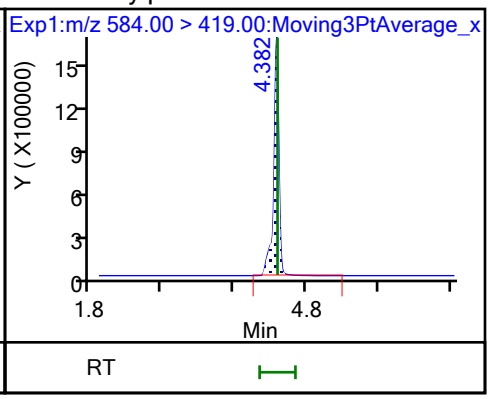
31 Perfluoroundecanoic acid



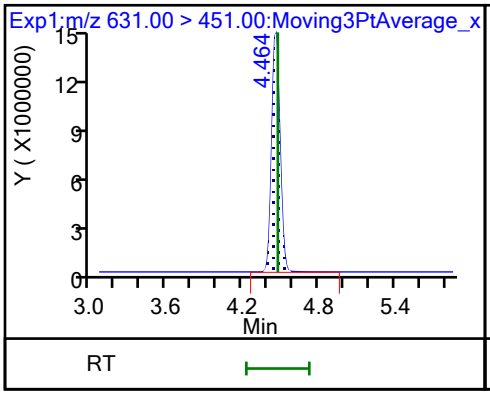
D 32 d5-NEtFOSAA



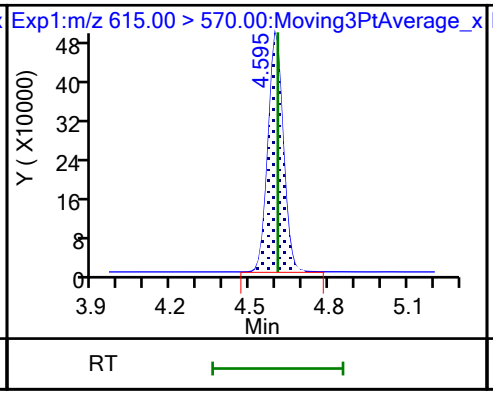
33 N-ethylperfluorooctanesulfonamid



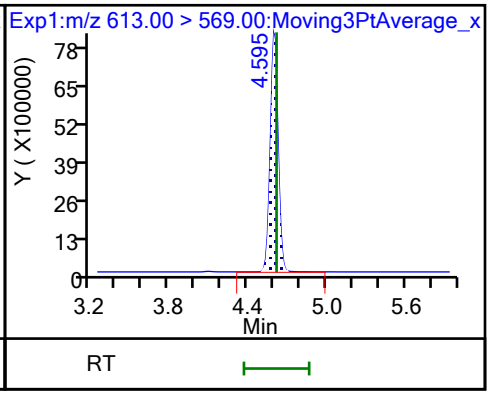
66 11-Chloroeicosafluoro-3-oxaundec



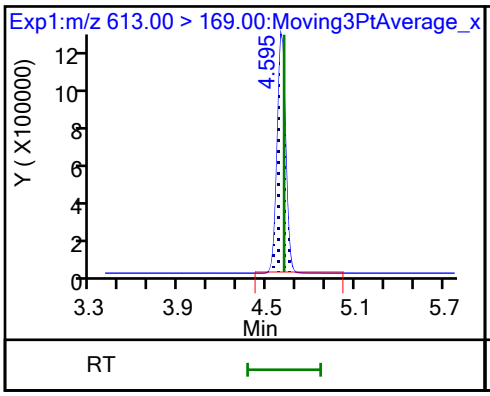
D 36 13C2 PFDoA



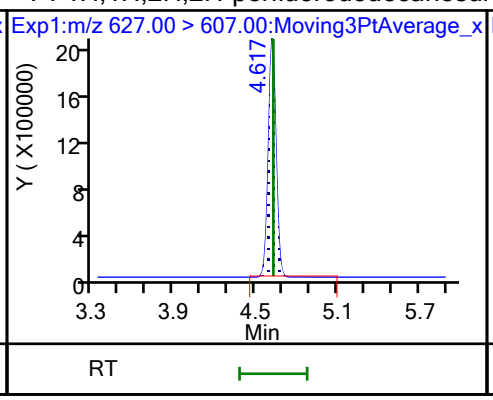
37 Perfluorododecanoic acid



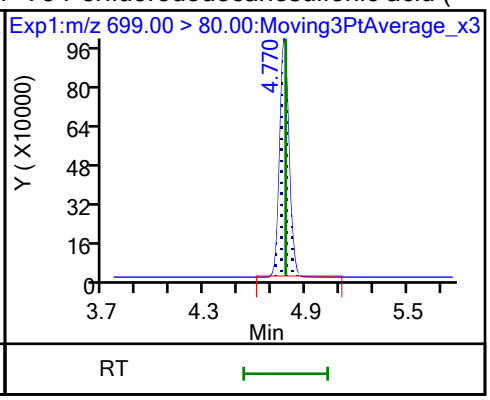
37 Perfluorododecanoic acid



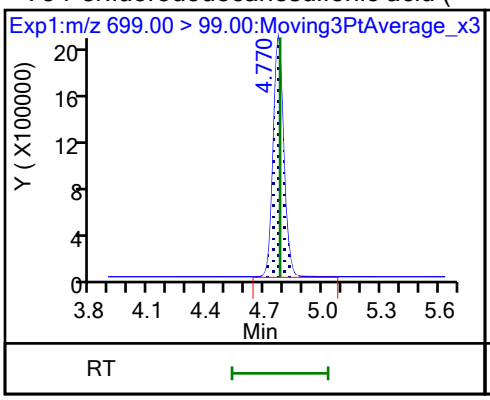
74 1H,1H,2H,2H-perfluorododecanesul



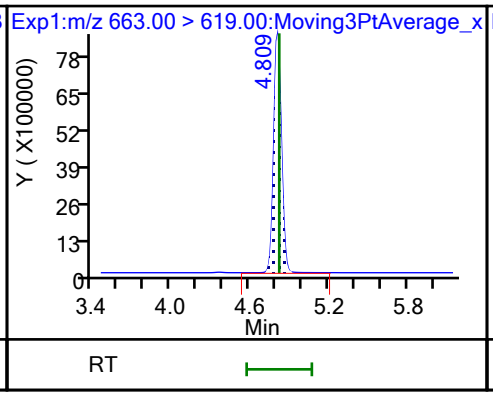
75 Perfluorododecanesulfonic acid (



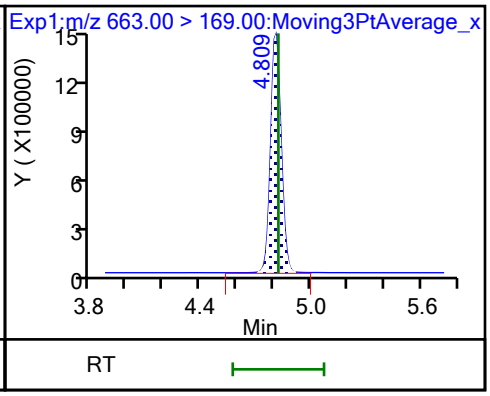
75 Perfluorododecanesulfonic acid (



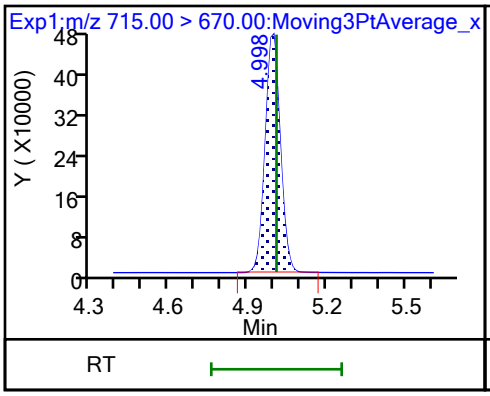
41 Perfluorotridecanoic acid



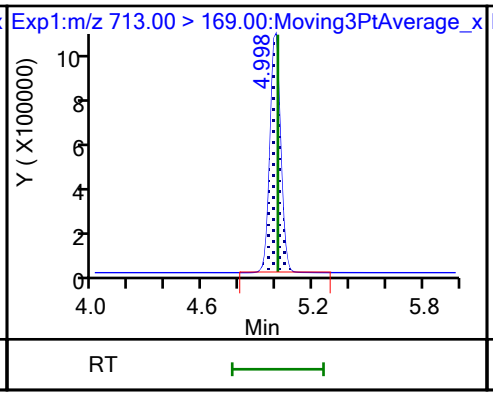
41 Perfluorotridecanoic acid



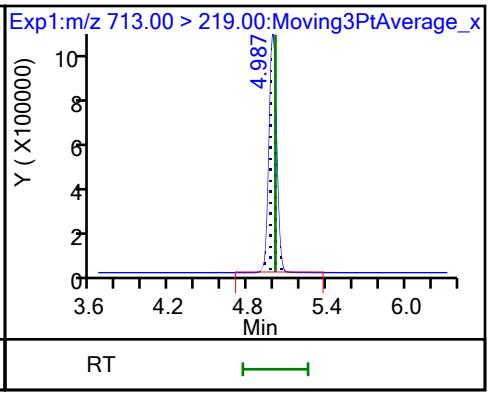
D 43 13C2 PFTeDA



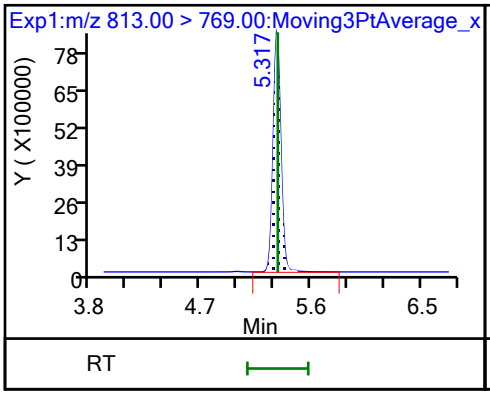
42 Perfluorotetradecanoic acid



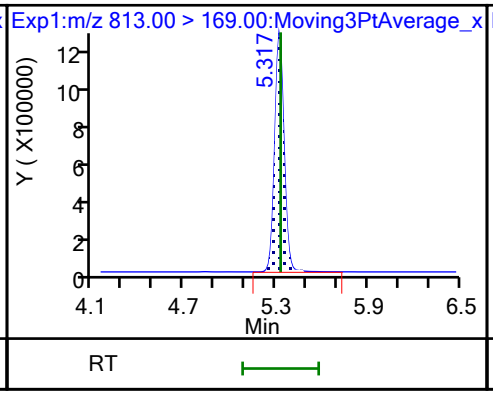
42 Perfluorotetradecanoic acid



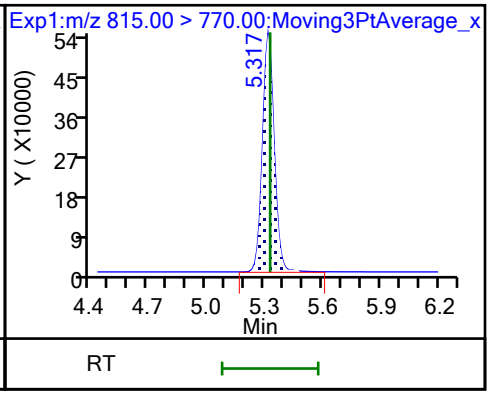
45 Perfluorohexadecanoic acid



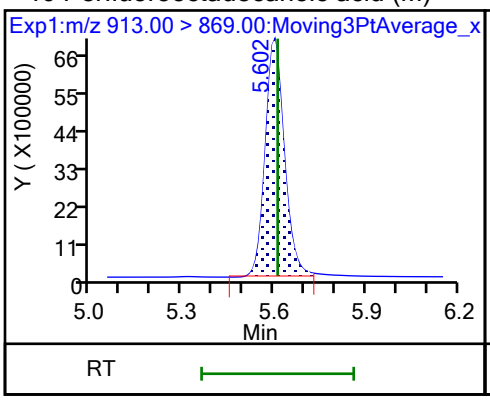
45 Perfluorohexadecanoic acid



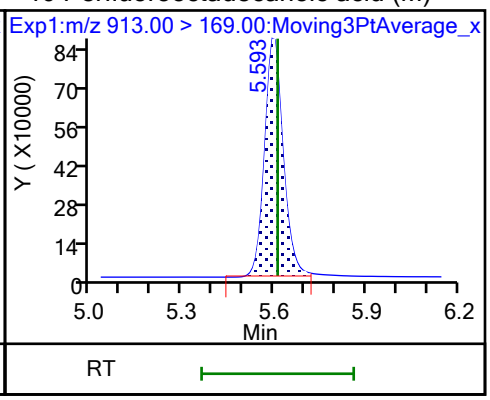
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Calibration / Perfluorobutanoic acid

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

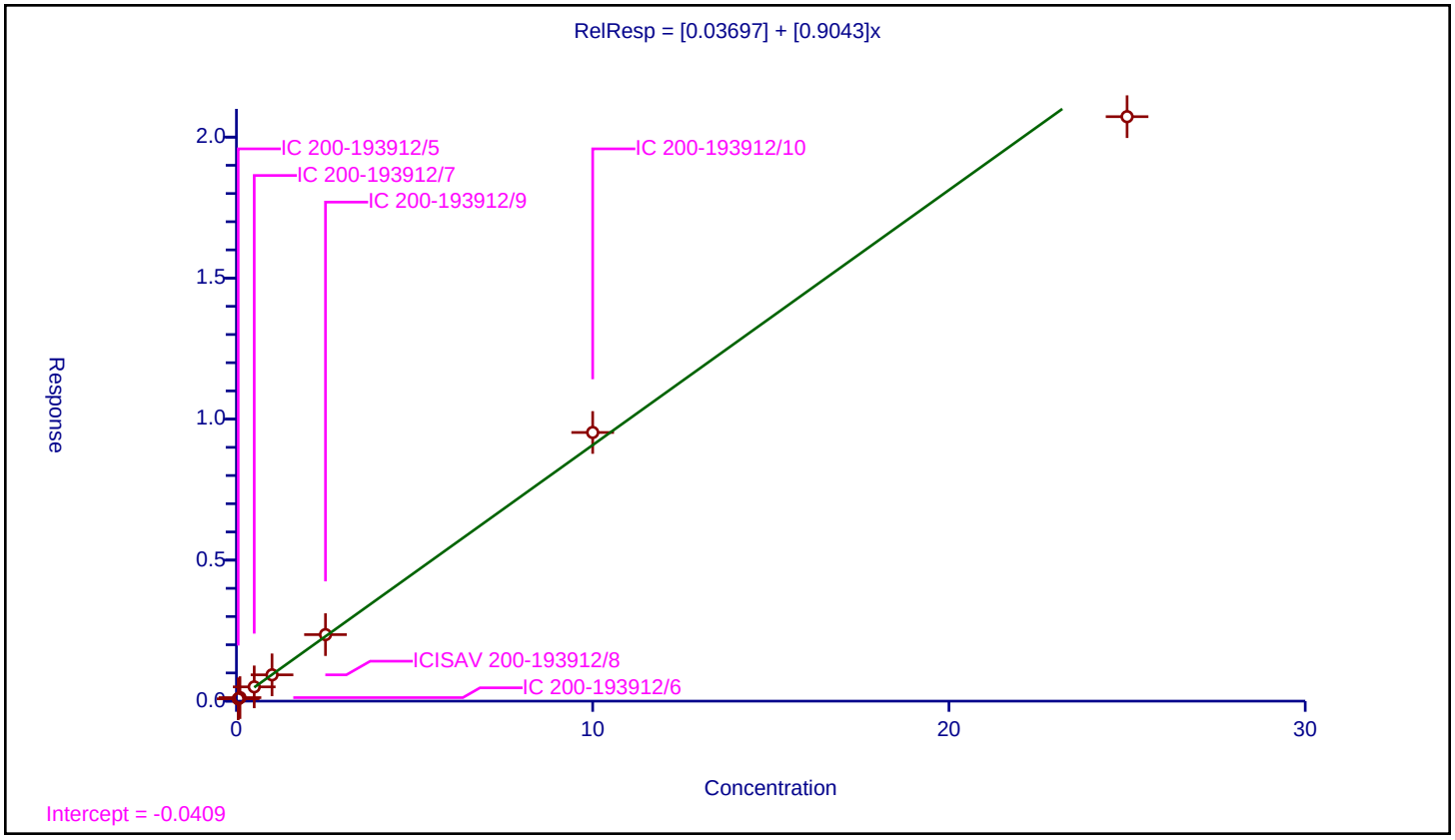
Curve Coefficients

Intercept:	0.03697
Slope:	0.9043

Error Coefficients

Standard Error:	14300000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.082621	1.25	2253572.0	1.652421	Y
2	IC 200-193912/6	0.1	0.124976	1.25	1926725.0	1.249757	Y
3	IC 200-193912/7	0.5	0.505344	1.25	1916527.0	1.010688	Y
4	ICISAV 200-193912/8	1.0	0.932118	1.25	1929850.0	0.932118	Y
5	IC 200-193912/9	2.5	2.358169	1.25	2025338.0	0.943268	Y
6	IC 200-193912/10	10.0	9.52612	1.25	1663241.0	0.952612	Y
7	IC 200-193912/11	25.0	20.72438	1.25	1758198.0	0.828975	Y



11/1/2023
12:01 PM

Calibration / Perfluoropentanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

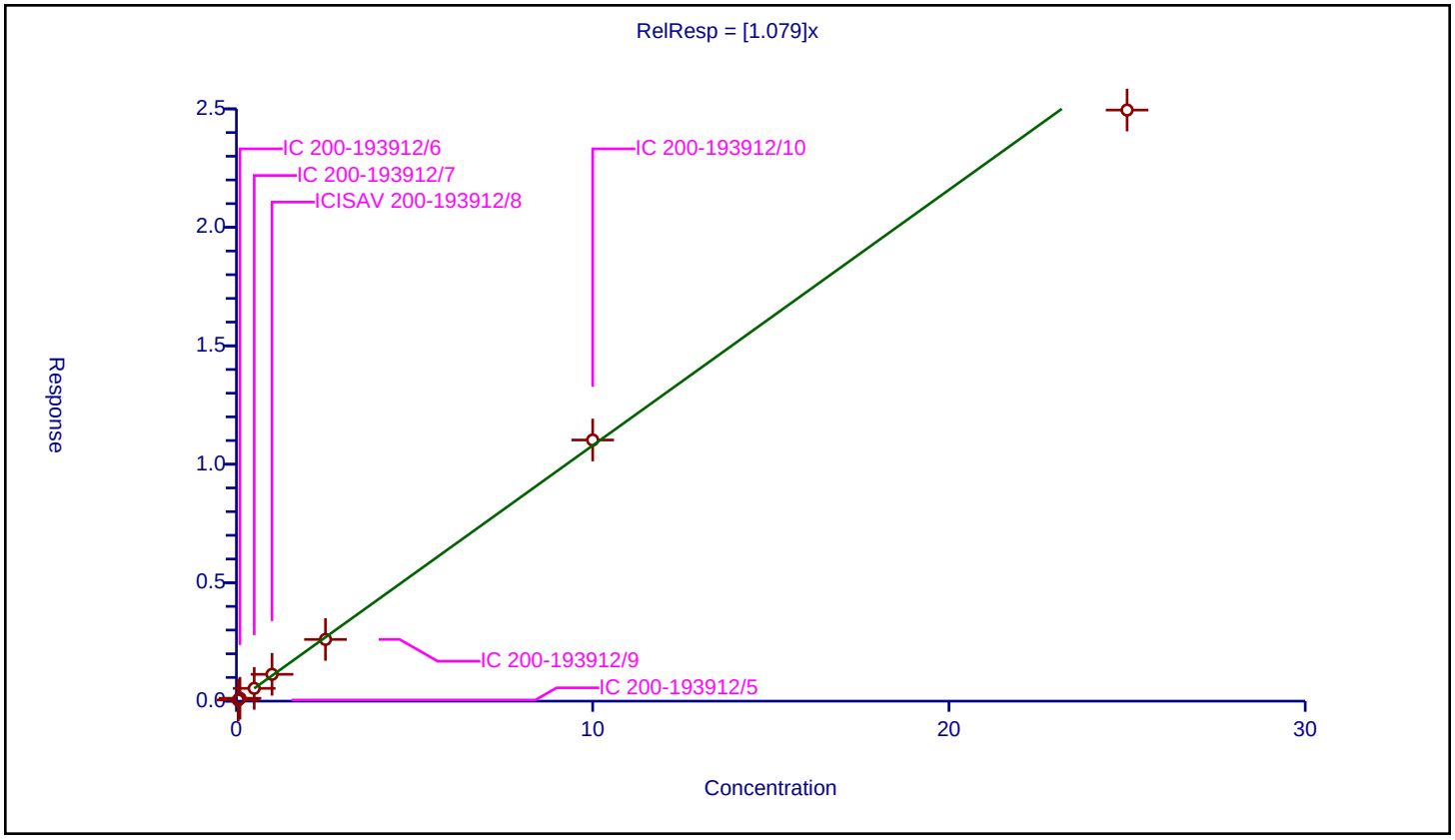
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.049068	1.25	1827623.0	0.981357	Y
2	IC 200-193912/6	0.1	0.121675	1.25	1458161.0	1.216747	Y
3	IC 200-193912/7	0.5	0.540415	1.25	1507442.0	1.080831	Y
4	ICISAV 200-193912/8	1.0	1.132983	1.25	1529086.0	1.132983	Y
5	IC 200-193912/9	2.5	2.604075	1.25	1531883.0	1.04163	Y
6	IC 200-193912/10	10.0	11.023306	1.25	1291692.0	1.102331	Y
7	IC 200-193912/11	25.0	24.951062	1.25	1319141.0	0.998042	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

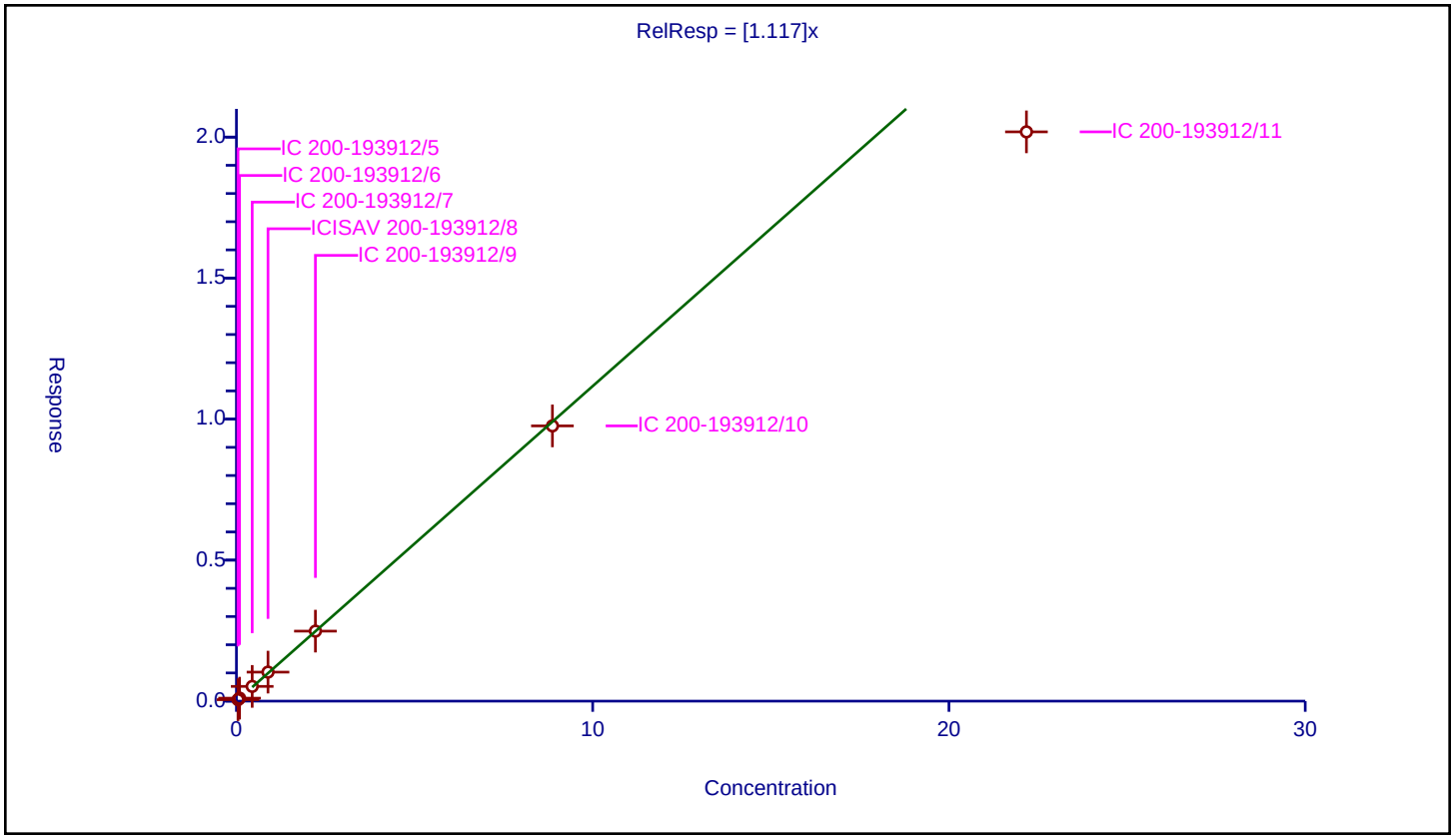
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	14900000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04435	0.0515	1.1625	2112456.0	1.161217	Y
2	IC 200-193912/6	0.0887	0.105408	1.1625	1835537.0	1.188361	Y
3	IC 200-193912/7	0.4435	0.522575	1.1625	1758991.0	1.178297	Y
4	ICISAV 200-193912/8	0.887	1.029257	1.1625	1858340.0	1.16038	Y
5	IC 200-193912/9	2.2175	2.482423	1.1625	1976378.0	1.119469	Y
6	IC 200-193912/10	8.87	9.759782	1.1625	1657995.0	1.100314	Y
7	IC 200-193912/11	22.175	20.18591	1.1625	1925353.0	0.9103	Y



Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

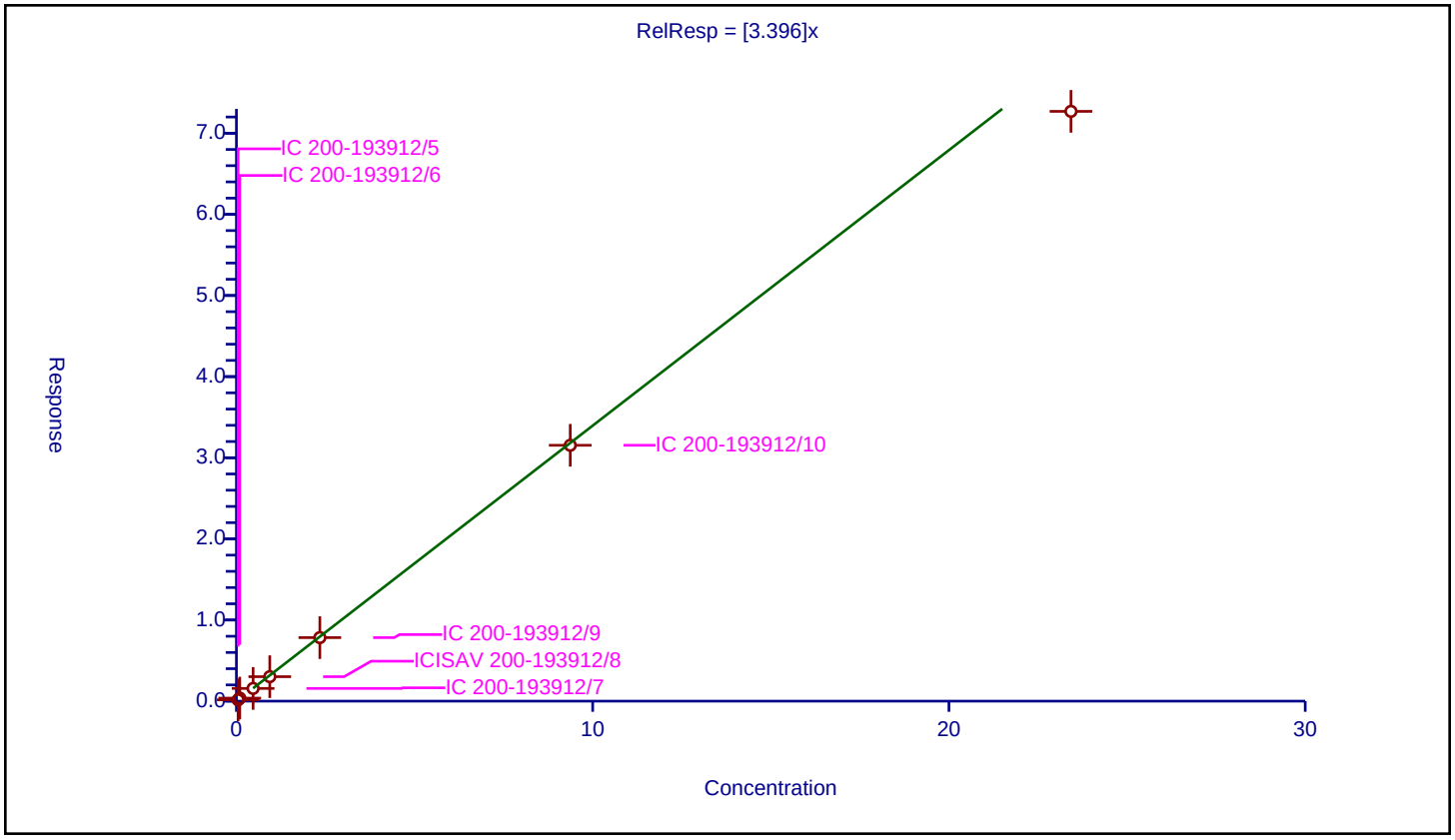
Curve Coefficients

Intercept:	0
Slope:	3.396

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04685	0.160153	1.1675	264843.0	3.41841	Y
2	IC 200-193912/6	0.0937	0.372622	1.1675	202715.0	3.976756	Y
3	IC 200-193912/7	0.4685	1.567171	1.1675	215257.0	3.345081	Y
4	ICISAV 200-193912/8	0.937	3.015993	1.1675	220382.0	3.218776	Y
5	IC 200-193912/9	2.3425	7.830737	1.1675	221658.0	3.342898	Y
6	IC 200-193912/10	9.37	31.536056	1.1675	194992.0	3.365641	Y
7	IC 200-193912/11	23.425	72.694144	1.1675	207012.0	3.103272	Y



11/1/2023
12:01 PM

Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

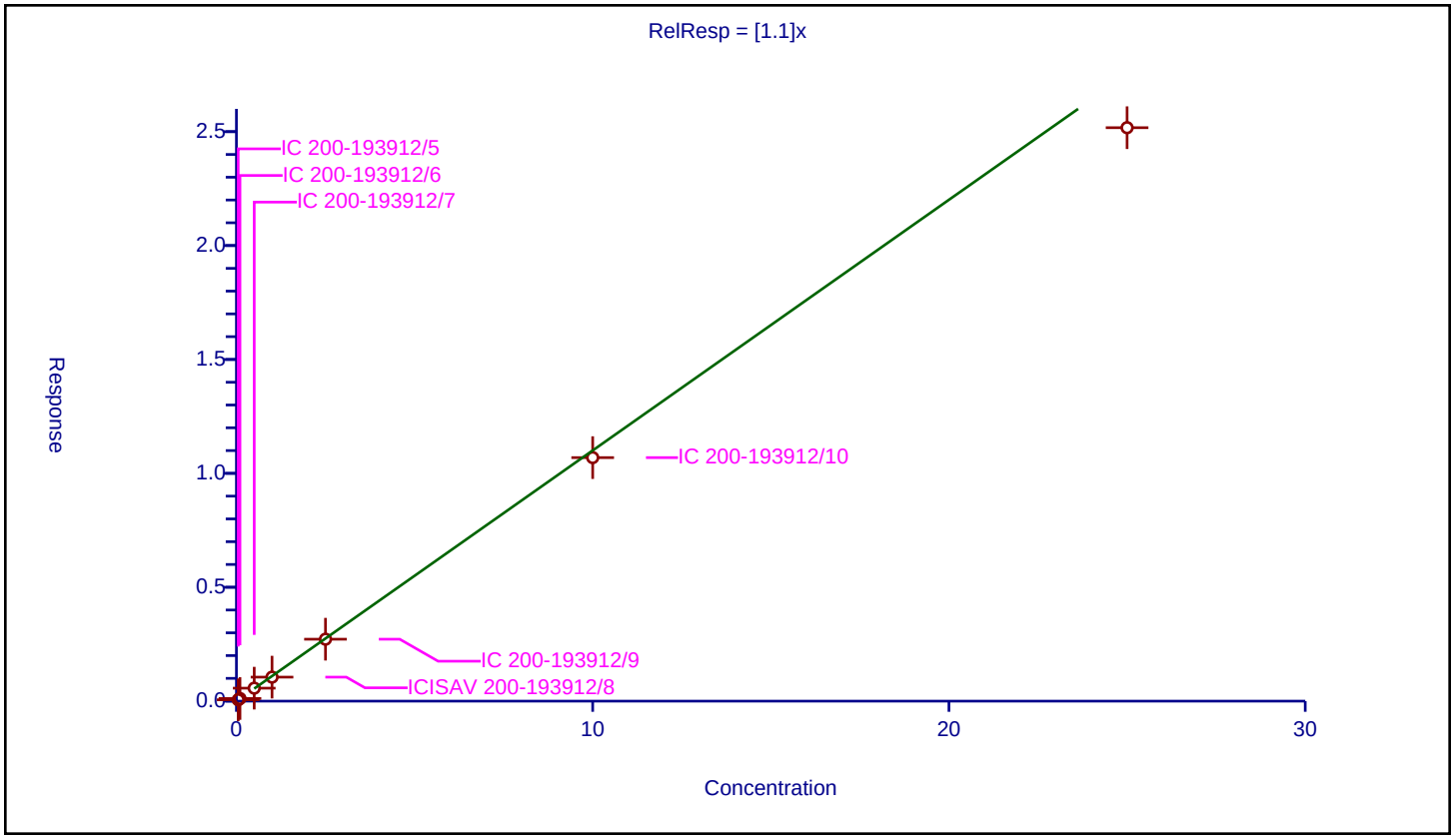
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059408	1.25	1853797.0	1.188169	Y
2	IC 200-193912/6	0.1	0.11566	1.25	1566461.0	1.156596	Y
3	IC 200-193912/7	0.5	0.570489	1.25	1472867.0	1.140977	Y
4	ICISAV 200-193912/8	1.0	1.053678	1.25	1544435.0	1.053678	Y
5	IC 200-193912/9	2.5	2.719251	1.25	1545081.0	1.087701	Y
6	IC 200-193912/10	10.0	10.691075	1.25	1345799.0	1.069107	Y
7	IC 200-193912/11	25.0	25.174033	1.25	1316912.0	1.006961	Y



11/1/2023
12:01 PM

Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

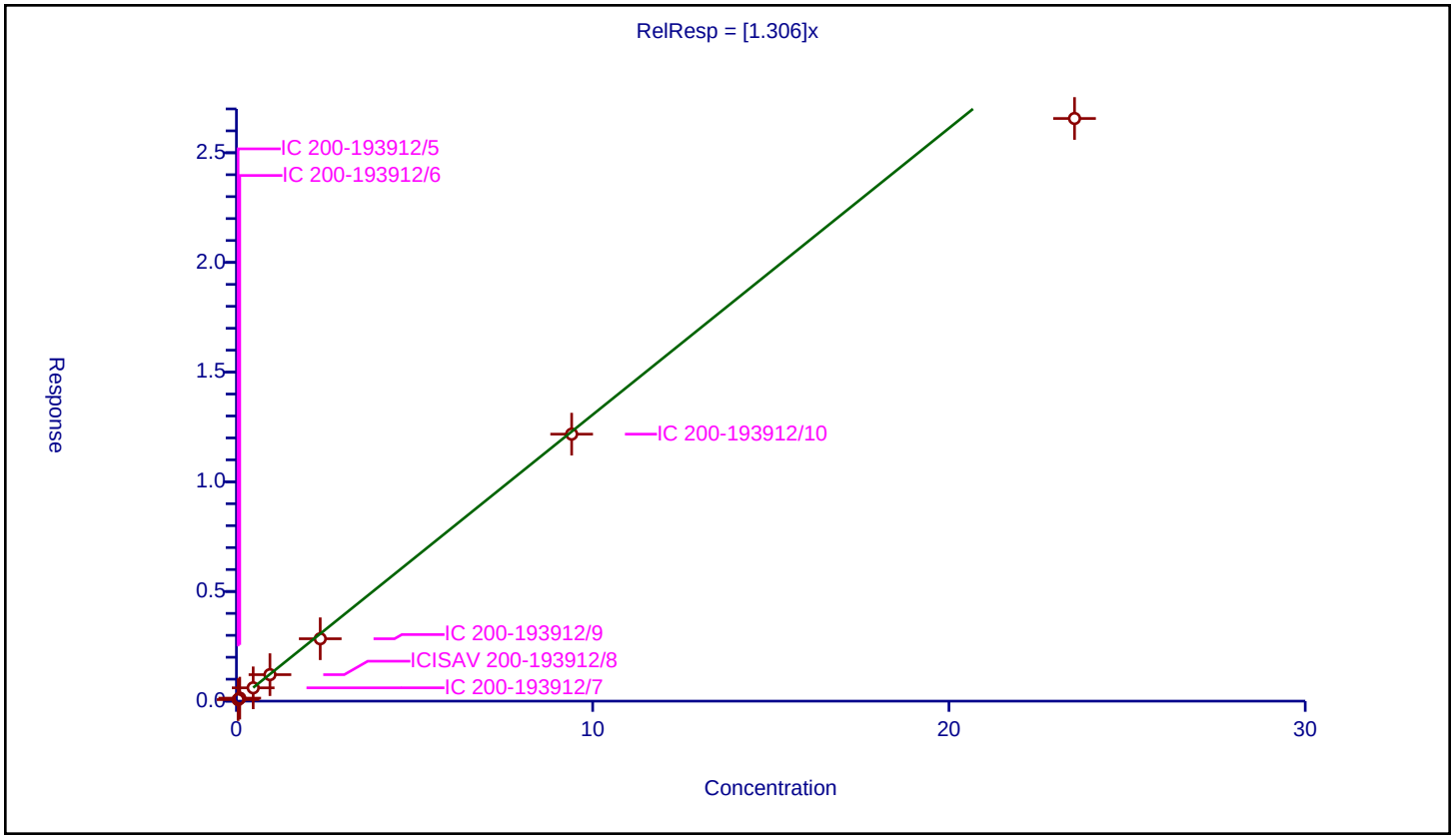
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04705	0.069845	1.1825	1487994.0	1.484482	Y
2	IC 200-193912/6	0.0941	0.136641	1.1825	1305238.0	1.452086	Y
3	IC 200-193912/7	0.4705	0.606956	1.1825	1353967.0	1.290024	Y
4	ICISAV 200-193912/8	0.941	1.207241	1.1825	1396957.0	1.282934	Y
5	IC 200-193912/9	2.3525	2.844335	1.1825	1406672.0	1.209069	Y
6	IC 200-193912/10	9.41	12.172239	1.1825	1242233.0	1.293543	Y
7	IC 200-193912/11	23.525	26.56316	1.1825	1370941.0	1.129146	Y



11/1/2023
12:01 PM

Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

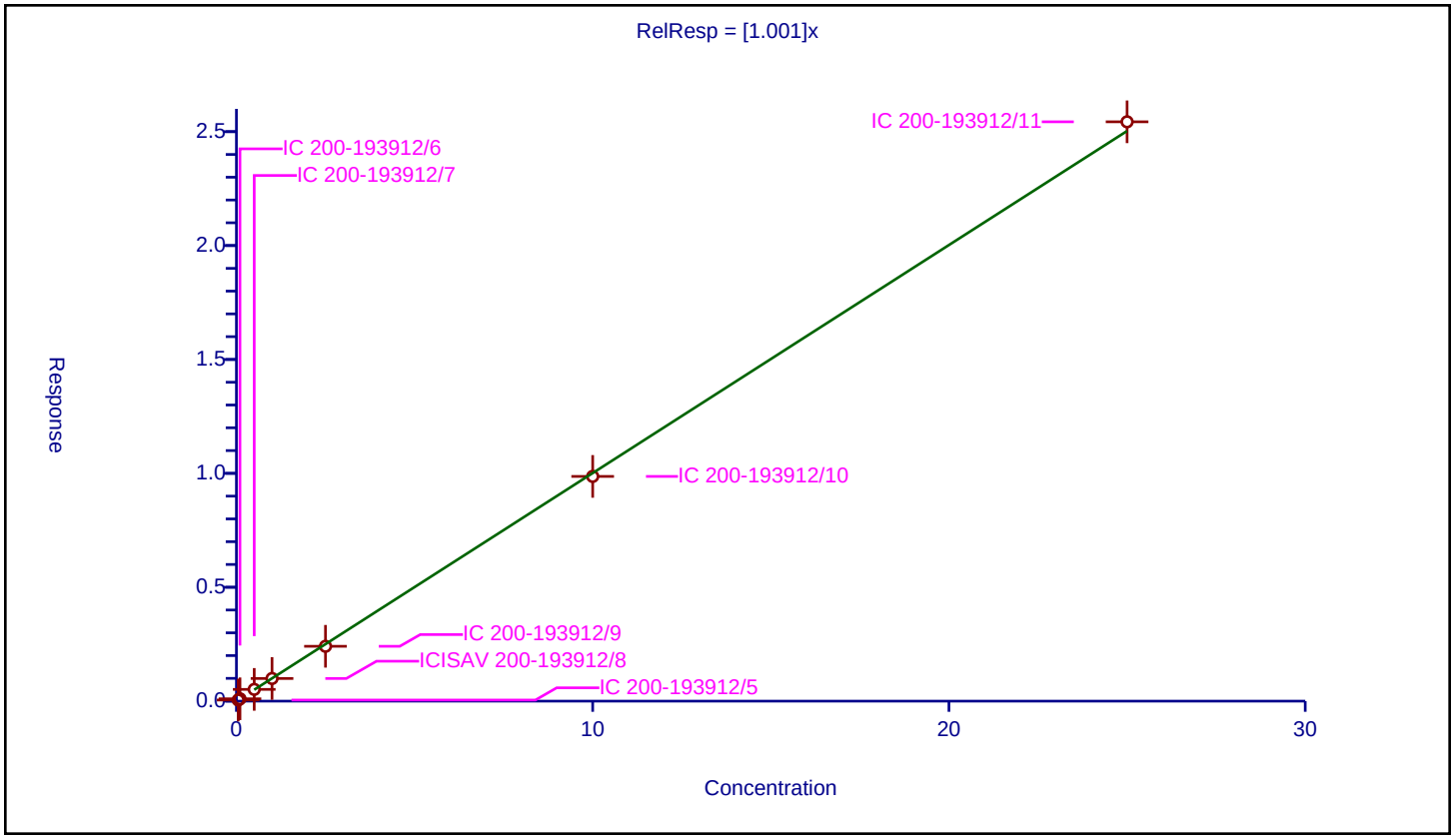
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.04907	1.25	346930.0	0.981394	Y
2	IC 200-193912/6	0.1	0.103291	1.25	299977.0	1.032913	Y
3	IC 200-193912/7	0.5	0.516151	1.25	279126.0	1.032303	Y
4	ICISAV 200-193912/8	1.0	0.994769	1.25	296521.0	0.994769	Y
5	IC 200-193912/9	2.5	2.407784	1.25	295164.0	0.963114	Y
6	IC 200-193912/10	10.0	9.865207	1.25	265620.0	0.986521	Y
7	IC 200-193912/11	25.0	25.432513	1.25	273677.0	1.017301	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

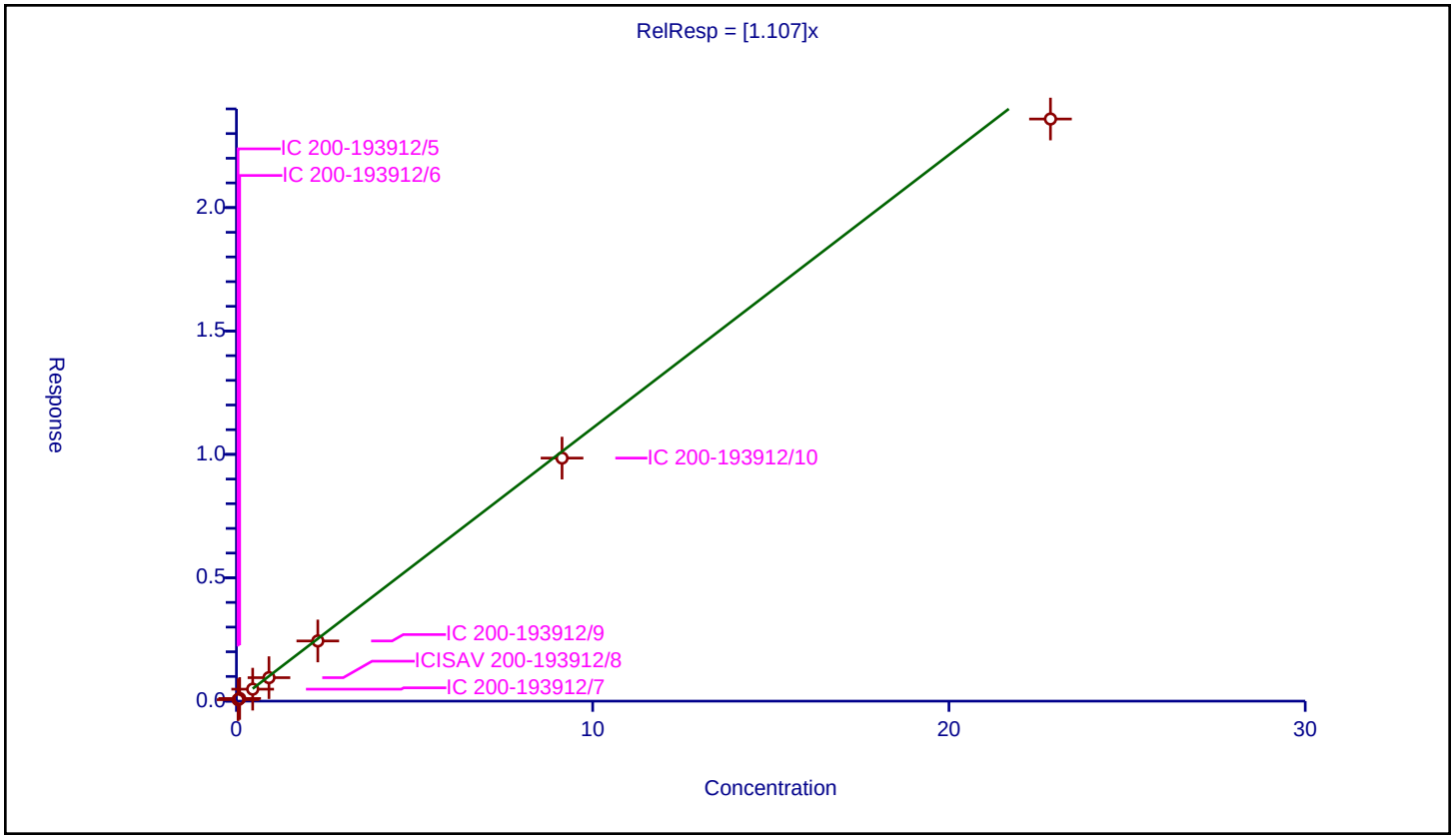
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0457	0.05908	1.1825	1487994.0	1.292778	Y
2	IC 200-193912/6	0.0914	0.107635	1.1825	1305238.0	1.177626	Y
3	IC 200-193912/7	0.457	0.484795	1.1825	1353967.0	1.06082	Y
4	ICISAV 200-193912/8	0.914	0.95088	1.1825	1396957.0	1.04035	Y
5	IC 200-193912/9	2.285	2.438823	1.1825	1406672.0	1.067319	Y
6	IC 200-193912/10	9.14	9.849131	1.1825	1242233.0	1.077585	Y
7	IC 200-193912/11	22.85	23.590185	1.1825	1370941.0	1.032393	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

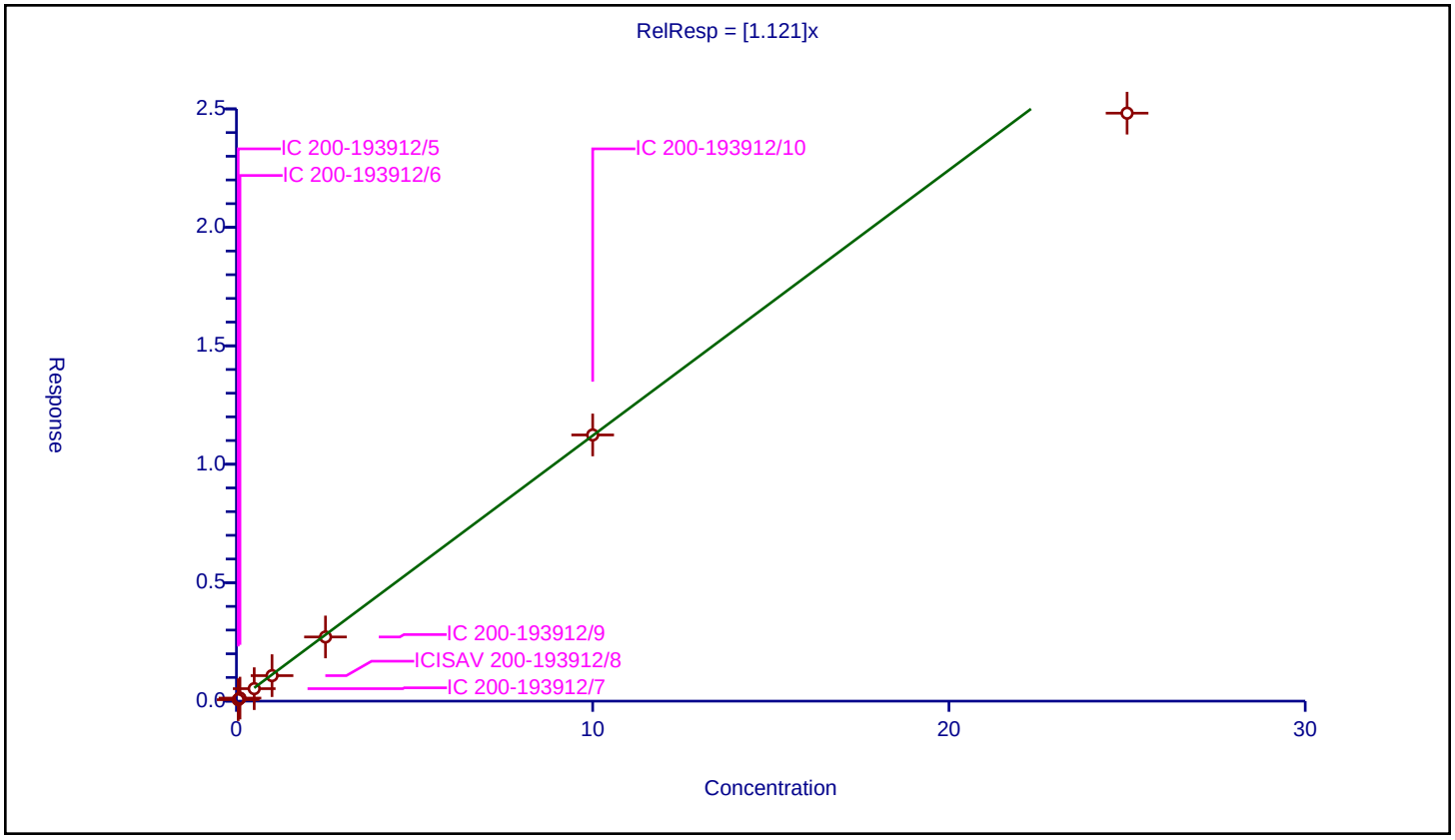
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.061632	1.25	1876608.0	1.23265	Y
2	IC 200-193912/6	0.1	0.128259	1.25	1628956.0	1.282585	Y
3	IC 200-193912/7	0.5	0.527087	1.25	1672833.0	1.054174	Y
4	ICISAV 200-193912/8	1.0	1.076804	1.25	1679653.0	1.076804	Y
5	IC 200-193912/9	2.5	2.708862	1.25	1773444.0	1.083545	Y
6	IC 200-193912/10	10.0	11.23637	1.25	1466571.0	1.123637	Y
7	IC 200-193912/11	25.0	24.820079	1.25	1559821.0	0.992803	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

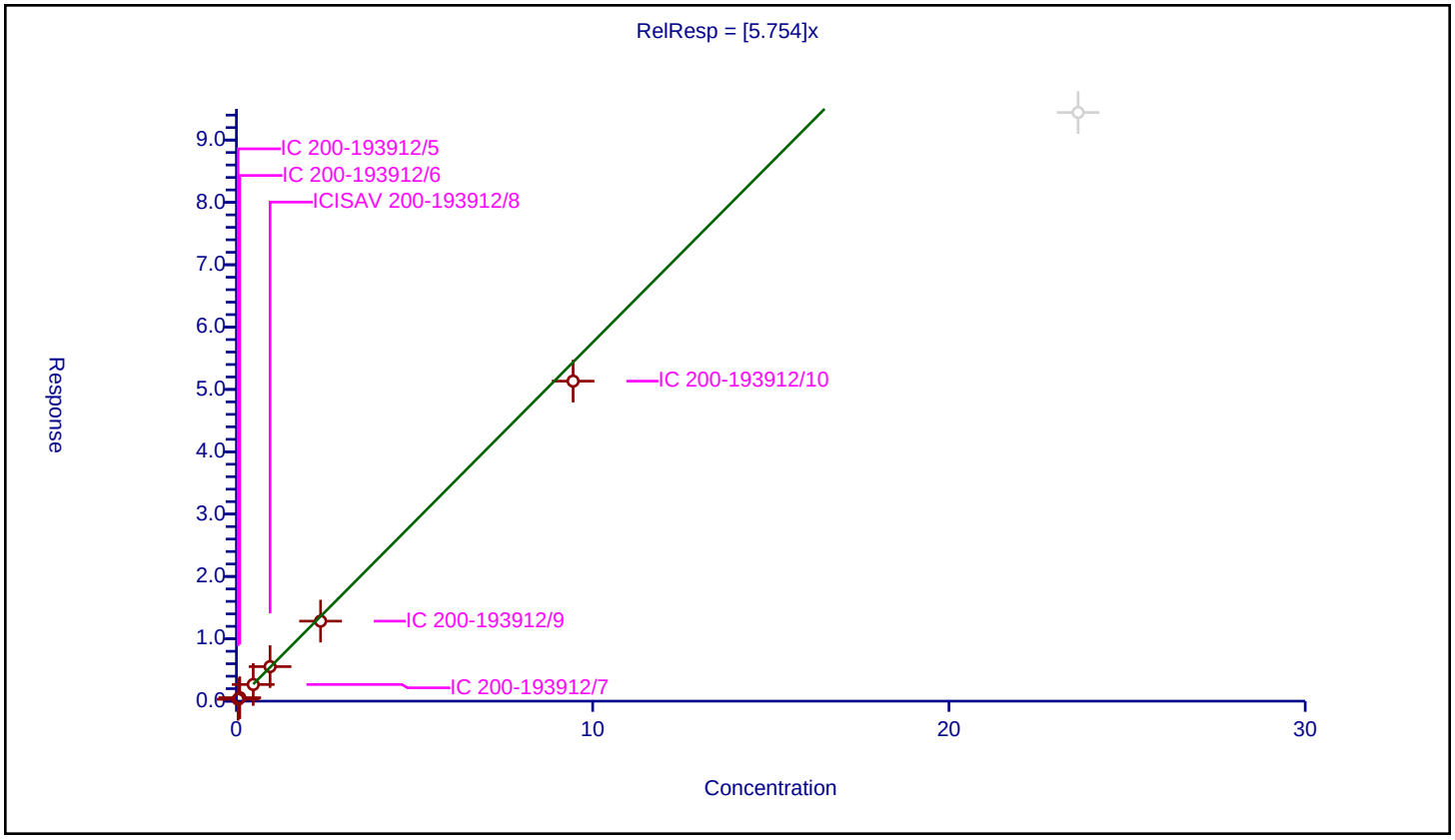
Curve Coefficients

Intercept:	0
Slope:	5.754

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04725	0.297259	1.195	943517.0	6.291195	Y
2	IC 200-193912/6	0.0945	0.553418	1.195	863764.0	5.856277	Y
3	IC 200-193912/7	0.4725	2.671126	1.195	882764.0	5.653177	Y
4	ICISAV 200-193912/8	0.945	5.536858	1.195	904398.0	5.859109	Y
5	IC 200-193912/9	2.3625	12.835921	1.195	919926.0	5.433194	Y
6	IC 200-193912/10	9.45	51.335121	1.195	765818.0	5.432288	Y
7	IC 200-193912/11	23.625	94.418048	1.195	865311.0	3.996531	N



Calibration / Perfluoroheptanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

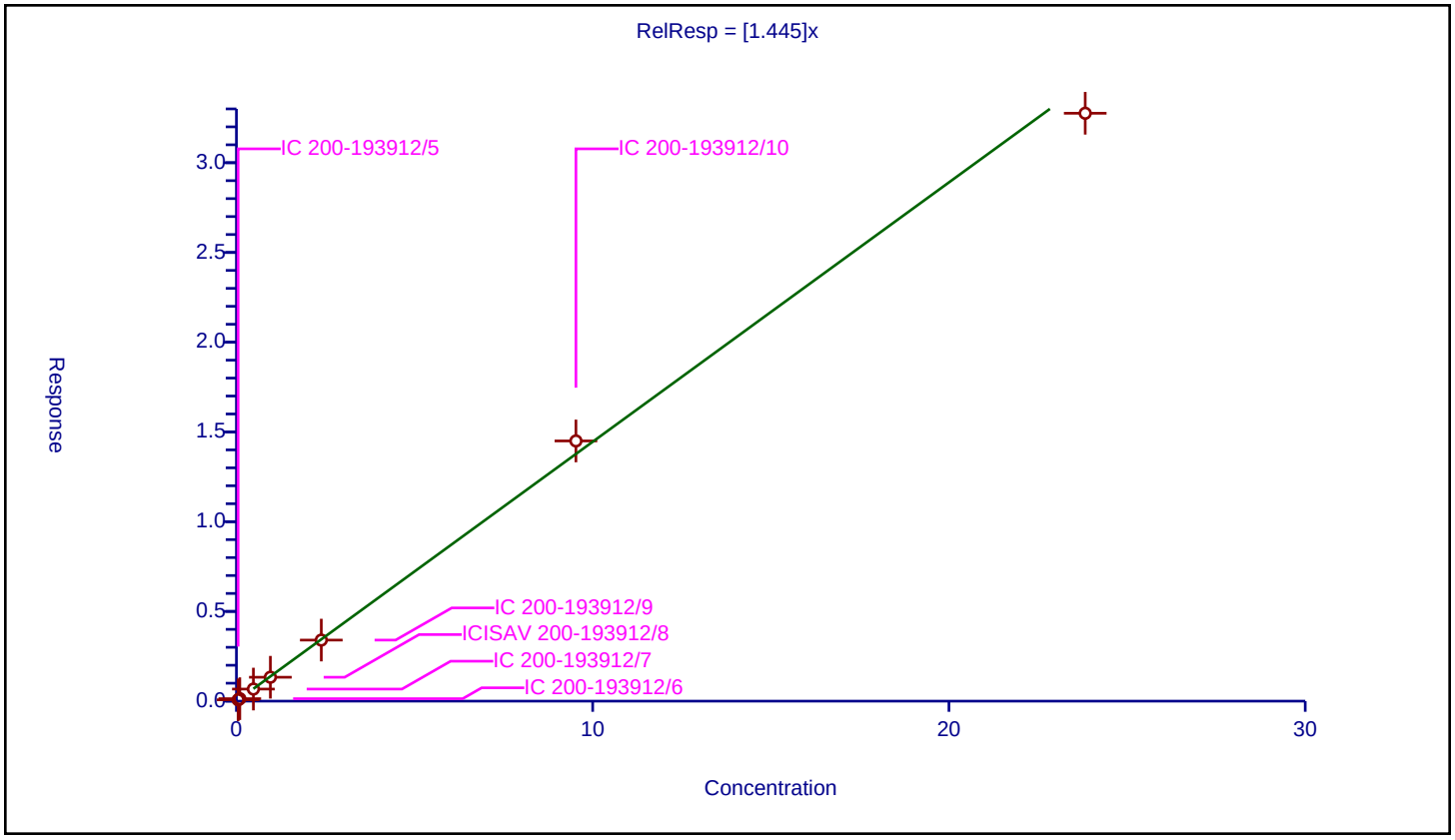
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04765	0.073316	1.195	943517.0	1.538638	Y
2	IC 200-193912/6	0.0953	0.13751	1.195	863764.0	1.442913	Y
3	IC 200-193912/7	0.4765	0.673122	1.195	882764.0	1.412638	Y
4	ICISAV 200-193912/8	0.953	1.332604	1.195	904398.0	1.398325	Y
5	IC 200-193912/9	2.3825	3.401611	1.195	919926.0	1.427749	Y
6	IC 200-193912/10	9.53	14.49894	1.195	765818.0	1.5214	Y
7	IC 200-193912/11	23.825	32.755938	1.195	865311.0	1.374856	Y



11/1/2023
12:01 PM

Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

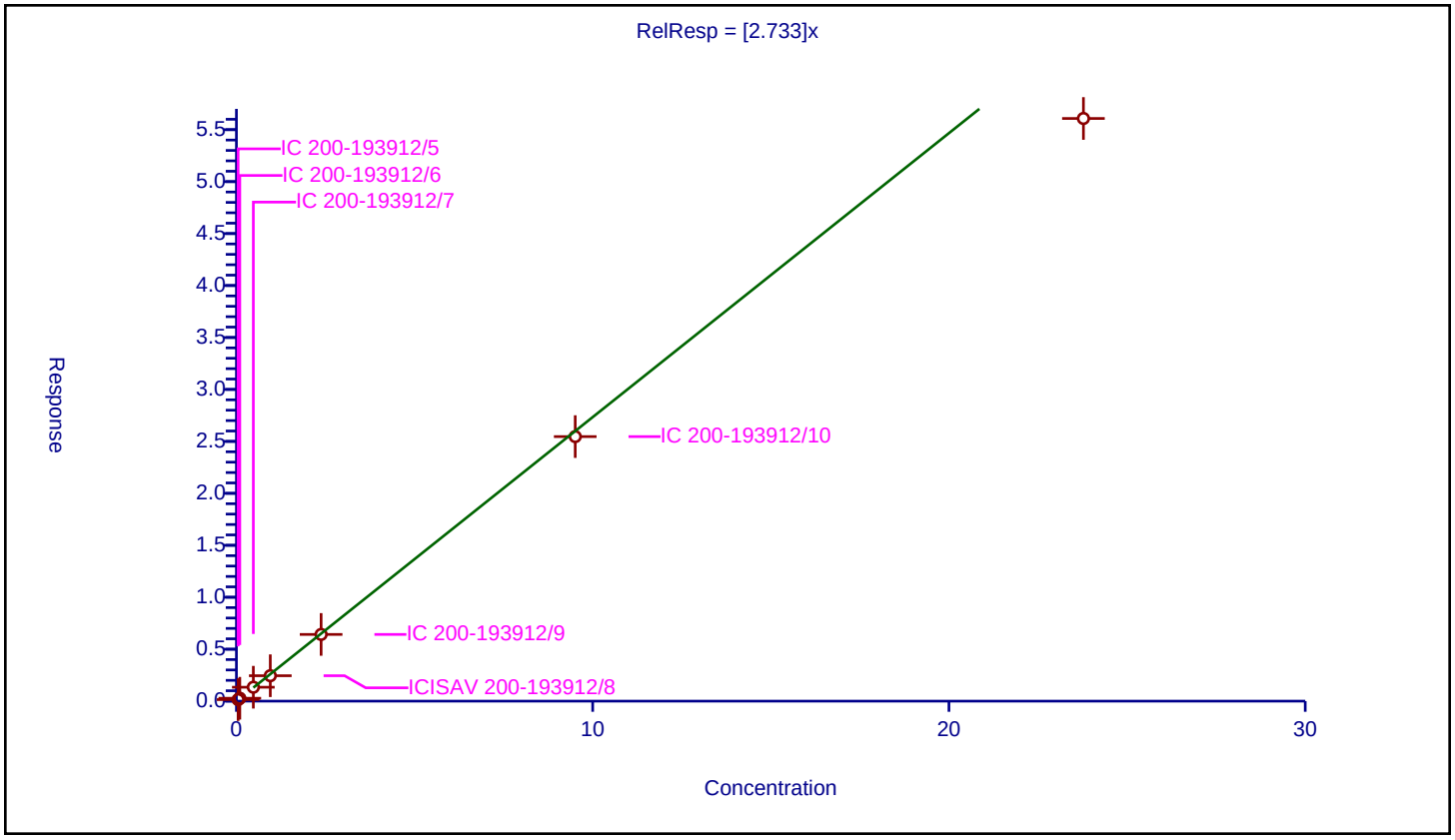
Curve Coefficients

Intercept:	0
Slope:	2.733

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04755	0.14644	1.1875	309808.0	3.079716	Y
2	IC 200-193912/6	0.0951	0.278153	1.1875	286854.0	2.924848	Y
3	IC 200-193912/7	0.4755	1.340299	1.1875	274798.0	2.818715	Y
4	ICISAV 200-193912/8	0.951	2.447413	1.1875	299923.0	2.573515	Y
5	IC 200-193912/9	2.3775	6.419079	1.1875	305639.0	2.699928	Y
6	IC 200-193912/10	9.51	25.460284	1.1875	250039.0	2.677212	Y
7	IC 200-193912/11	23.775	56.075977	1.1875	271643.0	2.358611	Y



11/1/2023
12:01 PM

Calibration / Perfluorooctanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

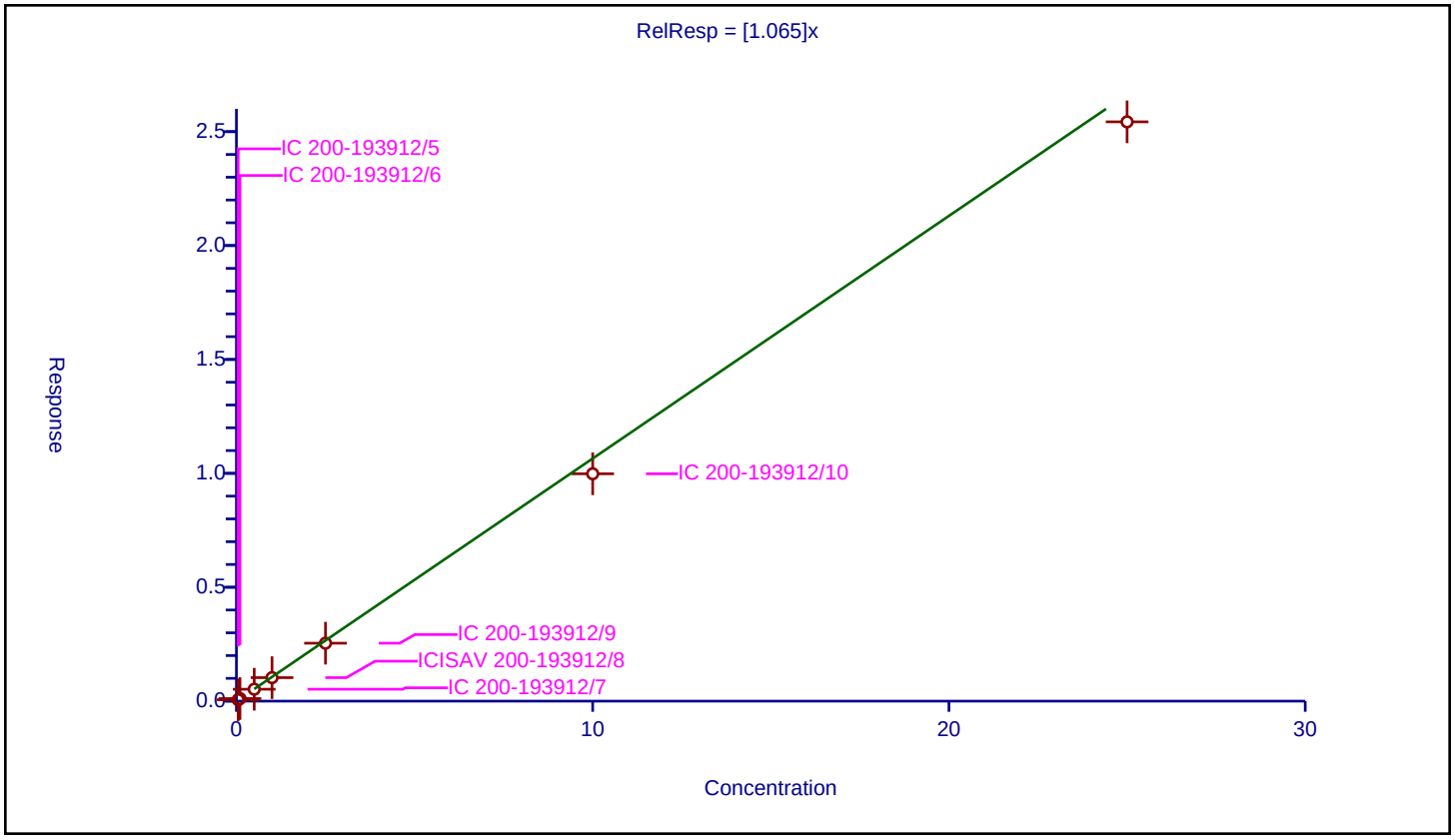
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	14700000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060812	1.25	2027588.0	1.216248	Y
2	IC 200-193912/6	0.1	0.112776	1.25	1982384.0	1.127765	Y
3	IC 200-193912/7	0.5	0.523481	1.25	1912820.0	1.046962	Y
4	ICISAV 200-193912/8	1.0	1.032173	1.25	1934463.0	1.032173	Y
5	IC 200-193912/9	2.5	2.543526	1.25	2045642.0	1.01741	Y
6	IC 200-193912/10	10.0	9.981516	1.25	1691186.0	0.998152	Y
7	IC 200-193912/11	25.0	25.431645	1.25	1620734.0	1.017266	Y



11/1/2023
12:01 PM

Calibration / Perfluorooctanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

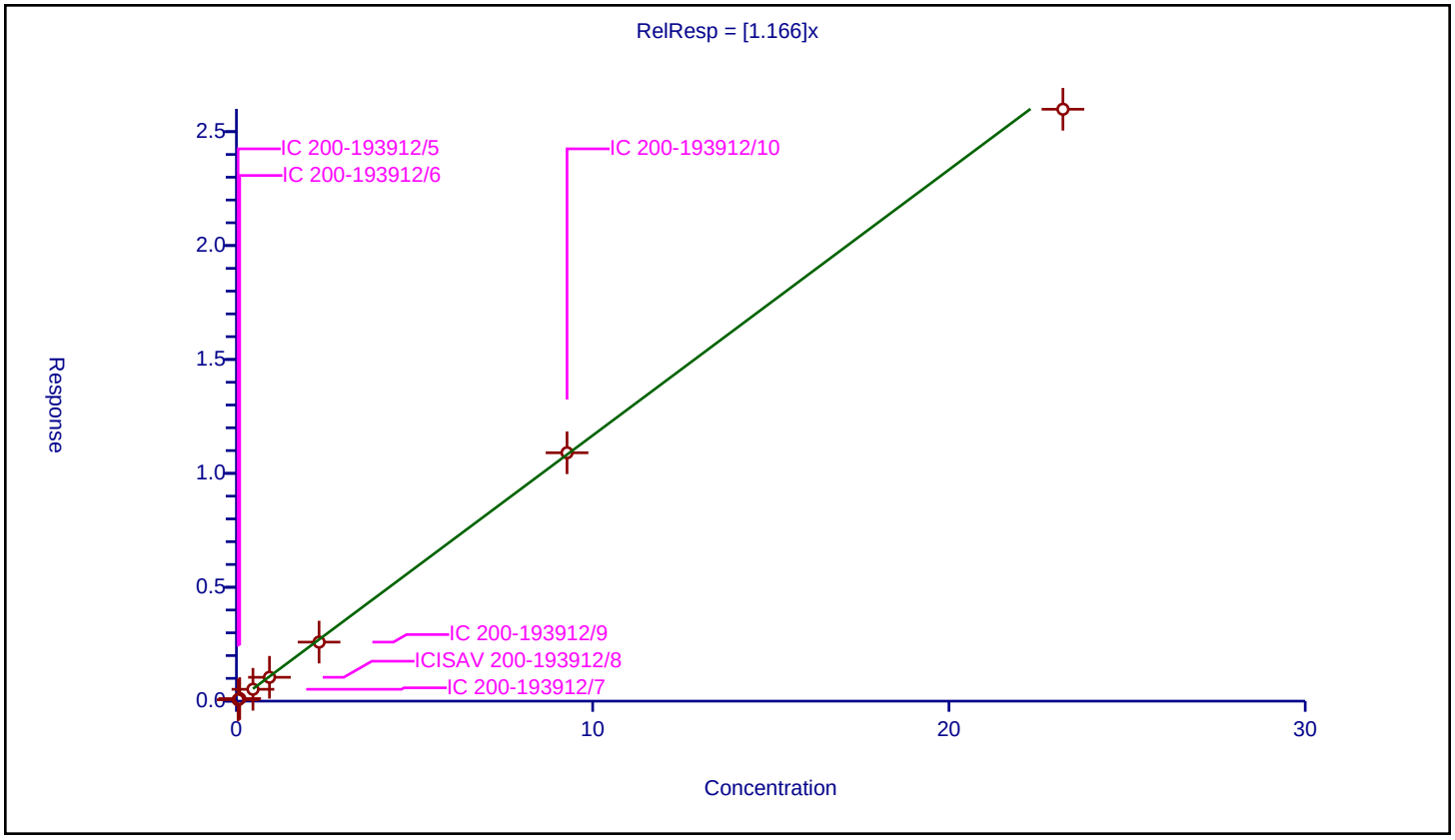
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	8240000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0464	0.060053	1.195	943517.0	1.294243	Y
2	IC 200-193912/6	0.0928	0.112059	1.195	863764.0	1.207533	Y
3	IC 200-193912/7	0.464	0.520913	1.195	882764.0	1.122657	Y
4	ICISAV 200-193912/8	0.928	1.047054	1.195	904398.0	1.128291	Y
5	IC 200-193912/9	2.32	2.591991	1.195	919926.0	1.117237	Y
6	IC 200-193912/10	9.28	10.903287	1.195	765818.0	1.174923	Y
7	IC 200-193912/11	23.2	25.9853	1.195	865311.0	1.120056	Y



11/1/2023
12:01 PM

Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

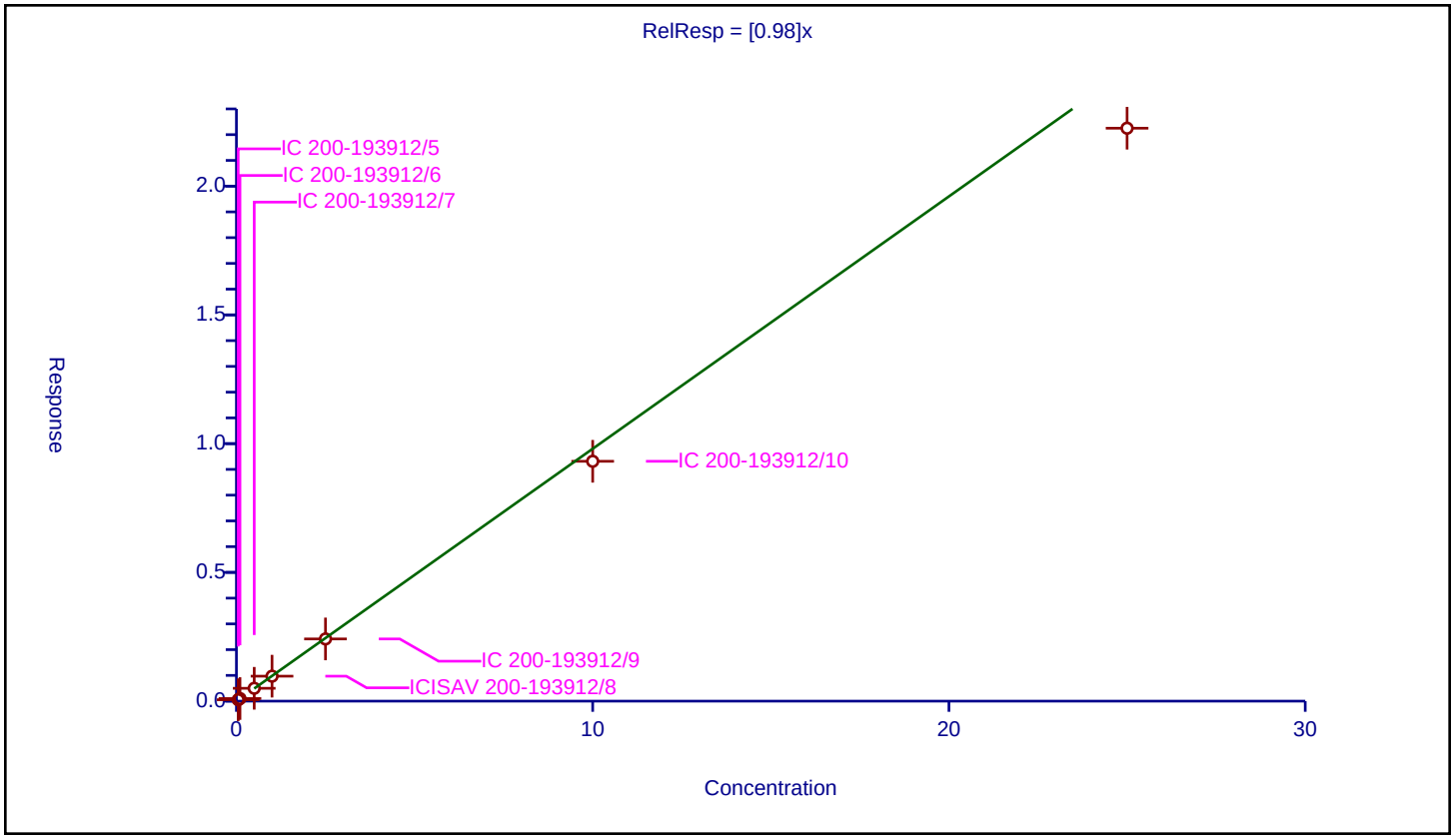
Curve Coefficients

Intercept:	0
Slope:	0.98

Error Coefficients

Standard Error:	15100000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.054544	1.25	2335475.0	1.090881	Y
2	IC 200-193912/6	0.1	0.101347	1.25	1965971.0	1.013469	Y
3	IC 200-193912/7	0.5	0.499549	1.25	2008931.0	0.999099	Y
4	ICISAV 200-193912/8	1.0	0.969174	1.25	2143126.0	0.969174	Y
5	IC 200-193912/9	2.5	2.415598	1.25	2116548.0	0.966239	Y
6	IC 200-193912/10	10.0	9.314659	1.25	1889768.0	0.931466	Y
7	IC 200-193912/11	25.0	22.250286	1.25	1902682.0	0.890011	Y



11/1/2023
12:01 PM

Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

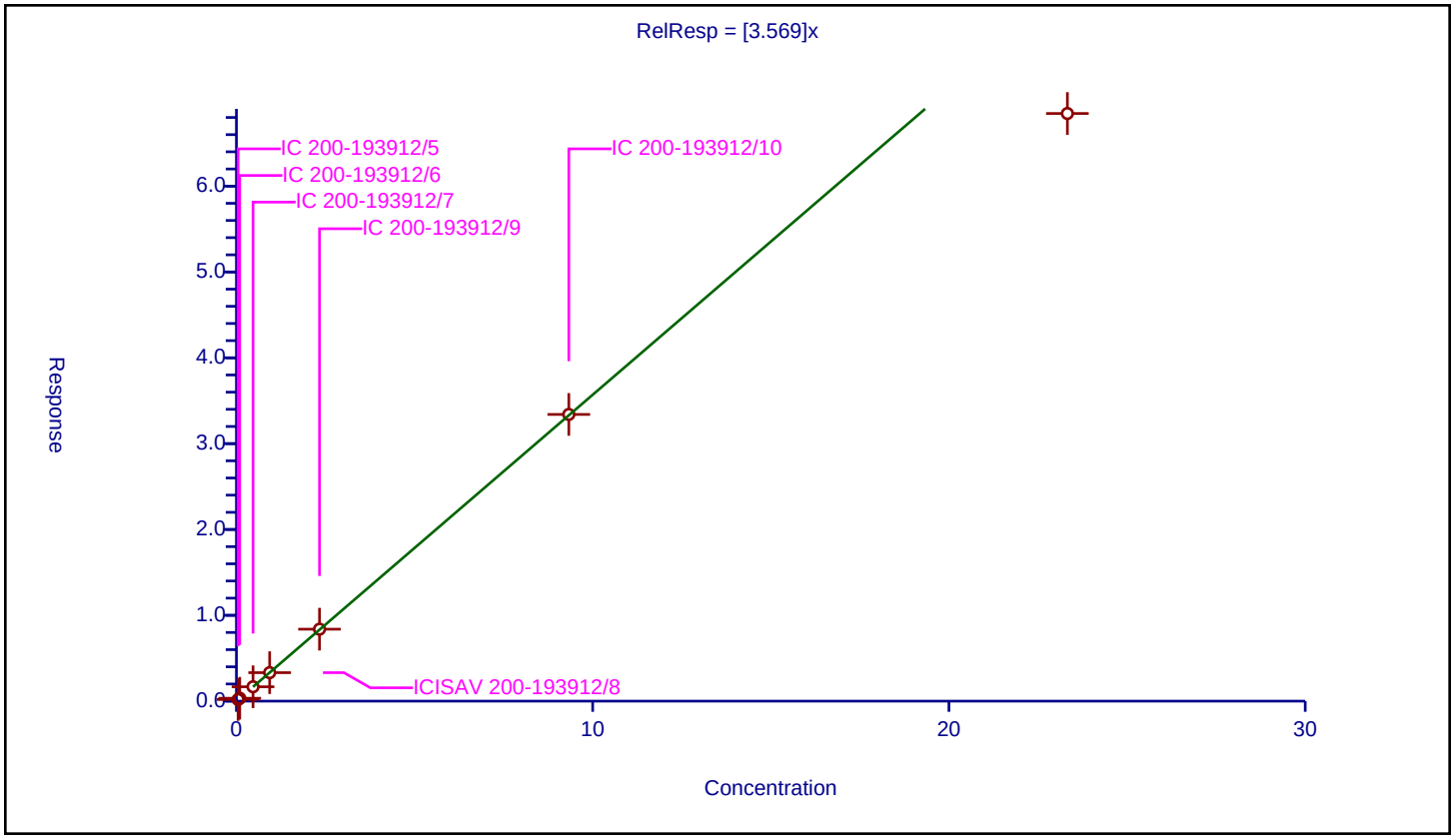
Curve Coefficients

Intercept:	0
Slope:	3.569

Error Coefficients

Standard Error:	22200000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04665	0.191359	1.195	943517.0	4.102008	Y
2	IC 200-193912/6	0.0933	0.338082	1.195	863764.0	3.623605	Y
3	IC 200-193912/7	0.4665	1.67515	1.195	882764.0	3.59089	Y
4	ICISAV 200-193912/8	0.933	3.319787	1.195	904398.0	3.558186	Y
5	IC 200-193912/9	2.3325	8.383828	1.195	919926.0	3.594353	Y
6	IC 200-193912/10	9.33	33.401161	1.195	765818.0	3.579974	Y
7	IC 200-193912/11	23.325	68.461822	1.195	865311.0	2.935126	Y



11/1/2023
12:01 PM

Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

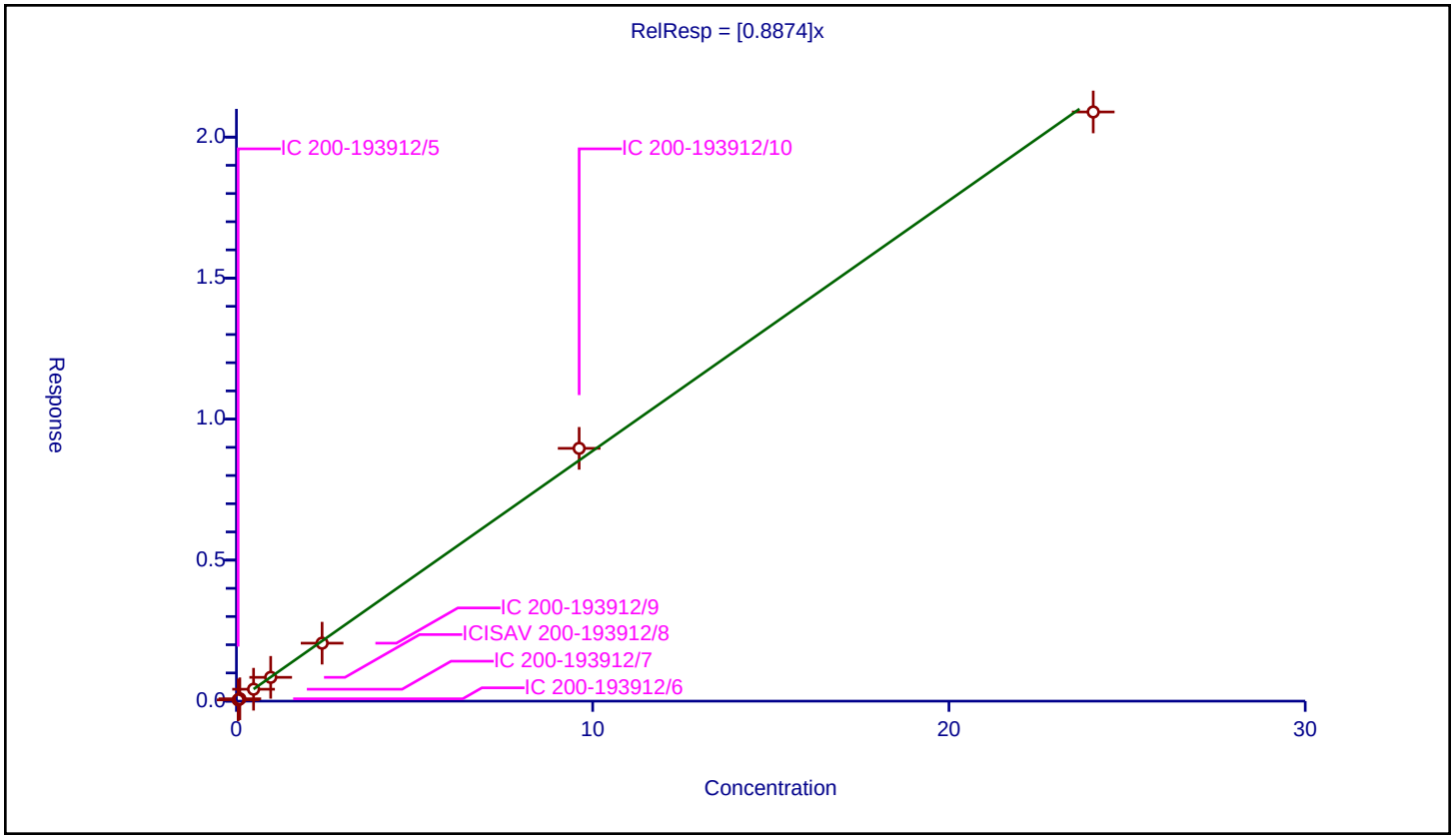
Curve Coefficients

Intercept:	0
Slope:	0.8874

Error Coefficients

Standard Error:	6640000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0481	0.044866	1.195	943517.0	0.932762	Y
2	IC 200-193912/6	0.0962	0.083528	1.195	863764.0	0.86827	Y
3	IC 200-193912/7	0.481	0.422495	1.195	882764.0	0.878367	Y
4	ICISAV 200-193912/8	0.962	0.843613	1.195	904398.0	0.876937	Y
5	IC 200-193912/9	2.405	2.055747	1.195	919926.0	0.854781	Y
6	IC 200-193912/10	9.62	8.96416	1.195	765818.0	0.931825	Y
7	IC 200-193912/11	24.05	20.891757	1.195	865311.0	0.86868	Y



Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

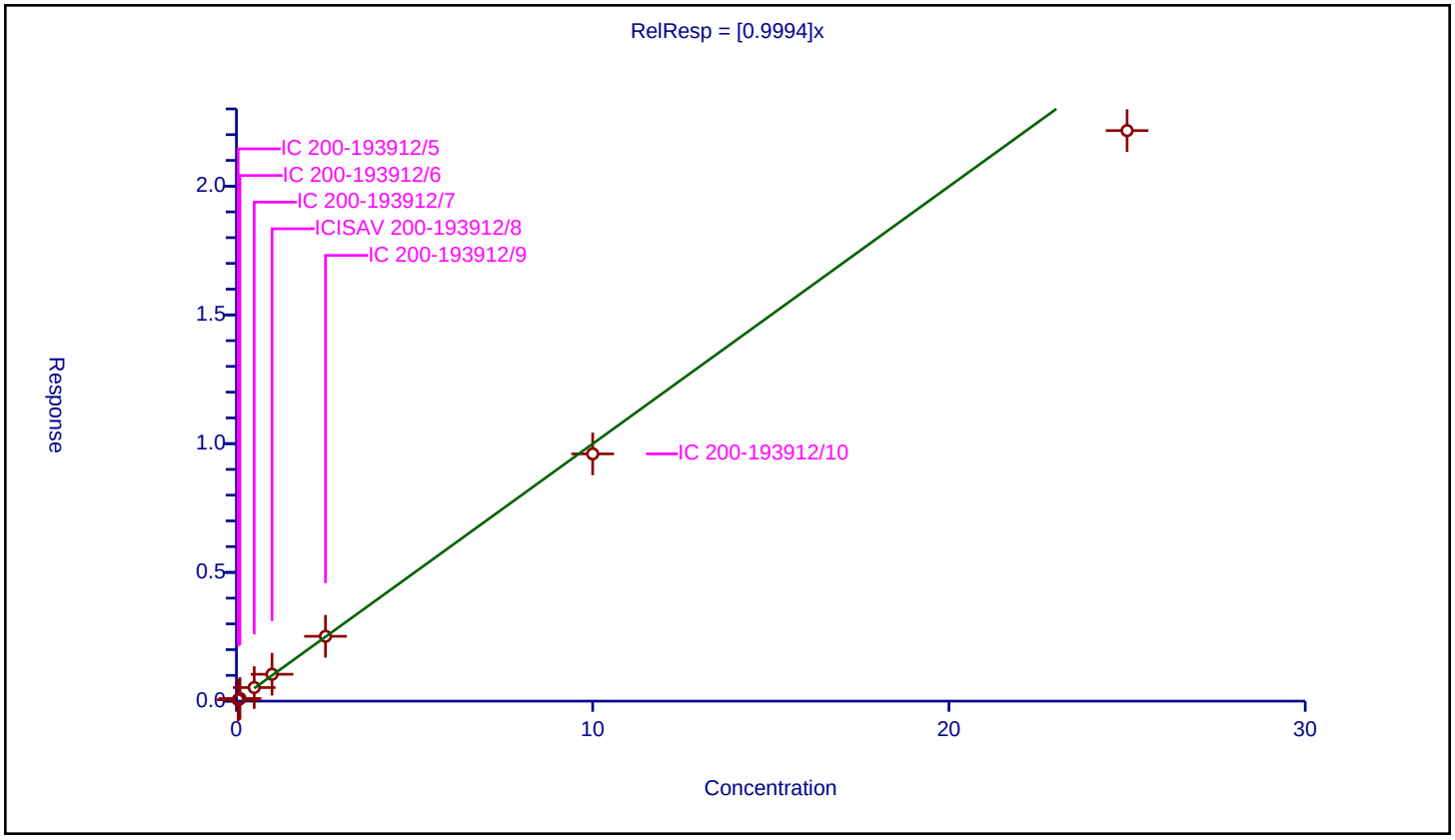
Curve Coefficients

Intercept:	0
Slope:	0.9994

Error Coefficients

Standard Error:	15800000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.051407	1.25	2492424.0	1.028136	Y
2	IC 200-193912/6	0.1	0.101543	1.25	2097344.0	1.015433	Y
3	IC 200-193912/7	0.5	0.527053	1.25	2062234.0	1.054107	Y
4	ICISAV 200-193912/8	1.0	1.043889	1.25	2125756.0	1.043889	Y
5	IC 200-193912/9	2.5	2.518567	1.25	2307904.0	1.007427	Y
6	IC 200-193912/10	10.0	9.601822	1.25	1979736.0	0.960182	Y
7	IC 200-193912/11	25.0	22.157516	1.25	1981566.0	0.886301	Y



11/1/2023
12:01 PM

Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

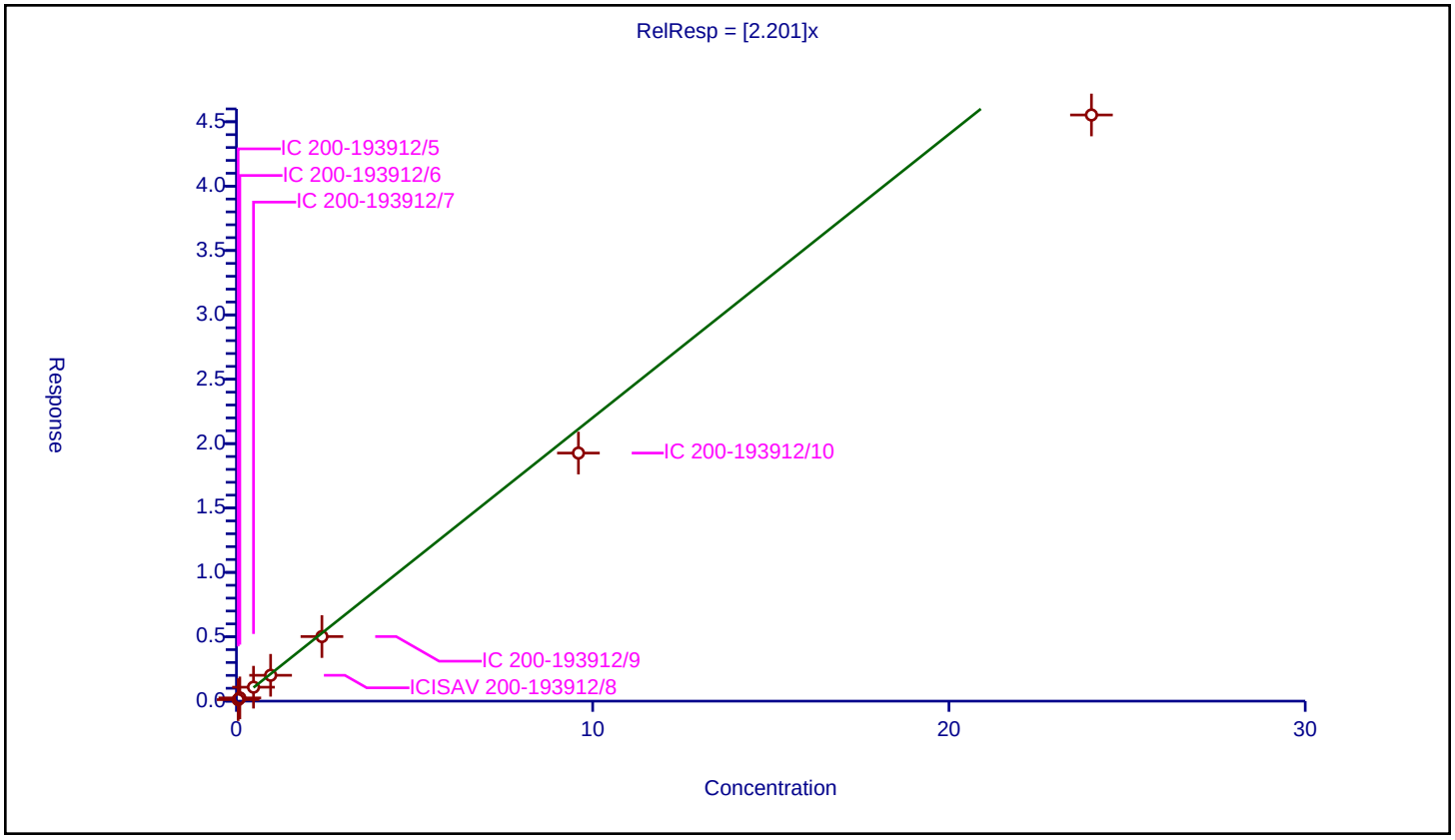
Curve Coefficients

Intercept:	0
Slope:	2.201

Error Coefficients

Standard Error:	5360000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.048	0.117827	1.1975	366485.0	2.45473	Y
2	IC 200-193912/6	0.096	0.250914	1.1975	307295.0	2.613688	Y
3	IC 200-193912/7	0.48	1.083603	1.1975	298552.0	2.257506	Y
4	ICISAV 200-193912/8	0.96	2.007175	1.1975	331913.0	2.090808	Y
5	IC 200-193912/9	2.4	5.014617	1.1975	331708.0	2.089424	Y
6	IC 200-193912/10	9.6	19.268997	1.1975	309678.0	2.007187	Y
7	IC 200-193912/11	24.0	45.528205	1.1975	316911.0	1.897009	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

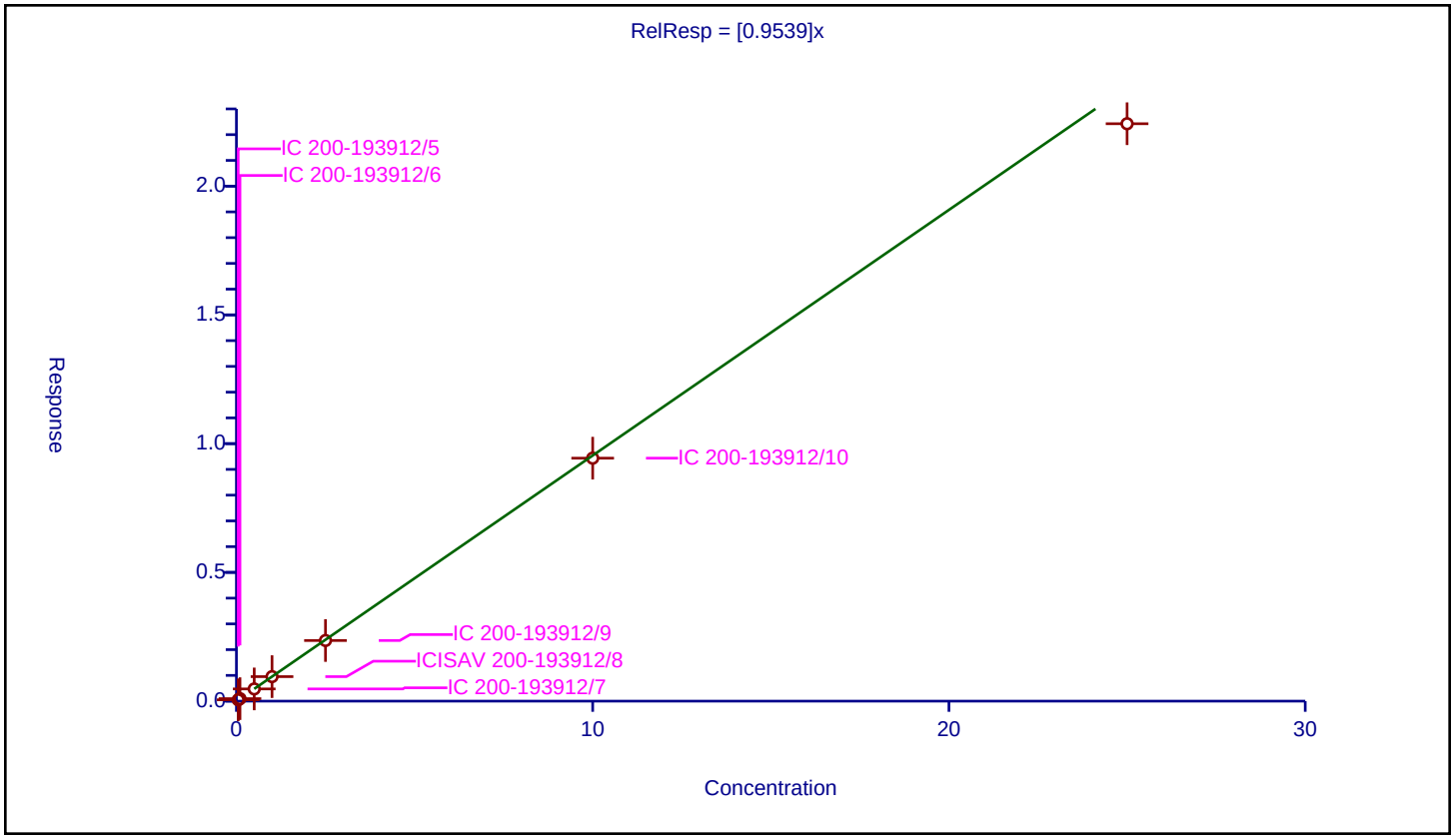
Curve Coefficients

Intercept:	0
Slope:	0.9539

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.05114	1.25	1884229.0	1.022792	Y
2	IC 200-193912/6	0.1	0.097032	1.25	1858847.0	0.970319	Y
3	IC 200-193912/7	0.5	0.474712	1.25	1790735.0	0.949424	Y
4	ICISAV 200-193912/8	1.0	0.952135	1.25	1887535.0	0.952135	Y
5	IC 200-193912/9	2.5	2.354683	1.25	1904586.0	0.941873	Y
6	IC 200-193912/10	10.0	9.435572	1.25	1724931.0	0.943557	Y
7	IC 200-193912/11	25.0	22.424085	1.25	1759972.0	0.896963	Y



Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

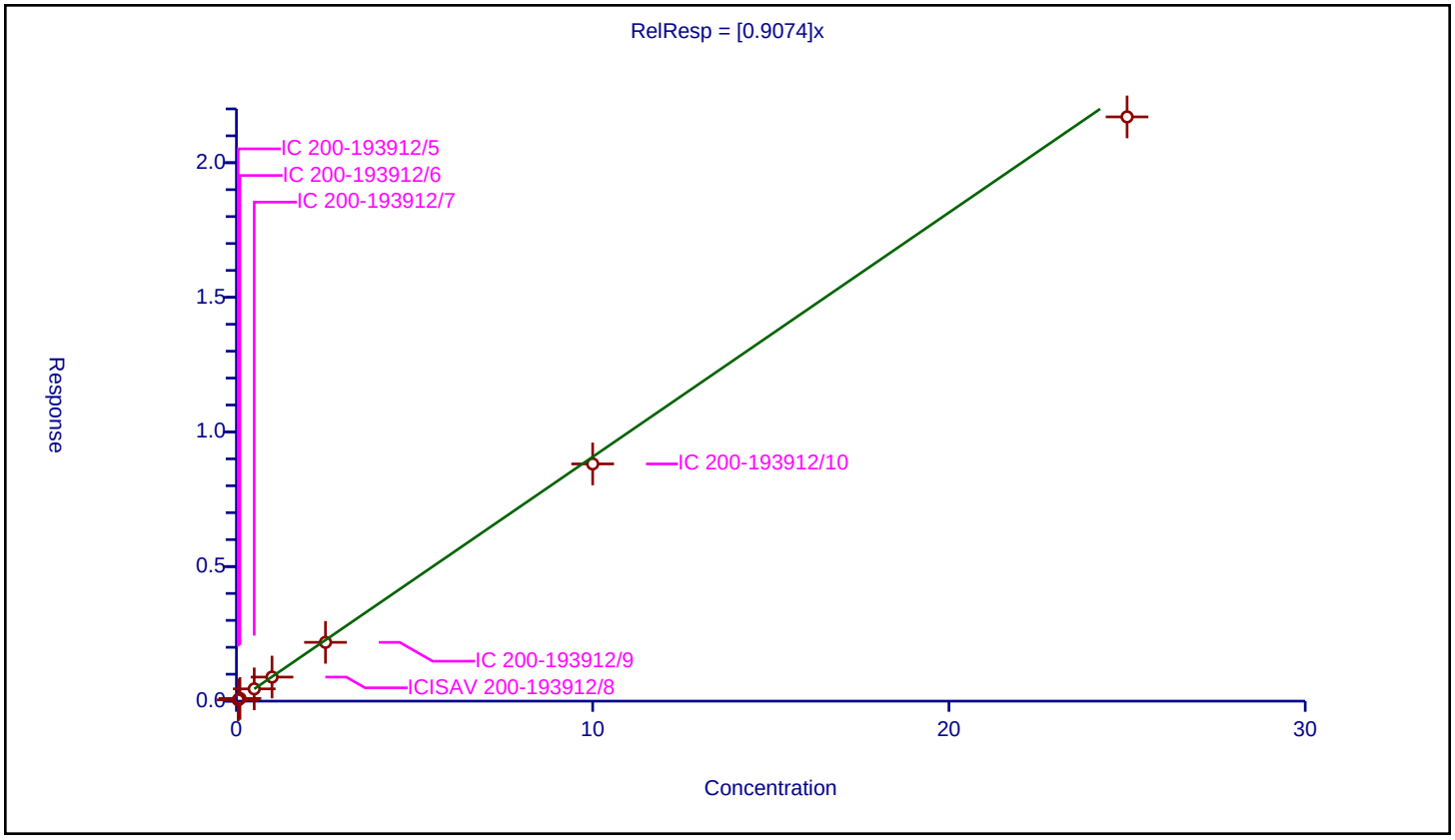
Curve Coefficients

Intercept:	0
Slope:	0.9074

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.047213	1.25	589245.0	0.944259	Y
2	IC 200-193912/6	0.1	0.098038	1.25	509447.0	0.980377	Y
3	IC 200-193912/7	0.5	0.45553	1.25	486461.0	0.91106	Y
4	ICISAV 200-193912/8	1.0	0.893408	1.25	518688.0	0.893408	Y
5	IC 200-193912/9	2.5	2.183599	1.25	518571.0	0.87344	Y
6	IC 200-193912/10	10.0	8.811989	1.25	465286.0	0.881199	Y
7	IC 200-193912/11	25.0	21.70302	1.25	505130.0	0.868121	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

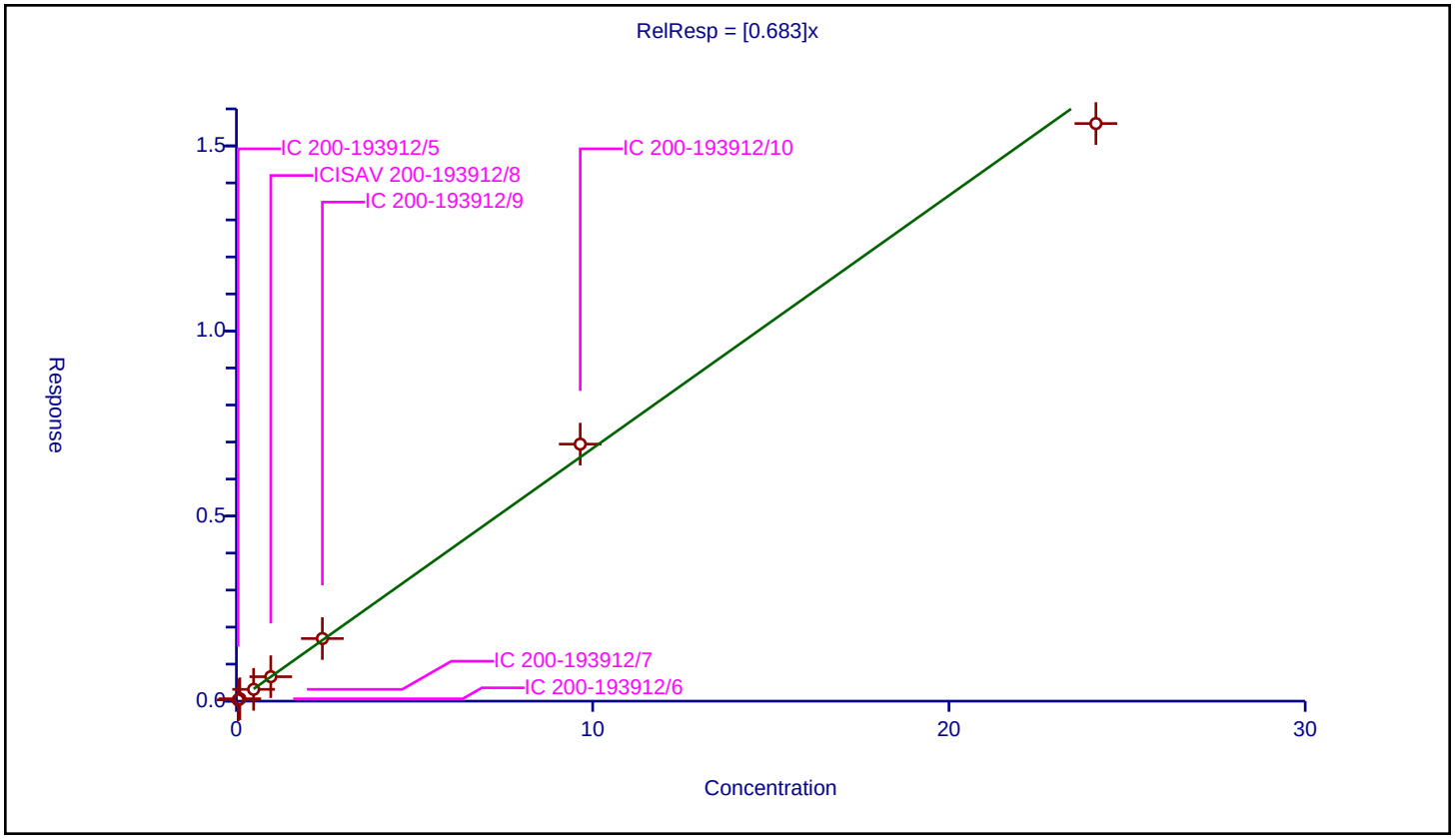
Curve Coefficients

Intercept:	0
Slope:	0.683

Error Coefficients

Standard Error:	4990000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04825	0.033974	1.195	943517.0	0.704116	Y
2	IC 200-193912/6	0.0965	0.064249	1.195	863764.0	0.665791	Y
3	IC 200-193912/7	0.4825	0.318115	1.195	882764.0	0.659305	Y
4	ICISAV 200-193912/8	0.965	0.659955	1.195	904398.0	0.683891	Y
5	IC 200-193912/9	2.4125	1.691543	1.195	919926.0	0.701158	Y
6	IC 200-193912/10	9.65	6.944096	1.195	765818.0	0.719595	Y
7	IC 200-193912/11	24.125	15.604572	1.195	865311.0	0.646822	Y



Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

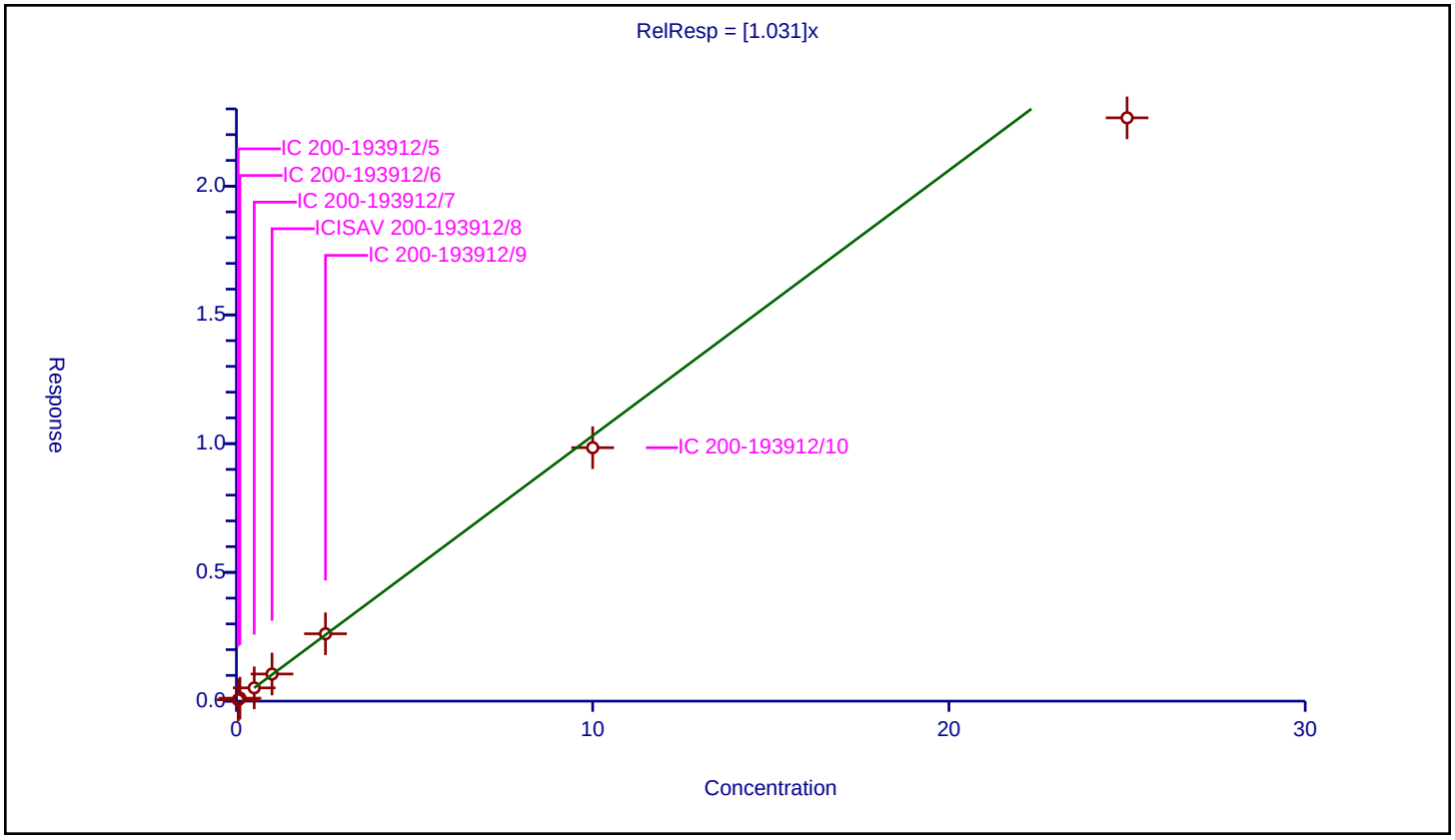
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	14600000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.052687	1.25	2441700.0	1.053743	Y
2	IC 200-193912/6	0.1	0.113929	1.25	1976379.0	1.139293	Y
3	IC 200-193912/7	0.5	0.515751	1.25	1983358.0	1.031502	Y
4	ICISAV 200-193912/8	1.0	1.053027	1.25	2053330.0	1.053027	Y
5	IC 200-193912/9	2.5	2.616249	1.25	2158999.0	1.0465	Y
6	IC 200-193912/10	10.0	9.84312	1.25	1818926.0	0.984312	Y
7	IC 200-193912/11	25.0	22.652933	1.25	1790927.0	0.906117	Y



11/1/2023
12:01 PM

Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

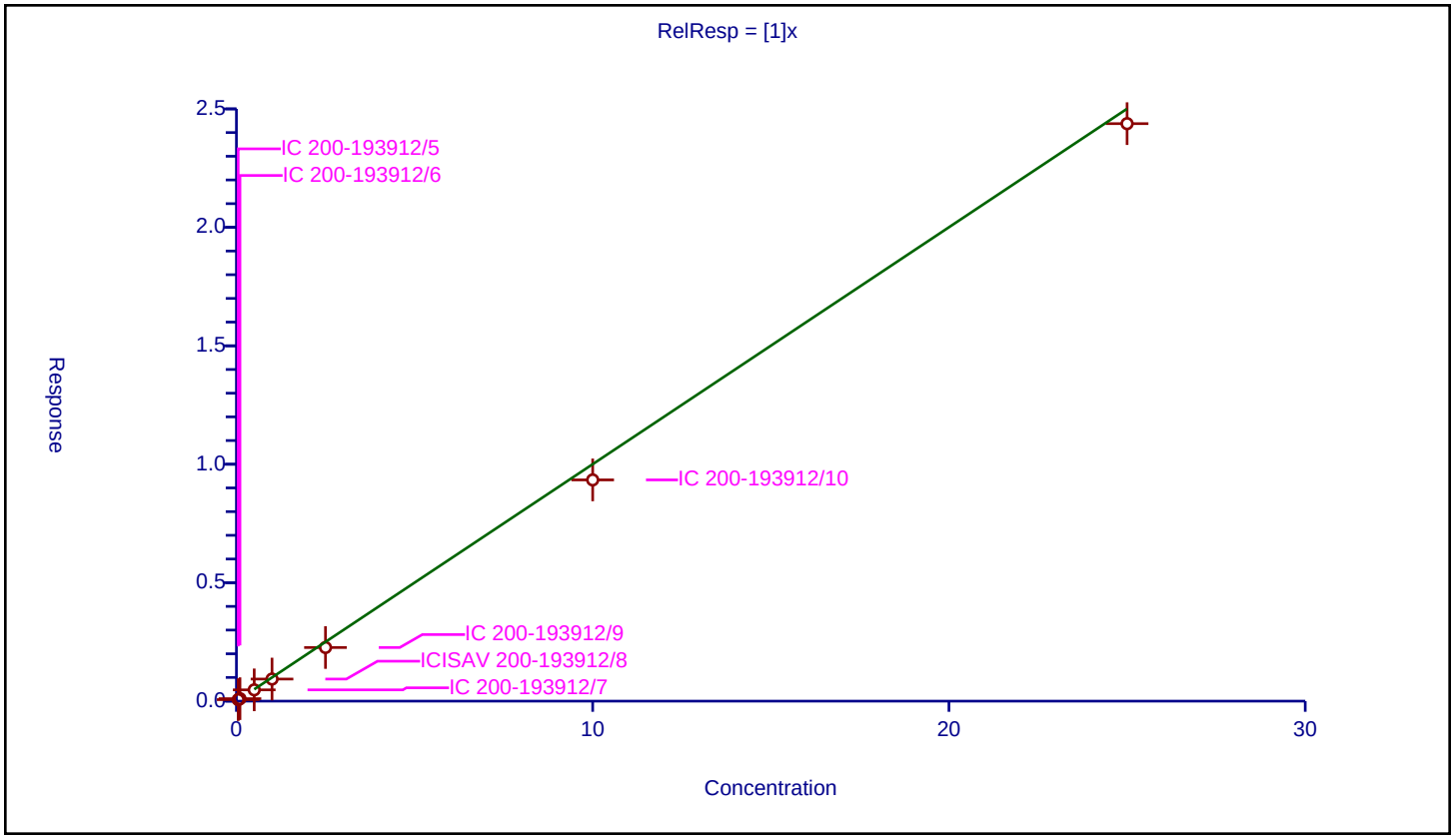
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.062984	1.25	566846.0	1.25969	Y
2	IC 200-193912/6	0.1	0.104122	1.25	488020.0	1.041223	Y
3	IC 200-193912/7	0.5	0.476346	1.25	491633.0	0.952692	Y
4	ICISAV 200-193912/8	1.0	0.933122	1.25	487913.0	0.933122	Y
5	IC 200-193912/9	2.5	2.264152	1.25	544137.0	0.905661	Y
6	IC 200-193912/10	10.0	9.339057	1.25	456350.0	0.933906	Y
7	IC 200-193912/11	25.0	24.377511	1.25	430319.0	0.9751	Y



11/1/2023
12:01 PM

Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

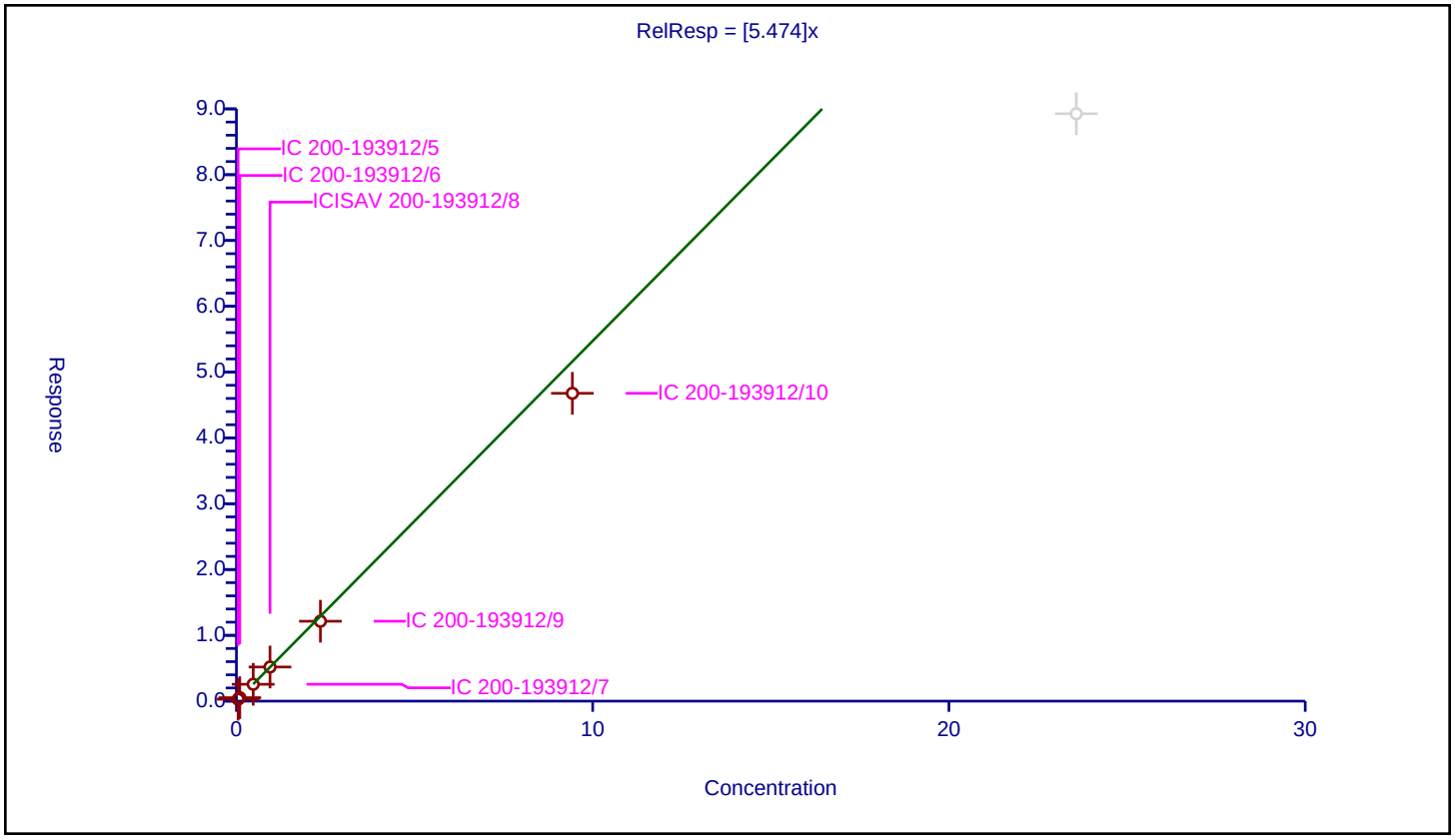
Curve Coefficients

Intercept:	0
Slope:	5.474

Error Coefficients

Standard Error:	14200000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04715	0.292105	1.195	943517.0	6.195237	Y
2	IC 200-193912/6	0.0943	0.527614	1.195	863764.0	5.595053	Y
3	IC 200-193912/7	0.4715	2.564572	1.195	882764.0	5.439177	Y
4	ICISAV 200-193912/8	0.943	5.187209	1.195	904398.0	5.500751	Y
5	IC 200-193912/9	2.3575	12.142724	1.195	919926.0	5.150678	Y
6	IC 200-193912/10	9.43	46.776459	1.195	765818.0	4.960388	Y
7	IC 200-193912/11	23.575	89.262798	1.195	865311.0	3.786333	N



11/1/2023
12:01 PM

Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

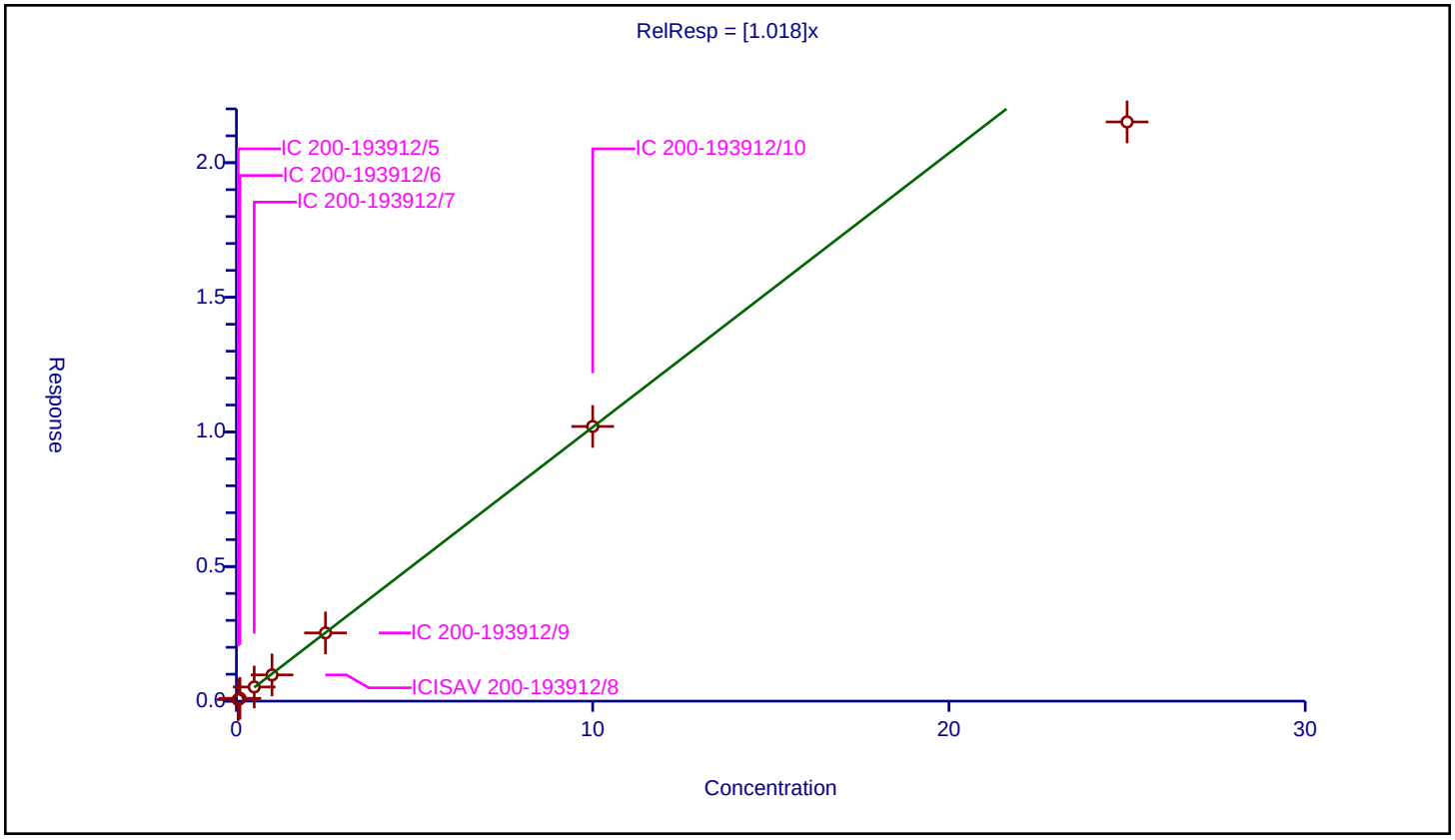
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	15400000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.057397	1.25	2296115.0	1.14795	Y
2	IC 200-193912/6	0.1	0.10537	1.25	2131572.0	1.0537	Y
3	IC 200-193912/7	0.5	0.526674	1.25	2022512.0	1.053347	Y
4	ICISAV 200-193912/8	1.0	0.974949	1.25	2123640.0	0.974949	Y
5	IC 200-193912/9	2.5	2.534654	1.25	2062631.0	1.013862	Y
6	IC 200-193912/10	10.0	10.203479	1.25	1800020.0	1.020348	Y
7	IC 200-193912/11	25.0	21.515509	1.25	1994604.0	0.86062	Y



11/1/2023
12:01 PM

Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

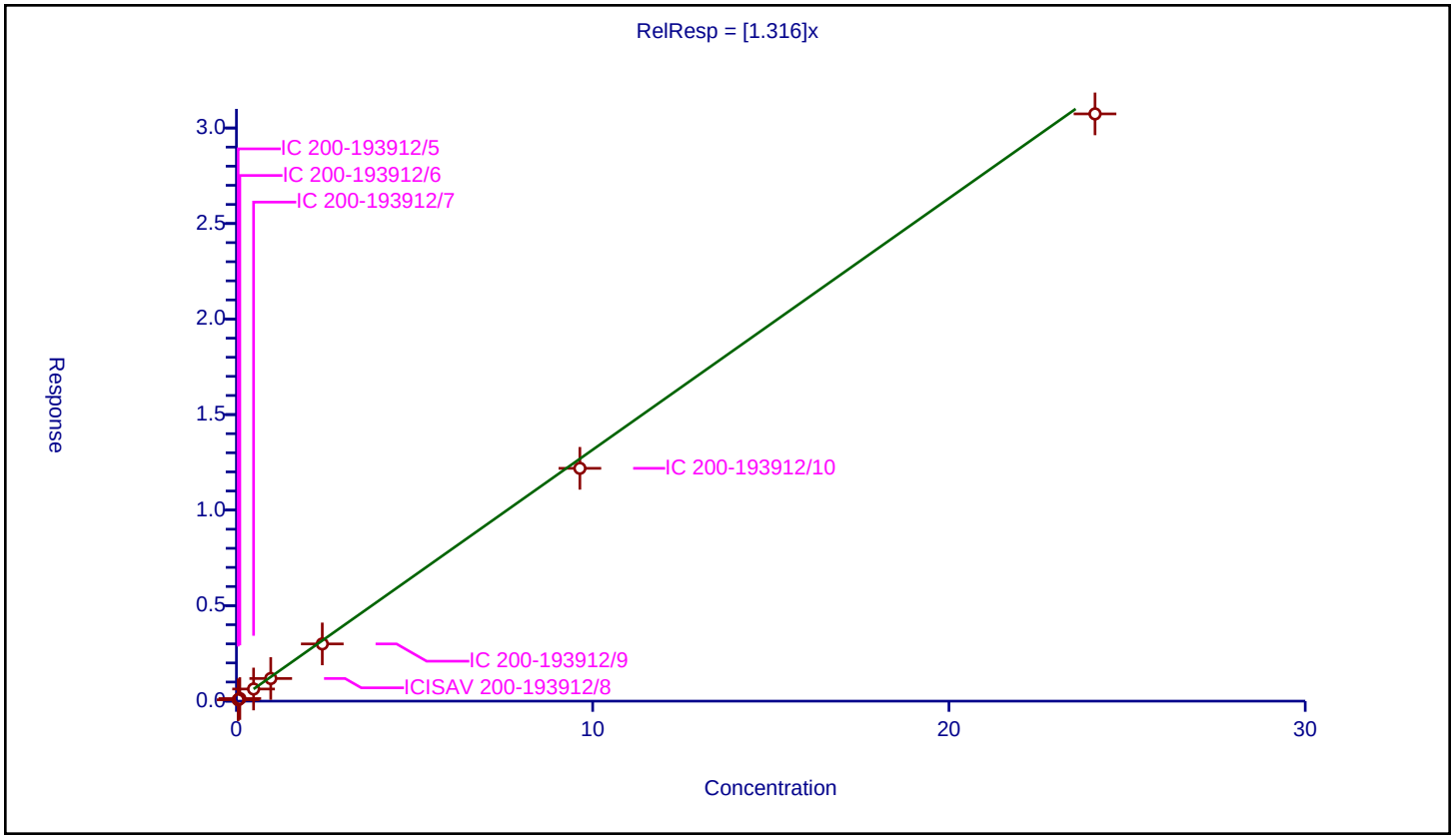
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	3580000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0482	0.071608	1.1975	366485.0	1.485641	Y
2	IC 200-193912/6	0.0964	0.134646	1.1975	307295.0	1.396742	Y
3	IC 200-193912/7	0.482	0.635587	1.1975	298552.0	1.318646	Y
4	ICISAV 200-193912/8	0.964	1.184378	1.1975	331913.0	1.228608	Y
5	IC 200-193912/9	2.41	2.994685	1.1975	331708.0	1.242608	Y
6	IC 200-193912/10	9.64	12.186219	1.1975	309678.0	1.264131	Y
7	IC 200-193912/11	24.1	30.739313	1.1975	316911.0	1.27549	Y



11/1/2023
12:01 PM

Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

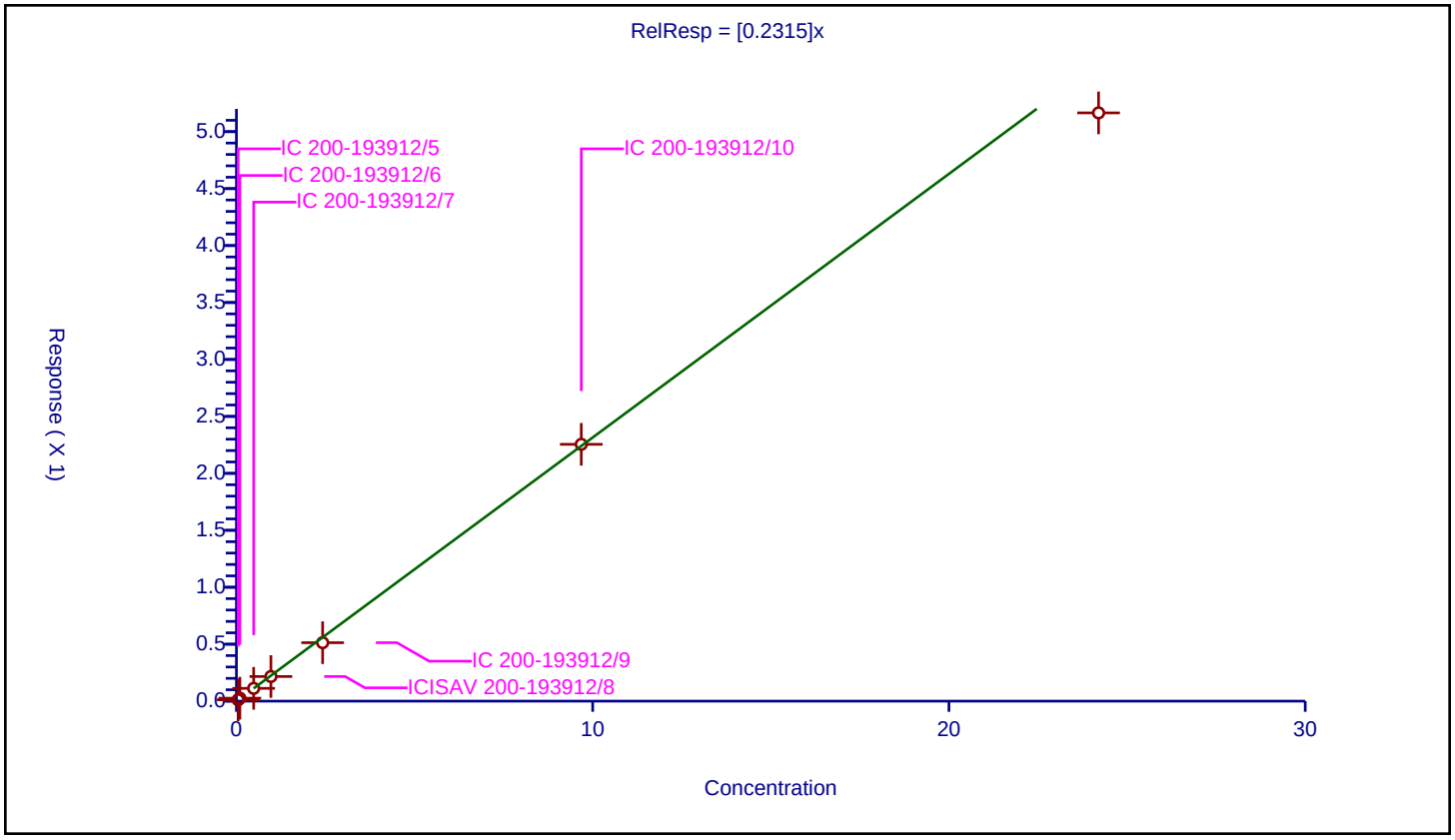
Curve Coefficients

Intercept:	0
Slope:	0.2315

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0484	0.011586	1.195	943517.0	0.239386	Y
2	IC 200-193912/6	0.0968	0.025868	1.195	863764.0	0.267235	Y
3	IC 200-193912/7	0.484	0.112249	1.195	882764.0	0.231919	Y
4	ICISAV 200-193912/8	0.968	0.216192	1.195	904398.0	0.223339	Y
5	IC 200-193912/9	2.42	0.513259	1.195	919926.0	0.21209	Y
6	IC 200-193912/10	9.68	2.254814	1.195	765818.0	0.232935	Y
7	IC 200-193912/11	24.2	5.164816	1.195	865311.0	0.213422	Y



11/1/2023
12:01 PM

Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

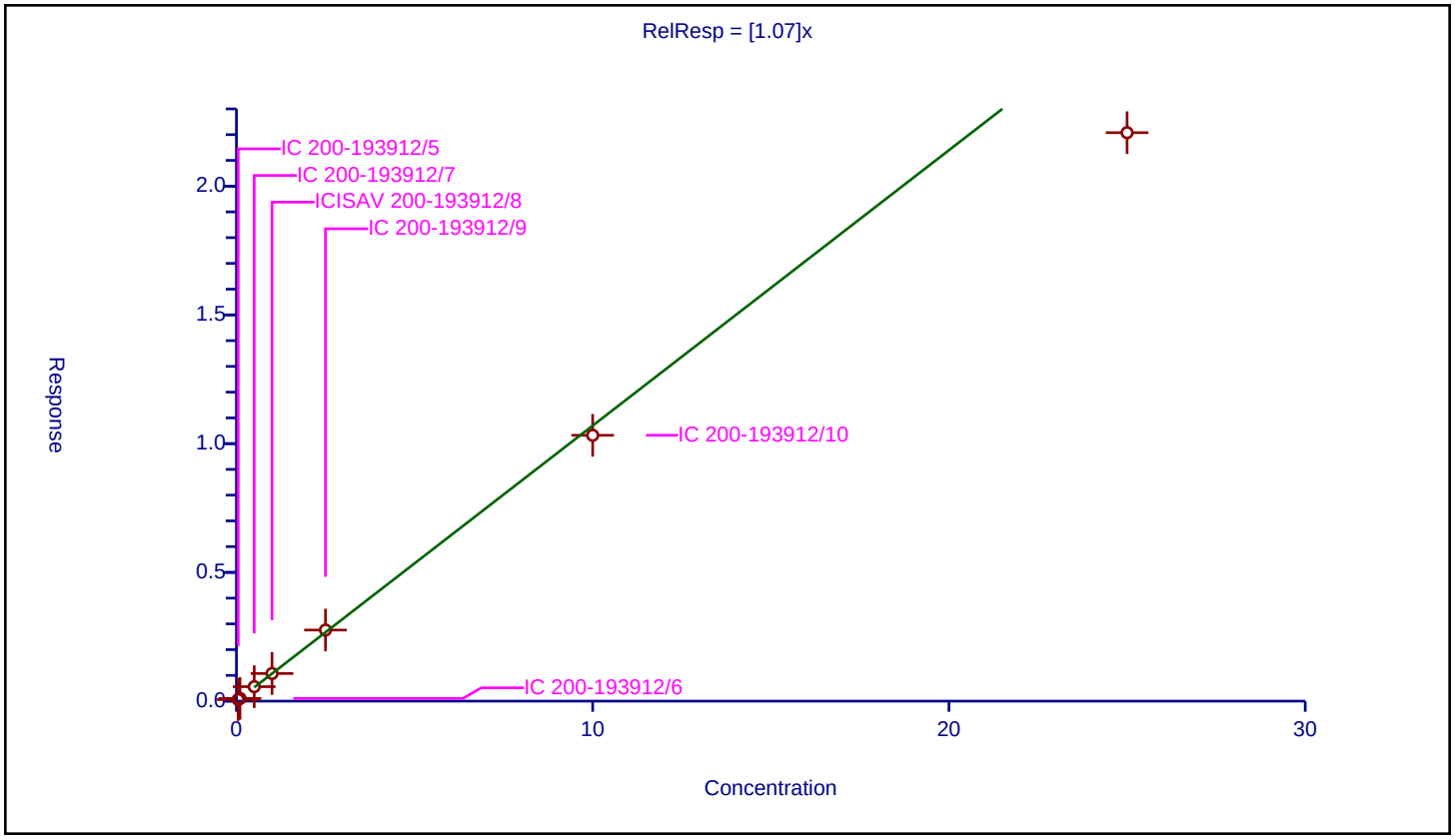
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	15700000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060572	1.25	2296115.0	1.211438	Y
2	IC 200-193912/6	0.1	0.106191	1.25	2131572.0	1.06191	Y
3	IC 200-193912/7	0.5	0.561156	1.25	2022512.0	1.122311	Y
4	ICISAV 200-193912/8	1.0	1.07307	1.25	2123640.0	1.07307	Y
5	IC 200-193912/9	2.5	2.761299	1.25	2062631.0	1.10452	Y
6	IC 200-193912/10	10.0	10.323864	1.25	1800020.0	1.032386	Y
7	IC 200-193912/11	25.0	22.076299	1.25	1994604.0	0.883052	Y



11/1/2023
12:01 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

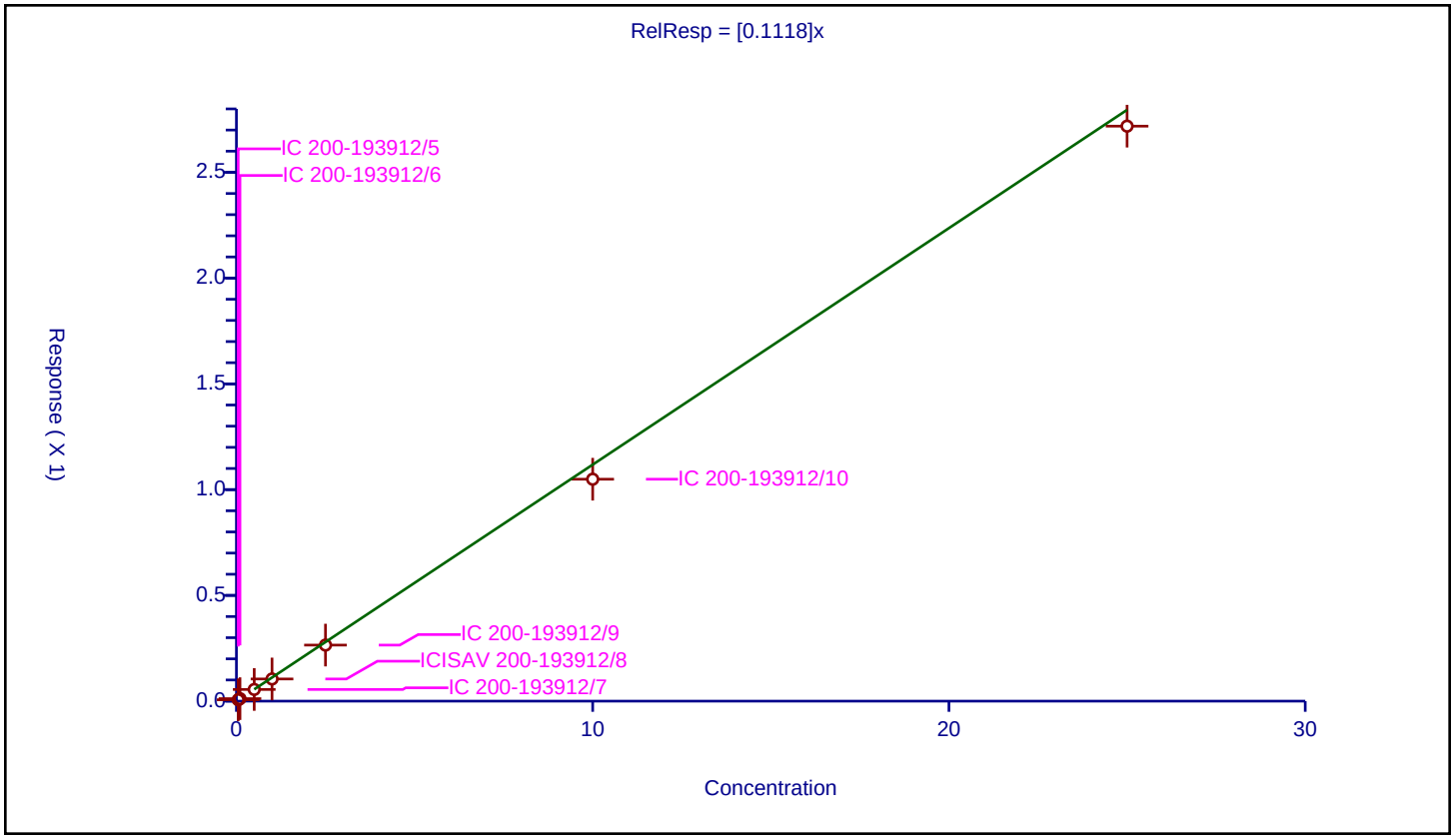
Curve Coefficients

Intercept:	0
Slope:	0.1118

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.006497	1.25	2302510.0	0.129934	Y
2	IC 200-193912/6	0.1	0.011797	1.25	2061289.0	0.117972	Y
3	IC 200-193912/7	0.5	0.055166	1.25	1996289.0	0.110332	Y
4	ICISAV 200-193912/8	1.0	0.10478	1.25	2077683.0	0.10478	Y
5	IC 200-193912/9	2.5	0.265032	1.25	2135161.0	0.106013	Y
6	IC 200-193912/10	10.0	1.049255	1.25	1876594.0	0.104926	Y
7	IC 200-193912/11	25.0	2.718444	1.25	1918275.0	0.108738	Y



Calibration / Perfluorohexadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

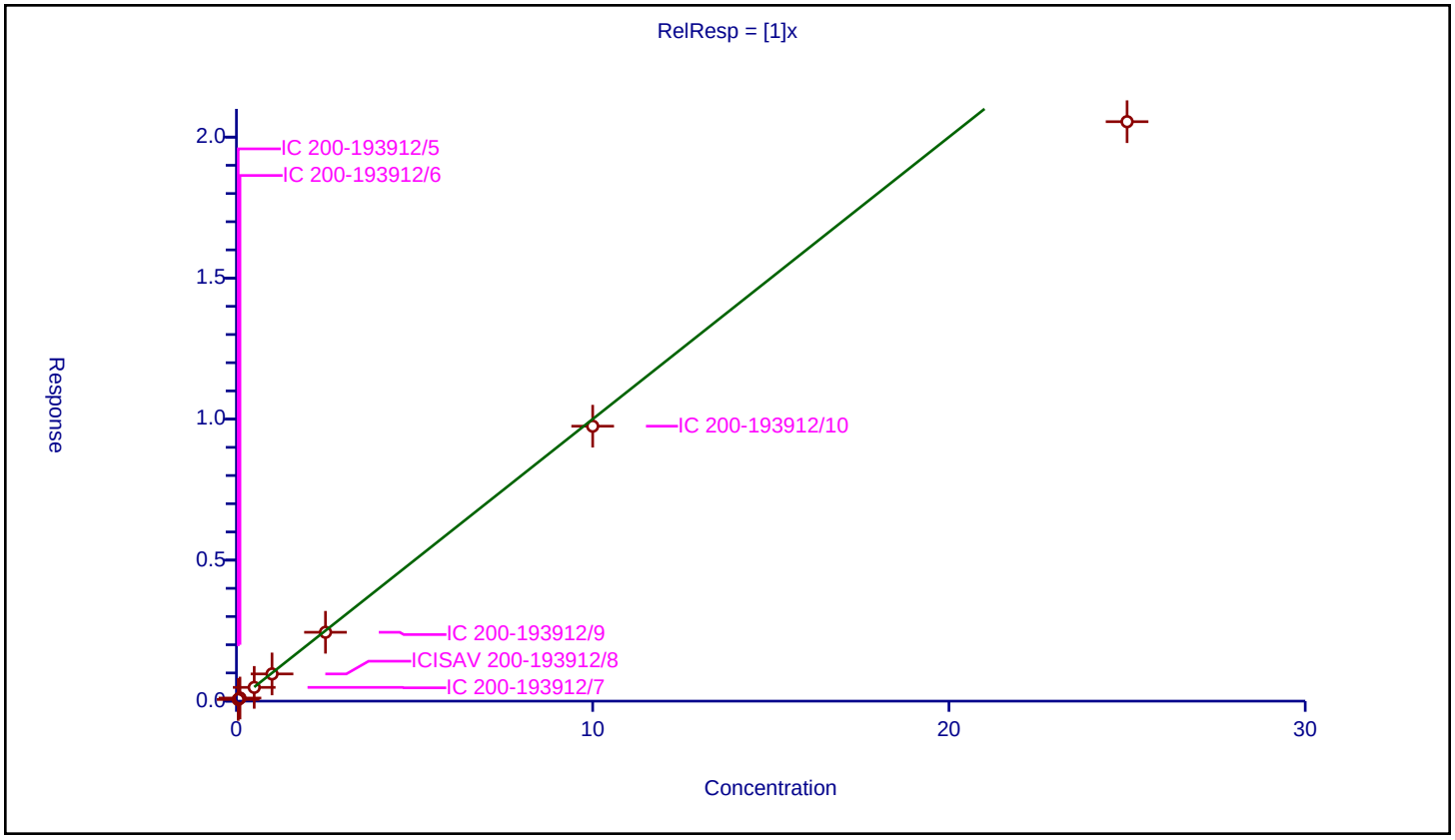
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	16800000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059148	1.25	2773326.0	1.182966	Y
2	IC 200-193912/6	0.1	0.110397	1.25	2341179.0	1.103968	Y
3	IC 200-193912/7	0.5	0.487301	1.25	2309121.0	0.974602	Y
4	ICISAV 200-193912/8	1.0	0.965145	1.25	2422773.0	0.965145	Y
5	IC 200-193912/9	2.5	2.442011	1.25	2376838.0	0.976804	Y
6	IC 200-193912/10	10.0	9.749491	1.25	2051028.0	0.974949	Y
7	IC 200-193912/11	25.0	20.546324	1.25	2292454.0	0.821853	Y



11/1/2023
12:01 PM

Calibration / Perfluorooctadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

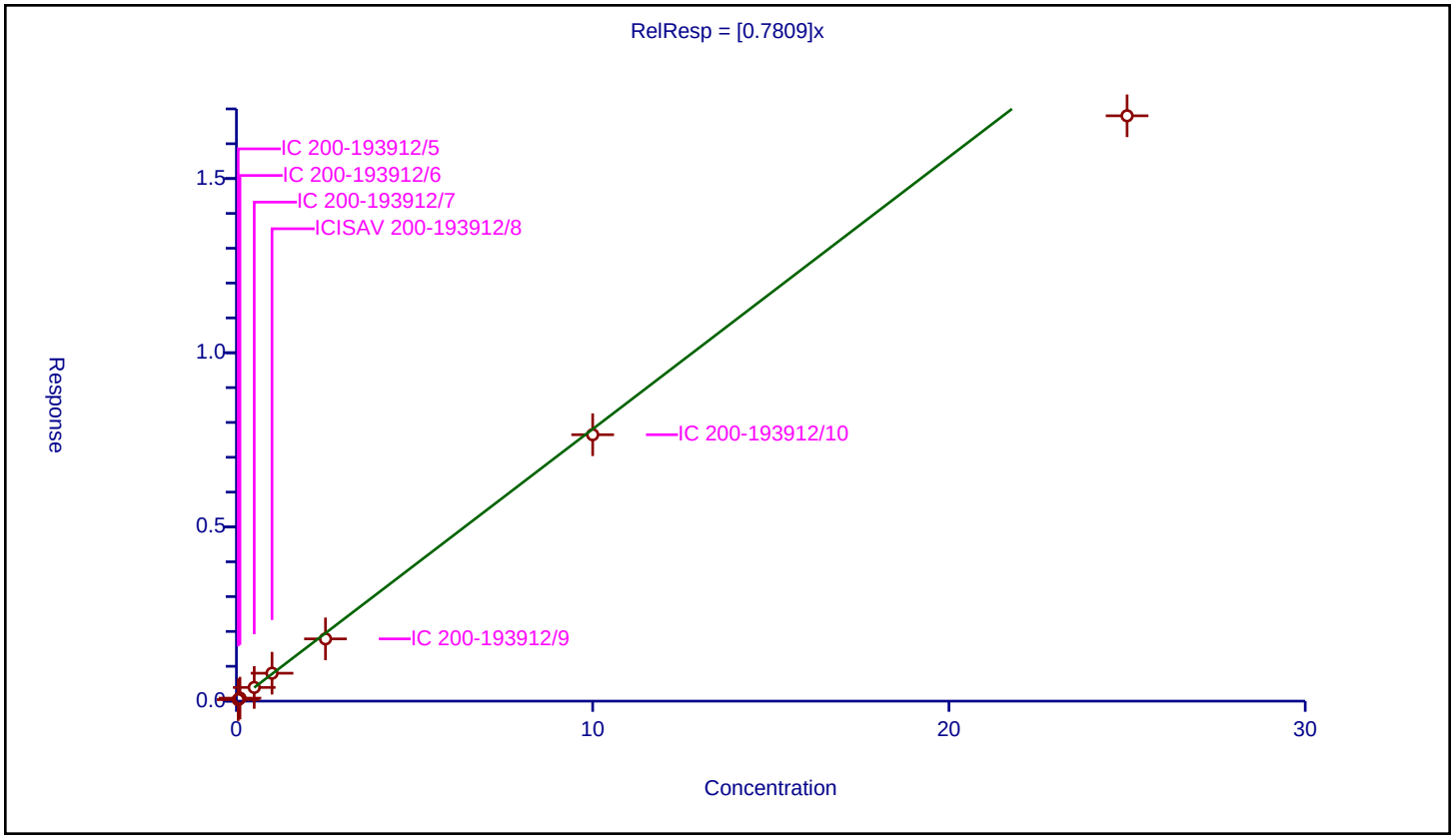
Curve Coefficients

Intercept:	0
Slope:	0.7809

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.043147	1.25	2773326.0	0.862944	Y
2	IC 200-193912/6	0.1	0.086341	1.25	2341179.0	0.863411	Y
3	IC 200-193912/7	0.5	0.393238	1.25	2309121.0	0.786476	Y
4	ICISAV 200-193912/8	1.0	0.801959	1.25	2422773.0	0.801959	Y
5	IC 200-193912/9	2.5	1.786872	1.25	2376838.0	0.714749	Y
6	IC 200-193912/10	10.0	7.647519	1.25	2051028.0	0.764752	Y
7	IC 200-193912/11	25.0	16.801641	1.25	2292454.0	0.672066	Y



11/1/2023
12:01 PM

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.091		1.17	1.00	16.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.233		1.15	1.01	14.2	30.0
Perfluorobutanesulfonic acid	AveID	1.117	1.273		1.14	1.00	14.0	30.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.749		1.10	1.00	10.4	30.0
Perfluorohexanoic acid	AveID	1.100	1.265		1.16	1.01	14.9	30.0
Perfluoropentanesulfonic acid	AveID	1.306	1.519		1.16	1.00	16.3	30.0
HFPODA	AveID	1.001	1.187		1.20	1.01	18.5	30.0
Perfluoroheptanoic acid	AveID	1.121	1.275		1.14	1.00	13.8	30.0
Perfluorohexanesulfonic acid	AveID	1.107	1.171		1.07	1.01	5.8	30.0
DONA	AveID	5.754	6.626		1.15	1.00	15.1	30.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.589		1.10	1.00	10.0	30.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.837		1.04	1.00	3.8	30.0
Perfluorooctanoic acid	AveID	1.065	1.147		1.08	1.00	7.6	30.0
Perfluorooctanesulfonic acid	AveID	1.166	1.129		0.977	1.01	-3.2	30.0
Perfluorononanoic acid	AveID	0.9800	1.173		1.20	1.00	19.7	30.0
9Cl-PF3ONS	AveID	3.569	3.916		1.10	1.00	9.7	30.0
Perfluorononanesulfonic acid	AveID	0.8874	0.9697		1.10	1.01	9.3	30.0
Perfluorodecanoic acid	AveID	0.999	1.132		1.13	1.00	13.3	30.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.648		1.22	1.01	20.3	30.0
Perfluorooctanesulfonamide	AveID	0.9539	1.010		1.06	1.00	5.9	30.0
NMeFOSAA	AveID	0.9074	1.065		1.17	1.00	17.3	30.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7209		1.07	1.01	5.6	30.0
Perfluoroundecanoic acid	AveID	1.031	1.105		1.07	1.00	7.2	30.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.079		1.08	1.00	7.9	30.0
11Cl-PF3OUdS	AveID	5.474	5.985		1.09	1.00	9.3	30.0
Perfluorododecanoic acid	AveID	1.018	1.033		1.02	1.00	1.5	30.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.421		1.04	0.964	7.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2219		0.928	0.968	-4.1	30.0
Perfluorotridecanoic acid	AveID	1.070	1.093		1.02	1.00	2.2	30.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1309		1.17	1.00	17.1	30.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9902		0.990	1.00	-1.0	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7992		1.02	1.00	2.3	30.0
13C4 PFBA	Ave	0.9917	0.9819		1.24	1.25	-1.0	50.0
13C3 PFBS	Ave	1.041	0.9897		1.11	1.16	-5.0	50.0
13C5 PFPeA	Ave	0.7696	0.7799		1.27	1.25	1.3	50.0
M2-4:2 FTS	Ave	0.1204	0.1244		1.21	1.17	3.3	50.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7614		1.22	1.25	-2.8	50.0
13C3 HFPO-DA	Ave	0.1516	0.1402		1.16	1.25	-7.5	50.0
13C4 PFHpA	Ave	0.8590	0.8570		1.25	1.25	-0.2	50.0
18O2 PFHxS	Ave	0.7464	0.7510		1.19	1.18	0.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1630		1.25	1.19	5.1	50.0
13C4 PFOA	Ave	0.9731	0.9893		1.27	1.25	1.7	50.0
13C4 PFOS	Ave	0.4742	0.4785		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.073		1.27	1.25	1.4	50.0
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	50.0
M2-8:2 FTS	Ave	0.1744	0.1644		1.13	1.20	-5.8	50.0
13C8 FOSA	Ave	0.9462	0.9298		1.23	1.25	-1.7	50.0
d3-NMeFOSAA	Ave	0.2650	0.2507		1.18	1.25	-5.4	50.0
13C2 PFUnA	Ave	1.047	1.065		1.27	1.25	1.7	50.0
d5-NEtFOSAA	Ave	0.2552	0.2498		1.22	1.25	-2.1	50.0
13C2 PFDoA	Ave	1.064	1.040		1.22	1.25	-2.3	50.0
13C2 PFTeDA	Ave	1.059	1.068		1.26	1.25	0.8	50.0
13C2 PFHxDA	Ave	1.221	1.213		1.24	1.25	-0.6	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Jul-2023 18:22:05 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0056441-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:46:57 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:36:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	2061390	1.24		99.0	1111	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	1799894	1.17			128	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1637273	1.27		101	855	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1630838	1.15			72.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.695	1932315	1.10		95.0	61660	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.006	2115731	1.14	Target=2.06		394	M
298.90 > 99.00	2.424	2.425	-0.001	1.006	951335		2.22(1.03-3.09)		205	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	243947	1.21		103	89.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	783361	1.10			1210	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1598439	1.22		97.2	1019	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	1633342	1.16	Target=14.12		201	M
313.00 > 119.00	2.755	2.731	0.024	1.000	119996		13.61(7.06-21.17)		87.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	1915826	1.16	Target=2.72		2515	
349.00 > 99.00	2.755	2.731	0.024	0.885	690197		2.78(1.36-4.09)		775	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.855	2.844	0.011	0.823	294290	1.16		92.5	1359	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	1.000	282227	1.20			1561	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1491459	1.19		101	3008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.114	3.092	0.022	1.000	1492005	1.07	Target=3.32		2002	
399.00 > 99.00	3.114	3.092	0.022	1.000	447913		3.33(1.66-4.98)		275	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.114	3.104	0.010	1.000	1835676	1.14	Target=4.17		375	
363.00 > 169.00	3.114	3.104	0.010	1.000	421780		4.35(2.09-6.26)		330	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1799170	1.25		99.8	4344	
77 DONA										
377.00 > 251.00	3.149	3.138	0.011	0.832	5325110	1.15	Target=3.33		4580	
377.00 > 85.00	3.149	3.138	0.011	0.832	1587786		3.35(1.66-4.99)		1564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.452	3.446	0.006	0.913	1277458	1.10	Target=4.83		2835	
449.00 > 99.00	3.452	3.446	0.006	0.913	271741		4.70(2.41-7.24)		608	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	325183	1.25		105	449	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	776988	1.04			1505	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.470	3.464	0.006	1.000	1905230	1.08	Target=2.88		155	
413.00 > 169.00	3.470	3.464	0.006	1.000	700454		2.72(1.44-4.32)		688	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	2077032	1.27		102	10779	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		2099437	1.25			5857	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	960411	1.21		101	3123	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	916205	0.9773	Target=4.24		1279	M
499.00 > 99.00	3.783	3.783	0.0	1.000	219275		4.18(2.12-6.37)		332	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2253485	1.27		101	8237	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	2114355	1.20	Target=8.34		396	
463.00 > 169.00	3.803	3.803	0.0	1.000	258068		8.19(4.17-12.51)		1687	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	3147105	1.10			4619	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	787129	1.10	Target=2.17		3635	
549.00 > 99.00	4.074	4.074	0.0	1.077	362945		2.17(1.08-3.25)		1106	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2306656	1.24		99.1	7364	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	2089059	1.13	Target=11.44		513	
513.00 > 169.00	4.108	4.108	0.0	1.000	187846		11.12(5.72-17.16)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.184	330559	1.13		94.2	534	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	738302	1.21			3324	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1951992	1.23		98.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1577862	1.06			1967	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	526368	1.18		94.6	1324	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.249	4.260	-0.011	1.000	448255	1.17			766	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	585144	1.07	Target=2.37		2036	
599.00 > 99.00	4.346	4.346	0.0	1.149	247580		2.36(1.19-3.56)		636	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2235945	1.27		102	10895	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.370	4.382	-0.012	1.000	1976512	1.07	Target=12.20		463	M
563.00 > 169.00	4.370	4.382	-0.012	1.000	173430		11.40(6.10-18.31)		356	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	524453	1.22		97.9	1054	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.000	452913	1.08			5512	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	4810172	1.09			5397	
D 36 13C2 PFDoA										
615.00 > 570.00	4.594	4.605	-0.011	1.324	2183255	1.22		97.7	5174	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.002	1804447	1.02	Target=8.47		152	
613.00 > 169.00	4.605	4.616	-0.011	1.002	231970		7.78(4.23-12.70)		1231	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.627	-0.011	1.124	378024	1.04			6028	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.261	172632	0.9280	Target=0.48		1502	
699.00 > 99.00	4.770	4.779	-0.009	1.261	341632		0.51(0.24-0.72)		2051	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.822	-0.023	1.044	1909411	1.02	Target=6.41		181	M
663.00 > 169.00	4.799	4.822	-0.023	1.044	273530		6.98(3.21-9.62)		474	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	2241989	1.26		101	6438	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.997	5.008	-0.011	1.000	234844	1.17	Target=0.87		1052	M
713.00 > 219.00	4.987	5.008	-0.021	0.998	248103		0.95(0.43-1.30)		673	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	2016874	0.99	Target=7.89		201	
813.00 > 169.00	5.317	5.328	-0.011	1.000	259711		7.77(3.94-11.83)		1503	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2546016	1.24		99.4	4909	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	1627913	1.02	Target=9.39		156	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	179766		9.06(4.69-14.08)		339	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

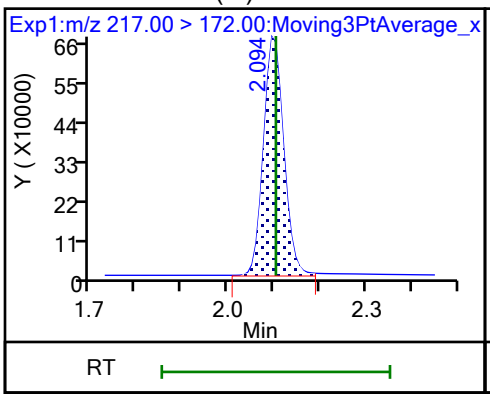
LCPFAS28NCICV_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:46:58 Chrom Revision: 2.3 19-Jul-2023 18:28:48

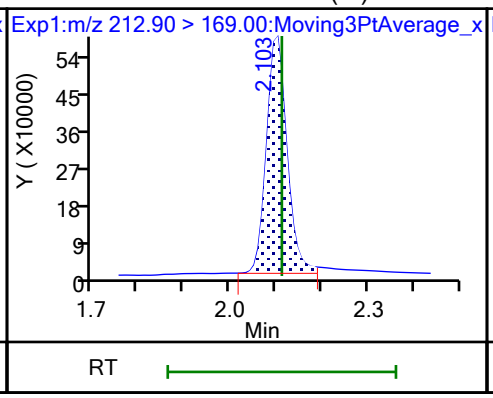
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Injection Date: 26-Jul-2023 18:22:05 Instrument ID: LC812
Lims ID: ICV
Client ID:
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

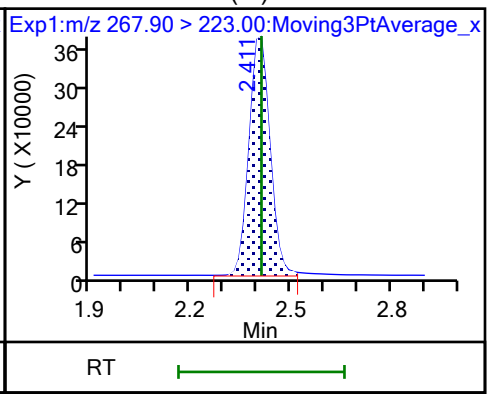
D 1 13C4 PFBA (M)



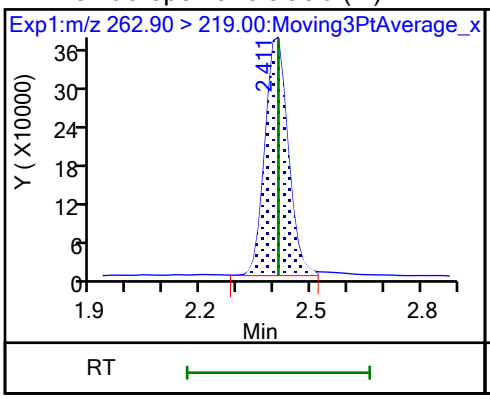
2 Perfluorobutanoic acid (M)



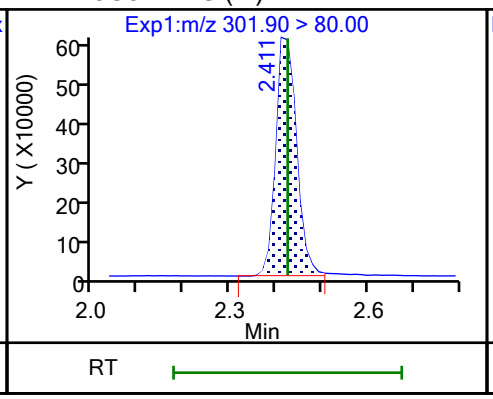
D 3 13C5 PFPeA (M)



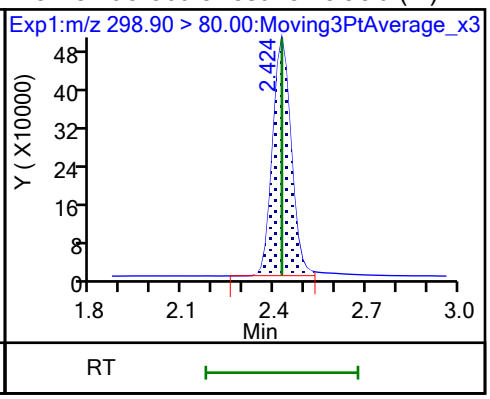
4 Perfluoropentanoic acid (M)



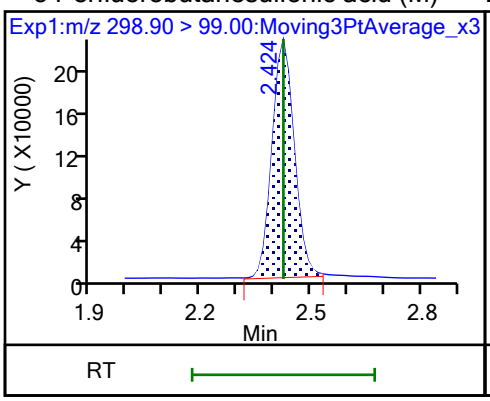
D 47 13C3 PFBS (M)



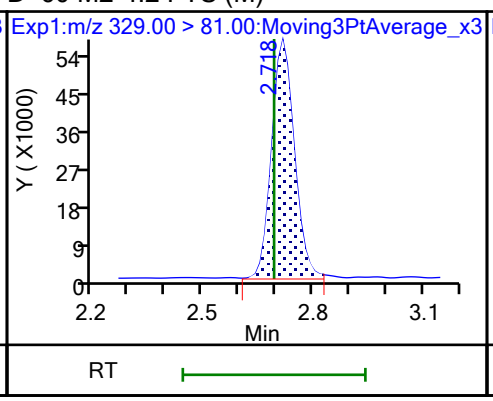
5 Perfluorobutanesulfonic acid (M)



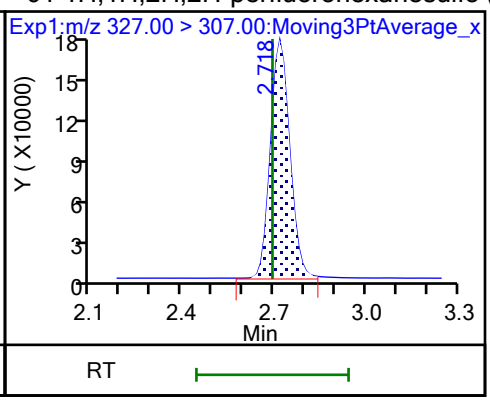
5 Perfluorobutanesulfonic acid (M)



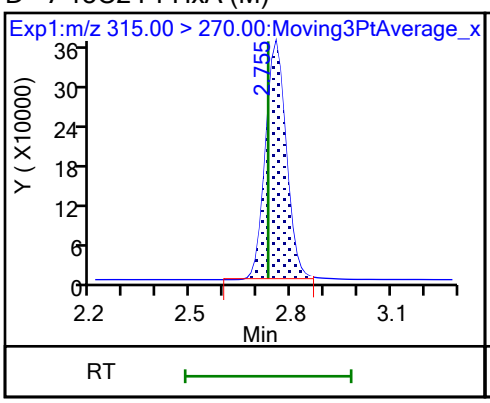
D 60 M2-4:2 FTS (M)



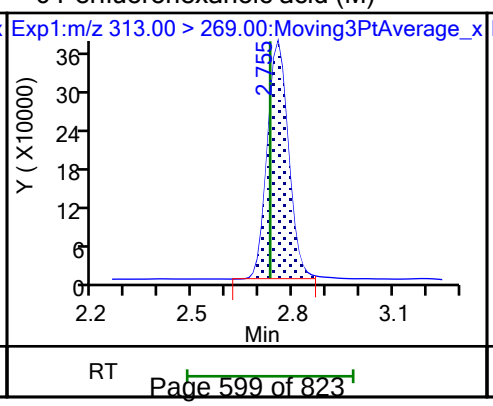
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



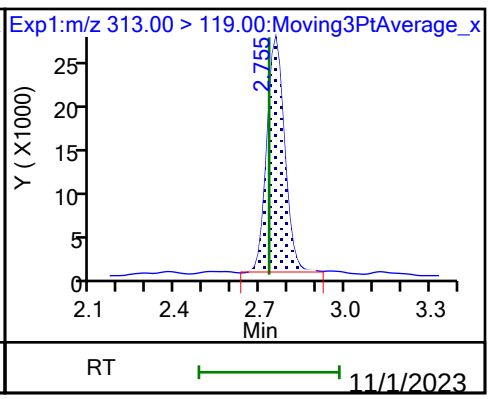
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

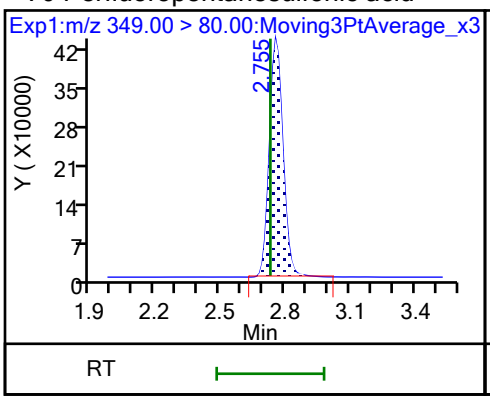


6 Perfluorohexanoic acid

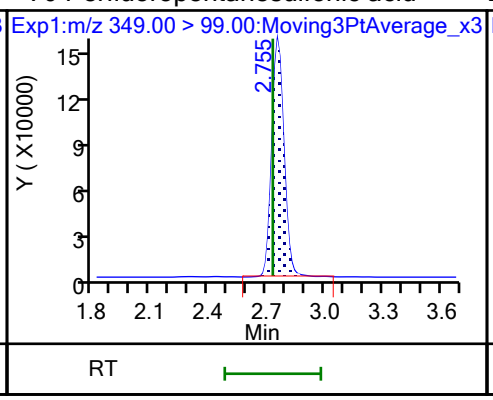


11/1/2023
12:01 PM

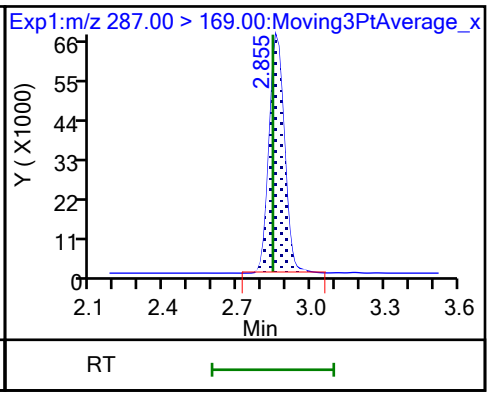
70 Perfluoropentanesulfonic acid



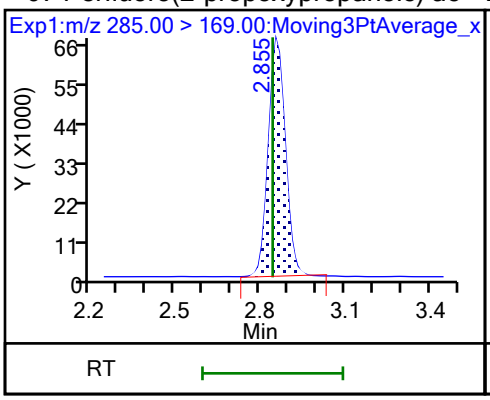
70 Perfluoropentanesulfonic acid



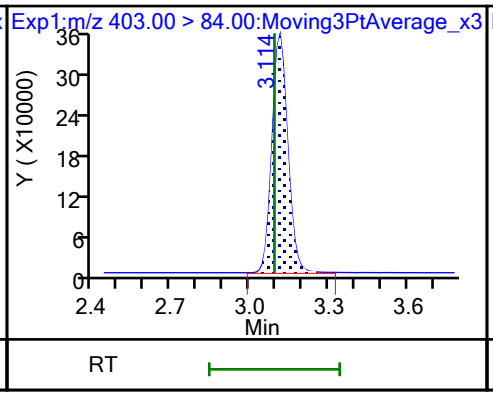
D 64 13C3 HFPO-DA



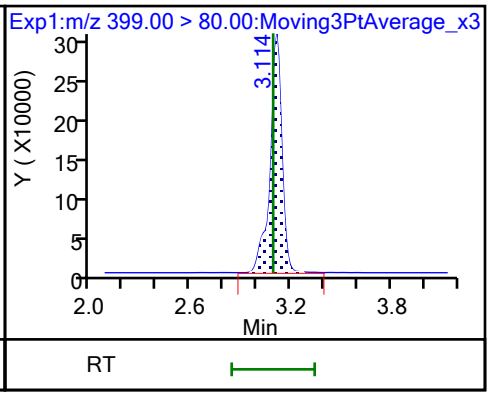
67 Perfluoro(2-propoxypropanoic) ac



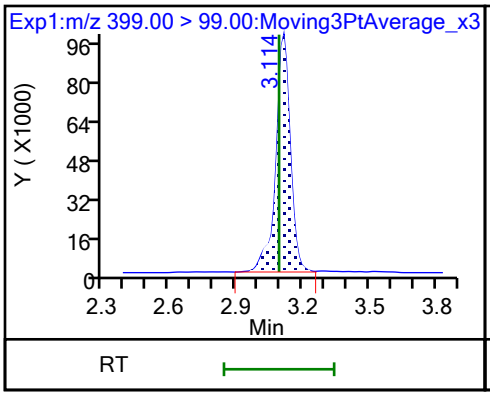
D 11 18O2 PFHxS



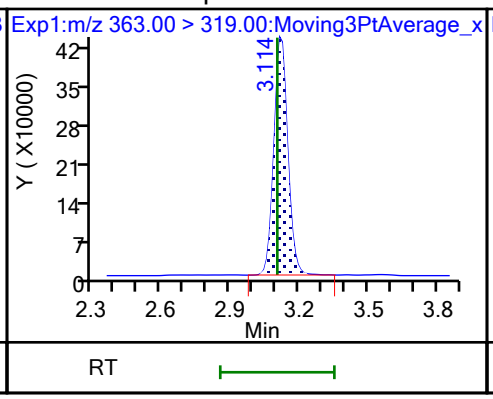
8 Perfluorohexanesulfonic acid



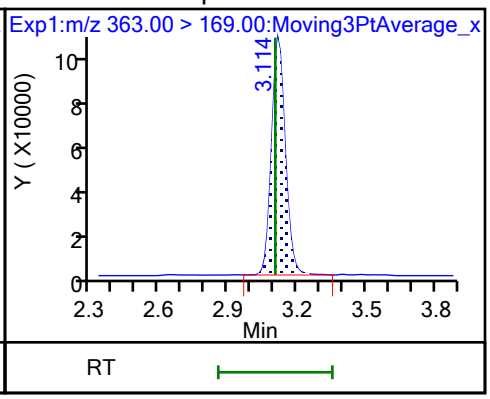
8 Perfluorohexanesulfonic acid



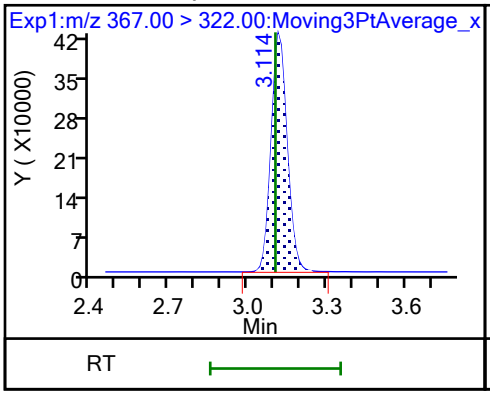
10 Perfluoroheptanoic acid



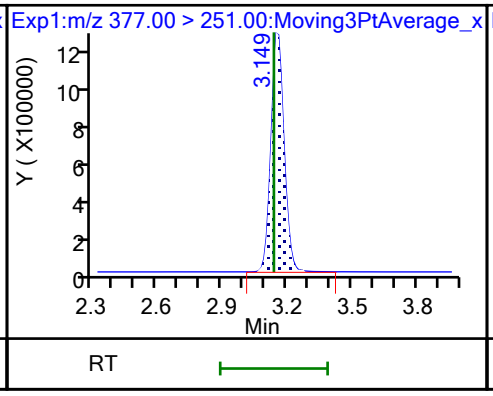
10 Perfluoroheptanoic acid



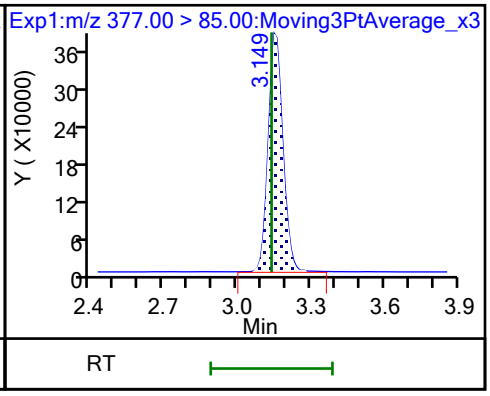
D 9 13C4 PFHpA



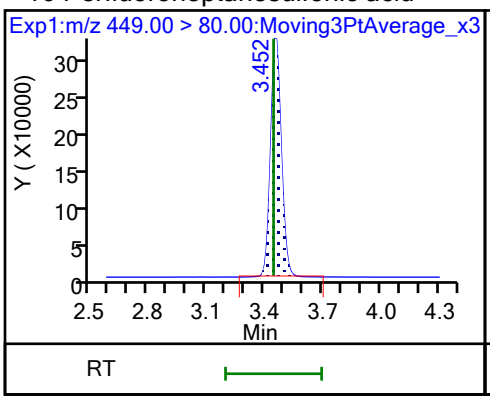
77 DONA



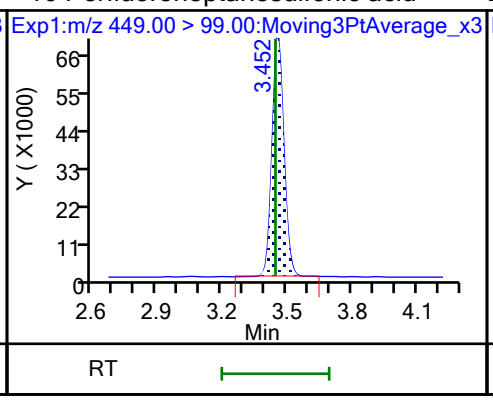
77 DONA



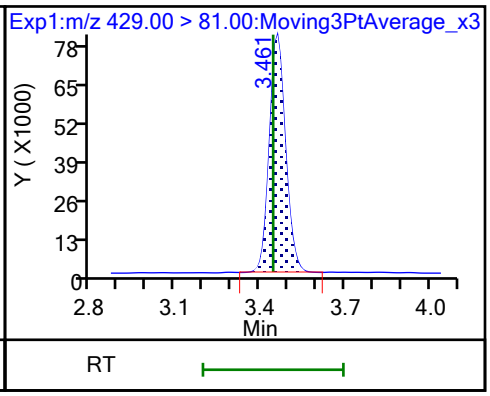
16 Perfluoroheptanesulfonic acid



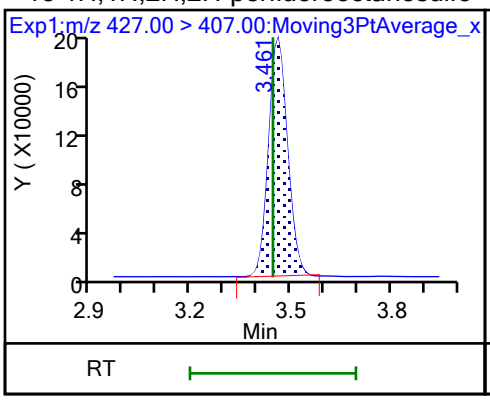
16 Perfluoroheptanesulfonic acid



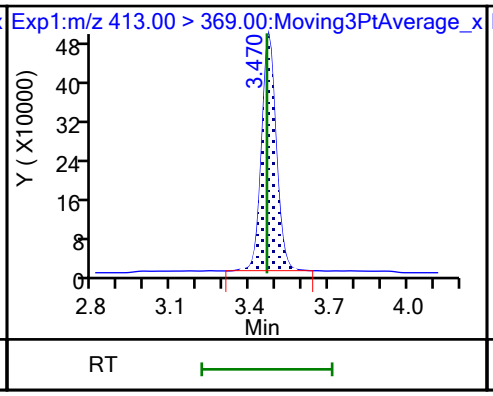
D 12 M2-6:2 FTS



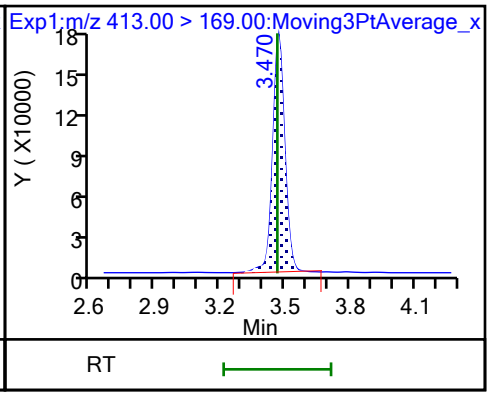
13 1H,1H,2H,2H-perfluorooctanesulfo



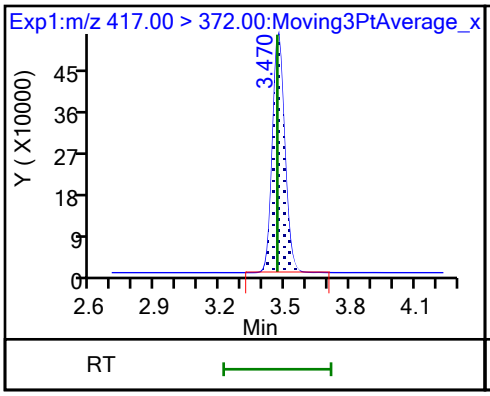
15 Perfluorooctanoic acid



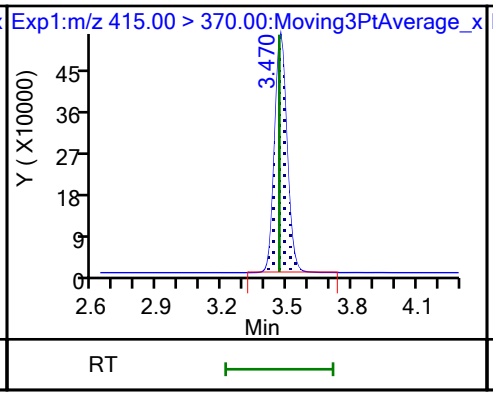
15 Perfluorooctanoic acid



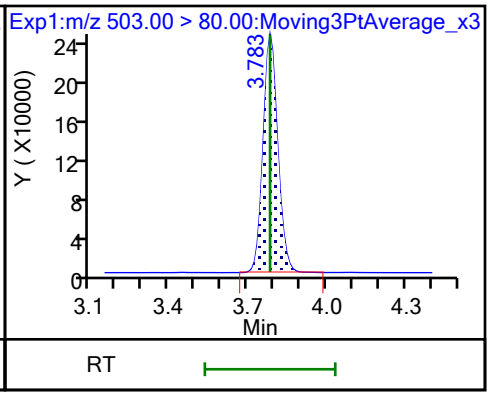
D 14 13C4 PFOA



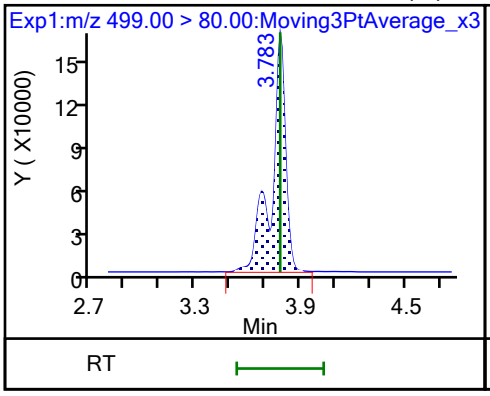
* 62 13C2 PFOA



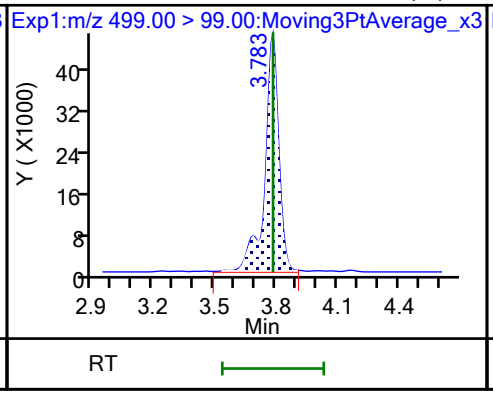
D 18 13C4 PFOS



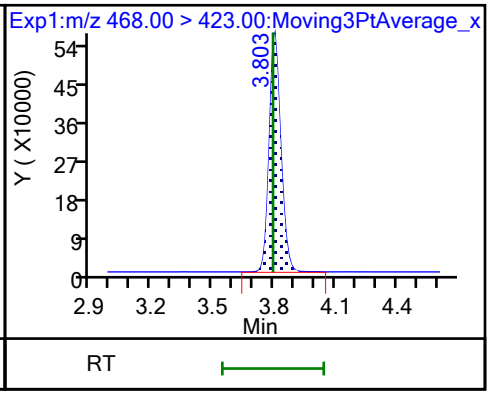
17 Perfluorooctanesulfonic acid (M)



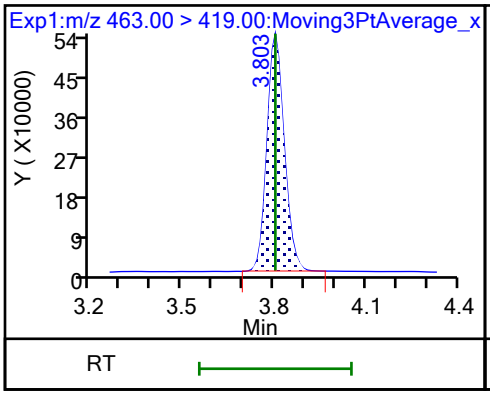
17 Perfluorooctanesulfonic acid (M)



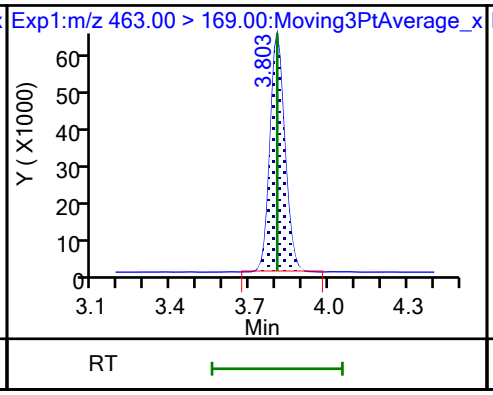
D 19 13C5 PFNA



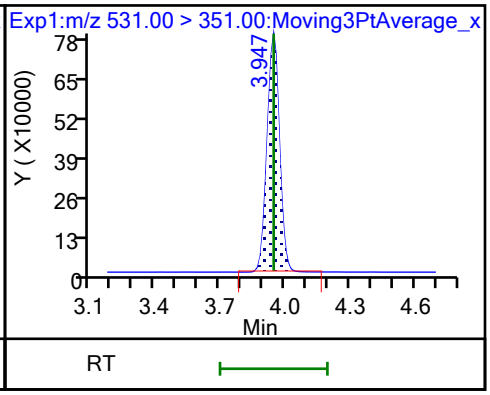
20 Perfluorononanoic acid



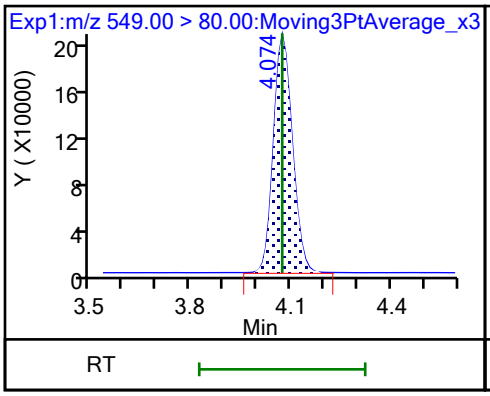
20 Perfluorononanoic acid



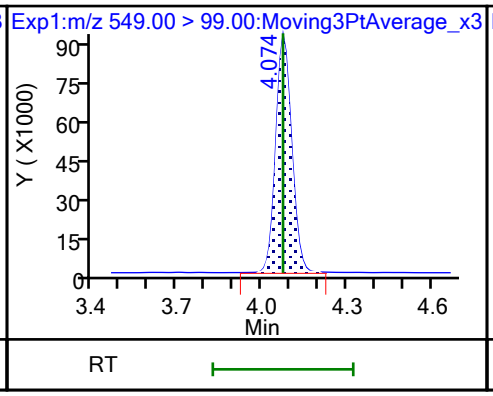
69 9-Chlorohexadecafluoro-3-oxanona



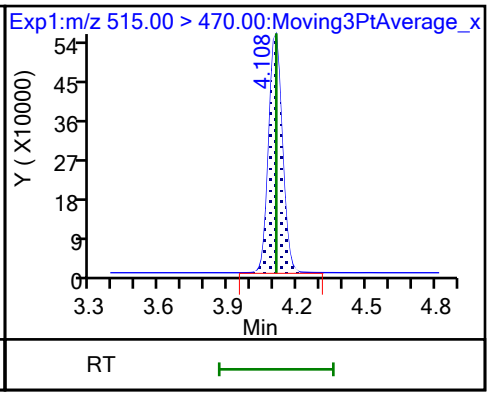
68 Perfluorononanesulfonic acid



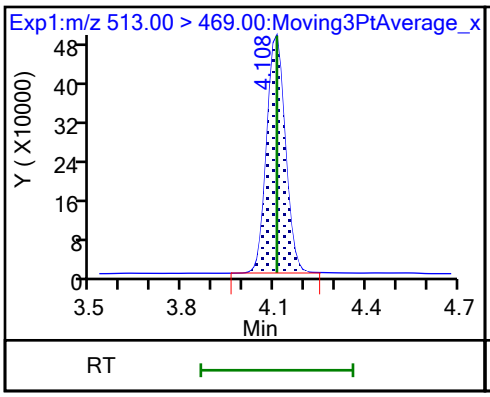
68 Perfluorononanesulfonic acid



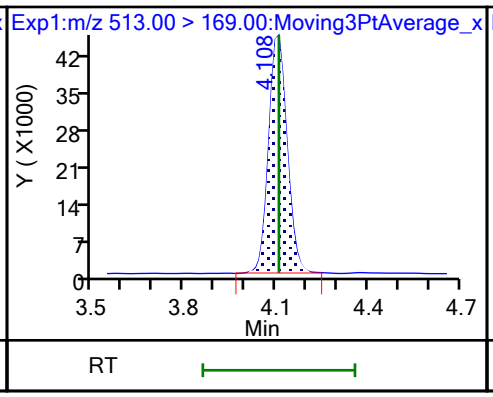
D 23 13C2 PFDA



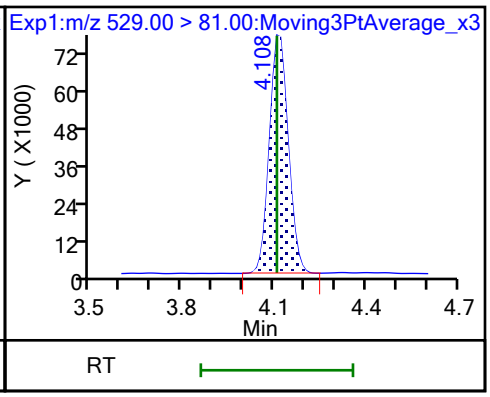
24 Perfluorodecanoic acid



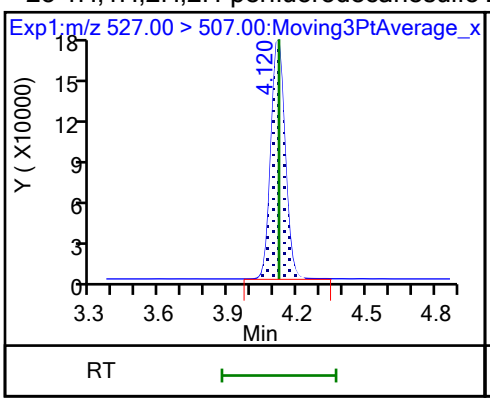
24 Perfluorodecanoic acid



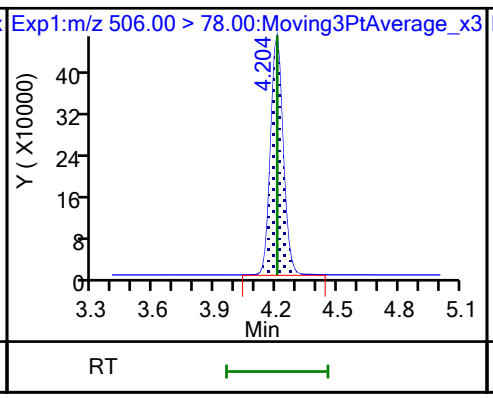
D 26 M2-8:2 FTS



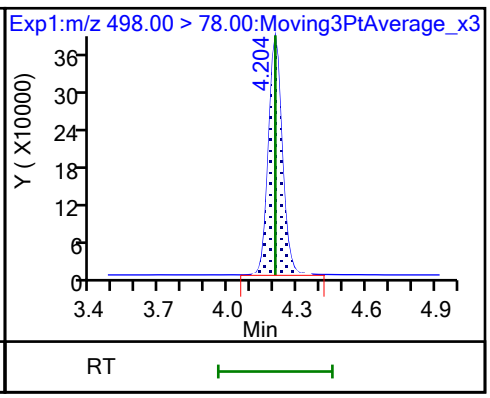
25 1H,1H,2H,2H-perfluorodecanesulfo



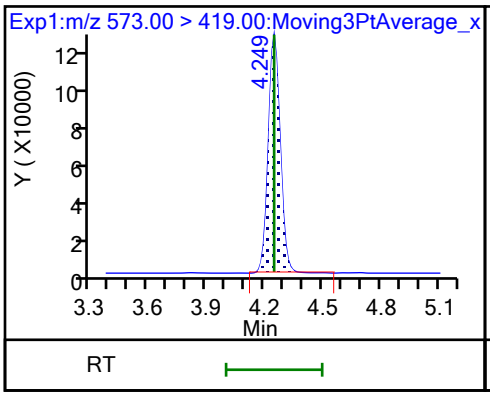
D 21 13C8 FOSA



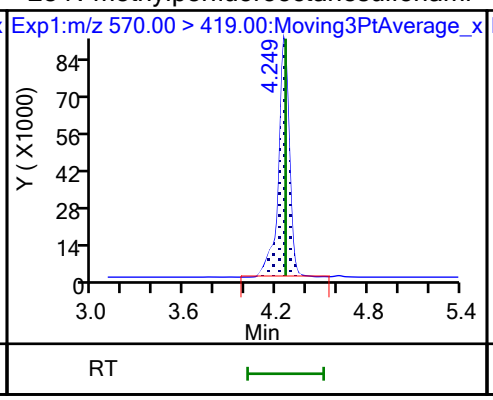
22 Perfluorooctanesulfonamide



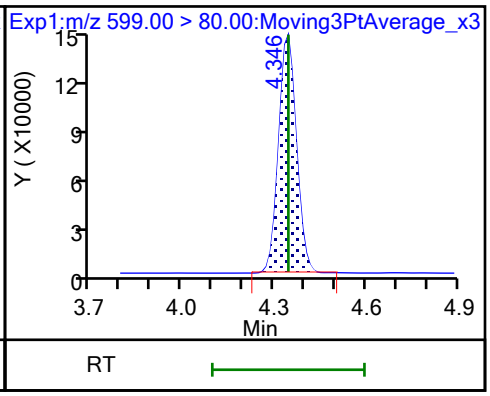
D 27 d3-NMeFOSAA



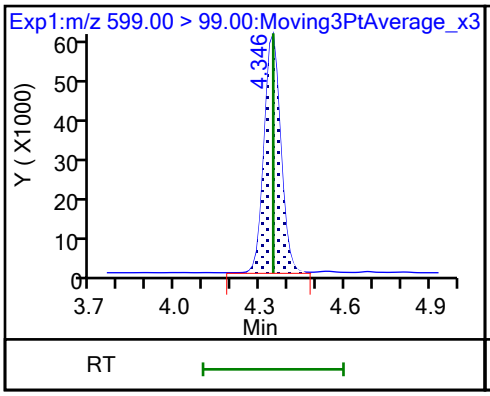
28 N-methylperfluorooctanesulfonami



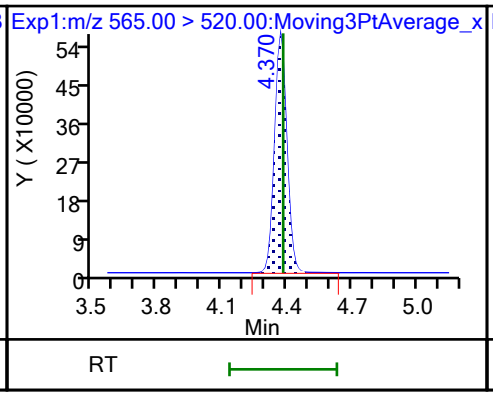
29 Perfluorodecanesulfonic acid



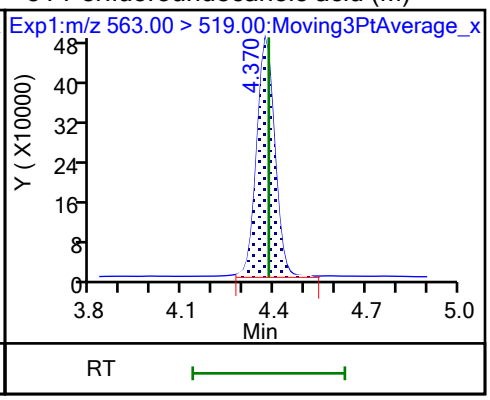
29 Perfluorodecanesulfonic acid



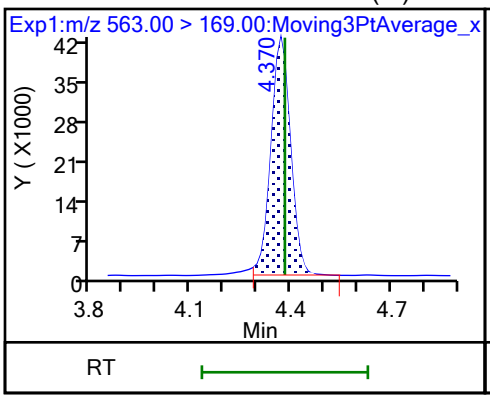
D 30 13C2 PFUnA



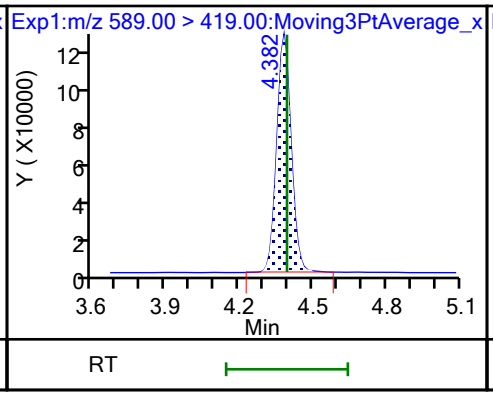
31 Perfluoroundecanoic acid (M)



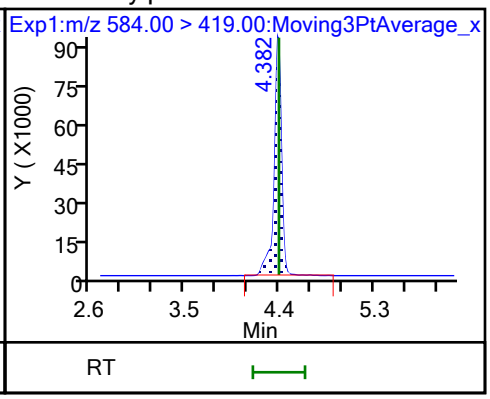
31 Perfluoroundecanoic acid (M)



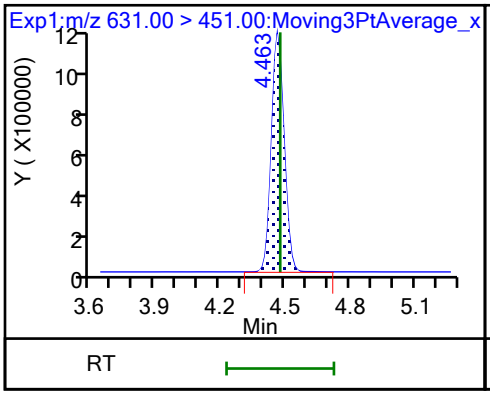
D 32 d5-NEtFOSAA



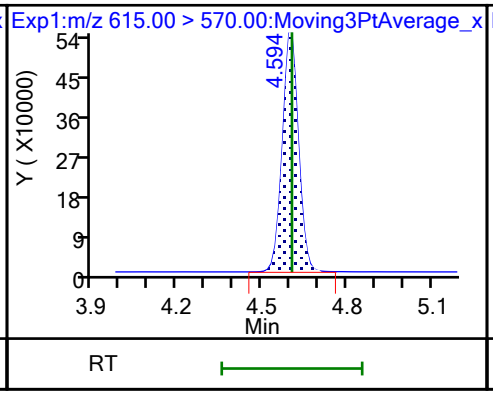
33 N-ethylperfluorooctanesulfonamid



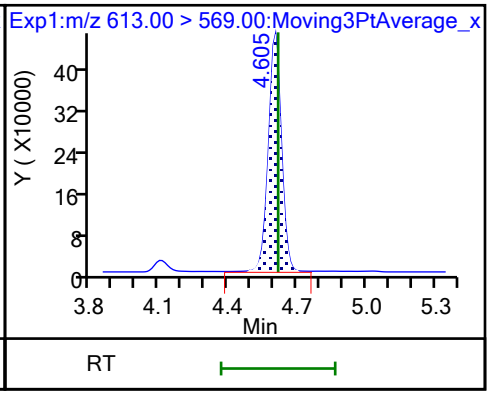
66 11-Chloroeicosafluoro-3-oxaundec



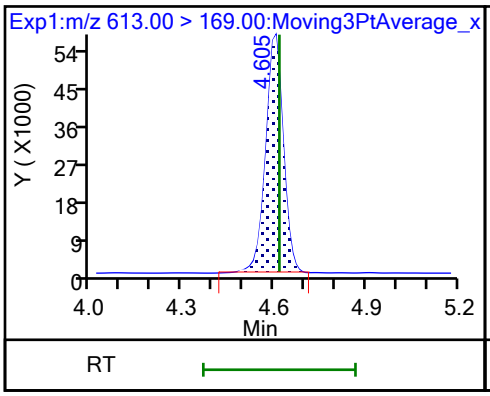
D 36 13C2 PFDoA



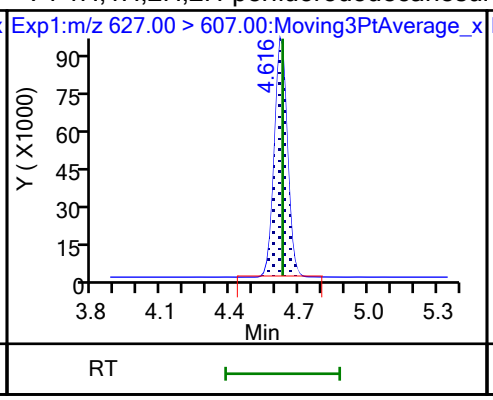
37 Perfluorododecanoic acid



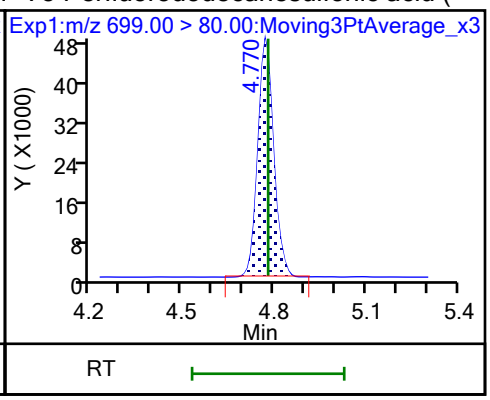
37 Perfluorododecanoic acid



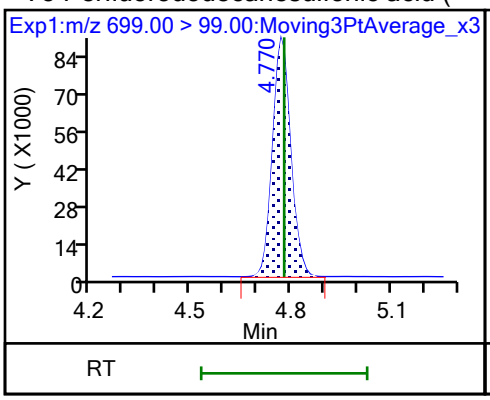
74 1H,1H,2H,2H-perfluorododecanesul



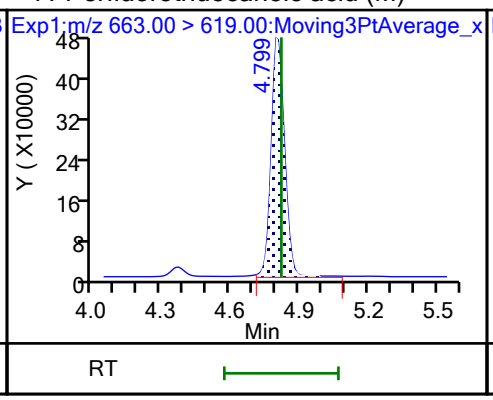
75 Perfluorododecanesulfonic acid (



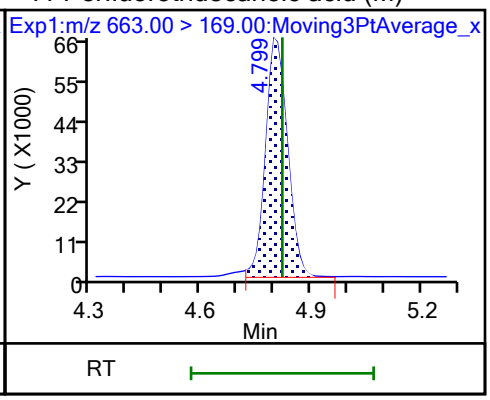
75 Perfluorododecanesulfonic acid (



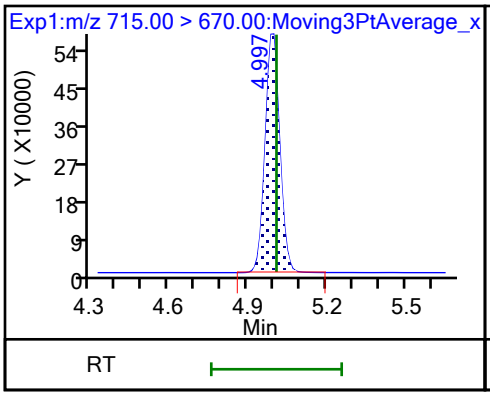
41 Perfluorotridecanoic acid (M)



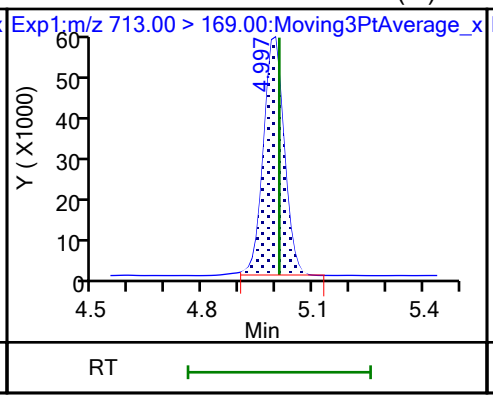
41 Perfluorotridecanoic acid (M)



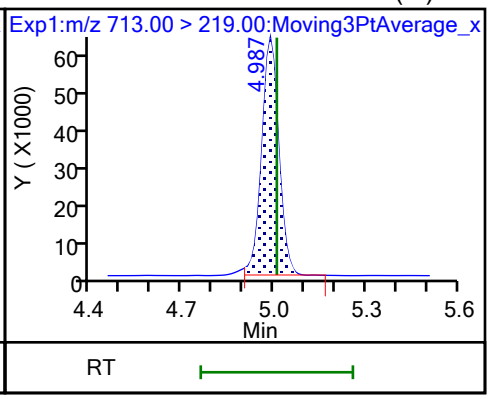
D 43 13C2 PFTeDA



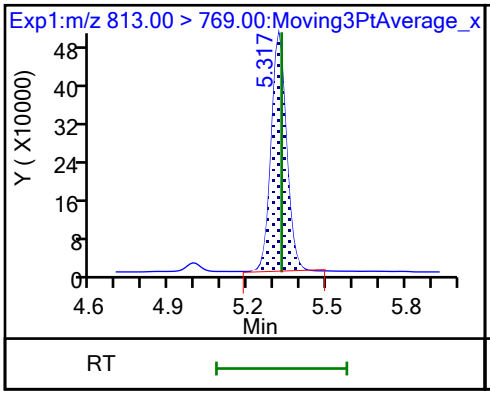
42 Perfluorotetradecanoic acid (M)



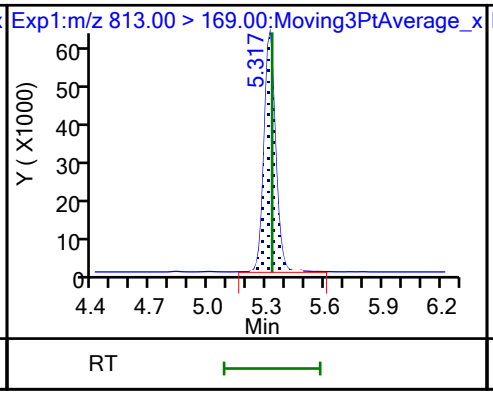
42 Perfluorotetradecanoic acid (M)



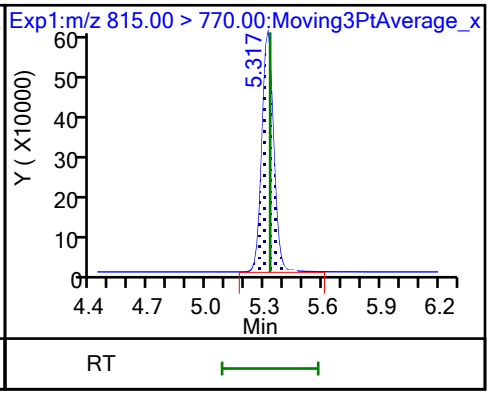
45 Perfluorohexadecanoic acid



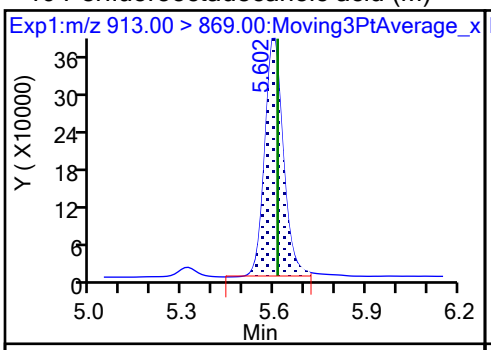
45 Perfluorohexadecanoic acid



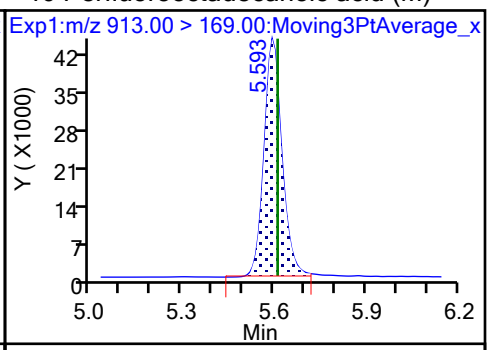
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196791/5 Calibration Date: 10/25/2023 18:24

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.275		0.135	0.125	8.3	50.0
Perfluoropentanoic acid	AveID	1.079	1.247		0.0578	0.0500	15.5	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.269		0.0504	0.0444	13.6	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	4.024		0.0555	0.0469	18.5	50.0
Perfluorohexanoic acid	AveID	1.100	1.077		0.0489	0.0500	-2.2	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.475		0.0531	0.0471	13.0	50.0
HFPODA	AveID	1.001	1.209		0.121	0.100	20.7	50.0
Perfluoroheptanoic acid	AveID	1.121	1.283		0.0572	0.0500	14.5	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.180		0.0487	0.0457	6.6	50.0
DONA	AveID	5.754	5.873		0.0482	0.0473	2.1	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.457		0.0480	0.0477	0.8	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.399		0.148	0.119	24.3	50.0
Perfluorooctanoic acid	AveID	1.065	1.202		0.0564	0.0500	12.9	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.259		0.0501	0.0464	8.0	50.0
Perfluorononanoic acid	AveID	0.9800	0.9625		0.0491	0.0500	-1.8	50.0
9Cl-PF3ONS	AveID	3.569	4.213		0.0551	0.0467	18.0	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8765		0.0475	0.0481	-1.2	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.619		0.0571	0.0480	19.0	50.0
Perfluorodecanoic acid	AveID	0.999	1.165		0.0583	0.0500	16.6	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9948		0.0521	0.0500	4.3	50.0
NMeFOSAA	AveID	0.9074	1.089		0.150	0.125	20.0	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7248		0.0512	0.0483	6.1	50.0
Perfluoroundecanoic acid	AveID	1.031	1.138		0.0552	0.0500	10.4	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.160		0.145	0.125	16.0	50.0
11Cl-PF3OUdS	AveID	5.474	6.329		0.0545	0.0472	15.6	50.0
Perfluorododecanoic acid	AveID	1.018	1.002		0.0492	0.0500	-1.5	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.725		0.0632	0.0482	31.1	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2077		0.0434	0.0484	-10.3	50.0
Perfluorotridecanoic acid	AveID	1.070	1.160		0.0542	0.0500	8.5	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1250		0.0559	0.0500	11.8	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.177		0.0589	0.0500	17.7	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7925		0.0507	0.0500	1.5	50.0
13C4 PFBA	Ave	0.9917	1.074		1.35	1.25	8.3	
13C5 PFPeA	Ave	0.7696	0.8201		1.33	1.25	6.6	
13C3 PFBS	Ave	1.041	1.041		1.16	1.16	-0.0	
M2-4:2 FTS	Ave	0.1204	0.1147		1.11	1.17	-4.7	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196791/5 Calibration Date: 10/25/2023 18:24

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7933		1.27	1.25	1.3	
13C3 HFPO-DA	Ave	0.1516	0.1451		1.20	1.25	-4.3	
13C4 PFHpA	Ave	0.8590	0.7940		1.16	1.25	-7.6	
18O2 PFHxS	Ave	0.7464	0.7866		1.25	1.18	5.4	
M2-6:2 FTS	Ave	0.1551	0.1570		1.20	1.19	1.2	
13C4 PFOA	Ave	0.9731	0.997		1.28	1.25	2.5	
13C4 PFOS	Ave	0.4742	0.5092		1.28	1.20	7.4	
13C5 PFNA	Ave	1.059	1.147		1.35	1.25	8.3	
13C2 PFDA	Ave	1.109	1.053		1.19	1.25	-5.0	
M2-8:2 FTS	Ave	0.1744	0.1715		1.18	1.20	-1.7	
13C8 FOSA	Ave	0.9462	0.997		1.32	1.25	5.3	
d3-NMeFOSAA	Ave	0.2650	0.2573		1.21	1.25	-2.9	
13C2 PFUnA	Ave	1.047	1.071		1.28	1.25	2.3	
d5-NEtFOSAA	Ave	0.2552	0.2595		1.27	1.25	1.7	
13C2 PFDoA	Ave	1.064	1.129		1.33	1.25	6.1	
13C2 PFTeDA	Ave	1.059	1.078		1.27	1.25	1.8	
13C2 PFHxDA	Ave	1.221	1.203		1.23	1.25	-1.4	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 25-Oct-2023 18:24:58 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057556-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:54:20 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 10:03:29
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.139	2.139	0.0	0.606	2044775	1.35		108	755	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.139	0.0	1.000	260649	0.1353		108	20.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.695	1561598	1.33		107	1981	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	77870	0.0578		116	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.480	2.480	0.0	0.703	1844007	1.16		100	104738	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.480	0.0	1.000	89260	0.0504	Target=2.06	114	69.9	M
298.90 > 99.00	2.480	2.480	0.0	1.000	44648		2.00(1.03-3.09)		16.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.772	0.0	1.000	32943	0.0555		118	243	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.786	204033	1.11		95.3	134	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.810	2.810	0.0	0.796	1510735	1.27		101	4773	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.810	0.0	1.000	65053	0.0489	Target=14.12	97.8	12.2	M
313.00 > 119.00	2.810	2.810	0.0	1.000	5184		12.55(7.06-21.17)		5.6	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.885	83170	0.0531	Target=2.72	113	157	M
349.00 > 99.00	2.810	2.810	0.0	0.885	28022		2.97(1.36-4.09)		47.2	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.918	0.0	0.827	276315	1.20		95.7	1123	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.918	0.0	1.000	26722	0.1207		121	331	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.176	3.176	0.0	0.900	1417069	1.25		105	7984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.176	3.176	0.0	1.000	64620	0.0487	Target=3.32	107	113	M
399.00 > 99.00	3.176	3.176	0.0	1.000	20158		3.21(1.66-4.98)		20.0	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.176	0.0	1.000	77613	0.0572	Target=4.17	114	18.3	
363.00 > 169.00	3.176	3.176	0.0	1.000	17584		4.41(2.09-6.26)		35.3	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.176	0.0	0.900	1511895	1.16		92.4	6507	
77 DONA										
377.00 > 251.00	3.212	3.212	0.0	0.839	215281	0.0482	Target=3.33	102	321	
377.00 > 85.00	3.212	3.212	0.0	0.839	57623		3.74(1.66-4.99)		95.2	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.511	0.0	0.917	53869	0.0480	Target=4.83	101	200	M
449.00 > 99.00	3.511	3.511	0.0	0.917	11557		4.66(2.41-7.24)		32.9	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.995	284029	1.20		101	792	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.520	3.520	0.0	1.003	96451	0.1475		124	88.0	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.529	3.529	0.0	1.000	91330	0.0564	Target=2.88	113	3.9	M
413.00 > 169.00	3.529	3.529	0.0	1.000	31192		2.93(1.44-4.32)		49.0	M
D 14 13C4 PFOA										
417.00 > 372.00	3.529	3.529	0.0	1.000	1898803	1.28		102	4933	
* 62 13C2 PFOA										
415.00 > 370.00	3.529	3.529	0.0		1904259	1.25			4886	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.830	0.0	1.000	45330	0.0501	Target=4.24	108	138	M
499.00 > 99.00	3.830	3.830	0.0	1.000	11149		4.07(2.12-6.37)		28.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.085	927002	1.28		107	6581	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.854	3.854	0.0	1.000	84085	0.0491	Target=8.34	98.2	13.5	M
463.00 > 169.00	3.854	3.854	0.0	1.000	11027		7.63(4.17-12.51)		79.5	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.854	0.0	1.092	2184079	1.35		108	20406	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.990	3.990	0.0	1.042	152452	0.0551		118	452	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.112	4.112	0.0	1.074	32705	0.0475	Target=2.17	98.8	634	
549.00 > 99.00	4.112	4.112	0.0	1.074	13440		2.43(1.08-3.25)		54.6	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.148	4.148	0.0	1.000	93467	0.0583	Target=11.44	117	24.4	
513.00 > 169.00	4.148	4.148	0.0	1.000	6726		13.90(5.72-17.16)		33.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.148	4.148	0.0	1.175	2005968	1.19		95.0	5875	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.148	0.0	1.000	32843	0.0571		119	375	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.175	312795	1.18		98.3	909	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.202	1898080	1.32		105	8291	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.242	0.0	1.000	75529	0.0521		104	354	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.278	0.0	1.212	489927	1.21		97.1	1825	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.291	4.291	0.0	1.003	53335	0.1500		120	118	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.375	4.375	0.0	1.142	27130	0.0512	Target=2.37	106	254	
599.00 > 99.00	4.375	4.375	0.0	1.142	10151		2.67(1.19-3.56)		96.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.398	4.398	0.0	1.246	2039285	1.28		102	5383	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.398	4.398	0.0	1.000	92839	0.0552	Target=12.20	110	20.3	M
563.00 > 169.00	4.398	4.398	0.0	1.000	7797		11.91(6.10-18.31)		60.0	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.410	4.410	0.0	1.250	494184	1.27		102	830	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.410	0.0	1.000	57337	0.1450		116	221	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.482	4.482	0.0	1.170	231486	0.0545		116	354	
D 36 13C2 PFDoA										
615.00 > 570.00	4.621	4.621	0.0	1.309	2149752	1.33		106	7708	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.621	4.621	0.0	1.000	86198	0.0492	Target=8.47	98.5	4.9	
613.00 > 169.00	4.621	4.621	0.0	1.000	11007		7.83(4.23-12.70)		153	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.632	0.0	1.117	21714	0.0632		131	289	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.774	0.0	1.246	7798	0.0434	Target=0.48	89.7	200	
699.00 > 99.00	4.774	4.774	0.0	1.246	18314		0.43(0.24-0.72)		234	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.812	4.812	0.0	1.041	99790	0.0542	Target=6.41	108	6.0	
663.00 > 169.00	4.812	4.812	0.0	1.041	14271		6.99(3.21-9.62)		94.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.989	4.989	0.0	1.414	2053213	1.27		102	5204	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.989	4.989	0.0	1.000	10264	0.0559	Target=0.87	112	135	
713.00 > 219.00	4.989	4.989	0.0	1.000	9266		1.11(0.43-1.30)		111	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.307	5.307	0.0	1.504	2290837	1.23		98.6	5351	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.307	5.307	0.0	1.000	107897	0.0589	Target=7.89	118	7.2	M
813.00 > 169.00	5.307	5.307	0.0	1.000	12537		8.61(3.94-11.83)		267	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.566	5.566	0.0	1.049	72616	0.0507	Target=9.39	101	9.0	M
913.00 > 169.00	5.575	5.566	0.009	1.051	7192		10.10(4.69-14.08)		151	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

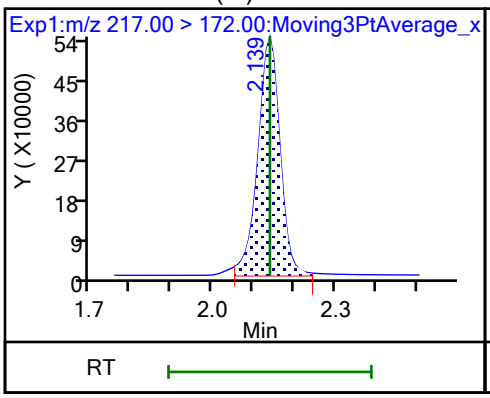
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 26-Oct-2023 16:54:21 Chrom Revision: 2.3 18-Oct-2023 21:16:54

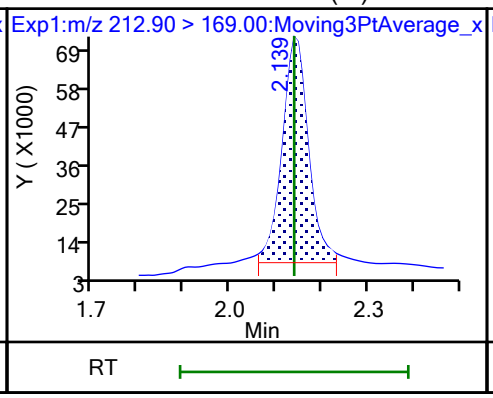
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A05.d
Injection Date: 25-Oct-2023 18:24:58 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

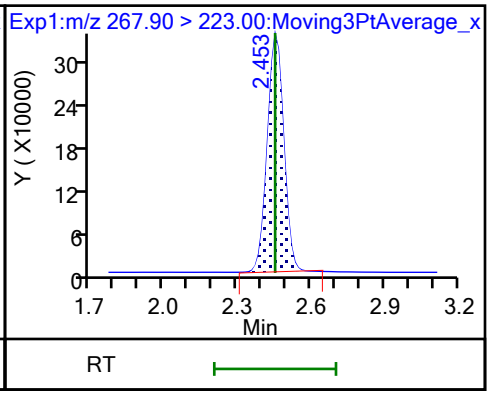
D 1 13C4 PFBA (M)



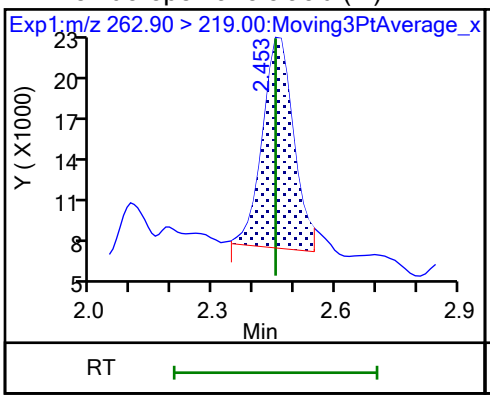
2 Perfluorobutanoic acid (M)



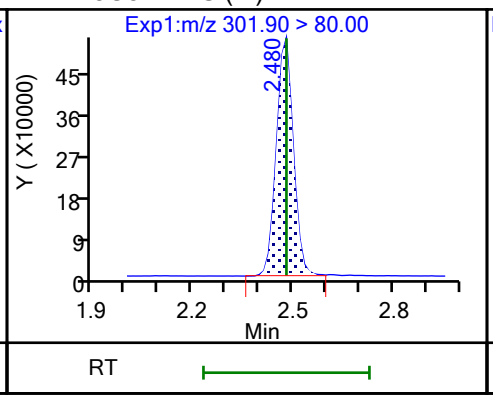
D 3 13C5 PFPeA



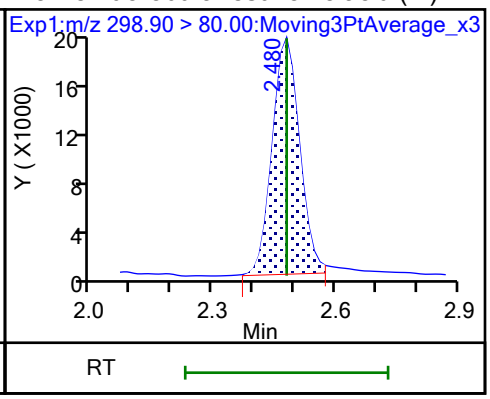
4 Perfluoropentanoic acid (M)



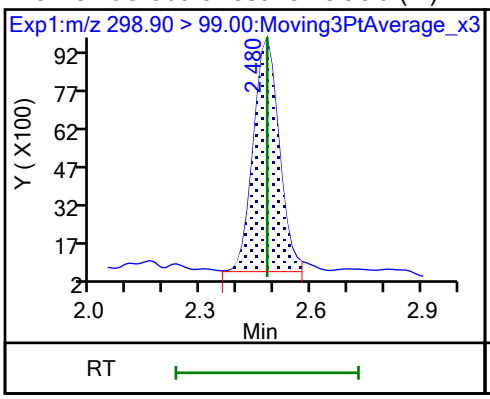
D 47 13C3 PFBS (M)



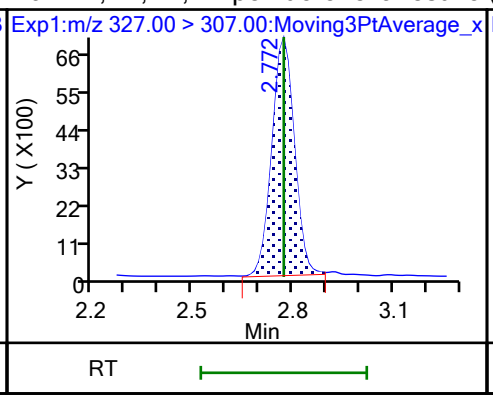
5 Perfluorobutanesulfonic acid (M)



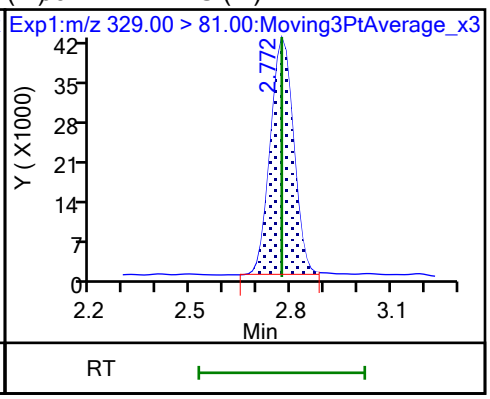
5 Perfluorobutanesulfonic acid (M)



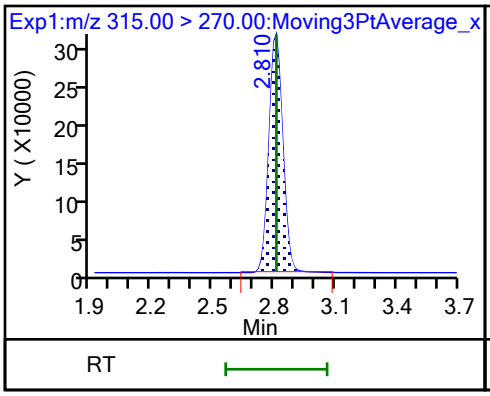
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



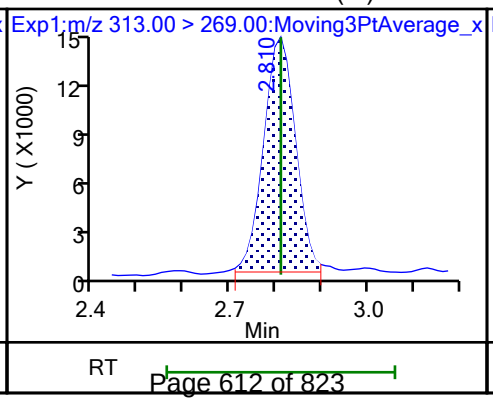
60 M2-4:2 FTS (M)



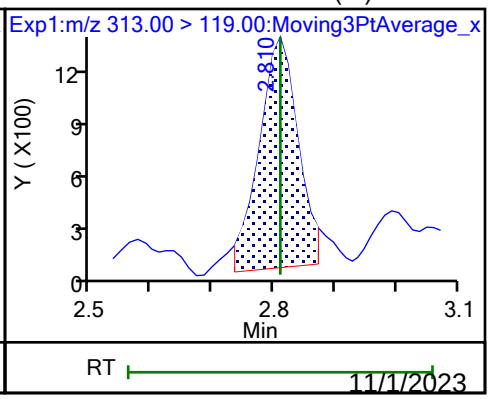
D 7 13C2 PFHxA



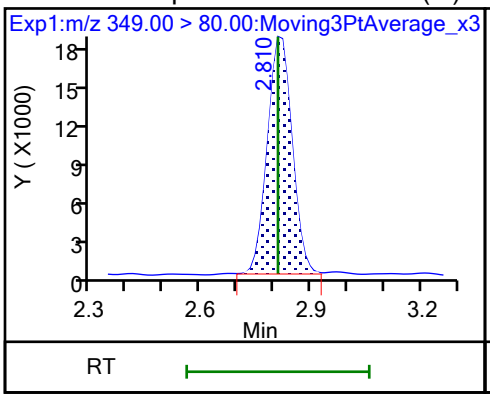
6 Perfluorohexanoic acid (M)



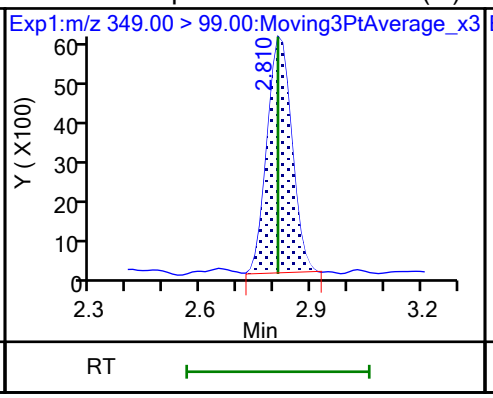
6 Perfluorohexanoic acid (M)



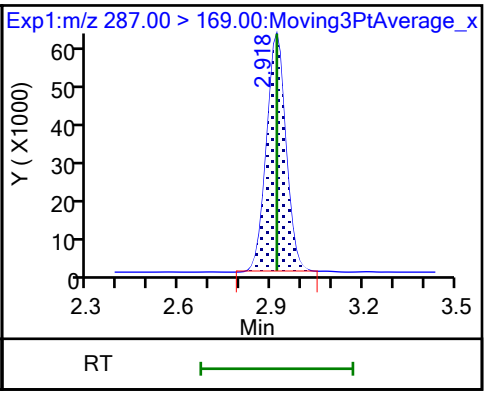
70 Perfluoropentanesulfonic acid (M)



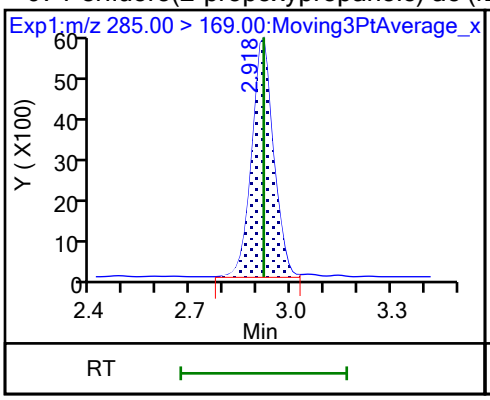
70 Perfluoropentanesulfonic acid (M)



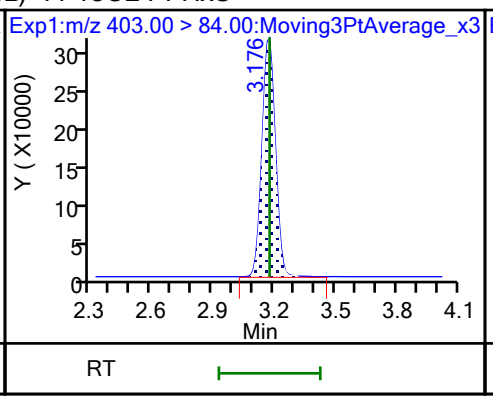
D 64 13C3 HFPO-DA



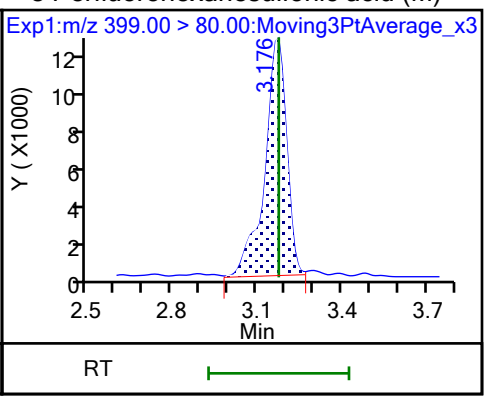
67 Perfluoro(2-propoxypropanoic) ac (M)



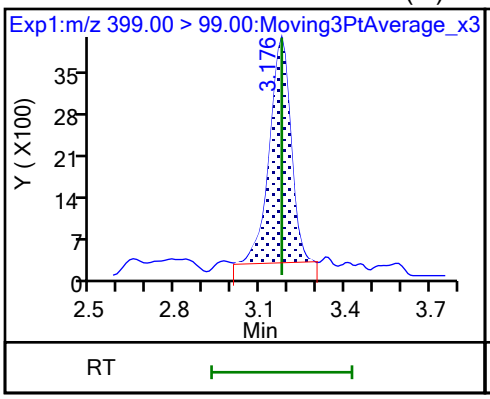
D 11 18O2 PFHxS



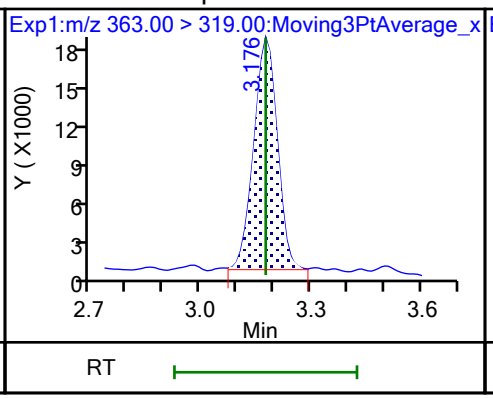
8 Perfluorohexanesulfonic acid (M)



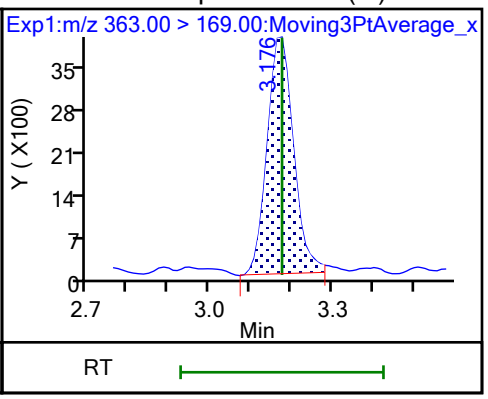
8 Perfluorohexanesulfonic acid (M)



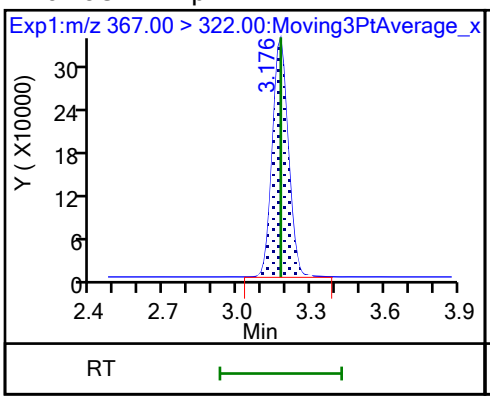
10 Perfluoroheptanoic acid



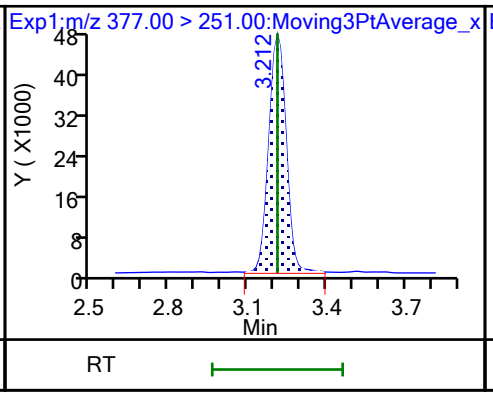
10 Perfluoroheptanoic acid (M)



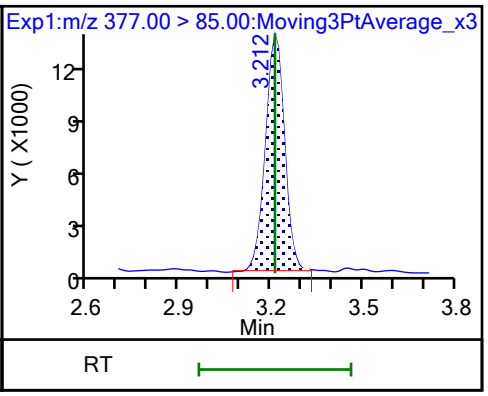
D 9 13C4 PFHpA



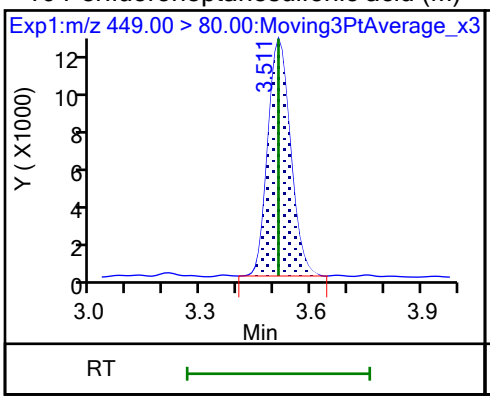
77 DONA



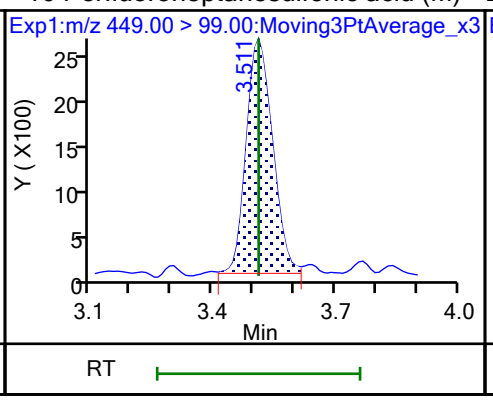
77 DONA



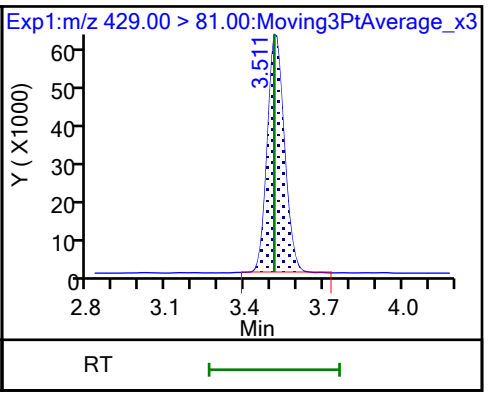
16 Perfluoroheptanesulfonic acid (M)



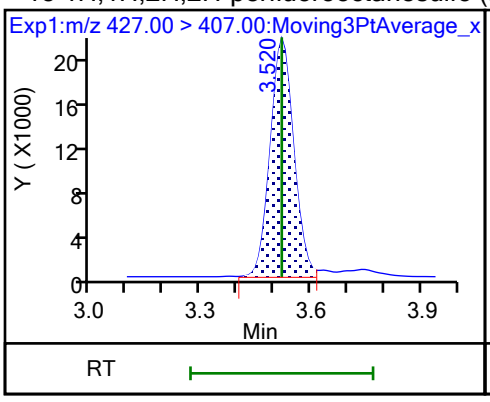
16 Perfluoroheptanesulfonic acid (M)



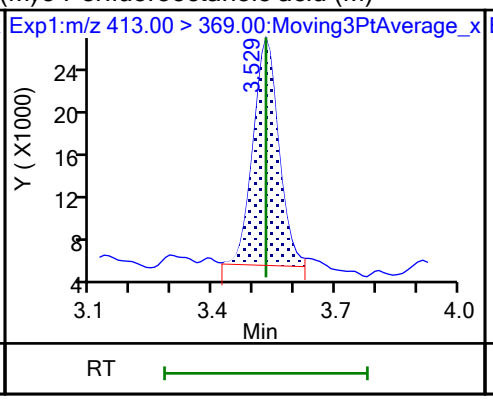
D 12 M2-6:2 FTS



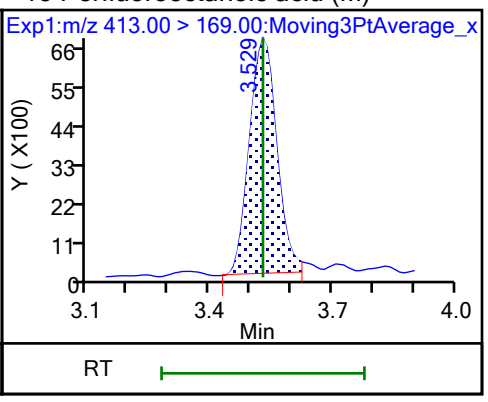
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



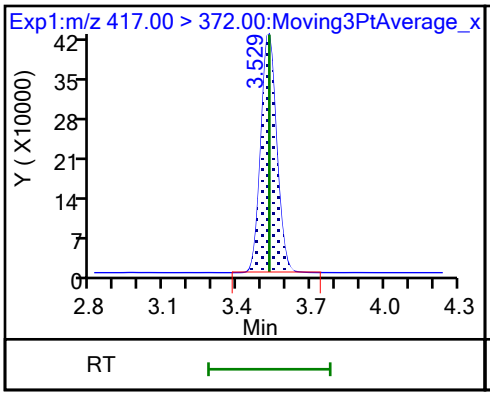
15 Perfluorooctanoic acid (M)



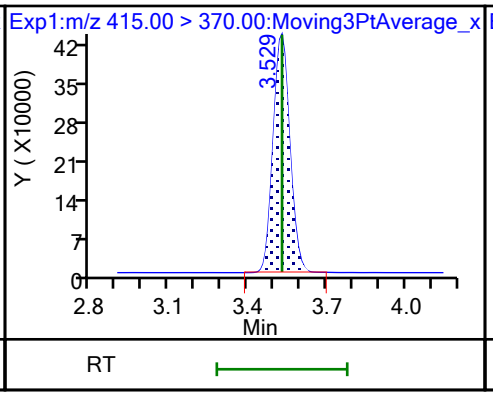
15 Perfluorooctanoic acid (M)



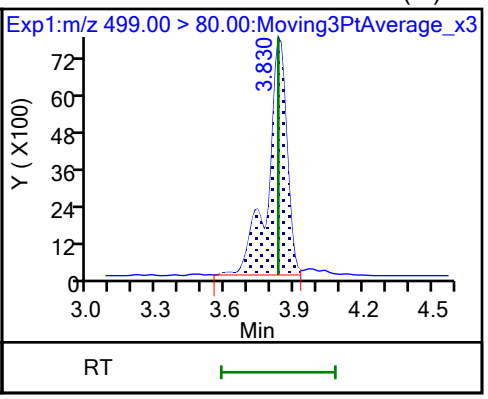
D 14 13C4 PFOA



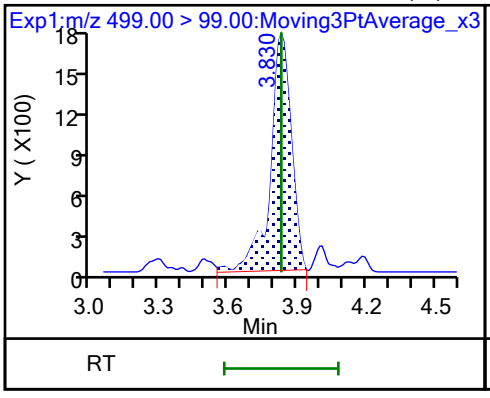
* 62 13C2 PFOA



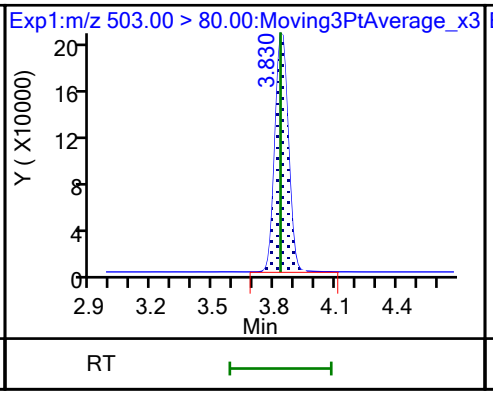
17 Perfluorooctanesulfonic acid (M)



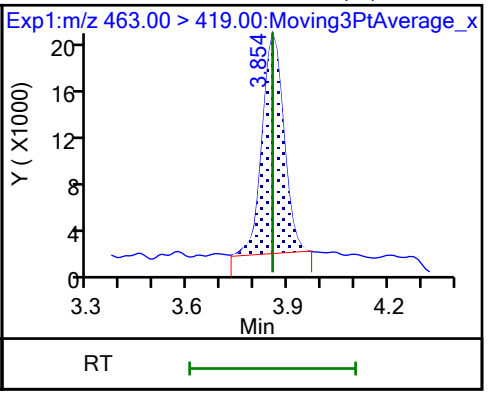
17 Perfluorooctanesulfonic acid (M)



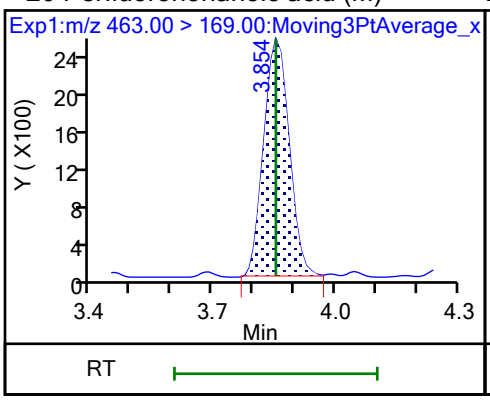
D 18 13C4 PFOS



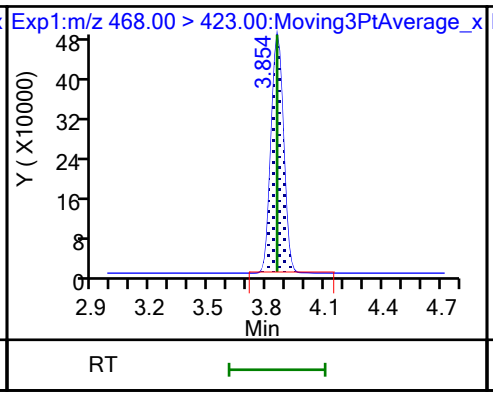
20 Perfluorononanoic acid (M)



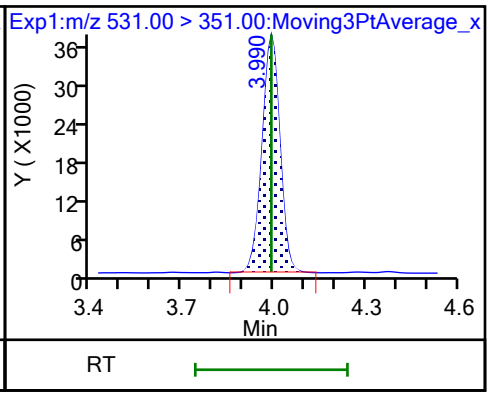
20 Perfluorononanoic acid (M)



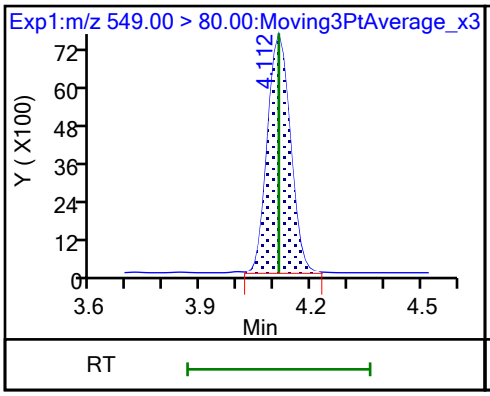
D 19 13C5 PFNA



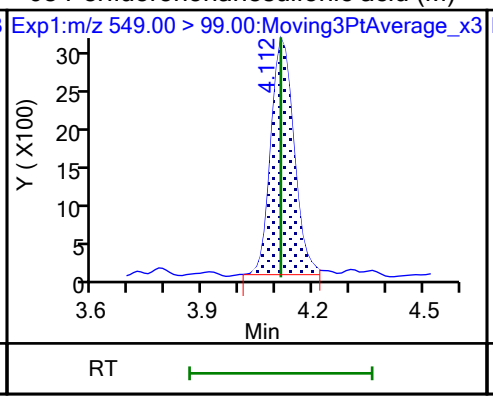
69 9-Chlorohexadecafluoro-3-oxanona



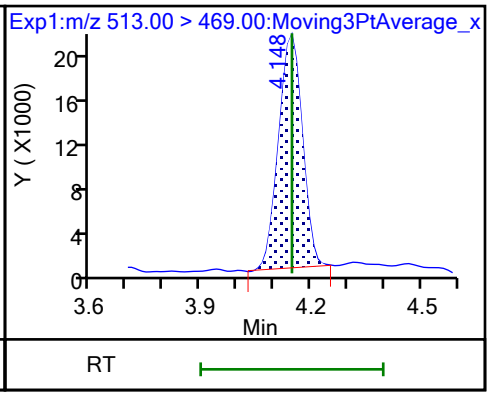
68 Perfluorononanesulfonic acid



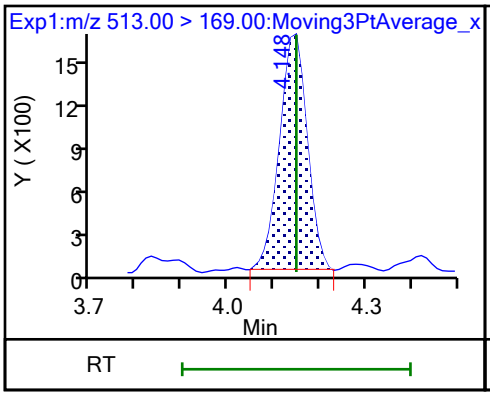
68 Perfluorononanesulfonic acid (M)



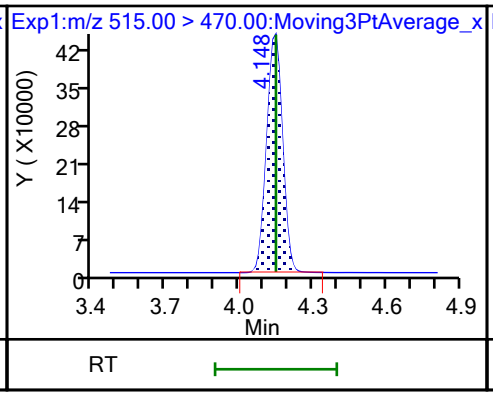
24 Perfluorodecanoic acid



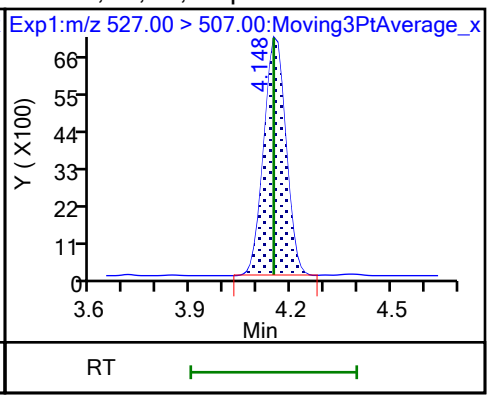
24 Perfluorodecanoic acid



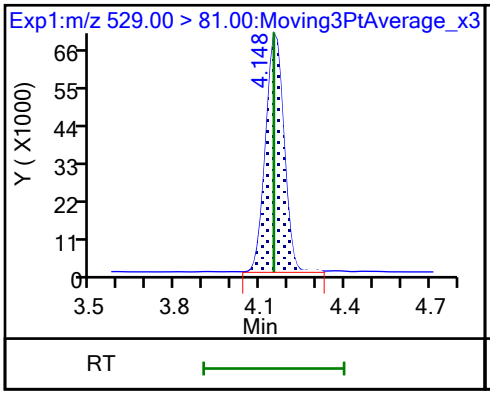
D 23 13C2 PFDA



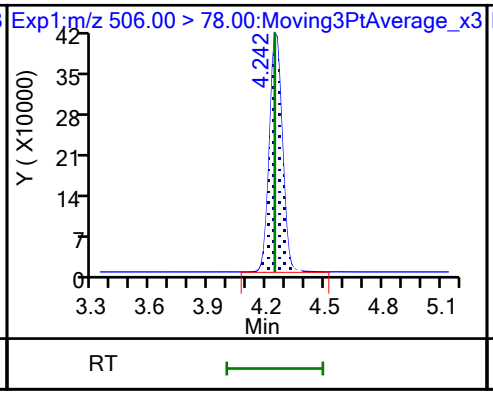
25 1H,1H,2H,2H-perfluorodecanesulfo



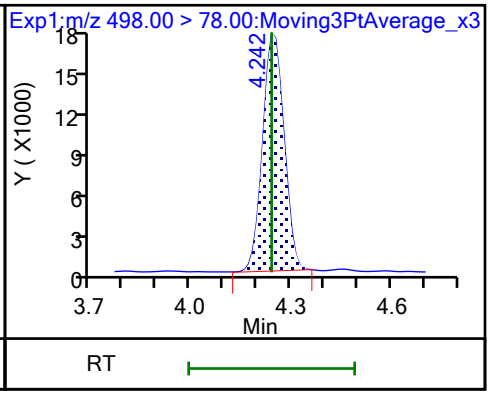
D 26 M2-8:2 FTS



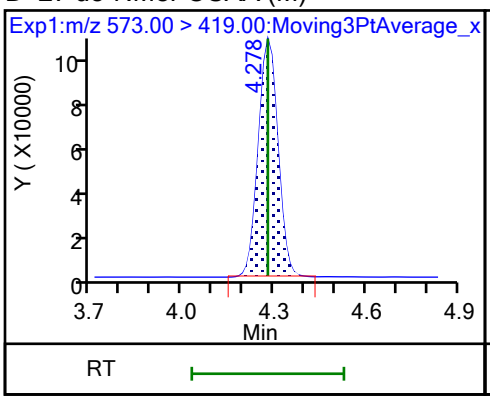
D 21 13C8 FOSA



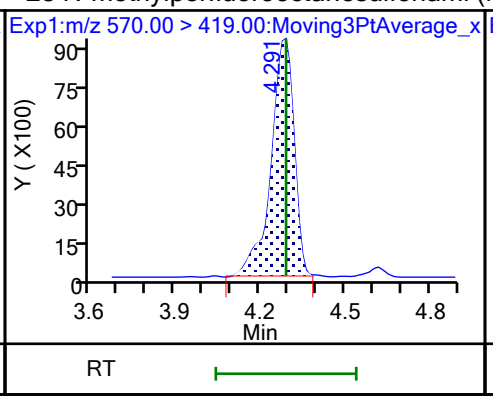
22 Perfluorooctanesulfonamide



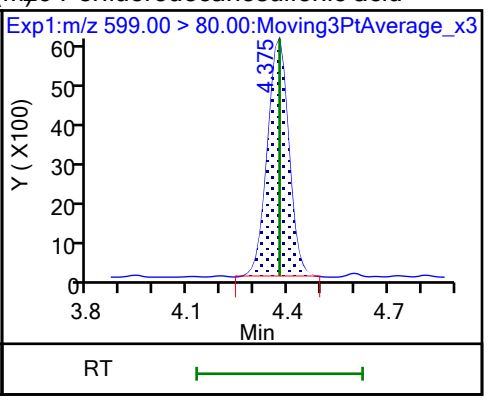
D 27 d3-NMeFOSAA (M)



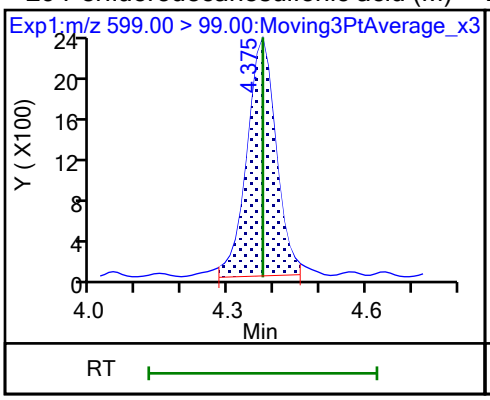
28 N-methylperfluorooctanesulfonami (M)



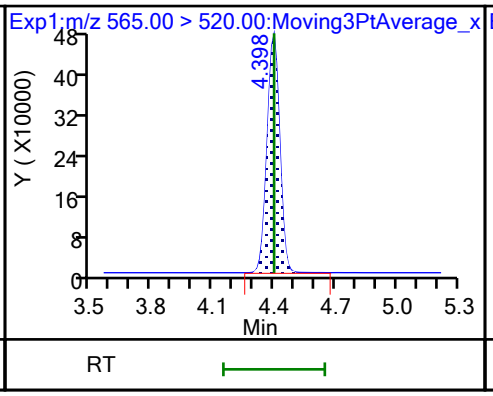
29 Perfluorodecanesulfonic acid



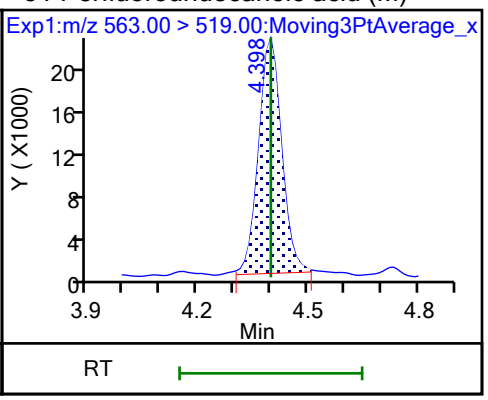
29 Perfluorodecanesulfonic acid (M)



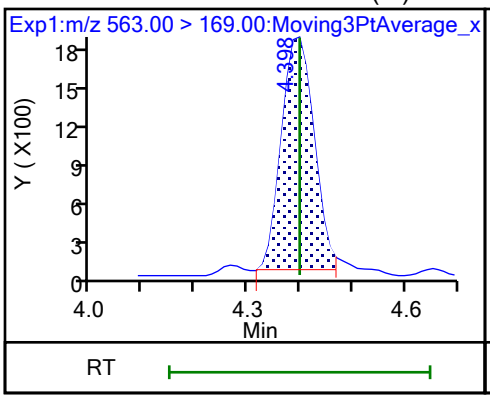
D 30 13C2 PFUnA



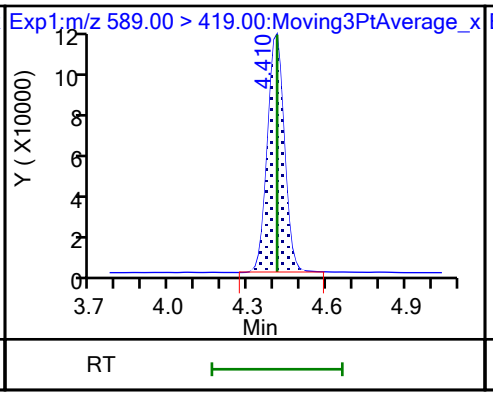
31 Perfluoroundecanoic acid (M)



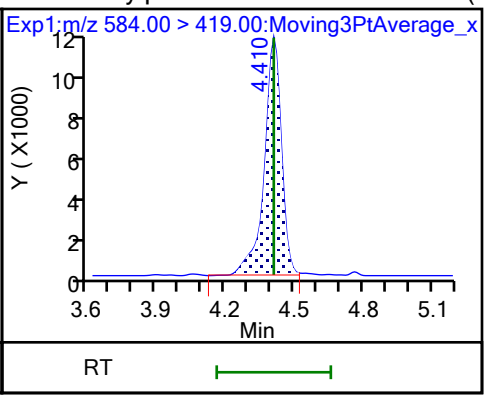
31 Perfluoroundecanoic acid (M)



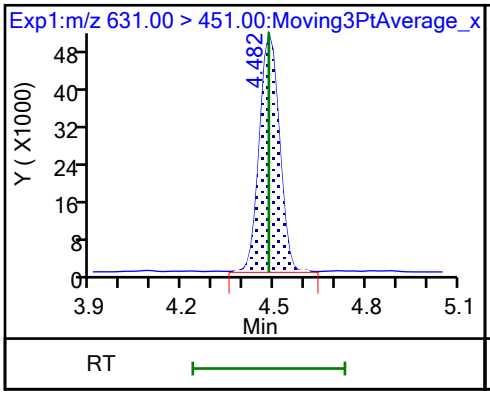
D 32 d5-NEtFOSAA



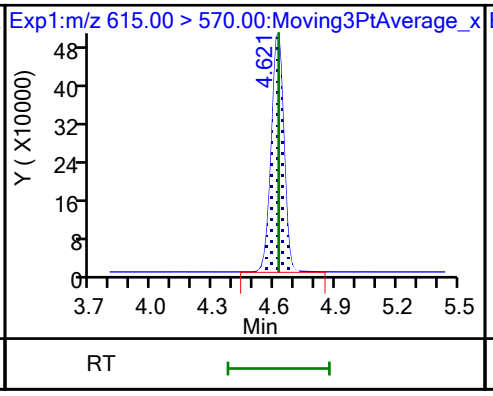
33 N-ethylperfluorooctanesulfonamid (M)



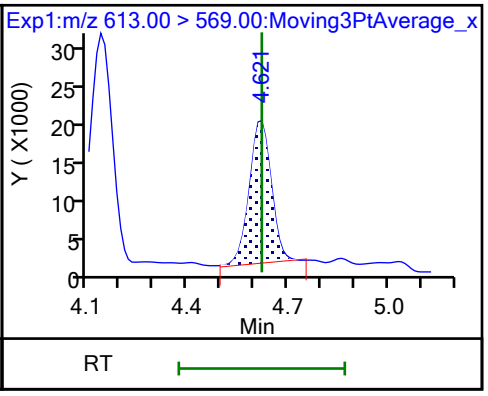
66 11-Chloroeicosafluoro-3-oxaundec



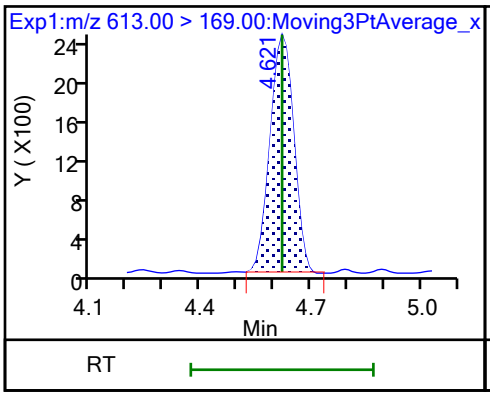
D 36 13C2 PFDoA



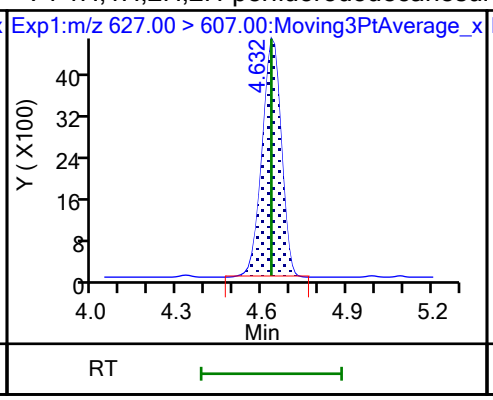
37 Perfluorododecanoic acid



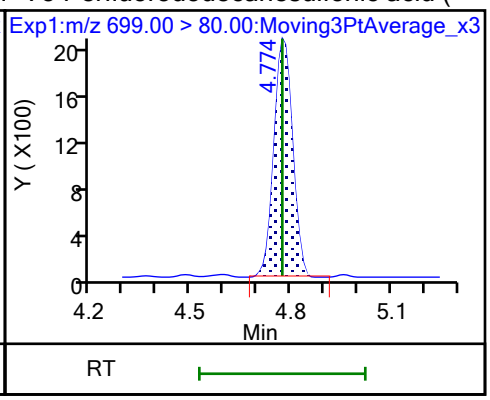
37 Perfluorododecanoic acid



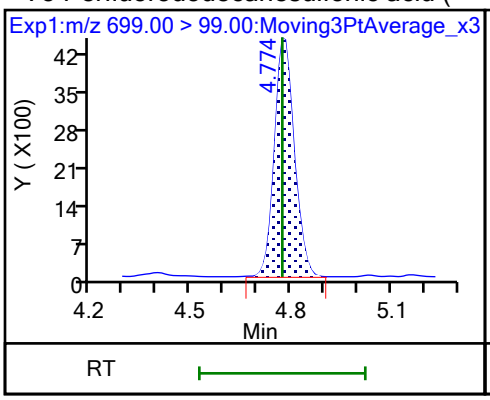
74 1H,1H,2H,2H-perfluorododecanesul



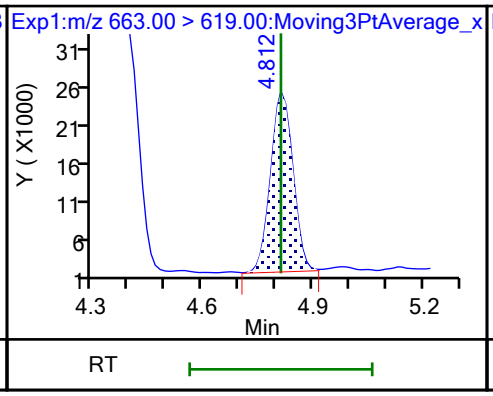
75 Perfluorododecanesulfonic acid (



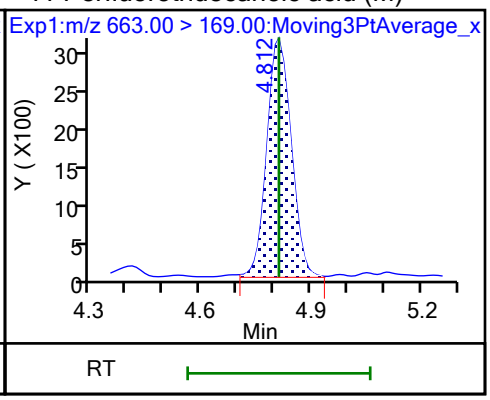
75 Perfluorododecanesulfonic acid (



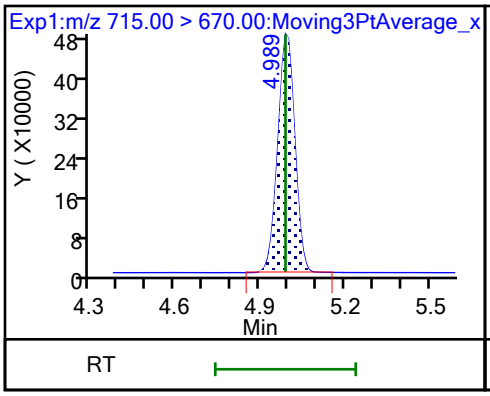
41 Perfluorotridecanoic acid



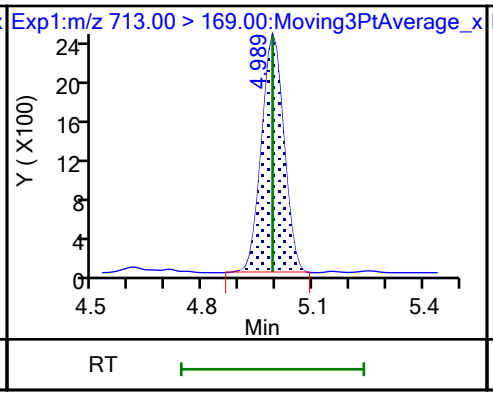
41 Perfluorotridecanoic acid (M)



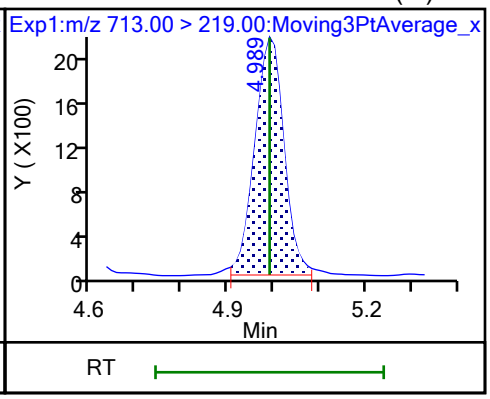
D 43 13C2 PFTeDA



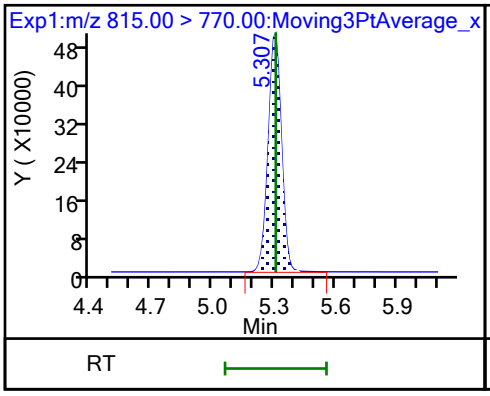
42 Perfluorotetradecanoic acid



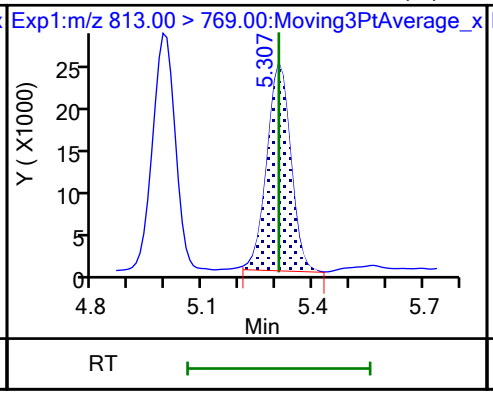
42 Perfluorotetradecanoic acid (M)



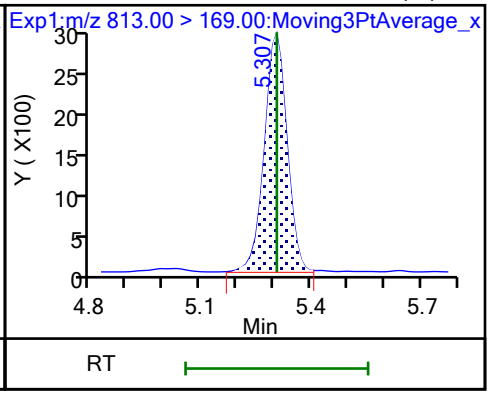
D 44 13C2 PFHxDA



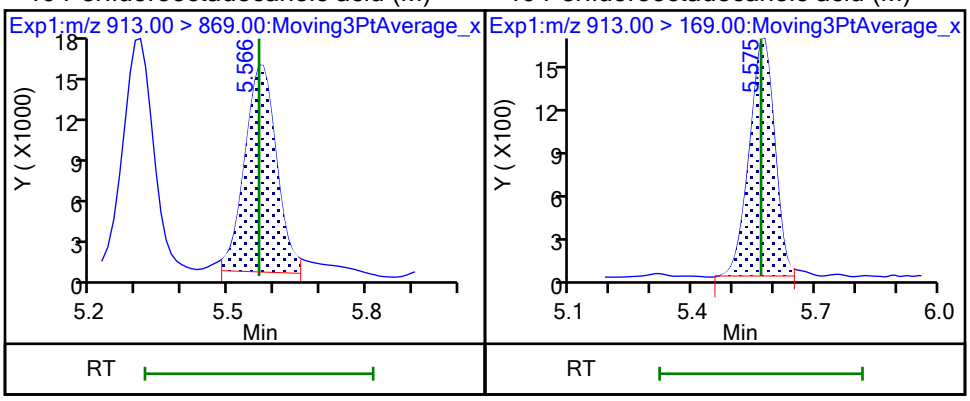
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196791/19 Calibration Date: 10/25/2023 20:19

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8725		0.924	1.00	-7.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.028		0.953	1.00	-4.7	
Perfluorobutanesulfonic acid	AveID	1.117	1.081		0.859	0.887	-3.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.400		0.938	0.937	0.1	
Perfluorohexanoic acid	AveID	1.100	0.9569		0.870	1.00	-13.0	
Perfluoropentanesulfonic acid	AveID	1.306	1.241		0.894	0.941	-5.0	
HFPODA	AveID	1.001	0.8967		0.896	1.00	-10.4	
Perfluoroheptanoic acid	AveID	1.121	1.070		0.955	1.00	-4.5	
Perfluorohexanesulfonic acid	AveID	1.107	1.036		0.856	0.914	-6.4	
DONA	AveID	5.754	5.170		0.849	0.945	-10.1	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.780		0.967	0.951	1.7	
Perfluoroheptanesulfonic acid	AveID	1.445	1.353		0.892	0.953	-6.4	
Perfluorooctanoic acid	AveID	1.065	0.9795		0.920	1.00	-8.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.069		0.850	0.928	-8.4	
Perfluorononanoic acid	AveID	0.9800	0.8846		0.903	1.00	-9.7	
9Cl-PF3ONS	AveID	3.569	3.627		0.948	0.933	1.6	
Perfluorononanesulfonic acid	AveID	0.8874	0.7798		0.845	0.962	-12.1	
Perfluorodecanoic acid	AveID	0.999	0.8998		0.900	1.00	-10.0	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.289		0.998	0.960	4.0	
Perfluorooctanesulfonamide	AveID	0.9539	0.9605		1.01	1.00	0.7	
NMeFOSAA	AveID	0.9074	0.8698		0.959	1.00	-4.1	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5956		0.842	0.965	-12.8	
Perfluoroundecanoic acid	AveID	1.031	0.8983		0.872	1.00	-12.8	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9554		0.955	1.00	-4.5	
11Cl-PF3OUdS	AveID	5.474	5.493		0.946	0.943	0.4	
Perfluorododecanoic acid	AveID	1.018	0.9417		0.925	1.00	-7.5	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.411		1.03	0.964	7.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2146		0.897	0.968	-7.3	
Perfluorotridecanoic acid	AveID	1.070	1.025		0.958	1.00	-4.2	
Perfluorotetradecanoic acid	AveID	0.1118	0.1005		0.899	1.00	-10.1	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.024		1.02	1.00	2.4	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7343		0.940	1.00	-6.0	
13C4 PFBA	Ave	0.9917	1.043		1.32	1.25	5.2	
13C5 PFPeA	Ave	0.7696	0.7594		1.23	1.25	-1.3	
13C3 PFBS	Ave	1.041	1.058		1.18	1.16	1.6	
M2-4:2 FTS	Ave	0.1204	0.1178		1.14	1.17	-2.2	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196791/19 Calibration Date: 10/25/2023 20:19

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7967		1.27	1.25	1.8	
13C3 HFPO-DA	Ave	0.1516	0.1394		1.15	1.25	-8.0	
13C4 PFHpA	Ave	0.8590	0.8372		1.22	1.25	-2.5	50.0
18O2 PFHxS	Ave	0.7464	0.7937		1.26	1.18	6.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1539		1.18	1.19	-0.8	
13C4 PFOA	Ave	0.9731	0.995		1.28	1.25	2.3	50.0
13C4 PFOS	Ave	0.4742	0.5093		1.28	1.20	7.4	50.0
13C5 PFNA	Ave	1.059	1.009		1.19	1.25	-4.7	50.0
13C2 PFDA	Ave	1.109	1.132		1.28	1.25	2.1	
M2-8:2 FTS	Ave	0.1744	0.1612		1.11	1.20	-7.6	
13C8 FOSA	Ave	0.9462	0.9384		1.24	1.25	-0.8	
d3-NMeFOSAA	Ave	0.2650	0.2598		1.23	1.25	-2.0	
13C2 PFUnA	Ave	1.047	1.108		1.32	1.25	5.9	
d5-NEtFOSAA	Ave	0.2552	0.2538		1.24	1.25	-0.5	
13C2 PFDoA	Ave	1.064	1.086		1.28	1.25	2.1	
13C2 PFTeDA	Ave	1.059	1.025		1.21	1.25	-3.2	
13C2 PFHxDA	Ave	1.221	1.074		1.10	1.25	-12.0	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A19.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 25-Oct-2023 20:19:17 ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057556-019 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:55:11 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 10:35:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	2058821	1.32		105	775	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	1437010	0.9240		92.4	118	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1498422	1.23		98.7	1924	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1232743	0.9530		95.3	35.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.701	1940699	1.18		102	115071	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.480	-0.013	1.000	1600948	0.8586	Target=2.06	96.8	821	M
298.90 > 99.00	2.467	2.480	-0.013	1.000	777922		2.06(1.03-3.09)		289	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.772	-0.012	0.995	592168	0.9381		100	2850	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.772	0.0	0.788	217013	1.14		97.8	131	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1572032	1.27		102	8797	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	1203407	0.8695	Target=14.12	87.0	197	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	86310		13.94(7.06-21.17)		90.9	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1462744	0.8941	Target=2.72	95.0	1164	M
349.00 > 99.00	2.810	2.810	0.0	0.888	514695		2.84(1.36-4.09)		719	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	275013	1.15		92.0	2347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.918	-0.010	1.000	197278	0.8956		89.6	1026	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1481436	1.26		106	5122	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	1186787	0.8558	Target=3.32	93.6	1731	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	340440		3.49(1.66-4.98)		255	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.176	-0.011	1.000	1414140	0.9546	Target=4.17	95.5	333	M
363.00 > 169.00	3.165	3.176	-0.011	1.000	337144		4.19(2.09-6.26)		559	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1651967	1.22		97.5	7614	
77 DONA										
377.00 > 251.00	3.212	3.212	0.0	0.839	3927766	0.8491	Target=3.33	89.9	3744	
377.00 > 85.00	3.199	3.212	-0.013	0.835	1028249		3.82(1.66-4.99)		1565	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.511	0.0	0.917	1036766	0.8924	Target=4.83	93.6	2855	
449.00 > 99.00	3.511	3.511	0.0	0.917	211343		4.91(2.41-7.24)		755	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	288391	1.18		99.2	620	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.520	-0.009	1.000	642130	0.9674		102	725	M
15 Perfluorooctanoic acid										
413.00 > 369.00	3.520	3.529	-0.009	1.000	1538504	0.9196	Target=2.88	92.0	72.6	
413.00 > 169.00	3.520	3.529	-0.009	1.000	544944		2.82(1.44-4.32)		744	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1963340	1.28		102	4580	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.529	-0.009		1973110	1.25			6686	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.830	0.0	1.000	797107	0.8501	Target=4.24	91.6	1107	M
499.00 > 99.00	3.830	3.830	0.0	1.000	175184		4.55(2.12-6.37)		470	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.088	960627	1.28		107	3643	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.854	-0.012	0.997	1408764	0.9026	Target=8.34	90.3	199	
463.00 > 169.00	3.842	3.854	-0.012	0.997	169322		8.32(4.17-12.51)		695	M
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.854	0.0	1.095	1990710	1.19		95.3	6205	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.990	-0.009	1.039	2720369	0.9481		102	7345	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.112	-0.012	1.071	603069	0.8454	Target=2.17	87.9	4147	
549.00 > 99.00	4.100	4.112	-0.012	1.071	249820		2.41(1.08-3.25)		771	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.148	-0.012	1.000	1607574	0.9003	Target=11.44	90.0	466	
513.00 > 169.00	4.136	4.148	-0.012	1.000	161184		9.97(5.72-17.16)		1199	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	2233360	1.28		102	6136	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.148	0.0	1.000	559179	1.00		104	3630	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	304664	1.11		92.4	916	
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.242	0.0	1.205	1851637	1.24		99.2	3527	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.242	0.0	1.000	1422771	1.01		101	3338	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.278	-0.012	1.212	512652	1.23		98.0	1314	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.291	-0.012	1.003	356712	0.9585		95.9	427	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.375	-0.012	1.139	462007	0.8415	Target=2.37	87.2	4285	
599.00 > 99.00	4.363	4.375	-0.012	1.139	183440		2.52(1.19-3.56)		1411	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.398	-0.011	1.246	2186557	1.32		106	9311	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.398	-0.011	1.000	1571363	0.8716	Target=12.20	87.2	363	
563.00 > 169.00	4.387	4.398	-0.011	1.000	144204		10.90(6.10-18.31)		1181	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.399	4.410	-0.011	1.250	500753	1.24		99.5	1159	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.410	-0.011	1.000	382754	0.9553		95.5	873	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.482	4.482	0.0	1.170	4164325	0.9464		100	4238	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	2142691	1.28		102	8070	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.621	-0.011	1.000	1614243	0.9252	Target=8.47	92.5	102	M
613.00 > 169.00	4.610	4.621	-0.011	1.000	199662		8.08(4.23-12.70)		2299	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.632	0.0	1.117	346118	1.03		107	2840	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.774	0.0	1.246	166952	0.8972	Target=0.48	92.7	2299	
699.00 > 99.00	4.774	4.774	0.0	1.246	349165		0.48(0.24-0.72)		3606	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.812	-0.009	1.042	1756627	0.9579	Target=6.41	95.8	102	M
663.00 > 169.00	4.803	4.812	-0.009	1.042	257949		6.81(3.21-9.62)		1587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.417	2022575	1.21		96.8	7197	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.990	4.989	0.001	1.000	162658	0.8991	Target=0.87	89.9	1236	M
713.00 > 219.00	4.979	4.989	-0.010	0.998	193975		0.84(0.43-1.30)		2097	M

Report Date: 26-Oct-2023 16:55:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A19.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.307	-0.011	1.504	2119976	1.10		88.0	5471	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.307	-0.011	1.000	1736660	1.02	Target=7.89	102	115	M
813.00 > 169.00	5.296	5.307	-0.011	1.000	212516		8.17(3.94-11.83)		2499	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.567	5.566	0.001	1.051	1245394	0.9403	Target=9.39	94.0	135	M
913.00 > 169.00	5.557	5.566	-0.009	1.049	133990		9.29(4.69-14.08)		784	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

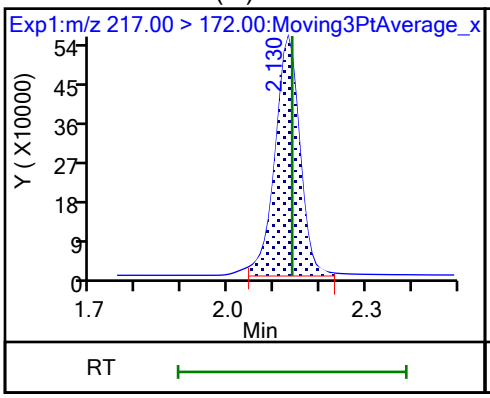
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 26-Oct-2023 16:55:12 Chrom Revision: 2.3 18-Oct-2023 21:16:54

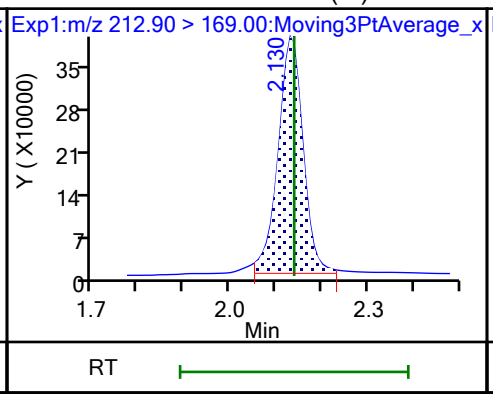
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A19.d
Injection Date: 25-Oct-2023 20:19:17 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

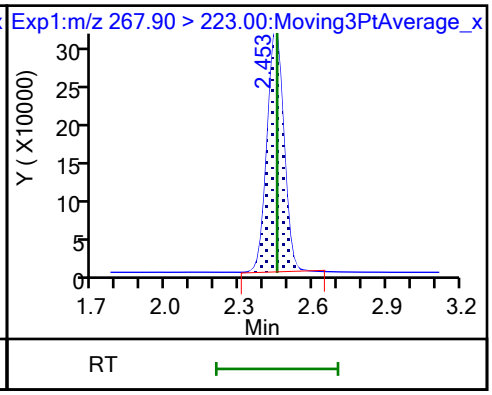
D 1 13C4 PFBA (M)



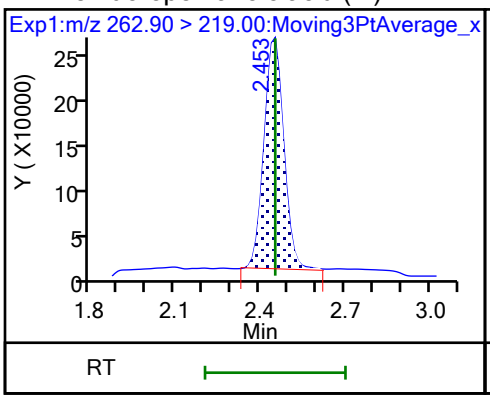
2 Perfluorobutanoic acid (M)



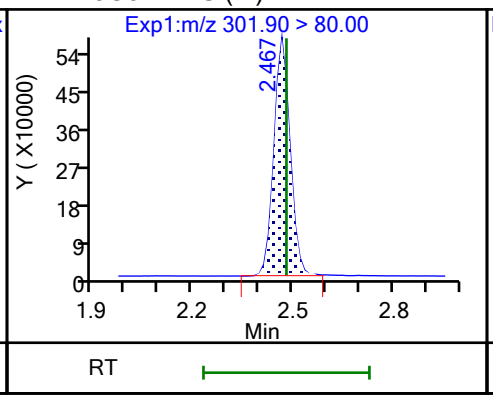
D 3 13C5 PFPeA



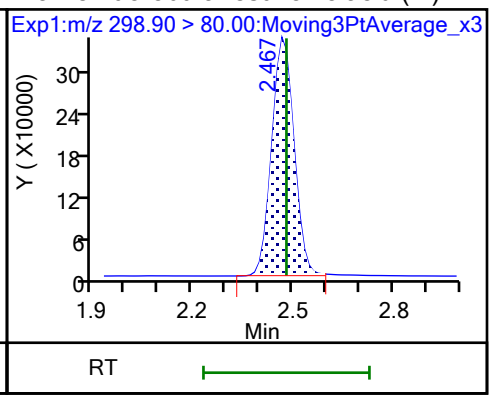
4 Perfluoropentanoic acid (M)



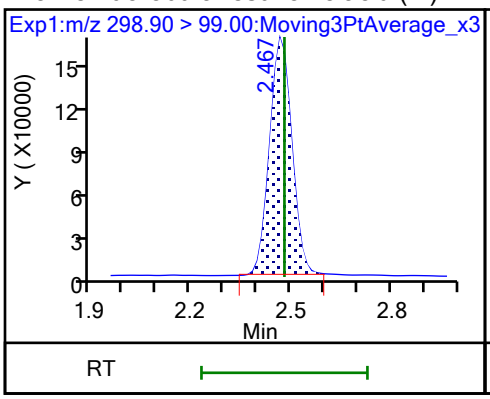
D 47 13C3 PFBS (M)



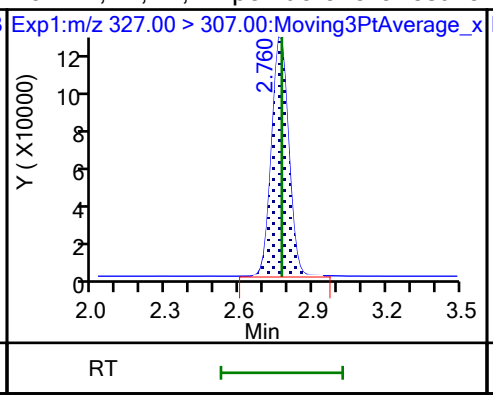
5 Perfluorobutanesulfonic acid (M)



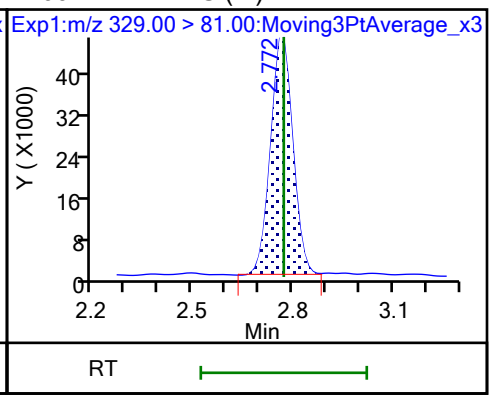
5 Perfluorobutanesulfonic acid (M)



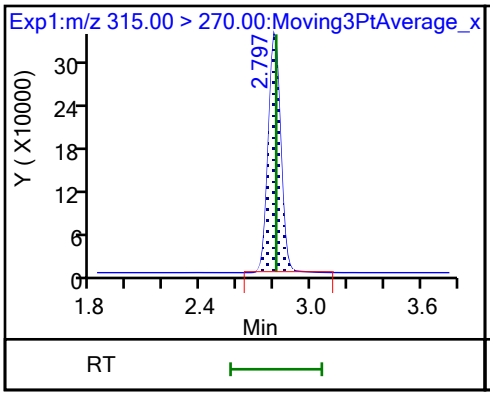
61 1H,1H,2H,2H-perfluorohexanesulfo



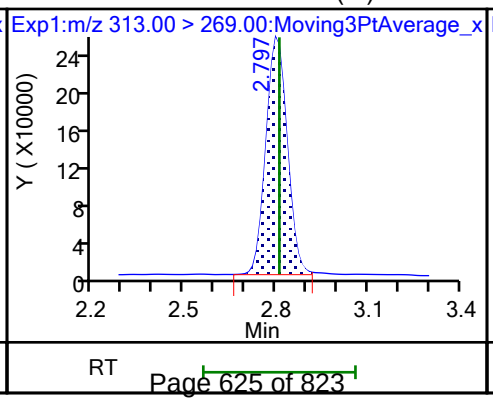
D 60 M2-4:2 FTS (M)



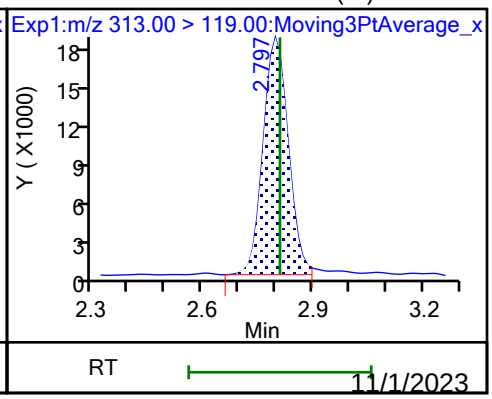
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

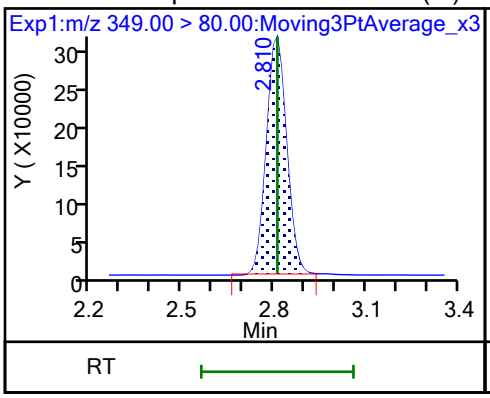


6 Perfluorohexanoic acid (M)

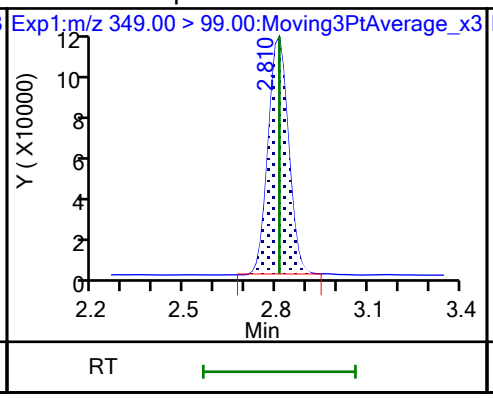


11/1/2023
12:01 PM

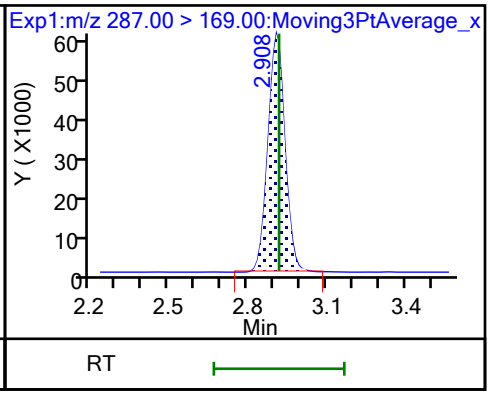
70 Perfluoropentanesulfonic acid (M)



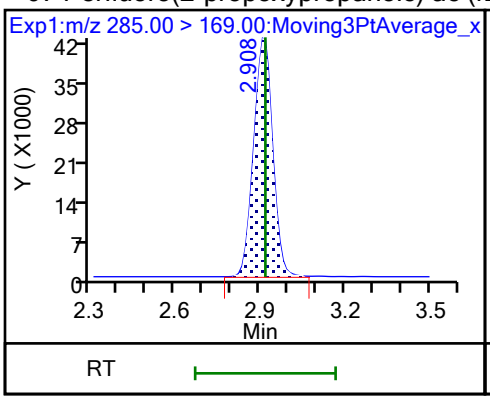
70 Perfluoropentanesulfonic acid



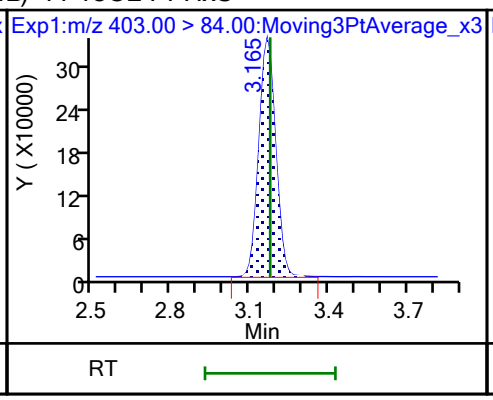
D 64 13C3 HFPO-DA



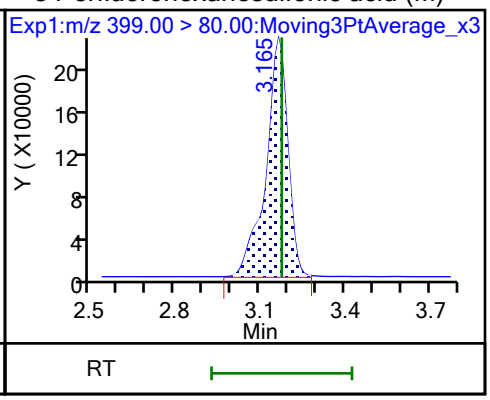
67 Perfluoro(2-propoxypropanoic) ac (M)



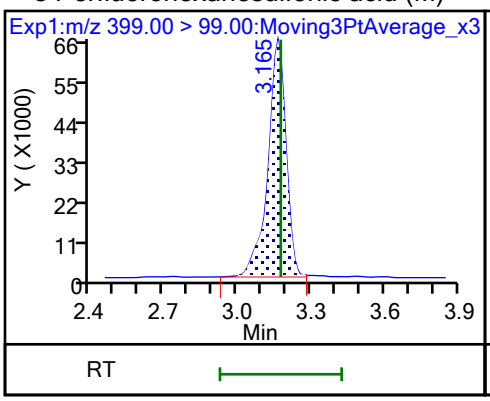
D 11 18O2 PFHxS



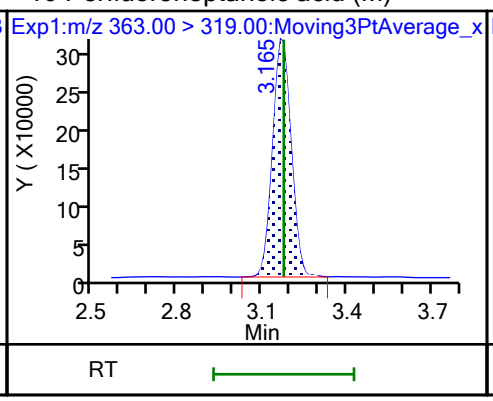
8 Perfluorohexanesulfonic acid (M)



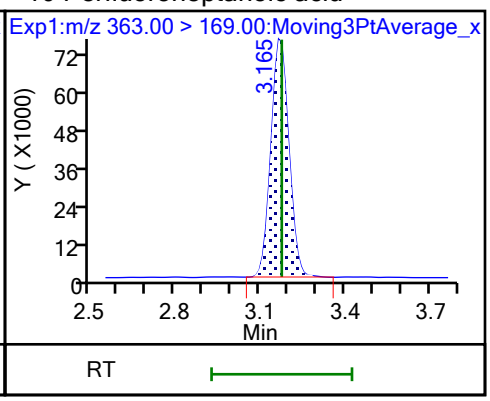
8 Perfluorohexanesulfonic acid (M)



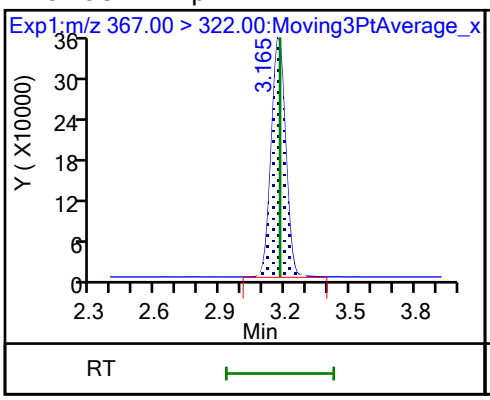
10 Perfluoroheptanoic acid (M)



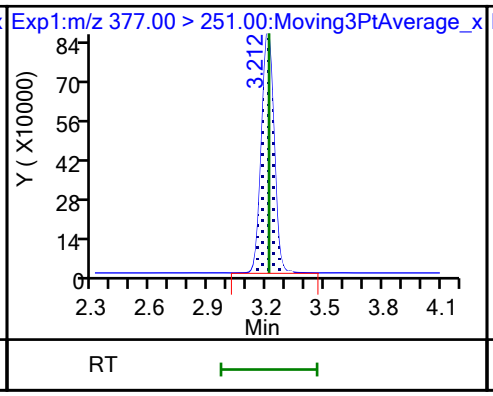
10 Perfluoroheptanoic acid



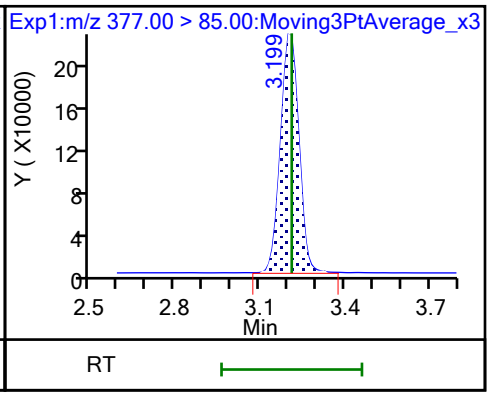
D 9 13C4 PFHpA



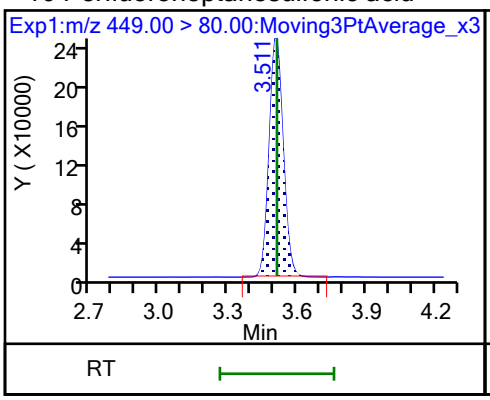
77 DONA



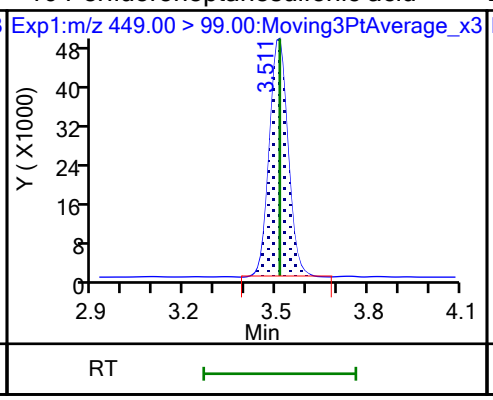
77 DONA



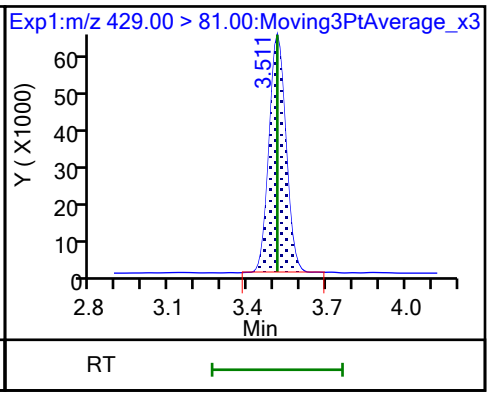
16 Perfluoroheptanesulfonic acid



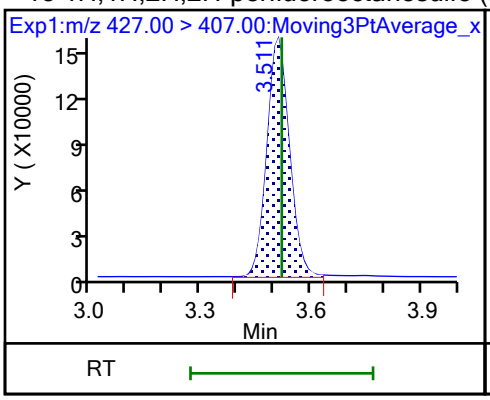
16 Perfluoroheptanesulfonic acid



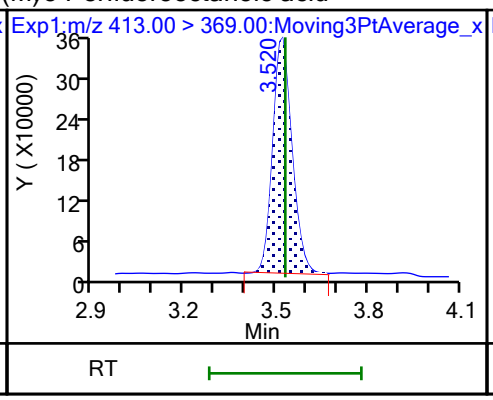
D 12 M2-6:2 FTS



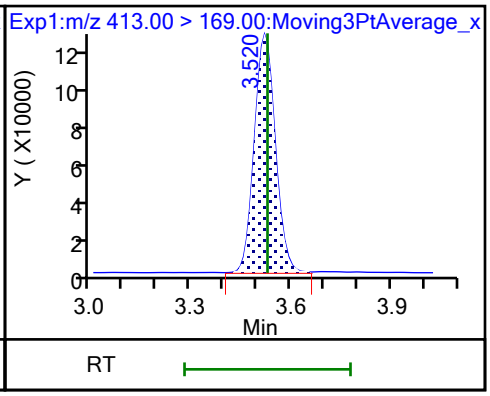
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



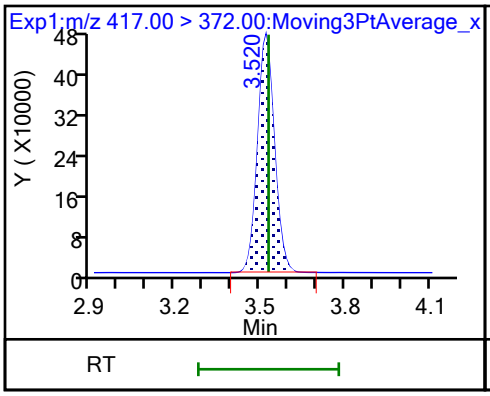
15 Perfluorooctanoic acid



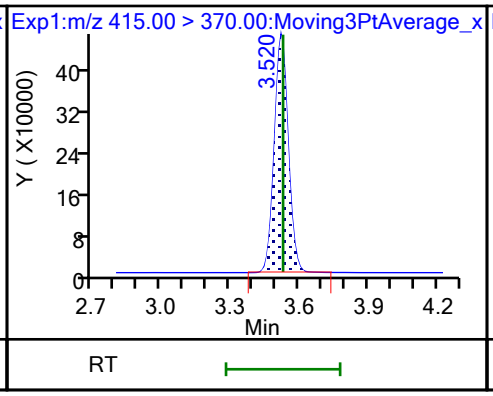
15 Perfluorooctanoic acid



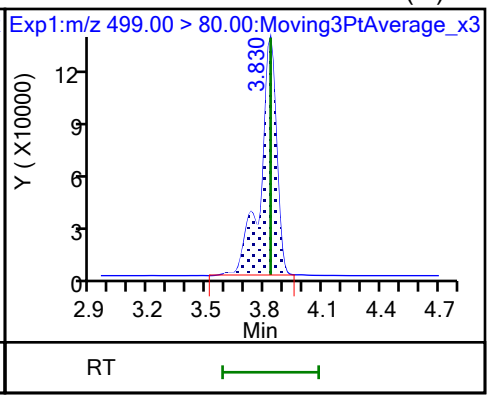
D 14 13C4 PFOA



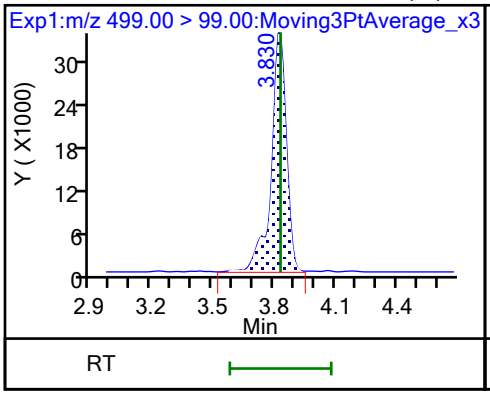
* 62 13C2 PFOA



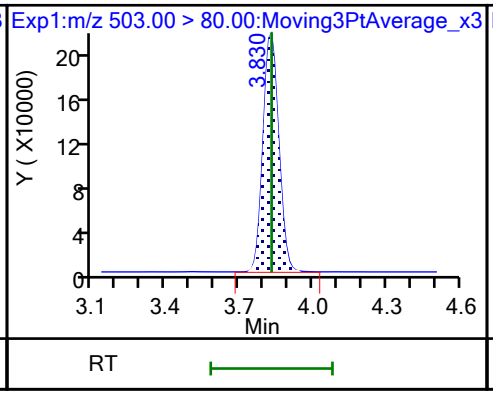
17 Perfluorooctanesulfonic acid (M)



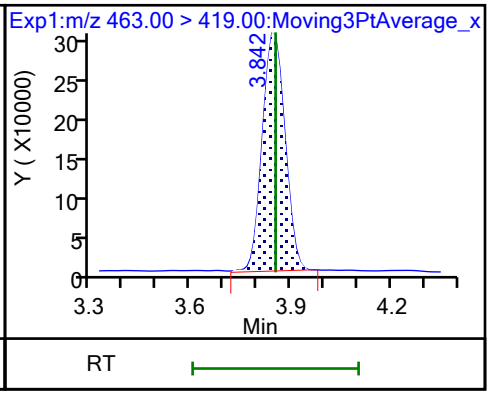
17 Perfluorooctanesulfonic acid (M)



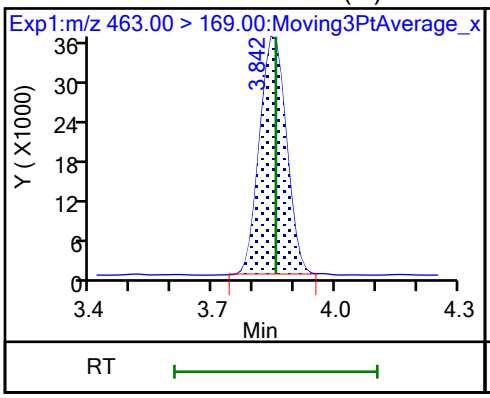
D 18 13C4 PFOS



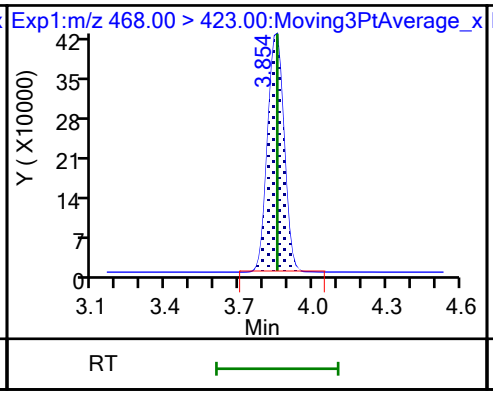
20 Perfluorononanoic acid



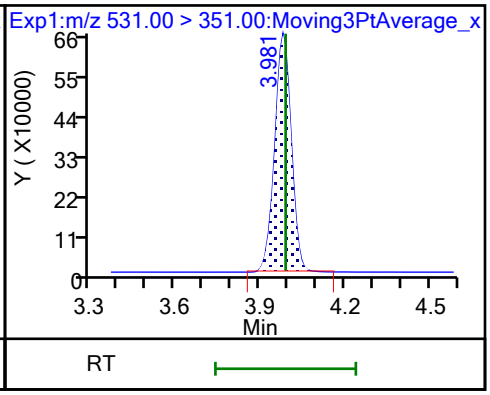
20 Perfluorononanoic acid (M)



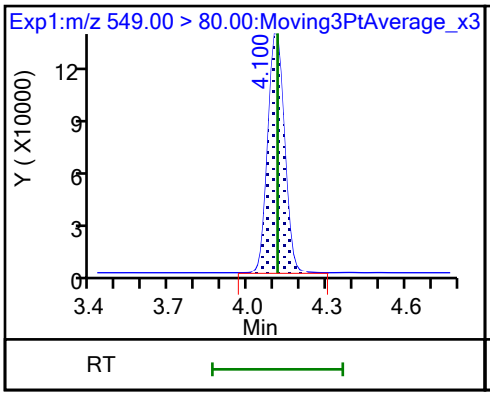
D 19 13C5 PFNA



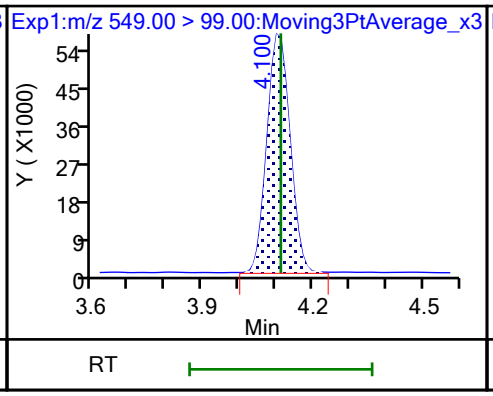
69 9-Chlorohexadecafluoro-3-oxanona (M)



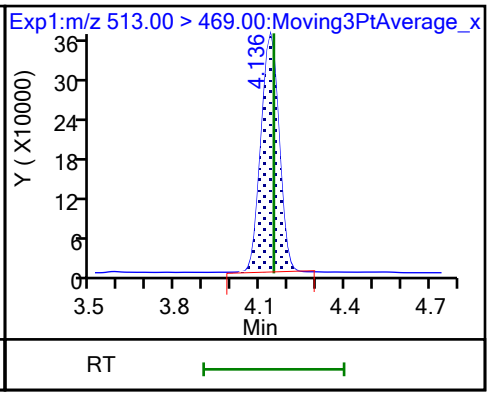
68 Perfluorononanesulfonic acid



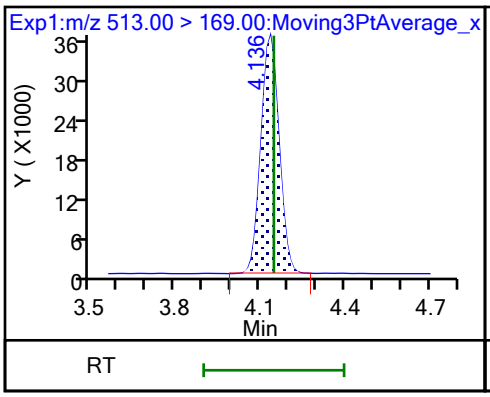
68 Perfluorononanesulfonic acid



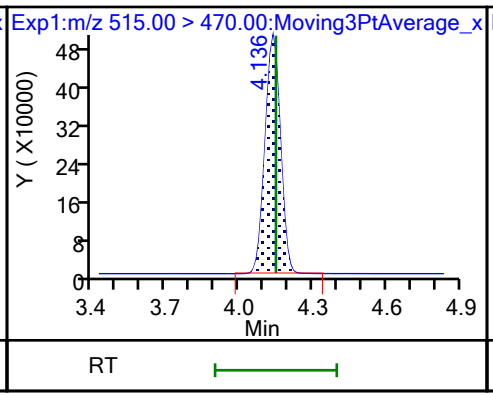
24 Perfluorodecanoic acid



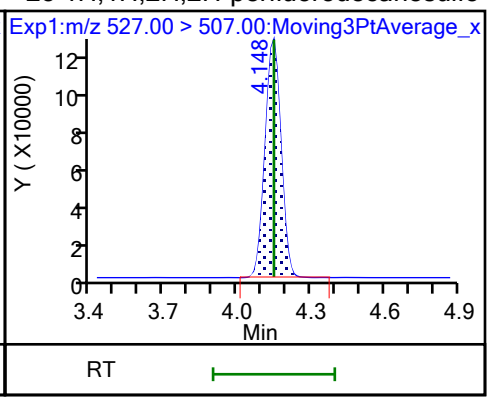
24 Perfluorodecanoic acid



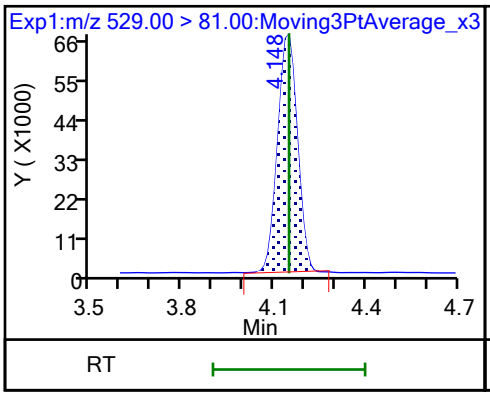
D 23 13C2 PFDA



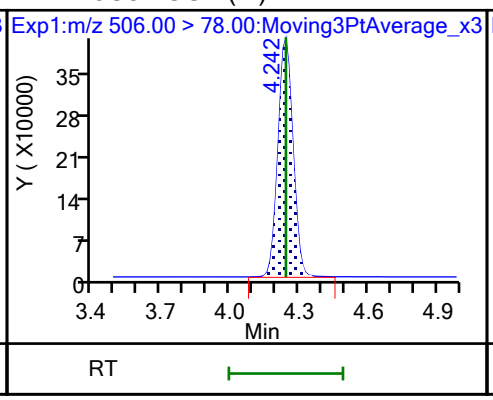
25 1H,1H,2H,2H-perfluorodecanesulfo



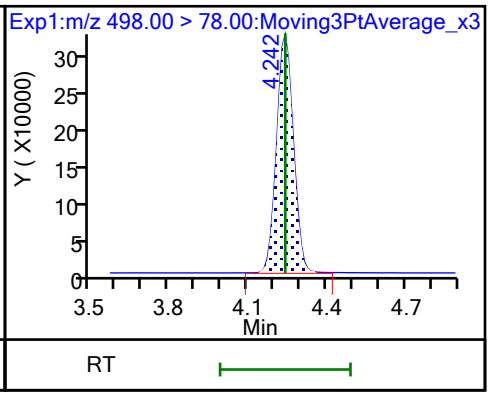
D 26 M2-8:2 FTS



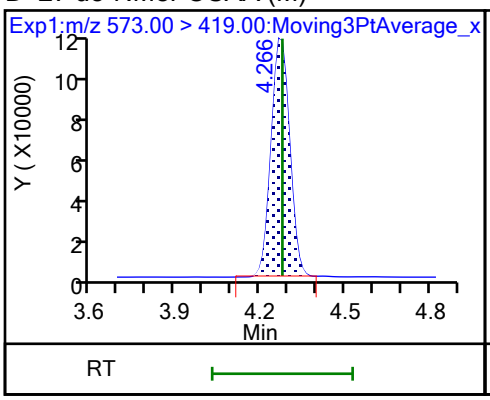
D 21 13C8 FOSA (M)



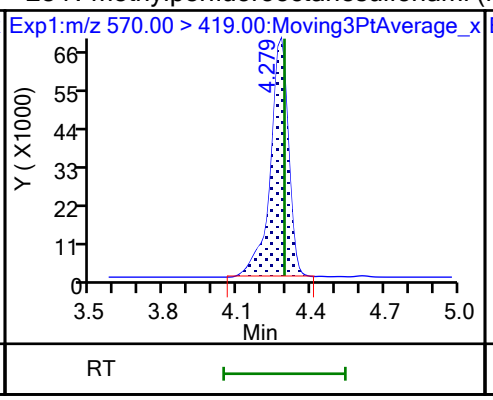
22 Perfluorooctanesulfonamide



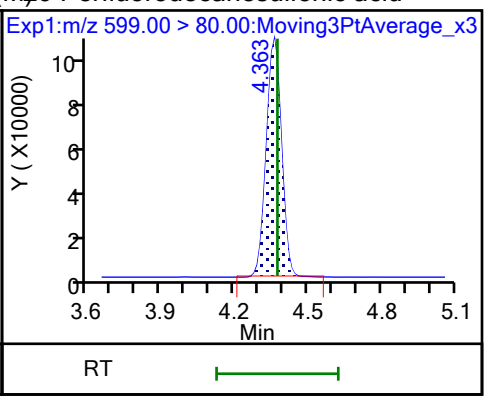
D 27 d3-NMeFOSAA (M)



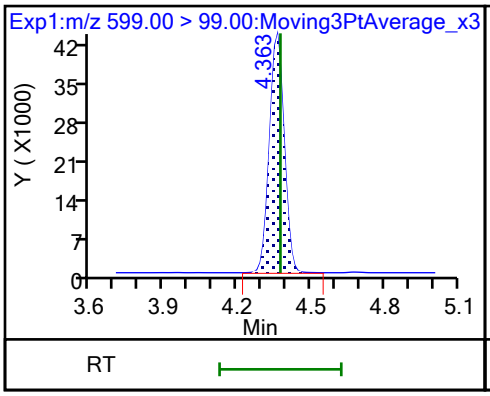
28 N-methylperfluorooctanesulfonami (M)



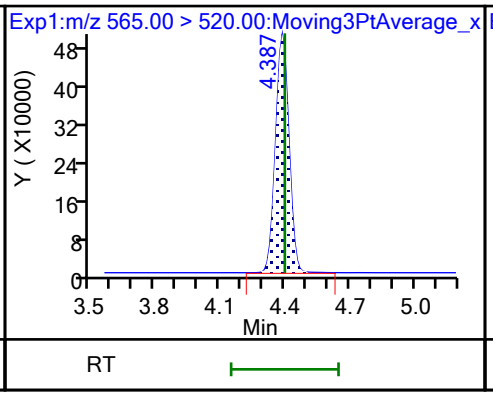
29 Perfluorodecanesulfonic acid



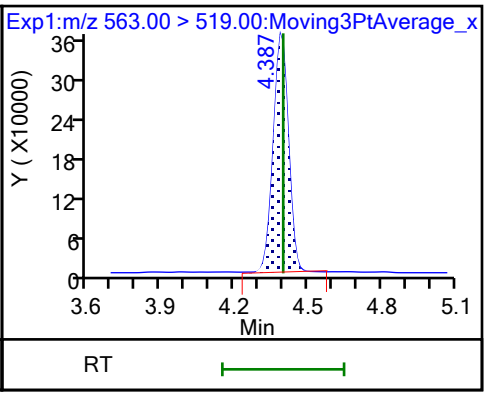
29 Perfluorodecanesulfonic acid



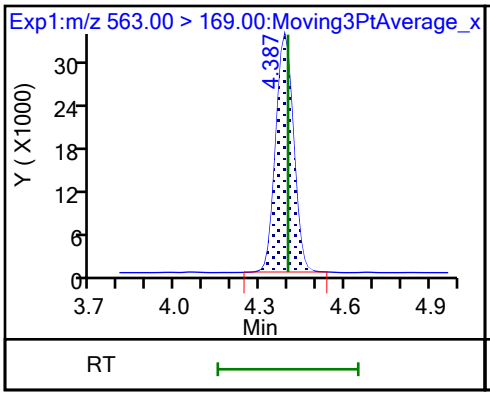
D 30 13C2 PFUnA



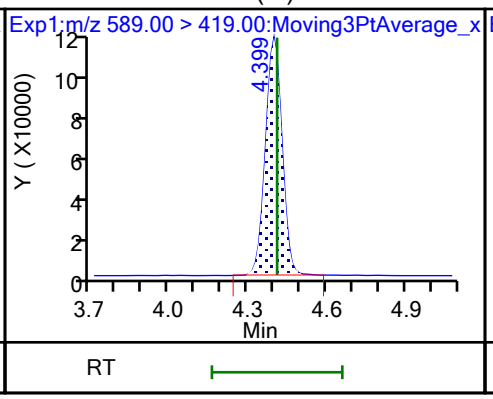
31 Perfluoroundecanoic acid



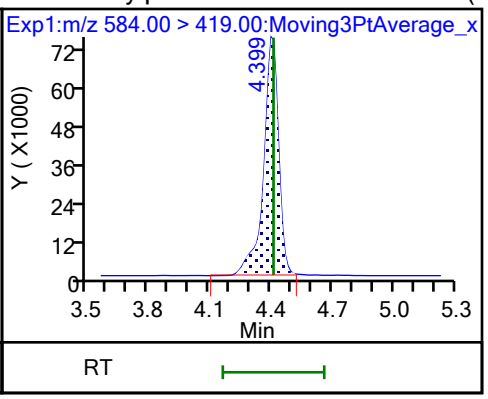
31 Perfluoroundecanoic acid



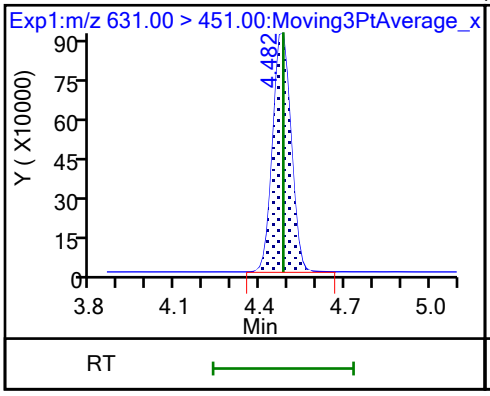
D 32 d5-NEtFOSAA (M)



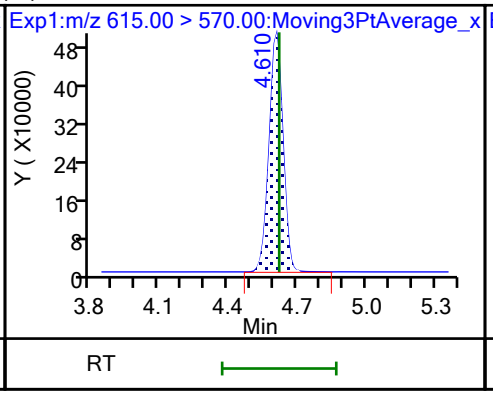
33 N-ethylperfluorooctanesulfonamid (M)



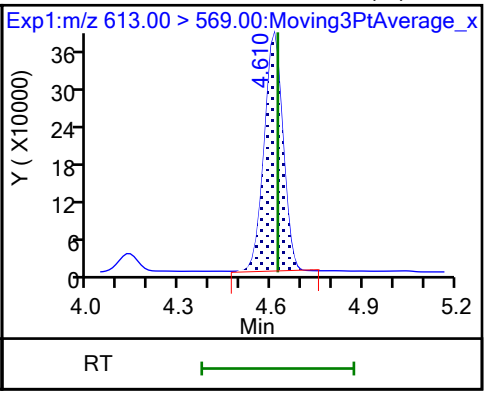
66 11-Chloroeicosafluoro-3-oxaundec (M)



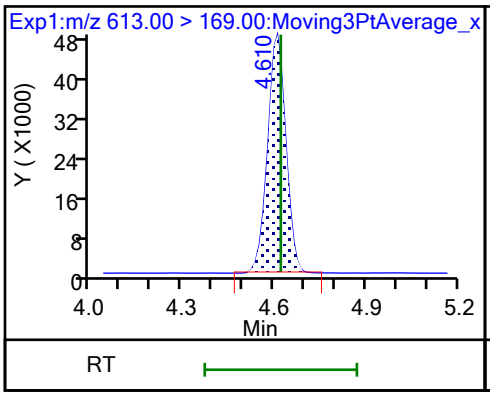
D 36 13C2 PFDoA



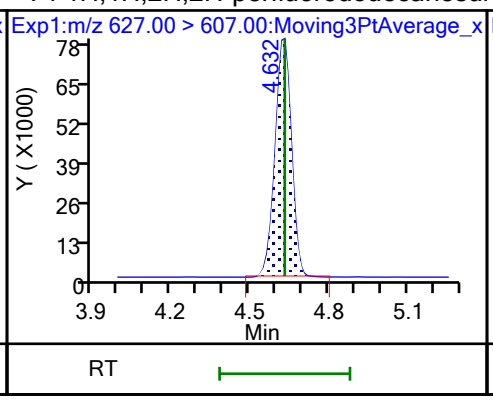
37 Perfluorododecanoic acid (M)



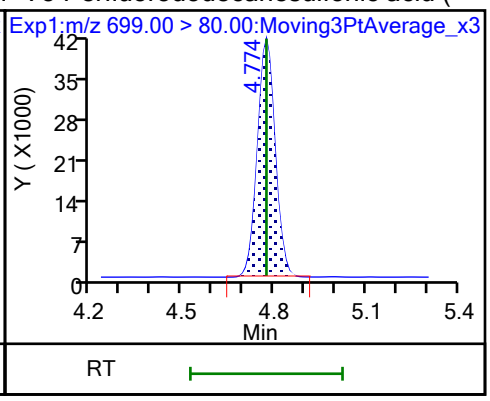
37 Perfluorododecanoic acid



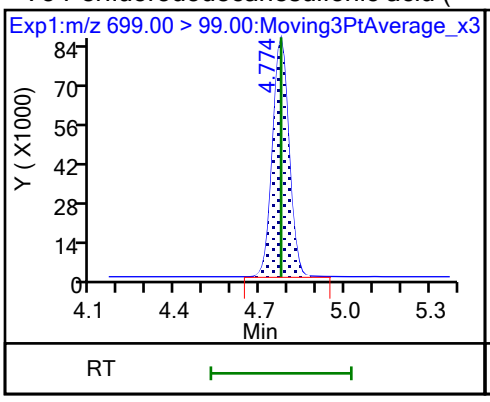
74 1H,1H,2H,2H-perfluorododecanesul



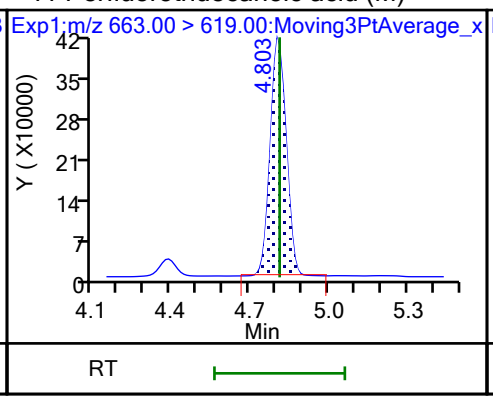
75 Perfluorododecanesulfonic acid (



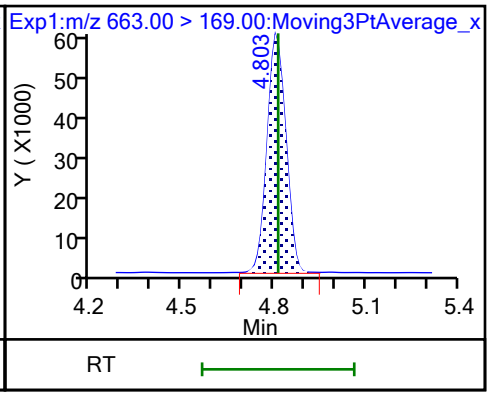
75 Perfluorododecanesulfonic acid (



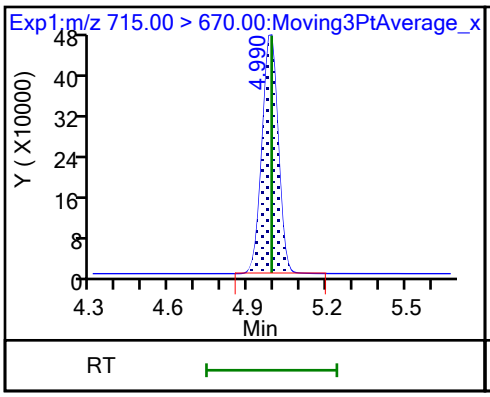
41 Perfluorotridecanoic acid (M)



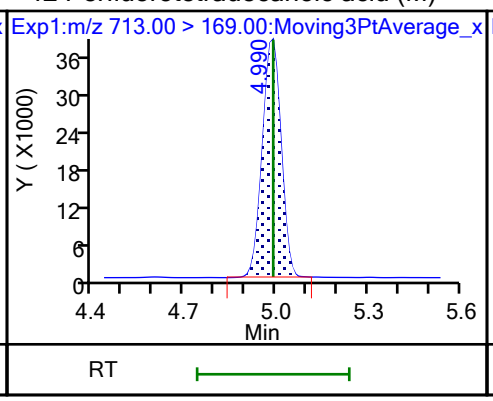
41 Perfluorotridecanoic acid



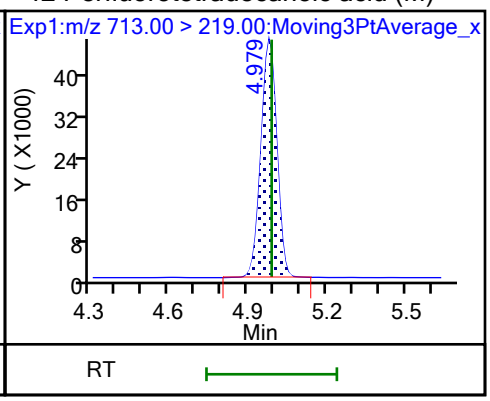
D 43 13C2 PFTeDA



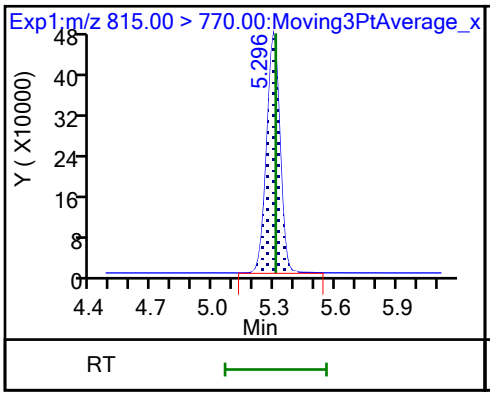
42 Perfluorotetradecanoic acid (M)



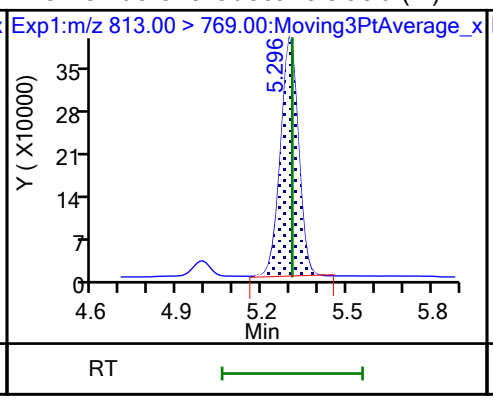
42 Perfluorotetradecanoic acid (M)



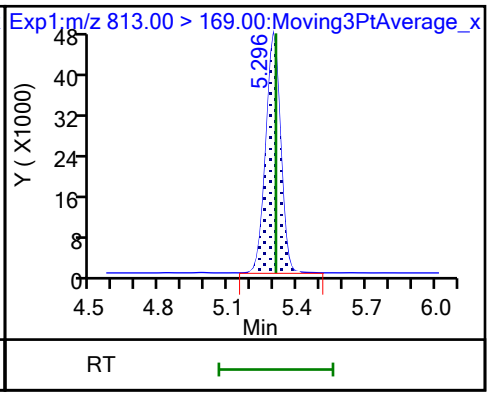
D 44 13C2 PFHxDA



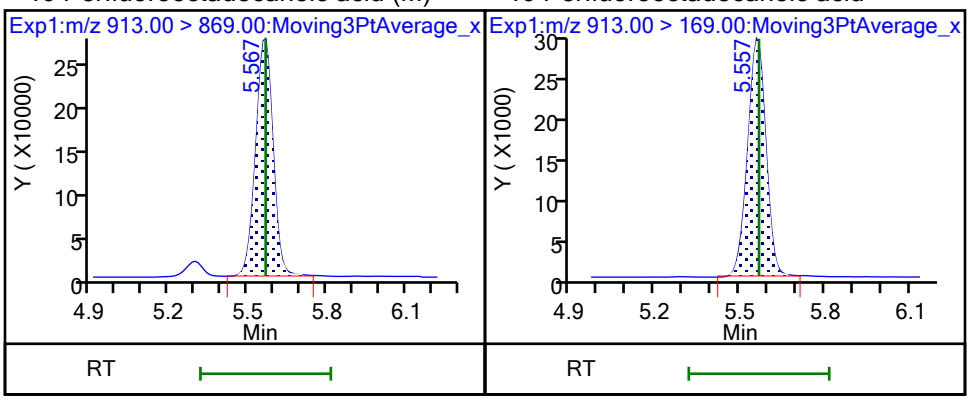
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196791/32 Calibration Date: 10/25/2023 22:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A32.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9206		2.50	2.50	0.2	30.0
Perfluoropentanoic acid	AveID	1.079	1.101		2.55	2.50	2.1	
Perfluorobutanesulfonic acid	AveID	1.117	1.132		2.25	2.22	1.4	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.546		2.45	2.34	4.4	
Perfluorohexanoic acid	AveID	1.100	1.045		2.37	2.50	-5.0	
Perfluoropentanesulfonic acid	AveID	1.306	1.320		2.38	2.35	1.1	
HFPODA	AveID	1.001	0.9194		2.30	2.50	-8.2	
Perfluorohexanesulfonic acid	AveID	1.107	1.021		2.11	2.29	-7.8	
Perfluoroheptanoic acid	AveID	1.121	1.095		2.44	2.50	-2.3	
DONA	AveID	5.754	5.375		2.21	2.36	-6.6	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.880		2.51	2.38	5.4	
Perfluoroheptanesulfonic acid	AveID	1.445	1.437		2.37	2.38	-0.6	
Perfluorooctanoic acid	AveID	1.065	0.9747		2.29	2.50	-8.5	
Perfluorooctanesulfonic acid	AveID	1.166	1.133		2.25	2.32	-2.8	
Perfluorononanoic acid	AveID	0.9800	0.9653		2.46	2.50	-1.5	
9Cl-PF3ONS	AveID	3.569	3.787		2.48	2.33	6.1	
Perfluorononanesulfonic acid	AveID	0.8874	0.8068		2.19	2.41	-9.1	
Perfluorodecanoic acid	AveID	0.999	0.9868		2.47	2.50	-1.3	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.404		2.62	2.40	9.2	
Perfluorooctanesulfonamide	AveID	0.9539	0.9829		2.58	2.50	3.0	
NMeFOSAA	AveID	0.9074	0.9100		2.51	2.50	0.3	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6592		2.33	2.41	-3.5	
Perfluoroundecanoic acid	AveID	1.031	0.9936		2.41	2.50	-3.6	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9794		2.45	2.50	-2.1	
11Cl-PF3OUdS	AveID	5.474	5.834		2.51	2.36	6.6	
Perfluorododecanoic acid	AveID	1.018	0.9015		2.21	2.50	-11.4	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.458		2.67	2.41	10.8	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2273		2.38	2.42	-1.8	
Perfluorotridecanoic acid	AveID	1.070	1.015		2.37	2.50	-5.1	
Perfluorotetradecanoic acid	AveID	0.1118	0.1023		2.29	2.50	-8.5	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.007		2.52	2.50	0.7	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7277		2.33	2.50	-6.8	
13C4 PFBA	Ave	0.9917	1.031		1.30	1.25	4.0	
13C5 PFPeA	Ave	0.7696	0.7466		1.21	1.25	-3.0	
13C3 PFBS	Ave	1.041	1.032		1.15	1.16	-0.9	
M2-4:2 FTS	Ave	0.1204	0.1129		1.09	1.17	-6.3	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196791/32 Calibration Date: 10/25/2023 22:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231025A32.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7812		1.25	1.25	-0.2	
13C3 HFPO-DA	Ave	0.1516	0.1448		1.19	1.25	-4.5	
18O2 PFHxS	Ave	0.7464	0.7768		1.23	1.18	4.1	50.0
13C4 PFHpA	Ave	0.8590	0.8355		1.22	1.25	-2.7	50.0
M2-6:2 FTS	Ave	0.1551	0.1462		1.12	1.19	-5.8	
13C4 PFOA	Ave	0.9731	1.019		1.31	1.25	4.7	50.0
13C4 PFOS	Ave	0.4742	0.4863		1.23	1.20	2.5	50.0
13C5 PFNA	Ave	1.059	1.019		1.20	1.25	-3.7	50.0
13C2 PFDA	Ave	1.109	1.075		1.21	1.25	-3.0	
M2-8:2 FTS	Ave	0.1744	0.1576		1.08	1.20	-9.6	
13C8 FOSA	Ave	0.9462	0.9122		1.21	1.25	-3.6	
d3-NMeFOSAA	Ave	0.2650	0.2544		1.20	1.25	-4.0	
13C2 PFUnA	Ave	1.047	1.005		1.20	1.25	-4.0	
d5-NEtFOSAA	Ave	0.2552	0.2482		1.22	1.25	-2.7	
13C2 PFDoA	Ave	1.064	1.085		1.28	1.25	2.0	
13C2 PFTeDA	Ave	1.059	1.061		1.25	1.25	0.1	
13C2 PFHxDA	Ave	1.221	1.119		1.15	1.25	-8.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A32.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 25-Oct-2023 22:05:21 ALS Bottle#: 29 Worklist Smp#: 32
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057556-032 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:56:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 10:55:36
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	2000603	1.30		104	757	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	3683412	2.50		100	305	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1448093	1.21		97.0	1934	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	3189511	2.55		102	97.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.701	1862315	1.15		99.1	103292	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.480	-0.013	1.000	4023104	2.25	Target=2.06	101	1152	M
298.90 > 99.00	2.467	2.480	-0.013	1.000	1942847		2.07(1.03-3.09)		712	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.772	0.0	1.005	1454952	2.45		104	1468	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	204478	1.09		93.7	115	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1515220	1.25		99.8	9388	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.810	-0.013	1.000	3167001	2.37	Target=14.12	95.0	465	M
313.00 > 119.00	2.797	2.810	-0.013	1.000	197840		16.01(7.06-21.17)		235	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	3744049	2.38	Target=2.72	101	8258	
349.00 > 99.00	2.810	2.810	0.0	0.888	1268729		2.95(1.36-4.09)		1802	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.918	0.0	0.829	280830	1.19		95.5	3346	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.918	-0.010	0.996	516376	2.30		91.8	4325	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1425420	1.23		104	5526	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	2811553	2.11	Target=3.32	92.2	3665	M
399.00 > 99.00	3.165	3.176	-0.011	1.000	842267		3.34(1.66-4.98)		691	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.176	3.176	0.0	1.000	3548673	2.44	Target=4.17	97.7	771	M
363.00 > 169.00	3.176	3.176	0.0	1.000	918749		3.86(2.09-6.26)		1700	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.176	0.0	0.902	1620609	1.22		97.3	4756	
77 DONA										
377.00 > 251.00	3.212	3.212	0.0	0.838	9581526	2.21	Target=3.33	93.4	8926	
377.00 > 85.00	3.212	3.212	0.0	0.838	2600048		3.69(1.66-4.99)		2892	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.511	0.0	0.916	2583193	2.37	Target=4.83	99.4	4454	M
449.00 > 99.00	3.511	3.511	0.0	0.916	507370		5.09(2.41-7.24)		1295	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	269356	1.12		94.2	486	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.520	-0.009	1.000	1552901	2.50		105	1381	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.529	-0.009	1.000	3853013	2.29	Target=2.88	91.5	173	M
413.00 > 169.00	3.520	3.529	-0.009	1.000	1410943		2.73(1.44-4.32)		1761	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1976542	1.31		105	7095	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.529	-0.009		1939704	1.25			10253	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.830	0.001	1.000	1984150	2.25	Target=4.24	97.2	2382	M
499.00 > 99.00	3.831	3.830	0.001	1.000	433979		4.57(2.12-6.37)		1151	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.830	0.001	1.088	901703	1.23		103	2360	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.843	3.854	-0.011	1.000	3816845	2.46	Target=8.34	98.5	570	
463.00 > 169.00	3.855	3.854	0.001	1.003	451502		8.45(4.17-12.51)		2109	M
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.854	-0.011	1.092	1977077	1.20		96.3	5506	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.990	-0.009	1.039	6664821	2.47		106	15015	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.112	-0.010	1.071	1464083	2.19	Target=2.17	90.9	8688	
549.00 > 99.00	4.114	4.112	0.002	1.074	601179		2.44(1.08-3.25)		1743	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.148	-0.010	1.000	4116926	2.47	Target=11.44	98.7	1136	
513.00 > 169.00	4.138	4.148	-0.010	1.000	352365		11.68(5.72-17.16)		1415	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.148	-0.010	1.176	2085901	1.21		97.0	6540	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.148	0.002	1.000	1410548	2.62		109	4171	M
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.150	4.148	0.002	1.179	292806	1.08		90.4	616	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.242	0.002	1.206	1769375	1.21		96.4	4817	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.242	0.002	1.000	3478273	2.58		103	3168	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.281	4.278	0.003	1.216	493472	1.20		96.0	1123	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.291	-0.010	1.000	898127	2.51		100	863	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.364	4.375	-0.011	1.139	1200044	2.33	Target=2.37	96.5	3280	
599.00 > 99.00	4.364	4.375	-0.011	1.139	481295		2.49(1.19-3.56)		2922	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.398	-0.010	1.246	1949823	1.20		96.0	9897	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.398	-0.010	1.000	3874721	2.41	Target=12.20	96.4	891	
563.00 > 169.00	4.388	4.398	-0.010	1.000	344179		11.26(6.10-18.31)		2147	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.410	-0.010	1.250	481367	1.22		97.3	1081	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.410	-0.010	1.000	942872	2.45		97.9	1509	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.482	0.001	1.170	10377642	2.51		107	8672	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.621	-0.010	1.310	2104272	1.27		102	6099	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.621	-0.010	1.000	3794090	2.21	Target=8.47	88.6	226	
613.00 > 169.00	4.611	4.621	-0.010	1.000	484969		7.82(4.23-12.70)		2837	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.633	4.632	0.001	1.116	858943	2.67		111	4954	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.774	0.001	1.246	415013	2.38	Target=0.48	98.2	6548	
699.00 > 99.00	4.775	4.774	0.001	1.246	864611		0.48(0.24-0.72)		5868	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.812	-0.008	1.042	4272644	2.37	Target=6.41	94.9	237	M
663.00 > 169.00	4.804	4.812	-0.008	1.042	671004		6.37(3.21-9.62)		3475	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.991	4.989	0.002	1.418	2057470	1.25		100	5012	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.991	4.989	0.002	1.000	421064	2.29	Target=0.87	91.5	2550	M
713.00 > 219.00	4.980	4.989	-0.009	0.998	475299		0.89(0.43-1.30)		2748	M

Report Date: 26-Oct-2023 16:56:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A32.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.301	5.307	-0.006	1.506	2171388	1.15		91.7	5664	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.301	5.307	-0.006	1.000	4374678	2.52	Target=7.89	101	278	M
813.00 > 169.00	5.301	5.307	-0.006	1.000	545229		8.02(3.94-11.83)		4536	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.566	-0.003	1.049	3160112	2.33	Target=9.39	93.2	307	M
913.00 > 169.00	5.563	5.566	-0.003	1.049	342311		9.23(4.69-14.08)		1497	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

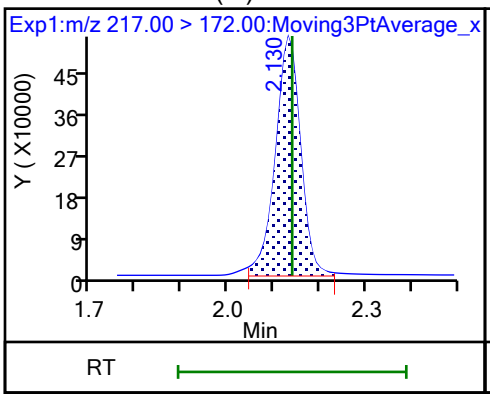
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 26-Oct-2023 16:56:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

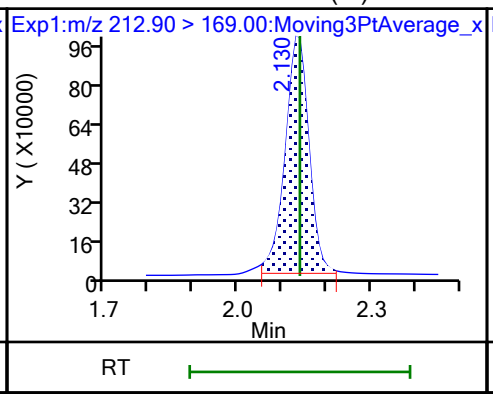
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A32.d
Injection Date: 25-Oct-2023 22:05:21 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 29 Worklist Smp#: 32
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

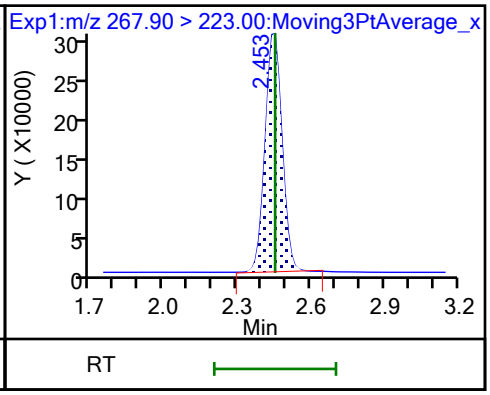
D 1 13C4 PFBA (M)



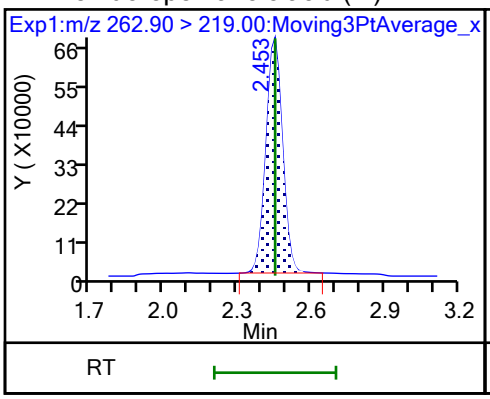
2 Perfluorobutanoic acid (M)



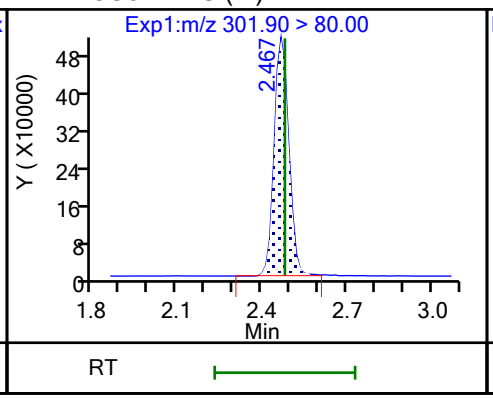
D 3 13C5 PFPeA



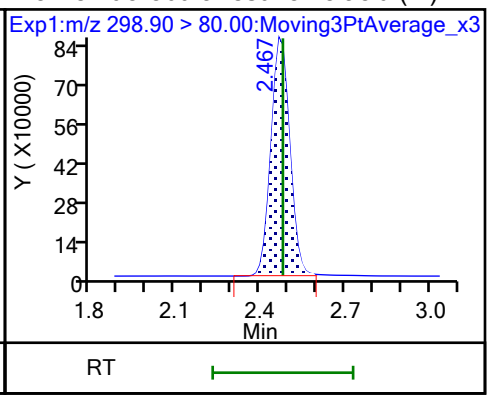
4 Perfluoropentanoic acid (M)



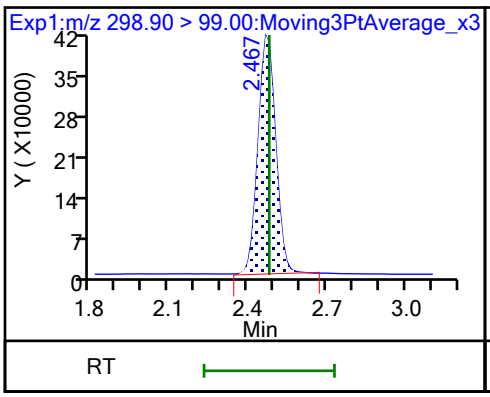
D 47 13C3 PFBS (M)



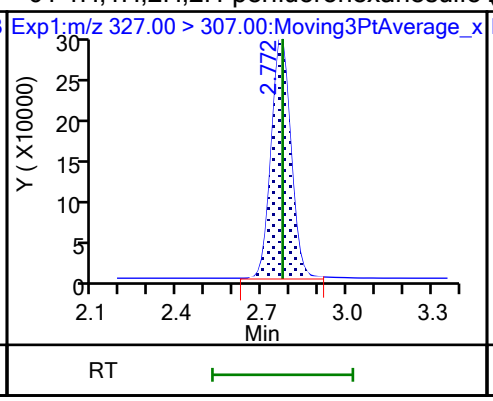
5 Perfluorobutanesulfonic acid (M)



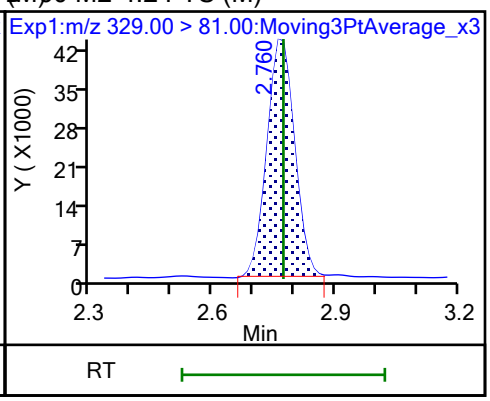
5 Perfluorobutanesulfonic acid



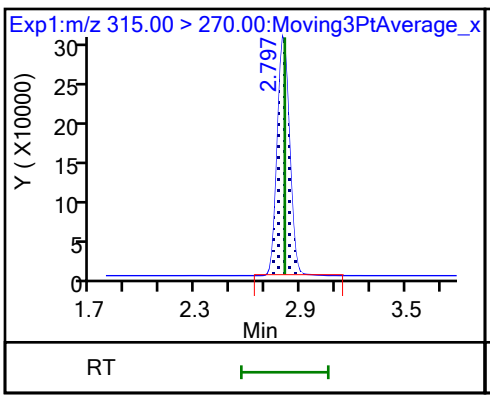
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



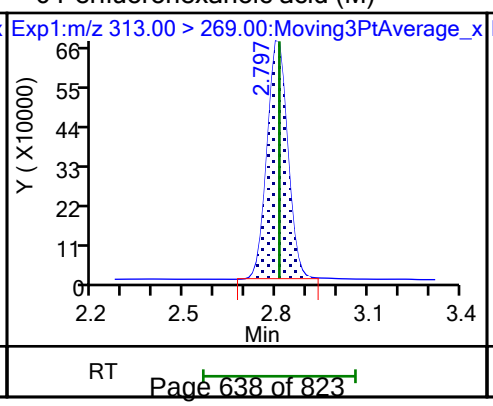
D 60 M2-4:2 FTS (M)



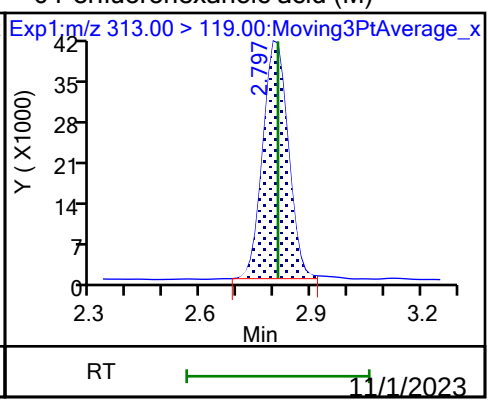
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

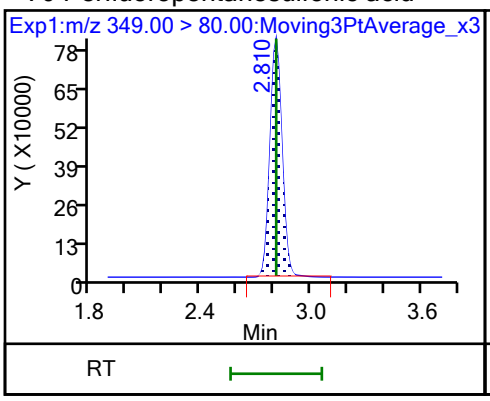


6 Perfluorohexanoic acid (M)

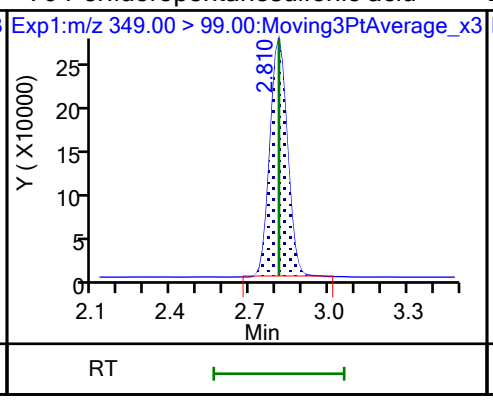


11/1/2023
12:01 PM

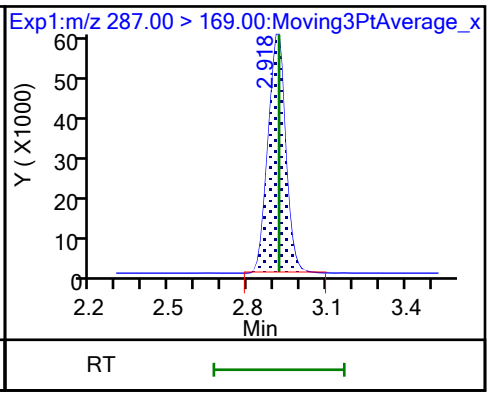
70 Perfluoropentanesulfonic acid



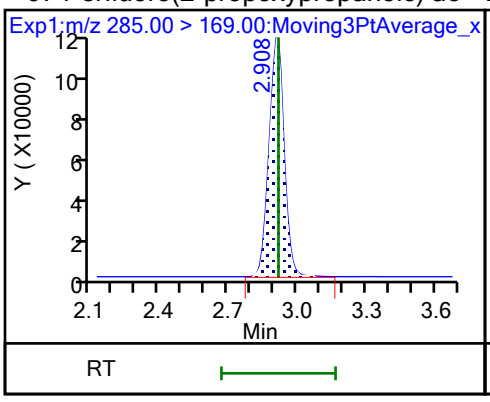
70 Perfluoropentanesulfonic acid



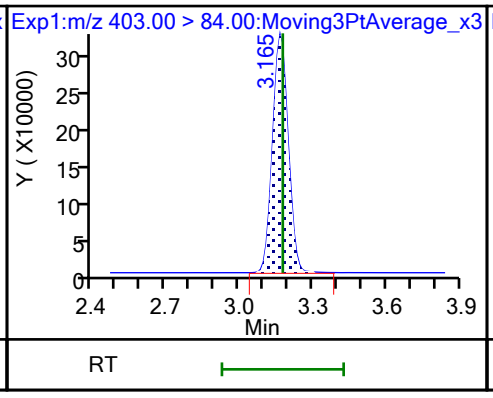
D 64 13C3 HFPO-DA



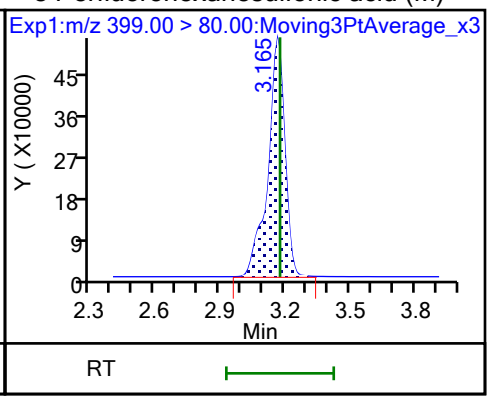
67 Perfluoro(2-propoxypropanoic) ac



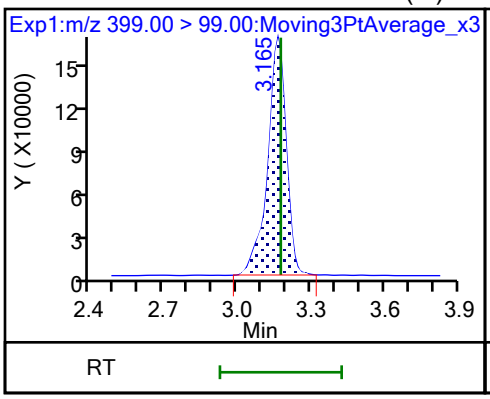
D 11 18O2 PFHxS



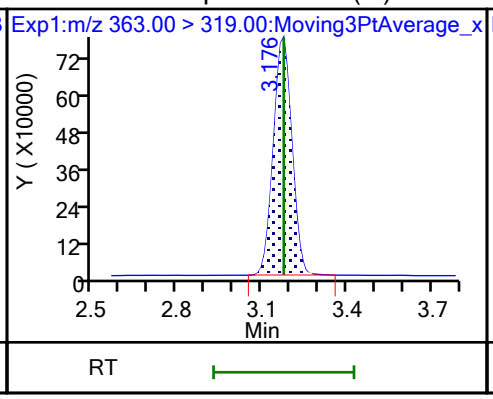
8 Perfluorohexanesulfonic acid (M)



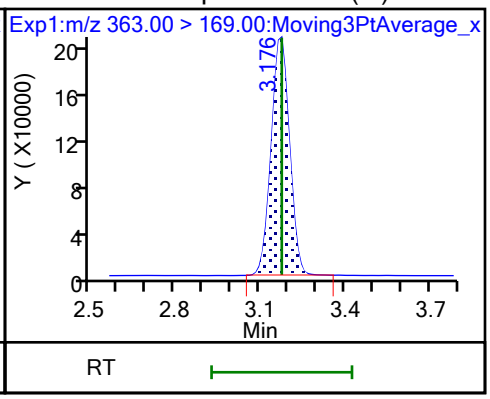
8 Perfluorohexanesulfonic acid (M)



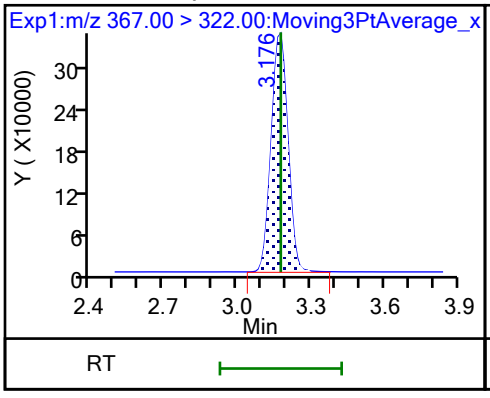
10 Perfluoroheptanoic acid (M)



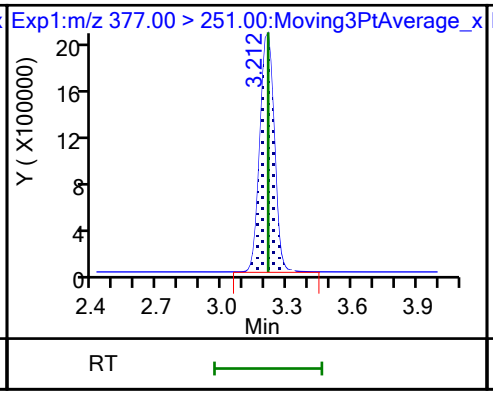
10 Perfluoroheptanoic acid (M)



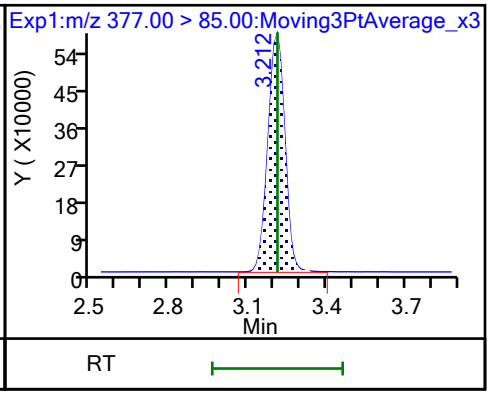
D 9 13C4 PFHpA



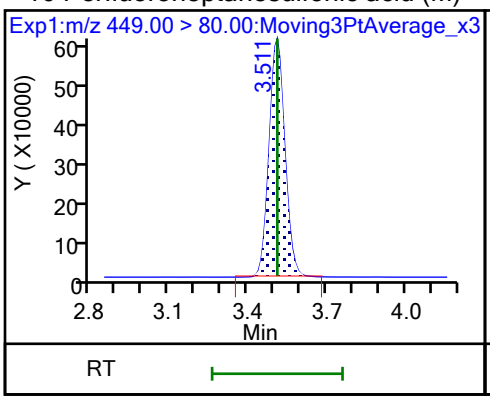
77 DONA



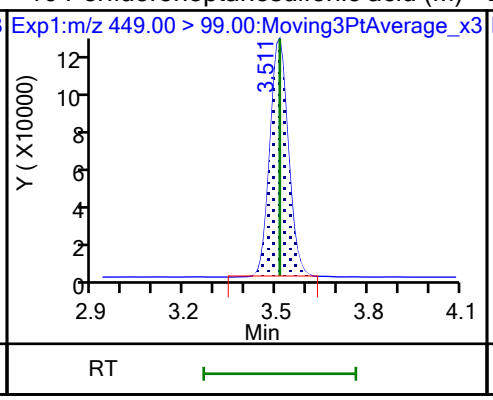
77 DONA



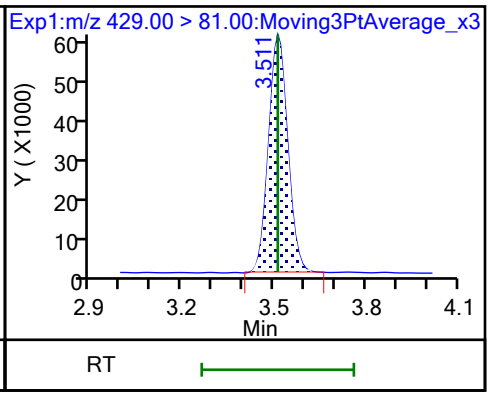
16 Perfluoroheptanesulfonic acid (M)



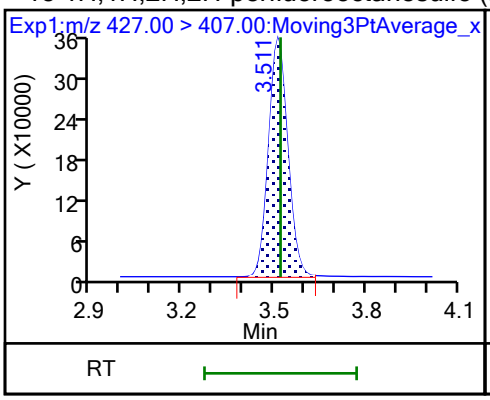
16 Perfluoroheptanesulfonic acid (M)



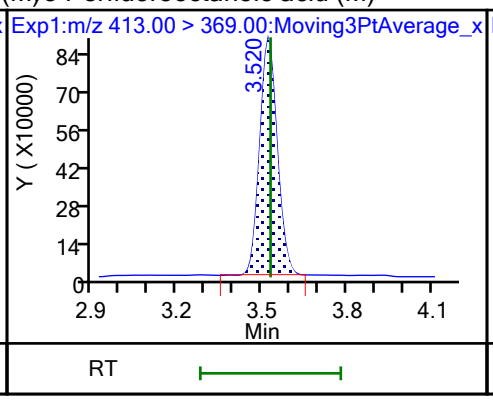
D 12 M2-6:2 FTS



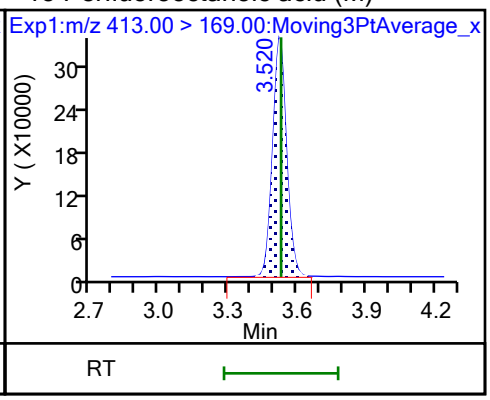
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



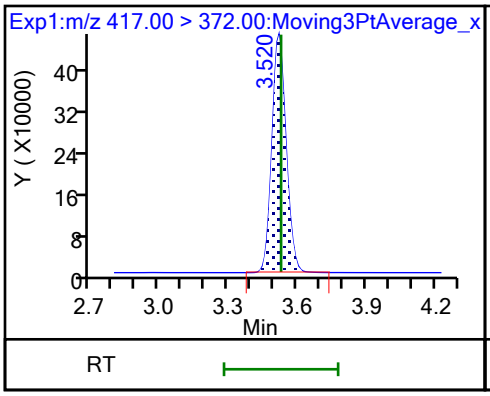
15 Perfluorooctanoic acid (M)



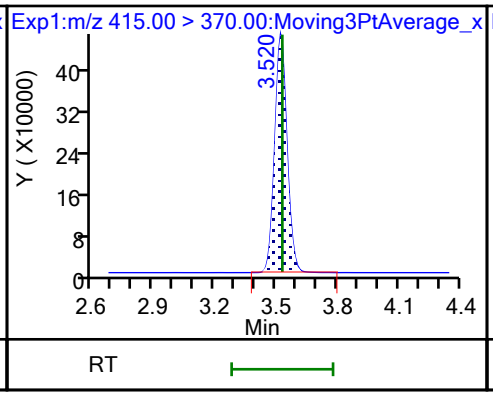
15 Perfluorooctanoic acid (M)



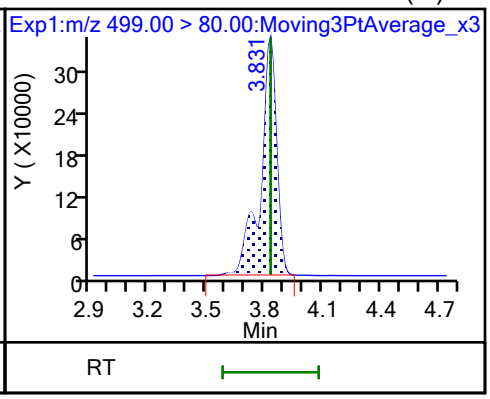
D 14 13C4 PFOA



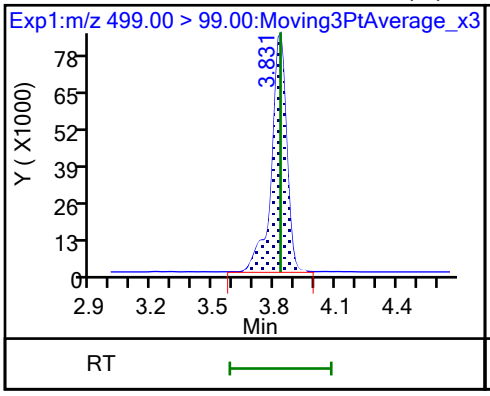
* 62 13C2 PFOA



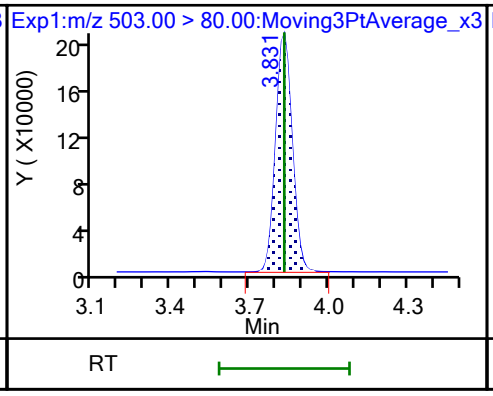
17 Perfluorooctanesulfonic acid (M)



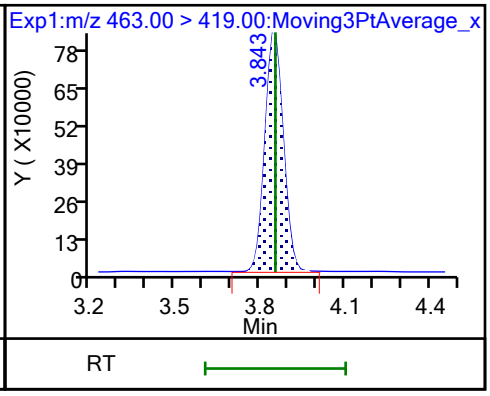
17 Perfluorooctanesulfonic acid (M)



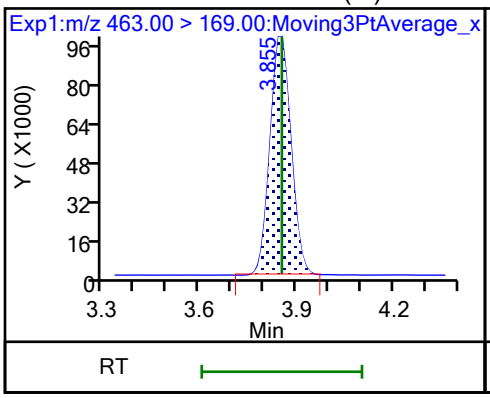
D 18 13C4 PFOS



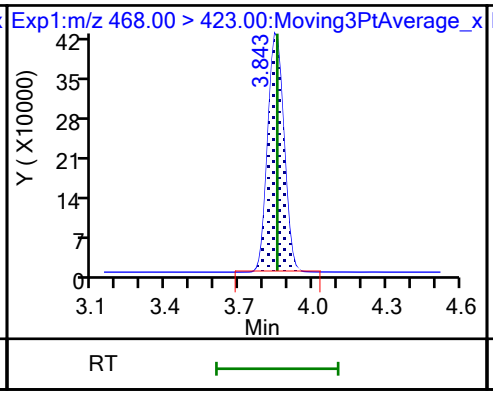
20 Perfluorononanoic acid



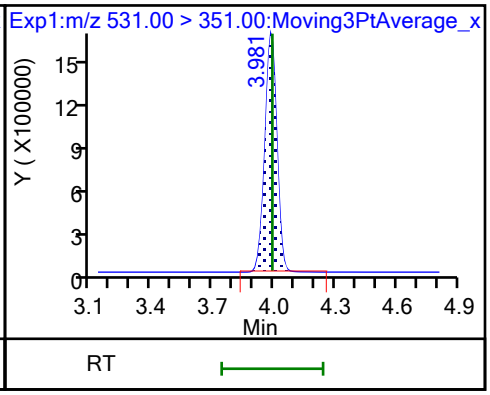
20 Perfluorononanoic acid (M)



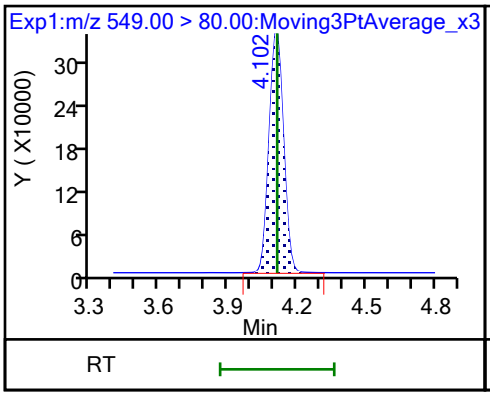
D 19 13C5 PFNA



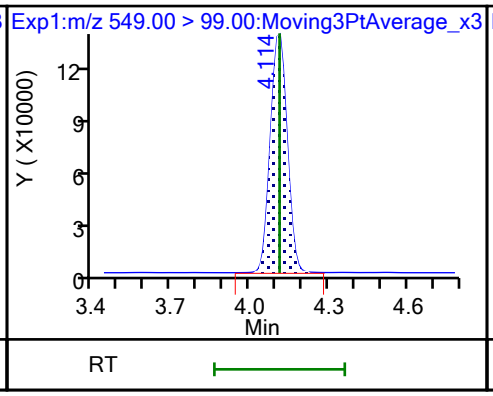
69 9-Chlorohexadecafluoro-3-oxanona



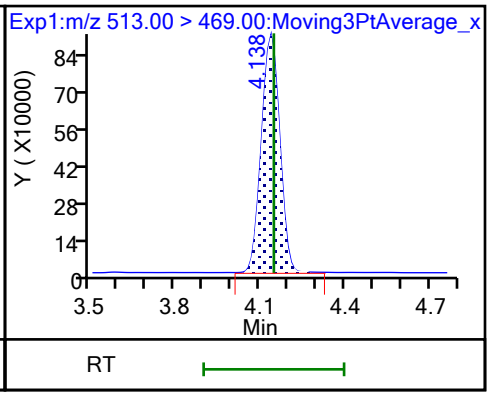
68 Perfluorononanesulfonic acid



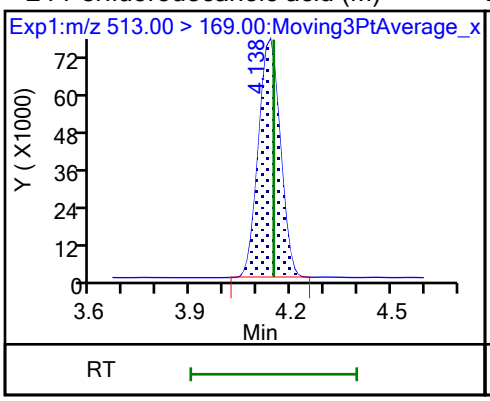
68 Perfluorononanesulfonic acid



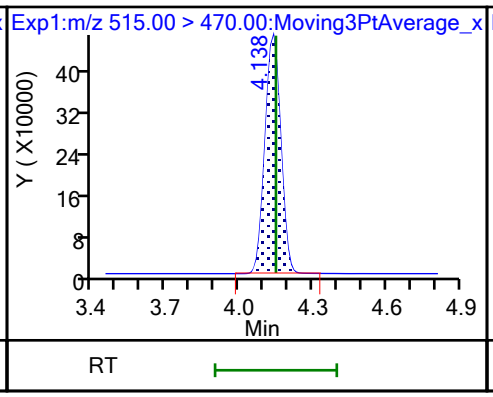
24 Perfluorodecanoic acid



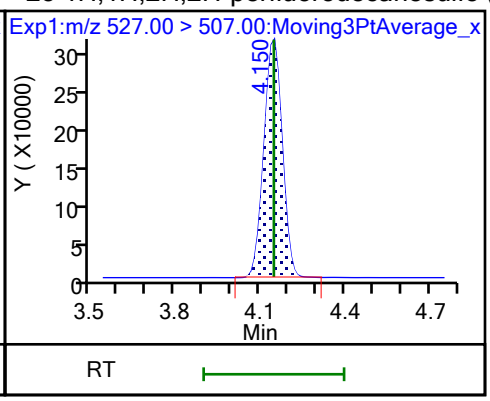
24 Perfluorodecanoic acid (M)



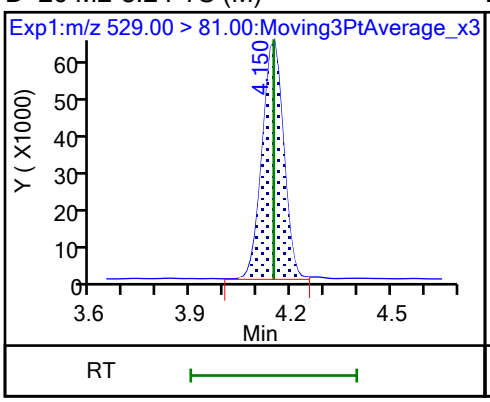
D 23 13C2 PFDA



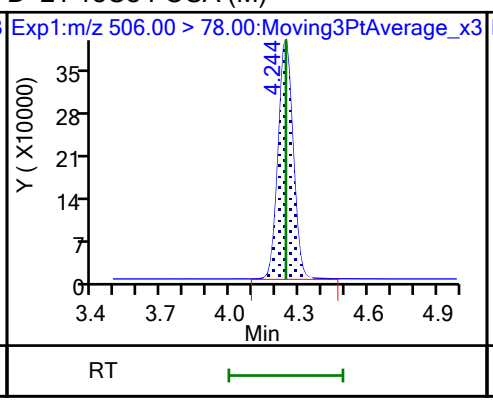
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



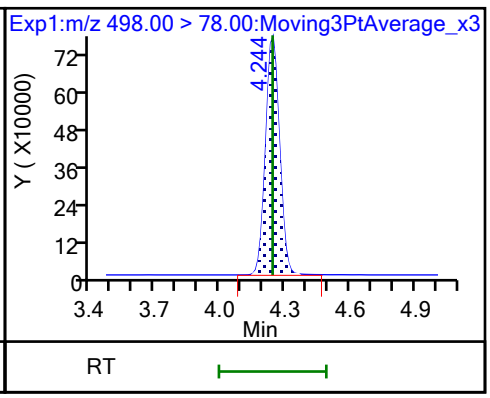
D 26 M2-8:2 FTS (M)



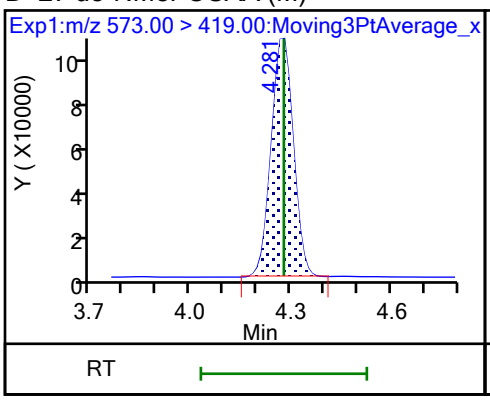
D 21 13C8 FOSA (M)



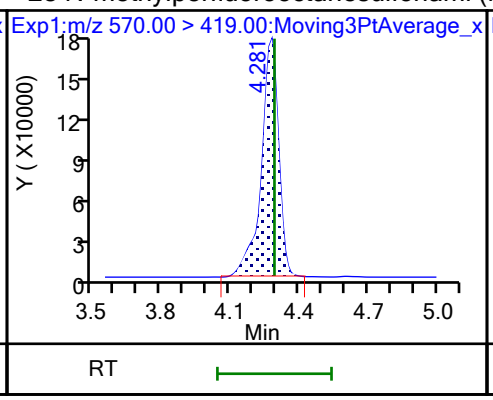
22 Perfluorooctanesulfonamide



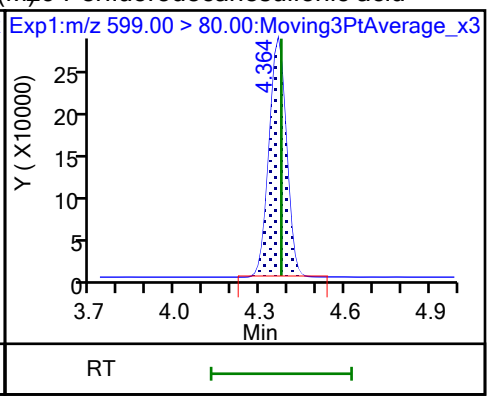
D 27 d3-NMeFOSAA (M)



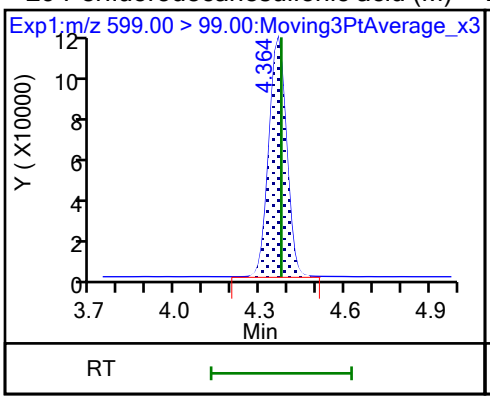
28 N-methylperfluorooctanesulfonami (M)



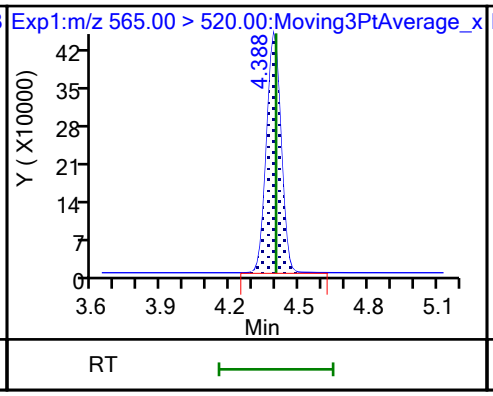
29 Perfluorodecanesulfonic acid



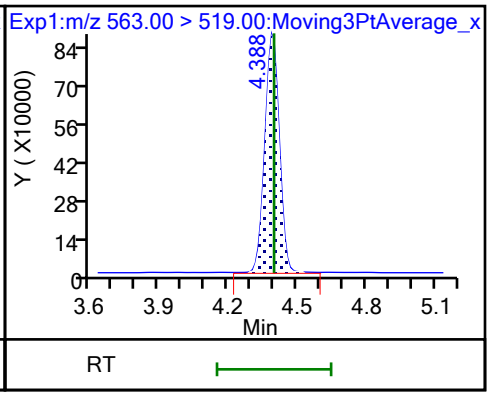
29 Perfluorodecanesulfonic acid (M)



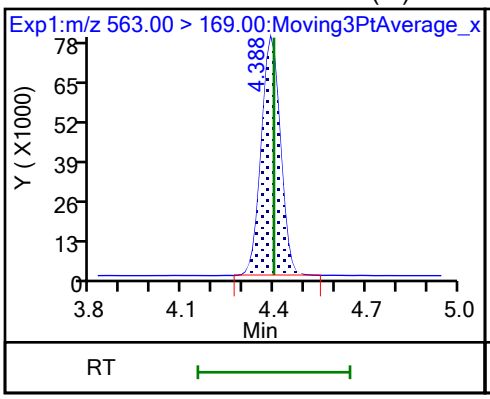
D 30 13C2 PFUnA



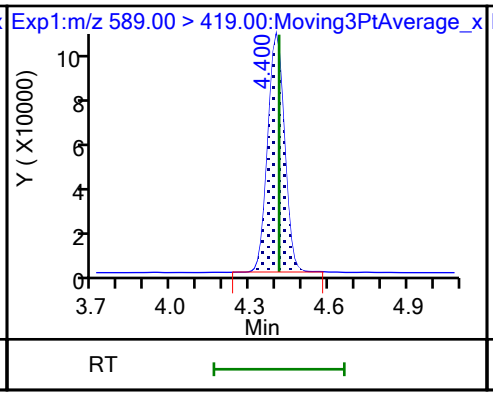
31 Perfluoroundecanoic acid



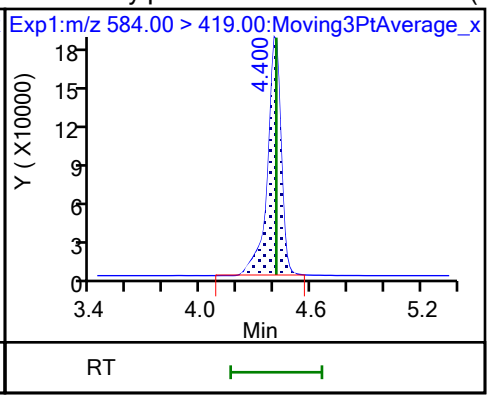
31 Perfluoroundecanoic acid (M)



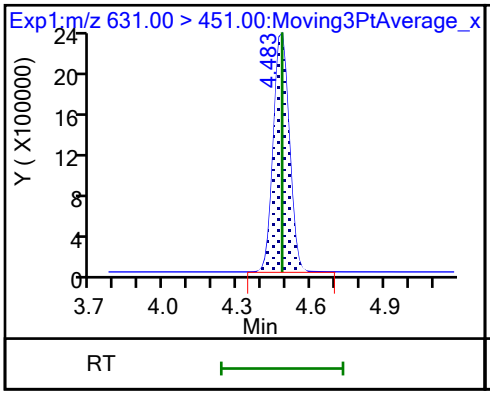
D 32 d5-NEtFOSAA



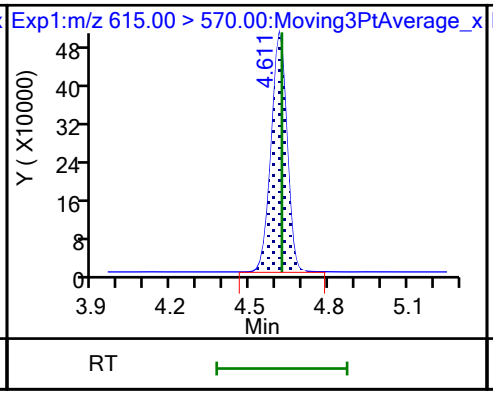
33 N-ethylperfluorooctanesulfonamid (M)



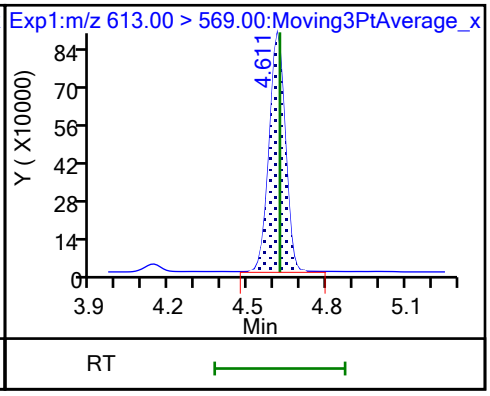
66 11-Chloroeicosafluoro-3-oxaundec



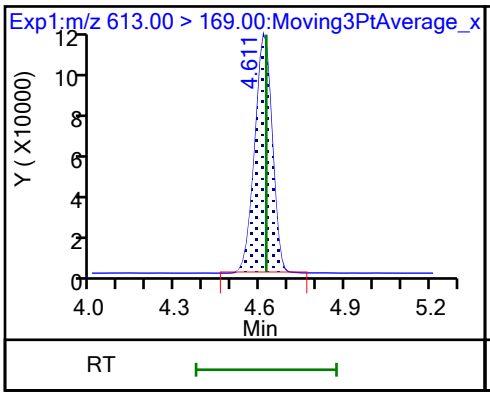
D 36 13C2 PFDoA



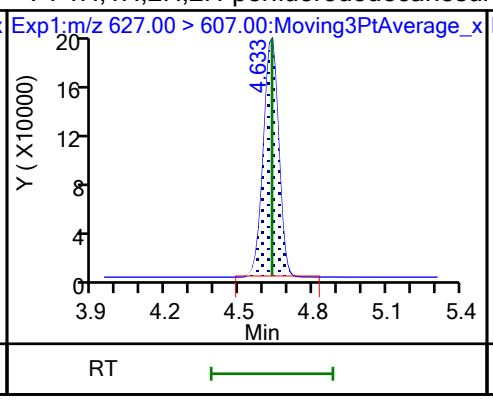
37 Perfluorododecanoic acid



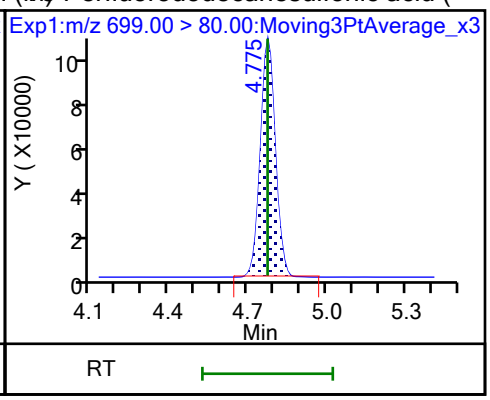
37 Perfluorododecanoic acid



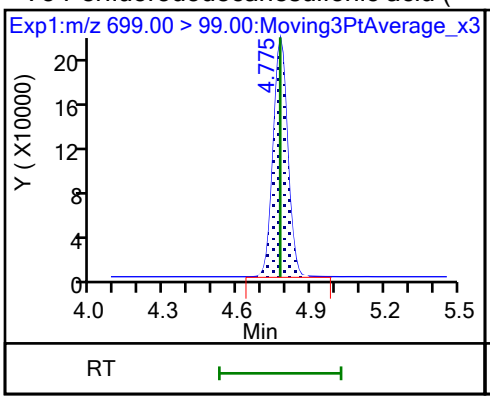
74 1H,1H,2H,2H-perfluorododecanesul (M)



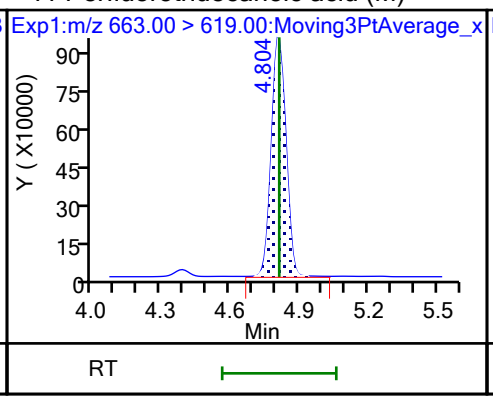
75 Perfluorododecanesulfonic acid (



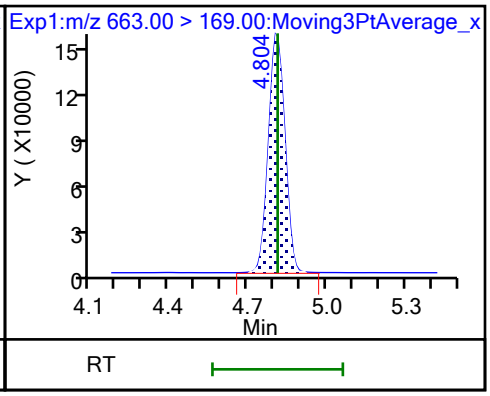
75 Perfluorododecanesulfonic acid (



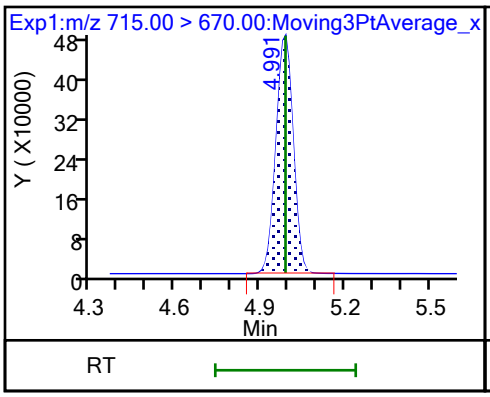
41 Perfluorotridecanoic acid (M)



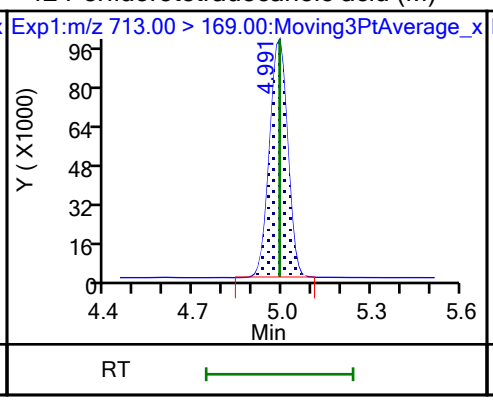
41 Perfluorotridecanoic acid



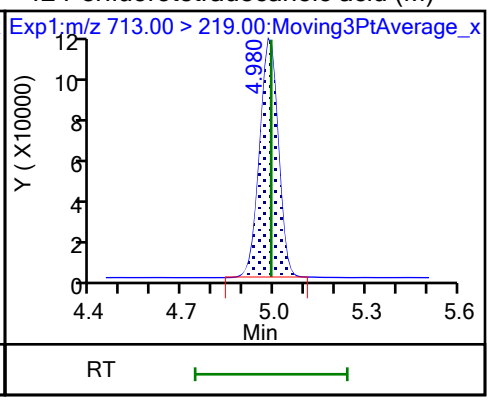
D 43 13C2 PFTeDA



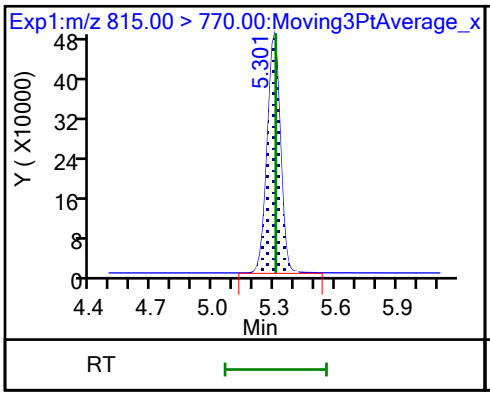
42 Perfluorotetradecanoic acid (M)



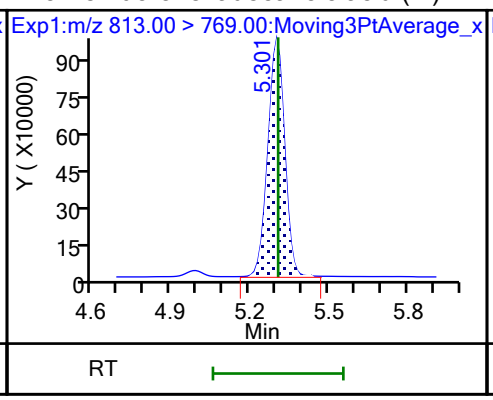
42 Perfluorotetradecanoic acid (M)



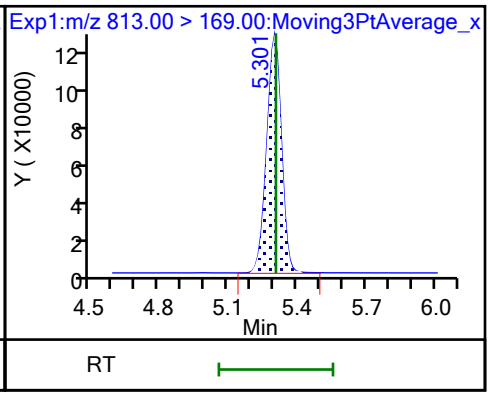
D 44 13C2 PFHxDA



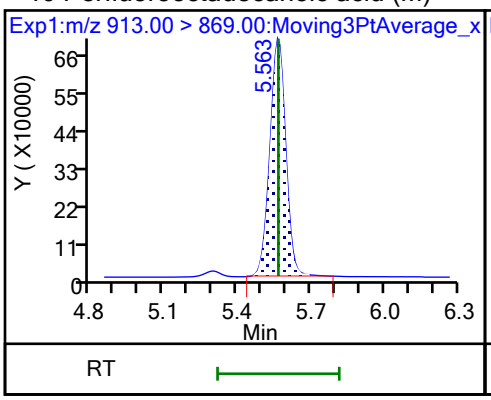
45 Perfluorohexadecanoic acid (M)



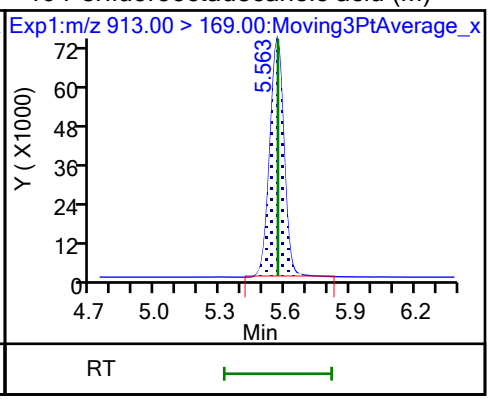
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.307		0.140	0.125	11.8	50.0
Perfluoropentanoic acid	AveID	1.079	1.232		0.0571	0.0500	14.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.213		0.0482	0.0444	8.6	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	4.068		0.0561	0.0469	19.8	50.0
Perfluorohexanoic acid	AveID	1.100	1.181		0.0537	0.0500	7.3	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.370		0.0494	0.0471	4.9	50.0
HFPODA	AveID	1.001	1.221		0.122	0.100	22.0	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.256		0.0518	0.0457	13.4	50.0
Perfluoroheptanoic acid	AveID	1.121	1.125		0.0502	0.0500	0.4	50.0
DONA	AveID	5.754	5.863		0.0481	0.0473	1.9	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.323		0.144	0.119	21.6	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.467		0.0484	0.0477	1.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.166		0.0548	0.0500	9.5	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.286		0.0512	0.0464	10.3	50.0
Perfluorononanoic acid	AveID	0.9800	1.016		0.0519	0.0500	3.7	50.0
9Cl-PF3ONS	AveID	3.569	3.899		0.0510	0.0467	9.2	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8088		0.0438	0.0481	-8.9	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.553		0.0557	0.0480	16.0	50.0
Perfluorodecanoic acid	AveID	0.999	1.000		0.0500	0.0500	0.0	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9624		0.0504	0.0500	0.9	50.0
NMeFOSAA	AveID	0.9074	1.102		0.152	0.125	21.5	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6279		0.0444	0.0483	-8.1	50.0
Perfluoroundecanoic acid	AveID	1.031	1.029		0.0499	0.0500	-0.2	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.125		0.141	0.125	12.5	50.0
11Cl-PF3OUdS	AveID	5.474	6.210		0.0535	0.0472	13.5	50.0
Perfluorododecanoic acid	AveID	1.018	1.030		0.0506	0.0500	1.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.609		0.0589	0.0482	22.2	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2184		0.0457	0.0484	-5.6	50.0
Perfluorotridecanoic acid	AveID	1.070	1.269		0.0593	0.0500	18.7	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1170		0.0523	0.0500	4.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.235		0.0617	0.0500	23.4	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7816		0.0500	0.0500	0.0	50.0
13C4 PFBA	Ave	0.9917	1.038		1.31	1.25	4.7	
13C5 PFPeA	Ave	0.7696	0.7780		1.26	1.25	1.1	
13C3 PFBS	Ave	1.041	0.996		1.11	1.16	-4.3	
M2-4:2 FTS	Ave	0.1204	0.1093		1.06	1.17	-9.3	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196833/5 Calibration Date: 10/26/2023 21:03

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8006		1.28	1.25	2.3	
13C3 HFPO-DA	Ave	0.1516	0.1454		1.20	1.25	-4.0	
18O2 PFHxS	Ave	0.7464	0.7550		1.20	1.18	1.2	
13C4 PFHpA	Ave	0.8590	0.9204		1.34	1.25	7.1	
M2-6:2 FTS	Ave	0.1551	0.1545		1.18	1.19	-0.4	
13C4 PFOA	Ave	0.9731	0.9523		1.22	1.25	-2.1	
13C4 PFOS	Ave	0.4742	0.4939		1.25	1.20	4.2	
13C5 PFNA	Ave	1.059	1.048		1.24	1.25	-1.1	
13C2 PFDA	Ave	1.109	1.041		1.17	1.25	-6.1	
M2-8:2 FTS	Ave	0.1744	0.1534		1.05	1.20	-12.0	
13C8 FOSA	Ave	0.9462	0.9336		1.23	1.25	-1.3	
d3-NMeFOSAA	Ave	0.2650	0.2548		1.20	1.25	-3.9	
13C2 PFUnA	Ave	1.047	1.088		1.30	1.25	4.0	
d5-NEtFOSAA	Ave	0.2552	0.2515		1.23	1.25	-1.4	
13C2 PFDoA	Ave	1.064	1.035		1.22	1.25	-2.7	
13C2 PFTeDA	Ave	1.059	1.014		1.20	1.25	-4.2	
13C2 PFHxDA	Ave	1.221	1.113		1.14	1.25	-8.8	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 26-Oct-2023 21:03:32 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057574-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 13:24:45 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1667

First Level Reviewer: nampitakw Date: 27-Oct-2023 12:19:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.131	0.0	0.607	2054138	1.31		105	1366	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.131	2.131	0.0	1.000	268511	0.1398		112	19.0	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1539344	1.26		101	1509	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	75830	0.0571		114	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1833232	1.11		95.7	72941	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	84851	0.0482	Target=2.06	109	78.8	M
298.90 > 99.00	2.467	2.467	0.0	1.000	40718		2.08(1.03-3.09)		19.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	32965	0.0561		120	315	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	201925	1.06		90.7	139	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1584164	1.28		102	1284	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	74832	0.0537	Target=14.12	107	14.9	M
313.00 > 119.00	2.797	2.797	0.0	1.000	6397		11.70(7.06-21.17)		6.7	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	77028	0.0494	Target=2.72	105	128	
349.00 > 99.00	2.797	2.797	0.0	0.887	26651		2.89(1.36-4.09)		61.8	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.897	0.0	0.996	28108	0.1220		122	222	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.828	287765	1.20		96.0	1168	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1413192	1.20		101	5945	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.153	0.0	1.000	68587	0.0518	Target=3.32	113	169	M
399.00 > 99.00	3.153	3.153	0.0	1.000	21002		3.27(1.66-4.98)		18.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.165	0.0	1.000	81947	0.0502	Target=4.17	100	19.2	M
363.00 > 169.00	3.153	3.165	-0.012	0.996	19395		4.23(2.09-6.26)		31.4	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	1821068	1.34		107	9840	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	216549	0.0481	Target=3.33	102	253	
377.00 > 85.00	3.199	3.199	0.0	0.838	55649		3.89(1.66-4.99)		97.4	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.502	0.0	0.917	54643	0.0484	Target=4.83	102	123	
449.00 > 99.00	3.493	3.502	-0.009	0.915	10155		5.38(2.41-7.24)		31.1	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	290445	1.18		99.6	600	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	96429	0.1442		122	104	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.512	3.512	0.0	1.000	87916	0.0548	Target=2.88	110	3.6	M
413.00 > 169.00	3.512	3.512	0.0	1.000	27579		3.19(1.44-4.32)		49.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.512	0.0	1.000	1884337	1.22		97.9	8541	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.512	0.0		1978630	1.25			12318	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.819	0.0	1.000	46664	0.0512	Target=4.24	110	101	M
499.00 > 99.00	3.808	3.819	-0.011	0.997	10051		4.64(2.12-6.37)		26.4	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.819	0.0	1.088	934177	1.24		104	3103	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.842	0.0	1.000	84262	0.0519	Target=8.34	104	13.5	
463.00 > 169.00	3.842	3.842	0.0	1.000	8391		10.04(4.17-12.51)		61.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.094	2072676	1.24		98.9	5533	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.971	3.971	0.0	1.040	142187	0.0510		109	619	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.101	4.101	0.0	1.074	30412	0.0438	Target=2.17	91.1	379	M
549.00 > 99.00	4.101	4.101	0.0	1.074	12431		2.45(1.08-3.25)		55.8	
D 23 13C2 PFDA										
515.00 > 470.00	4.125	4.125	0.0	1.175	2060552	1.17		93.9	10196	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.136	0.0	1.003	82424	0.0500	Target=11.44	100	21.3	
513.00 > 169.00	4.125	4.136	-0.011	1.000	10789		7.64(5.72-17.16)		52.6	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.136	0.0	1.000	29767	0.0557		116	290	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.136	0.0	1.178	290857	1.05		88.0	737	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.205	1847283	1.23		98.7	6873	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.230	4.230	0.0	1.000	71115	0.0504		101	506	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.266	4.266	0.0	1.215	504175	1.20		96.1	1733	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.266	0.0	1.000	55582	0.1519		121	158	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.351	4.351	0.0	1.139	23685	0.0444	Target=2.37	91.9	208	
599.00 > 99.00	4.351	4.351	0.0	1.139	10917		2.17(1.19-3.56)		99.5	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.249	2153250	1.30		104	9920	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.387	4.387	0.0	1.000	88595	0.0499	Target=12.20	99.8	21.8	M
563.00 > 169.00	4.387	4.387	0.0	1.000	8100		10.94(6.10-18.31)		55.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.253	497581	1.23		98.6	898	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.399	0.0	1.000	55982	0.1406		112	210	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.468	0.0	1.170	228912	0.0535		113	446	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.313	2047635	1.22		97.3	4419	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.610	0.0	1.000	84345	0.0506	Target=8.47	101	5.7	M
613.00 > 169.00	4.599	4.610	-0.011	0.998	9299		9.07(4.23-12.70)		79.6	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.621	0.0	1.117	18834	0.0589		122	322	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.764	4.764	0.0	1.248	8265	0.0457	Target=0.48	94.4	107	
699.00 > 99.00	4.764	4.764	0.0	1.248	17651		0.47(0.24-0.72)		261	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.803	0.0	1.042	103978	0.0593	Target=6.41	119	7.0	
663.00 > 169.00	4.803	4.803	0.0	1.042	14615		7.11(3.21-9.62)		199	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.980	0.0	1.418	2007031	1.20		95.8	6419	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.980	4.980	0.0	1.000	9391	0.0523	Target=0.87	105	119	
713.00 > 219.00	4.980	4.980	0.0	1.000	9666		0.97(0.43-1.30)		214	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.508	2201944	1.14		91.2	5047	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.296	0.0	1.000	108735	0.0617	Target=7.89	123	7.9	M
813.00 > 169.00	5.296	5.296	0.0	1.000	12052		9.02(3.94-11.83)		140	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.567	5.567	0.0	1.051	68840	0.0500	Target=9.39	100	9.5	M
913.00 > 169.00	5.567	5.567	0.0	1.051	7125		9.66(4.69-14.08)		180	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

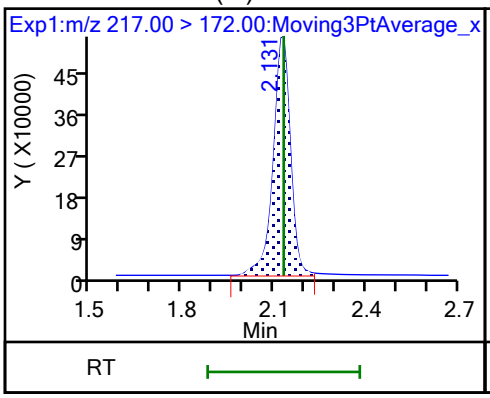
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 13:24:45 Chrom Revision: 2.3 18-Oct-2023 21:16:54

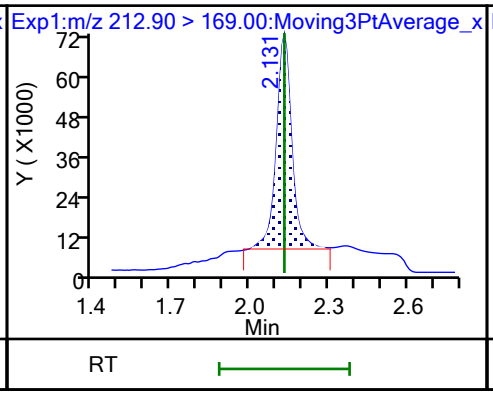
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57574.b\PA231026A05.d
Injection Date: 26-Oct-2023 21:03:32 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

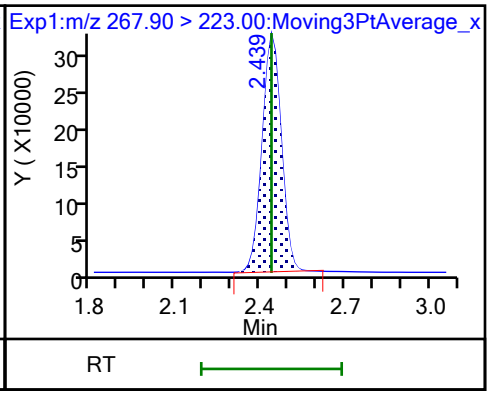
D 1 13C4 PFBA (M)



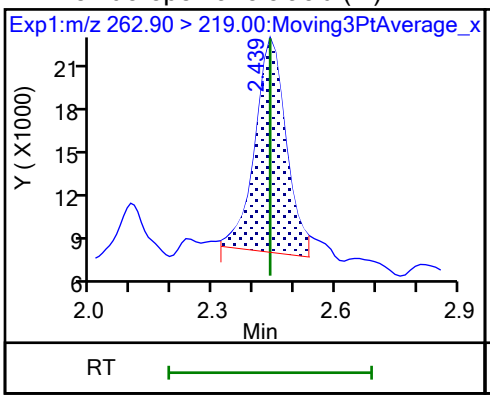
2 Perfluorobutanoic acid



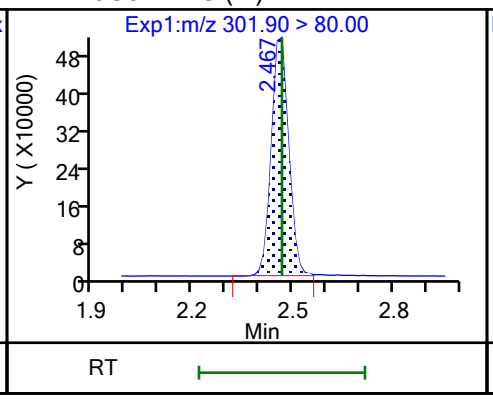
D 3 13C5 PFPeA



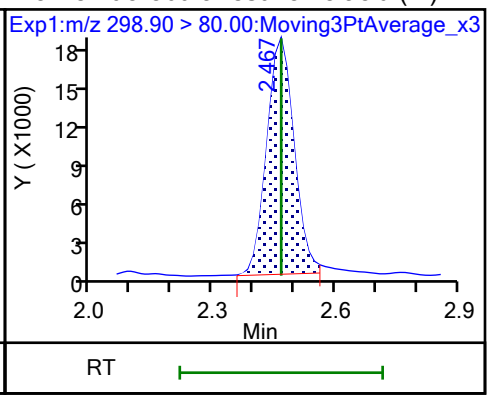
4 Perfluoropentanoic acid (M)



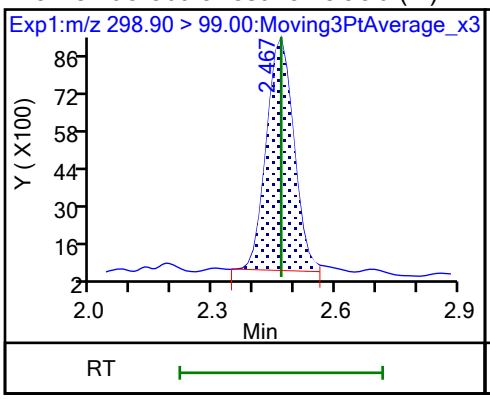
D 47 13C3 PFBS (M)



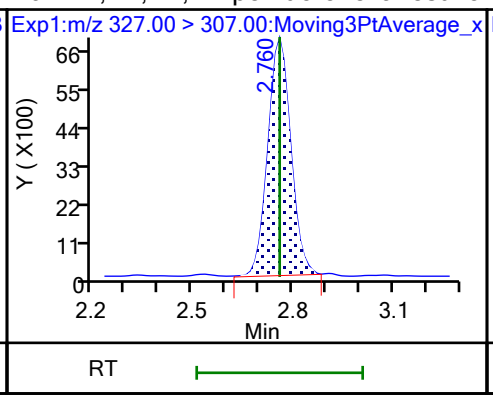
5 Perfluorobutanesulfonic acid (M)



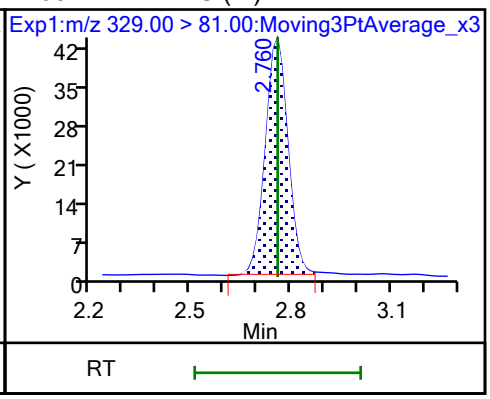
5 Perfluorobutanesulfonic acid (M)



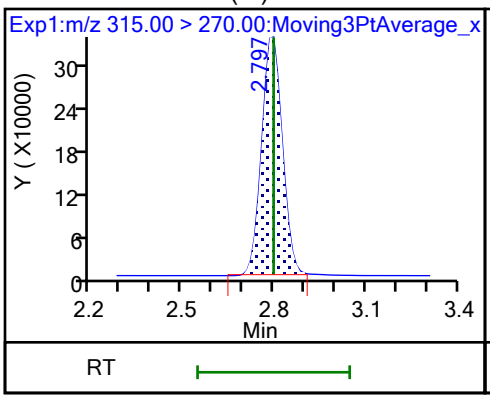
61 1H,1H,2H,2H-perfluorohexanesulfo



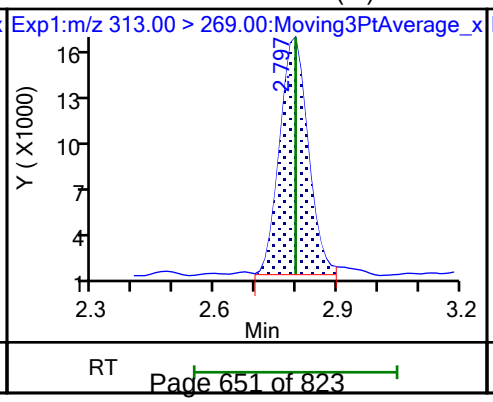
D 60 M2-4:2 FTS (M)



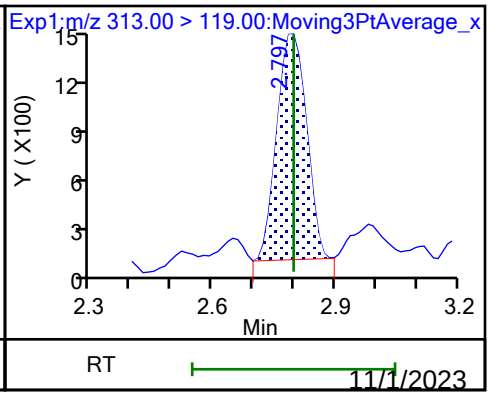
D 7 13C2 PFHxA (M)



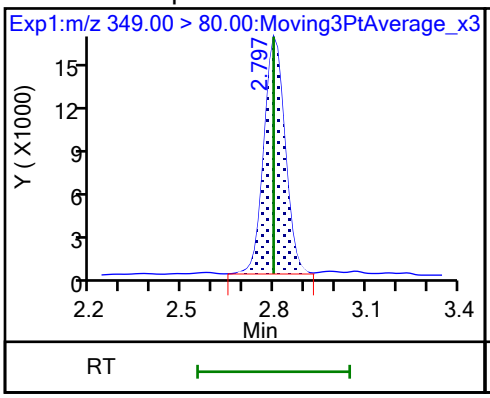
6 Perfluorohexanoic acid (M)



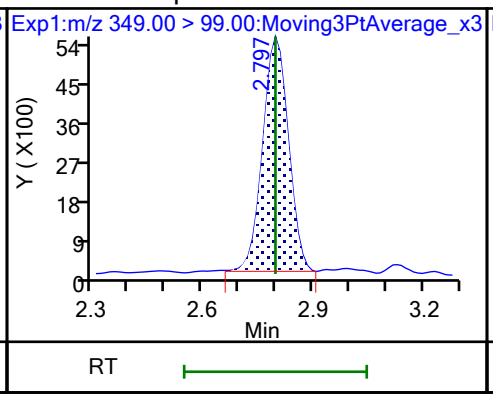
6 Perfluorohexanoic acid



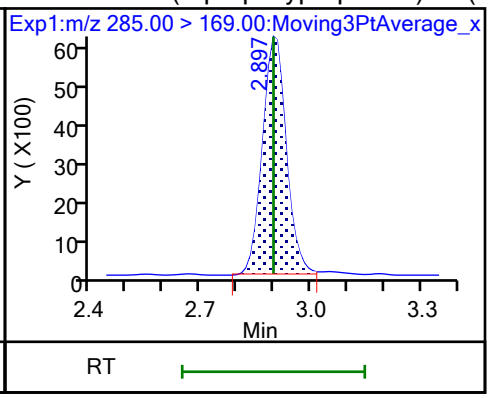
70 Perfluoropentanesulfonic acid



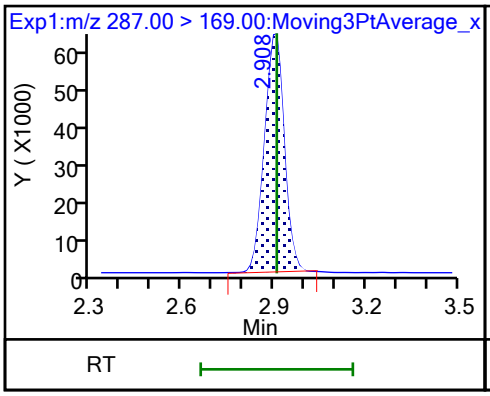
70 Perfluoropentanesulfonic acid



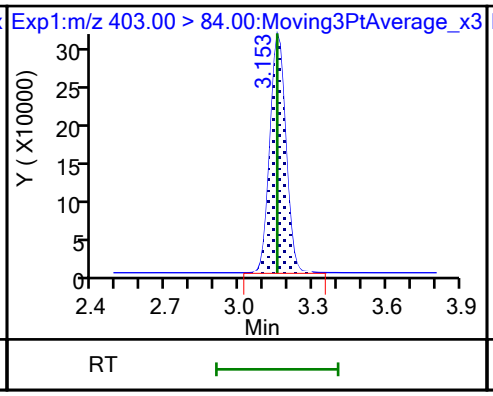
67 Perfluoro(2-propoxypropanoic) ac (M)



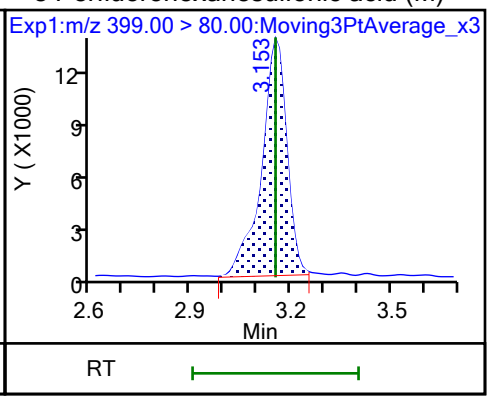
D 64 13C3 HFPO-DA



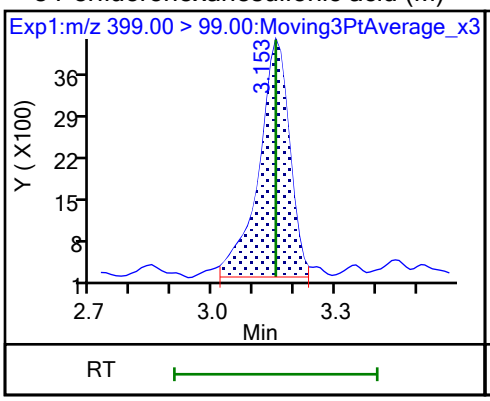
D 11 18O2 PFHxS



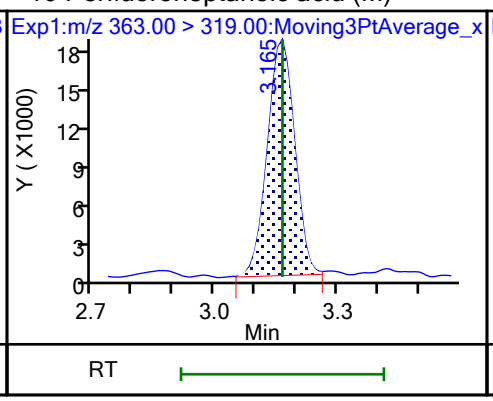
8 Perfluorohexanesulfonic acid (M)



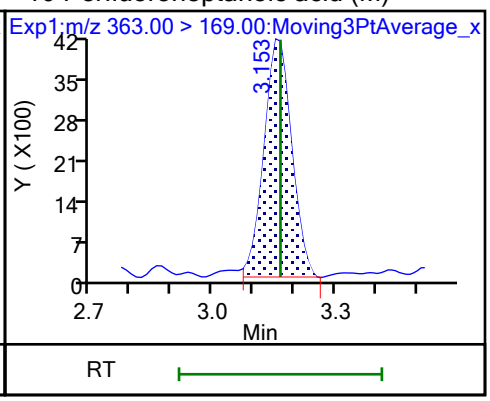
8 Perfluorohexanesulfonic acid (M)



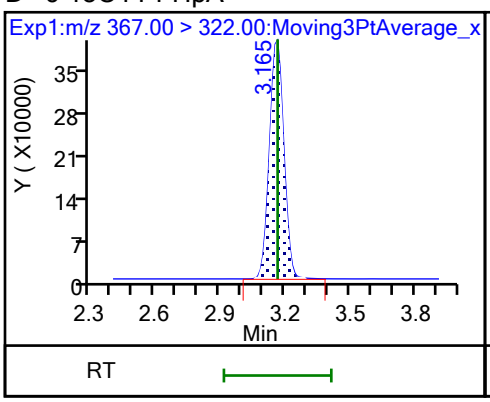
10 Perfluoroheptanoic acid (M)



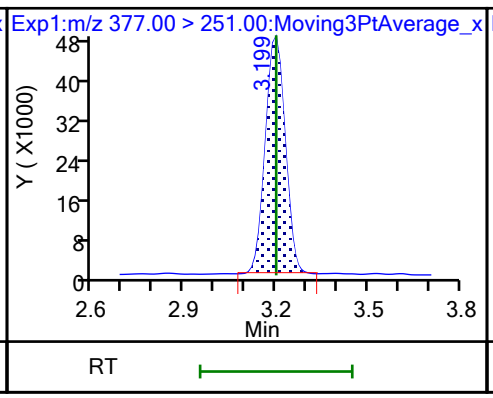
10 Perfluoroheptanoic acid (M)



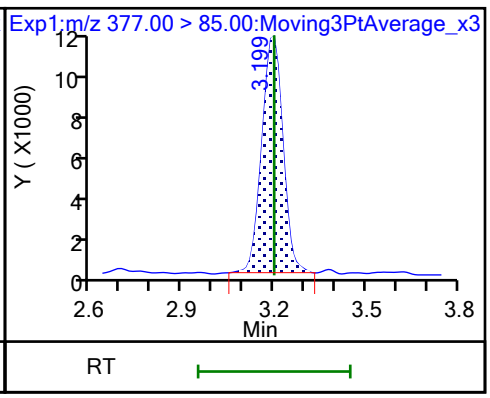
D 9 13C4 PFHpA



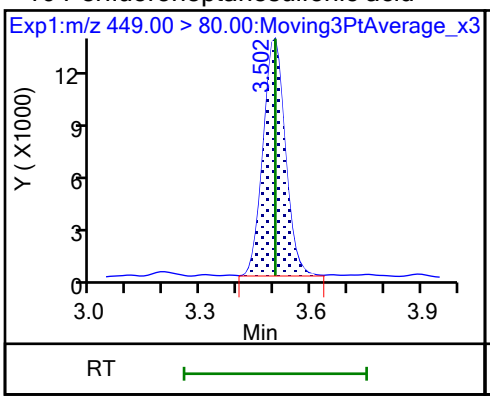
77 DONA



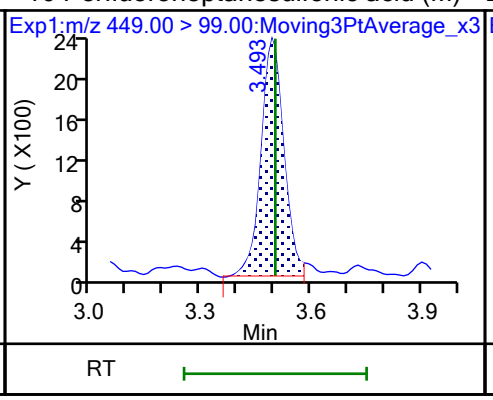
77 DONA



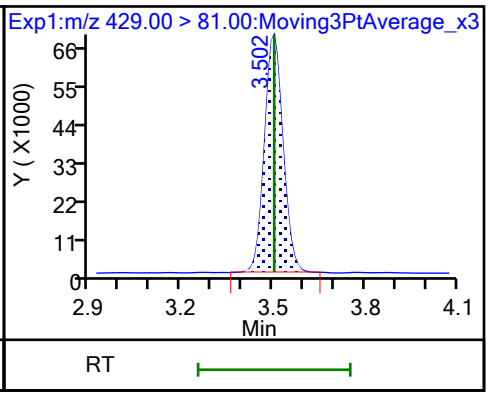
16 Perfluoroheptanesulfonic acid



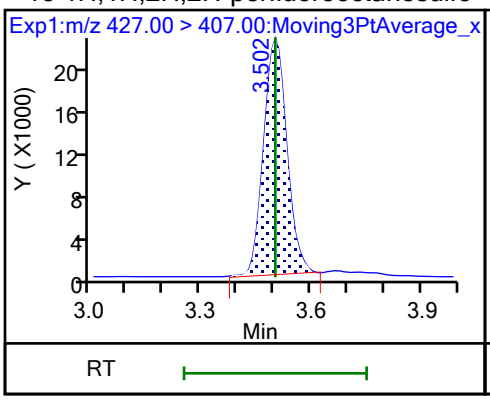
16 Perfluoroheptanesulfonic acid (M)



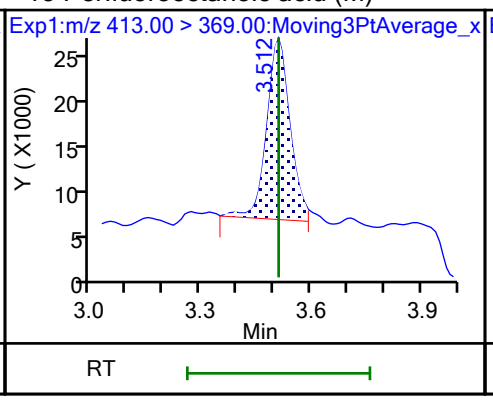
D 12 M2-6:2 FTS



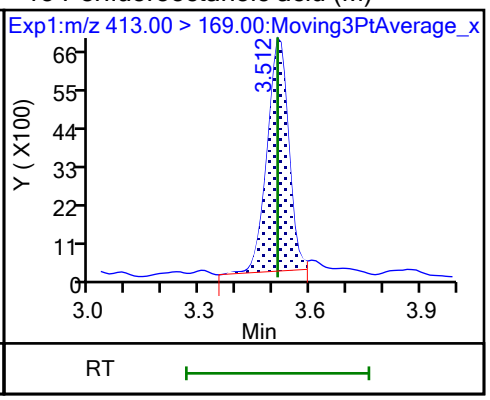
13 1H,1H,2H,2H-perfluorooctanesulfo



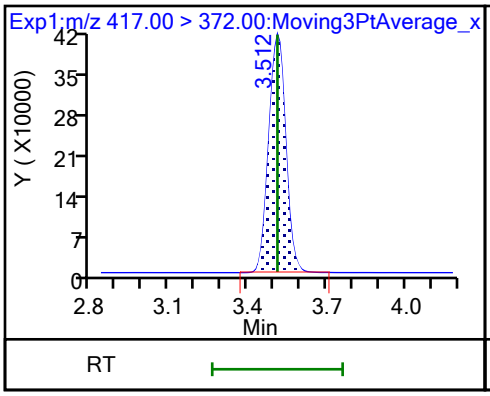
15 Perfluorooctanoic acid (M)



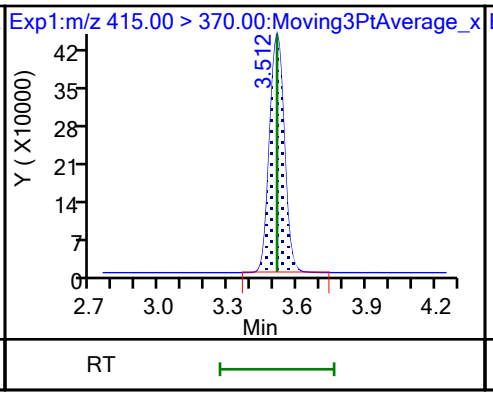
15 Perfluorooctanoic acid (M)



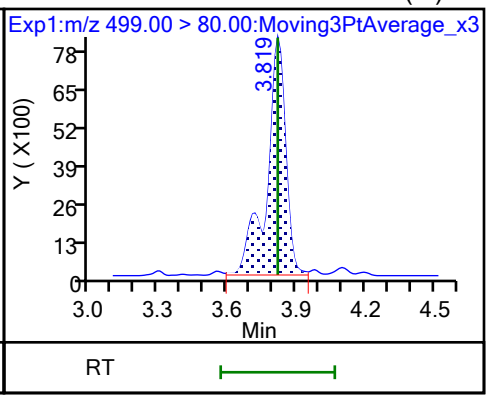
D 14 13C4 PFOA



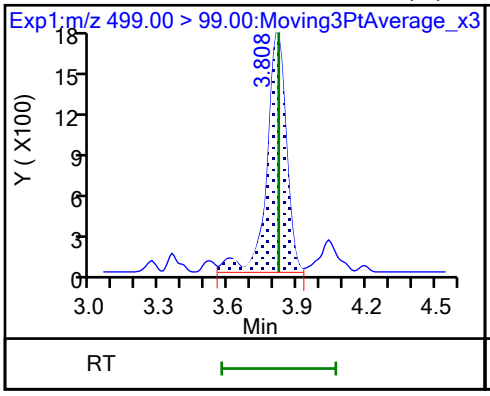
* 62 13C2 PFOA



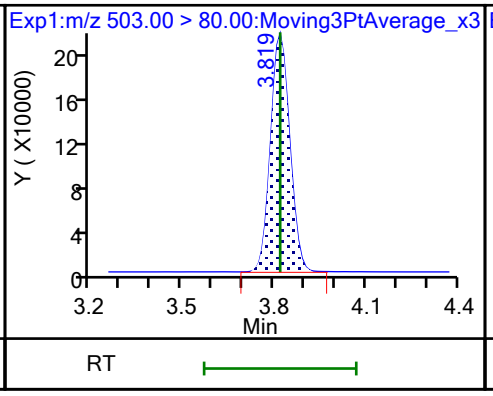
17 Perfluorooctanesulfonic acid (M)



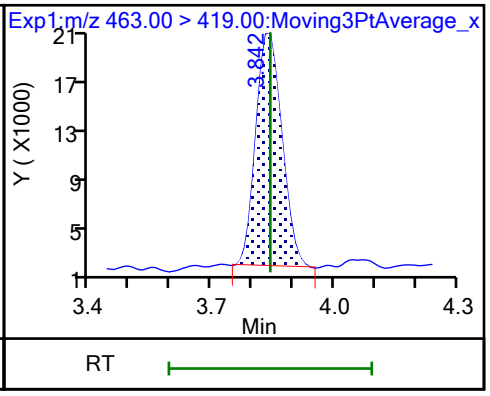
17 Perfluorooctanesulfonic acid (M)



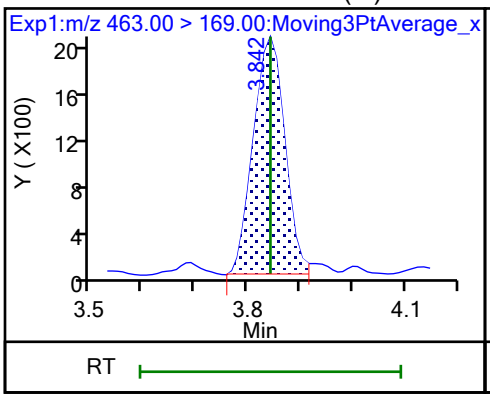
D 18 13C4 PFOS



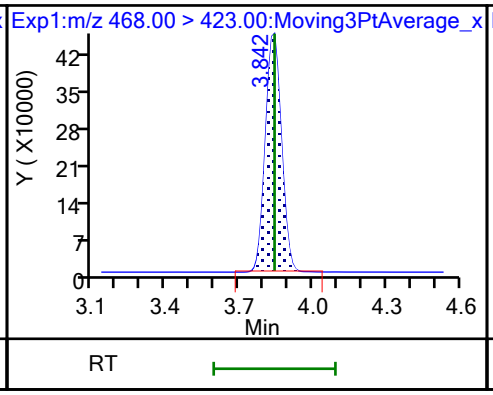
20 Perfluorononanoic acid



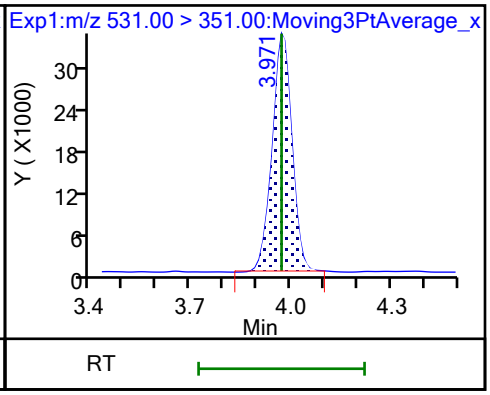
20 Perfluorononanoic acid (M)



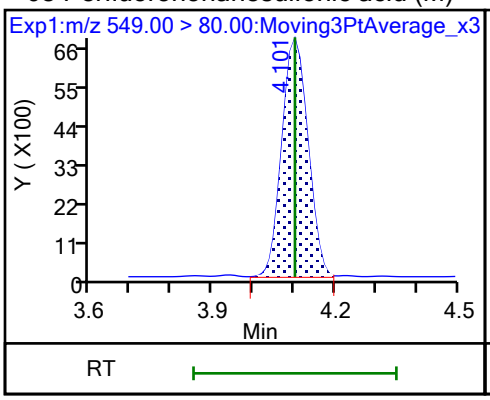
D 19 13C5 PFNA



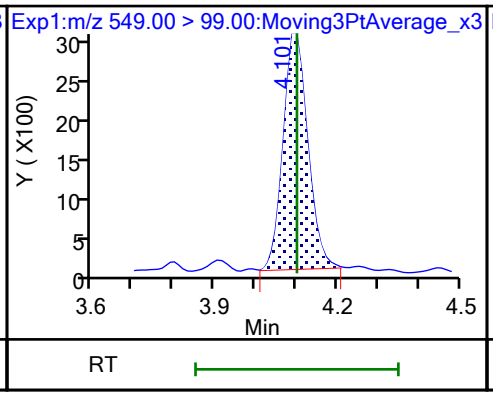
69 9-Chlorohexadecafluoro-3-oxanona



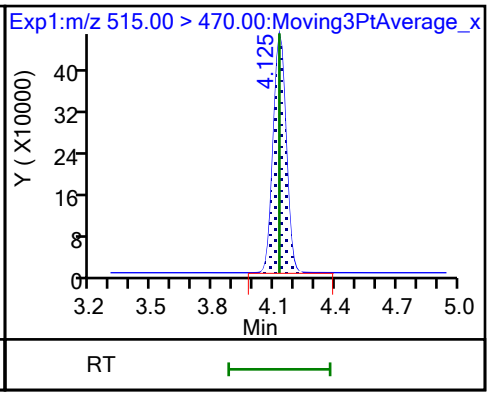
68 Perfluorononanesulfonic acid (M)



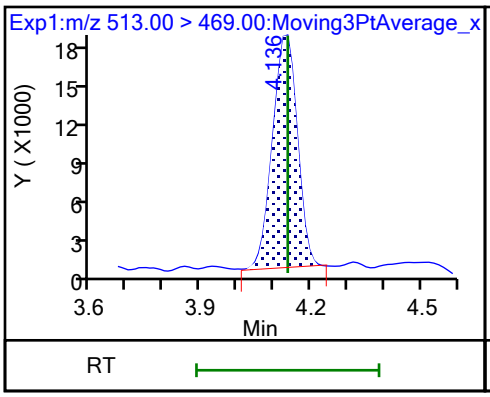
68 Perfluorononanesulfonic acid



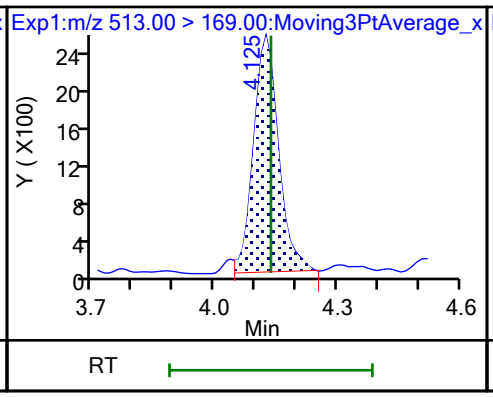
D 23 13C2 PFDA



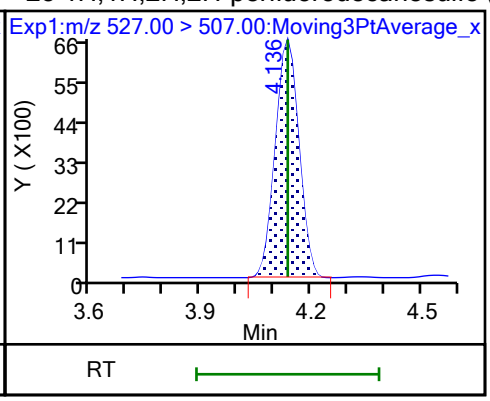
24 Perfluorodecanoic acid



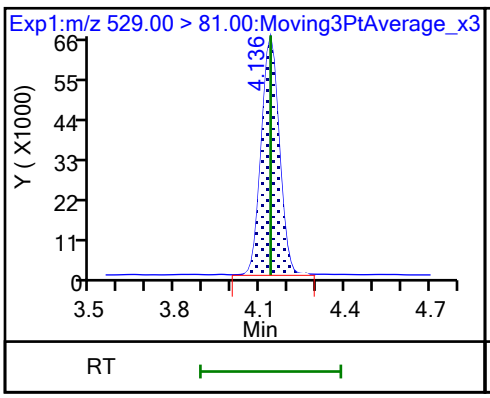
24 Perfluorodecanoic acid



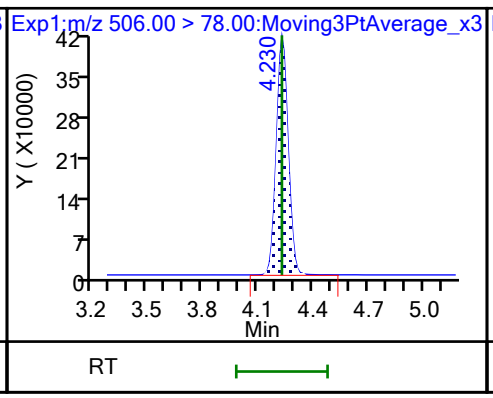
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



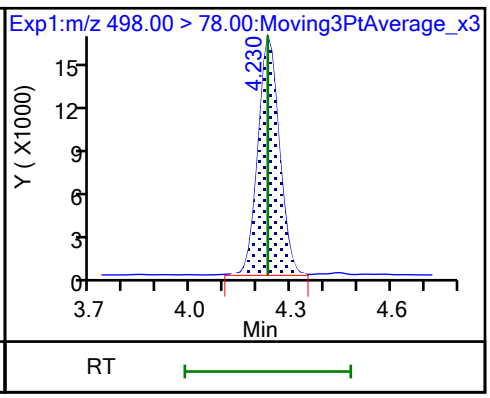
D 26 M2-8:2 FTS



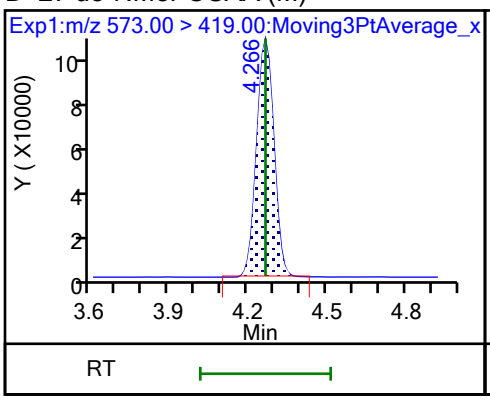
D 21 13C8 FOSA



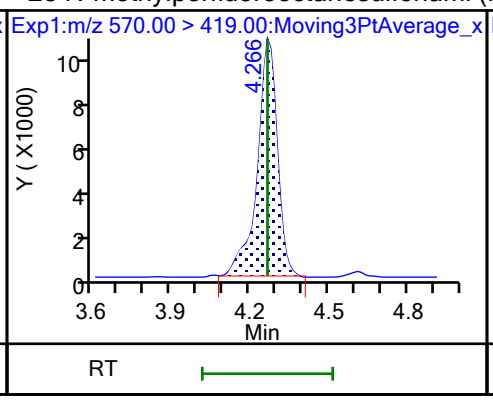
22 Perfluorooctanesulfonamide



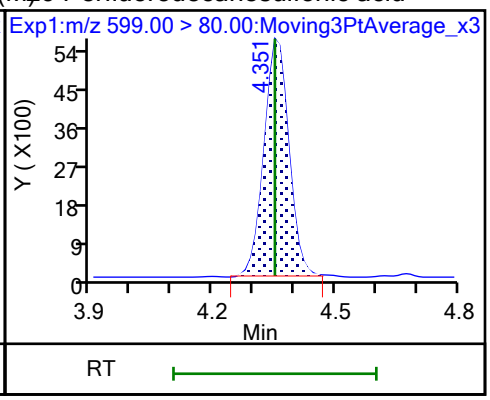
D 27 d3-NMeFOSAA (M)



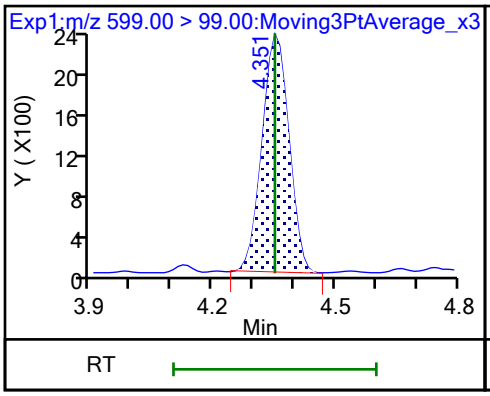
28 N-methylperfluorooctanesulfonami (M)



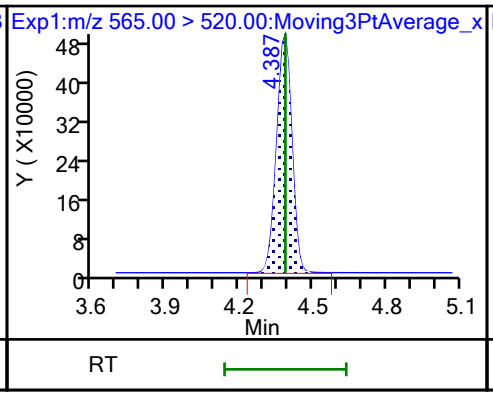
29 Perfluorodecanesulfonic acid



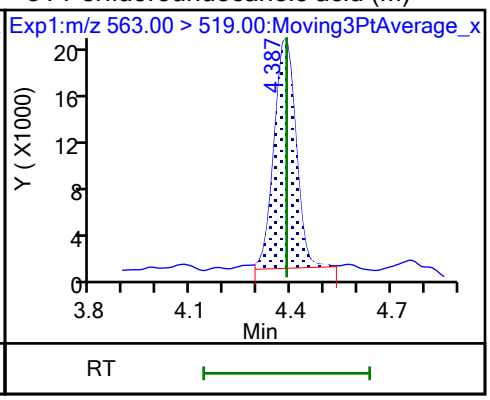
29 Perfluorodecanesulfonic acid



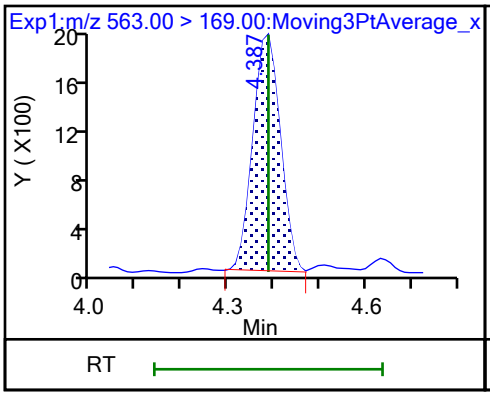
D 30 13C2 PFUnA



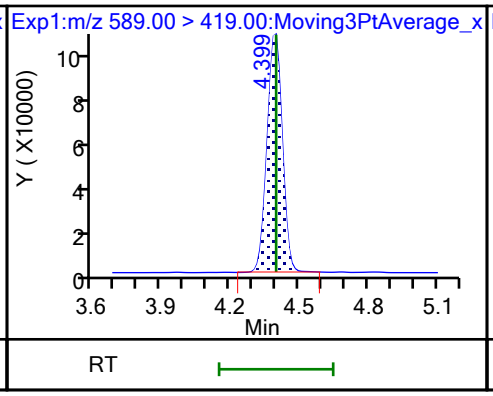
31 Perfluoroundecanoic acid (M)



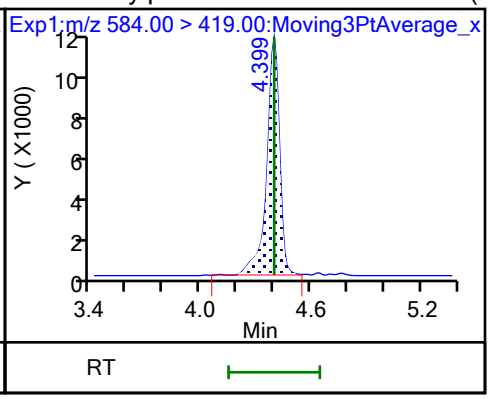
31 Perfluoroundecanoic acid



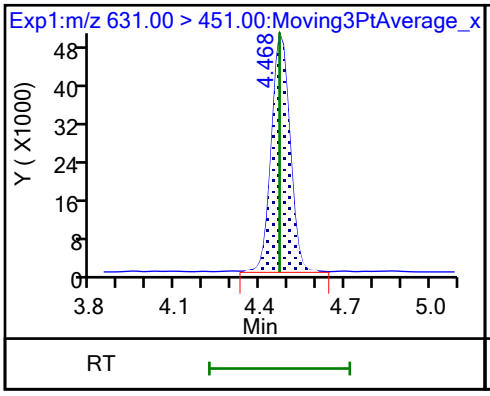
D 32 d5-NEtFOSAA



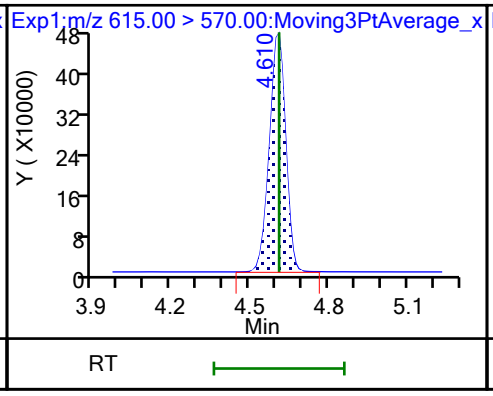
33 N-ethylperfluorooctanesulfonamid (M)



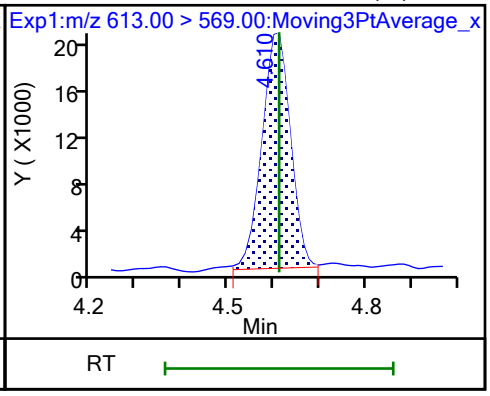
66 11-Chloroeicosafluoro-3-oxaundec



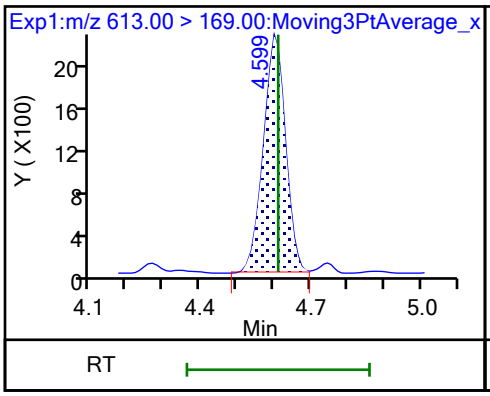
D 36 13C2 PFDoA



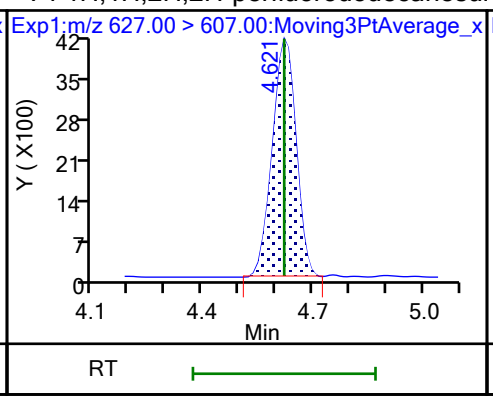
37 Perfluorododecanoic acid (M)



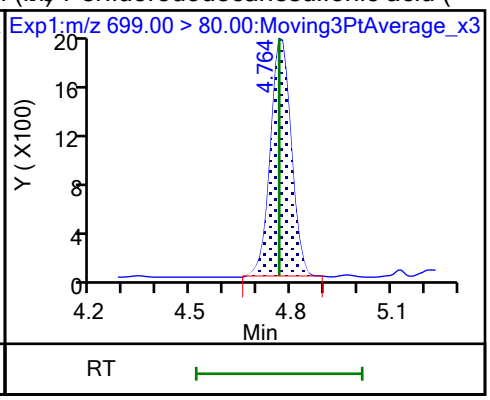
37 Perfluorododecanoic acid



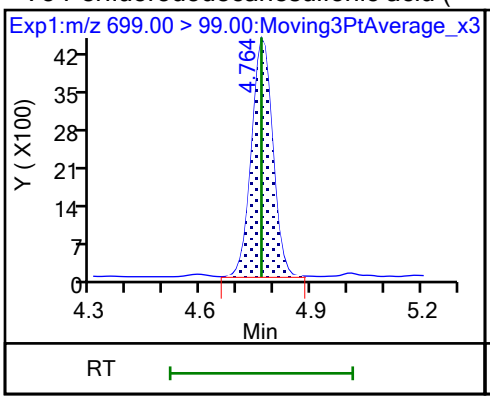
74 1H,1H,2H,2H-perfluorododecanesul (M)



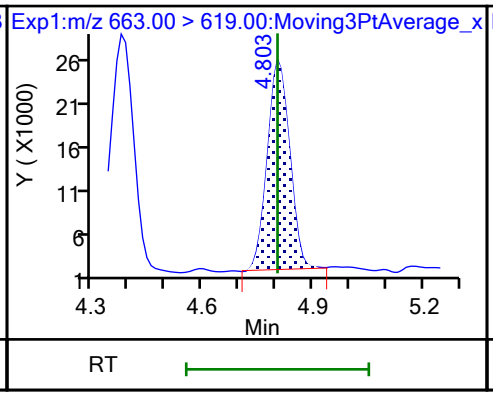
75 Perfluorododecanesulfonic acid (



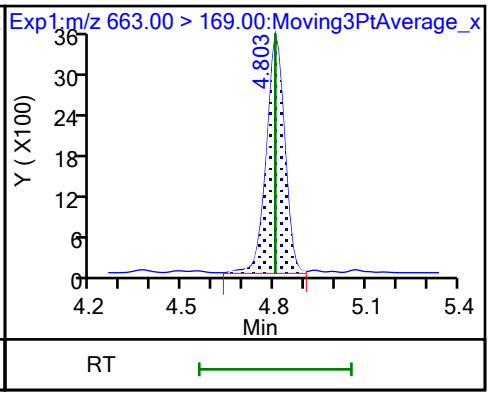
75 Perfluorododecanesulfonic acid (



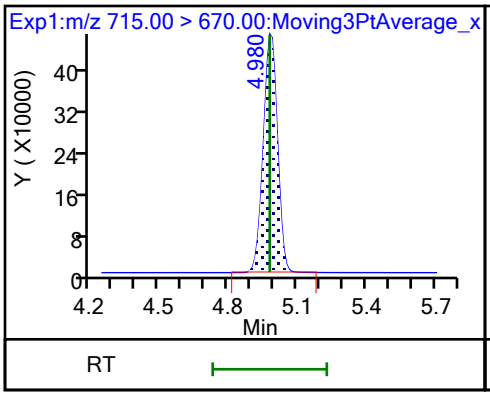
41 Perfluorotridecanoic acid



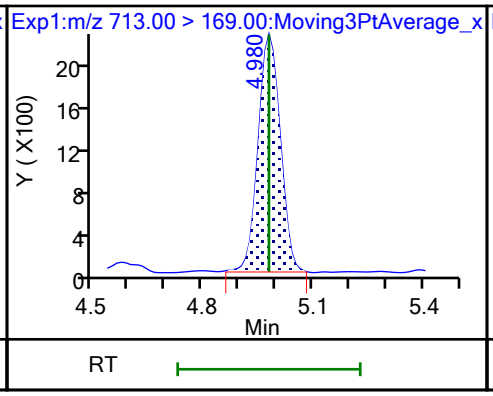
41 Perfluorotridecanoic acid



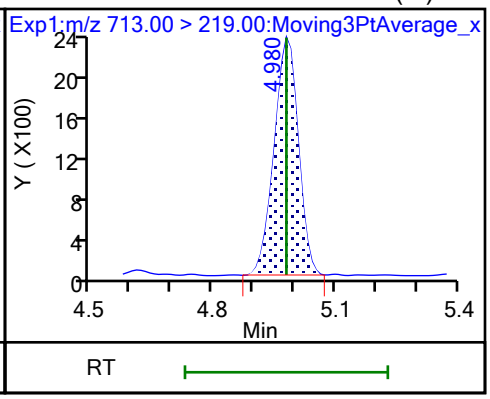
D 43 13C2 PFTeDA



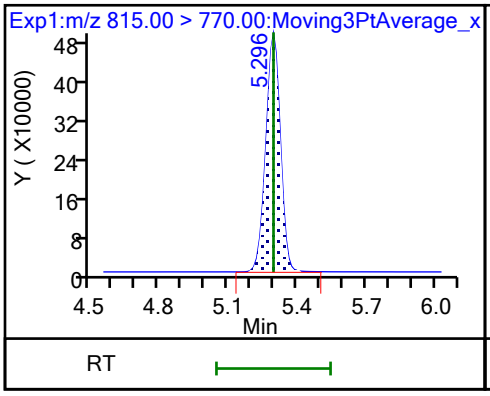
42 Perfluorotetradecanoic acid



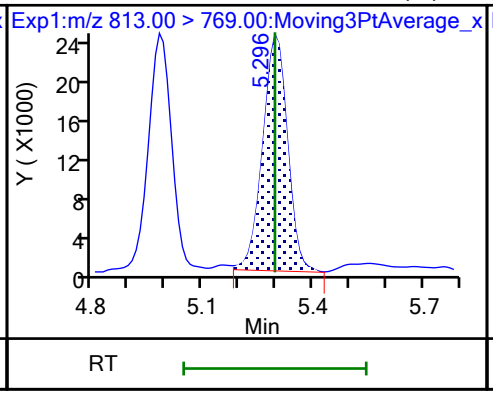
42 Perfluorotetradecanoic acid (M)



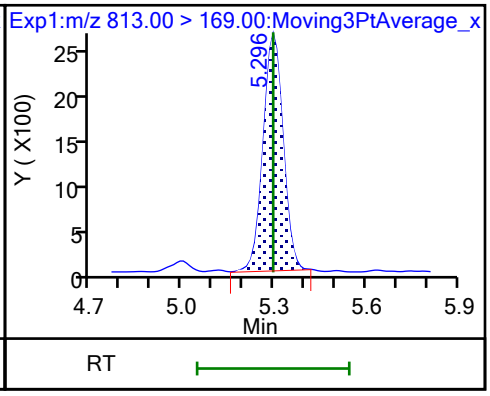
D 44 13C2 PFHxDA



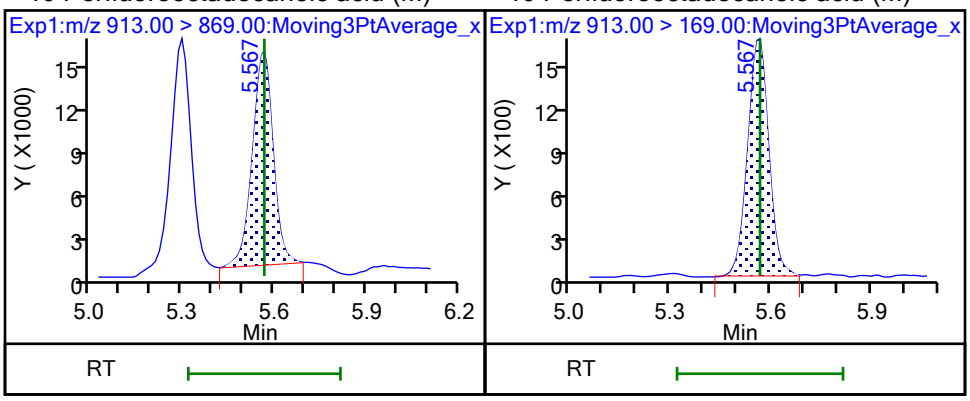
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8845		0.937	1.00	-6.3	30.0
Perfluoropentanoic acid	AveID	1.079	1.002		0.929	1.00	-7.1	
Perfluorobutanesulfonic acid	AveID	1.117	1.084		0.861	0.887	-3.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.411		0.941	0.937	0.4	
Perfluorohexanoic acid	AveID	1.100	0.9258		0.841	1.00	-15.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.302		0.938	0.941	-0.3	
HFPODA	AveID	1.001	1.007		1.01	1.00	0.6	
Perfluoroheptanoic acid	AveID	1.121	1.025		0.914	1.00	-8.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.028		0.849	0.914	-7.2	
DONA	AveID	5.754	5.442		0.894	0.945	-5.4	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.675		0.931	0.951	-2.1	
Perfluoroheptanesulfonic acid	AveID	1.445	1.337		0.882	0.953	-7.5	
Perfluorooctanoic acid	AveID	1.065	0.9783		0.918	1.00	-8.2	
Perfluorooctanesulfonic acid	AveID	1.166	1.066		0.848	0.928	-8.6	
Perfluorononanoic acid	AveID	0.9800	0.8904		0.908	1.00	-9.2	
9Cl-PF3ONS	AveID	3.569	3.655		0.955	0.933	2.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7591		0.823	0.962	-14.5	
Perfluorodecanoic acid	AveID	0.999	0.9170		0.918	1.00	-8.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.245		0.979	0.960	2.0	
Perfluorooctanesulfonamide	AveID	0.9539	0.9694		1.02	1.00	1.6	
NMeFOSAA	AveID	0.9074	0.9155		1.01	1.00	0.9	
Perfluorodecanesulfonic acid	AveID	0.6830	0.5933		0.838	0.965	-13.1	
Perfluoroundecanoic acid	AveID	1.031	1.129		1.10	1.00	9.5	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9949		0.995	1.00	-0.5	
11Cl-PF3OUdS	AveID	5.474	5.626		0.969	0.943	2.8	
Perfluorododecanoic acid	AveID	1.018	0.9187		0.903	1.00	-9.7	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.314		0.963	0.964	-0.1	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2133		0.892	0.968	-7.8	
Perfluorotridecanoic acid	AveID	1.070	1.003		0.937	1.00	-6.3	
Perfluorotetradecanoic acid	AveID	0.1118	0.1057		0.946	1.00	-5.4	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9895		0.989	1.00	-1.1	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7205		0.923	1.00	-7.7	
13C4 PFBA	Ave	0.9917	1.084		1.37	1.25	9.3	
13C5 PFPeA	Ave	0.7696	0.7787		1.27	1.25	1.2	
13C3 PFBS	Ave	1.041	1.008		1.13	1.16	-3.2	
M2-4:2 FTS	Ave	0.1204	0.1105		1.07	1.17	-8.2	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196839/1 Calibration Date: 10/27/2023 10:08

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8015		1.28	1.25	2.4	
13C3 HFPO-DA	Ave	0.1516	0.1441		1.19	1.25	-4.9	
13C4 PFHpA	Ave	0.8590	0.9113		1.33	1.25	6.1	50.0
18O2 PFHxS	Ave	0.7464	0.7317		1.16	1.18	-2.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1472		1.13	1.19	-5.1	
13C4 PFOA	Ave	0.9731	0.9842		1.26	1.25	1.1	50.0
13C4 PFOS	Ave	0.4742	0.4824		1.22	1.20	1.7	50.0
13C5 PFNA	Ave	1.059	1.102		1.30	1.25	4.1	50.0
13C2 PFDA	Ave	1.109	1.124		1.27	1.25	1.3	
M2-8:2 FTS	Ave	0.1744	0.1633		1.12	1.20	-6.3	
13C8 FOSA	Ave	0.9462	0.8662		1.14	1.25	-8.5	
d3-NMeFOSAA	Ave	0.2650	0.2633		1.24	1.25	-0.6	
13C2 PFUnA	Ave	1.047	0.9382		1.12	1.25	-10.4	
d5-NEtFOSAA	Ave	0.2552	0.2483		1.22	1.25	-2.7	
13C2 PFDoA	Ave	1.064	1.068		1.26	1.25	0.4	
13C2 PFTeDA	Ave	1.059	0.9784		1.15	1.25	-7.6	
13C2 PFHxDA	Ave	1.221	1.073		1.10	1.25	-12.1	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 10:08:01 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057578-001 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:39:49
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.130	2.131	-0.001	0.605	2275064	1.37		109	14777	
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	1609883	0.9373		93.7	123	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1634357	1.26		101	2148	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	1310252	0.9286		92.9	37.8	
D 47 13C3 PFBS										
301.90 > 80.00	2.453	2.467	-0.014	0.697	1967633	1.13		96.8	184829	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.006	1627370	0.8608	Target=2.06	97.0	2450	
298.90 > 99.00	2.466	2.467	-0.001	1.006	807201		2.02(1.03-3.09)		414	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.757	2.760	-0.003	1.000	592851	0.9411		100	3437	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.757	2.760	-0.003	0.784	216590	1.07		91.8	161	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.797	-0.002	0.794	1682082	1.28		102	3385	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.795	2.797	-0.002	1.000	1245813	0.8413	Target=14.12	84.1	278	
313.00 > 119.00	2.795	2.797	-0.002	1.000	94484		13.19(7.06-21.17)		116	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.807	2.797	0.010	0.888	1505539	0.9384	Target=2.72	99.7	3515	
349.00 > 99.00	2.795	2.797	-0.002	0.884	524410		2.87(1.36-4.09)		1013	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.897	0.008	1.000	243662	1.01		101	2981	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.826	302365	1.19		95.1	1027	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.153	0.009	0.899	1452715	1.16		98.0	6427	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.162	3.153	0.009	1.000	1154067	0.8486	Target=3.32	92.8	2711	
399.00 > 99.00	3.162	3.153	0.009	1.000	349326		3.30(1.66-4.98)		346	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.162	3.165	-0.003	1.000	1568062	0.9143	Target=4.17	91.4	384	
363.00 > 169.00	3.162	3.165	-0.003	1.000	399811		3.92(2.09-6.26)		673	
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.165	-0.003	0.899	1912570	1.33		106	6299	
77 DONA										
377.00 > 251.00	3.196	3.199	-0.003	0.836	4164940	0.8937	Target=3.33	94.6	4632	
377.00 > 85.00	3.196	3.199	-0.003	0.836	1057463		3.94(1.66-4.99)		1726	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.501	3.502	-0.001	0.915	1032239	0.8819	Target=4.83	92.5	4894	
449.00 > 99.00	3.501	3.502	-0.001	0.915	201535		5.12(2.41-7.24)		892	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.502	-0.001	0.995	293481	1.13		94.9	631	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.501	3.502	-0.001	1.000	628674	0.9307		97.9	1525	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.510	3.512	-0.002	0.997	1616503	0.9185	Target=2.88	91.8	70.4	
413.00 > 169.00	3.519	3.512	0.007	1.000	595616		2.71(1.44-4.32)		1043	
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.512	0.007	1.000	2065460	1.26		101	3653	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.512	0.007		2098703	1.25			5518	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.819	0.005	1.000	801537	0.8485	Target=4.24	91.4	1743	M
499.00 > 99.00	3.824	3.819	0.005	1.000	175470		4.57(2.12-6.37)		555	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.819	0.005	1.087	967818	1.22		102	5141	
20 Perfluorononanoic acid										
463.00 > 419.00	3.836	3.842	-0.006	1.000	1647748	0.9085	Target=8.34	90.8	261	
463.00 > 169.00	3.836	3.842	-0.006	1.000	193445		8.52(4.17-12.51)		1043	
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.842	-0.006	1.090	2313282	1.30		104	7815	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.971	0.006	1.040	2761509	0.9553		102	5779	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.108	4.101	0.007	1.074	591463	0.8230	Target=2.17	85.5	3361	
549.00 > 99.00	4.096	4.101	-0.005	1.071	246199		2.40(1.08-3.25)		975	
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.125	0.007	1.174	2357959	1.27		101	11804	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.136	-0.004	1.000	1729777	0.9176	Target=11.44	91.8	542	
513.00 > 169.00	4.132	4.136	-0.004	1.000	169079		10.23(5.72-17.16)		990	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.144	4.136	0.008	1.000	590917	0.9788		102	3088	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.136	0.008	1.178	328393	1.12		93.7	1040	
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.230	0.007	1.204	1817949	1.14		91.5	4046	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.230	0.007	1.000	1409809	1.02		102	2897	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.266	0.007	1.214	552638	1.24		99.4	2863	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.273	4.266	0.007	1.000	404763	1.01		101	550	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.358	4.351	0.007	1.139	463690	0.8383	Target=2.37	86.9	6020	
599.00 > 99.00	4.358	4.351	0.007	1.139	180684		2.57(1.19-3.56)		1820	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.387	-0.006	1.245	1968994	1.12		89.6	7624	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.387	-0.006	1.000	1778460	1.10	Target=12.20	110	456	
563.00 > 169.00	4.381	4.387	-0.006	1.000	139905		12.71(6.10-18.31)		1361	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.399	-0.006	1.249	521030	1.22		97.3	801	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.405	4.399	0.006	1.003	414687	0.99		99.5	3987	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.468	0.009	1.171	4297045	0.9693		103	3676	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.610	-0.005	1.309	2242309	1.26		100	8638	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.610	-0.005	1.000	1647921	0.9026	Target=8.47	90.3	99.1	
613.00 > 169.00	4.605	4.610	-0.005	1.000	206263		7.99(4.23-12.70)		3012	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.621	0.006	1.117	347422	0.9627		99.9	4533	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.764	0.006	1.247	167251	0.8922	Target=0.48	92.2	2743	
699.00 > 99.00	4.770	4.764	0.006	1.247	339439		0.49(0.24-0.72)		5849	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.803	0.005	1.044	1798382	0.9371	Target=6.41	93.7	81.6	
663.00 > 169.00	4.799	4.803	-0.004	1.042	273816		6.57(3.21-9.62)		1529	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.980	0.007	1.417	2053279	1.15		92.4	5747	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.987	4.980	0.007	1.000	173695	0.9457	Target=0.87	94.6	2394	
713.00 > 219.00	4.976	4.980	-0.004	0.998	187778		0.93(0.43-1.30)		2095	

Report Date: 27-Oct-2023 18:44:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.294	5.296	-0.002	1.505	2251339	1.10		87.9	5273	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.294	5.296	-0.002	1.000	1782230	0.9895	Target=7.89	98.9	109	
813.00 > 169.00	5.294	5.296	-0.002	1.000	223547		7.97(3.94-11.83)		1890	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.565	5.567	-0.002	1.051	1297759	0.9227	Target=9.39	92.3	133	
913.00 > 169.00	5.565	5.567	-0.002	1.051	135453		9.58(4.69-14.08)		1105	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

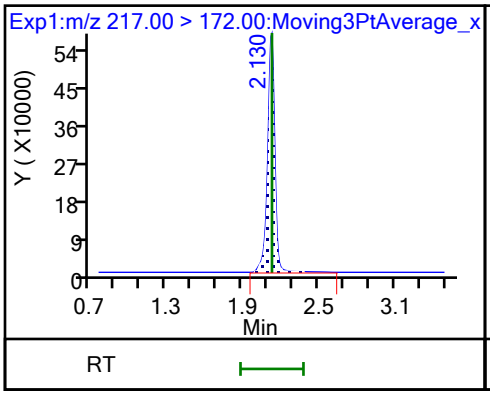
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:44:18 Chrom Revision: 2.3 18-Oct-2023 21:16:54

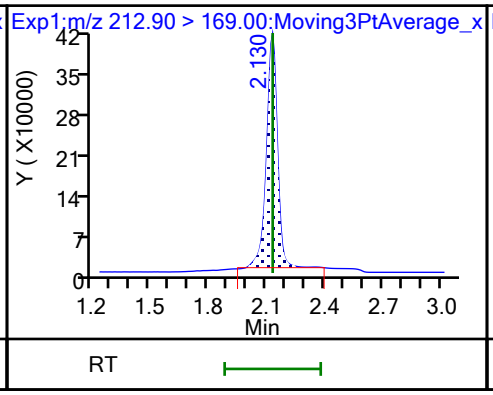
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E01.d
Injection Date: 27-Oct-2023 10:08:01 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

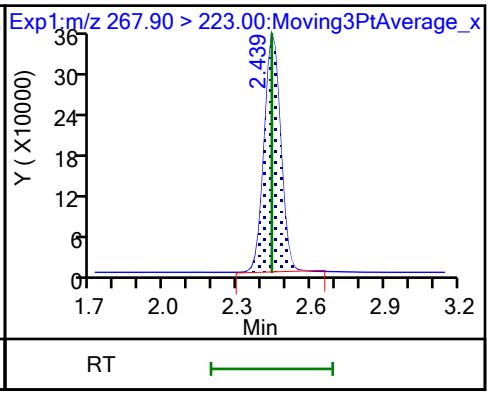
D 1 13C4 PFBA



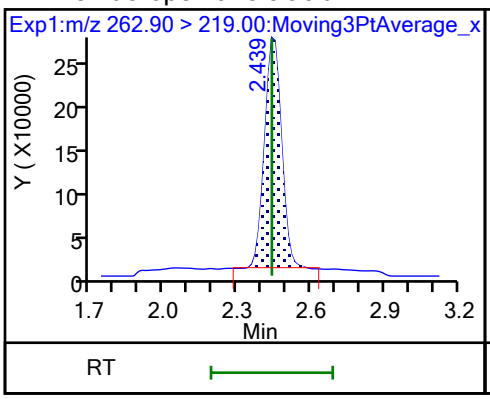
2 Perfluorobutanoic acid



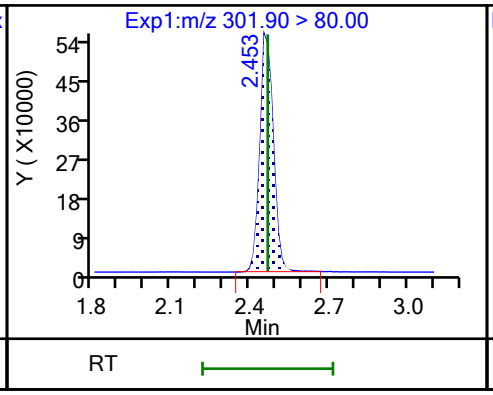
D 3 13C5 PFPeA



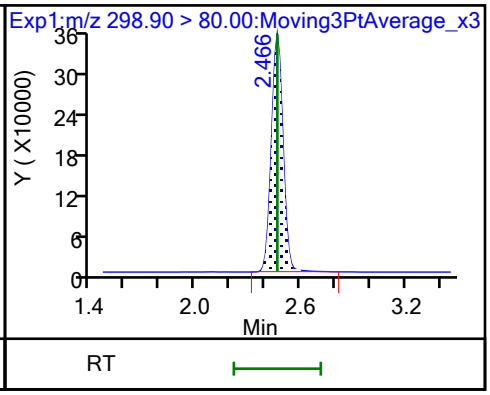
4 Perfluoropentanoic acid



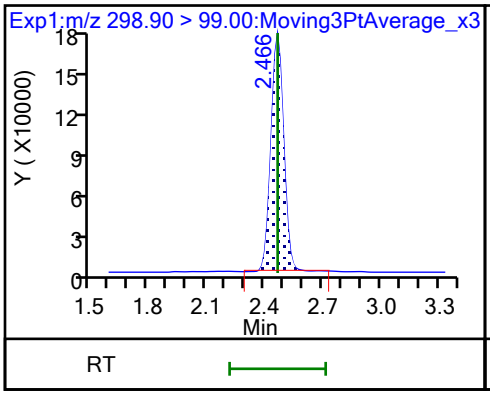
D 47 13C3 PFBS



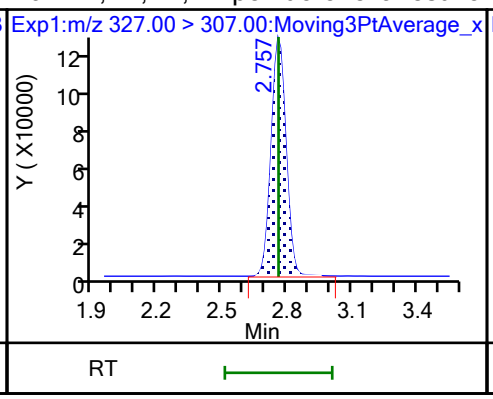
5 Perfluorobutanesulfonic acid



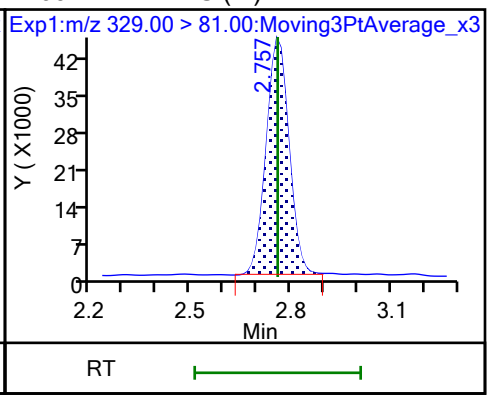
5 Perfluorobutanesulfonic acid



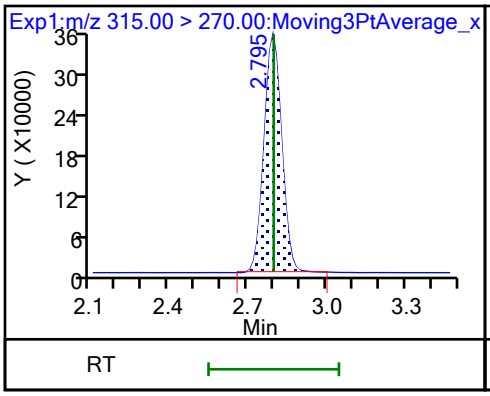
61 1H,1H,2H,2H-perfluorohexanesulfo



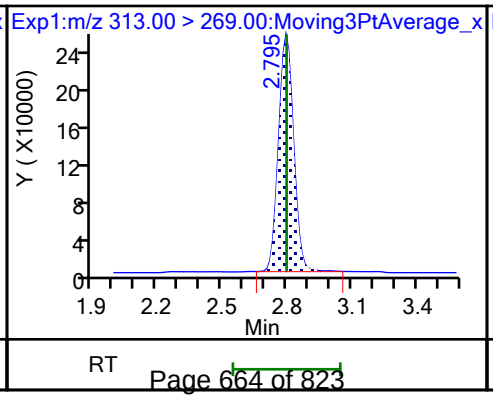
D 60 M2-4:2 FTS (M)



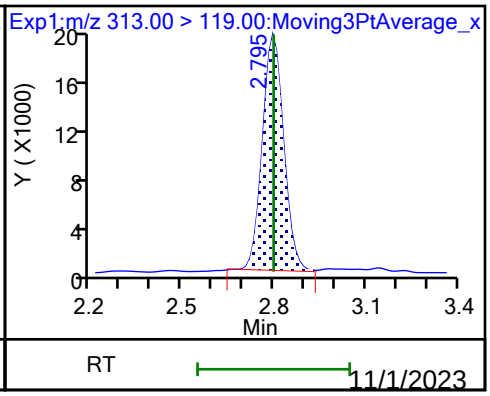
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

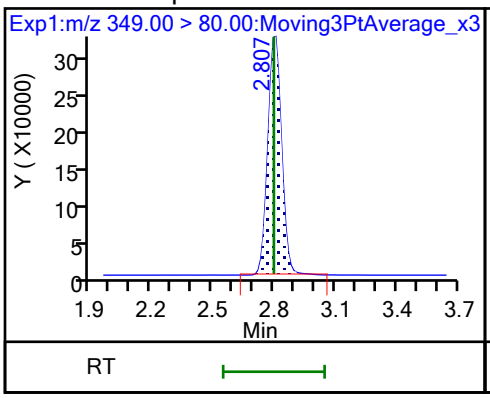


6 Perfluorohexanoic acid

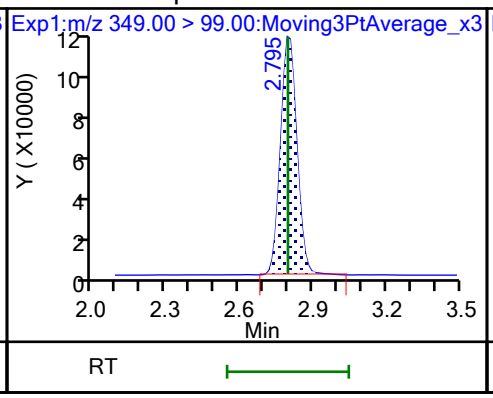


11/1/2023
12:01 PM

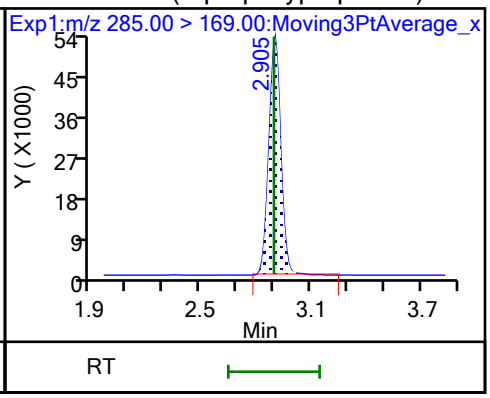
70 Perfluoropentanesulfonic acid



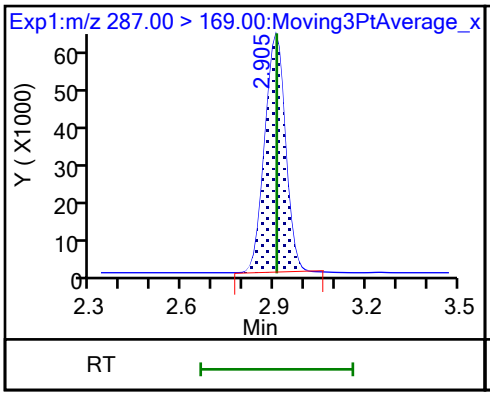
70 Perfluoropentanesulfonic acid



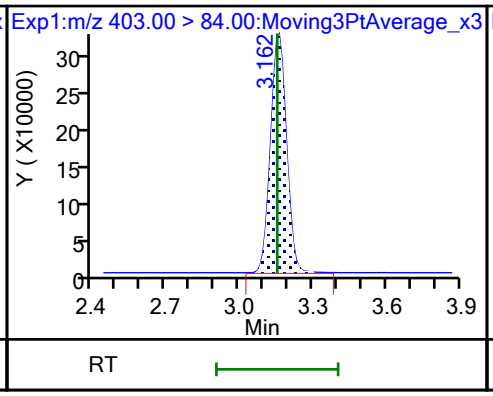
67 Perfluoro(2-propoxypropanoic) ac



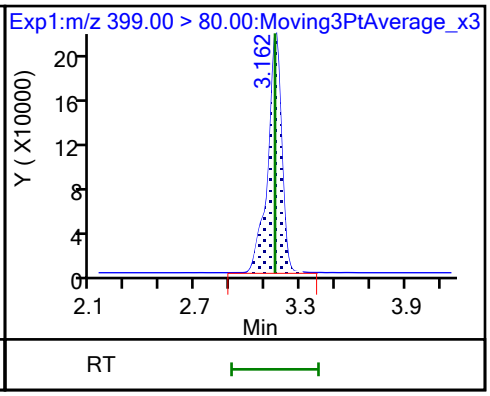
D 64 13C3 HFPO-DA



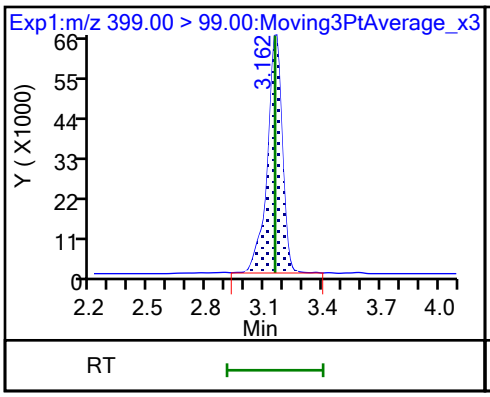
D 11 18O2 PFHxS



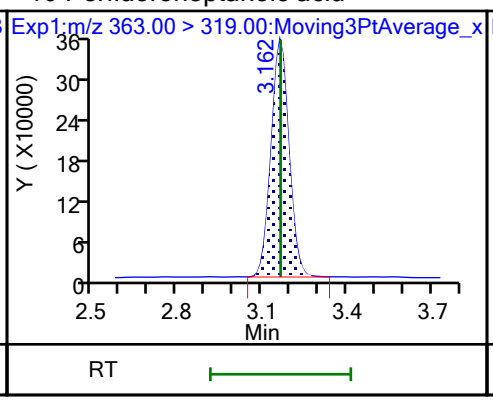
8 Perfluorohexanesulfonic acid



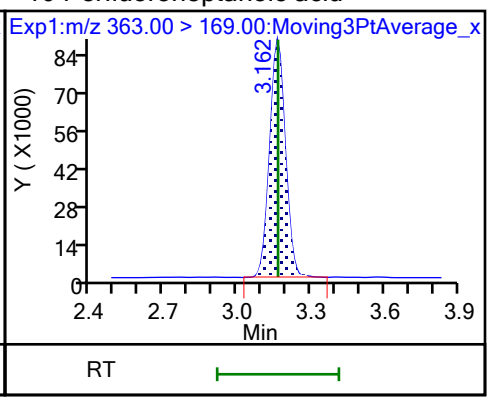
8 Perfluorohexanesulfonic acid



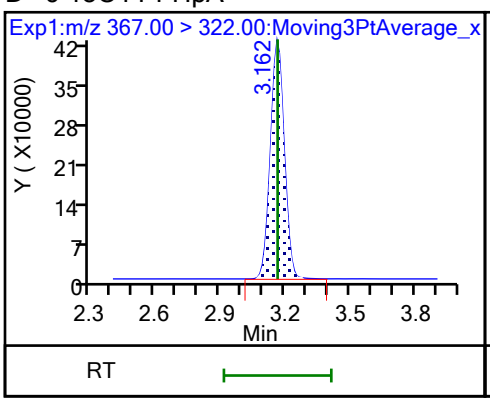
10 Perfluoroheptanoic acid



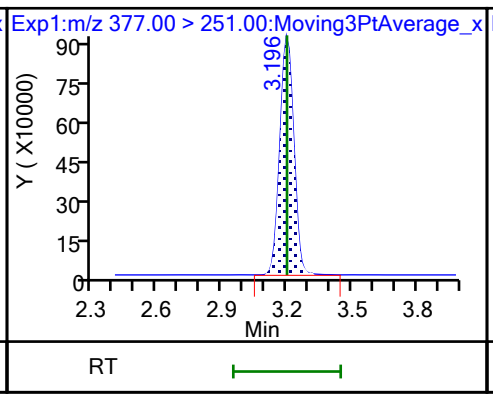
10 Perfluoroheptanoic acid



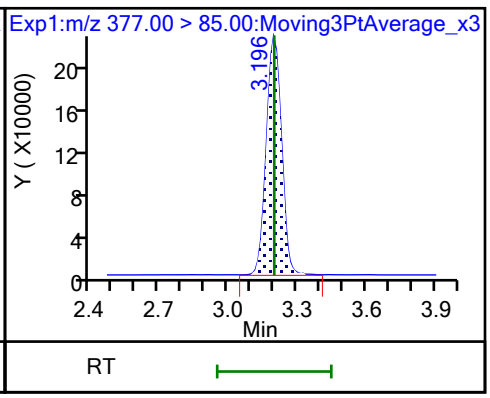
D 9 13C4 PFHpA



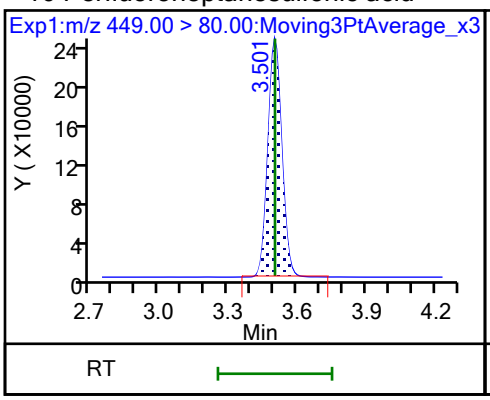
77 DONA



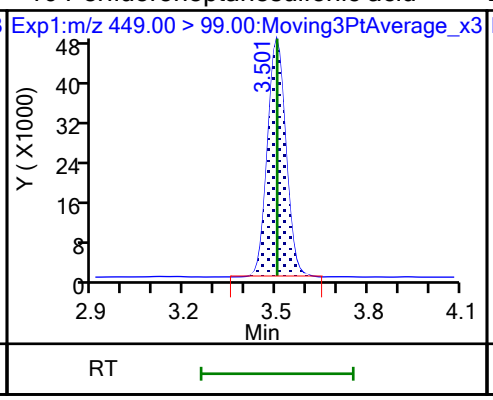
77 DONA



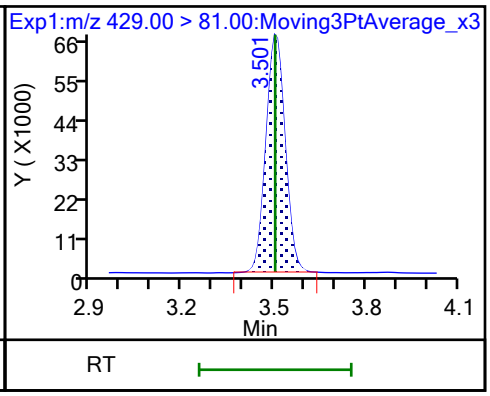
16 Perfluoroheptanesulfonic acid



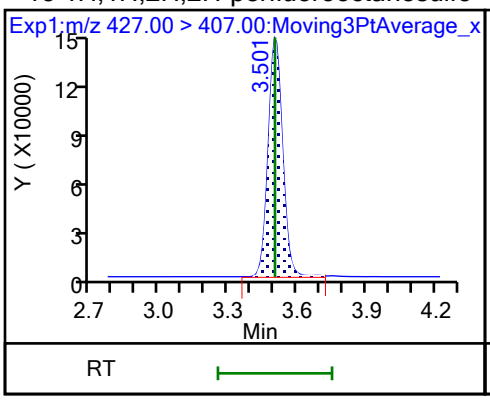
16 Perfluoroheptanesulfonic acid



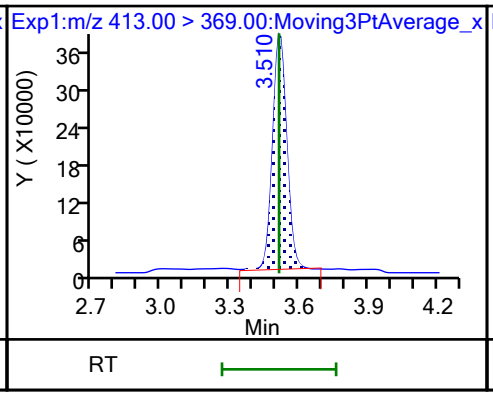
D 12 M2-6:2 FTS



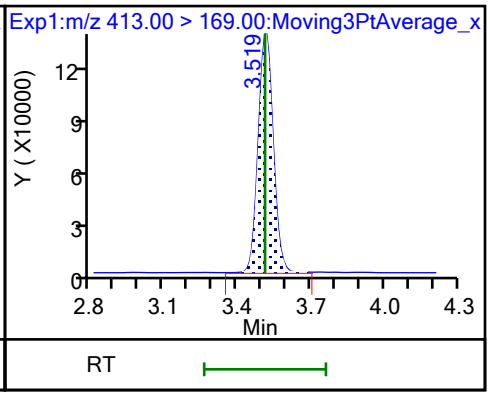
13 1H,1H,2H,2H-perfluorooctanesulfo



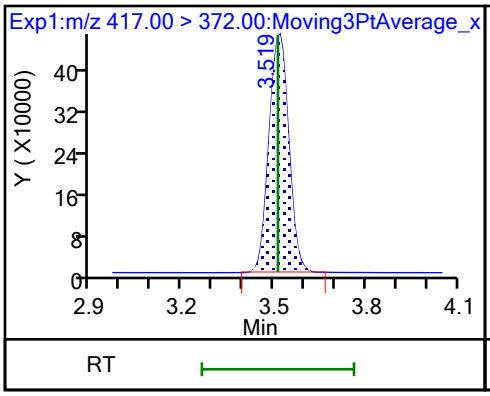
15 Perfluorooctanoic acid



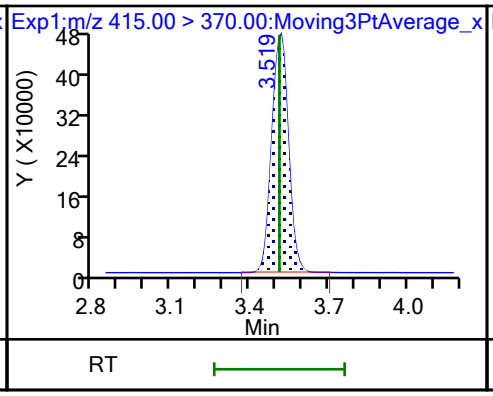
15 Perfluorooctanoic acid



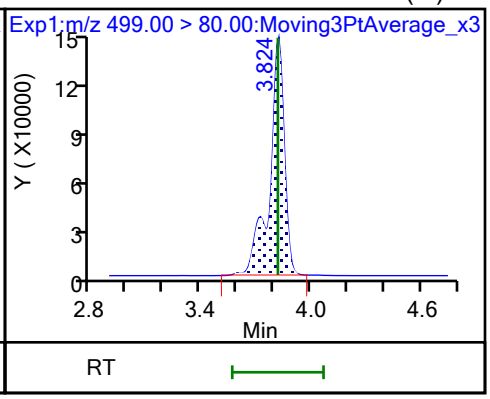
D 14 13C4 PFOA



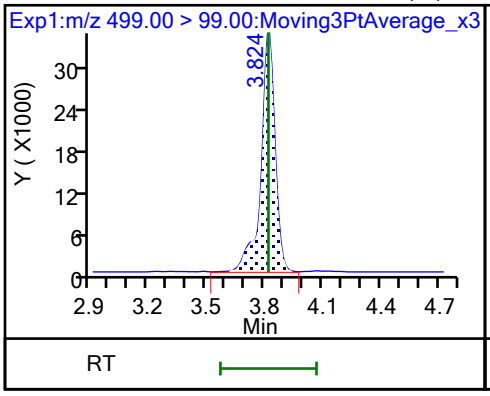
* 62 13C2 PFOA



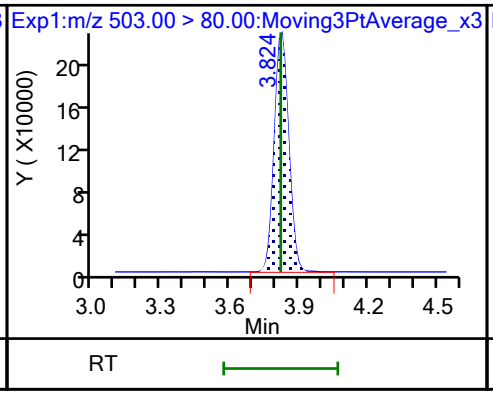
17 Perfluorooctanesulfonic acid (M)



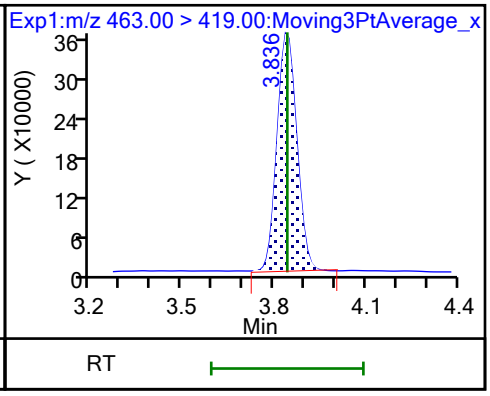
17 Perfluorooctanesulfonic acid (M)



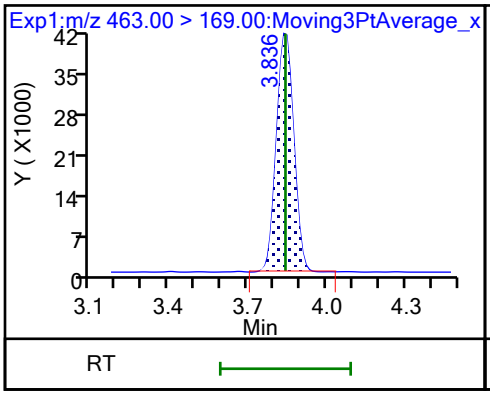
D 18 13C4 PFOS



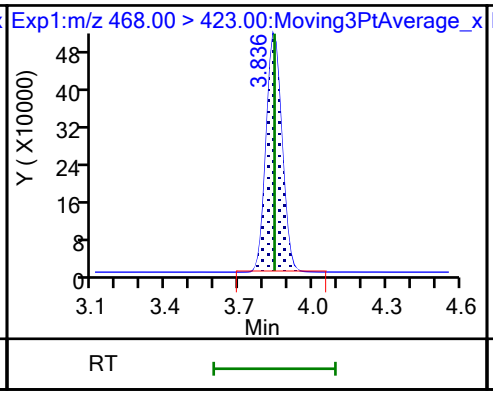
20 Perfluorononanoic acid



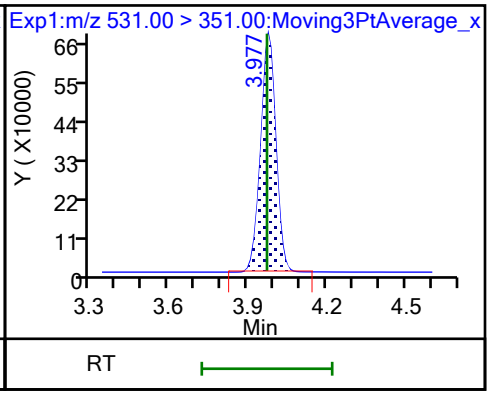
20 Perfluorononanoic acid



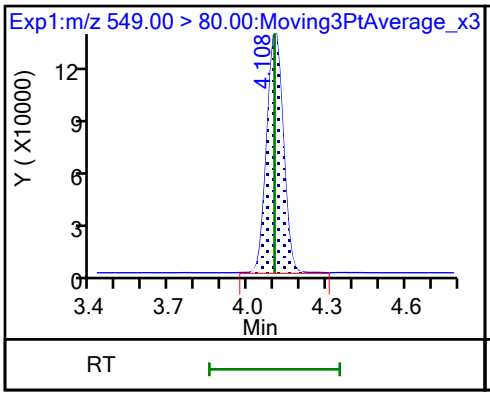
D 19 13C5 PFNA



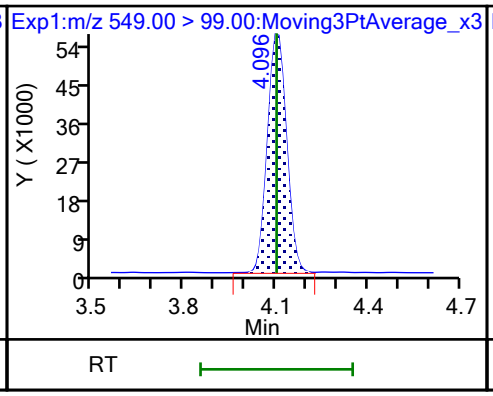
69 9-Chlorohexadecafluoro-3-oxanona



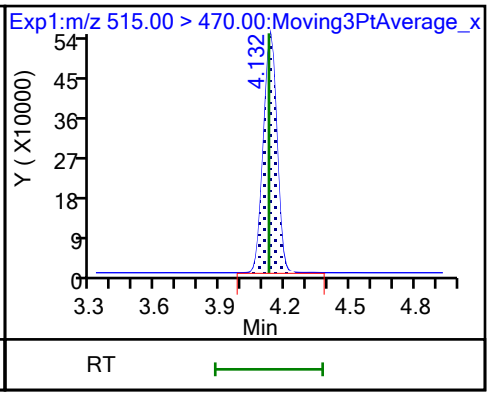
68 Perfluorononanesulfonic acid



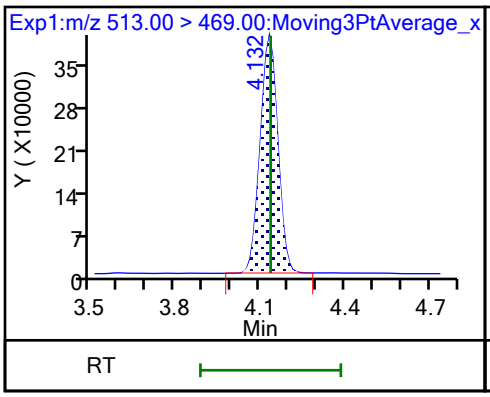
68 Perfluorononanesulfonic acid



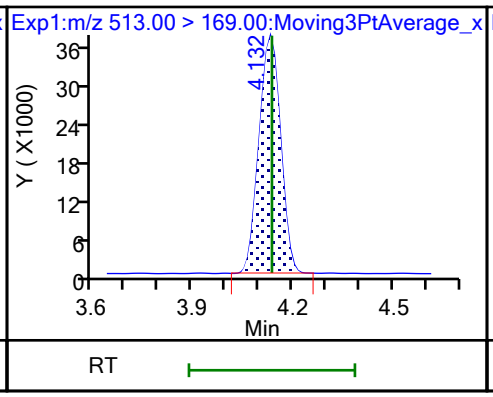
D 23 13C2 PFDA



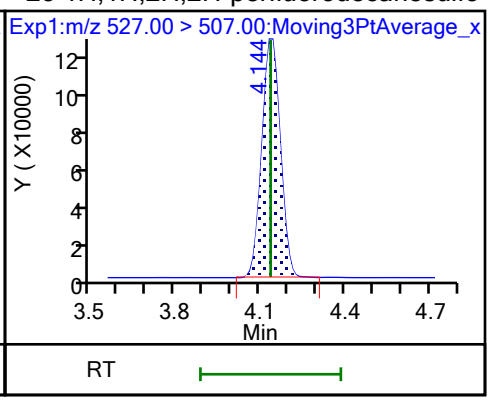
24 Perfluorodecanoic acid



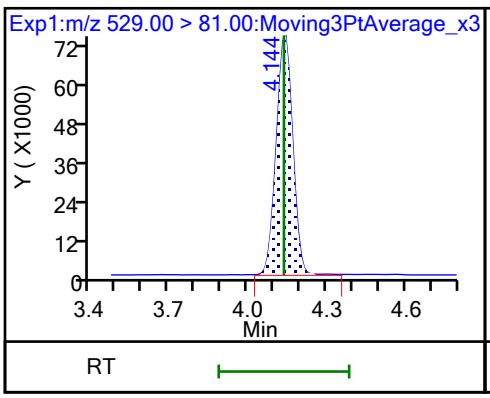
24 Perfluorodecanoic acid



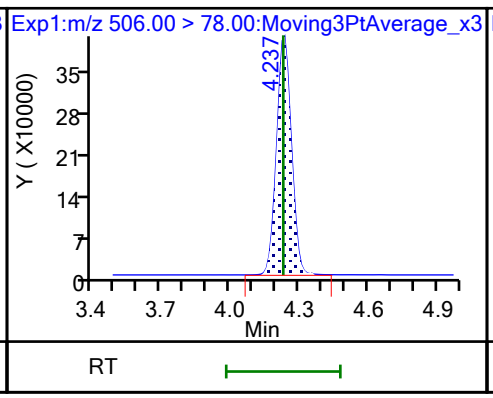
25 1H,1H,2H,2H-perfluorodecanesulfo



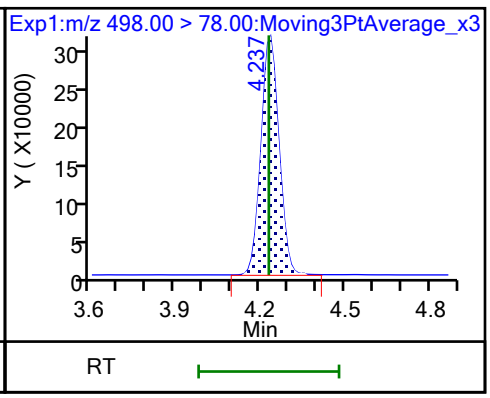
D 26 M2-8:2 FTS



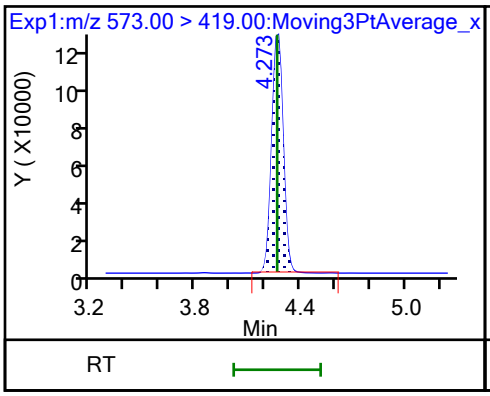
D 21 13C8 FOSA



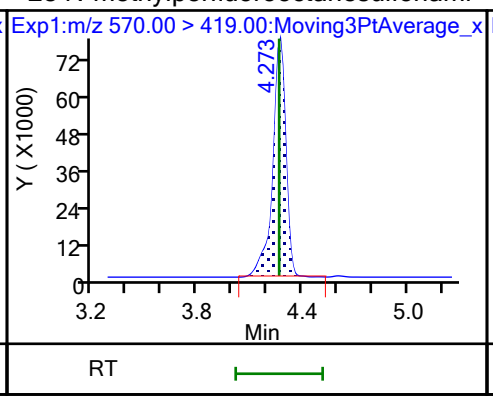
22 Perfluorooctanesulfonamide



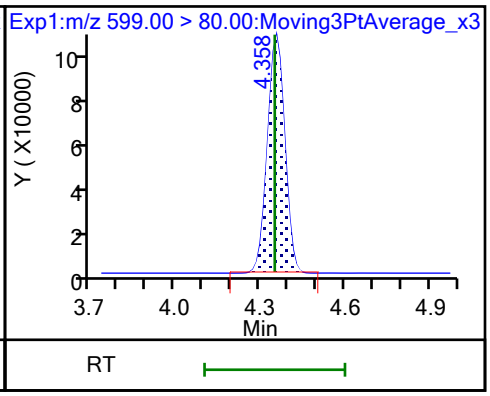
D 27 d3-NMeFOSAA



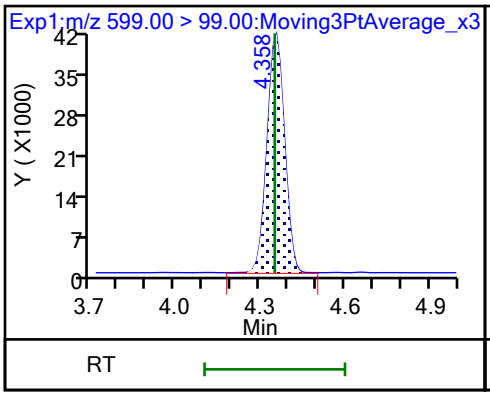
28 N-methylperfluorooctanesulfonami



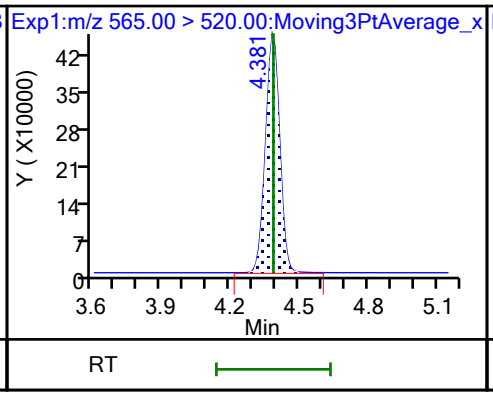
29 Perfluorodecanesulfonic acid



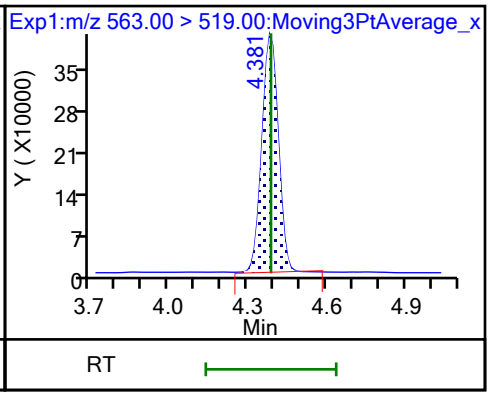
29 Perfluorodecanesulfonic acid



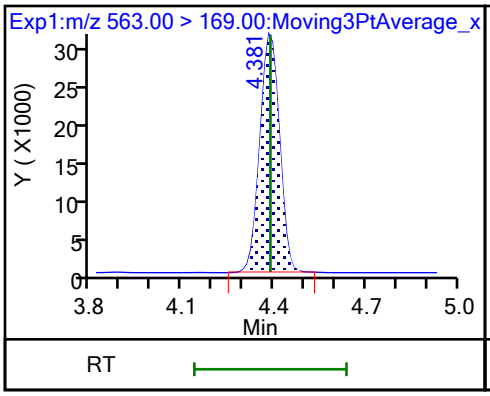
D 30 13C2 PFUnA



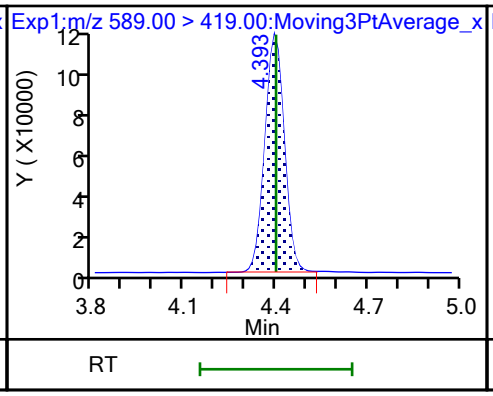
31 Perfluoroundecanoic acid



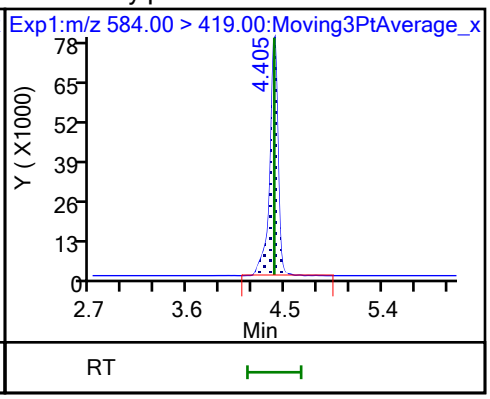
31 Perfluoroundecanoic acid



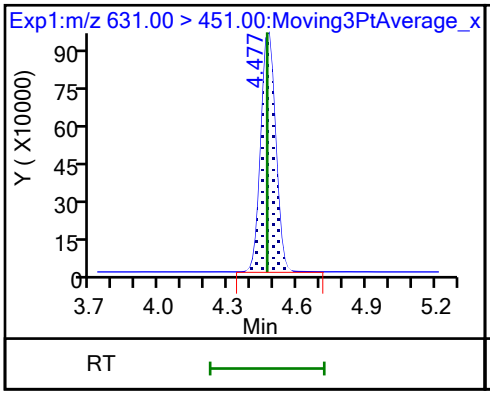
D 32 d5-NEtFOSAA



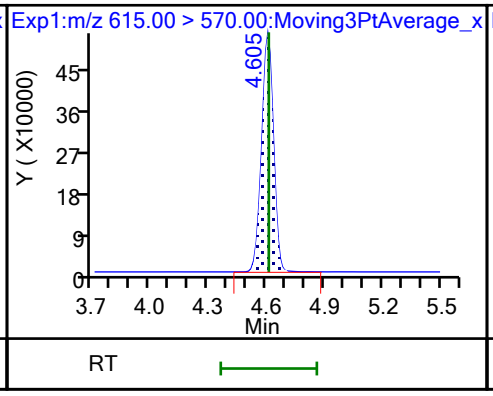
33 N-ethylperfluorooctanesulfonamid



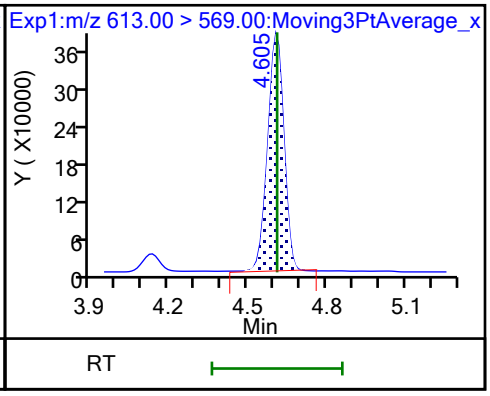
66 11-Chloroeicosafluoro-3-oxaundec



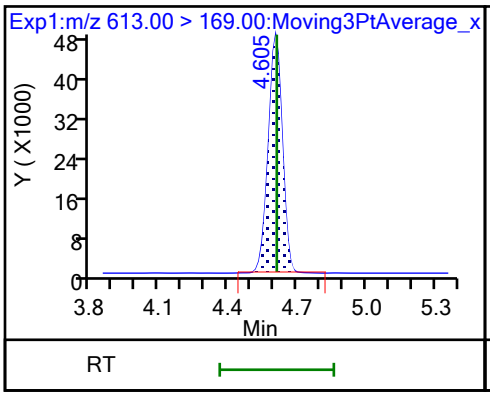
D 36 13C2 PFDoA



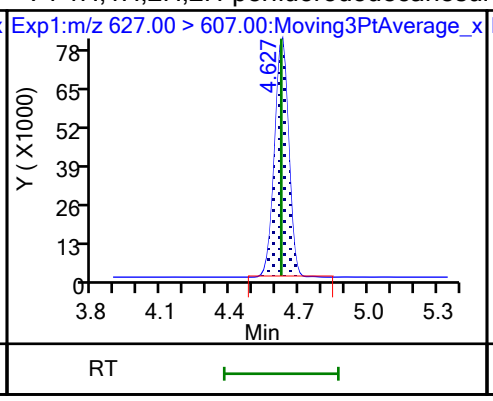
37 Perfluorododecanoic acid



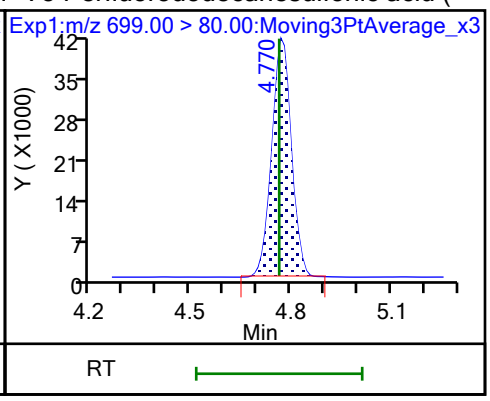
37 Perfluorododecanoic acid



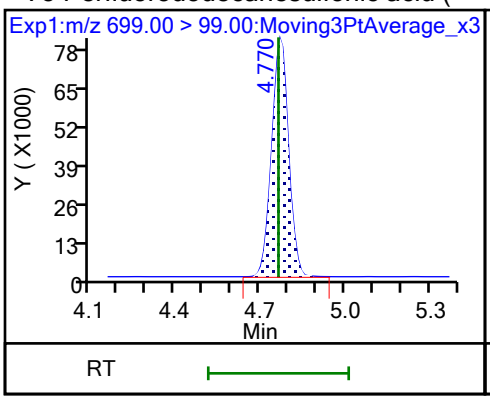
74 1H,1H,2H,2H-perfluorododecanesul



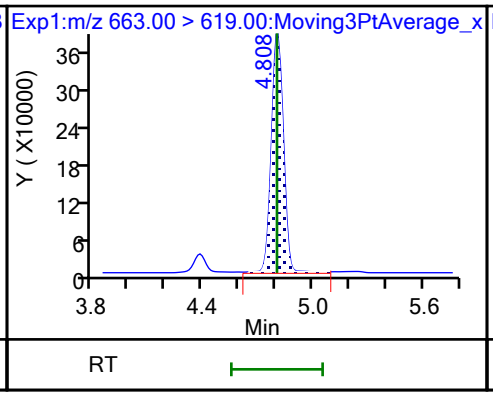
75 Perfluorododecanesulfonic acid (



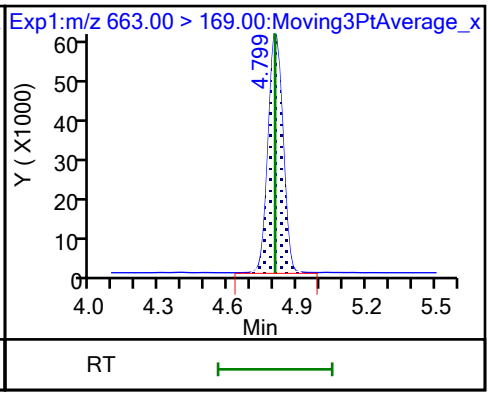
75 Perfluorododecanesulfonic acid (



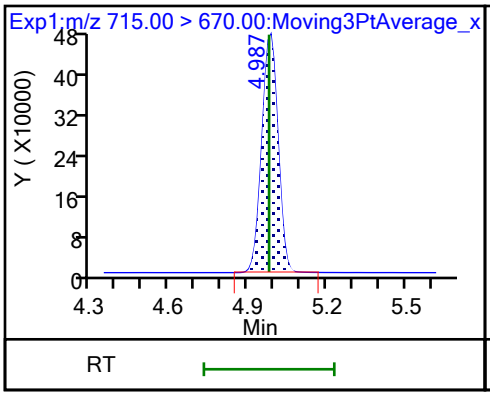
41 Perfluorotridecanoic acid



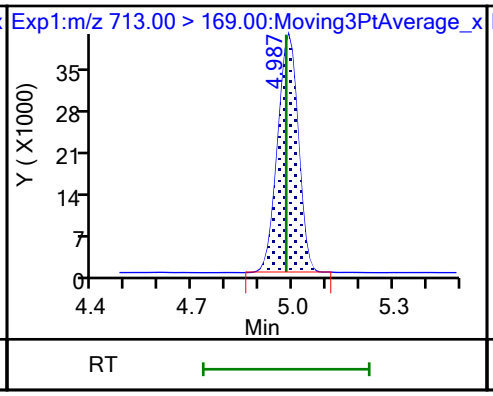
41 Perfluorotridecanoic acid



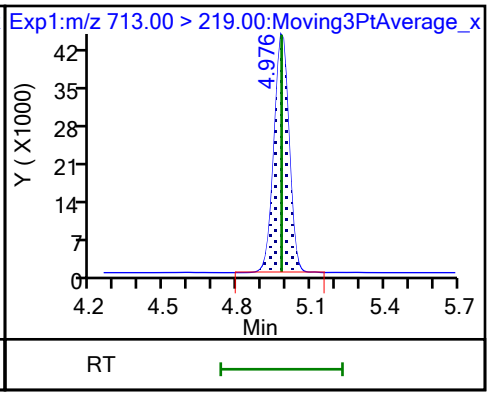
D 43 13C2 PFTeDA



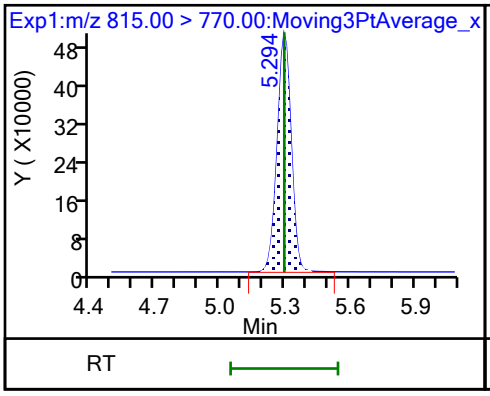
42 Perfluorotetradecanoic acid



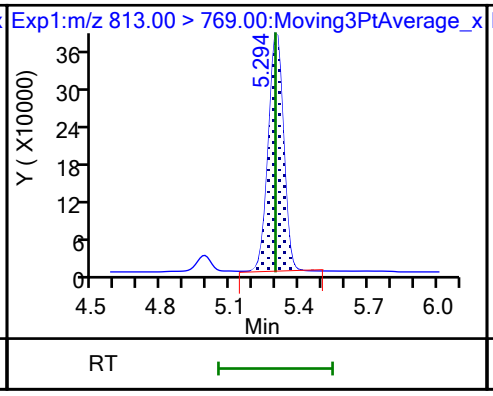
42 Perfluorotetradecanoic acid



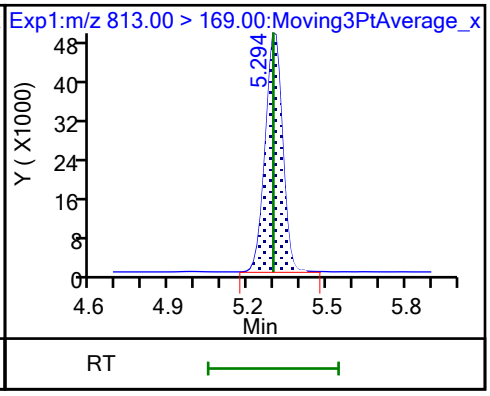
D 44 13C2 PFHxDA



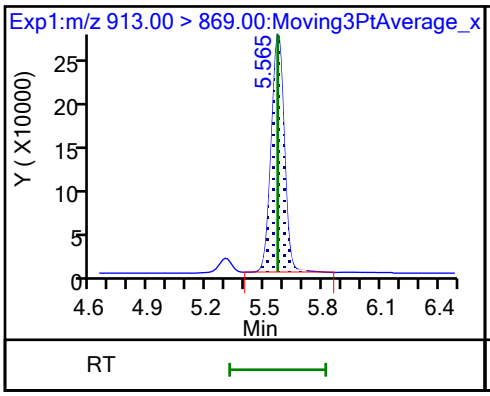
45 Perfluorohexadecanoic acid



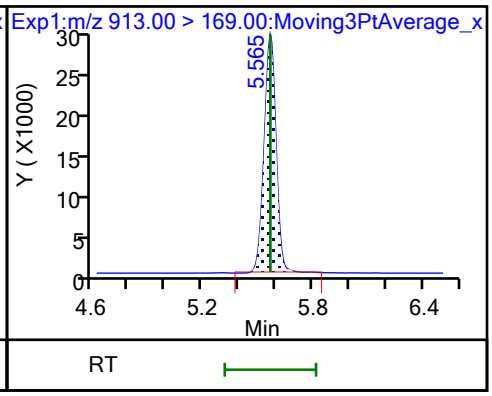
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9180		2.50	2.50	-0.1	30.0
Perfluoropentanoic acid	AveID	1.079	1.022		2.37	2.50	-5.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.115		2.21	2.22	-0.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.588		2.48	2.34	5.7	
Perfluorohexanoic acid	AveID	1.100	1.062		2.41	2.50	-3.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.373		2.47	2.35	5.2	
HFPODA	AveID	1.001	0.9607		2.40	2.50	-4.0	
Perfluoroheptanoic acid	AveID	1.121	1.152		2.57	2.50	2.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.066		2.20	2.29	-3.7	
DONA	AveID	5.754	5.627		2.31	2.36	-2.2	
Perfluoroheptanesulfonic acid	AveID	1.445	1.405		2.32	2.38	-2.8	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.771		2.41	2.38	1.4	
Perfluorooctanoic acid	AveID	1.065	1.066		2.50	2.50	0.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.087		2.16	2.32	-6.8	
Perfluorononanoic acid	AveID	0.9800	0.9588		2.45	2.50	-2.2	
9Cl-PF3ONS	AveID	3.569	3.904		2.55	2.33	9.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.8067		2.19	2.41	-9.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.361		2.57	2.40	7.3	
Perfluorodecanoic acid	AveID	0.999	0.9706		2.43	2.50	-2.9	
Perfluorooctanesulfonamide	AveID	0.9539	1.008		2.64	2.50	5.6	
NMeFOSAA	AveID	0.9074	0.9166		2.53	2.50	1.0	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6186		2.19	2.41	-9.4	
Perfluoroundecanoic acid	AveID	1.031	0.9238		2.24	2.50	-10.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9481		2.37	2.50	-5.2	
11Cl-PF3OUdS	AveID	5.474	5.645		2.43	2.36	3.1	
Perfluorododecanoic acid	AveID	1.018	0.9330		2.29	2.50	-8.3	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.544		2.83	2.41	17.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2174		2.27	2.42	-6.1	
Perfluorotridecanoic acid	AveID	1.070	1.012		2.37	2.50	-5.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1031		2.31	2.50	-7.8	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.001		2.50	2.50	0.0	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7527		2.41	2.50	-3.6	
13C4 PFBA	Ave	0.9917	1.058		1.33	1.25	6.7	
13C5 PFPeA	Ave	0.7696	0.7716		1.25	1.25	0.3	
13C3 PFBS	Ave	1.041	1.001		1.12	1.16	-3.9	
M2-4:2 FTS	Ave	0.1204	0.1055		1.02	1.17	-12.4	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196839/13 Calibration Date: 10/27/2023 11:46

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231026E13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7452		1.19	1.25	-4.8	
13C3 HFPO-DA	Ave	0.1516	0.1399		1.15	1.25	-7.7	
13C4 PFHpA	Ave	0.8590	0.8240		1.20	1.25	-4.1	50.0
18O2 PFHxS	Ave	0.7464	0.7087		1.12	1.18	-5.0	50.0
M2-6:2 FTS	Ave	0.1551	0.1421		1.09	1.19	-8.4	
13C4 PFOA	Ave	0.9731	0.9798		1.26	1.25	0.7	50.0
13C4 PFOS	Ave	0.4742	0.4644		1.17	1.20	-2.1	50.0
13C5 PFNA	Ave	1.059	1.004		1.19	1.25	-5.2	50.0
13C2 PFDA	Ave	1.109	1.085		1.22	1.25	-2.1	
M2-8:2 FTS	Ave	0.1744	0.1477		1.01	1.20	-15.3	
13C8 FOSA	Ave	0.9462	0.8497		1.12	1.25	-10.2	
d3-NMeFOSAA	Ave	0.2650	0.2600		1.23	1.25	-1.9	
13C2 PFUnA	Ave	1.047	1.027		1.23	1.25	-1.9	
d5-NEtFOSAA	Ave	0.2552	0.2514		1.23	1.25	-1.5	
13C2 PFDoA	Ave	1.064	1.053		1.24	1.25	-1.0	
13C2 PFTeDA	Ave	1.059	1.007		1.19	1.25	-4.9	
13C2 PFHxDA	Ave	1.221	1.056		1.08	1.25	-13.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 27-Oct-2023 11:46:16 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057578-013 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:43:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 15:48:18
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.131	-0.001	0.605	2189160	1.33		107	5990	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.131	-0.001	1.000	4019437	2.50		99.9	301	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1596766	1.25		100	2032	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.439	0.014	1.006	3263790	2.37		94.7	90.0	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.701	1926203	1.12		96.1	190461	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	4097122	2.21	Target=2.06	99.8	5762	
298.90 > 99.00	2.466	2.467	-0.001	1.000	2023548		2.02(1.03-3.09)		953	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	1468199	2.47		106	5376	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.784	203959	1.02		87.6	141	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.794	1542134	1.19		95.2	11380	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	3274160	2.41	Target=14.12	96.5	614	
313.00 > 119.00	2.797	2.797	0.0	1.000	237941		13.76(7.06-21.17)		342	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.797	0.013	0.887	3790920	2.47	Target=2.72	105	8468	
349.00 > 99.00	2.810	2.797	0.013	0.887	1268036		2.99(1.36-4.09)		1348	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.897	0.011	1.000	556302	2.40		96.0	2991	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	289539	1.15		92.3	2667	
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.153	0.013	0.899	1387573	1.12		95.0	5155	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.166	3.153	0.013	1.000	2857763	2.20	Target=3.32	96.3	5666	
399.00 > 99.00	3.154	3.153	0.001	0.996	851433		3.36(1.66-4.98)		742	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.166	3.165	0.001	1.000	3929063	2.57	Target=4.17	103	817	
363.00 > 169.00	3.166	3.165	0.001	1.000	912458		4.31(2.09-6.26)		1680	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.165	0.001	0.899	1705244	1.20		95.9	6645	
77 DONA										
377.00 > 251.00	3.201	3.199	0.002	0.838	10220608	2.31	Target=3.33	97.8	8777	
377.00 > 85.00	3.201	3.199	0.002	0.838	2756017		3.71(1.66-4.99)		3834	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.503	3.502	0.001	0.917	2573479	2.32	Target=4.83	97.2	7904	
449.00 > 99.00	3.503	3.502	0.001	0.917	513213		5.01(2.41-7.24)		1555	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.502	0.010	0.997	279380	1.09		91.6	507	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.512	3.502	0.010	1.000	1550097	2.41		101	3226	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.521	3.512	0.009	1.000	4323734	2.50	Target=2.88	100	184	
413.00 > 169.00	3.521	3.512	0.009	1.000	1486274		2.91(1.44-4.32)		2633	
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.512	0.009	1.000	2027805	1.26		101	13444	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.512	0.009		2069548	1.25			13237	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.819	0.001	1.000	1939107	2.16	Target=4.24	93.2	3362	M
499.00 > 99.00	3.820	3.819	0.001	1.000	428452		4.53(2.12-6.37)		1318	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.819	0.001	1.085	918783	1.17		97.9	3099	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.842	0.001	1.000	3983291	2.45	Target=8.34	97.8	608	
463.00 > 169.00	3.843	3.842	0.001	1.000	476670		8.36(4.17-12.51)		3129	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.842	0.001	1.092	2077322	1.18		94.8	3566	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.971	0.010	1.042	7000977	2.55		109	22006	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.101	0.001	1.074	1491733	2.19	Target=2.17	90.9	8252	
549.00 > 99.00	4.102	4.101	0.001	1.074	604081		2.47(1.08-3.25)		2435	
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.125	0.013	1.175	2245976	1.22		97.9	7309	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.138	4.136	0.002	1.000	4359910	2.43	Target=11.44	97.1	1314	
513.00 > 169.00	4.138	4.136	0.002	1.000	400157		10.90(5.72-17.16)		1531	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.136	0.002	1.000	1385409	2.57		107	5715	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.136	0.002	1.175	292765	1.01		84.7	726	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.230	0.002	1.202	1758541	1.12		89.8	12188	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.230	0.002	1.000	3543658	2.64		106	8138	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.267	4.266	0.001	1.212	537988	1.23		98.1	2700	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.280	4.266	0.014	1.003	986205	2.53		101	1987	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.351	0.013	1.142	1147393	2.19	Target=2.37	90.6	5892	
599.00 > 99.00	4.364	4.351	0.013	1.142	444525		2.58(1.19-3.56)		3966	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.246	2124874	1.23		98.1	12021	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.387	0.0	1.000	3925723	2.24	Target=12.20	89.6	834	
563.00 > 169.00	4.387	4.387	0.0	1.000	343879		11.42(6.10-18.31)		3941	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	0.0	1.249	520343	1.23		98.5	1239	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.399	4.399	0.0	1.000	986631	2.37		94.8	5937	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.468	0.001	1.170	10232851	2.43		103	10191	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.610	0.001	1.310	2178851	1.24		99.0	8083	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.610	0.001	1.000	4065566	2.29	Target=8.47	91.7	218	
613.00 > 169.00	4.611	4.610	0.001	1.000	480695		8.46(4.23-12.70)		3052	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.621	0.001	1.117	909994	2.83		117	19016	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.764	0.011	1.250	404415	2.27	Target=0.48	93.9	4198	
699.00 > 99.00	4.775	4.764	0.011	1.250	841430		0.48(0.24-0.72)		7046	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.813	4.803	0.010	1.044	4410278	2.37	Target=6.41	94.6	249	
663.00 > 169.00	4.803	4.803	0.0	1.042	671283		6.57(3.21-9.62)		3204	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.417	2084655	1.19		95.1	6359	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.980	0.010	1.000	430026	2.31	Target=0.87	92.2	3778	
713.00 > 219.00	4.980	4.980	0.0	0.998	466930		0.92(0.43-1.30)		5724	

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.296	0.0	1.504	2185654	1.08		86.5	6373	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.307	5.296	0.011	1.002	4374410	2.50	Target=7.89	100	257	
813.00 > 169.00	5.296	5.296	0.0	1.000	549671		7.96(3.94-11.83)		4870	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.576	5.567	0.009	1.053	3290435	2.41	Target=9.39	96.4	293	
913.00 > 169.00	5.567	5.567	0.0	1.051	344054		9.56(4.69-14.08)		1486	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

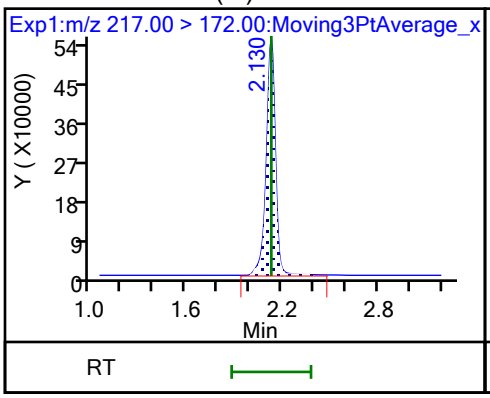
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 27-Oct-2023 18:43:54 Chrom Revision: 2.3 18-Oct-2023 21:16:54

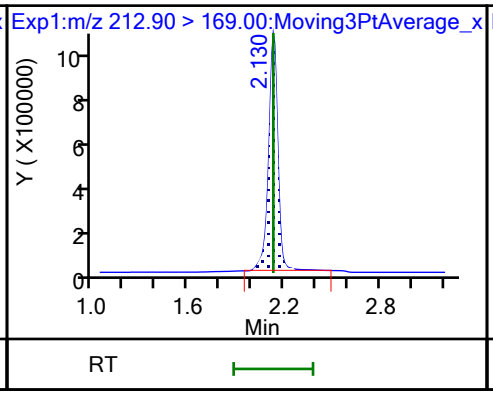
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E13.d
Injection Date: 27-Oct-2023 11:46:16 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

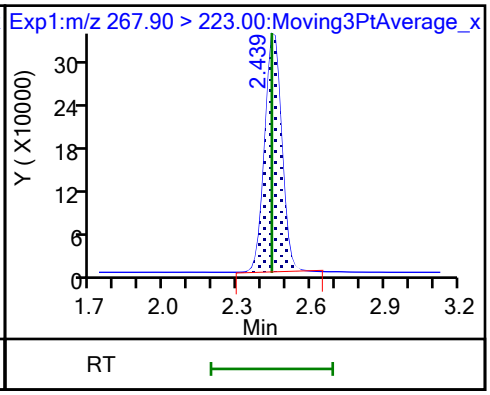
D 1 13C4 PFBA (M)



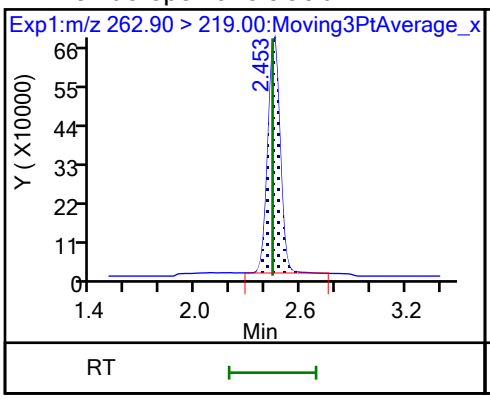
2 Perfluorobutanoic acid



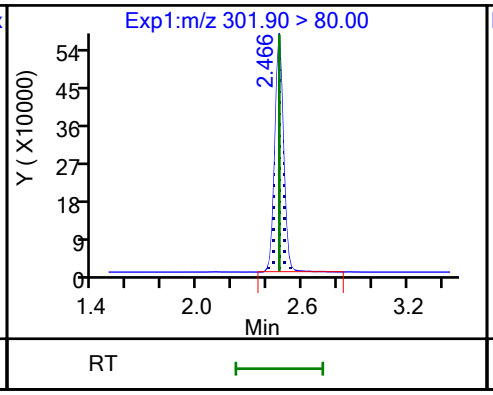
D 3 13C5 PFPeA



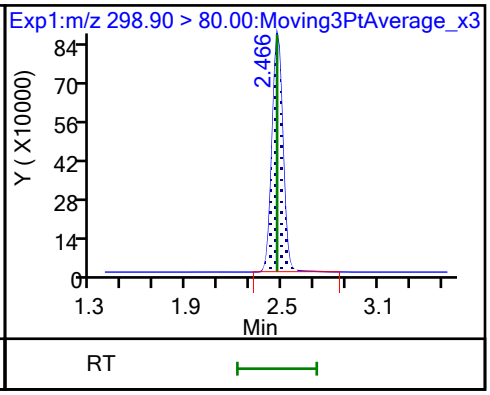
4 Perfluoropentanoic acid



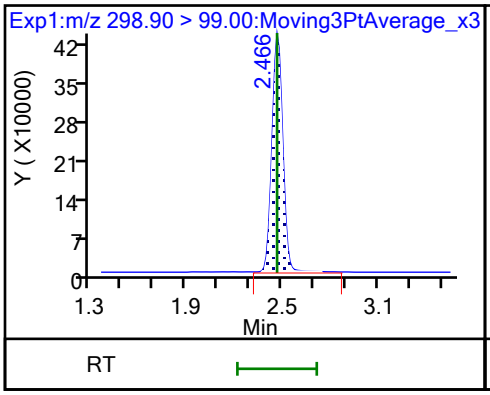
D 47 13C3 PFBS



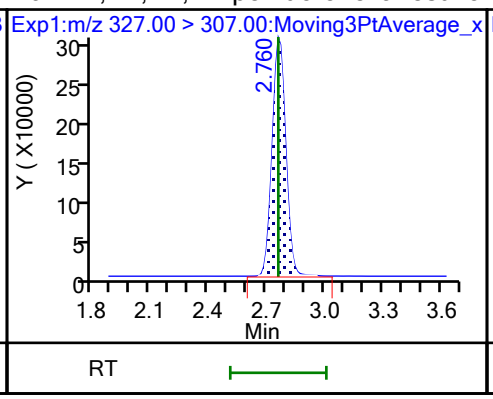
5 Perfluorobutanesulfonic acid



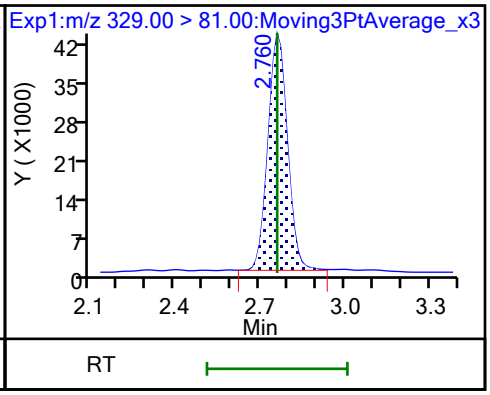
5 Perfluorobutanesulfonic acid



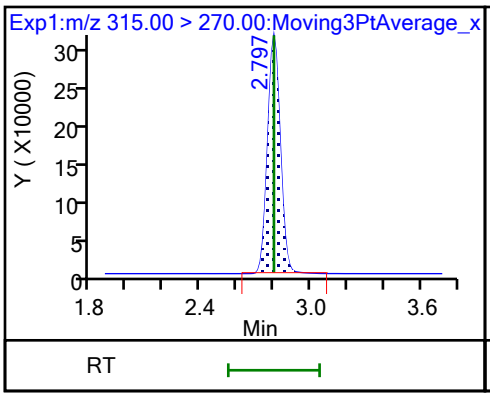
61 1H,1H,2H,2H-perfluorohexanesulfo



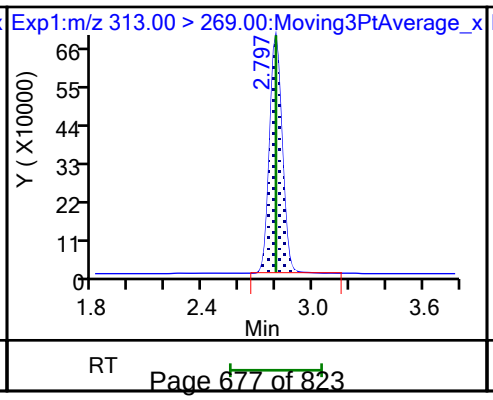
D 60 M2-4:2 FTS



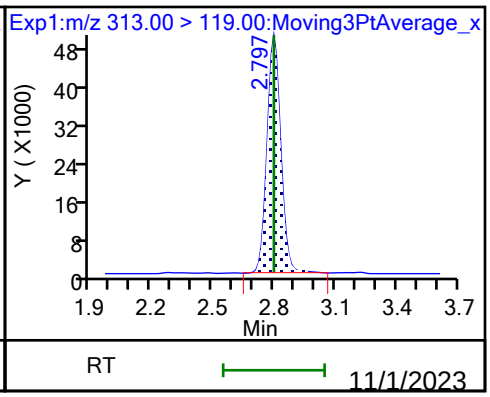
D 7 13C2 PFHxA



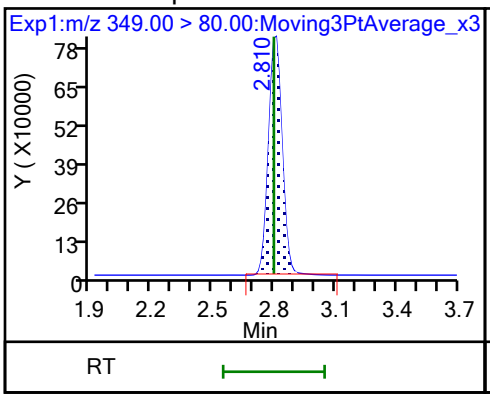
6 Perfluorohexanoic acid



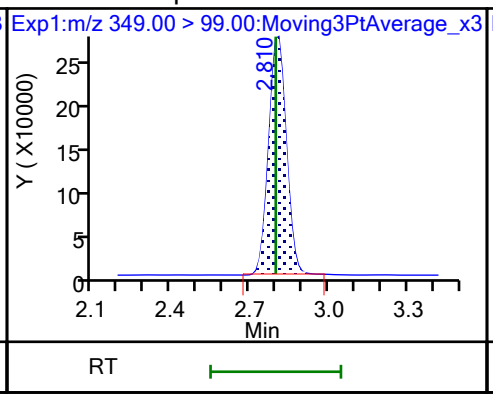
6 Perfluorohexanoic acid



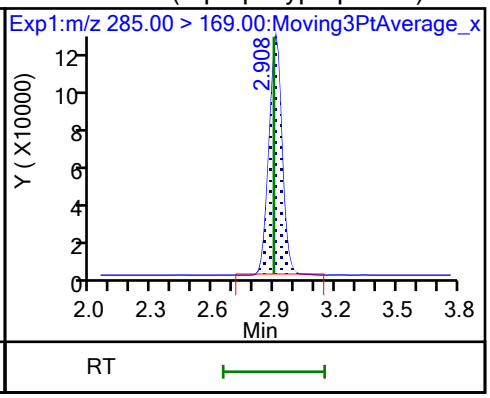
70 Perfluoropentanesulfonic acid



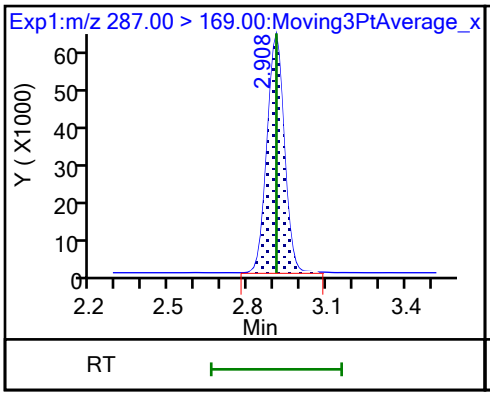
70 Perfluoropentanesulfonic acid



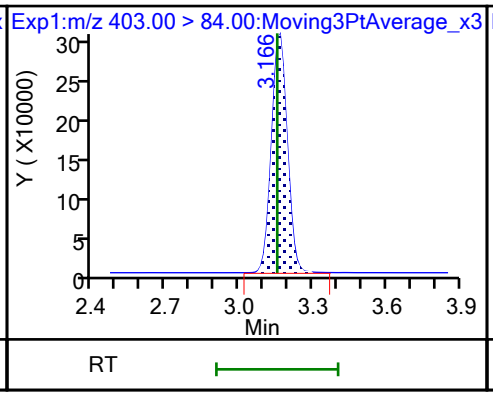
67 Perfluoro(2-propoxypropanoic) ac



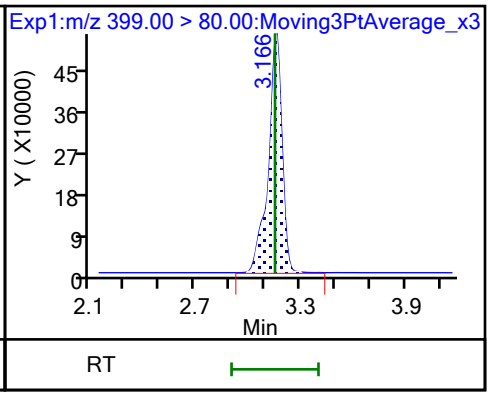
D 64 13C3 HFPO-DA



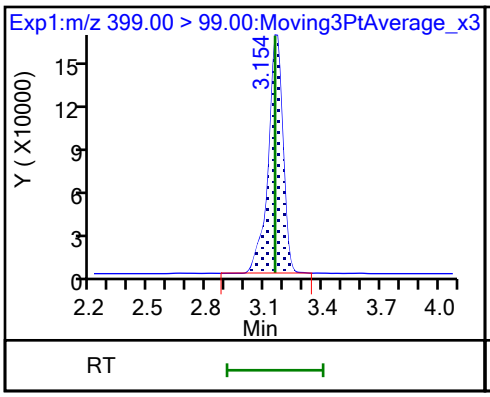
D 11 18O2 PFHxS



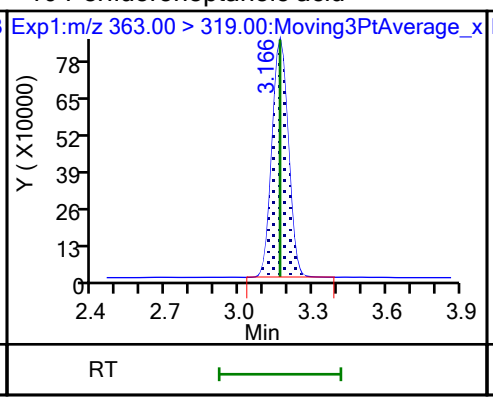
8 Perfluorohexanesulfonic acid



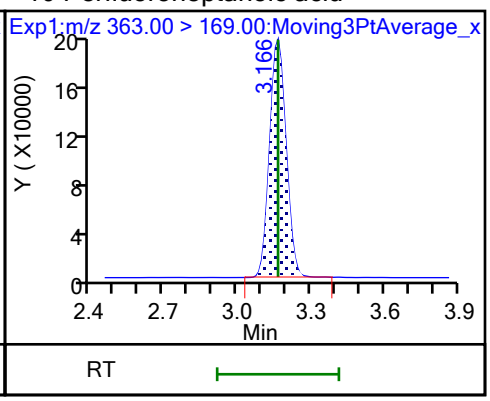
8 Perfluorohexanesulfonic acid



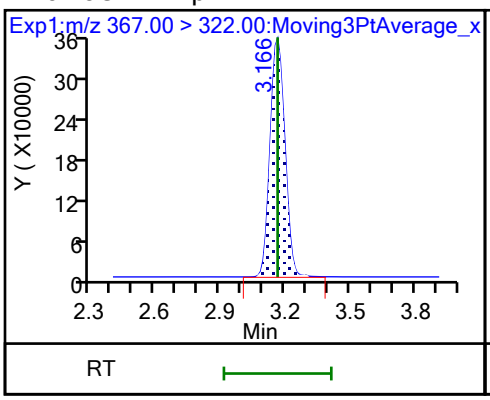
10 Perfluoroheptanoic acid



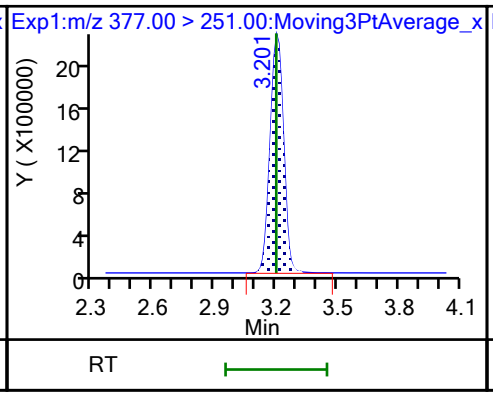
10 Perfluoroheptanoic acid



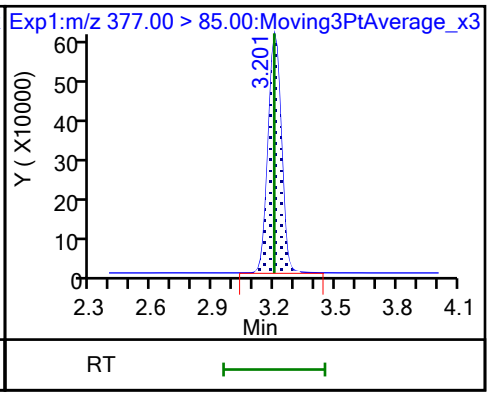
D 9 13C4 PFHpA



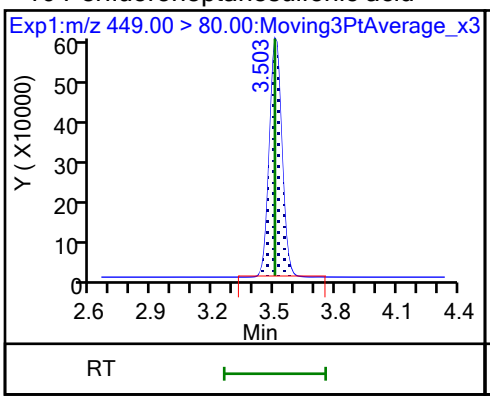
77 DONA



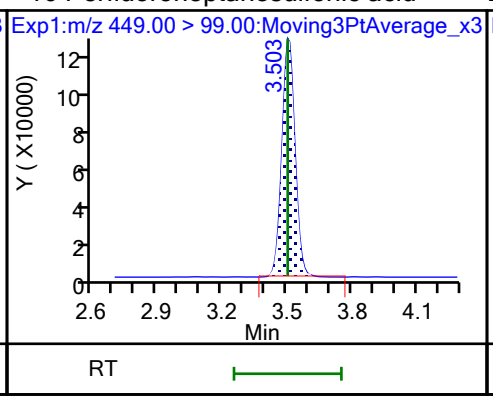
77 DONA



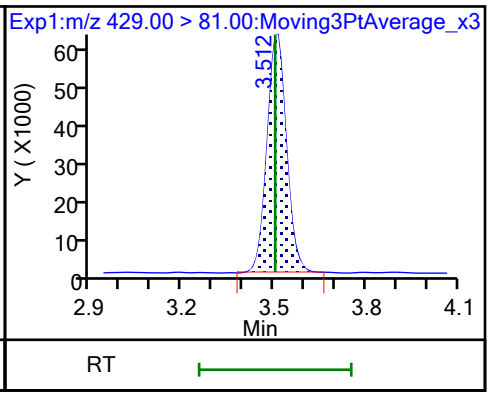
16 Perfluoroheptanesulfonic acid



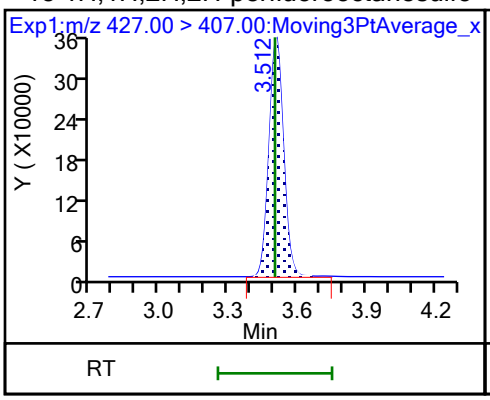
16 Perfluoroheptanesulfonic acid



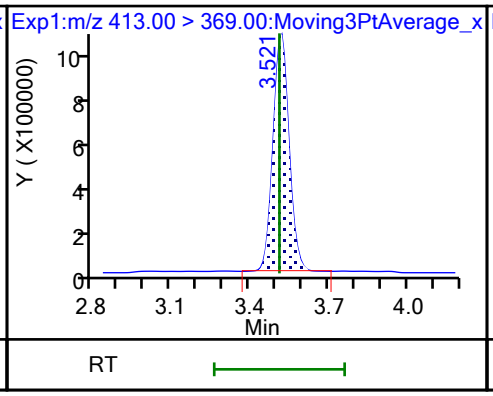
D 12 M2-6:2 FTS



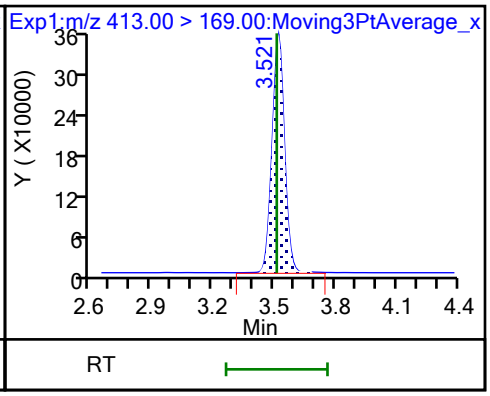
13 1H,1H,2H,2H-perfluorooctanesulfo



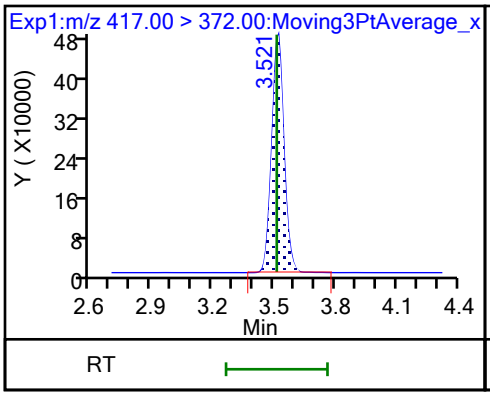
15 Perfluorooctanoic acid



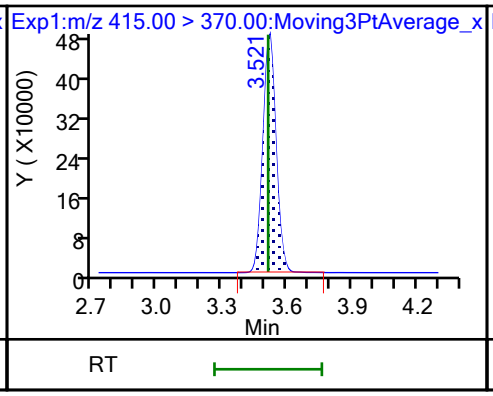
15 Perfluorooctanoic acid



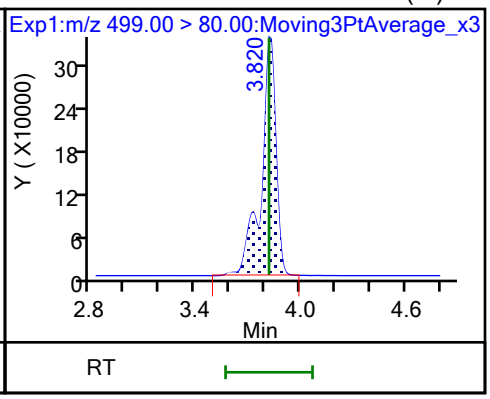
D 14 13C4 PFOA



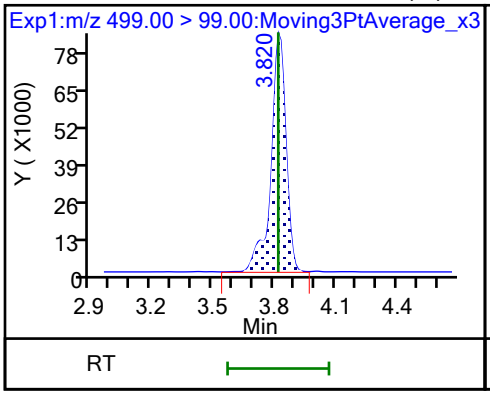
* 62 13C2 PFOA



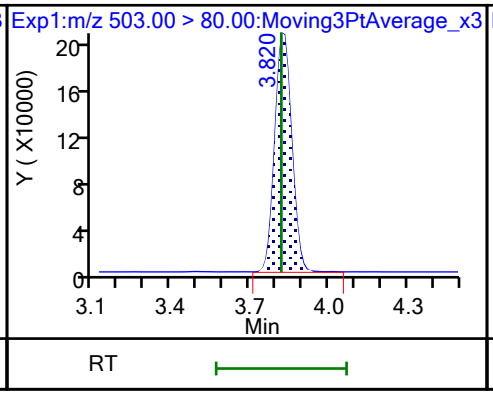
17 Perfluorooctanesulfonic acid (M)



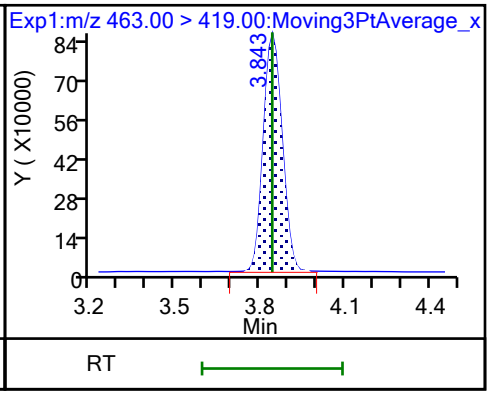
17 Perfluorooctanesulfonic acid (M)



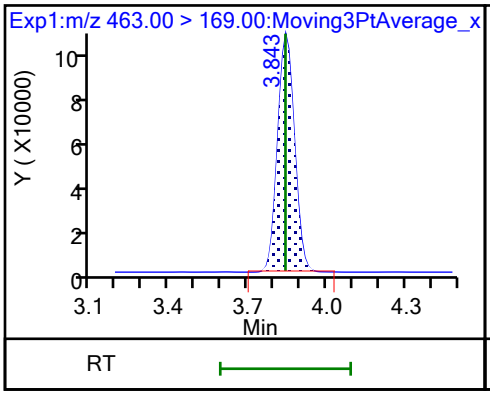
D 18 13C4 PFOS



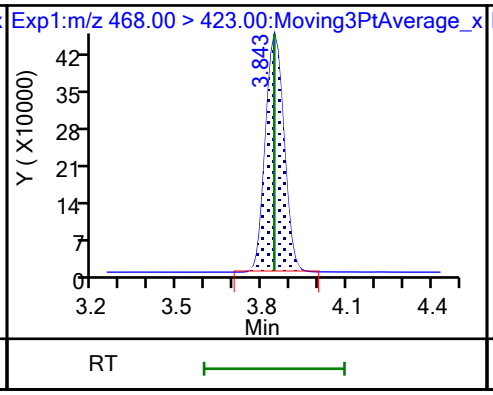
20 Perfluorononanoic acid



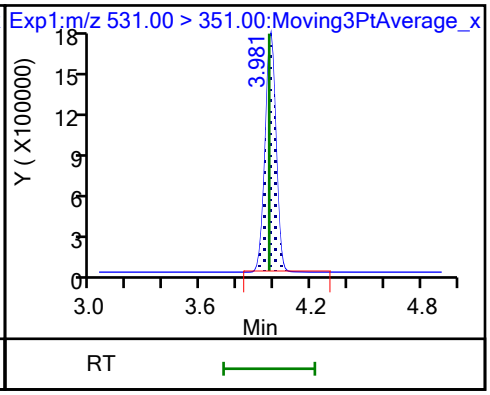
20 Perfluorononanoic acid



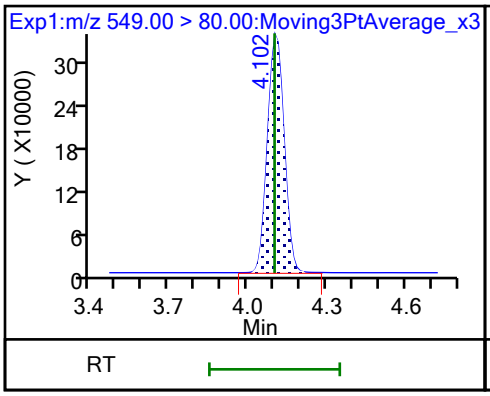
D 19 13C5 PFNA



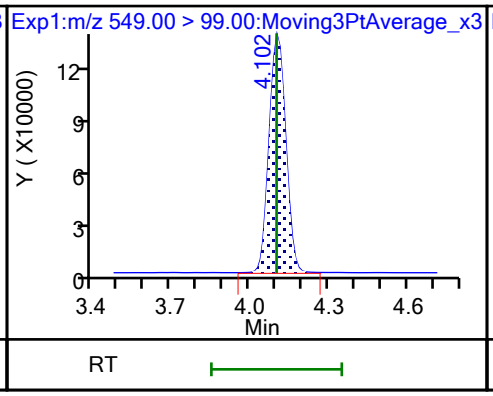
69 9-Chlorohexadecafluoro-3-oxanona



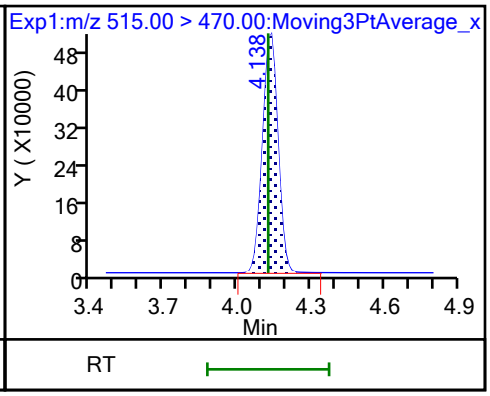
68 Perfluorononanesulfonic acid



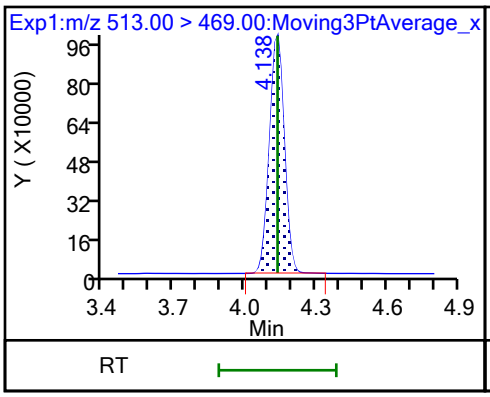
68 Perfluorononanesulfonic acid



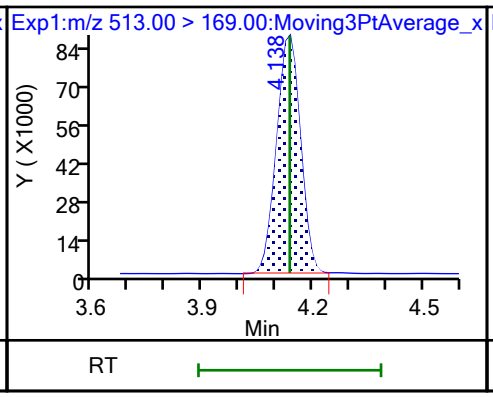
D 23 13C2 PFDA



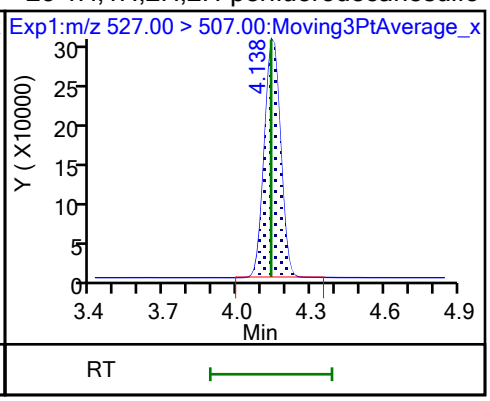
24 Perfluorodecanoic acid



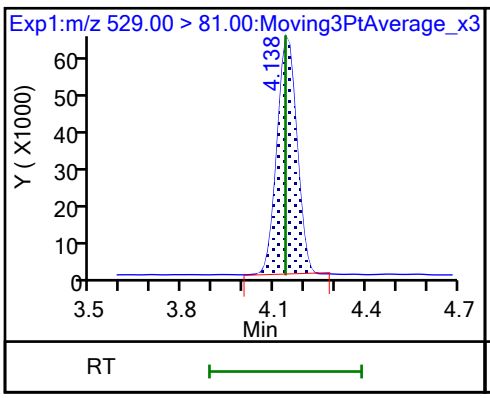
24 Perfluorodecanoic acid



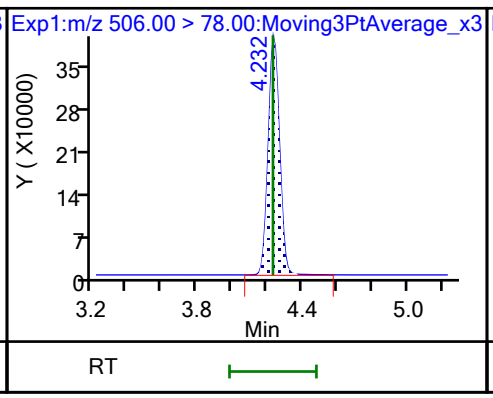
25 1H,1H,2H,2H-perfluorodecanesulfo



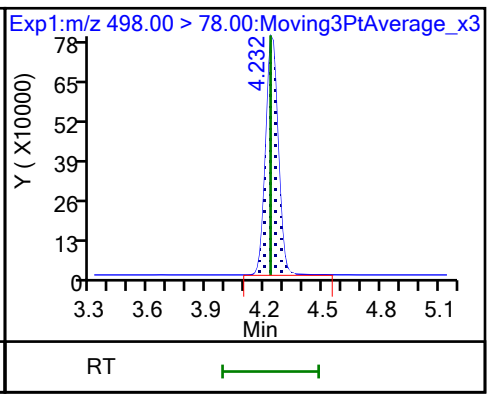
D 26 M2-8:2 FTS



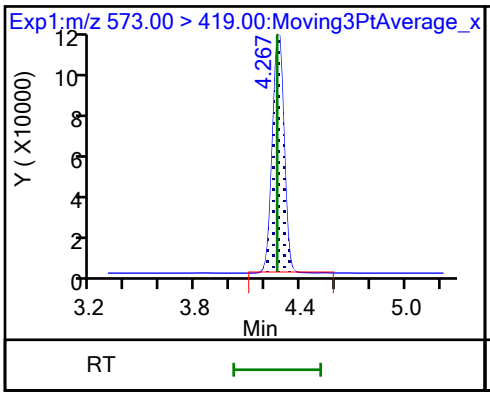
D 21 13C8 FOSA



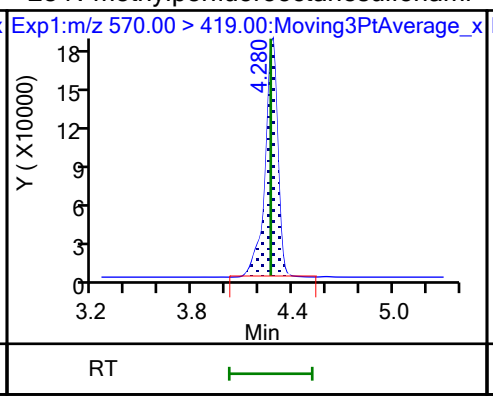
22 Perfluorooctanesulfonamide



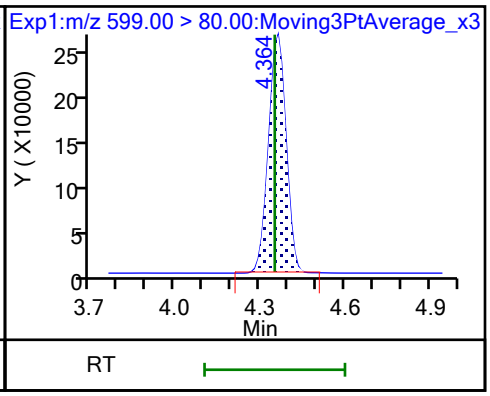
D 27 d3-NMeFOSAA



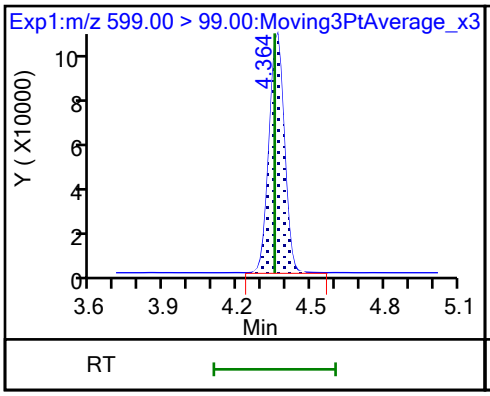
28 N-methylperfluorooctanesulfonami



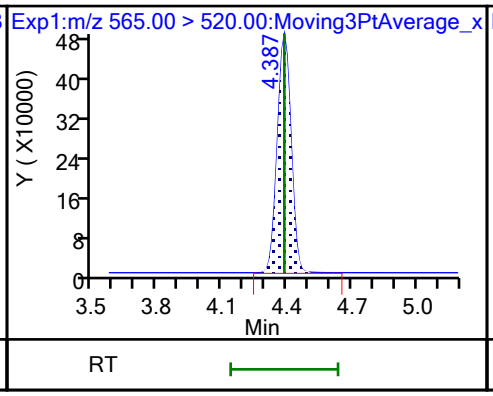
29 Perfluorodecanesulfonic acid



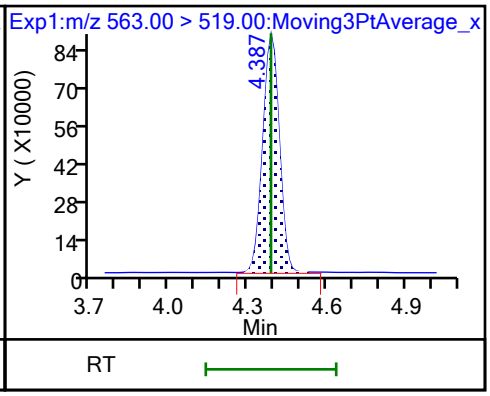
29 Perfluorodecanesulfonic acid



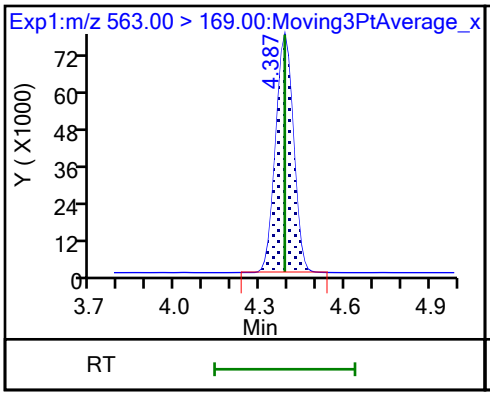
D 30 13C2 PFUnA



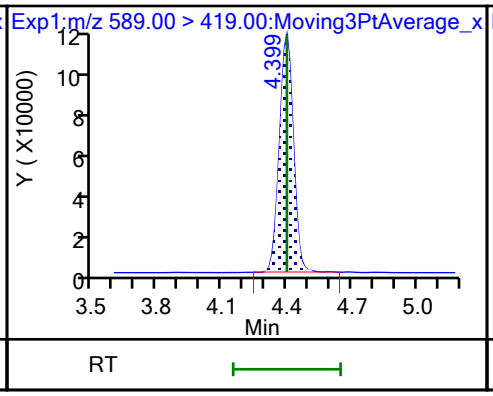
31 Perfluoroundecanoic acid



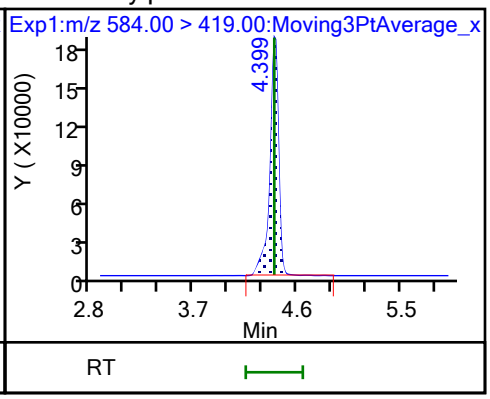
31 Perfluoroundecanoic acid



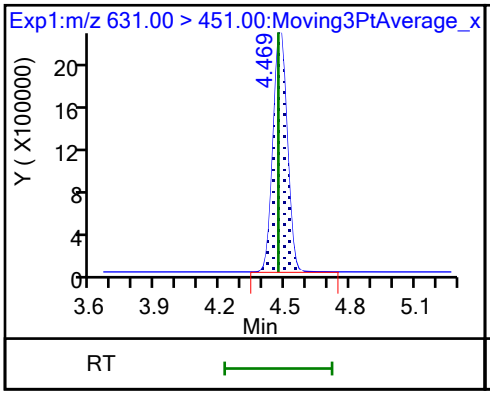
D 32 d5-NEtFOSAA



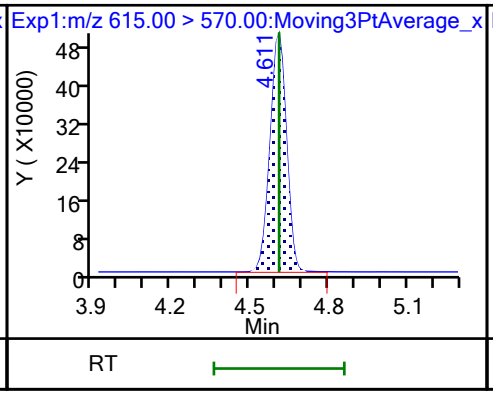
33 N-ethylperfluorooctanesulfonamid



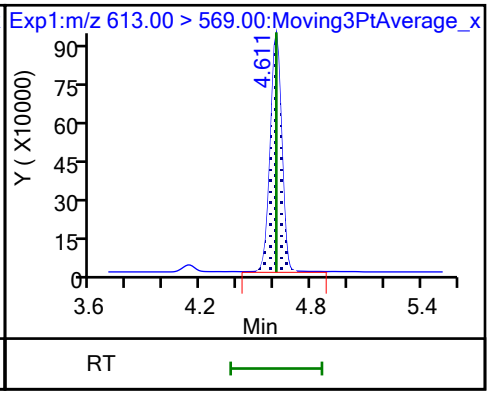
66 11-Chloroeicosafluoro-3-oxaundec



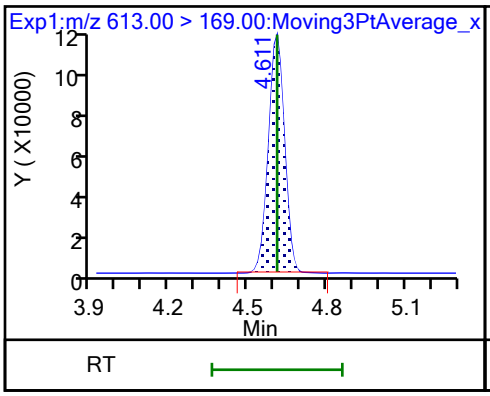
D 36 13C2 PFDoA



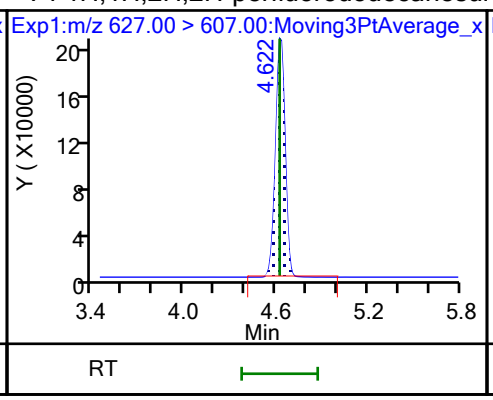
37 Perfluorododecanoic acid



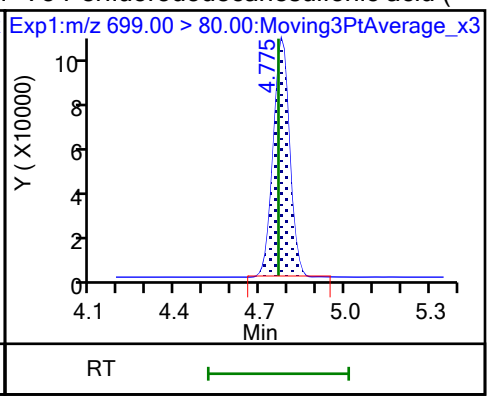
37 Perfluorododecanoic acid



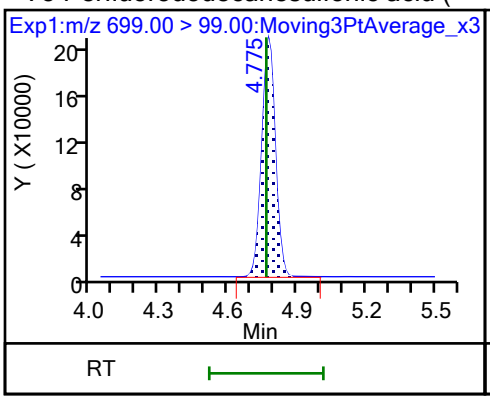
74 1H,1H,2H,2H-perfluorododecanesul



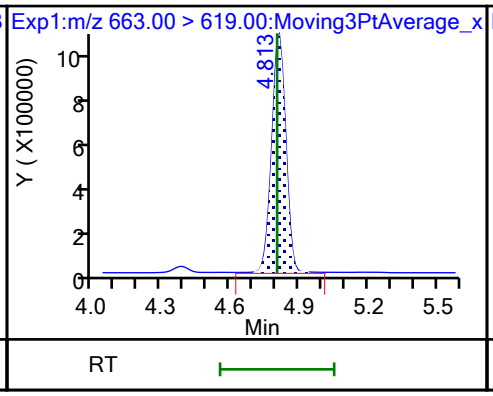
75 Perfluorododecanesulfonic acid (



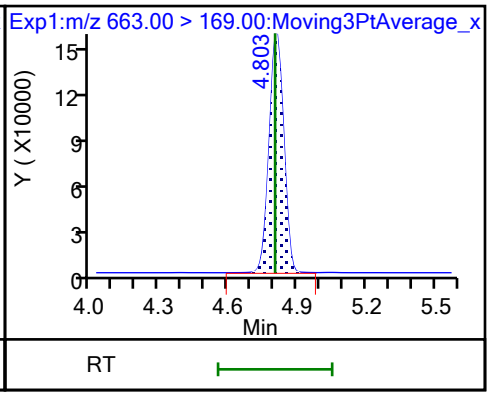
75 Perfluorododecanesulfonic acid (



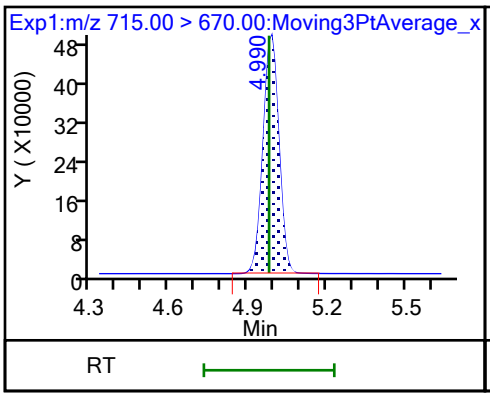
41 Perfluorotridecanoic acid



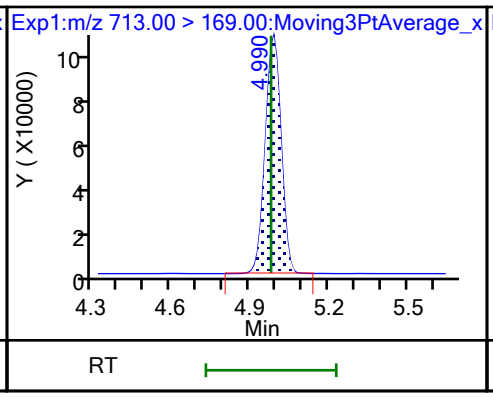
41 Perfluorotridecanoic acid



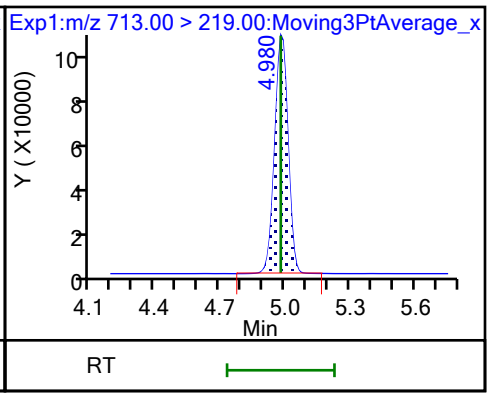
D 43 13C2 PFTeDA



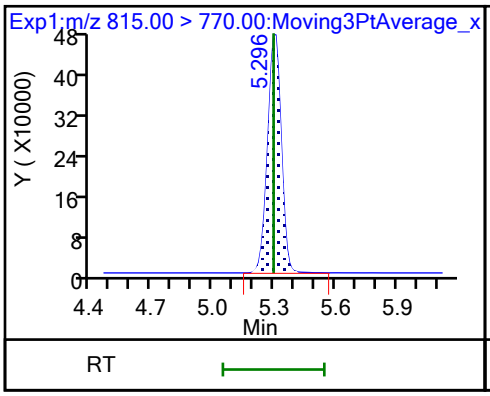
42 Perfluorotetradecanoic acid



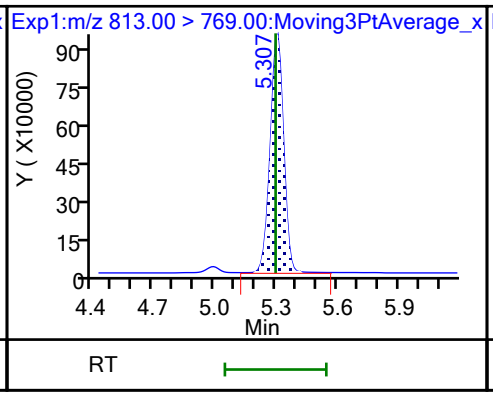
42 Perfluorotetradecanoic acid



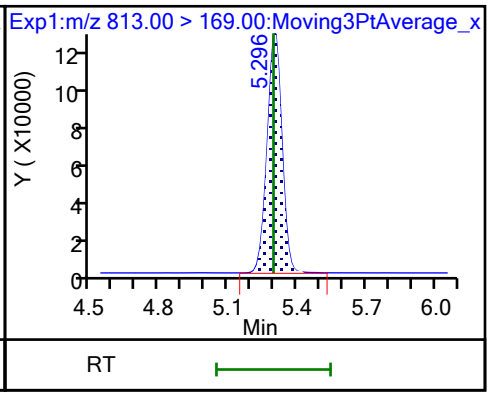
D 44 13C2 PFHxDA



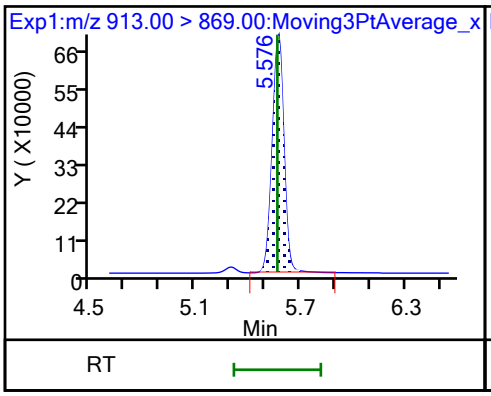
45 Perfluorohexadecanoic acid



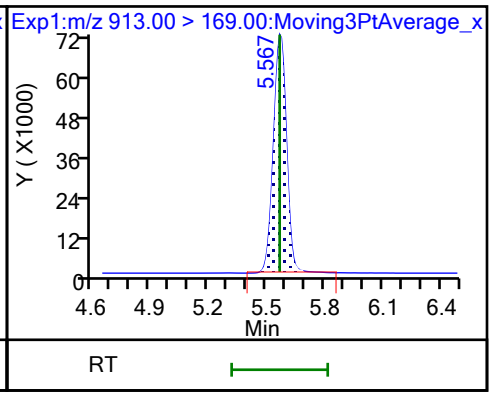
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196924/5 Calibration Date: 10/30/2023 17:34

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231030A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.425		0.156	0.125	24.8	50.0
Perfluoropentanoic acid	AveID	1.079	1.218		0.0564	0.0500	12.9	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.241		0.0493	0.0444	11.1	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	4.015		0.0554	0.0469	18.2	50.0
Perfluorohexanoic acid	AveID	1.100	1.196		0.0543	0.0500	8.7	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.376		0.0496	0.0471	5.4	50.0
HFPODA	AveID	1.001	1.112		0.111	0.100	11.1	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.139		0.0470	0.0457	2.9	50.0
Perfluoroheptanoic acid	AveID	1.121	1.160		0.0517	0.0500	3.5	50.0
DONA	AveID	5.754	6.036		0.0496	0.0473	4.9	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.369		0.146	0.119	23.3	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.562		0.0515	0.0477	8.1	50.0
Perfluorooctanoic acid	AveID	1.065	0.998		0.0468	0.0500	-6.3	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.293		0.0514	0.0464	10.8	50.0
Perfluorononanoic acid	AveID	0.9800	0.9937		0.0507	0.0500	1.4	50.0
9Cl-PF3ONS	AveID	3.569	4.319		0.0565	0.0467	21.0	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8175		0.0443	0.0481	-7.9	50.0
Perfluorodecanoic acid	AveID	0.999	0.9905		0.0496	0.0500	-0.9	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.530		0.0552	0.0480	14.9	50.0
Perfluorooctanesulfonamide	AveID	0.9539	0.9572		0.0502	0.0500	0.4	50.0
NMeFOSAA	AveID	0.9074	1.098		0.151	0.125	21.0	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6870		0.0485	0.0483	0.6	50.0
Perfluoroundecanoic acid	AveID	1.031	1.012		0.0491	0.0500	-1.8	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.147		0.143	0.125	14.7	50.0
11Cl-PF3OUdS	AveID	5.474	6.568		0.0566	0.0472	20.0	50.0
Perfluorododecanoic acid	AveID	1.018	1.007		0.0495	0.0500	-1.1	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.698		0.0622	0.0482	29.1	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2663		0.0557	0.0484	15.0	50.0
Perfluorotridecanoic acid	AveID	1.070	1.141		0.0533	0.0500	6.6	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1270		0.0568	0.0500	13.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.201		0.0601	0.0500	20.1	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7855		0.0503	0.0500	0.6	50.0
13C4 PFBA	Ave	0.9917	0.9785		1.23	1.25	-1.3	
13C5 PFPeA	Ave	0.7696	0.6951		1.13	1.25	-9.7	
13C3 PFBS	Ave	1.041	0.8572		0.957	1.16	-17.7	
M2-4:2 FTS	Ave	0.1204	0.0991		0.960	1.17	-17.7	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCVLIS 200-196924/5 Calibration Date: 10/30/2023 17:34

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231030A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7774		1.24	1.25	-0.7	
13C3 HFPO-DA	Ave	0.1516	0.1295		1.07	1.25	-14.5	
18O2 PFHxS	Ave	0.7464	0.6658		1.06	1.18	-10.8	
13C4 PFHpA	Ave	0.8590	0.8240		1.20	1.25	-4.1	
M2-6:2 FTS	Ave	0.1551	0.1376		1.05	1.19	-11.3	
13C4 PFOA	Ave	0.9731	0.9674		1.24	1.25	-0.6	
13C4 PFOS	Ave	0.4742	0.4145		1.05	1.20	-12.6	
13C5 PFNA	Ave	1.059	1.048		1.24	1.25	-1.1	
13C2 PFDA	Ave	1.109	1.087		1.23	1.25	-2.0	
M2-8:2 FTS	Ave	0.1744	0.1426		0.979	1.20	-18.2	
13C8 FOSA	Ave	0.9462	0.8287		1.10	1.25	-12.4	
d3-NMeFOSAA	Ave	0.2650	0.2296		1.08	1.25	-13.4	
13C2 PFUnA	Ave	1.047	1.009		1.21	1.25	-3.6	
d5-NEtFOSAA	Ave	0.2552	0.2323		1.14	1.25	-9.0	
13C2 PFDoA	Ave	1.064	1.046		1.23	1.25	-1.7	
13C2 PFTeDA	Ave	1.059	1.041		1.23	1.25	-1.7	
13C2 PFHxDA	Ave	1.221	1.141		1.17	1.25	-6.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 30-Oct-2023 17:34:00 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057602-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 31-Oct-2023 13:59:54 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1640

First Level Reviewer: SJ4N Date: 31-Oct-2023 12:23:55
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2161517	1.23		98.7	1803	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.131	0.0	1.004	307942	0.1561		125	26.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1535456	1.13		90.3	2206	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.439	0.0	1.000	74821	0.0564		113	1.8	M
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.702	1761003	0.9569		82.3	161919	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.467	2.467	0.0	1.000	83403	0.0493	Target=2.06	111	76.3	
298.90 > 99.00	2.467	2.467	0.0	1.000	40509		2.06(1.03-3.09)		15.0	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	32930	0.0554		118	201	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.786	204375	0.9603		82.3	147	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1717262	1.24		99.3	13124	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	82141	0.0543	Target=14.12	109	15.3	M
313.00 > 119.00	2.797	2.797	0.0	1.000	6057		13.56(7.06-21.17)		6.0	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	76164	0.0496	Target=2.72	105	139	
349.00 > 99.00	2.797	2.797	0.0	0.887	27350		2.78(1.36-4.09)		48.6	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.897	0.0	0.825	286128	1.07		85.5	1550	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.004	25457	0.1111		111	188	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1391373	1.05		89.2	6133	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.153	0.0	1.000	61238	0.0470	Target=3.32	103	115	M
399.00 > 99.00	3.153	3.153	0.0	1.000	21795		2.81(1.66-4.98)		14.0	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.165	0.0	1.000	84442	0.0517	Target=4.17	103	16.5	M
363.00 > 169.00	3.165	3.165	0.0	1.000	20362		4.15(2.09-6.26)		34.9	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	1820356	1.20		95.9	8361	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	208930	0.0496	Target=3.33	105	231	
377.00 > 85.00	3.199	3.199	0.0	0.838	59865		3.49(1.66-4.99)		99.0	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.917	54516	0.0515	Target=4.83	108	175	
449.00 > 99.00	3.502	3.502	0.0	0.917	12976		4.20(2.41-7.24)		40.3	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	288848	1.05		88.7	407	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.502	3.502	0.0	1.000	97237	0.1463		123	140	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.511	0.0	1.000	85300	0.0468	Target=2.88	93.7	4.0	M
413.00 > 169.00	3.511	3.511	0.0	1.000	33443		2.55(1.44-4.32)		52.3	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.511	0.0	1.000	2137052	1.24		99.4	7711	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.511	0.0		2209073	1.25			5189	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.820	0.0	1.000	43951	0.0514	Target=4.24	111	140	M
499.00 > 99.00	3.820	3.820	0.0	1.000	10457		4.20(2.12-6.37)		23.0	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.820	0.0	1.088	875460	1.04		87.4	2899	
20 Perfluorononanoic acid										
463.00 > 419.00	3.831	3.831	0.0	1.000	91985	0.0507	Target=8.34	101	14.4	
463.00 > 169.00	3.831	3.831	0.0	1.000	11547		7.97(4.17-12.51)		68.5	
D 19 13C5 PFNA										
468.00 > 423.00	3.831	3.831	0.0	1.091	2314305	1.24		98.9	6638	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.972	3.972	0.0	1.040	147614	0.0565		121	558	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.103	4.103	0.0	1.074	28806	0.0443	Target=2.17	92.1	380	
549.00 > 99.00	4.091	4.103	-0.011	1.071	13507		2.13(1.08-3.25)		61.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.126	0.0	1.175	2401729	1.23		98.0	11255	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.126	4.126	0.0	1.000	95160	0.0496	Target=11.44	99.1	26.4	
513.00 > 169.00	4.126	4.126	0.0	1.000	8924		10.66(5.72-17.16)		40.0	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.138	0.0	1.000	30610	0.0552		115	276	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.138	0.0	1.179	301851	0.9794		81.8	593	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.232	0.0	1.205	1830646	1.09		87.6	5565	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.232	4.232	0.0	1.000	70095	0.0502		100	402	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.256	4.256	0.0	1.212	507154	1.08		86.6	2030	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.268	4.268	0.0	1.003	55690	0.1513		121	141	
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.352	4.352	0.0	1.139	24284	0.0485	Target=2.37	101	203	
599.00 > 99.00	4.352	4.352	0.0	1.139	9390		2.59(1.19-3.56)		78.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.376	4.376	0.0	1.246	2228618	1.20		96.4	12173	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.376	4.376	0.0	1.000	90222	0.0491	Target=12.20	98.2	21.5	
563.00 > 169.00	4.376	4.376	0.0	1.000	9707		9.29(6.10-18.31)		99.7	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.388	4.388	0.0	1.250	513112	1.14		91.0	828	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.388	4.388	0.0	1.000	58850	0.1433		115	361	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.469	0.0	1.170	226881	0.0566		120	501	
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.600	0.0	1.310	2310998	1.23		98.3	9134	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.600	4.600	0.0	1.000	93057	0.0495	Target=8.47	98.9	6.0	M
613.00 > 169.00	4.600	4.600	0.0	1.000	9954		9.35(4.23-12.70)		113	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.622	4.622	0.0	1.117	20635	0.0622		129	120	M
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.765	4.765	0.0	1.248	9442	0.0557	Target=0.48	115	160	M
699.00 > 99.00	4.756	4.765	-0.009	1.245	18537		0.51(0.24-0.72)		351	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.794	4.794	0.0	1.042	105455	0.0533	Target=6.41	107	7.2	
663.00 > 169.00	4.794	4.794	0.0	1.042	15628		6.75(3.21-9.62)		123	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.970	4.970	0.0	1.415	2299779	1.23		98.3	6102	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.970	4.970	0.0	1.000	11686	0.0568	Target=0.87	114	201	
713.00 > 219.00	4.970	4.970	0.0	1.000	11536		1.01(0.43-1.30)		210	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.274	5.274	0.0	1.502	2521559	1.17		93.5	6061	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.285	5.285	0.0	1.002	121151	0.0601	Target=7.89	120	8.4	M
813.00 > 169.00	5.274	5.285	-0.011	1.000	14234		8.51(3.94-11.83)		150	M
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.540	5.540	0.0	1.050	79224	0.0503	Target=9.39	101	10.9	
913.00 > 169.00	5.531	5.540	-0.009	1.049	7511		10.55(4.69-14.08)		133	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

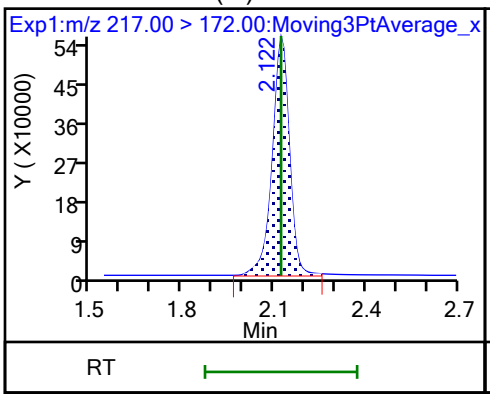
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 31-Oct-2023 13:59:55 Chrom Revision: 2.3 18-Oct-2023 21:16:54

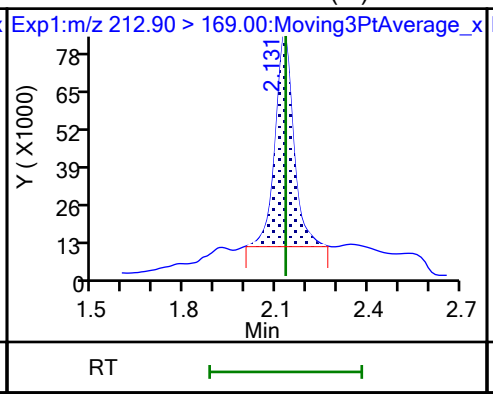
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A05.d
Injection Date: 30-Oct-2023 17:34:00 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

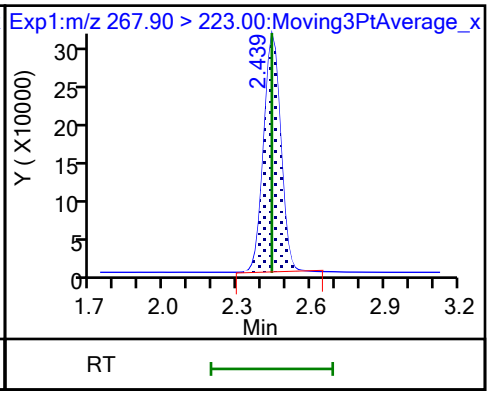
D 1 13C4 PFBA (M)



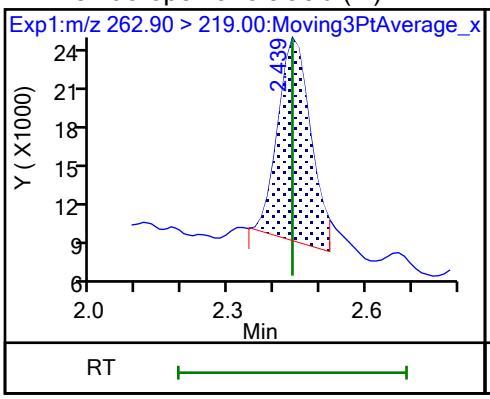
2 Perfluorobutanoic acid (M)



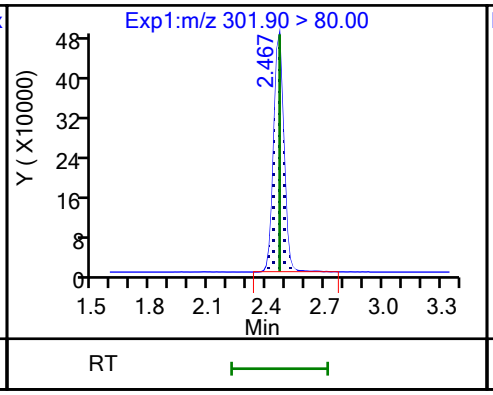
D 3 13C5 PFPeA



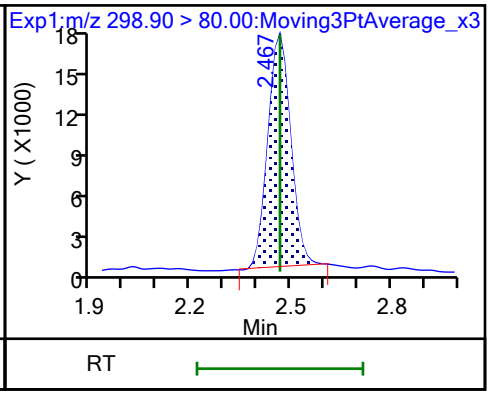
4 Perfluoropentanoic acid (M)



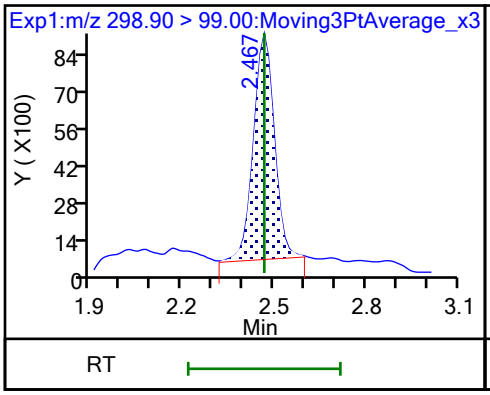
D 47 13C3 PFBS



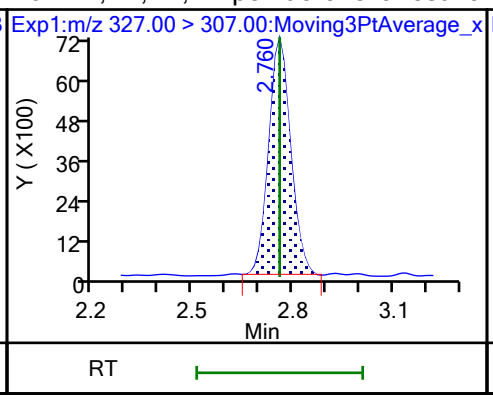
5 Perfluorobutanesulfonic acid



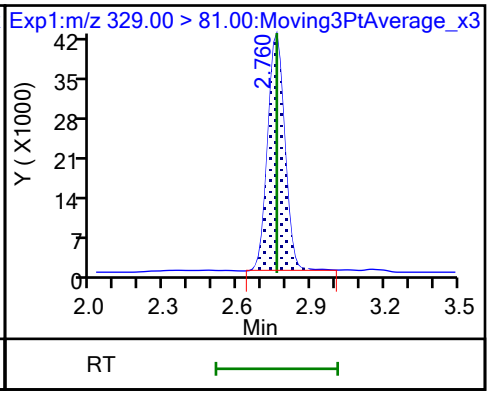
5 Perfluorobutanesulfonic acid



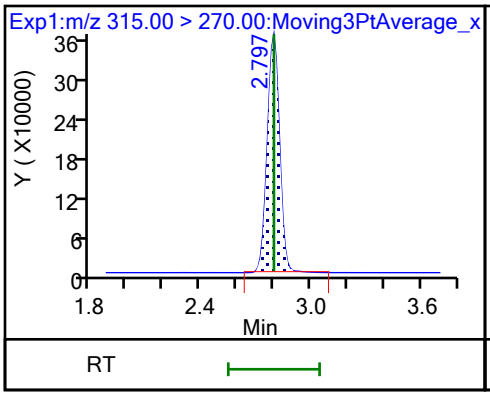
61 1H,1H,2H,2H-perfluorohexanesulfo



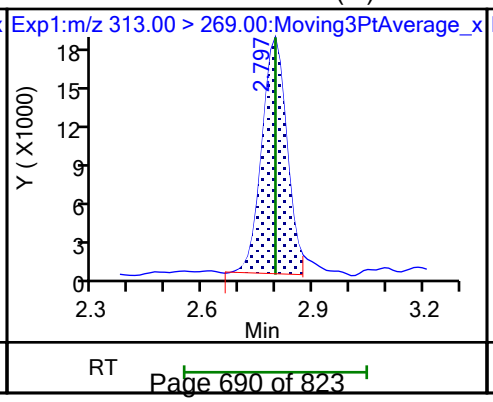
D 60 M2-4:2 FTS



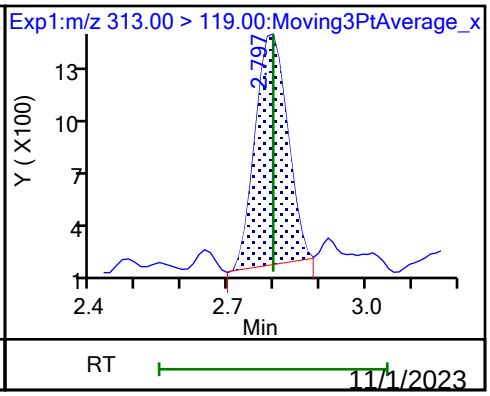
D 7 13C2 PFHxA



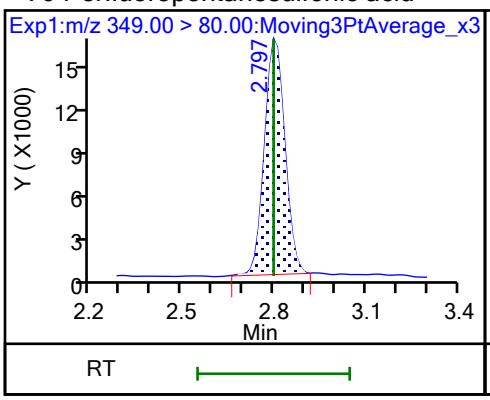
6 Perfluorohexanoic acid (M)



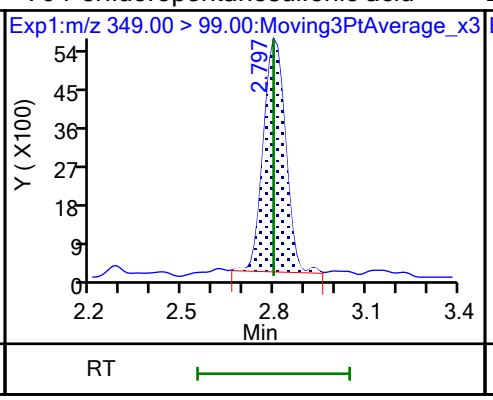
6 Perfluorohexanoic acid



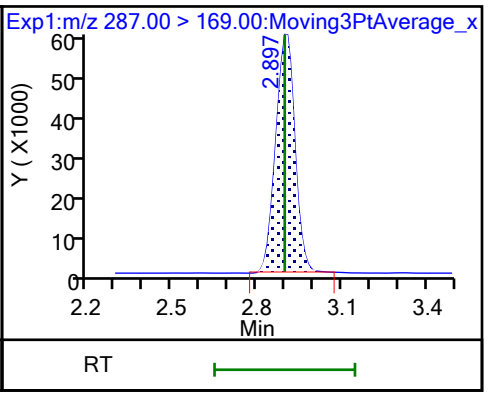
70 Perfluoropentanesulfonic acid



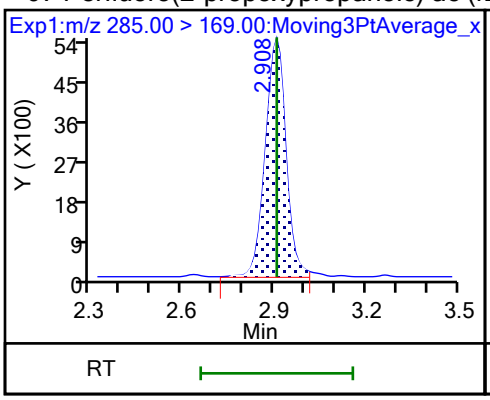
70 Perfluoropentanesulfonic acid



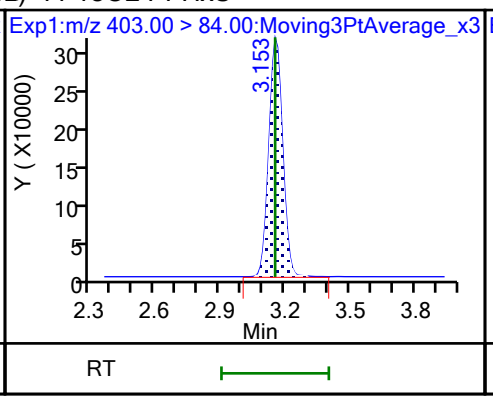
D 64 13C3 HFPO-DA



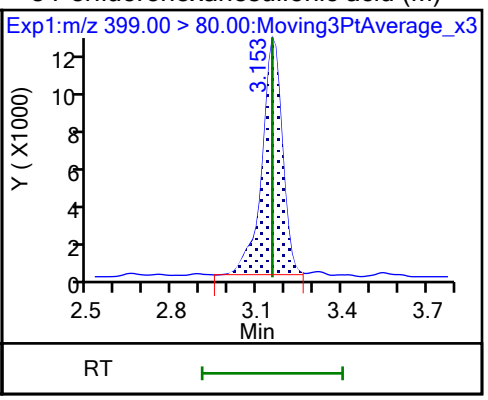
67 Perfluoro(2-propoxypropanoic) ac (M)



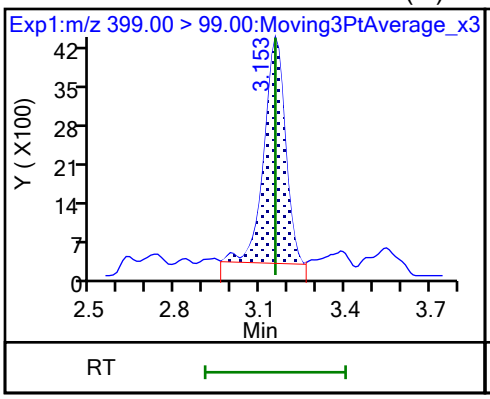
D 11 18O2 PFHxS



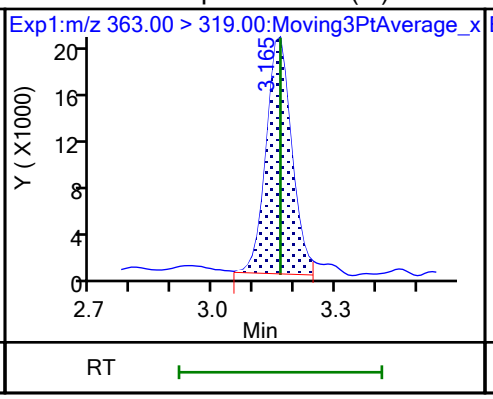
8 Perfluorohexanesulfonic acid (M)



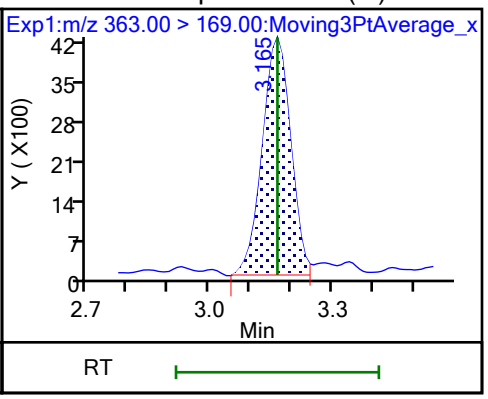
8 Perfluorohexanesulfonic acid (M)



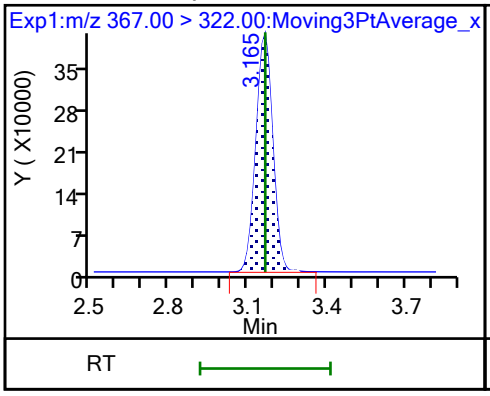
10 Perfluoroheptanoic acid (M)



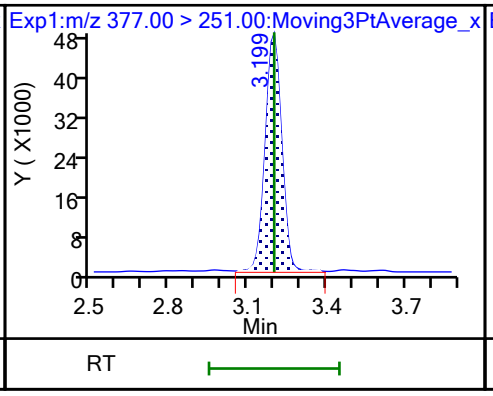
10 Perfluoroheptanoic acid (M)



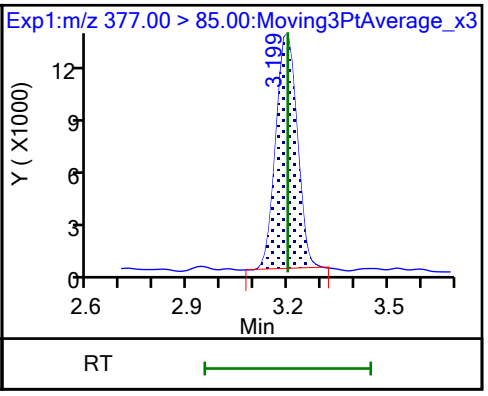
D 9 13C4 PFHpA



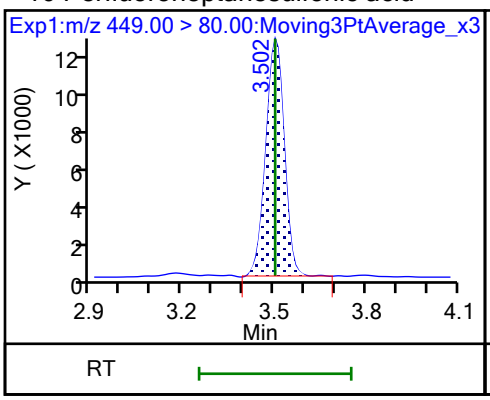
77 DONA



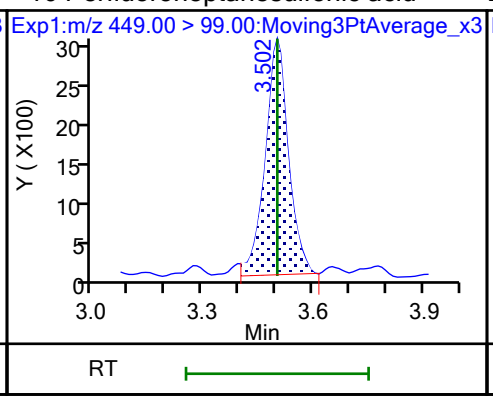
77 DONA



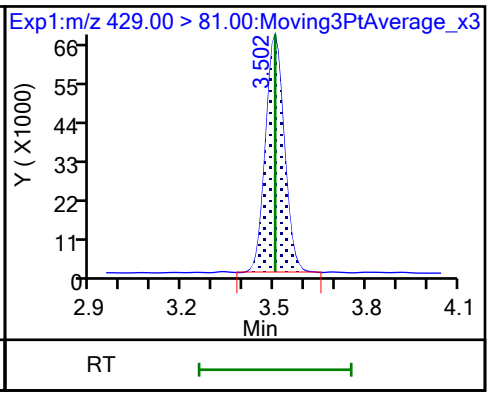
16 Perfluoroheptanesulfonic acid



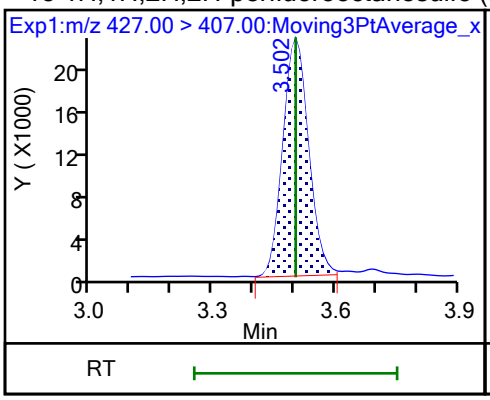
16 Perfluoroheptanesulfonic acid



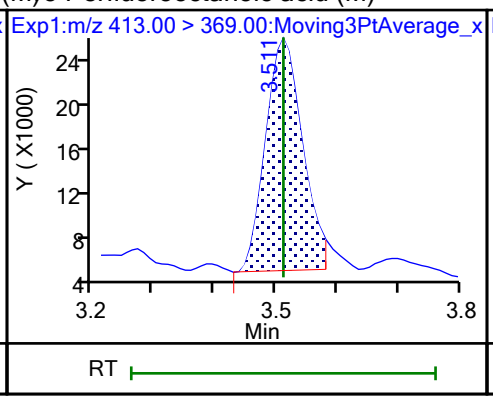
D 12 M2-6:2 FTS



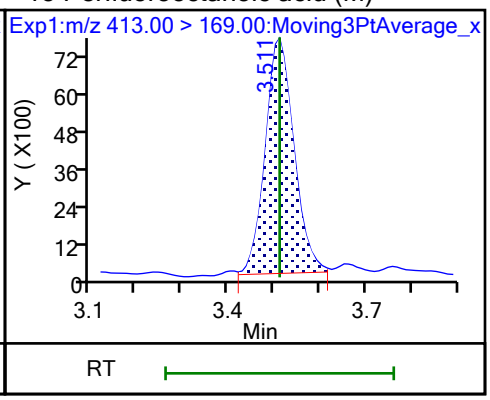
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



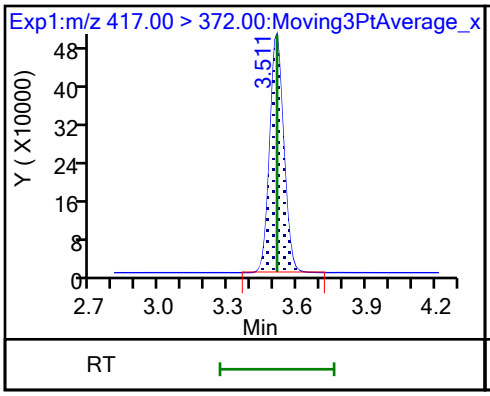
15 Perfluorooctanoic acid (M)



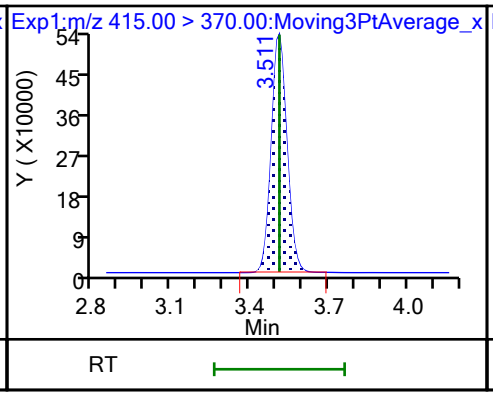
15 Perfluorooctanoic acid (M)



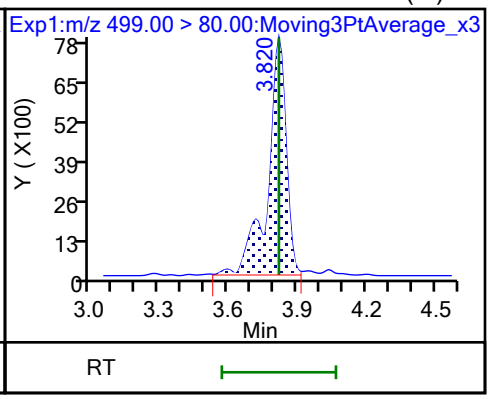
D 14 13C4 PFOA



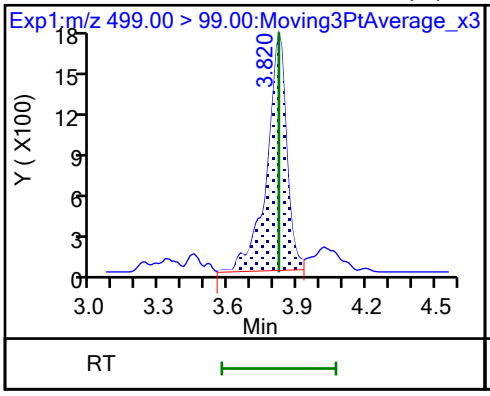
* 62 13C2 PFOA



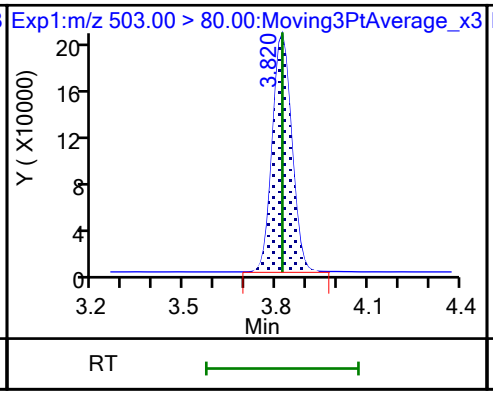
17 Perfluorooctanesulfonic acid (M)



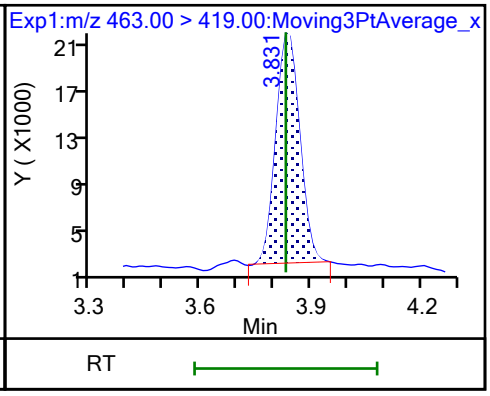
17 Perfluorooctanesulfonic acid (M)



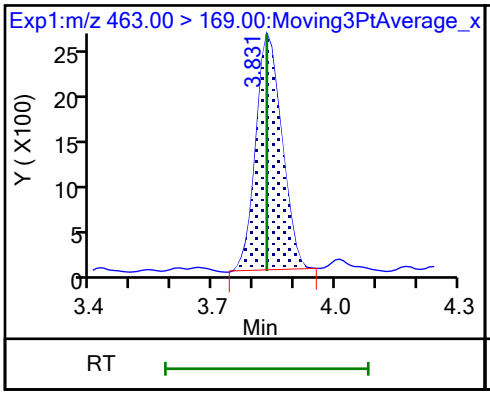
D 18 13C4 PFOS



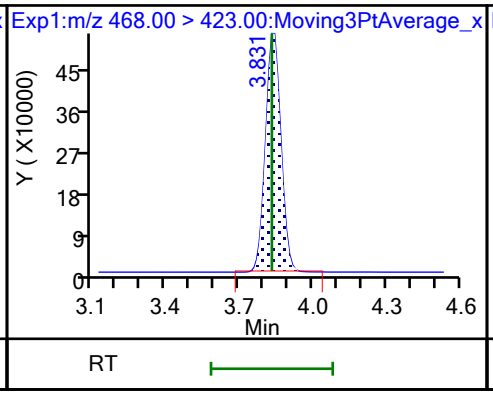
20 Perfluorononanoic acid



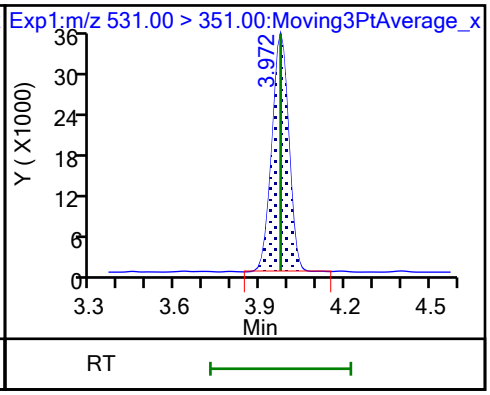
20 Perfluorononanoic acid



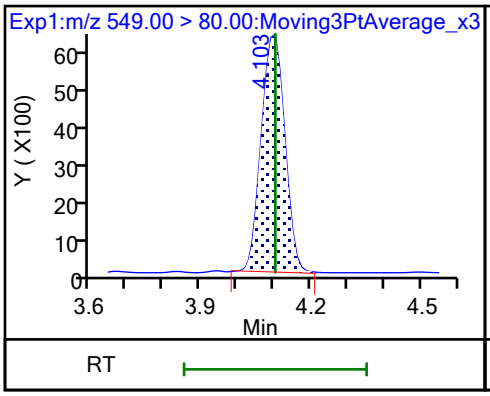
D 19 13C5 PFNA



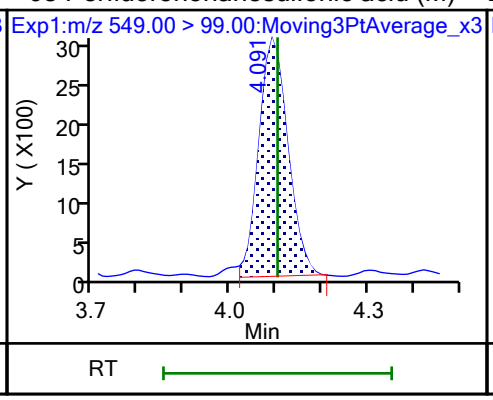
69 9-Chlorohexadecafluoro-3-oxanona



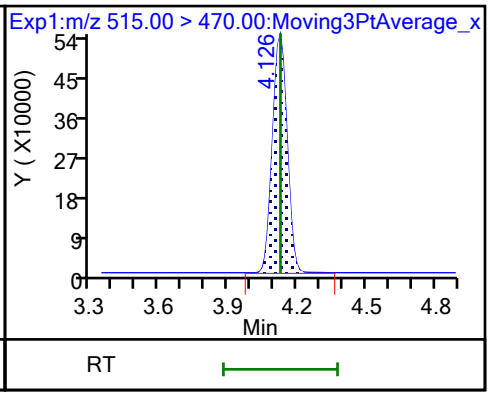
68 Perfluorononanesulfonic acid



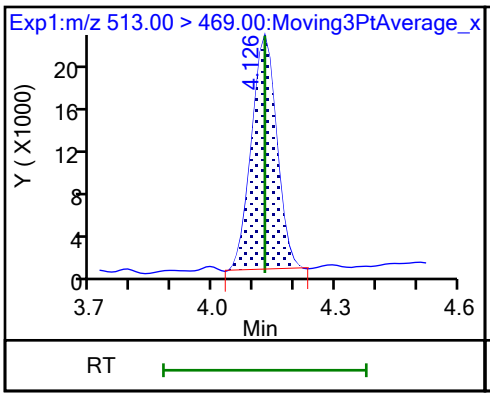
68 Perfluorononanesulfonic acid (M)



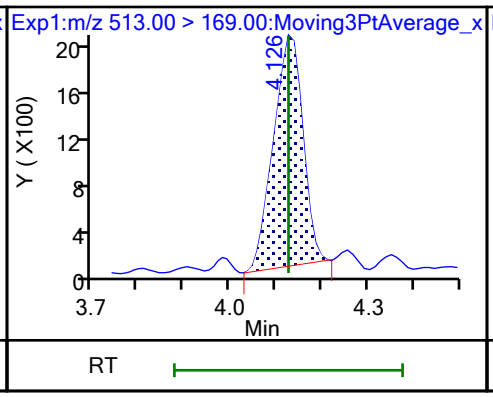
D 23 13C2 PFDA



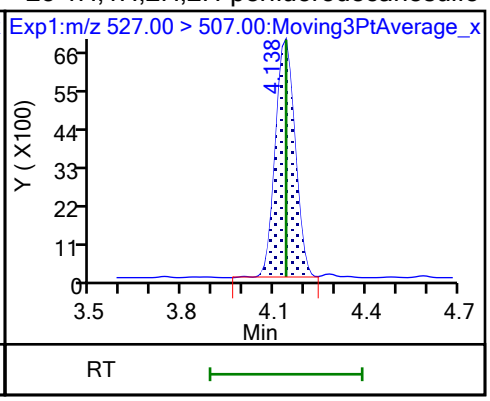
24 Perfluorodecanoic acid



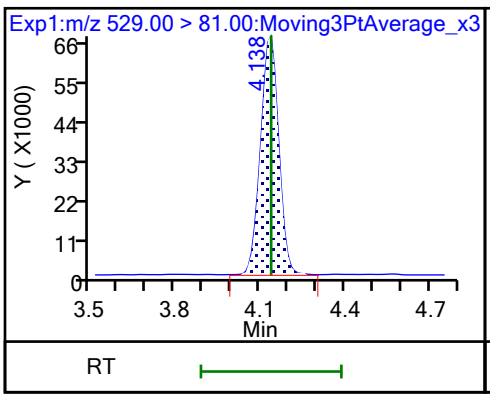
24 Perfluorodecanoic acid



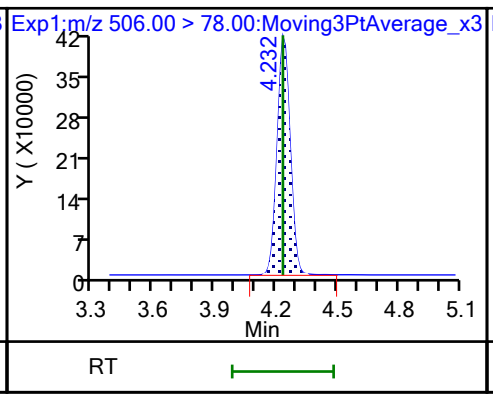
25 1H,1H,2H,2H-perfluorodecanesulfo



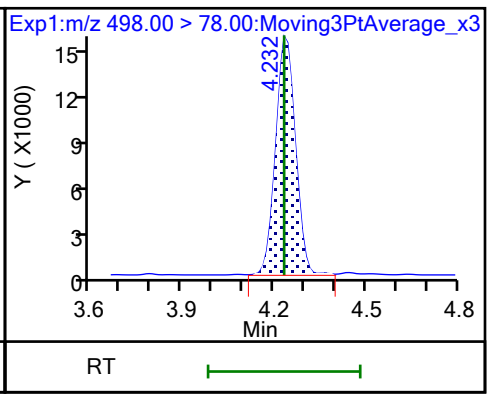
D 26 M2-8:2 FTS



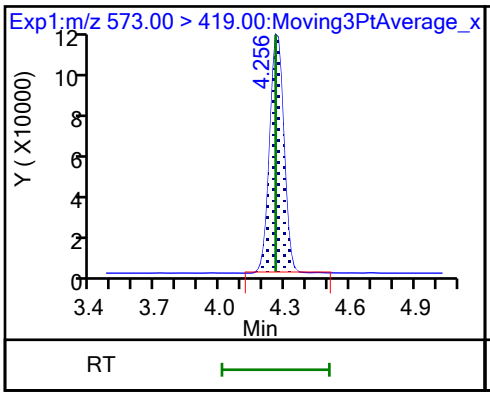
D 21 13C8 FOSA



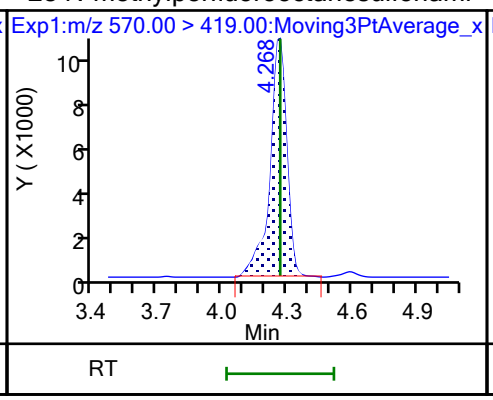
22 Perfluorooctanesulfonamide



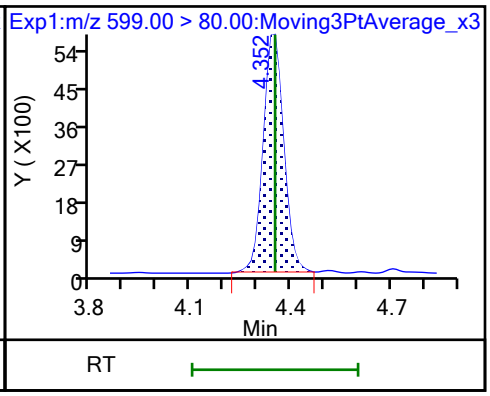
D 27 d3-NMeFOSAA



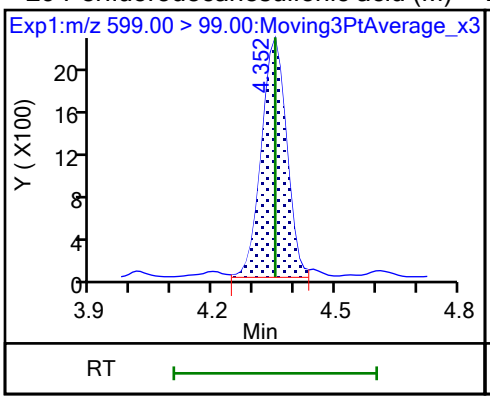
28 N-methylperfluorooctanesulfonami



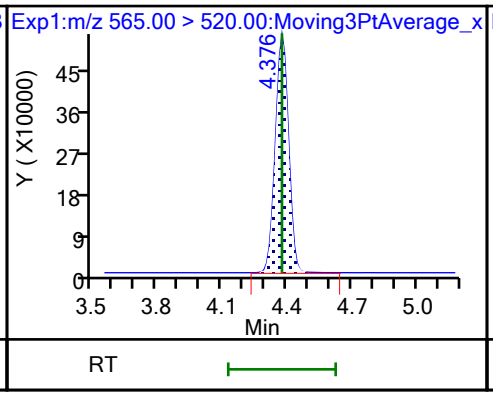
29 Perfluorodecanesulfonic acid



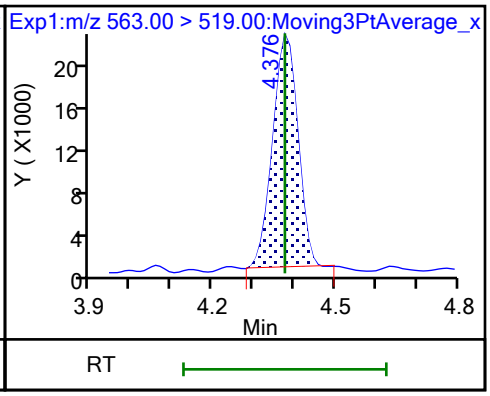
29 Perfluorodecanesulfonic acid (M)



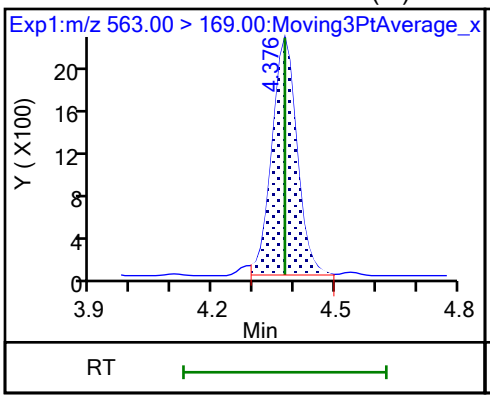
D 30 13C2 PFUnA



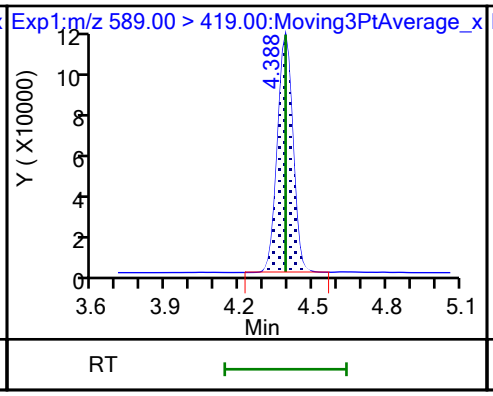
31 Perfluoroundecanoic acid



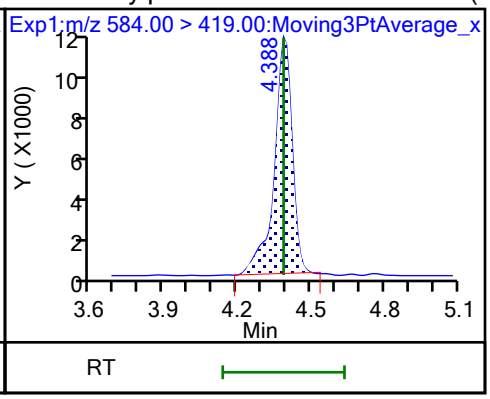
31 Perfluoroundecanoic acid (M)



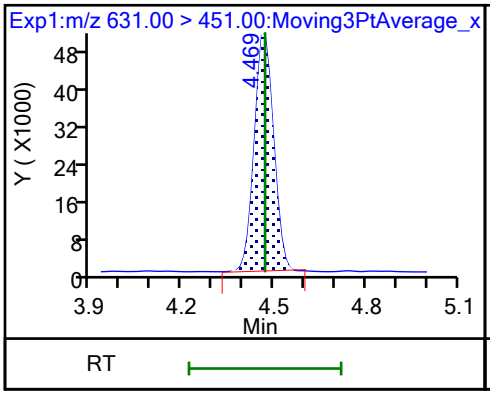
D 32 d5-NEtFOSAA



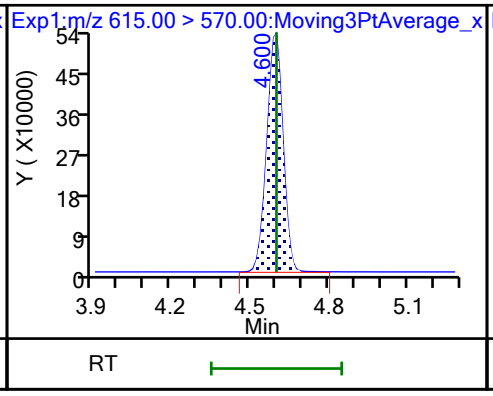
33 N-ethylperfluorooctanesulfonamid (M)



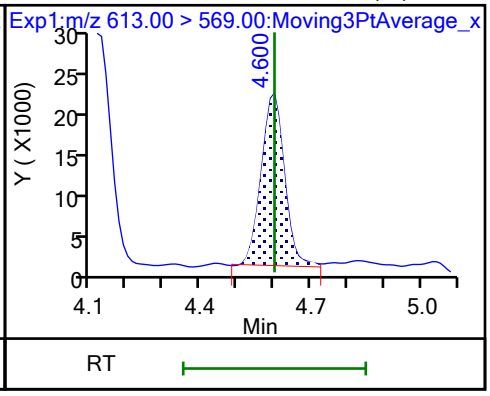
66 11-Chloroeicosafluoro-3-oxaundec



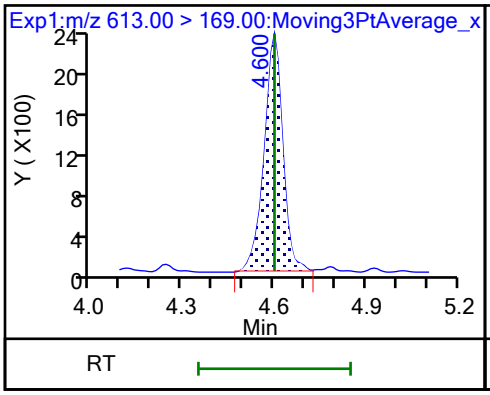
D 36 13C2 PFDoA



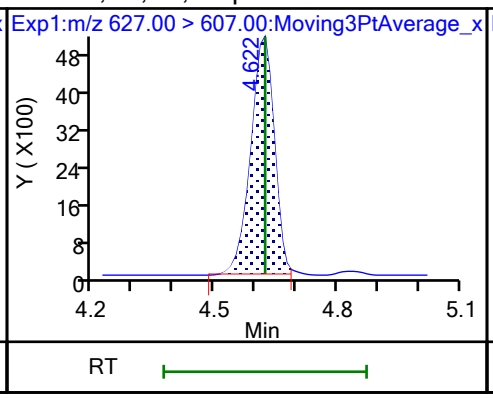
37 Perfluorododecanoic acid (M)



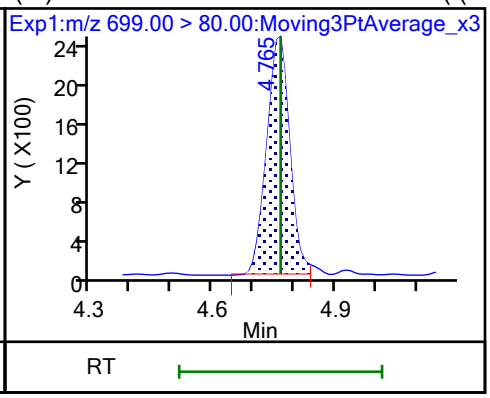
37 Perfluorododecanoic acid



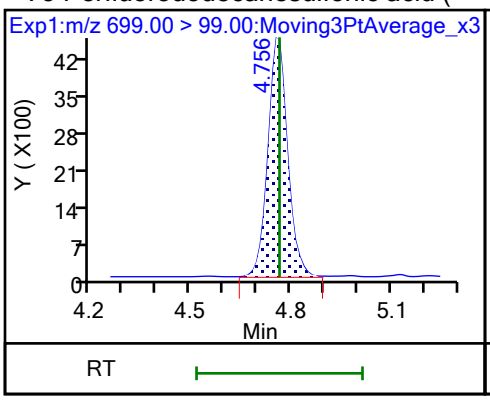
74 1H,1H,2H,2H-perfluorododecanesul (M)



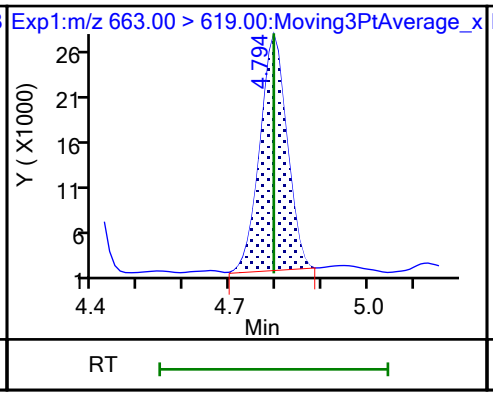
75 Perfluorododecanesulfonic acid ((M)



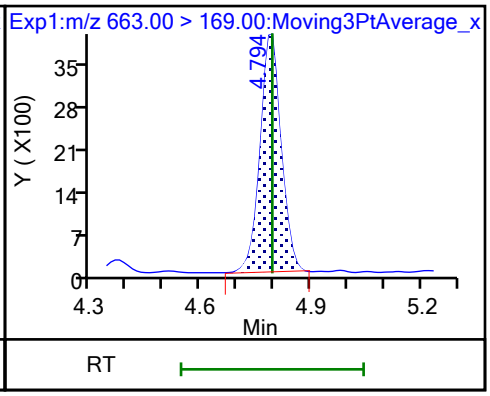
75 Perfluorododecanesulfonic acid (



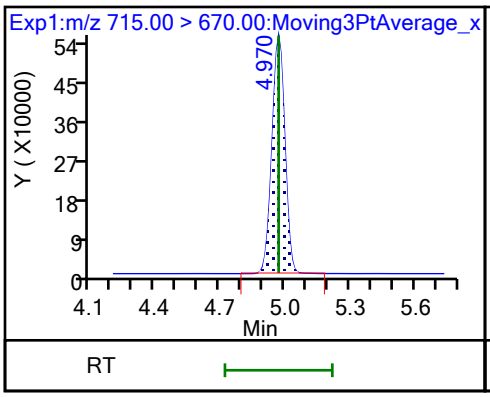
41 Perfluorotridecanoic acid



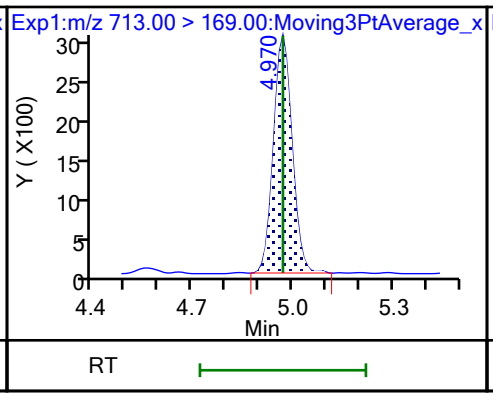
41 Perfluorotridecanoic acid



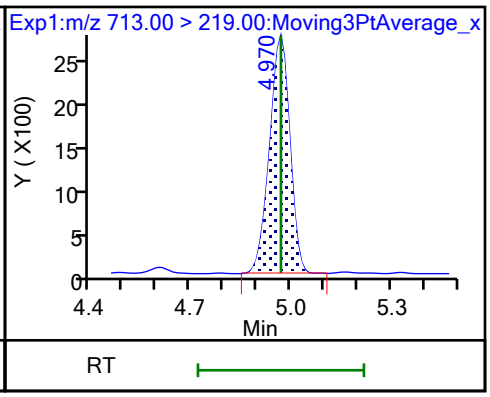
D 43 13C2 PFTeDA



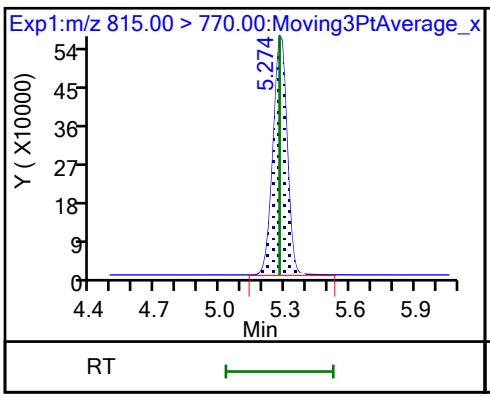
42 Perfluorotetradecanoic acid



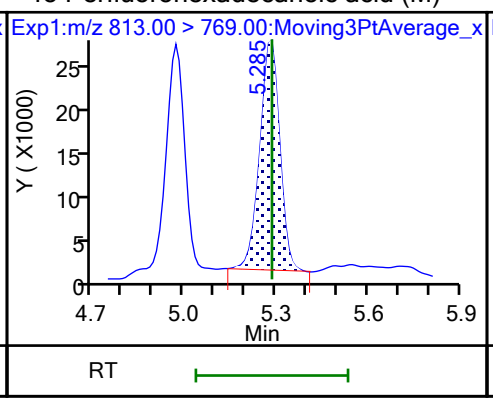
42 Perfluorotetradecanoic acid



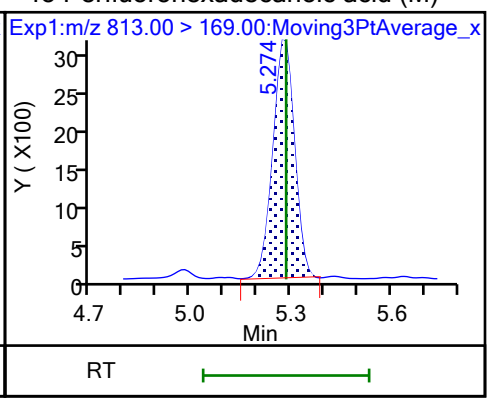
D 44 13C2 PFHxDA



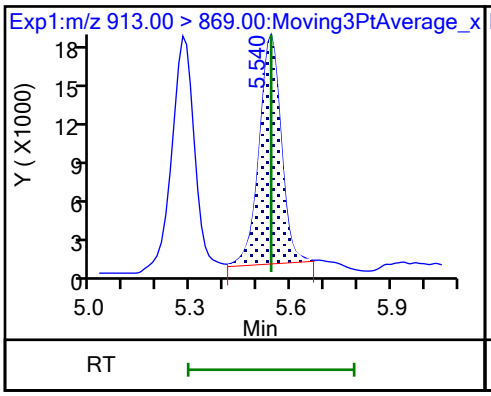
45 Perfluorohexadecanoic acid (M)



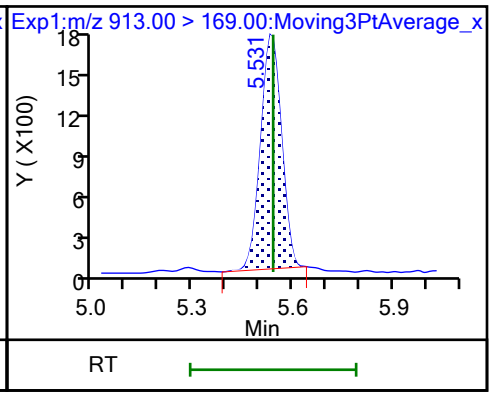
45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196924/19 Calibration Date: 10/30/2023 19:28

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231030A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.9037		0.959	1.00	-4.1	30.0
Perfluoropentanoic acid	AveID	1.079	1.044		0.968	1.00	-3.2	
Perfluorobutanesulfonic acid	AveID	1.117	1.072		0.851	0.887	-4.0	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.419		0.943	0.937	0.7	
Perfluorohexanoic acid	AveID	1.100	0.9358		0.850	1.00	-15.0	
Perfluoropentanesulfonic acid	AveID	1.306	1.299		0.936	0.941	-0.5	
HFPODA	AveID	1.001	0.9428		0.942	1.00	-5.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.012		0.835	0.914	-8.6	
Perfluoroheptanoic acid	AveID	1.121	1.045		0.932	1.00	-6.8	
DONA	AveID	5.754	5.440		0.893	0.945	-5.5	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.784		0.969	0.951	1.9	
Perfluoroheptanesulfonic acid	AveID	1.445	1.402		0.924	0.953	-3.0	
Perfluorooctanoic acid	AveID	1.065	0.9138		0.858	1.00	-14.2	
Perfluorooctanesulfonic acid	AveID	1.166	1.058		0.842	0.928	-9.3	
Perfluorononanoic acid	AveID	0.9800	0.9226		0.941	1.00	-5.9	
9Cl-PF3ONS	AveID	3.569	3.654		0.955	0.933	2.4	
Perfluorononanesulfonic acid	AveID	0.8874	0.7801		0.846	0.962	-12.1	
Perfluorodecanoic acid	AveID	0.999	0.9523		0.953	1.00	-4.7	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.353		1.03	0.960	6.9	
Perfluorooctanesulfonamide	AveID	0.9539	0.9726		1.02	1.00	2.0	
NMeFOSAA	AveID	0.9074	0.8464		0.933	1.00	-6.7	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6238		0.881	0.965	-8.7	
Perfluoroundecanoic acid	AveID	1.031	0.9460		0.918	1.00	-8.2	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9613		0.961	1.00	-3.9	
11Cl-PF3OUdS	AveID	5.474	5.448		0.939	0.943	-0.5	
Perfluorododecanoic acid	AveID	1.018	0.8696		0.854	1.00	-14.6	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.568		1.15	0.964	19.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2187		0.914	0.968	-5.5	
Perfluorotridecanoic acid	AveID	1.070	0.9585		0.896	1.00	-10.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1005		0.899	1.00	-10.1	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9820		0.982	1.00	-1.8	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7417		0.950	1.00	-5.0	
13C4 PFBA	Ave	0.9917	1.096		1.38	1.25	10.5	
13C5 PFPeA	Ave	0.7696	0.7564		1.23	1.25	-1.7	
13C3 PFBS	Ave	1.041	1.012		1.13	1.16	-2.9	
M2-4:2 FTS	Ave	0.1204	0.1163		1.13	1.17	-3.4	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Lab Sample ID: CCV 200-196924/19 Calibration Date: 10/30/2023 19:28

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231030A19.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.8048		1.29	1.25	2.8	
13C3 HFPO-DA	Ave	0.1516	0.1394		1.15	1.25	-8.0	
18O2 PFHxS	Ave	0.7464	0.7681		1.22	1.18	2.9	50.0
13C4 PFHpA	Ave	0.8590	0.8650		1.26	1.25	0.7	50.0
M2-6:2 FTS	Ave	0.1551	0.1499		1.15	1.19	-3.4	
13C4 PFOA	Ave	0.9731	1.056		1.36	1.25	8.5	50.0
13C4 PFOS	Ave	0.4742	0.4916		1.24	1.20	3.7	50.0
13C5 PFNA	Ave	1.059	1.075		1.27	1.25	1.6	50.0
13C2 PFDA	Ave	1.109	1.158		1.31	1.25	4.4	
M2-8:2 FTS	Ave	0.1744	0.1592		1.09	1.20	-8.7	
13C8 FOSA	Ave	0.9462	0.8996		1.19	1.25	-4.9	
d3-NMeFOSAA	Ave	0.2650	0.2689		1.27	1.25	1.5	
13C2 PFUnA	Ave	1.047	1.044		1.25	1.25	-0.3	
d5-NEtFOSAA	Ave	0.2552	0.2549		1.25	1.25	-0.1	
13C2 PFDoA	Ave	1.064	1.132		1.33	1.25	6.4	
13C2 PFTeDA	Ave	1.059	1.073		1.27	1.25	1.3	
13C2 PFHxDA	Ave	1.221	1.144		1.17	1.25	-6.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A19.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 30-Oct-2023 19:28:19 ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057602-019 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 31-Oct-2023 14:00:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1640

First Level Reviewer: SJ4N Date: 31-Oct-2023 13:17:14
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.604	2244729	1.38		110	1741	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.131	-0.001	1.004	1622932	0.9585		95.9	147	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1549414	1.23		98.3	2127	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	1294446	0.9677		96.8	35.9	
D 47 13C3 PFBS										
301.90 > 80.00	2.467	2.467	0.0	0.702	1927255	1.13		97.1	181595	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1576556	0.8514	Target=2.06	96.0	833	M
298.90 > 99.00	2.467	2.467	0.0	1.000	808307		1.95(1.03-3.09)		289	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.760	2.760	0.0	1.000	610524	0.9433		101	2625	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.760	2.760	0.0	0.786	222508	1.13		96.6	142	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1648750	1.28		103	4288	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1234363	0.8504	Target=14.12	85.0	236	M
313.00 > 119.00	2.797	2.797	0.0	1.000	89108		13.85(7.06-21.17)		76.8	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	1539033	0.9362	Target=2.72	99.5	4249	
349.00 > 99.00	2.797	2.797	0.0	0.887	508460		3.03(1.36-4.09)		826	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.897	0.011	0.828	285591	1.15		92.0	1241	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.908	2.908	0.0	1.000	215407	0.9417		94.2	2399	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1488577	1.22		103	5248	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.153	3.153	0.0	1.000	1164163	0.8354	Target=3.32	91.4	1222	M
399.00 > 99.00	3.153	3.153	0.0	1.000	356101		3.27(1.66-4.98)		269	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.165	0.0	1.000	1480817	0.9319	Target=4.17	93.2	337	
363.00 > 169.00	3.165	3.165	0.0	1.000	360247		4.11(2.09-6.26)		729	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.165	0.0	0.901	1772039	1.26		101	8906	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	4142120	0.8935	Target=3.33	94.5	4735	
377.00 > 85.00	3.199	3.199	0.0	0.838	1140202		3.63(1.66-4.99)		1747	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.917	1076251	0.9243	Target=4.83	97.0	2671	
449.00 > 99.00	3.502	3.502	0.0	0.917	217897		4.94(2.41-7.24)		507	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	291666	1.15		96.6	578	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	650326	0.9687		102	5327	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.511	3.511	0.0	1.000	1581808	0.8579	Target=2.88	85.8	79.1	
413.00 > 169.00	3.511	3.511	0.0	1.000	585212		2.70(1.44-4.32)		1538	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.511	0.0	1.000	2163815	1.36		109	7582	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.511	0.0		2048519	1.25			6693	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.820	-0.002	1.000	791346	0.8421	Target=4.24	90.7	1868	M
499.00 > 99.00	3.819	3.820	-0.002	1.000	170149		4.65(2.12-6.37)		409	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.820	-0.002	1.088	962765	1.24		104	4357	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.831	0.011	1.000	1626038	0.9414	Target=8.34	94.1	259	
463.00 > 169.00	3.842	3.831	0.011	1.000	192281		8.46(4.17-12.51)		990	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.831	0.011	1.094	2203058	1.27		102	10310	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.971	3.972	-0.001	1.040	2747007	0.9553		102	4117	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.103	-0.002	1.074	604608	0.8457	Target=2.17	87.9	5597	
549.00 > 99.00	4.100	4.103	-0.002	1.074	254676		2.37(1.08-3.25)		1010	
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.126	-0.002	1.175	2371558	1.31		104	11635	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.124	4.126	-0.002	1.000	1806765	0.9529	Target=11.44	95.3	539	
513.00 > 169.00	4.124	4.126	-0.002	1.000	168808		10.70(5.72-17.16)		683	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.136	4.138	-0.002	1.000	589358	1.03		107	3418	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.138	-0.002	1.178	312491	1.09		91.3	949	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.232	0.010	1.208	1842939	1.19		95.1	7595	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.232	0.010	1.000	1433888	1.02		102	5804	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.266	4.256	0.010	1.215	550797	1.27		101	2063	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.266	4.268	-0.002	1.000	372954	0.9328		93.3	646	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.351	4.352	-0.001	1.139	484974	0.8814	Target=2.37	91.3	2642	
599.00 > 99.00	4.351	4.352	-0.001	1.139	192725		2.52(1.19-3.56)		1958	
D 30 13C2 PFUnA										
565.00 > 520.00	4.375	4.376	-0.001	1.246	2137976	1.25		99.7	8864	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.375	4.376	-0.001	1.000	1617938	0.9178	Target=12.20	91.8	367	
563.00 > 169.00	4.375	4.376	-0.001	1.000	150168		10.77(6.10-18.31)		1719	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.387	4.388	-0.001	1.249	522068	1.25		99.9	894	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.399	4.388	0.011	1.003	401478	0.9611		96.1	843	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.469	-0.001	1.170	4138824	0.9385		99.5	5088	
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.600	-0.001	1.310	2319714	1.33		106	6294	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.599	4.600	-0.001	1.000	1613831	0.8544	Target=8.47	85.4	91.3	M
613.00 > 169.00	4.599	4.600	-0.001	1.000	203682		7.92(4.23-12.70)		1773	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.622	-0.001	1.117	394493	1.15		119	2908	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.765	4.765	0.0	1.248	170522	0.9144	Target=0.48	94.5	2242	
699.00 > 99.00	4.765	4.765	0.0	1.248	350272		0.49(0.24-0.72)		6775	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.794	4.794	0.0	1.042	1778797	0.8960	Target=6.41	89.6	97.3	
663.00 > 169.00	4.794	4.794	0.0	1.042	269358		6.60(3.21-9.62)		1767	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.969	4.970	-0.001	1.415	2198699	1.27		101	6782	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.970	0.009	1.002	176796	0.8989	Target=0.87	89.9	1478	
713.00 > 219.00	4.969	4.970	-0.001	1.000	200122		0.88(0.43-1.30)		1960	

Report Date: 31-Oct-2023 14:00:35 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A19.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.285	5.274	0.011	1.505	2343618	1.17		93.7	4720	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.285	5.285	0.0	1.000	1841067	0.9819	Target=7.89	98.2	113	M
813.00 > 169.00	5.285	5.285	0.0	1.000	235237		7.83(3.94-11.83)		2844	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.549	5.540	0.009	1.050	1390629	0.9498	Target=9.39	95.0	139	M
913.00 > 169.00	5.540	5.540	0.0	1.048	145922		9.53(4.69-14.08)		654	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

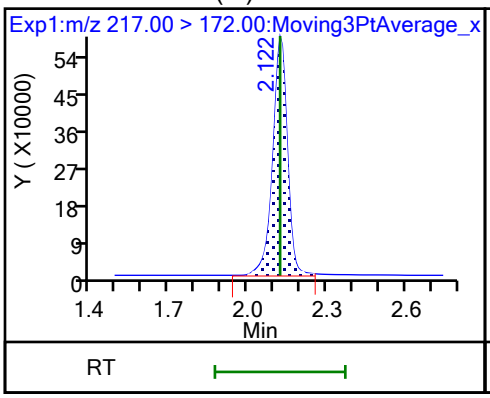
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 31-Oct-2023 14:00:36 Chrom Revision: 2.3 18-Oct-2023 21:16:54

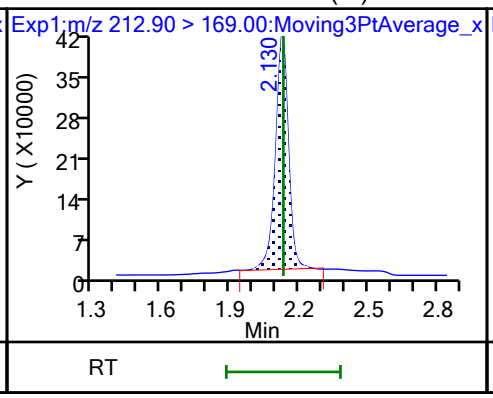
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231030-57602.b\PA231030A19.d
Injection Date: 30-Oct-2023 19:28:19 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

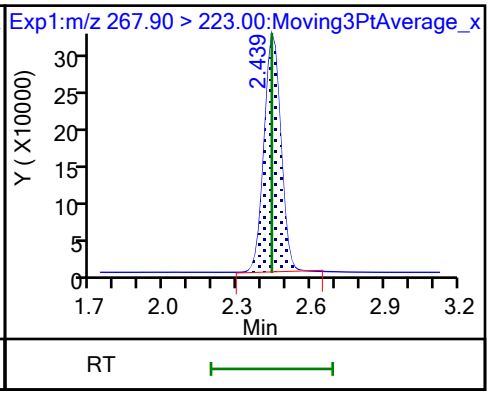
D 1 13C4 PFBA (M)



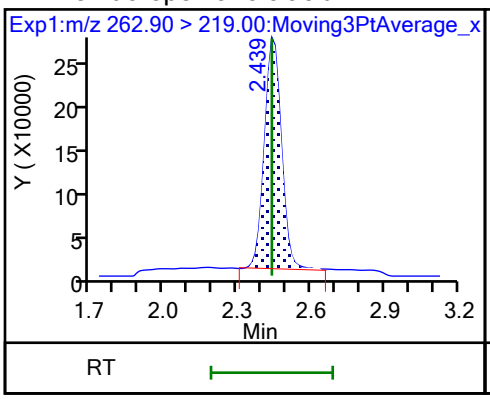
2 Perfluorobutanoic acid (M)



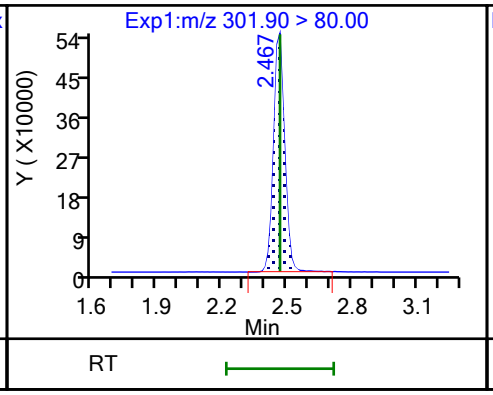
D 3 13C5 PFPeA



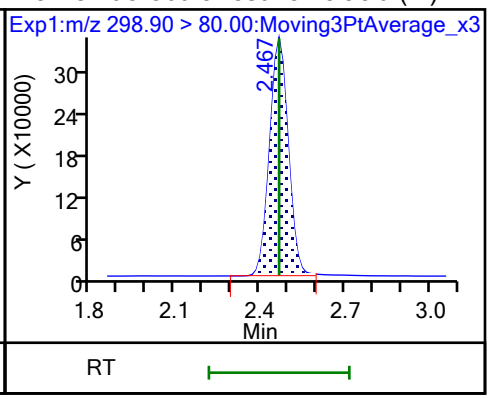
4 Perfluoropentanoic acid



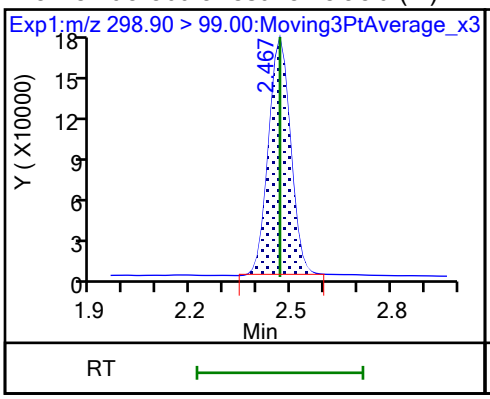
D 47 13C3 PFBS



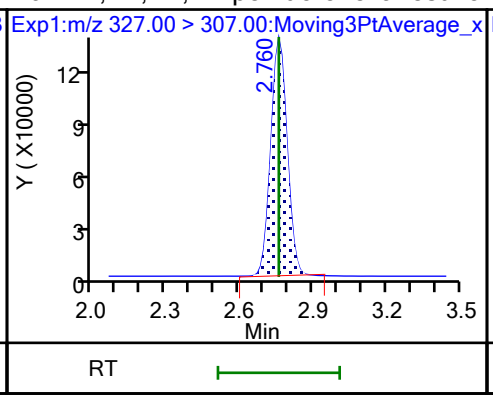
5 Perfluorobutanesulfonic acid (M)



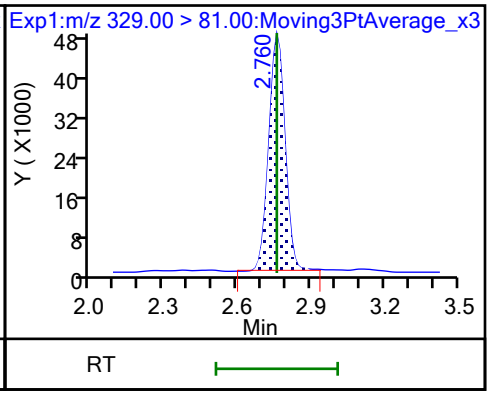
5 Perfluorobutanesulfonic acid (M)



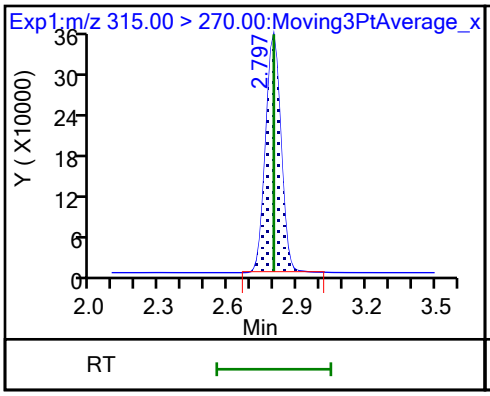
61 1H,1H,2H,2H-perfluorohexanesulfo



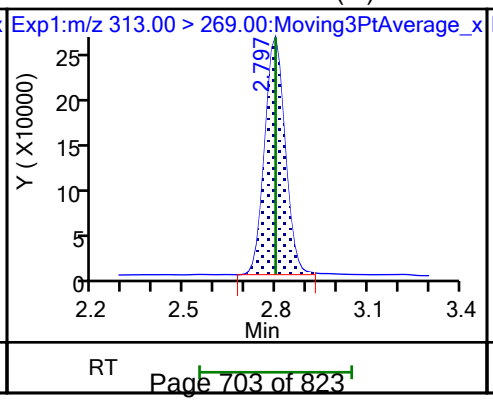
D 60 M2-4:2 FTS



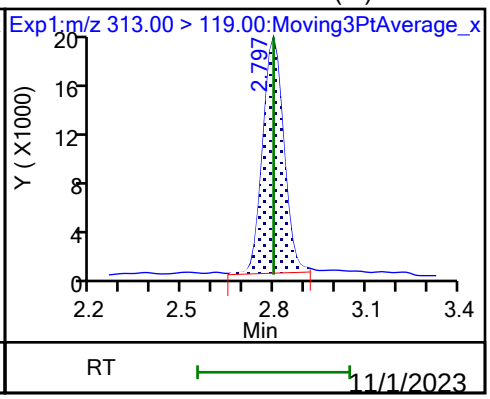
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

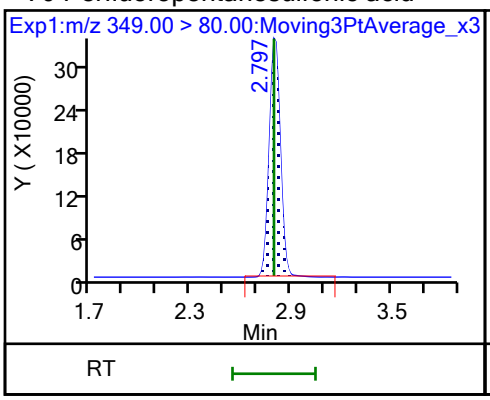


6 Perfluorohexanoic acid (M)

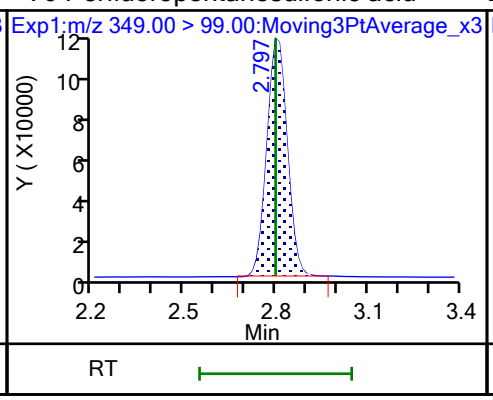


11/1/2023
12:01 PM

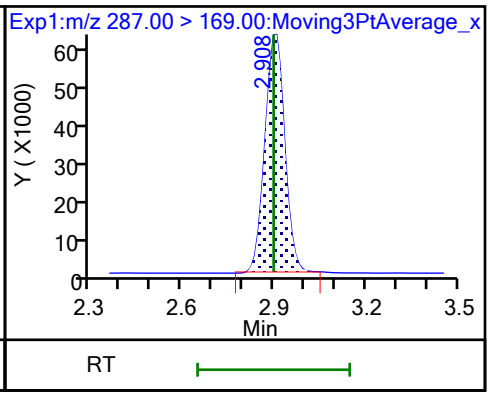
70 Perfluoropentanesulfonic acid



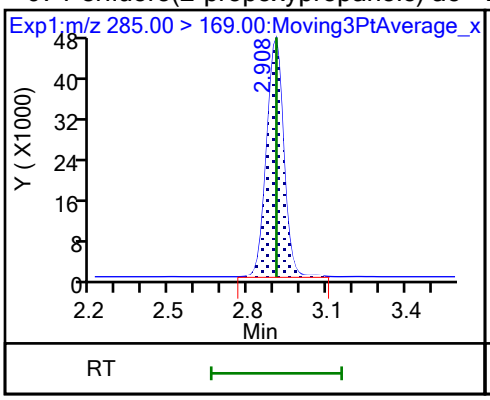
70 Perfluoropentanesulfonic acid



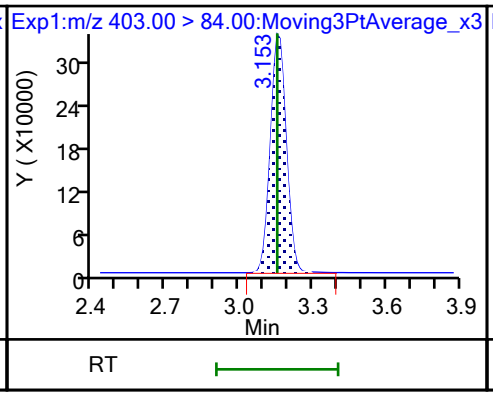
D 64 13C3 HFPO-DA



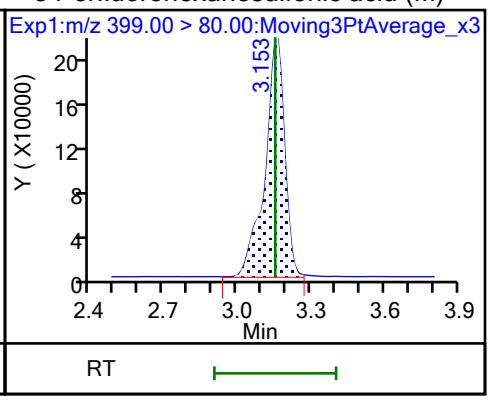
67 Perfluoro(2-propoxypropanoic) ac



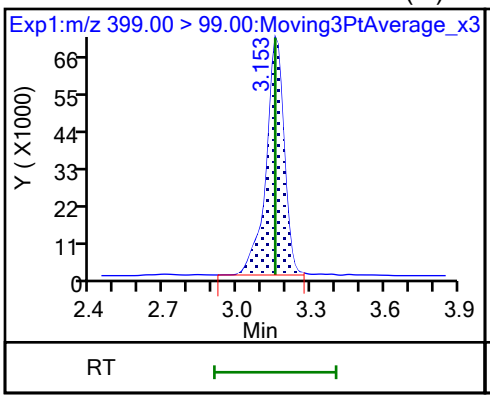
D 11 18O2 PFHxS



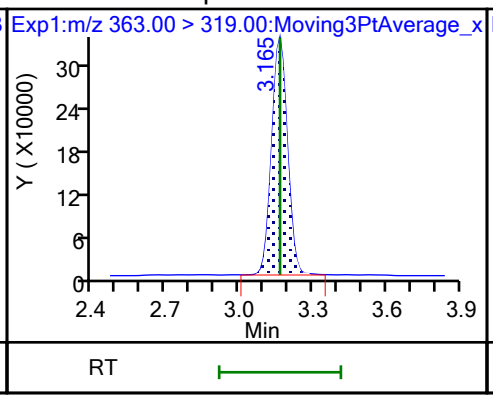
8 Perfluorohexanesulfonic acid (M)



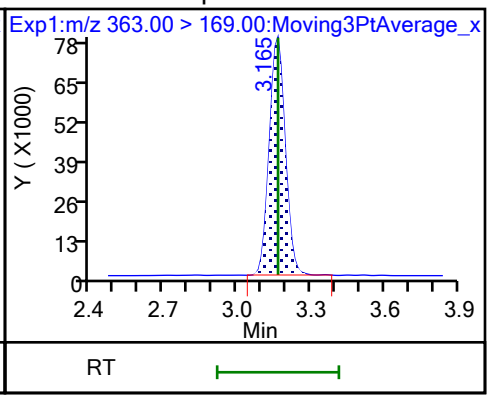
8 Perfluorohexanesulfonic acid (M)



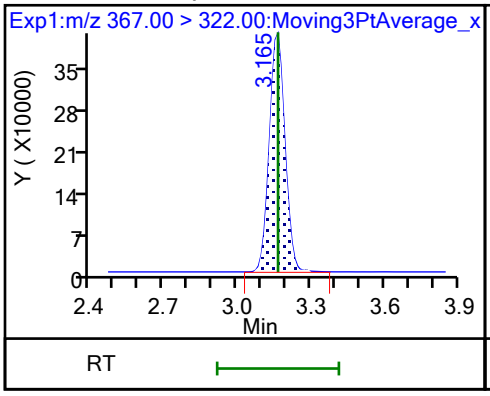
10 Perfluoroheptanoic acid



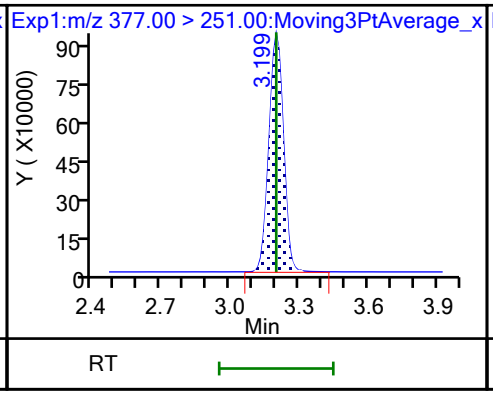
10 Perfluoroheptanoic acid



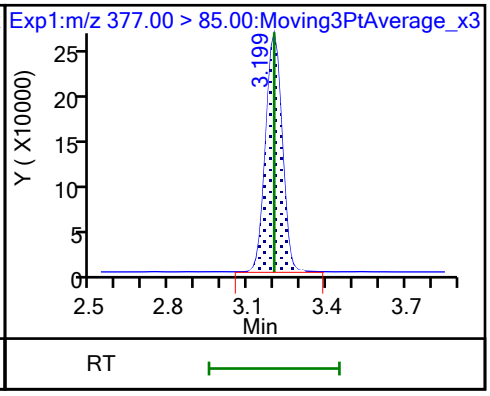
D 9 13C4 PFHpA



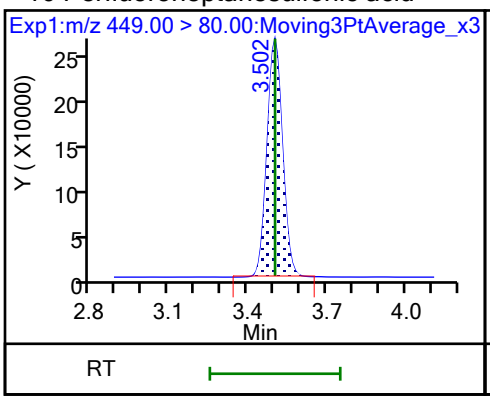
77 DONA



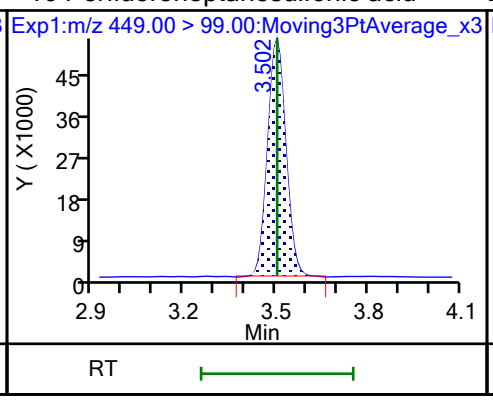
77 DONA



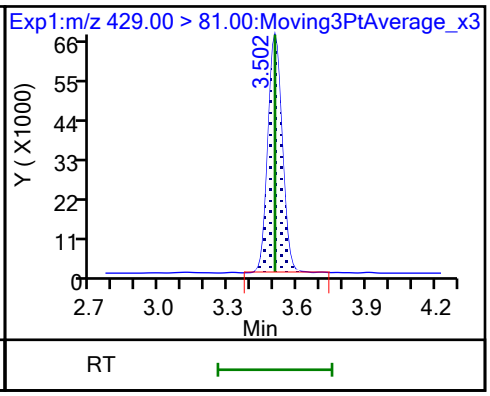
16 Perfluoroheptanesulfonic acid



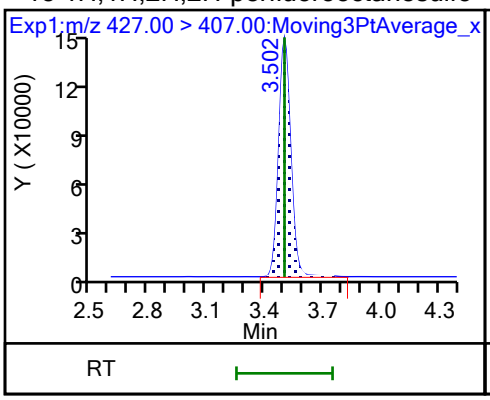
16 Perfluoroheptanesulfonic acid



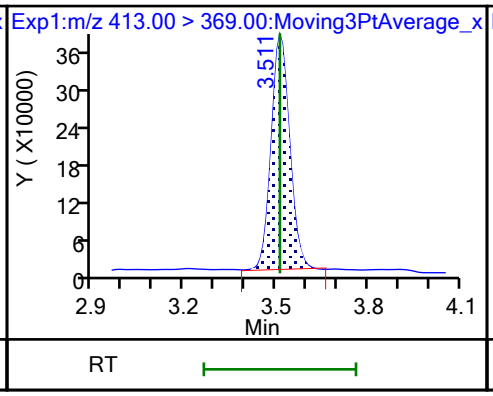
D 12 M2-6:2 FTS



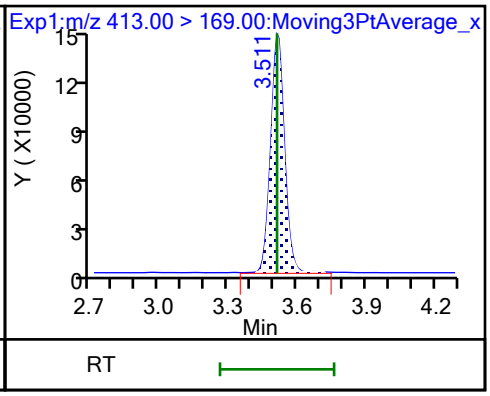
13 1H,1H,2H,2H-perfluorooctanesulfo



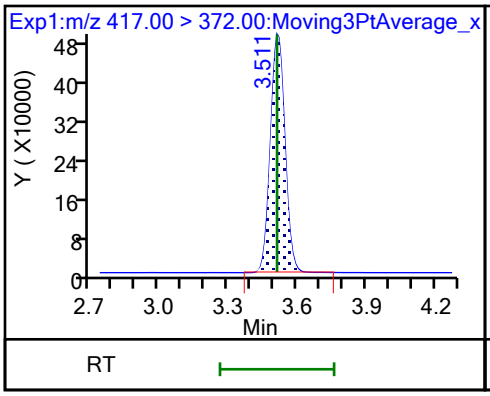
15 Perfluorooctanoic acid



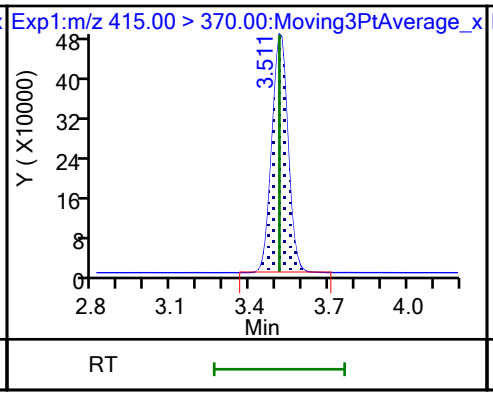
15 Perfluorooctanoic acid



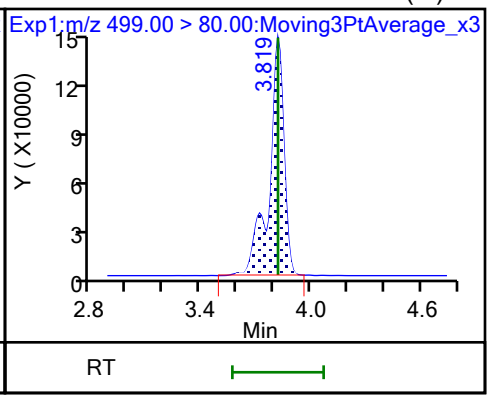
D 14 13C4 PFOA



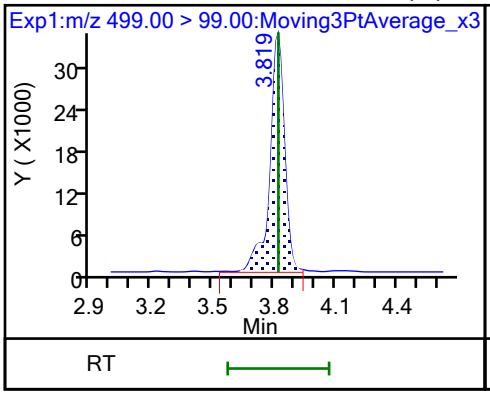
* 62 13C2 PFOA



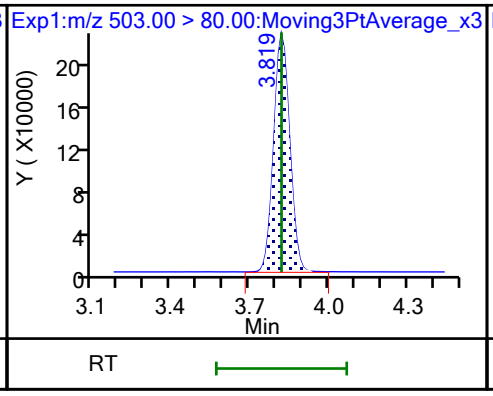
17 Perfluorooctanesulfonic acid (M)



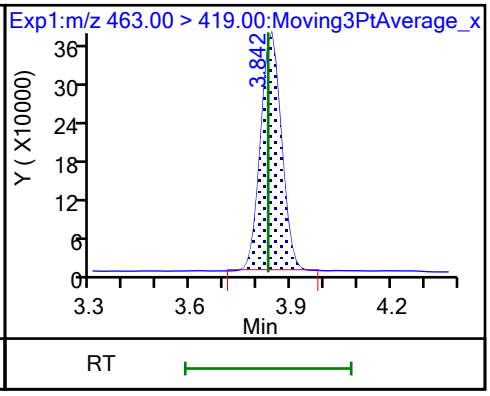
17 Perfluorooctanesulfonic acid (M)



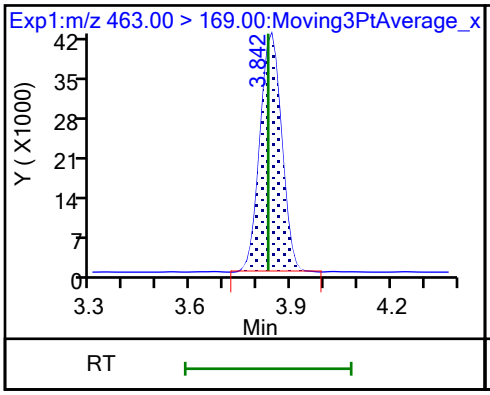
D 18 13C4 PFOS



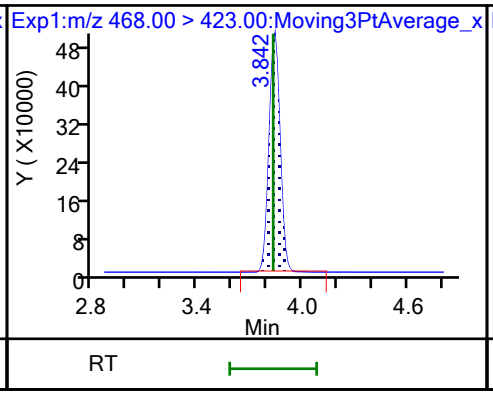
20 Perfluorononanoic acid



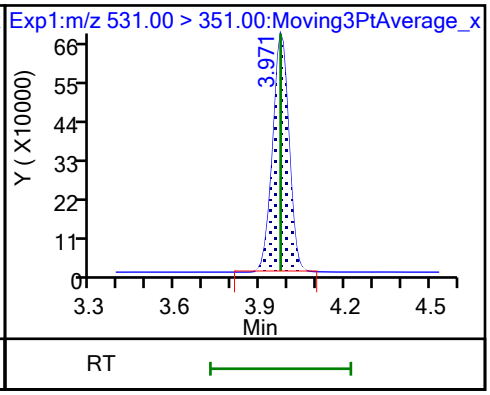
20 Perfluorononanoic acid



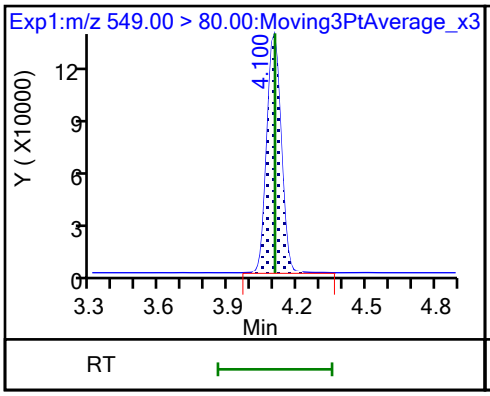
D 19 13C5 PFNA



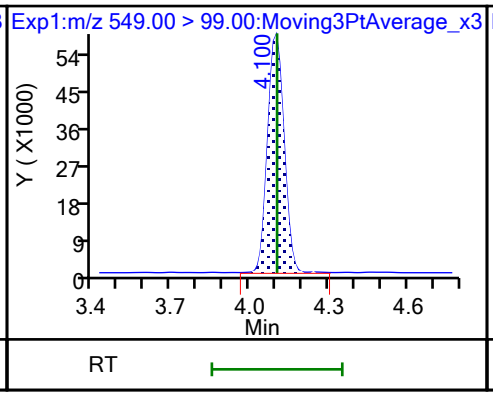
69 9-Chlorohexadecafluoro-3-oxanona (M)



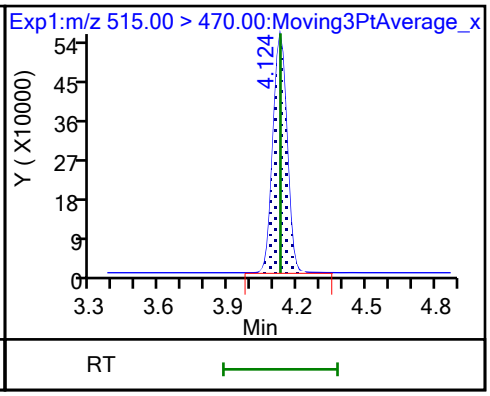
68 Perfluorononanesulfonic acid



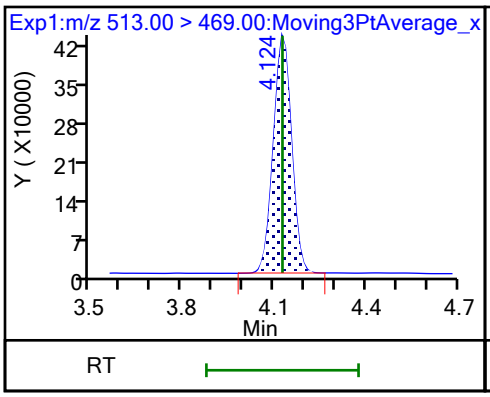
68 Perfluorononanesulfonic acid



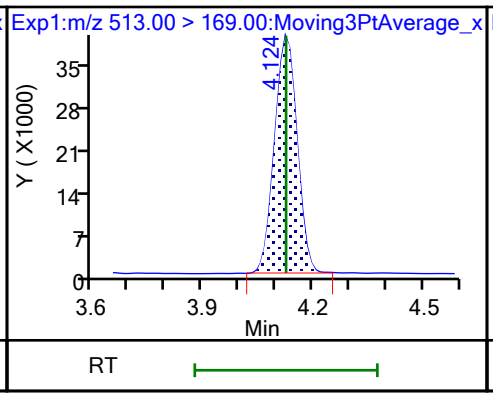
D 23 13C2 PFDA



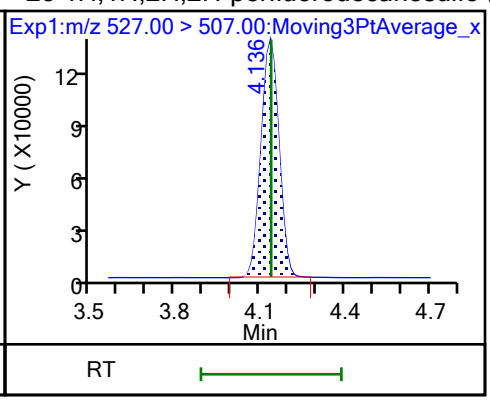
24 Perfluorodecanoic acid



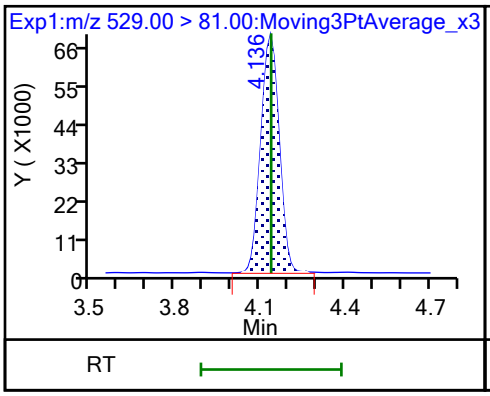
24 Perfluorodecanoic acid



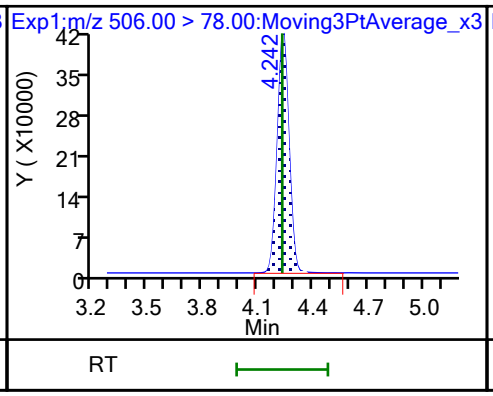
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



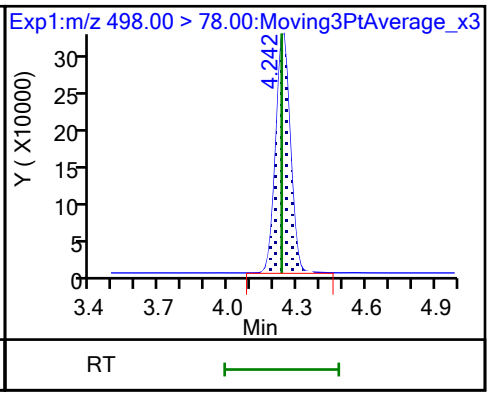
D 26 M2-8:2 FTS



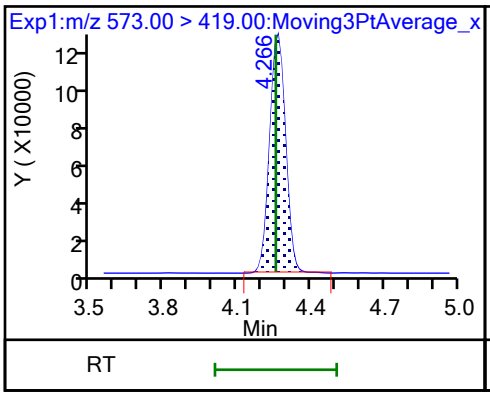
D 21 13C8 FOSA



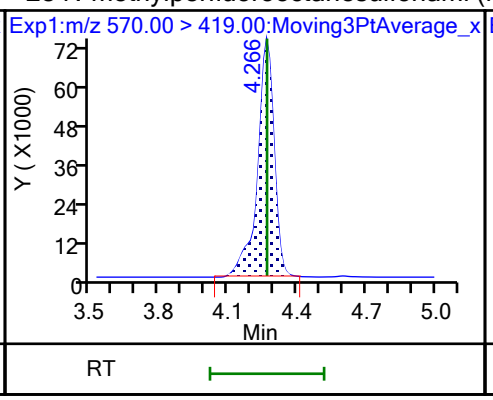
22 Perfluorooctanesulfonamide



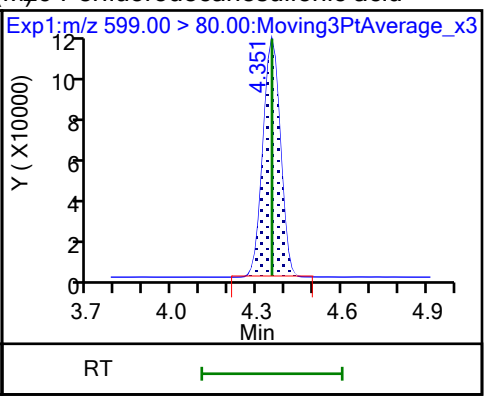
D 27 d3-NMeFOSAA



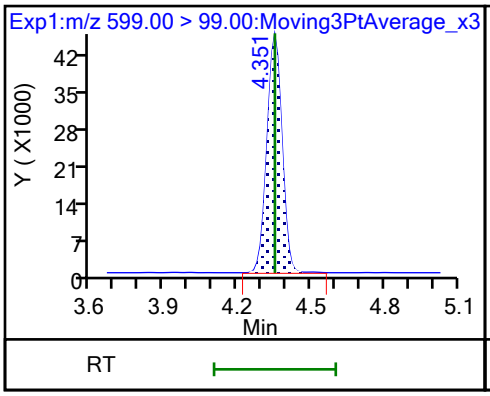
28 N-methylperfluorooctanesulfonami (M)



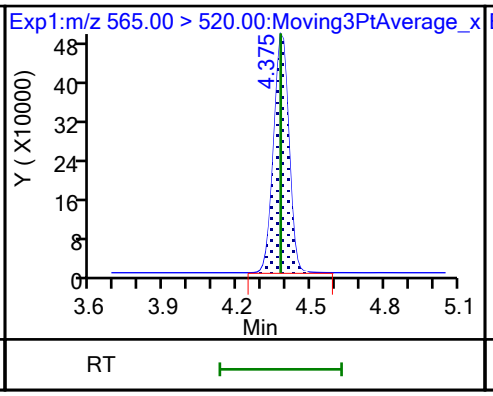
29 Perfluorodecanesulfonic acid



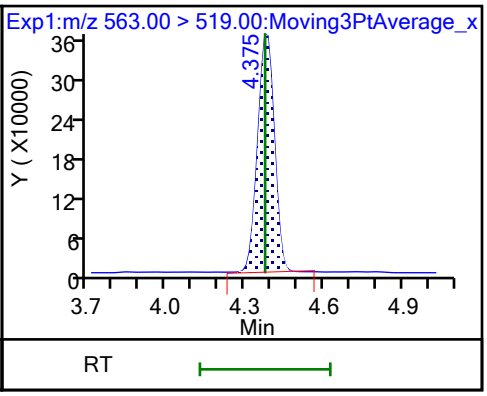
29 Perfluorodecanesulfonic acid



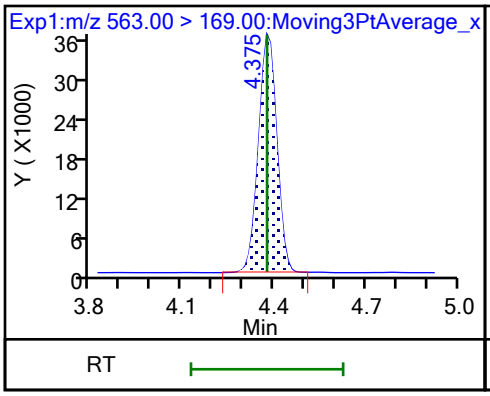
D 30 13C2 PFUnA



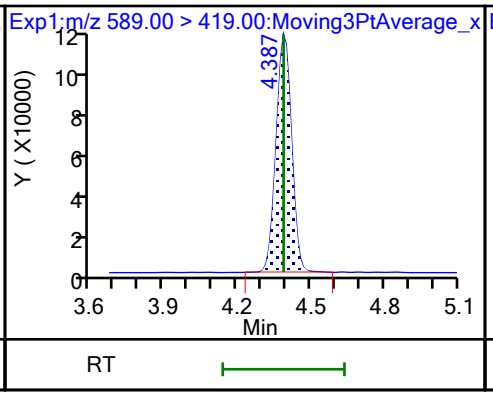
31 Perfluoroundecanoic acid



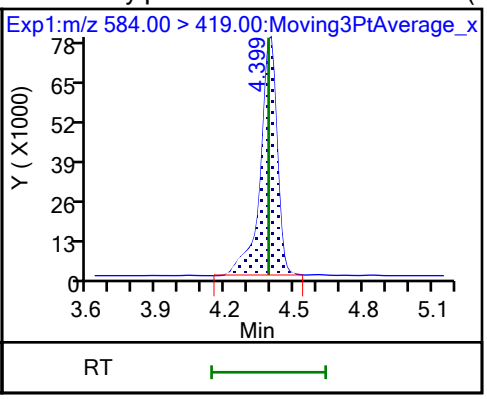
31 Perfluoroundecanoic acid



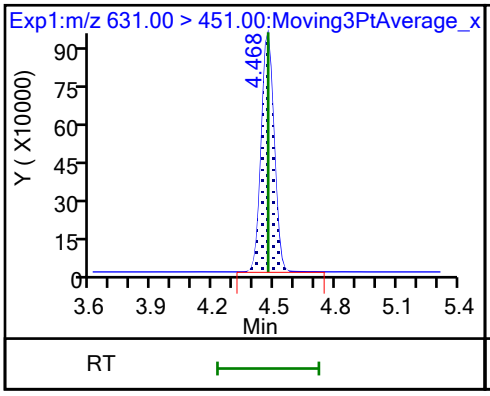
D 32 d5-NEtFOSAA



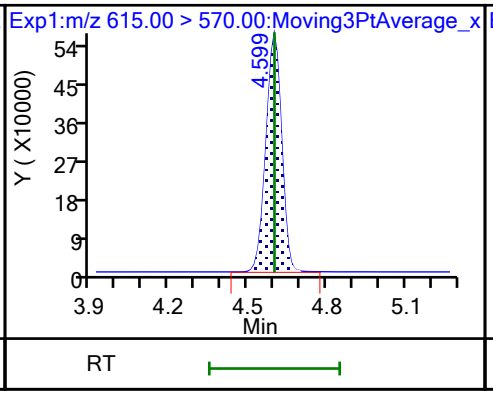
33 N-ethylperfluorooctanesulfonamid (M)



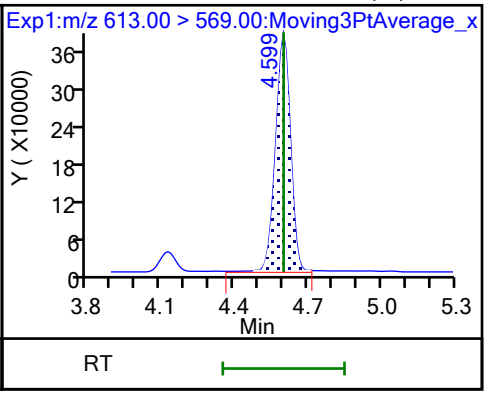
66 11-Chloroeicosafluoro-3-oxaundec



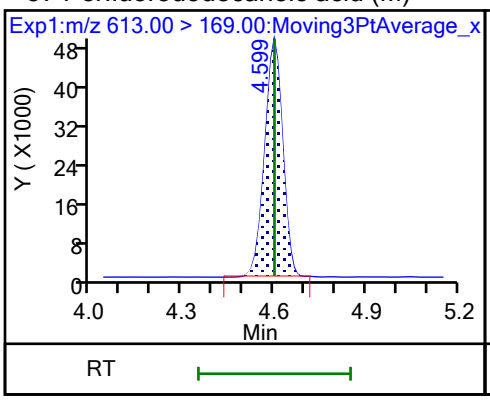
D 36 13C2 PFDoA



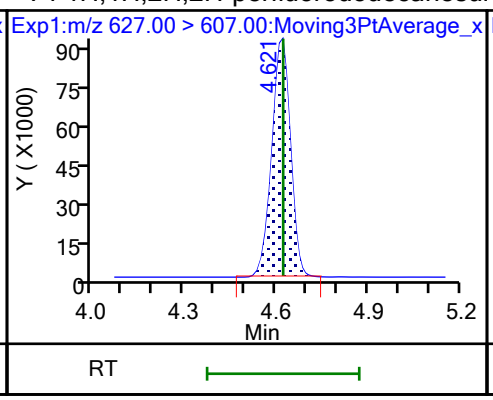
37 Perfluorododecanoic acid (M)



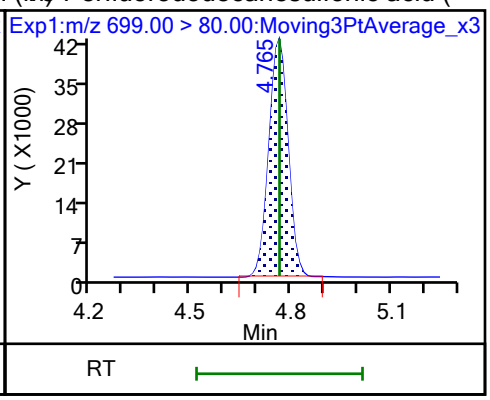
37 Perfluorododecanoic acid (M)



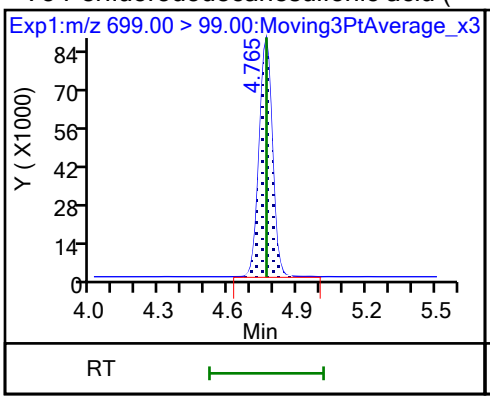
74 1H,1H,2H,2H-perfluorododecanesul (M)



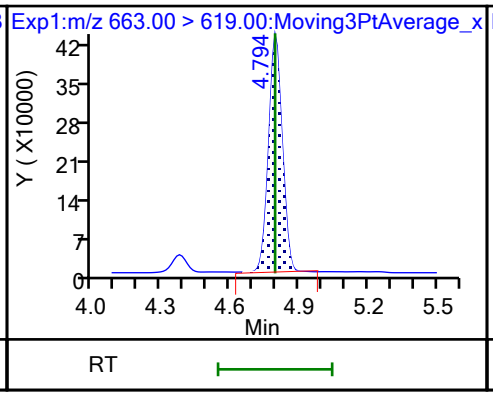
75 Perfluorododecanesulfonic acid (



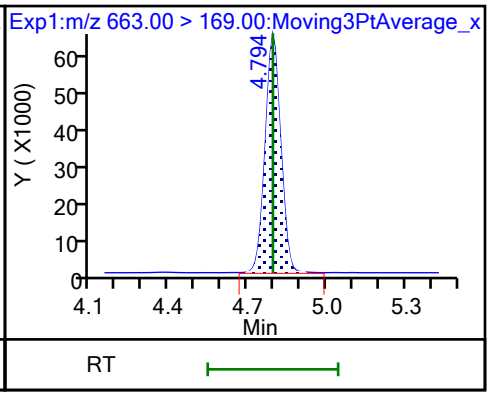
75 Perfluorododecanesulfonic acid (



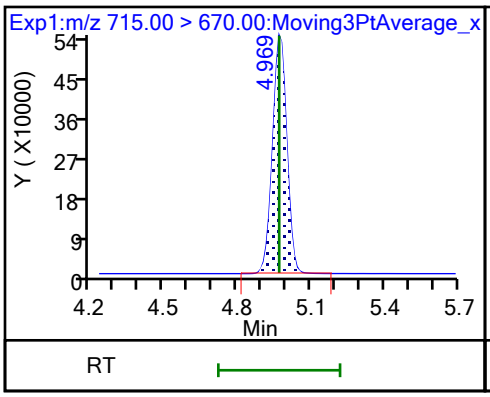
41 Perfluorotridecanoic acid



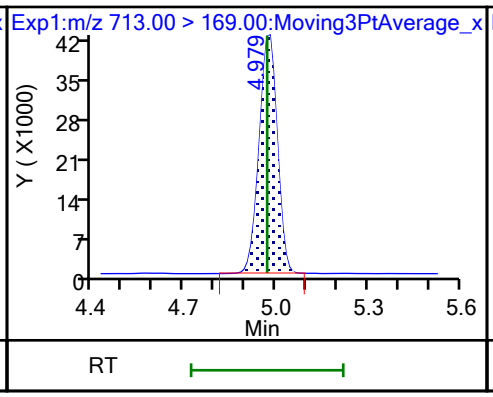
41 Perfluorotridecanoic acid



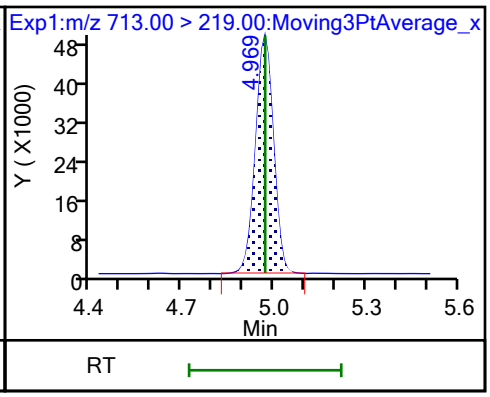
D 43 13C2 PFTeDA



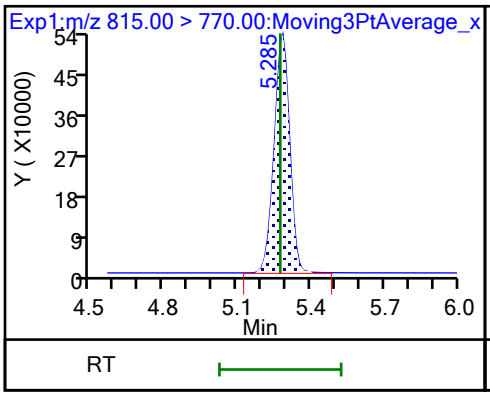
42 Perfluorotetradecanoic acid



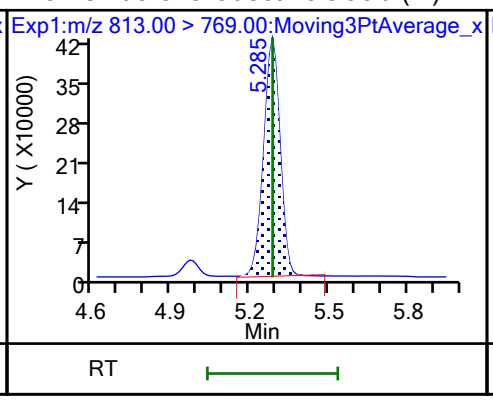
42 Perfluorotetradecanoic acid



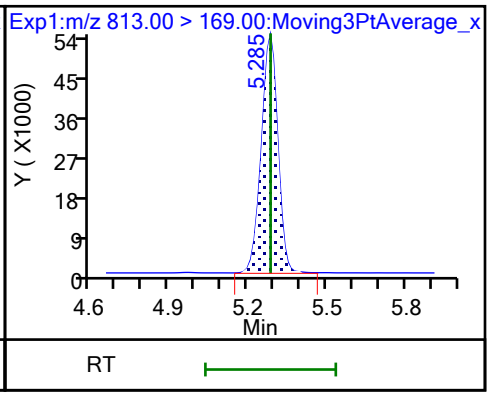
D 44 13C2 PFHxDA



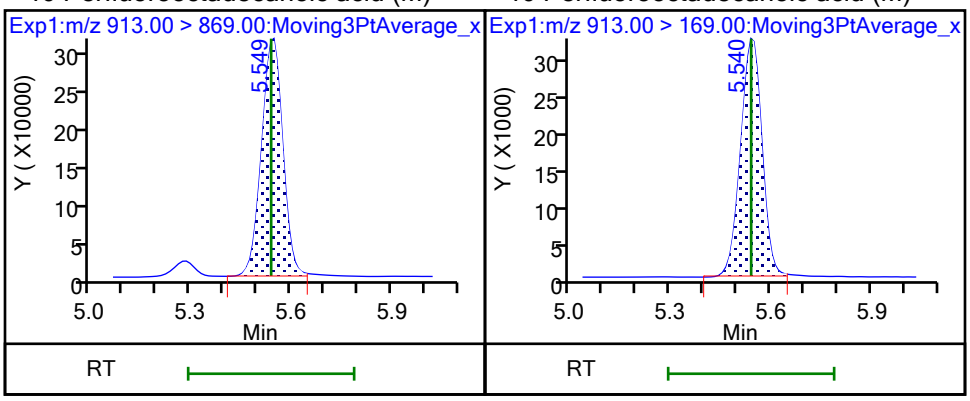
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196761/1-A

Matrix: Water | Lab File ID: PA231025A06.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) | Date Analyzed: 10/25/2023 18:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	0.540	J	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	0.504	J	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196761/1-A

Matrix: Water Lab File ID: PA231025A06.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) Date Analyzed: 10/25/2023 18:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	119		50-150
STL01893	13C5 PFPeA	113		50-150
STL01892	13C4 PFHpA	112		50-150
STL02116	13C2 PFTeDA	89		50-150
STL02337	13C3 PFBS	114		50-150
STL01056	13C8 FOSA	86		50-150
STL02118	d3-NMeFOSAA	105		50-150
STL02117	d5-NEtFOSAA	96		50-150
STL02395	M2-4:2 FTS	106		50-150
STL02279	M2-6:2 FTS	116		50-150
STL02280	M2-8:2 FTS	106		50-150
STL02255	13C3 HFPO-DA	106		50-150
STL00994	18O2 PFHxS	118		50-150
STL00993	13C2 PFHxA	113		50-150
STL00991	13C4 PFOS	120		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	120		50-150
STL00996	13C2 PFDA	111		50-150
STL00990	13C4 PFOA	112		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Lims ID: MB 200-196761/1-A
Client ID:
Sample Type: MB
Inject. Date: 25-Oct-2023 18:33:07 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196761/1-A
Misc. Info.: 200-0057556-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:54:20 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 10:10:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	2086678	1.49		119	770	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.139	0.0	1.004	42764	-0.0126			2.2	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.453	-0.014	0.693	1534699	1.41		113	1766	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.480	-0.013	0.701	1945172	1.32		114	142139	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.480	0.0	1.006	9188	0.004916	Target=2.06		10.8	M
298.90 > 99.00	2.480	2.480	0.0	1.006	4716		1.95(1.03-3.09)		1.8	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.772	-0.012	0.784	211081	1.24		106	134	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.810	-0.013	0.795	1566117	1.41		113	5509	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.918	-0.010	0.826	284997	1.33		106	2187	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.176	-0.011	0.899	1480102	1.40		118	10263	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.176	-0.011	1.000	4755	0.003432	Target=3.32		13.3	M
399.00 > 99.00	3.153	3.176	-0.023	0.996	2195		2.17(1.66-4.98)		2.4	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.176	-0.011	0.899	1709347	1.41		112	6456	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.511	0.0	0.997	301112	1.37		116	603	
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.529	-0.009	1.000	1925953	1.40		112	4558	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.529	-0.009		1769197	1.25			4917	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.842	3.830	0.012	1.003	2422	0.002584	Target=4.24		4.1	RM
499.00 > 99.00	3.808	3.830	-0.022	0.994	1457		1.66(2.12-6.37)		3.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.830	0.0	1.088	960346	1.43		120	3832	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.854	-0.012	1.091	2244074	1.50		120	9659	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	4.000	3.990	0.010	1.044	979	0.000341			3.8	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.148	-0.012	1.175	2181321	1.39		111	12351	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.148	0.0	1.178	313706	1.27		106	805	
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.242	0.0	1.205	1431613	1.07		85.5	4906	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.242	0.012	1.003	1023	0.000936			9.3	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.278	4.278	0.0	1.215	492204	1.31		105	1958	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.291	-0.026	0.997	2390	0.006689			7.7	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.375	-0.012	1.139	1115	0.002032	Target=2.37		9.4	M
599.00 > 99.00	4.375	4.375	0.0	1.142	427		2.61(1.19-3.56)		3.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.398	-0.011	1.246	1786595	1.21		96.5	9327	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.375	4.398	-0.023	0.997	4979	0.003380	Target=12.20		1.2	M
563.00 > 169.00	4.398	4.398	0.0	1.003	680		7.32(6.10-18.31)		9.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.410	-0.012	1.250	432318	1.20		95.8	993	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.410	-0.012	1.000	3408	0.009852			20.6	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.482	-0.014	1.166	7960	0.001810			13.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.621	-0.011	1.310	1746675	1.16		92.8	7088	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.610	4.621	-0.011	1.000	19192	0.0135	Target=8.47		1.1	M
613.00 > 169.00	4.610	4.621	-0.011	1.000	1836		10.45(4.23-12.70)		16.2	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.621	4.632	-0.011	1.114	2427	0.007040			39.6	M
75 Perfluorododecanesulfonic acid (										RM
699.00 > 80.00	4.793	4.774	0.019	1.251	539	0.002898	Target=0.48		9.1	RM
699.00 > 99.00	4.764	4.774	-0.010	1.244	586		0.92(0.24-0.72)		10.0	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.812	-0.009	1.042	18843	0.0126	Target=6.41		1.2	M
663.00 > 169.00	4.803	4.812	-0.009	1.042	2318		8.13(3.21-9.62)		12.2	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.989	0.001	1.417	1667616	1.11		89.0	4513	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.989	-0.010	0.998	645	0.004324	Target=0.87		9.9	M
713.00 > 219.00	4.979	4.989	-0.010	0.998	879		0.73(0.43-1.30)		11.5	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.307	-0.012	1.504	1911574	1.11		88.5	4543	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.307	-0.012	1.000	7216	0.004718	Target=7.89		0.6	M
813.00 > 169.00	5.295	5.307	-0.012	1.000	778		9.28(3.94-11.83)		14.1	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.566	5.566	0.0	1.051	2462	0.002062	Target=9.39		0.4	M
913.00 > 169.00	5.566	5.566	0.0	1.051	430		5.73(4.69-14.08)		10.8	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

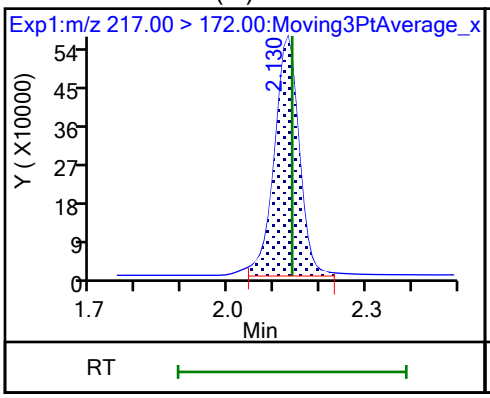
M - Manually Integrated

Report Date: 26-Oct-2023 16:54:29 Chrom Revision: 2.3 18-Oct-2023 21:16:54

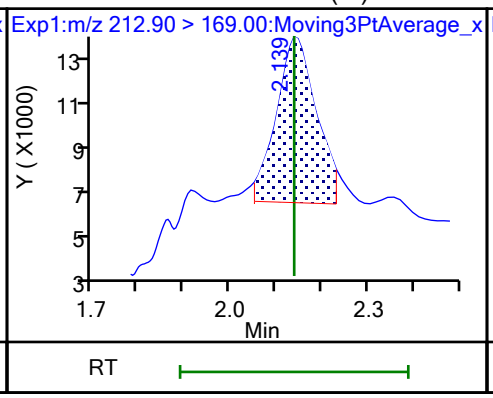
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

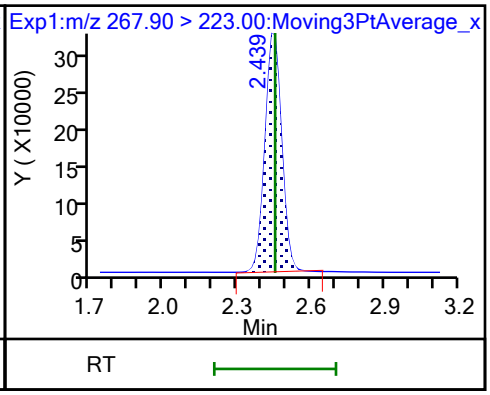
D 1 13C4 PFBA (M)



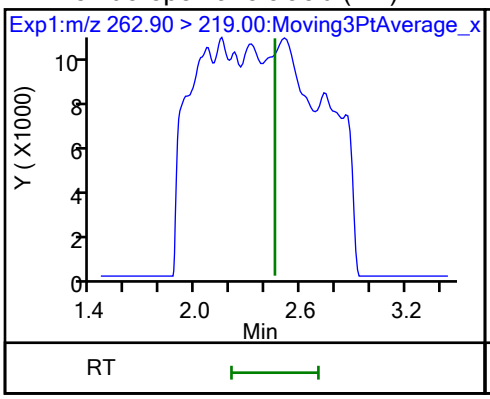
2 Perfluorobutanoic acid (M)



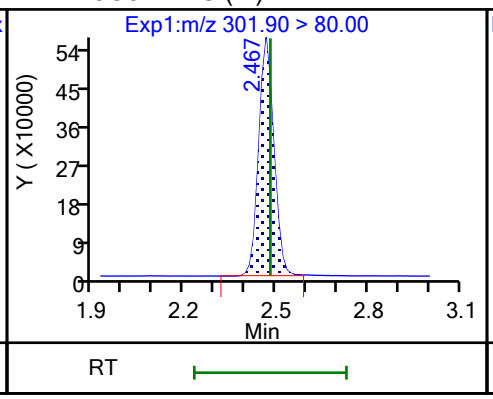
D 3 13C5 PFPeA



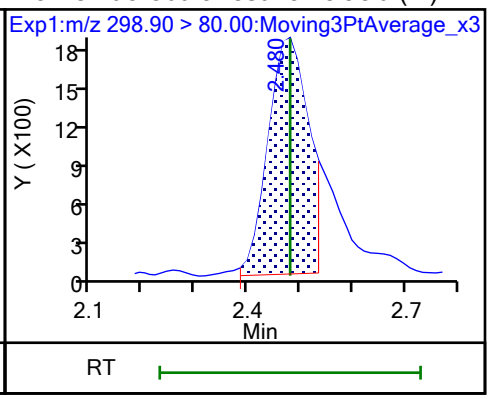
4 Perfluoropentanoic acid (ND)



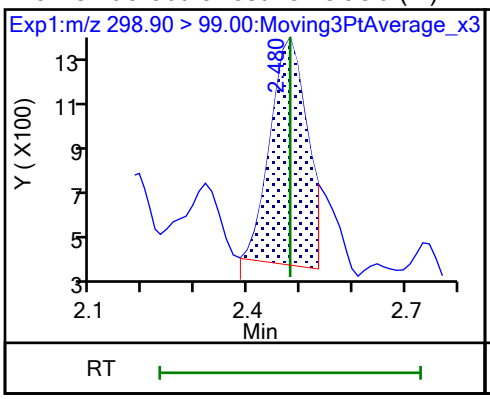
D 47 13C3 PFBS (M)



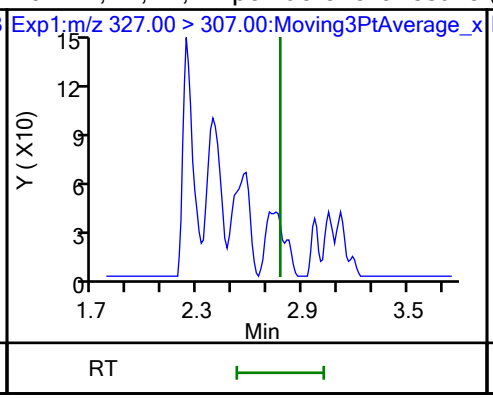
5 Perfluorobutanesulfonic acid (M)



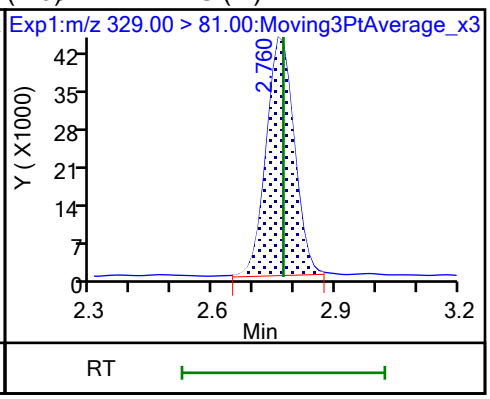
5 Perfluorobutanesulfonic acid (M)



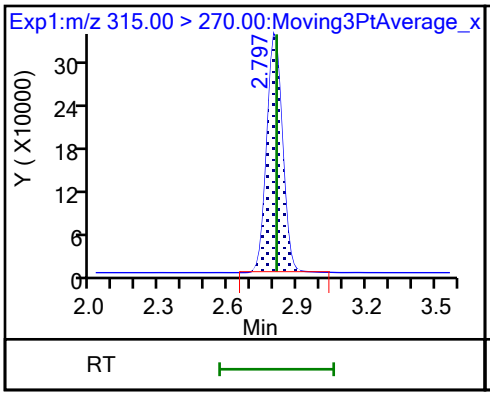
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



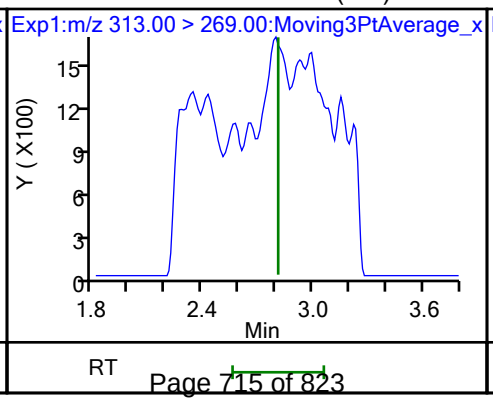
D 60 M2-4:2 FTS (M)



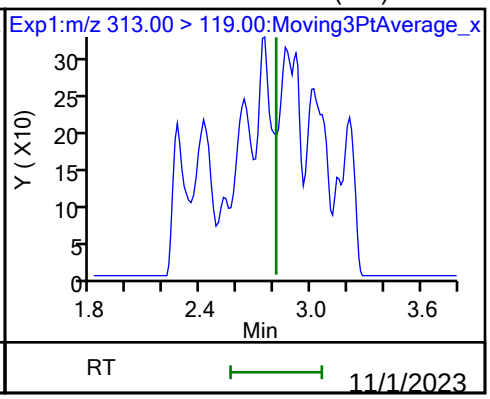
D 7 13C2 PFHxA



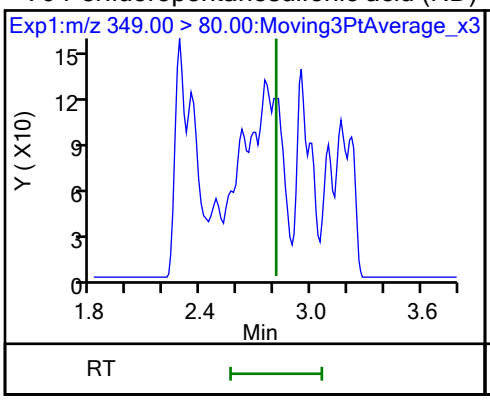
6 Perfluorohexanoic acid (ND)



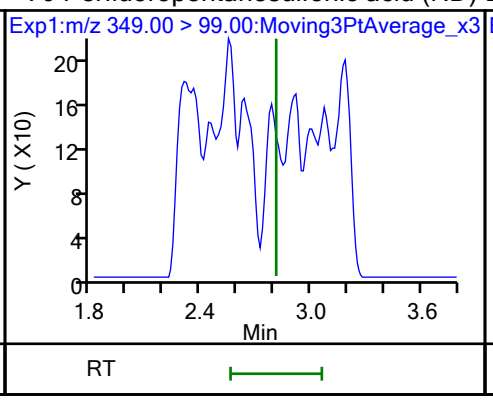
6 Perfluorohexanoic acid (ND)

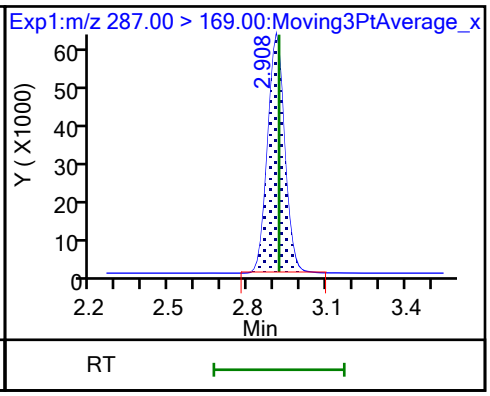


70 Perfluoropentanesulfonic acid (ND)

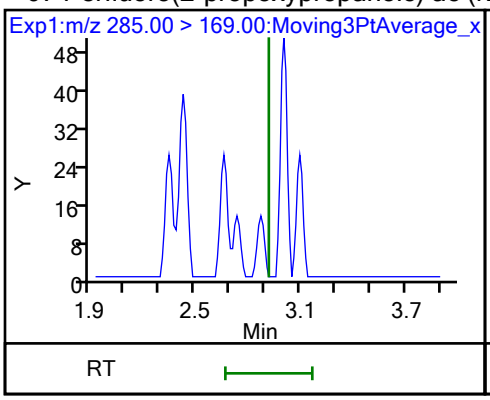


70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA

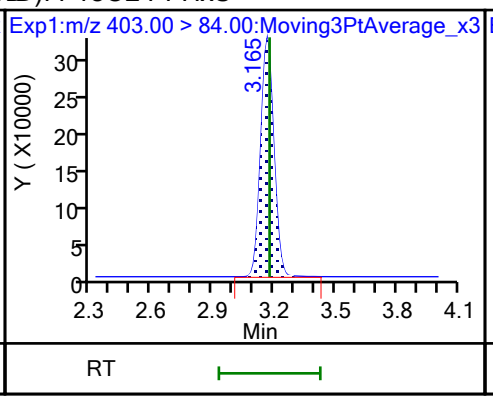




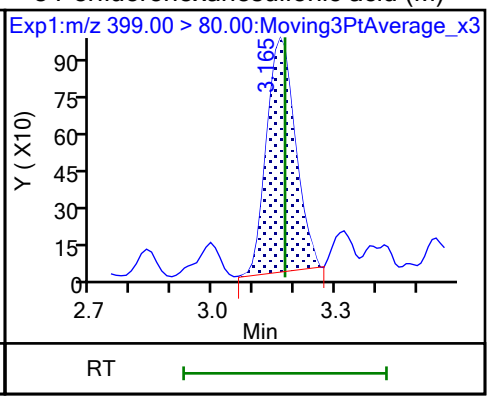
67 Perfluoro(2-propoxypropanoic) ac (ND)



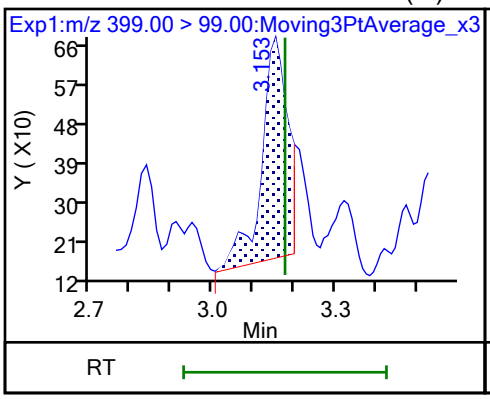
D 11 18O2 PFHxS



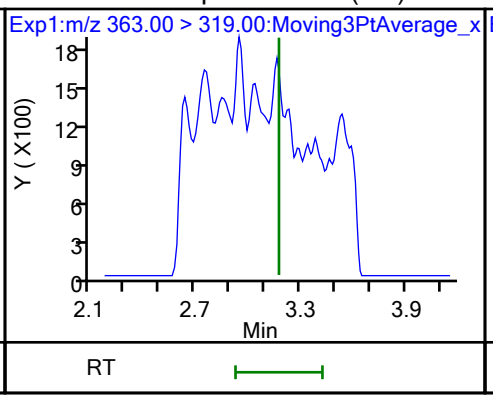
8 Perfluorohexanesulfonic acid (M)



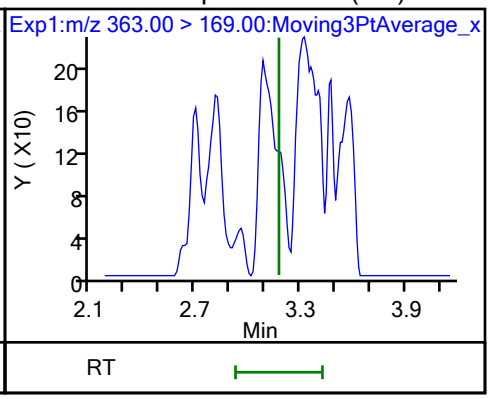
8 Perfluorohexanesulfonic acid (M)



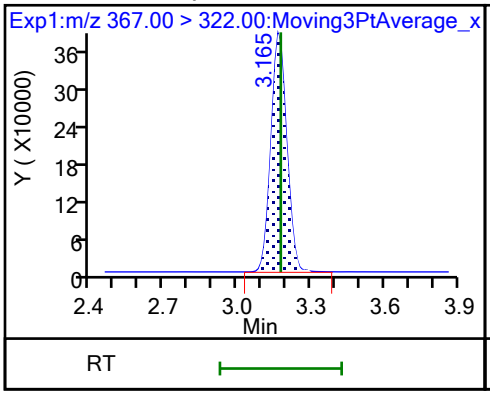
10 Perfluoroheptanoic acid (ND)



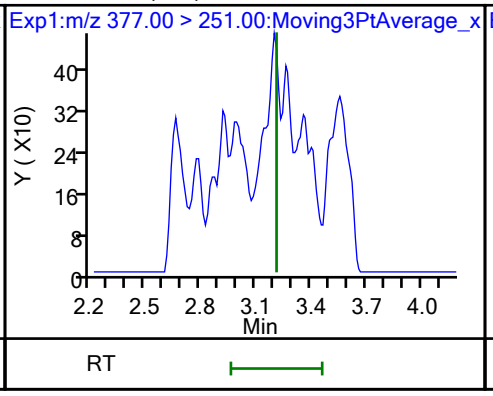
10 Perfluoroheptanoic acid (ND)



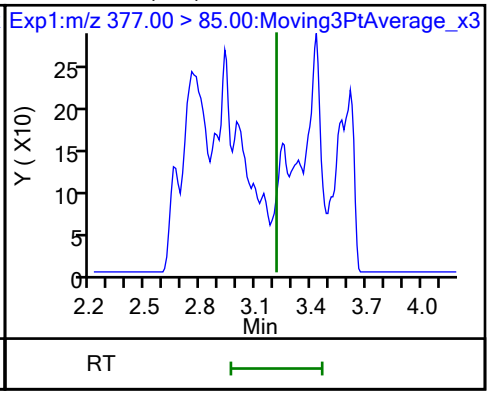
D 9 13C4 PFHpA



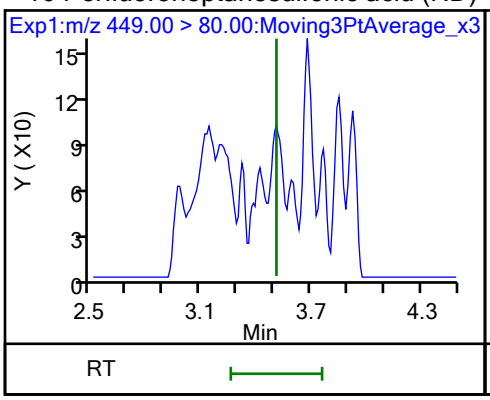
77 DONA (ND)



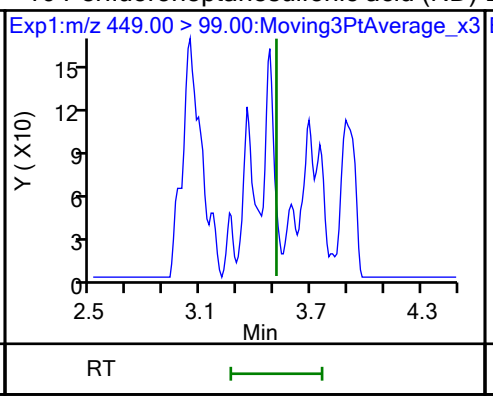
77 DONA (ND)



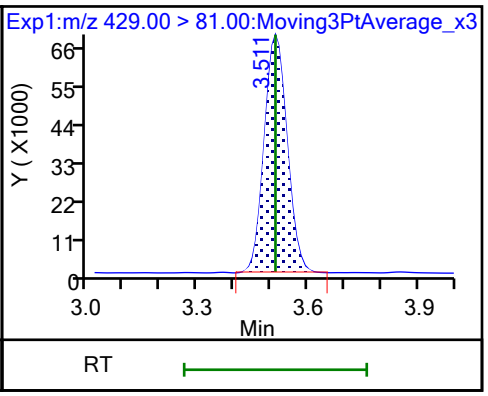
16 Perfluoroheptanesulfonic acid (ND)



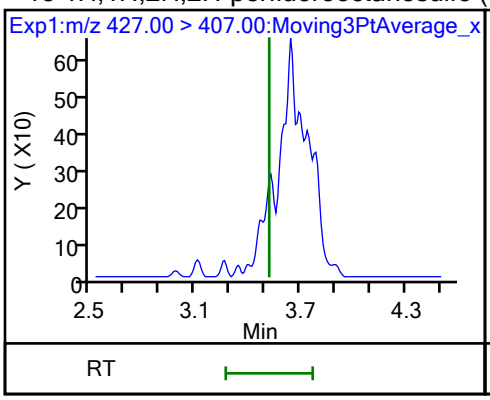
16 Perfluoroheptanesulfonic acid (ND)



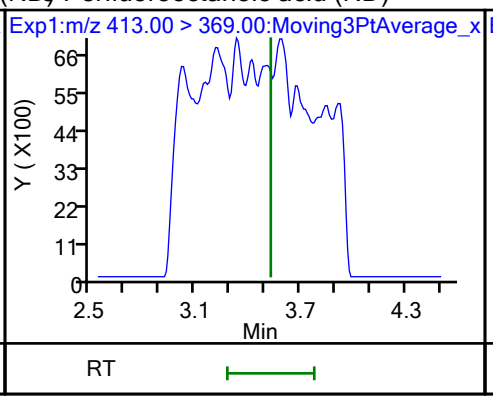
D 12 M2-6:2 FTS



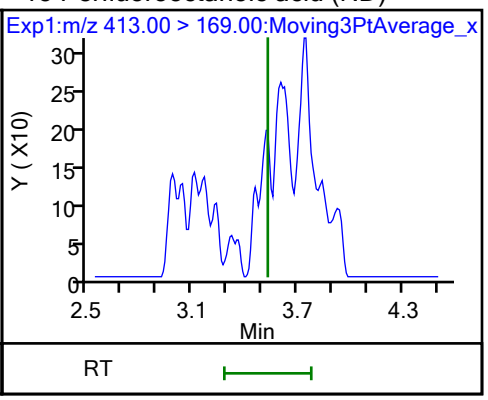
13 1H,1H,2H,2H-perfluorooctanesulfo (ND)



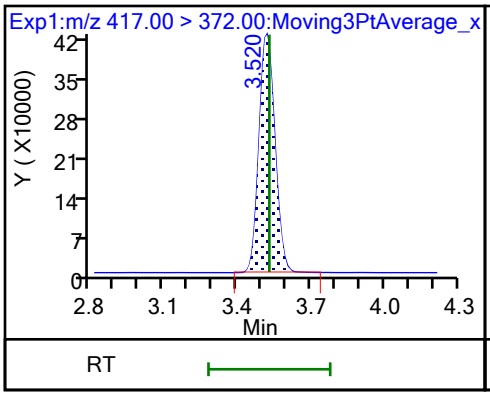
15 Perfluorooctanoic acid (ND)



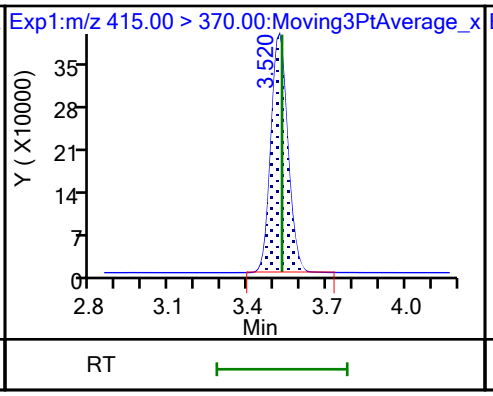
15 Perfluorooctanoic acid (ND)



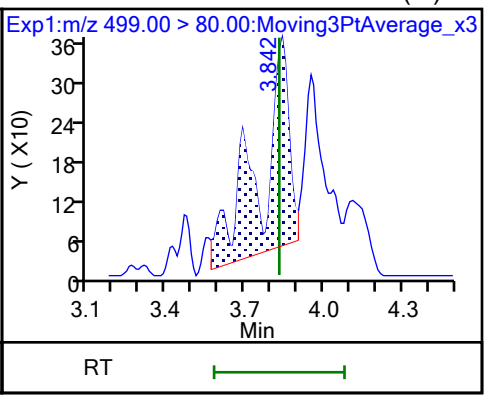
D 14 13C4 PFOA



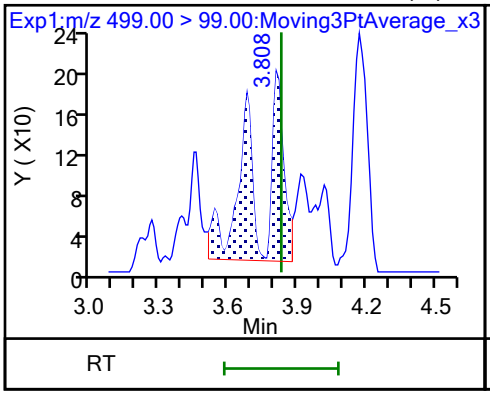
* 62 13C2 PFOA



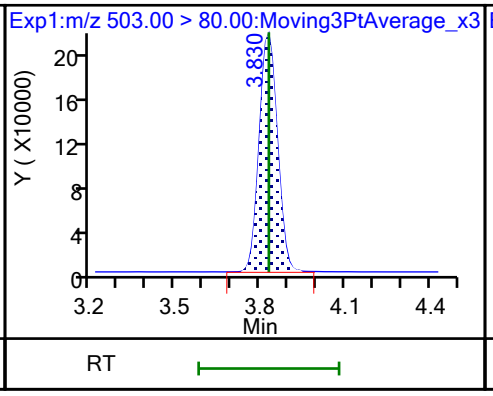
17 Perfluorooctanesulfonic acid (M)



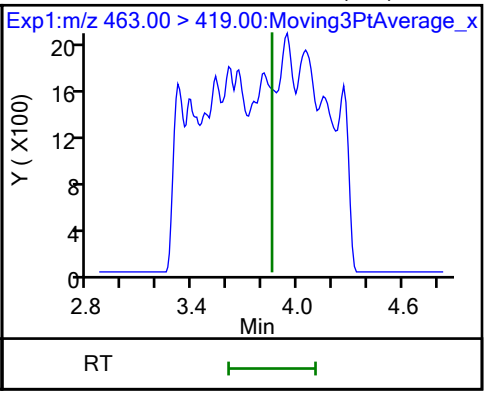
17 Perfluorooctanesulfonic acid (M)



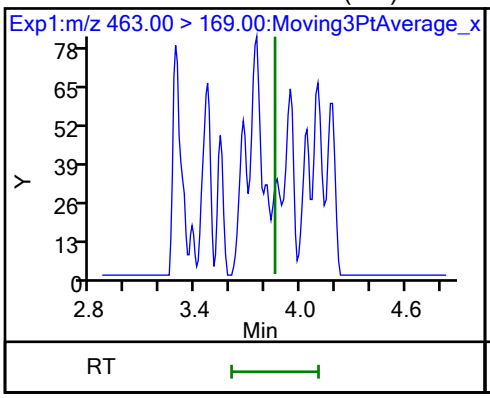
D 18 13C4 PFOS



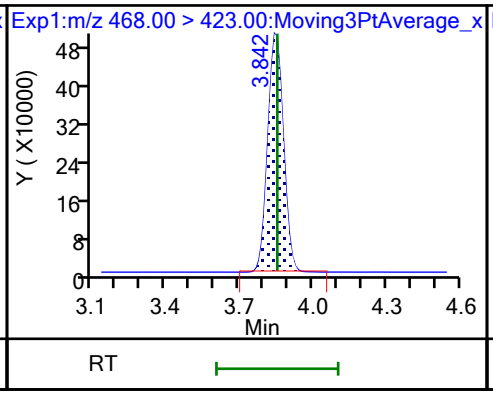
20 Perfluorononanoic acid (ND)



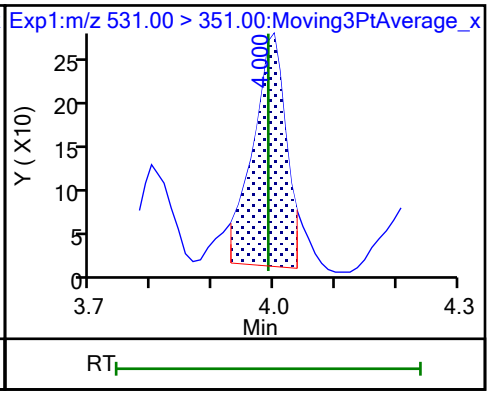
20 Perfluorononanoic acid (ND)



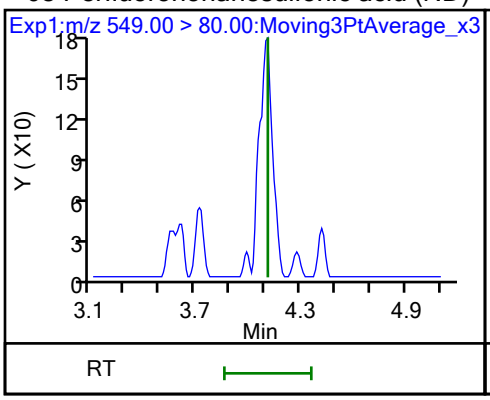
D 19 13C5 PFNA



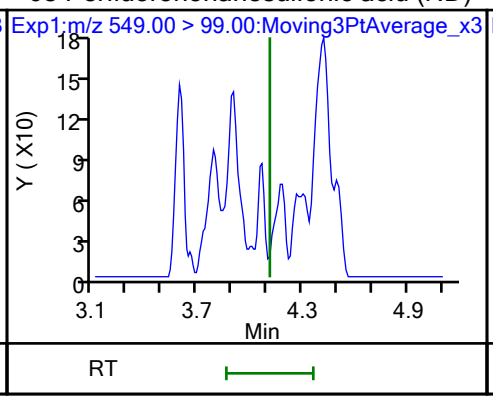
69 9-Chlorohexadecafluoro-3-oxanona (M)



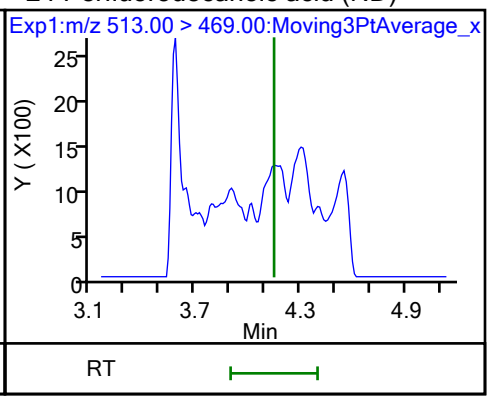
68 Perfluorononanesulfonic acid (ND)



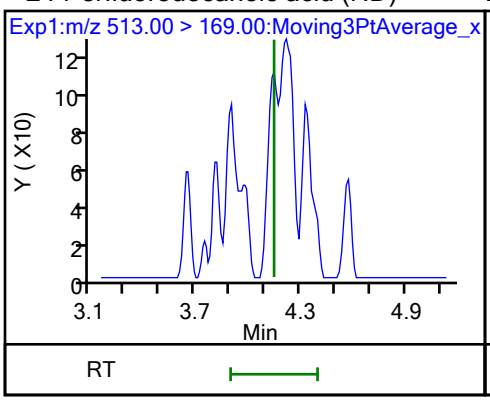
68 Perfluorononanesulfonic acid (ND)



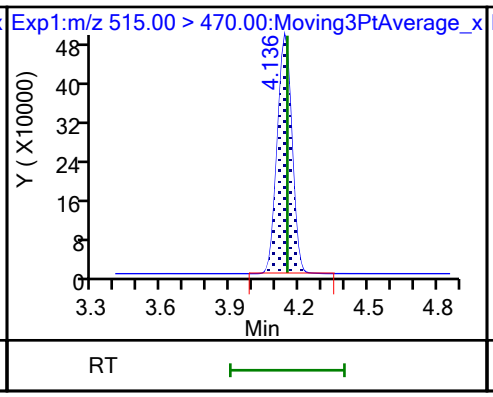
24 Perfluorodecanoic acid (ND)



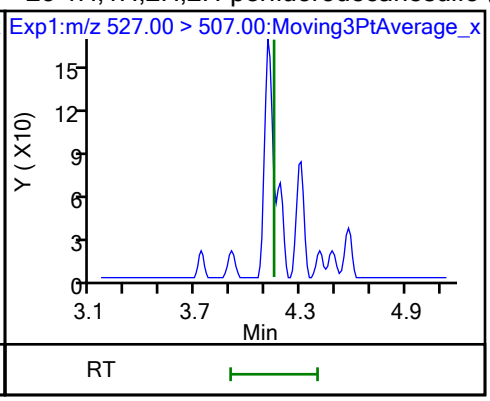
24 Perfluorodecanoic acid (ND)



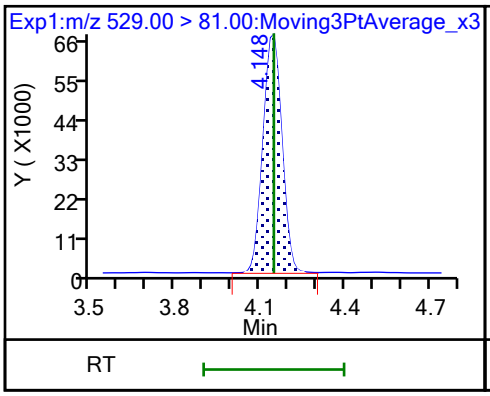
D 23 13C2 PFDA



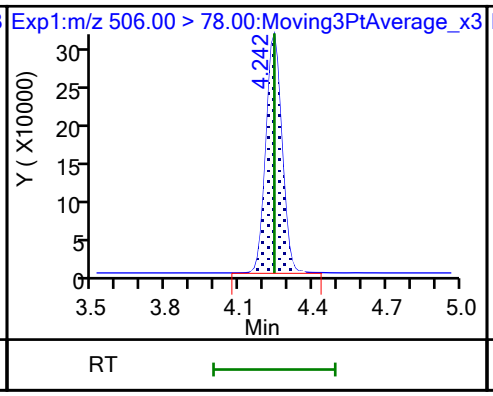
25 1H,1H,2H,2H-perfluorodecanesulfo (ND)



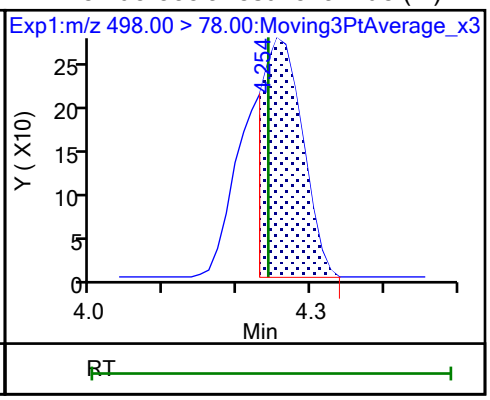
D 26 M2-8:2 FTS



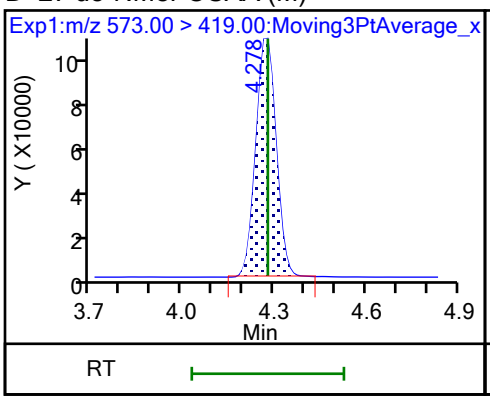
D 21 13C8 FOSA



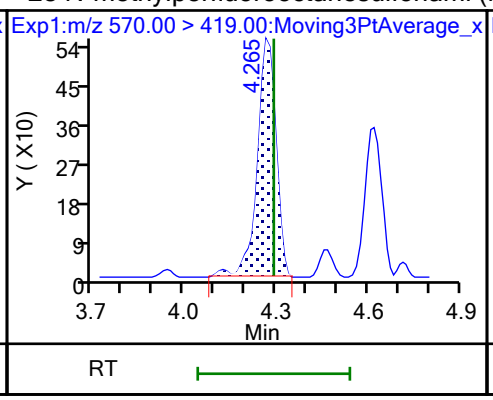
22 Perfluorooctanesulfonamide (M)



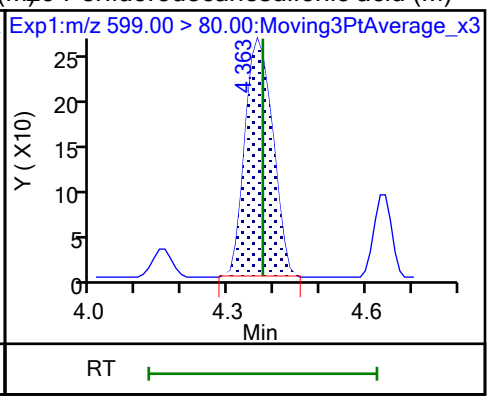
D 27 d3-NMeFOSAA (M)



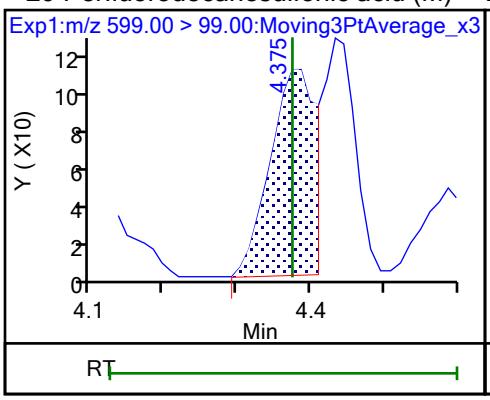
28 N-methylperfluorooctanesulfonami (M)



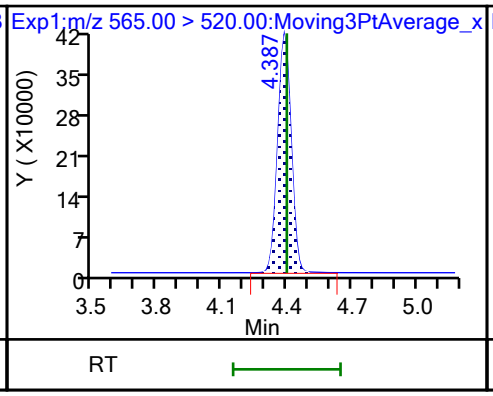
29 Perfluorodecanesulfonic acid (M)



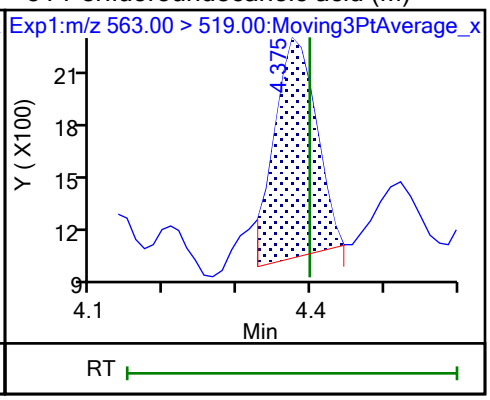
29 Perfluorodecanesulfonic acid (M)



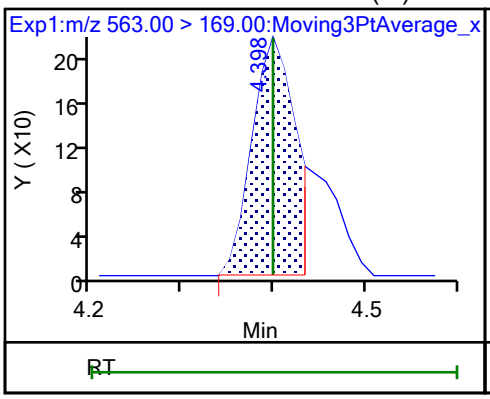
D 30 13C2 PFUnA



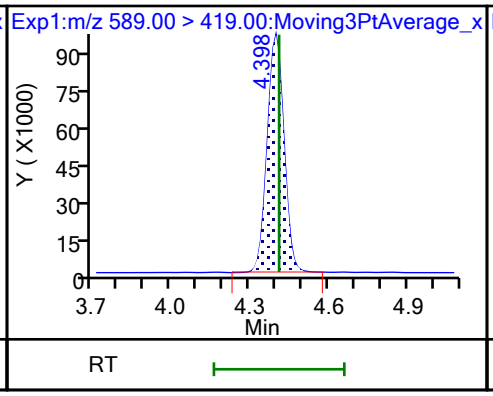
31 Perfluoroundecanoic acid (M)



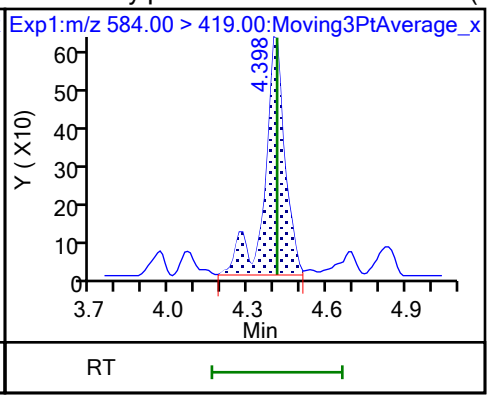
31 Perfluoroundecanoic acid (M)



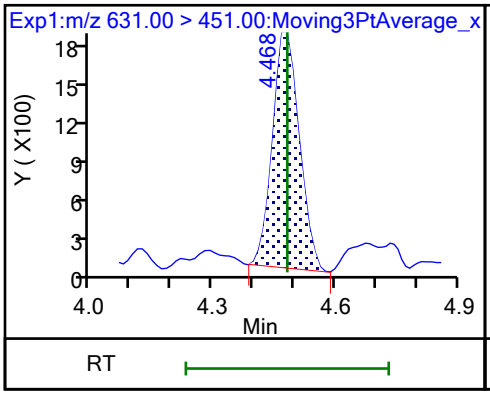
D 32 d5-NEtFOSAA



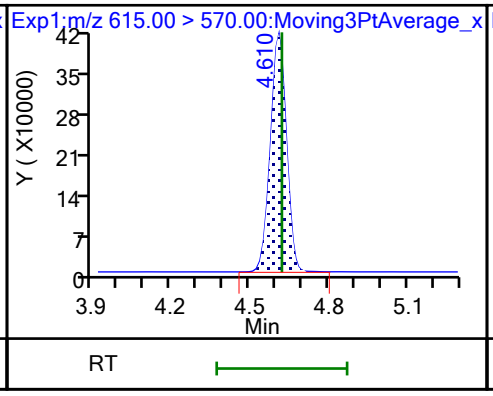
33 N-ethylperfluorooctanesulfonamid (M)



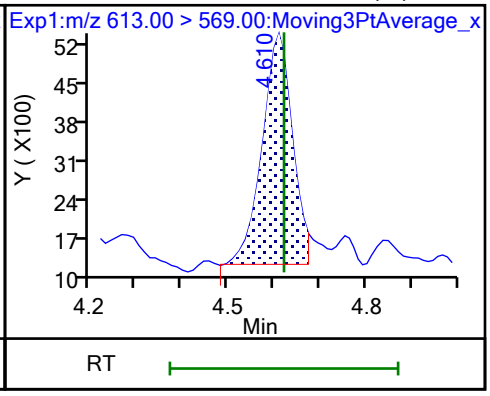
66 11-Chloroeicosafluoro-3-oxaundec



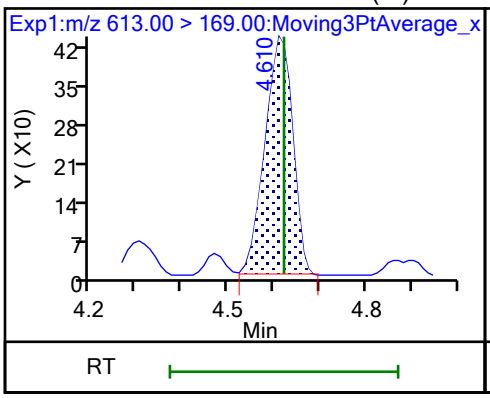
D 36 13C2 PFDoA



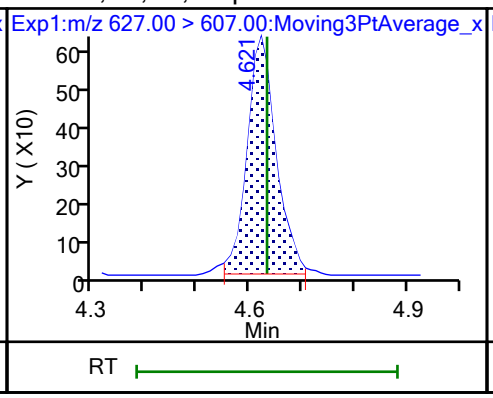
37 Perfluorododecanoic acid (M)



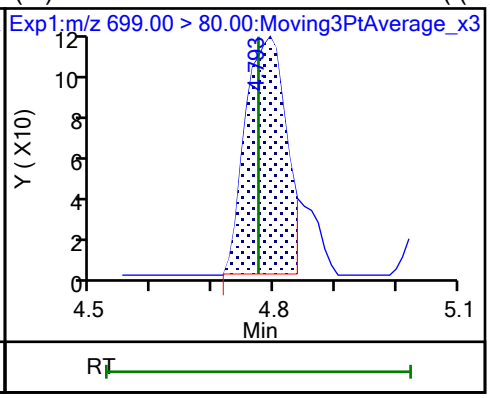
37 Perfluorododecanoic acid (M)



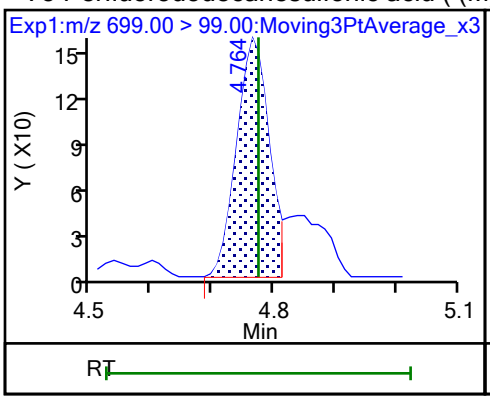
74 1H,1H,2H,2H-perfluorododecanesul (M)



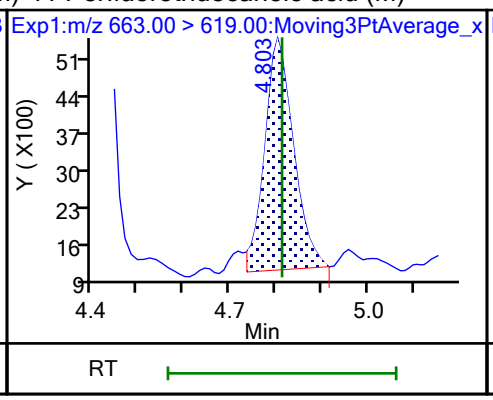
75 Perfluorododecanesulfonic acid ((M)



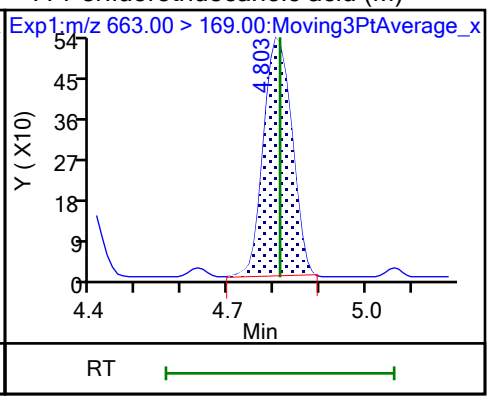
75 Perfluorododecanesulfonic acid ((M)



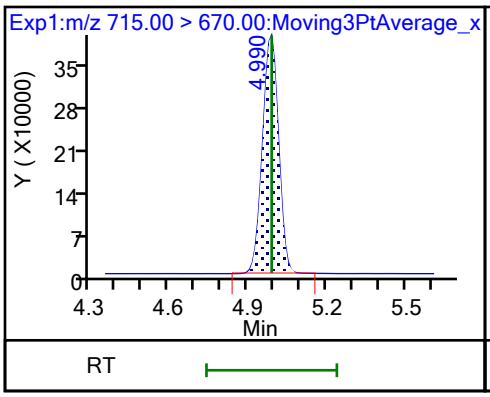
41 Perfluorotridecanoic acid (M)



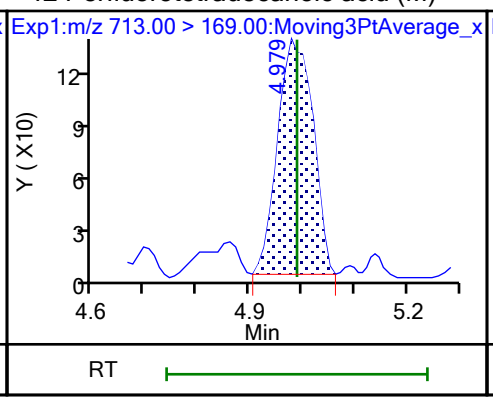
41 Perfluorotridecanoic acid (M)



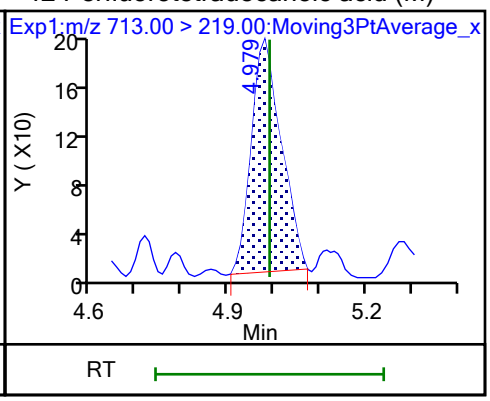
D 43 13C2 PFTeDA



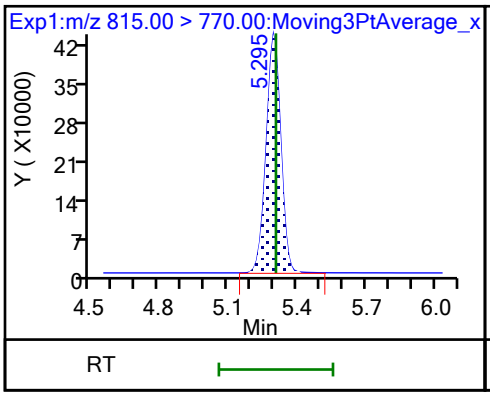
42 Perfluorotetradecanoic acid (M)



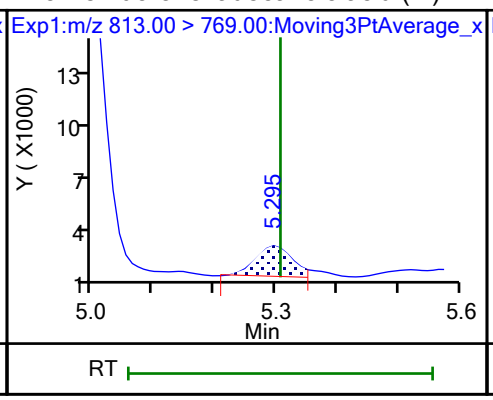
42 Perfluorotetradecanoic acid (M)



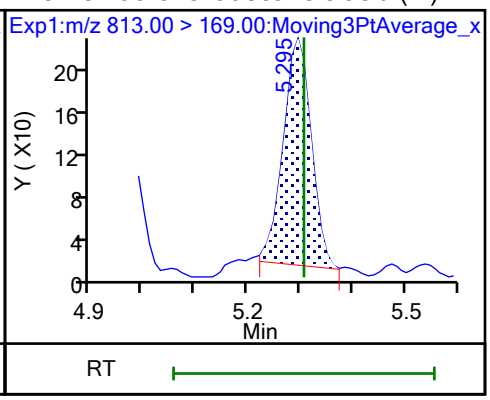
D 44 13C2 PFHxDA



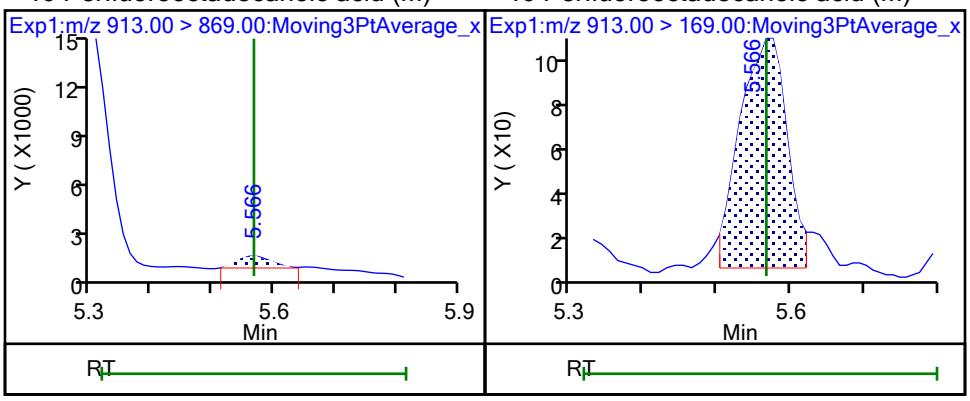
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Eurofins Burlington

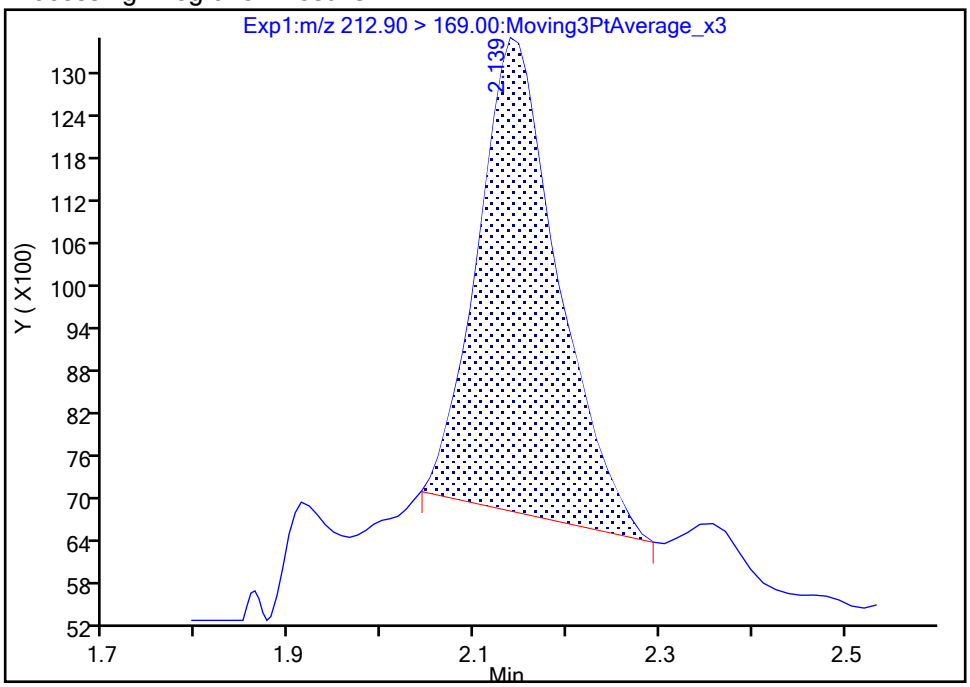
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

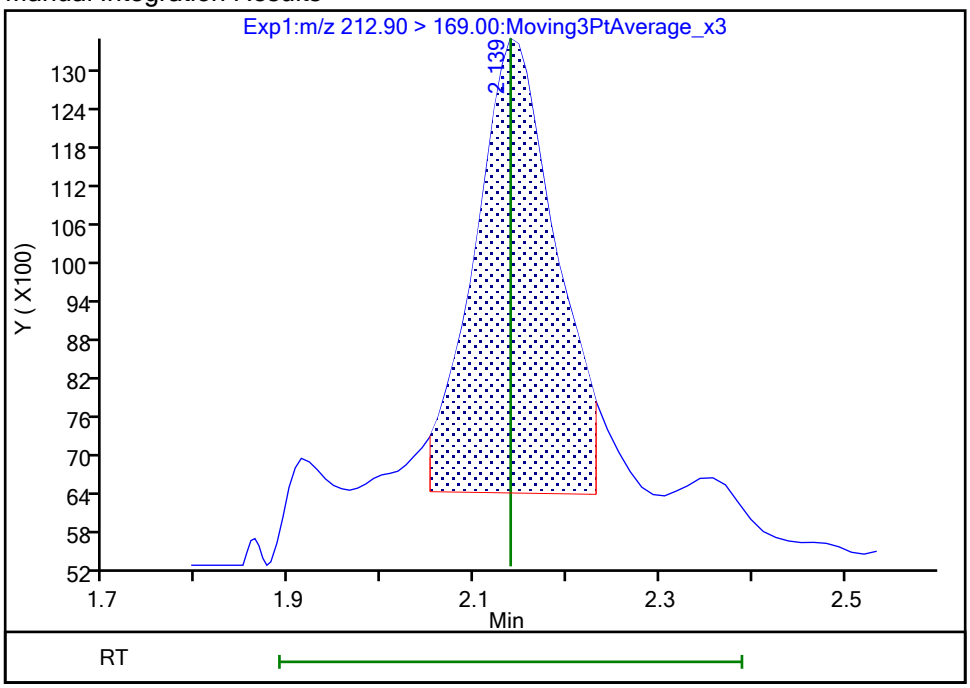
Processing Integration Results

RT: 2.14
Area: 40292
Amount: -0.014192
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 42764
Amount: -0.012554
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:04:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

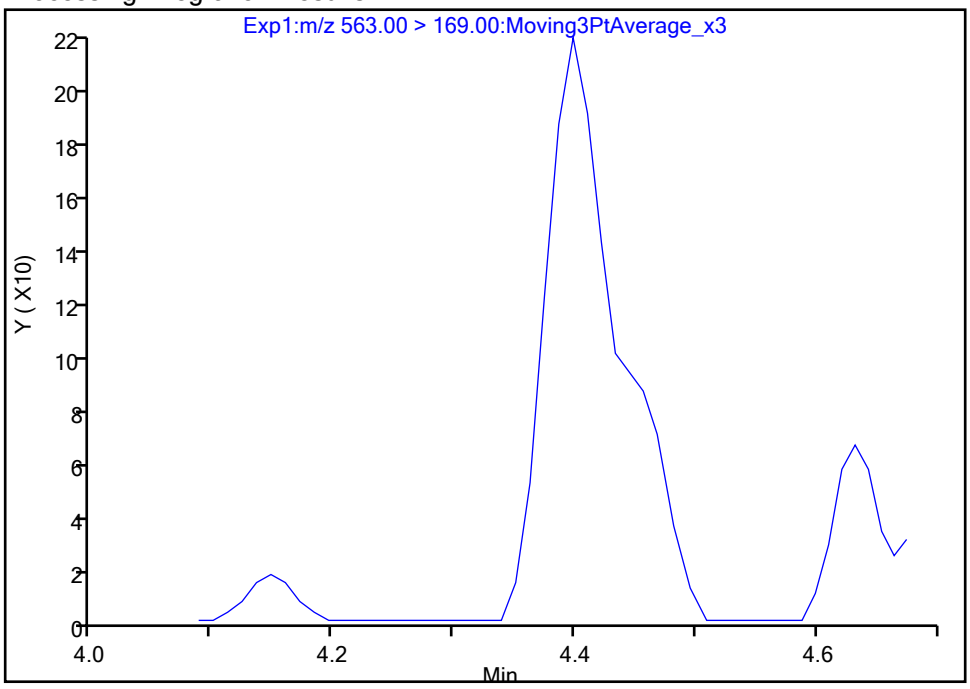
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

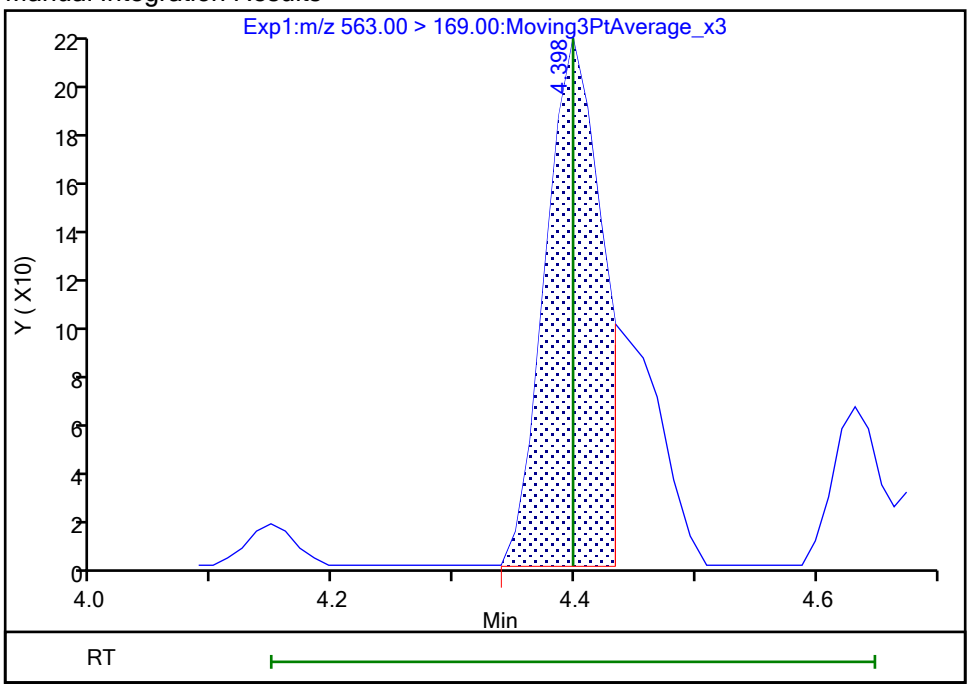
Not Detected
Expected RT: 4.40

Processing Integration Results



Manual Integration Results

RT: 4.40
Area: 680
Amount: 0.003380
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:08:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

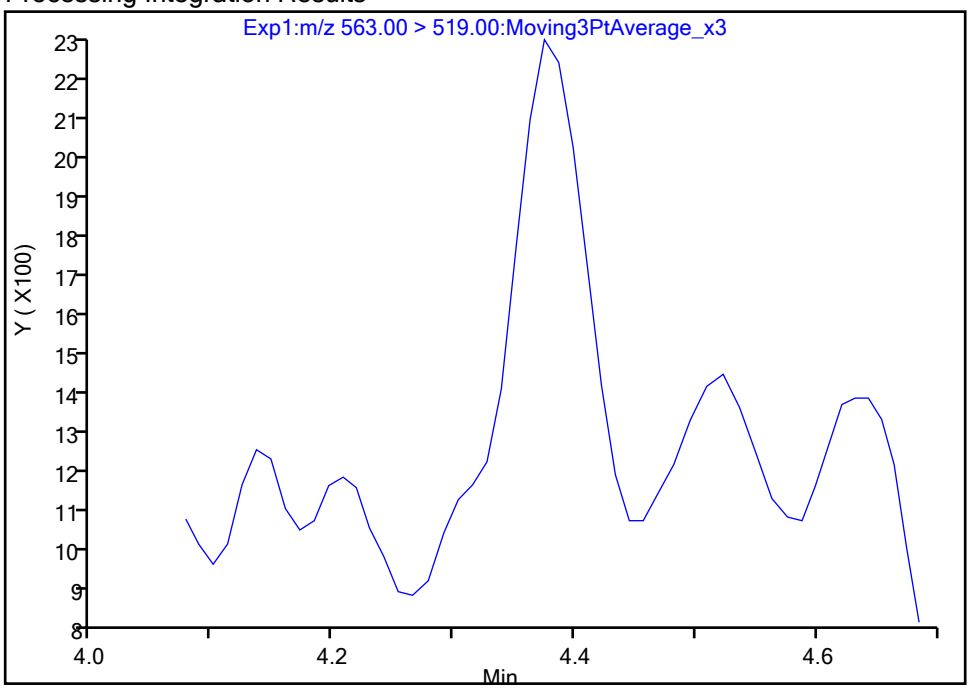
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

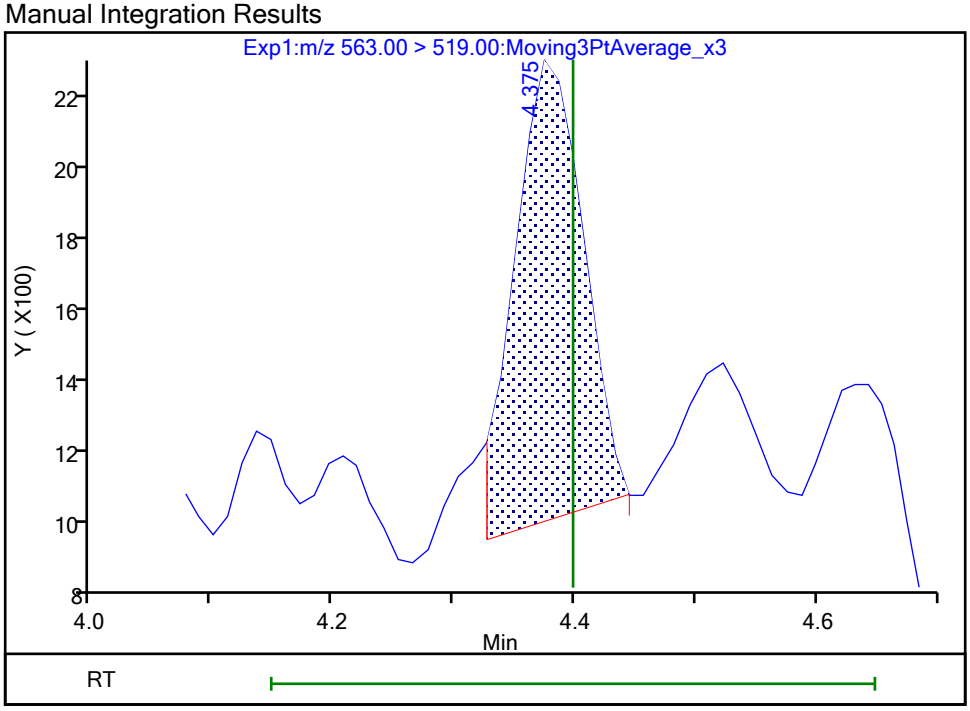
Not Detected
Expected RT: 4.40

Processing Integration Results



Manual Integration Results

RT: 4.37
Area: 4979
Amount: 0.003380
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:08:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

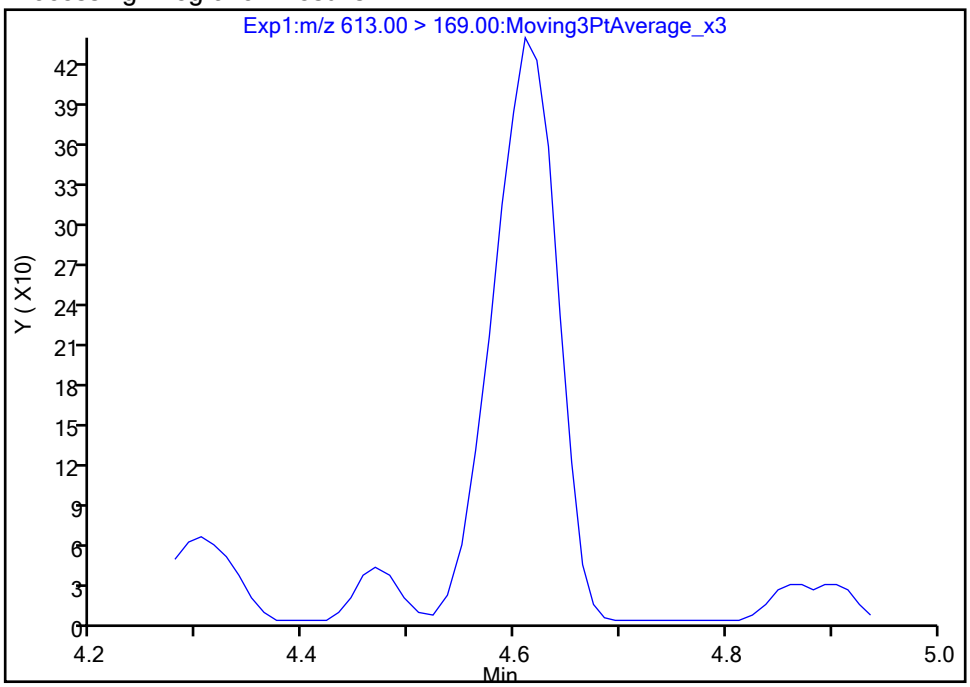
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

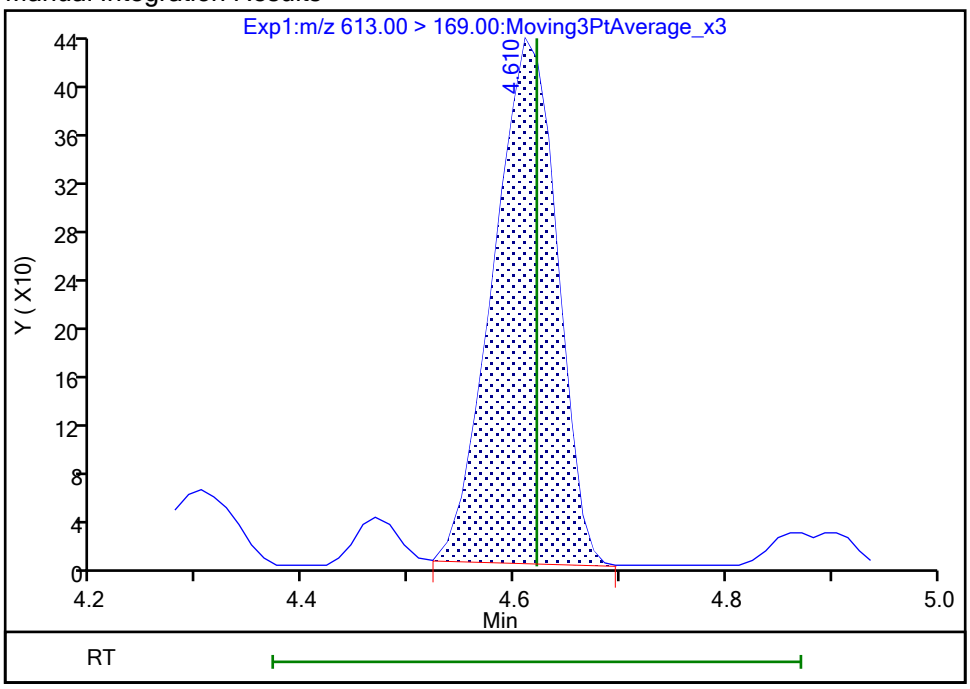
Not Detected
Expected RT: 4.62

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 1836
Amount: 0.013494
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:08:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

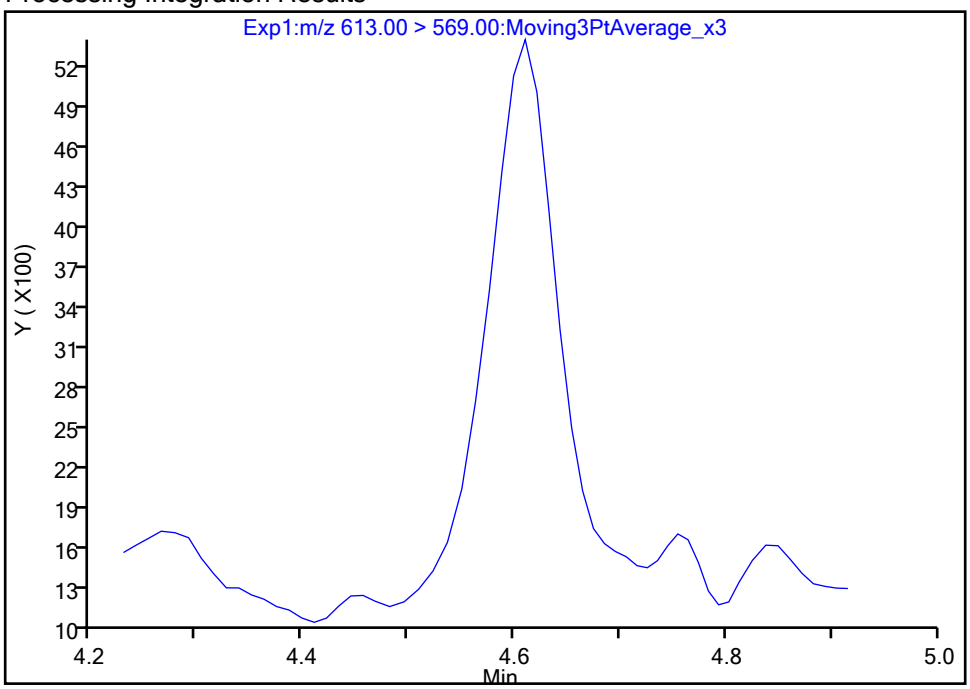
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

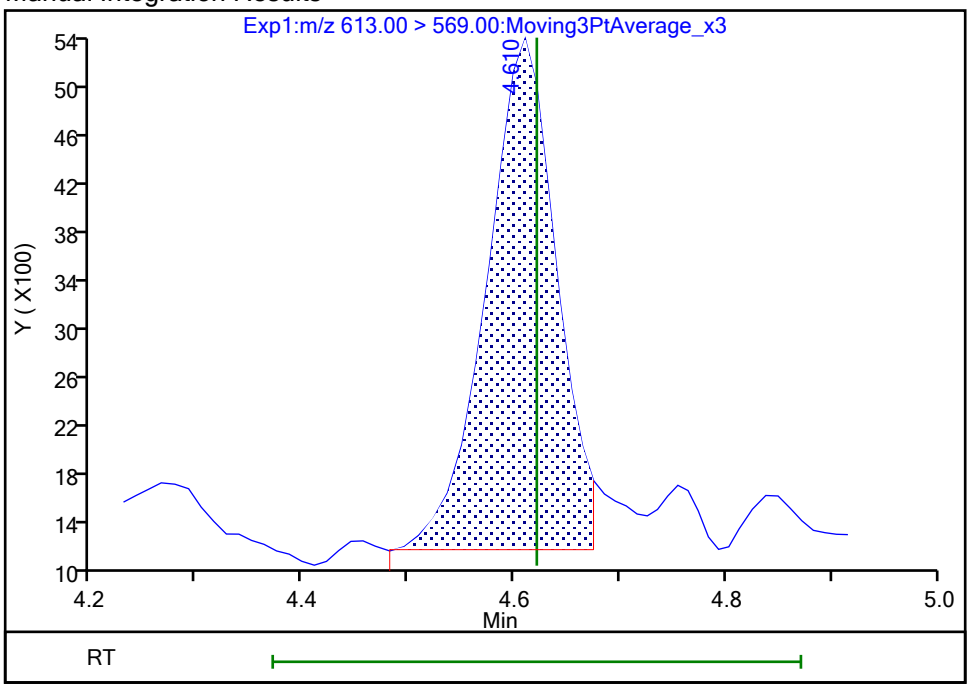
Not Detected
Expected RT: 4.62

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 19192
Amount: 0.013494
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:08:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

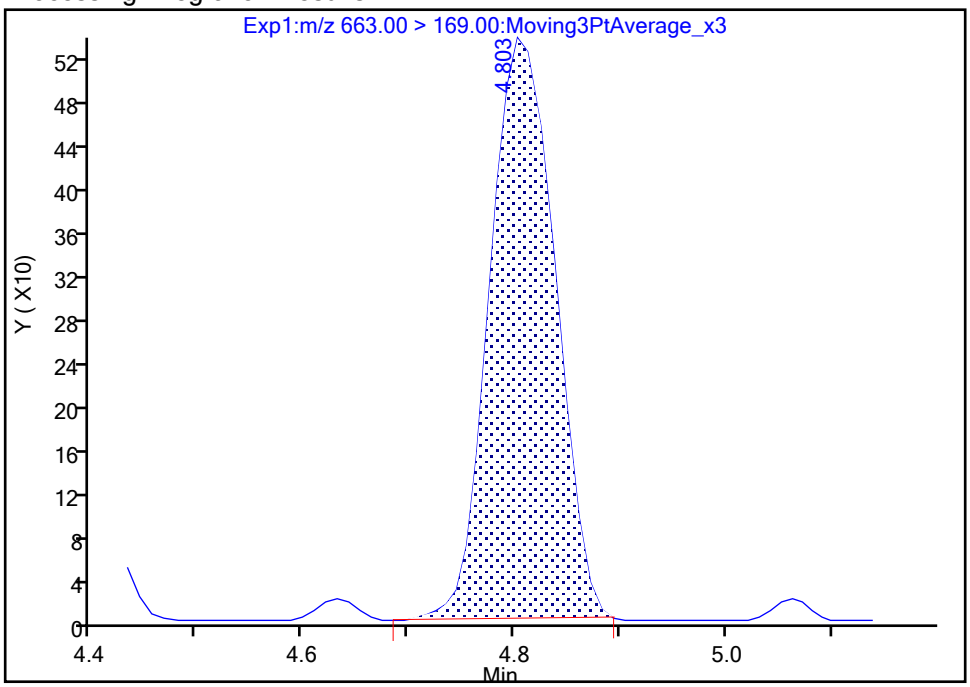
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

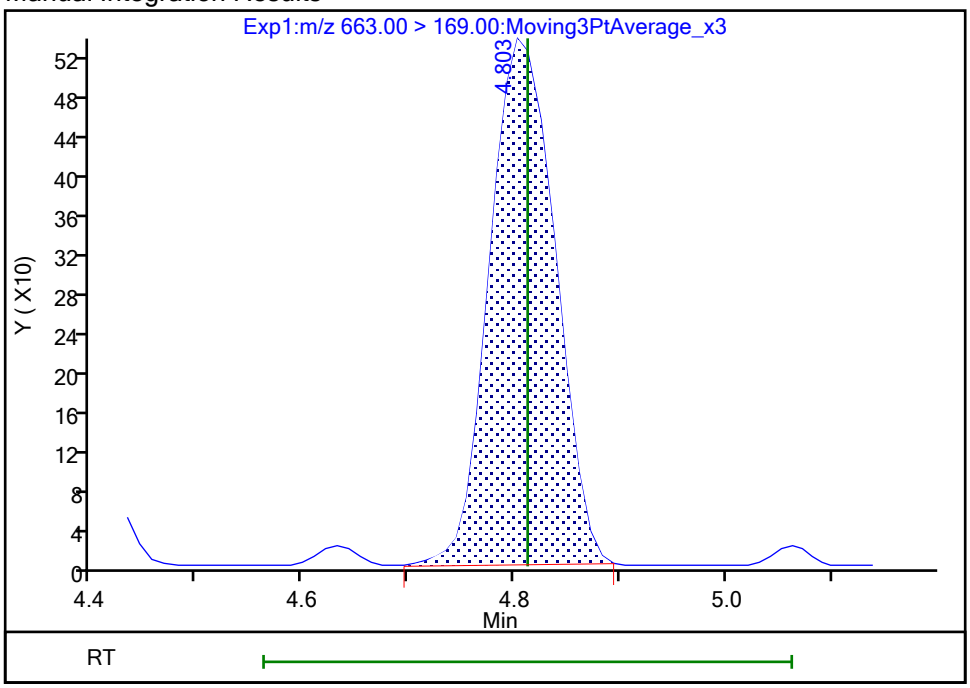
Processing Integration Results

RT: 4.80
Area: 2318
Amount: 0.013585
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 2318
Amount: 0.012605
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:09:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

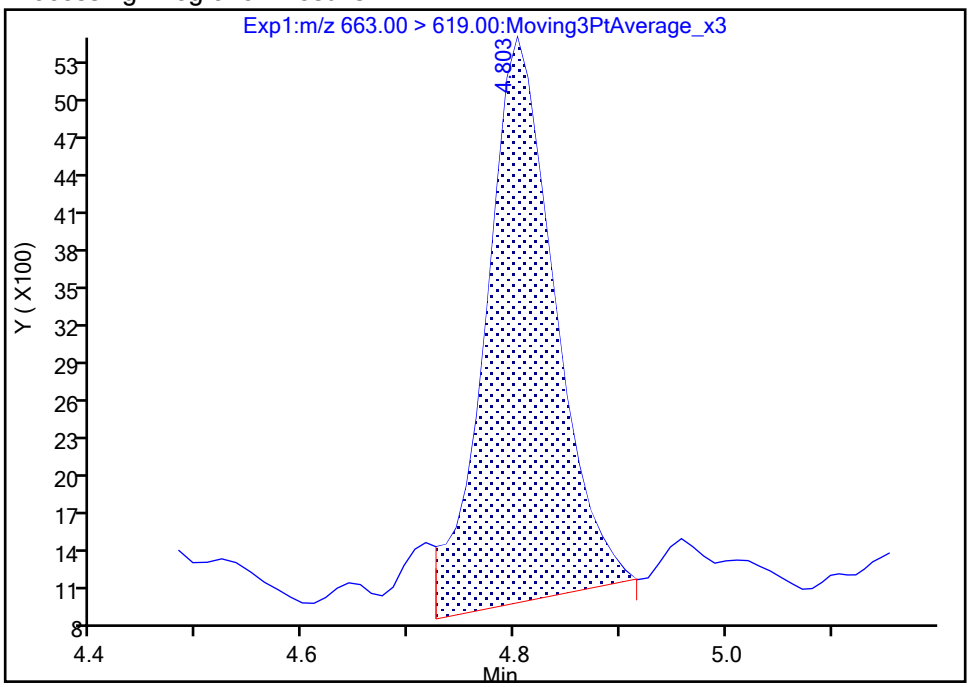
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

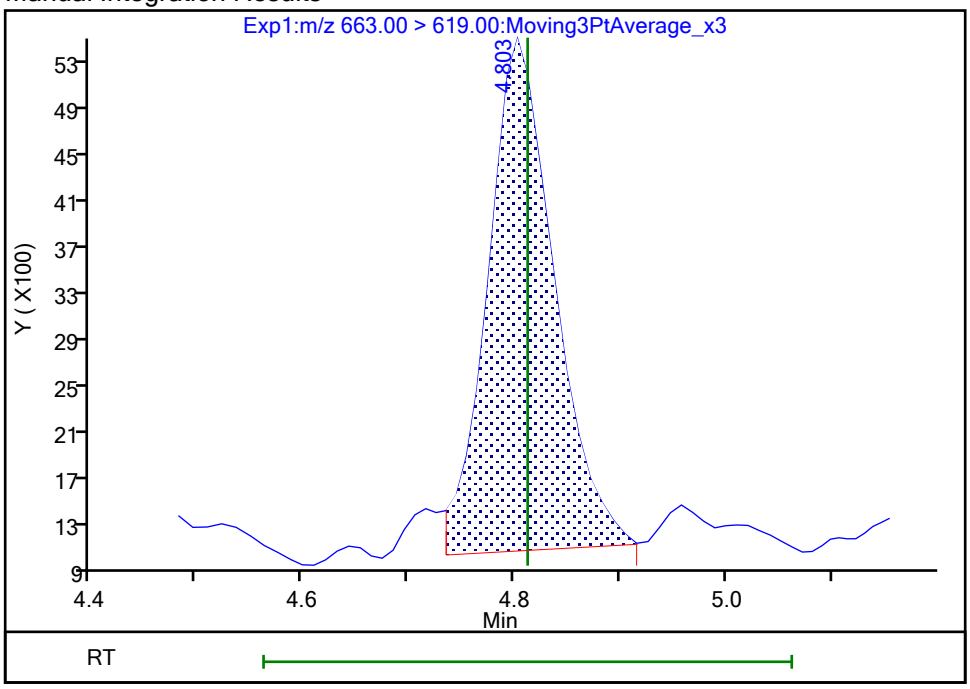
Processing Integration Results

RT: 4.80
Area: 20308
Amount: 0.013585
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 18843
Amount: 0.012605
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:09:48 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

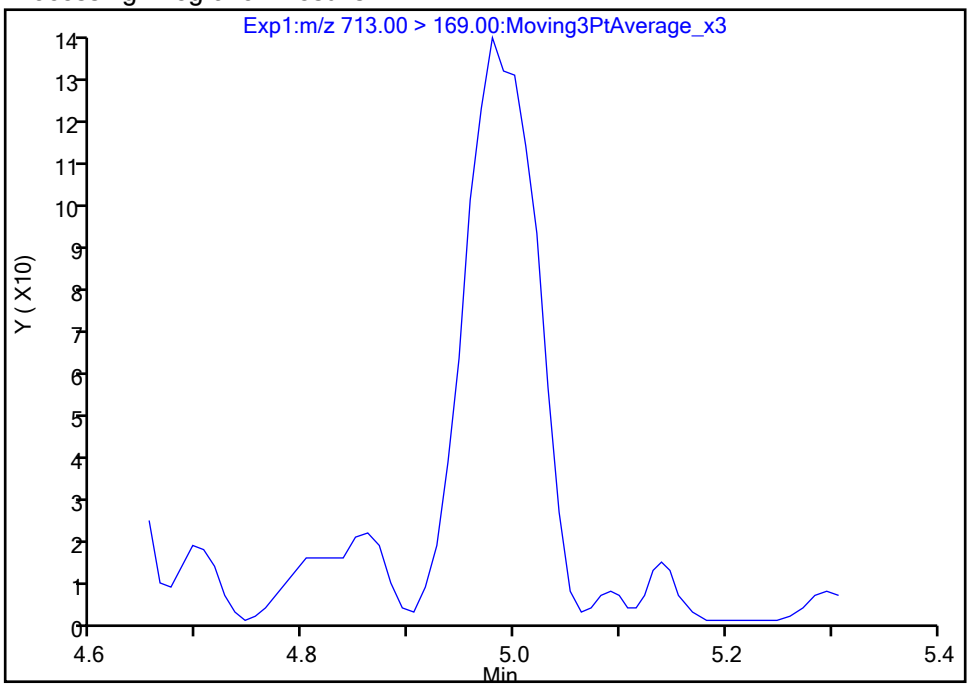
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

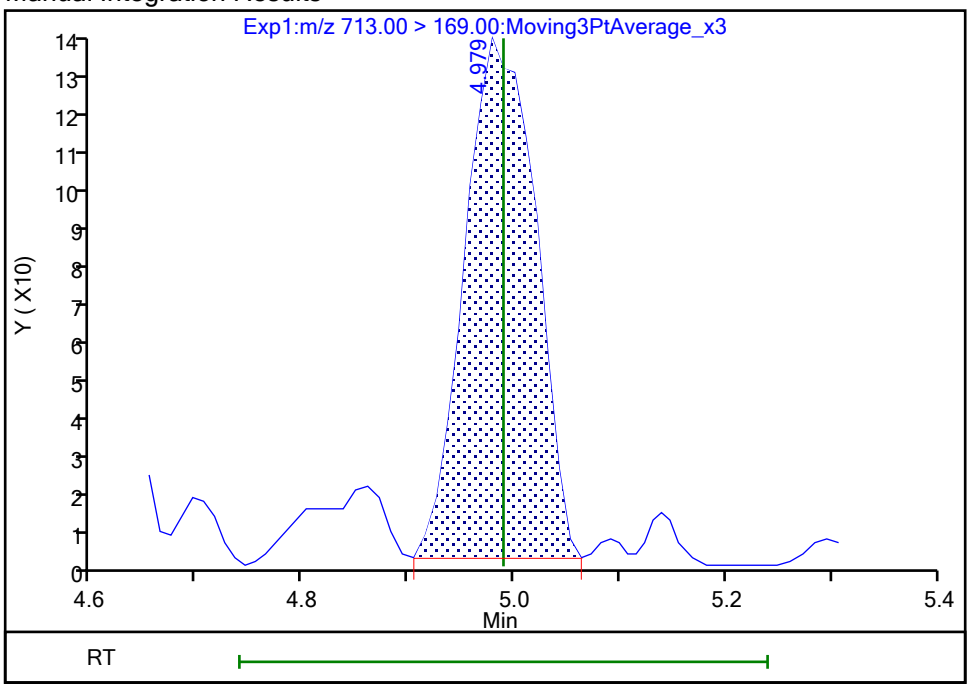
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 645
Amount: 0.004324
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:10:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

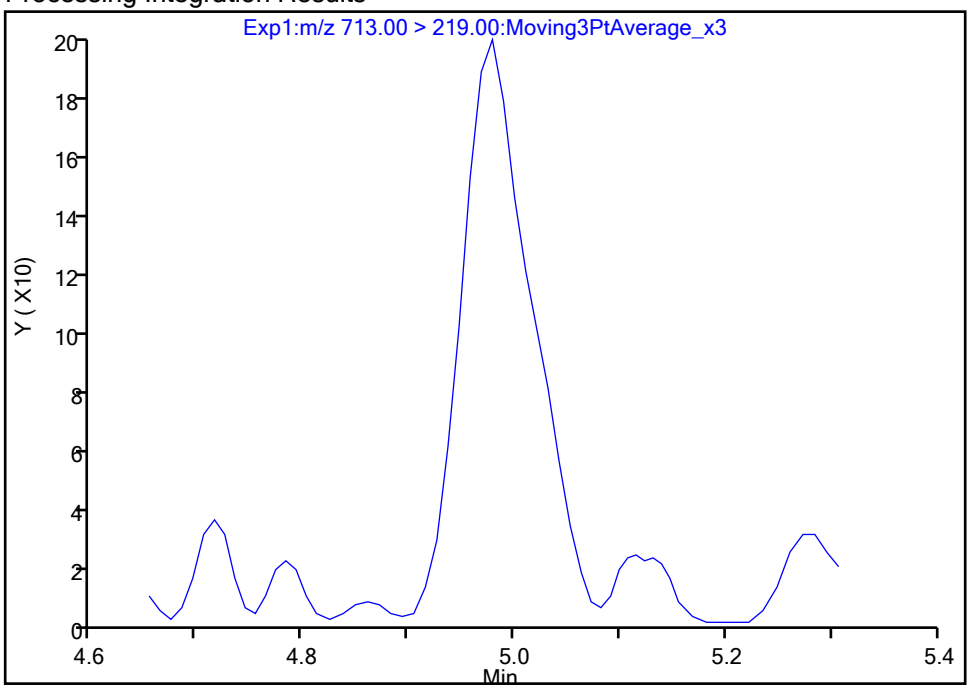
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

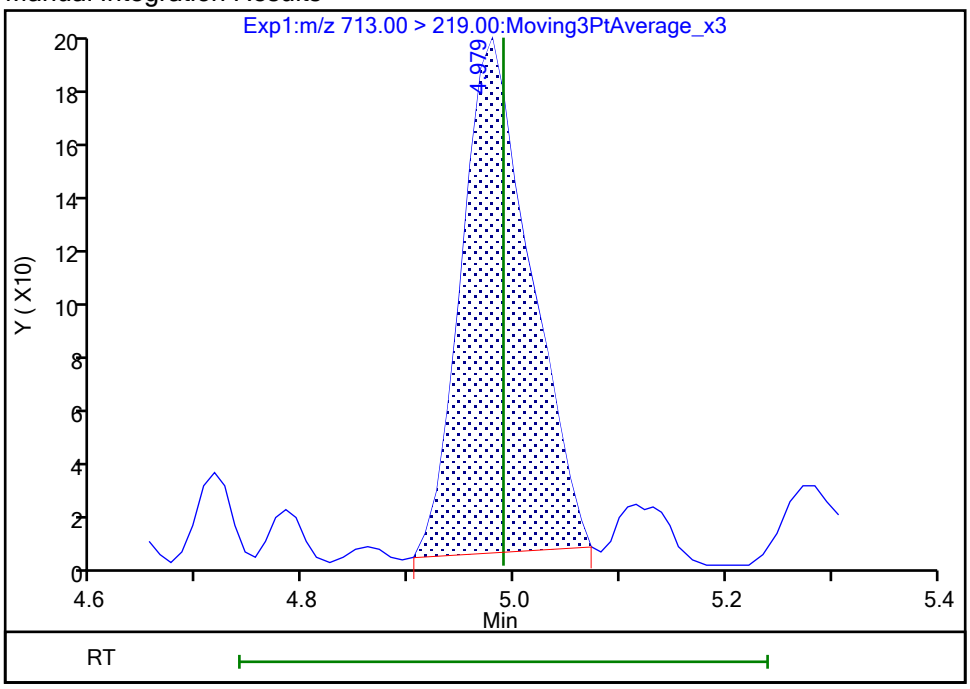
Not Detected
Expected RT: 4.99

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 879
Amount: 0.004324
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:10:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

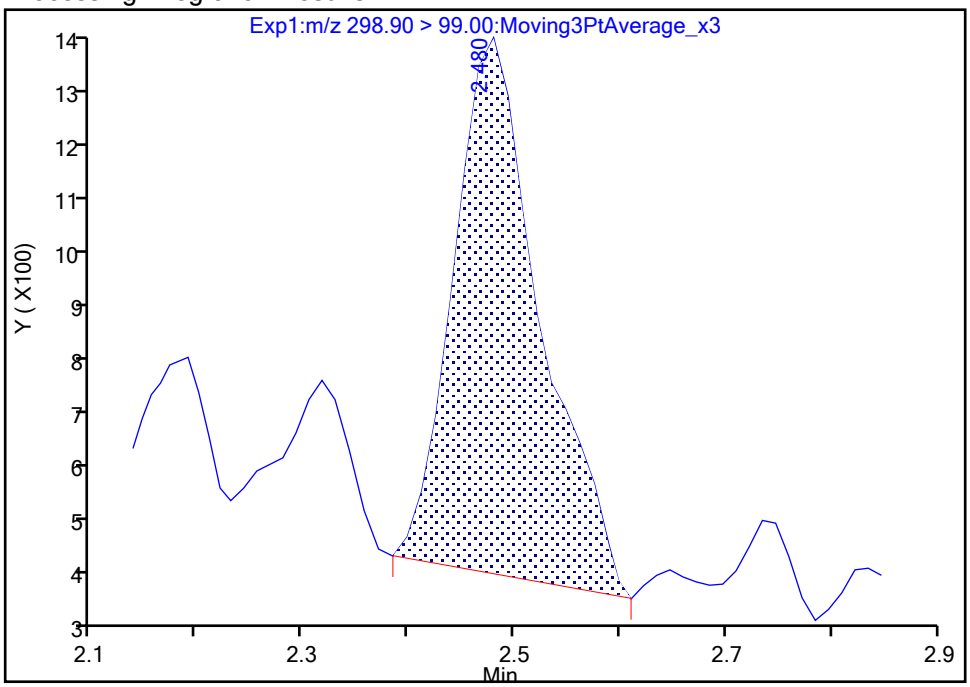
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

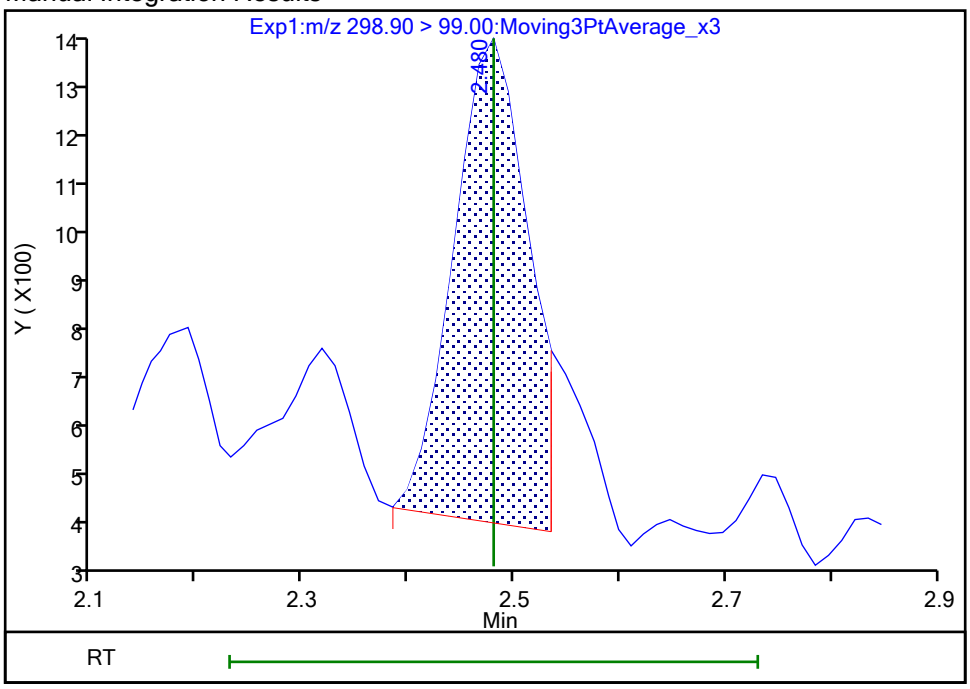
Processing Integration Results

RT: 2.48
Area: 5593
Amount: 0.005520
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 4716
Amount: 0.004916
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:05:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

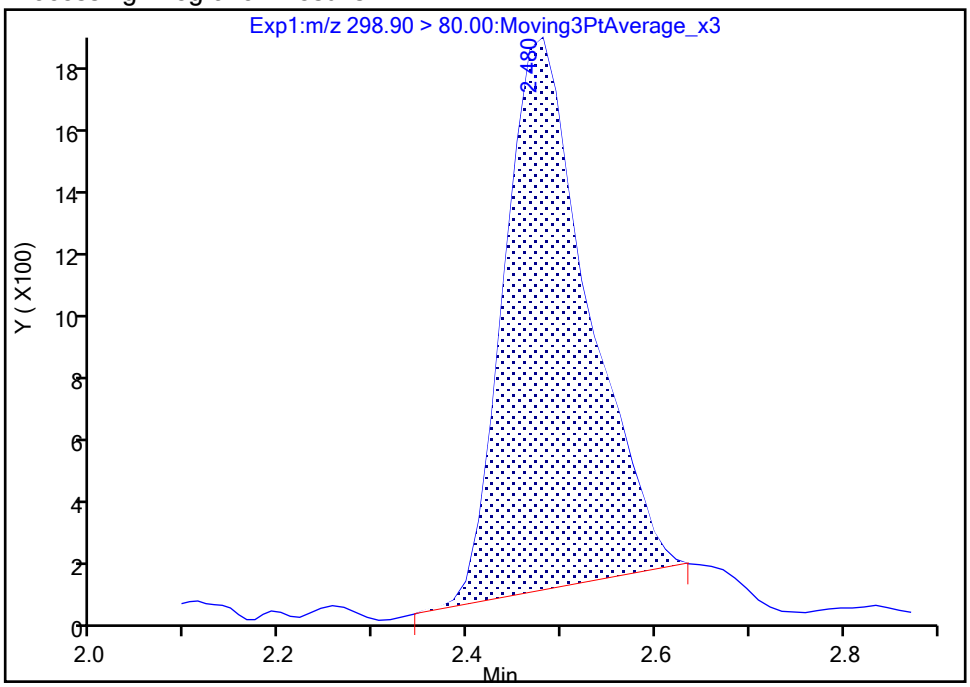
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

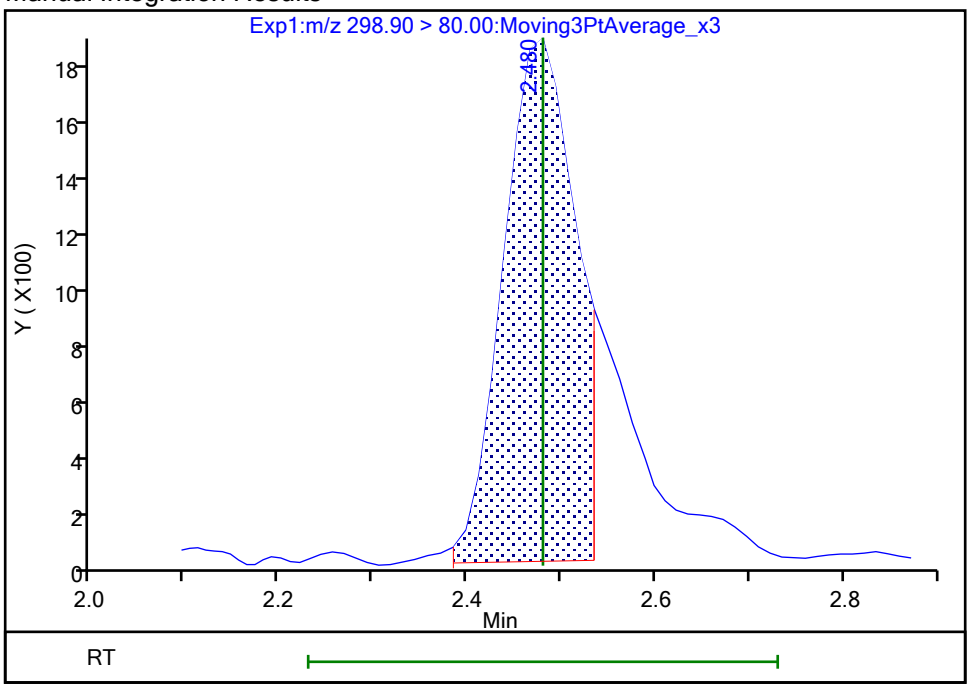
Processing Integration Results

RT: 2.48
Area: 10317
Amount: 0.005520
Amount Units: ng/ml



Manual Integration Results

RT: 2.48
Area: 9188
Amount: 0.004916
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:05:14 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

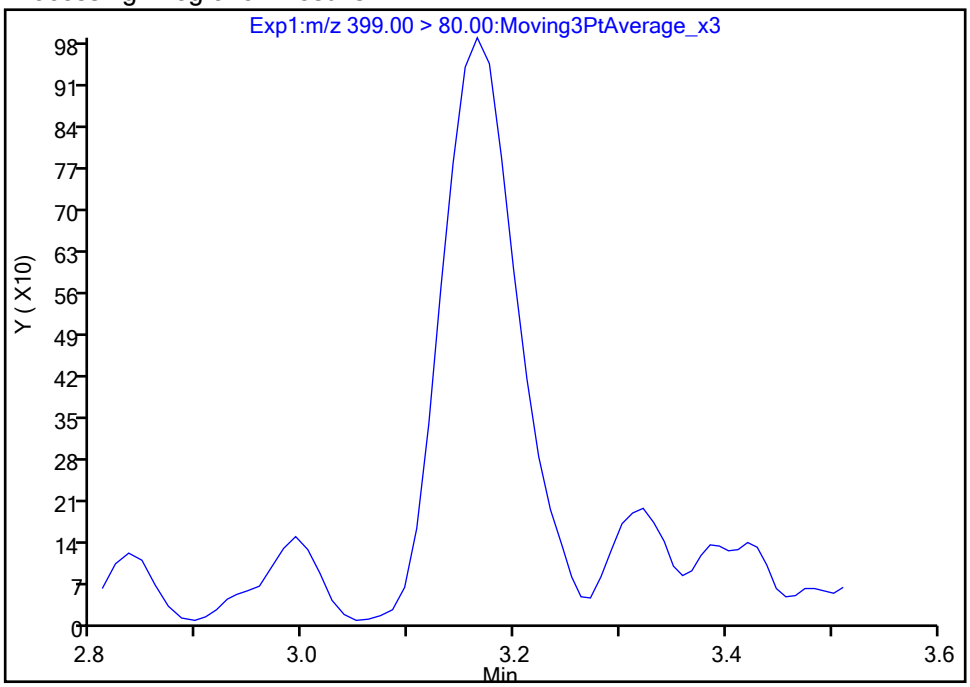
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

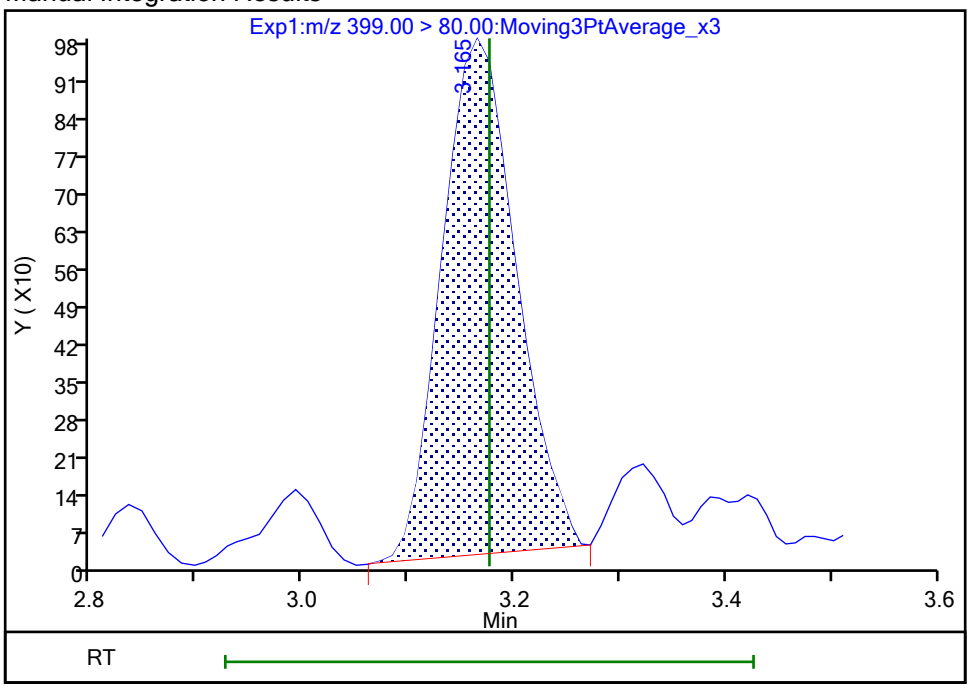
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 4755
Amount: 0.003432
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:05:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

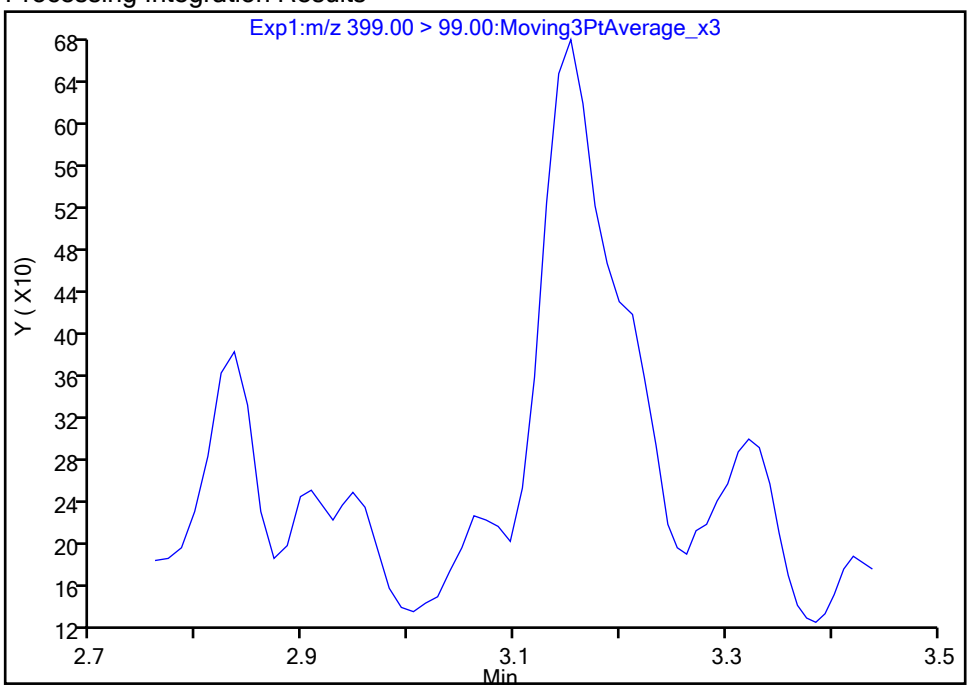
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

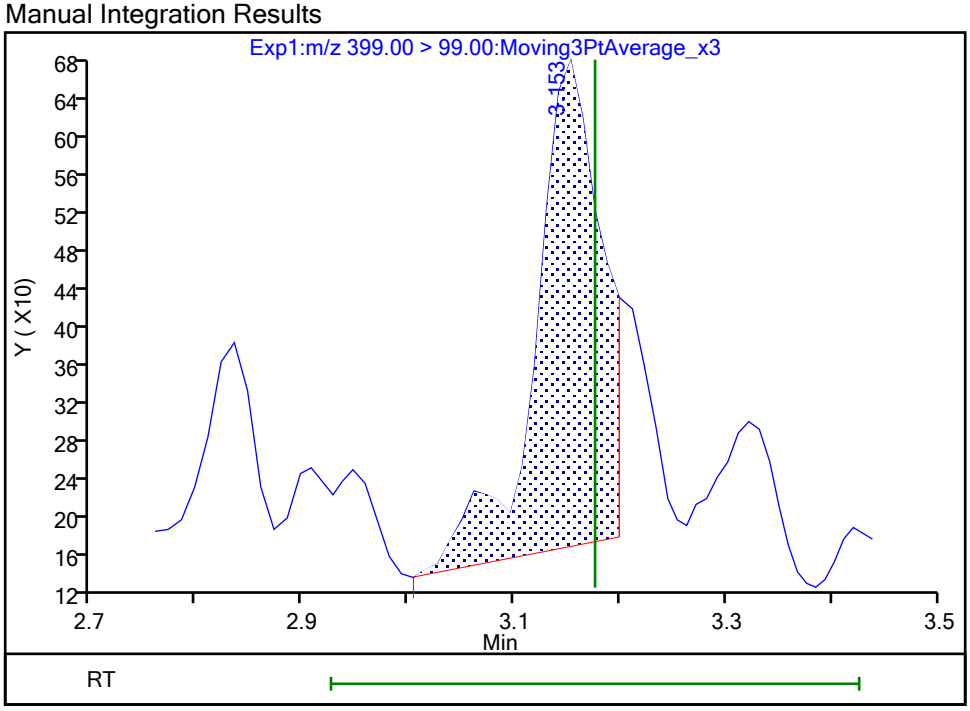
Processing Integration Results

Not Detected
Expected RT: 3.18



Manual Integration Results

RT: 3.15
Area: 2195
Amount: 0.003432
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:05:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

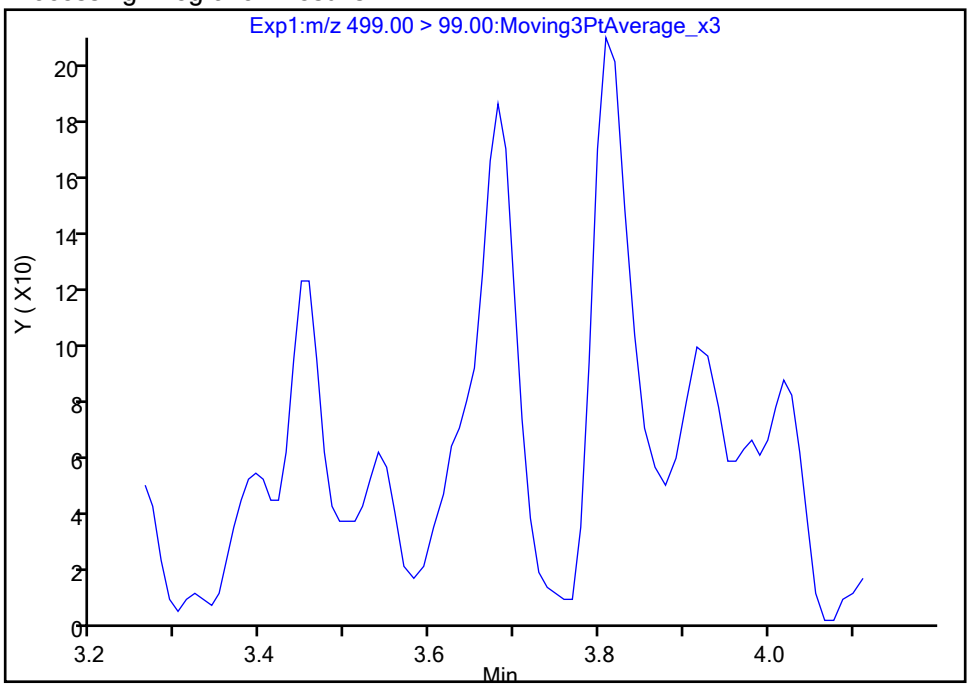
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

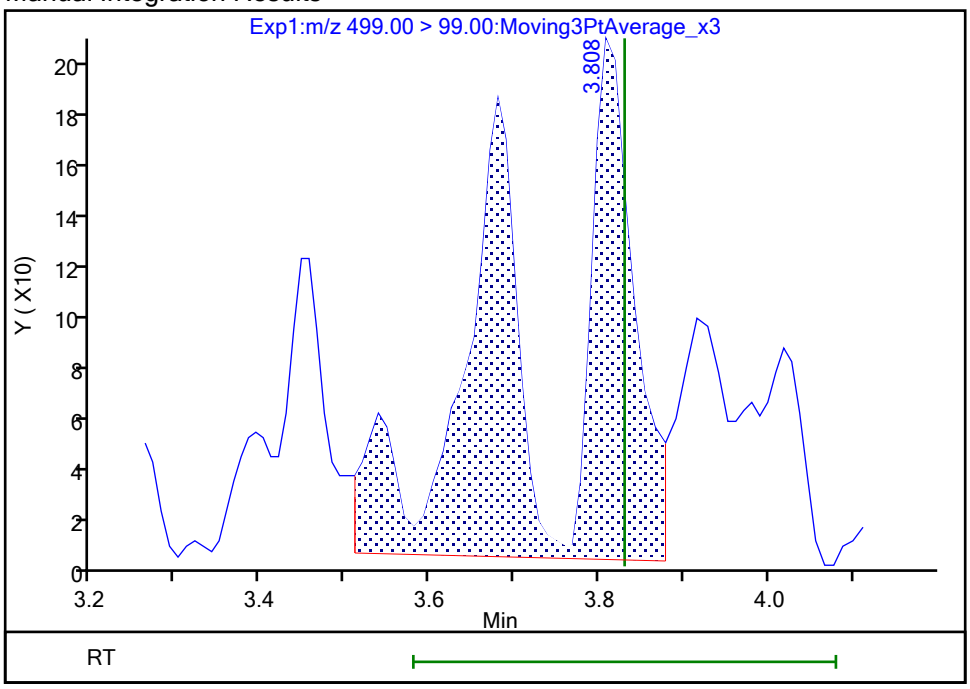
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.81
Area: 1457
Amount: 0.002584
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:06:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

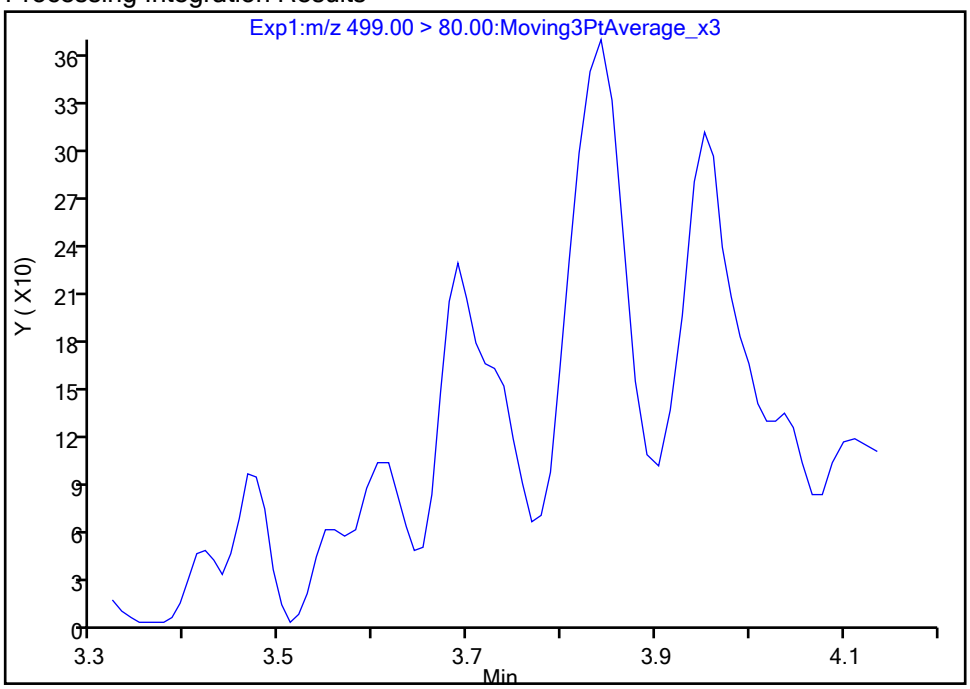
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

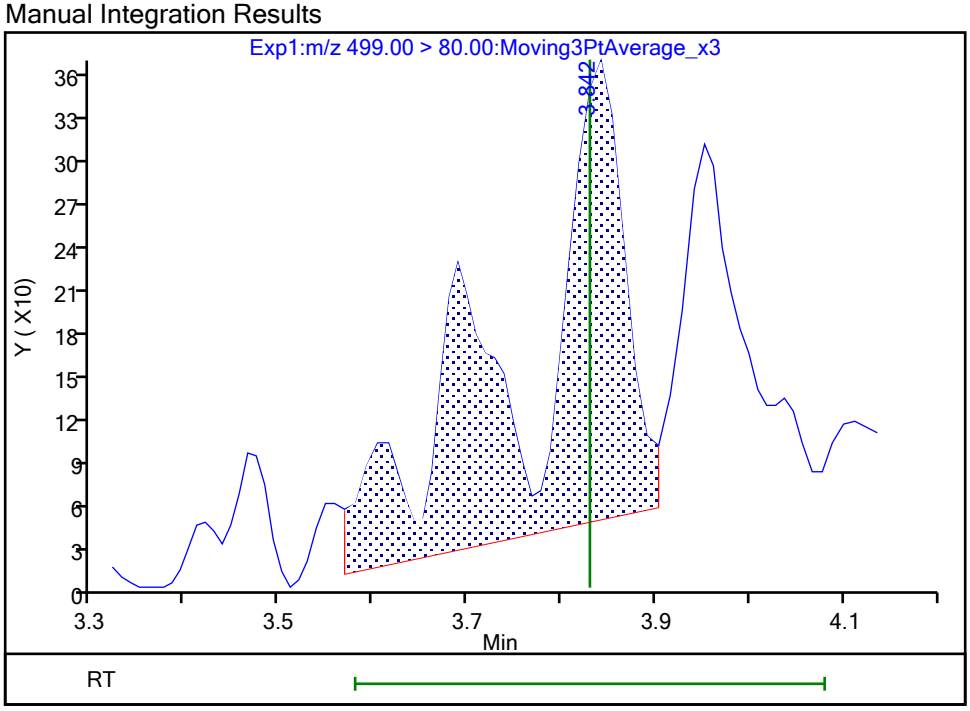
Not Detected
Expected RT: 3.83

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 2422
Amount: 0.002584
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:06:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

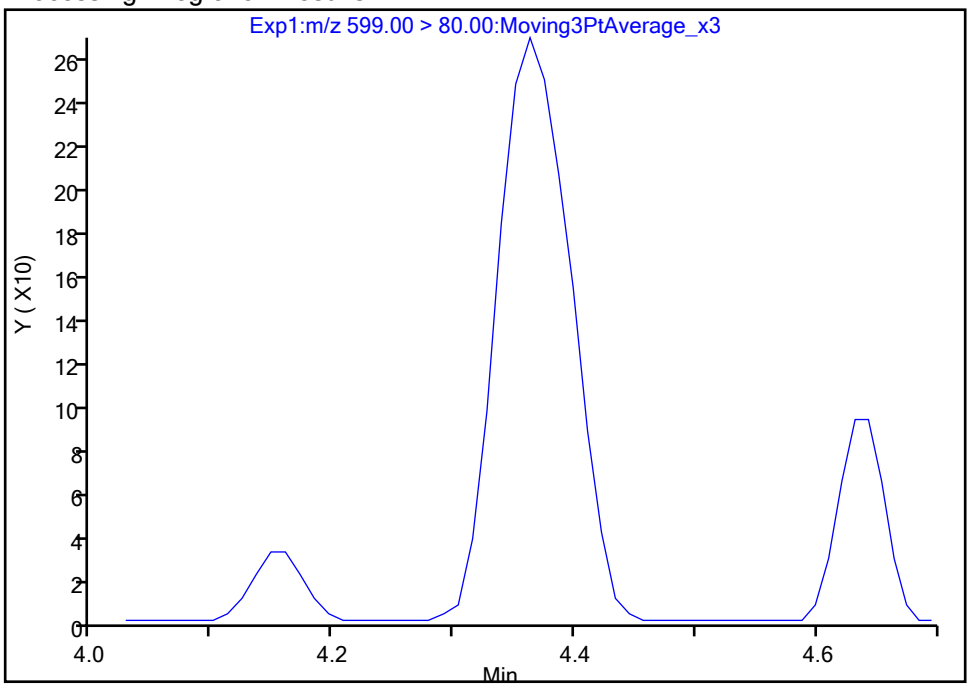
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

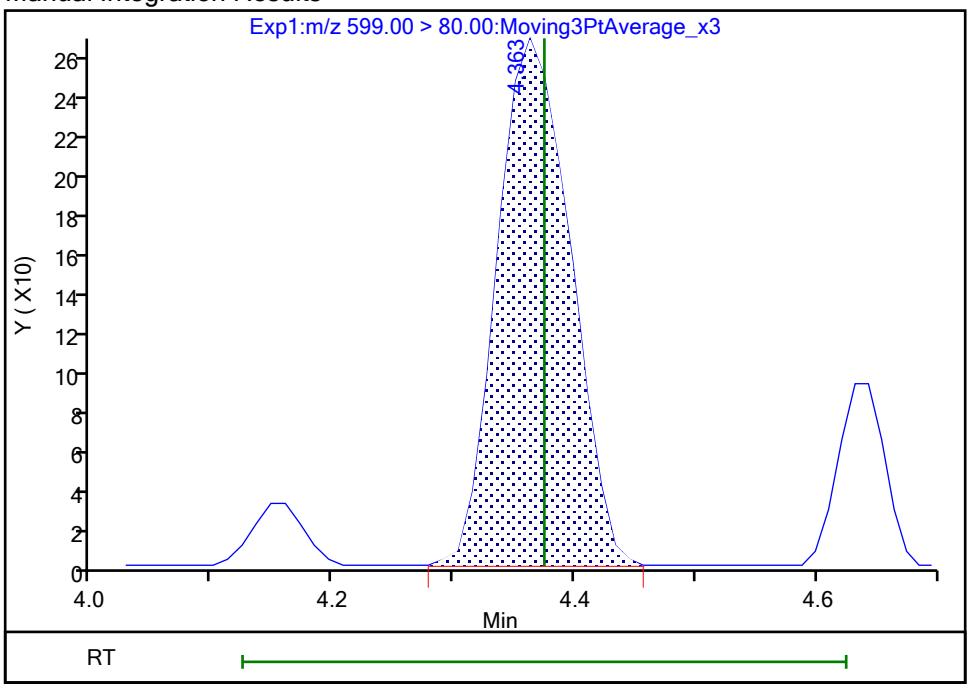
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 1115
Amount: 0.002032
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:07:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

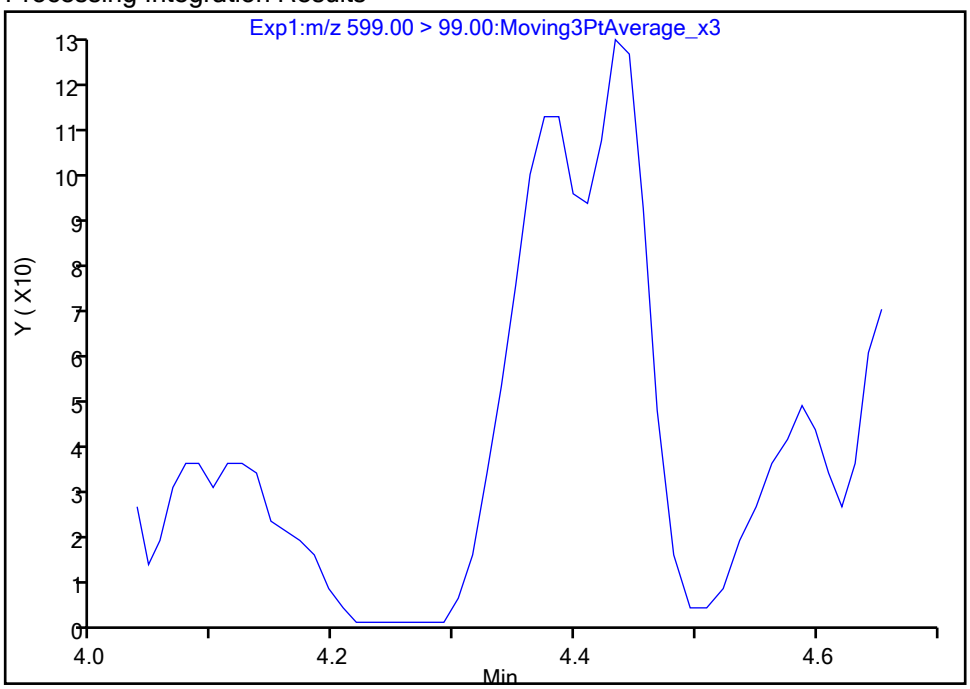
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

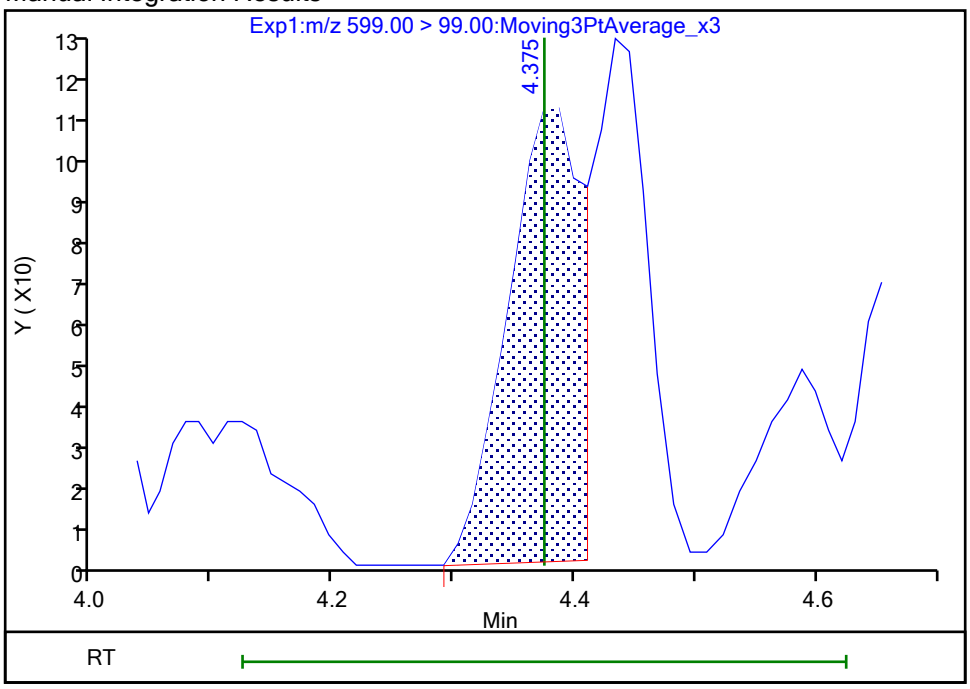
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.37
Area: 427
Amount: 0.002032
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:07:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

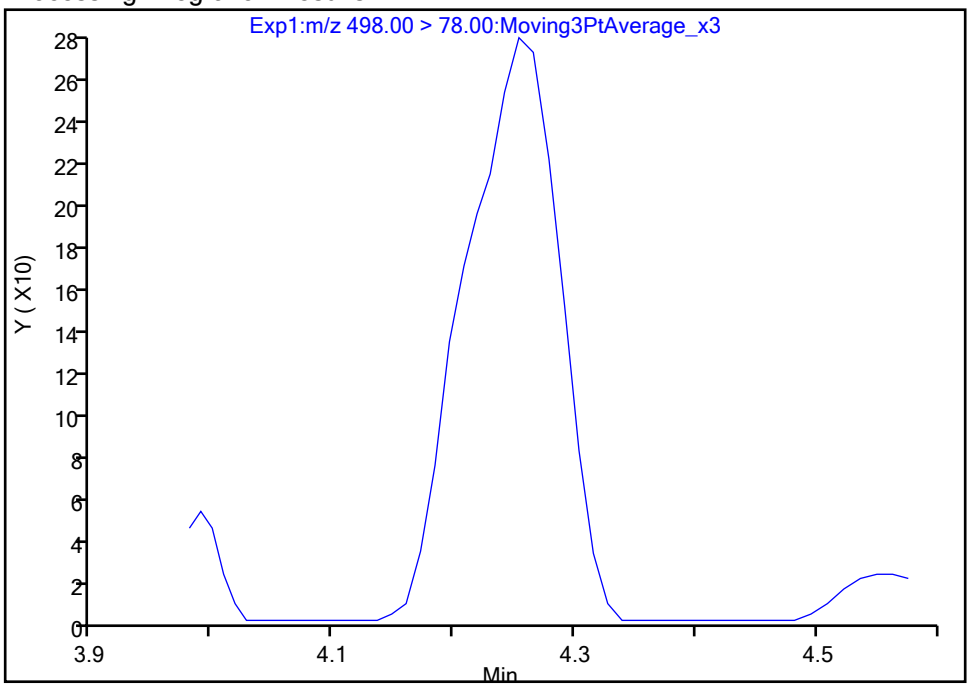
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

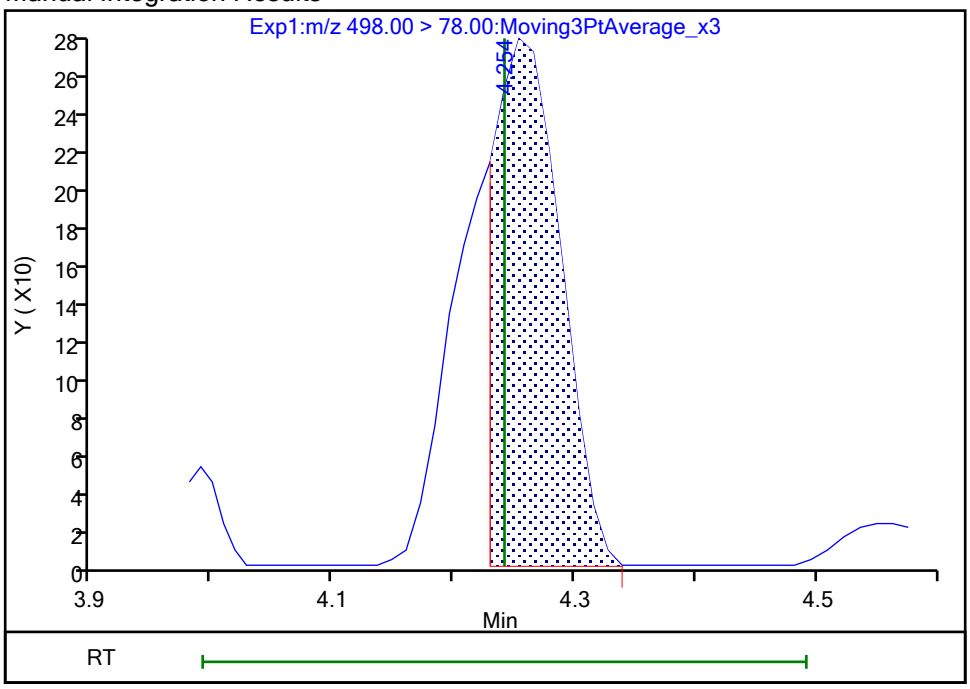
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 1023
Amount: 0.000936
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:07:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

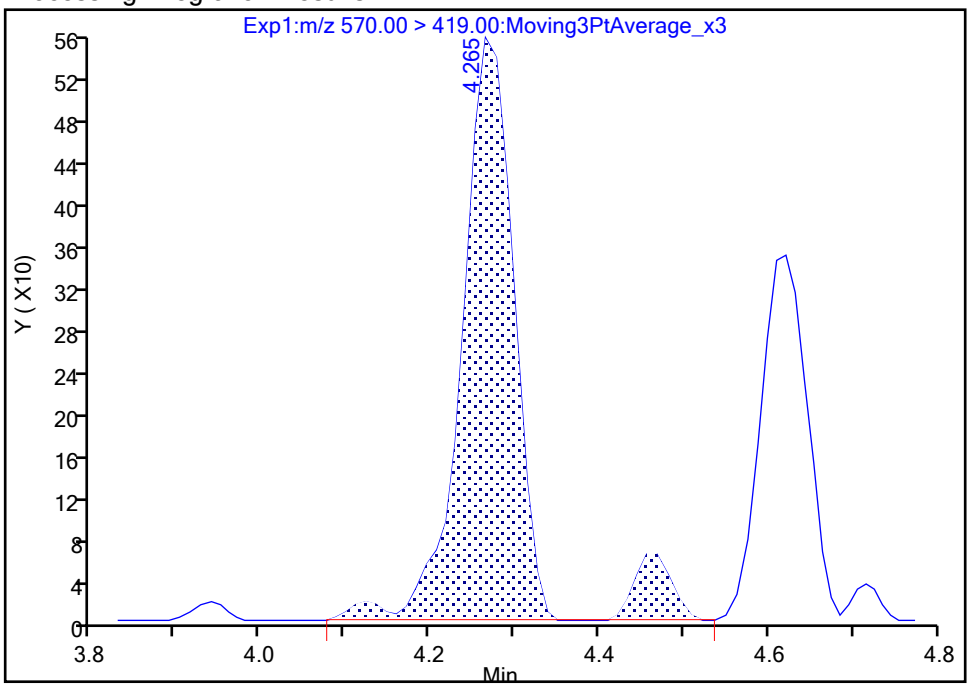
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

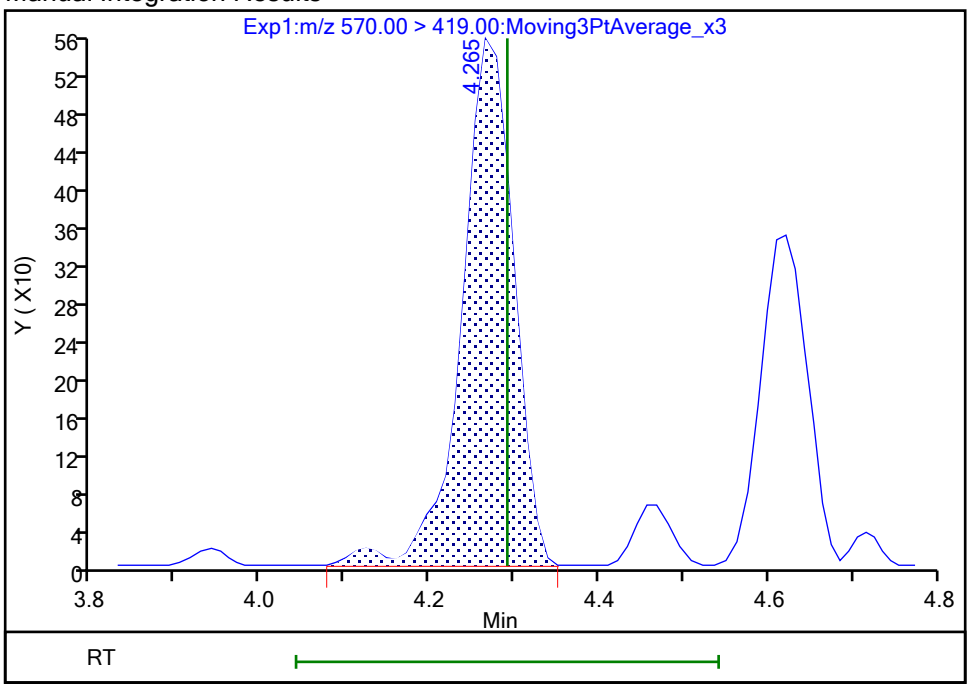
Processing Integration Results

RT: 4.27
Area: 2587
Amount: 0.007240
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 2390
Amount: 0.006689
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:07:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

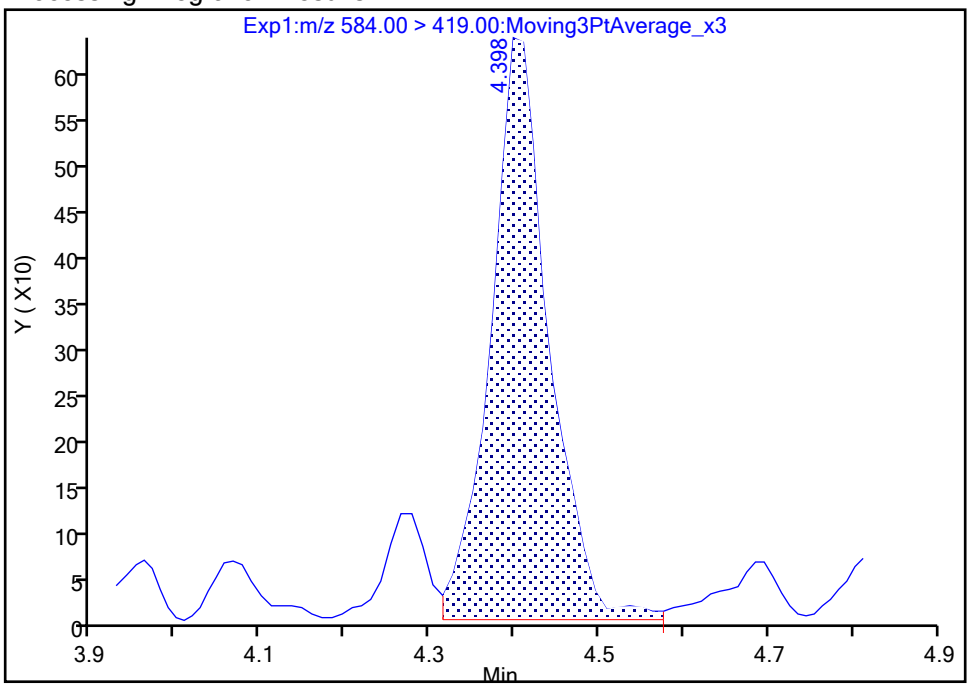
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

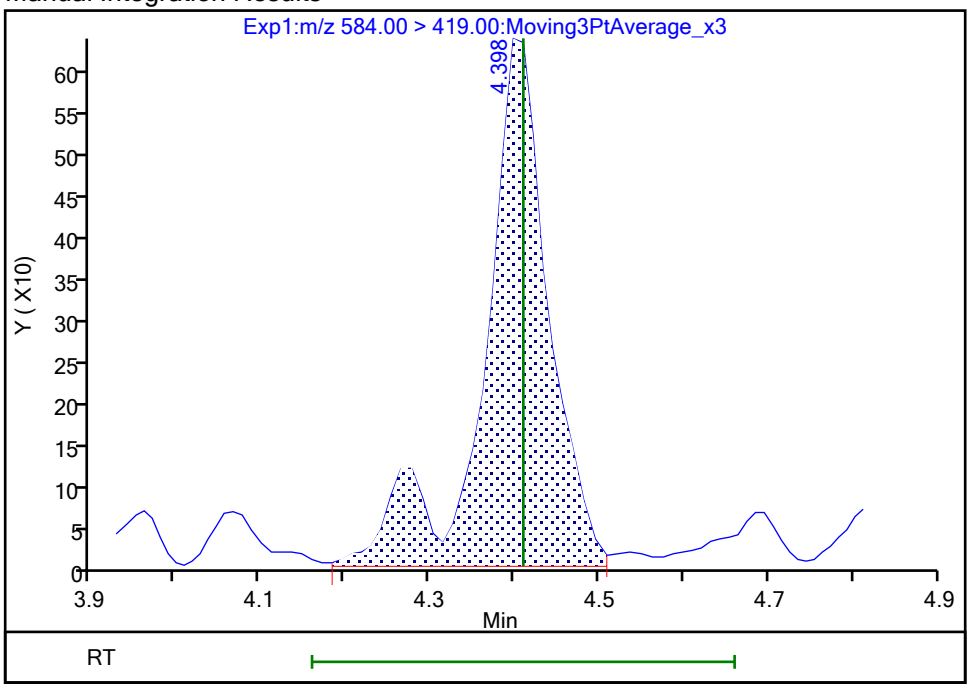
Processing Integration Results

RT: 4.40
Area: 3052
Amount: 0.008823
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 3408
Amount: 0.009852
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:08:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

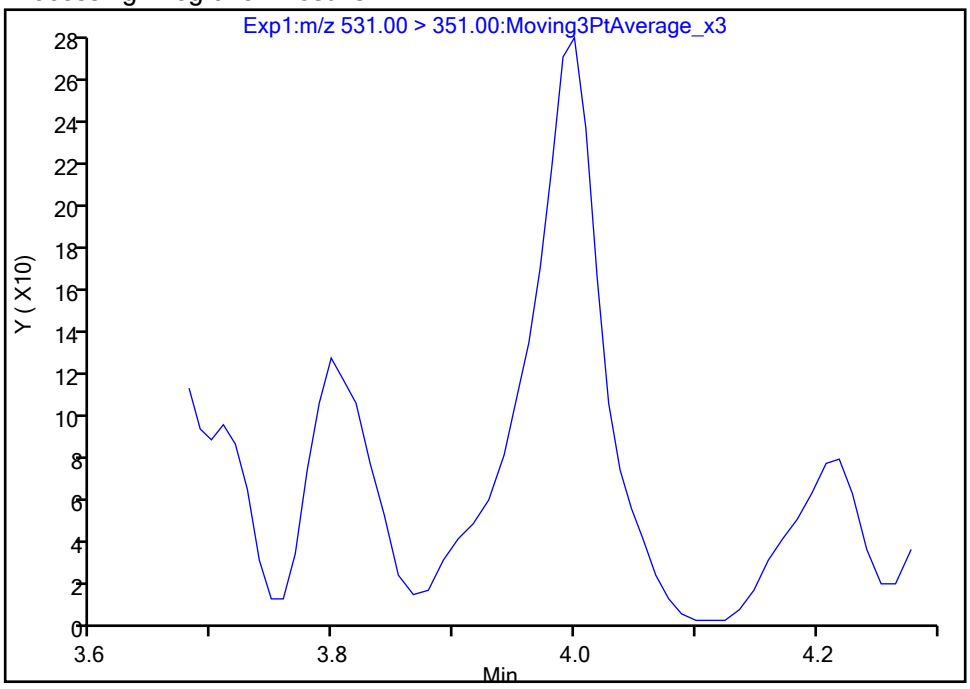
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

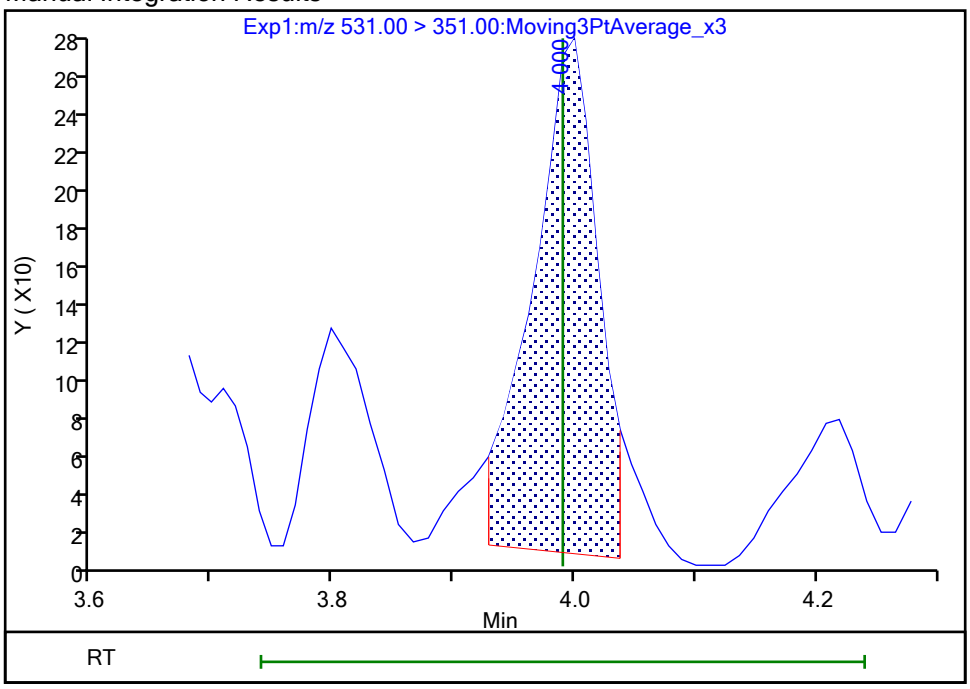
Not Detected
Expected RT: 3.99

Processing Integration Results



Manual Integration Results

RT: 4.00
Area: 979
Amount: 0.000341
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:06:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

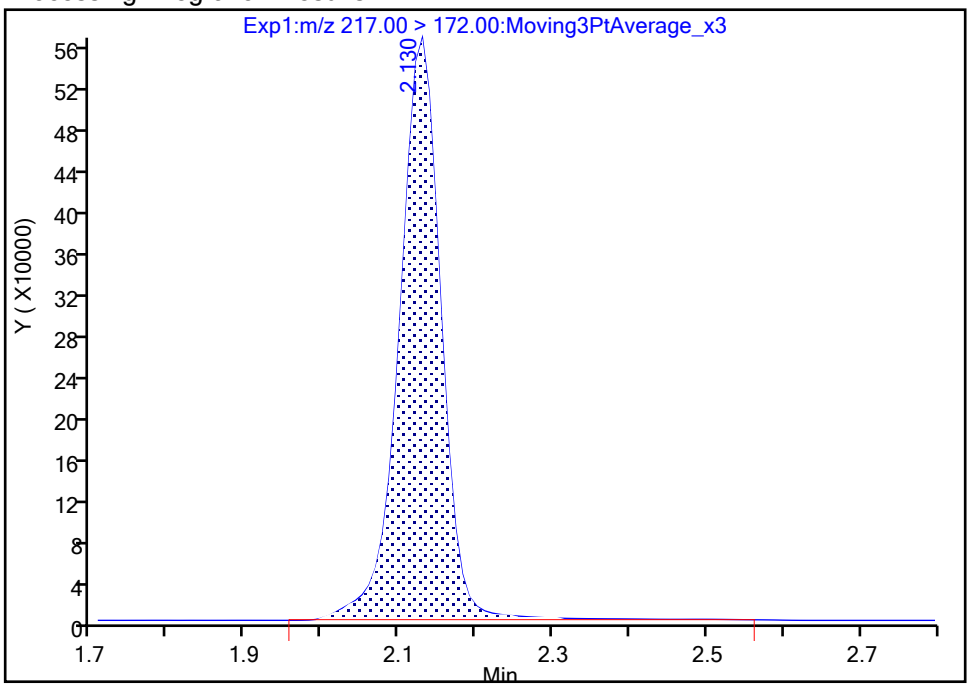
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d
Injection Date: 25-Oct-2023 18:33:07 Instrument ID: LC812
Lims ID: MB 200-196761/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

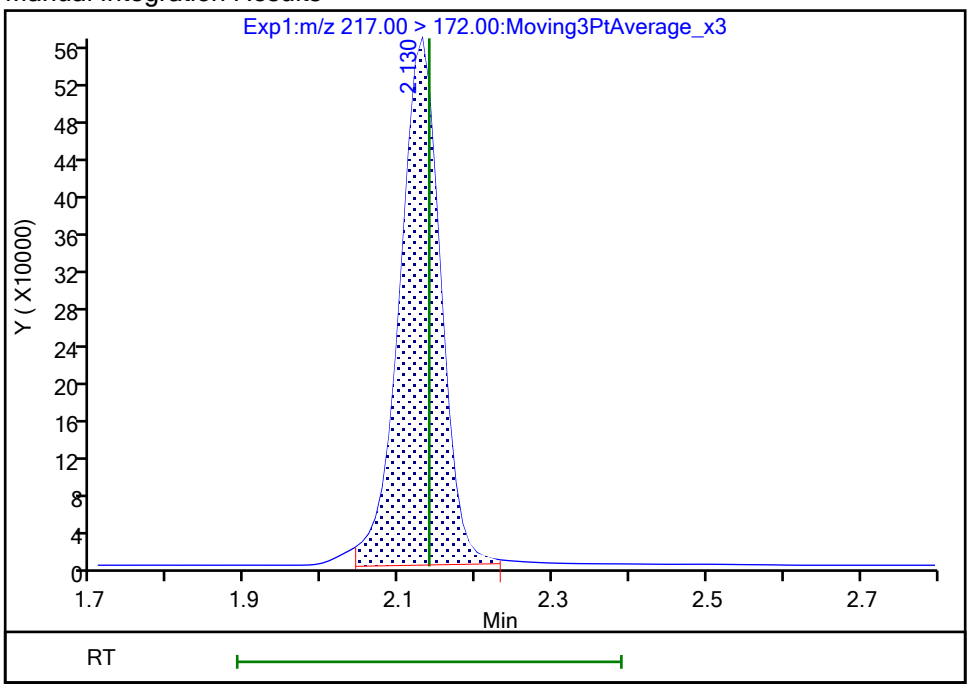
Processing Integration Results

RT: 2.13
Area: 2140590
Amount: 1.525110
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2086678
Amount: 1.486699
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:03:44 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

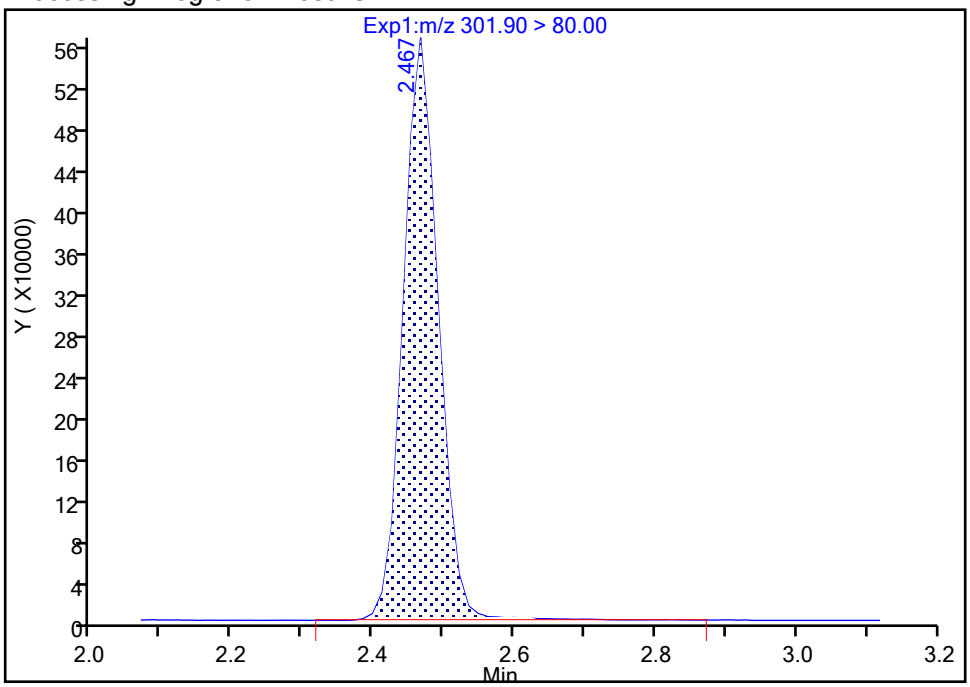
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

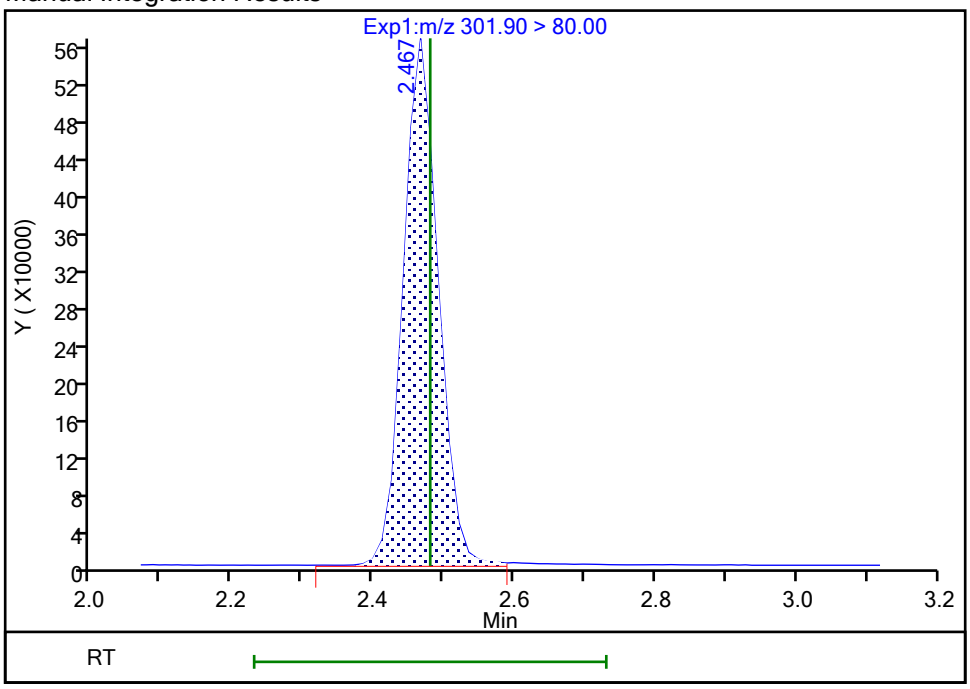
Processing Integration Results

RT: 2.47
Area: 1958659
Amount: 1.328918
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1945172
Amount: 1.319767
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:03:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

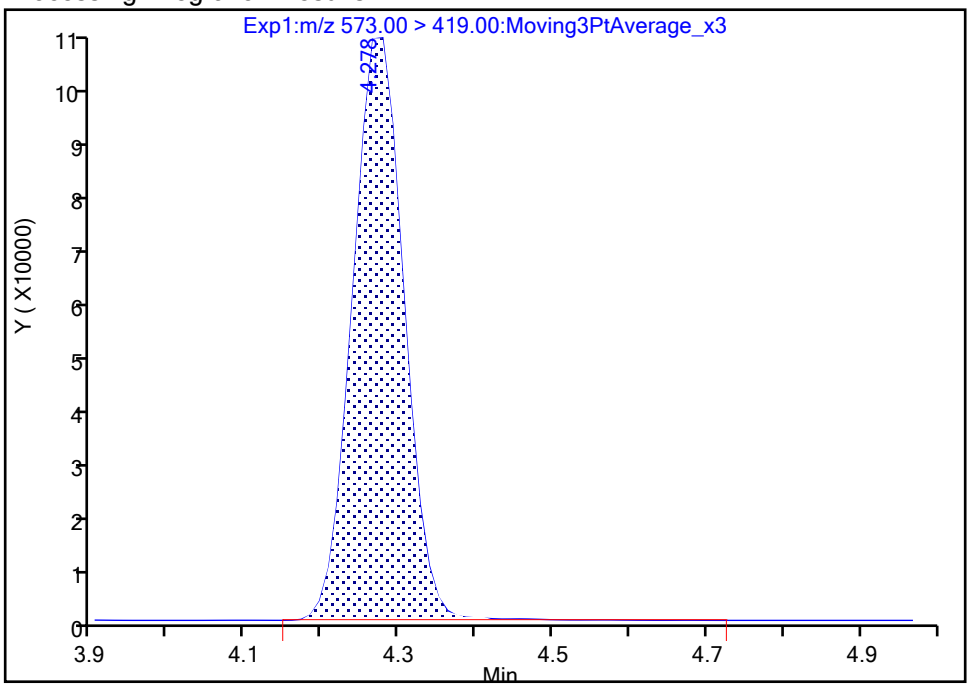
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

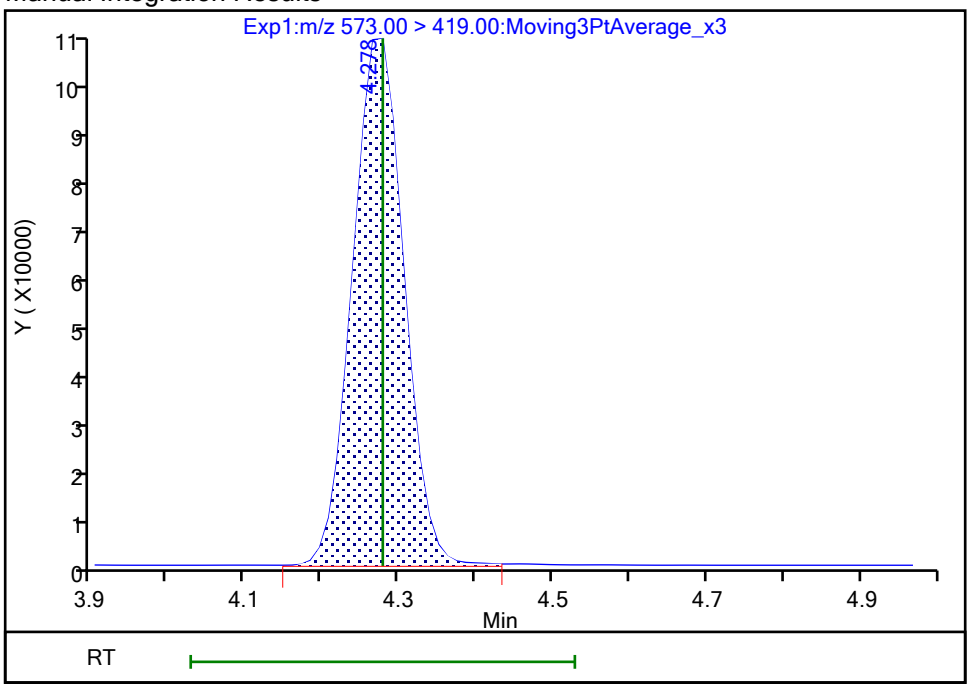
Processing Integration Results

RT: 4.28
Area: 493615
Amount: 1.315993
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 492204
Amount: 1.312231
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:04:23 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

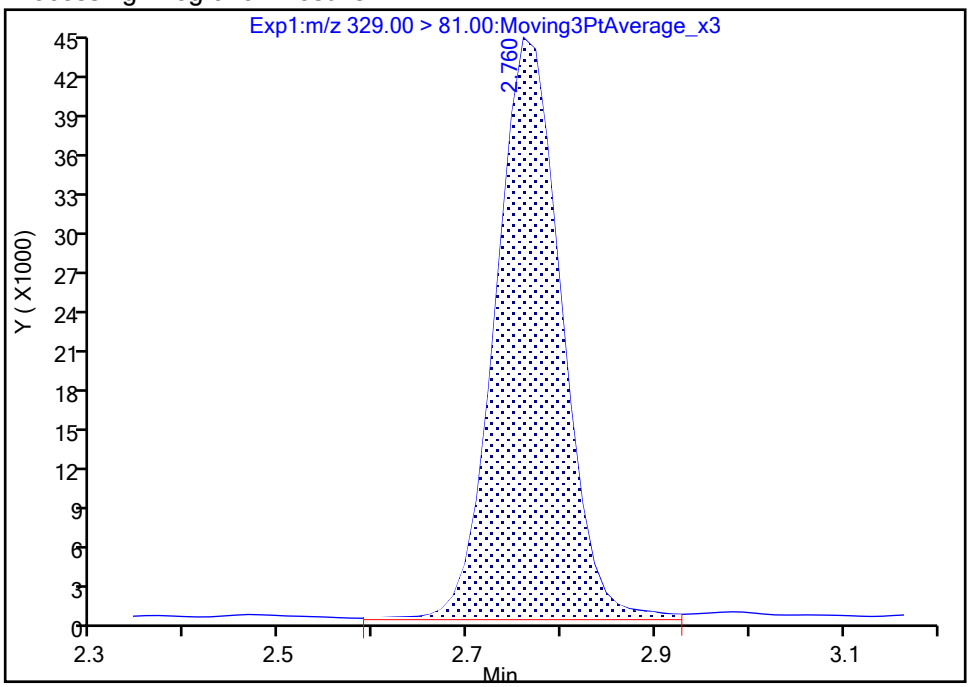
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A06.d				
Injection Date:	25-Oct-2023 18:33:07	Instrument ID:	LC812		
Lims ID:	MB 200-196761/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

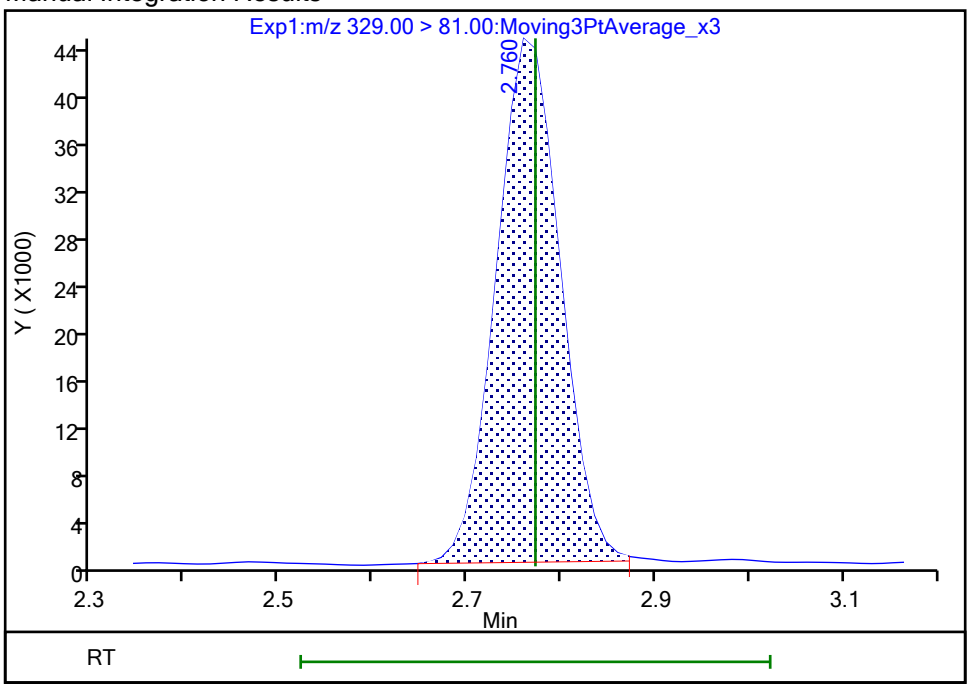
Processing Integration Results

RT: 2.76
Area: 218262
Amount: 1.280514
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 211081
Amount: 1.238384
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:04:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 200-196761/2-A

Matrix: Water | Lab File ID: PA231025A07.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) | Date Analyzed: 10/25/2023 18:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	73.72		5.00	1.20
2706-90-3	Perfluoropentanoic acid	72.90		2.00	0.68
307-24-4	Perfluorohexanoic acid	73.08		2.00	0.65
375-85-9	Perfluoroheptanoic acid	67.13		2.00	0.54
335-67-1	Perfluorooctanoic acid	68.67		2.00	0.76
375-95-1	Perfluorononanoic acid	73.70		2.00	0.49
335-76-2	Perfluorodecanoic acid	74.74		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	75.69		2.00	0.55
307-55-1	Perfluorododecanoic acid	69.68		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	72.05		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	69.92		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	67.92		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	72.50		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	64.50		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	71.25		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	66.09		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	67.87		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	63.49		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	71.54		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	71.54		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	78.17		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	78.81		2.00	0.92
2355-31-9	NMeFOSAA	74.00		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	68.74		5.00	1.60
13252-13-6	HFPODA	72.46		4.00	1.10
919005-14-4	DONA	67.90		2.00	0.42
756426-58-1	9Cl-PF3ONS	75.54		2.00	0.32
763051-92-9	11Cl-PF3OUdS	68.26		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196761/2-A

Matrix: Water Lab File ID: PA231025A07.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) Date Analyzed: 10/25/2023 18:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196791 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	112		50-150
STL01893	13C5 PFPeA	104		50-150
STL01892	13C4 PFHpA	105		50-150
STL02116	13C2 PFTeDA	88		50-150
STL02337	13C3 PFBS	99		50-150
STL01056	13C8 FOSA	79		50-150
STL02118	d3-NMeFOSAA	98		50-150
STL02117	d5-NEtFOSAA	97		50-150
STL02395	M2-4:2 FTS	101		50-150
STL02279	M2-6:2 FTS	103		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	93		50-150
STL00994	18O2 PFHxS	106		50-150
STL00993	13C2 PFHxA	103		50-150
STL00991	13C4 PFOS	106		50-150
STL00998	13C2 PFDoA	91		50-150
STL00995	13C5 PFNA	102		50-150
STL00996	13C2 PFDA	99		50-150
STL00990	13C4 PFOA	111		50-150
STL00997	13C2 PFUnA	95		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Lims ID: LCS 200-196761/2-A
Client ID:
Sample Type: LCS
Inject. Date: 25-Oct-2023 18:41:18 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196761/2-A
Misc. Info.: 200-0057556-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Oct-2023 16:54:20 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1646

First Level Reviewer: khanphomeea Date: 26-Oct-2023 10:19:41
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.139	-0.009	0.605	2165776	1.40		112	831	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.139	-0.009	1.000	2951773	1.84		92.2	239	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.453	0.0	0.697	1562084	1.30		104	1941	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	2457648	1.82		91.1	65.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.480	-0.014	0.701	1874783	1.15		99.1	106229	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.480	-0.014	1.000	3058377	1.70	Target=2.06	95.7	940	M
298.90 > 99.00	2.466	2.480	-0.014	1.000	1517809		2.01(1.03-3.09)		428	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.770	2.772	-0.002	1.005	1151040	1.79		95.4	4341	M
D 60 M2-4:2 FTS										
329.00 > 81.00	2.757	2.772	-0.015	0.784	221259	1.18		101	169	
D 7 13C2 PFHxA										
315.00 > 270.00	2.795	2.810	-0.015	0.794	1568551	1.28		103	7321	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.795	2.810	-0.015	1.000	2522775	1.83	Target=14.12	91.3	433	M
313.00 > 119.00	2.795	2.810	-0.015	1.000	173738		14.52(7.06-21.17)		188	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.807	2.810	-0.003	0.888	2932356	1.81	Target=2.72	96.3	7276	
349.00 > 99.00	2.807	2.810	-0.003	0.888	993612		2.95(1.36-4.09)		1705	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.918	-0.013	0.826	276216	1.17		93.3	1535	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.905	2.918	-0.013	1.000	400750	1.81		90.6	879	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.176	-0.014	0.899	1465040	1.26		106	5003	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.176	-0.014	1.000	2211381	1.61	Target=3.32	88.2	3298	M
399.00 > 99.00	3.162	3.176	-0.014	1.000	668262		3.31(1.66-4.98)		484	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.162	3.176	-0.014	1.000	2657750	1.68	Target=4.17	83.9	480	M
363.00 > 169.00	3.162	3.176	-0.014	1.000	657872		4.04(2.09-6.26)		732	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.162	3.176	-0.014	0.899	1766063	1.32		105	10631	
77 DONA										
377.00 > 251.00	3.209	3.212	-0.003	0.839	7637292	1.70	Target=3.33	89.8	7301	
377.00 > 85.00	3.197	3.212	-0.015	0.836	2039940		3.74(1.66-4.99)		3282	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.510	3.511	-0.001	0.918	2012723	1.78	Target=4.83	93.5	3691	M
449.00 > 99.00	3.501	3.511	-0.010	0.915	403886		4.98(2.41-7.24)		1153	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.510	3.511	-0.001	0.997	295004	1.22		103	708	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.510	3.520	-0.010	1.000	1214356	1.79		94.0	1089	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.519	3.529	-0.010	1.000	3073531	1.72	Target=2.88	85.8	134	
413.00 > 169.00	3.519	3.529	-0.010	1.000	1051966		2.92(1.44-4.32)		1389	M
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.529	-0.010	1.000	2101189	1.38		111	4801	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.529	-0.010		1952822	1.25			7637	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.825	3.830	-0.005	1.000	1506751	1.65	Target=4.24	89.0	1616	M
499.00 > 99.00	3.825	3.830	-0.005	1.000	336507		4.48(2.12-6.37)		820	M
D 18 13C4 PFOS										
503.00 > 80.00	3.825	3.830	-0.005	1.087	934322	1.26		106	2792	
20 Perfluorononanoic acid										
463.00 > 419.00	3.848	3.854	-0.006	1.000	3061353	1.84	Target=8.34	92.1	432	
463.00 > 169.00	3.848	3.854	-0.006	1.000	360201		8.50(4.17-12.51)		2561	
D 19 13C5 PFNA										
468.00 > 423.00	3.848	3.854	-0.006	1.093	2119219	1.28		102	7738	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.977	3.990	-0.013	1.040	5270326	1.89		101	8845	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.108	4.112	-0.004	1.074	1177251	1.70	Target=2.17	88.2	8797	
549.00 > 99.00	4.108	4.112	-0.004	1.074	465134		2.53(1.08-3.25)		1344	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.132	4.148	-0.016	1.000	3203763	1.87	Target=11.44	93.4	796	
513.00 > 169.00	4.132	4.148	-0.016	1.000	274243		11.68(5.72-17.16)		1300	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.148	-0.016	1.174	2144772	1.24		99.0	11979	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.148	-0.004	1.000	1098932	1.95		102	2396	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.148	-0.004	1.178	305862	1.12		93.7	630	
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.242	-0.005	1.204	1461633	0.9888		79.1	4493	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.237	4.242	-0.005	1.000	2197476	1.97		98.5	4685	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.274	4.278	-0.004	1.214	508611	1.23		98.3	1082	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.274	4.291	-0.017	1.000	683014	1.85		92.5	827	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.358	4.375	-0.017	1.139	847492	1.59	Target=2.37	82.2	12367	
599.00 > 99.00	4.358	4.375	-0.017	1.139	342764		2.47(1.19-3.56)		2220	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.394	4.398	-0.004	1.249	1947501	1.19		95.3	5489	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.394	4.398	-0.004	1.000	3038421	1.89	Target=12.20	94.6	623	
563.00 > 169.00	4.394	4.398	-0.004	1.000	261034		11.64(6.10-18.31)		1194	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.394	4.410	-0.016	1.249	485641	1.22		97.5	828	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.406	4.410	-0.004	1.003	667776	1.72		85.9	1023	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.477	4.482	-0.005	1.171	7303495	1.71		90.5	8952	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.621	-0.015	1.309	1896432	1.14		91.3	5216	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.606	4.621	-0.015	1.000	2690155	1.74	Target=8.47	87.1	151	M
613.00 > 169.00	4.606	4.621	-0.015	1.000	333020		8.08(4.23-12.70)		3191	M
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.628	4.632	-0.004	1.117	621153	1.85		95.8	3523	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.774	-0.004	1.247	275954	1.52	Target=0.48	78.8	2030	
699.00 > 99.00	4.770	4.774	-0.004	1.247	595015		0.46(0.24-0.72)		3759	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.809	4.812	-0.003	1.044	2923615	1.80	Target=6.41	90.1	176	M
663.00 > 169.00	4.809	4.812	-0.003	1.044	457018		6.40(3.21-9.62)		2616	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.989	-0.002	1.417	1822273	1.10		88.1	3969	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.987	4.989	-0.002	1.000	284929	1.75	Target=0.87	87.4	2723	
713.00 > 219.00	4.977	4.989	-0.012	0.998	318319		0.90(0.43-1.30)		4443	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.294	5.307	-0.013	1.504	2073014	1.09		87.0	4379	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.294	5.307	-0.013	1.000	3242332	1.96	Target=7.89	97.8	199	M
813.00 > 169.00	5.294	5.307	-0.013	1.000	388003		8.36(3.94-11.83)		2162	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.565	5.566	-0.001	1.051	2393234	1.85	Target=9.39	92.4	244	M
913.00 > 169.00	5.556	5.566	-0.010	1.049	255849		9.35(4.69-14.08)		1105	M

QC Flag Legend

Processing Flags

Review Flags

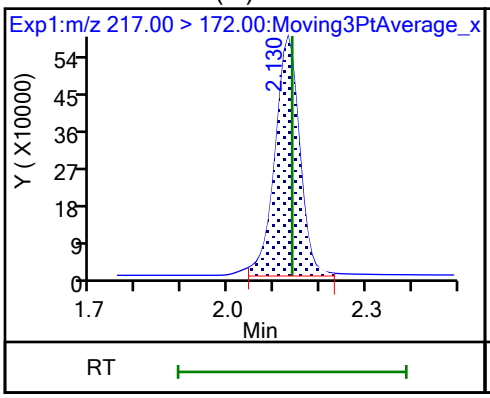
M - Manually Integrated

Report Date: 26-Oct-2023 16:54:33 Chrom Revision: 2.3 18-Oct-2023 21:16:54

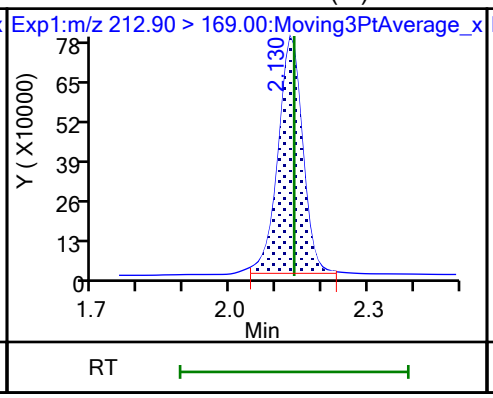
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

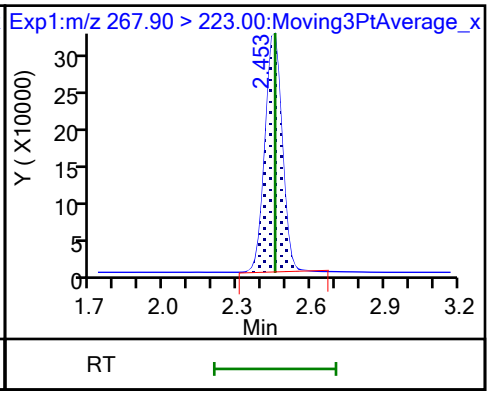
D 1 13C4 PFBA (M)



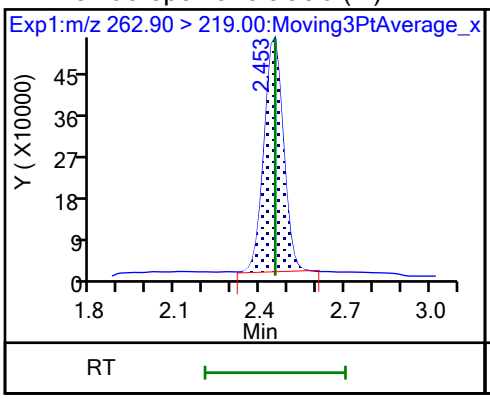
2 Perfluorobutanoic acid (M)



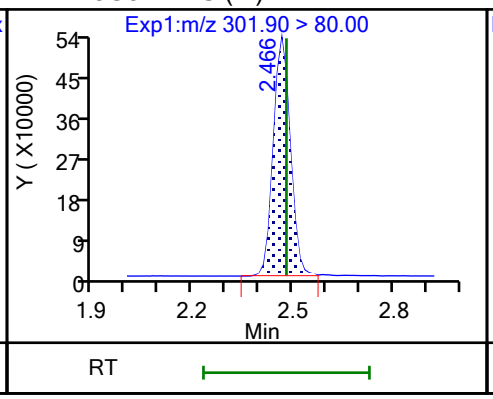
D 3 13C5 PFPeA



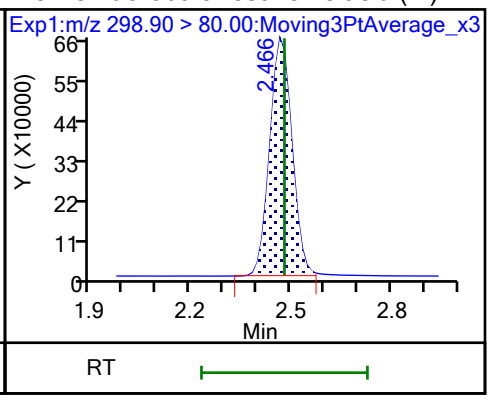
4 Perfluoropentanoic acid (M)



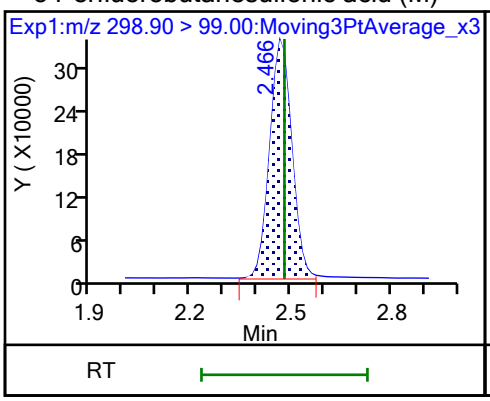
D 47 13C3 PFBS (M)



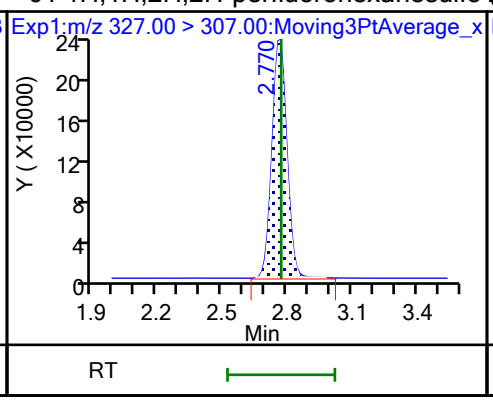
5 Perfluorobutanesulfonic acid (M)



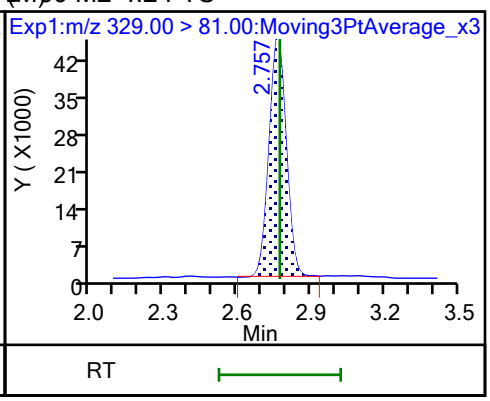
5 Perfluorobutanesulfonic acid (M)



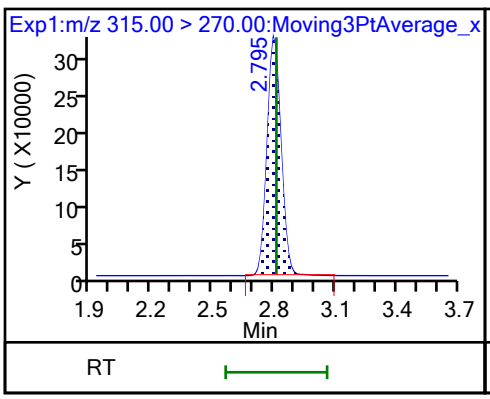
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



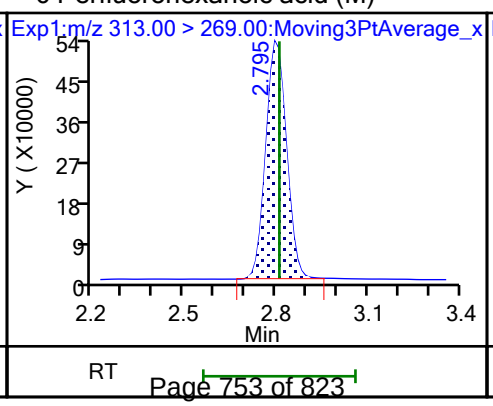
60 M2-4:2 FTS



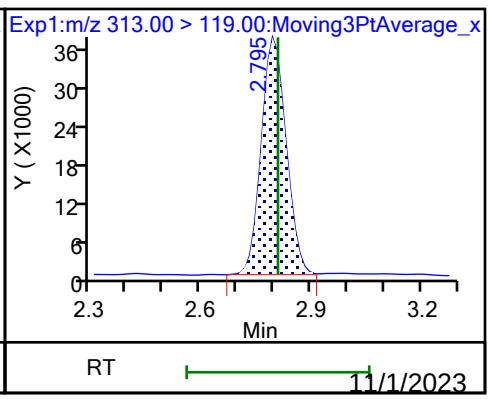
D 7 13C2 PFHxA



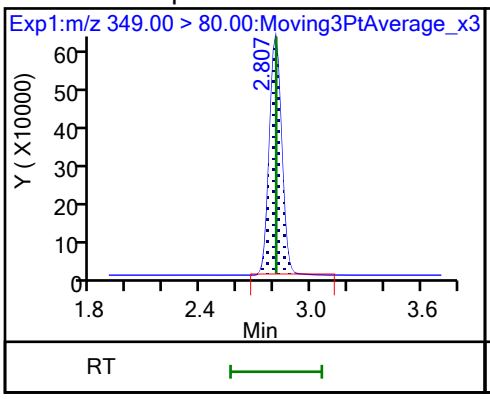
6 Perfluorohexanoic acid (M)



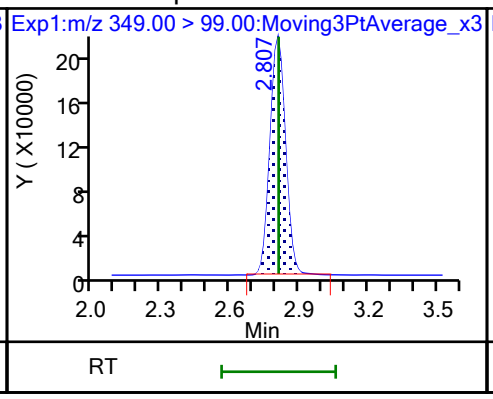
6 Perfluorohexanoic acid



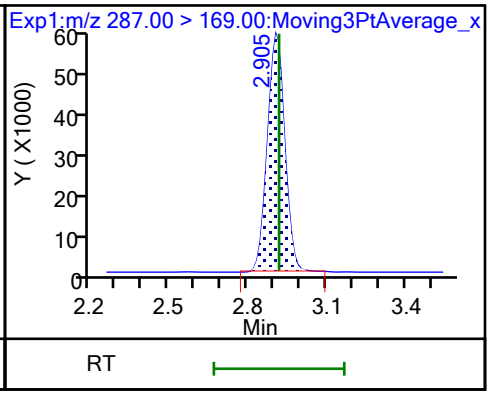
70 Perfluoropentanesulfonic acid



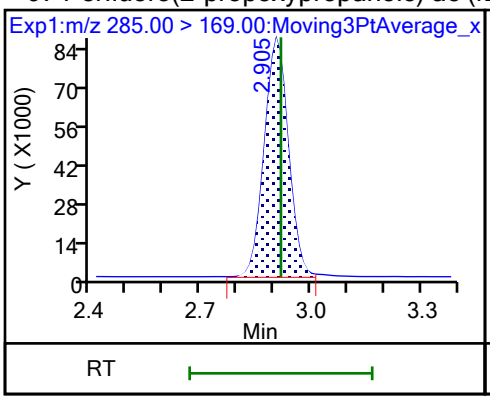
70 Perfluoropentanesulfonic acid



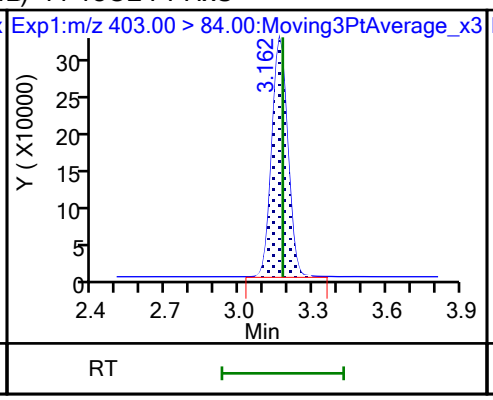
D 64 13C3 HFPO-DA



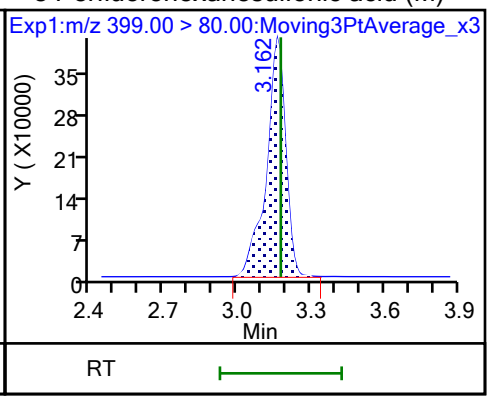
67 Perfluoro(2-propoxypropanoic) ac (M)



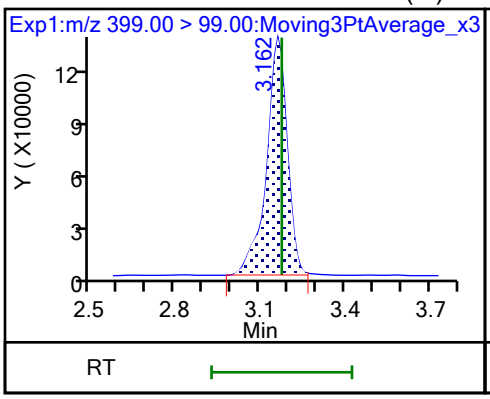
D 11 18O2 PFHxS



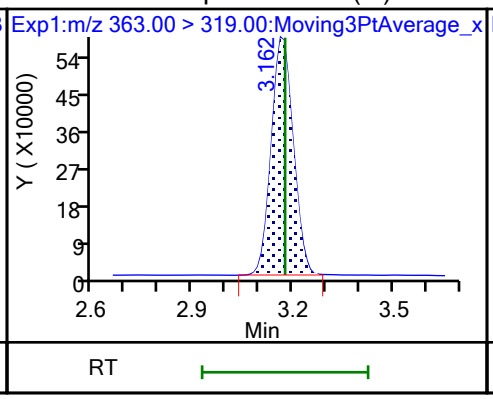
8 Perfluorohexanesulfonic acid (M)



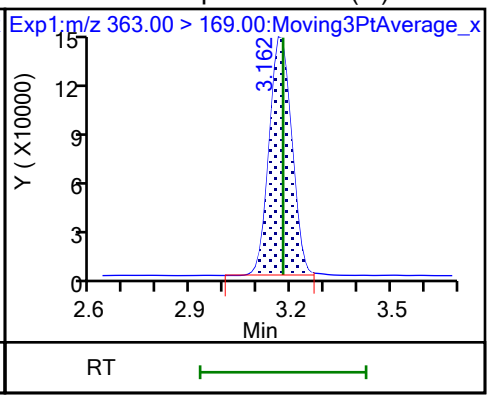
8 Perfluorohexanesulfonic acid (M)



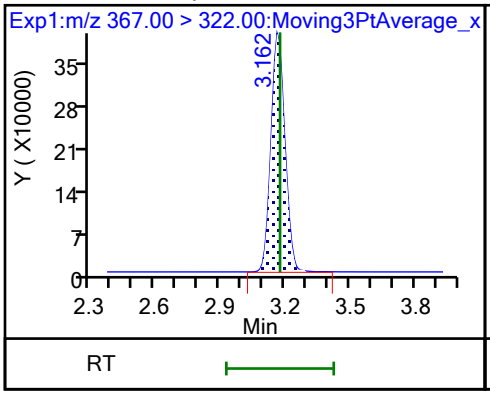
10 Perfluoroheptanoic acid (M)



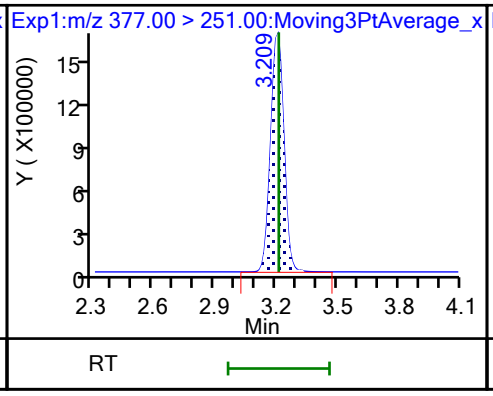
10 Perfluoroheptanoic acid (M)



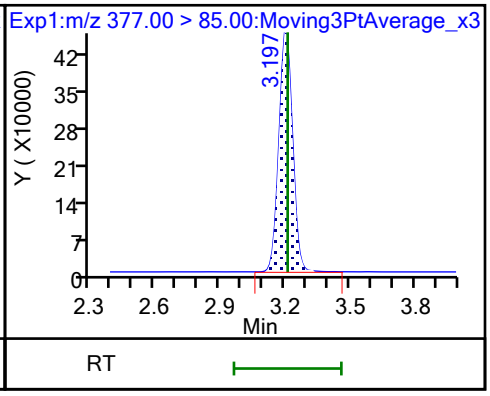
D 9 13C4 PFHpA



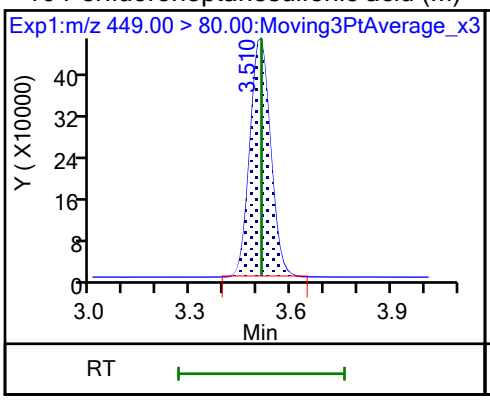
77 DONA



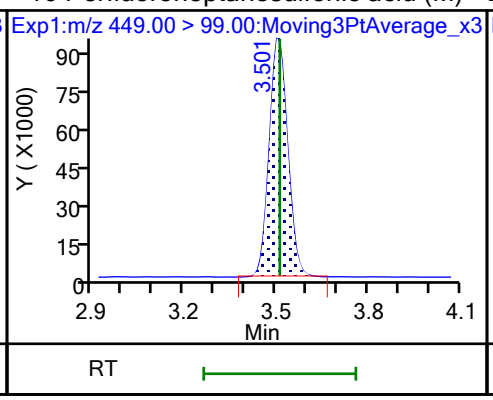
77 DONA



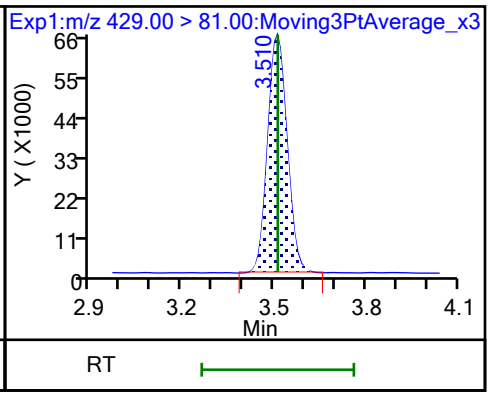
16 Perfluoroheptanesulfonic acid (M)



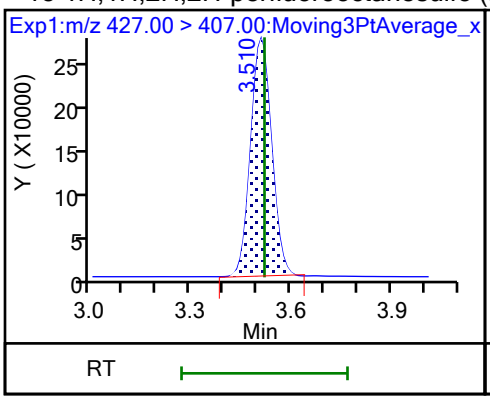
16 Perfluoroheptanesulfonic acid (M)



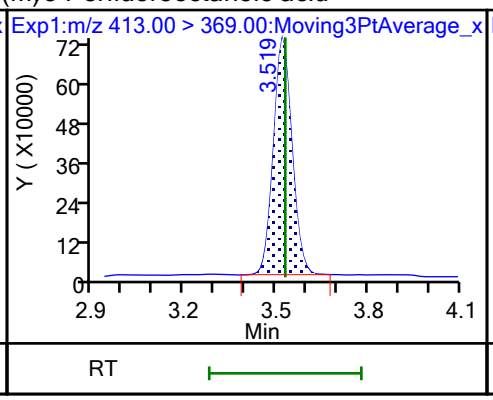
D 12 M2-6:2 FTS



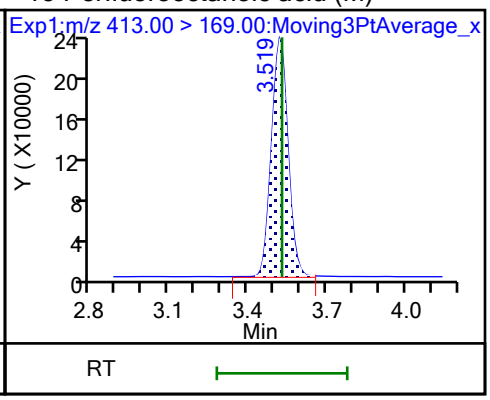
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



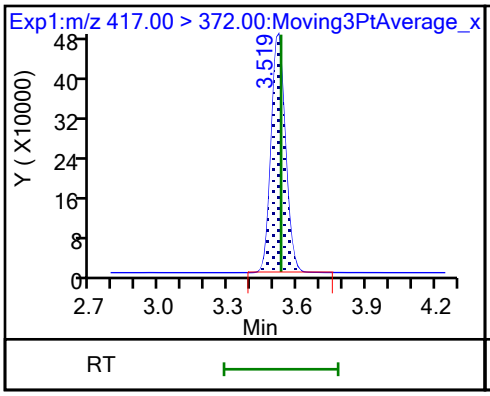
15 Perfluorooctanoic acid



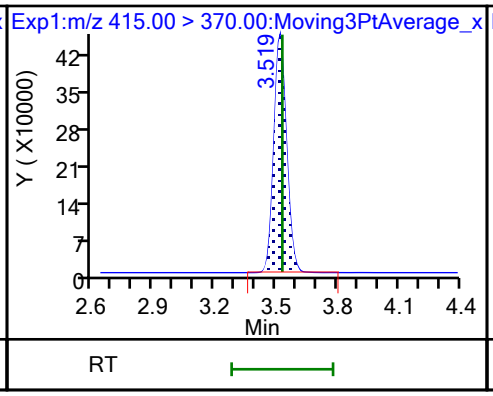
15 Perfluorooctanoic acid (M)



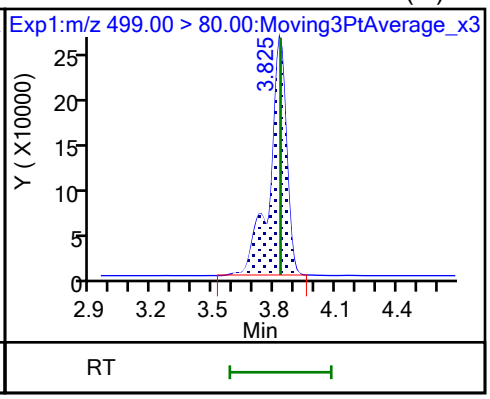
D 14 13C4 PFOA



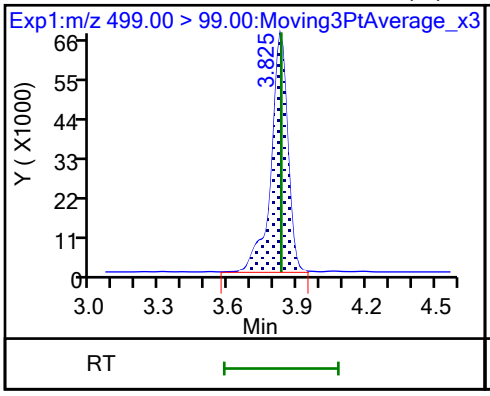
* 62 13C2 PFOA



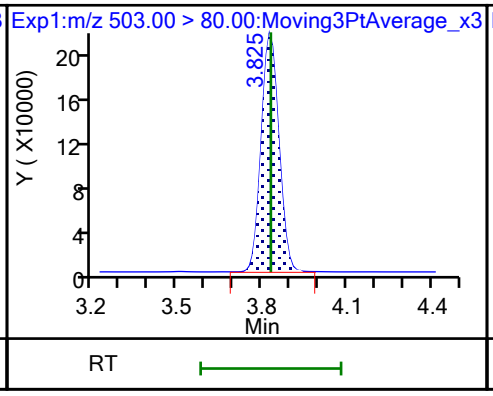
17 Perfluorooctanesulfonic acid (M)



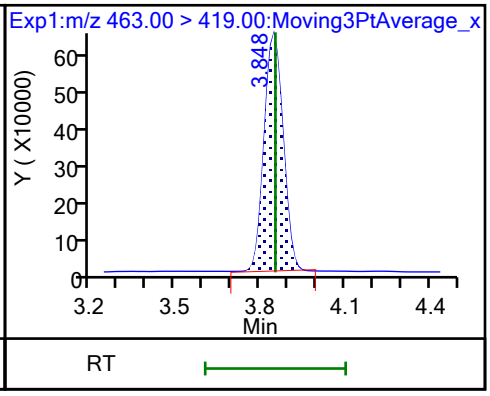
17 Perfluorooctanesulfonic acid (M)



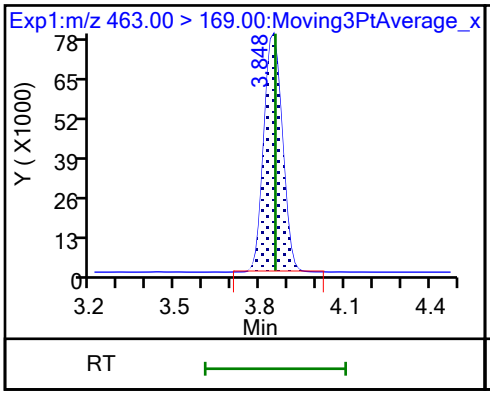
D 18 13C4 PFOS



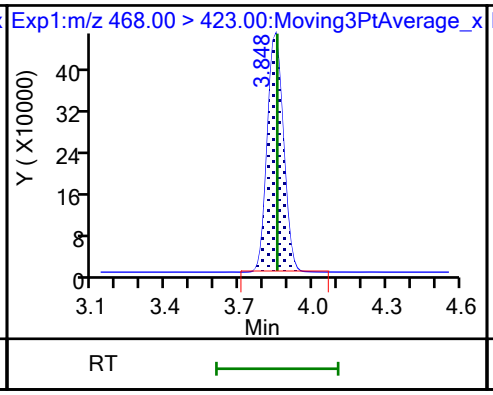
20 Perfluorononanoic acid



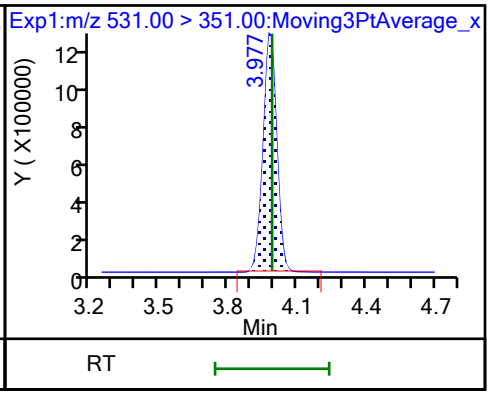
20 Perfluorononanoic acid



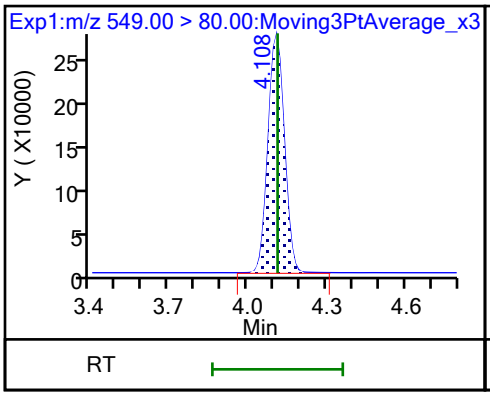
D 19 13C5 PFNA



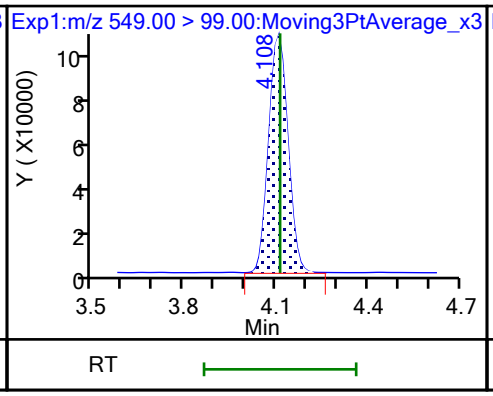
69 9-Chlorohexadecafluoro-3-oxanona



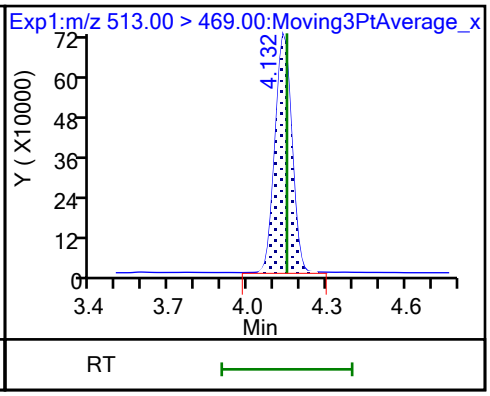
68 Perfluorononanesulfonic acid



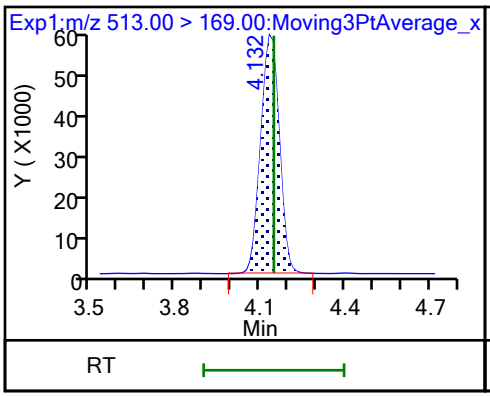
68 Perfluorononanesulfonic acid



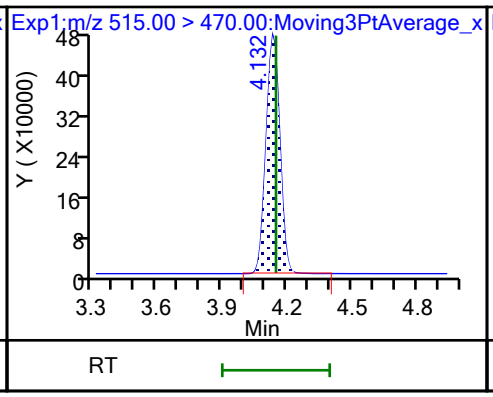
24 Perfluorodecanoic acid



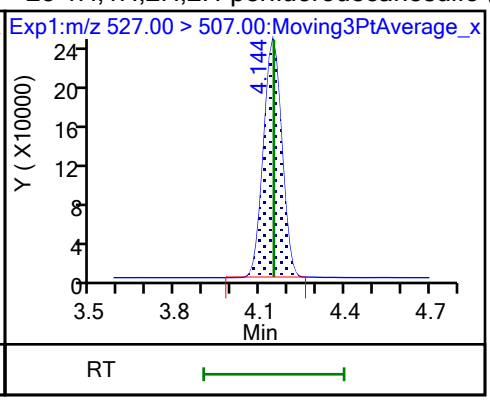
24 Perfluorodecanoic acid



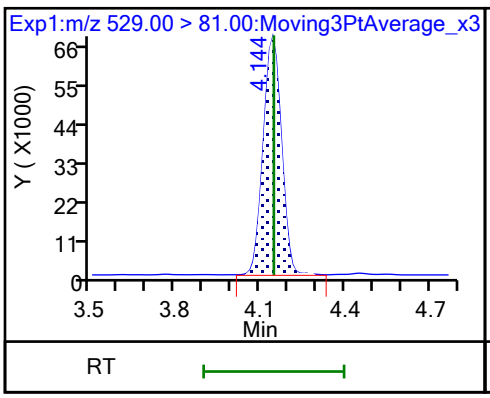
D 23 13C2 PFDA



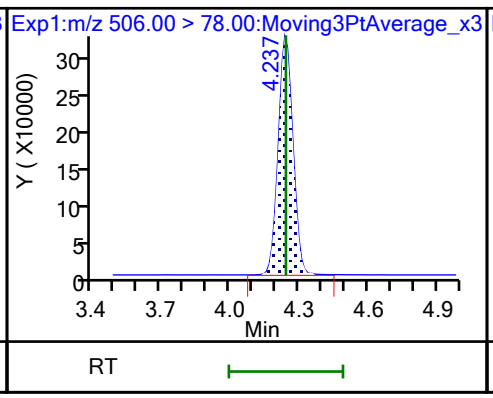
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



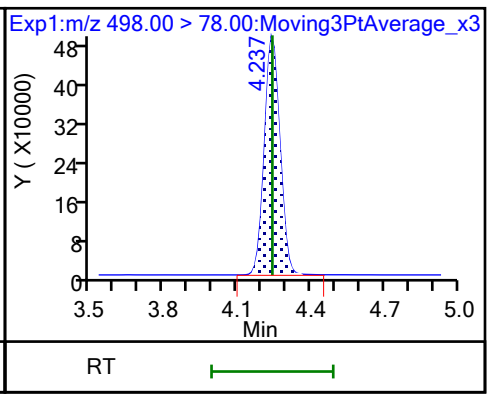
D 26 M2-8:2 FTS



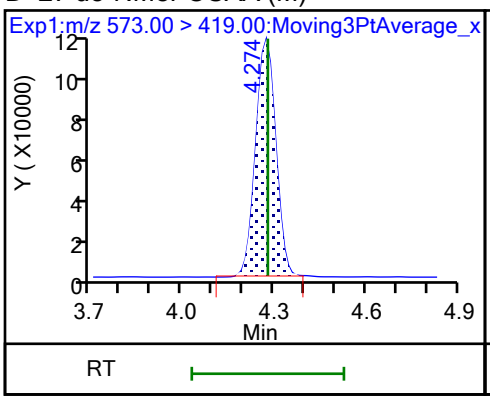
D 21 13C8 FOSA



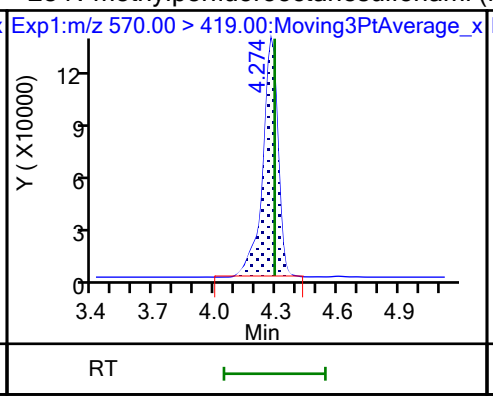
22 Perfluorooctanesulfonamide



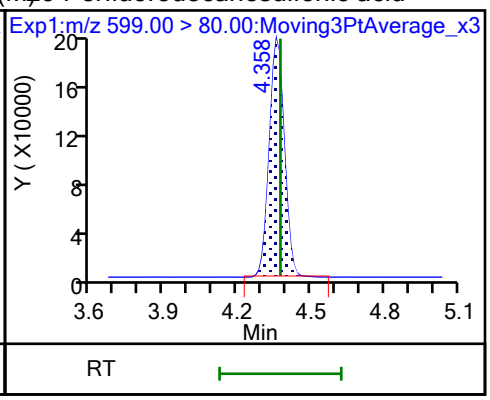
D 27 d3-NMeFOSAA (M)



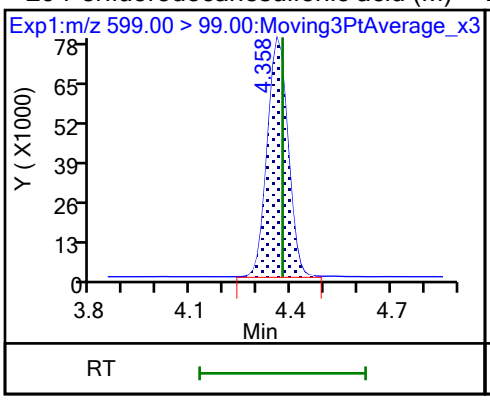
28 N-methylperfluorooctanesulfonami (M)



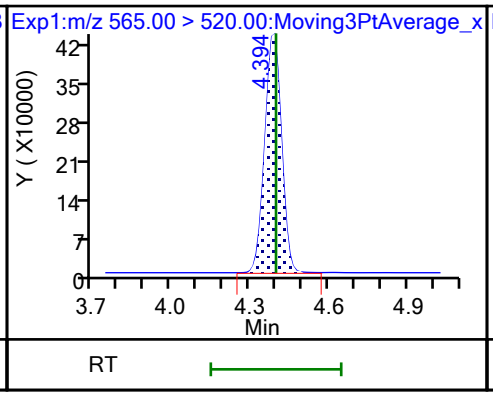
29 Perfluorodecanesulfonic acid



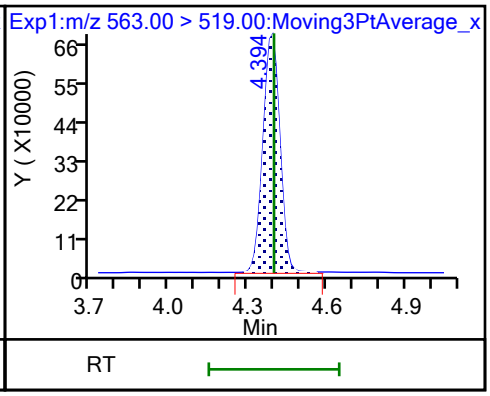
29 Perfluorodecanesulfonic acid (M)



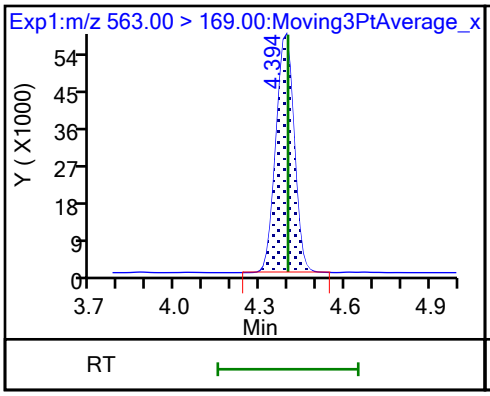
D 30 13C2 PFUnA



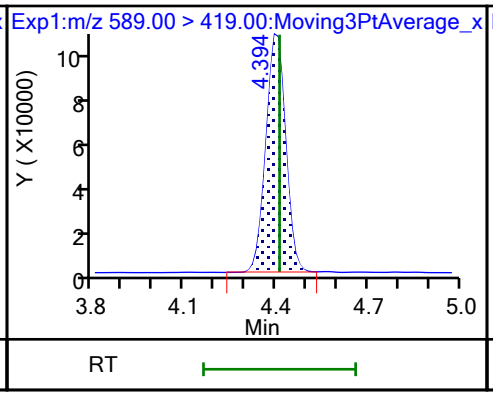
31 Perfluoroundecanoic acid



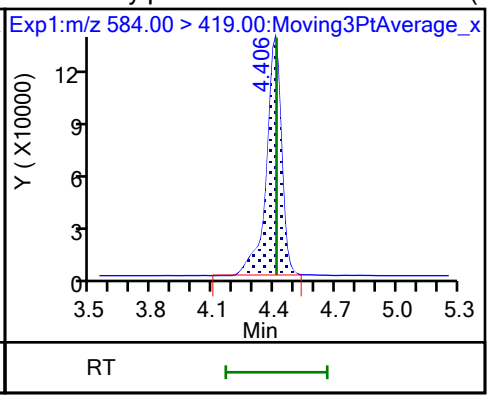
31 Perfluoroundecanoic acid



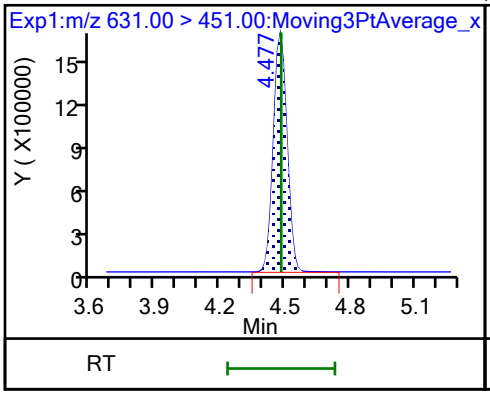
D 32 d5-NEtFOSAA



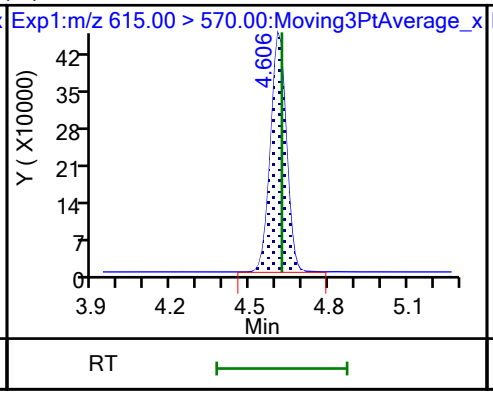
33 N-ethylperfluorooctanesulfonamid (M)



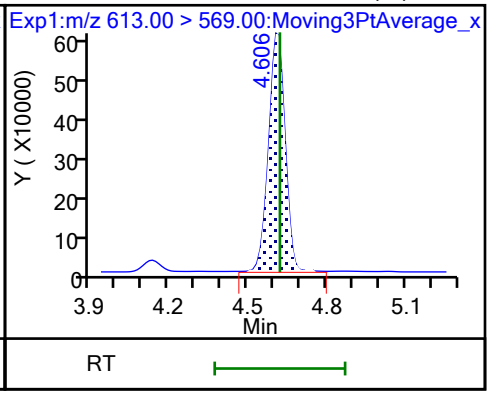
66 11-Chloroeicosafluoro-3-oxaundec (M)



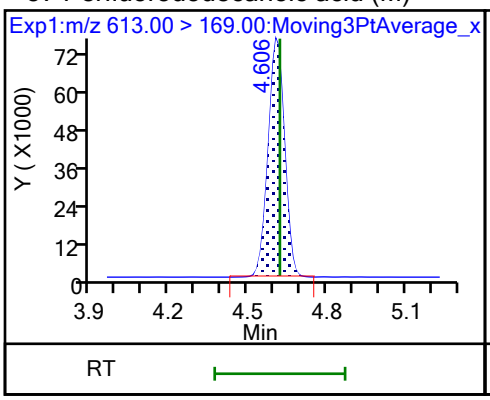
D 36 13C2 PFDoA



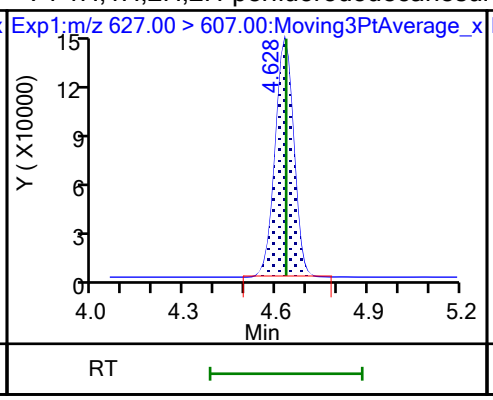
37 Perfluorododecanoic acid (M)



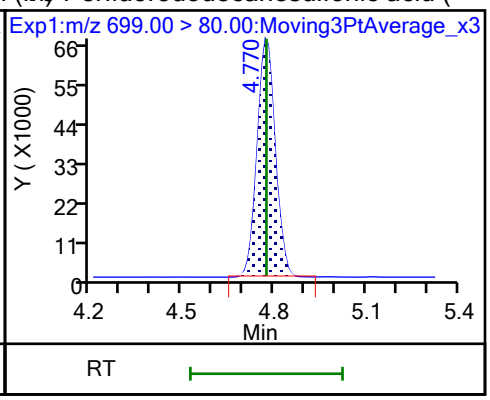
37 Perfluorododecanoic acid (M)



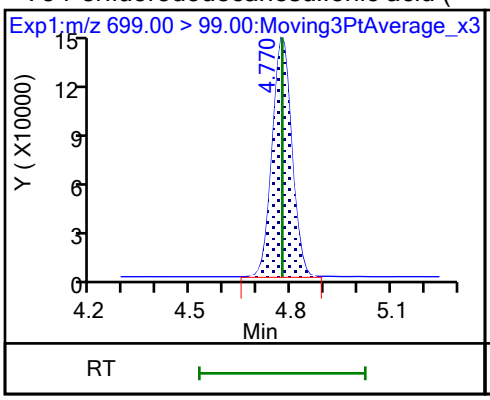
74 1H,1H,2H,2H-perfluorododecanesul (M)



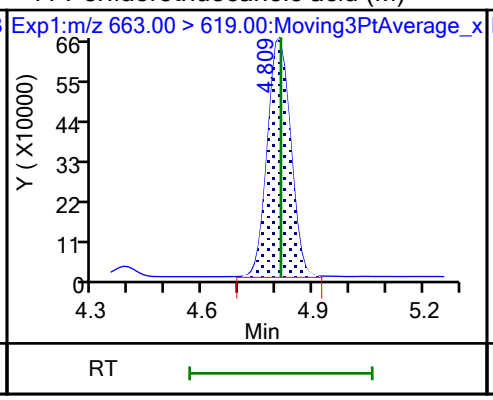
75 Perfluorododecanesulfonic acid (



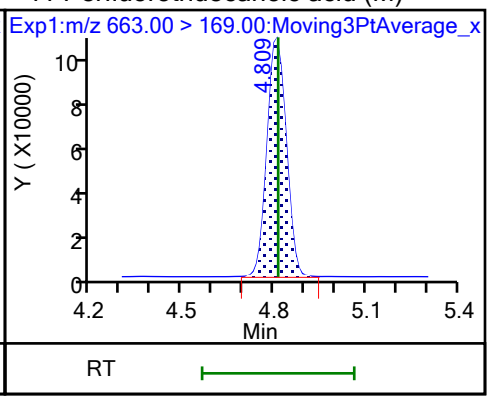
75 Perfluorododecanesulfonic acid (



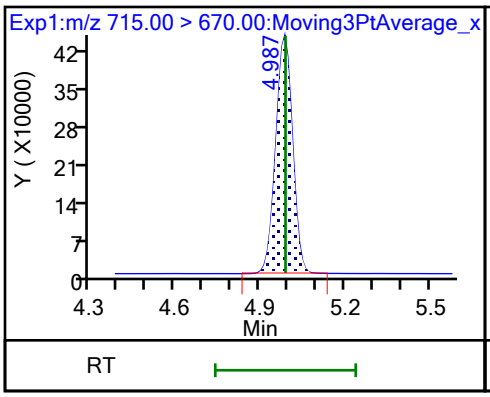
41 Perfluorotridecanoic acid (M)



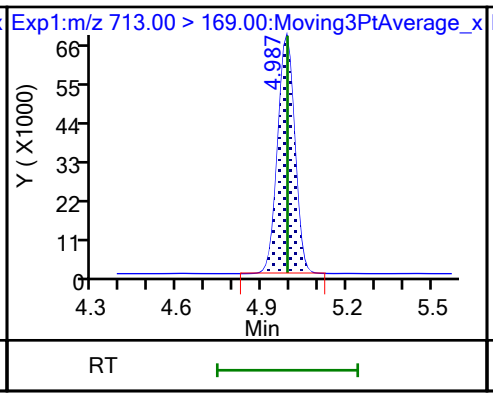
41 Perfluorotridecanoic acid (M)



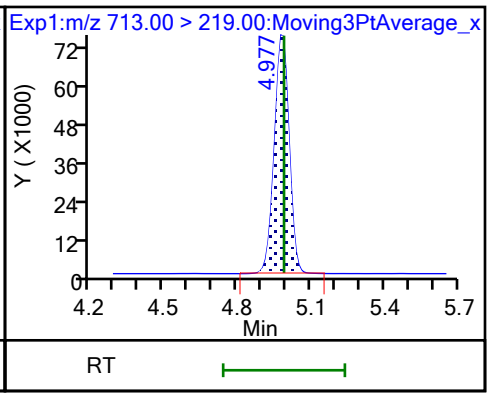
D 43 13C2 PFTeDA



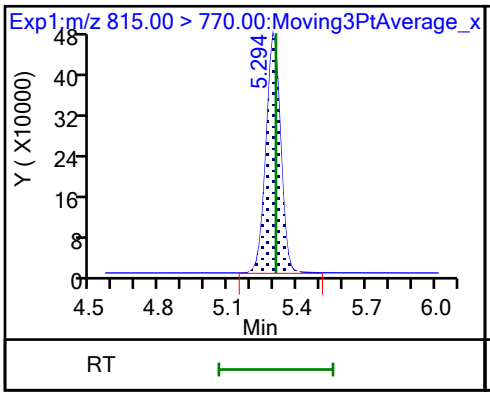
42 Perfluorotetradecanoic acid



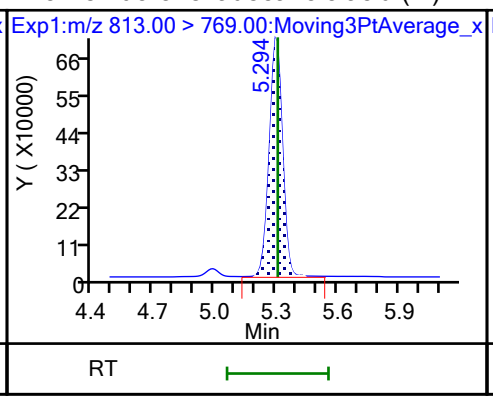
42 Perfluorotetradecanoic acid



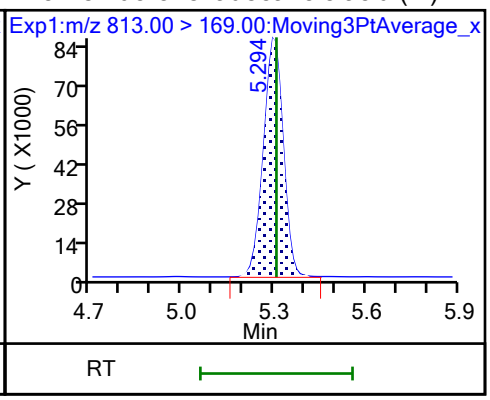
D 44 13C2 PFHxDA



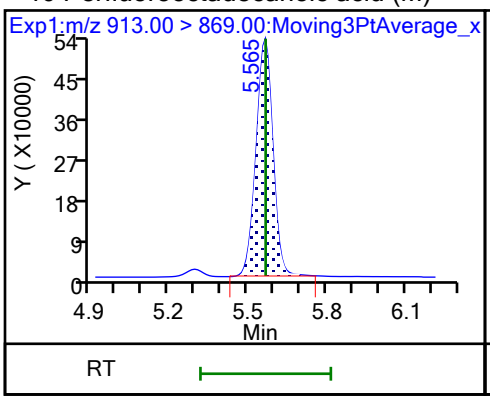
45 Perfluorohexadecanoic acid (M)



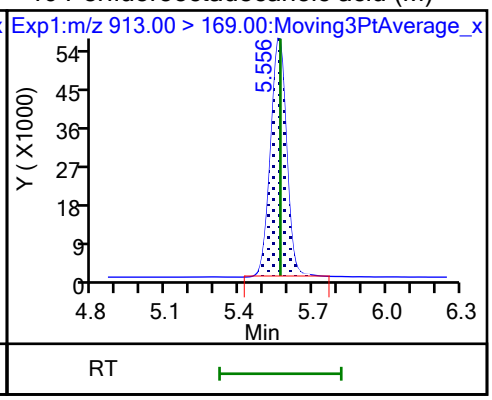
45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

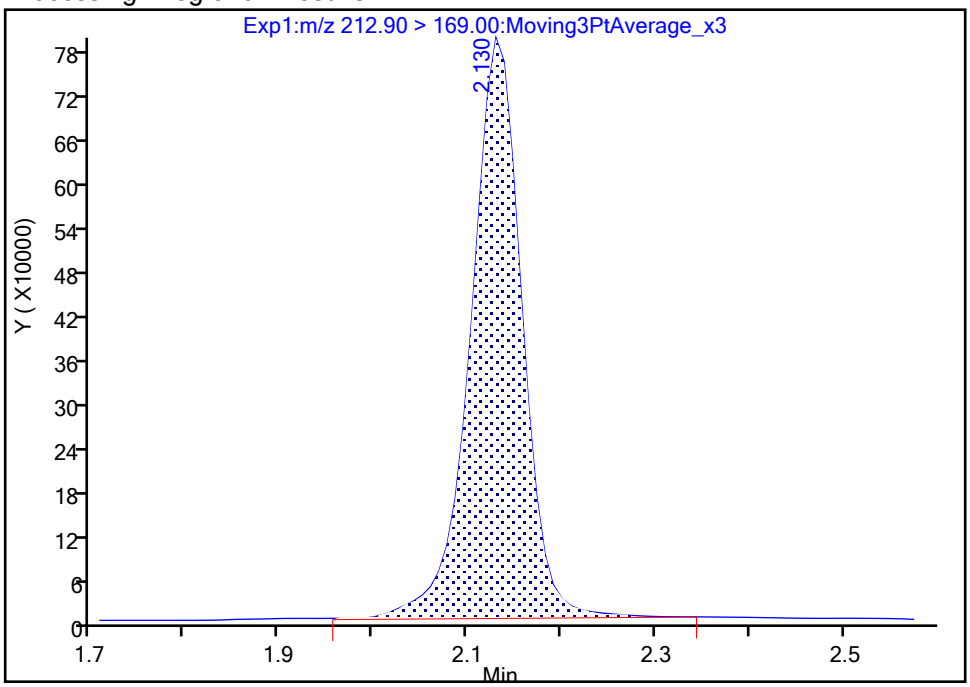
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

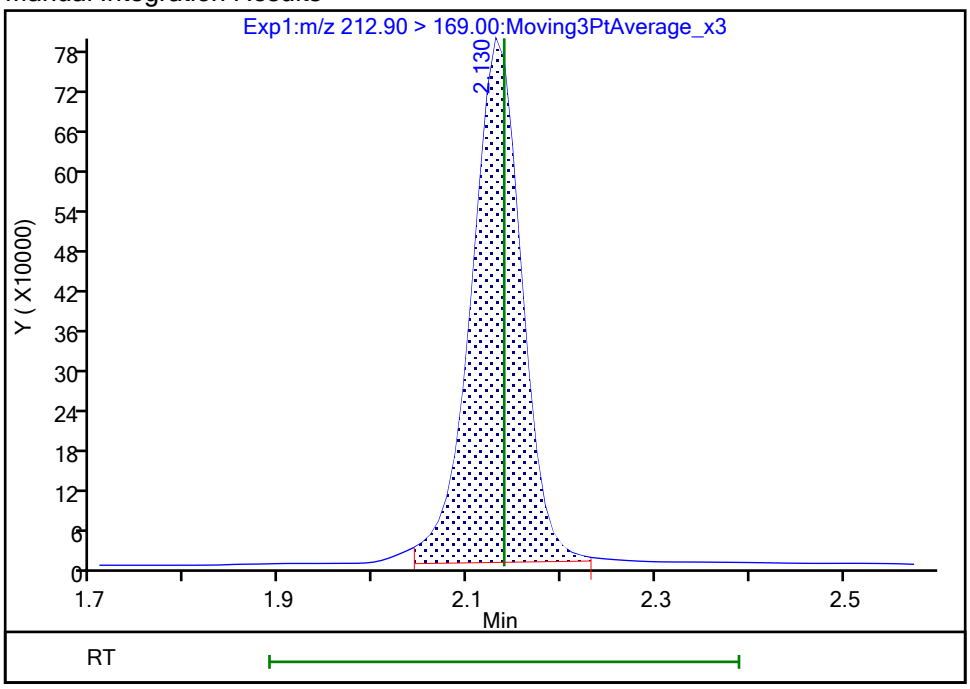
Processing Integration Results

RT: 2.13
Area: 2998212
Amount: 1.872764
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2951773
Amount: 1.843124
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:13:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

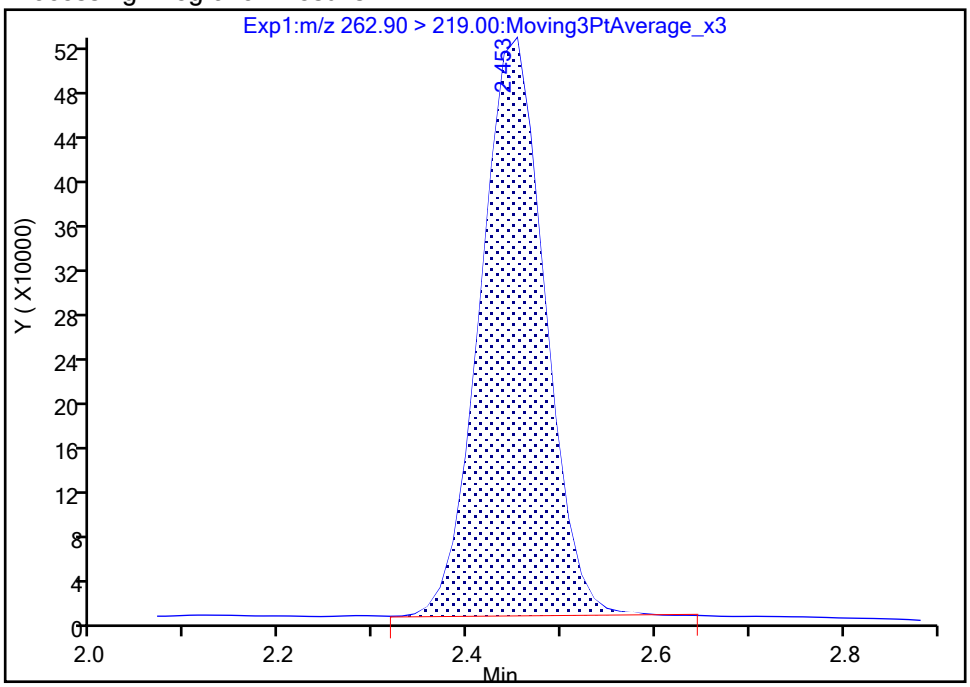
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

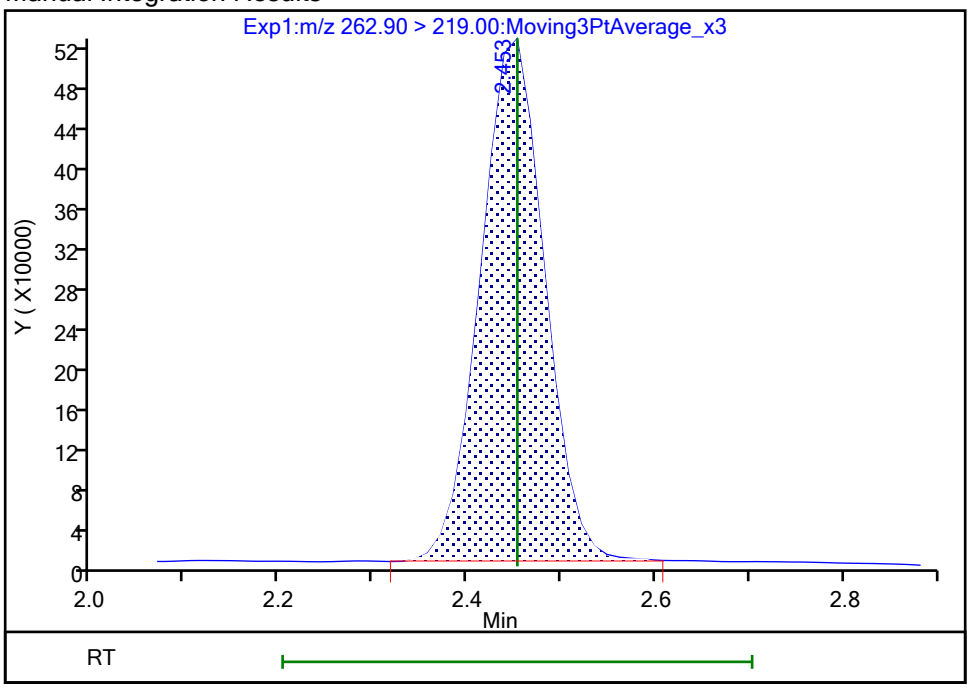
Processing Integration Results

RT: 2.45
Area: 2461476
Amount: 1.825269
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 2457648
Amount: 1.822430
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:13:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

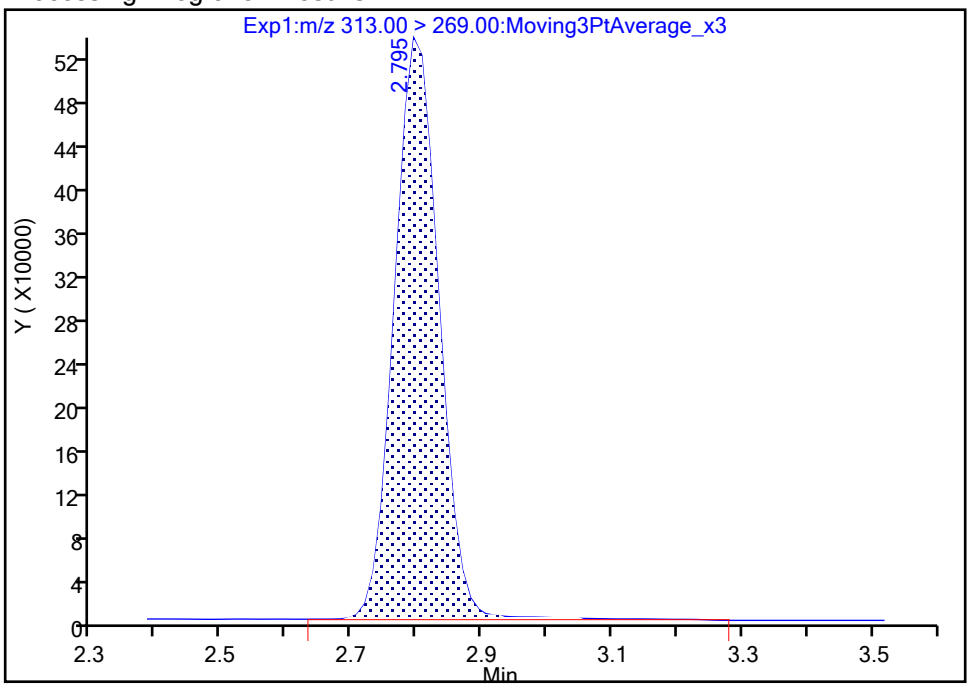
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

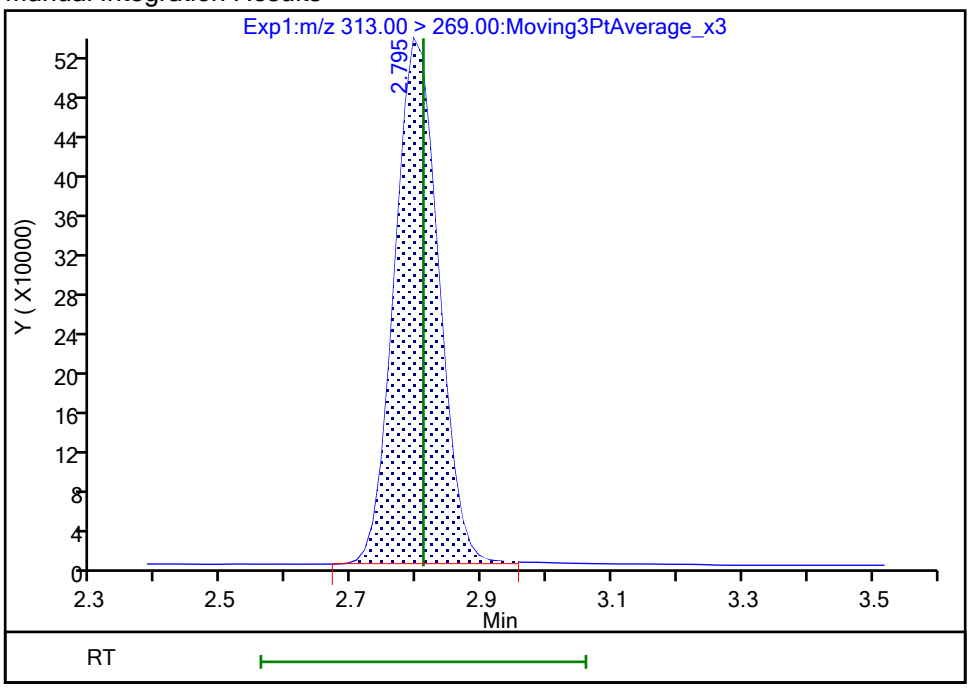
Processing Integration Results

RT: 2.79
Area: 2554249
Amount: 1.849703
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 2522775
Amount: 1.826911
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:14:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

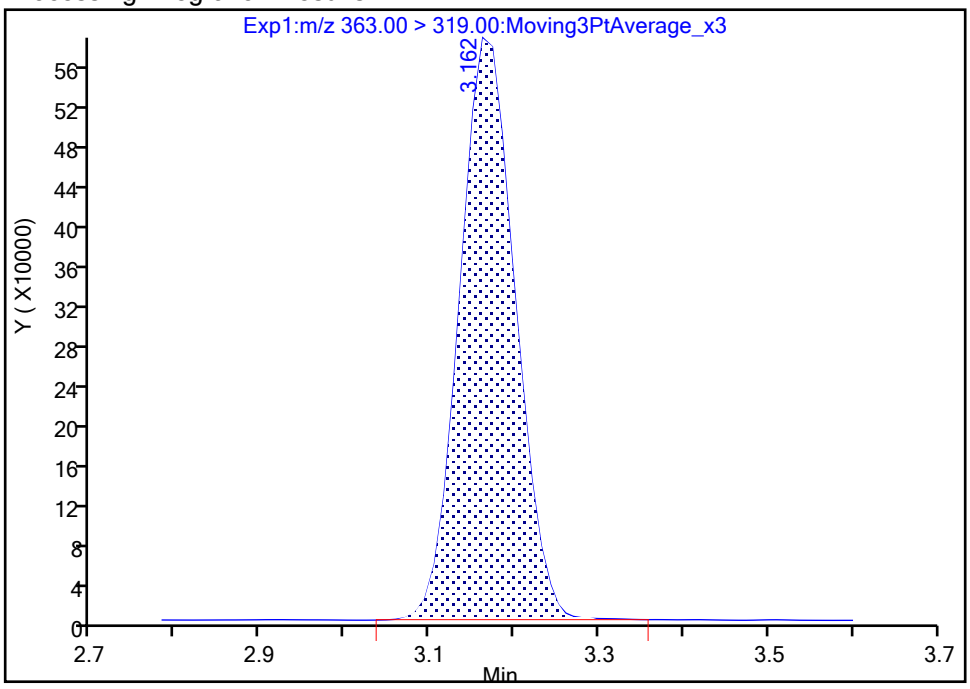
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

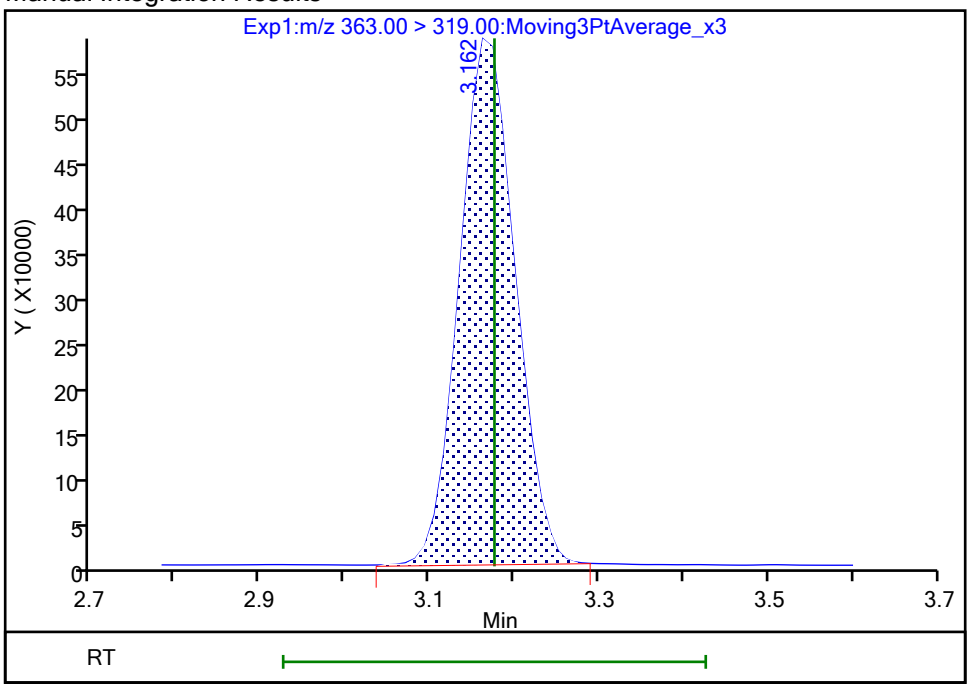
Processing Integration Results

RT: 3.16
Area: 2660660
Amount: 1.680088
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2657750
Amount: 1.678250
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:15:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

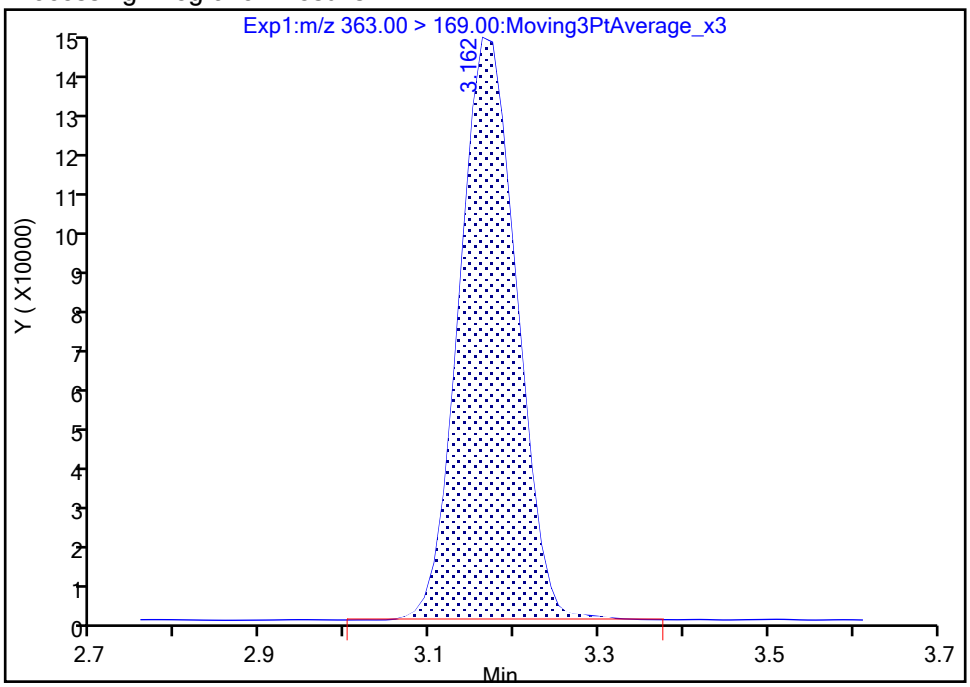
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

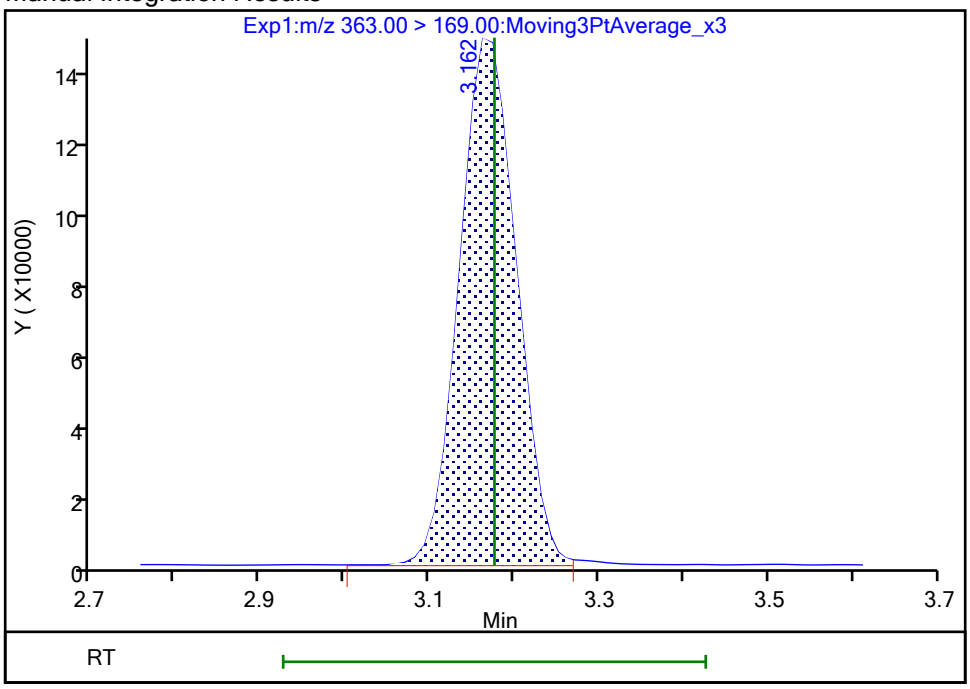
Processing Integration Results

RT: 3.16
Area: 660753
Amount: 1.680088
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 657872
Amount: 1.678250
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:15:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

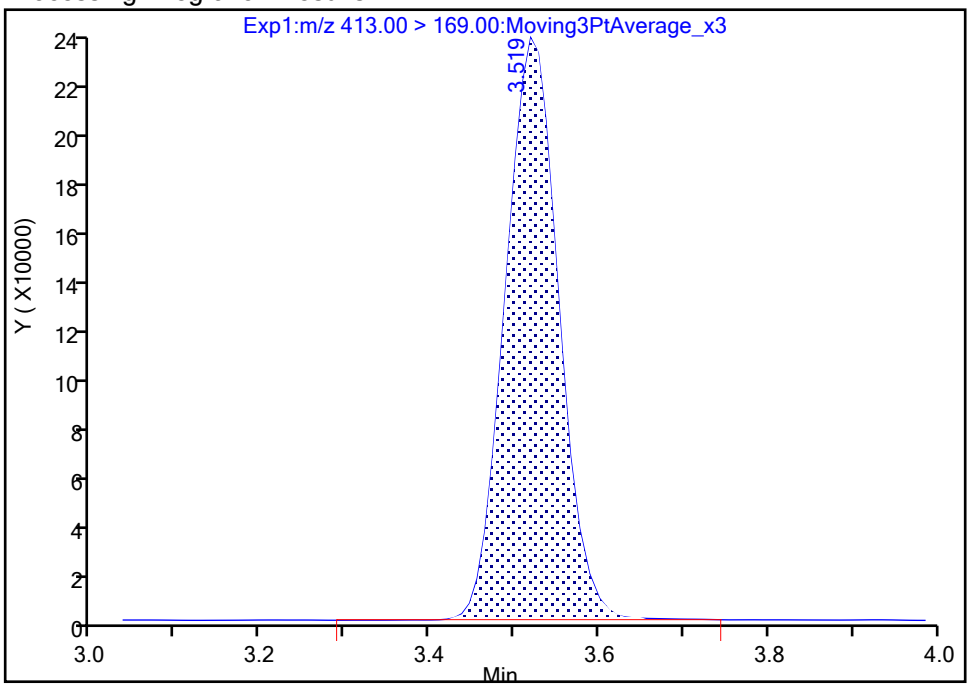
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

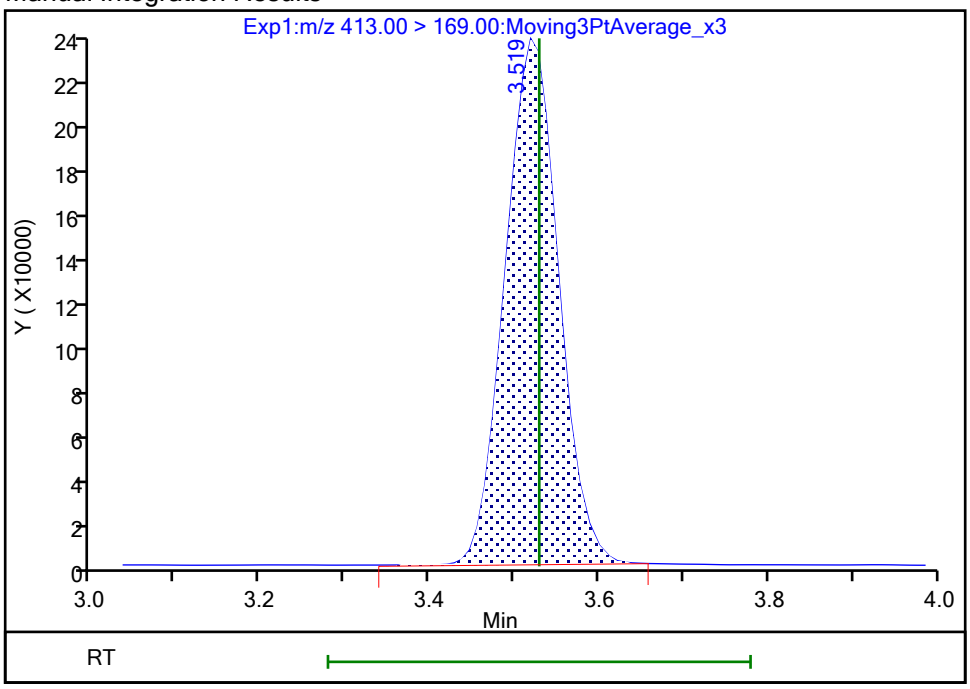
Processing Integration Results

RT: 3.52
Area: 1053221
Amount: 1.716627
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1051966
Amount: 1.716627
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:16:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

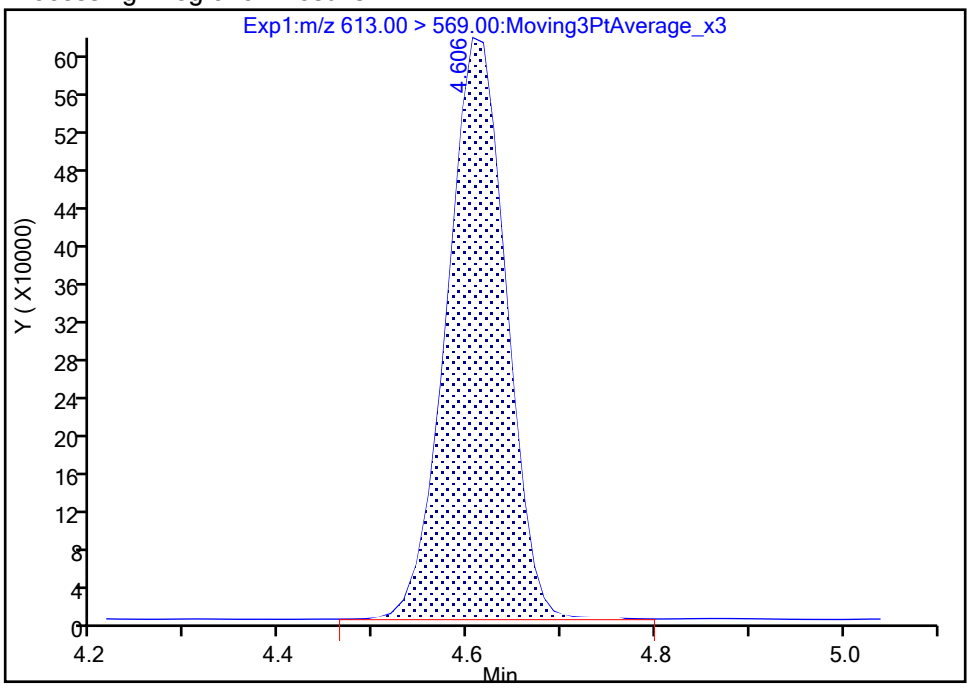
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

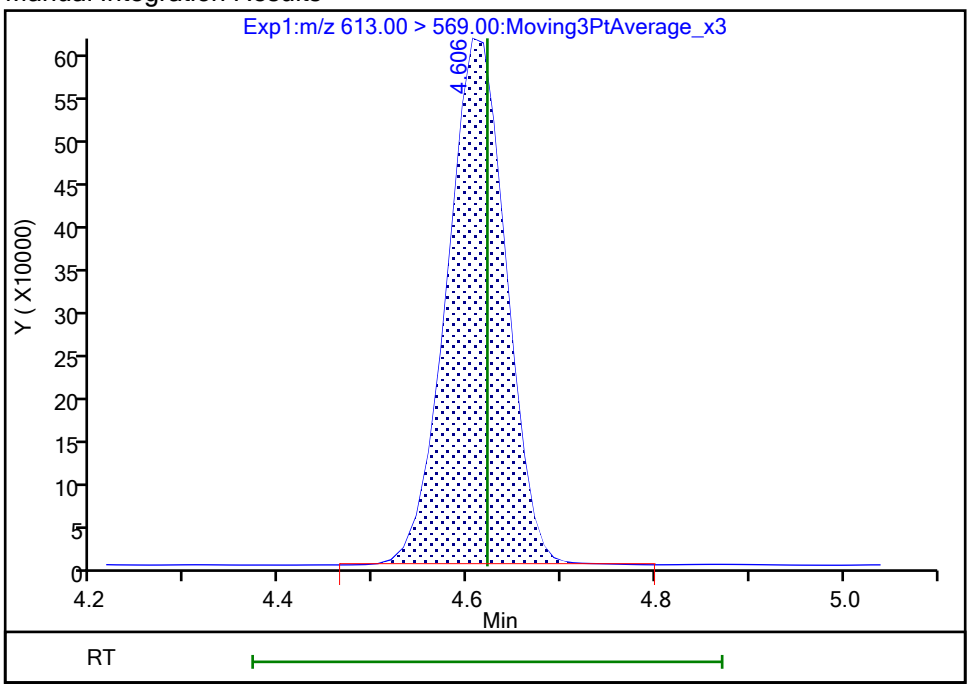
Processing Integration Results

RT: 4.61
Area: 2718250
Amount: 1.760309
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 2690155
Amount: 1.742115
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:18:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

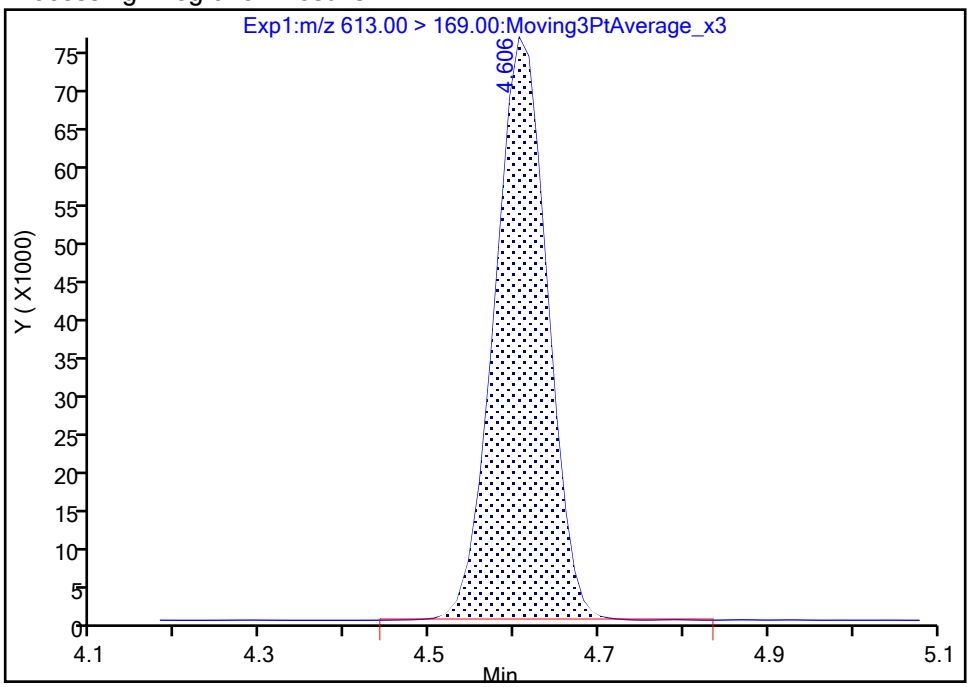
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

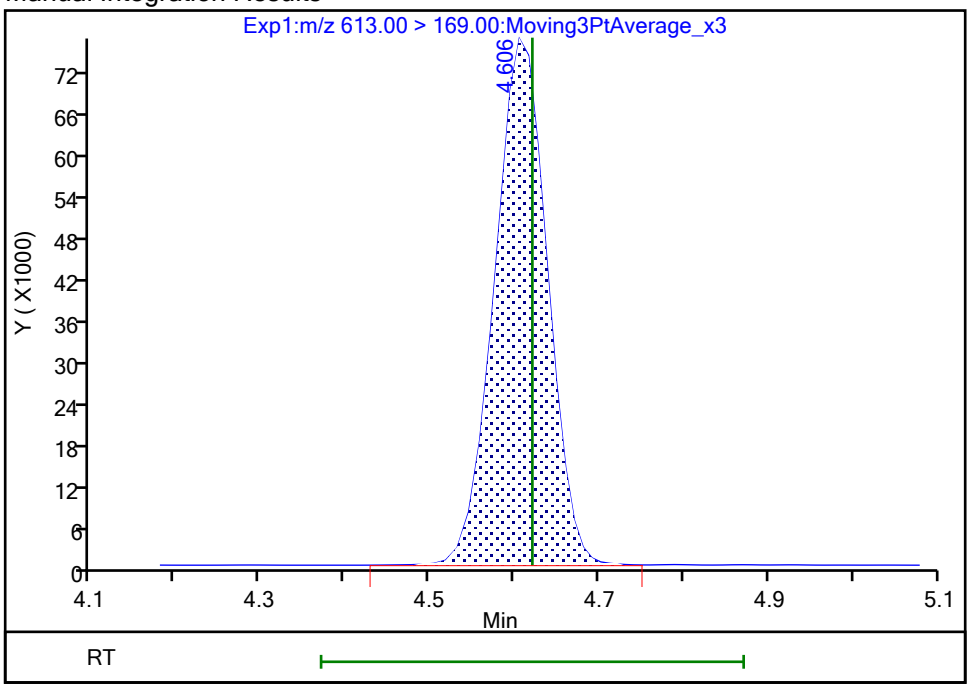
Processing Integration Results

RT: 4.61
Area: 333260
Amount: 1.760309
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 333020
Amount: 1.742115
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:18:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

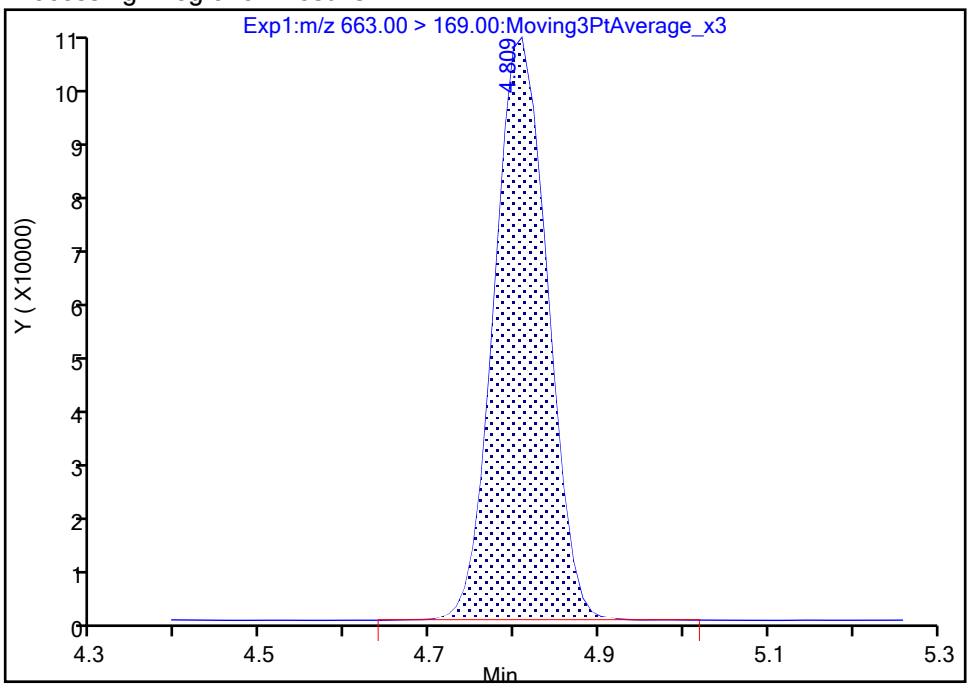
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

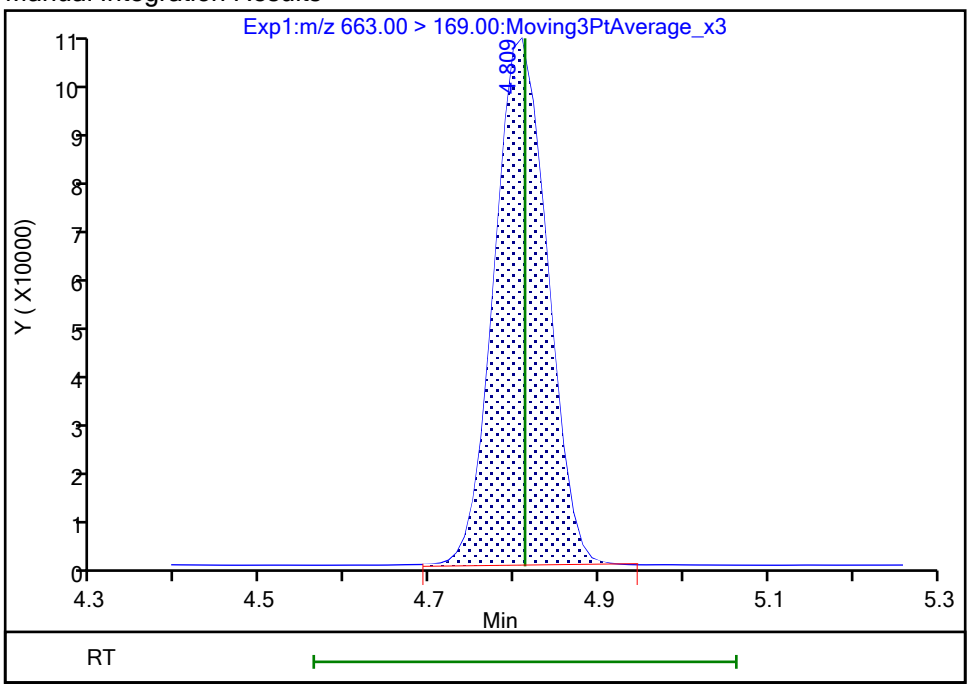
Processing Integration Results

RT: 4.81
Area: 457910
Amount: 1.809714
Amount Units: ng/ml



Manual Integration Results

RT: 4.81
Area: 457018
Amount: 1.801297
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:19:09 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

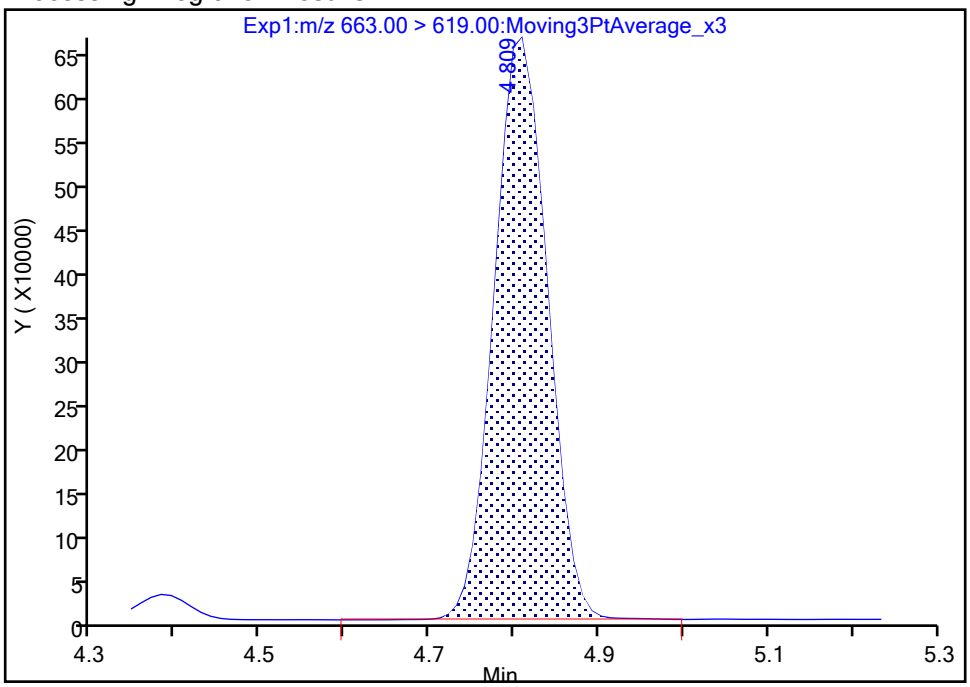
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

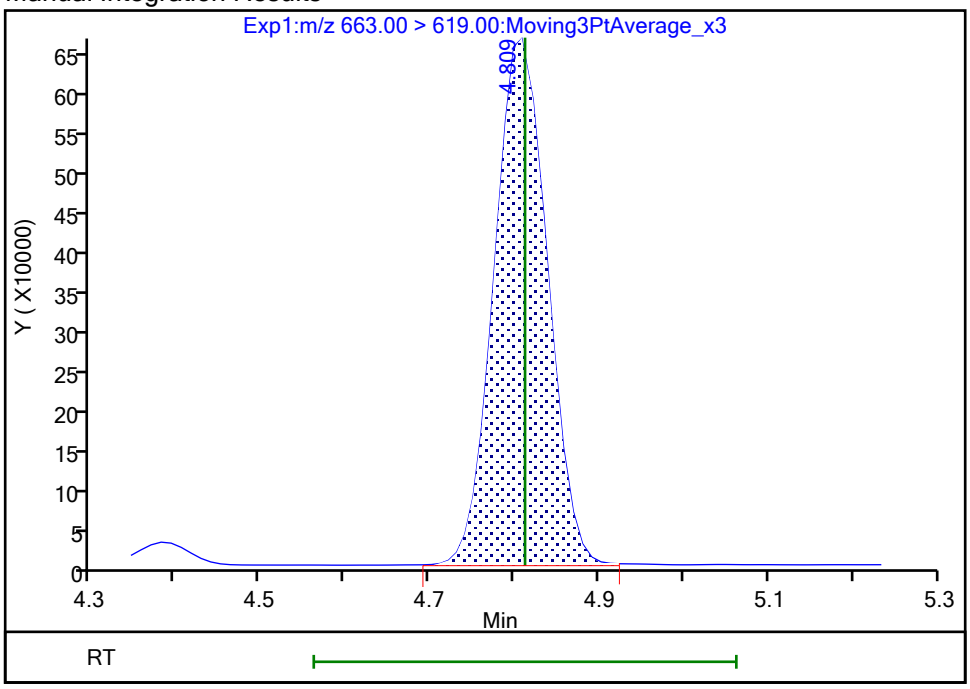
Processing Integration Results

RT: 4.81
Area: 2937277
Amount: 1.809714
Amount Units: ng/ml



Manual Integration Results

RT: 4.81
Area: 2923615
Amount: 1.801297
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:19:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

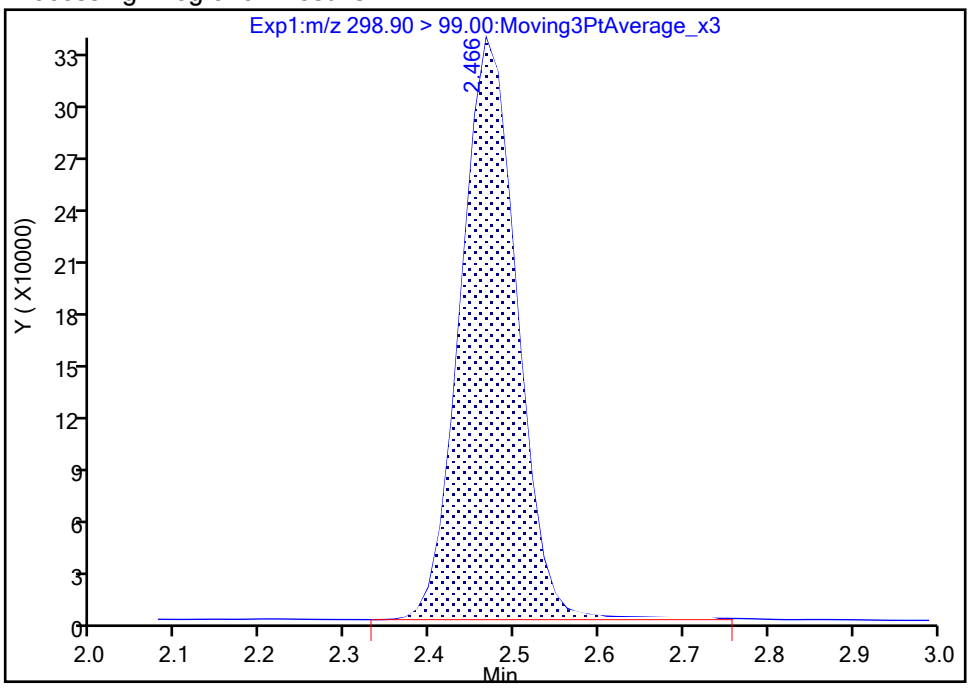
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

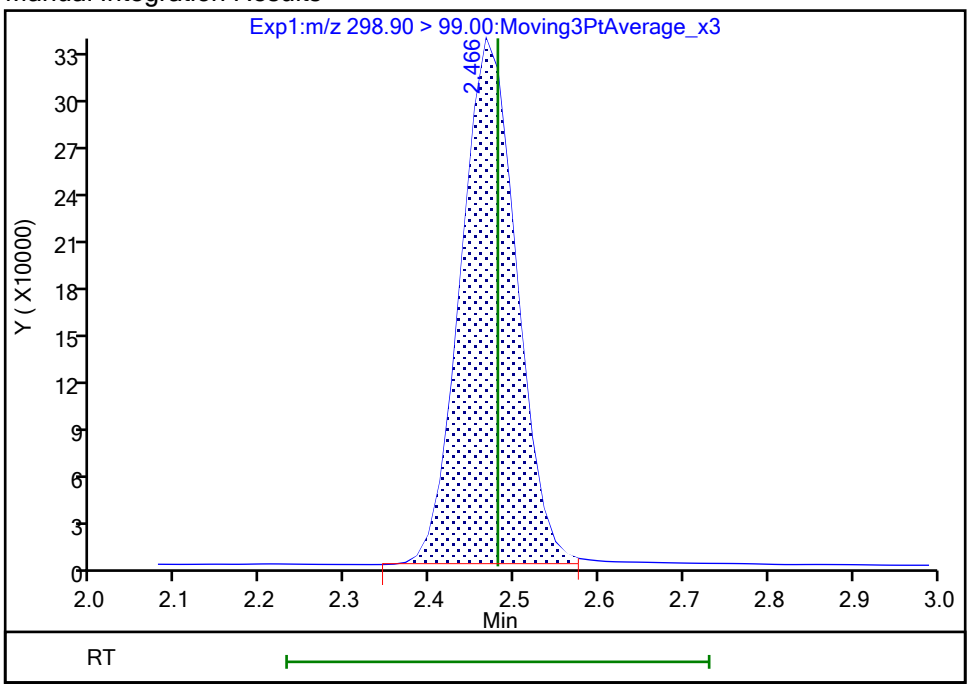
Processing Integration Results

RT: 2.47
Area: 1525670
Amount: 1.715496
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1517809
Amount: 1.697918
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:13:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

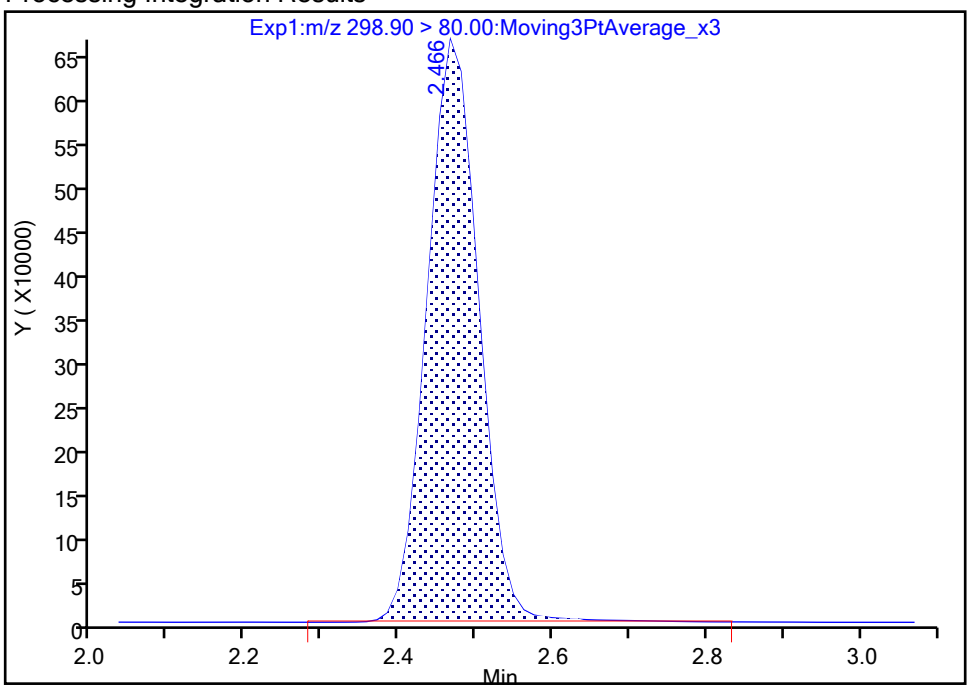
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

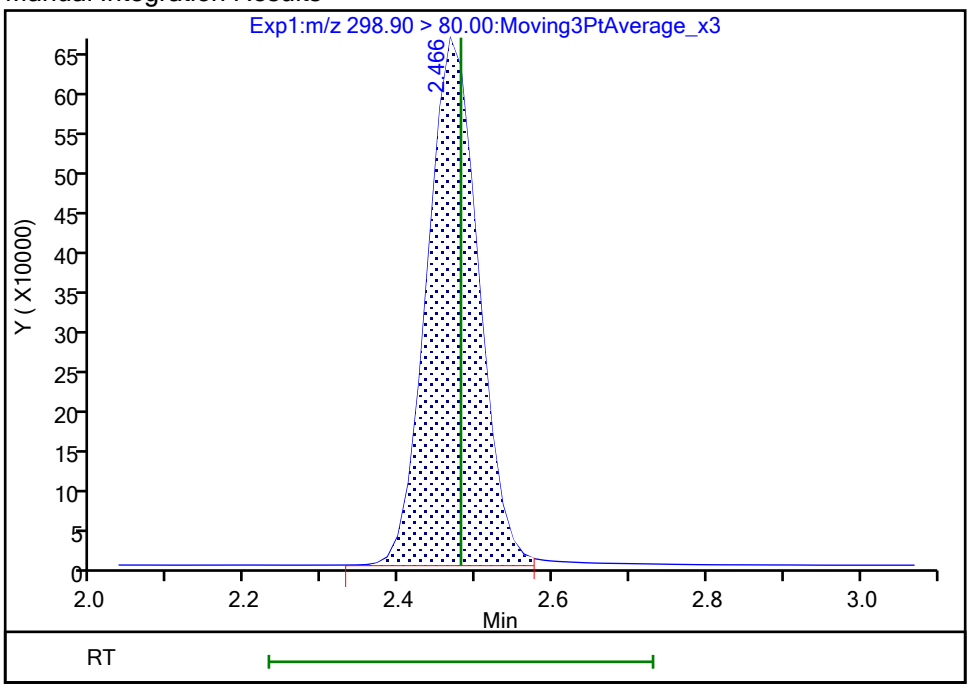
Processing Integration Results

RT: 2.47
Area: 3090040
Amount: 1.715496
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 3058377
Amount: 1.697918
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:13:43 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

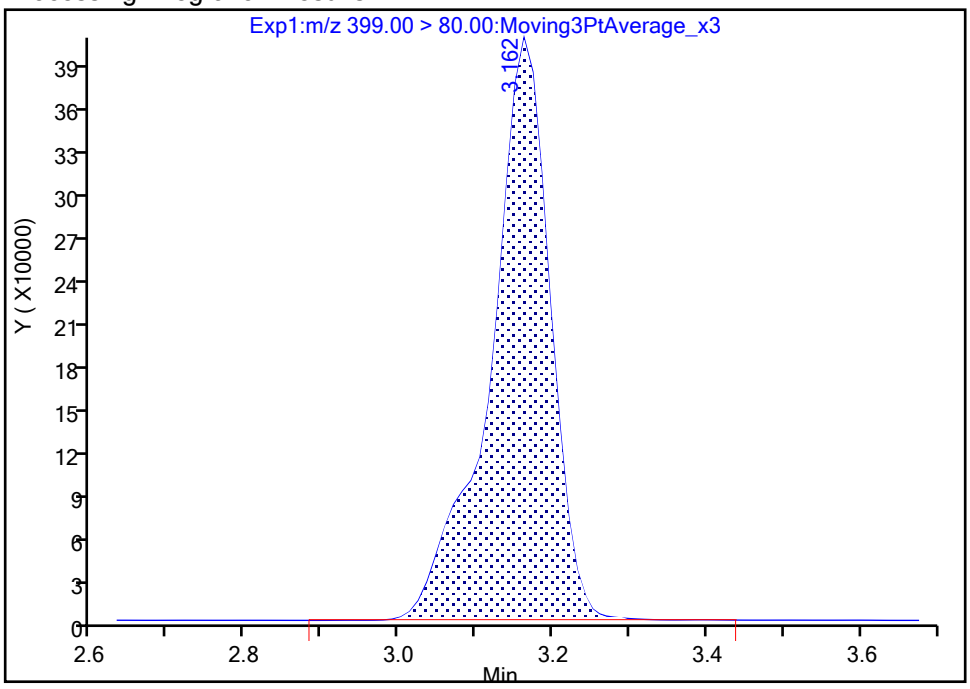
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

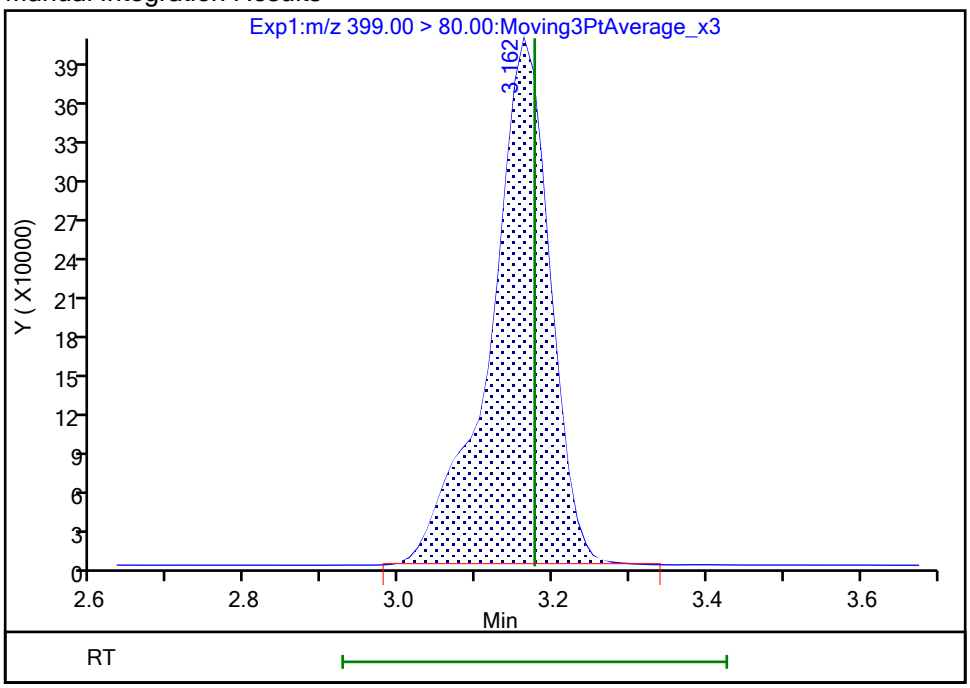
Processing Integration Results

RT: 3.16
Area: 2218027
Amount: 1.617253
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 2211381
Amount: 1.612408
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:14:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

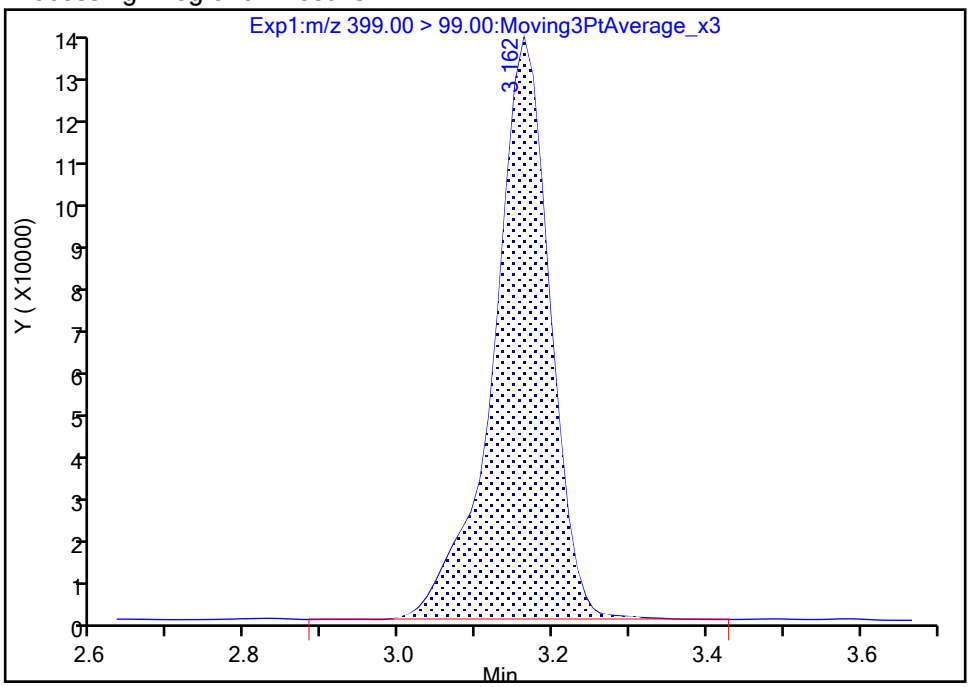
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

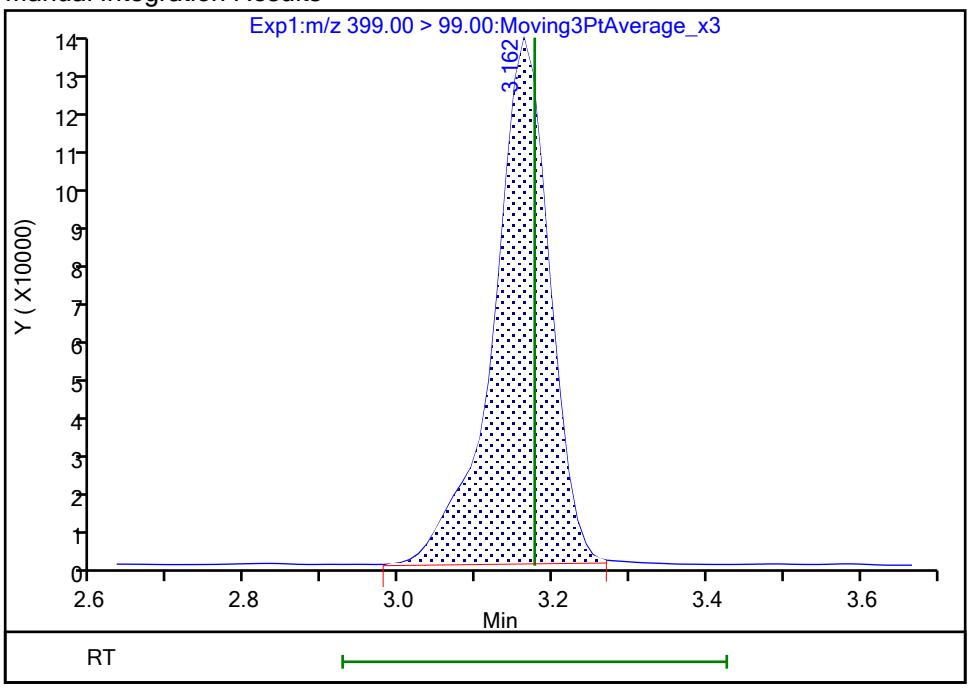
Processing Integration Results

RT: 3.16
Area: 672112
Amount: 1.617253
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 668262
Amount: 1.612408
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:14:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

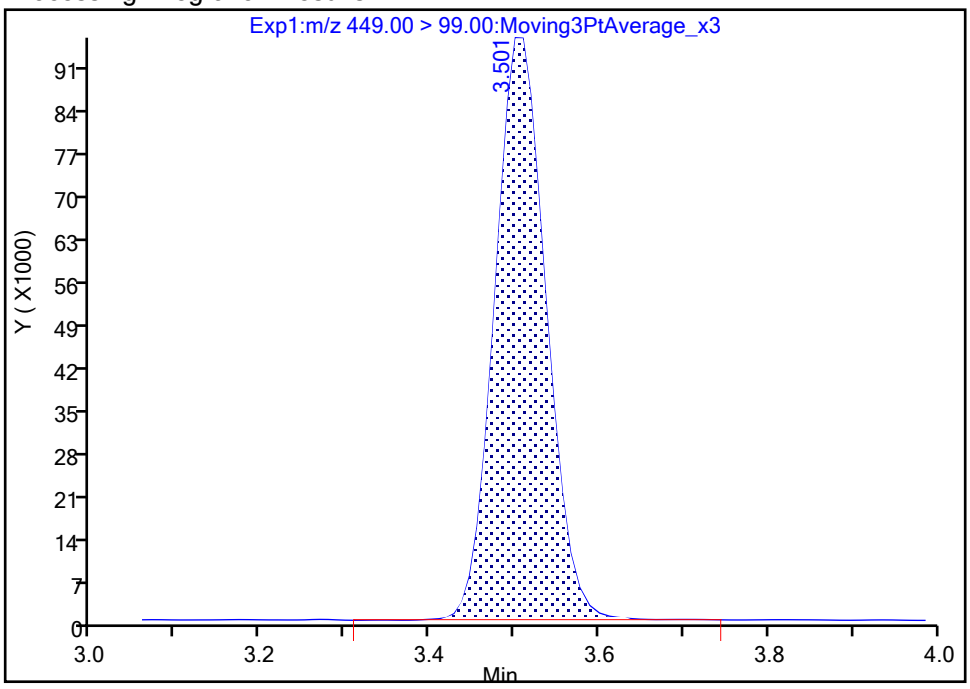
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

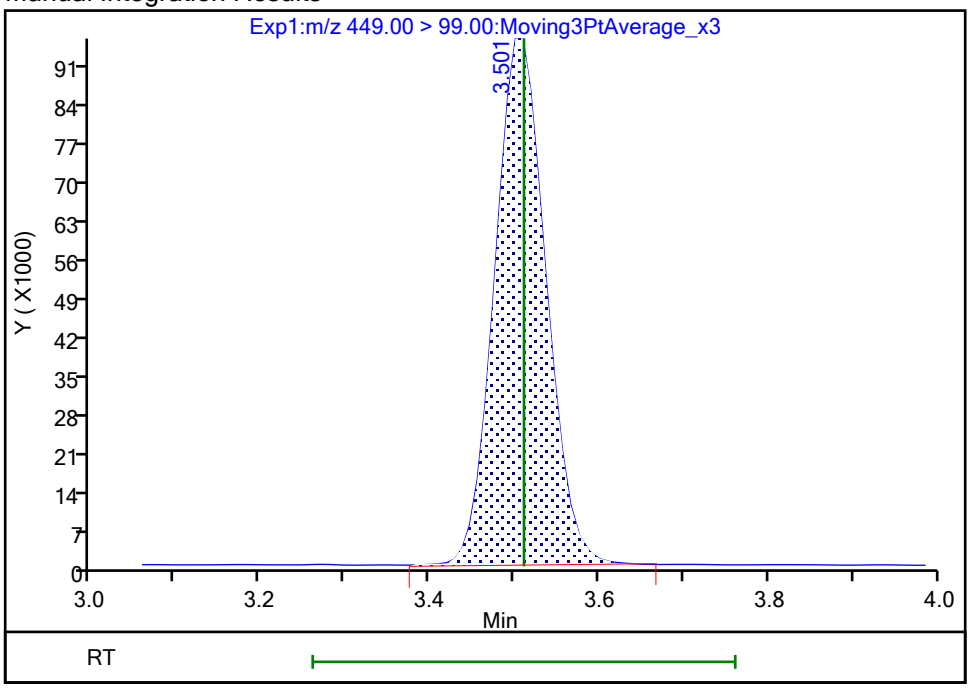
Processing Integration Results

RT: 3.50
Area: 404758
Amount: 1.784532
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 403886
Amount: 1.781240
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:16:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

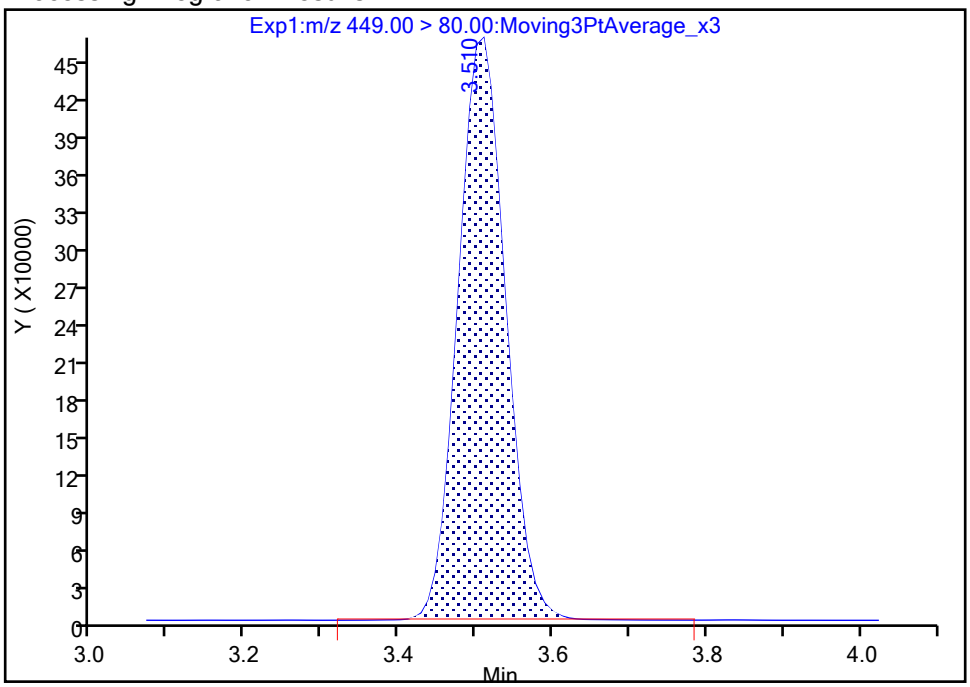
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

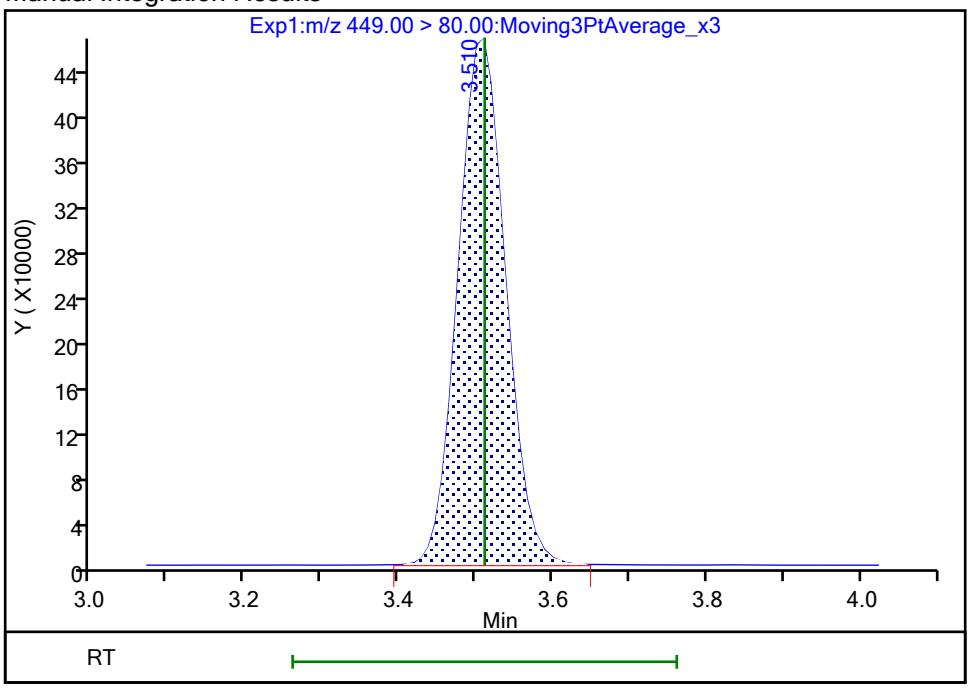
Processing Integration Results

RT: 3.51
Area: 2016443
Amount: 1.784532
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 2012723
Amount: 1.781240
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:16:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

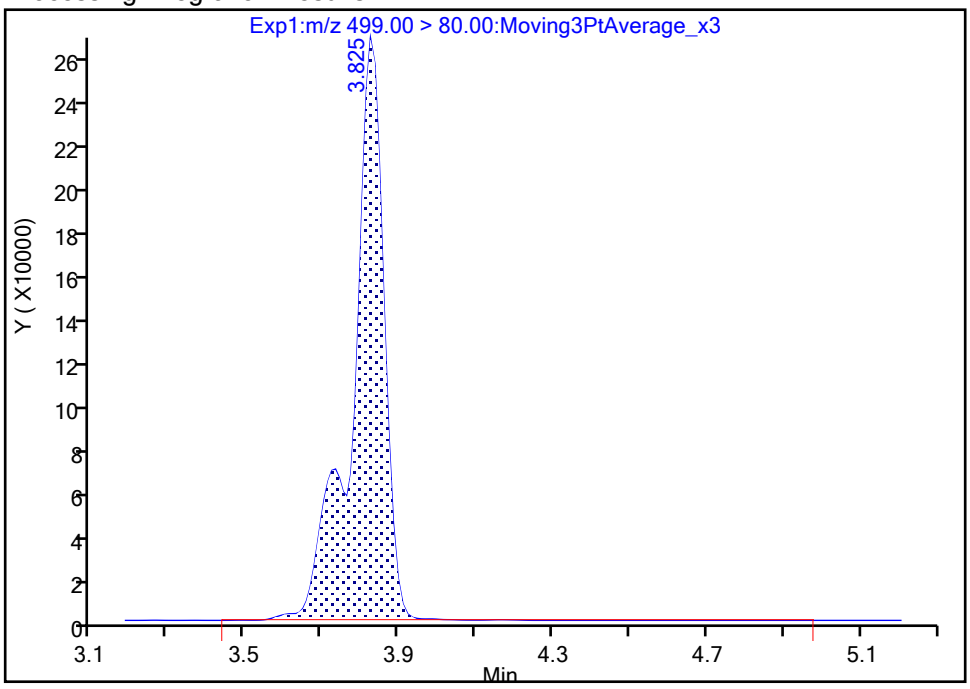
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

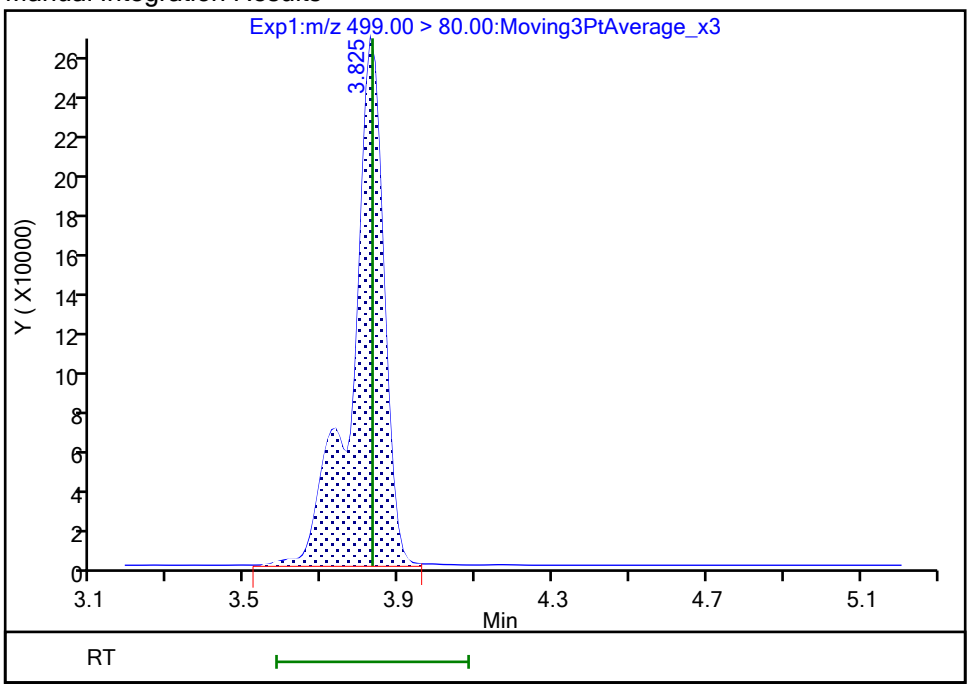
Processing Integration Results

RT: 3.82
Area: 1513706
Amount: 1.659808
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1506751
Amount: 1.652182
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:16:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

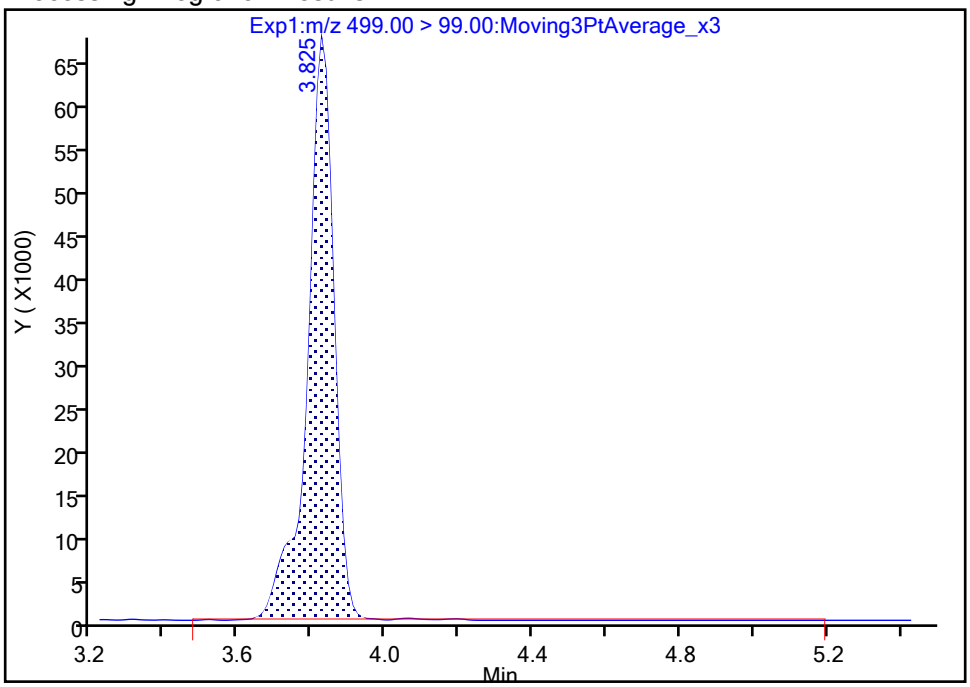
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

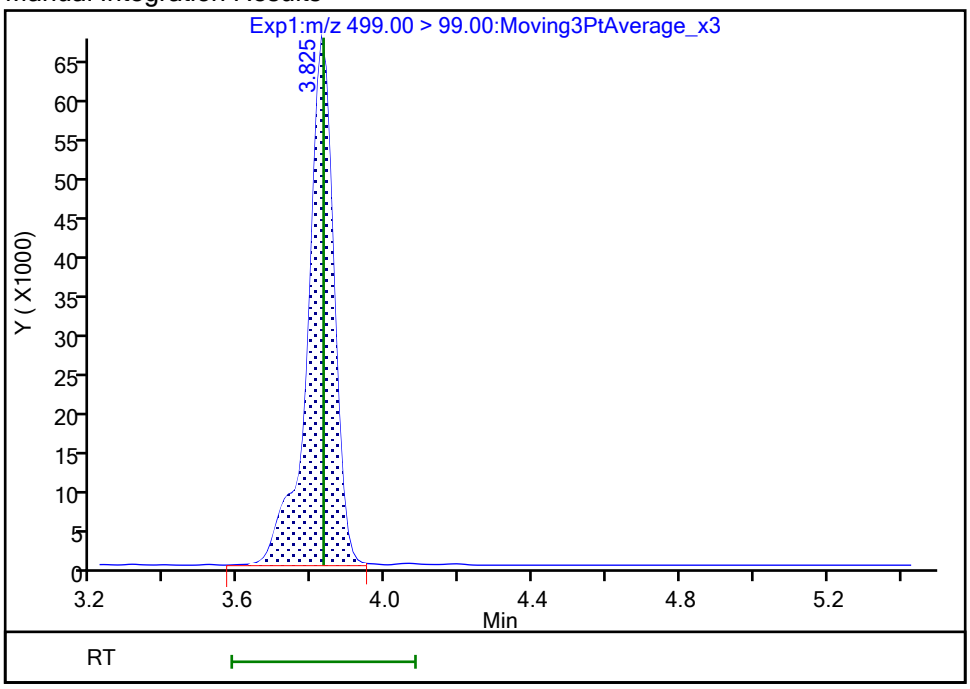
Processing Integration Results

RT: 3.82
Area: 339584
Amount: 1.659808
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 336507
Amount: 1.652182
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:17:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

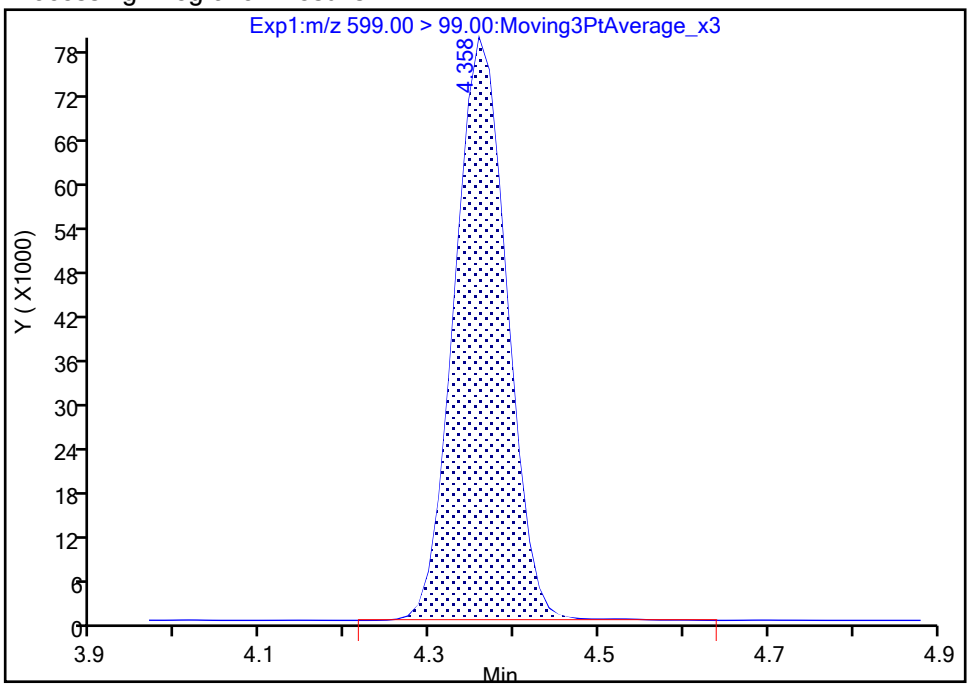
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

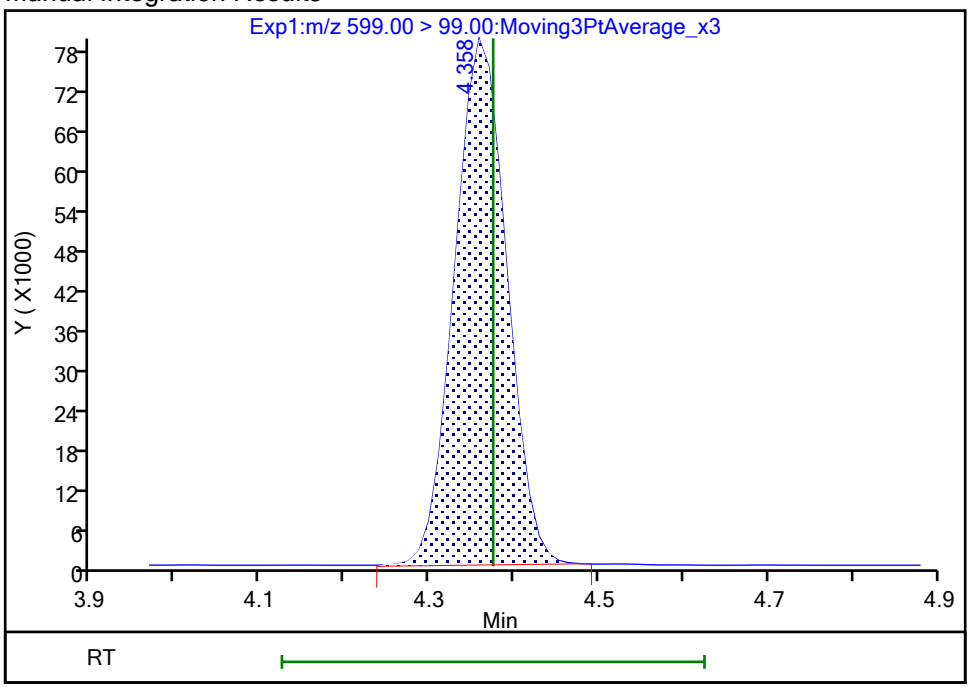
Processing Integration Results

RT: 4.36
Area: 345027
Amount: 1.587141
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 342764
Amount: 1.587141
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:17:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

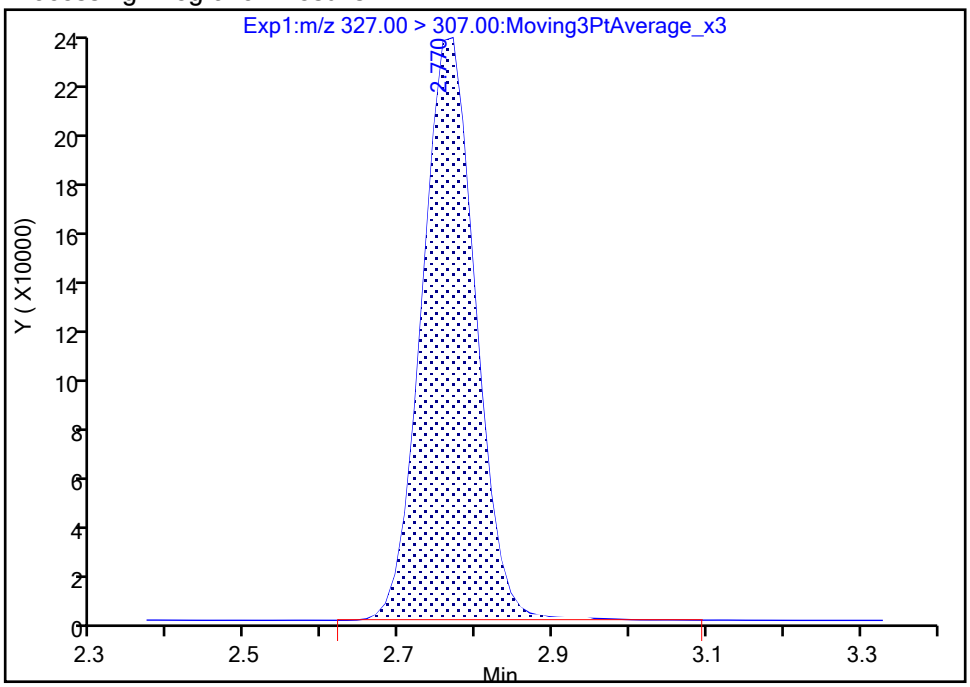
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

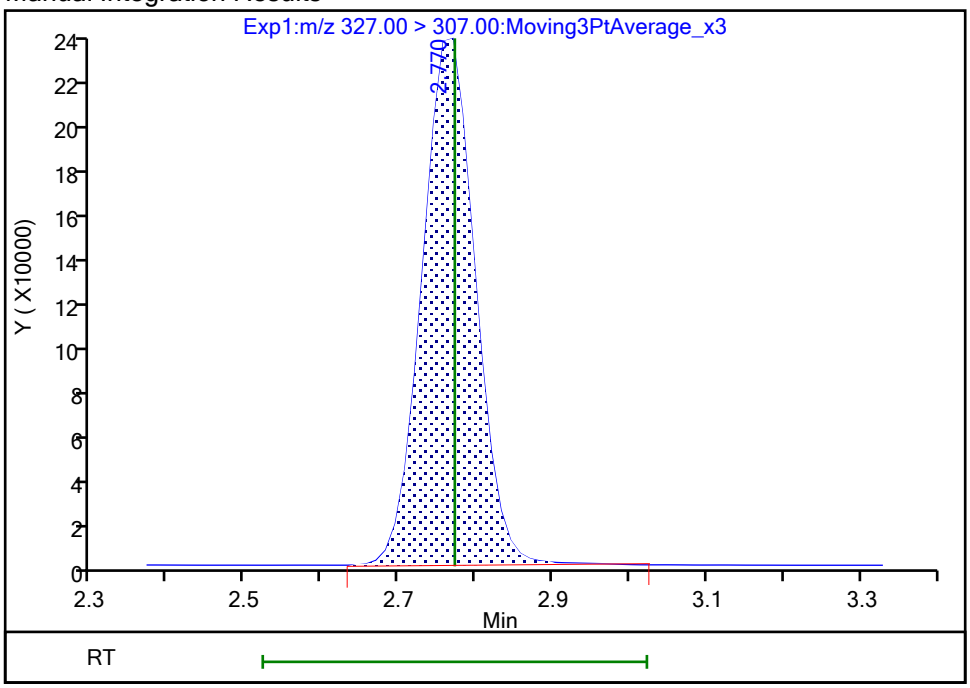
Processing Integration Results

RT: 2.77
Area: 1152640
Amount: 1.791032
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 1151040
Amount: 1.788545
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:13:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

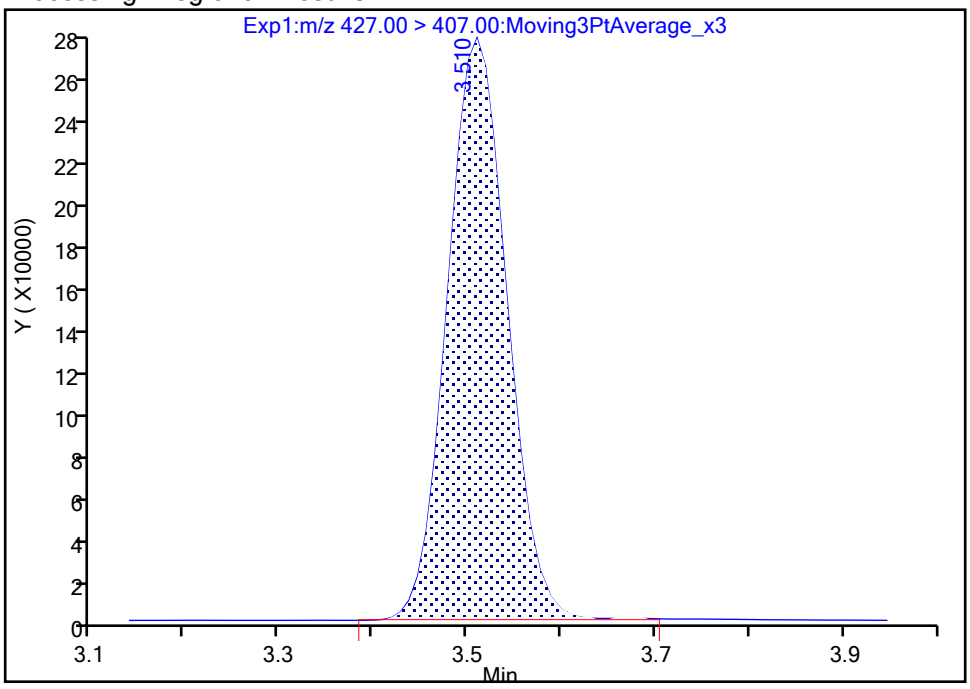
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

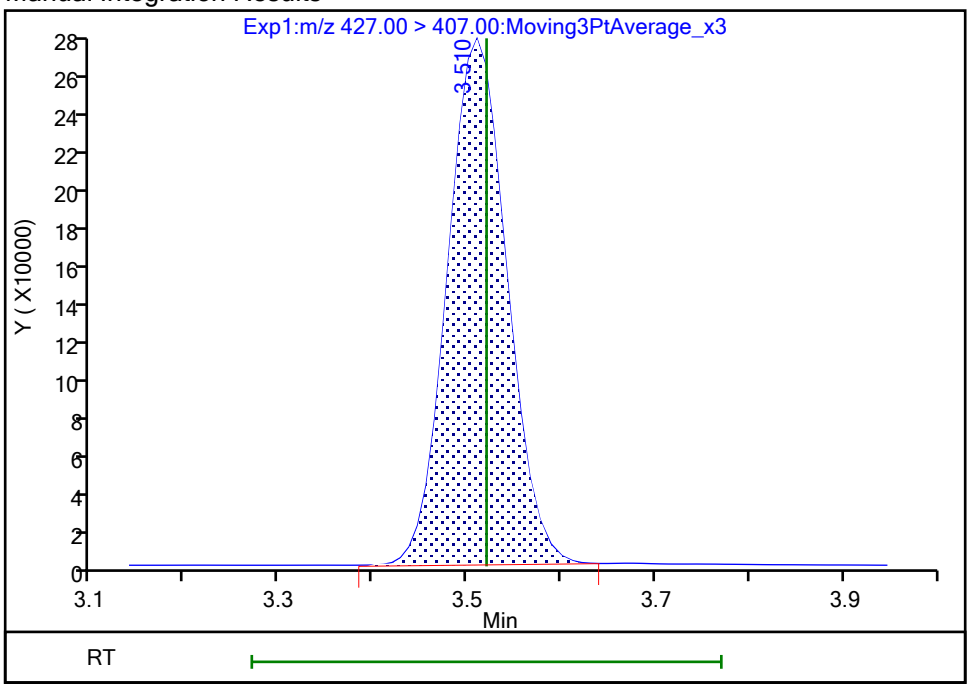
Processing Integration Results

RT: 3.51
Area: 1218384
Amount: 1.794383
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1214356
Amount: 1.788451
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:16:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

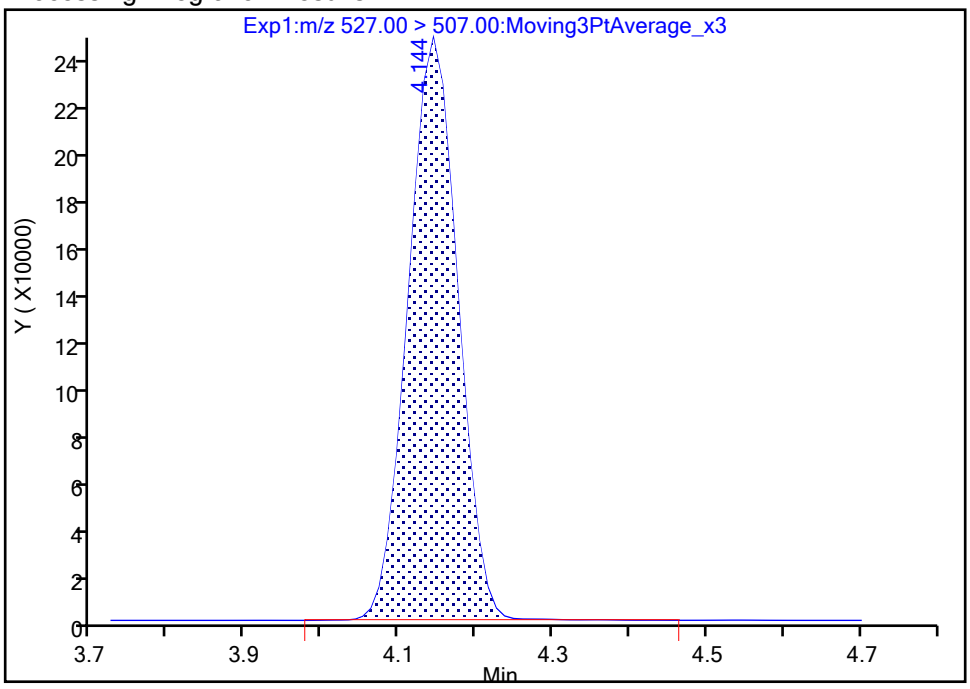
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

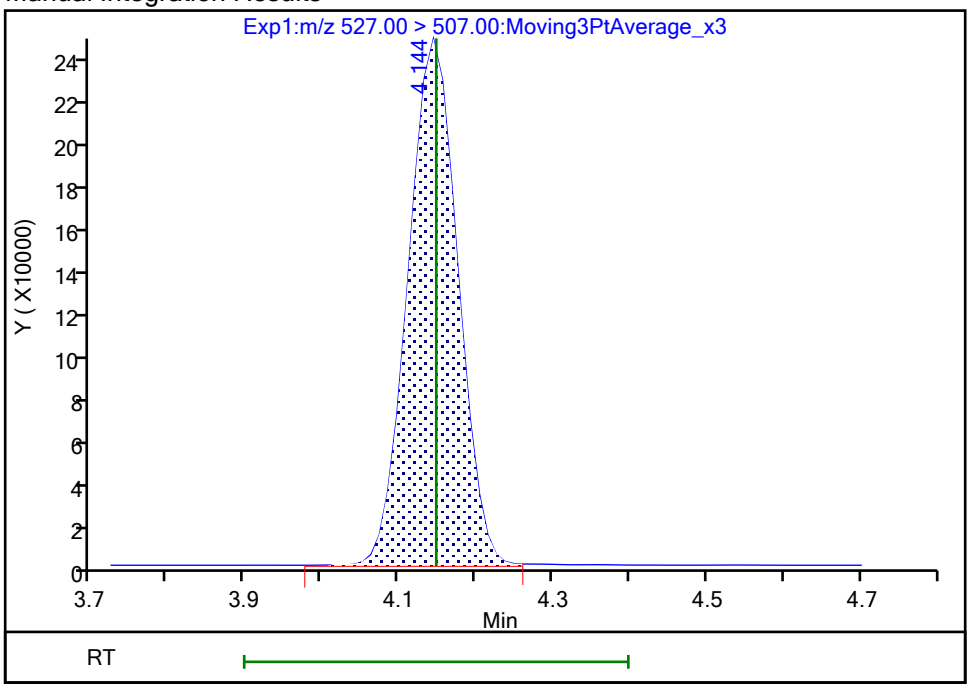
Processing Integration Results

RT: 4.14
Area: 1101454
Amount: 1.958853
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 1098932
Amount: 1.954368
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:17:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

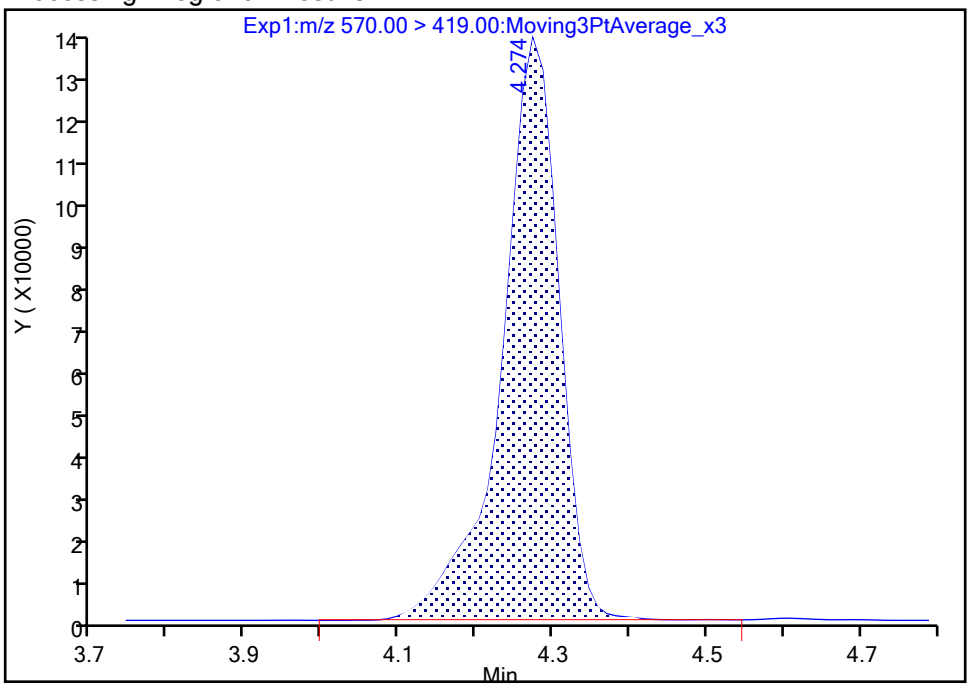
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

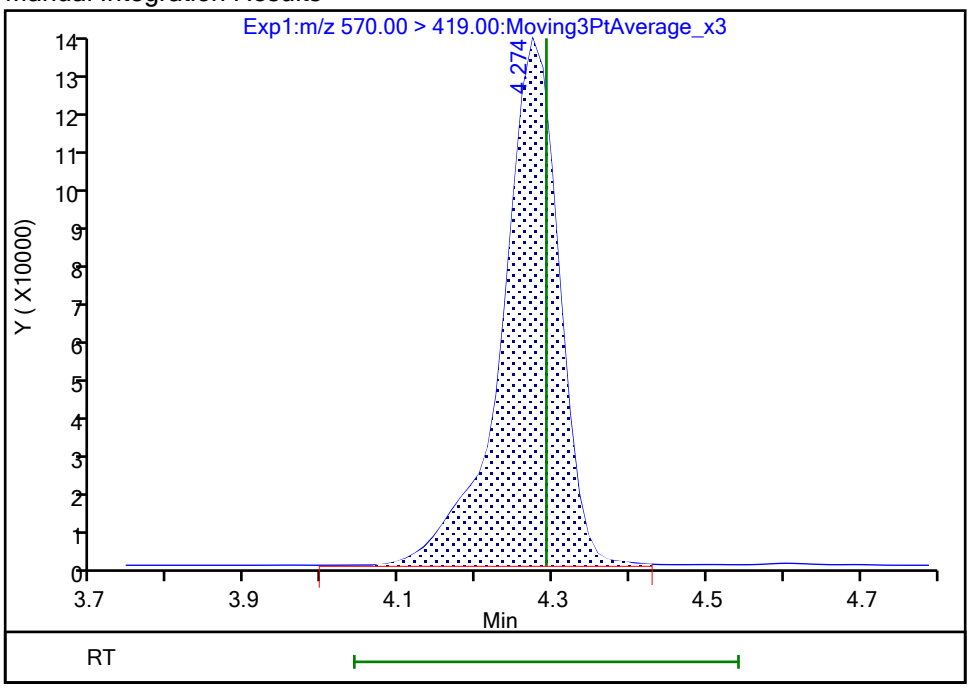
Processing Integration Results

RT: 4.27
Area: 684126
Amount: 1.852923
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 683014
Amount: 1.849911
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:17:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

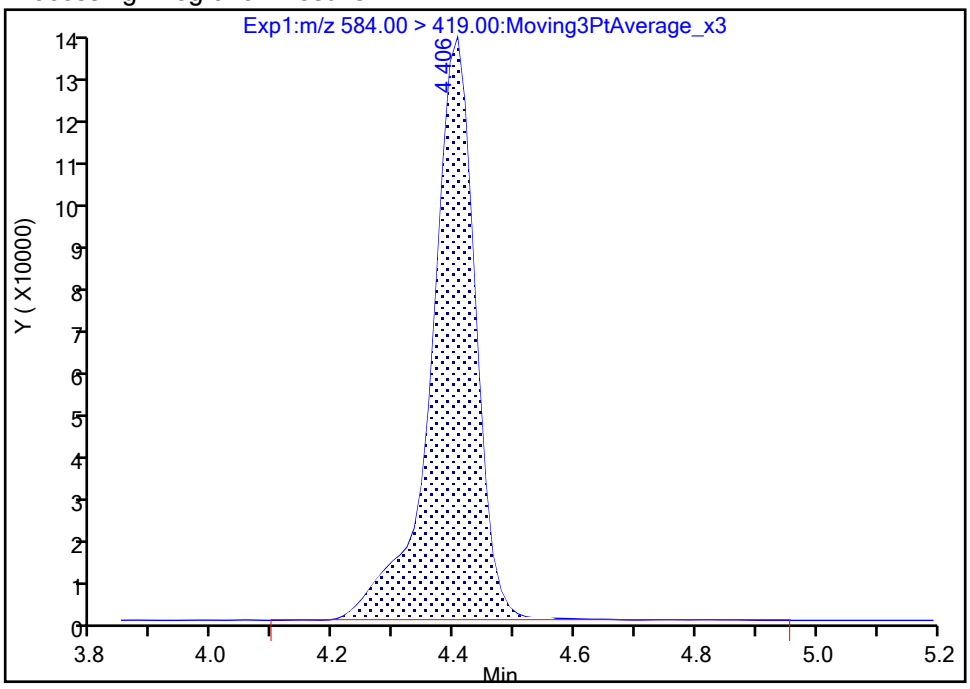
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

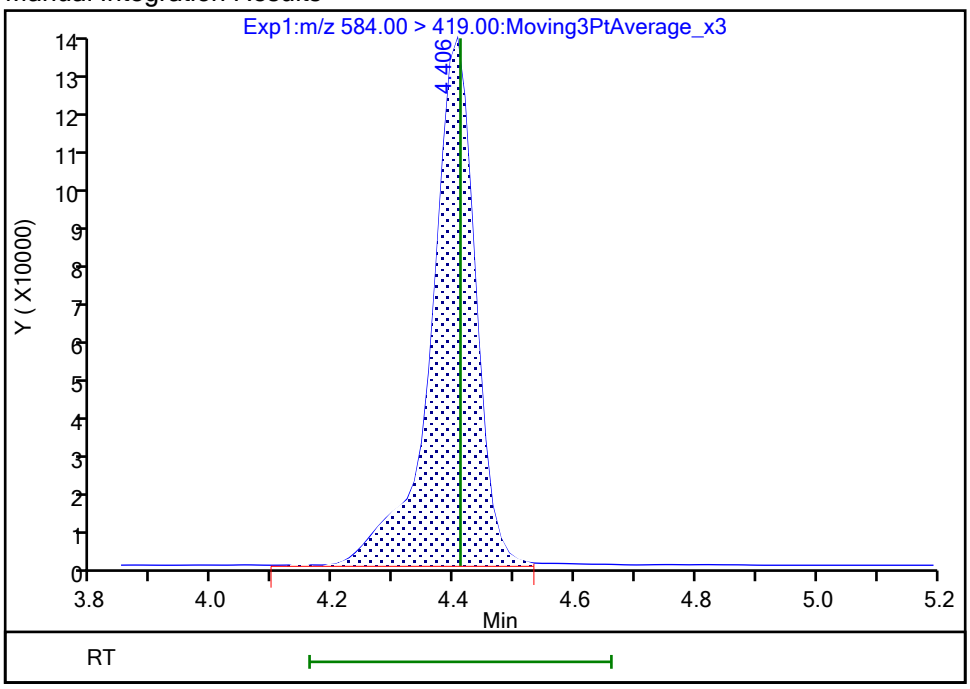
Processing Integration Results

RT: 4.41
Area: 672351
Amount: 1.730232
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 667776
Amount: 1.718458
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:17:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

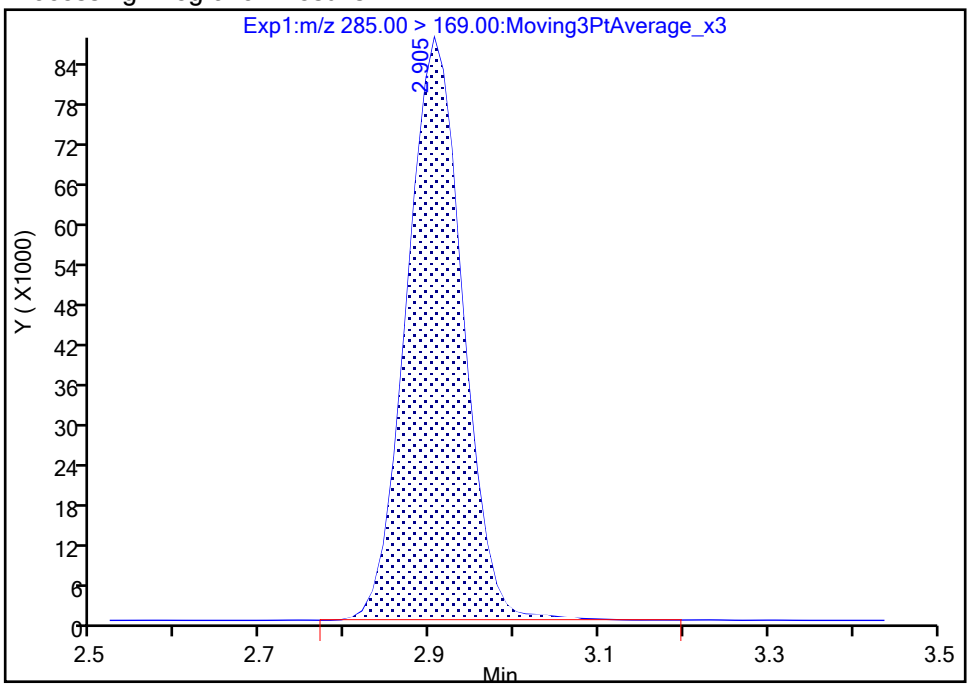
Data File: \\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d
Injection Date: 25-Oct-2023 18:41:18 Instrument ID: LC812
Lims ID: LCS 200-196761/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

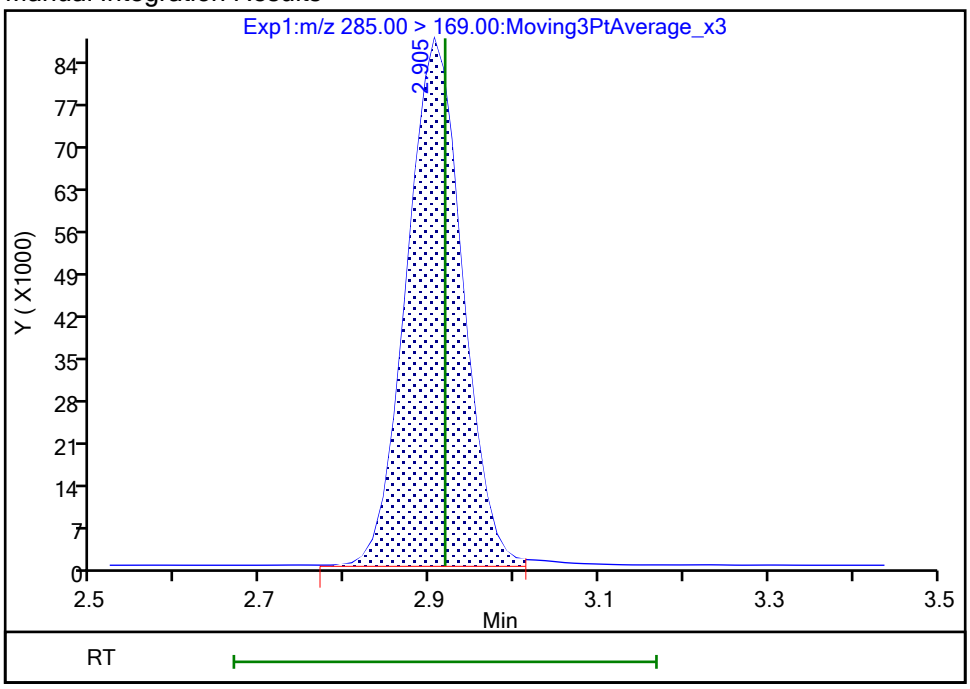
Processing Integration Results

RT: 2.91
Area: 403501
Amount: 1.823855
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 400750
Amount: 1.811420
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:14:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

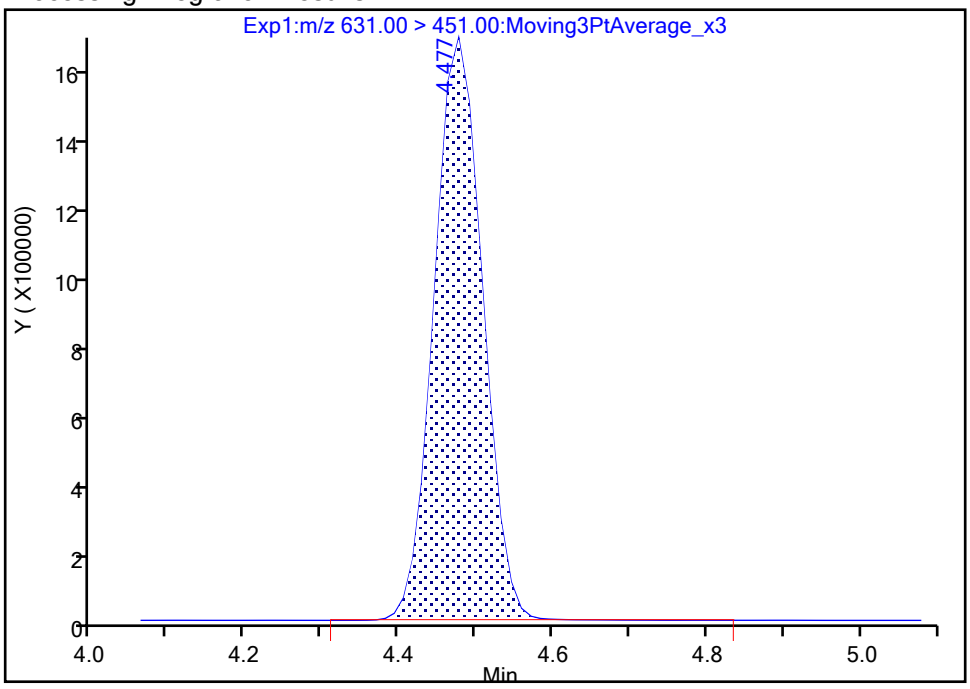
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

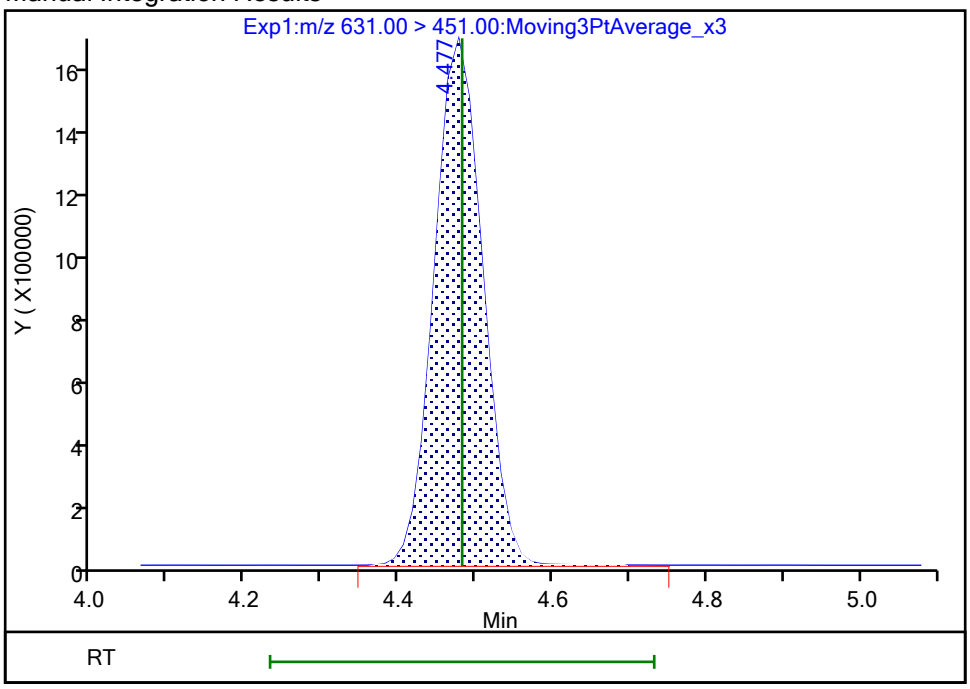
Processing Integration Results

RT: 4.48
Area: 7305654
Amount: 1.707110
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 7303495
Amount: 1.706606
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:18:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

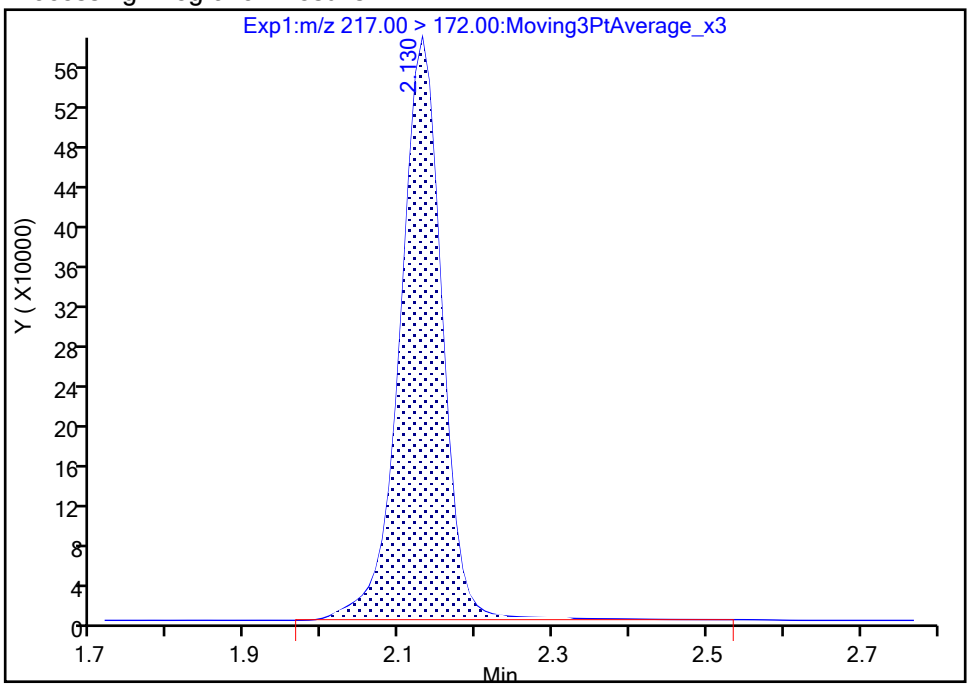
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

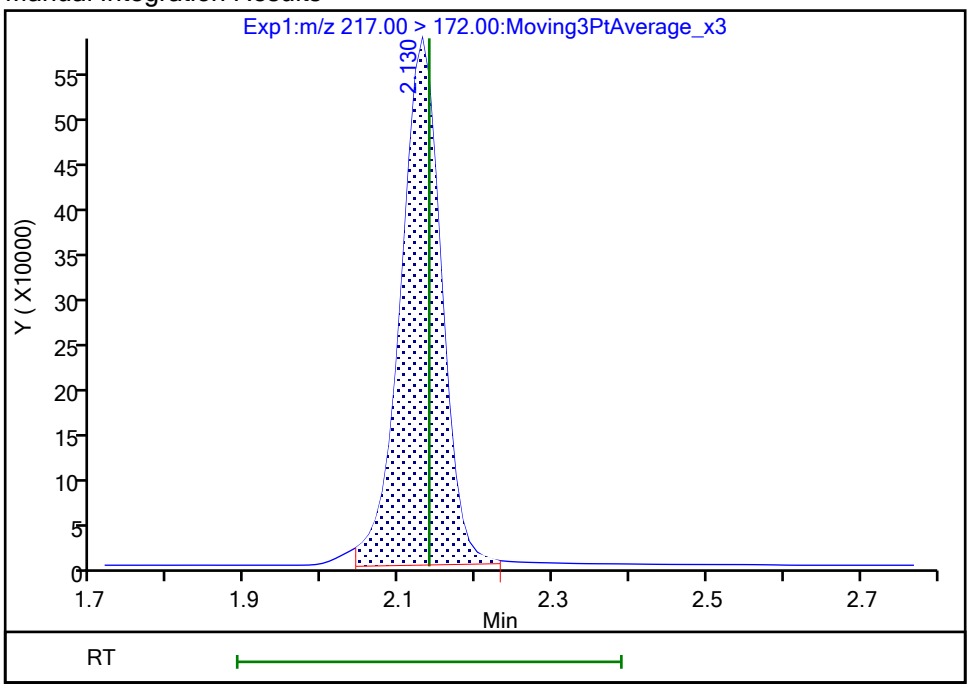
Processing Integration Results

RT: 2.13
Area: 2214623
Amount: 1.429490
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2165776
Amount: 1.397960
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:11:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

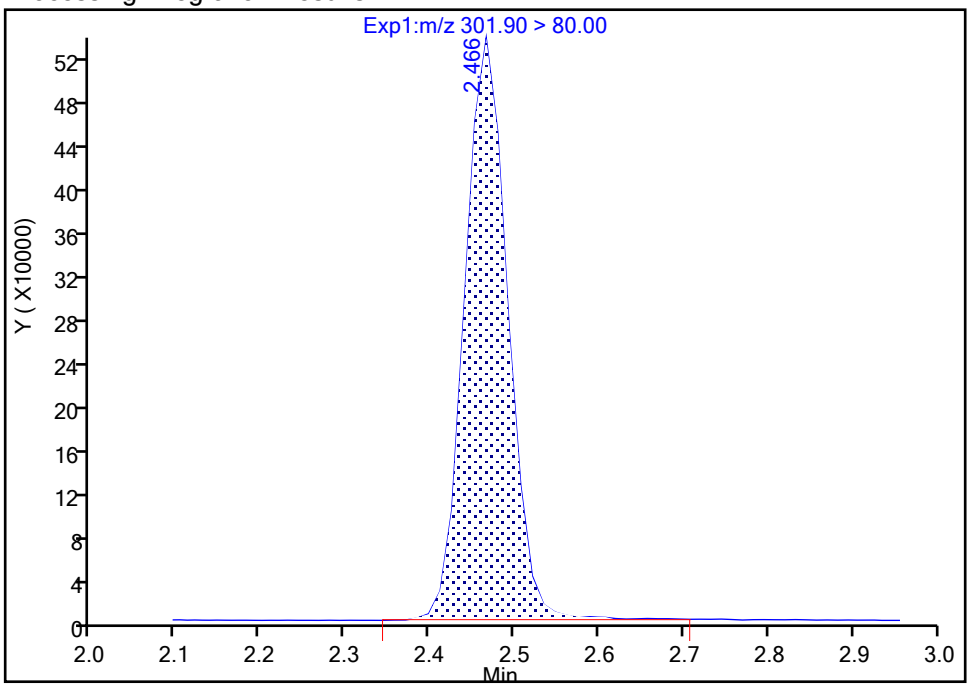
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

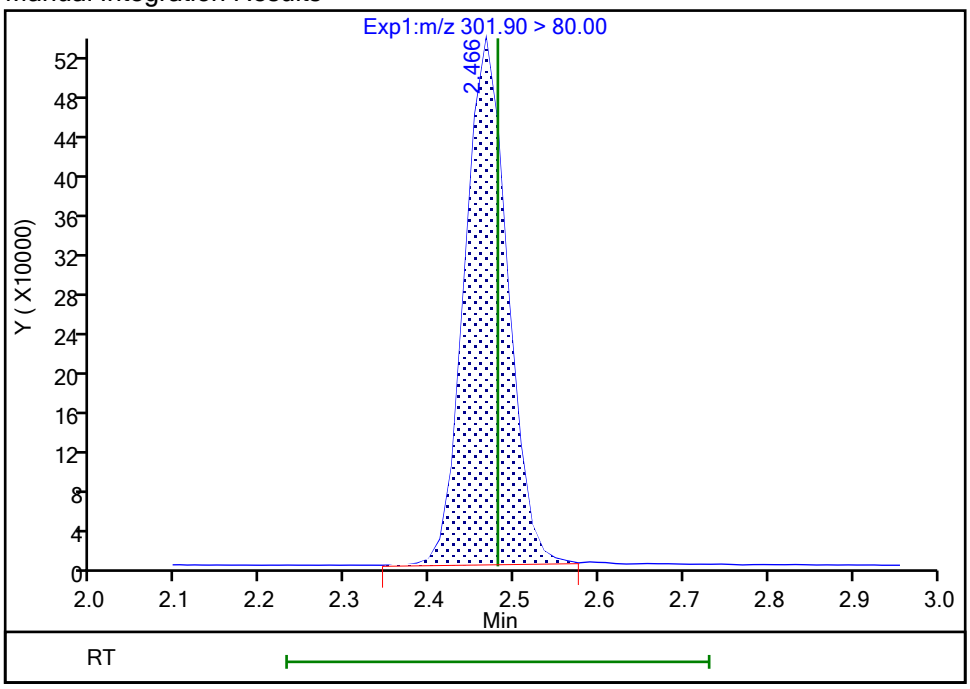
Processing Integration Results

RT: 2.47
Area: 1883141
Amount: 1.157539
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1874783
Amount: 1.152402
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:11:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

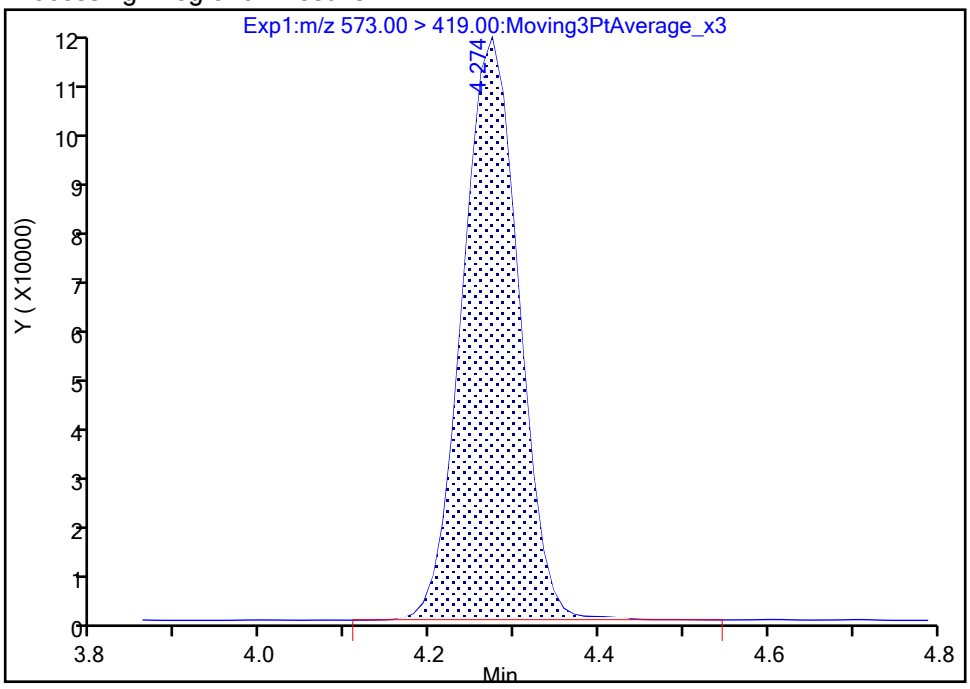
Data File:	\\chromfs\Burlington\ChromData\LC812\20231025-57556.b\PA231025A07.d				
Injection Date:	25-Oct-2023 18:41:18	Instrument ID:	LC812		
Lims ID:	LCS 200-196761/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

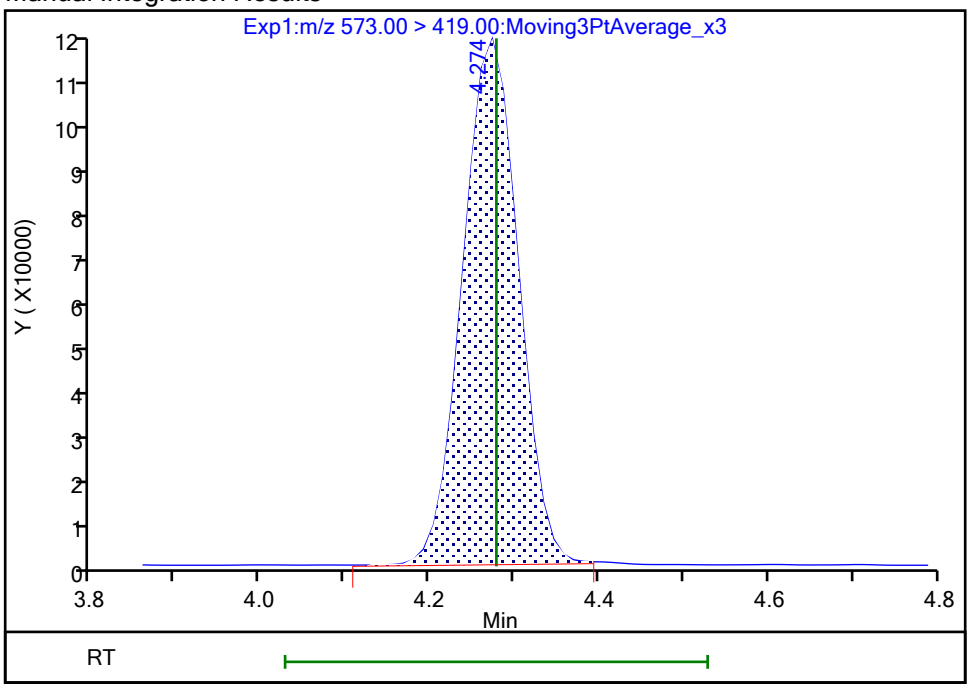
Processing Integration Results

RT: 4.27
Area: 510300
Amount: 1.232550
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 508611
Amount: 1.228470
Amount Units: ng/ml



Reviewer: khanphomeea, 26-Oct-2023 10:12:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 200-196761/3-A

Matrix: Water | Lab File ID: PA231026E06.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) | Date Analyzed: 10/27/2023 10:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	76.51		5.00	1.20
2706-90-3	Perfluoropentanoic acid	75.64		2.00	0.68
307-24-4	Perfluorohexanoic acid	66.59		2.00	0.65
375-85-9	Perfluoroheptanoic acid	80.16		2.00	0.54
335-67-1	Perfluorooctanoic acid	72.20		2.00	0.76
375-95-1	Perfluorononanoic acid	73.31		2.00	0.49
335-76-2	Perfluorodecanoic acid	79.80		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	73.50		2.00	0.55
307-55-1	Perfluorododecanoic acid	68.56		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	67.94		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	69.30		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	68.15		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	71.30		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	64.36		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	72.89		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	68.91		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	67.99		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	62.50		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	72.18		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	73.12		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	80.78		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	74.20		2.00	0.92
2355-31-9	NMeFOSAA	76.11		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	71.23		5.00	1.60
13252-13-6	HFPODA	68.85		4.00	1.10
919005-14-4	DONA	75.56		2.00	0.42
756426-58-1	9Cl-PF3ONS	78.71		2.00	0.32
763051-92-9	11Cl-PF3OUdS	69.37		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290543-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 200-196761/3-A

Matrix: Water | Lab File ID: PA231026E06.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/25/2023 10:43

Sample wt/vol: 250(mL) | Date Analyzed: 10/27/2023 10:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196839 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	105		50-150
STL01893	13C5 PFPeA	95		50-150
STL01892	13C4 PFHpA	105		50-150
STL02116	13C2 PFTeDA	86		50-150
STL02337	13C3 PFBS	98		50-150
STL01056	13C8 FOSA	73		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	98		50-150
STL02395	M2-4:2 FTS	93		50-150
STL02279	M2-6:2 FTS	97		50-150
STL02280	M2-8:2 FTS	94		50-150
STL02255	13C3 HFPO-DA	98		50-150
STL00994	18O2 PFHxS	104		50-150
STL00993	13C2 PFHxA	110		50-150
STL00991	13C4 PFOS	100		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	106		50-150
STL00996	13C2 PFDA	97		50-150
STL00990	13C4 PFOA	109		50-150
STL00997	13C2 PFUnA	100		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E06.d
Lims ID: LCSD 200-196761/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 27-Oct-2023 10:49:00 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196761/3-A
Misc. Info.: 200-0057578-006 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 27-Oct-2023 18:44:17 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1619

First Level Reviewer: SJ4N Date: 27-Oct-2023 16:01:10
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.131	-0.010	0.604	2128526	1.31		105	3470	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.121	2.131	-0.010	1.000	3008334	1.91		95.6	231	
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1504014	1.19		95.4	1975	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.439	2.439	0.0	1.000	2455303	1.89		94.5	61.3	
D 47 13C3 PFBS										
301.90 > 80.00	2.466	2.467	-0.001	0.702	1952044	1.14		98.4	180354	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.466	2.467	-0.001	1.000	3195139	1.70	Target=2.06	96.0	4762	
298.90 > 99.00	2.466	2.467	-0.001	1.000	1595228		2.00(1.03-3.09)		746	
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.759	2.760	-0.001	1.000	1127516	1.80		96.3	4040	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.759	2.760	-0.001	0.786	214827	1.09		93.3	178	
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1762989	1.37		110	7576	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.797	2.797	0.0	1.000	2583951	1.66	Target=14.12	83.2	552	
313.00 > 119.00	2.797	2.797	0.0	1.000	178930		14.44(7.06-21.17)		213	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.797	2.797	0.0	0.887	2962374	1.78	Target=2.72	94.7	5297	
349.00 > 99.00	2.797	2.797	0.0	0.887	1027343		2.88(1.36-4.09)		1998	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.897	2.897	0.0	1.000	420981	1.72		86.1	5966	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.897	2.908	-0.011	0.825	305380	1.23		98.4	2197	
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.153	0.0	0.898	1504818	1.23		104	11950	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.153	3.153	0.0	1.000	2266746	1.61	Target=3.32	88.0	5112	
399.00 > 99.00	3.153	3.153	0.0	1.000	685154		3.31(1.66-4.98)		662	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.164	3.165	-0.001	1.000	3303086	2.00	Target=4.17	100	702	
363.00 > 169.00	3.164	3.165	-0.001	1.000	744402		4.44(2.09-6.26)		1570	
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.165	-0.001	0.901	1837996	1.31		105	7353	
77 DONA										
377.00 > 251.00	3.199	3.199	0.0	0.838	8469628	1.89	Target=3.33	99.9	8809	
377.00 > 85.00	3.199	3.199	0.0	0.838	2204506		3.84(1.66-4.99)		2491	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.502	3.502	0.0	0.917	2052021	1.82	Target=4.83	95.6	5792	
449.00 > 99.00	3.502	3.502	0.0	0.917	421319		4.87(2.41-7.24)		1262	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.502	0.0	0.997	294033	1.16		97.5	644	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.502	0.0	1.000	1237094	1.83		96.1	3513	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.511	3.512	-0.001	1.000	3338845	1.80	Target=2.88	90.2	141	
413.00 > 169.00	3.511	3.512	-0.001	1.000	1207907		2.76(1.44-4.32)		2701	
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.512	-0.001	1.000	2170961	1.36		109	7318	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.512	-0.001		2047567	1.25			5063	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.819	3.819	-0.001	1.000	1565752	1.72	Target=4.24	92.8	2771	M
499.00 > 99.00	3.819	3.819	-0.001	1.000	342450		4.57(2.12-6.37)		777	M
D 18 13C4 PFOS										
503.00 > 80.00	3.819	3.819	-0.001	1.088	931139	1.20		100	2218	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.842	0.0	1.000	3303981	1.83	Target=8.34	91.6	588	
463.00 > 169.00	3.842	3.842	0.0	1.000	401093		8.24(4.17-12.51)		1819	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.842	0.0	1.094	2299263	1.33		106	11561	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.971	0.010	1.042	5472731	1.97		105	15447	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.100	4.101	-0.001	1.074	1175312	1.70	Target=2.17	88.3	8171	
549.00 > 99.00	4.100	4.101	-0.001	1.074	499258		2.35(1.08-3.25)		1789	
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.125	-0.001	1.175	2201938	1.21		97.0	9589	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.136	0.0	1.003	3511919	1.99	Target=11.44	99.7	935	
513.00 > 169.00	4.136	4.136	0.0	1.003	327275		10.73(5.72-17.16)		1623	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.136	4.136	0.0	1.000	1187864	2.02		105	9132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.136	0.0	1.178	319970	1.12		93.5	1003	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.230	0.0	1.205	1415842	0.9135		73.1	4080	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.230	4.230	0.0	1.000	2004091	1.85		92.7	4576	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.266	4.266	0.0	1.215	542239	1.25		99.9	2286	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.266	4.266	0.0	1.000	748983	1.90		95.1	814	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.363	4.351	0.012	1.143	831492	1.56	Target=2.37	81.0	7430	
599.00 > 99.00	4.351	4.351	0.0	1.139	339978		2.45(1.19-3.56)		3017	
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.387	0.0	1.249	2141434	1.25		99.9	12044	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.387	0.0	1.000	3244479	1.84	Target=12.20	91.9	745	
563.00 > 169.00	4.387	4.387	0.0	1.000	268111		12.10(6.10-18.31)		2472	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.399	-0.001	1.253	509507	1.22		97.5	1131	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.399	4.399	-0.001	1.000	725999	1.78		89.0	1501	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.468	0.0	1.170	7396926	1.73		92.0	7807	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.610	0.0	1.313	2031860	1.17		93.3	10353	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.610	0.0	1.000	2835596	1.71	Target=8.47	85.7	188	
613.00 > 169.00	4.610	4.610	0.0	1.000	332634		8.52(4.23-12.70)		3394	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.621	4.621	0.0	1.117	640806	1.82		94.5	3388	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.764	0.010	1.250	269772	1.50	Target=0.48	77.3	5038	
699.00 > 99.00	4.774	4.764	0.010	1.250	567837		0.48(0.24-0.72)		9327	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.803	4.803	0.0	1.042	2953812	1.70	Target=6.41	84.9	180	
663.00 > 169.00	4.803	4.803	0.0	1.042	437966		6.74(3.21-9.62)		2192	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.980	0.010	1.421	1872922	1.08		86.3	6654	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.990	4.980	0.010	1.000	290267	1.73	Target=0.87	86.6	3071	
713.00 > 219.00	4.979	4.980	-0.001	0.998	312652		0.93(0.43-1.30)		3201	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.296	-0.001	1.508	2080619	1.04		83.2	5986	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.295	5.296	-0.001	1.000	3089816	1.86	Target=7.89	92.8	208	
813.00 > 169.00	5.295	5.296	-0.001	1.000	383236		8.06(3.94-11.83)		3008	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.566	5.567	-0.001	1.051	2390822	1.84	Target=9.39	92.0	248	
913.00 > 169.00	5.566	5.567	-0.001	1.051	251951		9.49(4.69-14.08)		1535	

QC Flag Legend

Processing Flags

Review Flags

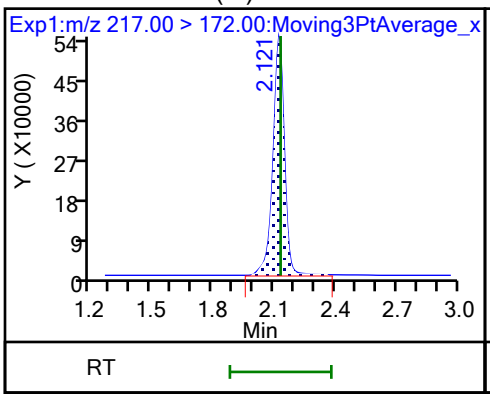
M - Manually Integrated

Report Date: 27-Oct-2023 18:44:33 Chrom Revision: 2.3 18-Oct-2023 21:16:54

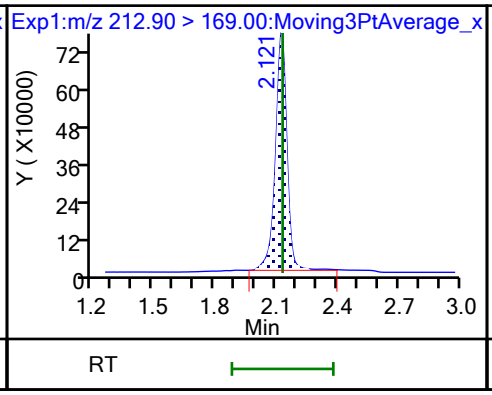
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E06.d
Injection Date: 27-Oct-2023 10:49:00 Instrument ID: LC812
Lims ID: LCSD 200-196761/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

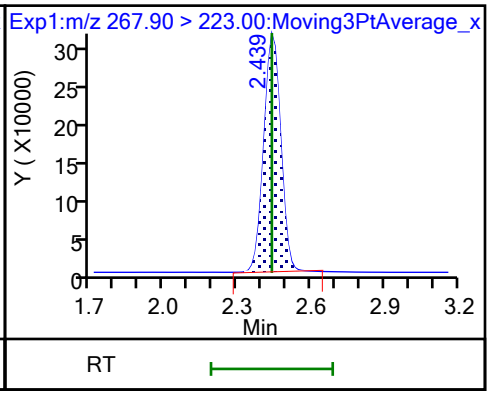
D 1 13C4 PFBA (M)



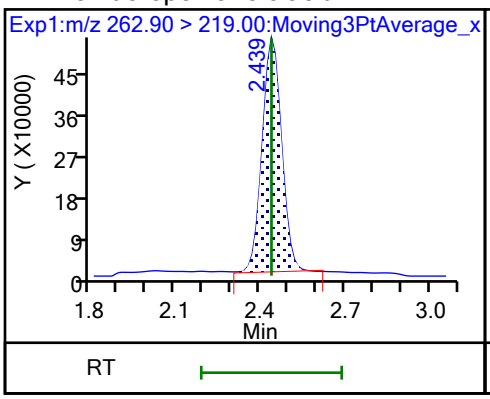
2 Perfluorobutanoic acid



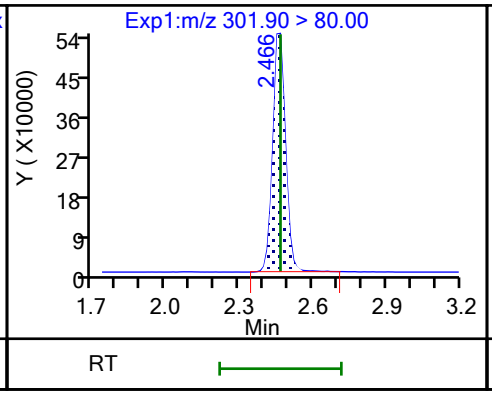
D 3 13C5 PFPeA



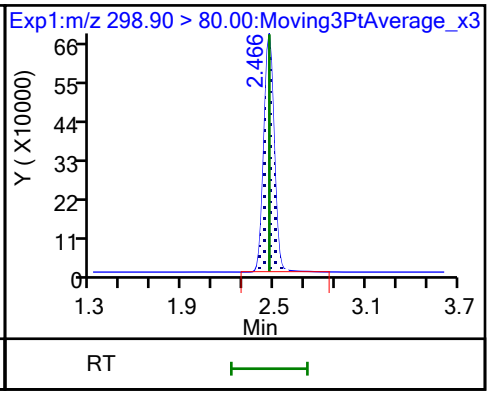
4 Perfluoropentanoic acid



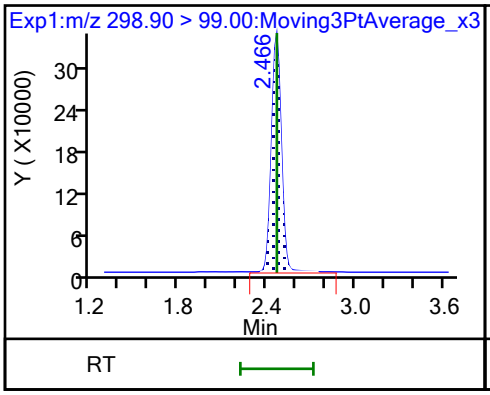
D 47 13C3 PFBS



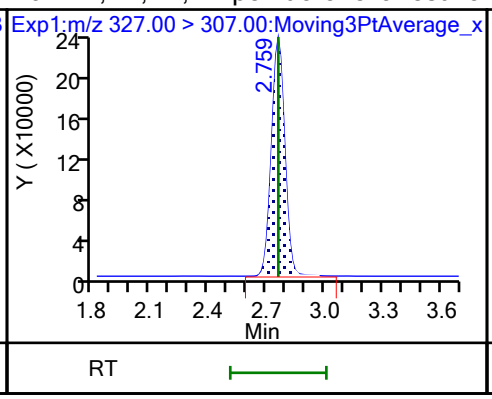
5 Perfluorobutanesulfonic acid



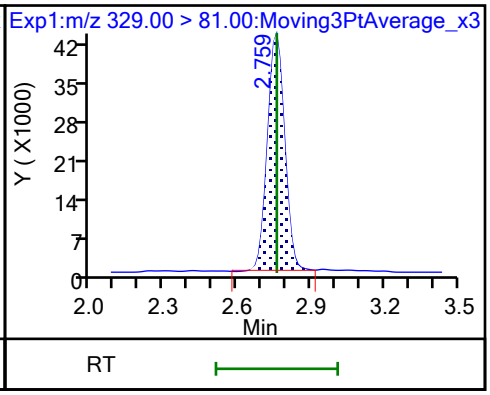
5 Perfluorobutanesulfonic acid



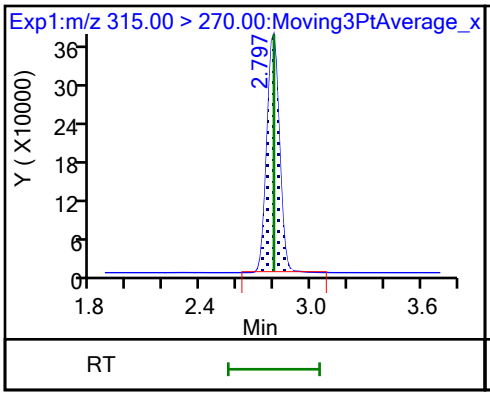
61 1H,1H,2H,2H-perfluorohexanesulfo



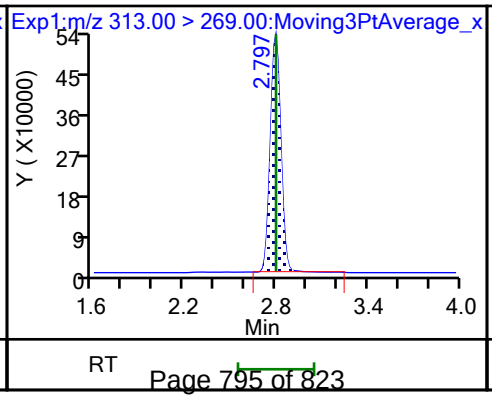
D 60 M2-4:2 FTS



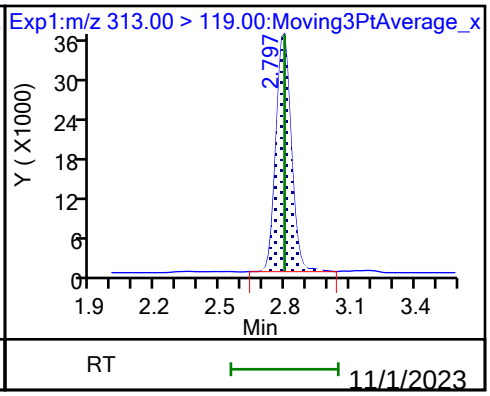
D 7 13C2 PFHxA



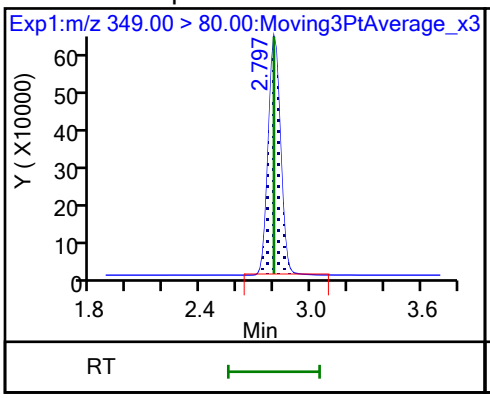
6 Perfluorohexanoic acid



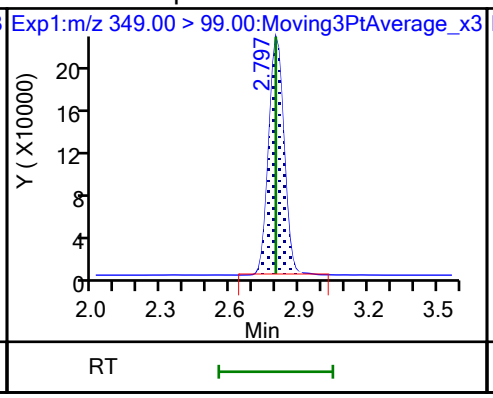
6 Perfluorohexanoic acid



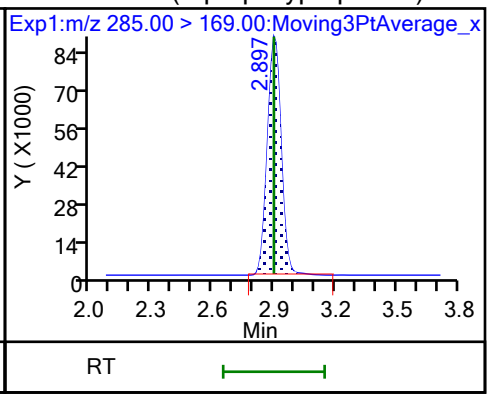
70 Perfluoropentanesulfonic acid



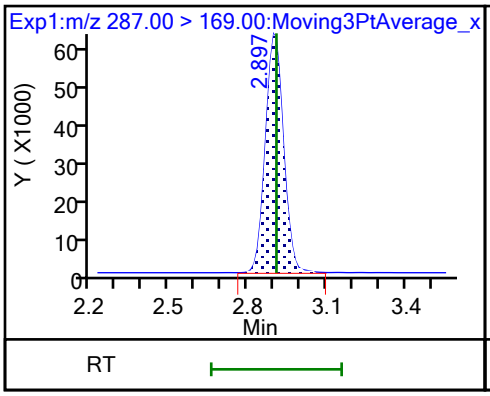
70 Perfluoropentanesulfonic acid



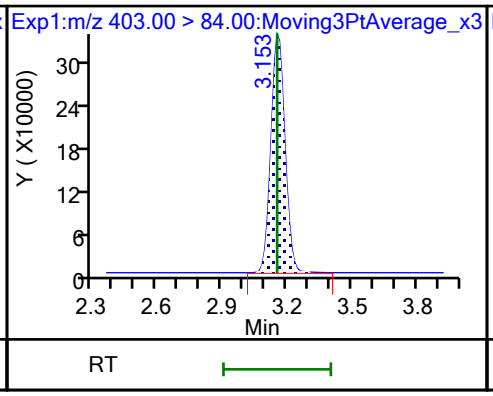
67 Perfluoro(2-propoxypropanoic) ac



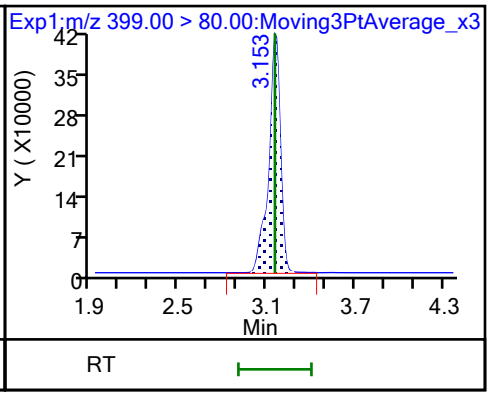
D 64 13C3 HFPO-DA



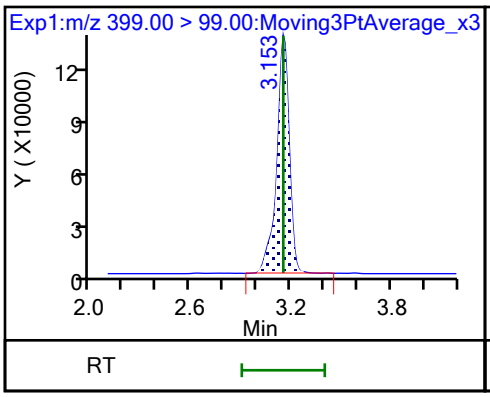
D 11 18O2 PFHxS



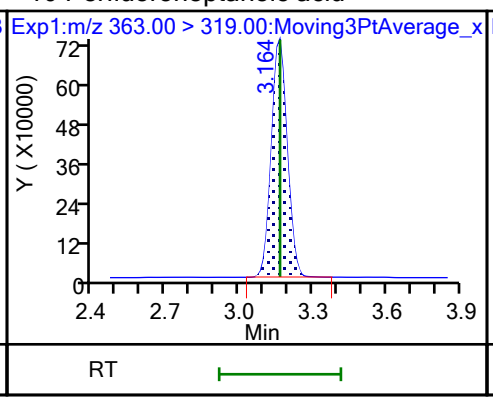
8 Perfluorohexanesulfonic acid



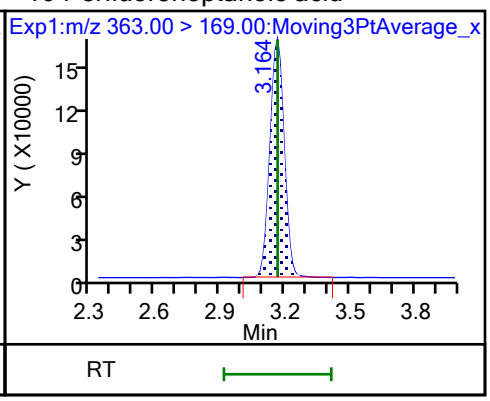
8 Perfluorohexanesulfonic acid



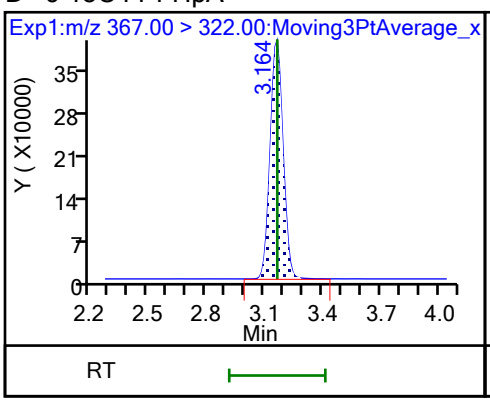
10 Perfluoroheptanoic acid



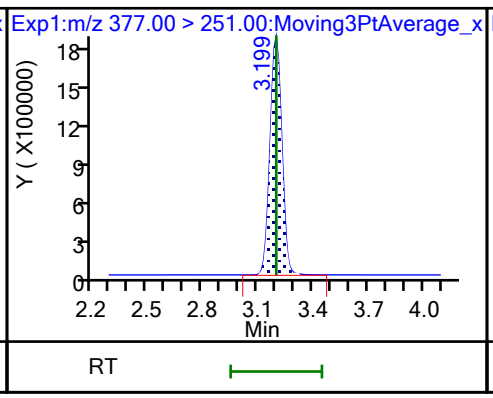
10 Perfluoroheptanoic acid



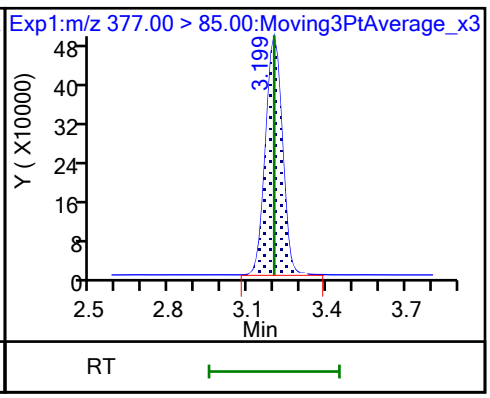
D 9 13C4 PFHpA



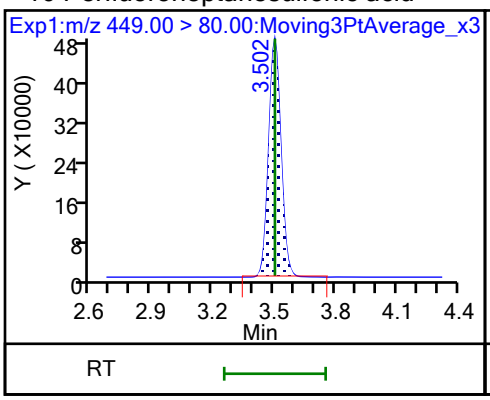
77 DONA



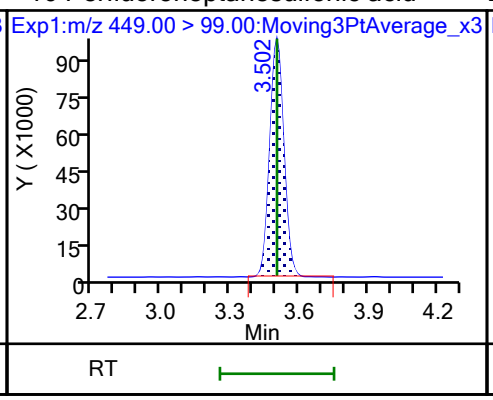
77 DONA



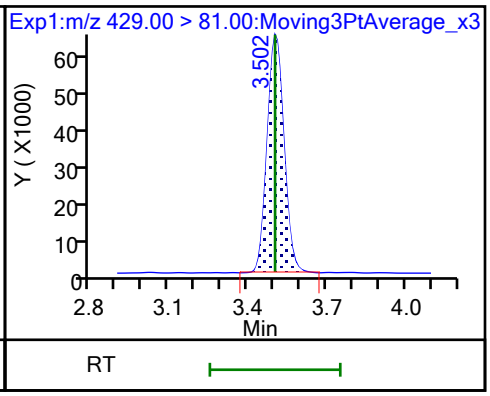
16 Perfluoroheptanesulfonic acid



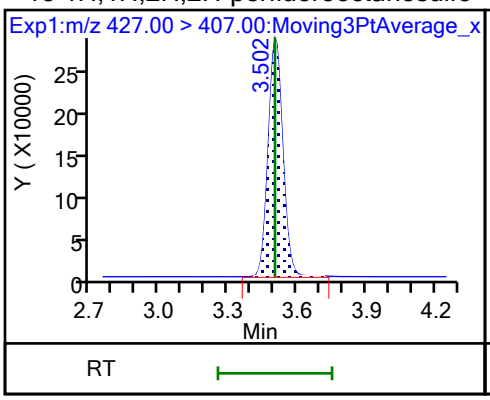
16 Perfluoroheptanesulfonic acid



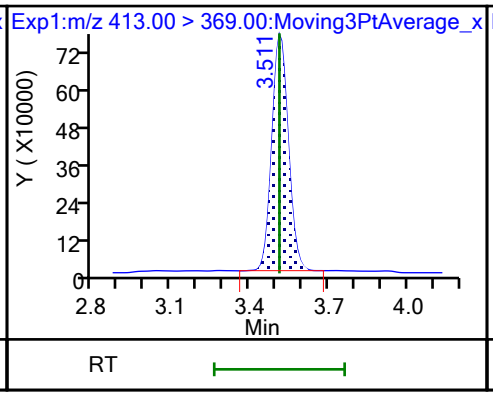
D 12 M2-6:2 FTS



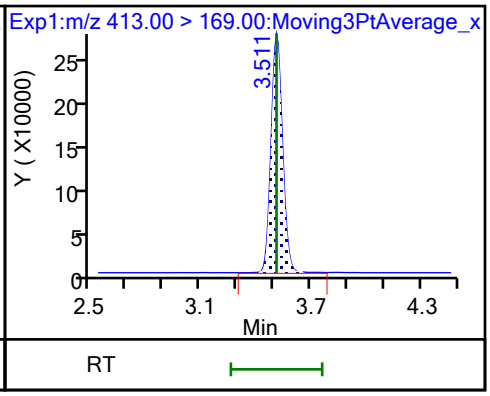
13 1H,1H,2H,2H-perfluorooctanesulfo



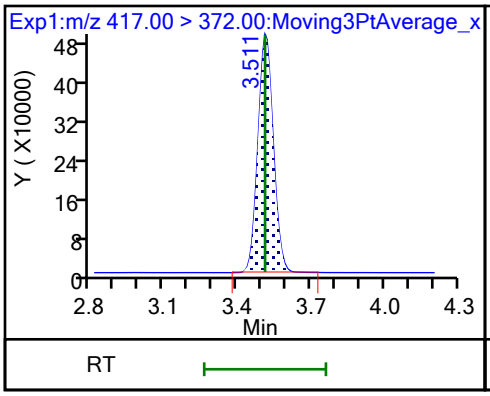
15 Perfluorooctanoic acid



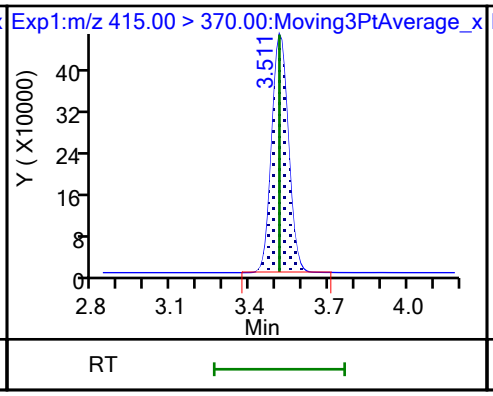
15 Perfluorooctanoic acid



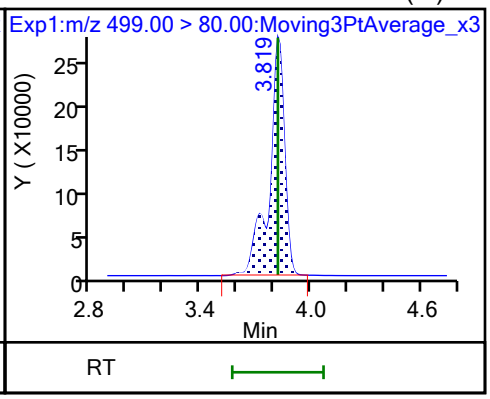
D 14 13C4 PFOA



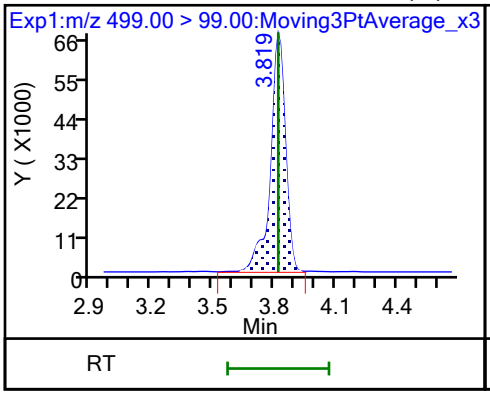
* 62 13C2 PFOA



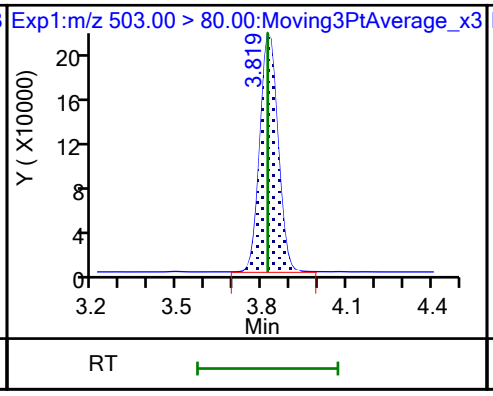
17 Perfluorooctanesulfonic acid (M)



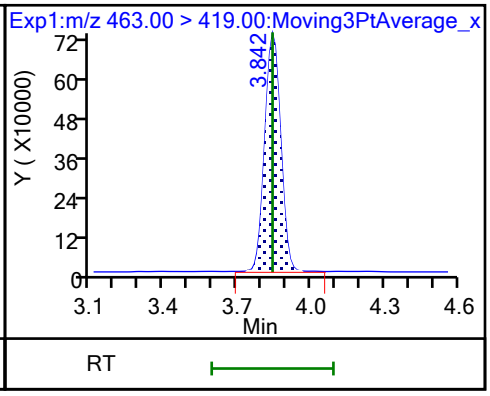
17 Perfluorooctanesulfonic acid (M)



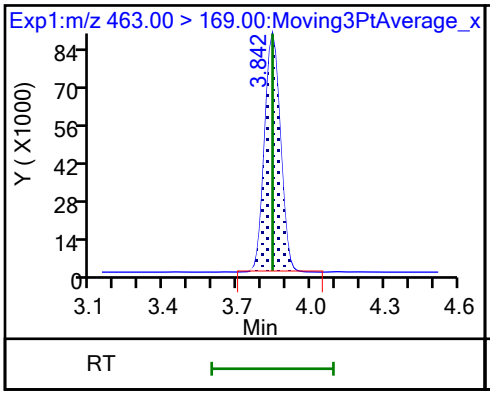
D 18 13C4 PFOS



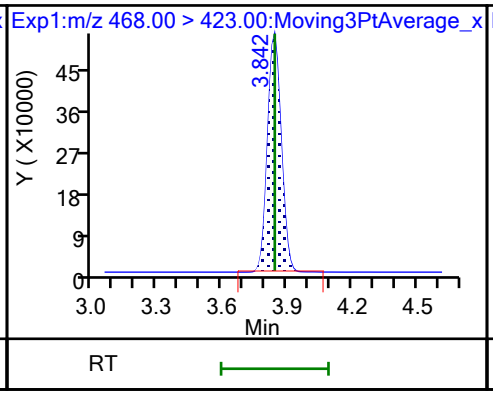
20 Perfluorononanoic acid



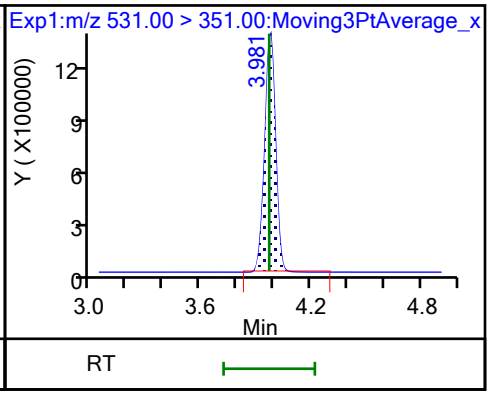
20 Perfluorononanoic acid



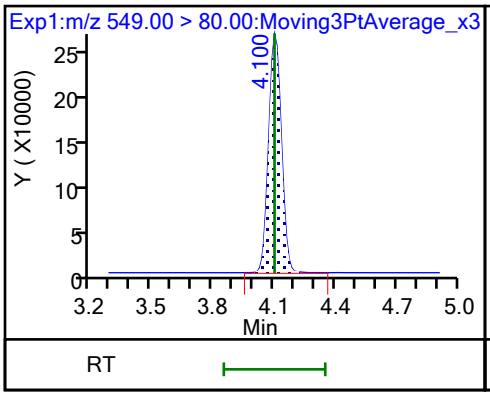
D 19 13C5 PFNA



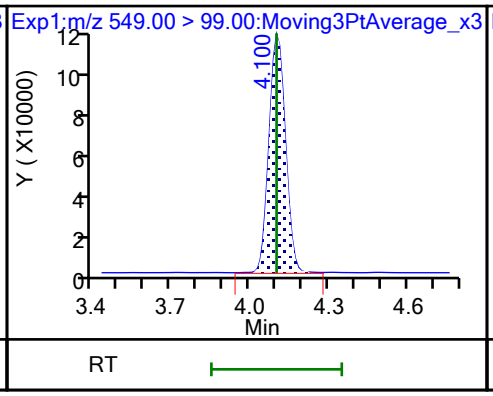
69 9-Chlorohexadecafluoro-3-oxanona



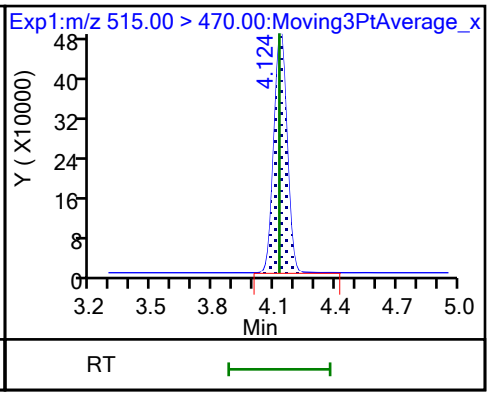
68 Perfluorononanesulfonic acid



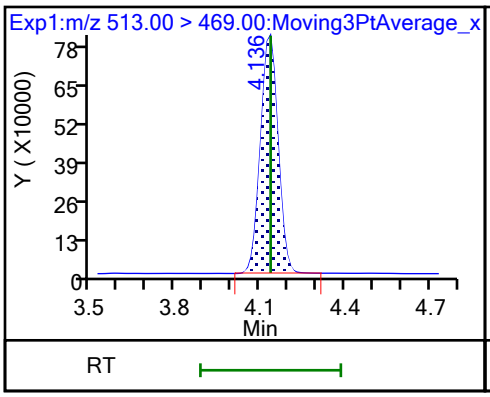
68 Perfluorononanesulfonic acid



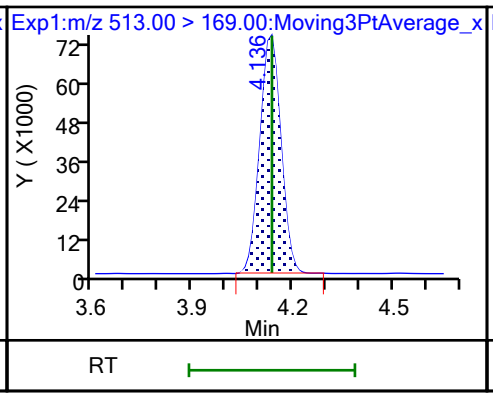
D 23 13C2 PFDA



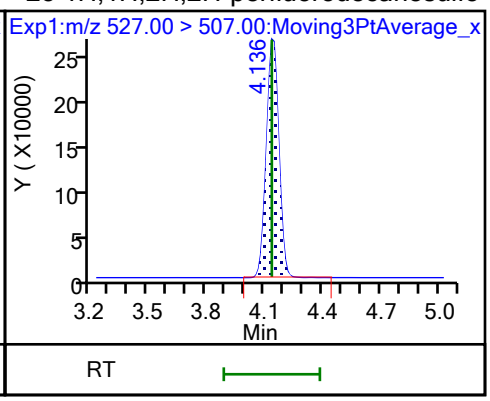
24 Perfluorodecanoic acid



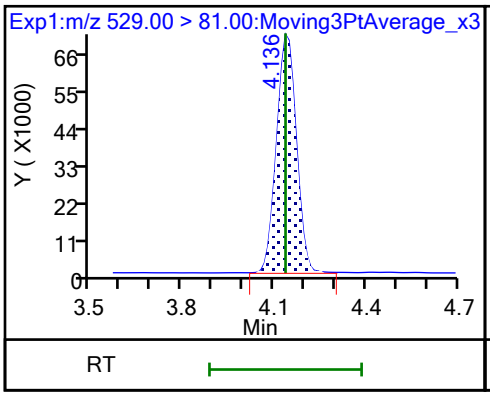
24 Perfluorodecanoic acid



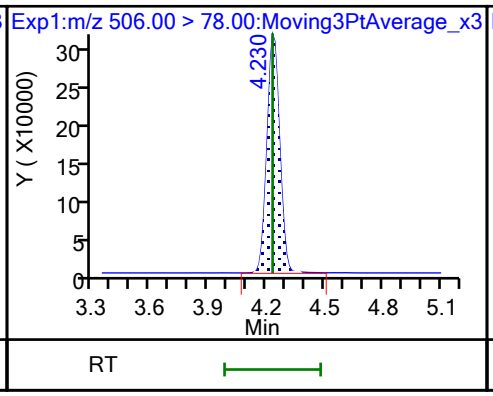
25 1H,1H,2H,2H-perfluorodecanesulfo



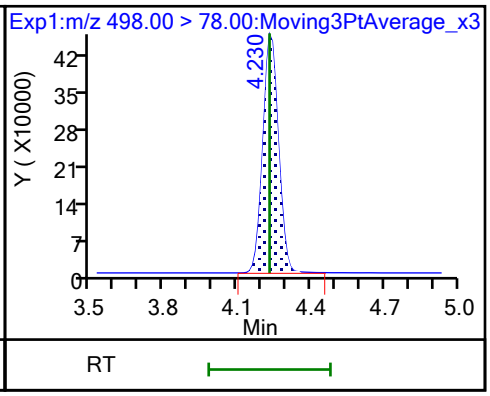
D 26 M2-8:2 FTS



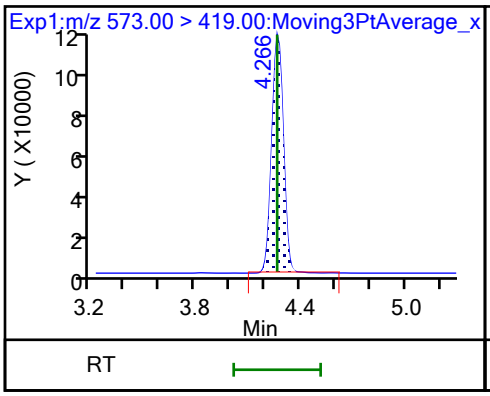
D 21 13C8 FOSA



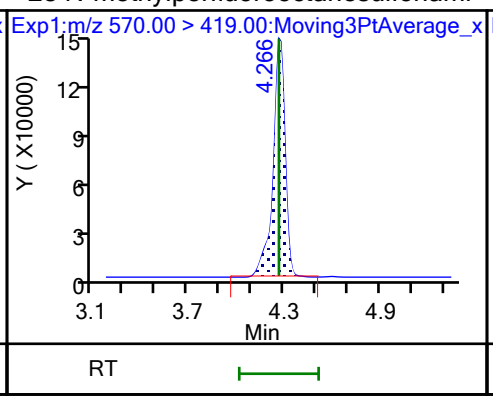
22 Perfluorooctanesulfonamide



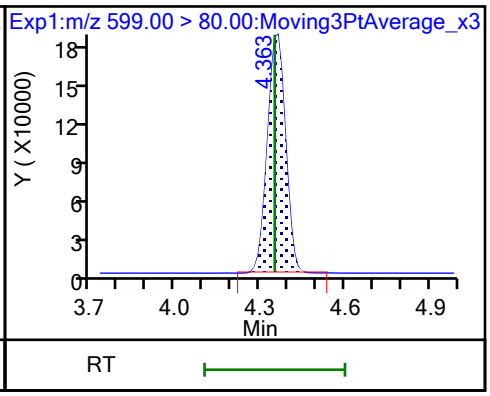
D 27 d3-NMeFOSAA



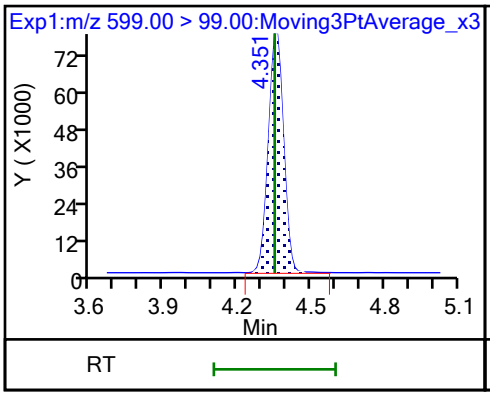
28 N-methylperfluorooctanesulfonami



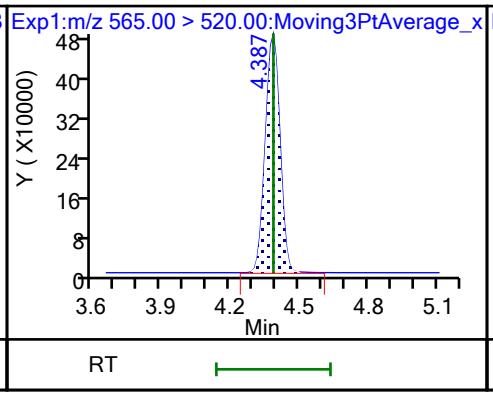
29 Perfluorodecanesulfonic acid



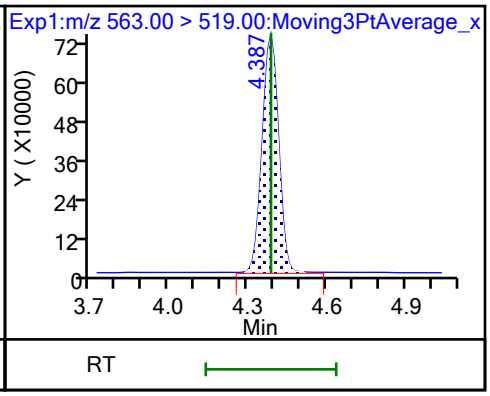
29 Perfluorodecanesulfonic acid



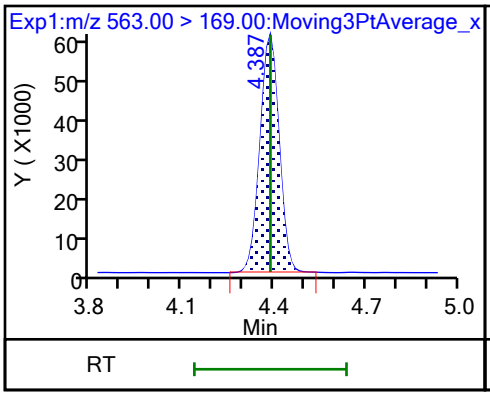
D 30 13C2 PFUnA



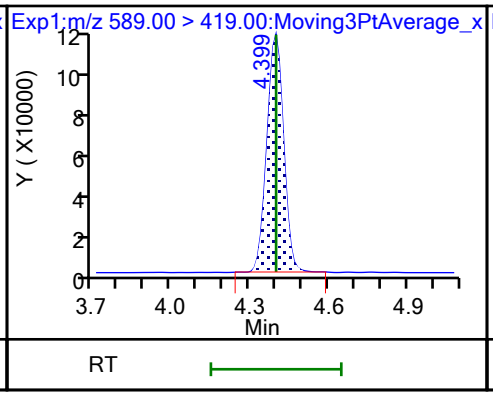
31 Perfluoroundecanoic acid



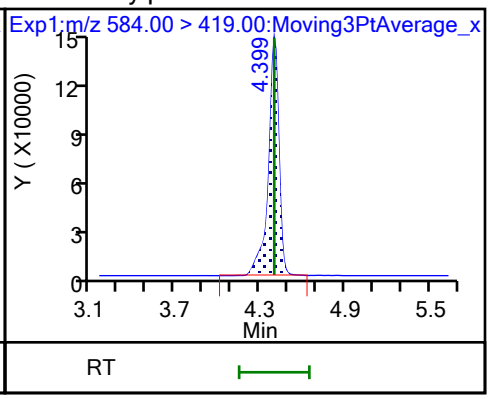
31 Perfluoroundecanoic acid



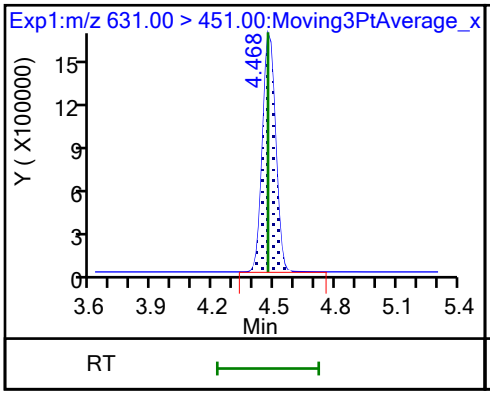
D 32 d5-NEtFOSAA



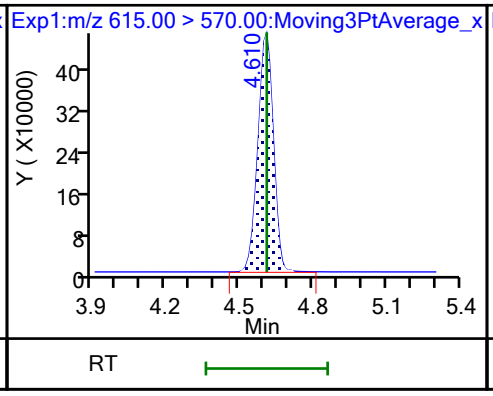
33 N-ethylperfluorooctanesulfonamid



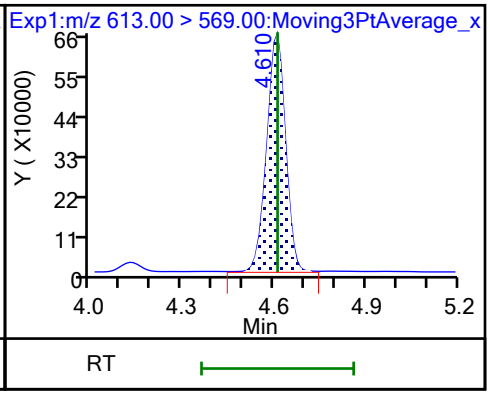
66 11-Chloroeicosafluoro-3-oxaundec



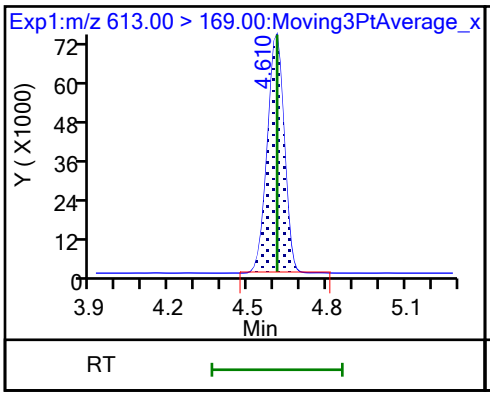
D 36 13C2 PFDoA



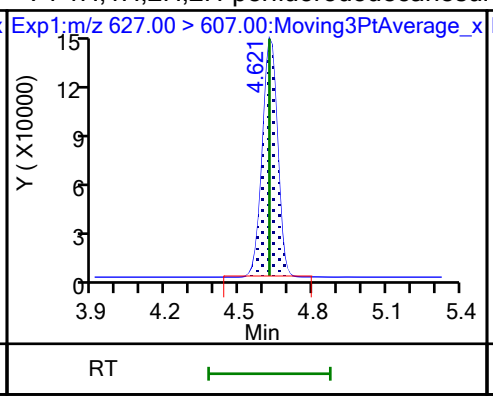
37 Perfluorododecanoic acid



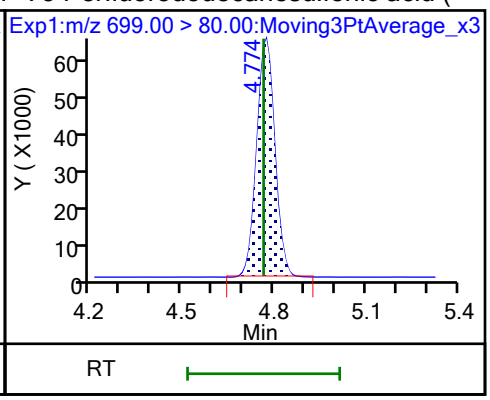
37 Perfluorododecanoic acid



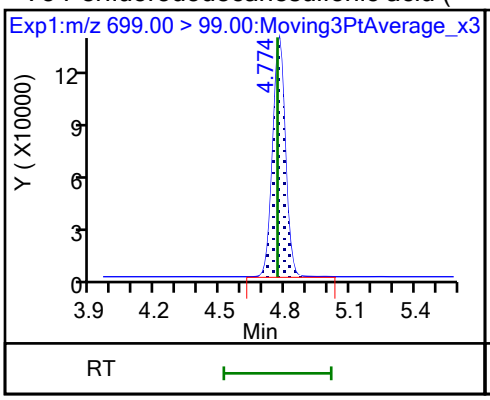
74 1H,1H,2H,2H-perfluorododecanesul



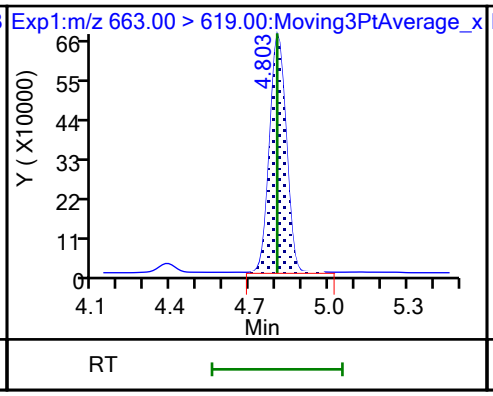
75 Perfluorododecanesulfonic acid (



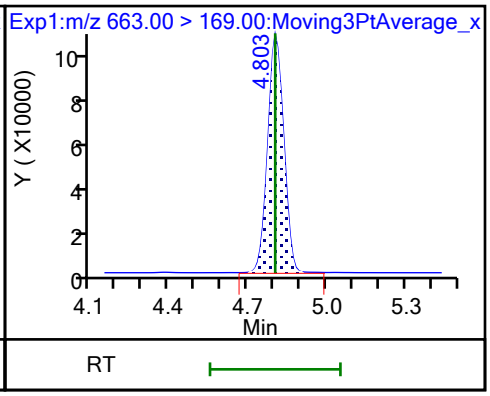
75 Perfluorododecanesulfonic acid (



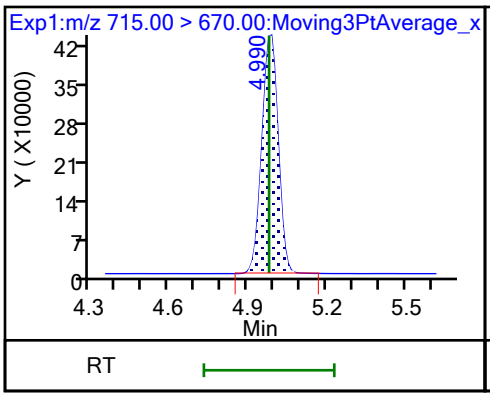
41 Perfluorotridecanoic acid



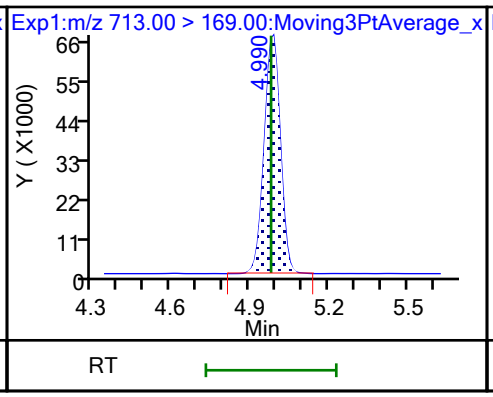
41 Perfluorotridecanoic acid



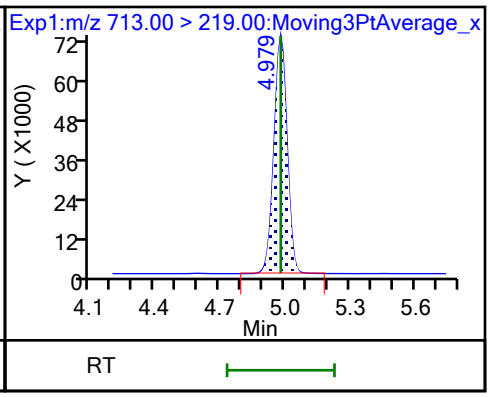
D 43 13C2 PFTeDA



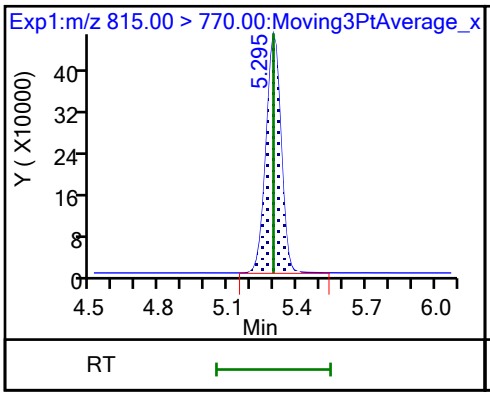
42 Perfluorotetradecanoic acid



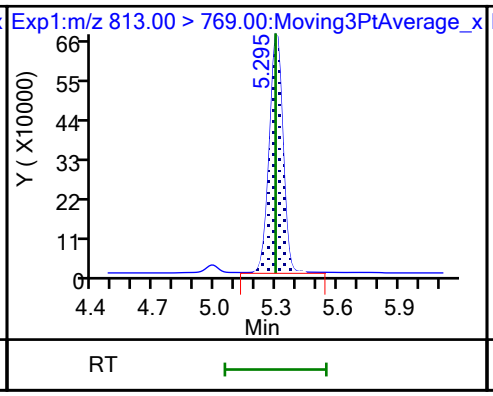
42 Perfluorotetradecanoic acid



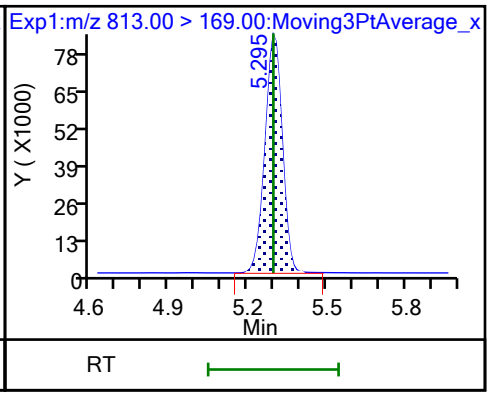
D 44 13C2 PFHxDA



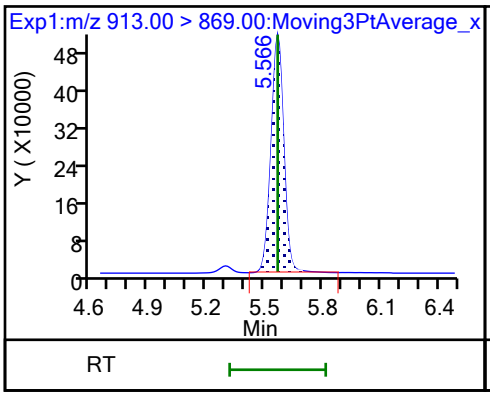
45 Perfluorohexadecanoic acid



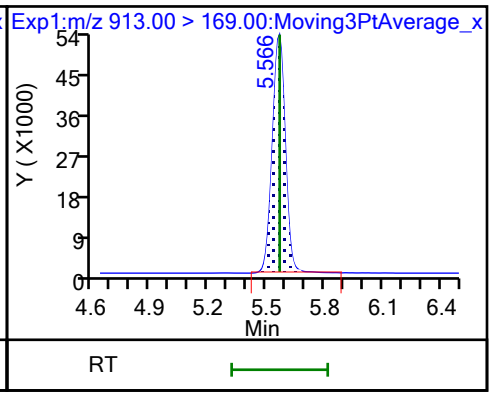
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

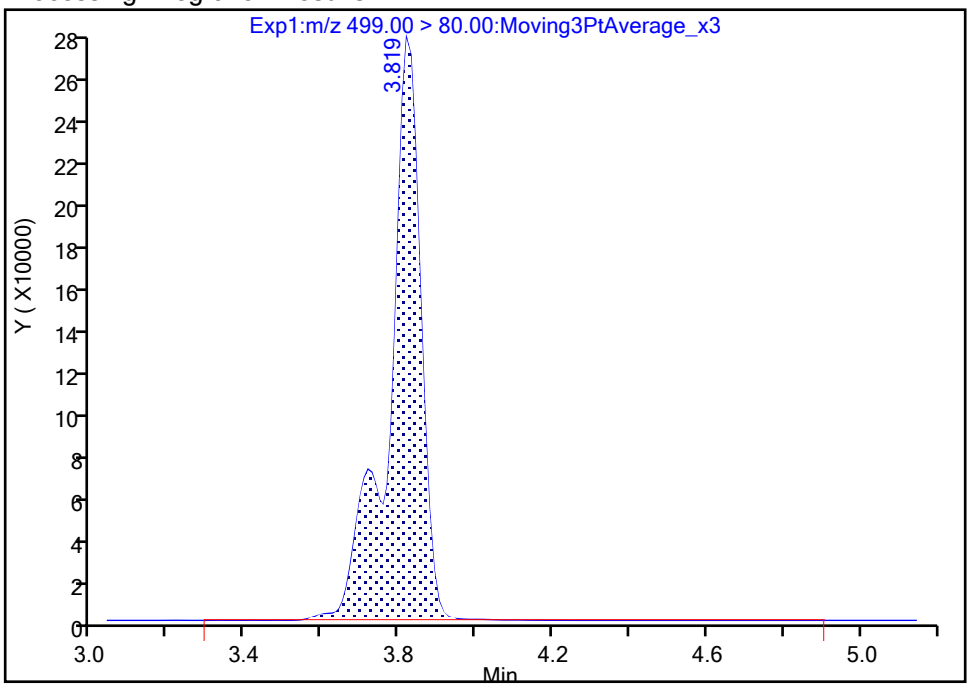
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E06.d				
Injection Date:	27-Oct-2023 10:49:00	Instrument ID:	LC812		
Lims ID:	LCSD 200-196761/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

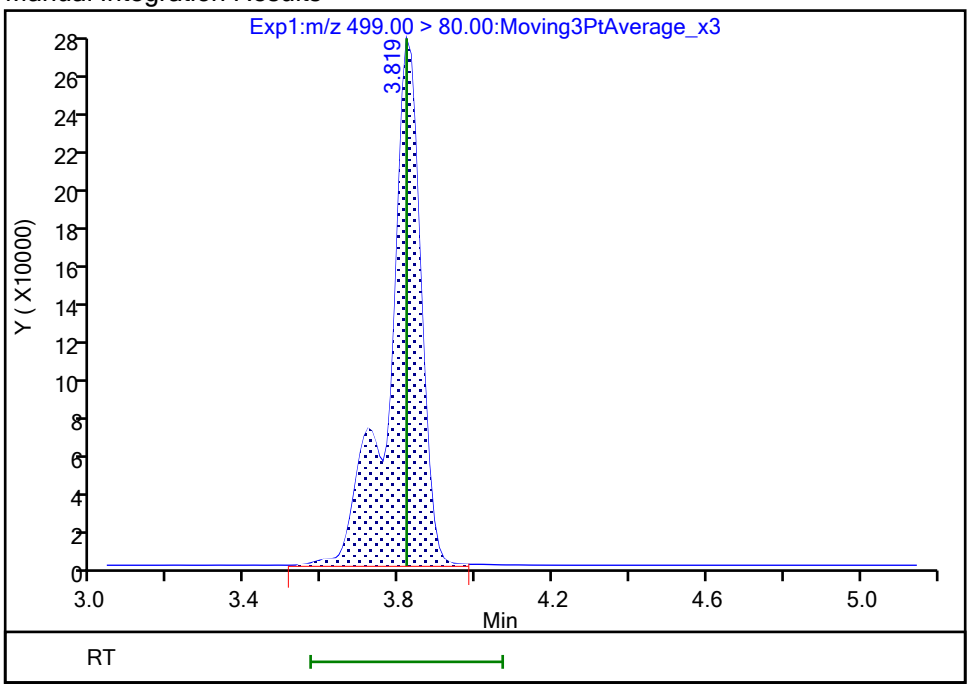
Processing Integration Results

RT: 3.82
Area: 1569774
Amount: 1.727172
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1565752
Amount: 1.722746
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 16:00:34 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

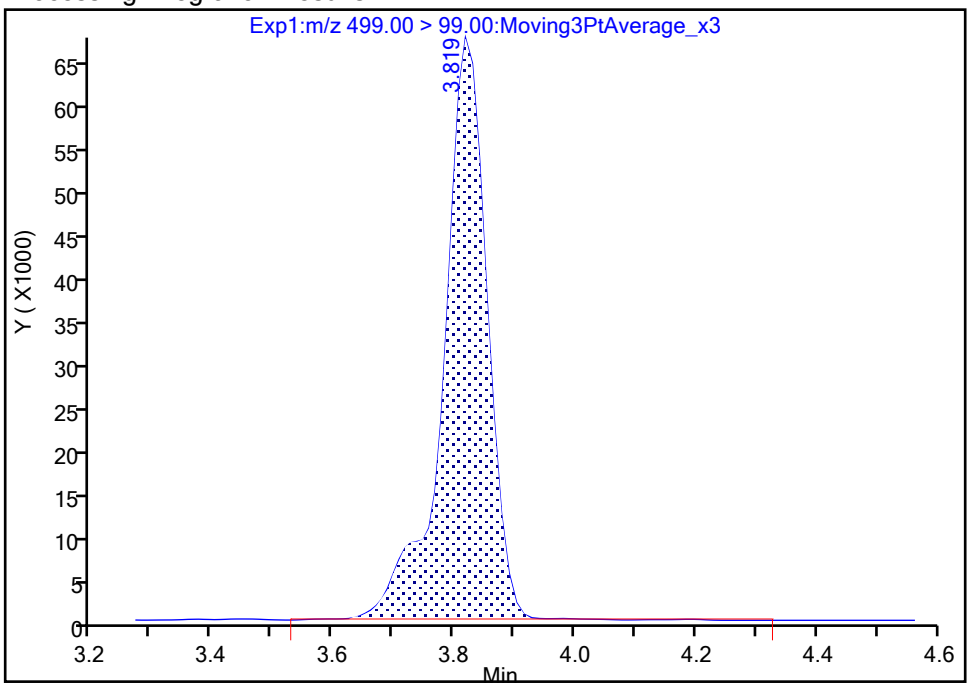
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E06.d				
Injection Date:	27-Oct-2023 10:49:00	Instrument ID:	LC812		
Lims ID:	LCSD 200-196761/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

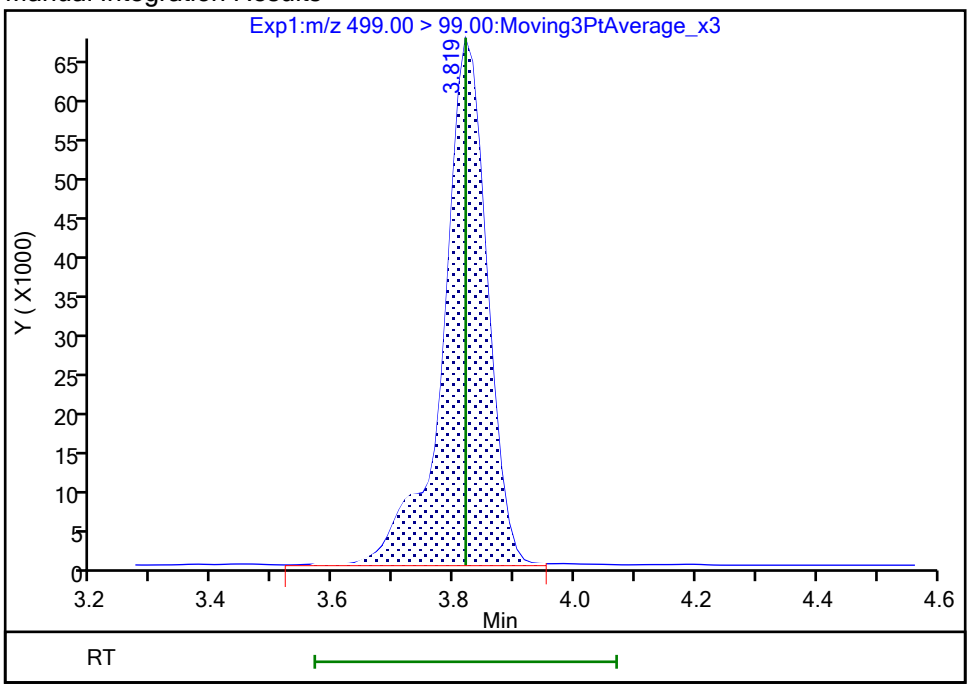
Processing Integration Results

RT: 3.82
Area: 345165
Amount: 1.727172
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 342450
Amount: 1.722746
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 16:00:36 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

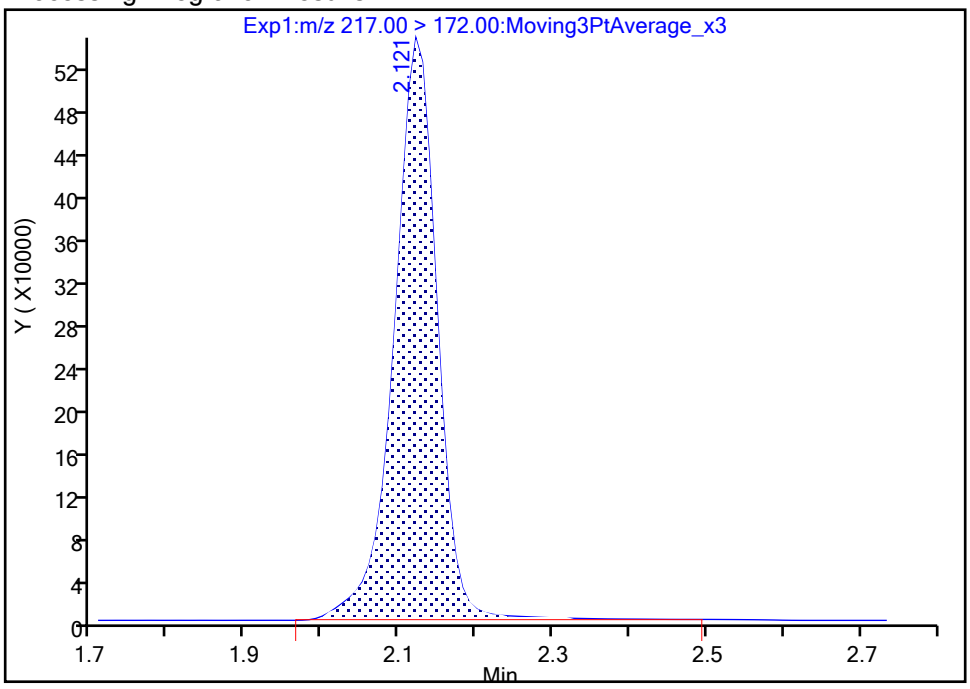
Data File:	\\chromfs\Burlington\ChromData\LC812\20231026-57578.b\PA231026E06.d				
Injection Date:	27-Oct-2023 10:49:00	Instrument ID:	LC812		
Lims ID:	LCSD 200-196761/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

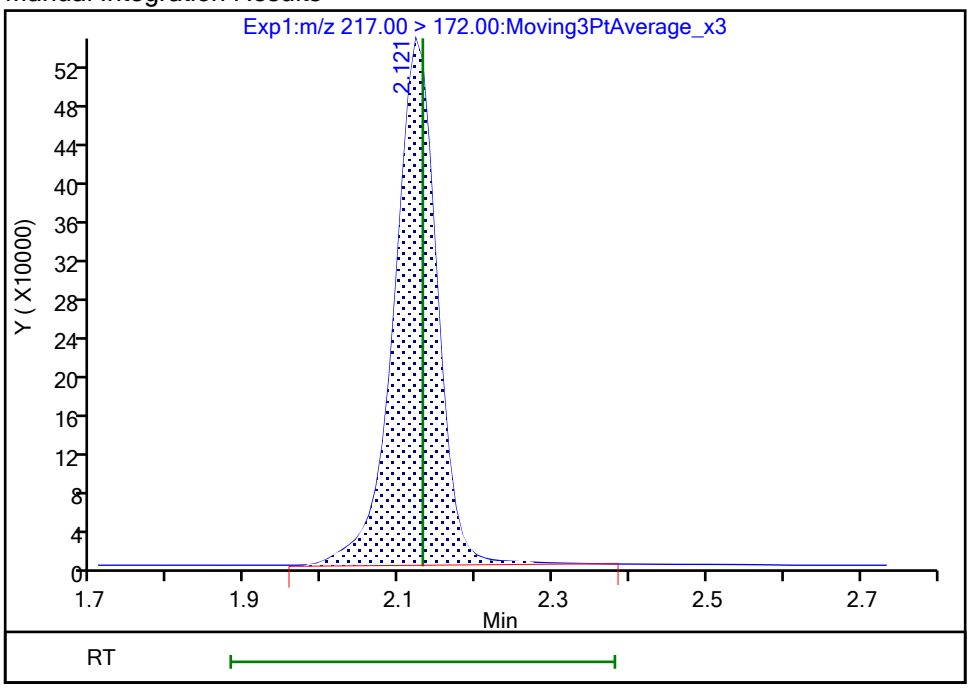
Processing Integration Results

RT: 2.12
Area: 2137452
Amount: 1.315837
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2128526
Amount: 1.310342
Amount Units: ng/ml



Reviewer: SJ4N, 27-Oct-2023 15:59:07 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument ID: LC812 Start Date: 07/26/2023 16:44

Analysis Batch Number: 193912 End Date: 07/26/2023 18:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:08	1		C-18 4.6(mm)
IC 200-193912/5		07/26/2023 17:16	1	PA230726ICAL05.d	C-18 4.6(mm)
IC 200-193912/6		07/26/2023 17:25	1	PA230726ICAL06.d	C-18 4.6(mm)
IC 200-193912/7		07/26/2023 17:33	1	PA230726ICAL07.d	C-18 4.6(mm)
ICISAV 200-193912/8		07/26/2023 17:41	1	PA230726ICAL08.d	C-18 4.6(mm)
IC 200-193912/9		07/26/2023 17:49	1	PA230726ICAL09.d	C-18 4.6(mm)
IC 200-193912/10		07/26/2023 17:57	1	PA230726ICAL10.d	C-18 4.6(mm)
IC 200-193912/11		07/26/2023 18:05	1	PA230726ICAL11.d	C-18 4.6(mm)
ICB 200-193912/12		07/26/2023 18:13	1	PA230726ICAL12.d	C-18 4.6(mm)
ICV 200-193912/13		07/26/2023 18:22	1	PA230726ICAL13.d	C-18 4.6(mm)
ZZZZZ		07/26/2023 18:30	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument ID: LC812 Start Date: 10/25/2023 17:52

Analysis Batch Number: 196791 End Date: 10/25/2023 22:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/25/2023 17:52	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 18:00	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 18:08	1		C-18 4.6(mm)
CCB 200-196791/4		10/25/2023 18:16	1	PA231025A04.d	C-18 4.6(mm)
CCVLIS 200-196791/5		10/25/2023 18:24	1	PA231025A05.d	C-18 4.6(mm)
MB 200-196761/1-A		10/25/2023 18:33	1	PA231025A06.d	C-18 4.6(mm)
LCS 200-196761/2-A		10/25/2023 18:41	1	PA231025A07.d	C-18 4.6(mm)
ZZZZZ		10/25/2023 18:49	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 18:57	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:05	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:13	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:22	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:30	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:38	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:46	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 19:54	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 20:02	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 20:11	1		C-18 4.6(mm)
CCV 200-196791/19		10/25/2023 20:19	1	PA231025A19.d	C-18 4.6(mm)
460-290543-1	MW84R-101723-0906-29	10/25/2023 20:27	1	PA231025A20.d	C-18 4.6(mm)
460-290543-2	MW84AR-101723-1011-75	10/25/2023 20:35	1	PA231025A21.d	C-18 4.6(mm)
460-290543-3	MW77-101723-1131-20	10/25/2023 20:43	1	PA231025A22.d	C-18 4.6(mm)
460-290543-4	SW1-101723-1210	10/25/2023 20:51	1	PA231025A23.d	C-18 4.6(mm)
460-290543-5	MW6-101723-0917-10	10/25/2023 21:00	1	PA231025A24.d	C-18 4.6(mm)
460-290543-6	MW7-101723-1052-13	10/25/2023 21:08	1	PA231025A25.d	C-18 4.6(mm)
460-290543-7	MW11-101723-1212-25.5	10/25/2023 21:16	1	PA231025A26.d	C-18 4.6(mm)
460-290543-8	SW4-101723-0940	10/25/2023 21:24	1	PA231025A27.d	C-18 4.6(mm)
460-290543-9	1000-101723-0002	10/25/2023 21:32	1	PA231025A28.d	C-18 4.6(mm)
460-290543-10	1000-101723-0004	10/25/2023 21:40	1	PA231025A29.d	C-18 4.6(mm)
ZZZZZ		10/25/2023 21:49	1		C-18 4.6(mm)
ZZZZZ		10/25/2023 21:57	1		C-18 4.6(mm)
CCV 200-196791/32		10/25/2023 22:05	1	PA231025A32.d	C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument ID: LC812 Start Date: 10/26/2023 20:30

Analysis Batch Number: 196833 End Date: 10/27/2023 00:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/26/2023 20:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:39	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 20:47	1		C-18 4.6(mm)
CCB 200-196833/4		10/26/2023 20:55	1	PA231026A04.d	C-18 4.6(mm)
CCVLIS 200-196833/5		10/26/2023 21:03	1	PA231026A05.d	C-18 4.6(mm)
ZZZZZ		10/26/2023 21:11	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:19	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:28	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:36	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:44	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 21:52	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:00	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:08	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:17	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:25	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:33	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:41	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:49	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 22:57	1		C-18 4.6(mm)
CCV 200-196833/20		10/26/2023 23:05	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:14	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:22	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:30	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:38	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:46	1		C-18 4.6(mm)
ZZZZZ		10/26/2023 23:54	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:03	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 00:11	1		C-18 4.6(mm)
CCV 200-196833/29		10/27/2023 00:19	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument ID: LC812 Start Date: 10/27/2023 10:08

Analysis Batch Number: 196839 End Date: 10/27/2023 12:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196839/1		10/27/2023 10:08	1	PA231026E01.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 10:16	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:24	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:32	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 10:40	5		C-18 4.6(mm)
LCSD 200-196761/3-A		10/27/2023 10:49	1	PA231026E06.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 10:57	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:05	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:13	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:21	10		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:29	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 11:38	2		C-18 4.6(mm)
CCV 200-196839/13		10/27/2023 11:46	1	PA231026E13.d	C-18 4.6(mm)
ZZZZZ		10/27/2023 11:54	2		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:02	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:10	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:19	5		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:27	1		C-18 4.6(mm)
ZZZZZ		10/27/2023 12:35	1		C-18 4.6(mm)
CCV 200-196839/20		10/27/2023 12:43	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Instrument ID: LC812 Start Date: 10/30/2023 17:01

Analysis Batch Number: 196924 End Date: 10/30/2023 21:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/30/2023 17:01	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 17:09	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 17:17	1		C-18 4.6(mm)
CCB 200-196924/4		10/30/2023 17:25	1	PA231030A04.d	C-18 4.6(mm)
CCVLIS 200-196924/5		10/30/2023 17:34	1	PA231030A05.d	C-18 4.6(mm)
ZZZZZ		10/30/2023 17:42	5		C-18 4.6(mm)
460-290543-2 DL	MW84AR-101723-1011-75 DL	10/30/2023 17:50	2	PA231030A07.d	C-18 4.6(mm)
ZZZZZ		10/30/2023 17:58	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:06	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:14	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:23	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:31	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:39	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:47	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 18:55	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 19:03	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 19:12	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 19:20	1		C-18 4.6(mm)
CCV 200-196924/19		10/30/2023 19:28	1	PA231030A19.d	C-18 4.6(mm)
ZZZZZ		10/30/2023 19:36	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 19:44	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 19:52	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:00	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:09	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:17	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:25	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:33	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:41	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 20:49	1		C-18 4.6(mm)
CCV 200-196924/30		10/30/2023 20:58	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 21:06	1		C-18 4.6(mm)
ZZZZZ		10/30/2023 21:14	1		C-18 4.6(mm)
CCV 200-196924/33		10/30/2023 21:22	1		C-18 4.6(mm)

537 (modified)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LCPFAS28NCICV 00014	PFAS23NClC7 00001	PFAS32NCBLK20 00025	PFAS32NCIC1 00015	PFAS32NCIC2 00014
IC 200-193912/5		537 (modified)		1 mL				100 uL	
IC 200-193912/6		537 (modified)		1 mL					100 uL
IC 200-193912/7		537 (modified)		1 mL					
ICISAV 200-193912/8		537 (modified)		1 mL					
IC 200-193912/9		537 (modified)		1 mL					
IC 200-193912/10		537 (modified)		1 mL					
IC 200-193912/11		537 (modified)		1 mL		100 uL			
ICB 200-193912/12		537 (modified)		1 mL			100 uL		
ICV 200-193912/13		537 (modified)		1 mL	100 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS32NCIC3 00016	PFAS32NCIC4 00042	PFAS32NCIC5 00035	PFAS32NCIC6 00014		
IC 200-193912/5		537 (modified)							
IC 200-193912/6		537 (modified)							
IC 200-193912/7		537 (modified)		100 uL					
ICISAV 200-193912/8		537 (modified)			100 uL				
IC 200-193912/9		537 (modified)				100 uL			
IC 200-193912/10		537 (modified)					100 uL		
IC 200-193912/11		537 (modified)							
ICB 200-193912/12		537 (modified)							
ICV 200-193912/13		537 (modified)							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Batch Number: 196761 Batch Start Date: 10/25/23 10:43 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/25/23 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196761/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196761/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
LCSD 200-196761/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	50 uL	100 uL
460-290543-A-1	MW84R-101723-0906-29	3535, 537 (modified)	T	342.74 g	27.50 g	315.2 mL	10 mL		100 uL
460-290543-A-2	MW84AR-101723-1011-75	3535, 537 (modified)	T	343.91 g	27.46 g	316.5 mL	10 mL		100 uL
460-290543-A-3	MW77-101723-1131-20	3535, 537 (modified)	T	339.98 g	27.87 g	312.1 mL	10 mL		100 uL
460-290543-A-4	SW1-101723-1210	3535, 537 (modified)	T	337.16 g	27.40 g	309.8 mL	10 mL		100 uL
460-290543-B-5	MW6-101723-0917-10	3535, 537 (modified)	T	314.25 g	27.40 g	286.9 mL	10 mL		100 uL
460-290543-B-6	MW7-101723-1052-13	3535, 537 (modified)	T	319.66 g	27.89 g	291.8 mL	10 mL		100 uL
460-290543-B-7	MW11-101723-1212-25.5	3535, 537 (modified)	T	321.64 g	27.24 g	294.4 mL	10 mL		100 uL
460-290543-A-8	SW4-101723-0940	3535, 537 (modified)	T	325.13 g	27.75 g	297.4 mL	10 mL		100 uL
460-290543-A-9	1000-101723-0002	3535, 537 (modified)	T	318.84 g	27.37 g	291.5 mL	10 mL		100 uL
460-290543-A-10	1000-101723-0004	3535, 537 (modified)	T	311.21 g	27.37 g	283.8 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196761/1		3535, 537 (modified)		100 uL					
LCS 200-196761/2		3535, 537 (modified)		100 uL					
LCSD 200-196761/3		3535, 537 (modified)		100 uL					
460-290543-A-1	MW84R-101723-0906-29	3535, 537 (modified)	T	100 uL					
460-290543-A-2	MW84AR-101723-1011-75	3535, 537 (modified)	T	100 uL					
460-290543-A-3	MW77-101723-1131-20	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Batch Number: 196761 Batch Start Date: 10/25/23 10:43 Batch Analyst: Wisniewski, Kurtis F

Batch Method: 3535 Batch End Date: 10/25/23 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
460-290543-A-4	SW1-101723-1210	3535, 537 (modified)	T	100 uL					
460-290543-B-5	MW6-101723-0917-10	3535, 537 (modified)	T	100 uL					
460-290543-B-6	MW7-101723-1052-13	3535, 537 (modified)	T	100 uL					
460-290543-B-7	MW11-101723-1212-25.5	3535, 537 (modified)	T	100 uL					
460-290543-A-8	SW4-101723-0940	3535, 537 (modified)	T	100 uL					
460-290543-A-9	1000-101723-0002	3535, 537 (modified)	T	100 uL					
460-290543-A-10	1000-101723-0004	3535, 537 (modified)	T	100 uL					

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	KFW
Analyst ID - Spike Witness Analyst	MJW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290543-1

SDG No.:

Batch Number: 196833 Batch Start Date: 10/26/23 20:30 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196833/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196833/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Subcontract Data

Shipping and Receiving Documents

Eurofins TestAmerica, Edison
777 New Durham Road
Edison NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

Chain of Custody Record

590543

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: Dimitri Quafisi	Site Contact:	Date:	COC No:
Haley & Aldrich	Email: DQuafisi@haleyaldrich.com	Lab Contact:	Carrier:	1 of 1 COCs
65 Rockside Rd, Suite 200	Tel/Fax:			Sampler: EST Associates
Cleveland, OH 44131	Analysis Turnaround Time			
216.706.1314	☐ CALENDAR DAYS ☐ WORKING DAYS			
216.739.0560	TAT if different from Below _____			
Job #: 70613-78	☐ 2 weeks			
Site: Racer Ewing	☑ 1 week			
Lab Project # 46013839	☐ 2 days			
	☐ 1 day			

460-290543 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PFAS (537 1M)	Sample Specific Notes:
MW84R-101723-0906-29	10/17/23	906		GW	2			X	1
MW84AR-101723-1011-75	10/17/23	1011		GW	2			X	2
MW77-101723-1131-20	10/17/23	1131		GW	2			X	3
GW1-101723-1210	10/17/23	1210		GW	2			X	4
MW6-101723-0917-10	10/17/23	917		GW	2			X	5
MW7-101723-1052-13	10/17/23	1052		GW	2			X	6
MW11-101723-1212-255	10/17/23	1212		GW	2			X	7
SW4-101723-0940	10/17/23	940		GW	2			X	8
1000-101723-0002	10/17/23	1231		GW	2			X	9
1000-101723-0004	10/17/23	1240		GW	2			X	10

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Dissolved Metals field filtered

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: EST	Date/Time: 10/17/23 1340	Received by:	Company: ETA	Date/Time: 10/17/23 1340
Relinquished by:	Company: ETA	Date/Time: 10/17/23 1345	Received in Laboratory by:	Company: ETA	Date/Time: 10/17

Form No. CA-C-WI-002, Rev 4.23, dated 4/16/2019

Page 87 of 88
12:01 PM 10/17/2023

10/17 1900 Dan Seely ETA 10/17/23 1900

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 290543

Number of Coolers: 1 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.0 °C	3.0 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below*

Sample No(s) adjusted _____

Preservative Name/Conc.. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: MW Date: 10/17/23

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

460-290543 Chain of Custody

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Tempe, Kristyn L		COC No: 460-69554 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290543-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/24/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email	WO #:			
Project Name: Racer, Ewing/Trenton	Project #: 46010893			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW84R-101723-0906-29 (460-290543-1)	10/17/23	09:06 Eastern		Water			X	2	
MW84AR-101723-1011-75 (460-290543-2)	10/17/23	10:11 Eastern		Water			X	2	
MW77-101723-1131-20 (460-290543-3)	10/17/23	11 31 Eastern		Water			X	2	
SW1-101723-1210 (460-290543-4)	10/17/23	12.10 Eastern		Water			X	2	
MW6-101723-0917-10 (460-290543-5)	10/17/23	09:17 Eastern		Water			X	2	
MW7-101723-1052-13 (460-290543-6)	10/17/23	10:52 Eastern		Water			X	2	
MW11-101723-1212-25.5 (460-290543-7)	10/17/23	12.12 Eastern		Water			X	2	
SW4-101723-0940 (460-290543-8)	10/17/23	09.40 Eastern		Water			X	2	
1000-101723-0002 (460-290543-9)	10/17/23	12 31 Eastern		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:
Relinquished by:	Date/Time: 10/19/23 1900	Company: EEDL	Received by: Date/Time: 10/20/23 9:55 Company: TABB
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Page 119 of 223
11/1/2023 12:01 PM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Tempe, Kristyn L	Carrier Tracking No(s)	COC No: 460-69554.2
Client Contact: Shipping/Receiving	Phone	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290543-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/24/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email	WO #:			
Project Name: Racer, Ewing/Trenton	Project #: 46010893			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
1000-101723-0004 (460-290543-10)	10/17/23	12 40 Eastern		Water			X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratones This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 10/19/23 1900	Company	Received by:	Date/Time: 10/20/23 955	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

12:01 PM
11/1/2023

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 19OCT23
ACTWGT: 45.95 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO **SHIPPING/RECEIVING**
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: 8460-174336
PO: YES

FedEx Express

TRK# 0201 **6553 1010 3405**

FRI - 20 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US **BTV**

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290543-1

Login Number: 290543
List Number: 1
Creator: Hall, Alonzo

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290543-1

Login Number: 290543
List Number: 2
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington
List Creation: 10/20/23 03:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1969974
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitri Quafisi
Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland OH 44131

Generated 10/27/2023 10:52 AM

JOB DESCRIPTION

Racer, Ewing

JOB NUMBER

460-290546-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/27/2023 10:52 AM

Authorized for release by
Kristyn L Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
732 549-3900

Table of Contents

Cover Title Page 1

Data Summaries 5

- Report Narrative 5
- Sample Summary 6
- Detection Summary 7
- Method Summary 8
- Client Sample Results 9
- Isotope Dilution Summary 14
- QC Sample Results 15
- Definitions 19
- QC Association 20
- Chronicle 21
- Certification Summary 22

Organic Sample Data 23

- LCMS 23
  - Method PFC IDA 23
    - Method PFC IDA QC Summary 24
    - Method PFC IDA Sample Data 34
    - Standards Data 213
      - Method PFC IDA ICAL Data 213
      - Method PFC IDA CCAL Data 330
    - Raw QC Data 395
      - Method PFC IDA Blank Data 395
      - Method PFC IDA LCS/LCSD Data 445
    - Method PFC IDA Run Logs 528
    - Method PFC IDA Prep Data 531

Table of Contents

Shipping and Receiving Documents 536
Client Chain of Custody 537
Sample Receipt Checklist 541

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer, Ewing

Report Number: 460-290546-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/16/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Samples 1000-101623-0002 (460-290546-1), FDMH-1 (460-290546-2), FDMH-2 (460-290546-3) and FDMH-4 (460-290546-4) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC-IDA - 537 (modified). The samples were prepared on 10/23/2023 and analyzed on 10/24/2023.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196662.

No difficulties were encountered during the PFAS analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290546-1	1000-101623-0002	Water	10/16/23 10:50	10/16/23 16:45
460-290546-2	FDMH-1	Water	10/16/23 09:15	10/16/23 16:45
460-290546-3	FDMH-2	Water	10/16/23 09:30	10/16/23 16:45
460-290546-4	FDMH-4	Water	10/16/23 10:15	10/16/23 16:45

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Client Sample ID: 1000-101623-0002 — Lab Sample ID: 460-290546-1

No Detections.

Client Sample ID: FDMH-1 — Lab Sample ID: 460-290546-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	59.2		4.42	1.06	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	6.75		1.77	0.60	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	6.09		1.77	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	3.86		1.77	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	9.73		1.77	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.20		1.77	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.52	J	1.77	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	4.15		1.77	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	0.69	J	1.77	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	4.03		1.77	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	21.3		1.77	0.75	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FDMH-2 — Lab Sample ID: 460-290546-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	74.4		4.37	1.05	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	35.8		1.75	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	25.8		1.75	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	15.1		1.75	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	12.1		1.75	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	2.23		1.75	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid	0.42	J	1.75	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	6.41		1.75	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	5.02		1.75	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	24.4		1.75	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	0.82	J	1.75	0.36	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	29.2		1.75	0.74	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FDMH-4 — Lab Sample ID: 460-290546-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	25.6		4.12	0.99	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid	62.6		1.65	0.56	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid	38.6		1.65	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	17.2		1.65	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid	9.14		1.65	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid	1.52	J	1.65	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid	14.8		1.65	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid	9.36		1.65	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid	45.1		1.65	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid	1.73		1.65	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid	70.2		1.65	0.70	ng/L	1		537 (modified)	Total/NA
6:2 Fluorotelomer sulfonic acid	21.2		4.12	1.07	ng/L	1		537 (modified)	Total/NA
8:2 Fluorotelomer sulfonic acid	4.41		1.65	0.63	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET BUR
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: 1000-101623-0002

Date Collected: 10/16/23 10:50
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	4.42	U	4.42	1.06	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluoropentanoic acid	1.77	U	1.77	0.60	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorohexanoic acid	1.77	U	1.77	0.58	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluoroheptanoic acid	1.77	U	1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorooctanoic acid	1.77	U	1.77	0.67	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorononanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorodecanoic acid	1.77	U	1.77	0.41	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluoroundecanoic acid	1.77	U	1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorododecanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorotridecanoic acid	1.77	U	1.77	0.42	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorotetradecanoic acid	1.77	U	1.77	0.57	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorobutanesulfonic acid	1.77	U	1.77	0.55	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluoropentanesulfonic acid	1.77	U	1.77	0.44	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorohexanesulfonic acid	1.77	U	1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorooctanesulfonic acid	1.77	U	1.77	0.75	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorononanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorodecanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:08	1
4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:08	1
6:2 Fluorotelomer sulfonic acid	4.42	U	4.42	1.15	ng/L		10/23/23 07:42	10/24/23 08:08	1
8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68	ng/L		10/23/23 07:42	10/24/23 08:08	1
Perfluorooctanesulfonamide	1.77	U	1.77	0.81	ng/L		10/23/23 07:42	10/24/23 08:08	1
NMeFOSAA	4.42	U	4.42	1.68	ng/L		10/23/23 07:42	10/24/23 08:08	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.42	U	4.42	1.42	ng/L		10/23/23 07:42	10/24/23 08:08	1
HFPODA	3.54	U	3.54	0.97	ng/L		10/23/23 07:42	10/24/23 08:08	1
DONA	1.77	U	1.77	0.37	ng/L		10/23/23 07:42	10/24/23 08:08	1
9Cl-PF3ONS	1.77	U	1.77	0.28	ng/L		10/23/23 07:42	10/24/23 08:08	1
11Cl-PF3OUdS	1.77	U	1.77	0.77	ng/L		10/23/23 07:42	10/24/23 08:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C4 PFHpA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C2 PFTeDA	*77*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C8 FOSA	*80*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
d5-NEtFOSAA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
M2-4:2 FTS	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
M2-6:2 FTS	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
M2-8:2 FTS	*85*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C3 HFPO-DA	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
18O2 PFHxS	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C2 PFHxA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C4 PFOS	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C2 PFDoA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C5 PFNA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C2 PFDA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*
13C4 PFOA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*

Client Sample ID: 1000-101623-0002

Date Collected: 10/16/23 10:50
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFUnA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:08*	*1*

Client Sample ID: FDMH-1

Date Collected: 10/16/23 09:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-2

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**59.2**		4.42	1.06	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluoropentanoic acid	**6.75**		1.77	0.60	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorohexanoic acid	**6.09**		1.77	0.57	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluoroheptanoic acid	**3.86**		1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorooctanoic acid	**9.73**		1.77	0.67	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorononanoic acid	**2.20**		1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorodecanoic acid	**0.52**	**J**	1.77	0.41	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluoroundecanoic acid	1.77	U	1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorododecanoic acid	1.77	U	1.77	0.43	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorotridecanoic acid	1.77	U	1.77	0.42	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorotetradecanoic acid	1.77	U	1.77	0.57	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorobutanesulfonic acid	**4.15**		1.77	0.55	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluoropentanesulfonic acid	**0.69**	**J**	1.77	0.44	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorohexanesulfonic acid	**4.03**		1.77	0.49	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorooctanesulfonic acid	**21.3**		1.77	0.75	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorononanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorodecanesulfonic acid	1.77	U	1.77	0.35	ng/L		10/23/23 07:42	10/24/23 08:16	1
4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48	ng/L		10/23/23 07:42	10/24/23 08:16	1
6:2 Fluorotelomer sulfonic acid	4.42	U	4.42	1.15	ng/L		10/23/23 07:42	10/24/23 08:16	1
8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68	ng/L		10/23/23 07:42	10/24/23 08:16	1
Perfluorooctanesulfonamide	1.77	U	1.77	0.81	ng/L		10/23/23 07:42	10/24/23 08:16	1
NMeFOSAA	4.42	U	4.42	1.68	ng/L		10/23/23 07:42	10/24/23 08:16	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.42	U	4.42	1.41	ng/L		10/23/23 07:42	10/24/23 08:16	1
HFPODA	3.53	U	3.53	0.97	ng/L		10/23/23 07:42	10/24/23 08:16	1
DONA	1.77	U	1.77	0.37	ng/L		10/23/23 07:42	10/24/23 08:16	1
9Cl-PF3ONS	1.77	U	1.77	0.28	ng/L		10/23/23 07:42	10/24/23 08:16	1
11Cl-PF3OUdS	1.77	U	1.77	0.77	ng/L		10/23/23 07:42	10/24/23 08:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C5 PFPeA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C4 PFHpA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C2 PFTeDA	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C3 PFBS	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C8 FOSA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
d3-NMeFOSAA	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
d5-NEtFOSAA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
M2-4:2 FTS	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
M2-6:2 FTS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
M2-8:2 FTS	*93*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C3 HFPO-DA	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*

Client Sample ID: FDMH-1

Date Collected: 10/16/23 09:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-2

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*102*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C2 PFHxA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C4 PFOS	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C2 PFDoA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C5 PFNA	*105*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C2 PFDA	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C4 PFOA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*
13C2 PFUnA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:16*	*1*

Client Sample ID: FDMH-2

Date Collected: 10/16/23 09:30
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-3

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**74.4**		4.37	1.05	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluoropentanoic acid	**35.8**		1.75	0.59	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorohexanoic acid	**25.8**		1.75	0.57	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluoroheptanoic acid	**15.1**		1.75	0.47	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorooctanoic acid	**12.1**		1.75	0.66	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorononanoic acid	**2.23**		1.75	0.43	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorodecanoic acid	**0.42**	**J**	1.75	0.40	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluoroundecanoic acid	1.75	U	1.75	0.48	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorododecanoic acid	1.75	U	1.75	0.43	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorotridecanoic acid	1.75	U	1.75	0.42	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorotetradecanoic acid	1.75	U	1.75	0.56	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorobutanesulfonic acid	**6.41**		1.75	0.54	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluoropentanesulfonic acid	**5.02**		1.75	0.44	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorohexanesulfonic acid	**24.4**		1.75	0.48	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluoroheptanesulfonic acid	**0.82**	**J**	1.75	0.36	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorooctanesulfonic acid	**29.2**		1.75	0.74	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorononanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorodecanesulfonic acid	1.75	U	1.75	0.35	ng/L		10/23/23 07:42	10/24/23 08:24	1
4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47	ng/L		10/23/23 07:42	10/24/23 08:24	1
6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14	ng/L		10/23/23 07:42	10/24/23 08:24	1
8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67	ng/L		10/23/23 07:42	10/24/23 08:24	1
Perfluorooctanesulfonamide	1.75	U	1.75	0.80	ng/L		10/23/23 07:42	10/24/23 08:24	1
NMeFOSAA	4.37	U	4.37	1.66	ng/L		10/23/23 07:42	10/24/23 08:24	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40	ng/L		10/23/23 07:42	10/24/23 08:24	1
HFPODA	3.50	U	3.50	0.96	ng/L		10/23/23 07:42	10/24/23 08:24	1
DONA	1.75	U	1.75	0.37	ng/L		10/23/23 07:42	10/24/23 08:24	1
9Cl-PF3ONS	1.75	U	1.75	0.28	ng/L		10/23/23 07:42	10/24/23 08:24	1
11Cl-PF3OUdS	1.75	U	1.75	0.76	ng/L		10/23/23 07:42	10/24/23 08:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C4 PFHpA	*101*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C3 PFBS	*93*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*

Client Sample ID: FDMH-2

Date Collected: 10/16/23 09:30
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-3

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
d3-NMeFOSAA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
d5-NEtFOSAA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
M2-4:2 FTS	*91*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
M2-6:2 FTS	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
M2-8:2 FTS	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C3 HFPO-DA	*88*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
18O2 PFHxS	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C2 PFHxA	*87*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C4 PFOS	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C2 PFDoA	*93*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C5 PFNA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C2 PFDA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C4 PFOA	*105*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*
13C2 PFUnA	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:24*	*1*

Client Sample ID: FDMH-4

Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-4

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	**25.6**		4.12	0.99	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluoropentanoic acid	**62.6**		1.65	0.56	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorohexanoic acid	**38.6**		1.65	0.54	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluoroheptanoic acid	**17.2**		1.65	0.44	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorooctanoic acid	**9.14**		1.65	0.63	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorononanoic acid	**1.52**	**J**	1.65	0.40	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorodecanoic acid	1.65	U	1.65	0.38	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluoroundecanoic acid	1.65	U	1.65	0.45	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorododecanoic acid	1.65	U	1.65	0.40	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorotridecanoic acid	1.65	U	1.65	0.40	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorotetradecanoic acid	1.65	U	1.65	0.53	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorobutanesulfonic acid	**14.8**		1.65	0.51	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluoropentanesulfonic acid	**9.36**		1.65	0.41	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorohexanesulfonic acid	**45.1**		1.65	0.45	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluoroheptanesulfonic acid	**1.73**		1.65	0.34	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorooctanesulfonic acid	**70.2**		1.65	0.70	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorononanesulfonic acid	1.65	U	1.65	0.33	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorodecanesulfonic acid	1.65	U	1.65	0.33	ng/L		10/23/23 07:42	10/24/23 08:32	1
4:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.44	ng/L		10/23/23 07:42	10/24/23 08:32	1
6:2 Fluorotelomer sulfonic acid	**21.2**		4.12	1.07	ng/L		10/23/23 07:42	10/24/23 08:32	1
8:2 Fluorotelomer sulfonic acid	**4.41**		1.65	0.63	ng/L		10/23/23 07:42	10/24/23 08:32	1
Perfluorooctanesulfonamide	1.65	U	1.65	0.76	ng/L		10/23/23 07:42	10/24/23 08:32	1
NMeFOSAA	4.12	U	4.12	1.57	ng/L		10/23/23 07:42	10/24/23 08:32	1
N-ethylperfluorooctanesulfonamidoacetic acid	4.12	U	4.12	1.32	ng/L		10/23/23 07:42	10/24/23 08:32	1
HFPODA	3.29	U	3.29	0.91	ng/L		10/23/23 07:42	10/24/23 08:32	1
DONA	1.65	U	1.65	0.35	ng/L		10/23/23 07:42	10/24/23 08:32	1
9Cl-PF3ONS	1.65	U	1.65	0.26	ng/L		10/23/23 07:42	10/24/23 08:32	1

Client Sample ID: FDMH-4

Date Collected: 10/16/23 10:15
Date Received: 10/16/23 16:45

Lab Sample ID: 460-290546-4

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	1.65	U	1.65	0.72	ng/L		10/23/23 07:42	10/24/23 08:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C5 PFPeA	*95*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C4 PFHpA	*100*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C2 PFTeDA	*86*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C3 PFBS	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C8 FOSA	*90*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
d5-NEtFOSAA	*94*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
M2-4:2 FTS	*88*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
M2-6:2 FTS	*96*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C3 HFPO-DA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
18O2 PFHxS	*98*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C2 PFHxA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C4 PFOS	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C2 PFDoA	*89*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C5 PFNA	*99*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C2 PFDA	*97*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C4 PFOA	*109*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*
13C2 PFUnA	*92*		*50 - 150*	*10/23/23 07:42*	*10/24/23 08:32*	*1*

Isotope Dilution Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	C4PFHA	PFTDA	C3PFBS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290546-1	1000-101623-0002	101	92	94	77	90	80	89	89
460-290546-2	FDMH-1	102	98	99	91	94	92	100	99
460-290546-3	FDMH-2	98	92	101	92	93	89	95	94
460-290546-4	FDMH-4	103	95	100	86	94	90	92	94
LCS 200-196662/2-A	Lab Control Sample	106	99	104	89	101	91	104	105
LCSD 200-196662/3-A	Lab Control Sample Dup	96	88	93	75	90	78	90	88
MB 200-196662/1-A	Method Blank	98	87	98	76	90	75	90	86

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	PFHxS	PFHxA	PFOS	PFDoA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
460-290546-1	1000-101623-0002	92	97	85	87	101	98	98	89
460-290546-2	FDMH-1	90	99	93	87	102	92	100	99
460-290546-3	FDMH-2	91	94	87	88	99	87	97	93
460-290546-4	FDMH-4	88	96	84	92	98	97	97	89
LCS 200-196662/2-A	Lab Control Sample	95	98	95	92	101	100	101	103
LCSD 200-196662/3-A	Lab Control Sample Dup	89	90	87	84	96	91	97	81
MB 200-196662/1-A	Method Blank	89	91	84	84	96	94	96	81

		Percent Isotope Dilution Recovery (Acceptance Limits)			
		PFNA	PFDA	PFOA	PFUnA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)
460-290546-1	1000-101623-0002	98	95	101	91
460-290546-2	FDMH-1	105	100	101	103
460-290546-3	FDMH-2	99	94	105	98
460-290546-4	FDMH-4	99	97	109	92
LCS 200-196662/2-A	Lab Control Sample	100	96	105	98
LCSD 200-196662/3-A	Lab Control Sample Dup	95	92	100	89
MB 200-196662/1-A	Method Blank	94	94	99	96

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
PFHxS = 18O2 PFHxS
PFHxA = 13C2 PFHxA
PFOS = 13C4 PFOS
PFDoA = 13C2 PFDoA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFOA = 13C4 PFOA
PFUnA = 13C2 PFUnA

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-196662/1-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	5.00	U	5.00	1.20	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoropentanoic acid	2.00	U	2.00	0.68	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorohexanoic acid	2.00	U	2.00	0.65	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroheptanoic acid	2.00	U	2.00	0.54	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanoic acid	2.00	U	2.00	0.76	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorononanoic acid	2.00	U	2.00	0.49	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorodecanoic acid	2.00	U	2.00	0.46	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroundecanoic acid	2.00	U	2.00	0.55	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorododecanoic acid	2.00	U	2.00	0.49	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorotridecanoic acid	2.00	U	2.00	0.48	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorotetradecanoic acid	2.00	U	2.00	0.64	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorobutanesulfonic acid	2.00	U	2.00	0.62	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoropentanesulfonic acid	2.00	U	2.00	0.50	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorohexanesulfonic acid	2.00	U	2.00	0.55	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanesulfonic acid	2.00	U	2.00	0.85	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorononanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorodecanesulfonic acid	2.00	U	2.00	0.40	ng/L		10/23/23 07:41	10/24/23 06:13	1
4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54	ng/L		10/23/23 07:41	10/24/23 06:13	1
6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30	ng/L		10/23/23 07:41	10/24/23 06:13	1
8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77	ng/L		10/23/23 07:41	10/24/23 06:13	1
Perfluorooctanesulfonamide	2.00	U	2.00	0.92	ng/L		10/23/23 07:41	10/24/23 06:13	1
NMeFOSAA	5.00	U	5.00	1.90	ng/L		10/23/23 07:41	10/24/23 06:13	1
N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60	ng/L		10/23/23 07:41	10/24/23 06:13	1
HFPODA	4.00	U	4.00	1.10	ng/L		10/23/23 07:41	10/24/23 06:13	1
DONA	2.00	U	2.00	0.42	ng/L		10/23/23 07:41	10/24/23 06:13	1
9Cl-PF3ONS	2.00	U	2.00	0.32	ng/L		10/23/23 07:41	10/24/23 06:13	1
11Cl-PF3OUdS	2.00	U	2.00	0.87	ng/L		10/23/23 07:41	10/24/23 06:13	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C5 PFPeA	*87*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C4 PFHpA	*98*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFTeDA	*76*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C3 PFBS	*90*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C8 FOSA	*75*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
d5-NEtFOSAA	*86*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-4:2 FTS	*89*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C3 HFPO-DA	*84*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
18O2 PFHxS	*96*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFHxA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C4 PFOS	*96*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFDoA	*81*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C5 PFNA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*
13C2 PFDA	*94*		*50 - 150*	*10/23/23 07:41*	*10/24/23 06:13*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-196662/1-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	99		50 - 150	10/23/23 07:41	10/24/23 06:13	1
13C2 PFUnA	96		50 - 150	10/23/23 07:41	10/24/23 06:13	1

Lab Sample ID: LCS 200-196662/2-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	40.0	38.92		ng/L		97	70 - 130
Perfluoropentanoic acid	40.0	38.61		ng/L		97	70 - 130
Perfluorohexanoic acid	40.0	38.82		ng/L		97	70 - 130
Perfluoroheptanoic acid	40.0	38.08		ng/L		95	70 - 130
Perfluorooctanoic acid	40.0	38.29		ng/L		96	70 - 130
Perfluorononanoic acid	40.0	39.45		ng/L		99	70 - 130
Perfluorodecanoic acid	40.0	40.74		ng/L		102	70 - 130
Perfluoroundecanoic acid	40.0	41.23		ng/L		103	70 - 130
Perfluorododecanoic acid	40.0	34.71		ng/L		87	70 - 130
Perfluorotridecanoic acid	40.0	36.45		ng/L		91	70 - 130
Perfluorotetradecanoic acid	40.0	37.66		ng/L		94	70 - 130
Perfluorobutanesulfonic acid	35.5	34.30		ng/L		97	70 - 130
Perfluoropentanesulfonic acid	37.6	36.85		ng/L		98	70 - 130
Perfluorohexanesulfonic acid	36.6	33.99		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid	38.1	38.15		ng/L		100	70 - 130
Perfluorooctanesulfonic acid	37.1	35.07		ng/L		94	70 - 130
Perfluorononanesulfonic acid	38.5	34.32		ng/L		89	70 - 130
Perfluorodecanesulfonic acid	38.6	35.69		ng/L		92	70 - 130
4:2 Fluorotelomer sulfonic acid	37.5	37.98		ng/L		101	70 - 130
6:2 Fluorotelomer sulfonic acid	38.0	38.54		ng/L		101	60 - 140
8:2 Fluorotelomer sulfonic acid	38.4	41.65		ng/L		108	70 - 130
Perfluorooctanesulfonamide	40.0	40.08		ng/L		100	70 - 130
NMeFOSAA	40.0	39.24		ng/L		98	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.52		ng/L		94	70 - 130
HFPODA	40.0	37.94		ng/L		95	60 - 140
DONA	37.8	37.16		ng/L		98	70 - 130
9Cl-PF3ONS	37.3	39.95		ng/L		107	70 - 130
11Cl-PF3OUdS	37.7	36.16		ng/L		96	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	106		50 - 150
13C5 PFPeA	99		50 - 150
13C4 PFHpA	104		50 - 150
13C2 PFTeDA	89		50 - 150
13C3 PFBS	101		50 - 150
13C8 FOSA	91		50 - 150
d3-NMeFOSAA	104		50 - 150
d5-NEtFOSAA	105		50 - 150
M2-4:2 FTS	95		50 - 150
M2-6:2 FTS	98		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-196662/2-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-8:2 FTS	95		50 - 150
13C3 HFPO-DA	92		50 - 150
18O2 PFHxS	101		50 - 150
13C2 PFHxA	100		50 - 150
13C4 PFOS	101		50 - 150
13C2 PFDoA	103		50 - 150
13C5 PFNA	100		50 - 150
13C2 PFDA	96		50 - 150
13C4 PFOA	105		50 - 150
13C2 PFUnA	98		50 - 150

Lab Sample ID: LCSD 200-196662/3-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid			40.0	38.50		ng/L		96	70 - 130	1	30
Perfluoropentanoic acid			40.0	41.85		ng/L		105	70 - 130	8	30
Perfluorohexanoic acid			40.0	38.27		ng/L		96	70 - 130	1	30
Perfluoroheptanoic acid			40.0	41.74		ng/L		104	70 - 130	9	30
Perfluorooctanoic acid			40.0	38.60		ng/L		96	70 - 130	1	30
Perfluorononanoic acid			40.0	37.70		ng/L		94	70 - 130	5	30
Perfluorodecanoic acid			40.0	39.12		ng/L		98	70 - 130	4	30
Perfluoroundecanoic acid			40.0	37.31		ng/L		93	70 - 130	10	30
Perfluorododecanoic acid			40.0	36.54		ng/L		91	70 - 130	5	30
Perfluorotridecanoic acid			40.0	38.38		ng/L		96	70 - 130	5	30
Perfluorotetradecanoic acid			40.0	36.00		ng/L		90	70 - 130	5	30
Perfluorobutanesulfonic acid			35.5	35.80		ng/L		101	70 - 130	4	30
Perfluoropentanesulfonic acid			37.6	37.61		ng/L		100	70 - 130	2	30
Perfluorohexanesulfonic acid			36.6	33.58		ng/L		92	70 - 130	1	30
Perfluoroheptanesulfonic acid			38.1	36.16		ng/L		95	70 - 130	5	30
Perfluorooctanesulfonic acid			37.1	34.58		ng/L		93	70 - 130	1	30
Perfluorononanesulfonic acid			38.5	33.84		ng/L		88	70 - 130	1	30
Perfluorodecanesulfonic acid			38.6	29.91		ng/L		77	70 - 130	18	30
4:2 Fluorotelomer sulfonic acid			37.5	37.18		ng/L		99	70 - 130	2	30
6:2 Fluorotelomer sulfonic acid			38.0	38.79		ng/L		102	60 - 140	1	30
8:2 Fluorotelomer sulfonic acid			38.4	40.14		ng/L		105	70 - 130	4	30
Perfluorooctanesulfonamide			40.0	41.50		ng/L		104	70 - 130	3	30
NMeFOSAA			40.0	38.55		ng/L		96	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid			40.0	38.11		ng/L		95	70 - 130	2	30
HFPODA			40.0	39.70		ng/L		99	60 - 140	5	30
DONA			37.8	36.02		ng/L		95	70 - 130	3	30
9Cl-PF3ONS			37.3	37.73		ng/L		101	70 - 130	6	30
11Cl-PF3OUdS			37.7	31.91		ng/L		85	60 - 140	12	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	96		50 - 150
13C5 PFPeA	88		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-196662/3-A
Matrix: Water
Analysis Batch: 196692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 196662

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	93		50 - 150
13C2 PFTeDA	75		50 - 150
13C3 PFBS	90		50 - 150
13C8 FOSA	78		50 - 150
d3-NMeFOSAA	90		50 - 150
d5-NEtFOSAA	88		50 - 150
M2-4:2 FTS	89		50 - 150
M2-6:2 FTS	90		50 - 150
M2-8:2 FTS	87		50 - 150
13C3 HFPO-DA	84		50 - 150
18O2 PFHxS	96		50 - 150
13C2 PFHxA	91		50 - 150
13C4 PFOS	97		50 - 150
13C2 PFDoA	81		50 - 150
13C5 PFNA	95		50 - 150
13C2 PFDA	92		50 - 150
13C4 PFOA	100		50 - 150
13C2 PFUnA	89		50 - 150

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 196662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290546-1	1000-101623-0002	Total/NA	Water	3535	
460-290546-2	FDMH-1	Total/NA	Water	3535	
460-290546-3	FDMH-2	Total/NA	Water	3535	
460-290546-4	FDMH-4	Total/NA	Water	3535	
MB 200-196662/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-196662/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-196662/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 196692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-290546-1	1000-101623-0002	Total/NA	Water	537 (modified)	196662
460-290546-2	FDMH-1	Total/NA	Water	537 (modified)	196662
460-290546-3	FDMH-2	Total/NA	Water	537 (modified)	196662
460-290546-4	FDMH-4	Total/NA	Water	537 (modified)	196662
MB 200-196662/1-A	Method Blank	Total/NA	Water	537 (modified)	196662
LCS 200-196662/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	196662
LCSD 200-196662/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	196662

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Client Sample ID: 1000-101623-0002
Lab Sample ID: 460-290546-1
Date Collected: 10/16/23 10:50
Matrix: Water
Date Received: 10/16/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:08

Client Sample ID: FDMH-1
Lab Sample ID: 460-290546-2
Date Collected: 10/16/23 09:15
Matrix: Water
Date Received: 10/16/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:16

Client Sample ID: FDMH-2
Lab Sample ID: 460-290546-3
Date Collected: 10/16/23 09:30
Matrix: Water
Date Received: 10/16/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:24

Client Sample ID: FDMH-4
Lab Sample ID: 460-290546-4
Date Collected: 10/16/23 10:15
Matrix: Water
Date Received: 10/16/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			196662	MCK	EET BUR	10/23/23 07:42
Total/NA	Analysis	537 (modified)		1	196692	BWC	EET BUR	10/24/23 08:32

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer, Ewing

Job ID: 460-290546-1

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-23
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-24
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399140830	08-31-24

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	C3PFBS #	M242FTS #	PFHxA #	HFPODA #	C4PFHA #	PFHxS #
1000-101623-0002	460-290546-1	101	92	90	92	98	87	94	101
FDMH-1	460-290546-2	102	98	94	90	92	87	99	102
FDMH-2	460-290546-3	98	92	93	91	87	88	101	99
FDMH-4	460-290546-4	103	95	94	88	97	92	100	98
	MB 200-196662/1-A	98	87	90	89	94	84	98	96
	LCS 200-196662/2-A	106	99	101	95	100	92	104	101
	LCSD 200-196662/3-A	96	88	90	89	91	84	93	96

	QC LIMITS
PFBA = 13C4 PFBA	50-150
PFPeA = 13C5 PFPeA	50-150
C3PFBS = 13C3 PFBS	50-150
M242FTS = M2-4:2 FTS	50-150
PFHxA = 13C2 PFHxA	50-150
HFPODA = 13C3 HFPO-DA	50-150
C4PFHA = 13C4 PFHpA	50-150
PFHxS = 18O2 PFHxS	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #
1000-101623-0002	460-290546-1	97	101	98	98	95	85	80	89
FDMH-1	460-290546-2	99	101	100	105	100	93	92	100
FDMH-2	460-290546-3	94	105	97	99	94	87	89	95
FDMH-4	460-290546-4	96	109	97	99	97	84	90	92
	MB 200-196662/1-A	91	99	96	94	94	84	75	90
	LCS 200-196662/2-A	98	105	101	100	96	95	91	104
	LCSD 200-196662/3-A	90	100	97	95	92	87	78	90

	QC LIMITS
M262FTS = M2-6:2 FTS	50-150
PFOA = 13C4 PFOA	50-150
PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	50-150
PFOSA = 13C8 FOSA	50-150
d3NMFOS = d3-NMeFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFUnA #	d5NEFOS #	PFDoA #	PFTDA #
1000-101623-0002	460-290546-1	91	89	89	77
FDMH-1	460-290546-2	103	99	99	91
FDMH-2	460-290546-3	98	94	93	92
FDMH-4	460-290546-4	92	94	89	86
	MB 200-196662/1-A	96	86	81	76
	LCS 200-196662/2-A	98	105	103	89
	LCSD 200-196662/3-A	89	88	81	75

	QC LIMITS
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150
PFDoA = 13C2 PFDoA	50-150
PFTDA = 13C2 PFTeDA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E03.d

Lab ID: LCS 200-196662/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.92	97	70-130	
Perfluoropentanoic acid	40.0	38.61	97	70-130	
Perfluorohexanoic acid	40.0	38.82	97	70-130	
Perfluoroheptanoic acid	40.0	38.08	95	70-130	
Perfluorooctanoic acid	40.0	38.29	96	70-130	
Perfluorononanoic acid	40.0	39.45	99	70-130	
Perfluorodecanoic acid	40.0	40.74	102	70-130	
Perfluoroundecanoic acid	40.0	41.23	103	70-130	
Perfluorododecanoic acid	40.0	34.71	87	70-130	
Perfluorotridecanoic acid	40.0	36.45	91	70-130	
Perfluorotetradecanoic acid	40.0	37.66	94	70-130	
Perfluorobutanesulfonic acid	35.5	34.30	97	70-130	
Perfluoropentanesulfonic acid	37.6	36.85	98	70-130	
Perfluorohexanesulfonic acid	36.6	33.99	93	70-130	
Perfluoroheptanesulfonic acid	38.1	38.15	100	70-130	
Perfluorooctanesulfonic acid	37.1	35.07	94	70-130	
Perfluorononanesulfonic acid	38.5	34.32	89	70-130	
Perfluorodecanesulfonic acid	38.6	35.69	92	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	37.98	101	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	38.54	101	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	41.65	108	70-130	
Perfluorooctanesulfonamide	40.0	40.08	100	70-130	
NMeFOSAA	40.0	39.24	98	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	37.52	94	70-130	
HFPODA	40.0	37.94	95	60-140	
DONA	37.8	37.16	98	70-130	
9Cl-PF3ONS	37.3	39.95	107	70-130	
11Cl-PF3OUdS	37.7	36.16	96	60-140	
13C4 PFBA	50.0	52.87	106	50-150	
13C5 PFPeA	50.0	49.46	99	50-150	
13C4 PFHpA	50.0	52.13	104	50-150	
13C2 PFTeDA	50.0	44.54	89	50-150	
13C3 PFBS	46.5	46.75	101	50-150	
13C8 FOSA	50.0	45.50	91	50-150	
d3-NMeFOSAA	50.0	51.77	104	50-150	
d5-NEtFOSAA	50.0	52.48	105	50-150	
M2-4:2 FTS	46.7	44.27	95	50-150	
M2-6:2 FTS	47.5	46.76	98	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E03.d

Lab ID: LCS 200-196662/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
M2-8:2 FTS	47.9	45.46	95	50-150	
13C3 HFPO-DA	50.0	45.96	92	50-150	
18O2 PFHxS	47.3	47.97	101	50-150	
13C2 PFHxA	50.0	49.94	100	50-150	
13C4 PFOS	47.8	48.36	101	50-150	
13C2 PFDoA	50.0	51.37	103	50-150	
13C5 PFNA	50.0	50.20	100	50-150	
13C2 PFDA	50.0	48.13	96	50-150	
13C4 PFOA	50.0	52.53	105	50-150	
13C2 PFUnA	50.0	49.22	98	50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E04.d

Lab ID: LCSD 200-196662/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	40.0	38.50	96	1	30	70-130	
Perfluoropentanoic acid	40.0	41.85	105	8	30	70-130	
Perfluorohexanoic acid	40.0	38.27	96	1	30	70-130	
Perfluoroheptanoic acid	40.0	41.74	104	9	30	70-130	
Perfluorooctanoic acid	40.0	38.60	96	1	30	70-130	
Perfluorononanoic acid	40.0	37.70	94	5	30	70-130	
Perfluorodecanoic acid	40.0	39.12	98	4	30	70-130	
Perfluoroundecanoic acid	40.0	37.31	93	10	30	70-130	
Perfluorododecanoic acid	40.0	36.54	91	5	30	70-130	
Perfluorotridecanoic acid	40.0	38.38	96	5	30	70-130	
Perfluorotetradecanoic acid	40.0	36.00	90	5	30	70-130	
Perfluorobutanesulfonic acid	35.5	35.80	101	4	30	70-130	
Perfluoropentanesulfonic acid	37.6	37.61	100	2	30	70-130	
Perfluorohexanesulfonic acid	36.6	33.58	92	1	30	70-130	
Perfluoroheptanesulfonic acid	38.1	36.16	95	5	30	70-130	
Perfluorooctanesulfonic acid	37.1	34.58	93	1	30	70-130	
Perfluorononanesulfonic acid	38.5	33.84	88	1	30	70-130	
Perfluorodecanesulfonic acid	38.6	29.91	77	18	30	70-130	
4:2 Fluorotelomer sulfonic acid	37.5	37.18	99	2	30	70-130	
6:2 Fluorotelomer sulfonic acid	38.0	38.79	102	1	30	60-140	
8:2 Fluorotelomer sulfonic acid	38.4	40.14	105	4	30	70-130	
Perfluorooctanesulfonamide	40.0	41.50	104	3	30	70-130	
NMeFOSAA	40.0	38.55	96	2	30	70-130	
N-ethylperfluorooctanesulfonamidoacetic acid	40.0	38.11	95	2	30	70-130	
HFPODA	40.0	39.70	99	5	30	60-140	
DONA	37.8	36.02	95	3	30	70-130	
9Cl-PF3ONS	37.3	37.73	101	6	30	70-130	
11Cl-PF3OUdS	37.7	31.91	85	12	30	60-140	
13C4 PFBA	50.0	48.11	96			50-150	
13C5 PFPeA	50.0	44.09	88			50-150	
13C4 PFHpA	50.0	46.53	93			50-150	
13C2 PFTeDA	50.0	37.49	75			50-150	
13C3 PFBS	46.5	41.78	90			50-150	
13C8 FOSA	50.0	38.84	78			50-150	
d3-NMeFOSAA	50.0	44.88	90			50-150	
d5-NEtFOSAA	50.0	44.06	88			50-150	
M2-4:2 FTS	46.7	41.73	89			50-150	
M2-6:2 FTS	47.5	42.54	90			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
PFAS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA231023E04.d

Lab ID: LCSD 200-196662/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
M2-8:2 FTS	47.9	41.73	87			50-150	
13C3 HFPO-DA	50.0	41.86	84			50-150	
18O2 PFHxS	47.3	45.18	96			50-150	
13C2 PFHxA	50.0	45.49	91			50-150	
13C4 PFOS	47.8	46.26	97			50-150	
13C2 PFDoA	50.0	40.51	81			50-150	
13C5 PFNA	50.0	47.59	95			50-150	
13C2 PFDA	50.0	46.12	92			50-150	
13C4 PFOA	50.0	50.15	100			50-150	
13C2 PFUnA	50.0	44.30	89			50-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab File ID: PA231023E02.d Lab Sample ID: MB 200-196662/1-A

Matrix: Water Date Extracted: 10/23/2023 07:41

Instrument ID: LC812 Date Analyzed: 10/24/2023 06:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-196662/2-A	PA231023E03.d	10/24/2023 06:22
	LCSD 200-196662/3-A	PA231023E04.d	10/24/2023 06:30
1000-101623-0002	460-290546-1	PA231023E16.d	10/24/2023 08:08
FDMH-1	460-290546-2	PA231023E17.d	10/24/2023 08:16
FDMH-2	460-290546-3	PA231023E18.d	10/24/2023 08:24
FDMH-4	460-290546-4	PA231023E19.d	10/24/2023 08:32

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Instrument I LC812 Calibration Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.6(mm) Calibration End Date: 07/26/2023 18:05

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		1938034	3.46				
UPPER LIMIT		2907051	3.66				
LOWER LIMIT		969017	3.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-193912/12		2117259	3.46				
ICV 200-193912/13		2099437	3.47				
CCB 200-196686/4		2210905	3.52				
CCVLIS 200-196686/5		2261885	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Sample No.: CCVLIS 200-196686/5 Date Analyzed: 10/23/2023 15:47

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA231023A05.d Heated Purge: (Y/N) N

Calibration ID: 50615

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		2261885	3.52				
UPPER LIMIT		3392828	3.72				
LOWER LIMIT		1130943	3.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 200-196692/1		2062208	3.52				
MB 200-196662/1-A		2274471	3.52				
LCS 200-196662/2-A		2108118	3.52				
LCSD 200-196662/3-A		2340056	3.52				
CCV 200-196692/15		2105481	3.51				
460-290546-1	1000-101623-0002	2199213	3.52				
460-290546-2	FDMH-1	2078030	3.52				
460-290546-3	FDMH-2	2150013	3.51				
460-290546-4	FDMH-4	2109924	3.52				
CCV 200-196692/26		2053093	3.52				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: 1000-101623-0002 | Lab Sample ID: 460-290546-1

Matrix: Water | Lab File ID: PA231023E16.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 10:50

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 282.5(mL) | Date Analyzed: 10/24/2023 08:08

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	4.42	U	4.42	1.06
2706-90-3	Perfluoropentanoic acid	1.77	U	1.77	0.60
307-24-4	Perfluorohexanoic acid	1.77	U	1.77	0.58
375-85-9	Perfluoroheptanoic acid	1.77	U	1.77	0.48
335-67-1	Perfluorooctanoic acid	1.77	U	1.77	0.67
375-95-1	Perfluorononanoic acid	1.77	U	1.77	0.43
335-76-2	Perfluorodecanoic acid	1.77	U	1.77	0.41
2058-94-8	Perfluoroundecanoic acid	1.77	U	1.77	0.49
307-55-1	Perfluorododecanoic acid	1.77	U	1.77	0.43
72629-94-8	Perfluorotridecanoic acid	1.77	U	1.77	0.42
376-06-7	Perfluorotetradecanoic acid	1.77	U	1.77	0.57
375-73-5	Perfluorobutanesulfonic acid	1.77	U	1.77	0.55
2706-91-4	Perfluoropentanesulfonic acid	1.77	U	1.77	0.44
355-46-4	Perfluorohexanesulfonic acid	1.77	U	1.77	0.49
375-92-8	Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36
1763-23-1	Perfluorooctanesulfonic acid	1.77	U	1.77	0.75
68259-12-1	Perfluorononanesulfonic acid	1.77	U	1.77	0.35
335-77-3	Perfluorodecanesulfonic acid	1.77	U	1.77	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.42	U	4.42	1.15
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68
754-91-6	Perfluorooctanesulfonamide	1.77	U	1.77	0.81
2355-31-9	NMeFOSAA	4.42	U	4.42	1.68
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.42	U	4.42	1.42
13252-13-6	HFPODA	3.54	U	3.54	0.97
919005-14-4	DONA	1.77	U	1.77	0.37
756426-58-1	9Cl-PF3ONS	1.77	U	1.77	0.28
763051-92-9	11Cl-PF3OUdS	1.77	U	1.77	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: 1000-101623-0002 Lab Sample ID: 460-290546-1

Matrix: Water Lab File ID: PA231023E16.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 10:50

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 282.5(mL) Date Analyzed: 10/24/2023 08:08

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	101		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	94		50-150
STL02116	13C2 PFTeDA	77		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	80		50-150
STL02118	d3-NMeFOSAA	89		50-150
STL02117	d5-NEtFOSAA	89		50-150
STL02395	M2-4:2 FTS	92		50-150
STL02279	M2-6:2 FTS	97		50-150
STL02280	M2-8:2 FTS	85		50-150
STL02255	13C3 HFPO-DA	87		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	98		50-150
STL00991	13C4 PFOS	98		50-150
STL00998	13C2 PFDoA	89		50-150
STL00995	13C5 PFNA	98		50-150
STL00996	13C2 PFDA	95		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	91		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d
Lims ID: 460-290546-A-1-A
Client ID: 1000-101623-0002
Sample Type: Client
Inject. Date: 24-Oct-2023 08:08:24 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290546-A-1-A
Misc. Info.: 200-0057513-016 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:13:51
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.120	2.122	-0.002	0.603	2192933	1.26		101	1496	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.138	2.130	0.008	1.008	29963	-0.0220			2.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.438	2.439	-0.001	0.693	1557753	1.15		92.0	1290	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.451	2.453	-0.002	1.006	11039	0.008209			0.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.465	2.467	-0.002	0.701	1910589	1.04		89.7	105157	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.755	2.760	-0.005	0.784	227717	1.07		92.1	157	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.793	2.797	-0.004	0.794	1690448	1.23		98.2	6360	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.806	2.797	0.009	1.004	3662	0.002461	Target=14.12		1.1	M
313.00 > 119.00	2.818	2.797	0.021	1.009	432		8.48(7.06-21.17)		0.6	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.904	2.908	-0.004	0.826	289777	1.09		86.9	1604	
D 11 18O2 PFHxS										
403.00 > 84.00	3.161	3.168	-0.007	0.899	1574849	1.20		101	2869	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.161	3.168	-0.007	1.000	6989	0.004741	Target=3.32		25.6	M
399.00 > 99.00	3.172	3.168	0.004	1.004	2876		2.43(1.66-4.98)		2.7	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.161	3.168	-0.007	0.899	1782526	1.18		94.4	1850	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
77 DONA										M
377.00 > 251.00	3.195	3.203	-0.008	0.835	1863	0.000397	Target=3.33		2.1	M
377.00 > 85.00	3.208	3.203	0.005	0.839	479		3.89(1.66-4.99)		1.2	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.507	3.505	0.002	0.997	313332	1.15		96.7	565	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.507	3.514	-0.007	0.997	8635	0.004694	Target=2.88		0.5	M
413.00 > 169.00	3.516	3.514	0.002	1.000	2146		4.02(1.44-4.32)		5.0	M
D 14 13C4 PFOA										
417.00 > 372.00	3.516	3.523	-0.007	1.000	2158639	1.26		101	4607	
* 62 13C2 PFOA										M
415.00 > 370.00	3.516	3.523	-0.007		2199213	1.25			4947	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.825	3.822	0.002	1.000	2103	0.002209	Target=4.24		3.9	M
499.00 > 99.00	3.825	3.822	0.002	1.000	842		2.50(2.12-6.37)		1.6	M
D 18 13C4 PFOS										
503.00 > 80.00	3.825	3.822	0.002	1.088	975309	1.17		97.8	4047	
D 19 13C5 PFNA										
468.00 > 423.00	3.848	3.845	0.003	1.094	2286548	1.23		98.2	7351	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.986	3.983	0.003	1.042	4839	0.001661			17.6	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.120	4.129	-0.009	0.997	5772	0.003121	Target=11.44		1.9	M
513.00 > 169.00	4.132	4.129	0.003	1.000	720		8.02(5.72-17.16)		4.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.129	0.003	1.175	2313130	1.19		94.9	8639	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.141	0.003	1.179	312584	1.02		85.1	1061	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.120	4.141	-0.021	0.994	1105	0.001923			19.6	M
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.234	0.003	1.205	1655345	0.99		79.5	3101	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.237	4.234	0.003	1.000	14127	0.0112			82.5	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.273	4.270	0.003	1.215	521417	1.12		89.5	1799	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.273	4.270	0.003	1.000	3869	0.0102			8.7	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.358	4.366	-0.008	1.139	993	0.001781	Target=2.37		8.9	M
599.00 > 99.00	4.370	4.366	0.004	1.143	286		3.47(1.19-3.56)		3.9	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.390	-0.008	1.246	2104973	1.14		91.4	8620	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.393	4.401	-0.008	1.249	497596	1.11		88.7	785	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.405	4.401	0.004	1.003	5411	0.0136			18.9	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.477	4.473	0.004	1.171	12922	0.002893			20.5	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.310	2071891	1.11		88.6	6063	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.613	-0.008	1.000	11470	0.006799	Target=8.47		0.7	M
613.00 > 169.00	4.616	4.613	0.003	1.002	1806		6.35(4.23-12.70)		18.2	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.806	0.002	1.044	15259	0.008605	Target=6.41		0.8	
663.00 > 169.00	4.799	4.806	-0.007	1.042	2300		6.63(3.21-9.62)		15.1	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.976	4.982	-0.006	1.415	1800608	0.9661		77.3	4859	

QC Flag Legend

Processing Flags

Review Flags

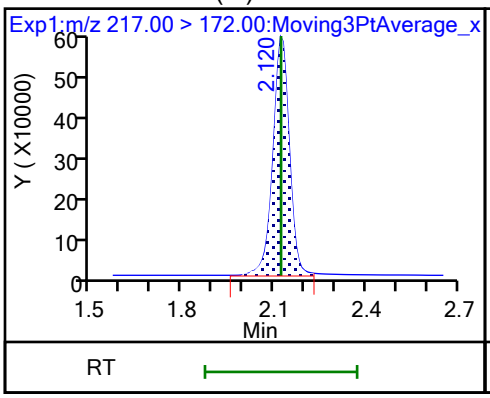
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:34 Chrom Revision: 2.3 18-Oct-2023 21:16:54

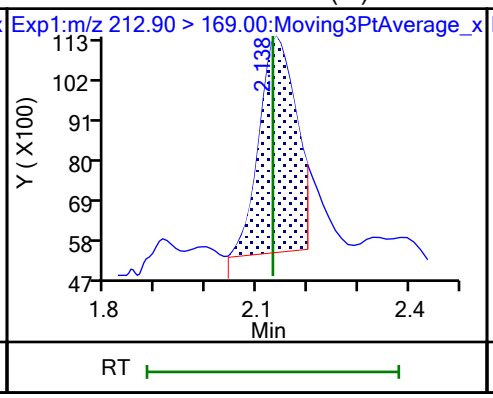
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d
Injection Date: 24-Oct-2023 08:08:24 Instrument ID: LC812
Lims ID: 460-290546-A-1-A Lab Sample ID: 200-290546-1
Client ID: 1000-101623-0002
Operator ID: LC812user ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

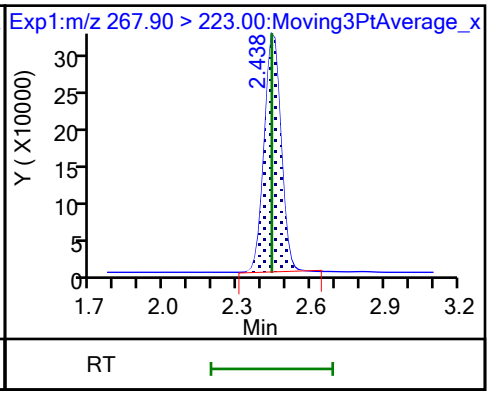
D 1 13C4 PFBA (M)



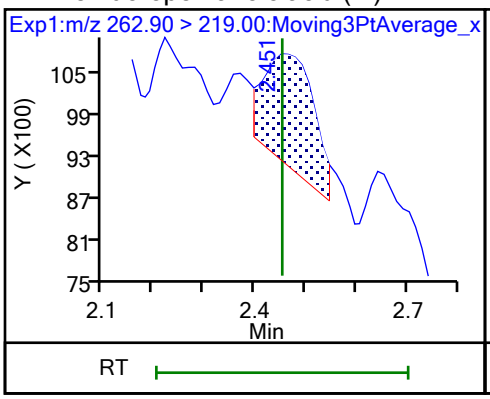
2 Perfluorobutanoic acid (M)



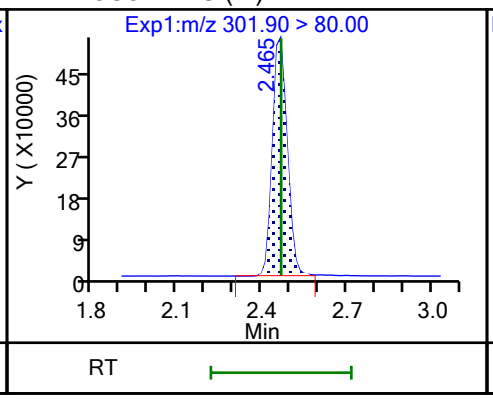
D 3 13C5 PFPeA



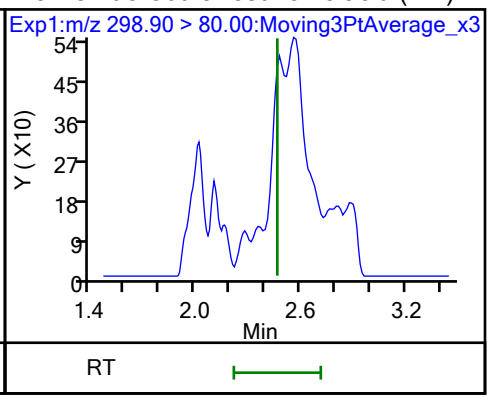
4 Perfluoropentanoic acid (M)



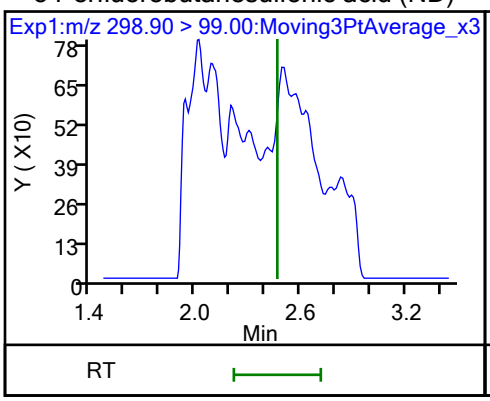
D 47 13C3 PFBS (M)



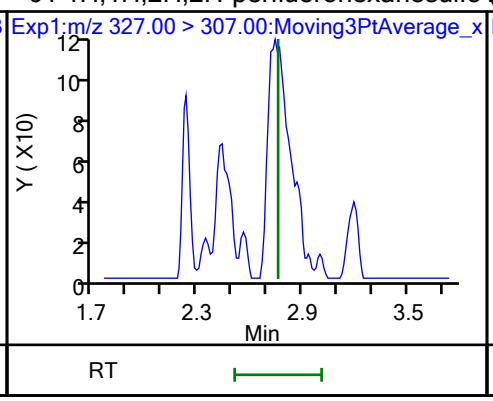
5 Perfluorobutanesulfonic acid (ND)



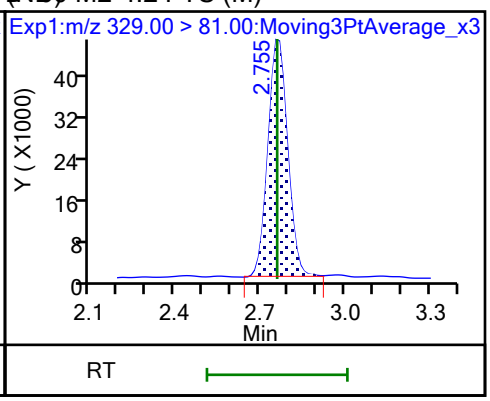
5 Perfluorobutanesulfonic acid (ND)



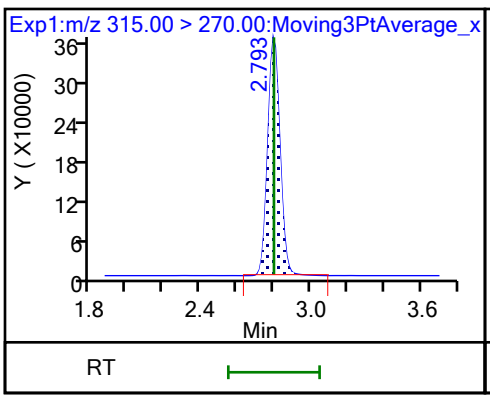
61 1H,1H,2H,2H-perfluorohexanesulfo (ND)



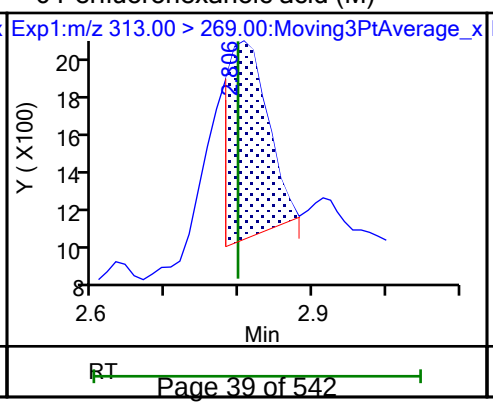
D 60 M2-4:2 FTS (M)



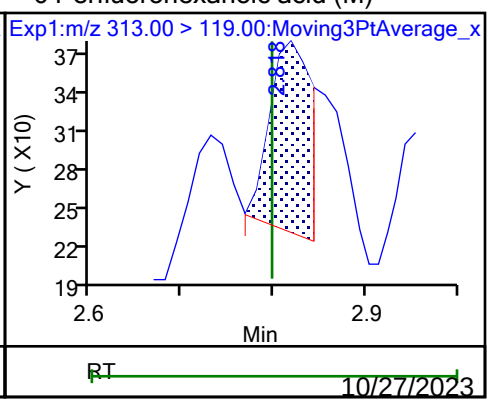
D 7 13C2 PFHxA



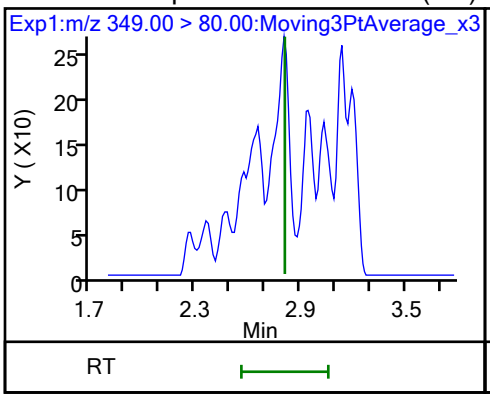
6 Perfluorohexanoic acid (M)



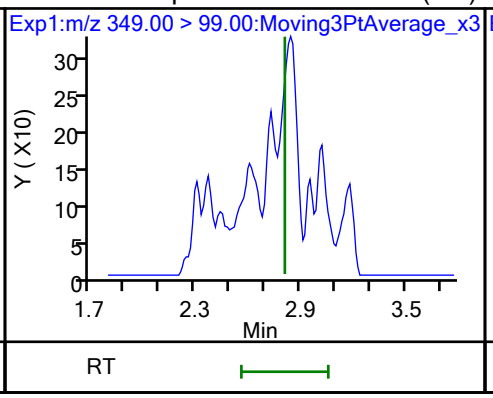
6 Perfluorohexanoic acid (M)



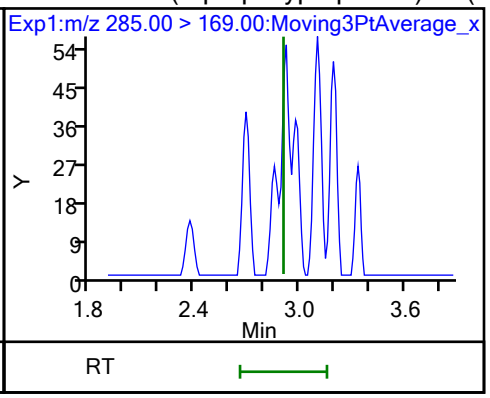
70 Perfluoropentanesulfonic acid (ND)



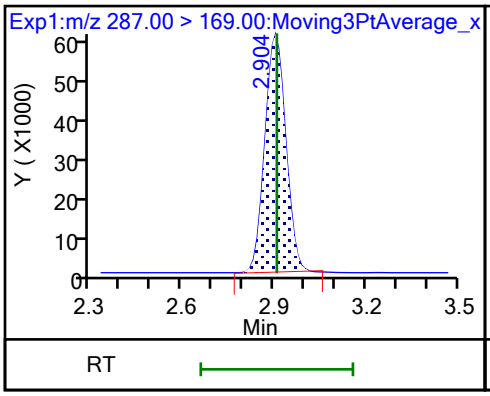
70 Perfluoropentanesulfonic acid (ND)



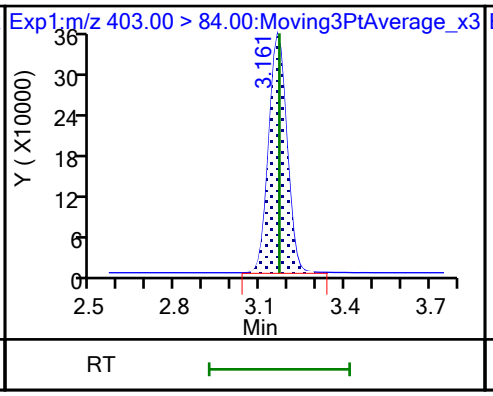
67 Perfluoro(2-propoxypropanoic) ac (ND)



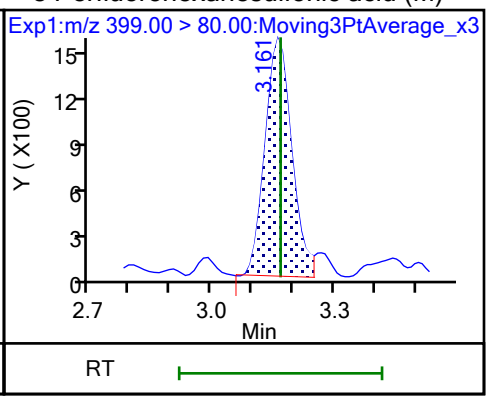
D 64 13C3 HFPO-DA



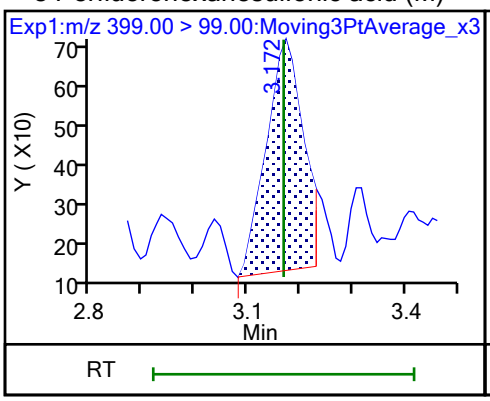
D 11 18O2 PFHxS



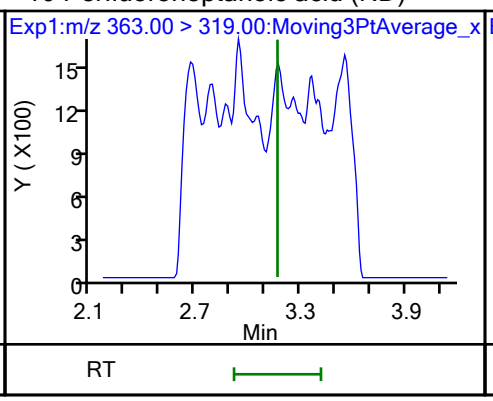
8 Perfluorohexanesulfonic acid (M)



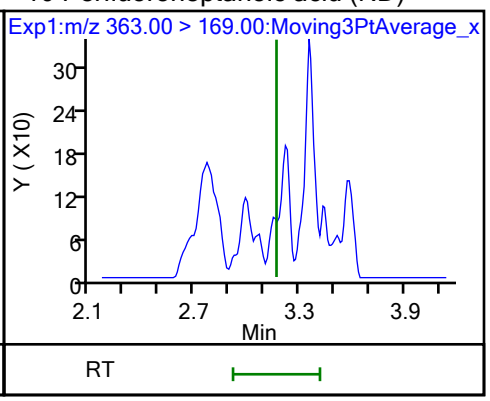
8 Perfluorohexanesulfonic acid (M)



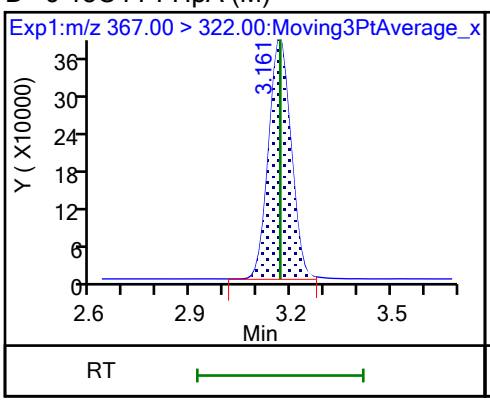
10 Perfluoroheptanoic acid (ND)



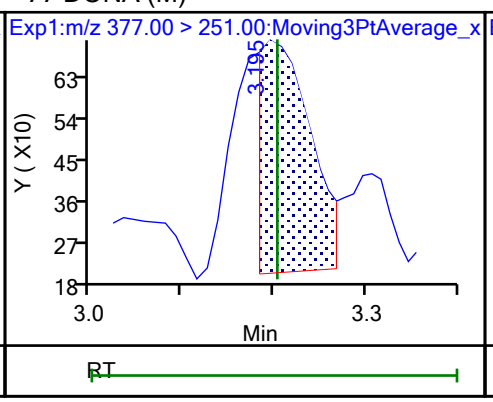
10 Perfluoroheptanoic acid (ND)



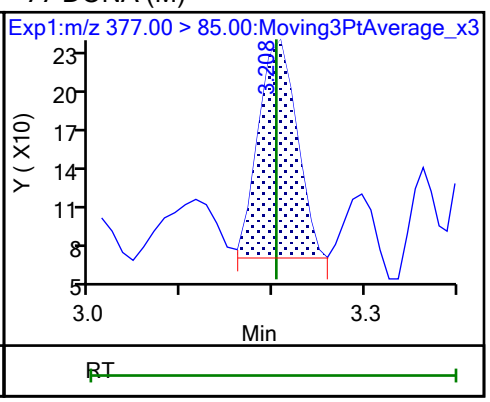
D 9 13C4 PFHpA (M)



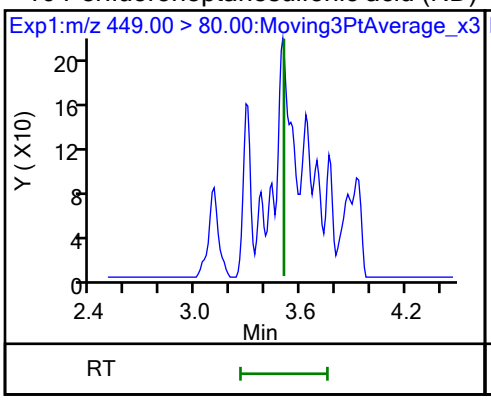
77 DONA (M)



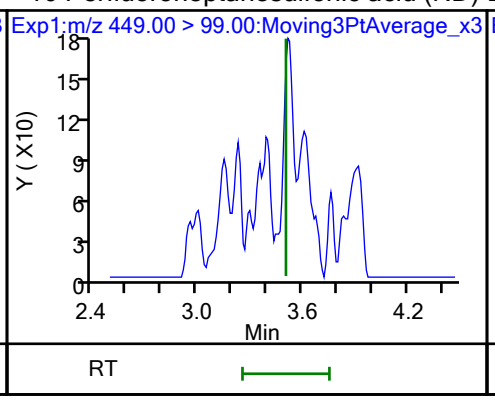
77 DONA (M)



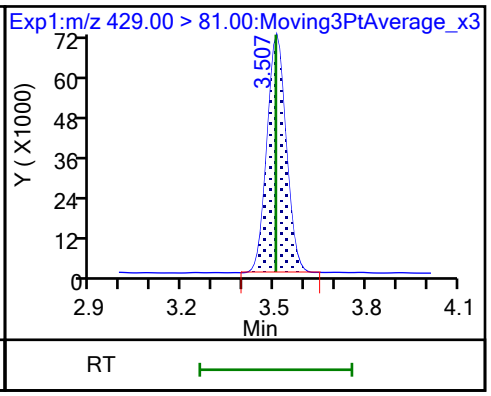
16 Perfluoroheptanesulfonic acid (ND)



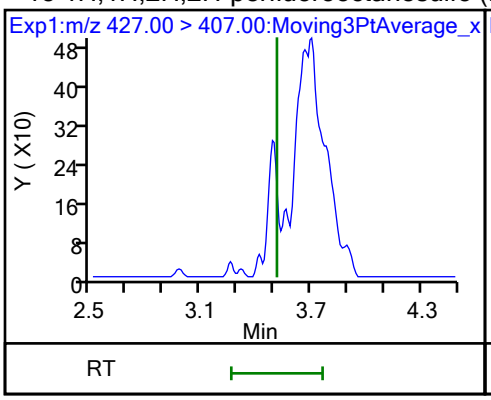
16 Perfluoroheptanesulfonic acid (ND)



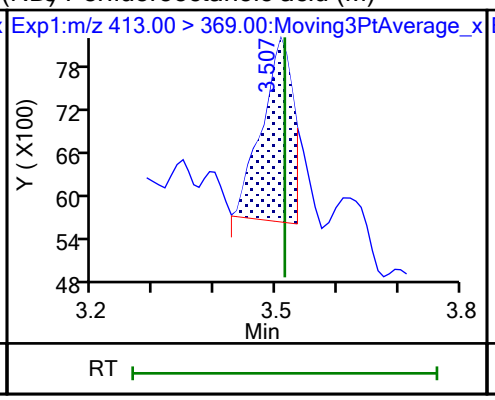
D 12 M2-6:2 FTS



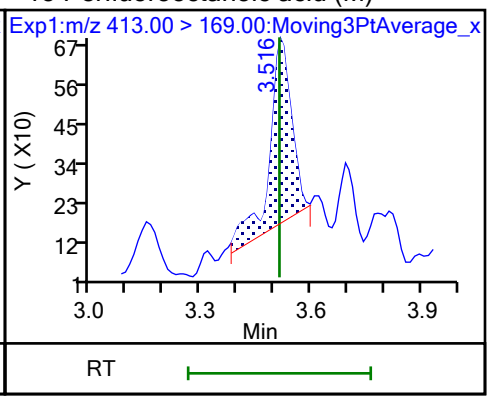
13 1H,1H,2H,2H-perfluorooctanesulfo (ND)



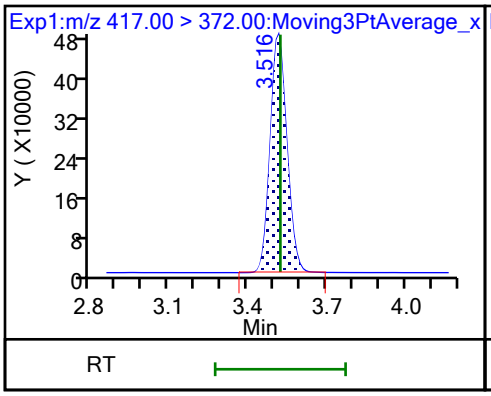
D 5 Perfluorooctanoic acid (M)



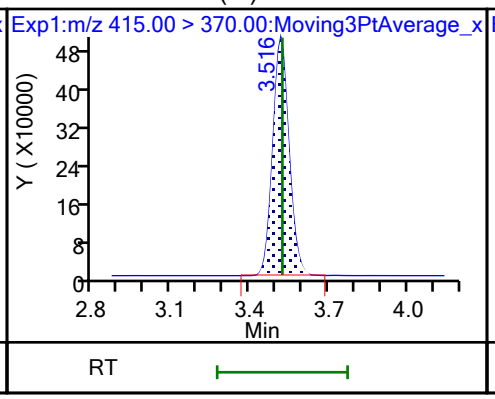
15 Perfluorooctanoic acid (M)



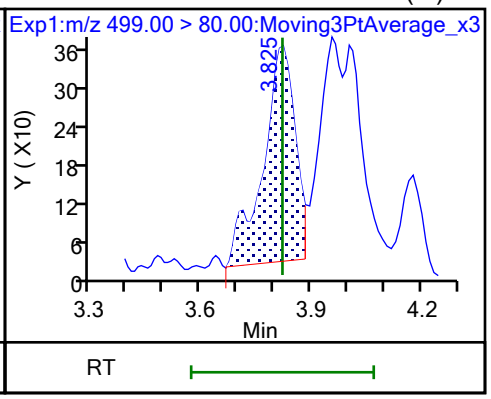
D 14 13C4 PFOA



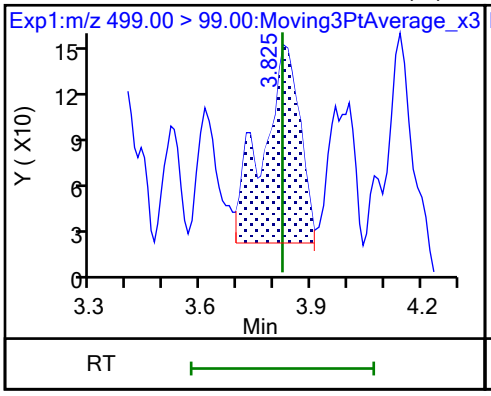
* 62 13C2 PFOA (M)



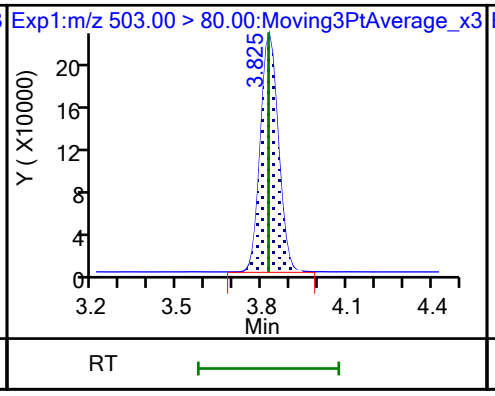
17 Perfluorooctanesulfonic acid (M)



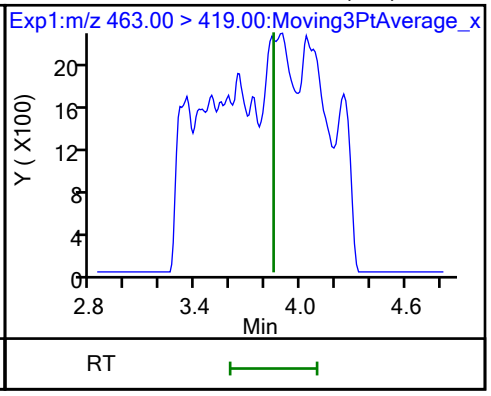
17 Perfluorooctanesulfonic acid (M)



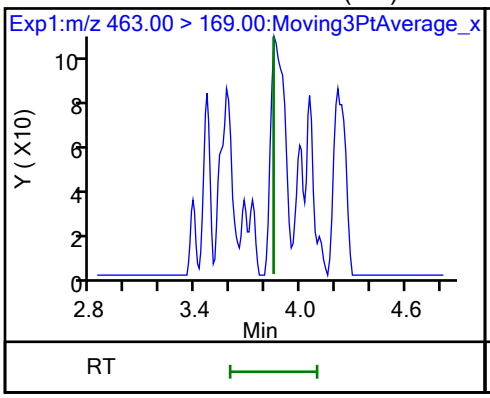
D 18 13C4 PFOS



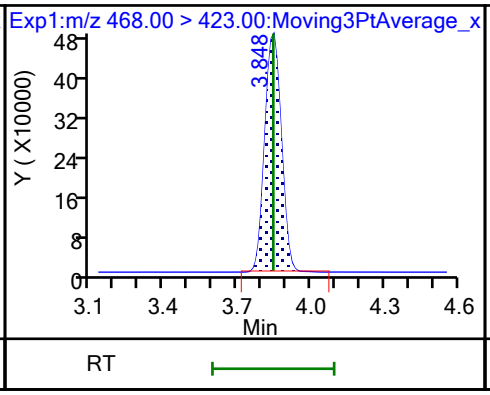
20 Perfluorononanoic acid (ND)



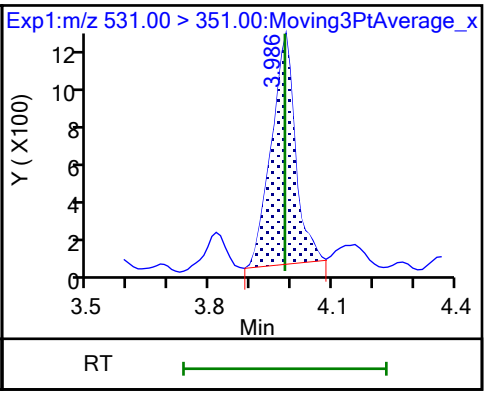
20 Perfluorononanoic acid (ND)



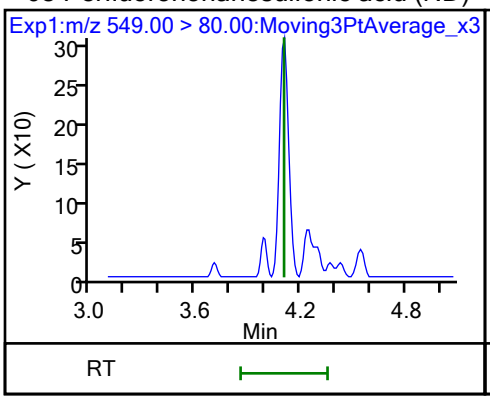
D 19 13C5 PFNA



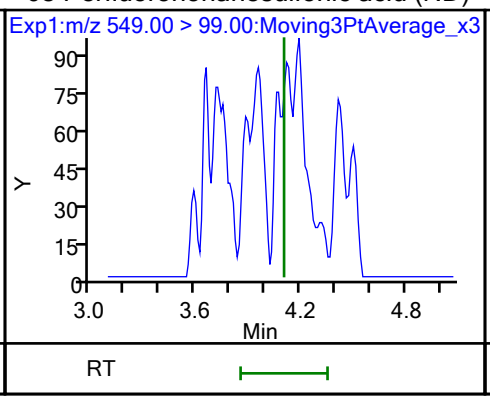
69 9-Chlorohexadecafluoro-3-oxanona (M)



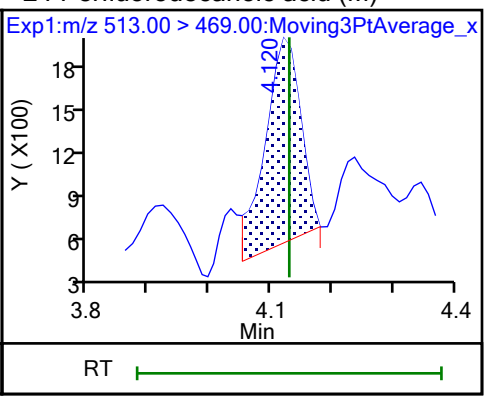
68 Perfluorononanesulfonic acid (ND)



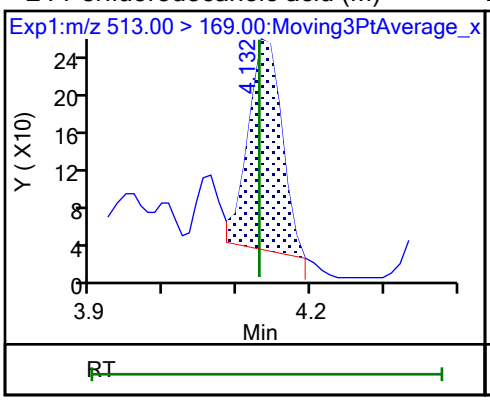
68 Perfluorononanesulfonic acid (ND)



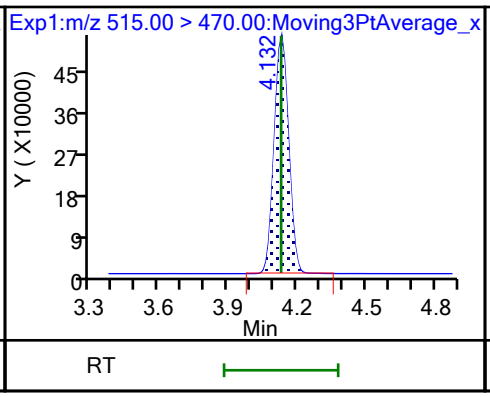
24 Perfluorodecanoic acid (M)



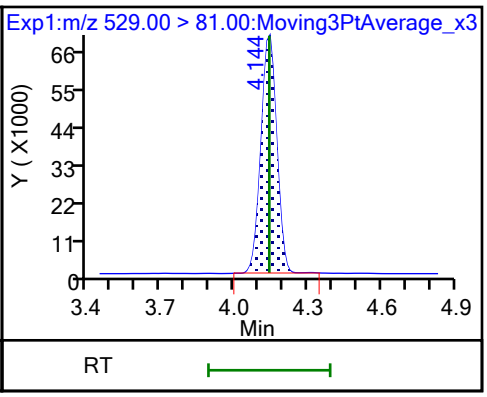
24 Perfluorodecanoic acid (M)



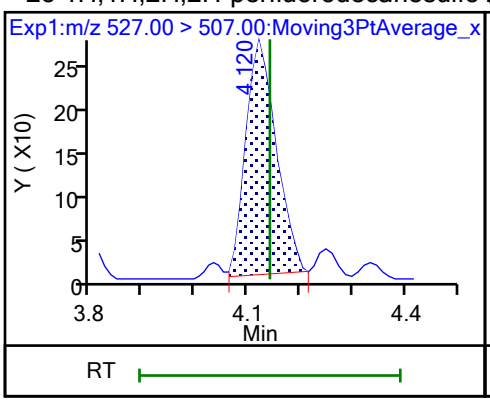
D 23 13C2 PFDA



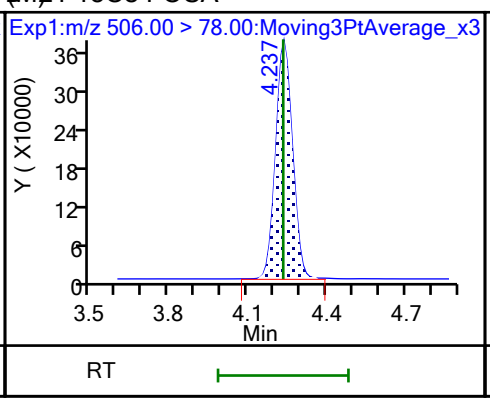
D 26 M2-8:2 FTS



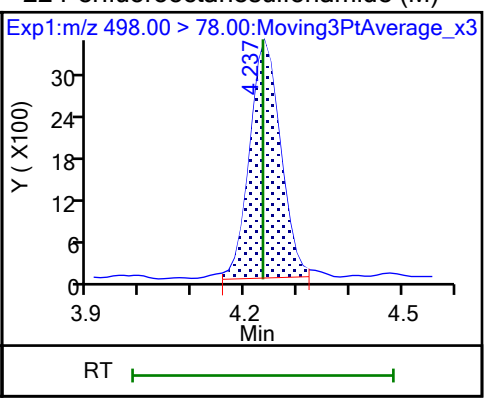
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



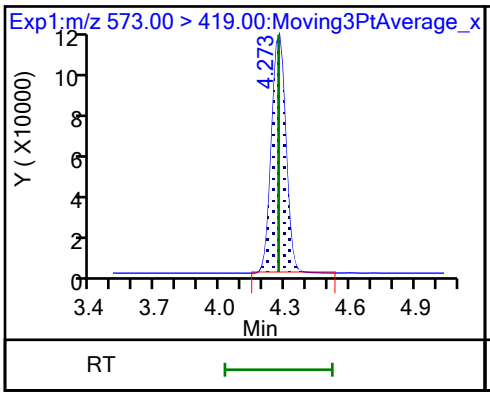
D 21 13C8 FOSA



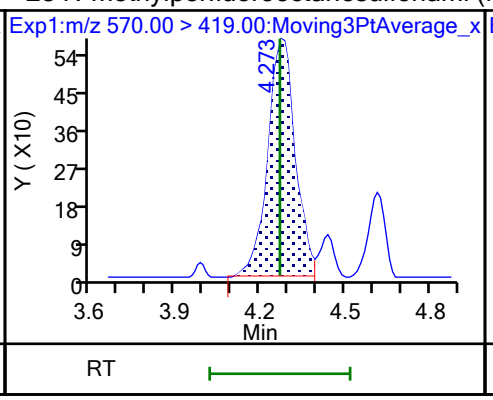
22 Perfluorooctanesulfonamide (M)



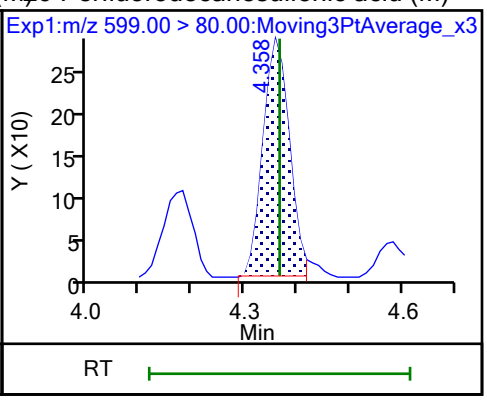
D 27 d3-NMeFOSAA



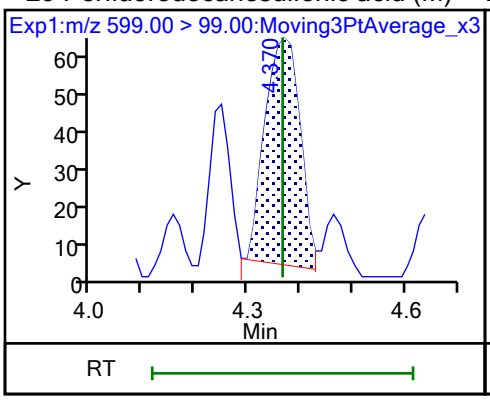
28 N-methylperfluorooctanesulfonami (M)



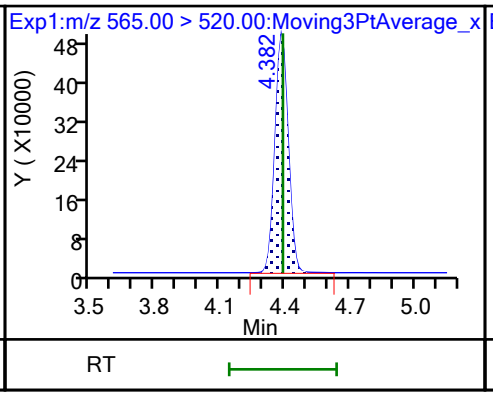
29 Perfluorodecanesulfonic acid (M)



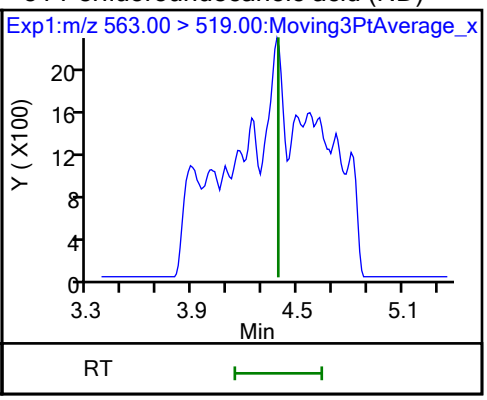
29 Perfluorodecanesulfonic acid (M)



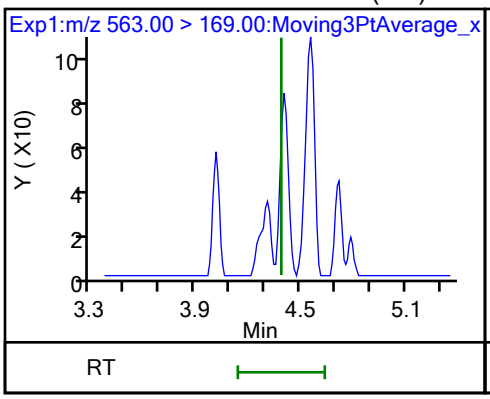
D 30 13C2 PFUnA



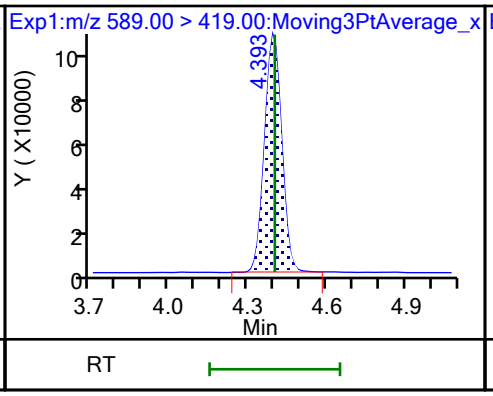
31 Perfluoroundecanoic acid (ND)



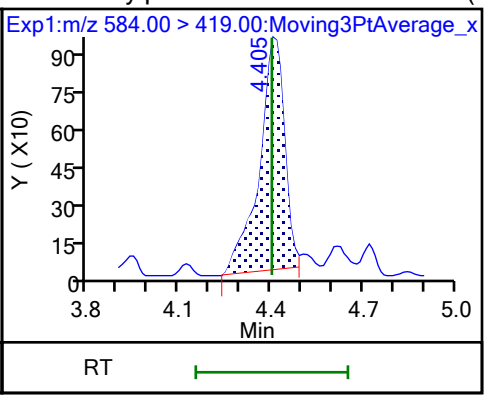
31 Perfluoroundecanoic acid (ND)



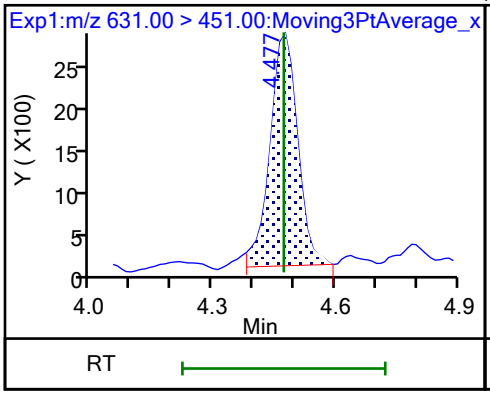
D 32 d5-NEtFOSAA



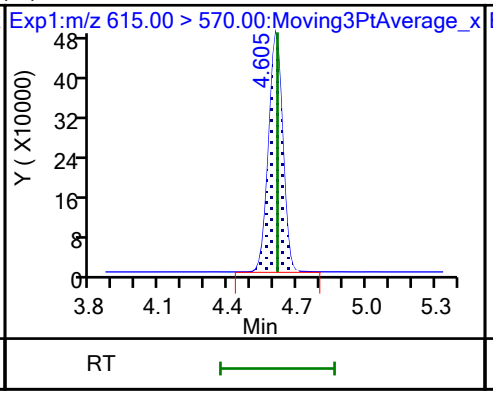
33 N-ethylperfluorooctanesulfonamid (M)



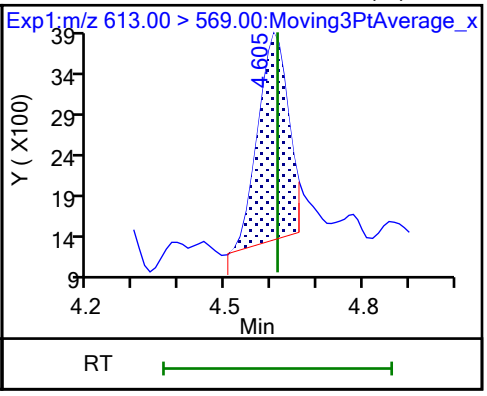
66 11-Chloroeicosafluoro-3-oxaundec (M)



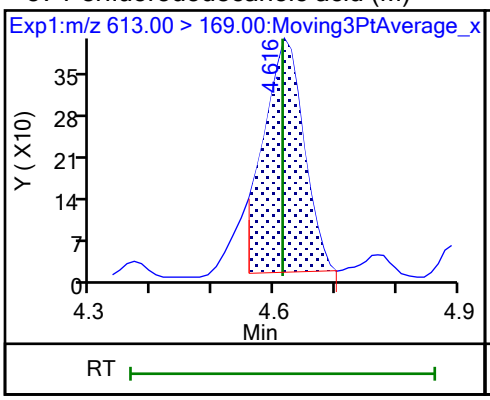
D 36 13C2 PFDoA



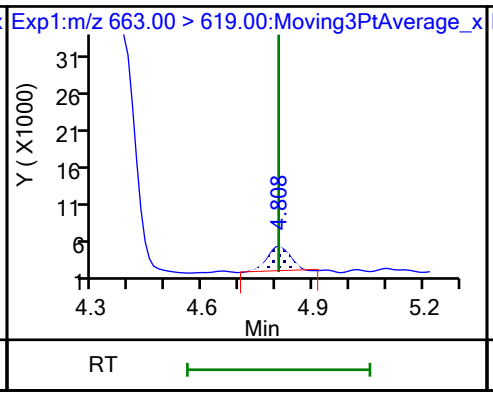
37 Perfluorododecanoic acid (M)



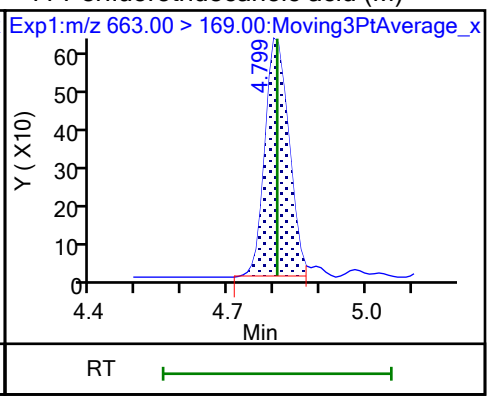
37 Perfluorododecanoic acid (M)



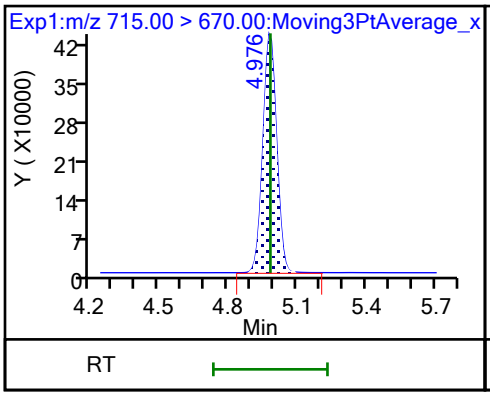
41 Perfluorotridecanoic acid



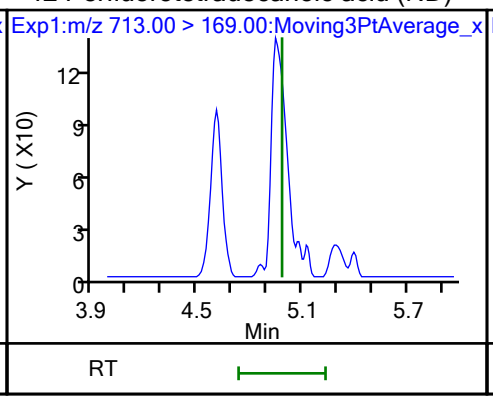
41 Perfluorotridecanoic acid (M)



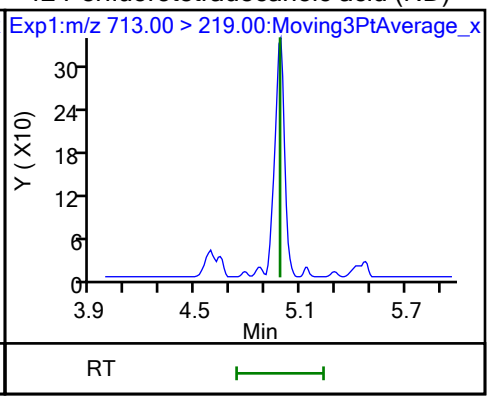
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

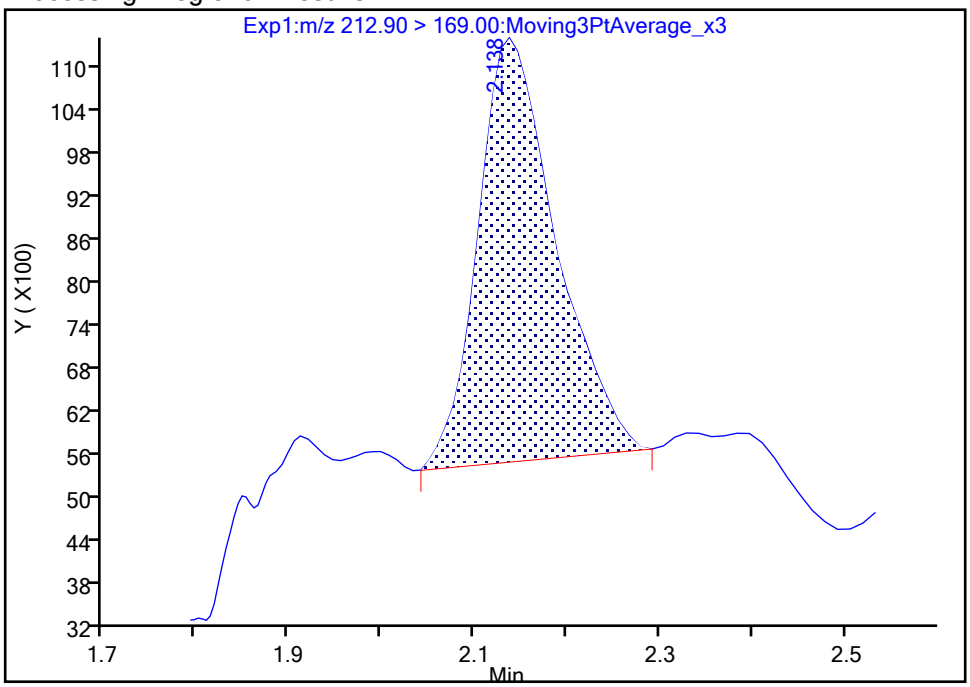
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

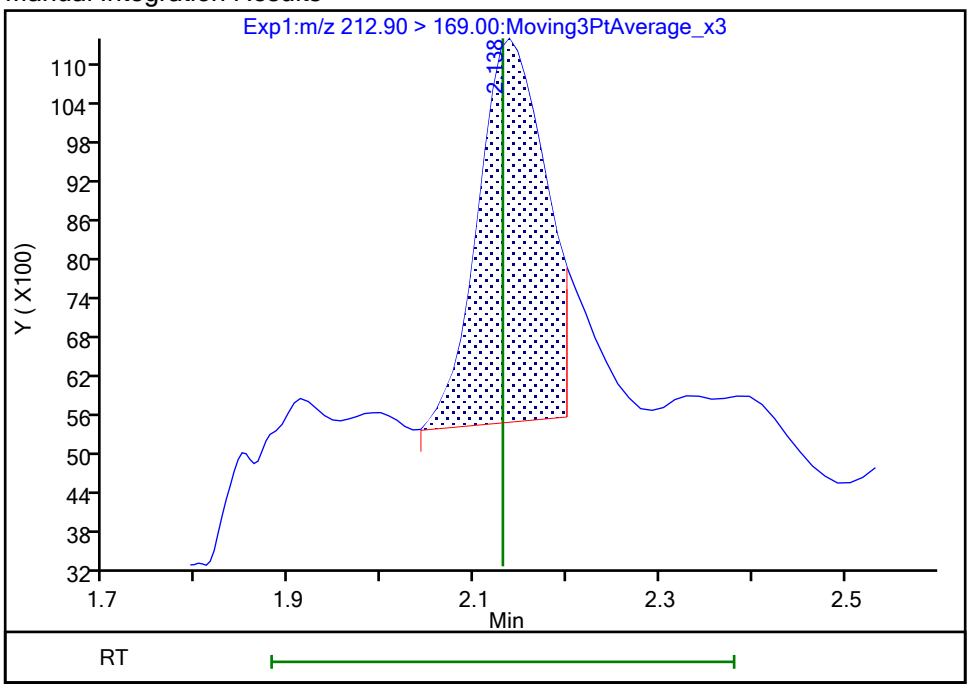
Processing Integration Results

RT: 2.14
Area: 34753
Amount: -0.018977
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 29963
Amount: -0.021996
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

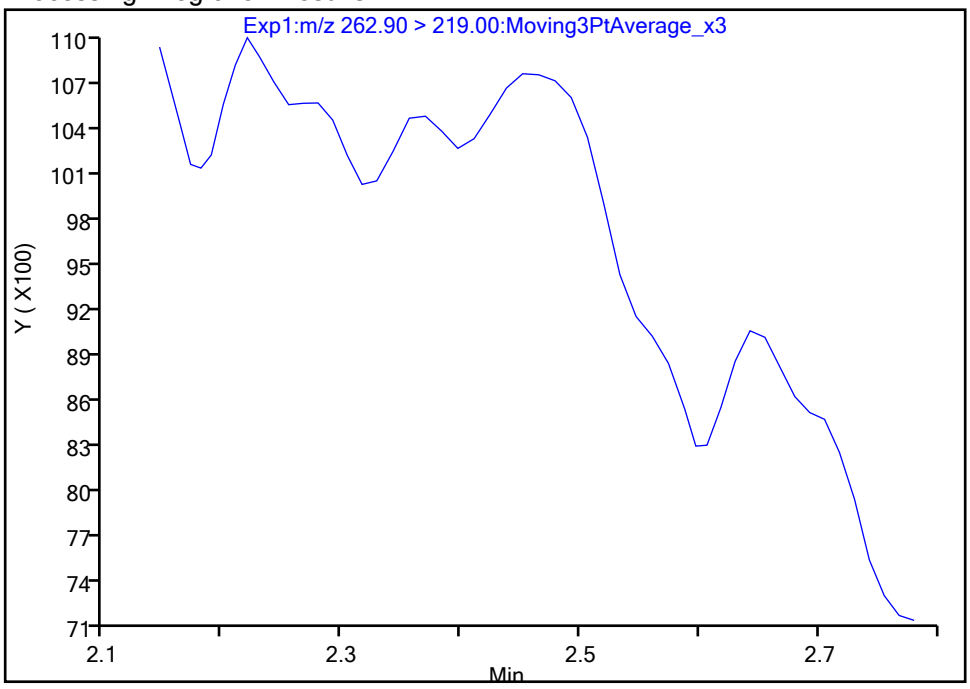
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

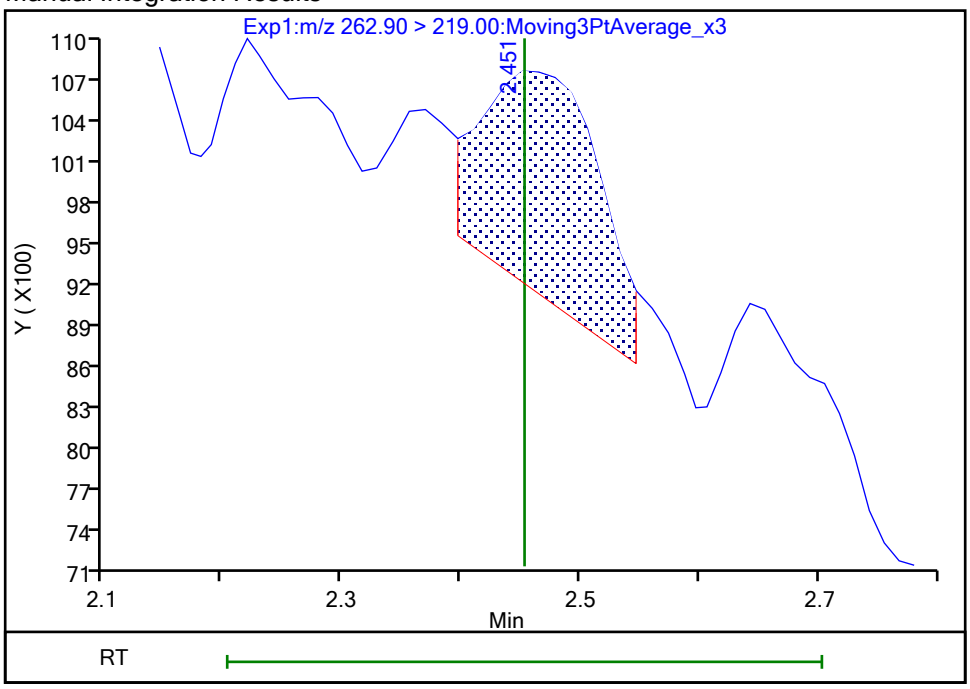
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.45
Area: 11039
Amount: 0.008209
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

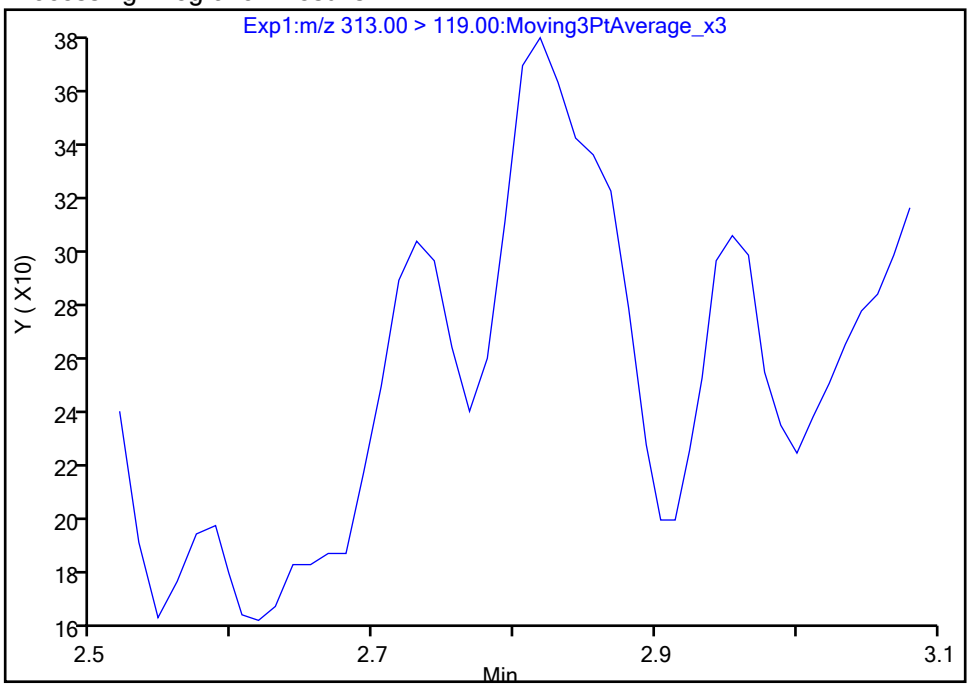
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

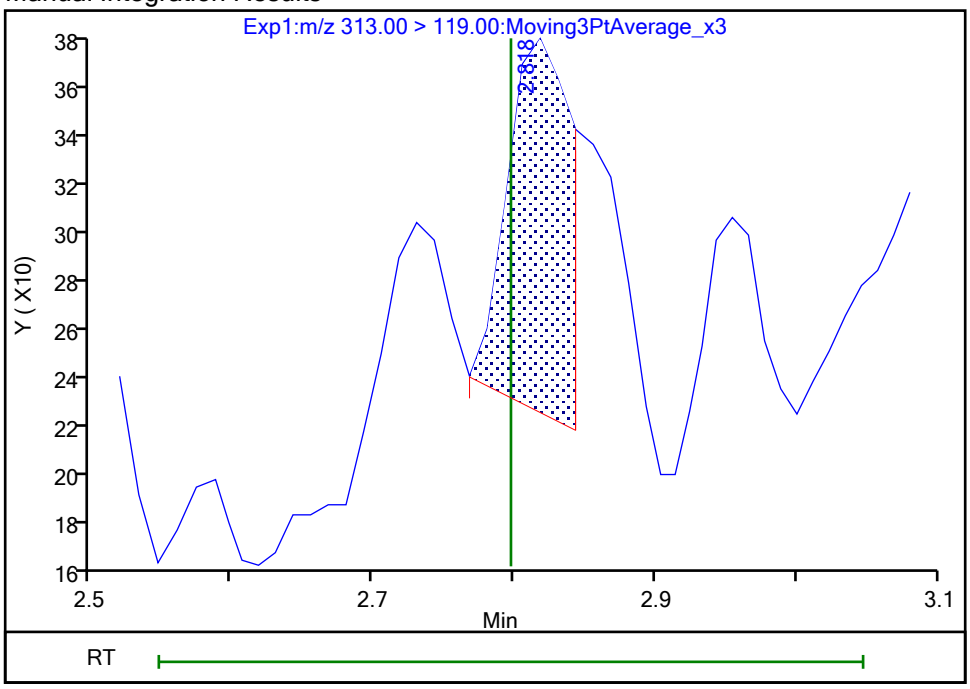
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.82
Area: 432
Amount: 0.002461
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:52 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

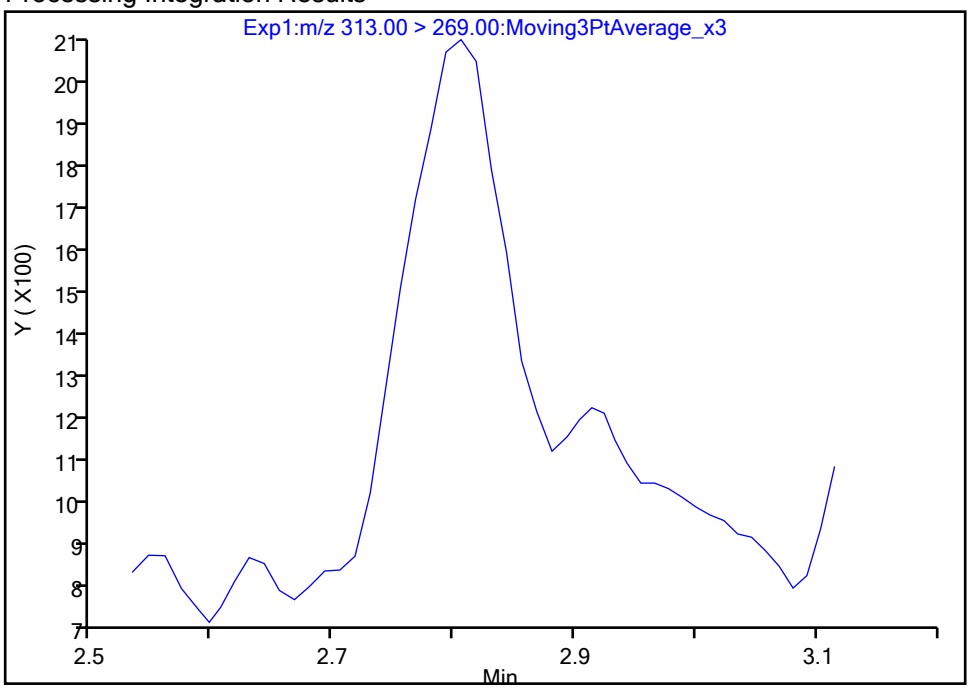
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

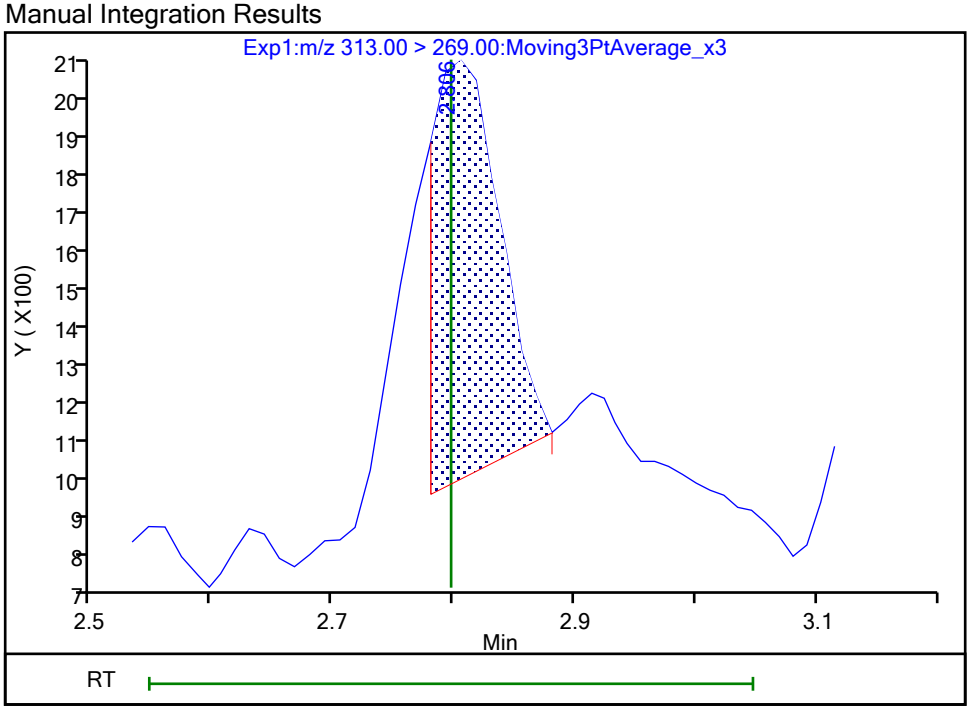
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.81
Area: 3662
Amount: 0.002461
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

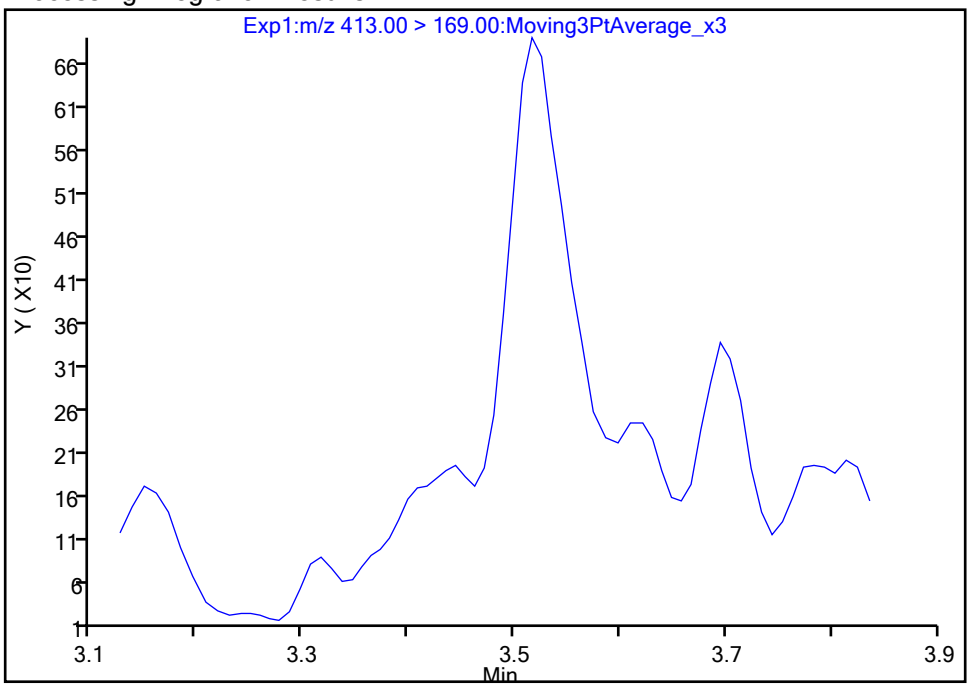
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

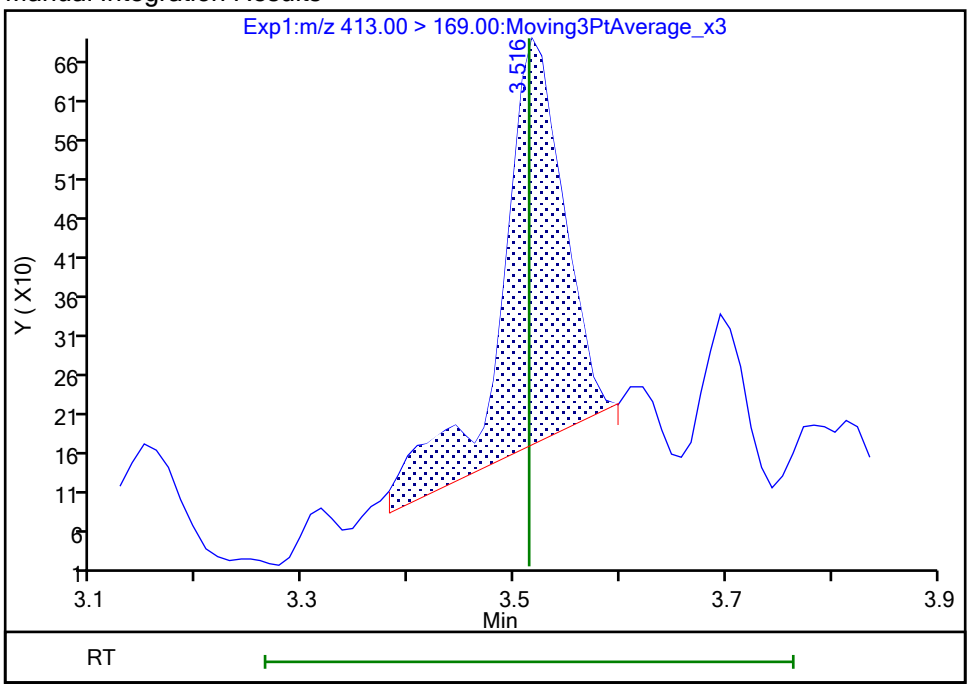
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.52
Area: 2146
Amount: 0.004694
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:11:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

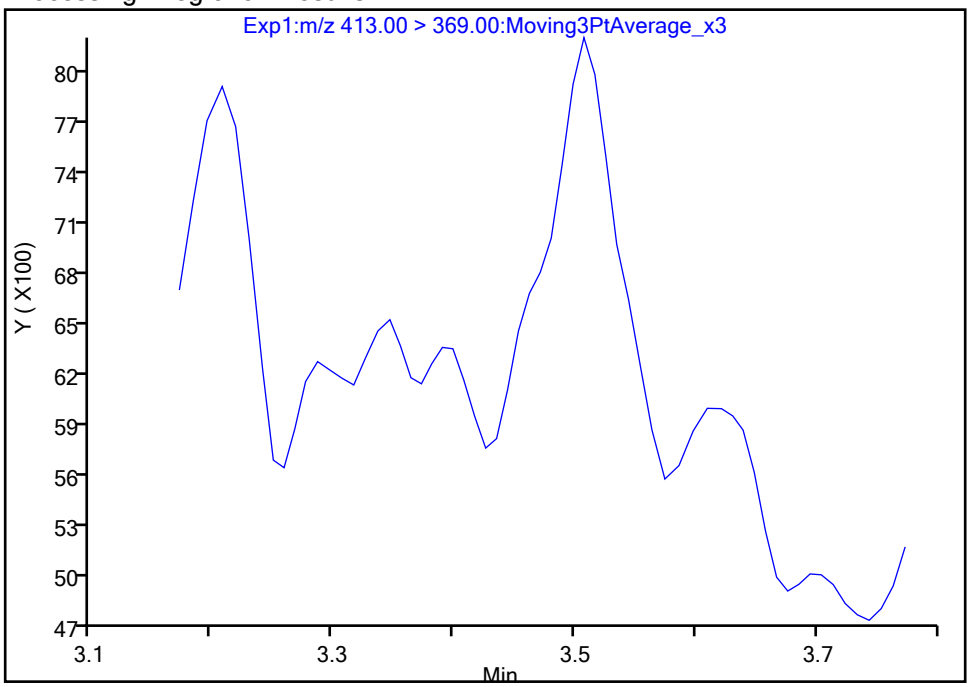
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

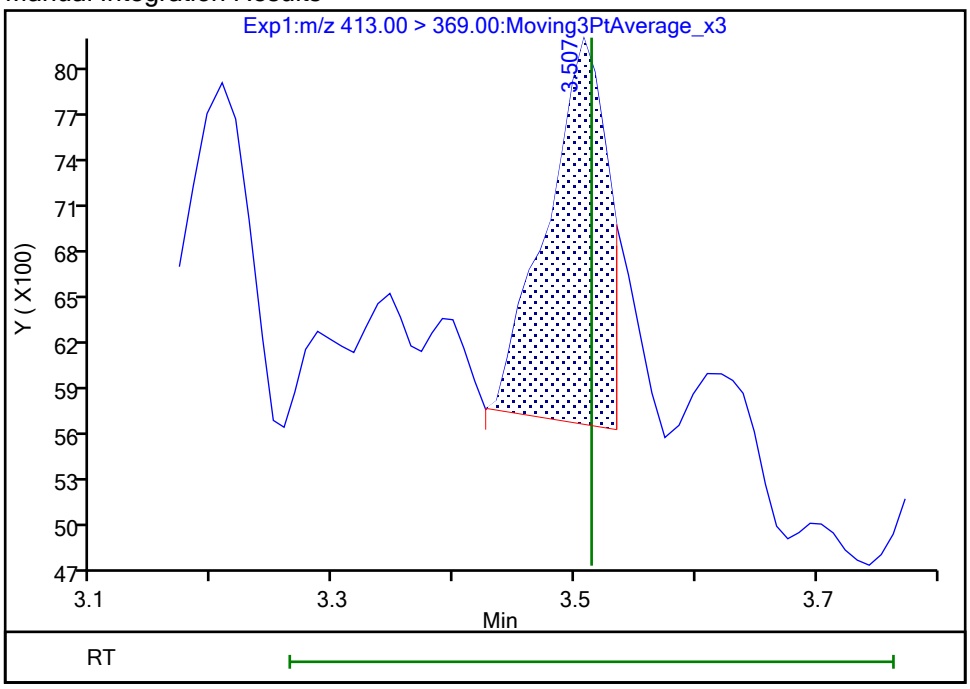
Not Detected
Expected RT: 3.51

Processing Integration Results



Manual Integration Results

RT: 3.51
Area: 8635
Amount: 0.004694
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:11:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

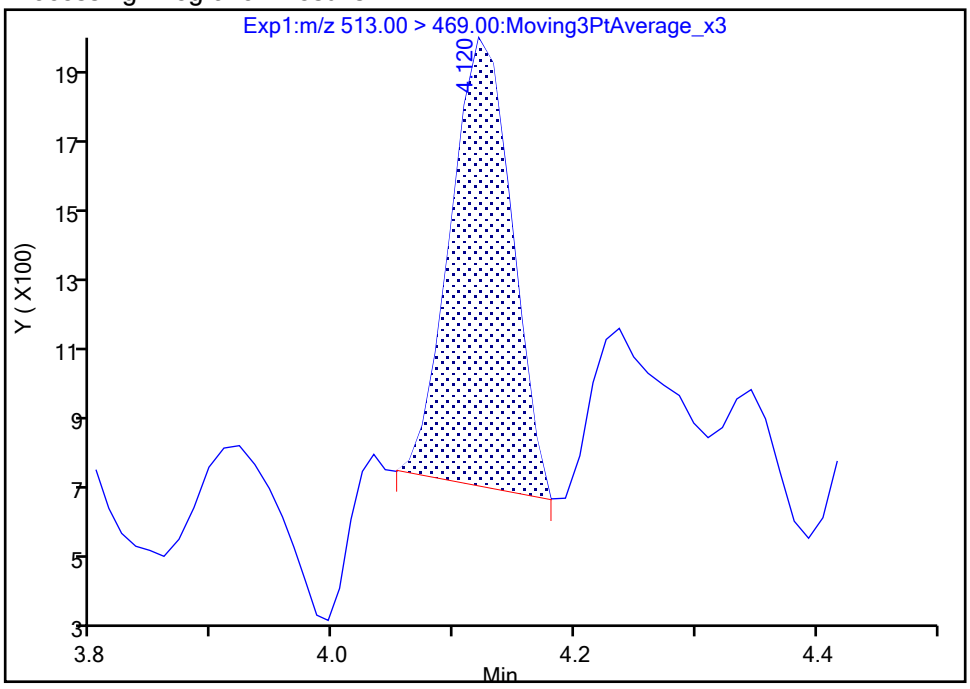
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

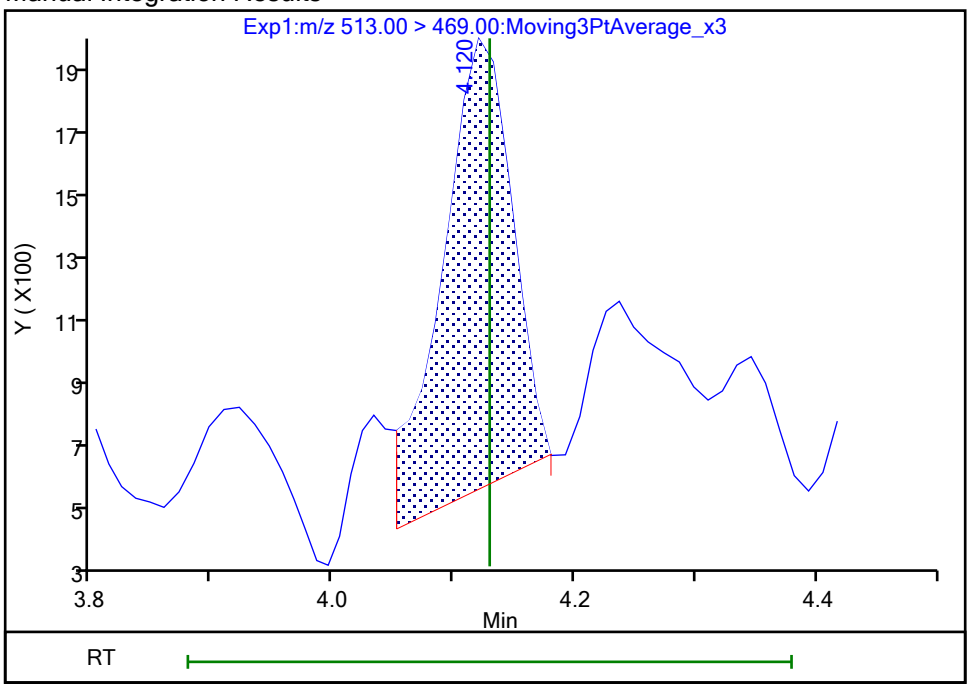
Processing Integration Results

RT: 4.12
Area: 4570
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 5772
Amount: 0.003121
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:12:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

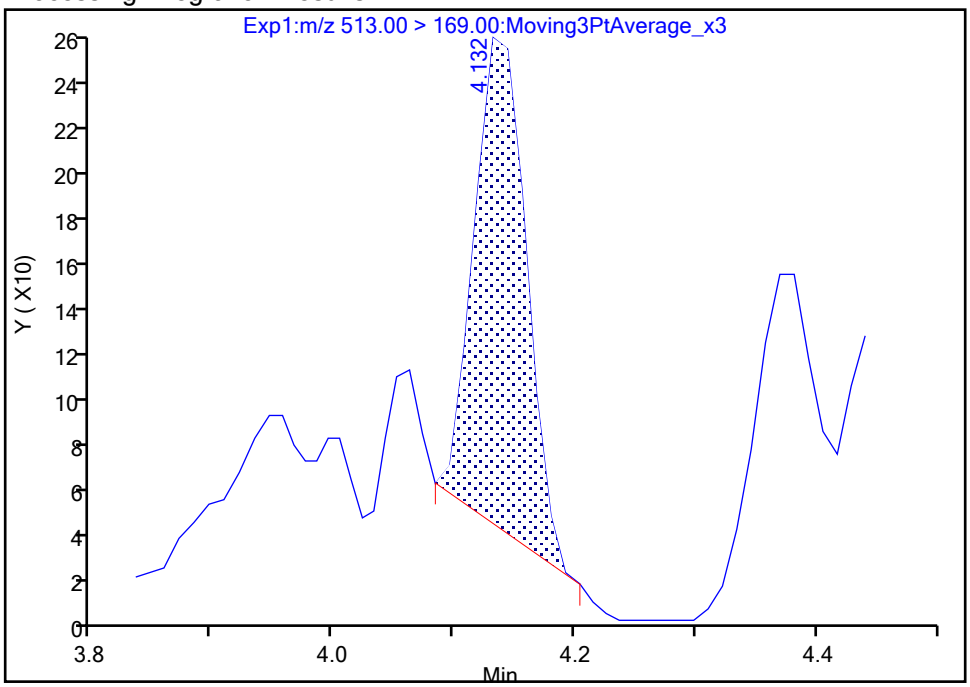
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

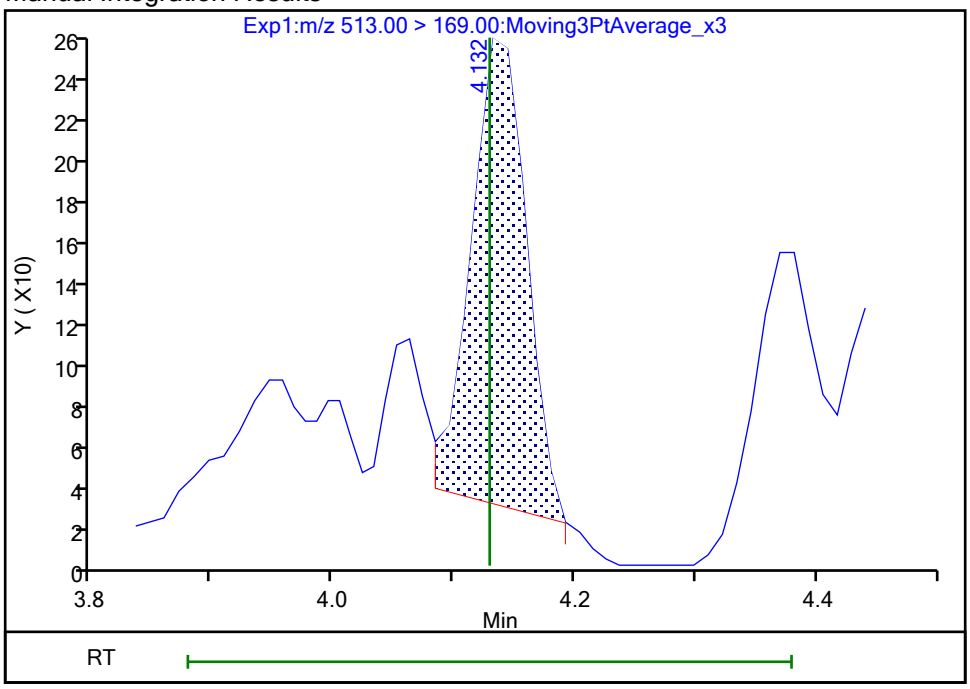
Processing Integration Results

RT: 4.13
Area: 648
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 720
Amount: 0.003121
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:12:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

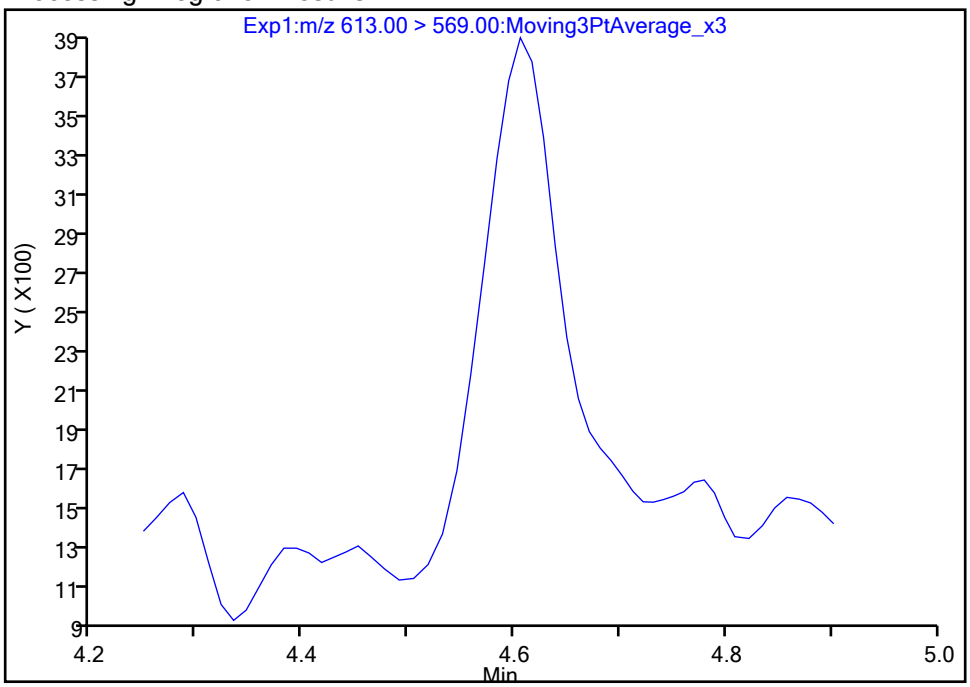
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

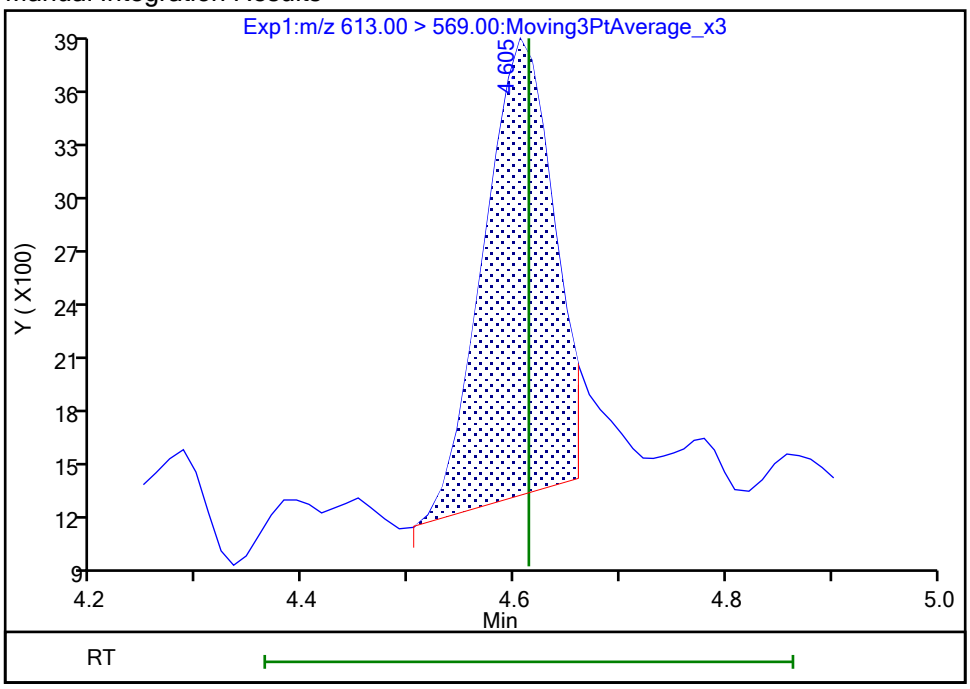
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 11470
Amount: 0.006799
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:40 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

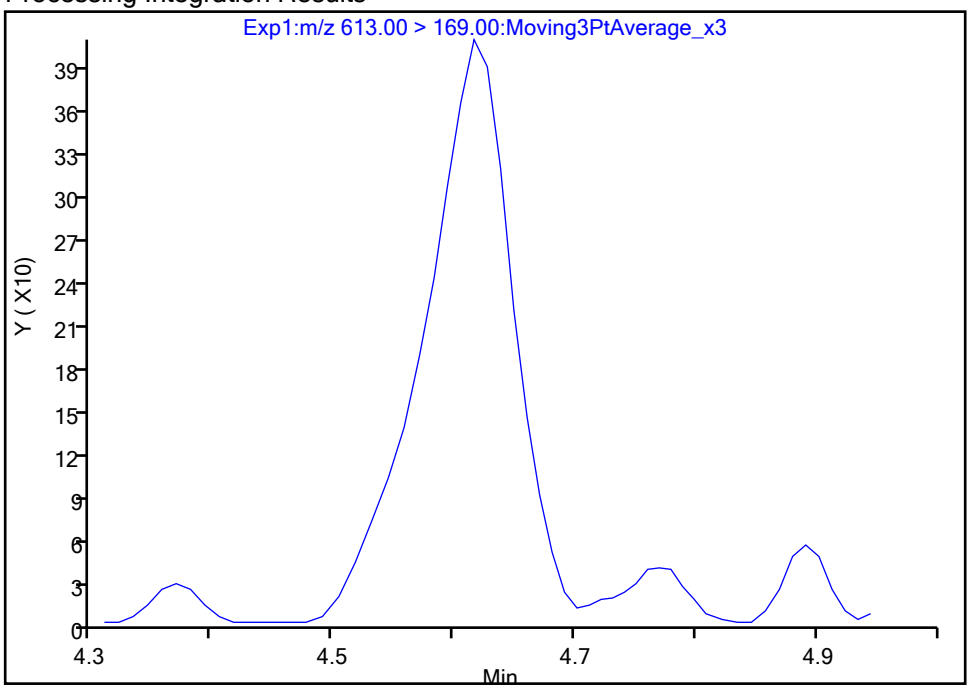
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

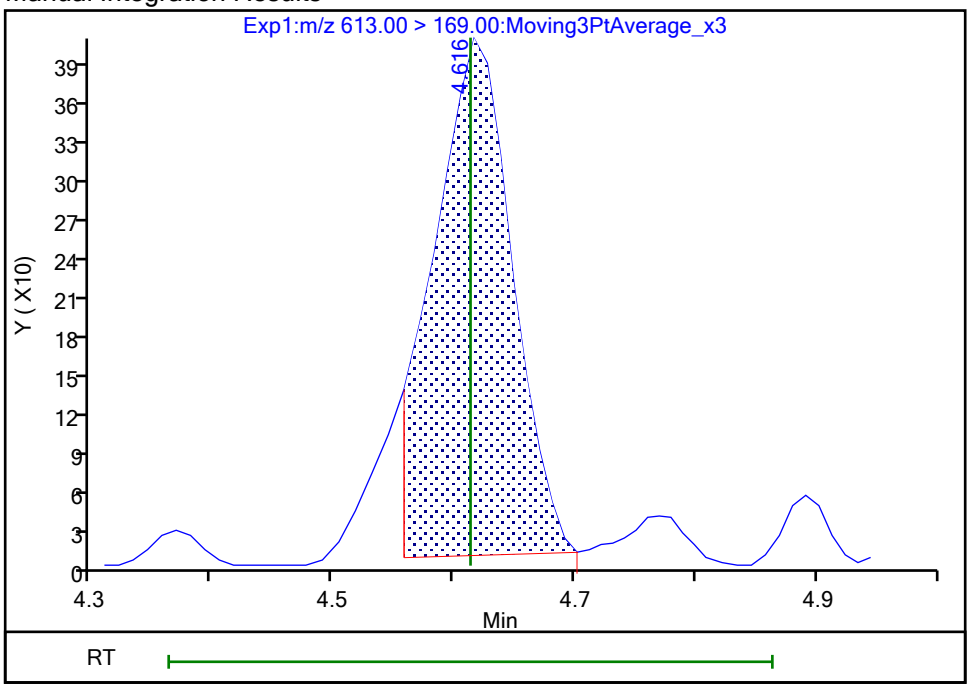
Processing Integration Results

Not Detected
Expected RT: 4.61



Manual Integration Results

RT: 4.62
Area: 1806
Amount: 0.006799
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

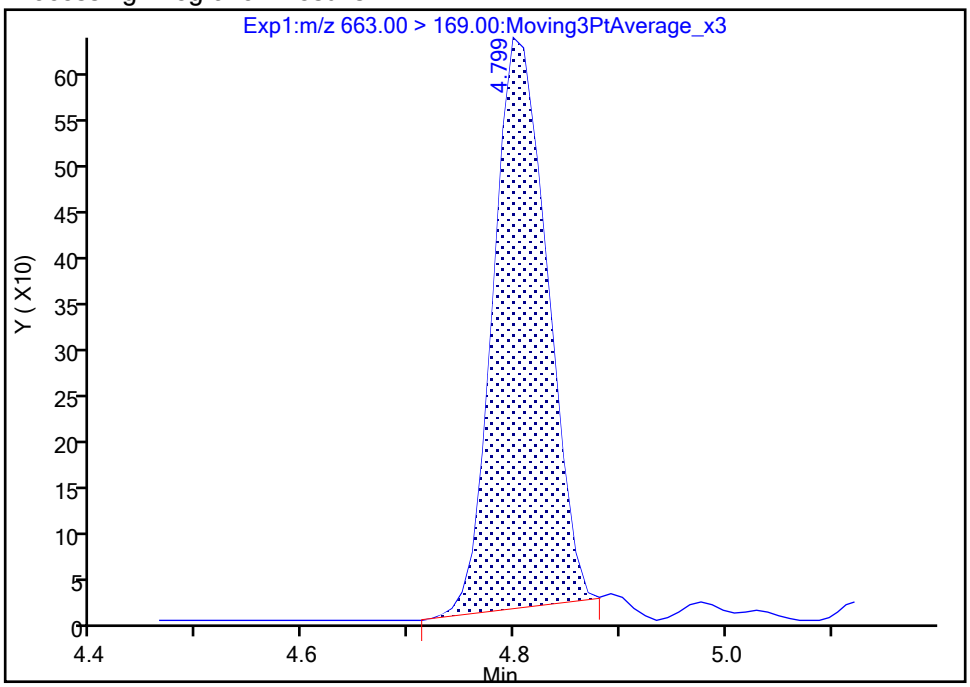
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

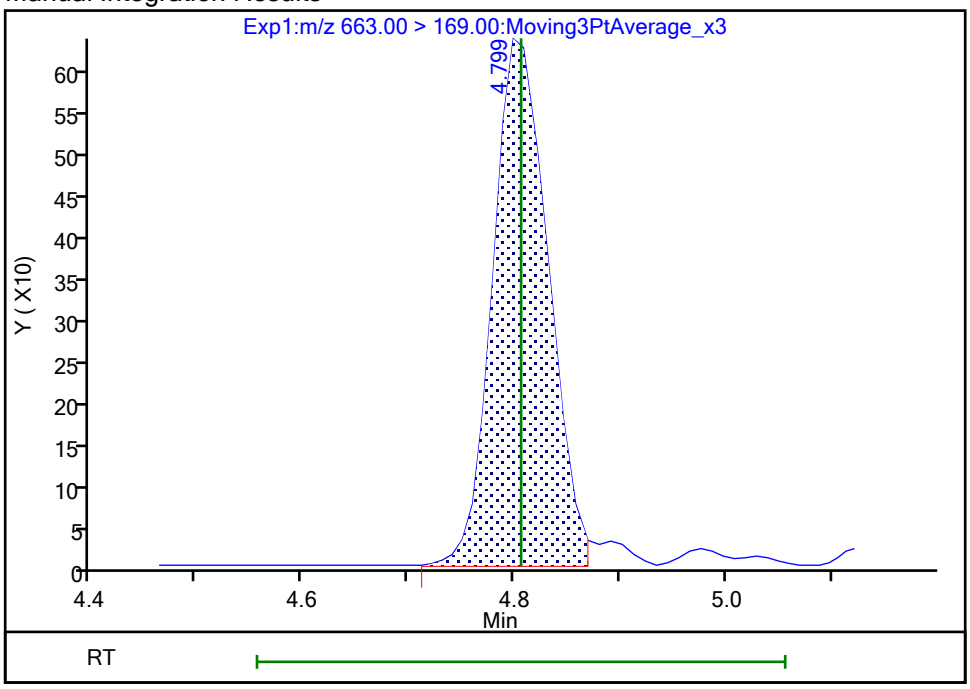
Processing Integration Results

RT: 4.80
Area: 2192
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 2300
Amount: 0.008605
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

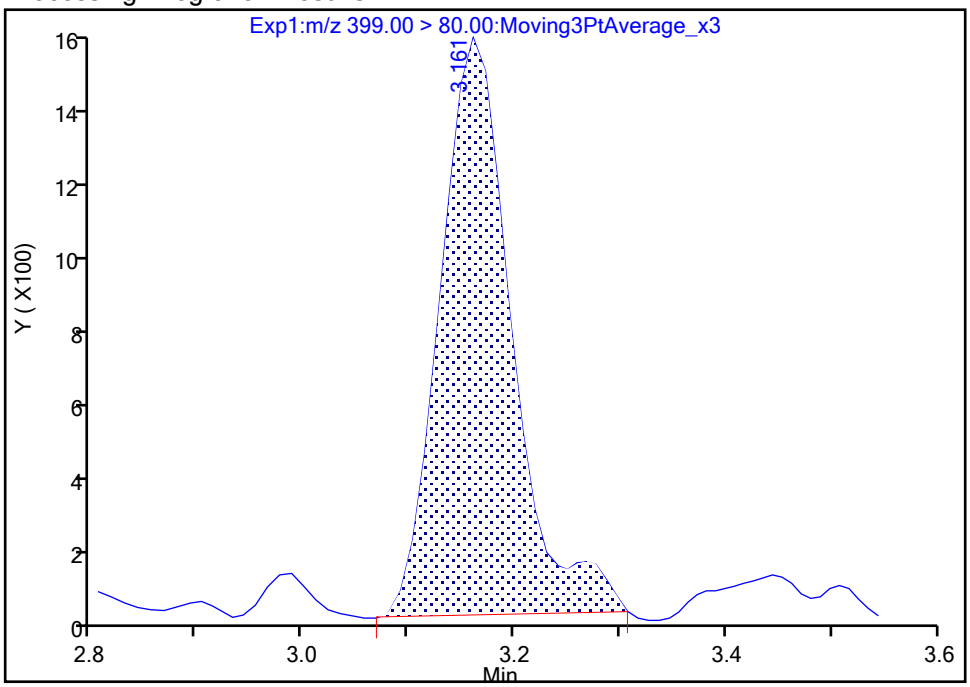
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

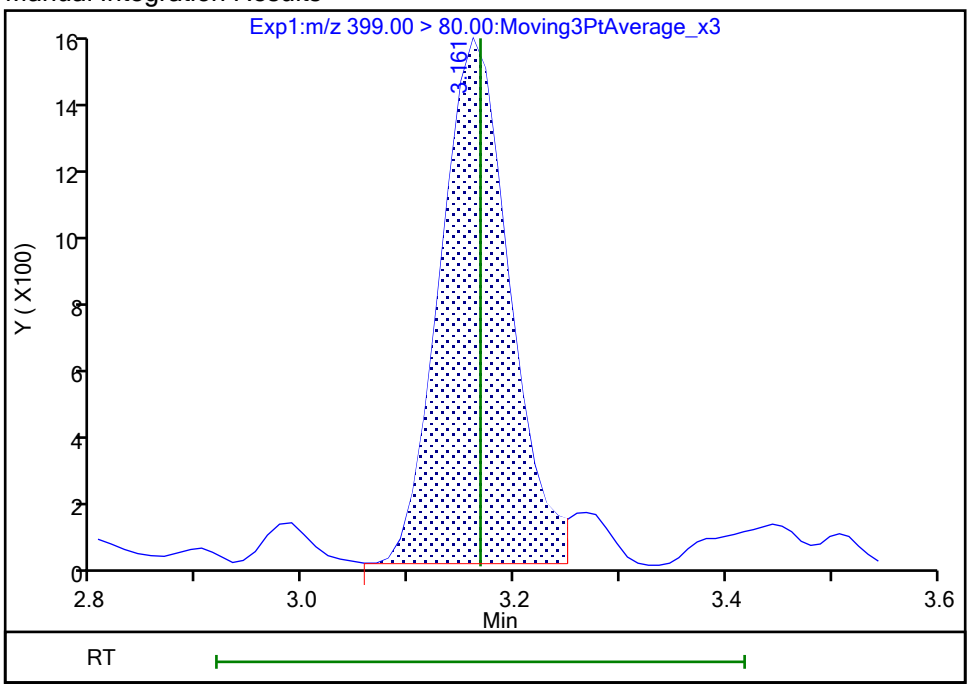
Processing Integration Results

RT: 3.16
Area: 7210
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 6989
Amount: 0.004741
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:10:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

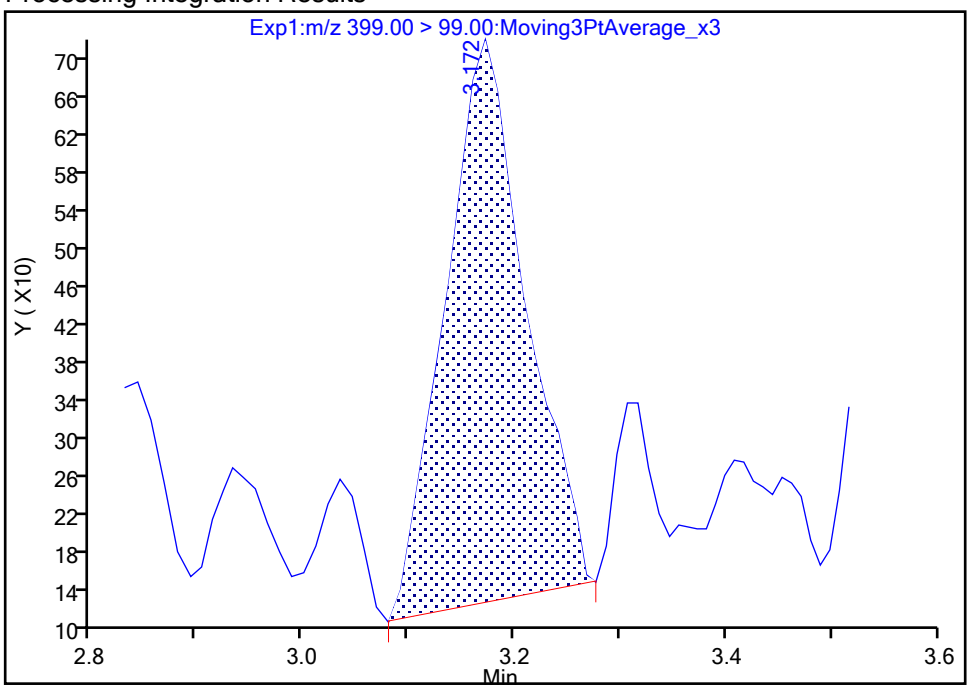
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

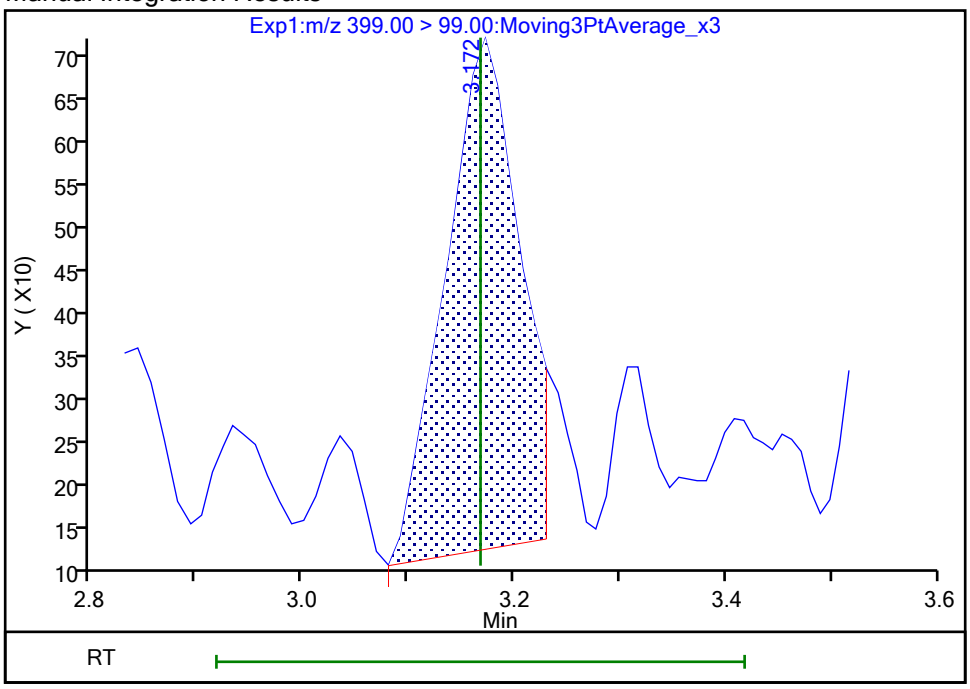
Processing Integration Results

RT: 3.17
Area: 3142
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 2876
Amount: 0.004741
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:10:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

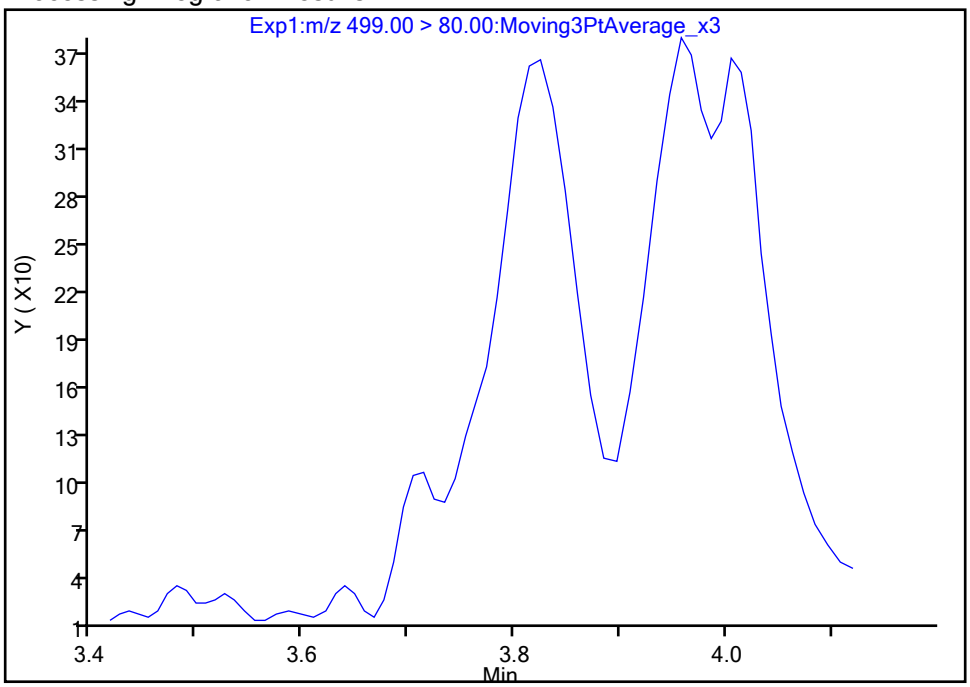
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

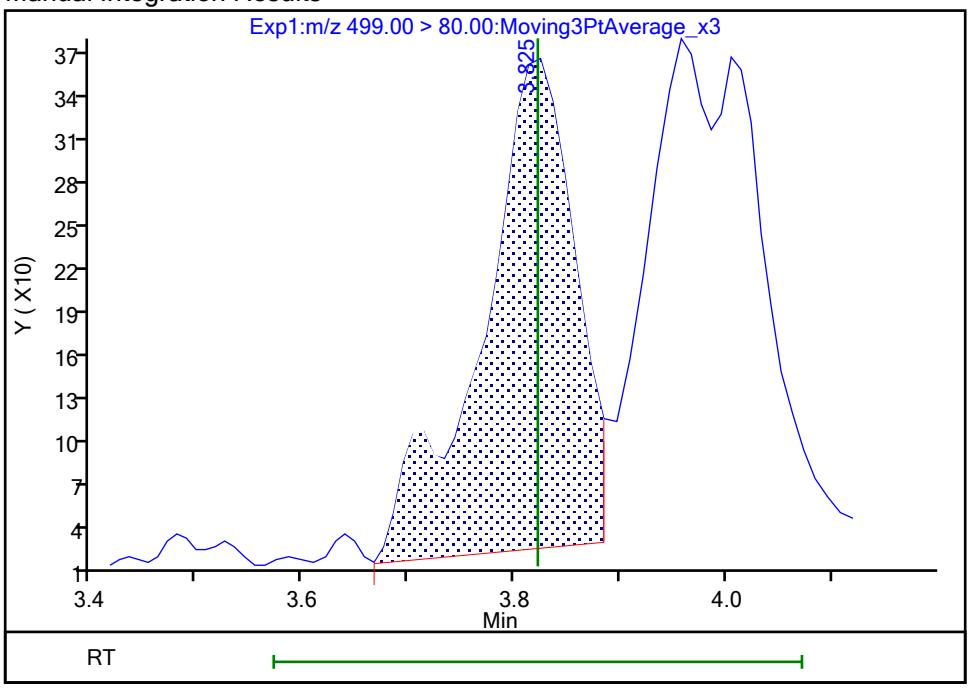
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.82
Area: 2103
Amount: 0.002209
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:11:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

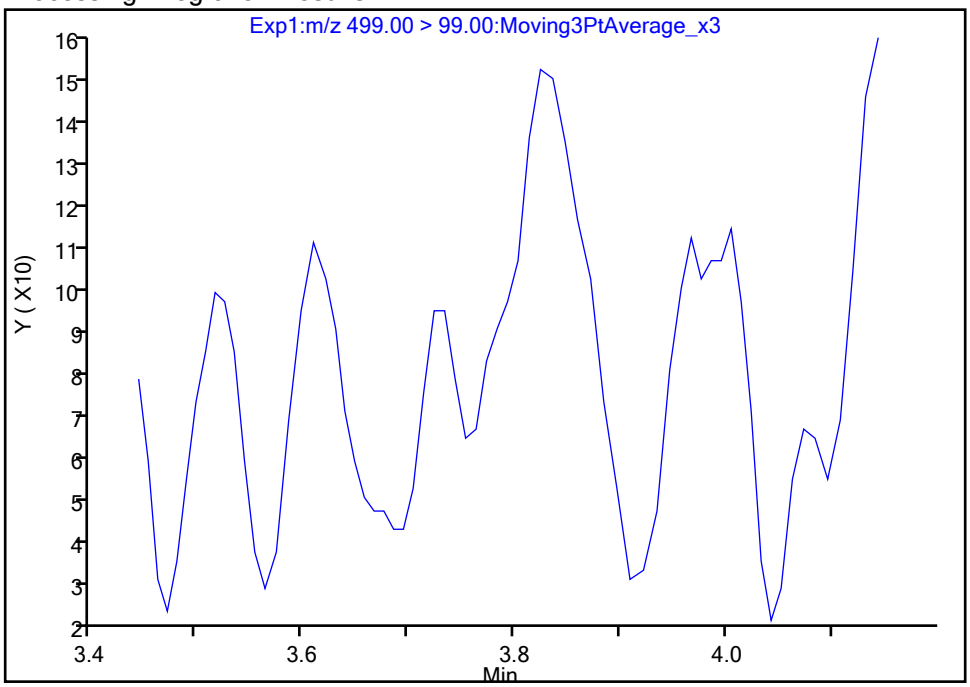
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

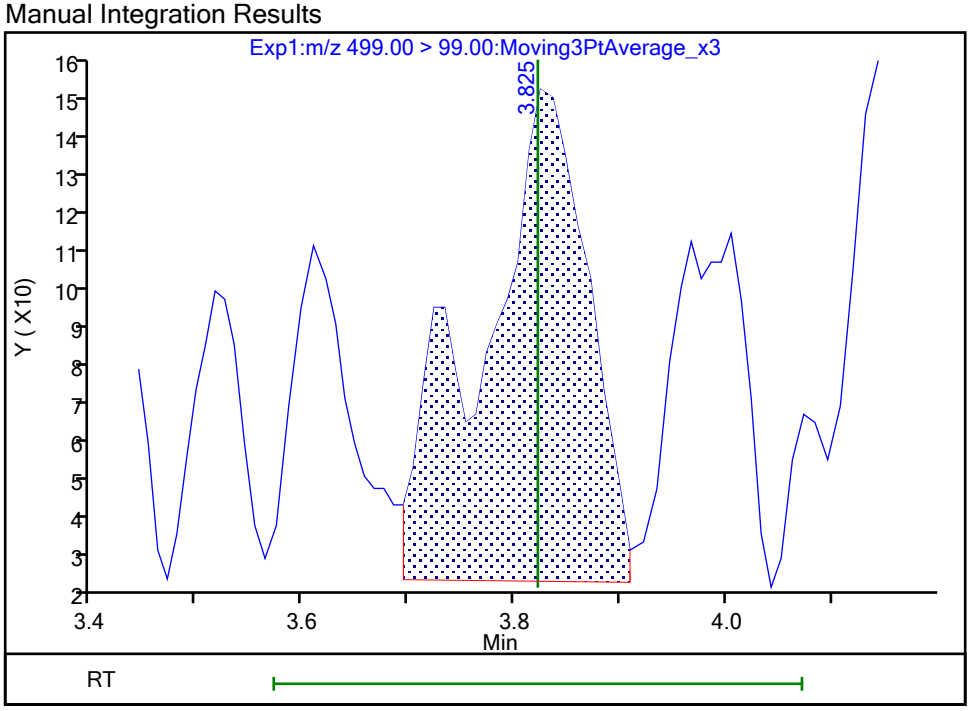
Processing Integration Results

Not Detected
Expected RT: 3.82



Manual Integration Results

RT: 3.82
Area: 842
Amount: 0.002209
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:11:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

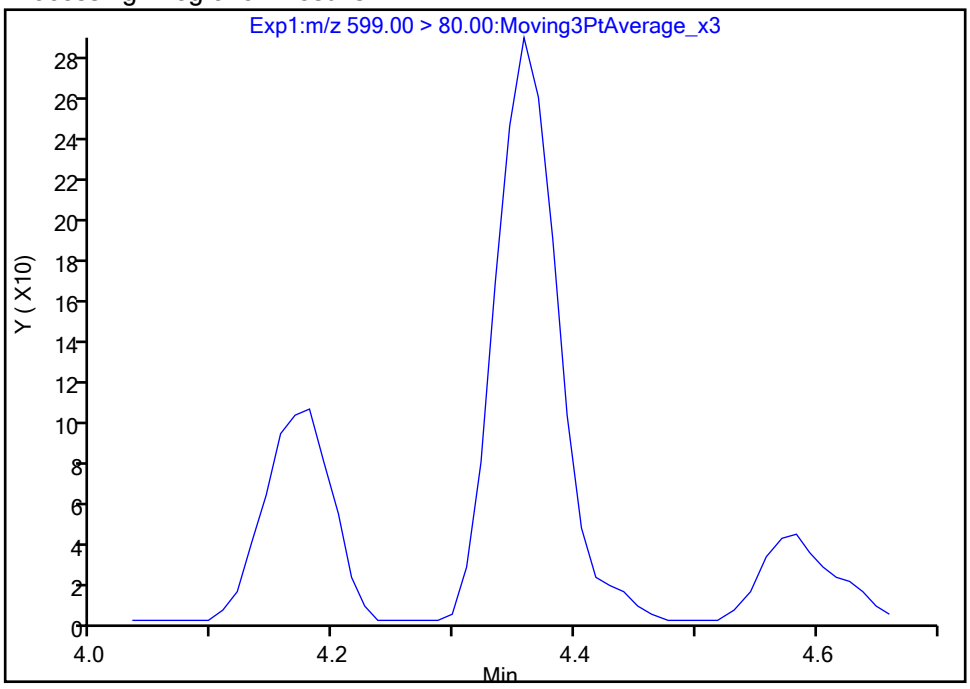
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

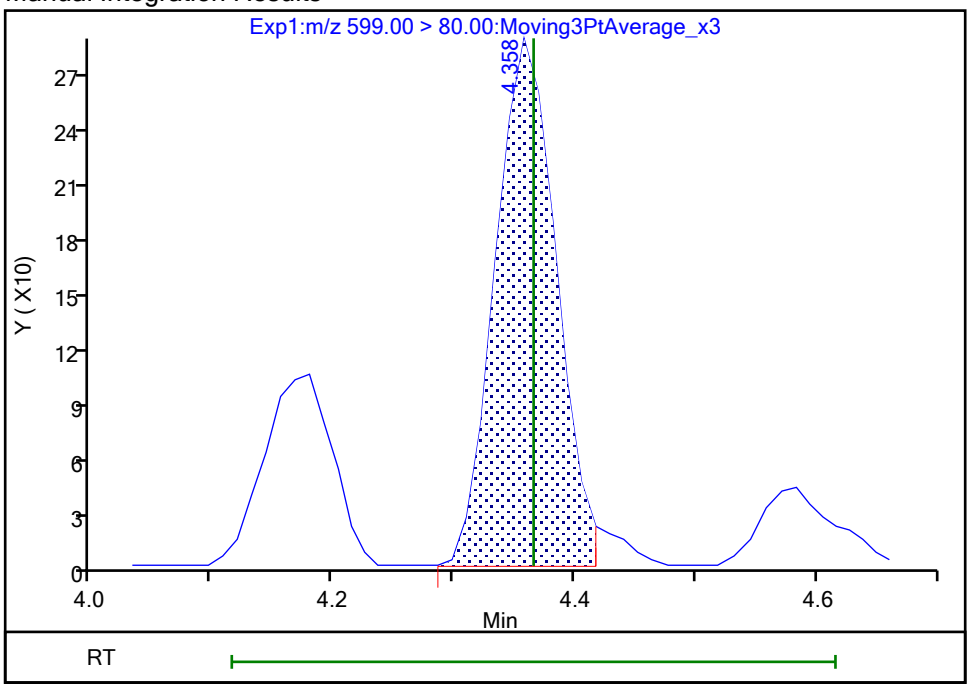
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.36
Area: 993
Amount: 0.001781
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

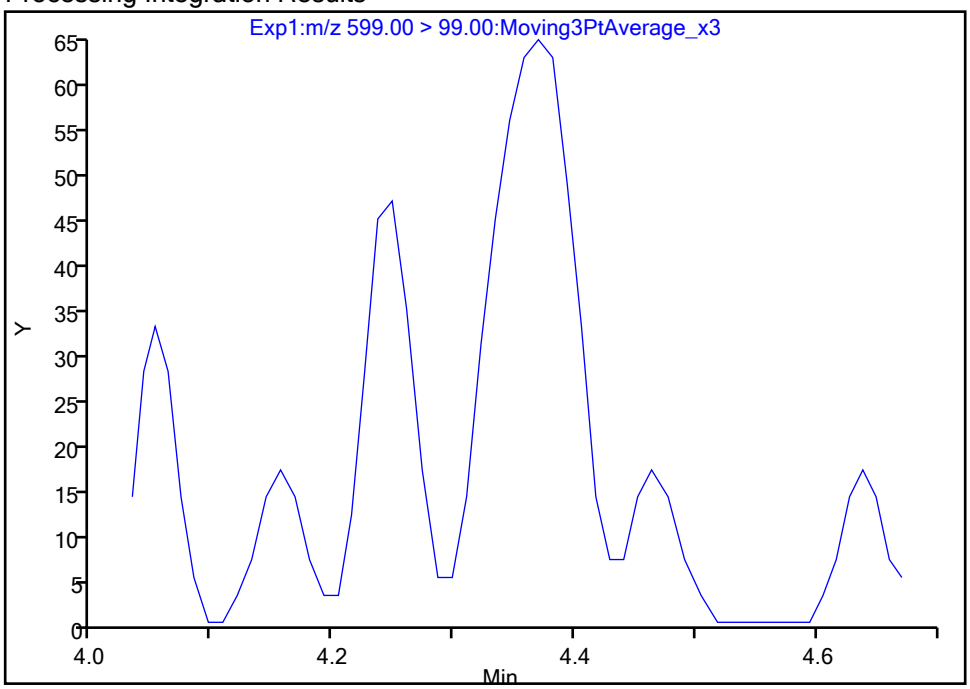
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

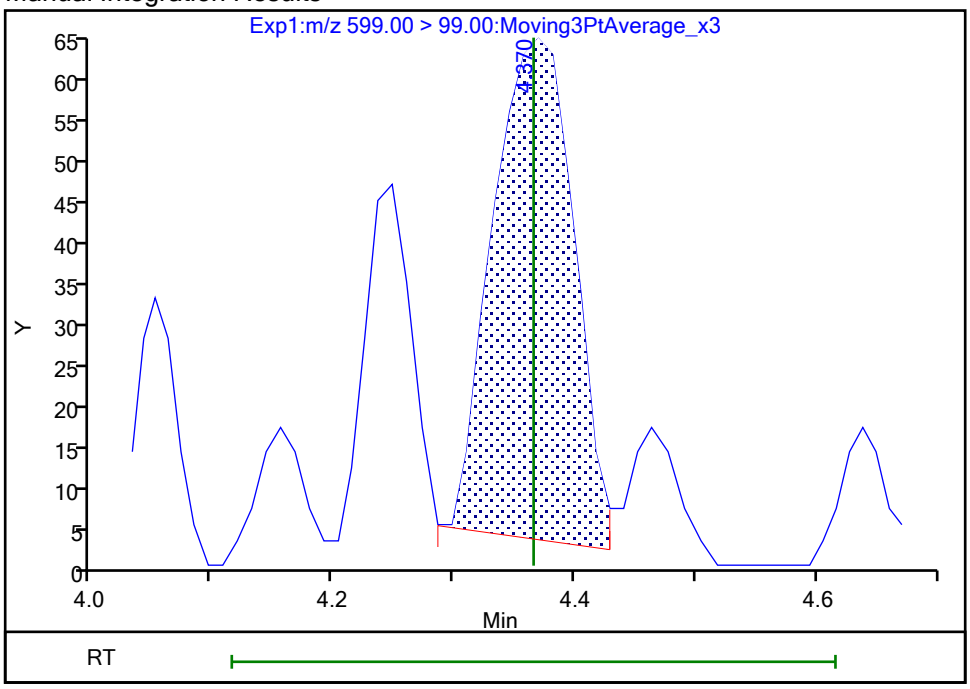
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.37
Area: 286
Amount: 0.001781
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:05 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

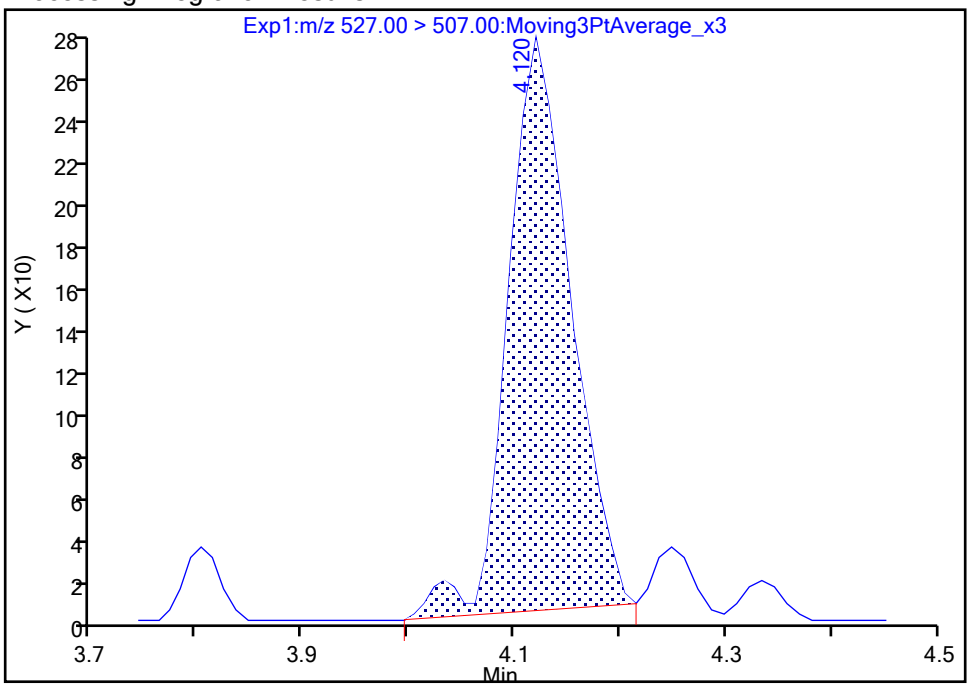
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

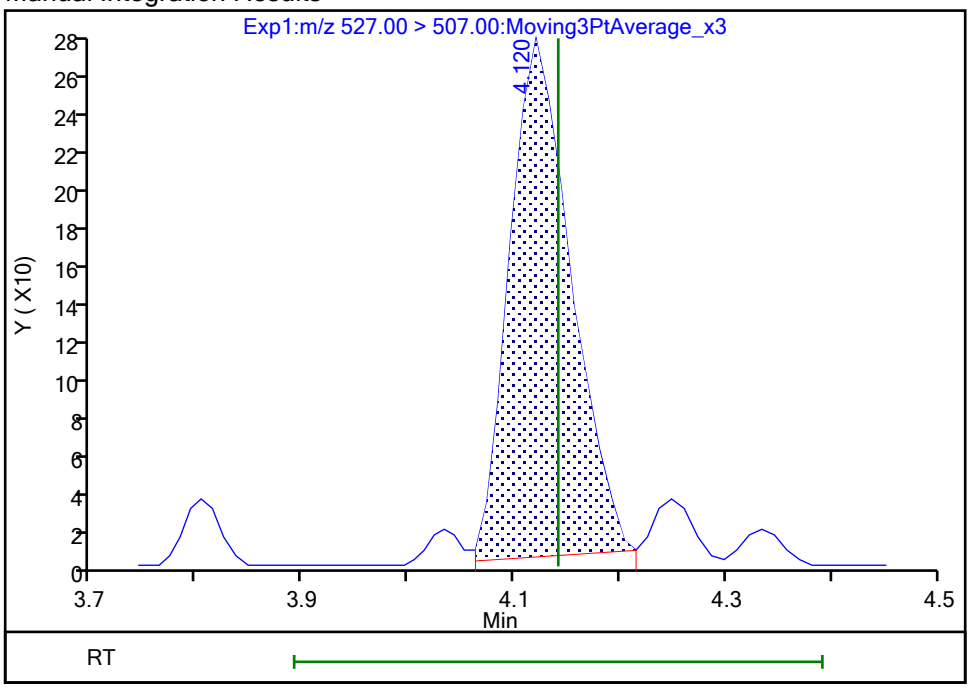
Processing Integration Results

RT: 4.12
Area: 1140
Amount: 0.001984
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 1105
Amount: 0.001923
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:12:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

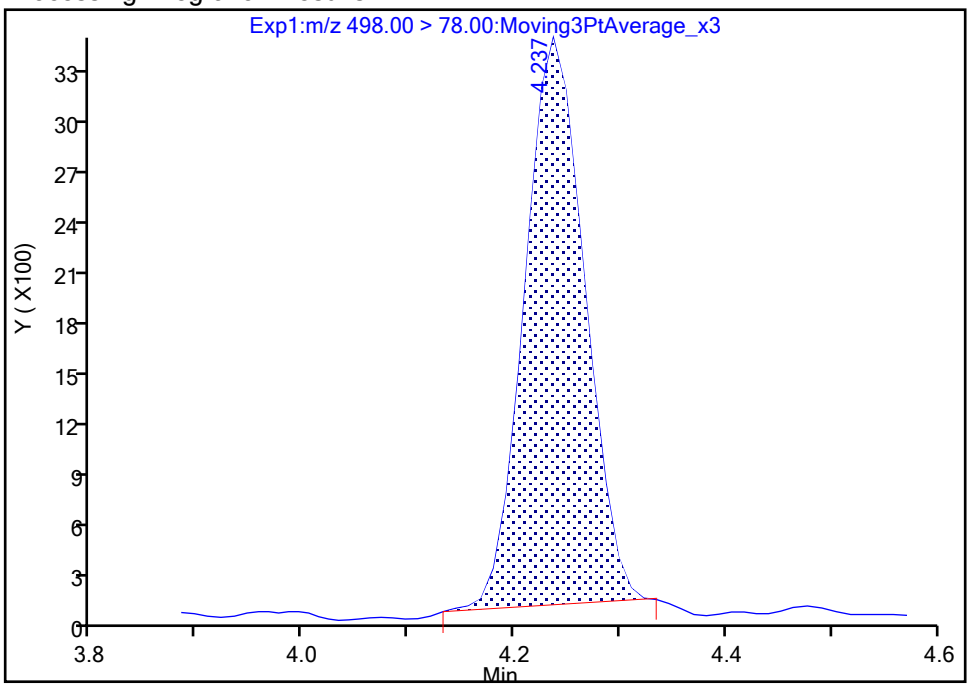
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

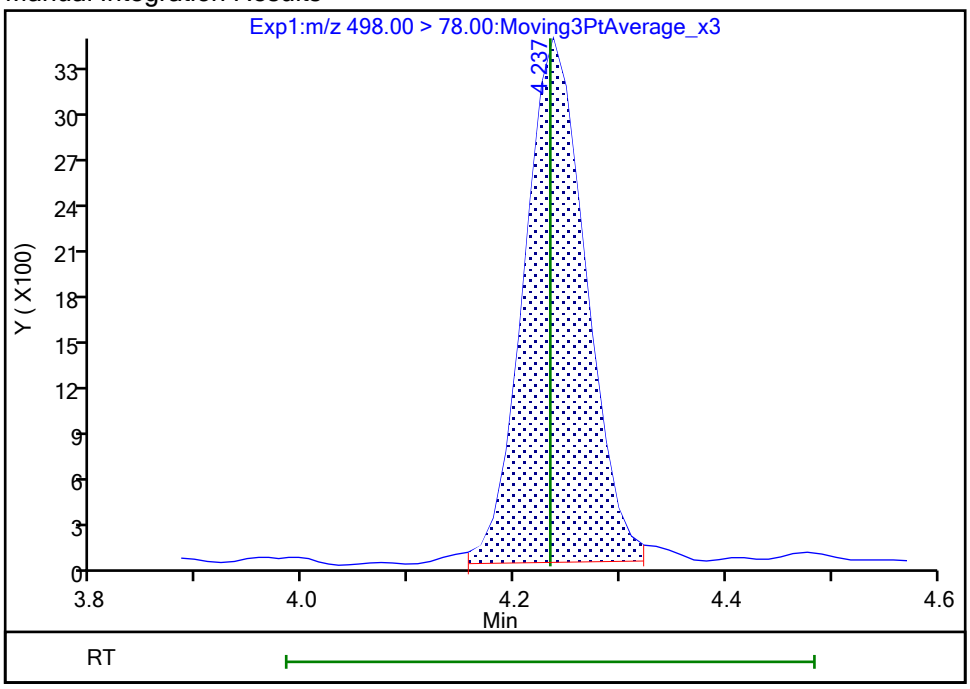
Processing Integration Results

RT: 4.24
Area: 13418
Amount: 0.010622
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 14127
Amount: 0.011184
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:12:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

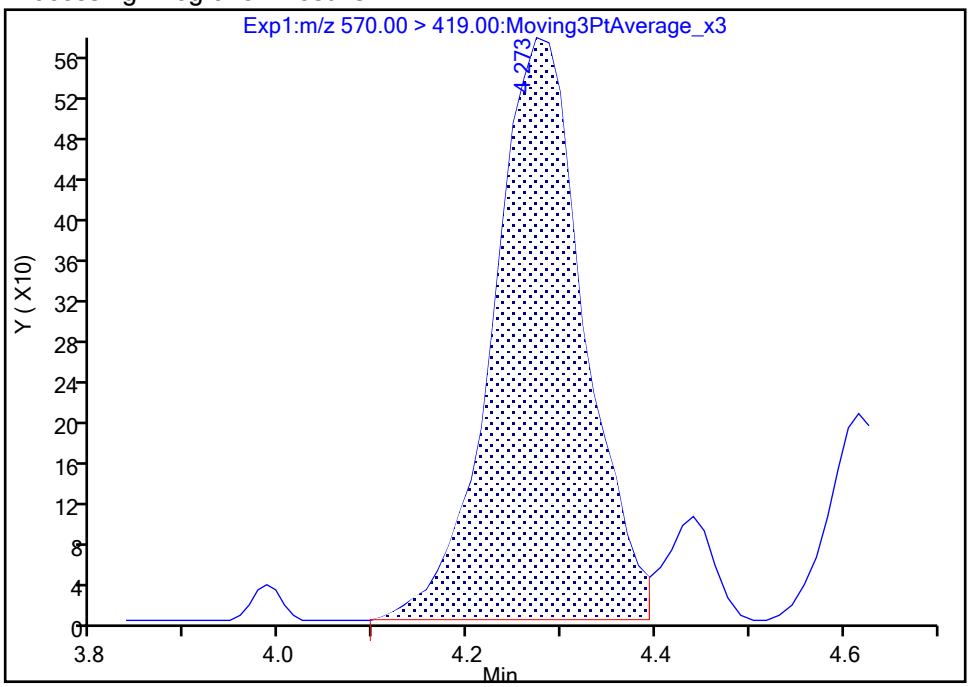
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

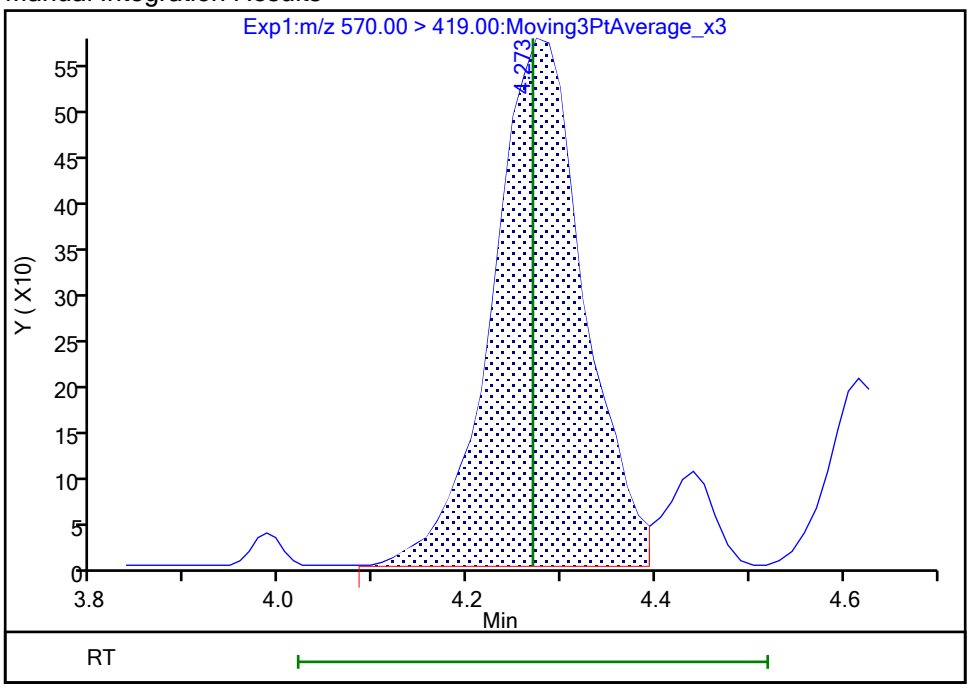
Processing Integration Results

RT: 4.27
Area: 3869
Amount: 0.010222
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 3869
Amount: 0.010222
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:12:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

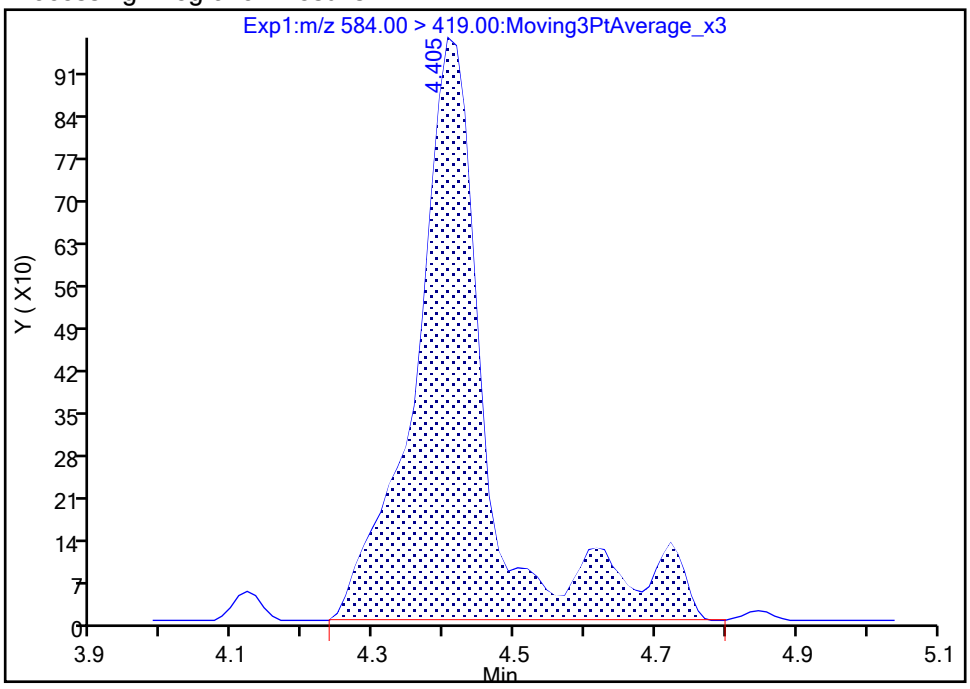
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

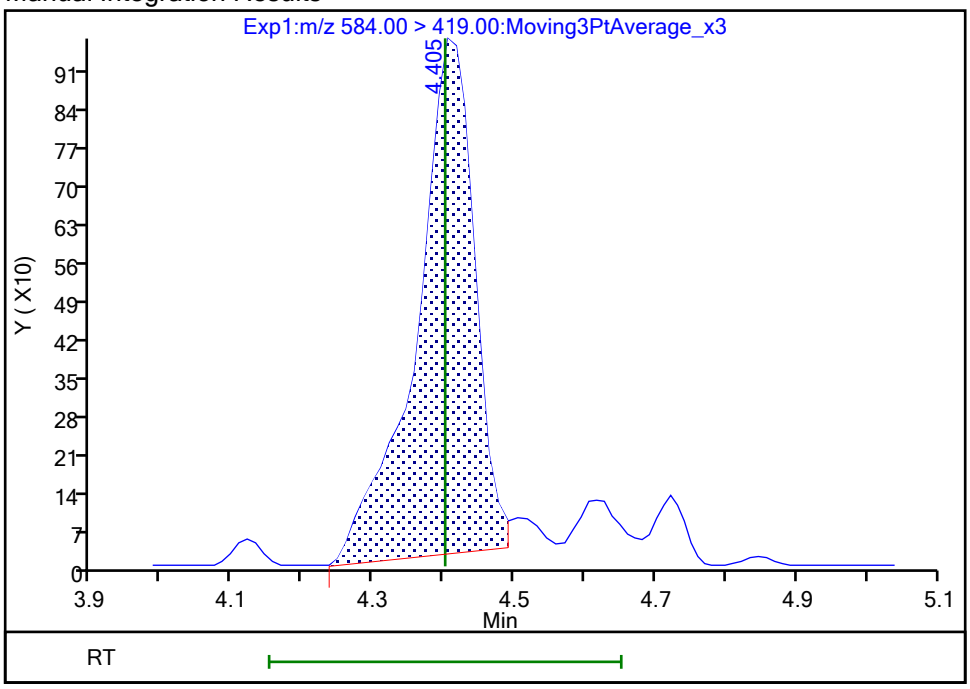
Processing Integration Results

RT: 4.41
Area: 6889
Amount: 0.017302
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 5411
Amount: 0.013590
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:18 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

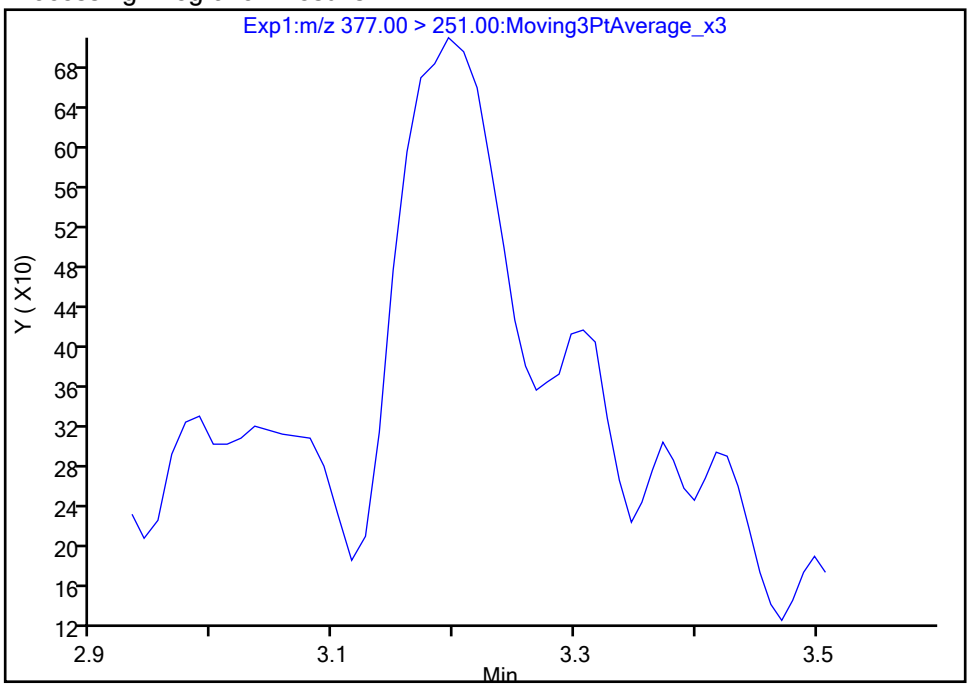
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

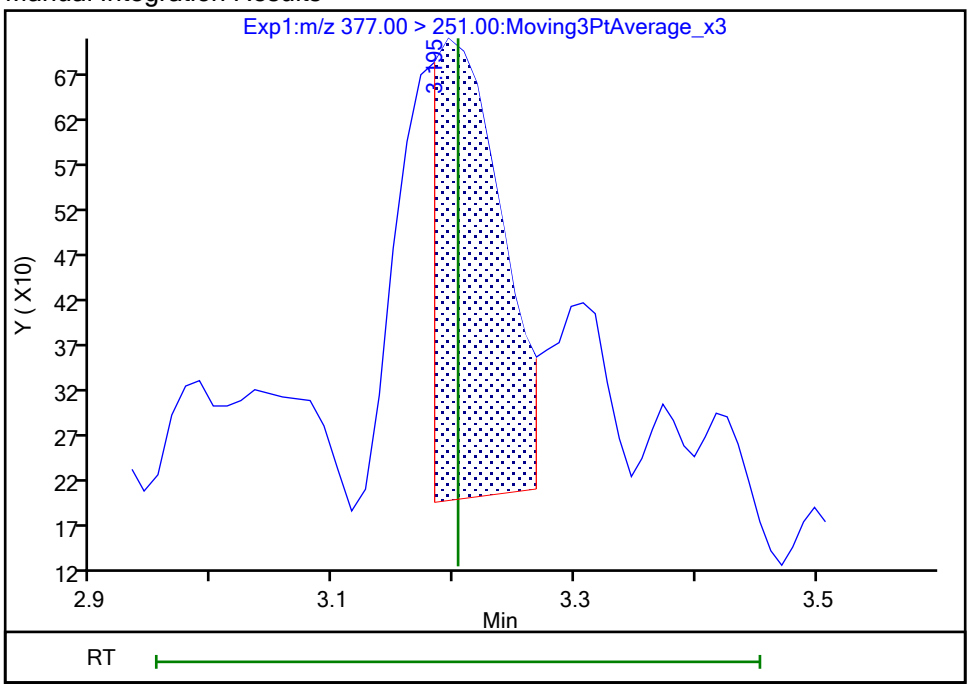
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 1863
Amount: 0.000397
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:10:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

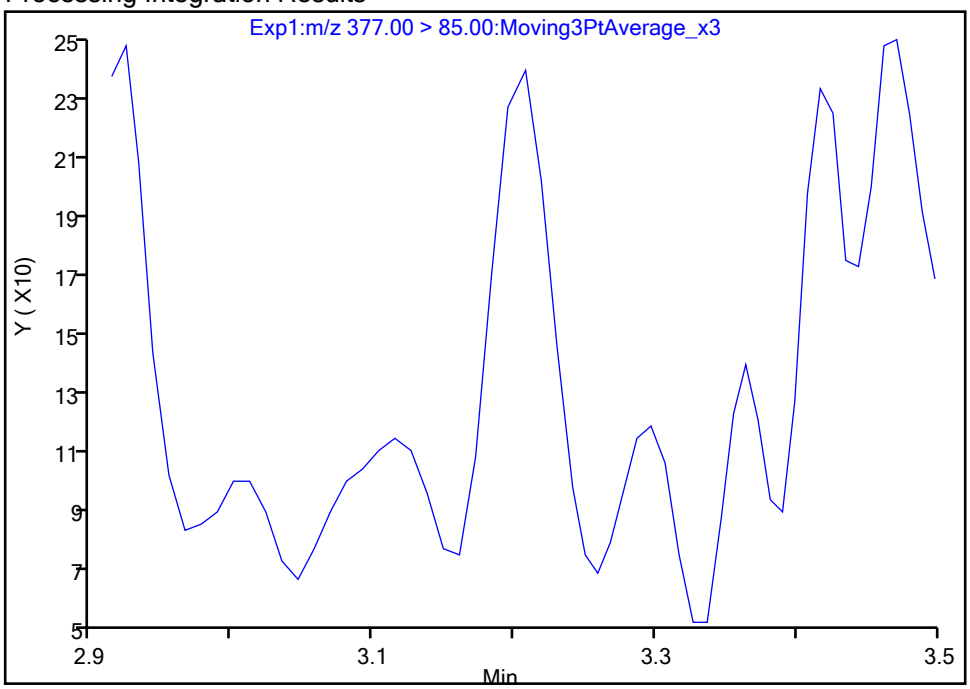
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

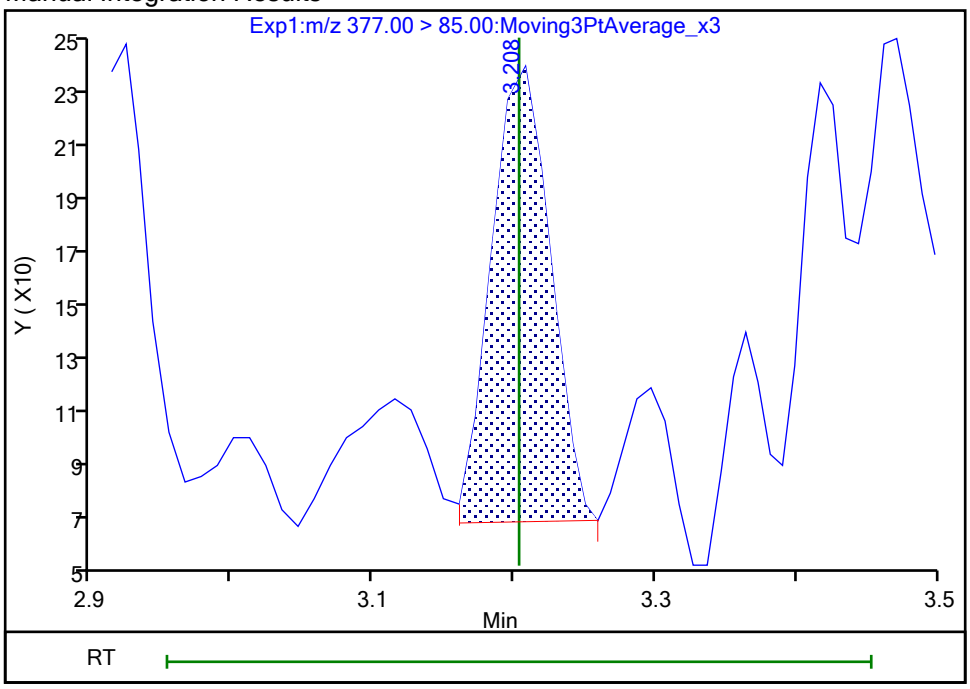
Processing Integration Results

Not Detected
Expected RT: 3.20



Manual Integration Results

RT: 3.21
Area: 479
Amount: 0.000397
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:10:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

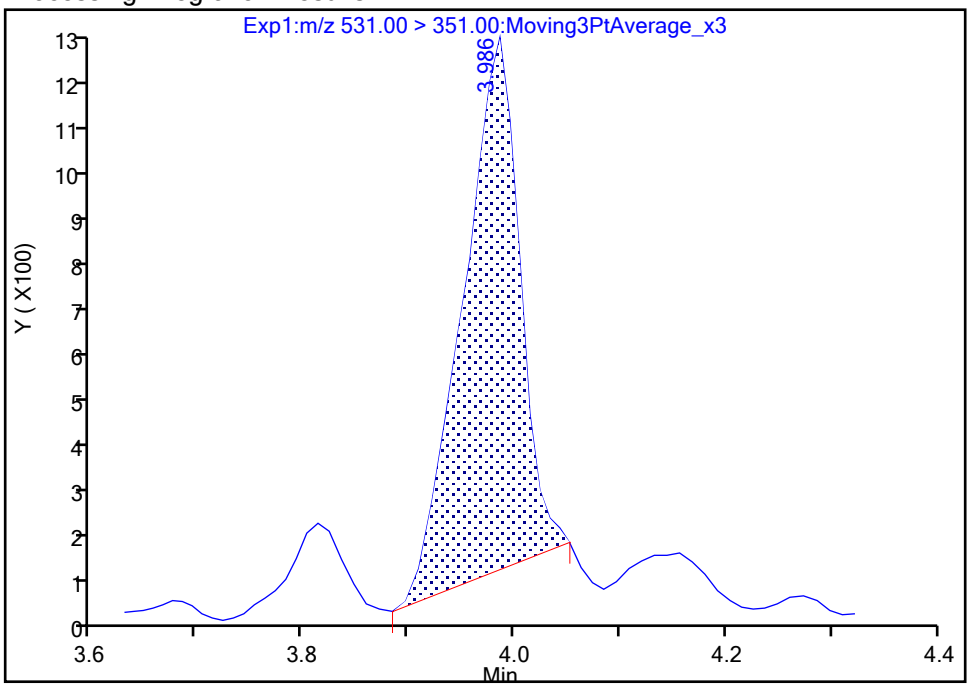
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

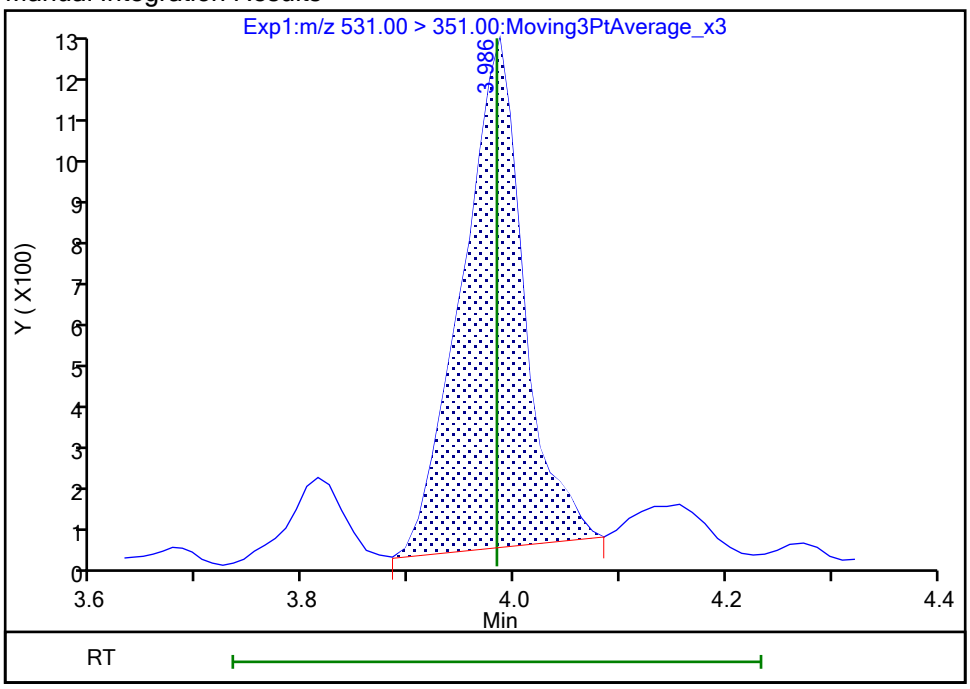
Processing Integration Results

RT: 3.99
Area: 4231
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.99
Area: 4839
Amount: 0.001661
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:11:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

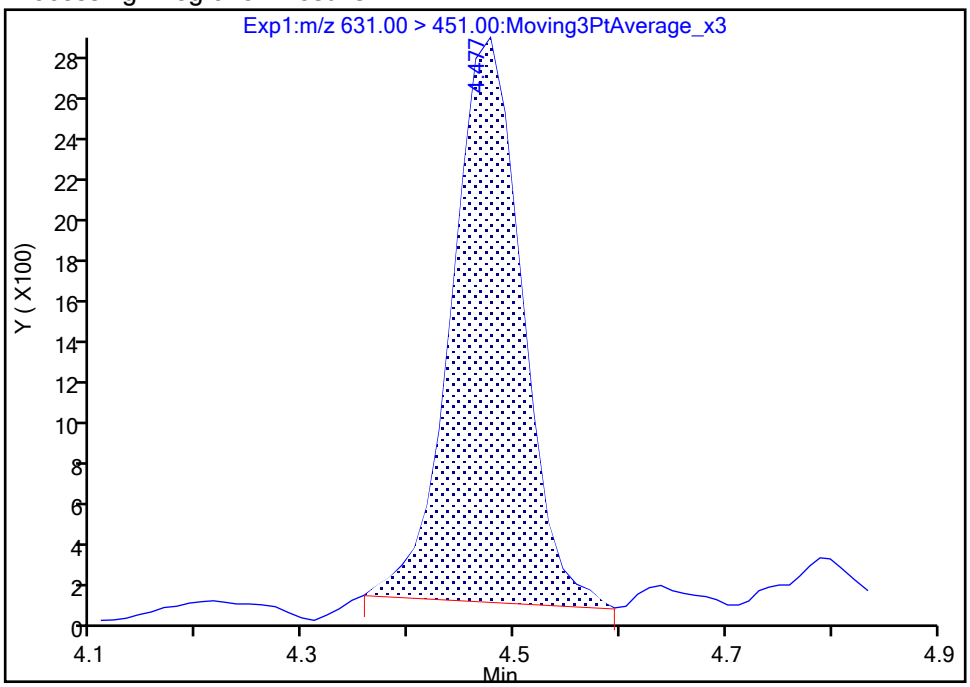
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

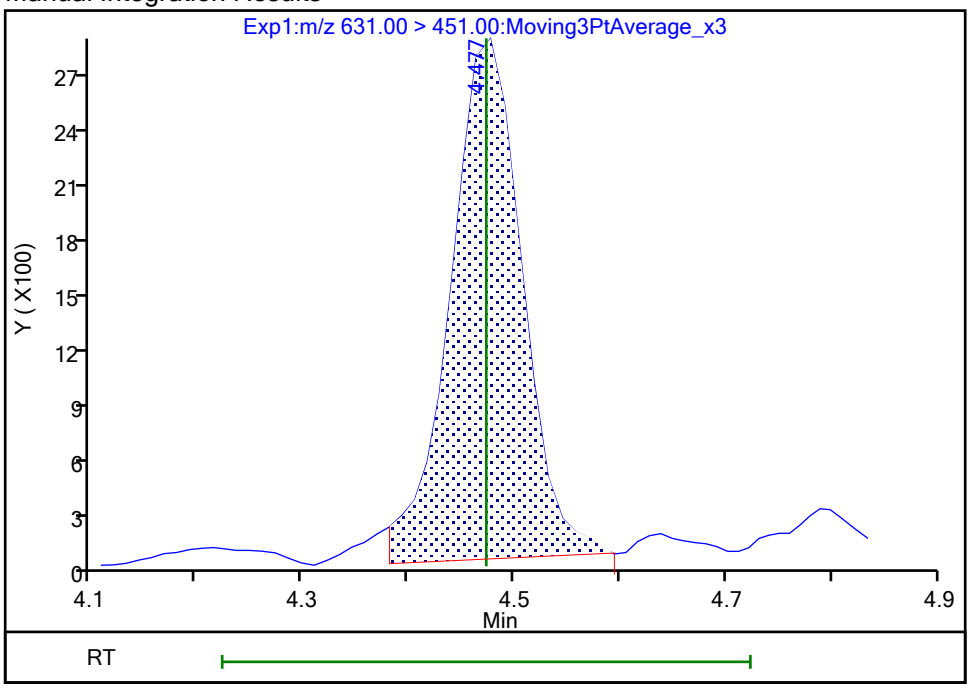
Processing Integration Results

RT: 4.48
Area: 12356
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.48
Area: 12922
Amount: 0.002893
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:13:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

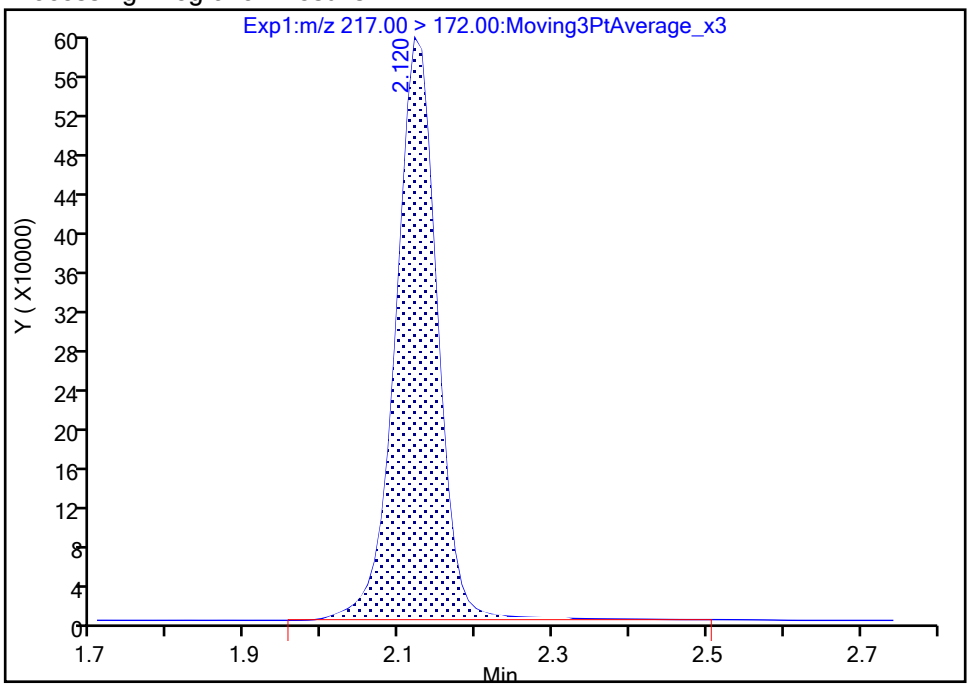
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

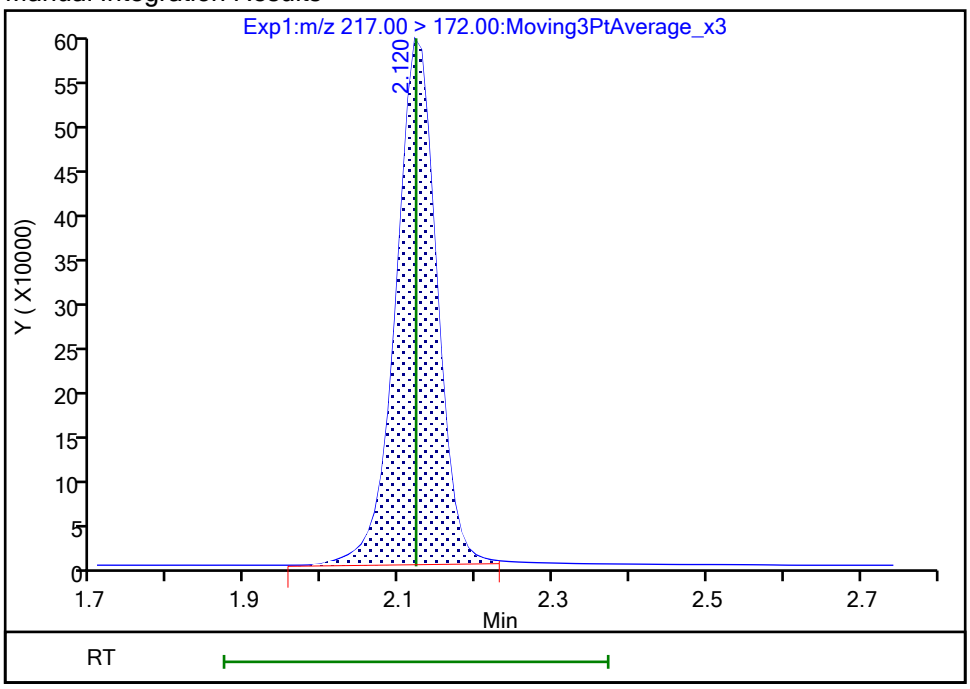
Processing Integration Results

RT: 2.12
Area: 2213835
Amount: 1.268313
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2192933
Amount: 1.256904
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:08:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

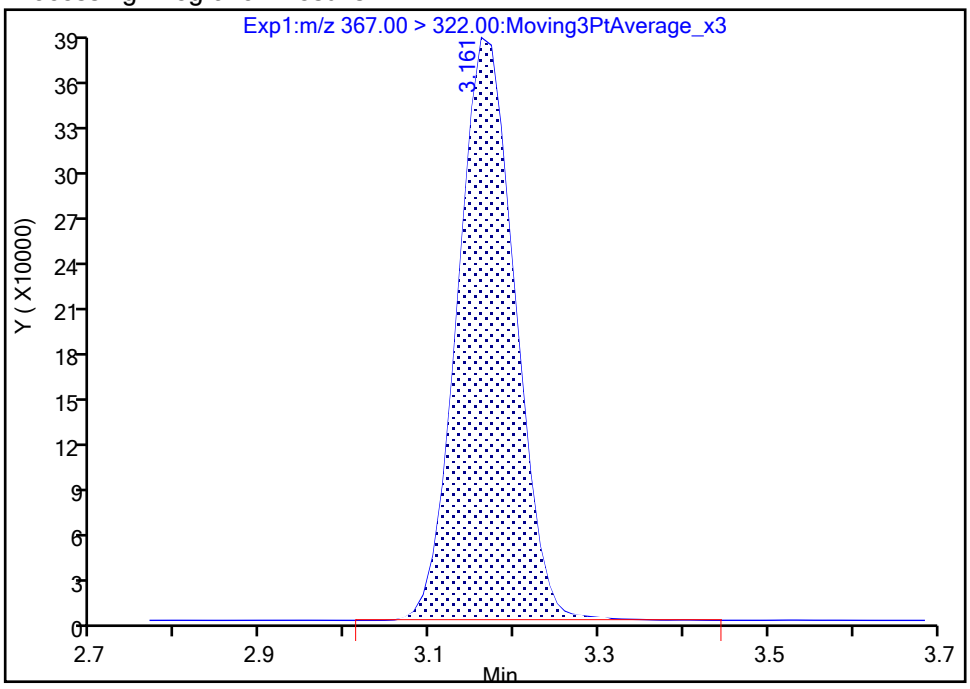
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 9 13C4 PFHpA, CAS: STL01892

Signal: 1

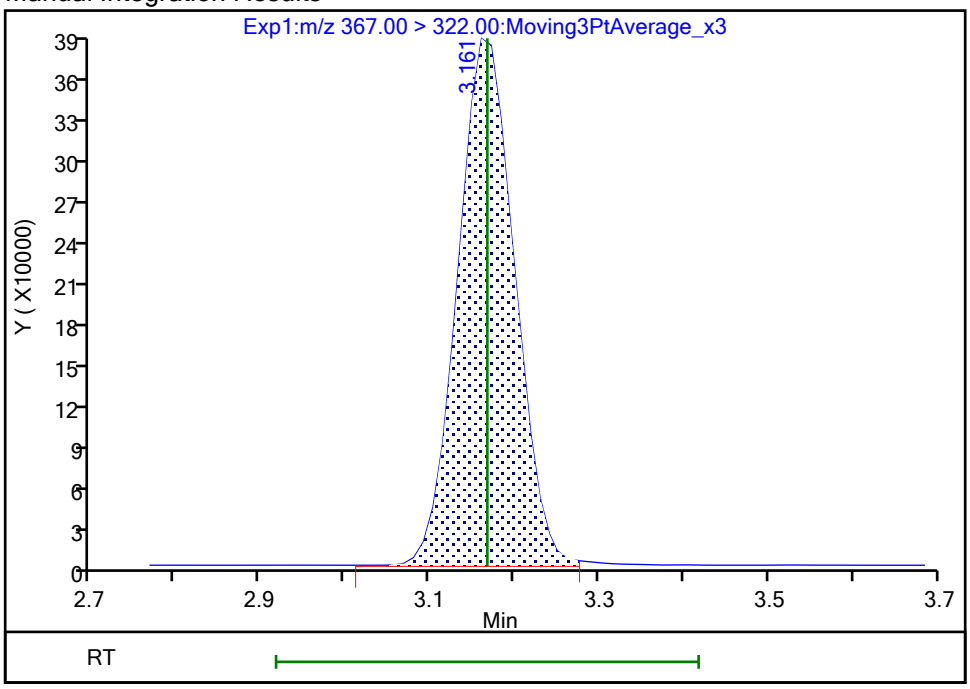
Processing Integration Results

RT: 3.16
Area: 1789853
Amount: 1.183836
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1782526
Amount: 1.179520
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

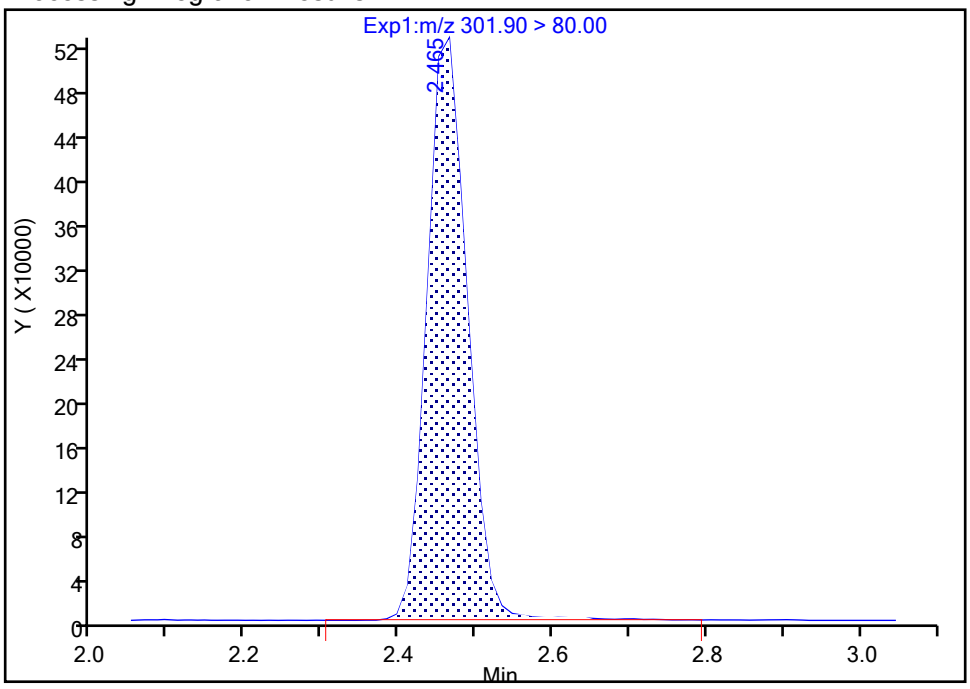
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

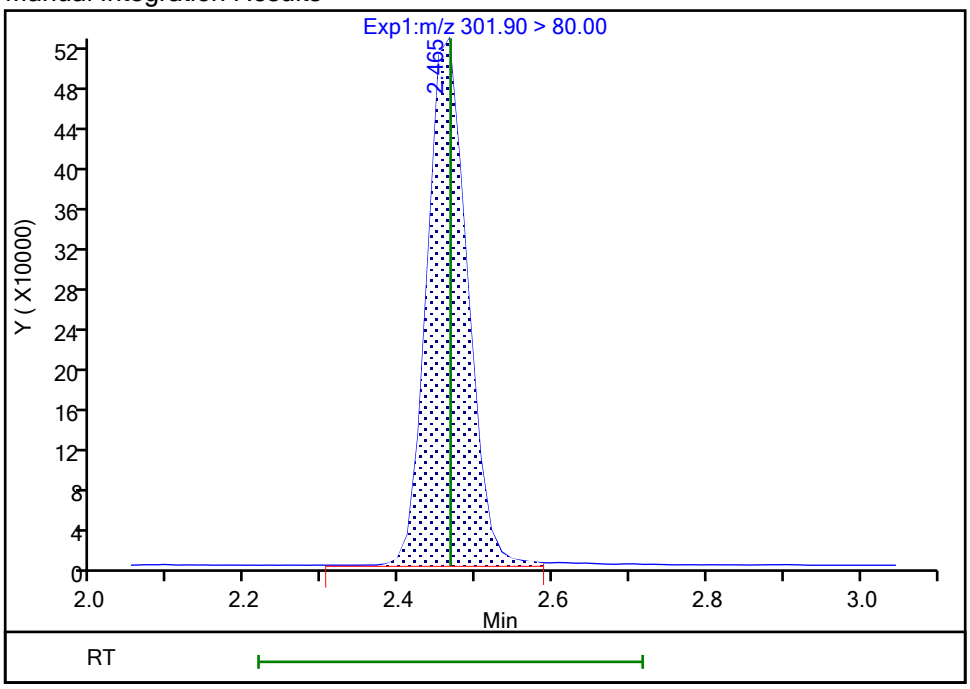
Processing Integration Results

RT: 2.47
Area: 1923971
Amount: 1.049666
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1910589
Amount: 1.042835
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:08:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

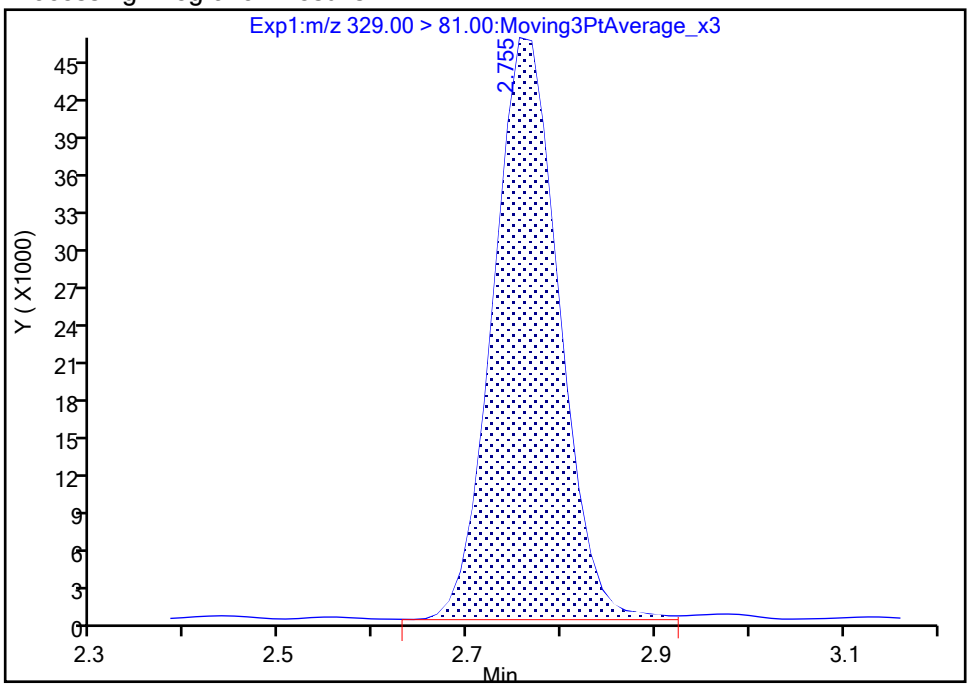
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

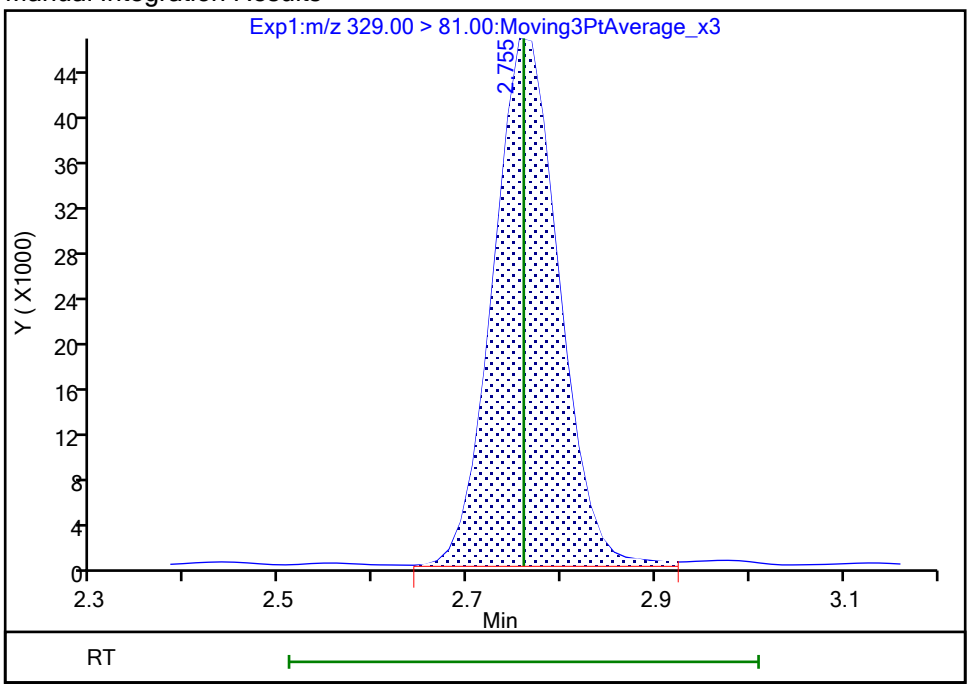
Processing Integration Results

RT: 2.76
Area: 228445
Amount: 1.077708
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 227717
Amount: 1.074758
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:08:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

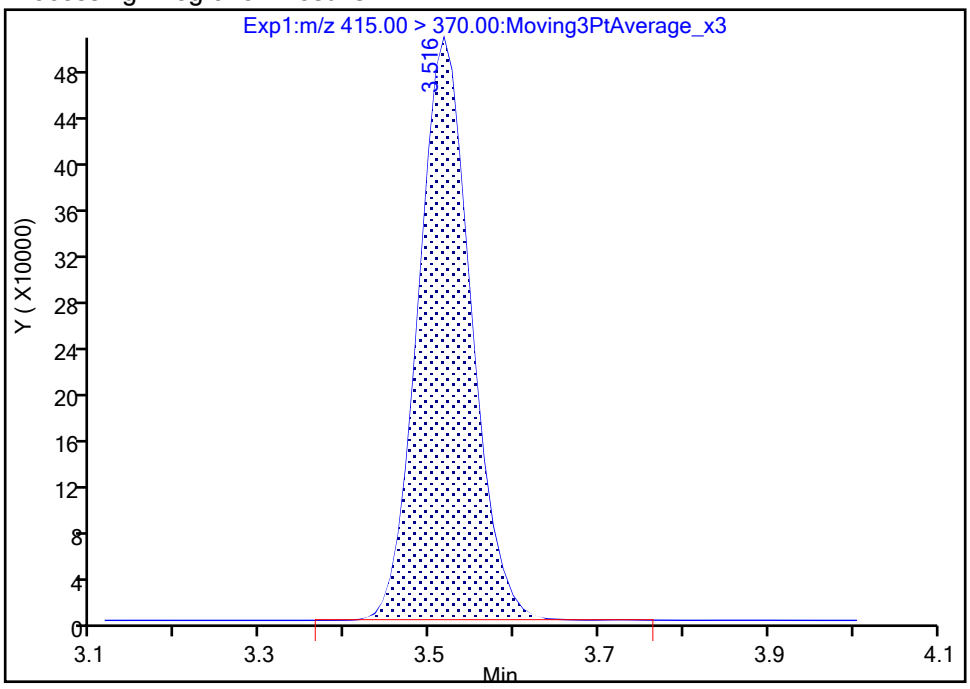
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E16.d				
Injection Date:	24-Oct-2023 08:08:24	Instrument ID:	LC812		
Lims ID:	460-290546-A-1-A	Lab Sample ID:	200-290546-1		
Client ID:	1000-101623-0002				
Operator ID:	LC812user	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

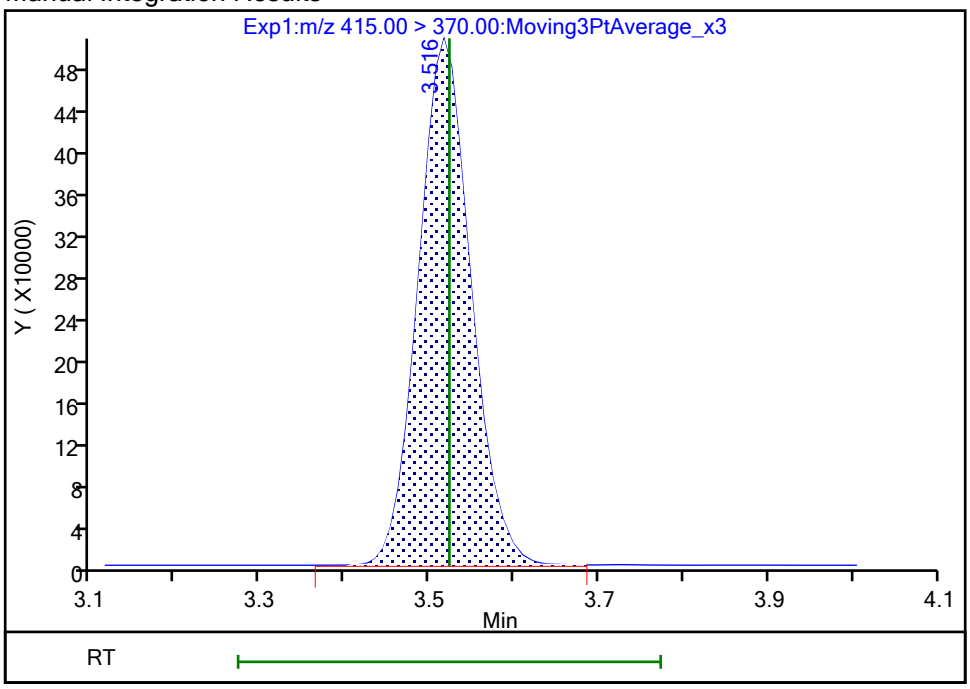
Processing Integration Results

RT: 3.52
Area: 2200203
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 2199213
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:09:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-1 | Lab Sample ID: 460-290546-2

Matrix: Water | Lab File ID: PA231023E17.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 09:15

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 283(mL) | Date Analyzed: 10/24/2023 08:16

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	59.2		4.42	1.06
2706-90-3	Perfluoropentanoic acid	6.75		1.77	0.60
307-24-4	Perfluorohexanoic acid	6.09		1.77	0.57
375-85-9	Perfluoroheptanoic acid	3.86		1.77	0.48
335-67-1	Perfluorooctanoic acid	9.73		1.77	0.67
375-95-1	Perfluorononanoic acid	2.20		1.77	0.43
335-76-2	Perfluorodecanoic acid	0.52	J	1.77	0.41
2058-94-8	Perfluoroundecanoic acid	1.77	U	1.77	0.49
307-55-1	Perfluorododecanoic acid	1.77	U	1.77	0.43
72629-94-8	Perfluorotridecanoic acid	1.77	U	1.77	0.42
376-06-7	Perfluorotetradecanoic acid	1.77	U	1.77	0.57
375-73-5	Perfluorobutanesulfonic acid	4.15		1.77	0.55
2706-91-4	Perfluoropentanesulfonic acid	0.69	J	1.77	0.44
355-46-4	Perfluorohexanesulfonic acid	4.03		1.77	0.49
375-92-8	Perfluoroheptanesulfonic acid	1.77	U	1.77	0.36
1763-23-1	Perfluorooctanesulfonic acid	21.3		1.77	0.75
68259-12-1	Perfluorononanesulfonic acid	1.77	U	1.77	0.35
335-77-3	Perfluorodecanesulfonic acid	1.77	U	1.77	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.48
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.42	U	4.42	1.15
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.77	U	1.77	0.68
754-91-6	Perfluorooctanesulfonamide	1.77	U	1.77	0.81
2355-31-9	NMeFOSAA	4.42	U	4.42	1.68
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.42	U	4.42	1.41
13252-13-6	HFPODA	3.53	U	3.53	0.97
919005-14-4	DONA	1.77	U	1.77	0.37
756426-58-1	9Cl-PF3ONS	1.77	U	1.77	0.28
763051-92-9	11Cl-PF3OUdS	1.77	U	1.77	0.77

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-1 Lab Sample ID: 460-290546-2

Matrix: Water Lab File ID: PA231023E17.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 09:15

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 283(mL) Date Analyzed: 10/24/2023 08:16

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		50-150
STL01893	13C5 PFPeA	98		50-150
STL01892	13C4 PFHpA	99		50-150
STL02116	13C2 PFTeDA	91		50-150
STL02337	13C3 PFBS	94		50-150
STL01056	13C8 FOSA	92		50-150
STL02118	d3-NMeFOSAA	100		50-150
STL02117	d5-NEtFOSAA	99		50-150
STL02395	M2-4:2 FTS	90		50-150
STL02279	M2-6:2 FTS	99		50-150
STL02280	M2-8:2 FTS	93		50-150
STL02255	13C3 HFPO-DA	87		50-150
STL00994	18O2 PFHxS	102		50-150
STL00993	13C2 PFHxA	92		50-150
STL00991	13C4 PFOS	100		50-150
STL00998	13C2 PFDoA	99		50-150
STL00995	13C5 PFNA	105		50-150
STL00996	13C2 PFDA	100		50-150
STL00990	13C4 PFOA	101		50-150
STL00997	13C2 PFUnA	103		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d
Lims ID: 460-290546-A-2-A
Client ID: FDMH-1
Sample Type: Client
Inject. Date: 24-Oct-2023 08:16:35 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290546-A-2-A
Misc. Info.: 200-0057513-017 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:20:08
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.122	-0.001	0.603	2092531	1.27		102	1604	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.121	2.130	-0.009	1.000	2596522	1.67			209	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1570500	1.23		98.2	1343	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	259172	0.1912			3.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.452	2.467	-0.015	0.697	1883974	1.09		93.6	35755	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	212794	0.1176	Target=2.06		16.4	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	104339		2.04(1.03-3.09)		17.9	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.759	2.760	-0.001	1.000	1032	0.001681			6.0	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.759	2.760	-0.001	0.784	211044	1.05		90.3	30.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.796	2.797	-0.001	0.795	1495224	1.15		91.9	5567	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.796	2.797	-0.001	1.000	226792	0.1723	Target=14.12		10.7	M
313.00 > 119.00	2.784	2.797	-0.013	0.996	16049		14.13(7.06-21.17)		9.9	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.796	2.810	-0.014	0.884	32144	0.0195	Target=2.72		6.5	M
349.00 > 99.00	2.796	2.810	-0.014	0.884	11506		2.79(1.36-4.09)		5.8	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.906	2.908	-0.002	1.000	1178	0.005395			12.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.906	2.908	-0.002	0.826	272612	1.08		86.6	3666	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.164	3.168	-0.004	0.899	1489784	1.20		102	8404	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.152	3.168	-0.016	0.996	158875	0.1139	Target=3.32		50.7	M
399.00 > 99.00	3.164	3.168	-0.004	1.000	42434		3.74(1.66-4.98)		30.3	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.164	3.168	-0.004	1.000	173561	0.1092	Target=4.17		12.0	
363.00 > 169.00	3.164	3.168	-0.004	1.000	42576		4.08(2.09-6.26)		53.3	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.164	3.168	-0.004	0.899	1772433	1.24		99.3	4676	
77 DONA										M
377.00 > 251.00	3.211	3.203	0.008	0.839	539	0.000119	Target=3.33		0.6	M
377.00 > 85.00	3.198	3.203	-0.005	0.836	218		2.47(1.66-4.99)		0.4	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.501	3.505	-0.004	0.915	9400	0.008287	Target=4.83		4.9	M
449.00 > 99.00	3.519	3.505	0.014	0.920	1493		6.30(2.41-7.24)		2.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.501	3.505	-0.004	0.995	302333	1.17		98.7	184	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.501	3.514	-0.013	1.000	2766	0.003975			3.6	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.510	3.514	-0.004	1.000	480995	0.2755	Target=2.88		16.3	M
413.00 > 169.00	3.510	3.514	-0.004	1.000	175300		2.74(1.44-4.32)		219	M
D 14 13C4 PFOA										
417.00 > 372.00	3.510	3.523	-0.013	0.997	2048961	1.27		101	9502	
* 62 13C2 PFOA										M
415.00 > 370.00	3.519	3.523	-0.004		2078030	1.25			4020	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.825	3.822	0.003	1.000	552242	0.6032	Target=4.24		356	M
499.00 > 99.00	3.814	3.822	-0.008	0.997	113281		4.87(2.12-6.37)		152	M
D 18 13C4 PFOS										
503.00 > 80.00	3.825	3.822	0.003	1.087	937963	1.19		99.6	1159	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.836	3.845	-0.009	1.000	112290	0.0622	Target=8.34		11.3	M
463.00 > 169.00	3.836	3.845	-0.009	1.000	14923		7.52(4.17-12.51)		41.5	M
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.845	-0.009	1.090	2303648	1.31		105	6649	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.977	3.983	-0.006	1.040	291	0.000104			1.3	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.121	4.129	-0.009	0.997	27172	0.0147	Target=11.44		4.9	M
513.00 > 169.00	4.121	4.129	-0.009	0.997	2975		9.13(5.72-17.16)		10.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.129	0.003	1.174	2305248	1.25		100	5693	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.132	4.141	-0.009	1.174	321444	1.11		92.6	470	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.141	0.003	1.003	437	0.000739			7.0	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.237	4.234	0.003	1.204	1805713	1.15		91.8	3933	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.237	4.234	0.003	1.000	1087	0.000789			5.8	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.261	4.270	-0.009	1.211	552882	1.25		100	1524	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.270	-0.009	1.000	558	0.001390			2.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.390	-0.008	1.245	2247413	1.29		103	9954	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.390	-0.008	1.000	7032	0.003795	Target=12.20		1.5	M
563.00 > 169.00	4.382	4.390	-0.008	1.000	926		7.59(6.10-18.31)		6.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.394	4.401	-0.007	1.249	526135	1.24		99.2	1265	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.401	-0.007	1.000	2967	0.007048			9.1	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.477	4.473	0.004	1.171	1007	0.000234			1.4	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.613	-0.007	1.309	2195931	1.24		99.3	5465	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.977	4.982	-0.005	1.414	2006740	1.14		91.2	3968	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.977	4.982	-0.005	1.000	222	0.001237	Target=0.87		4.6	M
713.00 > 219.00	4.966	4.982	-0.016	0.998	285		0.78(0.43-1.30)		5.0	M

QC Flag Legend

Processing Flags

Review Flags

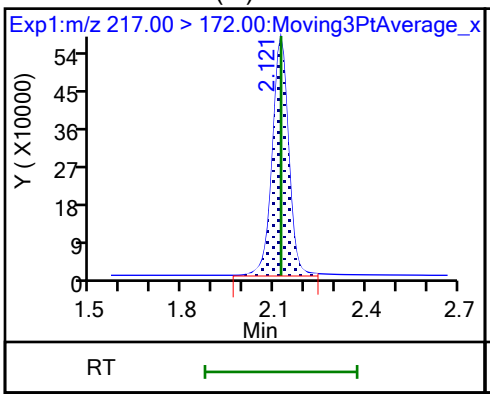
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:36 Chrom Revision: 2.3 18-Oct-2023 21:16:54

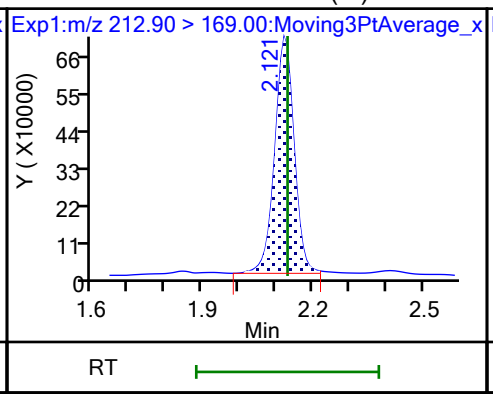
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d
Injection Date: 24-Oct-2023 08:16:35 Instrument ID: LC812
Lims ID: 460-290546-A-2-A Lab Sample ID: 200-290546-2
Client ID: FDMH-1
Operator ID: LC812user ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

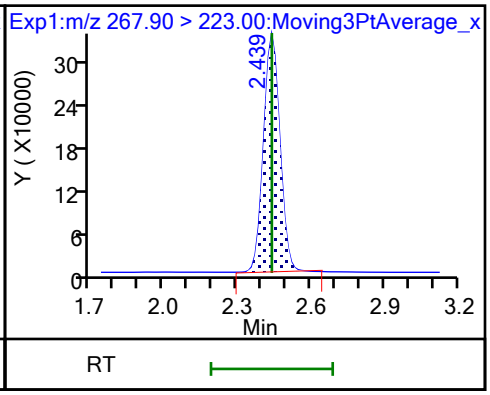
D 1 13C4 PFBA (M)



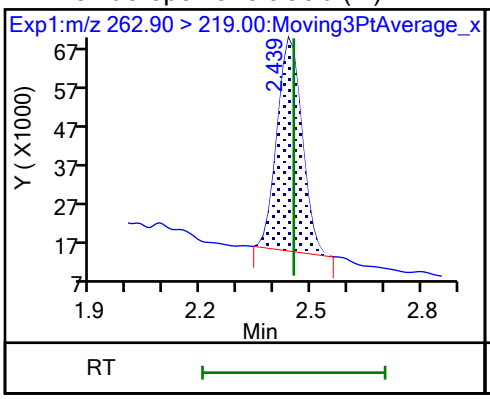
2 Perfluorobutanoic acid (M)



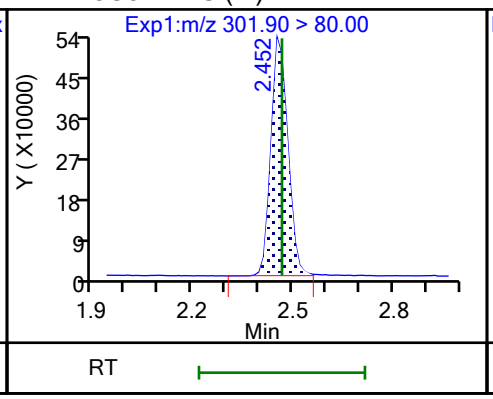
D 3 13C5 PFPeA



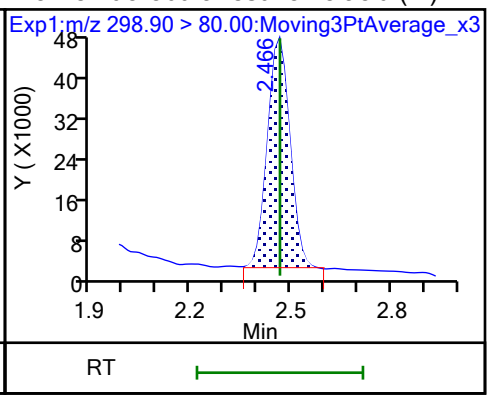
4 Perfluoropentanoic acid (M)



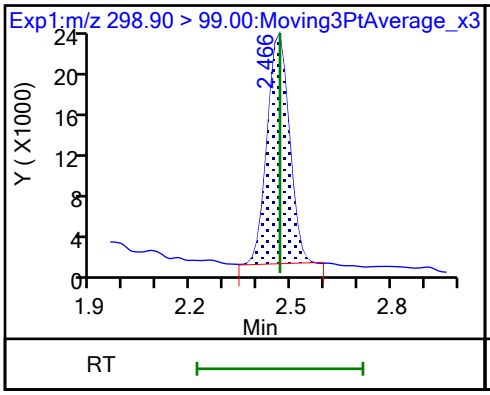
D 47 13C3 PFBS (M)



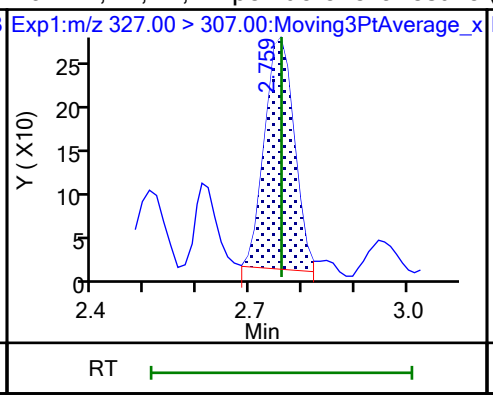
5 Perfluorobutanesulfonic acid (M)



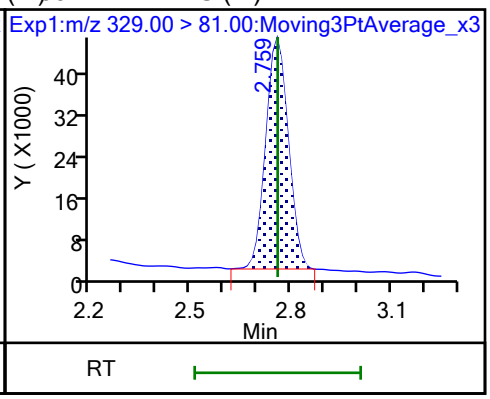
5 Perfluorobutanesulfonic acid



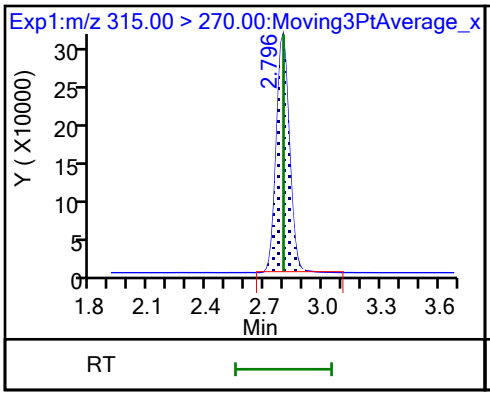
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



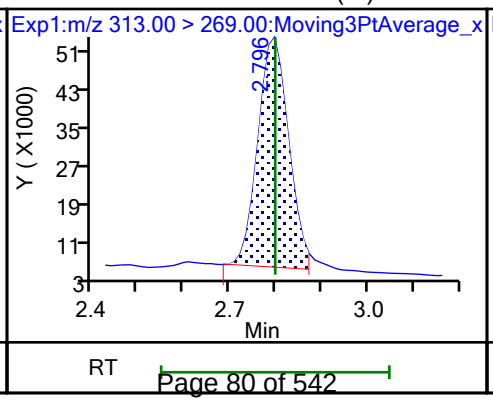
60 M2-4:2 FTS (M)



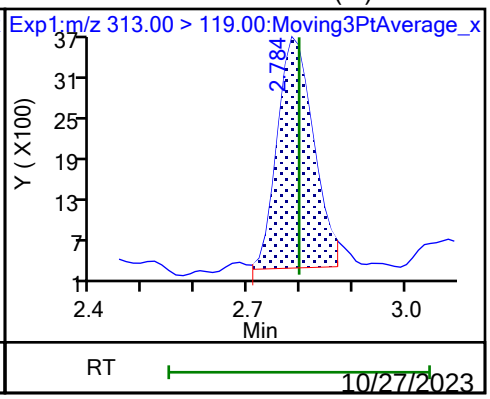
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

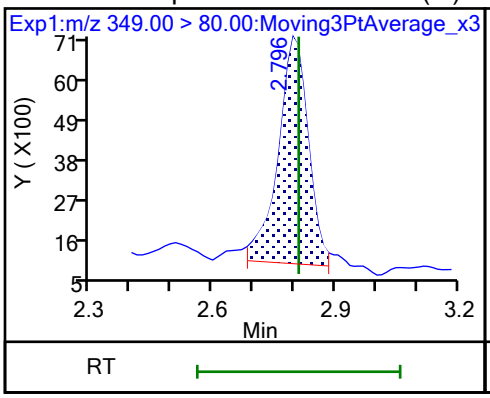


6 Perfluorohexanoic acid (M)

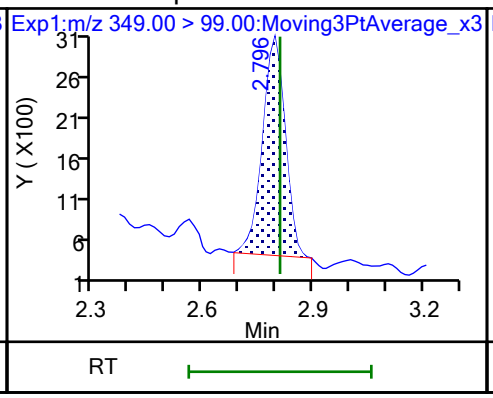


10/27/2023
10:52 AM

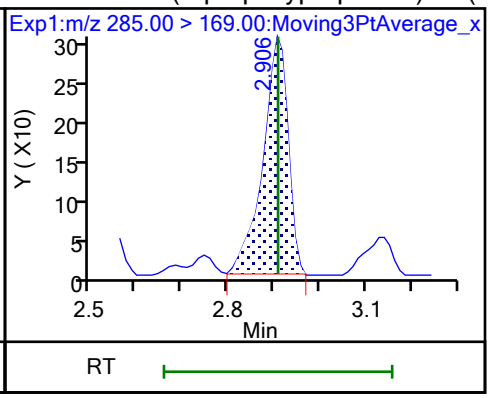
70 Perfluoropentanesulfonic acid (M)



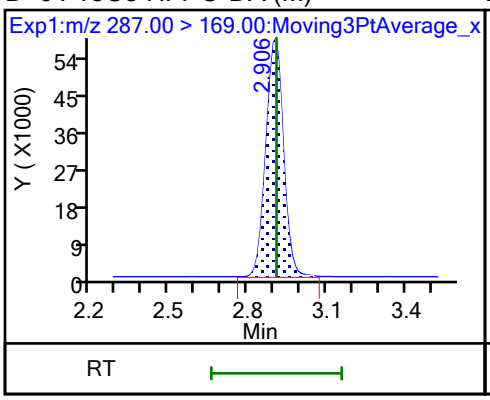
70 Perfluoropentanesulfonic acid



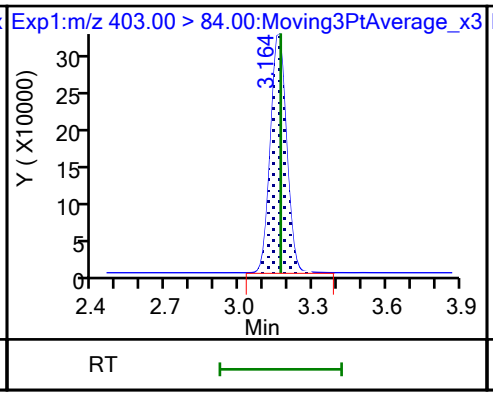
67 Perfluoro(2-propoxypropanoic) ac (M)



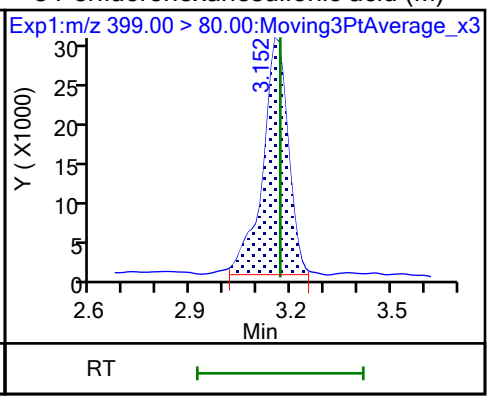
D 64 13C3 HFPO-DA (M)



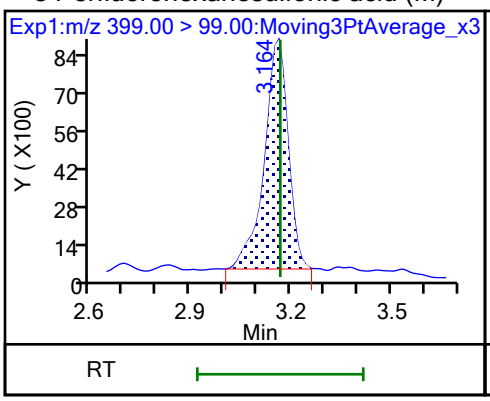
D 11 18O2 PFHxS



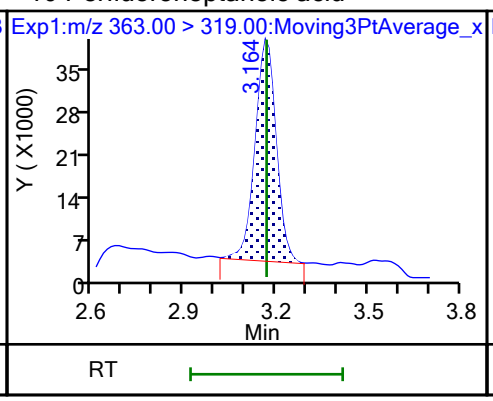
8 Perfluorohexanesulfonic acid (M)



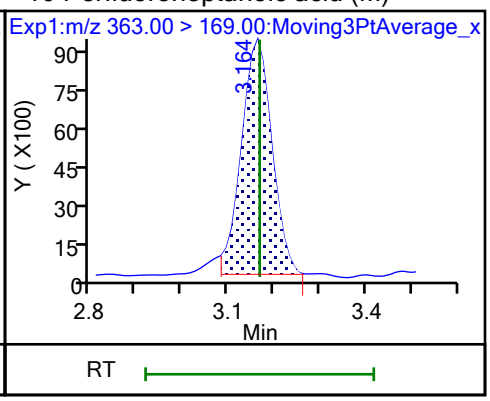
8 Perfluorohexanesulfonic acid (M)



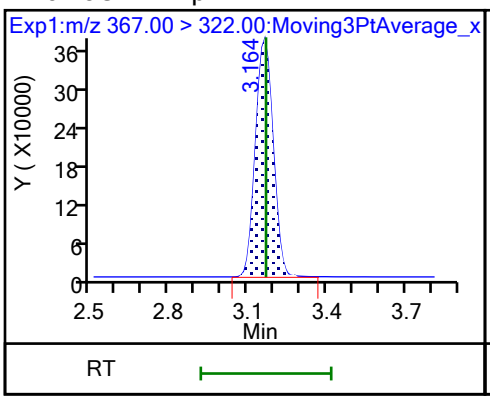
10 Perfluoroheptanoic acid



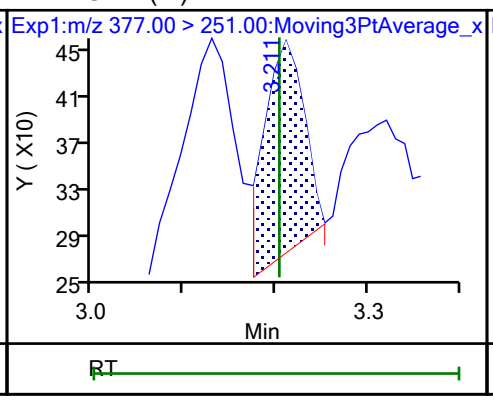
10 Perfluoroheptanoic acid (M)



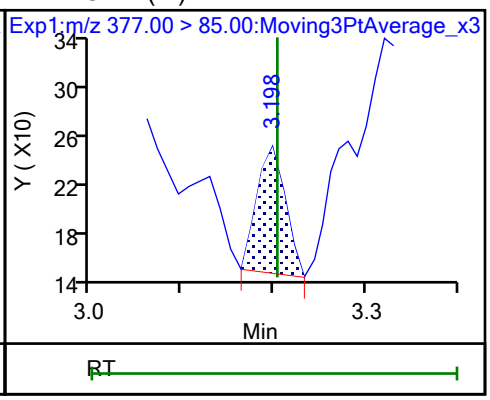
D 9 13C4 PFHpA



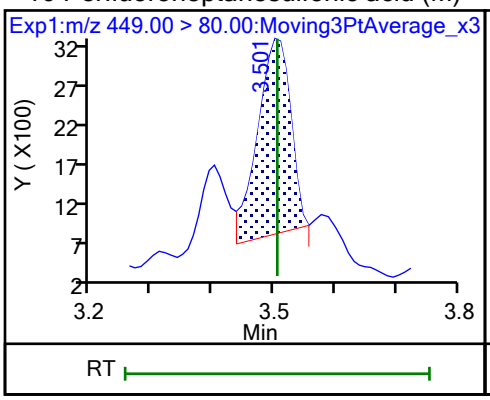
77 DONA (M)



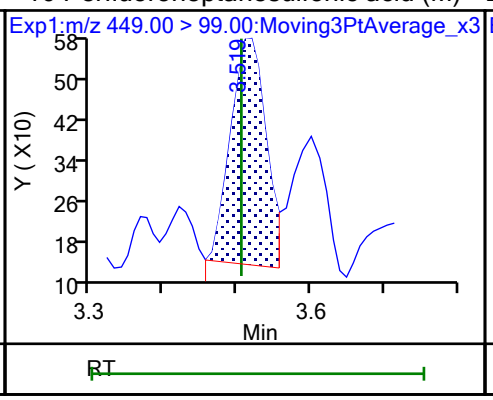
77 DONA (M)



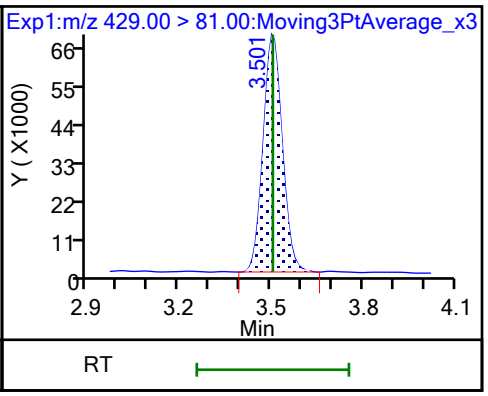
16 Perfluoroheptanesulfonic acid (M)



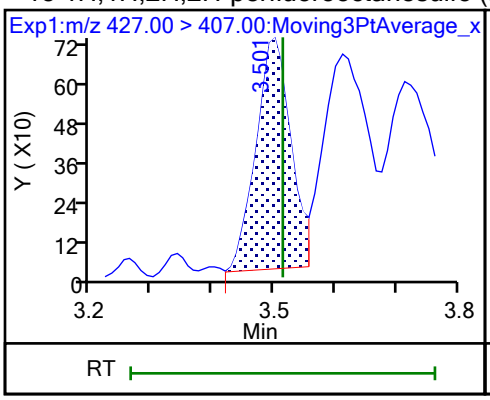
16 Perfluoroheptanesulfonic acid (M)



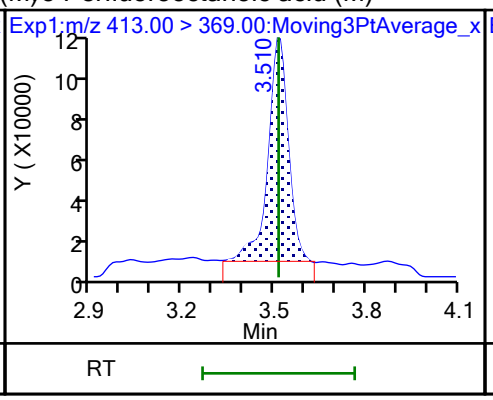
D 12 M2-6:2 FTS



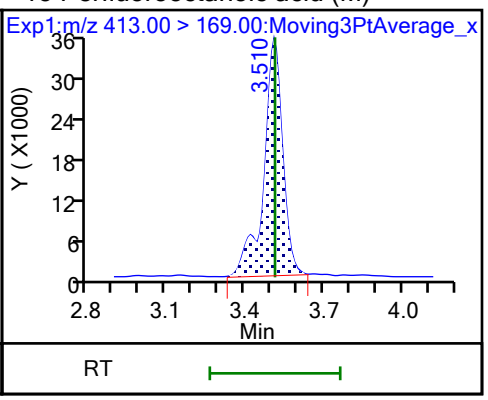
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



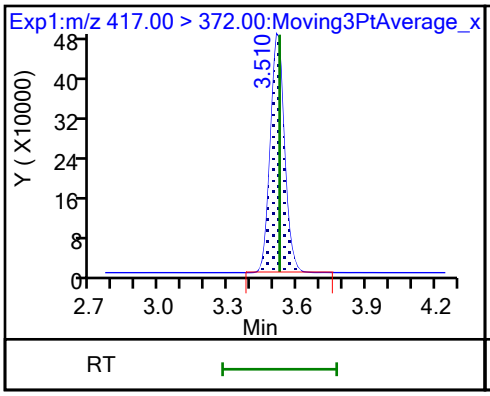
15 Perfluorooctanoic acid (M)



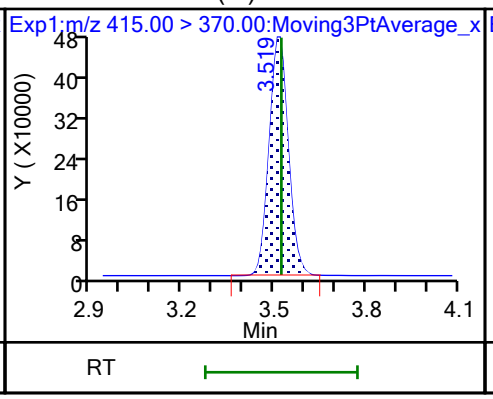
15 Perfluorooctanoic acid (M)



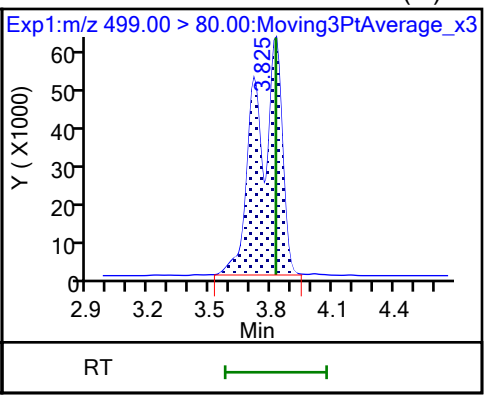
D 14 13C4 PFOA



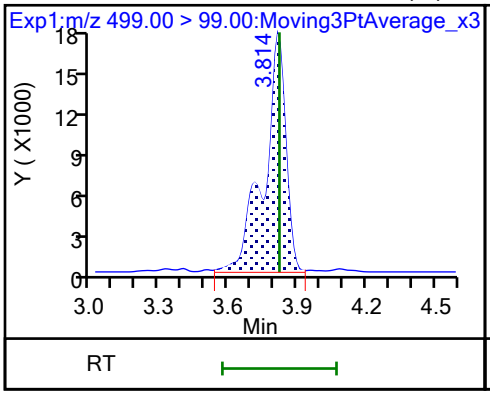
* 62 13C2 PFOA (M)



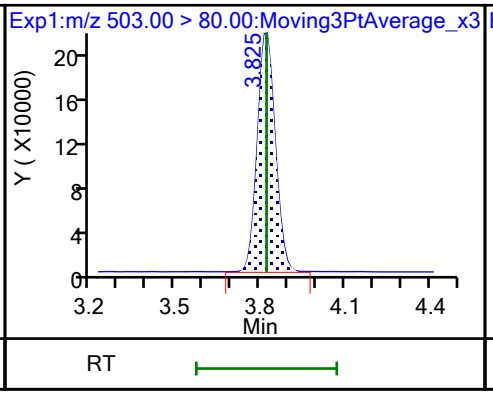
17 Perfluorooctanesulfonic acid (M)



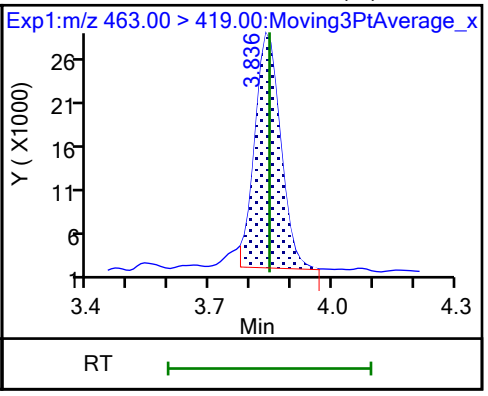
17 Perfluorooctanesulfonic acid (M)



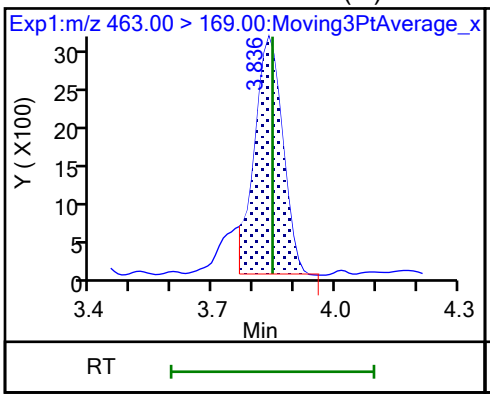
D 18 13C4 PFOS



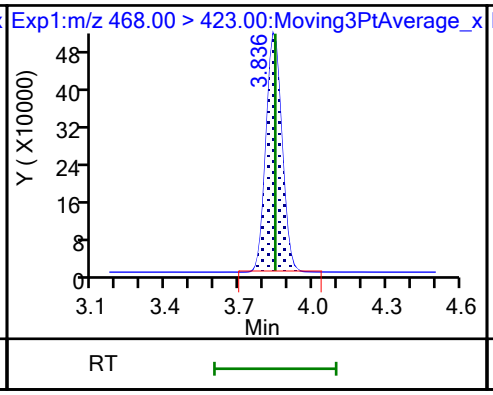
20 Perfluorononanoic acid (M)



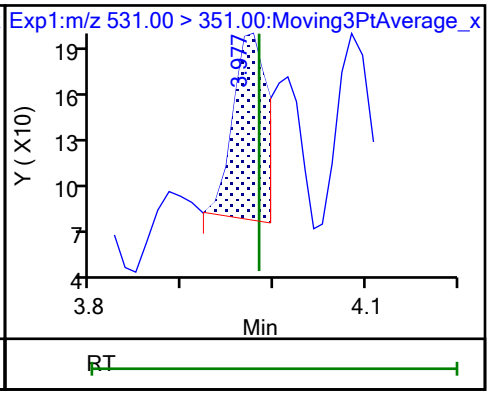
20 Perfluorononanoic acid (M)



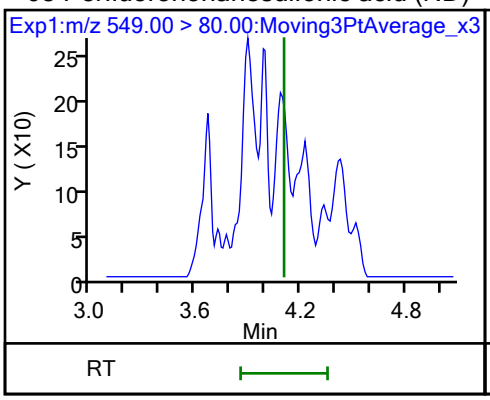
D 19 13C5 PFNA



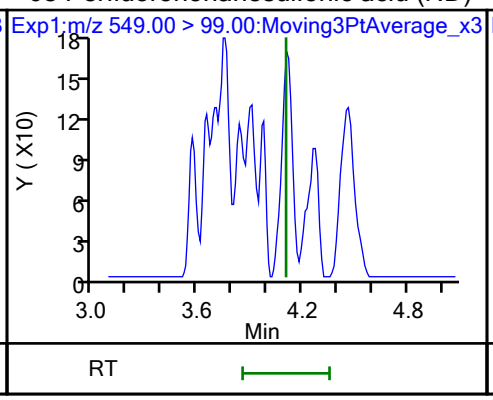
69 9-Chlorohexadecafluoro-3-oxanona (M)



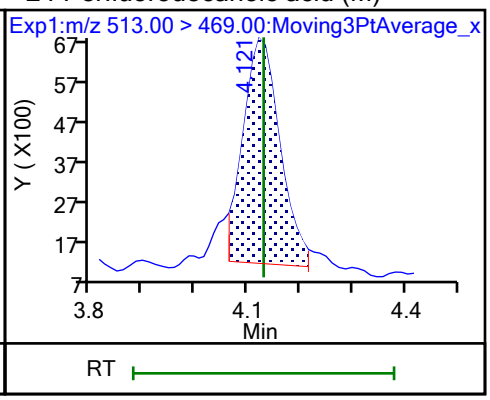
68 Perfluorononanesulfonic acid (ND)



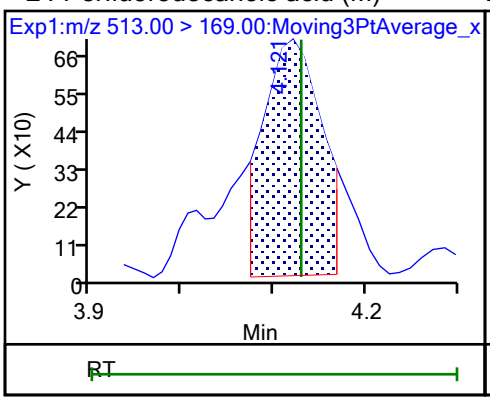
68 Perfluorononanesulfonic acid (ND)



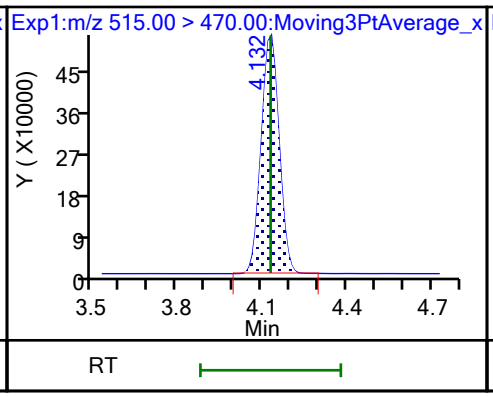
24 Perfluorodecanoic acid (M)



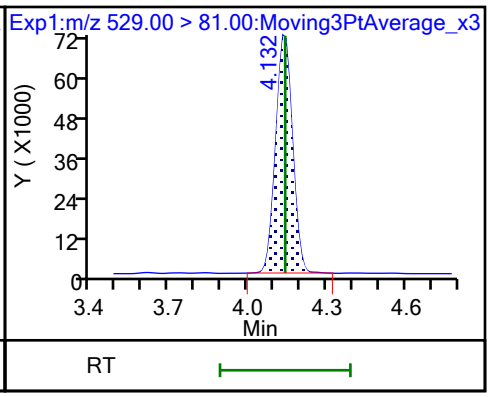
24 Perfluorodecanoic acid (M)



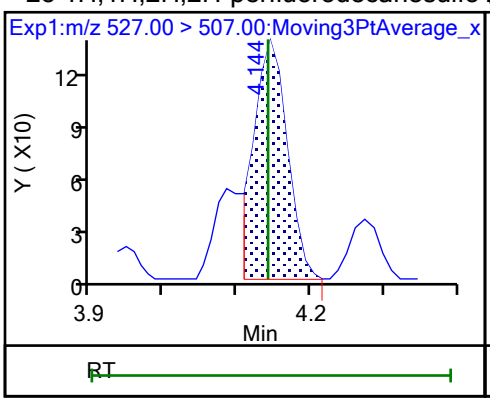
D 23 13C2 PFDA



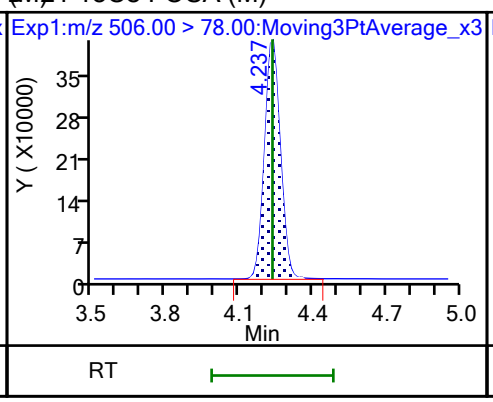
D 26 M2-8:2 FTS



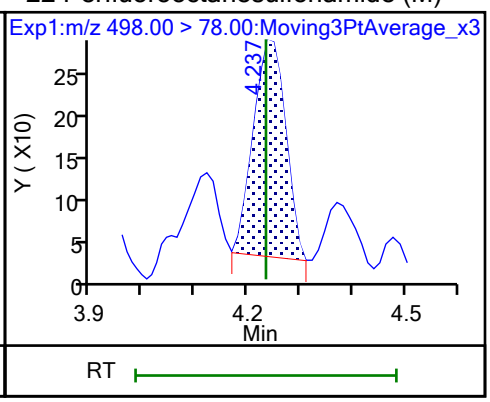
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



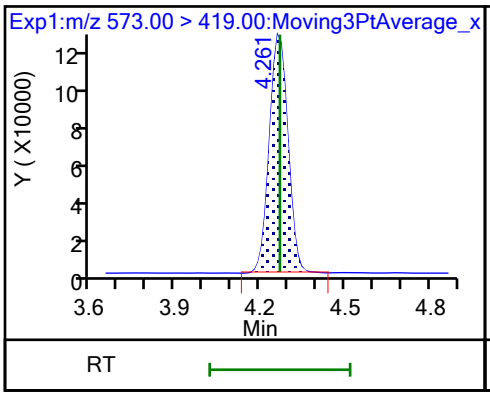
D 21 13C8 FOSA (M)



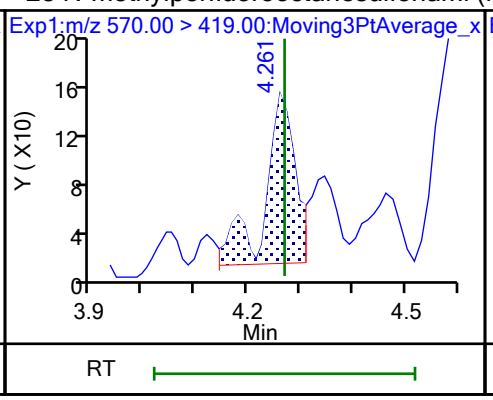
22 Perfluorooctanesulfonamide (M)



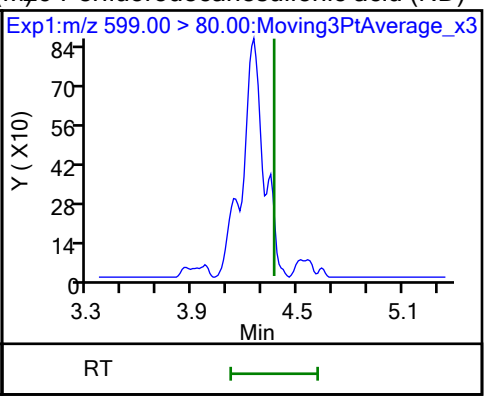
D 27 d3-NMeFOSAA



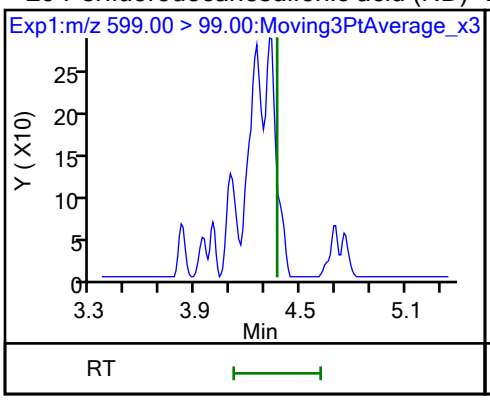
28 N-methylperfluorooctanesulfonami (M)



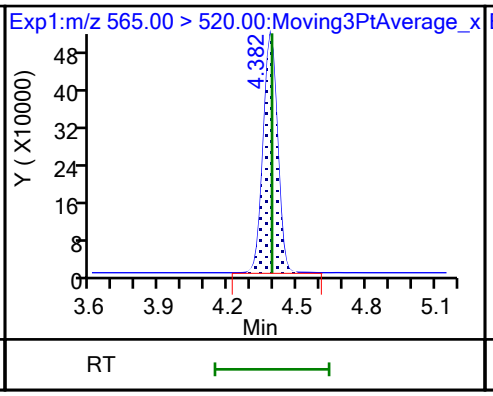
29 Perfluorodecanesulfonic acid (ND)



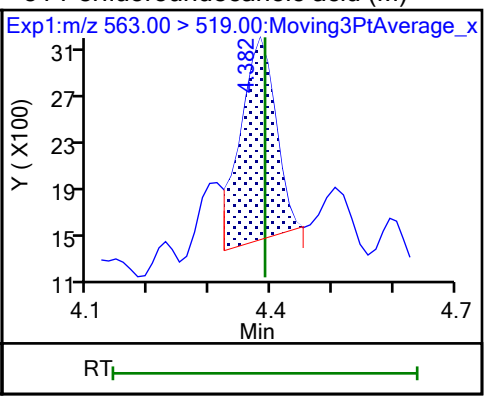
29 Perfluorodecanesulfonic acid (ND)



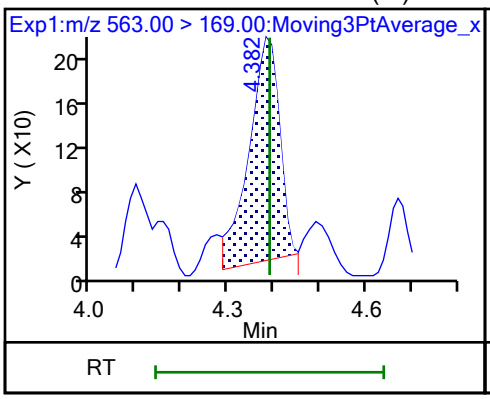
D 30 13C2 PFUnA



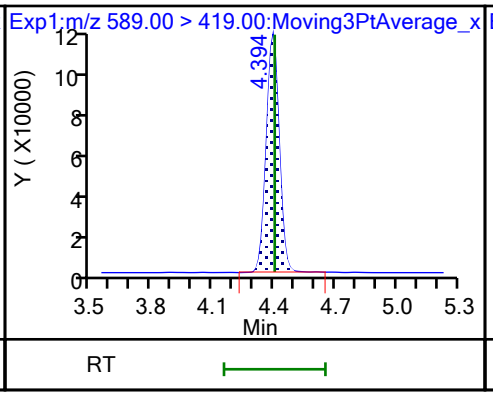
31 Perfluoroundecanoic acid (M)



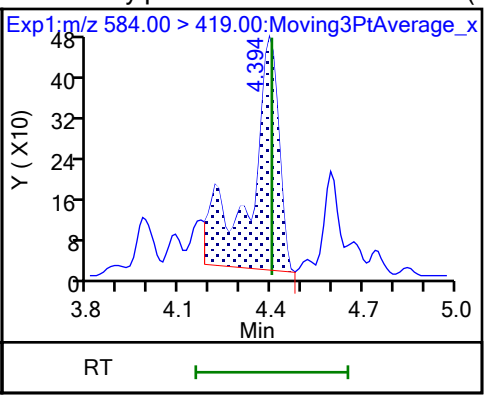
31 Perfluoroundecanoic acid (M)



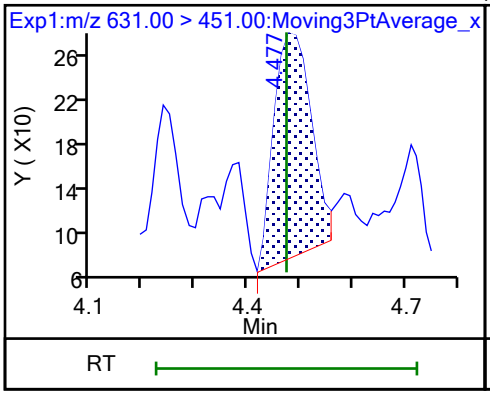
D 32 d5-NEtFOSAA



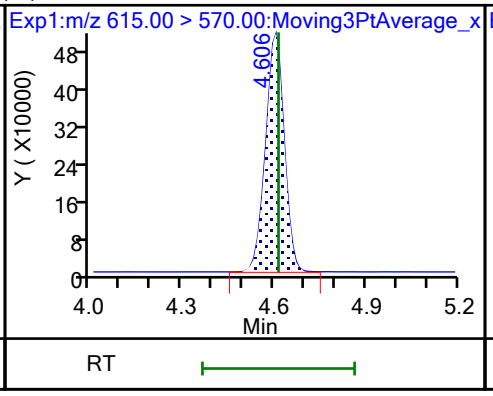
33 N-ethylperfluorooctanesulfonamid (M)



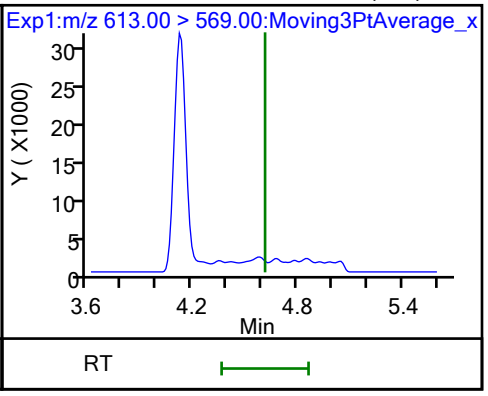
66 11-Chloroeicosafluoro-3-oxaundec (M)



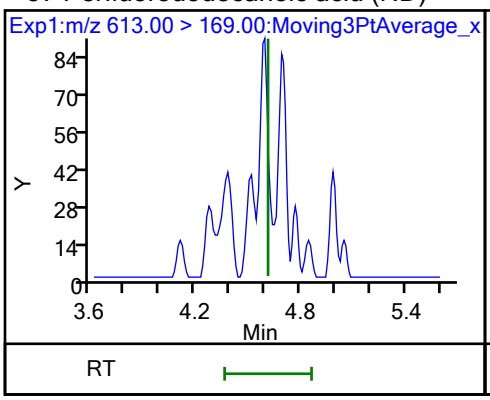
D 36 13C2 PFDoA



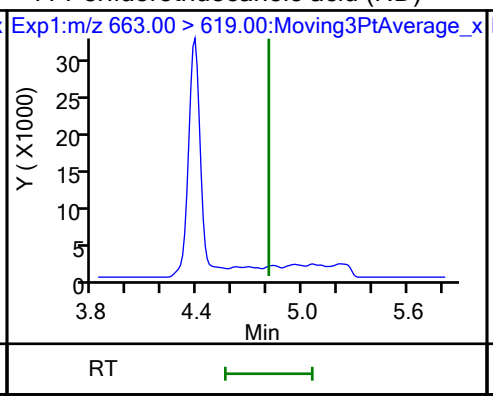
37 Perfluorododecanoic acid (ND)



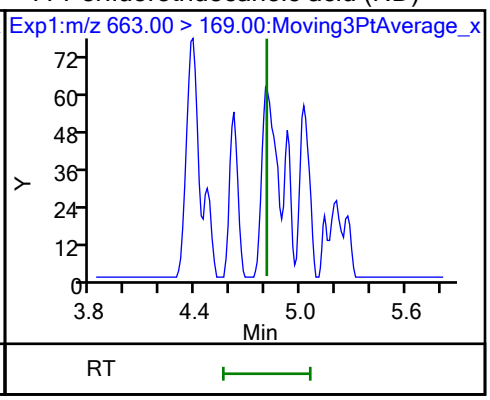
37 Perfluorododecanoic acid (ND)



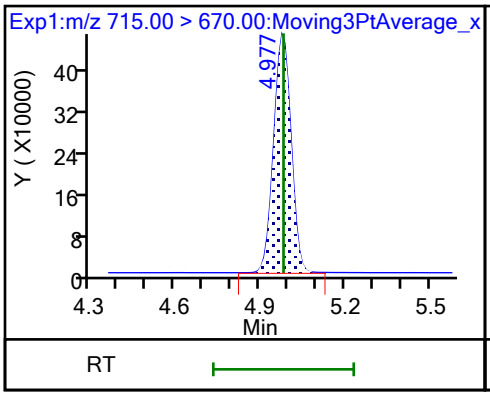
41 Perfluorotridecanoic acid (ND)



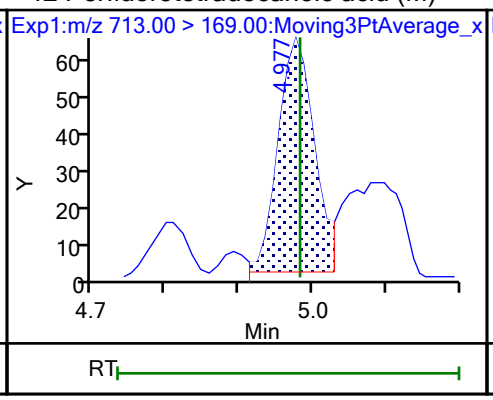
41 Perfluorotridecanoic acid (ND)



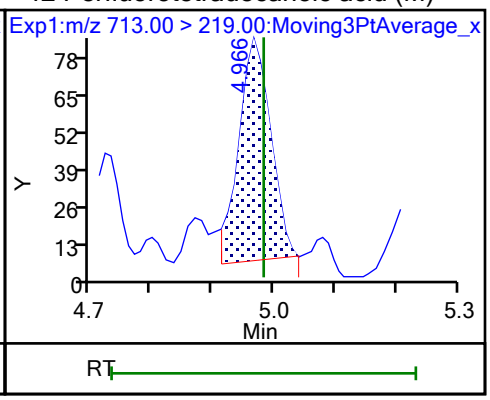
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

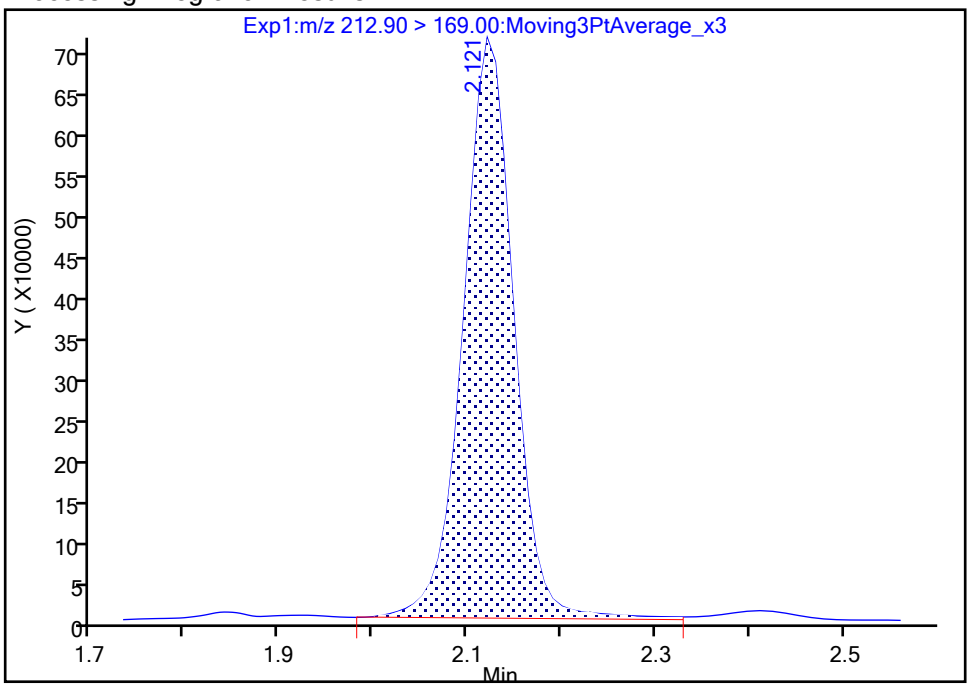
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

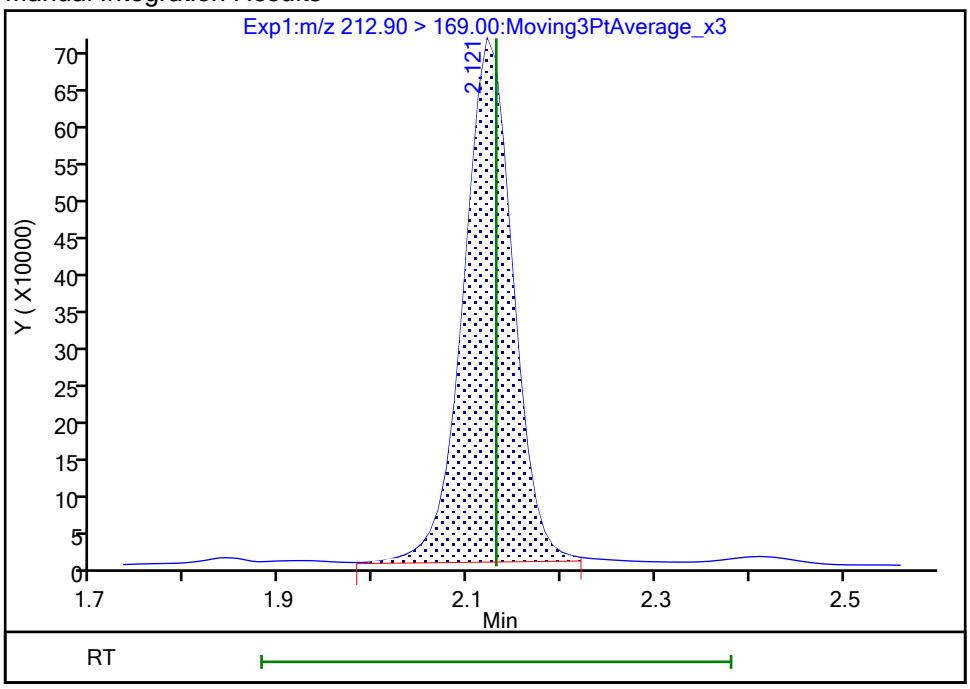
Processing Integration Results

RT: 2.12
Area: 2637830
Amount: 1.701678
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2596522
Amount: 1.674389
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:15:06 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

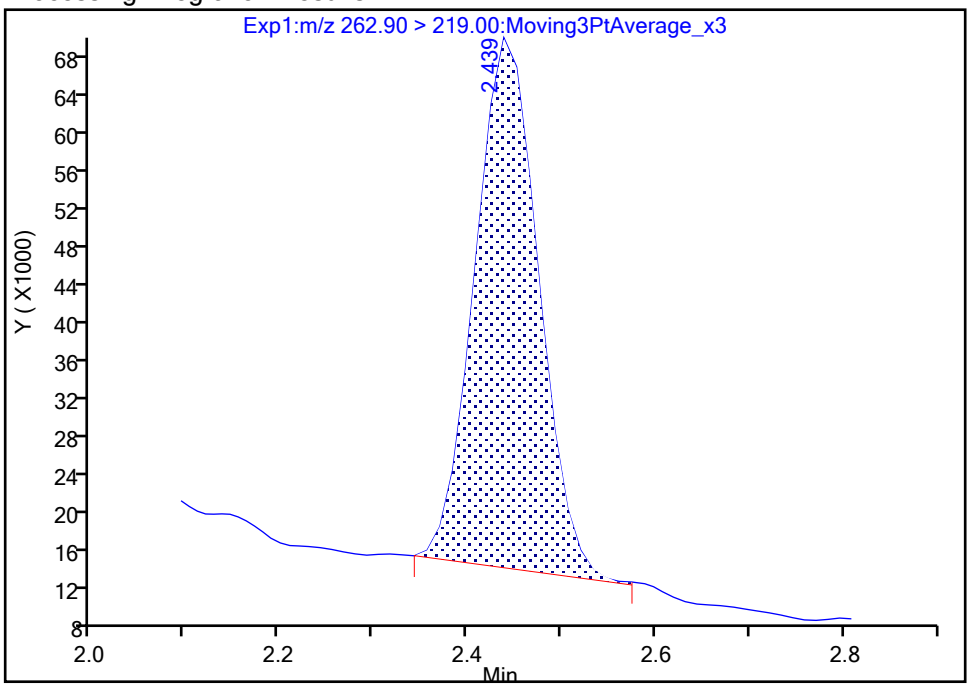
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

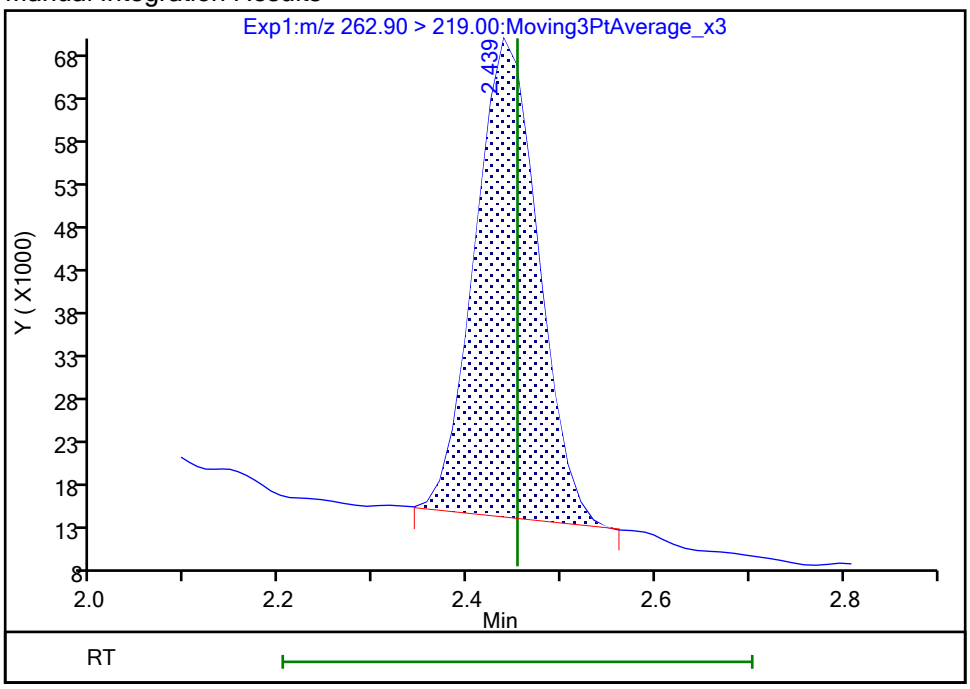
Processing Integration Results

RT: 2.44
Area: 259738
Amount: 0.191573
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 259172
Amount: 0.191155
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:15:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

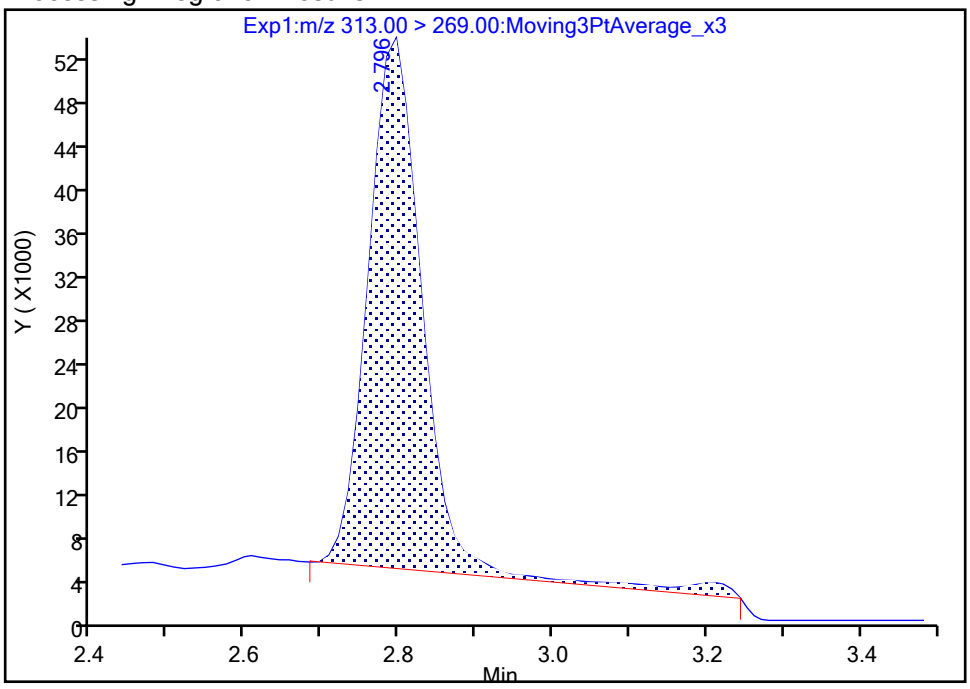
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

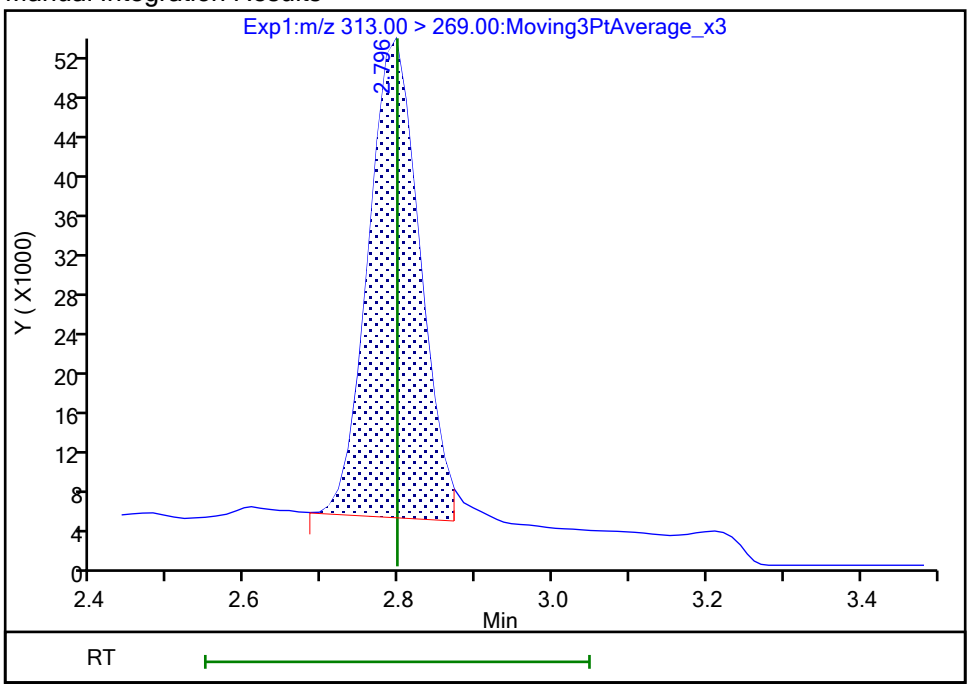
Processing Integration Results

RT: 2.80
Area: 244488
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 226792
Amount: 0.172290
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:07:34 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

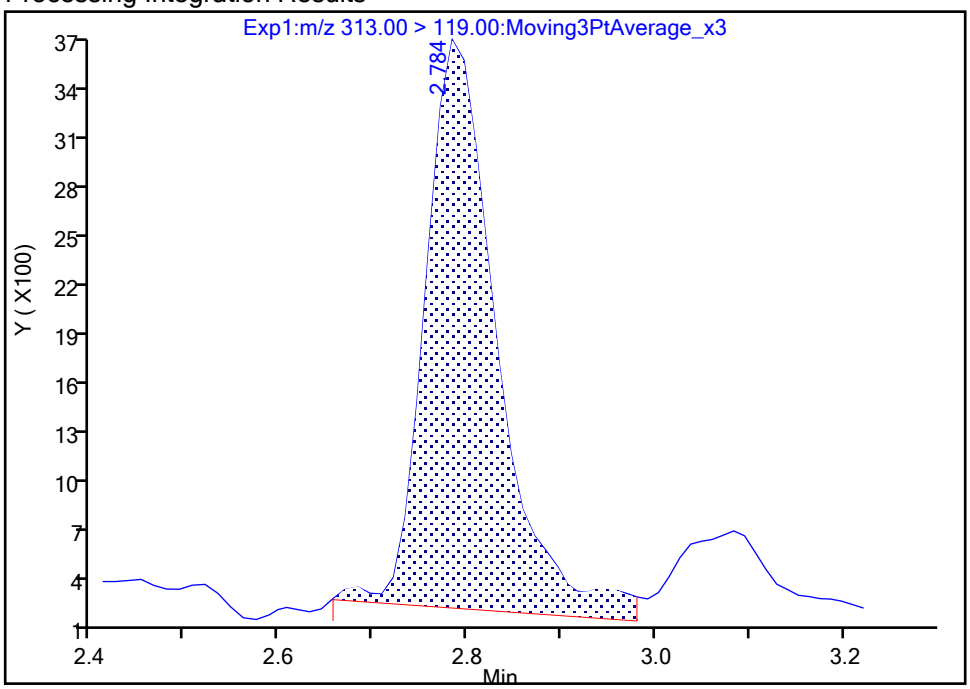
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

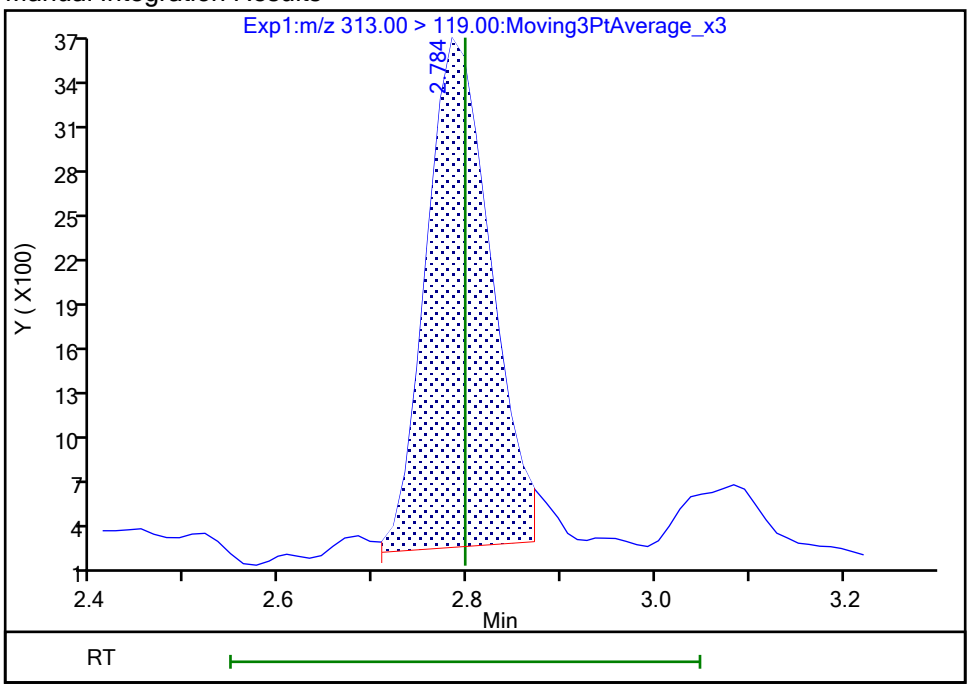
Processing Integration Results

RT: 2.78
Area: 18154
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.78
Area: 16049
Amount: 0.172290
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:07:37 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

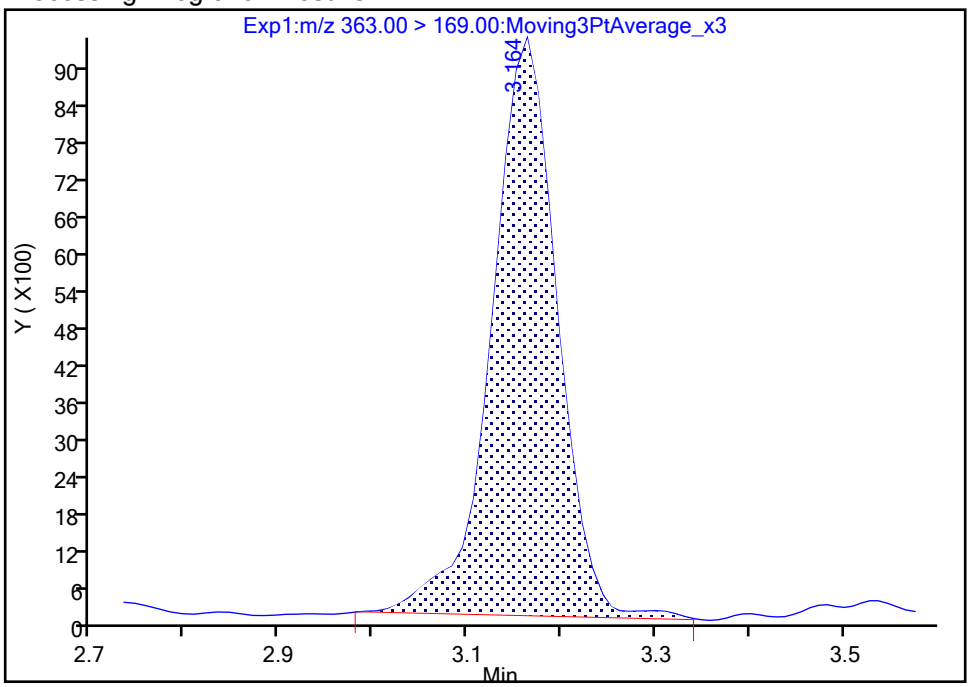
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

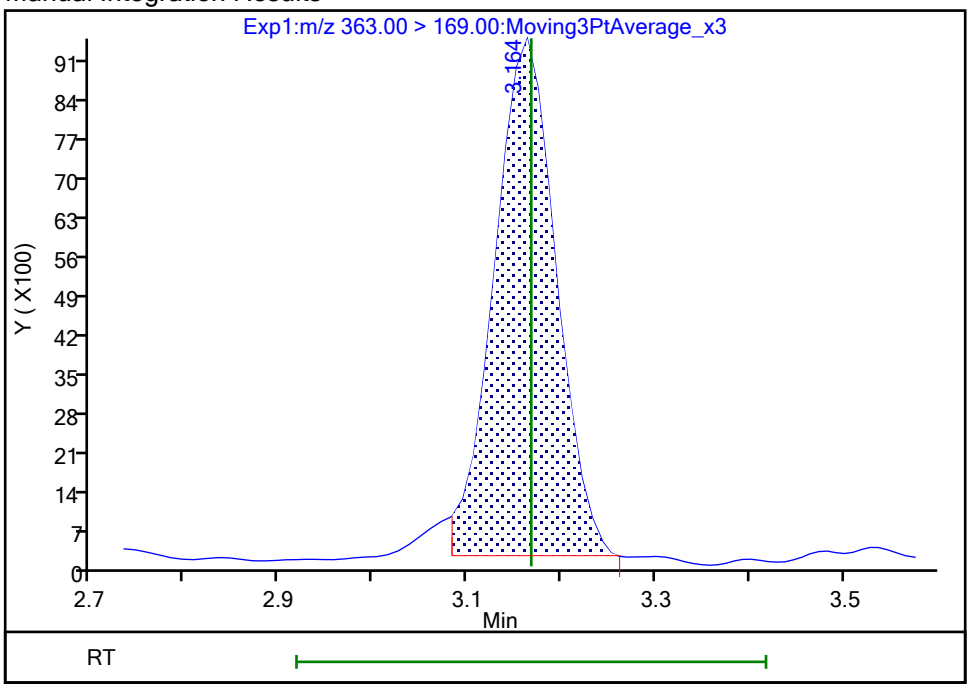
Processing Integration Results

RT: 3.16
Area: 45545
Amount: 0.109202
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 42576
Amount: 0.109202
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

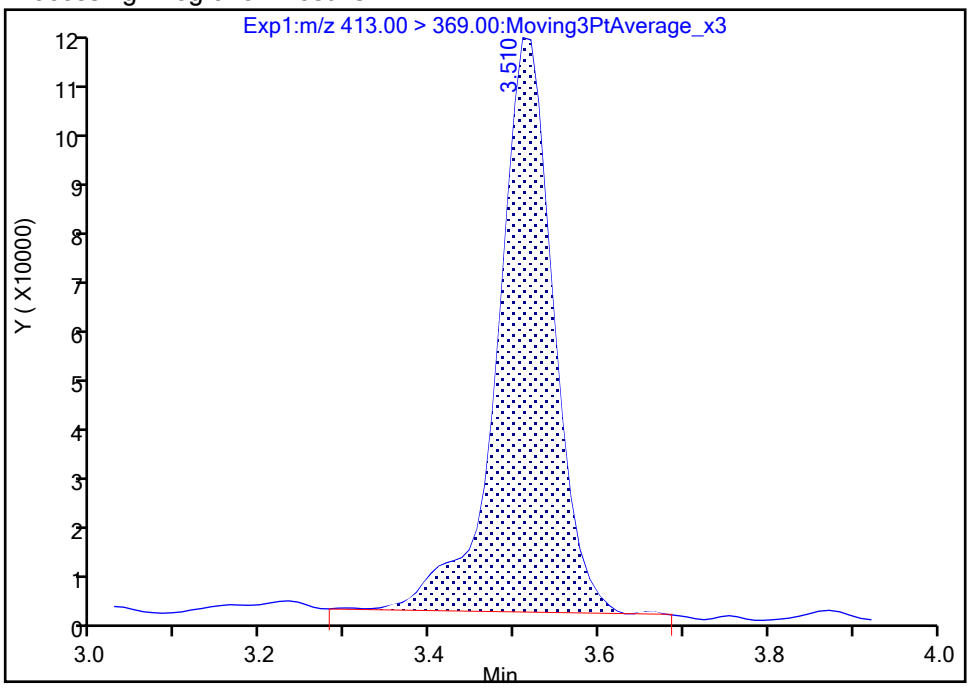
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

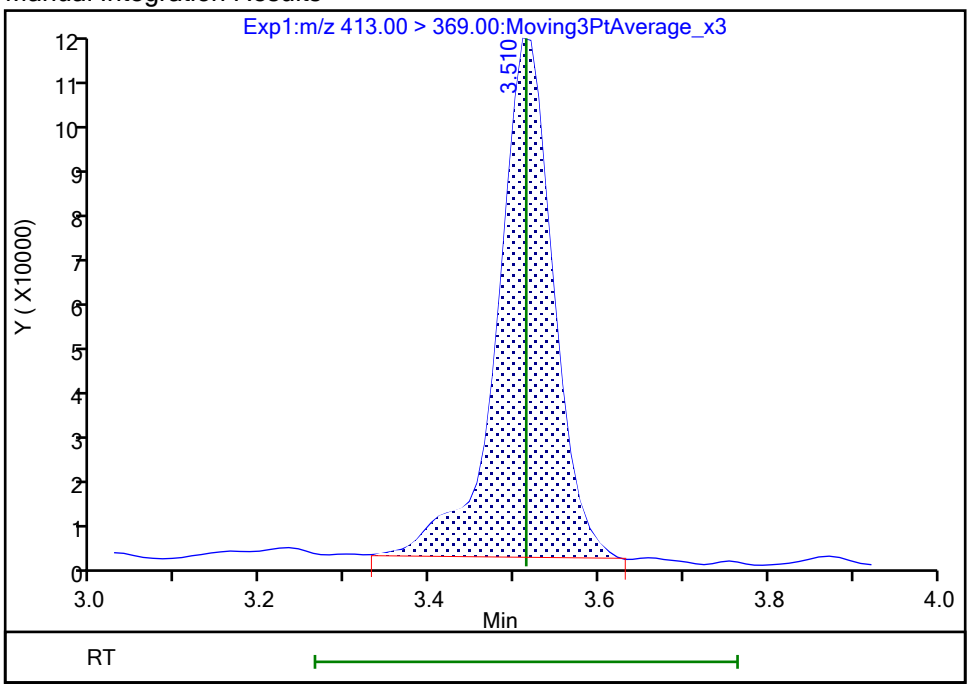
Processing Integration Results

RT: 3.51
Area: 484226
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 480995
Amount: 0.275493
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:17:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

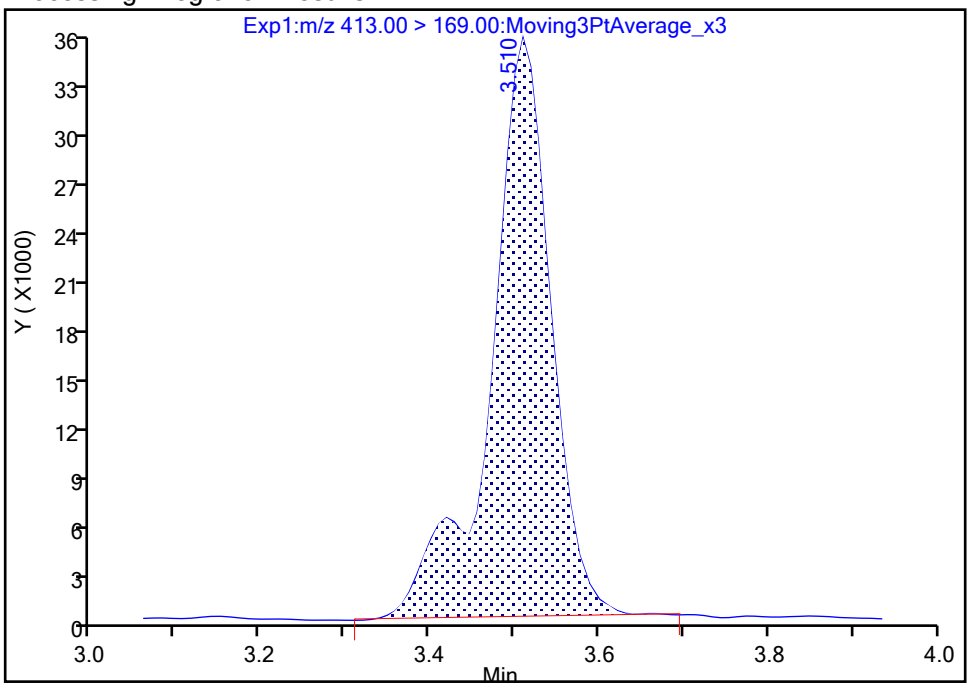
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

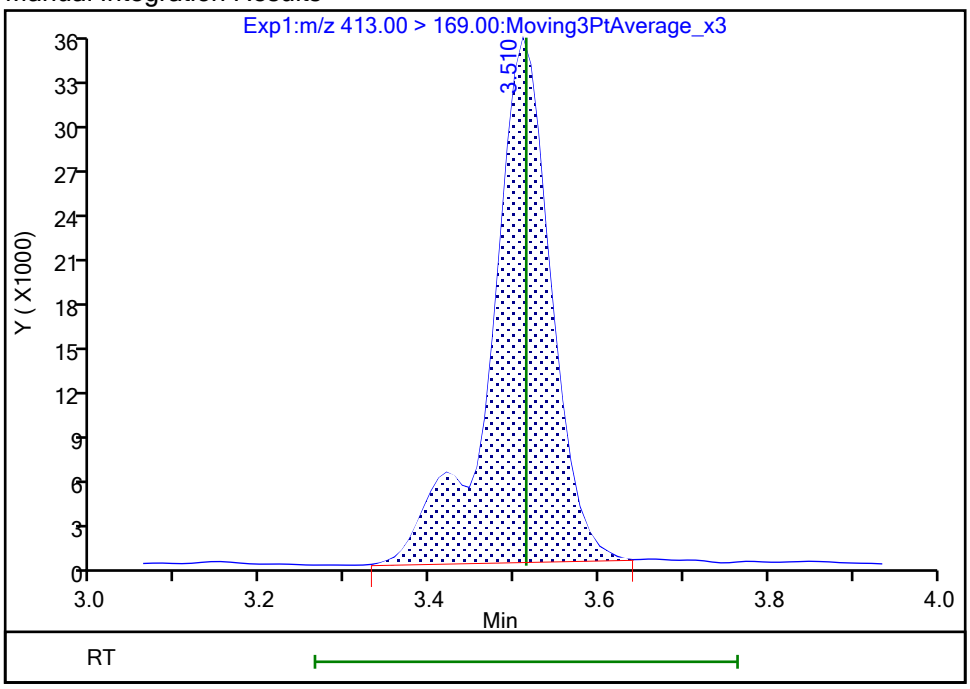
Processing Integration Results

RT: 3.51
Area: 176736
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 175300
Amount: 0.275493
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:17:21 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

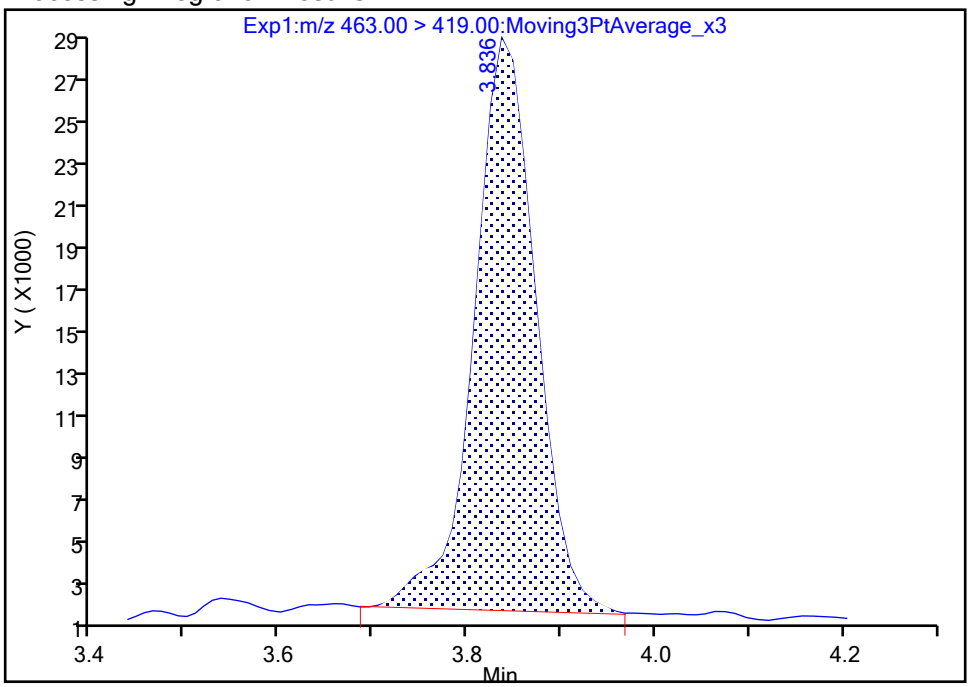
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

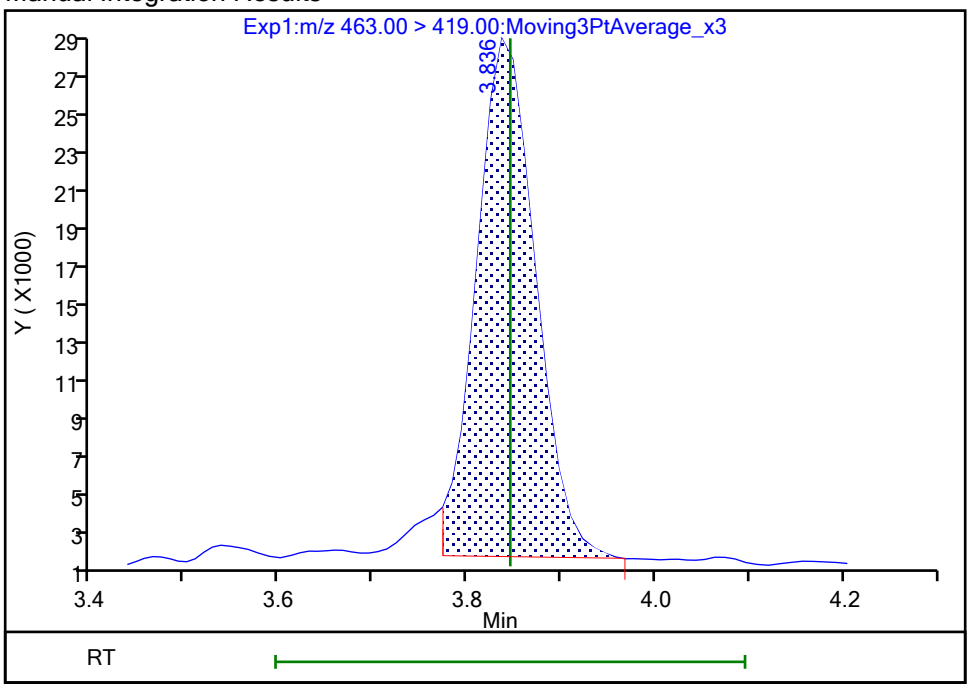
Processing Integration Results

RT: 3.84
Area: 117167
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 112290
Amount: 0.062171
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

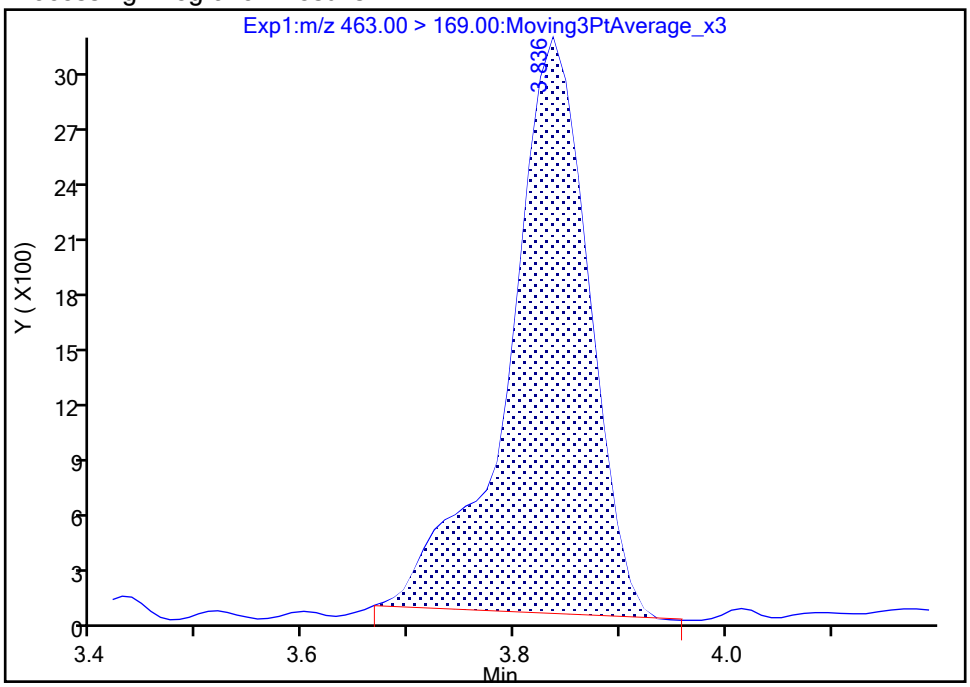
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

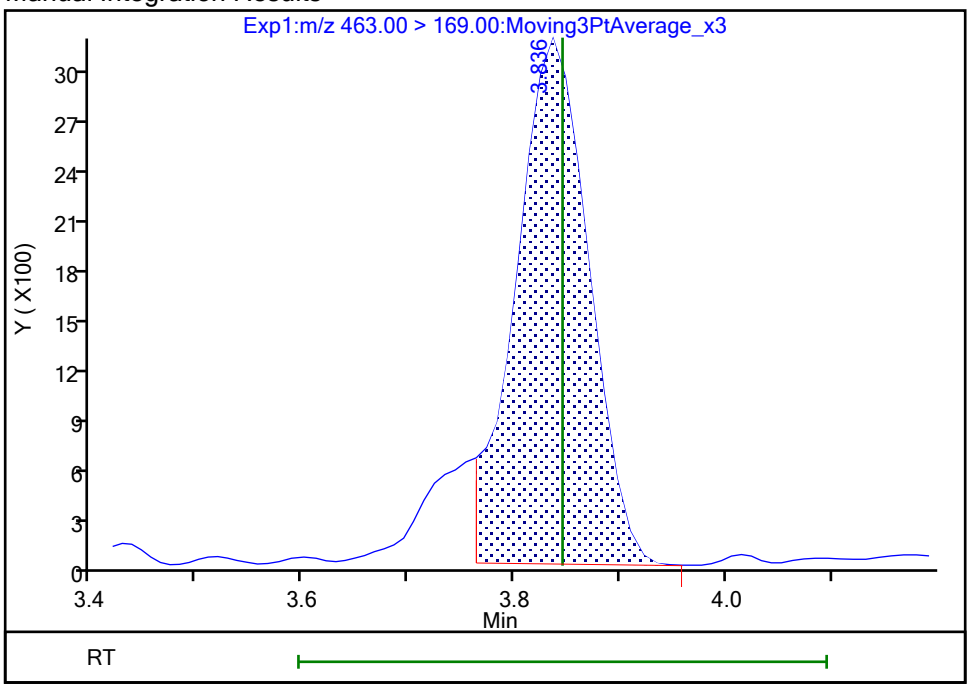
Processing Integration Results

RT: 3.84
Area: 16408
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 14923
Amount: 0.062171
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

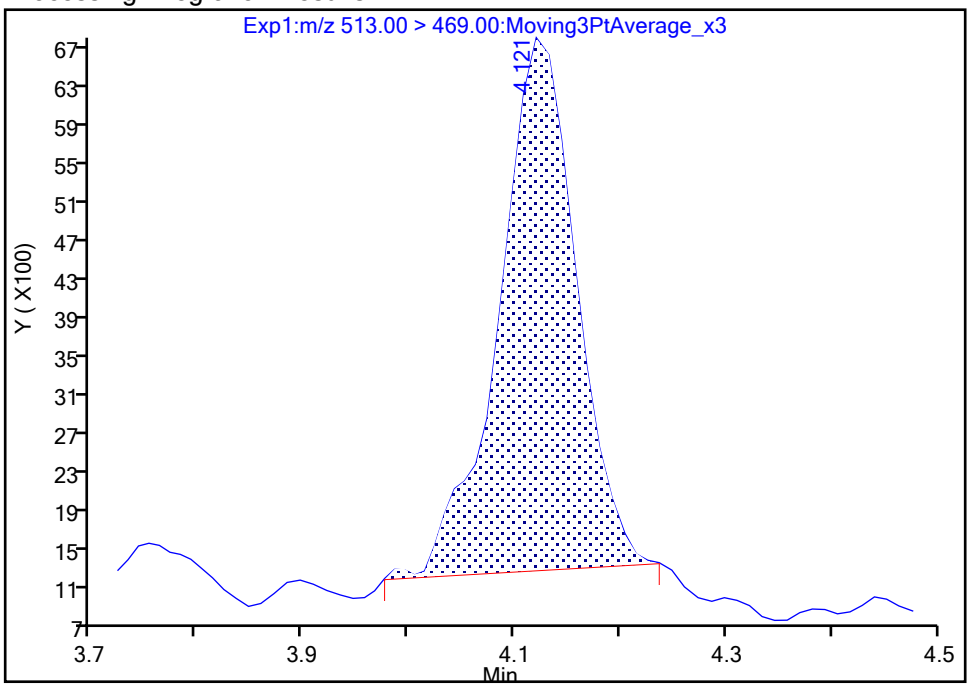
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

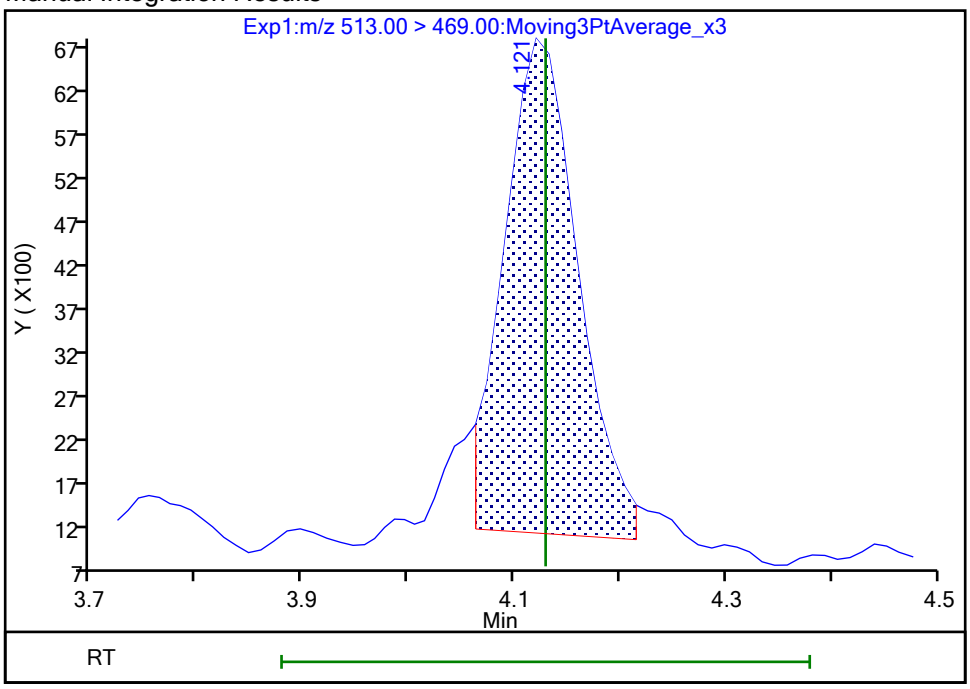
Processing Integration Results

RT: 4.12
Area: 27652
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 27172
Amount: 0.014743
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:35 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

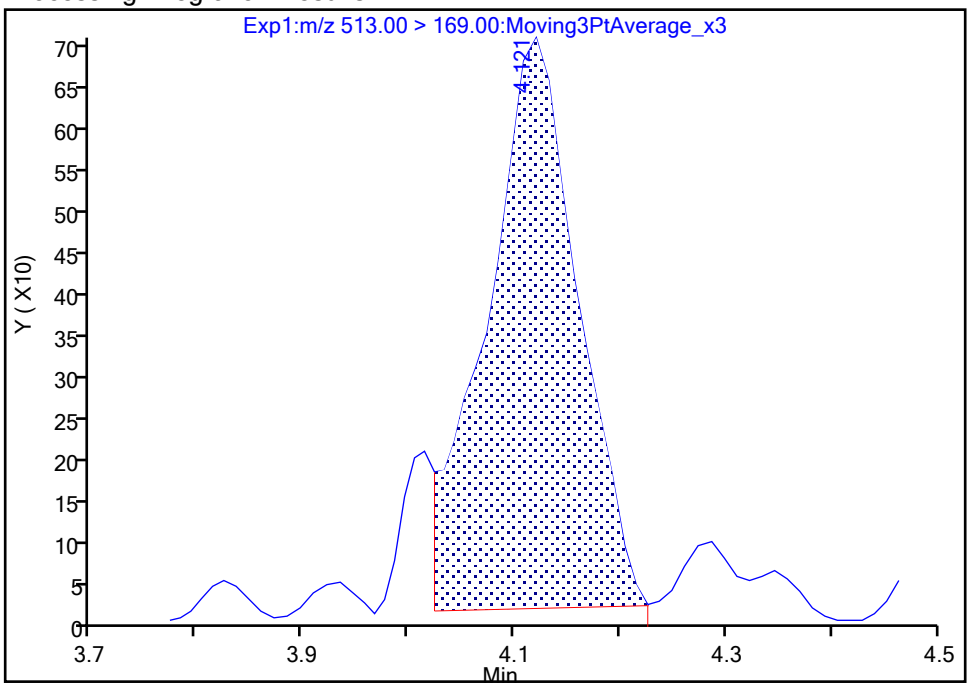
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

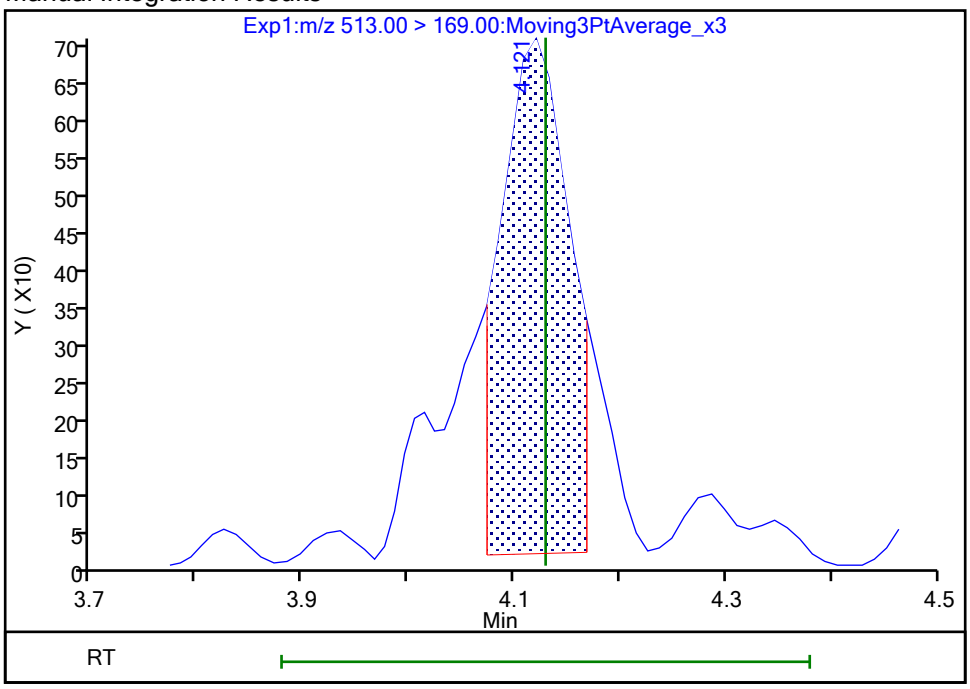
Processing Integration Results

RT: 4.12
Area: 4144
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 2975
Amount: 0.014743
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

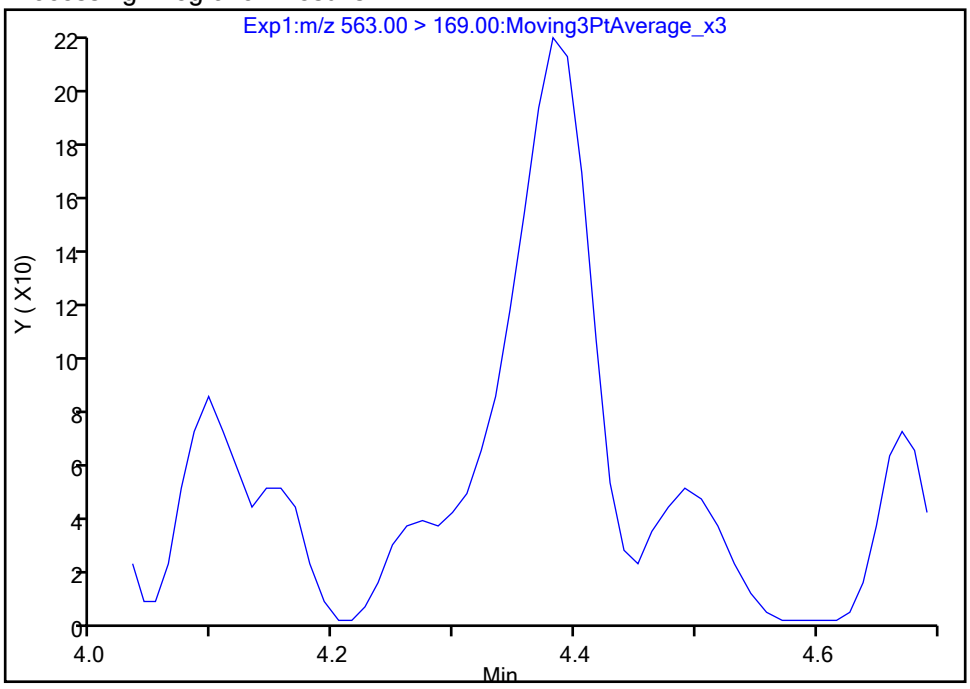
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

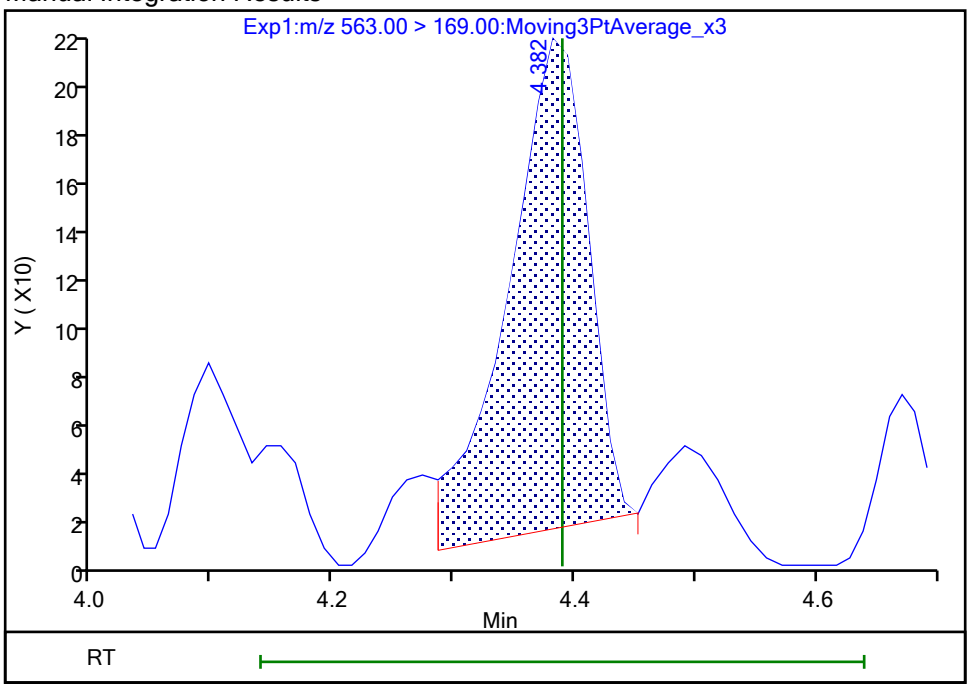
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 926
Amount: 0.003795
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

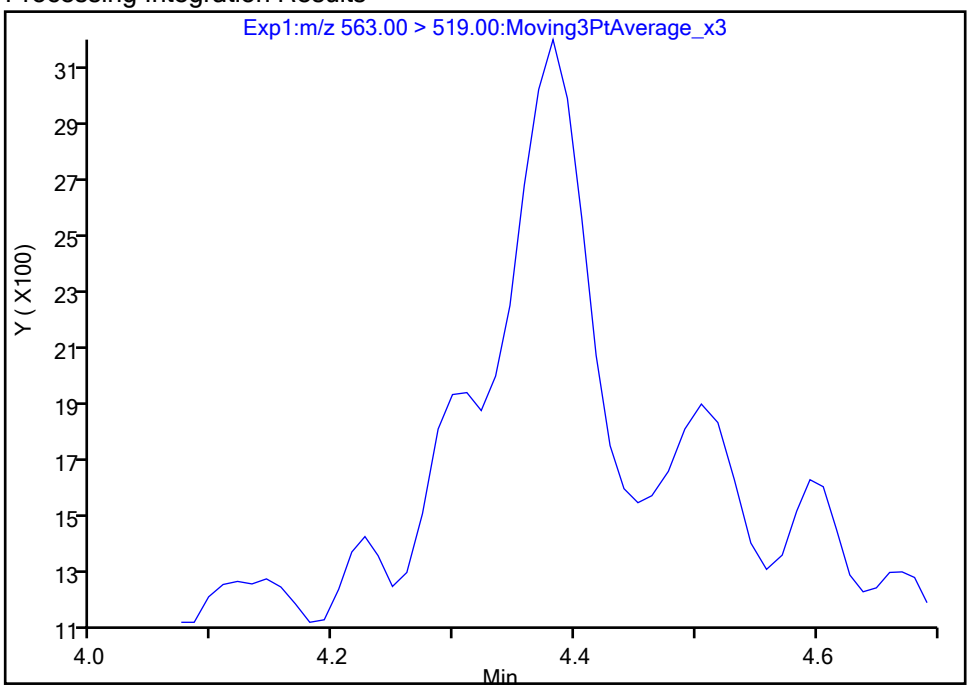
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

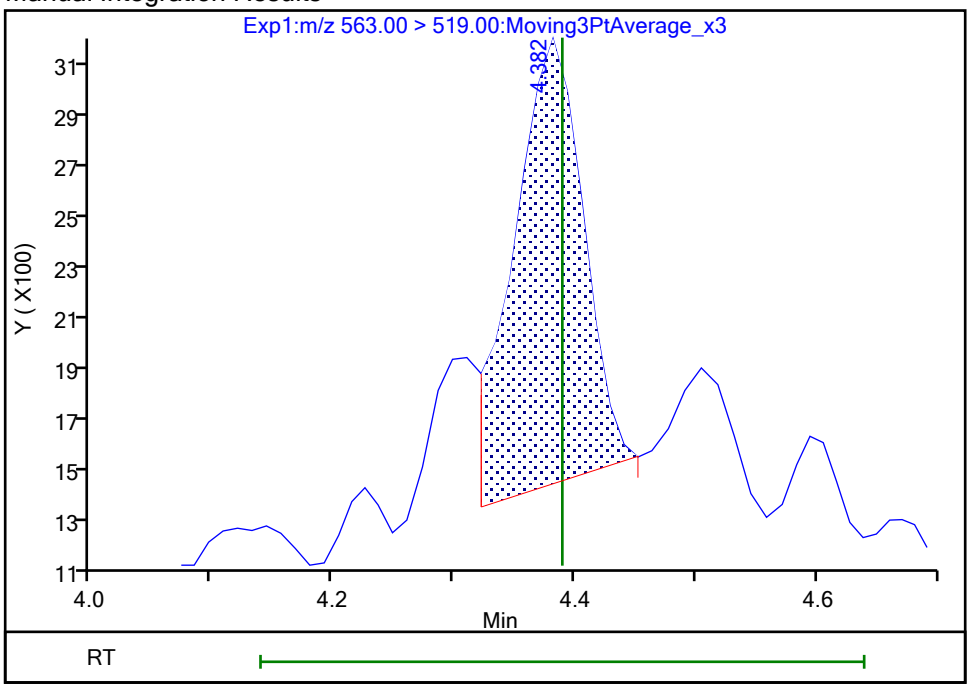
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 7032
Amount: 0.003795
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

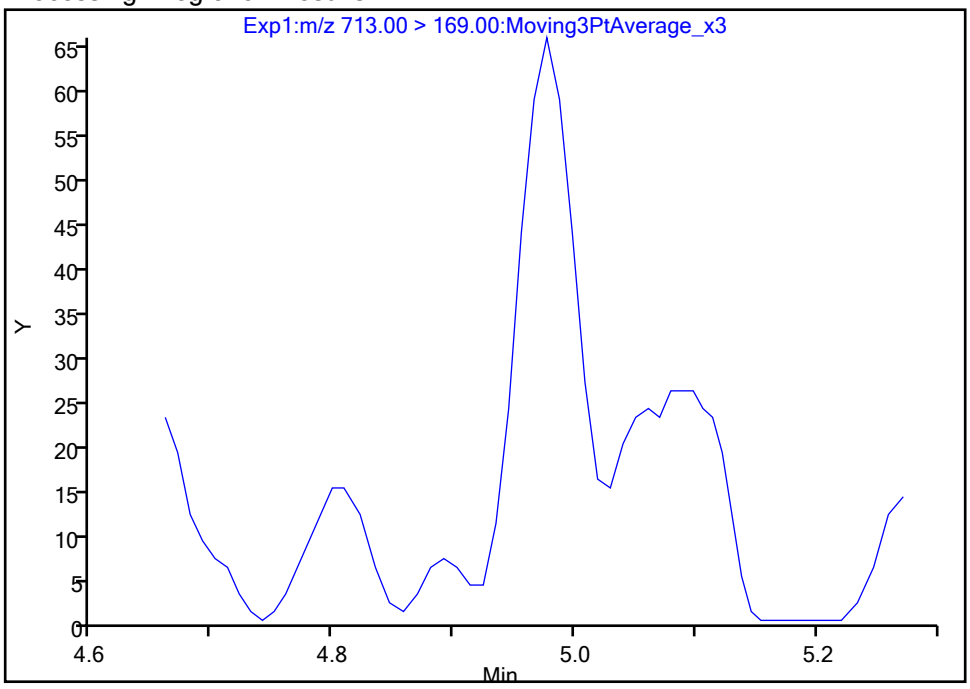
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

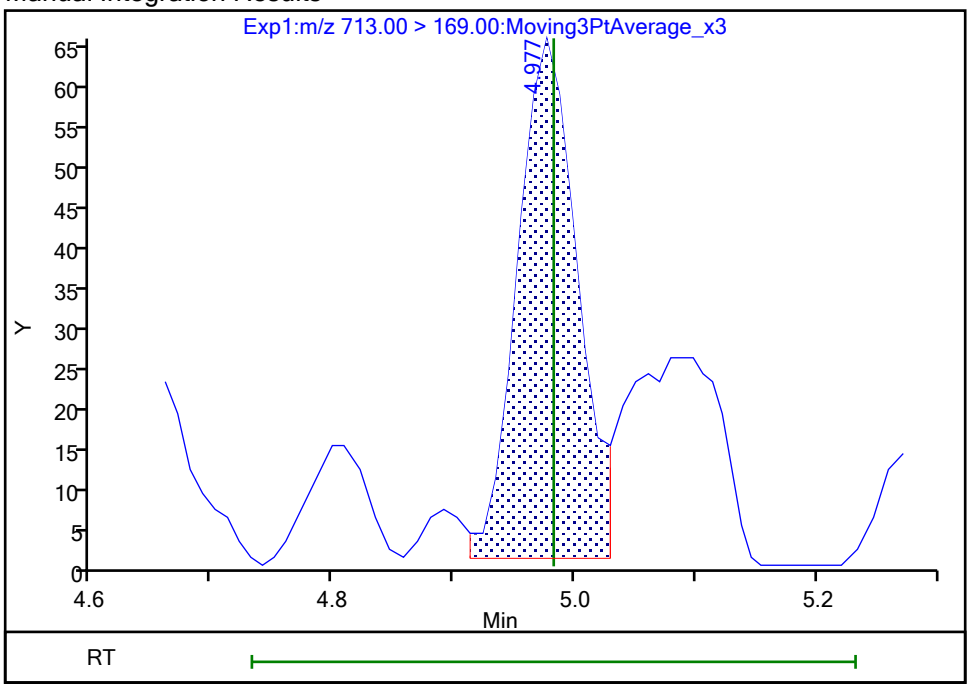
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 222
Amount: 0.001237
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

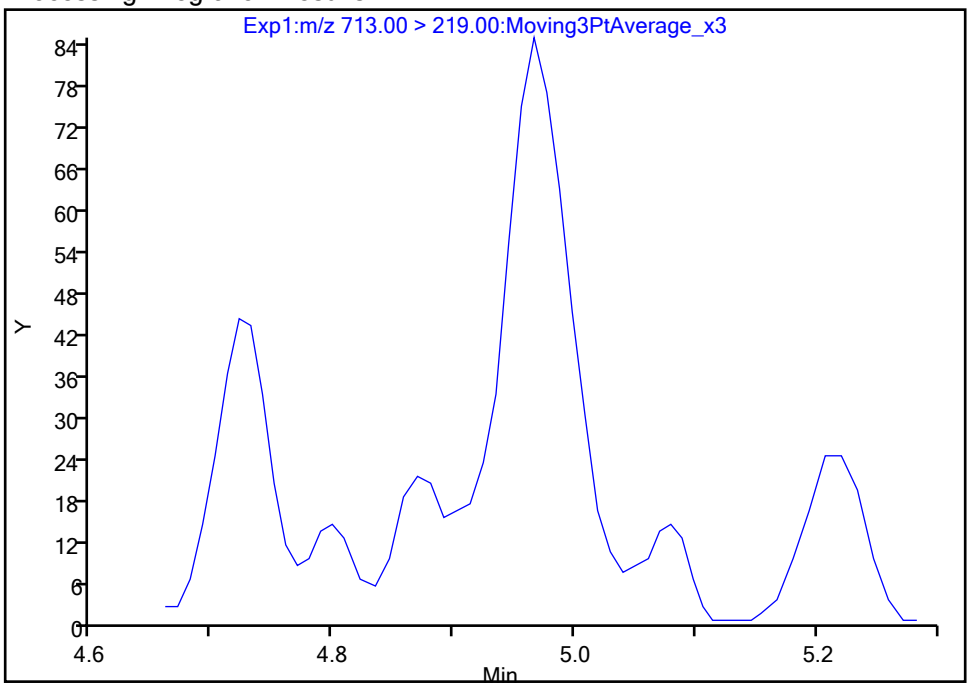
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

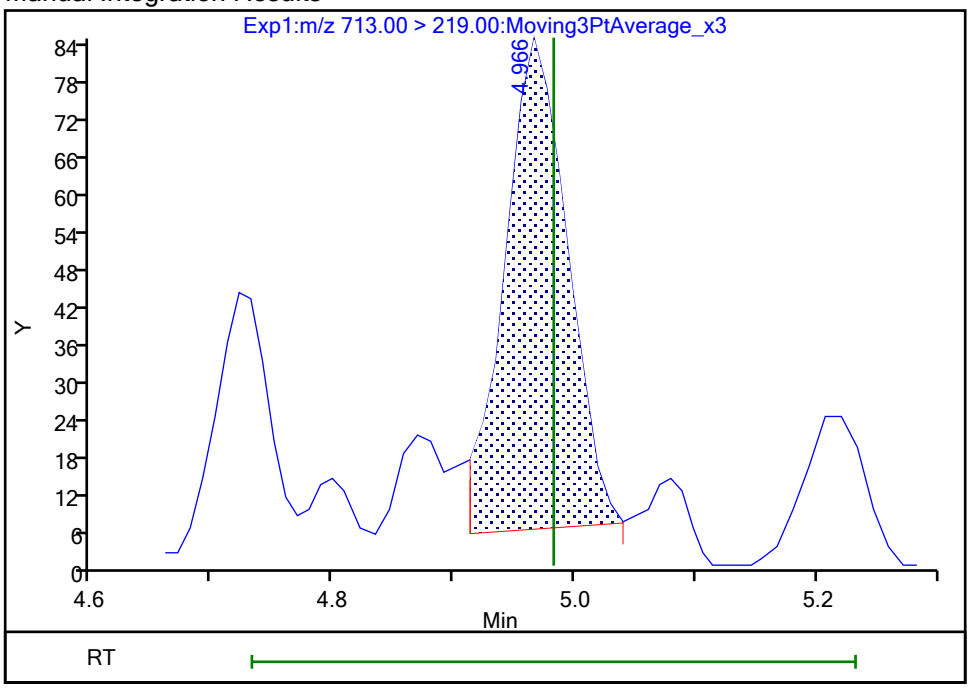
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 285
Amount: 0.001237
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

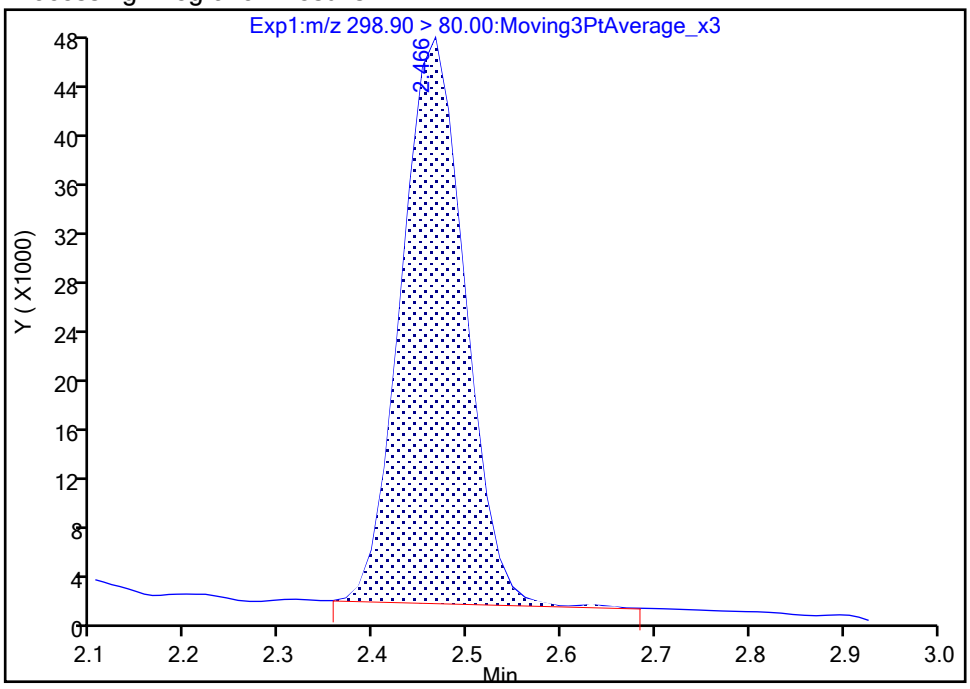
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

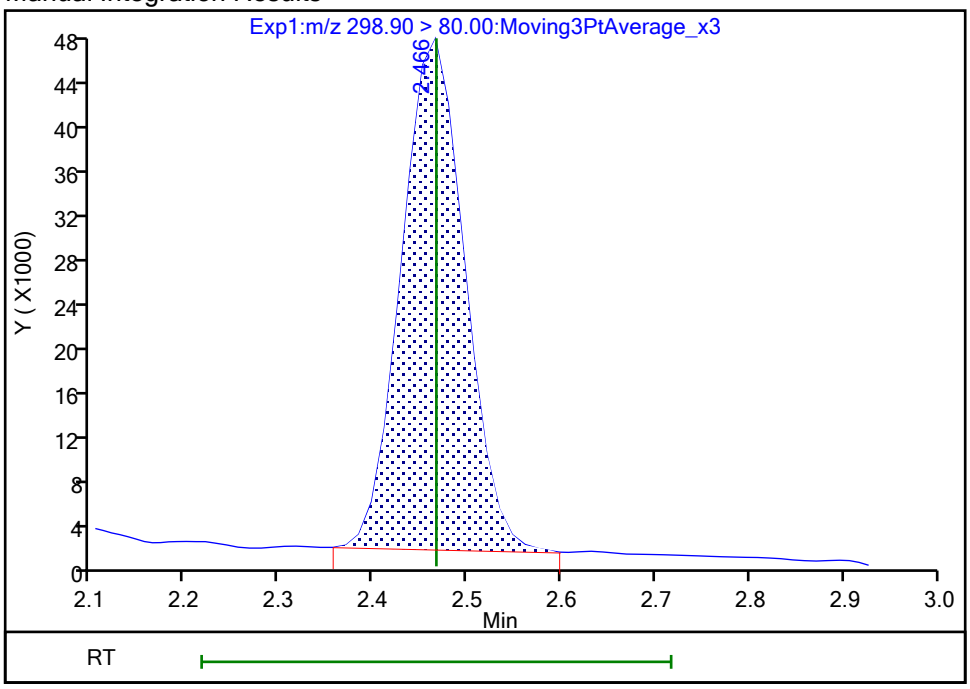
Processing Integration Results

RT: 2.47
Area: 213552
Amount: 0.117979
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 212794
Amount: 0.117560
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:15:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

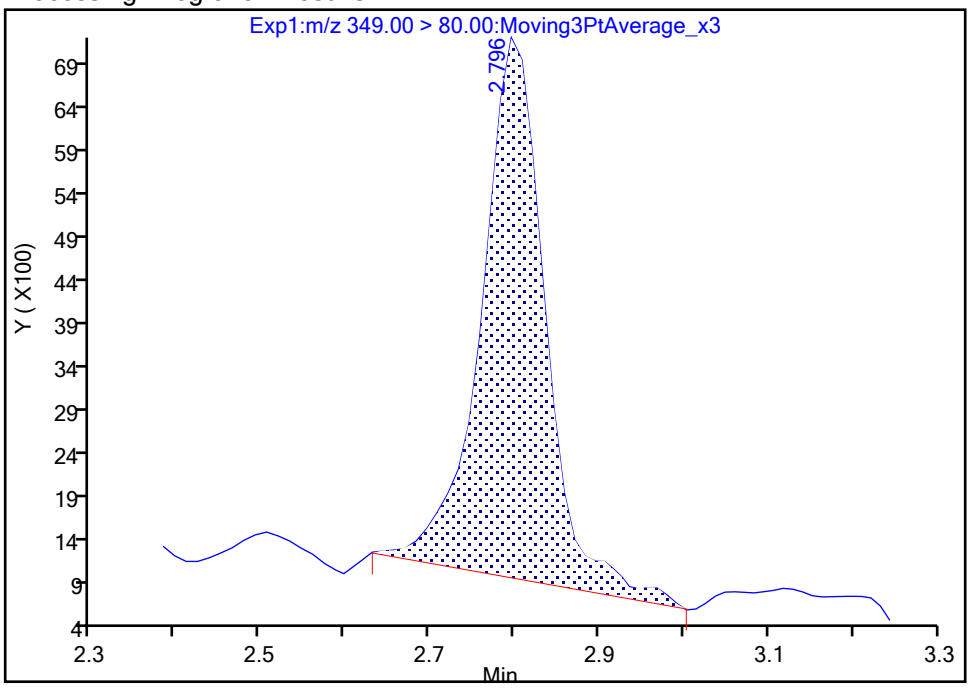
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

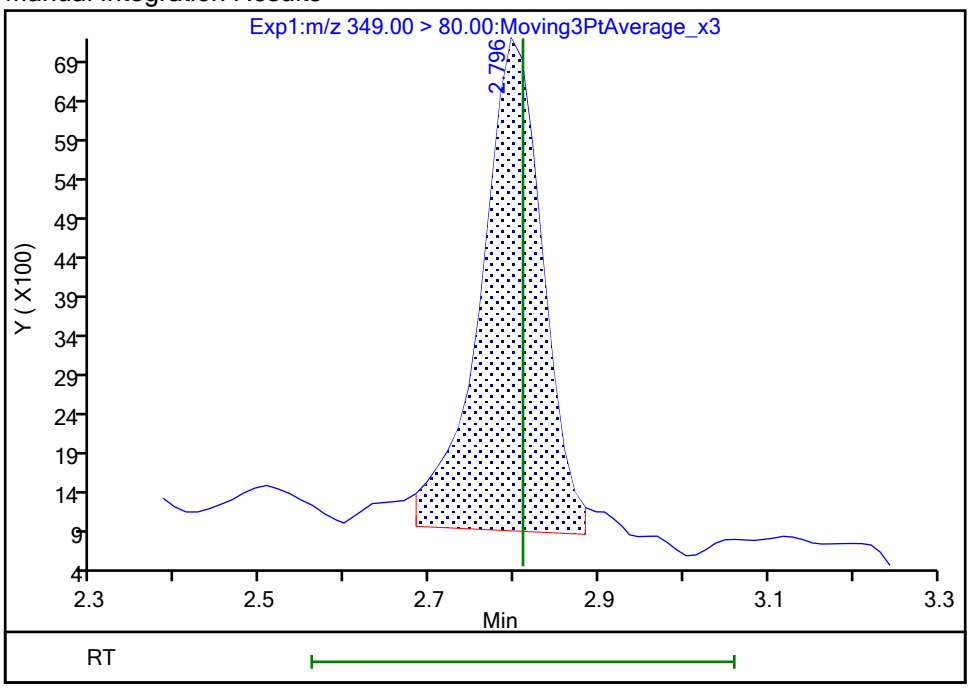
Processing Integration Results

RT: 2.80
Area: 33189
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 32144
Amount: 0.019537
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:15:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

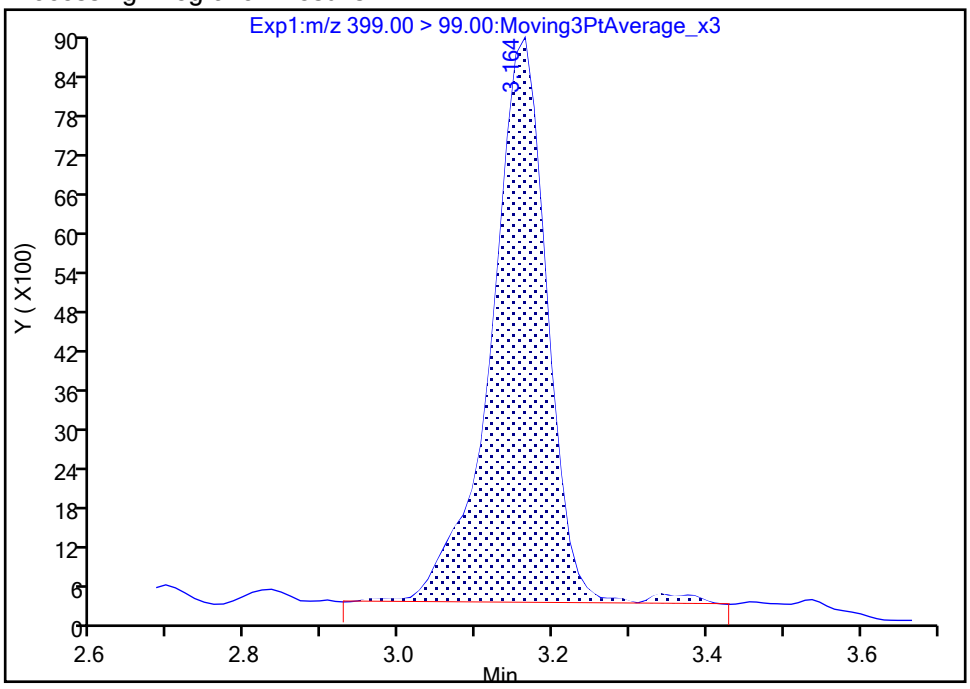
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

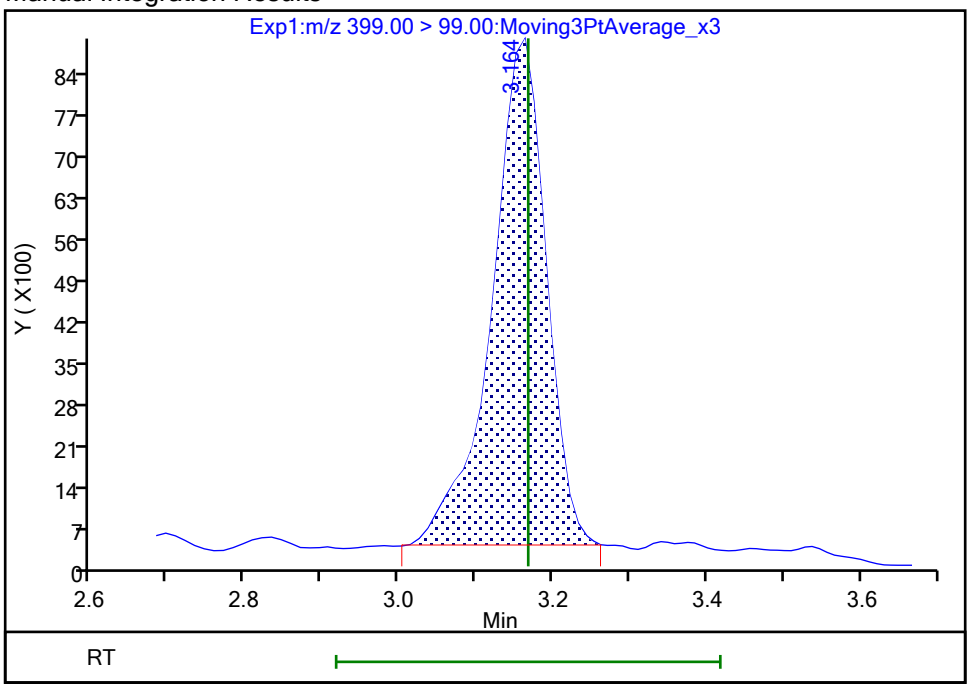
Processing Integration Results

RT: 3.16
Area: 44482
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 42434
Amount: 0.113918
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:13 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

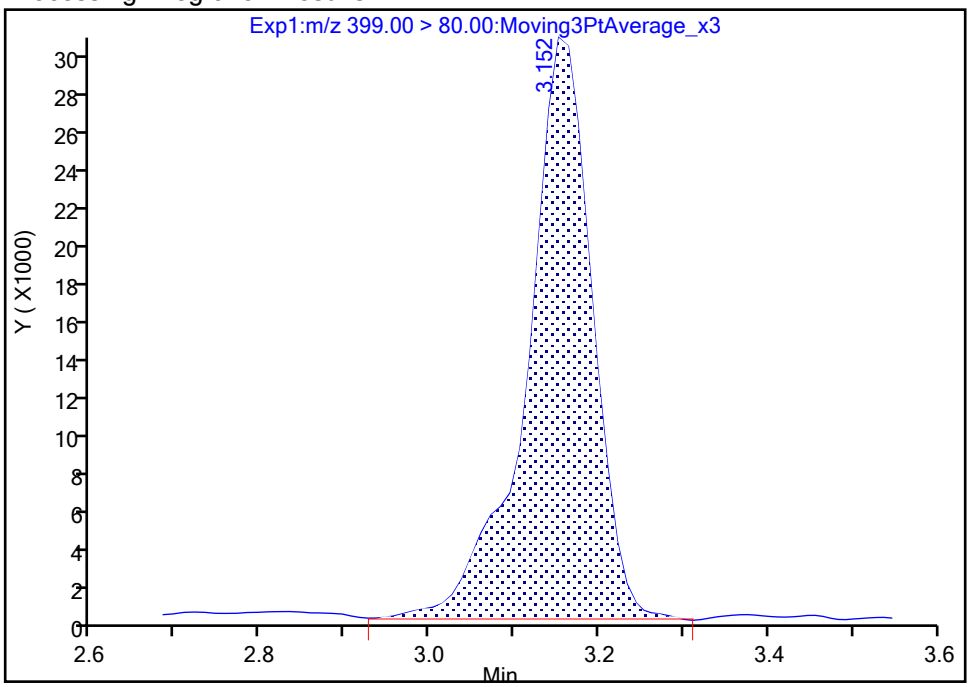
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

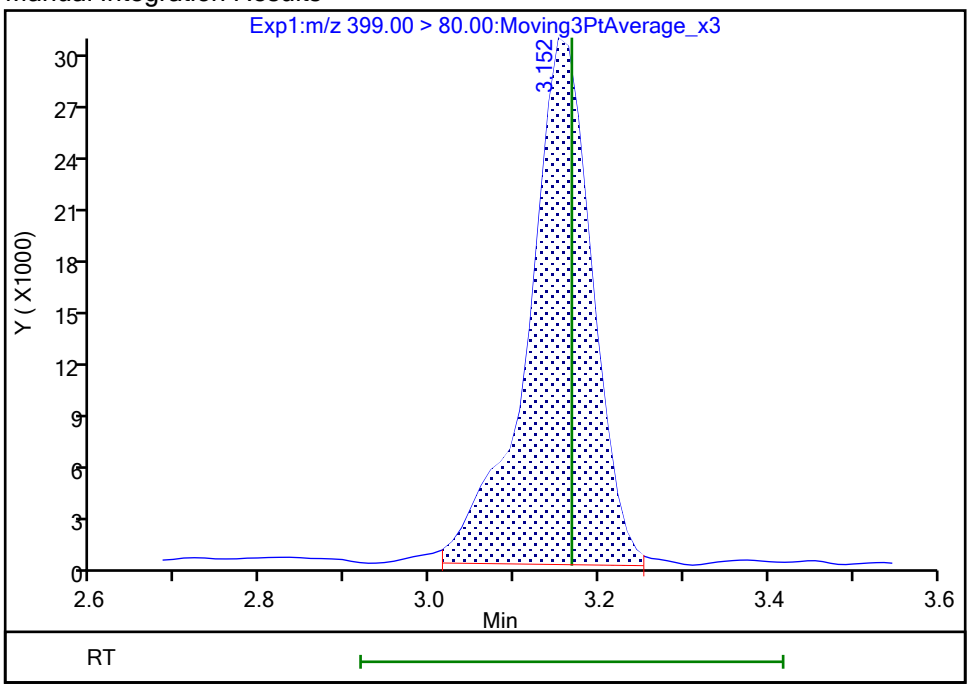
Processing Integration Results

RT: 3.15
Area: 161219
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 158875
Amount: 0.113918
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

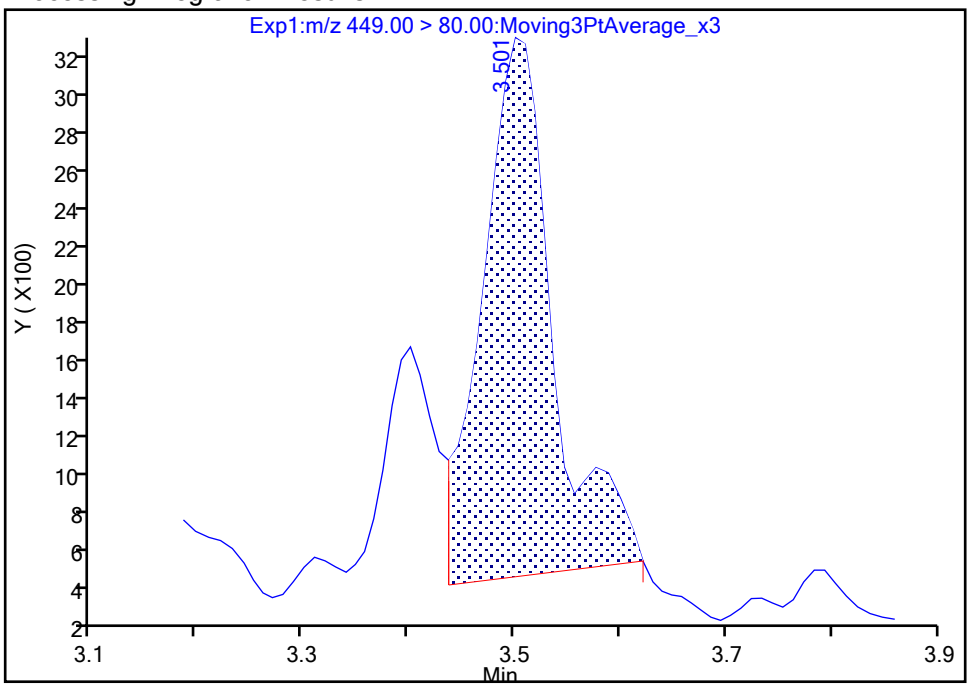
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

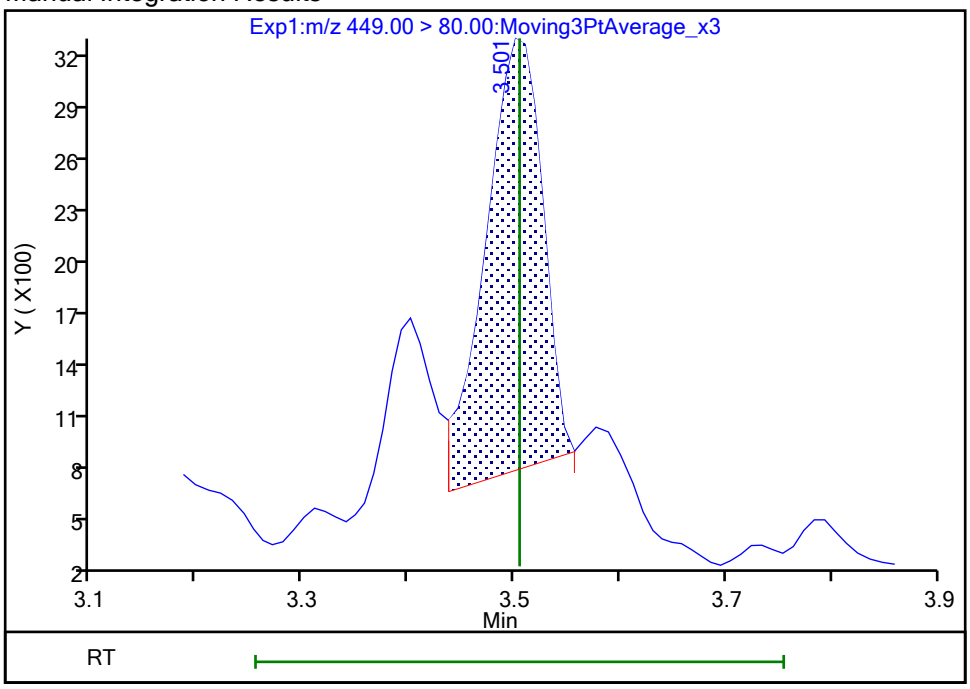
Processing Integration Results

RT: 3.50
Area: 13188
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 9400
Amount: 0.008287
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

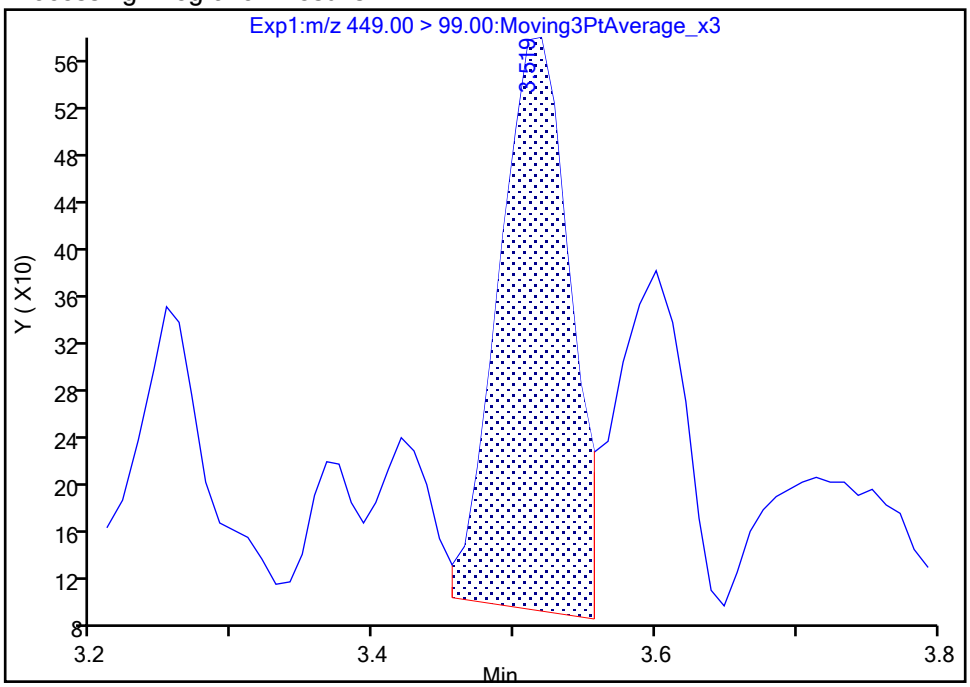
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

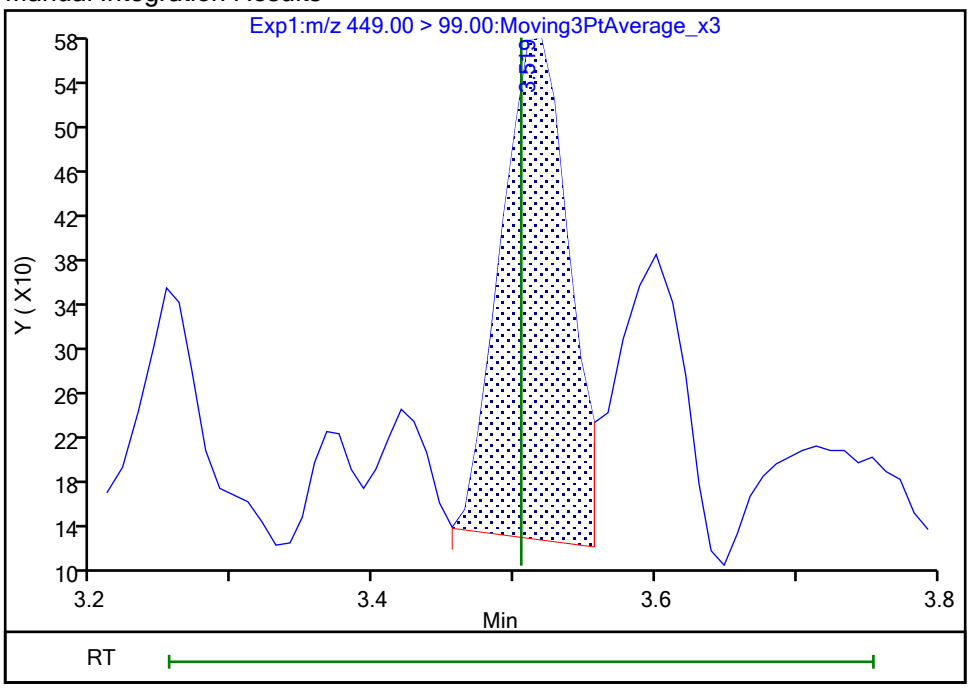
Processing Integration Results

RT: 3.52
Area: 1666
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1493
Amount: 0.008287
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

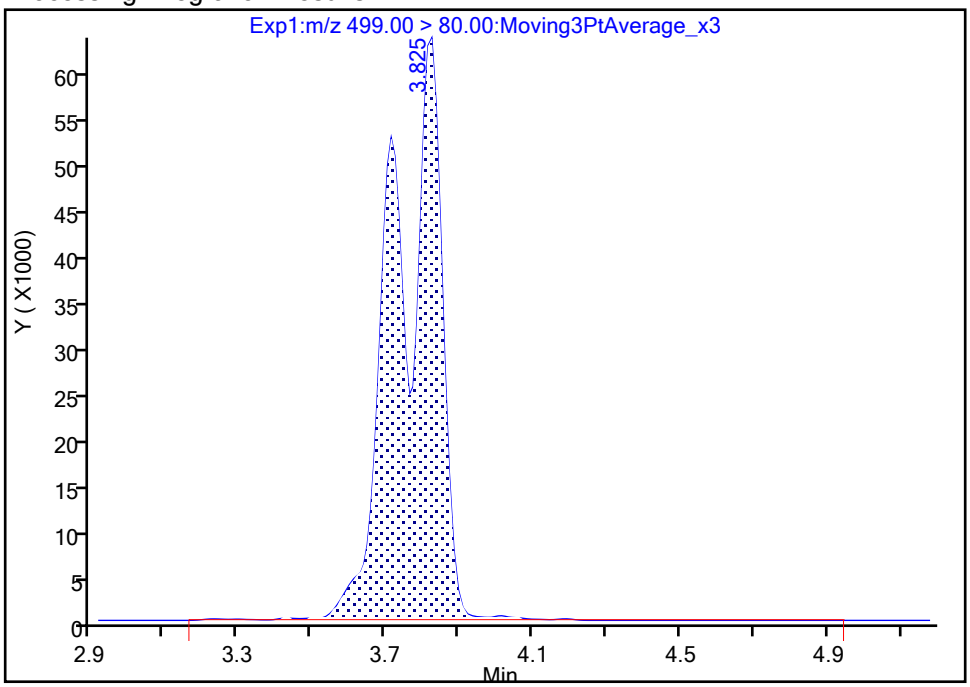
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

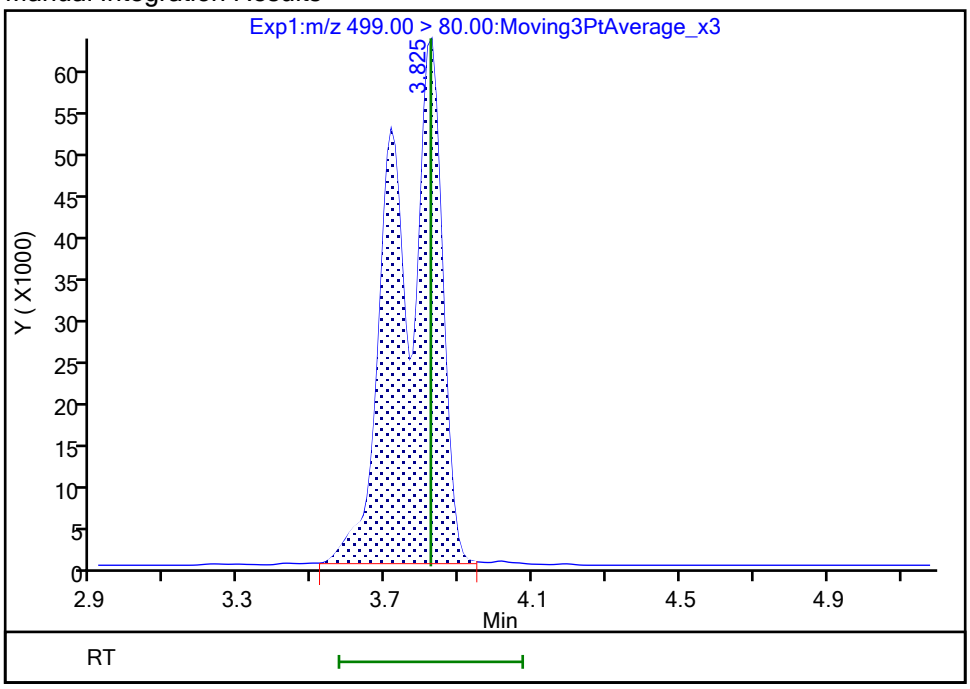
Processing Integration Results

RT: 3.82
Area: 560634
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 552242
Amount: 0.603193
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

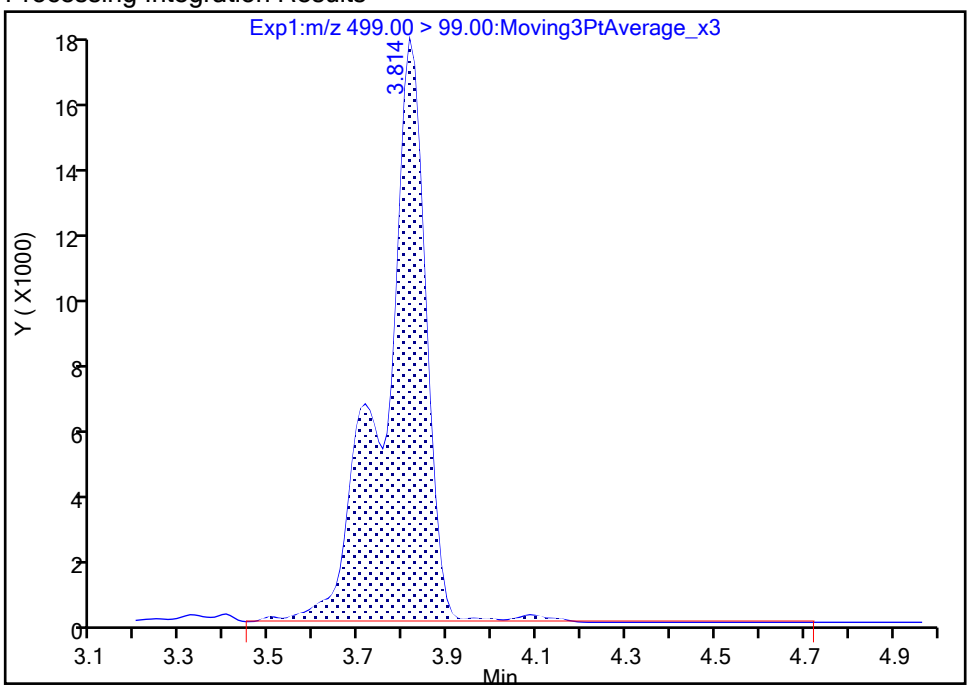
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

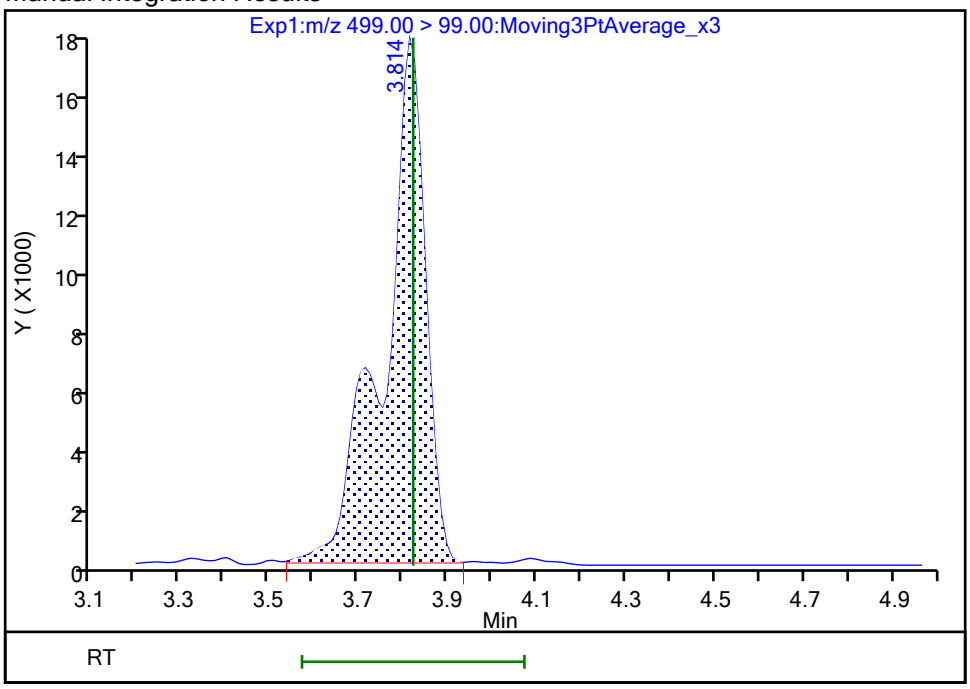
Processing Integration Results

RT: 3.81
Area: 116632
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 113281
Amount: 0.603193
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

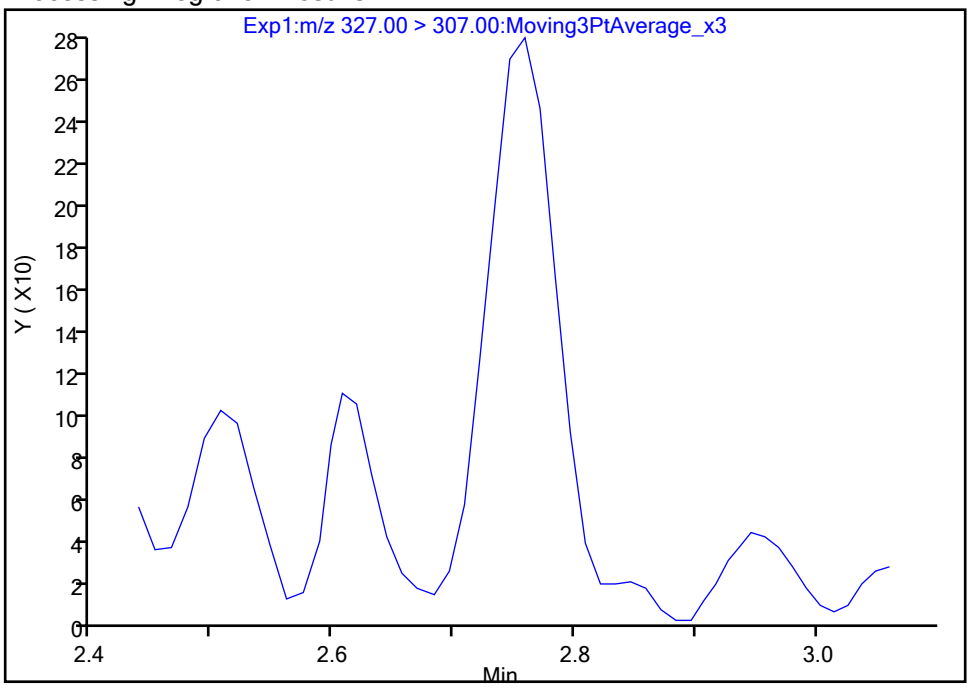
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

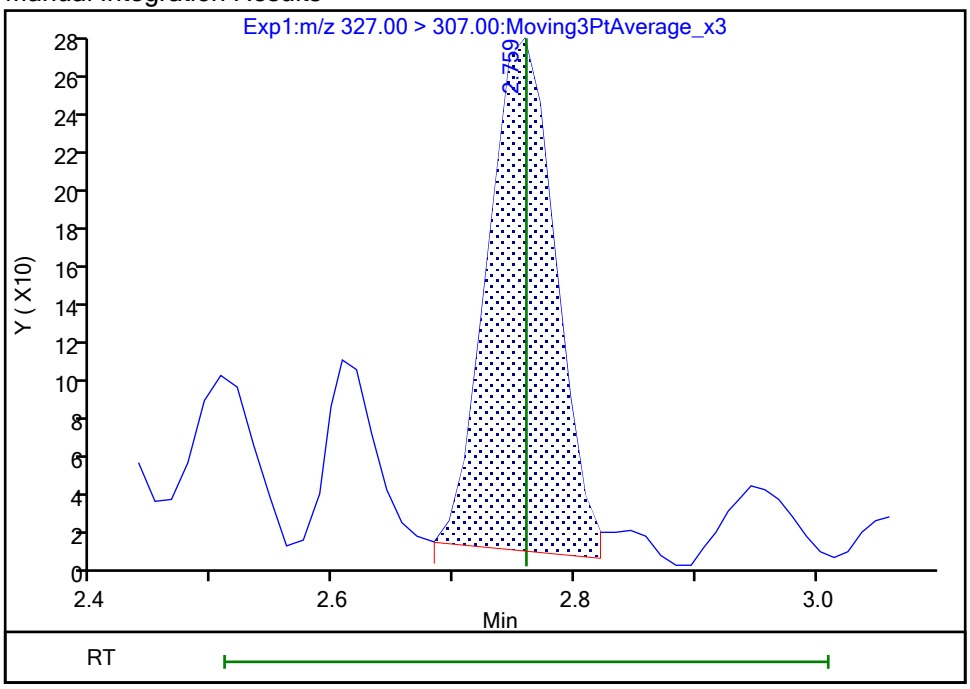
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 1032
Amount: 0.001681
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:15:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

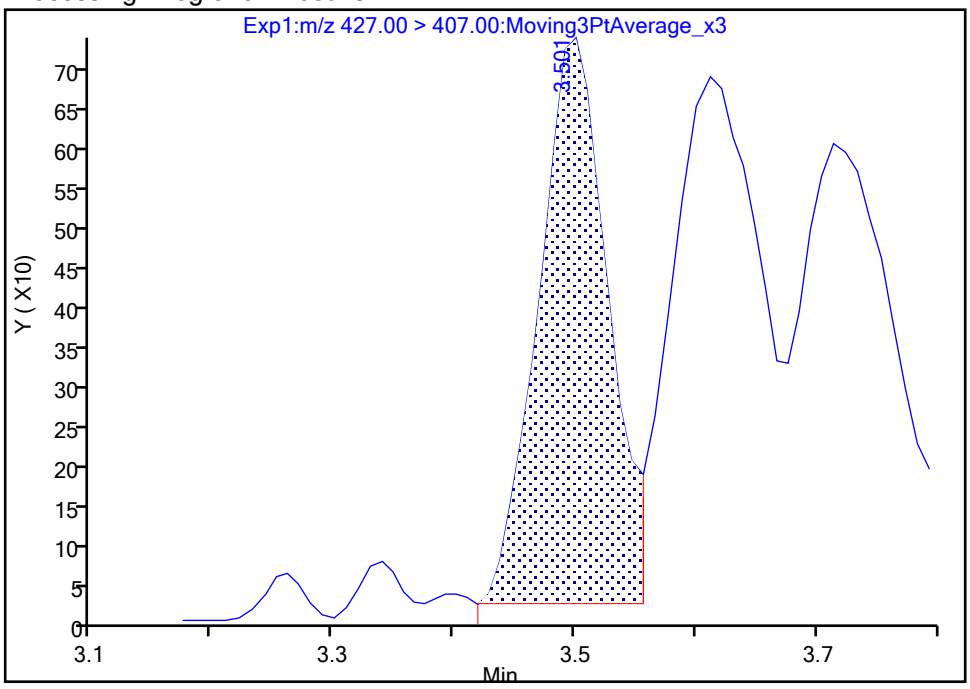
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

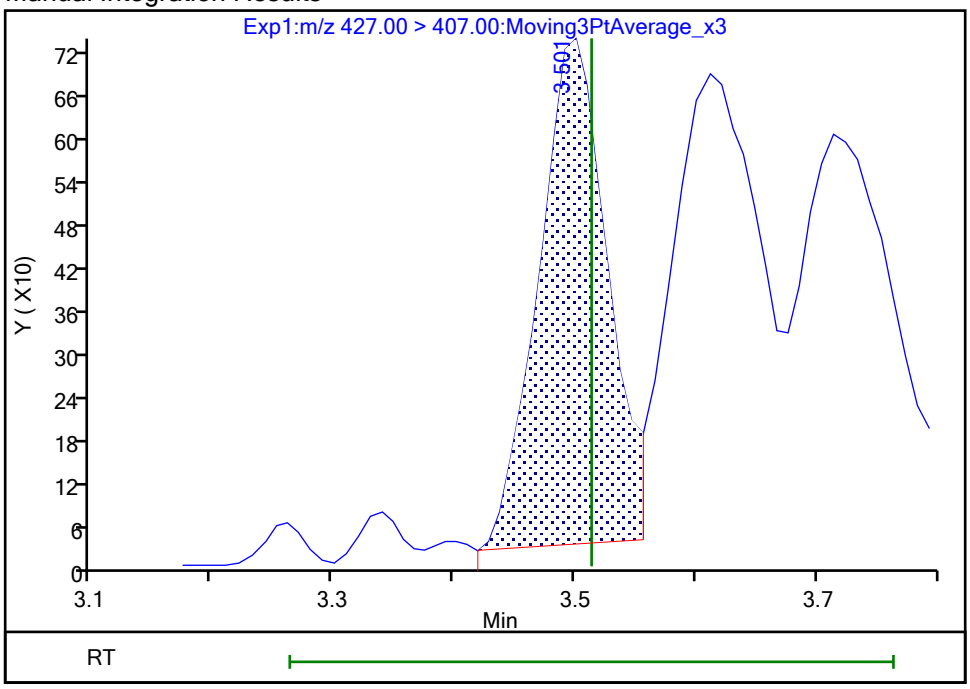
Processing Integration Results

RT: 3.50
Area: 2827
Amount: 0.004063
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 2766
Amount: 0.003975
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:17:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

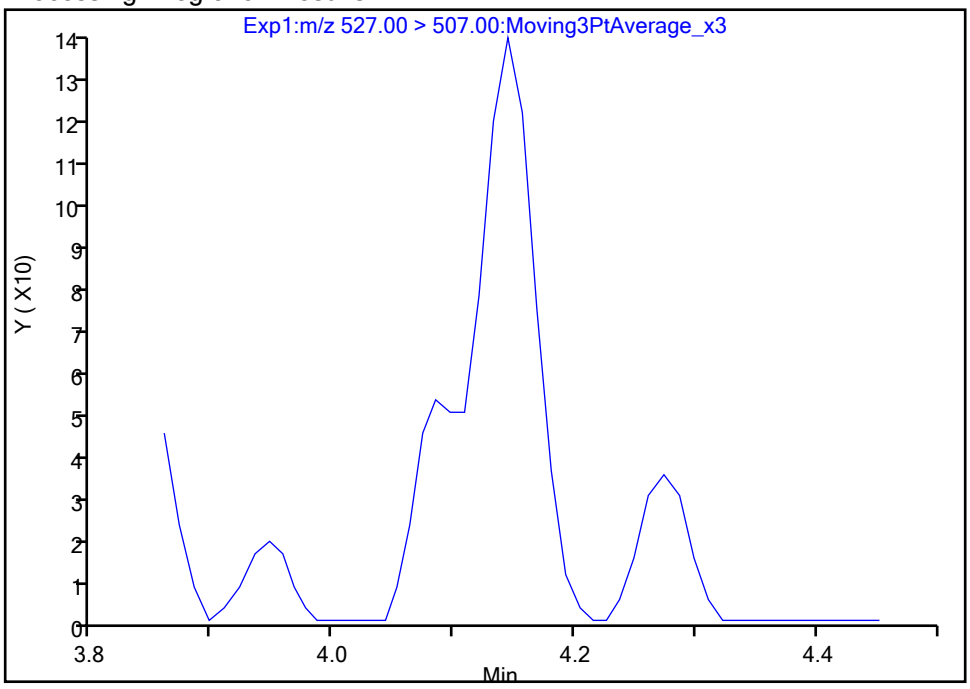
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

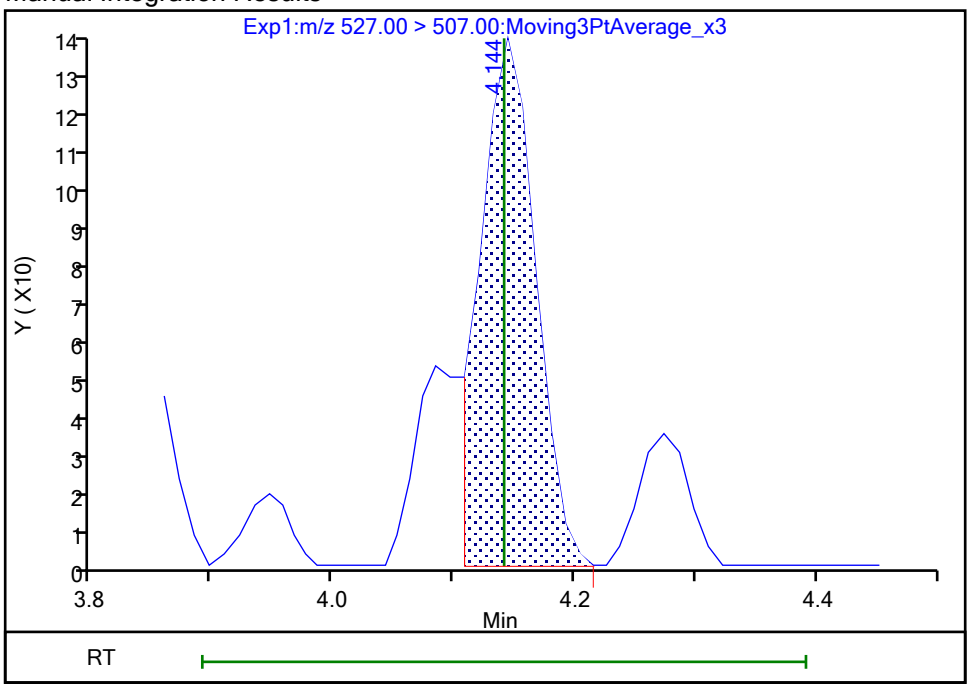
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 437
Amount: 0.000739
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:01 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

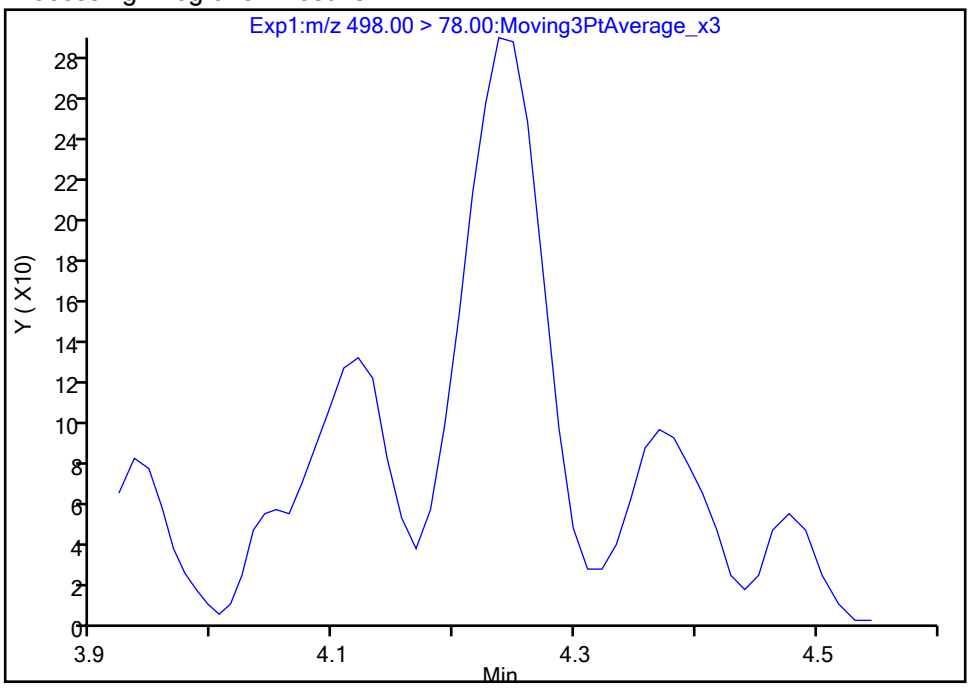
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

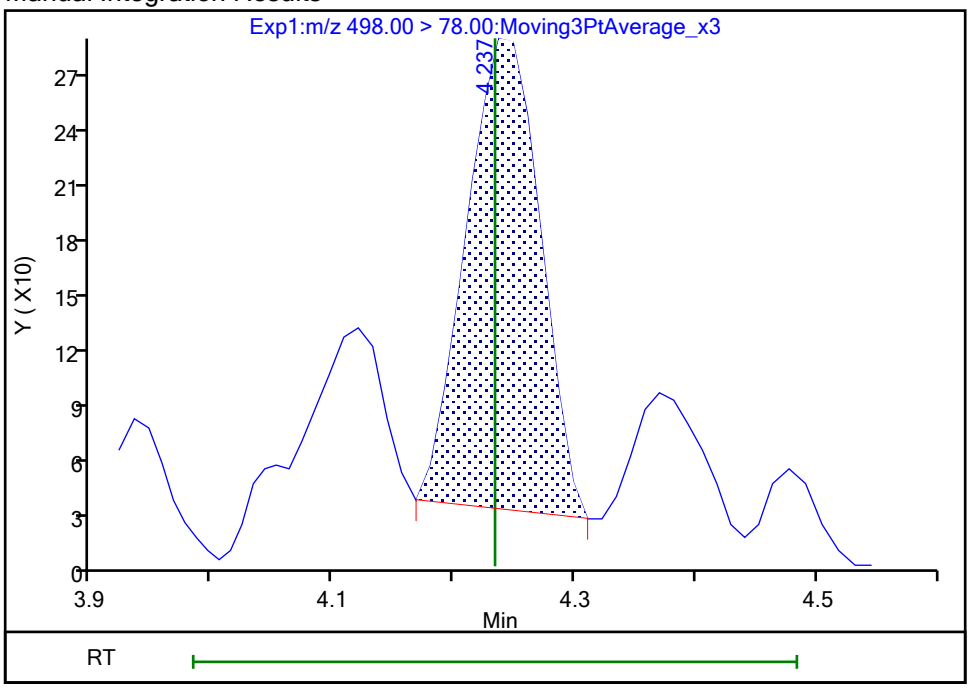
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1087
Amount: 0.000789
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

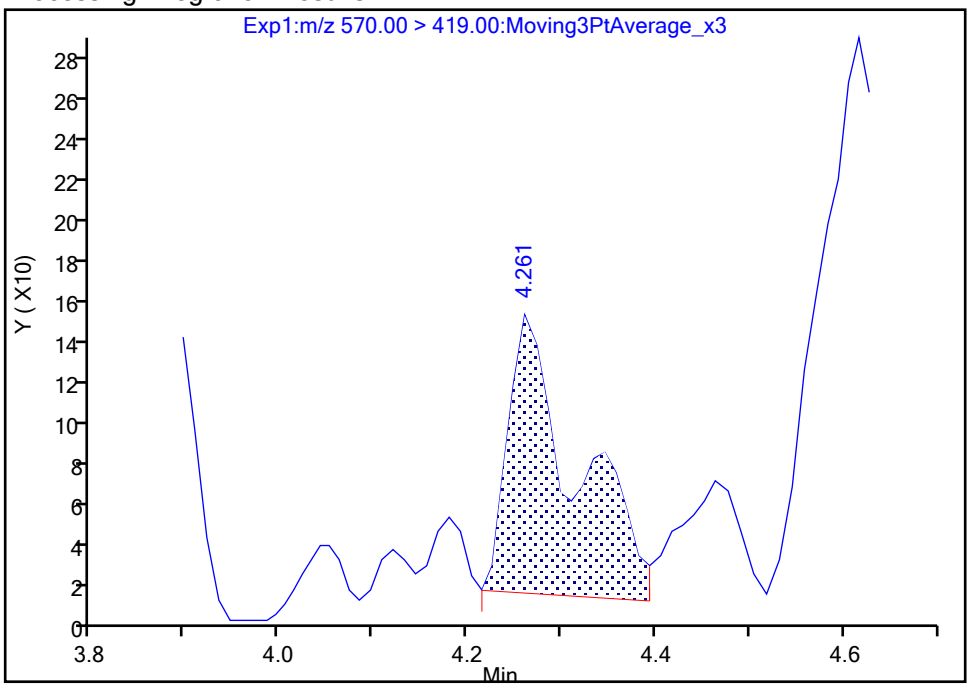
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

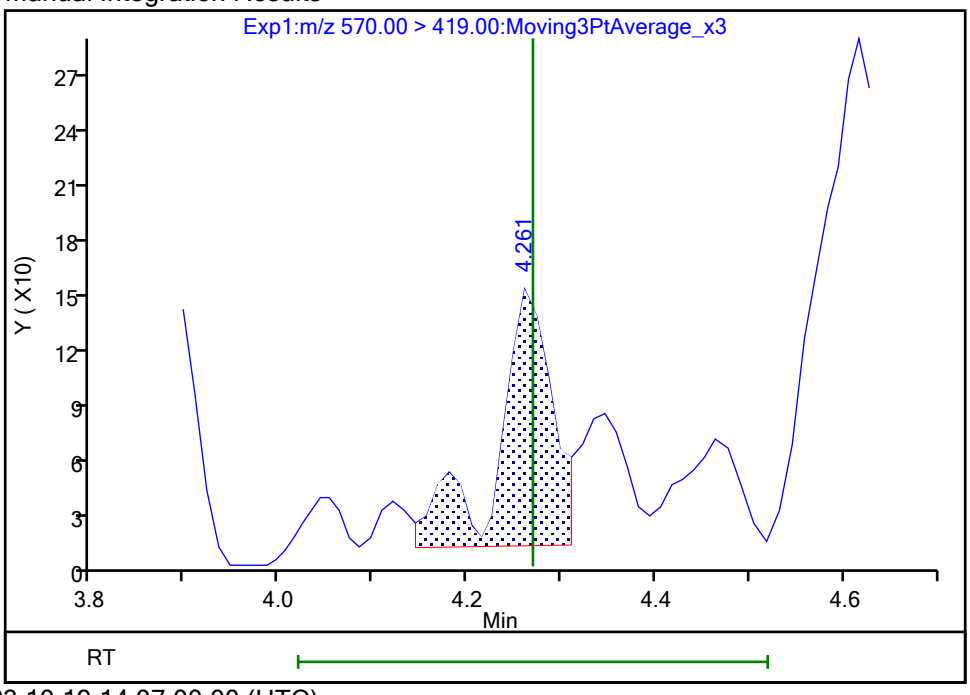
Processing Integration Results

RT: 4.26
Area: 694
Amount: 0.001729
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Area: 558
Amount: 0.001390
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:14 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

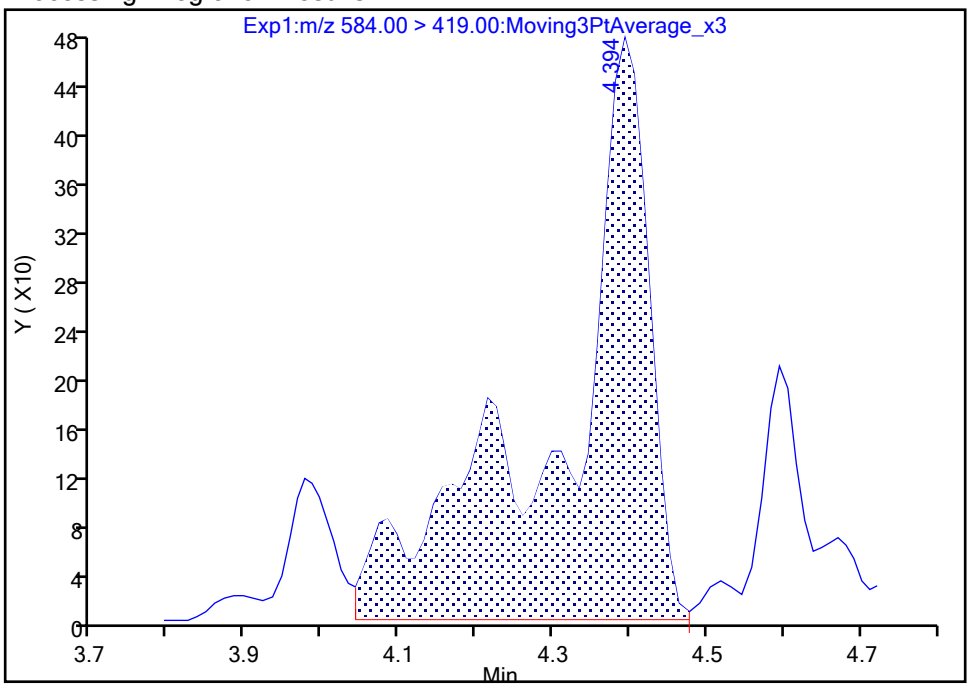
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

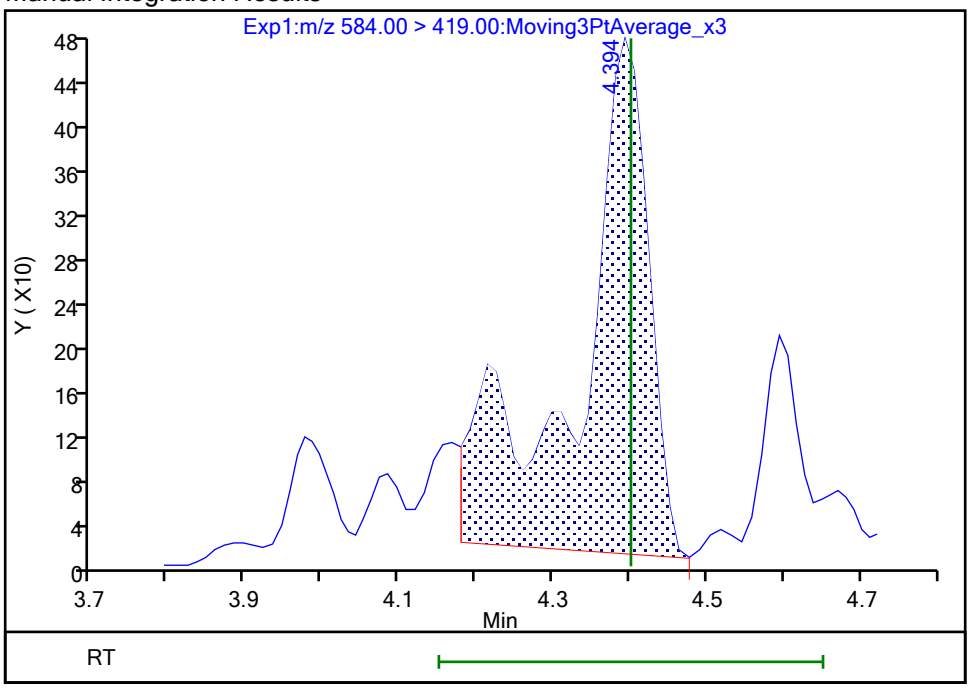
Processing Integration Results

RT: 4.39
Area: 3825
Amount: 0.009086
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2967
Amount: 0.007048
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:19:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

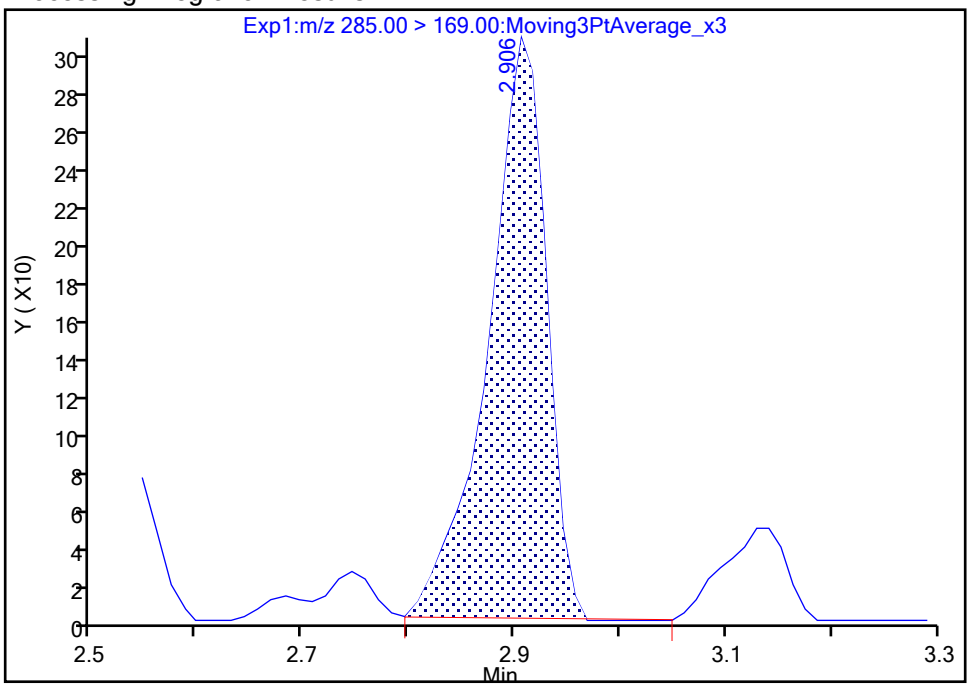
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

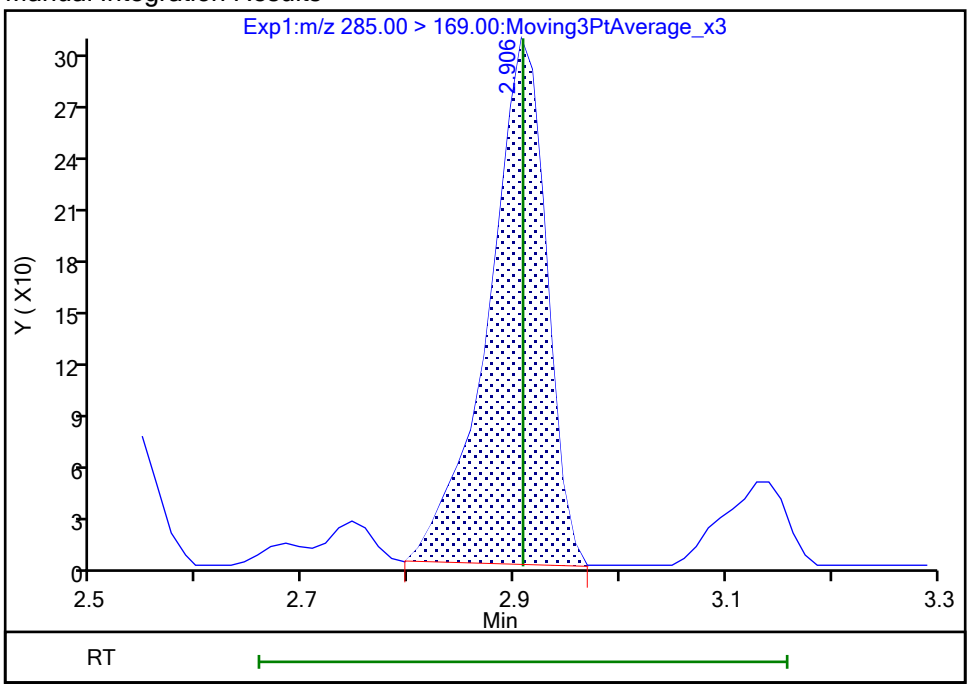
Processing Integration Results

RT: 2.91
Area: 1173
Amount: 0.005372
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 1178
Amount: 0.005395
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:05 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

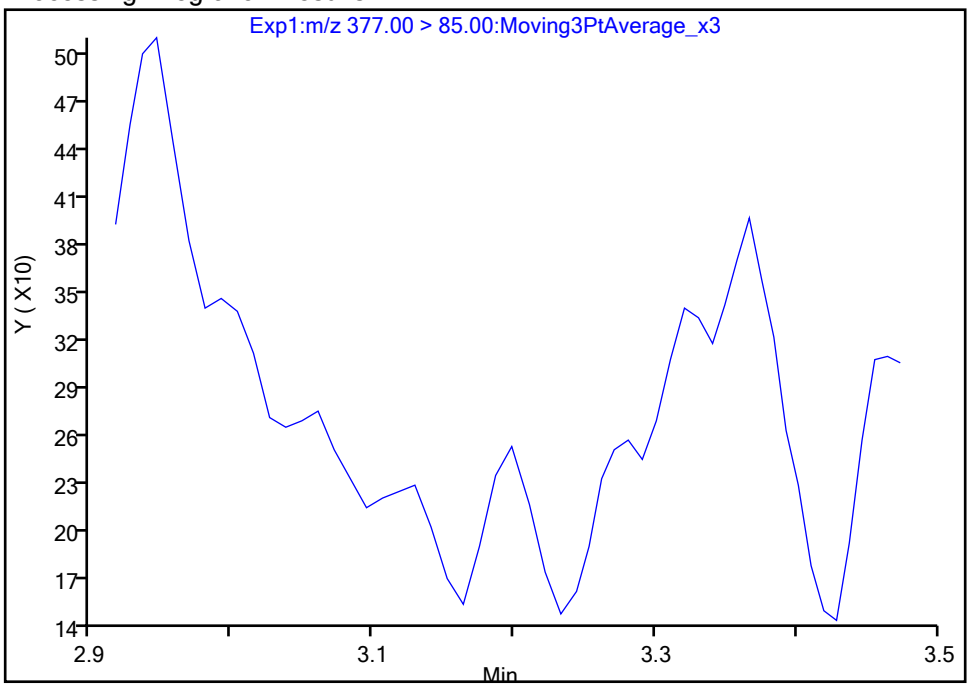
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

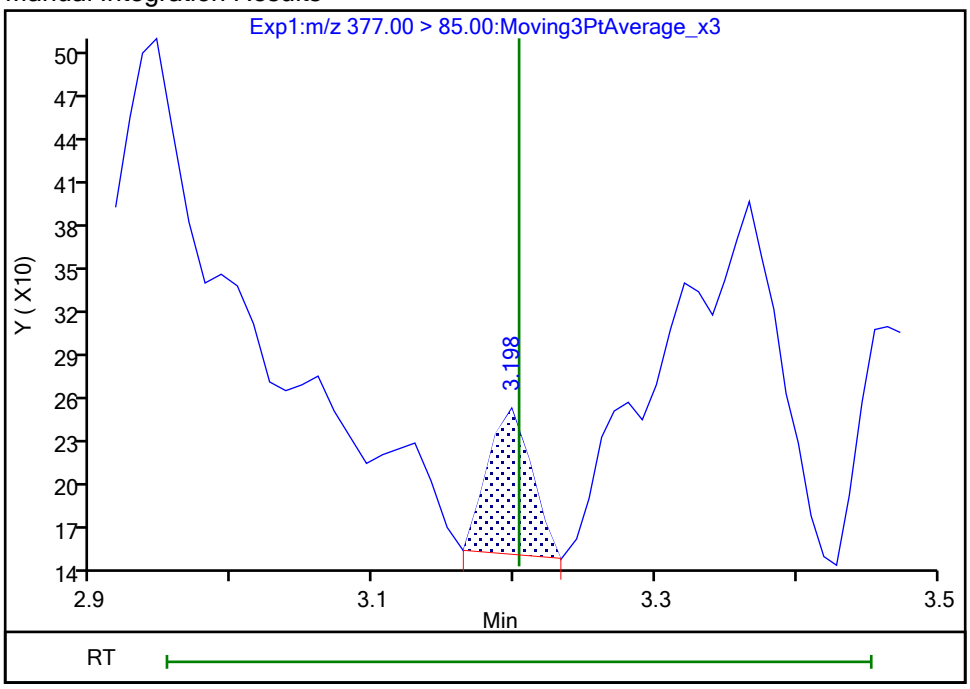
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 218
Amount: 0.000119
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:36 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

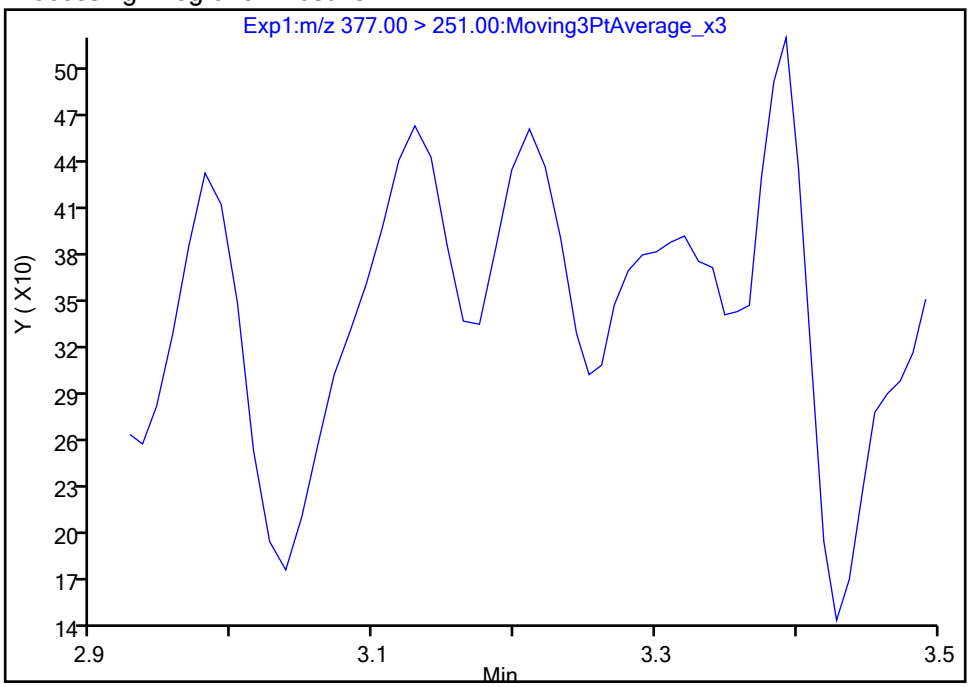
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

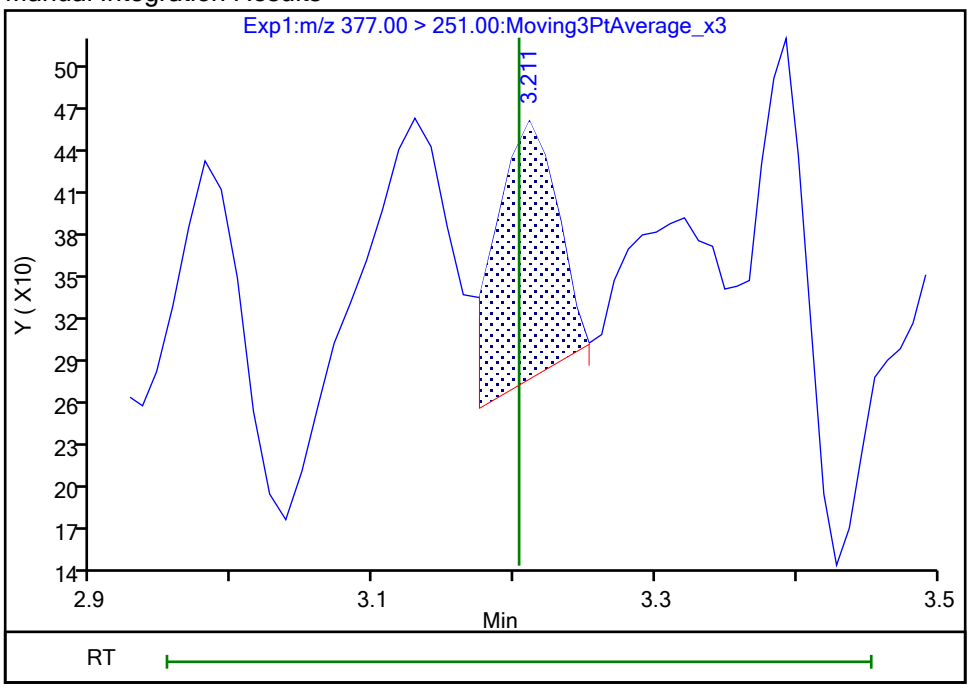
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 539
Amount: 0.000119
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:16:38 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

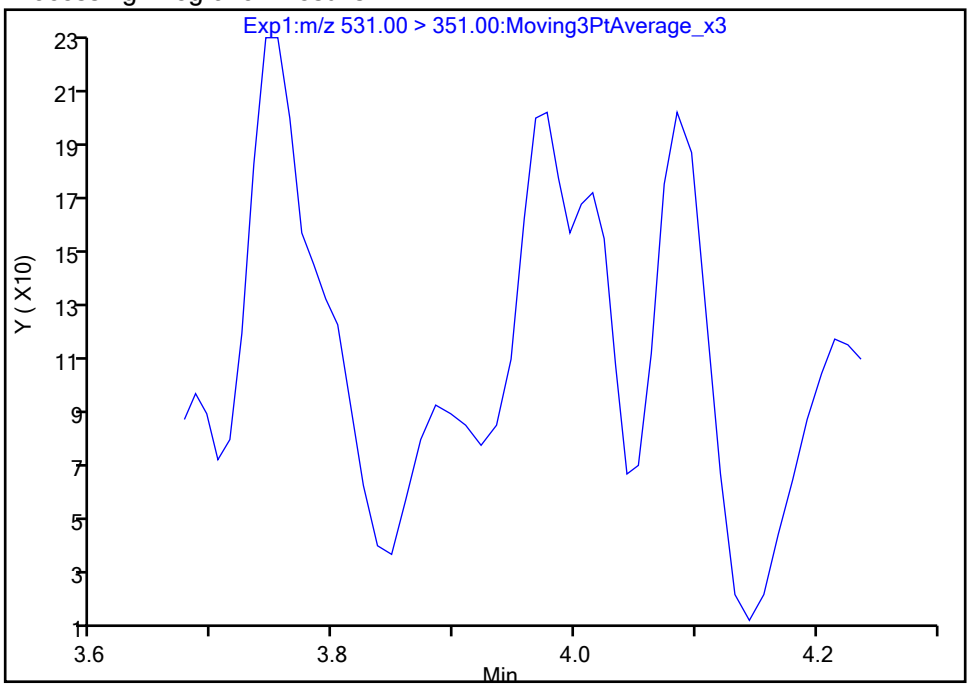
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

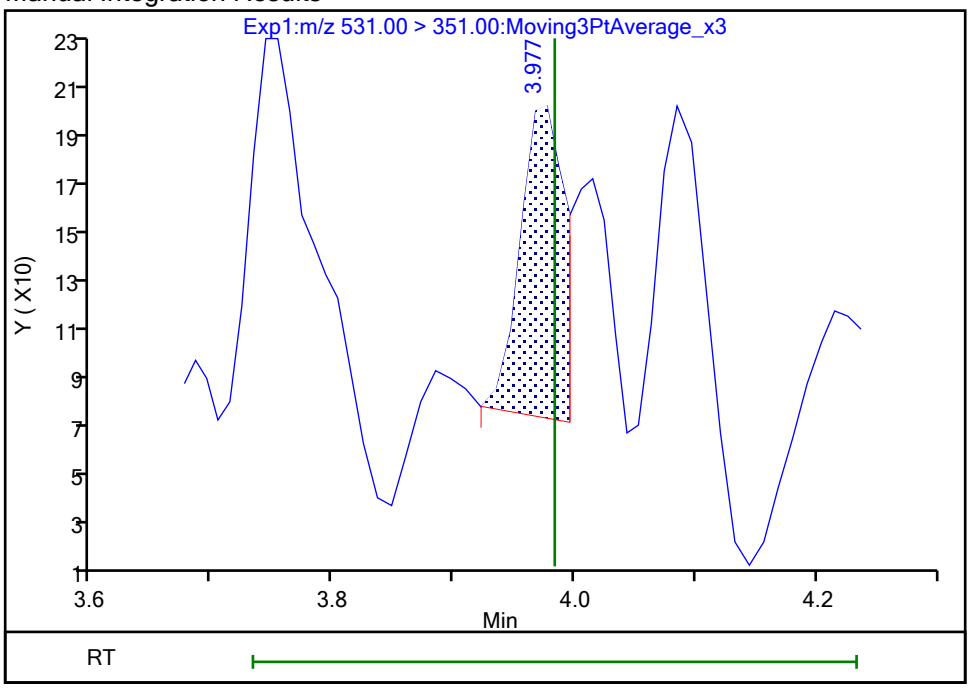
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 291
Amount: 0.000104
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:18:48 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

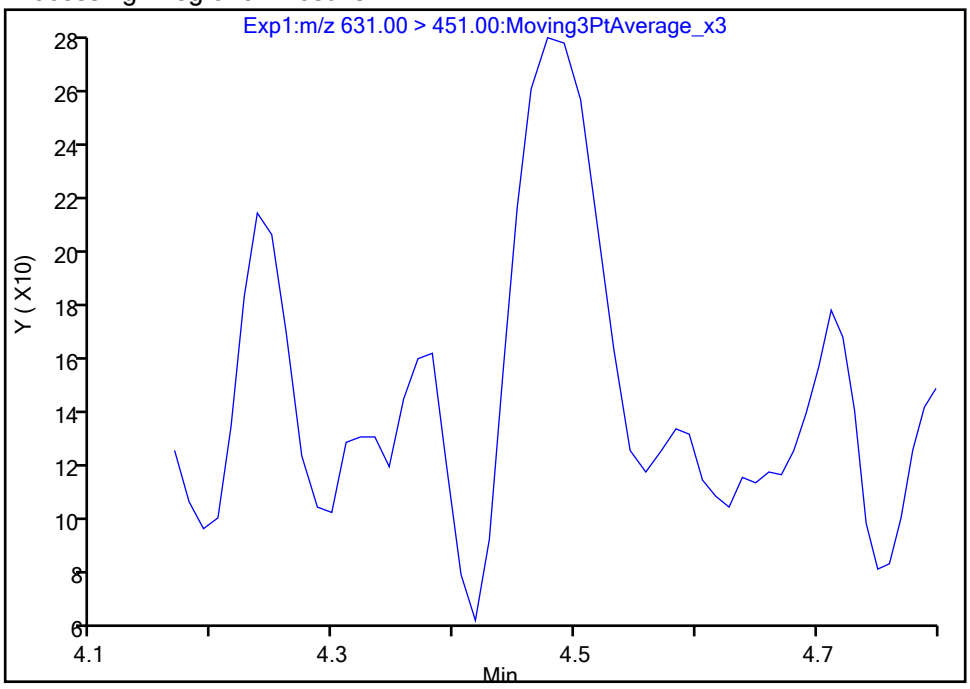
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

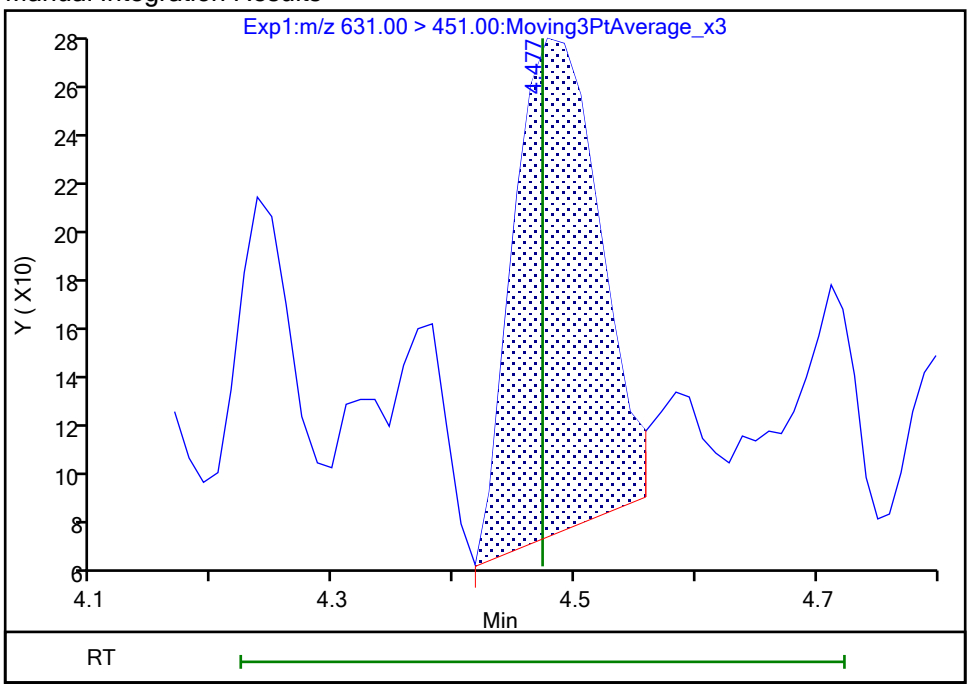
Not Detected
Expected RT: 4.47

Processing Integration Results



RT: 4.48
Area: 1007
Amount: 0.000234
Amount Units: ng/ml

Manual Integration Results



Reviewer: nampitakw, 25-Oct-2023 10:19:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

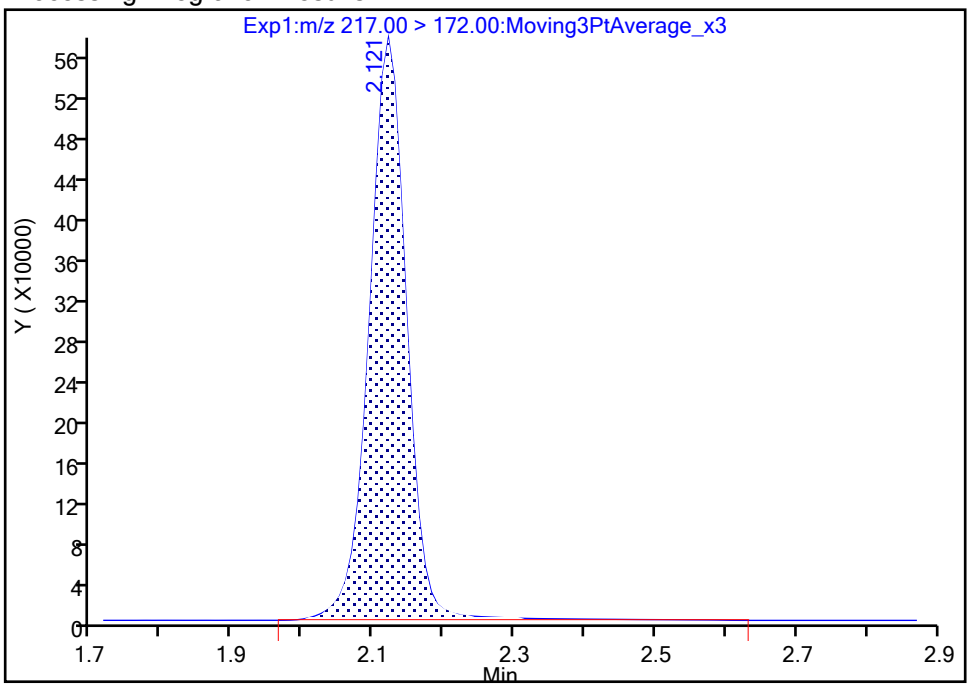
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

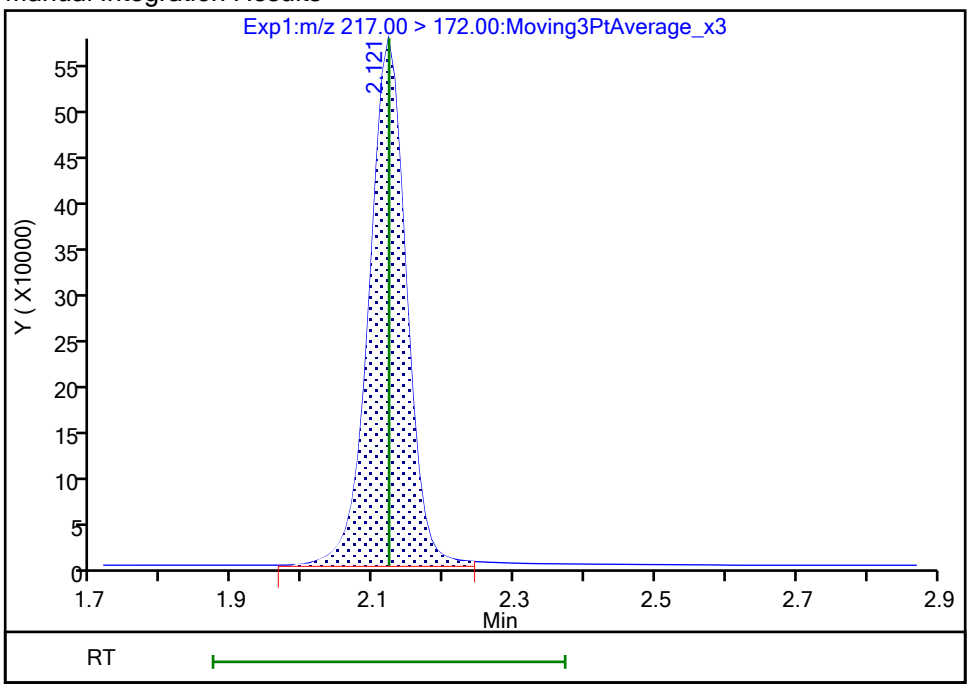
Processing Integration Results

RT: 2.12
Area: 2121405
Amount: 1.285407
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2092531
Amount: 1.269299
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:04 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

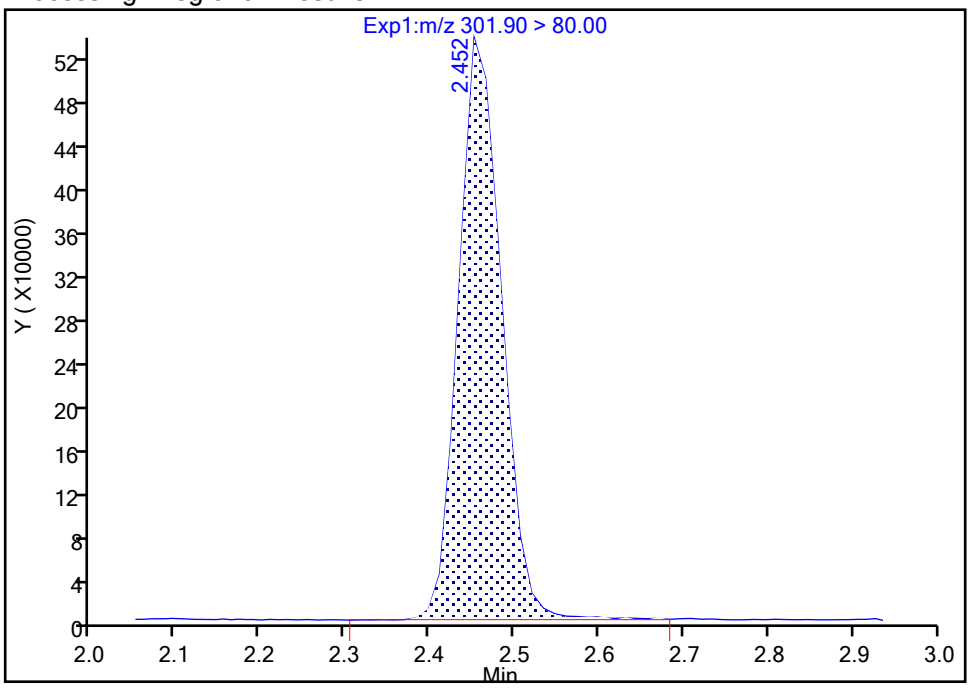
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

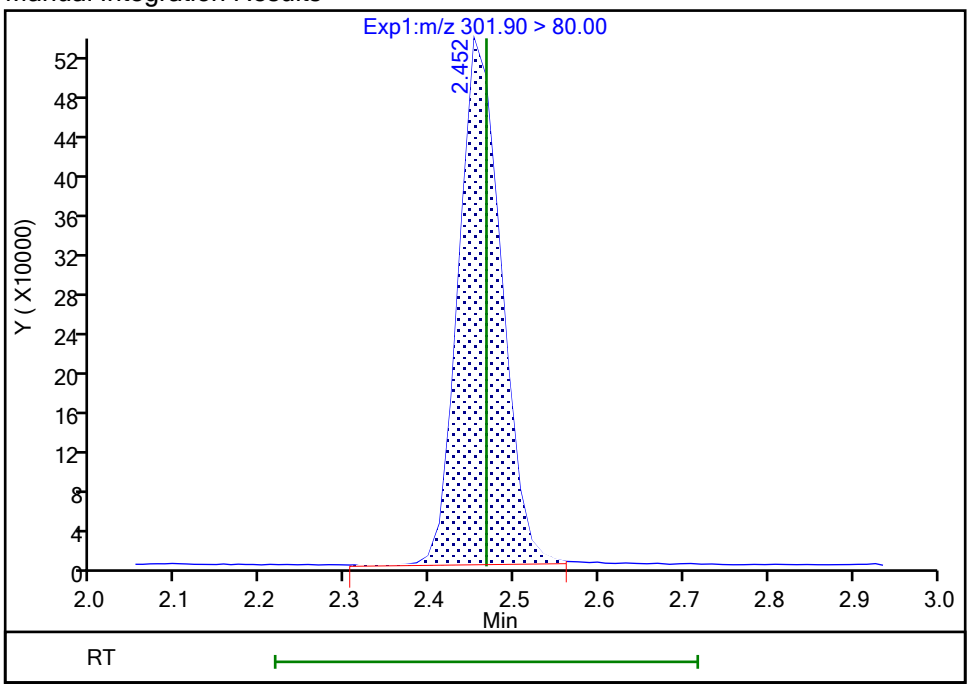
Processing Integration Results

RT: 2.45
Area: 1894954
Amount: 1.093421
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1883974
Amount: 1.088275
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

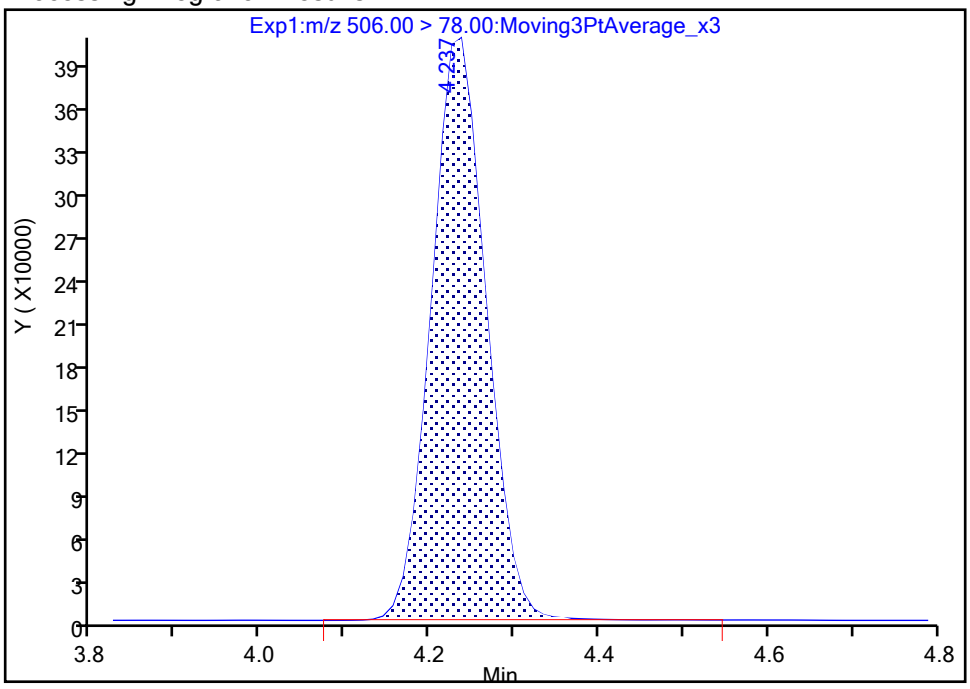
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

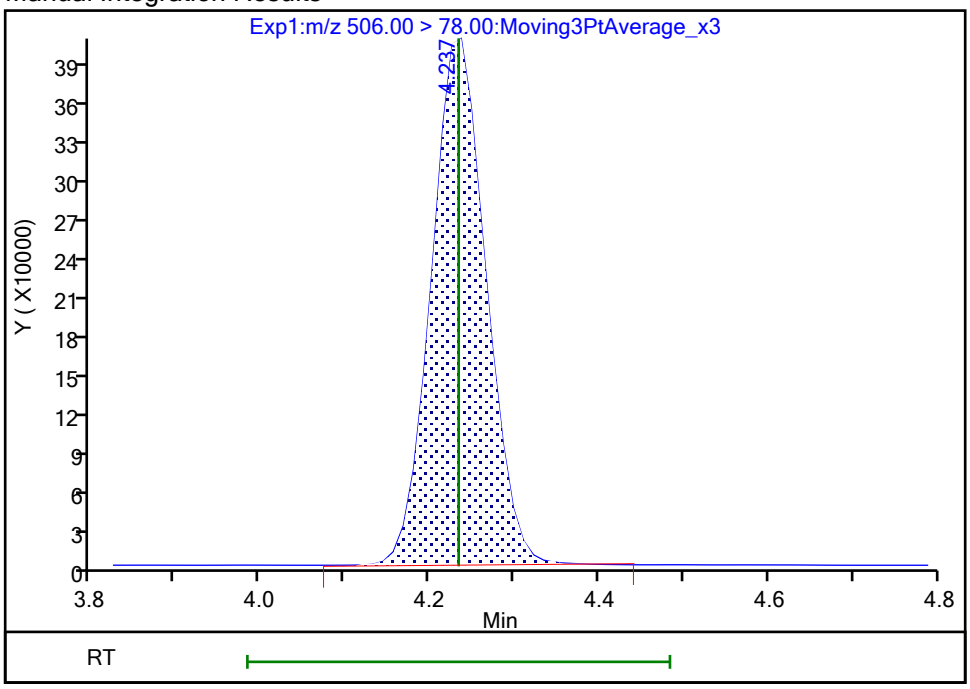
Processing Integration Results

RT: 4.24
Area: 1806376
Amount: 1.147110
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1805713
Amount: 1.147943
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

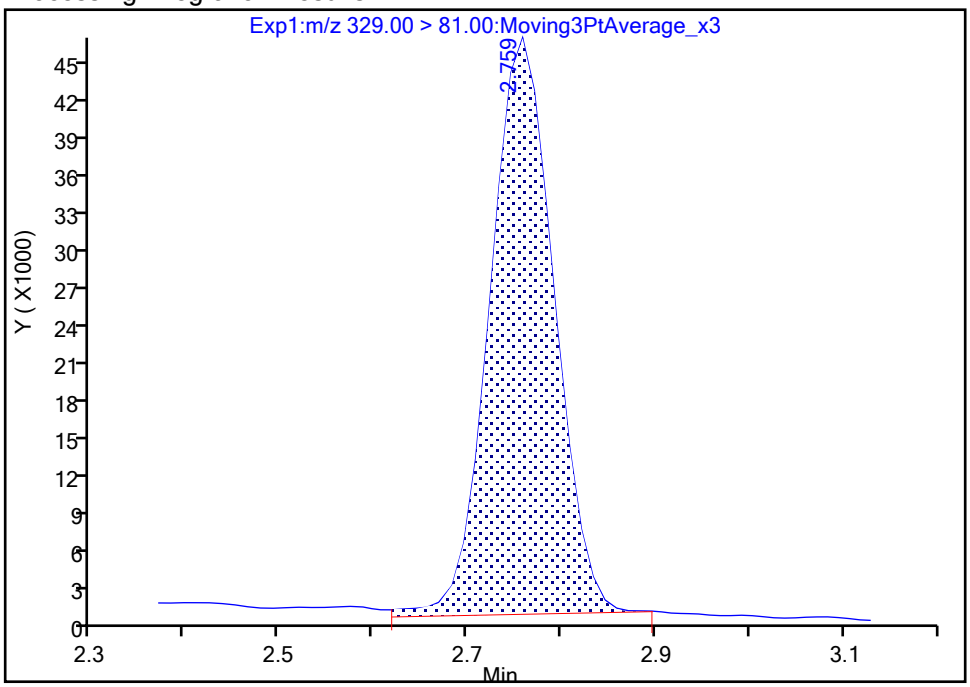
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

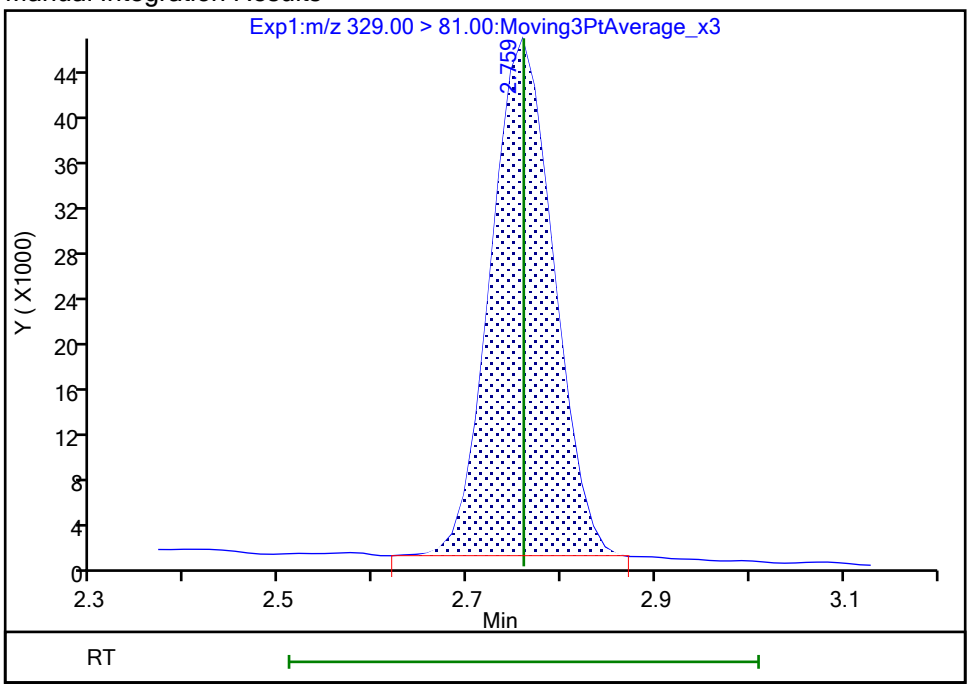
Processing Integration Results

RT: 2.76
Area: 216212
Amount: 1.078786
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 211044
Amount: 1.054153
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

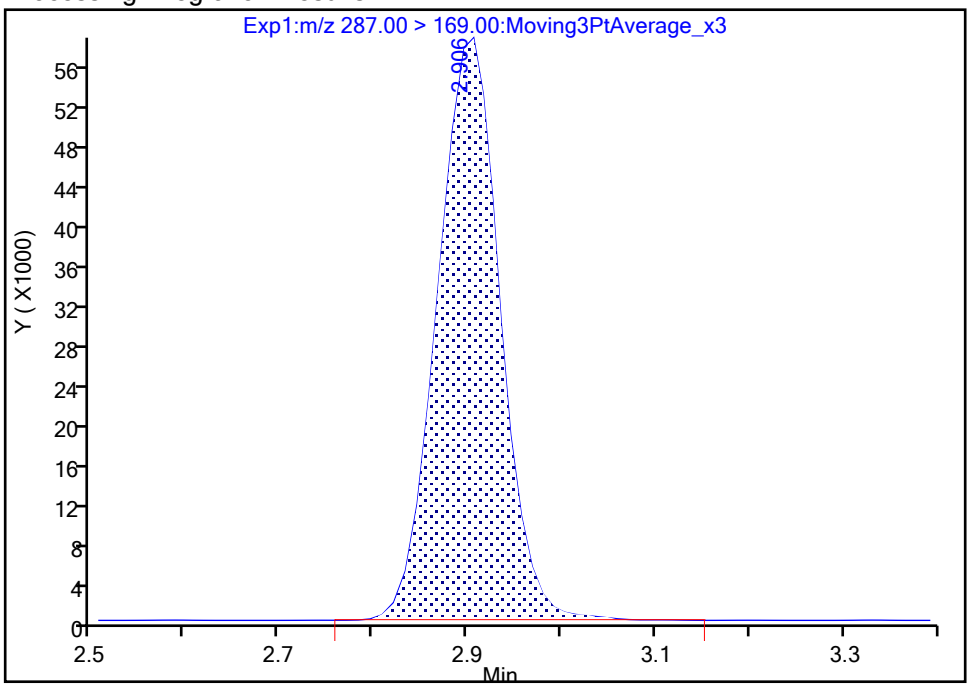
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

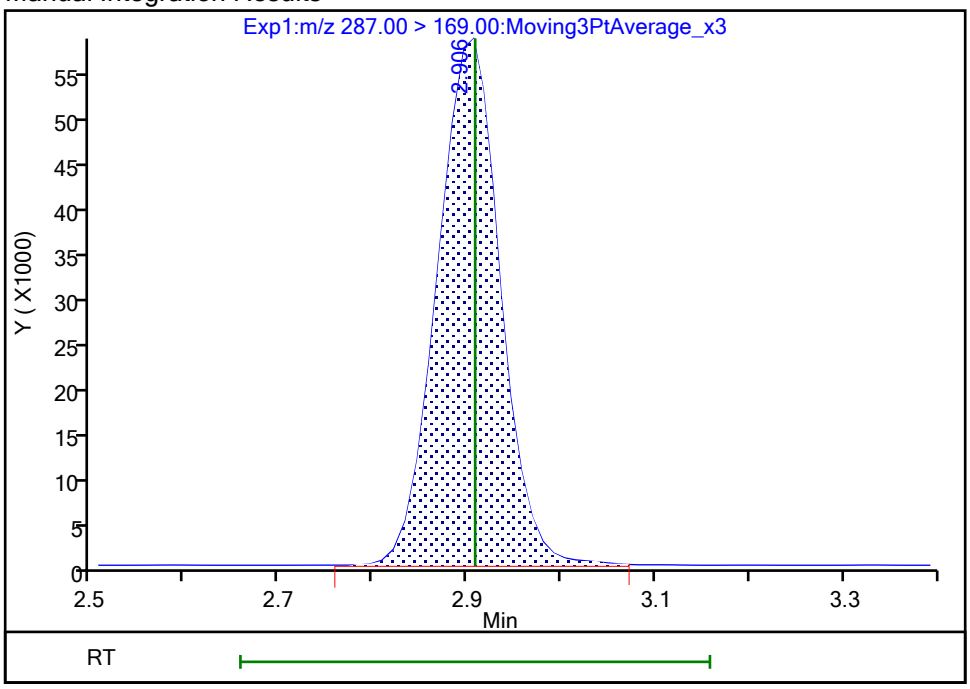
Processing Integration Results

RT: 2.91
Area: 272799
Amount: 1.081607
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 272612
Amount: 1.082048
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

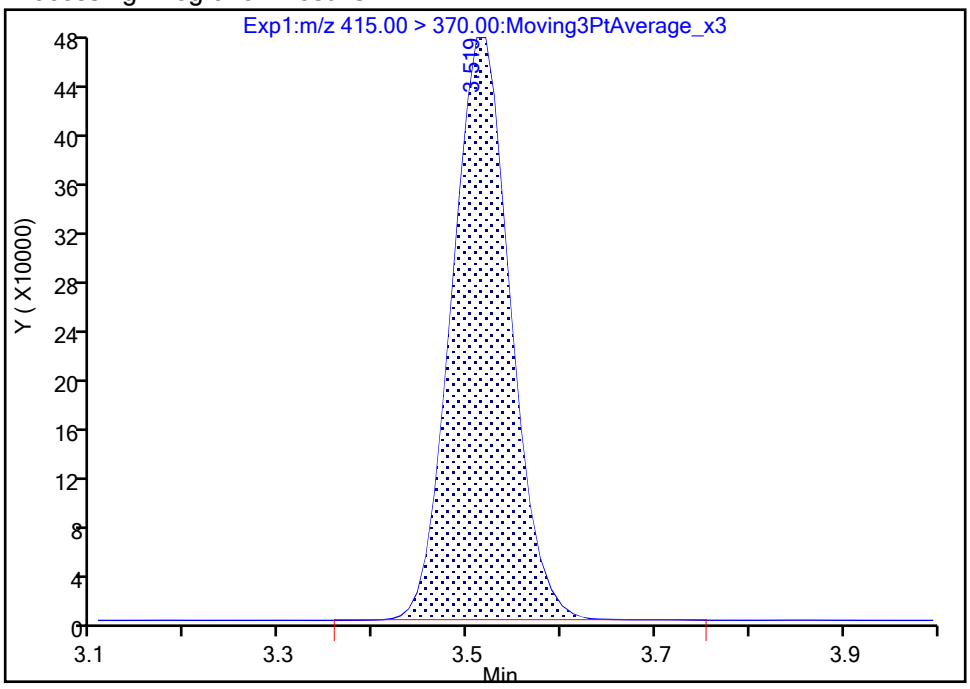
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E17.d				
Injection Date:	24-Oct-2023 08:16:35	Instrument ID:	LC812		
Lims ID:	460-290546-A-2-A	Lab Sample ID:	200-290546-2		
Client ID:	FDMH-1				
Operator ID:	LC812user	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

* 62 13C2 PFOA, CAS: STL00623

Signal: 1

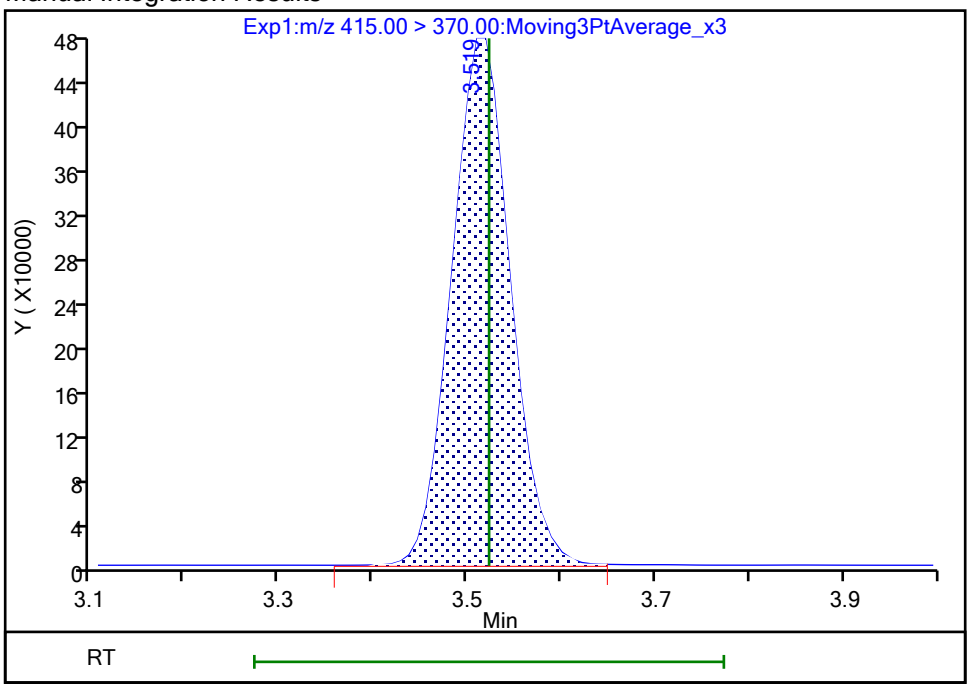
Processing Integration Results

RT: 3.52
Area: 2080304
Amount: 1.250000
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 2078030
Amount: 1.250000
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:14:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-2 | Lab Sample ID: 460-290546-3

Matrix: Water | Lab File ID: PA231023E18.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 09:30

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 285.8(mL) | Date Analyzed: 10/24/2023 08:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	74.4		4.37	1.05
2706-90-3	Perfluoropentanoic acid	35.8		1.75	0.59
307-24-4	Perfluorohexanoic acid	25.8		1.75	0.57
375-85-9	Perfluoroheptanoic acid	15.1		1.75	0.47
335-67-1	Perfluorooctanoic acid	12.1		1.75	0.66
375-95-1	Perfluorononanoic acid	2.23		1.75	0.43
335-76-2	Perfluorodecanoic acid	0.42	J	1.75	0.40
2058-94-8	Perfluoroundecanoic acid	1.75	U	1.75	0.48
307-55-1	Perfluorododecanoic acid	1.75	U	1.75	0.43
72629-94-8	Perfluorotridecanoic acid	1.75	U	1.75	0.42
376-06-7	Perfluorotetradecanoic acid	1.75	U	1.75	0.56
375-73-5	Perfluorobutanesulfonic acid	6.41		1.75	0.54
2706-91-4	Perfluoropentanesulfonic acid	5.02		1.75	0.44
355-46-4	Perfluorohexanesulfonic acid	24.4		1.75	0.48
375-92-8	Perfluoroheptanesulfonic acid	0.82	J	1.75	0.36
1763-23-1	Perfluorooctanesulfonic acid	29.2		1.75	0.74
68259-12-1	Perfluorononanesulfonic acid	1.75	U	1.75	0.35
335-77-3	Perfluorodecanesulfonic acid	1.75	U	1.75	0.35
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.47
27619-97-2	6:2 Fluorotelomer sulfonic acid	4.37	U	4.37	1.14
39108-34-4	8:2 Fluorotelomer sulfonic acid	1.75	U	1.75	0.67
754-91-6	Perfluorooctanesulfonamide	1.75	U	1.75	0.80
2355-31-9	NMeFOSAA	4.37	U	4.37	1.66
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.37	U	4.37	1.40
13252-13-6	HFPODA	3.50	U	3.50	0.96
919005-14-4	DONA	1.75	U	1.75	0.37
756426-58-1	9Cl-PF3ONS	1.75	U	1.75	0.28
763051-92-9	11Cl-PF3OUdS	1.75	U	1.75	0.76

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-2 Lab Sample ID: 460-290546-3

Matrix: Water Lab File ID: PA231023E18.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 09:30

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 285.8(mL) Date Analyzed: 10/24/2023 08:24

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	92		50-150
STL01892	13C4 PFHpA	101		50-150
STL02116	13C2 PFTeDA	92		50-150
STL02337	13C3 PFBS	93		50-150
STL01056	13C8 FOSA	89		50-150
STL02118	d3-NMeFOSAA	95		50-150
STL02117	d5-NEtFOSAA	94		50-150
STL02395	M2-4:2 FTS	91		50-150
STL02279	M2-6:2 FTS	94		50-150
STL02280	M2-8:2 FTS	87		50-150
STL02255	13C3 HFPO-DA	88		50-150
STL00994	18O2 PFHxS	99		50-150
STL00993	13C2 PFHxA	87		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	93		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	94		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d
Lims ID: 460-290546-A-3-A
Client ID: FDMH-2
Sample Type: Client
Inject. Date: 24-Oct-2023 08:24:46 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290546-A-3-A
Misc. Info.: 200-0057513-018 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:25:25
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.121	2.122	-0.001	0.604	2090844	1.23		98.1	1446	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.121	2.130	-0.009	1.000	3277363	2.13			256	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1522509	1.15		92.0	1238	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1346306	1.02			18.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.453	2.467	-0.014	0.699	1942132	1.08		93.3	34009	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.006	341591	0.1831	Target=2.06		25.4	M
298.90 > 99.00	2.466	2.467	-0.001	1.006	170645		2.00(1.03-3.09)		29.9	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	218948	1.06		90.5	30.9	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.797	2.797	0.0	0.797	1471096	1.09		87.4	5090	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	955831	0.7380	Target=14.12		46.6	
313.00 > 119.00	2.797	2.797	0.0	1.000	62184		15.37(7.06-21.17)		34.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.797	2.810	-0.013	0.887	238163	0.1435	Target=2.72		45.6	M
349.00 > 99.00	2.797	2.810	-0.013	0.887	83093		2.87(1.36-4.09)		30.9	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.907	2.908	-0.001	1.000	1870	0.008156			23.2	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.907	2.908	-0.001	0.828	286274	1.10		87.9	1230	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
403.00 > 84.00	3.153	3.168	-0.015	0.898	1503241	1.17		99.0	11446	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.004	980662	0.6969	Target=3.32		339	M
399.00 > 99.00	3.153	3.168	-0.015	1.000	265720		3.69(1.66-4.98)		148	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	717957	0.4306	Target=4.17		49.7	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	169108		4.25(2.09-6.26)		247	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.901	1859465	1.26		101	4963	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.502	3.505	-0.003	0.917	26833	0.0235	Target=4.83		11.1	M
449.00 > 99.00	3.493	3.505	-0.012	0.915	7306		3.67(2.41-7.24)		10.0	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.502	3.505	-0.003	0.997	298214	1.12		94.1	182	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.502	3.514	-0.012	1.000	5261	0.007665			9.0	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.511	3.514	-0.003	1.000	646343	0.3454	Target=2.88		21.6	M
413.00 > 169.00	3.511	3.514	-0.003	1.000	244104		2.65(1.44-4.32)		321	M
D 14 13C4 PFOA										
417.00 > 372.00	3.511	3.523	-0.012	1.000	2195945	1.31		105	9864	
* 62 13C2 PFOA										
415.00 > 370.00	3.511	3.523	-0.012		2150013	1.25			12239	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.818	3.822	-0.004	1.000	770934	0.8356	Target=4.24		540	M
499.00 > 99.00	3.818	3.822	-0.004	1.000	173980		4.43(2.12-6.37)		234	M
D 18 13C4 PFOS										
503.00 > 80.00	3.818	3.822	-0.004	1.088	945212	1.16		97.0	1407	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.842	3.845	-0.003	1.000	112481	0.0636	Target=8.34		10.4	M
463.00 > 169.00	3.830	3.845	-0.015	0.997	13032		8.63(4.17-12.51)		44.7	M
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.094	2255350	1.24		99.1	6303	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.124	4.129	-0.005	1.000	21368	0.0119	Target=11.44		4.3	M
513.00 > 169.00	4.112	4.129	-0.017	0.997	1270		16.83(5.72-17.16)		6.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.124	4.129	-0.005	1.175	2250234	1.18		94.4	12347	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.136	4.141	-0.005	1.178	313406	1.04		87.2	397	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.124	4.141	-0.017	0.997	818	0.001420			9.2	
D 21 13C8 FOSA										
506.00 > 78.00	4.230	4.234	-0.004	1.205	1819598	1.12		89.4	3304	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.230	4.234	-0.004	1.000	550	0.000396			3.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.265	4.270	-0.005	1.215	540970	1.19		94.9	2709	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.265	4.270	-0.005	1.000	1131	0.002880			3.5	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.386	4.390	-0.004	1.249	2212810	1.23		98.3	9065	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.386	4.390	-0.004	1.000	4528	0.002482	Target=12.20		1.2	
563.00 > 169.00	4.374	4.390	-0.016	0.997	693		6.53(6.10-18.31)		3.6	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.253	515745	1.18		94.0	792	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.230	4.401	-0.171	0.962	794	0.001924			1.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.599	4.613	-0.014	1.310	2117569	1.16		92.6	5309	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.599	4.613	-0.014	1.000	1773	0.001028	Target=8.47		0.1	
613.00 > 169.00	4.610	4.613	-0.003	1.002	211		8.40(4.23-12.70)		1.9	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.418	2096021	1.15		92.0	5137	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.982	-0.003	1.000	255	0.001360	Target=0.87		8.5	M
713.00 > 219.00	4.989	4.982	0.007	1.002	218		1.17(0.43-1.30)		7.5	M

QC Flag Legend

Processing Flags

Review Flags

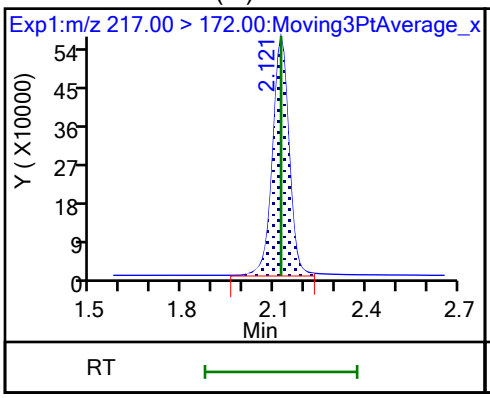
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:39 Chrom Revision: 2.3 18-Oct-2023 21:16:54

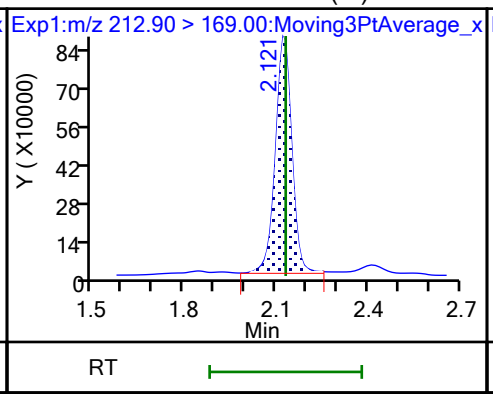
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d
Injection Date: 24-Oct-2023 08:24:46 Instrument ID: LC812
Lims ID: 460-290546-A-3-A Lab Sample ID: 200-290546-3
Client ID: FDMH-2
Operator ID: LC812user ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

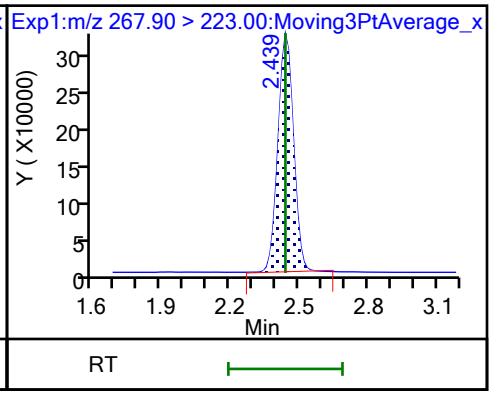
D 1 13C4 PFBA (M)



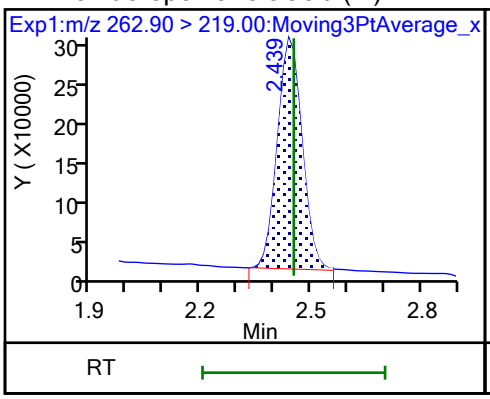
2 Perfluorobutanoic acid (M)



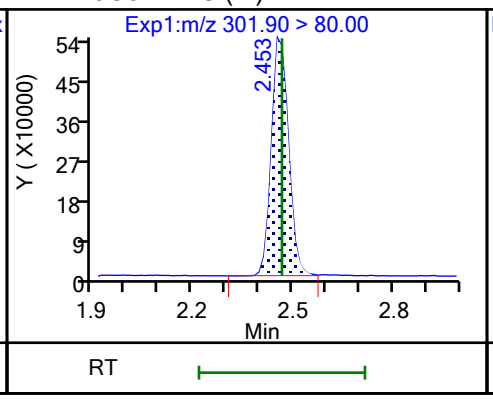
D 3 13C5 PFPeA



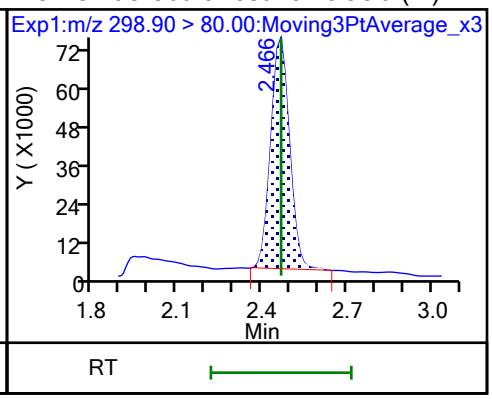
4 Perfluoropentanoic acid (M)



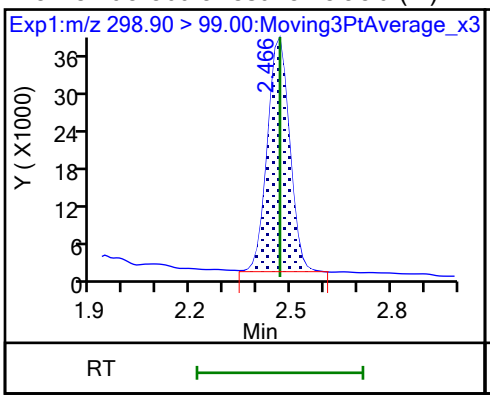
D 47 13C3 PFBS (M)



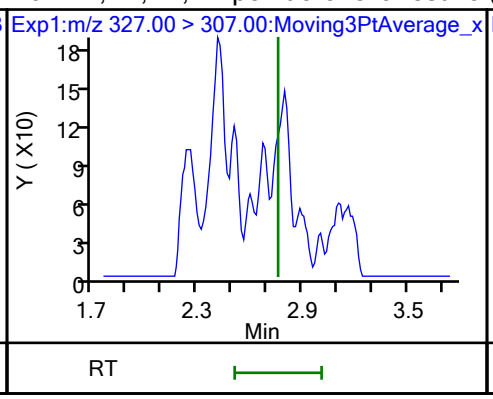
5 Perfluorobutanesulfonic acid (M)



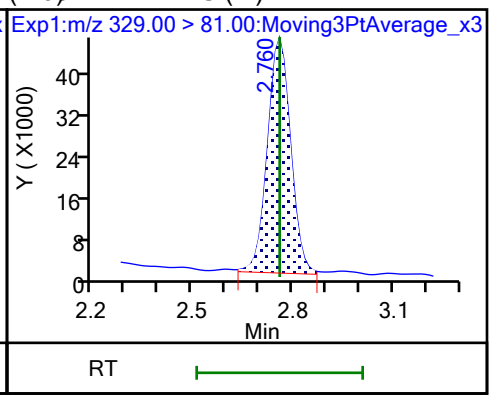
5 Perfluorobutanesulfonic acid (M)



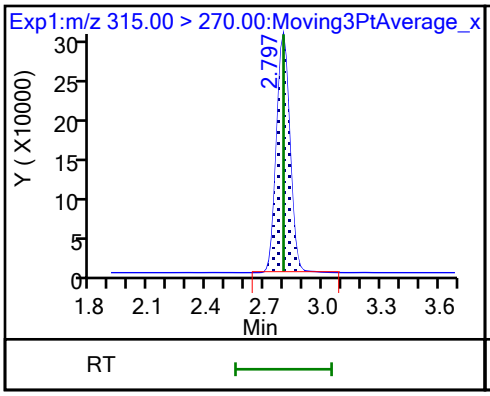
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



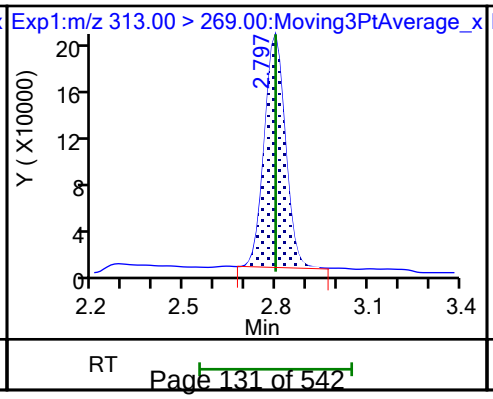
D 50 M2-4:2 FTS (M)



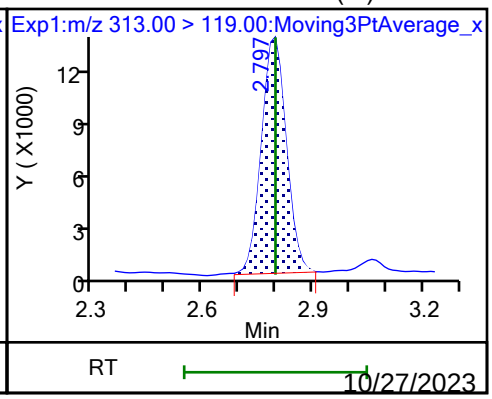
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

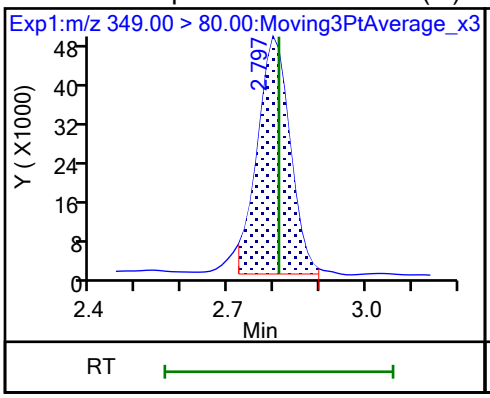


6 Perfluorohexanoic acid (M)

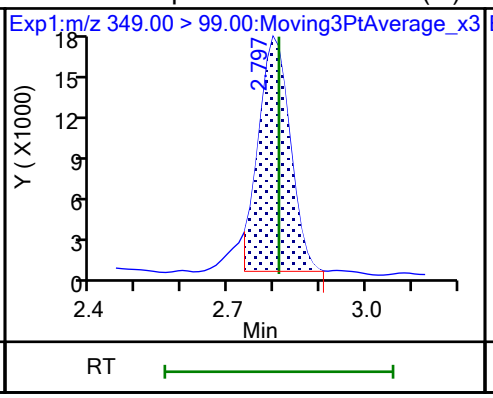


10/27/2023
10:52 AM

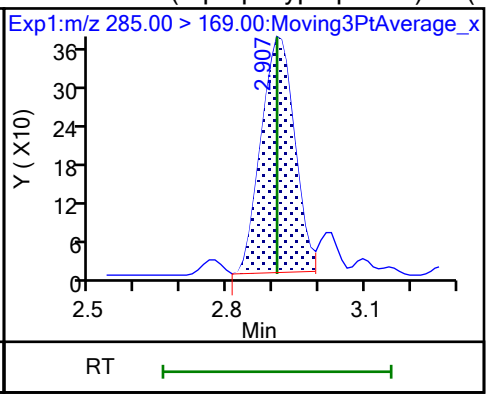
70 Perfluoropentanesulfonic acid (M)



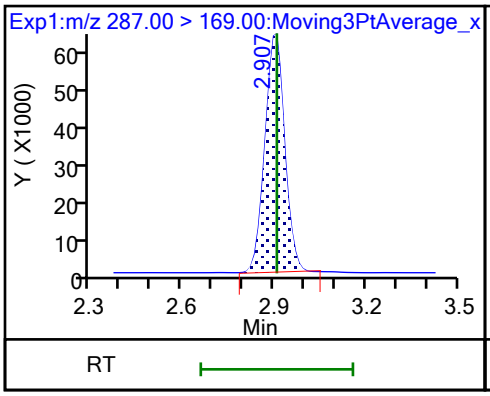
70 Perfluoropentanesulfonic acid (M)



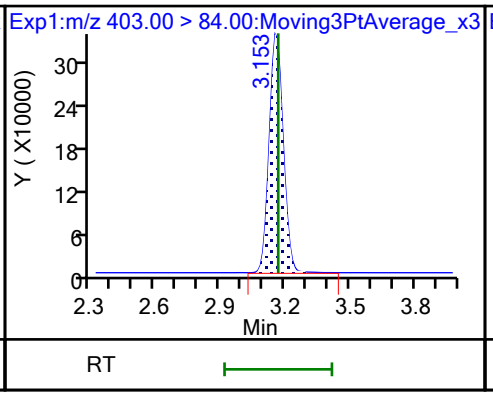
67 Perfluoro(2-propoxypropanoic) ac (M)



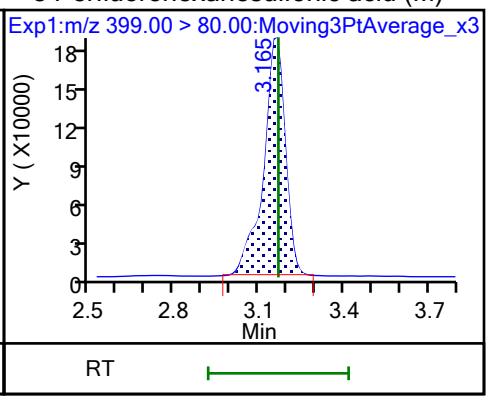
D 64 13C3 HFPO-DA



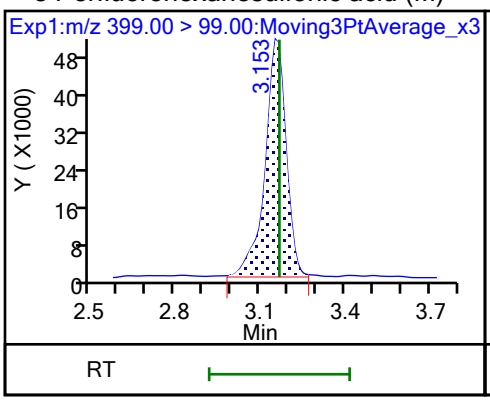
D 11 18O2 PFHxS



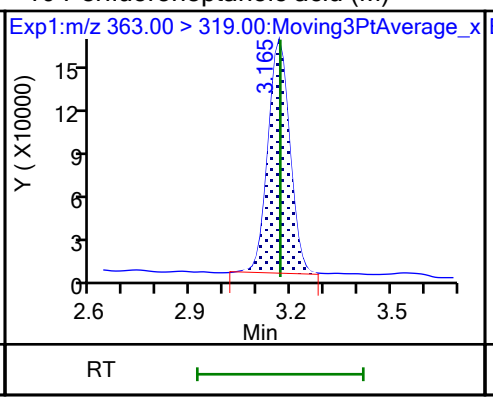
8 Perfluorohexanesulfonic acid (M)



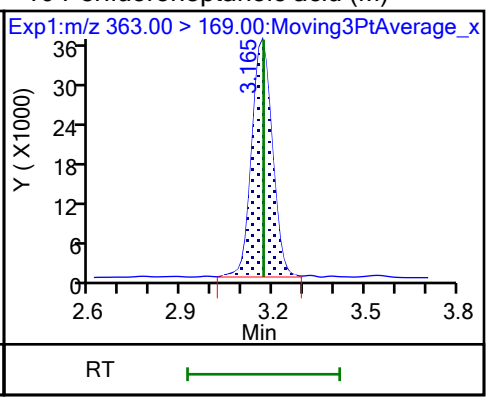
8 Perfluorohexanesulfonic acid (M)



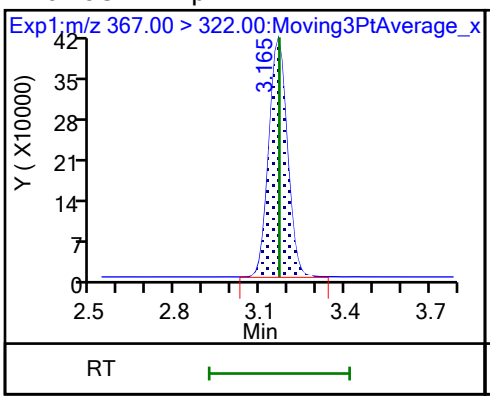
10 Perfluoroheptanoic acid (M)



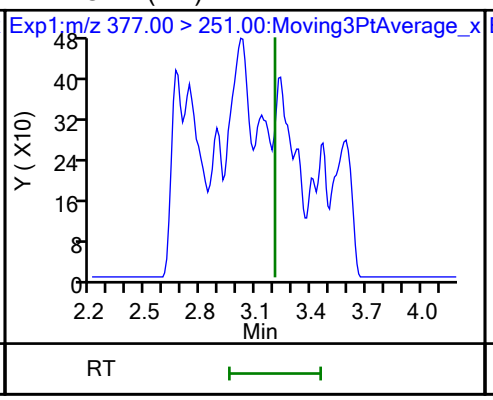
10 Perfluoroheptanoic acid (M)



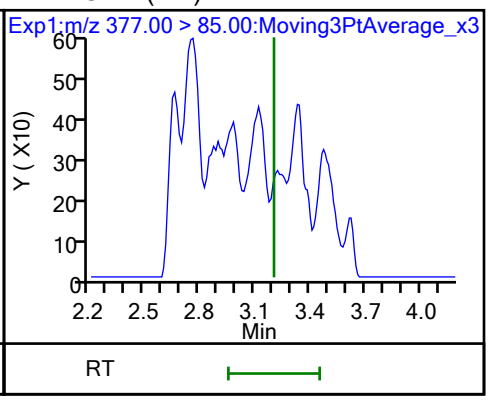
D 9 13C4 PFHpA



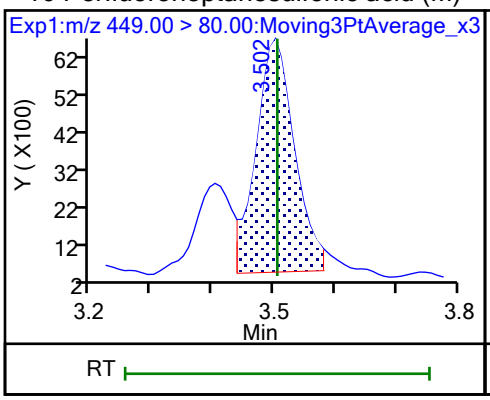
77 DONA (ND)



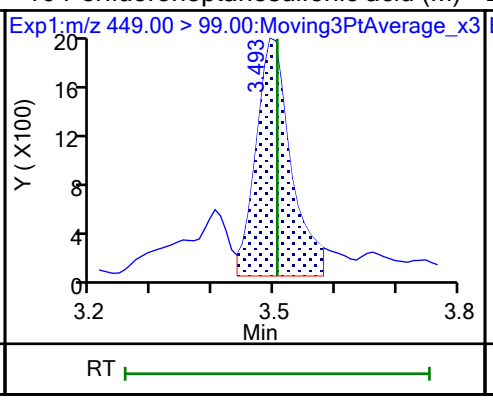
77 DONA (ND)



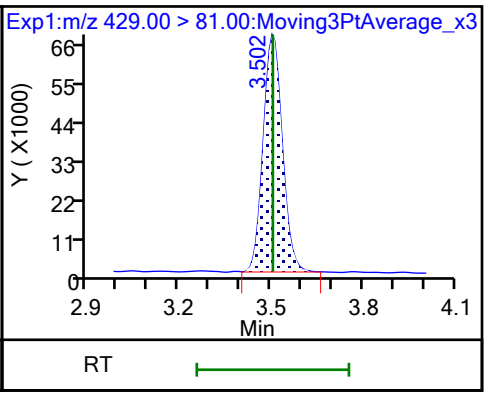
16 Perfluoroheptanesulfonic acid (M)



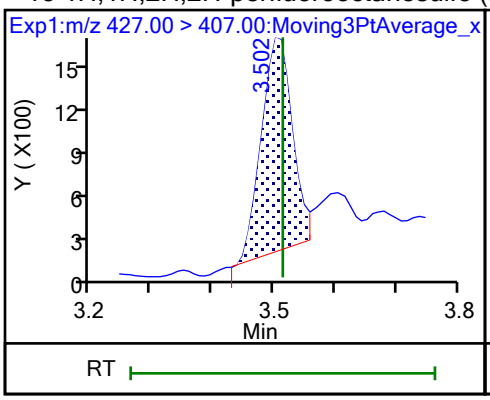
16 Perfluoroheptanesulfonic acid (M)



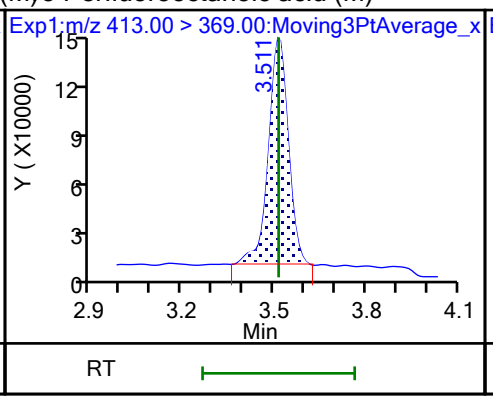
D 12 M2-6:2 FTS



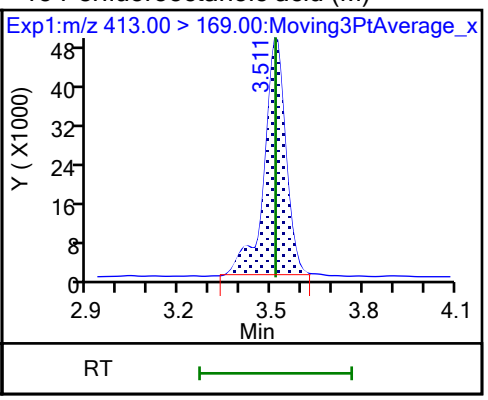
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



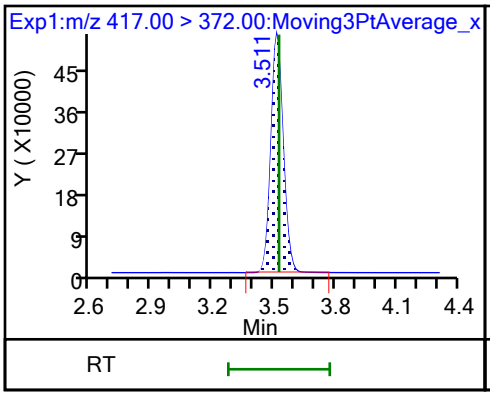
15 Perfluorooctanoic acid (M)



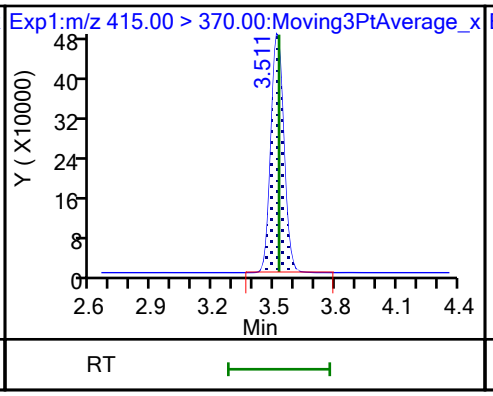
15 Perfluorooctanoic acid (M)



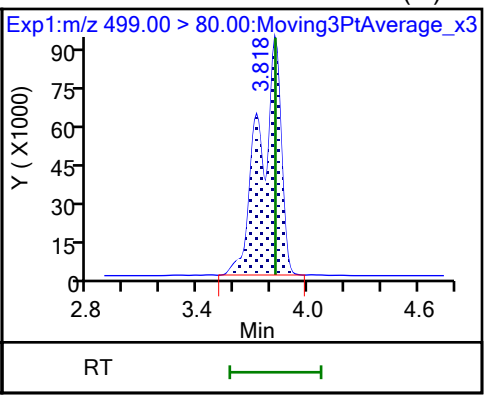
D 14 13C4 PFOA



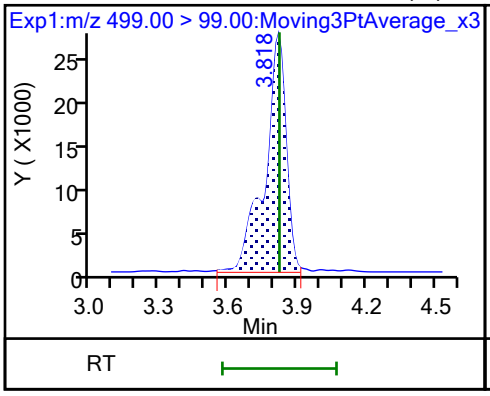
* 62 13C2 PFOA



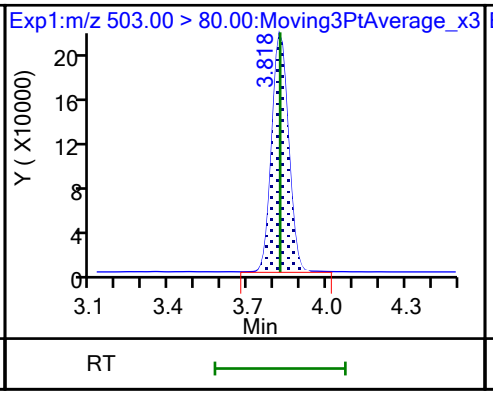
17 Perfluorooctanesulfonic acid (M)



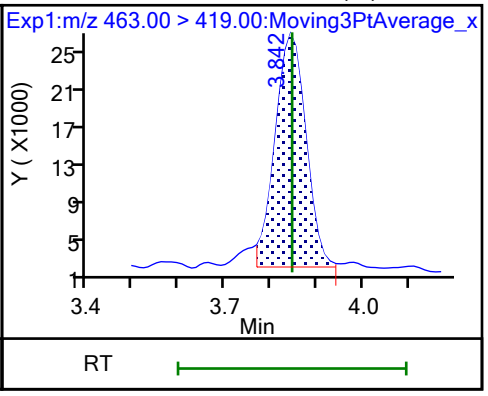
17 Perfluorooctanesulfonic acid (M)



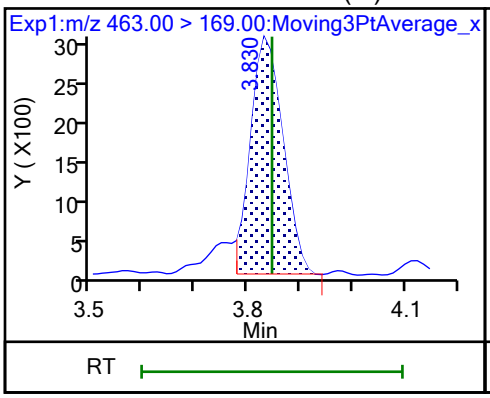
D 18 13C4 PFOS



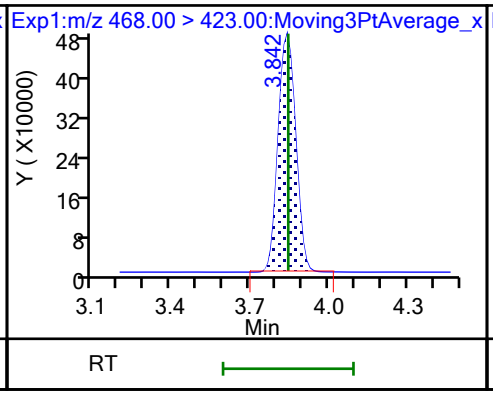
20 Perfluorononanoic acid (M)



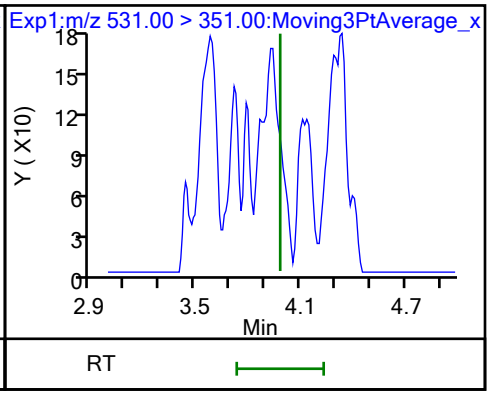
20 Perfluorononanoic acid (M)



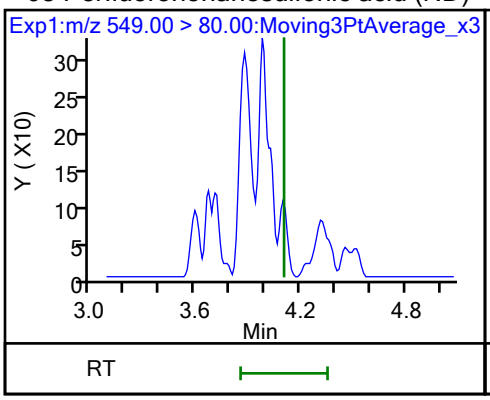
D 19 13C5 PFNA



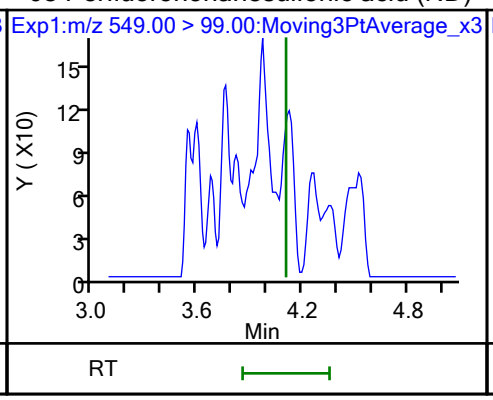
69 9-Chlorohexadecafluoro-3-oxanona (ND)



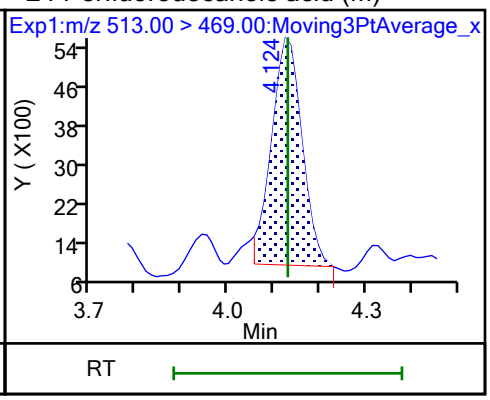
68 Perfluorononanesulfonic acid (ND)



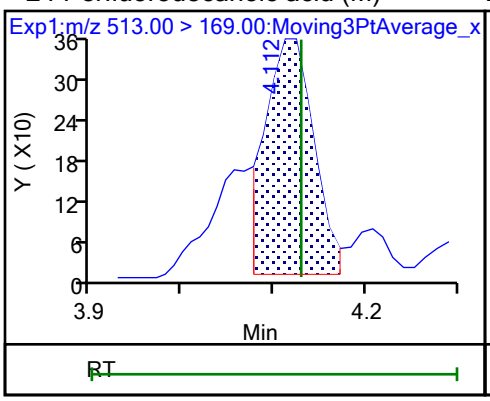
68 Perfluorononanesulfonic acid (ND)



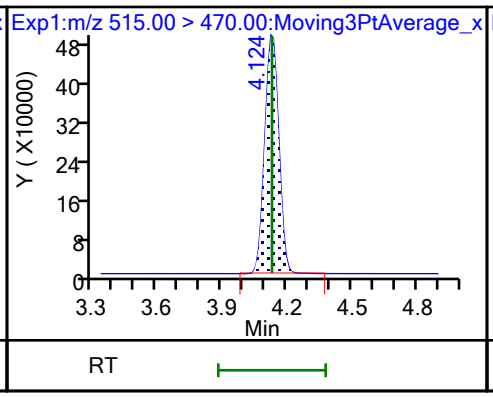
24 Perfluorodecanoic acid (M)



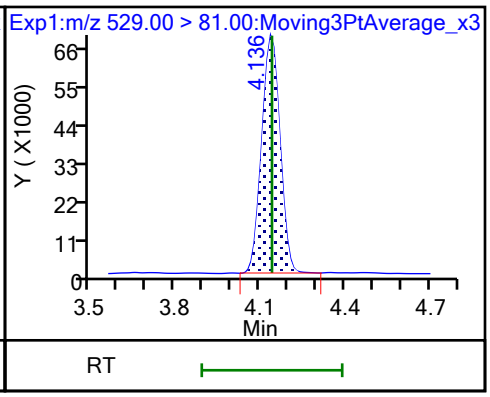
24 Perfluorodecanoic acid (M)



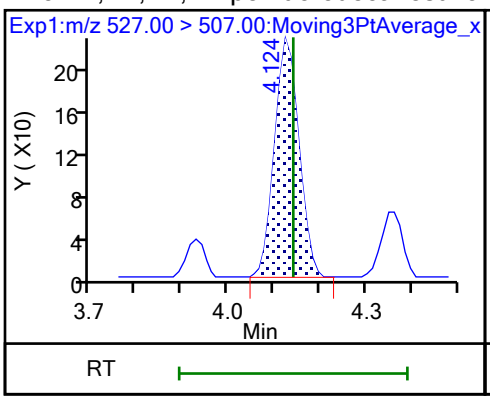
D 23 13C2 PFDA



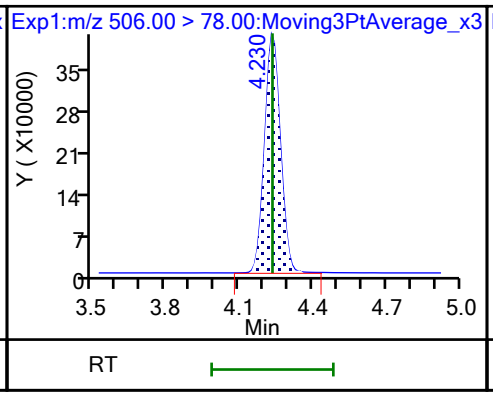
D 26 M2-8:2 FTS



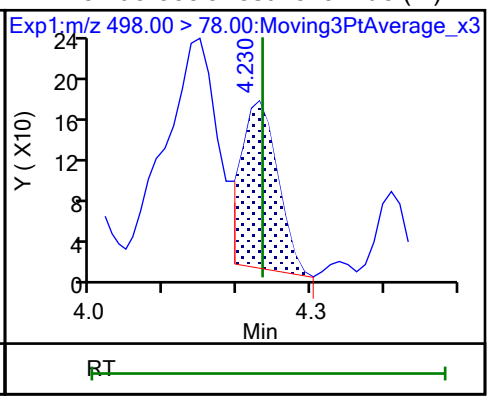
25 1H,1H,2H,2H-perfluorodecanesulfo



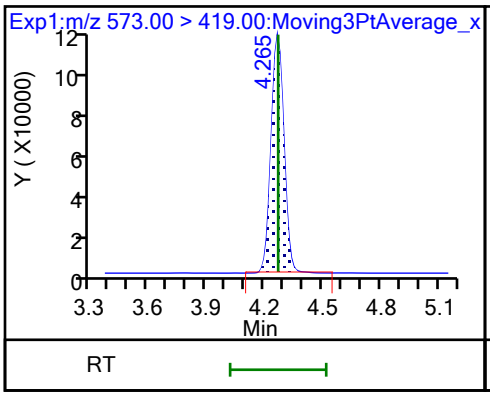
D 21 13C8 FOSA



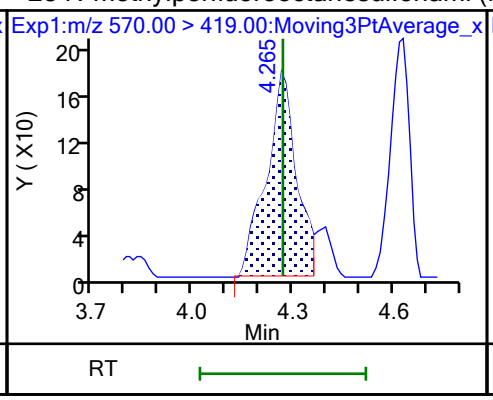
22 Perfluorooctanesulfonamide (M)



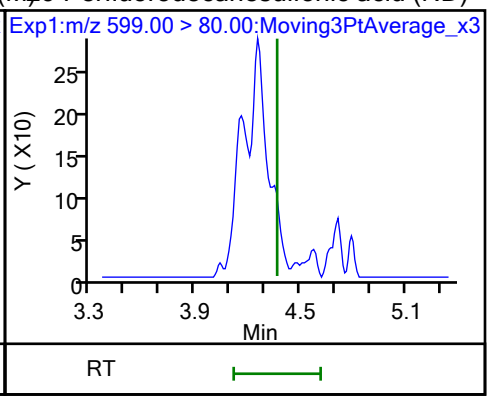
D 27 d3-NMeFOSAA



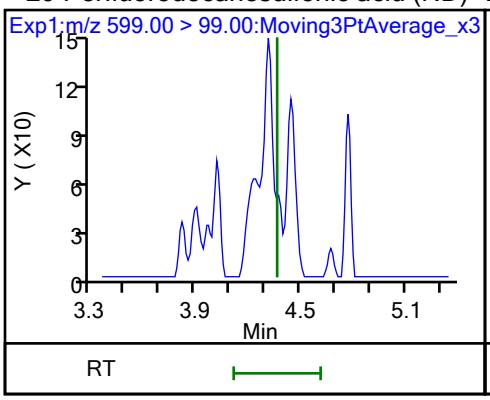
28 N-methylperfluorooctanesulfonami (M)



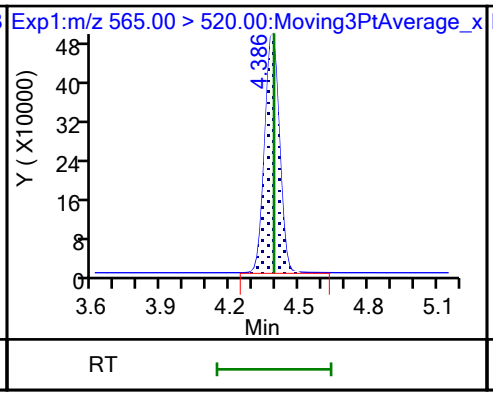
29 Perfluorodecanesulfonic acid (ND)



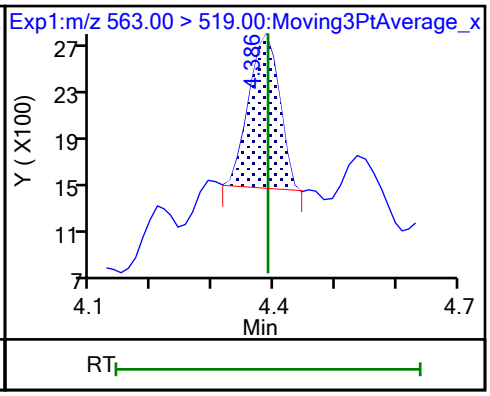
29 Perfluorodecanesulfonic acid (ND)



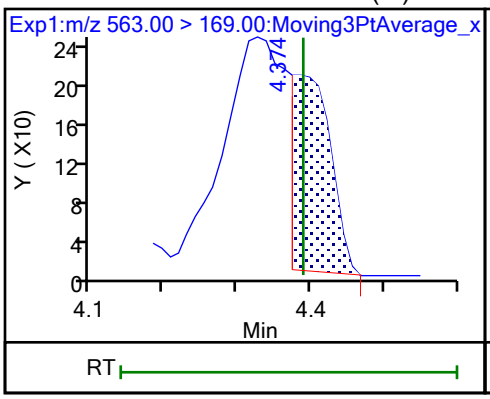
D 30 13C2 PFUnA



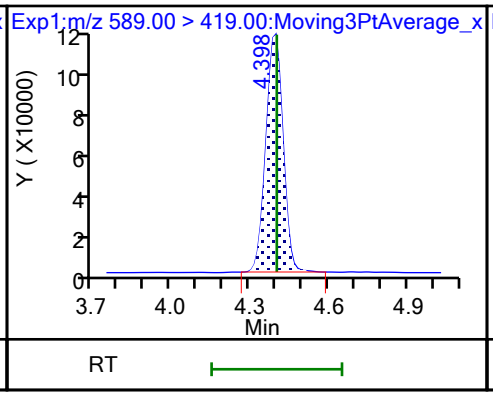
31 Perfluoroundecanoic acid



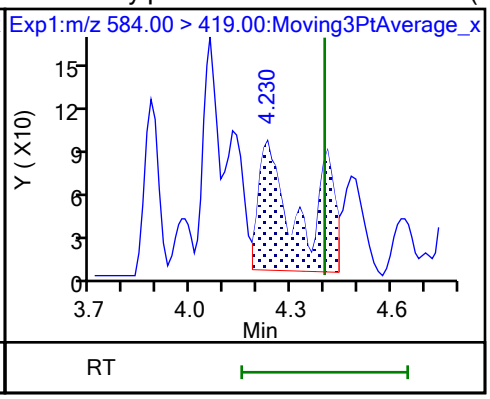
31 Perfluoroundecanoic acid (M)



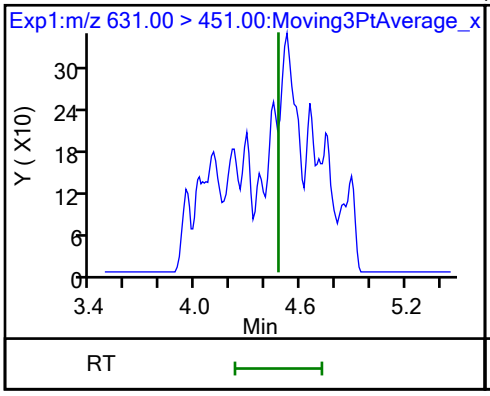
D 32 d5-NEtFOSAA



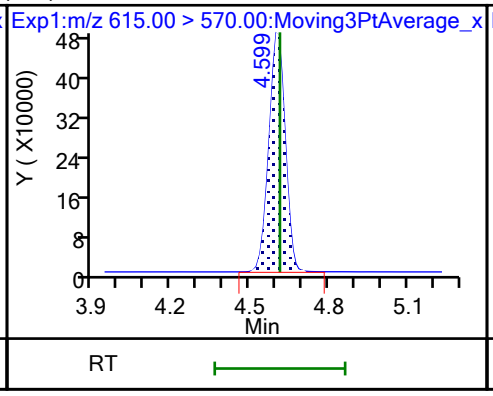
33 N-ethylperfluorooctanesulfonamid (M)



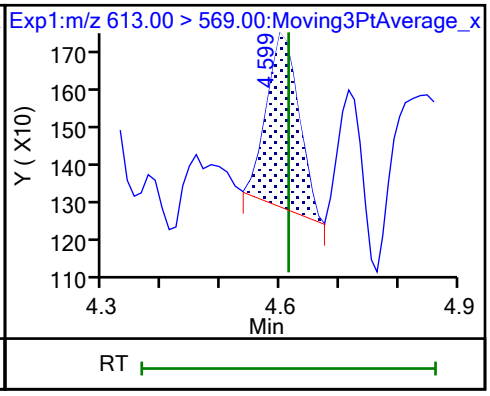
66 11-Chloroeicosafluoro-3-oxaundec (ND)



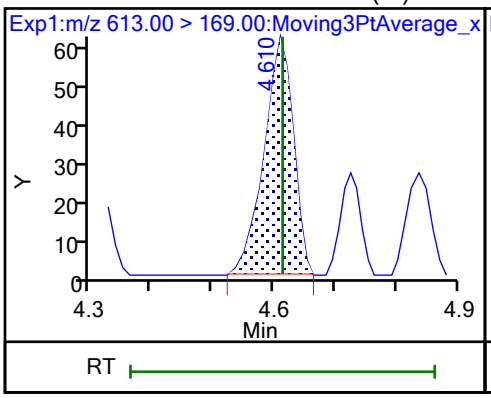
D 36 13C2 PFDoA



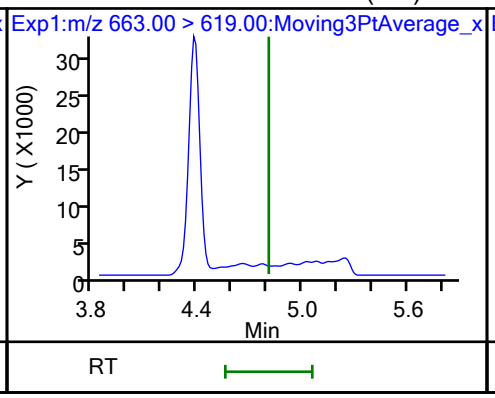
37 Perfluorododecanoic acid



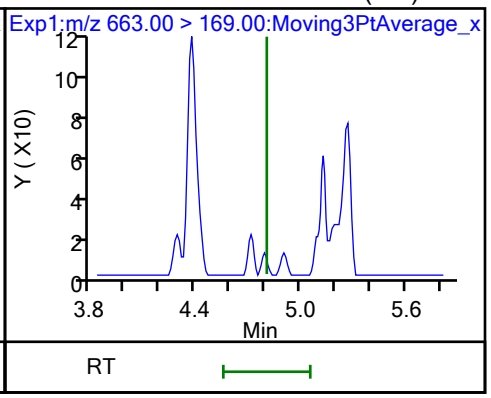
37 Perfluorododecanoic acid (M)



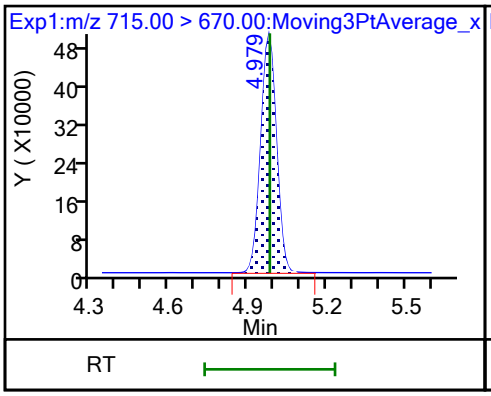
41 Perfluorotridecanoic acid (ND)



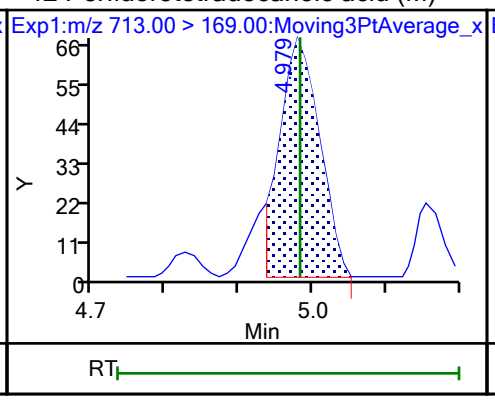
41 Perfluorotridecanoic acid (ND)



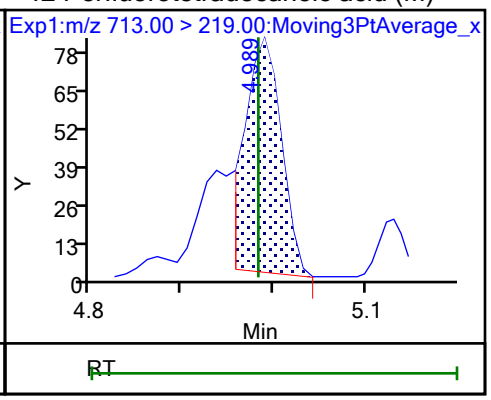
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Eurofins Burlington

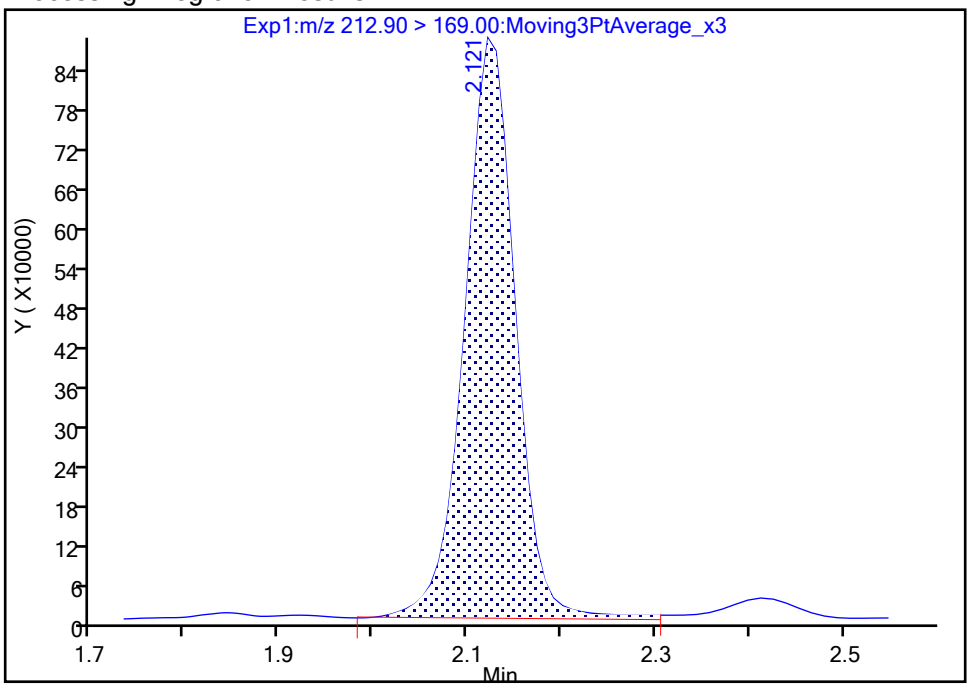
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

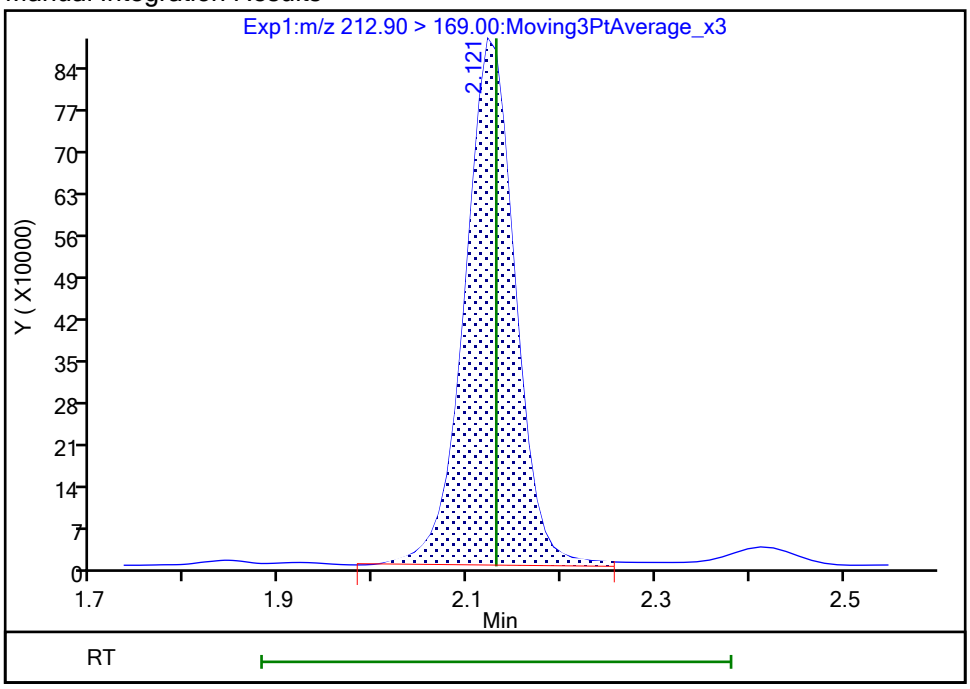
Processing Integration Results

RT: 2.12
Area: 3324327
Amount: 2.156952
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 3277363
Amount: 2.125902
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

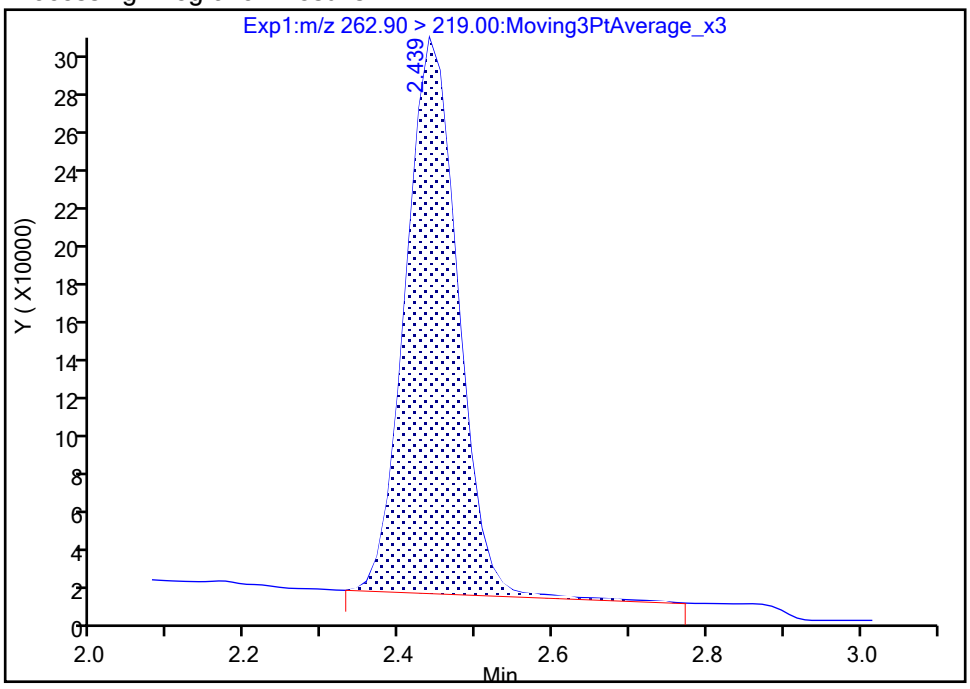
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

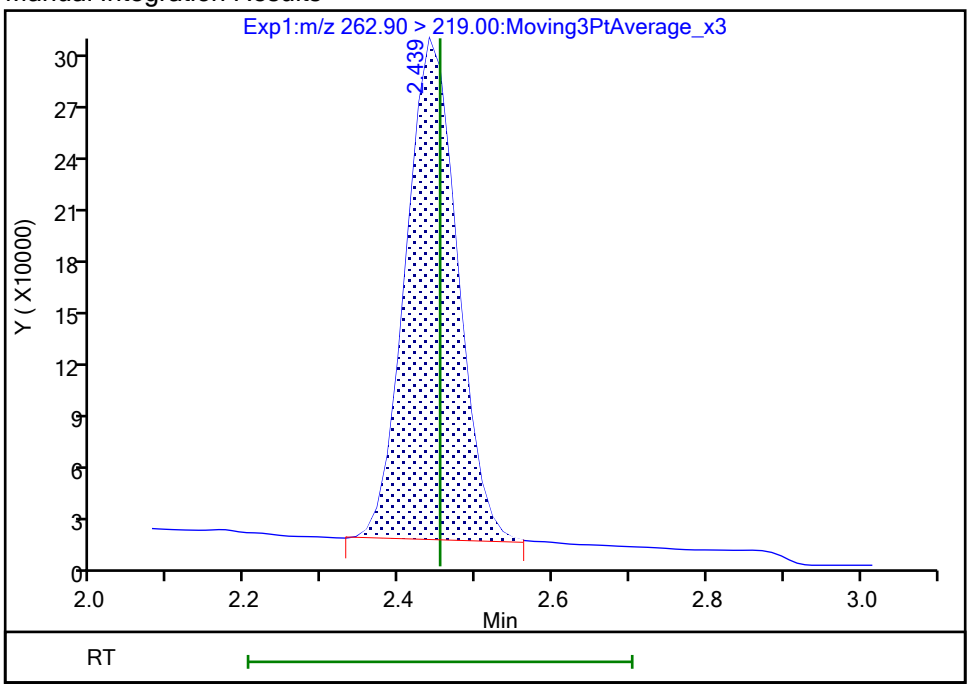
Processing Integration Results

RT: 2.44
Area: 1363933
Amount: 1.037693
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1346306
Amount: 1.024282
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

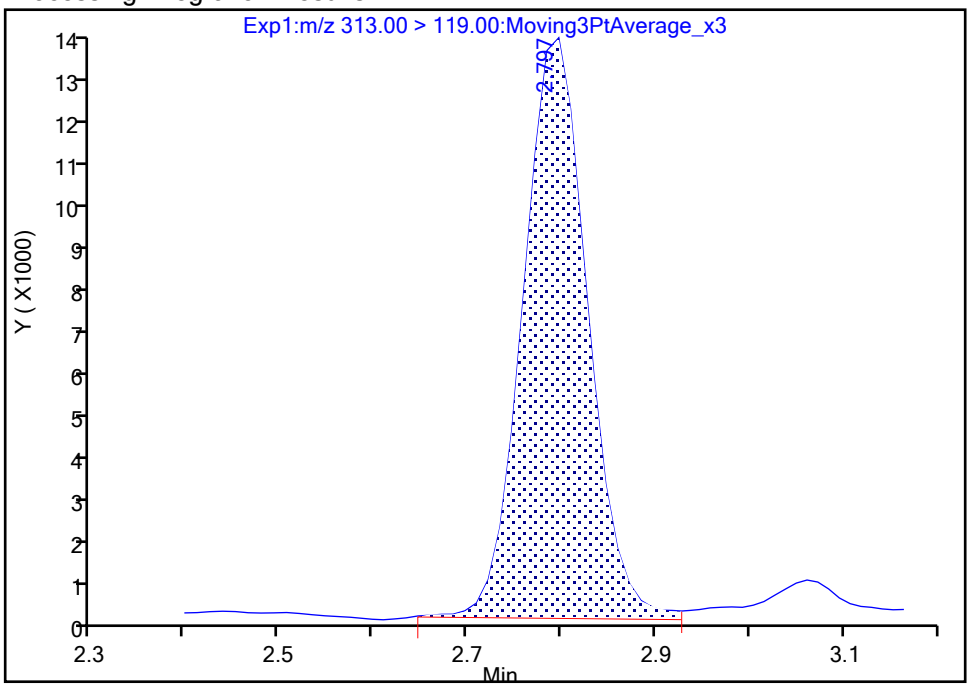
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

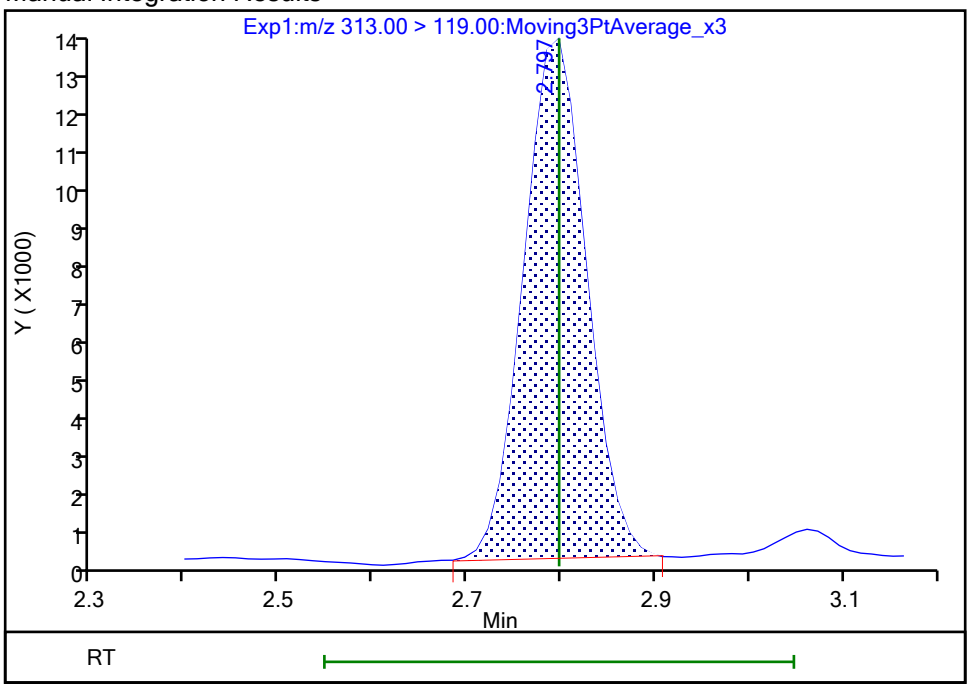
Processing Integration Results

RT: 2.80
Area: 64423
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 62184
Amount: 0.738036
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

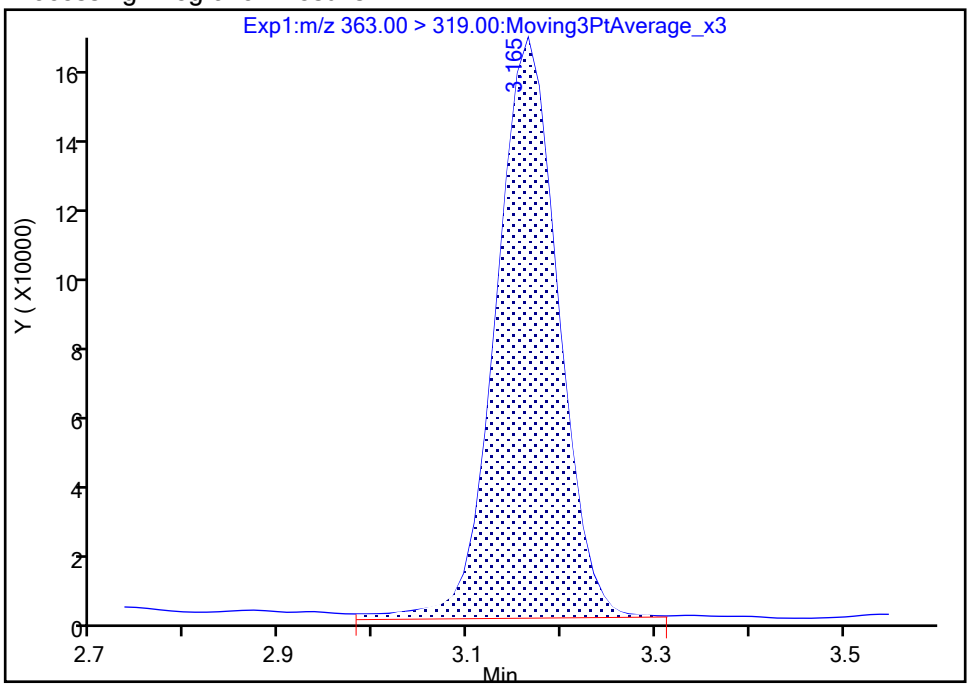
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

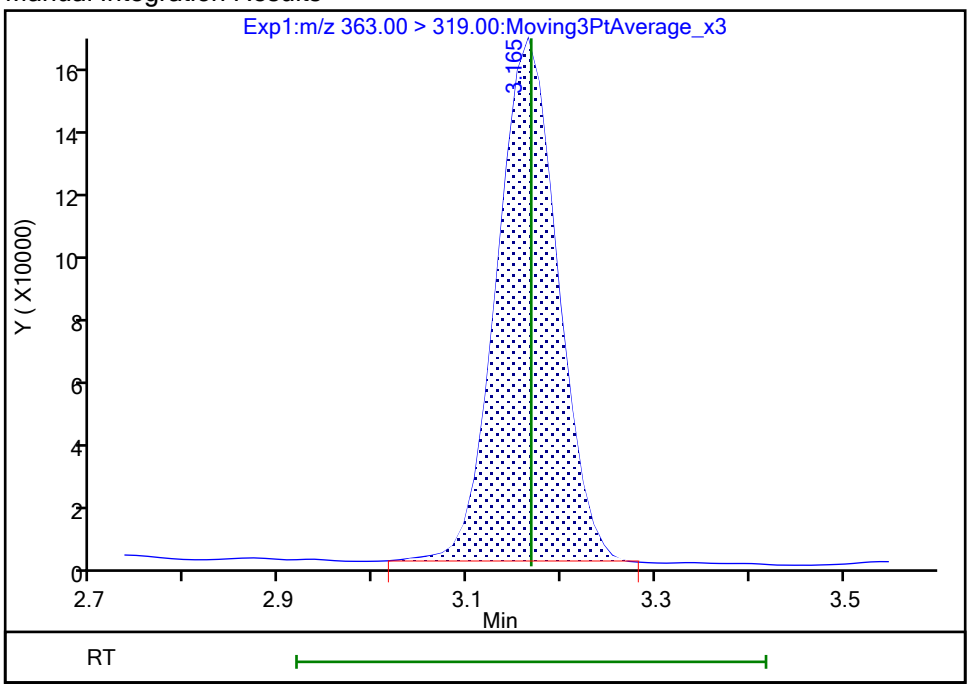
Processing Integration Results

RT: 3.16
Area: 739789
Amount: 0.443679
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 717957
Amount: 0.430585
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:22:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

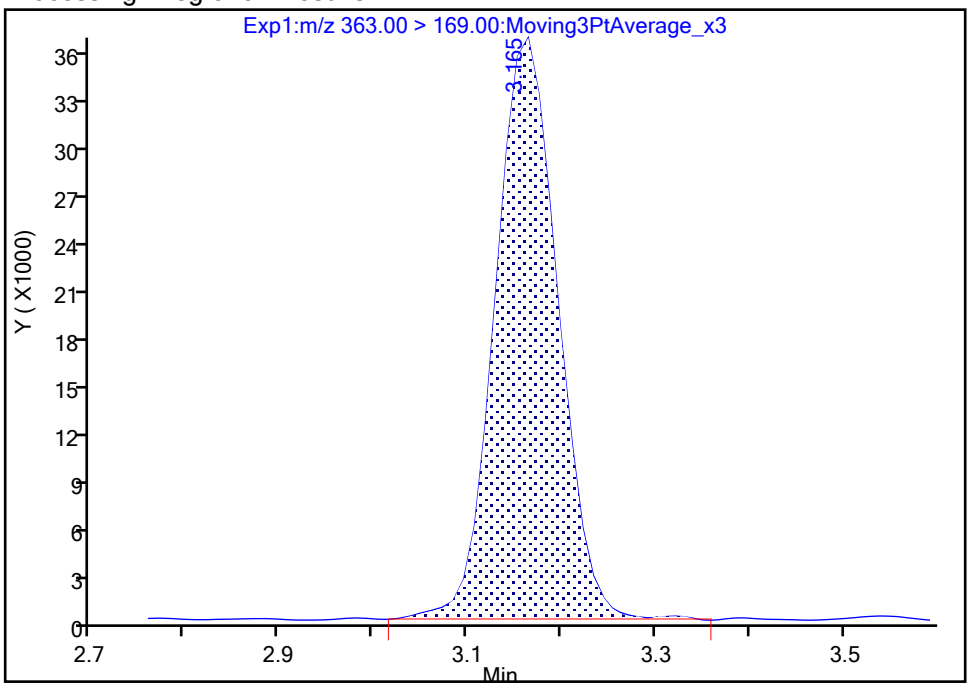
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

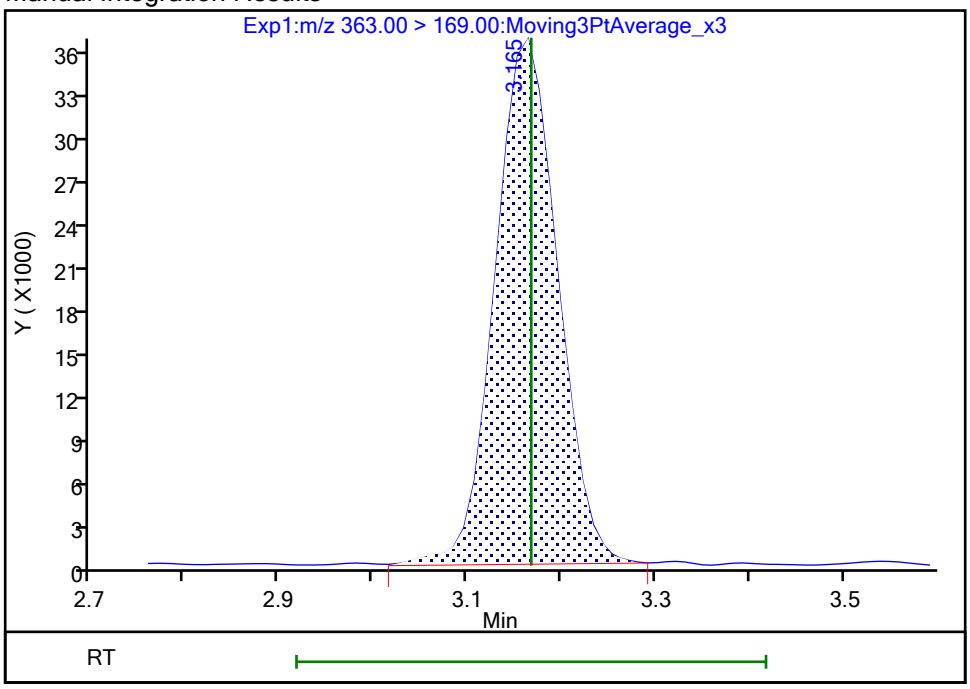
Processing Integration Results

RT: 3.16
Area: 170978
Amount: 0.443679
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 169108
Amount: 0.430585
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:22:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

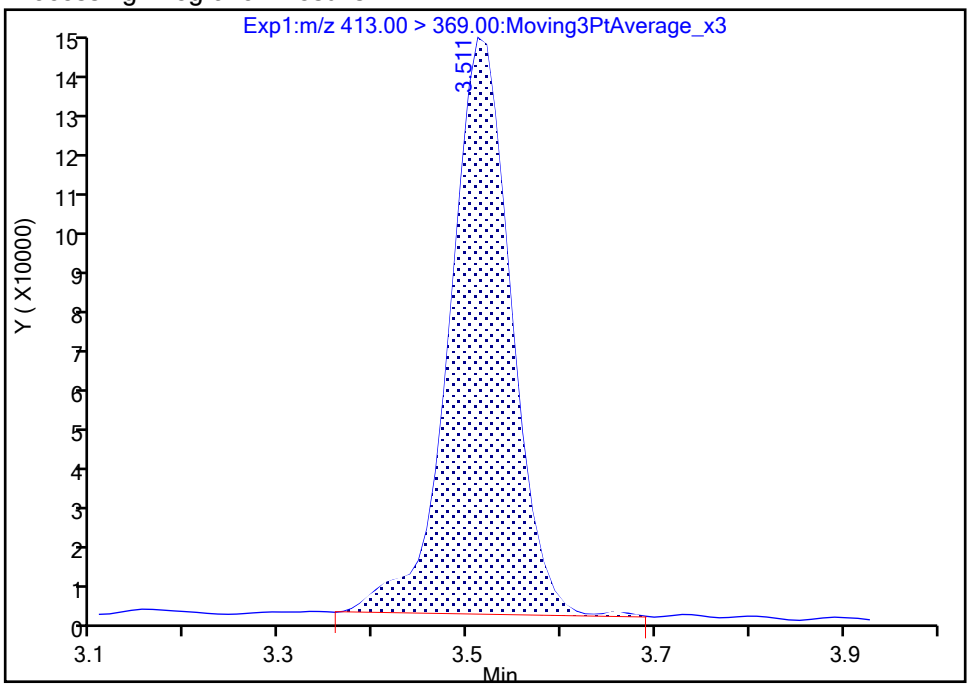
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

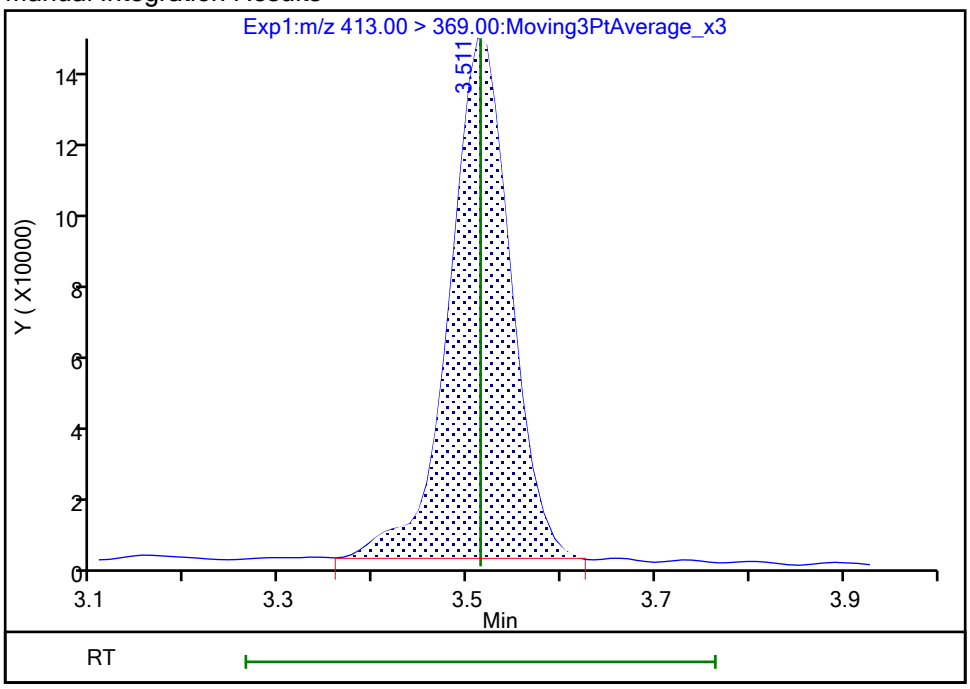
Processing Integration Results

RT: 3.51
Area: 651094
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 646343
Amount: 0.345418
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:22:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

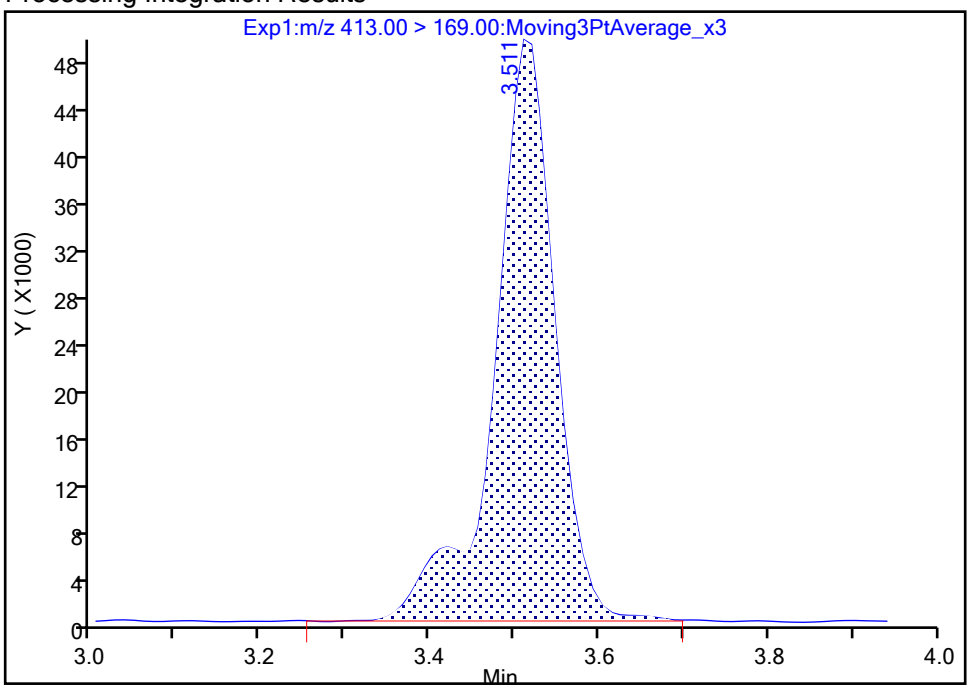
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

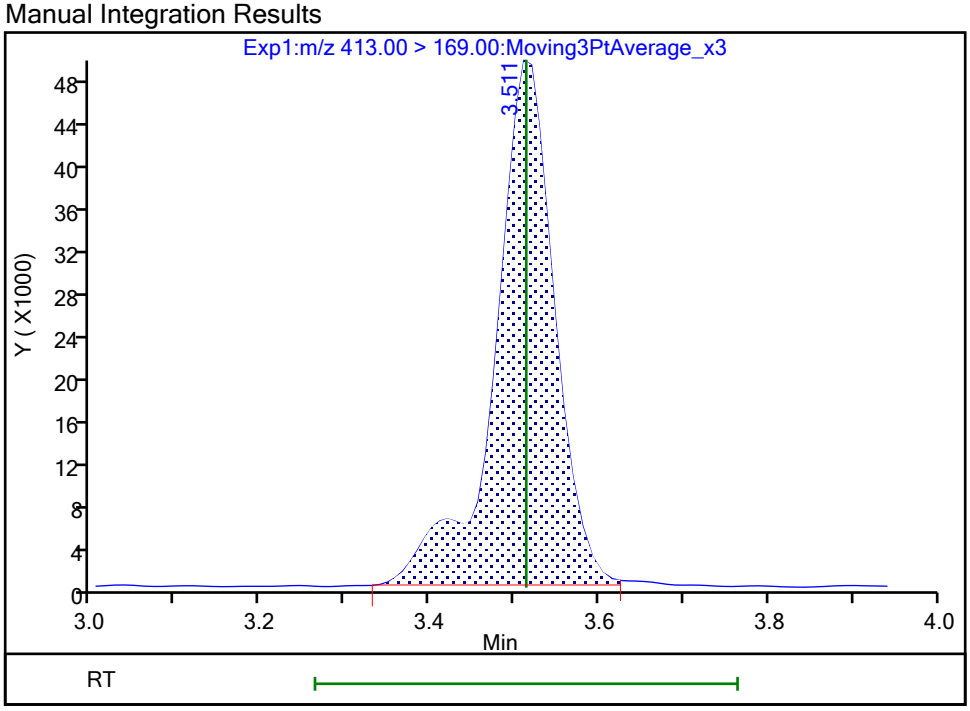
Processing Integration Results

RT: 3.51
Area: 246385
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 244104
Amount: 0.345418
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:23:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

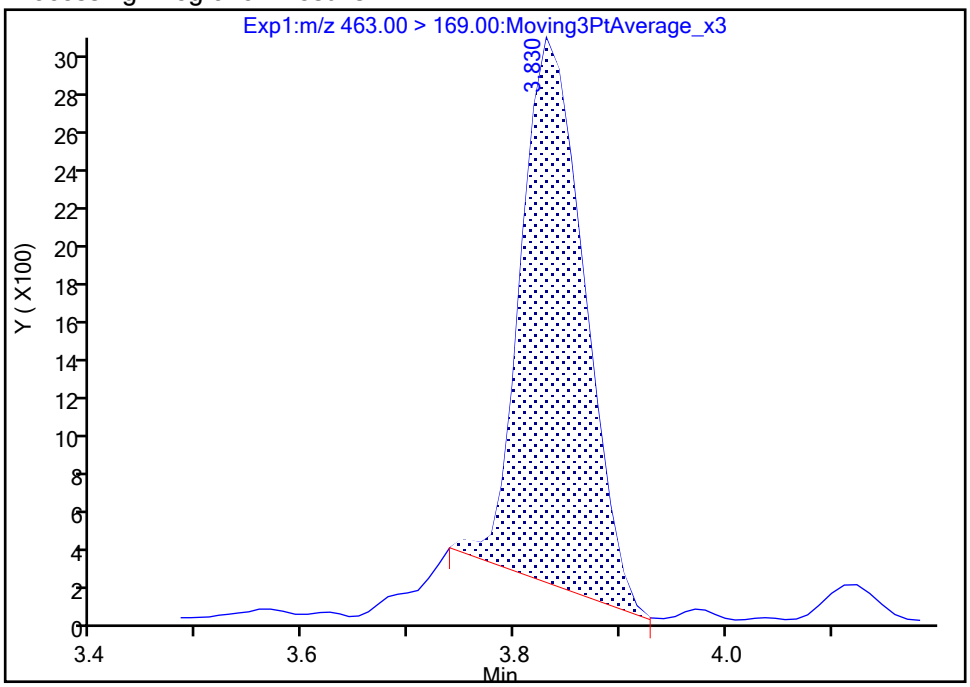
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

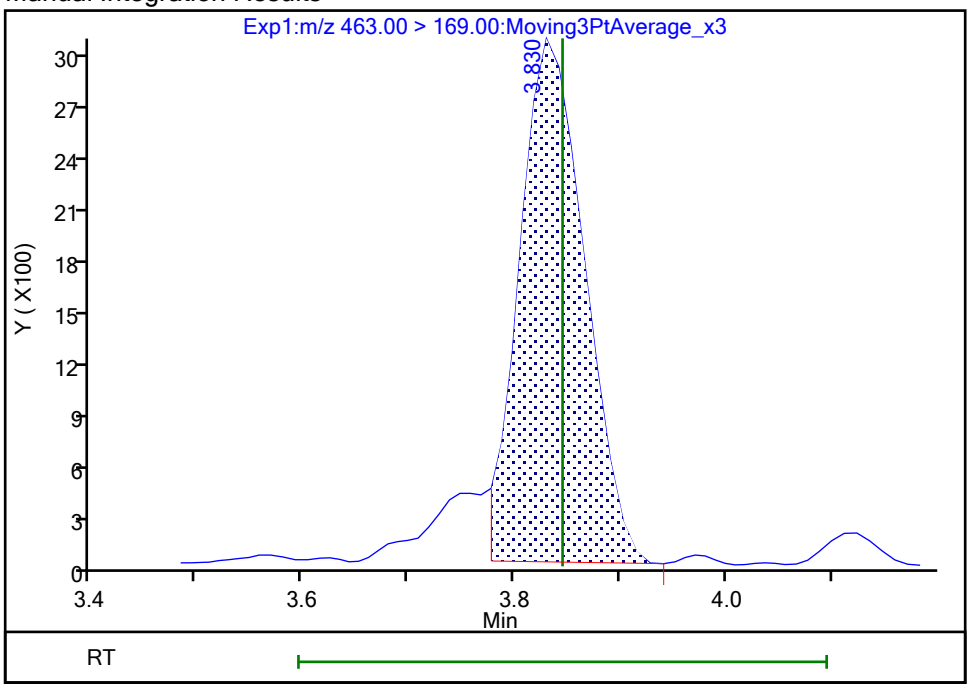
Processing Integration Results

RT: 3.83
Area: 11970
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 13032
Amount: 0.063610
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:23:52 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

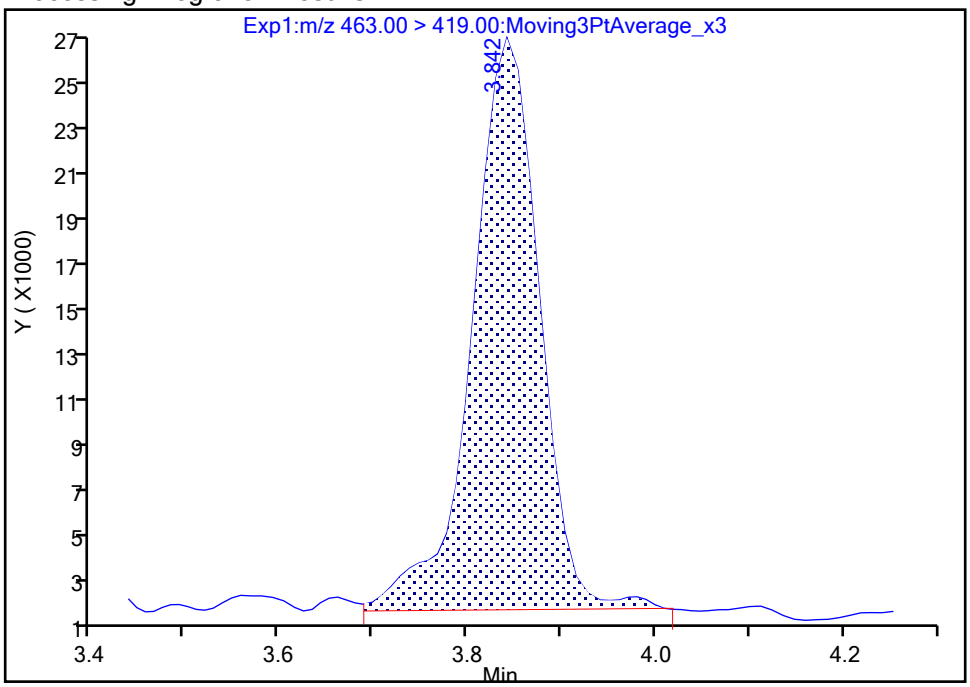
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

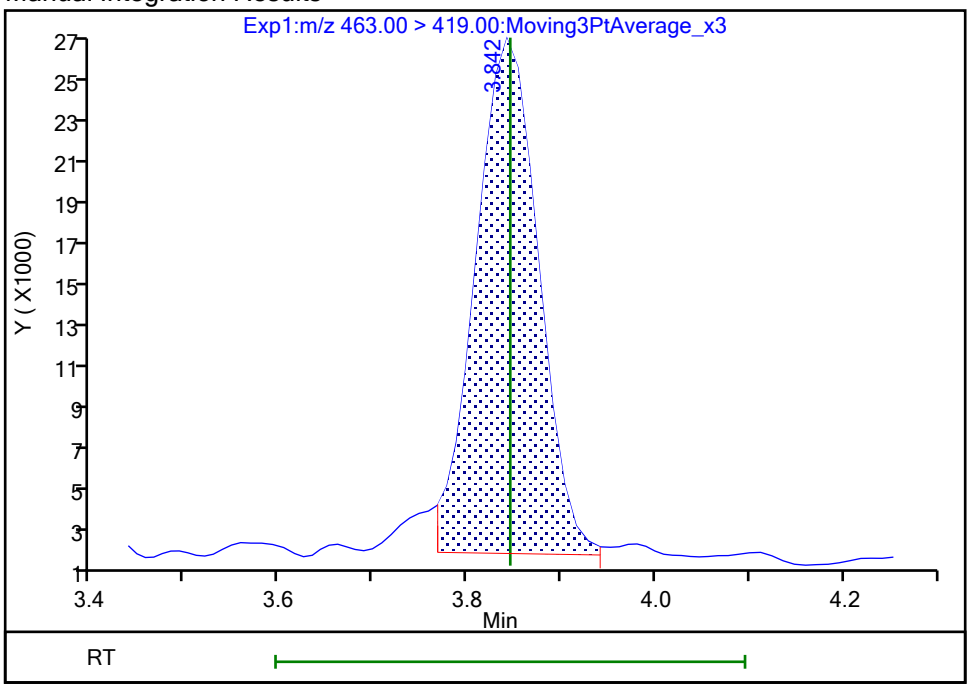
Processing Integration Results

RT: 3.84
Area: 121894
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.84
Area: 112481
Amount: 0.063610
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:23:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

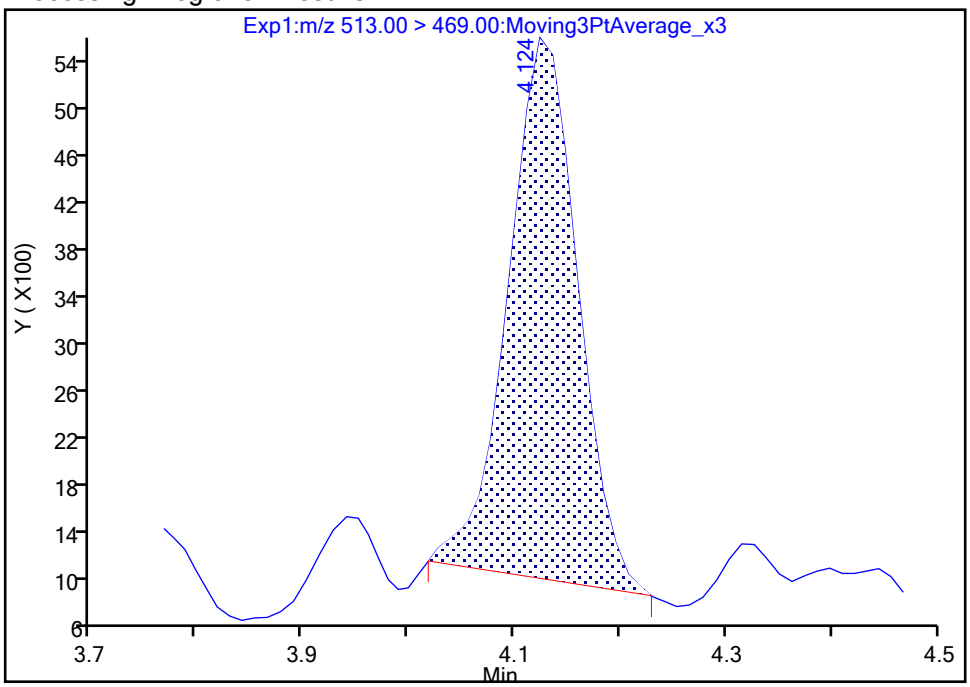
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

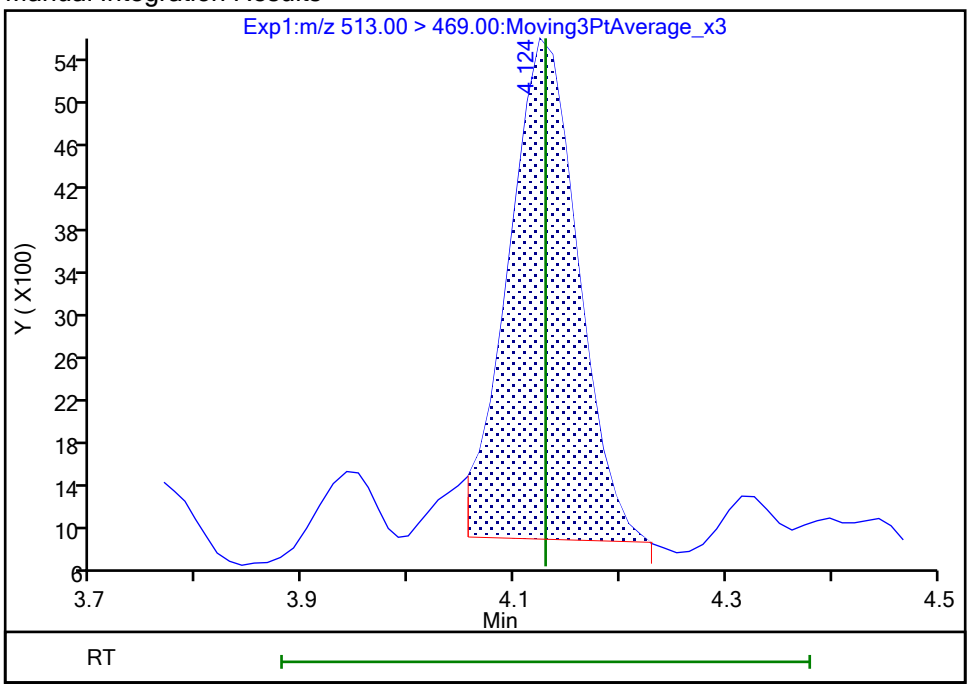
Processing Integration Results

RT: 4.12
Area: 20861
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.12
Area: 21368
Amount: 0.011878
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:24:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

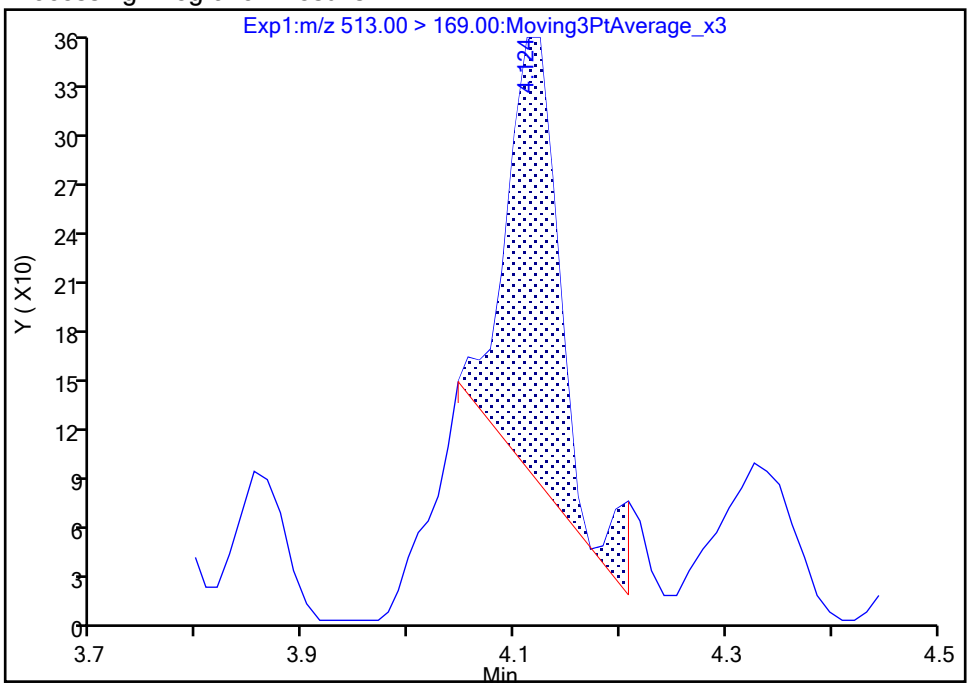
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

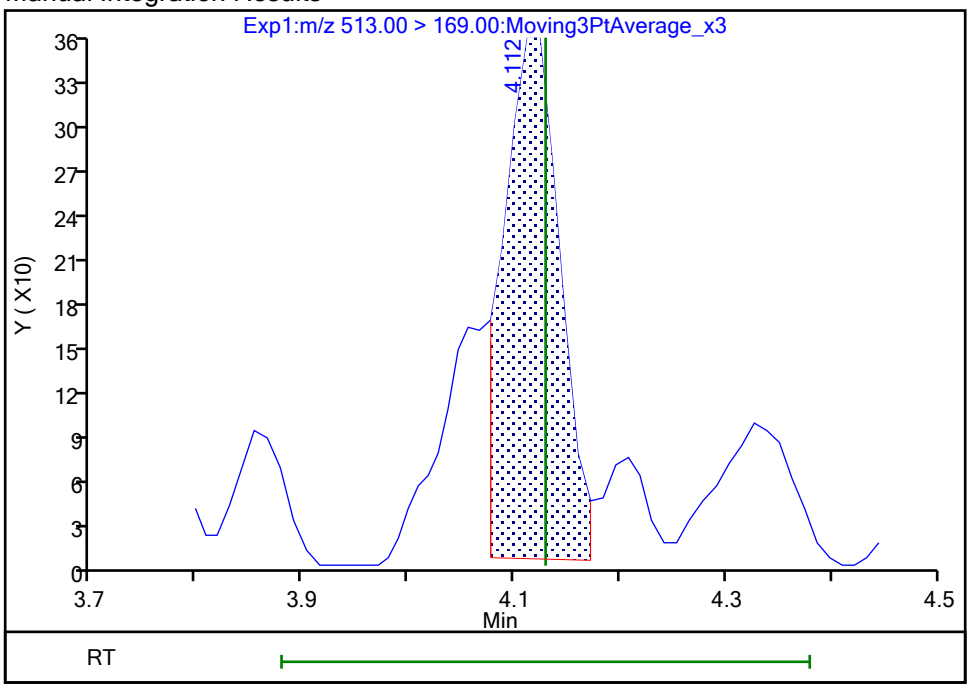
Processing Integration Results

RT: 4.12
Area: 934
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 1270
Amount: 0.011878
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:09:01 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

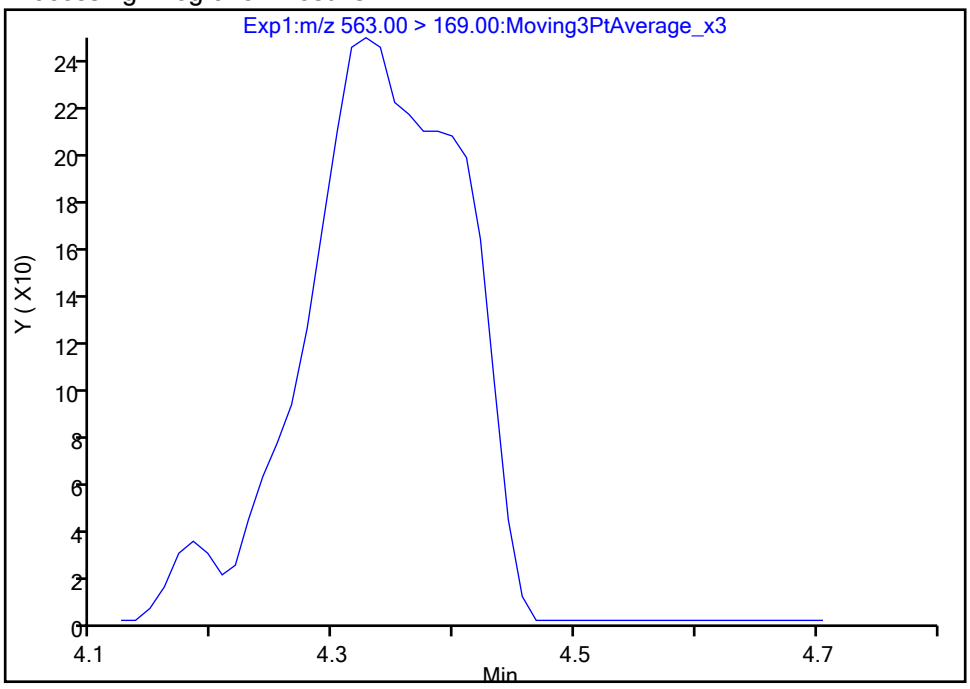
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

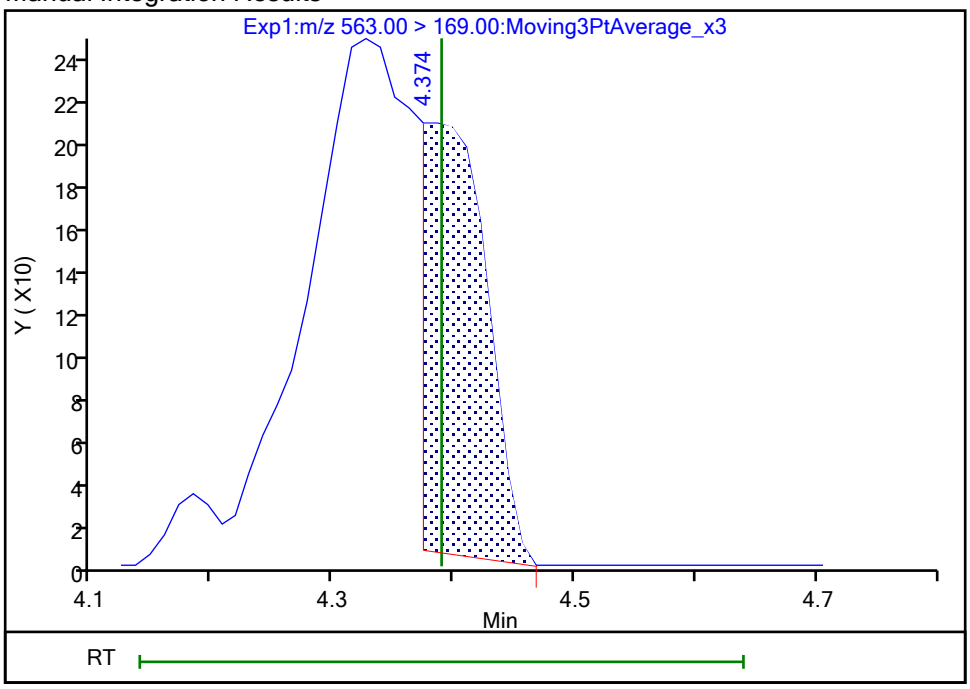
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.37
Area: 693
Amount: 0.002482
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:24:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

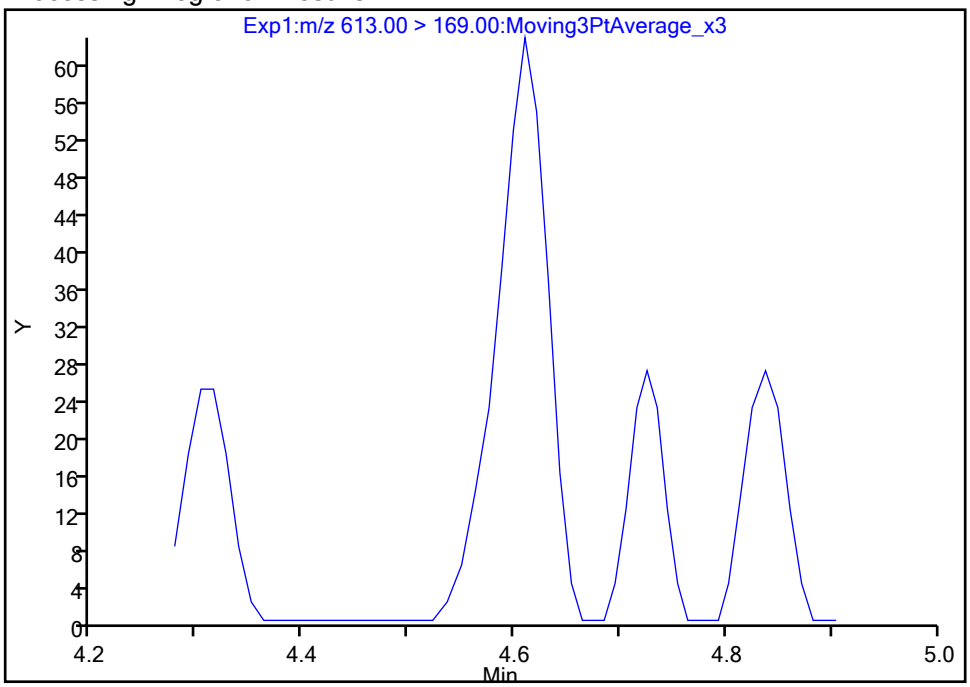
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

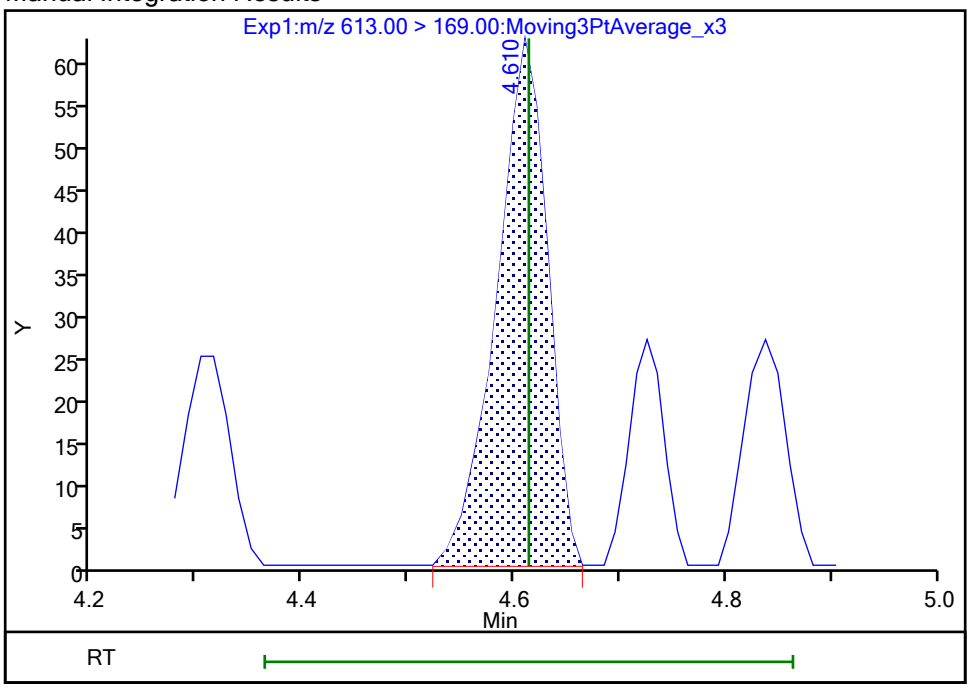
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 211
Amount: 0.001028
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:10 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

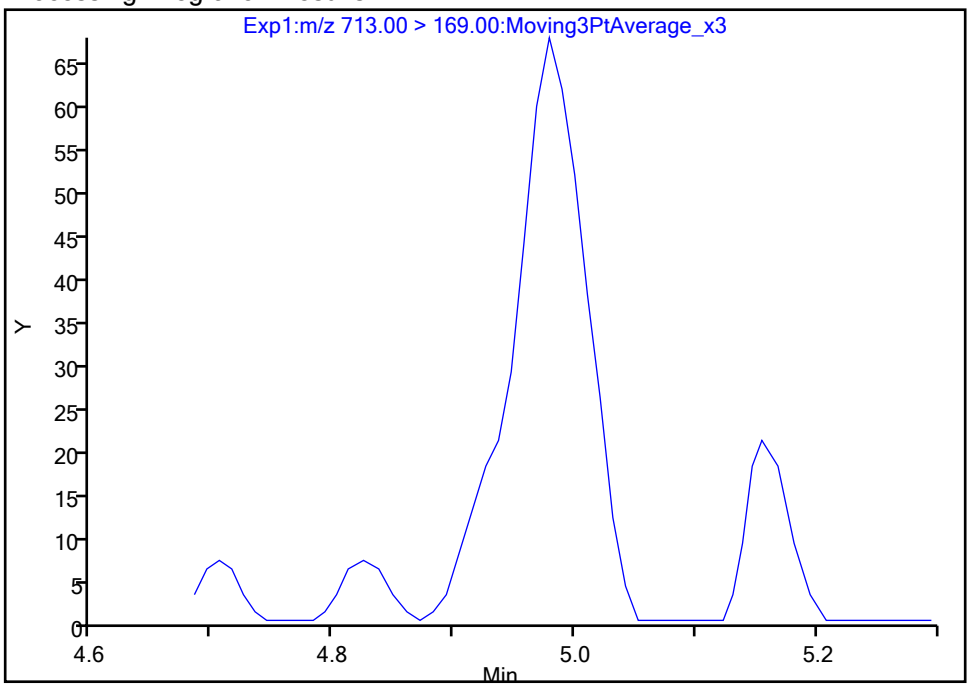
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

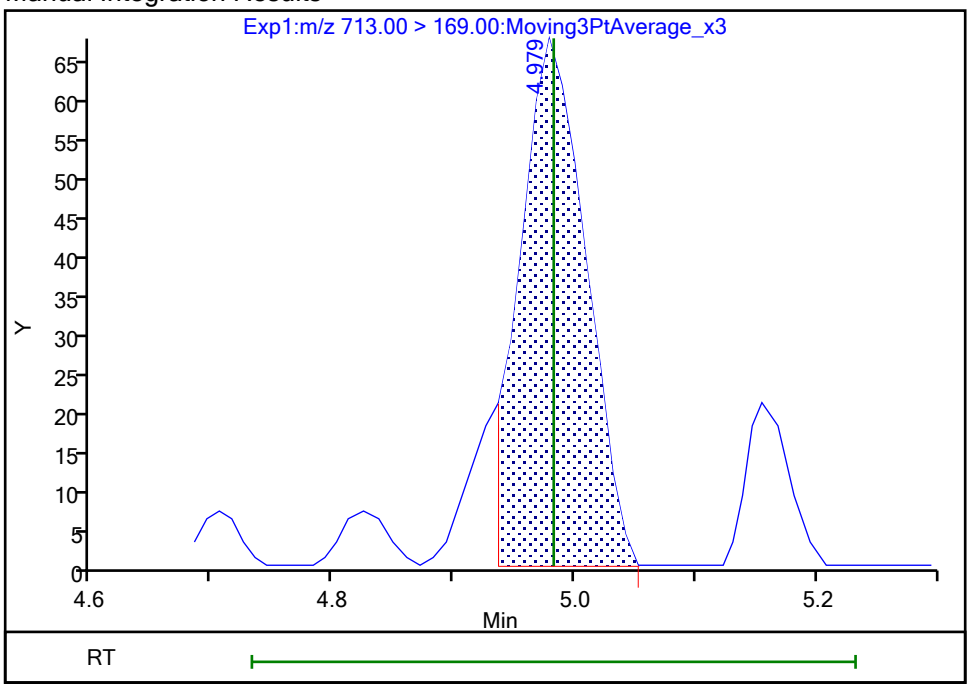
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 255
Amount: 0.001360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

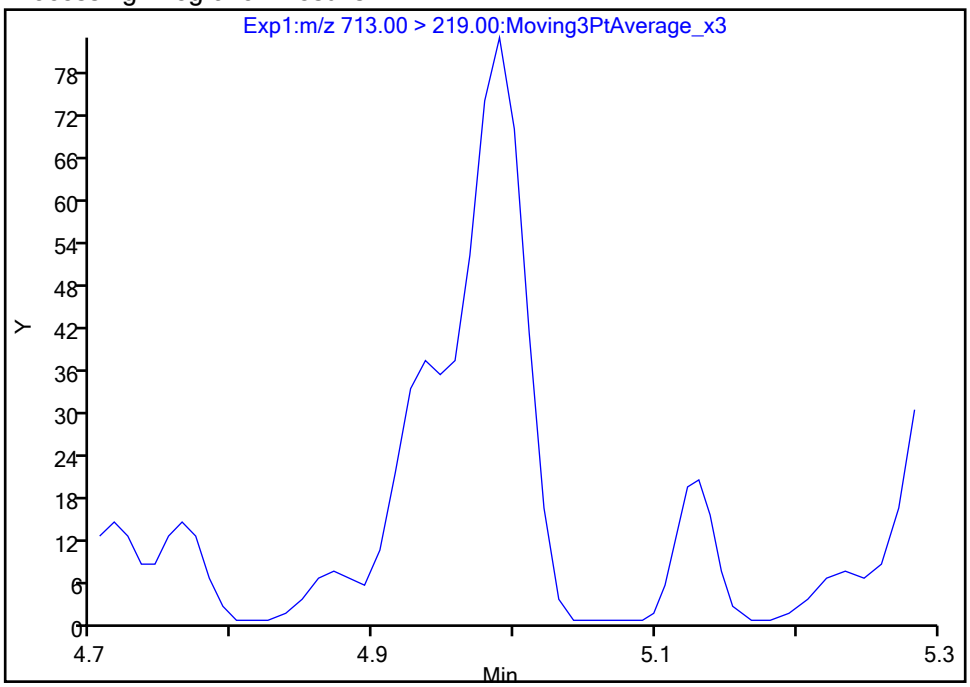
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

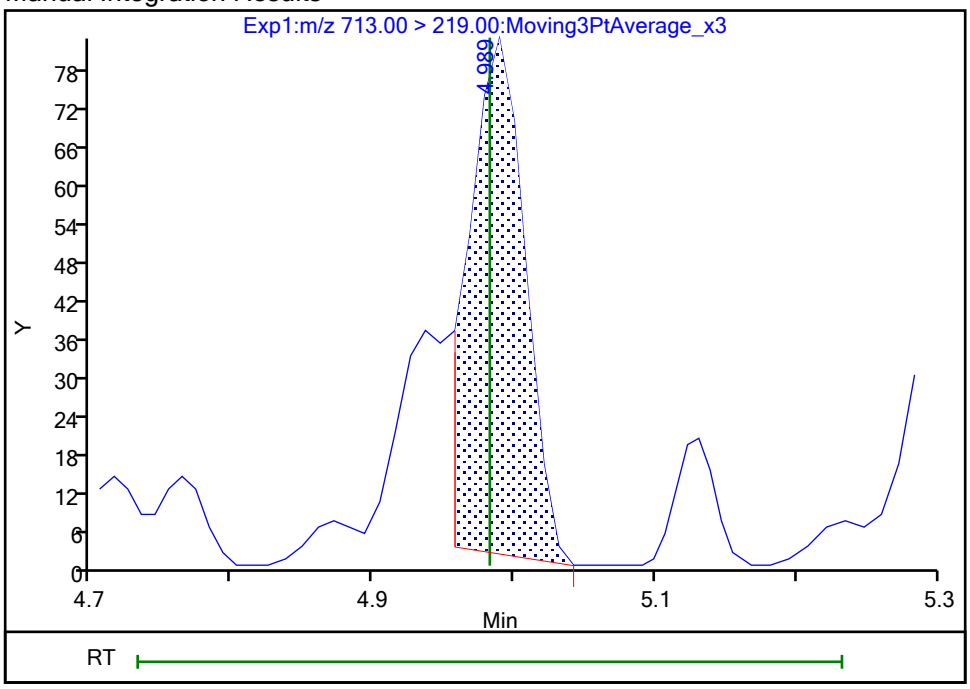
Not Detected
Expected RT: 4.98

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 218
Amount: 0.001360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

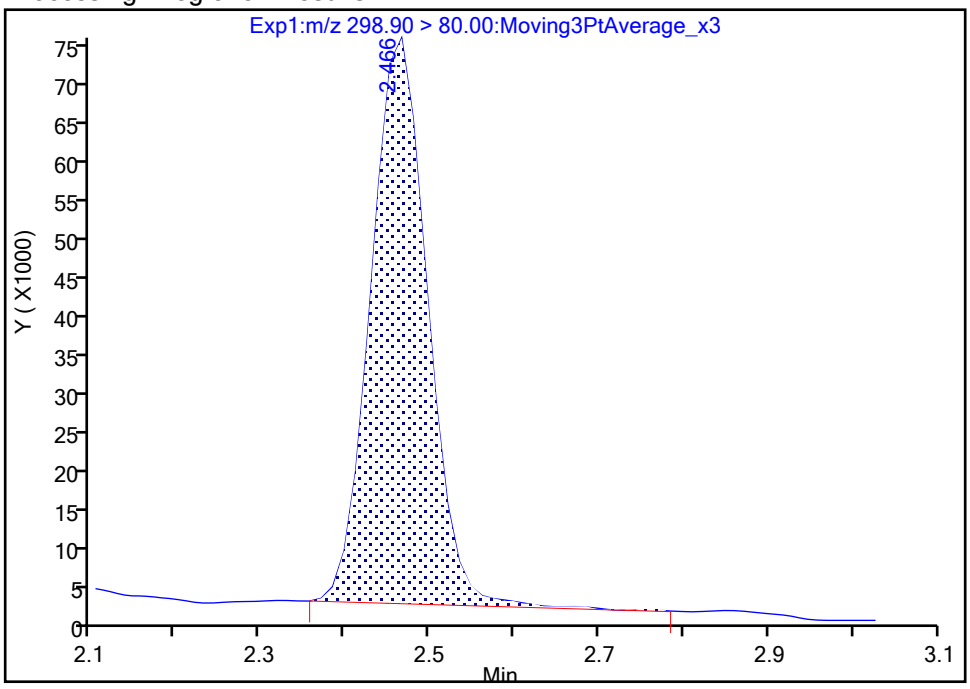
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

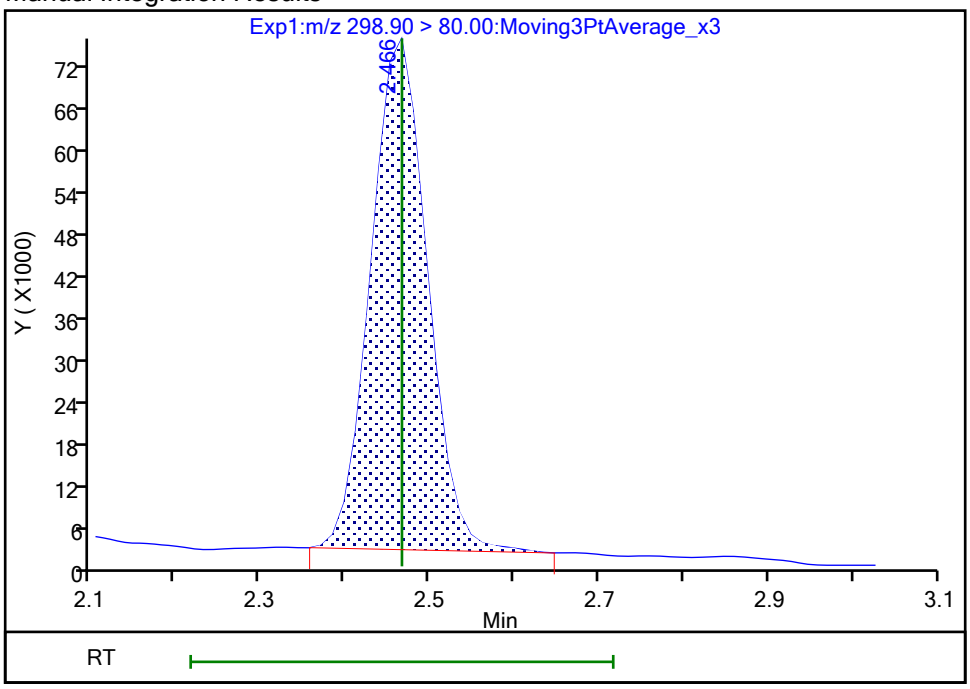
Processing Integration Results

RT: 2.47
Area: 344718
Amount: 0.184740
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 341591
Amount: 0.183065
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

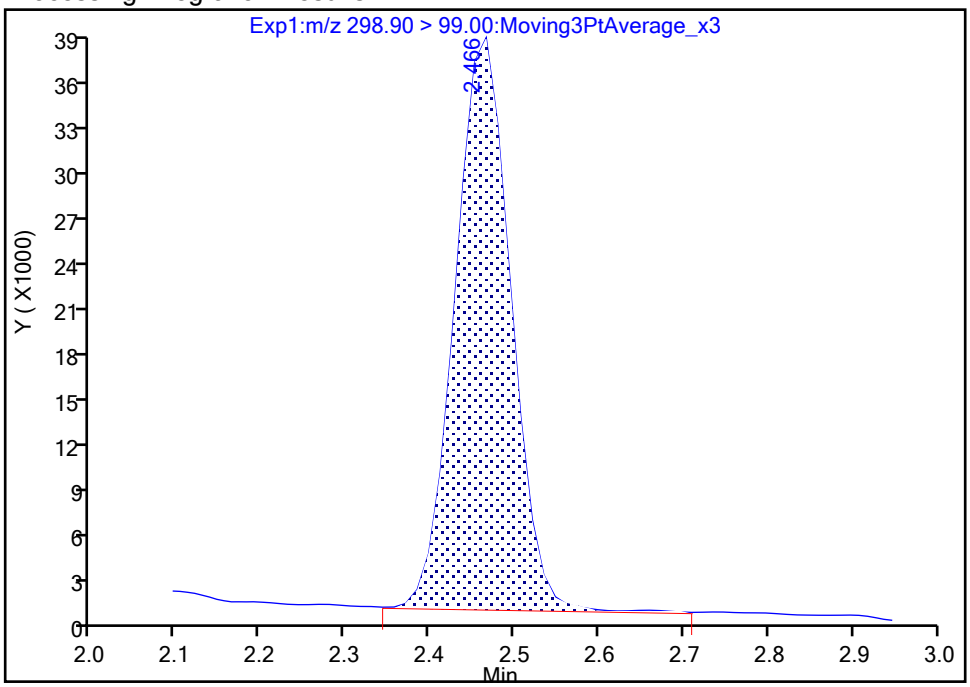
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

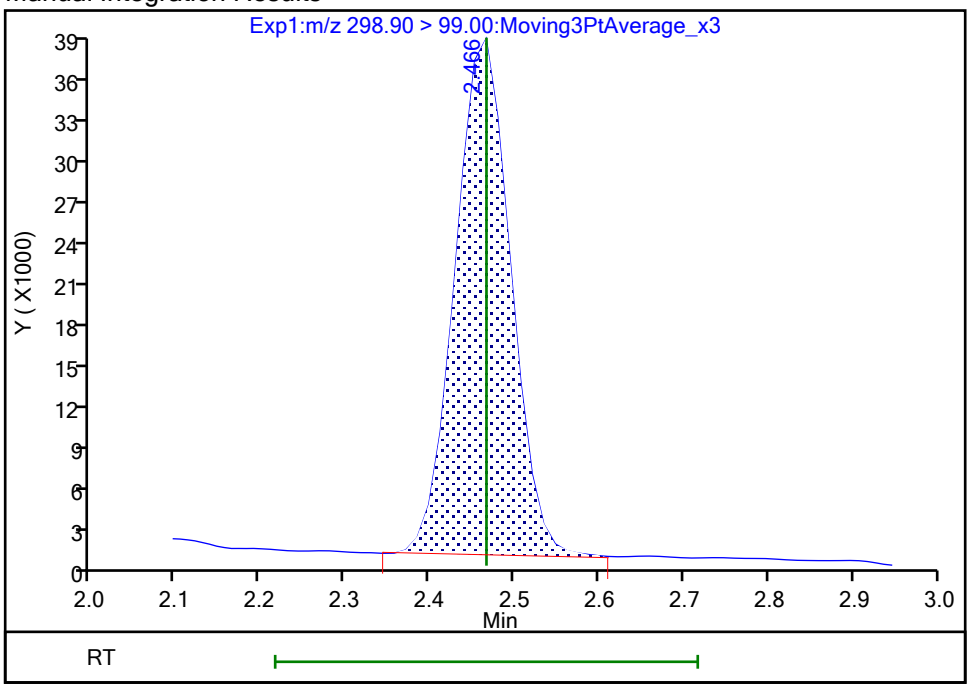
Processing Integration Results

RT: 2.47
Area: 171115
Amount: 0.184740
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 170645
Amount: 0.183065
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:18 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

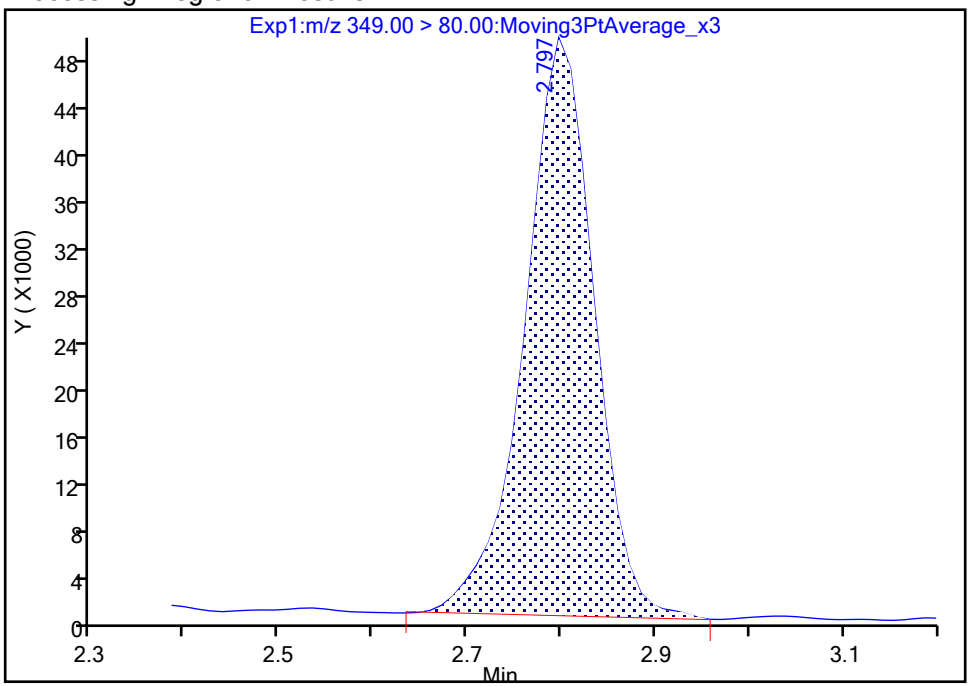
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

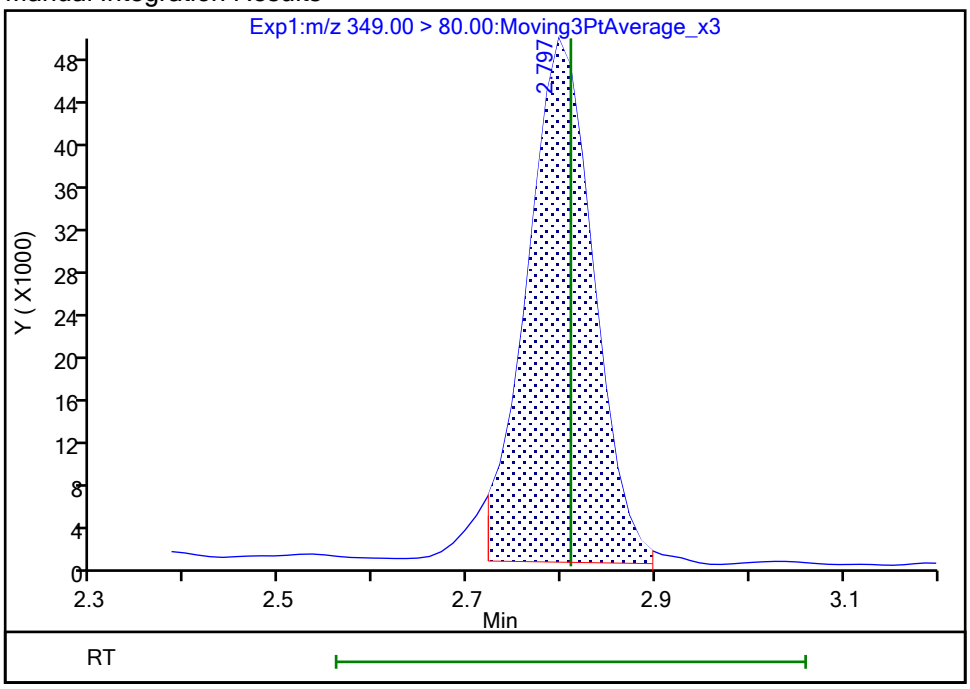
Processing Integration Results

RT: 2.80
Area: 249294
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 238163
Amount: 0.143462
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

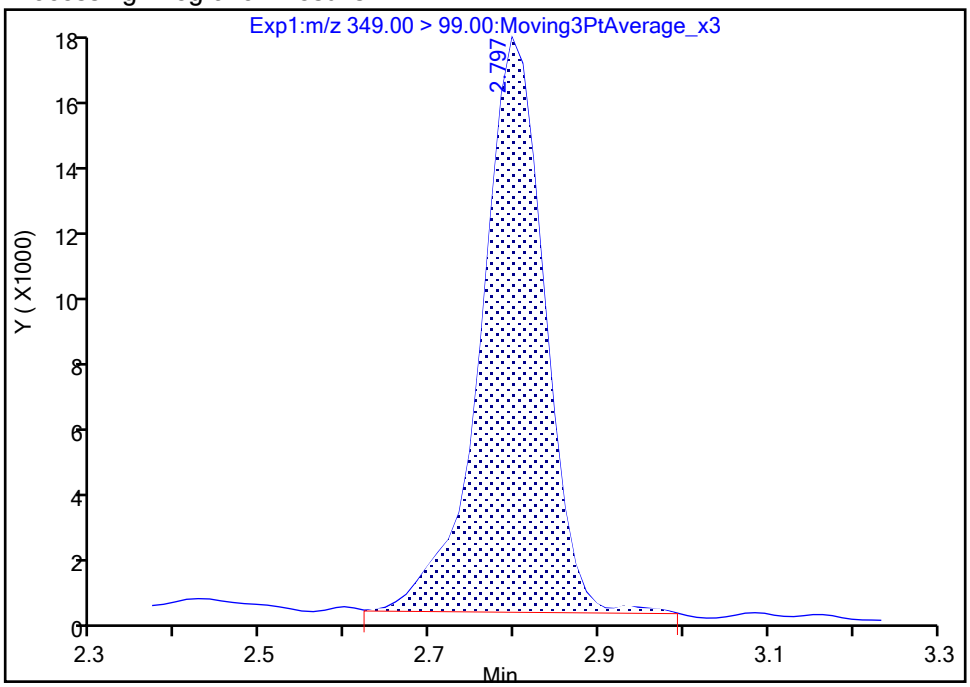
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

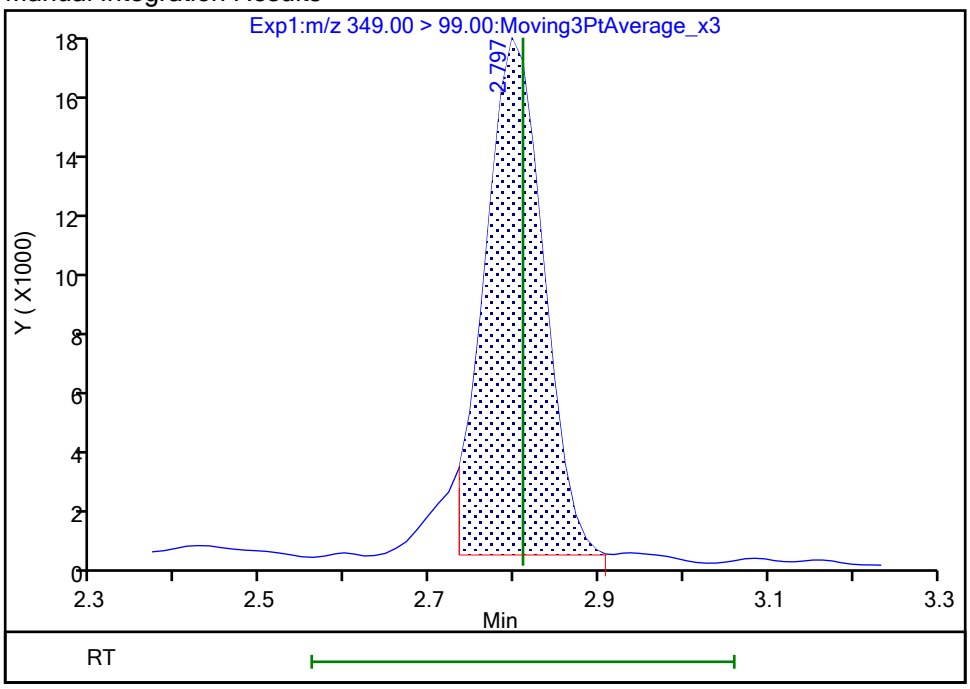
Processing Integration Results

RT: 2.80
Area: 91203
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 83093
Amount: 0.143462
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

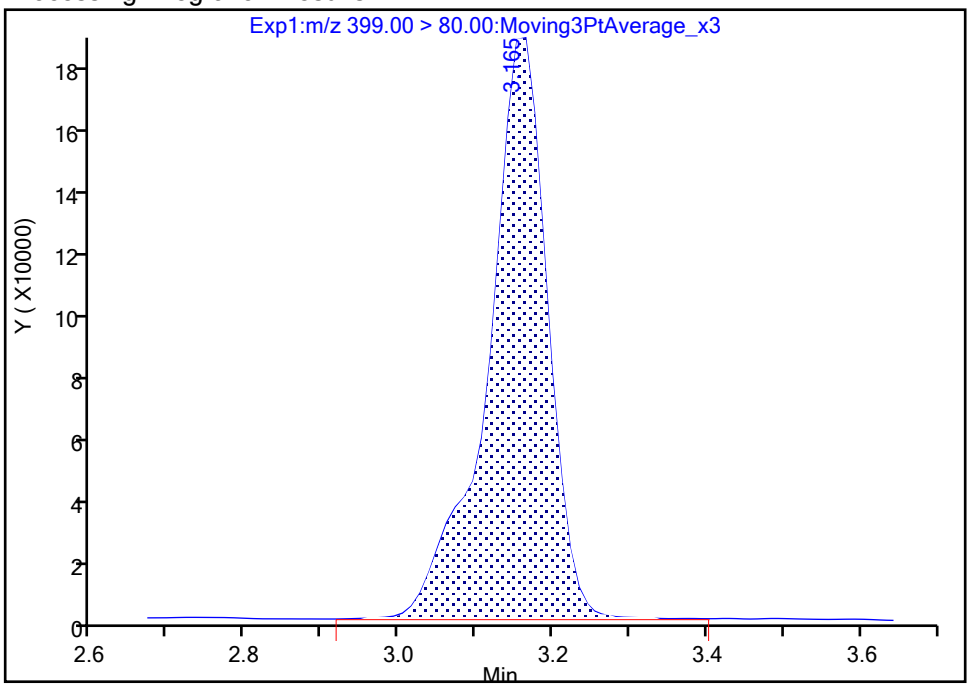
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

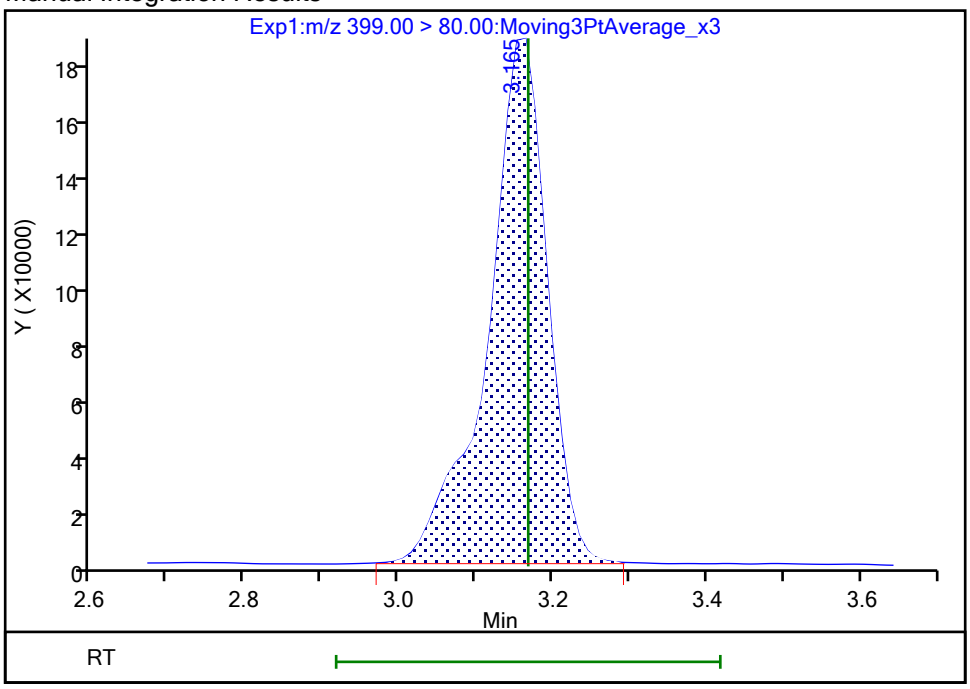
Processing Integration Results

RT: 3.16
Area: 990565
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 980662
Amount: 0.696870
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

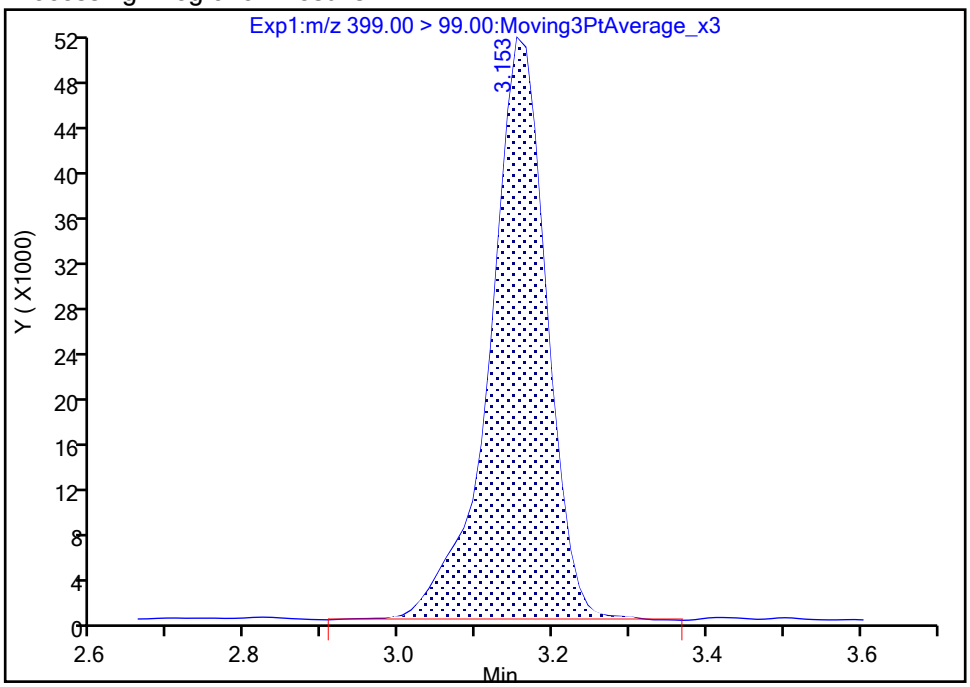
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

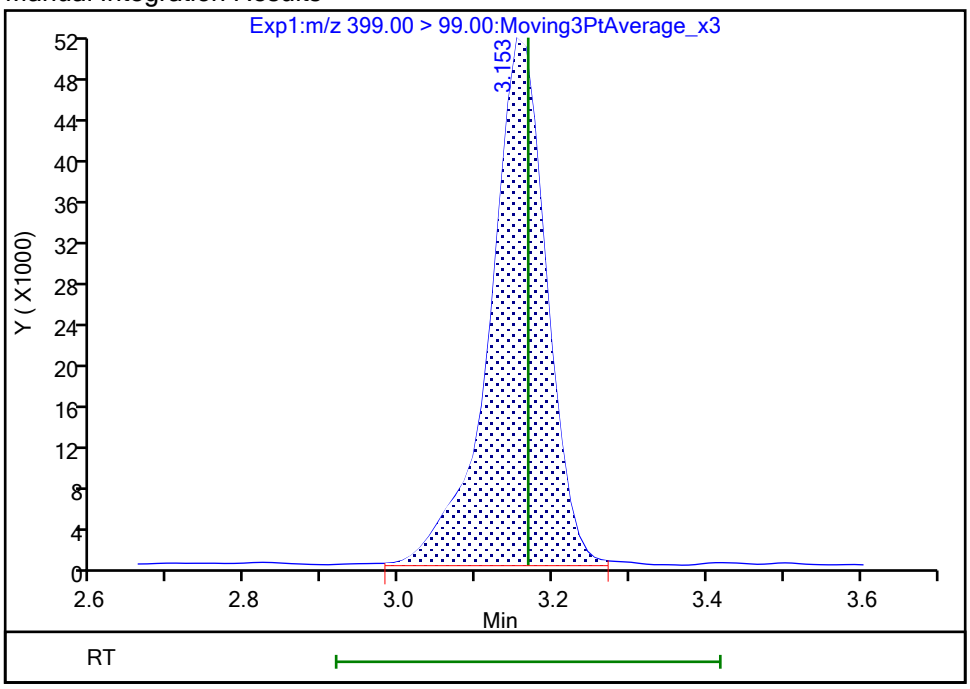
Processing Integration Results

RT: 3.15
Area: 267085
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.15
Area: 265720
Amount: 0.696870
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

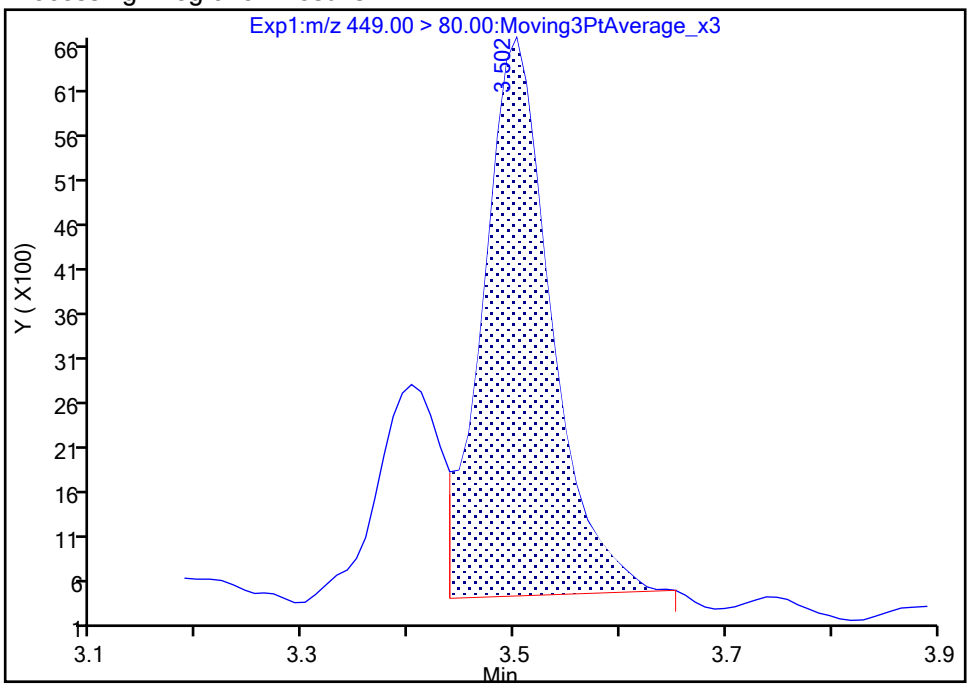
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

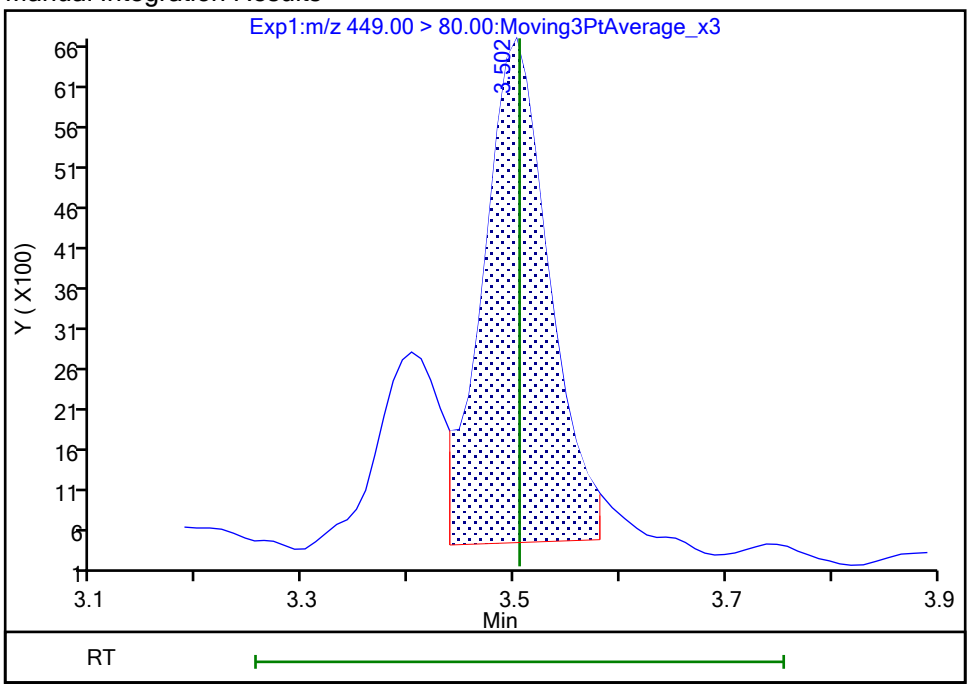
Processing Integration Results

RT: 3.50
Area: 27711
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 26833
Amount: 0.023473
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:08:35 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

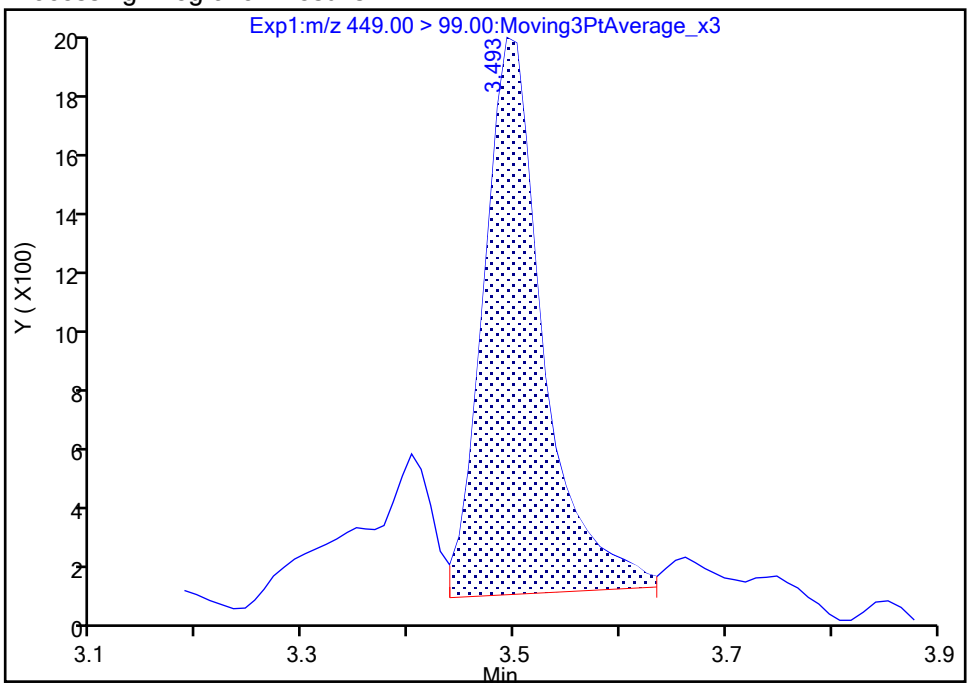
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

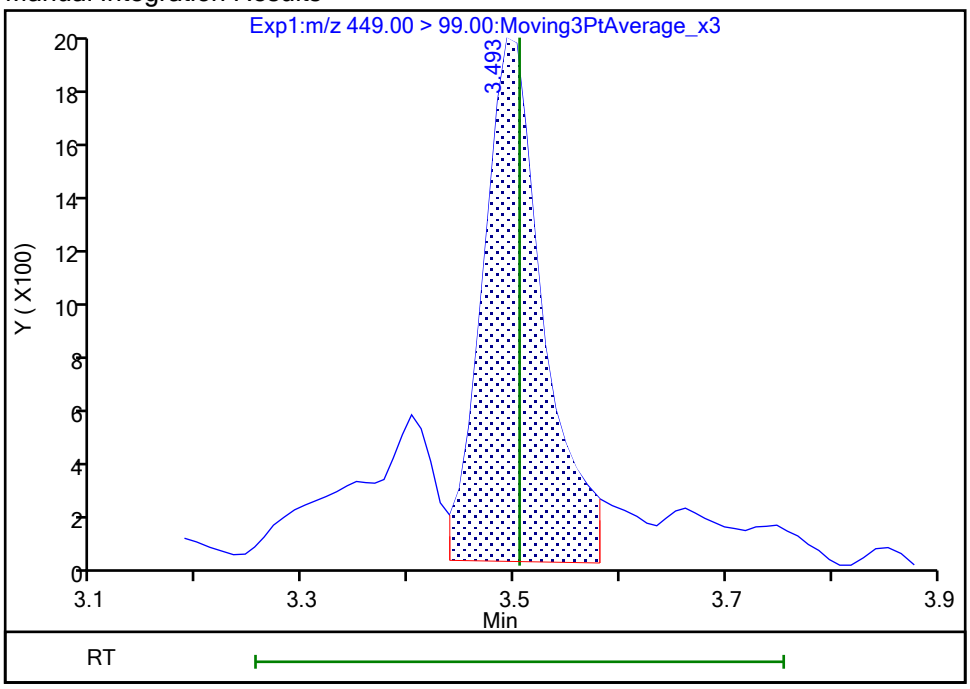
Processing Integration Results

RT: 3.49
Area: 6956
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.49
Area: 7306
Amount: 0.023473
Amount Units: ng/ml



Reviewer: SJ4N, 25-Oct-2023 23:08:43 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

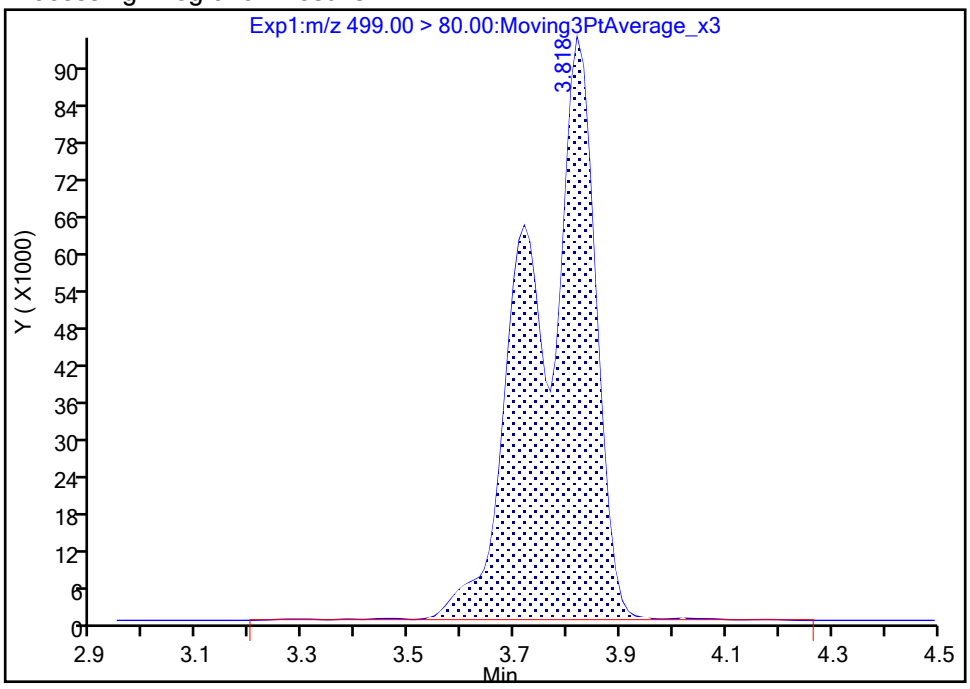
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

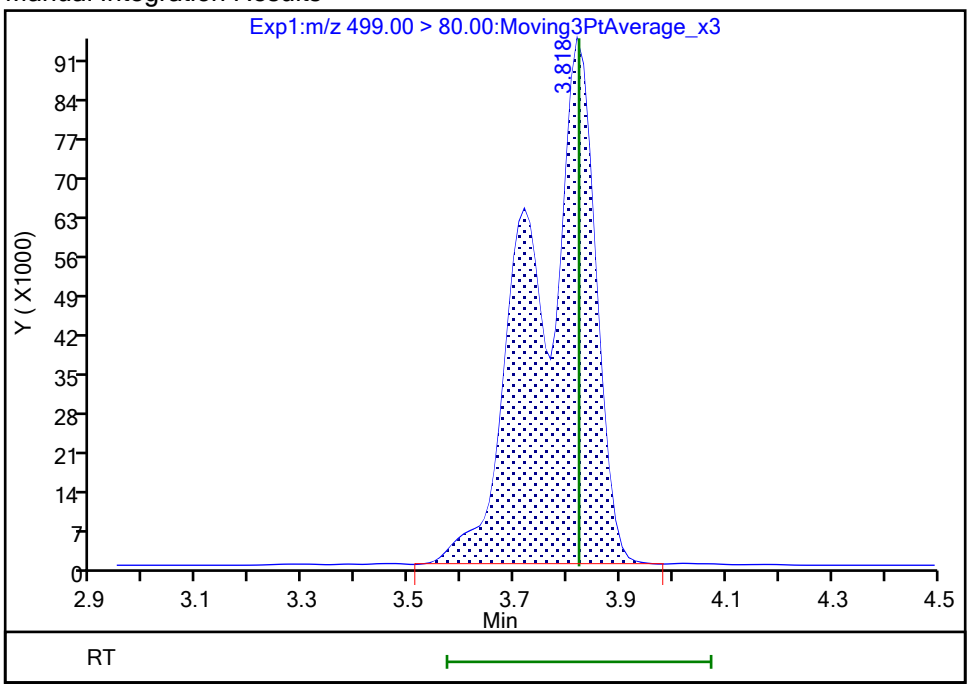
Processing Integration Results

RT: 3.82
Area: 779556
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 770934
Amount: 0.835605
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:23:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

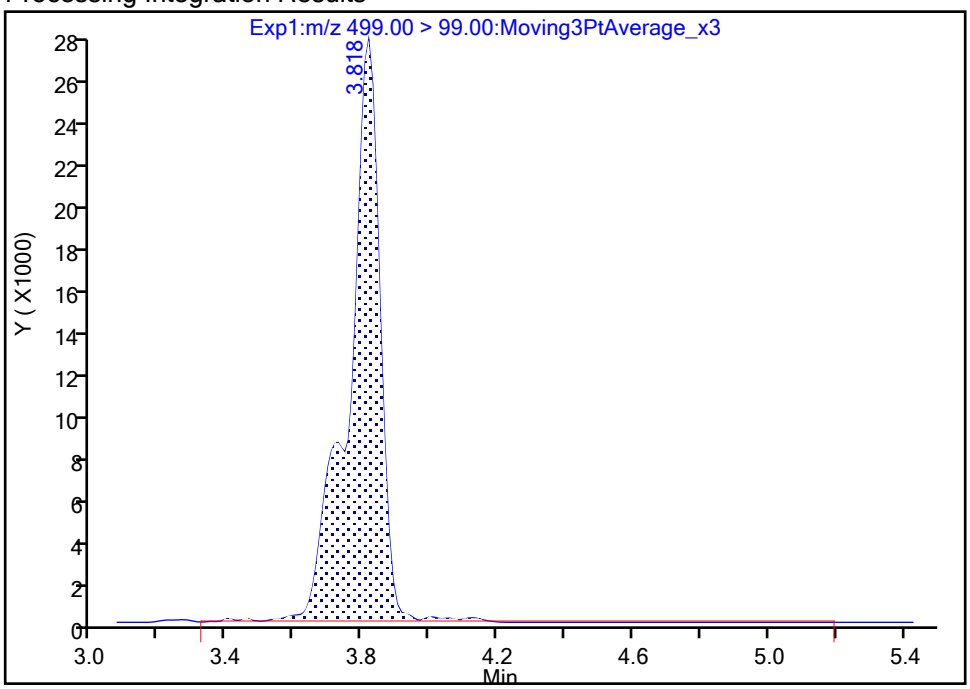
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

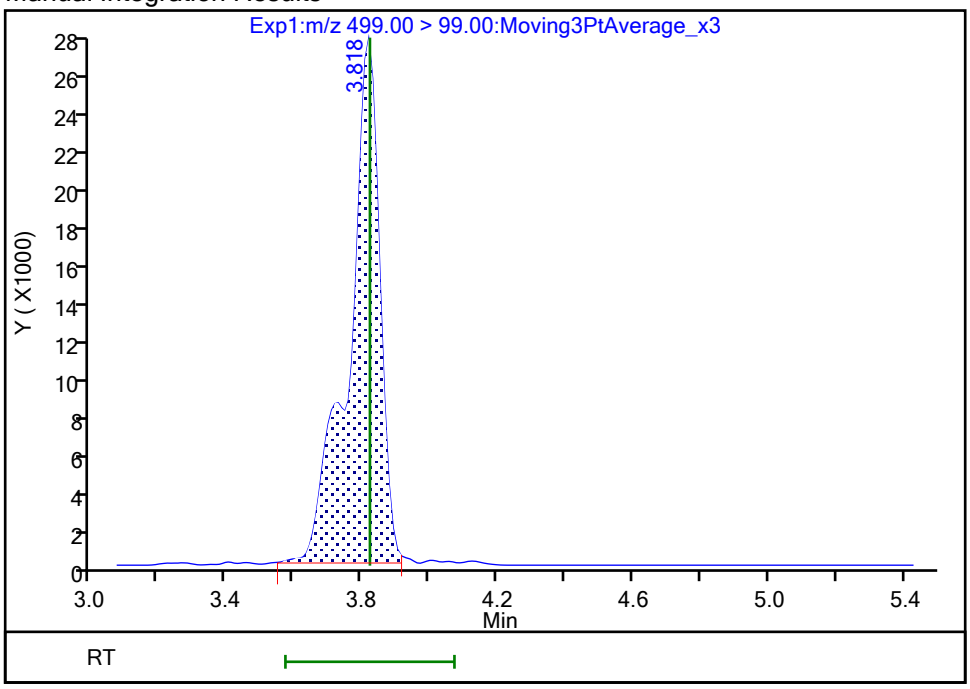
Processing Integration Results

RT: 3.82
Area: 180005
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 173980
Amount: 0.835605
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:23:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

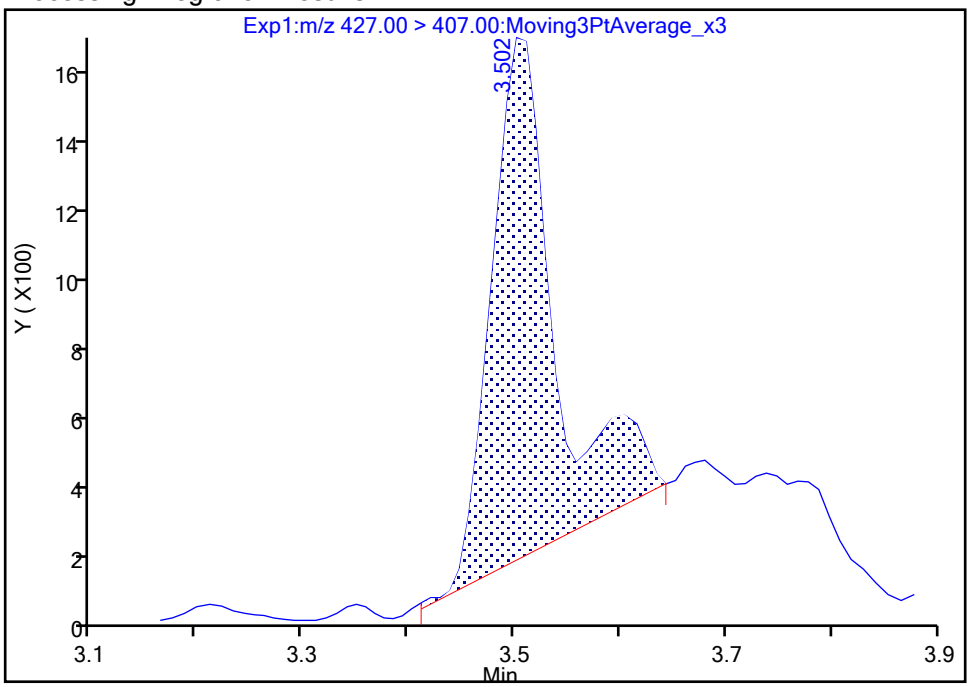
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

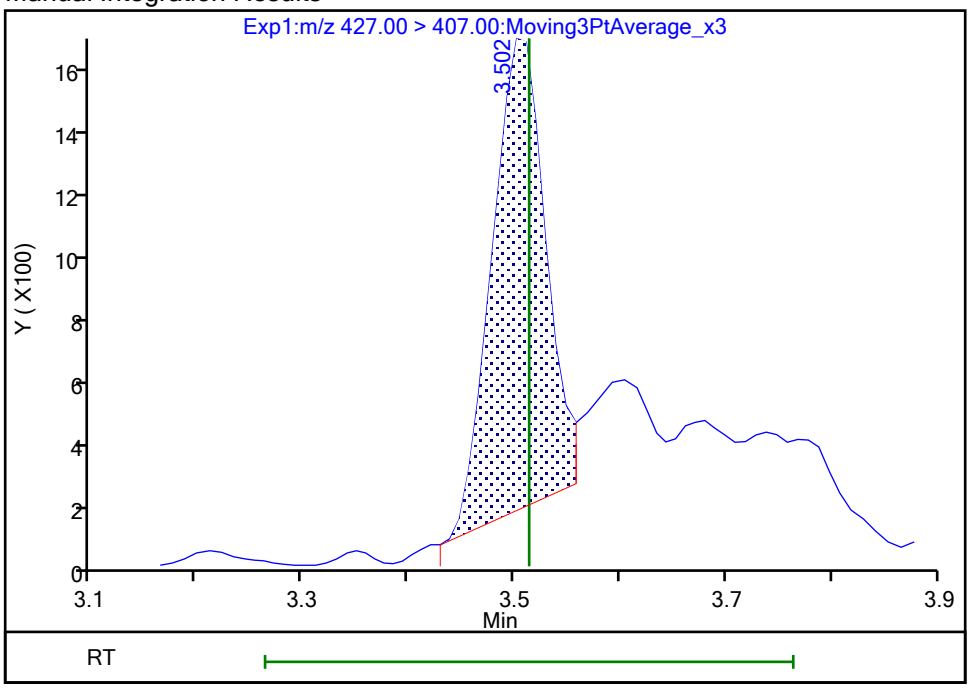
Processing Integration Results

RT: 3.50
Area: 6246
Amount: 0.009100
Amount Units: ng/ml



Manual Integration Results

RT: 3.50
Area: 5261
Amount: 0.007665
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:22:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

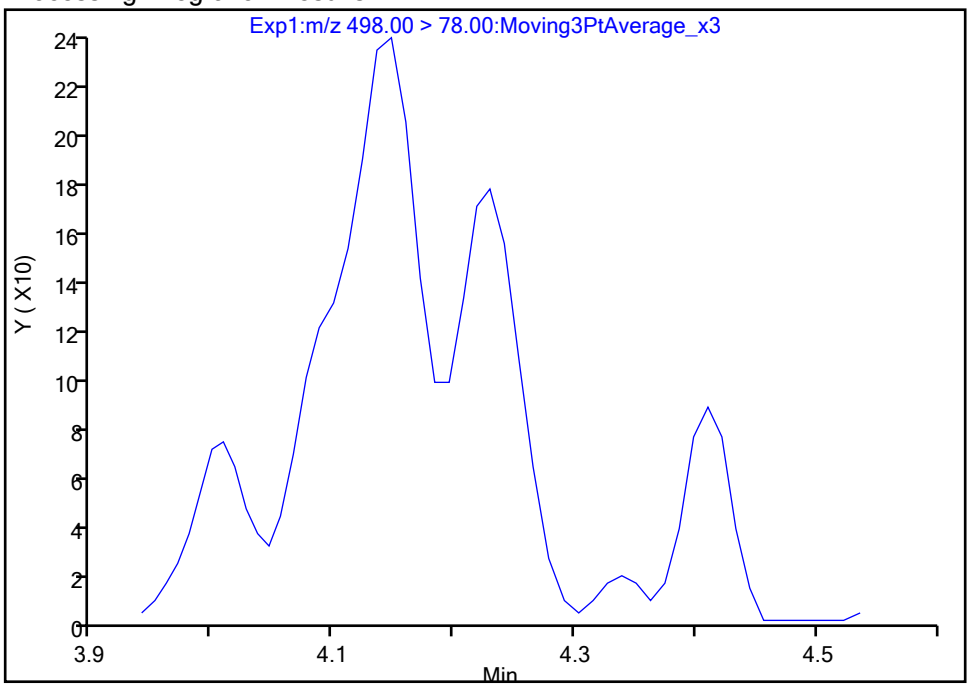
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

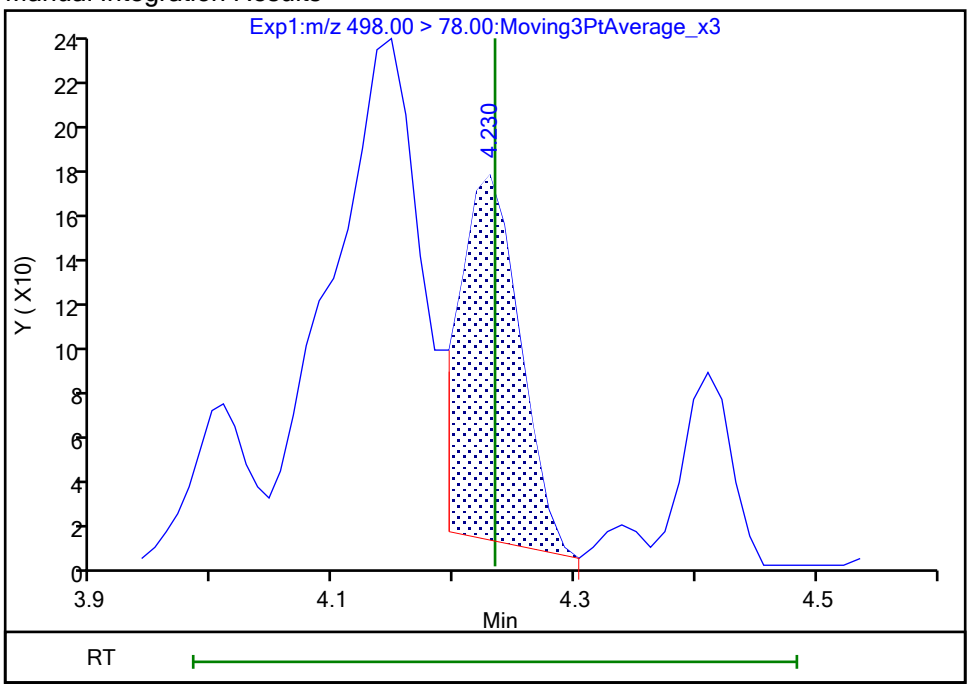
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 550
Amount: 0.000396
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:24:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

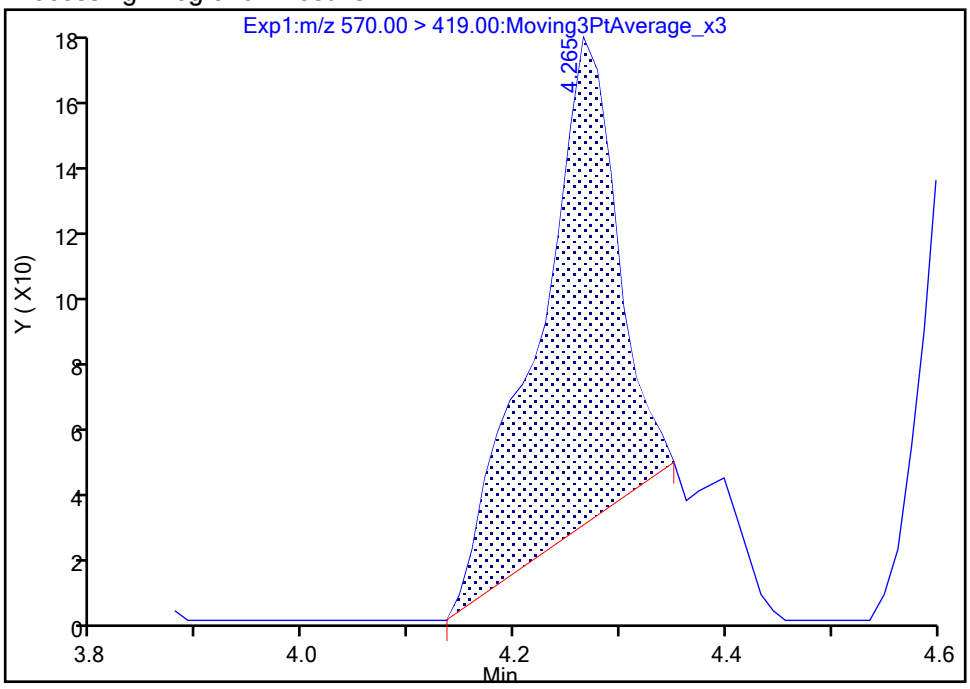
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

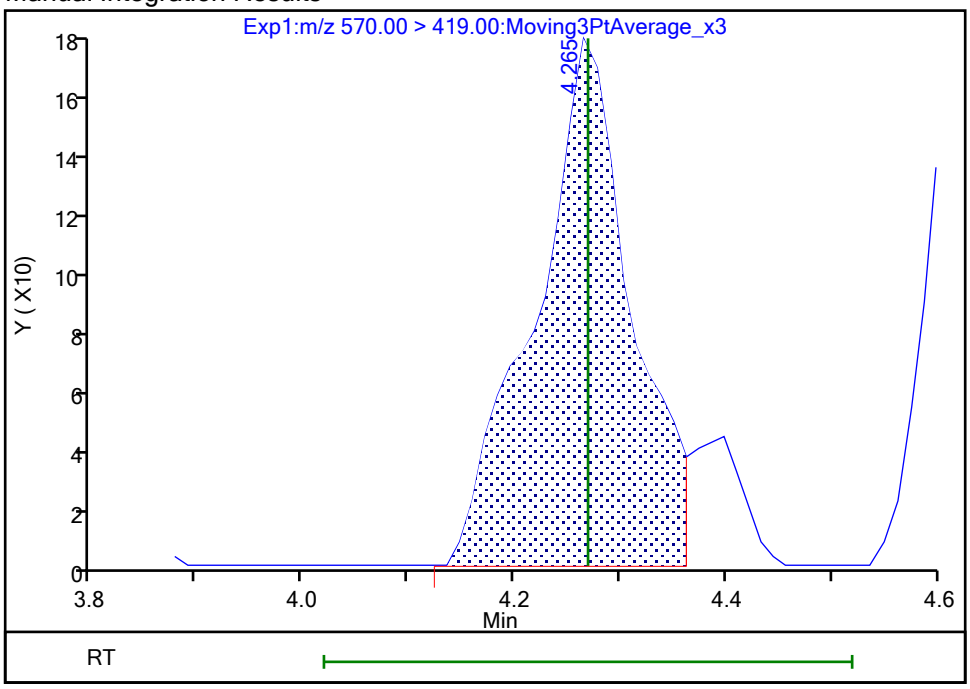
Processing Integration Results

RT: 4.27
Area: 785
Amount: 0.001999
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 1131
Amount: 0.002880
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:24:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

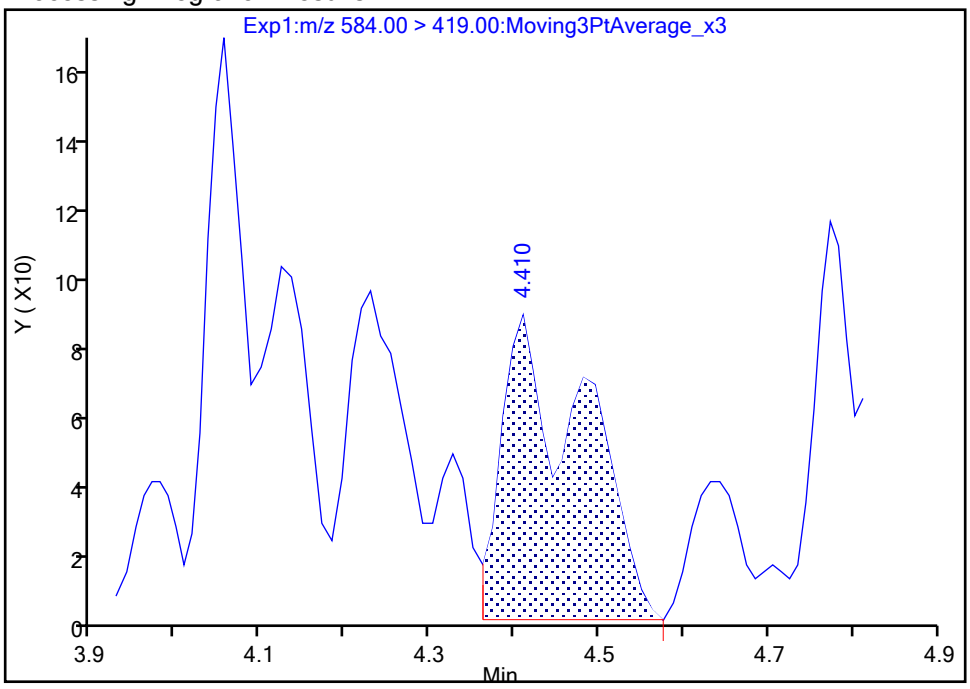
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

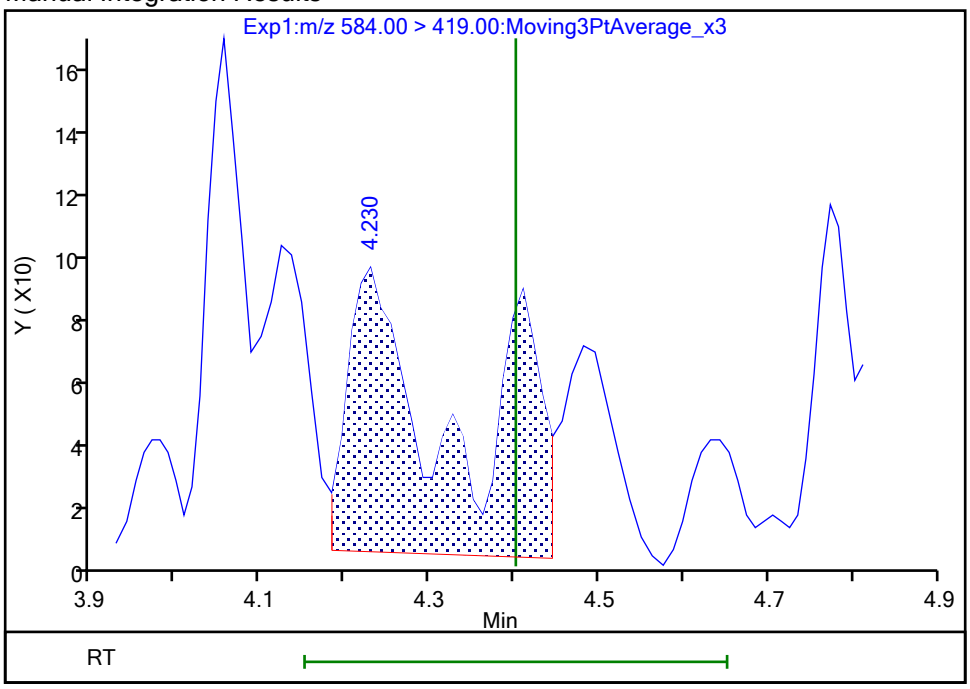
Processing Integration Results

RT: 4.41
Area: 591
Amount: 0.001432
Amount Units: ng/ml



Manual Integration Results

RT: 4.23
Area: 794
Amount: 0.001924
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:02 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

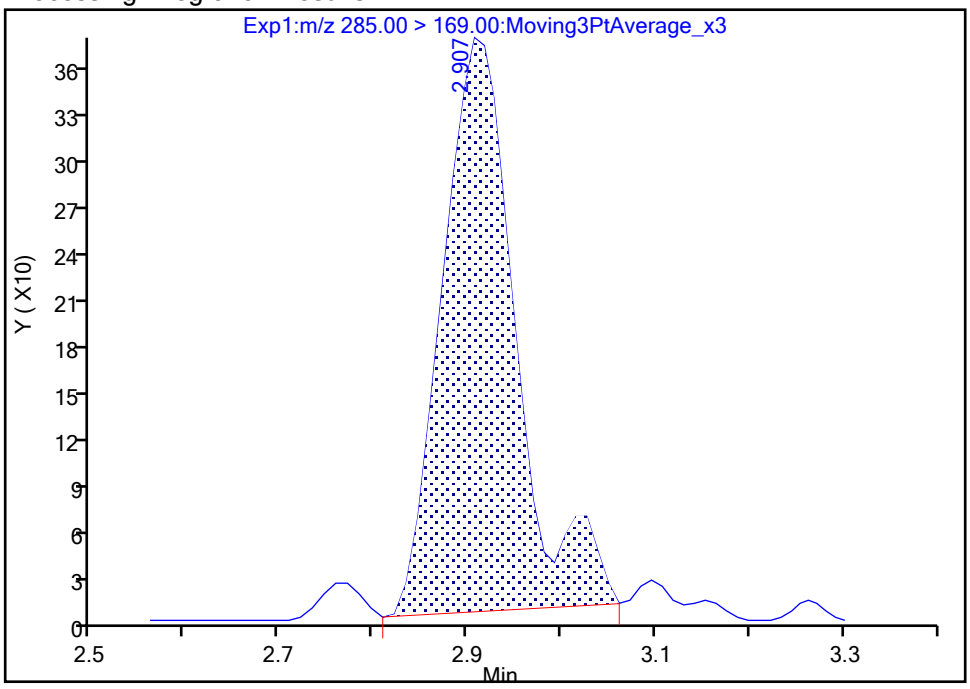
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

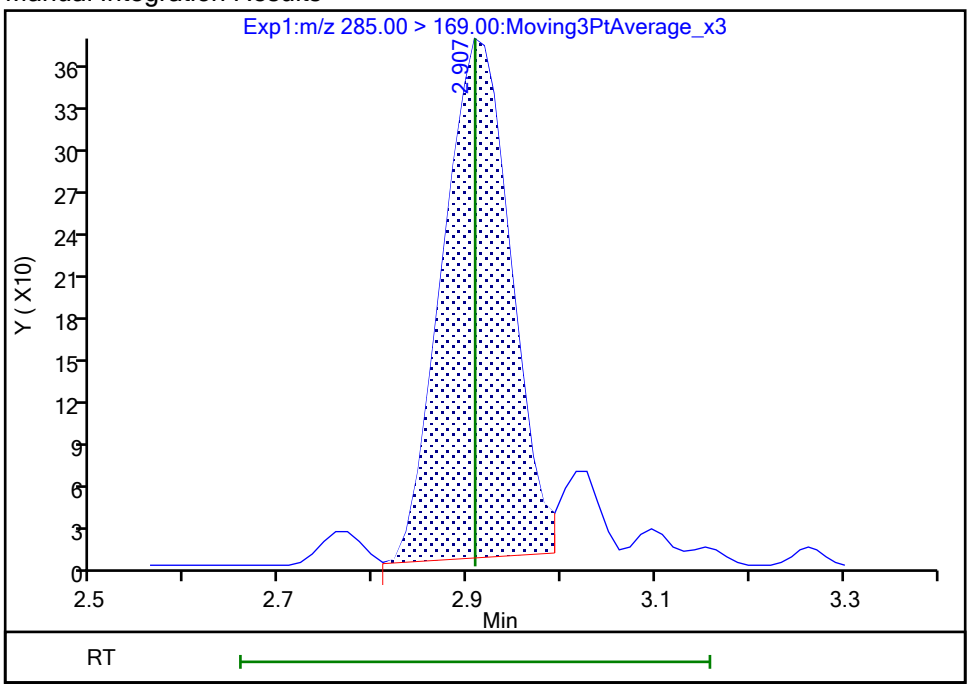
Processing Integration Results

RT: 2.91
Area: 2021
Amount: 0.008814
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 1870
Amount: 0.008156
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:21:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

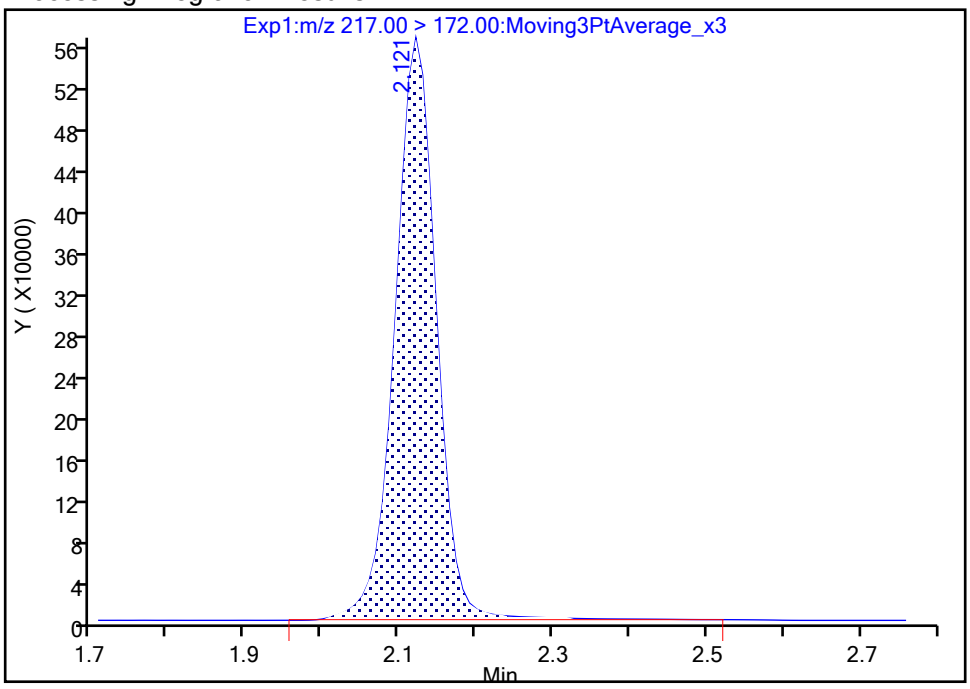
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

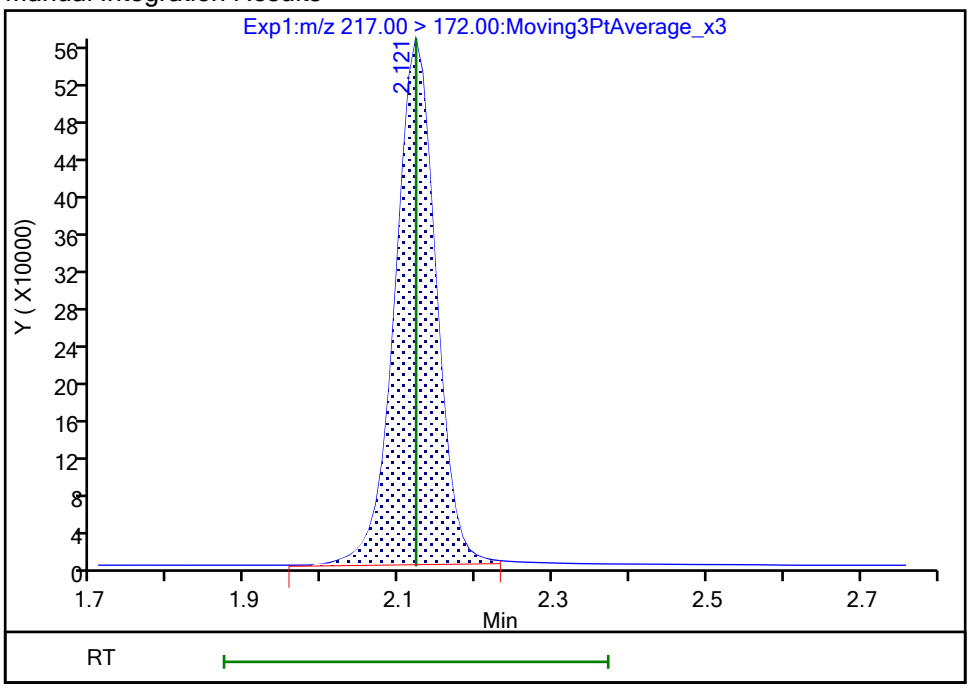
Processing Integration Results

RT: 2.12
Area: 2112206
Amount: 1.238338
Amount Units: ng/ml



Manual Integration Results

RT: 2.12
Area: 2090844
Amount: 1.225814
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

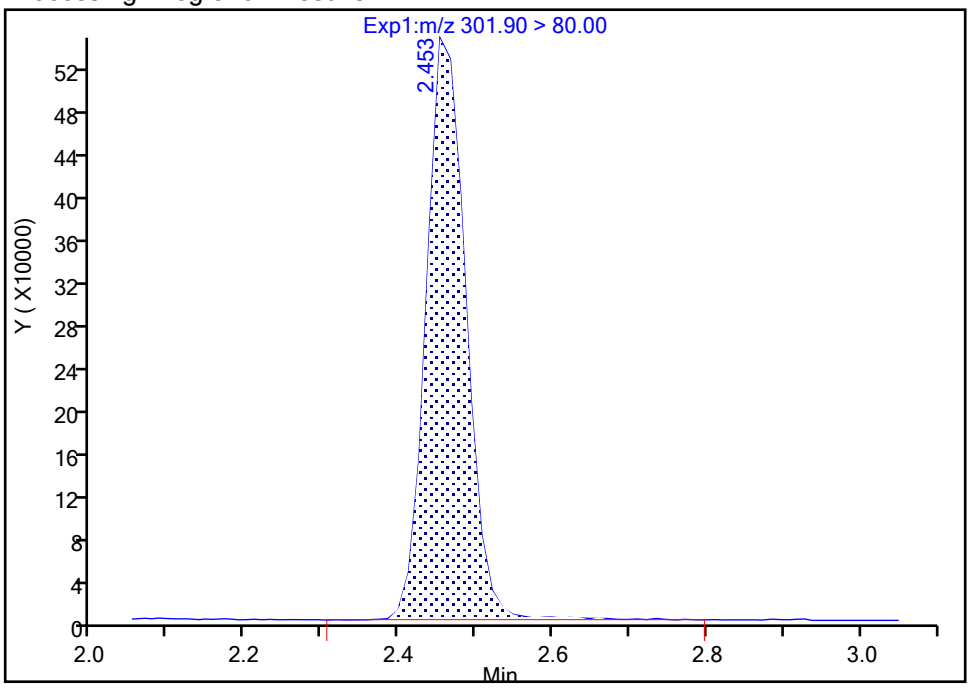
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

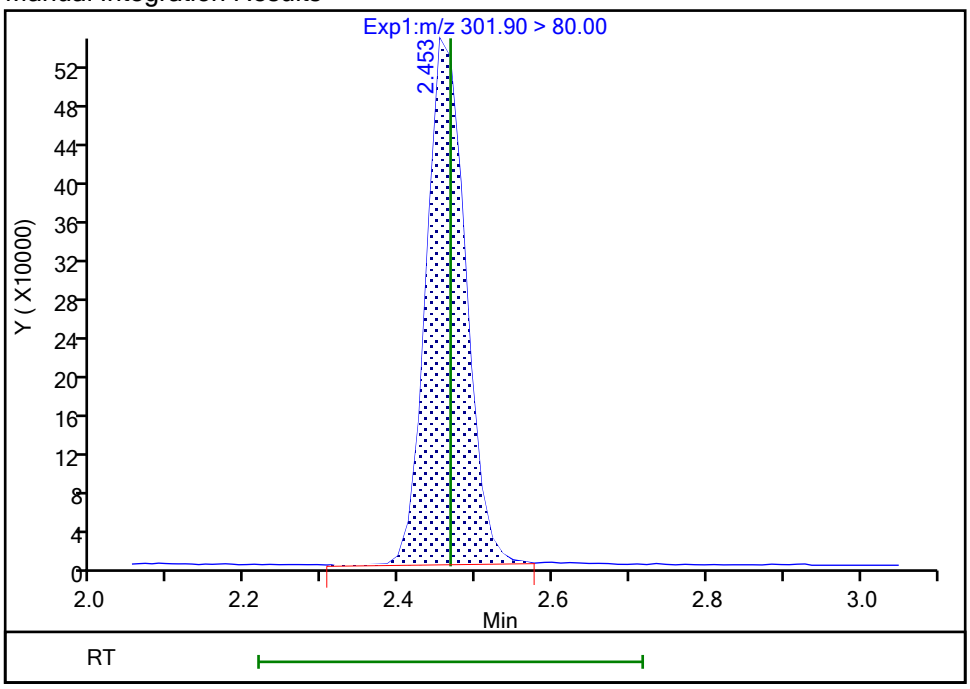
Processing Integration Results

RT: 2.45
Area: 1957918
Amount: 1.093123
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1942132
Amount: 1.084309
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:24 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

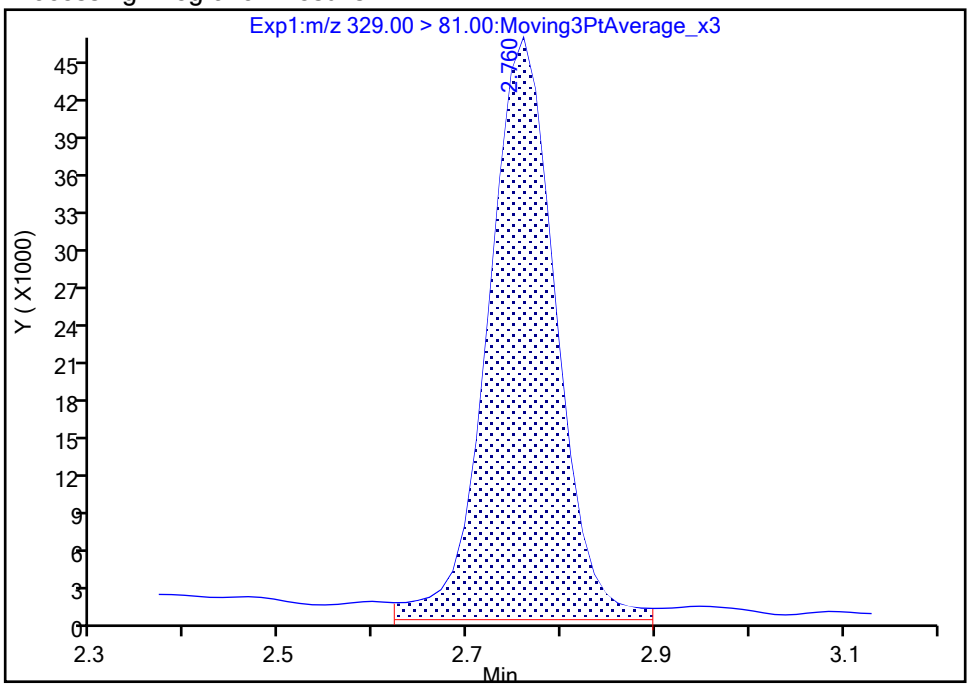
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E18.d				
Injection Date:	24-Oct-2023 08:24:46	Instrument ID:	LC812		
Lims ID:	460-290546-A-3-A	Lab Sample ID:	200-290546-3		
Client ID:	FDMH-2				
Operator ID:	LC812user	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

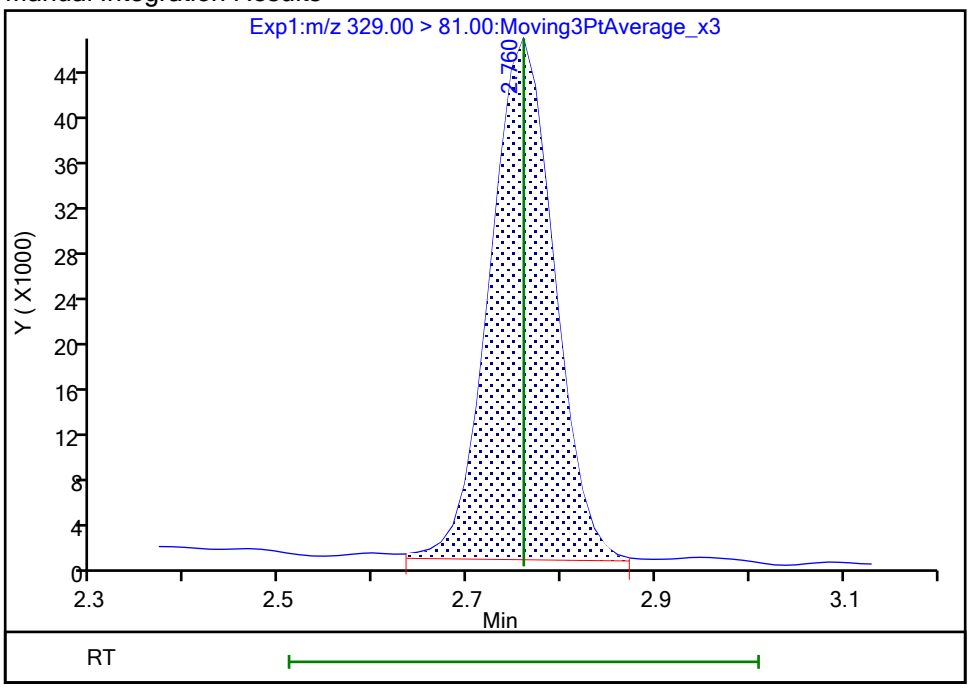
Processing Integration Results

RT: 2.76
Area: 233613
Amount: 1.127816
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 218948
Amount: 1.057018
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:20:36 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-4 | Lab Sample ID: 460-290546-4

Matrix: Water | Lab File ID: PA231023E19.d

Analysis Method: 537 (modified) | Date Collected: 10/16/2023 10:15

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:42

Sample wt/vol: 303.5(mL) | Date Analyzed: 10/24/2023 08:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	25.6		4.12	0.99
2706-90-3	Perfluoropentanoic acid	62.6		1.65	0.56
307-24-4	Perfluorohexanoic acid	38.6		1.65	0.54
375-85-9	Perfluoroheptanoic acid	17.2		1.65	0.44
335-67-1	Perfluorooctanoic acid	9.14		1.65	0.63
375-95-1	Perfluorononanoic acid	1.52	J	1.65	0.40
335-76-2	Perfluorodecanoic acid	1.65	U	1.65	0.38
2058-94-8	Perfluoroundecanoic acid	1.65	U	1.65	0.45
307-55-1	Perfluorododecanoic acid	1.65	U	1.65	0.40
72629-94-8	Perfluorotridecanoic acid	1.65	U	1.65	0.40
376-06-7	Perfluorotetradecanoic acid	1.65	U	1.65	0.53
375-73-5	Perfluorobutanesulfonic acid	14.8		1.65	0.51
2706-91-4	Perfluoropentanesulfonic acid	9.36		1.65	0.41
355-46-4	Perfluorohexanesulfonic acid	45.1		1.65	0.45
375-92-8	Perfluoroheptanesulfonic acid	1.73		1.65	0.34
1763-23-1	Perfluorooctanesulfonic acid	70.2		1.65	0.70
68259-12-1	Perfluorononanesulfonic acid	1.65	U	1.65	0.33
335-77-3	Perfluorodecanesulfonic acid	1.65	U	1.65	0.33
757124-72-4	4:2 Fluorotelomer sulfonic acid	1.65	U	1.65	0.44
27619-97-2	6:2 Fluorotelomer sulfonic acid	21.2		4.12	1.07
39108-34-4	8:2 Fluorotelomer sulfonic acid	4.41		1.65	0.63
754-91-6	Perfluorooctanesulfonamide	1.65	U	1.65	0.76
2355-31-9	NMeFOSAA	4.12	U	4.12	1.57
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	4.12	U	4.12	1.32
13252-13-6	HFPODA	3.29	U	3.29	0.91
919005-14-4	DONA	1.65	U	1.65	0.35
756426-58-1	9Cl-PF3ONS	1.65	U	1.65	0.26
763051-92-9	11Cl-PF3OUdS	1.65	U	1.65	0.72

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: FDMH-4 Lab Sample ID: 460-290546-4

Matrix: Water Lab File ID: PA231023E19.d

Analysis Method: 537 (modified) Date Collected: 10/16/2023 10:15

Extraction Method: 3535 Date Extracted: 10/23/2023 07:42

Sample wt/vol: 303.5(mL) Date Analyzed: 10/24/2023 08:32

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		50-150
STL01893	13C5 PFPeA	95		50-150
STL01892	13C4 PFHpA	100		50-150
STL02116	13C2 PFTeDA	86		50-150
STL02337	13C3 PFBS	94		50-150
STL01056	13C8 FOSA	90		50-150
STL02118	d3-NMeFOSAA	92		50-150
STL02117	d5-NEtFOSAA	94		50-150
STL02395	M2-4:2 FTS	88		50-150
STL02279	M2-6:2 FTS	96		50-150
STL02280	M2-8:2 FTS	84		50-150
STL02255	13C3 HFPO-DA	92		50-150
STL00994	18O2 PFHxS	98		50-150
STL00993	13C2 PFHxA	97		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	89		50-150
STL00995	13C5 PFNA	99		50-150
STL00996	13C2 PFDA	97		50-150
STL00990	13C4 PFOA	109		50-150
STL00997	13C2 PFUnA	92		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d
Lims ID: 460-290546-A-4-A
Client ID: FDMH-4
Sample Type: Client
Inject. Date: 24-Oct-2023 08:32:56 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-290546-A-4-A
Misc. Info.: 200-0057513-019 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 10:30:37
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2146796	1.28		103	1582	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1269338	0.7765			109	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.452	2.439	0.013	0.697	1540874	1.19		94.9	1465	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.452	2.453	-0.001	1.000	2528555	1.90			42.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.466	2.467	-0.001	0.701	1914588	1.09		93.7	46124	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.466	2.467	-0.001	1.000	827803	0.4500	Target=2.06		143	M
298.90 > 99.00	2.466	2.467	-0.001	1.000	413997		2.00(1.03-3.09)		97.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.757	2.760	-0.003	0.995	2074	0.003426			16.6	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.769	2.760	0.009	0.787	208115	1.02		87.7	44.5	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.794	2.797	-0.003	0.794	1595977	1.21		96.6	7920	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.807	2.797	0.010	1.004	1644689	1.17	Target=14.12		139	M
313.00 > 119.00	2.794	2.797	-0.003	1.000	103406		15.91(7.06-21.17)		75.4	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.807	2.810	-0.003	0.888	456933	0.2842	Target=2.72		123	M
349.00 > 99.00	2.807	2.810	-0.003	0.888	162042		2.82(1.36-4.09)		89.7	M
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.905	2.908	-0.003	1.000	1165	0.004932			12.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.905	2.908	-0.003	0.826	294909	1.15		92.2	1282	
D 11 18O2 PFHxS										
403.00 > 84.00	3.162	3.168	-0.006	0.899	1455848	1.16		97.7	8390	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.162	3.168	-0.006	1.000	1864879	1.37	Target=3.32		980	M
399.00 > 99.00	3.162	3.168	-0.006	1.000	524229		3.56(1.66-4.98)		379	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.173	3.168	0.005	1.000	847101	0.5209	Target=4.17		95.3	
363.00 > 169.00	3.173	3.168	0.005	1.000	209600		4.04(2.09-6.26)		318	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.173	3.168	0.005	0.902	1813380	1.25		100	10063	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.510	3.505	0.005	0.918	59009	0.0525	Target=4.83		22.9	
449.00 > 99.00	3.510	3.505	0.005	0.918	13888		4.25(2.41-7.24)		19.6	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.510	3.505	0.005	0.997	297002	1.13		95.5	394	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.510	3.514	-0.004	1.000	440054	0.6437			635	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.519	3.514	0.005	1.000	528148	0.2773	Target=2.88		20.6	M
413.00 > 169.00	3.519	3.514	0.005	1.000	195814		2.70(1.44-4.32)		259	M
D 14 13C4 PFOA										
417.00 > 372.00	3.519	3.523	-0.004	1.000	2235245	1.36		109	7013	
* 62 13C2 PFOA										
415.00 > 370.00	3.519	3.523	-0.004		2109924	1.25			7220	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.824	3.822	0.002	1.000	1935059	2.13	Target=4.24		2280	M
499.00 > 99.00	3.824	3.822	0.002	1.000	473223		4.09(2.12-6.37)		886	M
D 18 13C4 PFOS										
503.00 > 80.00	3.824	3.822	0.002	1.087	929977	1.16		97.2	2211	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.848	3.845	0.003	1.000	80506	0.0462	Target=8.34		9.5	M
463.00 > 169.00	3.848	3.845	0.003	1.000	8476		9.50(4.17-12.51)		44.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.848	3.845	0.003	1.094	2223035	1.24		99.5	8053	
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.108	4.105	0.003	1.074	967	0.001400	Target=2.17		1.7	RM
549.00 > 99.00	4.096	4.105	-0.009	1.071	178		5.43(1.08-3.25)		0.8	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.132	4.129	0.003	1.000	15253	0.008432	Target=11.44		4.1	M
513.00 > 169.00	4.132	4.129	0.003	1.000	1154		13.22(5.72-17.16)		6.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.132	4.129	0.003	1.174	2262747	1.21		96.7	10701	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.144	4.141	0.003	1.178	296721	1.01		84.2	1090	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.144	4.141	0.003	1.000	72930	0.1337			738	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	4.237	4.234	0.003	1.204	1802469	1.13		90.3	5029	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.248	4.234	0.014	1.003	11760	0.008550			13.7	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.273	4.270	0.003	1.214	513019	1.15		91.7	1153	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.298	4.270	0.028	1.006	144	0.000387			0.7	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.390	-0.009	1.245	2031248	1.15		92.0	12387	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.381	4.390	-0.009	1.000	4872	0.002909	Target=12.20		1.2	RM
563.00 > 169.00	4.381	4.390	-0.009	1.000	214		22.77(6.10-18.31)		3.4	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.405	4.401	0.004	1.252	506217	1.18		94.0	940	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.346	4.401	-0.055	0.987	577	0.001425			1.4	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.613	-0.008	1.309	1998451	1.11		89.0	5495	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.987	4.982	0.005	1.417	1916086	1.07		85.7	5236	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

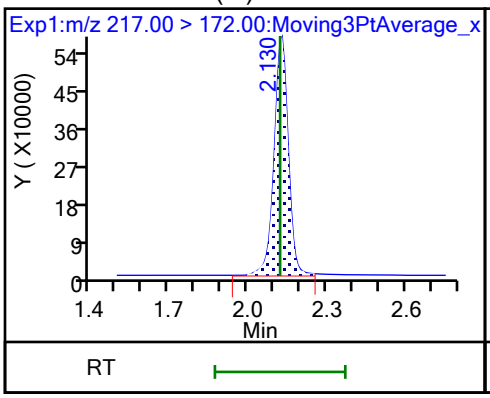
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:42 Chrom Revision: 2.3 18-Oct-2023 21:16:54

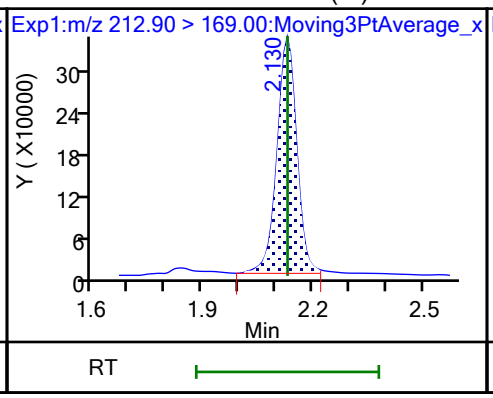
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d
Injection Date: 24-Oct-2023 08:32:56 Instrument ID: LC812
Lims ID: 460-290546-A-4-A Lab Sample ID: 200-290546-4
Client ID: FDMH-4
Operator ID: LC812user ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

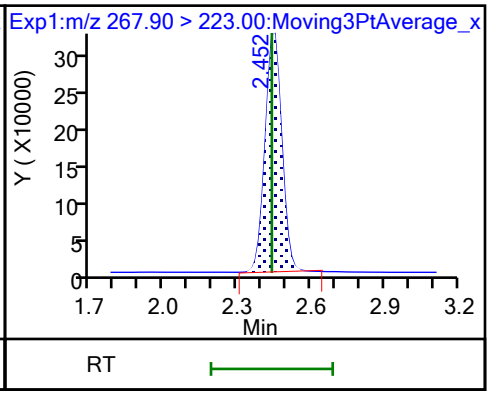
D 1 13C4 PFBA (M)



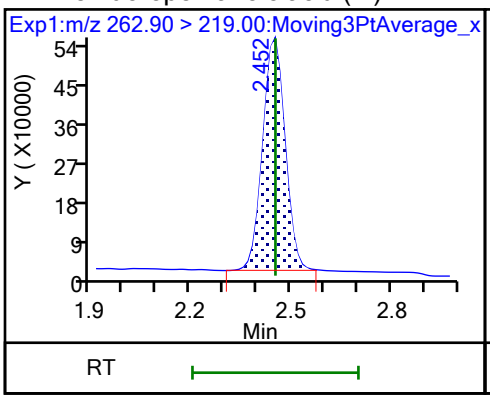
2 Perfluorobutanoic acid (M)



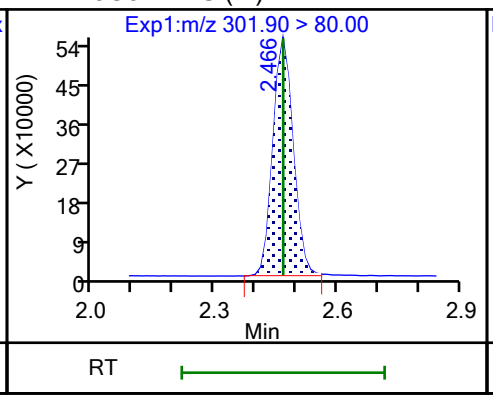
D 3 13C5 PFPeA



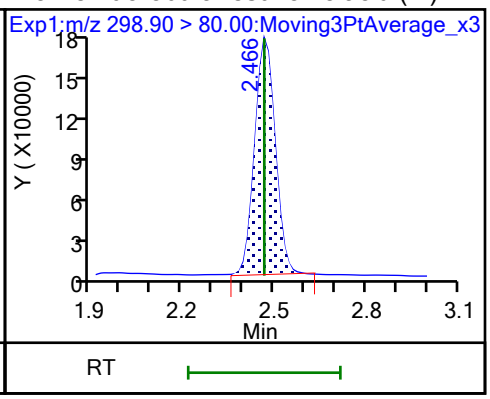
4 Perfluoropentanoic acid (M)



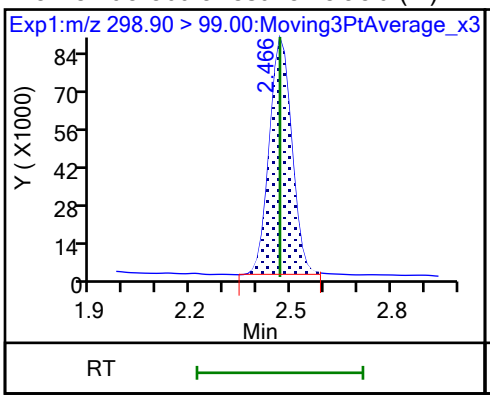
D 47 13C3 PFBS (M)



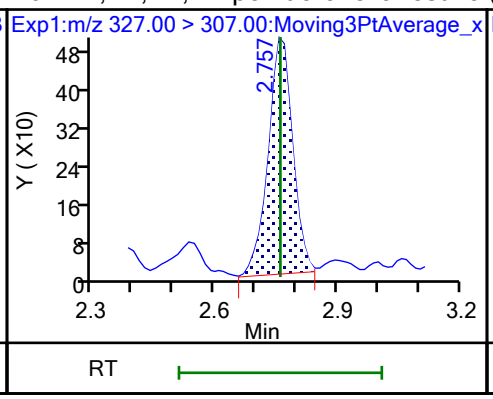
5 Perfluorobutanesulfonic acid (M)



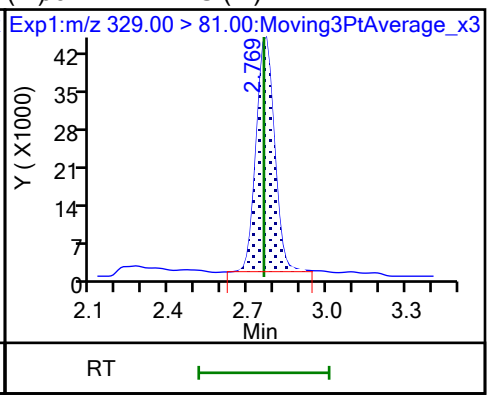
5 Perfluorobutanesulfonic acid (M)



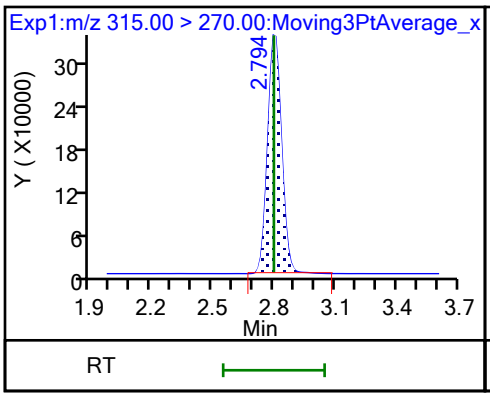
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



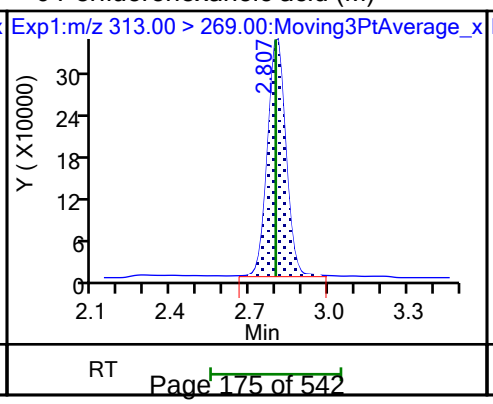
60 M2-4:2 FTS (M)



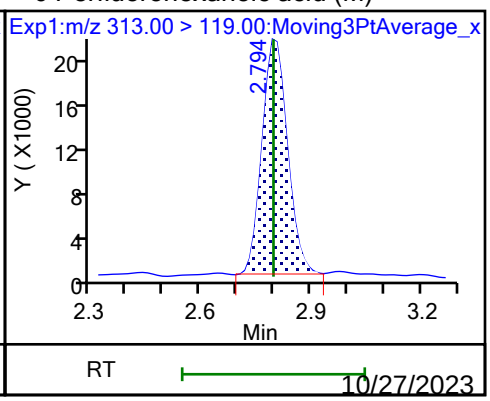
D 7 13C2 PFHxA



6 Perfluorohexanoic acid (M)

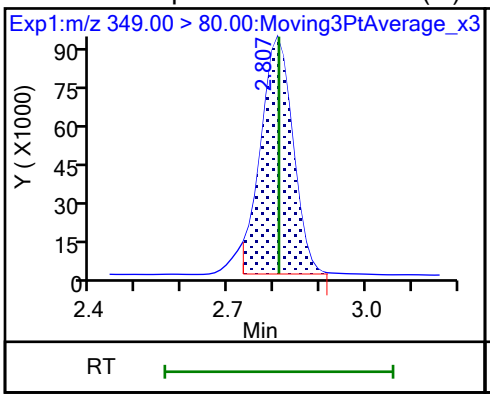


6 Perfluorohexanoic acid (M)

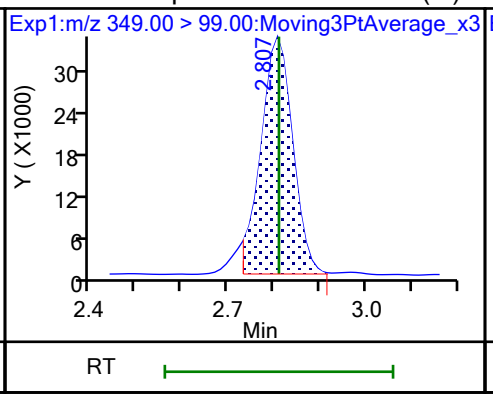


10/27/2023
10:52 AM

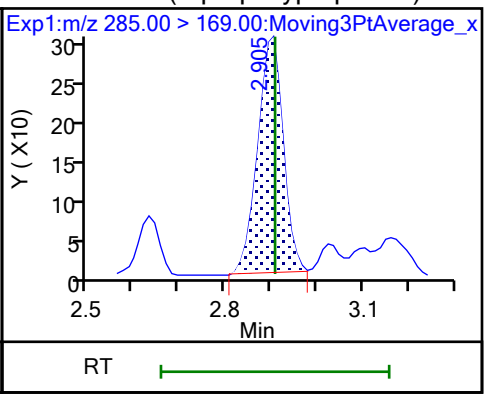
70 Perfluoropentanesulfonic acid (M)



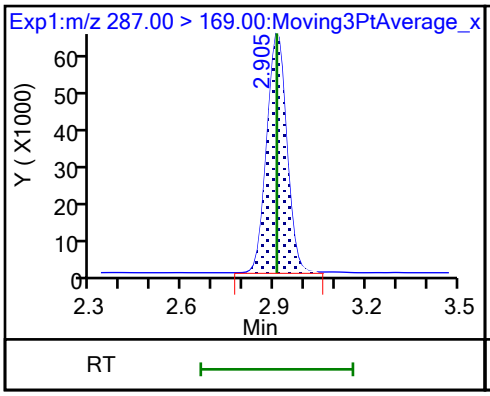
70 Perfluoropentanesulfonic acid (M)



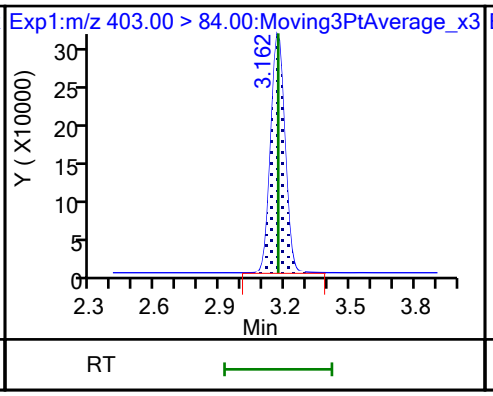
67 Perfluoro(2-propoxypropanoic) ac



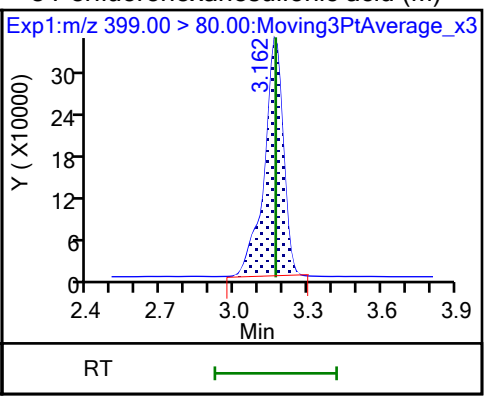
D 64 13C3 HFPO-DA



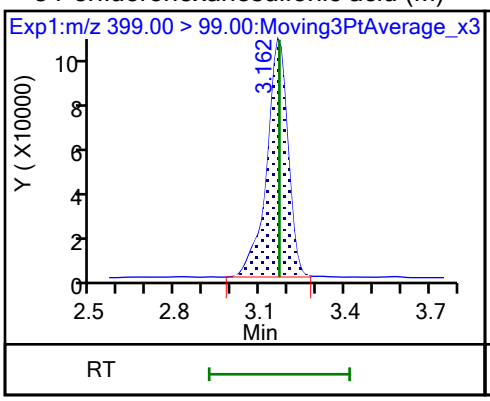
D 11 18O2 PFHxS



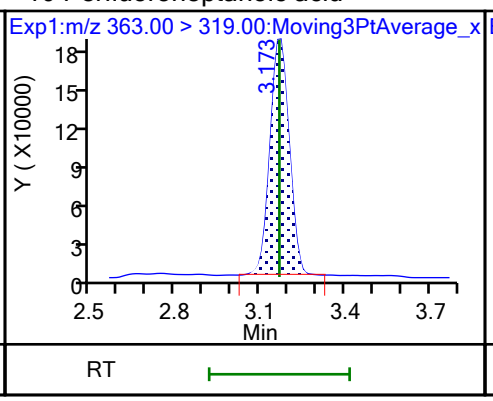
8 Perfluorohexanesulfonic acid (M)



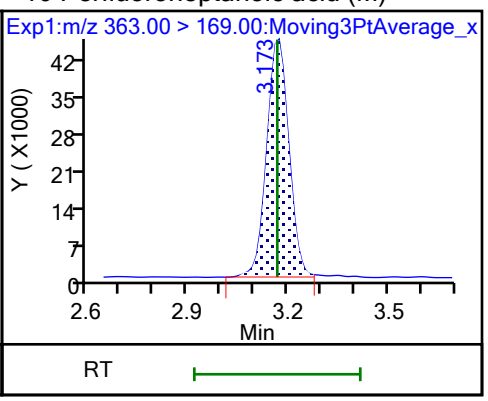
8 Perfluorohexanesulfonic acid (M)



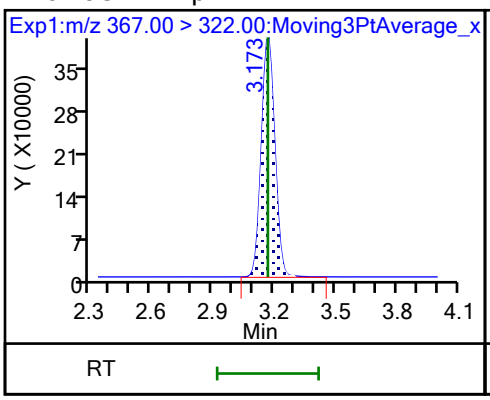
10 Perfluoroheptanoic acid



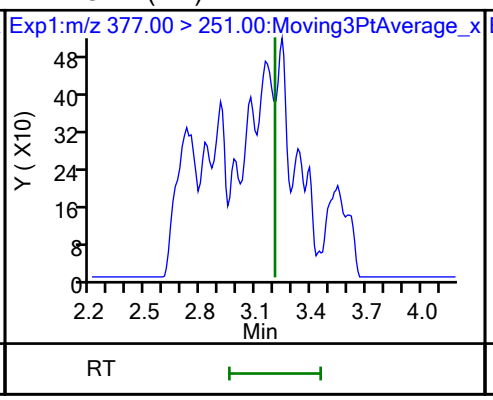
10 Perfluoroheptanoic acid (M)



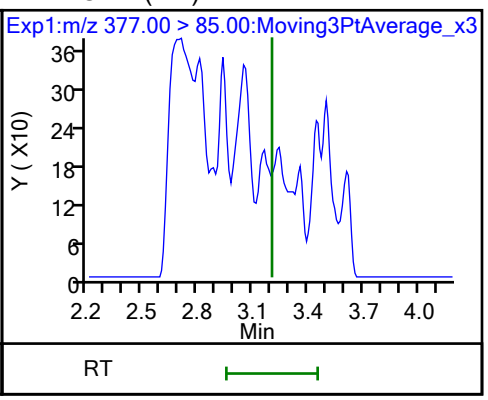
D 9 13C4 PFHpA



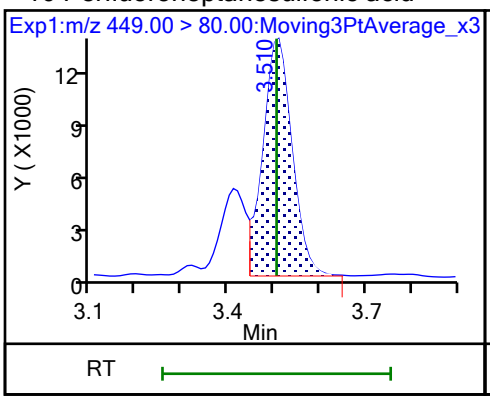
77 DONA (ND)



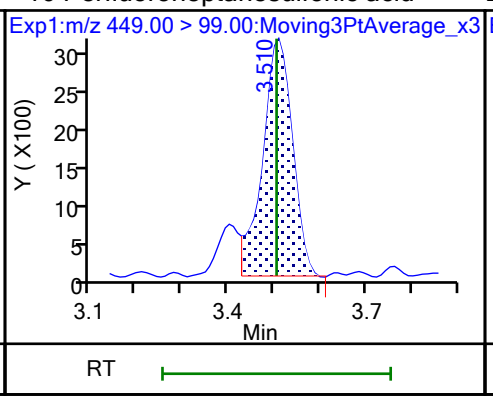
77 DONA (ND)



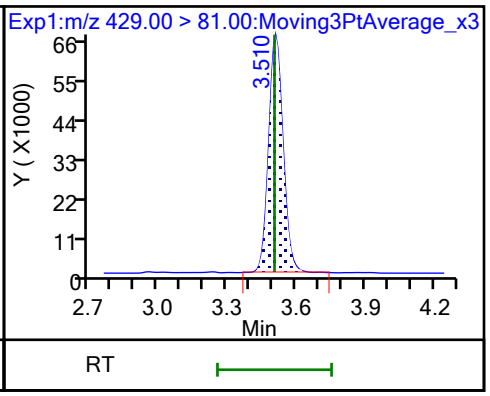
16 Perfluoroheptanesulfonic acid



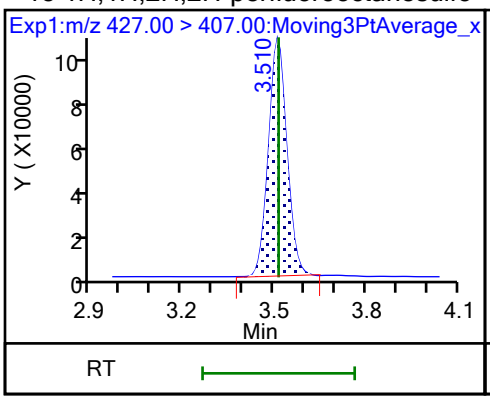
16 Perfluoroheptanesulfonic acid



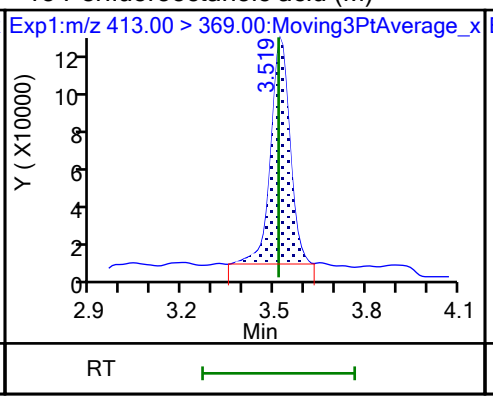
D 12 M2-6:2 FTS



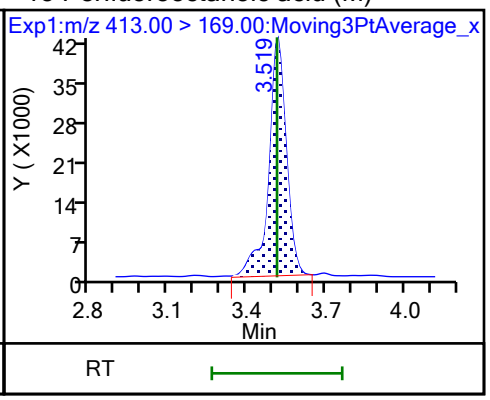
13 1H,1H,2H,2H-perfluorooctanesulfo



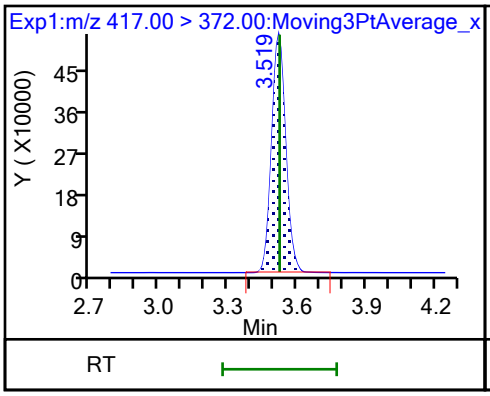
15 Perfluorooctanoic acid (M)



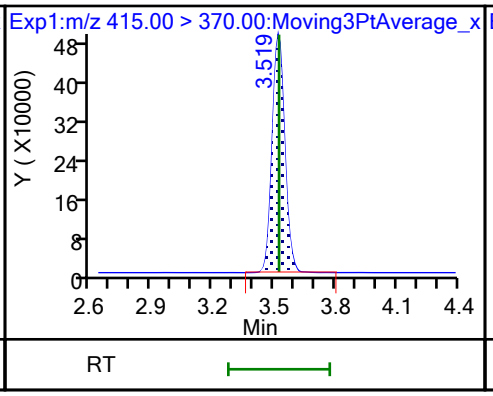
15 Perfluorooctanoic acid (M)



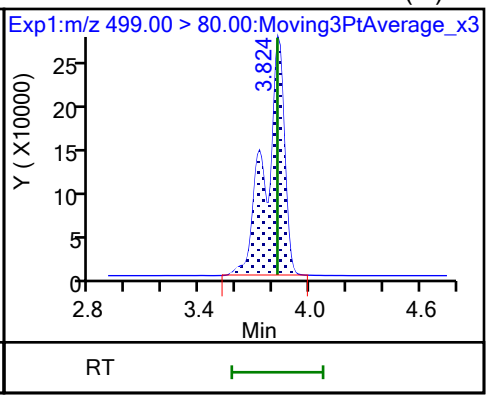
D 14 13C4 PFOA



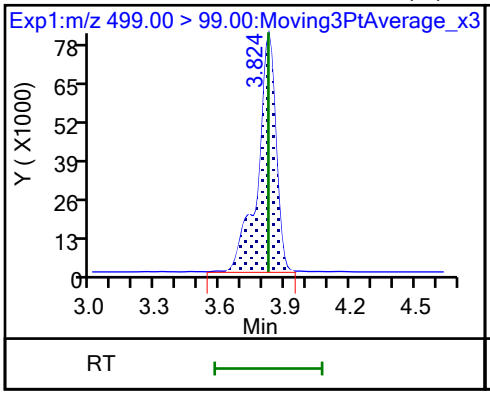
* 62 13C2 PFOA



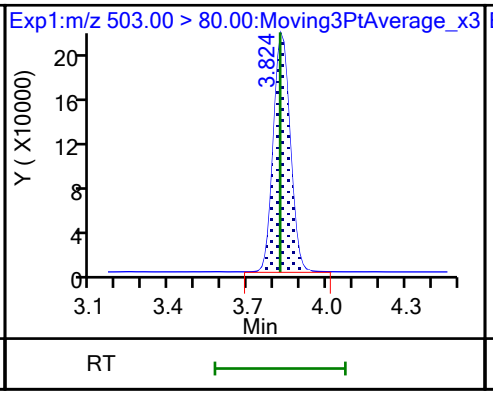
17 Perfluorooctanesulfonic acid (M)



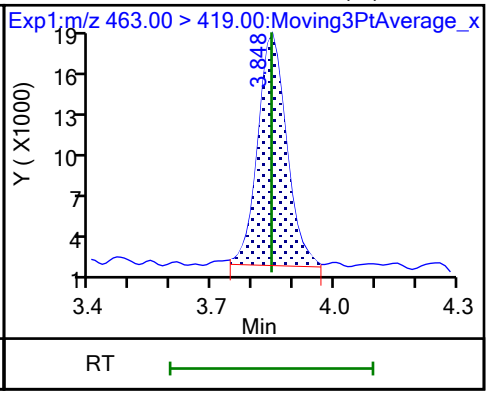
17 Perfluorooctanesulfonic acid (M)



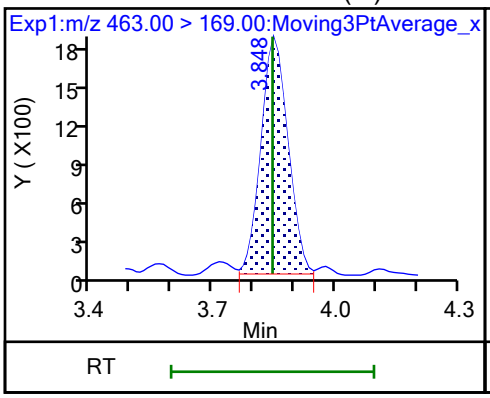
D 18 13C4 PFOS



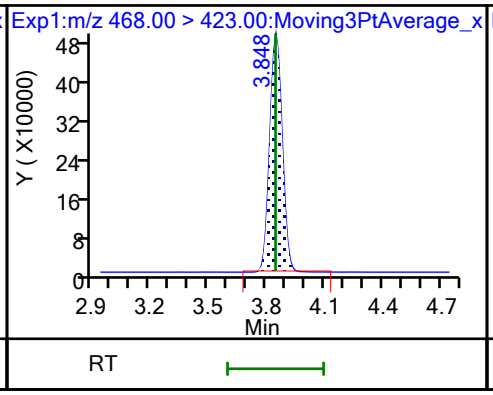
20 Perfluorononanoic acid (M)



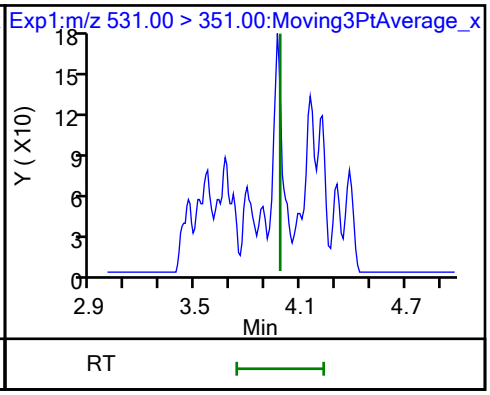
20 Perfluorononanoic acid (M)



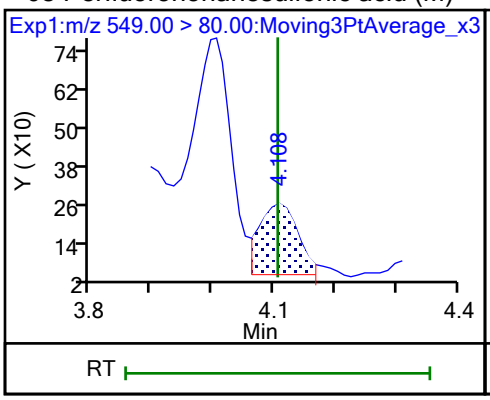
D 19 13C5 PFNA



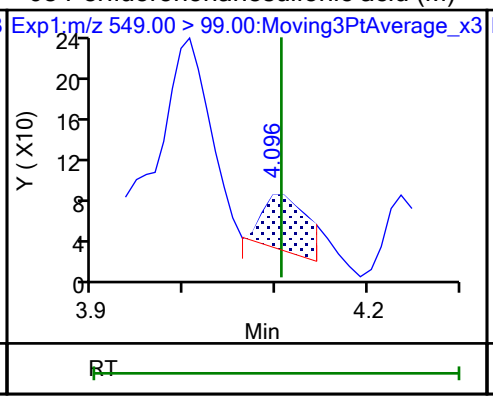
69 9-Chlorohexadecafluoro-3-oxanona (ND)



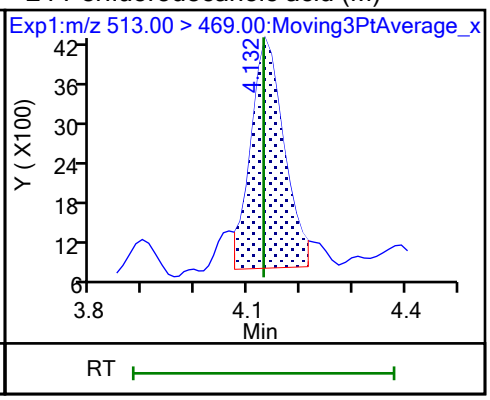
68 Perfluorononanesulfonic acid (M)



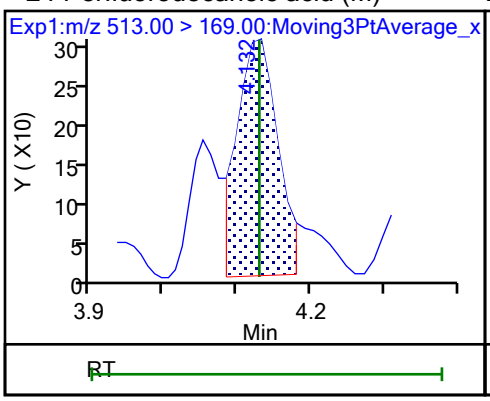
68 Perfluorononanesulfonic acid (M)



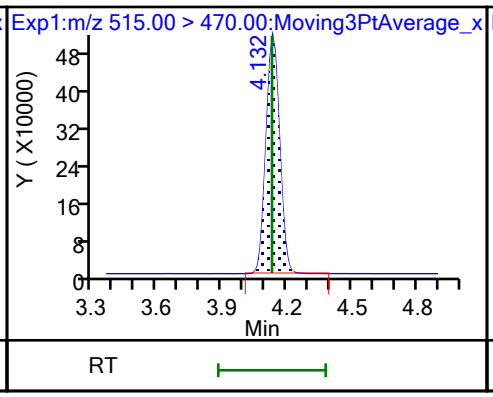
24 Perfluorodecanoic acid (M)



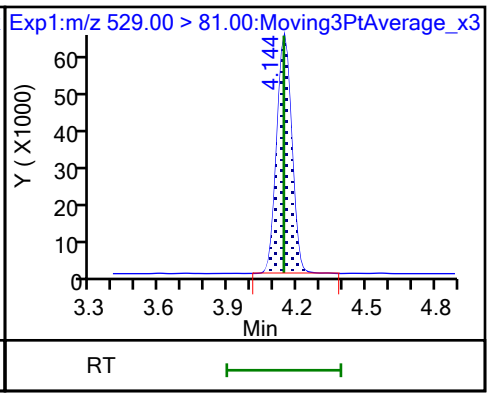
24 Perfluorodecanoic acid (M)



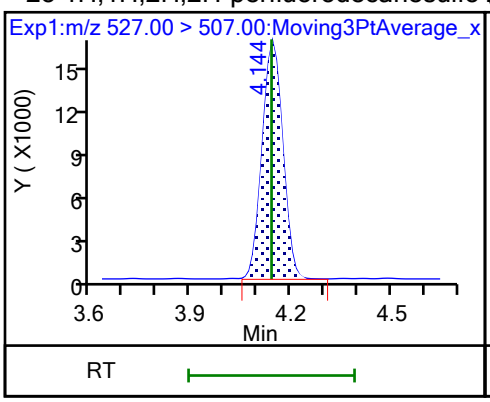
D 23 13C2 PFDA



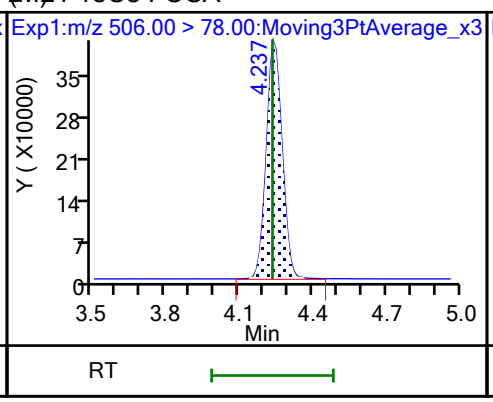
D 26 M2-8:2 FTS



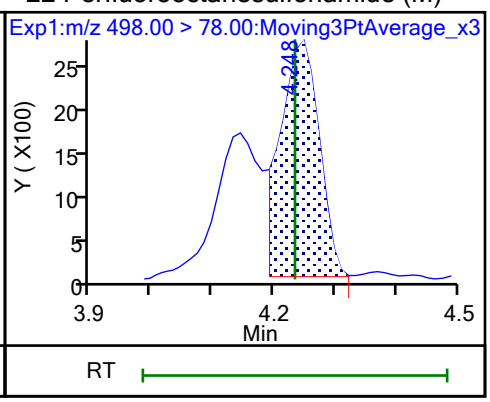
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



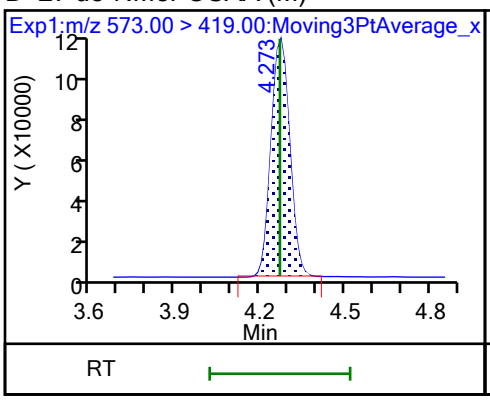
D 21 13C8 FOSA



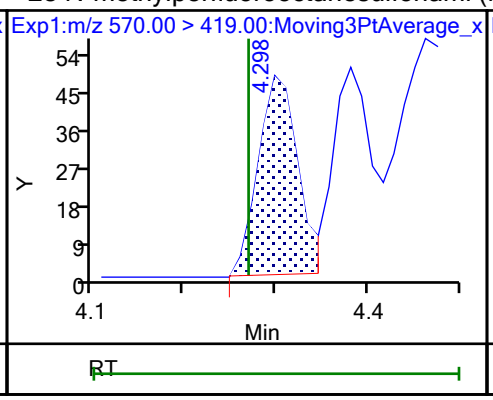
22 Perfluorooctanesulfonamide (M)



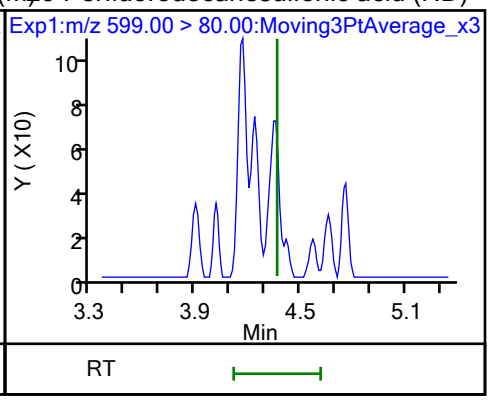
D 27 d3-NMeFOSAA (M)



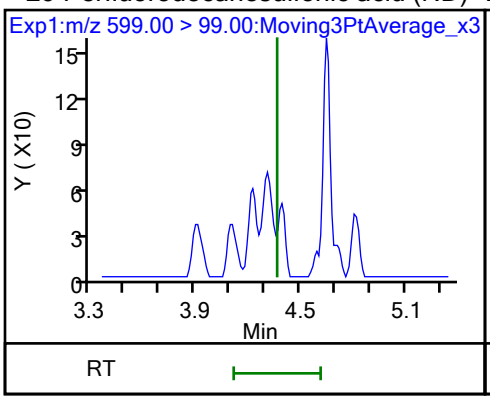
28 N-methylperfluorooctanesulfonami (M)



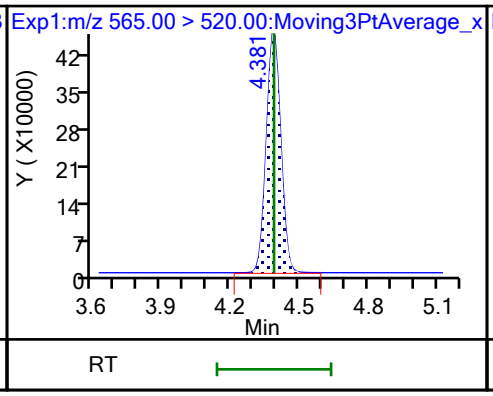
29 Perfluorodecanesulfonic acid (ND)



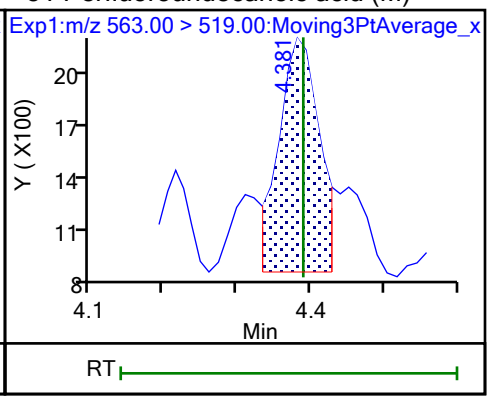
29 Perfluorodecanesulfonic acid (ND)



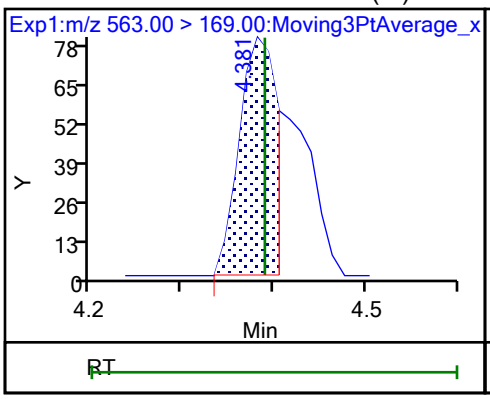
D 30 13C2 PFUnA



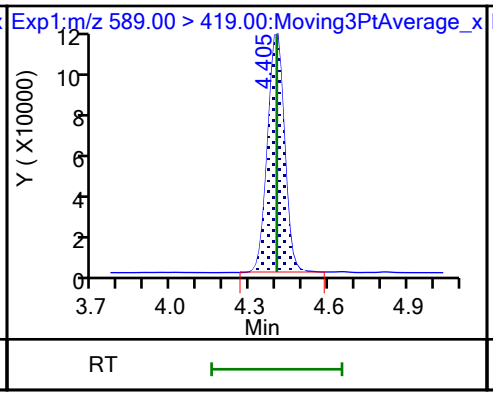
31 Perfluoroundecanoic acid (M)



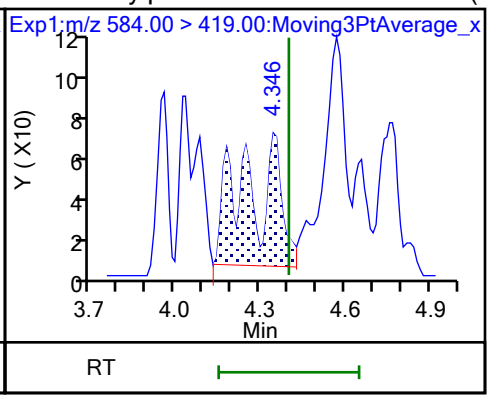
31 Perfluoroundecanoic acid (M)



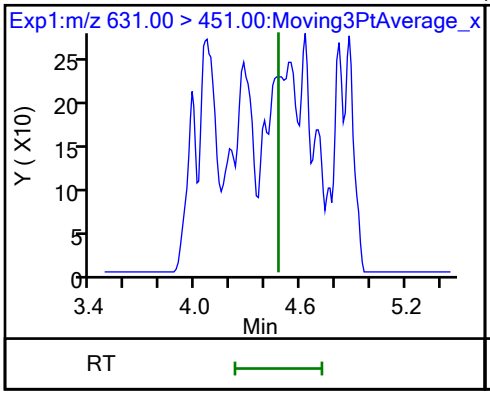
D 32 d5-NEtFOSAA



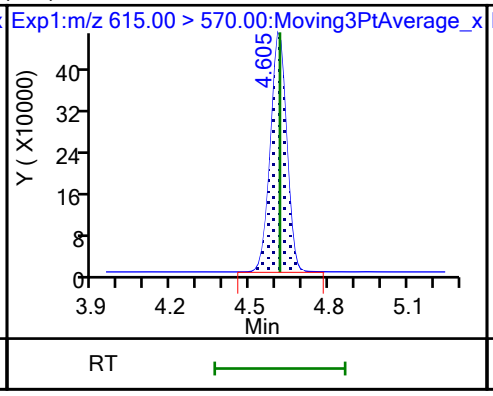
33 N-ethylperfluorooctanesulfonamid (M)



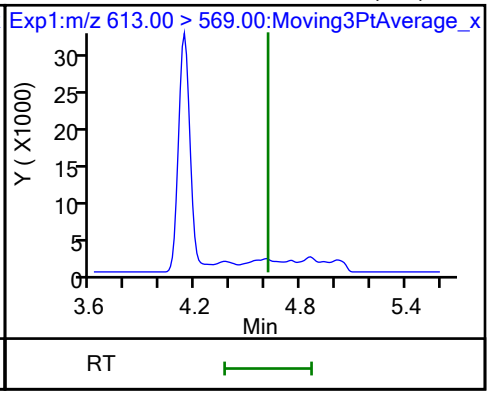
66 11-Chloroeicosafluoro-3-oxaundec (ND)



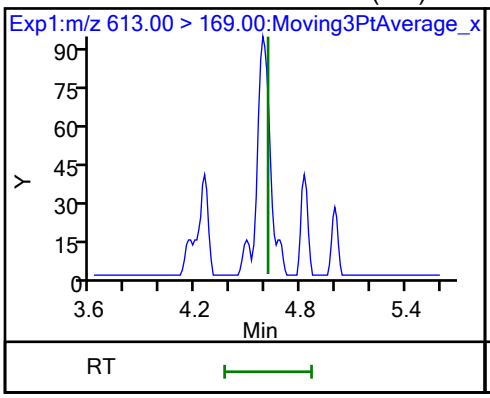
D 36 13C2 PFDoA



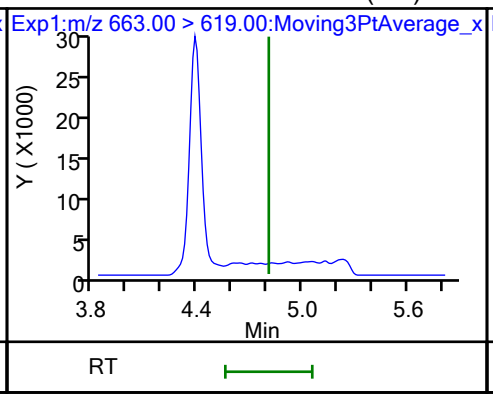
37 Perfluorododecanoic acid (ND)



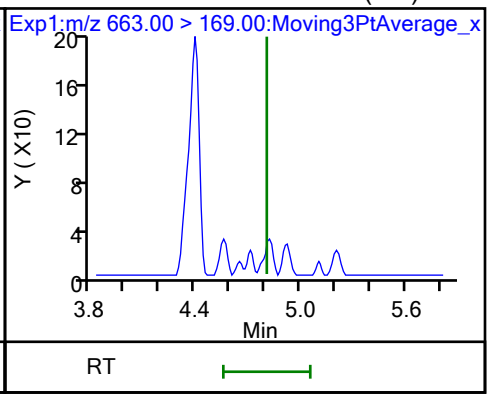
37 Perfluorododecanoic acid (ND)



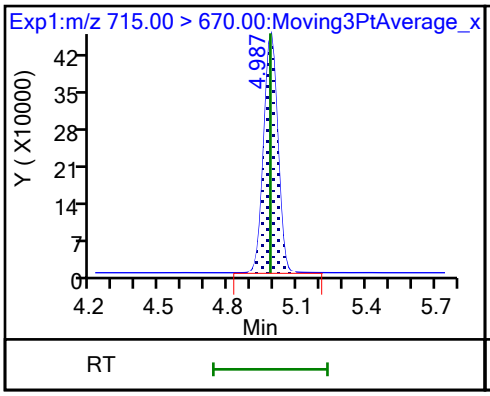
41 Perfluorotridecanoic acid (ND)



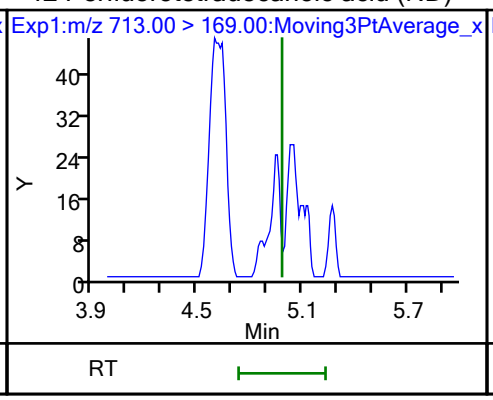
41 Perfluorotridecanoic acid (ND)



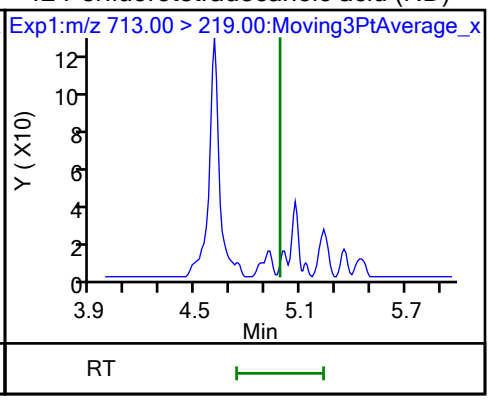
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Eurofins Burlington

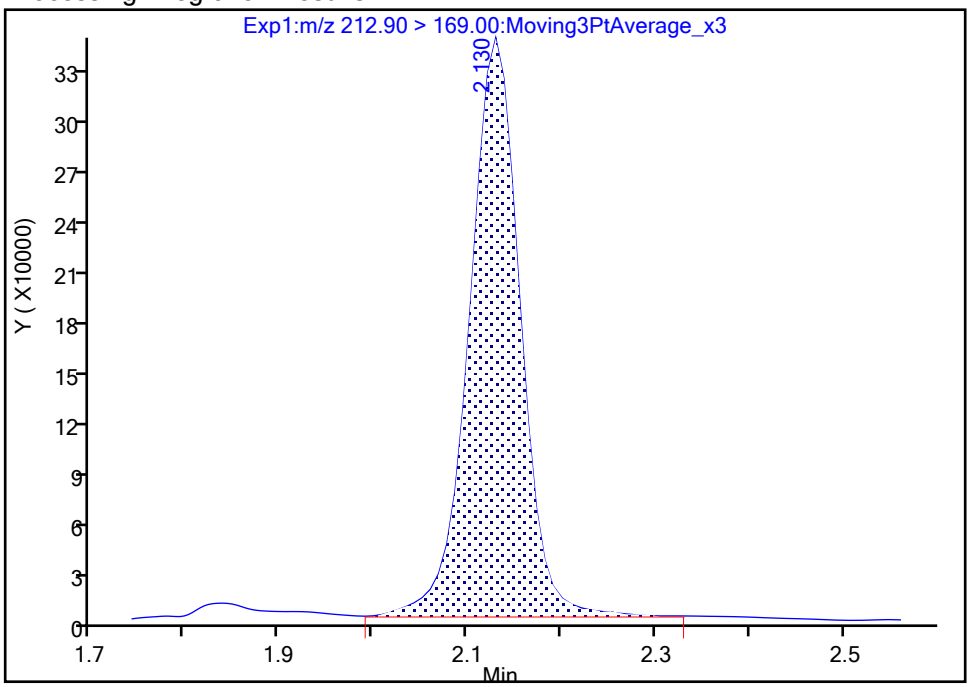
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

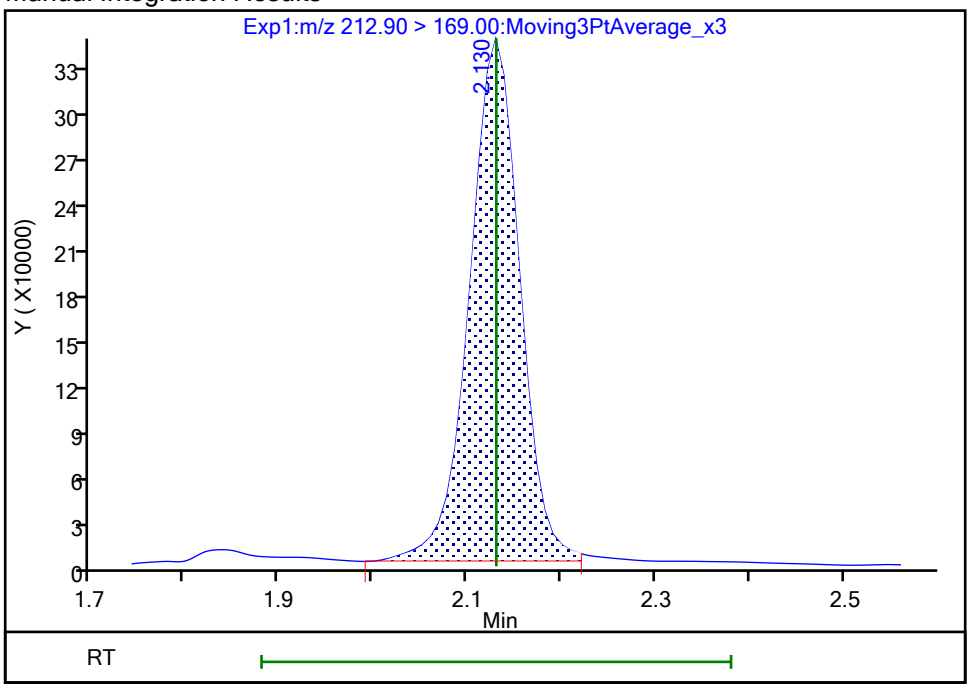
Processing Integration Results

RT: 2.13
Area: 1278107
Amount: 0.782097
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1269338
Amount: 0.776450
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:24 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

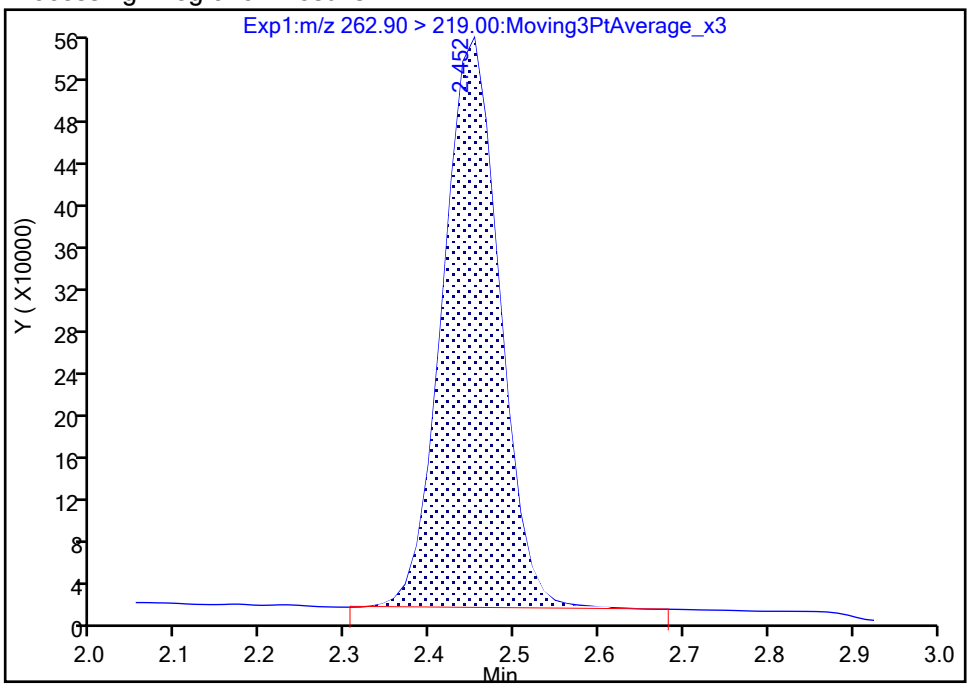
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

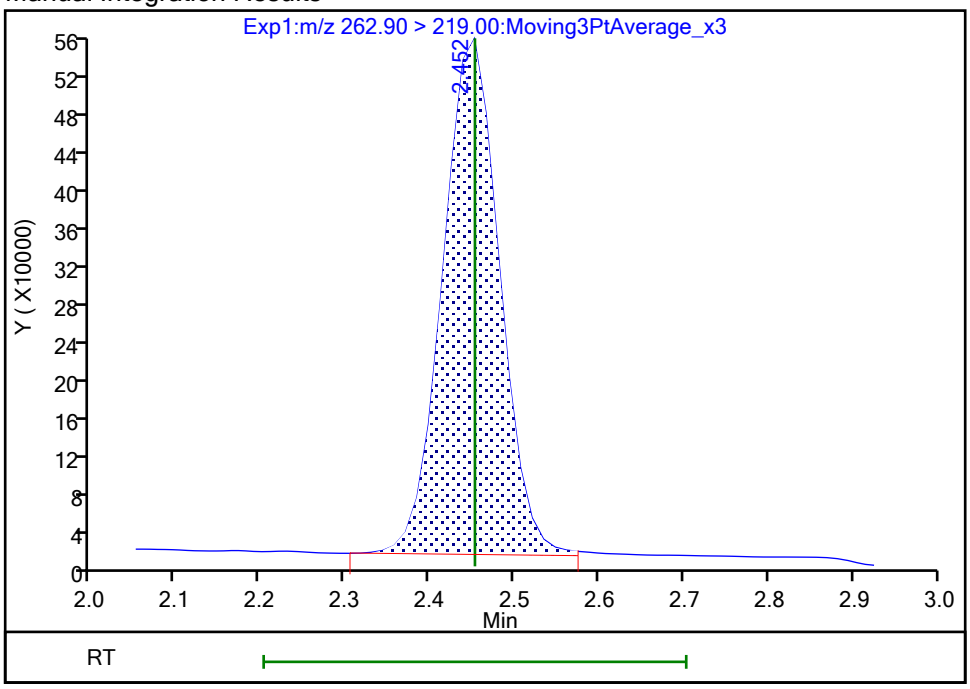
Processing Integration Results

RT: 2.45
Area: 2536413
Amount: 1.906727
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 2528555
Amount: 1.900820
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

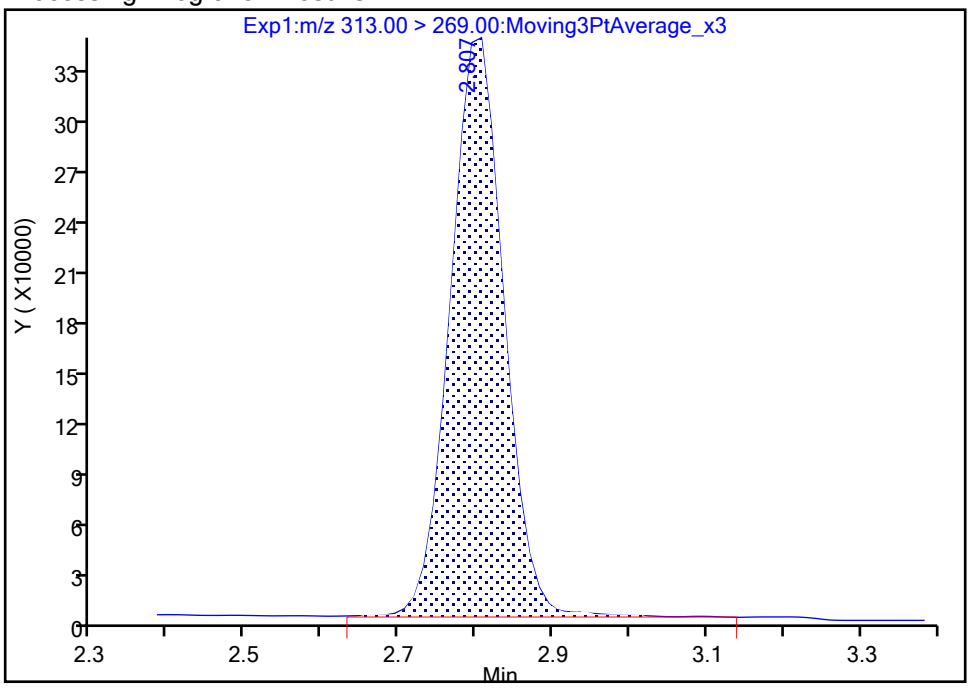
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

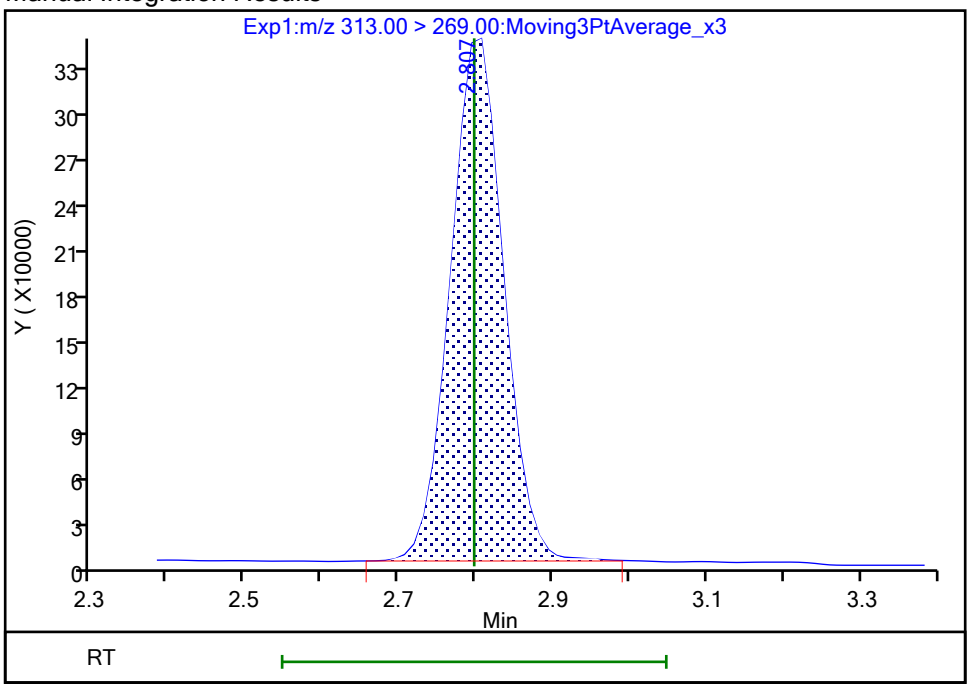
Processing Integration Results

RT: 2.81
Area: 1662489
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1644689
Amount: 1.170562
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:08 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

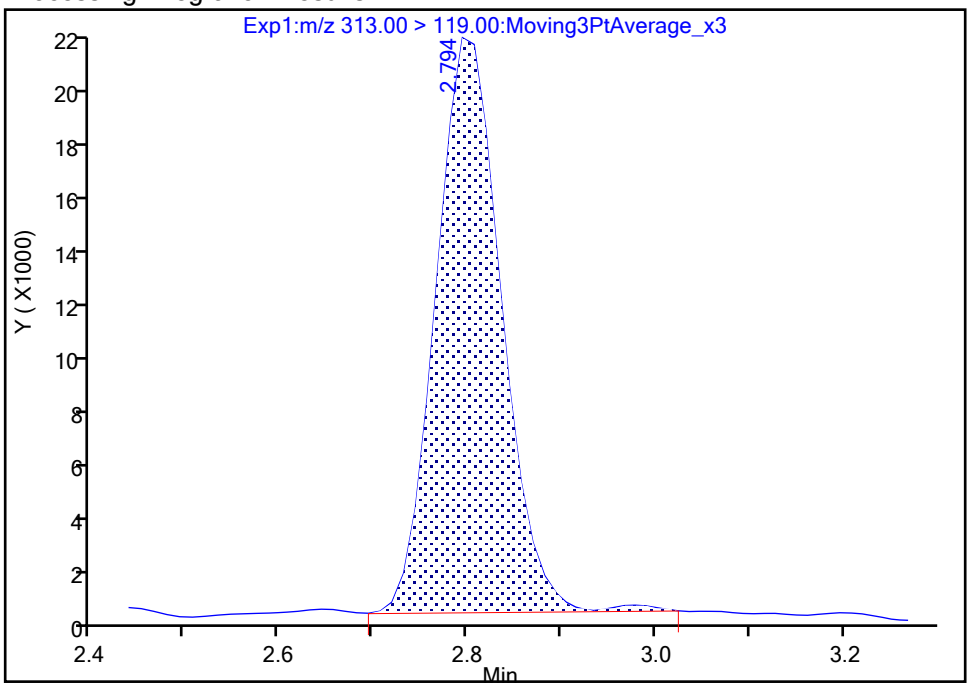
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

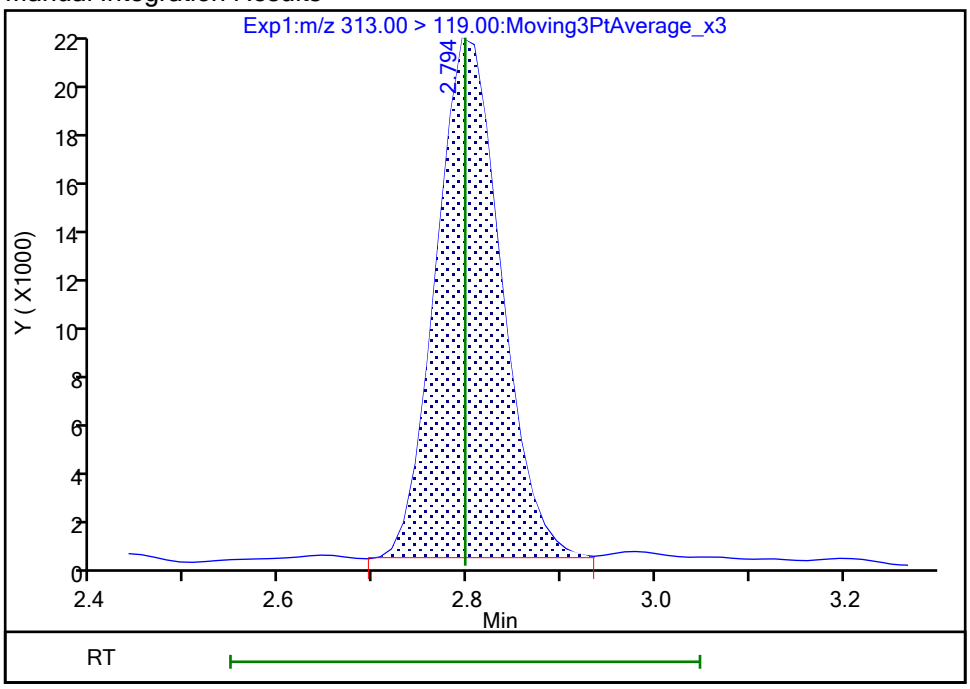
Processing Integration Results

RT: 2.79
Area: 104105
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 103406
Amount: 1.170562
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

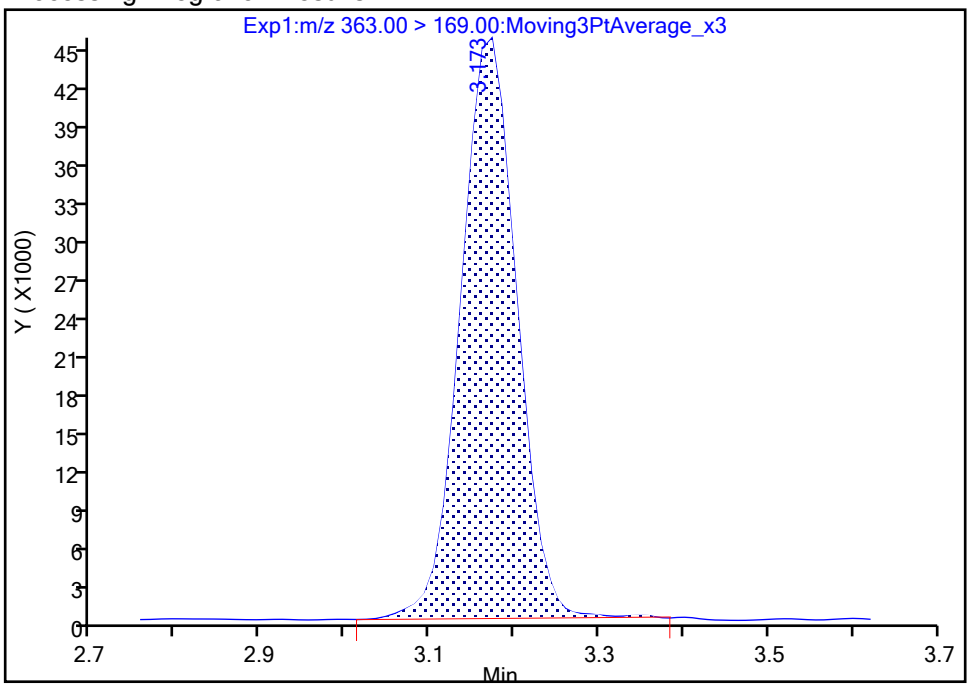
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

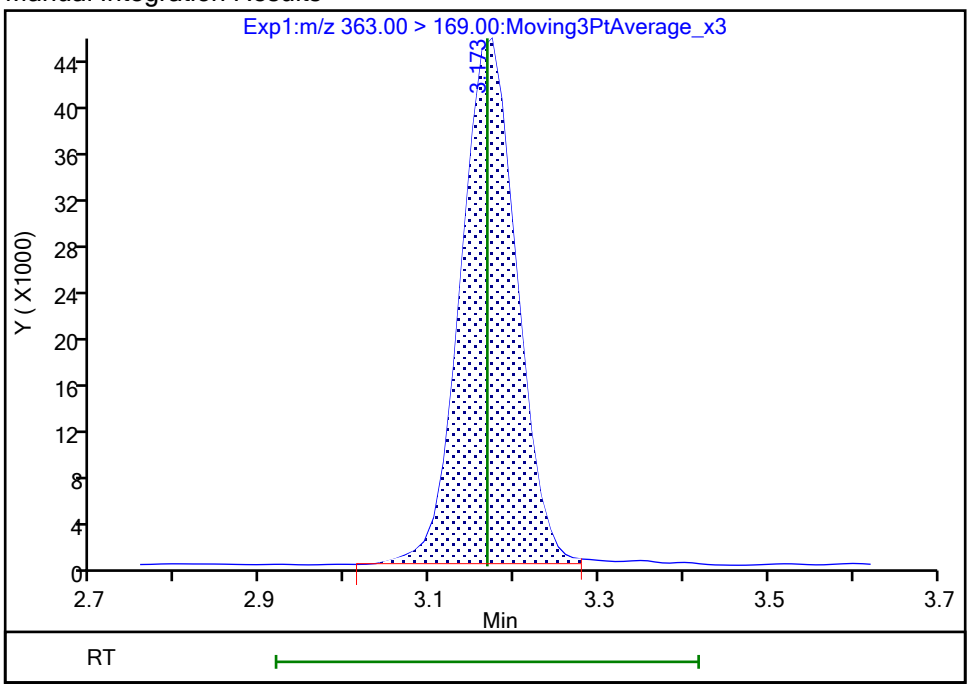
Processing Integration Results

RT: 3.17
Area: 210820
Amount: 0.520949
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 209600
Amount: 0.520949
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:50 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

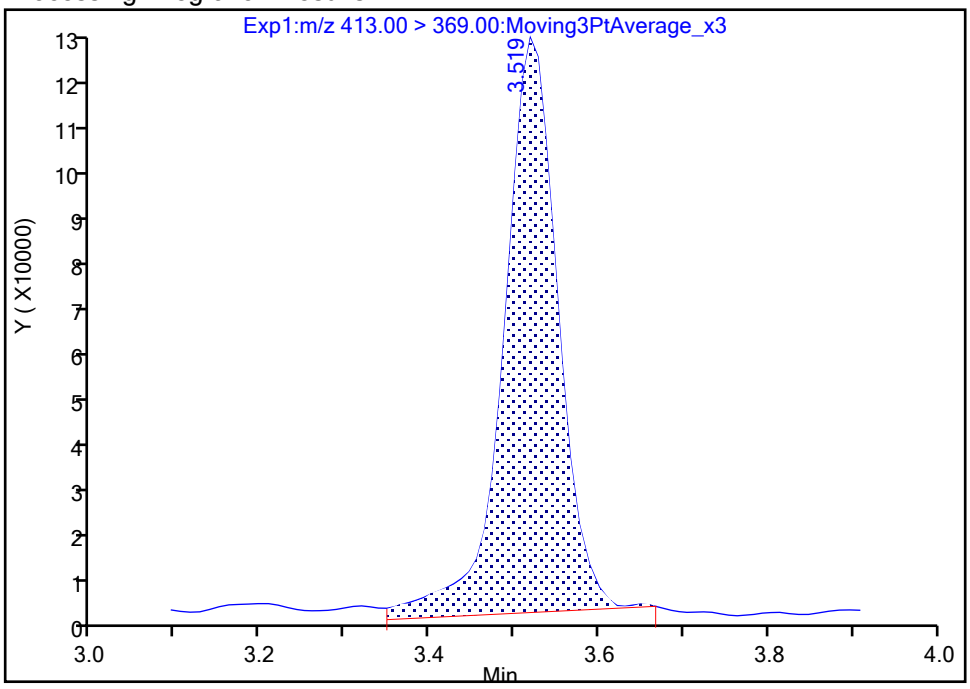
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

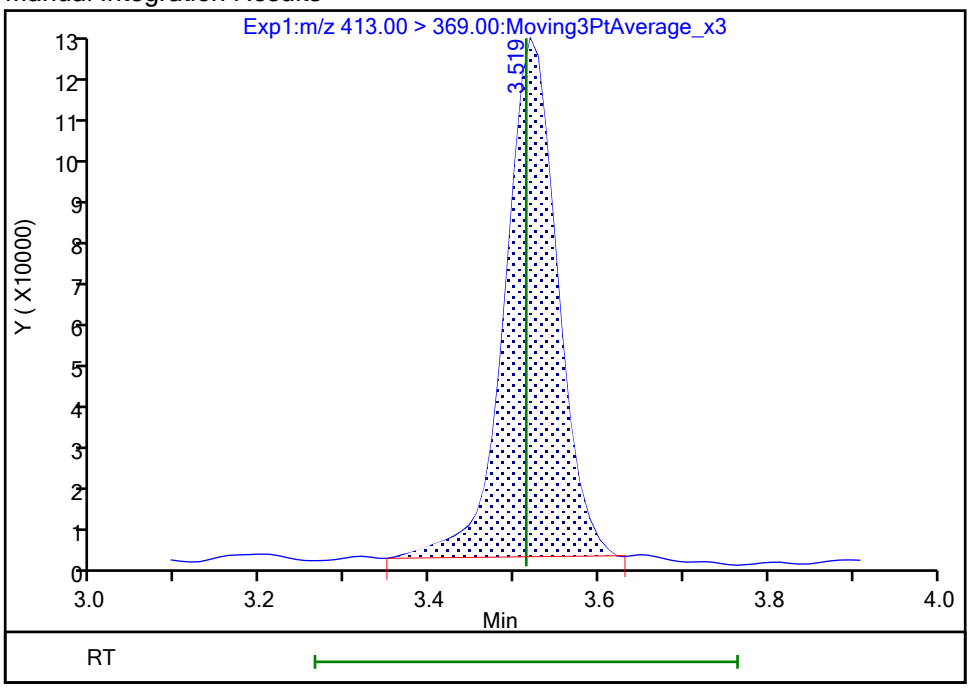
Processing Integration Results

RT: 3.52
Area: 554057
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 528148
Amount: 0.277290
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

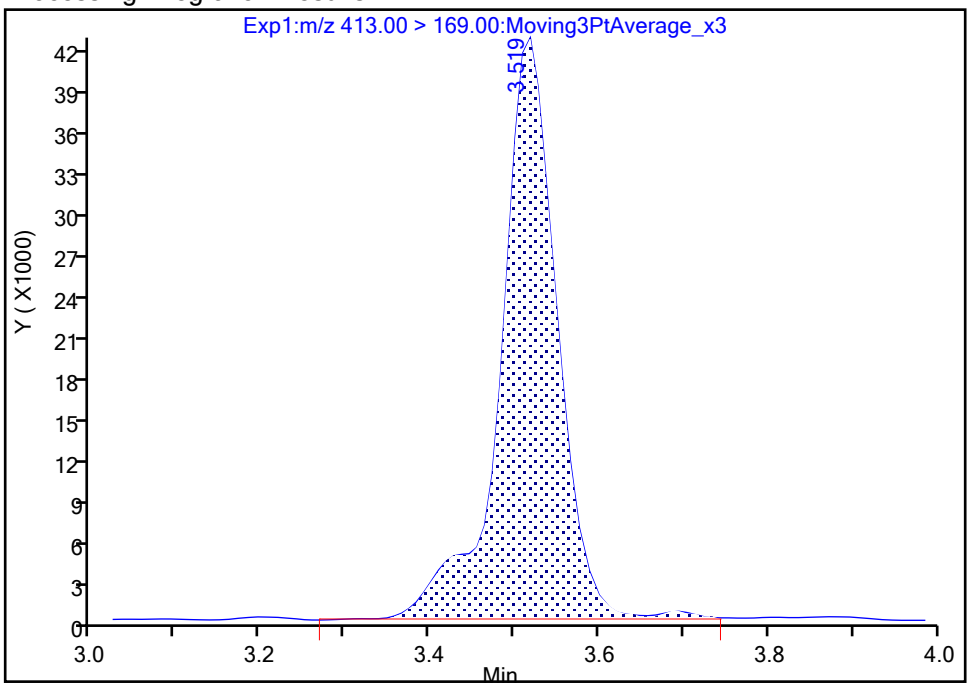
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

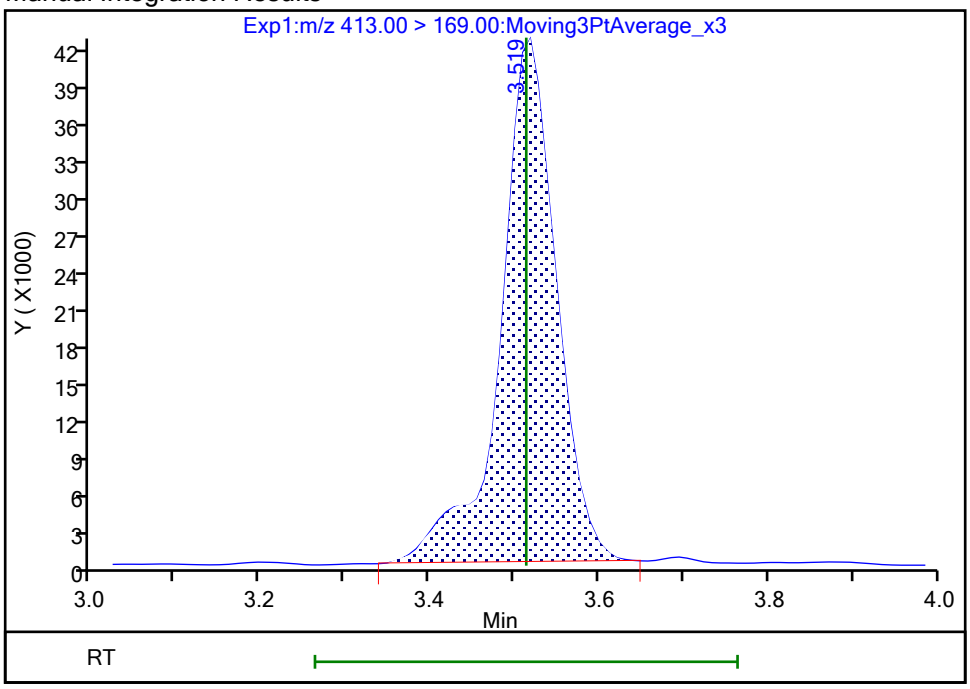
Processing Integration Results

RT: 3.52
Area: 200121
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 195814
Amount: 0.277290
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:28:02 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

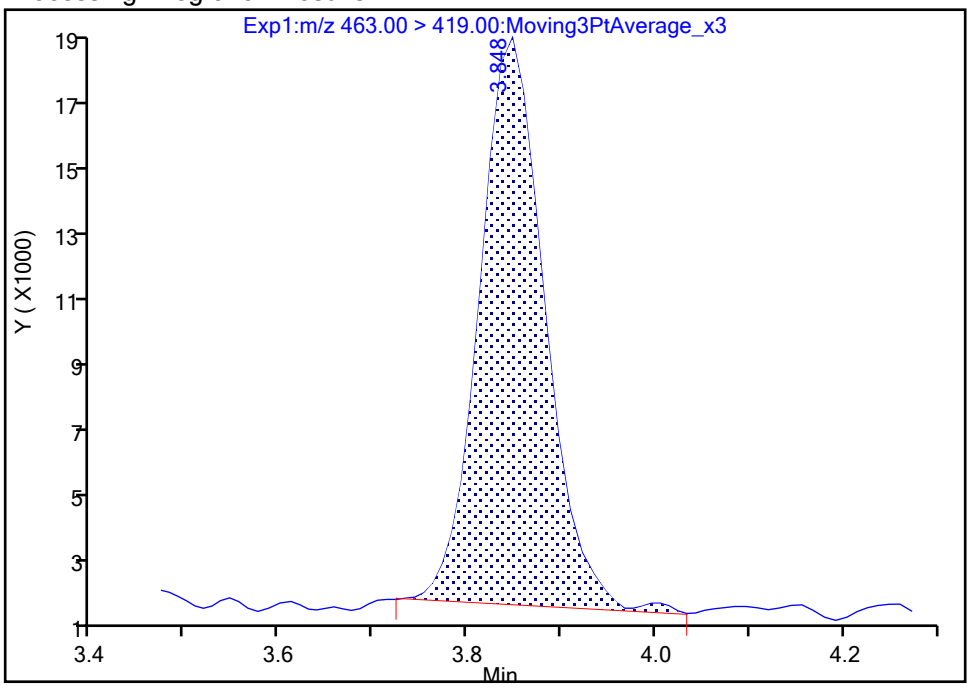
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

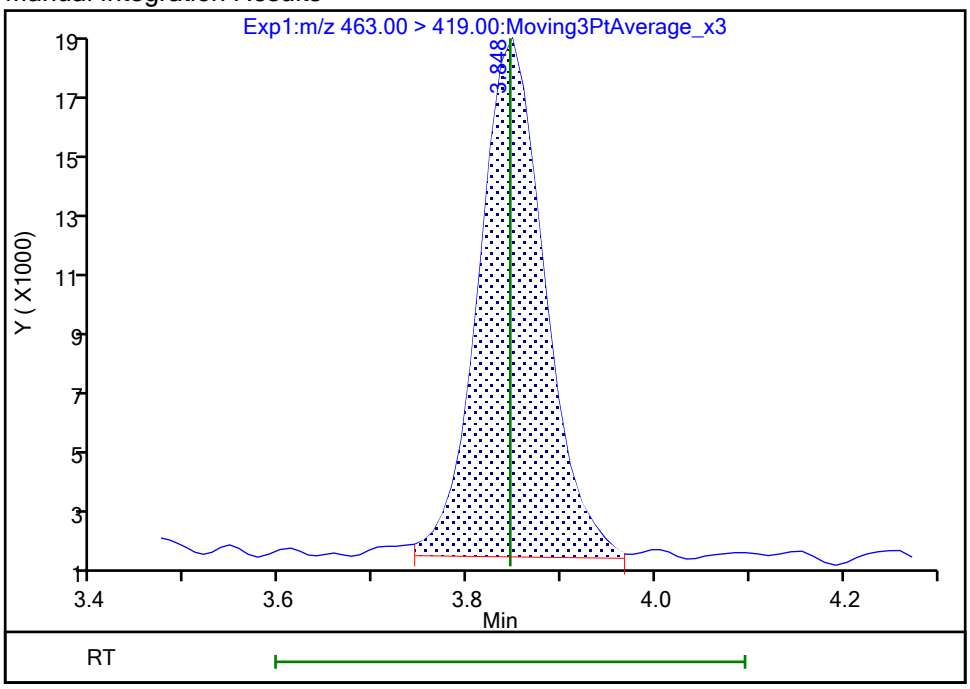
Processing Integration Results

RT: 3.85
Area: 78740
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 80506
Amount: 0.046190
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:28:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

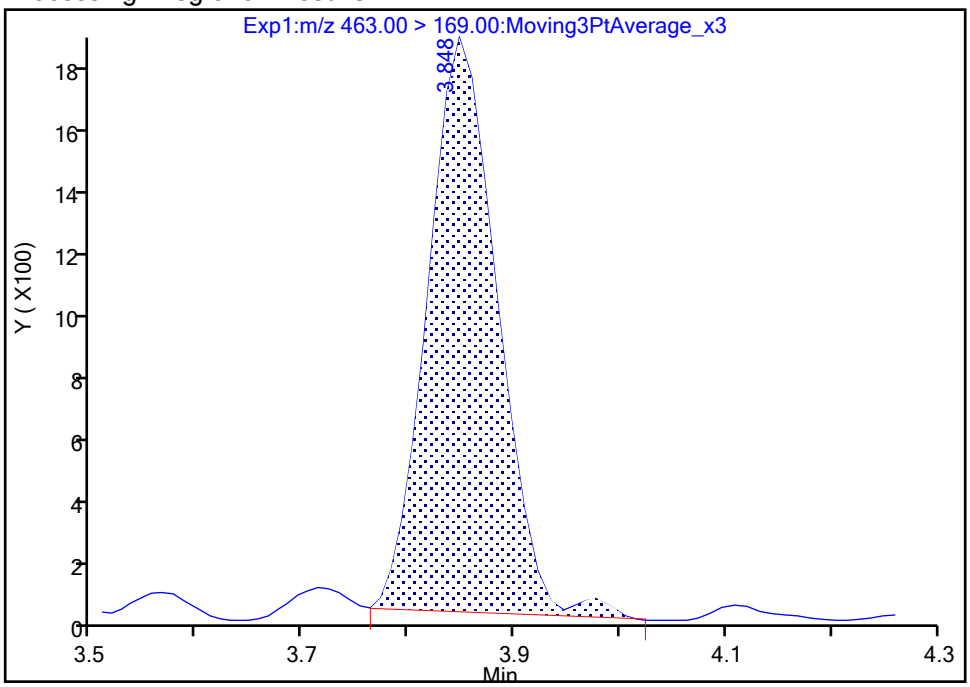
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

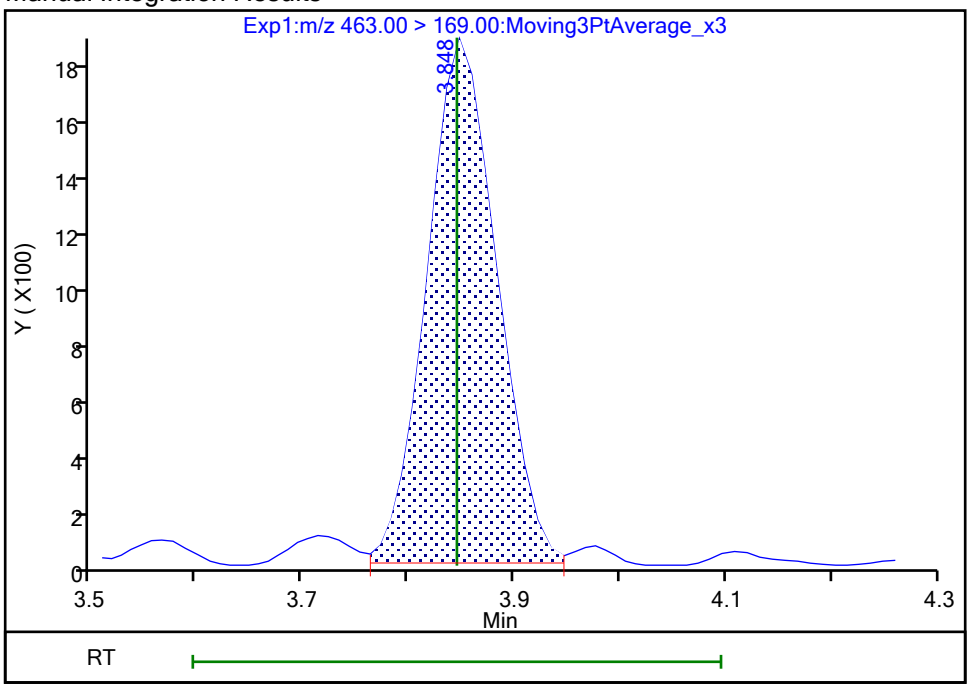
Processing Integration Results

RT: 3.85
Area: 8401
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.85
Area: 8476
Amount: 0.046190
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:28:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

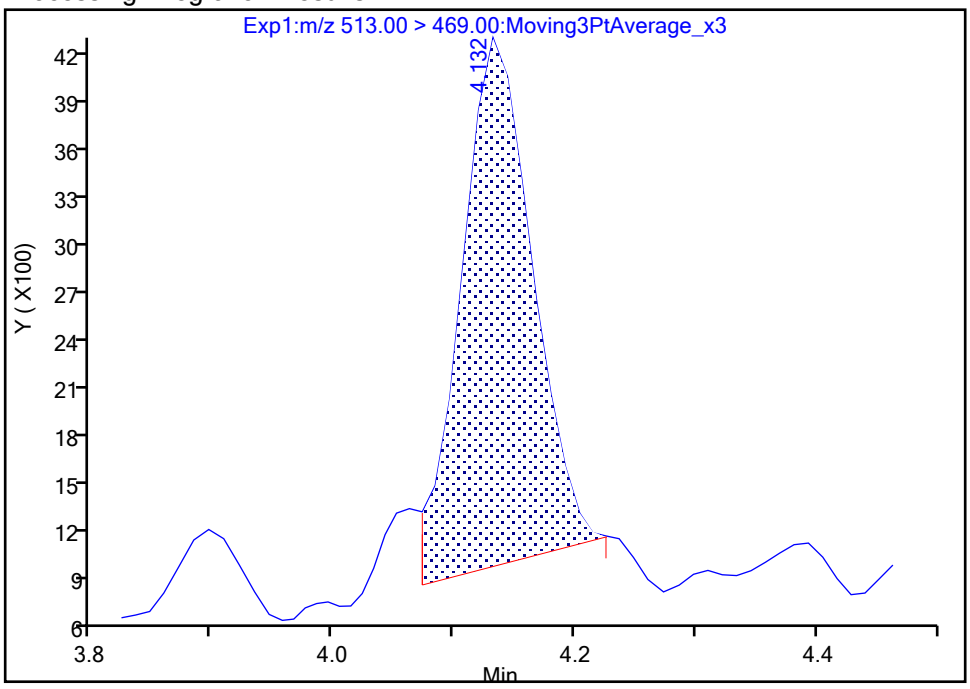
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

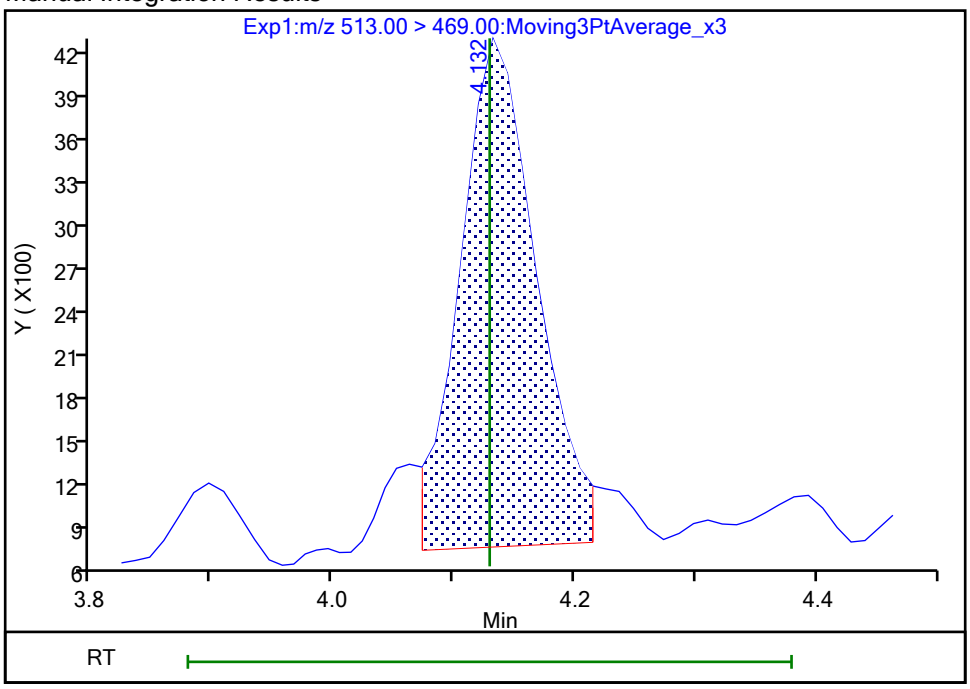
Processing Integration Results

RT: 4.13
Area: 13324
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 15253
Amount: 0.008432
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

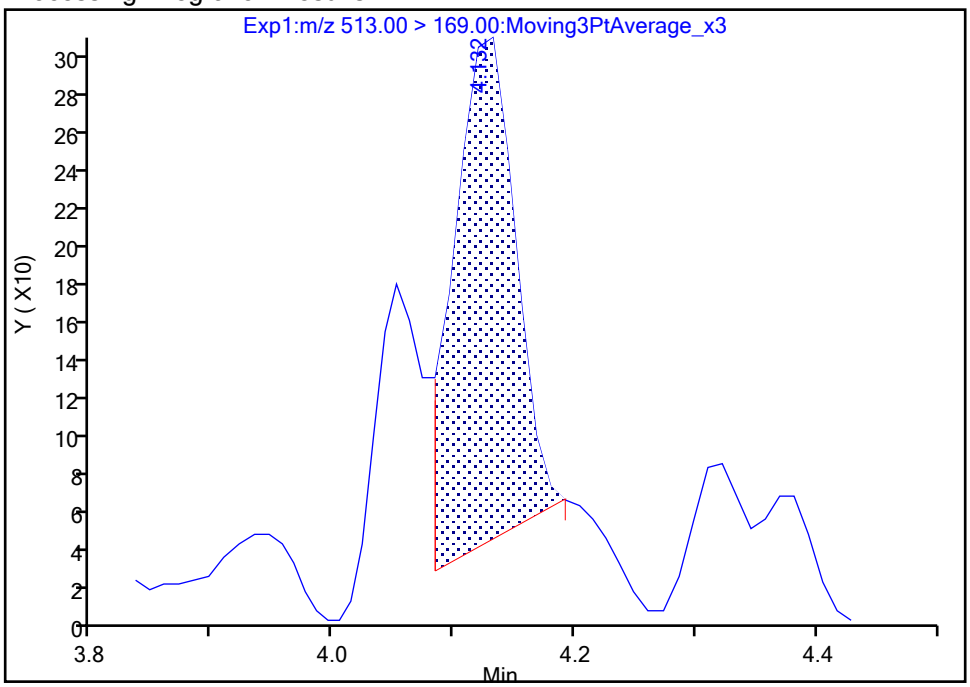
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

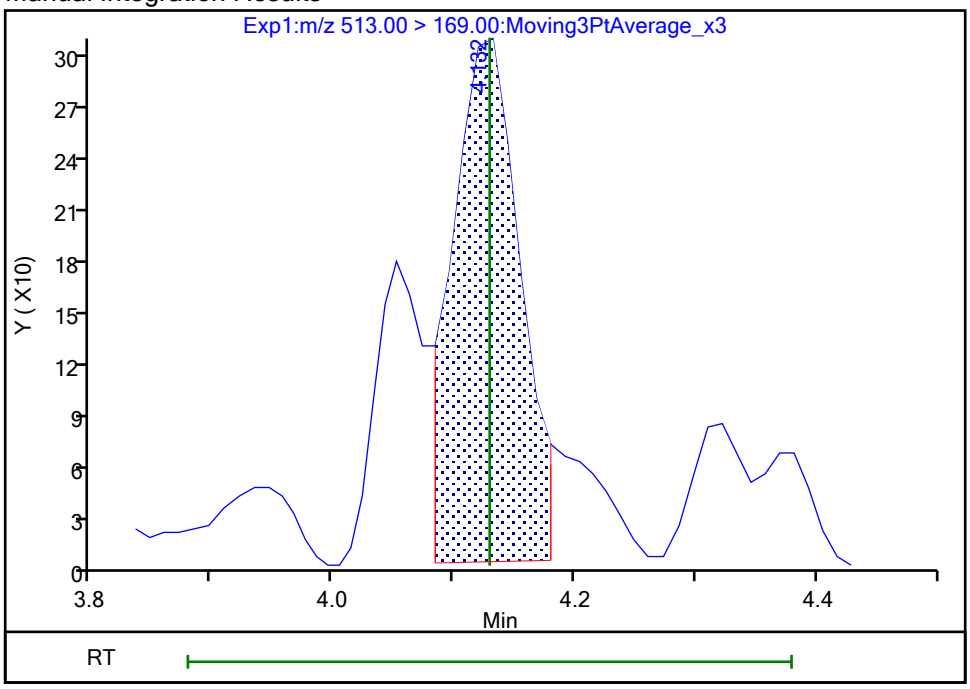
Processing Integration Results

RT: 4.13
Area: 926
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 1154
Amount: 0.008432
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

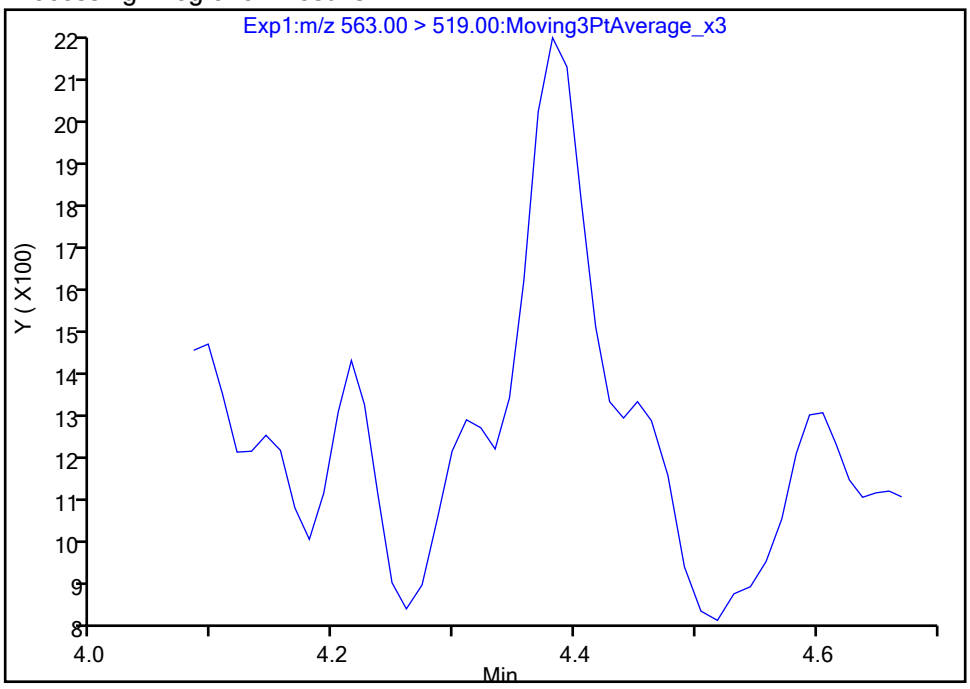
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

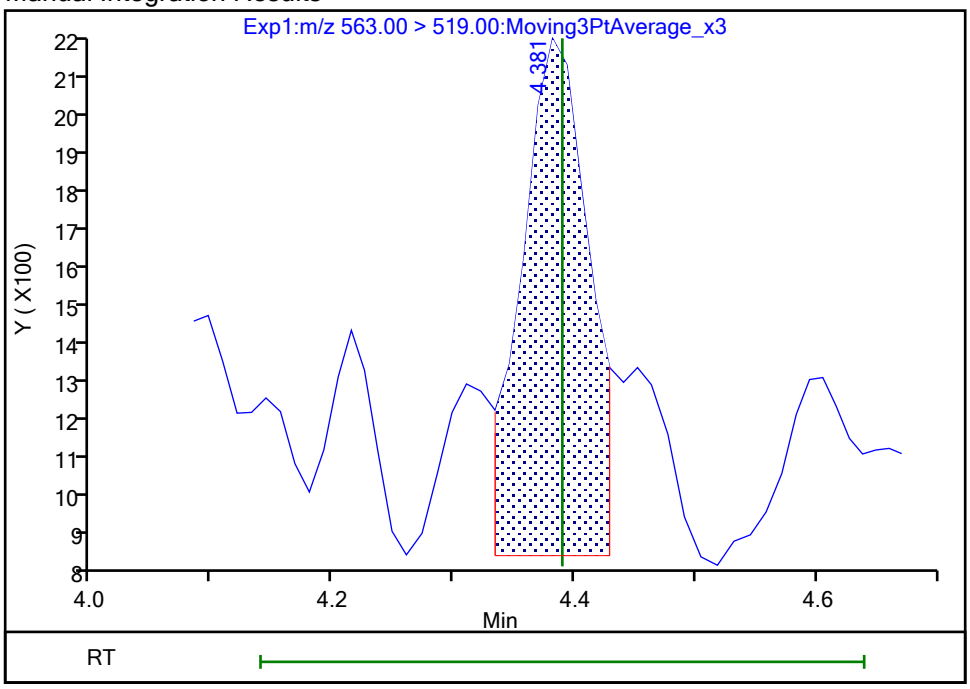
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 4872
Amount: 0.002909
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:30:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

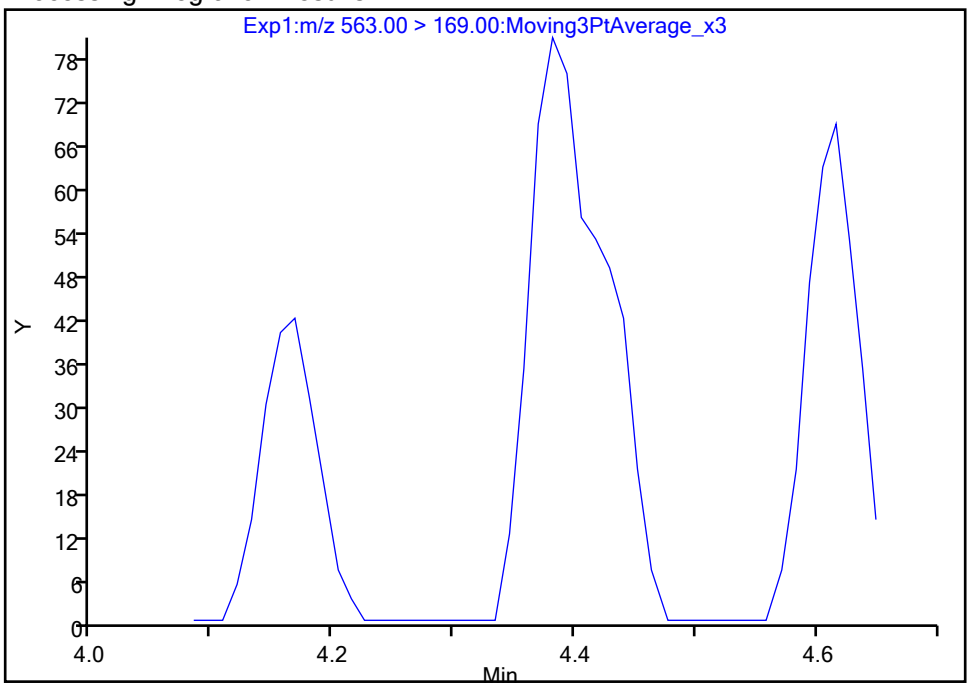
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

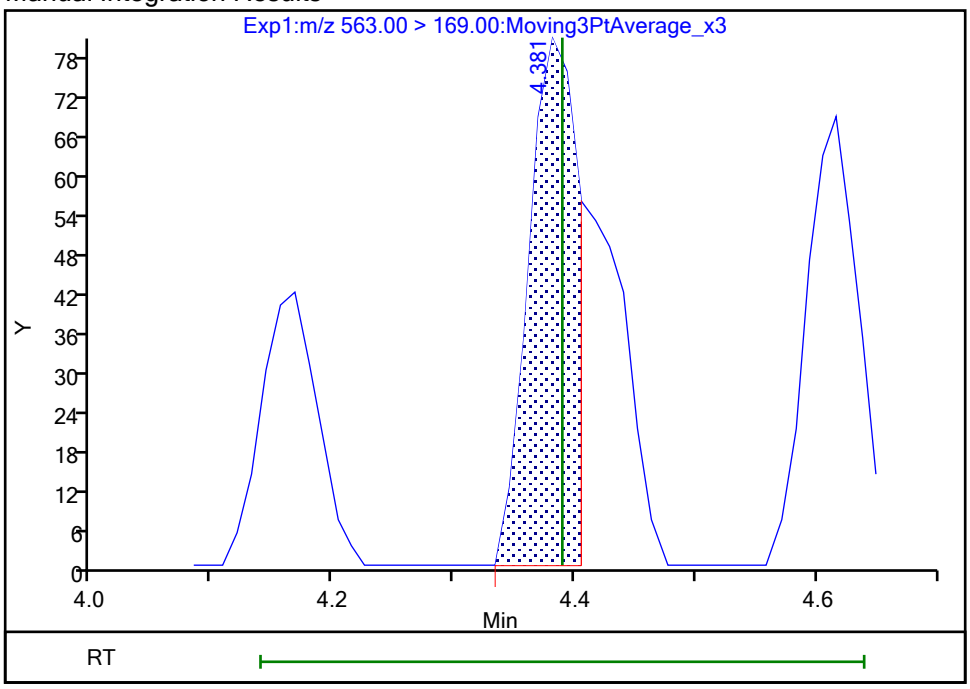
Processing Integration Results

Not Detected
Expected RT: 4.39



Manual Integration Results

RT: 4.38
Area: 214
Amount: 0.002909
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:30:16 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

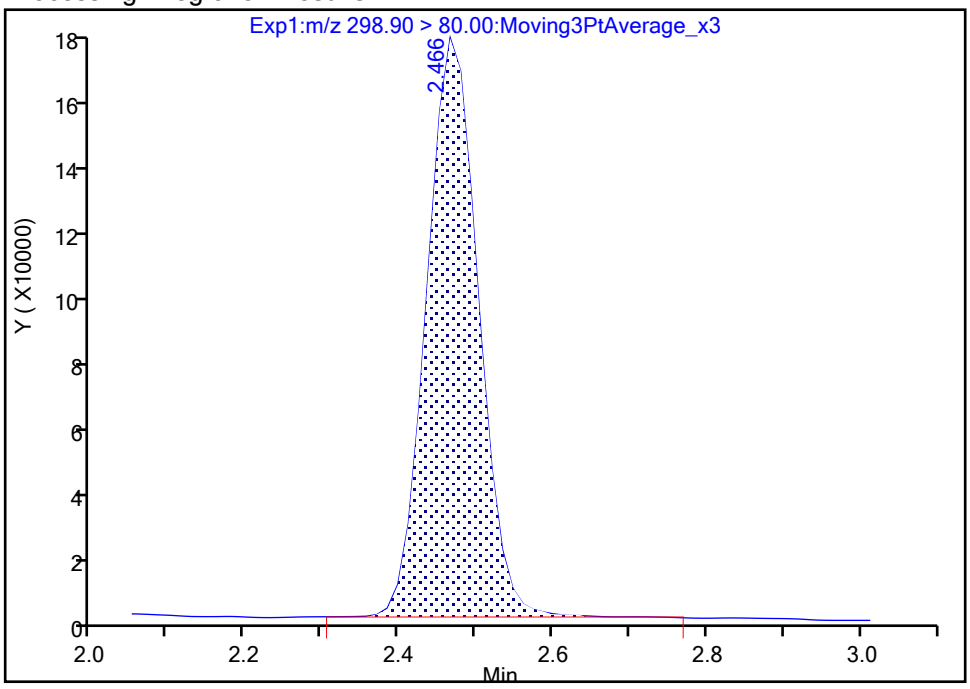
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

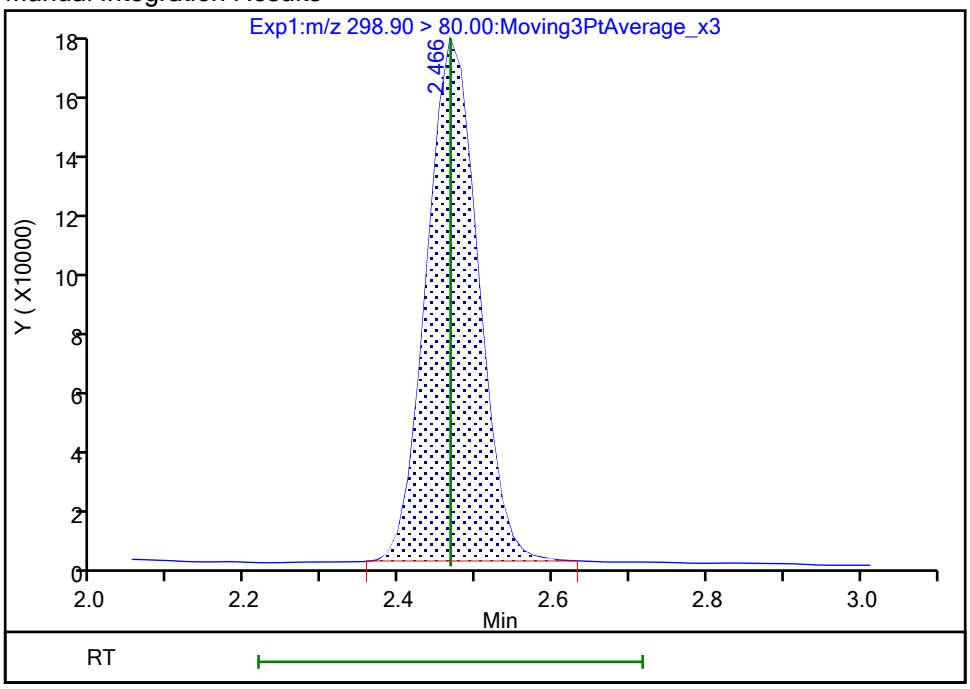
Processing Integration Results

RT: 2.47
Area: 836865
Amount: 0.454943
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 827803
Amount: 0.450016
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

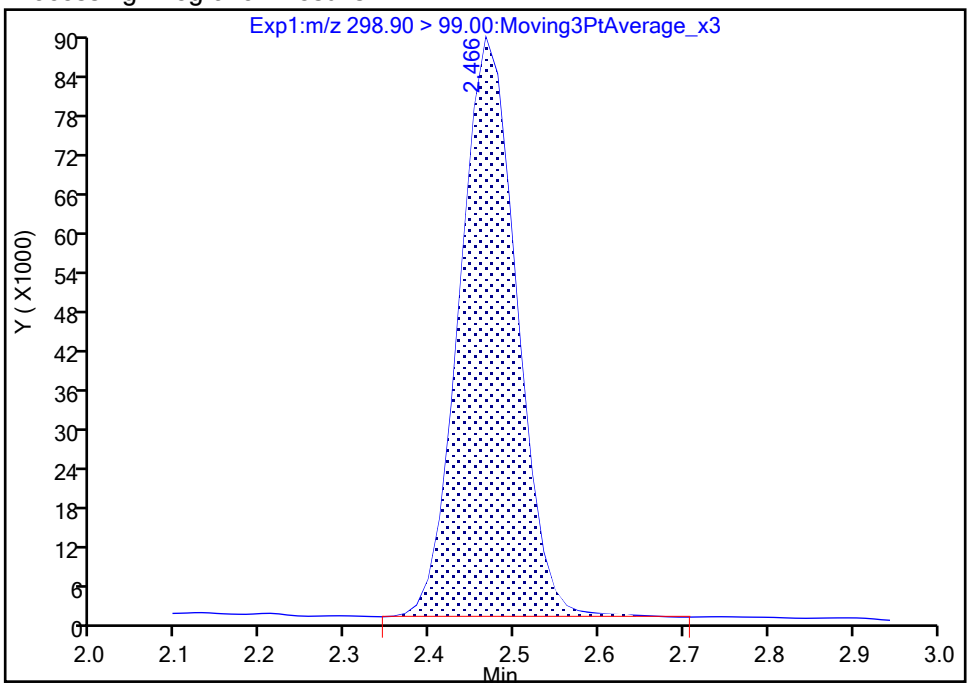
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

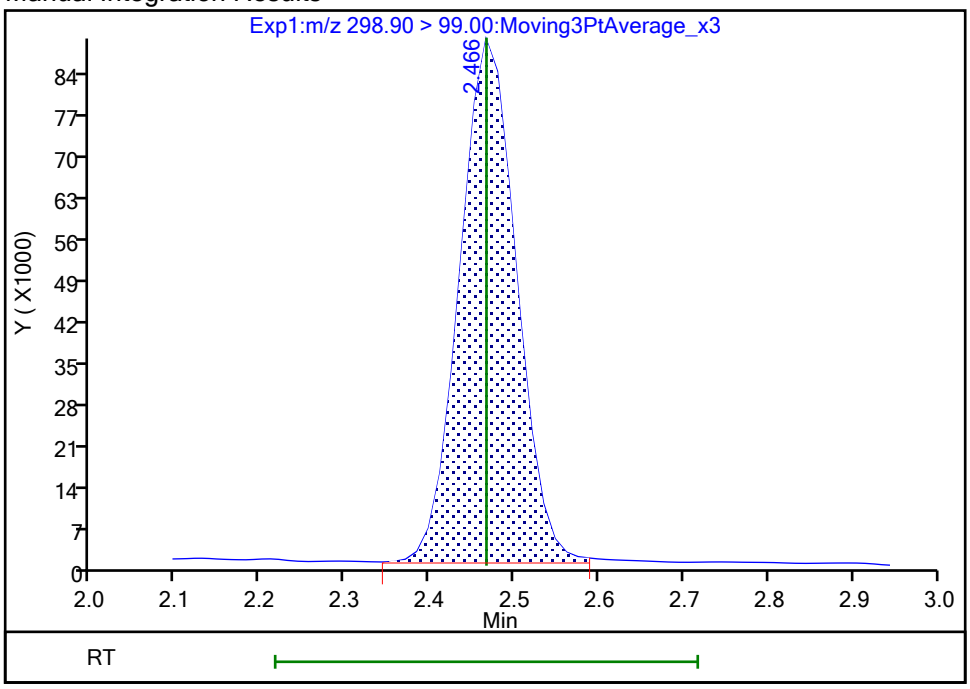
Processing Integration Results

RT: 2.47
Area: 415859
Amount: 0.454943
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 413997
Amount: 0.450016
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

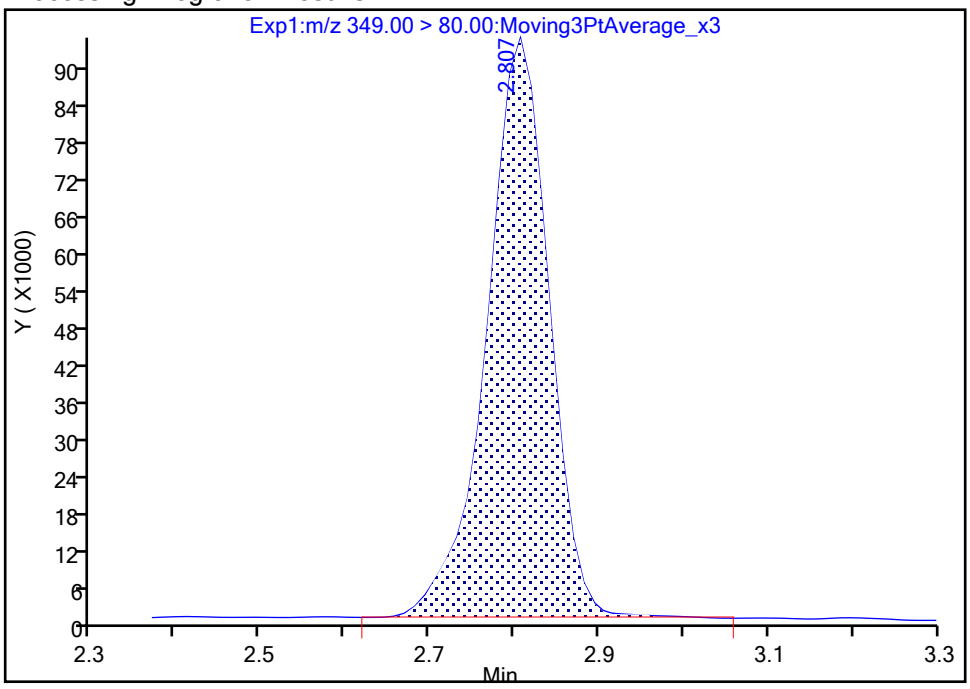
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

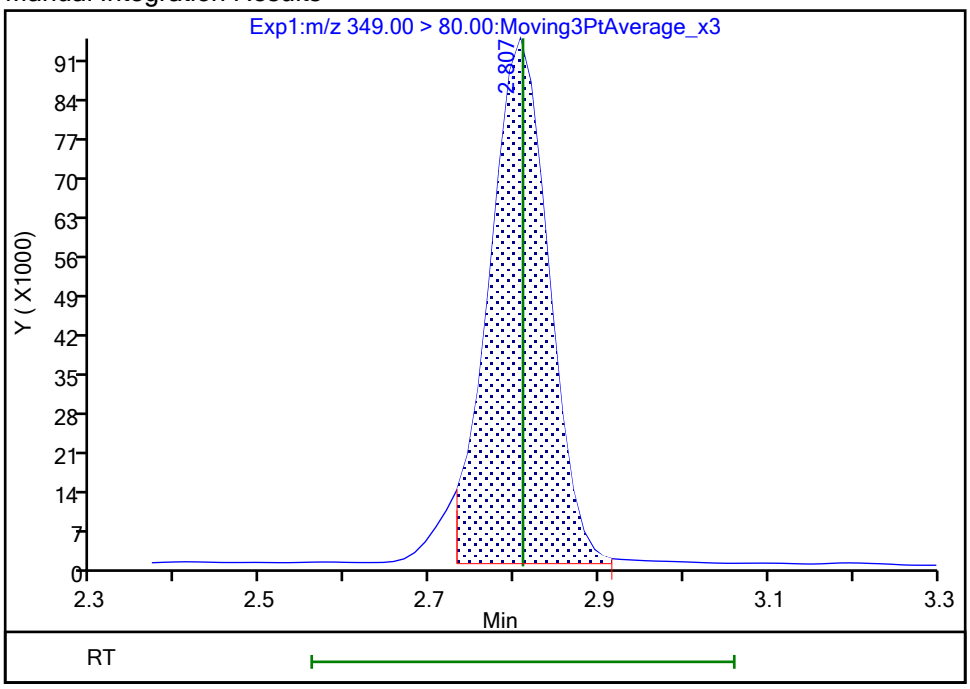
Processing Integration Results

RT: 2.81
Area: 481353
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 456933
Amount: 0.284203
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

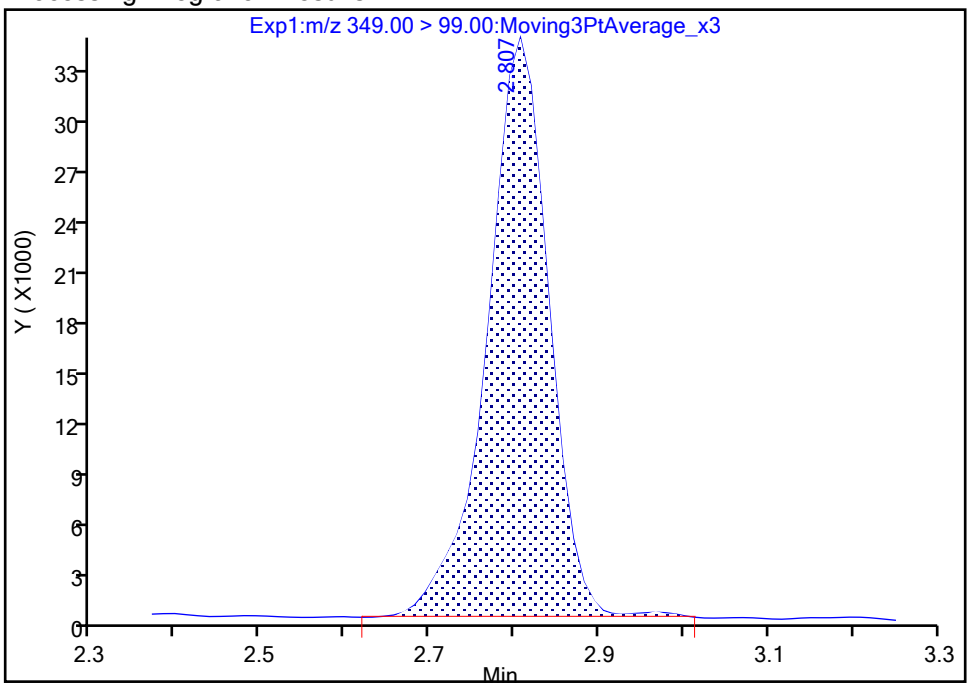
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

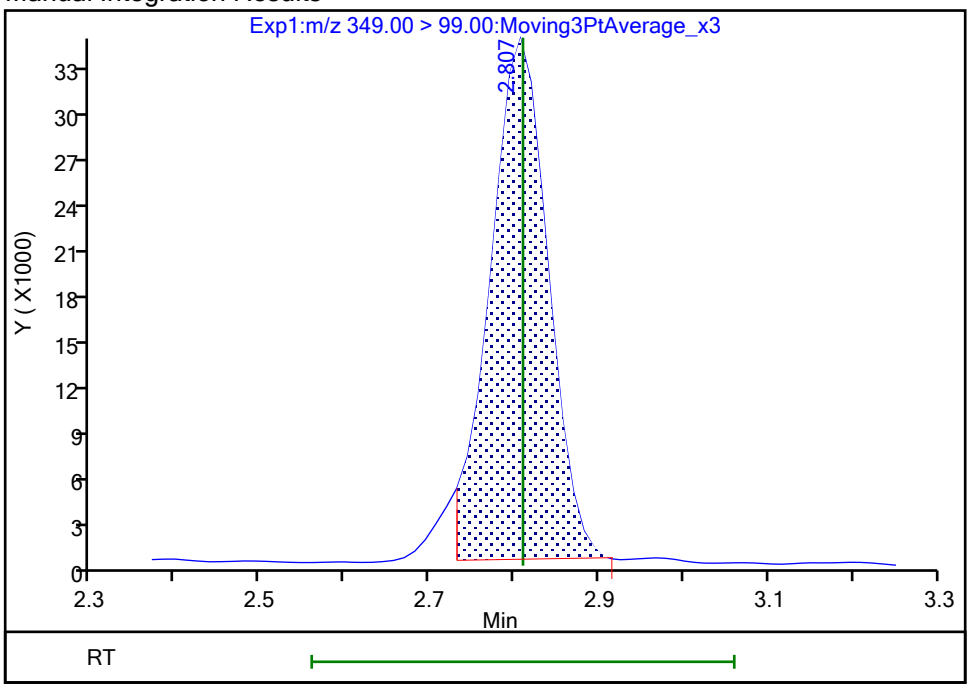
Processing Integration Results

RT: 2.81
Area: 173578
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 162042
Amount: 0.284203
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

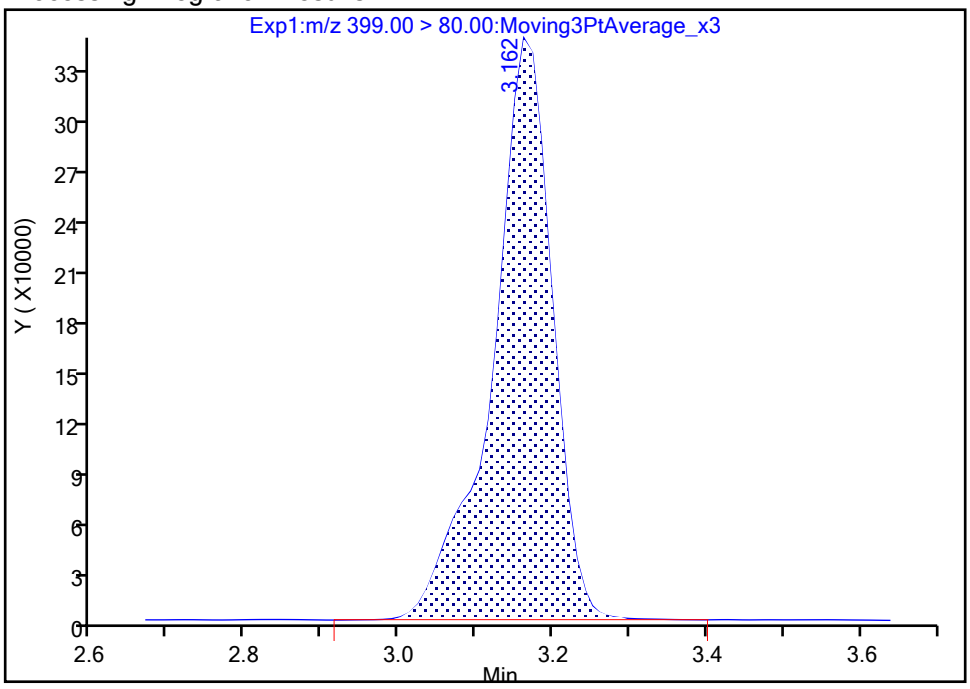
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

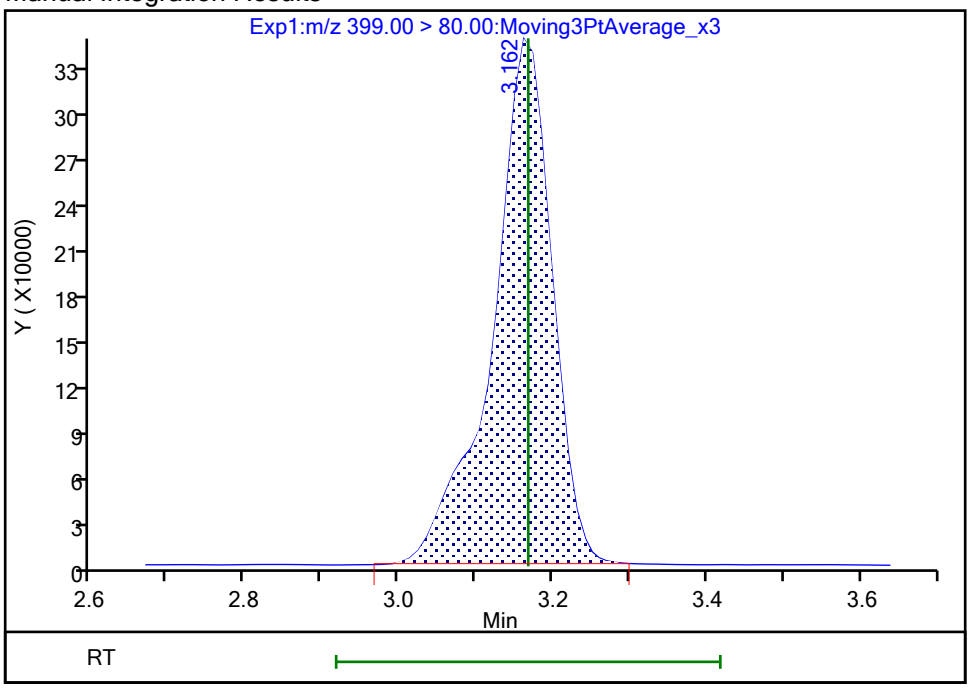
Processing Integration Results

RT: 3.16
Area: 1877992
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1864879
Amount: 1.368344
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

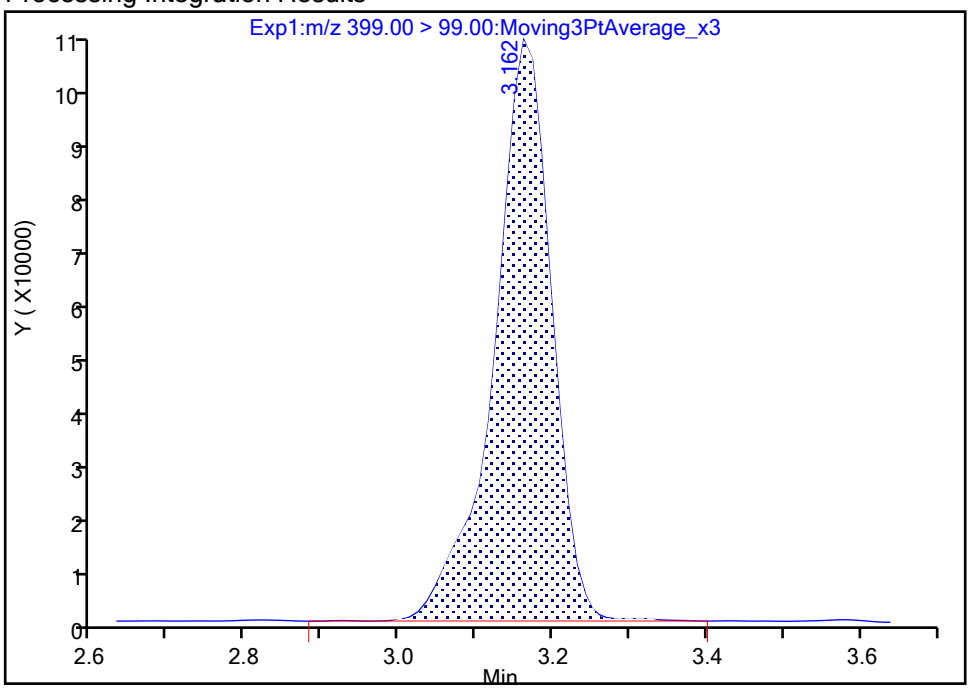
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

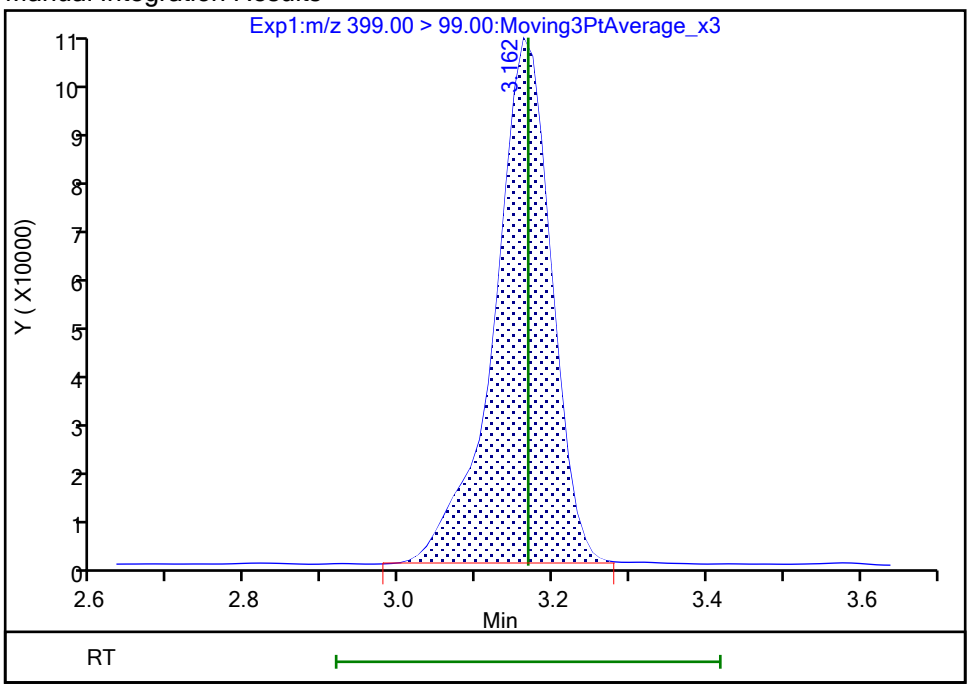
Processing Integration Results

RT: 3.16
Area: 530910
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 524229
Amount: 1.368344
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:27:44 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

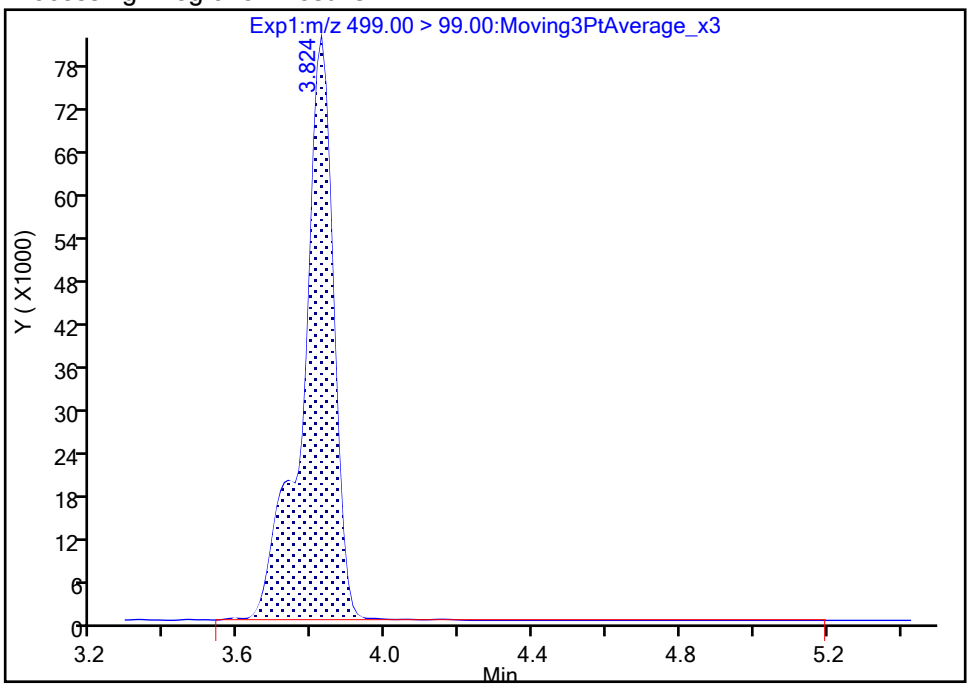
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

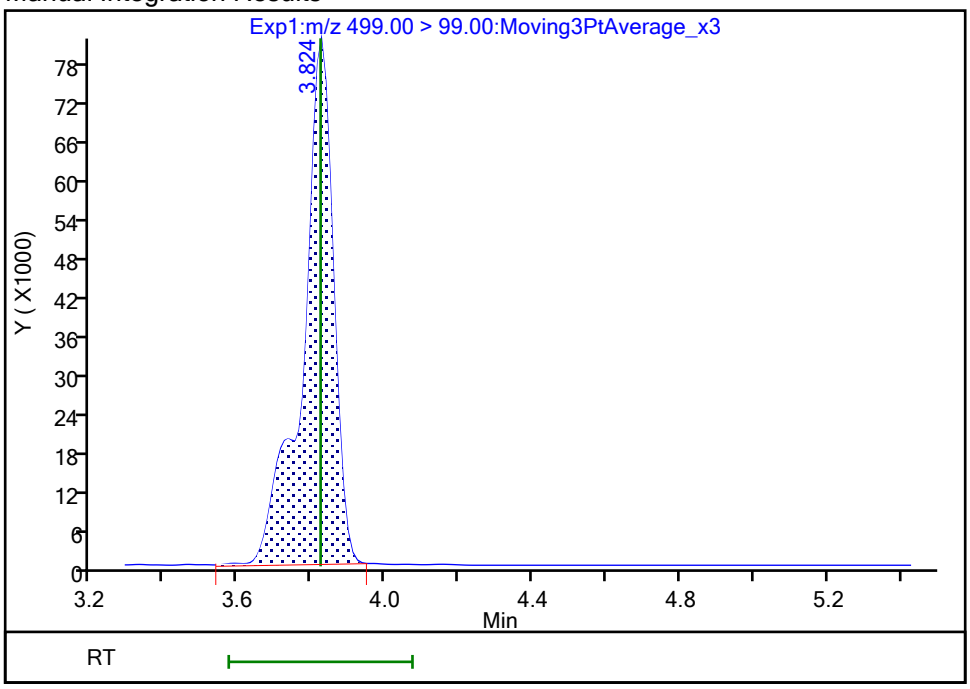
Processing Integration Results

RT: 3.82
Area: 476541
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 473223
Amount: 2.131743
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:28:26 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

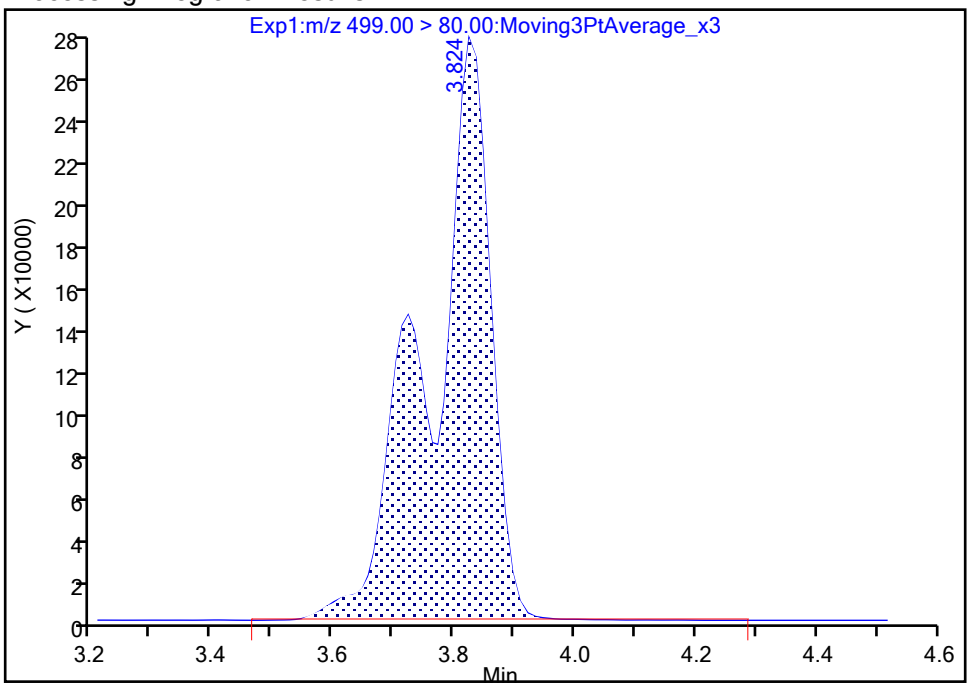
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

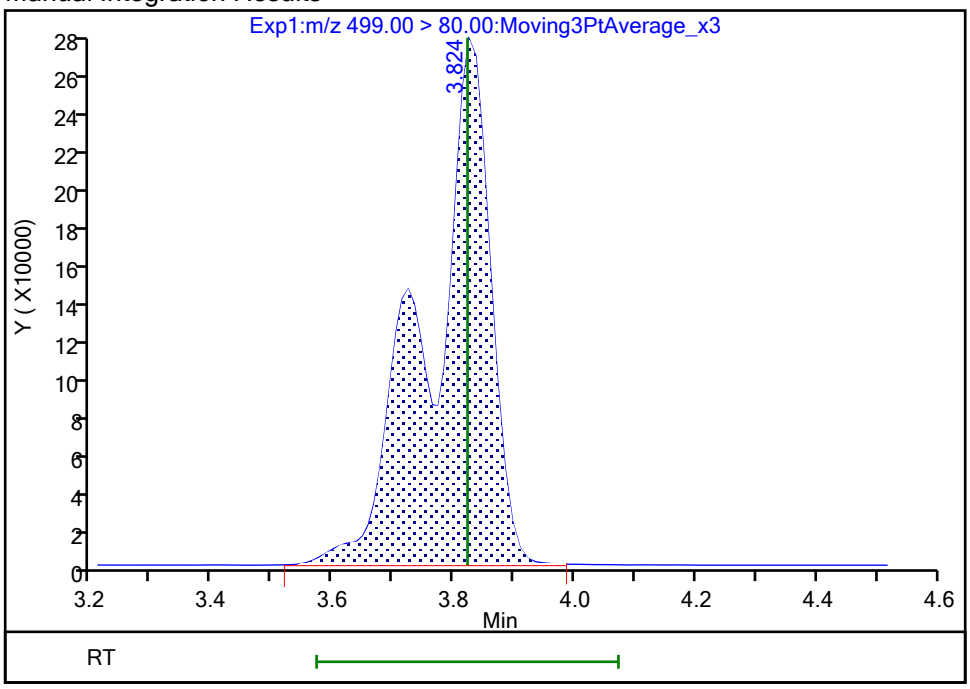
Processing Integration Results

RT: 3.82
Area: 1939888
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 3.82
Area: 1935059
Amount: 2.131743
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:28:27 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

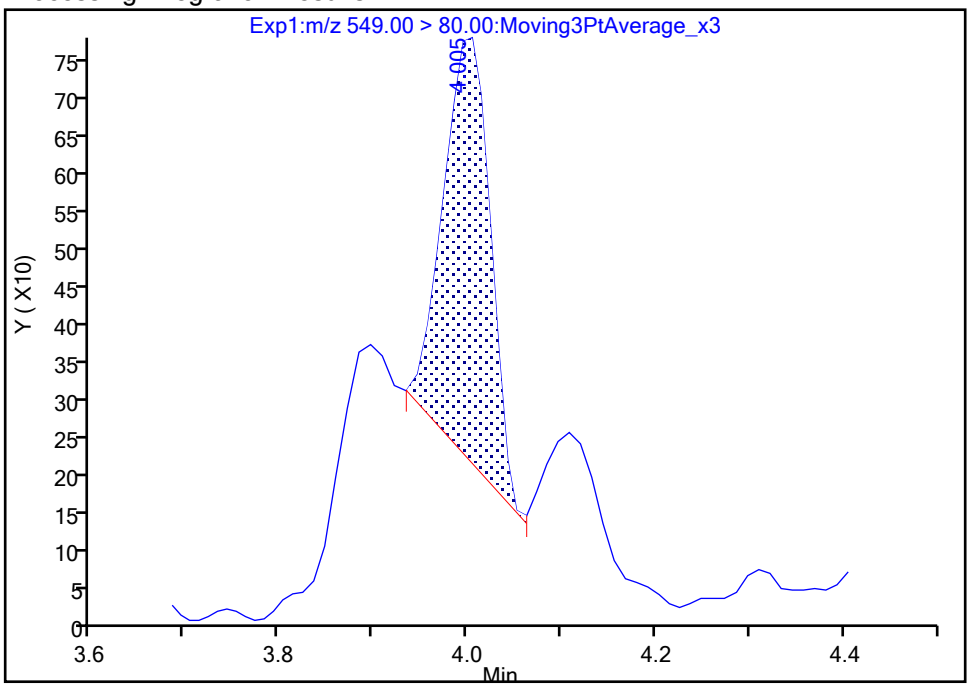
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

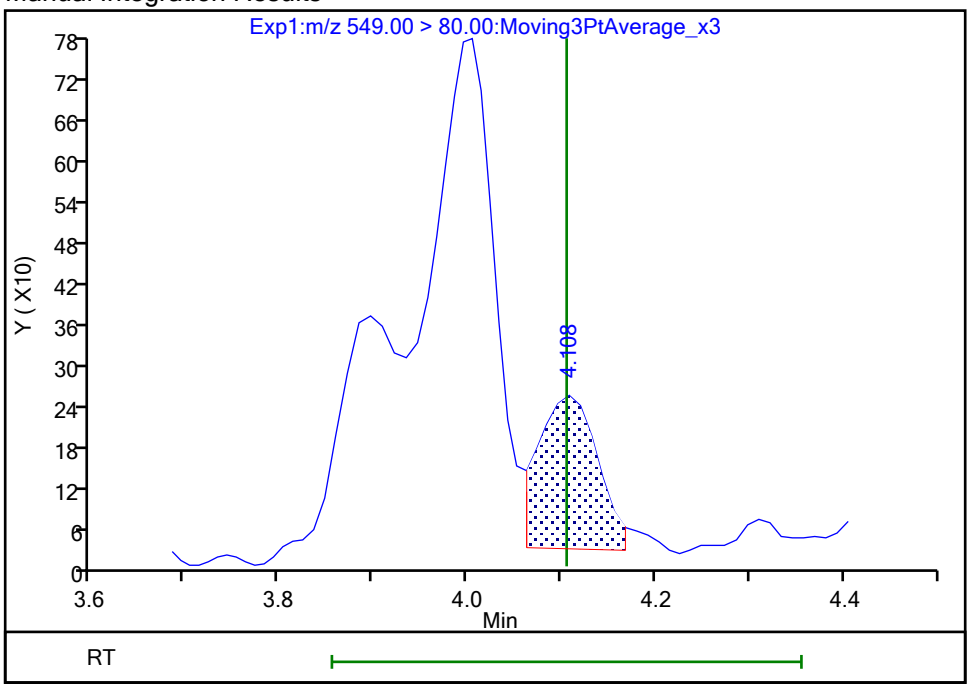
Processing Integration Results

RT: 4.00
Area: 1925
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 967
Amount: 0.001400
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:10 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

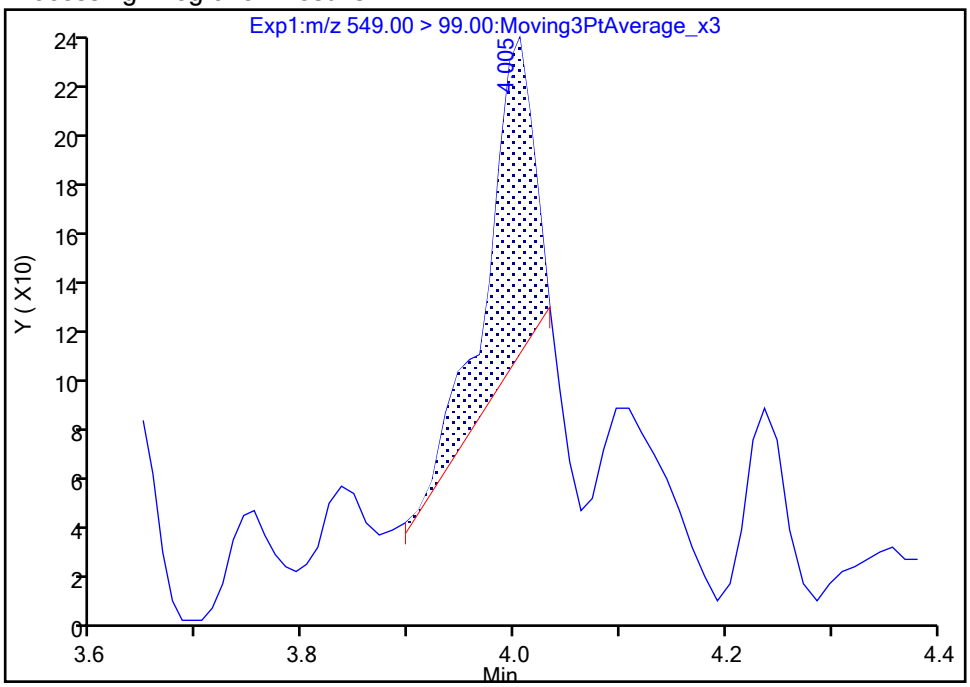
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

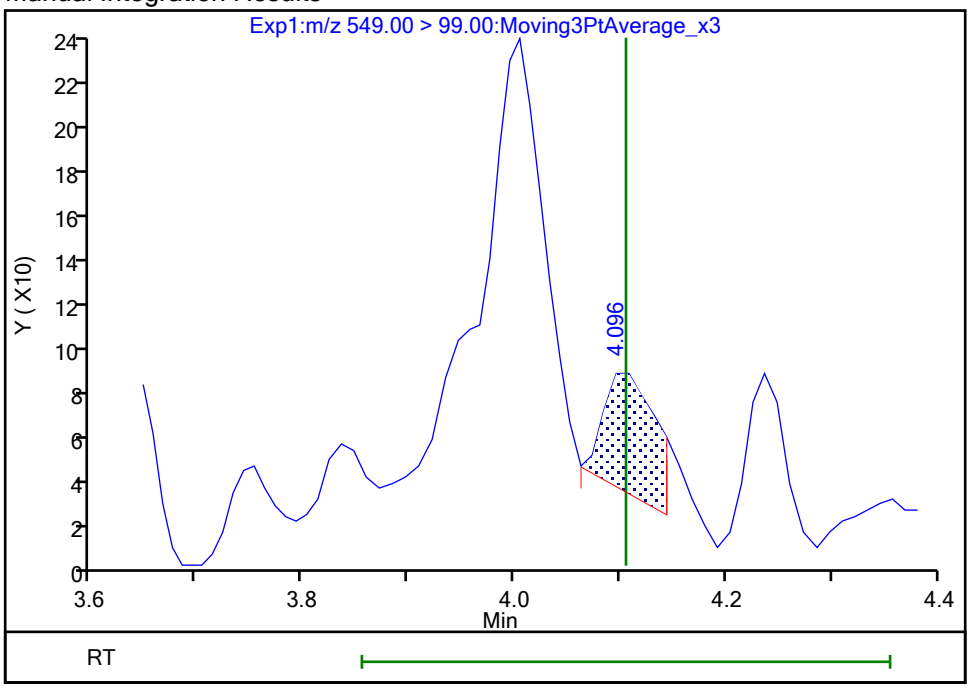
Processing Integration Results

RT: 4.00
Area: 385
Amount: 0
Amount Units: ng/ml



Manual Integration Results

RT: 4.10
Area: 178
Amount: 0.001400
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

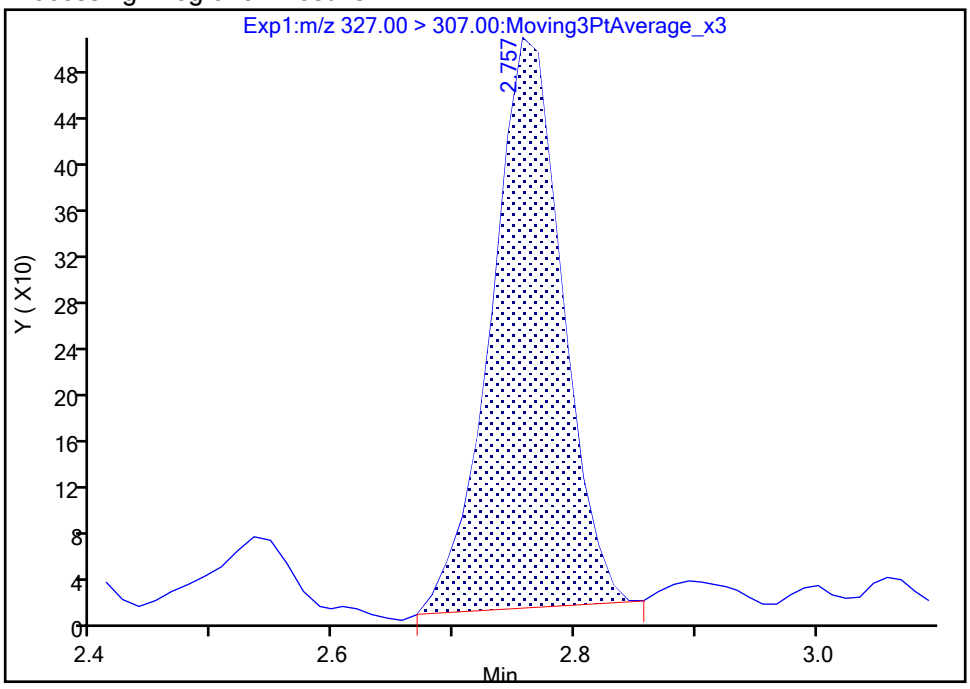
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

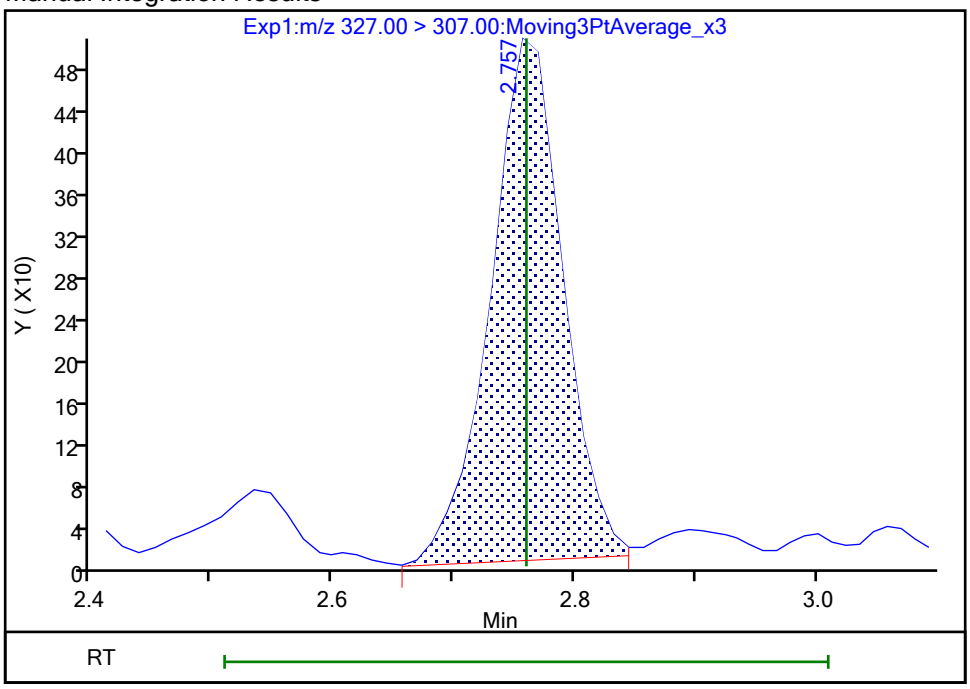
Processing Integration Results

RT: 2.76
Area: 2006
Amount: 0.003314
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 2074
Amount: 0.003426
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

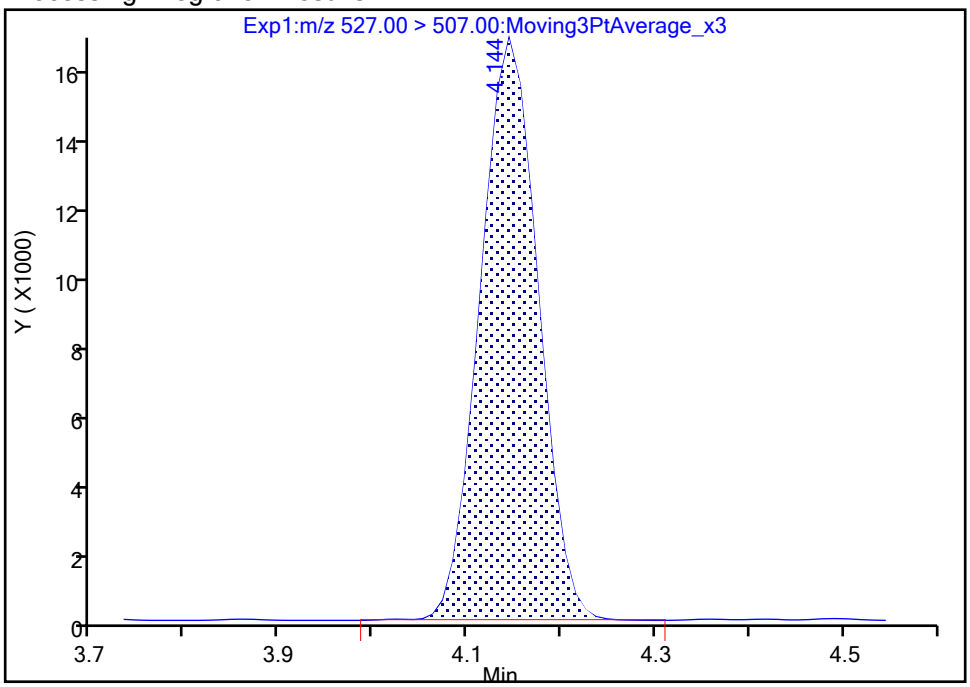
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

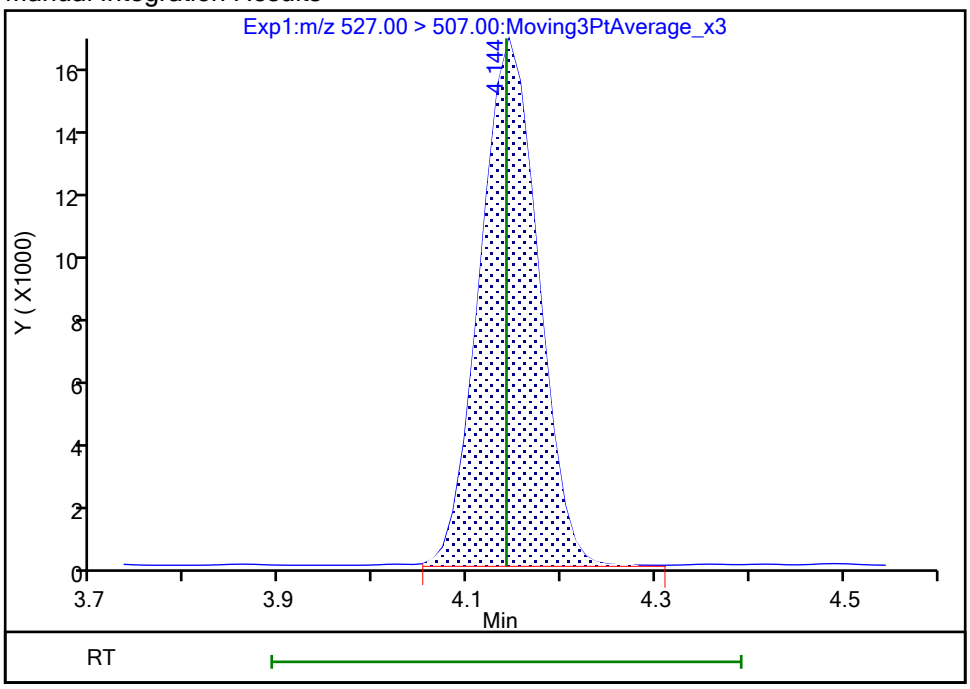
Processing Integration Results

RT: 4.14
Area: 73025
Amount: 0.133870
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 72930
Amount: 0.133696
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:38 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

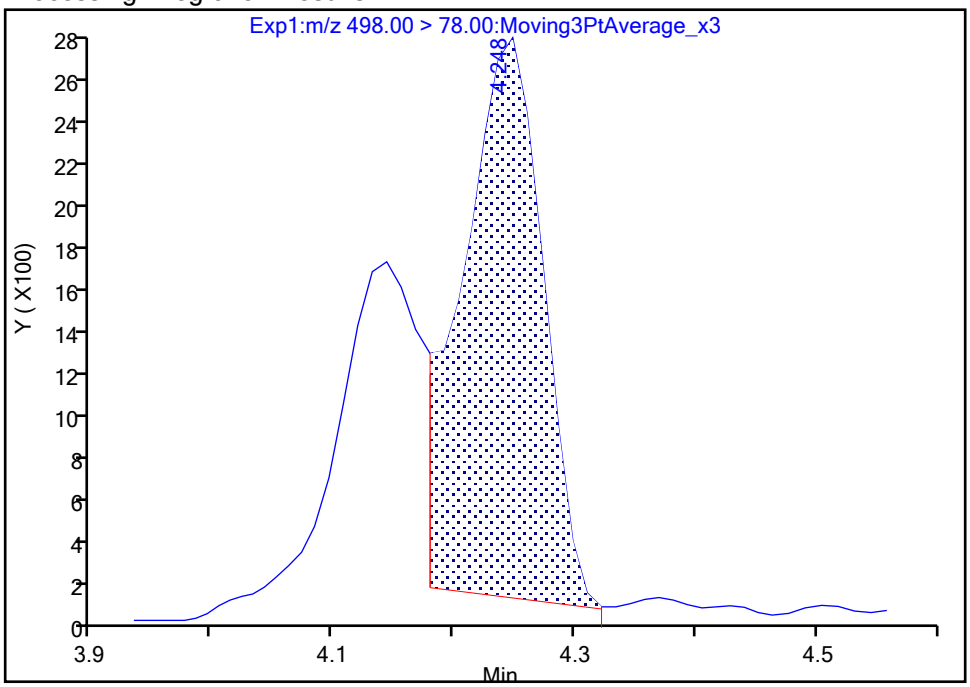
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

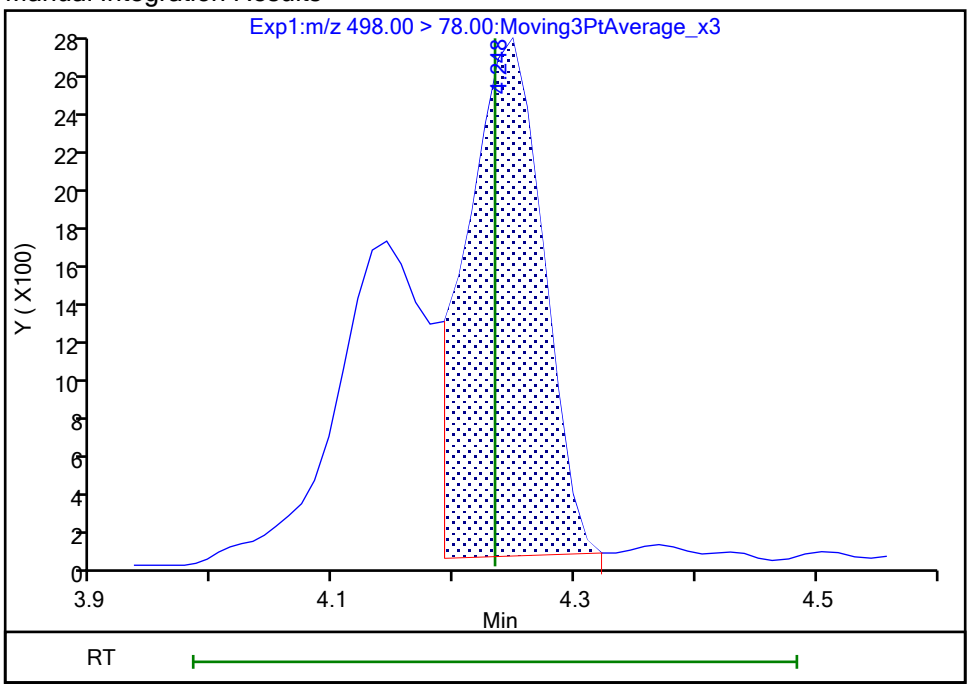
Processing Integration Results

RT: 4.25
Area: 12183
Amount: 0.008857
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 11760
Amount: 0.008550
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

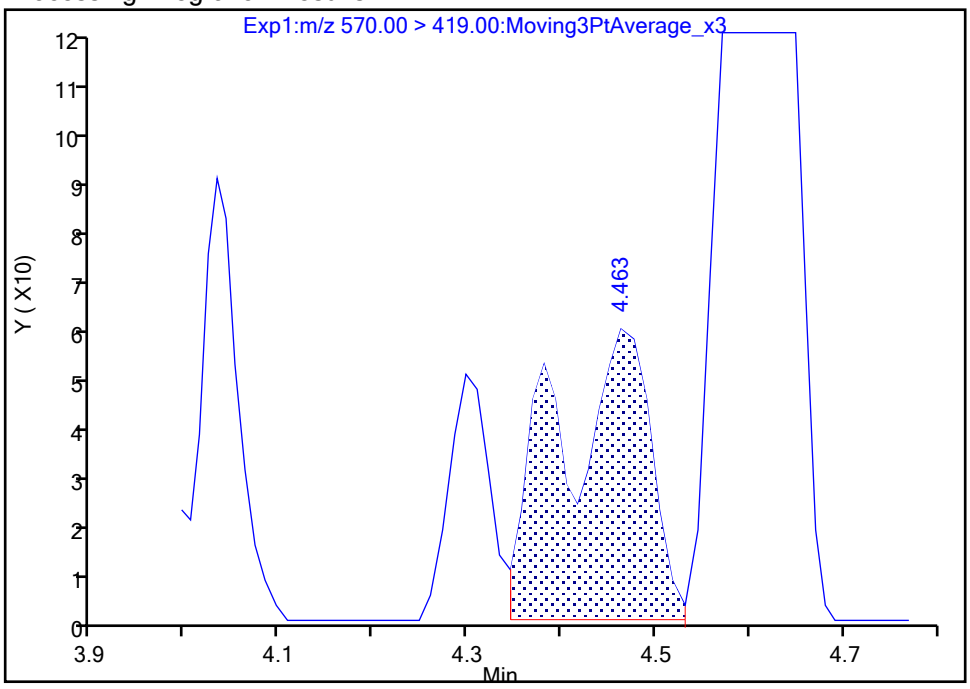
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

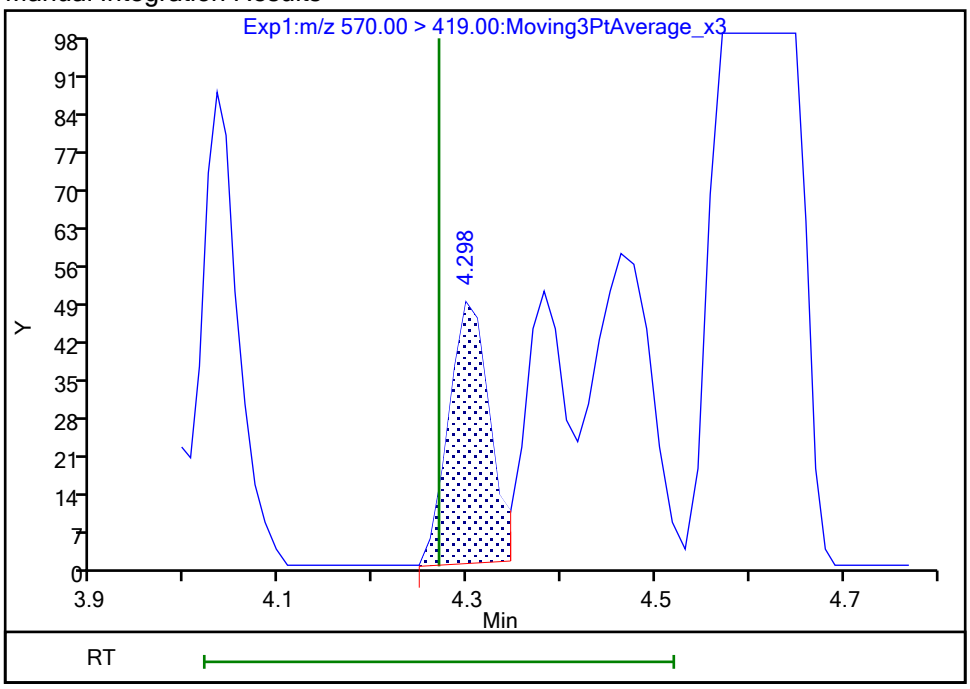
Processing Integration Results

RT: 4.46
Area: 390
Amount: 0.001047
Amount Units: ng/ml



Manual Integration Results

RT: 4.30
Area: 144
Amount: 0.000387
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:29:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

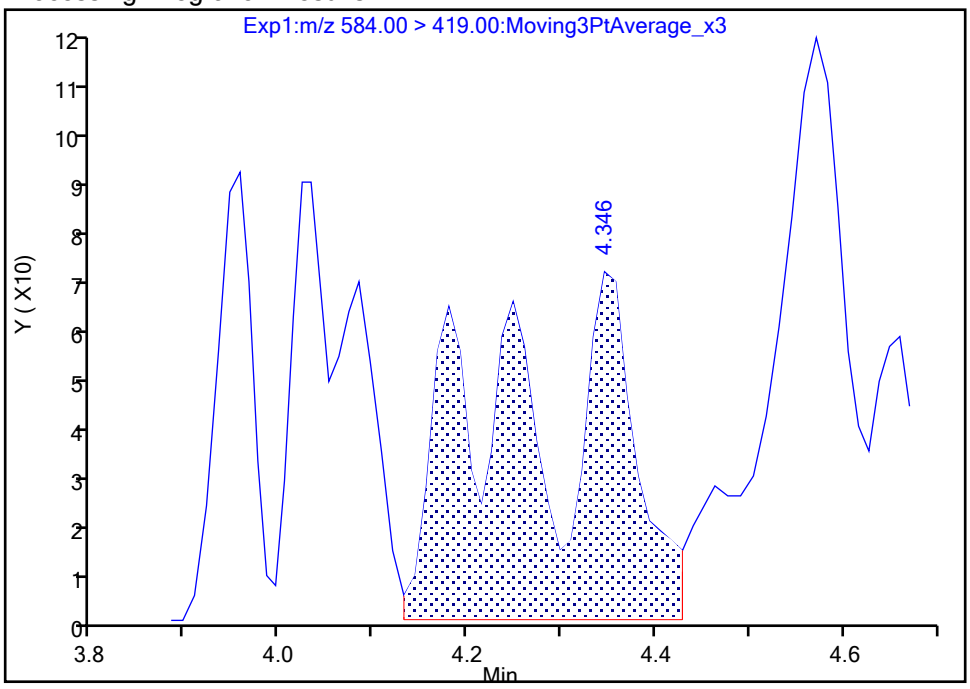
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

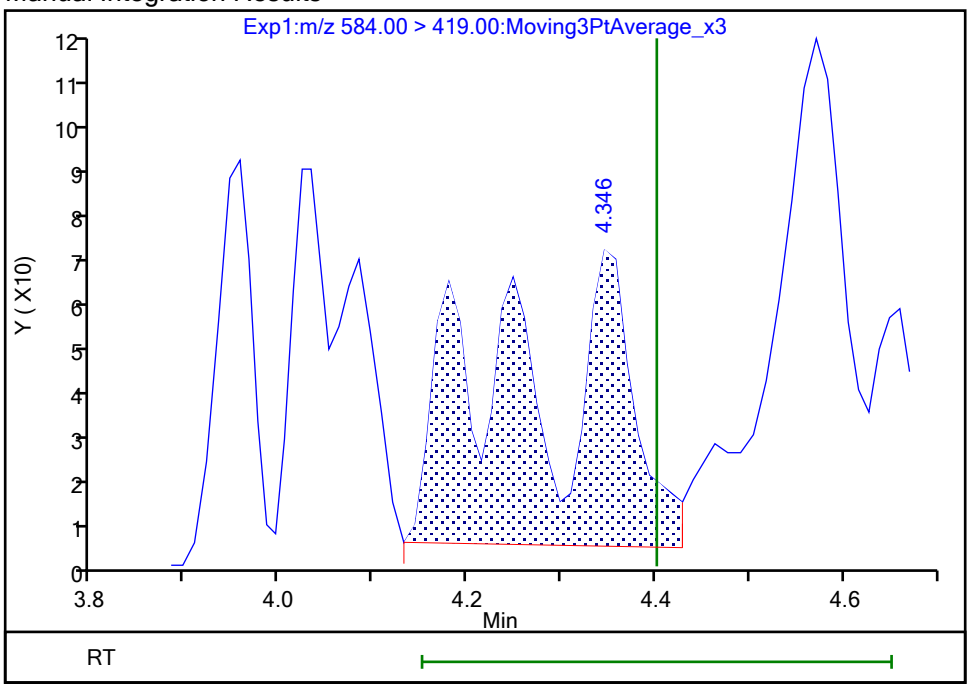
Processing Integration Results

RT: 4.35
Area: 657
Amount: 0.001622
Amount Units: ng/ml



Manual Integration Results

RT: 4.35
Area: 577
Amount: 0.001425
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:30:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

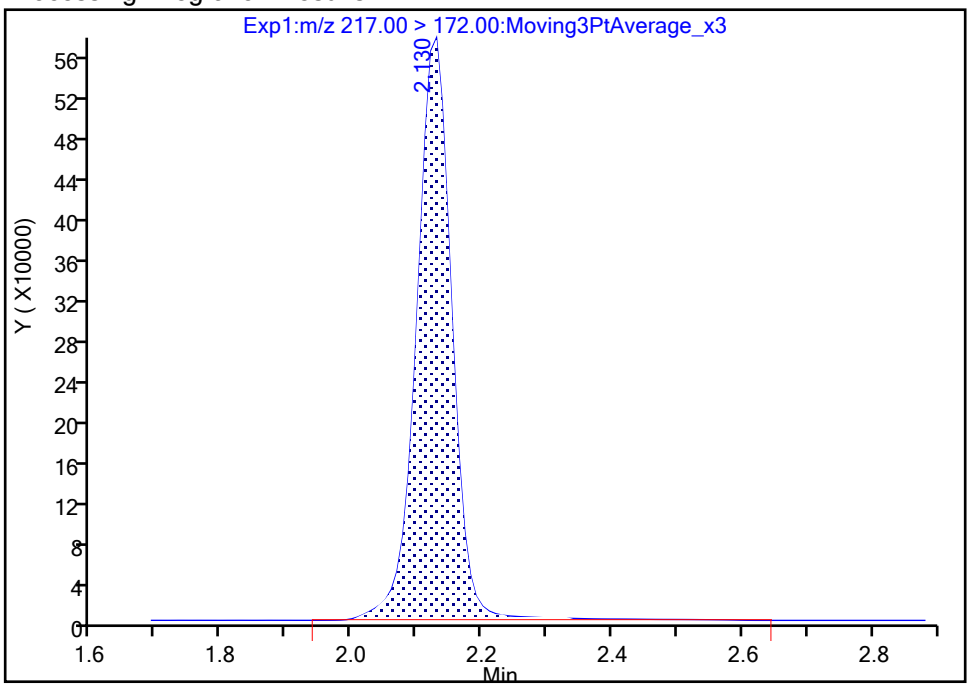
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

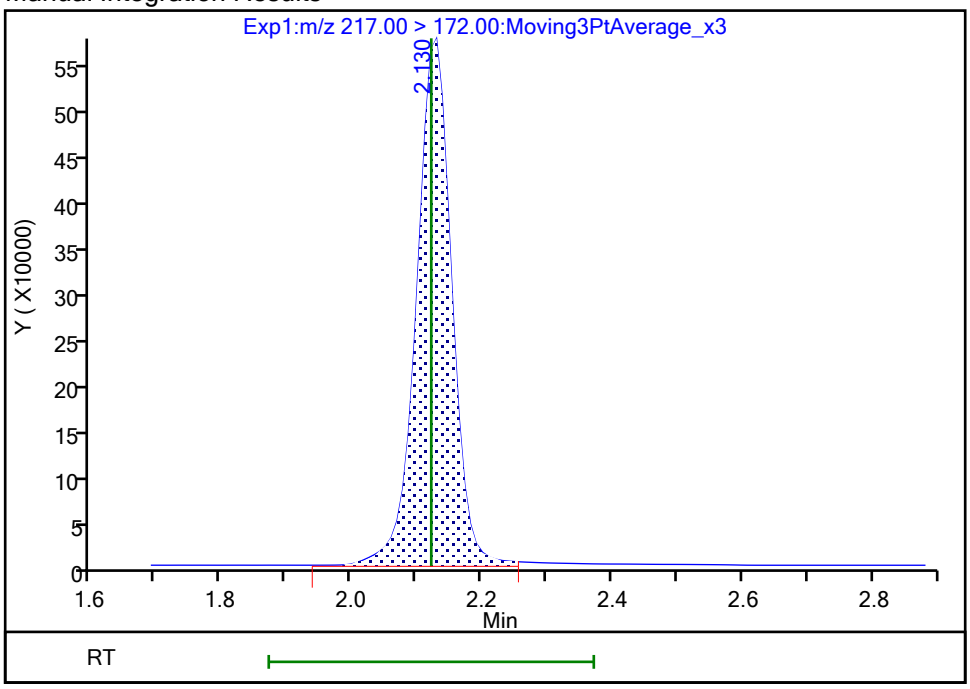
Processing Integration Results

RT: 2.13
Area: 2175989
Amount: 1.299971
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2146796
Amount: 1.282531
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:37 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

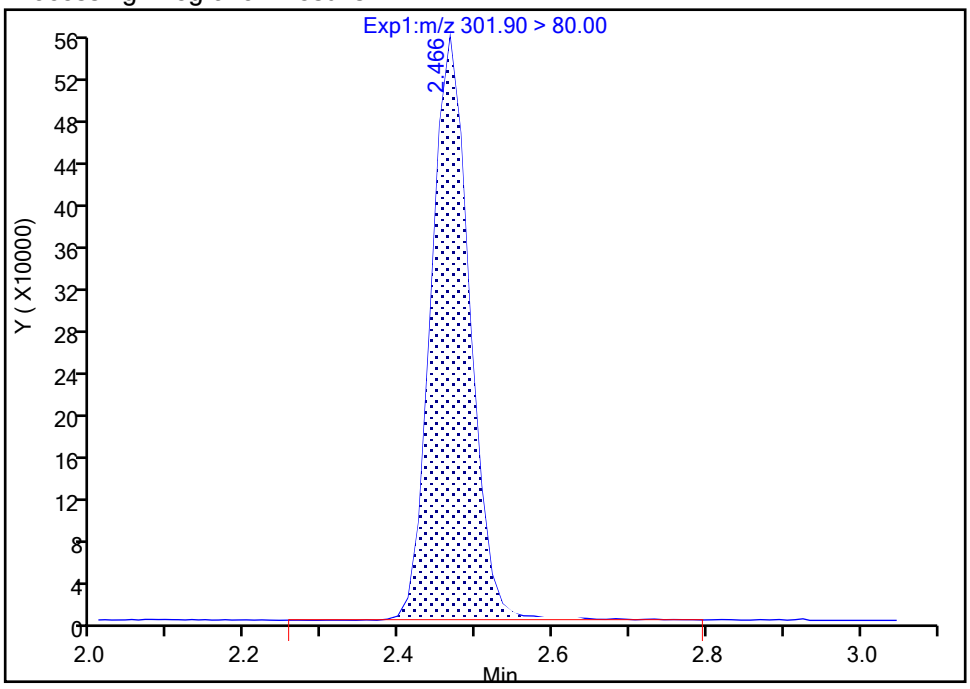
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

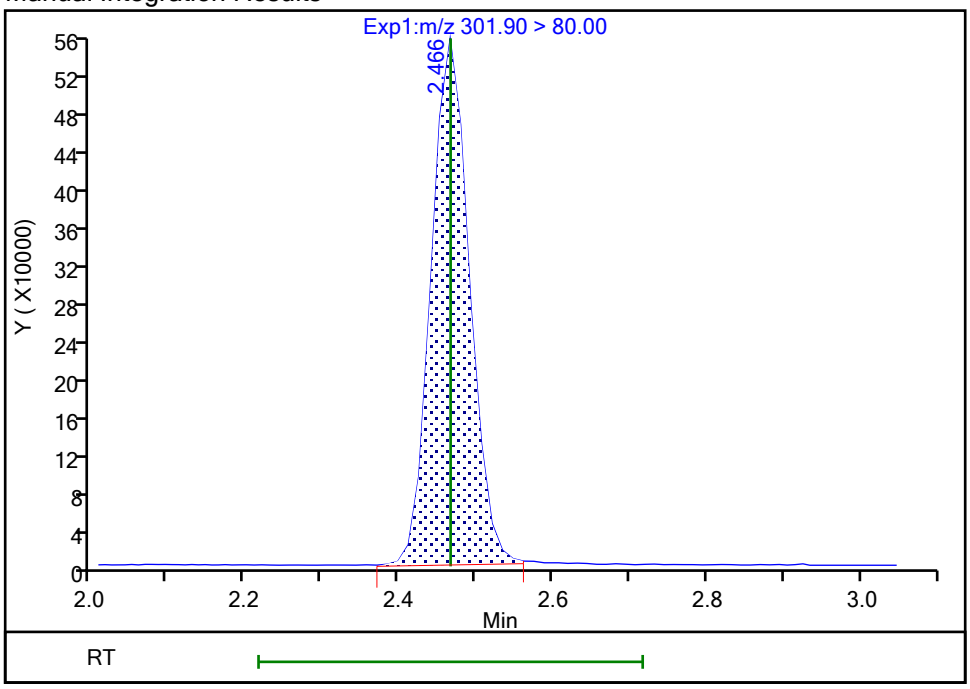
Processing Integration Results

RT: 2.47
Area: 1936156
Amount: 1.101512
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1914588
Amount: 1.089241
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

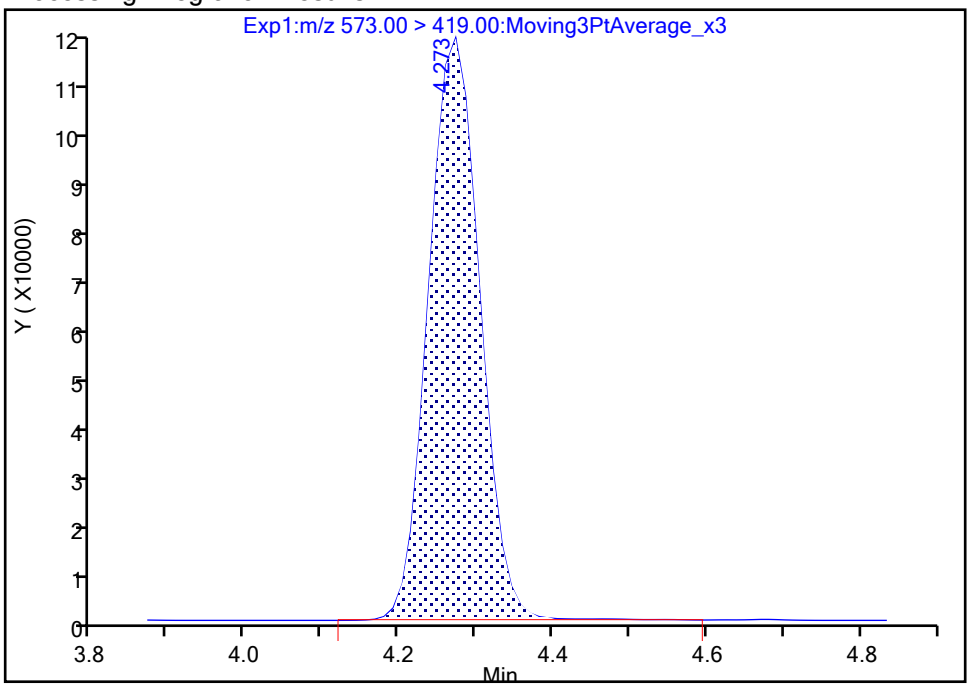
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

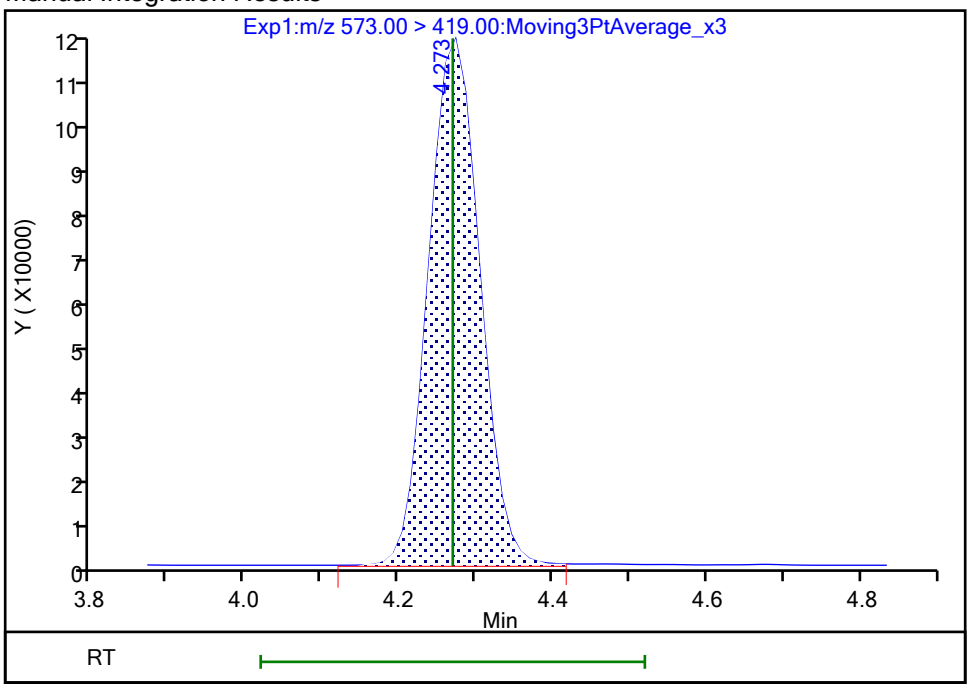
Processing Integration Results

RT: 4.27
Area: 514494
Amount: 1.150151
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 513019
Amount: 1.146854
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:26:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

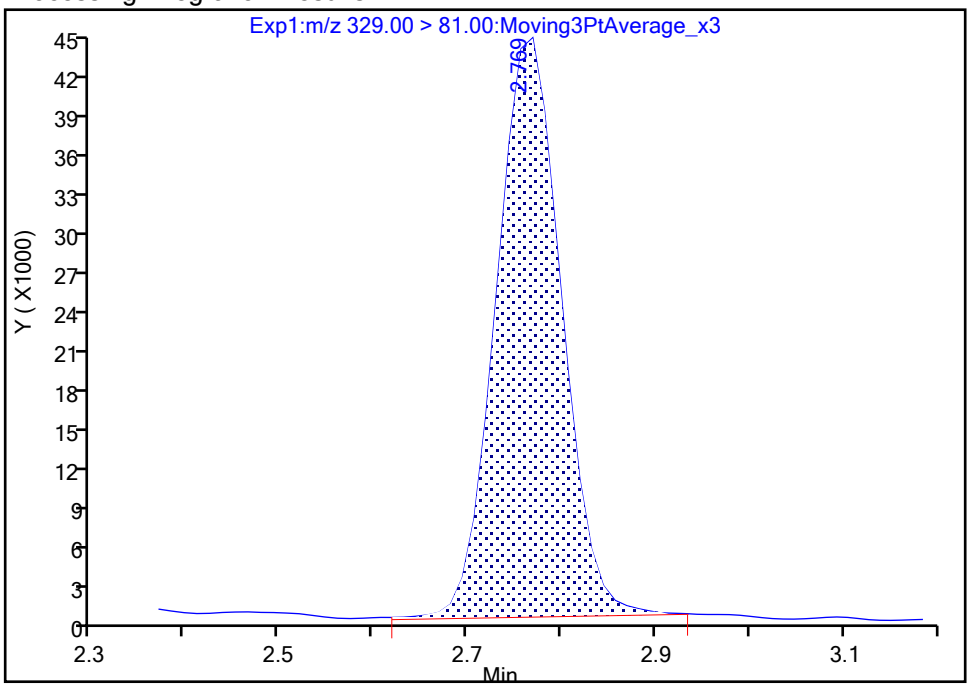
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E19.d				
Injection Date:	24-Oct-2023 08:32:56	Instrument ID:	LC812		
Lims ID:	460-290546-A-4-A	Lab Sample ID:	200-290546-4		
Client ID:	FDMH-4				
Operator ID:	LC812user	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

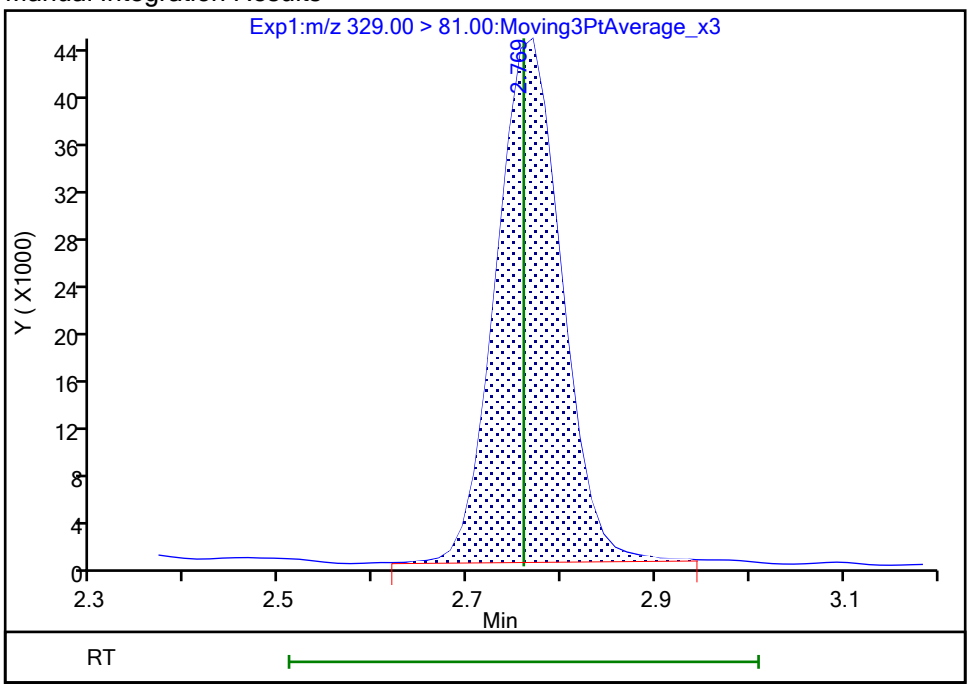
Processing Integration Results

RT: 2.77
Area: 209078
Amount: 1.028546
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 208115
Amount: 1.023809
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 10:25:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid	1.6524 0.9526	1.2498 0.8290	1.0107	0.9321	0.9433	L2ID	0.0370	0.9043							0.9970		0.9900
Perfluoropentanoic acid	0.9814 1.1023	1.2167 0.9980	1.0808	1.1330	1.0416	AveID		1.0791				7.6		20.0			
Perfluorobutanesulfonic acid	1.1612 1.1003	1.1884 0.9103	1.1783	1.1604	1.1195	AveID		1.1169				8.6		20.0			
4:2 Fluorotelomer sulfonic acid	3.4184 3.3656	3.9768 3.1033	3.3451	3.2188	3.3429	AveID		3.3958				8.2		20.0			
Perfluorohexanoic acid	1.1882 1.0691	1.1566 1.0070	1.1410	1.0537	1.0877	AveID		1.1005				5.8		20.0			
Perfluoropentanesulfonic acid	1.4845 1.2935	1.4521 1.1291	1.2900	1.2829	1.2091	AveID		1.3059				9.6		20.0			
HFPODA	0.9814 0.9865	1.0329 1.0173	1.0323	0.9948	0.9631	AveID		1.0012				2.7		20.0			
Perfluorohexanesulfonic acid	1.2928 1.0776	1.1776 1.0324	1.0608	1.0404	1.0673	AveID		1.1070				8.6		20.0			
Perfluoroheptanoic acid	1.2326 1.1236	1.2826 0.9928	1.0542	1.0768	1.0835	AveID		1.1209				9.1		20.0			
DONA	6.2912 5.4323	5.8563 +++++	5.6532	5.8591	5.4332	AveID		5.7542				5.6		20.0			
Perfluoroheptanesulfonic acid	1.5386 1.5214	1.4429 1.3749	1.4126	1.3983	1.4277	AveID		1.4452				4.3		20.0			
6:2 Fluorotelomer sulfonic acid	3.0797 2.6772	2.9248 2.3586	2.8187	2.5735	2.6999	AveID		2.7332				8.6		20.0			
Perfluorooctanoic acid	1.2162 0.9982	1.1278 1.0173	1.0470	1.0322	1.0174	AveID		1.0651				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid	1.2942 1.1749	1.2075 1.1201	1.1227	1.1283	1.1172	AveID		1.1664				5.6		20.0			
Perfluorononanoic acid	1.0909 0.9315	1.0135 0.8900	0.9991	0.9692	0.9662	AveID		0.9800				6.5		20.0			
9Cl-PF3ONS	4.1020 3.5800	3.6236 2.9351	3.5909	3.5582	3.5944	AveID		3.5692				9.5		20.0			
Perfluorononanesulfonic acid	0.9328 0.9318	0.8683 0.8687	0.8784	0.8769	0.8548	AveID		0.8874				3.6		20.0			
Perfluorodecanoic acid	1.0281 0.9602	1.0154 0.8863	1.0541	1.0439	1.0074	AveID		0.9994				5.8		20.0			
8:2 Fluorotelomer sulfonic acid	2.4547 2.0072	2.6137 1.8970	2.2575	2.0908	2.0894	AveID		2.2015				11.6		20.0			
Perfluorooctanesulfonamide	1.0228 0.9436	0.9703 0.8970	0.9494	0.9521	0.9419	AveID		0.9539				4.0		20.0			
NMeFOSAA	0.9443 0.8812	0.9804 0.8681	0.9111	0.8934	0.8734	AveID		0.9074				4.6		20.0			
Perfluorodecanesulfonic acid	0.7041 0.7196	0.6658 0.6468	0.6593	0.6839	0.7012	AveID		0.6830				3.9		20.0			
Perfluoroundecanoic acid	1.0537 0.9843	1.1393 0.9061	1.0315	1.0530	1.0465	AveID		1.0306				6.9		20.0			
N-ethylperfluorooctanesulfonamidoacetic acid	1.2597 0.9339	1.0412 0.9751	0.9527	0.9331	0.9057	AveID		1.0002				12.2		20.0			
11Cl-PF3OUdS	6.1952 4.9604	5.5951 +++++	5.4392	5.5008	5.1507	AveID		5.4735				7.8		20.0			
Perfluorododecanoic acid	1.1479 1.0203	1.0537 0.8606	1.0533	0.9749	1.0139	AveID		1.0178				8.6		20.0			
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	1.4856 1.2641	1.3967 1.2755	1.3186	1.2286	1.2426	AveID		1.3160				7.1		20.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2394 0.2329	0.2672 0.2134	0.2319	0.2233	0.2121	AveID		0.2315				8.1		20.0			
Perfluorotridecanoic acid	1.2114 1.0324	1.0619 0.8831	1.1223	1.0731	1.1045	AveID		1.0698				9.4		20.0			
Perfluorotetradecanoic acid	0.1299 0.1049	0.1180 0.1087	0.1103	0.1048	0.1060	AveID		0.1118				8.2		20.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.1830 0.9749	1.1040 0.8219	0.9746	0.9651	0.9768	AveID		1.0000				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoro-n-octadecanoic acid (PFODA)	0.8629 0.7648	0.8634 0.6721	0.7865	0.8020	0.7147	AveI n		0.7809				9.1		20.0			
13C4 PFBA	1.0672 0.9509	0.9641 0.9862	0.9676	0.9942	1.0117	Ave		0.9917				3.9		50.0			
13C5 PFPeA	0.8654 0.7385	0.7296 0.7399	0.7610	0.7877	0.7652	Ave		0.7696				6.1		50.0			
13C3 PFBS	1.0756 1.0192	0.9876 1.1612	0.9549	1.0294	1.0615	Ave		1.0413				6.4		50.0			
M2-4:2 FTS	0.1343 0.1194	0.1086 0.1243	0.1164	0.1216	0.1185	Ave		0.1204				6.5		50.0			
13C2 PFHxA	0.8778 0.7694	0.7838 0.7387	0.7436	0.7956	0.7718	Ave		0.7830				5.9		50.0			
13C3 HFPO-DA	0.1643 0.1519	0.1501 0.1535	0.1409	0.1528	0.1474	Ave		0.1516				4.7		50.0			
18O2 PFHxS	0.7448 0.7507	0.6904 0.8129	0.7226	0.7607	0.7427	Ave		0.7464				5.0		50.0			
13C4 PFHpA	0.8886 0.8385	0.8151 0.8749	0.8445	0.8653	0.8858	Ave		0.8590				3.2		50.0			
M2-6:2 FTS	0.1544 0.1505	0.1511 0.1604	0.1460	0.1626	0.1607	Ave		0.1551				4.0		50.0			
13C4 PFOA	0.9601 0.9669	0.9919 0.9091	0.9657	0.9965	1.0218	Ave		0.9731				3.7		50.0			
13C4 PFOS	0.4674 0.4580	0.4521 0.5077	0.4662	0.4873	0.4807	Ave		0.4742				4.0		50.0			
13C5 PFNA	1.1059 1.0804	0.9837 1.0672	1.0142	1.1040	1.0572	Ave		1.0590				4.3		50.0			
13C2 PFDA	1.1803 1.1318	1.0494 1.1115	1.0411	1.0951	1.1528	Ave		1.1089				4.6		50.0			
M2-8:2 FTS	0.1812 0.1848	0.1605 0.1855	0.1573	0.1785	0.1730	Ave		0.1744				6.5		50.0			
13C8 FOSA	0.8923 0.9862	0.9301 0.9872	0.9041	0.9724	0.9514	Ave		0.9462				4.1		50.0			
d3-NMeFOSAA	0.2790 0.2660	0.2549 0.2833	0.2456	0.2672	0.2590	Ave		0.2650				5.0		50.0			
13C2 PFUnA	1.1562 1.0399	0.9889 1.0045	1.0013	1.0578	1.0784	Ave		1.0467				5.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
d5-NEtFOSAA	0.2684 0.2609	0.2442 0.2414	0.2482	0.2513	0.2718	Ave		0.2552				4.7		50.0			
13C2 PFDoA	1.0873 1.0291	1.0666 1.1188	1.0211	1.0940	1.0303	Ave		1.0639				3.6		50.0			
13C2 PFTeDA	1.0903 1.0729	1.0314 1.0760	1.0078	1.0703	1.0665	Ave		1.0593				2.7		50.0			
13C2 PFHxDA	1.3133 1.1726	1.1714 1.2858	1.1658	1.2481	1.1872	Ave		1.2206				5.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-193912/5	PA230726ICAL05.d
Level 2	IC 200-193912/6	PA230726ICAL06.d
Level 3	IC 200-193912/7	PA230726ICAL07.d
Level 4	ICISAV 200-193912/8	PA230726ICAL08.d
Level 5	IC 200-193912/9	PA230726ICAL09.d
Level 6	IC 200-193912/10	PA230726ICAL10.d
Level 7	IC 200-193912/11	PA230726ICAL11.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid		L2ID	148954 12675387	192635 29150051	774804	1439078	3820872	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanoic acid		AveID	71742 11390973	141937 26331175	651716	1385943	3191311	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorobutanesulfonic acid		AveID	93584 13919716	166434 33432260	790713	1645342	4220392	0.0444 8.87	0.0887 22.2	0.444	0.887	2.22
4:2 Fluorotelomer sulfonic acid		AveID	36330 5267048	64699 12889559	288946	569311	1486720	0.0469 9.37	0.0937 23.4	0.469	0.937	2.34
Perfluorohexanoic acid		AveID	88105 11510430	144941 26521589	672203	1301870	3361171	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoropentanesulfonic acid		AveID	87889 12787110	150824 30796216	694967	1426185	3383549	0.0471 9.41	0.0941 23.5	0.471	0.941	2.35
HFPODA		AveID	13619 2096317	24788 5568235	115257	235976	568553	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorohexanesulfonic acid		AveID	74343 10346652	118807 27349473	555092	1123331	2901162	0.0457 9.14	0.0914 22.9	0.457	0.914	2.29
Perfluoroheptanoic acid		AveID	92528 13183148	167142 30971904	705383	1446925	3843212	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
DONA		AveID	234702 32898209	400019 +++++	1973200	4190396	9881253	0.0473 9.45	0.0945 +++++	0.473	0.945	2.36
Perfluoroheptanesulfonic acid		AveID	57887 9291673	99394 23718890	497245	1008539	2618603	0.0477 9.53	0.0953 23.8	0.477	0.953	2.38
6:2 Fluorotelomer sulfonic acid		AveID	38205 5360896	67191 12827492	310157	618135	1652144	0.0476 9.51	0.0951 23.8	0.476	0.951	2.38
Perfluorooctanoic acid		AveID	98642 13504480	178853 32974345	801060	1597361	4162515	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorooctanesulfonic acid		AveID	47415 6987392	80998 18816206	384806	792430	1995347	0.0464 9.28	0.0928 23.2	0.464	0.928	2.32
Perfluorononanoic acid		AveID	101909 14082035	159396 33868175	802848	1661649	4090183	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
9Cl-PF3ONS		AveID	151088	244371	1237458	2512476	6453976	0.0467	0.0933	0.467	0.933	2.33

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21405197	49573864				9.33	23.3			
Perfluorononanesulfonic acid		AveID	35424 5744699	60375 15127922	312103	638462	1582540	0.0481 9.62	0.0962 24.1	0.481	0.962	2.41
Perfluorodecanoic acid		AveID	102502 15207258	170377 35125264	869526	1775242	4650088	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
8:2 Fluorotelomer sulfonic acid		AveID	36060 4983035	64388 12048759	270156	556332	1389051	0.0480 9.60	0.0960 24.0	0.480	0.960	2.40
Perfluorooctanesulfonamide		AveID	77087 13020569	144294 31572610	680067	1437750	3587757	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
NMeFOSAA		AveID	22256 3280076	39956 8770277	177278	370720	905881	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorodecanesulfonic acid		AveID	26824 4450137	46440 11299421	234996	499466	1302171	0.0483 9.65	0.0965 24.1	0.483	0.965	2.41
Perfluoroundecanoic acid		AveID	102917 14323125	180134 32455800	818335	1729770	4518784	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid		AveID	28562 3409503	40651 8392085	187350	364226	985607	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
11Cl-PF3OUdS		AveID	230633 29976782	381367 +++++	1894487	3925775	9347621	0.0472 9.43	0.0943 +++++	0.472	0.943	2.36
Perfluorododecanoic acid		AveID	105433 14693173	179683 34331936	852163	1656352	4182445	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)		AveID	21915 3151402	34552 8134970	158460	328276	829529	0.0482 9.64	0.0964 24.1	0.482	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	9148 1445002	18698 3739893	82920	163618	395113	0.0484 9.68	0.0968 24.2	0.484	0.968	2.42
Perfluorotridecanoic acid		AveID	111264 14866529	181083 35226779	907955	1823052	4556433	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluorotetradecanoic acid		AveID	11967 1575221	19454 4171778	88102	174160	452708	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		AveID	131230 15997184	206767 37681202	900190	1870661	4643411	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	95729 12548221	161712 30813591	726427	1554372	3397685	0.0500 10.0	0.100 25.0	0.500	1.00	2.50
13C4 PFBA	13PFOA	Ave	2253572 1663241	1926725 1758198	1916527	1929850	2025338	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C5 PFPeA	13PFOA	Ave	1827623 1291692	1458161 1319141	1507442	1529086	1531883	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 PFBS	13PFOA	Ave	2112456 1657995	1835537 1925353	1758991	1858340	1976378	1.16 1.16	1.16 1.16	1.16	1.16	1.16
M2-4:2 FTS	13PFOA	Ave	264843 194992	202715 207012	215257	220382	221658	1.17 1.17	1.17 1.17	1.17	1.17	1.17
13C2 PFHxA	13PFOA	Ave	1853797 1345799	1566461 1316912	1472867	1544435	1545081	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C3 HFPO-DA	13PFOA	Ave	346930 265620	299977 273677	279126	296521	295164	1.25 1.25	1.25 1.25	1.25	1.25	1.25
18O2 PFHxS	13PFOA	Ave	1487994 1242233	1305238 1370941	1353967	1396957	1406672	1.18 1.18	1.18 1.18	1.18	1.18	1.18
13C4 PFHpA	13PFOA	Ave	1876608 1466571	1628956 1559821	1672833	1679653	1773444	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-6:2 FTS	13PFOA	Ave	309808 250039	286854 271643	274798	299923	305639	1.19 1.19	1.19 1.19	1.19	1.19	1.19
13C4 PFOA	13PFOA	Ave	2027588 1691186	1982384 1620734	1912820	1934463	2045642	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C4 PFOS	13PFOA	Ave	943517 765818	863764 865311	882764	904398	919926	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C5 PFNA	13PFOA	Ave	2335475 1889768	1965971 1902682	2008931	2143126	2116548	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDA	13PFOA	Ave	2492424 1979736	2097344 1981566	2062234	2125756	2307904	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	13PFOA	Ave	366485 309678	307295 316911	298552	331913	331708	1.20 1.20	1.20 1.20	1.20	1.20	1.20
13C8 FOSA	13PFOA	Ave	1884229 1724931	1858847 1759972	1790735	1887535	1904586	1.25 1.25	1.25 1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 460-290546-1 Analy Batch No.: 193912

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2023 17:16 Calibration End Date: 07/26/2023 18:05 Calibration ID: 50615

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
d3-NMeFOSAA	13PFOA	Ave	589245 465286	509447 505130	486461	518688	518571	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFUnA	13PFOA	Ave	2441700 1818926	1976379 1790927	1983358	2053330	2158999	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d5-NEtFOSAA	13PFOA	Ave	566846 456350	488020 430319	491633	487913	544137	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFDoA	13PFOA	Ave	2296115 1800020	2131572 1994604	2022512	2123640	2062631	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	13PFOA	Ave	2302510 1876594	2061289 1918275	1996289	2077683	2135161	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFHxDA	13PFOA	Ave	2773326 2051028	2341179 2292454	2309121	2422773	2376838	1.25 1.25	1.25 1.25	1.25	1.25	1.25

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Jul-2023 17:16:50 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 1
Misc. Info.: 200-0056441-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:35 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:27:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.112	2.103	0.009	0.616	2253572	1.35		108	1147	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.120	2.112	0.008	1.004	148954	0.0505		101	7.7	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.704	1827623	1.41		112	783	M
4 Perfluoropentanoic acid										
262.90 > 219.00	2.411	2.411	0.0	1.000	71742	0.0455		90.9	3.5	
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.708	2112456	1.20		103	64154	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	93584	0.0461	Target=2.07	104	18.4	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	42190		2.22(1.04-3.11)	104	8.4	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.693	2.694	-0.001	0.786	264843	1.30		111	103	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.693	2.694	-0.001	1.000	36330	0.0472		101	404	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.797	1853797	1.40		112	1419	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	88105	0.0540	Target=14.29	108	11.4	M
313.00 > 119.00	2.718	2.731	-0.013	0.995	5337		16.51(7.15-21.44)	108	3.1	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.896	87889	0.0535	Target=2.78	114	123	M
349.00 > 99.00	2.731	2.731	0.0	0.896	29458		2.98(1.39-4.17)	114	37.8	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.806	2.844	-0.038	0.819	346930	1.36		108	1501	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.806	2.844	-0.038	1.000	13619	0.0490		98.0	101	
D 11 18O2 PFHxS										
403.00 > 84.00	3.046	3.092	-0.046	0.889	1487994	1.18		99.8	3478	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.046	3.092	-0.046	1.000	74343	0.0534	Target=3.23	117	116	M
399.00 > 99.00	3.046	3.092	-0.046	1.000	22455		3.31(1.62-4.84)	117	14.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.058	3.104	-0.046	1.000	92528	0.0550	Target=4.11	110	17.1	M
363.00 > 169.00	3.058	3.104	-0.046	1.000	21986		4.21(2.06-6.17)	110	17.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.058	3.104	-0.046	0.892	1876608	1.29		103	5156	
77 DONA										
377.00 > 251.00	3.092	3.138	-0.046	0.824	234702	0.0517	Target=3.28	109	257	
377.00 > 85.00	3.092	3.138	-0.046	0.824	72544		3.24(1.64-4.92)	109	83.1	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.408	3.446	-0.038	0.908	57887	0.0507	Target=4.71	106	138	
449.00 > 99.00	3.408	3.446	-0.038	0.908	11640		4.97(2.36-7.07)	106	22.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.417	3.446	-0.029	0.997	309808	1.18		99.6	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.417	3.446	-0.029	1.000	38205	0.0536		113	138	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.426	3.464	-0.038	1.000	98642	0.0571	Target=2.90	114	6.8	M
413.00 > 169.00	3.426	3.464	-0.038	1.000	31899		3.09(1.45-4.35)	114	28.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.426	3.464	-0.038	1.000	2027588	1.23		98.7	5902	
* 62 13C2 PFOA										
415.00 > 370.00	3.426	3.464	-0.038		2111765	1.25			5485	
D 18 13C4 PFOS										
503.00 > 80.00	3.754	3.783	-0.029	1.096	943517	1.18		98.6	4119	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.754	3.783	-0.029	1.000	47415	0.0515	Target=4.11	111	65.8	M
499.00 > 99.00	3.754	3.783	-0.029	1.000	11529		4.11(2.05-6.16)	111	16.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.774	3.793	-0.019	1.101	2335475	1.31		104	6410	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.774	3.803	-0.029	1.000	101909	0.0557	Target=8.48	111	17.9	M
463.00 > 169.00	3.764	3.803	-0.039	0.997	10750		9.48(4.24-12.72)	111	35.9	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.922	3.947	-0.025	1.045	151088	0.0536		115	288	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.063	4.074	-0.011	1.082	35424	0.0506	Target=2.17	105	275	M
549.00 > 99.00	4.063	4.074	-0.011	1.082	15853		2.23(1.08-3.25)	105	31.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.084	4.108	-0.024	1.192	2492424	1.33		106	10504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.084	4.108	-0.024	1.000	102502	0.0514	Target=10.55	103	25.3	
513.00 > 169.00	4.084	4.108	-0.024	1.000	10265		9.99(5.27-15.82)	103	39.8	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.096	4.108	-0.012	1.196	366485	1.24		104	569	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.096	4.120	-0.024	1.000	36060	0.0535		112	260	M
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.224	1884229	1.18		94.3	3520	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	77087	0.0536		107	320	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.237	4.249	-0.012	1.237	589245	1.32		105	1006	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.260	-0.011	1.003	22256	0.0520		104	39.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.334	4.346	-0.012	1.155	26824	0.0497	Target=2.28	103	168	
599.00 > 99.00	4.334	4.346	-0.012	1.155	12867		2.08(1.14-3.42)	103	59.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.275	2441700	1.38		110	9527	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.000	102917	0.0511	Target=11.30	102	27.7	
563.00 > 169.00	4.370	4.382	-0.012	1.000	10486		9.81(5.65-16.96)	102	73.6	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.382	4.393	-0.011	1.279	566846	1.31		105	864	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.382	4.393	-0.011	1.000	28562	0.0630		126	124	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.189	230633	0.0534		113	329	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.344	2296115	1.28		102	6831	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	105433	0.0564	Target=8.15	113	10.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	13359		7.89(4.07-12.22)	113	79.9	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.130	21915	0.0544		113	524	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.780	4.779	0.001	1.273	9148	0.0501	Target=0.50	103	110	M
699.00 > 99.00	4.780	4.779	0.001	1.273	18434		0.50(0.25-0.75)	103	160	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	111264	0.0566	Target=6.61	113	12.0	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	15139		7.35(3.31-9.92)	113	149	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.459	2302510	1.29		103	7005	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.002	11967	0.0581	Target=0.96	116	150	
713.00 > 219.00	4.998	5.008	-0.010	1.000	11422		1.05(0.48-1.44)	116	211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	131230	0.0591	Target=7.69	118	14.7	
813.00 > 169.00	5.328	5.328	0.0	1.000	16433		7.99(3.85-11.54)	118	172	
D 44 13C2 PFHxDA										M
815.00 > 770.00	5.328	5.328	0.0	1.555	2773326	1.34		108	1764	M
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.620	5.611	0.009	1.055	95729	0.0553	Target=9.13	111	15.3	M
913.00 > 169.00	5.620	5.611	0.009	1.055	9904		9.67(4.56-13.69)	111	101	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

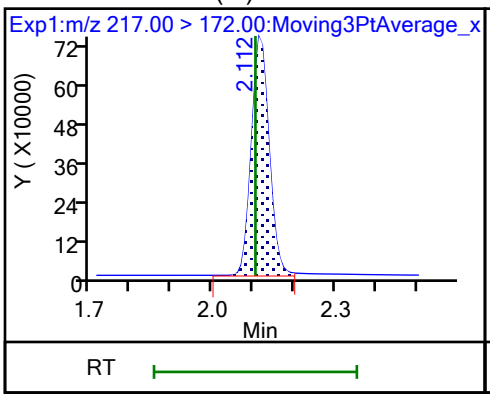
PFAS32NCIC1_00015 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:37 Chrom Revision: 2.3 19-Jul-2023 18:28:48

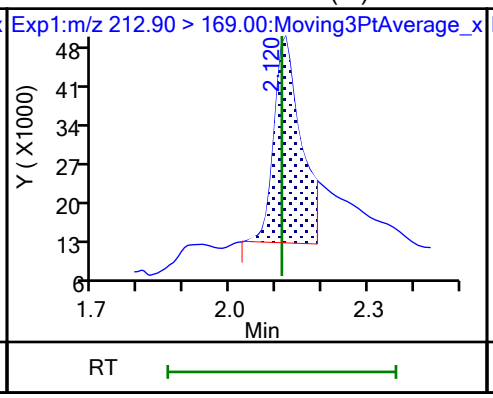
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL05.d
Injection Date: 26-Jul-2023 17:16:50 Instrument ID: LC812
Lims ID: IC 1
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

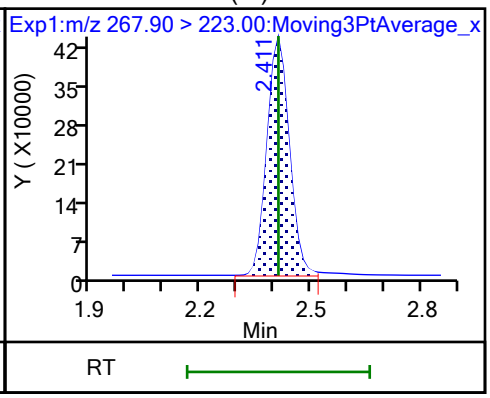
D 1 13C4 PFBA (M)



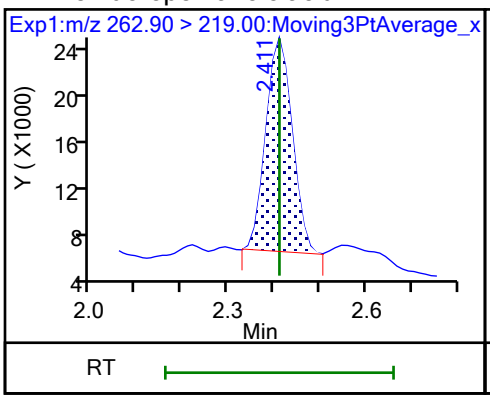
2 Perfluorobutanoic acid (M)



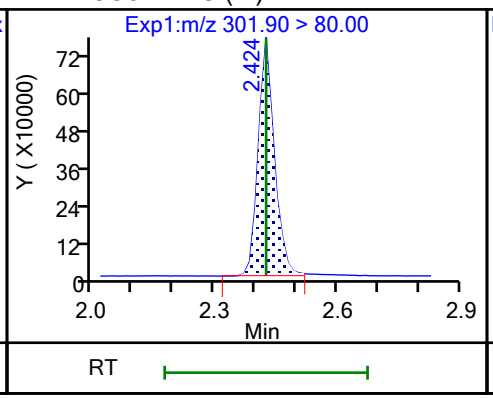
D 3 13C5 PFPeA (M)



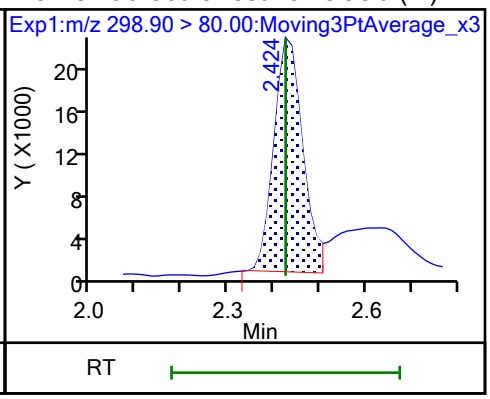
4 Perfluoropentanoic acid



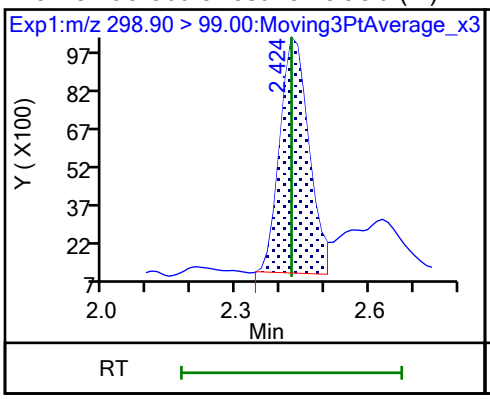
D 47 13C3 PFBS (M)



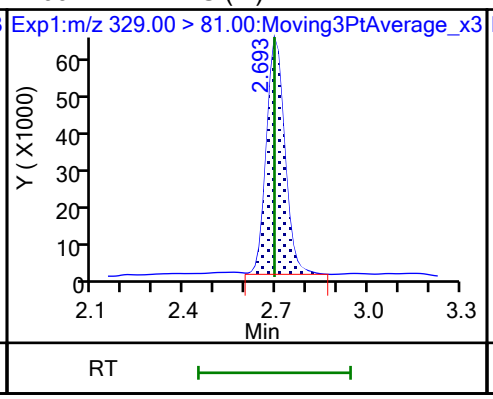
5 Perfluorobutanesulfonic acid (M)



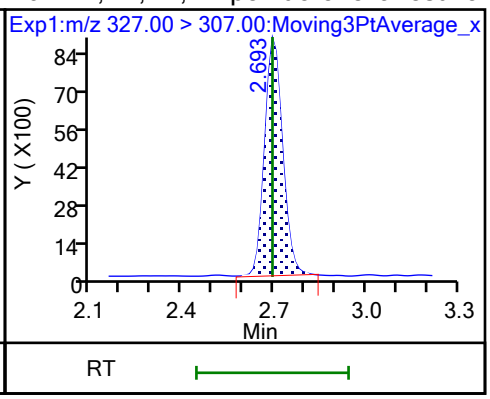
5 Perfluorobutanesulfonic acid (M)



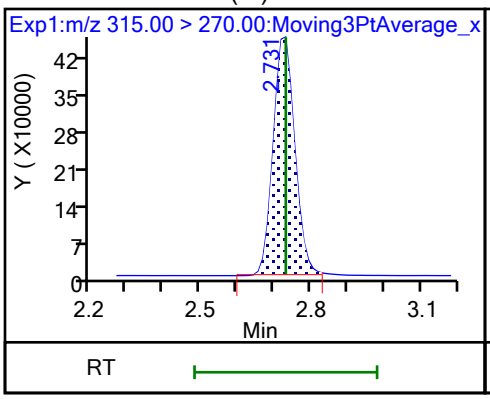
D 60 M2-4:2 FTS (M)



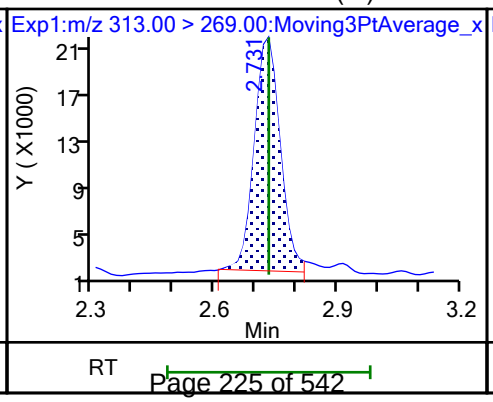
61 1H,1H,2H,2H-perfluorohexanesulfo



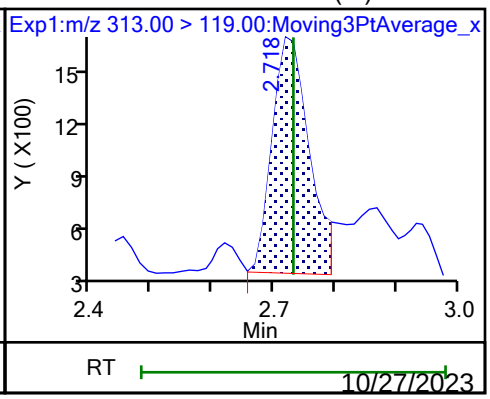
D 7 13C2 PFHxA (M)



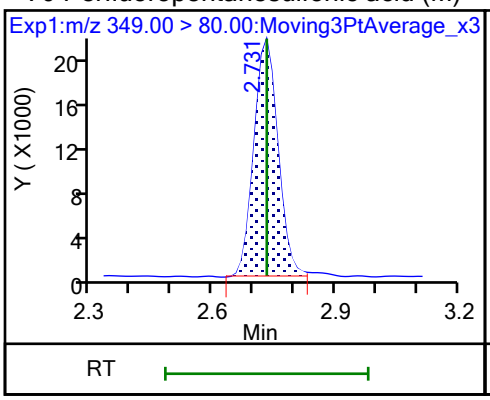
6 Perfluorohexanoic acid (M)



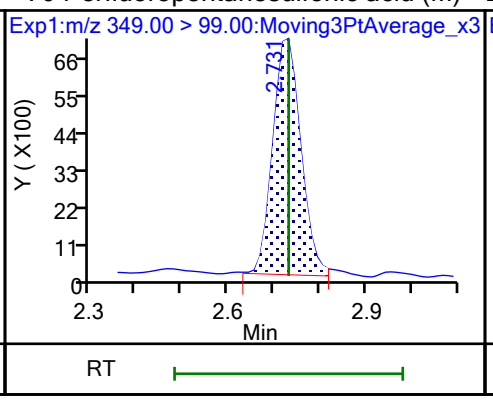
6 Perfluorohexanoic acid (M)



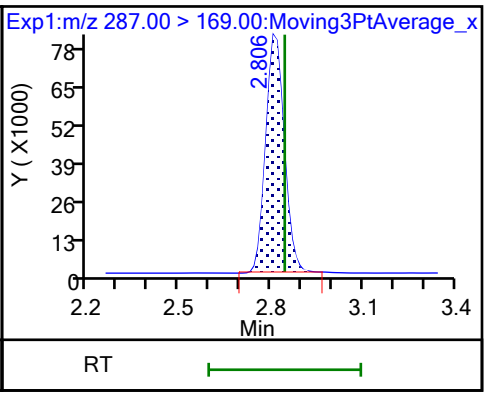
70 Perfluoropentanesulfonic acid (M)



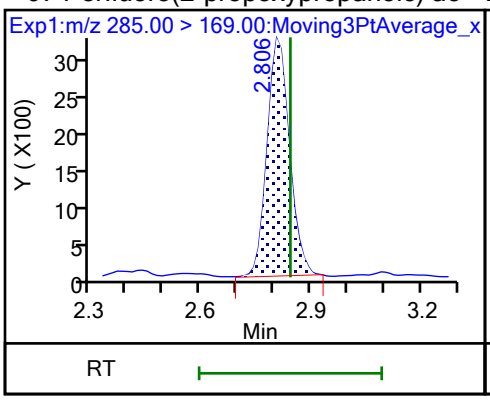
70 Perfluoropentanesulfonic acid (M)



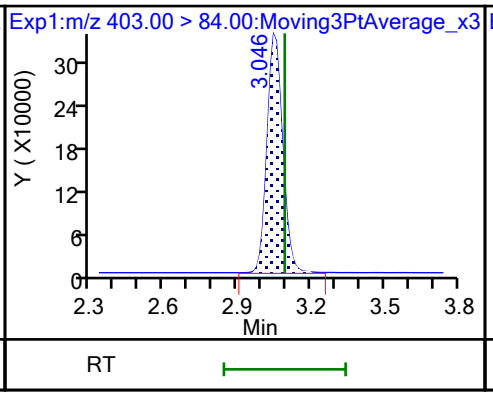
D 64 13C3 HFPO-DA



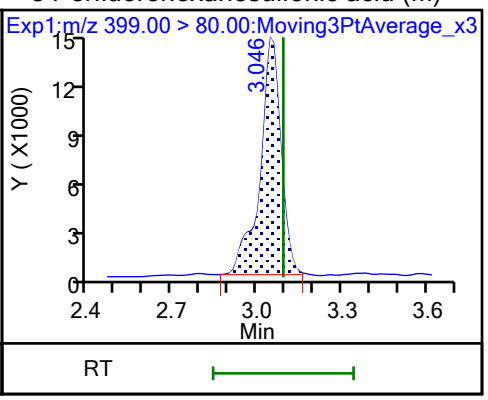
67 Perfluoro(2-propoxypropanoic) ac



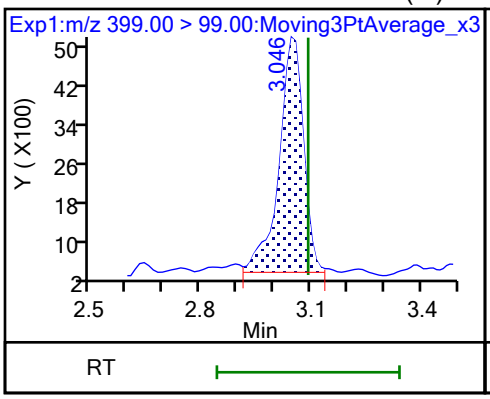
D 11 18O2 PFHxS



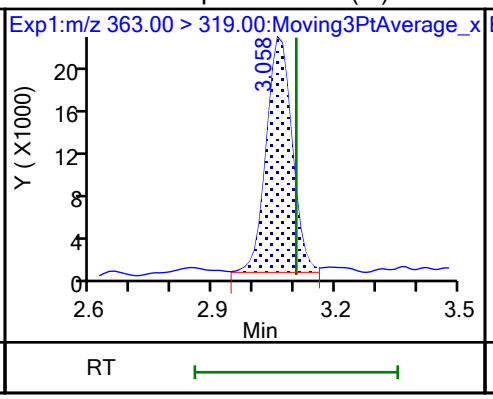
8 Perfluorohexanesulfonic acid (M)



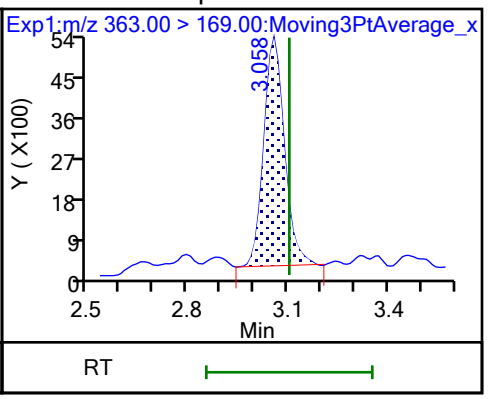
8 Perfluorohexanesulfonic acid (M)



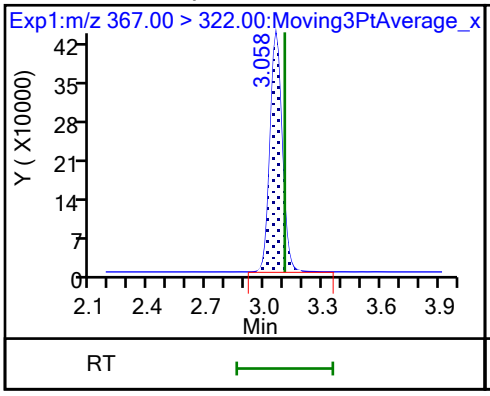
10 Perfluoroheptanoic acid (M)



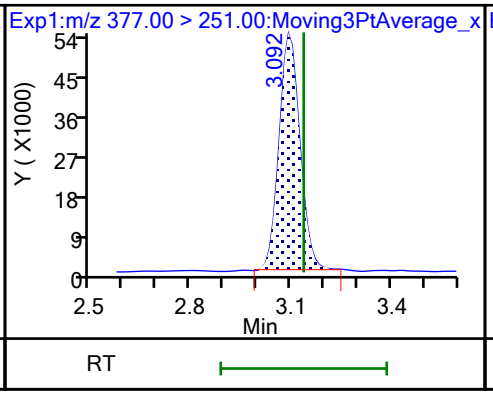
10 Perfluoroheptanoic acid



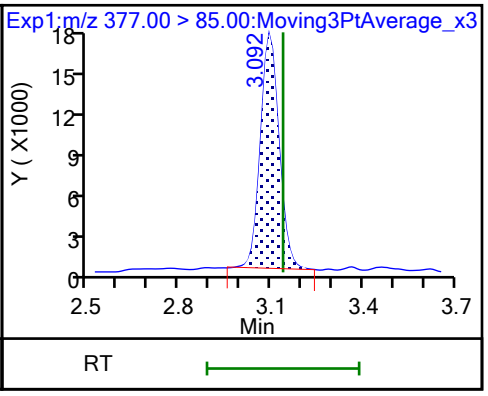
D 9 13C4 PFHpA



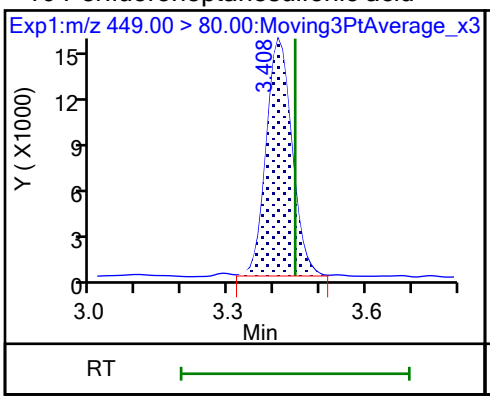
77 DONA



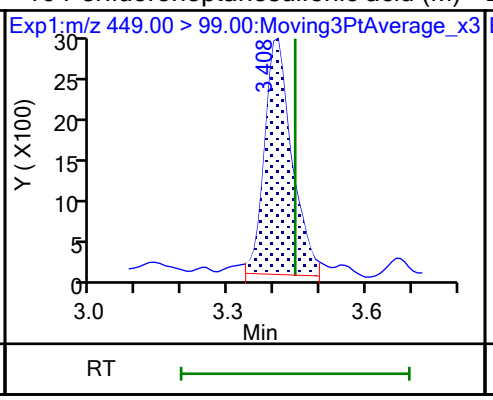
77 DONA



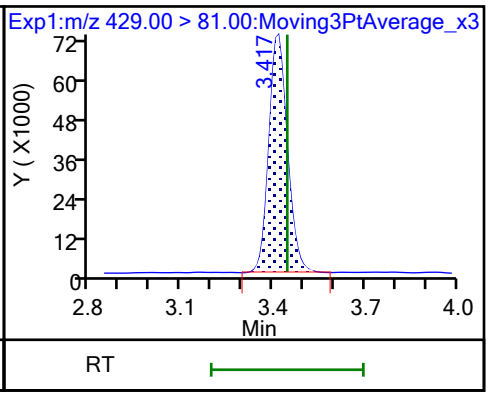
16 Perfluoroheptanesulfonic acid



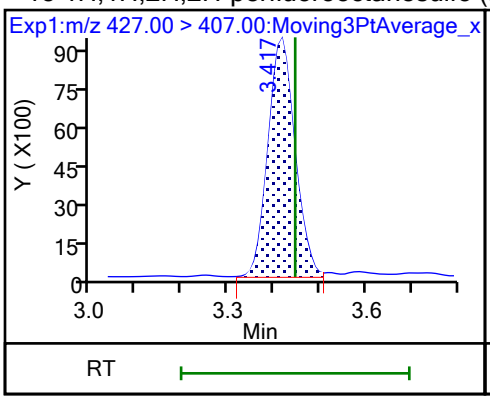
16 Perfluoroheptanesulfonic acid (M)



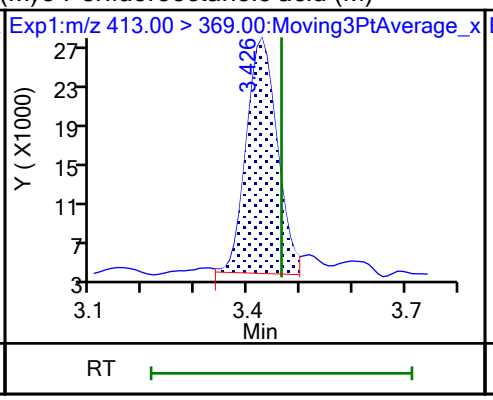
D 12 M2-6:2 FTS



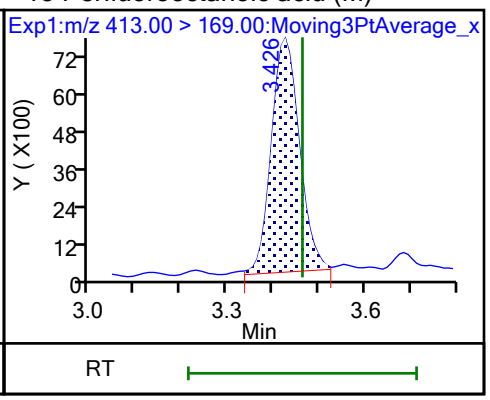
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



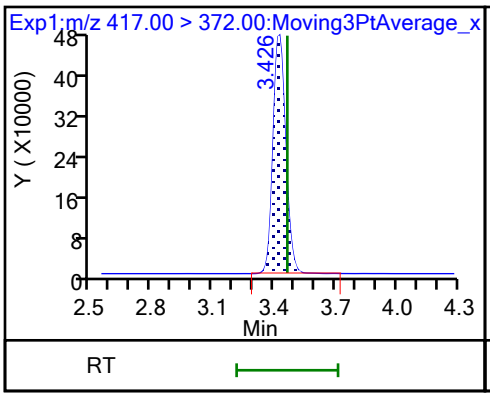
15 Perfluorooctanoic acid (M)



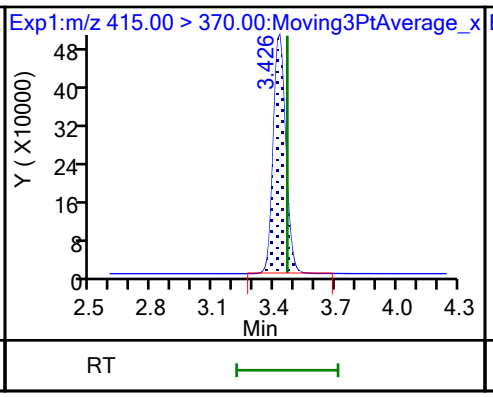
15 Perfluorooctanoic acid (M)



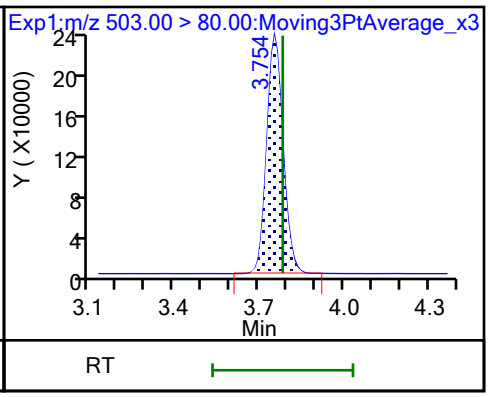
D 14 13C4 PFOA



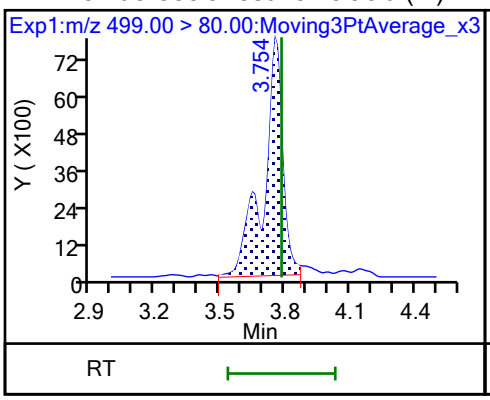
* 62 13C2 PFOA



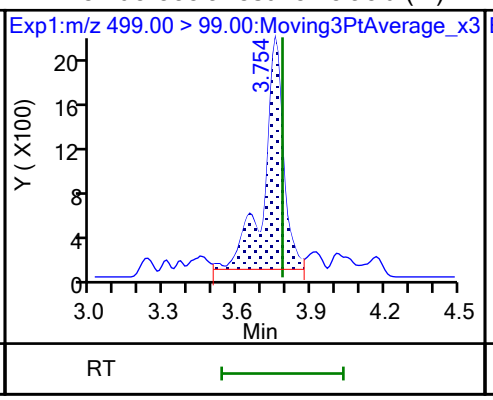
D 18 13C4 PFOS



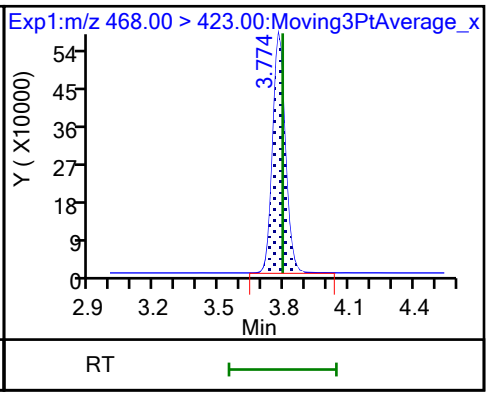
17 Perfluorooctanesulfonic acid (M)



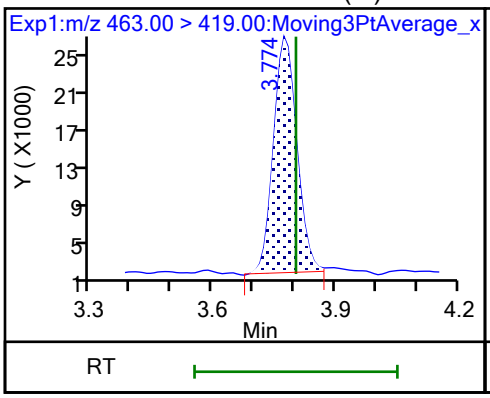
17 Perfluorooctanesulfonic acid (M)



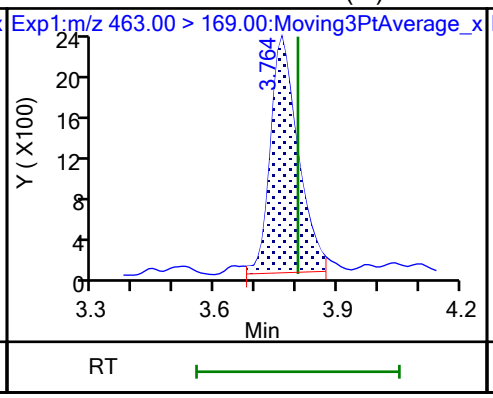
D 19 13C5 PFNA



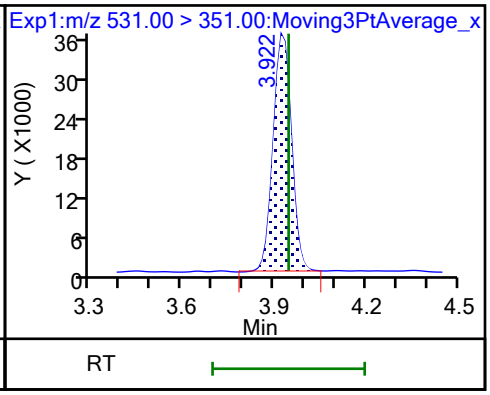
20 Perfluorononanoic acid (M)



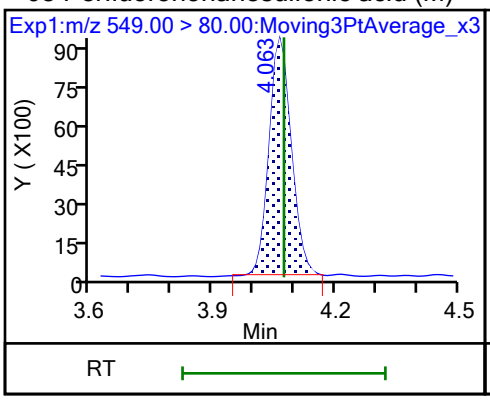
20 Perfluorononanoic acid (M)



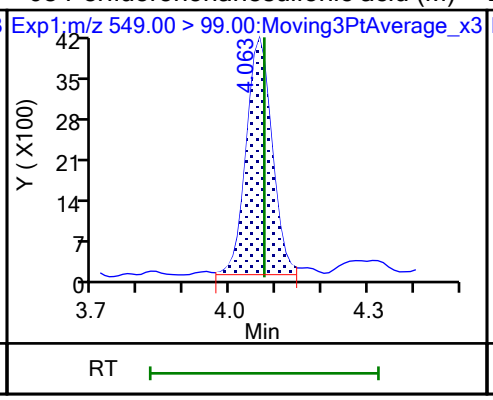
69 9-Chlorohexadecafluoro-3-oxanona



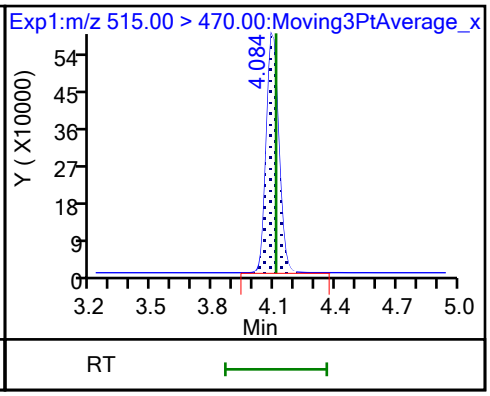
68 Perfluorononanesulfonic acid (M)



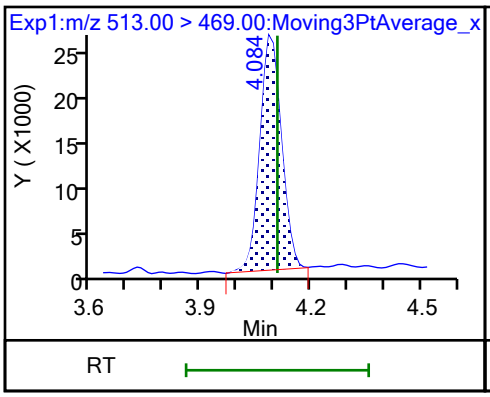
68 Perfluorononanesulfonic acid (M)



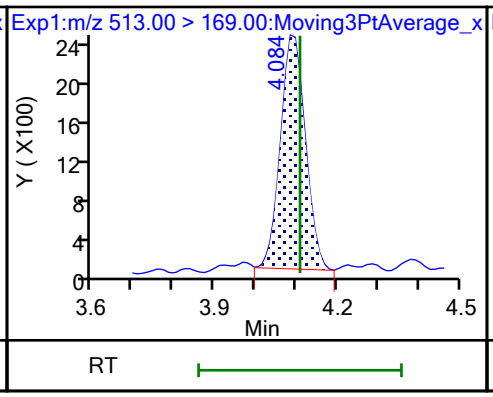
D 23 13C2 PFDA



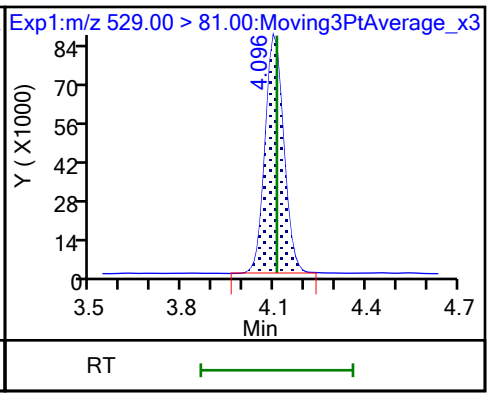
24 Perfluorodecanoic acid



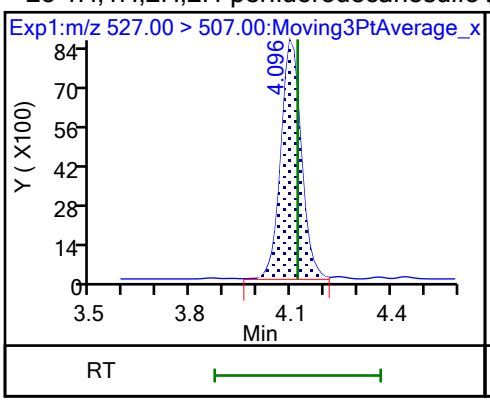
24 Perfluorodecanoic acid



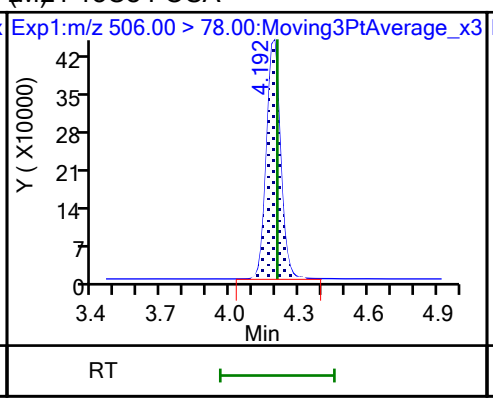
D 26 M2-8:2 FTS



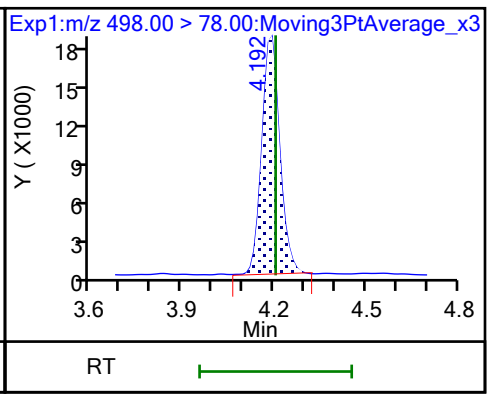
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



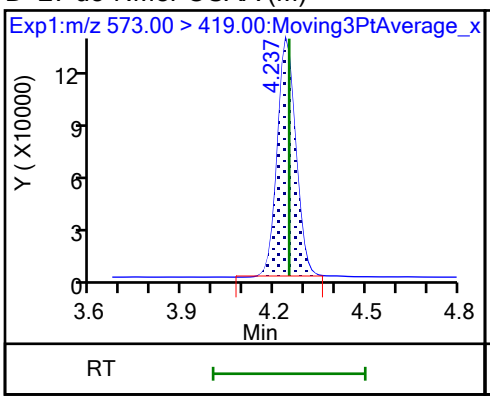
D 21 13C8 FOSA



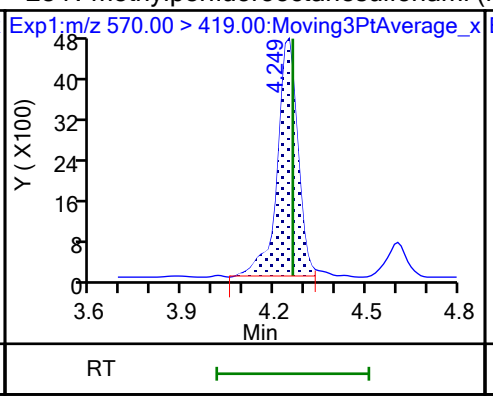
22 Perfluorooctanesulfonamide



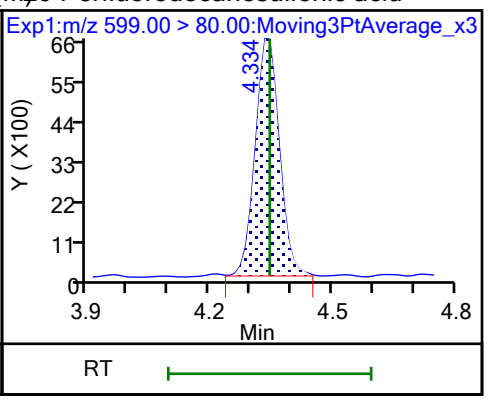
D 27 d3-NMeFOSAA (M)



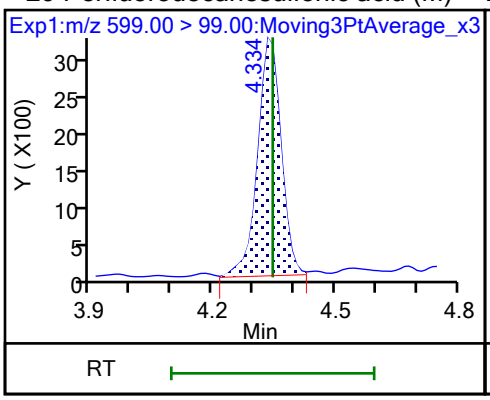
28 N-methylperfluorooctanesulfonami (M)



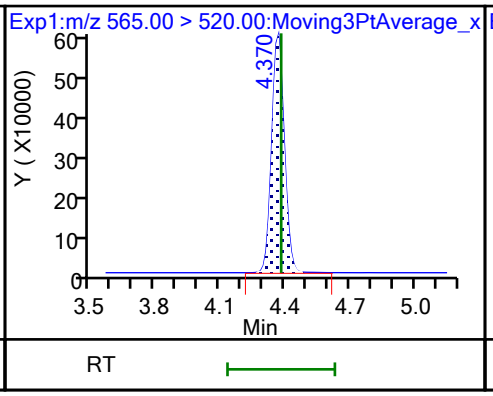
29 Perfluorodecanesulfonic acid



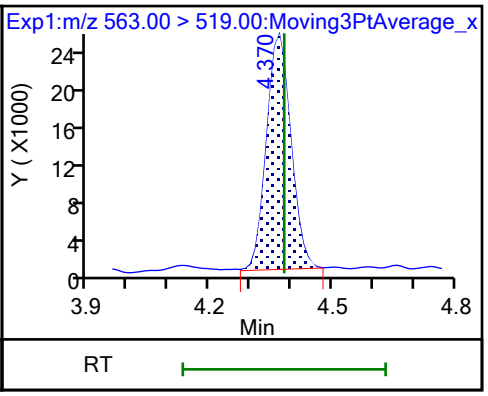
29 Perfluorodecanesulfonic acid (M)



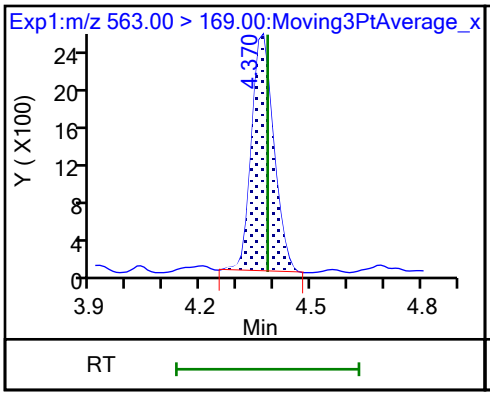
D 30 13C2 PFUnA



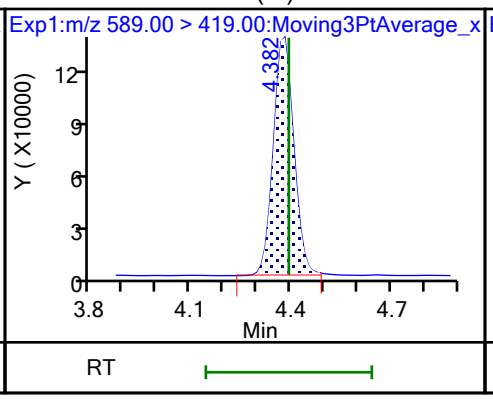
31 Perfluoroundecanoic acid



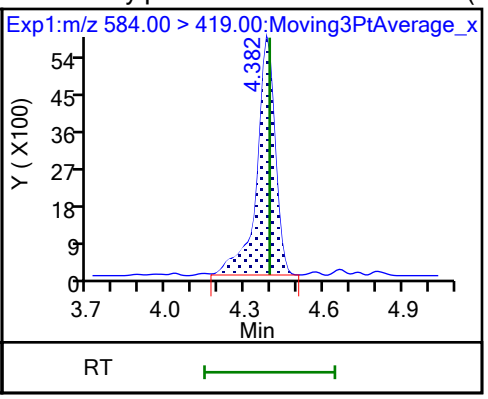
31 Perfluoroundecanoic acid



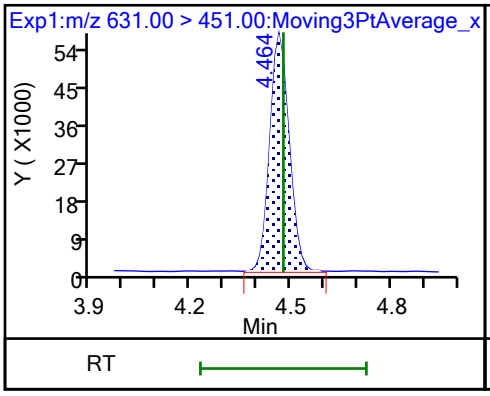
D 32 d5-NEtFOSAA (M)



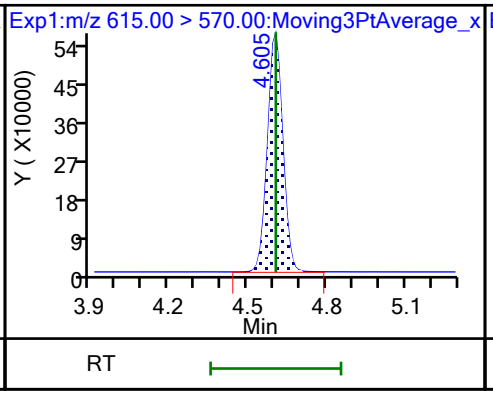
33 N-ethylperfluorooctanesulfonamid (M)



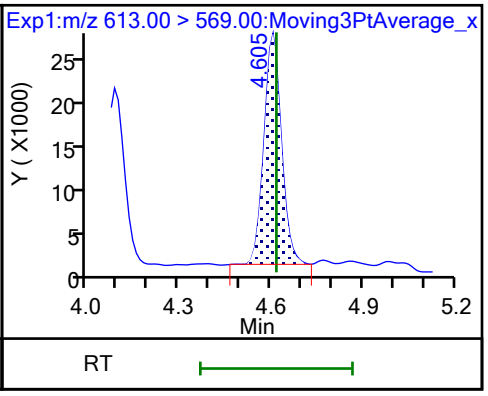
66 11-Chloroeicosafluoro-3-oxaundec



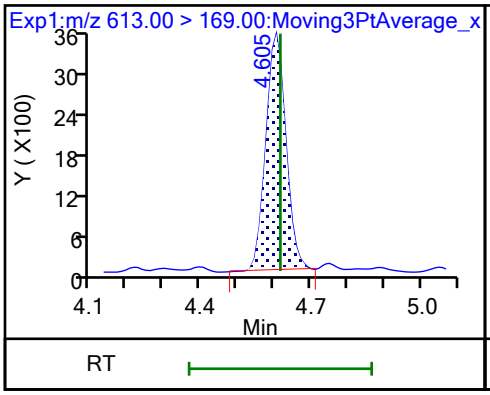
D 36 13C2 PFDoA



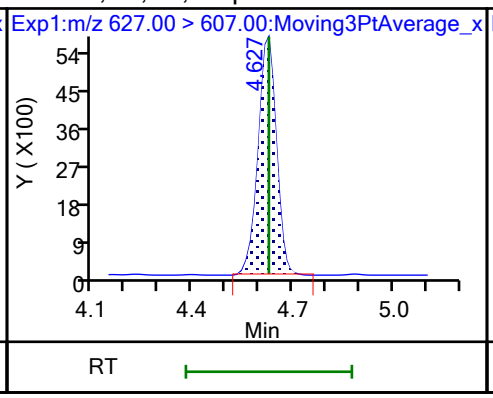
37 Perfluorododecanoic acid



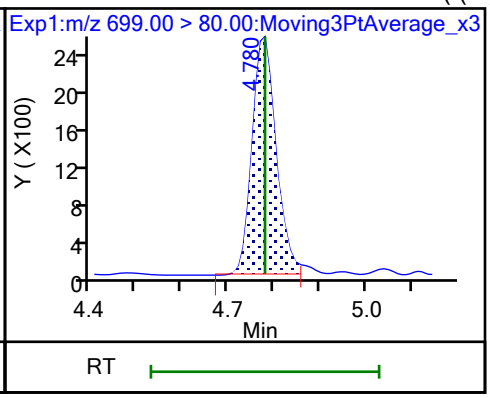
37 Perfluorododecanoic acid



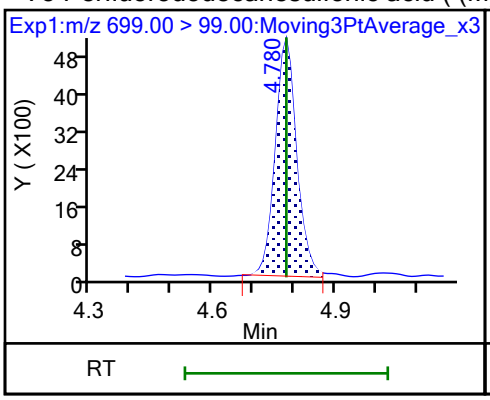
74 1H,1H,2H,2H-perfluorododecanesul



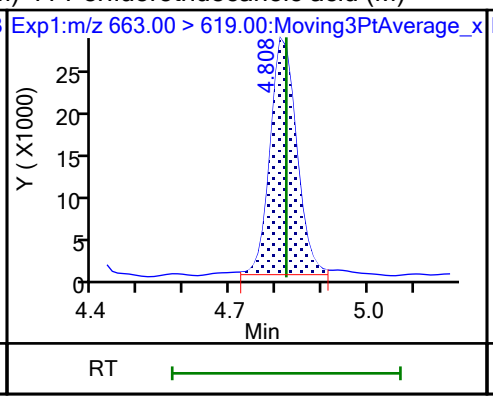
75 Perfluorododecanesulfonic acid ((M)



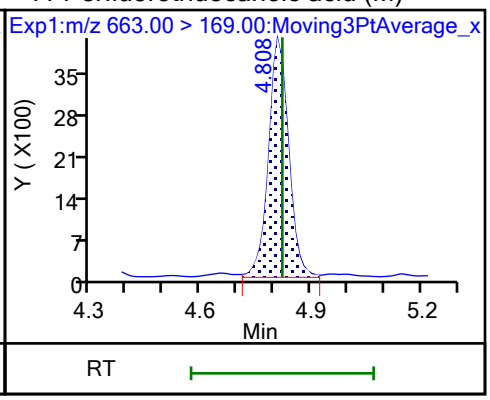
75 Perfluorododecanesulfonic acid ((M)



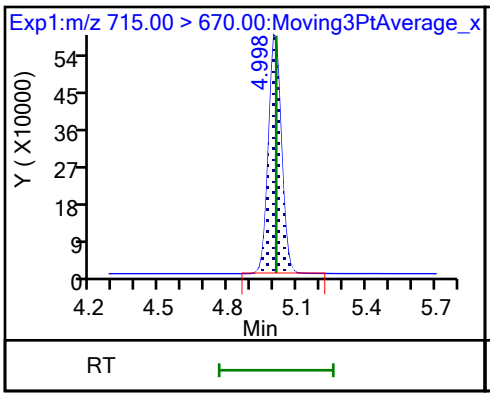
41 Perfluorotridecanoic acid (M)



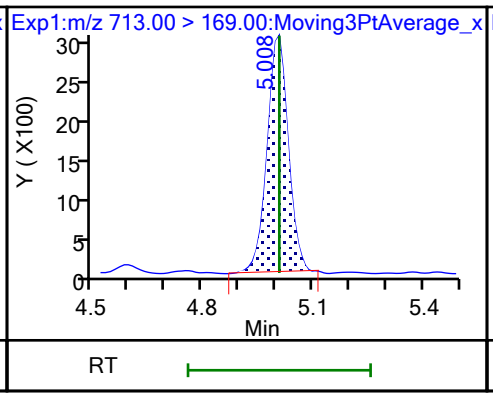
41 Perfluorotridecanoic acid (M)



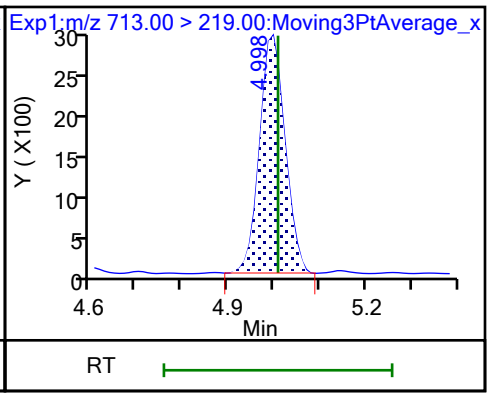
D 43 13C2 PFTeDA



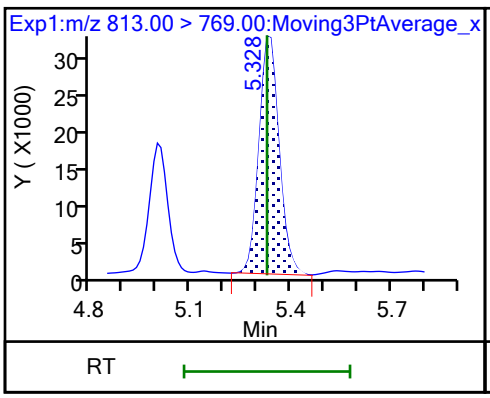
42 Perfluorotetradecanoic acid



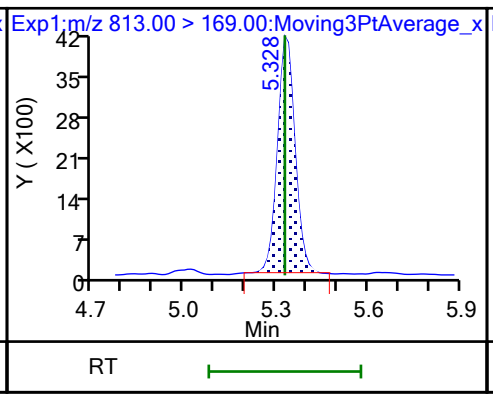
42 Perfluorotetradecanoic acid



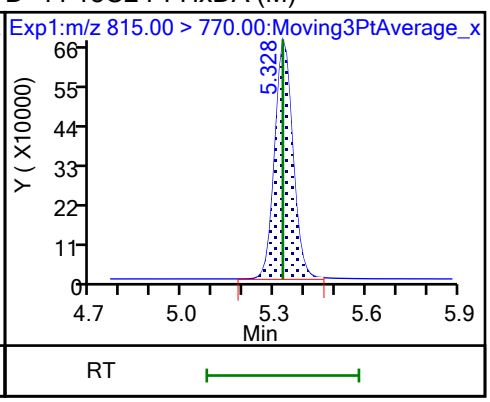
45 Perfluorohexadecanoic acid



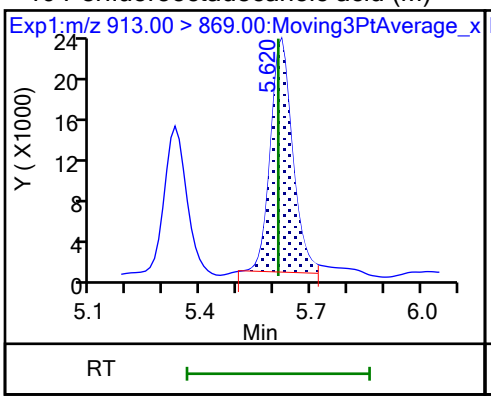
45 Perfluorohexadecanoic acid



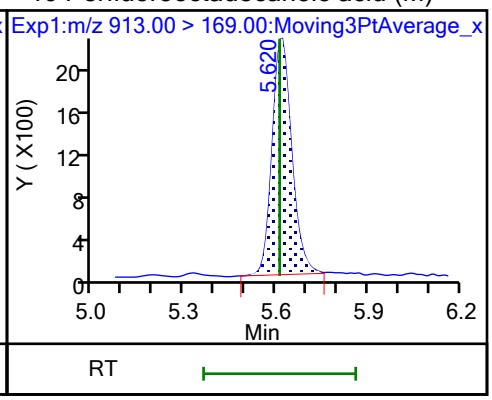
D 44 13C2 PFHxDA (M)



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Jul-2023 17:25:00 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 200-0056441-006 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:42 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:45:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	1926725	1.22		97.2	993	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	192635	0.0973		97.3	11.3	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1458161	1.19		94.8	648	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	141937	0.1128		113	6.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.699	1835537	1.10		94.8	58282	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	166434	0.0944	Target=2.07	106	35.5	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	85051		1.96(1.04-3.11)	106	17.7	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	202715	1.05		90.2	72.2	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.718	2.694	0.024	1.000	64699	0.1097		117	613	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1566461	1.25		100	1391	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	144941	0.1051	Target=14.29	105	19.0	M
313.00 > 119.00	2.755	2.731	0.024	1.000	10821		13.39(7.15-21.44)	105	7.0	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.755	2.731	0.024	0.885	150824	0.1046	Target=2.78	111	211	M
349.00 > 99.00	2.755	2.731	0.024	0.885	53128		2.84(1.39-4.17)	111	51.9	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.826	299977	1.24		99.0	1628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.868	2.844	0.024	1.000	24788	0.1032		103	273	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1305238	1.09		92.5	2984	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	118807	0.0972	Target=3.23	106	250	M
399.00 > 99.00	3.114	3.092	0.022	1.000	38530		3.08(1.62-4.84)	106	21.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.126	3.104	0.022	1.004	167142	0.1144	Target=4.11	114	33.0	M
363.00 > 169.00	3.126	3.104	0.022	1.004	38992		4.29(2.06-6.17)	114	33.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1628956	1.19		94.9	4384	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	400019	0.0962	Target=3.28	102	466	
377.00 > 85.00	3.160	3.138	0.022	0.835	118017		3.39(1.64-4.92)	102	143	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.461	3.446	0.015	0.915	99394	0.0951	Target=4.71	99.8	250	
449.00 > 99.00	3.461	3.446	0.015	0.915	23637		4.21(2.36-7.07)	99.8	50.3	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	286854	1.16		97.4	368	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.470	3.446	0.024	1.003	67191	0.1018		107	230	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.470	3.464	0.006	1.000	178853	0.1059	Target=2.90	106	14.0	M
413.00 > 169.00	3.479	3.464	0.015	1.003	59442		3.01(1.45-4.35)	106	72.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	1982384	1.27		102	5935	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		1998562	1.25			4141	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	863764	1.14		95.3	3395	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	80998	0.0961	Target=4.11	104	153	M
499.00 > 99.00	3.783	3.783	0.0	1.000	22759		3.56(2.05-6.16)	104	37.1	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1965971	1.16		92.9	4371	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.803	3.803	0.0	1.000	159396	0.1034	Target=8.48	103	30.7	
463.00 > 169.00	3.803	3.803	0.0	1.000	20785		7.67(4.24-12.72)	103	124	M
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.046	244371	0.0947		102	482	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.084	4.074	0.010	1.080	60375	0.0941	Target=2.17	97.8	490	
549.00 > 99.00	4.074	4.074	0.0	1.077	30462		1.98(1.08-3.25)	97.8	79.9	M
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2097344	1.18		94.6	8331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.108	4.108	0.0	1.000	170377	0.1016	Target=10.55	102	41.1	M
513.00 > 169.00	4.108	4.108	0.0	1.000	16328		10.43(5.27-15.82)	102	43.9	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	307295	1.10		92.0	634	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	64388	0.1140		119	478	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1858847	1.23		98.3	3368	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	144294	0.1017		102	567	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	509447	1.20		96.2	2611	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.261	4.260	0.001	1.003	39956	0.1080		108	67.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.346	4.346	0.0	1.149	46440	0.0941	Target=2.28	97.5	269	
599.00 > 99.00	4.346	4.346	0.0	1.149	23477		1.98(1.14-3.42)	97.5	80.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.263	1976379	1.18		94.5	7486	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.382	4.382	0.0	1.000	180134	0.1105	Target=11.30	111	48.4	
563.00 > 169.00	4.382	4.382	0.0	1.000	13744		13.11(5.65-16.96)	111	83.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	488020	1.20		95.7	1048	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	40651	0.1041		104	155	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	381367	0.0964		102	559	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	2131572	1.25		100	9591	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.605	4.616	-0.011	1.000	179683	0.1035	Target=8.15	104	19.1	M
613.00 > 169.00	4.605	4.616	-0.011	1.000	22765		7.89(4.07-12.22)	104	200	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.627	4.627	0.0	1.123	34552	0.1023		106	582	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	18698	0.1118	Target=0.50	115	275	
699.00 > 99.00	4.780	4.779	0.001	1.263	34305		0.55(0.25-0.75)	115	396	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.808	4.822	-0.014	1.044	181083	0.0993	Target=6.61	99.3	22.2	M
663.00 > 169.00	4.808	4.822	-0.014	1.044	27094		6.68(3.31-9.92)	99.3	218	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2061289	1.22		97.4	7140	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	19454	0.1055	Target=0.96	106	217	
713.00 > 219.00	4.998	5.008	-0.010	1.000	19131		1.02(0.48-1.44)	106	242	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	206767	0.1104	Target=7.69	110	24.0	
813.00 > 169.00	5.328	5.328	0.0	1.000	26550		7.79(3.85-11.54)	110	351	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.535	2341179	1.20		96.0	5506	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	161712	0.1106	Target=9.13	111	27.0	M
913.00 > 169.00	5.611	5.611	0.0	1.053	16958		9.54(4.56-13.69)	111	117	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

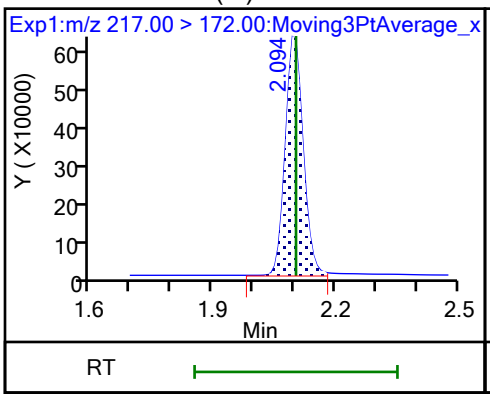
PFAS32NCIC2_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:44 Chrom Revision: 2.3 19-Jul-2023 18:28:48

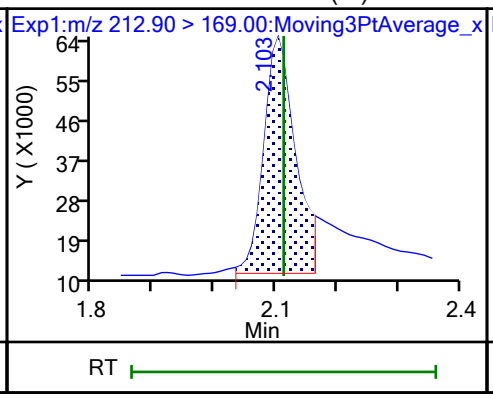
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL06.d
Injection Date: 26-Jul-2023 17:25:00 Instrument ID: LC812
Lims ID: IC 2
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

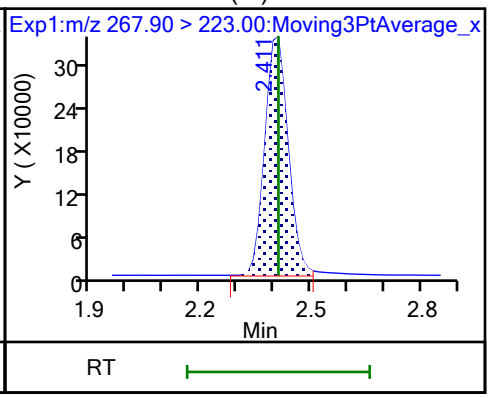
D 1 13C4 PFBA (M)



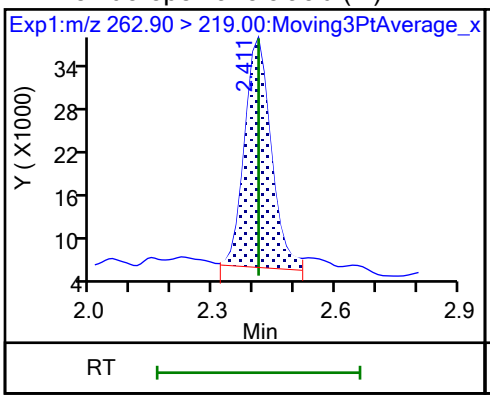
2 Perfluorobutanoic acid (M)



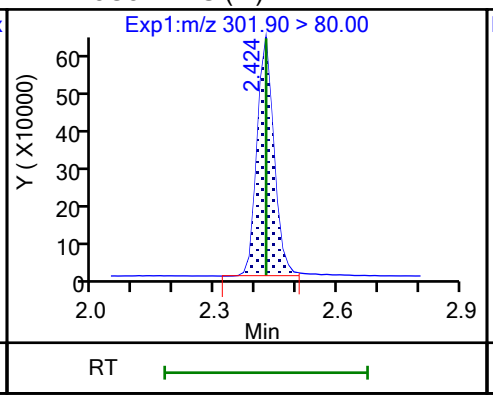
D 3 13C5 PFPeA (M)



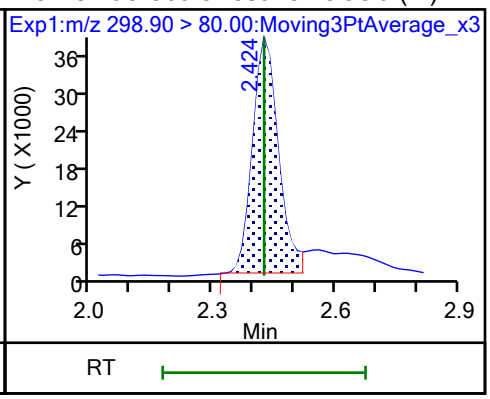
4 Perfluoropentanoic acid (M)



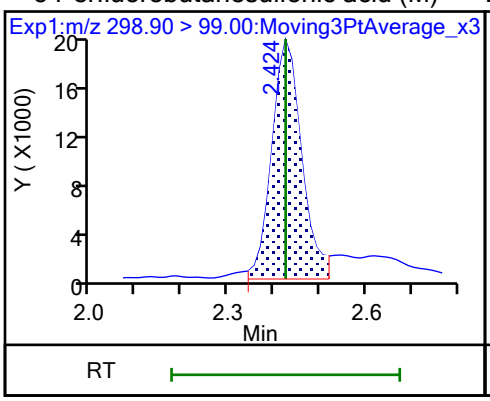
D 47 13C3 PFBS (M)



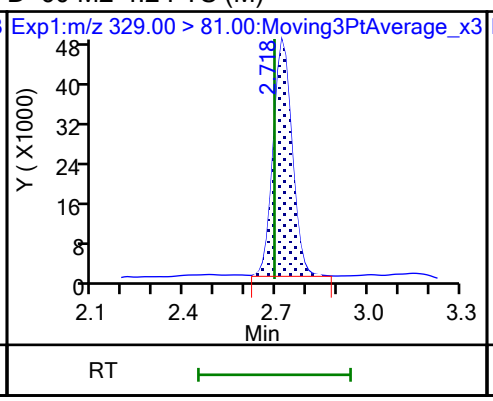
5 Perfluorobutanesulfonic acid (M)



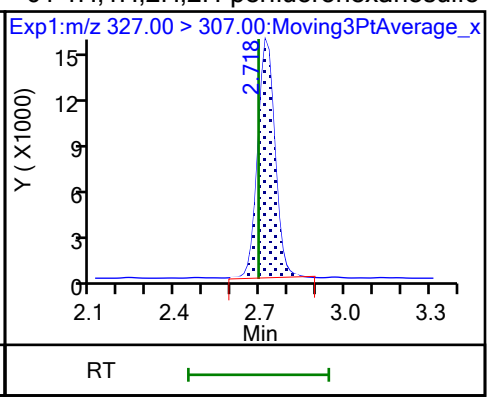
5 Perfluorobutanesulfonic acid (M)



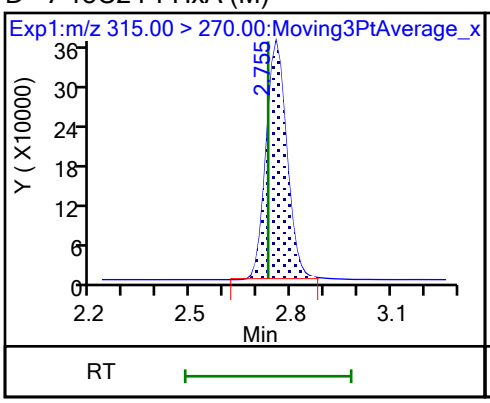
D 60 M2-4:2 FTS (M)



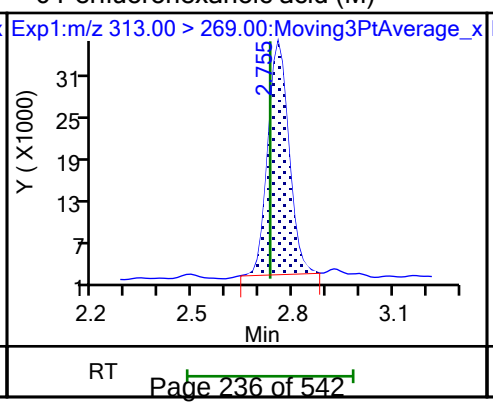
61 1H,1H,2H,2H-perfluorohexanesulfo



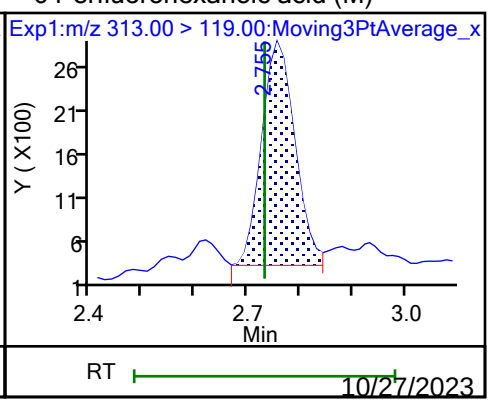
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

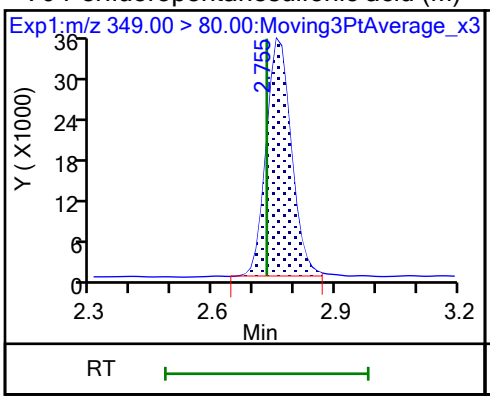


6 Perfluorohexanoic acid (M)

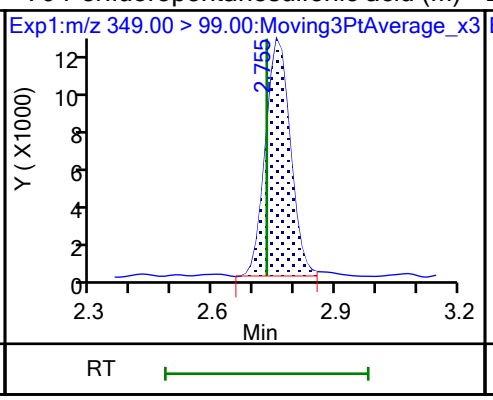


10/27/2023
10:52 AM

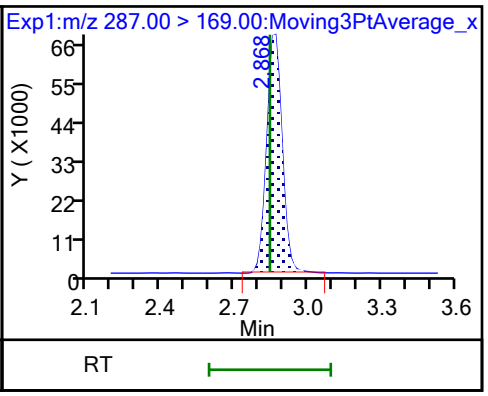
70 Perfluoropentanesulfonic acid (M)



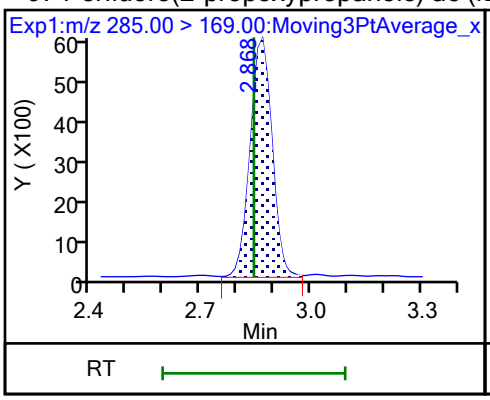
70 Perfluoropentanesulfonic acid (M)



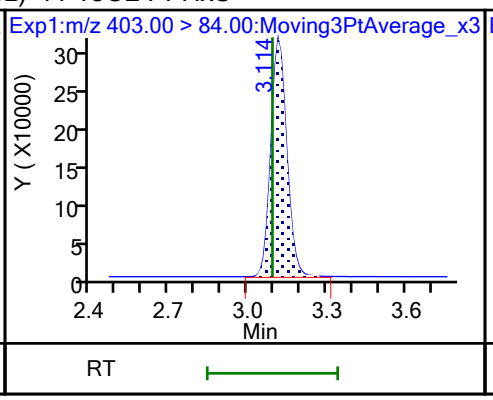
D 64 13C3 HFPO-DA



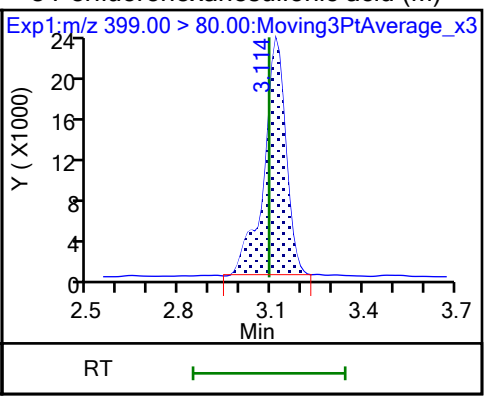
67 Perfluoro(2-propoxypropanoic) ac (M)



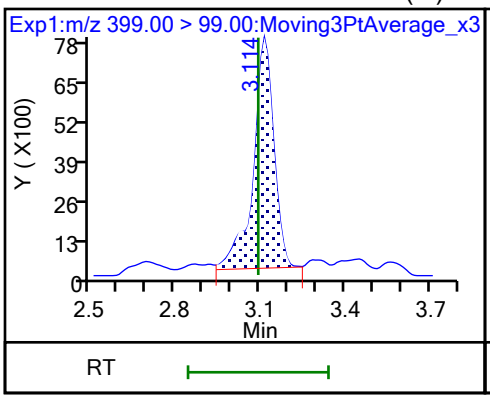
D 11 18O2 PFHxS



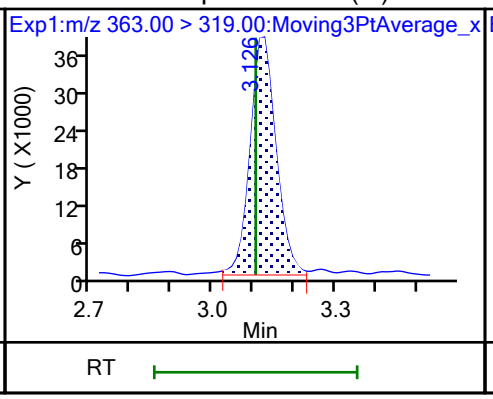
8 Perfluorohexanesulfonic acid (M)



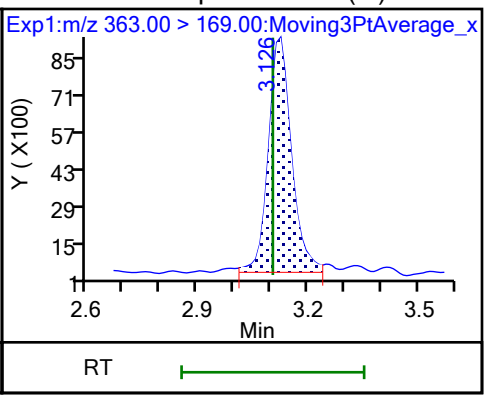
8 Perfluorohexanesulfonic acid (M)



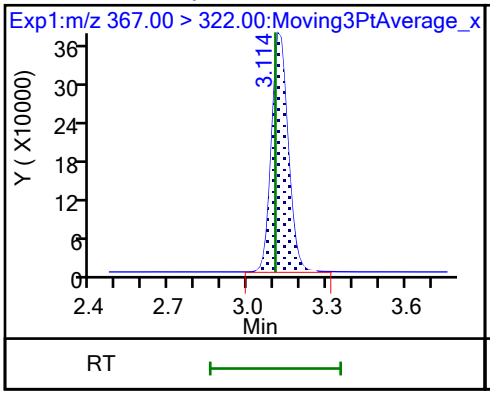
10 Perfluoroheptanoic acid (M)



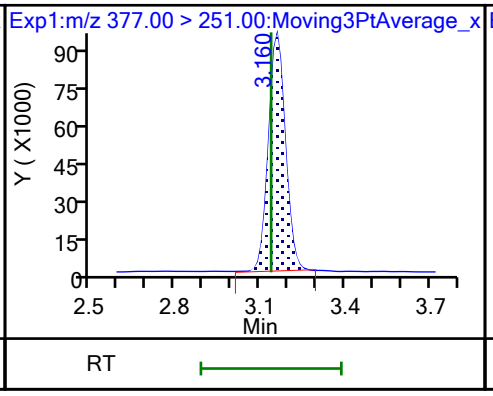
10 Perfluoroheptanoic acid (M)



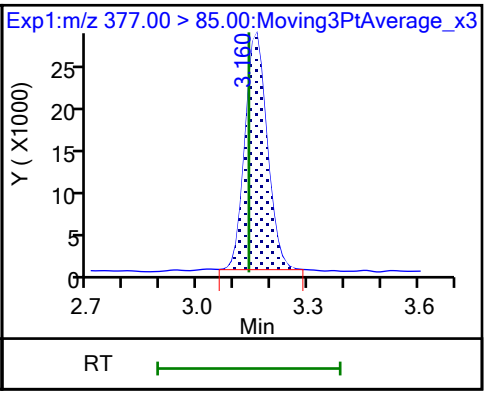
D 9 13C4 PFHpA



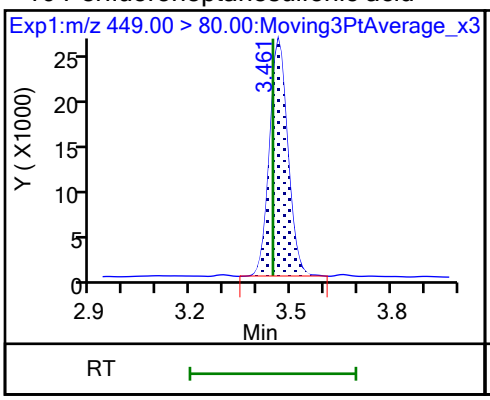
77 DONA



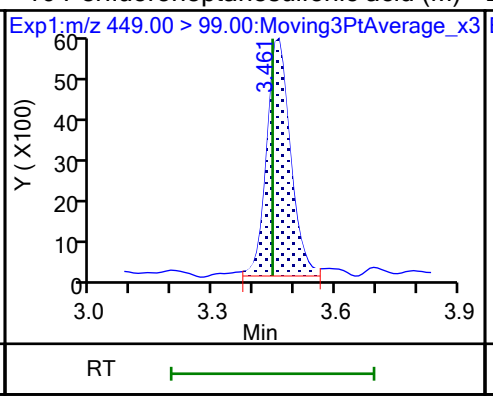
77 DONA



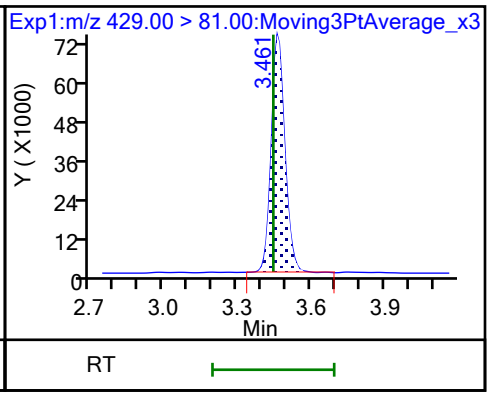
16 Perfluoroheptanesulfonic acid



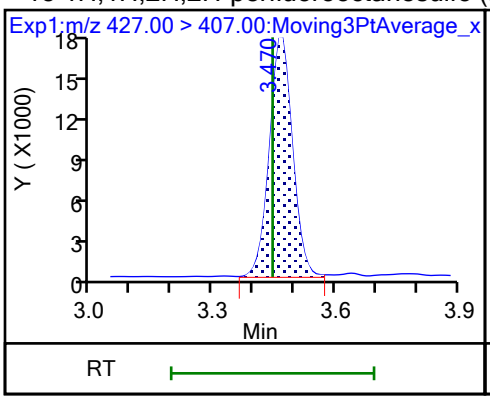
16 Perfluoroheptanesulfonic acid (M)



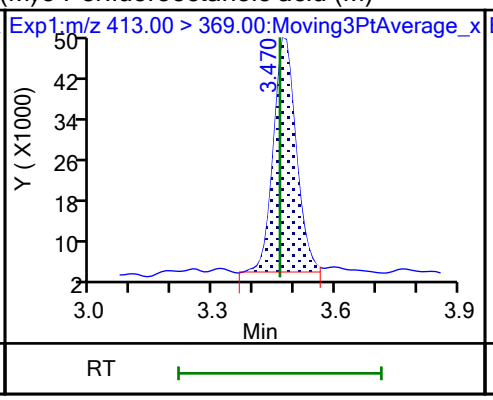
D 12 M2-6:2 FTS



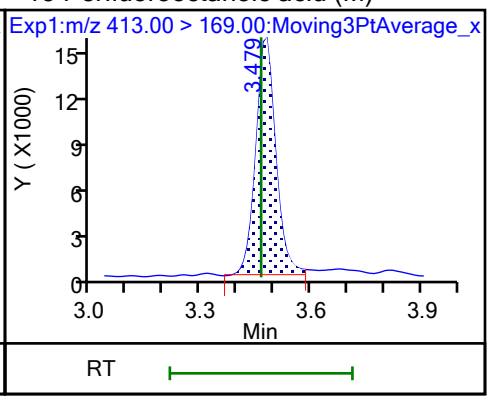
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



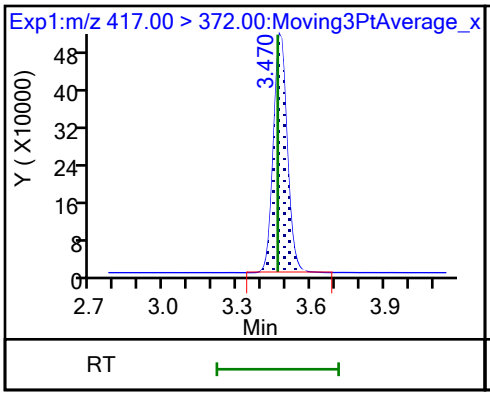
15 Perfluorooctanoic acid (M)



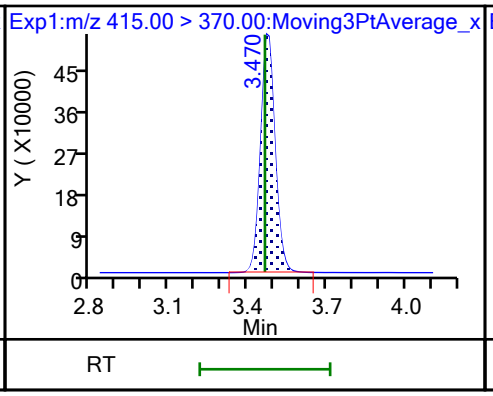
15 Perfluorooctanoic acid (M)



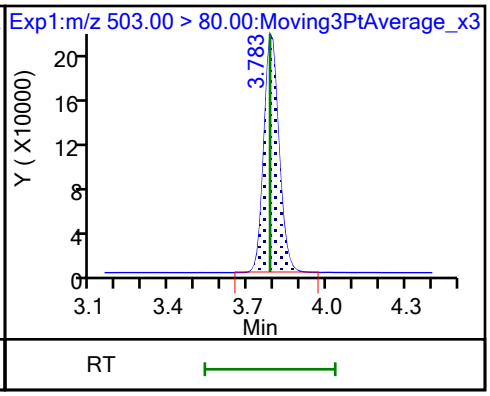
D 14 13C4 PFOA



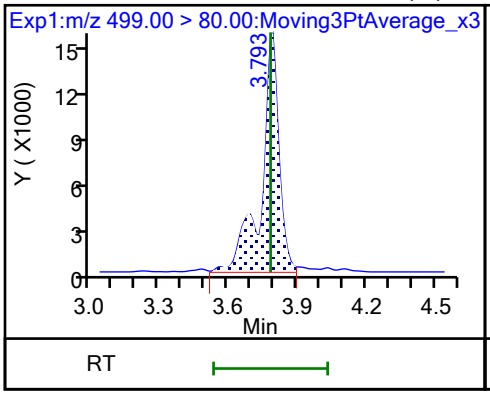
* 62 13C2 PFOA



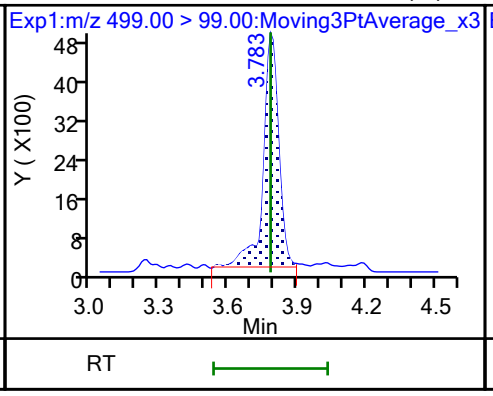
D 18 13C4 PFOS



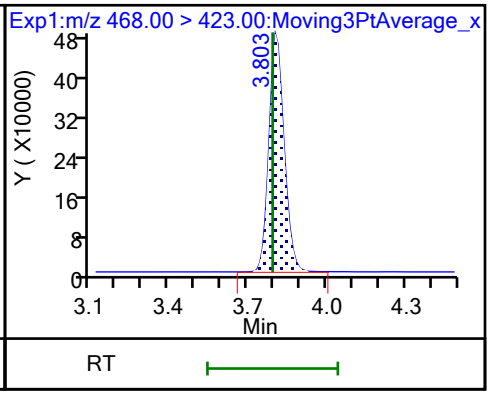
17 Perfluorooctanesulfonic acid (M)



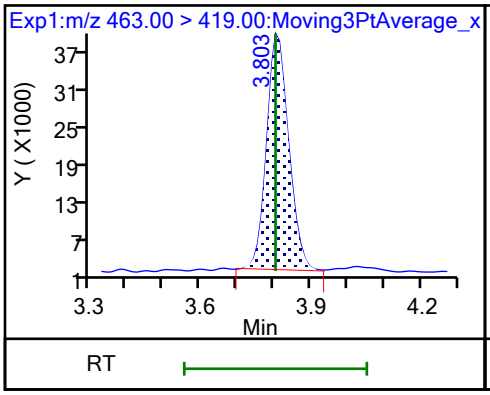
17 Perfluorooctanesulfonic acid (M)



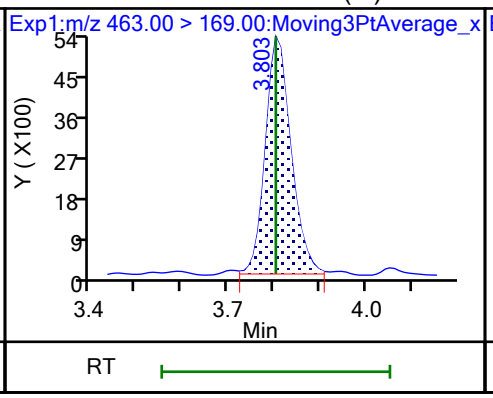
D 19 13C5 PFNA



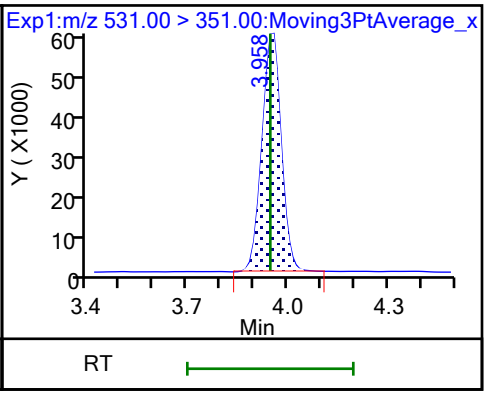
20 Perfluorononanoic acid



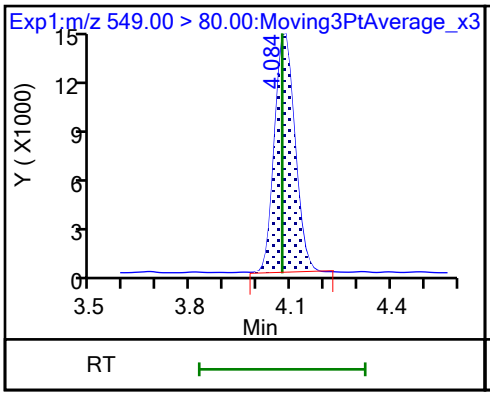
20 Perfluorononanoic acid (M)



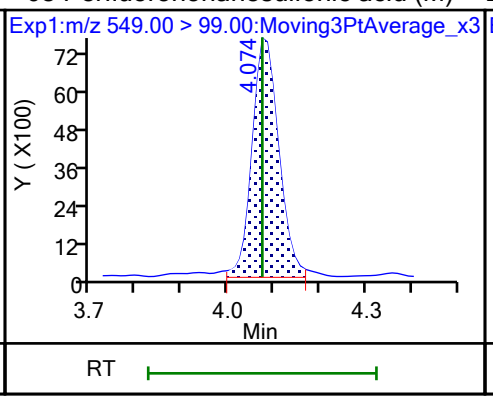
69 9-Chlorohexadecafluoro-3-oxanona



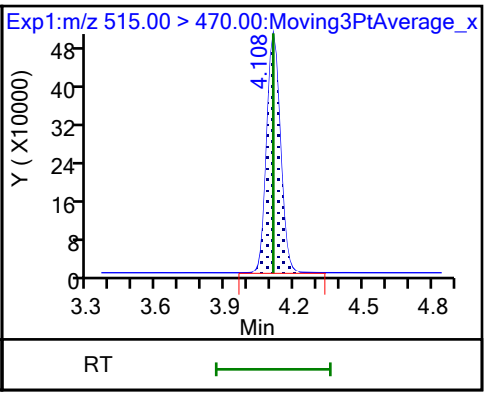
68 Perfluorononanesulfonic acid



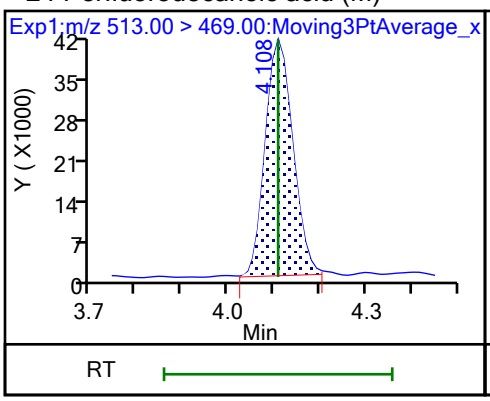
68 Perfluorononanesulfonic acid (M)



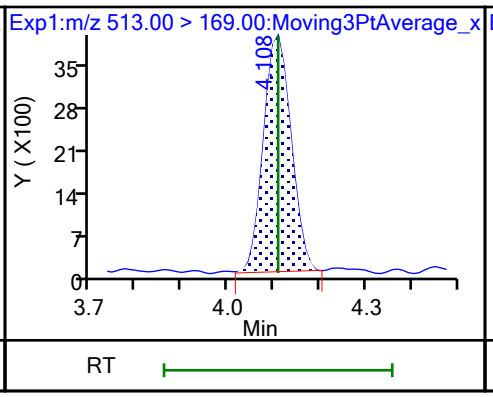
D 23 13C2 PFDA



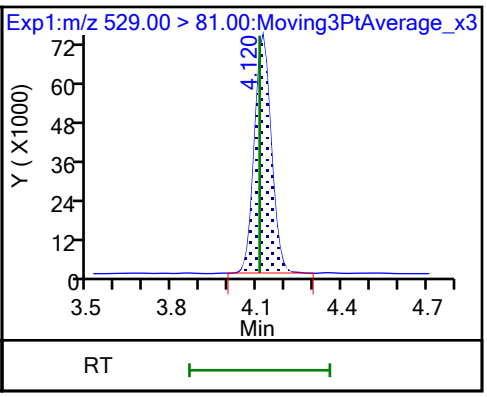
24 Perfluorodecanoic acid (M)



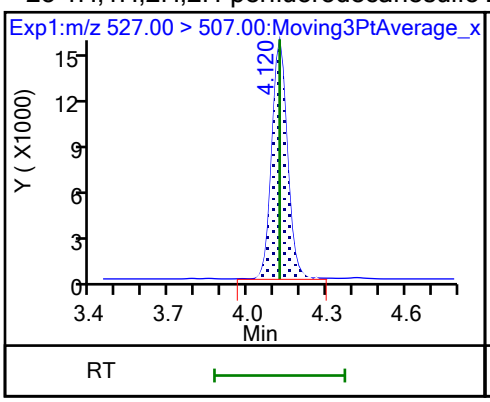
24 Perfluorodecanoic acid



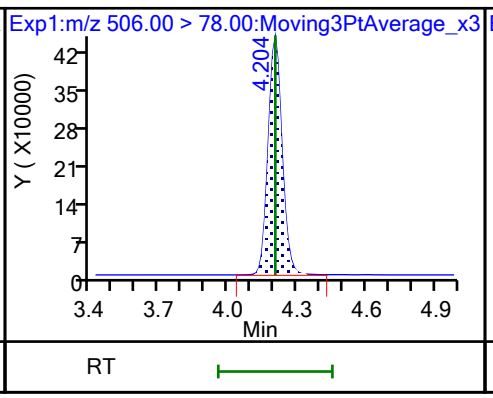
D 26 M2-8:2 FTS



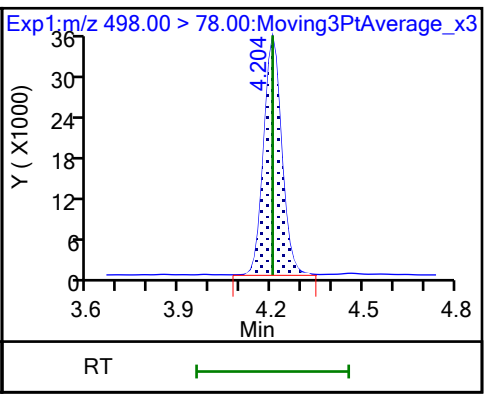
25 1H,1H,2H,2H-perfluorodecanesulfo



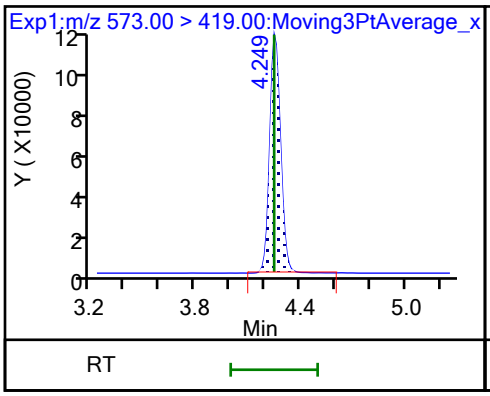
D 21 13C8 FOSA



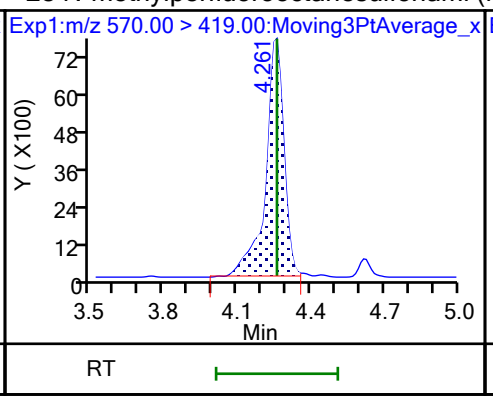
22 Perfluorooctanesulfonamide



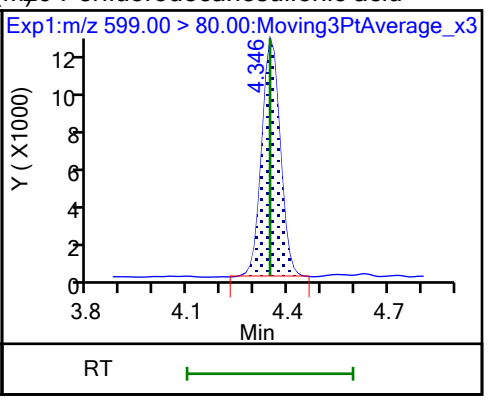
D 27 d3-NMeFOSAA



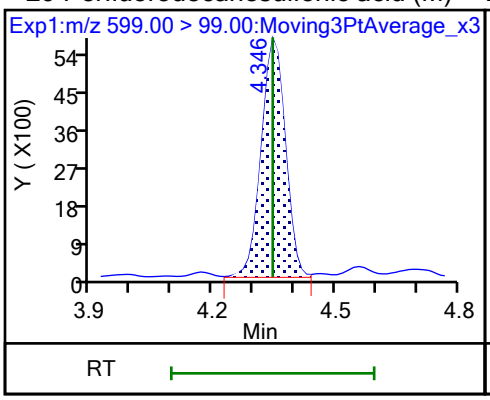
28 N-methylperfluorooctanesulfonami (M)



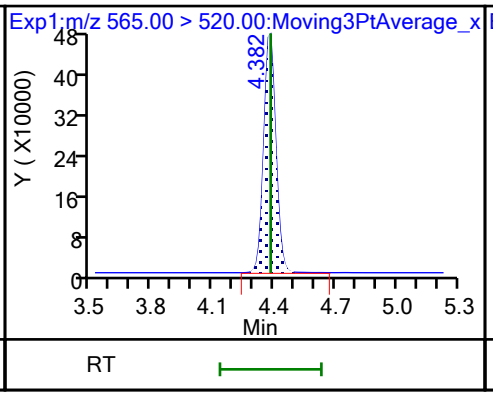
29 Perfluorodecanesulfonic acid



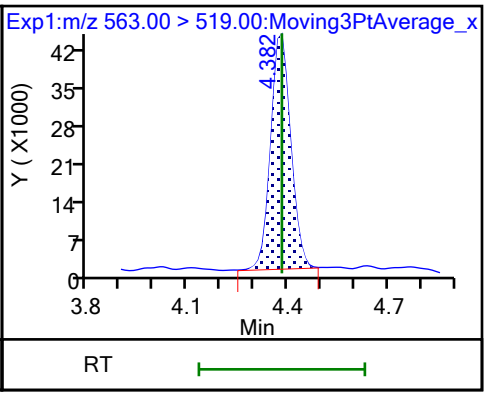
29 Perfluorodecanesulfonic acid (M)



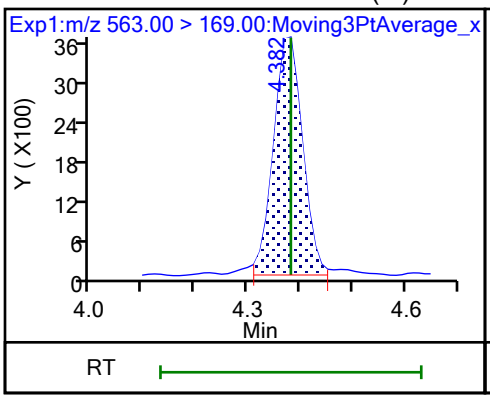
D 30 13C2 PFUnA



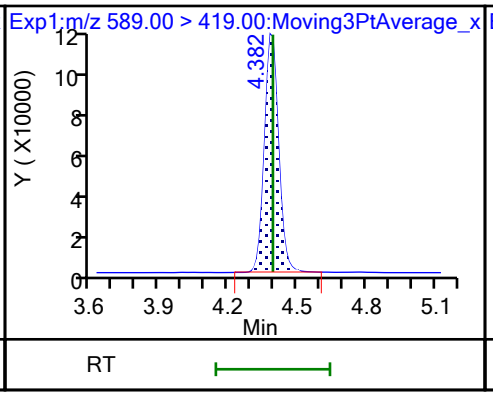
31 Perfluoroundecanoic acid



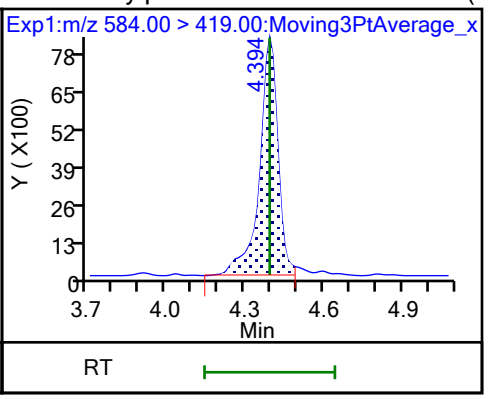
31 Perfluoroundecanoic acid (M)



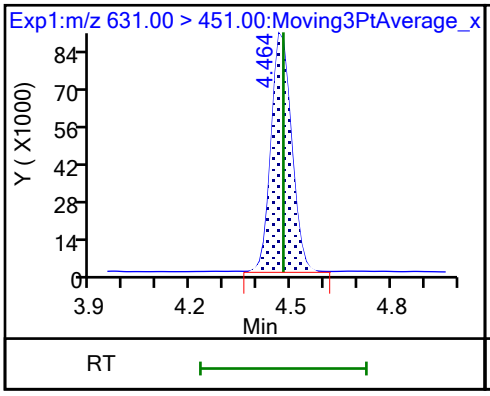
D 32 d5-NEtFOSAA



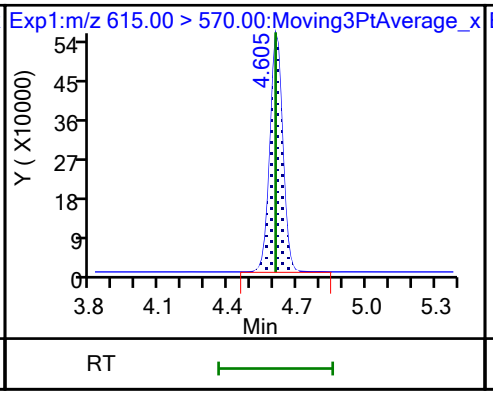
33 N-ethylperfluorooctanesulfonamid (M)



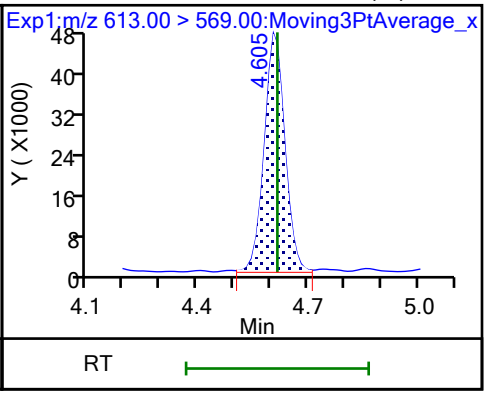
66 11-Chloroeicosafluoro-3-oxaundec



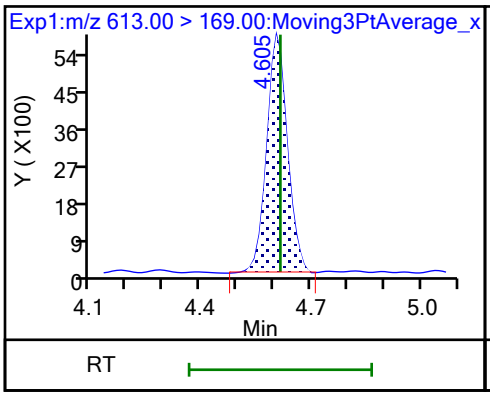
D 36 13C2 PFDoA



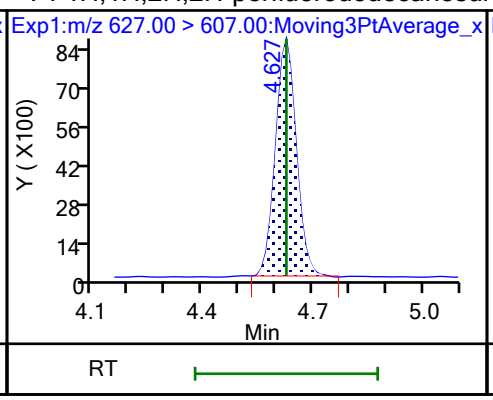
37 Perfluorododecanoic acid (M)



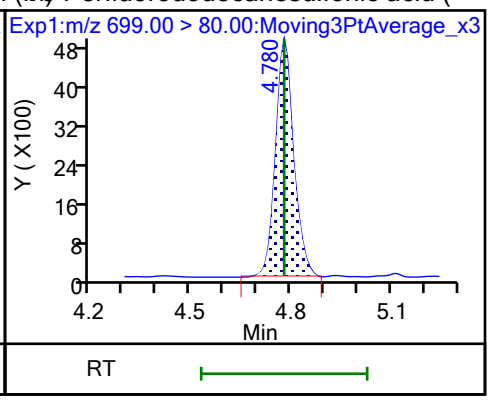
37 Perfluorododecanoic acid



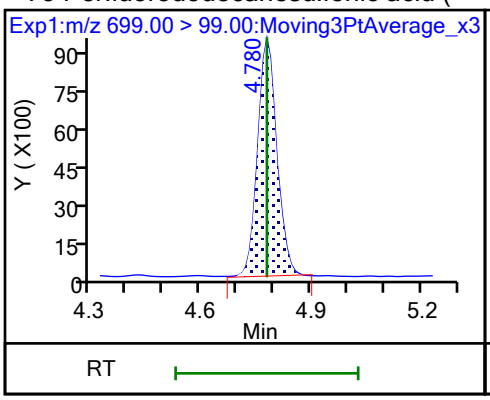
74 1H,1H,2H,2H-perfluorododecanesul (M)



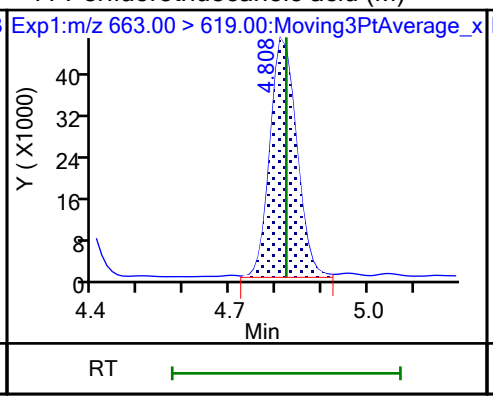
75 Perfluorododecanesulfonic acid (



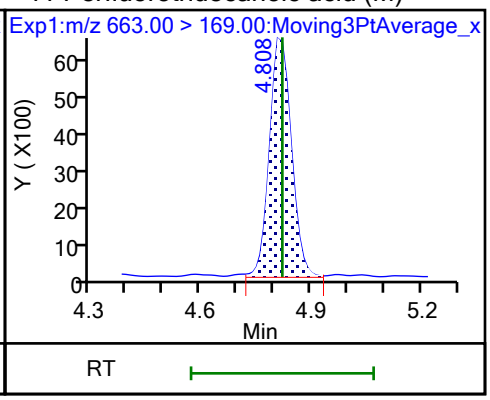
75 Perfluorododecanesulfonic acid (



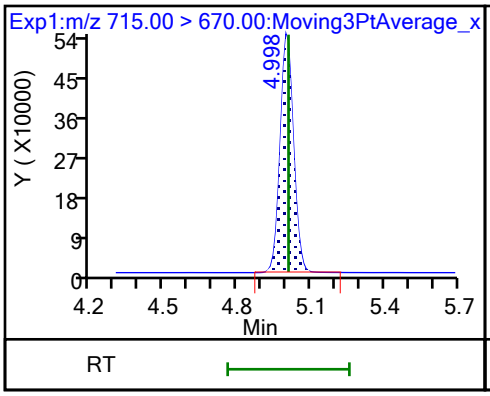
41 Perfluorotridecanoic acid (M)



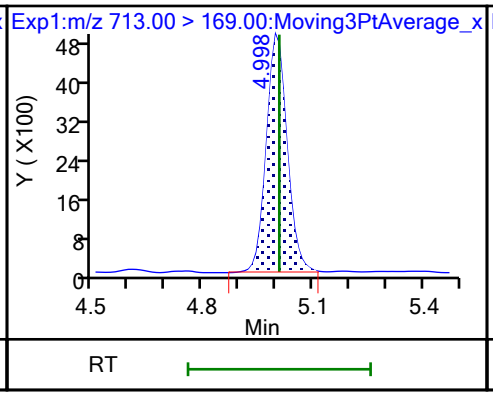
41 Perfluorotridecanoic acid (M)



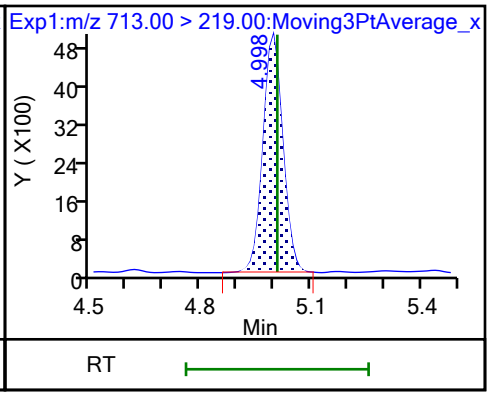
D 43 13C2 PFTeDA



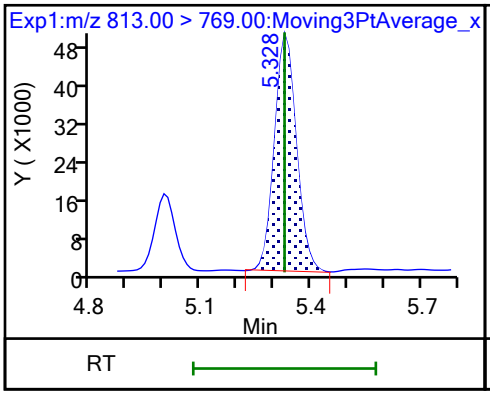
42 Perfluorotetradecanoic acid



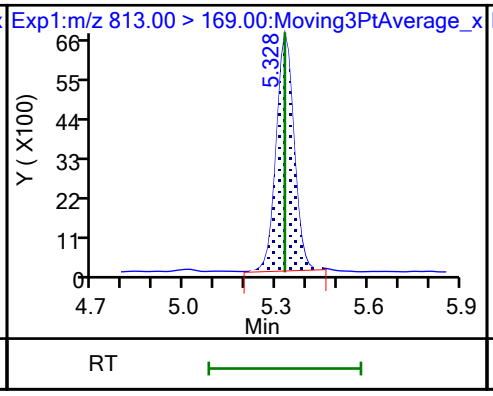
42 Perfluorotetradecanoic acid



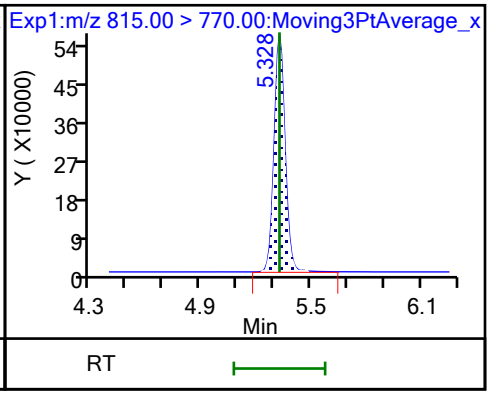
45 Perfluorohexadecanoic acid



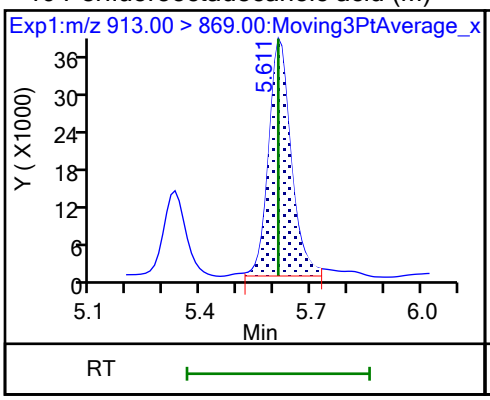
45 Perfluorohexadecanoic acid



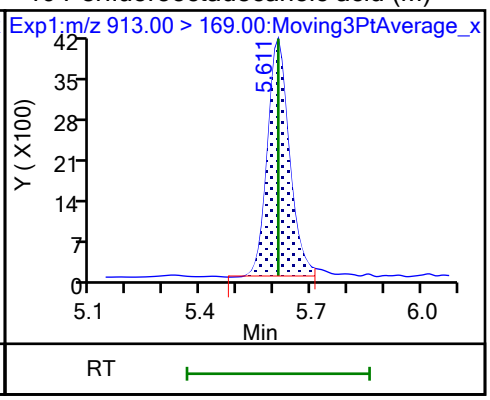
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Jul-2023 17:33:10 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 200-0056441-007 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:49 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 17:49:59
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.602	1916527	1.22		97.6	1037	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	774804	0.5180		104	49.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.693	1507442	1.24		98.9	854	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	651716	0.5008		100	28.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.697	1758991	1.07		91.7	56488	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	790713	0.4679	Target=2.07	105	143	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	376898		2.10(1.04-3.11)	105	75.3	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.781	215257	1.13		96.6	77.9	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	288946	0.4615		98.5	883	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.755	2.731	0.024	0.792	1472867	1.19		95.0	3850	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	672203	0.5184	Target=14.29	104	87.4	
313.00 > 119.00	2.755	2.731	0.024	1.000	43102		15.60(7.15-21.44)	104	30.9	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	694967	0.4648	Target=2.78	98.8	1051	
349.00 > 99.00	2.755	2.731	0.024	0.885	242262		2.87(1.39-4.17)	98.8	272	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.868	2.844	0.024	0.824	279126	1.16		93.0	2331	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	0.996	115257	0.5155		103	712	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.895	1353967	1.14		96.8	3822	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.114	3.092	0.022	1.000	555092	0.4379	Target=3.23	95.8	787	M
399.00 > 99.00	3.114	3.092	0.022	1.000	169403		3.28(1.62-4.84)	95.8	113	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.126	3.104	0.022	1.004	705383	0.4702	Target=4.11	94.0	148	
363.00 > 169.00	3.114	3.104	0.010	1.000	172971		4.08(2.06-6.17)	94.0	135	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.895	1672833	1.23		98.3	4178	
77 DONA										
377.00 > 251.00	3.160	3.138	0.022	0.835	1973200	0.4642	Target=3.28	98.2	2579	
377.00 > 85.00	3.160	3.138	0.022	0.835	597494		3.30(1.64-4.92)	98.2	814	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.461	3.446	0.015	0.915	497245	0.4658	Target=4.71	97.7	1145	
449.00 > 99.00	3.461	3.446	0.015	0.915	101764		4.89(2.36-7.07)	97.7	193	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.995	274798	1.12		94.2	369	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	310157	0.4904		103	795	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.479	3.464	0.015	1.003	801060	0.4915	Target=2.90	98.3	61.0	
413.00 > 169.00	3.479	3.464	0.015	1.003	274444		2.92(1.45-4.35)	98.3	334	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	0.997	1912820	1.24		99.2	5100	
* 62 13C2 PFOA										
415.00 > 370.00	3.479	3.464	0.015		1980756	1.25			7103	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.087	882764	1.17		98.3	3627	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.003	384806	0.4466	Target=4.11	96.2	673	M
499.00 > 99.00	3.793	3.783	0.010	1.003	97181		3.96(2.05-6.16)	96.2	140	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.093	2008931	1.20		95.8	5719	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	802848	0.5097	Target=8.48	102	153	
463.00 > 169.00	3.803	3.803	0.0	1.000	92789		8.65(4.24-12.72)	102	535	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	1237458	0.4693		101	2329	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.080	312103	0.4761	Target=2.17	99.0	1622	
549.00 > 99.00	4.084	4.074	0.010	1.080	140337		2.22(1.08-3.25)	99.0	373	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.181	2062234	1.17		93.9	9314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	869526	0.5274	Target=10.55	105	223	
513.00 > 169.00	4.108	4.108	0.0	1.000	81818		10.63(5.27-15.82)	105	203	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.184	298552	1.08		90.2	633	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	270156	0.4922		103	2104	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.208	1790735	1.19		95.5	3553	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	680067	0.4977		99.5	1708	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.248	4.249	-0.001	1.221	486461	1.16		92.7	1692	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.248	4.260	-0.012	1.000	177278	0.5020		100	343	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	234996	0.4658	Target=2.28	96.5	994	
599.00 > 99.00	4.346	4.346	0.0	1.149	102960		2.28(1.14-3.42)	96.5	384	
D 30 13C2 PFUnA										
565.00 > 520.00	4.381	4.382	-0.001	1.259	1983358	1.20		95.7	15111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.381	4.382	-0.001	1.000	818335	0.5004	Target=11.30	100	237	
563.00 > 169.00	4.381	4.382	-0.001	1.000	76353		10.72(5.65-16.96)	100	564	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.381	4.393	-0.012	1.259	491633	1.22		97.3	1018	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.003	187350	0.4763		95.3	408	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	1894487	0.4685		99.4	2418	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.324	2022512	1.20		96.0	6242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	852163	0.5175	Target=8.15	103	86.6	
613.00 > 169.00	4.605	4.616	-0.011	1.000	100190		8.51(4.07-12.22)	103	964	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	158460	0.4830		100	1667	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	82920	0.4849	Target=0.50	100	1359	
699.00 > 99.00	4.779	4.779	0.0	1.263	159027		0.52(0.25-0.75)	100	1291	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	907955	0.5245	Target=6.61	105	105	
663.00 > 169.00	4.808	4.822	-0.014	1.044	136886		6.63(3.31-9.92)	105	771	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.994	5.008	-0.014	1.435	1996289	1.19		95.1	6980	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.994	5.008	-0.014	1.000	88102	0.4934	Target=0.96	98.7	1397	
713.00 > 219.00	4.994	5.008	-0.014	1.000	92762		0.95(0.48-1.44)	98.7	896	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.326	5.328	-0.002	1.000	900190	0.4873	Target=7.69	97.5	97.8	
813.00 > 169.00	5.326	5.328	-0.002	1.000	120909		7.45(3.85-11.54)	97.5	1116	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.326	5.328	-0.002	1.531	2309121	1.19		95.5	3874	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.609	5.611	-0.002	1.053	726427	0.5036	Target=9.13	101	95.3	M
913.00 > 169.00	5.600	5.611	-0.011	1.051	78986		9.20(4.56-13.69)	101	265	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

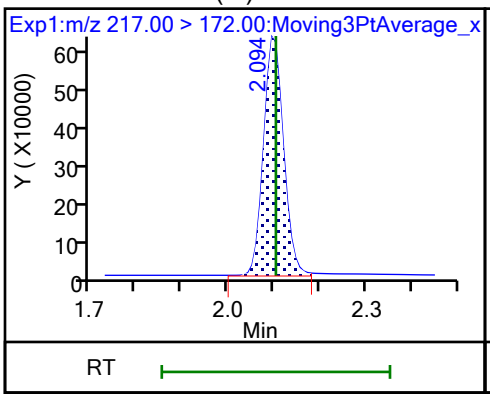
PFAS32NCIC3_00016 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:50 Chrom Revision: 2.3 19-Jul-2023 18:28:48

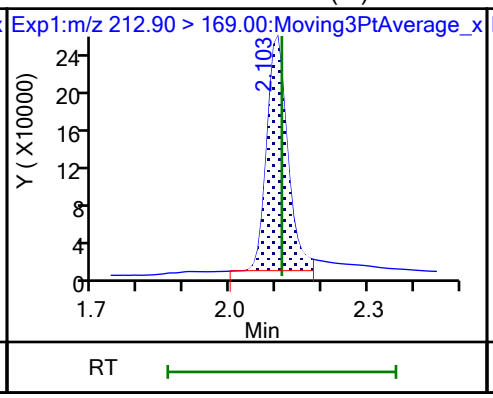
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL07.d
Injection Date: 26-Jul-2023 17:33:10 Instrument ID: LC812
Lims ID: IC 3
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

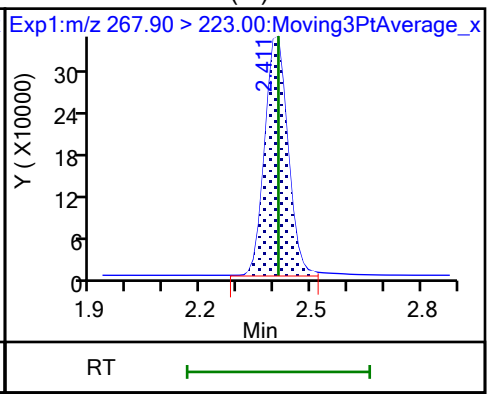
D 1 13C4 PFBA (M)



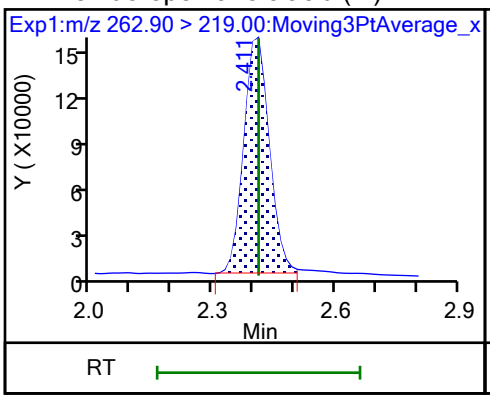
2 Perfluorobutanoic acid (M)



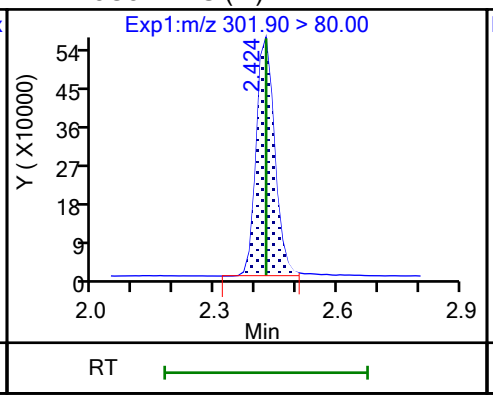
D 3 13C5 PFPeA (M)



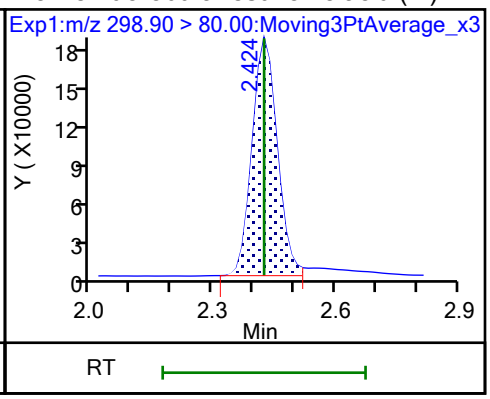
4 Perfluoropentanoic acid (M)



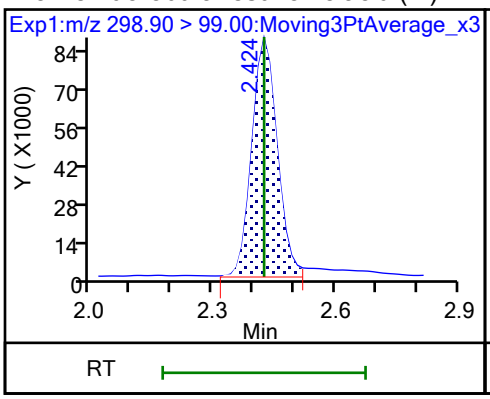
D 47 13C3 PFBS (M)



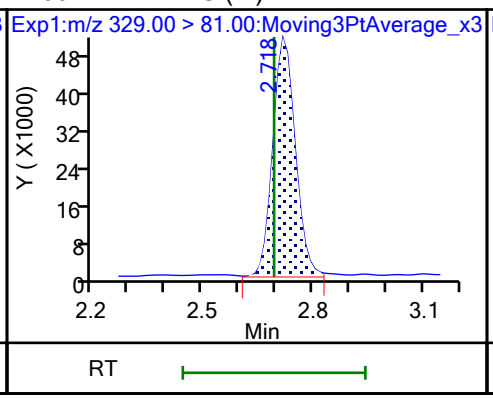
5 Perfluorobutanesulfonic acid (M)



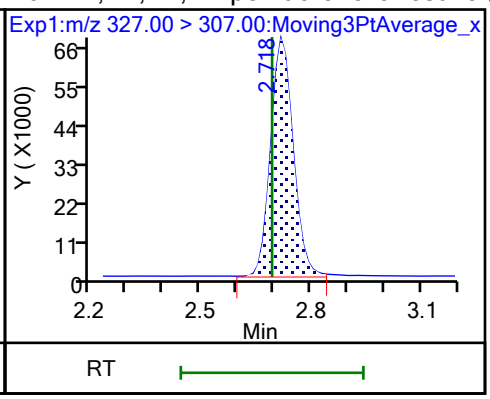
5 Perfluorobutanesulfonic acid (M)



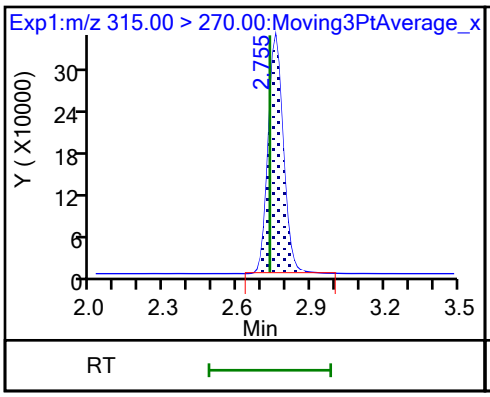
D 60 M2-4:2 FTS (M)



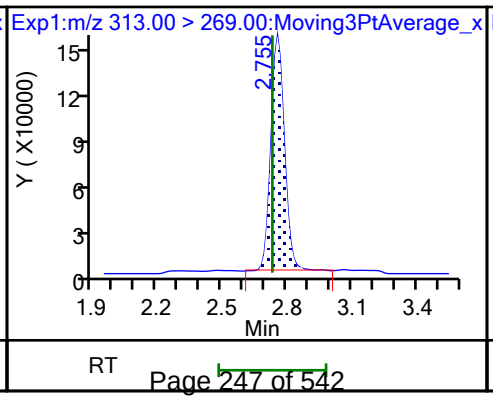
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



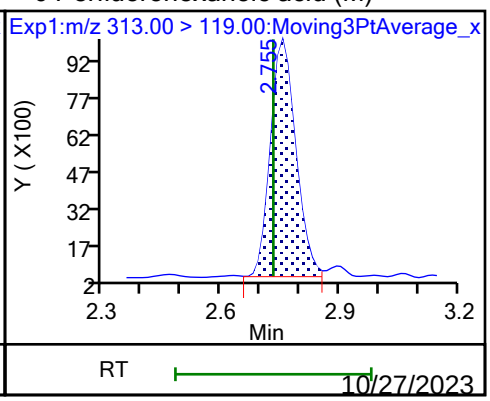
D 7 13C2 PFHxA



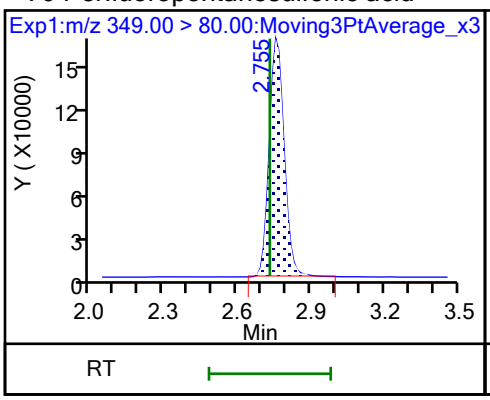
6 Perfluorohexanoic acid



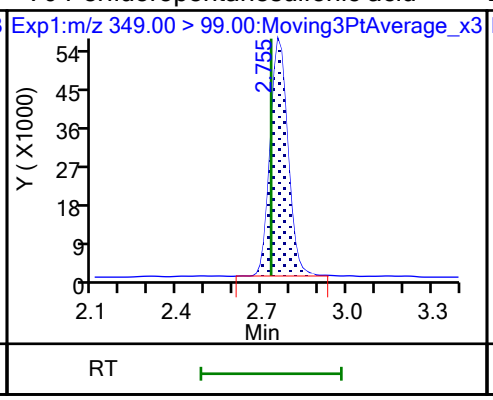
6 Perfluorohexanoic acid (M)



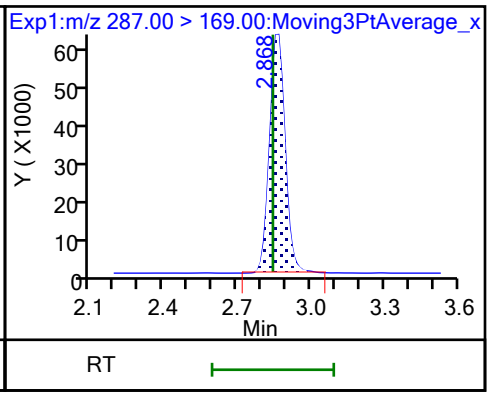
70 Perfluoropentanesulfonic acid



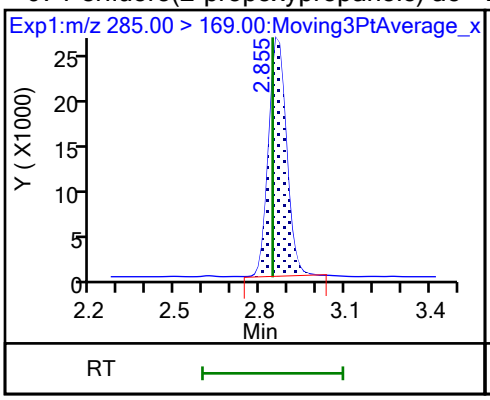
70 Perfluoropentanesulfonic acid



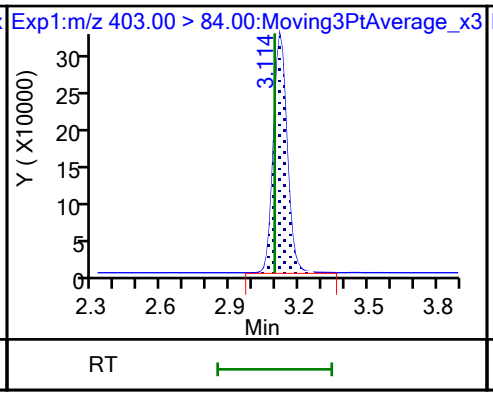
D 64 13C3 HFPO-DA



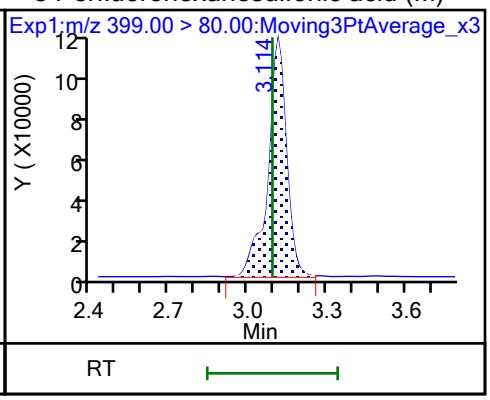
67 Perfluoro(2-propoxypropanoic) ac



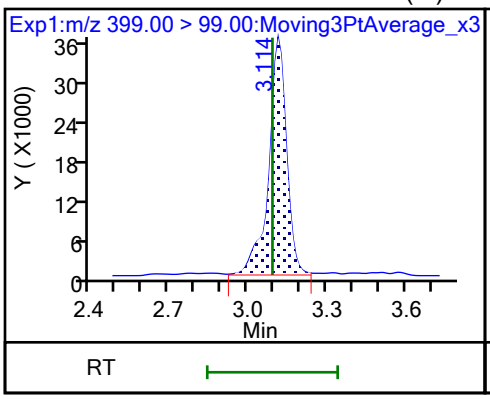
D 11 18O2 PFHxS



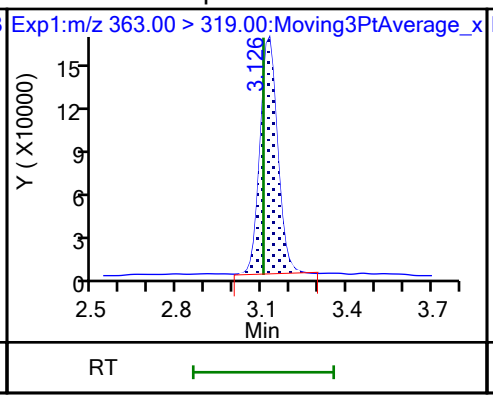
8 Perfluorohexanesulfonic acid (M)



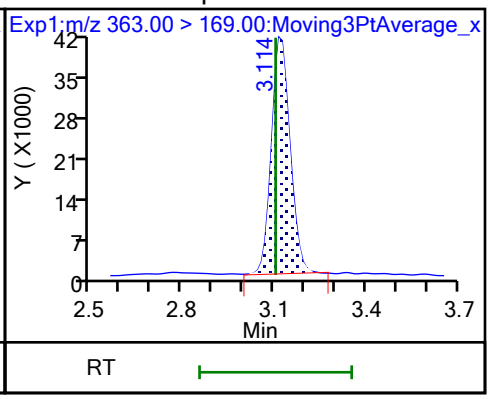
8 Perfluorohexanesulfonic acid (M)



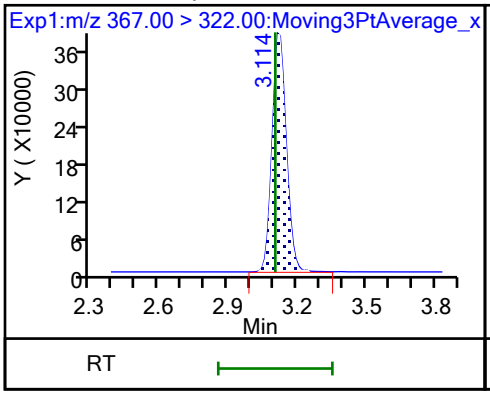
10 Perfluoroheptanoic acid



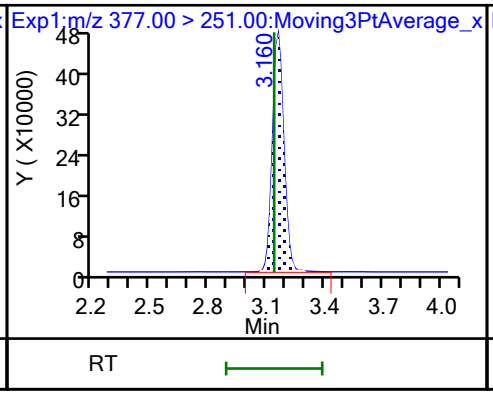
10 Perfluoroheptanoic acid



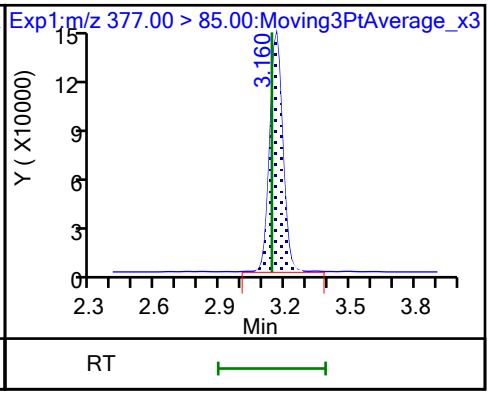
D 9 13C4 PFHpA



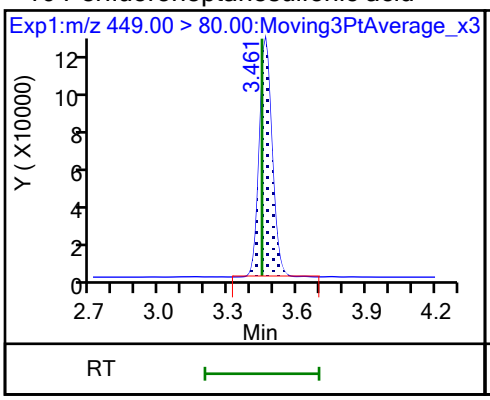
77 DONA



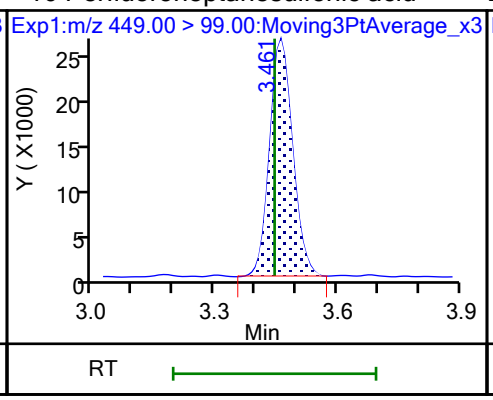
77 DONA



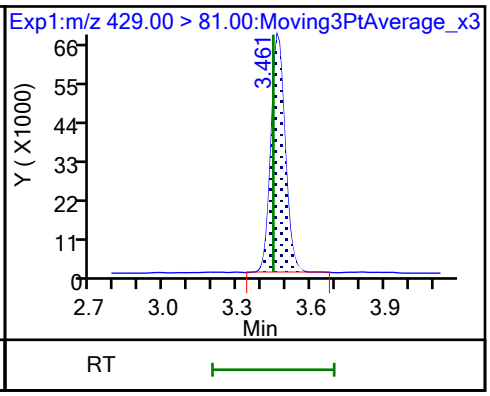
16 Perfluoroheptanesulfonic acid



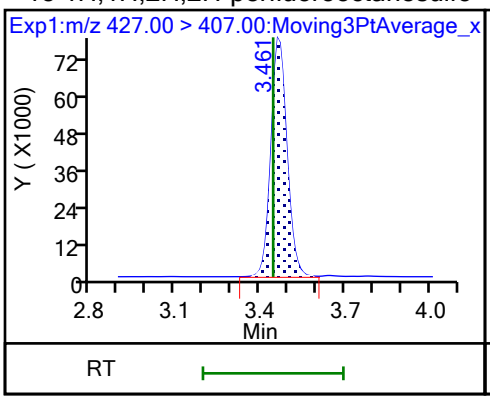
16 Perfluoroheptanesulfonic acid



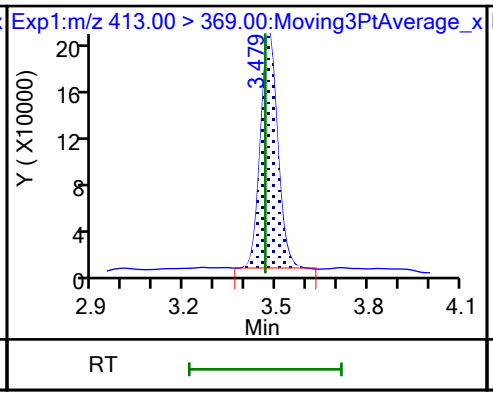
D 12 M2-6:2 FTS



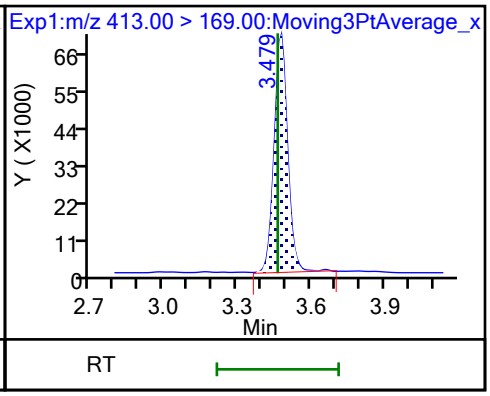
13 1H,1H,2H,2H-perfluorooctanesulfo



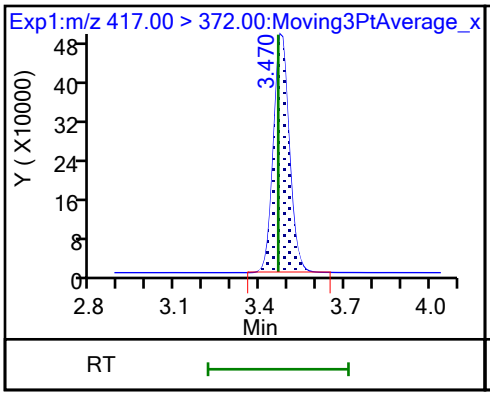
15 Perfluorooctanoic acid



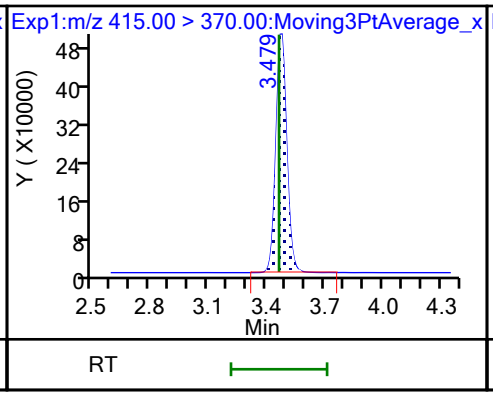
15 Perfluorooctanoic acid



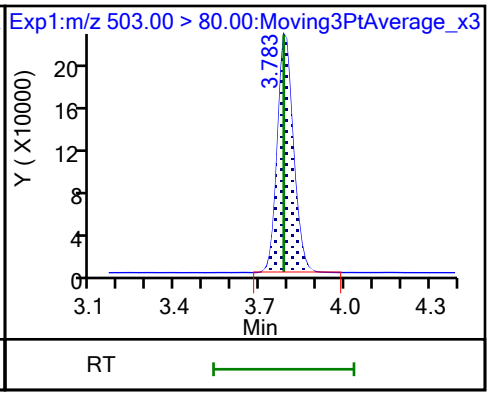
D 14 13C4 PFOA



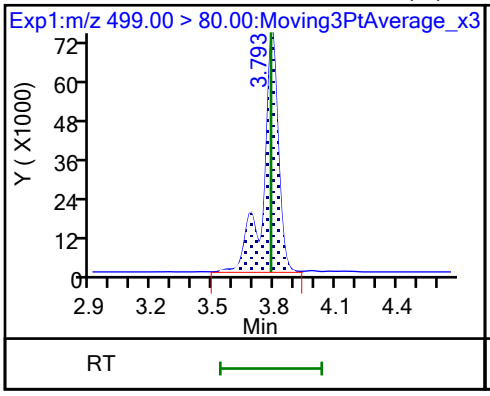
* 62 13C2 PFOA



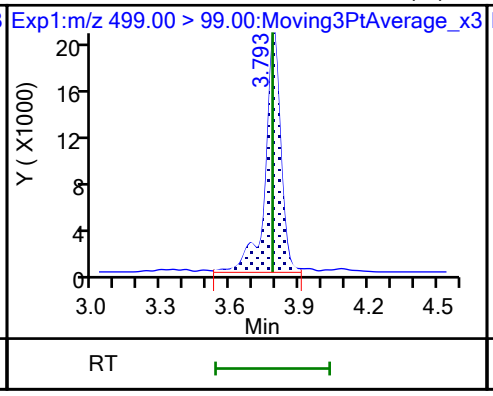
D 18 13C4 PFOS



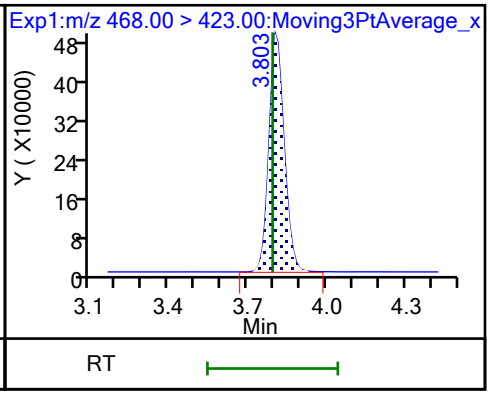
17 Perfluorooctanesulfonic acid (M)



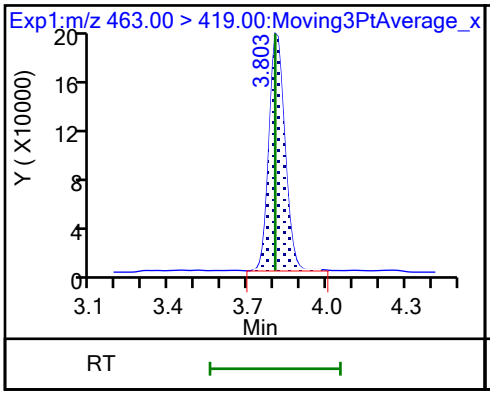
17 Perfluorooctanesulfonic acid (M)



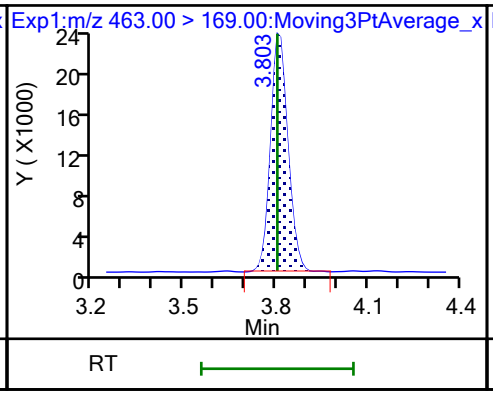
D 19 13C5 PFNA



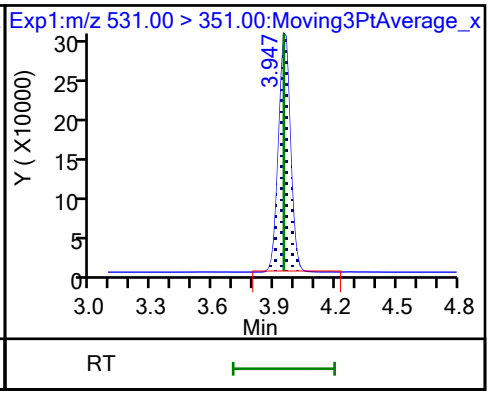
20 Perfluorononanoic acid



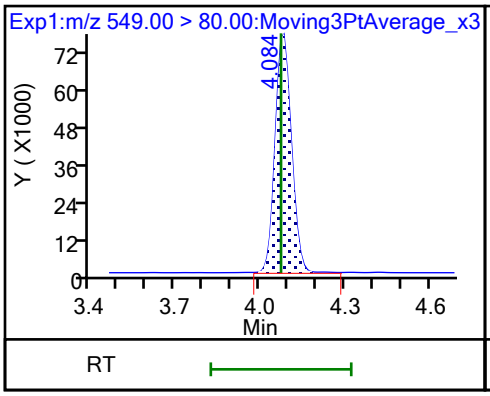
20 Perfluorononanoic acid



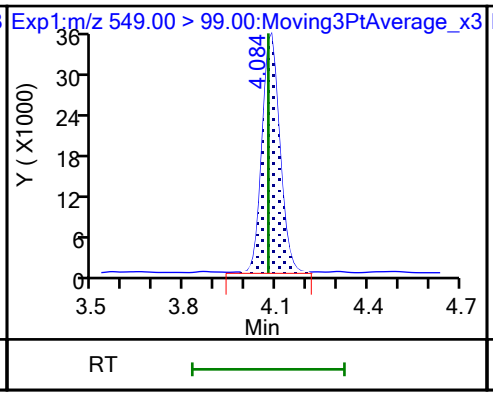
69 9-Chlorohexadecafluoro-3-oxanona



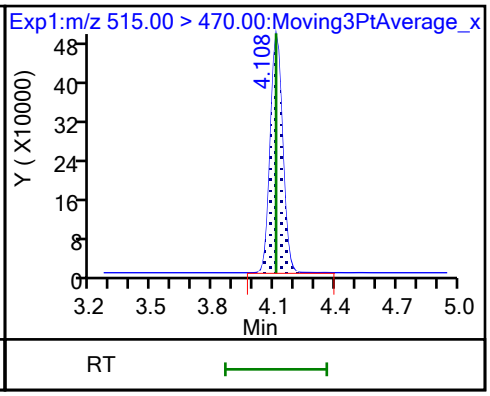
68 Perfluorononanesulfonic acid



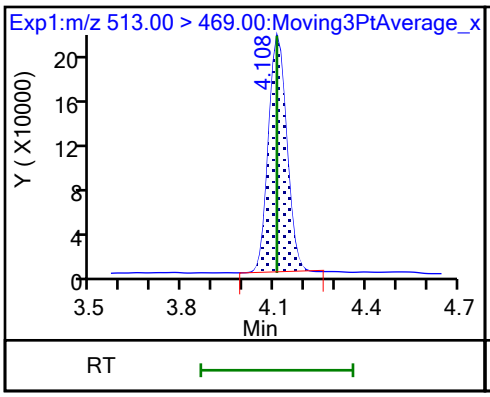
68 Perfluorononanesulfonic acid



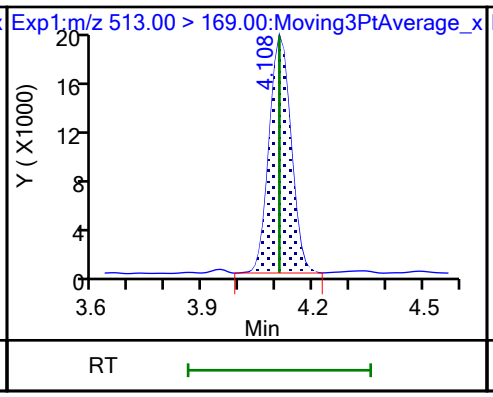
D 23 13C2 PFDA



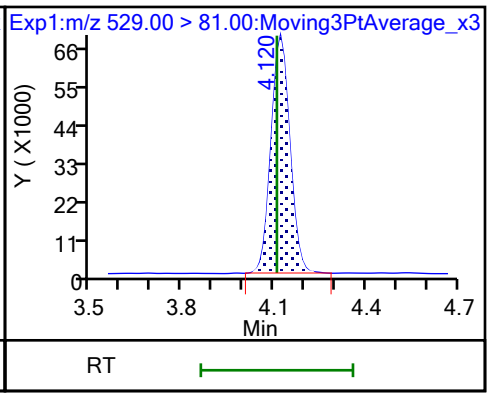
24 Perfluorodecanoic acid



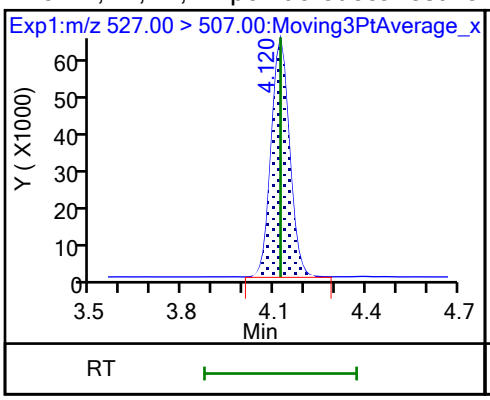
24 Perfluorodecanoic acid



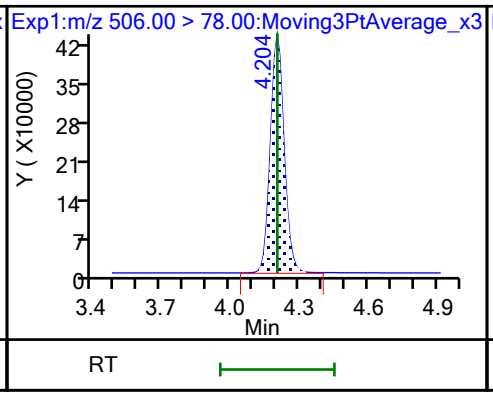
D 26 M2-8:2 FTS



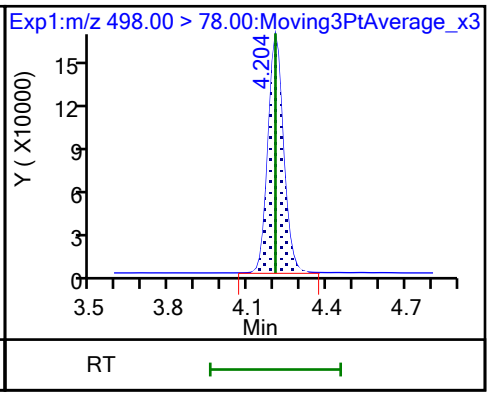
25 1H,1H,2H,2H-perfluorodecanesulfo



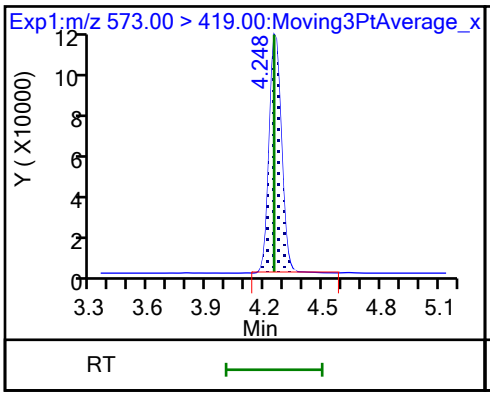
D 21 13C8 FOSA



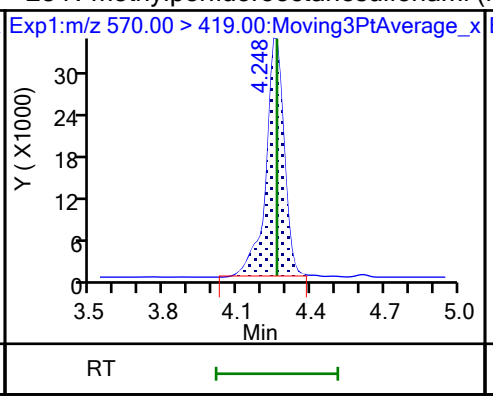
22 Perfluorooctanesulfonamide



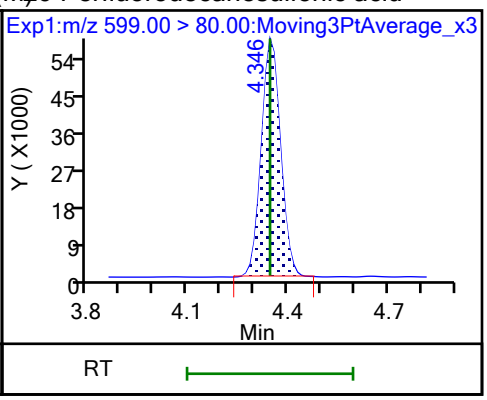
D 27 d3-NMeFOSAA



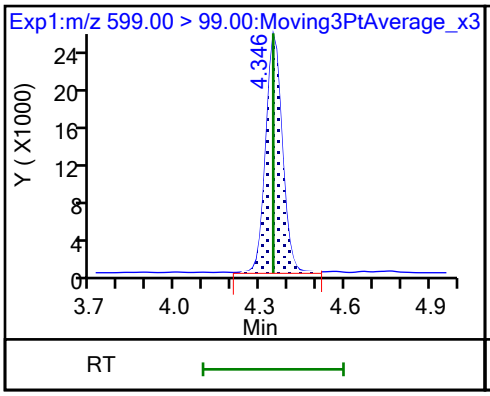
28 N-methylperfluorooctanesulfonami (M)



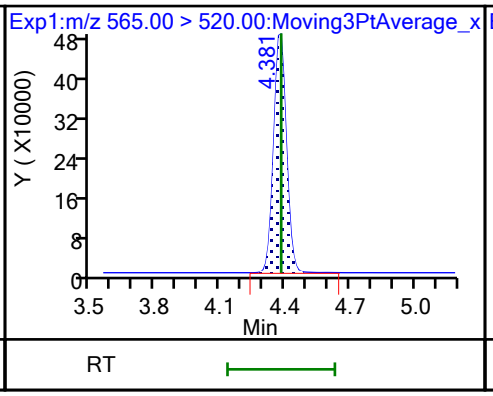
29 Perfluorodecanesulfonic acid



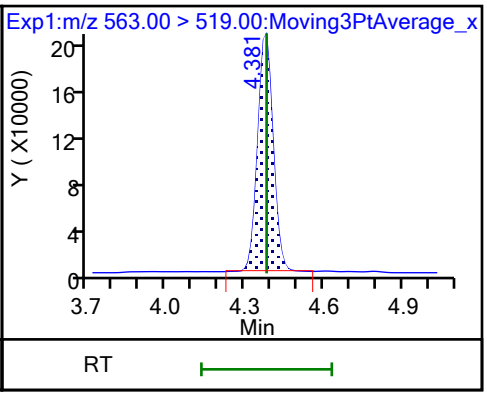
29 Perfluorodecanesulfonic acid



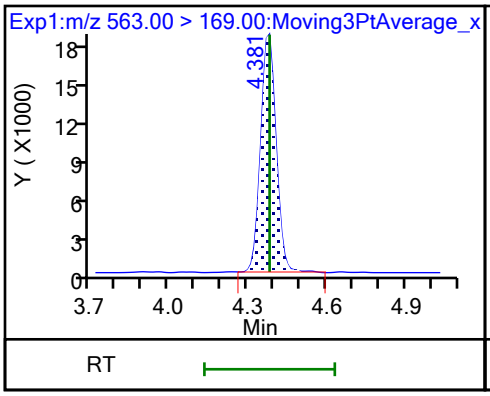
D 30 13C2 PFUnA



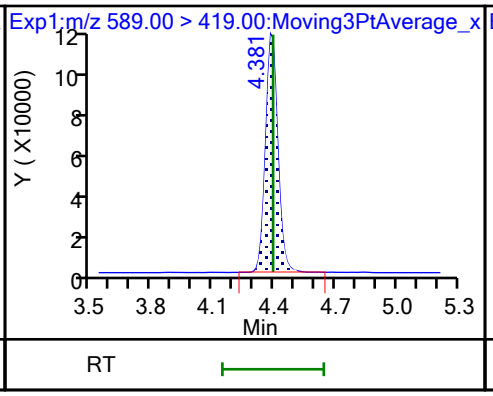
31 Perfluoroundecanoic acid



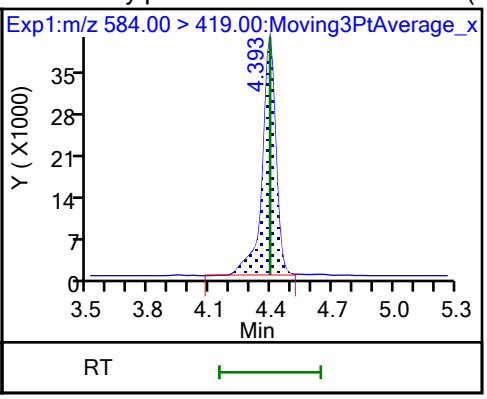
31 Perfluoroundecanoic acid



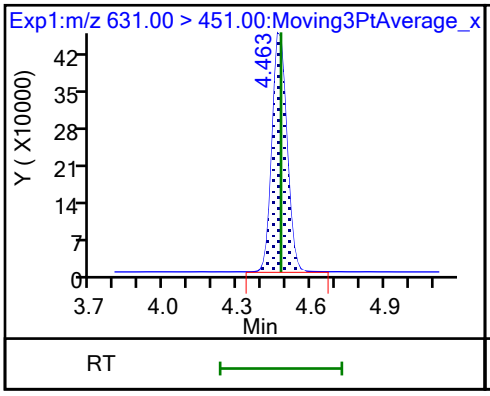
D 32 d5-NEtFOSAA



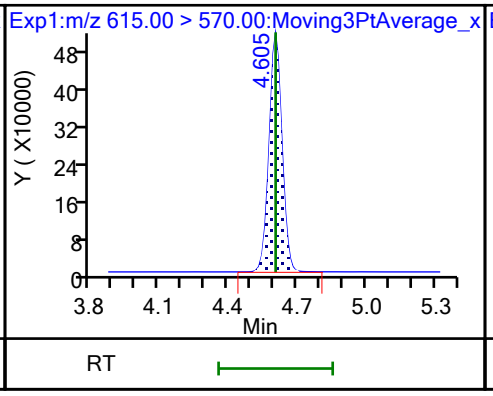
33 N-ethylperfluorooctanesulfonamid (M)



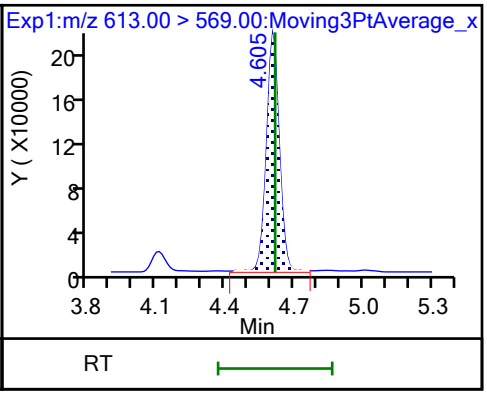
66 11-Chloroeicosafluoro-3-oxaundec



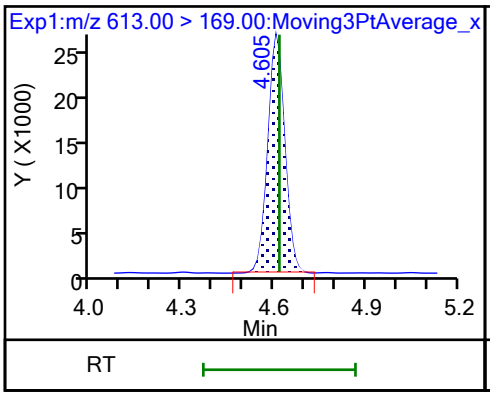
D 36 13C2 PFDoA



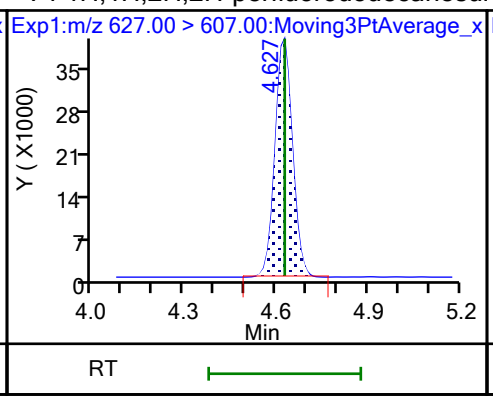
37 Perfluorododecanoic acid



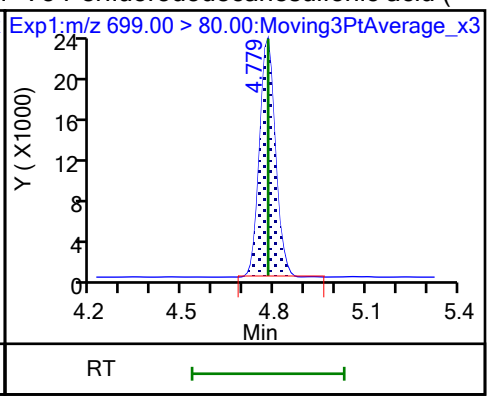
37 Perfluorododecanoic acid



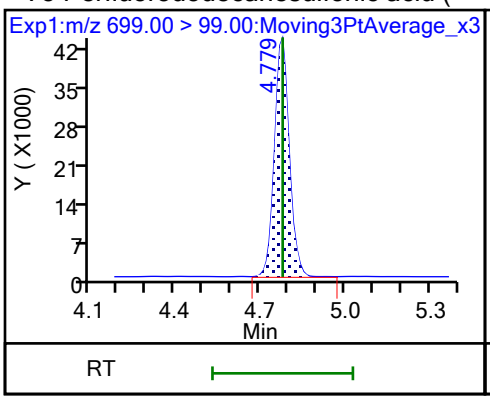
74 1H,1H,2H,2H-perfluorododecanesul



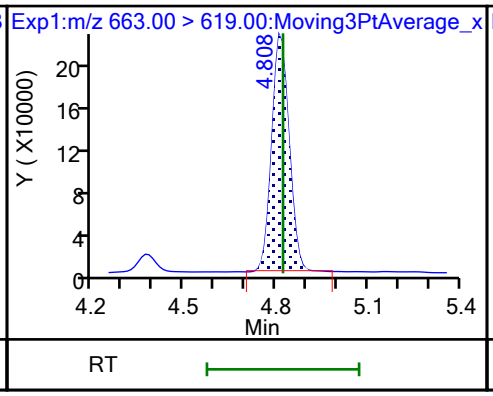
75 Perfluorododecanesulfonic acid (



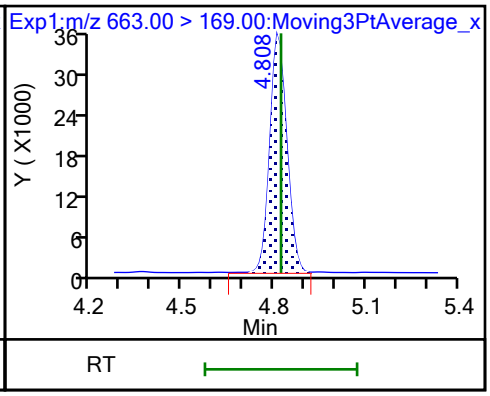
75 Perfluorododecanesulfonic acid (



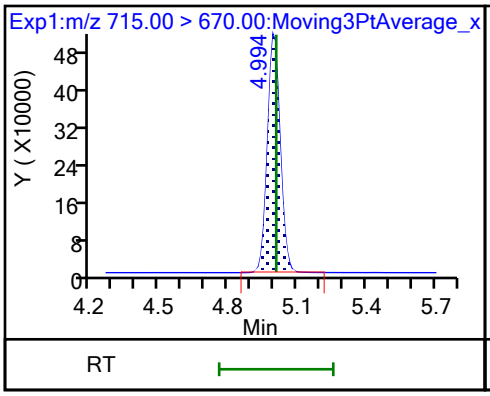
41 Perfluorotridecanoic acid



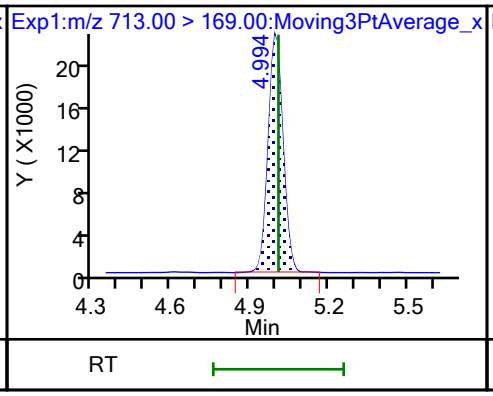
41 Perfluorotridecanoic acid



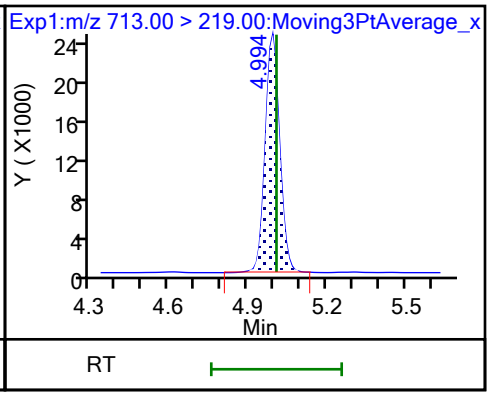
D 43 13C2 PFTeDA



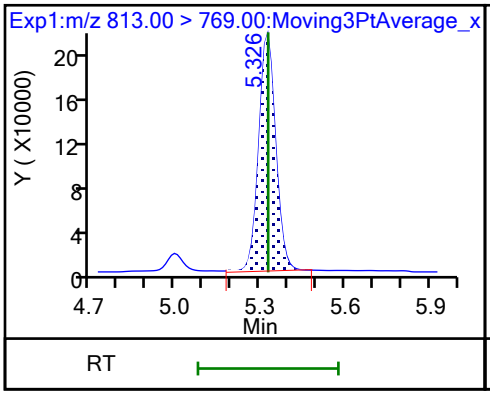
42 Perfluorotetradecanoic acid



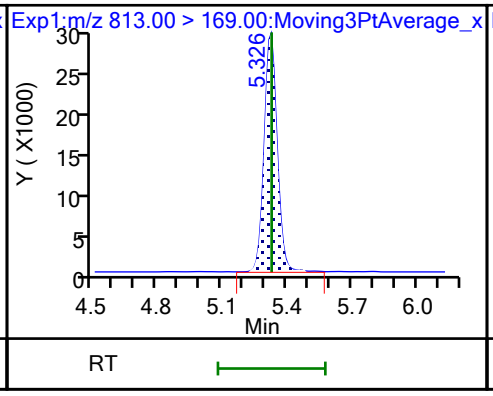
42 Perfluorotetradecanoic acid



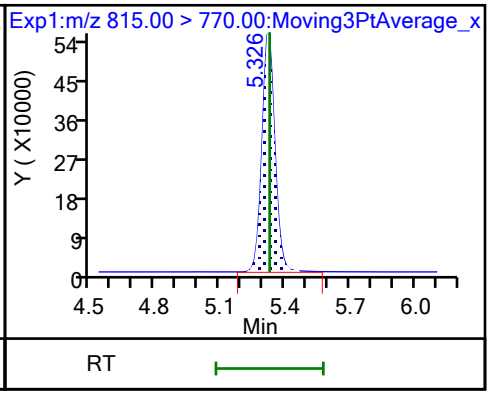
45 Perfluorohexadecanoic acid



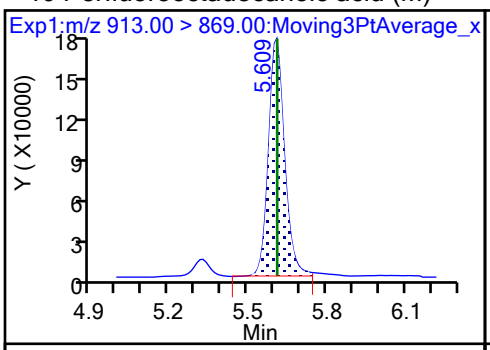
45 Perfluorohexadecanoic acid



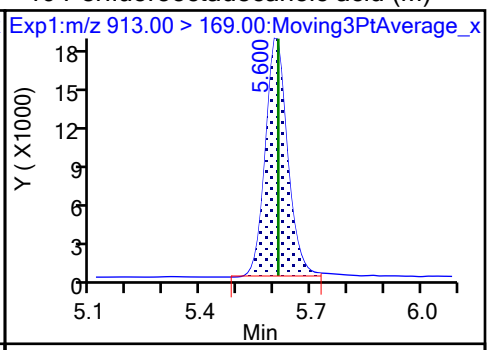
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Lims ID: ICISAV
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 26-Jul-2023 17:41:18 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICISAV
Misc. Info.: 200-0056441-008 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:28 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:44:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.607	1929850	1.25		100	852	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.112	2.112	0.0	1.004	1439078	0.9899		99.0	94.8	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.696	1529086	1.28		102	548	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1385943	1.05		105	60.6	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.425	2.425	0.0	0.700	1858340	1.15		98.8	53325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.425	2.425	0.0	1.000	1645342	0.9215	Target=2.07	104	208	M
298.90 > 99.00	2.425	2.425	0.0	1.000	798559		2.06(1.04-3.11)	104	141	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.694	2.694	0.0	0.778	220382	1.18		101	73.8	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.694	2.694	0.0	1.000	569311	0.8881		94.8	567	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.731	2.731	0.0	0.789	1544435	1.27		102	502	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.731	2.731	0.0	1.000	1301870	0.9575	Target=14.29	95.7	137	M
313.00 > 119.00	2.731	2.731	0.0	1.000	92229		14.12(7.15-21.44)	95.7	50.8	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.731	2.731	0.0	0.883	1426185	0.9245	Target=2.78	98.2	453	M
349.00 > 99.00	2.731	2.731	0.0	0.883	523421		2.72(1.39-4.17)	98.2	329	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.844	2.844	0.0	0.821	296521	1.26		101	448	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.844	2.844	0.0	1.000	235976	0.99		99.4	561	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.092	3.092	0.0	1.000	1123331	0.8590	Target=3.23	94.0	519	M
399.00 > 99.00	3.092	3.092	0.0	1.000	338365		3.32(1.62-4.84)	94.0	154	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.092	3.092	0.0	0.893	1396957	1.21		102	6682	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.104	3.104	0.0	1.000	1446925	0.9607	Target=4.11	96.1	215	M
363.00 > 169.00	3.104	3.104	0.0	1.000	346831		4.17(2.06-6.17)	96.1	225	M
D 9 13C4 PFHpA										M
367.00 > 322.00	3.104	3.104	0.0	0.896	1679653	1.26		101	737	M
77 DONA										
377.00 > 251.00	3.138	3.138	0.0	0.830	4190396	0.9622	Target=3.28	102	3717	
377.00 > 85.00	3.138	3.138	0.0	0.830	1260116		3.33(1.64-4.92)	102	1390	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.446	3.446	0.0	0.911	1008539	0.9221	Target=4.71	96.8	1714	
449.00 > 99.00	3.446	3.446	0.0	0.911	208912		4.83(2.36-7.07)	96.8	432	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.446	0.0	0.995	299923	1.25		105	422	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.446	3.446	0.0	1.000	618135	0.8954		94.2	1663	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.464	3.464	0.0	1.000	1597361	0.9691	Target=2.90	96.9	122	
413.00 > 169.00	3.464	3.464	0.0	1.000	554295		2.88(1.45-4.35)	96.9	502	M
D 14 13C4 PFOA										
417.00 > 372.00	3.464	3.464	0.0	1.000	1934463	1.28		102	3978	
* 62 13C2 PFOA										
415.00 > 370.00	3.464	3.464	0.0		1941206	1.25			4649	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.092	904398	1.23		103	2576	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	792430	0.8977	Target=4.11	96.7	1005	M
499.00 > 99.00	3.783	3.783	0.0	1.000	186696		4.24(2.05-6.16)	96.7	256	M
D 19 13C5 PFNA										
468.00 > 423.00	3.793	3.793	0.0	1.095	2143126	1.30		104	7977	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.003	1661649	0.9889	Target=8.48	98.9	305	
463.00 > 169.00	3.803	3.803	0.0	1.003	199241		8.34(4.24-12.72)	98.9	1189	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	2512476	0.9301		99.7	3906	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	638462	0.9507	Target=2.17	98.8	2935	
549.00 > 99.00	4.074	4.074	0.0	1.077	294408		2.17(1.08-3.25)	98.8	552	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.186	2125756	1.23		98.8	9272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	1775242	1.04	Target=10.55	104	474	
513.00 > 169.00	4.108	4.108	0.0	1.000	155159		11.44(5.27-15.82)	104	563	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.186	331913	1.23		102	577	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	556332	0.9117		95.0	3162	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.214	1887535	1.28		103	3920	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1437750	1.00		99.8	2735	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.227	518688	1.26		101	1367	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.260	0.0	1.003	370720	0.9846		98.5	480	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	499466	0.9663	Target=2.28	100	1659	
599.00 > 99.00	4.346	4.346	0.0	1.149	210609		2.37(1.14-3.42)	100	596	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	1729770	1.02	Target=11.30	102	492	
563.00 > 169.00	4.370	4.382	-0.012	0.997	141730		12.20(5.65-16.96)	102	888	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.265	2053330	1.26		101	9003	
D 32 d5-NEtFOSAA										M
589.00 > 419.00	4.393	4.393	0.0	1.268	487913	1.23		98.5	834	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.393	4.393	0.0	1.000	364226	0.9329		93.3	589	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.477	4.477	0.0	1.183	3925775	0.9477		100	4259	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.330	2123640	1.29		103	8948	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.616	4.616	0.0	1.002	1656352	0.9579	Target=8.15	95.8	155	
613.00 > 169.00	4.616	4.616	0.0	1.002	195564		8.47(4.07-12.22)	95.8	1566	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.126	328276	0.9000		93.4	3601	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.779	4.779	0.0	1.263	163618	0.9340	Target=0.50	96.5	1669	
699.00 > 99.00	4.779	4.779	0.0	1.263	340004		0.48(0.25-0.75)	96.5	2126	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.822	4.822	0.0	1.047	1823052	1.00	Target=6.61	100	159	
663.00 > 169.00	4.822	4.822	0.0	1.047	284386		6.41(3.31-9.92)	100	1889	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.008	5.008	0.0	1.446	2077683	1.26		101	7096	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.008	5.008	0.0	1.000	174160	0.9371	Target=0.96	93.7	2069	
713.00 > 219.00	4.997	5.008	-0.011	0.998	200239		0.87(0.48-1.44)	93.7	2335	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.328	5.328	0.0	1.538	2422773	1.28		102	5274	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.000	1870661	0.9651	Target=7.69	96.5	189	
813.00 > 169.00	5.328	5.328	0.0	1.000	237159		7.89(3.85-11.54)	96.5	1188	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.611	5.611	0.0	1.053	1554372	1.03	Target=9.13	103	171	M
913.00 > 169.00	5.611	5.611	0.0	1.053	165585		9.39(4.56-13.69)	103	338	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

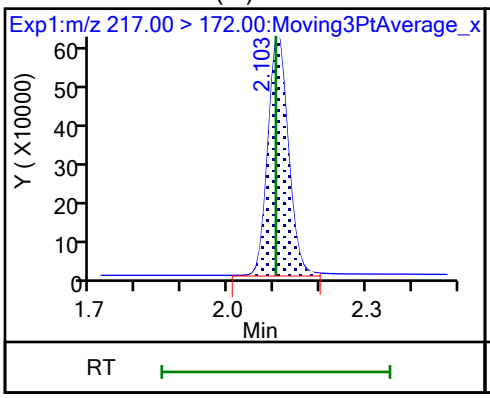
PFAS32NCIC4_00042 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:30 Chrom Revision: 2.3 19-Jul-2023 18:28:48

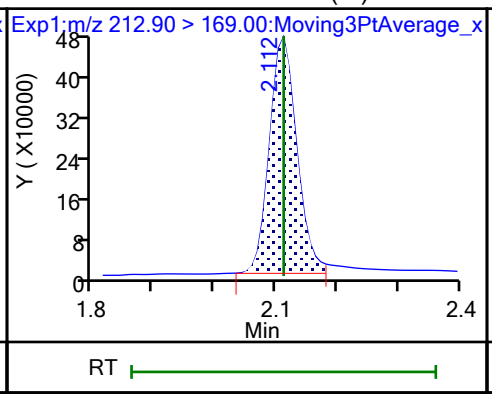
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL08.d
Injection Date: 26-Jul-2023 17:41:18 Instrument ID: LC812
Lims ID: ICISAV
Client ID:
Operator ID: LC812user ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

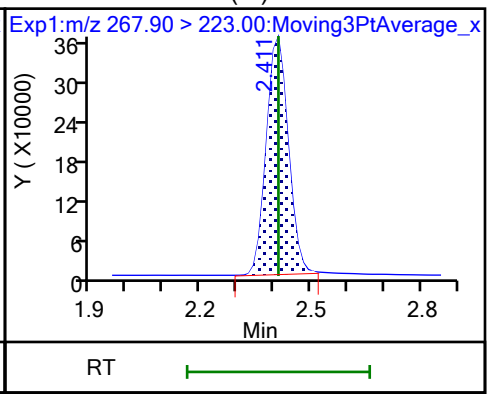
D 1 13C4 PFBA (M)



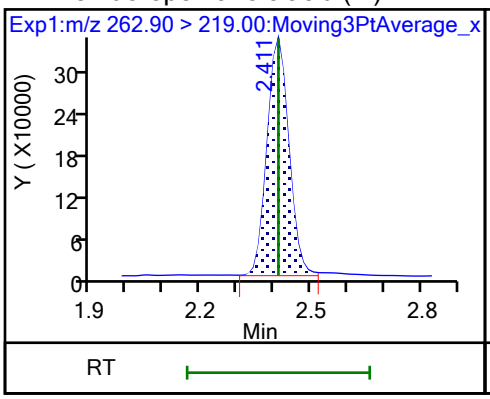
2 Perfluorobutanoic acid (M)



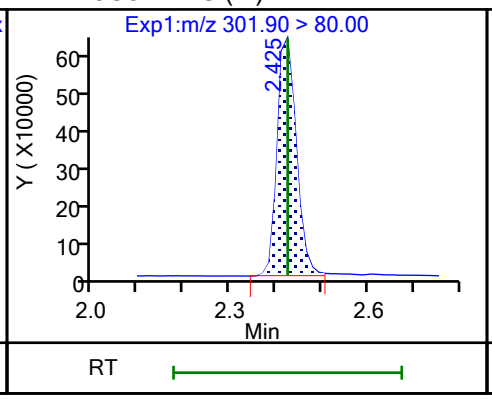
D 3 13C5 PFPeA (M)



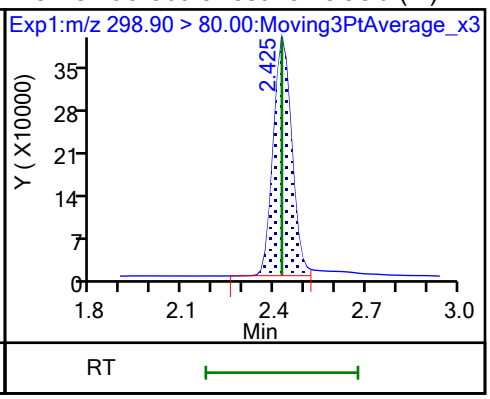
4 Perfluoropentanoic acid (M)



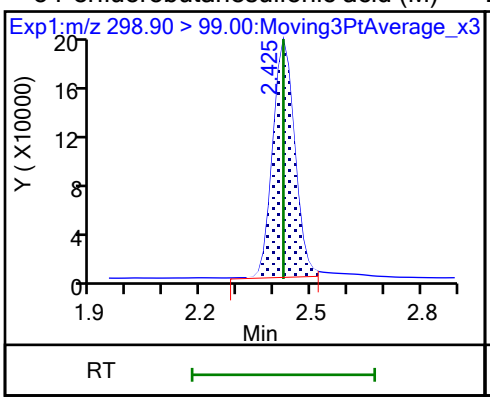
D 47 13C3 PFBS (M)



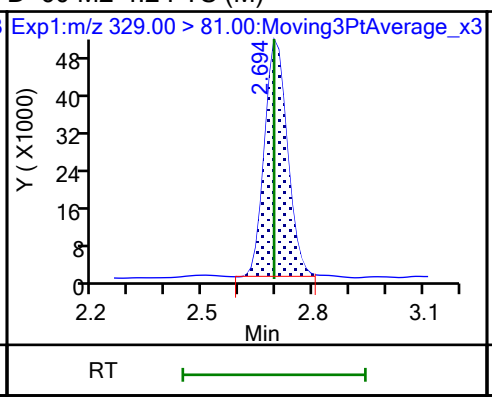
5 Perfluorobutanesulfonic acid (M)



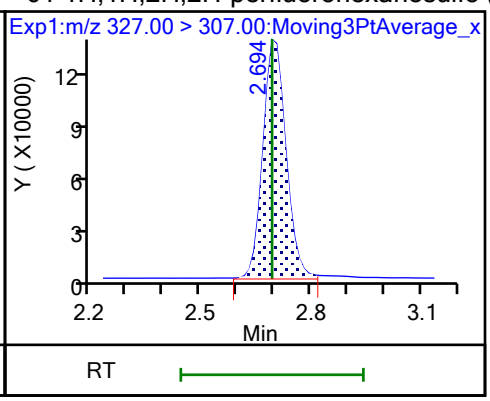
5 Perfluorobutanesulfonic acid (M)



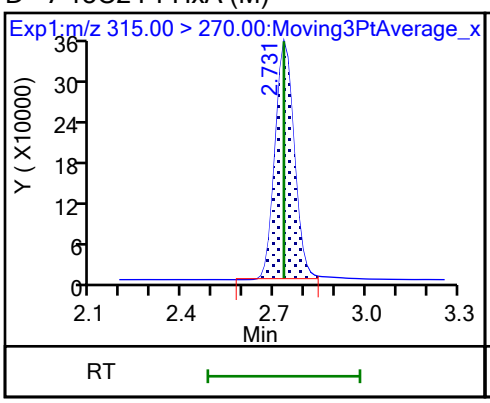
D 60 M2-4:2 FTS (M)



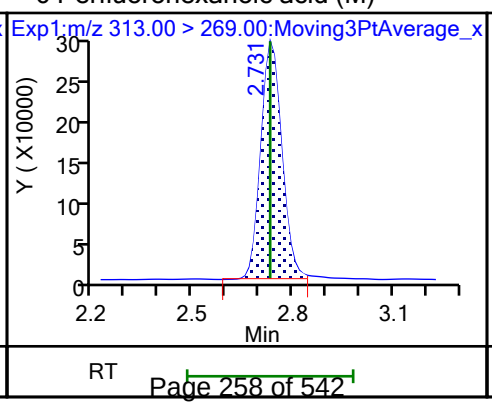
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



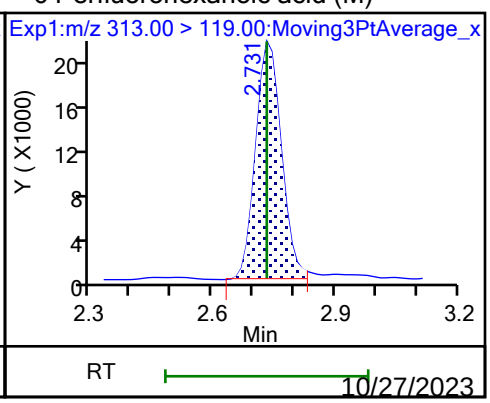
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

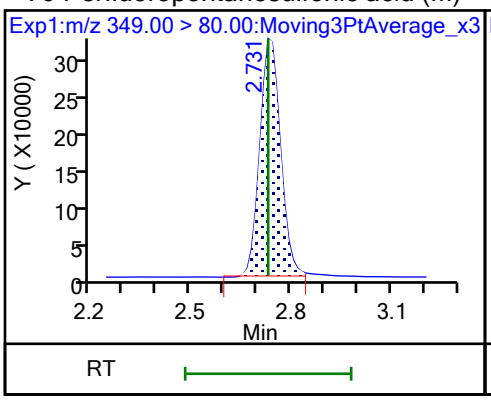


6 Perfluorohexanoic acid (M)

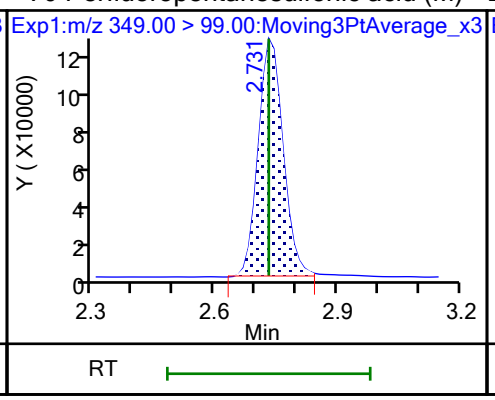


10/27/2023
10:52 AM

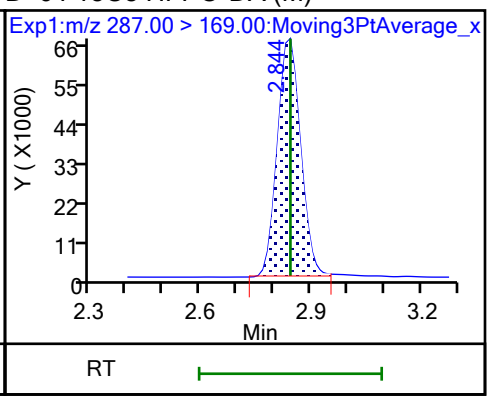
70 Perfluoropentanesulfonic acid (M)



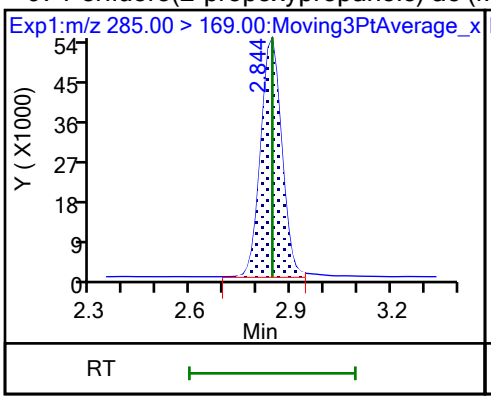
70 Perfluoropentanesulfonic acid (M)



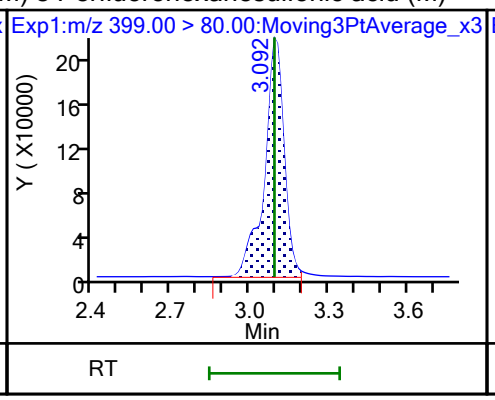
D 64 13C3 HFPO-DA (M)



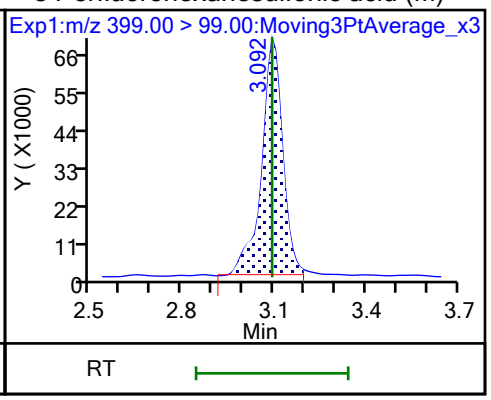
67 Perfluoro(2-propoxypropanoic) ac (M)



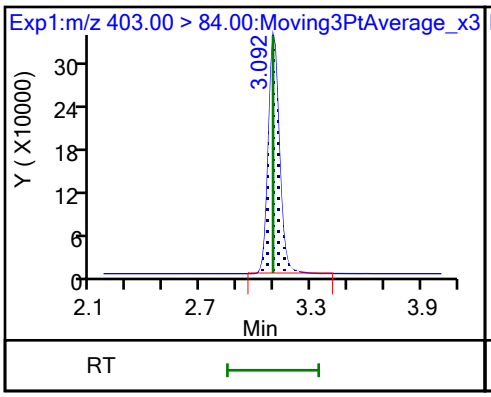
8 Perfluorohexanesulfonic acid (M)



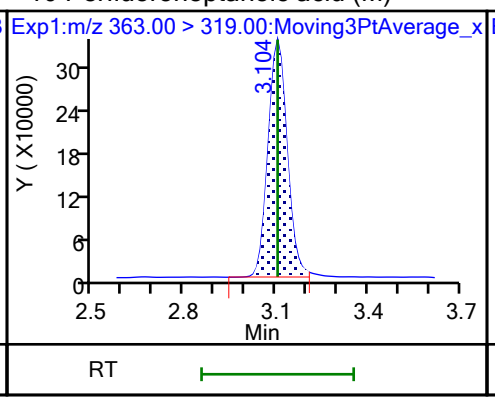
8 Perfluorohexanesulfonic acid (M)



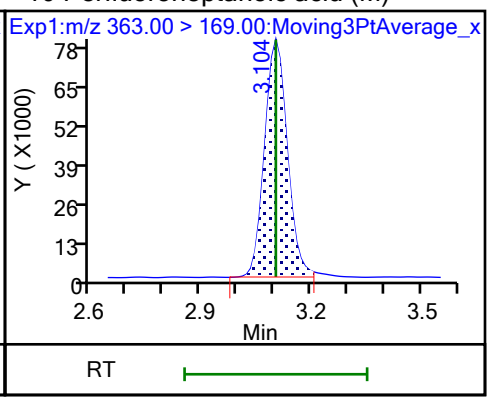
D 11 18O2 PFHxS



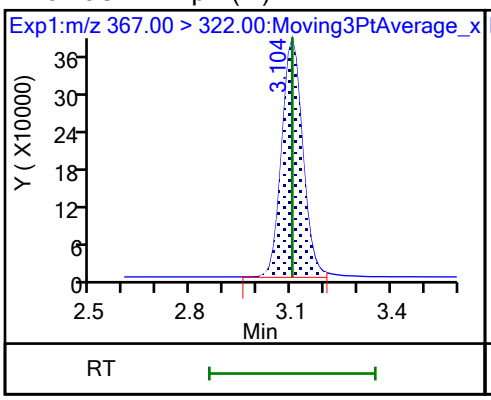
10 Perfluoroheptanoic acid (M)



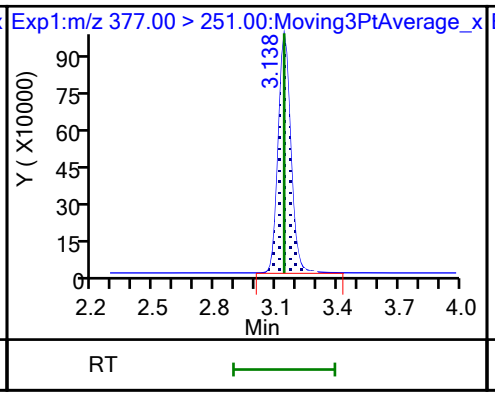
10 Perfluoroheptanoic acid (M)



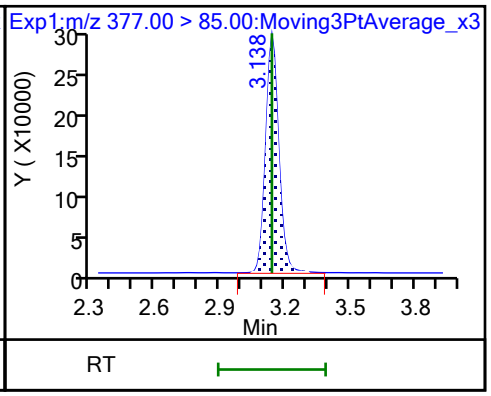
D 9 13C4 PFHpA (M)



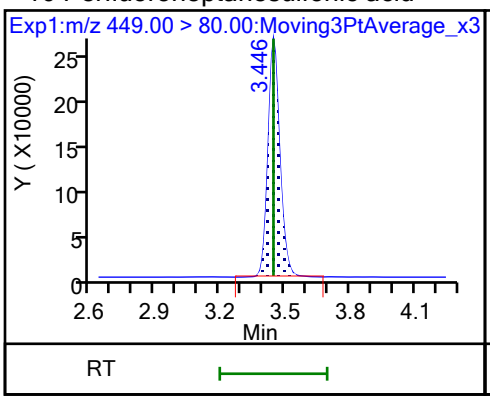
77 DONA



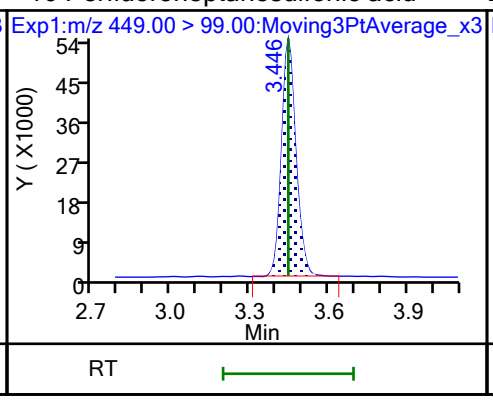
77 DONA



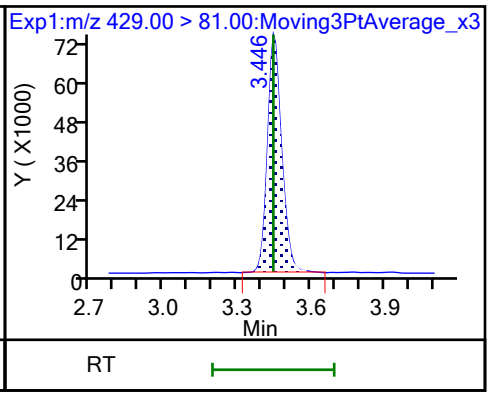
16 Perfluoroheptanesulfonic acid



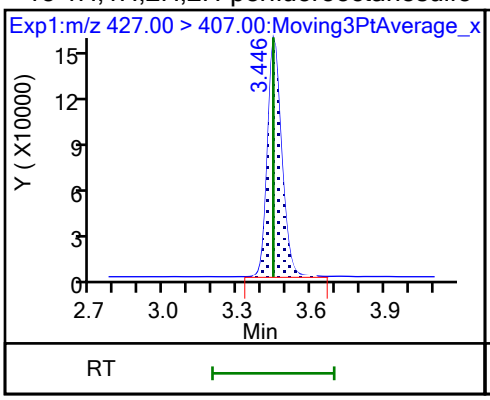
16 Perfluoroheptanesulfonic acid



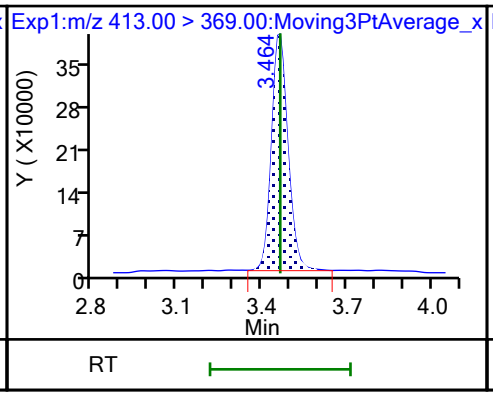
D 12 M2-6:2 FTS



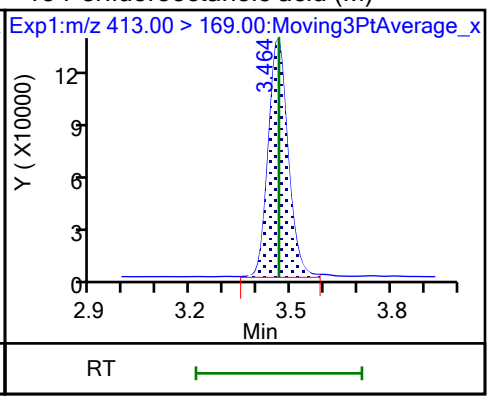
13 1H,1H,2H,2H-perfluorooctanesulfo



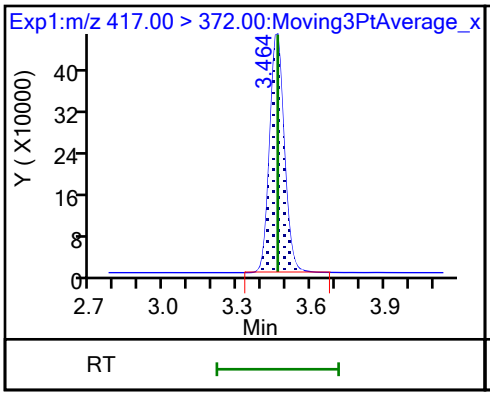
15 Perfluorooctanoic acid



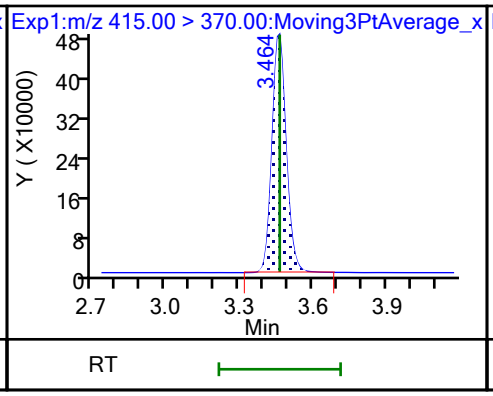
15 Perfluorooctanoic acid (M)



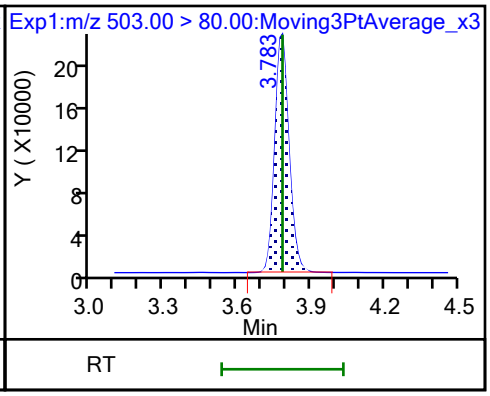
D 14 13C4 PFOA



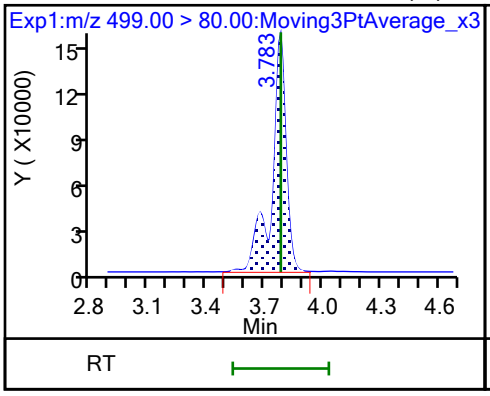
* 62 13C2 PFOA



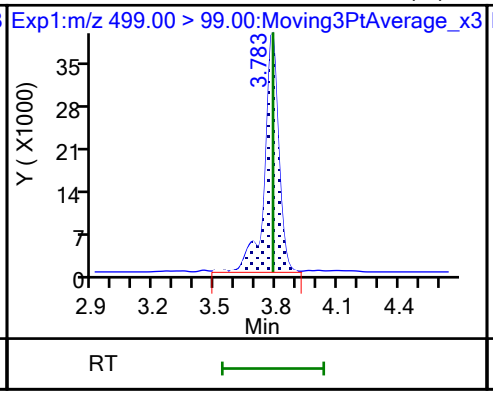
D 18 13C4 PFOS



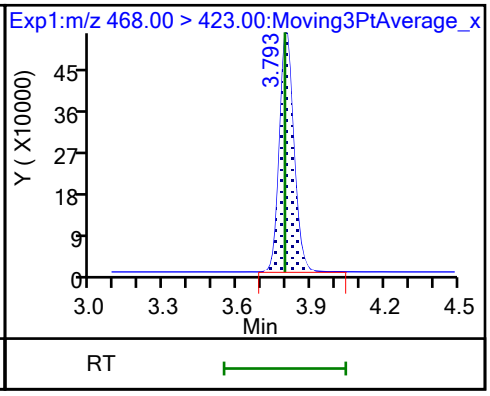
17 Perfluorooctanesulfonic acid (M)



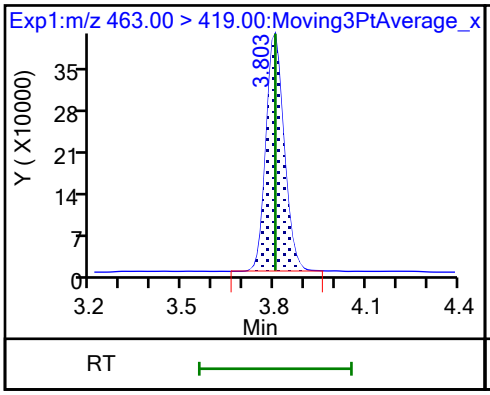
17 Perfluorooctanesulfonic acid (M)



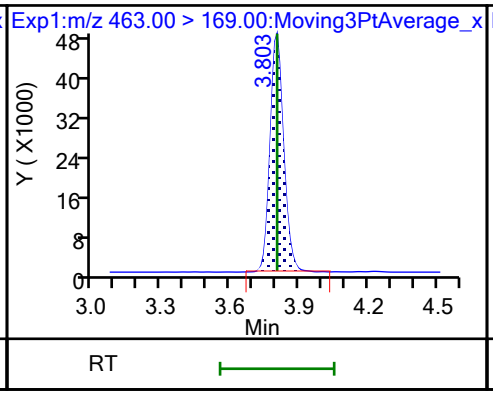
D 19 13C5 PFNA



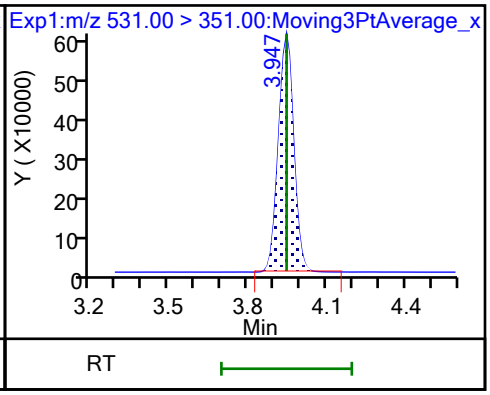
20 Perfluorononanoic acid



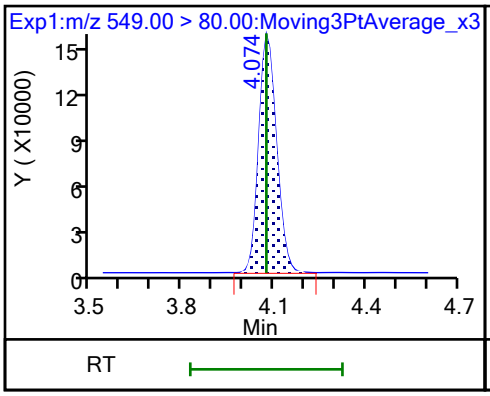
20 Perfluorononanoic acid



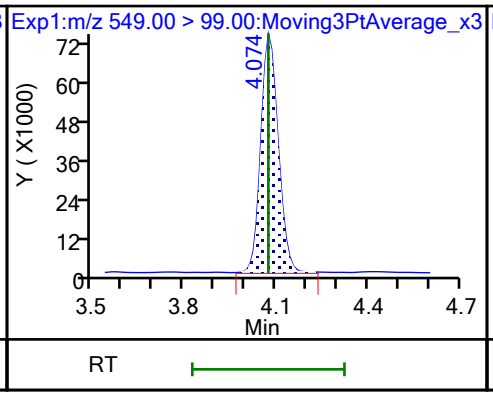
69 9-Chlorohexadecafluoro-3-oxanona



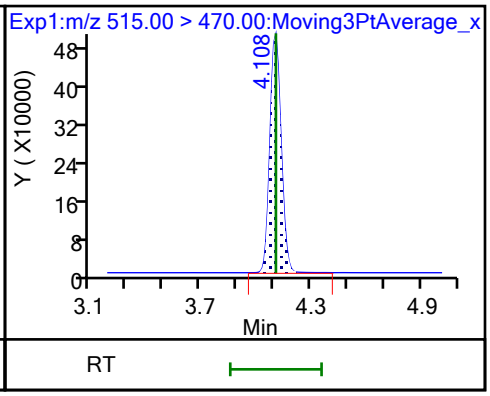
68 Perfluorononanesulfonic acid



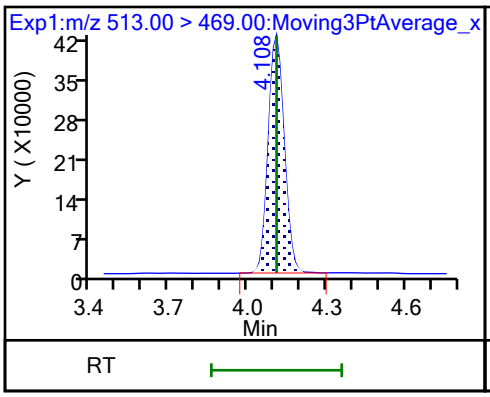
68 Perfluorononanesulfonic acid



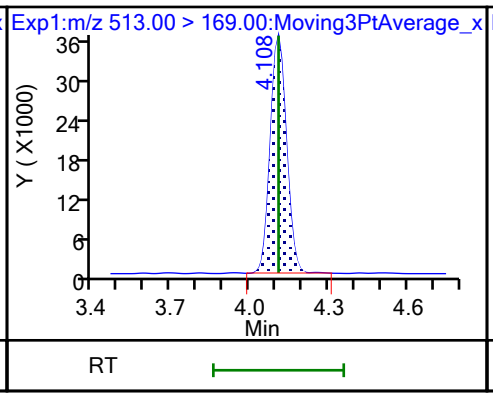
D 23 13C2 PFDA



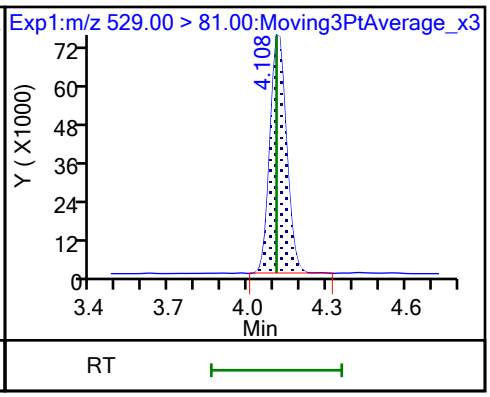
24 Perfluorodecanoic acid



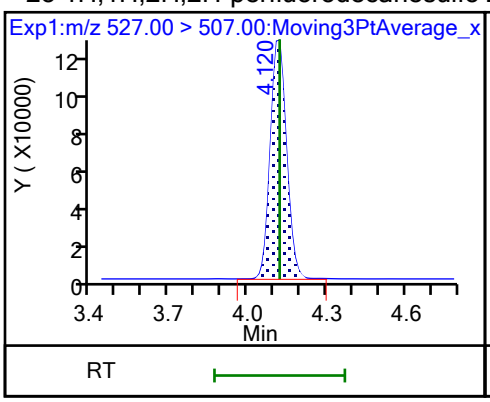
24 Perfluorodecanoic acid



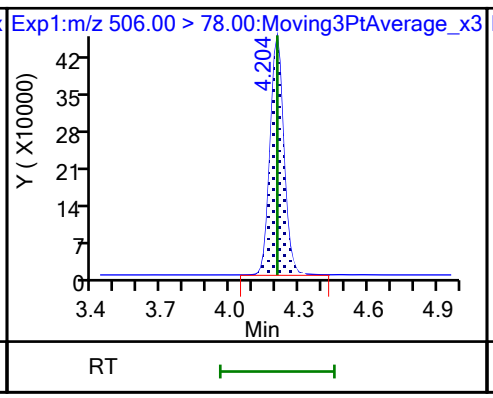
D 26 M2-8:2 FTS



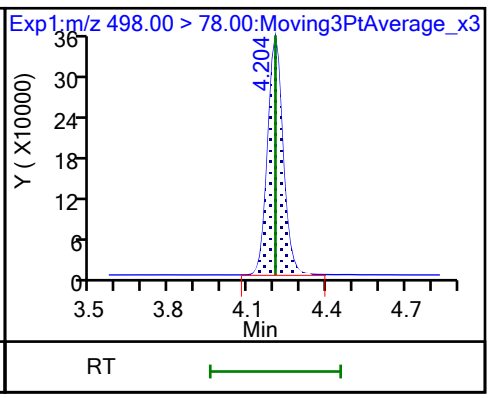
25 1H,1H,2H,2H-perfluorodecanesulfo



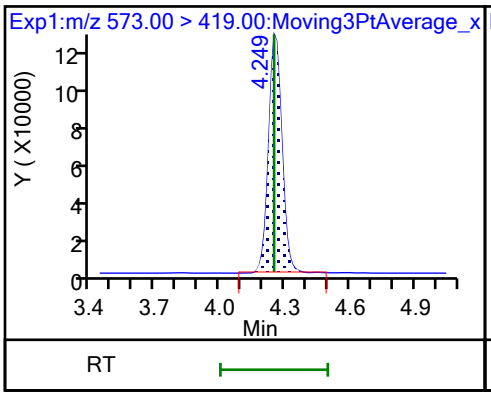
D 21 13C8 FOSA



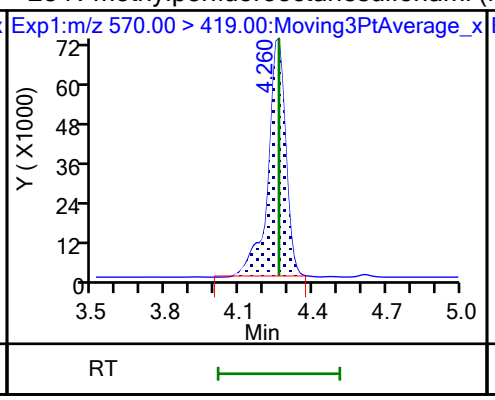
22 Perfluorooctanesulfonamide



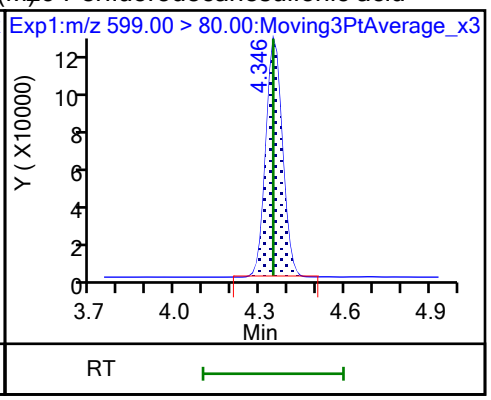
D 27 d3-NMeFOSAA



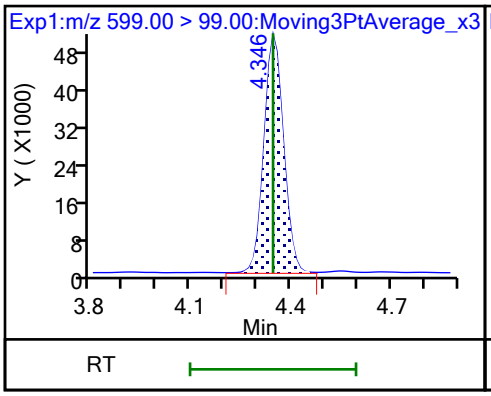
28 N-methylperfluorooctanesulfonami (M)



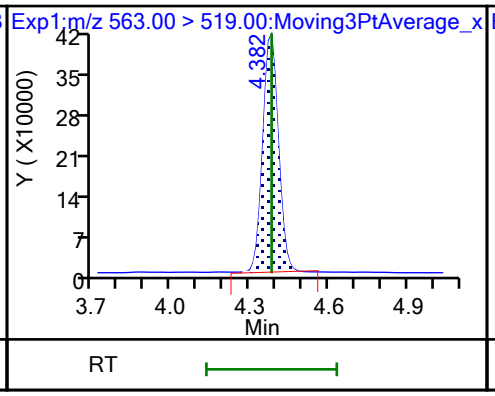
29 Perfluorodecanesulfonic acid



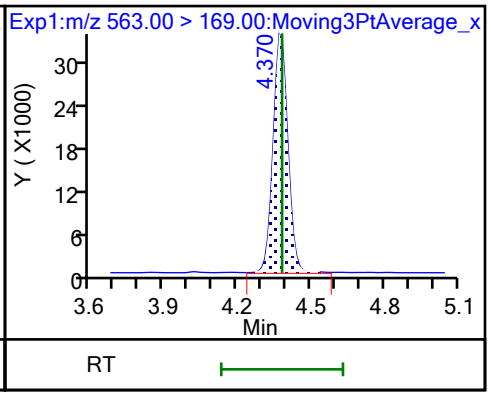
29 Perfluorodecanesulfonic acid



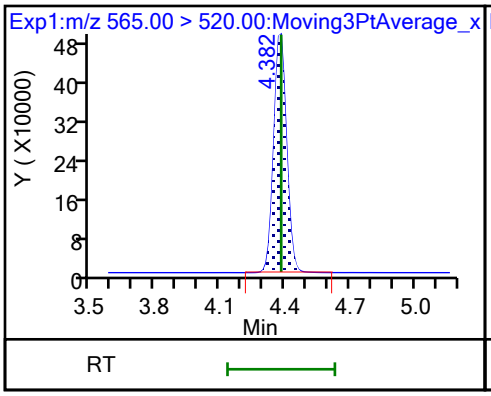
31 Perfluoroundecanoic acid



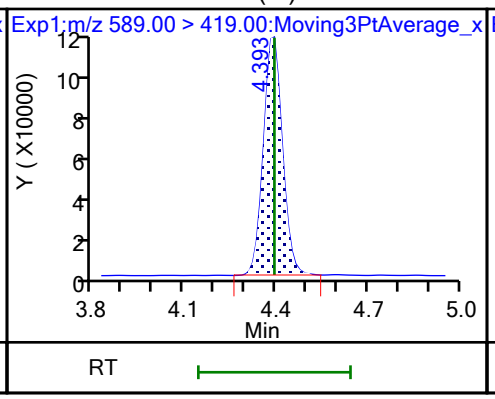
31 Perfluoroundecanoic acid



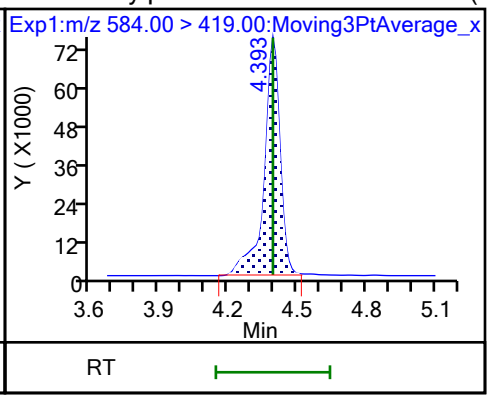
D 30 13C2 PFUnA



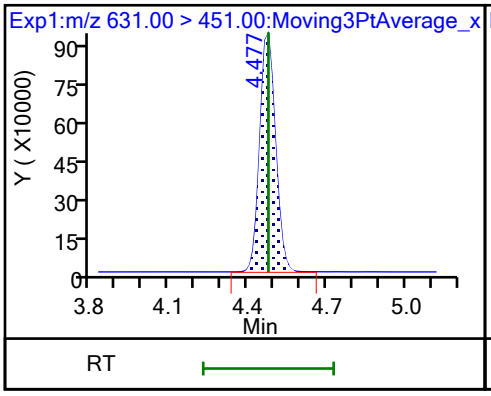
D 32 d5-NEtFOSAA (M)



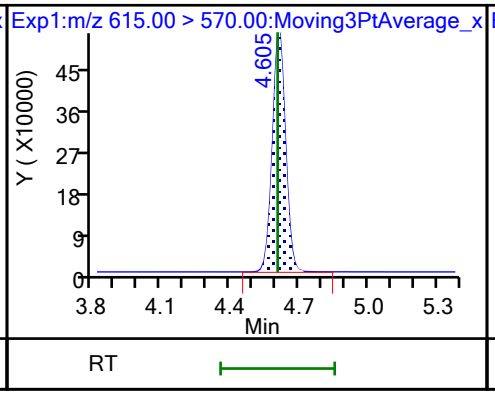
33 N-ethylperfluorooctanesulfonamid (M)



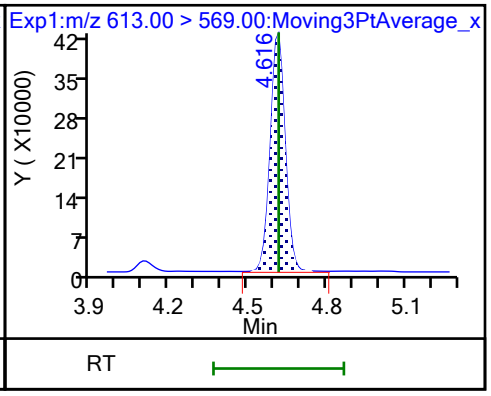
66 11-Chloroeicosafluoro-3-oxaundec



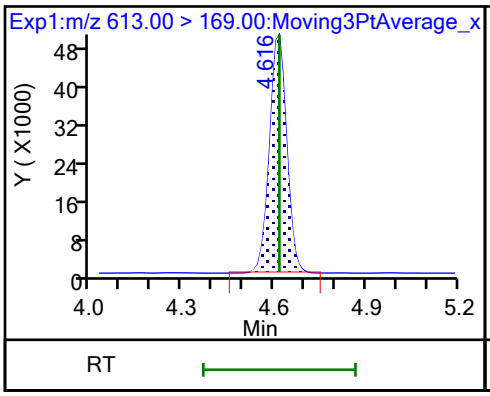
D 36 13C2 PFDoA



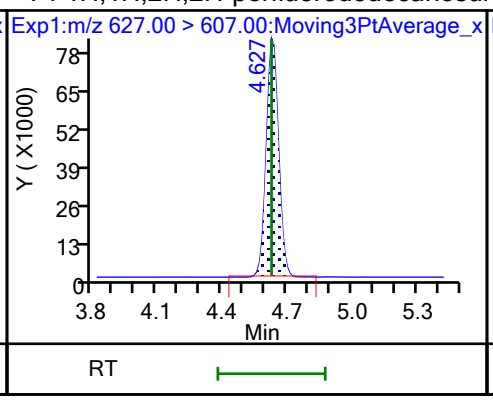
37 Perfluorododecanoic acid



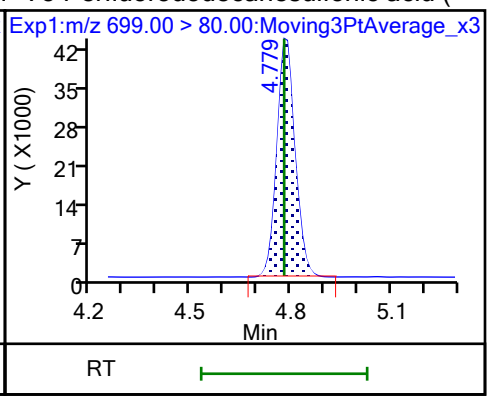
37 Perfluorododecanoic acid



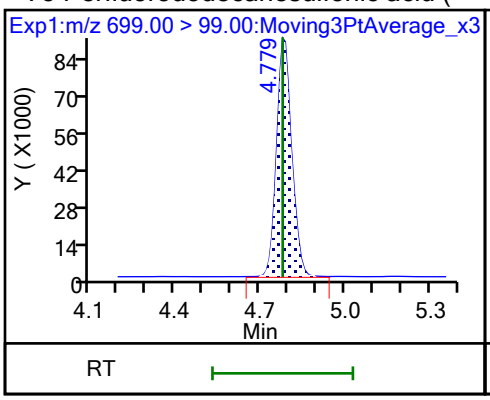
74 1H,1H,2H,2H-perfluorododecanesul



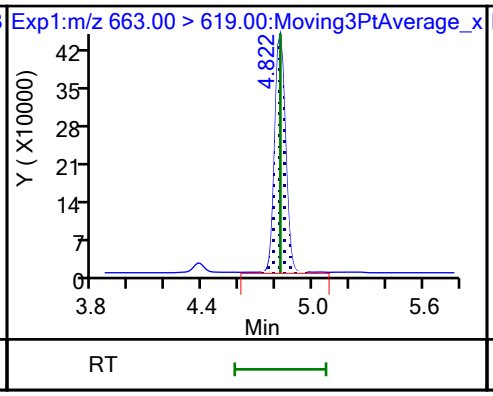
75 Perfluorododecanesulfonic acid (



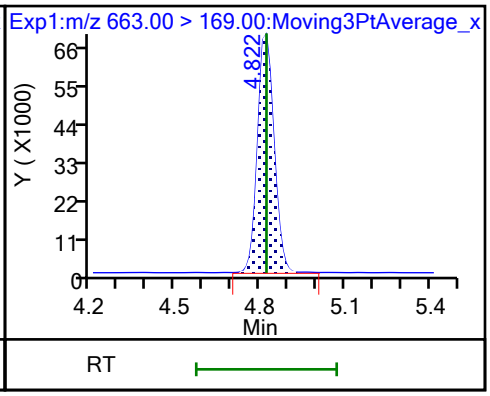
75 Perfluorododecanesulfonic acid (



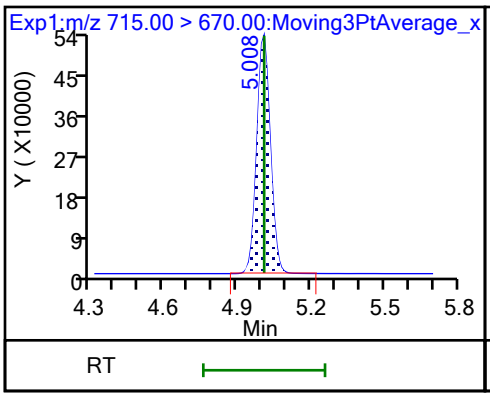
41 Perfluorotridecanoic acid



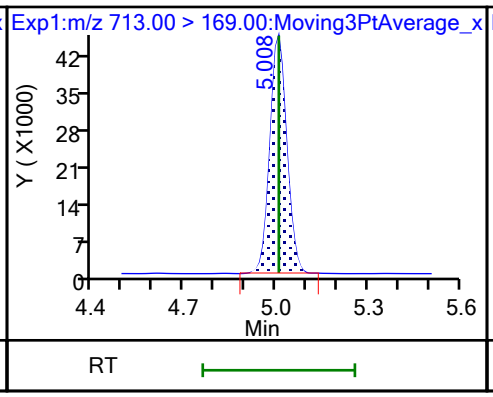
41 Perfluorotridecanoic acid



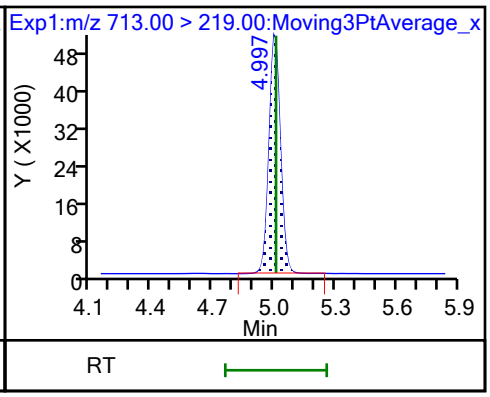
D 43 13C2 PFTeDA



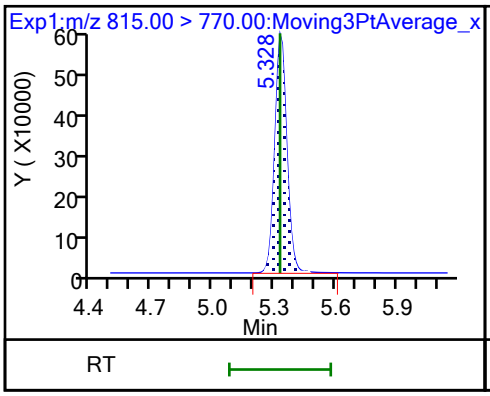
42 Perfluorotetradecanoic acid



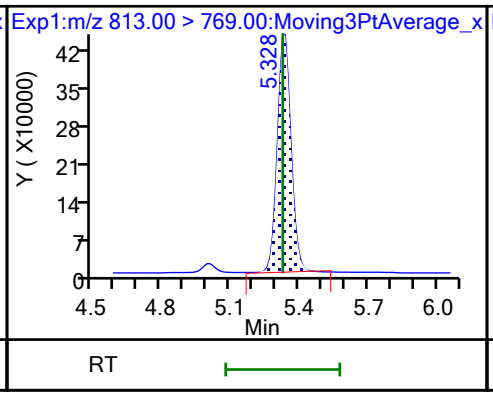
42 Perfluorotetradecanoic acid



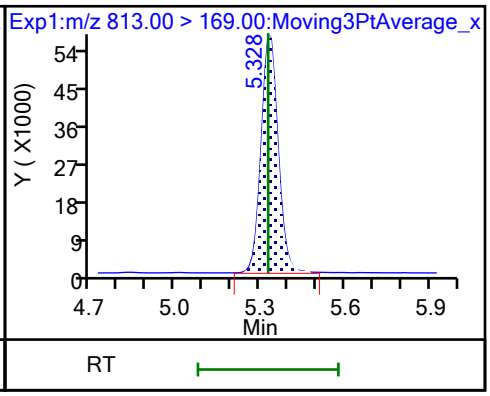
D 44 13C2 PFHxDA



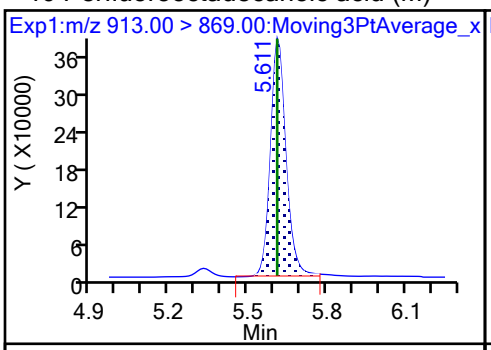
45 Perfluorohexadecanoic acid



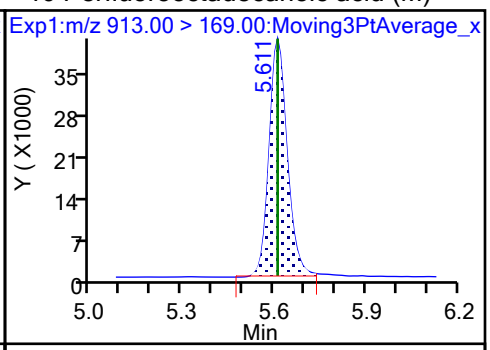
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Jul-2023 17:49:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 5
Misc. Info.: 200-0056441-009 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:44:56 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:04:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	2025338	1.28		102	885	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	3820872	2.57		103	264	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1531883	1.24		99.4	493	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	3191311	2.41		96.5	120	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1976378	1.19		102	60670	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	4220392	2.22	Target=2.07	100	362	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	1966405		2.15(1.04-3.11)	100	237	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.780	221658	1.15		98.4	76.5	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.719	2.694	0.025	1.005	1486720	2.31		98.4	503	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.790	1545081	1.23		98.6	491	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.756	2.731	0.025	1.005	3361171	2.47	Target=14.29	98.8	262	M
313.00 > 119.00	2.744	2.731	0.013	1.000	242572		13.86(7.15-21.44)	98.8	132	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	3383549	2.18	Target=2.78	92.6	480	M
349.00 > 99.00	2.756	2.731	0.025	0.885	1222931		2.77(1.39-4.17)	92.6	414	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.856	2.844	0.012	0.823	295164	1.22		97.3	301	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	568553	2.40		96.2	587	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.115	3.092	0.023	0.897	1406672	1.18		99.5	777	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.115	3.092	0.023	1.000	2901162	2.20	Target=3.23	96.4	1836	M
399.00 > 99.00	3.115	3.092	0.023	1.000	881531		3.29(1.62-4.84)	96.4	477	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	3843212	2.42	Target=4.11	96.7	693	
363.00 > 169.00	3.115	3.104	0.011	1.000	912116		4.21(2.06-6.17)	96.7	744	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.897	1773444	1.29		103	6393	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.832	9881253	2.23	Target=3.28	94.4	5501	
377.00 > 85.00	3.150	3.138	0.012	0.832	2882143		3.43(1.64-4.92)	94.4	2174	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.453	3.446	0.007	0.913	2618603	2.35	Target=4.71	98.8	7174	
449.00 > 99.00	3.453	3.446	0.007	0.913	550605		4.76(2.36-7.07)	98.8	949	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	305639	1.23		104	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	1652144	2.35		98.8	5134	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.471	3.464	0.007	1.000	4162515	2.39	Target=2.90	95.5	331	
413.00 > 169.00	3.471	3.464	0.007	1.000	1483061		2.81(1.45-4.35)	95.5	1671	
D 14 13C4 PFOA										
417.00 > 372.00	3.471	3.464	0.007	1.000	2045642	1.31		105	7037	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		2001977	1.25			5933	
D 18 13C4 PFOS										
503.00 > 80.00	3.784	3.783	0.001	1.090	919926	1.21		101	2583	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.784	3.783	0.001	1.000	1995347	2.22	Target=4.11	95.8	1944	M
499.00 > 99.00	3.784	3.783	0.001	1.000	459970		4.34(2.05-6.16)	95.8	606	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2116548	1.25		99.8	6446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	4090183	2.46	Target=8.48	98.6	745	
463.00 > 169.00	3.803	3.803	0.0	1.000	474097		8.63(4.24-12.72)	98.6	2866	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	6453976	2.35		101	11165	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	1582540	2.32	Target=2.17	96.3	4256	
549.00 > 99.00	4.074	4.074	0.0	1.077	738106		2.14(1.08-3.25)	96.3	2145	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2307904	1.30		104	5432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	4650088	2.52	Target=10.55	101	1254	
513.00 > 169.00	4.108	4.108	0.0	1.000	427287		10.88(5.27-15.82)	101	1132	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	331708	1.19		99.2	445	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	1389051	2.28		94.9	12042	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1904586	1.26		101	11251	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	3587757	2.47		98.7	5778	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.249	4.249	0.0	1.224	518571	1.22		97.7	719	M
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	905881	2.41		96.3	1138	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	1302171	2.48	Target=2.28	103	3082	
599.00 > 99.00	4.346	4.346	0.0	1.149	526351		2.47(1.14-3.42)	103	2245	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2158999	1.29		103	6427	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.003	4518784	2.54	Target=11.30	102	1338	
563.00 > 169.00	4.370	4.382	-0.012	1.000	385480		11.72(5.65-16.96)	102	1987	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	544137	1.33		107	1362	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.394	4.393	0.001	1.003	985607	2.26		90.5	993	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.180	9347621	2.22		94.1	9361	
D 36 13C2 PFDoA										
615.00 > 570.00	4.606	4.605	0.001	1.327	2062631	1.21		96.8	7038	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.606	4.616	-0.010	1.000	4182445	2.49	Target=8.15	99.6	410	
613.00 > 169.00	4.606	4.616	-0.010	1.000	492816		8.49(4.07-12.22)	99.6	2697	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.628	4.627	0.001	1.123	829529	2.28		94.4	4461	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.263	395113	2.22	Target=0.50	91.6	5811	
699.00 > 99.00	4.770	4.779	-0.009	1.261	796739		0.50(0.25-0.75)	91.6	3768	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.044	4556433	2.58	Target=6.61	103	378	
663.00 > 169.00	4.809	4.822	-0.013	1.044	675409		6.75(3.31-9.92)	103	3752	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.440	2135161	1.26		101	5547	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	452708	2.37	Target=0.96	94.8	4679	
713.00 > 219.00	4.987	5.008	-0.021	0.998	484354		0.93(0.48-1.44)	94.8	3347	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.317	5.328	-0.011	1.000	4643411	2.44	Target=7.69	97.7	433	
813.00 > 169.00	5.317	5.328	-0.011	1.000	592603		7.84(3.85-11.54)	97.7	1734	M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2376838	1.22		97.3	4400	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	3397685	2.29	Target=9.13	91.5	226	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	378101		8.99(4.56-13.69)	91.5	321	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

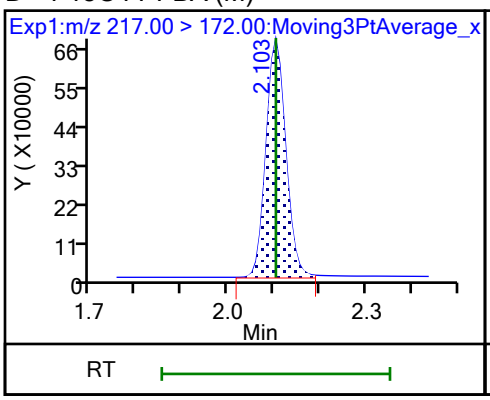
PFAS32NCIC5_00035 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:44:57 Chrom Revision: 2.3 19-Jul-2023 18:28:48

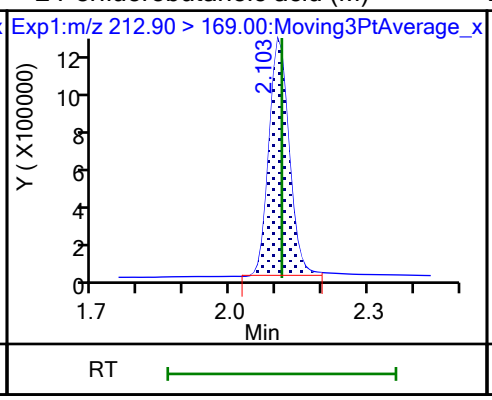
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL09.d
Injection Date: 26-Jul-2023 17:49:28 Instrument ID: LC812
Lims ID: IC 5
Client ID:
Operator ID: LC812user ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

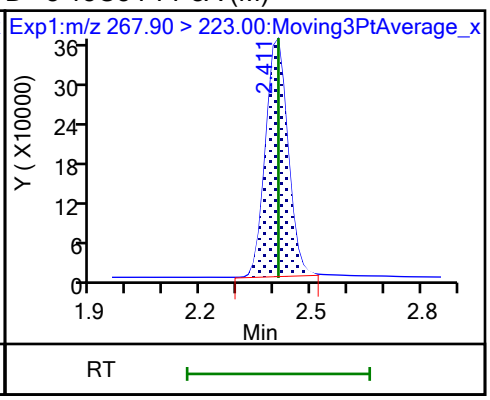
D 1 13C4 PFBA (M)



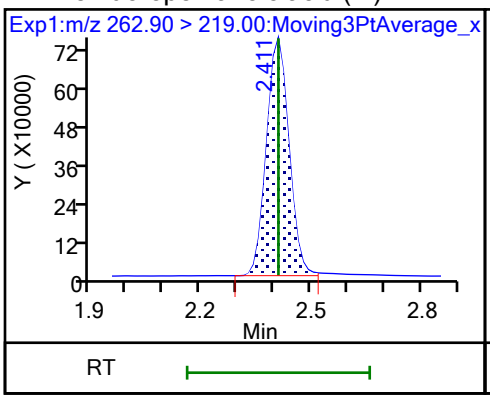
2 Perfluorobutanoic acid (M)



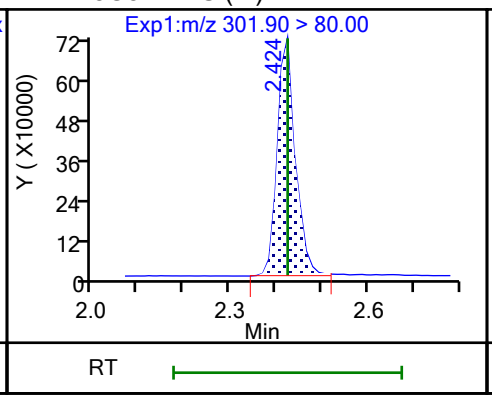
D 3 13C5 PFPeA (M)



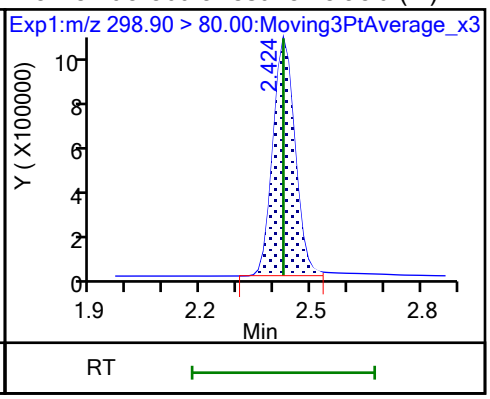
4 Perfluoropentanoic acid (M)



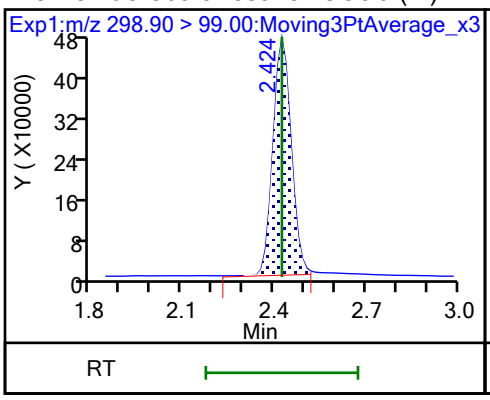
D 47 13C3 PFBS (M)



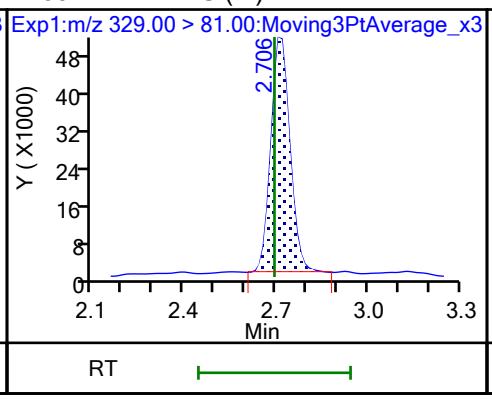
5 Perfluorobutanesulfonic acid (M)



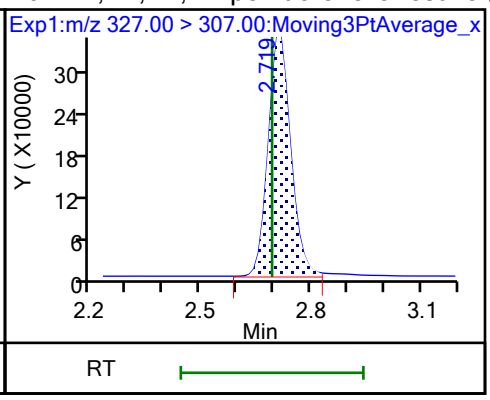
5 Perfluorobutanesulfonic acid (M)



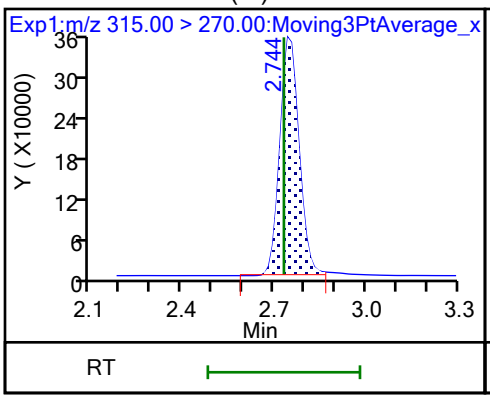
D 60 M2-4:2 FTS (M)



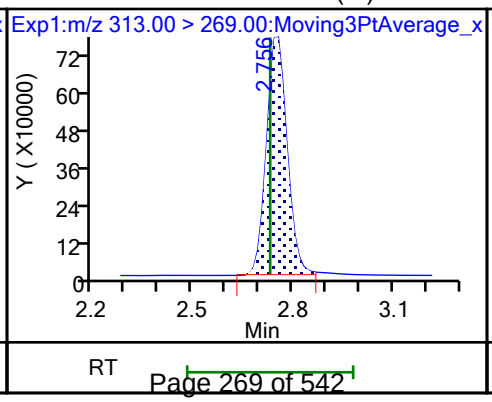
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



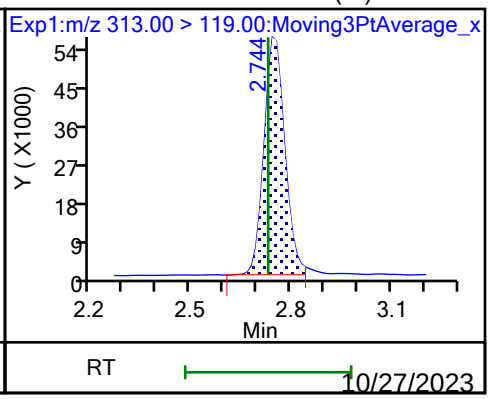
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

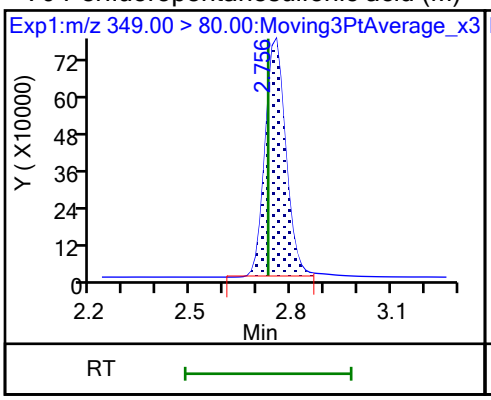


6 Perfluorohexanoic acid (M)

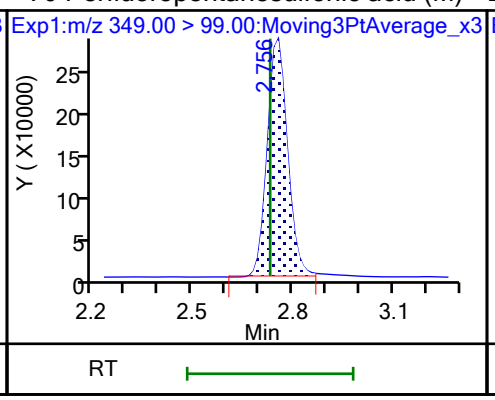


10/27/2023
10:52 AM

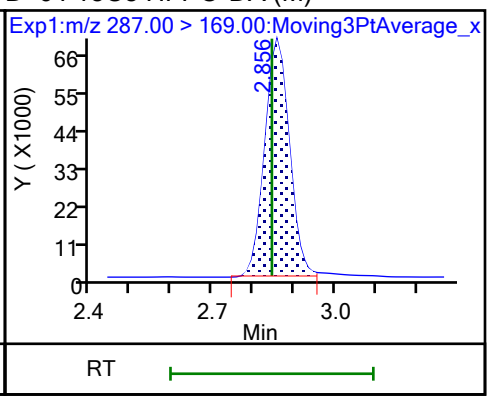
70 Perfluoropentanesulfonic acid (M)



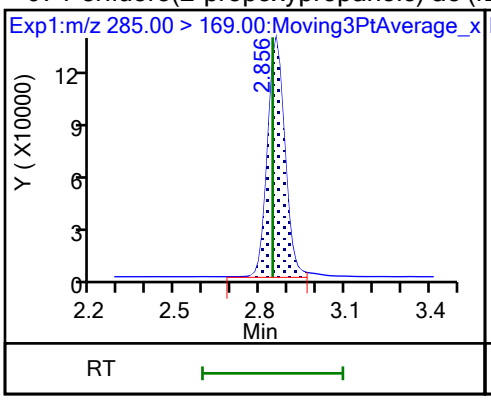
70 Perfluoropentanesulfonic acid (M)



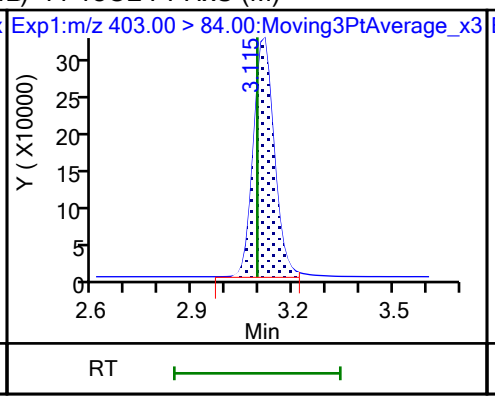
D 64 13C3 HFPO-DA (M)



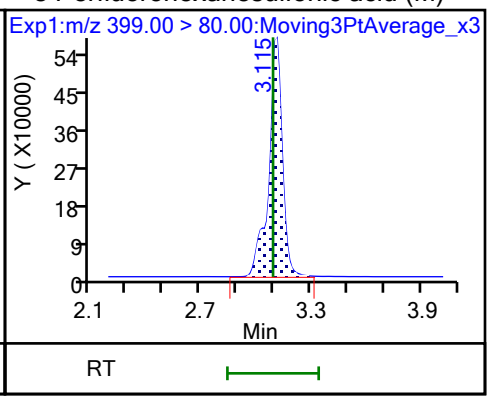
67 Perfluoro(2-propoxypropanoic) ac (M)



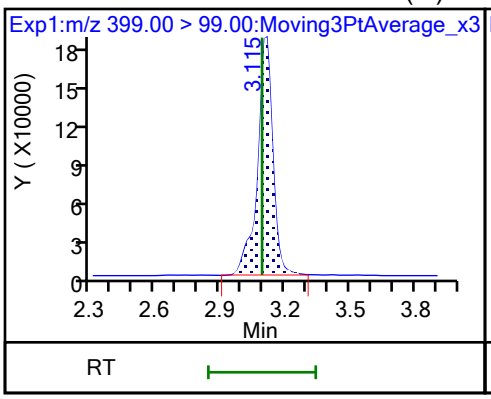
D 11 18O2 PFHxS (M)



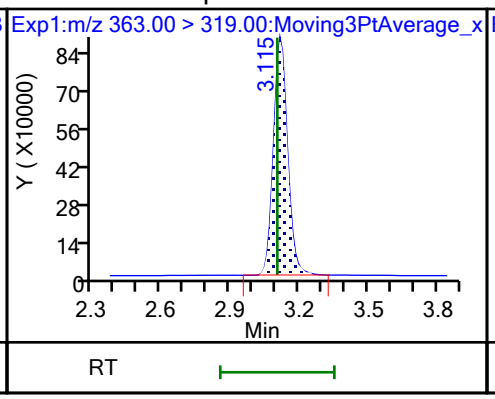
8 Perfluorohexanesulfonic acid (M)



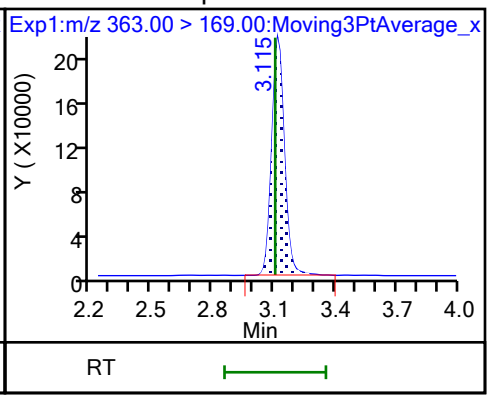
8 Perfluorohexanesulfonic acid (M)



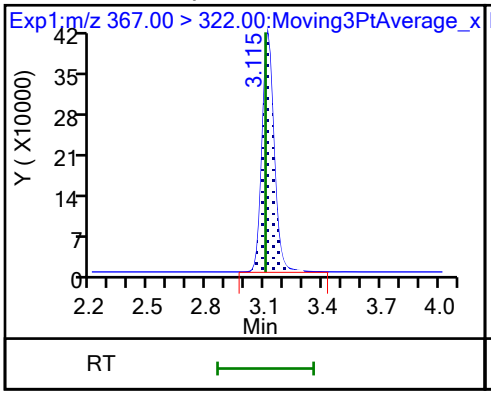
10 Perfluoroheptanoic acid



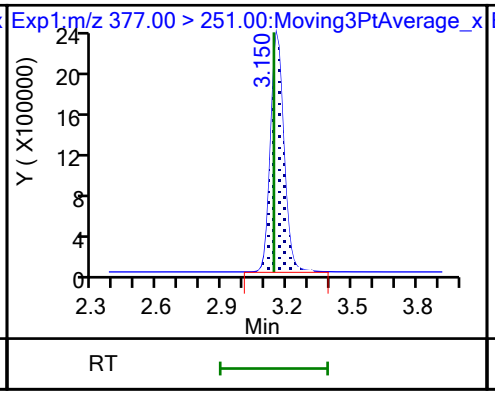
10 Perfluoroheptanoic acid



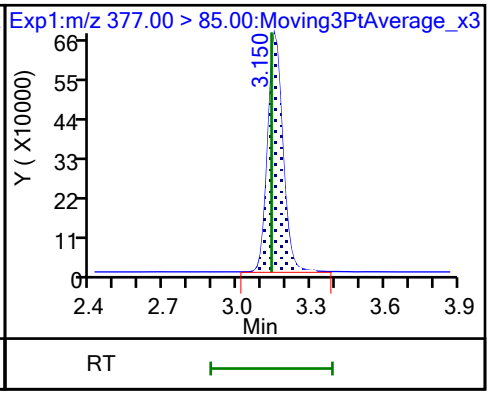
D 9 13C4 PFHpA



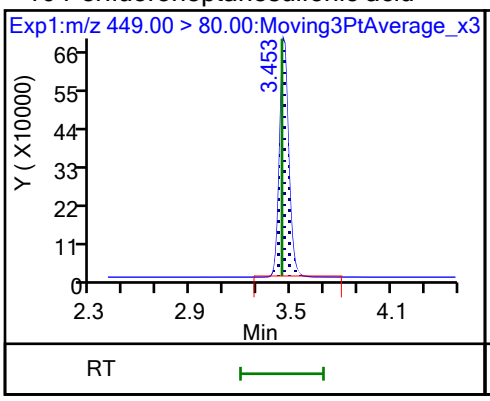
77 DONA



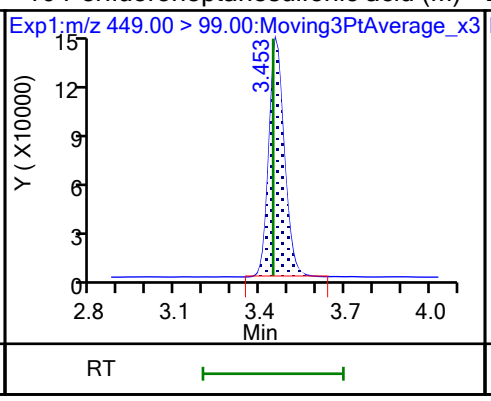
77 DONA



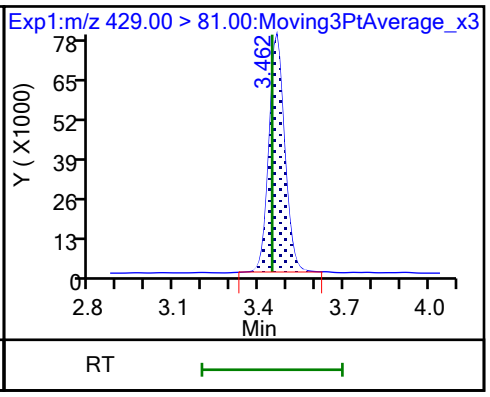
16 Perfluoroheptanesulfonic acid



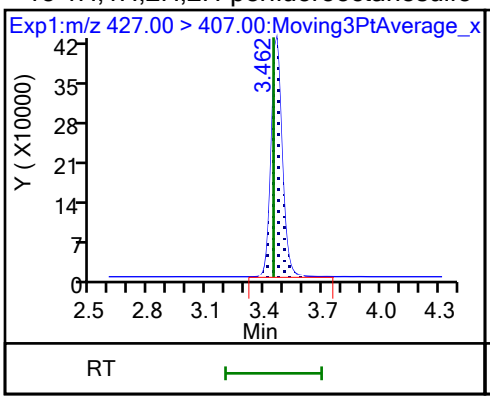
16 Perfluoroheptanesulfonic acid (M)



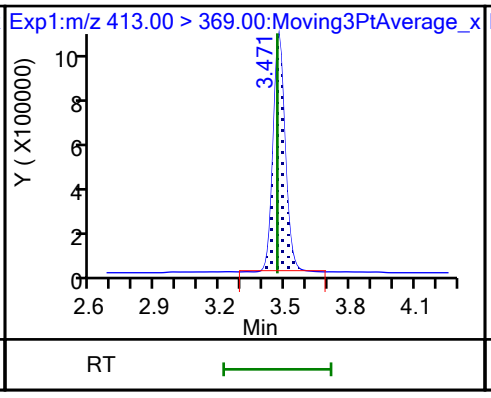
D 12 M2-6:2 FTS



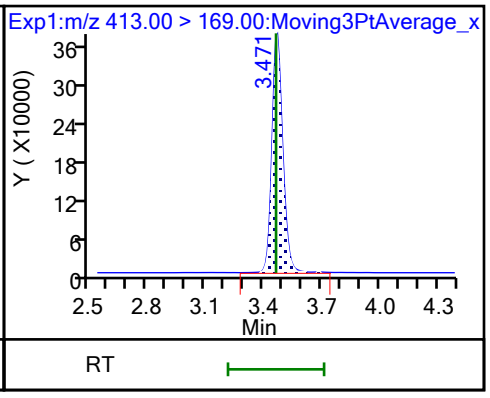
13 1H,1H,2H,2H-perfluorooctanesulfo



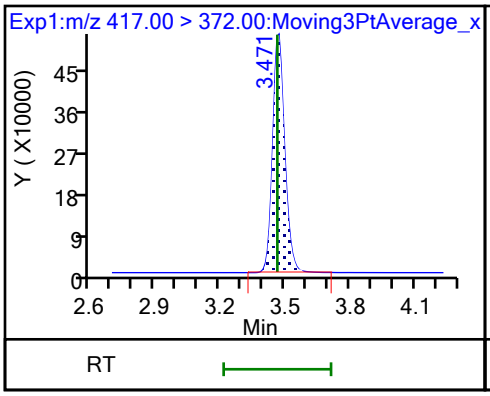
15 Perfluorooctanoic acid



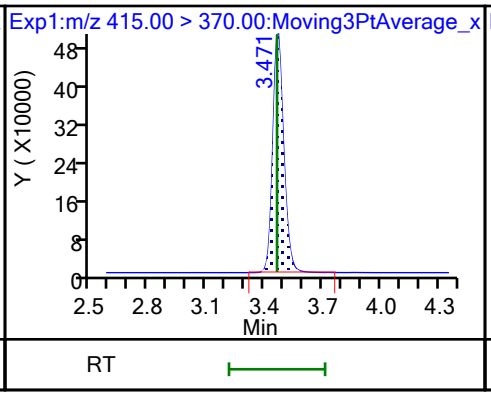
15 Perfluorooctanoic acid



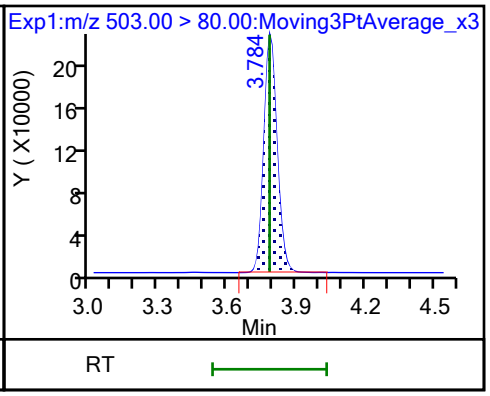
D 14 13C4 PFOA



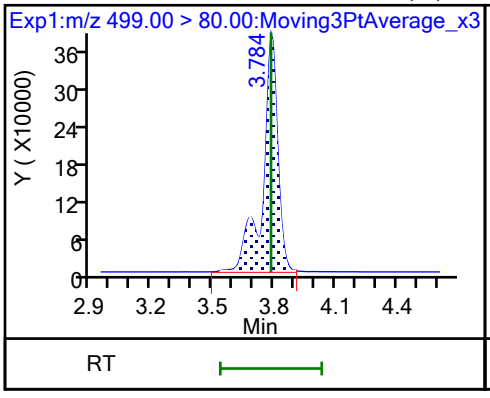
* 62 13C2 PFOA



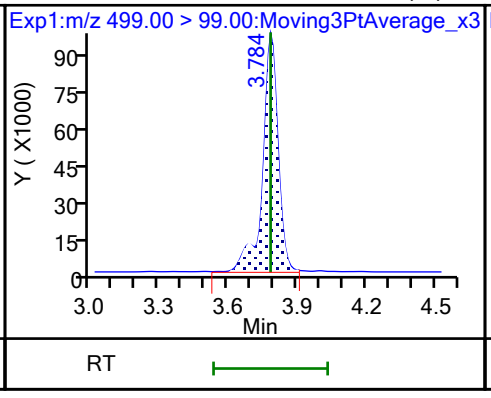
D 18 13C4 PFOS



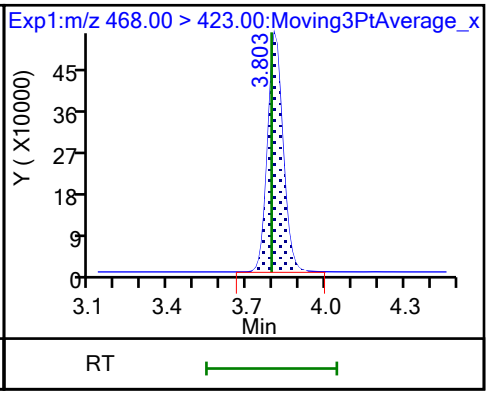
17 Perfluorooctanesulfonic acid (M)



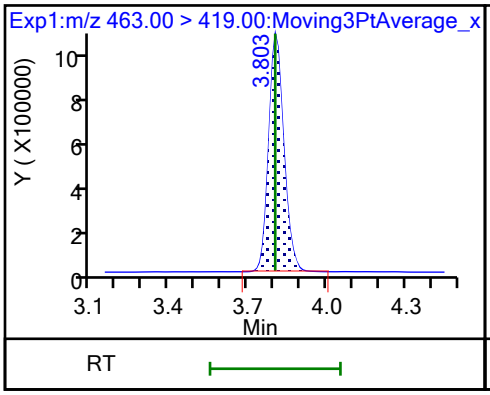
17 Perfluorooctanesulfonic acid (M)



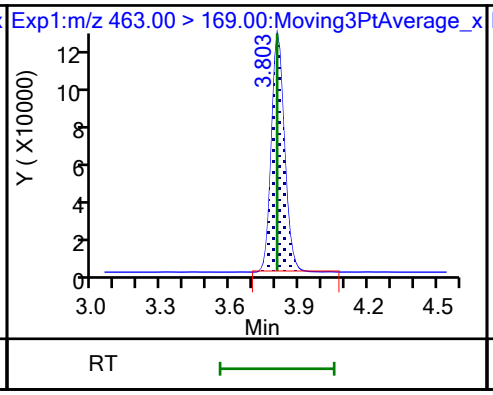
D 19 13C5 PFNA



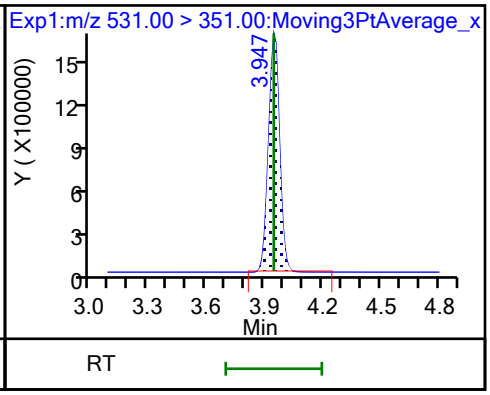
20 Perfluorononanoic acid



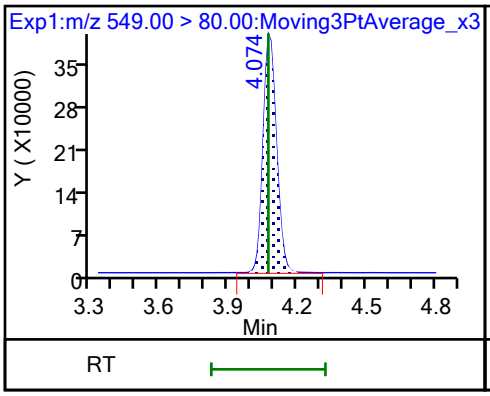
20 Perfluorononanoic acid



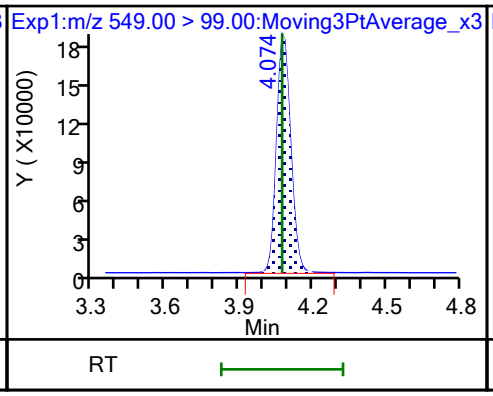
69 9-Chlorohexadecafluoro-3-oxanona



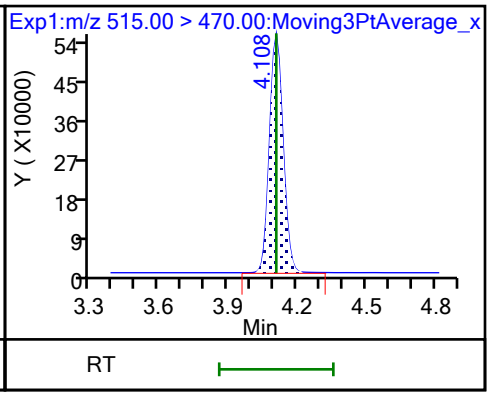
68 Perfluorononanesulfonic acid



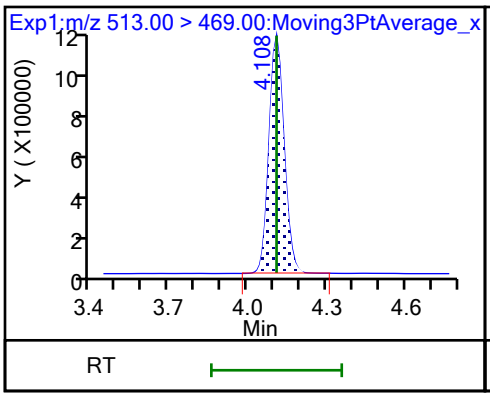
68 Perfluorononanesulfonic acid



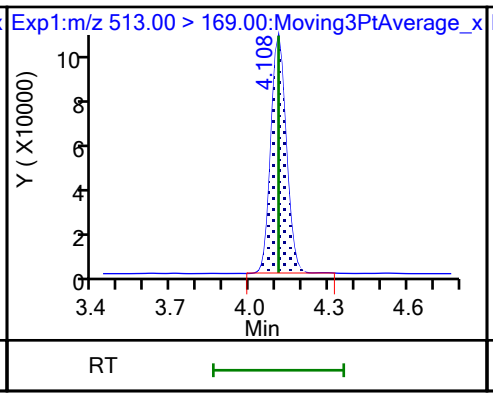
D 23 13C2 PFDA



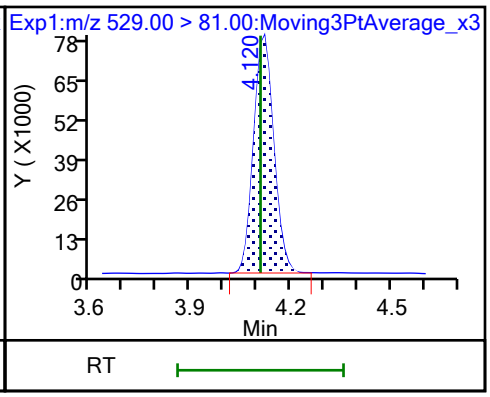
24 Perfluorodecanoic acid



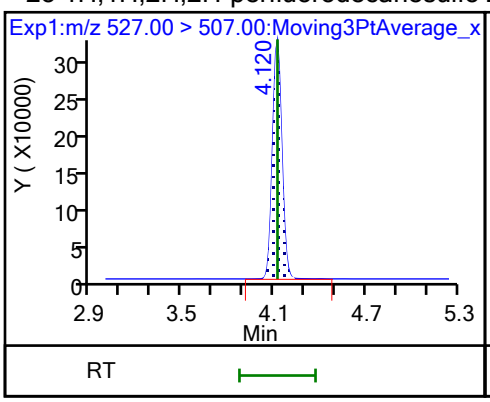
24 Perfluorodecanoic acid



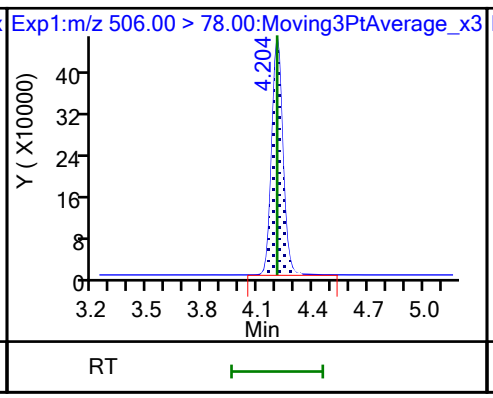
D 26 M2-8:2 FTS



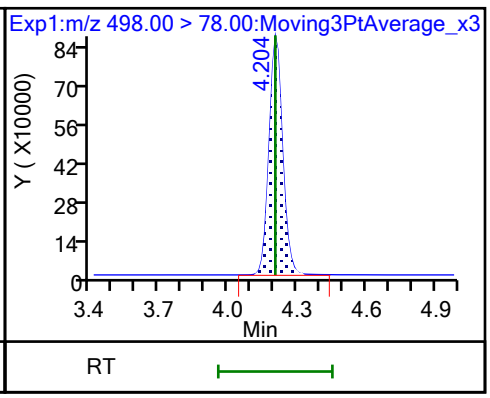
25 1H,1H,2H,2H-perfluorodecanesulfo



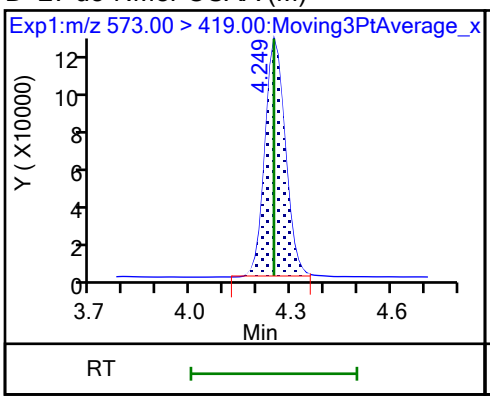
D 21 13C8 FOSA



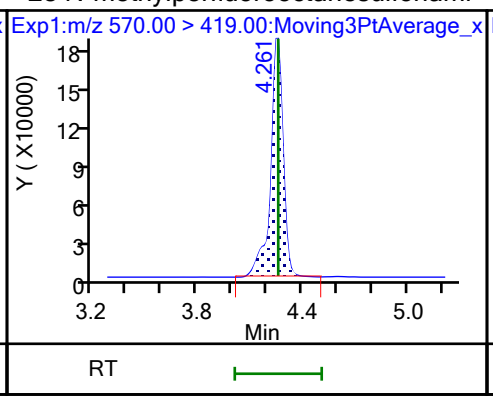
22 Perfluorooctanesulfonamide



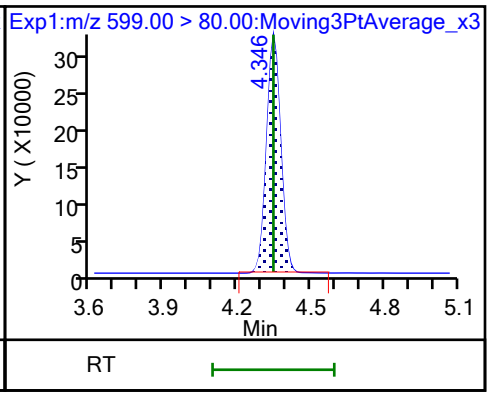
D 27 d3-NMeFOSAA (M)



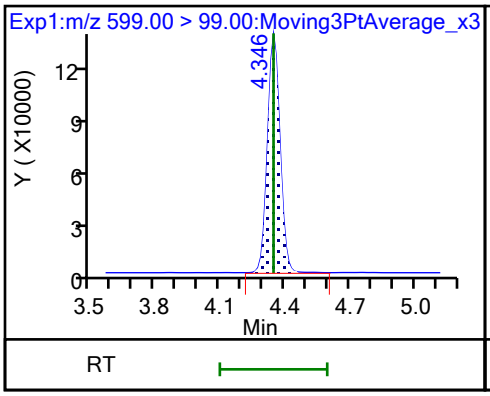
28 N-methylperfluorooctanesulfonami



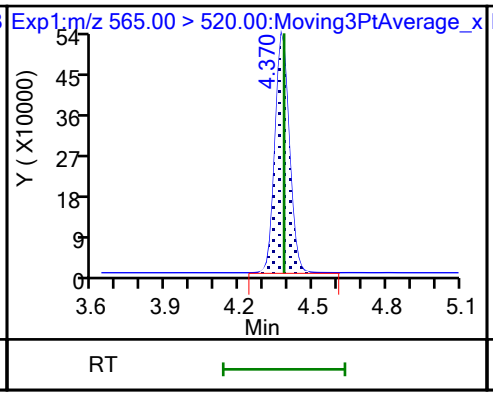
29 Perfluorodecanesulfonic acid



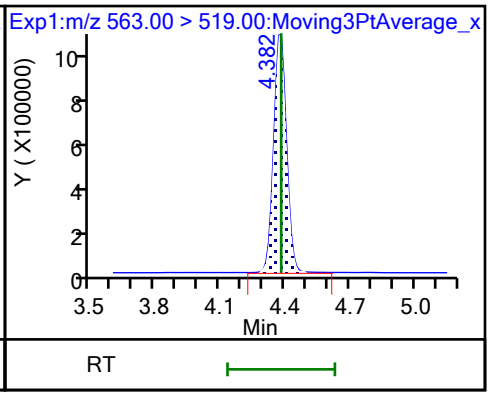
29 Perfluorodecanesulfonic acid



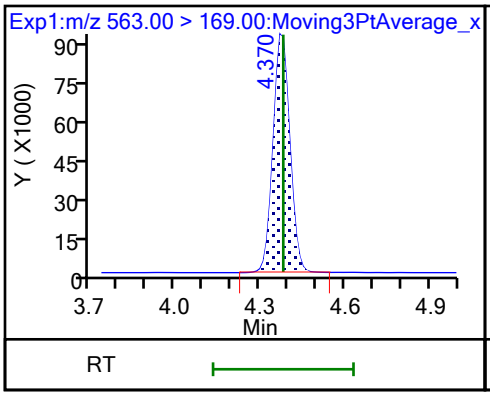
D 30 13C2 PFUnA



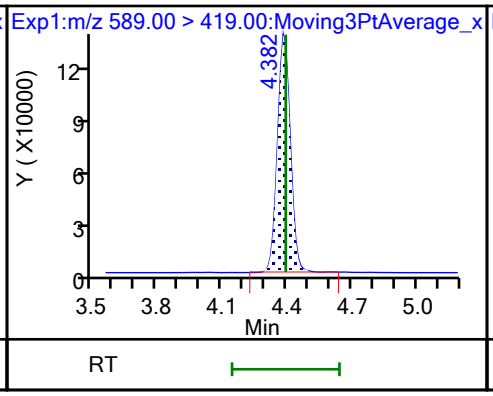
31 Perfluoroundecanoic acid



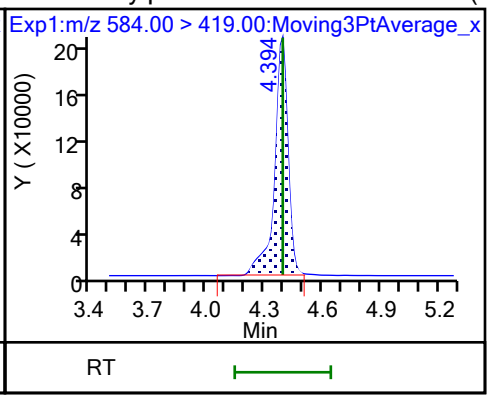
31 Perfluoroundecanoic acid



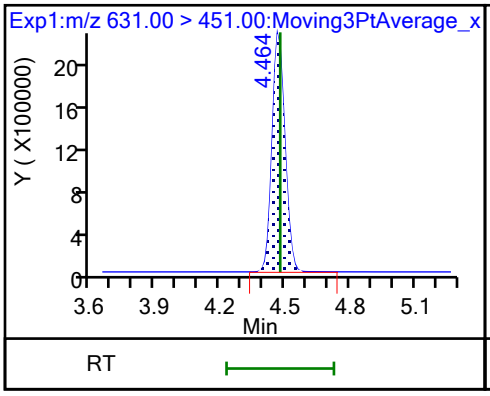
D 32 d5-NEtFOSAA



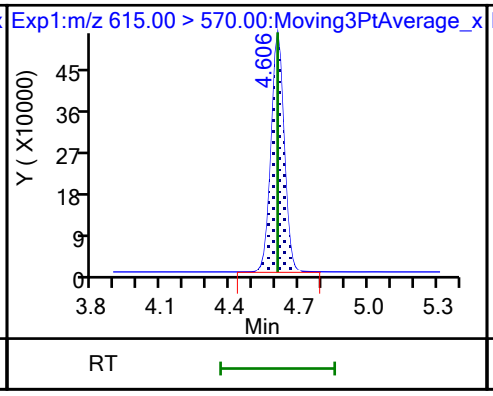
33 N-ethylperfluorooctanesulfonamid (M)



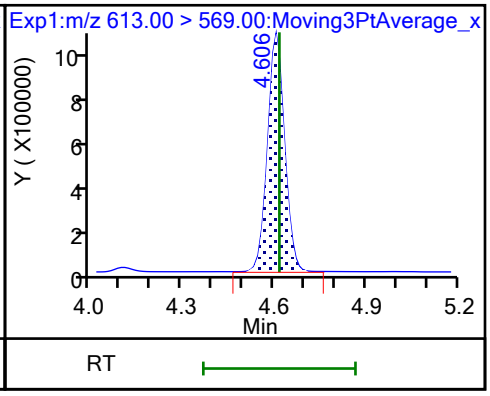
66 11-Chloroeicosafluoro-3-oxaundec



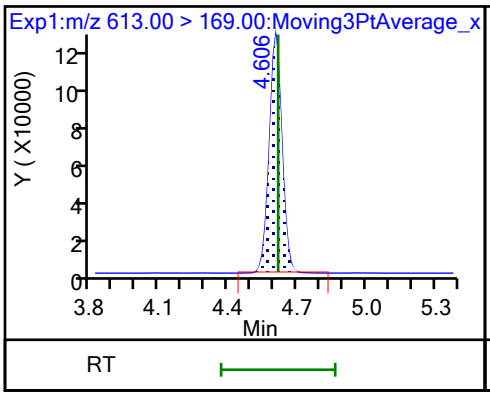
D 36 13C2 PFDoA



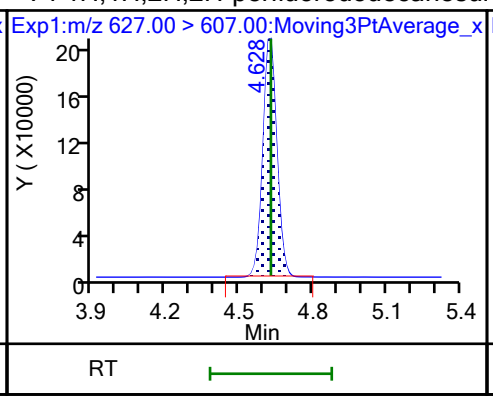
37 Perfluorododecanoic acid



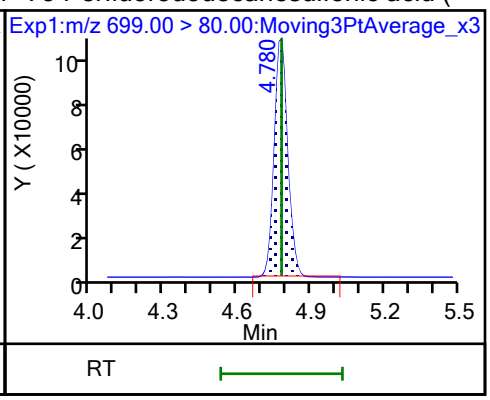
37 Perfluorododecanoic acid



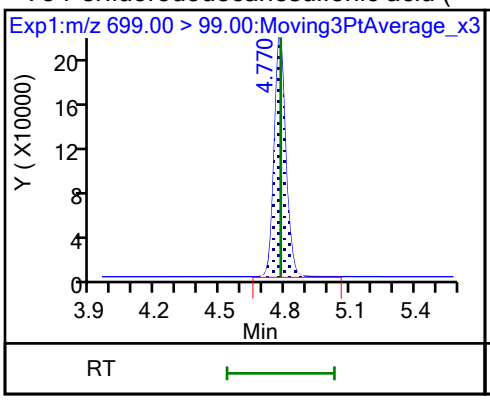
74 1H,1H,2H,2H-perfluorododecanesul



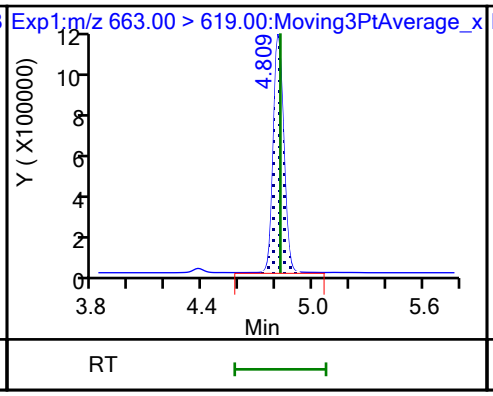
75 Perfluorododecanesulfonic acid (



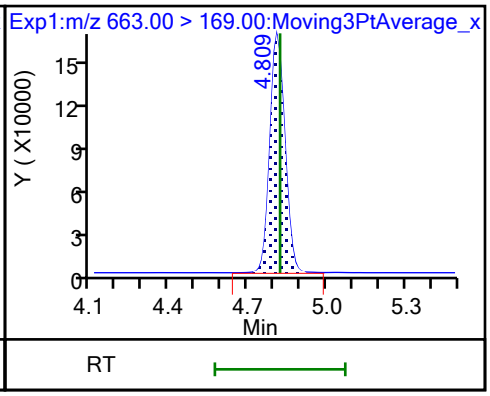
75 Perfluorododecanesulfonic acid (



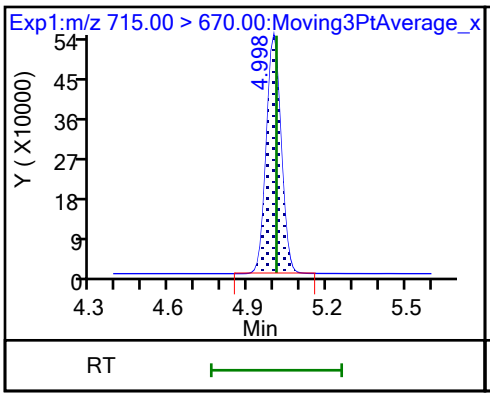
41 Perfluorotridecanoic acid



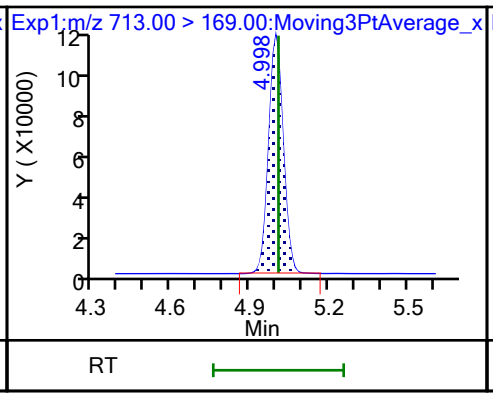
41 Perfluorotridecanoic acid



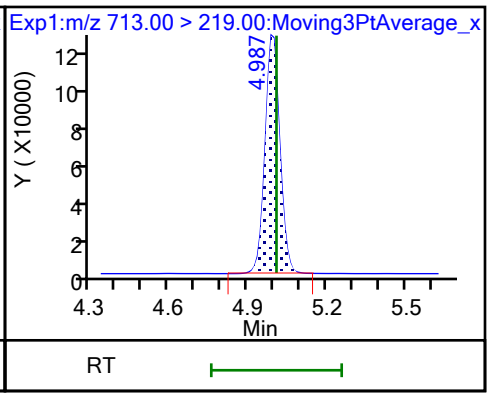
D 43 13C2 PFTeDA



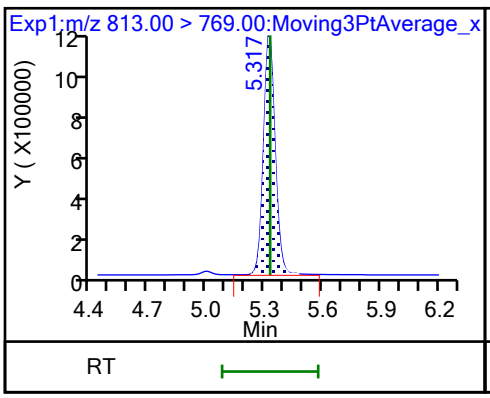
42 Perfluorotetradecanoic acid



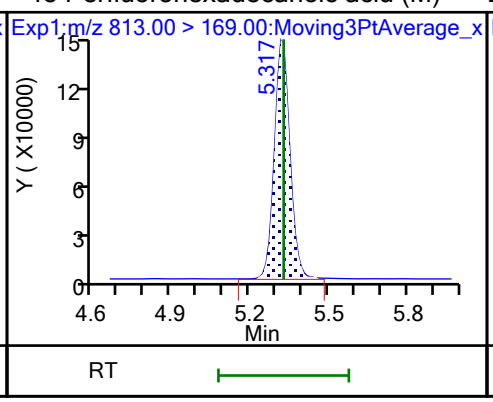
42 Perfluorotetradecanoic acid



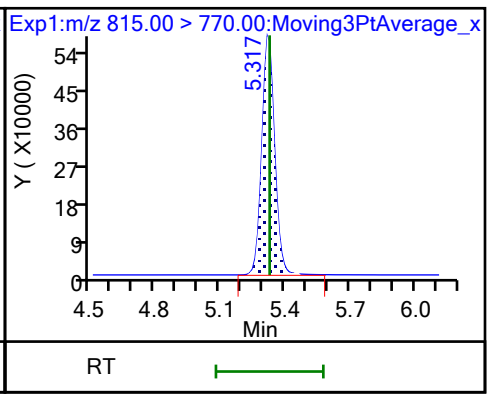
45 Perfluorohexadecanoic acid



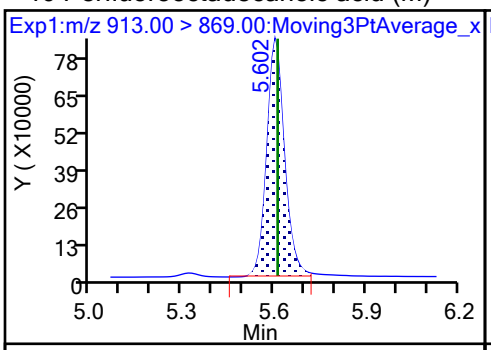
45 Perfluorohexadecanoic acid (M)



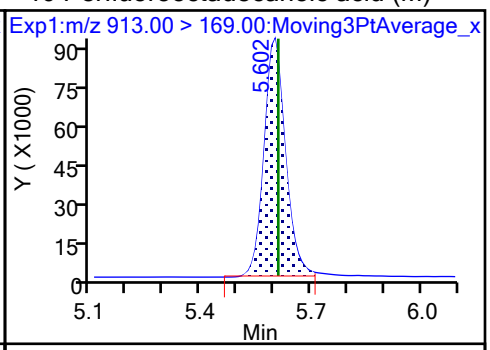
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Jul-2023 17:57:38 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 200-0056441-010 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:11:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.103	2.103	0.0	0.606	1663241	1.20		95.9	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.000	12675387	10.5		105	832	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.694	1291692	1.20		96.0	717	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	11390973	10.2		102	344	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.424	2.425	-0.001	0.698	1657995	1.14		97.9	71060	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.000	13919716	8.74	Target=2.07	98.5	587	M
298.90 > 99.00	2.424	2.425	-0.001	1.000	6698425		2.08(1.04-3.11)	98.5	540	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	194992	1.16		99.1	74.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	5267048	9.29		99.1	971	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.756	2.731	0.025	0.794	1345799	1.23		98.3	1043	M
6 Perfluorohexanoic acid										
313.00 > 269.00	2.756	2.731	0.025	1.000	11510430	9.72	Target=14.29	97.2	1512	
313.00 > 119.00	2.756	2.731	0.025	1.000	852173		13.51(7.15-21.44)	97.2	531	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.768	2.731	0.037	0.889	12787110	9.32	Target=2.78	99.1	25077	
349.00 > 99.00	2.756	2.731	0.025	0.885	4667101		2.74(1.39-4.17)	99.1	3572	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.869	2.844	0.025	0.826	265620	1.25		100	1509	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.869	2.844	0.025	1.000	2096317	9.85		98.5	8124	
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.897	1242233	1.19		101	4445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	10346652	8.90	Target=3.23	97.3	5752	
399.00 > 99.00	3.115	3.092	0.023	1.000	3264172		3.17(1.62-4.84)	97.3	1903	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.127	3.104	0.023	1.000	13183148	10.0	Target=4.11	100	2397	
363.00 > 169.00	3.127	3.104	0.023	1.000	3246220		4.06(2.06-6.17)	100	2137	
D 9 13C4 PFHpA										
367.00 > 322.00	3.127	3.104	0.023	0.901	1466571	1.22		97.6	3939	
77 DONA										
377.00 > 251.00	3.161	3.138	0.023	0.833	32898209	8.92	Target=3.28	94.4	23285	
377.00 > 85.00	3.161	3.138	0.023	0.833	10971378		3.00(1.64-4.92)	94.4	8094	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.462	3.446	0.016	0.913	9291673	10.0	Target=4.71	105	9326	
449.00 > 99.00	3.462	3.446	0.016	0.913	1923167		4.83(2.36-7.07)	105	2597	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.462	3.446	0.016	0.997	250039	1.15		97.0	319	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.462	3.446	0.016	1.000	5360896	9.32		98.0	3149	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.480	3.464	0.016	1.000	13504480	9.37	Target=2.90	93.7	1069	
413.00 > 169.00	3.480	3.464	0.016	1.000	4762707		2.84(1.45-4.35)	93.7	6332	
D 14 13C4 PFOA										
417.00 > 372.00	3.480	3.464	0.016	1.003	1691186	1.24		99.4	4091	
* 62 13C2 PFOA										
415.00 > 370.00	3.471	3.464	0.007		1749133	1.25			3853	
D 18 13C4 PFOS										
503.00 > 80.00	3.793	3.783	0.010	1.093	765818	1.15		96.6	1062	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.793	3.783	0.010	1.000	6987392	9.35	Target=4.11	101	3645	M
499.00 > 99.00	3.783	3.783	0.0	0.997	1609293		4.34(2.05-6.16)	101	1686	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	1889768	1.28		102	5845	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	14082035	9.50	Target=8.48	95.0	2121	
463.00 > 169.00	3.814	3.803	0.011	1.003	1663440		8.47(4.24-12.72)	95.0	6569	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.958	3.947	0.011	1.043	21405197	9.36		100	14512	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.084	4.074	0.010	1.077	5744699	10.1	Target=2.17	105	9927	
549.00 > 99.00	4.084	4.074	0.010	1.077	2540483		2.26(1.08-3.25)	105	4161	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	1979736	1.28		102	4717	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	15207258	9.61	Target=10.55	96.1	3130	
513.00 > 169.00	4.108	4.108	0.0	1.000	1435944		10.59(5.27-15.82)	96.1	3360	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.120	4.108	0.012	1.187	309678	1.27		106	551	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.000	4983035	8.75		91.2	118767	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1724931	1.30		104	4594	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	13020569	9.89		98.9	8748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	465286	1.25		100	354	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.261	4.260	0.001	1.003	3280076	9.71		97.1	1965	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.146	4450137	10.2	Target=2.28	105	9388	
599.00 > 99.00	4.346	4.346	0.0	1.146	1850008		2.41(1.14-3.42)	105	4976	
D 30 13C2 PFUnA										
565.00 > 520.00	4.382	4.382	0.0	1.262	1818926	1.24		99.3	12538	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.382	4.382	0.0	1.000	14323125	9.55	Target=11.30	95.5	3667	
563.00 > 169.00	4.382	4.382	0.0	1.000	1240618		11.55(5.65-16.96)	95.5	7177	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.262	456350	1.28		102	1074	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.394	4.393	0.001	1.003	3409503	9.34		93.4	39384	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.177	29976782	8.55		90.6	25762	
D 36 13C2 PFDoA										
615.00 > 570.00	4.605	4.605	0.0	1.327	1800020	1.21		96.7	6856	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.000	14693173	10.0	Target=8.15	100	1405	
613.00 > 169.00	4.605	4.616	-0.011	1.000	1710081		8.59(4.07-12.22)	100	10412	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.627	4.627	0.0	1.123	3151402	9.26		96.1	16125	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.780	4.779	0.001	1.260	1445002	9.74	Target=0.50	101	8185	
699.00 > 99.00	4.780	4.779	0.001	1.260	2914789		0.50(0.25-0.75)	101	8974	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.808	4.822	-0.014	1.044	14866529	9.65	Target=6.61	96.5	1279	
663.00 > 169.00	4.808	4.822	-0.014	1.044	2252925		6.60(3.31-9.92)	96.5	4587	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	1876594	1.27		101	6427	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.997	5.008	-0.011	1.000	1575221	9.38	Target=0.96	93.8	6626	
713.00 > 219.00	4.997	5.008	-0.011	1.000	1663605		0.95(0.48-1.44)	93.8	6338	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.328	5.328	0.0	1.002	15997184	9.75	Target=7.69	97.5	1329	
813.00 > 169.00	5.317	5.328	-0.011	1.000	2021184		7.91(3.85-11.54)	97.5	3771	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2051028	1.20		96.1	4731	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	12548221	9.79	Target=9.13	97.9	379	M
913.00 > 169.00	5.602	5.611	-0.009	1.054	1429786		8.78(4.56-13.69)	97.9	466	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

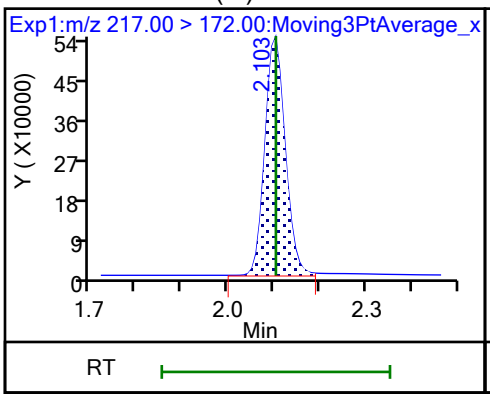
PFAS32NCIC6_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:03 Chrom Revision: 2.3 19-Jul-2023 18:28:48

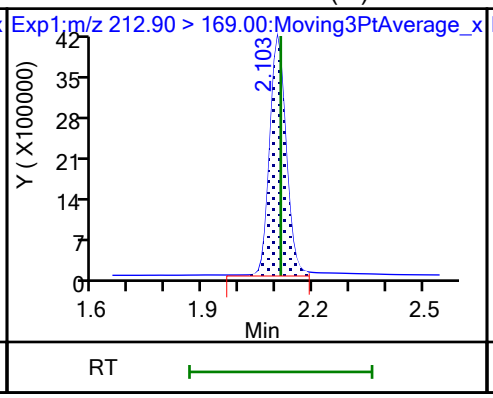
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL10.d
Injection Date: 26-Jul-2023 17:57:38 Instrument ID: LC812
Lims ID: IC 6
Client ID:
Operator ID: LC812user ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

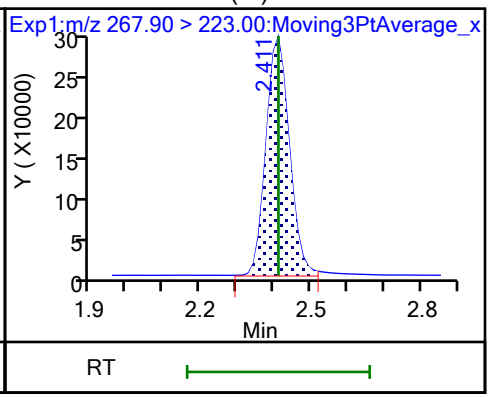
D 1 13C4 PFBA (M)



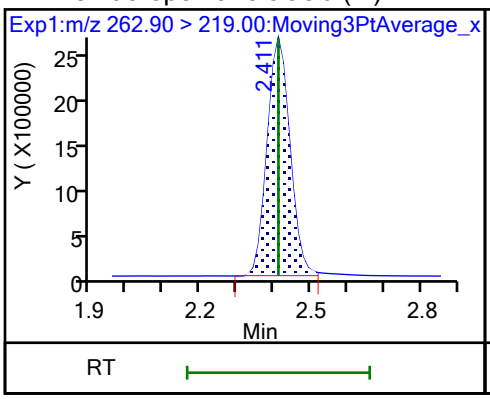
2 Perfluorobutanoic acid (M)



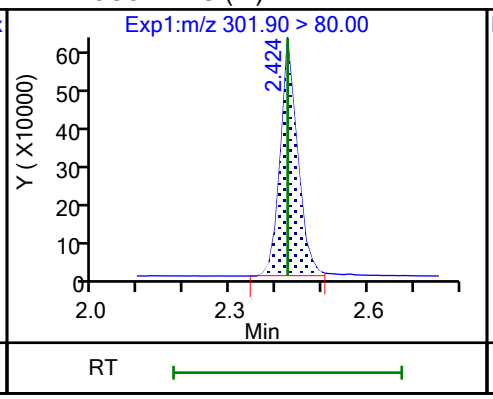
D 3 13C5 PFPeA (M)



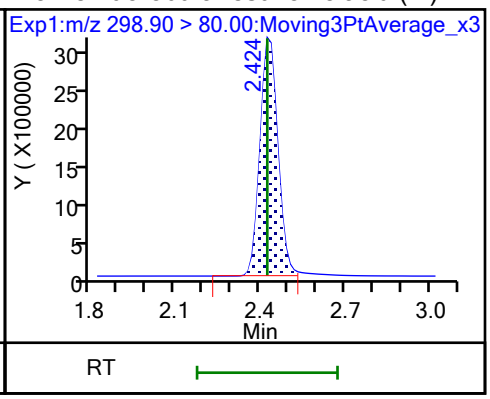
4 Perfluoropentanoic acid (M)



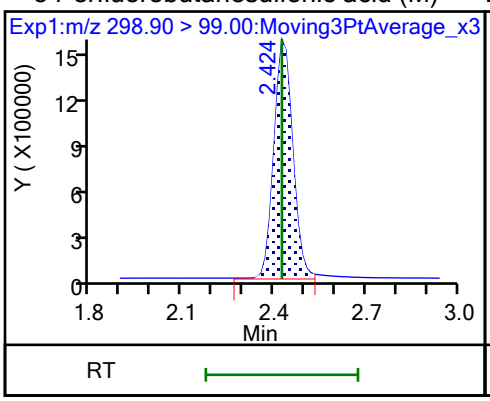
D 47 13C3 PFBS (M)



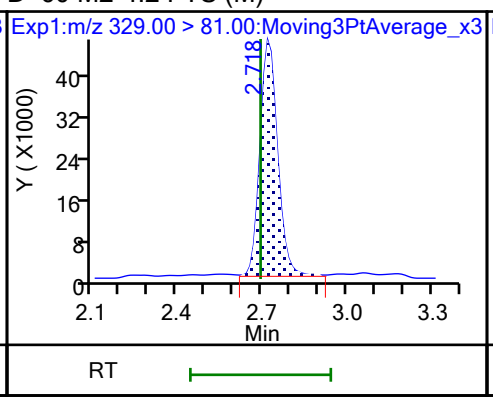
5 Perfluorobutanesulfonic acid (M)



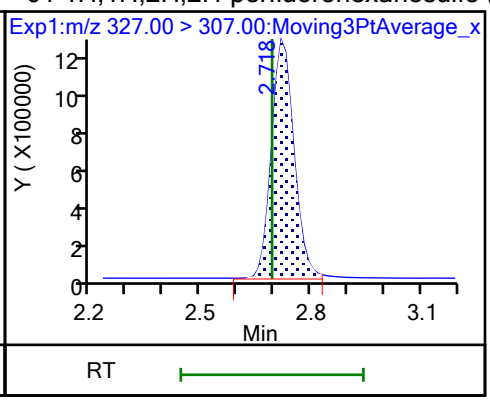
5 Perfluorobutanesulfonic acid (M)



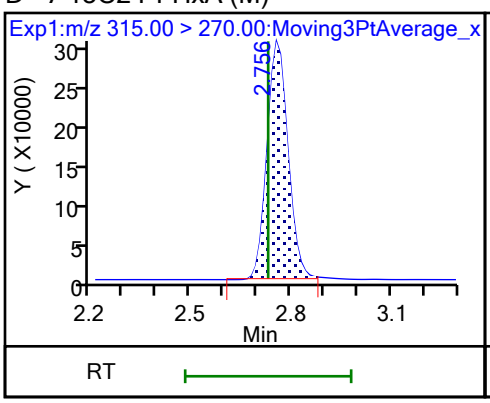
D 60 M2-4:2 FTS (M)



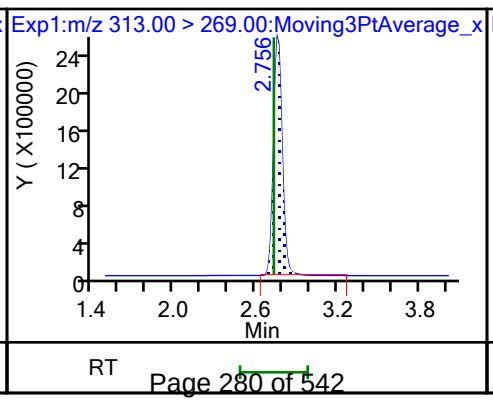
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



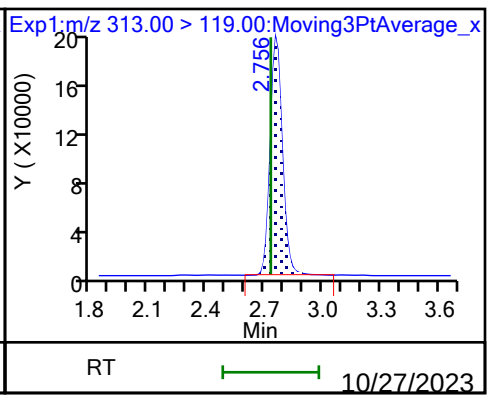
D 7 13C2 PFHxA (M)



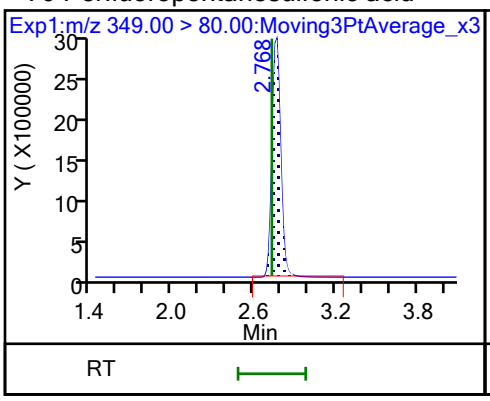
6 Perfluorohexanoic acid



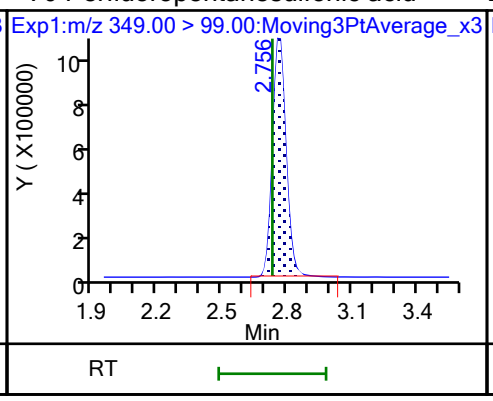
6 Perfluorohexanoic acid



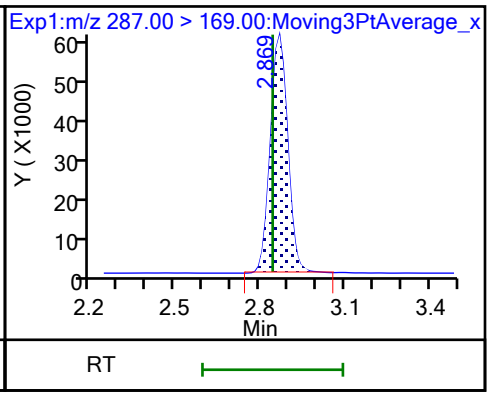
70 Perfluoropentanesulfonic acid



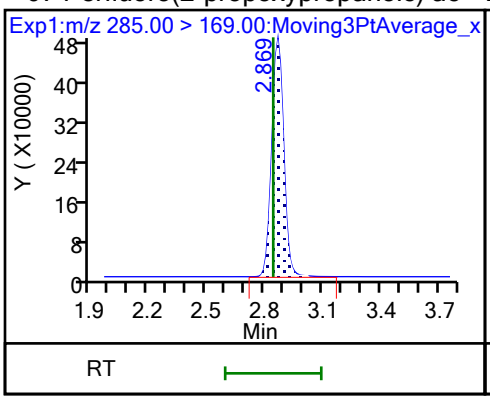
70 Perfluoropentanesulfonic acid



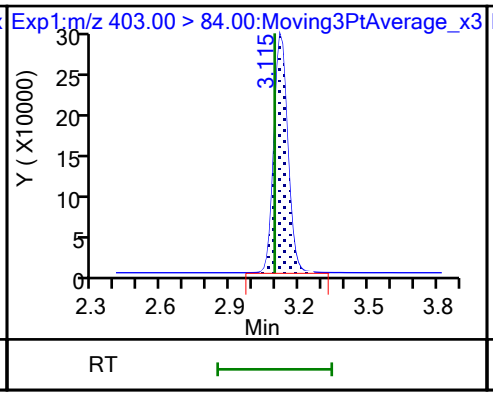
D 64 13C3 HFPO-DA



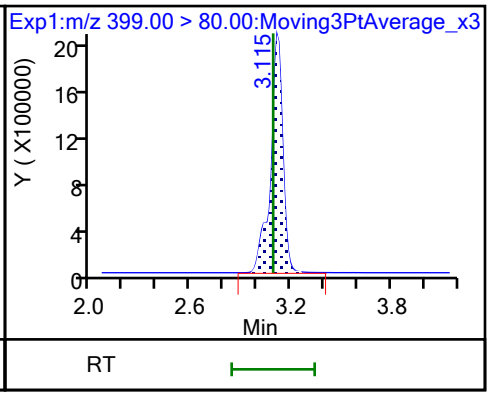
67 Perfluoro(2-propoxypropanoic) ac



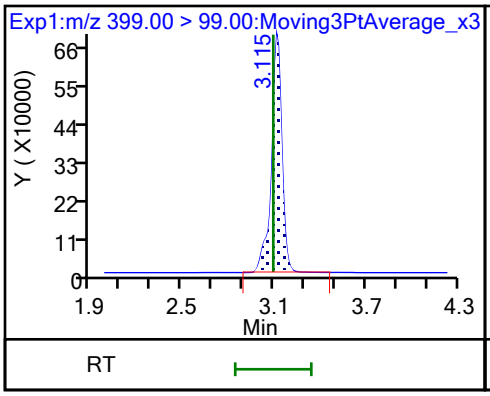
D 11 18O2 PFHxS



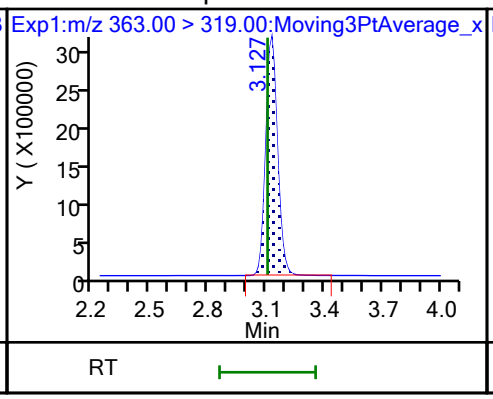
8 Perfluorohexanesulfonic acid



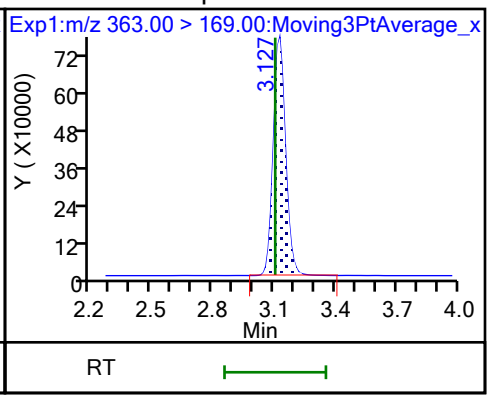
8 Perfluorohexanesulfonic acid



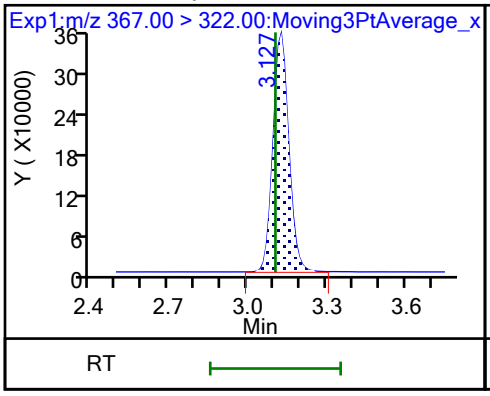
10 Perfluoroheptanoic acid



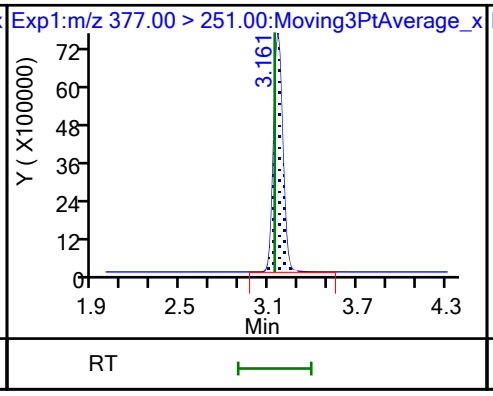
10 Perfluoroheptanoic acid



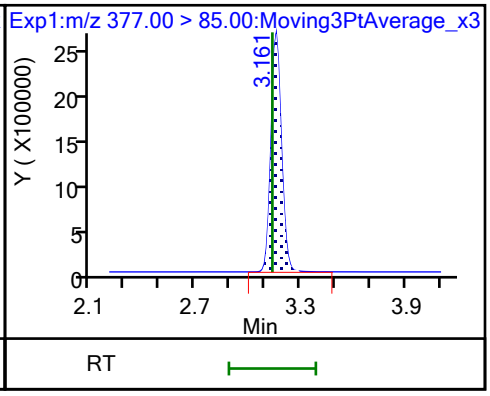
D 9 13C4 PFHpA



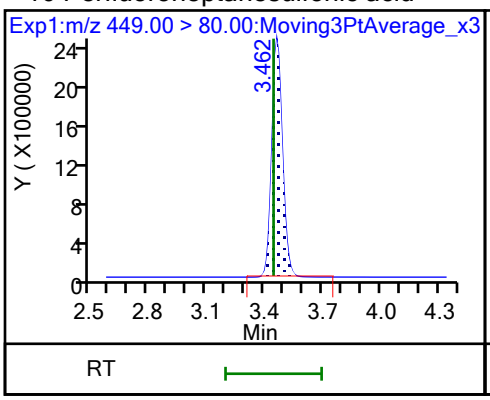
77 DONA



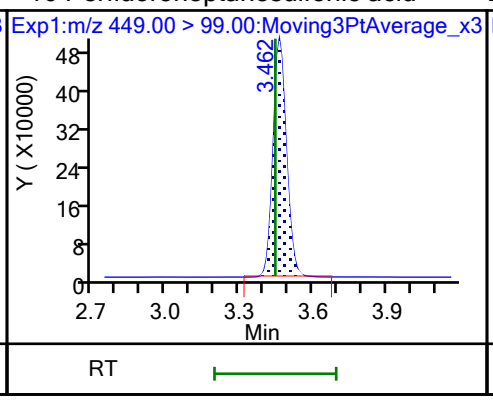
77 DONA



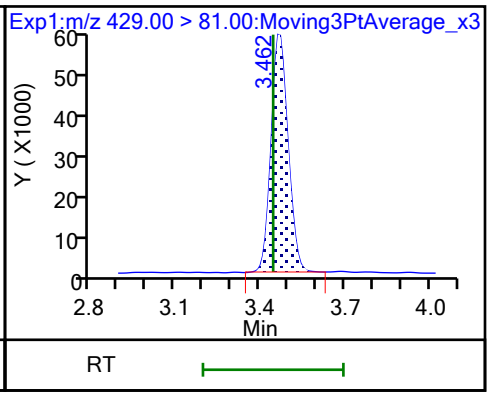
16 Perfluoroheptanesulfonic acid



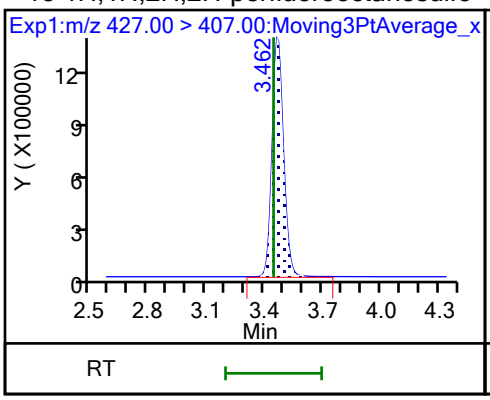
16 Perfluoroheptanesulfonic acid



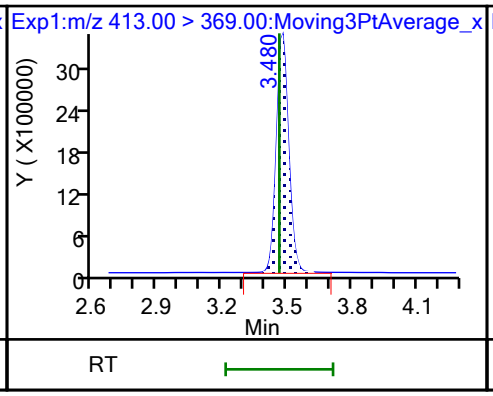
D 12 M2-6:2 FTS



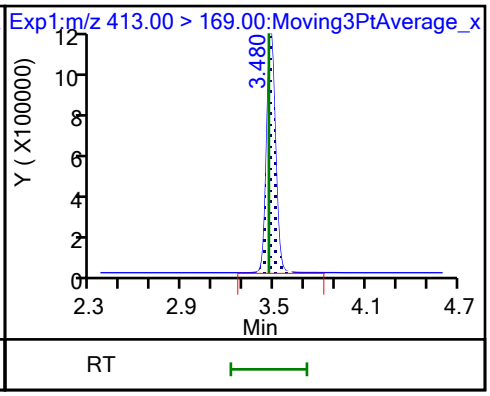
13 1H,1H,2H,2H-perfluorooctanesulfo



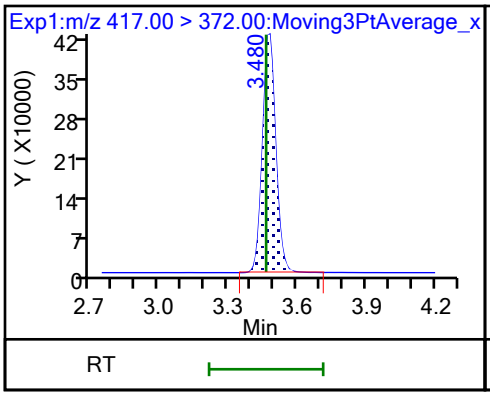
15 Perfluorooctanoic acid



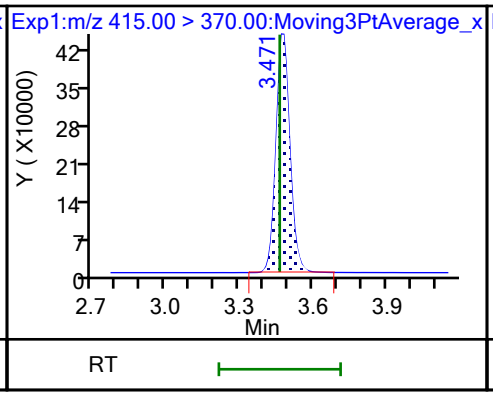
15 Perfluorooctanoic acid



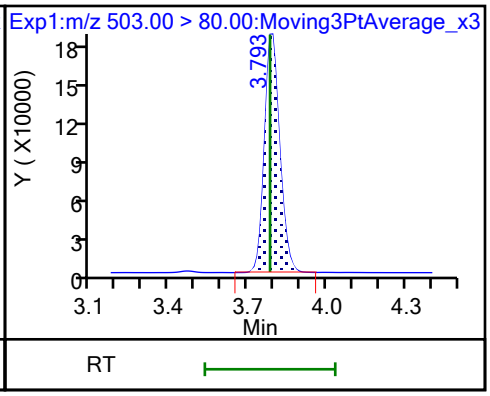
D 14 13C4 PFOA



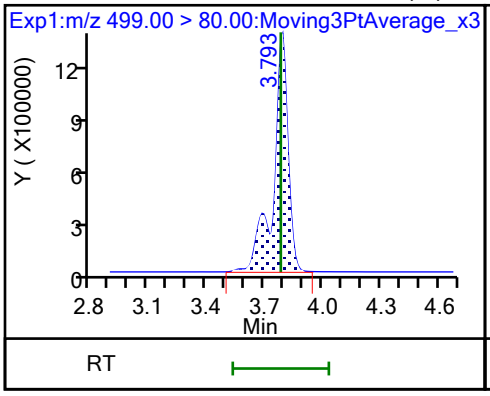
* 62 13C2 PFOA



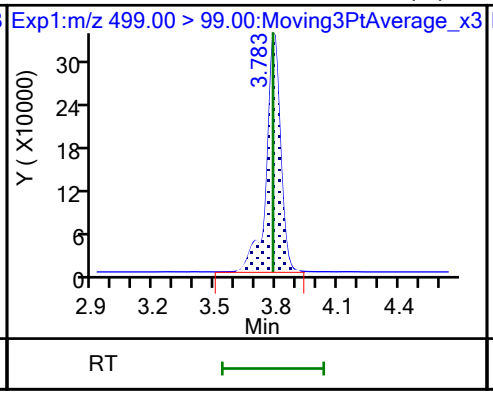
D 18 13C4 PFOS



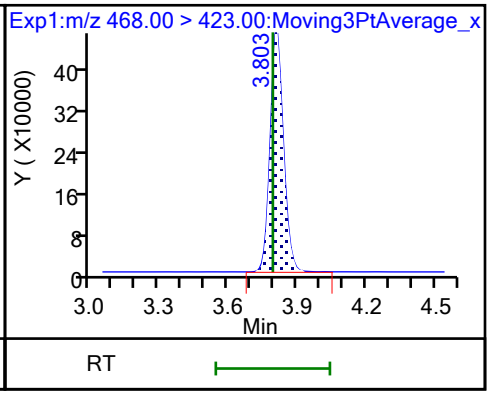
17 Perfluorooctanesulfonic acid (M)



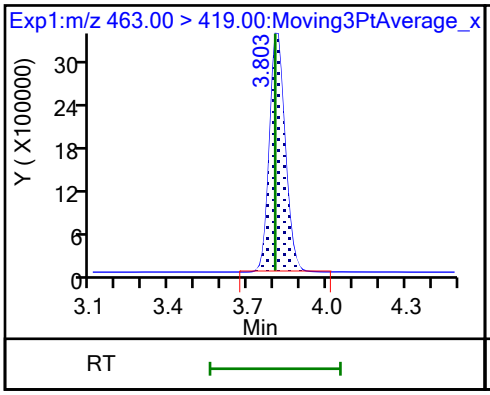
17 Perfluorooctanesulfonic acid (M)



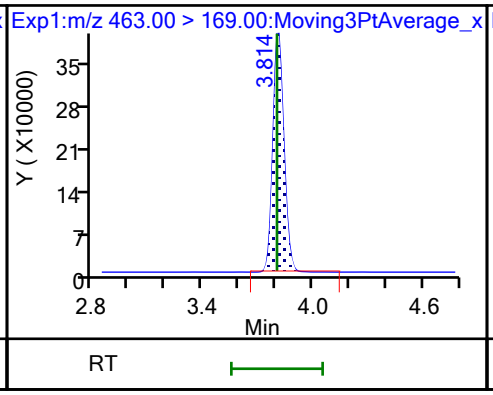
D 19 13C5 PFNA



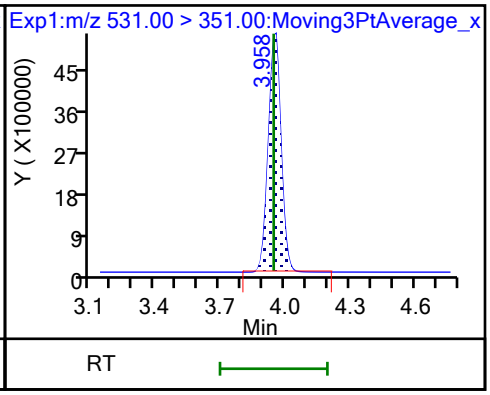
20 Perfluorononanoic acid



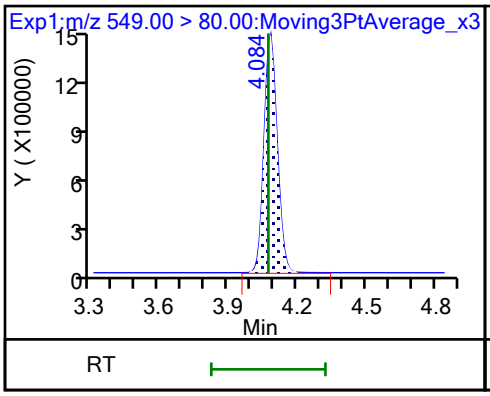
20 Perfluorononanoic acid



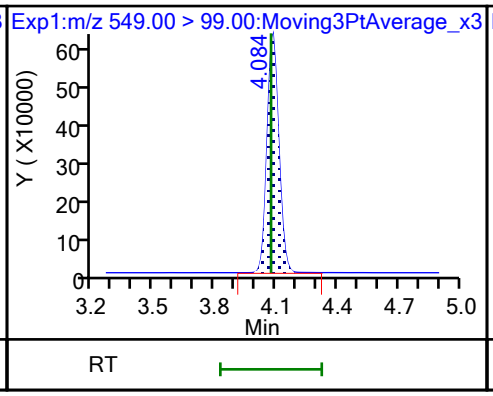
69 9-Chlorohexadecafluoro-3-oxanona



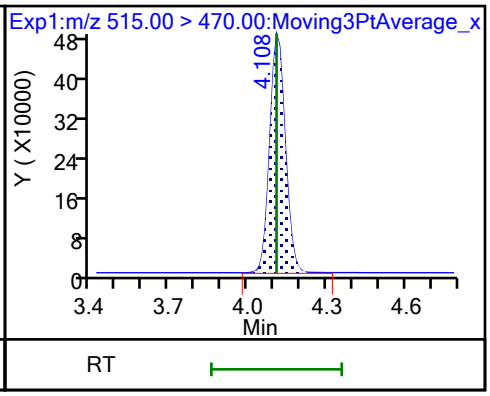
68 Perfluorononanesulfonic acid



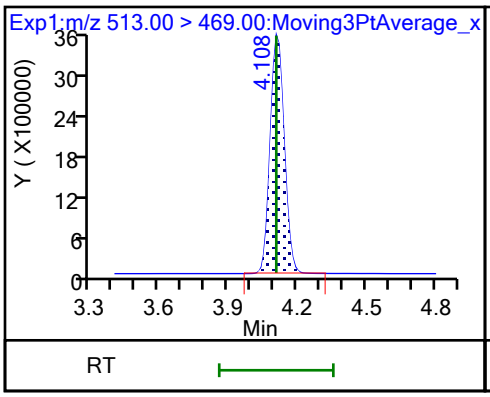
68 Perfluorononanesulfonic acid



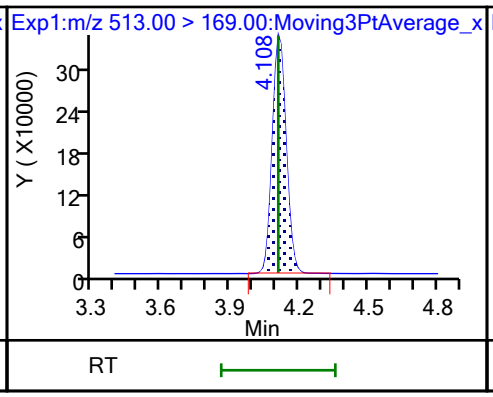
D 23 13C2 PFDA



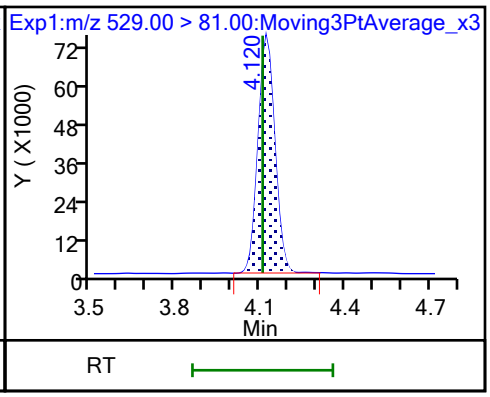
24 Perfluorodecanoic acid



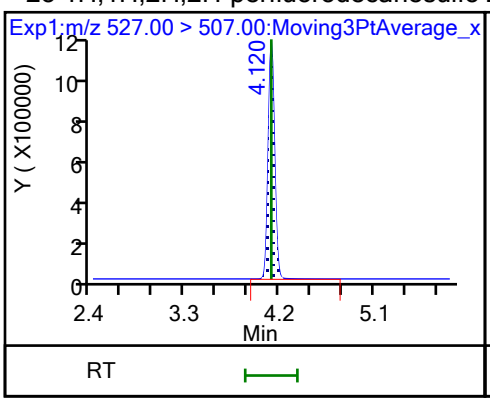
24 Perfluorodecanoic acid



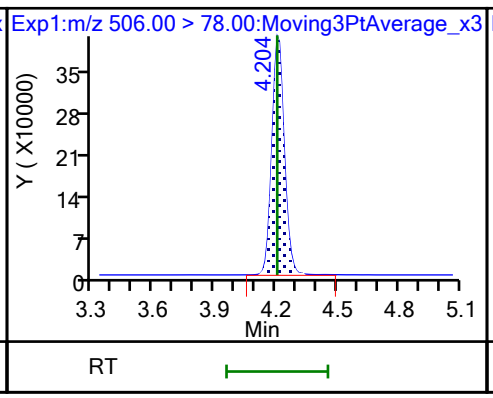
D 26 M2-8:2 FTS



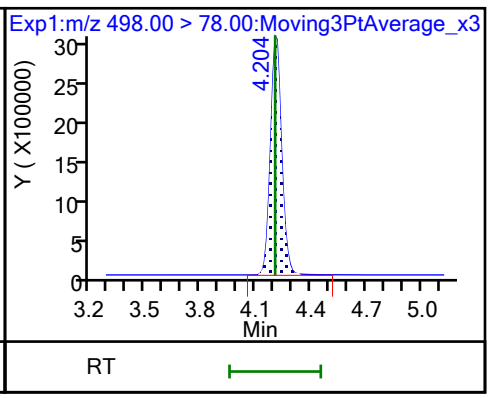
25 1H,1H,2H,2H-perfluorodecanesulfo



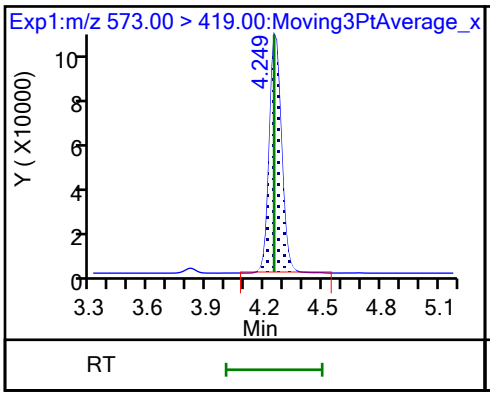
D 21 13C8 FOSA



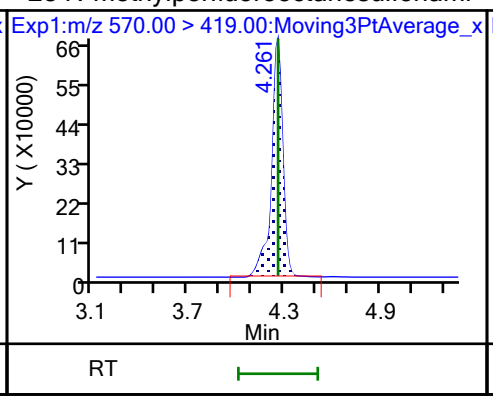
22 Perfluorooctanesulfonamide



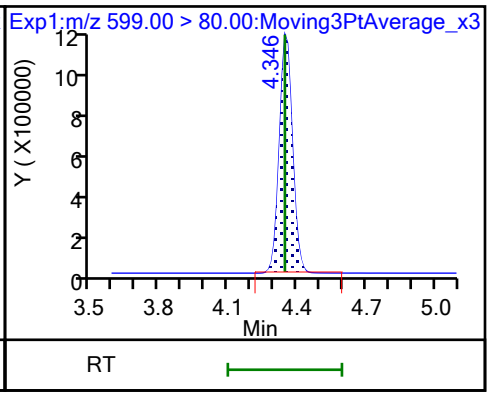
D 27 d3-NMeFOSAA



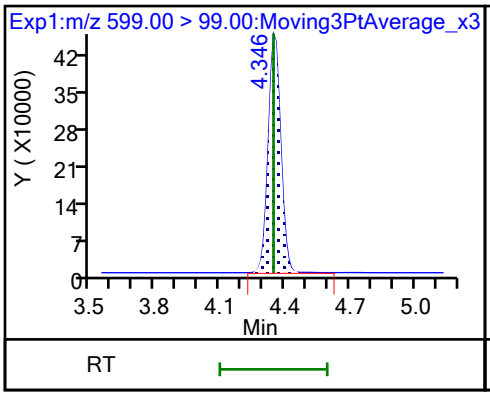
28 N-methylperfluorooctanesulfonami



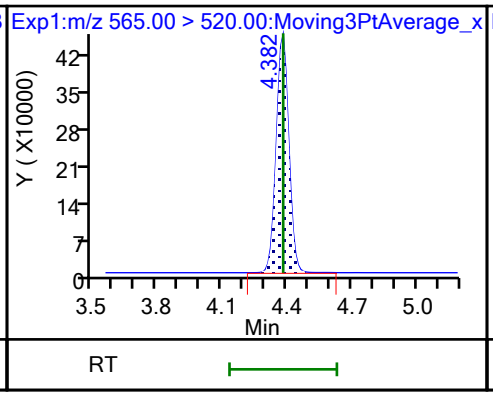
29 Perfluorodecanesulfonic acid



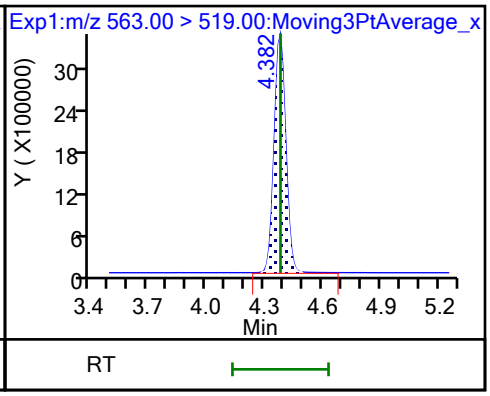
29 Perfluorodecanesulfonic acid



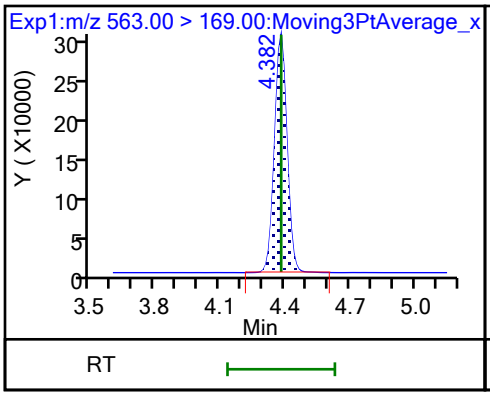
D 30 13C2 PFUnA



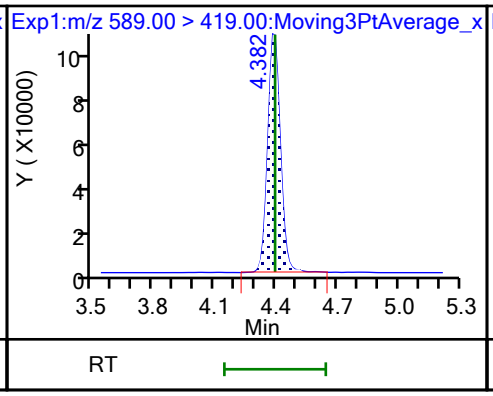
31 Perfluoroundecanoic acid



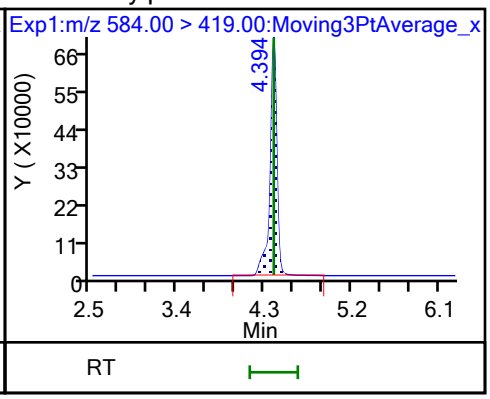
31 Perfluoroundecanoic acid



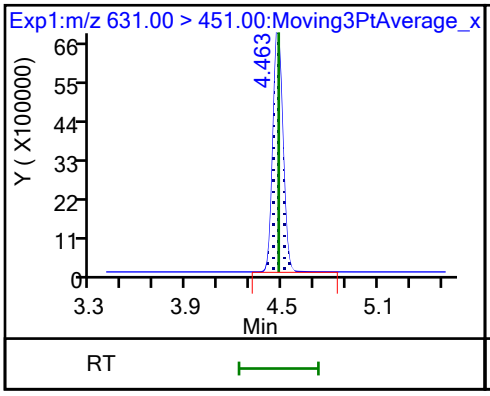
D 32 d5-NEtFOSAA



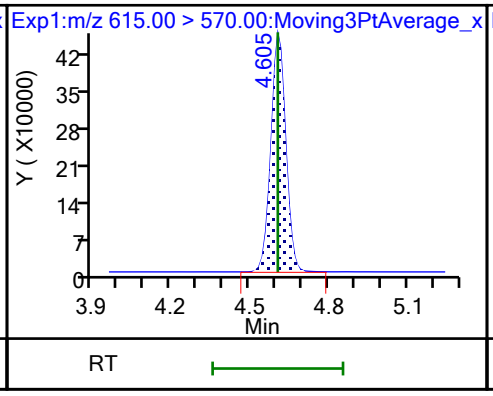
33 N-ethylperfluorooctanesulfonamid



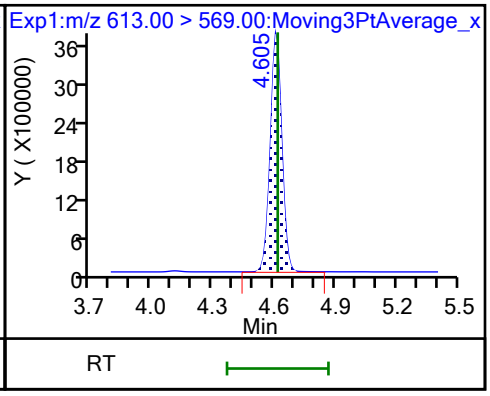
66 11-Chloroeicosafluoro-3-oxaundec



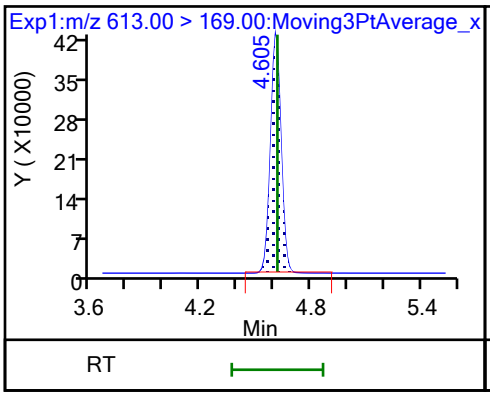
D 36 13C2 PFDoA



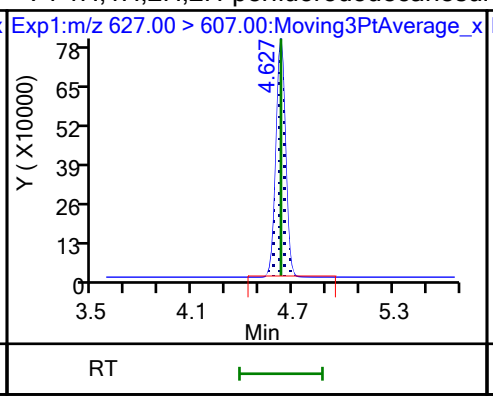
37 Perfluorododecanoic acid



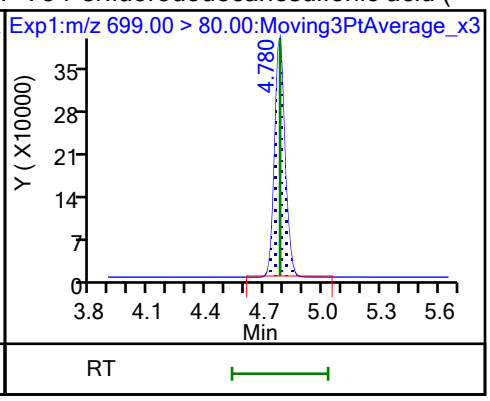
37 Perfluorododecanoic acid



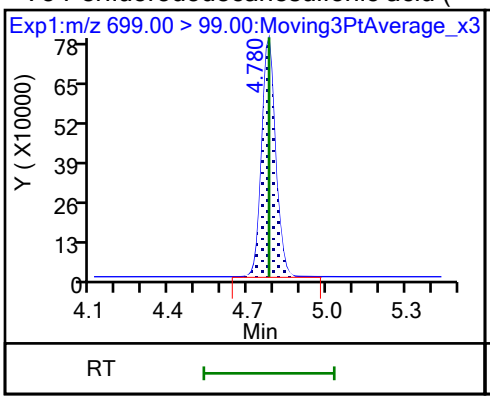
74 1H,1H,2H,2H-perfluorododecanesul



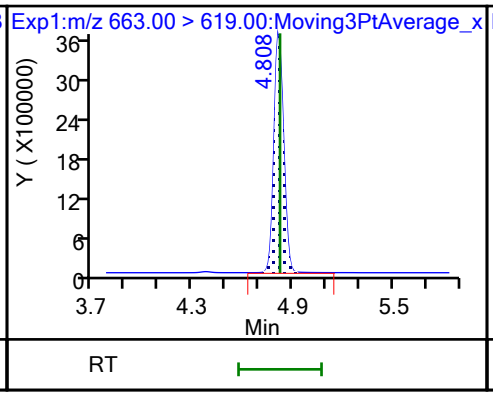
75 Perfluorododecanesulfonic acid (



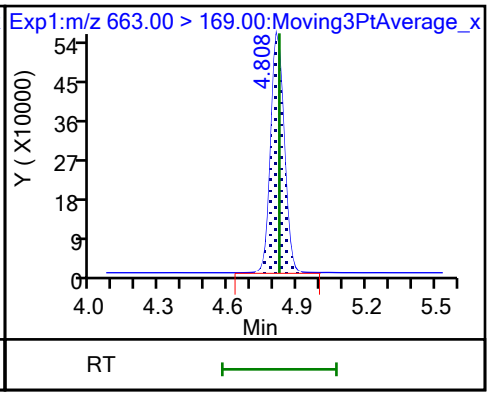
75 Perfluorododecanesulfonic acid (



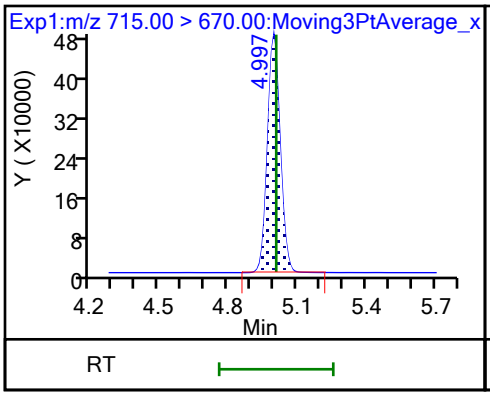
41 Perfluorotridecanoic acid



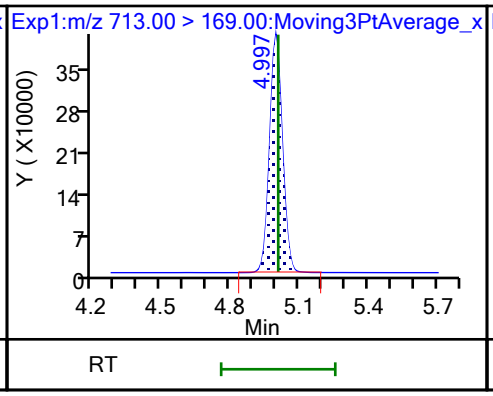
41 Perfluorotridecanoic acid



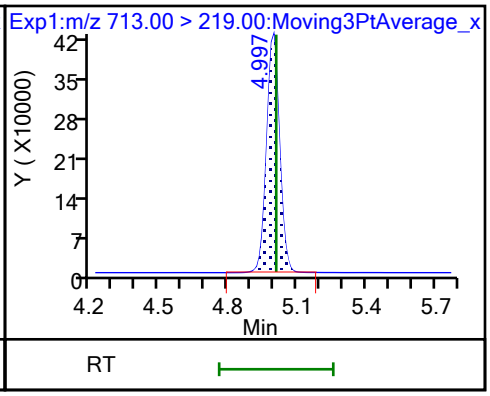
D 43 13C2 PFTeDA



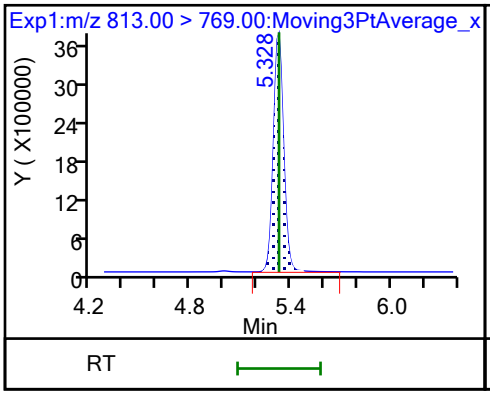
42 Perfluorotetradecanoic acid



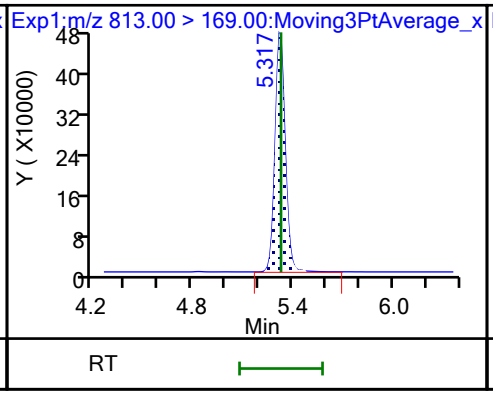
42 Perfluorotetradecanoic acid



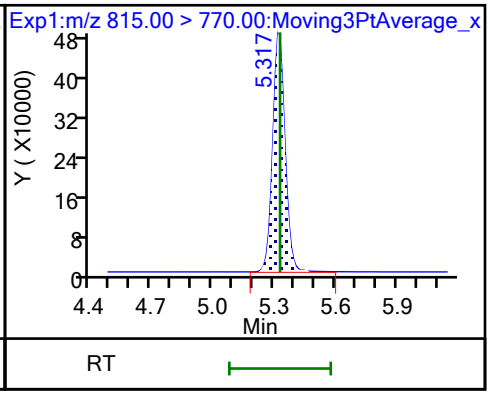
45 Perfluorohexadecanoic acid



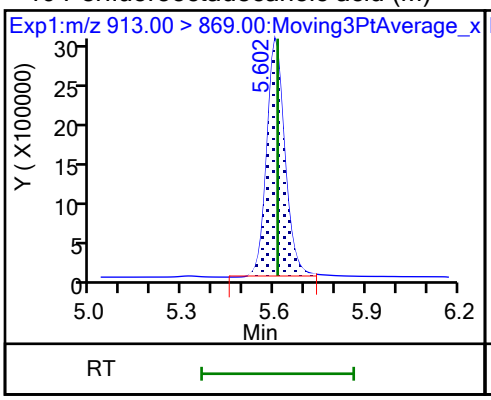
45 Perfluorohexadecanoic acid



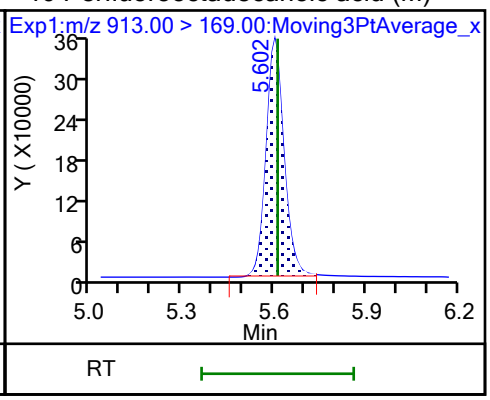
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Jul-2023 18:05:46 ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 200-0056441-011 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:45:07 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:17:02
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.606	1758198	1.24		99.4	992	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	29150051	22.9		91.5	1625	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.397	2.411	-0.014	0.694	1319141	1.20		96.1	720	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.397	2.411	-0.014	1.000	26331175	23.1		92.5	419	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.698	1925353	1.30		112	70151	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.411	2.425	-0.014	1.000	33432260	18.1	Target=2.07	81.5	580	M
298.90 > 99.00	2.411	2.425	-0.014	1.000	17197877		1.94(1.04-3.11)	81.5	556	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.706	2.694	0.012	0.784	207012	1.21		103	77.1	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.706	2.694	0.012	1.000	12889559	21.4		91.4	85591	
D 7 13C2 PFHxA										M
315.00 > 270.00	2.744	2.731	0.013	0.794	1316912	1.18		94.3	776	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.744	2.731	0.013	1.000	26521589	22.9	Target=14.29	91.5	753	M
313.00 > 119.00	2.744	2.731	0.013	1.000	2031245		13.06(7.15-21.44)	91.5	678	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.756	2.731	0.025	0.885	30796216	20.3	Target=2.78	86.5	1048	M
349.00 > 99.00	2.756	2.731	0.025	0.885	12222657		2.52(1.39-4.17)	86.5	1012	M
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.856	2.844	0.012	0.827	273677	1.27		101	1285	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.856	2.844	0.012	1.000	5568235	25.4		102	6439	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.115	3.092	0.023	0.902	1370941	1.29		109	2166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.115	3.092	0.023	1.000	27349473	21.3	Target=3.23	93.3	7764	
399.00 > 99.00	3.115	3.092	0.023	1.000	8658987		3.16(1.62-4.84)	93.3	7018	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.115	3.104	0.011	1.000	30971904	22.1	Target=4.11	88.6	5231	
363.00 > 169.00	3.115	3.104	0.011	1.000	8208481		3.77(2.06-6.17)	88.6	4733	
D 9 13C4 PFHpA										
367.00 > 322.00	3.115	3.104	0.011	0.902	1559821	1.27		102	3648	
77 DONA										
377.00 > 251.00	3.150	3.138	0.012	0.837	68369017	16.4	Target=3.28	69.5	79642	
377.00 > 85.00	3.150	3.138	0.012	0.837	26772118		2.55(1.64-4.92)	69.5	10230	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.435	3.446	-0.011	0.913	23718890	22.7	Target=4.71	95.1	34545	
449.00 > 99.00	3.435	3.446	-0.011	0.913	5261248		4.51(2.36-7.07)	95.1	8032	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.444	3.446	-0.002	0.997	271643	1.23		103	338	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.444	3.446	-0.002	1.000	12827492	20.5		86.3	1734	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.453	3.464	-0.011	1.000	32974345	23.9	Target=2.90	95.5	2249	
413.00 > 169.00	3.453	3.464	-0.011	1.000	11969902		2.75(1.45-4.35)	95.5	9272	
D 14 13C4 PFOA										
417.00 > 372.00	3.453	3.464	-0.011	1.000	1620734	1.17		93.4	5069	
* 62 13C2 PFOA										
415.00 > 370.00	3.453	3.464	-0.011		1782839	1.25			3950	
D 18 13C4 PFOS										
503.00 > 80.00	3.764	3.783	-0.019	1.090	865311	1.28		107	633	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.764	3.783	-0.019	1.000	18816206	22.3	Target=4.11	96.0	9491	M
499.00 > 99.00	3.764	3.783	-0.019	1.000	4470828		4.21(2.05-6.16)	96.0	4135	M
D 19 13C5 PFNA										
468.00 > 423.00	3.794	3.793	0.001	1.098	1902682	1.26		101	3585	
20 Perfluorononanoic acid										
463.00 > 419.00	3.784	3.803	-0.019	0.997	33868175	22.7	Target=8.48	90.8	4295	
463.00 > 169.00	3.794	3.803	-0.009	1.000	4166541		8.13(4.24-12.72)	90.8	5885	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.935	3.947	-0.012	1.045	49573864	19.2		82.2	122080	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.063	4.074	-0.011	1.080	15127922	23.5	Target=2.17	97.9	34897	
549.00 > 99.00	4.063	4.074	-0.011	1.080	7013195		2.16(1.08-3.25)	97.9	11531	
D 23 13C2 PFDA										
515.00 > 470.00	4.097	4.108	-0.011	1.186	1981566	1.25		100	6749	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.097	4.108	-0.011	1.000	35125264	22.2	Target=10.55	88.7	8430	
513.00 > 169.00	4.097	4.108	-0.011	1.000	3557829		9.87(5.27-15.82)	88.7	7050	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.109	4.108	0.001	1.190	316911	1.27		106	810	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.109	4.120	-0.011	1.000	12048759	20.7		86.2	64543	
D 21 13C8 FOSA										
506.00 > 78.00	4.192	4.204	-0.012	1.214	1759972	1.30		104	4229	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.192	4.204	-0.012	1.000	31572610	23.5		94.0	87074	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.237	4.249	-0.012	1.227	505130	1.34		107	228	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.237	4.260	-0.023	1.000	8770277	23.9		95.7	2253	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.334	4.346	-0.012	1.152	11299421	22.8	Target=2.28	94.7	10546	
599.00 > 99.00	4.334	4.346	-0.012	1.152	4799204		2.35(1.14-3.42)	94.7	10362	
D 30 13C2 PFUnA										
565.00 > 520.00	4.358	4.382	-0.024	1.262	1790927	1.20		96.0	5216	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.370	4.382	-0.012	1.003	32455800	22.0	Target=11.30	87.9	7502	
563.00 > 169.00	4.370	4.382	-0.012	1.003	3240672		10.02(5.65-16.96)	87.9	10679	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.370	4.393	-0.023	1.265	430319	1.18		94.6	987	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.003	8392085	24.4		97.5	27196	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.464	4.477	-0.013	1.186	64636051	16.3		69.2	118442	
D 36 13C2 PFDoA										
615.00 > 570.00	4.595	4.605	-0.010	1.330	1994604	1.31		105	5976	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.595	4.616	-0.021	1.000	34331936	21.1	Target=8.15	84.6	1991	
613.00 > 169.00	4.595	4.616	-0.021	1.000	4769328		7.20(4.07-12.22)	84.6	22673	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.617	4.627	-0.010	1.124	8134970	23.4		96.9	121535	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.267	3739893	22.3	Target=0.50	92.2	19469	
699.00 > 99.00	4.770	4.779	-0.009	1.267	7697869		0.49(0.25-0.75)	92.2	16871	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.809	4.822	-0.013	1.047	35226779	20.6	Target=6.61	82.5	2165	
663.00 > 169.00	4.809	4.822	-0.013	1.047	5990766		5.88(3.31-9.92)	82.5	4583	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.998	5.008	-0.010	1.447	1918275	1.27		102	5387	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.998	5.008	-0.010	1.000	4171778	24.3	Target=0.96	97.2	14200	
713.00 > 219.00	4.987	5.008	-0.021	0.998	4312498		0.97(0.48-1.44)	97.2	10053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	37681202	20.5	Target=7.69	82.2	1953	
813.00 > 169.00	5.317	5.328	-0.011	1.000	5392503		6.99(3.85-11.54)	82.2	4998	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.540	2292454	1.32		105	5350	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	30813591	21.5	Target=9.13	86.1	331	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	3700392		8.33(4.56-13.69)	86.1	382	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

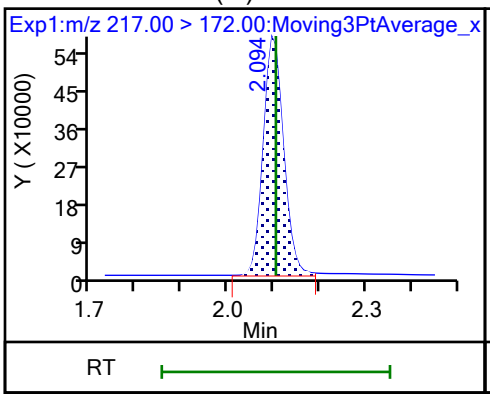
PFAS23NCIC7_00001 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:45:08 Chrom Revision: 2.3 19-Jul-2023 18:28:48

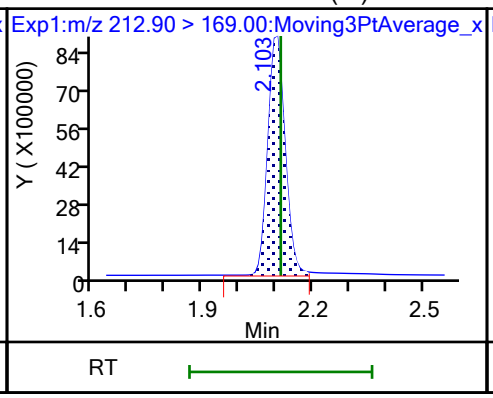
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d
Injection Date: 26-Jul-2023 18:05:46 Instrument ID: LC812
Lims ID: IC 7
Client ID:
Operator ID: LC812user ALS Bottle#: 8 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

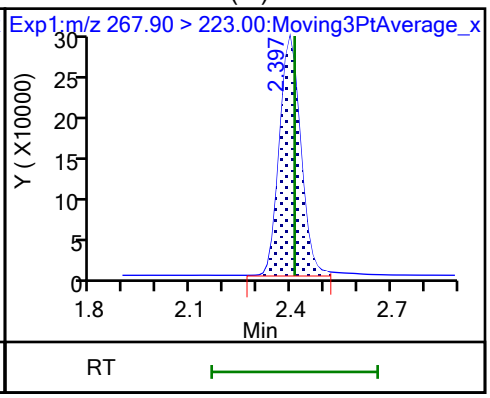
D 1 13C4 PFBA (M)



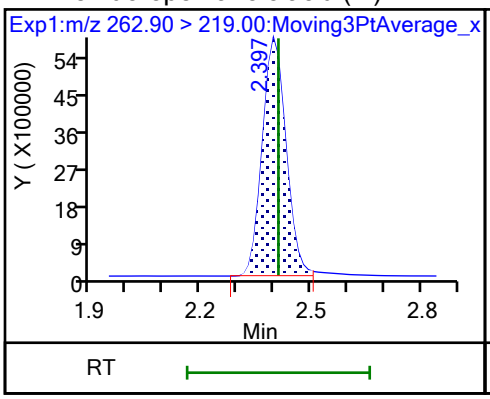
2 Perfluorobutanoic acid (M)



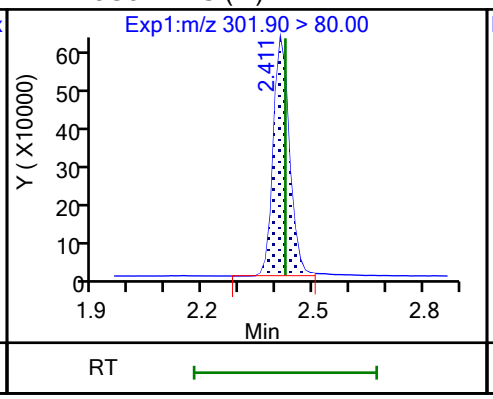
D 3 13C5 PFPeA (M)



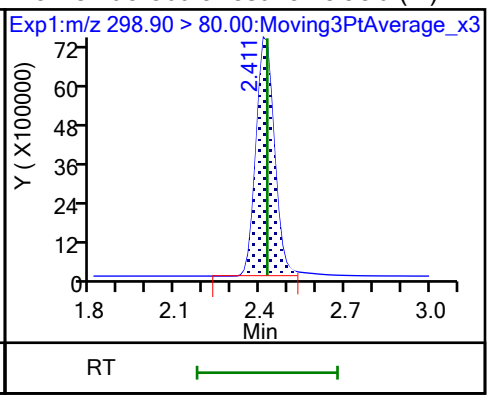
4 Perfluoropentanoic acid (M)



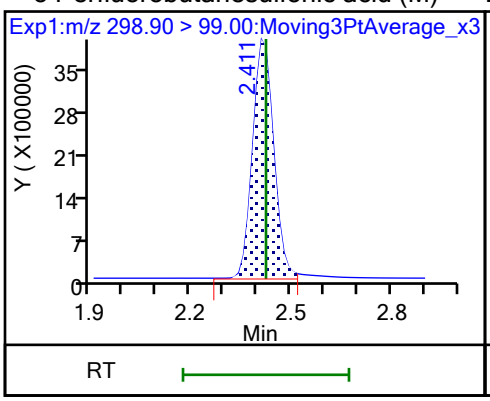
D 47 13C3 PFBS (M)



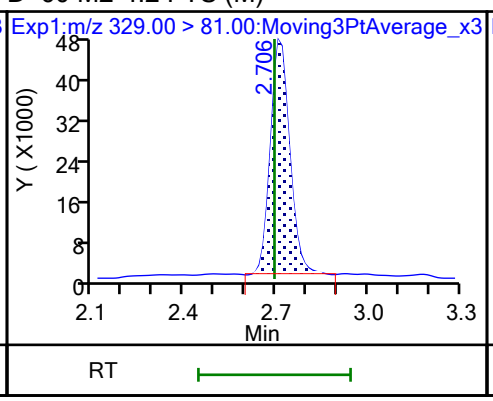
5 Perfluorobutanesulfonic acid (M)



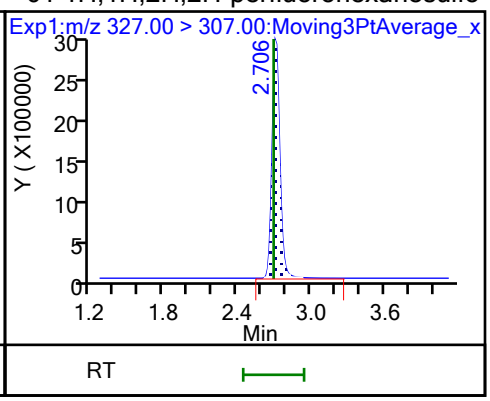
5 Perfluorobutanesulfonic acid (M)



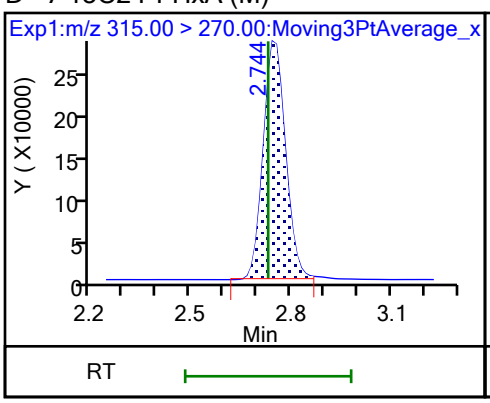
D 60 M2-4:2 FTS (M)



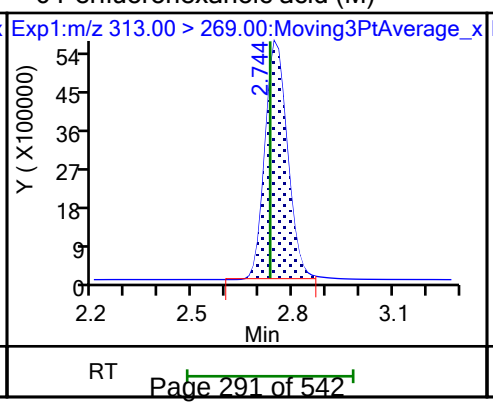
61 1H,1H,2H,2H-perfluorohexanesulfo



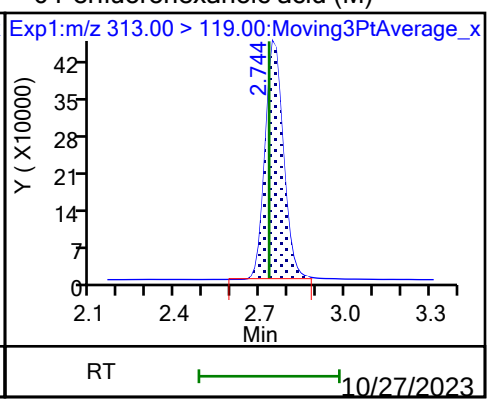
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

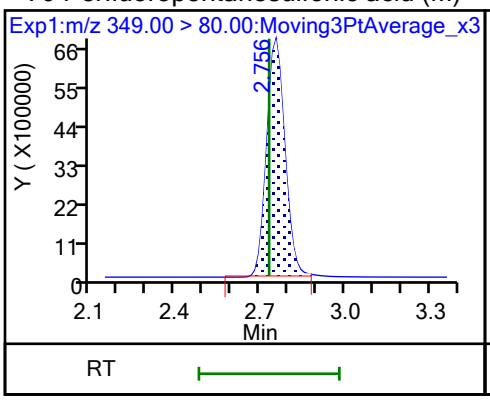


6 Perfluorohexanoic acid (M)

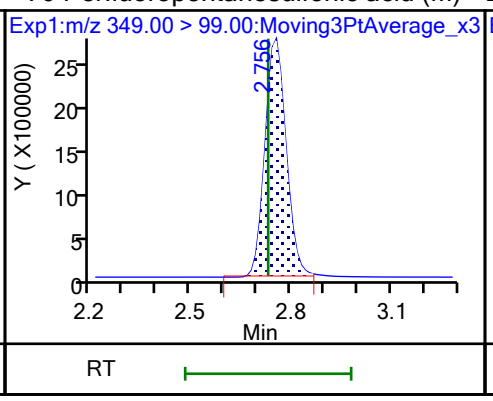


10/27/2023
10:52 AM

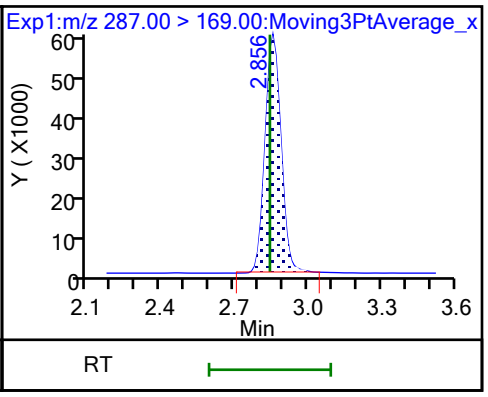
70 Perfluoropentanesulfonic acid (M)



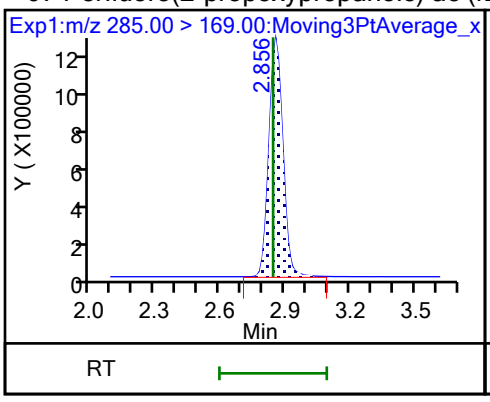
70 Perfluoropentanesulfonic acid (M)



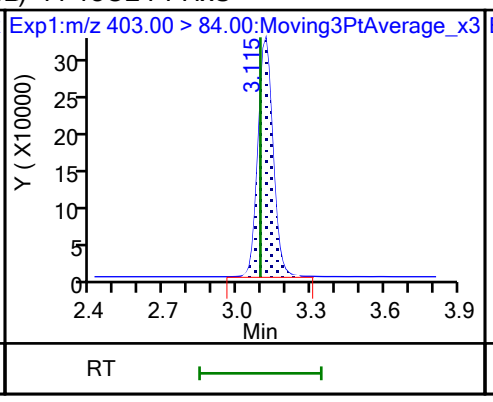
D 64 13C3 HFPO-DA



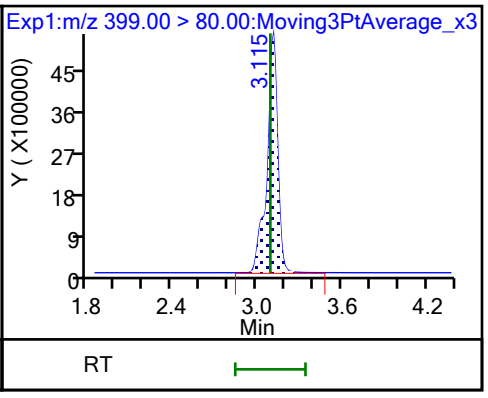
67 Perfluoro(2-propoxypropanoic) ac (M)



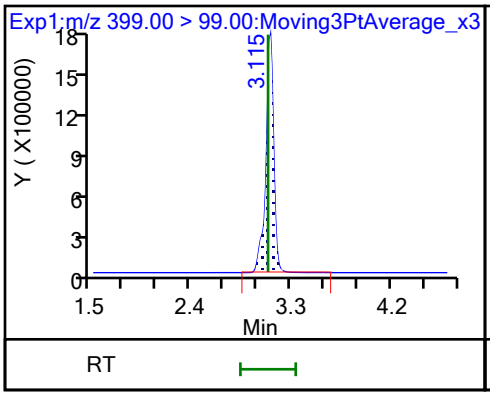
D 11 18O2 PFHxS



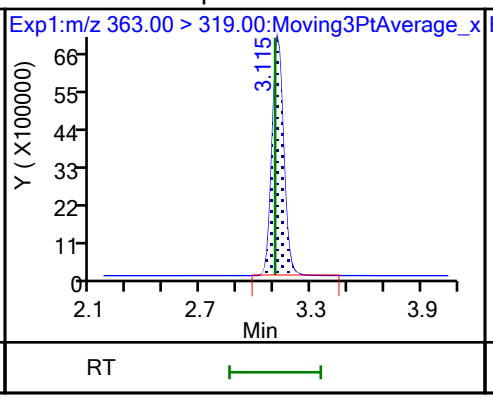
8 Perfluorohexanesulfonic acid



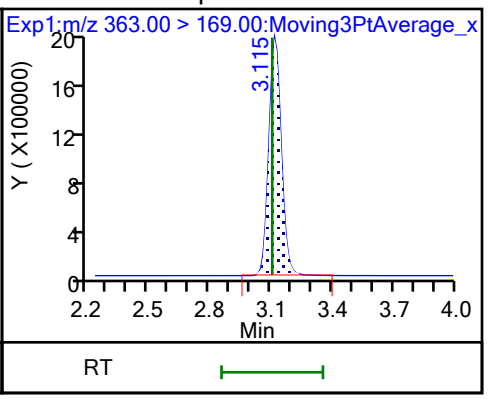
8 Perfluorohexanesulfonic acid



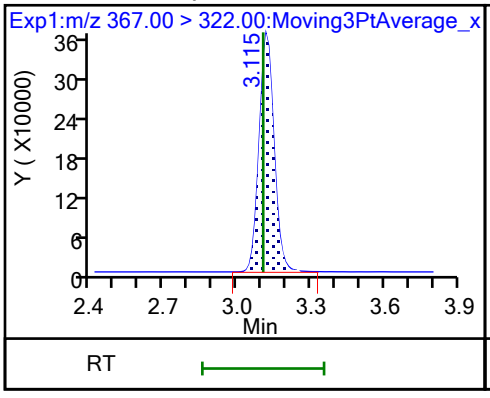
10 Perfluoroheptanoic acid



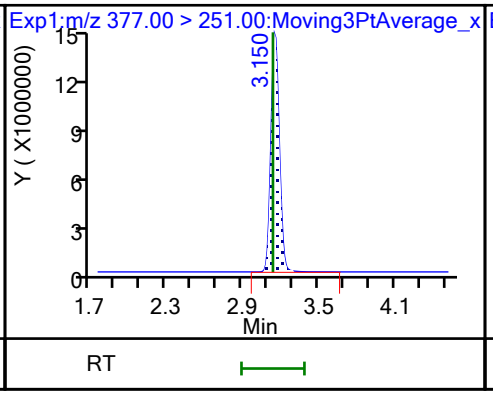
10 Perfluoroheptanoic acid



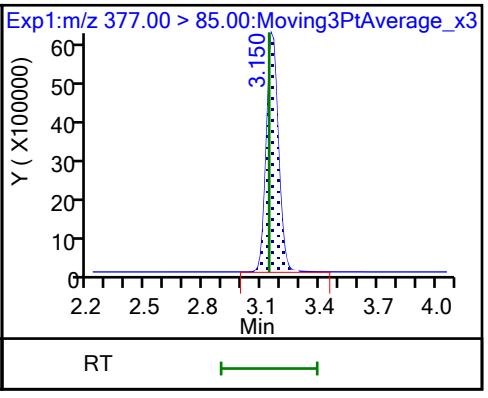
D 9 13C4 PFHpA



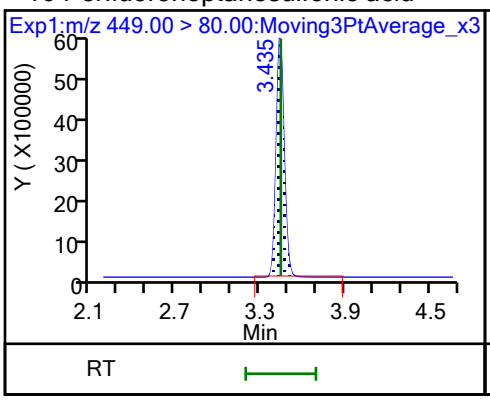
77 DONA



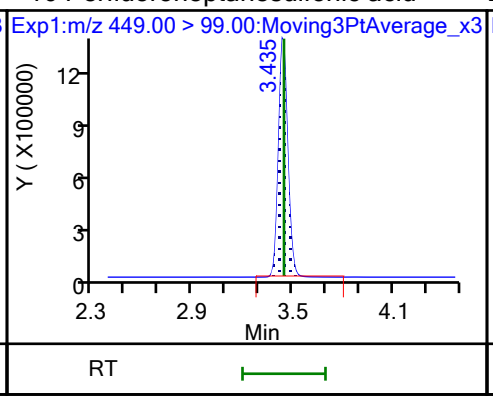
77 DONA



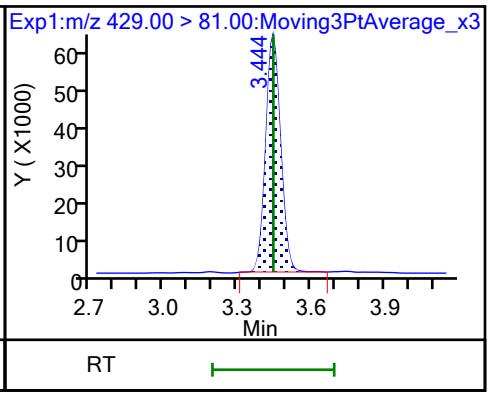
16 Perfluoroheptanesulfonic acid



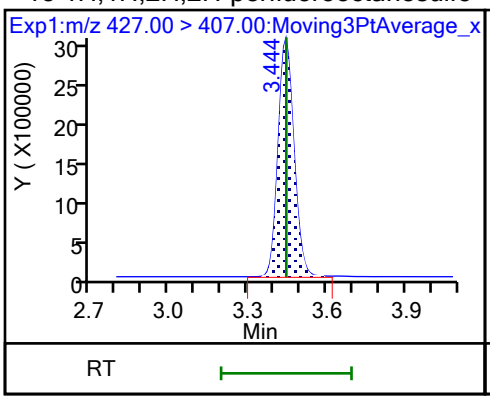
16 Perfluoroheptanesulfonic acid



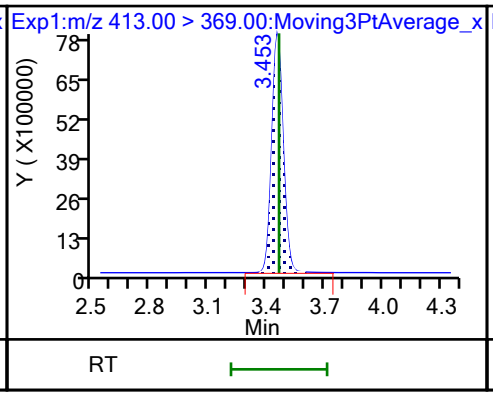
D 12 M2-6:2 FTS



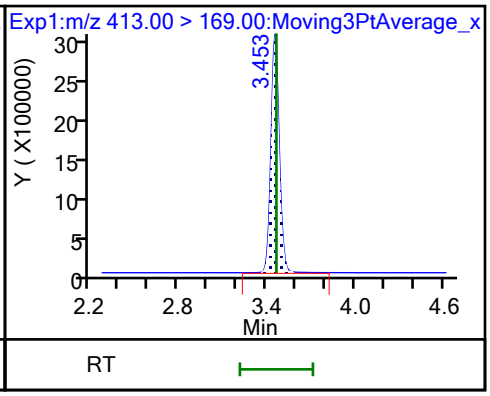
13 1H,1H,2H,2H-perfluorooctanesulfo



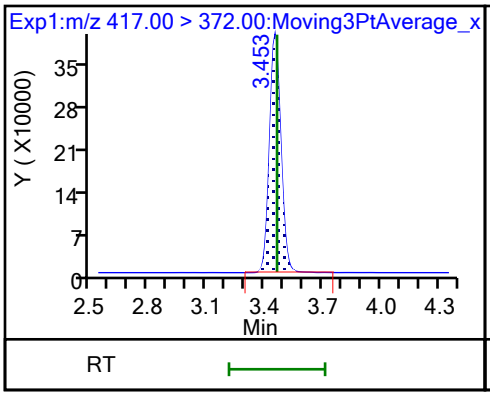
15 Perfluorooctanoic acid



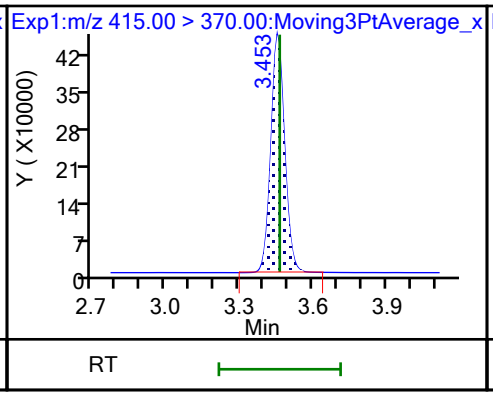
15 Perfluorooctanoic acid



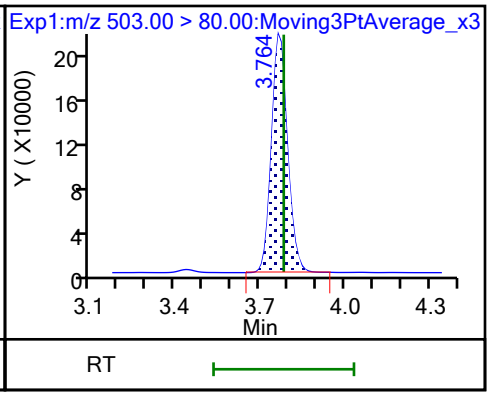
D 14 13C4 PFOA



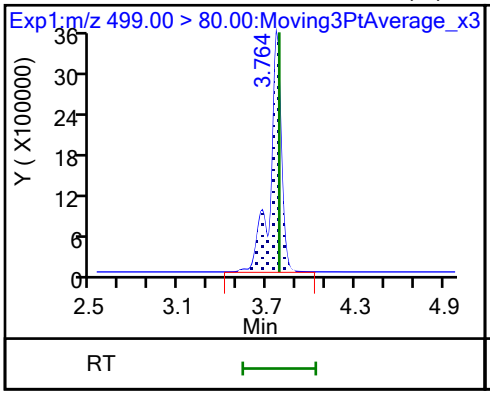
* 62 13C2 PFOA



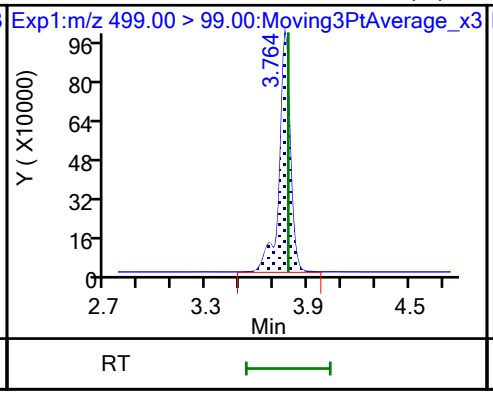
D 18 13C4 PFOS



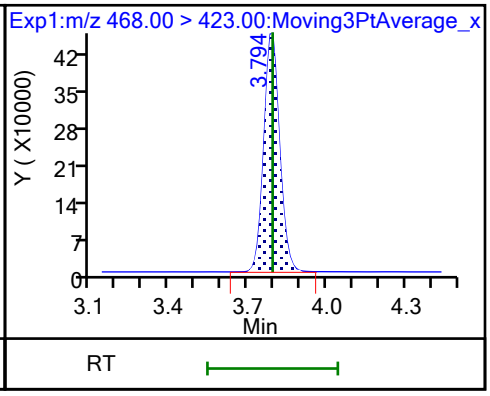
17 Perfluorooctanesulfonic acid (M)



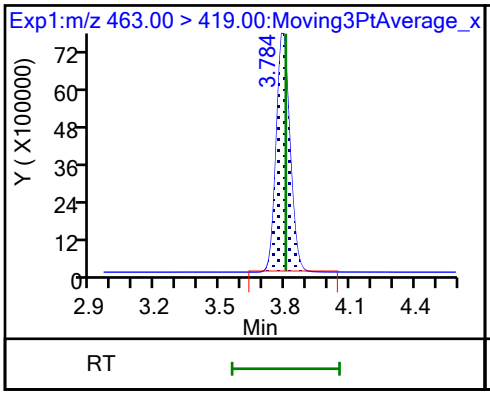
17 Perfluorooctanesulfonic acid (M)



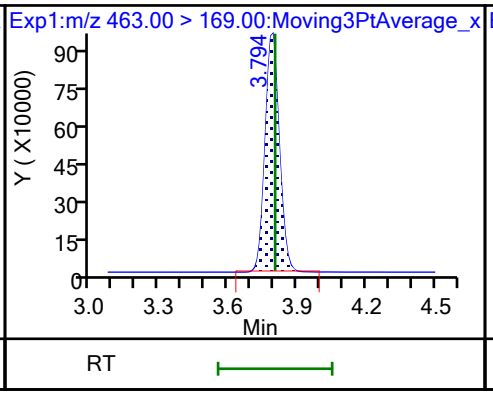
D 19 13C5 PFNA



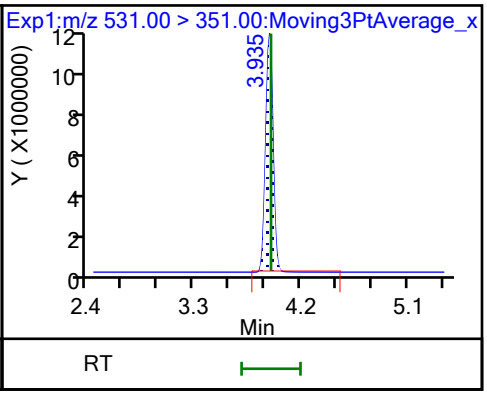
20 Perfluorononanoic acid



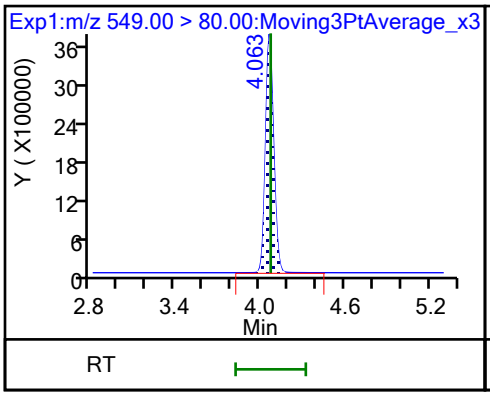
20 Perfluorononanoic acid



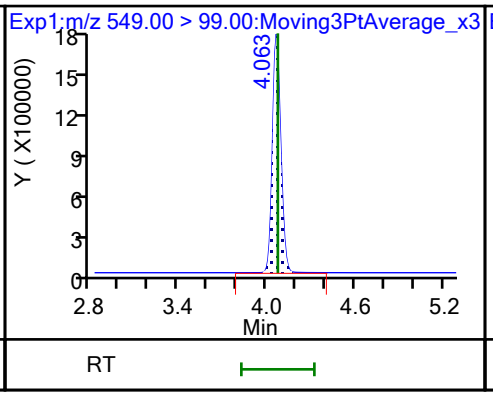
69 9-Chlorohexadecafluoro-3-oxanona



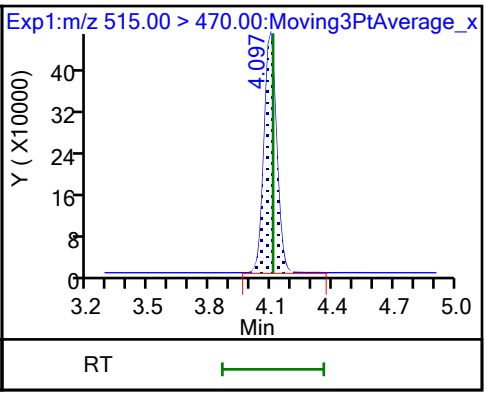
68 Perfluorononanesulfonic acid



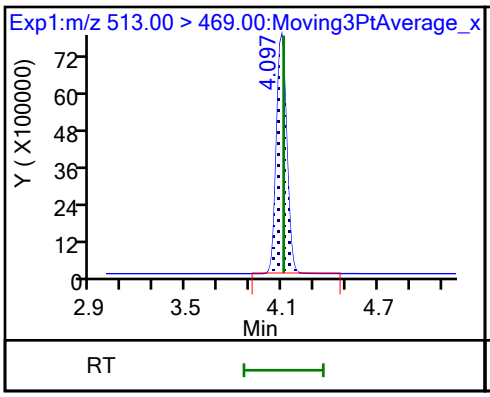
68 Perfluorononanesulfonic acid



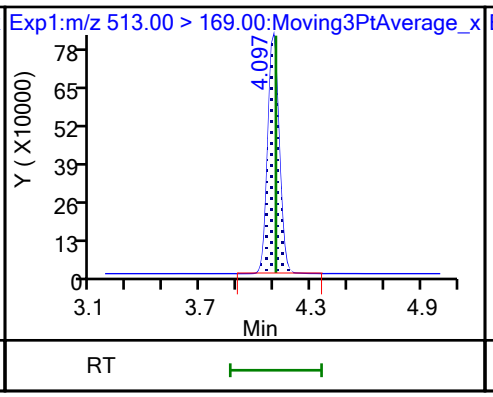
D 23 13C2 PFDA



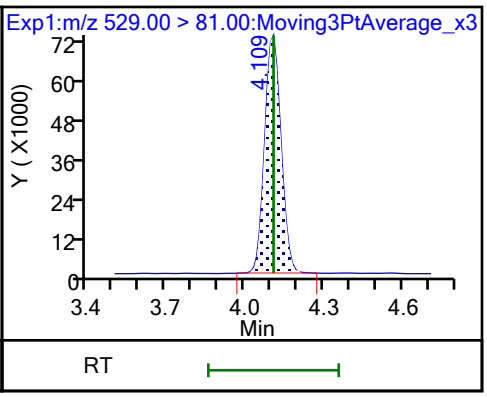
24 Perfluorodecanoic acid



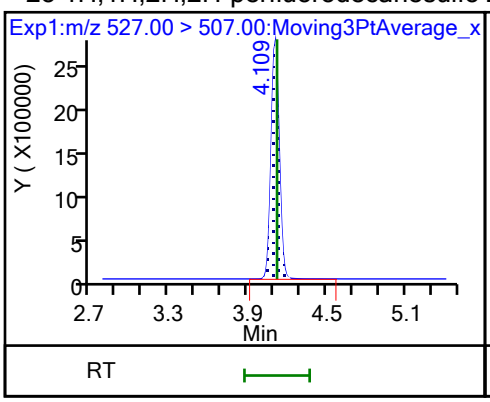
24 Perfluorodecanoic acid



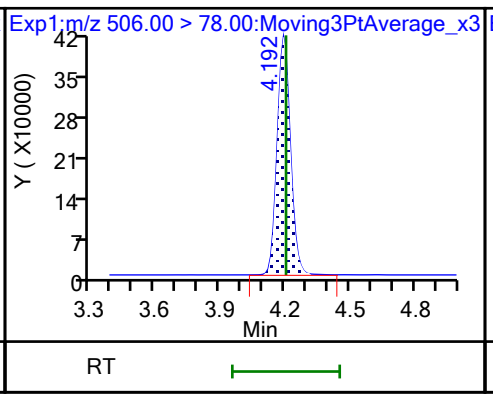
D 26 M2-8:2 FTS



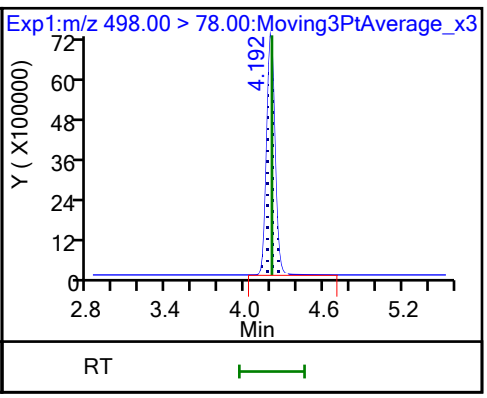
25 1H,1H,2H,2H-perfluorodecanesulfo



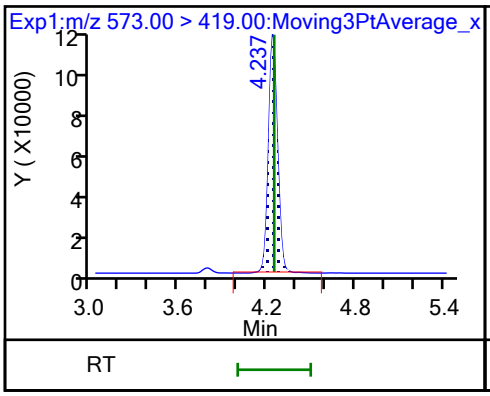
D 21 13C8 FOSA



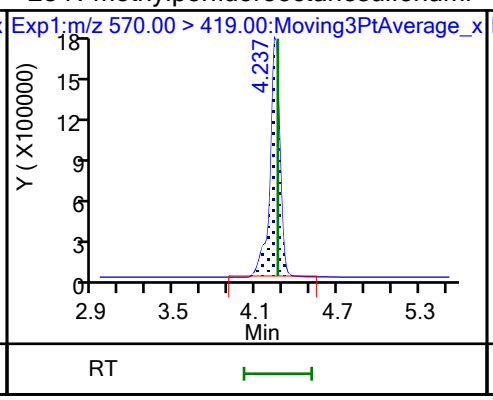
22 Perfluorooctanesulfonamide



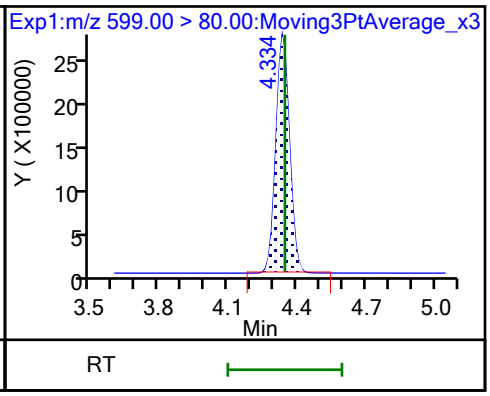
D 27 d3-NMeFOSAA



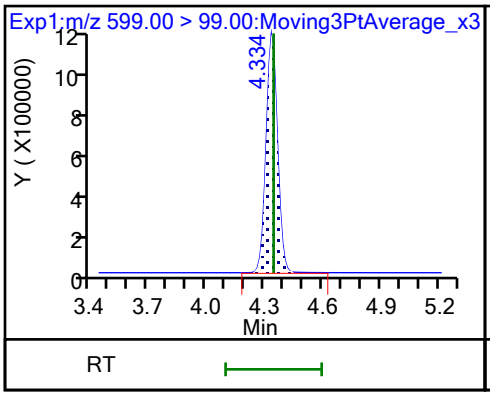
28 N-methylperfluorooctanesulfonami



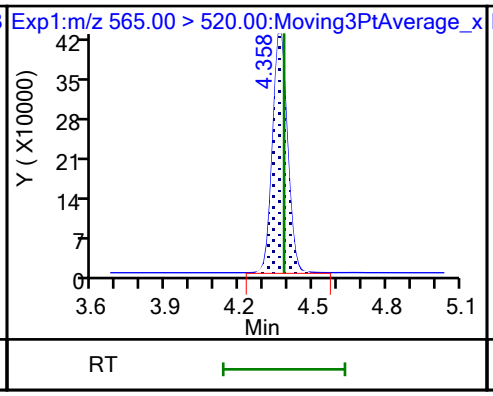
29 Perfluorodecanesulfonic acid



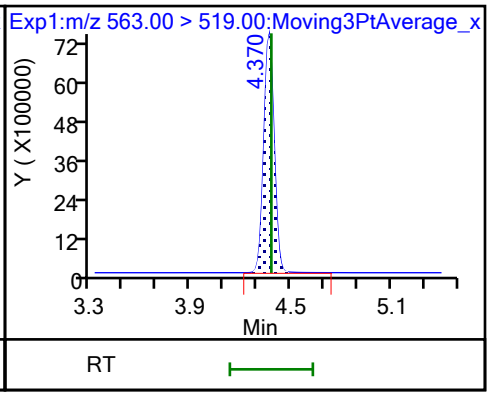
29 Perfluorodecanesulfonic acid



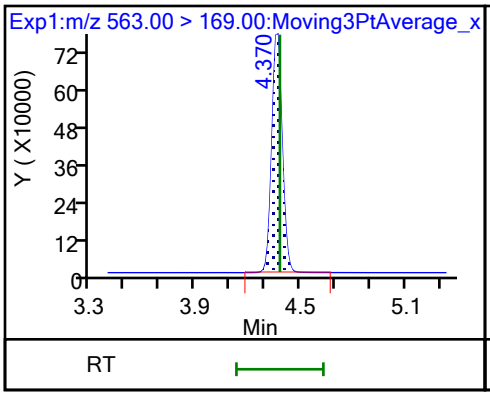
D 30 13C2 PFUnA



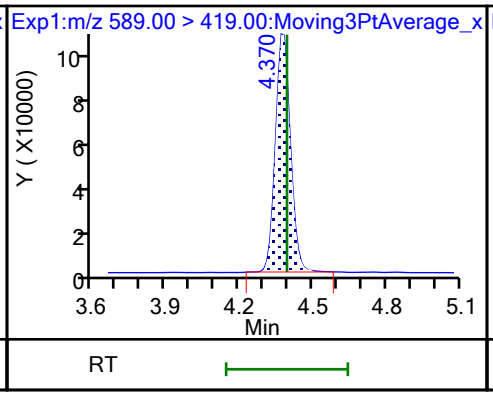
31 Perfluoroundecanoic acid



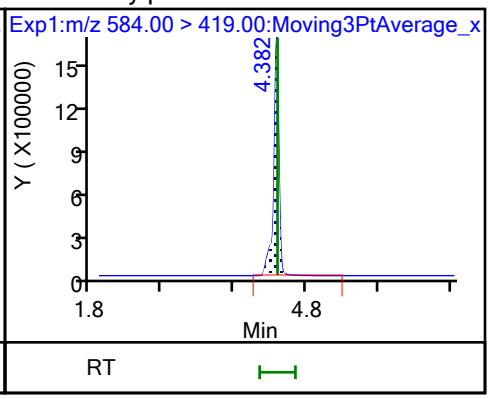
31 Perfluoroundecanoic acid



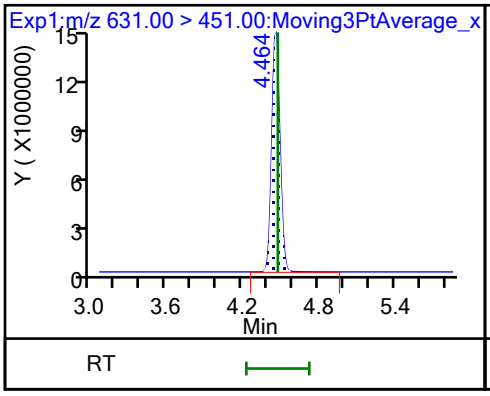
D 32 d5-NEtFOSAA



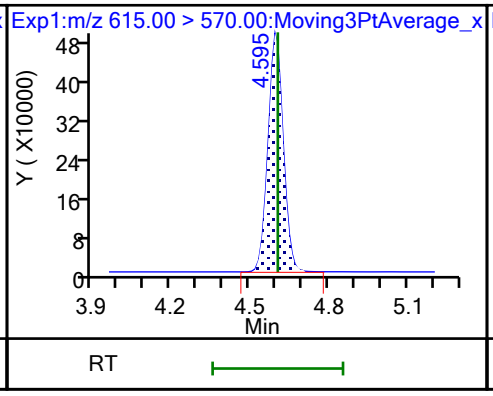
33 N-ethylperfluorooctanesulfonamid



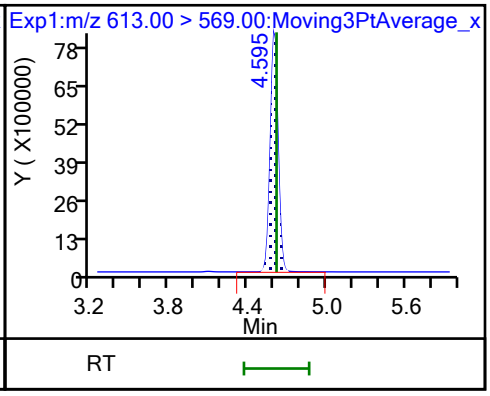
66 11-Chloroeicosafluoro-3-oxaundec



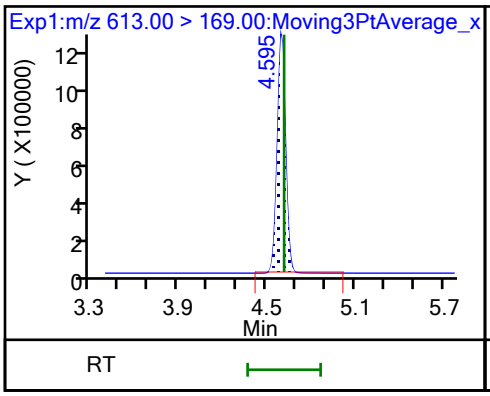
D 36 13C2 PFDoA



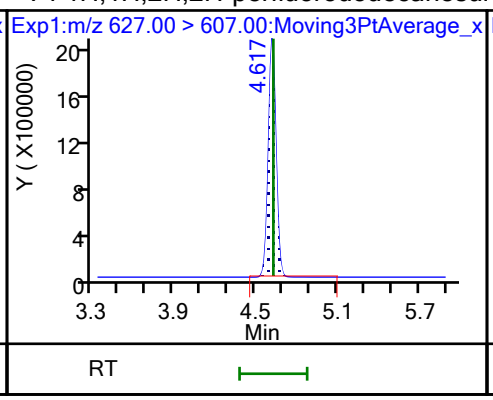
37 Perfluorododecanoic acid



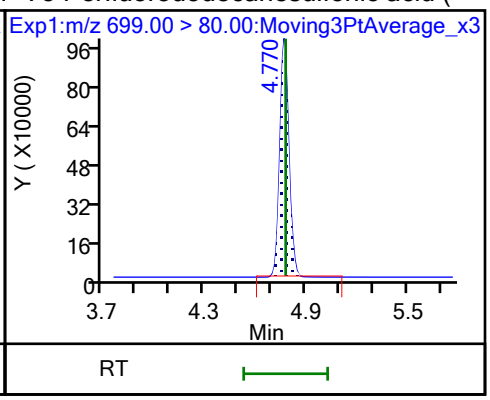
37 Perfluorododecanoic acid



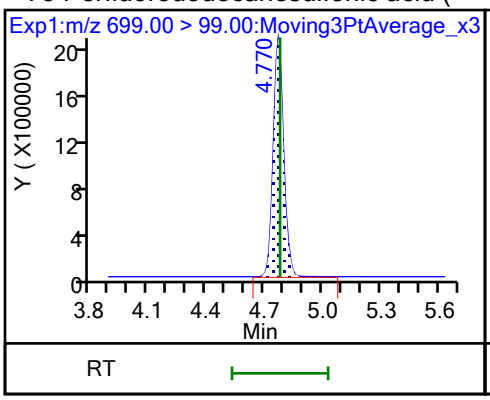
74 1H,1H,2H,2H-perfluorododecanesul



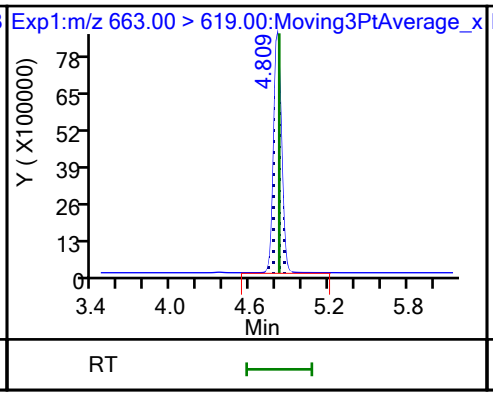
75 Perfluorododecanesulfonic acid (



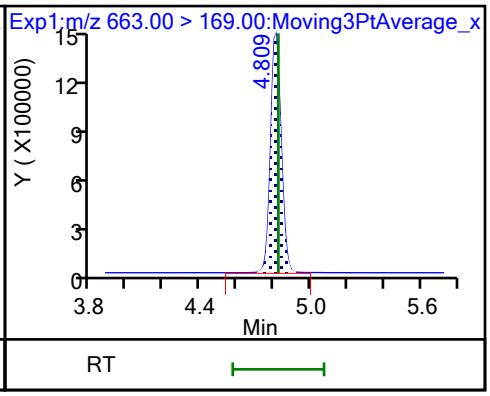
75 Perfluorododecanesulfonic acid (



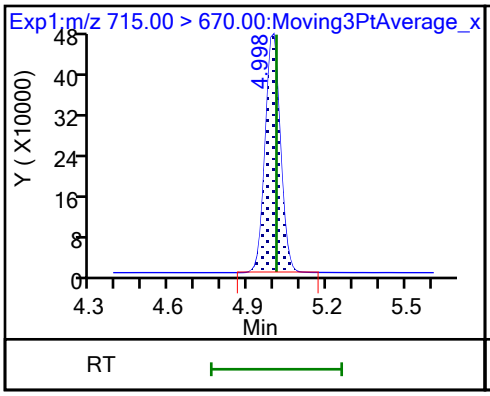
41 Perfluorotridecanoic acid



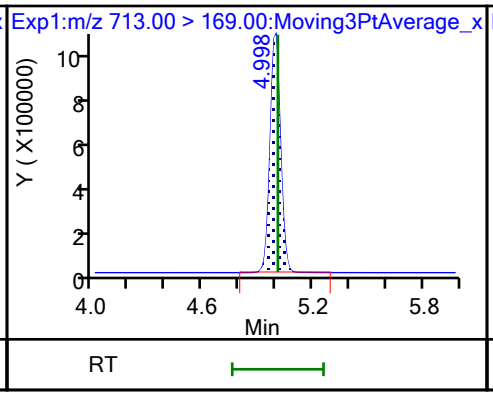
41 Perfluorotridecanoic acid



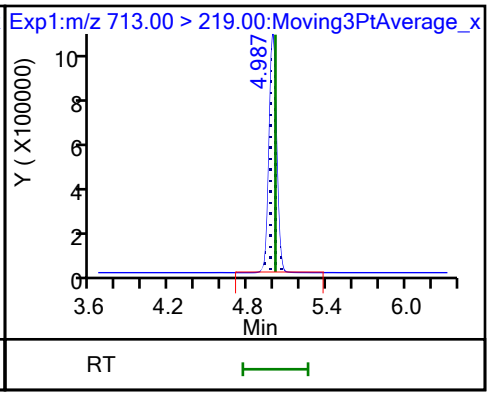
D 43 13C2 PFTeDA



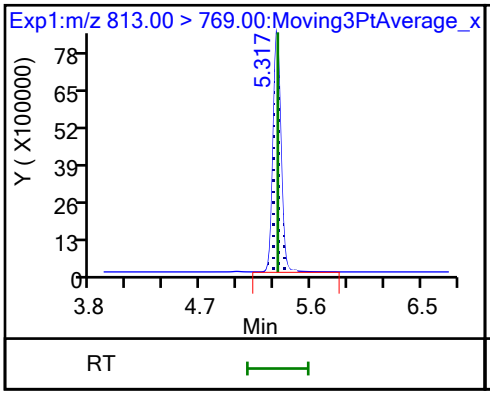
42 Perfluorotetradecanoic acid



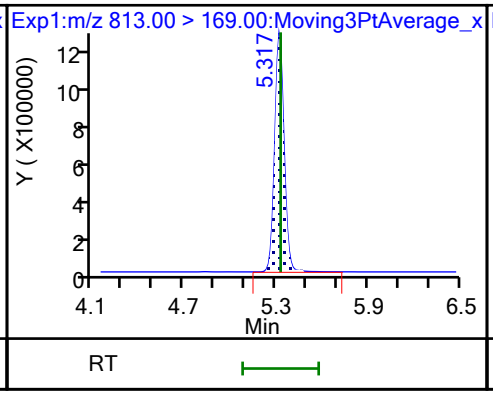
42 Perfluorotetradecanoic acid



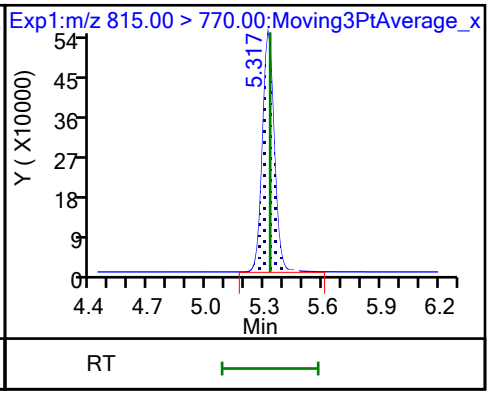
45 Perfluorohexadecanoic acid



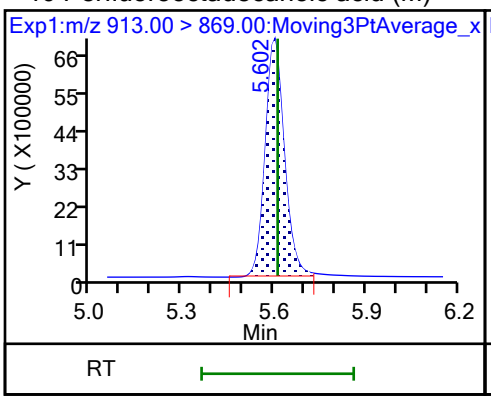
45 Perfluorohexadecanoic acid



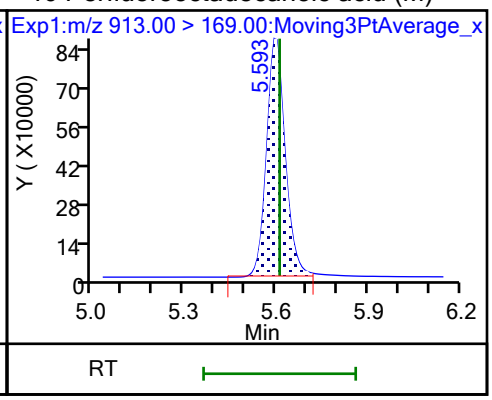
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Calibration / Perfluorobutanoic acid

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

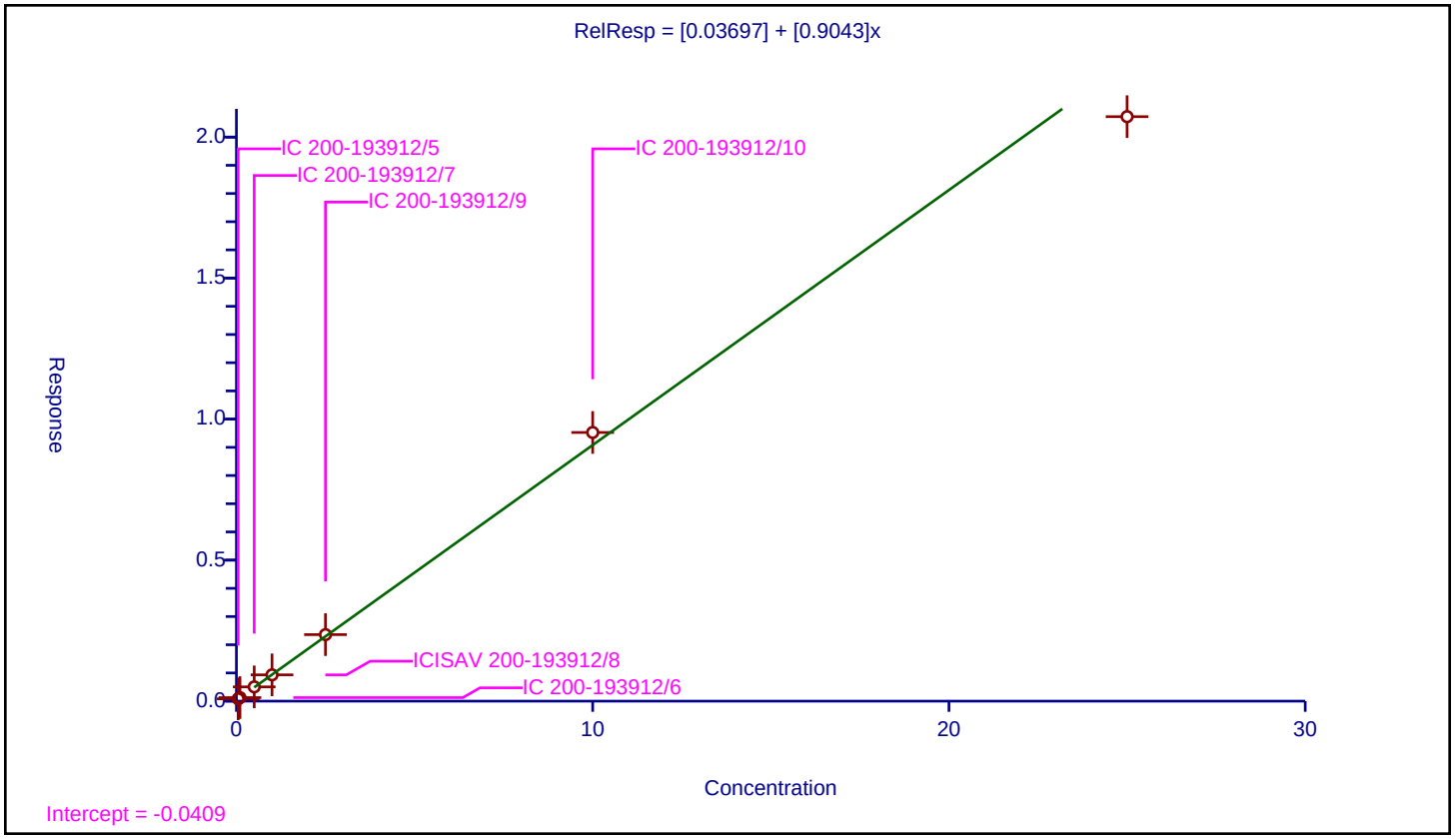
Curve Coefficients

Intercept:	0.03697
Slope:	0.9043

Error Coefficients

Standard Error:	14300000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.082621	1.25	2253572.0	1.652421	Y
2	IC 200-193912/6	0.1	0.124976	1.25	1926725.0	1.249757	Y
3	IC 200-193912/7	0.5	0.505344	1.25	1916527.0	1.010688	Y
4	ICISAV 200-193912/8	1.0	0.932118	1.25	1929850.0	0.932118	Y
5	IC 200-193912/9	2.5	2.358169	1.25	2025338.0	0.943268	Y
6	IC 200-193912/10	10.0	9.52612	1.25	1663241.0	0.952612	Y
7	IC 200-193912/11	25.0	20.72438	1.25	1758198.0	0.828975	Y



10/27/2023
10:52 AM

Calibration / Perfluoropentanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

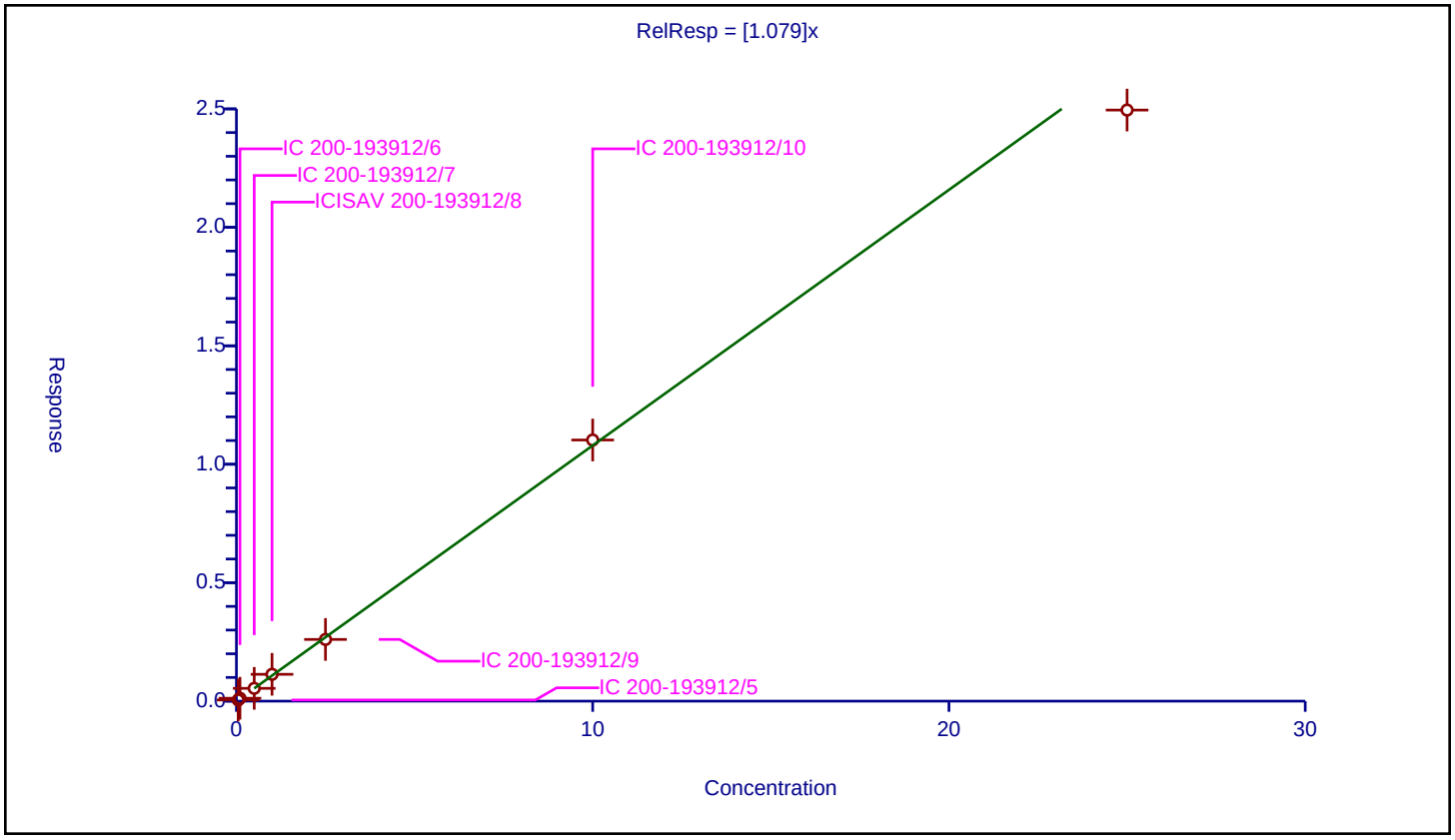
Curve Coefficients

Intercept:	0
Slope:	1.079

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.049068	1.25	1827623.0	0.981357	Y
2	IC 200-193912/6	0.1	0.121675	1.25	1458161.0	1.216747	Y
3	IC 200-193912/7	0.5	0.540415	1.25	1507442.0	1.080831	Y
4	ICISAV 200-193912/8	1.0	1.132983	1.25	1529086.0	1.132983	Y
5	IC 200-193912/9	2.5	2.604075	1.25	1531883.0	1.04163	Y
6	IC 200-193912/10	10.0	11.023306	1.25	1291692.0	1.102331	Y
7	IC 200-193912/11	25.0	24.951062	1.25	1319141.0	0.998042	Y



10/27/2023
10:52 AM

Calibration / Perfluorobutanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

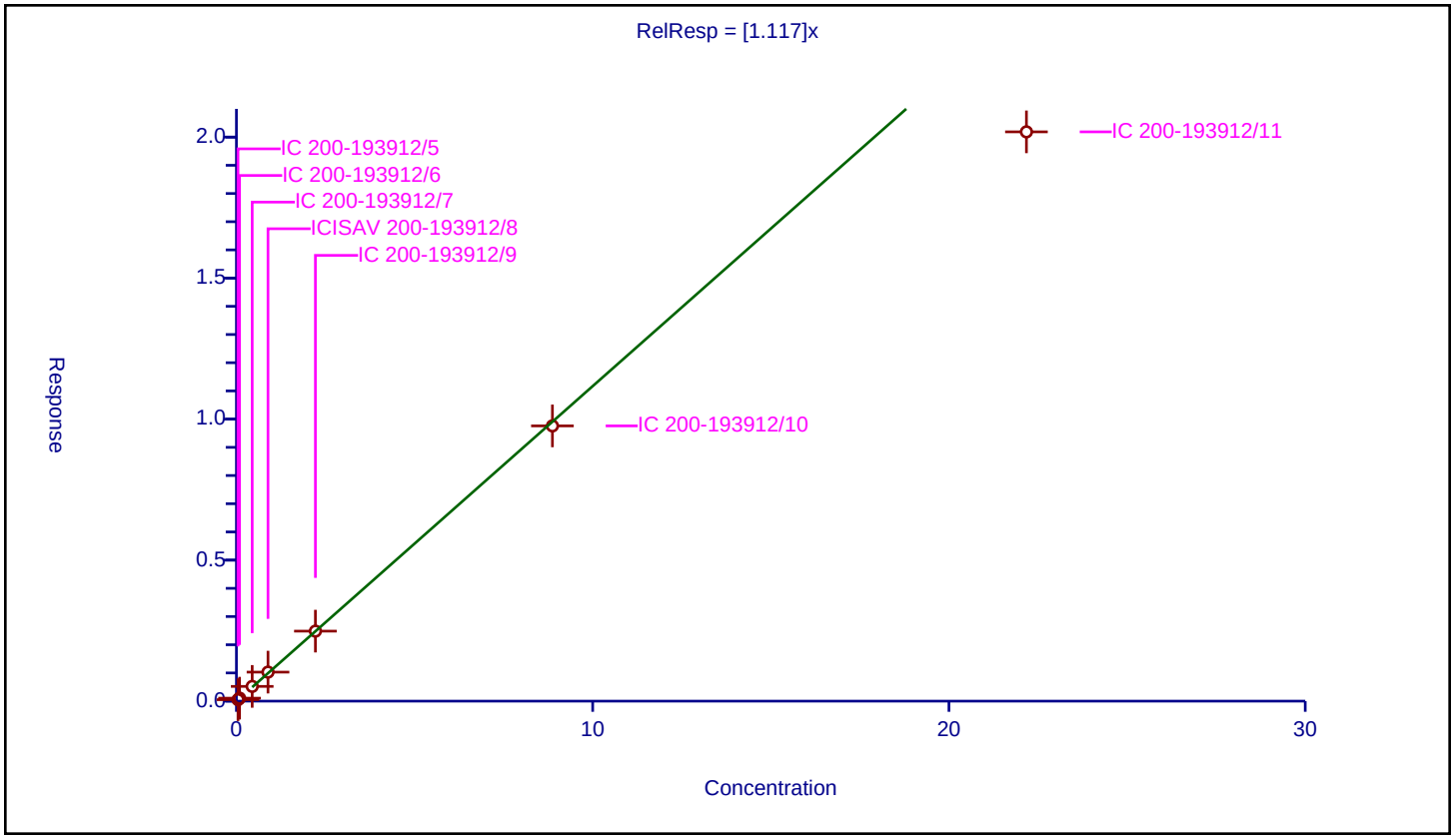
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	14900000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04435	0.0515	1.1625	2112456.0	1.161217	Y
2	IC 200-193912/6	0.0887	0.105408	1.1625	1835537.0	1.188361	Y
3	IC 200-193912/7	0.4435	0.522575	1.1625	1758991.0	1.178297	Y
4	ICISAV 200-193912/8	0.887	1.029257	1.1625	1858340.0	1.16038	Y
5	IC 200-193912/9	2.2175	2.482423	1.1625	1976378.0	1.119469	Y
6	IC 200-193912/10	8.87	9.759782	1.1625	1657995.0	1.100314	Y
7	IC 200-193912/11	22.175	20.18591	1.1625	1925353.0	0.9103	Y



10/27/2023
10:52 AM

Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

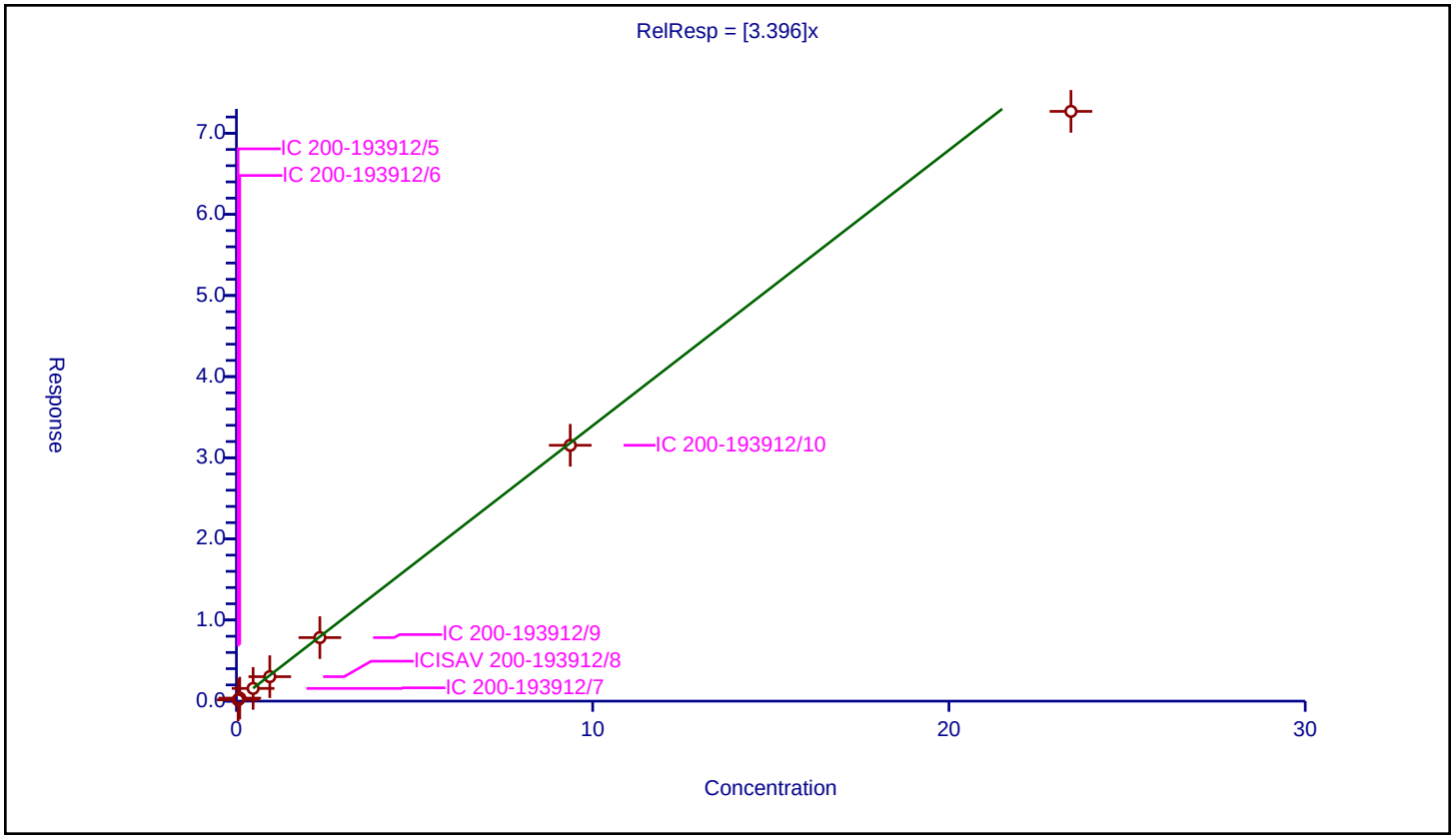
Curve Coefficients

Intercept:	0
Slope:	3.396

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04685	0.160153	1.1675	264843.0	3.41841	Y
2	IC 200-193912/6	0.0937	0.372622	1.1675	202715.0	3.976756	Y
3	IC 200-193912/7	0.4685	1.567171	1.1675	215257.0	3.345081	Y
4	ICISAV 200-193912/8	0.937	3.015993	1.1675	220382.0	3.218776	Y
5	IC 200-193912/9	2.3425	7.830737	1.1675	221658.0	3.342898	Y
6	IC 200-193912/10	9.37	31.536056	1.1675	194992.0	3.365641	Y
7	IC 200-193912/11	23.425	72.694144	1.1675	207012.0	3.103272	Y



10/27/2023
10:52 AM

Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

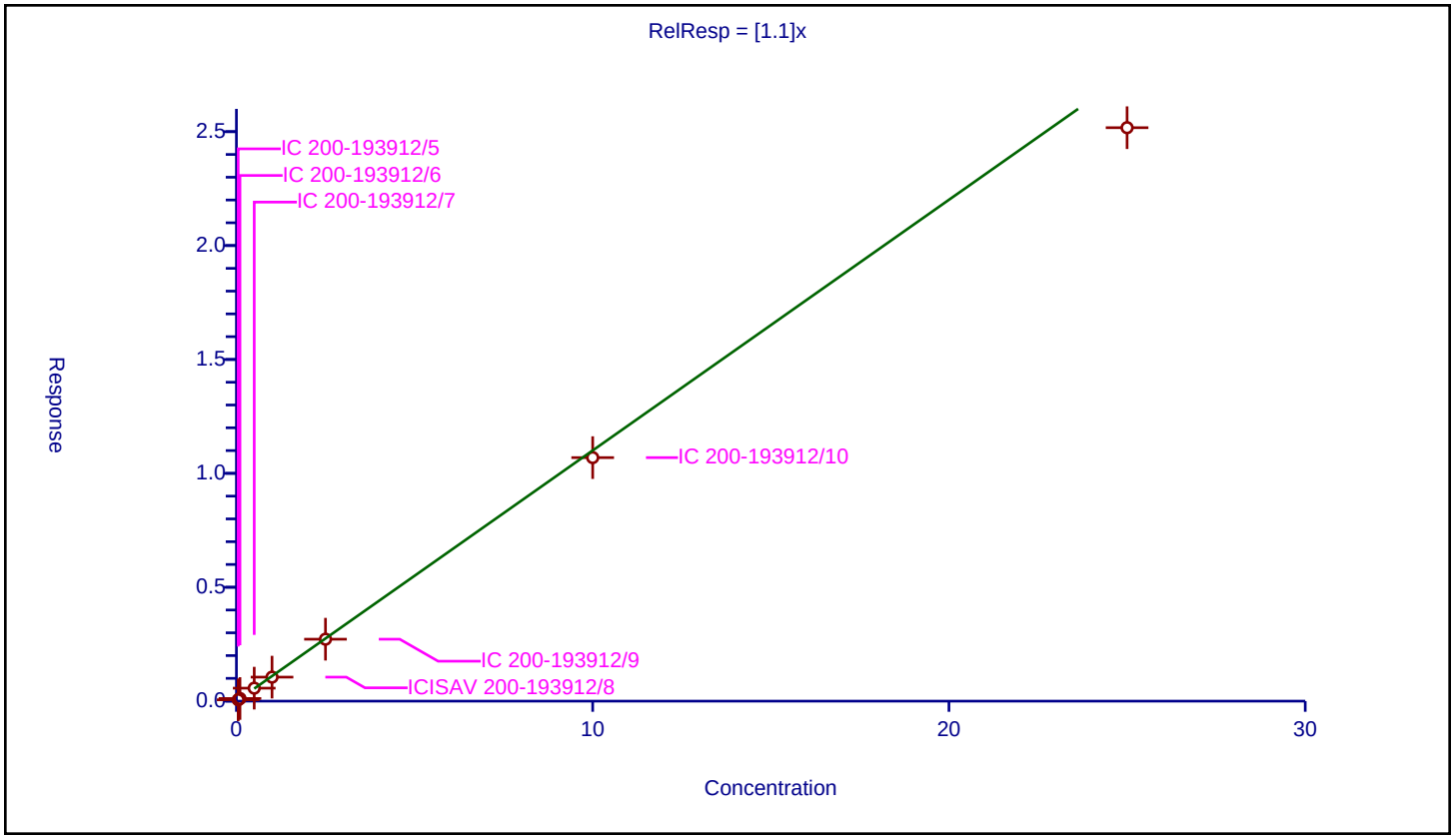
Curve Coefficients

Intercept:	0
Slope:	1.1

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059408	1.25	1853797.0	1.188169	Y
2	IC 200-193912/6	0.1	0.11566	1.25	1566461.0	1.156596	Y
3	IC 200-193912/7	0.5	0.570489	1.25	1472867.0	1.140977	Y
4	ICISAV 200-193912/8	1.0	1.053678	1.25	1544435.0	1.053678	Y
5	IC 200-193912/9	2.5	2.719251	1.25	1545081.0	1.087701	Y
6	IC 200-193912/10	10.0	10.691075	1.25	1345799.0	1.069107	Y
7	IC 200-193912/11	25.0	25.174033	1.25	1316912.0	1.006961	Y



Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

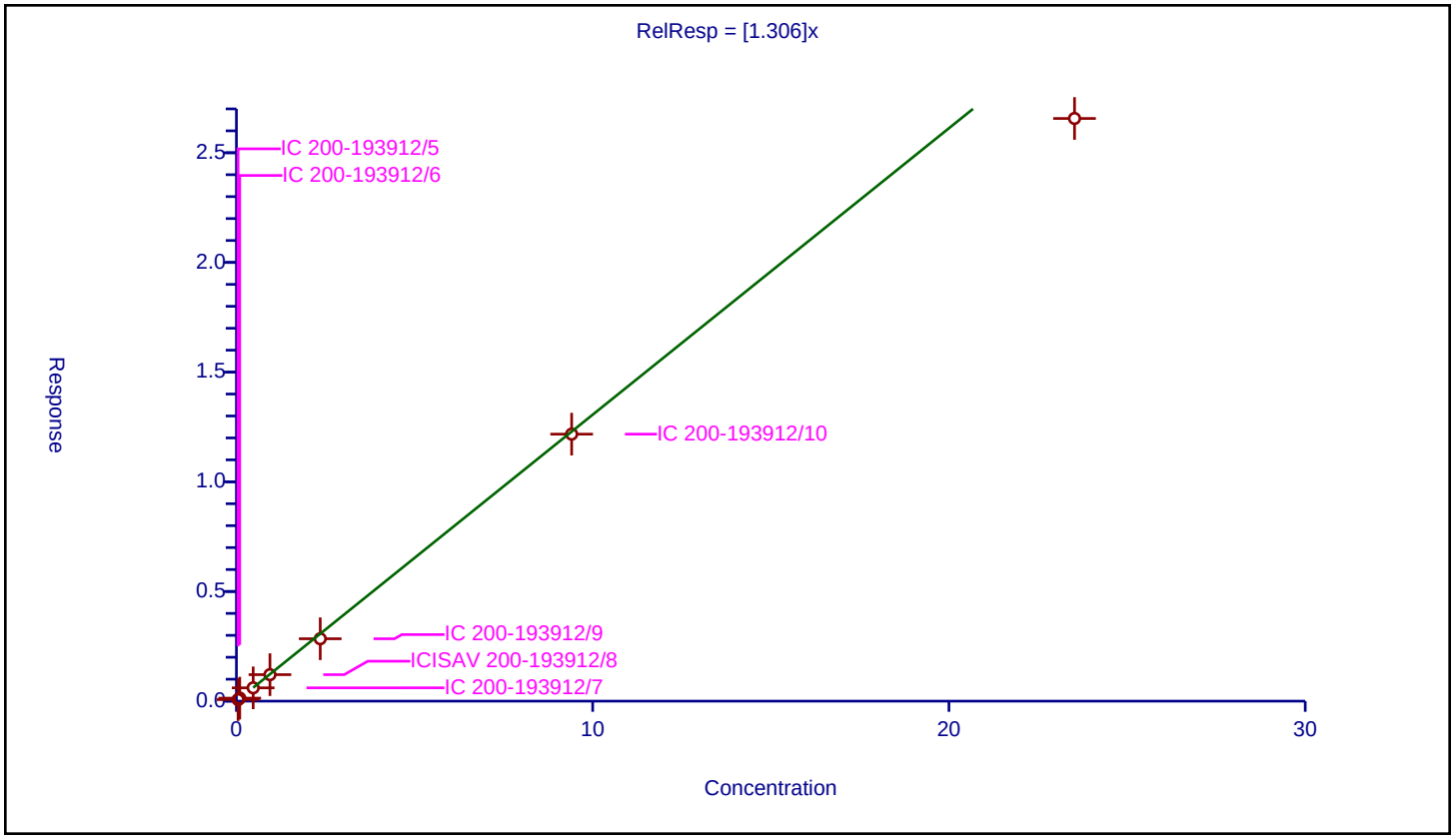
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04705	0.069845	1.1825	1487994.0	1.484482	Y
2	IC 200-193912/6	0.0941	0.136641	1.1825	1305238.0	1.452086	Y
3	IC 200-193912/7	0.4705	0.606956	1.1825	1353967.0	1.290024	Y
4	ICISAV 200-193912/8	0.941	1.207241	1.1825	1396957.0	1.282934	Y
5	IC 200-193912/9	2.3525	2.844335	1.1825	1406672.0	1.209069	Y
6	IC 200-193912/10	9.41	12.172239	1.1825	1242233.0	1.293543	Y
7	IC 200-193912/11	23.525	26.56316	1.1825	1370941.0	1.129146	Y



10/27/2023
10:52 AM

Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

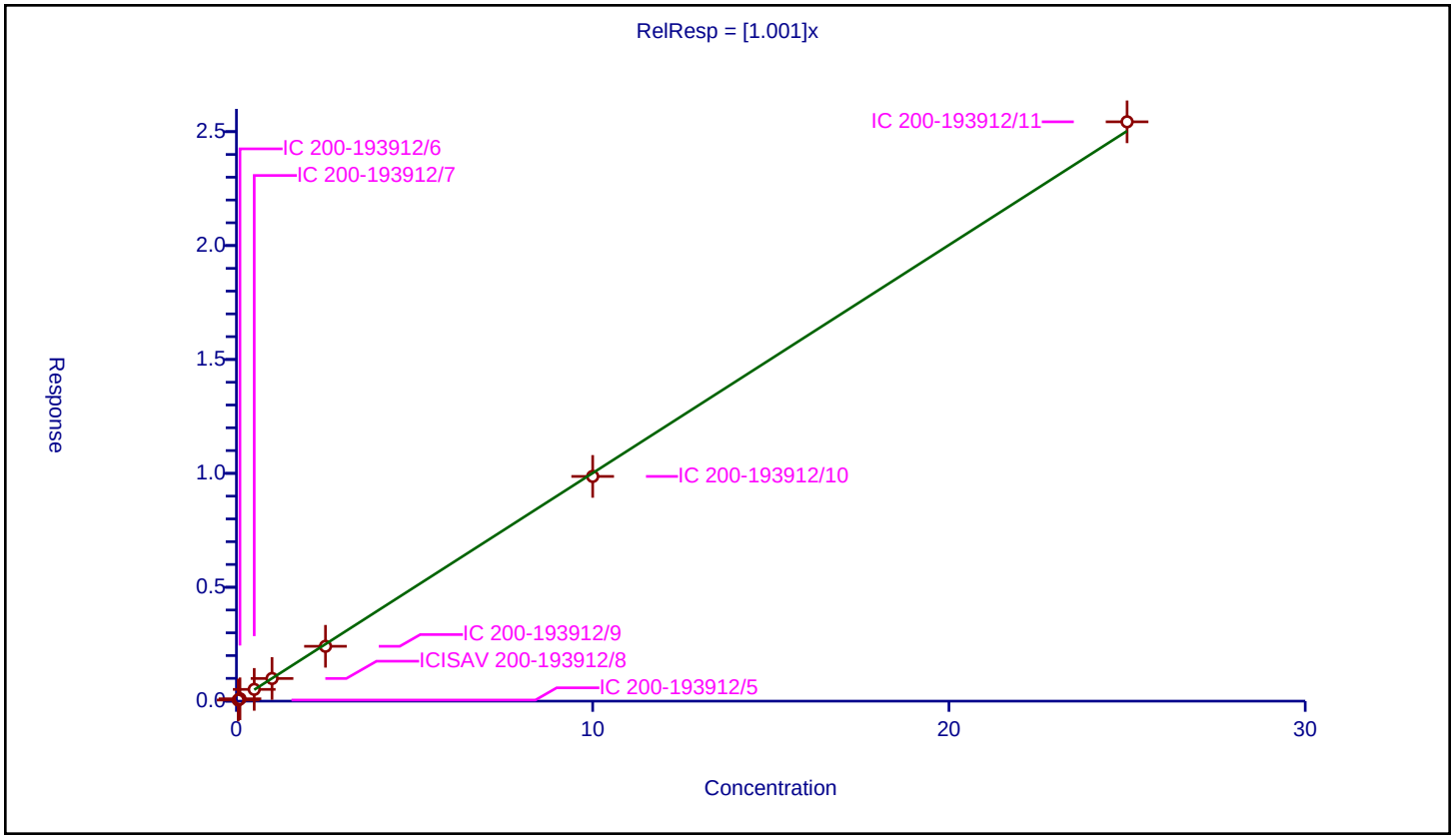
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.04907	1.25	346930.0	0.981394	Y
2	IC 200-193912/6	0.1	0.103291	1.25	299977.0	1.032913	Y
3	IC 200-193912/7	0.5	0.516151	1.25	279126.0	1.032303	Y
4	ICISAV 200-193912/8	1.0	0.994769	1.25	296521.0	0.994769	Y
5	IC 200-193912/9	2.5	2.407784	1.25	295164.0	0.963114	Y
6	IC 200-193912/10	10.0	9.865207	1.25	265620.0	0.986521	Y
7	IC 200-193912/11	25.0	25.432513	1.25	273677.0	1.017301	Y



10/27/2023
10:52 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

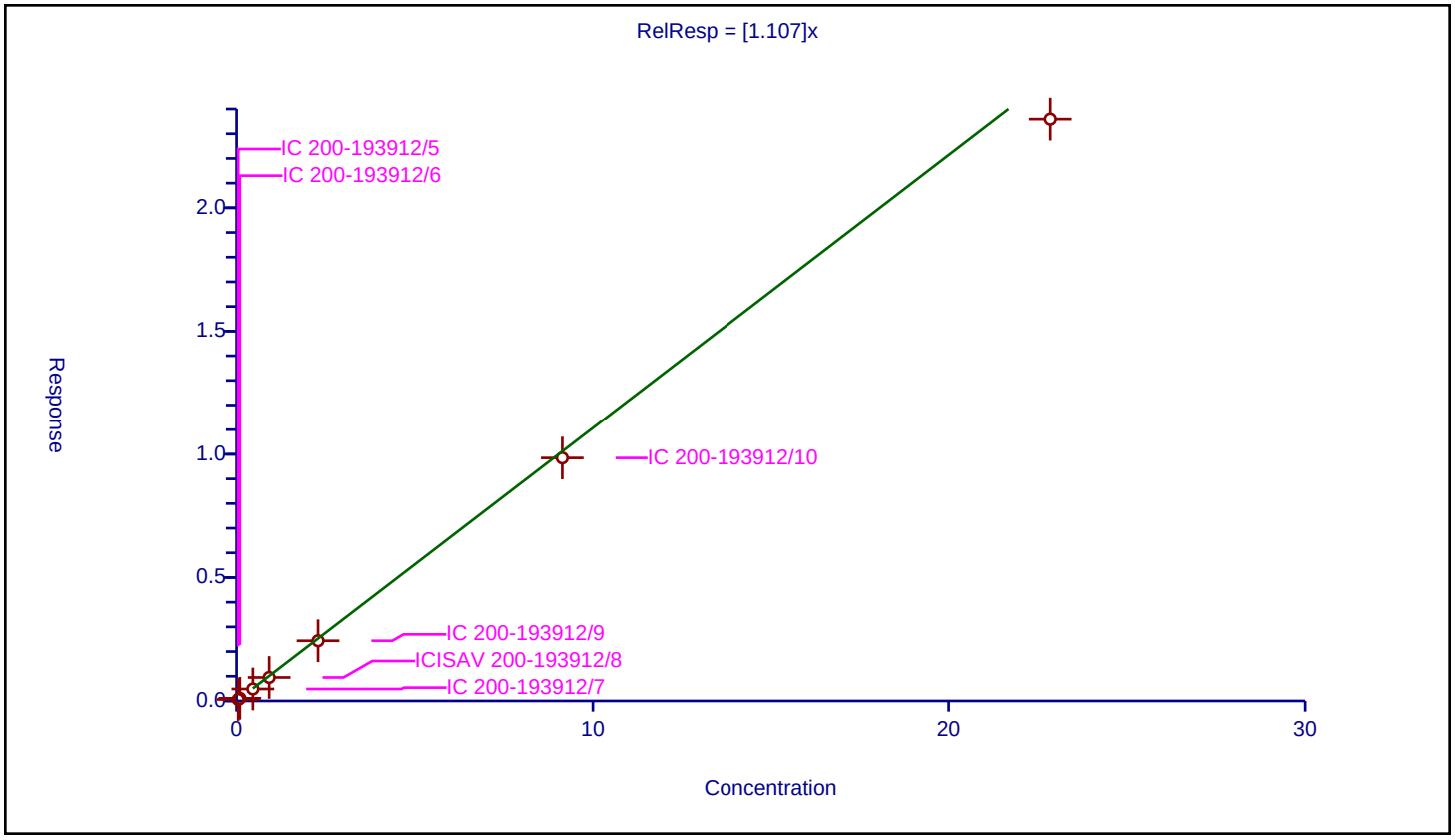
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0457	0.05908	1.1825	1487994.0	1.292778	Y
2	IC 200-193912/6	0.0914	0.107635	1.1825	1305238.0	1.177626	Y
3	IC 200-193912/7	0.457	0.484795	1.1825	1353967.0	1.06082	Y
4	ICISAV 200-193912/8	0.914	0.95088	1.1825	1396957.0	1.04035	Y
5	IC 200-193912/9	2.285	2.438823	1.1825	1406672.0	1.067319	Y
6	IC 200-193912/10	9.14	9.849131	1.1825	1242233.0	1.077585	Y
7	IC 200-193912/11	22.85	23.590185	1.1825	1370941.0	1.032393	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

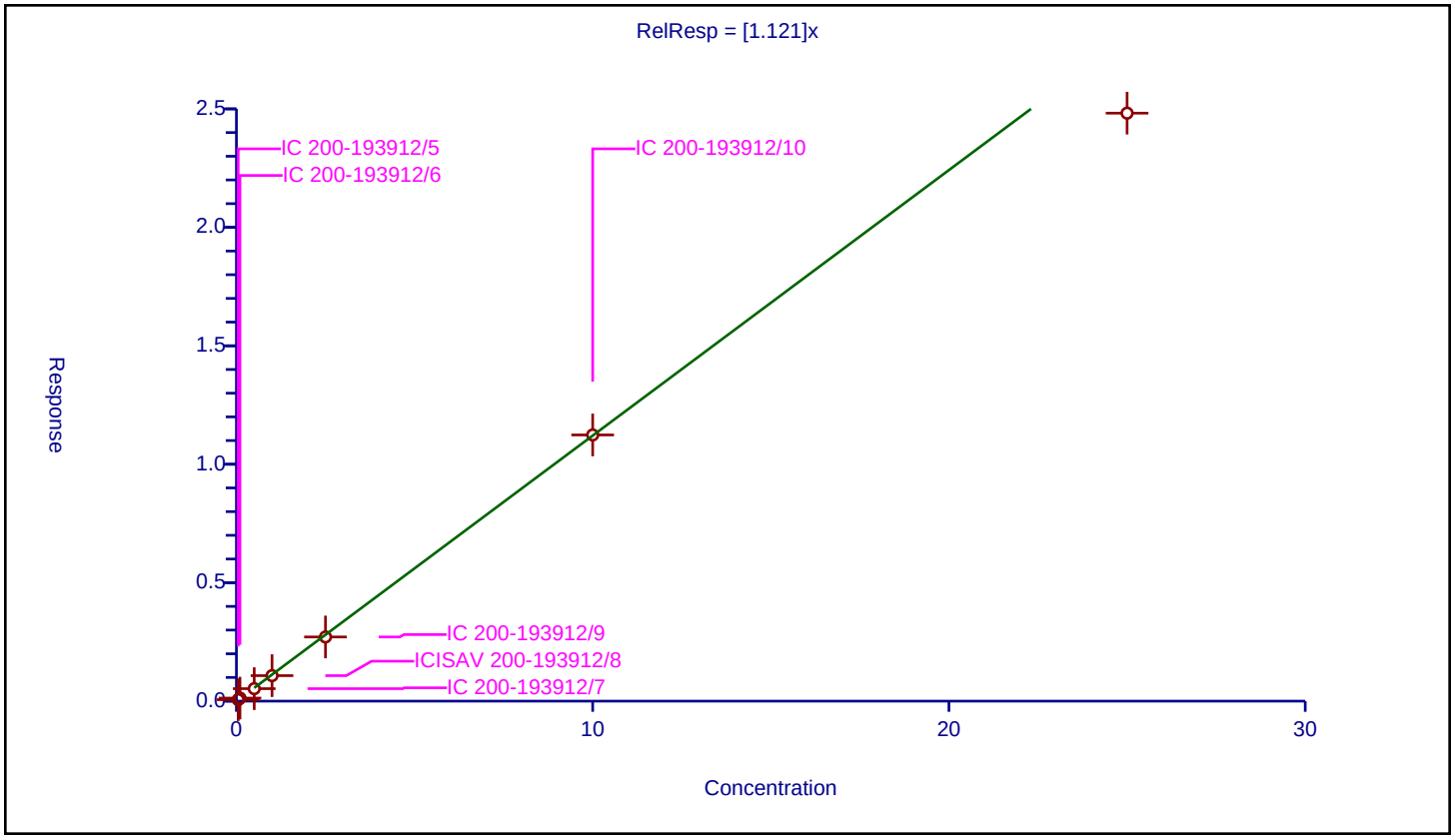
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.061632	1.25	1876608.0	1.23265	Y
2	IC 200-193912/6	0.1	0.128259	1.25	1628956.0	1.282585	Y
3	IC 200-193912/7	0.5	0.527087	1.25	1672833.0	1.054174	Y
4	ICISAV 200-193912/8	1.0	1.076804	1.25	1679653.0	1.076804	Y
5	IC 200-193912/9	2.5	2.708862	1.25	1773444.0	1.083545	Y
6	IC 200-193912/10	10.0	11.23637	1.25	1466571.0	1.123637	Y
7	IC 200-193912/11	25.0	24.820079	1.25	1559821.0	0.992803	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

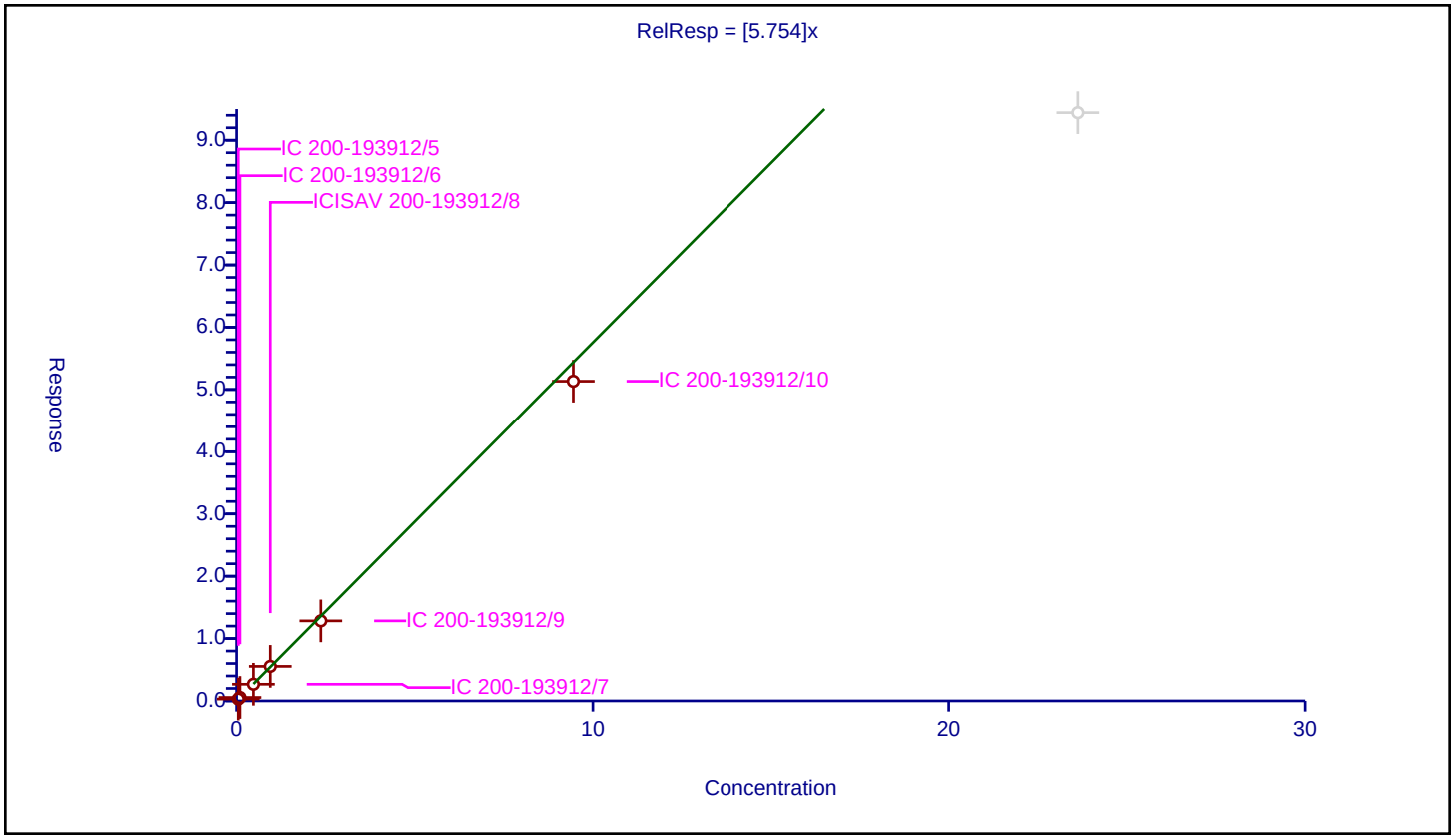
Curve Coefficients

Intercept:	0
Slope:	5.754

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04725	0.297259	1.195	943517.0	6.291195	Y
2	IC 200-193912/6	0.0945	0.553418	1.195	863764.0	5.856277	Y
3	IC 200-193912/7	0.4725	2.671126	1.195	882764.0	5.653177	Y
4	ICISAV 200-193912/8	0.945	5.536858	1.195	904398.0	5.859109	Y
5	IC 200-193912/9	2.3625	12.835921	1.195	919926.0	5.433194	Y
6	IC 200-193912/10	9.45	51.335121	1.195	765818.0	5.432288	Y
7	IC 200-193912/11	23.625	94.418048	1.195	865311.0	3.996531	N



Calibration / Perfluoroheptanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

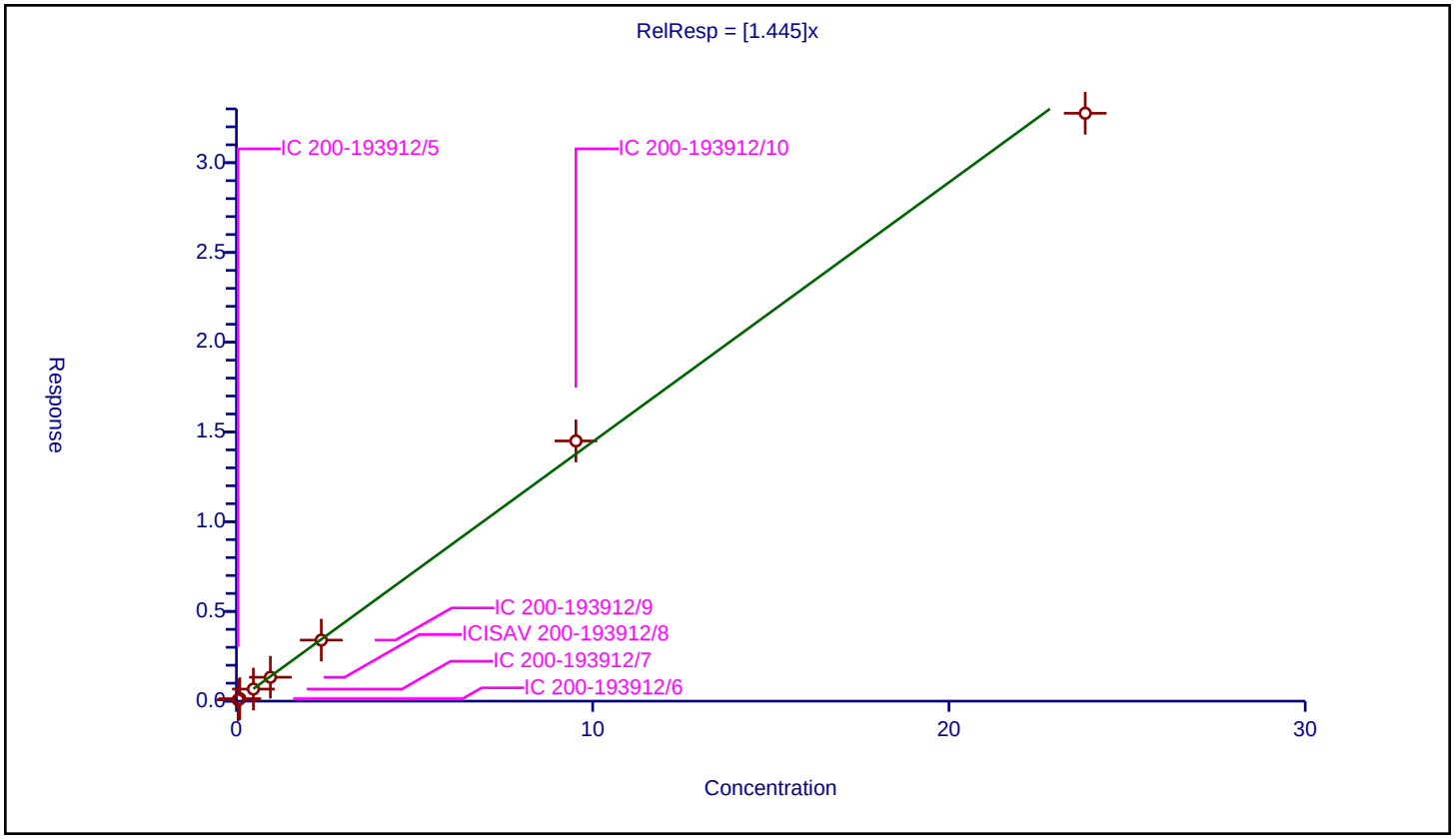
Curve Coefficients

Intercept:	0
Slope:	1.445

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04765	0.073316	1.195	943517.0	1.538638	Y
2	IC 200-193912/6	0.0953	0.13751	1.195	863764.0	1.442913	Y
3	IC 200-193912/7	0.4765	0.673122	1.195	882764.0	1.412638	Y
4	ICISAV 200-193912/8	0.953	1.332604	1.195	904398.0	1.398325	Y
5	IC 200-193912/9	2.3825	3.401611	1.195	919926.0	1.427749	Y
6	IC 200-193912/10	9.53	14.49894	1.195	765818.0	1.5214	Y
7	IC 200-193912/11	23.825	32.755938	1.195	865311.0	1.374856	Y



10/27/2023
10:52 AM

Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

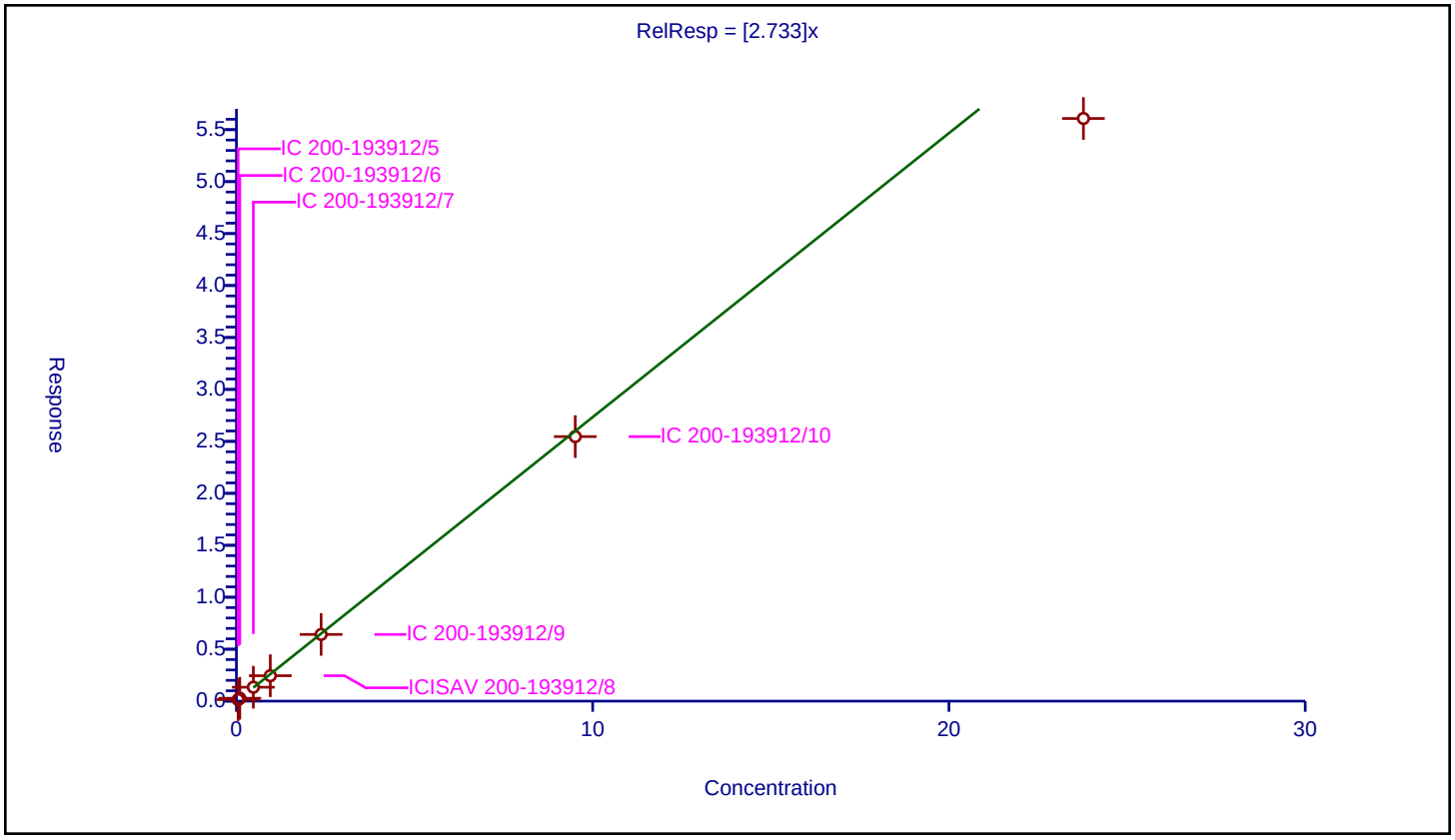
Curve Coefficients

Intercept:	0
Slope:	2.733

Error Coefficients

Standard Error:	5720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04755	0.14644	1.1875	309808.0	3.079716	Y
2	IC 200-193912/6	0.0951	0.278153	1.1875	286854.0	2.924848	Y
3	IC 200-193912/7	0.4755	1.340299	1.1875	274798.0	2.818715	Y
4	ICISAV 200-193912/8	0.951	2.447413	1.1875	299923.0	2.573515	Y
5	IC 200-193912/9	2.3775	6.419079	1.1875	305639.0	2.699928	Y
6	IC 200-193912/10	9.51	25.460284	1.1875	250039.0	2.677212	Y
7	IC 200-193912/11	23.775	56.075977	1.1875	271643.0	2.358611	Y



10/27/2023
10:52 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

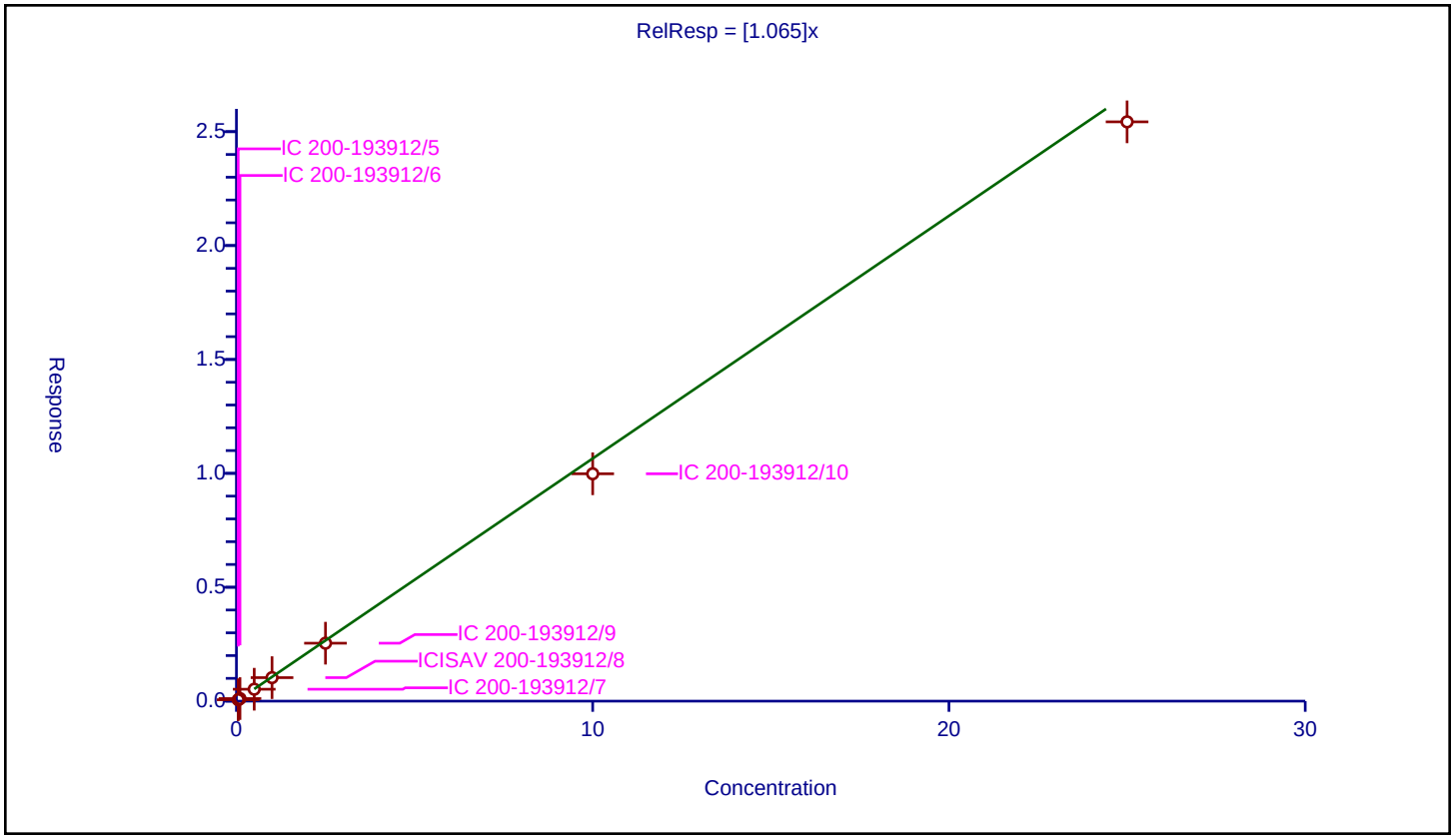
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	14700000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060812	1.25	2027588.0	1.216248	Y
2	IC 200-193912/6	0.1	0.112776	1.25	1982384.0	1.127765	Y
3	IC 200-193912/7	0.5	0.523481	1.25	1912820.0	1.046962	Y
4	ICISAV 200-193912/8	1.0	1.032173	1.25	1934463.0	1.032173	Y
5	IC 200-193912/9	2.5	2.543526	1.25	2045642.0	1.01741	Y
6	IC 200-193912/10	10.0	9.981516	1.25	1691186.0	0.998152	Y
7	IC 200-193912/11	25.0	25.431645	1.25	1620734.0	1.017266	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

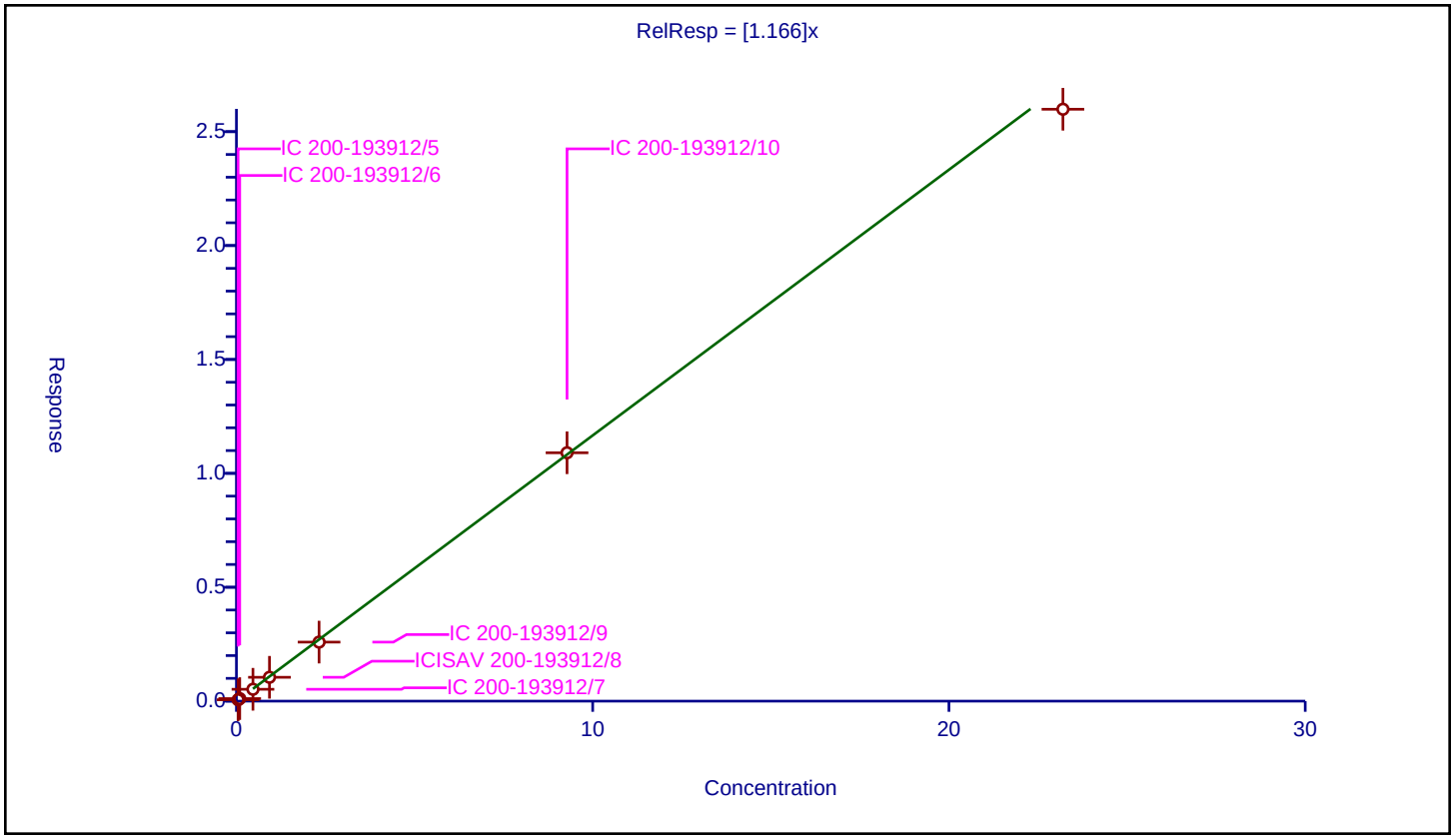
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	8240000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0464	0.060053	1.195	943517.0	1.294243	Y
2	IC 200-193912/6	0.0928	0.112059	1.195	863764.0	1.207533	Y
3	IC 200-193912/7	0.464	0.520913	1.195	882764.0	1.122657	Y
4	ICISAV 200-193912/8	0.928	1.047054	1.195	904398.0	1.128291	Y
5	IC 200-193912/9	2.32	2.591991	1.195	919926.0	1.117237	Y
6	IC 200-193912/10	9.28	10.903287	1.195	765818.0	1.174923	Y
7	IC 200-193912/11	23.2	25.9853	1.195	865311.0	1.120056	Y



Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

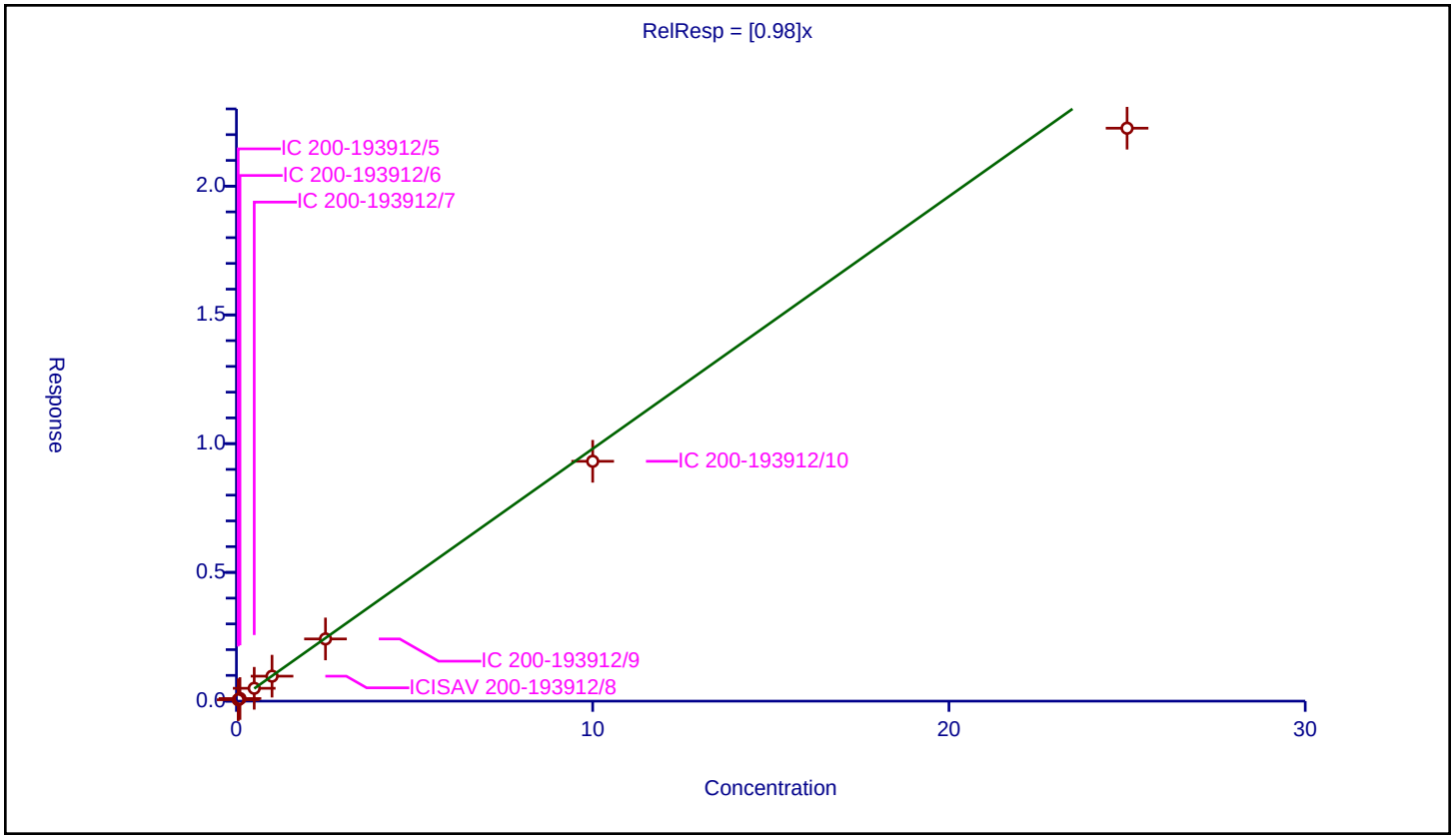
Curve Coefficients

Intercept:	0
Slope:	0.98

Error Coefficients

Standard Error:	15100000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.054544	1.25	2335475.0	1.090881	Y
2	IC 200-193912/6	0.1	0.101347	1.25	1965971.0	1.013469	Y
3	IC 200-193912/7	0.5	0.499549	1.25	2008931.0	0.999099	Y
4	ICISAV 200-193912/8	1.0	0.969174	1.25	2143126.0	0.969174	Y
5	IC 200-193912/9	2.5	2.415598	1.25	2116548.0	0.966239	Y
6	IC 200-193912/10	10.0	9.314659	1.25	1889768.0	0.931466	Y
7	IC 200-193912/11	25.0	22.250286	1.25	1902682.0	0.890011	Y



Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

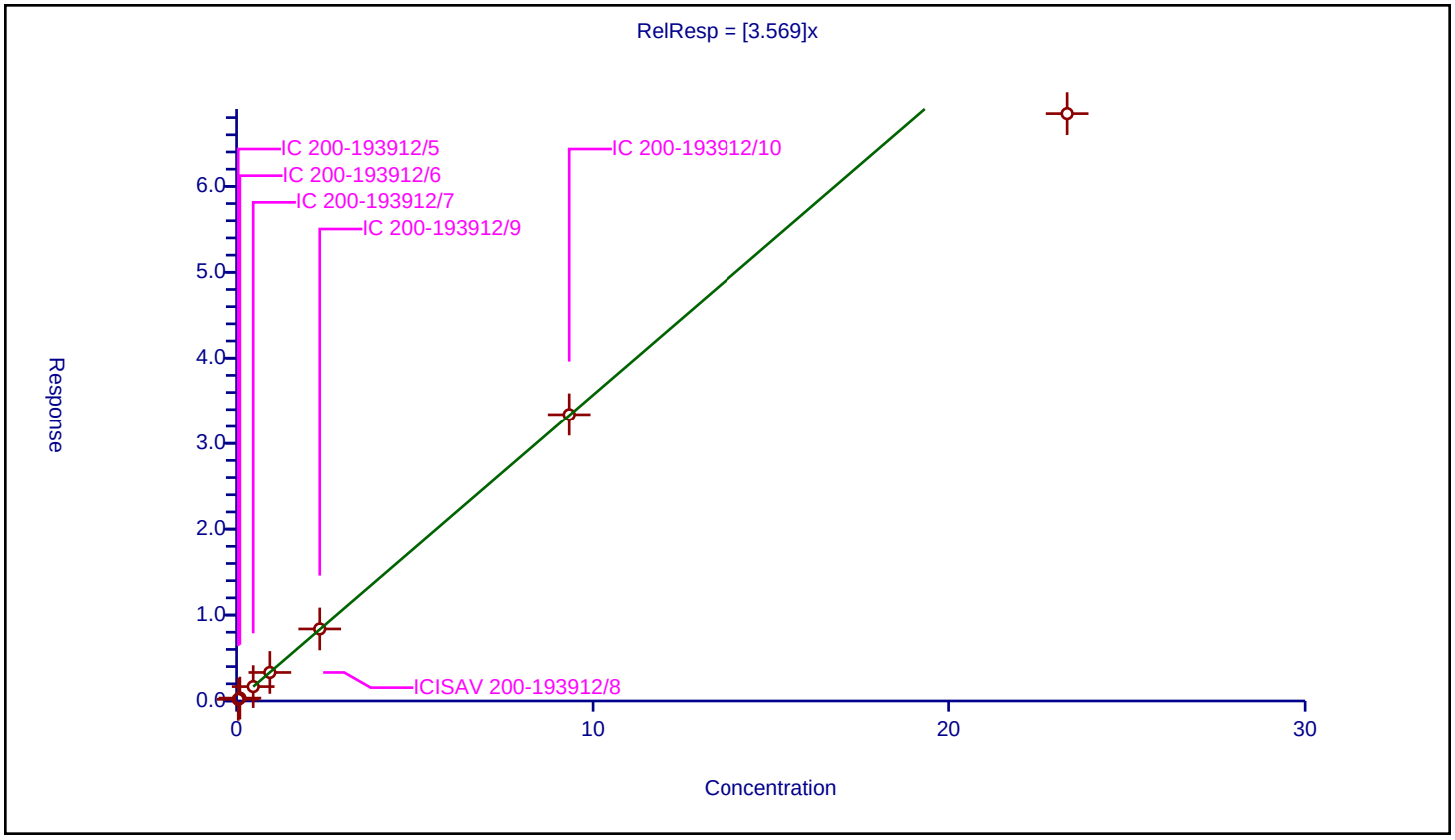
Curve Coefficients

Intercept:	0
Slope:	3.569

Error Coefficients

Standard Error:	22200000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04665	0.191359	1.195	943517.0	4.102008	Y
2	IC 200-193912/6	0.0933	0.338082	1.195	863764.0	3.623605	Y
3	IC 200-193912/7	0.4665	1.67515	1.195	882764.0	3.59089	Y
4	ICISAV 200-193912/8	0.933	3.319787	1.195	904398.0	3.558186	Y
5	IC 200-193912/9	2.3325	8.383828	1.195	919926.0	3.594353	Y
6	IC 200-193912/10	9.33	33.401161	1.195	765818.0	3.579974	Y
7	IC 200-193912/11	23.325	68.461822	1.195	865311.0	2.935126	Y



10/27/2023
10:52 AM

Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

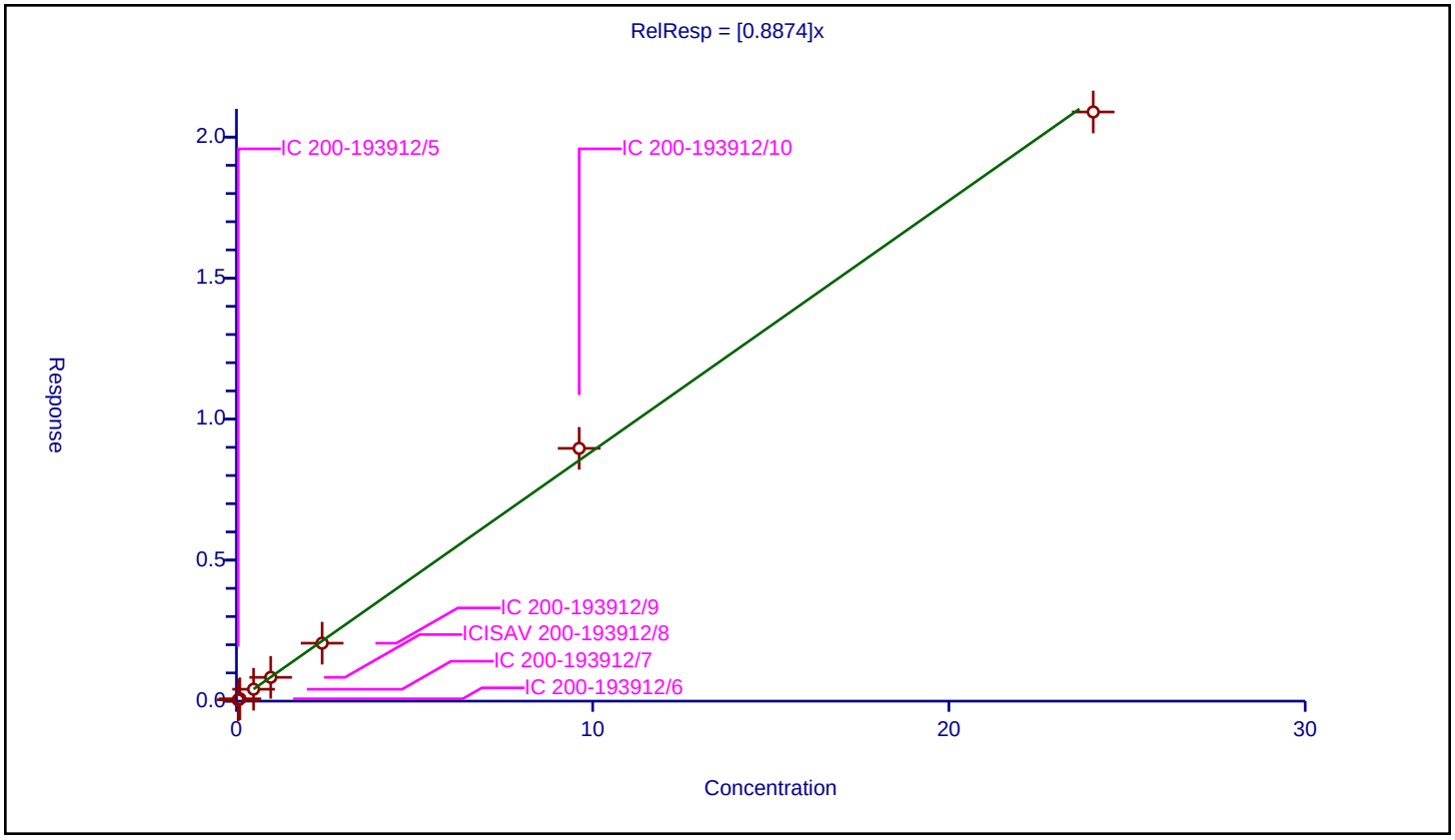
Curve Coefficients

Intercept:	0
Slope:	0.8874

Error Coefficients

Standard Error:	6640000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0481	0.044866	1.195	943517.0	0.932762	Y
2	IC 200-193912/6	0.0962	0.083528	1.195	863764.0	0.86827	Y
3	IC 200-193912/7	0.481	0.422495	1.195	882764.0	0.878367	Y
4	ICISAV 200-193912/8	0.962	0.843613	1.195	904398.0	0.876937	Y
5	IC 200-193912/9	2.405	2.055747	1.195	919926.0	0.854781	Y
6	IC 200-193912/10	9.62	8.96416	1.195	765818.0	0.931825	Y
7	IC 200-193912/11	24.05	20.891757	1.195	865311.0	0.86868	Y



10/27/2023
10:52 AM

Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

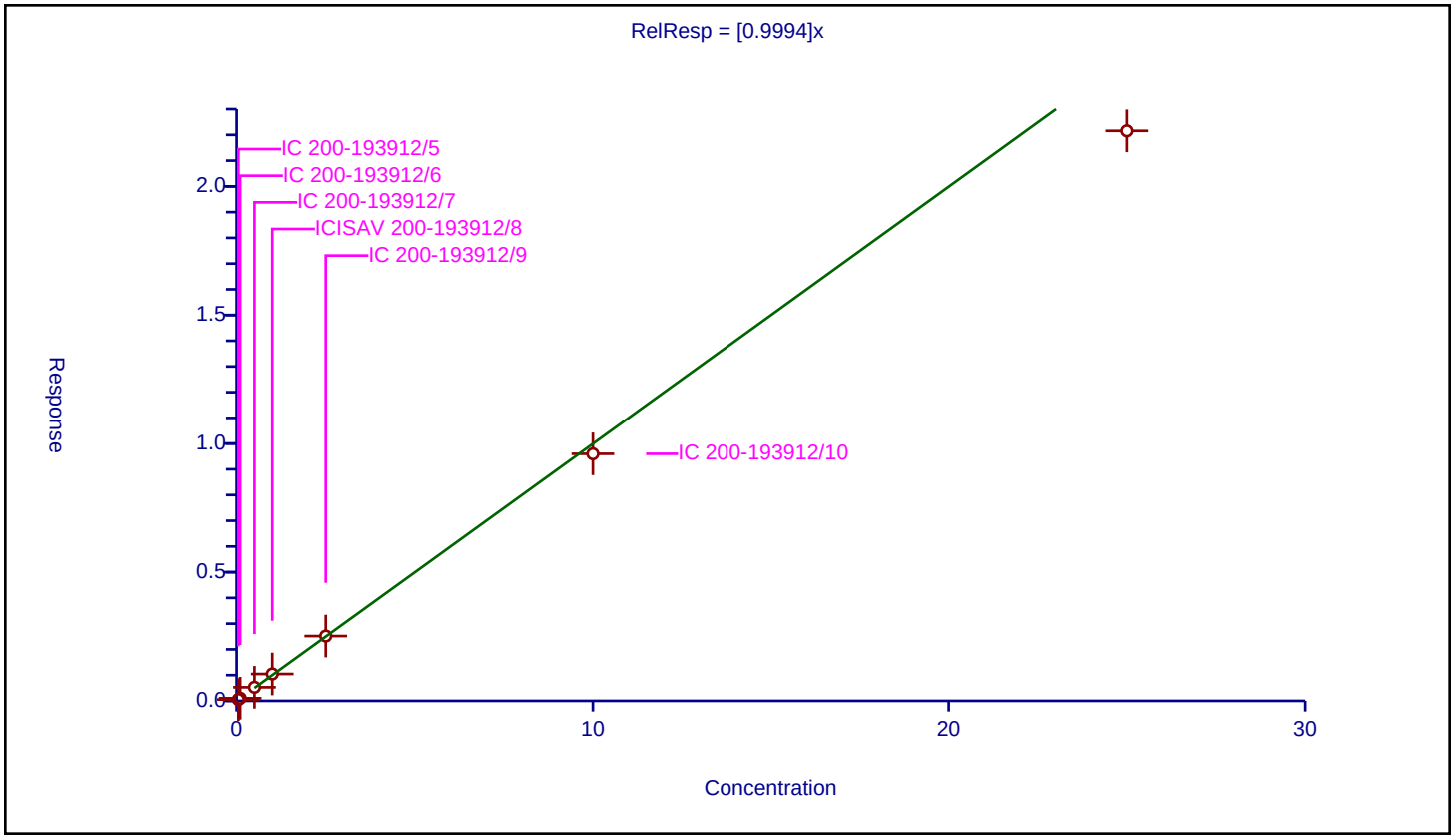
Curve Coefficients

Intercept:	0
Slope:	0.9994

Error Coefficients

Standard Error:	15800000
Relative Standard Error:	5.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.051407	1.25	2492424.0	1.028136	Y
2	IC 200-193912/6	0.1	0.101543	1.25	2097344.0	1.015433	Y
3	IC 200-193912/7	0.5	0.527053	1.25	2062234.0	1.054107	Y
4	ICISAV 200-193912/8	1.0	1.043889	1.25	2125756.0	1.043889	Y
5	IC 200-193912/9	2.5	2.518567	1.25	2307904.0	1.007427	Y
6	IC 200-193912/10	10.0	9.601822	1.25	1979736.0	0.960182	Y
7	IC 200-193912/11	25.0	22.157516	1.25	1981566.0	0.886301	Y



10/27/2023
10:52 AM

Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

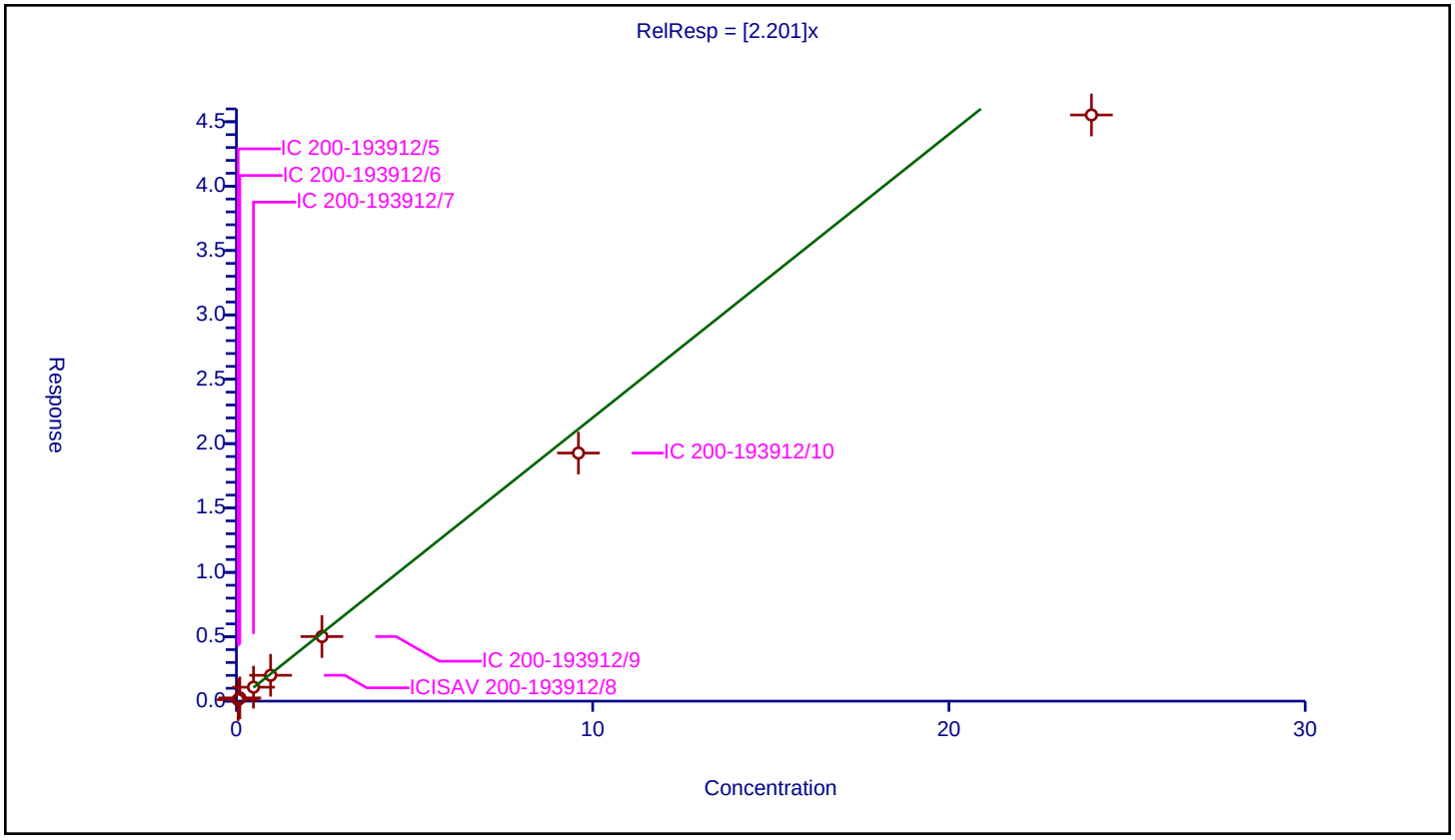
Curve Coefficients

Intercept:	0
Slope:	2.201

Error Coefficients

Standard Error:	5360000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.048	0.117827	1.1975	366485.0	2.45473	Y
2	IC 200-193912/6	0.096	0.250914	1.1975	307295.0	2.613688	Y
3	IC 200-193912/7	0.48	1.083603	1.1975	298552.0	2.257506	Y
4	ICISAV 200-193912/8	0.96	2.007175	1.1975	331913.0	2.090808	Y
5	IC 200-193912/9	2.4	5.014617	1.1975	331708.0	2.089424	Y
6	IC 200-193912/10	9.6	19.268997	1.1975	309678.0	2.007187	Y
7	IC 200-193912/11	24.0	45.528205	1.1975	316911.0	1.897009	Y



10/27/2023
10:52 AM

Calibration / Perfluorooctanesulfonamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

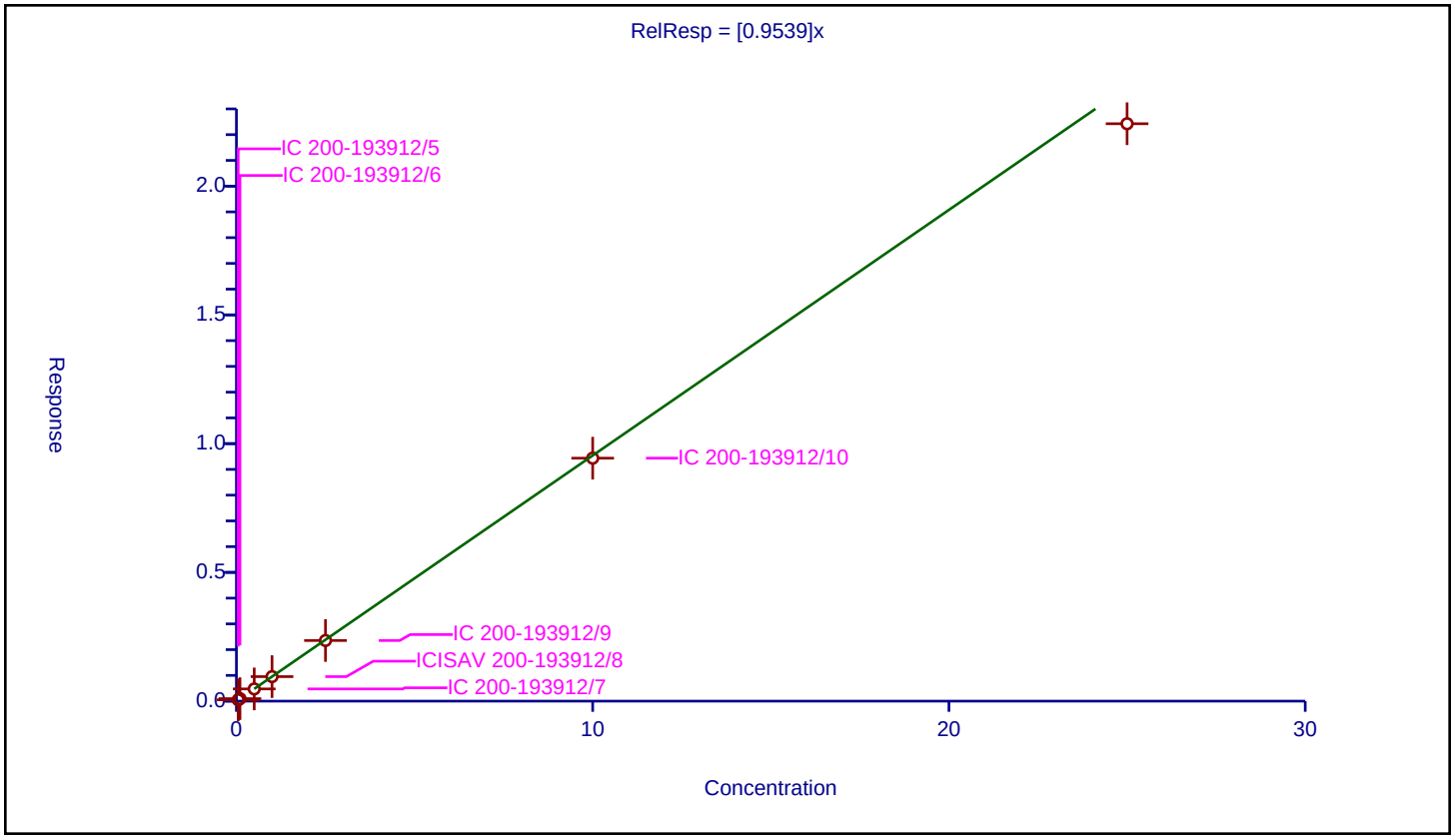
Curve Coefficients

Intercept:	0
Slope:	0.9539

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.05114	1.25	1884229.0	1.022792	Y
2	IC 200-193912/6	0.1	0.097032	1.25	1858847.0	0.970319	Y
3	IC 200-193912/7	0.5	0.474712	1.25	1790735.0	0.949424	Y
4	ICISAV 200-193912/8	1.0	0.952135	1.25	1887535.0	0.952135	Y
5	IC 200-193912/9	2.5	2.354683	1.25	1904586.0	0.941873	Y
6	IC 200-193912/10	10.0	9.435572	1.25	1724931.0	0.943557	Y
7	IC 200-193912/11	25.0	22.424085	1.25	1759972.0	0.896963	Y



10/27/2023
10:52 AM

Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

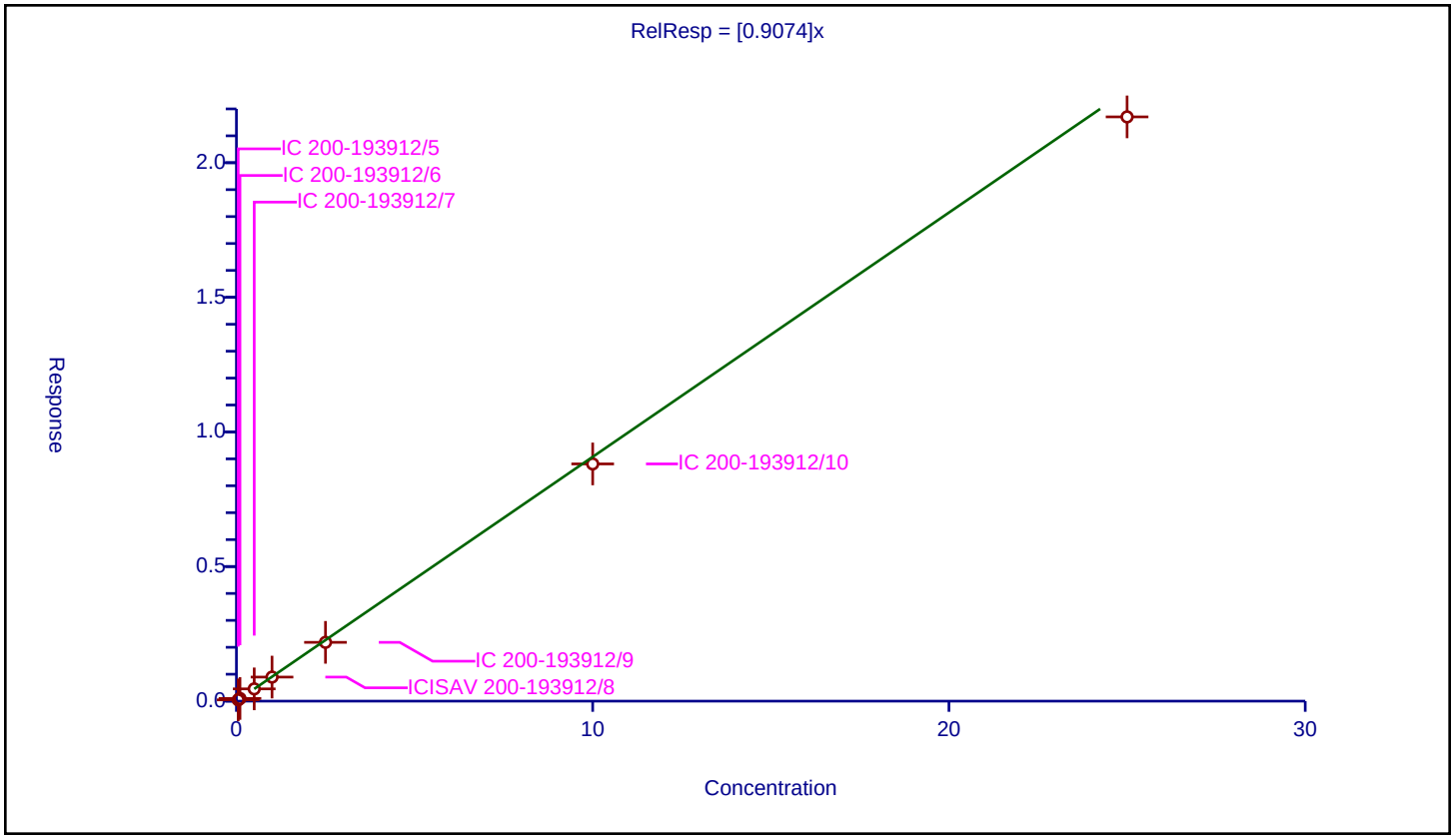
Curve Coefficients

Intercept:	0
Slope:	0.9074

Error Coefficients

Standard Error:	3840000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.047213	1.25	589245.0	0.944259	Y
2	IC 200-193912/6	0.1	0.098038	1.25	509447.0	0.980377	Y
3	IC 200-193912/7	0.5	0.45553	1.25	486461.0	0.91106	Y
4	ICISAV 200-193912/8	1.0	0.893408	1.25	518688.0	0.893408	Y
5	IC 200-193912/9	2.5	2.183599	1.25	518571.0	0.87344	Y
6	IC 200-193912/10	10.0	8.811989	1.25	465286.0	0.881199	Y
7	IC 200-193912/11	25.0	21.70302	1.25	505130.0	0.868121	Y



10/27/2023
10:52 AM

Calibration / Perfluorodecanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

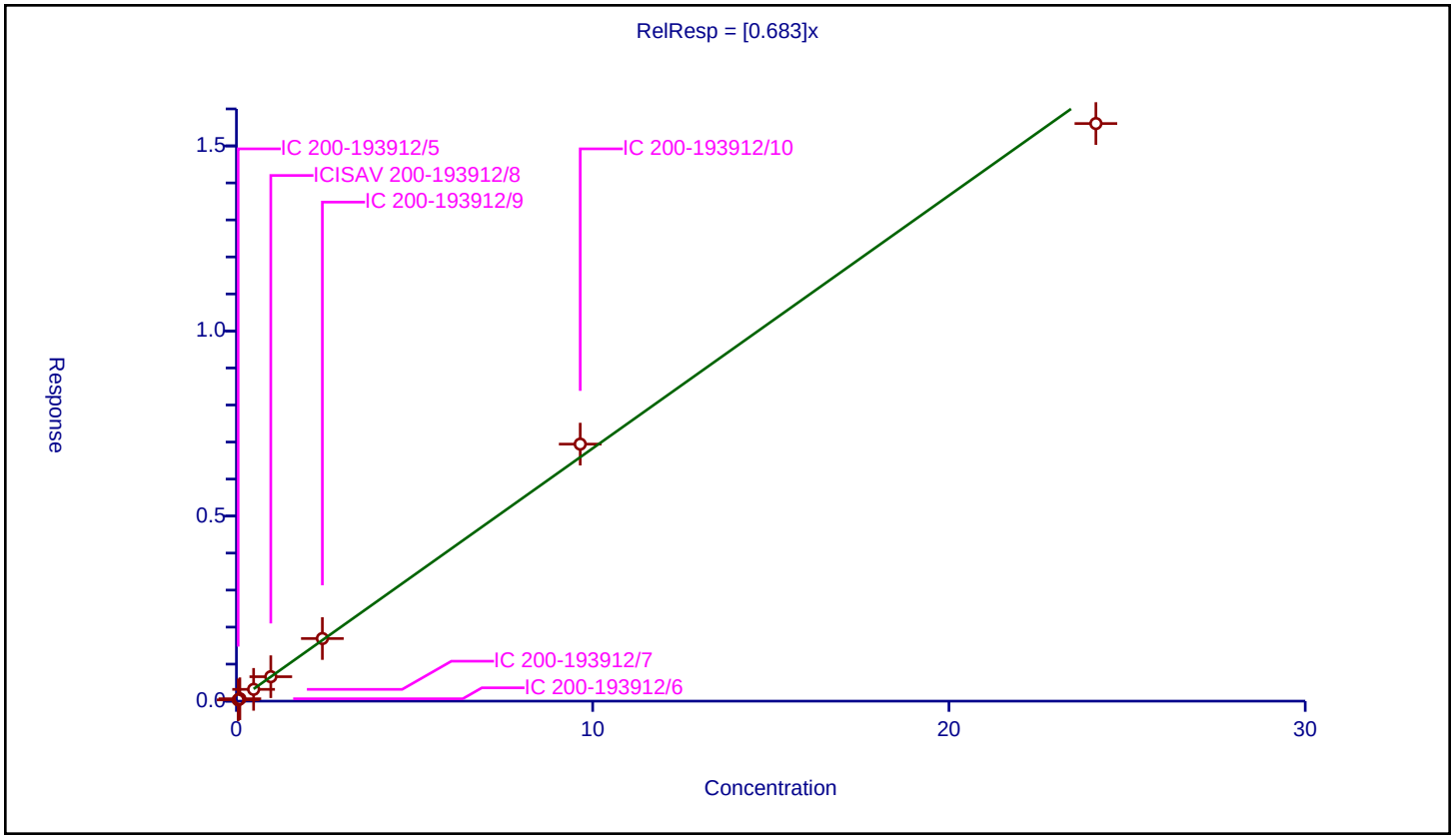
Curve Coefficients

Intercept:	0
Slope:	0.683

Error Coefficients

Standard Error:	4990000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04825	0.033974	1.195	943517.0	0.704116	Y
2	IC 200-193912/6	0.0965	0.064249	1.195	863764.0	0.665791	Y
3	IC 200-193912/7	0.4825	0.318115	1.195	882764.0	0.659305	Y
4	ICISAV 200-193912/8	0.965	0.659955	1.195	904398.0	0.683891	Y
5	IC 200-193912/9	2.4125	1.691543	1.195	919926.0	0.701158	Y
6	IC 200-193912/10	9.65	6.944096	1.195	765818.0	0.719595	Y
7	IC 200-193912/11	24.125	15.604572	1.195	865311.0	0.646822	Y



10/27/2023
10:52 AM

Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

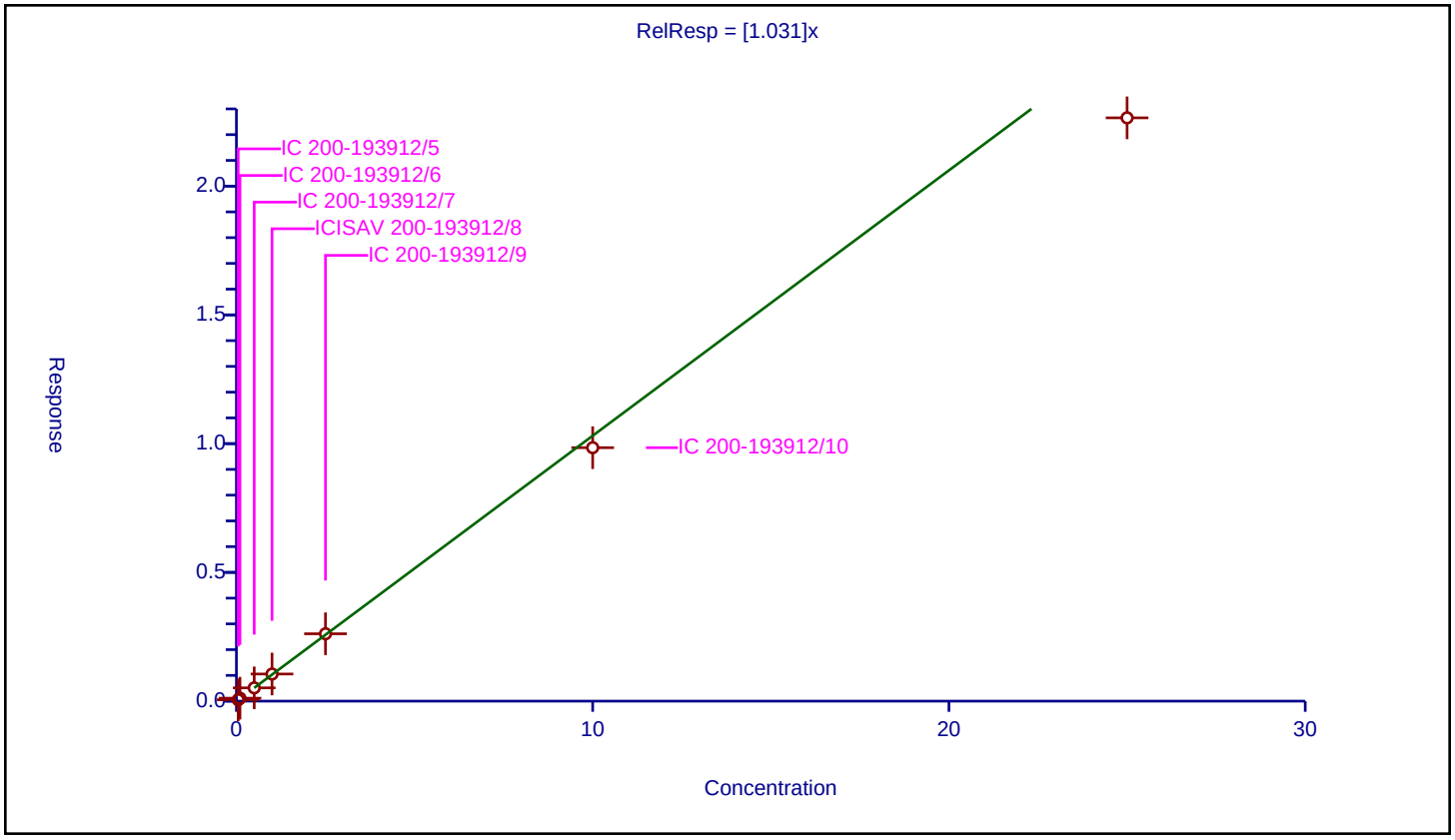
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	14600000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.052687	1.25	2441700.0	1.053743	Y
2	IC 200-193912/6	0.1	0.113929	1.25	1976379.0	1.139293	Y
3	IC 200-193912/7	0.5	0.515751	1.25	1983358.0	1.031502	Y
4	ICISAV 200-193912/8	1.0	1.053027	1.25	2053330.0	1.053027	Y
5	IC 200-193912/9	2.5	2.616249	1.25	2158999.0	1.0465	Y
6	IC 200-193912/10	10.0	9.84312	1.25	1818926.0	0.984312	Y
7	IC 200-193912/11	25.0	22.652933	1.25	1790927.0	0.906117	Y



10/27/2023
10:52 AM

Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

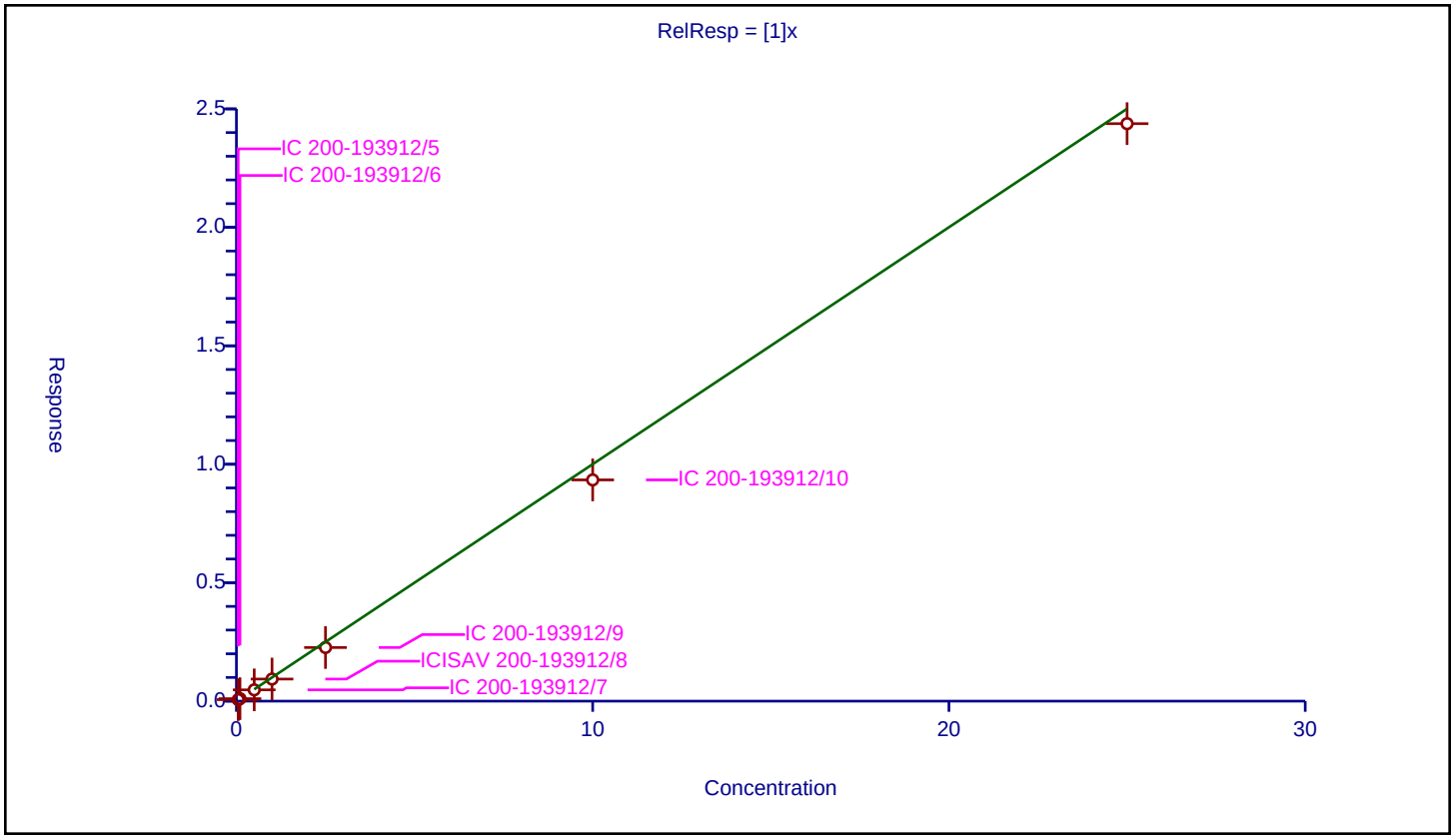
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	3720000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.062984	1.25	566846.0	1.25969	Y
2	IC 200-193912/6	0.1	0.104122	1.25	488020.0	1.041223	Y
3	IC 200-193912/7	0.5	0.476346	1.25	491633.0	0.952692	Y
4	ICISAV 200-193912/8	1.0	0.933122	1.25	487913.0	0.933122	Y
5	IC 200-193912/9	2.5	2.264152	1.25	544137.0	0.905661	Y
6	IC 200-193912/10	10.0	9.339057	1.25	456350.0	0.933906	Y
7	IC 200-193912/11	25.0	24.377511	1.25	430319.0	0.9751	Y



10/27/2023
10:52 AM

Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

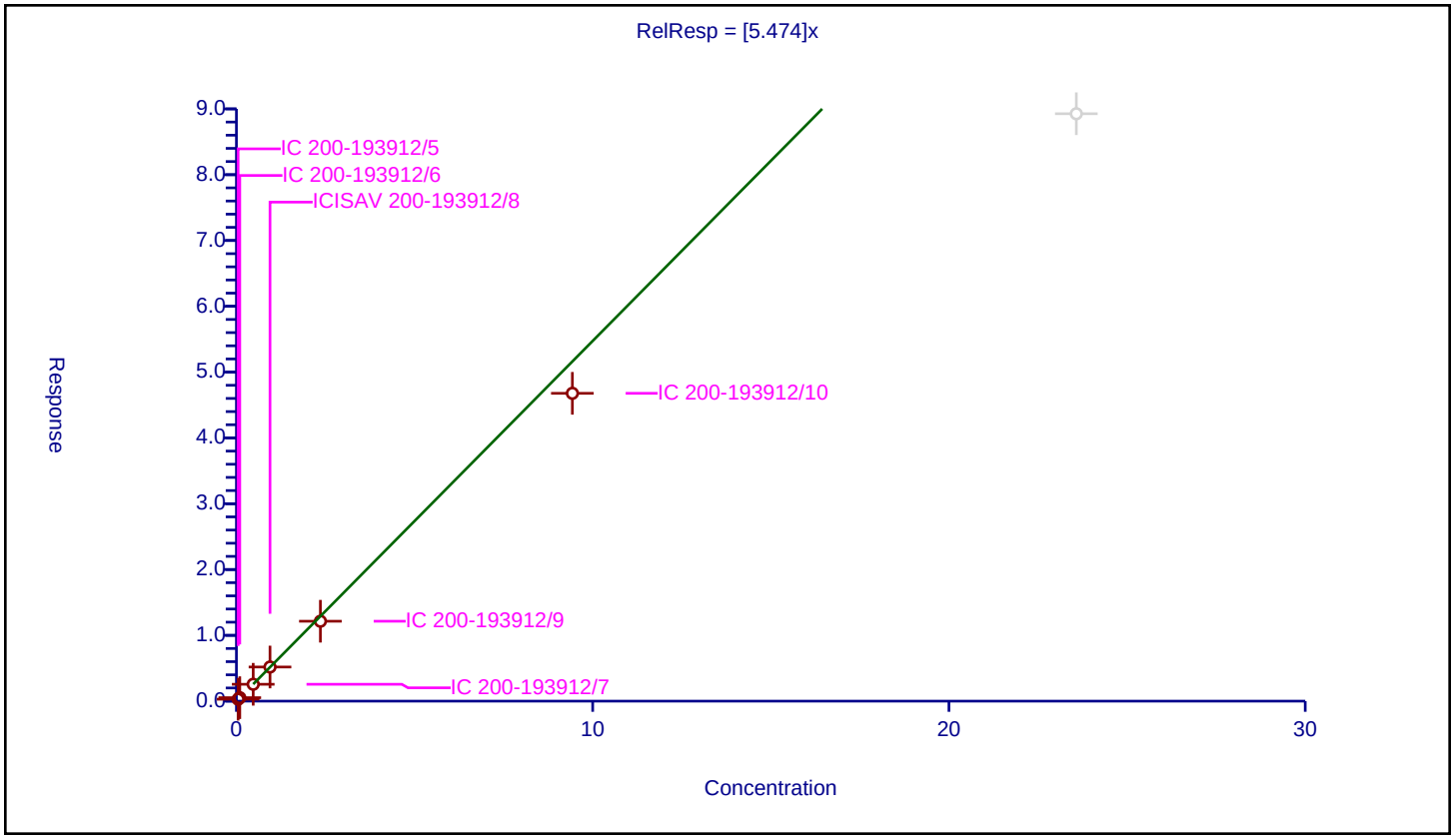
Curve Coefficients

Intercept:	0
Slope:	5.474

Error Coefficients

Standard Error:	14200000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.04715	0.292105	1.195	943517.0	6.195237	Y
2	IC 200-193912/6	0.0943	0.527614	1.195	863764.0	5.595053	Y
3	IC 200-193912/7	0.4715	2.564572	1.195	882764.0	5.439177	Y
4	ICISAV 200-193912/8	0.943	5.187209	1.195	904398.0	5.500751	Y
5	IC 200-193912/9	2.3575	12.142724	1.195	919926.0	5.150678	Y
6	IC 200-193912/10	9.43	46.776459	1.195	765818.0	4.960388	Y
7	IC 200-193912/11	23.575	89.262798	1.195	865311.0	3.786333	N



10/27/2023
10:52 AM

Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

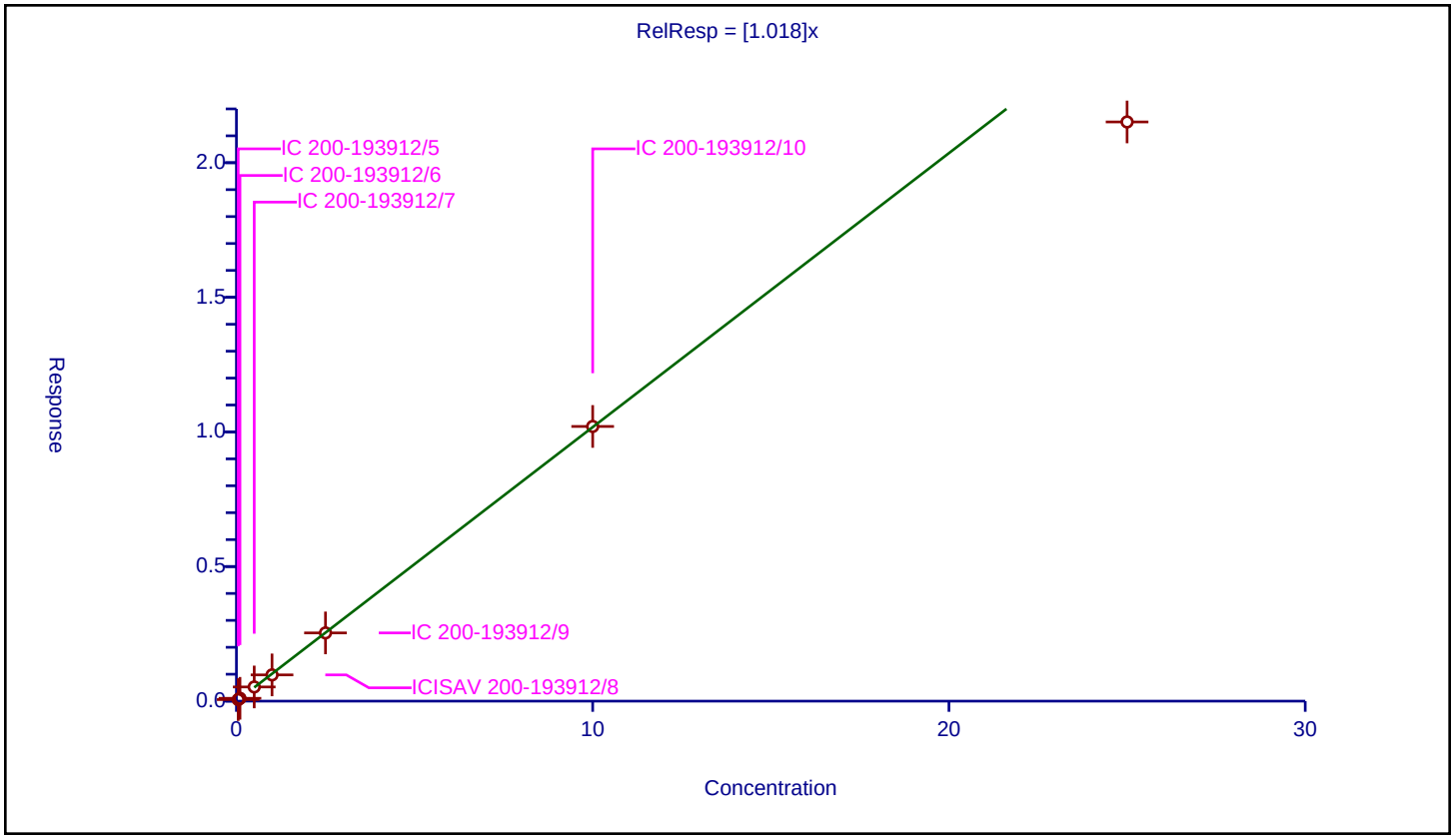
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	15400000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.057397	1.25	2296115.0	1.14795	Y
2	IC 200-193912/6	0.1	0.10537	1.25	2131572.0	1.0537	Y
3	IC 200-193912/7	0.5	0.526674	1.25	2022512.0	1.053347	Y
4	ICISAV 200-193912/8	1.0	0.974949	1.25	2123640.0	0.974949	Y
5	IC 200-193912/9	2.5	2.534654	1.25	2062631.0	1.013862	Y
6	IC 200-193912/10	10.0	10.203479	1.25	1800020.0	1.020348	Y
7	IC 200-193912/11	25.0	21.515509	1.25	1994604.0	0.86062	Y



10/27/2023
10:52 AM

Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

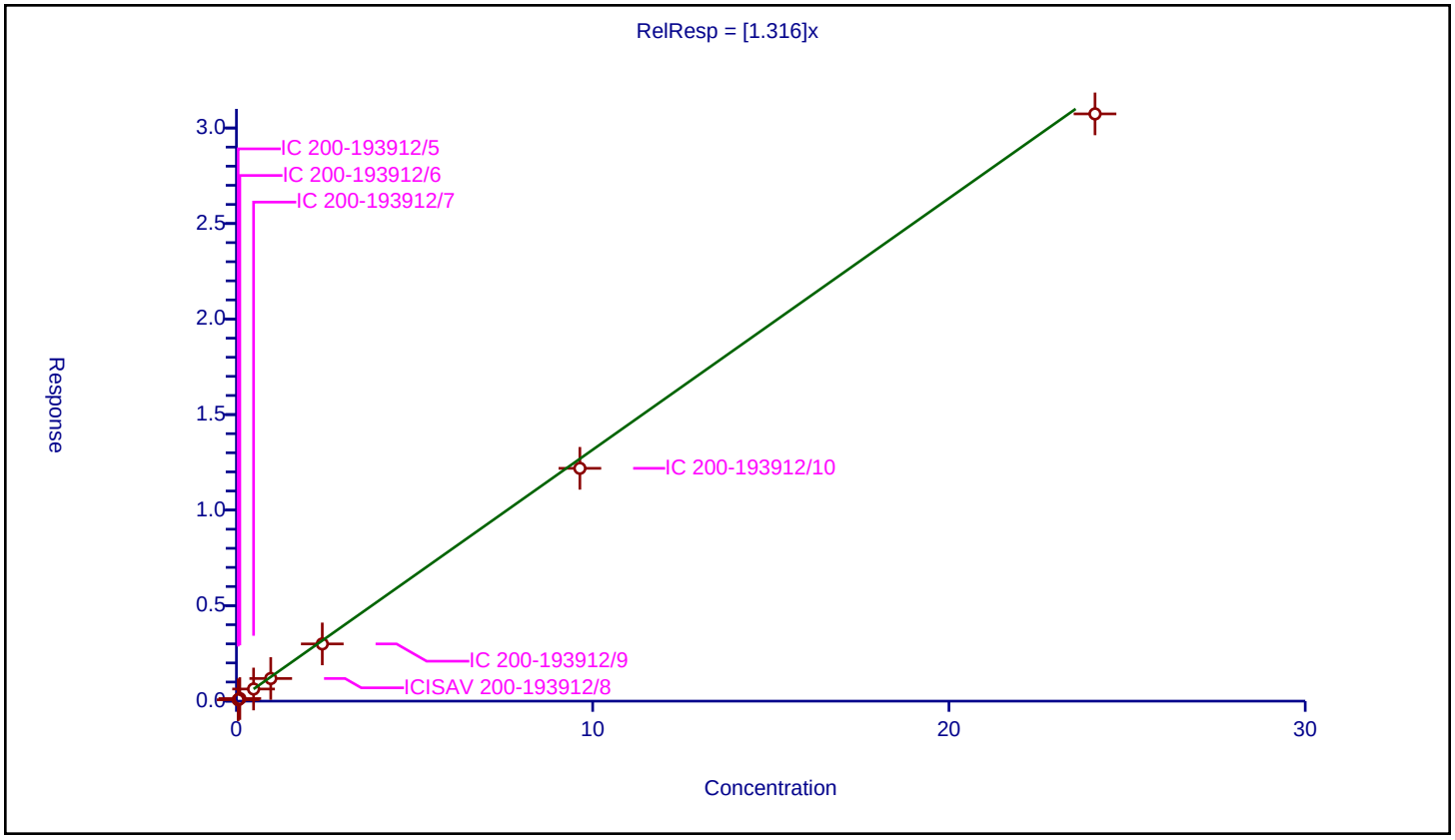
Curve Coefficients

Intercept:	0
Slope:	1.316

Error Coefficients

Standard Error:	3580000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0482	0.071608	1.1975	366485.0	1.485641	Y
2	IC 200-193912/6	0.0964	0.134646	1.1975	307295.0	1.396742	Y
3	IC 200-193912/7	0.482	0.635587	1.1975	298552.0	1.318646	Y
4	ICISAV 200-193912/8	0.964	1.184378	1.1975	331913.0	1.228608	Y
5	IC 200-193912/9	2.41	2.994685	1.1975	331708.0	1.242608	Y
6	IC 200-193912/10	9.64	12.186219	1.1975	309678.0	1.264131	Y
7	IC 200-193912/11	24.1	30.739313	1.1975	316911.0	1.27549	Y



Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

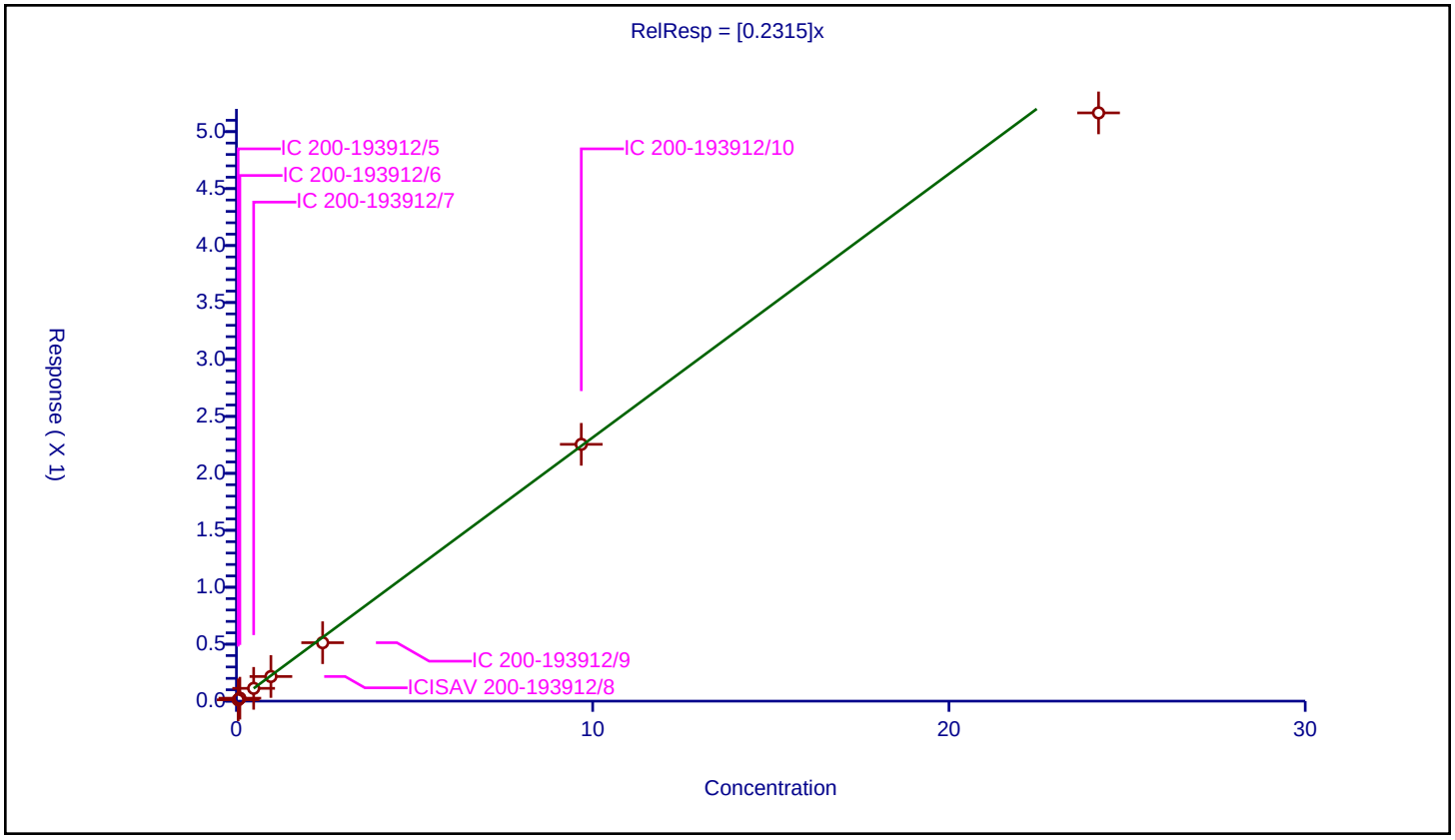
Curve Coefficients

Intercept:	0
Slope:	0.2315

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.0484	0.011586	1.195	943517.0	0.239386	Y
2	IC 200-193912/6	0.0968	0.025868	1.195	863764.0	0.267235	Y
3	IC 200-193912/7	0.484	0.112249	1.195	882764.0	0.231919	Y
4	ICISAV 200-193912/8	0.968	0.216192	1.195	904398.0	0.223339	Y
5	IC 200-193912/9	2.42	0.513259	1.195	919926.0	0.21209	Y
6	IC 200-193912/10	9.68	2.254814	1.195	765818.0	0.232935	Y
7	IC 200-193912/11	24.2	5.164816	1.195	865311.0	0.213422	Y



10/27/2023
10:52 AM

Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

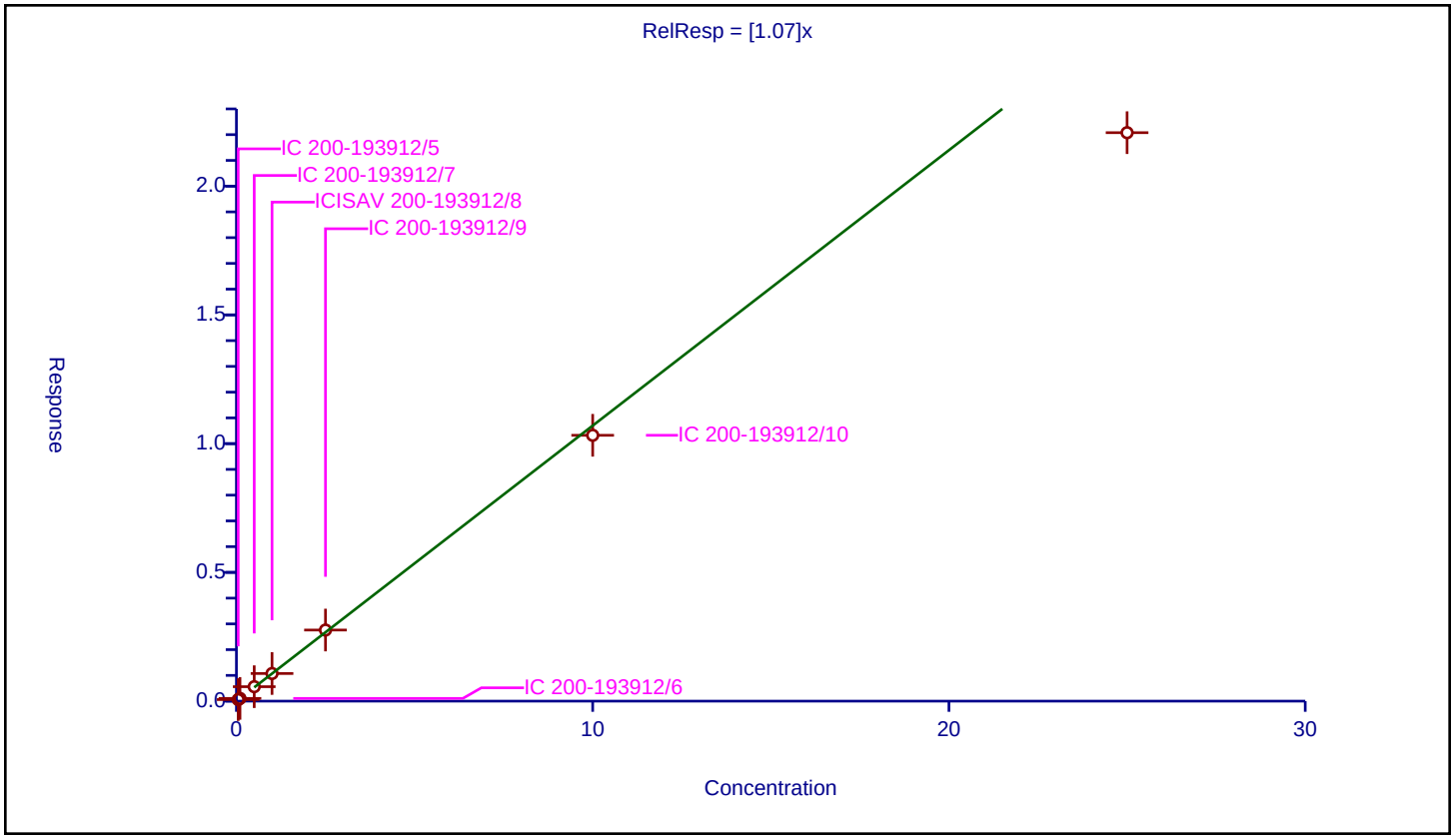
Curve Coefficients

Intercept:	0
Slope:	1.07

Error Coefficients

Standard Error:	15700000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.060572	1.25	2296115.0	1.211438	Y
2	IC 200-193912/6	0.1	0.106191	1.25	2131572.0	1.06191	Y
3	IC 200-193912/7	0.5	0.561156	1.25	2022512.0	1.122311	Y
4	ICISAV 200-193912/8	1.0	1.07307	1.25	2123640.0	1.07307	Y
5	IC 200-193912/9	2.5	2.761299	1.25	2062631.0	1.10452	Y
6	IC 200-193912/10	10.0	10.323864	1.25	1800020.0	1.032386	Y
7	IC 200-193912/11	25.0	22.076299	1.25	1994604.0	0.883052	Y



10/27/2023
10:52 AM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

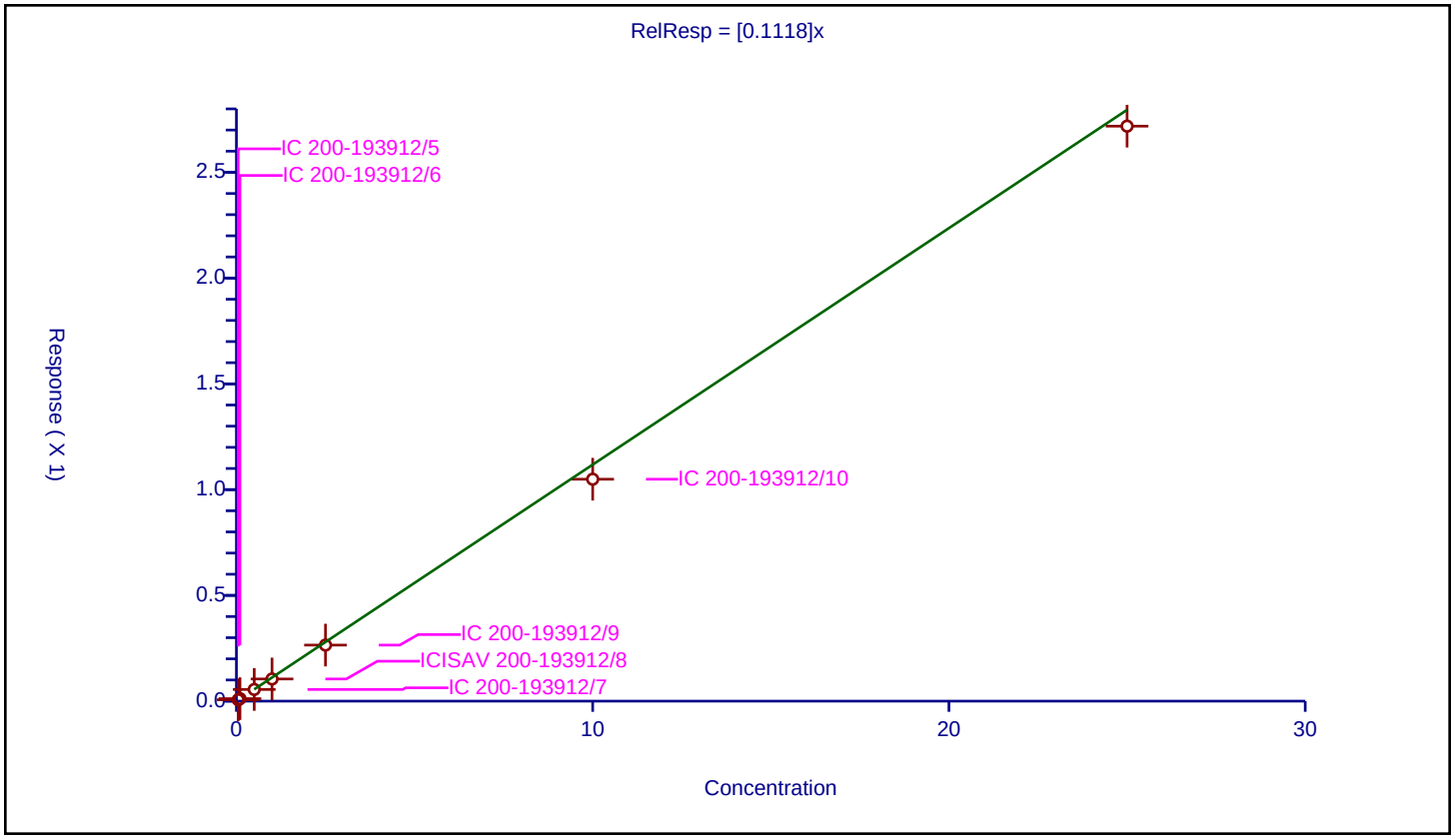
Curve Coefficients

Intercept:	0
Slope:	0.1118

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.006497	1.25	2302510.0	0.129934	Y
2	IC 200-193912/6	0.1	0.011797	1.25	2061289.0	0.117972	Y
3	IC 200-193912/7	0.5	0.055166	1.25	1996289.0	0.110332	Y
4	ICISAV 200-193912/8	1.0	0.10478	1.25	2077683.0	0.10478	Y
5	IC 200-193912/9	2.5	0.265032	1.25	2135161.0	0.106013	Y
6	IC 200-193912/10	10.0	1.049255	1.25	1876594.0	0.104926	Y
7	IC 200-193912/11	25.0	2.718444	1.25	1918275.0	0.108738	Y



Calibration / Perfluorohexadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

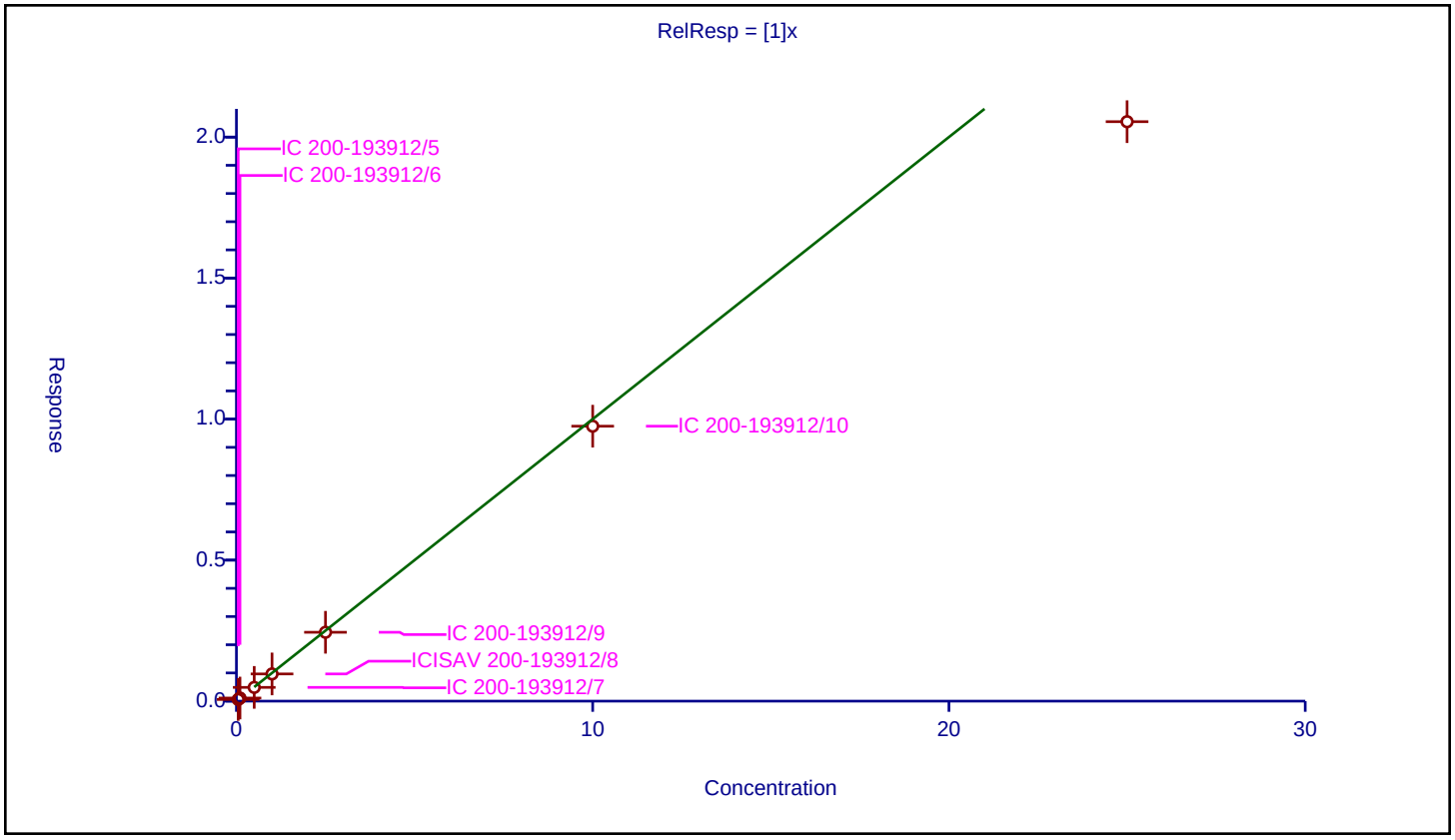
Curve Coefficients

Intercept:	0
Slope:	1

Error Coefficients

Standard Error:	16800000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.059148	1.25	2773326.0	1.182966	Y
2	IC 200-193912/6	0.1	0.110397	1.25	2341179.0	1.103968	Y
3	IC 200-193912/7	0.5	0.487301	1.25	2309121.0	0.974602	Y
4	ICISAV 200-193912/8	1.0	0.965145	1.25	2422773.0	0.965145	Y
5	IC 200-193912/9	2.5	2.442011	1.25	2376838.0	0.976804	Y
6	IC 200-193912/10	10.0	9.749491	1.25	2051028.0	0.974949	Y
7	IC 200-193912/11	25.0	20.546324	1.25	2292454.0	0.821853	Y



Calibration / Perfluorooctadecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

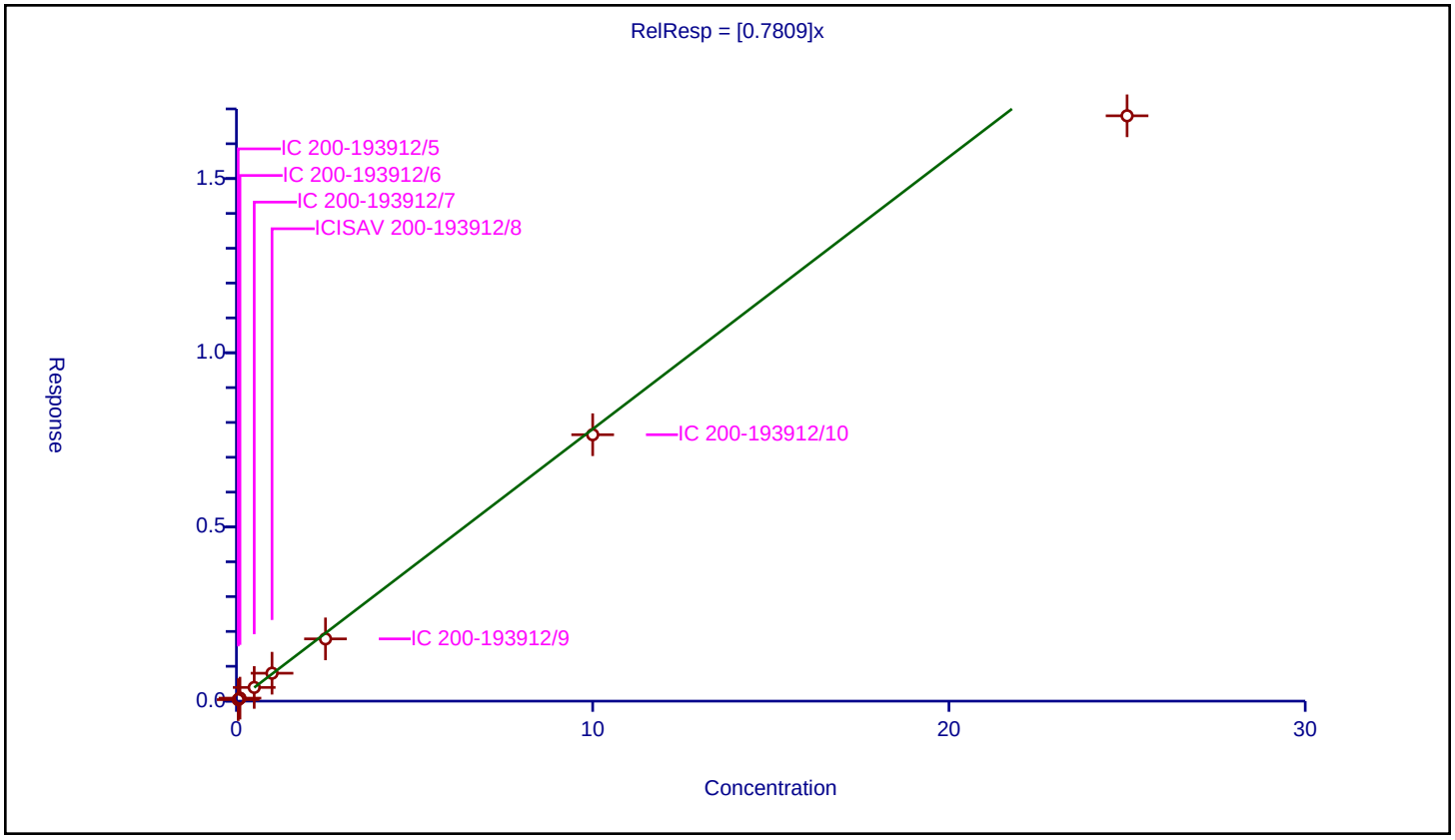
Curve Coefficients

Intercept:	0
Slope:	0.7809

Error Coefficients

Standard Error:	13700000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-193912/5	0.05	0.043147	1.25	2773326.0	0.862944	Y
2	IC 200-193912/6	0.1	0.086341	1.25	2341179.0	0.863411	Y
3	IC 200-193912/7	0.5	0.393238	1.25	2309121.0	0.786476	Y
4	ICISAV 200-193912/8	1.0	0.801959	1.25	2422773.0	0.801959	Y
5	IC 200-193912/9	2.5	1.786872	1.25	2376838.0	0.714749	Y
6	IC 200-193912/10	10.0	7.647519	1.25	2051028.0	0.764752	Y
7	IC 200-193912/11	25.0	16.801641	1.25	2292454.0	0.672066	Y



10/27/2023
10:52 AM

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.091		1.17	1.00	16.6	30.0
Perfluoropentanoic acid	AveID	1.079	1.233		1.15	1.01	14.2	30.0
Perfluorobutanesulfonic acid	AveID	1.117	1.273		1.14	1.00	14.0	30.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.749		1.10	1.00	10.4	30.0
Perfluorohexanoic acid	AveID	1.100	1.265		1.16	1.01	14.9	30.0
Perfluoropentanesulfonic acid	AveID	1.306	1.519		1.16	1.00	16.3	30.0
HFPODA	AveID	1.001	1.187		1.20	1.01	18.5	30.0
Perfluoroheptanoic acid	AveID	1.121	1.275		1.14	1.00	13.8	30.0
Perfluorohexanesulfonic acid	AveID	1.107	1.171		1.07	1.01	5.8	30.0
DONA	AveID	5.754	6.626		1.15	1.00	15.1	30.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.589		1.10	1.00	10.0	30.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.837		1.04	1.00	3.8	30.0
Perfluorooctanoic acid	AveID	1.065	1.147		1.08	1.00	7.6	30.0
Perfluorooctanesulfonic acid	AveID	1.166	1.129		0.977	1.01	-3.2	30.0
Perfluorononanoic acid	AveID	0.9800	1.173		1.20	1.00	19.7	30.0
9Cl-PF3ONS	AveID	3.569	3.916		1.10	1.00	9.7	30.0
Perfluorononanesulfonic acid	AveID	0.8874	0.9697		1.10	1.01	9.3	30.0
Perfluorodecanoic acid	AveID	0.999	1.132		1.13	1.00	13.3	30.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.648		1.22	1.01	20.3	30.0
Perfluorooctanesulfonamide	AveID	0.9539	1.010		1.06	1.00	5.9	30.0
NMeFOSAA	AveID	0.9074	1.065		1.17	1.00	17.3	30.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.7209		1.07	1.01	5.6	30.0
Perfluoroundecanoic acid	AveID	1.031	1.105		1.07	1.00	7.2	30.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.079		1.08	1.00	7.9	30.0
11Cl-PF3OUdS	AveID	5.474	5.985		1.09	1.00	9.3	30.0
Perfluorododecanoic acid	AveID	1.018	1.033		1.02	1.00	1.5	30.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.421		1.04	0.964	7.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2219		0.928	0.968	-4.1	30.0
Perfluorotridecanoic acid	AveID	1.070	1.093		1.02	1.00	2.2	30.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1309		1.17	1.00	17.1	30.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9902		0.990	1.00	-1.0	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7992		1.02	1.00	2.3	30.0
13C4 PFBA	Ave	0.9917	0.9819		1.24	1.25	-1.0	50.0
13C3 PFBS	Ave	1.041	0.9897		1.11	1.16	-5.0	50.0
13C5 PFPeA	Ave	0.7696	0.7799		1.27	1.25	1.3	50.0
M2-4:2 FTS	Ave	0.1204	0.1244		1.21	1.17	3.3	50.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: ICV 200-193912/13 Calibration Date: 07/26/2023 18:22

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA230726ICAL13.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7614		1.22	1.25	-2.8	50.0
13C3 HFPO-DA	Ave	0.1516	0.1402		1.16	1.25	-7.5	50.0
13C4 PFHpA	Ave	0.8590	0.8570		1.25	1.25	-0.2	50.0
18O2 PFHxS	Ave	0.7464	0.7510		1.19	1.18	0.6	50.0
M2-6:2 FTS	Ave	0.1551	0.1630		1.25	1.19	5.1	50.0
13C4 PFOA	Ave	0.9731	0.9893		1.27	1.25	1.7	50.0
13C4 PFOS	Ave	0.4742	0.4785		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.073		1.27	1.25	1.4	50.0
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	50.0
M2-8:2 FTS	Ave	0.1744	0.1644		1.13	1.20	-5.8	50.0
13C8 FOSA	Ave	0.9462	0.9298		1.23	1.25	-1.7	50.0
d3-NMeFOSAA	Ave	0.2650	0.2507		1.18	1.25	-5.4	50.0
13C2 PFUnA	Ave	1.047	1.065		1.27	1.25	1.7	50.0
d5-NEtFOSAA	Ave	0.2552	0.2498		1.22	1.25	-2.1	50.0
13C2 PFDoA	Ave	1.064	1.040		1.22	1.25	-2.3	50.0
13C2 PFTeDA	Ave	1.059	1.068		1.26	1.25	0.8	50.0
13C2 PFHxDA	Ave	1.221	1.213		1.24	1.25	-0.6	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 26-Jul-2023 18:22:05 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0056441-013 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 26-Jul-2023 18:46:57 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1656

First Level Reviewer: SJ4N Date: 26-Jul-2023 18:36:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.094	2.103	-0.009	0.603	2061390	1.24		99.0	1111	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.103	2.112	-0.009	1.004	1799894	1.17			128	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.411	0.0	0.695	1637273	1.27		101	855	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.411	2.411	0.0	1.000	1630838	1.15			72.7	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.411	2.425	-0.014	0.695	1932315	1.10		95.0	61660	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.424	2.425	-0.001	1.006	2115731	1.14	Target=2.06		394	M
298.90 > 99.00	2.424	2.425	-0.001	1.006	951335		2.22(1.03-3.09)		205	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.718	2.694	0.024	0.783	243947	1.21		103	89.7	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.718	2.694	0.024	1.000	783361	1.10			1210	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.755	2.731	0.024	0.794	1598439	1.22		97.2	1019	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.755	2.731	0.024	1.000	1633342	1.16	Target=14.12		201	M
313.00 > 119.00	2.755	2.731	0.024	1.000	119996		13.61(7.06-21.17)		87.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.755	2.731	0.024	0.885	1915826	1.16	Target=2.72		2515	
349.00 > 99.00	2.755	2.731	0.024	0.885	690197		2.78(1.36-4.09)		775	
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.855	2.844	0.011	0.823	294290	1.16		92.5	1359	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.855	2.844	0.011	1.000	282227	1.20			1561	
D 11 18O2 PFHxS										
403.00 > 84.00	3.114	3.092	0.022	0.897	1491459	1.19		101	3008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.114	3.092	0.022	1.000	1492005	1.07	Target=3.32		2002	
399.00 > 99.00	3.114	3.092	0.022	1.000	447913		3.33(1.66-4.98)		275	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.114	3.104	0.010	1.000	1835676	1.14	Target=4.17		375	
363.00 > 169.00	3.114	3.104	0.010	1.000	421780		4.35(2.09-6.26)		330	
D 9 13C4 PFHpA										
367.00 > 322.00	3.114	3.104	0.010	0.897	1799170	1.25		99.8	4344	
77 DONA										
377.00 > 251.00	3.149	3.138	0.011	0.832	5325110	1.15	Target=3.33		4580	
377.00 > 85.00	3.149	3.138	0.011	0.832	1587786		3.35(1.66-4.99)		1564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.452	3.446	0.006	0.913	1277458	1.10	Target=4.83		2835	
449.00 > 99.00	3.452	3.446	0.006	0.913	271741		4.70(2.41-7.24)		608	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.461	3.446	0.015	0.997	325183	1.25		105	449	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.461	3.446	0.015	1.000	776988	1.04			1505	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.470	3.464	0.006	1.000	1905230	1.08	Target=2.88		155	
413.00 > 169.00	3.470	3.464	0.006	1.000	700454		2.72(1.44-4.32)		688	
D 14 13C4 PFOA										
417.00 > 372.00	3.470	3.464	0.006	1.000	2077032	1.27		102	10779	
* 62 13C2 PFOA										
415.00 > 370.00	3.470	3.464	0.006		2099437	1.25			5857	
D 18 13C4 PFOS										
503.00 > 80.00	3.783	3.783	0.0	1.090	960411	1.21		101	3123	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.783	3.783	0.0	1.000	916205	0.9773	Target=4.24		1279	M
499.00 > 99.00	3.783	3.783	0.0	1.000	219275		4.18(2.12-6.37)		332	M
D 19 13C5 PFNA										
468.00 > 423.00	3.803	3.793	0.010	1.096	2253485	1.27		101	8237	
20 Perfluorononanoic acid										
463.00 > 419.00	3.803	3.803	0.0	1.000	2114355	1.20	Target=8.34		396	
463.00 > 169.00	3.803	3.803	0.0	1.000	258068		8.19(4.17-12.51)		1687	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.947	3.947	0.0	1.043	3147105	1.10			4619	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.074	4.074	0.0	1.077	787129	1.10	Target=2.17		3635	
549.00 > 99.00	4.074	4.074	0.0	1.077	362945		2.17(1.08-3.25)		1106	
D 23 13C2 PFDA										
515.00 > 470.00	4.108	4.108	0.0	1.184	2306656	1.24		99.1	7364	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.108	4.108	0.0	1.000	2089059	1.13	Target=11.44		513	
513.00 > 169.00	4.108	4.108	0.0	1.000	187846		11.12(5.72-17.16)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.108	4.108	0.0	1.184	330559	1.13		94.2	534	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.120	4.120	0.0	1.003	738302	1.21			3324	
D 21 13C8 FOSA										
506.00 > 78.00	4.204	4.204	0.0	1.211	1951992	1.23		98.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.204	4.204	0.0	1.000	1577862	1.06			1967	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.249	4.249	0.0	1.224	526368	1.18		94.6	1324	
28 N-methylperfluorooctanesulfonami										
570.00 > 419.00	4.249	4.260	-0.011	1.000	448255	1.17			766	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.346	4.346	0.0	1.149	585144	1.07	Target=2.37		2036	
599.00 > 99.00	4.346	4.346	0.0	1.149	247580		2.36(1.19-3.56)		636	
D 30 13C2 PFUnA										
565.00 > 520.00	4.370	4.382	-0.012	1.259	2235945	1.27		102	10895	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.370	4.382	-0.012	1.000	1976512	1.07	Target=12.20		463	M
563.00 > 169.00	4.370	4.382	-0.012	1.000	173430		11.40(6.10-18.31)		356	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.382	4.393	-0.011	1.263	524453	1.22		97.9	1054	
33 N-ethylperfluorooctanesulfonamid										
584.00 > 419.00	4.382	4.393	-0.011	1.000	452913	1.08			5512	
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.463	4.477	-0.014	1.180	4810172	1.09			5397	
D 36 13C2 PFDoA										
615.00 > 570.00	4.594	4.605	-0.011	1.324	2183255	1.22		97.7	5174	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.605	4.616	-0.011	1.002	1804447	1.02	Target=8.47		152	
613.00 > 169.00	4.605	4.616	-0.011	1.002	231970		7.78(4.23-12.70)		1231	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.616	4.627	-0.011	1.124	378024	1.04			6028	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.770	4.779	-0.009	1.261	172632	0.9280	Target=0.48		1502	
699.00 > 99.00	4.770	4.779	-0.009	1.261	341632		0.51(0.24-0.72)		2051	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.799	4.822	-0.023	1.044	1909411	1.02	Target=6.41		181	M
663.00 > 169.00	4.799	4.822	-0.023	1.044	273530		6.98(3.21-9.62)		474	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.997	5.008	-0.011	1.440	2241989	1.26		101	6438	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.997	5.008	-0.011	1.000	234844	1.17	Target=0.87		1052	M
713.00 > 219.00	4.987	5.008	-0.021	0.998	248103		0.95(0.43-1.30)		673	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.317	5.328	-0.011	1.000	2016874	0.99	Target=7.89		201	
813.00 > 169.00	5.317	5.328	-0.011	1.000	259711		7.77(3.94-11.83)		1503	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.317	5.328	-0.011	1.532	2546016	1.24		99.4	4909	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.602	5.611	-0.009	1.054	1627913	1.02	Target=9.39		156	M
913.00 > 169.00	5.593	5.611	-0.018	1.052	179766		9.06(4.69-14.08)		339	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

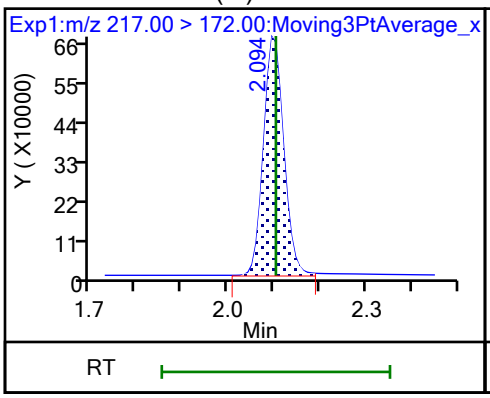
LCPFAS28NCICV_00014 Amount Added: 100.00 Units: uL

Report Date: 26-Jul-2023 18:46:58 Chrom Revision: 2.3 19-Jul-2023 18:28:48

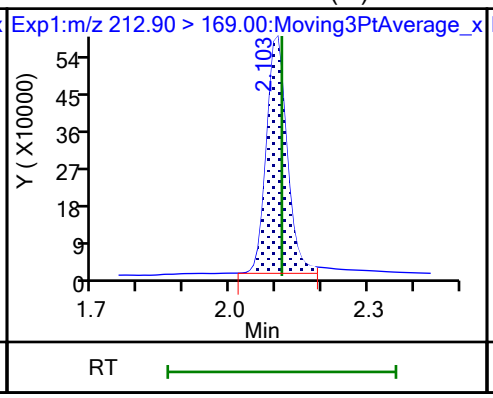
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL13.d
Injection Date: 26-Jul-2023 18:22:05 Instrument ID: LC812
Lims ID: ICV
Client ID:
Operator ID: LC812user ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

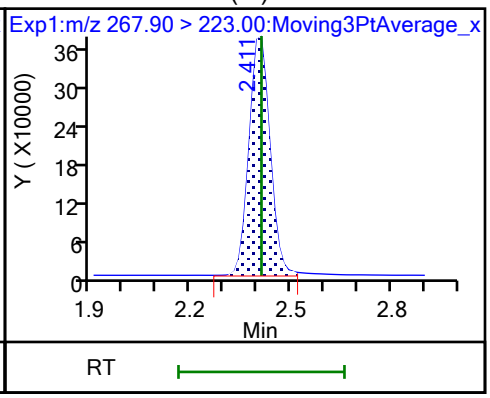
D 1 13C4 PFBA (M)



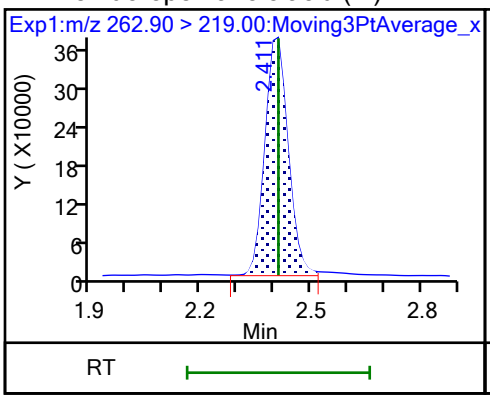
2 Perfluorobutanoic acid (M)



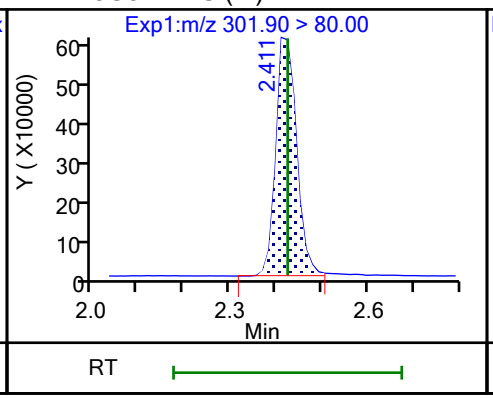
D 3 13C5 PFPeA (M)



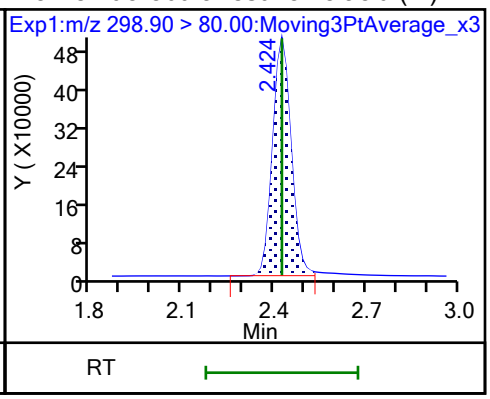
4 Perfluoropentanoic acid (M)



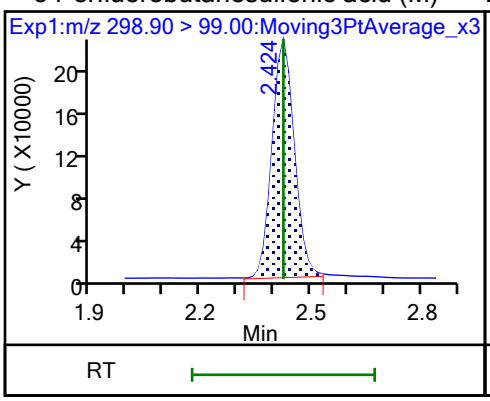
D 47 13C3 PFBS (M)



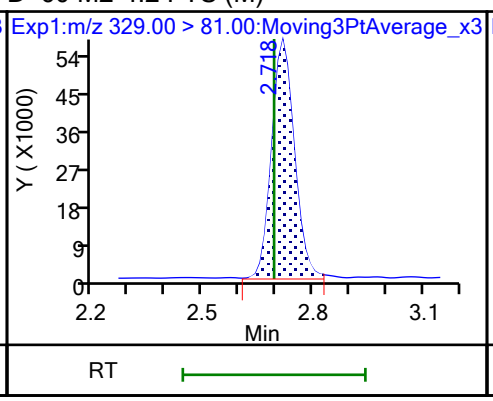
5 Perfluorobutanesulfonic acid (M)



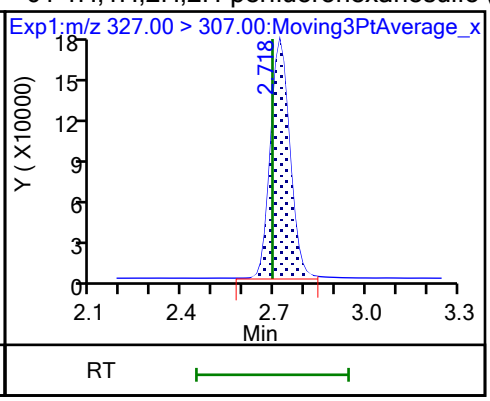
5 Perfluorobutanesulfonic acid (M)



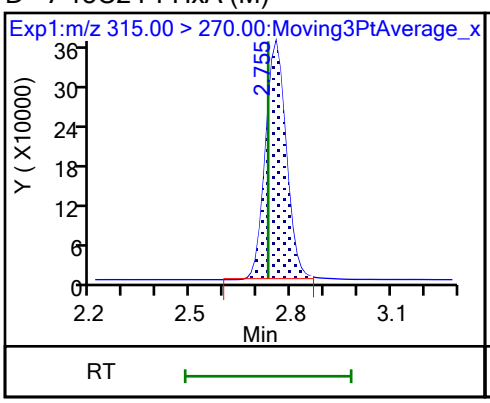
D 60 M2-4:2 FTS (M)



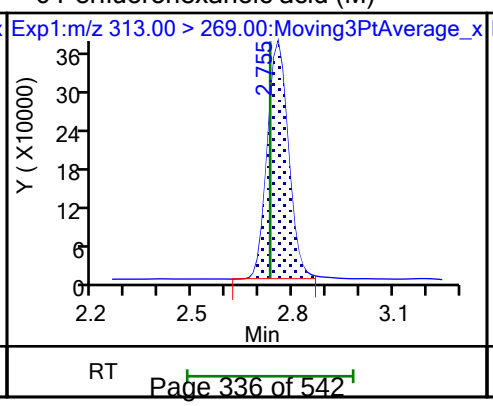
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



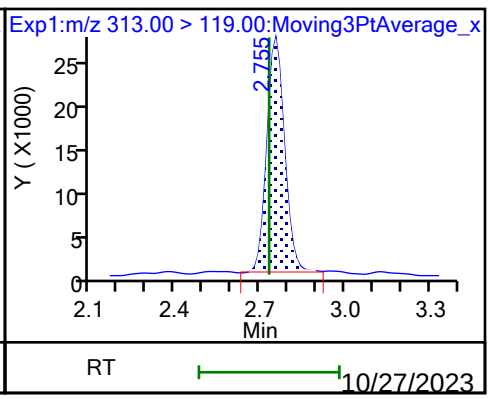
D 7 13C2 PFHxA (M)



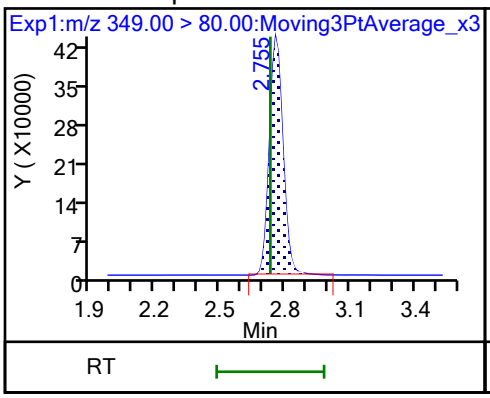
6 Perfluorohexanoic acid (M)



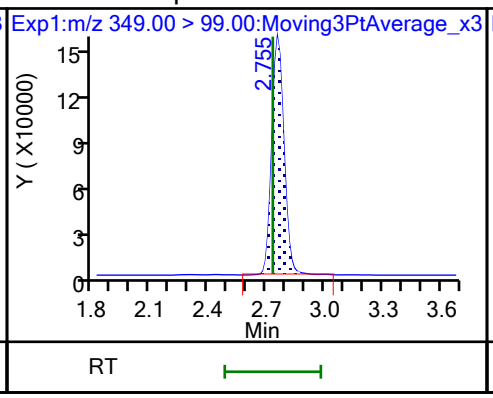
6 Perfluorohexanoic acid



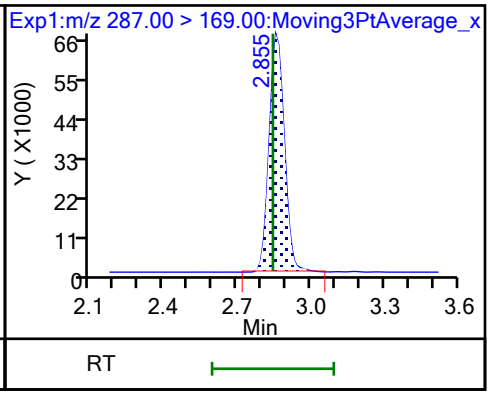
70 Perfluoropentanesulfonic acid



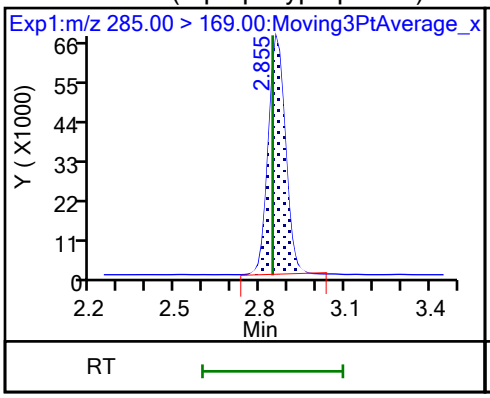
70 Perfluoropentanesulfonic acid



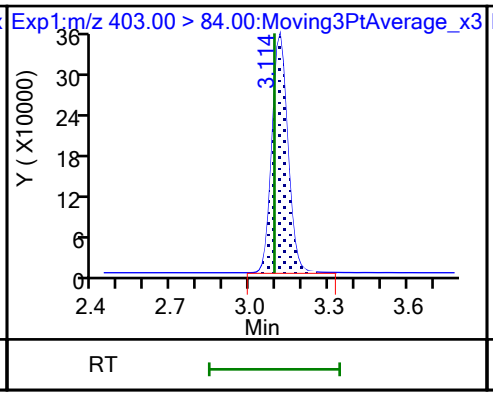
D 64 13C3 HFPO-DA



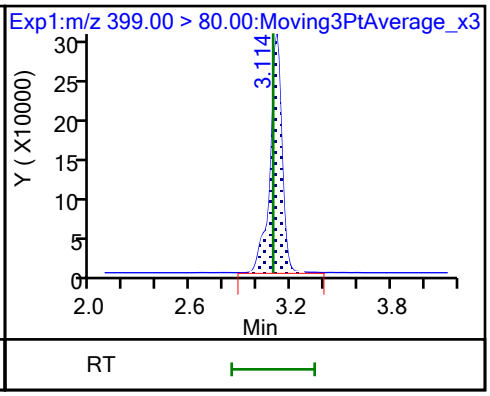
67 Perfluoro(2-propoxypropanoic) ac



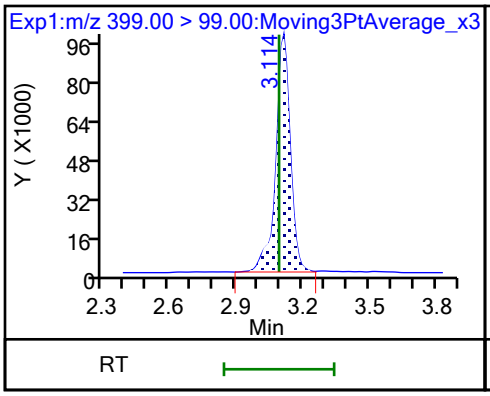
D 11 18O2 PFHxS



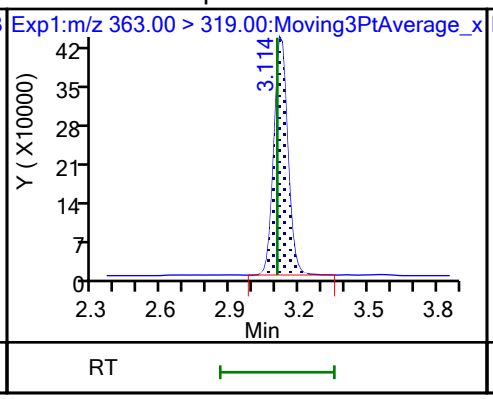
8 Perfluorohexanesulfonic acid



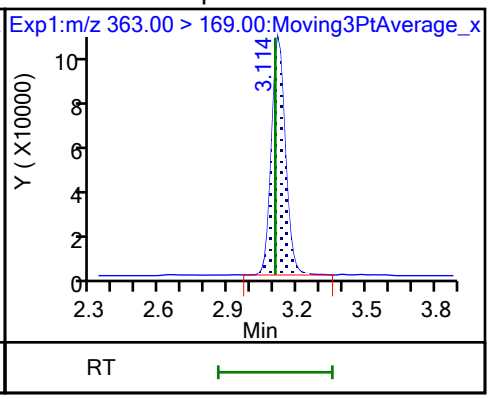
8 Perfluorohexanesulfonic acid



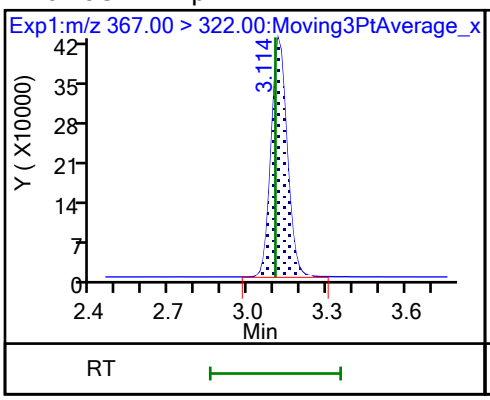
10 Perfluoroheptanoic acid



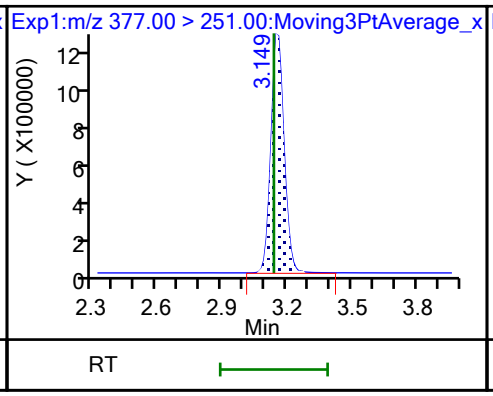
10 Perfluoroheptanoic acid



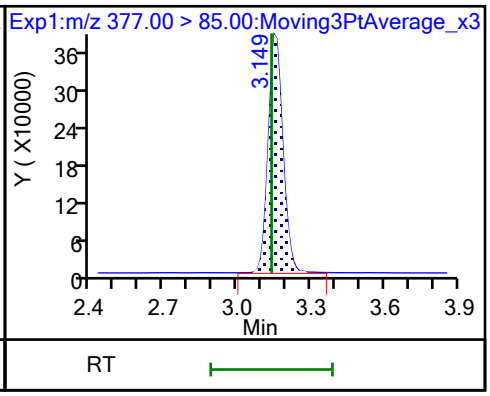
D 9 13C4 PFHpA



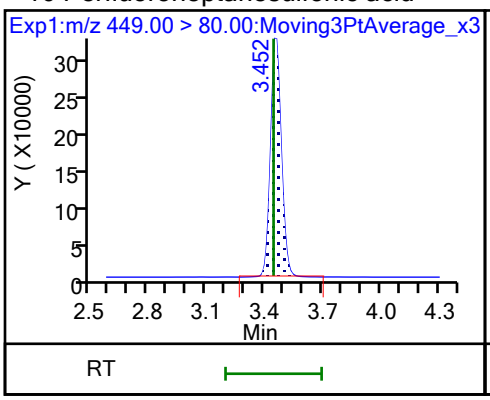
77 DONA



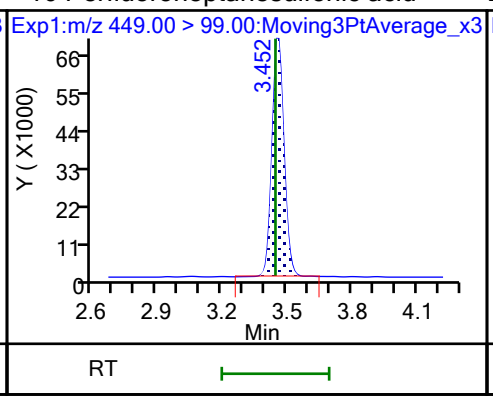
77 DONA



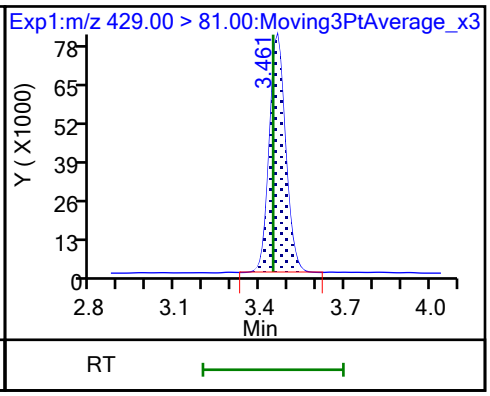
16 Perfluoroheptanesulfonic acid



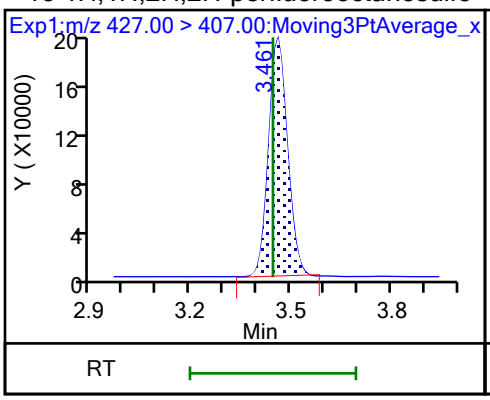
16 Perfluoroheptanesulfonic acid



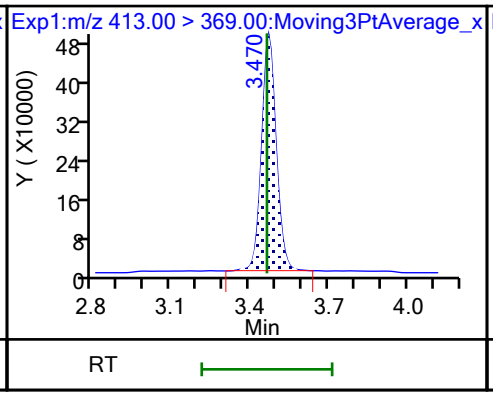
D 12 M2-6:2 FTS



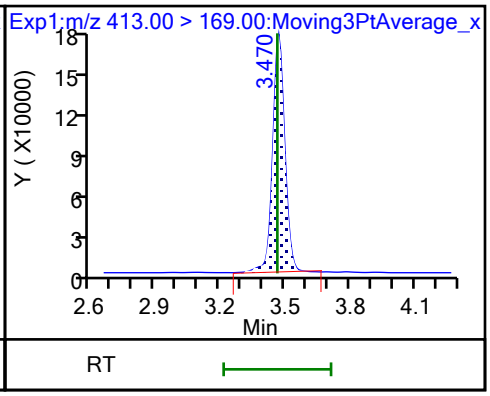
13 1H,1H,2H,2H-perfluorooctanesulfo



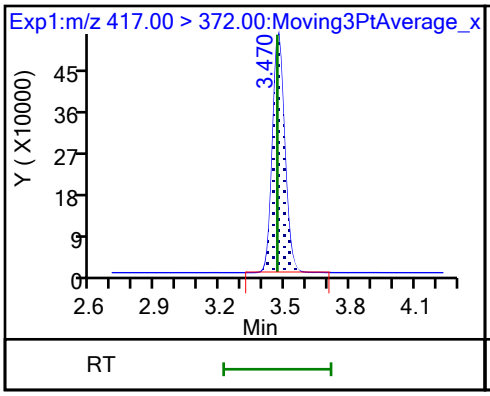
15 Perfluorooctanoic acid



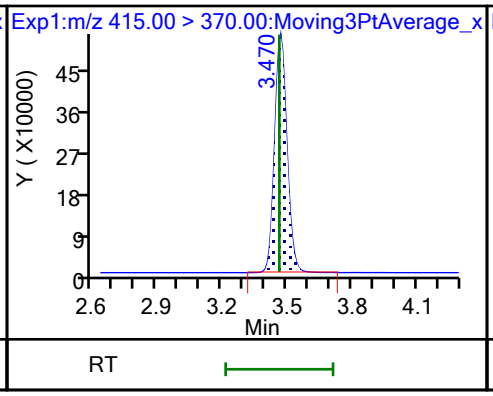
15 Perfluorooctanoic acid



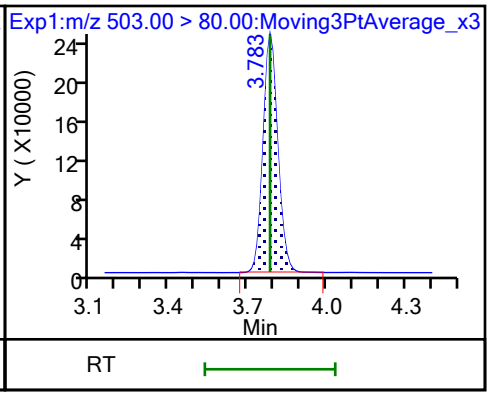
D 14 13C4 PFOA



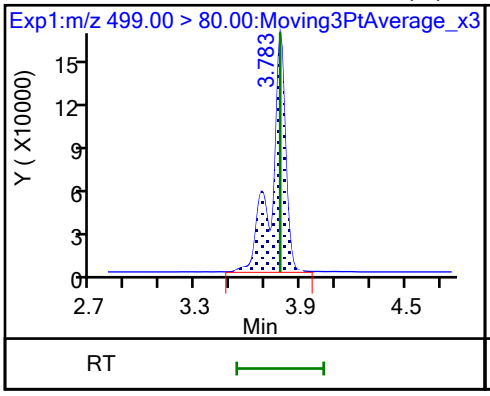
* 62 13C2 PFOA



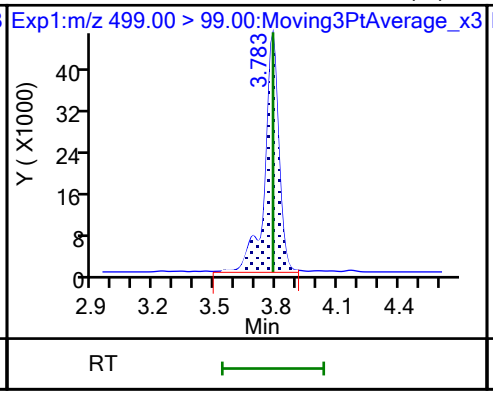
D 18 13C4 PFOS



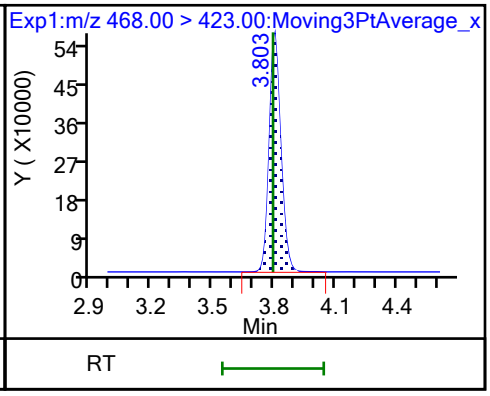
17 Perfluorooctanesulfonic acid (M)



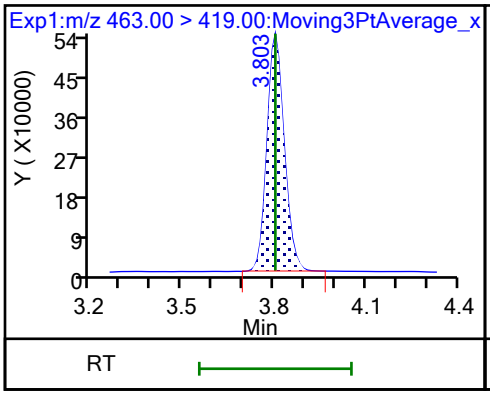
17 Perfluorooctanesulfonic acid (M)



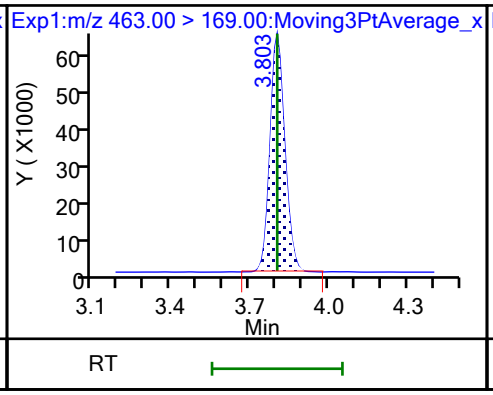
D 19 13C5 PFNA



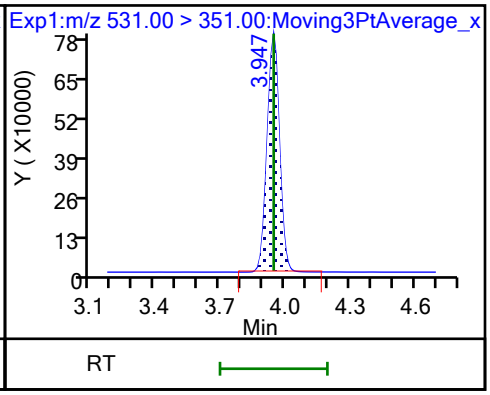
20 Perfluorononanoic acid



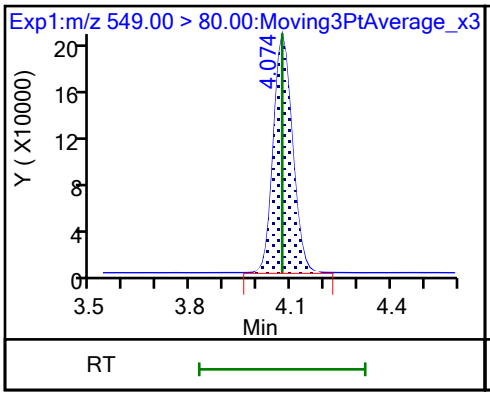
20 Perfluorononanoic acid



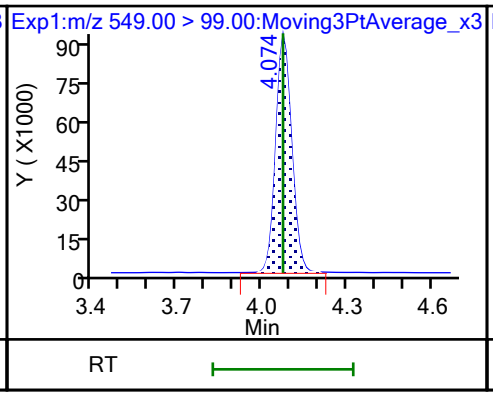
69 9-Chlorohexadecafluoro-3-oxanona



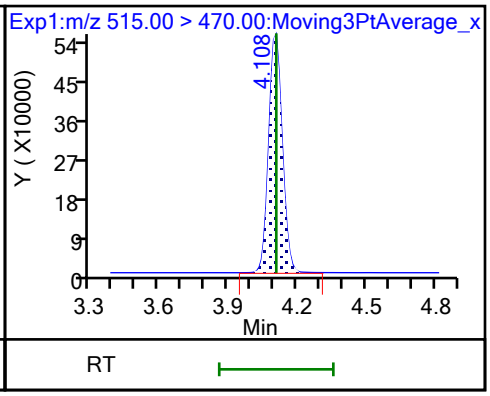
68 Perfluorononanesulfonic acid



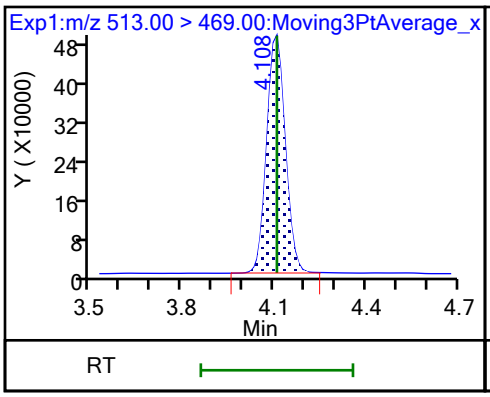
68 Perfluorononanesulfonic acid



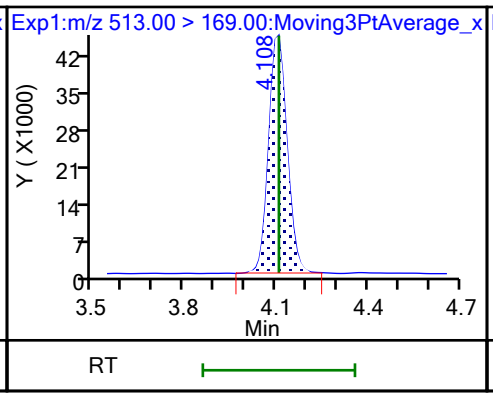
D 23 13C2 PFDA



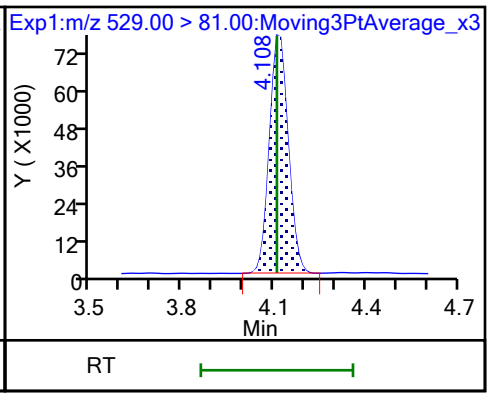
24 Perfluorodecanoic acid



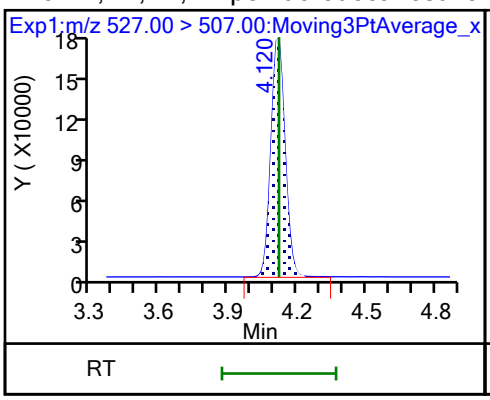
24 Perfluorodecanoic acid



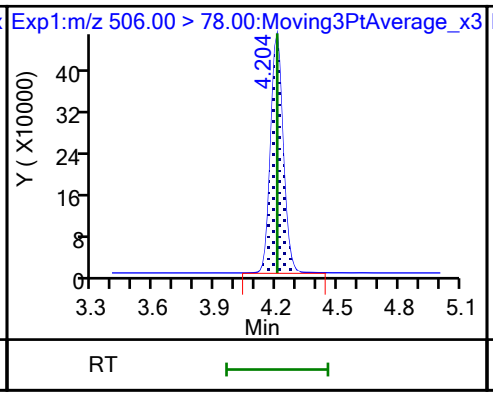
D 26 M2-8:2 FTS



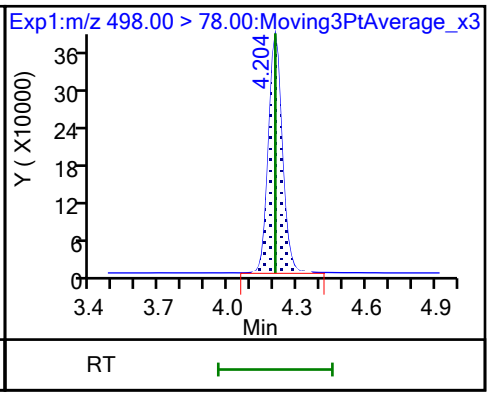
25 1H,1H,2H,2H-perfluorodecanesulfo



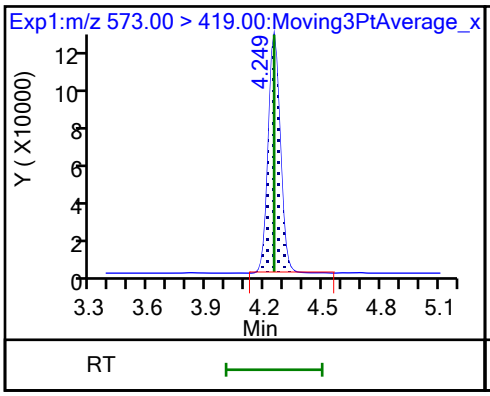
D 21 13C8 FOSA



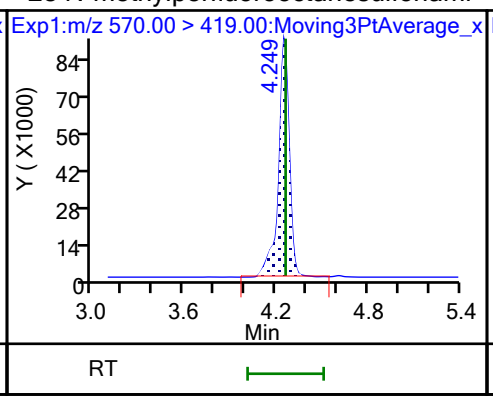
22 Perfluorooctanesulfonamide



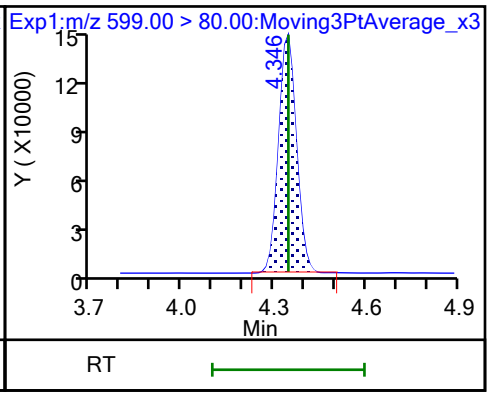
D 27 d3-NMeFOSAA



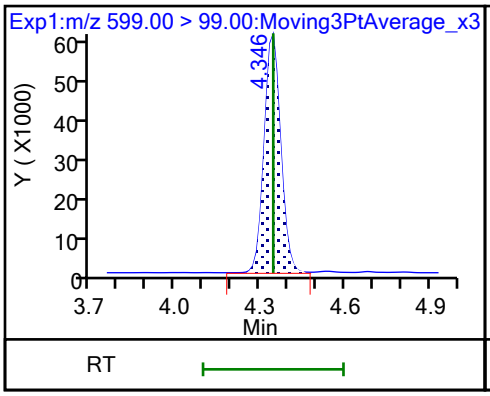
28 N-methylperfluorooctanesulfonami



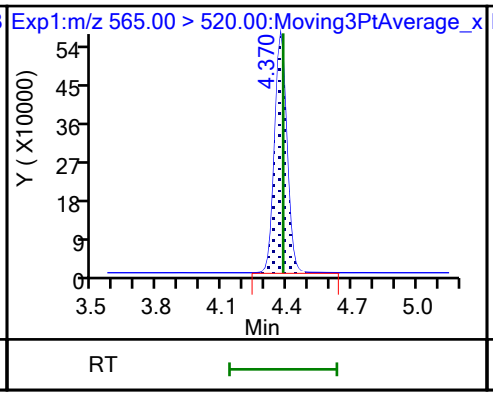
29 Perfluorodecanesulfonic acid



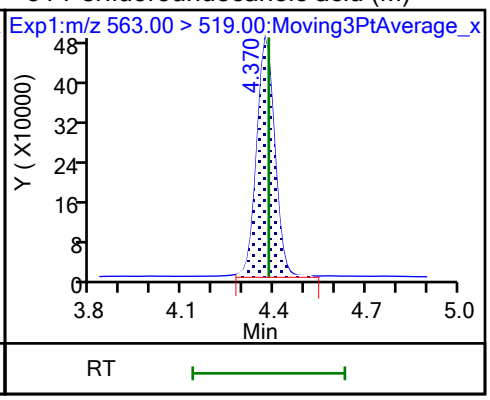
29 Perfluorodecanesulfonic acid



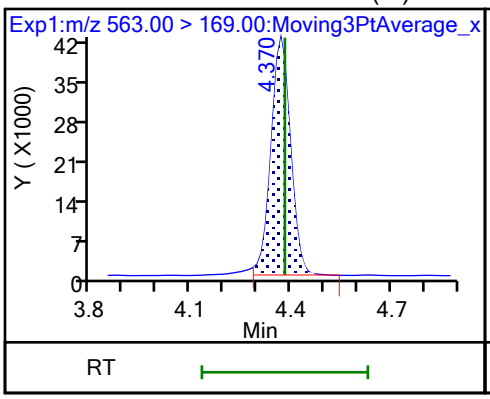
D 30 13C2 PFUnA



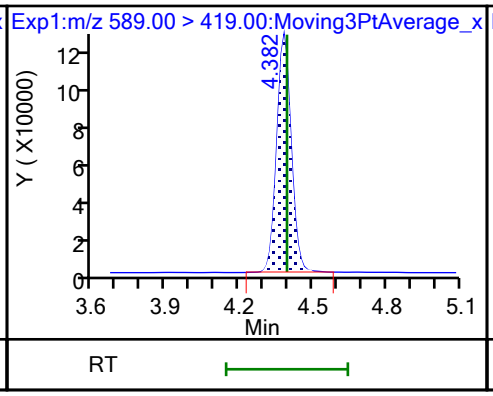
31 Perfluoroundecanoic acid (M)



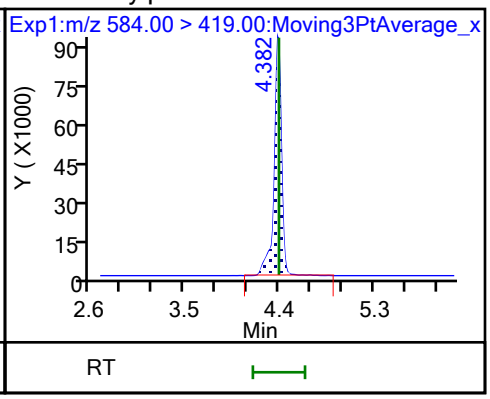
31 Perfluoroundecanoic acid (M)



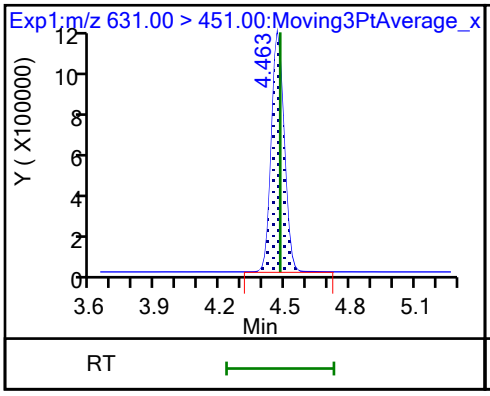
D 32 d5-NEtFOSAA



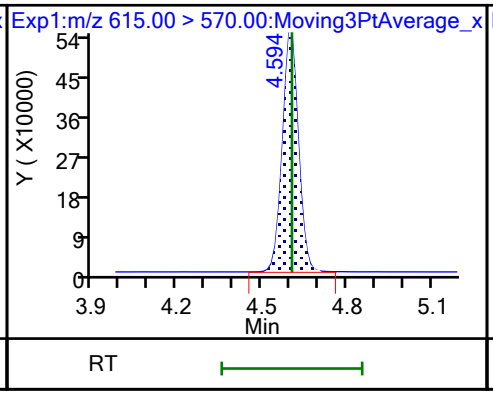
33 N-ethylperfluorooctanesulfonamid



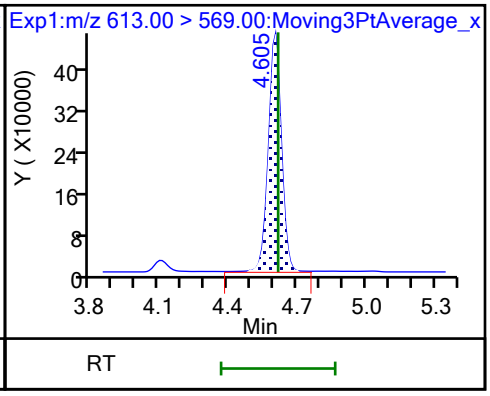
66 11-Chloroeicosafluoro-3-oxaundec



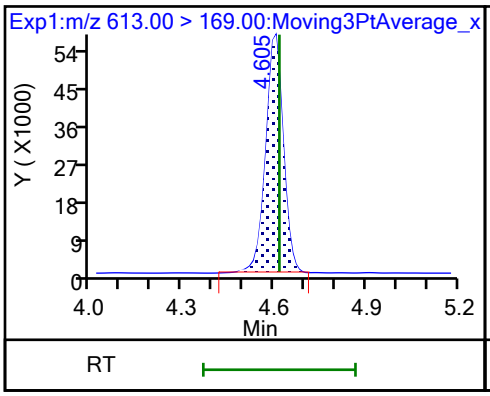
D 36 13C2 PFDoA



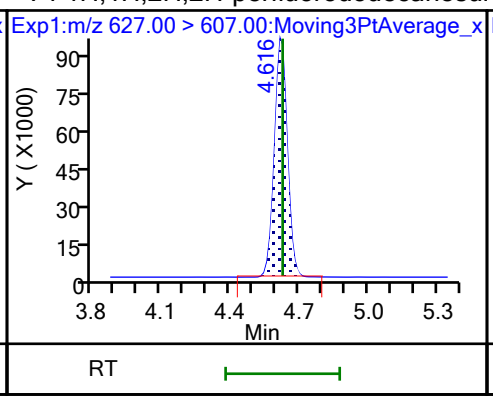
37 Perfluorododecanoic acid



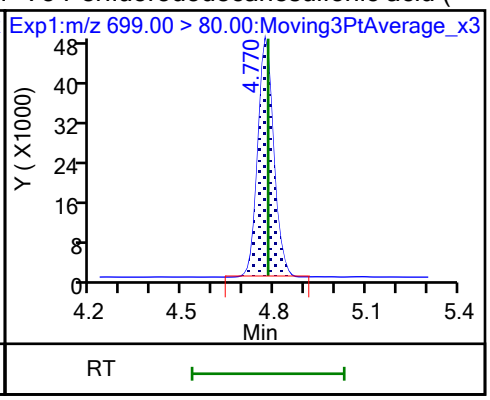
37 Perfluorododecanoic acid



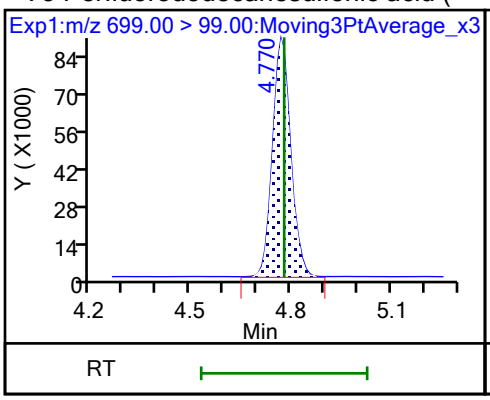
74 1H,1H,2H,2H-perfluorododecanesul



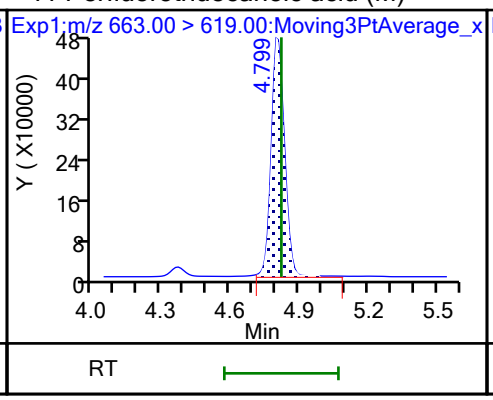
75 Perfluorododecanesulfonic acid (



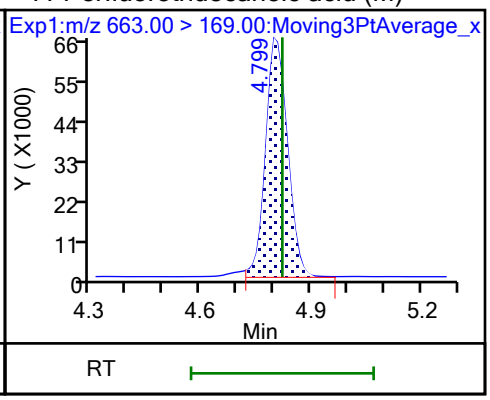
75 Perfluorododecanesulfonic acid (



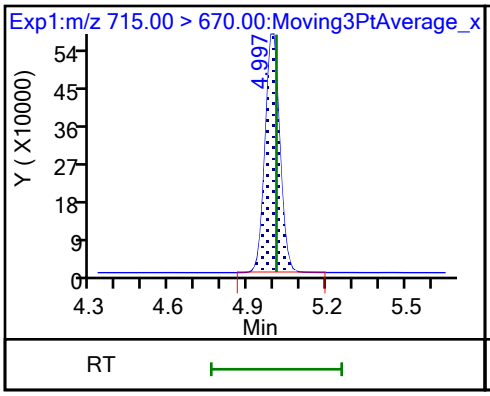
41 Perfluorotridecanoic acid (M)



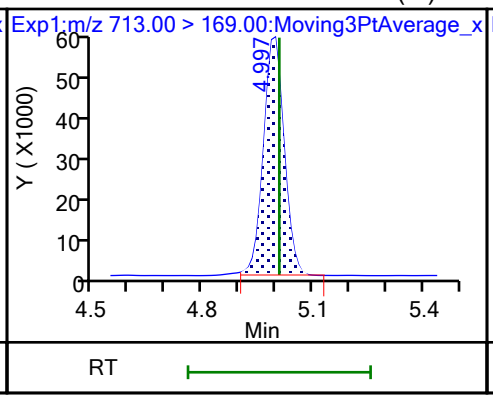
41 Perfluorotridecanoic acid (M)



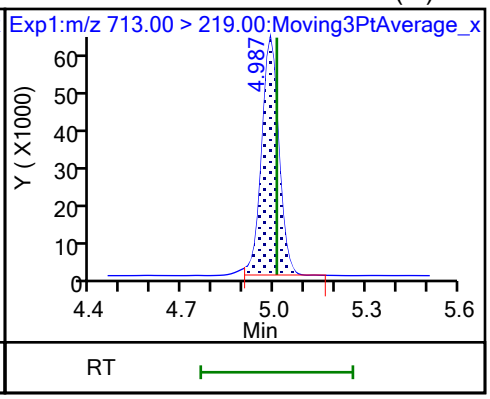
D 43 13C2 PFTeDA



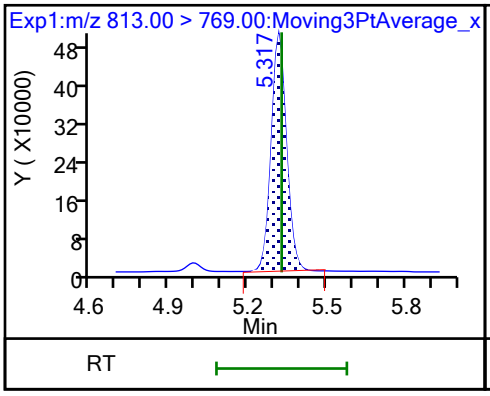
42 Perfluorotetradecanoic acid (M)



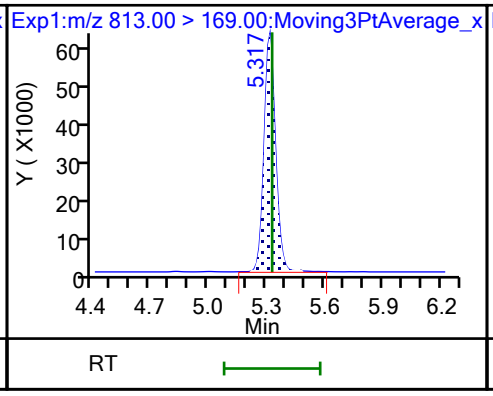
42 Perfluorotetradecanoic acid (M)



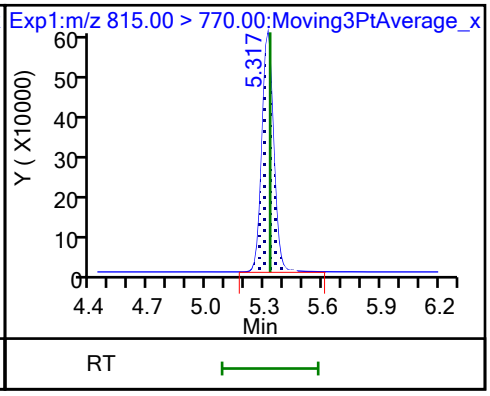
45 Perfluorohexadecanoic acid



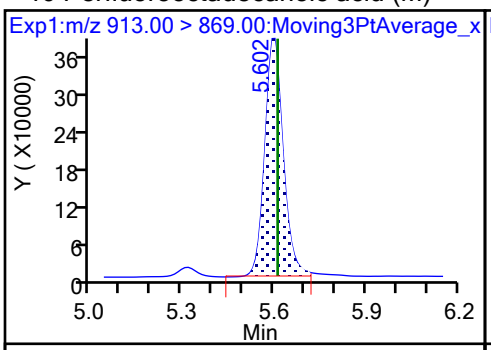
45 Perfluorohexadecanoic acid



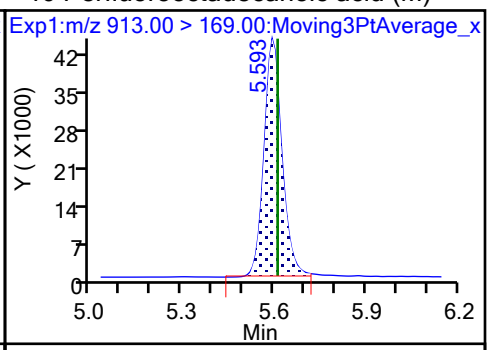
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		1.196		0.124	0.125	-0.4	50.0
Perfluoropentanoic acid	AveID	1.079	1.275		0.0591	0.0500	18.1	50.0
Perfluorobutanesulfonic acid	AveID	1.117	1.240		0.0492	0.0444	11.0	50.0
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.667		0.0506	0.0469	8.0	50.0
Perfluorohexanoic acid	AveID	1.100	1.099		0.0500	0.0500	-0.1	50.0
Perfluoropentanesulfonic acid	AveID	1.306	1.386		0.0499	0.0471	6.1	50.0
HFPODA	AveID	1.001	1.202		0.120	0.100	20.0	50.0
Perfluoroheptanoic acid	AveID	1.121	1.158		0.0516	0.0500	3.3	50.0
Perfluorohexanesulfonic acid	AveID	1.107	1.137		0.0469	0.0457	2.7	50.0
DONA	AveID	5.754	6.340		0.0521	0.0473	10.2	50.0
Perfluoroheptanesulfonic acid	AveID	1.445	1.534		0.0506	0.0477	6.1	50.0
6:2 Fluorotelomer sulfonic acid	AveID	2.733	3.238		0.141	0.119	18.5	50.0
Perfluorooctanoic acid	AveID	1.065	1.153		0.0541	0.0500	8.2	50.0
Perfluorooctanesulfonic acid	AveID	1.166	1.254		0.0499	0.0464	7.5	50.0
Perfluorononanoic acid	AveID	0.9800	0.9579		0.0489	0.0500	-2.3	50.0
9Cl-PF3ONS	AveID	3.569	4.158		0.0543	0.0467	16.5	50.0
Perfluorononanesulfonic acid	AveID	0.8874	0.8228		0.0446	0.0481	-7.3	50.0
Perfluorodecanoic acid	AveID	0.999	1.005		0.0503	0.0500	0.6	50.0
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.579		0.0562	0.0480	17.1	50.0
Perfluorooctanesulfonamide	AveID	0.9539	1.006		0.0527	0.0500	5.4	50.0
NMeFOSAA	AveID	0.9074	1.018		0.140	0.125	12.2	50.0
Perfluorodecanesulfonic acid	AveID	0.6830	0.6403		0.0452	0.0483	-6.2	50.0
Perfluoroundecanoic acid	AveID	1.031	1.062		0.0515	0.0500	3.1	50.0
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	1.102		0.138	0.125	10.2	50.0
11Cl-PF3OUdS	AveID	5.474	6.185		0.0533	0.0472	13.0	50.0
Perfluorododecanoic acid	AveID	1.018	0.996		0.0489	0.0500	-2.2	50.0
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.758		0.0644	0.0482	33.6	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2146		0.0449	0.0484	-7.3	50.0
Perfluorotridecanoic acid	AveID	1.070	1.138		0.0532	0.0500	6.4	50.0
Perfluorotetradecanoic acid	AveID	0.1118	0.1294		0.0579	0.0500	15.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.113		0.0557	0.0500	11.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7867		0.0504	0.0500	0.7	50.0
13C4 PFBA	Ave	0.9917	0.9573		1.21	1.25	-3.5	
13C5 PFPeA	Ave	0.7696	0.7248		1.18	1.25	-5.8	
13C3 PFBS	Ave	1.041	0.8566		0.956	1.16	-17.7	
M2-4:2 FTS	Ave	0.1204	0.0991		0.961	1.17	-17.7	

FORM VII 537 (modified)

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCVLIS 200-196686/5 Calibration Date: 10/23/2023 15:47

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7870		1.26	1.25	0.5	
13C3 HFPO-DA	Ave	0.1516	0.1401		1.16	1.25	-7.5	
13C4 PFHpA	Ave	0.8590	0.8057		1.17	1.25	-6.2	
18O2 PFHxS	Ave	0.7464	0.6670		1.06	1.18	-10.6	
M2-6:2 FTS	Ave	0.1551	0.1371		1.05	1.19	-11.6	
13C4 PFOA	Ave	0.9731	0.9317		1.20	1.25	-4.3	
13C4 PFOS	Ave	0.4742	0.4296		1.08	1.20	-9.4	
13C5 PFNA	Ave	1.059	1.034		1.22	1.25	-2.4	
13C2 PFDA	Ave	1.109	1.099		1.24	1.25	-0.9	
M2-8:2 FTS	Ave	0.1744	0.1424		0.978	1.20	-18.3	
13C8 FOSA	Ave	0.9462	0.8471		1.12	1.25	-10.5	
d3-NMeFOSAA	Ave	0.2650	0.2316		1.09	1.25	-12.6	
13C2 PFUnA	Ave	1.047	1.010		1.21	1.25	-3.5	
d5-NEtFOSAA	Ave	0.2552	0.2406		1.18	1.25	-5.7	
13C2 PFDoA	Ave	1.064	1.081		1.27	1.25	1.7	
13C2 PFTeDA	Ave	1.059	1.041		1.23	1.25	-1.7	
13C2 PFHxDA	Ave	1.221	1.217		1.25	1.25	-0.3	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Lims ID: CCVLIS
Client ID:
Sample Type: CCVLIS
Inject. Date: 23-Oct-2023 15:47:27 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVLIS
Misc. Info.: 200-0057509-005 Plate: 1 Rack: 1
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 15:12:13 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1616

First Level Reviewer: nampitakw Date: 24-Oct-2023 11:54:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.122	2.122	0.0	0.602	2165365	1.21		96.5	1549	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.004	258970	0.1244		99.6	28.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.692	1639412	1.18		94.2	2238	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.006	83586	0.0591		118	2.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.700	1802004	0.9563		82.3	88832	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	85221	0.0492	Target=2.06	111	77.3	M
298.90 > 99.00	2.467	2.467	0.0	1.000	41747		2.04(1.03-3.09)		15.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	30812	0.0506		108	208	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.783	209392	0.9609		82.3	158	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1780135	1.26		101	1668	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	78281	0.0500	Target=14.12	99.9	17.5	M
313.00 > 119.00	2.797	2.797	0.0	1.000	5833		13.42(7.06-21.17)		8.2	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.887	78694	0.0499	Target=2.72	106	125	
349.00 > 99.00	2.810	2.810	0.0	0.887	26871		2.93(1.36-4.09)		60.2	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	30475	0.1200		120	211	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.825	316943	1.16		92.5	3607	
D 11 18O2 PFHxS										
403.00 > 84.00	3.168	3.168	0.0	0.899	1427286	1.06		89.4	6130	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.168	3.168	0.0	1.000	62731	0.0469	Target=3.32	103	156	M
399.00 > 99.00	3.168	3.168	0.0	1.000	20807		3.01(1.66-4.98)		20.2	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.168	3.168	0.0	1.000	84395	0.0516	Target=4.17	103	18.3	M
363.00 > 169.00	3.168	3.168	0.0	1.000	19852		4.25(2.09-6.26)		43.5	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.168	3.168	0.0	0.899	1822385	1.17		93.8	10832	
77 DONA										M
377.00 > 251.00	3.203	3.203	0.0	0.838	232884	0.0521	Target=3.33	110	272	
377.00 > 85.00	3.203	3.203	0.0	0.838	61876		3.76(1.66-4.99)		109	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.505	3.505	0.0	0.917	56810	0.0506	Target=4.83	106	126	
449.00 > 99.00	3.514	3.505	0.009	0.919	12577		4.52(2.41-7.24)		41.6	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.505	3.505	0.0	0.995	294545	1.05		88.4	543	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.514	3.514	0.0	1.003	95292	0.1406		118	138	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.514	3.514	0.0	0.997	97192	0.0541	Target=2.88	108	4.7	M
413.00 > 169.00	3.514	3.514	0.0	0.997	39538		2.46(1.44-4.32)		71.9	M
D 14 13C4 PFOA										
417.00 > 372.00	3.523	3.523	0.0	1.000	2107370	1.20		95.7	6086	
* 62 13C2 PFOA										
415.00 > 370.00	3.523	3.523	0.0		2261885	1.25			8183	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.822	3.822	0.0	1.000	45243	0.0499	Target=4.24	108	88.9	M
499.00 > 99.00	3.822	3.822	0.0	1.000	11094		4.08(2.12-6.37)		27.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.822	3.822	0.0	1.085	928977	1.08		90.6	4921	
20 Perfluorononanoic acid										
463.00 > 419.00	3.845	3.845	0.0	1.000	89574	0.0489	Target=8.34	97.7	12.4	
463.00 > 169.00	3.845	3.845	0.0	1.000	11550		7.76(4.17-12.51)		121	
D 19 13C5 PFNA										
468.00 > 423.00	3.845	3.845	0.0	1.092	2337864	1.22		97.6	6498	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.983	3.983	0.0	1.042	150787	0.0543		116	608	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.105	4.105	0.0	1.074	30768	0.0446	Target=2.17	92.7	225	
549.00 > 99.00	4.105	4.105	0.0	1.074	13897		2.21(1.08-3.25)		53.0	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.129	4.129	0.0	1.000	99944	0.0503	Target=11.44	101	28.0	M
513.00 > 169.00	4.141	4.129	0.012	1.003	9567		10.45(5.72-17.16)		53.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.129	4.129	0.0	1.172	2486286	1.24		99.1	8282	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.141	4.141	0.0	1.176	308613	0.9779		81.7	576	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.141	4.141	0.0	1.000	31903	0.0562		117	299	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.234	4.234	0.0	1.202	1915989	1.12		89.5	2754	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.234	4.234	0.0	1.000	77077	0.0527		105	452	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.270	4.270	0.0	1.212	523930	1.09		87.4	1392	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.270	4.270	0.0	1.000	53350	0.1403		112	142	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.366	4.366	0.0	1.142	24017	0.0452	Target=2.37	93.8	186	M
599.00 > 99.00	4.354	4.366	-0.012	1.139	9428		2.55(1.19-3.56)		85.0	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.390	4.390	0.0	1.246	2285192	1.21		96.5	7490	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.390	4.390	0.0	1.000	97109	0.0515	Target=12.20	103	22.1	
563.00 > 169.00	4.390	4.390	0.0	1.000	10875		8.93(6.10-18.31)		203	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.401	4.401	0.0	1.249	544262	1.18		94.3	1595	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.401	4.401	0.0	1.000	59994	0.1378		110	240	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.473	4.473	0.0	1.170	226708	0.0533		113	413	
D 36 13C2 PFDoA										
615.00 > 570.00	4.613	4.613	0.0	1.310	2446106	1.27		102	10235	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.613	0.0	1.000	97419	0.0489	Target=8.47	97.8	6.6	
613.00 > 169.00	4.602	4.613	-0.011	0.998	12328		7.90(4.23-12.70)		101	
74 1H,1H,2H,2H-perfluorododecanesul										M
627.00 > 607.00	4.624	4.624	0.0	1.117	21839	0.0644		134	295	M
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.777	4.777	0.0	1.250	8075	0.0449	Target=0.48	92.7	126	
699.00 > 99.00	4.777	4.777	0.0	1.250	18264		0.44(0.24-0.72)		360	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.806	4.806	0.0	1.042	111351	0.0532	Target=6.41	106	7.1	M
663.00 > 169.00	4.806	4.806	0.0	1.042	17275		6.45(3.21-9.62)		196	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.982	4.982	0.0	1.414	2355579	1.23		98.3	5019	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.982	4.982	0.0	1.000	12192	0.0579	Target=0.87	116	174	
713.00 > 219.00	4.982	4.982	0.0	1.000	12559		0.97(0.43-1.30)		160	M

Report Date: 25-Oct-2023 15:12:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.292	5.292	0.0	1.502	2751956	1.25		99.7	6121	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.292	5.292	0.0	1.000	122528	0.0557	Target=7.89	111	8.5	M
813.00 > 169.00	5.292	5.292	0.0	1.000	14094		8.69(3.94-11.83)		156	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.563	0.0	1.051	86604	0.0504	Target=9.39	101	11.5	M
913.00 > 169.00	5.554	5.563	-0.009	1.049	8285		10.45(4.69-14.08)		139	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

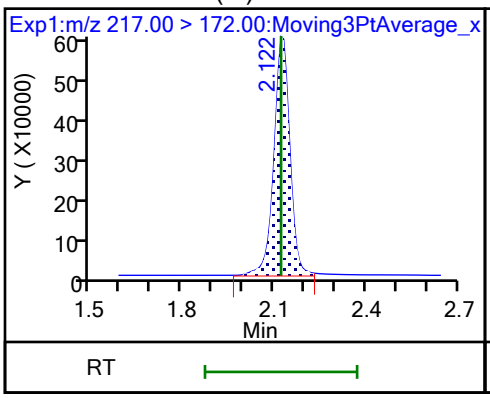
PFAS32NCLOQV_00028 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 15:12:14 Chrom Revision: 2.3 18-Oct-2023 21:16:54

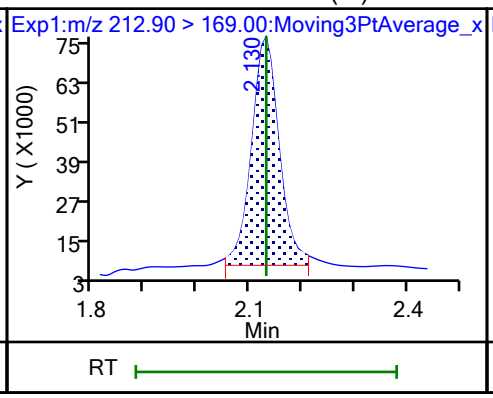
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57509.b\PA231023A05.d
Injection Date: 23-Oct-2023 15:47:27 Instrument ID: LC812
Lims ID: CCVLIS
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

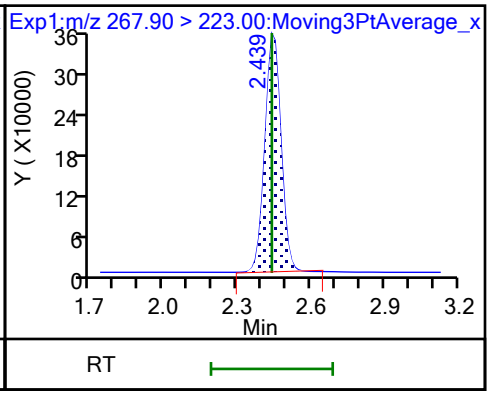
D 1 13C4 PFBA (M)



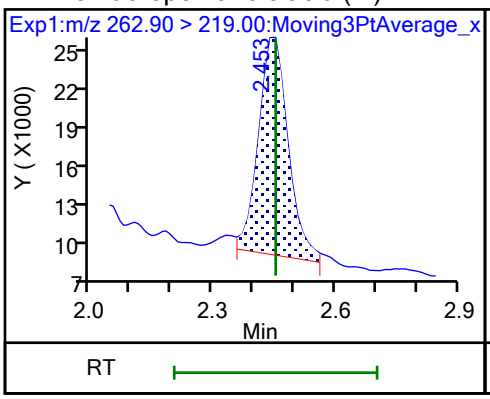
2 Perfluorobutanoic acid (M)



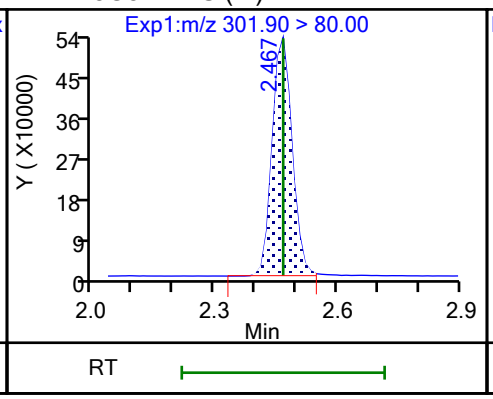
D 3 13C5 PFPeA



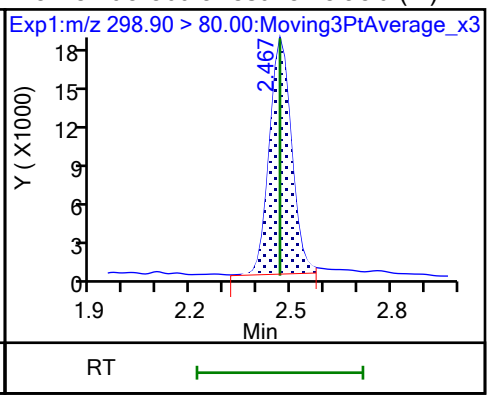
4 Perfluoropentanoic acid (M)



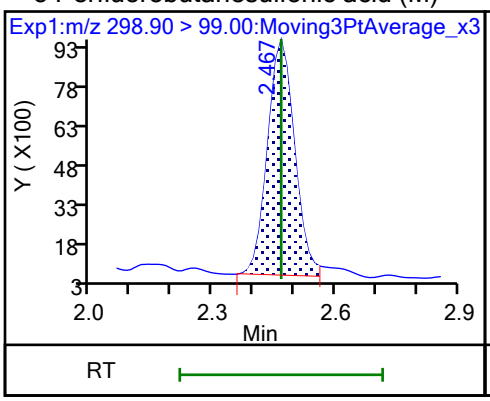
D 47 13C3 PFBS (M)



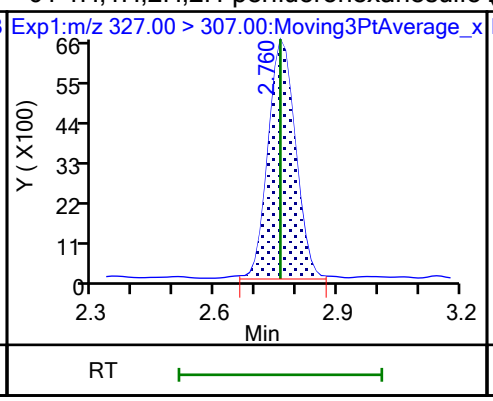
5 Perfluorobutanesulfonic acid (M)



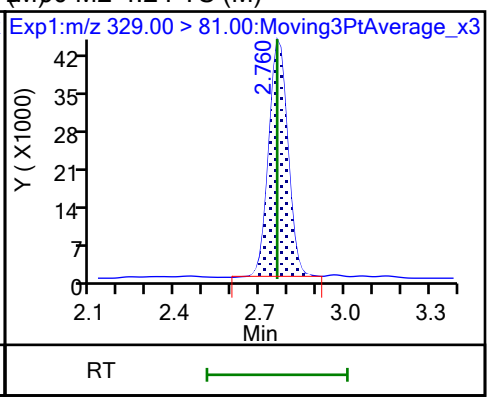
5 Perfluorobutanesulfonic acid (M)



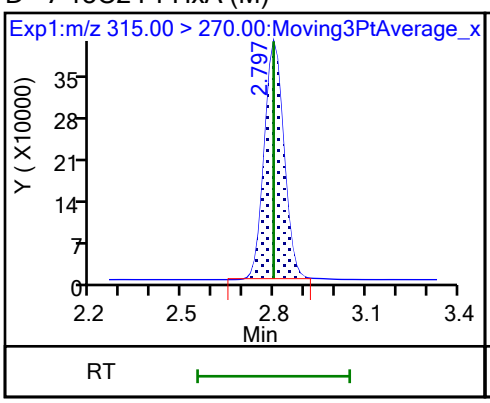
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



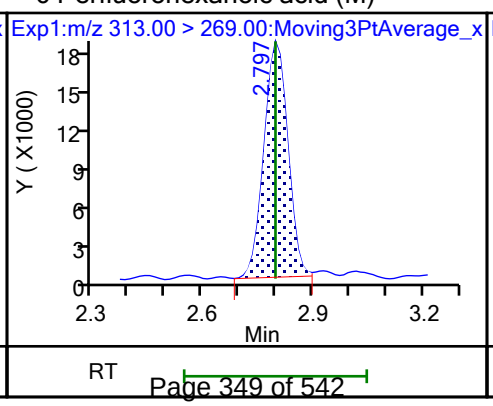
60 M2-4:2 FTS (M)



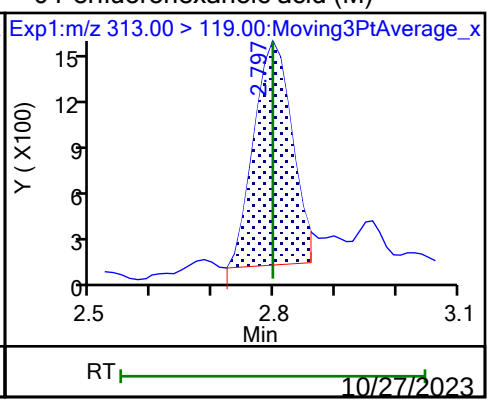
D 7 13C2 PFHxA (M)



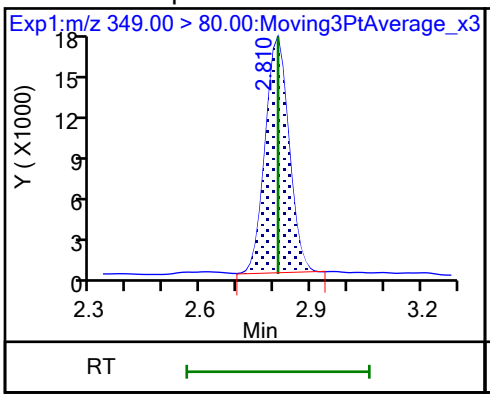
6 Perfluorohexanoic acid (M)



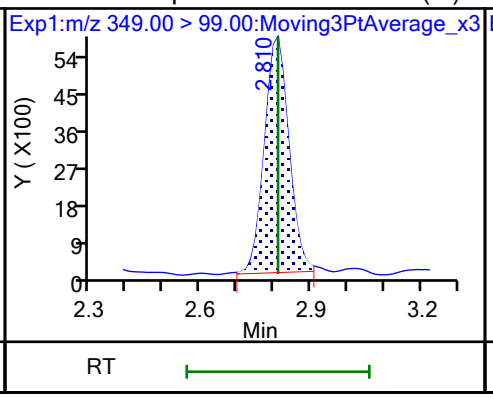
6 Perfluorohexanoic acid (M)



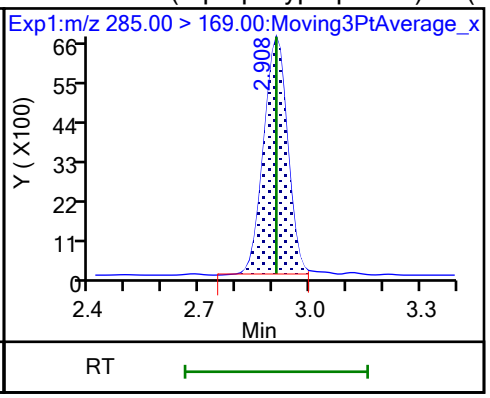
70 Perfluoropentanesulfonic acid



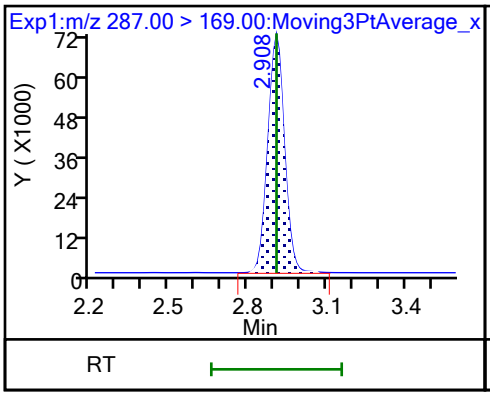
70 Perfluoropentanesulfonic acid (M)



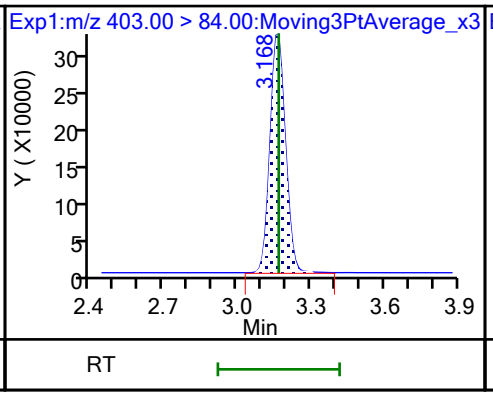
67 Perfluoro(2-propoxypropanoic) ac (M)



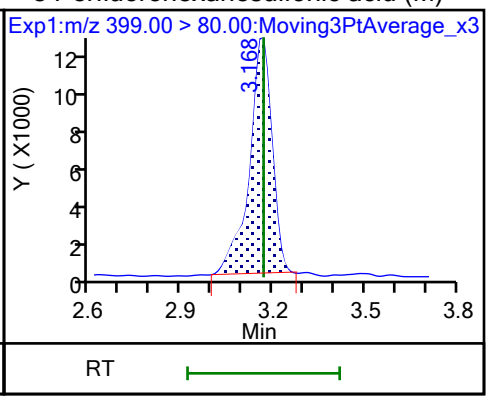
D 64 13C3 HFPO-DA



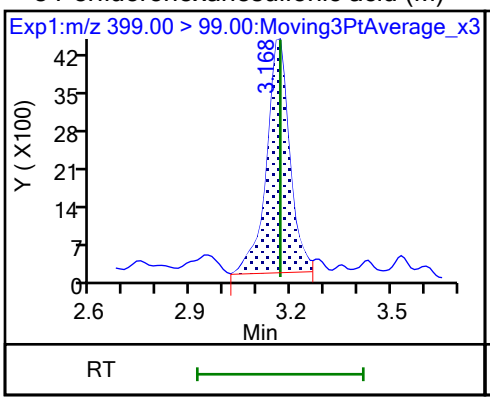
D 11 18O2 PFHxS



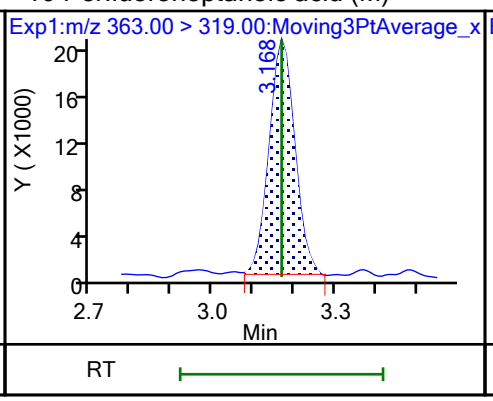
8 Perfluorohexanesulfonic acid (M)



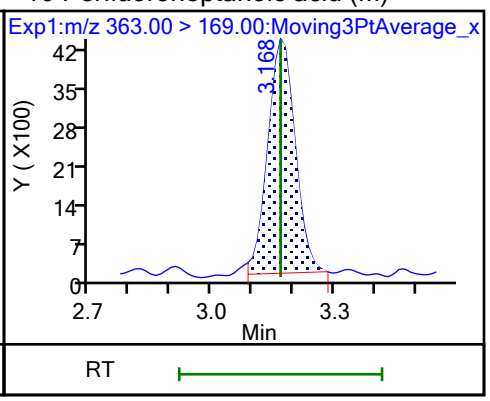
8 Perfluorohexanesulfonic acid (M)



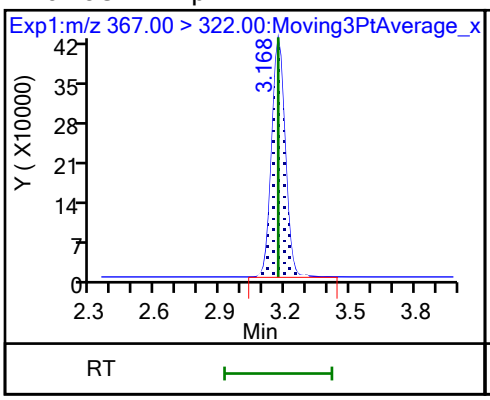
10 Perfluoroheptanoic acid (M)



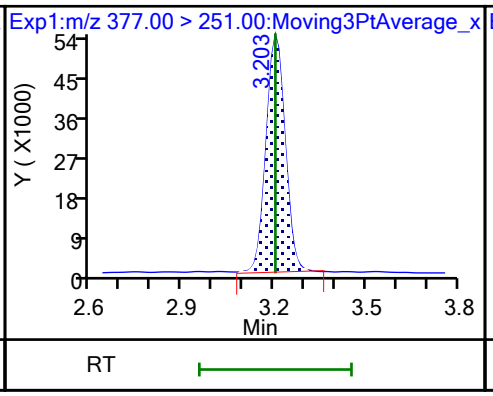
10 Perfluoroheptanoic acid (M)



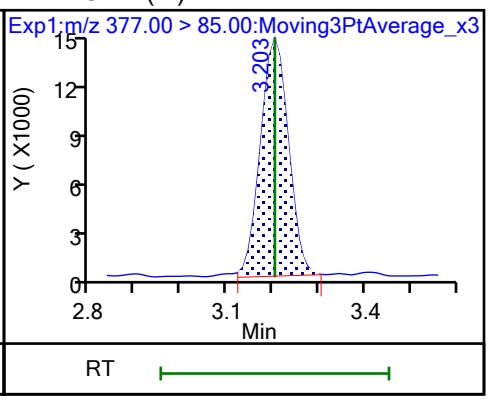
D 9 13C4 PFHpA



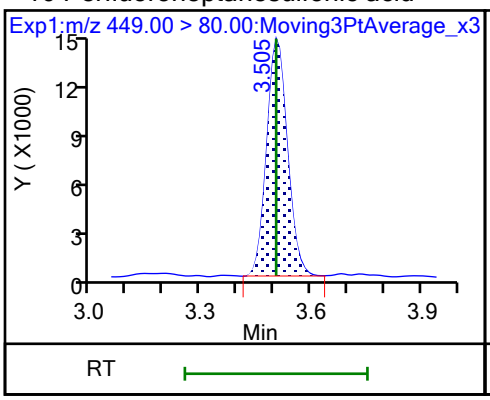
77 DONA



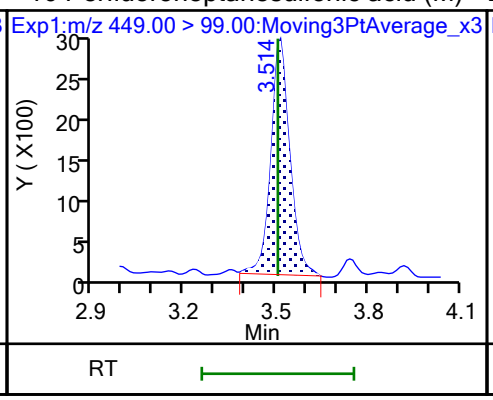
77 DONA (M)



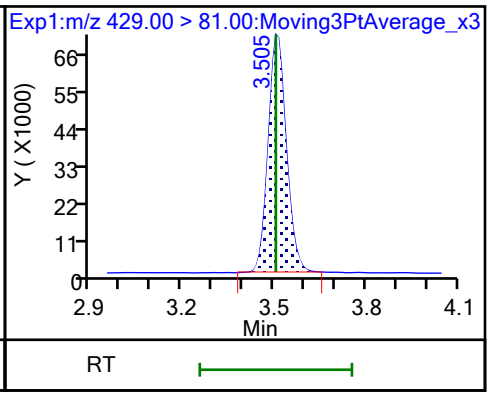
16 Perfluoroheptanesulfonic acid



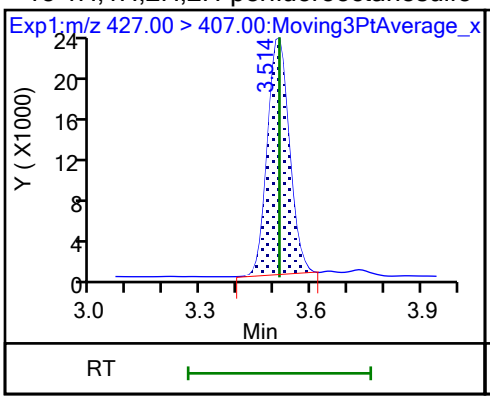
16 Perfluoroheptanesulfonic acid (M)



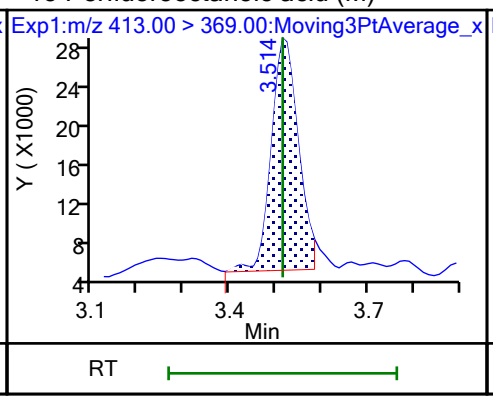
D 12 M2-6:2 FTS



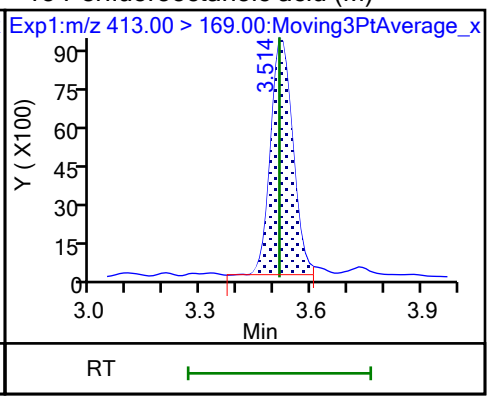
13 1H,1H,2H,2H-perfluorooctanesulfo



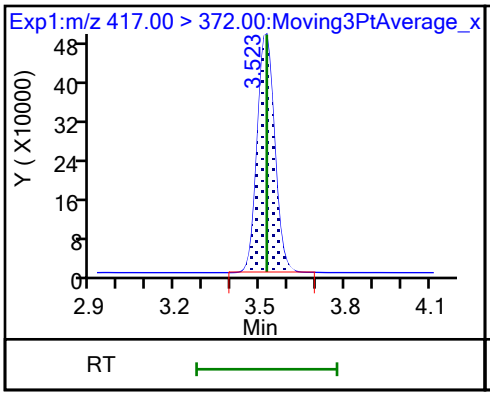
15 Perfluorooctanoic acid (M)



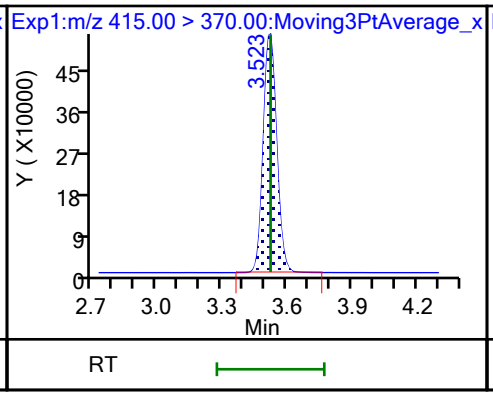
15 Perfluorooctanoic acid (M)



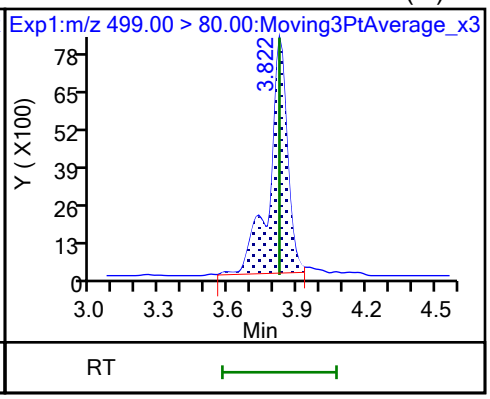
D 14 13C4 PFOA



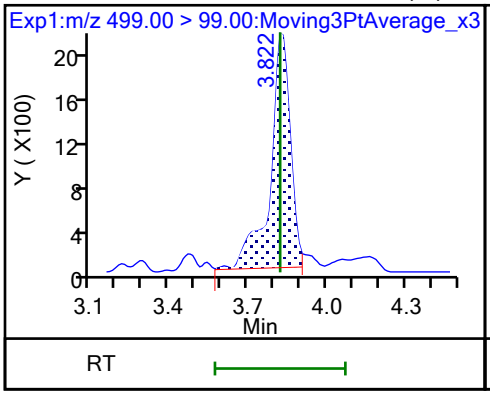
* 62 13C2 PFOA



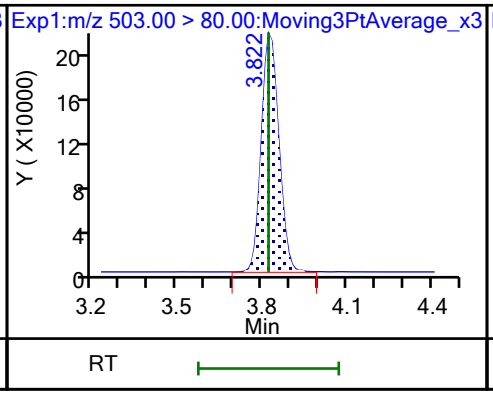
17 Perfluorooctanesulfonic acid (M)



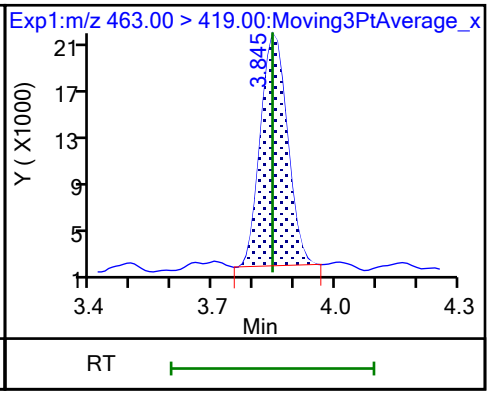
17 Perfluorooctanesulfonic acid (M)



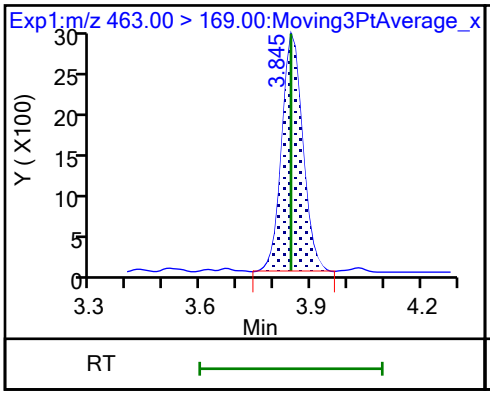
D 18 13C4 PFOS



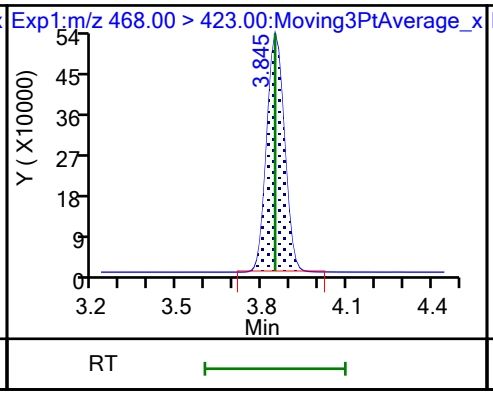
20 Perfluorononanoic acid



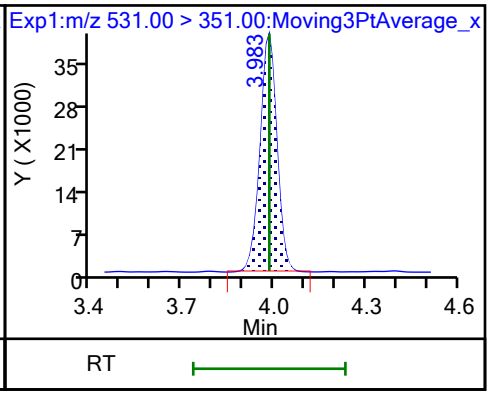
20 Perfluorononanoic acid



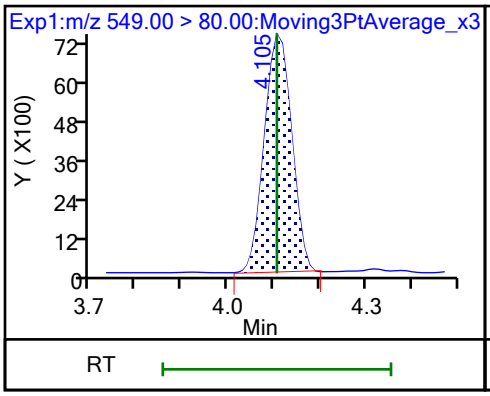
D 19 13C5 PFNA



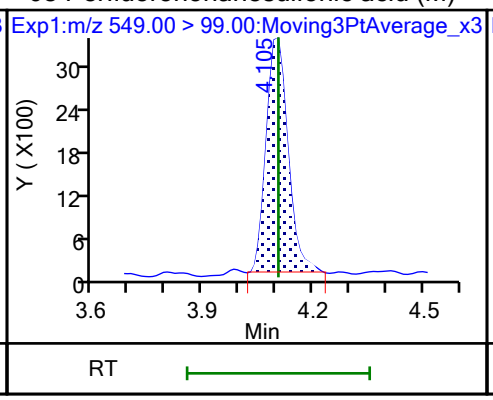
69 9-Chlorohexadecafluoro-3-oxanona



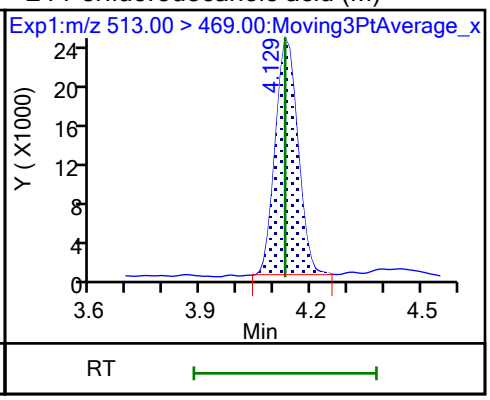
68 Perfluorononanesulfonic acid



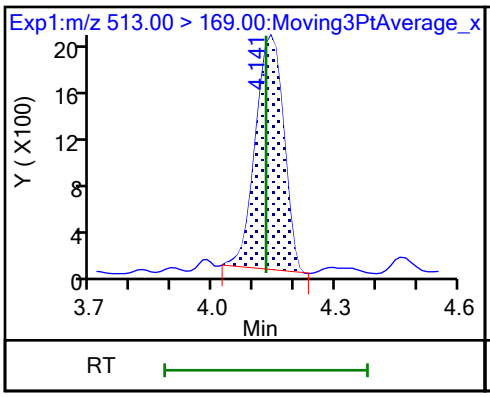
68 Perfluorononanesulfonic acid (M)



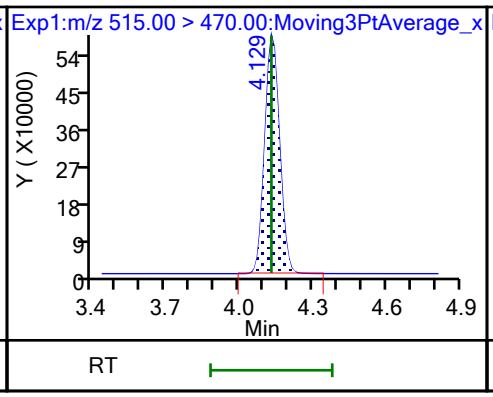
24 Perfluorodecanoic acid (M)



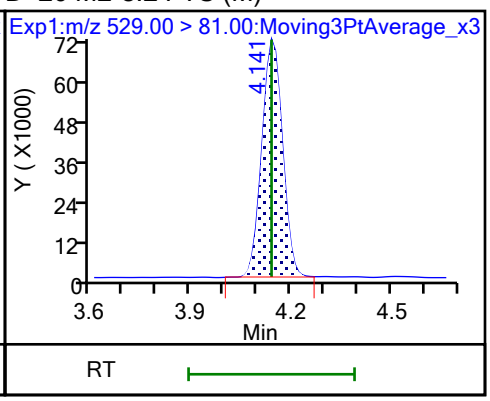
24 Perfluorodecanoic acid



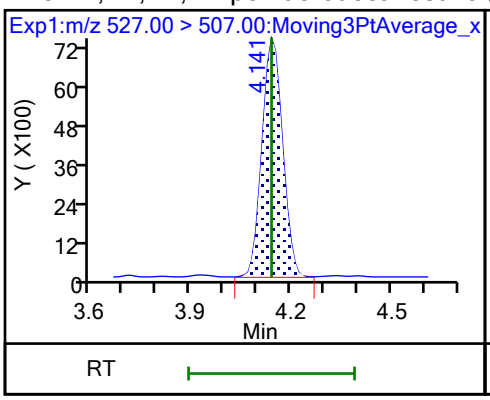
D 23 13C2 PFDA



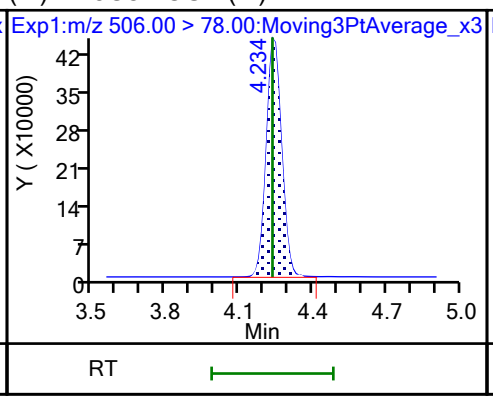
D 26 M2-8:2 FTS (M)



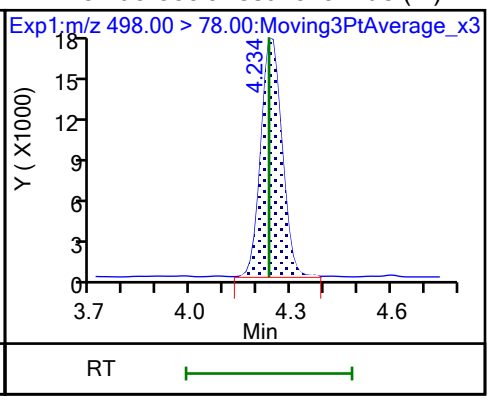
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



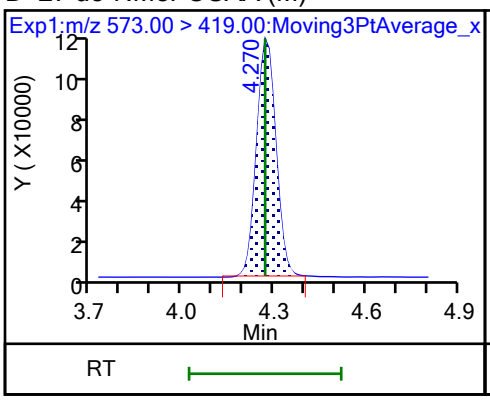
D 21 13C8 FOSA (M)



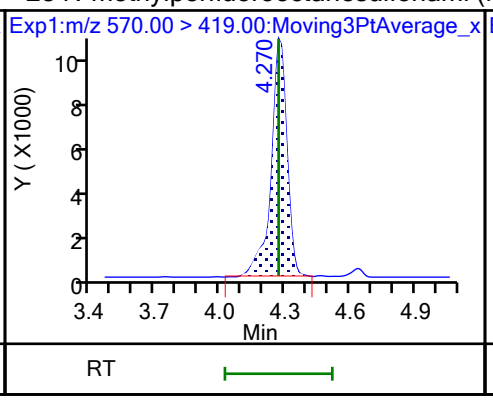
22 Perfluorooctanesulfonamide (M)



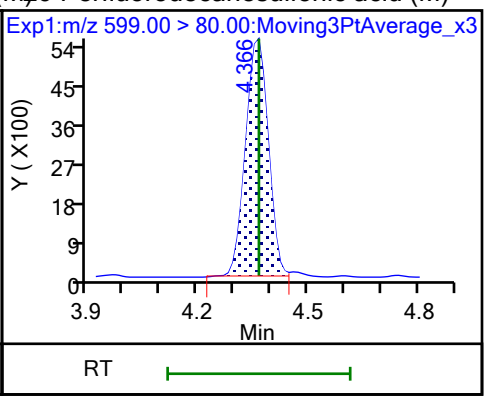
D 27 d3-NMeFOSAA (M)



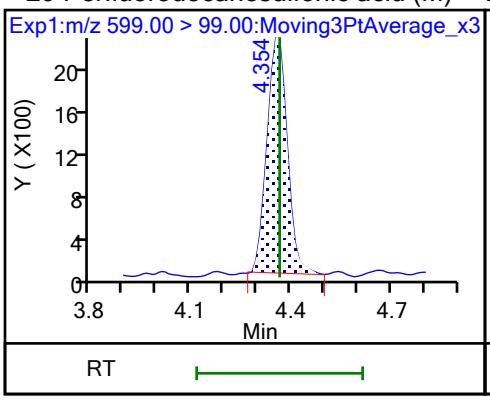
28 N-methylperfluorooctanesulfonami (M)



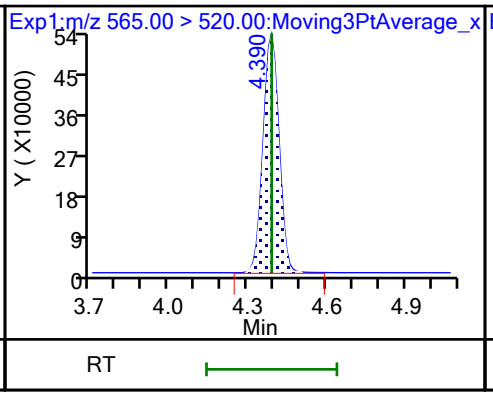
29 Perfluorodecanesulfonic acid (M)



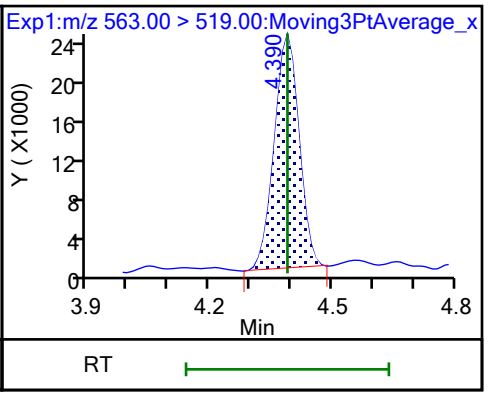
29 Perfluorodecanesulfonic acid (M)



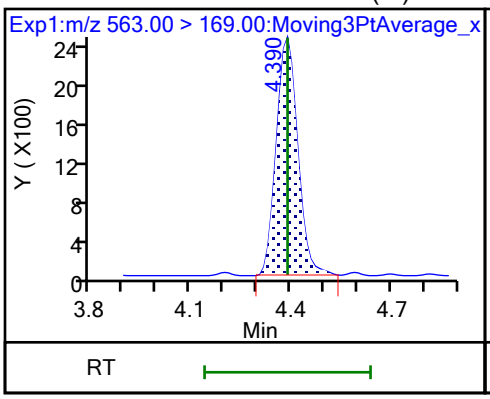
D 30 13C2 PFUnA



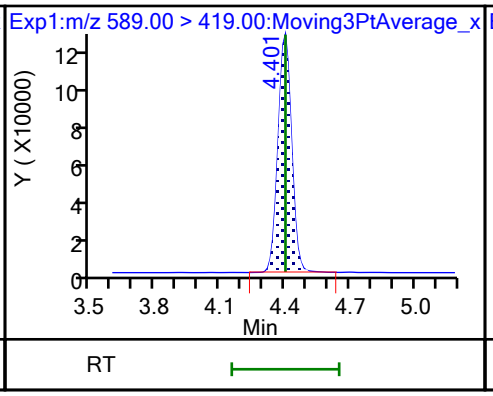
31 Perfluoroundecanoic acid



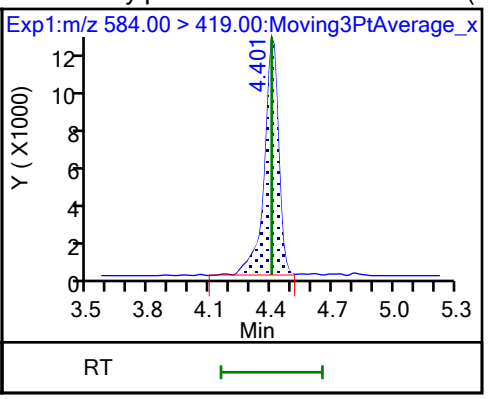
31 Perfluoroundecanoic acid (M)



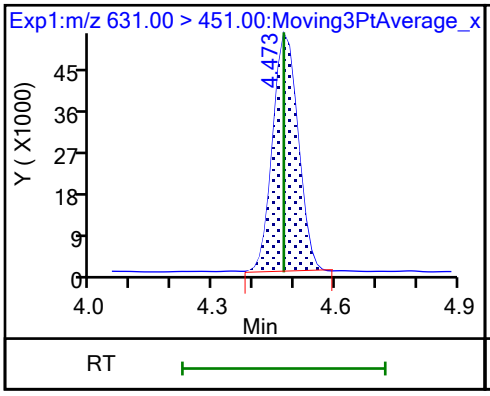
D 32 d5-NEtFOSAA



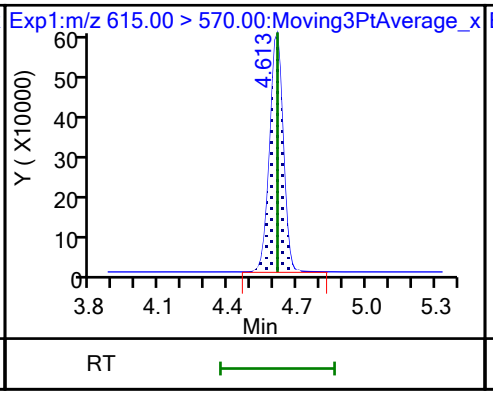
33 N-ethylperfluorooctanesulfonamid (M)



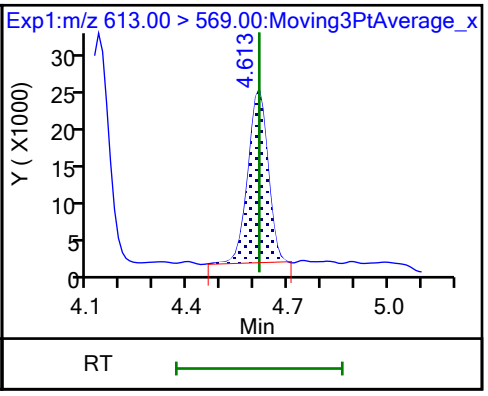
66 11-Chloroeicosafluoro-3-oxaundec



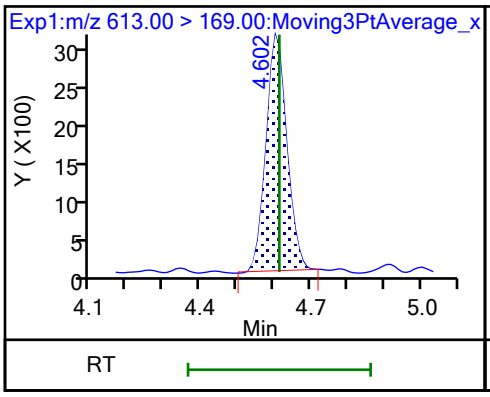
D 36 13C2 PFDoA



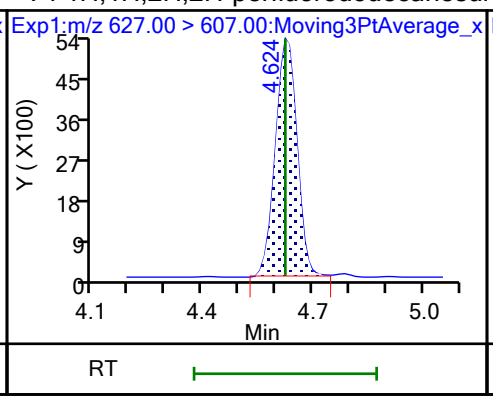
37 Perfluorododecanoic acid



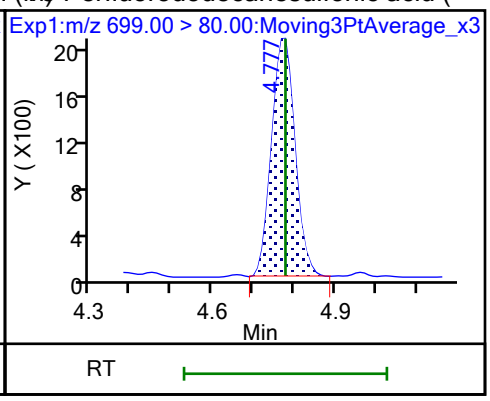
37 Perfluorododecanoic acid



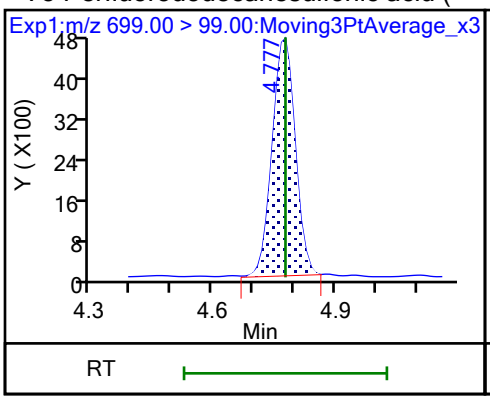
74 1H,1H,2H,2H-perfluorododecanesul (M)



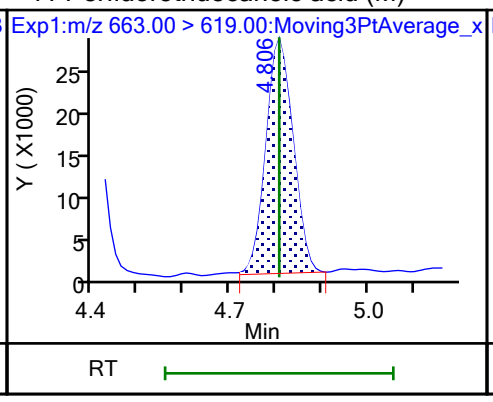
75 Perfluorododecanesulfonic acid (



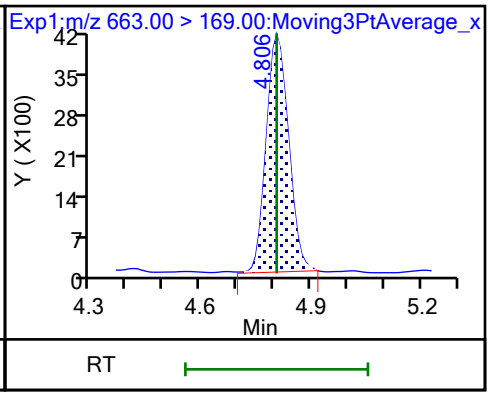
75 Perfluorododecanesulfonic acid (



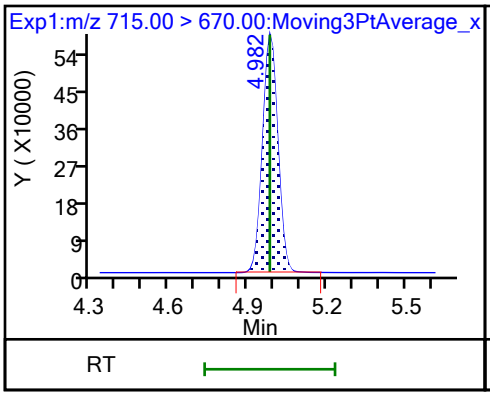
41 Perfluorotridecanoic acid (M)



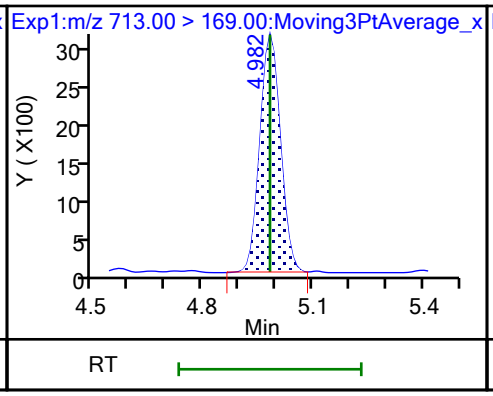
41 Perfluorotridecanoic acid



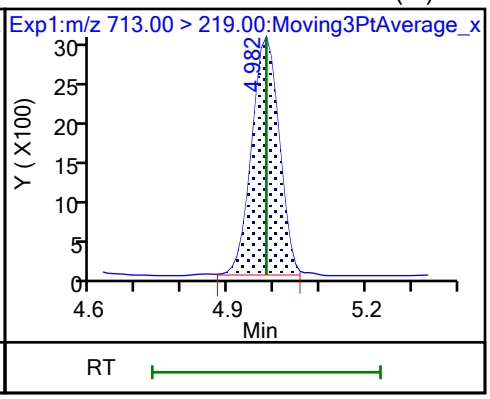
D 43 13C2 PFTeDA



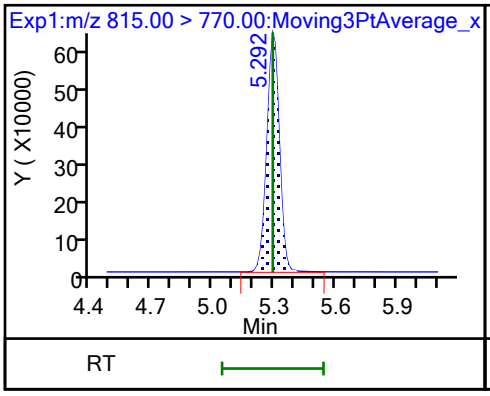
42 Perfluorotetradecanoic acid



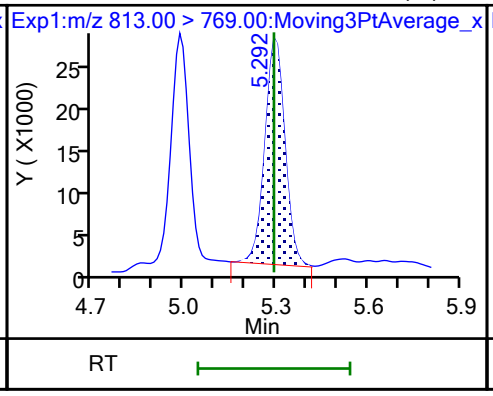
42 Perfluorotetradecanoic acid (M)



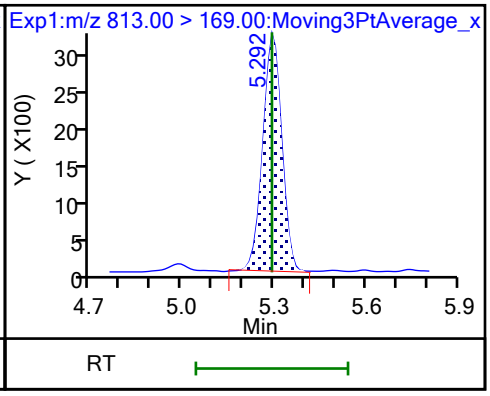
D 44 13C2 PFHxDA



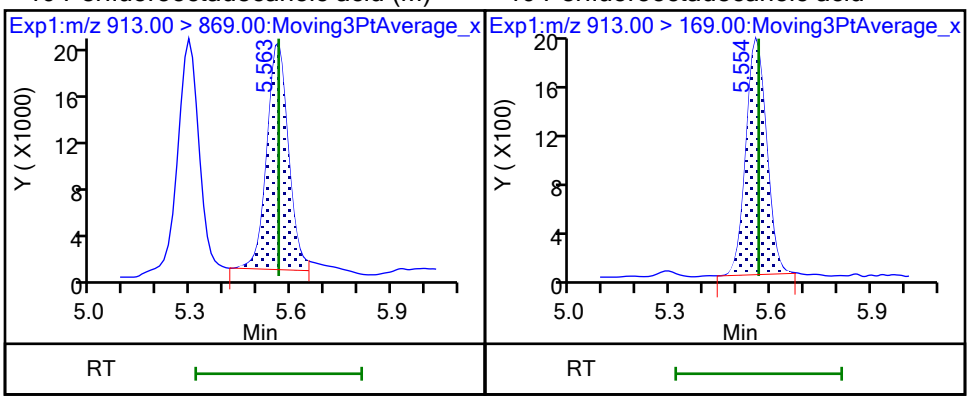
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/1 Calibration Date: 10/24/2023 06:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8779		0.930	1.00	-7.0	30.0
Perfluoropentanoic acid	AveID	1.079	1.075		0.996	1.00	-0.4	
Perfluorobutanesulfonic acid	AveID	1.117	1.082		0.859	0.887	-3.2	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.467		0.957	0.937	2.1	
Perfluorohexanoic acid	AveID	1.100	1.121		1.02	1.00	1.9	
Perfluoropentanesulfonic acid	AveID	1.306	1.258		0.906	0.941	-3.7	
HFPODA	AveID	1.001	0.9472		0.946	1.00	-5.4	
Perfluoroheptanoic acid	AveID	1.121	1.093		0.975	1.00	-2.5	
Perfluorohexanesulfonic acid	AveID	1.107	0.9928		0.820	0.914	-10.3	
DONA	AveID	5.754	5.412		0.889	0.945	-6.0	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.682		0.933	0.951	-1.9	
Perfluoroheptanesulfonic acid	AveID	1.445	1.396		0.921	0.953	-3.4	
Perfluorooctanoic acid	AveID	1.065	1.005		0.944	1.00	-5.6	
Perfluorooctanesulfonic acid	AveID	1.166	1.058		0.842	0.928	-9.3	
Perfluorononanoic acid	AveID	0.9800	0.8145		0.831	1.00	-16.9	
9Cl-PF3ONS	AveID	3.569	3.642		0.952	0.933	2.0	
Perfluorononanesulfonic acid	AveID	0.8874	0.8065		0.874	0.962	-9.1	
Perfluorodecanoic acid	AveID	0.999	0.9870		0.988	1.00	-1.2	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.230		0.973	0.960	1.3	
Perfluorooctanesulfonamide	AveID	0.9539	0.9602		1.01	1.00	0.7	
NMeFOSAA	AveID	0.9074	0.9109		1.00	1.00	0.4	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6354		0.898	0.965	-7.0	
Perfluoroundecanoic acid	AveID	1.031	0.9754		0.946	1.00	-5.4	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9852		0.985	1.00	-1.5	
11Cl-PF3OUdS	AveID	5.474	5.480		0.944	0.943	0.1	
Perfluorododecanoic acid	AveID	1.018	0.9206		0.904	1.00	-9.6	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.358		0.995	0.964	3.2	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2206		0.923	0.968	-4.7	
Perfluorotridecanoic acid	AveID	1.070	1.003		0.938	1.00	-6.2	
Perfluorotetradecanoic acid	AveID	0.1118	0.1043		0.933	1.00	-6.7	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9544		0.954	1.00	-4.6	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7198		0.922	1.00	-7.8	
13C4 PFBA	Ave	0.9917	1.098		1.38	1.25	10.7	
13C5 PFPeA	Ave	0.7696	0.7654		1.24	1.25	-0.5	
13C3 PFBS	Ave	1.041	1.028		1.15	1.16	-1.3	
M2-4:2 FTS	Ave	0.1204	0.1127		1.09	1.17	-6.4	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/1 Calibration Date: 10/24/2023 06:05

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E01.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7224		1.15	1.25	-7.7	
13C3 HFPO-DA	Ave	0.1516	0.1416		1.17	1.25	-6.6	
13C4 PFHpA	Ave	0.8590	0.8800		1.28	1.25	2.4	50.0
18O2 PFHxS	Ave	0.7464	0.7857		1.25	1.18	5.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1613		1.24	1.19	4.0	
13C4 PFOA	Ave	0.9731	1.031		1.32	1.25	5.9	50.0
13C4 PFOS	Ave	0.4742	0.4929		1.24	1.20	4.0	50.0
13C5 PFNA	Ave	1.059	1.176		1.39	1.25	11.0	50.0
13C2 PFDA	Ave	1.109	1.100		1.24	1.25	-0.8	
M2-8:2 FTS	Ave	0.1744	0.1655		1.14	1.20	-5.1	
13C8 FOSA	Ave	0.9462	0.9342		1.23	1.25	-1.3	
d3-NMeFOSAA	Ave	0.2650	0.2701		1.27	1.25	1.9	
13C2 PFUnA	Ave	1.047	1.077		1.29	1.25	2.9	
d5-NEtFOSAA	Ave	0.2552	0.2606		1.28	1.25	2.1	
13C2 PFDoA	Ave	1.064	1.154		1.36	1.25	8.4	
13C2 PFTeDA	Ave	1.059	1.065		1.26	1.25	0.5	
13C2 PFHxDA	Ave	1.221	1.202		1.23	1.25	-1.5	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 06:05:38 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057513-001 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: khanphomeea Date: 25-Oct-2023 08:39:40
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2264860	1.38		111	1423	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1590623	0.9299		93.0	148	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.693	1578399	1.24		99.5	1612	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.453	2.453	0.0	1.006	1357071	1.00		99.6	34.3	
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1970900	1.15		98.7	90505	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1626581	0.8590	Target=2.06	96.8	1860	
298.90 > 99.00	2.467	2.467	0.0	1.000	825548		1.97(1.03-3.09)		351	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.772	2.760	0.012	1.005	604139	0.9566		102	8202	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	217121	1.09		93.6	149	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1489650	1.15		92.3	6052	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1335900	1.02	Target=14.12	102	275	M
313.00 > 119.00	2.797	2.797	0.0	1.000	87521		15.26(7.06-21.17)		81.5	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1534245	0.9063	Target=2.72	96.3	2779	
349.00 > 99.00	2.810	2.810	0.0	0.888	533431		2.88(1.36-4.09)		889	
67 Perfluoro(2-propoxypropanoic) ac										
285.00 > 169.00	2.918	2.908	0.010	1.004	221246	0.9461		94.6	2611	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.908	2.908	0.0	0.826	291981	1.17		93.4	1269	
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1532862	1.24		105	8197	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1176219	0.8197	Target=3.32	89.7	1996	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	360771		3.26(1.66-4.98)		281	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	1.000	1586283	0.9748	Target=4.17	97.5	355	
363.00 > 169.00	3.165	3.168	-0.003	1.000	412124		3.85(2.09-6.26)		1118	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1814749	1.28		102	6243	
77 DONA										
377.00 > 251.00	3.199	3.203	-0.004	0.835	4159043	0.8888	Target=3.33	94.0	4414	
377.00 > 85.00	3.199	3.203	-0.004	0.835	1118594		3.72(1.66-4.99)		1420	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.917	1081929	0.9205	Target=4.83	96.6	4378	
449.00 > 99.00	3.511	3.505	0.006	0.917	211334		5.12(2.41-7.24)		664	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	316020	1.23		104	586	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	678863	0.9333		98.1	1003	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1709302	0.9439	Target=2.88	94.4	77.8	M
413.00 > 169.00	3.520	3.514	0.006	1.000	600667		2.85(1.44-4.32)		904	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2125282	1.32		106	4521	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2062208	1.25			3612	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	798248	0.8415	Target=4.24	90.7	1232	M
499.00 > 99.00	3.819	3.822	-0.003	0.997	187307		4.26(2.12-6.37)		296	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	971830	1.24		104	2597	
20 Perfluorononanoic acid										
463.00 > 419.00	3.842	3.845	-0.003	1.000	1579525	0.8311	Target=8.34	83.1	210	
463.00 > 169.00	3.842	3.845	-0.003	1.000	197689		7.99(4.17-12.51)		1316	
D 19 13C5 PFNA										
468.00 > 423.00	3.842	3.845	-0.003	1.091	2424153	1.39		111	5392	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.981	3.983	-0.002	1.039	2763526	0.9521		102	7001	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.105	0.007	1.074	630945	0.8743	Target=2.17	90.9	3386	
549.00 > 99.00	4.100	4.105	-0.005	1.070	264289		2.39(1.08-3.25)		1171	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1790940	0.9877	Target=11.44	98.8	484	
513.00 > 169.00	4.136	4.129	0.007	1.000	181396		9.87(5.72-17.16)		876	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2268104	1.24		99.2	6525	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.141	0.007	1.178	326866	1.14		94.9	714	M
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.148	4.141	0.007	1.000	584426	0.9726		101	4020	
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.234	0.008	1.205	1926589	1.23		98.7	4314	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.242	4.234	0.008	1.000	1479888	1.01		101	3708	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.265	4.270	-0.005	1.212	557090	1.27		102	1541	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.278	4.270	0.008	1.003	405984	1.00		100	611	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	498644	0.8978	Target=2.37	93.0	4966	
599.00 > 99.00	4.363	4.366	-0.003	1.139	196456		2.54(1.19-3.56)		2953	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.387	4.390	-0.003	1.246	2220890	1.29		103	11032	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.387	4.390	-0.003	1.000	1733073	0.9464	Target=12.20	94.6	388	
563.00 > 169.00	4.387	4.390	-0.003	1.000	157568		11.00(6.10-18.31)		1190	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.398	4.401	-0.003	1.250	537499	1.28		102	1086	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.401	-0.003	1.000	423639	0.9850		98.5	729	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.468	4.473	-0.005	1.167	4202385	0.9441		100	4936	
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	2378843	1.36		108	9479	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.610	4.613	-0.003	1.000	1751934	0.9045	Target=8.47	90.4	81.7	
613.00 > 169.00	4.610	4.613	-0.003	1.000	218129		8.03(4.23-12.70)		1540	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.632	4.624	0.008	1.117	357440	1.00		103	10138	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.774	4.777	-0.003	1.246	173685	0.9226	Target=0.48	95.3	1734	
699.00 > 99.00	4.774	4.777	-0.003	1.246	355377		0.49(0.24-0.72)		2332	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.803	4.806	-0.003	1.042	1909583	0.9379	Target=6.41	93.8	94.0	M
663.00 > 169.00	4.803	4.806	-0.003	1.042	295095		6.47(3.21-9.62)		2265	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.982	-0.003	1.414	2195294	1.26		100	4308	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.982	-0.003	1.000	183219	0.9330	Target=0.87	93.3	1340	
713.00 > 219.00	4.979	4.982	-0.003	1.000	205926		0.89(0.43-1.30)		1925	

Report Date: 25-Oct-2023 23:19:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.295	5.292	0.003	1.504	2479665	1.23		98.5	5848	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.295	5.292	0.003	1.000	1893352	0.9544	Target=7.89	95.4	101	M
813.00 > 169.00	5.295	5.292	0.003	1.000	244194		7.75(3.94-11.83)		2491	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.566	5.563	0.003	1.051	1427984	0.9218	Target=9.39	92.2	124	M
913.00 > 169.00	5.557	5.563	-0.006	1.049	144769		9.86(4.69-14.08)		720	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

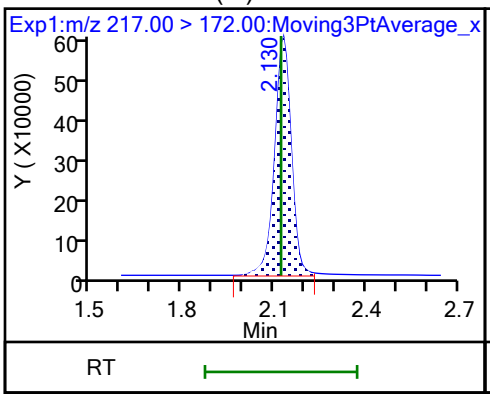
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:19:03 Chrom Revision: 2.3 18-Oct-2023 21:16:54

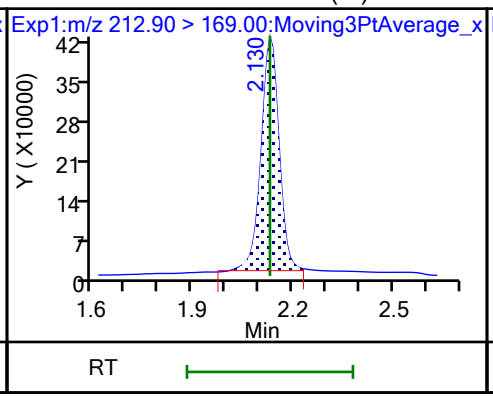
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E01.d
Injection Date: 24-Oct-2023 06:05:38 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

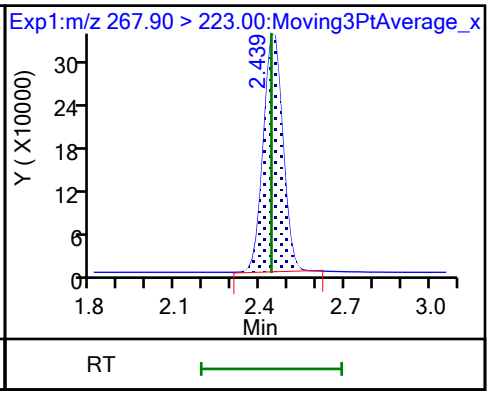
D 1 13C4 PFBA (M)



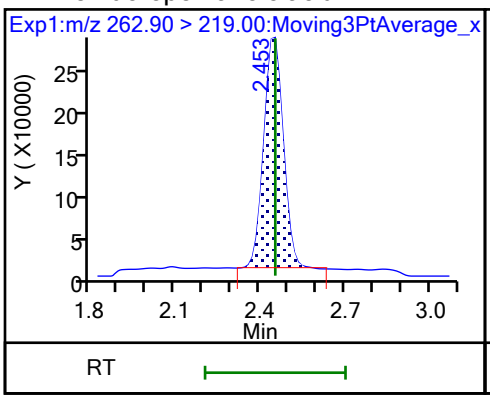
2 Perfluorobutanoic acid (M)



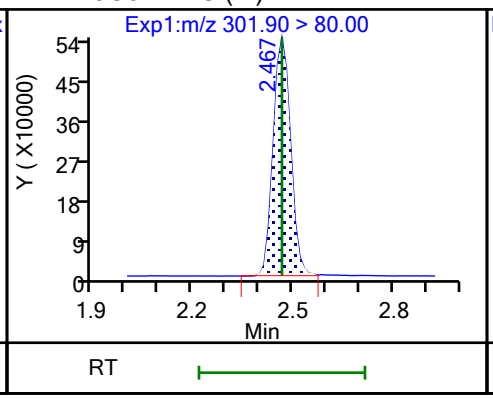
D 3 13C5 PFPeA



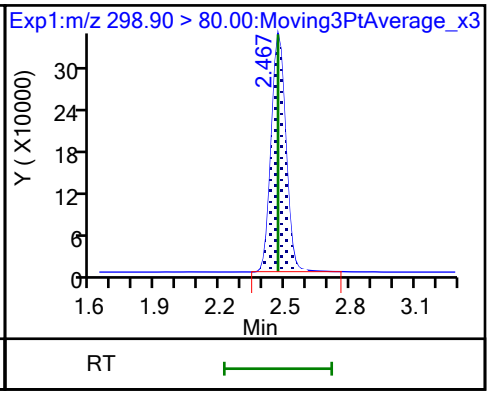
4 Perfluoropentanoic acid



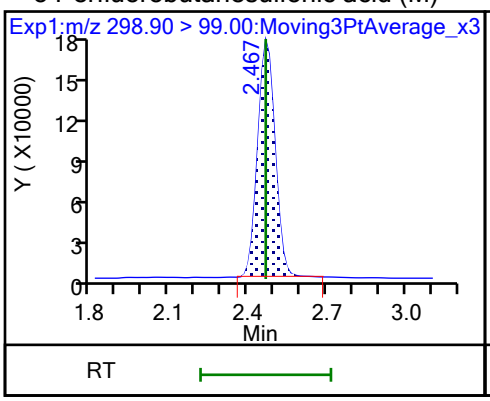
D 47 13C3 PFBS (M)



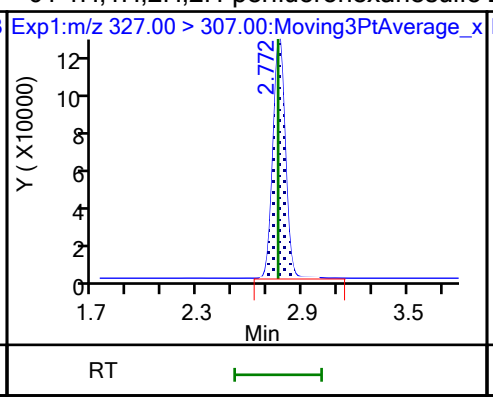
5 Perfluorobutanesulfonic acid



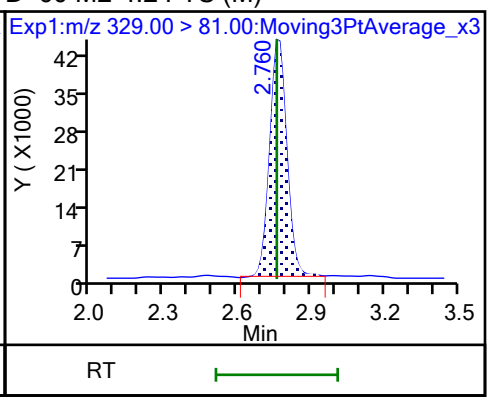
5 Perfluorobutanesulfonic acid (M)



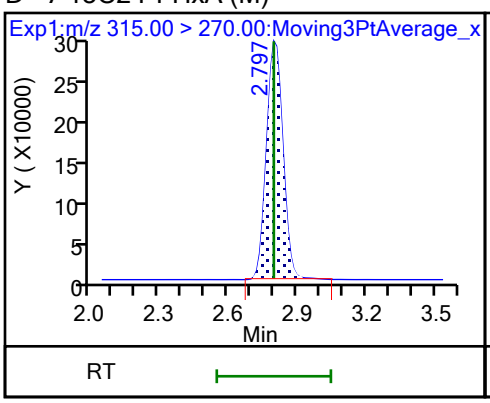
61 1H,1H,2H,2H-perfluorohexanesulfo



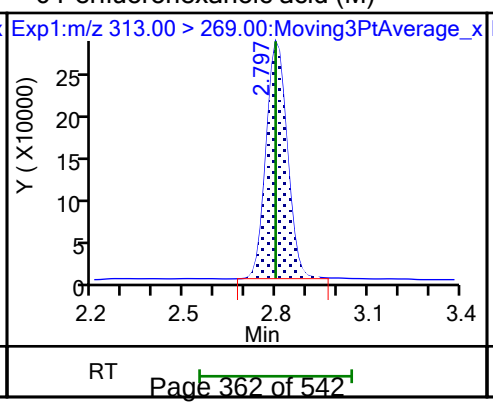
D 60 M2-4:2 FTS (M)



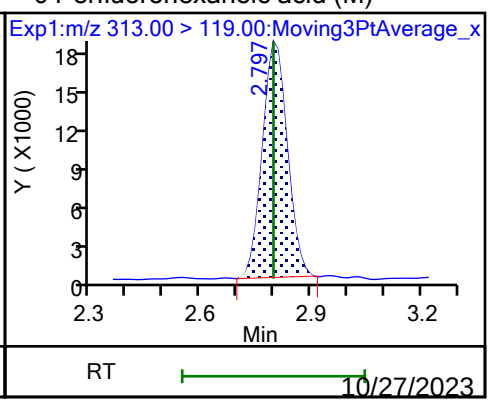
D 7 13C2 PFHxA (M)



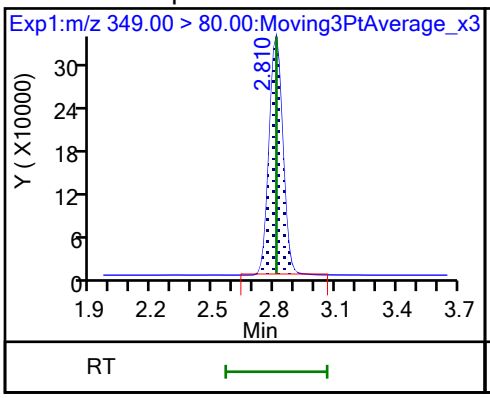
6 Perfluorohexanoic acid (M)



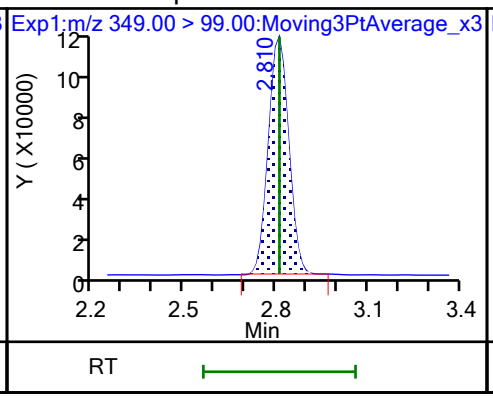
6 Perfluorohexanoic acid (M)



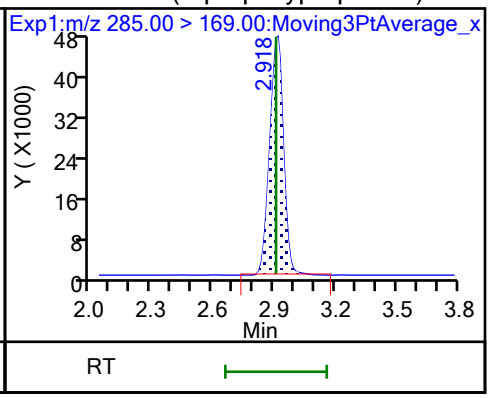
70 Perfluoropentanesulfonic acid



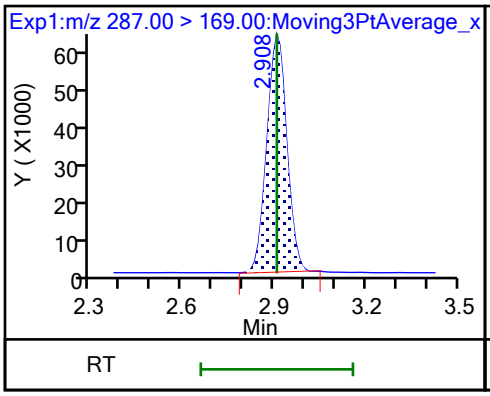
70 Perfluoropentanesulfonic acid



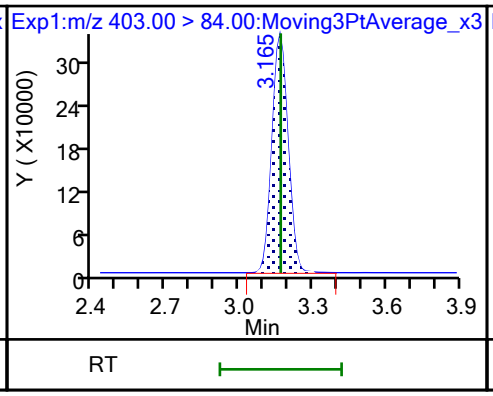
67 Perfluoro(2-propoxypropanoic) ac



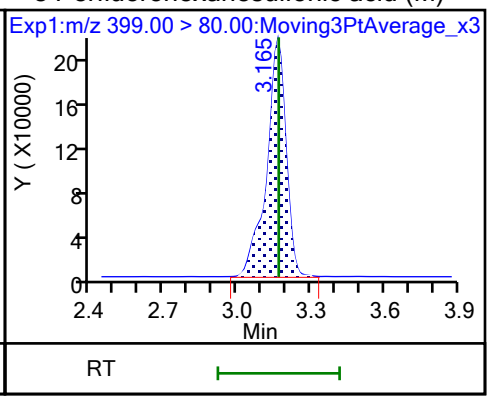
D 64 13C3 HFPO-DA



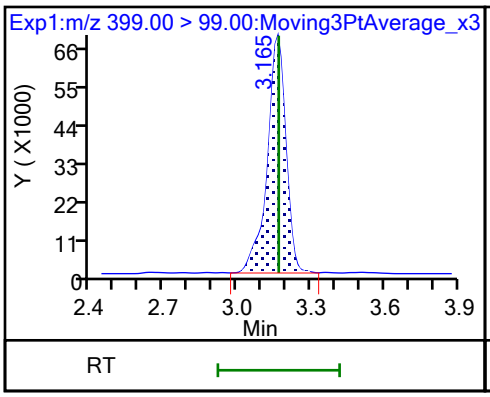
D 11 18O2 PFHxS



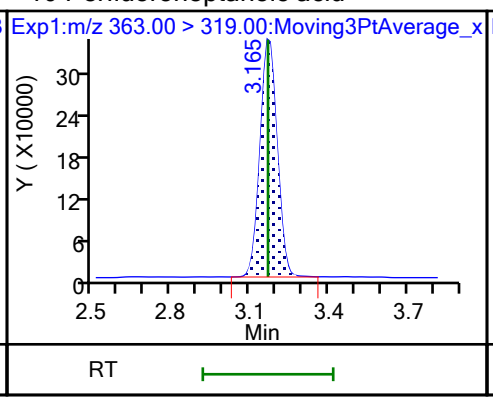
8 Perfluorohexanesulfonic acid (M)



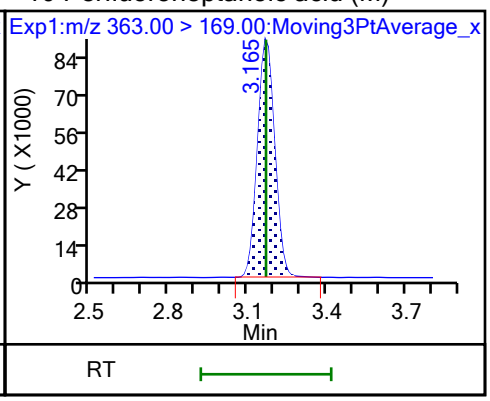
8 Perfluorohexanesulfonic acid



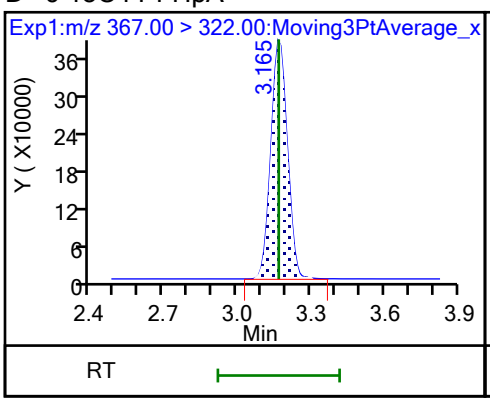
10 Perfluoroheptanoic acid



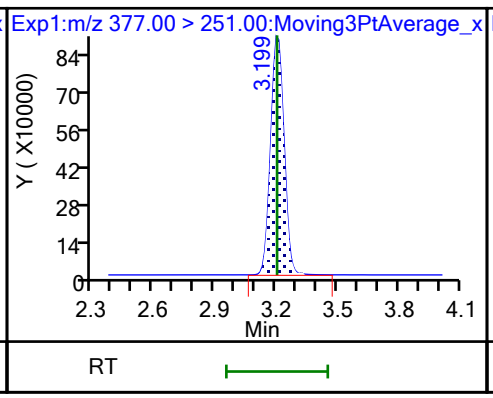
10 Perfluoroheptanoic acid (M)



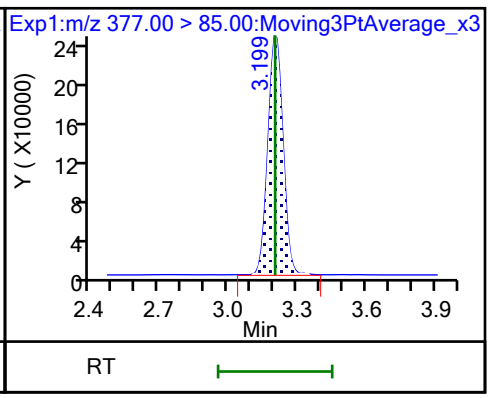
D 9 13C4 PFHpA



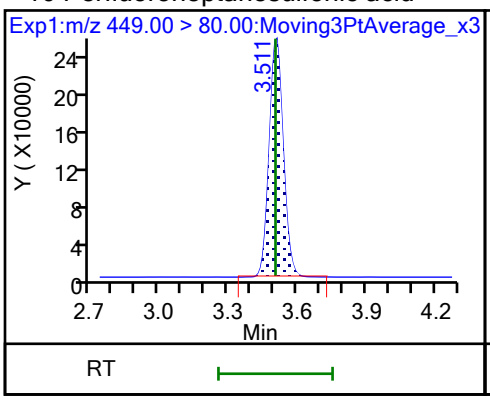
77 DONA



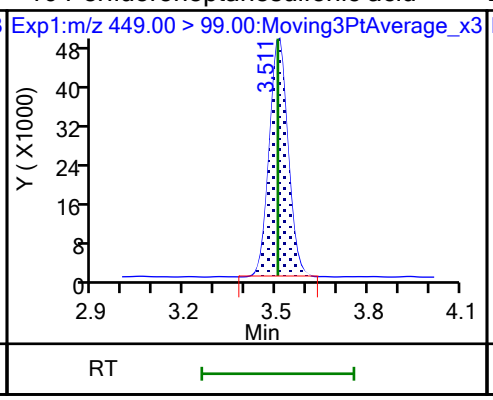
77 DONA



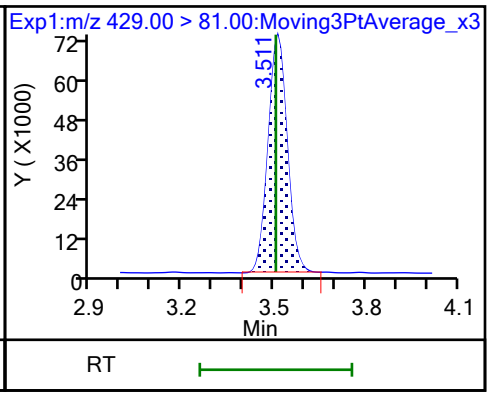
16 Perfluoroheptanesulfonic acid



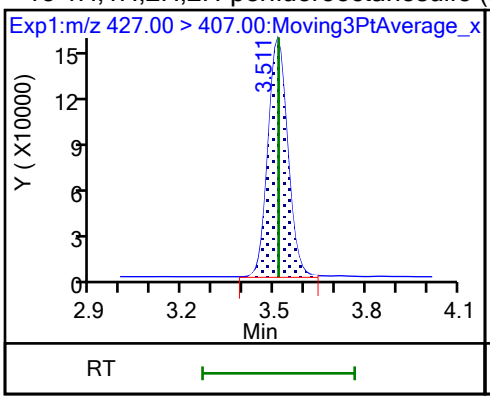
16 Perfluoroheptanesulfonic acid



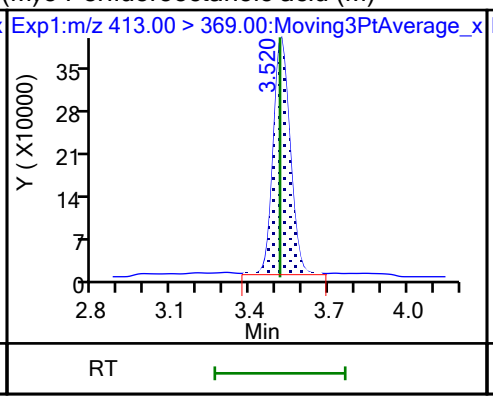
D 12 M2-6:2 FTS



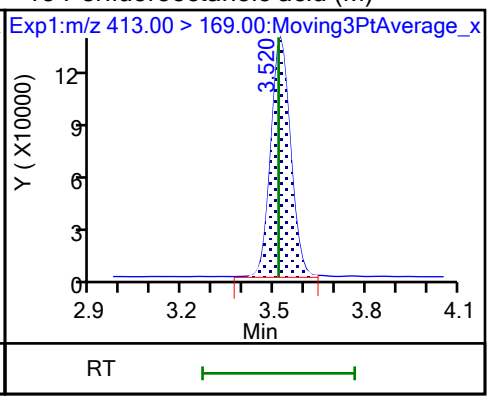
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



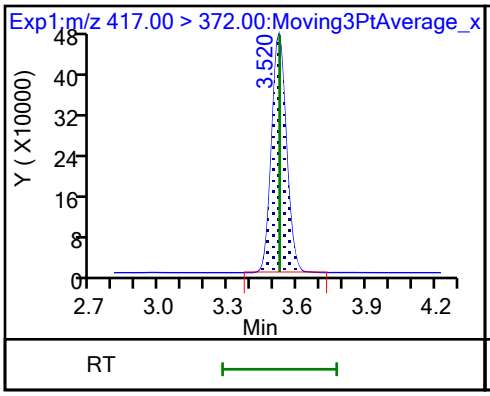
15 Perfluorooctanoic acid (M)



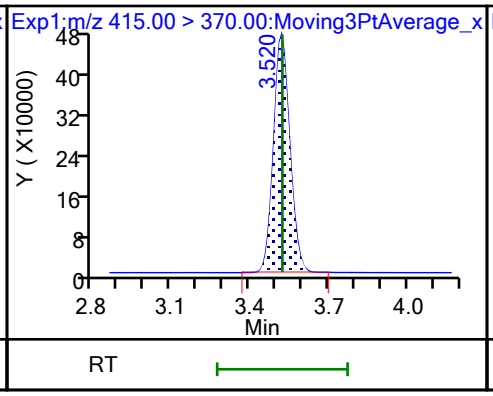
15 Perfluorooctanoic acid (M)



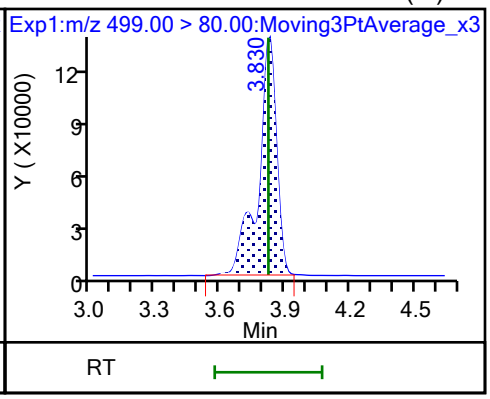
D 14 13C4 PFOA



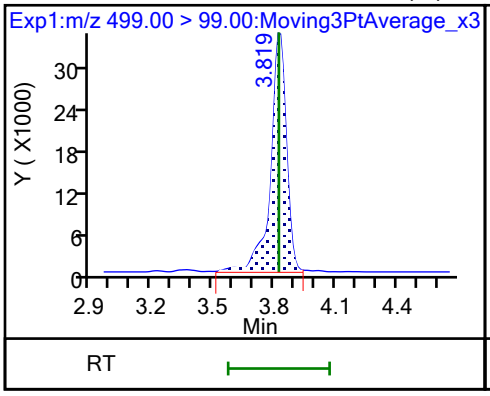
* 62 13C2 PFOA



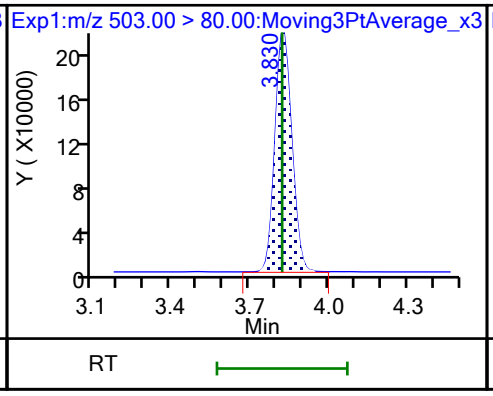
17 Perfluorooctanesulfonic acid (M)



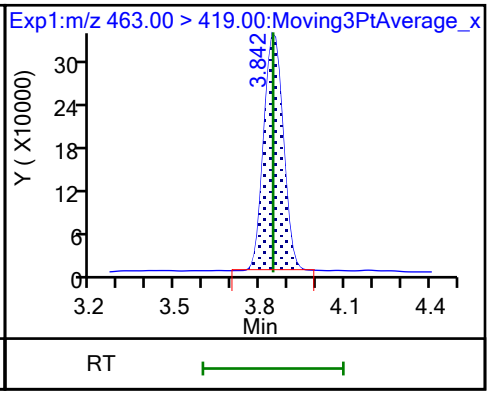
17 Perfluorooctanesulfonic acid (M)



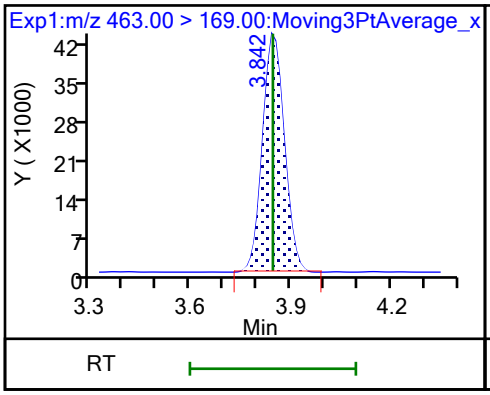
D 18 13C4 PFOS



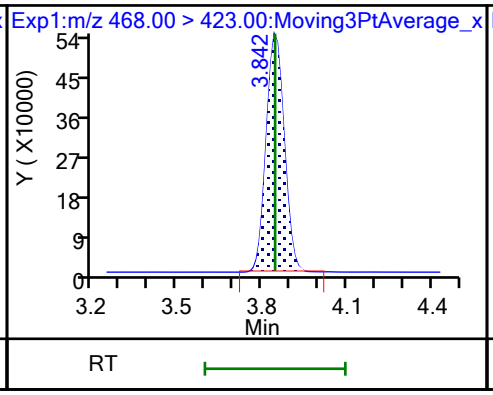
20 Perfluorononanoic acid



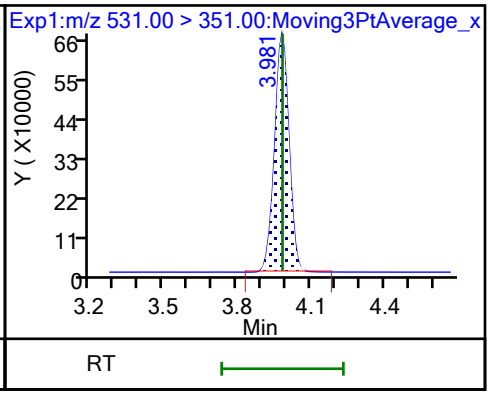
20 Perfluorononanoic acid



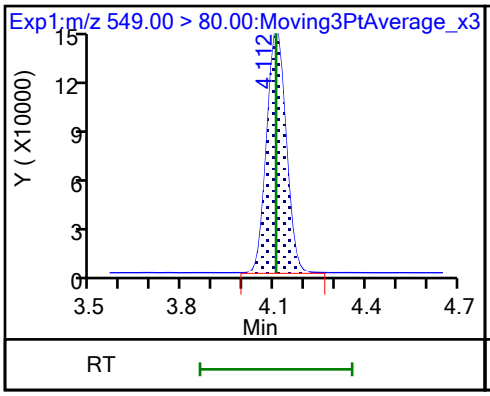
D 19 13C5 PFNA



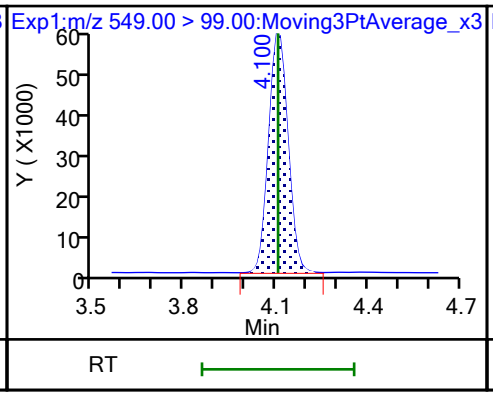
69 9-Chlorohexadecafluoro-3-oxanona



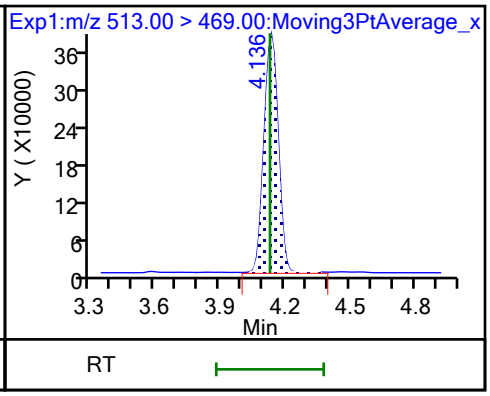
68 Perfluorononanesulfonic acid



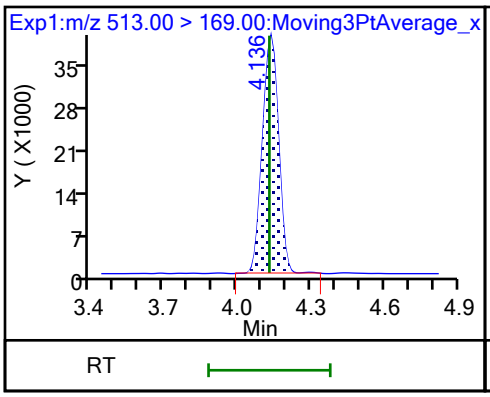
68 Perfluorononanesulfonic acid



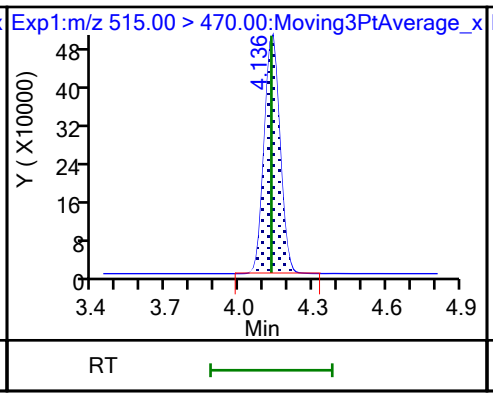
24 Perfluorodecanoic acid



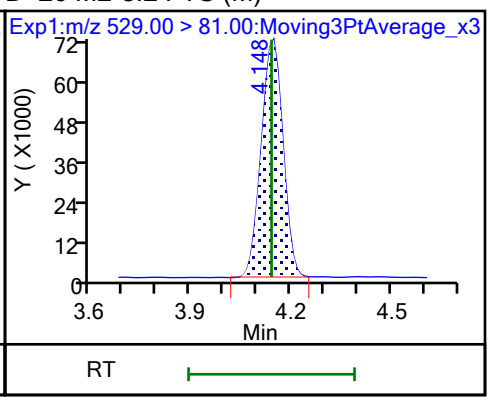
24 Perfluorodecanoic acid



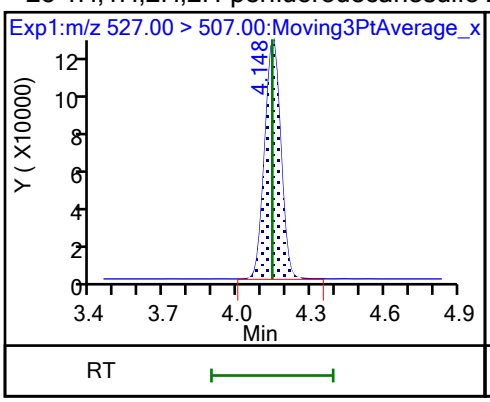
D 23 13C2 PFDA



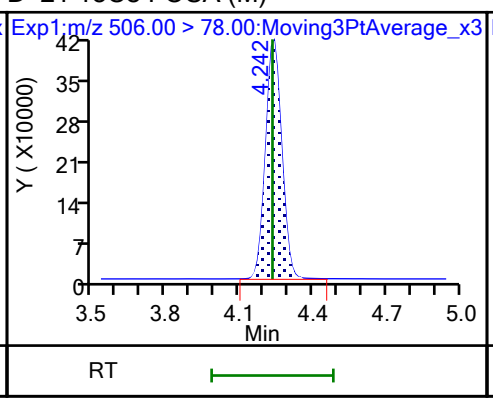
D 26 M2-8:2 FTS (M)



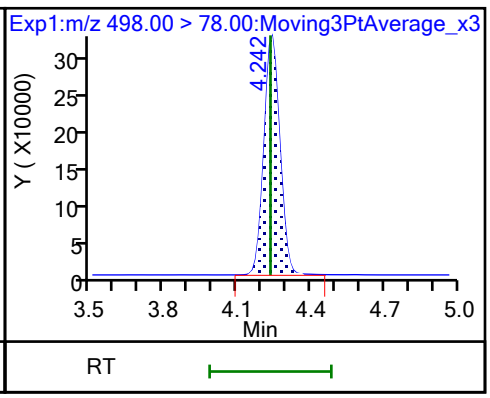
25 1H,1H,2H,2H-perfluorodecanesulfo



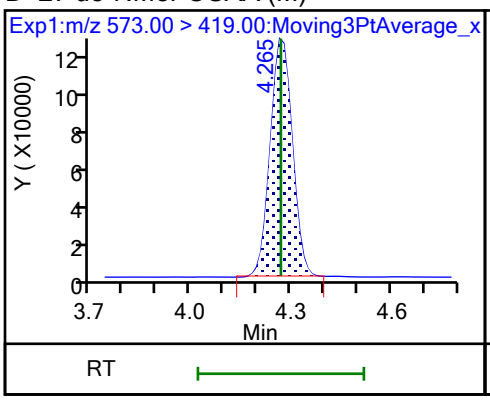
D 21 13C8 FOSA (M)



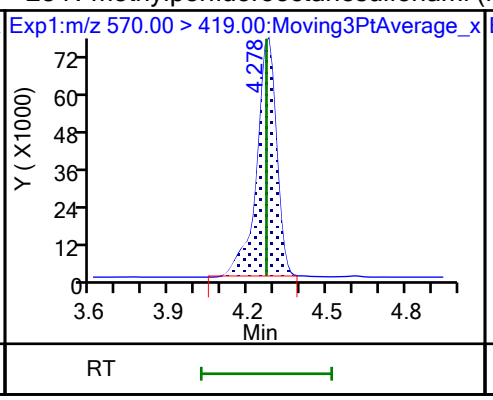
22 Perfluorooctanesulfonamide



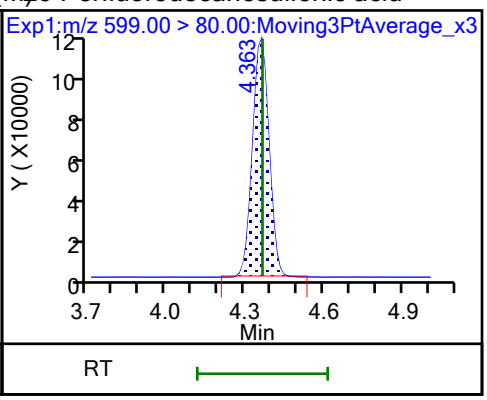
D 27 d3-NMeFOSAA (M)



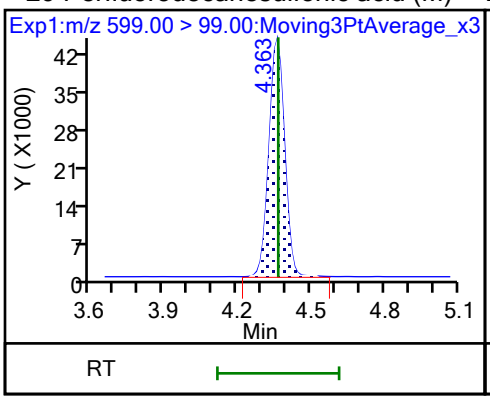
28 N-methylperfluorooctanesulfonami (M)



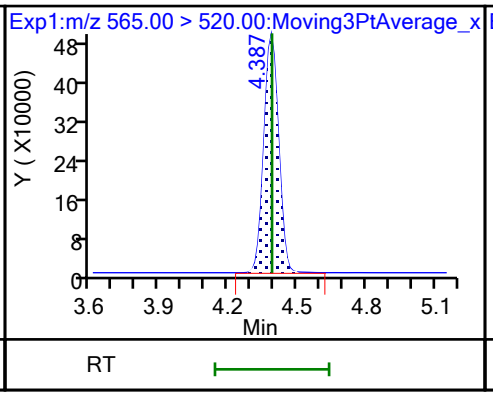
29 Perfluorodecanesulfonic acid



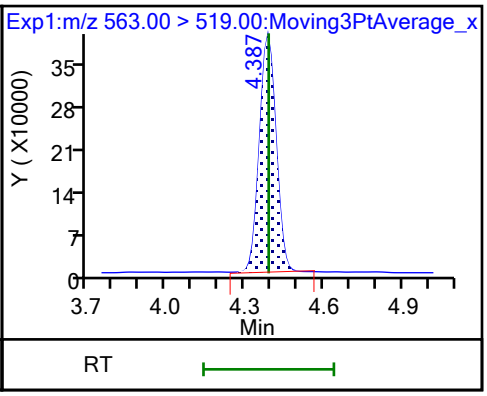
29 Perfluorodecanesulfonic acid (M)



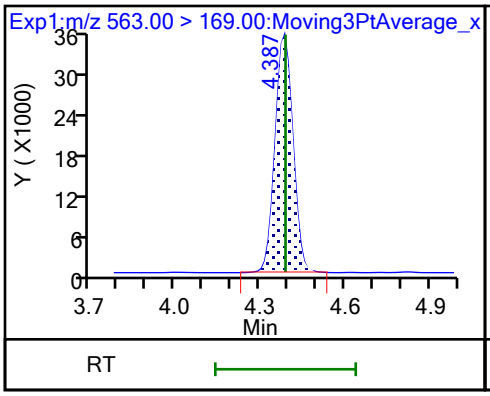
D 30 13C2 PFUnA



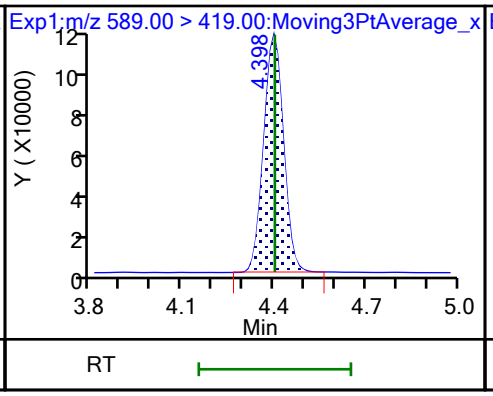
31 Perfluoroundecanoic acid



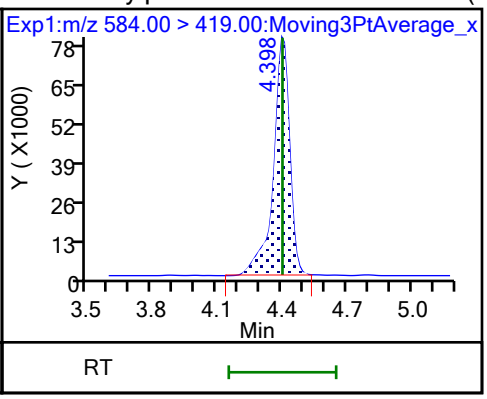
31 Perfluoroundecanoic acid



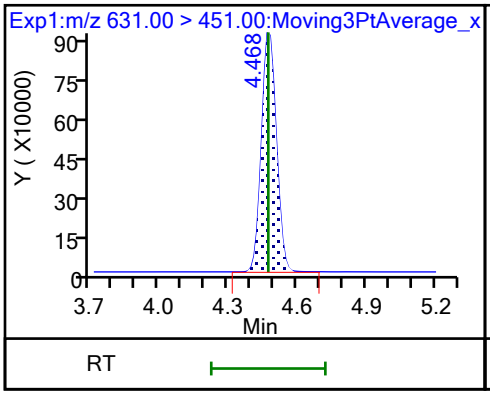
D 32 d5-NEtFOSAA



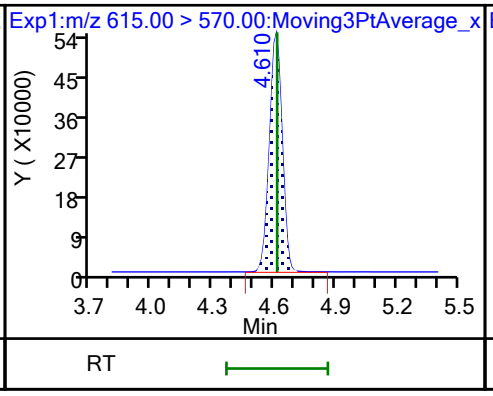
33 N-ethylperfluorooctanesulfonamid (M)



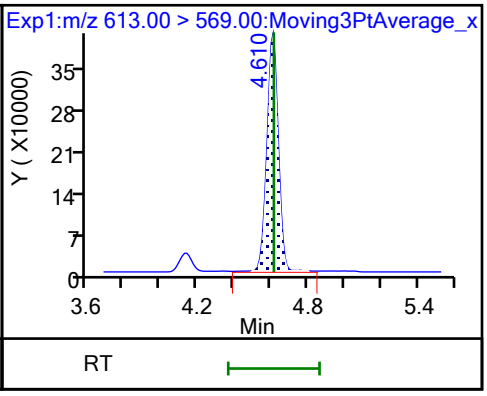
66 11-Chloroeicosafluoro-3-oxaundec



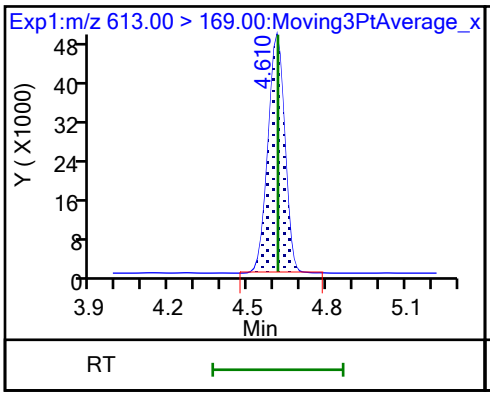
D 36 13C2 PFDoA



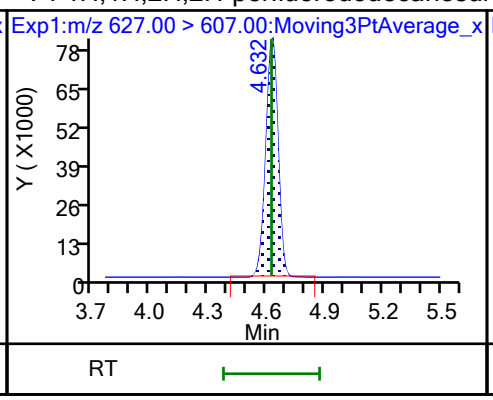
37 Perfluorododecanoic acid



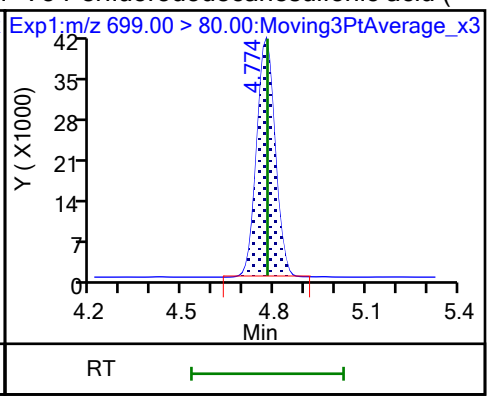
37 Perfluorododecanoic acid



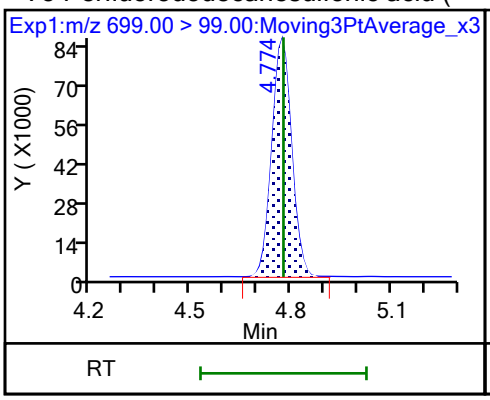
74 1H,1H,2H,2H-perfluorododecanesul



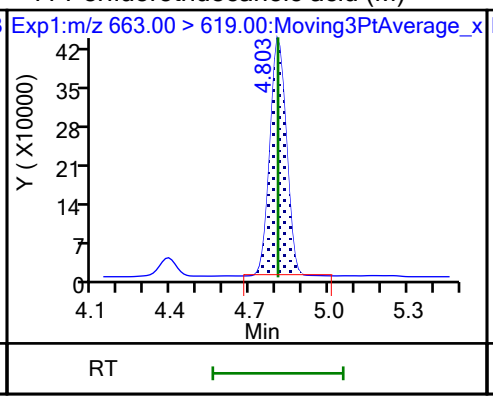
75 Perfluorododecanesulfonic acid (



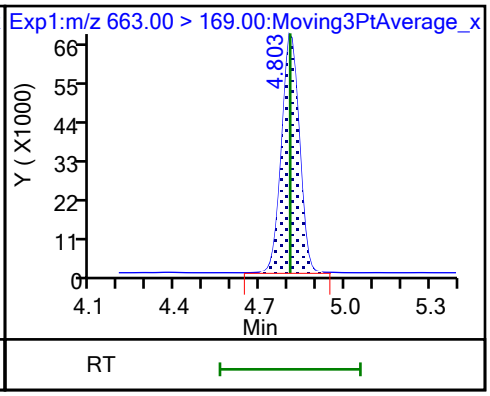
75 Perfluorododecanesulfonic acid (



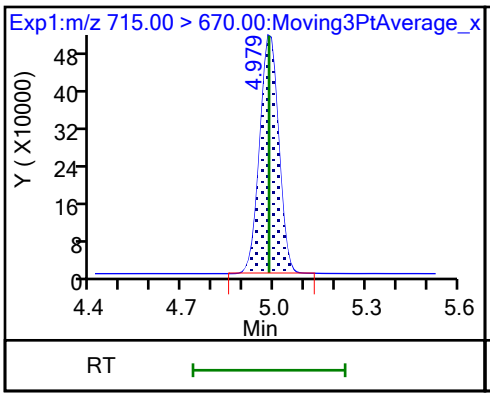
41 Perfluorotridecanoic acid (M)



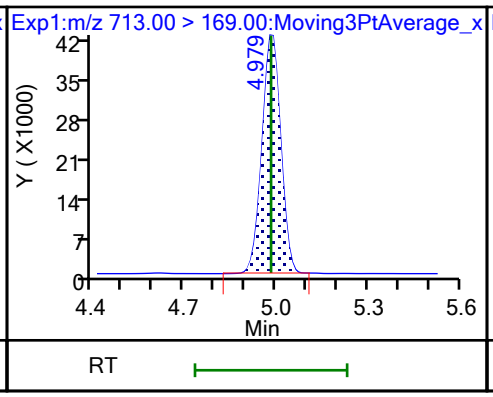
41 Perfluorotridecanoic acid



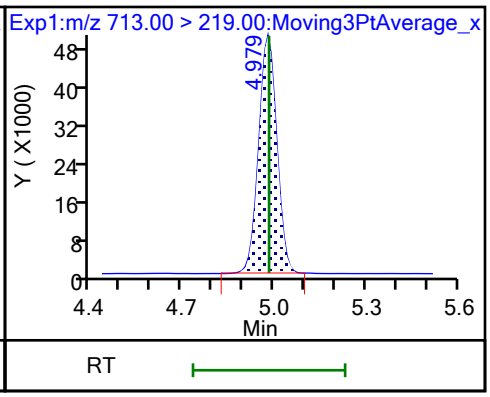
D 43 13C2 PFTeDA



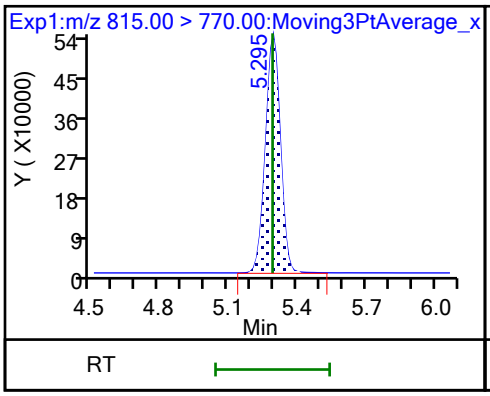
42 Perfluorotetradecanoic acid



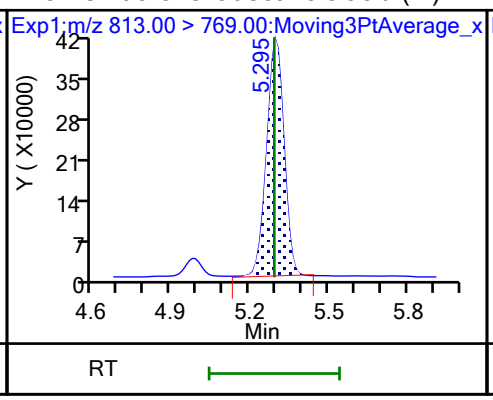
42 Perfluorotetradecanoic acid



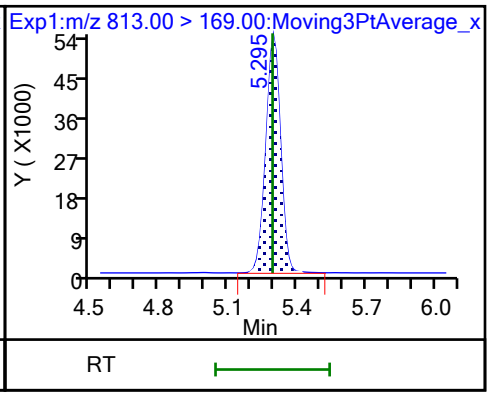
D 44 13C2 PFHxDA



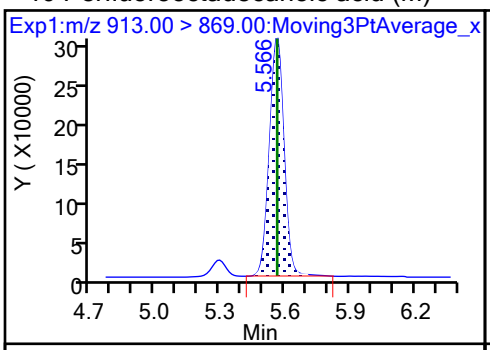
45 Perfluorohexadecanoic acid (M)



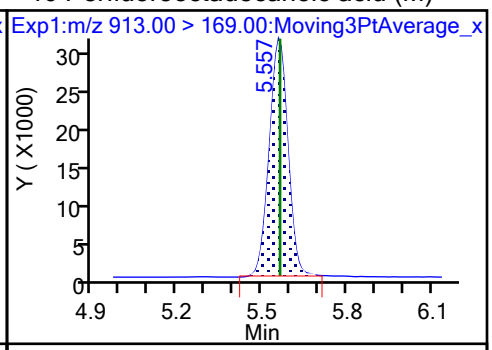
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/15 Calibration Date: 10/24/2023 08:00

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8947		2.43	2.50	-2.7	30.0
Perfluoropentanoic acid	AveID	1.079	1.028		2.38	2.50	-4.7	
Perfluorobutanesulfonic acid	AveID	1.117	1.134		2.25	2.22	1.5	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.455		2.38	2.34	1.7	
Perfluorohexanoic acid	AveID	1.100	0.9847		2.24	2.50	-10.5	
Perfluoropentanesulfonic acid	AveID	1.306	1.370		2.47	2.35	4.9	
HFPODA	AveID	1.001	0.9592		2.40	2.50	-4.2	
Perfluoroheptanoic acid	AveID	1.121	1.055		2.35	2.50	-5.8	
Perfluorohexanesulfonic acid	AveID	1.107	1.077		2.22	2.29	-2.7	
DONA	AveID	5.754	5.602		2.30	2.36	-2.6	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.669		2.32	2.38	-2.3	
Perfluoroheptanesulfonic acid	AveID	1.445	1.375		2.27	2.38	-4.8	
Perfluorooctanoic acid	AveID	1.065	1.044		2.45	2.50	-2.0	
Perfluorooctanesulfonic acid	AveID	1.166	1.078		2.14	2.32	-7.6	
Perfluorononanoic acid	AveID	0.9800	0.9435		2.41	2.50	-3.7	
9Cl-PF3ONS	AveID	3.569	3.600		2.35	2.33	0.9	
Perfluorononanesulfonic acid	AveID	0.8874	0.7903		2.14	2.41	-10.9	
Perfluorodecanoic acid	AveID	0.999	0.9320		2.33	2.50	-6.7	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.348		2.56	2.40	6.7	
Perfluorooctanesulfonamide	AveID	0.9539	0.9934		2.60	2.50	4.1	
NMeFOSAA	AveID	0.9074	0.8824		2.43	2.50	-2.8	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6228		2.20	2.41	-8.8	
Perfluoroundecanoic acid	AveID	1.031	0.9570		2.32	2.50	-7.1	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9381		2.35	2.50	-6.2	
11Cl-PF3OUdS	AveID	5.474	5.573		2.40	2.36	1.8	
Perfluorododecanoic acid	AveID	1.018	0.9241		2.27	2.50	-9.2	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.387		2.54	2.41	5.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2211		2.31	2.42	-4.5	
Perfluorotridecanoic acid	AveID	1.070	1.012		2.36	2.50	-5.4	
Perfluorotetradecanoic acid	AveID	0.1118	0.1089		2.43	2.50	-2.6	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	0.9784		2.45	2.50	-2.2	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7387		2.37	2.50	-5.4	
13C4 PFBA	Ave	0.9917	1.044		1.32	1.25	5.3	
13C5 PFPeA	Ave	0.7696	0.7345		1.19	1.25	-4.6	
13C3 PFBS	Ave	1.041	0.9652		1.08	1.16	-7.3	
M2-4:2 FTS	Ave	0.1204	0.1071		1.04	1.17	-11.1	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/15 Calibration Date: 10/24/2023 08:00

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E15.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7452		1.19	1.25	-4.8	
13C3 HFPO-DA	Ave	0.1516	0.1338		1.10	1.25	-11.7	
13C4 PFHpA	Ave	0.8590	0.8376		1.22	1.25	-2.5	50.0
18O2 PFHxS	Ave	0.7464	0.7221		1.14	1.18	-3.3	50.0
M2-6:2 FTS	Ave	0.1551	0.1498		1.15	1.19	-3.4	
13C4 PFOA	Ave	0.9731	0.9529		1.22	1.25	-2.1	50.0
13C4 PFOS	Ave	0.4742	0.4828		1.22	1.20	1.8	50.0
13C5 PFNA	Ave	1.059	1.019		1.20	1.25	-3.8	50.0
13C2 PFDA	Ave	1.109	1.136		1.28	1.25	2.4	
M2-8:2 FTS	Ave	0.1744	0.1583		1.09	1.20	-9.2	
13C8 FOSA	Ave	0.9462	0.8918		1.18	1.25	-5.7	
d3-NMeFOSAA	Ave	0.2650	0.2691		1.27	1.25	1.5	
13C2 PFUnA	Ave	1.047	1.113		1.33	1.25	6.3	
d5-NEtFOSAA	Ave	0.2552	0.2578		1.26	1.25	1.0	
13C2 PFDoA	Ave	1.064	1.081		1.27	1.25	1.6	
13C2 PFTeDA	Ave	1.059	1.008		1.19	1.25	-4.8	
13C2 PFHxDA	Ave	1.221	1.122		1.15	1.25	-8.1	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 08:00:13 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0057513-015 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:30 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:04:14
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.607	2198931	1.32		105	1557	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.131	2.130	0.001	1.000	3934978	2.43		97.3	367	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.439	2.439	0.0	0.695	1546407	1.19		95.4	2506	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	3179372	2.38		95.3	84.0	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.702	1889948	1.08		92.7	74129	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	4088863	2.25	Target=2.06	102	1297	M
298.90 > 99.00	2.467	2.467	0.0	1.000	2031167		2.01(1.03-3.09)		871	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	1460022	2.38		102	1224	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.786	210604	1.04		88.9	122	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.797	1568901	1.19		95.2	1457	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	3089849	2.24	Target=14.12	89.5	563	M
313.00 > 119.00	2.797	2.797	0.0	1.000	236797		13.05(7.06-21.17)		245	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	3919318	2.47	Target=2.72	105	1423	M
349.00 > 99.00	2.810	2.810	0.0	0.888	1332021		2.94(1.36-4.09)		1038	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	540639	2.40		95.8	2466	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.828	281805	1.10		88.3	1513	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.901	1438257	1.14		96.7	5596	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.168	-0.002	1.000	2993489	2.22	Target=3.32	97.3	3476	M
399.00 > 99.00	3.166	3.168	-0.002	1.000	876995		3.41(1.66-4.98)		777	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	1.000	3722708	2.35	Target=4.17	94.2	874	M
363.00 > 169.00	3.166	3.168	-0.002	1.000	932574		3.99(2.09-6.26)		1781	
D 9 13C4 PFHpA										
367.00 > 322.00	3.166	3.168	-0.002	0.901	1763569	1.22		97.5	8591	
77 DONA										
377.00 > 251.00	3.201	3.203	-0.002	0.838	10764113	2.30	Target=3.33	97.4	10329	
377.00 > 85.00	3.201	3.203	-0.002	0.838	2955185		3.64(1.66-4.99)		4136	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.503	3.505	-0.002	0.917	2665024	2.27	Target=4.83	95.2	3401	M
449.00 > 99.00	3.503	3.505	-0.002	0.917	536953		4.96(2.41-7.24)		2014	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.503	3.505	-0.002	0.997	299726	1.15		96.6	616	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.503	3.514	-0.011	1.000	1601635	2.32		97.7	1010	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.521	3.514	0.007	1.003	4188248	2.45	Target=2.88	98.0	188	M
413.00 > 169.00	3.521	3.514	0.007	1.003	1517706		2.76(1.44-4.32)		1472	M
D 14 13C4 PFOA										
417.00 > 372.00	3.512	3.523	-0.011	1.000	2006353	1.22		97.9	6124	
* 62 13C2 PFOA										
415.00 > 370.00	3.512	3.523	-0.011		2105481	1.25			6286	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.820	3.822	-0.002	1.000	2034032	2.14	Target=4.24	92.4	2440	M
499.00 > 99.00	3.820	3.822	-0.002	1.000	463988		4.38(2.12-6.37)		1078	M
D 18 13C4 PFOS										
503.00 > 80.00	3.820	3.822	-0.002	1.088	971845	1.22		102	2310	
20 Perfluorononanoic acid										
463.00 > 419.00	3.844	3.845	-0.001	1.000	4048723	2.41	Target=8.34	96.3	600	
463.00 > 169.00	3.844	3.845	-0.001	1.000	491993		8.23(4.17-12.51)		3458	
D 19 13C5 PFNA										
468.00 > 423.00	3.844	3.845	-0.001	1.094	2145700	1.20		96.2	7482	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.983	-0.002	1.042	6828956	2.35		101	6508	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.102	4.105	-0.003	1.074	1545753	2.14	Target=2.17	89.1	5239	
549.00 > 99.00	4.102	4.105	-0.003	1.074	637132		2.43(1.08-3.25)		2354	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.126	4.129	-0.003	1.000	4457638	2.33	Target=11.44	93.3	1273	
513.00 > 169.00	4.126	4.129	-0.003	1.000	429529		10.38(5.72-17.16)		2244	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.129	-0.003	1.175	2391339	1.28		102	5998	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.178	319368	1.09		90.8	824	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.138	4.141	-0.003	1.000	1503120	2.56		107	4912	
D 21 13C8 FOSA										
506.00 > 78.00	4.232	4.234	-0.002	1.205	1877727	1.18		94.3	5099	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.232	4.234	-0.002	1.000	3730670	2.60		104	5016	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.270	-0.002	1.215	566538	1.27		102	1188	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.268	4.270	-0.002	1.000	999791	2.43		97.2	1219	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.352	4.366	-0.014	1.139	1221944	2.20	Target=2.37	91.2	5548	
599.00 > 99.00	4.352	4.366	-0.014	1.139	481697		2.54(1.19-3.56)		3524	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.249	2342775	1.33		106	6004	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.388	4.390	-0.002	1.000	4484050	2.32	Target=12.20	92.9	879	M
563.00 > 169.00	4.388	4.390	-0.002	1.000	379163		11.83(6.10-18.31)		2301	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.253	542694	1.26		101	765	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	1018222	2.34		93.8	1334	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.469	4.473	-0.004	1.170	10685448	2.40		102	7464	
D 36 13C2 PFDoA										
615.00 > 570.00	4.600	4.613	-0.013	1.310	2275789	1.27		102	7730	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.611	4.613	-0.002	1.002	4206261	2.27	Target=8.47	90.8	235	M
613.00 > 169.00	4.600	4.613	-0.013	1.000	523791		8.03(4.23-12.70)		5490	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.622	4.624	-0.002	1.117	891665	2.54		105	5878	
75 Perfluorododecanesulfonic acid (										M
699.00 > 80.00	4.765	4.777	-0.012	1.247	435159	2.31	Target=0.48	95.5	3379	
699.00 > 99.00	4.765	4.777	-0.012	1.247	893253		0.49(0.24-0.72)		4509	M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.044	4604316	2.36	Target=6.41	94.6	241	M
663.00 > 169.00	4.804	4.806	-0.002	1.044	685875		6.71(3.21-9.62)		2912	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.980	4.982	-0.002	1.418	2122817	1.19		95.2	5517	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.980	4.982	-0.002	1.000	462193	2.43	Target=0.87	97.4	3656	
713.00 > 219.00	4.980	4.982	-0.002	1.000	514031		0.90(0.43-1.30)		3072	

Report Date: 25-Oct-2023 23:19:30 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.297	5.292	0.005	1.508	2361814	1.15		91.9	6089	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.297	5.292	0.005	1.000	4621661	2.45	Target=7.89	97.8	245	M
813.00 > 169.00	5.297	5.292	0.005	1.000	581603		7.95(3.94-11.83)		3457	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.559	5.563	-0.004	1.049	3489242	2.36	Target=9.39	94.6	273	M
913.00 > 169.00	5.550	5.563	-0.013	1.048	372230		9.37(4.69-14.08)		981	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

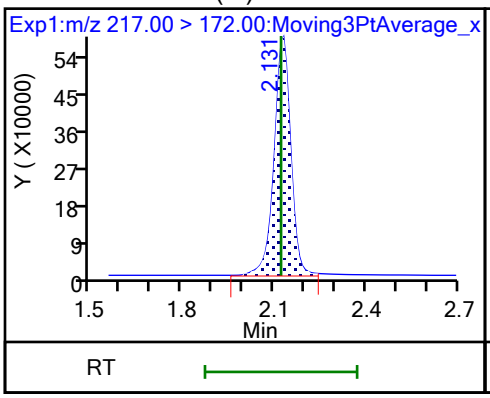
PFAS32NCIC5_00039 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:19:31 Chrom Revision: 2.3 18-Oct-2023 21:16:54

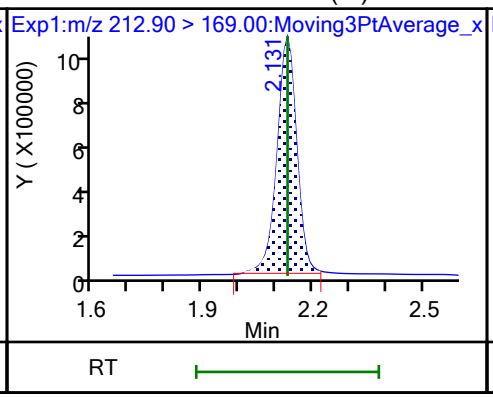
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E15.d
Injection Date: 24-Oct-2023 08:00:13 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: LC812user ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

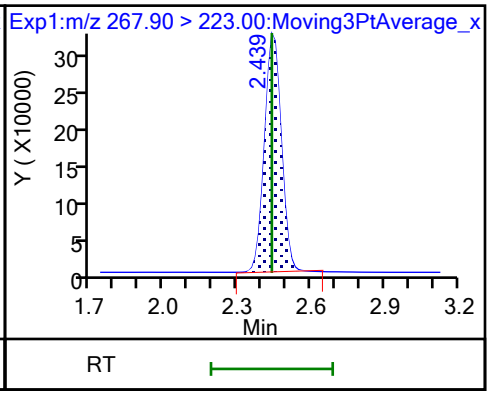
D 1 13C4 PFBA (M)



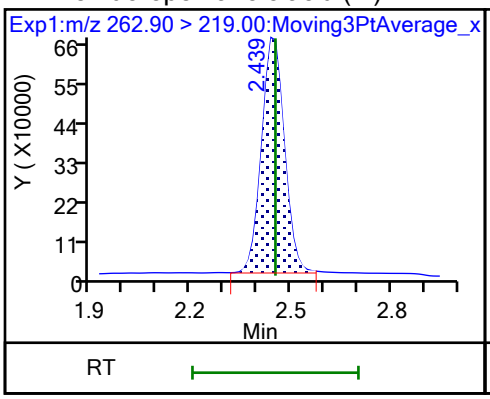
2 Perfluorobutanoic acid (M)



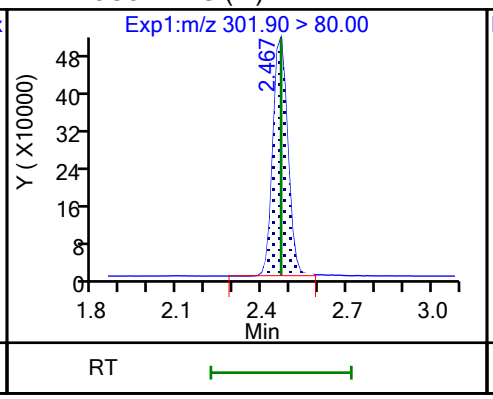
D 3 13C5 PFPeA



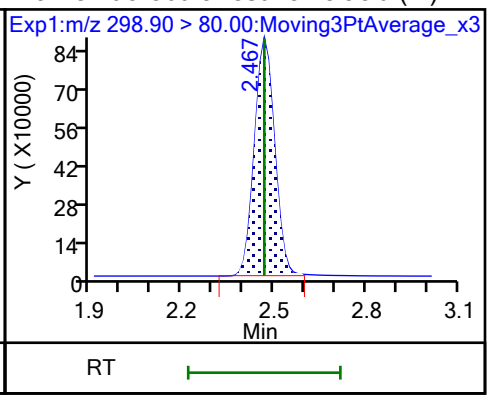
4 Perfluoropentanoic acid (M)



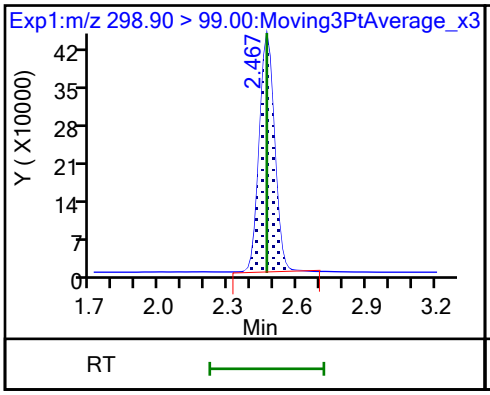
D 47 13C3 PFBS (M)



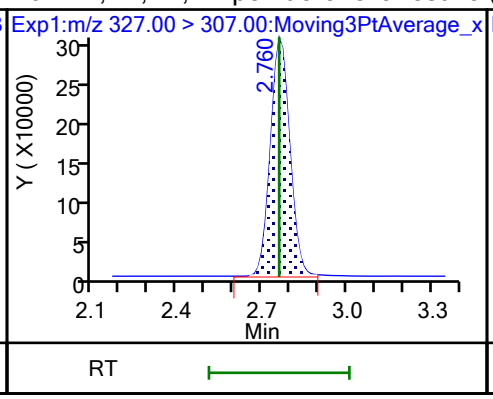
5 Perfluorobutanesulfonic acid (M)



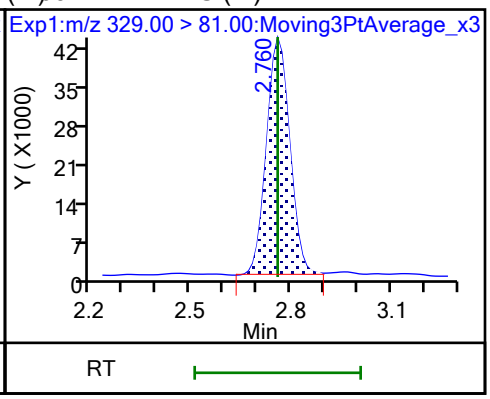
5 Perfluorobutanesulfonic acid



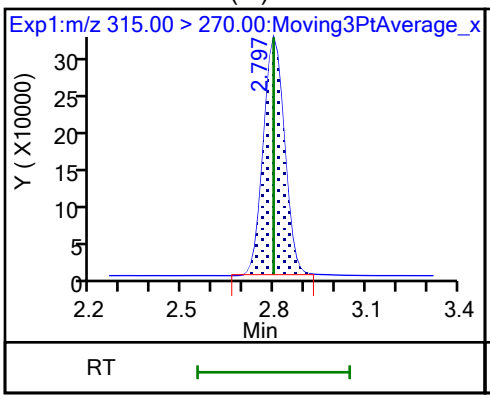
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



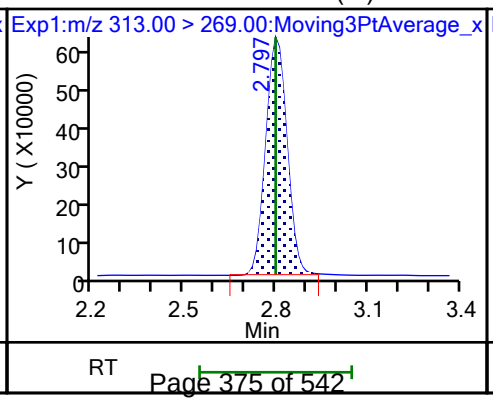
D 60 M2-4:2 FTS (M)



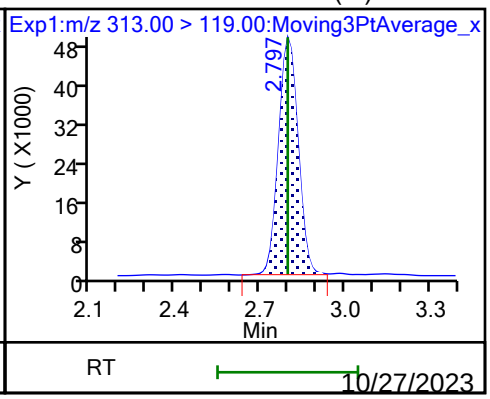
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

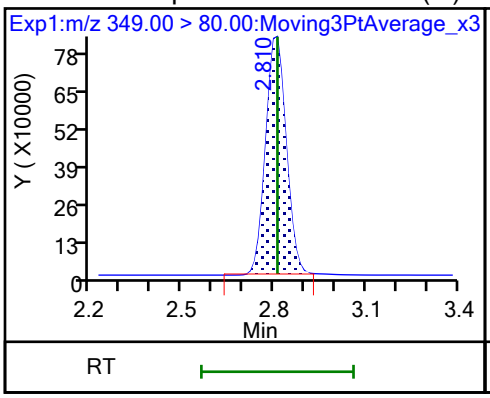


6 Perfluorohexanoic acid (M)

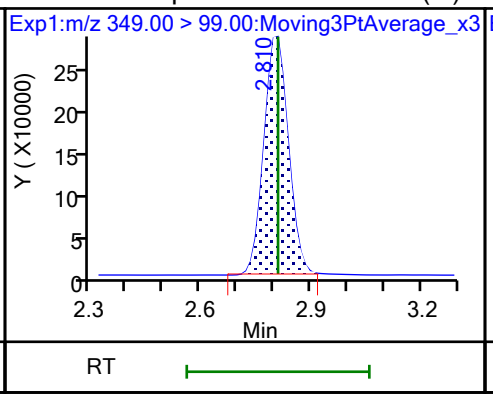


10/27/2023
10:52 AM

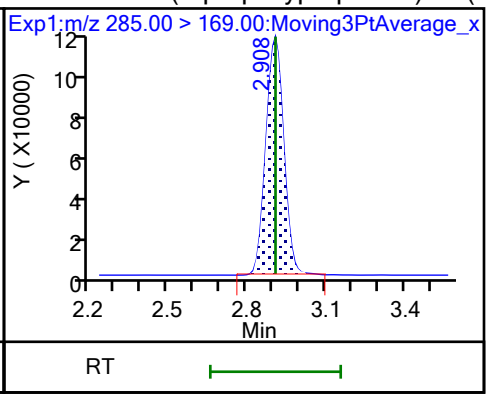
70 Perfluoropentanesulfonic acid (M)



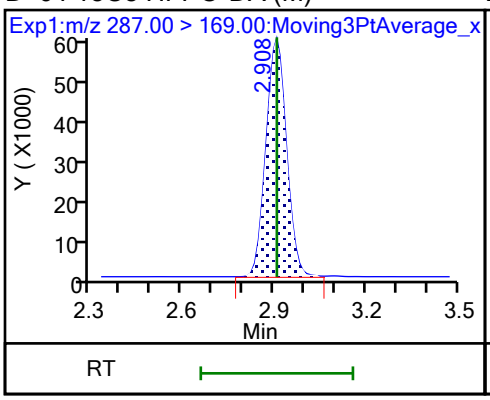
70 Perfluoropentanesulfonic acid (M)



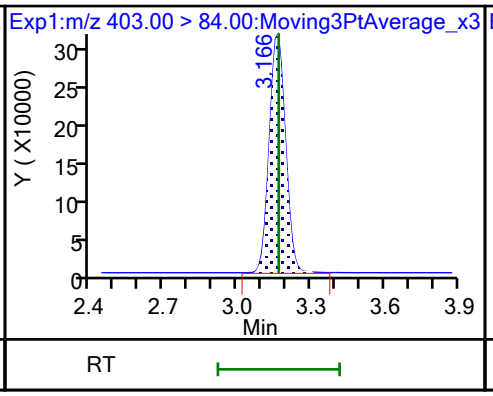
67 Perfluoro(2-propoxypropanoic) ac (M)



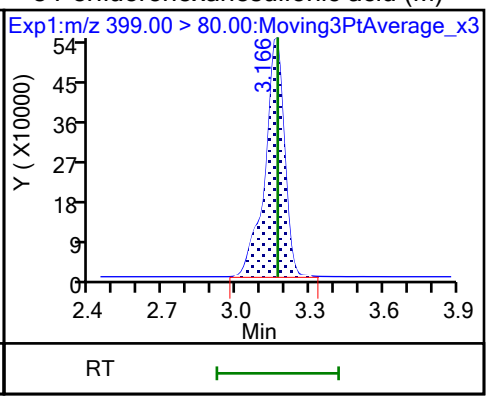
D 64 13C3 HFPO-DA (M)



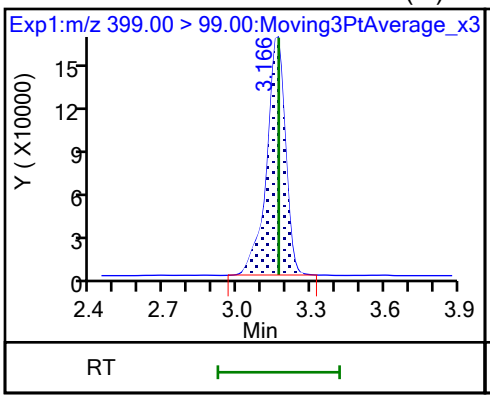
D 11 18O2 PFHxS



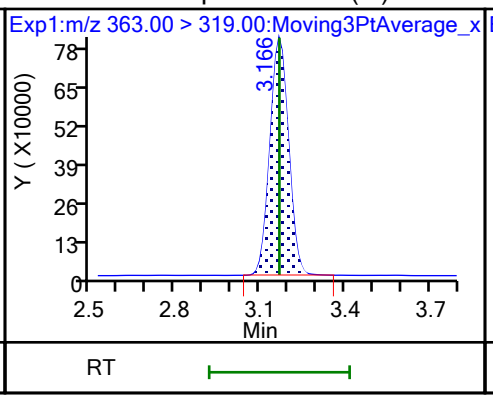
8 Perfluorohexanesulfonic acid (M)



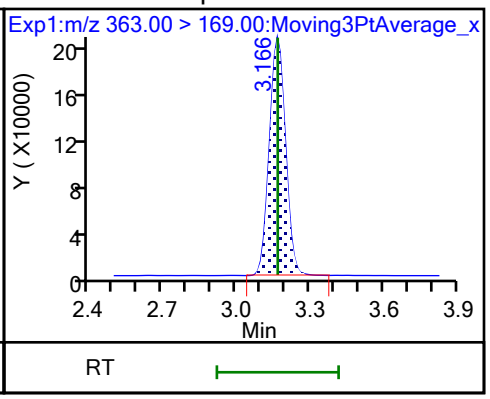
8 Perfluorohexanesulfonic acid (M)



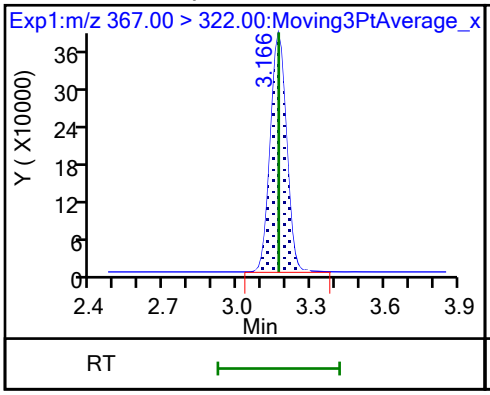
10 Perfluoroheptanoic acid (M)



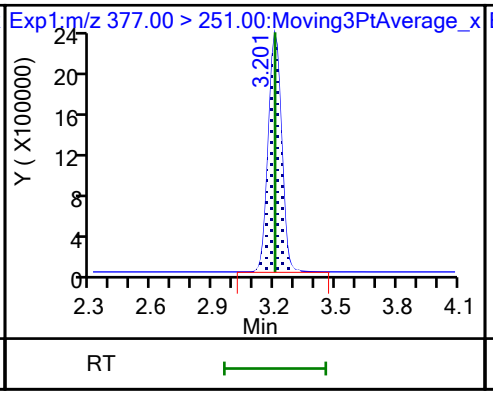
10 Perfluoroheptanoic acid



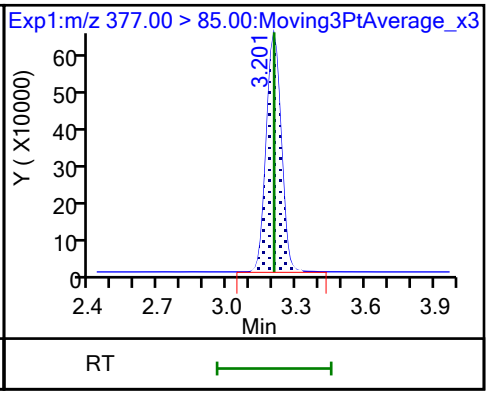
D 9 13C4 PFHpA



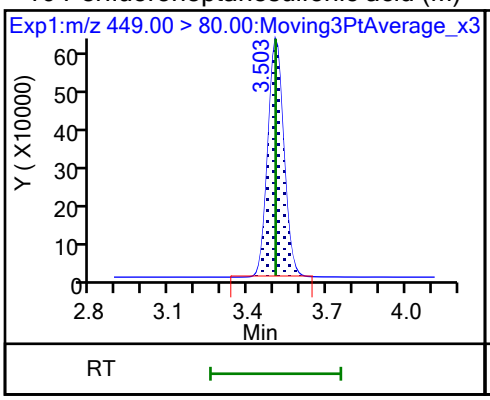
77 DONA



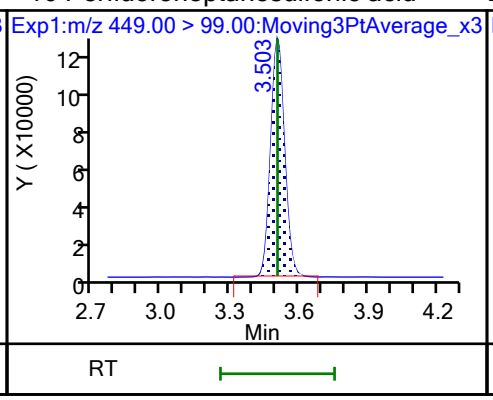
77 DONA



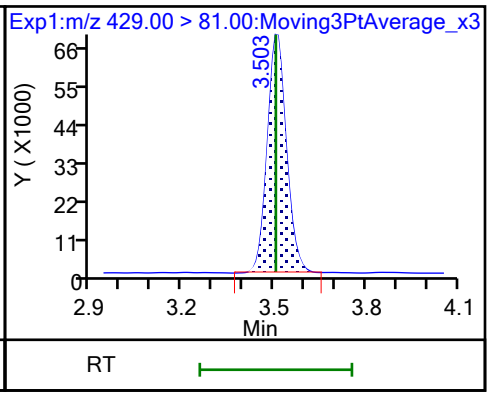
16 Perfluoroheptanesulfonic acid (M)



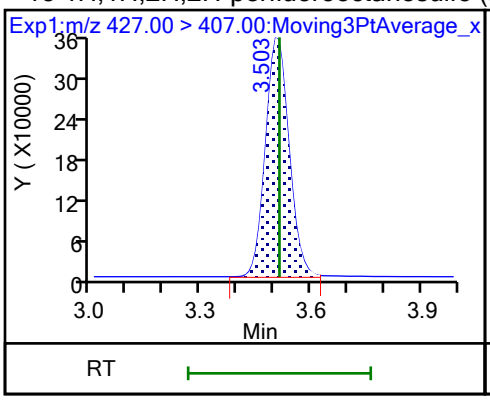
16 Perfluoroheptanesulfonic acid



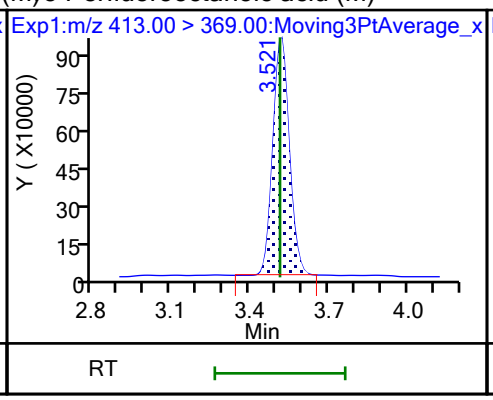
D 12 M2-6:2 FTS



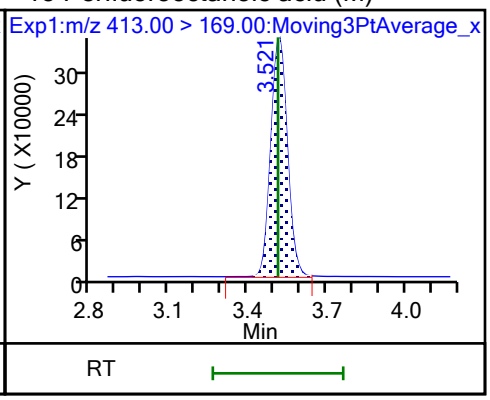
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



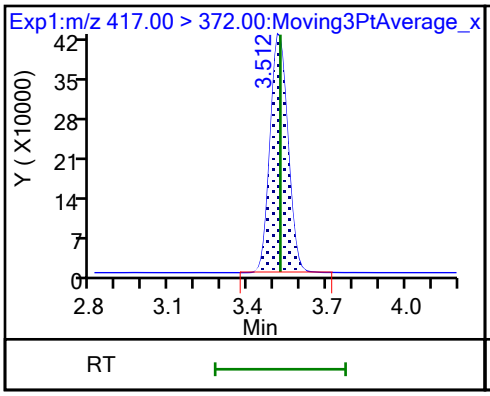
15 Perfluorooctanoic acid (M)



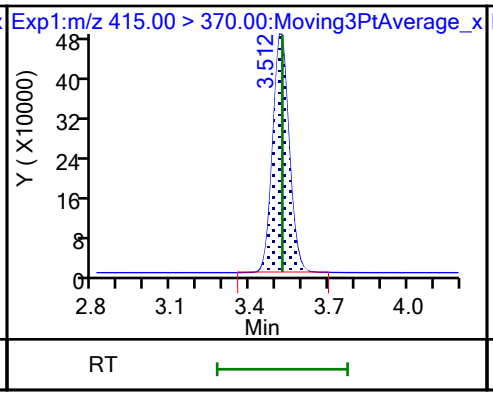
15 Perfluorooctanoic acid (M)



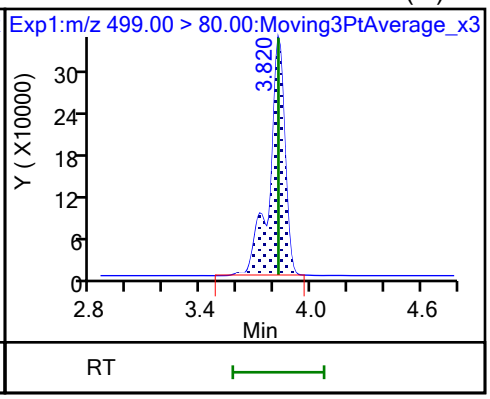
D 14 13C4 PFOA



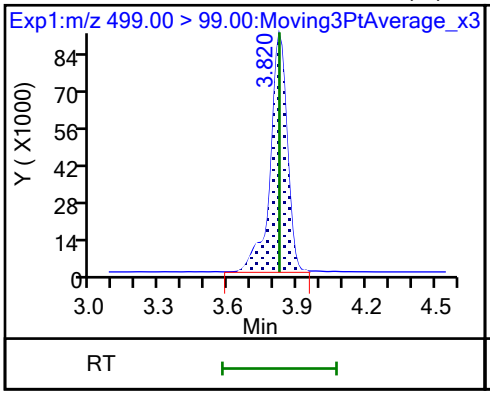
* 62 13C2 PFOA



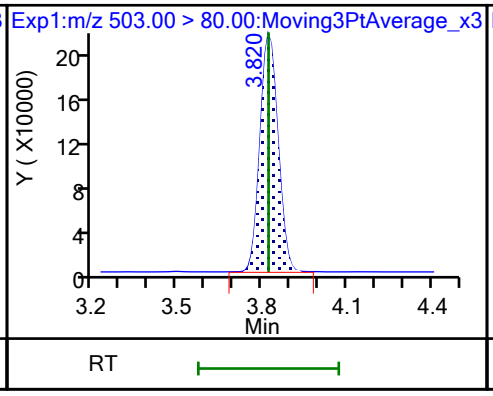
17 Perfluorooctanesulfonic acid (M)



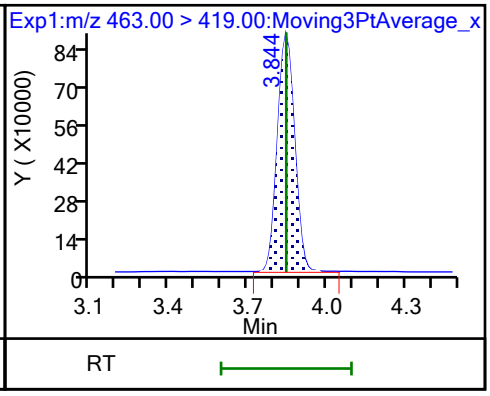
17 Perfluorooctanesulfonic acid (M)



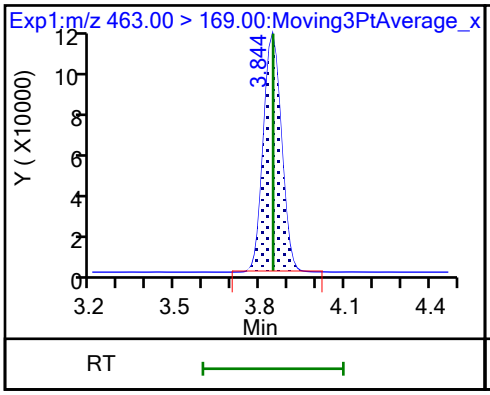
D 18 13C4 PFOS



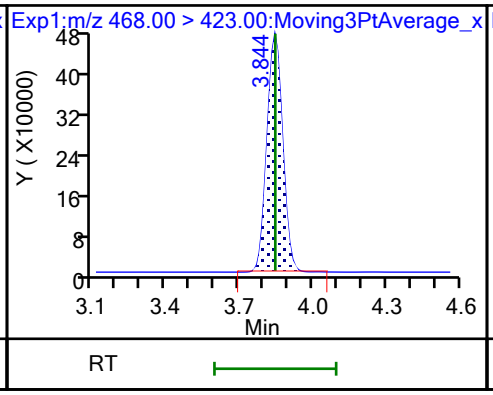
20 Perfluorononanoic acid



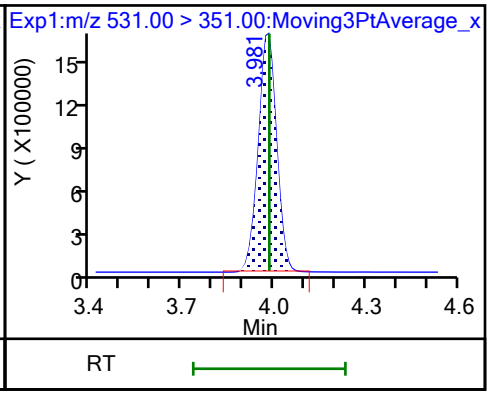
20 Perfluorononanoic acid



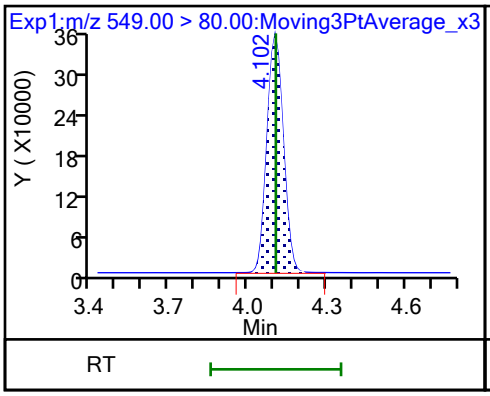
D 19 13C5 PFNA



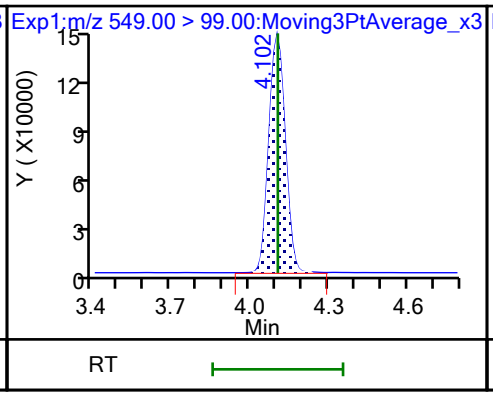
69 9-Chlorohexadecafluoro-3-oxanona (M)



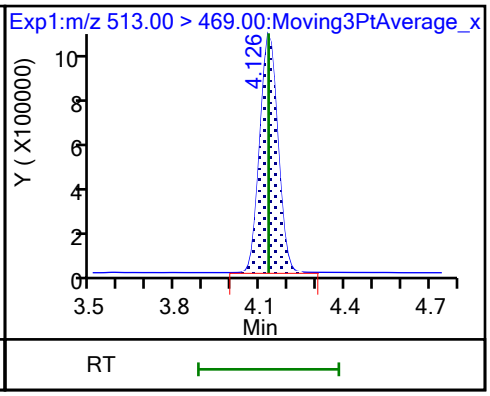
68 Perfluorononanesulfonic acid



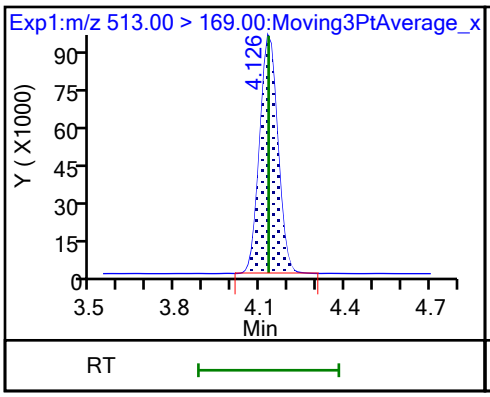
68 Perfluorononanesulfonic acid



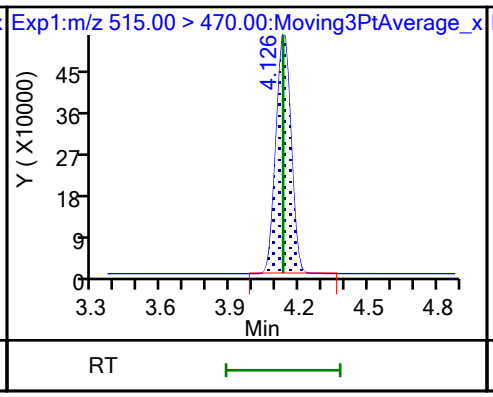
24 Perfluorodecanoic acid



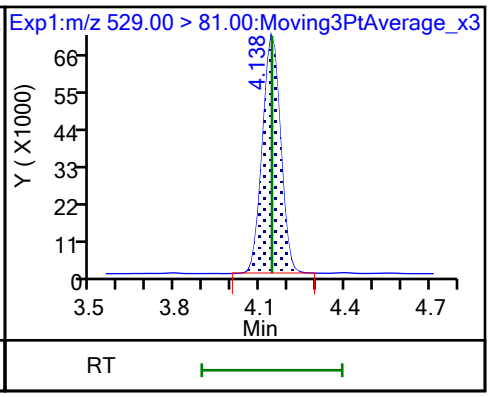
24 Perfluorodecanoic acid



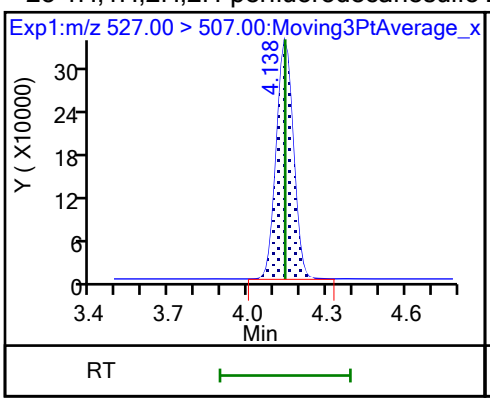
D 23 13C2 PFDA



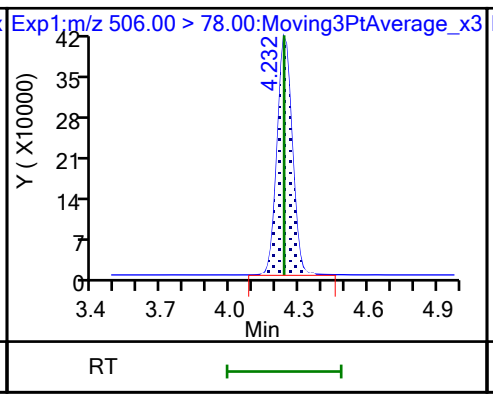
D 26 M2-8:2 FTS



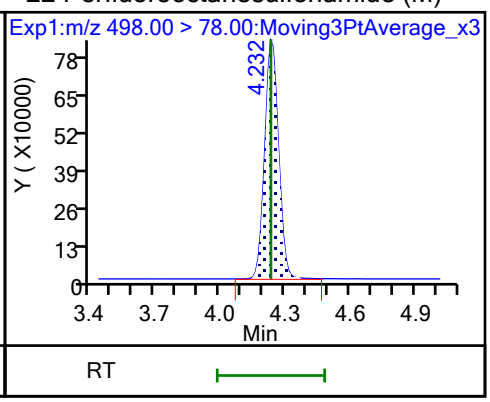
25 1H,1H,2H,2H-perfluorodecanesulfo



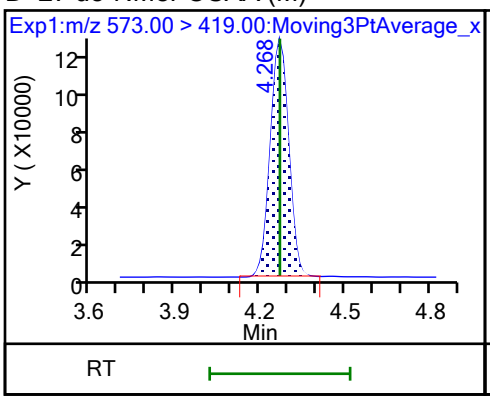
D 21 13C8 FOSA



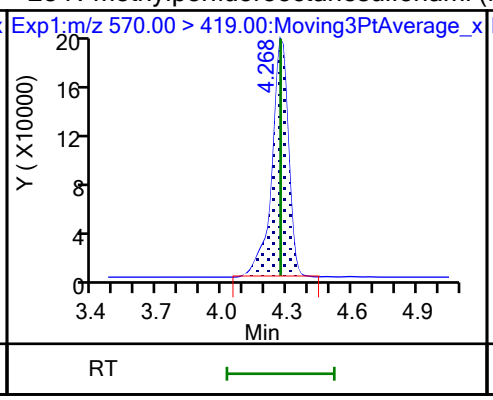
22 Perfluorooctanesulfonamide (M)



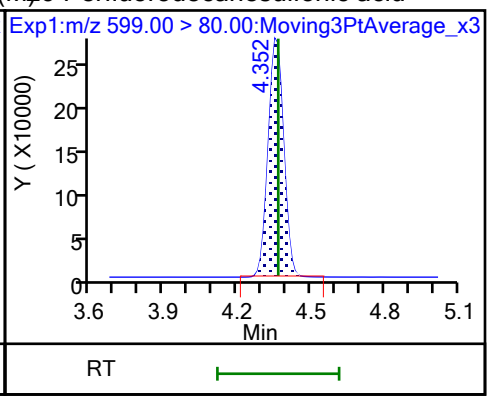
D 27 d3-NMeFOSAA (M)



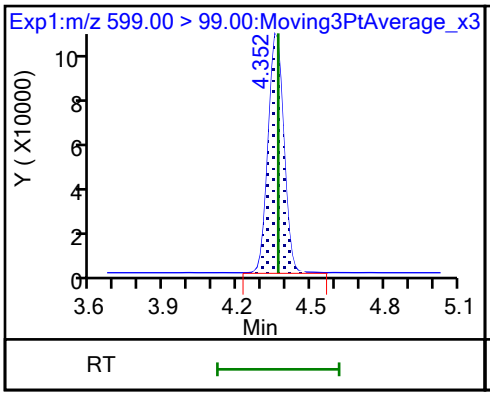
28 N-methylperfluorooctanesulfonami (M)



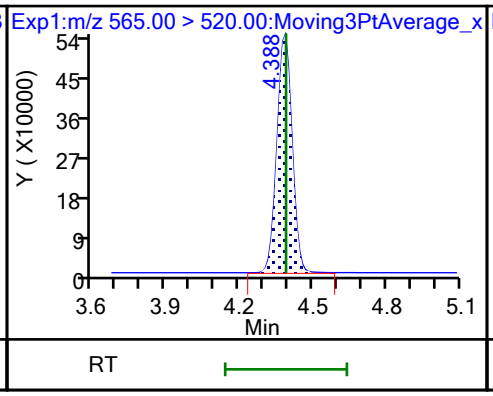
29 Perfluorodecanesulfonic acid



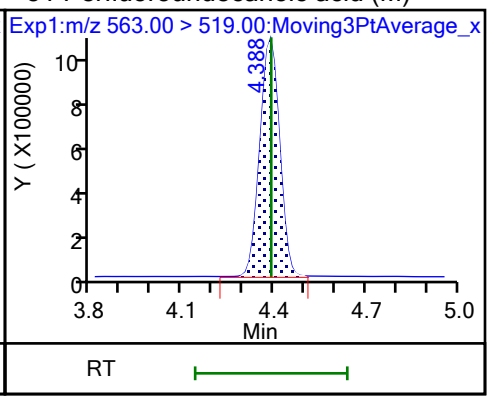
29 Perfluorodecanesulfonic acid



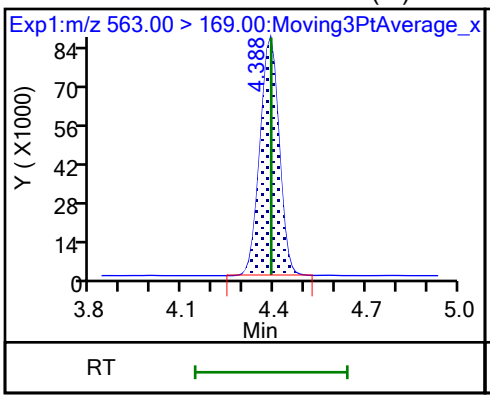
D 30 13C2 PFUnA



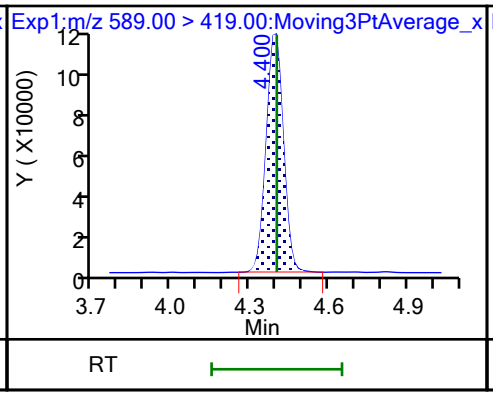
31 Perfluoroundecanoic acid (M)



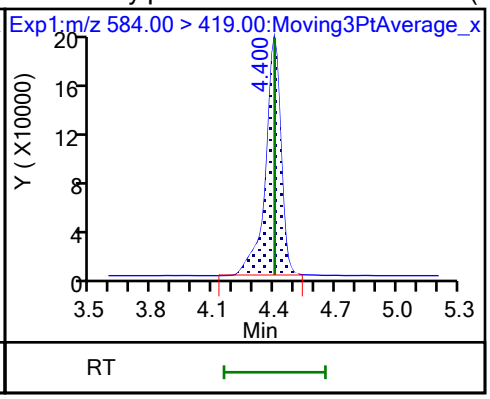
31 Perfluoroundecanoic acid (M)



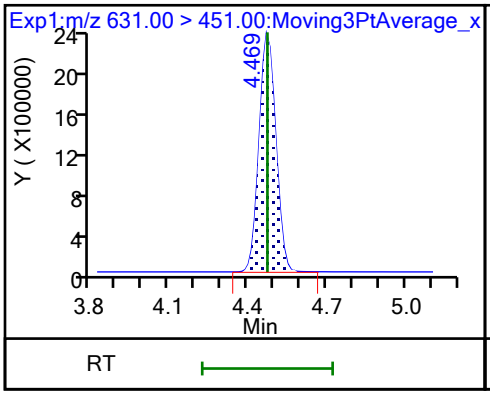
D 32 d5-NEtFOSAA



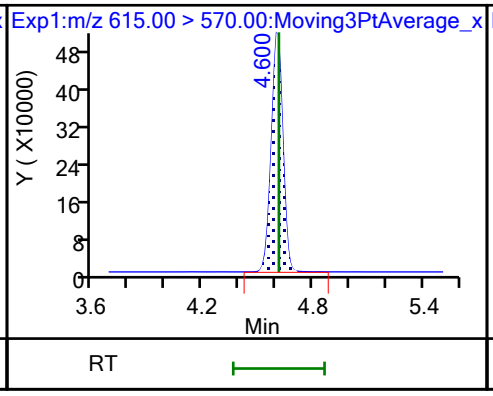
33 N-ethylperfluorooctanesulfonamid (M)



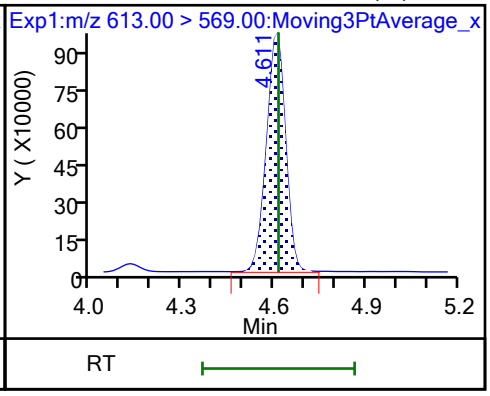
66 11-Chloroeicosafluoro-3-oxaundec



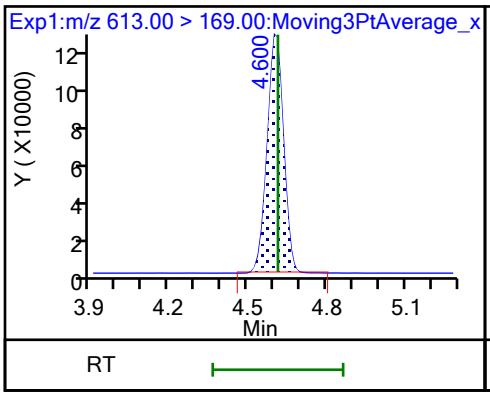
D 36 13C2 PFDoA



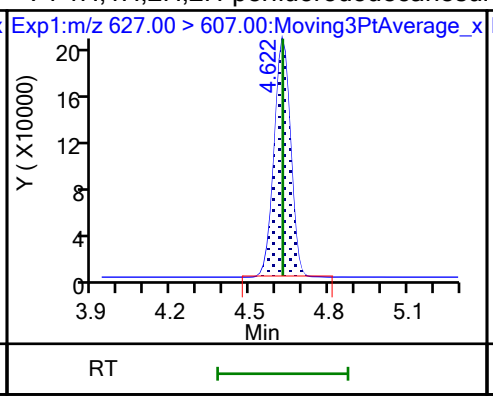
37 Perfluorododecanoic acid (M)



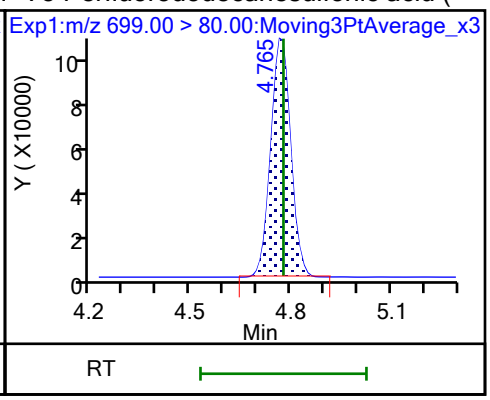
37 Perfluorododecanoic acid



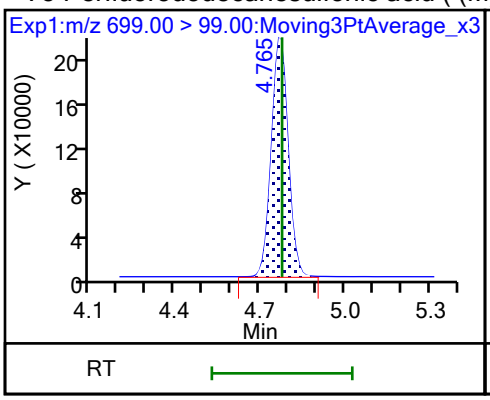
74 1H,1H,2H,2H-perfluorododecanesul



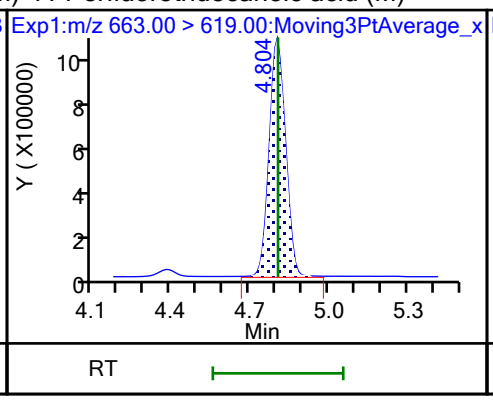
75 Perfluorododecanesulfonic acid (



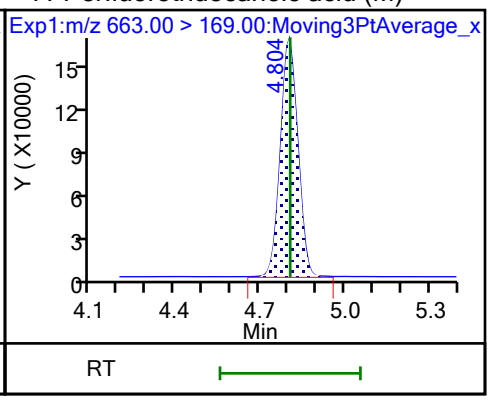
75 Perfluorododecanesulfonic acid ((M)



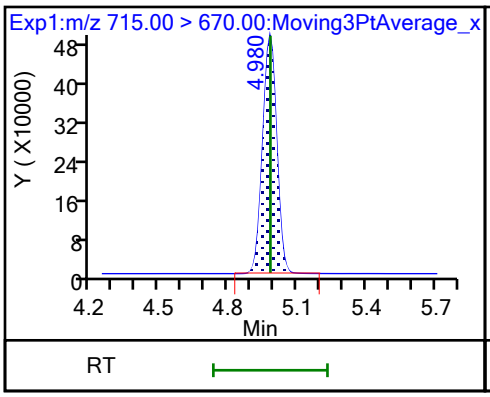
41 Perfluorotridecanoic acid (M)



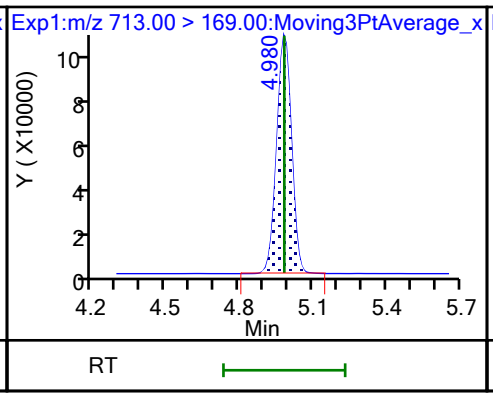
41 Perfluorotridecanoic acid (M)



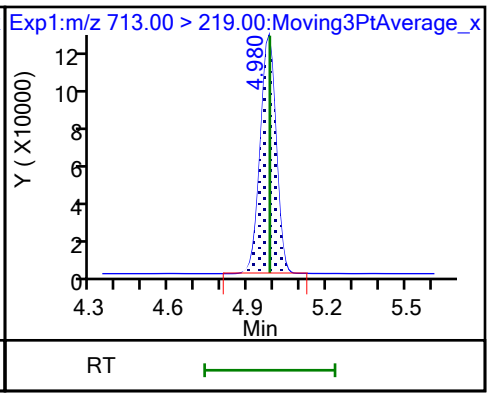
D 43 13C2 PFTeDA



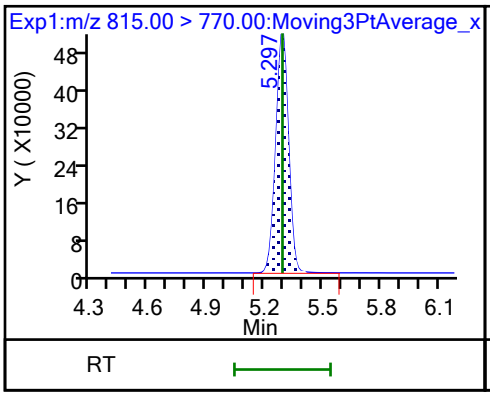
42 Perfluorotetradecanoic acid



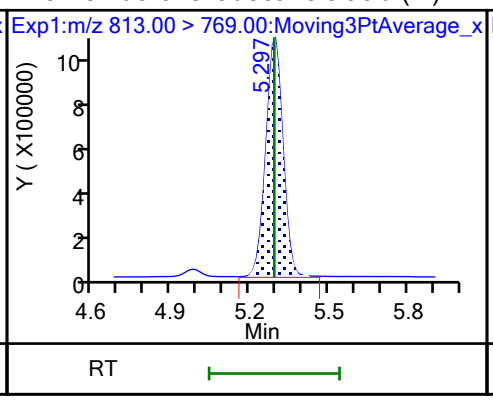
42 Perfluorotetradecanoic acid



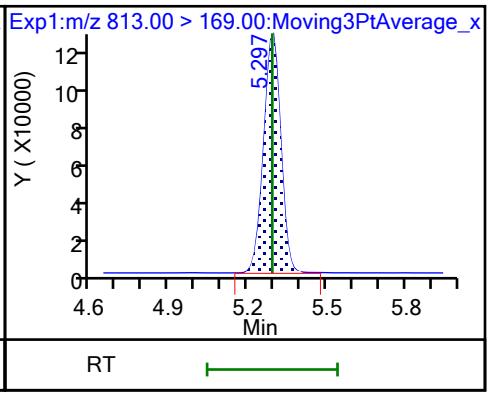
D 44 13C2 PFHxDA



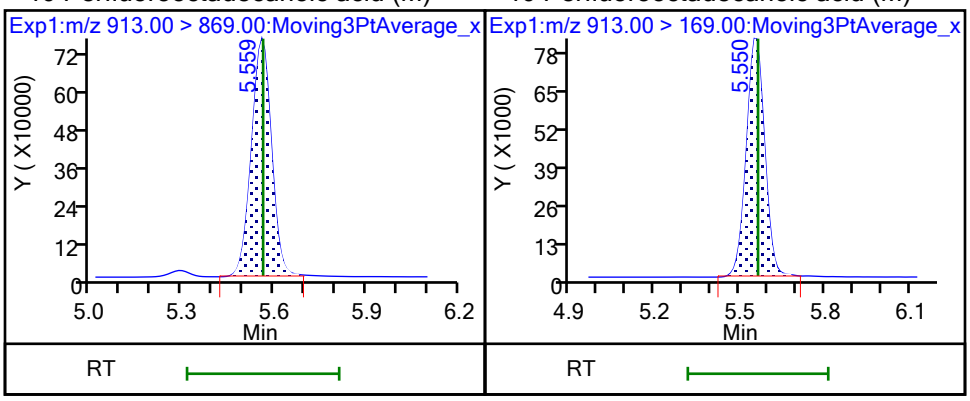
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/26 Calibration Date: 10/24/2023 09:30

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E26.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	L2ID		0.8701		0.921	1.00	-7.9	30.0
Perfluoropentanoic acid	AveID	1.079	1.065		0.987	1.00	-1.3	
Perfluorobutanesulfonic acid	AveID	1.117	1.086		0.863	0.887	-2.8	
4:2 Fluorotelomer sulfonic acid	AveID	3.396	3.410		0.941	0.937	0.4	
Perfluorohexanoic acid	AveID	1.100	1.027		0.933	1.00	-6.7	
Perfluoropentanesulfonic acid	AveID	1.306	1.300		0.937	0.941	-0.5	
HFPODA	AveID	1.001	0.9254		0.924	1.00	-7.6	
Perfluoroheptanoic acid	AveID	1.121	1.081		0.964	1.00	-3.6	
Perfluorohexanesulfonic acid	AveID	1.107	1.045		0.863	0.914	-5.6	
DONA	AveID	5.754	5.358		0.880	0.945	-6.9	
6:2 Fluorotelomer sulfonic acid	AveID	2.733	2.730		0.950	0.951	-0.1	
Perfluoroheptanesulfonic acid	AveID	1.445	1.380		0.910	0.953	-4.5	
Perfluorooctanoic acid	AveID	1.065	0.9432		0.886	1.00	-11.4	
Perfluorooctanesulfonic acid	AveID	1.166	1.112		0.885	0.928	-4.6	
Perfluorononanoic acid	AveID	0.9800	0.9507		0.970	1.00	-3.0	
9Cl-PF3ONS	AveID	3.569	3.624		0.947	0.933	1.5	
Perfluorononanesulfonic acid	AveID	0.8874	0.7756		0.841	0.962	-12.6	
Perfluorodecanoic acid	AveID	0.999	0.8487		0.849	1.00	-15.1	
8:2 Fluorotelomer sulfonic acid	AveID	2.201	2.317		1.01	0.960	5.2	
Perfluorooctanesulfonamide	AveID	0.9539	0.9761		1.02	1.00	2.3	
NMeFOSAA	AveID	0.9074	0.9059		0.998	1.00	-0.2	
Perfluorodecanesulfonic acid	AveID	0.6830	0.6466		0.914	0.965	-5.3	
Perfluoroundecanoic acid	AveID	1.031	0.9515		0.923	1.00	-7.7	
N-ethylperfluorooctanesulfonamidoacetic acid	AveID	1.000	0.9397		0.940	1.00	-6.0	
11Cl-PF3OUdS	AveID	5.474	5.767		0.994	0.943	5.4	
Perfluorododecanoic acid	AveID	1.018	0.9555		0.939	1.00	-6.1	
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	AveID	1.316	1.434		1.05	0.964	8.9	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2315	0.2240		0.937	0.968	-3.2	
Perfluorotridecanoic acid	AveID	1.070	1.096		1.03	1.00	2.5	
Perfluorotetradecanoic acid	AveID	0.1118	0.1074		0.961	1.00	-3.9	
Perfluoro-n-hexadecanoic acid (PFHxDA)	AveID	1.000	1.005		1.01	1.00	0.5	
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7809	0.7224		0.925	1.00	-7.5	
13C4 PFBA	Ave	0.9917	0.9935		1.25	1.25	0.2	
13C5 PFPeA	Ave	0.7696	0.7100		1.15	1.25	-7.7	
13C3 PFBS	Ave	1.041	0.9871		1.10	1.16	-5.2	
M2-4:2 FTS	Ave	0.1204	0.1050		1.02	1.17	-12.8	

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Lab Sample ID: CCV 200-196692/26 Calibration Date: 10/24/2023 09:30

Instrument ID: LC812 Calib Start Date: 07/26/2023 17:16

GC Column: C-18 ID: 4.60(mm) Calib End Date: 07/26/2023 18:05

Lab File ID: PA231023E26.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C2 PFHxA	Ave	0.7830	0.7231		1.16	1.25	-7.6	
13C3 HFPO-DA	Ave	0.1516	0.1343		1.11	1.25	-11.4	
18O2 PFHxS	Ave	0.7464	0.7518		1.19	1.18	0.7	50.0
13C4 PFHpA	Ave	0.8590	0.8203		1.19	1.25	-4.5	50.0
M2-6:2 FTS	Ave	0.1551	0.1445		1.11	1.19	-6.9	
13C4 PFOA	Ave	0.9731	0.999		1.28	1.25	2.7	50.0
13C4 PFOS	Ave	0.4742	0.4786		1.21	1.20	0.9	50.0
13C5 PFNA	Ave	1.059	1.047		1.24	1.25	-1.1	50.0
13C2 PFDA	Ave	1.109	1.129		1.27	1.25	1.9	
M2-8:2 FTS	Ave	0.1744	0.1530		1.05	1.20	-12.3	
13C8 FOSA	Ave	0.9462	0.8852		1.17	1.25	-6.5	
d3-NMeFOSAA	Ave	0.2650	0.2526		1.19	1.25	-4.7	
13C2 PFUnA	Ave	1.047	1.064		1.27	1.25	1.6	
d5-NEtFOSAA	Ave	0.2552	0.2553		1.25	1.25	0.0	
13C2 PFDoA	Ave	1.064	1.047		1.23	1.25	-1.6	
13C2 PFTeDA	Ave	1.059	1.036		1.22	1.25	-2.2	
13C2 PFHxDA	Ave	1.221	1.130		1.16	1.25	-7.4	

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 24-Oct-2023 09:30:16 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0057513-026 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:20:00 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:15:52
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.605	2039728	1.25		100	1286	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	1419871	0.9214		92.1	96.8	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1457681	1.15		92.3	798	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1242429	0.9873		98.7	13.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1884681	1.10		94.8	76618	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.480	2.467	0.013	1.006	1561893	0.8626	Target=2.06	97.2	508	M
298.90 > 99.00	2.467	2.467	0.0	1.000	781427		2.00(1.03-3.09)		158	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.000	550954	0.9410		100	1863	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	201298	1.02		87.2	98.8	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.794	1484670	1.15		92.4	1565	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.810	2.797	0.013	1.004	1219373	0.9329	Target=14.12	93.3	55.3	M
313.00 > 119.00	2.810	2.797	0.013	1.004	81641		14.94(7.06-21.17)		59.8	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1510389	0.9367	Target=2.72	99.5	1388	
349.00 > 99.00	2.810	2.810	0.0	0.888	510255		2.96(1.36-4.09)		495	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.918	2.908	0.010	1.000	204061	0.9243		92.4	541	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.918	2.908	0.010	0.829	275630	1.11		88.6	1393	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.166	3.168	-0.002	0.899	1460106	1.19		101	6551	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.166	3.168	-0.002	1.000	1179822	0.8632	Target=3.32	94.4	1813	M
399.00 > 99.00	3.166	3.168	-0.002	1.000	339939		3.47(1.66-4.98)		236	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.166	3.168	-0.002	0.996	1456479	0.9644	Target=4.17	96.4	123	M
363.00 > 169.00	3.166	3.168	-0.002	0.996	324368		4.49(2.09-6.26)		631	
D 9 13C4 PFHpA										
367.00 > 322.00	3.177	3.168	0.009	0.902	1684130	1.19		95.5	5386	
77 DONA										
377.00 > 251.00	3.213	3.203	0.010	0.838	3980659	0.8800	Target=3.33	93.1	2775	
377.00 > 85.00	3.213	3.203	0.010	0.838	1083224		3.67(1.66-4.99)		1273	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.512	3.505	0.007	0.917	1033996	0.9101	Target=4.83	95.5	1710	M
449.00 > 99.00	3.512	3.505	0.007	0.917	204864		5.05(2.41-7.24)		494	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.512	3.505	0.007	0.997	281751	1.11		93.1	445	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.512	3.514	-0.002	1.000	615903	0.9497		99.9	878	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.530	3.514	0.016	1.003	1548399	0.8855	Target=2.88	88.6	60.4	M
413.00 > 169.00	3.521	3.514	0.007	1.000	549898		2.82(1.44-4.32)		667	M
D 14 13C4 PFOA										
417.00 > 372.00	3.521	3.523	-0.002	1.000	2051993	1.28		103	4933	
* 62 13C2 PFOA										
415.00 > 370.00	3.521	3.523	-0.002		2053093	1.25			11287	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.832	3.822	0.010	1.000	811461	0.8850	Target=4.24	95.4	1348	M
499.00 > 99.00	3.832	3.822	0.010	1.000	187414		4.33(2.12-6.37)		264	M
D 18 13C4 PFOS										
503.00 > 80.00	3.832	3.822	0.010	1.088	939401	1.21		101	3537	
20 Perfluorononanoic acid										
463.00 > 419.00	3.844	3.845	-0.001	0.997	1634791	0.9701	Target=8.34	97.0	206	
463.00 > 169.00	3.844	3.845	-0.001	0.997	206032		7.93(4.17-12.51)		1429	
D 19 13C5 PFNA										
468.00 > 423.00	3.855	3.845	0.010	1.095	2149450	1.24		98.9	4930	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.982	3.983	-0.001	1.039	2657833	0.9473		102	4003	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.114	4.105	0.009	1.074	586556	0.8409	Target=2.17	87.4	4332	
549.00 > 99.00	4.114	4.105	0.009	1.074	244359		2.40(1.08-3.25)		837	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.138	4.129	0.009	1.000	1574306	0.8492	Target=11.44	84.9	389	
513.00 > 169.00	4.138	4.129	0.009	1.000	150974		10.43(5.72-17.16)		715	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.175	2318773	1.27		102	7196	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.150	4.141	0.009	1.179	300867	1.05		87.7	993	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.150	4.141	0.009	1.000	558748	1.01		105	1402	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.234	0.010	1.205	1817325	1.17		93.5	2248	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.234	0.010	1.000	1419110	1.02		102	2253	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.268	4.270	-0.002	1.212	518566	1.19		95.3	2507	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.270	0.011	1.003	375805	1.00		99.8	787	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.139	490476	0.9136	Target=2.37	94.7	4363	
599.00 > 99.00	4.364	4.366	-0.002	1.139	191639		2.56(1.19-3.56)		2069	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	2183935	1.27		102	7314	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	1662380	0.9232	Target=12.20	92.3	371	
563.00 > 169.00	4.388	4.390	-0.002	1.000	155683		10.68(6.10-18.31)		1992	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.249	524122	1.25		100	1015	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	394026	0.9395		94.0	963	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.473	0.010	1.170	4275398	0.99		105	5254	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2148658	1.23		98.4	6294	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.613	-0.002	1.000	1642427	0.9388	Target=8.47	93.9	98.8	
613.00 > 169.00	4.611	4.613	-0.002	1.000	209762		7.83(4.23-12.70)		2264	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.633	4.624	0.009	1.116	347229	1.05		109	4272	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.246	170448	0.9367	Target=0.48	96.8	2408	
699.00 > 99.00	4.775	4.777	-0.002	1.246	348927		0.49(0.24-0.72)		4054	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.814	4.806	0.008	1.044	1884683	1.02	Target=6.41	102	104	M
663.00 > 169.00	4.814	4.806	0.008	1.044	272316		6.92(3.21-9.62)		1637	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.991	4.982	0.009	1.417	2127364	1.22		97.8	4529	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.991	4.982	0.009	1.000	182843	0.9608	Target=0.87	96.1	1704	
713.00 > 219.00	4.980	4.982	-0.002	0.998	194106		0.94(0.43-1.30)		2285	

Report Date: 25-Oct-2023 23:20:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.297	5.292	0.005	1.504	2321011	1.16		92.6	4109	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.297	5.292	0.005	1.000	1866913	1.01	Target=7.89	101	111	M
813.00 > 169.00	5.297	5.292	0.005	1.000	229927		8.12(3.94-11.83)		1800	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.568	5.563	0.005	1.051	1341394	0.9251	Target=9.39	92.5	129	M
913.00 > 169.00	5.568	5.563	0.005	1.051	139141		9.64(4.69-14.08)		1064	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

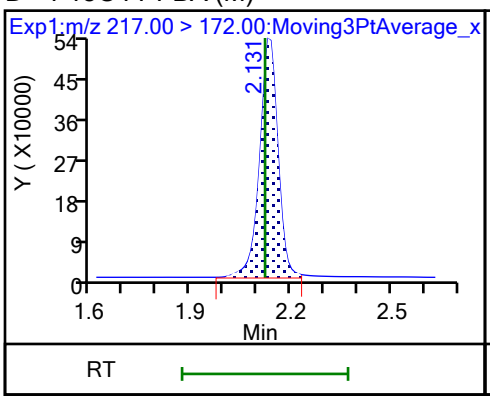
PFAS32NCIC4_00047 Amount Added: 100.00 Units: uL

Report Date: 25-Oct-2023 23:20:01 Chrom Revision: 2.3 18-Oct-2023 21:16:54

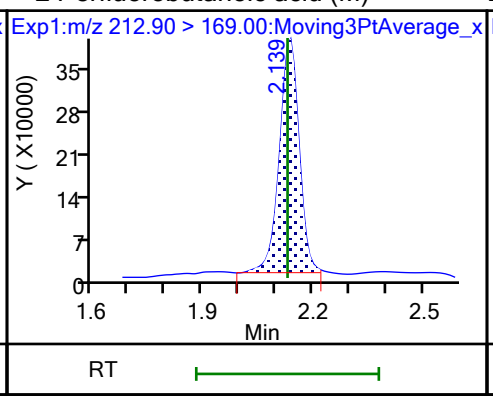
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E26.d
Injection Date: 24-Oct-2023 09:30:16 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: LC812user ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

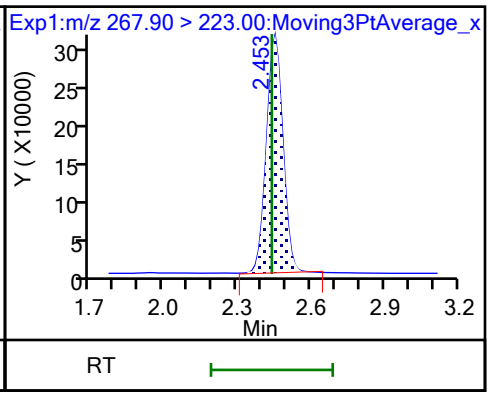
D 1 13C4 PFBA (M)



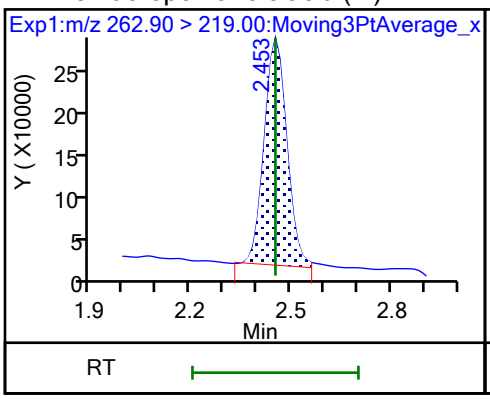
2 Perfluorobutanoic acid (M)



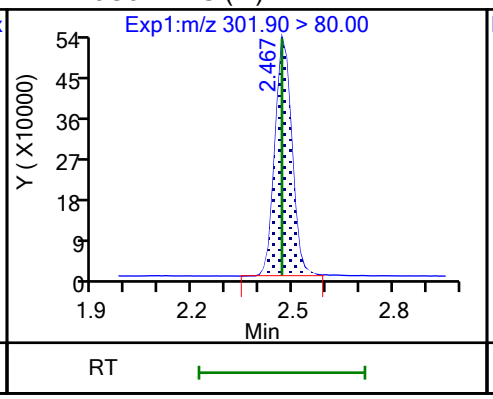
D 3 13C5 PFPeA



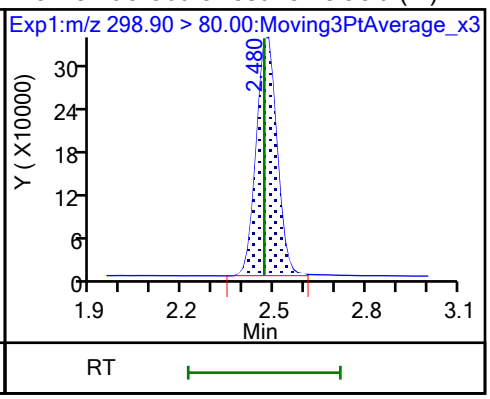
4 Perfluoropentanoic acid (M)



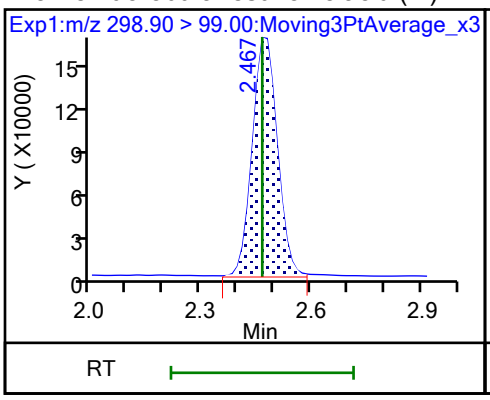
D 47 13C3 PFBS (M)



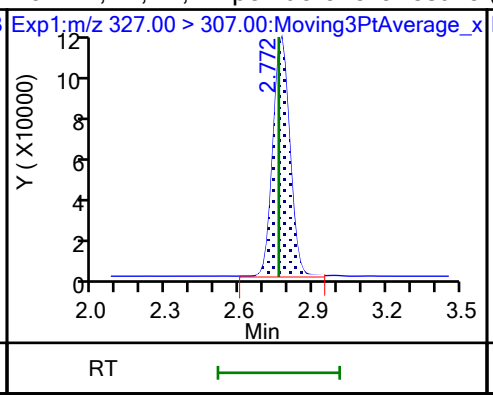
5 Perfluorobutanesulfonic acid (M)



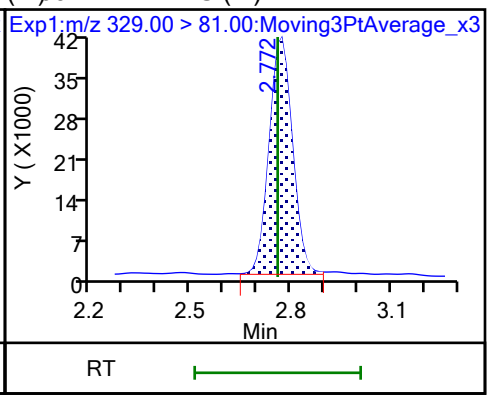
5 Perfluorobutanesulfonic acid (M)



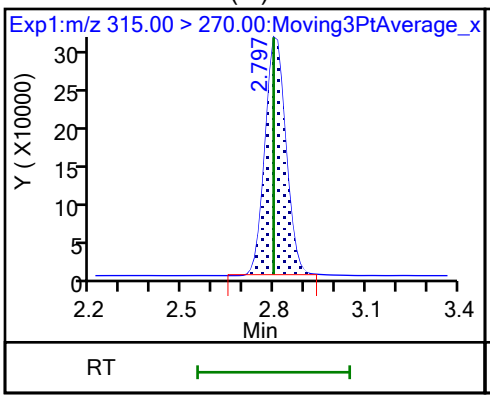
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



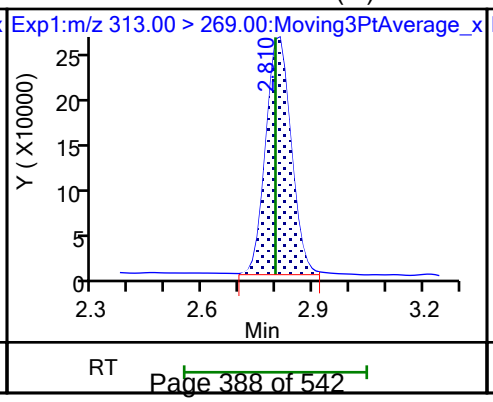
D 60 M2-4:2 FTS (M)



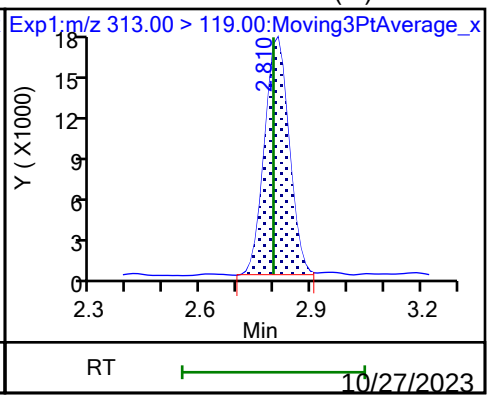
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

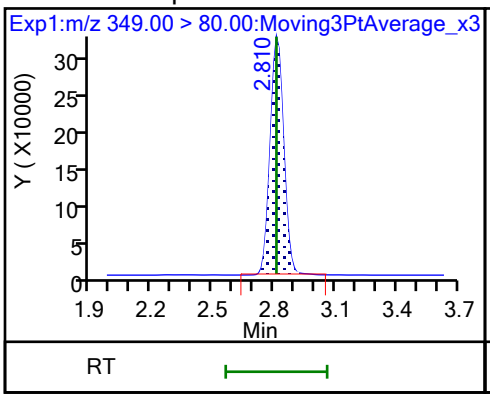


6 Perfluorohexanoic acid (M)

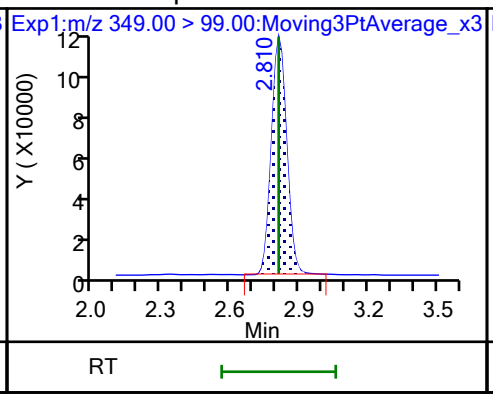


10/27/2023
10:52 AM

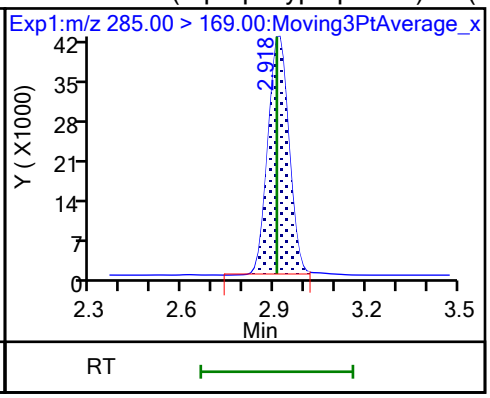
70 Perfluoropentanesulfonic acid



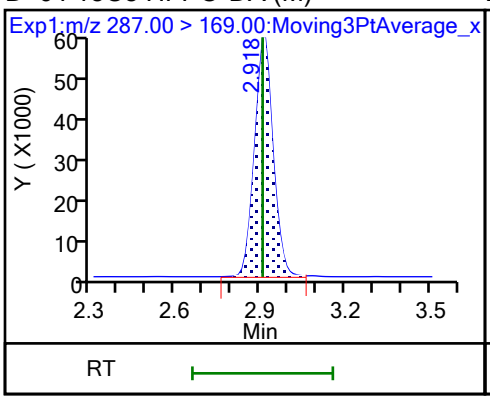
70 Perfluoropentanesulfonic acid



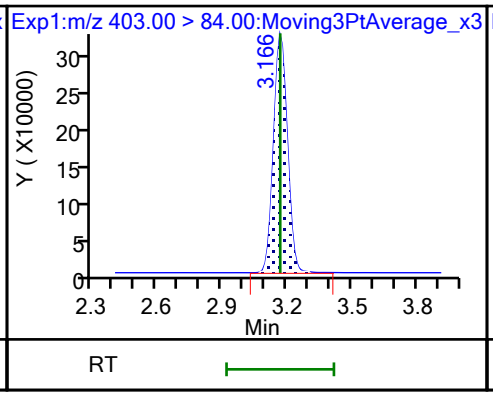
67 Perfluoro(2-propoxypropanoic) ac (M)



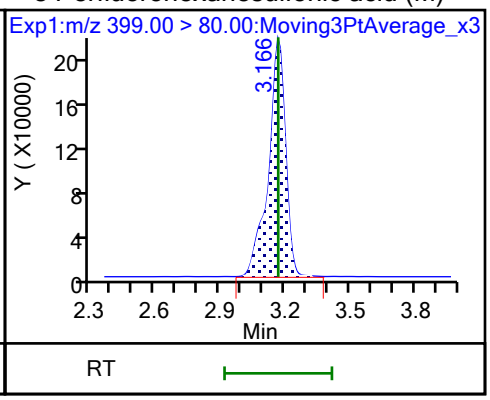
D 64 13C3 HFPO-DA (M)



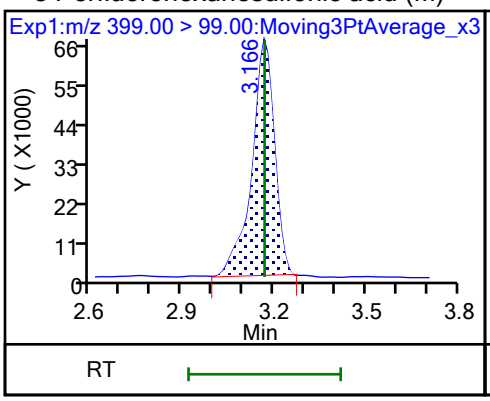
D 11 18O2 PFHxS



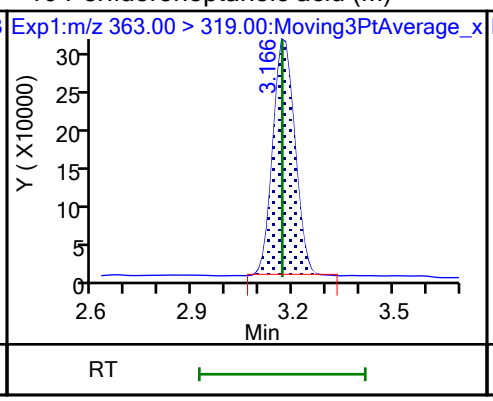
8 Perfluorohexanesulfonic acid (M)



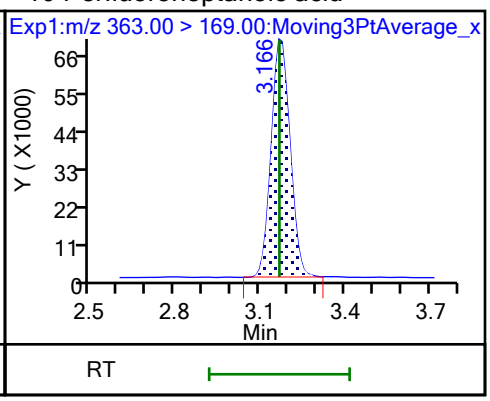
8 Perfluorohexanesulfonic acid (M)



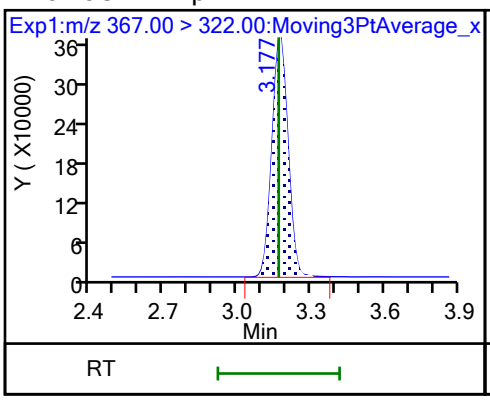
10 Perfluoroheptanoic acid (M)



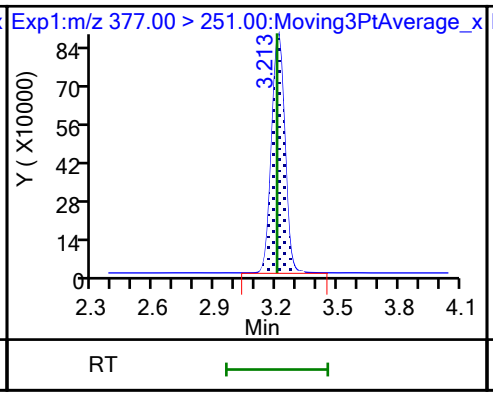
10 Perfluoroheptanoic acid



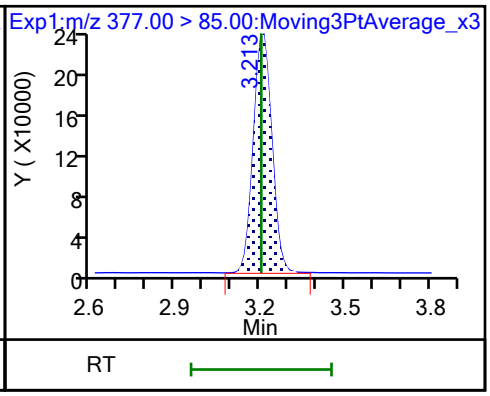
D 9 13C4 PFHpA



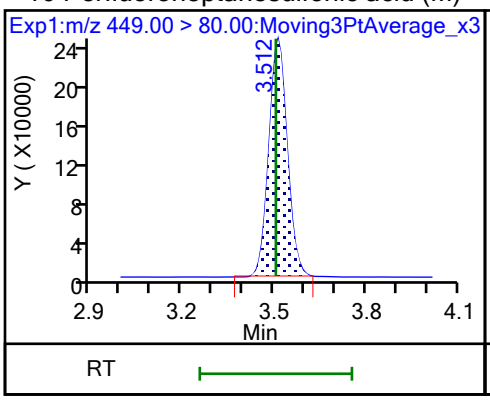
77 DONA



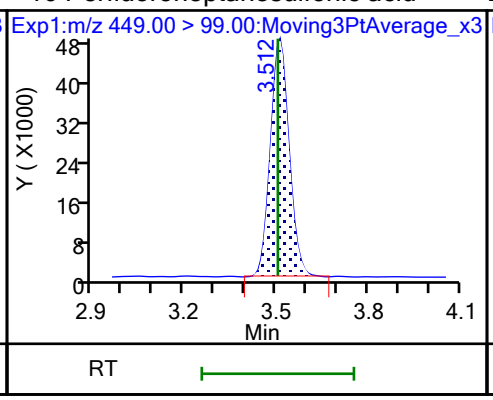
77 DONA



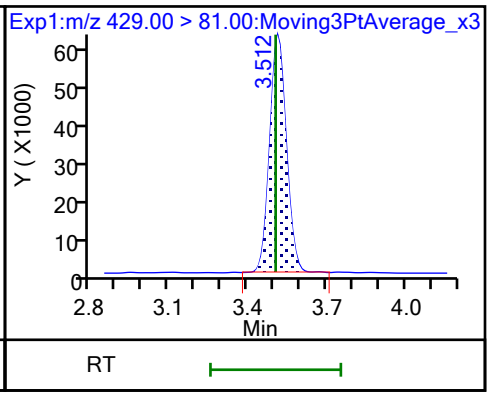
16 Perfluoroheptanesulfonic acid (M)



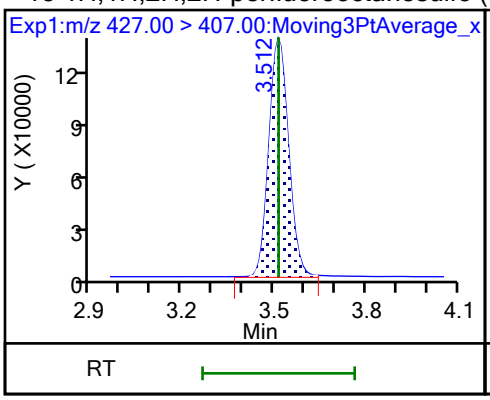
16 Perfluoroheptanesulfonic acid



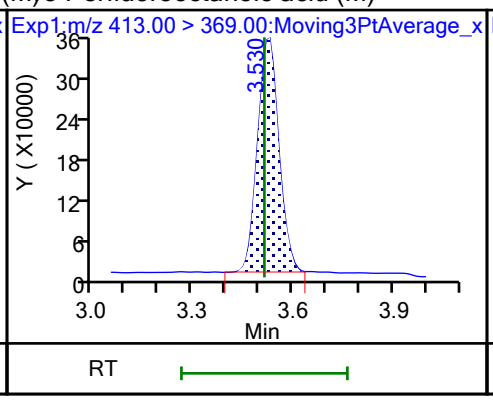
D 12 M2-6:2 FTS



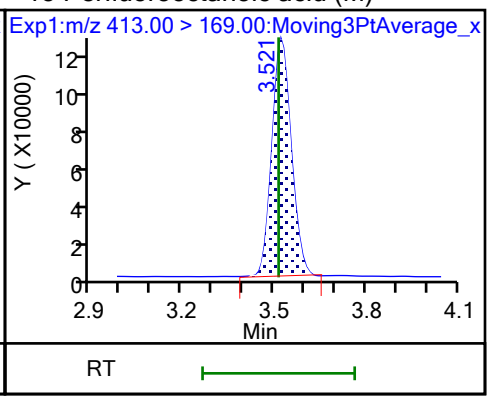
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



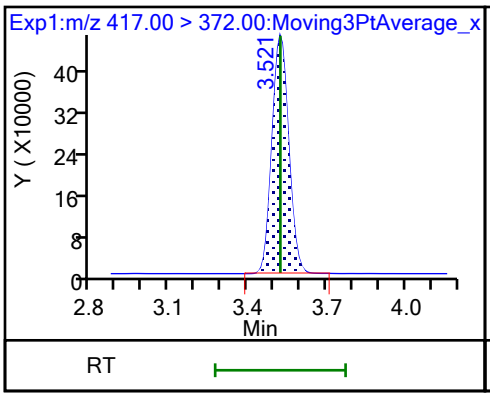
15 Perfluorooctanoic acid (M)



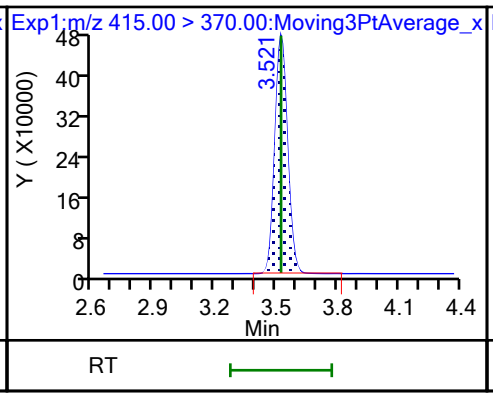
15 Perfluorooctanoic acid (M)



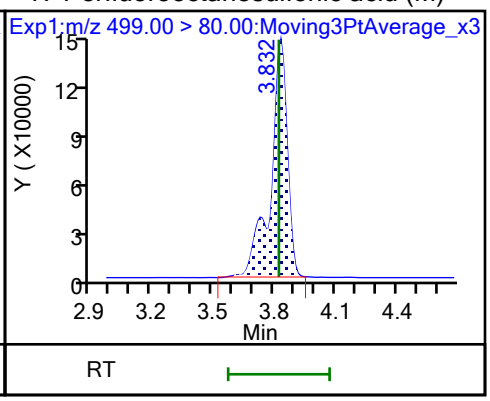
D 14 13C4 PFOA



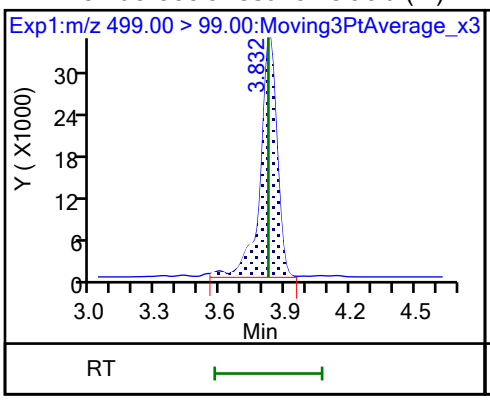
* 62 13C2 PFOA



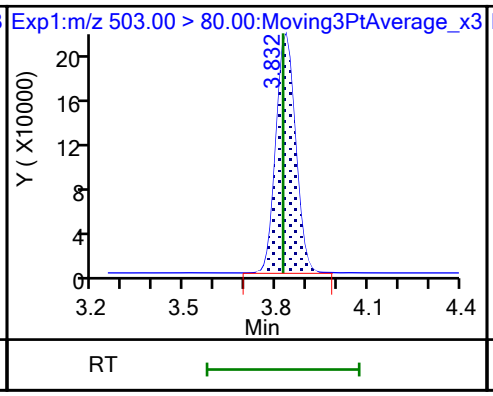
17 Perfluorooctanesulfonic acid (M)



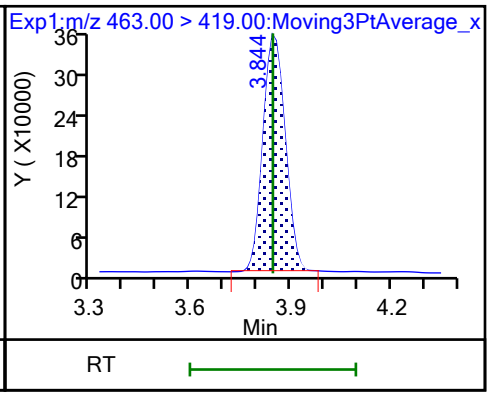
17 Perfluorooctanesulfonic acid (M)



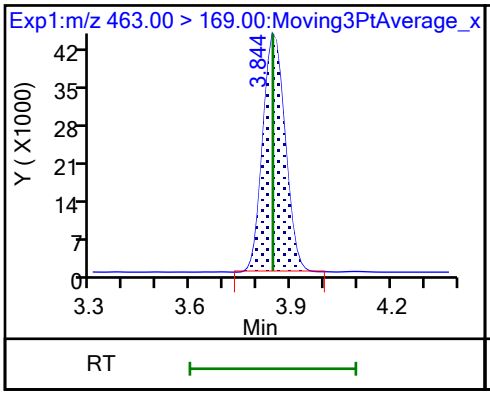
D 18 13C4 PFOS



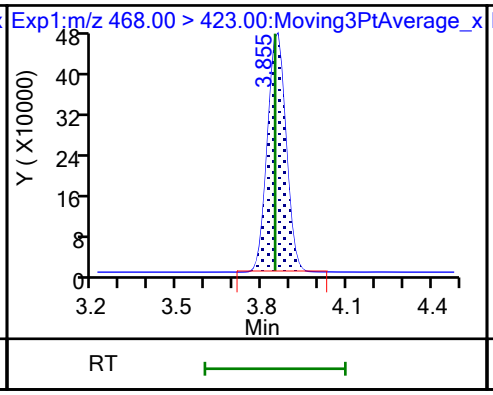
20 Perfluorononanoic acid



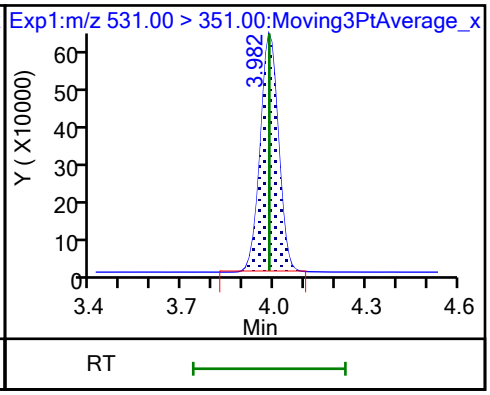
20 Perfluorononanoic acid



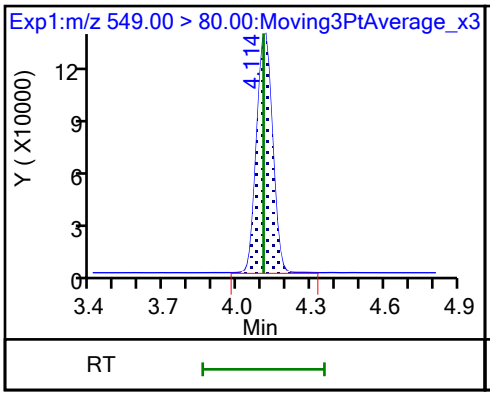
D 19 13C5 PFNA



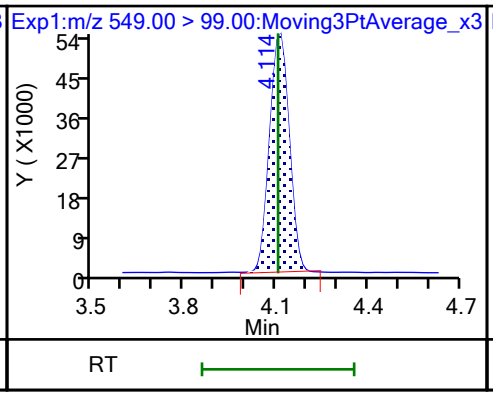
69 9-Chlorohexadecafluoro-3-oxanona (M)



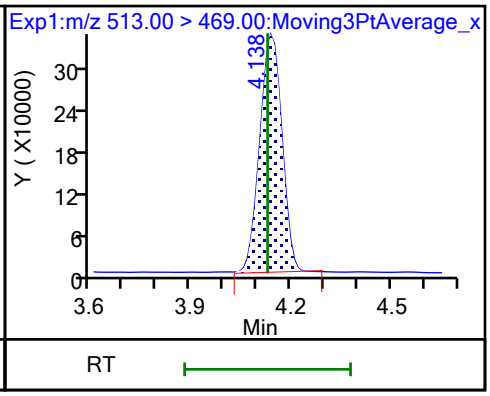
68 Perfluorononanesulfonic acid



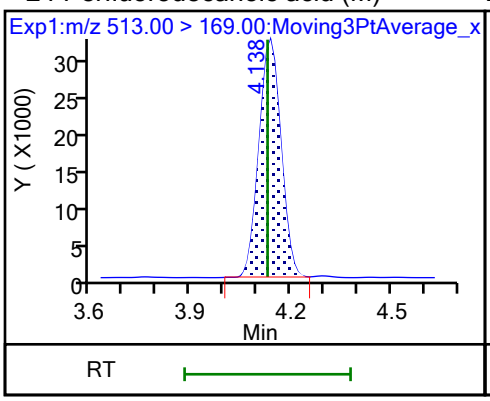
68 Perfluorononanesulfonic acid



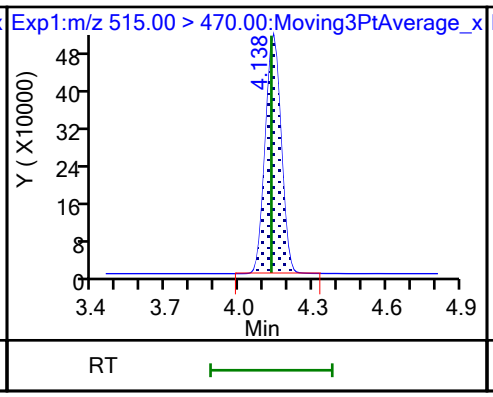
24 Perfluorodecanoic acid



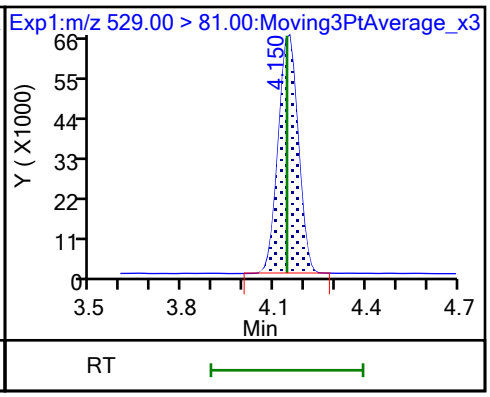
24 Perfluorodecanoic acid (M)



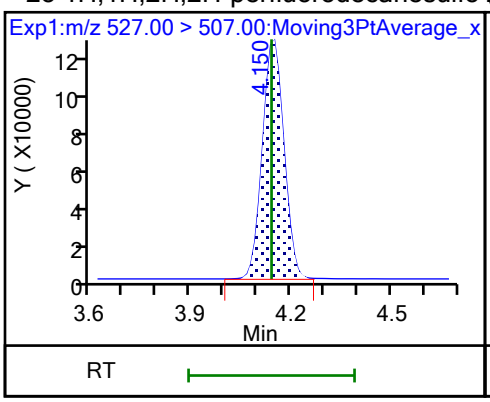
D 23 13C2 PFDA



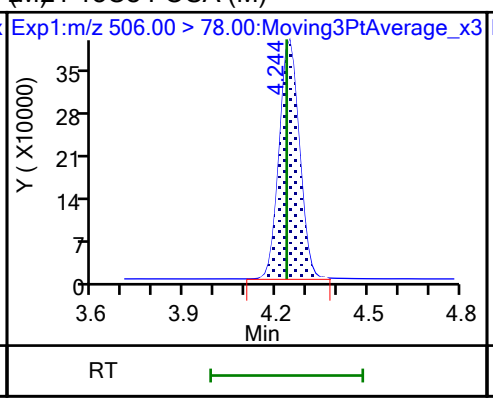
D 26 M2-8:2 FTS



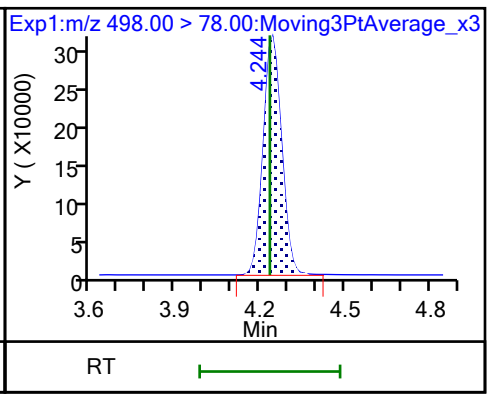
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



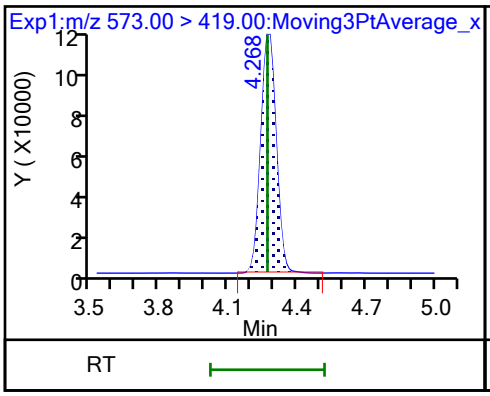
D 21 13C8 FOSA (M)



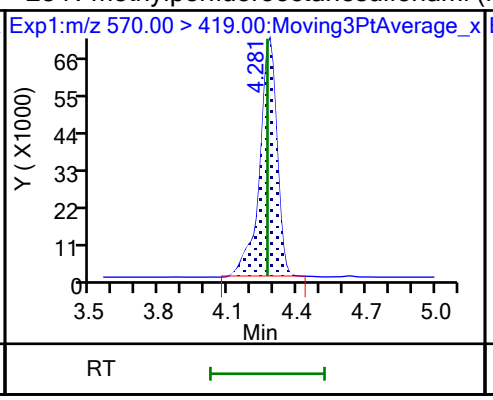
22 Perfluorooctanesulfonamide



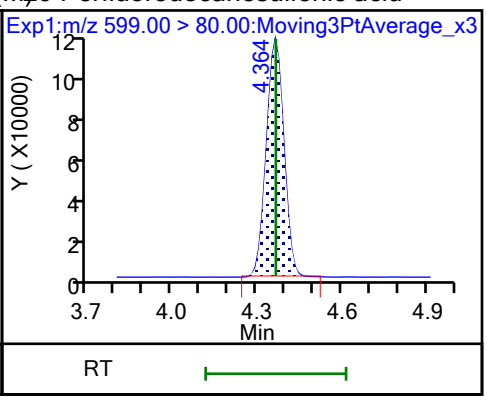
D 27 d3-NMeFOSAA



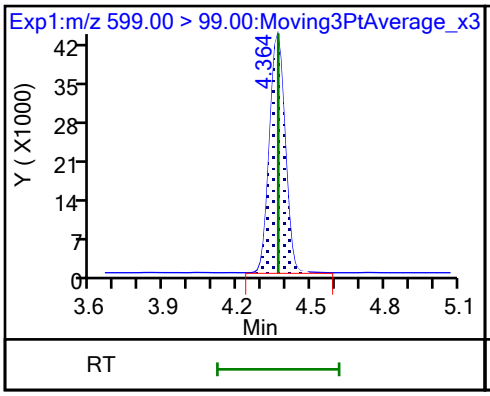
28 N-methylperfluorooctanesulfonami (M)



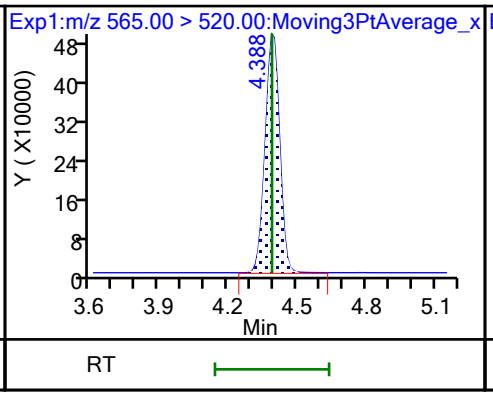
29 Perfluorodecanesulfonic acid



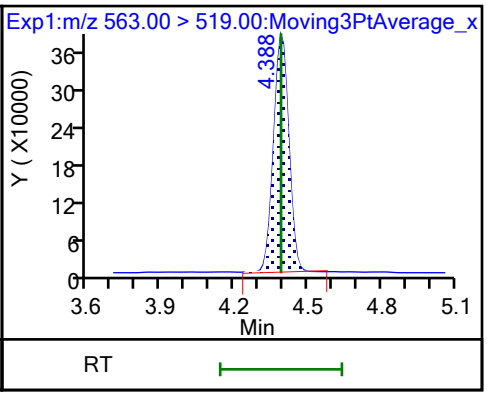
29 Perfluorodecanesulfonic acid



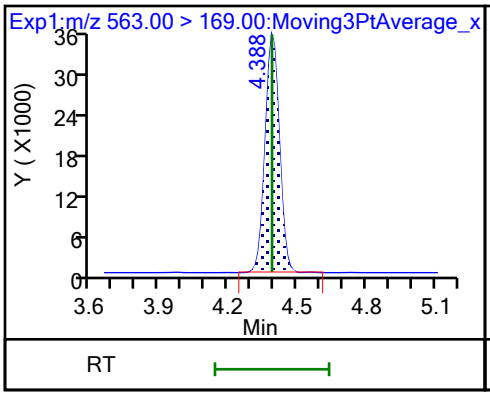
D 30 13C2 PFUnA



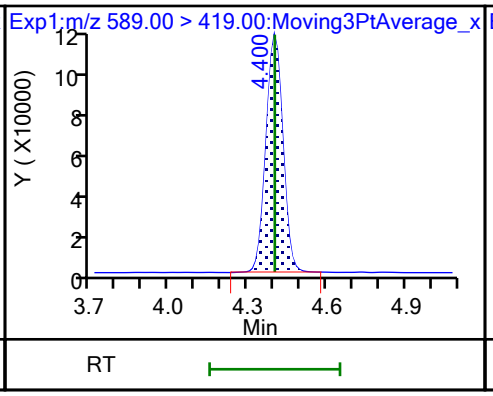
31 Perfluoroundecanoic acid



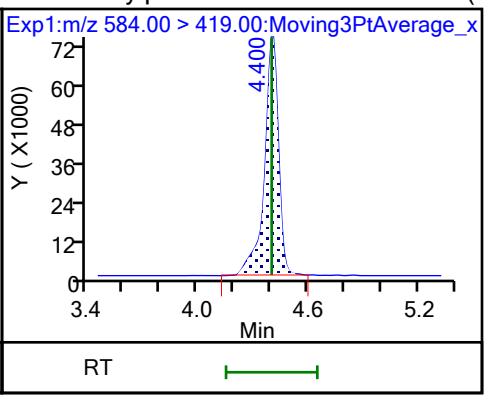
31 Perfluoroundecanoic acid



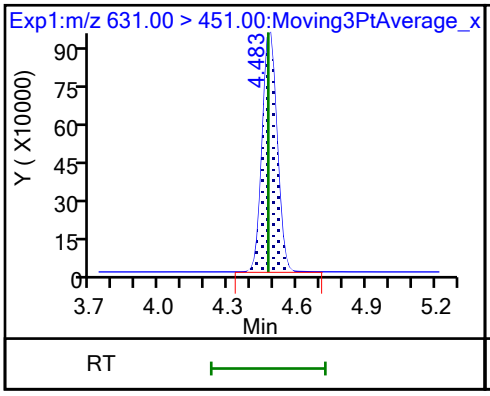
D 32 d5-NEtFOSAA



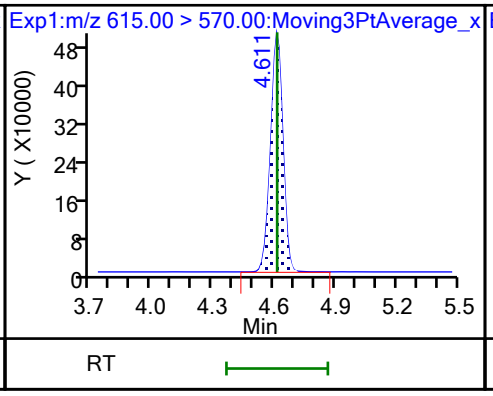
33 N-ethylperfluorooctanesulfonamid (M)



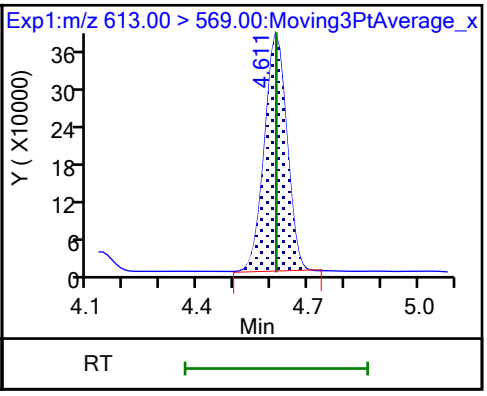
66 11-Chloroeicosafluoro-3-oxaundec



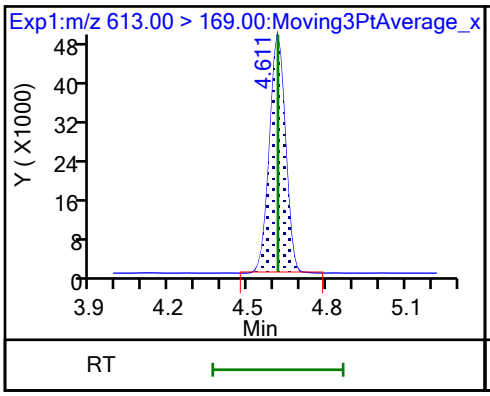
D 36 13C2 PFDoA



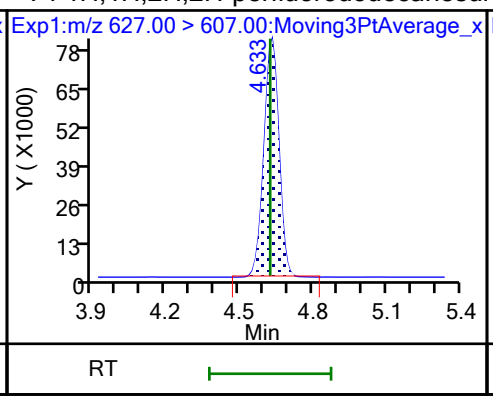
37 Perfluorododecanoic acid



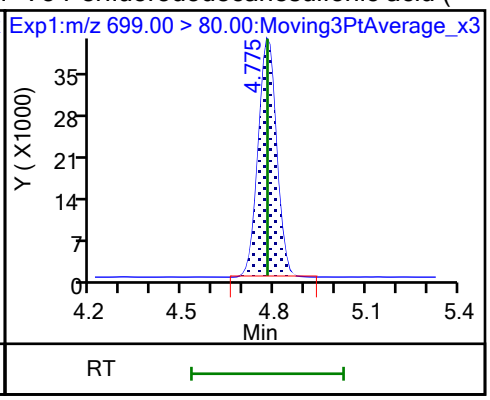
37 Perfluorododecanoic acid



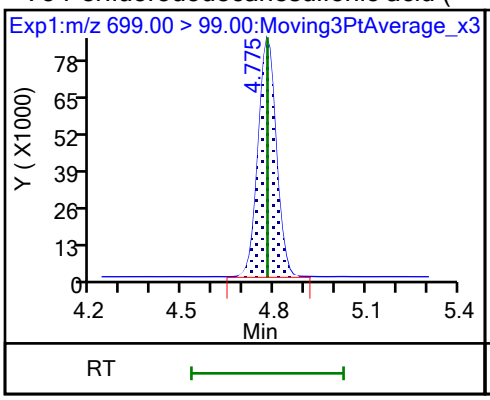
74 1H,1H,2H,2H-perfluorododecanesul



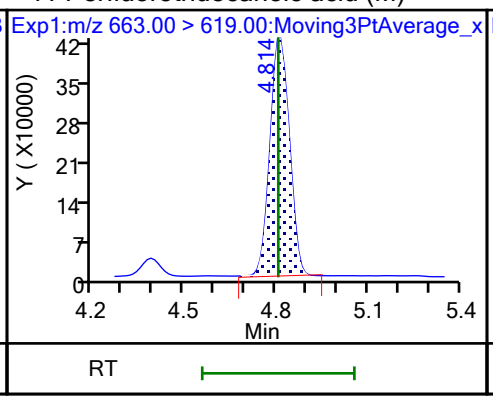
75 Perfluorododecanesulfonic acid (



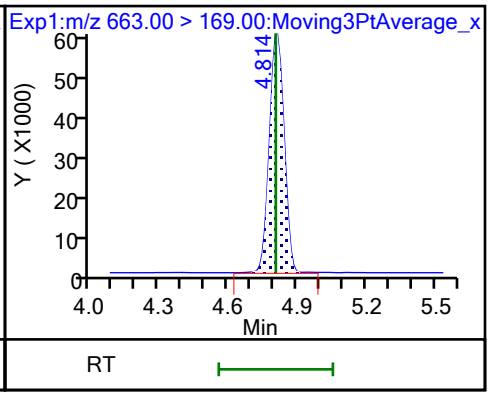
75 Perfluorododecanesulfonic acid (



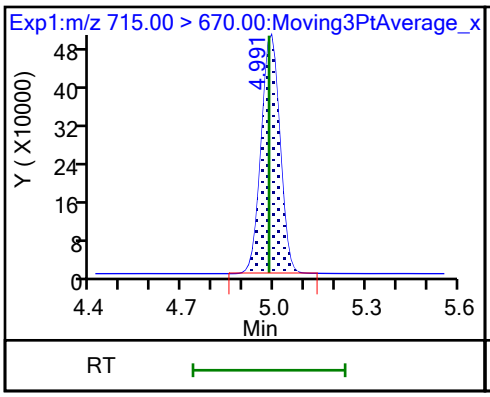
41 Perfluorotridecanoic acid (M)



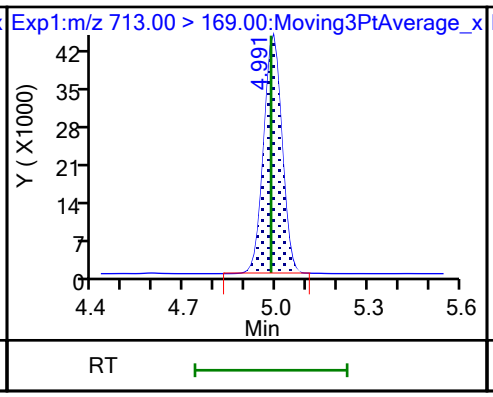
41 Perfluorotridecanoic acid



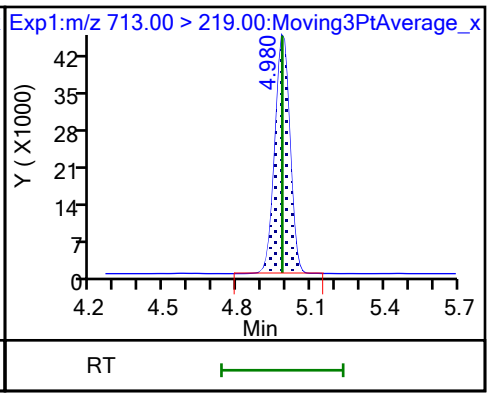
D 43 13C2 PFTeDA



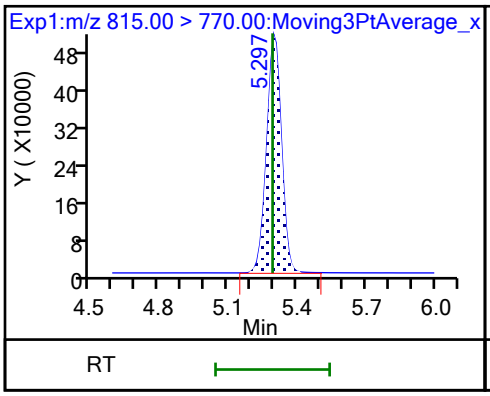
42 Perfluorotetradecanoic acid



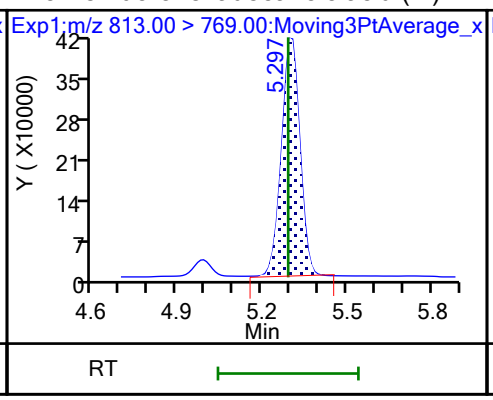
42 Perfluorotetradecanoic acid



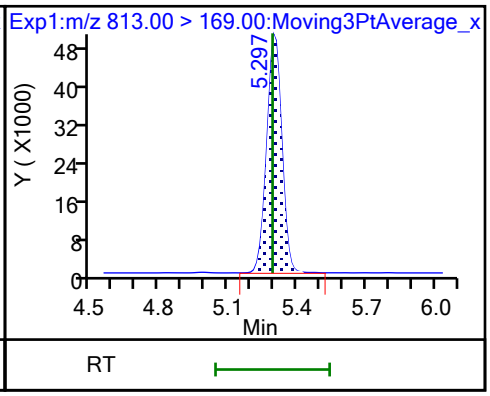
D 44 13C2 PFHxDA



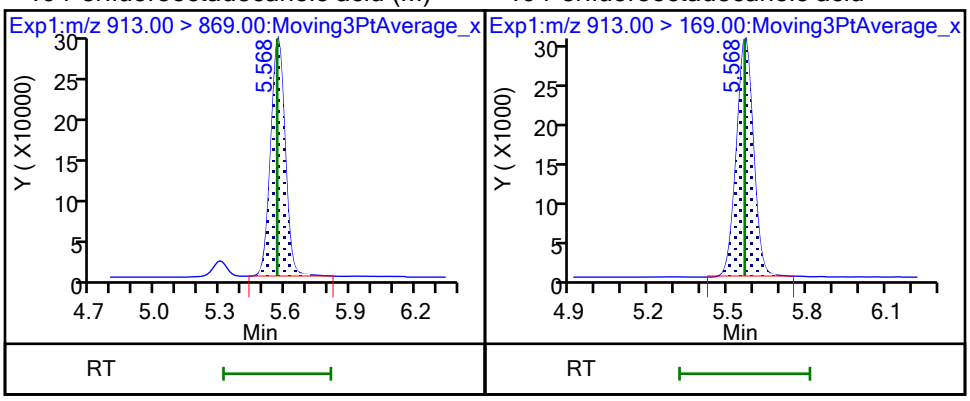
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-196662/1-A

Matrix: Water | Lab File ID: PA231023E02.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 06:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	5.00	U	5.00	1.20
2706-90-3	Perfluoropentanoic acid	2.00	U	2.00	0.68
307-24-4	Perfluorohexanoic acid	2.00	U	2.00	0.65
375-85-9	Perfluoroheptanoic acid	2.00	U	2.00	0.54
335-67-1	Perfluorooctanoic acid	2.00	U	2.00	0.76
375-95-1	Perfluorononanoic acid	2.00	U	2.00	0.49
335-76-2	Perfluorodecanoic acid	2.00	U	2.00	0.46
2058-94-8	Perfluoroundecanoic acid	2.00	U	2.00	0.55
307-55-1	Perfluorododecanoic acid	2.00	U	2.00	0.49
72629-94-8	Perfluorotridecanoic acid	2.00	U	2.00	0.48
376-06-7	Perfluorotetradecanoic acid	2.00	U	2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	2.00	U	2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	2.00	U	2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	2.00	U	2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	2.00	U	2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	5.00	U	5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	2.00	U	2.00	0.77
754-91-6	Perfluorooctanesulfonamide	2.00	U	2.00	0.92
2355-31-9	NMeFOSAA	5.00	U	5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	5.00	U	5.00	1.60
13252-13-6	HFPODA	4.00	U	4.00	1.10
919005-14-4	DONA	2.00	U	2.00	0.42
756426-58-1	9Cl-PF3ONS	2.00	U	2.00	0.32
763051-92-9	11Cl-PF3OUdS	2.00	U	2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-196662/1-A

Matrix: Water Lab File ID: PA231023E02.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:13

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		50-150
STL01893	13C5 PFPeA	87		50-150
STL01892	13C4 PFHpA	98		50-150
STL02116	13C2 PFTeDA	76		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	75		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	86		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	91		50-150
STL02280	M2-8:2 FTS	84		50-150
STL02255	13C3 HFPO-DA	84		50-150
STL00994	18O2 PFHxS	96		50-150
STL00993	13C2 PFHxA	94		50-150
STL00991	13C4 PFOS	96		50-150
STL00998	13C2 PFDoA	81		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	94		50-150
STL00990	13C4 PFOA	99		50-150
STL00997	13C2 PFUnA	96		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Lims ID: MB 200-196662/1-A
Client ID:
Sample Type: MB
Inject. Date: 24-Oct-2023 06:13:48 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-196662/1-A
Misc. Info.: 200-0057513-002 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:24:16
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.131	2.122	0.009	0.605	2218499	1.23		98.4	1715	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.139	2.130	0.009	1.004	40865	-0.0154			2.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1524653	1.09		87.1	1848	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.467	2.453	0.014	1.006	8272	0.006285			0.2	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	1991055	1.05		90.4	114647	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	5097	0.002664	Target=2.06		6.1	M
298.90 > 99.00	2.467	2.467	0.0	1.000	2664		1.91(1.03-3.09)		1.4	M
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.772	2.760	0.012	1.000	892	0.001351			10.2	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.787	227009	1.04		88.7	134	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1680836	1.18		94.4	1450	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	3445	0.002328	Target=14.12		0.9	M
313.00 > 119.00	2.810	2.797	0.013	1.004	365		9.44(7.06-21.17)		0.6	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.897	2.908	-0.011	0.996	165	0.000714			3.2	M
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	288596	1.05		83.7	813	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1539088	1.13		95.8	8963	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	6499	0.004511	Target=3.32		17.4	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	1631		3.98(1.66-4.98)		1.8	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.188	3.168	0.020	1.007	1759	0.001020	Target=4.17		0.5	M
363.00 > 169.00	3.165	3.168	-0.003	1.000	635		2.77(2.09-6.26)		2.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1922754	1.23		98.4	5618	
77 DONA										RM
377.00 > 251.00	3.199	3.203	-0.004	0.835	3702	0.000780	Target=3.33		2.7	RM
377.00 > 85.00	3.212	3.203	0.009	0.838	510		7.26(1.66-4.99)		1.1	M
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.511	3.505	0.006	0.917	1022	0.000858	Target=4.83		3.0	M
449.00 > 99.00	3.511	3.505	0.006	0.917	148		6.91(2.41-7.24)		0.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	306607	1.09		91.5	510	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.502	3.514	-0.012	0.997	455	0.000645			1.0	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.539	3.514	0.025	1.005	21366	0.0114	Target=2.88		0.8	M
413.00 > 169.00	3.530	3.514	0.016	1.003	5418		3.94(1.44-4.32)		9.1	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2195289	1.24		99.2	8550	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2274471	1.25			4528	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.842	3.822	0.020	1.003	2360	0.002455	Target=4.24		4.2	M
499.00 > 99.00	3.808	3.822	-0.014	0.994	478		4.94(2.12-6.37)		0.8	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	985039	1.14		95.5	5417	
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.845	0.009	1.095	2275520	1.18		94.5	6482	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	4.000	3.983	0.017	1.044	2158	0.000733			5.7	M
68 Perfluorononanesulfonic acid										RM
549.00 > 80.00	4.101	4.105	-0.004	1.070	702	0.000960	Target=2.17		12.4	RM
549.00 > 99.00	4.101	4.105	-0.004	1.070	136		5.16(1.08-3.25)		1.0	M
D 23 13C2 PFDA										
515.00 > 470.00	4.136	4.129	0.007	1.175	2380397	1.18		94.4	8706	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.148	4.141	0.007	1.178	318966	1.01		83.9	854	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	384	0.000655			4.2	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.242	4.234	0.008	1.205	1608846	0.9345		74.8	2952	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.254	4.234	0.020	1.003	1458	0.001188			9.0	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.270	0.009	1.215	542582	1.13		90.0	1534	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.292	4.270	0.022	1.003	1404	0.003565			2.9	M
D 30 13C2 PFUnA										M
565.00 > 520.00	4.387	4.390	-0.003	1.246	2288986	1.20		96.1	4158	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.249	500007	1.08		86.2	992	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.411	4.401	0.010	1.003	1279	0.003197			5.1	M
66 11-Chloroeicosafluoro-3-oxaundec										M
631.00 > 451.00	4.468	4.473	-0.005	1.167	3530	0.000782			5.1	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.610	4.613	-0.003	1.310	1963705	1.01		81.2	6216	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.610	4.613	-0.003	1.000	1980	0.001238	Target=8.47		0.2	RM
613.00 > 169.00	4.621	4.613	0.008	1.002	102		19.41(4.23-12.70)		1.8	M
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.610	4.624	-0.014	1.111	459	0.001309			10.9	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.990	4.982	0.008	1.417	1828212	0.9485		75.9	4845	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.296	5.292	0.004	1.504	2049087	0.9226		73.8	4536	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.296	5.292	0.004	1.000	4627	0.002822	Target=7.89		0.3	
813.00 > 169.00	5.296	5.292	0.004	1.000	676		6.84(3.94-11.83)		10.4	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

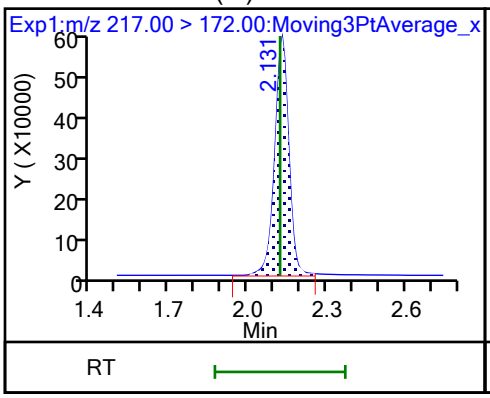
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:06 Chrom Revision: 2.3 18-Oct-2023 21:16:54

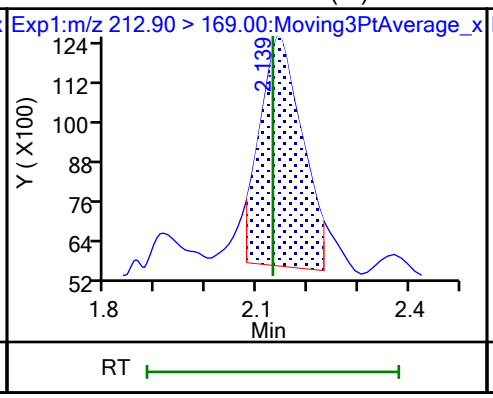
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

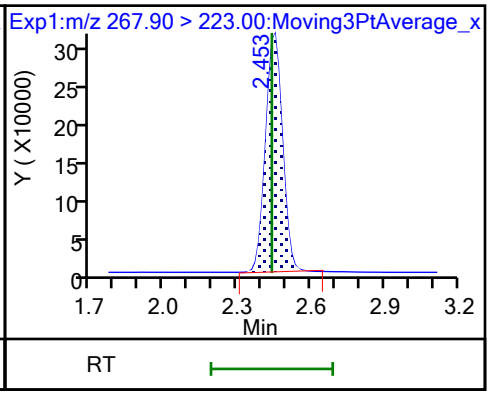
D 1 13C4 PFBA (M)



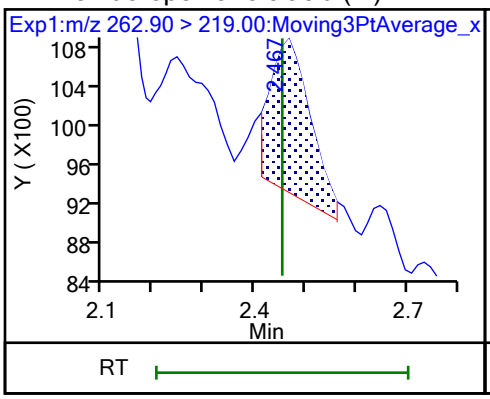
2 Perfluorobutanoic acid (M)



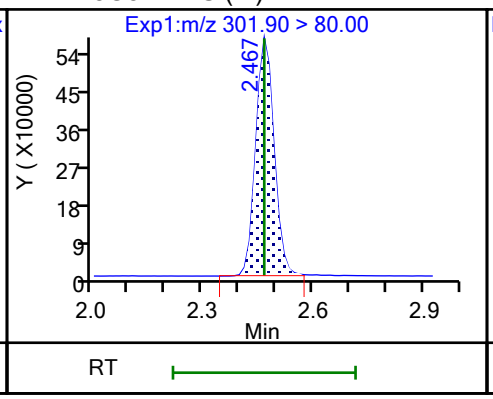
D 3 13C5 PFPeA



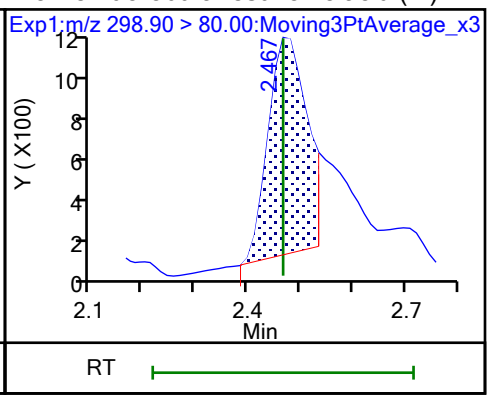
4 Perfluoropentanoic acid (M)



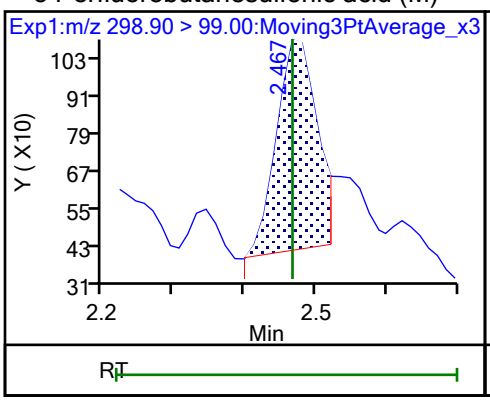
D 47 13C3 PFBS (M)



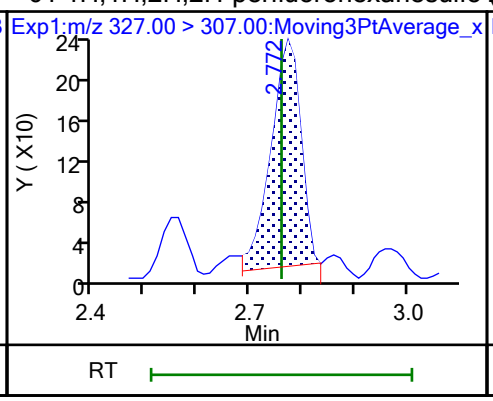
5 Perfluorobutanesulfonic acid (M)



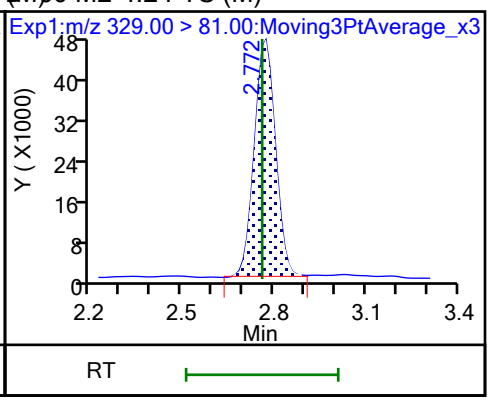
5 Perfluorobutanesulfonic acid (M)



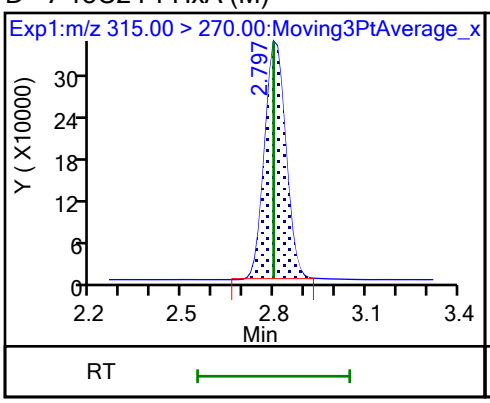
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



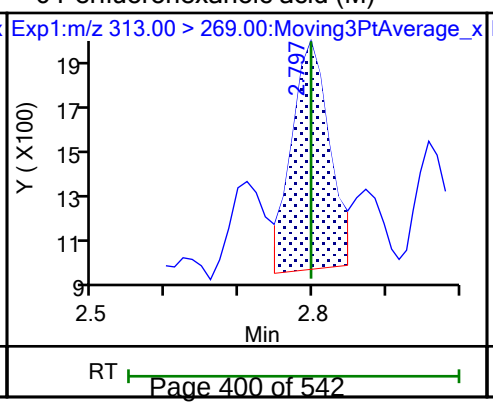
60 M2-4:2 FTS (M)



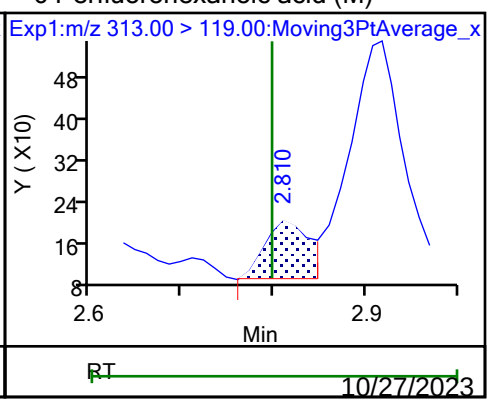
D 7 13C2 PFHxA (M)



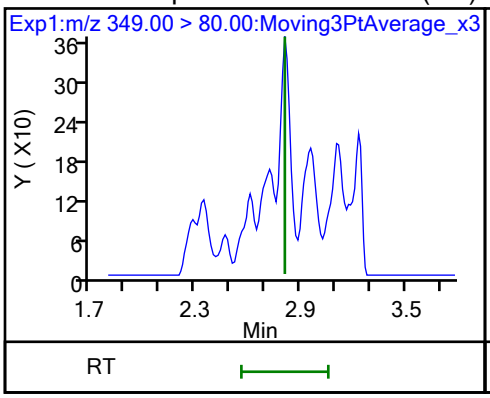
6 Perfluorohexanoic acid (M)



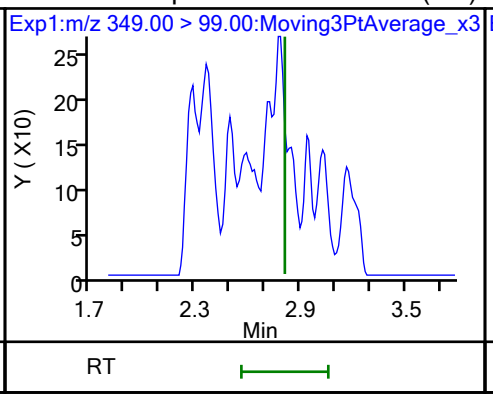
6 Perfluorohexanoic acid (M)



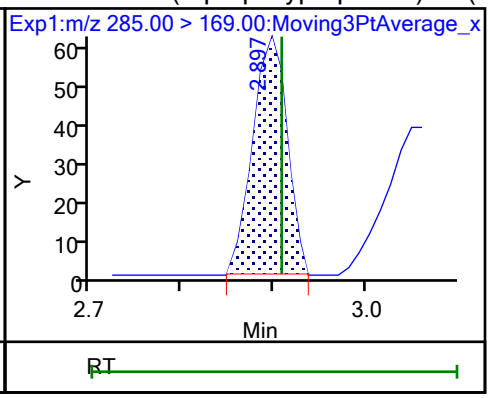
70 Perfluoropentanesulfonic acid (ND)



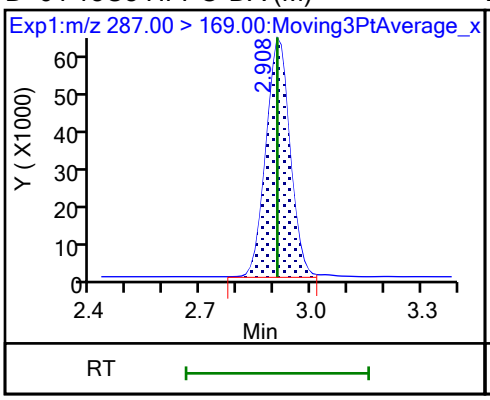
70 Perfluoropentanesulfonic acid (ND)



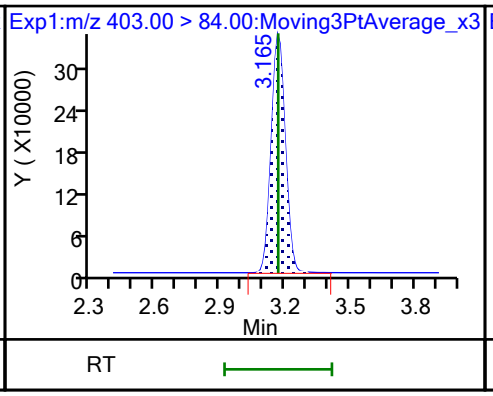
67 Perfluoro(2-propoxypropanoic) ac (M)



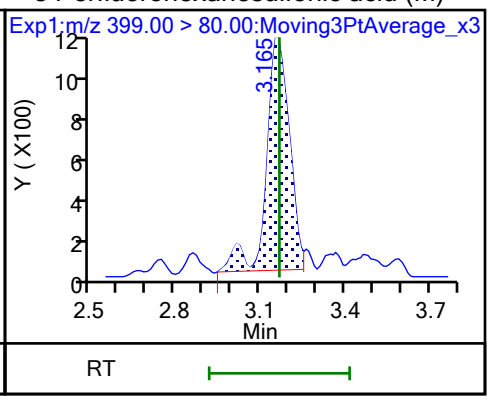
D 64 13C3 HFPO-DA (M)



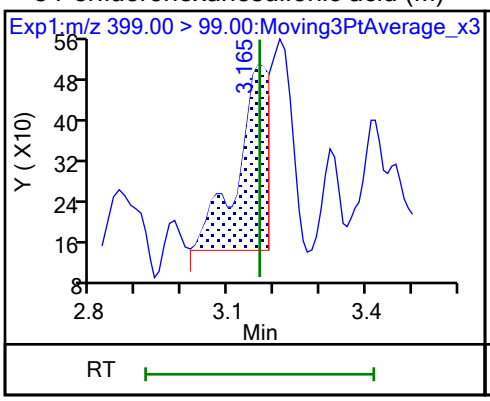
D 11 18O2 PFHxS



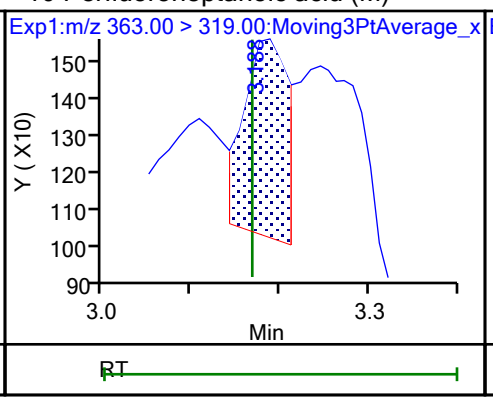
8 Perfluorohexanesulfonic acid (M)



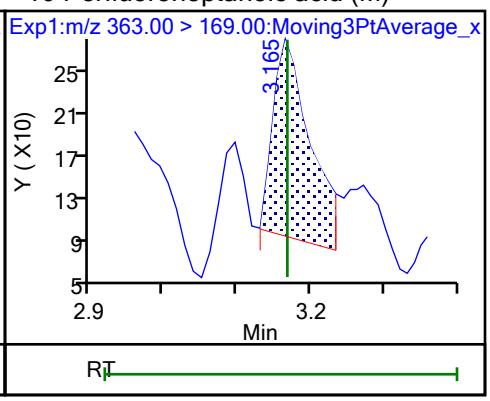
8 Perfluorohexanesulfonic acid (M)



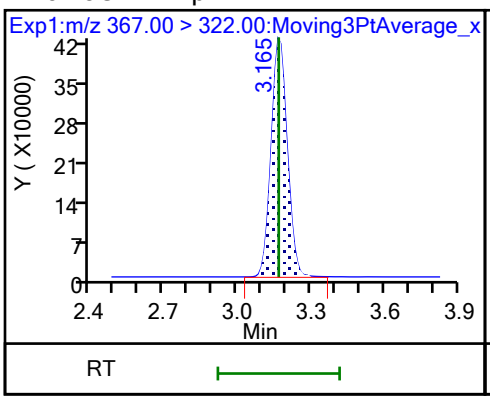
10 Perfluoroheptanoic acid (M)



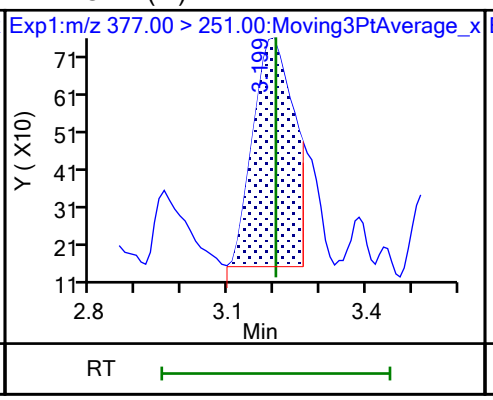
10 Perfluoroheptanoic acid (M)



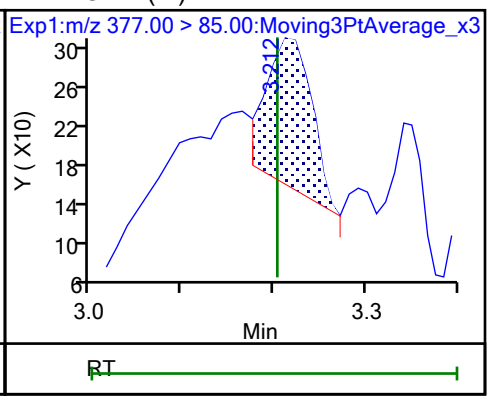
D 9 13C4 PFHpA



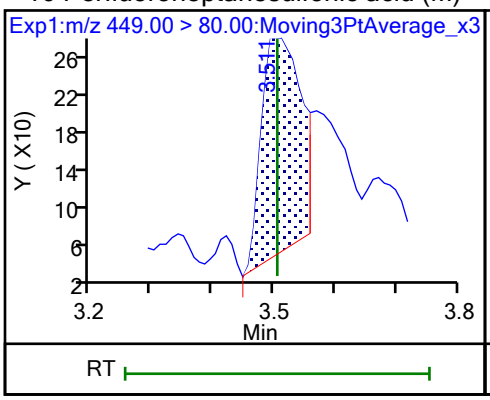
77 DONA (M)



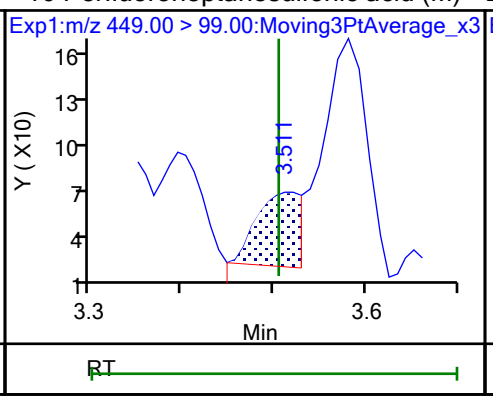
77 DONA (M)



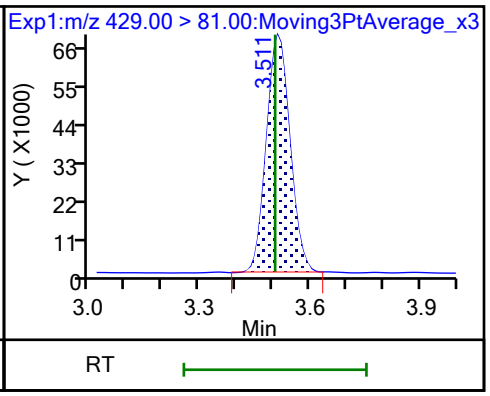
16 Perfluoroheptanesulfonic acid (M)



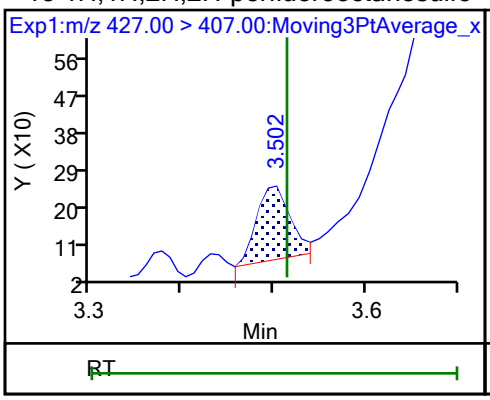
16 Perfluoroheptanesulfonic acid (M)



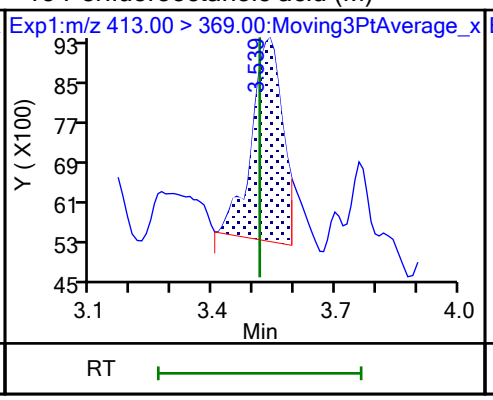
D 12 M2-6:2 FTS



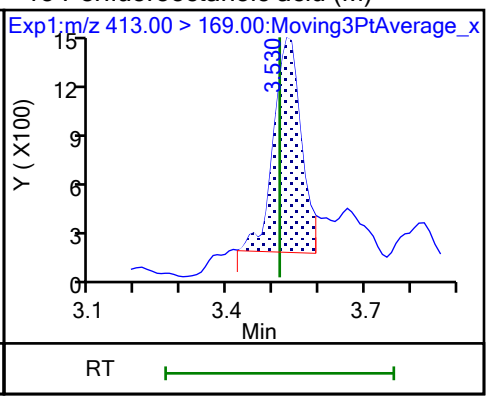
13 1H,1H,2H,2H-perfluorooctanesulfo



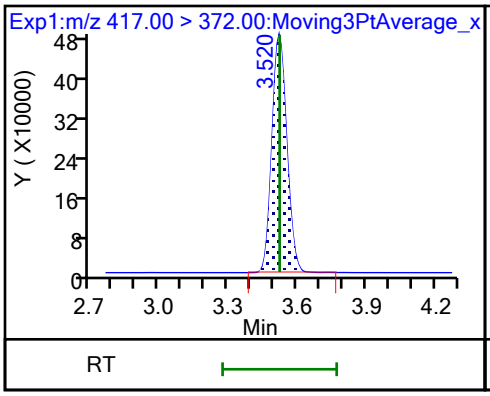
15 Perfluorooctanoic acid (M)



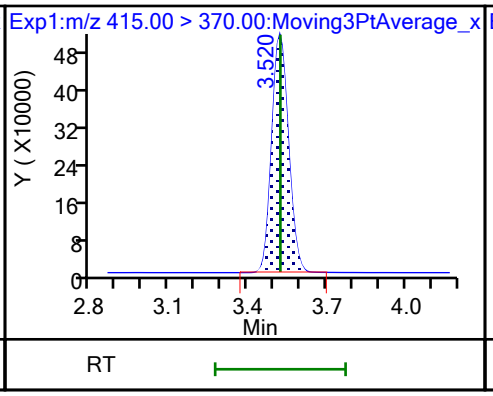
15 Perfluorooctanoic acid (M)



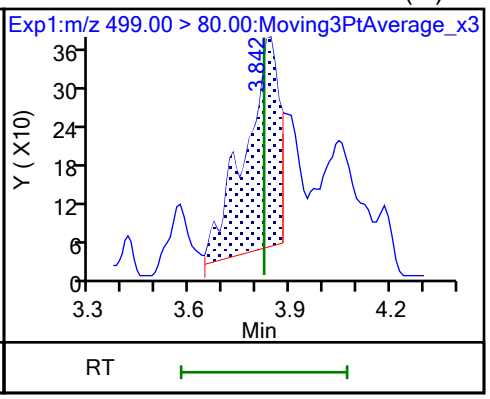
D 14 13C4 PFOA



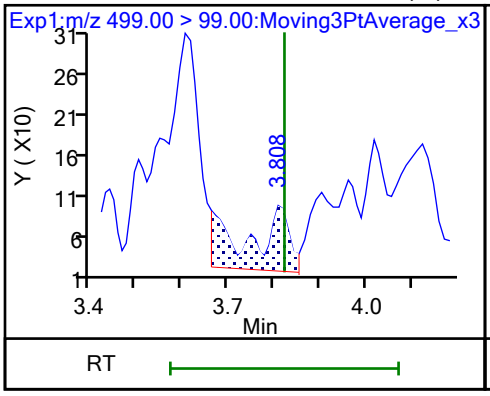
* 62 13C2 PFOA



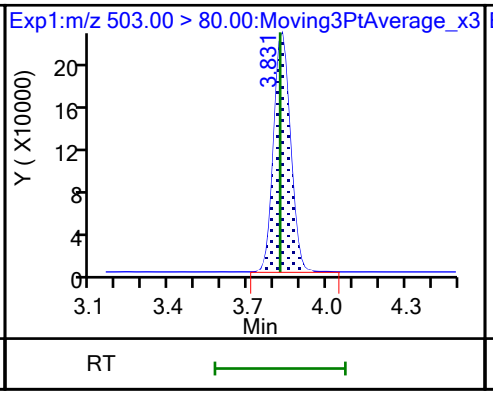
17 Perfluorooctanesulfonic acid (M)



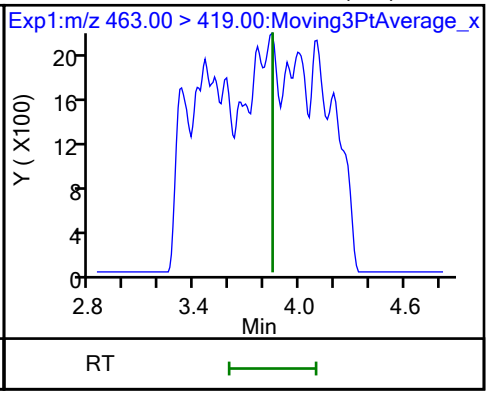
17 Perfluorooctanesulfonic acid (M)



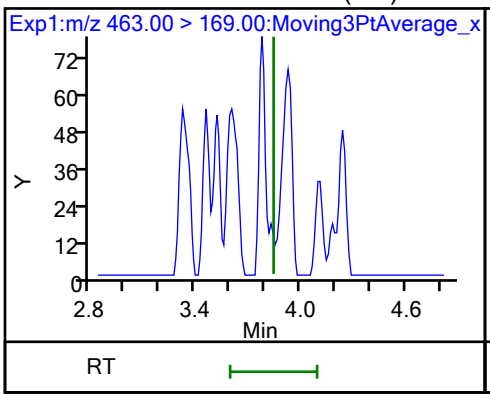
D 18 13C4 PFOS



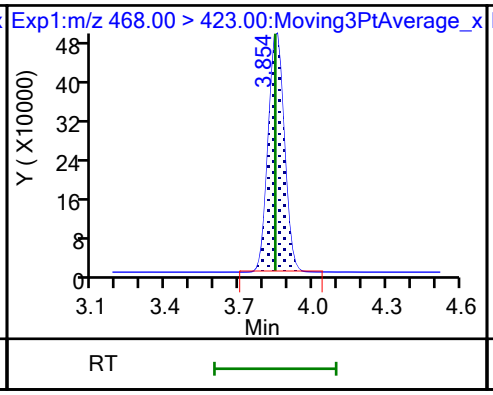
20 Perfluorononanoic acid (ND)



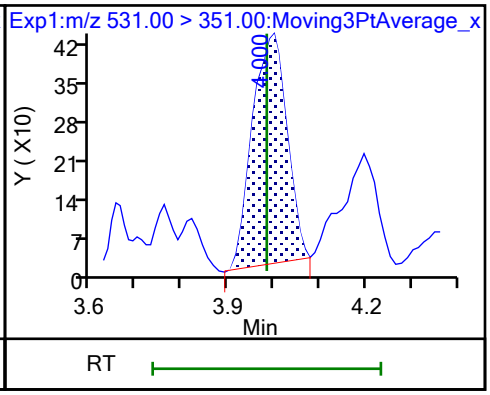
20 Perfluorononanoic acid (ND)



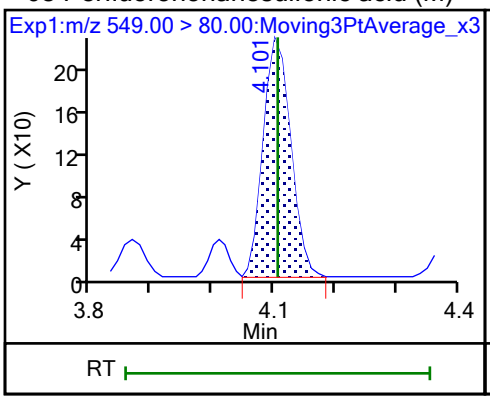
D 19 13C5 PFNA



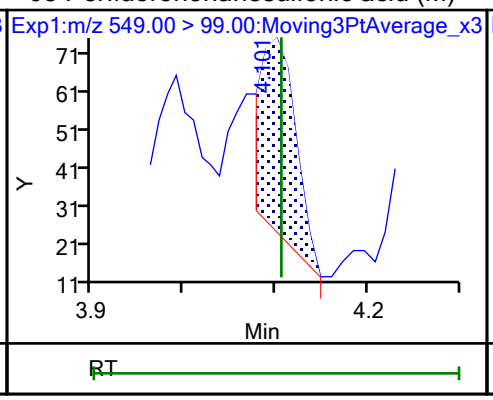
69 9-Chlorohexadecafluoro-3-oxanona (M)



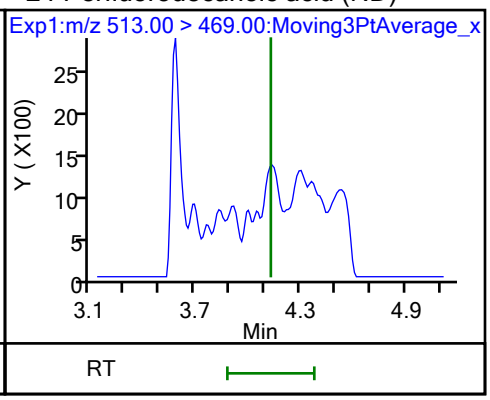
68 Perfluorononanesulfonic acid (M)



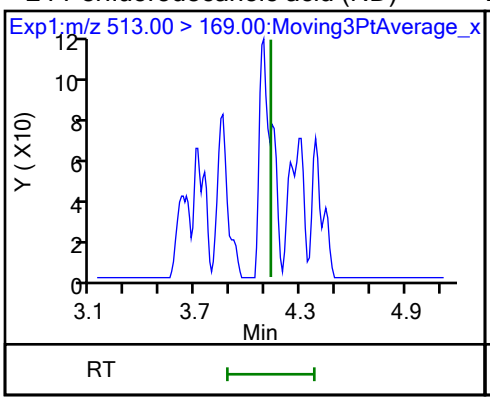
68 Perfluorononanesulfonic acid (M)



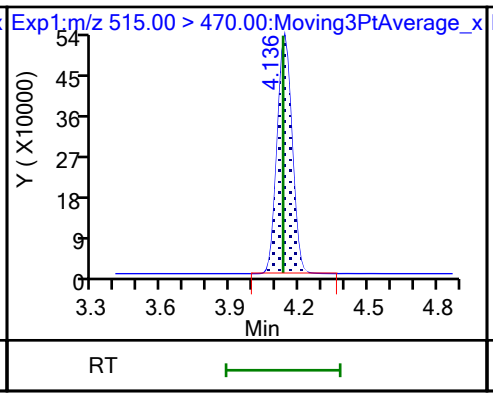
24 Perfluorodecanoic acid (ND)



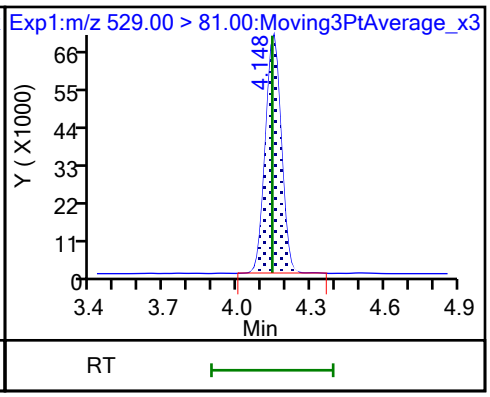
24 Perfluorodecanoic acid (ND)



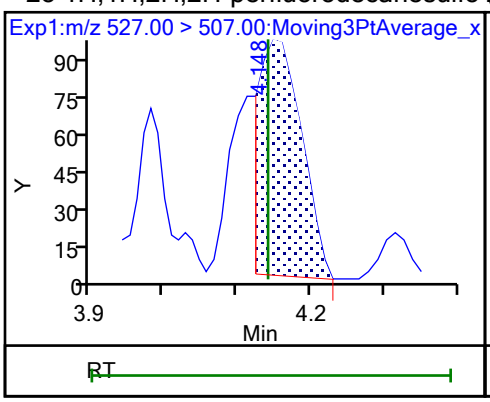
D 23 13C2 PFDA



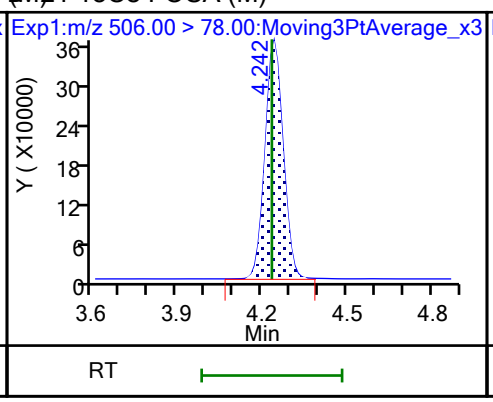
D 26 M2-8:2 FTS



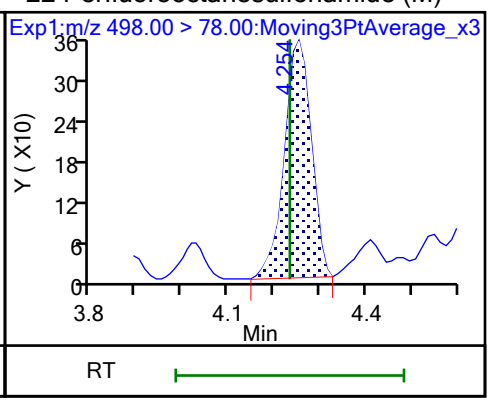
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



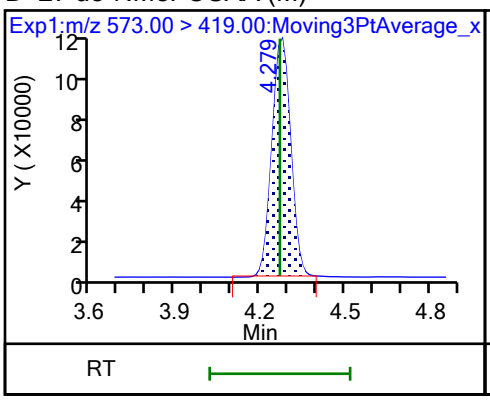
D 21 13C8 FOSA (M)



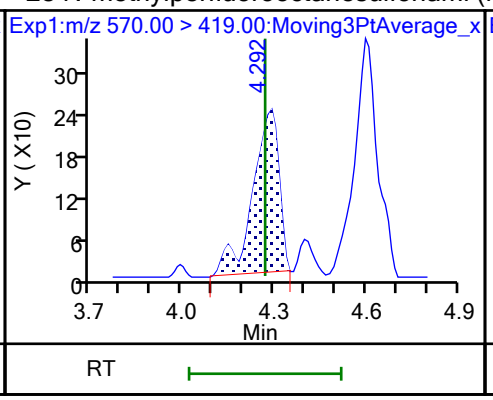
22 Perfluorooctanesulfonamide (M)



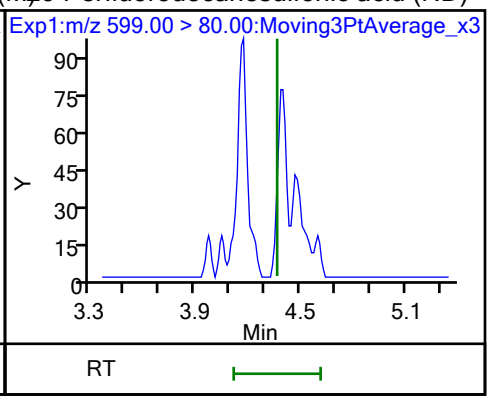
D 27 d3-NMeFOSAA (M)



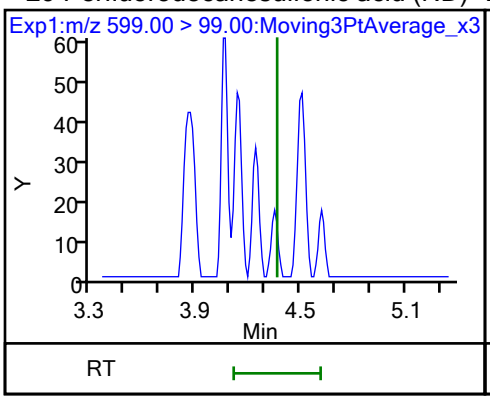
28 N-methylperfluorooctanesulfonami (M)



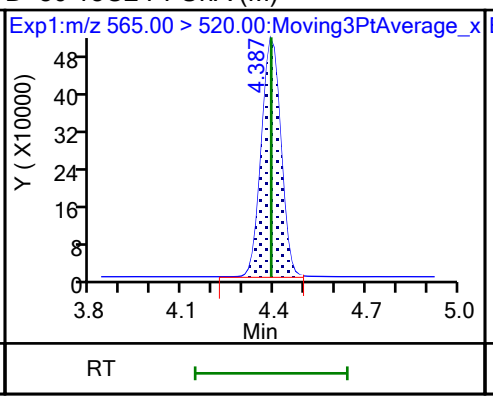
29 Perfluorodecanesulfonic acid (ND)



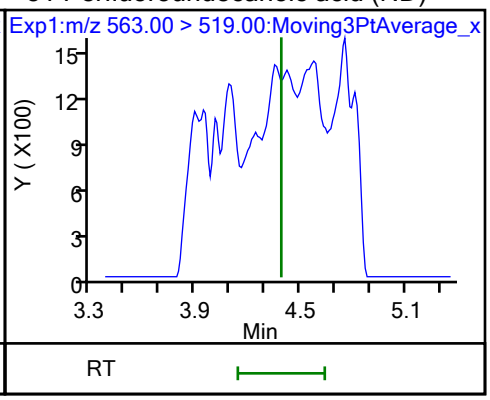
29 Perfluorodecanesulfonic acid (ND)



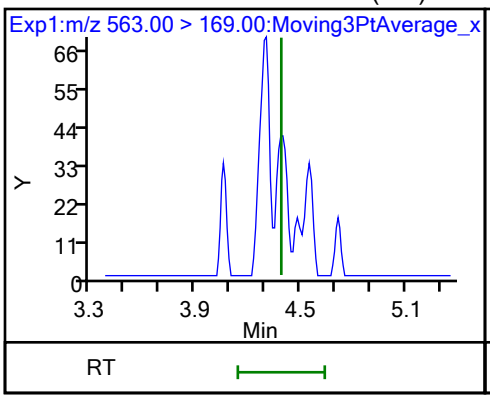
D 30 13C2 PFUnA (M)



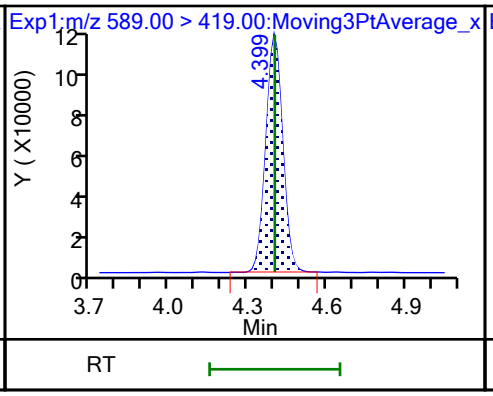
31 Perfluoroundecanoic acid (ND)



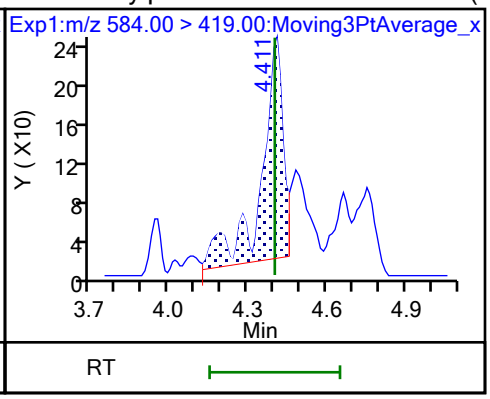
31 Perfluoroundecanoic acid (ND)



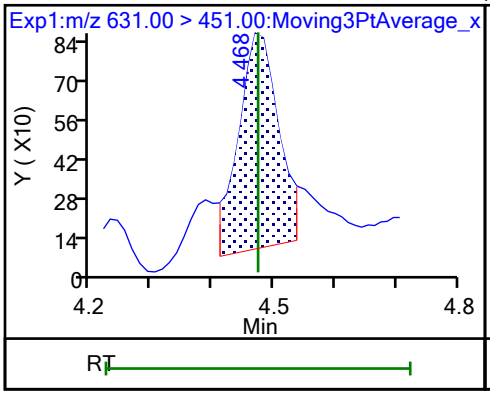
D 32 d5-NEtFOSAA



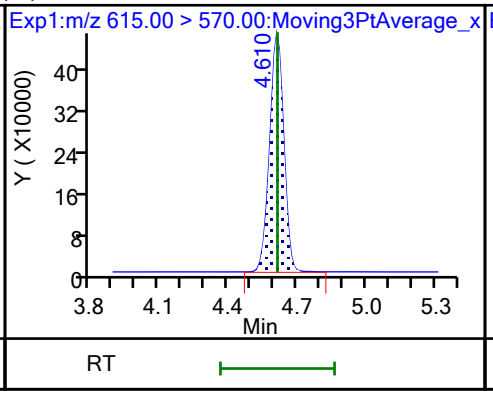
33 N-ethylperfluorooctanesulfonamid (M)



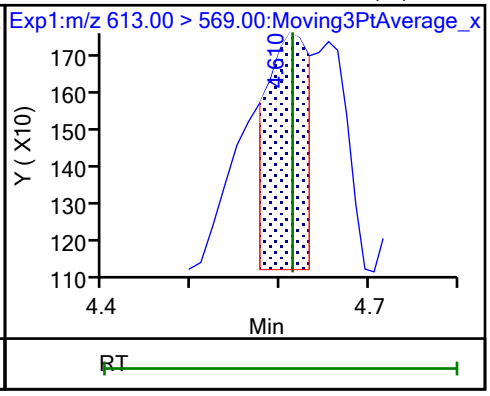
66 11-Chloroeicosafluoro-3-oxaundec (M)



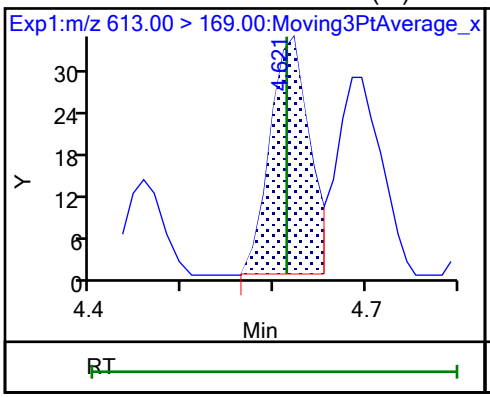
D 36 13C2 PFDoA



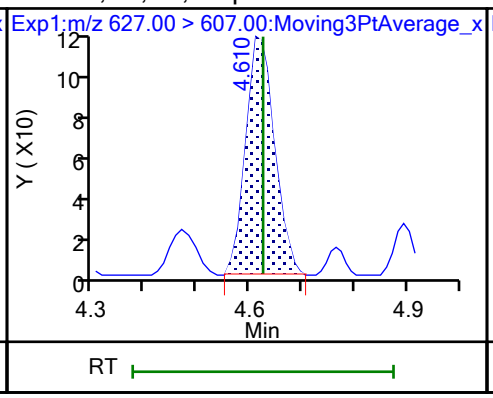
37 Perfluorododecanoic acid (M)



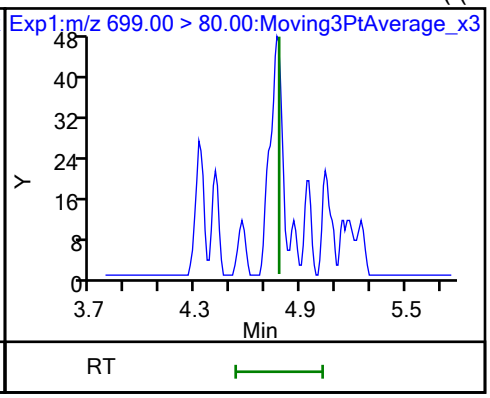
37 Perfluorododecanoic acid (M)



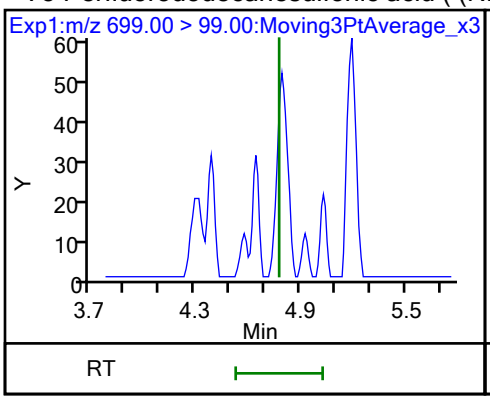
74 1H,1H,2H,2H-perfluorododecanesul



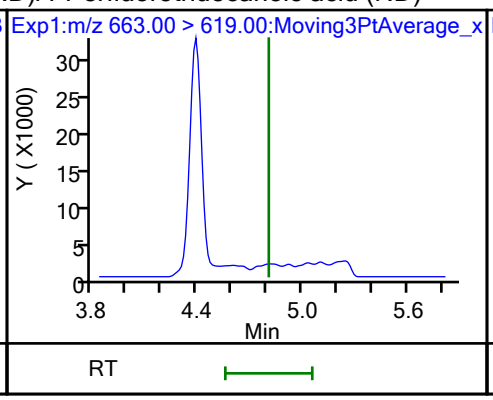
75 Perfluorododecanesulfonic acid ((ND)



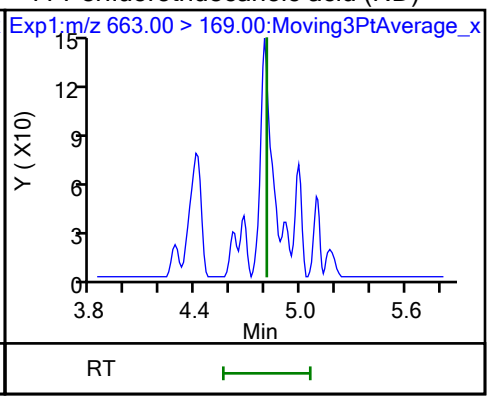
75 Perfluorododecanesulfonic acid ((ND)



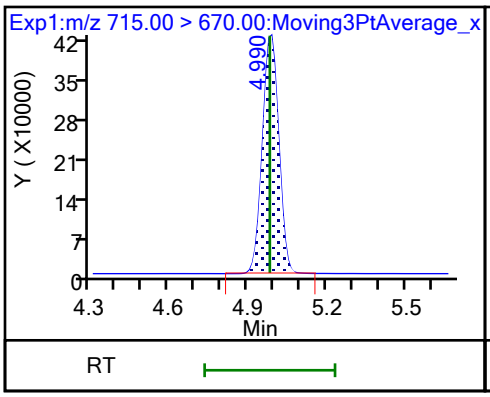
41 Perfluorotridecanoic acid (ND)



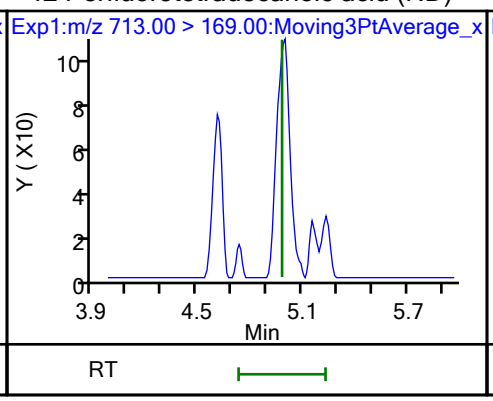
41 Perfluorotridecanoic acid (ND)



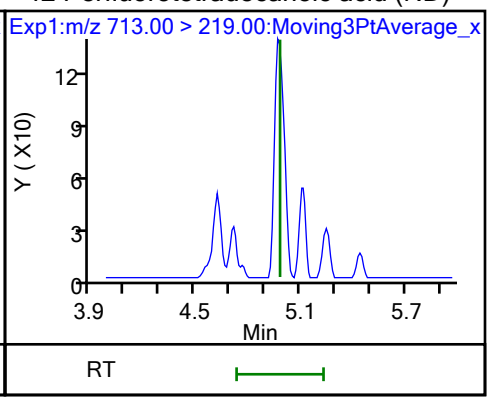
D 43 13C2 PFTeDA



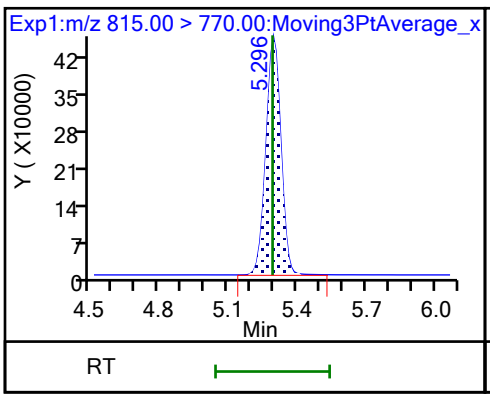
42 Perfluorotetradecanoic acid (ND)



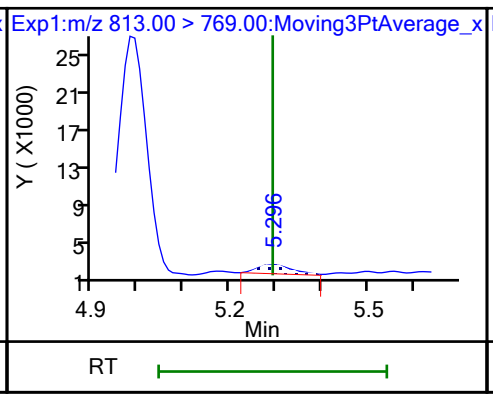
42 Perfluorotetradecanoic acid (ND)



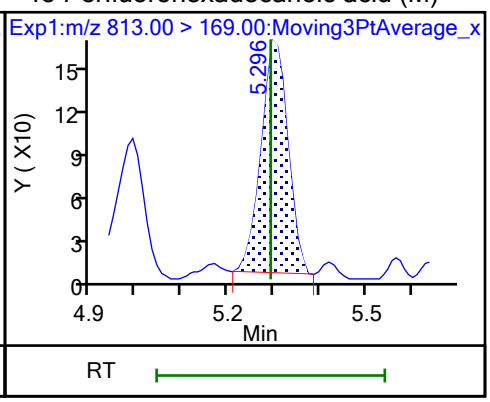
D 44 13C2 PFHxDA



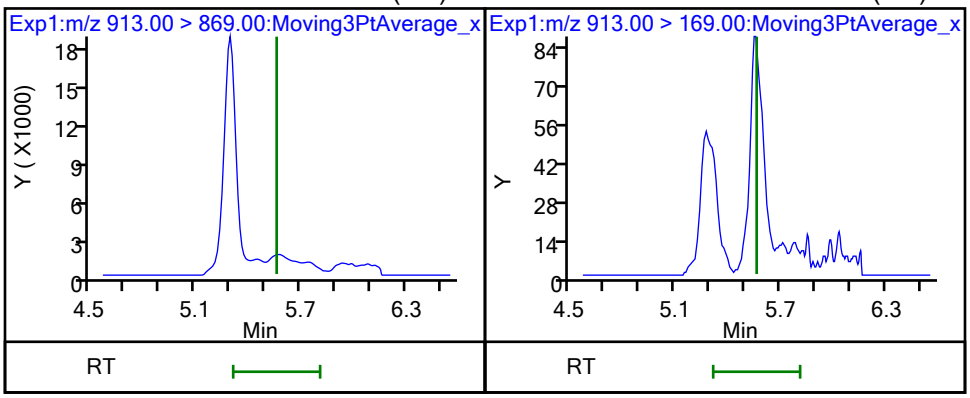
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins Burlington

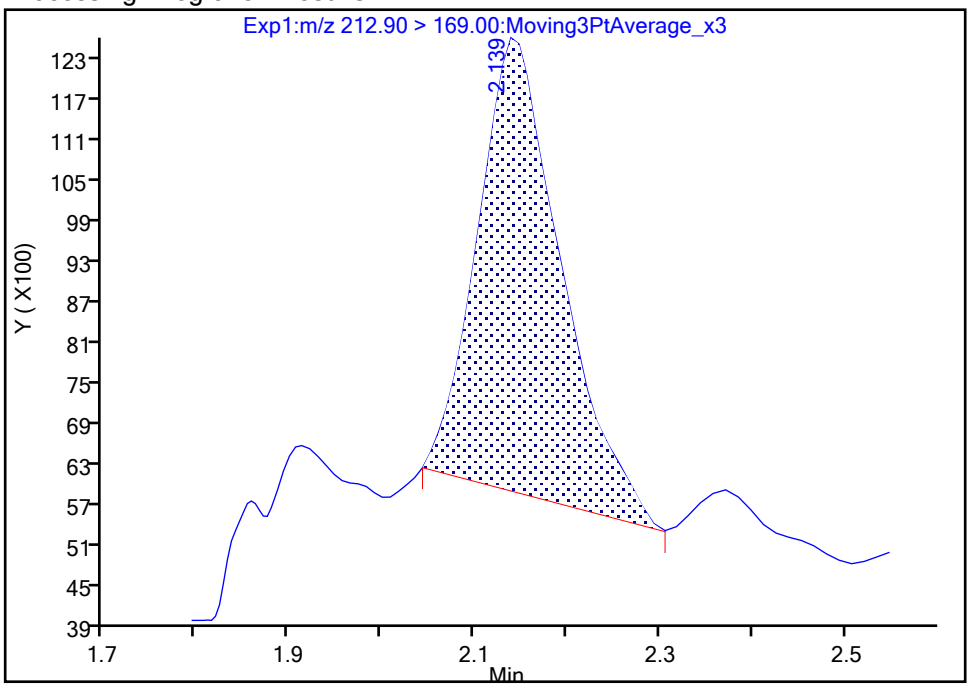
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

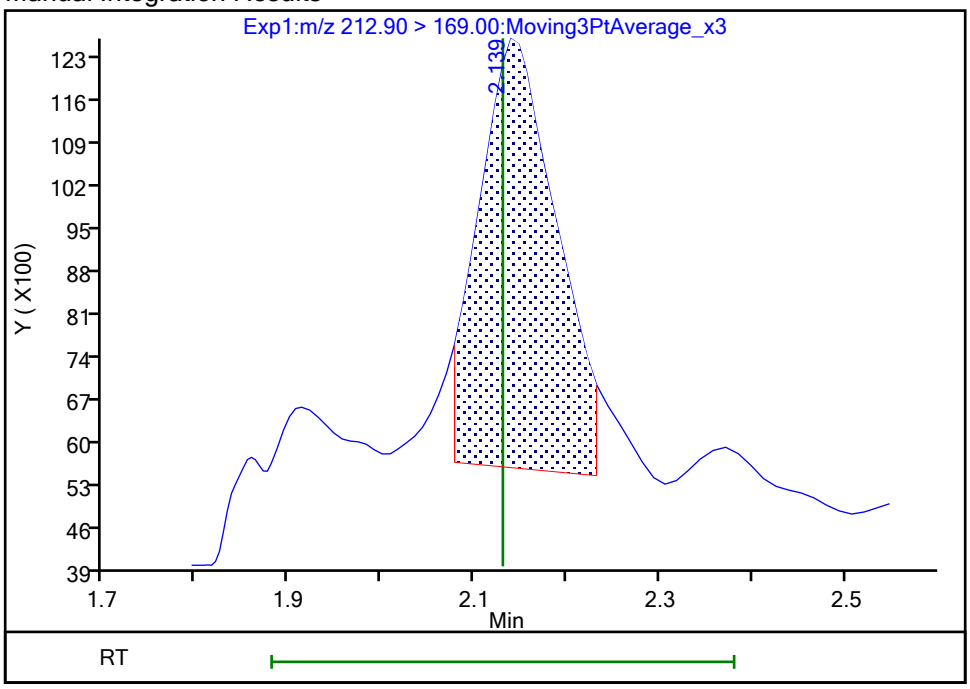
Processing Integration Results

RT: 2.14
Area: 42047
Amount: -0.014684
Amount Units: ng/ml



Manual Integration Results

RT: 2.14
Area: 40865
Amount: -0.015421
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:26 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

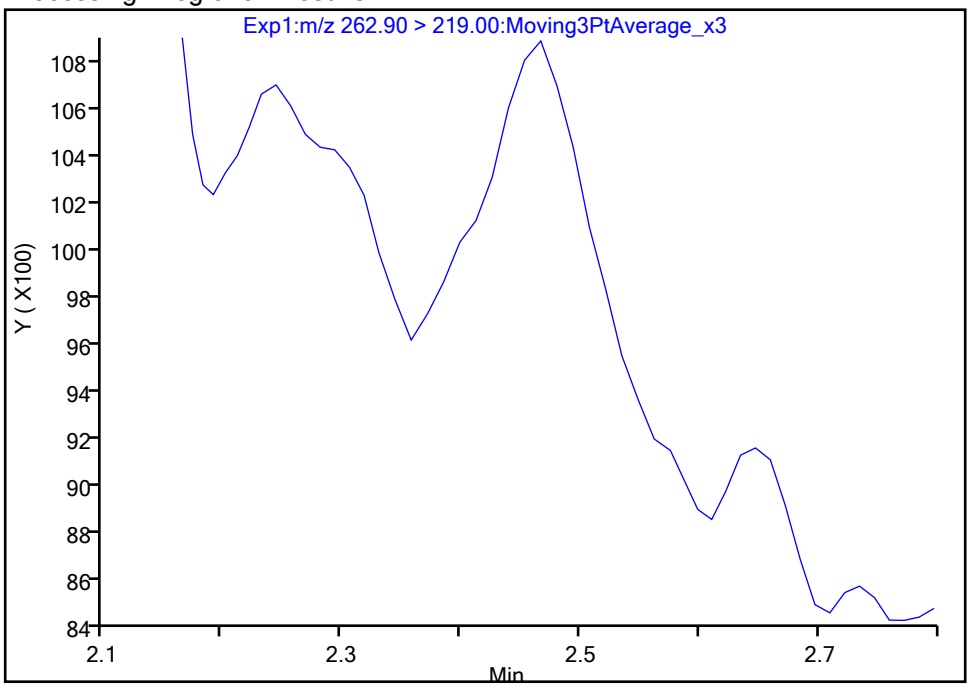
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

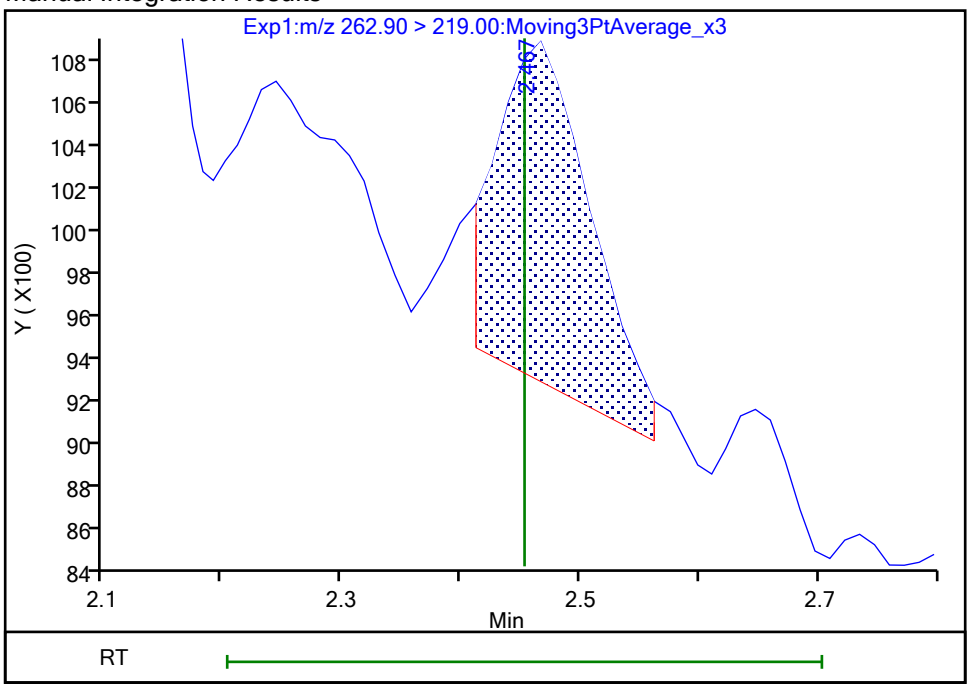
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 8272
Amount: 0.006285
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

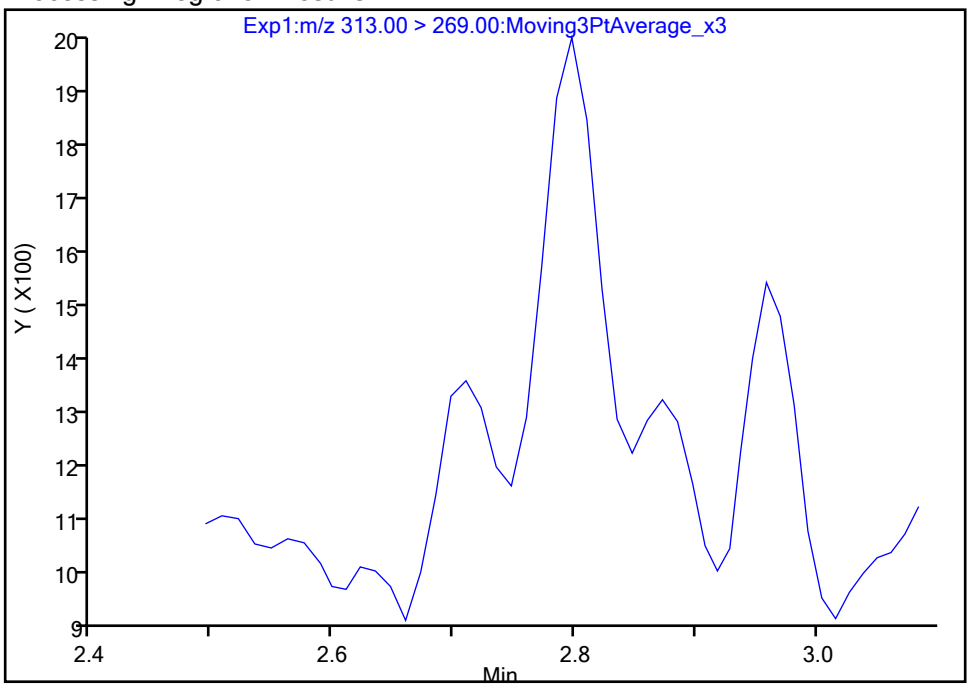
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

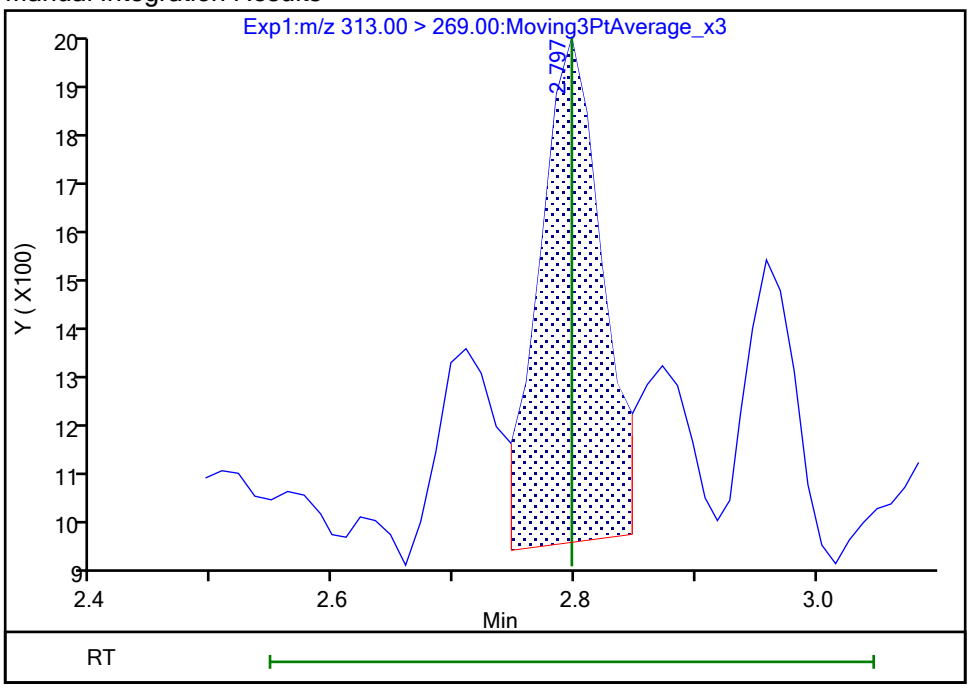
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 3445
Amount: 0.002328
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

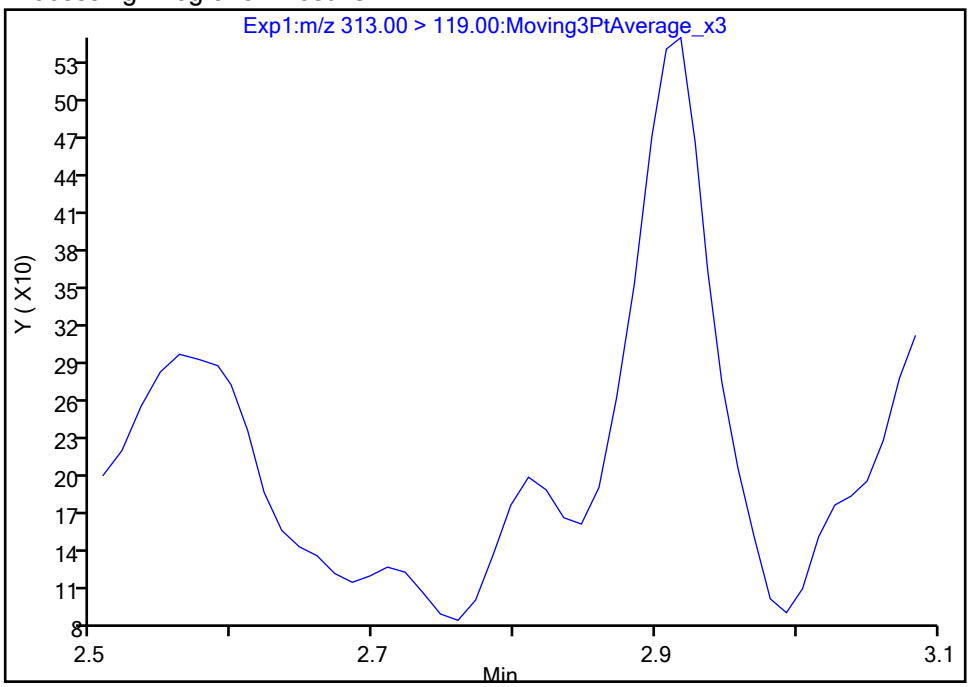
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

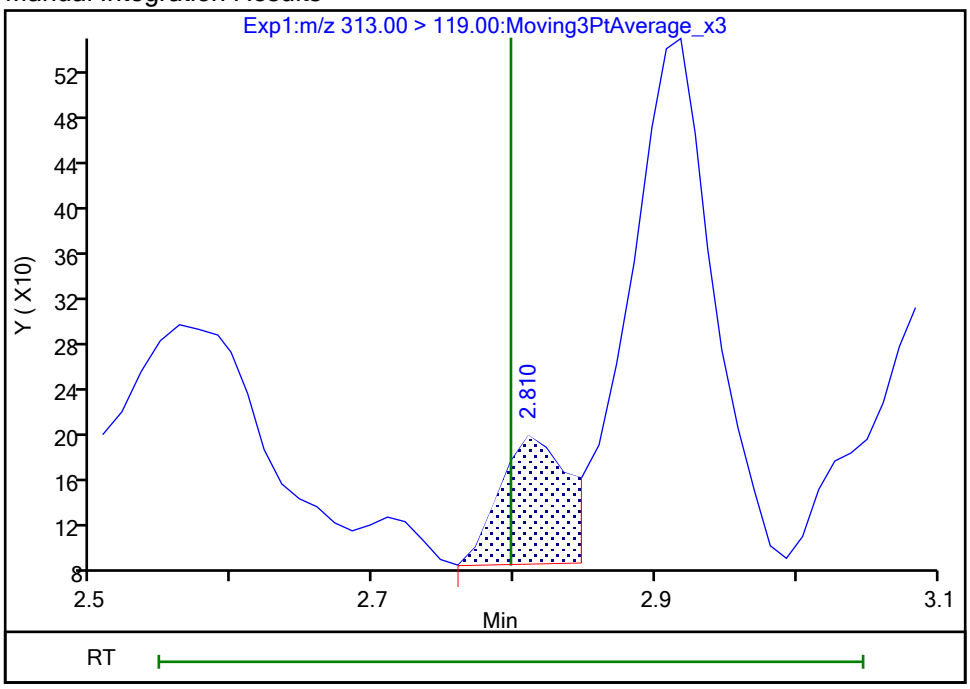
Not Detected
Expected RT: 2.80

Processing Integration Results



Manual Integration Results

RT: 2.81
Area: 365
Amount: 0.002328
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

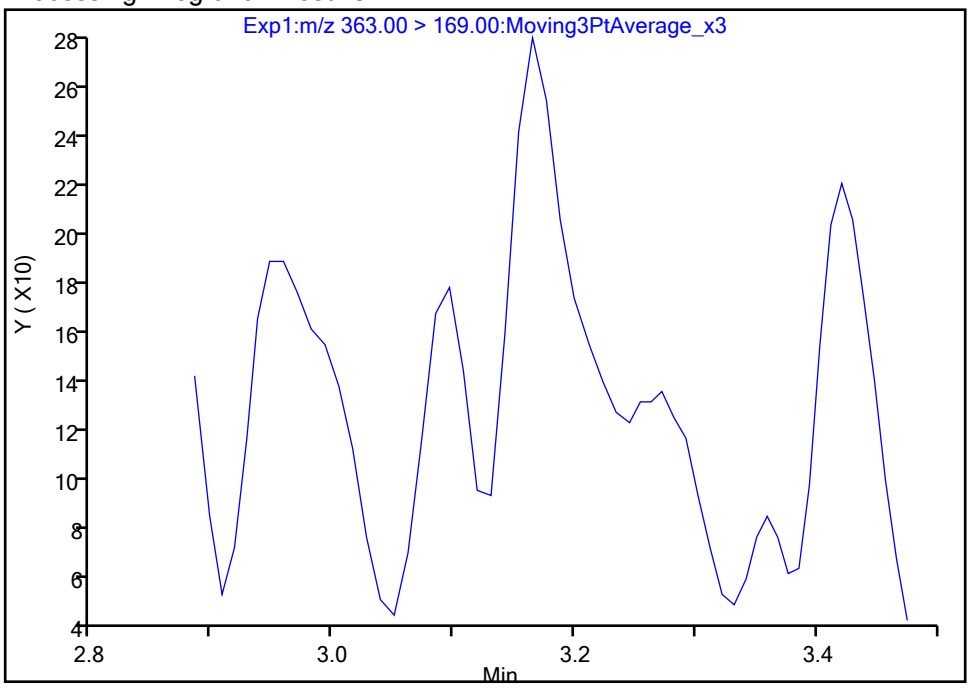
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

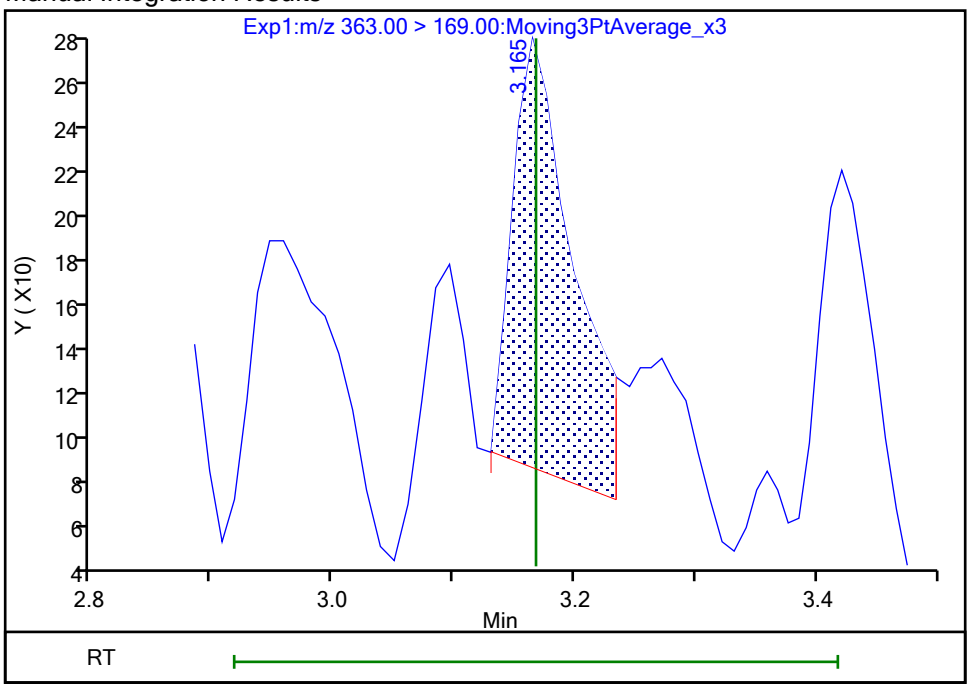
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 635
Amount: 0.001020
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:20:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

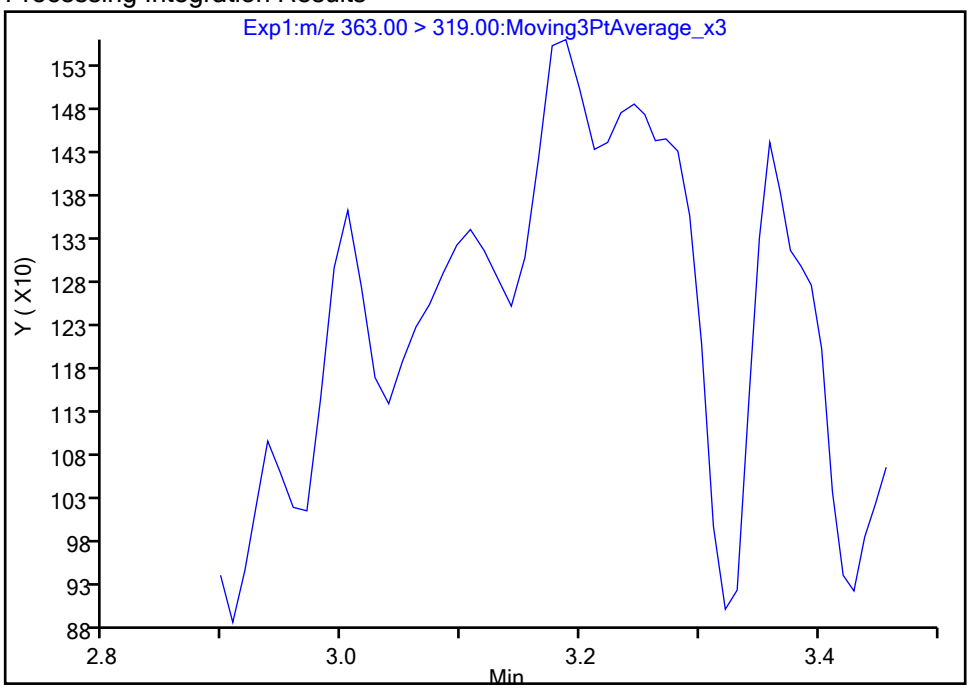
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

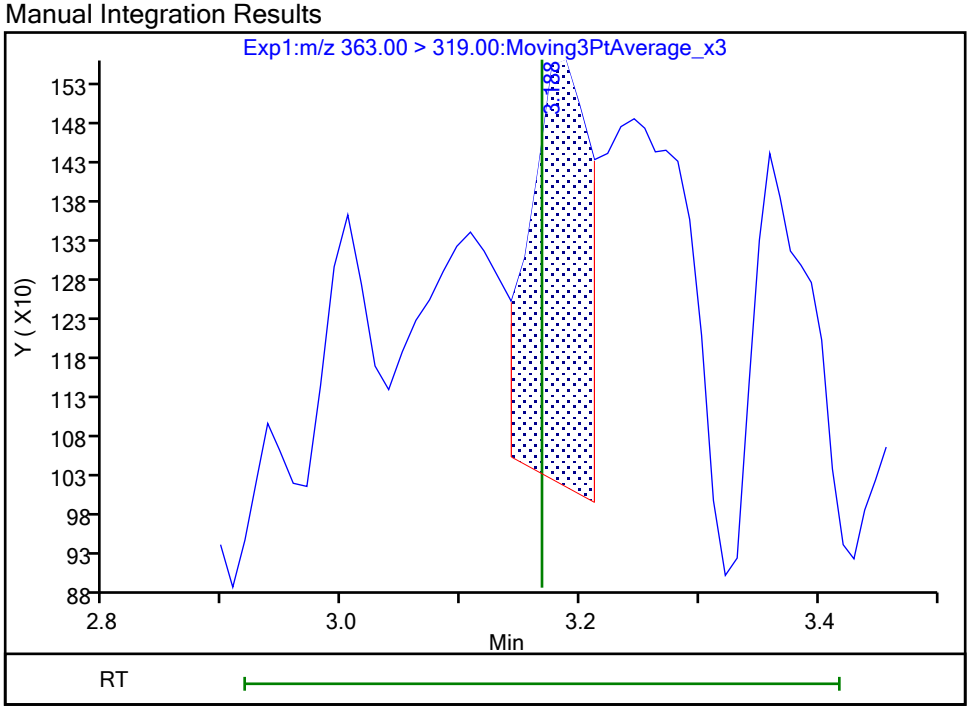
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.19
Area: 1759
Amount: 0.001020
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:20:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

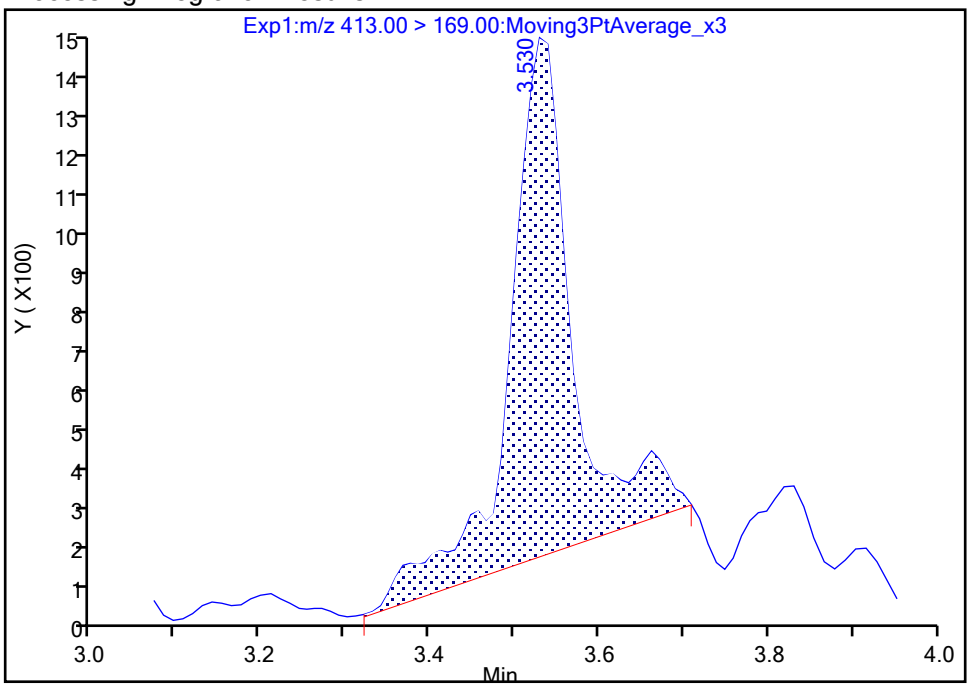
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

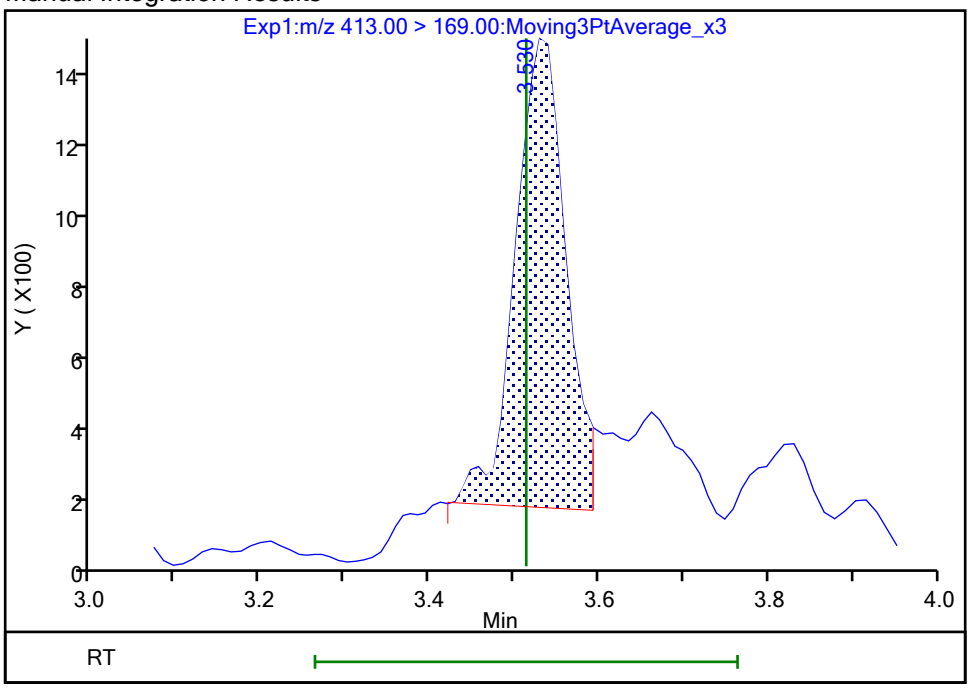
Processing Integration Results

RT: 3.53
Area: 6780
Amount: 0.012907
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 5418
Amount: 0.011422
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

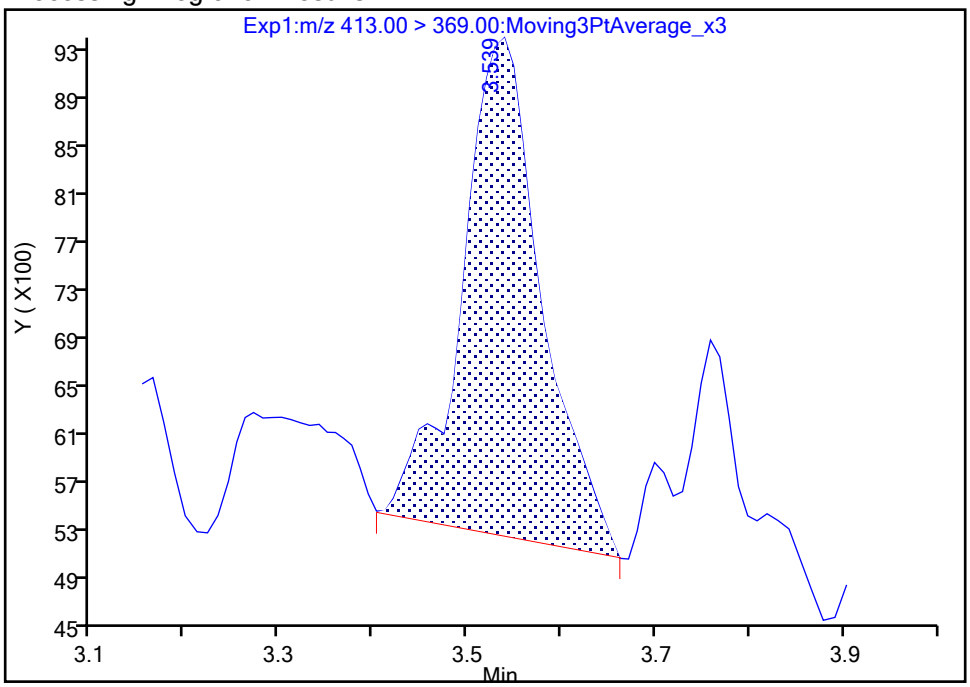
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

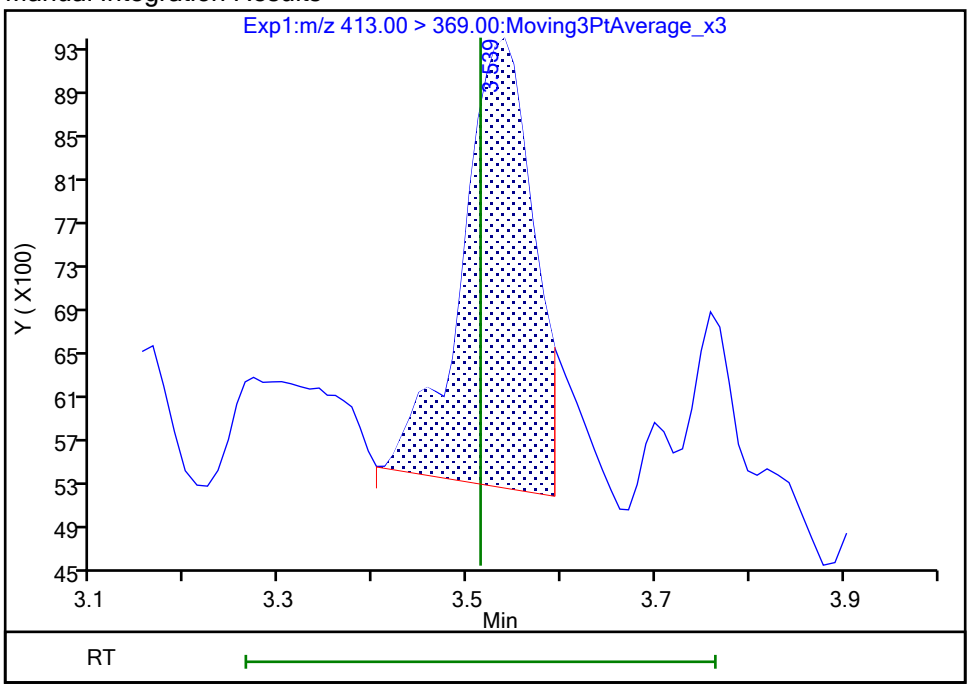
Processing Integration Results

RT: 3.54
Area: 24144
Amount: 0.012907
Amount Units: ng/ml



Manual Integration Results

RT: 3.54
Area: 21366
Amount: 0.011422
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

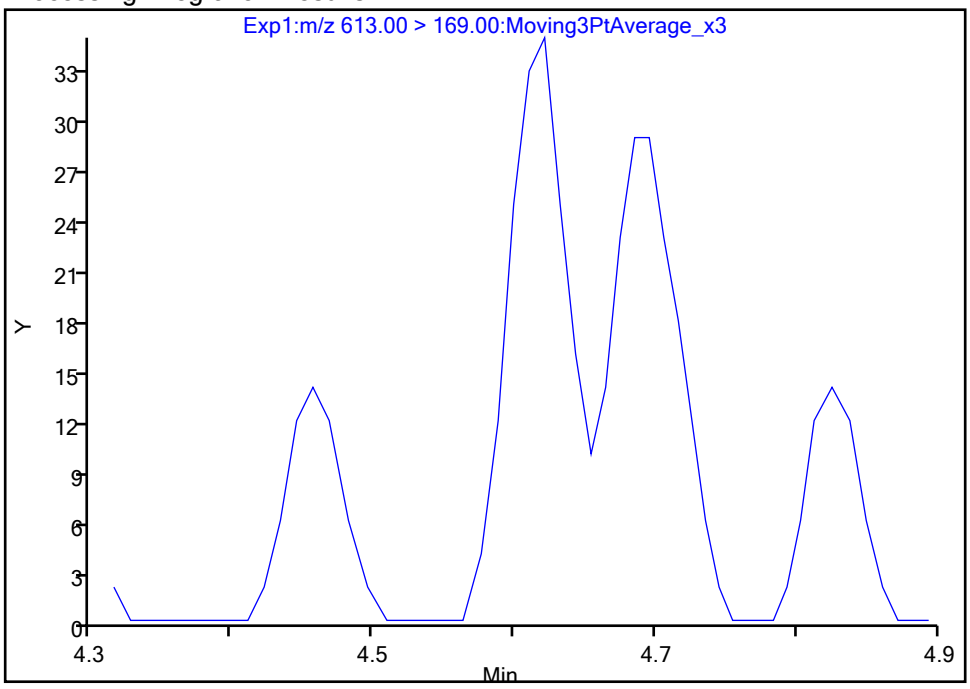
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

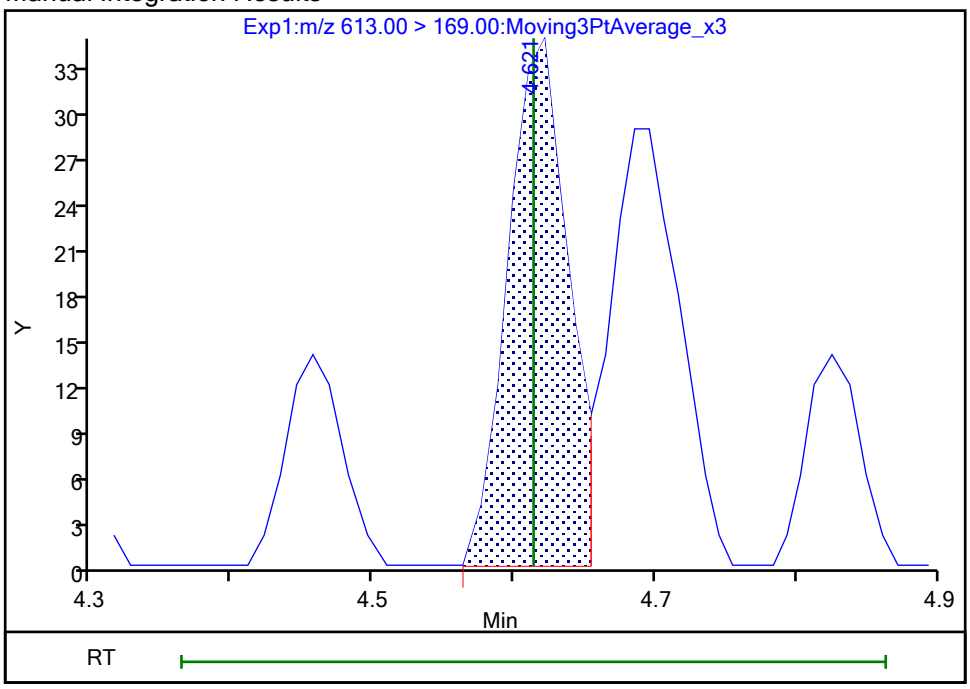
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 102
Amount: 0.001238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

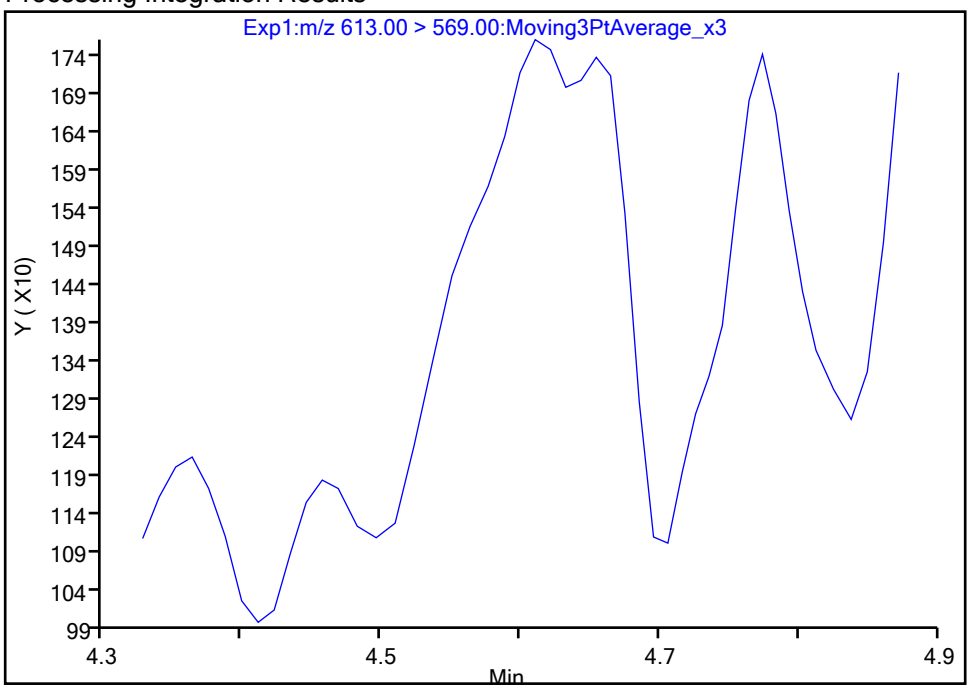
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

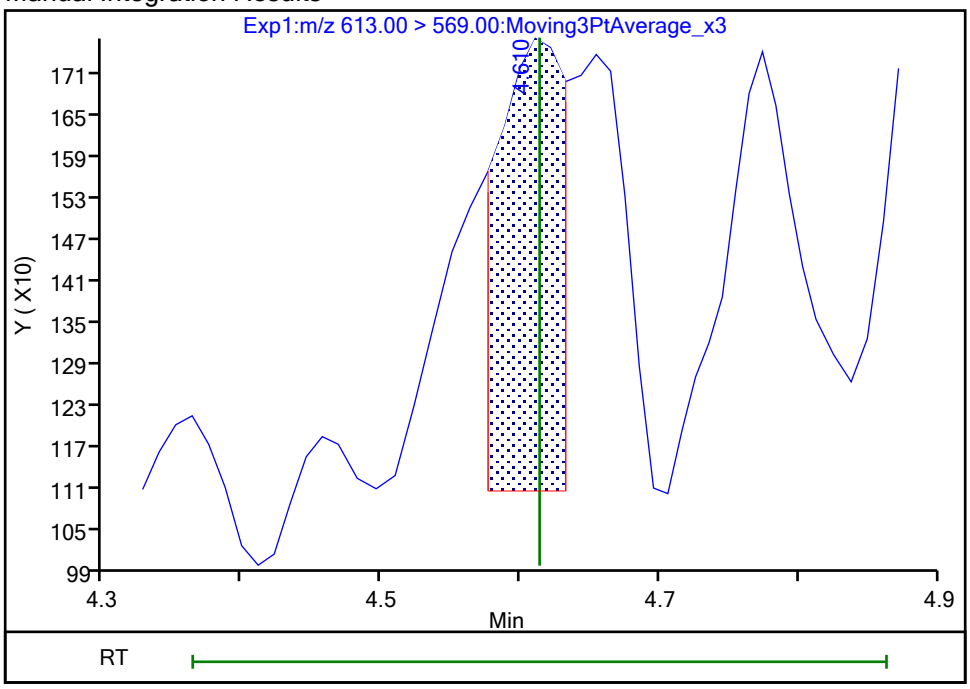
Not Detected
Expected RT: 4.61

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 1980
Amount: 0.001238
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

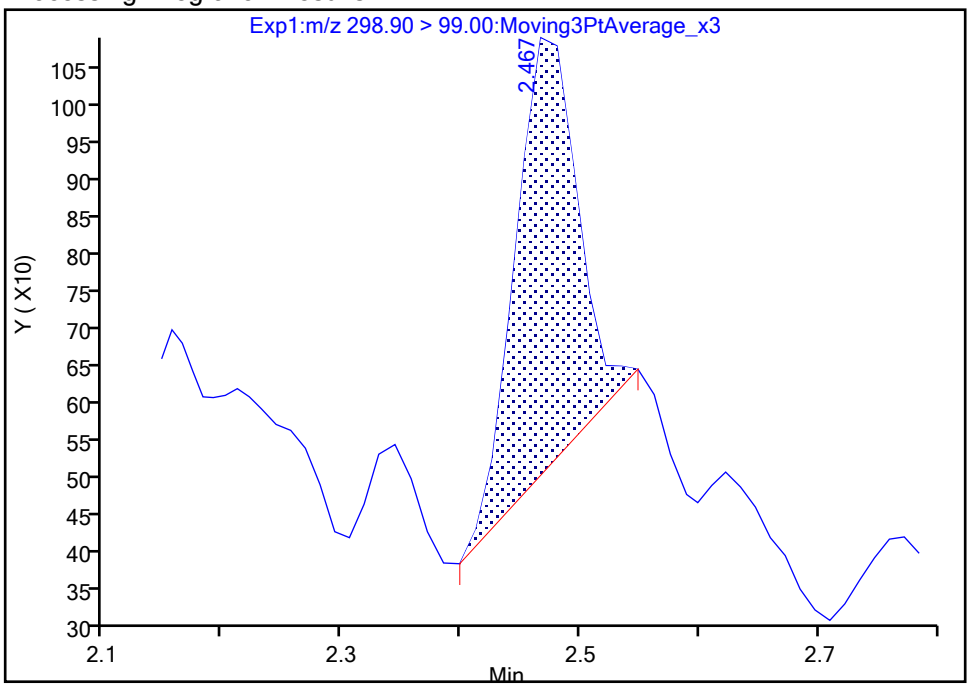
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

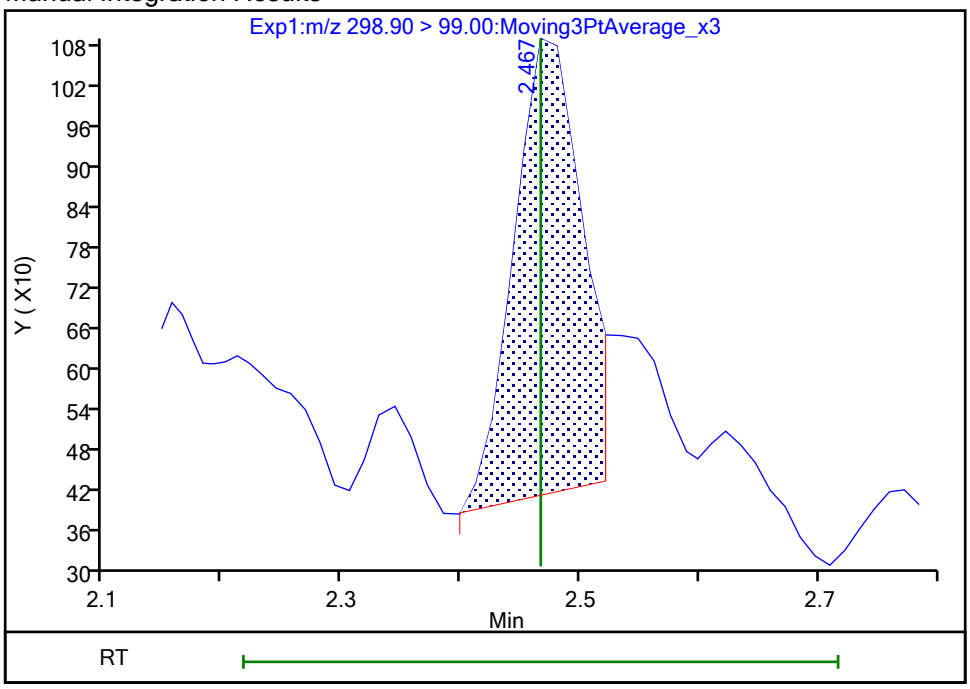
Processing Integration Results

RT: 2.47
Area: 2110
Amount: 0.002054
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2664
Amount: 0.002664
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:56 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

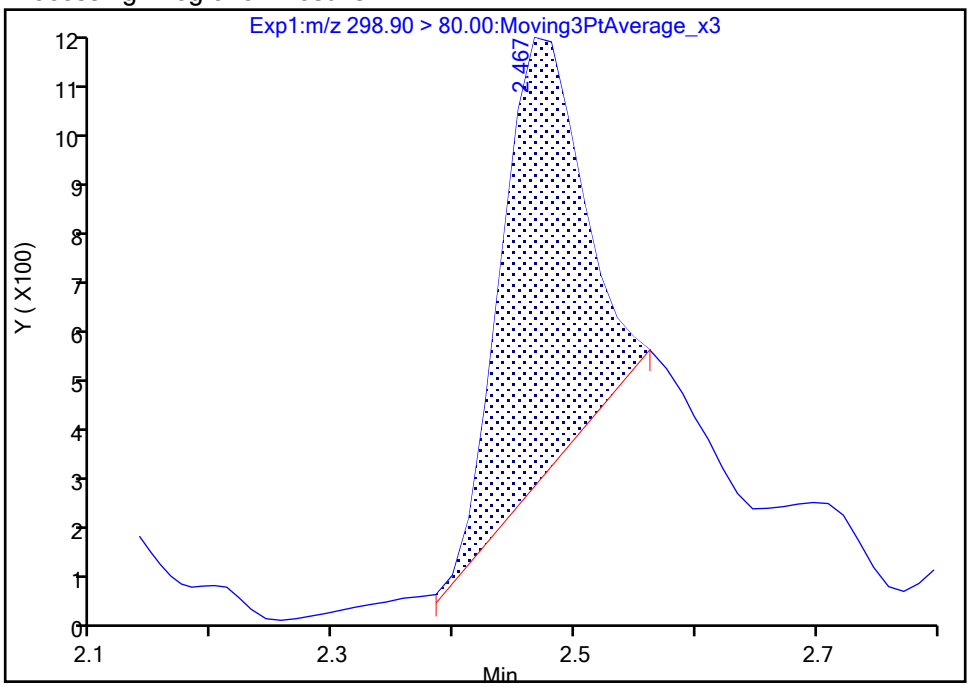
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

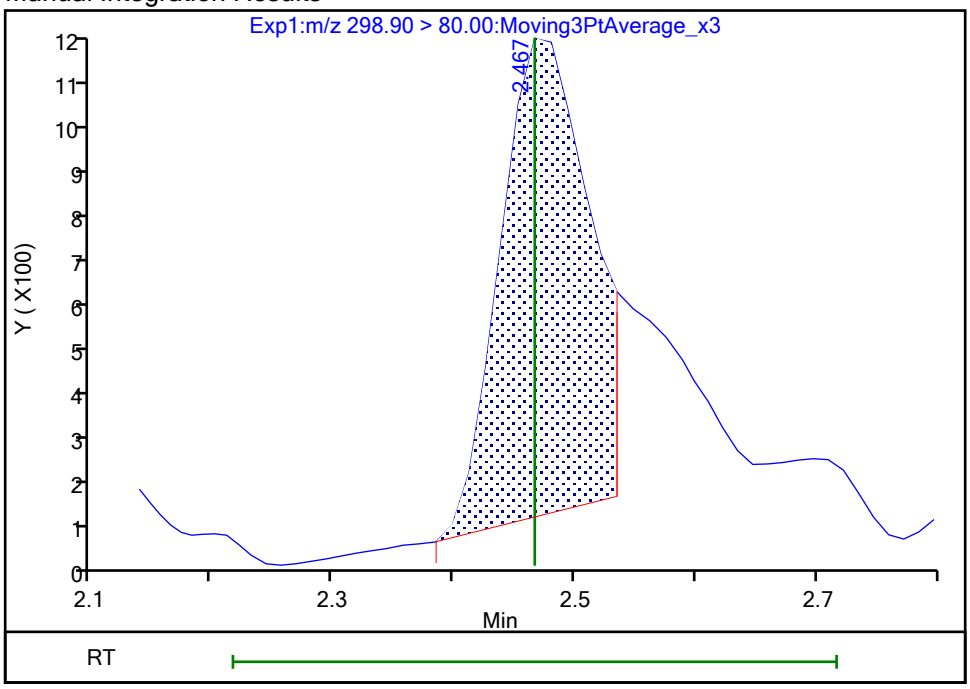
Processing Integration Results

RT: 2.47
Area: 3929
Amount: 0.002054
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 5097
Amount: 0.002664
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:17:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

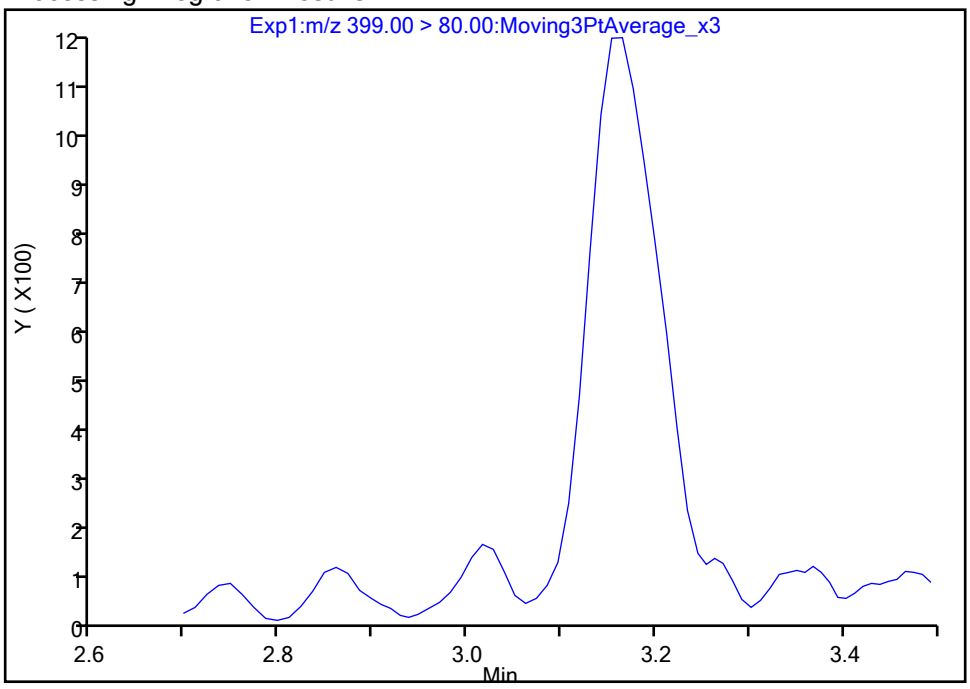
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

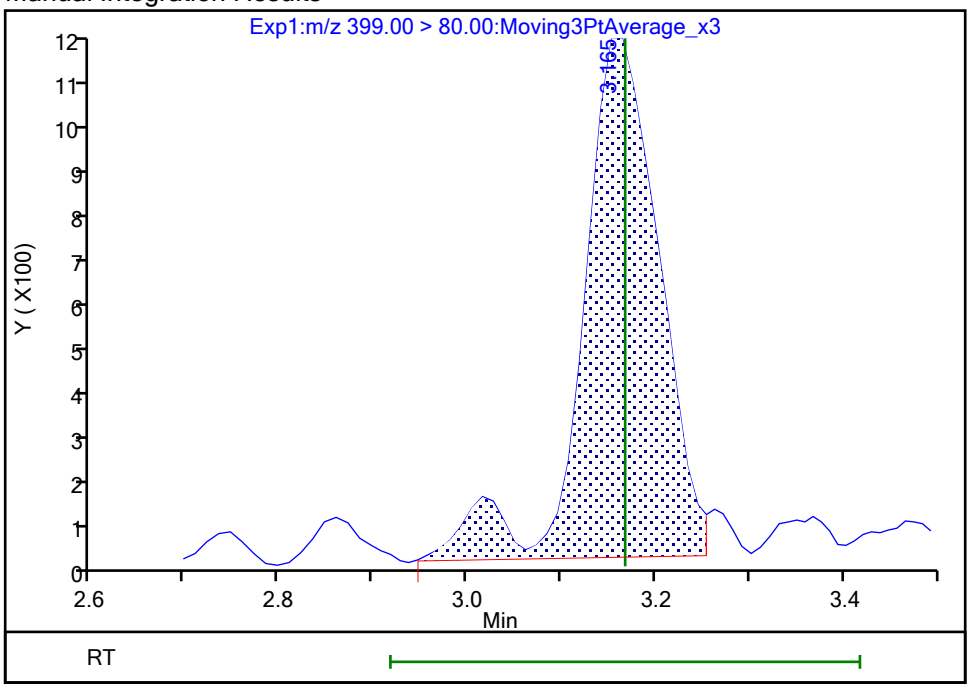
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 6499
Amount: 0.004511
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:53 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

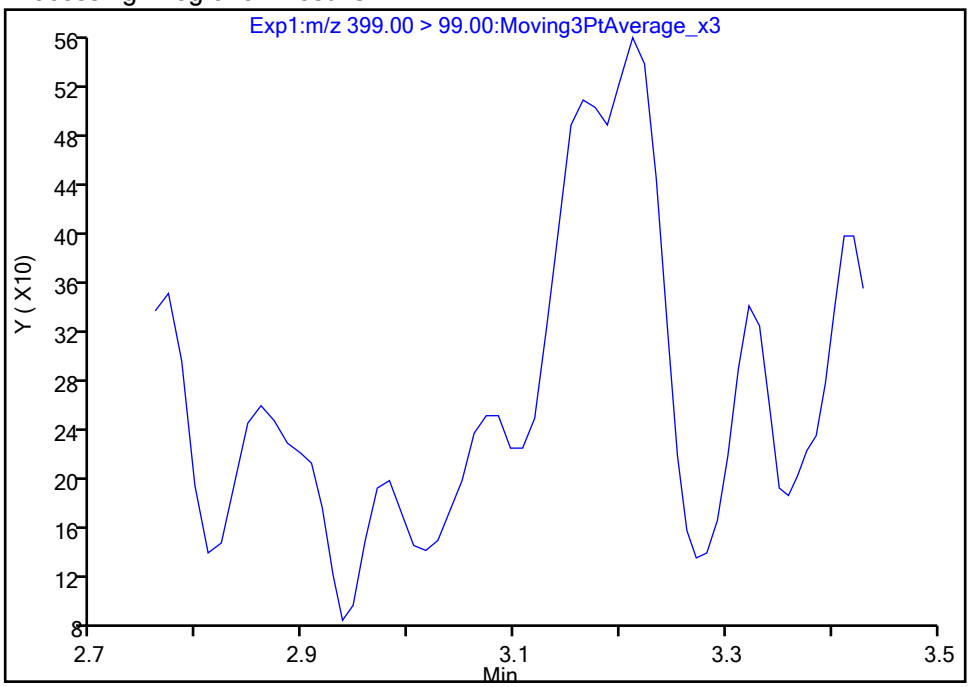
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

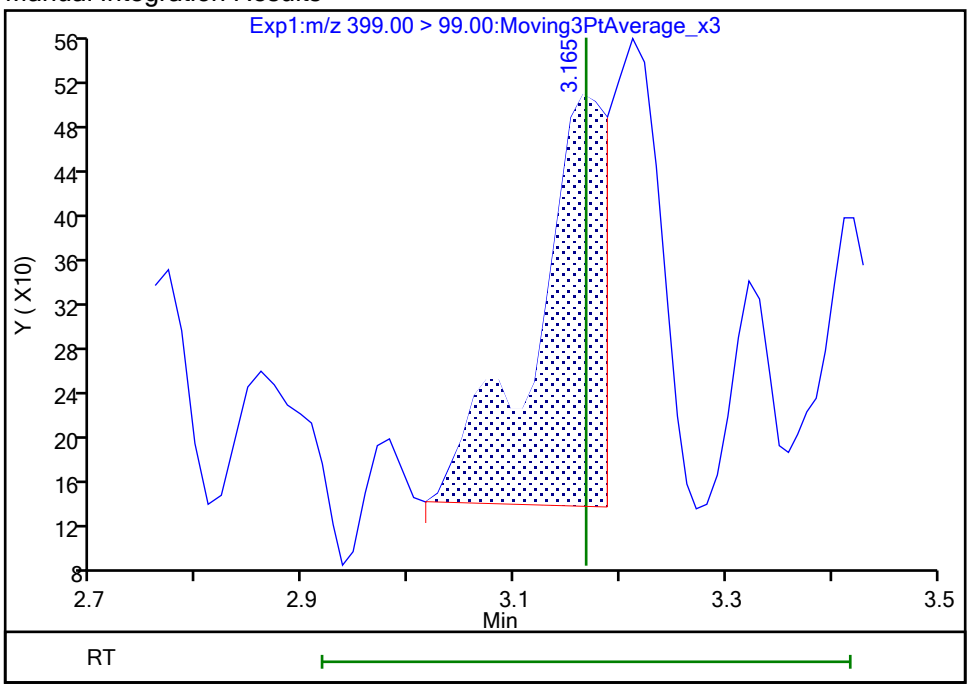
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 1631
Amount: 0.004511
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

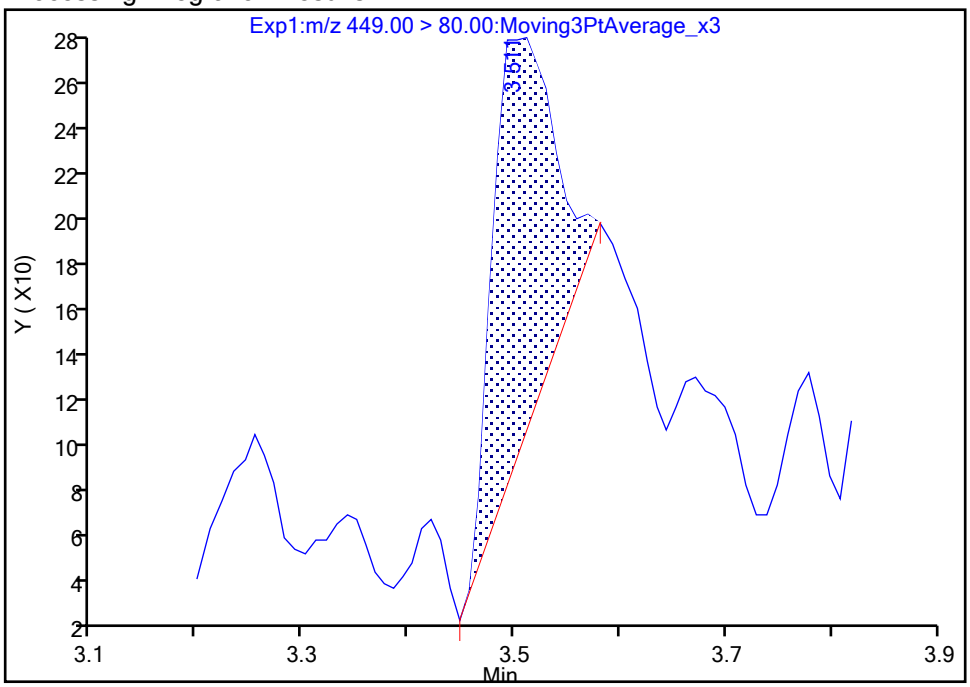
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

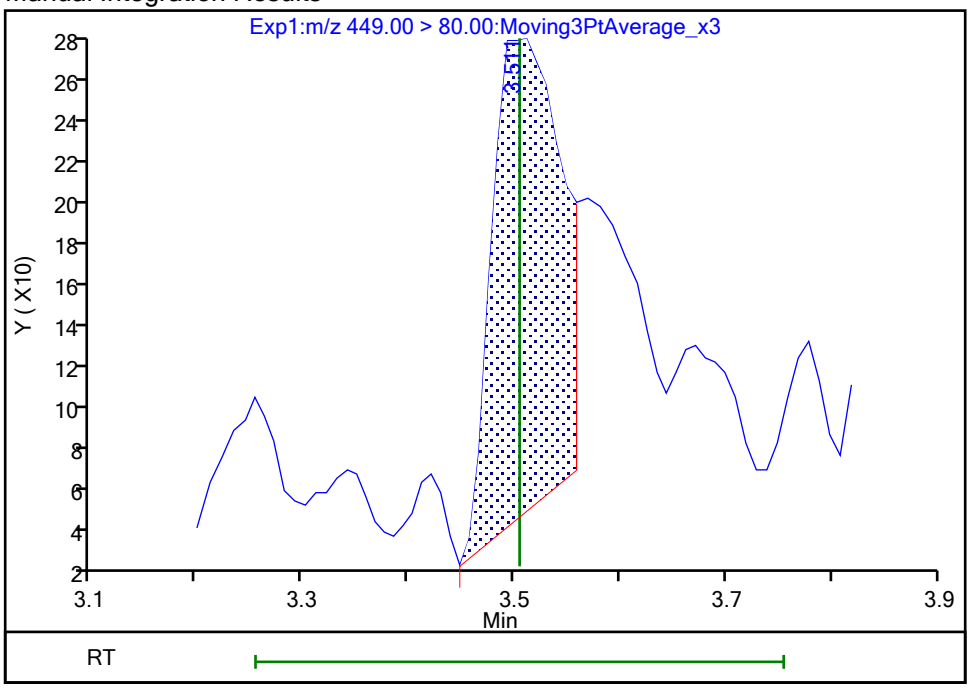
Processing Integration Results

RT: 3.51
Area: 719
Amount: 0.000604
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 1022
Amount: 0.000858
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:34 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

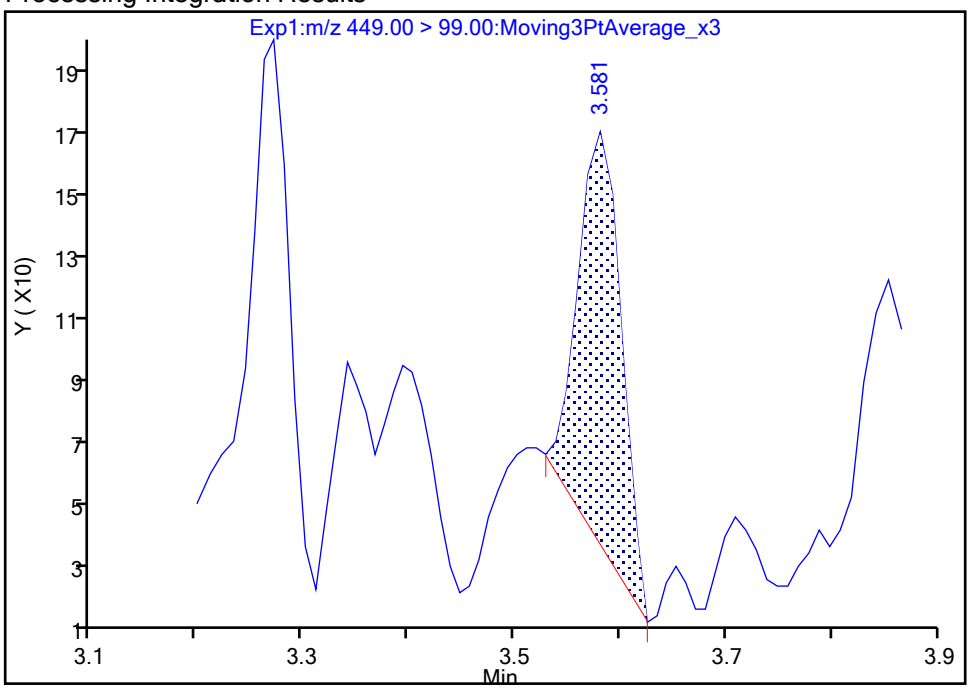
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

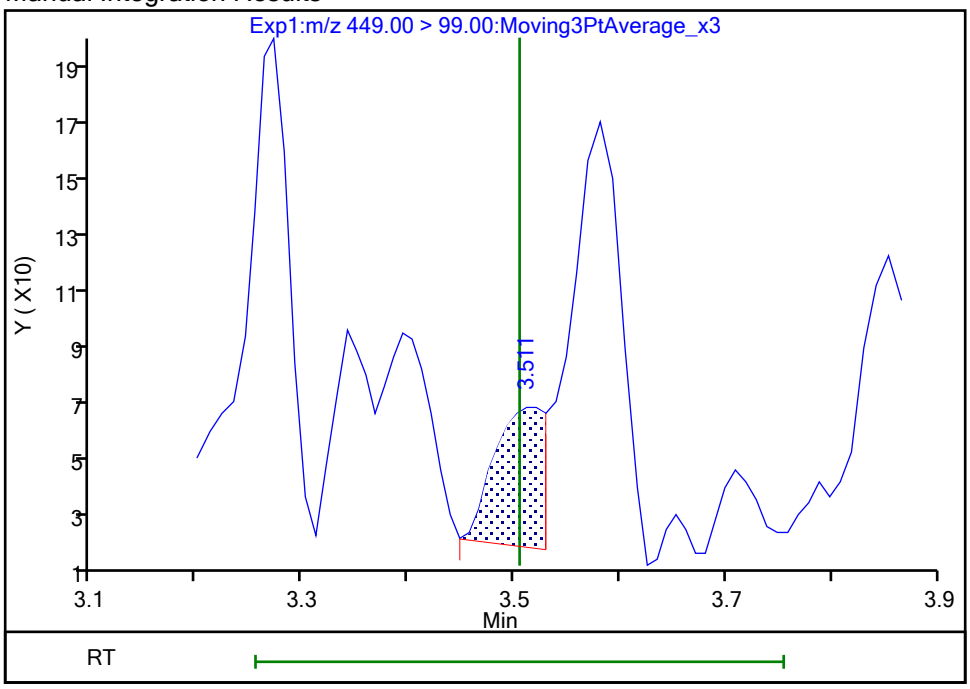
Processing Integration Results

RT: 3.58
Area: 356
Amount: 0.000604
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 148
Amount: 0.000858
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:41 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

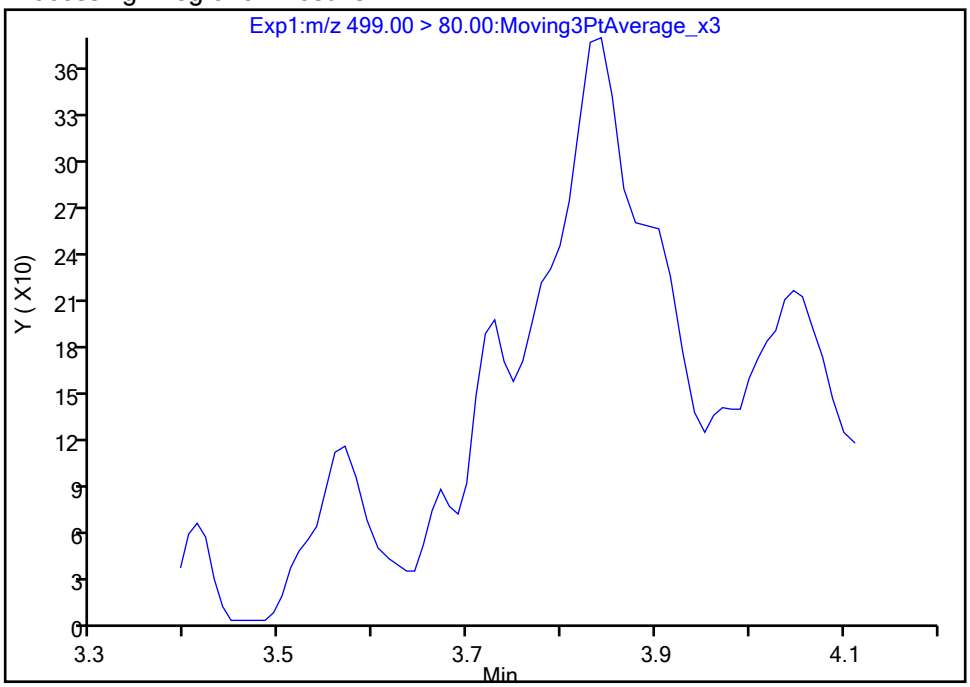
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

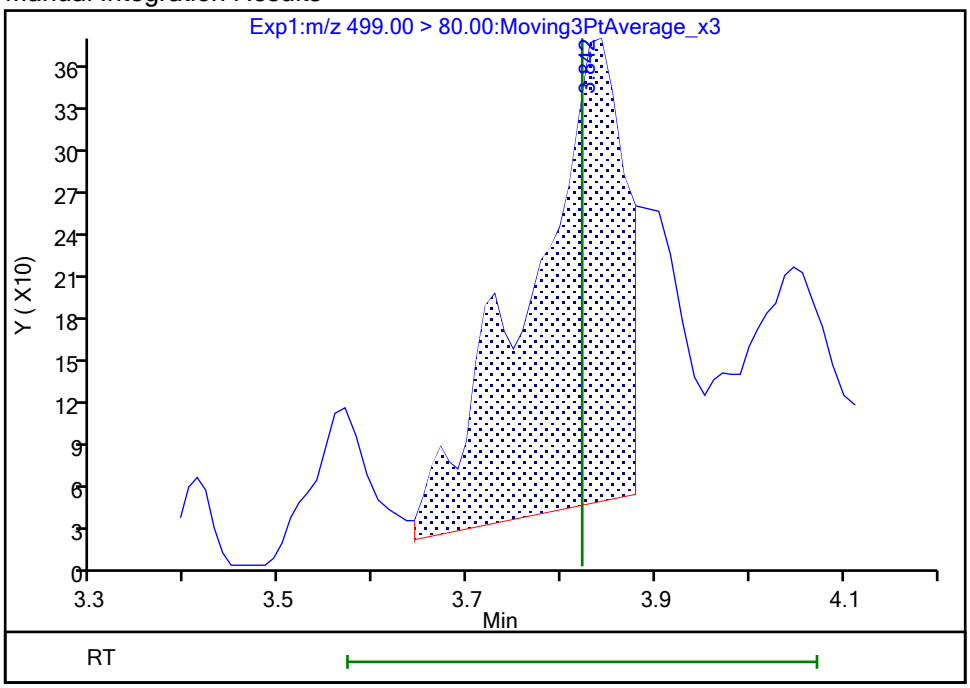
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 2360
Amount: 0.002455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:22 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

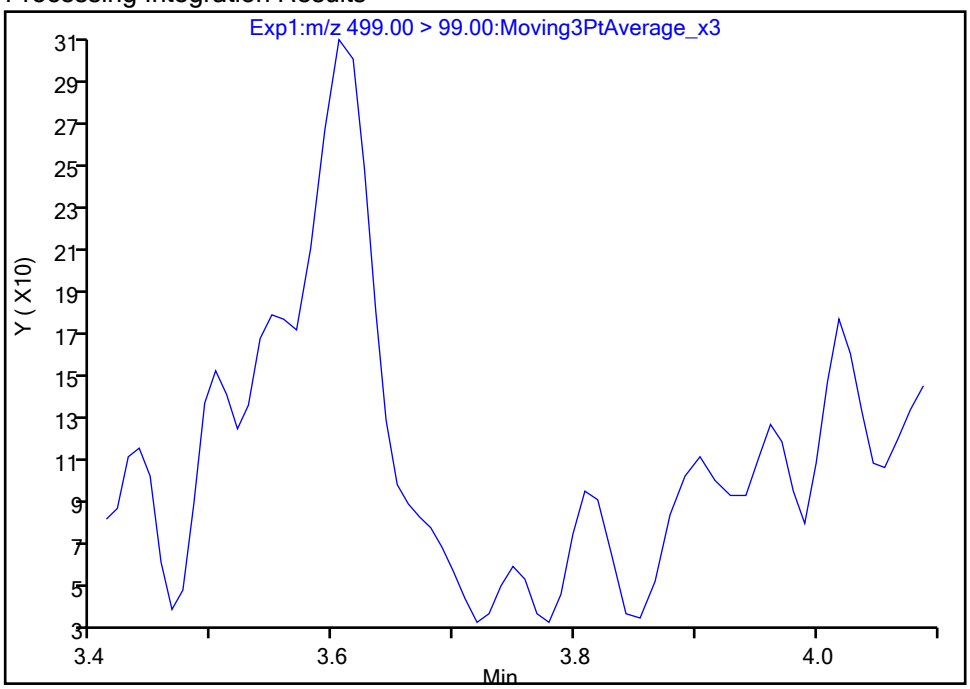
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

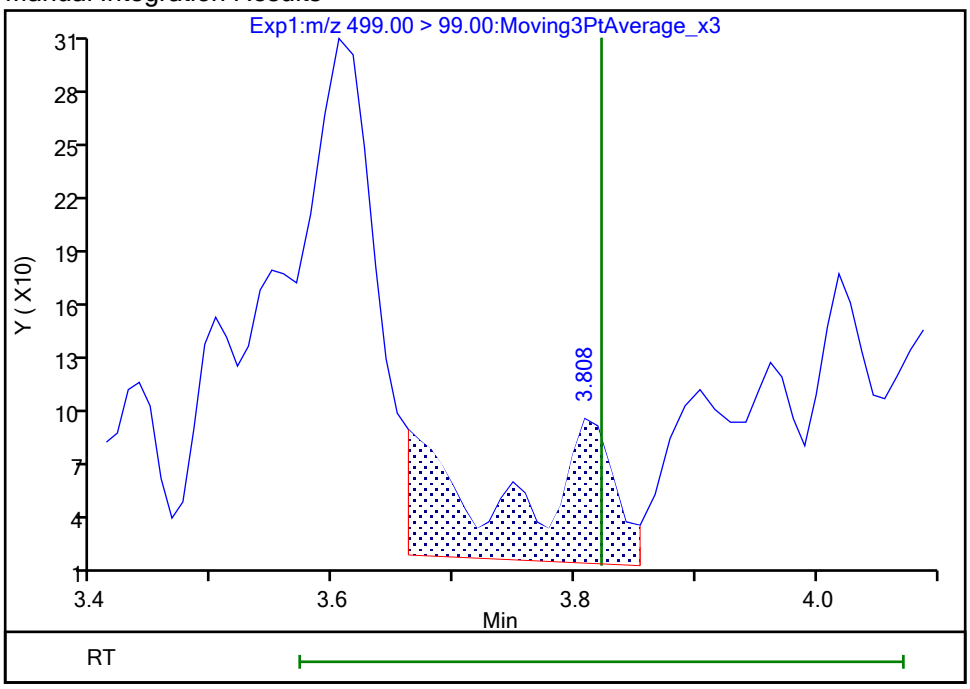
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.81
Area: 478
Amount: 0.002455
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:25 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

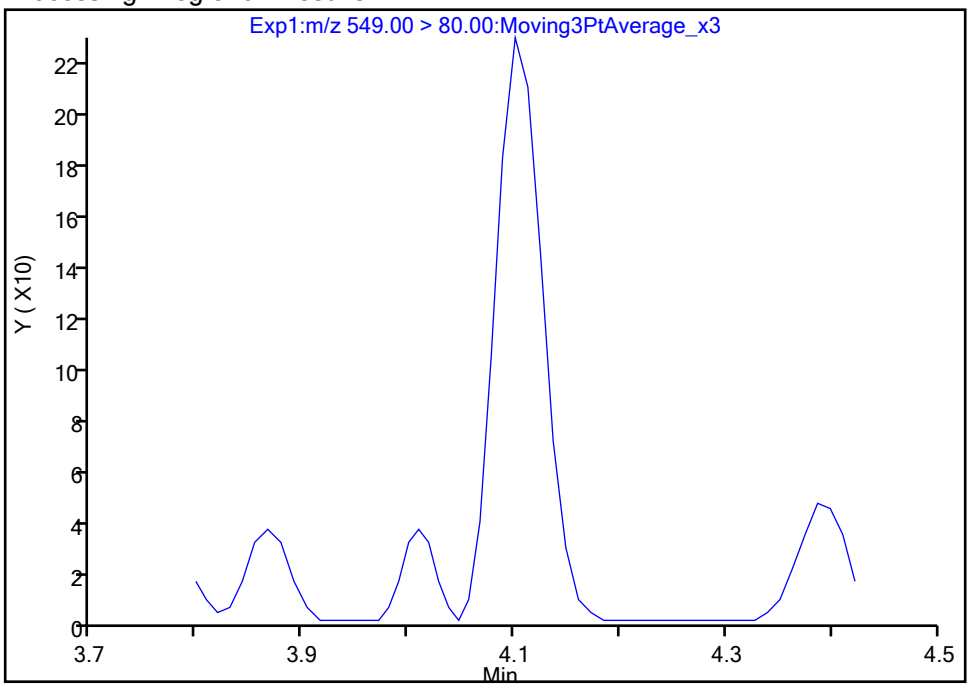
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

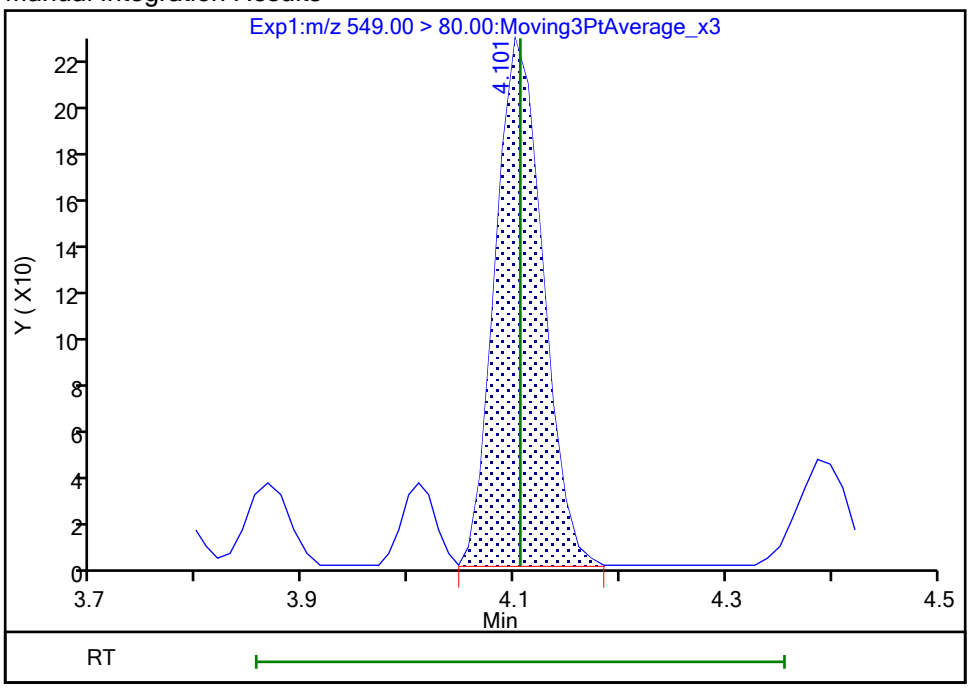
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 702
Amount: 0.000960
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:49 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

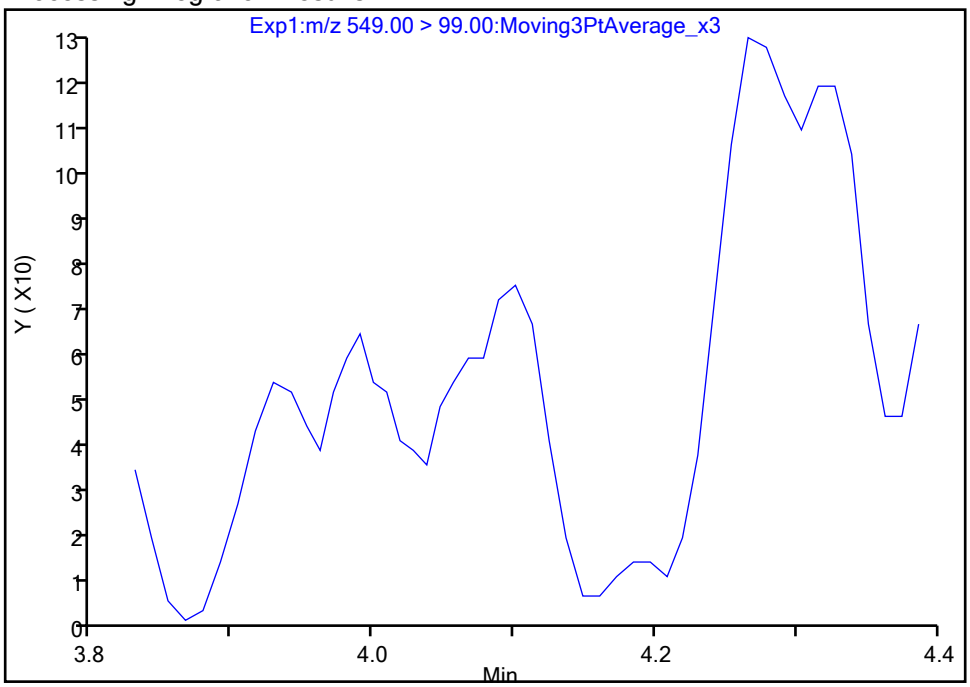
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

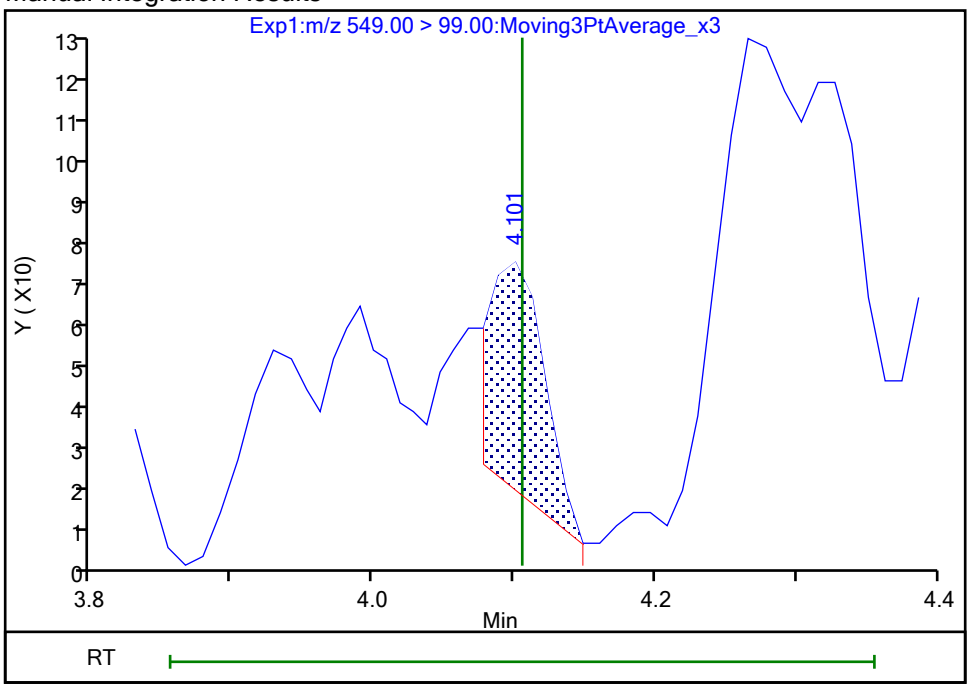
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 136
Amount: 0.000960
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:51 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

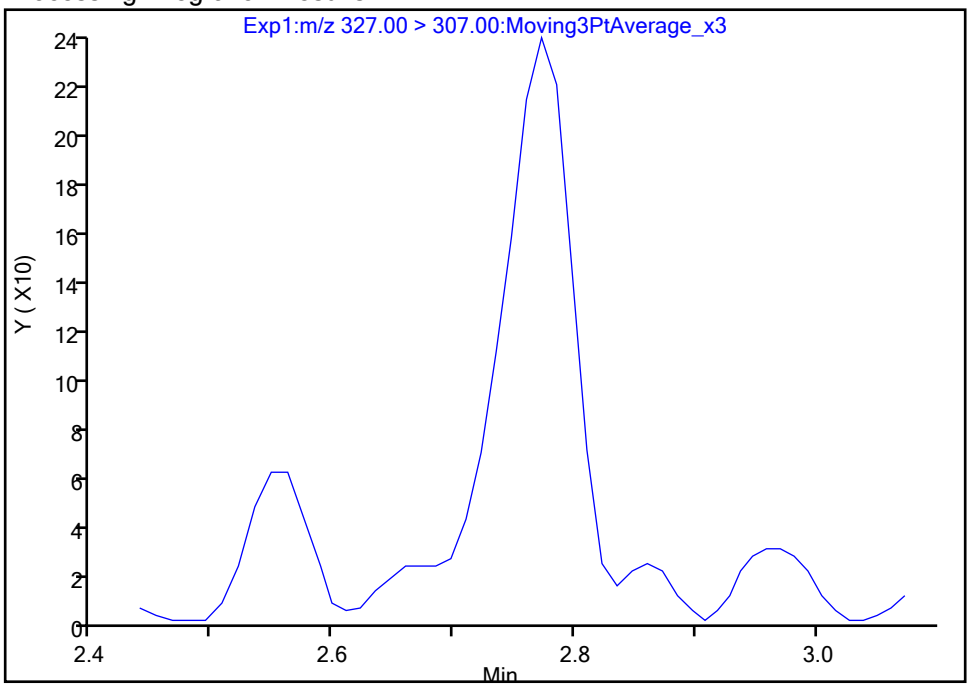
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

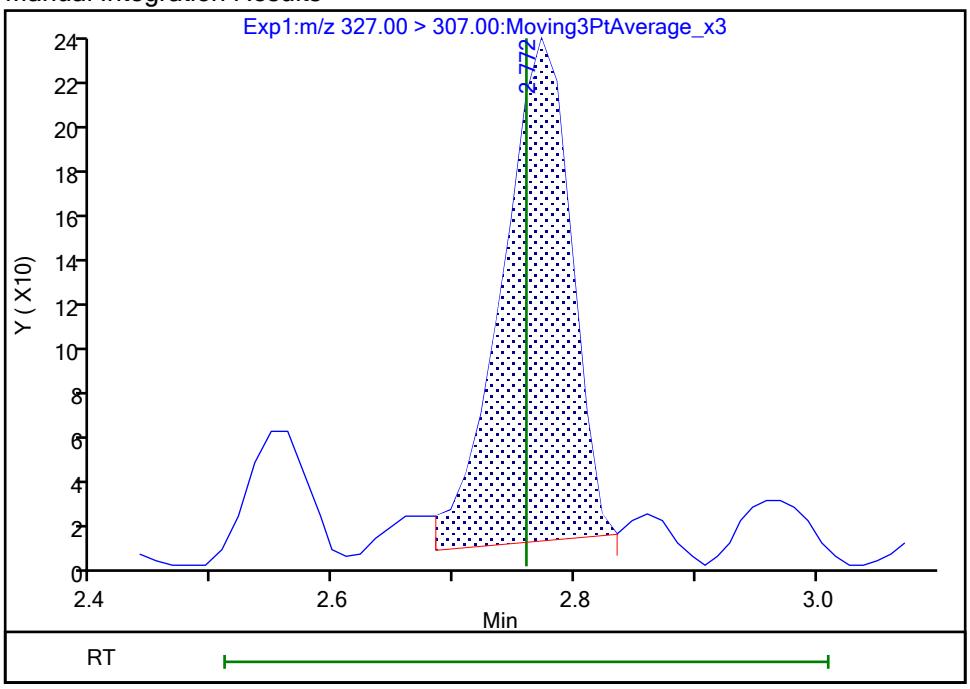
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 892
Amount: 0.001351
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:18:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

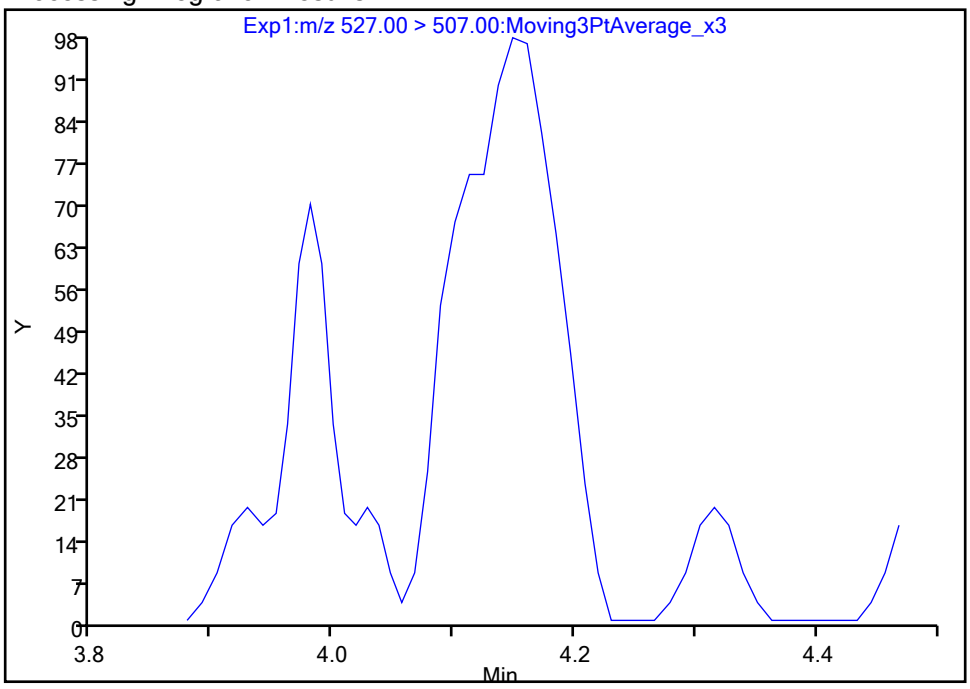
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

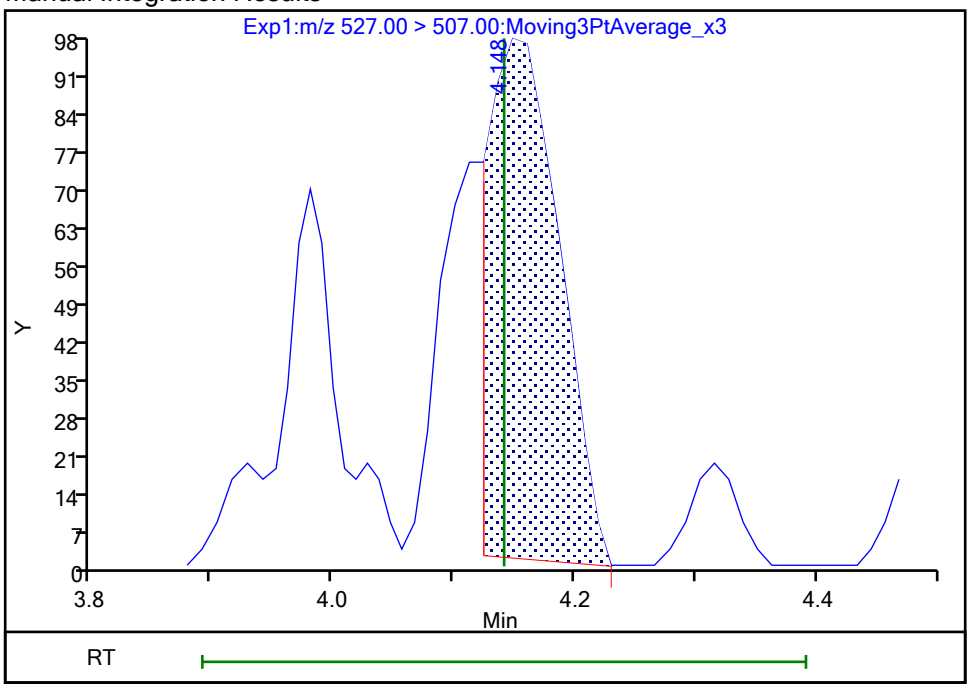
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 384
Amount: 0.000655
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:00 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

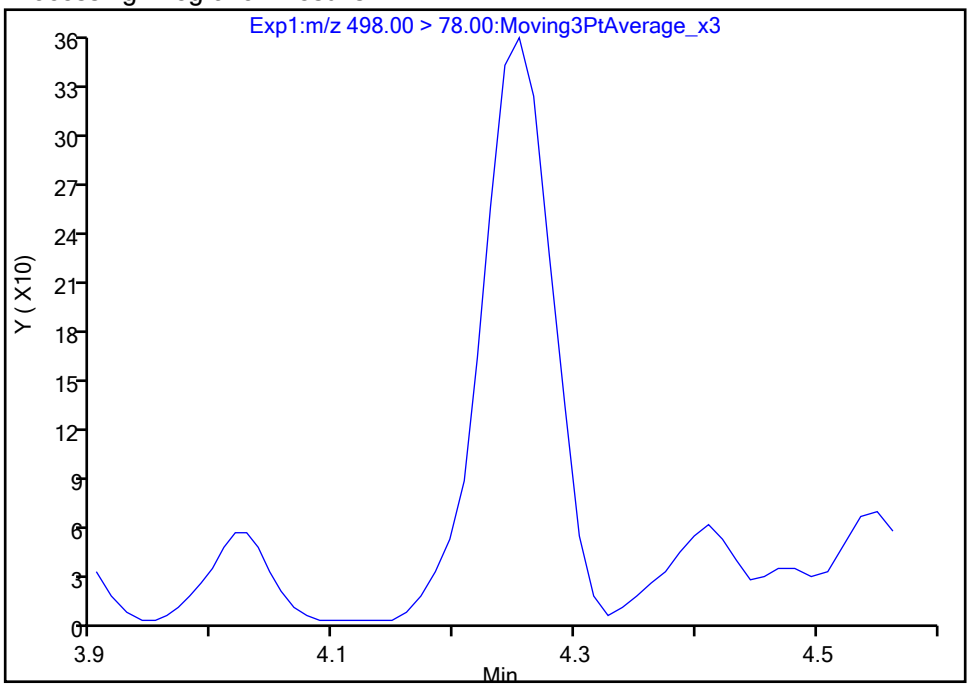
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

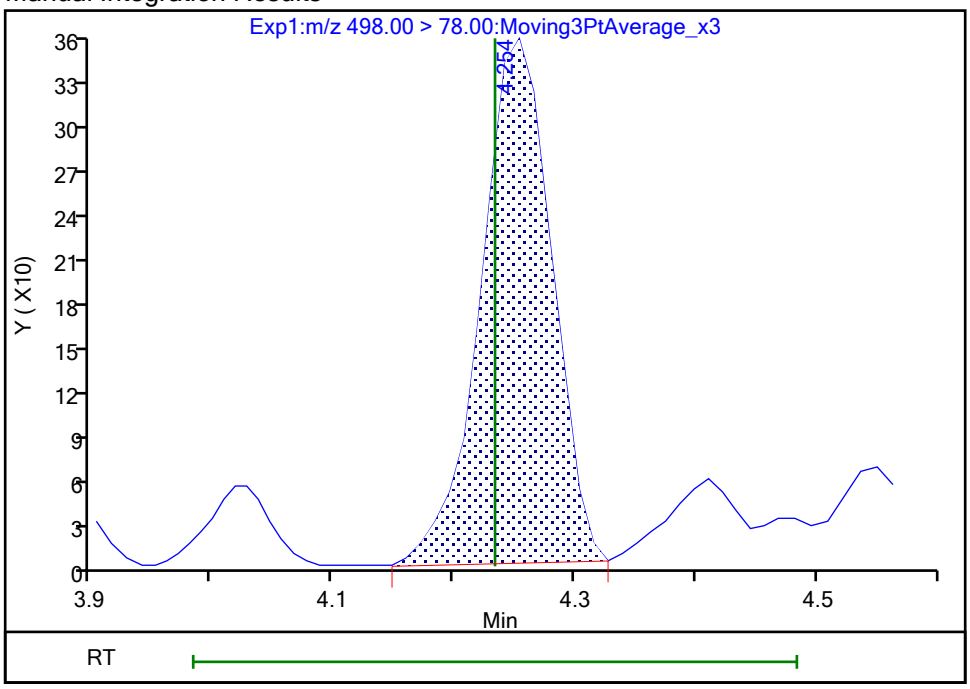
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 1458
Amount: 0.001188
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:04 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

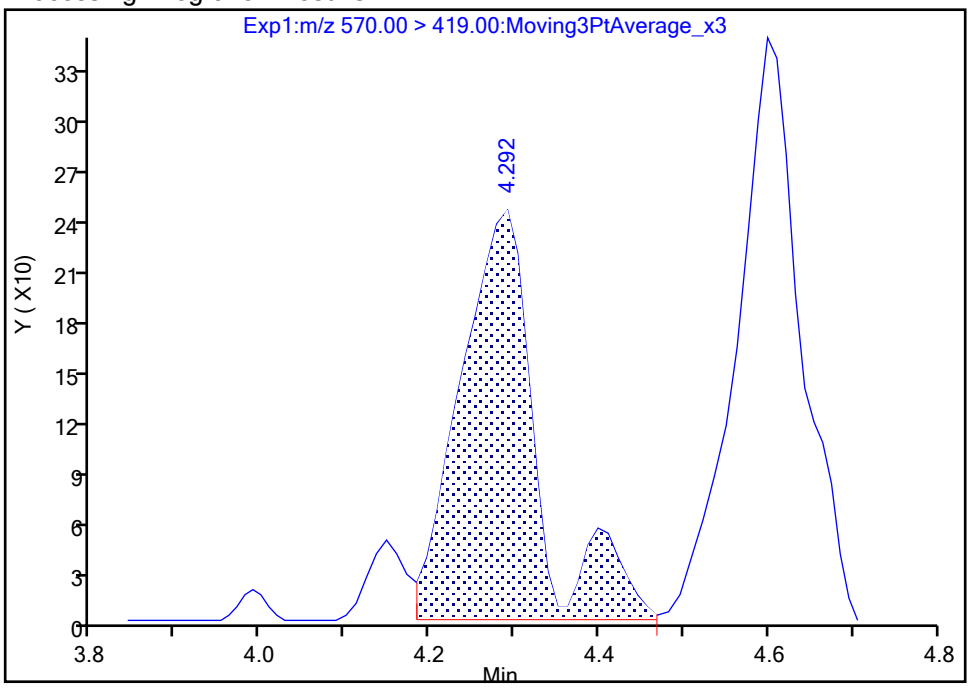
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

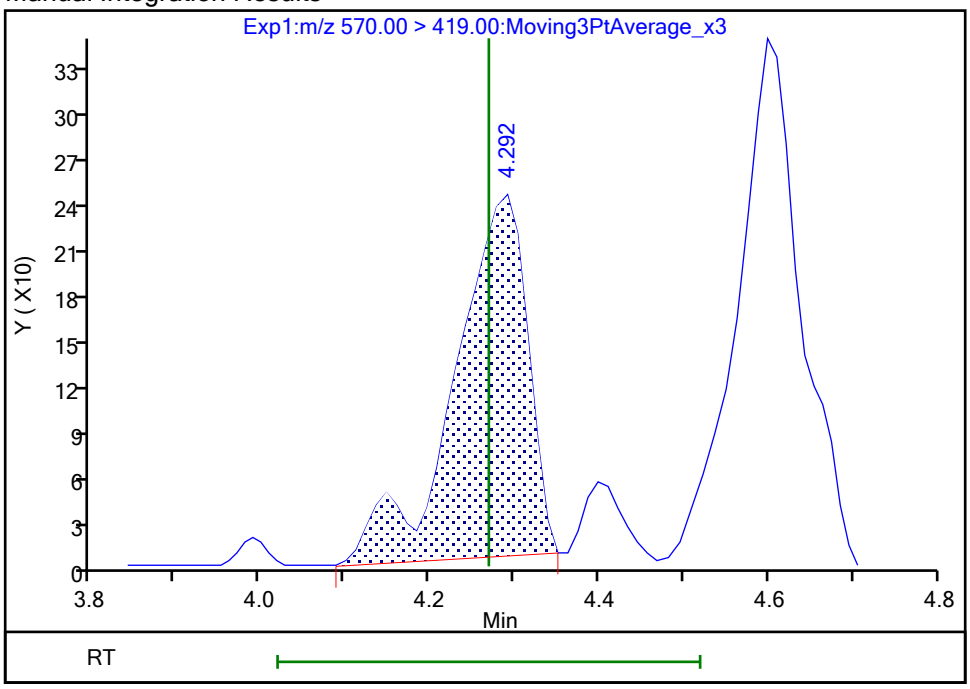
Processing Integration Results

RT: 4.29
Area: 1513
Amount: 0.003841
Amount Units: ng/ml



Manual Integration Results

RT: 4.29
Area: 1404
Amount: 0.003565
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:07 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

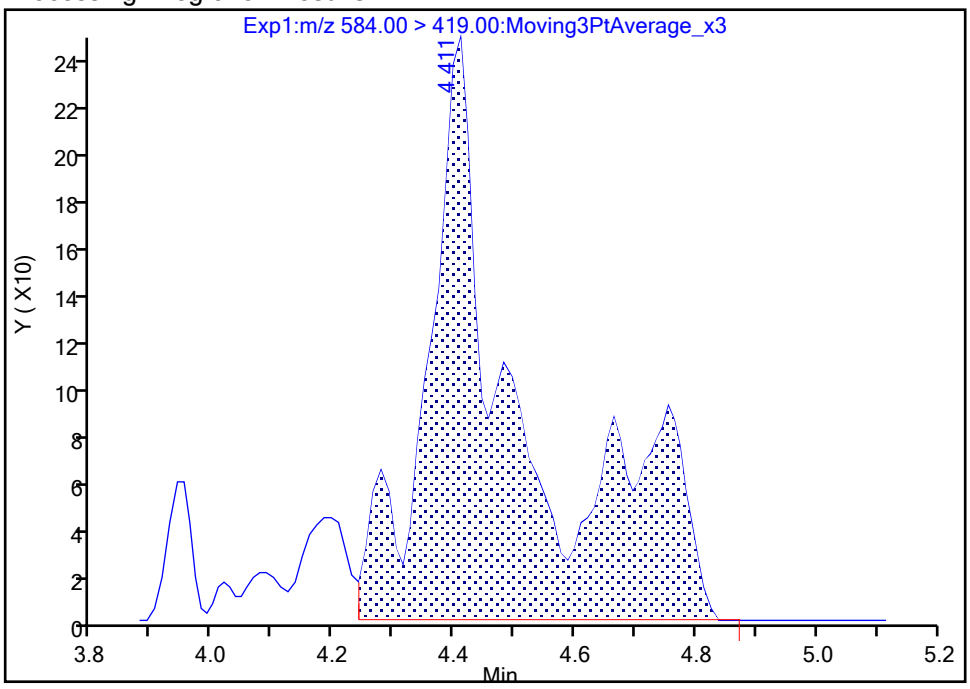
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

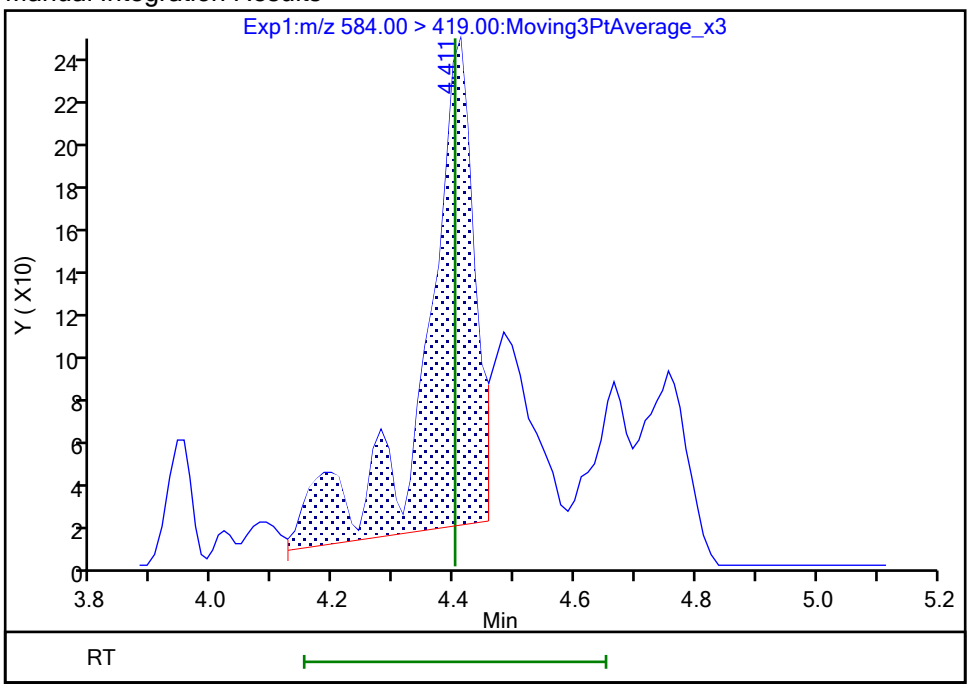
Processing Integration Results

RT: 4.41
Area: 2693
Amount: 0.006731
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 1279
Amount: 0.003197
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

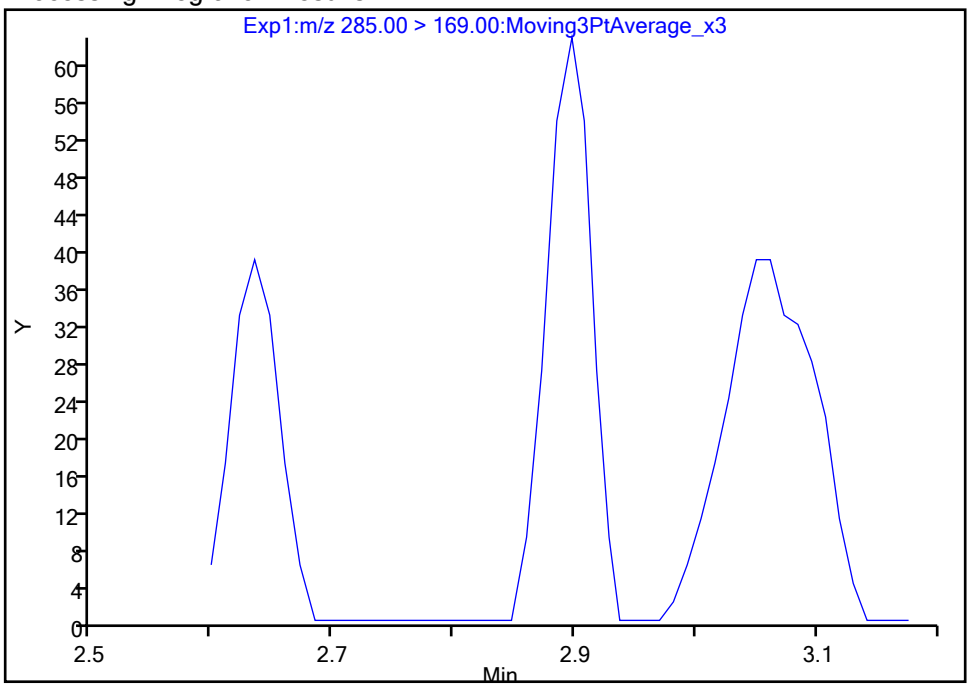
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

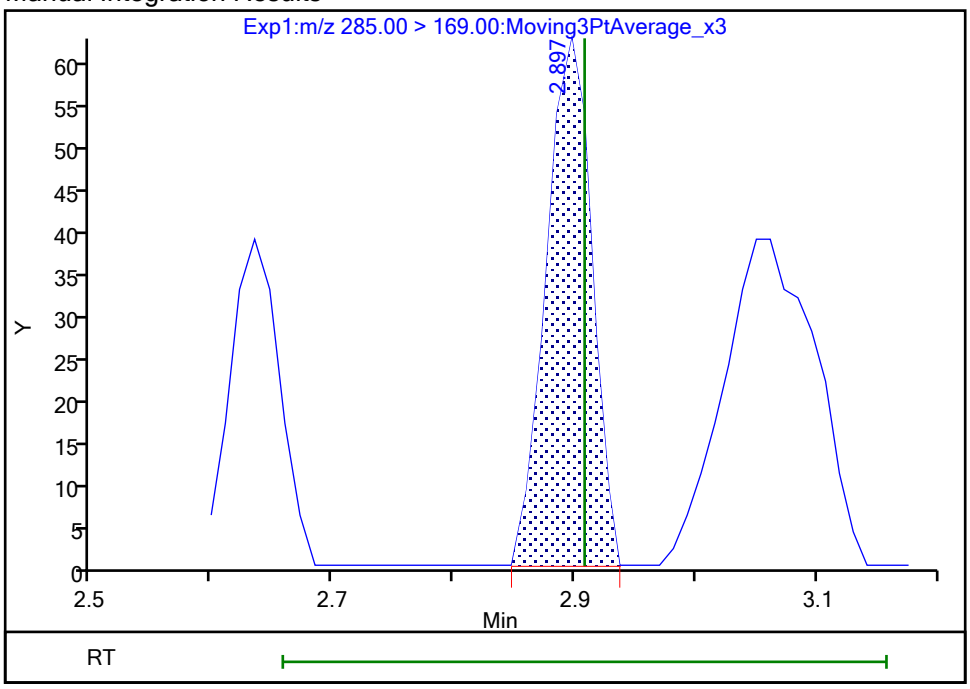
Not Detected
Expected RT: 2.91

Processing Integration Results



Manual Integration Results

RT: 2.90
Area: 165
Amount: 0.000714
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:19:45 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

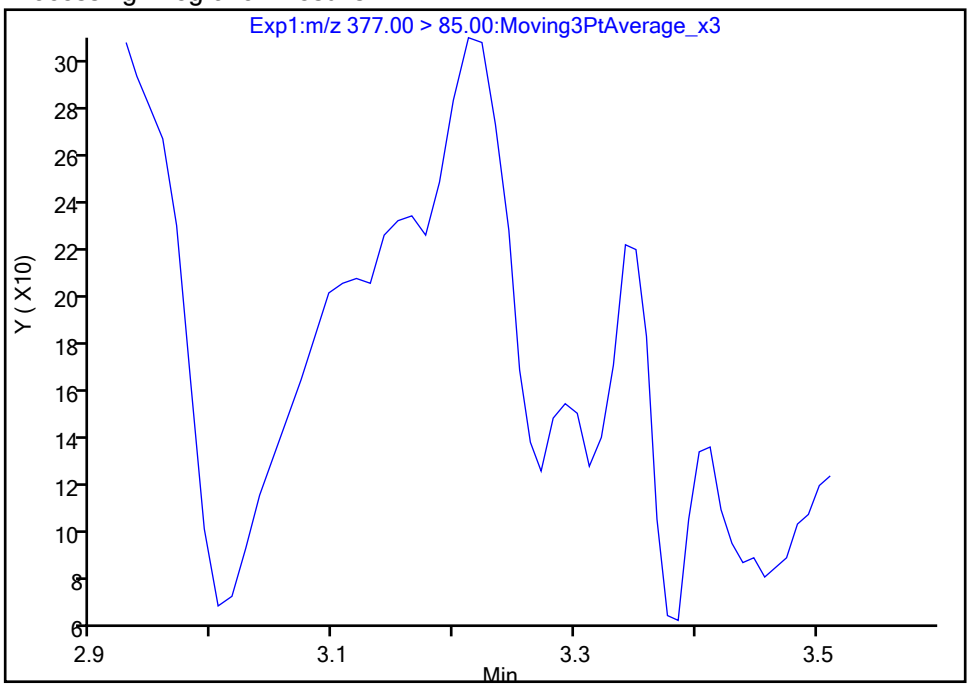
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 2

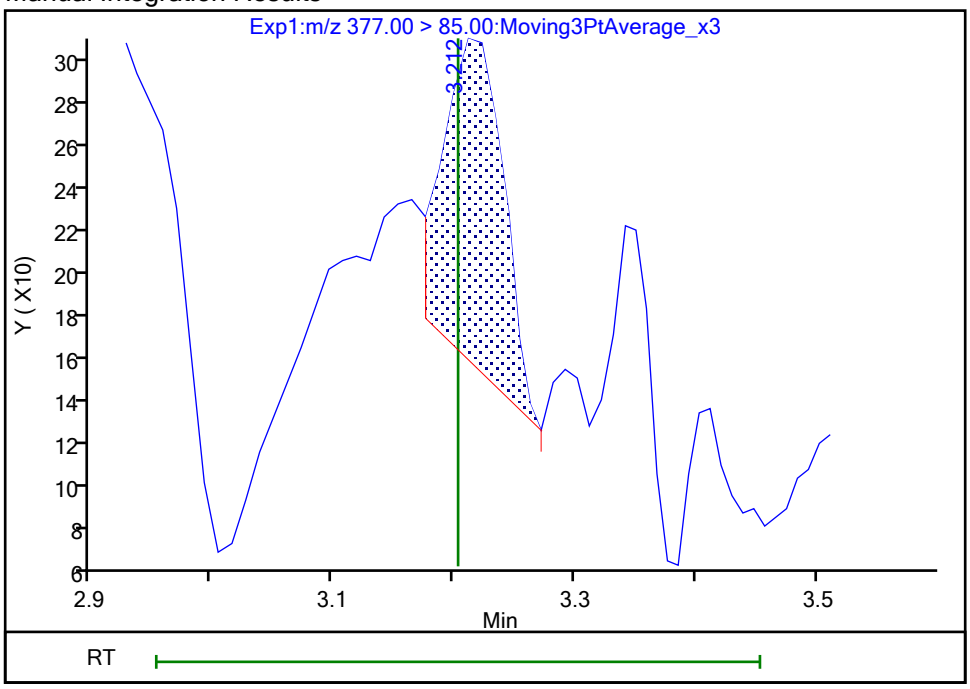
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 510
Amount: 0.000780
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

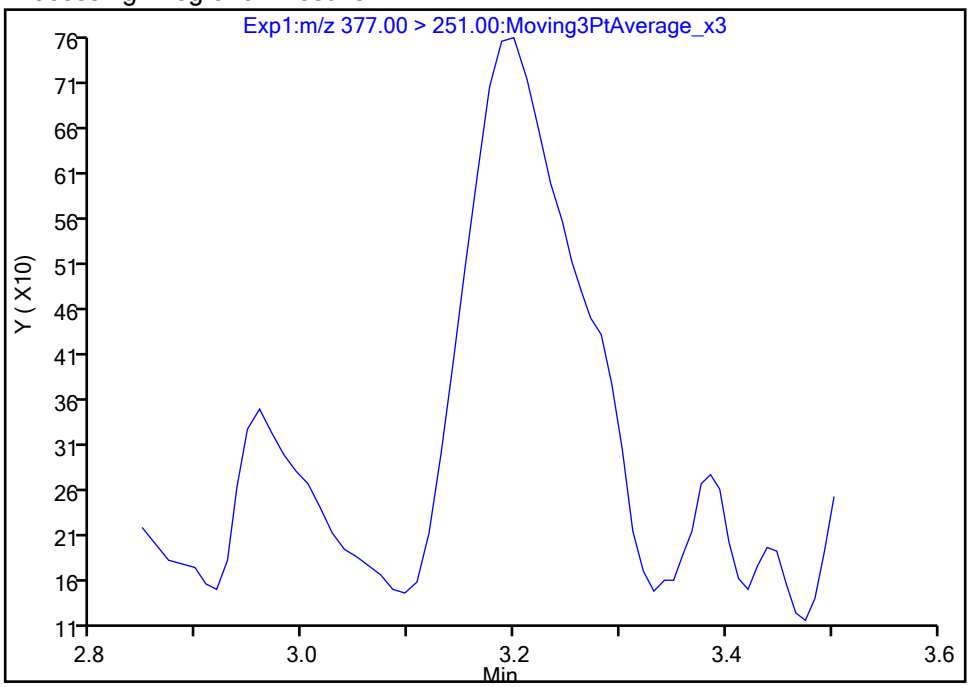
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

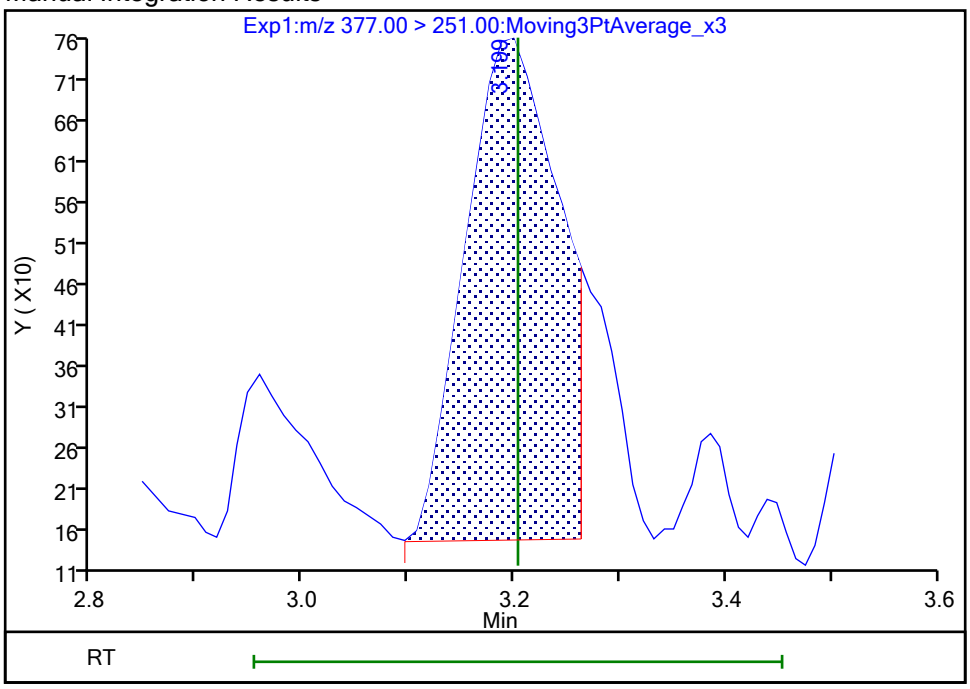
Not Detected
Expected RT: 3.20

Processing Integration Results



Manual Integration Results

RT: 3.20
Area: 3702
Amount: 0.000780
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:21:17 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

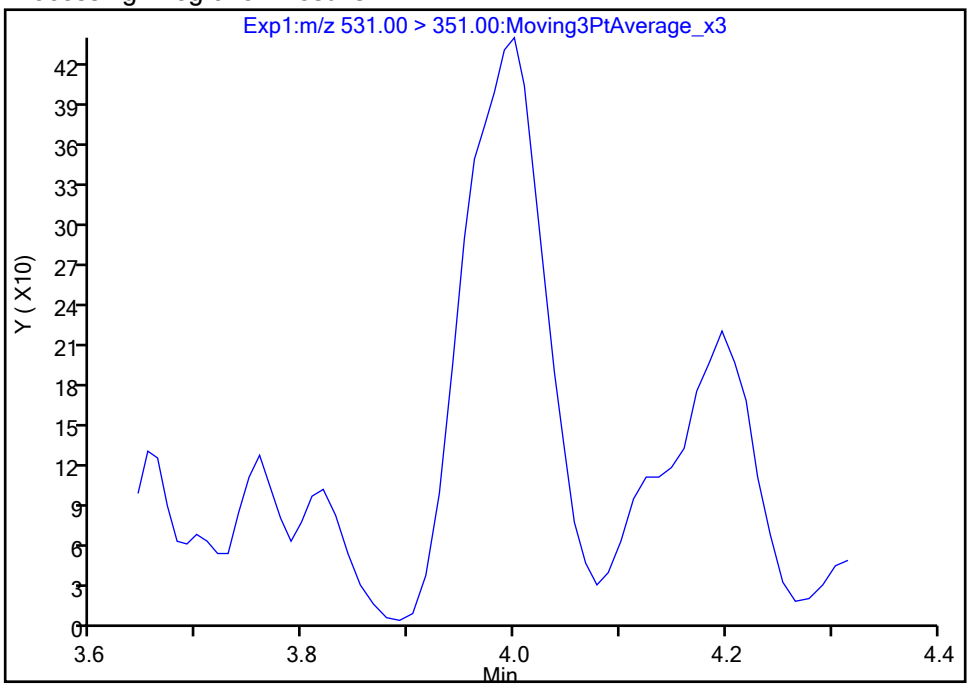
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

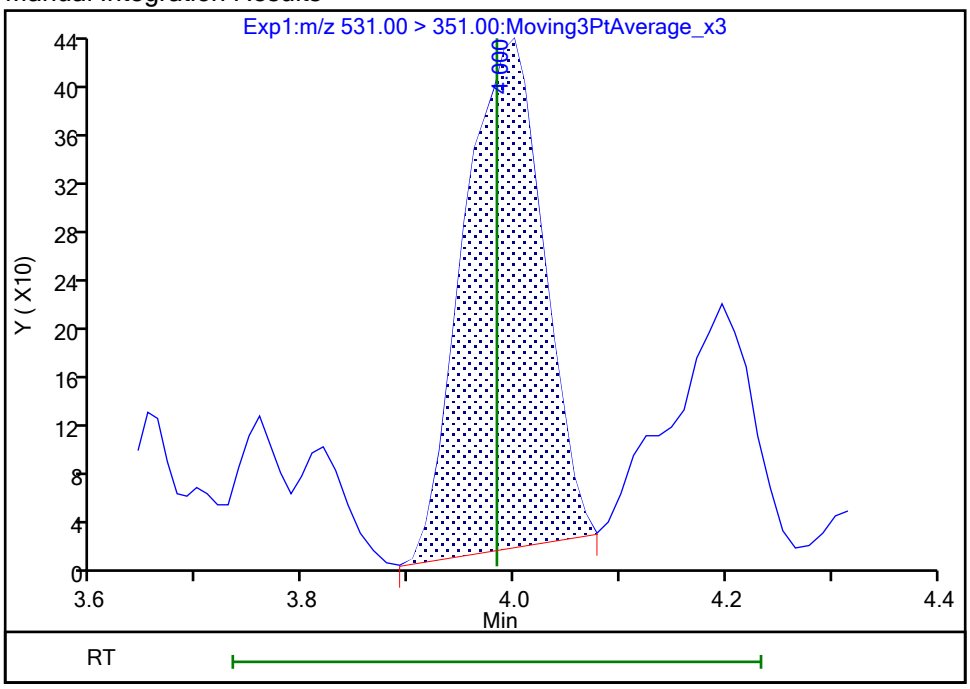
Not Detected
Expected RT: 3.98

Processing Integration Results



Manual Integration Results

RT: 4.00
Area: 2158
Amount: 0.000733
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:22:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

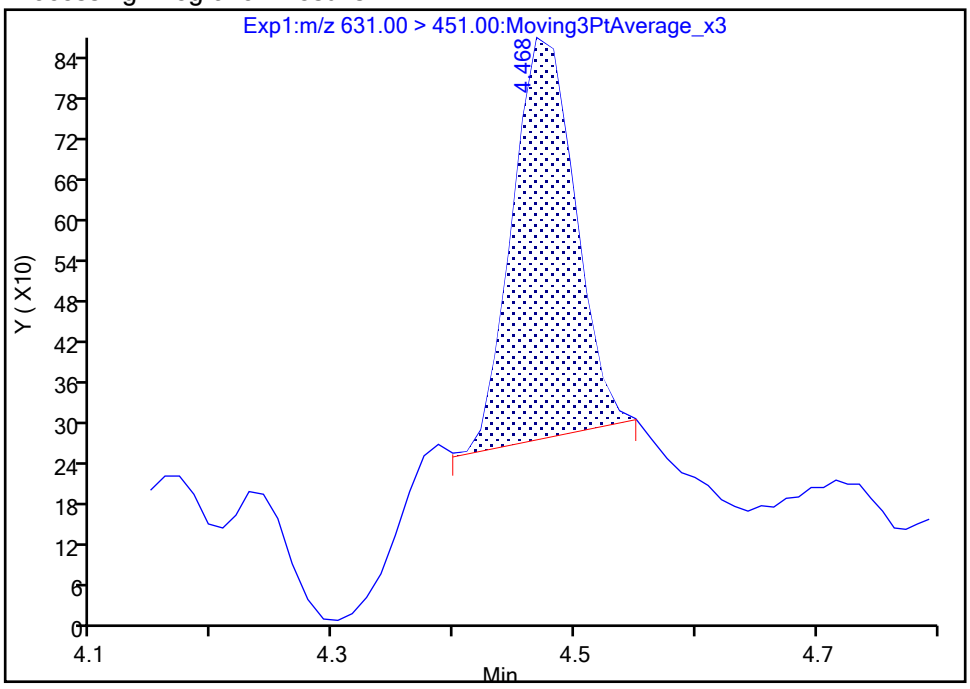
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

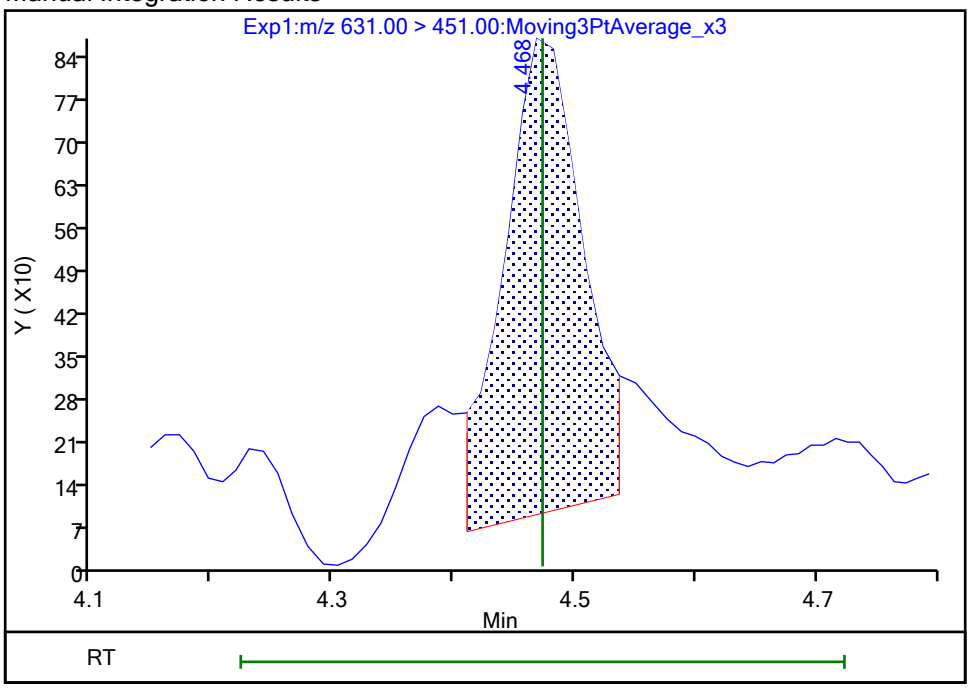
Processing Integration Results

RT: 4.47
Area: 2133
Amount: 0.000473
Amount Units: ng/ml



Manual Integration Results

RT: 4.47
Area: 3530
Amount: 0.000782
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:23:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

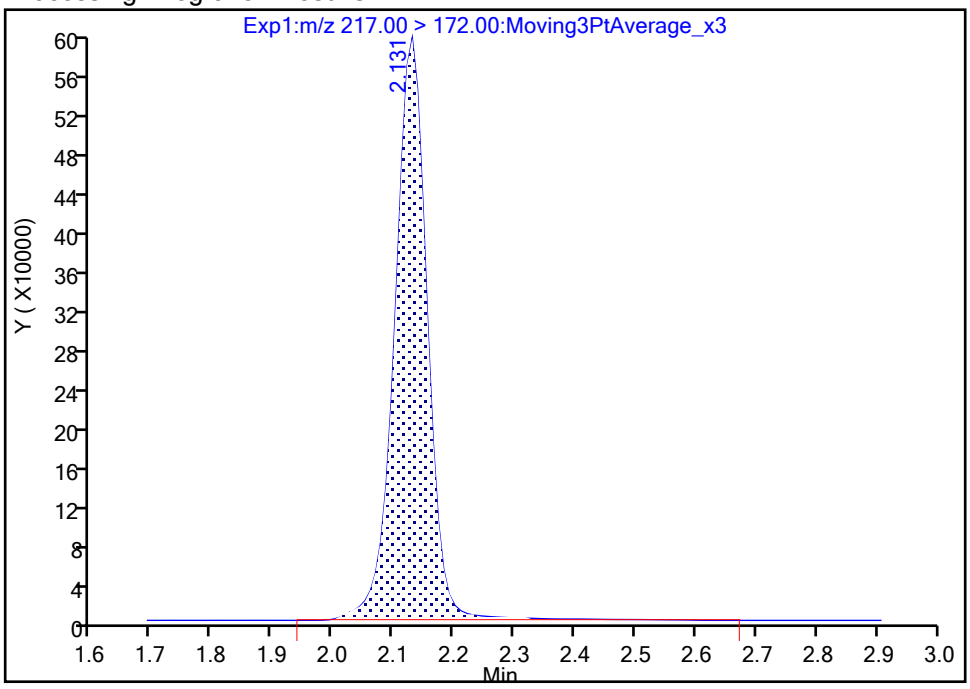
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

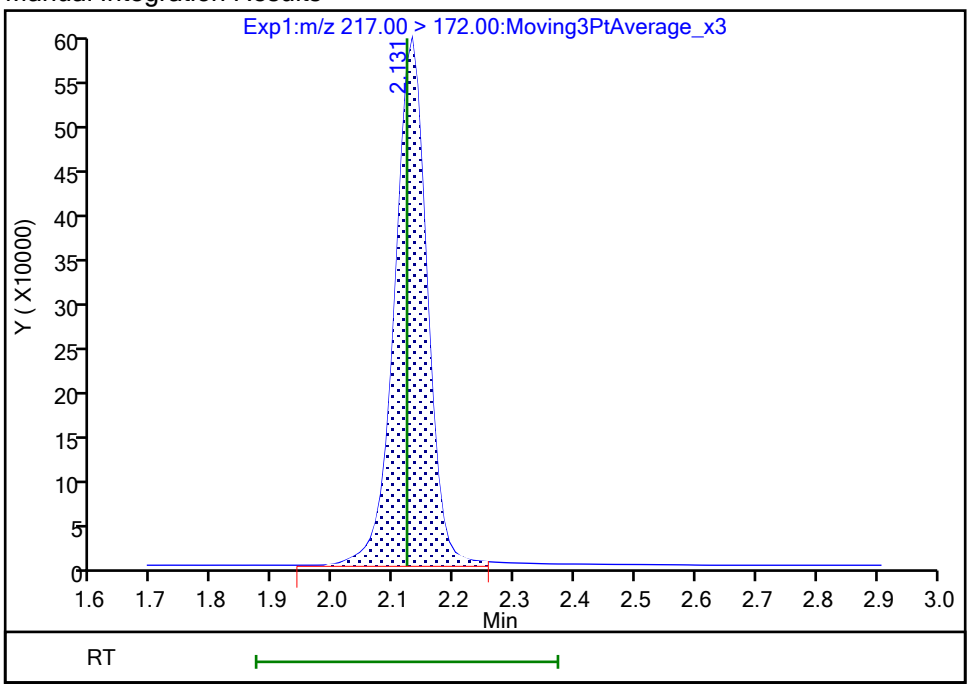
Processing Integration Results

RT: 2.13
Area: 2247536
Amount: 1.245576
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2218499
Amount: 1.229484
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:15 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

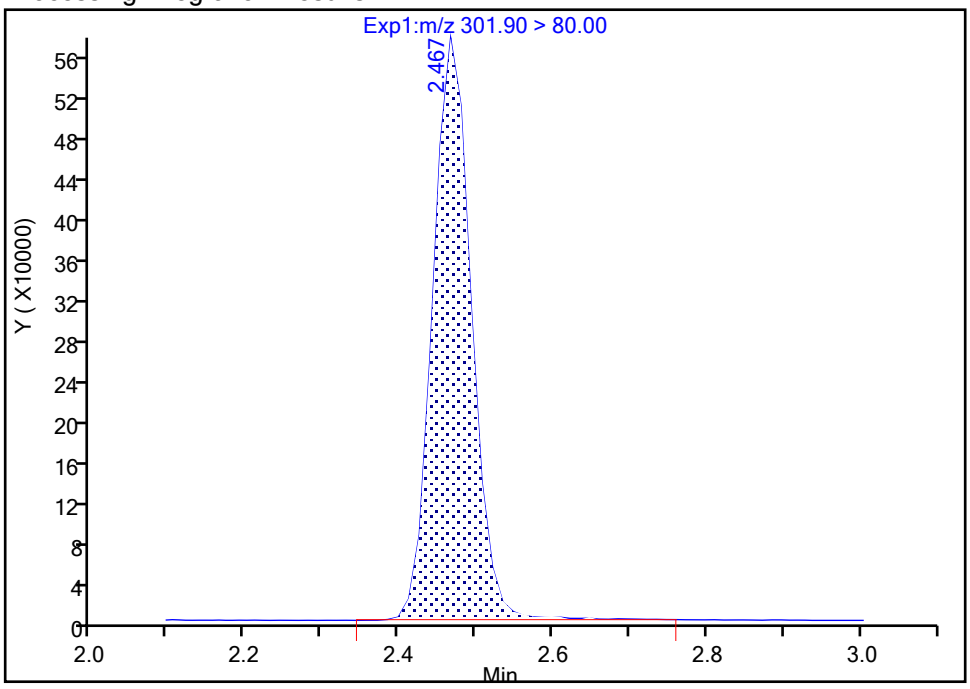
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

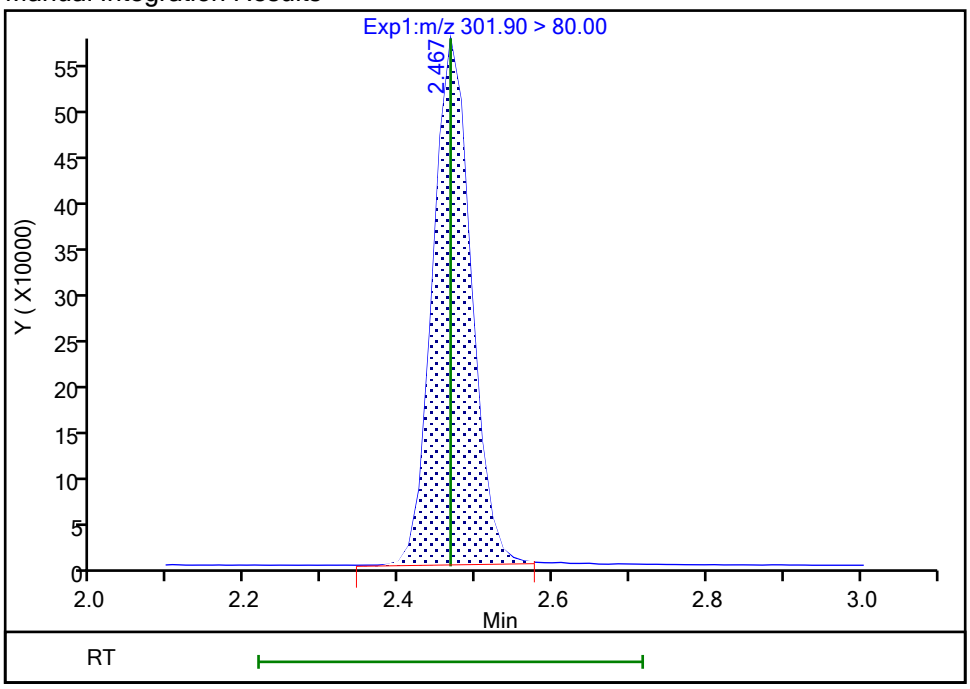
Processing Integration Results

RT: 2.47
Area: 2003376
Amount: 1.057298
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1991055
Amount: 1.050796
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

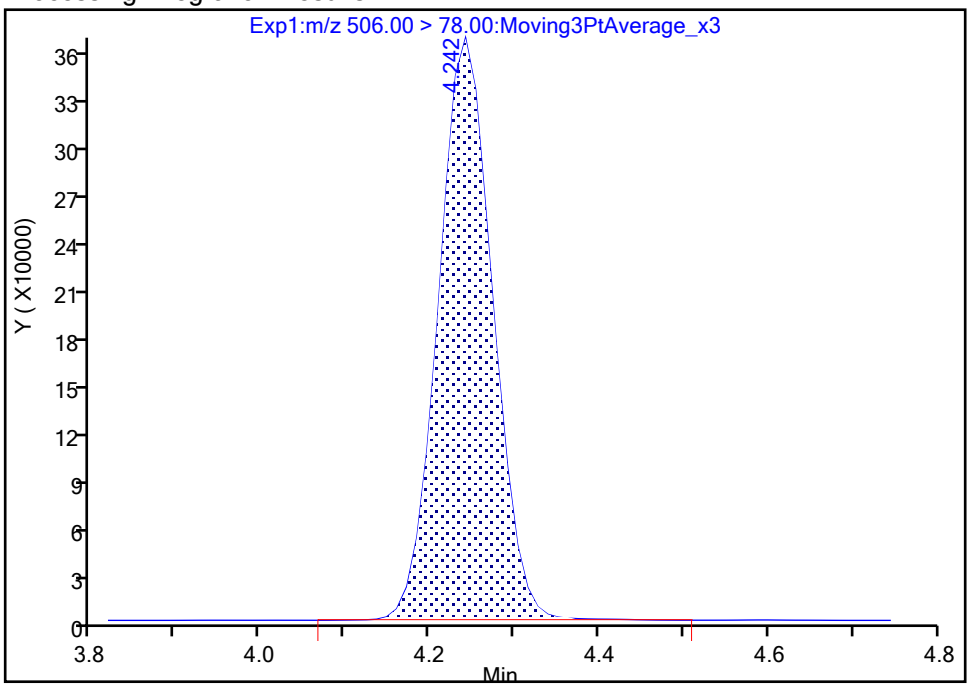
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

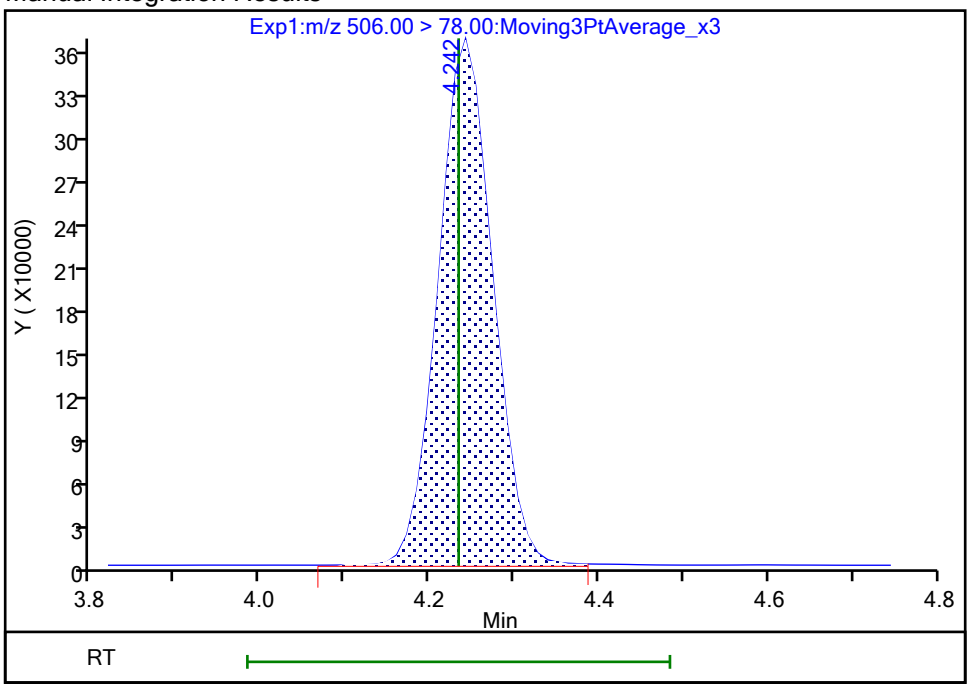
Processing Integration Results

RT: 4.24
Area: 1611205
Amount: 0.935824
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1608846
Amount: 0.934453
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:51 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

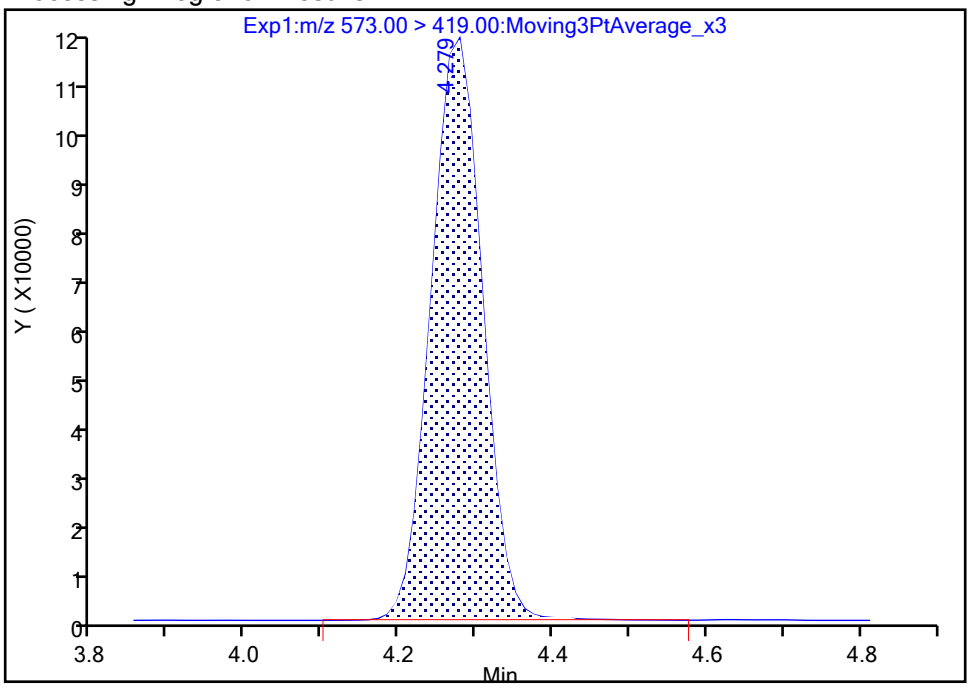
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

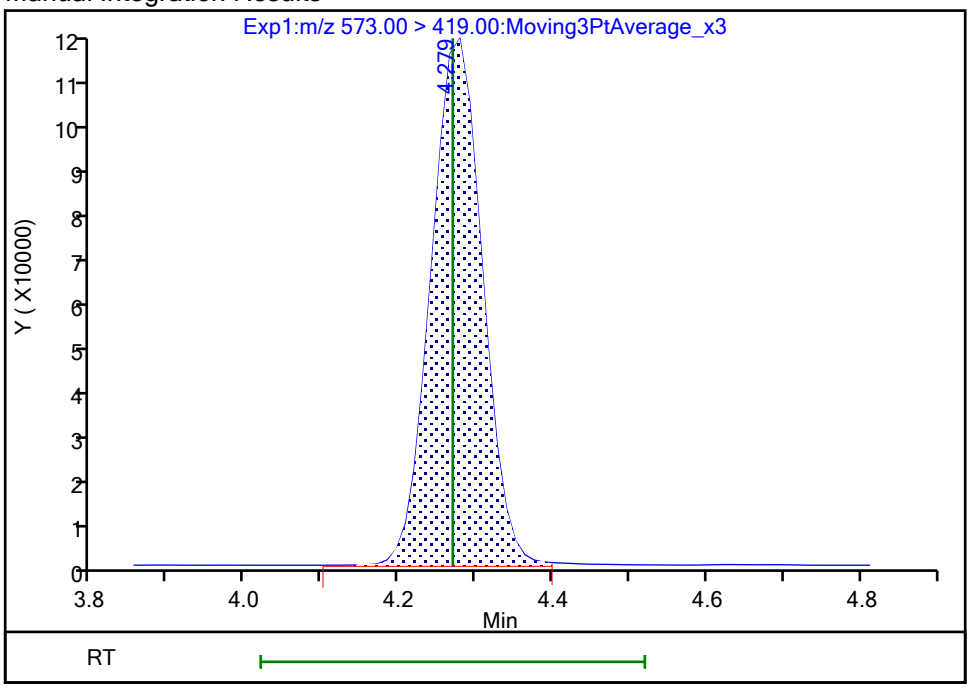
Processing Integration Results

RT: 4.28
Area: 544351
Amount: 1.128860
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 542582
Amount: 1.125192
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

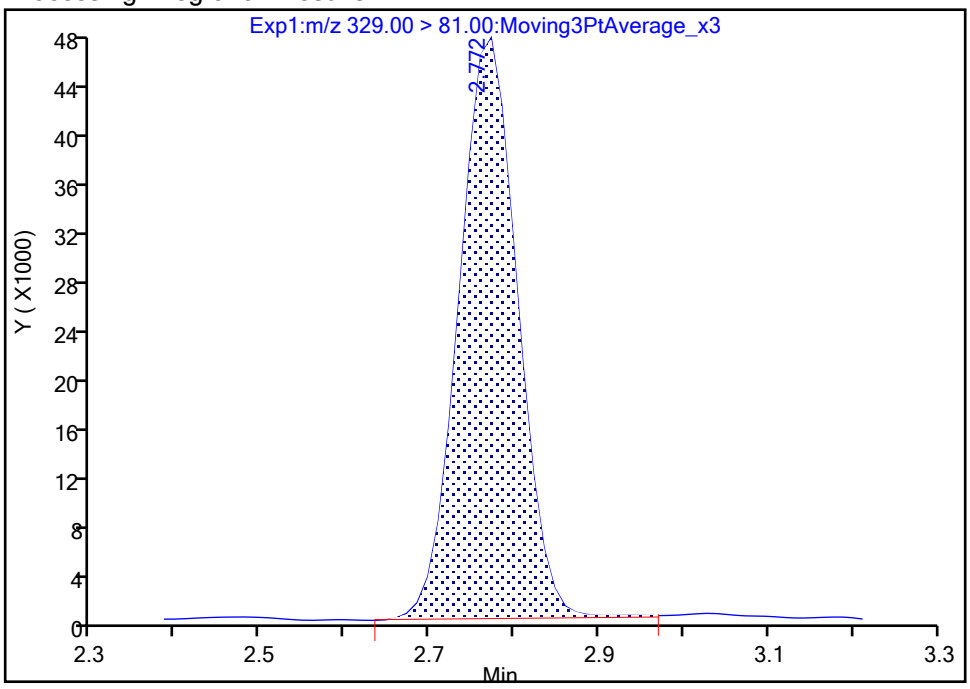
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

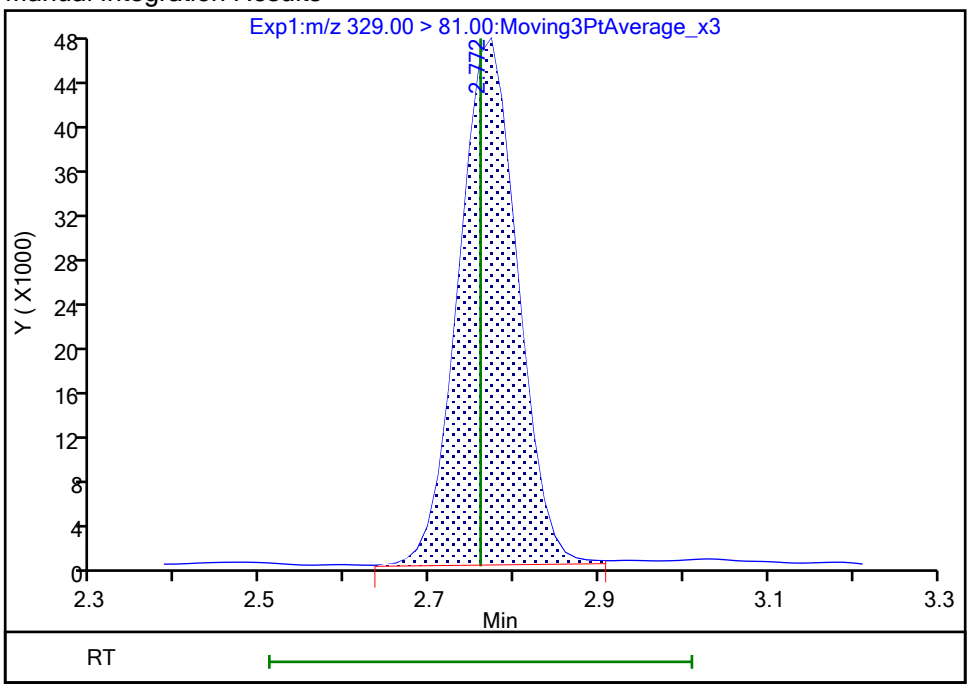
Processing Integration Results

RT: 2.77
Area: 226761
Amount: 1.034833
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 227009
Amount: 1.035965
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:29 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

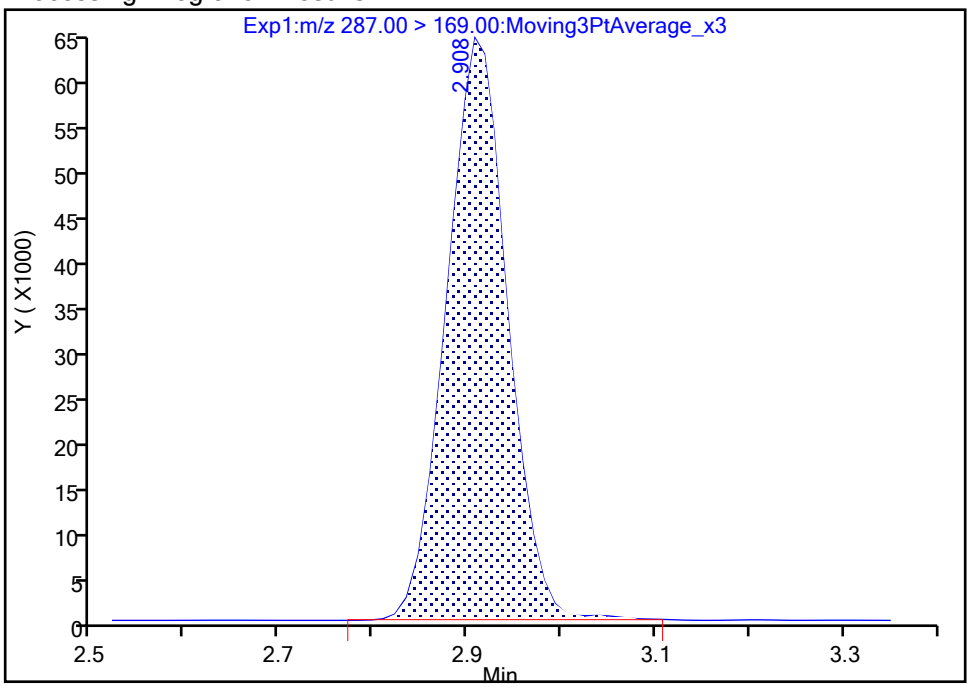
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

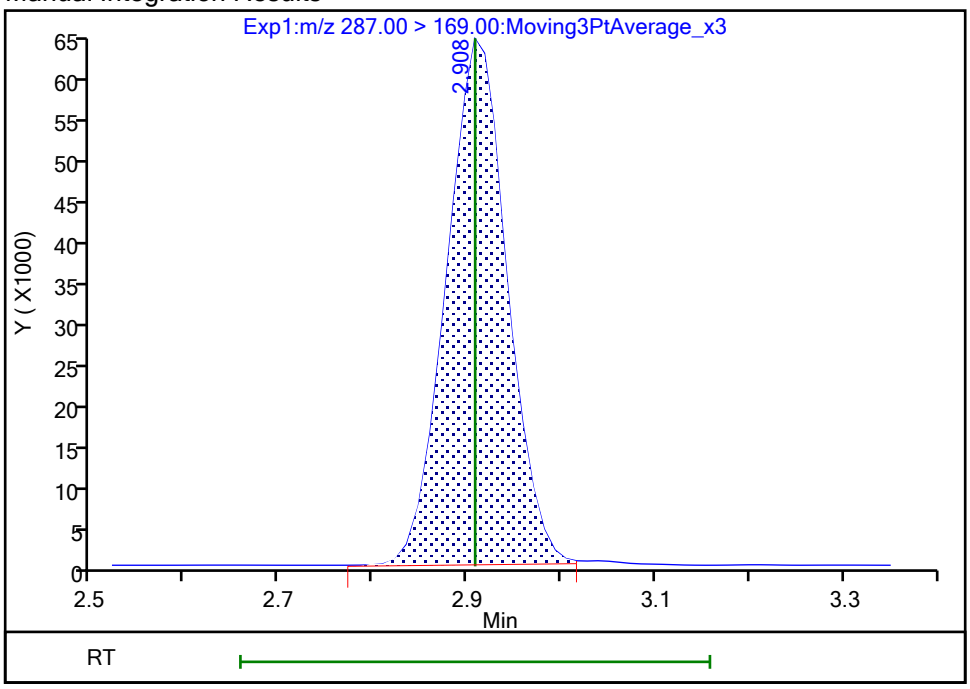
Processing Integration Results

RT: 2.91
Area: 289976
Amount: 1.051563
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 288596
Amount: 1.046558
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

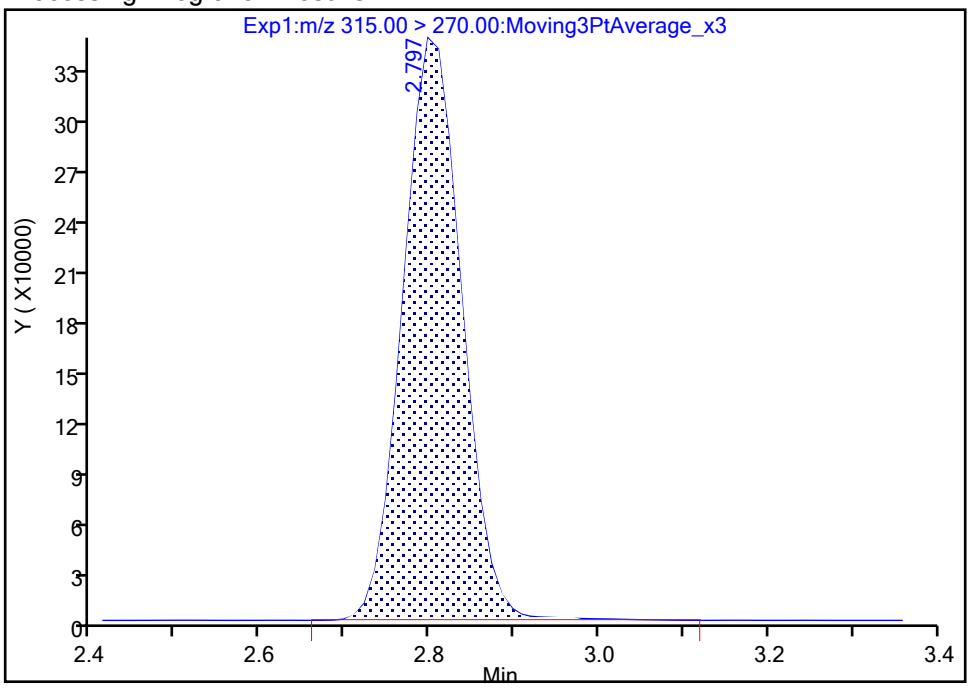
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d
Injection Date: 24-Oct-2023 06:13:48 Instrument ID: LC812
Lims ID: MB 200-196662/1-A
Client ID:
Operator ID: LC812user ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

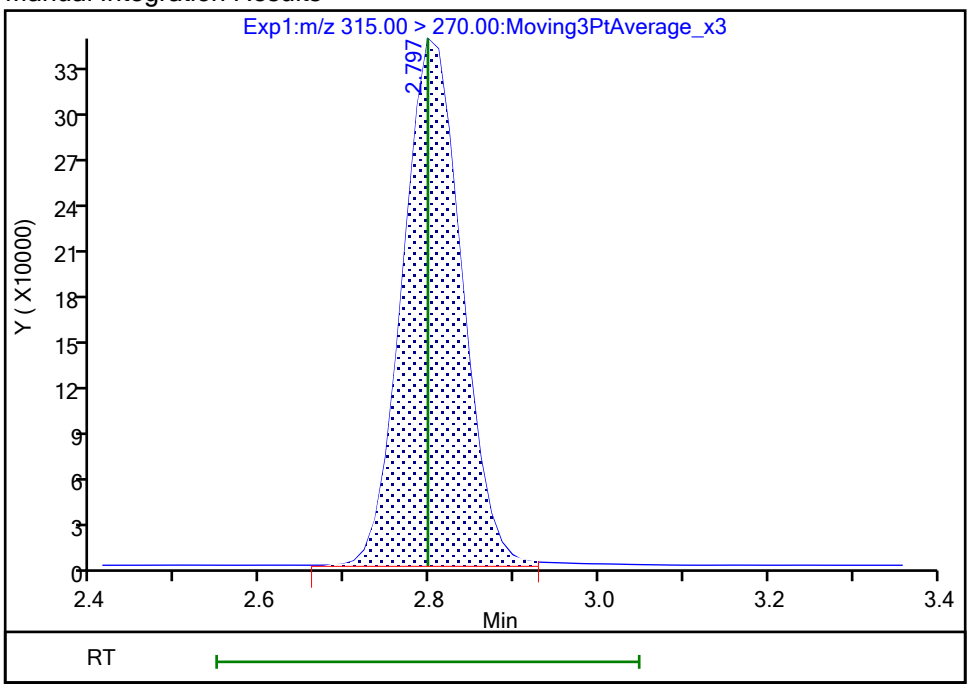
Processing Integration Results

RT: 2.80
Area: 1689498
Amount: 1.185908
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1680836
Amount: 1.179828
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:37 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

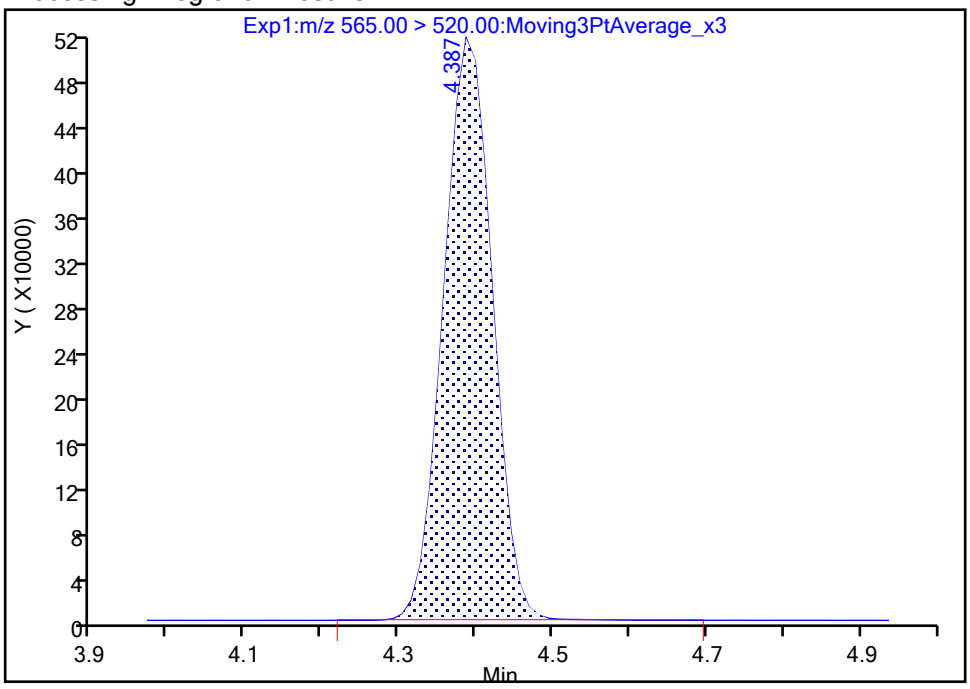
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E02.d				
Injection Date:	24-Oct-2023 06:13:48	Instrument ID:	LC812		
Lims ID:	MB 200-196662/1-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

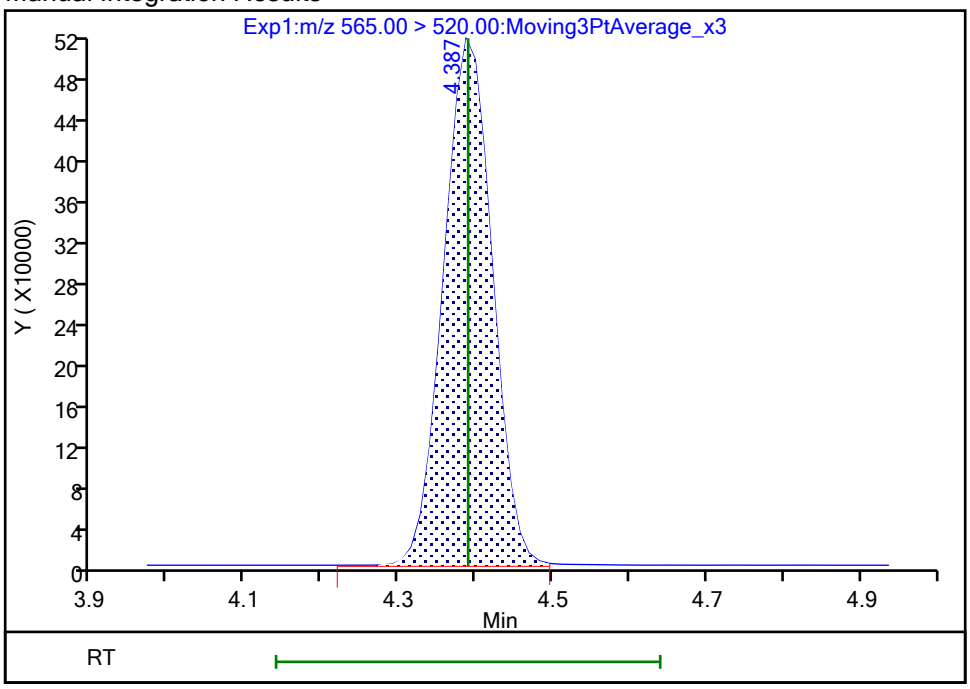
Processing Integration Results

RT: 4.39
Area: 2293274
Amount: 1.204072
Amount Units: ng/ml



Manual Integration Results

RT: 4.39
Area: 2288986
Amount: 1.201821
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:16:59 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 200-196662/2-A

Matrix: Water | Lab File ID: PA231023E03.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 06:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.92		5.00	1.20
2706-90-3	Perfluoropentanoic acid	38.61		2.00	0.68
307-24-4	Perfluorohexanoic acid	38.82		2.00	0.65
375-85-9	Perfluoroheptanoic acid	38.08		2.00	0.54
335-67-1	Perfluorooctanoic acid	38.29		2.00	0.76
375-95-1	Perfluorononanoic acid	39.45		2.00	0.49
335-76-2	Perfluorodecanoic acid	40.74		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	41.23		2.00	0.55
307-55-1	Perfluorododecanoic acid	34.71		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	36.45		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	37.66		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	34.30		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	36.85		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.99		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	38.15		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	35.07		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	34.32		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	35.69		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	37.98		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	38.54		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	41.65		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	40.08		2.00	0.92
2355-31-9	NMeFOSAA	39.24		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	37.52		5.00	1.60
13252-13-6	HFPODA	37.94		4.00	1.10
919005-14-4	DONA	37.16		2.00	0.42
756426-58-1	9Cl-PF3ONS	39.95		2.00	0.32
763051-92-9	11Cl-PF3OUdS	36.16		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-196662/2-A

Matrix: Water Lab File ID: PA231023E03.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	106		50-150
STL01893	13C5 PFPeA	99		50-150
STL01892	13C4 PFHpA	104		50-150
STL02116	13C2 PFTeDA	89		50-150
STL02337	13C3 PFBS	101		50-150
STL01056	13C8 FOSA	91		50-150
STL02118	d3-NMeFOSAA	104		50-150
STL02117	d5-NEtFOSAA	105		50-150
STL02395	M2-4:2 FTS	95		50-150
STL02279	M2-6:2 FTS	98		50-150
STL02280	M2-8:2 FTS	95		50-150
STL02255	13C3 HFPO-DA	92		50-150
STL00994	18O2 PFHxS	101		50-150
STL00993	13C2 PFHxA	100		50-150
STL00991	13C4 PFOS	101		50-150
STL00998	13C2 PFDoA	103		50-150
STL00995	13C5 PFNA	100		50-150
STL00996	13C2 PFDA	96		50-150
STL00990	13C4 PFOA	105		50-150
STL00997	13C2 PFUnA	98		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Lims ID: LCS 200-196662/2-A
Client ID:
Sample Type: LCS
Inject. Date: 24-Oct-2023 06:22:00 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-196662/2-A
Misc. Info.: 200-0057513-003 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:28:01
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2210490	1.32		106	1384	M
2 Perfluorobutanoic acid										
212.90 > 169.00	2.130	2.130	0.0	1.000	1621104	0.9729		97.3	155	
D 3 13C5 PFPeA										M
267.90 > 223.00	2.439	2.439	0.0	0.693	1604781	1.24		98.9	913	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.439	2.453	-0.014	1.000	1337240	0.9652		96.5	32.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	2052677	1.17		101	86380	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1691027	0.8574	Target=2.06	96.7	1010	M
298.90 > 99.00	2.467	2.467	0.0	1.000	823100		2.05(1.03-3.09)		322	
61 1H,1H,2H,2H-perfluorohexanesulfo										M
327.00 > 307.00	2.760	2.760	0.0	1.000	620909	0.9496		101	1104	M
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.760	2.760	0.0	0.784	224796	1.11		94.8	144	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1648515	1.25		99.9	1138	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1408643	0.9706	Target=14.12	97.1	260	M
313.00 > 119.00	2.797	2.797	0.0	1.000	99602		14.14(7.06-21.17)		117	M
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.810	2.810	0.0	0.888	1535898	0.9213	Target=2.72	97.9	1383	M
349.00 > 99.00	2.810	2.810	0.0	0.888	538165		2.85(1.36-4.09)		600	M
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	1.000	223128	0.9485		94.9	697	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										M
287.00 > 169.00	2.908	2.908	0.0	0.826	293691	1.15		91.9	866	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.165	3.168	-0.003	0.899	1509589	1.20		101	3340	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1200738	0.8497	Target=3.32	93.0	1991	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	368667		3.26(1.66-4.98)		377	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.165	3.168	-0.003	1.000	1611834	0.9521	Target=4.17	95.2	345	
363.00 > 169.00	3.165	3.168	-0.003	1.000	390273		4.13(2.09-6.26)		751	
D 9 13C4 PFHpA										
367.00 > 322.00	3.165	3.168	-0.003	0.899	1887971	1.30		104	9840	
77 DONA										M
377.00 > 251.00	3.212	3.203	0.009	0.838	4324703	0.9289	Target=3.33	98.3	3320	M
377.00 > 85.00	3.199	3.203	-0.004	0.835	1168720		3.70(1.66-4.99)		1624	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.916	1115174	0.9537	Target=4.83	100	4561	
449.00 > 99.00	3.511	3.505	0.006	0.916	220273		5.06(2.41-7.24)		694	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	305803	1.17		98.4	798	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.511	3.514	-0.003	1.000	678241	0.9636		101	755	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1758322	0.9574	Target=2.88	95.7	84.2	M
413.00 > 169.00	3.520	3.514	0.006	1.000	611265		2.88(1.44-4.32)		1200	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2155395	1.31		105	4264	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2108118	1.25			6741	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.831	3.822	0.009	1.000	827433	0.8768	Target=4.24	94.5	1669	M
499.00 > 99.00	3.831	3.822	0.009	1.000	185063		4.47(2.12-6.37)		562	M
D 18 13C4 PFOS										
503.00 > 80.00	3.831	3.822	0.009	1.088	966832	1.21		101	3112	
20 Perfluorononanoic acid										
463.00 > 419.00	3.843	3.845	-0.002	1.000	1732897	0.9862	Target=8.34	98.6	264	
463.00 > 169.00	3.855	3.845	0.010	1.003	191730		9.04(4.17-12.51)		1333	
D 19 13C5 PFNA										
468.00 > 423.00	3.843	3.845	-0.002	1.092	2241175	1.25		100	5839	
69 9-Chlorohexadecafluoro-3-oxanona										
531.00 > 351.00	3.982	3.983	-0.001	1.039	2884334	1.00		107	6806	
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	4.114	4.105	0.009	1.074	616050	0.8581	Target=2.17	89.2	4031	M
549.00 > 99.00	4.114	4.105	0.009	1.074	266166		2.31(1.08-3.25)		994	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.138	4.129	0.009	1.000	1832495	1.02	Target=11.44	102	555	
513.00 > 169.00	4.138	4.129	0.009	1.000	162362		11.29(5.72-17.16)		767	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	4.138	4.129	0.009	1.176	2250192	1.20		96.3	11680	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.138	4.141	-0.003	1.176	334239	1.14		94.9	880	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.150	4.141	0.009	1.003	639736	1.04		108	4894	
D 21 13C8 FOSA										M
506.00 > 78.00	4.244	4.234	0.010	1.206	1815175	1.14		91.0	2264	M
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.244	4.234	0.010	1.000	1387971	1.00		100	2893	
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.281	4.270	0.011	1.216	578440	1.29		104	1898	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.281	4.270	0.011	1.000	411947	0.9810		98.1	728	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.364	4.366	-0.002	1.139	493016	0.8922	Target=2.37	92.5	4701	
599.00 > 99.00	4.364	4.366	-0.002	1.139	188440		2.62(1.19-3.56)		2137	
D 30 13C2 PFUnA										
565.00 > 520.00	4.388	4.390	-0.002	1.246	2172059	1.23		98.4	8644	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.388	4.390	-0.002	1.000	1845989	1.03	Target=12.20	103	421	
563.00 > 169.00	4.388	4.390	-0.002	1.000	154424		11.95(6.10-18.31)		1928	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.400	4.401	-0.001	1.250	564638	1.31		105	1146	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.400	4.401	-0.001	1.000	423778	0.9380		93.8	1362	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.483	4.473	0.010	1.170	4003039	0.9039		95.9	3816	
D 36 13C2 PFDoA										
615.00 > 570.00	4.611	4.613	-0.002	1.310	2304308	1.28		103	7595	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.613	-0.002	1.000	1628102	0.8677	Target=8.47	86.8	91.4	
613.00 > 169.00	4.611	4.613	-0.002	1.000	193027		8.43(4.23-12.70)		1648	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.633	4.624	0.009	1.120	353651	0.9628		99.9	4167	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.775	4.777	-0.002	1.246	162419	0.8673	Target=0.48	89.6	1910	
699.00 > 99.00	4.775	4.777	-0.002	1.246	330066		0.49(0.24-0.72)		4748	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.804	4.806	-0.002	1.042	1797107	0.9112	Target=6.41	91.1	94.2	M
663.00 > 169.00	4.804	4.806	-0.002	1.042	254755		7.05(3.21-9.62)		1261	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.984	4.982	0.002	1.416	1989484	1.11		89.1	4181	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.984	4.982	0.002	1.000	167560	0.9416	Target=0.87	94.2	2055	
713.00 > 219.00	4.984	4.982	0.002	1.000	177908		0.94(0.43-1.30)		2608	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.293	5.292	0.001	1.504	2249620	1.09		87.4	4847	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.304	5.292	0.012	1.002	1726643	0.9594	Target=7.89	95.9	99.0	
813.00 > 169.00	5.293	5.292	0.001	1.000	221983		7.78(3.94-11.83)		2114	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.564	5.563	0.001	1.051	1309148	0.9315	Target=9.39	93.2	129	M
913.00 > 169.00	5.555	5.563	-0.008	1.049	134944		9.70(4.69-14.08)		833	M

QC Flag Legend

Processing Flags

Review Flags

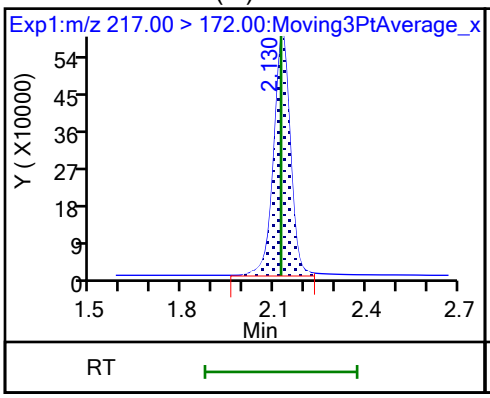
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:09 Chrom Revision: 2.3 18-Oct-2023 21:16:54

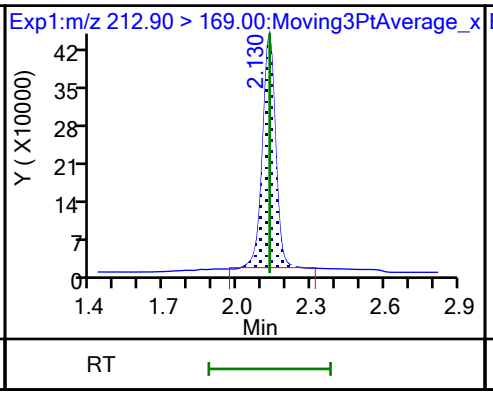
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

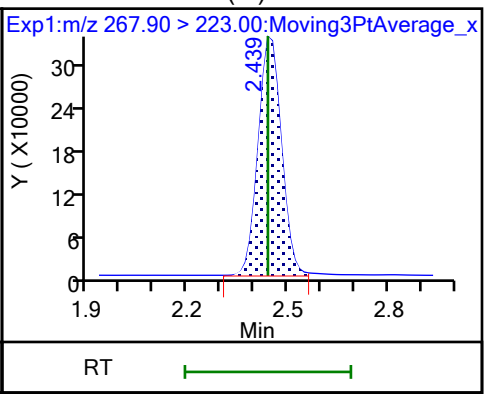
D 1 13C4 PFBA (M)



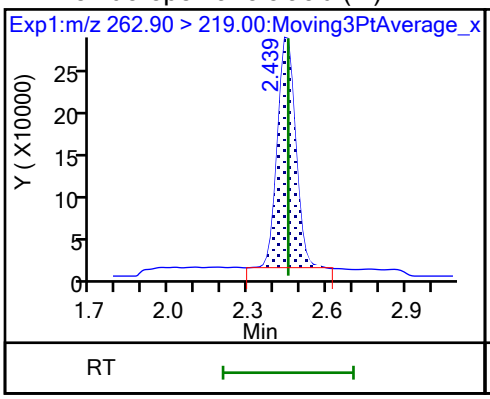
2 Perfluorobutanoic acid



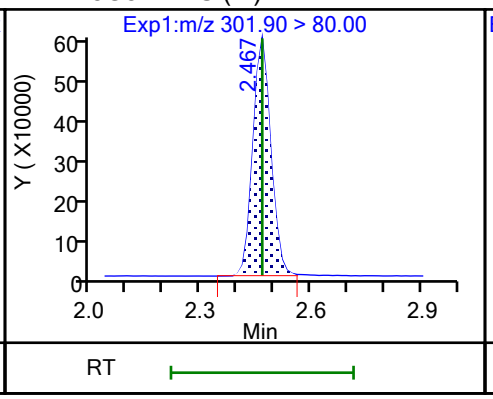
D 3 13C5 PFPeA (M)



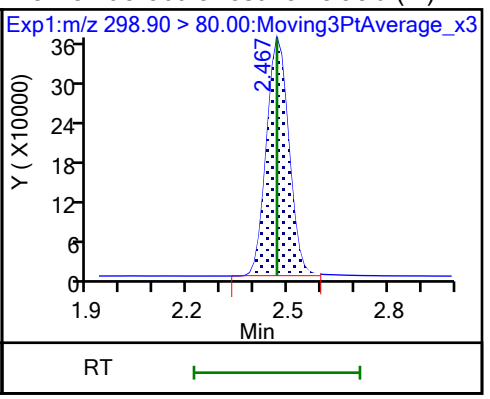
4 Perfluoropentanoic acid (M)



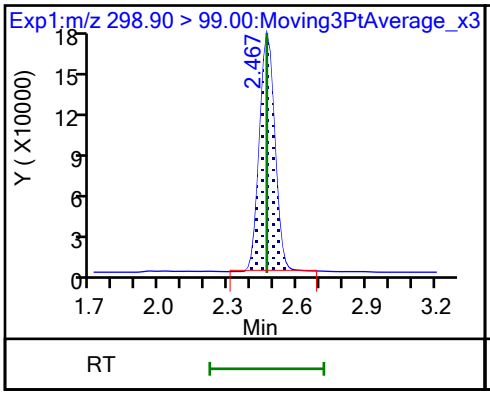
D 47 13C3 PFBS (M)



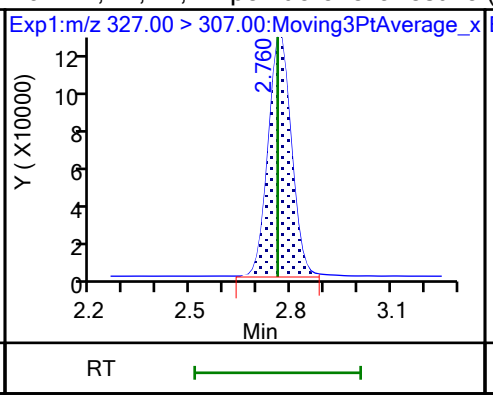
5 Perfluorobutanesulfonic acid (M)



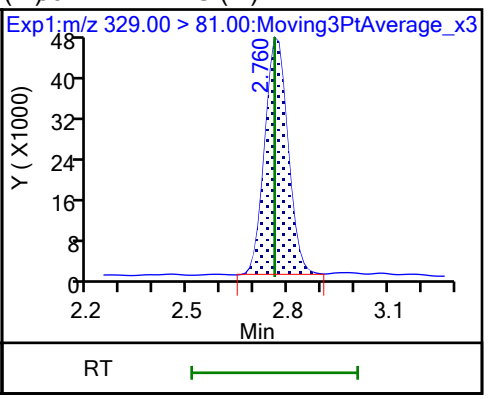
5 Perfluorobutanesulfonic acid



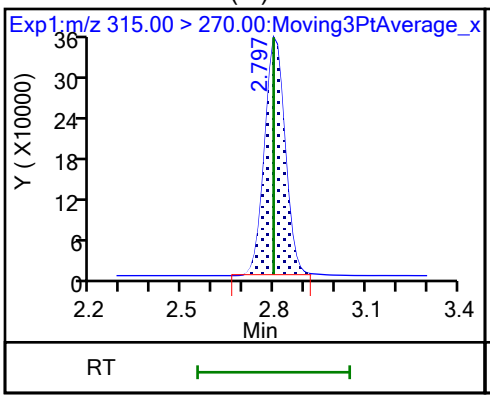
61 1H,1H,2H,2H-perfluorohexanesulfo (M)



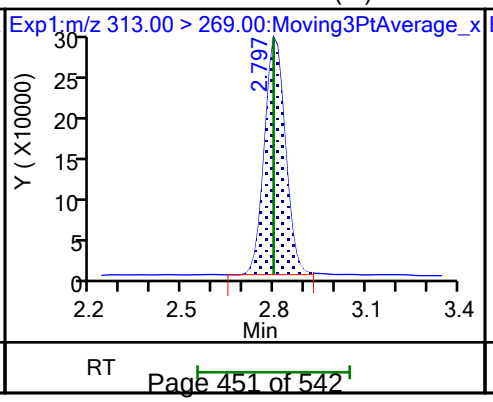
60 M2-4:2 FTS (M)



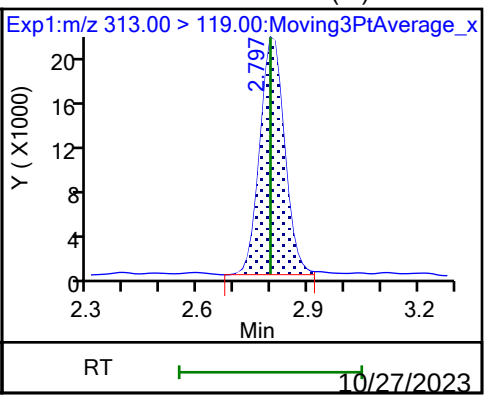
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

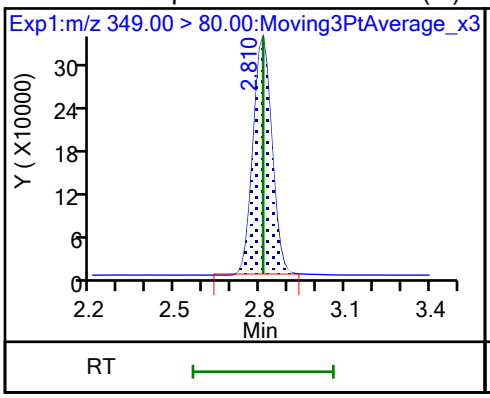


6 Perfluorohexanoic acid (M)

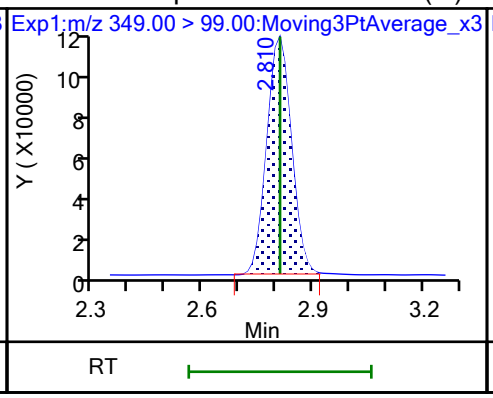


10/27/2023
10:52 AM

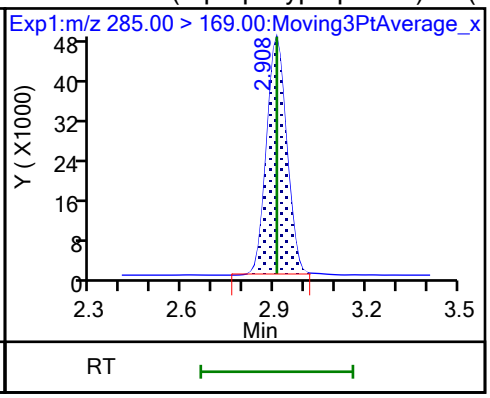
70 Perfluoropentanesulfonic acid (M)



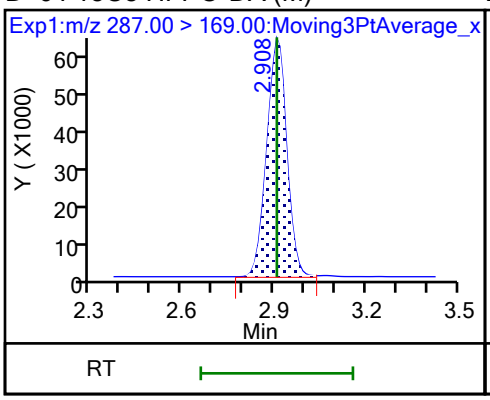
70 Perfluoropentanesulfonic acid (M)



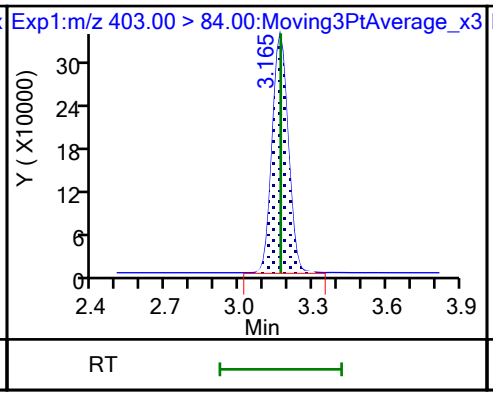
67 Perfluoro(2-propoxypropanoic) ac (M)



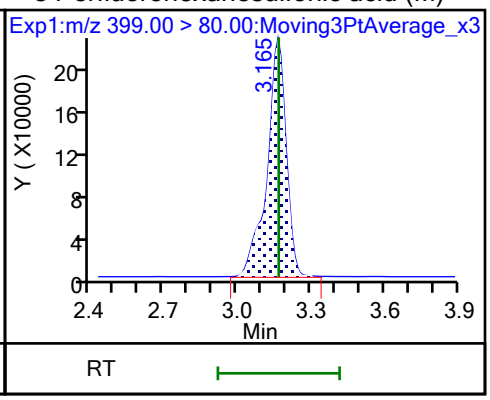
D 64 13C3 HFPO-DA (M)



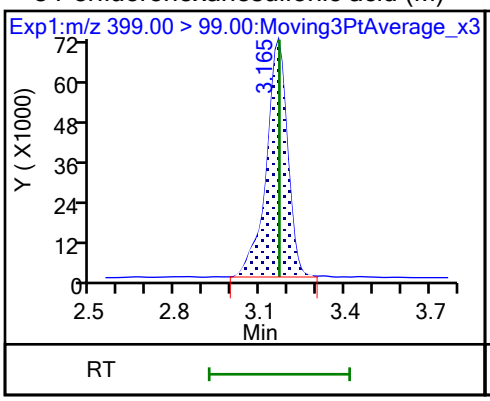
D 11 18O2 PFHxS



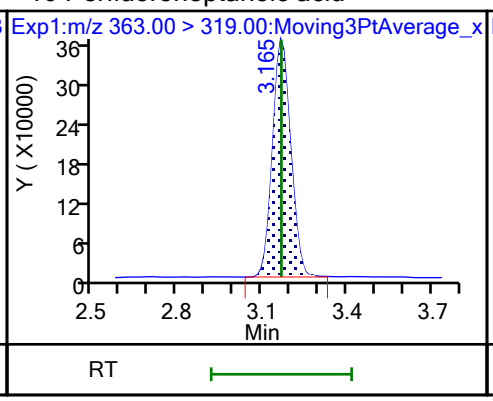
8 Perfluorohexanesulfonic acid (M)



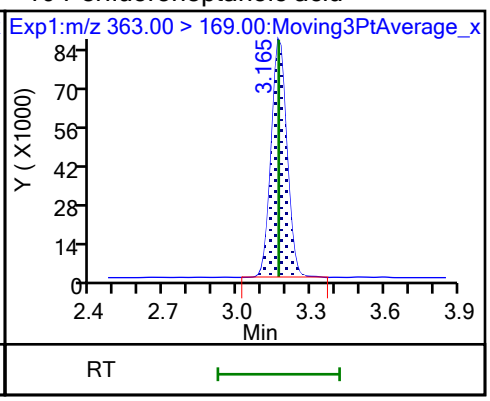
8 Perfluorohexanesulfonic acid (M)



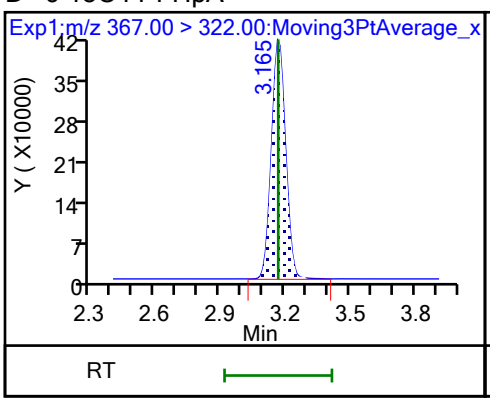
10 Perfluoroheptanoic acid



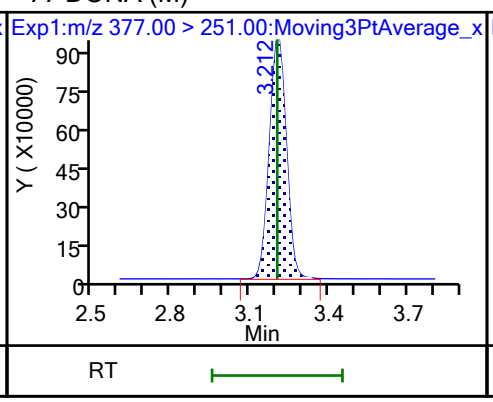
10 Perfluoroheptanoic acid



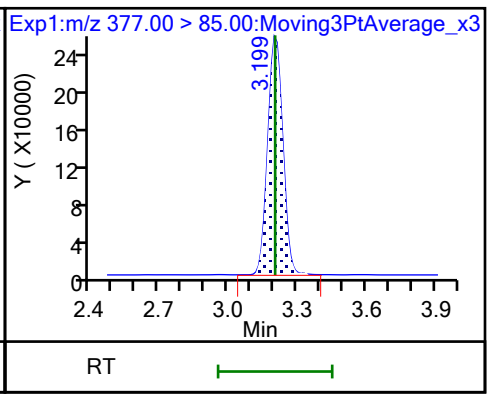
D 9 13C4 PFHpA



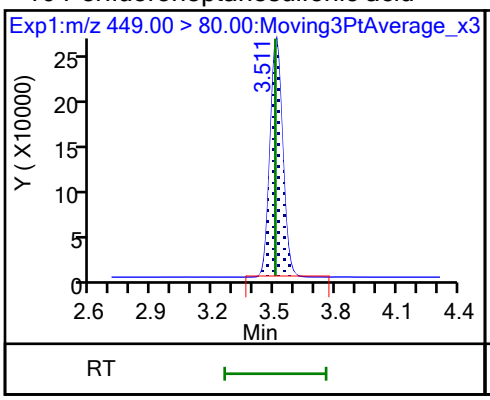
77 DONA (M)



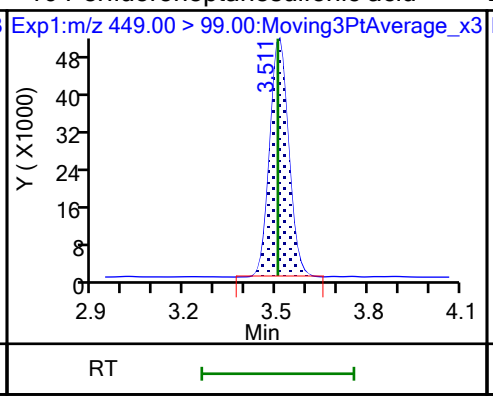
77 DONA



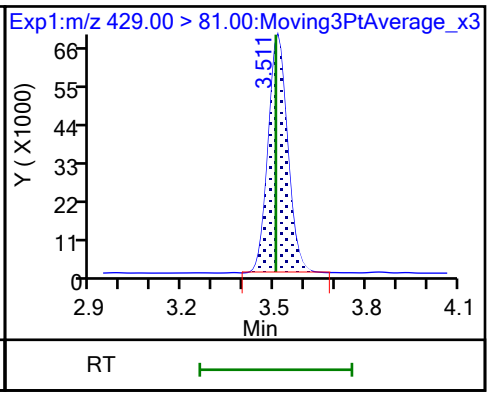
16 Perfluoroheptanesulfonic acid



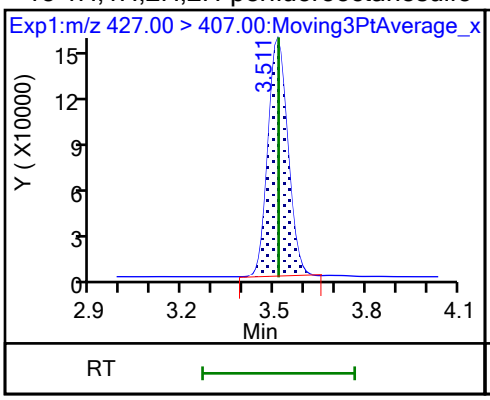
16 Perfluoroheptanesulfonic acid



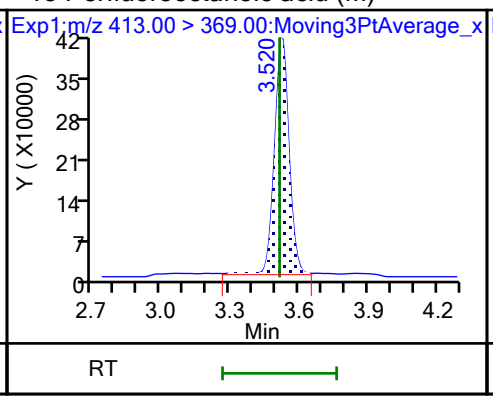
D 12 M2-6:2 FTS



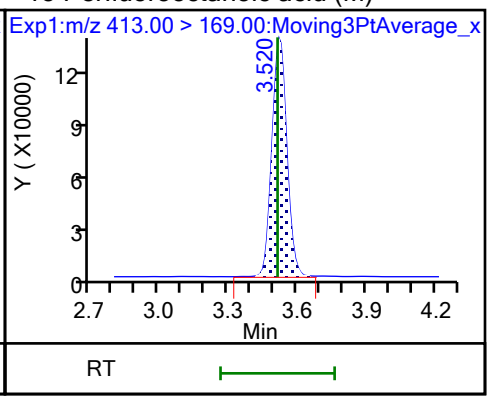
13 1H,1H,2H,2H-perfluorooctanesulfo



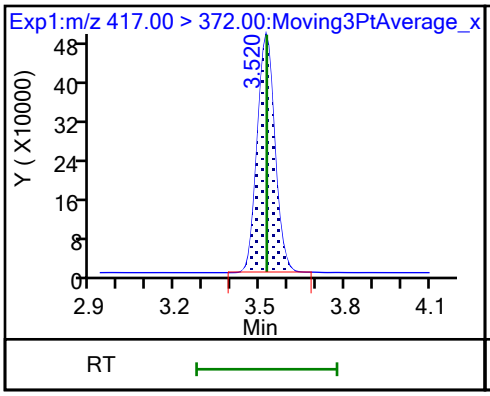
15 Perfluorooctanoic acid (M)



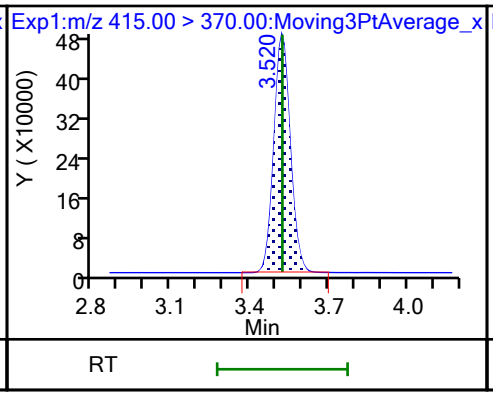
15 Perfluorooctanoic acid (M)



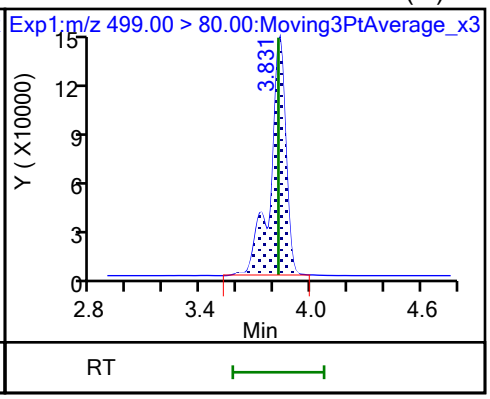
D 14 13C4 PFOA



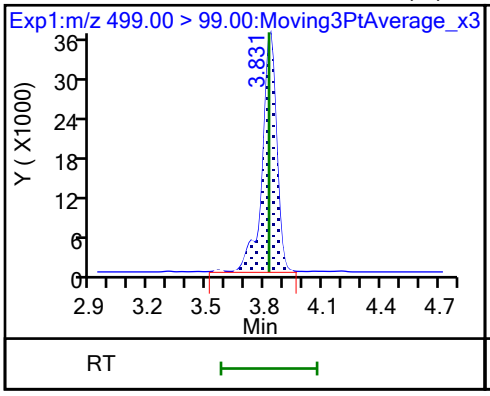
* 62 13C2 PFOA



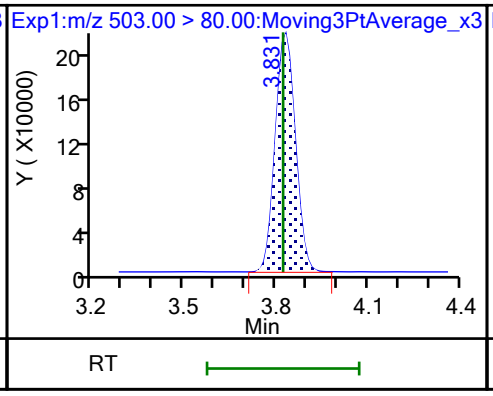
17 Perfluorooctanesulfonic acid (M)



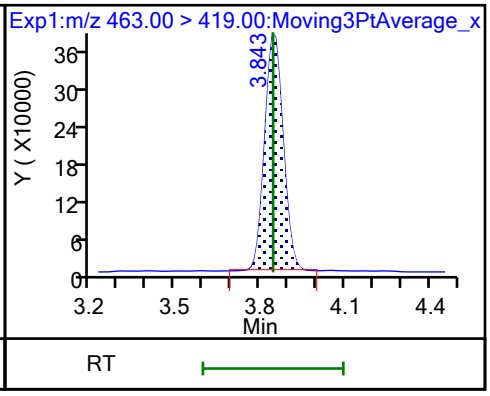
17 Perfluorooctanesulfonic acid (M)



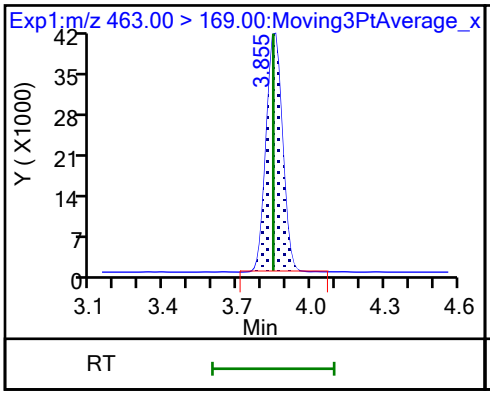
D 18 13C4 PFOS



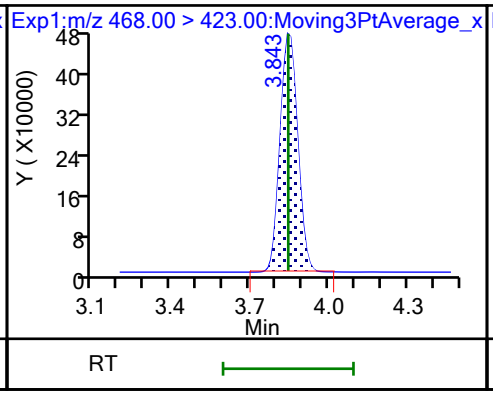
20 Perfluorononanoic acid



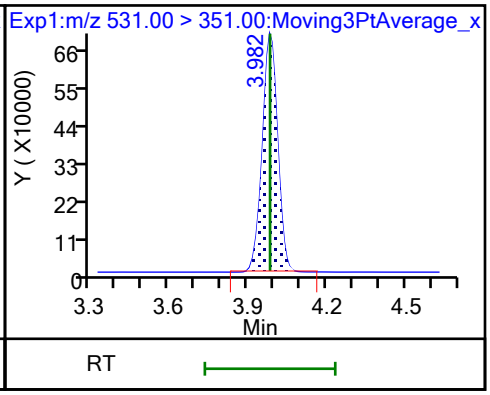
20 Perfluorononanoic acid



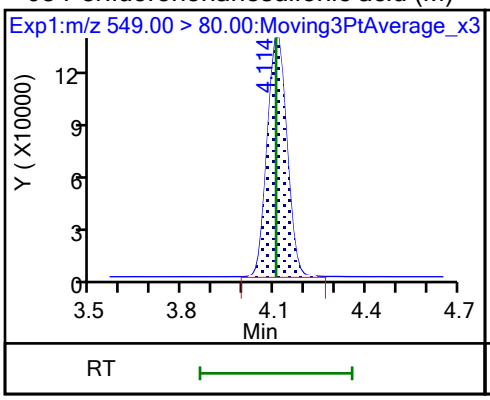
D 19 13C5 PFNA



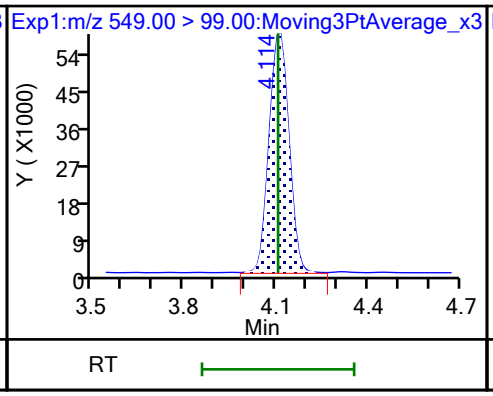
69 9-Chlorohexadecafluoro-3-oxanona



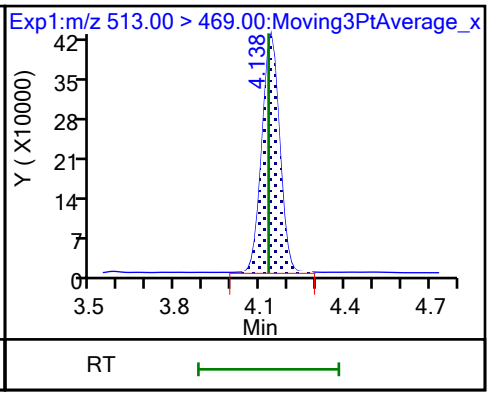
68 Perfluorononanesulfonic acid (M)



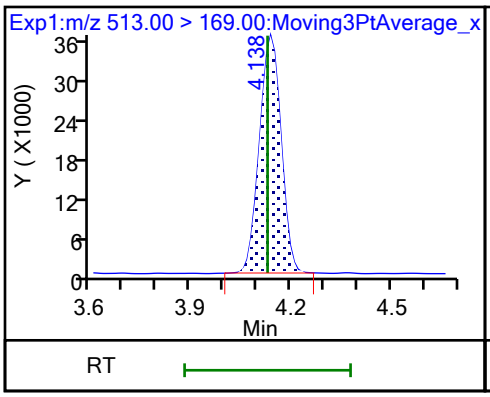
68 Perfluorononanesulfonic acid



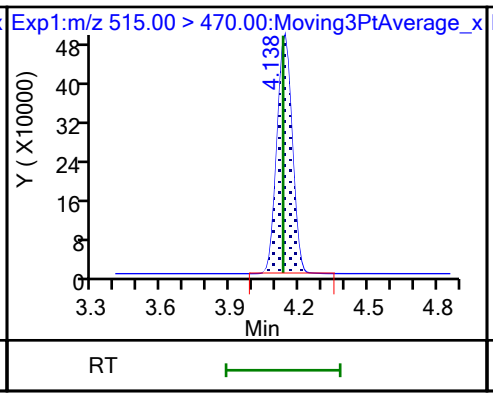
24 Perfluorodecanoic acid



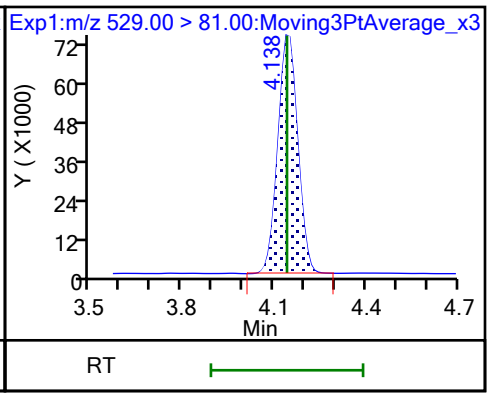
24 Perfluorodecanoic acid



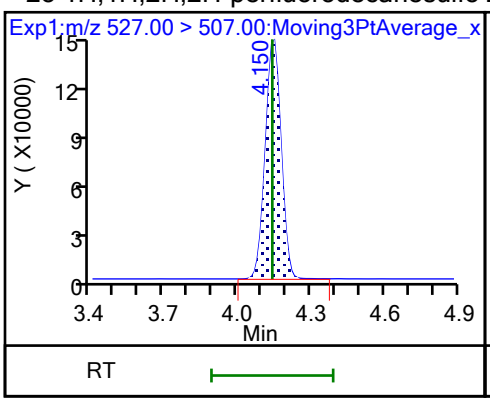
D 23 13C2 PFDA



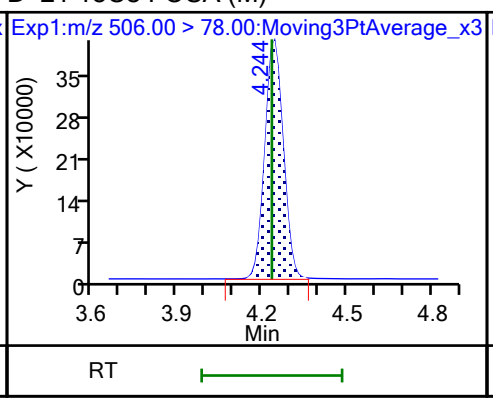
D 26 M2-8:2 FTS



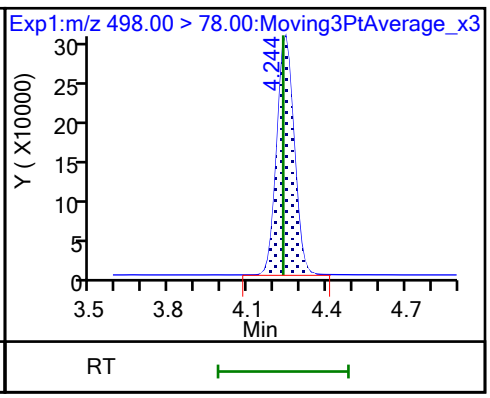
25 1H,1H,2H,2H-perfluorodecanesulfo



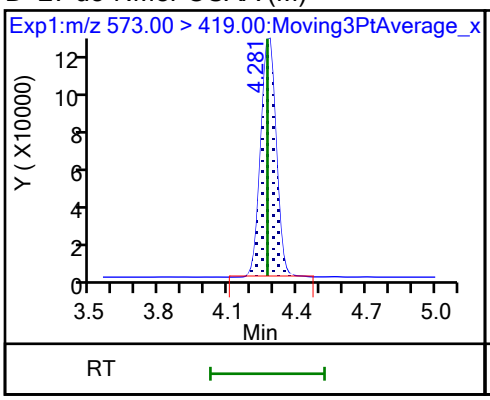
D 21 13C8 FOSA (M)



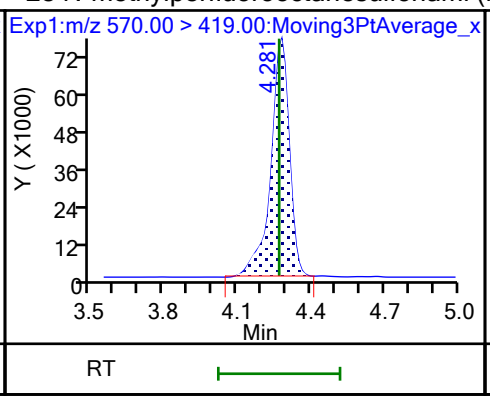
22 Perfluorooctanesulfonamide



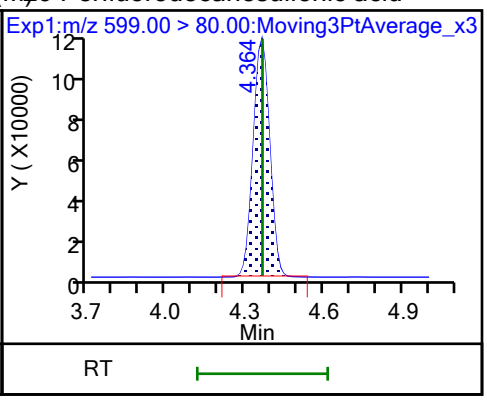
D 27 d3-NMeFOSAA (M)



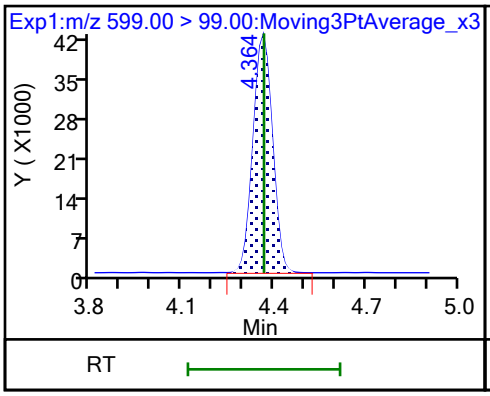
28 N-methylperfluorooctanesulfonami (M)



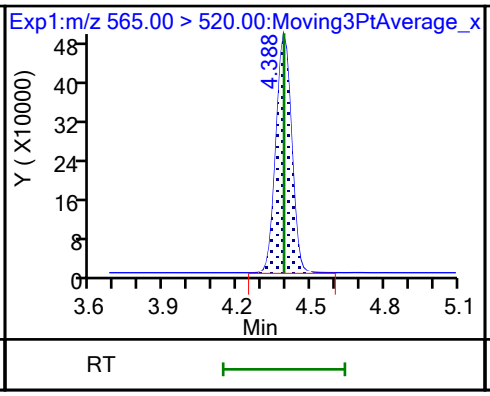
29 Perfluorodecanesulfonic acid



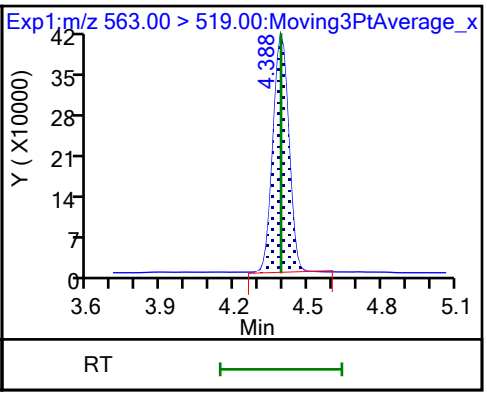
29 Perfluorodecanesulfonic acid



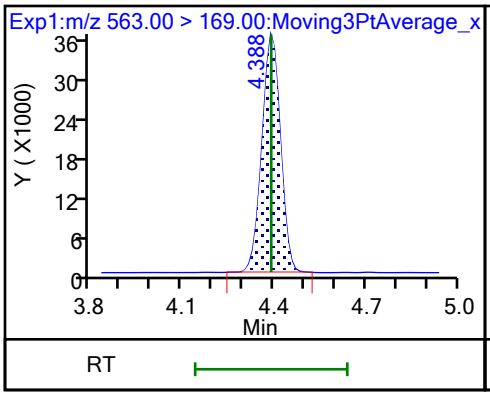
D 30 13C2 PFUnA



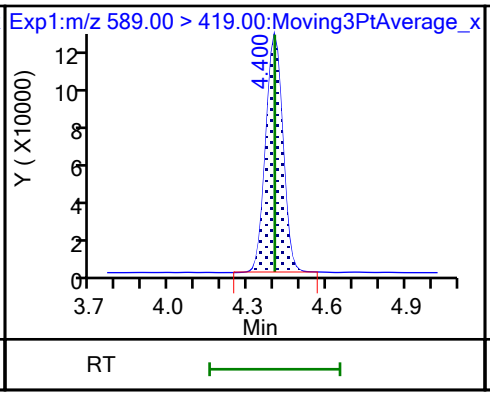
31 Perfluoroundecanoic acid



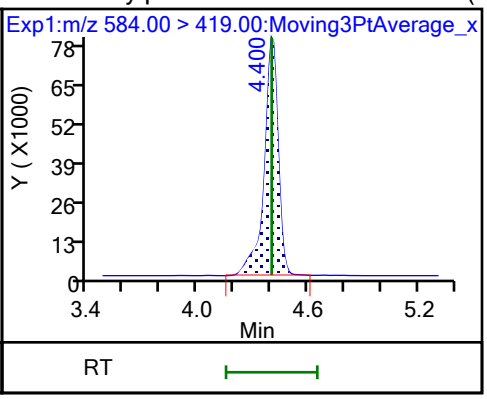
31 Perfluoroundecanoic acid



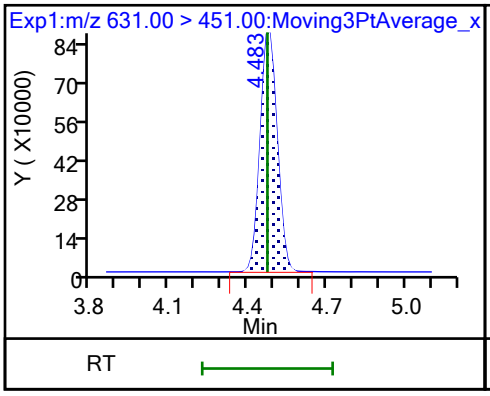
D 32 d5-NEtFOSAA



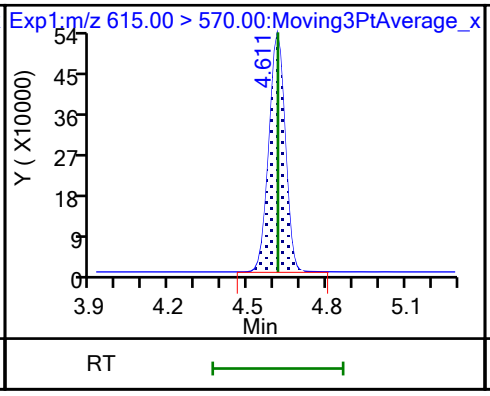
33 N-ethylperfluorooctanesulfonamid (M)



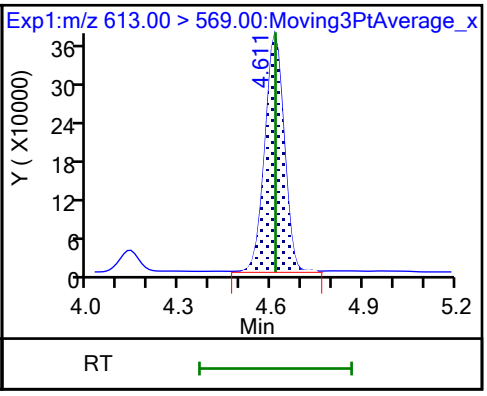
66 11-Chloroeicosafluoro-3-oxaundec



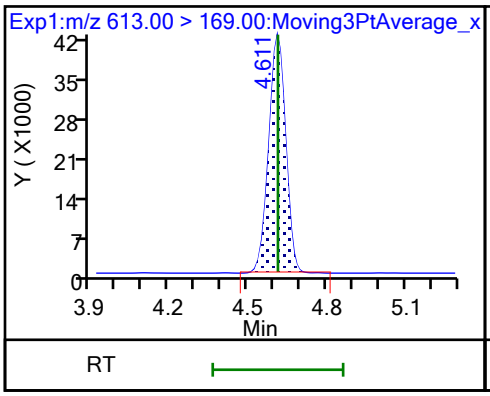
D 36 13C2 PFDoA



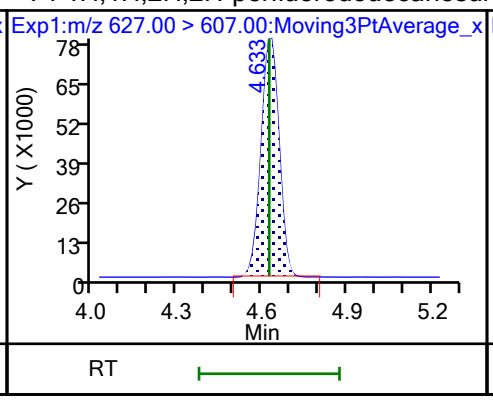
37 Perfluorododecanoic acid



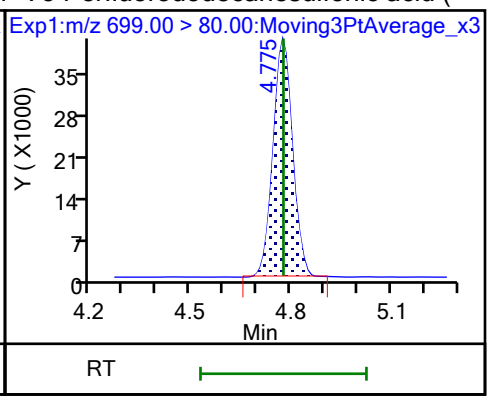
37 Perfluorododecanoic acid



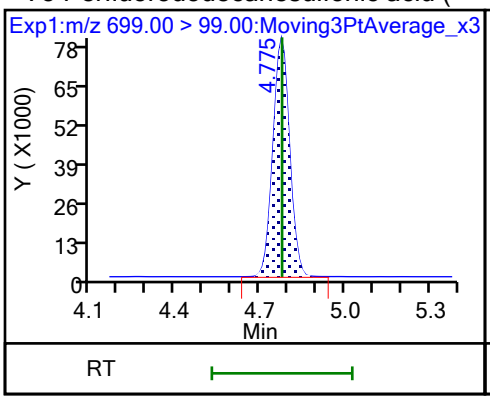
74 1H,1H,2H,2H-perfluorododecanesul



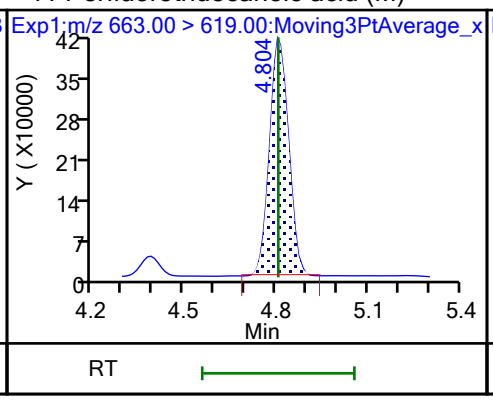
75 Perfluorododecanesulfonic acid (



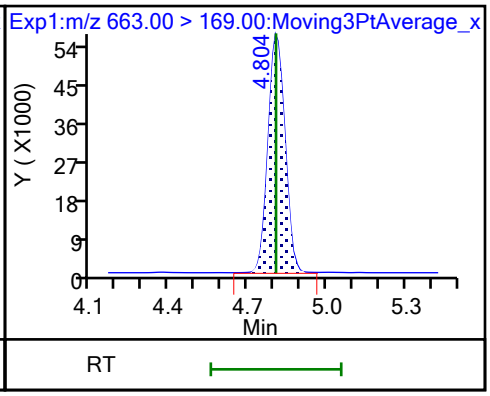
75 Perfluorododecanesulfonic acid (



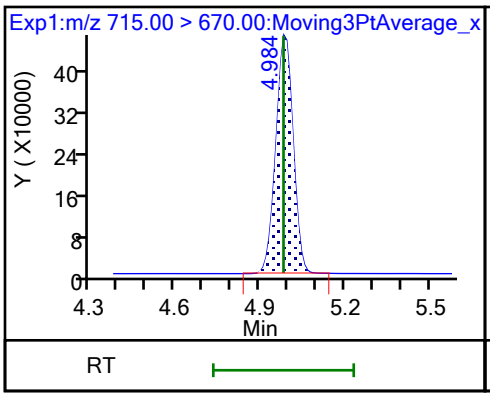
41 Perfluorotridecanoic acid (M)



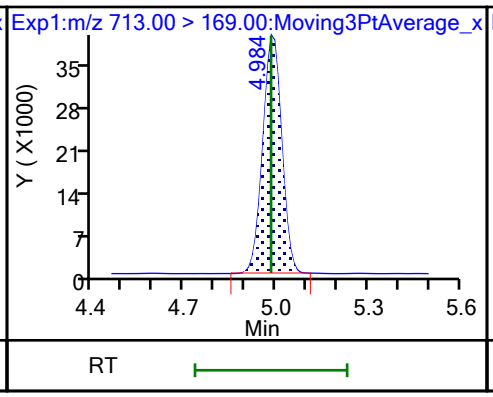
41 Perfluorotridecanoic acid



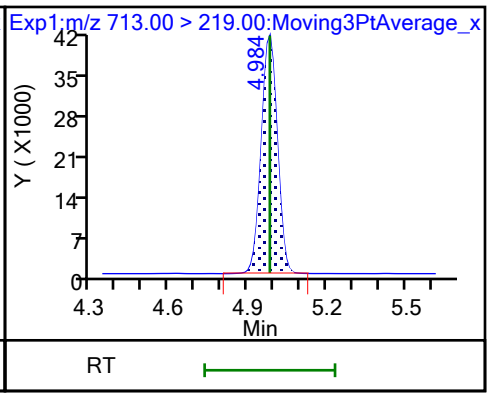
D 43 13C2 PFTeDA



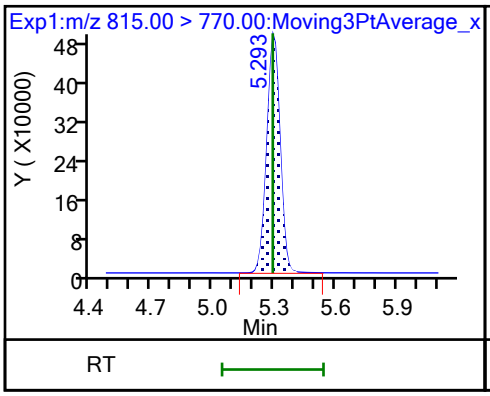
42 Perfluorotetradecanoic acid



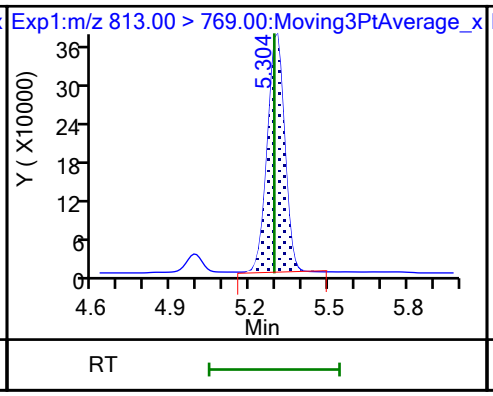
42 Perfluorotetradecanoic acid



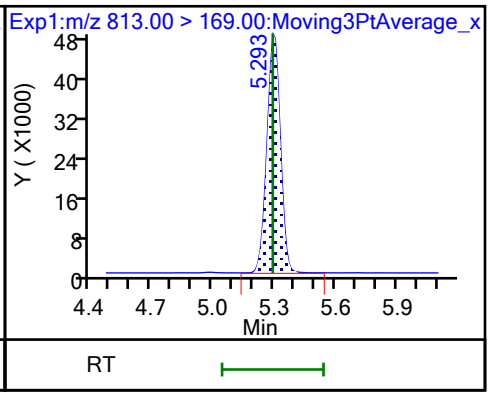
D 44 13C2 PFHxDA



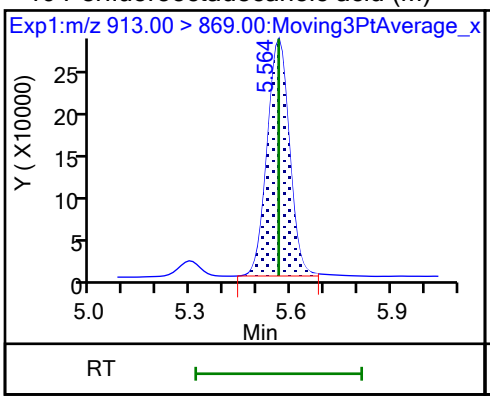
45 Perfluorohexadecanoic acid



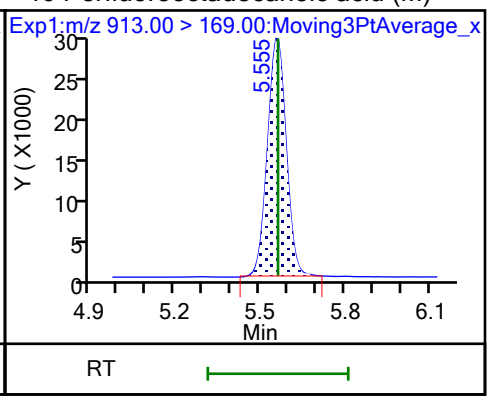
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M)



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins Burlington

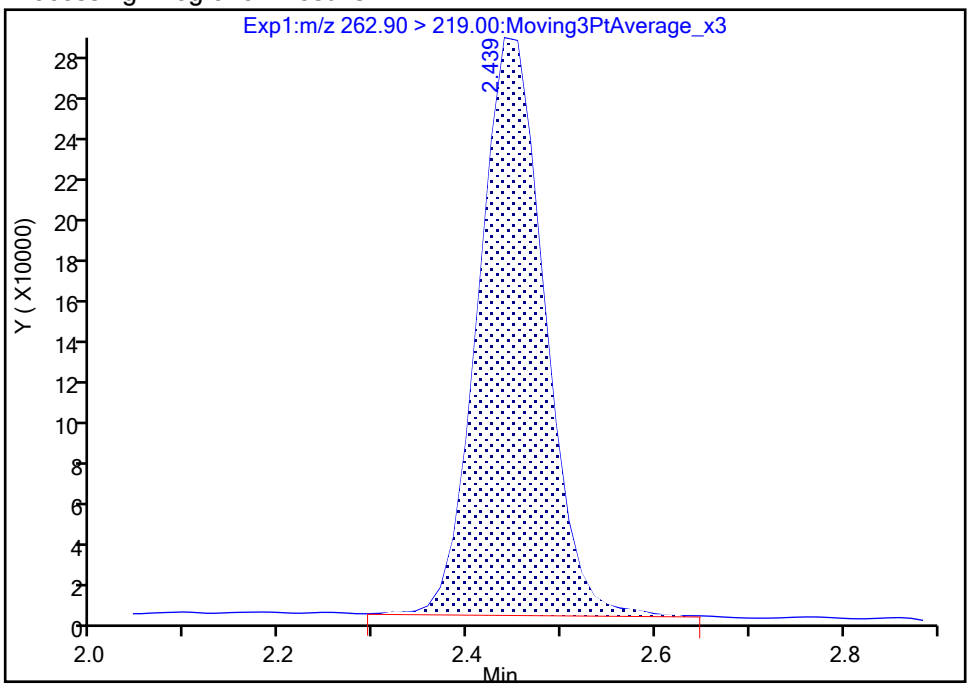
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

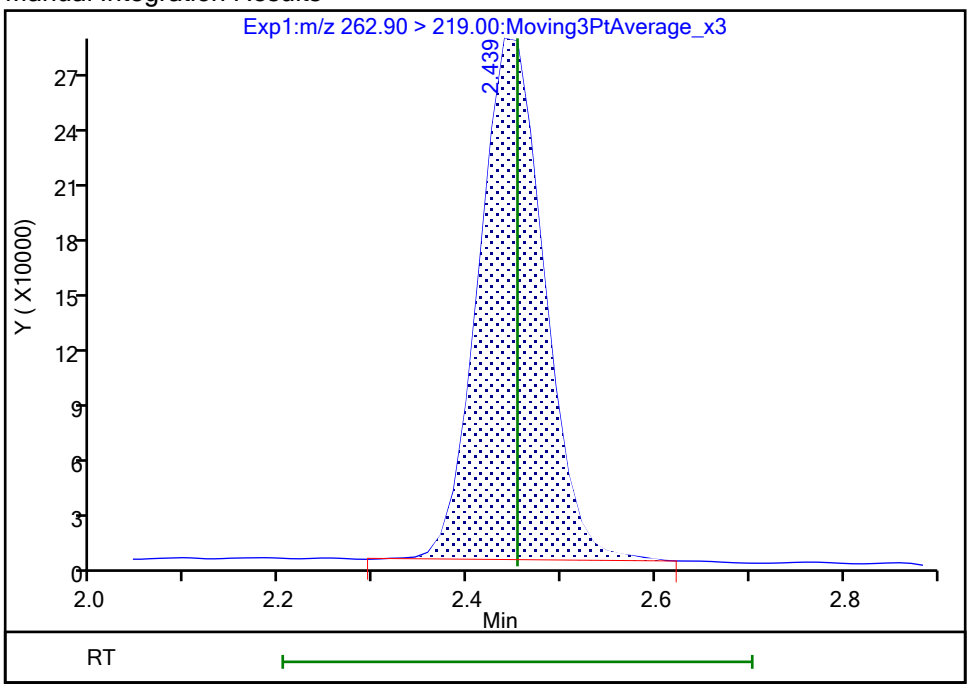
Processing Integration Results

RT: 2.44
Area: 1337470
Amount: 0.965392
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1337240
Amount: 0.965226
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:17 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

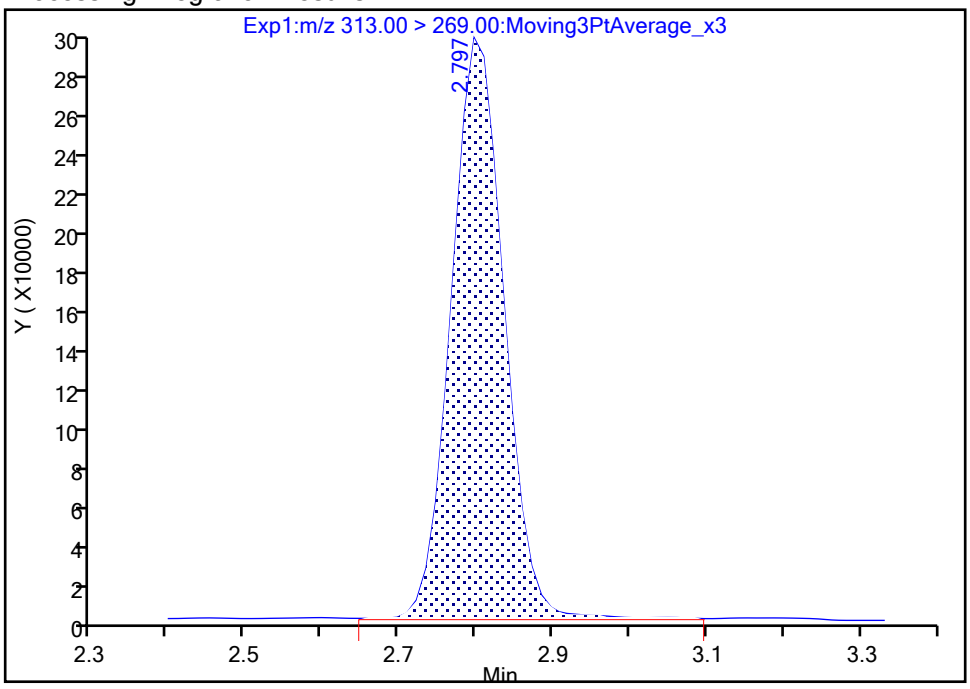
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

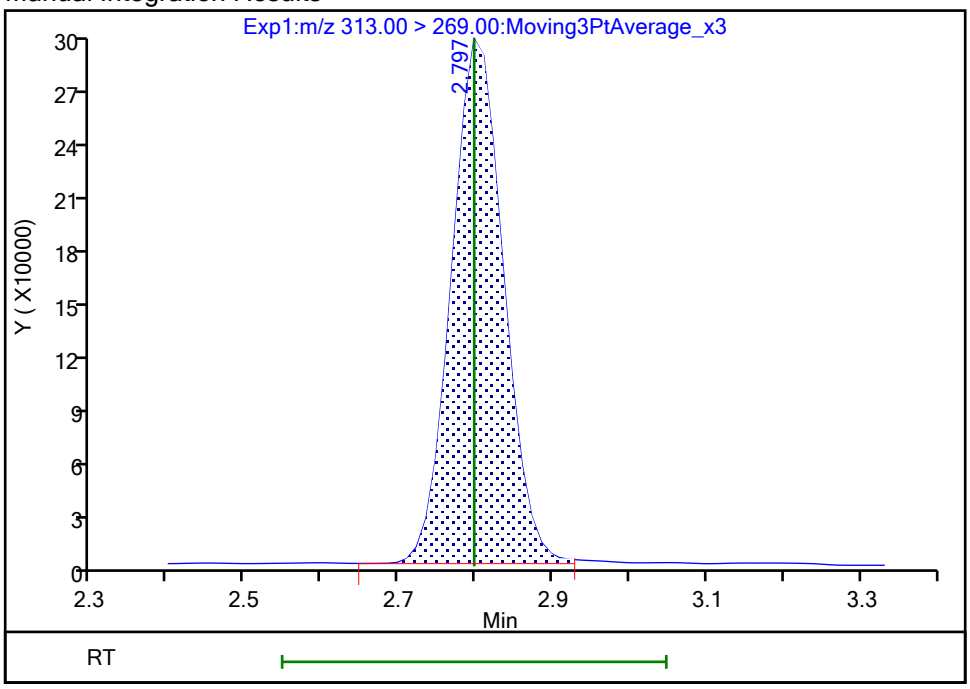
Processing Integration Results

RT: 2.80
Area: 1416915
Amount: 0.976311
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1408643
Amount: 0.970612
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:31 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

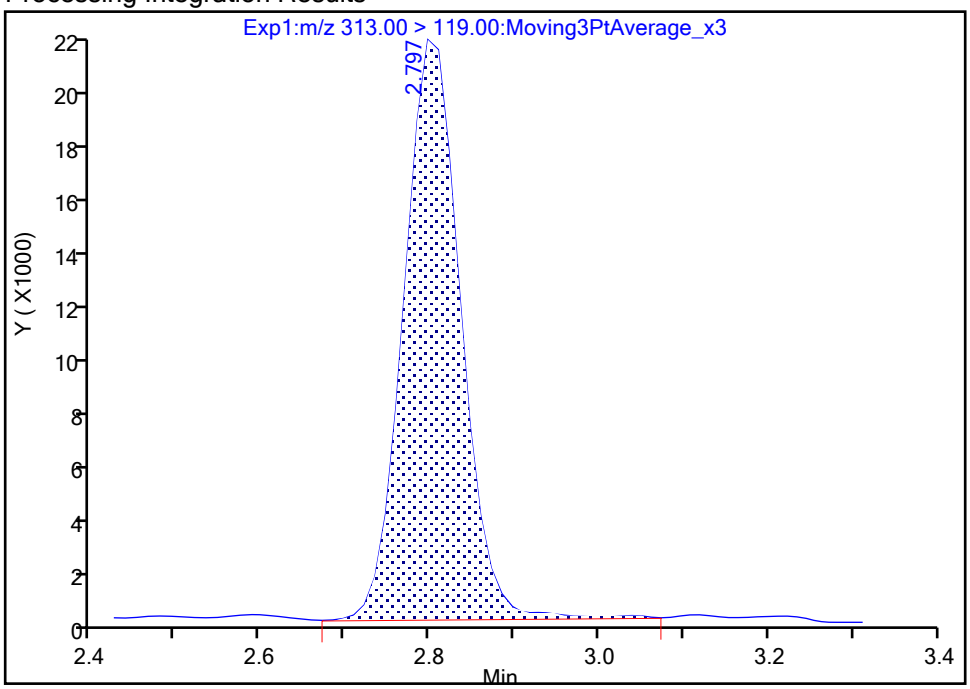
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

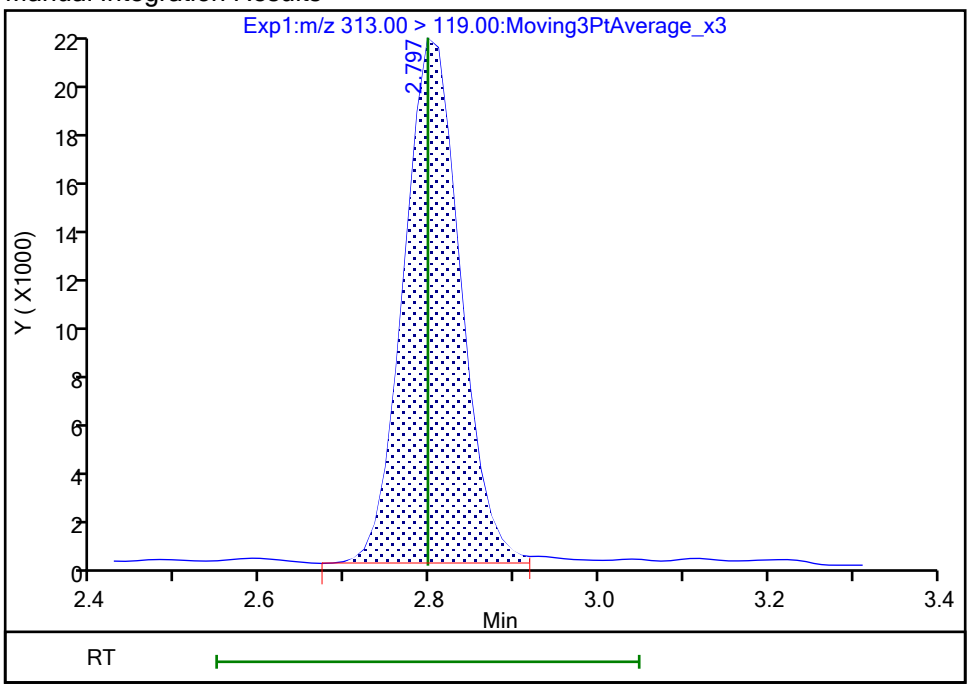
Processing Integration Results

RT: 2.80
Area: 100522
Amount: 0.976311
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 99602
Amount: 0.970612
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

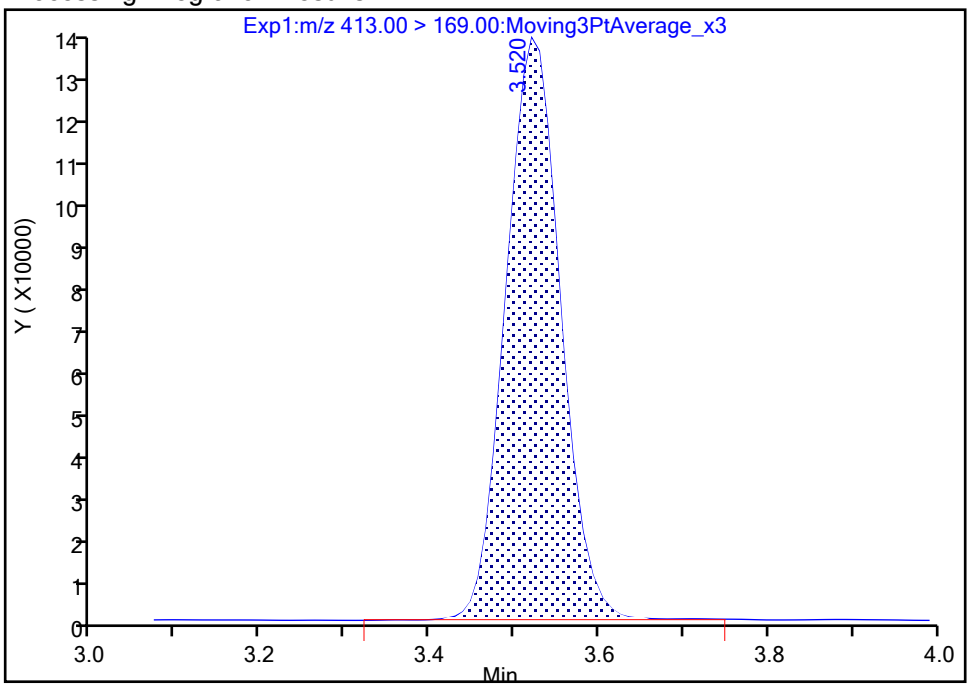
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

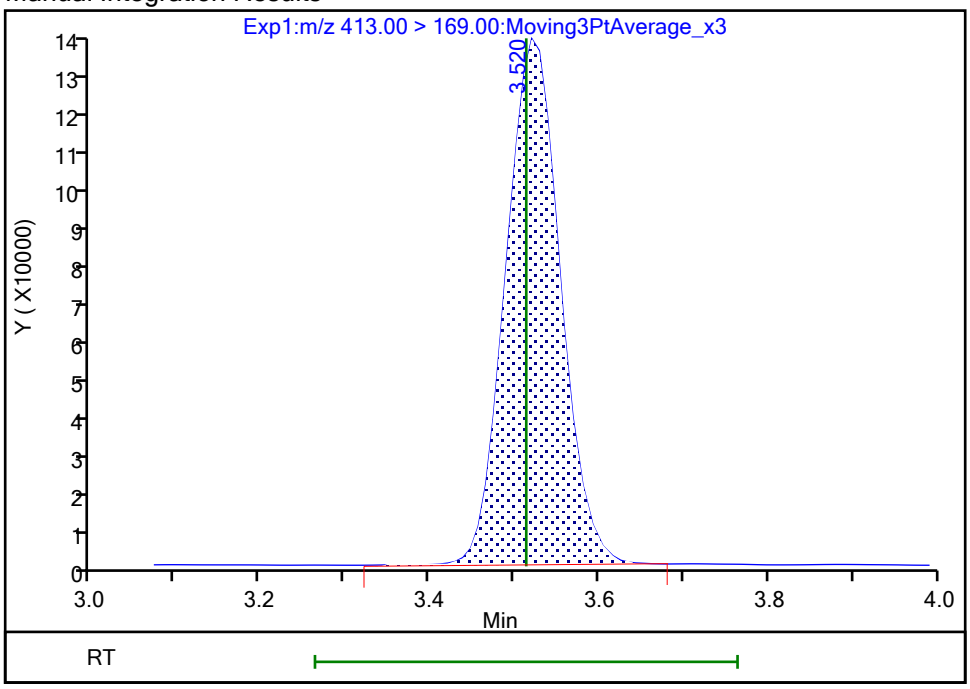
Processing Integration Results

RT: 3.52
Area: 609967
Amount: 0.952578
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 611265
Amount: 0.957360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

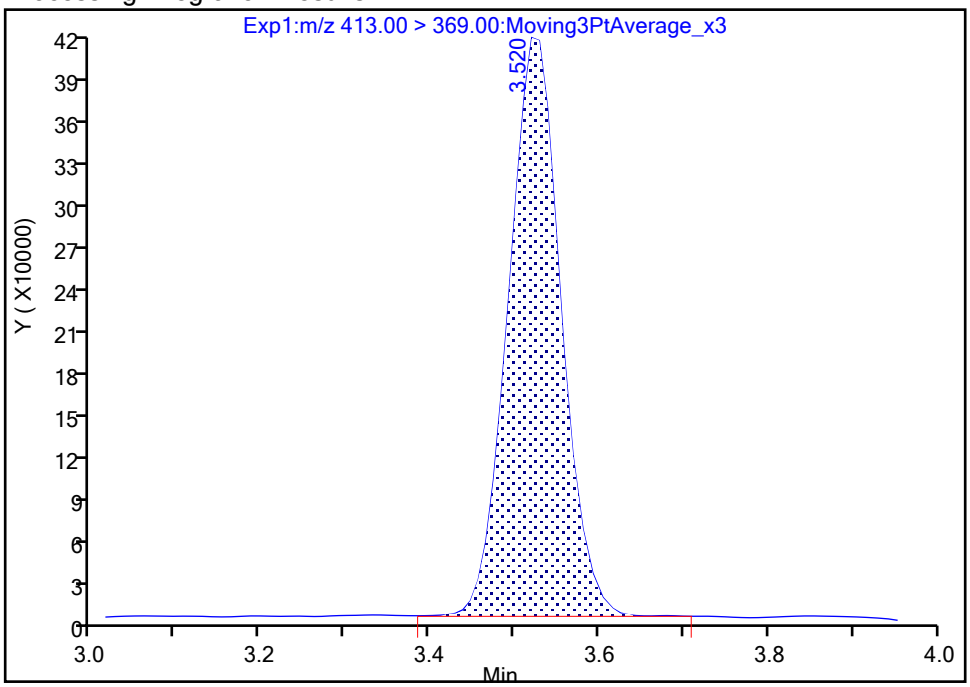
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

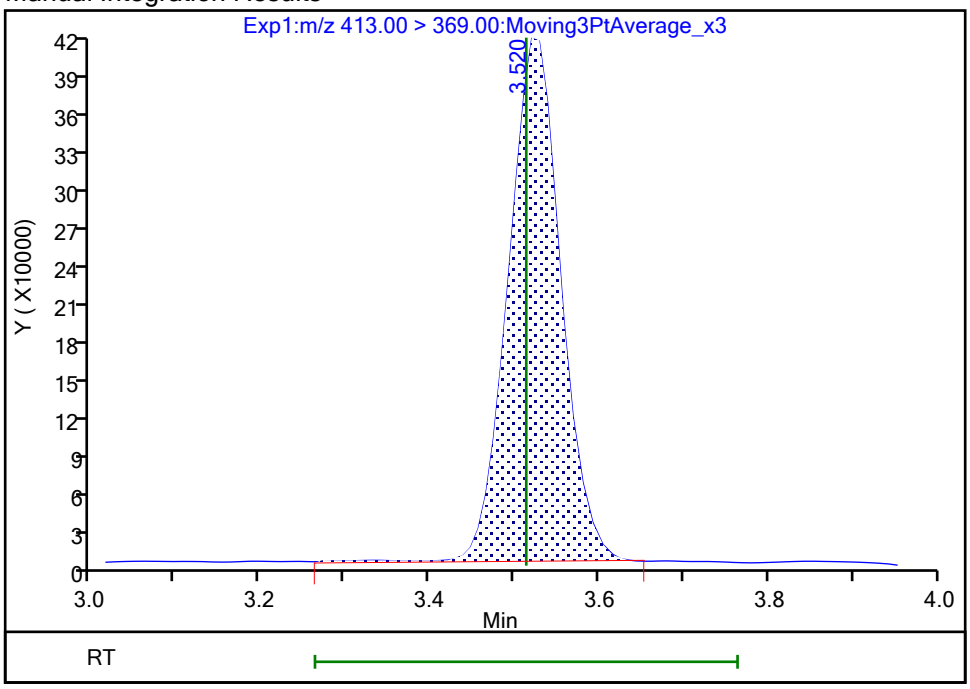
Processing Integration Results

RT: 3.52
Area: 1749540
Amount: 0.952578
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1758322
Amount: 0.957360
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

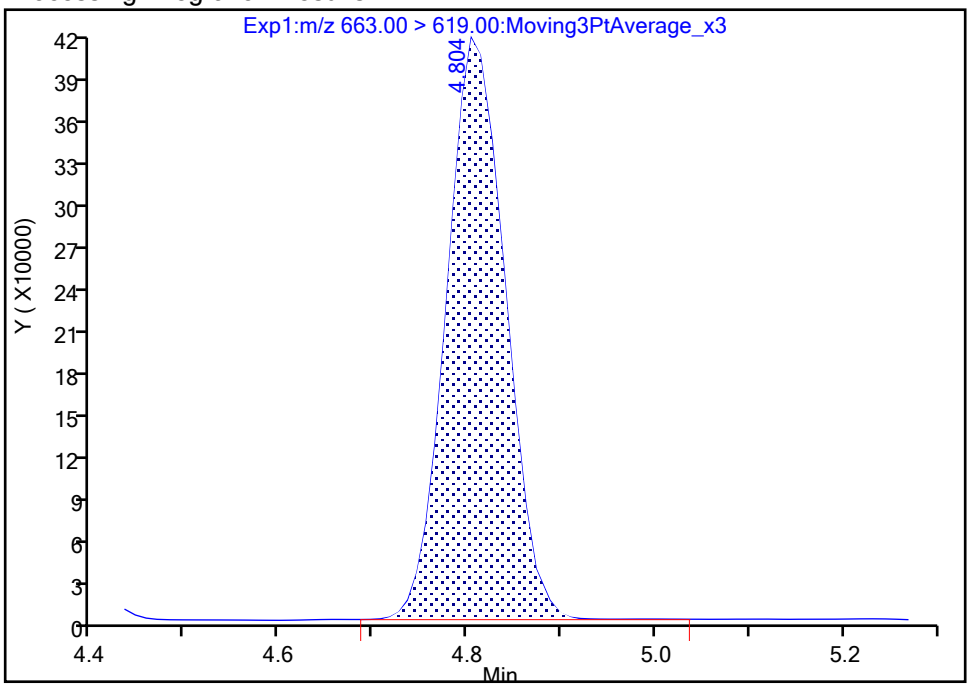
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

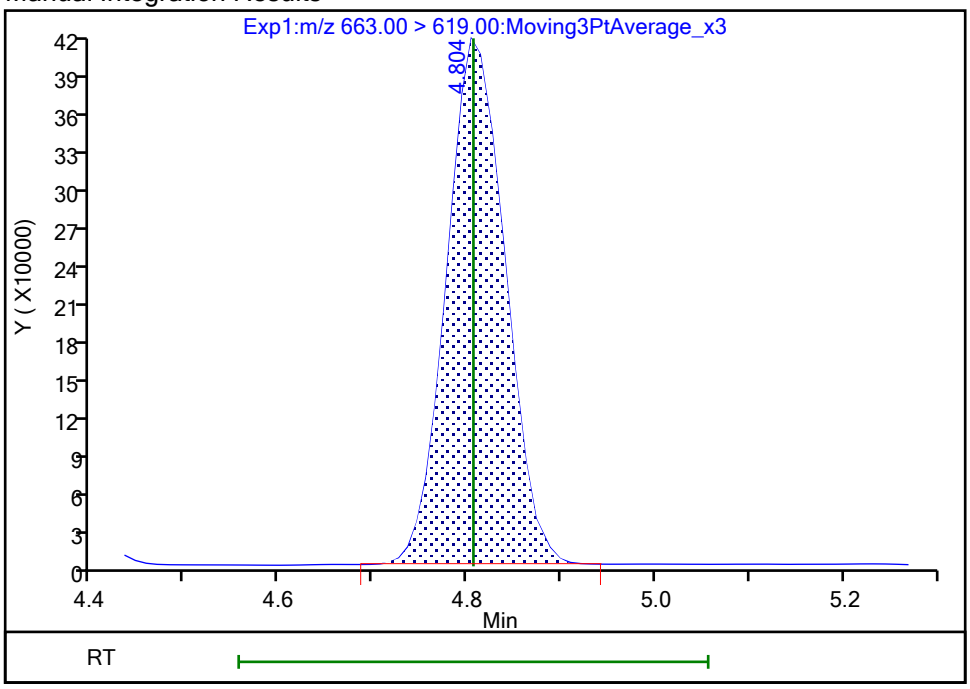
Processing Integration Results

RT: 4.80
Area: 1805234
Amount: 0.915367
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 1797107
Amount: 0.911246
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

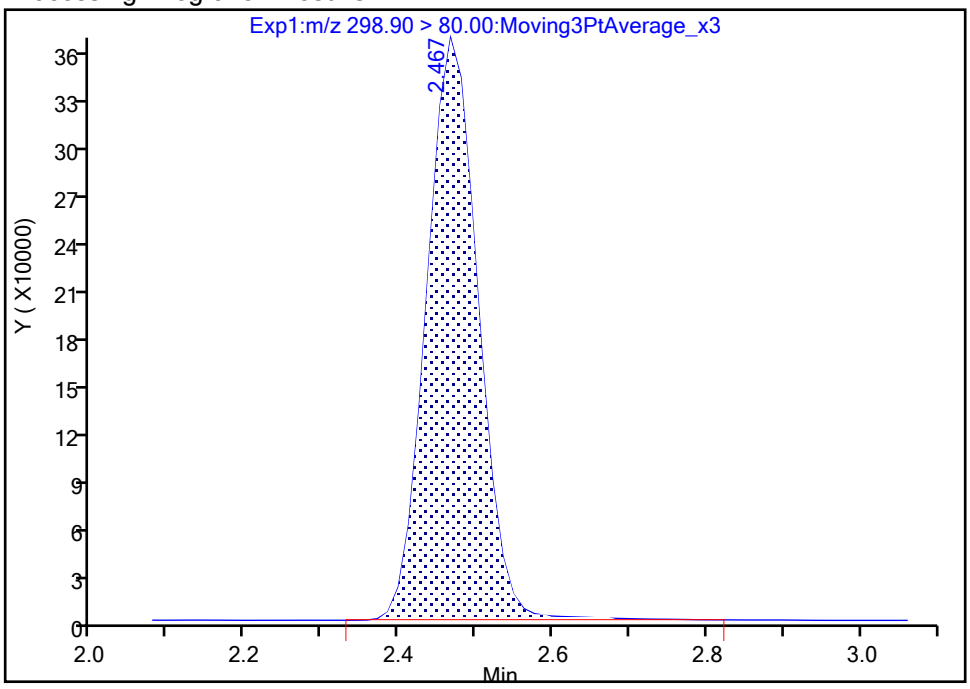
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

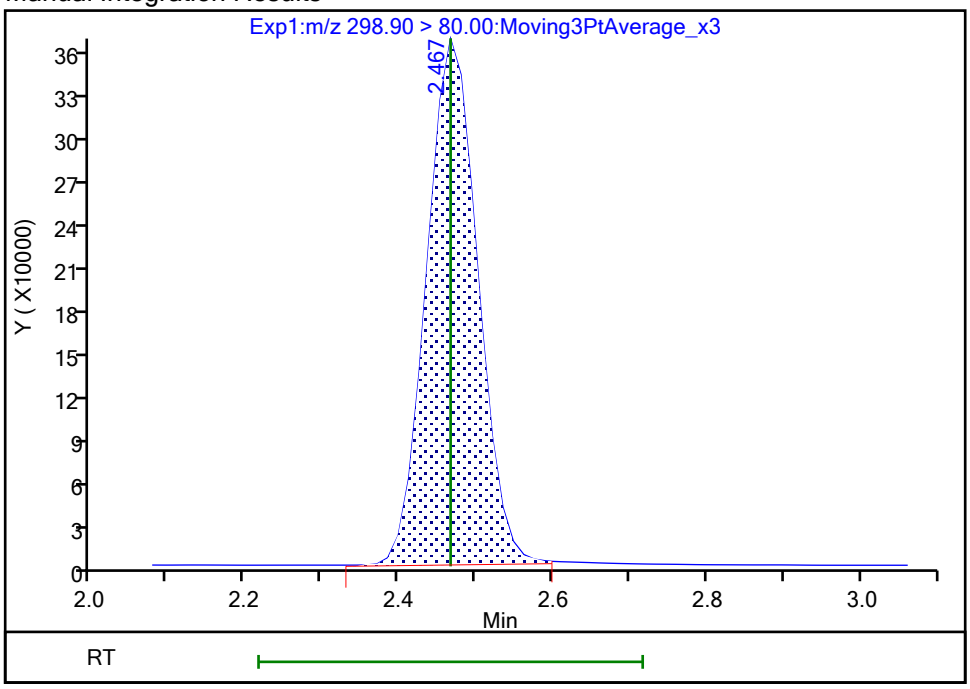
Processing Integration Results

RT: 2.47
Area: 1702974
Amount: 0.863503
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1691027
Amount: 0.857446
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:21 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

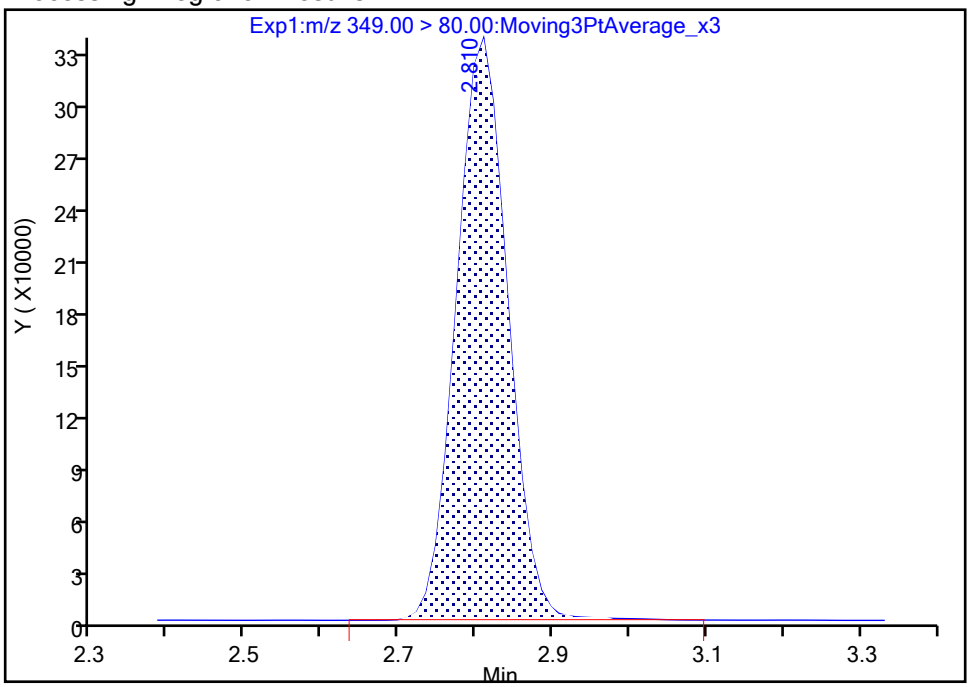
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

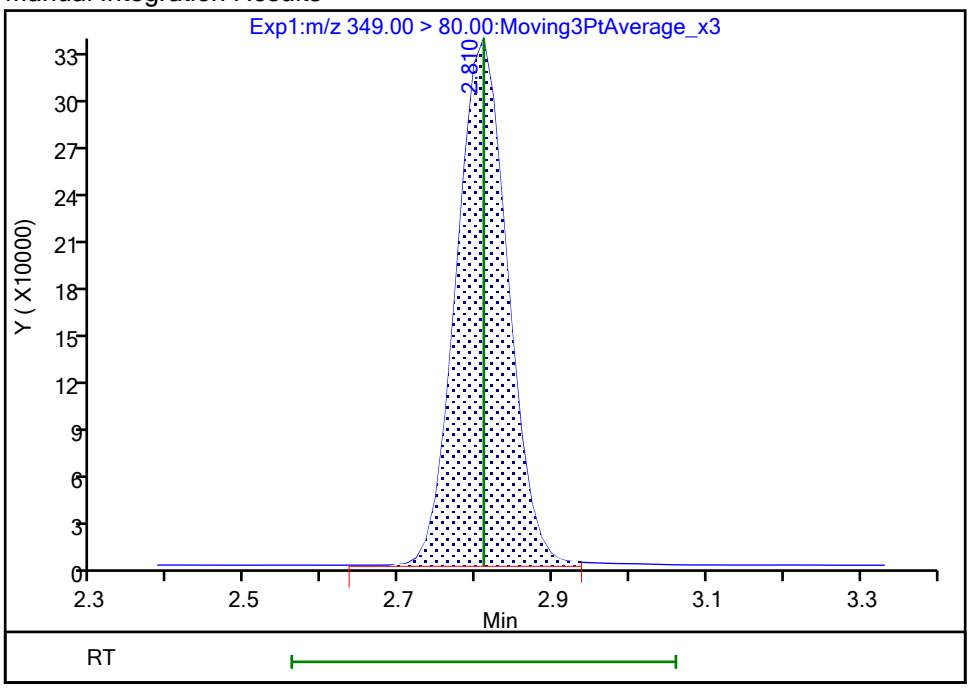
Processing Integration Results

RT: 2.81
Area: 1542101
Amount: 0.925009
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 1535898
Amount: 0.921289
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

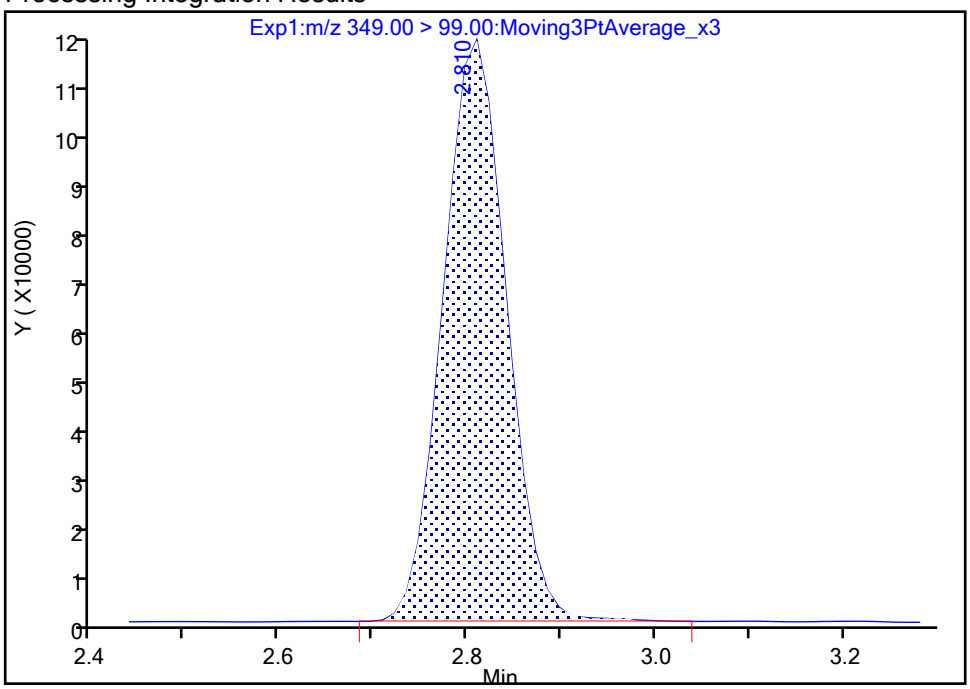
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

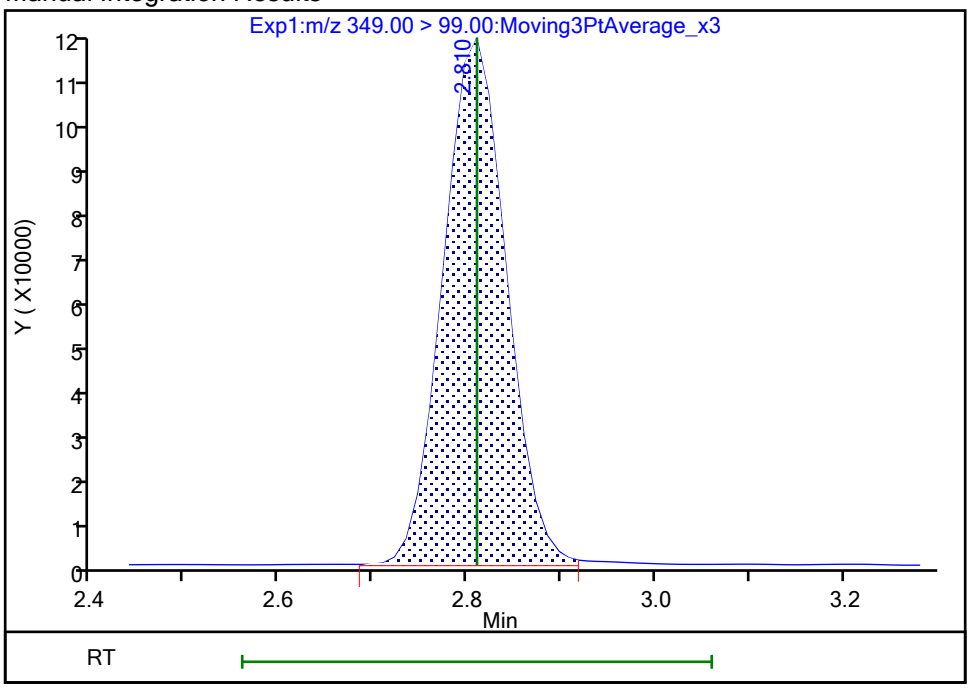
Processing Integration Results

RT: 2.81
Area: 540706
Amount: 0.925009
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 538165
Amount: 0.921289
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:42 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

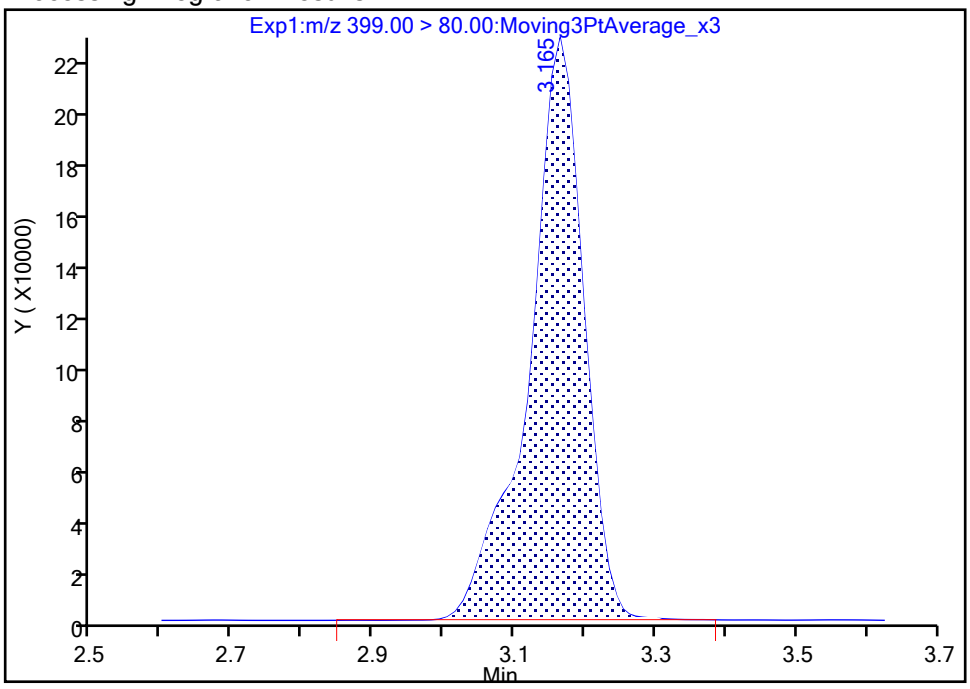
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

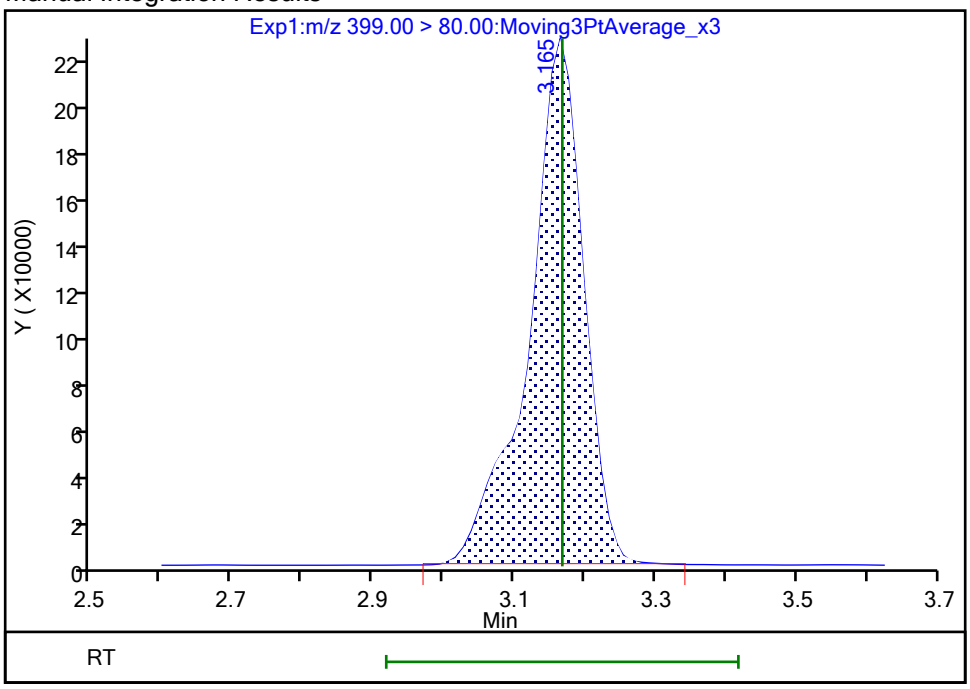
Processing Integration Results

RT: 3.16
Area: 1203394
Amount: 0.851549
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1200738
Amount: 0.849670
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:55 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

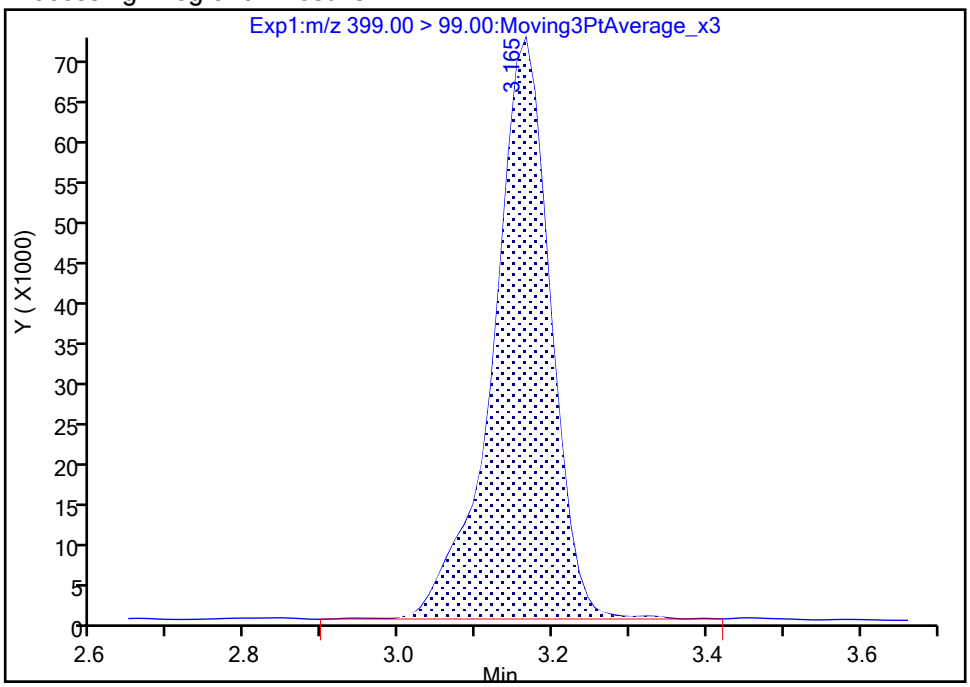
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

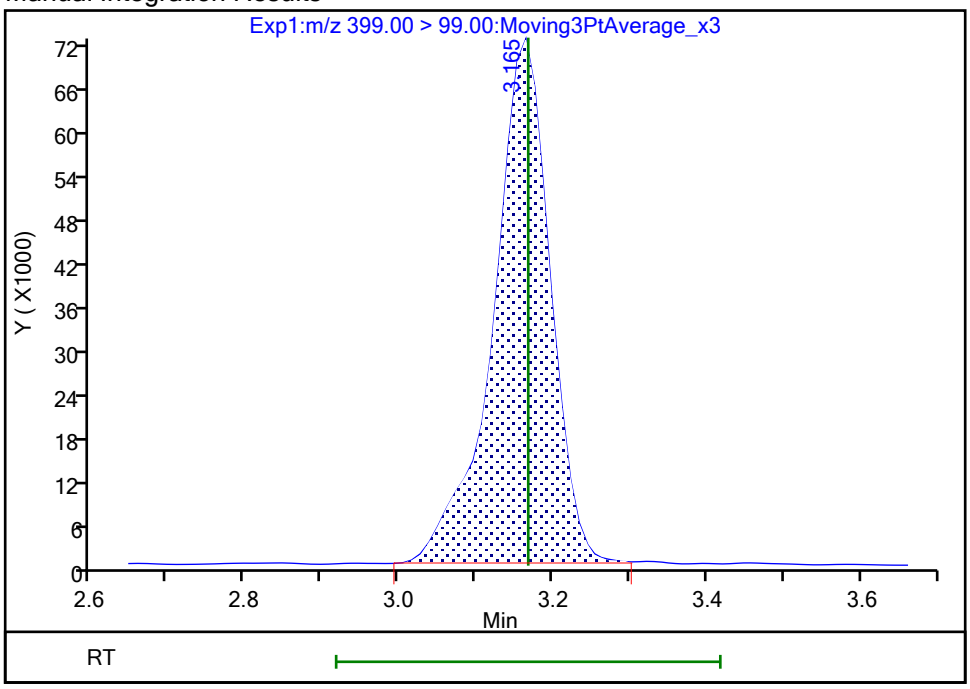
Processing Integration Results

RT: 3.16
Area: 373991
Amount: 0.851549
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 368667
Amount: 0.849670
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:59 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

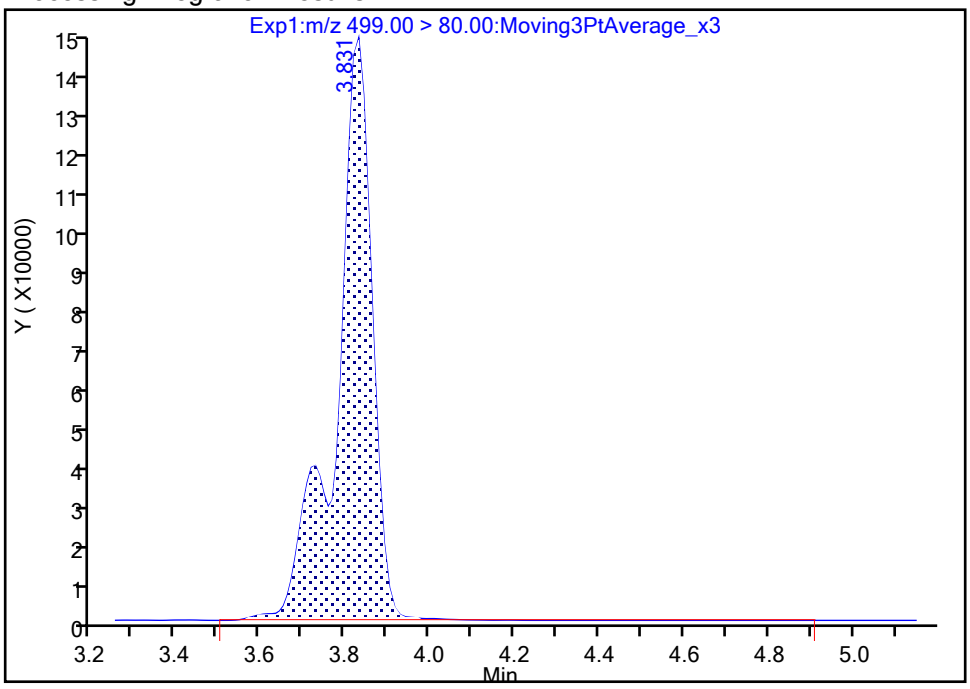
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

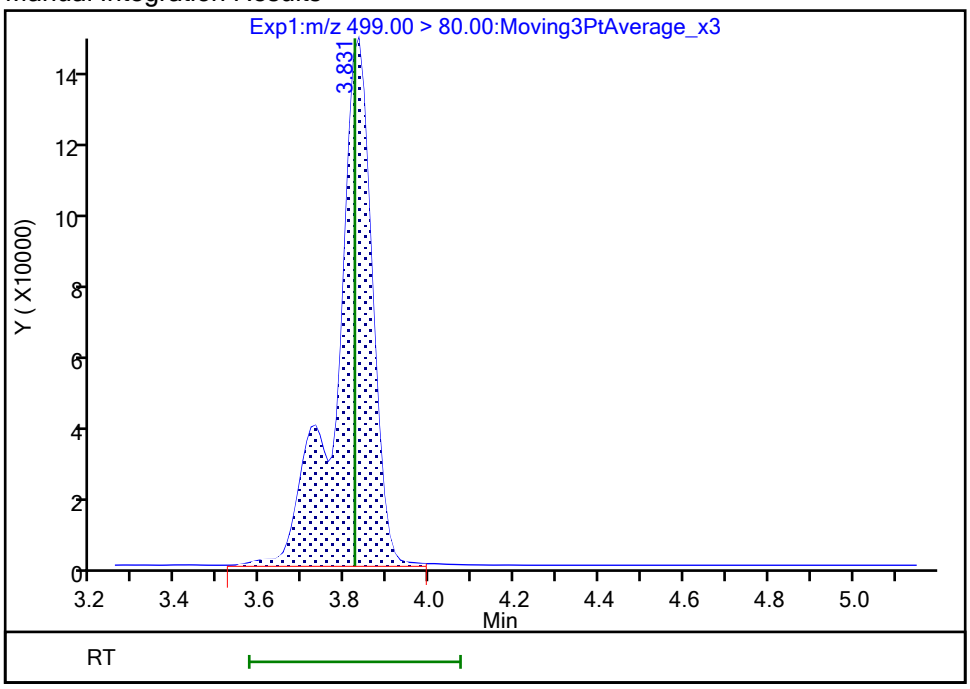
Processing Integration Results

RT: 3.83
Area: 830029
Amount: 0.879539
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 827433
Amount: 0.876788
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:54 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

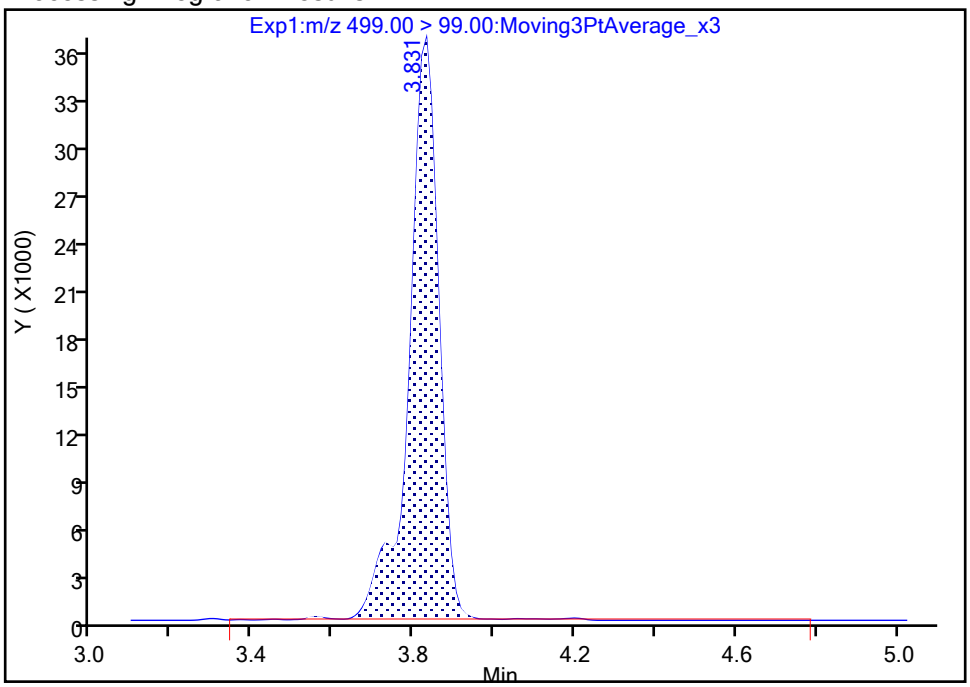
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

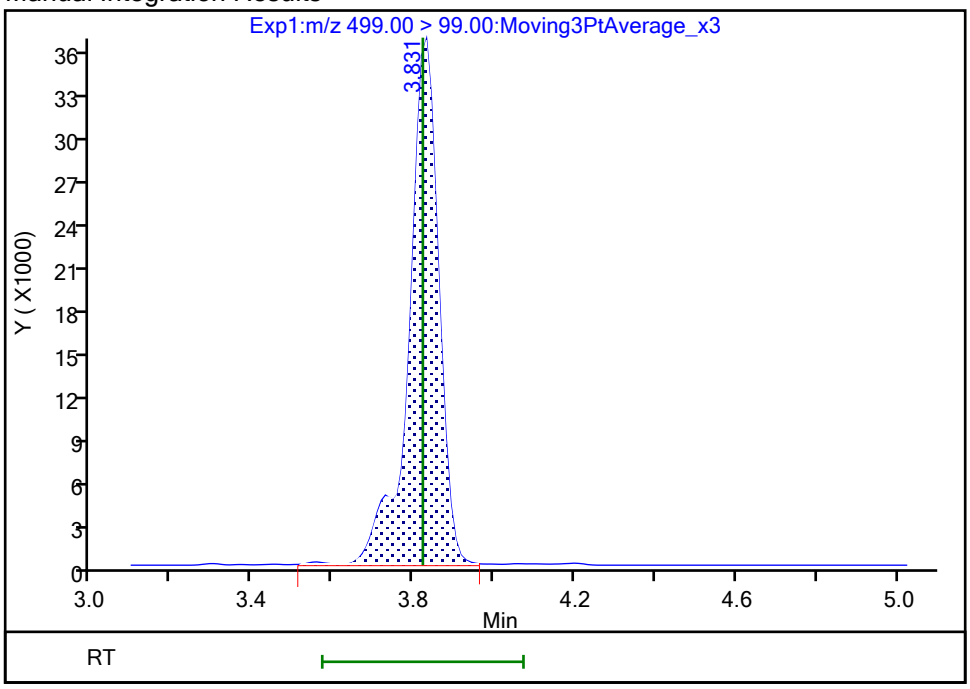
Processing Integration Results

RT: 3.83
Area: 188058
Amount: 0.879539
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 185063
Amount: 0.876788
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

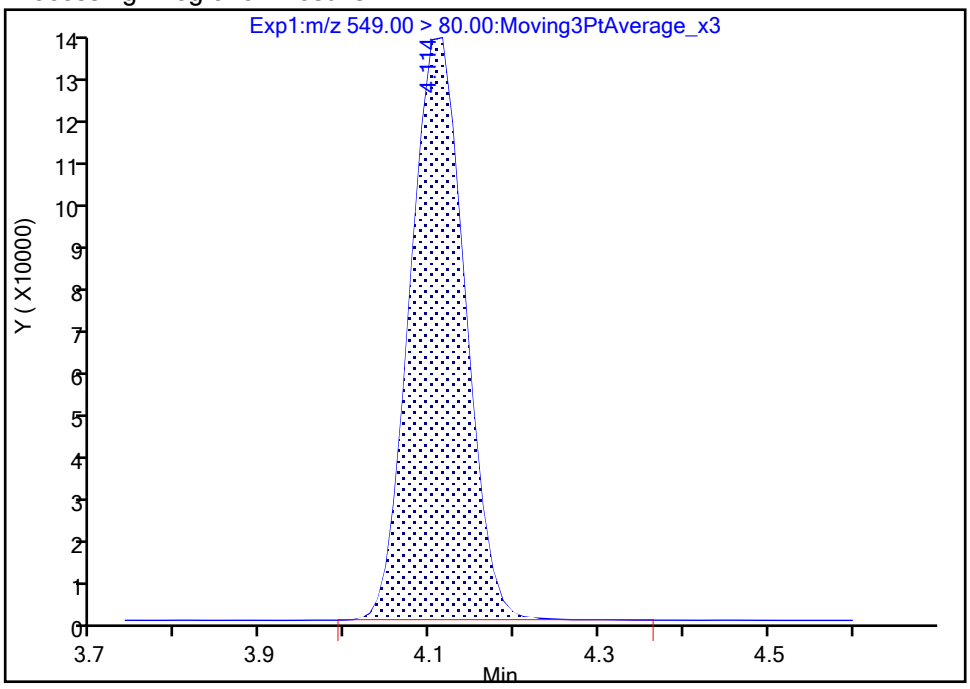
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

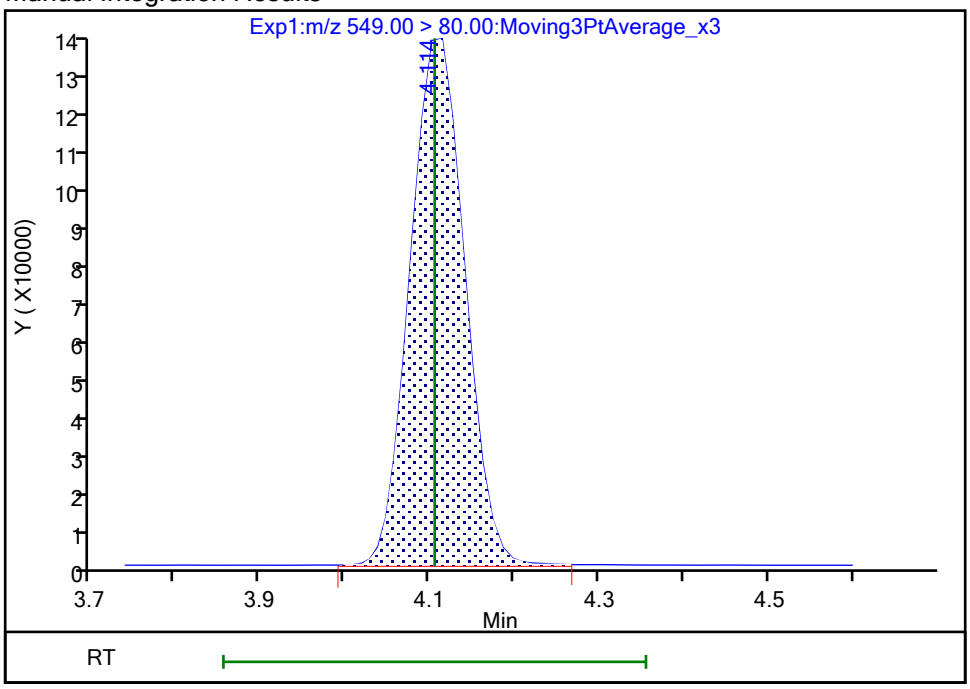
Processing Integration Results

RT: 4.11
Area: 616434
Amount: 0.858611
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 616050
Amount: 0.858076
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:12 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

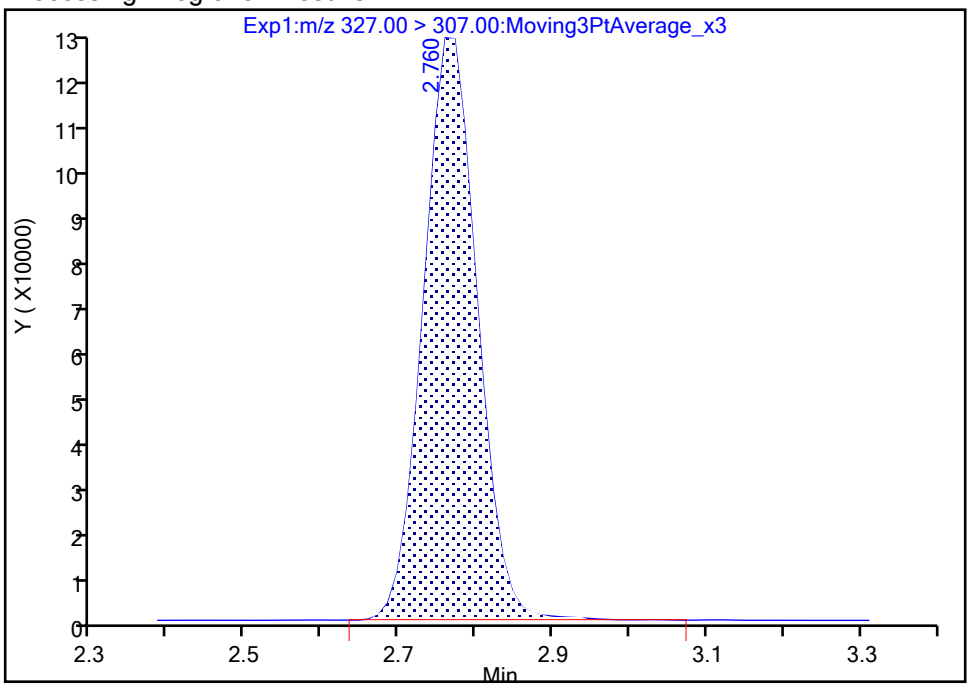
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

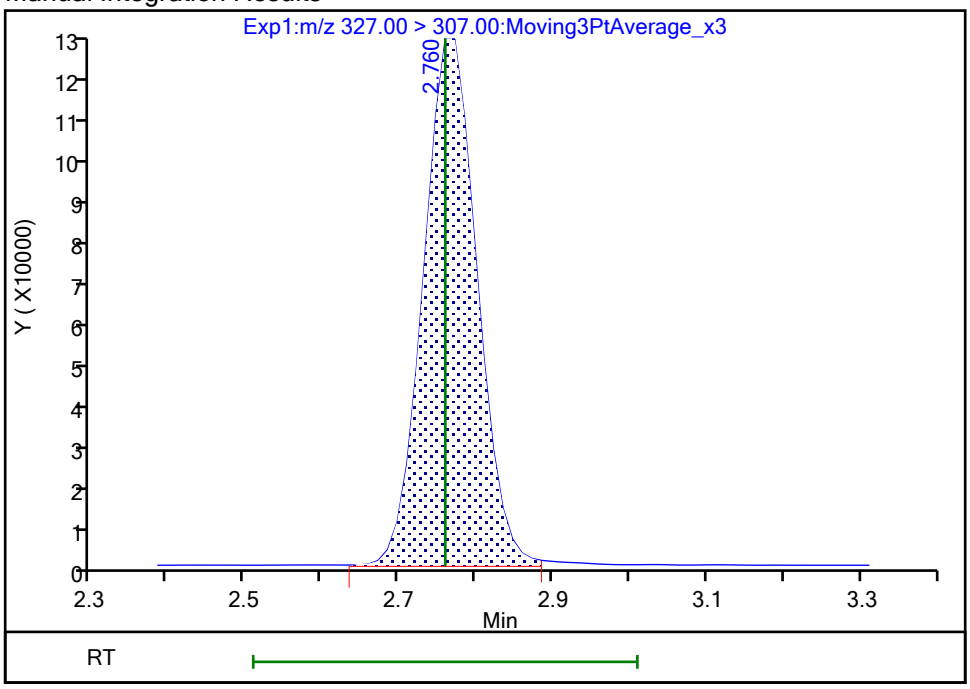
Processing Integration Results

RT: 2.76
Area: 624552
Amount: 0.955192
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 620909
Amount: 0.949620
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

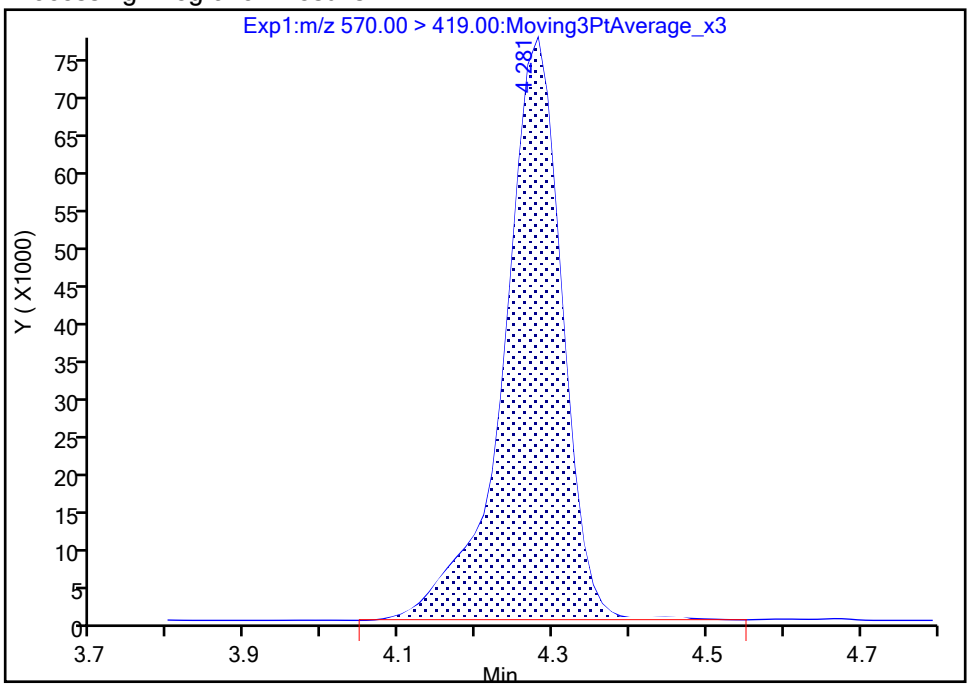
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

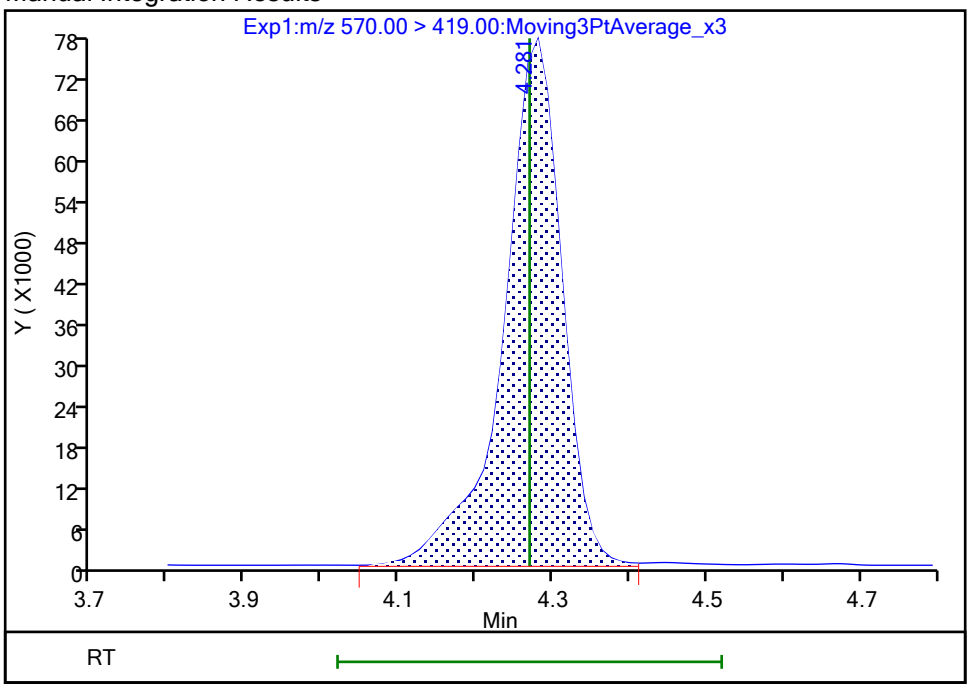
Processing Integration Results

RT: 4.28
Area: 414002
Amount: 0.985941
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 411947
Amount: 0.981047
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:19 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

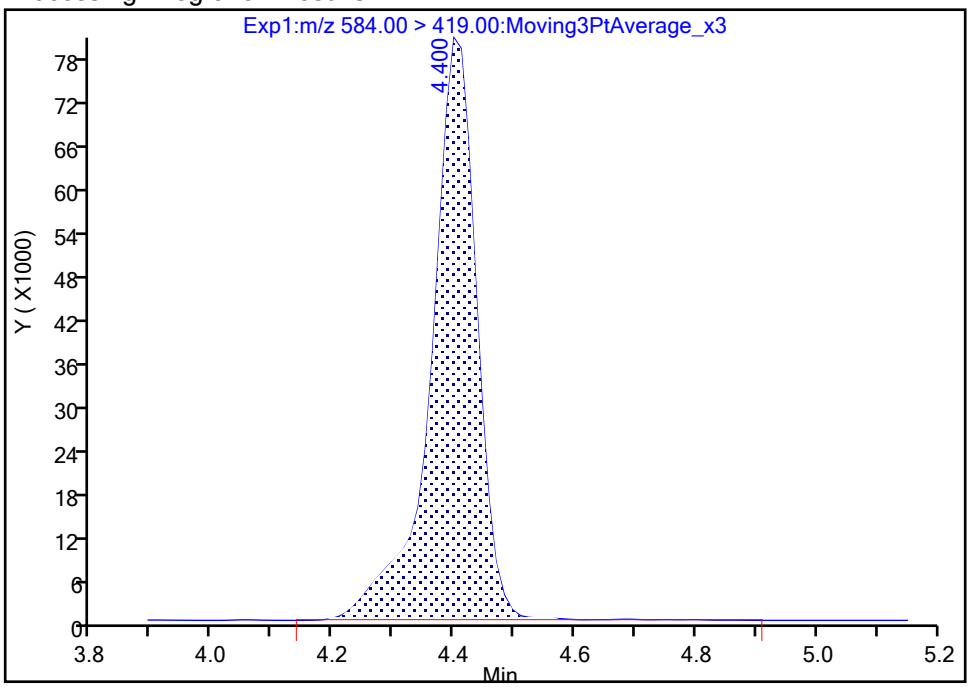
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

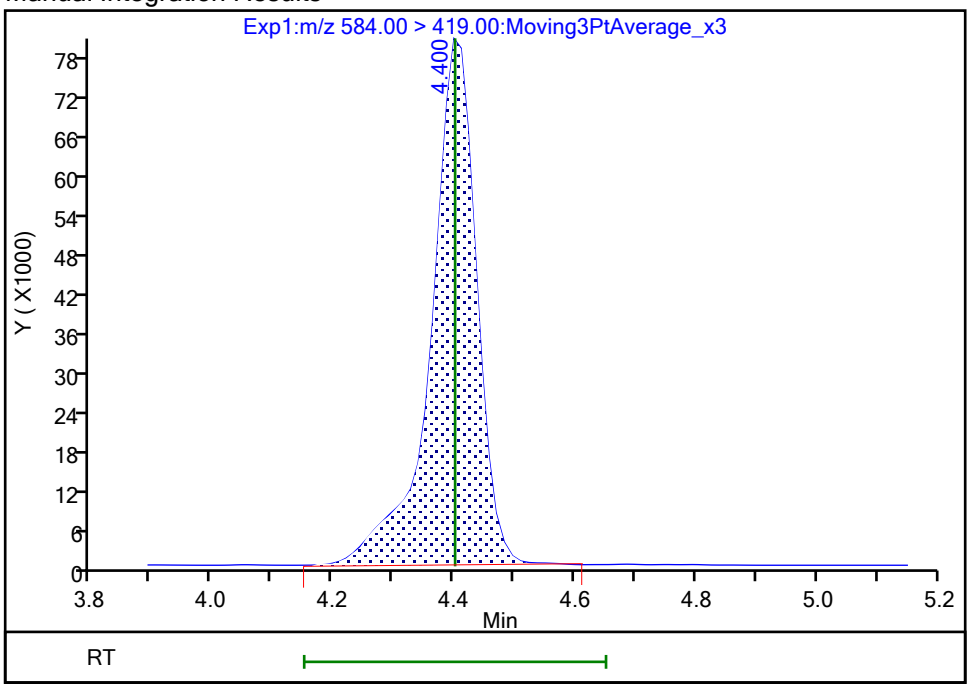
Processing Integration Results

RT: 4.40
Area: 426430
Amount: 0.943846
Amount Units: ng/ml



Manual Integration Results

RT: 4.40
Area: 423778
Amount: 0.937976
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:27:32 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

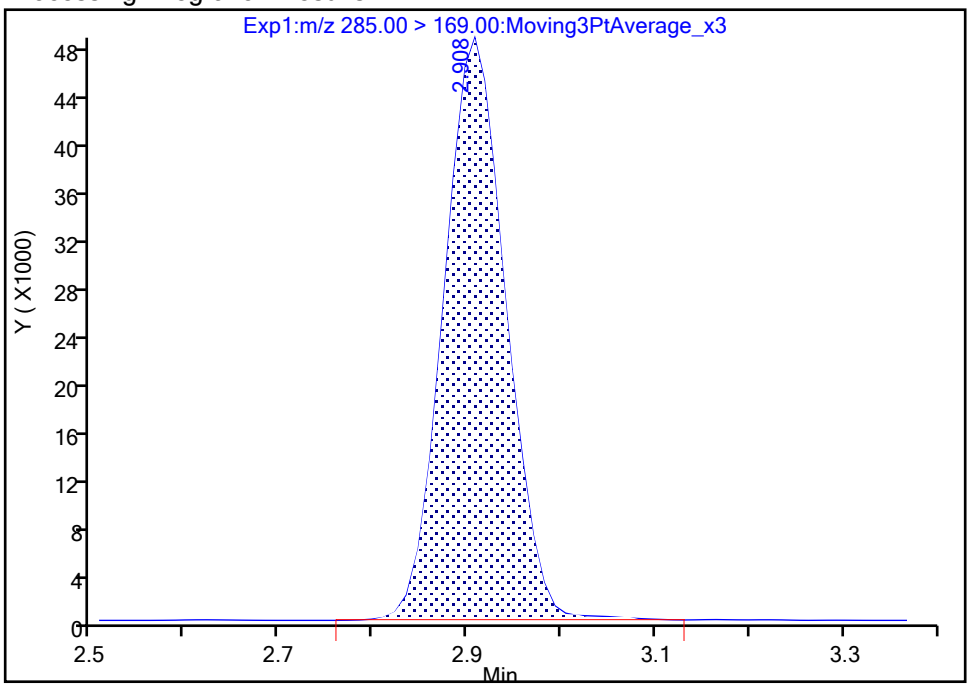
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

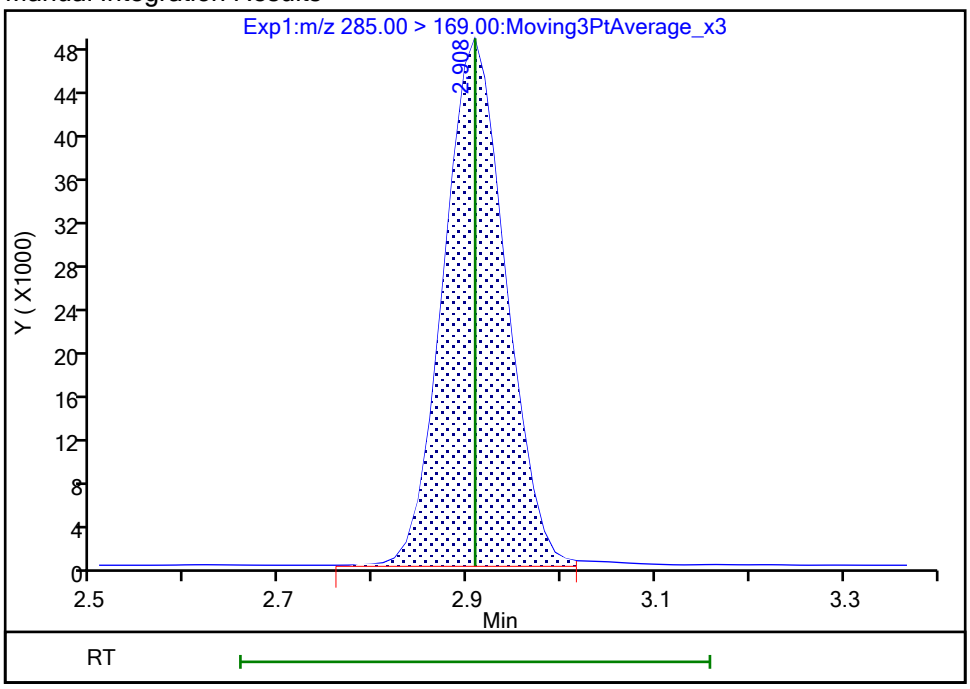
Processing Integration Results

RT: 2.91
Area: 224560
Amount: 0.954633
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 223128
Amount: 0.948545
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:46 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

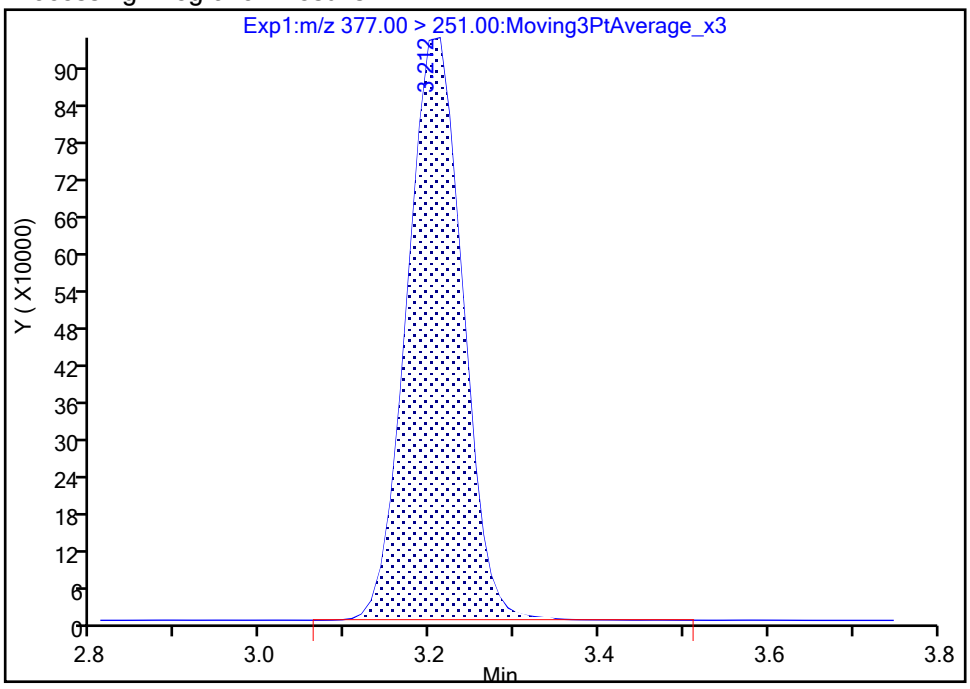
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

77 DONA, CAS: 919005-14-4

Signal: 1

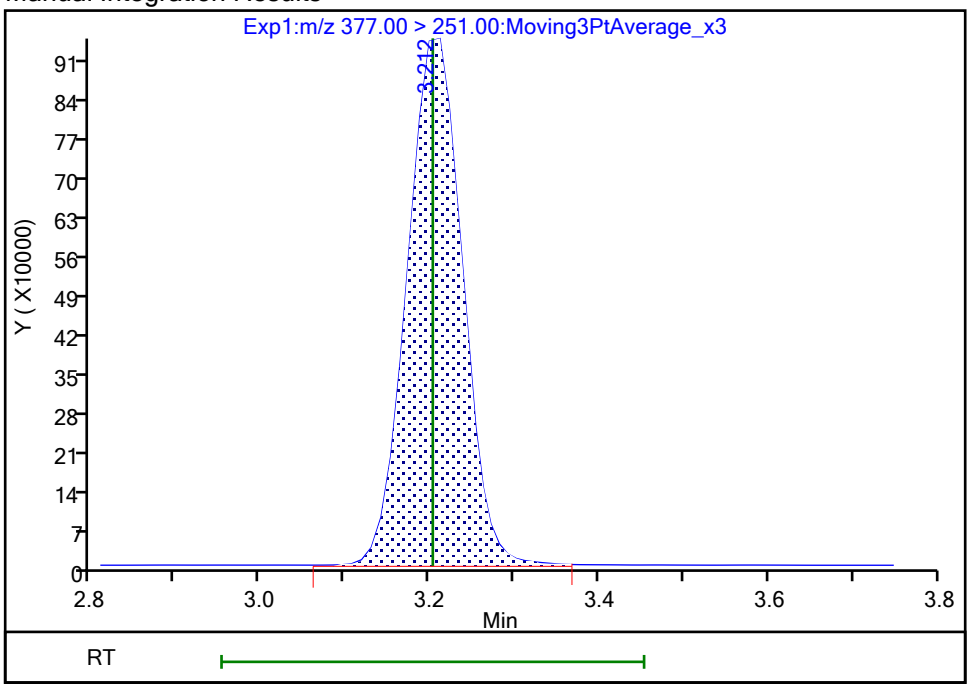
Processing Integration Results

RT: 3.21
Area: 4327875
Amount: 0.929621
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 4324703
Amount: 0.928940
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:26:07 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

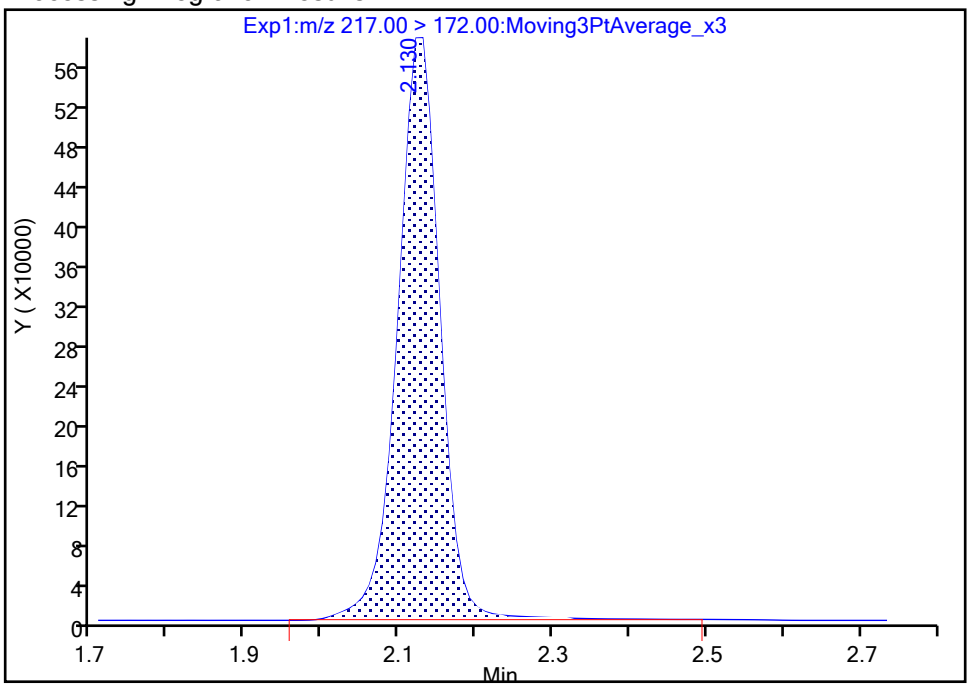
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

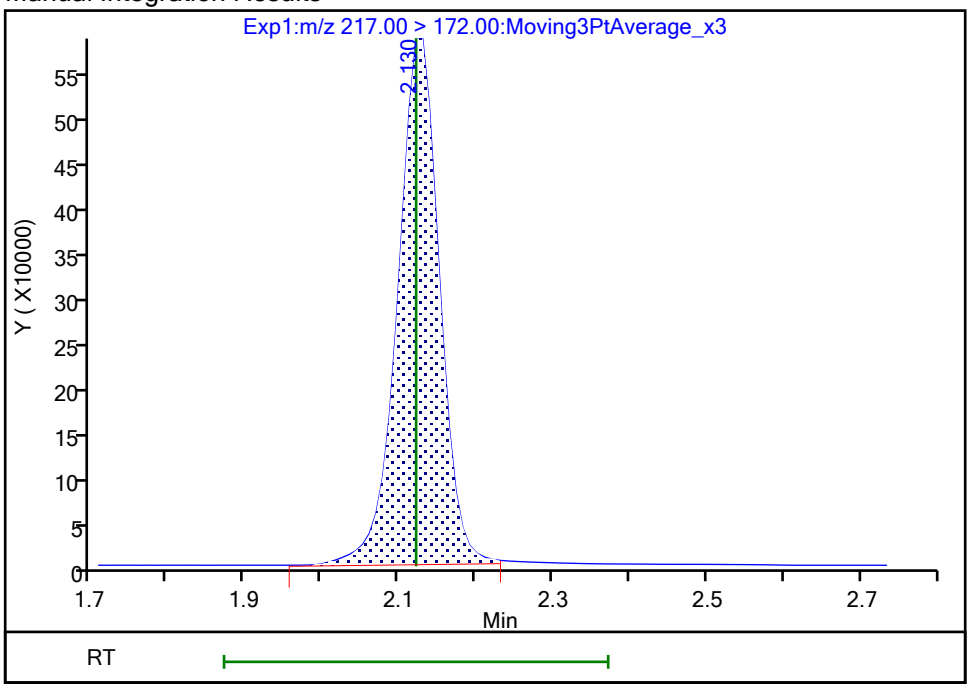
Processing Integration Results

RT: 2.13
Area: 2231192
Amount: 1.334093
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2210490
Amount: 1.321714
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:27 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

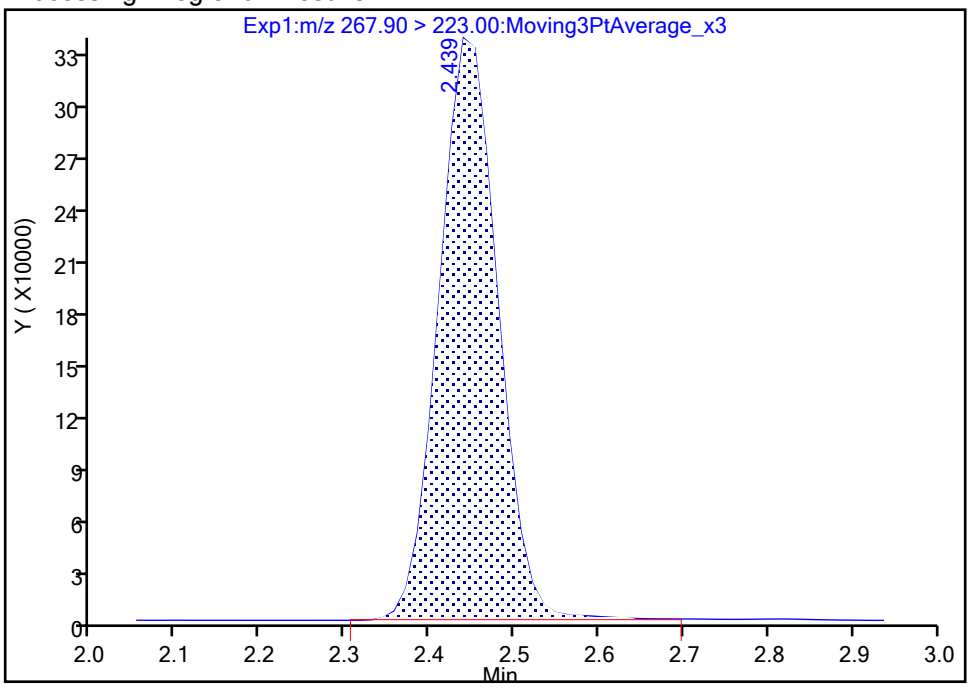
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

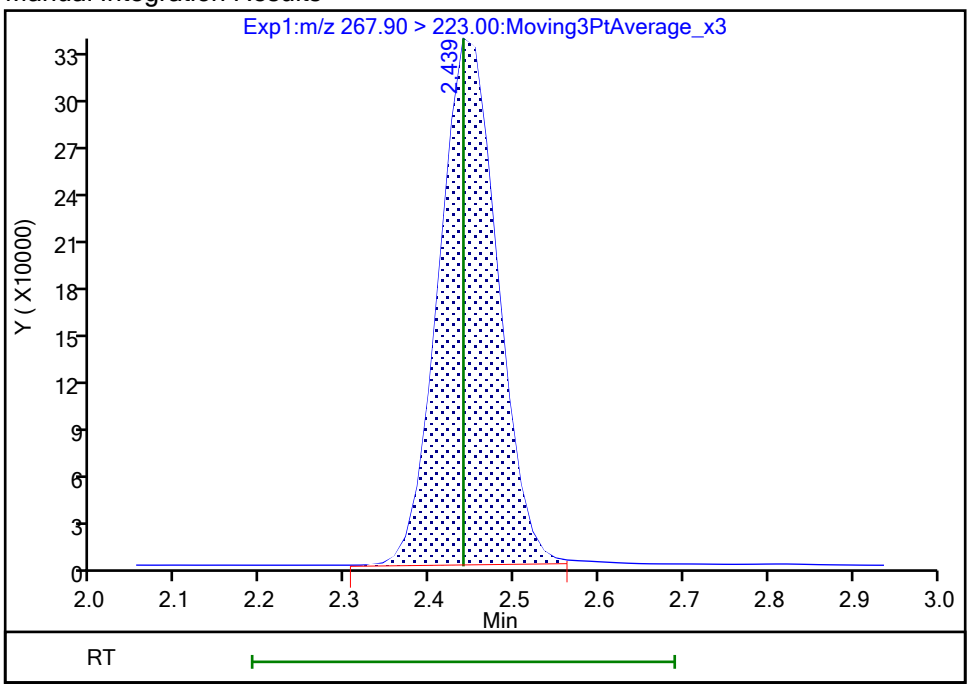
Processing Integration Results

RT: 2.44
Area: 1612648
Amount: 1.242442
Amount Units: ng/ml



Manual Integration Results

RT: 2.44
Area: 1604781
Amount: 1.236381
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

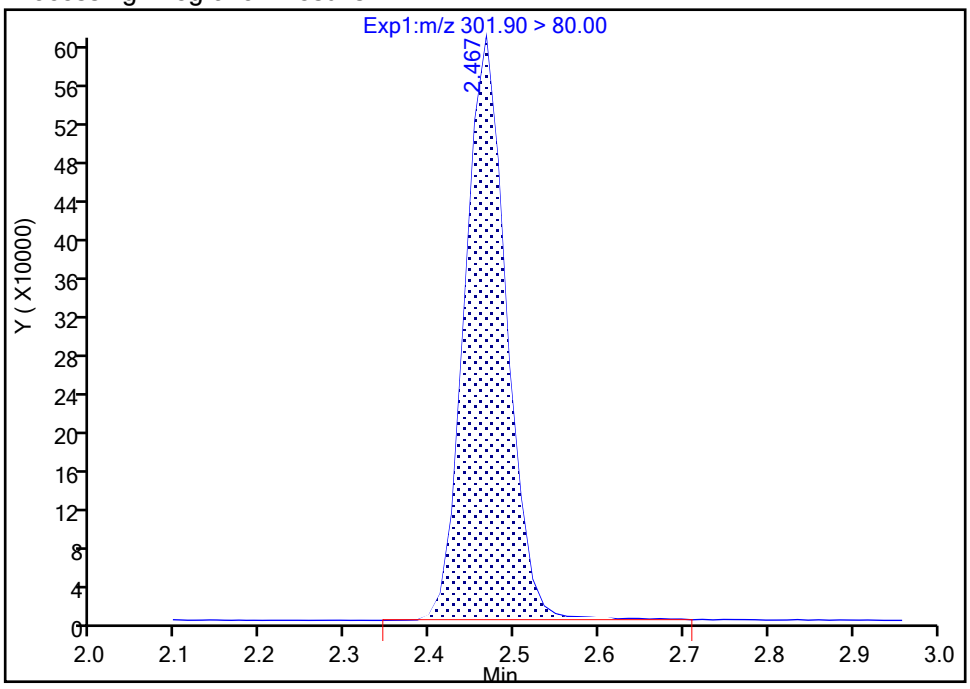
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

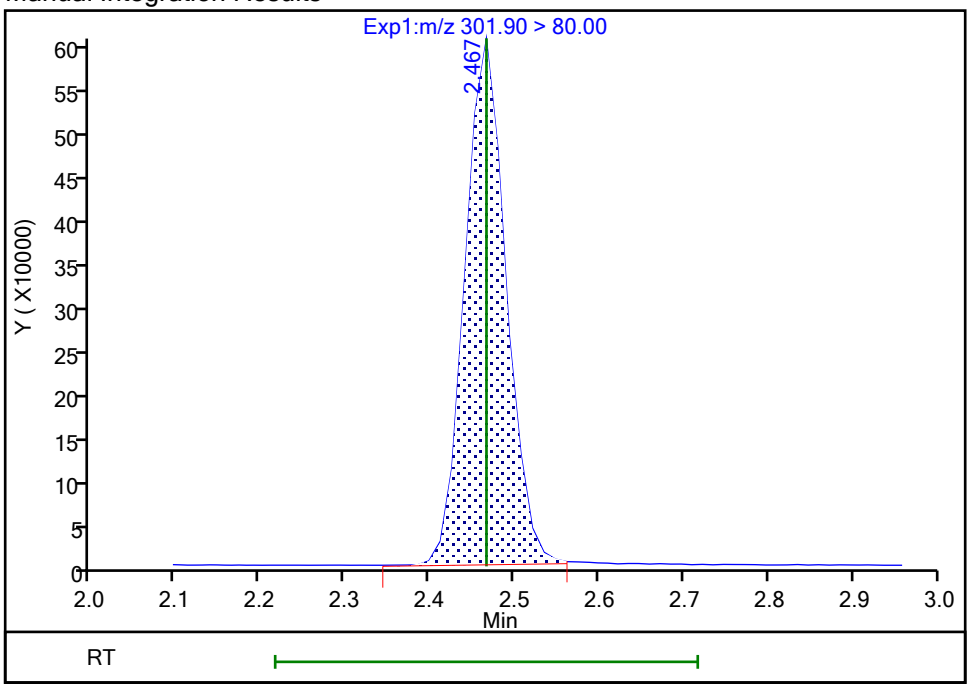
Processing Integration Results

RT: 2.47
Area: 2067564
Amount: 1.177280
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2052677
Amount: 1.168803
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:33 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

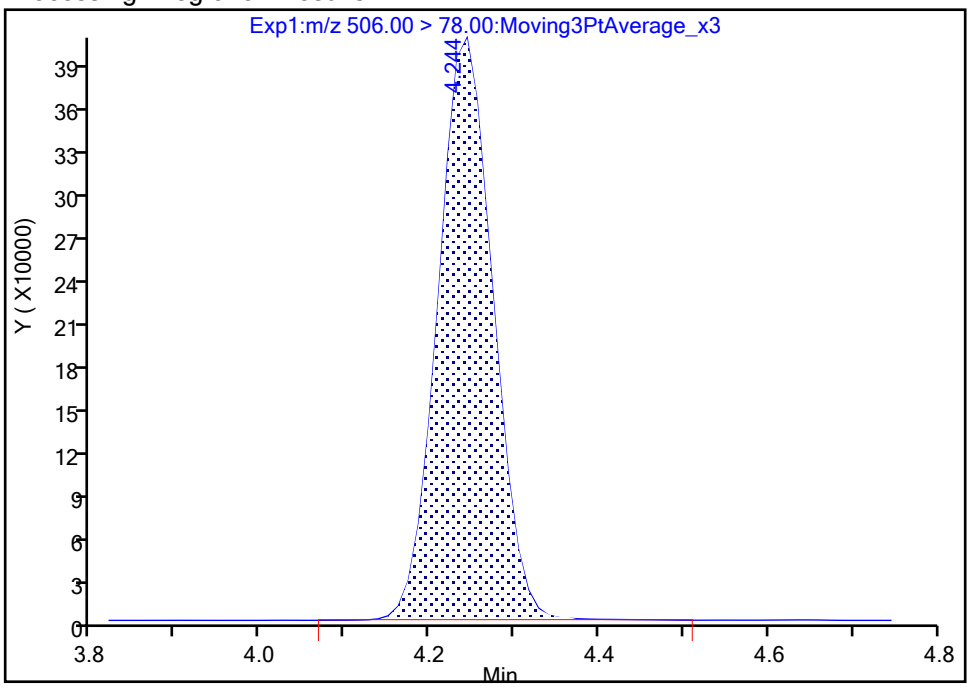
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 21 13C8 FOSA, CAS: STL01056

Signal: 1

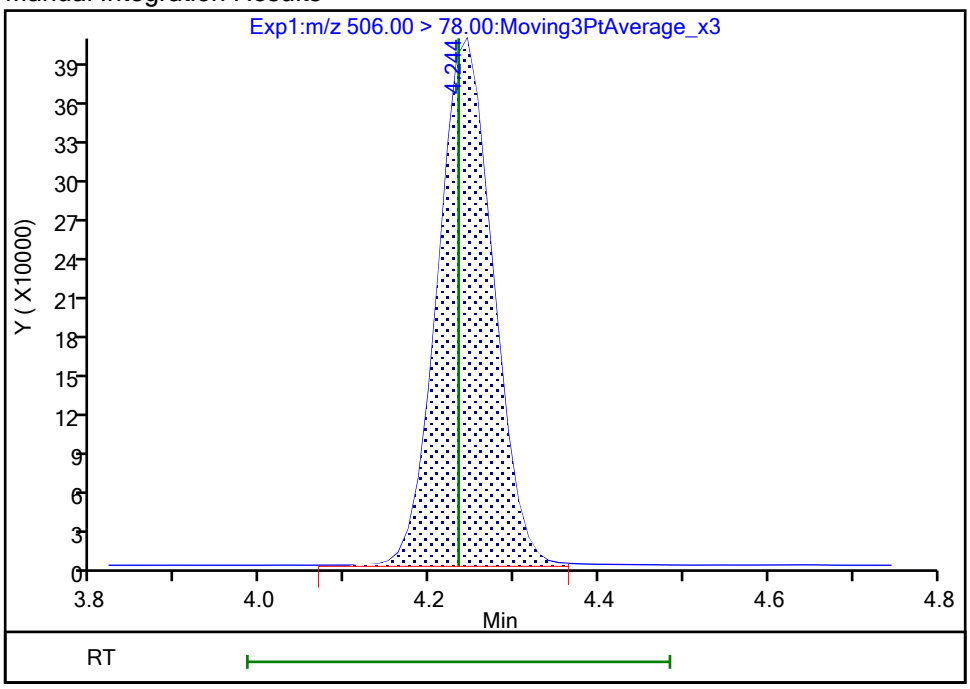
Processing Integration Results

RT: 4.24
Area: 1819229
Amount: 1.140029
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1815175
Amount: 1.137489
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:57 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

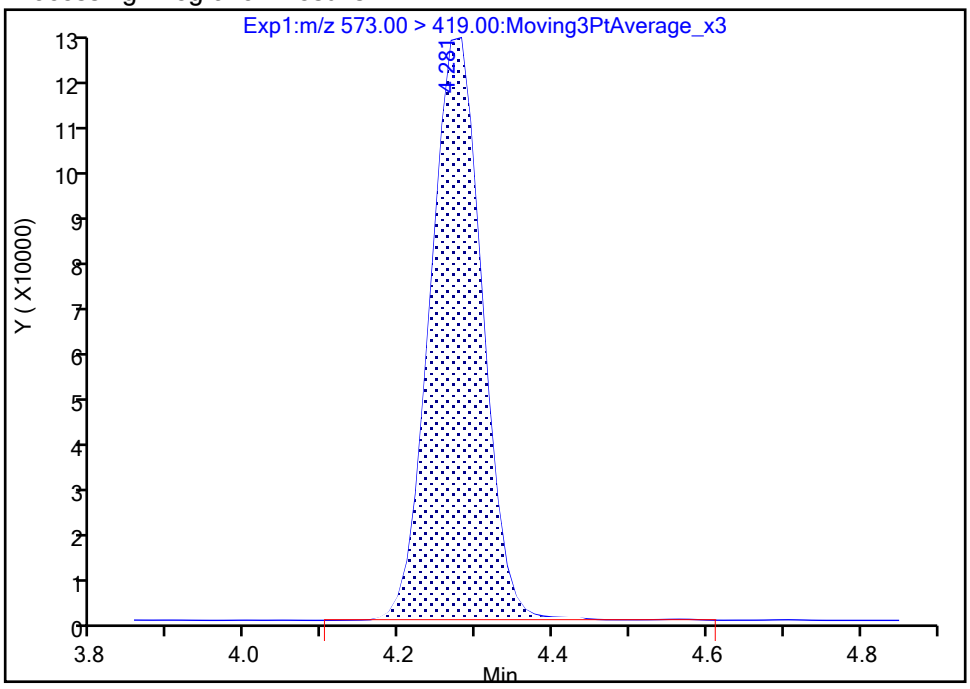
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

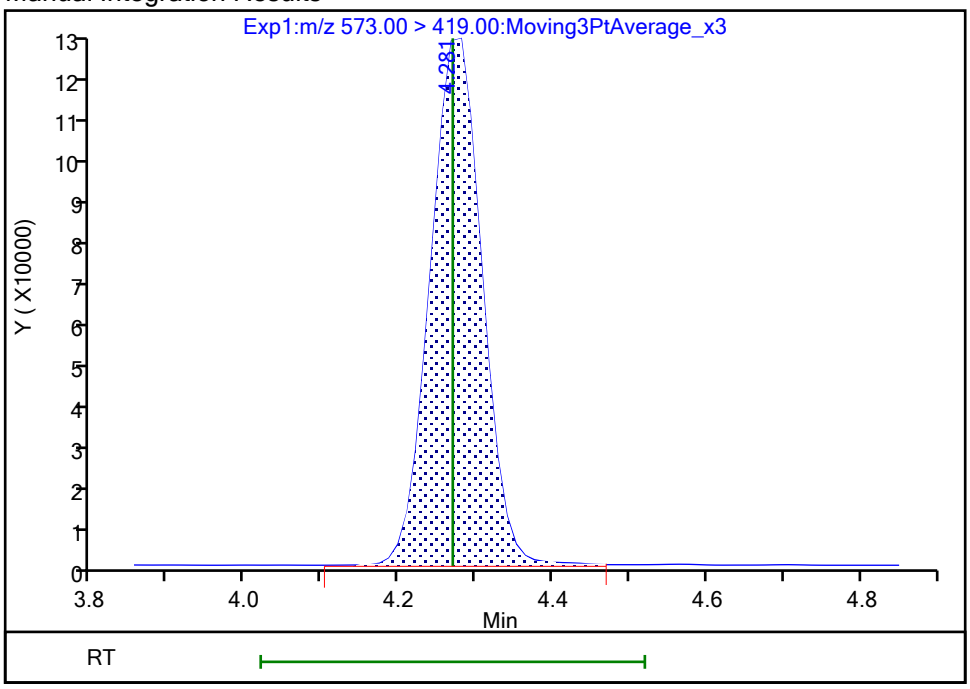
Processing Integration Results

RT: 4.28
Area: 579482
Amount: 1.296542
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 578440
Amount: 1.294210
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:25:03 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

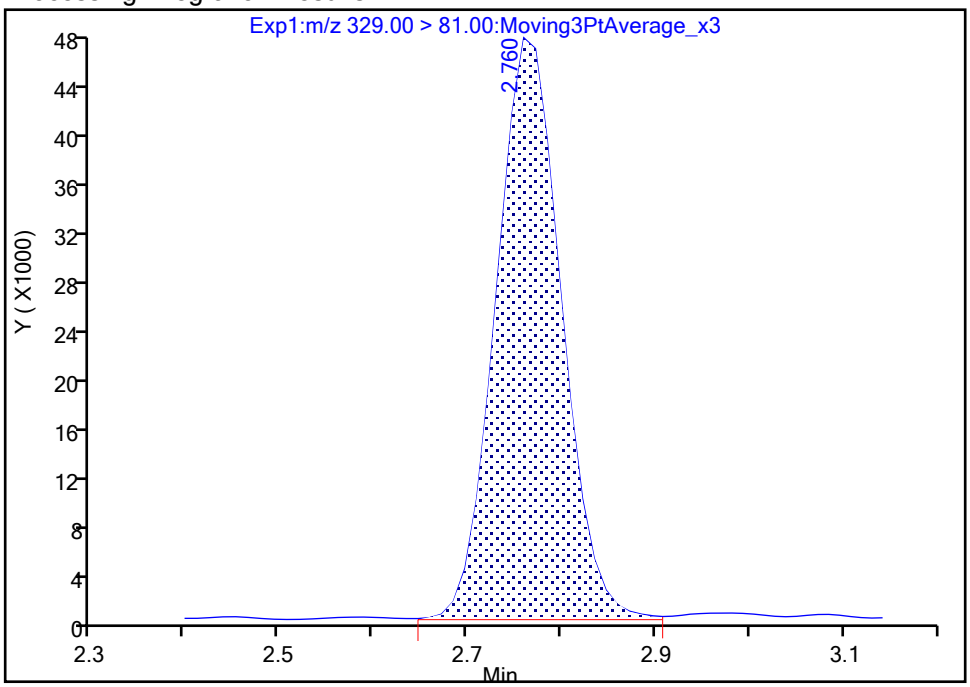
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

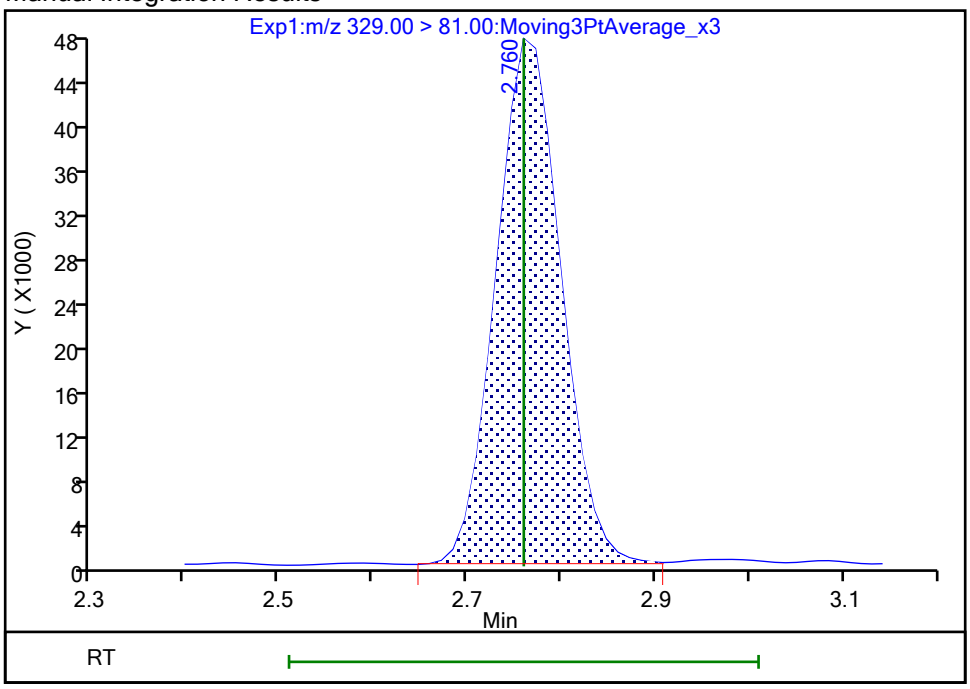
Processing Integration Results

RT: 2.76
Area: 227368
Amount: 1.119481
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 224796
Amount: 1.106818
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:40 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

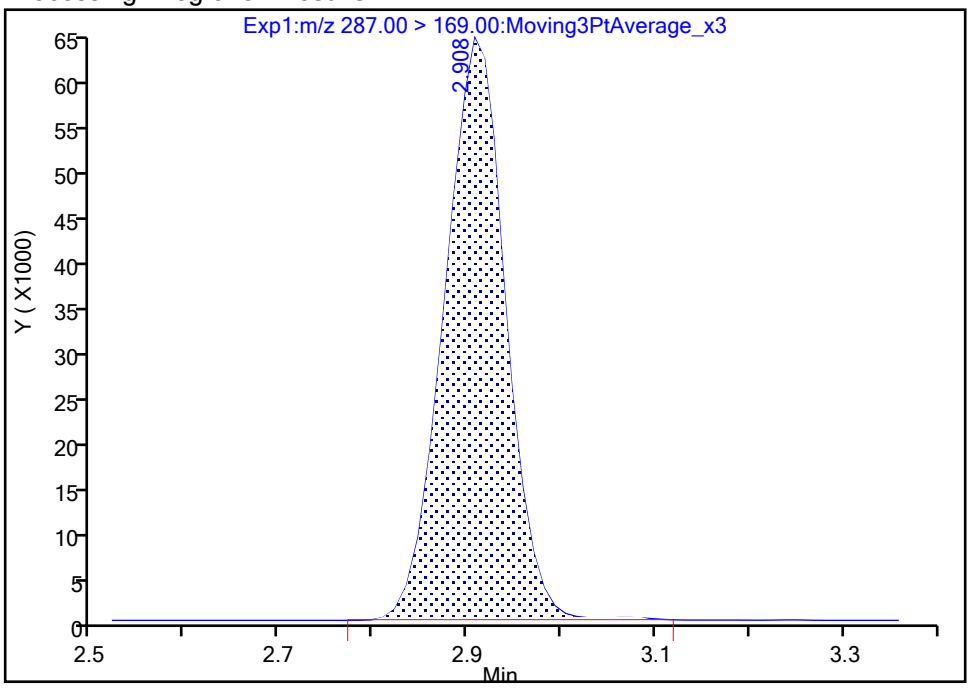
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d				
Injection Date:	24-Oct-2023 06:22:00	Instrument ID:	LC812		
Lims ID:	LCS 200-196662/2-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 64 13C3 HFPO-DA, CAS: STL02255

Signal: 1

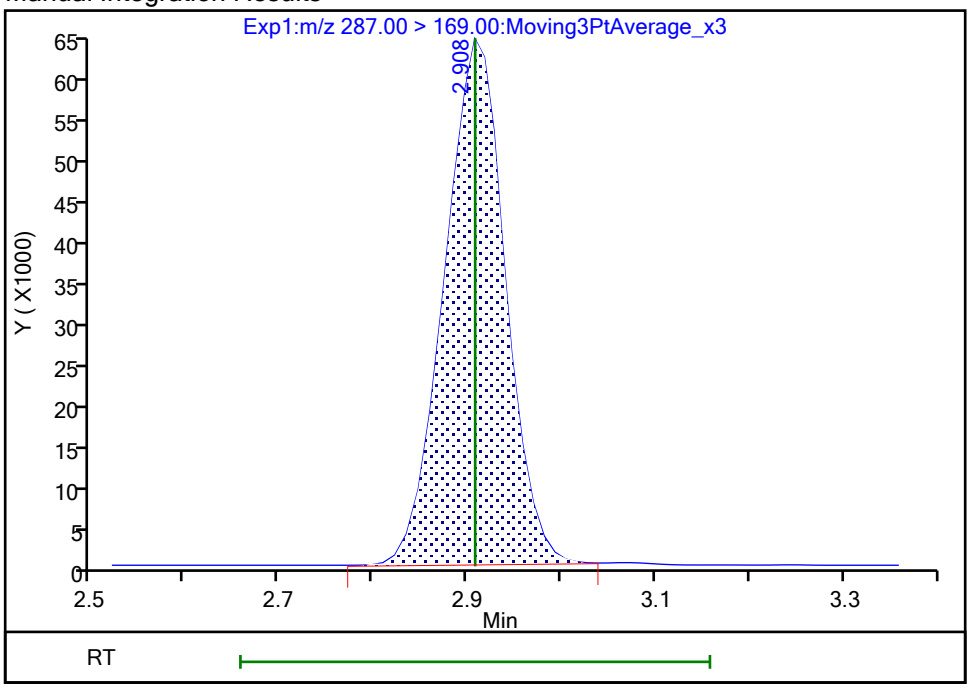
Processing Integration Results

RT: 2.91
Area: 294560
Amount: 1.152477
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 293691
Amount: 1.149077
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

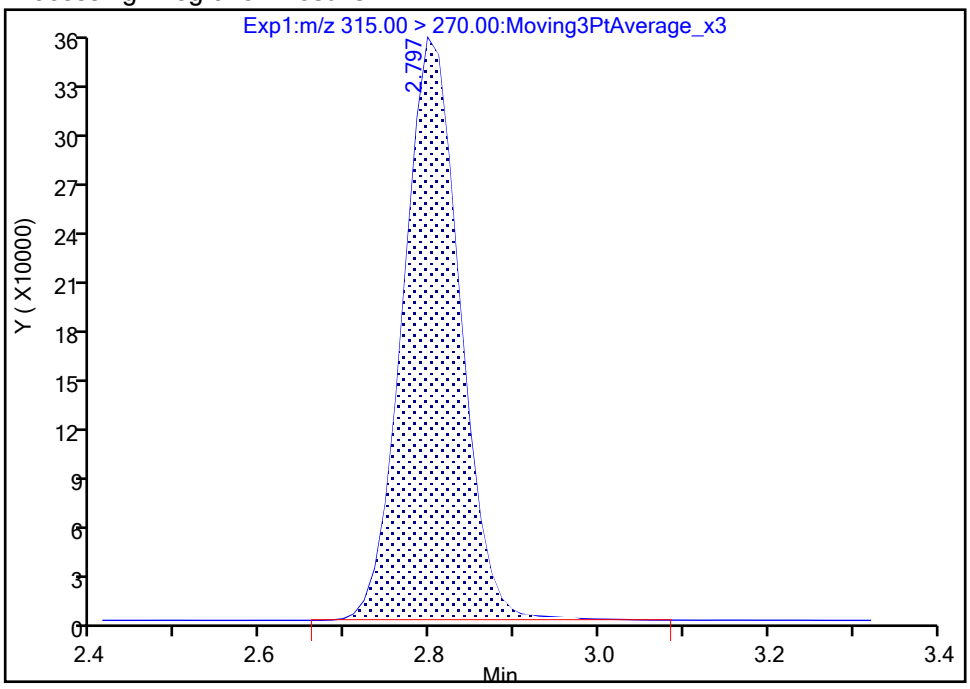
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E03.d
Injection Date: 24-Oct-2023 06:22:00 Instrument ID: LC812
Lims ID: LCS 200-196662/2-A
Client ID:
Operator ID: LC812user ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

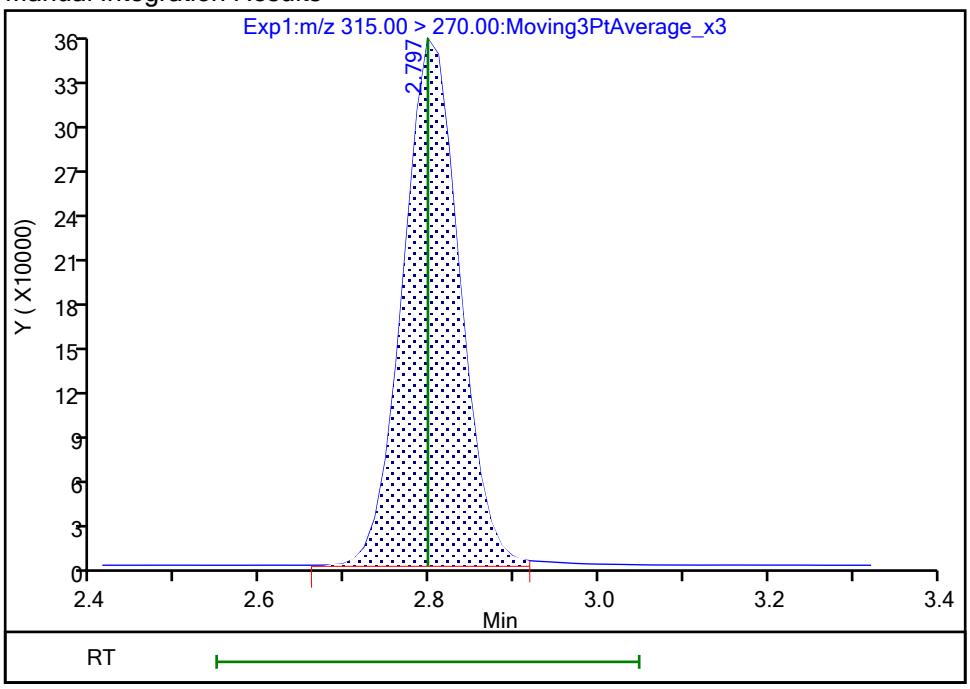
Processing Integration Results

RT: 2.80
Area: 1657807
Amount: 1.255489
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1648515
Amount: 1.248452
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:24:47 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 460-290546-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 200-196662/3-A

Matrix: Water | Lab File ID: PA231023E04.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) | Date Analyzed: 10/24/2023 06:30

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid	38.50		5.00	1.20
2706-90-3	Perfluoropentanoic acid	41.85		2.00	0.68
307-24-4	Perfluorohexanoic acid	38.27		2.00	0.65
375-85-9	Perfluoroheptanoic acid	41.74		2.00	0.54
335-67-1	Perfluorooctanoic acid	38.60		2.00	0.76
375-95-1	Perfluorononanoic acid	37.70		2.00	0.49
335-76-2	Perfluorodecanoic acid	39.12		2.00	0.46
2058-94-8	Perfluoroundecanoic acid	37.31		2.00	0.55
307-55-1	Perfluorododecanoic acid	36.54		2.00	0.49
72629-94-8	Perfluorotridecanoic acid	38.38		2.00	0.48
376-06-7	Perfluorotetradecanoic acid	36.00		2.00	0.64
375-73-5	Perfluorobutanesulfonic acid	35.80		2.00	0.62
2706-91-4	Perfluoropentanesulfonic acid	37.61		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid	33.58		2.00	0.55
375-92-8	Perfluoroheptanesulfonic acid	36.16		2.00	0.41
1763-23-1	Perfluorooctanesulfonic acid	34.58		2.00	0.85
68259-12-1	Perfluorononanesulfonic acid	33.84		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid	29.91		2.00	0.40
757124-72-4	4:2 Fluorotelomer sulfonic acid	37.18		2.00	0.54
27619-97-2	6:2 Fluorotelomer sulfonic acid	38.79		5.00	1.30
39108-34-4	8:2 Fluorotelomer sulfonic acid	40.14		2.00	0.77
754-91-6	Perfluorooctanesulfonamide	41.50		2.00	0.92
2355-31-9	NMeFOSAA	38.55		5.00	1.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	38.11		5.00	1.60
13252-13-6	HFPODA	39.70		4.00	1.10
919005-14-4	DONA	36.02		2.00	0.42
756426-58-1	9Cl-PF3ONS	37.73		2.00	0.32
763051-92-9	11Cl-PF3OUdS	31.91		2.00	0.87

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 200-196662/3-A

Matrix: Water Lab File ID: PA231023E04.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: 3535 Date Extracted: 10/23/2023 07:41

Sample wt/vol: 250(mL) Date Analyzed: 10/24/2023 06:30

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 196692 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	96		50-150
STL01893	13C5 PFPeA	88		50-150
STL01892	13C4 PFHpA	93		50-150
STL02116	13C2 PFTeDA	75		50-150
STL02337	13C3 PFBS	90		50-150
STL01056	13C8 FOSA	78		50-150
STL02118	d3-NMeFOSAA	90		50-150
STL02117	d5-NEtFOSAA	88		50-150
STL02395	M2-4:2 FTS	89		50-150
STL02279	M2-6:2 FTS	90		50-150
STL02280	M2-8:2 FTS	87		50-150
STL02255	13C3 HFPO-DA	84		50-150
STL00994	18O2 PFHxS	96		50-150
STL00993	13C2 PFHxA	91		50-150
STL00991	13C4 PFOS	97		50-150
STL00998	13C2 PFDoA	81		50-150
STL00995	13C5 PFNA	95		50-150
STL00996	13C2 PFDA	92		50-150
STL00990	13C4 PFOA	100		50-150
STL00997	13C2 PFUnA	89		50-150

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Lims ID: LCSD 200-196662/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 24-Oct-2023 06:30:12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 200-196662/3-A
Misc. Info.: 200-0057513-004 Plate: 1 Rack: 5
Operator ID: LC812user Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 25-Oct-2023 23:19:02 Calib Date: 26-Jul-2023 18:05:46
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20230726-56441.b\PA230726ICAL11.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1659

First Level Reviewer: nampitakw Date: 25-Oct-2023 09:34:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										M
217.00 > 172.00	2.130	2.122	0.008	0.605	2232775	1.20		96.2	1603	M
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.130	2.130	0.0	1.000	1620568	0.9624		96.2	150	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.453	2.439	0.014	0.697	1588181	1.10		88.2	1821	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.453	2.453	0.0	1.000	1434518	1.05		105	36.4	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.467	2.467	0.0	0.701	2035999	1.04		89.8	85679	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.467	2.467	0.0	1.000	1750536	0.8949	Target=2.06	101	992	M
298.90 > 99.00	2.467	2.467	0.0	1.000	854629		2.05(1.03-3.09)		275	M
61 1H,1H,2H,2H-perfluorohexanesulfo										
327.00 > 307.00	2.772	2.760	0.012	1.000	635906	0.9296		99.2	4160	
D 60 M2-4:2 FTS										M
329.00 > 81.00	2.772	2.760	0.012	0.788	235178	1.04		89.4	163	M
D 7 13C2 PFHxA										M
315.00 > 270.00	2.797	2.797	0.0	0.795	1666733	1.14		91.0	972	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.797	2.797	0.0	1.000	1404008	0.9568	Target=14.12	95.7	281	M
313.00 > 119.00	2.810	2.797	0.013	1.004	99465		14.12(7.06-21.17)		99.8	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.810	2.810	0.0	0.888	1638714	0.9402	Target=2.72	99.9	3225	
349.00 > 99.00	2.810	2.810	0.0	0.888	577518		2.84(1.36-4.09)		1418	
67 Perfluoro(2-propoxypropanoic) ac										M
285.00 > 169.00	2.908	2.908	0.0	0.996	236047	0.99		99.3	1502	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
287.00 > 169.00	2.918	2.908	0.010	0.829	296919	1.05		83.7	2289	
D 11 18O2 PFHxS										M
403.00 > 84.00	3.165	3.168	-0.003	0.899	1578167	1.13		95.5	1668	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.165	3.168	-0.003	1.000	1240291	0.8395	Target=3.32	91.9	1864	M
399.00 > 99.00	3.165	3.168	-0.003	1.000	380691		3.26(1.66-4.98)		347	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.165	3.168	-0.003	0.996	1750442	1.04	Target=4.17	104	395	M
363.00 > 169.00	3.176	3.168	0.008	1.000	416123		4.21(2.09-6.26)		811	
D 9 13C4 PFHpA										
367.00 > 322.00	3.176	3.168	0.008	0.902	1870526	1.16		93.1	6206	
77 DONA										M
377.00 > 251.00	3.212	3.203	0.009	0.838	4450733	0.9004	Target=3.33	95.3	3095	M
377.00 > 85.00	3.212	3.203	0.009	0.838	1251184		3.56(1.66-4.99)		1721	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.511	3.505	0.006	0.917	1122183	0.9039	Target=4.83	94.8	2416	
449.00 > 99.00	3.511	3.505	0.006	0.917	230693		4.86(2.41-7.24)		722	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.511	3.505	0.006	0.997	308777	1.06		89.5	624	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.511	3.514	-0.003	1.000	689268	0.9698		102	894	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.520	3.514	0.006	1.000	1877921	0.9649	Target=2.88	96.5	83.7	M
413.00 > 169.00	3.520	3.514	0.006	1.000	677681		2.77(1.44-4.32)		1025	M
D 14 13C4 PFOA										
417.00 > 372.00	3.520	3.523	-0.003	1.000	2283896	1.25		100	5162	
* 62 13C2 PFOA										
415.00 > 370.00	3.520	3.523	-0.003		2340056	1.25			7186	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.830	3.822	0.008	1.000	866301	0.8646	Target=4.24	93.2	1898	M
499.00 > 99.00	3.830	3.822	0.008	1.000	189203		4.58(2.12-6.37)		508	M
D 18 13C4 PFOS										
503.00 > 80.00	3.830	3.822	0.008	1.088	1026531	1.16		96.8	3306	
20 Perfluorononanoic acid										
463.00 > 419.00	3.854	3.845	0.009	1.000	1742867	0.9424	Target=8.34	94.2	263	
463.00 > 169.00	3.854	3.845	0.009	1.000	213694		8.16(4.17-12.51)		1994	
D 19 13C5 PFNA										
468.00 > 423.00	3.854	3.845	0.009	1.095	2358813	1.19		95.2	8084	
69 9-Chlorohexadecafluoro-3-oxanona										M
531.00 > 351.00	3.981	3.983	-0.002	1.039	2892092	0.9433		101	3879	M
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.112	4.105	0.007	1.074	644969	0.8461	Target=2.17	88.0	3724	
549.00 > 99.00	4.112	4.105	0.007	1.074	267219		2.41(1.08-3.25)		751	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.136	4.129	0.007	1.000	1871420	0.9780	Target=11.44	97.8	460	
513.00 > 169.00	4.136	4.129	0.007	1.000	177378		10.55(5.72-17.16)		1453	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										M
515.00 > 470.00	4.136	4.129	0.007	1.175	2393361	1.15		92.2	6375	M
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.148	4.141	0.007	1.178	340609	1.04		87.1	638	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.148	4.141	0.007	1.000	628322	1.00		105	1970	M
D 21 13C8 FOSA										
506.00 > 78.00	4.242	4.234	0.008	1.205	1720044	0.9710		77.7	3880	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.242	4.234	0.008	1.000	1361930	1.04		104	2313	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.279	4.270	0.009	1.215	556670	1.12		89.8	1144	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.279	4.270	0.009	1.000	389460	0.9638		96.4	625	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.363	4.366	-0.003	1.139	438673	0.7477	Target=2.37	77.5	3047	
599.00 > 99.00	4.363	4.366	-0.003	1.139	181878		2.41(1.19-3.56)		1315	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.399	4.390	0.009	1.250	2170032	1.11		88.6	7619	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.399	4.390	0.009	1.000	1668957	0.9328	Target=12.20	93.3	414	
563.00 > 169.00	4.387	4.390	-0.003	0.997	151423		11.02(6.10-18.31)		1235	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.399	4.401	-0.002	1.250	526238	1.10		88.1	1387	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.410	4.401	0.009	1.003	401206	0.9528		95.3	855	M
66 11-Chloroeicosafluoro-3-oxaundec										
631.00 > 451.00	4.486	4.473	0.013	1.171	3750355	0.7976		84.6	4821	
D 36 13C2 PFDoA										M
615.00 > 570.00	4.613	4.613	0.0	1.310	2017017	1.01		81.0	3176	M
37 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.613	0.0	1.000	1500448	0.9136	Target=8.47	91.4	83.1	
613.00 > 169.00	4.613	4.613	0.0	1.000	189405		7.92(4.23-12.70)		1456	
74 1H,1H,2H,2H-perfluorododecanesul										
627.00 > 607.00	4.635	4.624	0.011	1.117	332029	0.8870		92.0	4687	
75 Perfluorododecanesulfonic acid (										
699.00 > 80.00	4.777	4.777	0.0	1.247	152046	0.7647	Target=0.48	79.0	2212	
699.00 > 99.00	4.777	4.777	0.0	1.247	296047		0.51(0.24-0.72)		4002	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.806	4.806	0.0	1.042	1656362	0.9595	Target=6.41	96.0	86.3	
663.00 > 169.00	4.806	4.806	0.0	1.042	248944		6.65(3.21-9.62)		1424	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.993	4.982	0.011	1.418	1858814	0.9373		75.0	5419	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.993	4.982	0.011	1.000	149638	0.9000	Target=0.87	90.0	1384	
713.00 > 219.00	4.982	4.982	0.0	0.998	170346		0.88(0.43-1.30)		1778	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.303	5.292	0.011	1.506	2056672	0.9001		72.0	5145	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	5.303	5.292	0.011	1.000	1730943	1.05	Target=7.89	105	112	M
813.00 > 169.00	5.303	5.292	0.011	1.000	217602		7.95(3.94-11.83)		2393	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.563	5.563	0.0	1.049	1290368	1.00	Target=9.39	100	134	M
913.00 > 169.00	5.563	5.563	0.0	1.049	138534		9.31(4.69-14.08)		893	

QC Flag Legend

Processing Flags

Review Flags

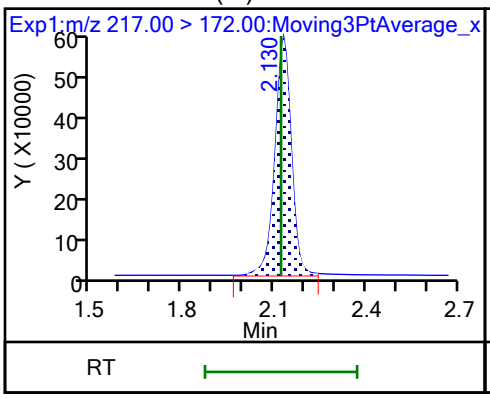
M - Manually Integrated

Report Date: 25-Oct-2023 23:19:13 Chrom Revision: 2.3 18-Oct-2023 21:16:54

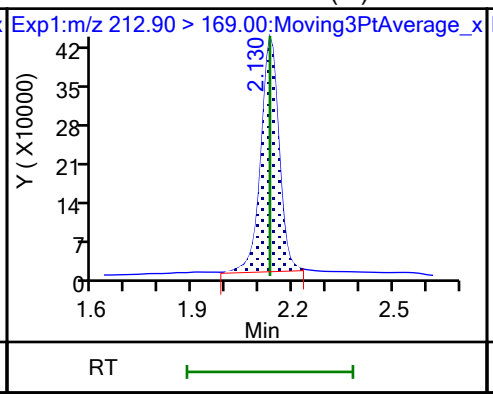
Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

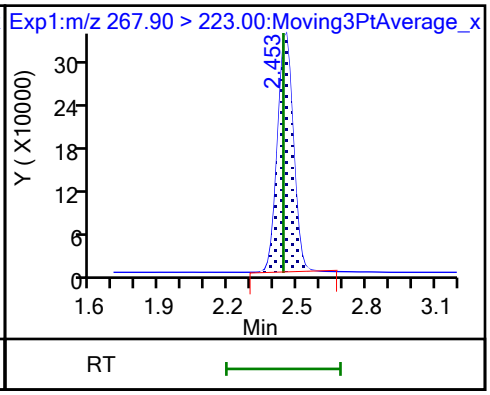
D 1 13C4 PFBA (M)



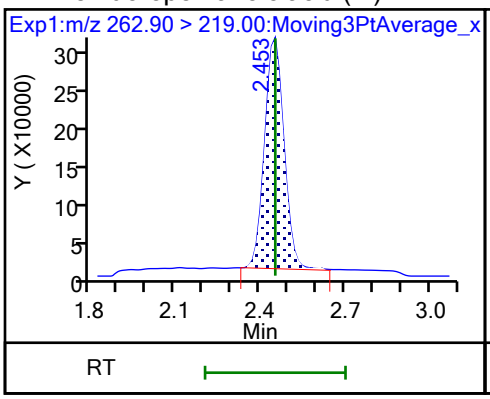
2 Perfluorobutanoic acid (M)



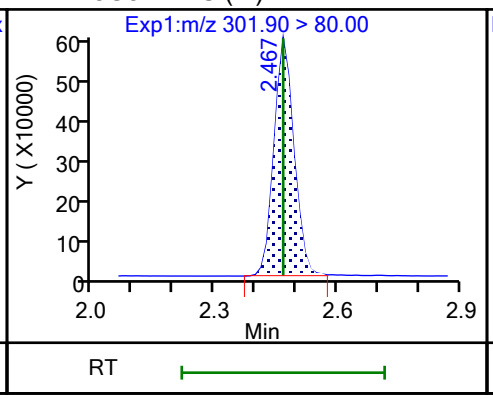
D 3 13C5 PFPeA



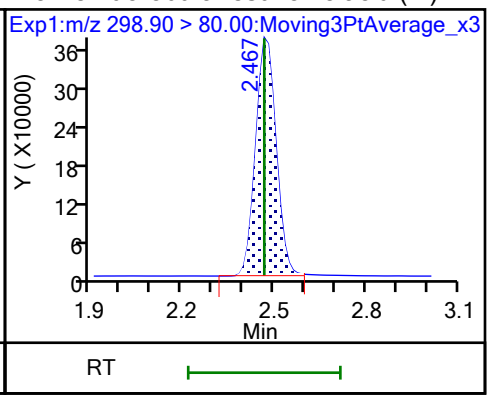
4 Perfluoropentanoic acid (M)



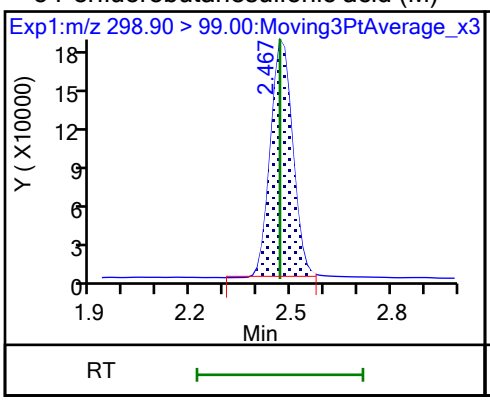
D 47 13C3 PFBS (M)



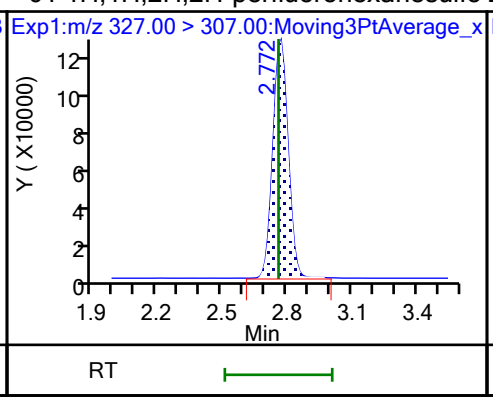
5 Perfluorobutanesulfonic acid (M)



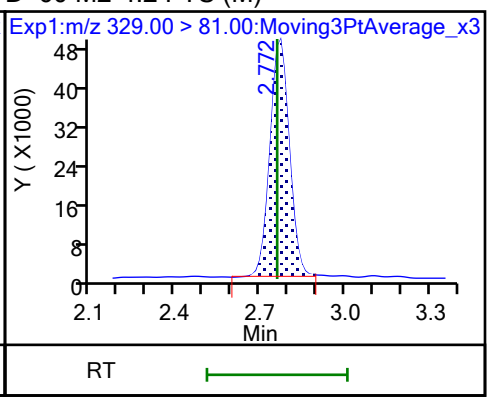
5 Perfluorobutanesulfonic acid (M)



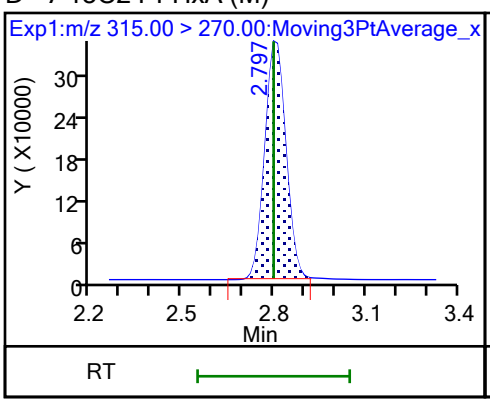
61 1H,1H,2H,2H-perfluorohexanesulfo



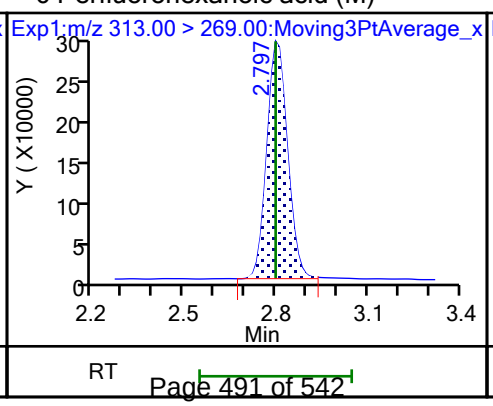
D 60 M2-4:2 FTS (M)



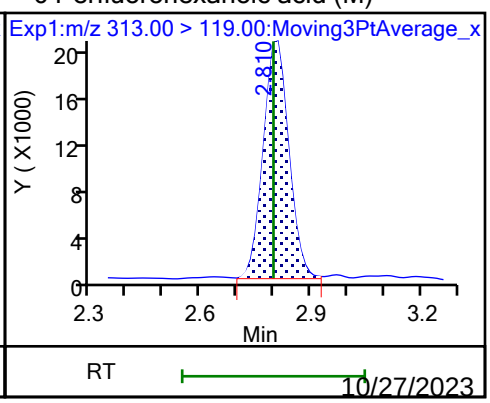
D 7 13C2 PFHxA (M)



6 Perfluorohexanoic acid (M)

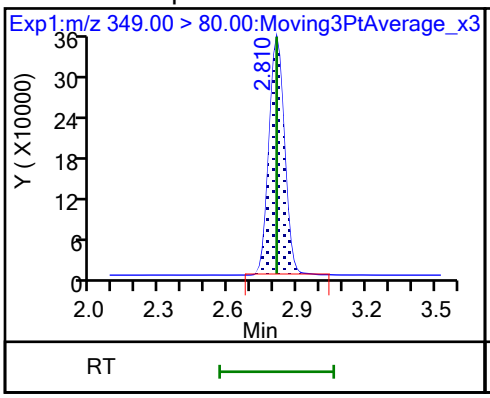


6 Perfluorohexanoic acid (M)

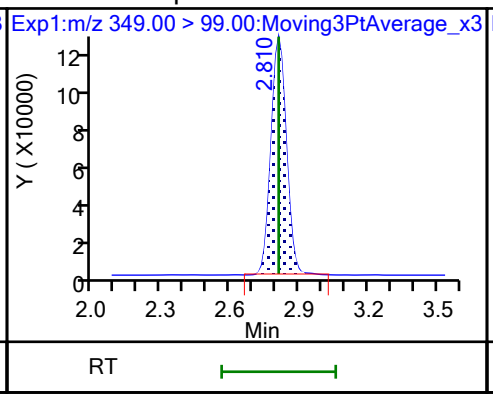


10/27/2023
10:52 AM

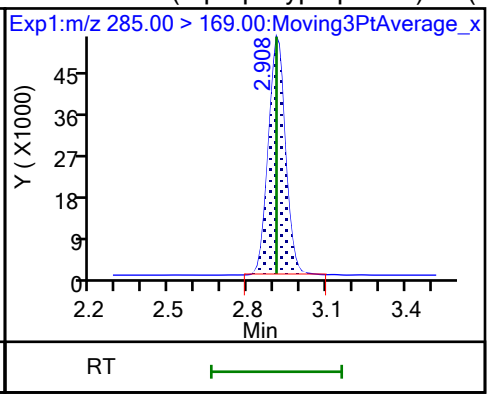
70 Perfluoropentanesulfonic acid



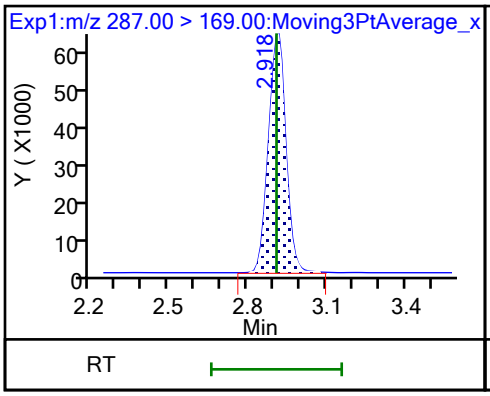
70 Perfluoropentanesulfonic acid



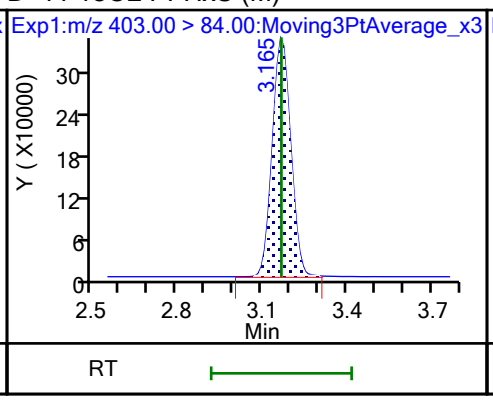
67 Perfluoro(2-propoxypropanoic) ac (M)



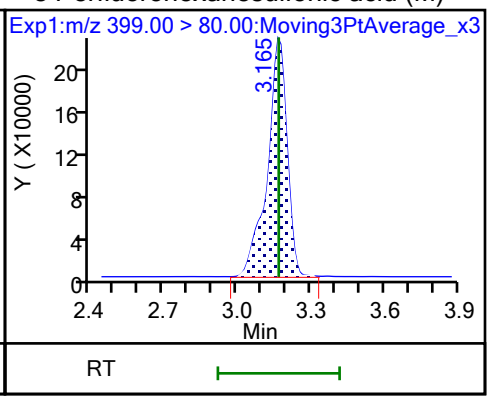
D 64 13C3 HFPO-DA



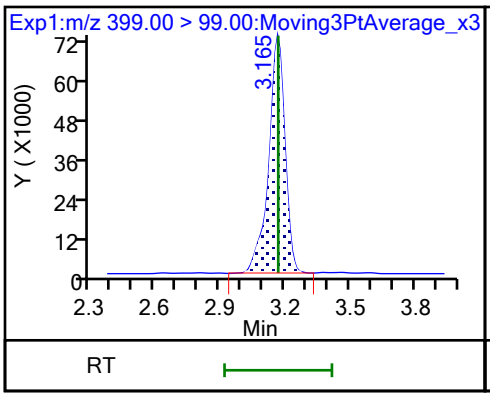
D 11 18O2 PFHxS (M)



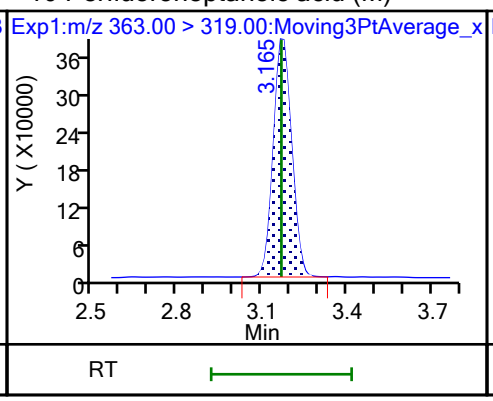
8 Perfluorohexanesulfonic acid (M)



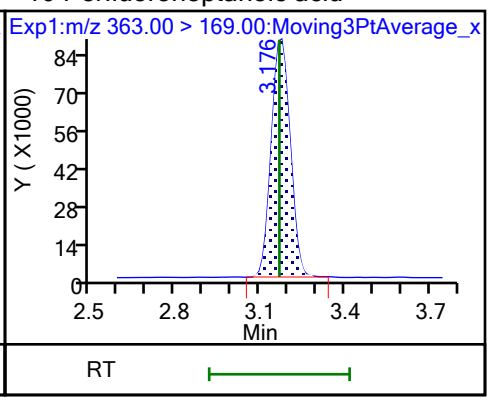
8 Perfluorohexanesulfonic acid



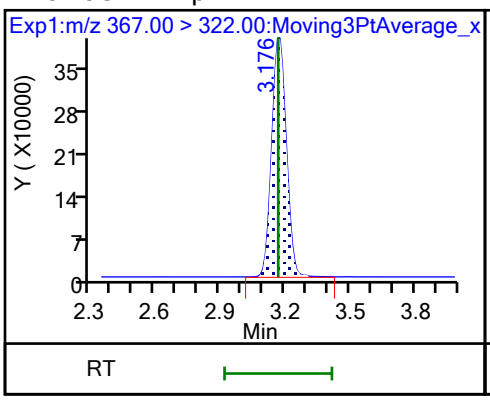
10 Perfluoroheptanoic acid (M)



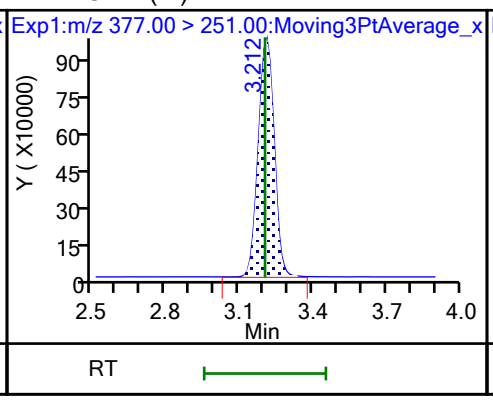
10 Perfluoroheptanoic acid



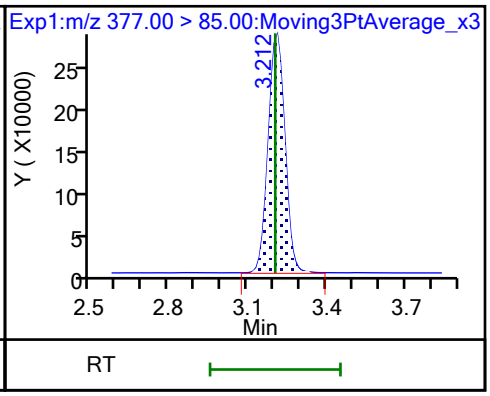
D 9 13C4 PFHpA



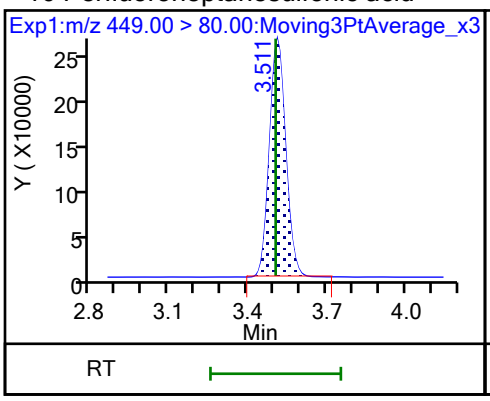
77 DONA (M)



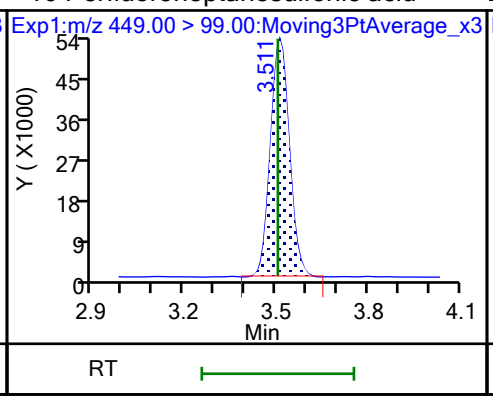
77 DONA



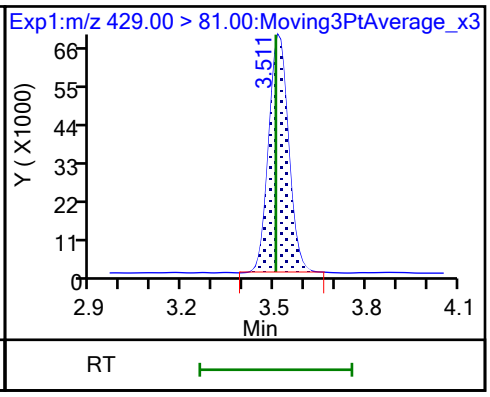
16 Perfluoroheptanesulfonic acid



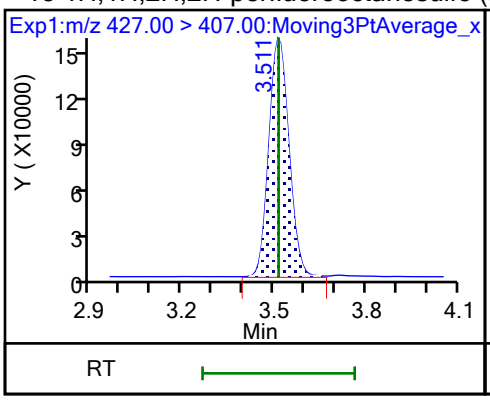
16 Perfluoroheptanesulfonic acid



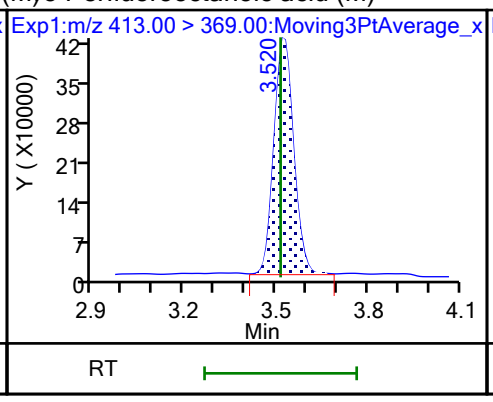
D 12 M2-6:2 FTS



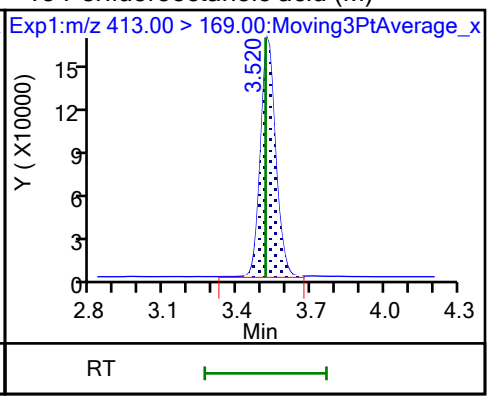
13 1H,1H,2H,2H-perfluorooctanesulfo (M)



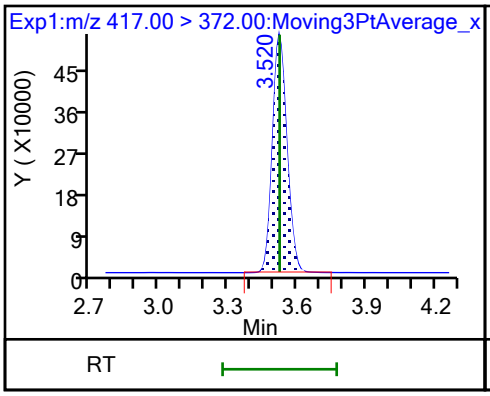
15 Perfluorooctanoic acid (M)



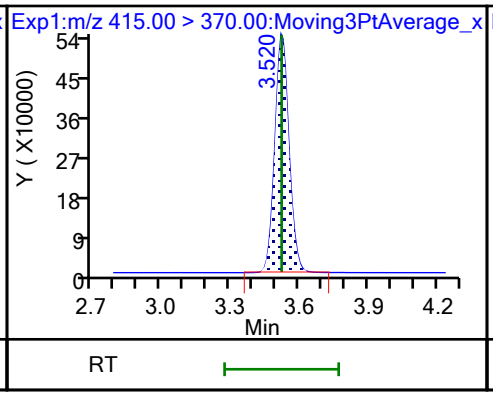
15 Perfluorooctanoic acid (M)



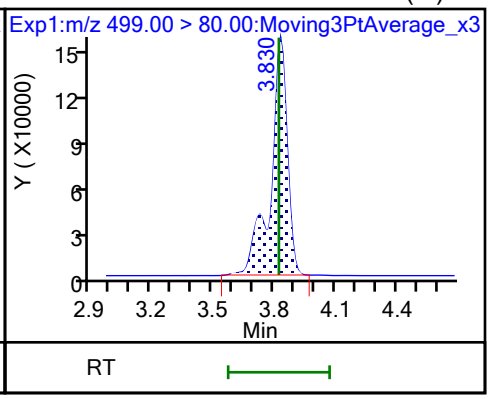
D 14 13C4 PFOA



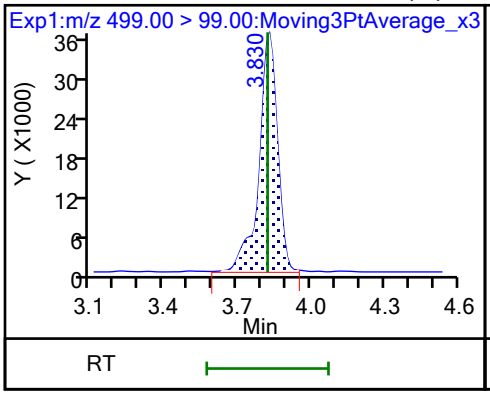
* 62 13C2 PFOA



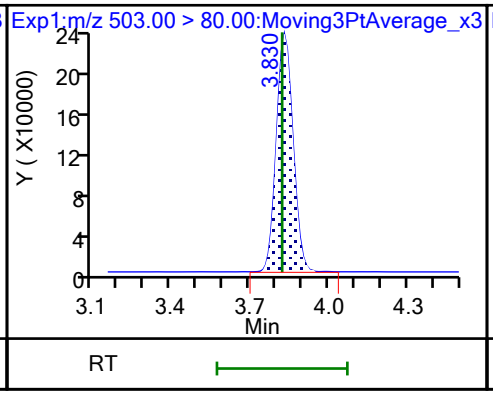
17 Perfluorooctanesulfonic acid (M)



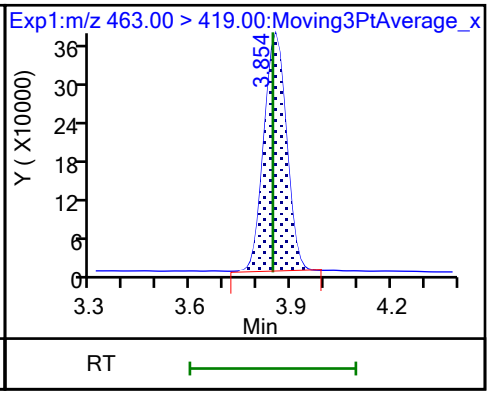
17 Perfluorooctanesulfonic acid (M)



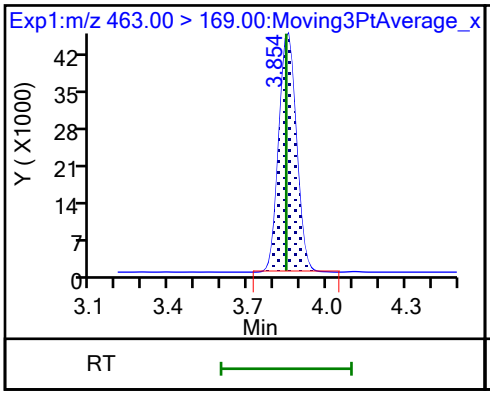
D 18 13C4 PFOS



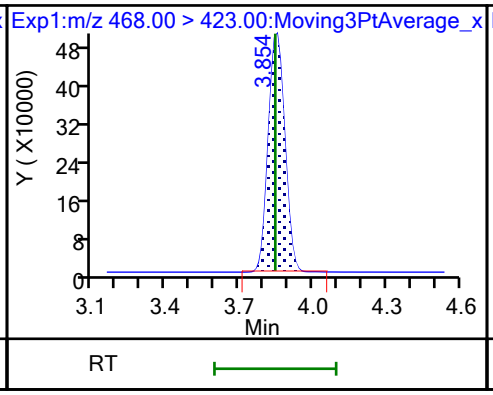
20 Perfluorononanoic acid



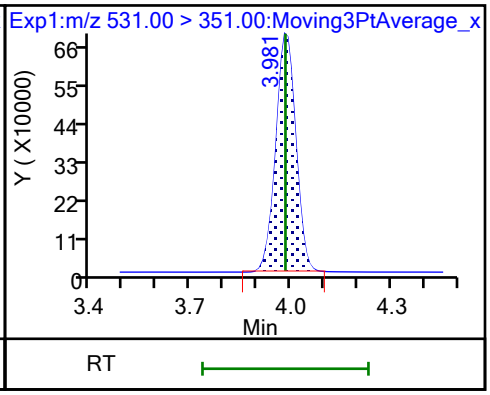
20 Perfluorononanoic acid



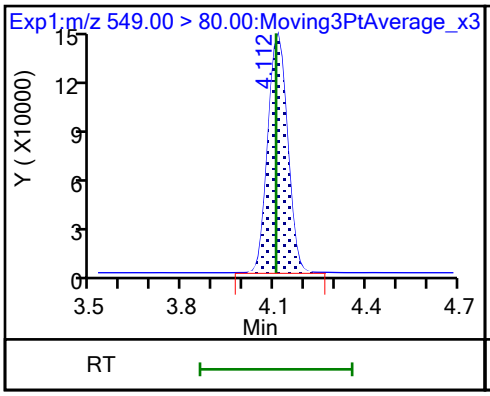
D 19 13C5 PFNA



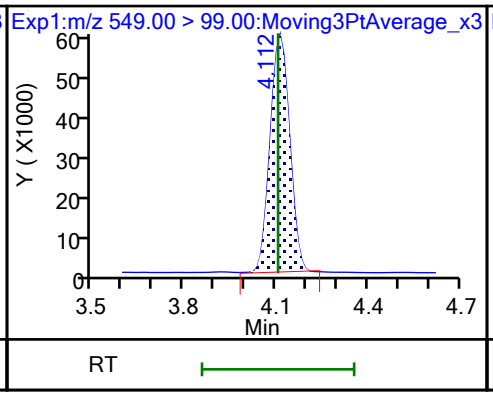
69 9-Chlorohexadecafluoro-3-oxanona (M)



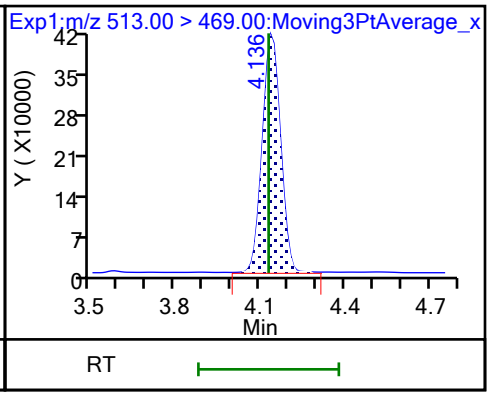
68 Perfluorononanesulfonic acid



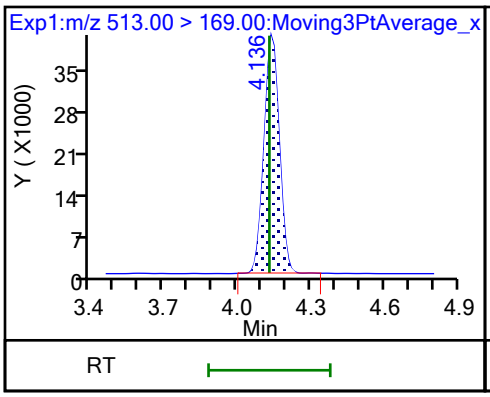
68 Perfluorononanesulfonic acid



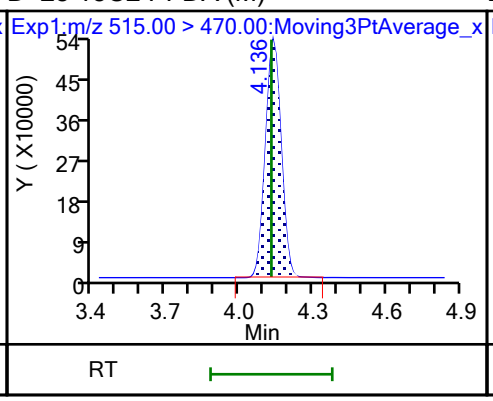
24 Perfluorodecanoic acid



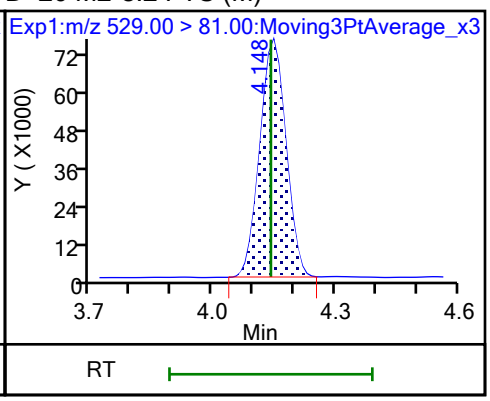
24 Perfluorodecanoic acid



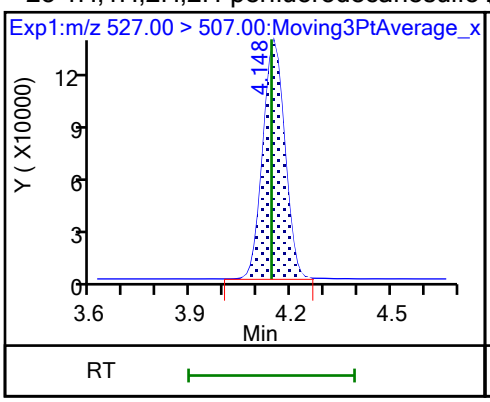
D 23 13C2 PFDA (M)



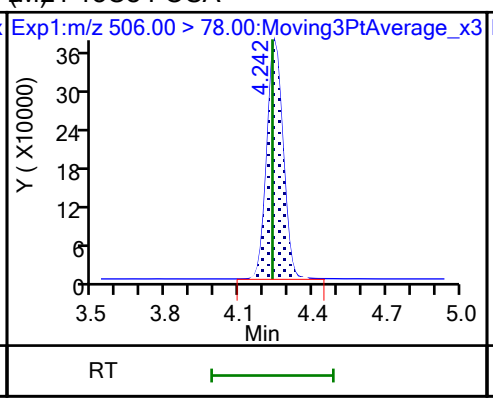
D 26 M2-8:2 FTS (M)



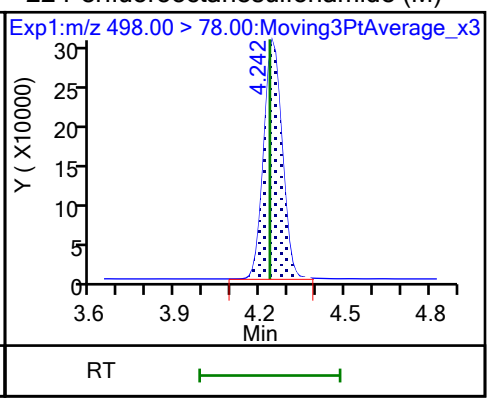
25 1H,1H,2H,2H-perfluorodecanesulfo (M)



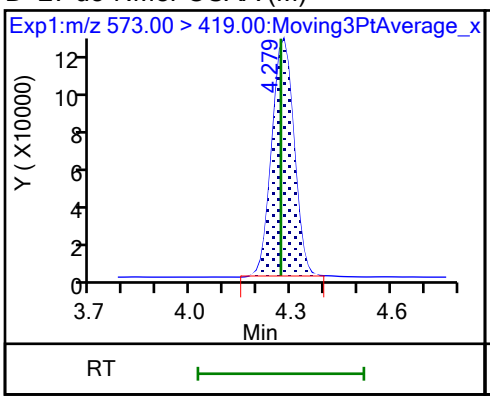
D 21 13C8 FOSA



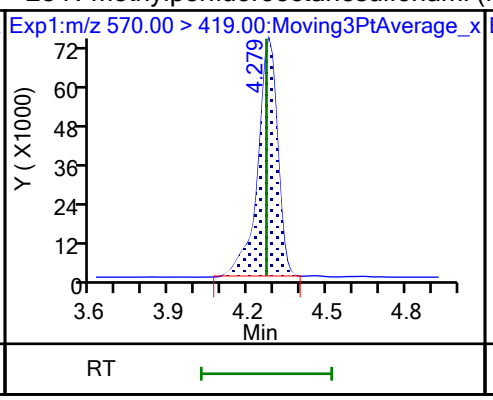
22 Perfluorooctanesulfonamide (M)



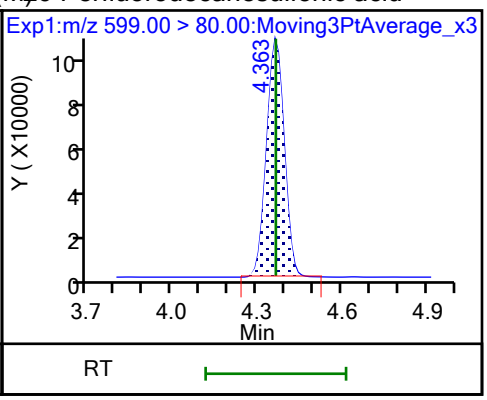
D 27 d3-NMeFOSAA (M)



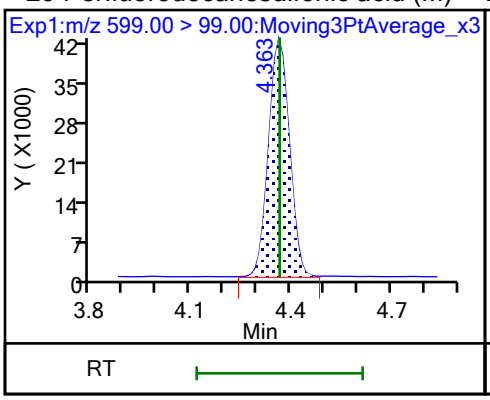
28 N-methylperfluorooctanesulfonami (M)



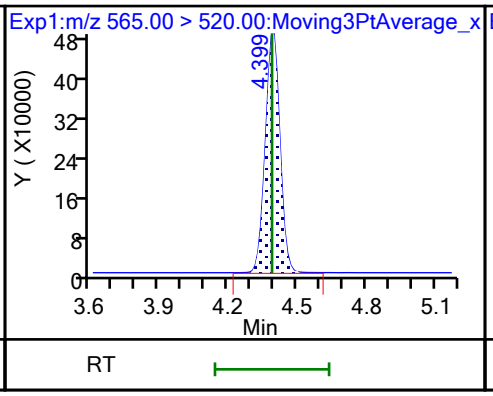
29 Perfluorodecanesulfonic acid



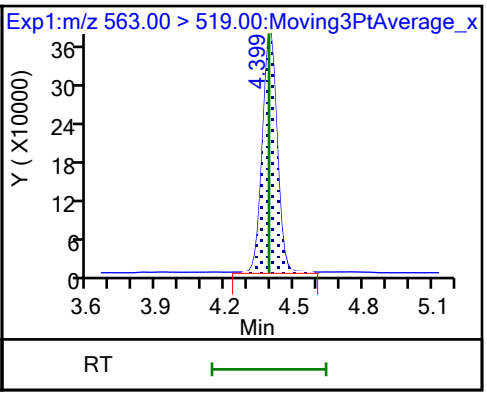
29 Perfluorodecanesulfonic acid (M)



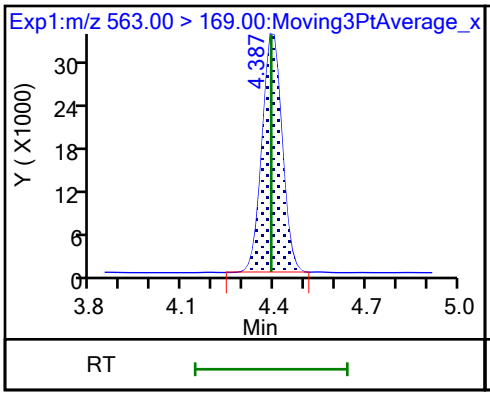
D 30 13C2 PFUnA



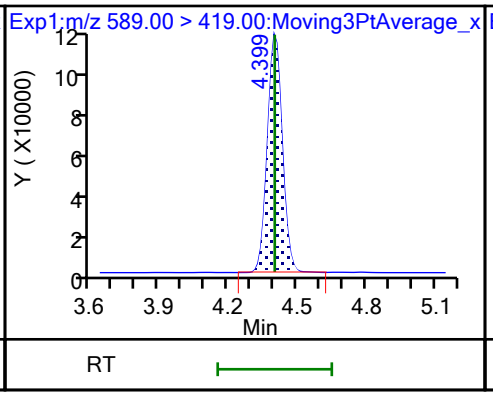
31 Perfluoroundecanoic acid



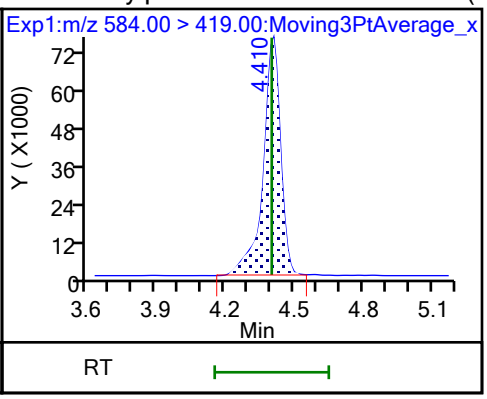
31 Perfluoroundecanoic acid



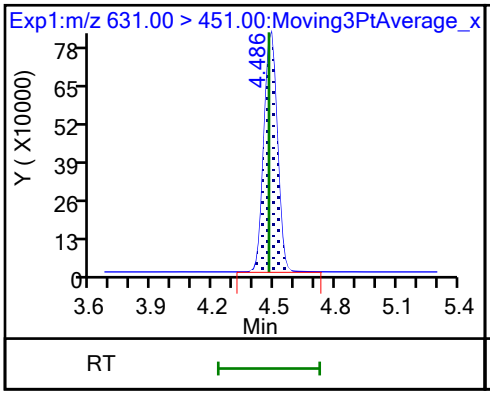
D 32 d5-NEtFOSAA



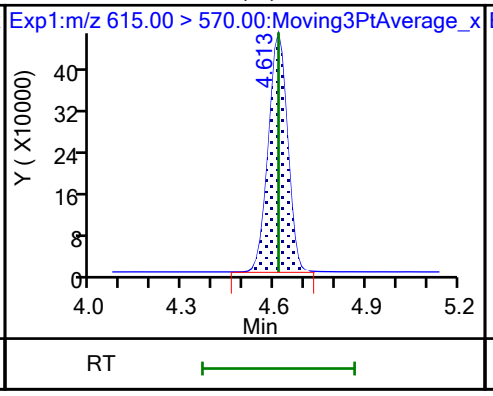
33 N-ethylperfluorooctanesulfonamid (M)



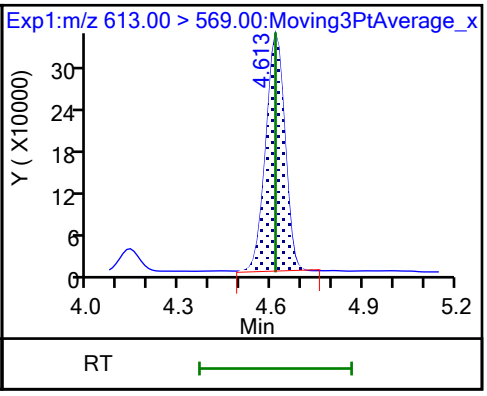
66 11-Chloroeicosafluoro-3-oxaundec



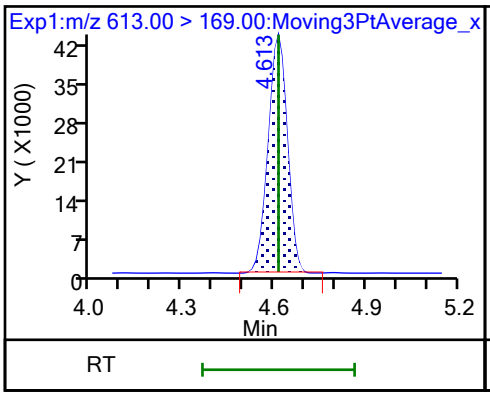
D 36 13C2 PFDoA (M)



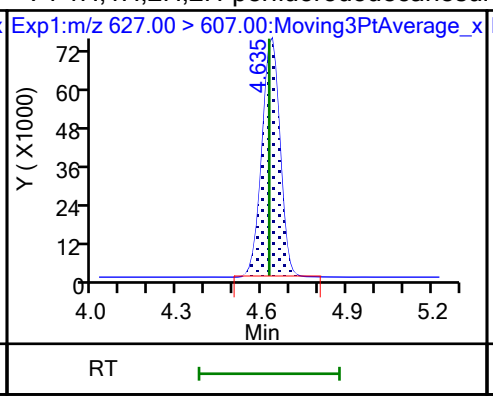
37 Perfluorododecanoic acid



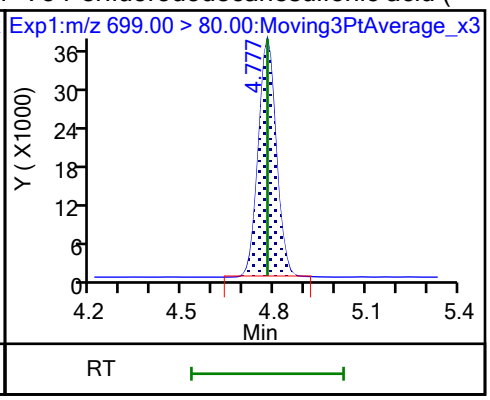
37 Perfluorododecanoic acid



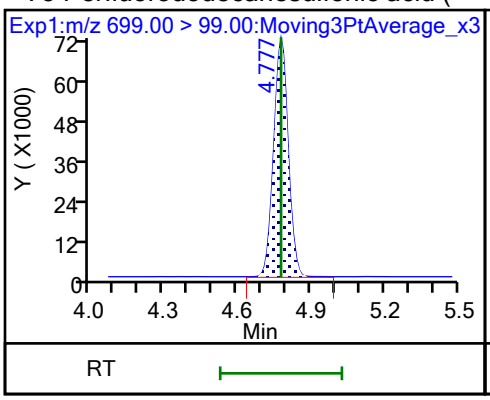
74 1H,1H,2H,2H-perfluorododecanesul



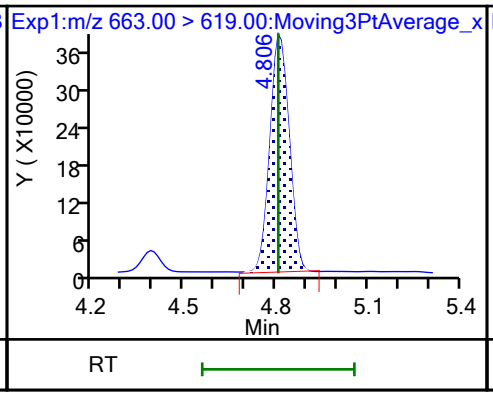
75 Perfluorododecanesulfonic acid (



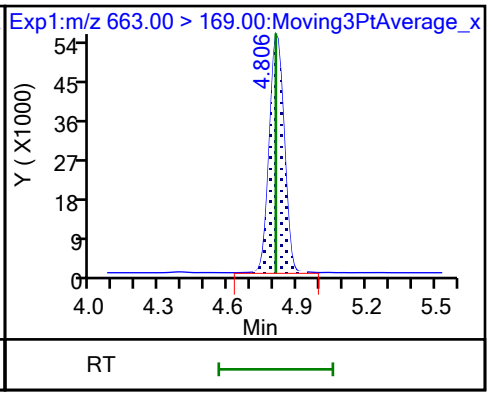
75 Perfluorododecanesulfonic acid (



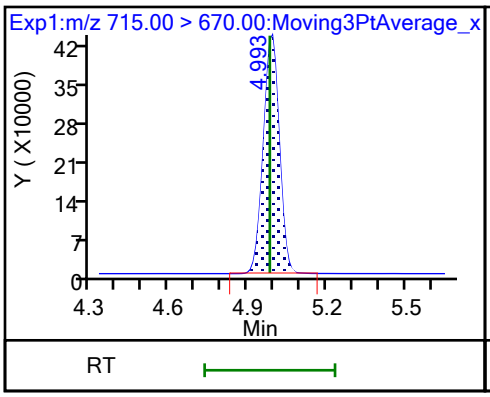
41 Perfluorotridecanoic acid



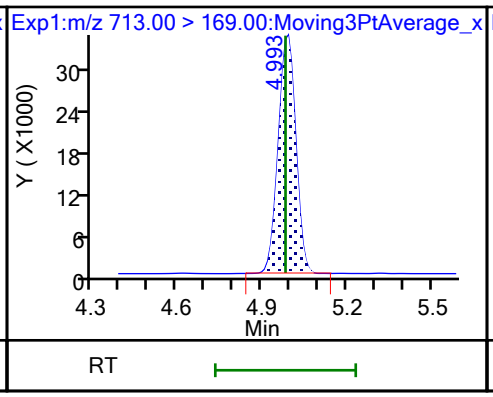
41 Perfluorotridecanoic acid



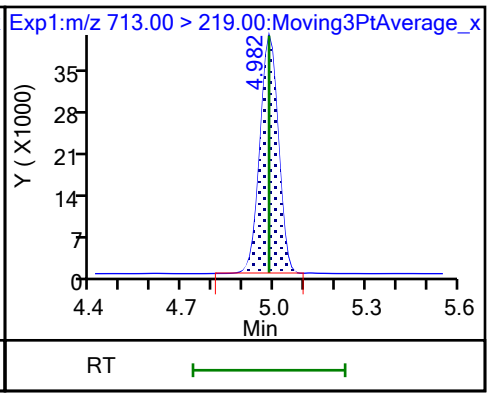
D 43 13C2 PFTeDA



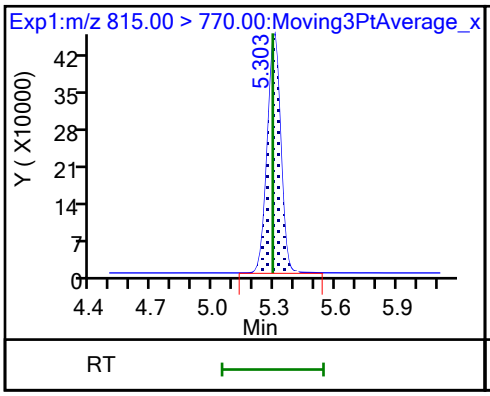
42 Perfluorotetradecanoic acid



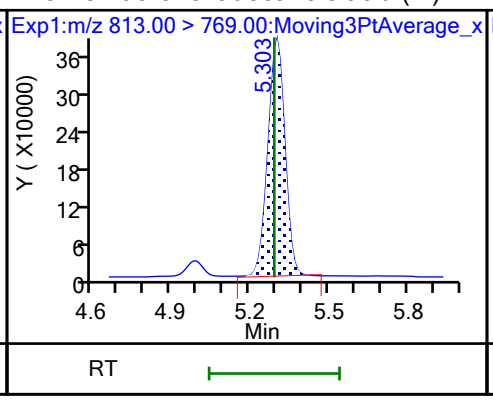
42 Perfluorotetradecanoic acid



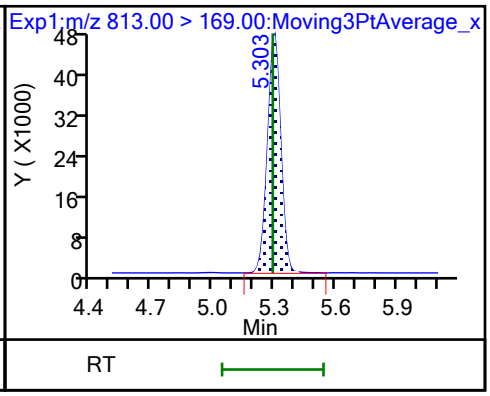
D 44 13C2 PFHxDA



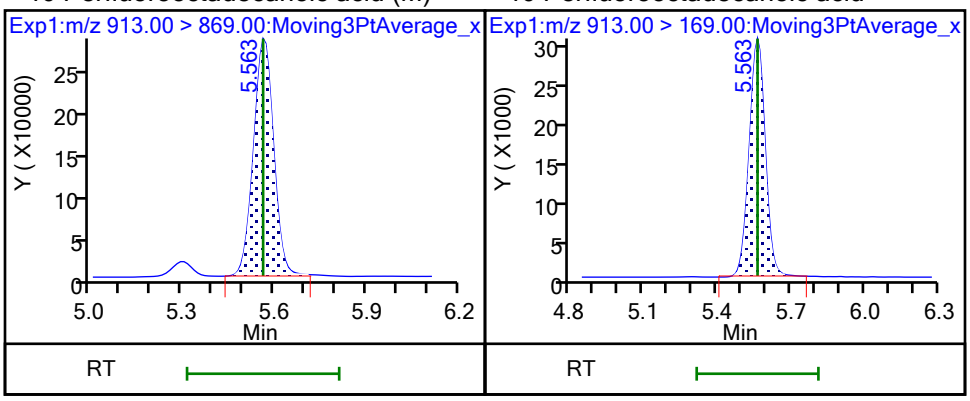
45 Perfluorohexadecanoic acid (M)



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins Burlington

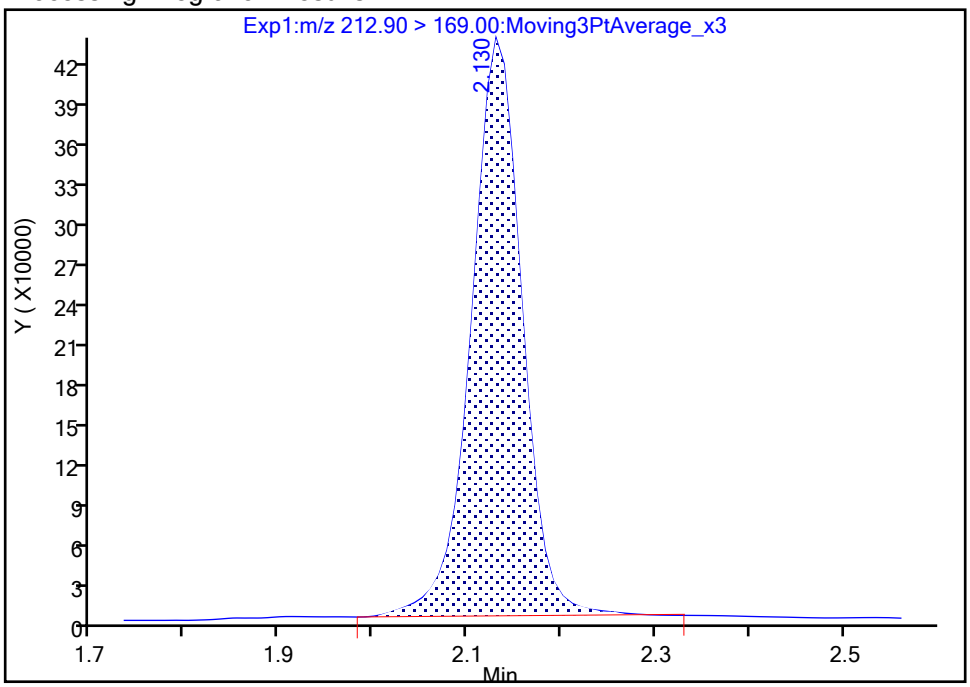
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

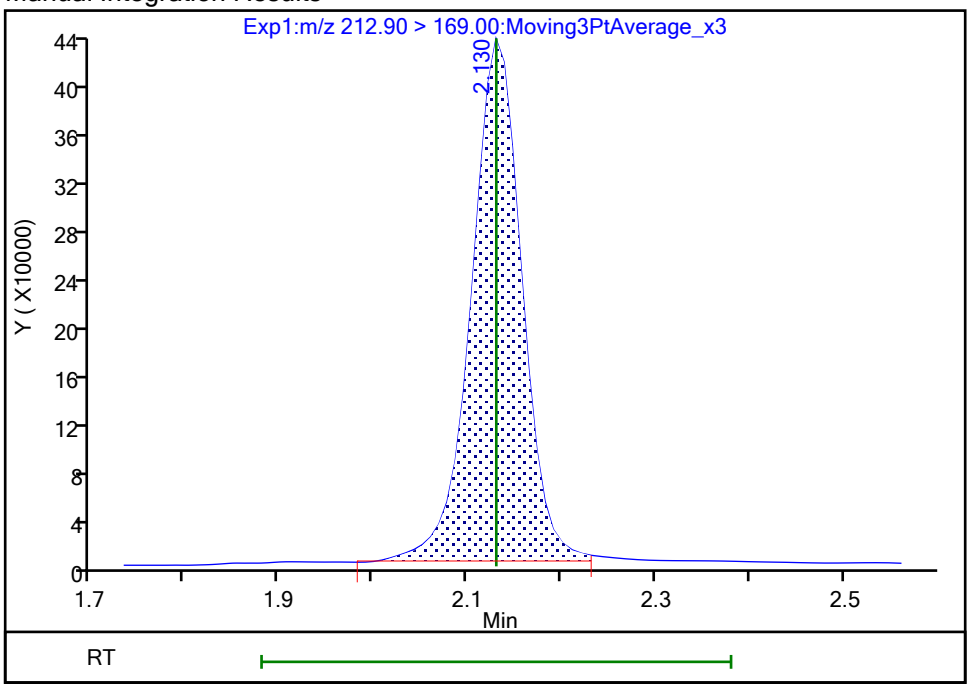
Processing Integration Results

RT: 2.13
Area: 1629754
Amount: 0.968114
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 1620568
Amount: 0.962427
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:50 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

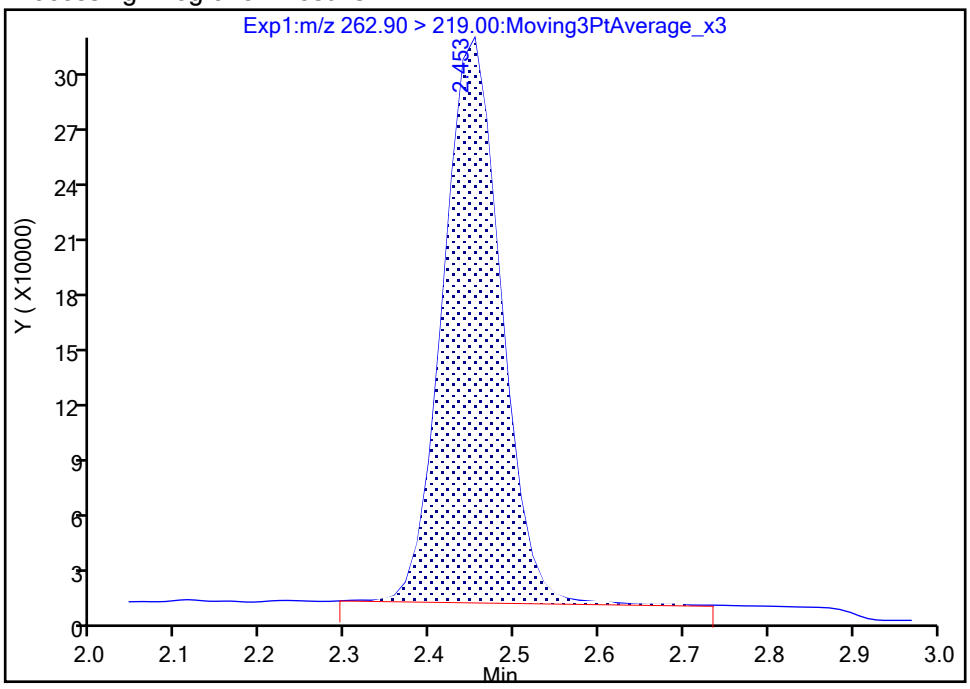
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

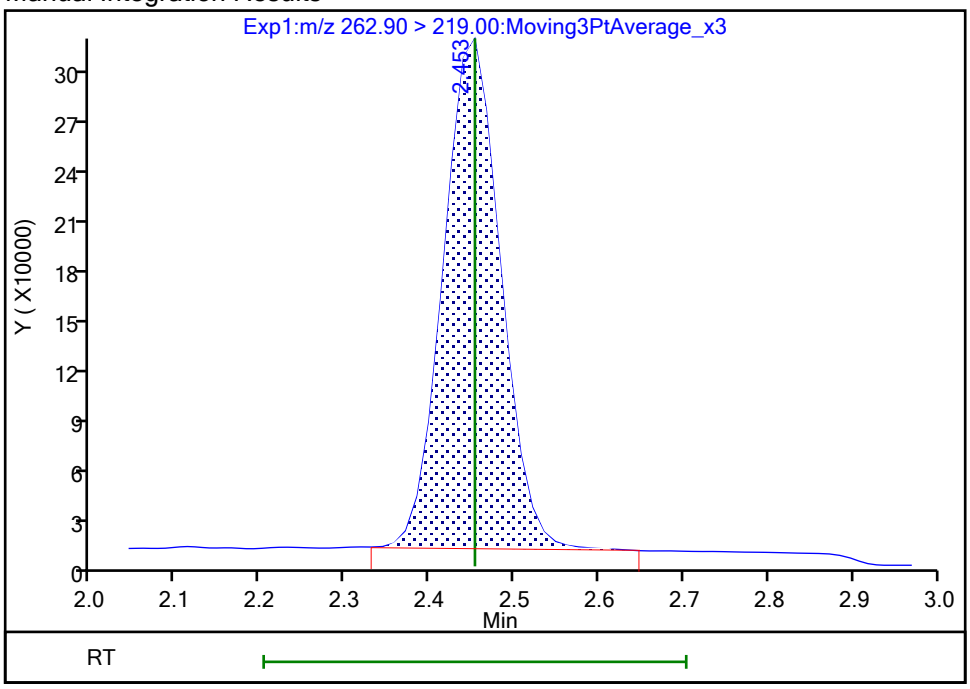
Processing Integration Results

RT: 2.45
Area: 1441999
Amount: 1.051721
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 1434518
Amount: 1.046265
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:55 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

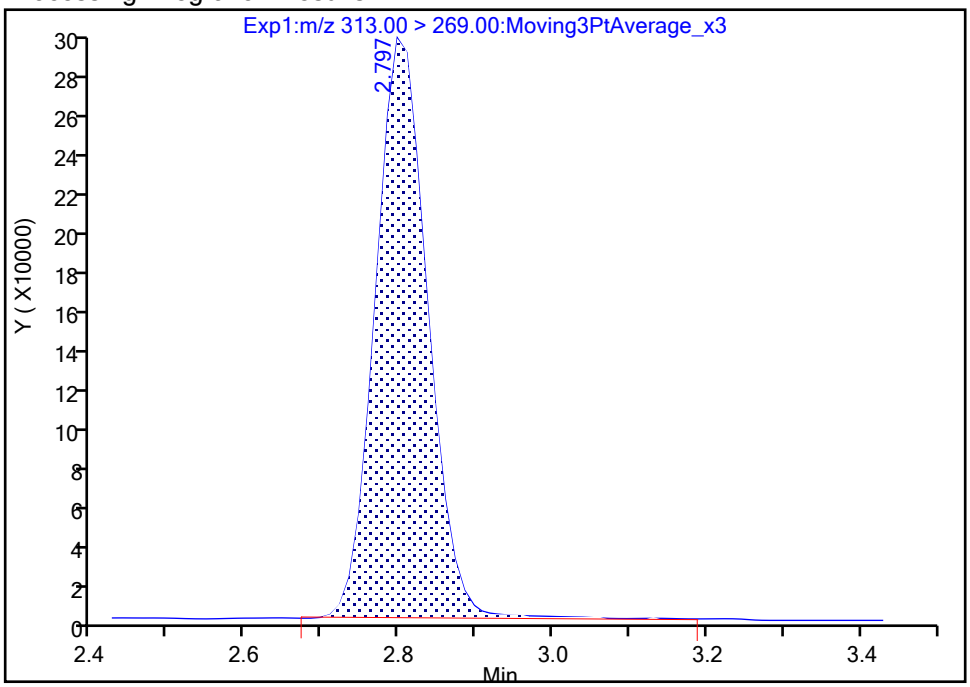
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

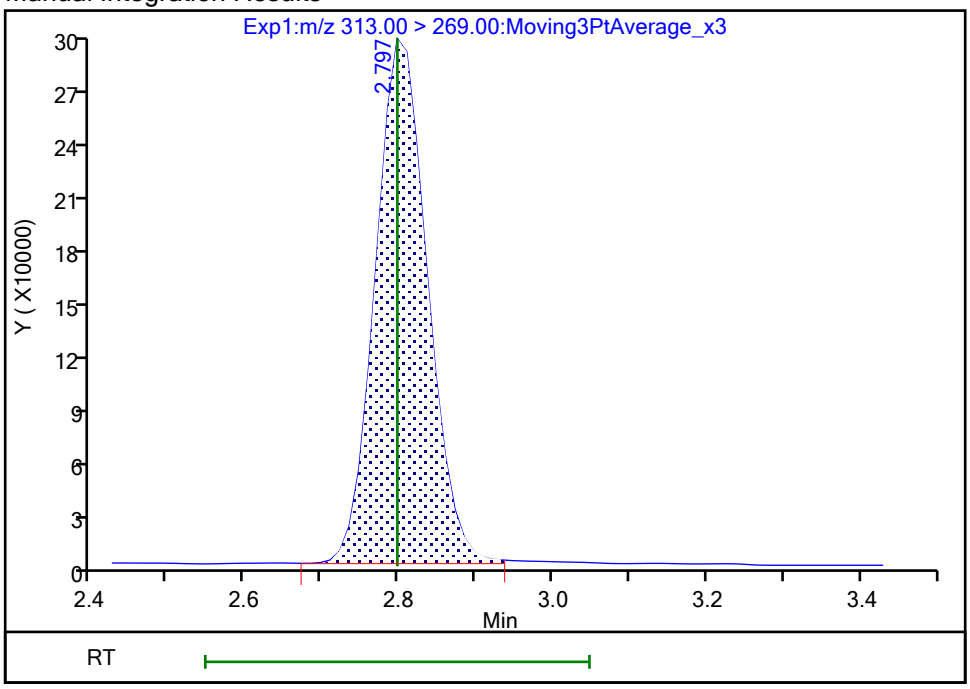
Processing Integration Results

RT: 2.80
Area: 1413832
Amount: 0.963539
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1404008
Amount: 0.956844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:29 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

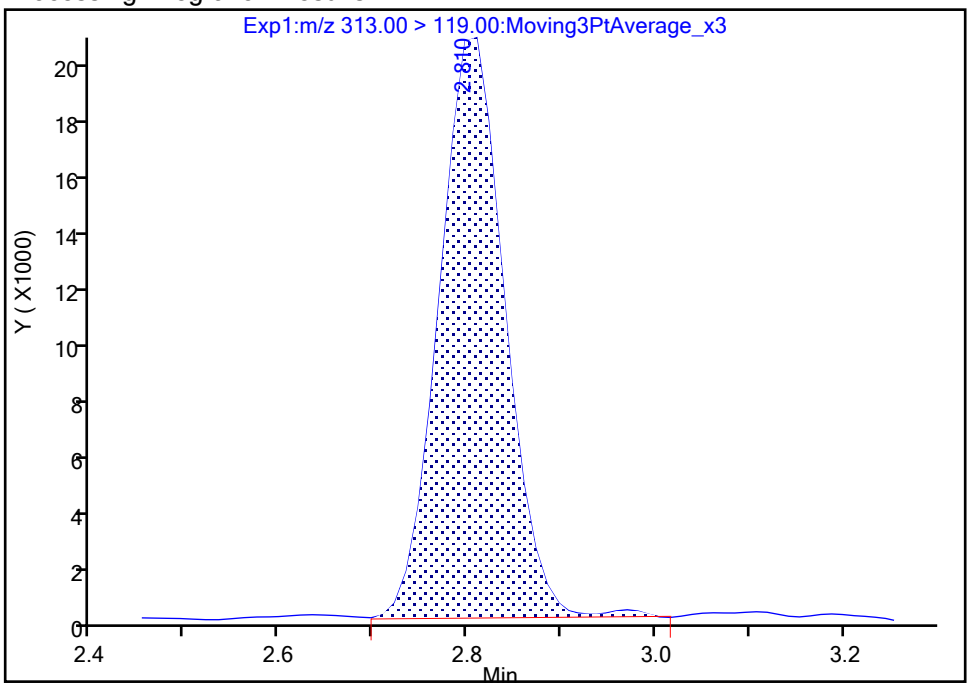
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

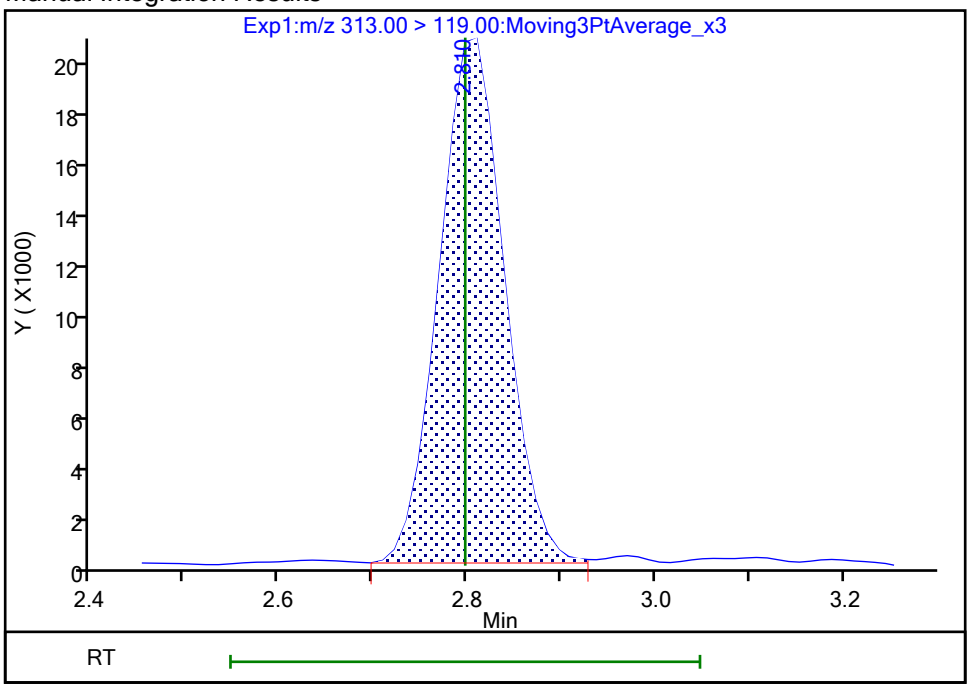
Processing Integration Results

RT: 2.81
Area: 100256
Amount: 0.963539
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 99465
Amount: 0.956844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

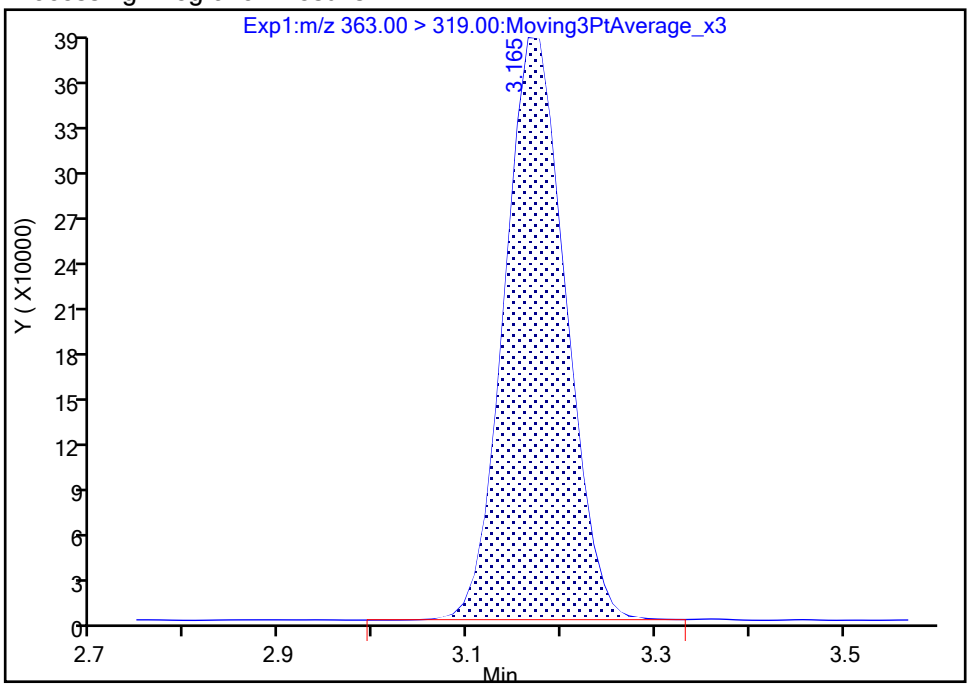
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

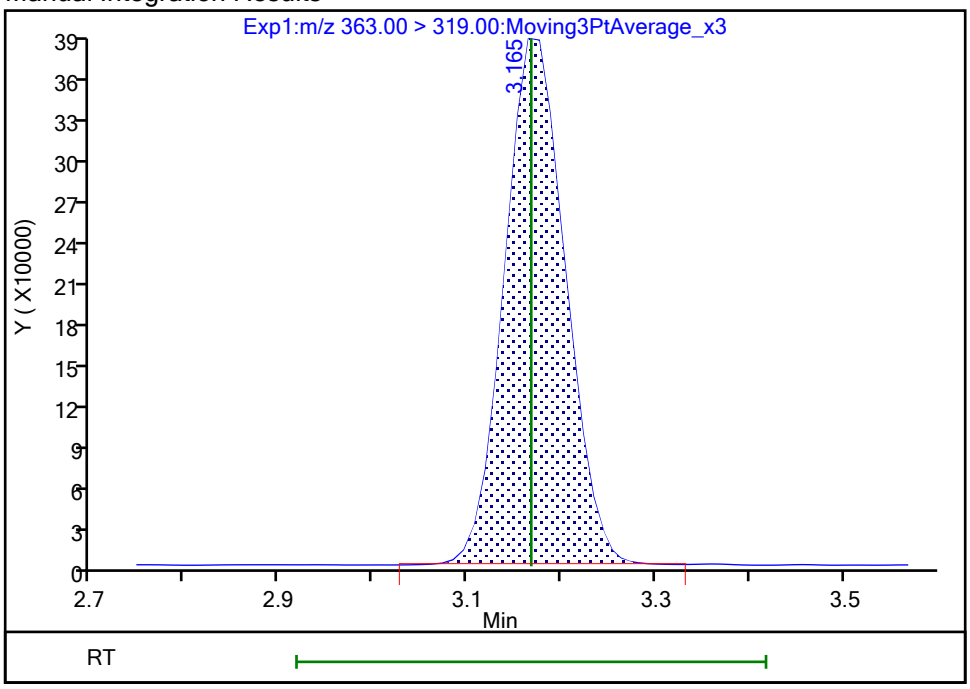
Processing Integration Results

RT: 3.16
Area: 1755340
Amount: 1.046517
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1750442
Amount: 1.043597
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

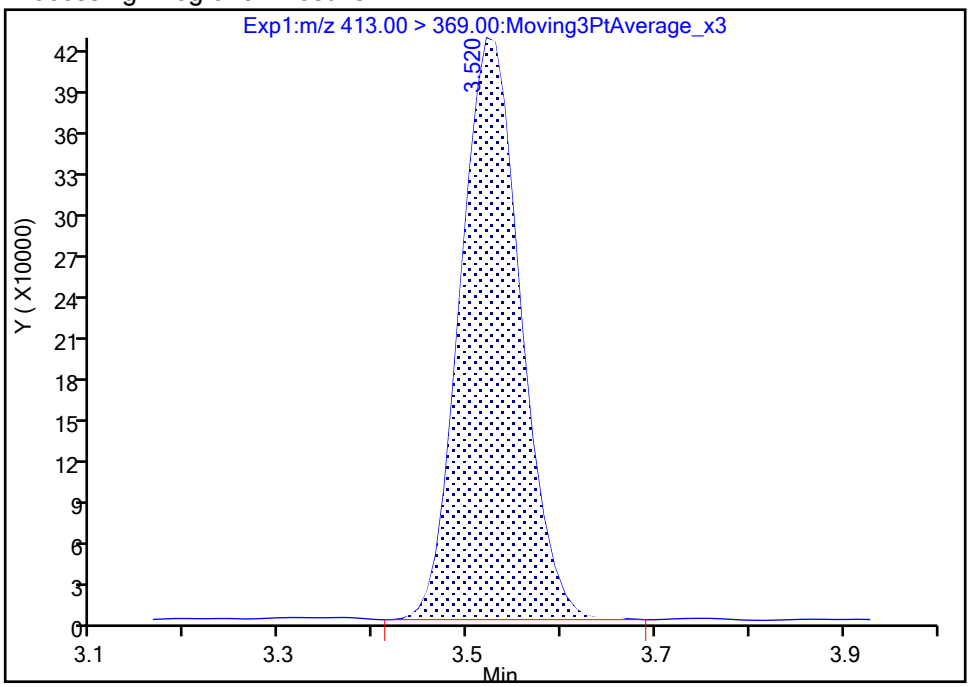
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

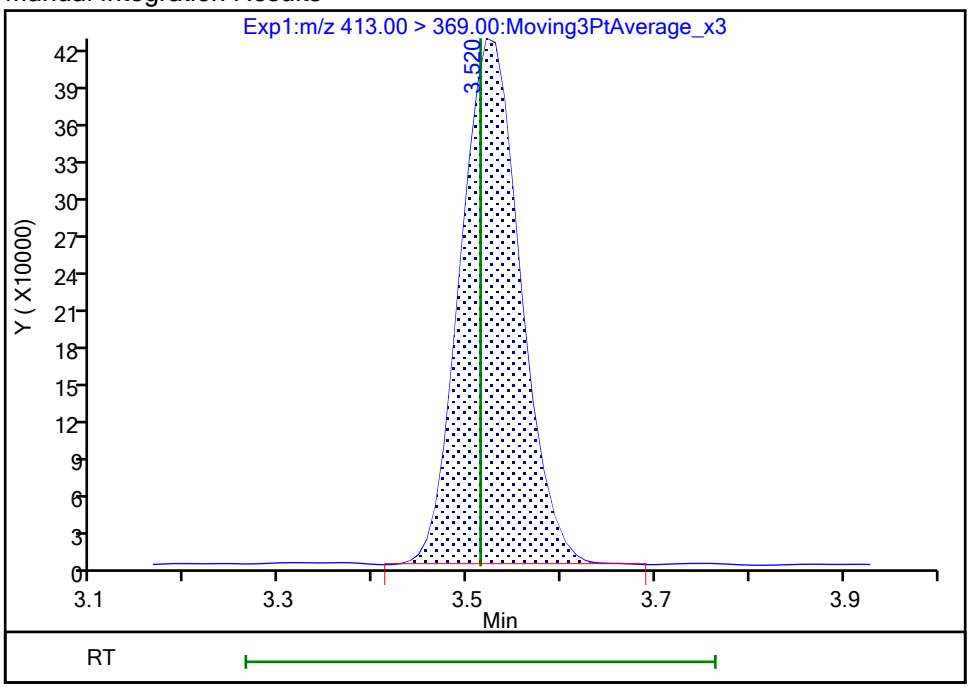
Processing Integration Results

RT: 3.52
Area: 1880890
Amount: 0.966475
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 1877921
Amount: 0.964949
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:58 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

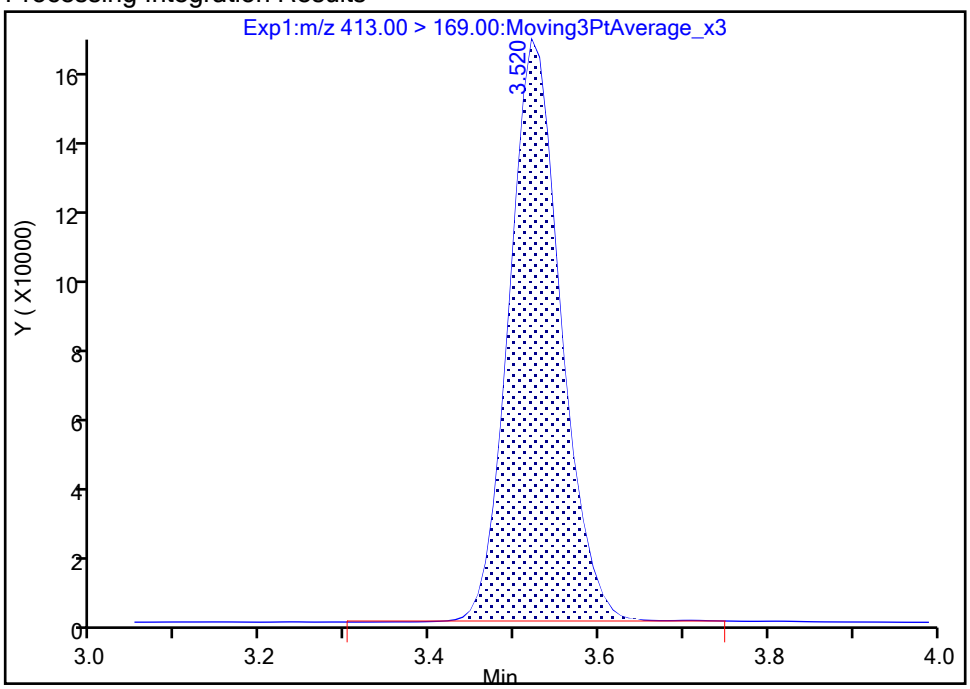
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

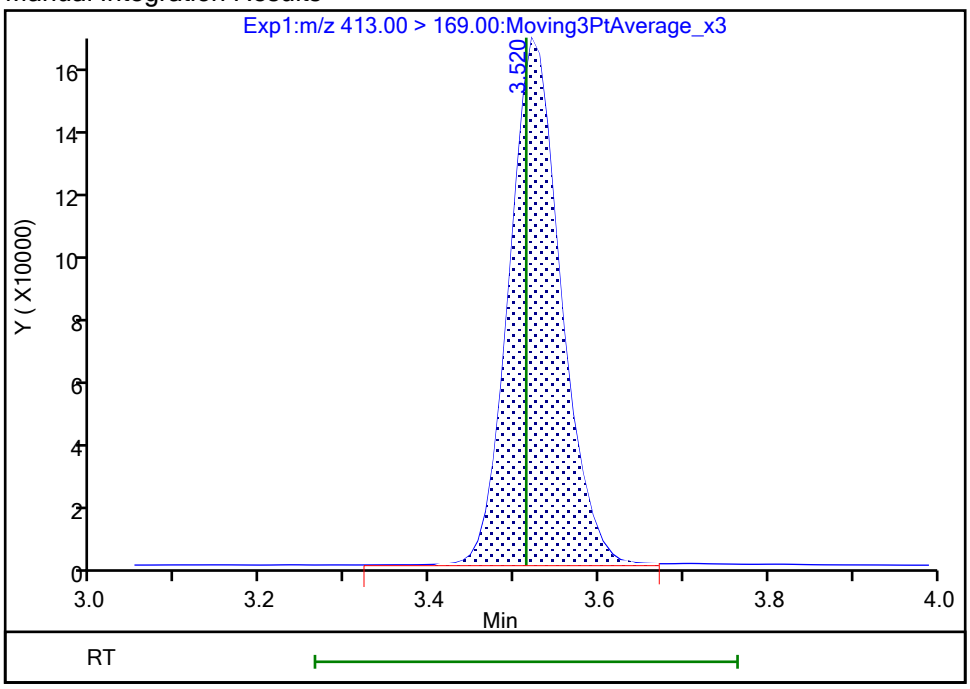
Processing Integration Results

RT: 3.52
Area: 677440
Amount: 0.966475
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 677681
Amount: 0.964949
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

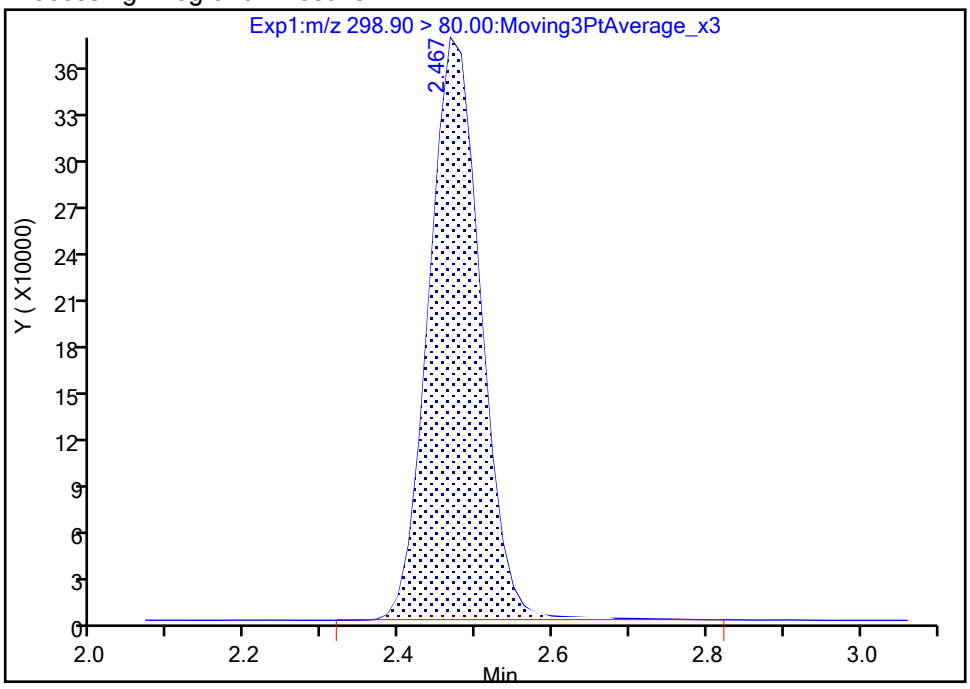
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

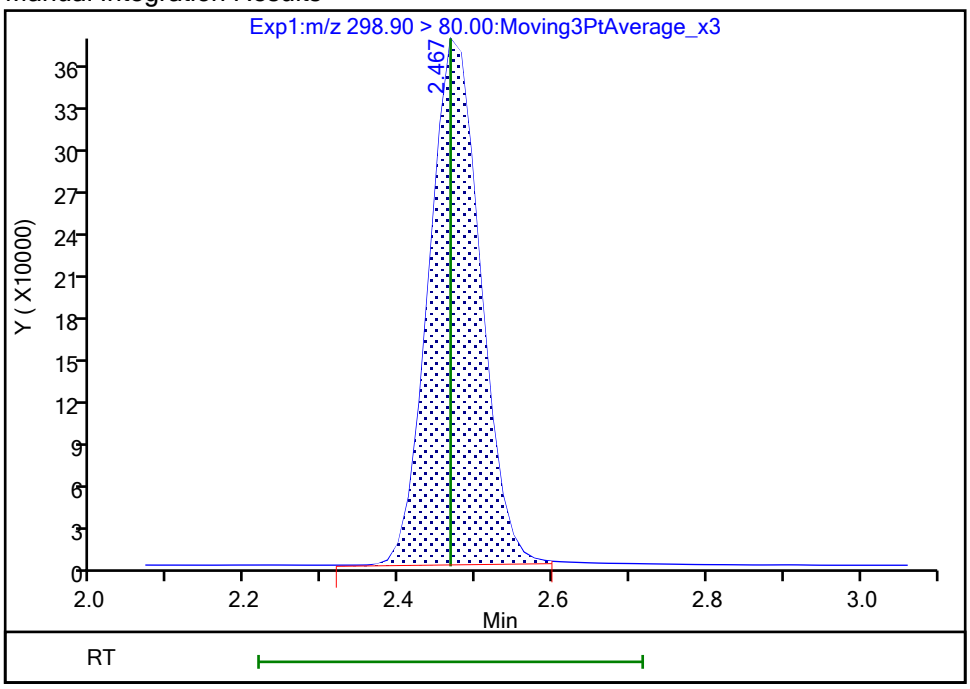
Processing Integration Results

RT: 2.47
Area: 1762566
Amount: 0.901041
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 1750536
Amount: 0.894891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:09 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

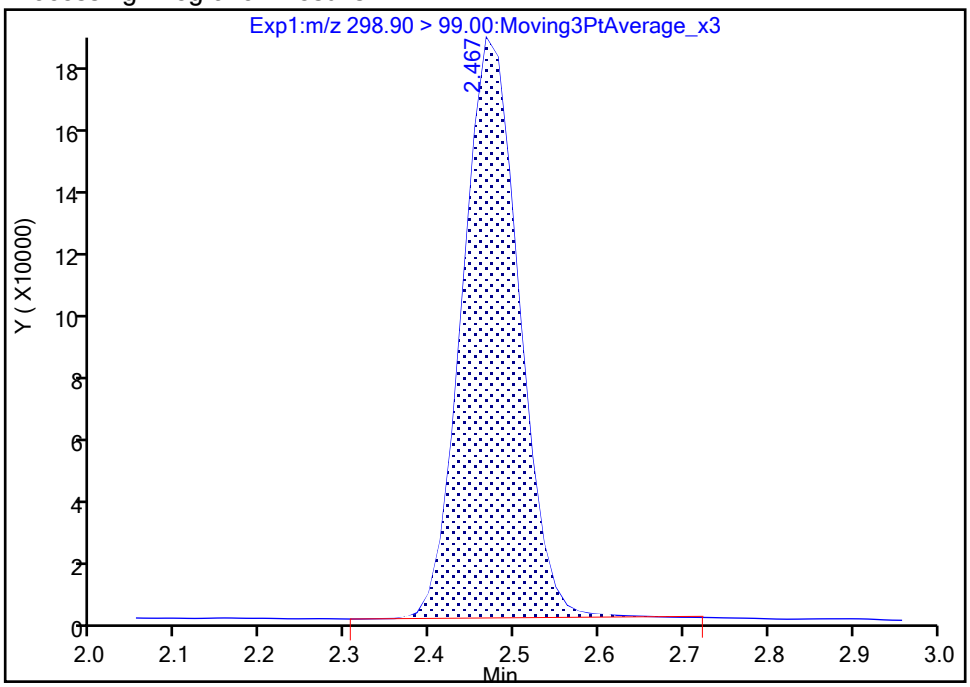
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

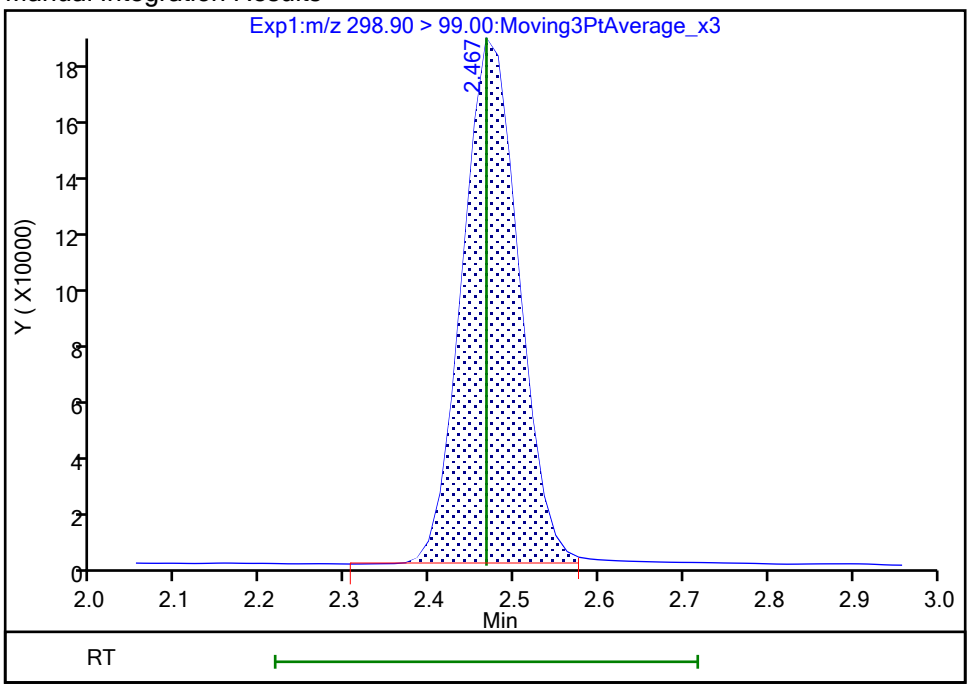
Processing Integration Results

RT: 2.47
Area: 859952
Amount: 0.901041
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 854629
Amount: 0.894891
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:30:13 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

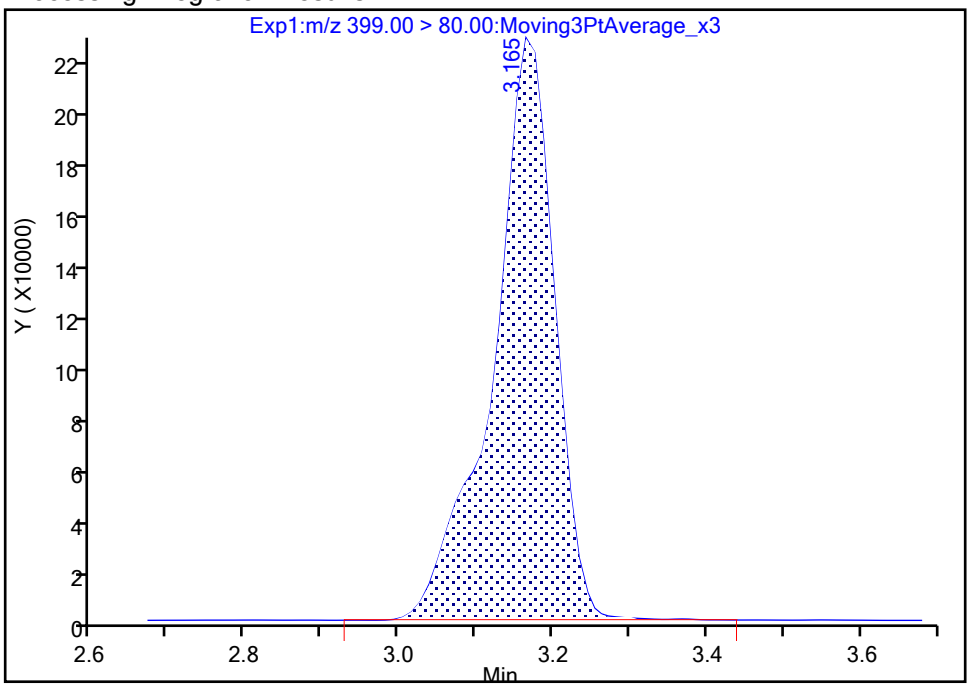
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

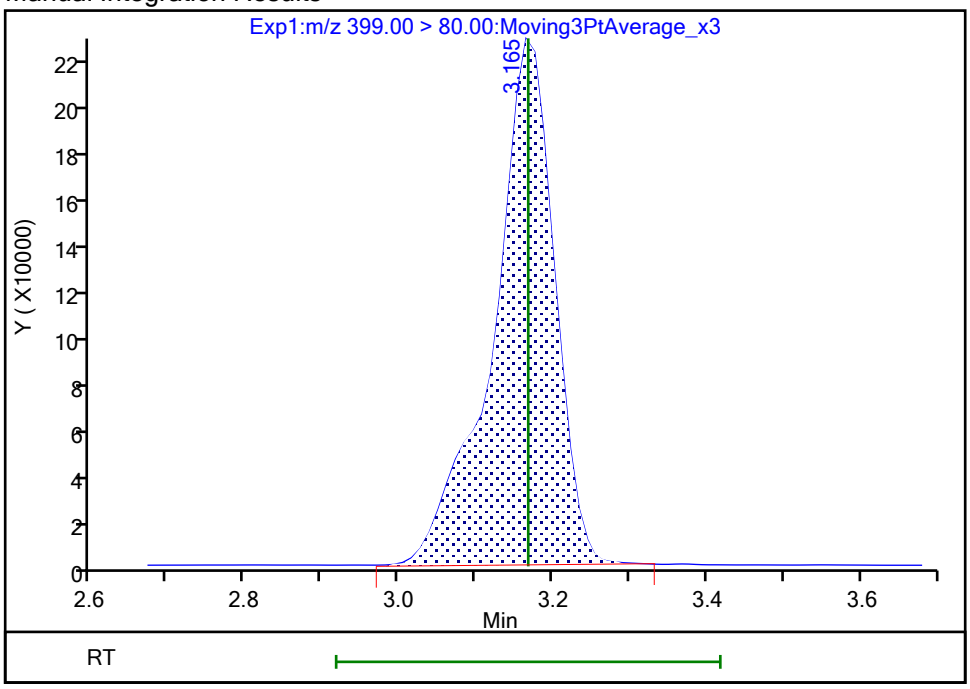
Processing Integration Results

RT: 3.16
Area: 1245555
Amount: 0.843084
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1240291
Amount: 0.839521
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

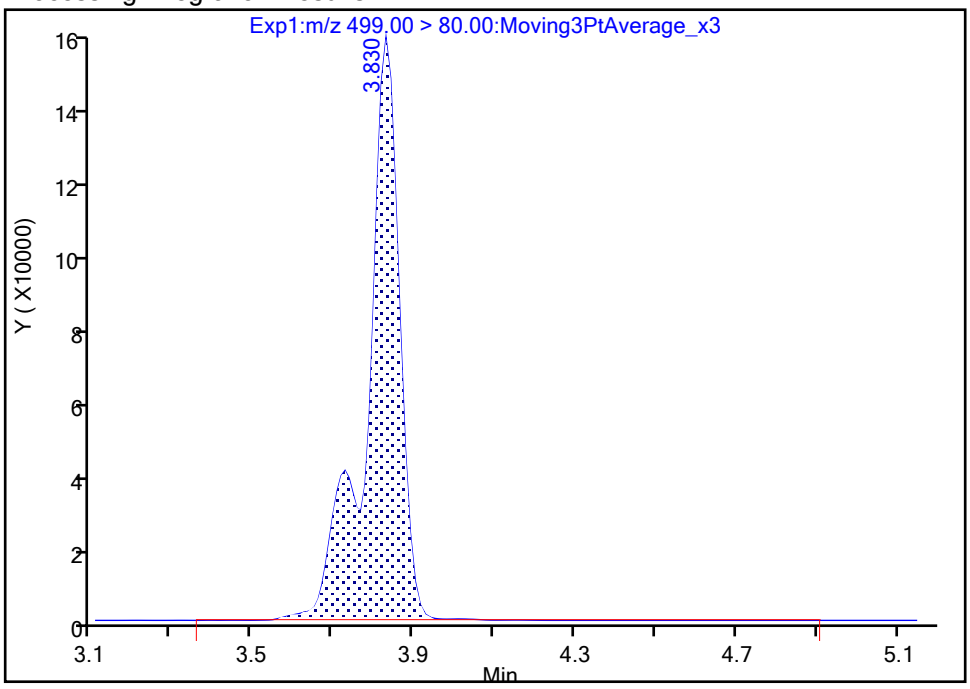
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

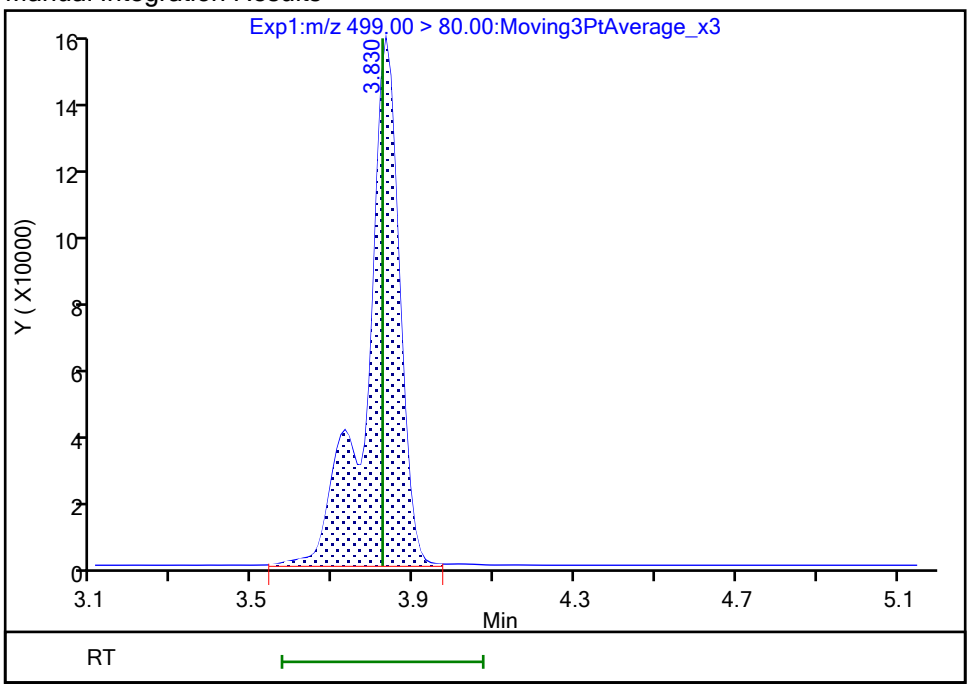
Processing Integration Results

RT: 3.83
Area: 869912
Amount: 0.868193
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 866301
Amount: 0.864589
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:28 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

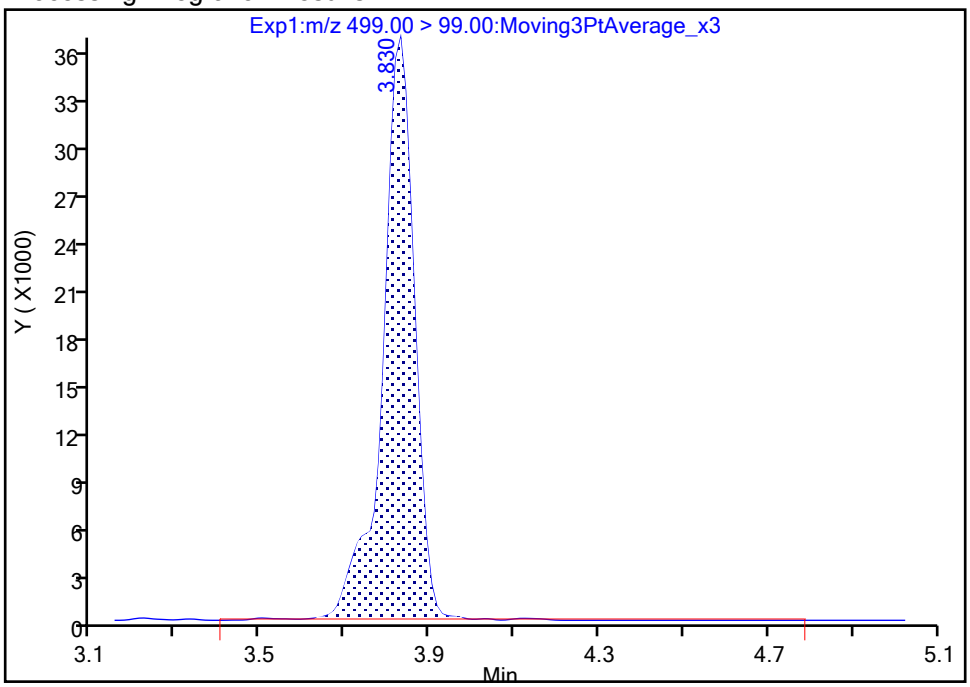
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

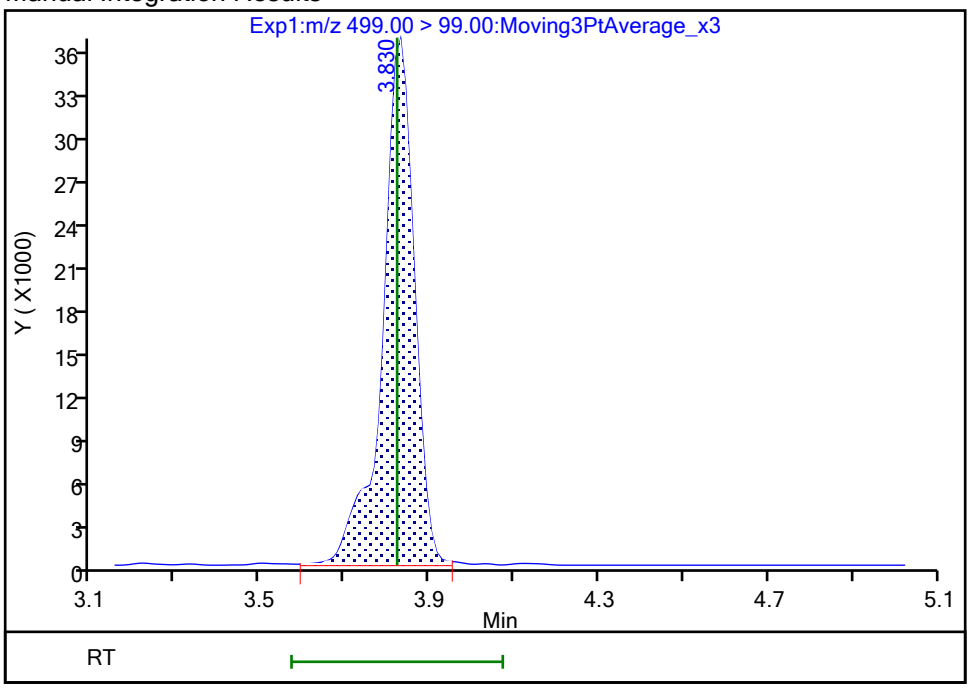
Processing Integration Results

RT: 3.83
Area: 191662
Amount: 0.868193
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 189203
Amount: 0.864589
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:34 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

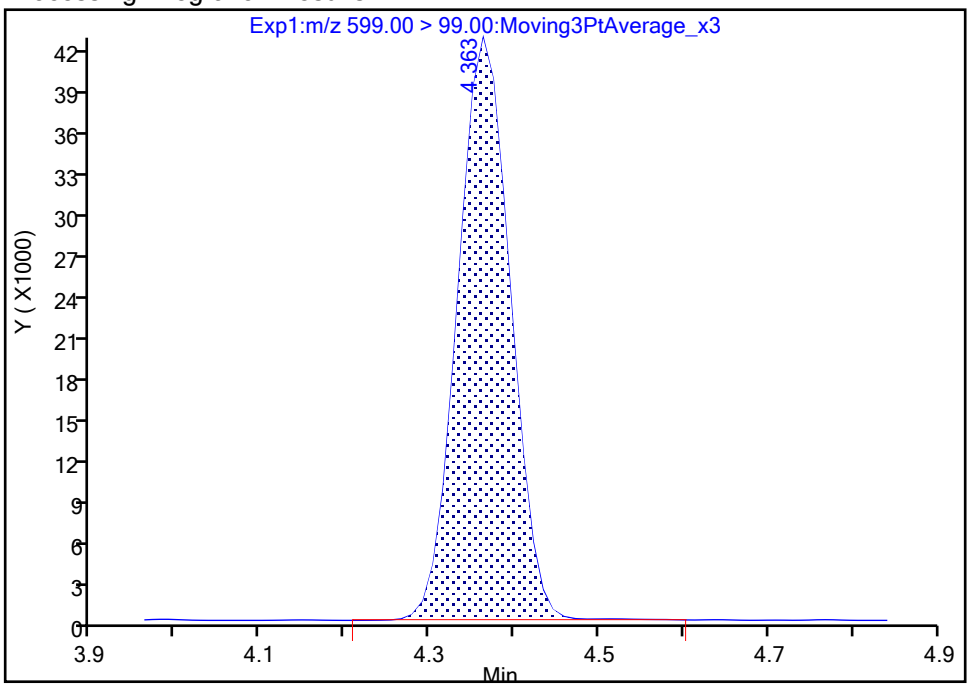
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

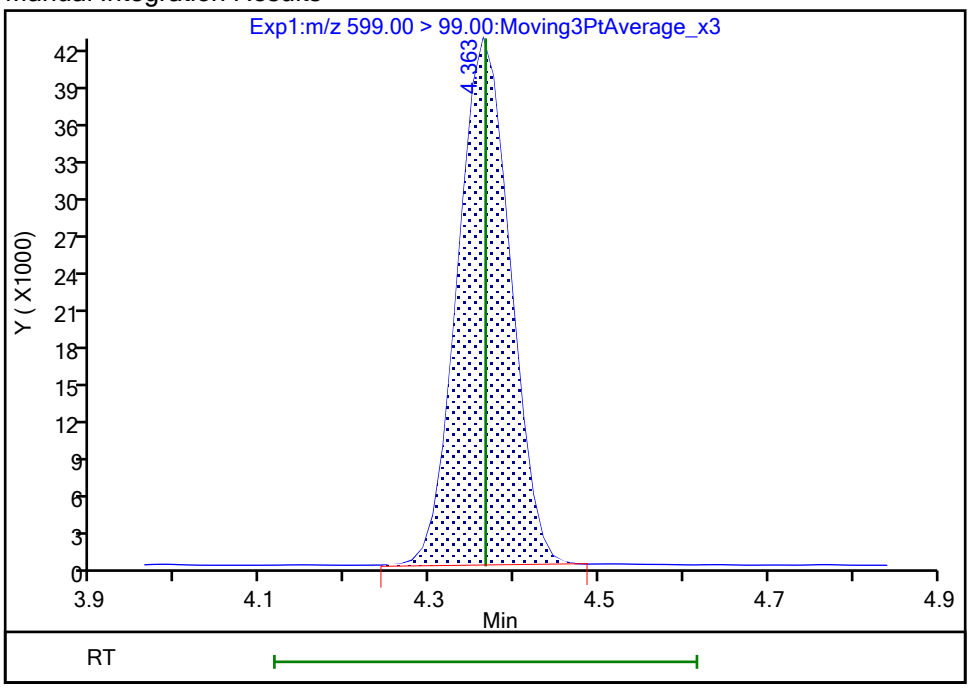
Processing Integration Results

RT: 4.36
Area: 183177
Amount: 0.747731
Amount Units: ng/ml



Manual Integration Results

RT: 4.36
Area: 181878
Amount: 0.747731
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:11 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

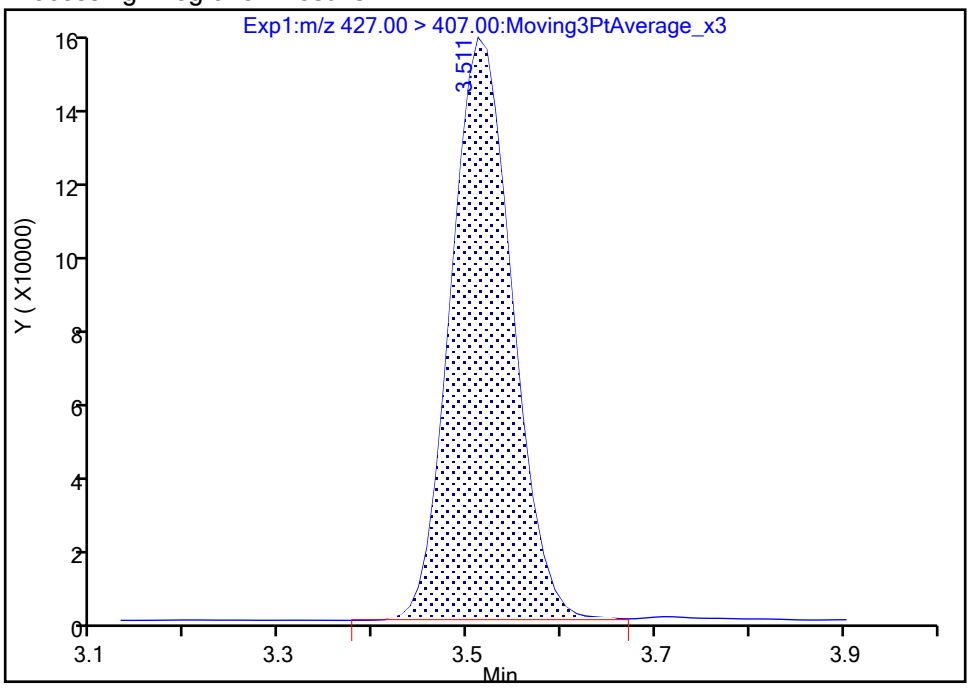
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

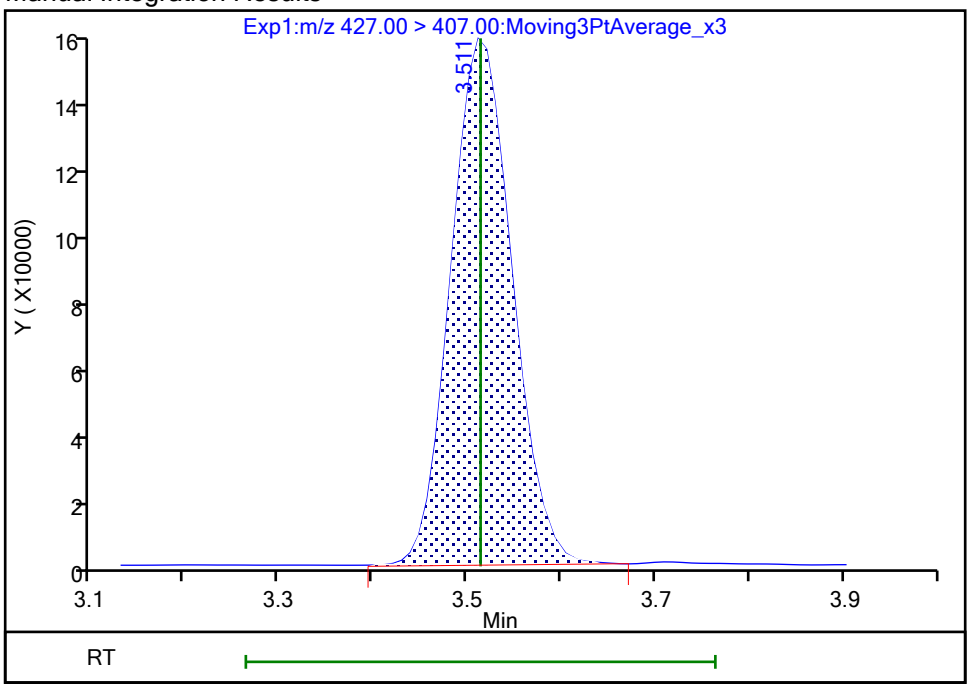
Processing Integration Results

RT: 3.51
Area: 692685
Amount: 0.974652
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 689268
Amount: 0.969844
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

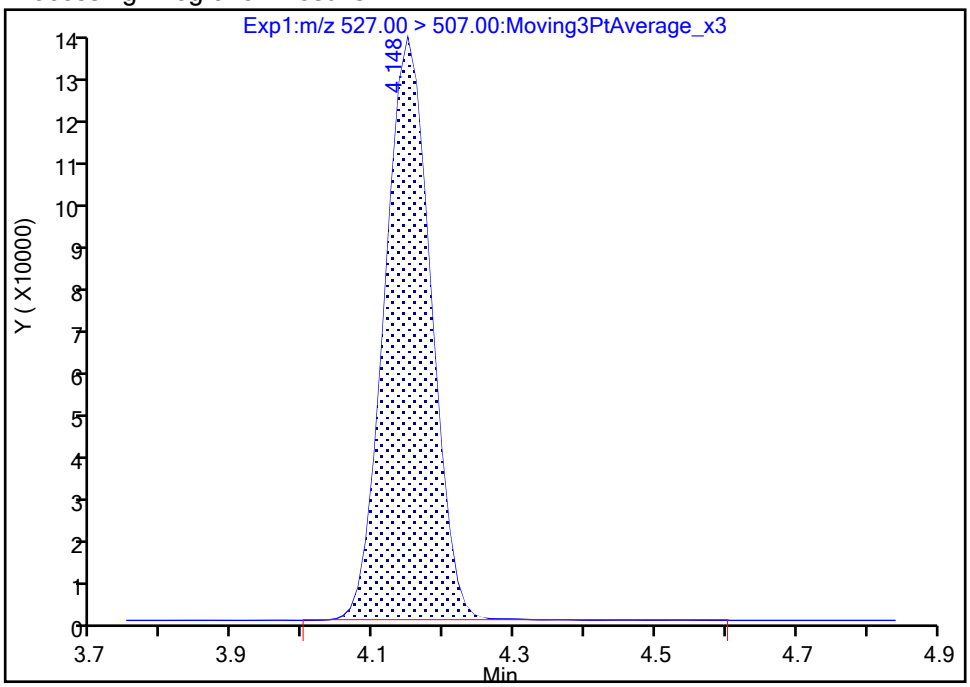
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

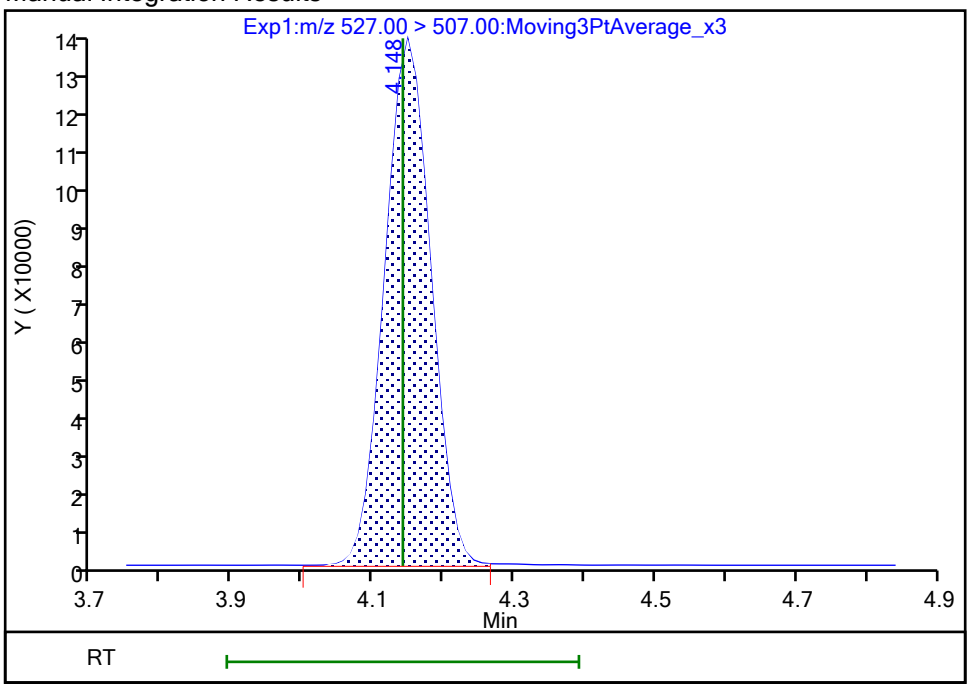
Processing Integration Results

RT: 4.15
Area: 630338
Amount: 1.006650
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 628322
Amount: 1.003430
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:53 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

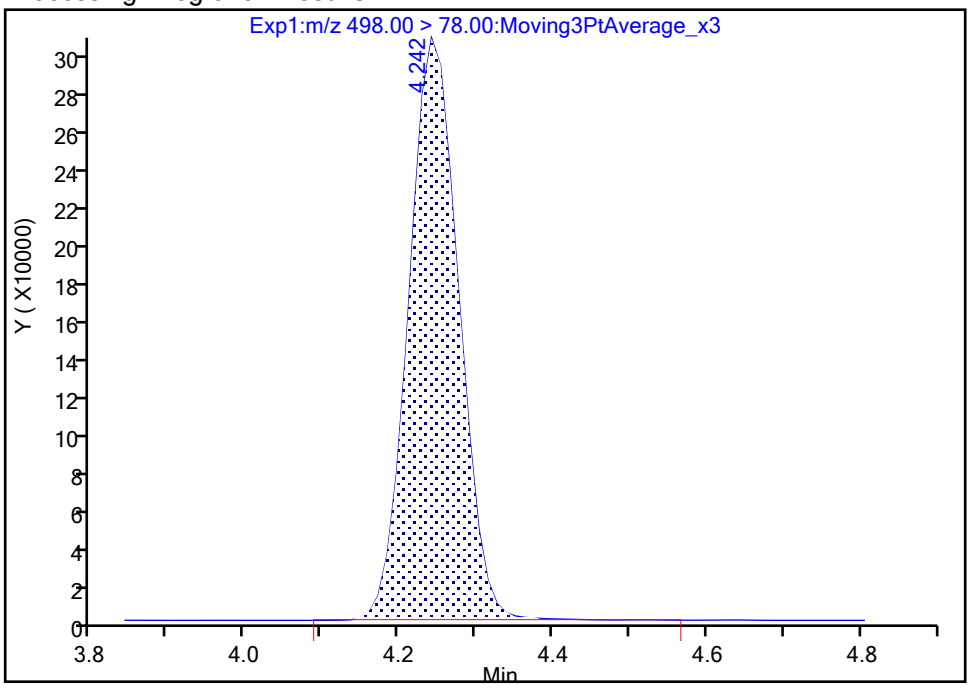
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

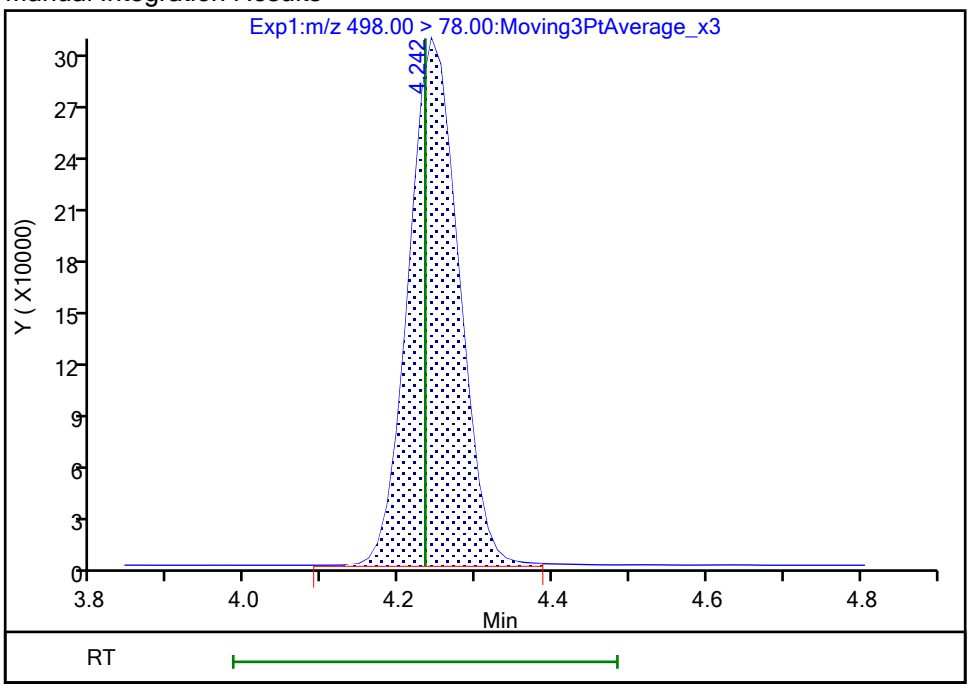
Processing Integration Results

RT: 4.24
Area: 1364908
Amount: 1.039887
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Area: 1361930
Amount: 1.037619
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

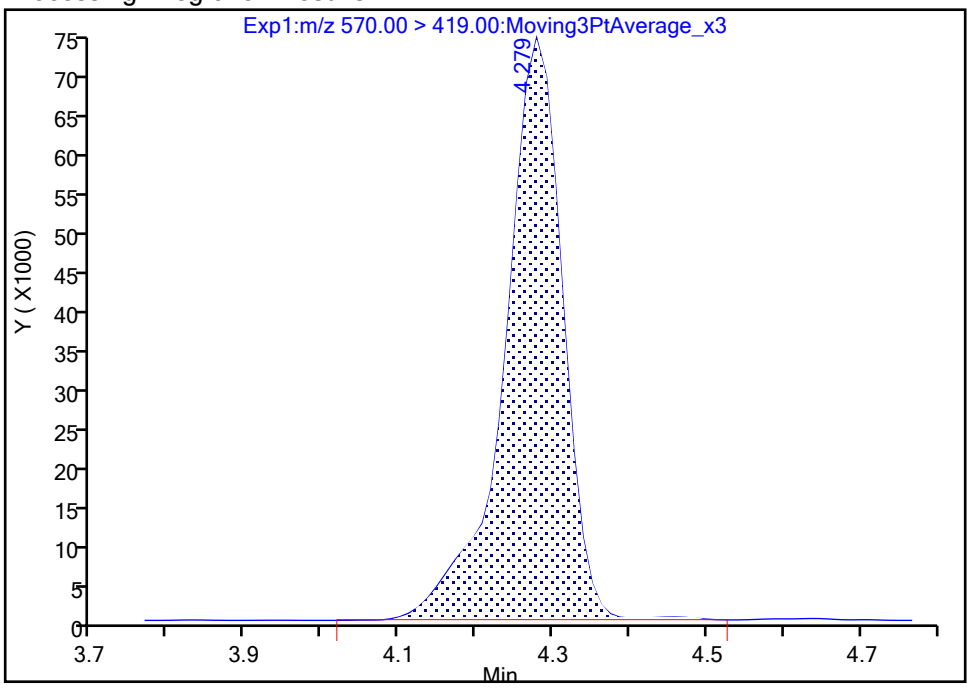
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

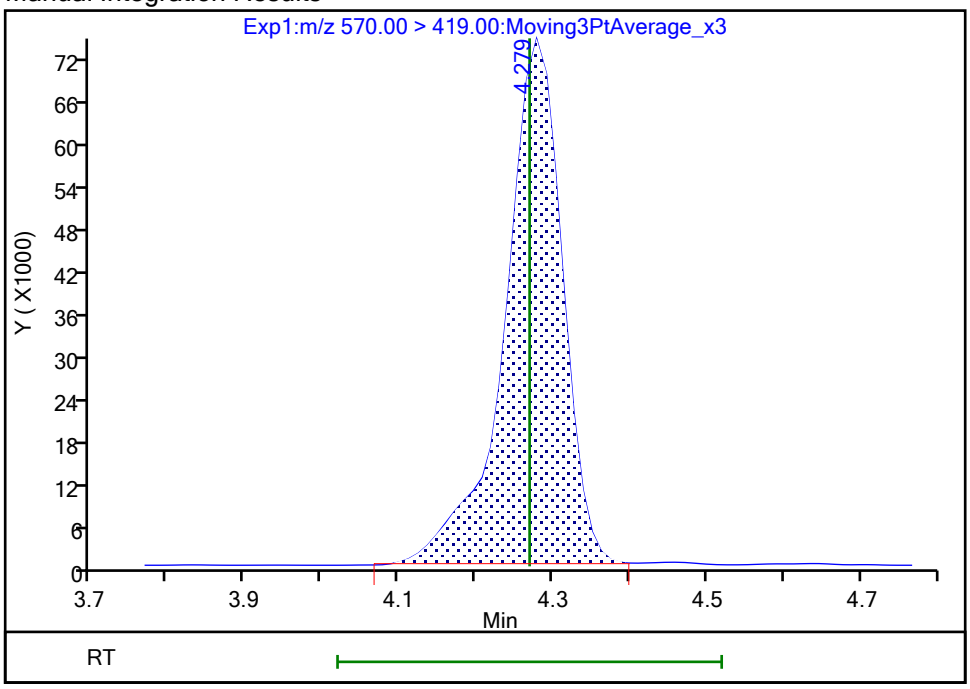
Processing Integration Results

RT: 4.28
Area: 395263
Amount: 0.978127
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 389460
Amount: 0.963767
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:03 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

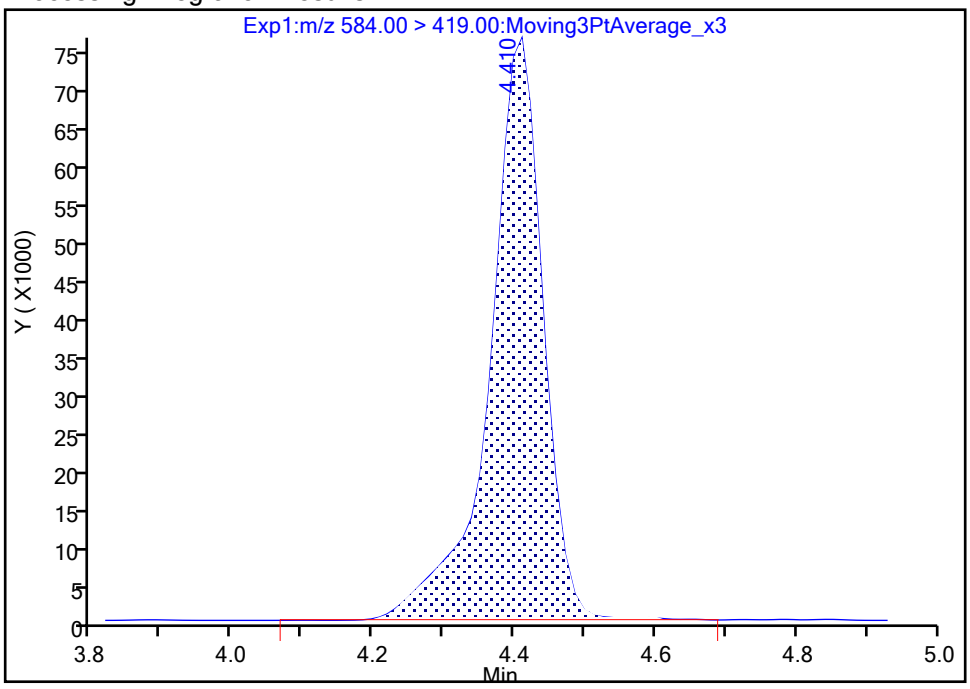
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

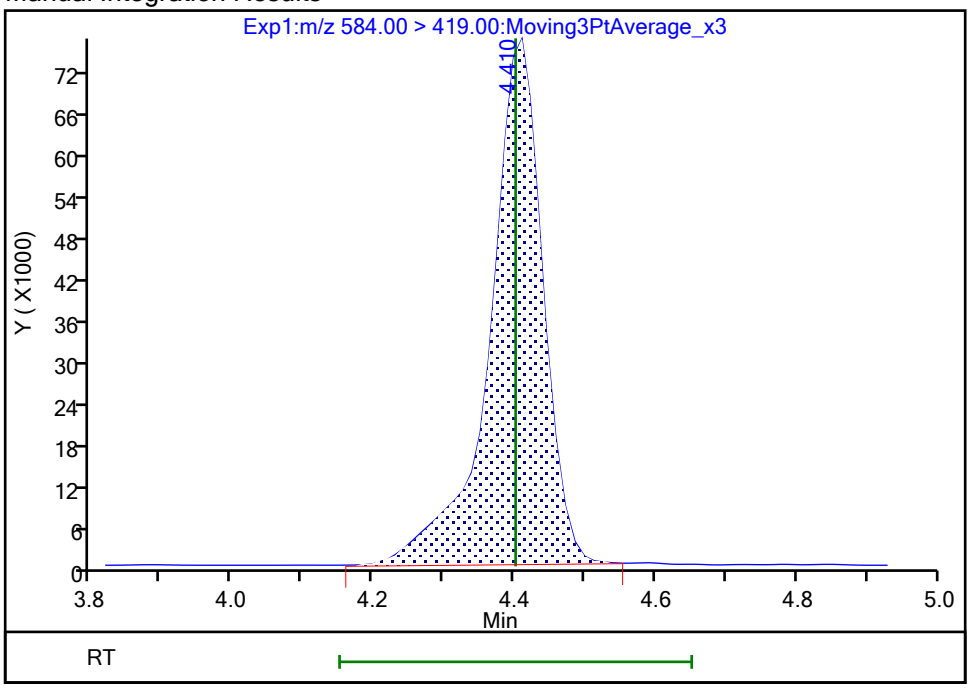
Processing Integration Results

RT: 4.41
Area: 402746
Amount: 0.956473
Amount Units: ng/ml



Manual Integration Results

RT: 4.41
Area: 401206
Amount: 0.952815
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:34:20 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

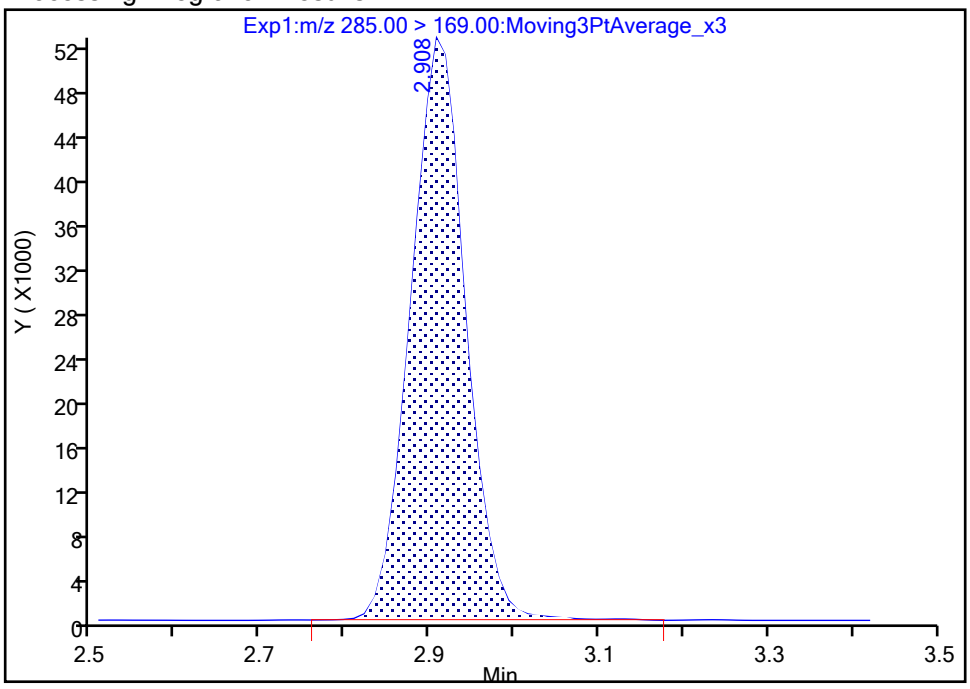
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

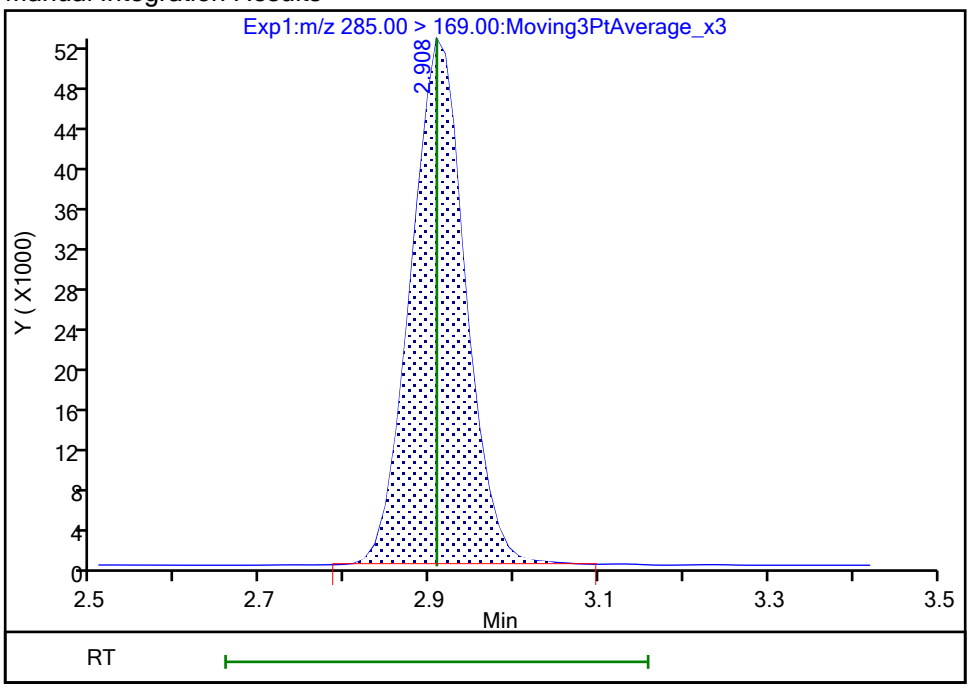
Processing Integration Results

RT: 2.91
Area: 237903
Amount: 1.000360
Amount Units: ng/ml



Manual Integration Results

RT: 2.91
Area: 236047
Amount: 0.992556
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:31:56 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

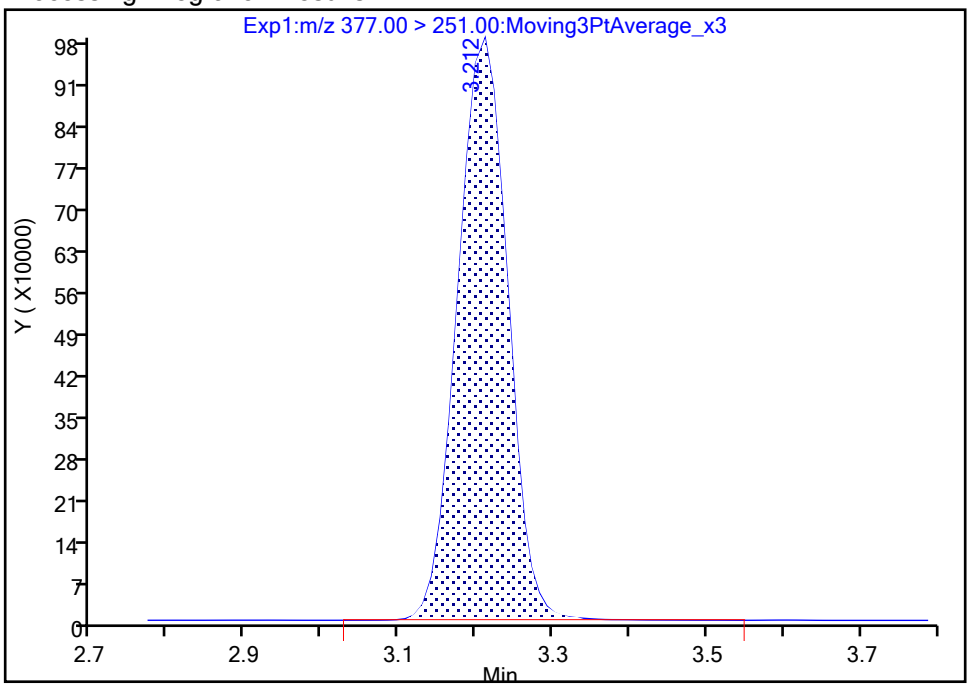
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

77 DONA, CAS: 919005-14-4

Signal: 1

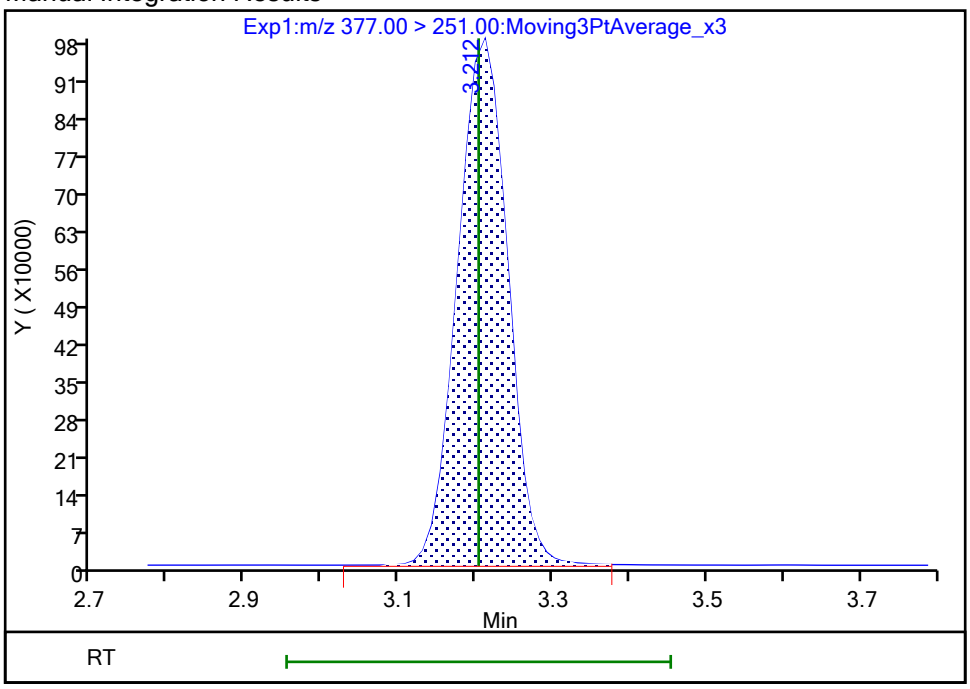
Processing Integration Results

RT: 3.21
Area: 4454990
Amount: 0.901275
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 4450733
Amount: 0.900413
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:32:39 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

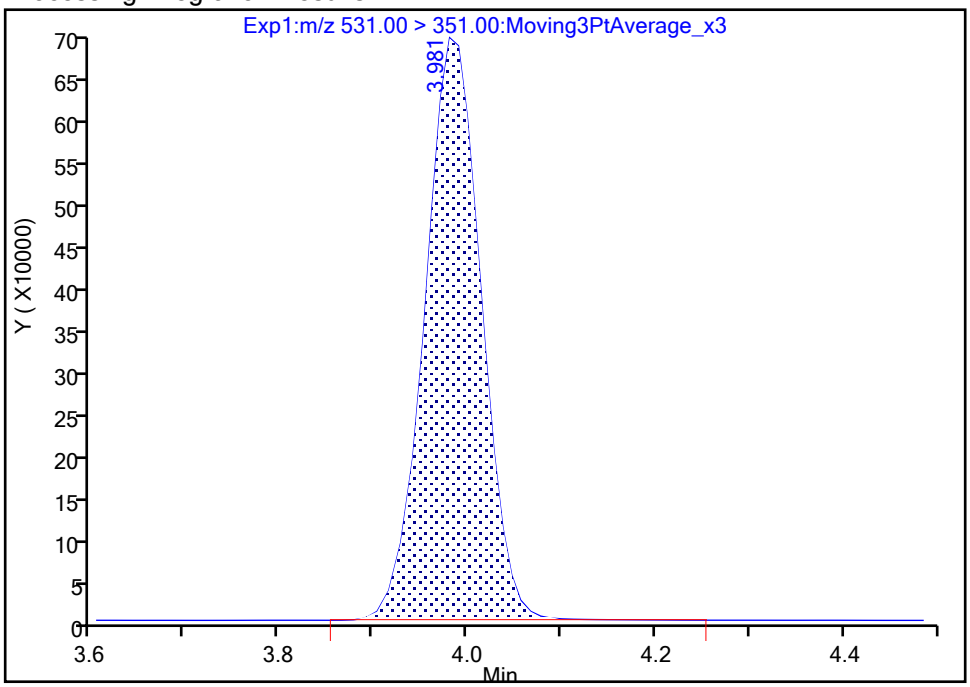
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

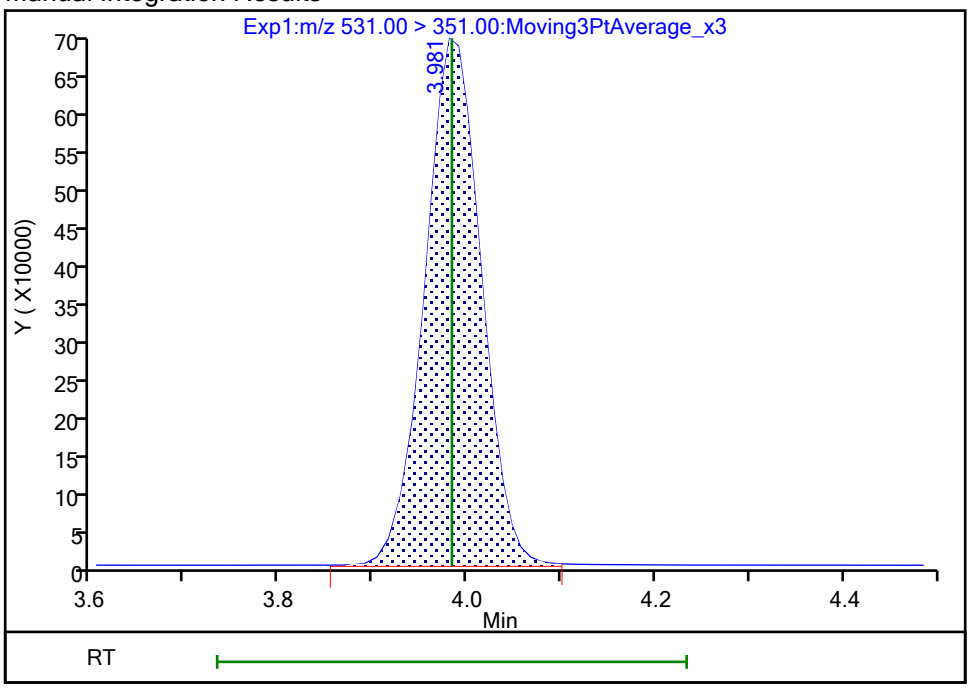
Processing Integration Results

RT: 3.98
Area: 2896923
Amount: 0.944858
Amount Units: ng/ml



Manual Integration Results

RT: 3.98
Area: 2892092
Amount: 0.943282
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:33:42 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

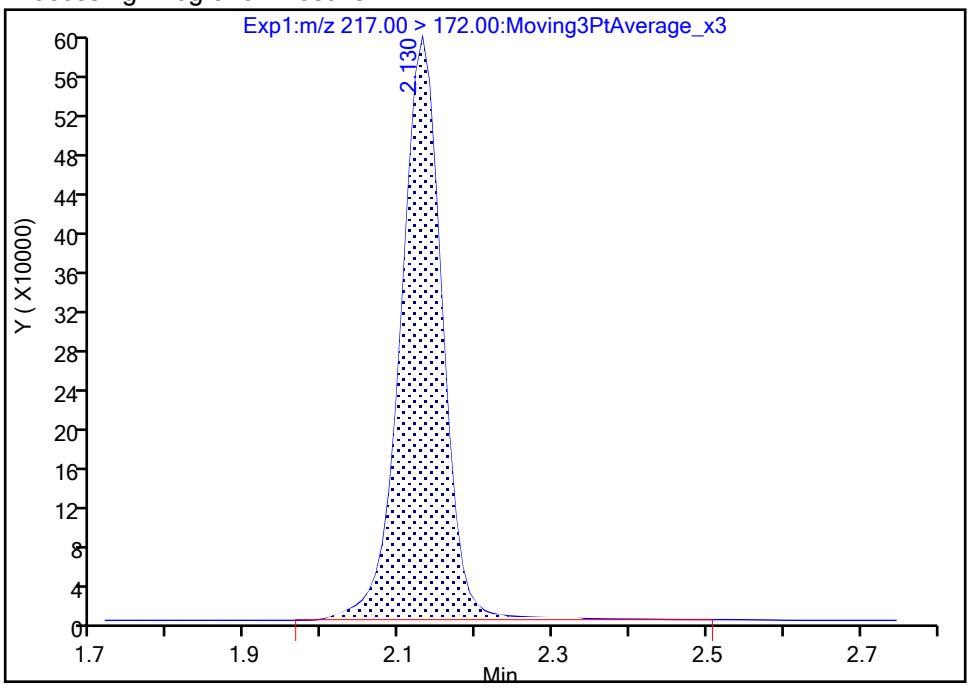
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 1 13C4 PFBA, CAS: STL00992

Signal: 1

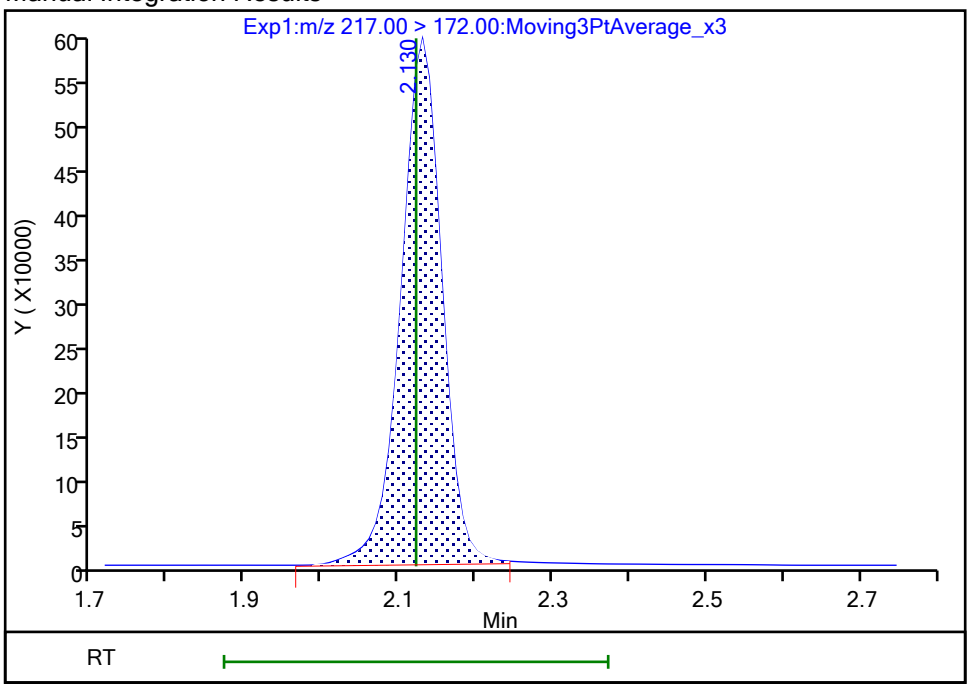
Processing Integration Results

RT: 2.13
Area: 2252319
Amount: 1.213242
Amount Units: ng/ml



Manual Integration Results

RT: 2.13
Area: 2232775
Amount: 1.202715
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:28:43 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

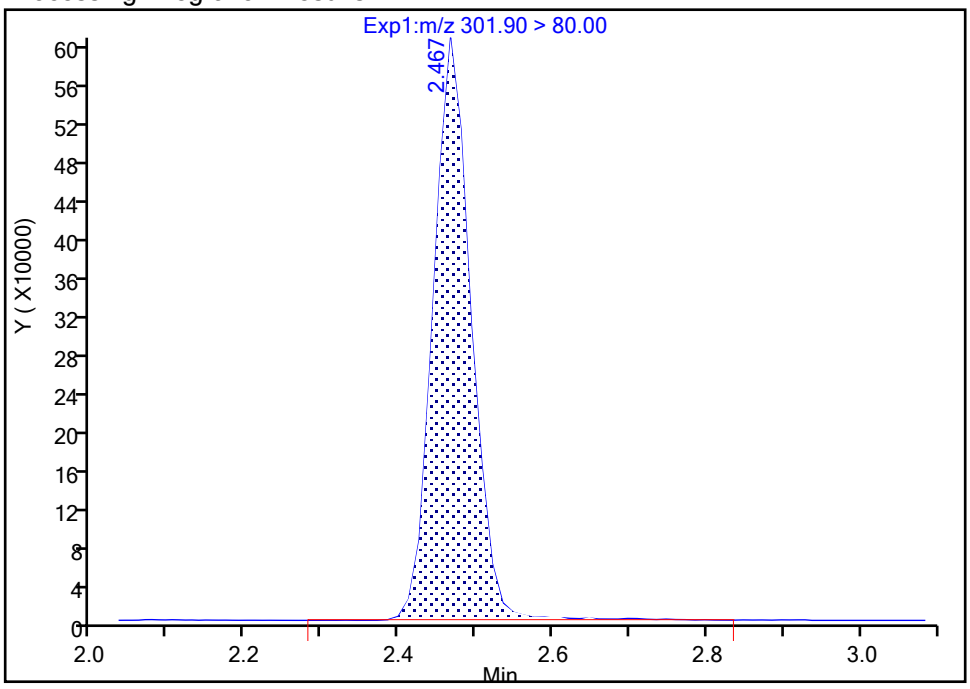
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

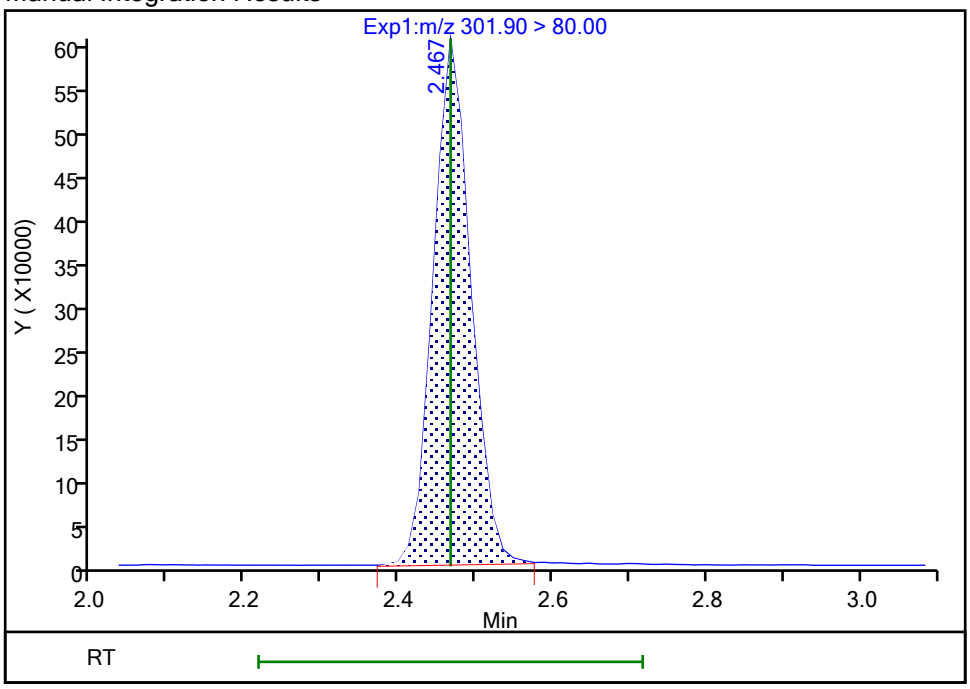
Processing Integration Results

RT: 2.47
Area: 2059607
Amount: 1.056510
Amount Units: ng/ml



Manual Integration Results

RT: 2.47
Area: 2035999
Amount: 1.044400
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:28:54 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

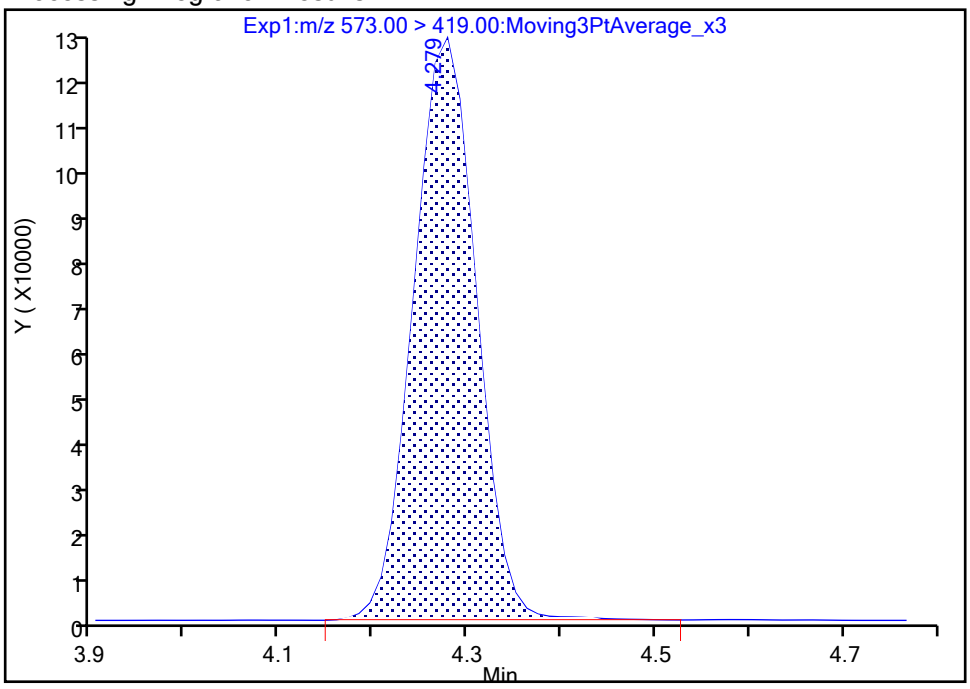
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

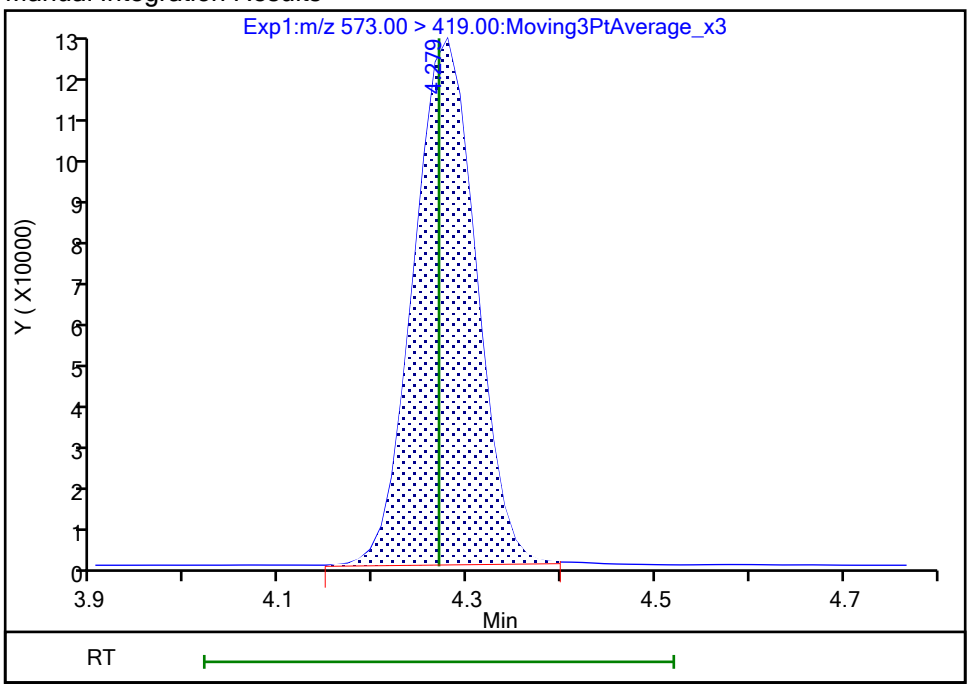
Processing Integration Results

RT: 4.28
Area: 558740
Amount: 1.126225
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 556670
Amount: 1.122052
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:35 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

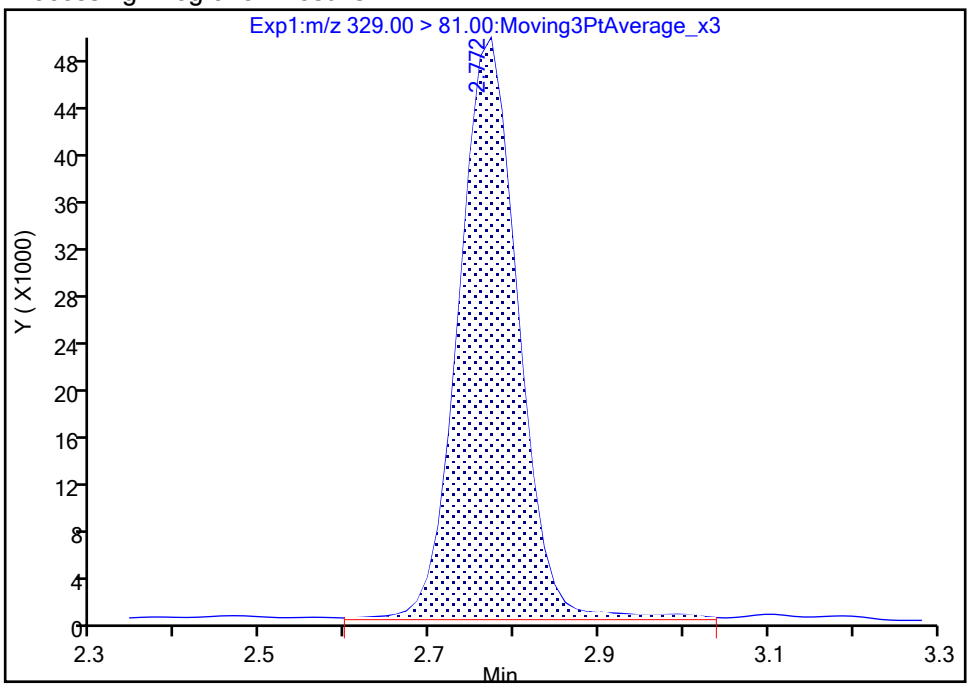
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

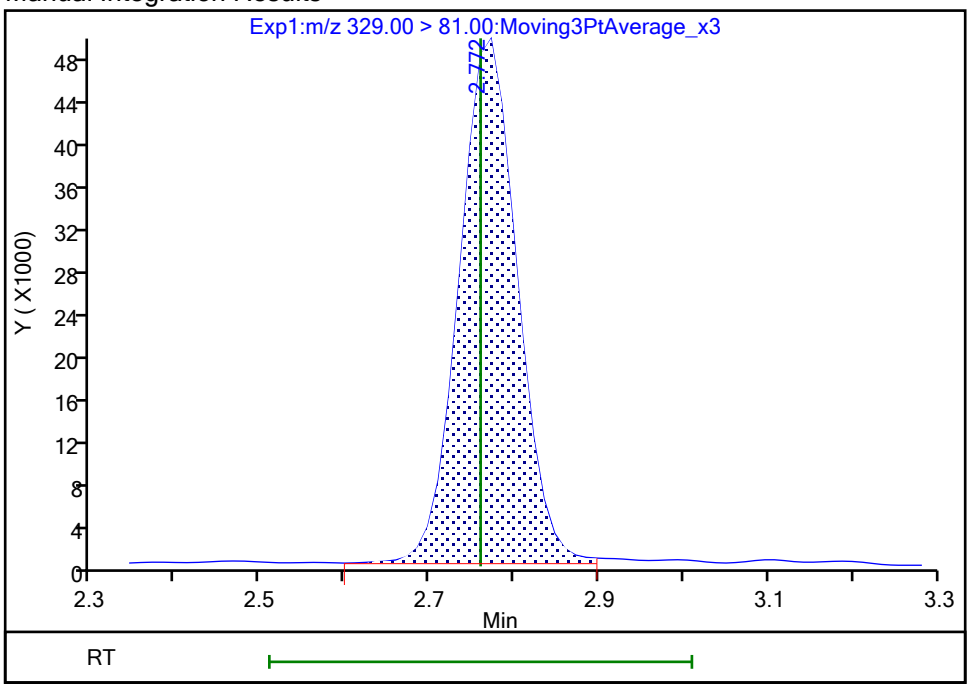
Processing Integration Results

RT: 2.77
Area: 240257
Amount: 1.065693
Amount Units: ng/ml



Manual Integration Results

RT: 2.77
Area: 235178
Amount: 1.043165
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:06 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

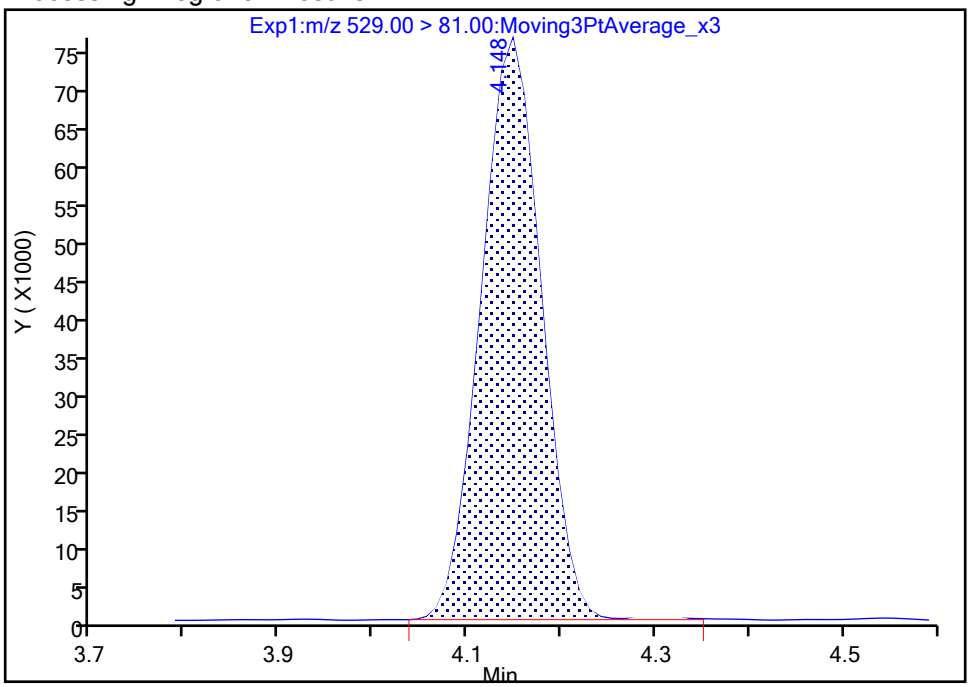
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

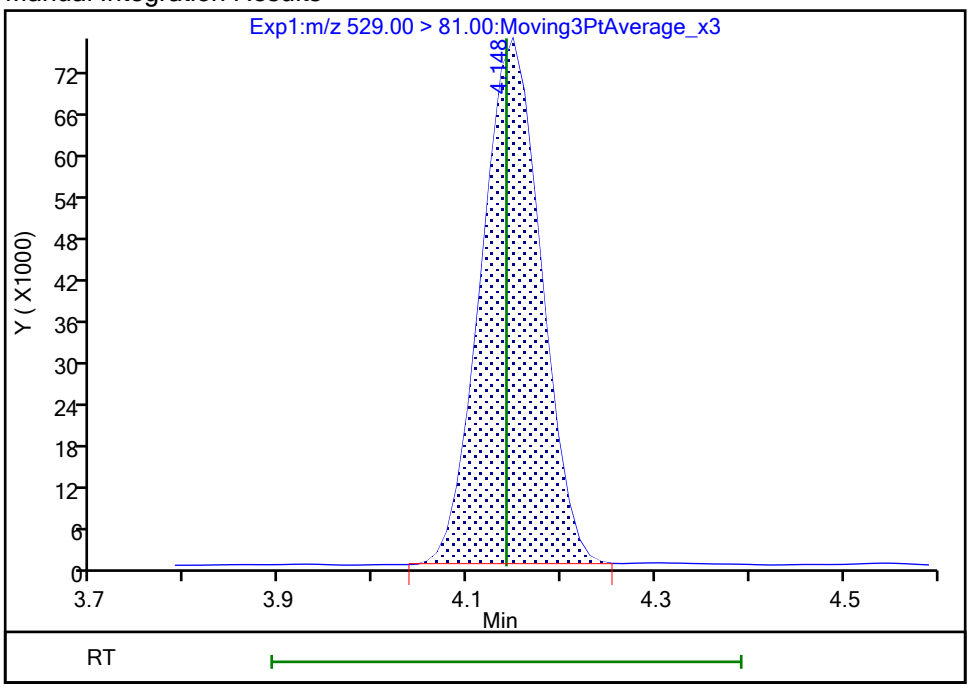
Processing Integration Results

RT: 4.15
Area: 341138
Amount: 1.044902
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 340609
Amount: 1.043281
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:30 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

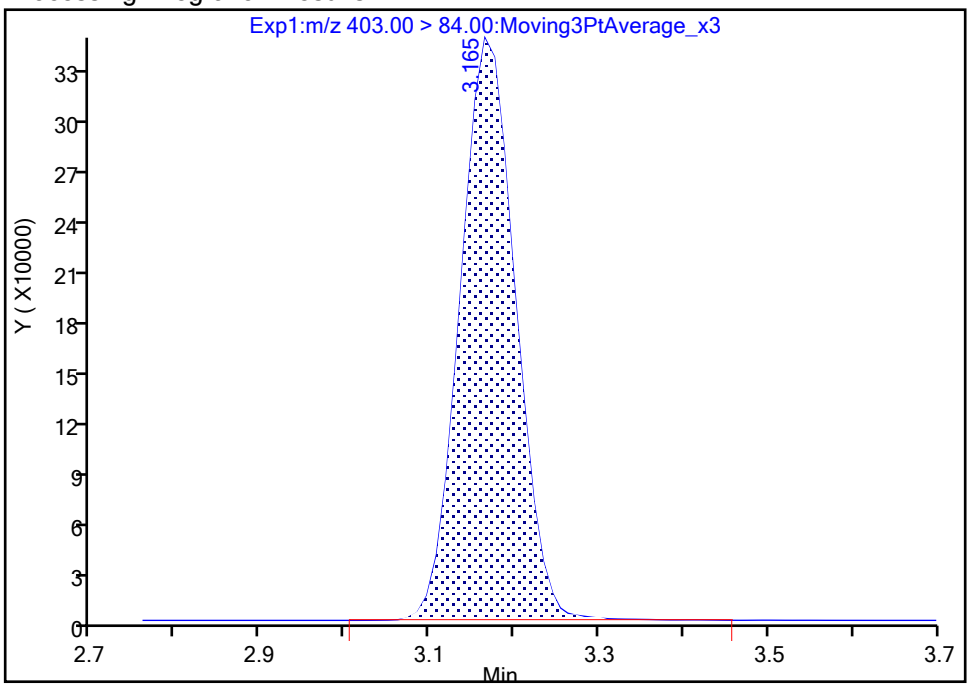
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 11 18O2 PFHxS, CAS: STL00994

Signal: 1

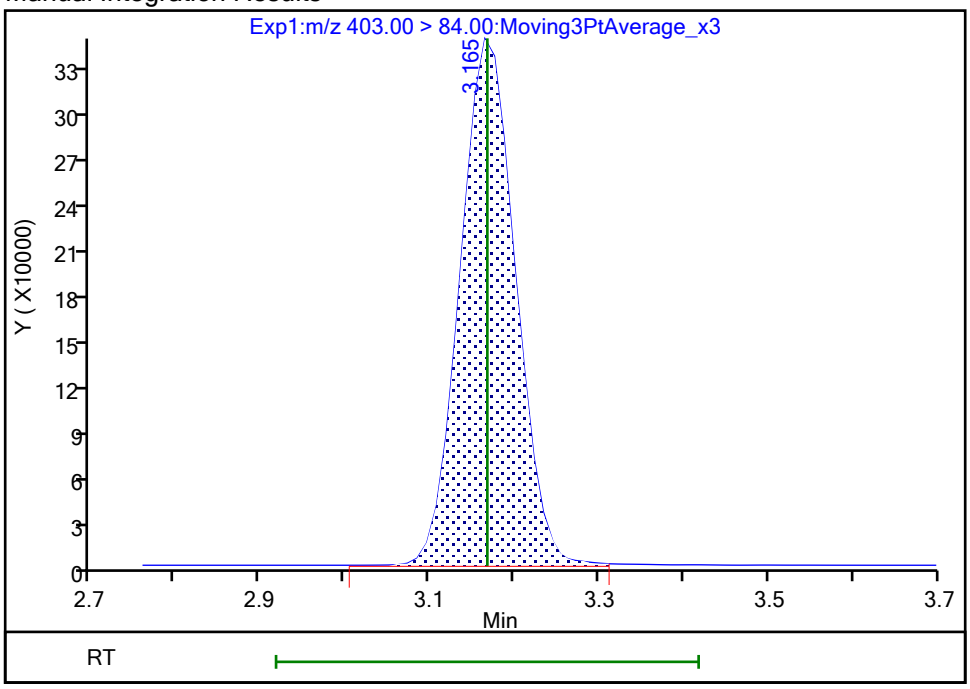
Processing Integration Results

RT: 3.16
Area: 1581275
Amount: 1.131658
Amount Units: ng/ml



Manual Integration Results

RT: 3.16
Area: 1578167
Amount: 1.129434
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

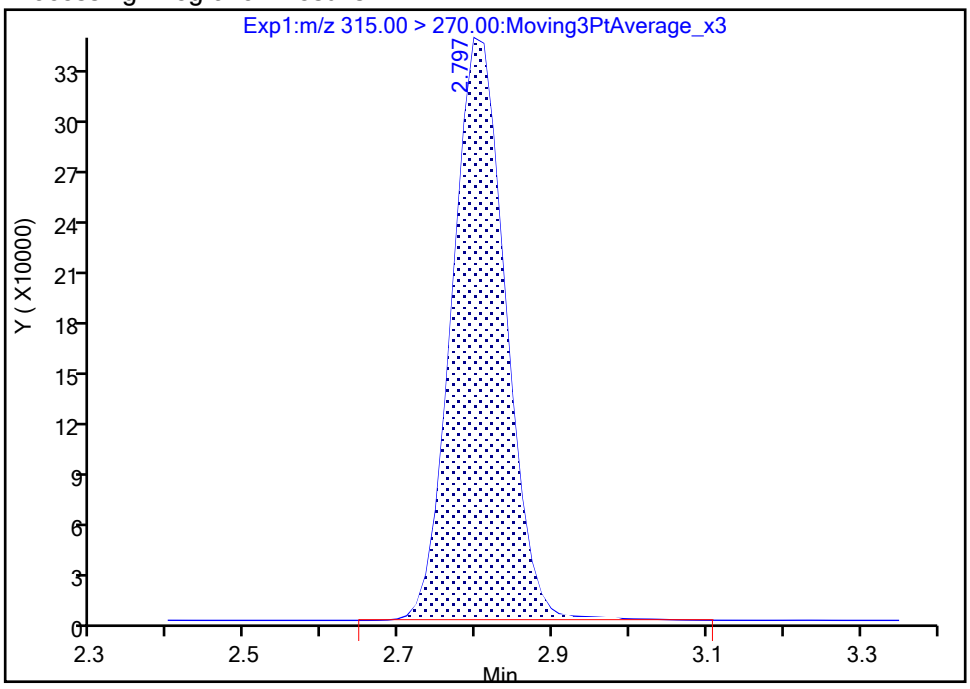
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 7 13C2 PFHxA, CAS: STL00993

Signal: 1

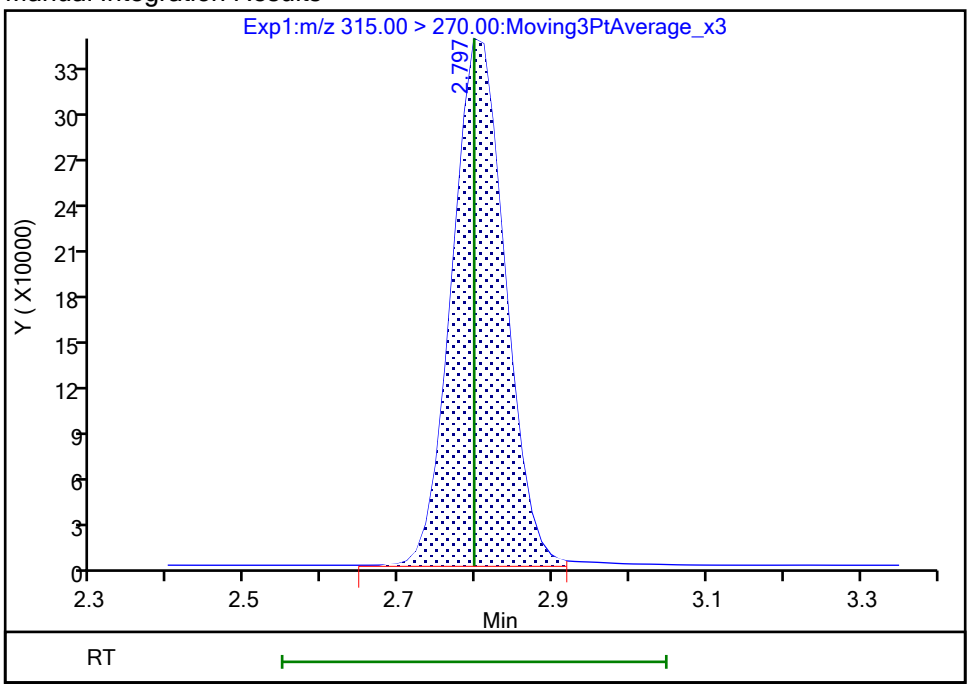
Processing Integration Results

RT: 2.80
Area: 1677839
Amount: 1.144716
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1666733
Amount: 1.137139
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:11 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

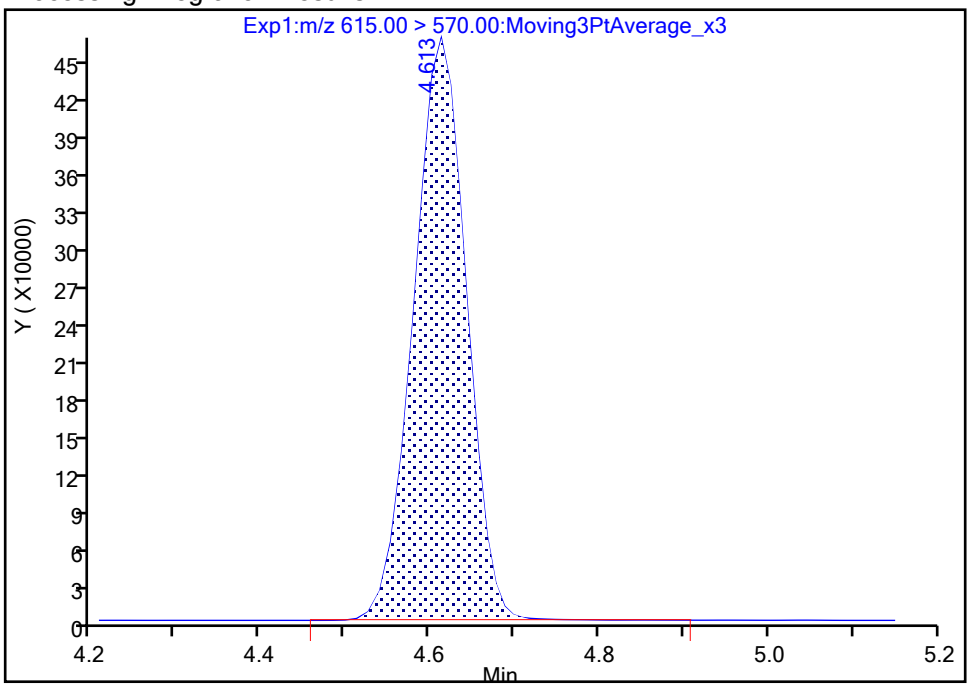
Data File: \\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d
Injection Date: 24-Oct-2023 06:30:12 Instrument ID: LC812
Lims ID: LCSD 200-196662/3-A
Client ID:
Operator ID: LC812user ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector EXP1

D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

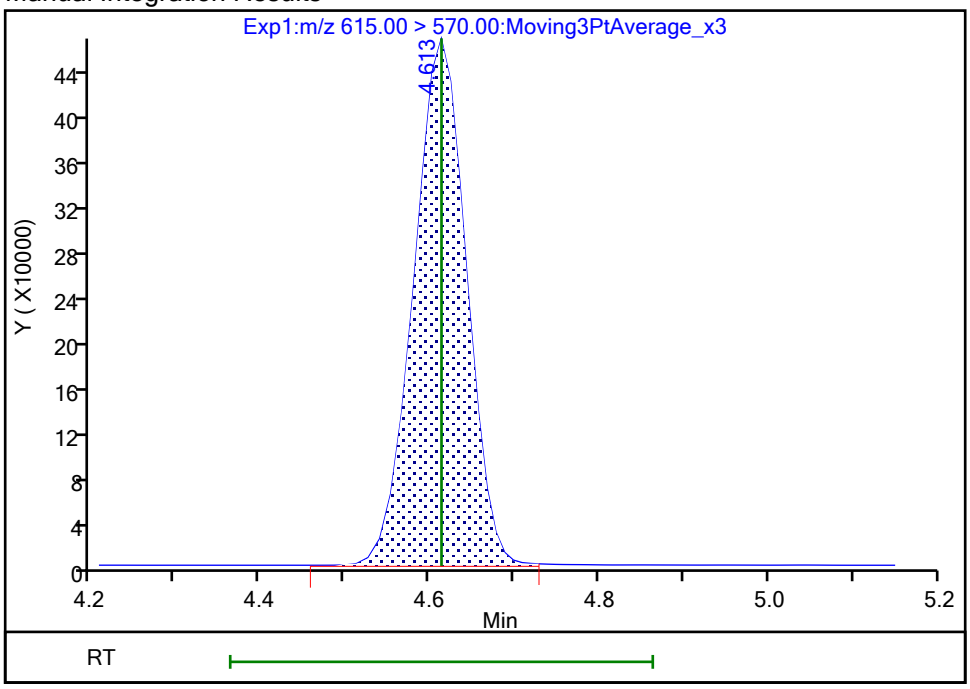
Processing Integration Results

RT: 4.61
Area: 2020128
Amount: 1.014319
Amount Units: ng/ml



Manual Integration Results

RT: 4.61
Area: 2017017
Amount: 1.012757
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:41 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

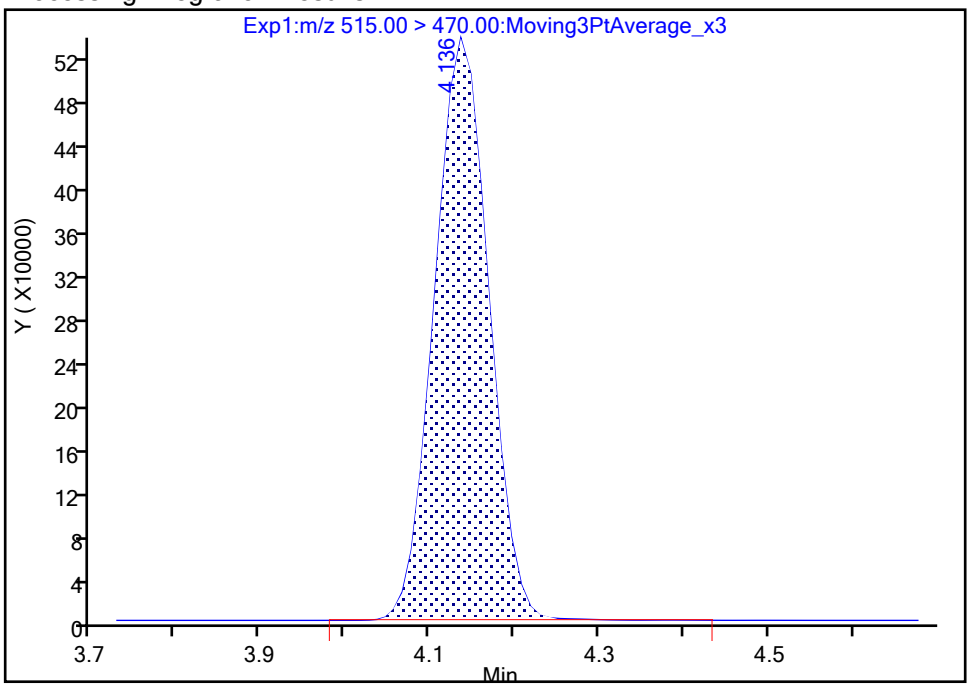
Data File:	\\chromfs\Burlington\ChromData\LC812\20231023-57513.b\PA231023E04.d				
Injection Date:	24-Oct-2023 06:30:12	Instrument ID:	LC812		
Lims ID:	LCSD 200-196662/3-A				
Client ID:					
Operator ID:	LC812user	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFC_LC812	Limit Group:	LC_PFC_ICAL		
Column:	C-18 (4.60 mm)	Detector	EXP1		

D 23 13C2 PFDA, CAS: STL00996

Signal: 1

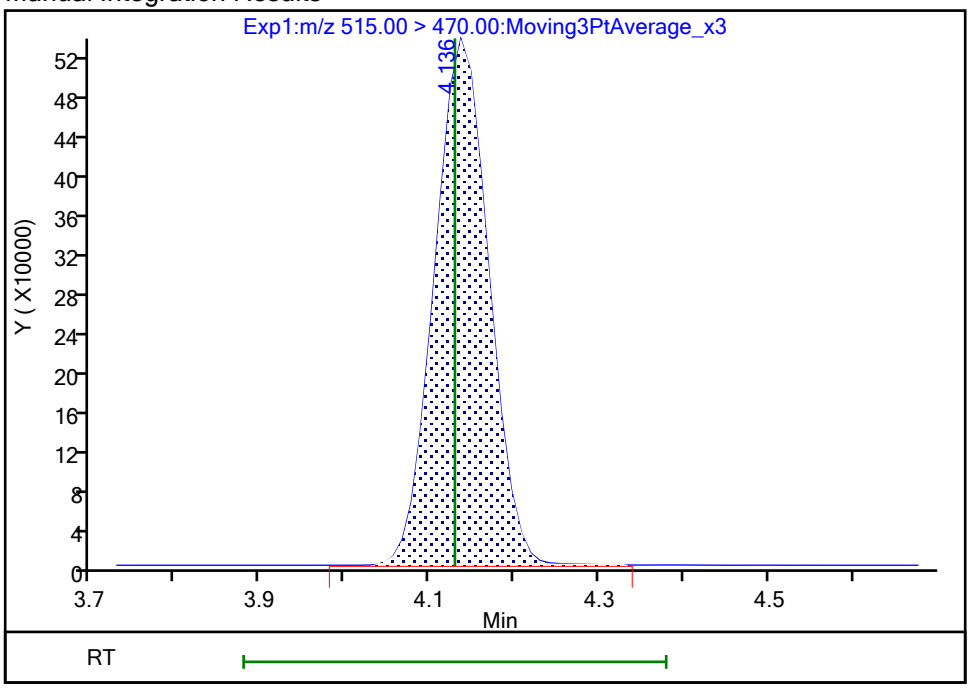
Processing Integration Results

RT: 4.14
Area: 2394137
Amount: 1.153339
Amount Units: ng/ml



Manual Integration Results

RT: 4.14
Area: 2393361
Amount: 1.152965
Amount Units: ng/ml



Reviewer: nampitakw, 25-Oct-2023 09:29:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Instrument ID: LC812 Start Date: 07/26/2023 16:44

Analysis Batch Number: 193912 End Date: 07/26/2023 18:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		07/26/2023 17:08	1		C-18 4.6(mm)
IC 200-193912/5		07/26/2023 17:16	1	PA230726ICAL05.d	C-18 4.6(mm)
IC 200-193912/6		07/26/2023 17:25	1	PA230726ICAL06.d	C-18 4.6(mm)
IC 200-193912/7		07/26/2023 17:33	1	PA230726ICAL07.d	C-18 4.6(mm)
ICISAV 200-193912/8		07/26/2023 17:41	1	PA230726ICAL08.d	C-18 4.6(mm)
IC 200-193912/9		07/26/2023 17:49	1	PA230726ICAL09.d	C-18 4.6(mm)
IC 200-193912/10		07/26/2023 17:57	1	PA230726ICAL10.d	C-18 4.6(mm)
IC 200-193912/11		07/26/2023 18:05	1	PA230726ICAL11.d	C-18 4.6(mm)
ICB 200-193912/12		07/26/2023 18:13	1	PA230726ICAL12.d	C-18 4.6(mm)
ICV 200-193912/13		07/26/2023 18:22	1	PA230726ICAL13.d	C-18 4.6(mm)
ZZZZZ		07/26/2023 18:30	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Instrument ID: LC812 Start Date: 10/23/2023 15:31

Analysis Batch Number: 196686 End Date: 10/23/2023 19:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/23/2023 15:31	1		C-18 4.6(mm)
CCB 200-196686/4		10/23/2023 15:39	1	PA231023A04.d	C-18 4.6(mm)
CCVLIS 200-196686/5		10/23/2023 15:47	1	PA231023A05.d	C-18 4.6(mm)
ZZZZZ		10/23/2023 15:55	10		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:03	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:11	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:20	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:28	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:36	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:44	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:09	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:17	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:25	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:33	1		C-18 4.6(mm)
CCV 200-196686/19		10/23/2023 17:41	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:49	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 17:58	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:06	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:14	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:22	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:30	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:38	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:47	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 18:55	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:03	1		C-18 4.6(mm)
CCV 200-196686/30		10/23/2023 19:11	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:19	1		C-18 4.6(mm)
ZZZZZ		10/23/2023 19:27	1		C-18 4.6(mm)
CCV 200-196686/33		10/23/2023 19:36	1		C-18 4.6(mm)

537 (modified)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Instrument ID: LC812 Start Date: 10/24/2023 06:05

Analysis Batch Number: 196692 End Date: 10/24/2023 09:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-196692/1		10/24/2023 06:05	1	PA231023E01.d	C-18 4.6(mm)
MB 200-196662/1-A		10/24/2023 06:13	1	PA231023E02.d	C-18 4.6(mm)
LCS 200-196662/2-A		10/24/2023 06:22	1	PA231023E03.d	C-18 4.6(mm)
LCSD 200-196662/3-A		10/24/2023 06:30	1	PA231023E04.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 06:38	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 06:46	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 06:54	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:02	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:11	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:19	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:27	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:35	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:43	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 07:52	1		C-18 4.6(mm)
CCV 200-196692/15		10/24/2023 08:00	1	PA231023E15.d	C-18 4.6(mm)
460-290546-1	1000-101623-0002	10/24/2023 08:08	1	PA231023E16.d	C-18 4.6(mm)
460-290546-2	FDMH-1	10/24/2023 08:16	1	PA231023E17.d	C-18 4.6(mm)
460-290546-3	FDMH-2	10/24/2023 08:24	1	PA231023E18.d	C-18 4.6(mm)
460-290546-4	FDMH-4	10/24/2023 08:32	1	PA231023E19.d	C-18 4.6(mm)
ZZZZZ		10/24/2023 08:41	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 08:49	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 08:57	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 09:05	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 09:13	1		C-18 4.6(mm)
ZZZZZ		10/24/2023 09:22	1		C-18 4.6(mm)
CCV 200-196692/26		10/24/2023 09:30	1	PA231023E26.d	C-18 4.6(mm)

537 (modified)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LCPFAS28NCICV 00014	PFAS23NClC7 00001	PFAS32NCBLK20 00025	PFAS32NCIC1 00015	PFAS32NCIC2 00014
IC 200-193912/5		537 (modified)		1 mL				100 uL	
IC 200-193912/6		537 (modified)		1 mL					100 uL
IC 200-193912/7		537 (modified)		1 mL					
ICISAV 200-193912/8		537 (modified)		1 mL					
IC 200-193912/9		537 (modified)		1 mL					
IC 200-193912/10		537 (modified)		1 mL					
IC 200-193912/11		537 (modified)		1 mL		100 uL			
ICB 200-193912/12		537 (modified)		1 mL			100 uL		
ICV 200-193912/13		537 (modified)		1 mL	100 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS32NCIC3 00016	PFAS32NCIC4 00042	PFAS32NCIC5 00035	PFAS32NCIC6 00014		
IC 200-193912/5		537 (modified)							
IC 200-193912/6		537 (modified)							
IC 200-193912/7		537 (modified)		100 uL					
ICISAV 200-193912/8		537 (modified)			100 uL				
IC 200-193912/9		537 (modified)				100 uL			
IC 200-193912/10		537 (modified)					100 uL		
IC 200-193912/11		537 (modified)							
ICB 200-193912/12		537 (modified)							
ICV 200-193912/13		537 (modified)							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Batch Number: 193912 Batch Start Date: 07/26/23 16:44 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Batch Number: 196662 Batch Start Date: 10/23/23 07:41 Batch Analyst: Kaplan, Matthew L

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCPFC32MTXStk 00062	LCPFIDA21_spk 00020
MB 200-196662/1		3535, 537 (modified)		250 g	0 g	250 mL	10 mL		100 uL
LCS 200-196662/2		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
LCSD 200-196662/3		3535, 537 (modified)		250 g	0 g	250 mL	10 mL	25 uL	100 uL
460-290546-A-1	1000-101623-0002	3535, 537 (modified)	T	310.17 g	27.66 g	282.5 mL	10 mL		100 uL
460-290546-A-2	FDMH-1	3535, 537 (modified)	T	310.91 g	27.93 g	283 mL	10 mL		100 uL
460-290546-A-3	FDMH-2	3535, 537 (modified)	T	313.59 g	27.83 g	285.8 mL	10 mL		100 uL
460-290546-A-4	FDMH-4	3535, 537 (modified)	T	331.16 g	27.68 g	303.5 mL	10 mL		100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	PFAS21 IS Stk 00066					
MB 200-196662/1		3535, 537 (modified)		100 uL					
LCS 200-196662/2		3535, 537 (modified)		100 uL					
LCSD 200-196662/3		3535, 537 (modified)		100 uL					
460-290546-A-1	1000-101623-0002	3535, 537 (modified)	T	100 uL					
460-290546-A-2	FDMH-1	3535, 537 (modified)	T	100 uL					
460-290546-A-3	FDMH-2	3535, 537 (modified)	T	100 uL					
460-290546-A-4	FDMH-4	3535, 537 (modified)	T	100 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Batch Number: 196662 Batch Start Date: 10/23/23 07:41 Batch Analyst: Kaplan, Matthew L

Batch Method: 3535 Batch End Date: 10/23/23 11:00

Batch Notes	
SPE Cartridge Type	Phenonmenex Strata PFAS (Wax/GCB) 500mg/50mg/6mL
SPE Cartridge Lot ID	Sorbent Lot: Y0627-PWAX/1260 Prod Lot: F01839
Balance ID	M02926
Balance is Level? (Y/N)	yes
Manifold ID	IDA 1,2
Pipette/Syringe/Dispenser ID	QH77727
Solvent Name	0.3% AmmOH
Solvent Lot #	1802260
Rinse Solvent Name	NaOH/H2O
Rinse Solvent Lot	1800600
Analyst ID - Spike Analyst	MLK
Analyst ID - Spike Witness Analyst	KFW
Batch Comment	30% MeOH:1802258 IDA: E MTX: B IS: A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 460-290546-1

SDG No.:

Batch Number: 196686 Batch Start Date: 10/23/23 15:31 Batch Analyst: Chirgwin, Bradley W

Batch Method: 537 (modified) Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	PFAS32NCBLK20 00026	PFAS32NCLOQV 00028			
CCB 200-196686/4		537 (modified)		1 mL	100 uL				
CCVLIS 200-196686/5		537 (modified)		1 mL		100 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record

660377

eurofins | Environment Testing America

Address: _____

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Dimitri Ovafis.	Site Contact: Dimitri Ovafis	Date: 10-16 23	COC No:
Company Name: Haley & Aldrich	Tel/Email: DOvafis@haleyaldrich.com	Lab Contact: [illegible]	Carrier:	1 of 1 COCs
Address: ~~299 C~~ 65 Rockside Rd, Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Cleveland OH 44131	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 216 706 1314	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling
Project Name: 70613-78	☑ 1 week			
Site: Racer Ewing	☐ 2 days			Job / SDG No. 290546
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (537.1 m)	Sample Specific Notes:
1000-101623-0002	10-16 23	1050	G	Aq.	2			X	
FDMH 1	↓	0915	G	SW	2			X	
FDMH-2	↓	0930	G	SW	2			X	
FDMH 4	↓	1015	G	SW	2			X	

460-290546 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd. _____ Corr'd: _____ Therm ID No. _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Haley and Aldrich	1645 10-16 23	[signature]	EETN	10/16/23 @ 1645
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

RF ID - (0.7°C / 0.8°C)

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 290546

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.7 °C	0.8 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below

Sample No(s). adjusted: _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: VP Date: 10/16/23

10/27/2023
10:52 AM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

460-290546 Chain of Custody

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Tempe, Kristyn L		COC No: 460-69535.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Kristyn.Tempe@et.eurofinsus.com	State of Origin: New Jersey	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New Jersey		Job #: 460-290546-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/20/2023			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer, Ewing	Project #: 46010893			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT 28 PFAS Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
1000-101623-0002 (460-290546-1)	10/16/23	10 50 Eastern		Water			X	2	
FDMH-1 (460-290546-2)	10/16/23	09:15 Eastern		Water			X	2	
FDMH-2 (460-290546-3)	10/16/23	09 30 Eastern		Water			X	2	
FDMH-4 (460-290546-4)	10/16/23	10.15 Eastern		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank. 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 10/18/23 1900	Company: EEST	Received by:	Date/Time: 10/19/23 0950	Company: ETA BUN
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

10/27/2023 10:52 AM

RT 916 FZ 915 1 10:30

Part # 159469-434 MTWL PC

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 47.75 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: S460-174268
PO: YES

FedEx Express

J233023051201uv

1 of 2
TRK# 0201 6553 1010 3254
MASTER

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

Part # 159469-434 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 18OCT23
ACTWGT: 40.85 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: S460-174268
PO: YES

FedEx Express

J233023051201uv

2 of 2
MPS# 0263 6553 1010 3265
Mstr# 6553 1010 3254 0201

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290546-1

Login Number: 290546
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 460-290546-1

Login Number: 290546
List Number: 2
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington
List Creation: 10/19/23 03:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1969961, 9962
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4ºC, 1.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C
Data Useability Reports

Haley & Aldrich, Inc.
299 Cherry Hill Road
Suite 303
Parsippany, NJ 08075
973.658.3900

Data Usability Summary Report

Project Name: Racer Ewing

Analytical Laboratory: Eurofins Edison – Edison, NJ

Usability Assessment Complete By: Sean Fischer

Haley & Aldrich, Inc. prepared this Data Usability Report (DUSR) to summarize the review of the RACER Ewing Industrial Land groundwater/surface water PFAS data collected during Q3 of 2023. Analytical results for the Sample Delivery Group (SDG) below was reviewed with guidance provided by the New Jersey Department of Environmental Protection (NJDEP) to determine the data's usability. This data usability assessment was performed per the guidance and requirements established by the Data Quality Assessment and Data Usability Evaluation (DQA/DUE) Technical Guidance (dated April 2014) and with the Quality Assurance Project Plan Technical Guidance (Version 1 dated April 2014). The overall usability of the data was assessed by evaluating the precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) of the data set with the measurement performance criteria.

The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable:

1. Sample Delivery Group 460-290219-1
2. Sample Delivery Group 460-290375-1
3. Sample Delivery Group 460-290512-1
4. Sample Delivery Group 460-290517-1
5. Sample Delivery Group 460-290543-1
6. Sample Delivery Group 460-290546-1

- Data of Known Quality Conformance/Non-Conformance Review
- Holding Times/Preservation
- Reporting Limits and Sample Dilution
- Blank Sample Analysis
- PFAS Sample Preparation
- PFAS Identification
- Extraction Internal Standards
- Surrogate Recovery Compliance
- Laboratory Control Samples
- Matrix Spike Samples
- Laboratory and Field Duplicate Sample Analysis
- System Performance and Overall Assessment

Analytical precision and accuracy were evaluated based on the laboratory control, matrix spike, or laboratory duplicate analyses performed concurrently with the project samples or based on field duplicates collected at the site.

Data reported in this sampling event were reported to the laboratory reporting limit (RL). Results found between the laboratory method detection limit (MDL) and the RL are flagged "J" as estimated.

Sample data were qualified by the laboratory in accordance with standard operating procedures (SOPs). Based on a check of the data qualifiers assigned as project sample results, these flags were applied to the reported results in accordance with the laboratory-specific SOPs. The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and usable; any exceptions are noted in the following pages.

1. Sample Delivery Group 460-290219-1

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290219-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- Sample custody seals were not used when samples were shipped to Eurofins Burlington.
- PFAS analysis by Eurofins IDA-LCMSMS subcontracted to Eurofins Burlington, South Burlington, VT.
- Lab report revisions to match COC: Sample MW90R-101223-1030-26 should be logged as MW90R-101223-1036-26 with a revised sample time of 10:36.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
MW90AR-101223-0927-95	N	460-290219-1	10/12/2023	WG	PFAS by Eurofins IDA-LCMSMS	A
MW90R-101223-1036-26	N	460-290219-2	10/12/2023	WG		
MW41R-101223-1137-29.5	N	460-290219-3	10/12/2023	WG		
MW14A-101223-1231-40	N	460-290219-4	10/12/2023	WG		
MW83R-101223-1346-29	N	460-290219-5	10/12/2023	WG		
1000-101223-0003	FD	460-290219-6	10/12/2023	WG		
MW89A-101223-0946-96	N	460-290219-7	10/12/2023	WG		
MW89-101223-1056-25	N	460-290219-8	10/12/2023	WG		
MW17A-101223-1206-29	N	460-290219-9	10/12/2023	WG		
MW17B-101223-1306-96	N	460-290219-10	10/12/2023	WG		
MW82-101223-1411-30	N	460-290219-11	10/12/2023	WG		
1000-101223-0002	FB	460-290219-12	10/12/2023	WQ		

Method Holding Time		
A.	Per- and polyfluoroalkyl substances (PFAS) by Eurofins IDA-LCMSMS*	14 days extraction/28 days analysis for liquid (unpreserved)

*** Subcontracted to Eurofins Burlington, South Burlington, VT**

1.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g. continuing calibration blank) not required by this review and no qualifiers were therefore applied.

- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196590.

1.3 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

PFAS does not fall under the DKQP program, therefore a DKQ Conformance/Non Conformance Summary was not included in the analytical report. From the case narrative, this SDG meets known quality requirements, with the following exceptions:

- Select RLs are above those defined in the Sampling and Analysis Plan (SAP). See Section 1.5 for details.
- Select PFAS ion ratios outside of limits. See Section 1.8 for details.

1.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to Eurofins Edison was: 5.5 degrees Celsius. Cooler temperatures on arrival to Eurofins Burlington were: 1.6, 1.1, and 1.6 degrees Celsius.

1.5 REPORTING LIMITS AND SAMPLE DILUTION

The reporting limits for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP/SAP, with the following exceptions:

- PFBA, NMeFOSAA, NEtFOSAA, and HFPO-DA have RLs above those defined in the SAP for all samples.
- PFUnDA does not have defined reporting limits, nor is it listed as a compound to be analyzed in the compound list in Table 2 (Haley & Aldrich 2023); however, it is present in the lab reports.
- PFDoS is listed in the compound list in Table 2 (Haley & Aldrich 2023), but is not analyzed for or present in the lab reports.

1.6 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. The analysis of the blank samples for field quality control was free of target compounds.

1.7 PFAS SAMPLE PREPARATION

The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

1.8 PFAS IDENTIFICATION

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary. However, the lab qualified the following samples with an "I" flag:

Lab Sample ID	Analyte	Assessment	Affected Samples
460-290219-5	Perfluorodecanoic acid (PFDA)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	MW83R-101223-1346-29

1.9 EXTRACTION INTERNAL STANDARDS

Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV).

1.10 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

1.11 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. The sample(s) below were used for MS/MSD:

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
460-290219-1 MS/MSD	MW90AR-101223-0927-95	Eurofins IDA-LCMSMS

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

1.12 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The following sample(s) were used for field duplicate analysis and the RPDs were all below 35% for water (or the absolute difference rule was satisfied if detects were less than 5x the RL)

Primary Sample ID	Duplicate Sample ID	Method(s)
MW41R-101223-1137-29.5	1000-101223-0003	Eurofins IDA-LCMSMS

1.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. A summary of potential bias associated with the samples in this SDG are shown below.

Sample ID	Analyte	Assessment	Action
MW83R-101223-1346-29	Perfluorodecanoic acid (PFDA)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	Possible high bias

2. Sample Delivery Group 460-290375-1

2.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290375-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- PFAS analysis by Eurofins IDA-LCMSMS subcontracted to Eurofins Burlington, South Burlington, VT.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
1000-101323-0002	FB	460-290375-1	10/13/2023	WQ	PFAS by Eurofins IDA-LCMSMS	A
MW39A-101323-0826-70	N	460-290375-2	10/13/2023	WG		
MW39-101323-0921-17	N	460-290375-3	10/13/2023	WG		
MW91-101323-1021-26	N	460-290375-4	10/13/2023	WG		
MW91A-101323-1116-66	N	460-290375-5	10/13/2023	WG		
MW88-101323-0831-80.5	N	460-290375-6	10/13/2023	WG		
MW92A-101323-1006-70	N	460-290375-7	10/13/2023	WG		
MW92-101323-1056-36	N	460-290375-8	10/13/2023	WG		
MW92B-101323-1156-92	N	460-290375-9	10/13/2023	WG		

Method Holding Time		
A.	Per- and polyfluoroalkyl substances (PFAS) by Eurofins IDA-LCMSMS*	14 days extraction/28 days analysis for liquid (unpreserved)

*** Subcontracted to Eurofins Burlington, South Burlington, VT**

2.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g. continuing calibration blank) not required by this review and no qualifiers were therefore applied.

- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196645.
- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196646.

2.3 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

PFAS does not fall under the DKQP program, therefore a DKQ Conformance/Non Conformance Summary was not included in the analytical report. From the case narrative, this SDG meets known quality requirements, with the following exceptions:

- Select RLs are above those defined in the Sampling and Analysis Plan (SAP). Select sample results were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. See Section 2.5 for details.
- Select PFAS ion ratios outside of limits. See Section 2.8 for details.
- Select Extraction Internal Standard recovery values were out of range. See section 2.9 for details.

2.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to Eurofins Edison was: 2.8 degrees Celsius. Cooler temperatures on arrival to Eurofins Burlington were: 1.4 and 1.3 degrees Celsius.

2.5 REPORTING LIMITS AND SAMPLE DILUTION

The reporting limits for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP with the following exceptions:

- PFBA, NMeFOSAA, NEtFOSAA, and HFPO-DA have RLs above those defined in the SAP for all samples.
- PFUnDA does not have defined reporting limits, nor is it listed as a compound to be analyzed in the compound list in Table 2 (Haley & Aldrich 2023); however, it is present in the lab reports.
- PFDoS is listed in the compound list in Table 2 (Haley & Aldrich 2023), but is not analyzed for or present in the lab reports.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
MW92A-101323-1006-70	460-290375-7	Perfluorooctanesulfonic acid (PFOS)	5x	Dilution required due to high concentration of the target analyte in the analysis of the undiluted extract. All results were detects, no effect.
MW92-101323-1056-36	460-290375-8			
MW92B-101323-1156-92	460-290375-9			

2.6 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. The analysis of the blank samples for field quality control was free of target compounds.

2.7 PFAS SAMPLE PREPARATION

The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

2.8 PFAS IDENTIFICATION

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary. However, the lab qualified the following samples with an "I" flag:

Lab Sample ID	Analyte	Assessment	Affected Samples
460-290375-2	Perfluorodecanoic acid (PFDA)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	MW39A-101323-0826-70
460-290375-8	Perfluorononane sulfonic acid (PFNS)		MW92-101323-1056-36

2.9 EXTRACTION INTERNAL STANDARDS

Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV), with the following exceptions:

Sample ID	Lab ID	Standard Name	%Recovery	Assessment	Target analytes
MW92A-101323-1006-70	460-290375-7	13C4 PFBA	27%	Low EIS recoveries. Data may contain high bias.	PFBA

2.10 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

2.11 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. No client samples were used for MS/MSD analysis in this SDG.

2.12 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. No field duplicates were collected in this data set.

2.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. A summary of potential bias associated with the samples in this SDG are shown below.

Sample ID	Analyte	Assessment	Action
MW39A-101323-0826-70	Perfluorodecanoic acid (PFDA)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	Possible high bias
MW92A-101323-1006-70	Perfluorobutanoic acid (PFBA)	Low EIS recoveries. Data may contain high bias.	Possible high bias
MW92-101323-1056-36	Perfluorononane sulfonic acid (PFNS)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	Possible high bias

3. Sample Delivery Group 460-290512-1

3.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290512-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
Trip_Blank_101323	TB	460-290512-1	10/13/2023	WQ	VOCs by SW8260D	A
1000-101623-0002_02	FB	460-290512-2	10/16/2023	WQ	VOCs by SW8260D 1,4-Dioxane by E522 Metals by SW6020B	A, B, C
FDMH-1-101623-0915	N	460-290512-3	10/16/2023	WS		
FDMH-2-101623-0930	N	460-290512-4	10/16/2023	WS		
FDMH-4-101623-1015	N	460-290512-5	10/16/2023	WS		

Method Holding Time		
A.	Volatile Organic Compounds (VOCs) by SW8260D	14 days (preserved)
B.	1,4-Dioxane by E522*	28 days extraction/28 days analysis (preserved)
C.	Metals by SW6020B	180 days (preserved)

3.2 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

The DKQ Conformance/Non Conformance Summary included the analytical report indicates this SDG meets the data of known quality requirements, with the following exceptions:

- Reporting limits exceeded the NJDEP GWQS for select analytes. See Section 3.4 for details.
- Blank detects present. See Section 3.5 for details
- Select MS and MSD recovery values were out of range. See Section 3.8 for details.

3.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to Eurofins Edison was: 1.7 degrees Celsius.

3.4 REPORTING LIMITS AND SAMPLE DILUTION

The reporting limits for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP with the following exceptions:

- 1,2-Dibromo-3-Chloropropane and Ethylene Dibromide had laboratory RLs above New Jersey Groundwater Quality Standards (GWQS) due to no SIM being run. These analytes are not site COCs so there are no usability issues.

3.5 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport. The analysis of the blank samples for field quality control was free of target compounds with the following exceptions:

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration (ug/L)	Assessment	Affected Samples
Trip Blank	10/13/2023	Acetone	16	NA	None, samples are ND
Field Blank	10/16/2023		13		

3.6 SURROGATE RECOVERY COMPLIANCE

Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to preparing samples for determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds. The %R for each surrogate compound added to each project samples was determined to be within the laboratory specified quality control limits.

3.7 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

- An LCSD was not reported for SW6020B. Because a site-specific matrix spike duplicate, field duplicate, or laboratory duplicate was also not analyzed, this data set does not include site-specific precision quality control information.

3.8 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. No client samples were used for MS/MSD analysis in this SDG.

3.9 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. No field duplicates were collected in this data set.

3.10 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. No bias issues were identified in this SDG.

4. Sample Delivery Group 460-290517-1

4.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290517-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- PFAS analysis by Eurofins IDA-LCMSMS subcontracted to Eurofins Burlington, South Burlington, VT.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
1000-101623-0002	FB	460-290517-1	10/16/2023	WQ	PFAS by Eurofins IDA-LCMSMS	A
1000-101623-0003	FD	460-290517-2	10/16/2023	WG		
1000-101623-0004	FB	460-290517-3	10/16/2023	WQ		
MW2-101623-0951-10	N	460-290517-4	10/16/2023	WG		
MW3-101623-1046-9	N	460-290517-5	10/16/2023	WG		
MW4-101623-1156-11.5	N	460-290517-6	10/16/2023	WG		
MW15-101623-1325-7	N	460-290517-7	10/16/2023	WG		
MW34R-101623-1421-12	N	460-290517-8	10/16/2023	WG		
MW16A-101623-0926-20	N	460-290517-9	10/16/2023	WG		
MW16C-101623-1026-120	N	460-290517-10	10/16/2023	WG		
MW93-101623-1206-30	N	460-290517-11	10/16/2023	WG		
MW93A-101623-1311-65	N	460-290517-12	10/16/2023	WG		

Method Holding Time		
A.	Per- and polyfluoroalkyl substances (PFAS) by Eurofins IDA-LCMSMS *	14 days extraction/28 days analysis for liquid (unpreserved)

*** Subcontracted to Eurofins Burlington, South Burlington, VT**

4.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g. continuing calibration blank) not required by this review and no qualifiers were therefore applied.

- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196662.

4.3 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

PFAS does not fall under the DKQP program, therefore a DKQ Conformance/Non Conformance Summary was not included in the analytical report. From the case narrative, this SDG meets known quality requirements, with the following exceptions:

- Select RLs are above those defined in the Sampling and Analysis Plan (SAP). Select sample results were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. See Section 4.5 for details.
- Select PFAS ion ratios outside of limits. See Section 4.8 for details.
- Select Extraction Internal Standard recovery values were out of range. See section 4.9 for details.

4.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to Eurofins Edison was: 4.5 degrees Celsius. Cooler temperatures on arrival to Eurofins Burlington were: 1.4 and 1.3 degrees Celsius.

4.5 REPORTING LIMITS AND SAMPLE DILUTION

The MDLs/RLs for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP with the following exceptions:

- PFBA, NMeFOSAA, NEtFOSAA, and HFPO-DA have RLs above those defined in the SAP for all samples.
- PFUnDA does not have defined reporting limits, nor is it listed as a compound to be analyzed in the compound list in Table 2 (Haley & Aldrich 2023); however, it is present in the lab reports.
- PFDoS is listed in the compound list in Table 2 (Haley & Aldrich 2023), but is not analyzed for or present in the lab reports.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
MW2-101623-0951-10	460-290517-4	Perfluorooctanesulfonic acid (PFOS)	5x	Dilution required due to high concentration of the target analyte in the analysis of the undiluted extract. All results were detects, no effect.
MW16C-101623-1026-120	460-290517-10		2x	

4.6 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. The analysis of the blank samples for field quality control was free of target compounds.

4.7 PFAS SAMPLE PREPARATION

The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

4.8 PFAS IDENTIFICATION

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary. However, the lab qualified the following samples with an "I" flag:

Lab Sample ID	Analyte	Assessment	Affected Samples
460-290517-6	Perfluorohexanesulfonic acid (PFHxS)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	MW4-101623-1156-11.5

4.9 EXTRACTION INTERNAL STANDARDS

Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV), with the following exceptions:

Sample ID	Lab ID	Standard Name	%Recovery	Assessment	Target analytes
MW4-101623-1156-11.5	460-290517-6	M2-8:2 FTS	157%	High EIS recoveries. Data may contain low bias.	8:2 FTS

4.10 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

4.11 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. The sample(s) below were used for MS/MSD:

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
460-290517-8 MS/MSD	MW34R-101623-1421-12	Eurofins IDA-LCMSMS

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

4.12 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The following sample(s) were used for field duplicate analysis and the RPDs were all below 35% for water (or the absolute difference rule was satisfied if detects were less than 5x the RL).

Primary Sample ID	Duplicate Sample ID	Method(s)
MW93-101623-1206-30	1000-101623-0003	Eurofins IDA-LCMSMS

4.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. A summary of potential bias associated with the samples in this SDG are shown below.

Sample ID	Analyte	Assessment	Action
MW4-101623-1156-11.5	Perfluorohexanesulfonic acid (PFHxS)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	Possible high bias.
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	High EIS recoveries. Data may contain low bias.	Possible low bias.

5. Sample Delivery Group 460-290543-1

5.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290543-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- PFAS analysis by Eurofins IDA-LCMSMS subcontracted to Eurofins Burlington, South Burlington, VT.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
MW84R-101723-0906-29	N	460-290543-1	10/17/2023	WG	PFAS by Eurofins IDA-LCMSMS	A
MW84AR-101723-1011-75	N	460-290543-2	10/17/2023	WG		
MW77-101723-1131-20	N	460-290543-3	10/17/2023	WG		
SW1-101723-1210	N	460-290543-4	10/17/2023	WS		
MW6-101723-0917-10	N	460-290543-5	10/17/2023	WG		
MW7-101723-1052-13	N	460-290543-6	10/17/2023	WG		
MW11-101723-1212-25.5	N	460-290543-7	10/17/2023	WG		
SW4-101723-0940	N	460-290543-8	10/17/2023	WS		
1000-101723-0002	FB	460-290543-9	10/17/2023	WQ		
1000-101723-0004	FB	460-290543-10	10/17/2023	WQ		

Method Holding Time		
A.	Per- and polyfluoroalkyl substances (PFAS) by Eurofins IDA-LCMSMS*	14 days extraction/28 days analysis for liquid (unpreserved)

*** Subcontracted to Eurofins Burlington, South Burlington, VT**

5.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g. continuing calibration blank) not required by this review and no qualifiers were therefore applied.

- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-196761.

5.3 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

PFAS does not fall under the DKQP program, therefore a DKQ Conformance/Non Conformance Summary was not included in the analytical report. From the case narrative, this SDG meets known quality requirements, with the following exceptions:

- Select RLs are above those defined in the Sampling and Analysis Plan (SAP). Select sample results were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. See Section 5.5 for details.
- Blank detects present. See Section 5.6 for details.
- Select PFAS ion ratios outside of limits. See Section 5.8 for details.

5.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to Eurofins Edison was: 3.0 degrees Celsius. Cooler temperature on arrival to Eurofins Burlington was: 2.9 degrees Celsius.

5.5 REPORTING LIMITS AND SAMPLE DILUTION

The reporting limits for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP with the following exceptions:

- PFBA, NMeFOSAA, NEtFOSAA, and HFPO-DA have RLs above those defined in the SAP for all samples.
- PFUnDA does not have defined reporting limits, nor is it listed as a compound to be analyzed in the compound list in Table 2 (Haley & Aldrich 2023); however, it is present in the lab reports.
- PFDoS is listed in the compound list in Table 2 (Haley & Aldrich 2023), but is not analyzed for nor present in the lab reports.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
MW84AR-101723-1011-75	460-290543-2	Perfluorooctanesulfonic acid (PFOS)	2x	Dilution required due to high concentration of the target analyte in the analysis of the undiluted extract. All results were detects, no effect.

5.6 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (ng/L)	Assessment	Affected Samples
Method Blank	196791	Perfluorododecanoic acid (PFDoDA)	0.540 J	NA	None, samples are ND
		Perfluorotridecanoic acid (PFTrDA)	0.504 J		

Field blanks are prepared to identify contamination that may have been introduced during field activity. The analysis of the blank samples for field quality control was free of target compounds.

5.7 PFAS SAMPLE PREPARATION

The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

5.8 PFAS IDENTIFICATION

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary. However, the lab qualified the following samples with an "I" flag:

Lab Sample ID	Analyte	Assessment	Affected Samples
460-290543-6	Perfluoropentanesulfonic acid (PFPeS)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	MW7-101723-1052-13
	Perfluorohexanesulfonic acid (PFHxS)		
	Perfluoroheptanesulfonic acid (PFHpS)		

5.9 EXTRACTION INTERNAL STANDARDS

Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV).

5.10 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

5.11 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. No client samples were used for MS/MSD analysis in this SDG.

5.12 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. No field duplicates were collected in this data set.

5.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. A summary of potential bias associated with the samples in this SDG are shown below.

Sample ID	Analyte	Assessment	Action
MW7-101723-1052-13	Perfluoropentanesulfonic acid (PFPeS)	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. Possible high bias.	Possible high bias
	Perfluorohexanesulfonic acid (PFHxS)		
	Perfluoroheptanesulfonic acid (PFHpS)		

6. Sample Delivery Group 460-290546-1

6.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 460-290546-1. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- PFAS analysis by Eurofins IDA-LCMSMS subcontracted to Eurofins Burlington, South Burlington, VT.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
1000-101623-0002_03	FB	460-290546-1	10/16/2023	WQ	PFAS by Eurofins IDA-LCMSMS	A
FDMH-1-101623-0915	N	460-290546-2	10/16/2023	WS		
FDMH-2-101623-0930	N	460-290546-3	10/16/2023	WS		
FDMH-4-101623-1015	N	460-290546-4	10/16/2023	WS		

Method Holding Time		
A.	Per- and polyfluoroalkyl substances (PFAS) by Eurofins IDA-LCMSMS*	14 days extraction/28 days analysis for liquid (unpreserved)

*** Subcontracted to Eurofins Burlington, South Burlington, VT**

6.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g. continuing calibration blank) not required by this review and no qualifiers were therefore applied.

- Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch200-196662.

6.3 DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE REVIEW

PFAS does not fall under the DKQP program, therefore a DKQ Conformance/Non Conformance Summary was not included in the analytical report. From the case narrative, this SDG meets known quality requirements, with the following exceptions::

- Select RLs are above those defined in the Sampling and Analysis Plan (SAP). See Section 6.5 for details.

6.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol with the following exceptions:

Cooler temperature on arrival to Eurofins Edison was: 0.8 degrees Celsius. Cooler temperature on arrival to Eurofins Burlington was: 1.4 and 1.3 degrees Celsius.

6.5 REPORTING LIMITS AND SAMPLE DILUTION

The reporting limits for the samples within this SDG met or were below the minimum reporting limit requirements specified by the project-specific QAPP with the following exceptions:

- PFBA, NMeFOSAA, NEtFOSAA, and HFPO-DA have RLs above those defined in the SAP for all samples.
- PFUnDA does not have defined reporting limits, nor is it listed as a compound to be analyzed in the compound list in Table 2 (Haley & Aldrich 2023); however, it is present in the lab reports.
- PFDoS is listed in the compound list in Table 2 (Haley & Aldrich 2023), but is not analyzed for nor present in the lab reports.

6.6 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. The analysis of the blank samples for field quality control was free of target compounds.

6.7 PFAS SAMPLE PREPARATION

The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

6.8 PFAS IDENTIFICATION

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary. However, the lab qualifies ion ratios outside acceptance limts with an "I" flag. None appeared in this SDG.

6.9 EXTRACTION INTERNAL STANDARDS

Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV).

6.10 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits.

6.11 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. No client samples were used for MS/MSD analysis in this SDG.

6.12 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. No client samples were used for laboratory duplicate analysis in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. No field duplicates were collected in this data set.

6.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to be compliant with the data quality objects for the project and the guidelines specified by analytical method. Based on the review of this report, the data are 100% useable. No bias issues were identified in this SDG.

Glossary

- Sample Types:
  - N Primary Sample
  - FD Field Duplicate Sample
  - FB Field Blank Sample
  - EB Equipment Blank Sample
  - TB Trip Blank Sample
- Units:
  - mg/kg milligrams per kilogram
- Table Footnotes
  - NA Not applicable
  - ND Non-detect
- Abbreviations
  - DUSR Data Usability Summary Report
  - SDG Sample Delivery Group
  - QAPP Quality Assurance Project Plan
  - QA/QC Quality Assurance/Quality Control
  - RL Reporting Limit
  - MDL Method Detection Limit
  - COC Chain of Custody
  - % Percent
  - %R Percent Recovery
  - RPD Relative Percent Difference
  - LCS/LCSD Laboratory Control Sample/Laboratory Control Sample Duplicate
  - MS/MSD Matrix Spike/Matrix Spike Duplicate

Qualifiers

Results are qualified with the following codes in accordance with EPA National Functional Guidelines:

- Concentration (C) Qualifiers:
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".
  - B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
  - E The compound was quantitated above the calibration range.
  - D The concentration is based on a diluted sample analysis.

References

1. Haley & Aldrich, September 2023. Per- and Polyfluoroalkyl Substances Groundwater Sampling and Analysis Plan. Ewing Township Industrial Land. Former Delphi Interior and Lighting Systems Division.
2. Haley & Aldrich, December 2021. Quality Assurance Project Plan. Ewing Township Industrial Land.
3. New Jersey Department of Environmental Protection, April 2014. Data Quality Assessment and Data Usability Evaluation Technical Guidance.
4. New Jersey Department of Environmental Protection, April 2014. Quality Assurance Project Plan Technical Guidance.
5. New Jersey Department of Environmental Protection, August 2005 (updated April 2011). Field Sampling Procedures Manual.
6. United Stated Department of Defense, 2019. Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.3, Table B-15: Per- and Polyfluoroalkyl Substances (PFAS) Using Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) With Isotope Dilution or Internal Standard Quantification in Matrices Other Than Drinking Water. 2019.
7. United States Department of Defense and Environmental Data Quality Workgroup, 2020. Data Validation Guidelines Module 3: Data Validation Procedure for Per- and Polyfluoroalkyl Substances Analysis by QSM Table B-15. May 2020.
8. Note: The QSM was used as a reference only. These samples were analyzed for PFAS using a laboratory-specific method and were not analyzed in accordance with DoD protocol.